

## AN *EINSTEIN* OBSERVATORY SAO-BASED CATALOG OF B-TYPE STARS

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### ABSTRACT

Using  $\sim 4000$  X-ray images obtained with the *Einstein Observatory* Imaging Proportional Counter (IPC), we have measured the 0.16–4.0 keV emission from 1545 B-type SAO stars falling in the  $\sim 10\%$  of the sky surveyed with the IPC. We identify 74 detected X-ray sources with B-type stars, estimating that no more than 15 can be misidentified, and present upper limits to the X-ray emission of the remaining stars. In addition to summarizing the X-ray measurements and giving other relevant optical data, our extensive catalog presents a detailed discussion of the reduction process, together with an analysis of selection effects associated with both SAO catalog completeness and IPC target selection procedures. We conclude that X-ray emission, at the level of  $L_x \geq 10^{30}$  ergs  $s^{-1}$ , is quite common in B stars of early spectral types (B0–B3), regardless of luminosity class, but that emission, at the same level, becomes less common, or nonexistent, in later B-type stars.

*Subject headings:* catalogs — stars: early-type — X-ray: stars

### 1. INTRODUCTION

In the last decade, Imaging Proportional Counter (IPC; Gorenstein, Harnden, & Fabricant 1981) observations have been widely used to construct a self-consistent, interpretational framework of stellar X-ray emission. By analogy with solar coronal phenomena, the present wide consensus relates X-ray emission from late-type stars to the presence of magnetic fields and to the interactions between differential rotation and convection (Parker 1955, 1979; Vaiana & Rosner 1978; Rosner & Vaiana 1980; Golub 1982; Vaiana 1983; Mestel 1988). In contrast, the occurrence of magnetic fields in early-type stars does not seem supported by our present knowledge: the absence of convection prevents the onset of a magnetic dynamo, and the surface magnetic fields seen for a few, chemically peculiar stars (Borra, Landstreet, & Thompson 1983) could be primordial in origin. For the most massive O-type stars, currently favored models (Lucy & White 1980; Lucy 1982) associate X-ray emission with radiation-driven shocks (see also Owocky & Rybicki 1984, 1985, 1986; but for a different point of view, see Linsky 1985, 1990).

Due to lack of magnetic activity, the occurrence of X-ray emission in late-B/early-A stars has been, since the origin of stellar X-ray astronomy, a puzzling question. The observed X-ray emission has usually been attributed to the coronal emission from a low-mass companion (Schmitt et al. 1985), however, in some cases—see for instance, Caillault & Zoone-matkermani (1989); Micela et al. (1988, 1990), Schmitt et al. (1990)—this interpretation seem not straightforward.

For the early B-type stars there are expectations based on wind modeling (Castor, Abbot & Klein 1975) that the X-ray emission should be associated with the same radiation-driven shock mechanism likely at work in more massive O-type stars. Such a models predict a substantial reduced efficiency of this

mechanism, due to the drop of mass outflow, when the stellar bolometric luminosity falls below  $L_{\text{bol}} \approx 10^{37}$  ergs  $s^{-1}$  (Castor et al. 1975; Abbot 1984).

The available published X-ray data on B stars do not constitute a “complete” well-defined sample, and this has prevented any systematic investigation of X-ray emission properties of B stars.

With the present X-ray catalog of B-type stars, we extend to spectral type B the kinds of data previously presented for O-type stars (Chlebowski, Harnden, & Sciortino 1989), thereby completing the set of X-ray data for early-type stars surveyed with the *Einstein Observatory* (Giacconi et al. 1979), and we build an homogeneous data set on which questions on the origin and level of X-ray emission of early and late B-type stars are best posed. Our paper is organized as follows: § 2 describes the selection criteria of the X-ray sample and compares our sample with the optical parent sample, § 3 discusses data reduction, § 4 discusses the catalog of X-ray measurements and analyzes some of the selection effects, and our results are summarized in § 5. A detailed statistical analysis and physical interpretation of the complete set of B-star data will be presented elsewhere (Grillo et al. 1991, 1992).

### 2. SURVEY COMPOSITION

#### 2.1. Sample Selection

Our sample (hereafter, the X-ray sample) consists of 1545 stars in the spectral range B0–B9, extracted from the Smithsonian Astrophysical Observatory Star Catalog (1971; Roman & Warren 1984) and falling either serendipitously or as targets in IPC X-ray images. The SAO Catalog is complete up to  $m_v = 8.5$  mag and also includes many stars with  $m_v$  up to  $\sim 10$  mag. As further sources of optical information on B-type stars, we have considered several additional stellar catalogs (Humphreys 1978; Humphreys & McElroy 1984; Hoffleit &

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Jaschek 1982; Hoffleit, Saladyga, & Wlasuk 1984; Rubin et al. 1962; Kennedy 1983; Jaschek 1978; Goy 1980; Chlebowski et al. 1989) which we have used primarily to improve spectral-type classifications. In constructing our X-ray sample, we rejected those stars with MK spectral classifications different from type B. The optical parent sample consists of all the 15,516 B-type stars listed in the SAO catalog, no attempt has been done to improve the spectral-type classification of the stars of the optical parent sample. However, only a small fraction of the initial X-ray sample stars have been excluded from the final sample due to improved spectral-type classification. On the basis of this result we do not expect that the contamination of the optical parent sample could sensibly affect any of the following results. The sky distributions of the optical parent sample (consisting of 15,516 B-type stars) and the X-ray sample are shown in Figures 1*a* and 1*b*, respectively.

Relevant optical data for the X-ray sample stars are listed in Table 1, ordered according to right ascension (1950) from the SAO catalog. Column (1) contains the HD/BD number. Column (2) contains the SAO catalog number. Columns (3) and (4) report right ascension and declination (1950) from the SAO Catalog. Column (5) gives the visual apparent magnitude. Column (6) gives the  $B - V$  color index. Columns (7) and (8) report the MK spectral type, and the quality of luminosity class determination: C indicates a measured, certain determination, D indicates a measured, but uncertain determination, and A indicates that we have assumed that the luminosity class is V. Column (9) gives the adopted absolute visual magnitude (taken from Mihalas & Binney 1981). Columns (10) and (11) give the adopted bolometric correction (taken from Flower 1977) and the derived absolute bolometric magnitude, respectively. Column (12) reports the adopted effective temperature

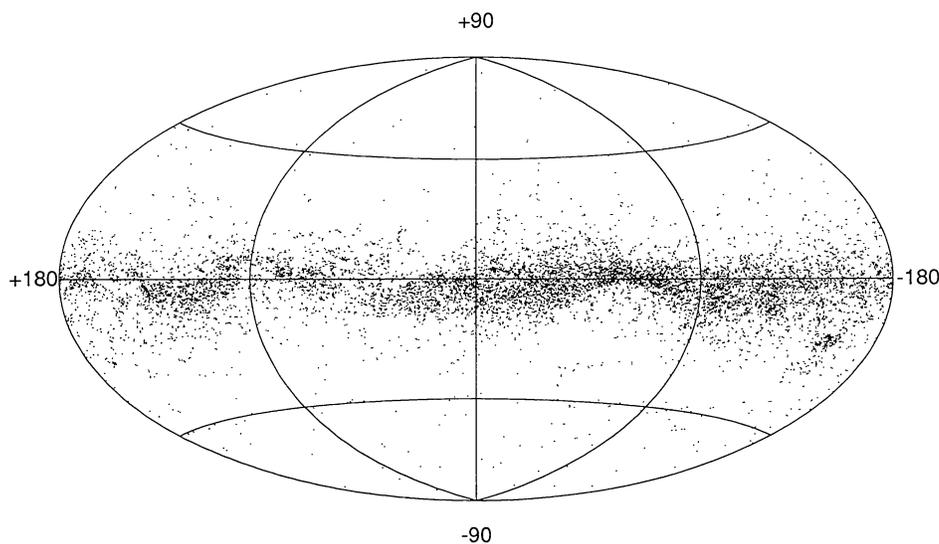
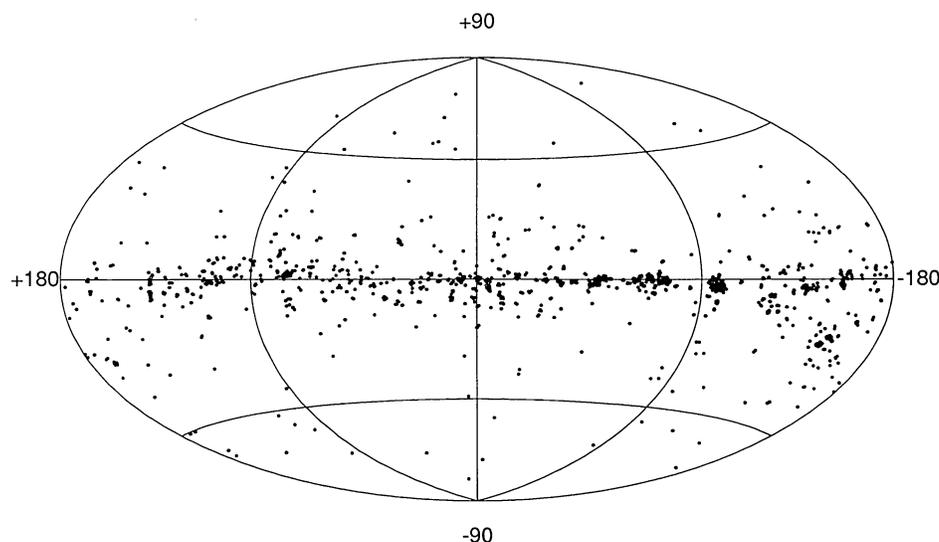
FIG. 1*a*FIG. 1*b*

FIG. 1.—(a) Galactic-coordinate distribution of the optical parent sample of B-type stars from the SAO catalog. Note the nonuniform concentration of stars in the Galactic plane due to inhomogeneities in the optical extinction. (b) Analogous distribution for our X-ray sample of SAO B stars surveyed with the *Einstein Observatory* IPC.

TABLE 1  
SUMMARY OF OPTICAL DATA OF THE SURVEYED B STARS

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_c$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	(19)	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)		
225094	10942	0 0 50.7	63 21 46	6.24	0.33	B3Ia	C	-7.20	-1.15	-8.35	16300	1.41	3.13	2.55	Y	0	1			
225187	192345	0 1 38.5	-30 24 48	7.10	-0.09	B9V	C	0.36	-0.50	-0.14	11200	(0.10)	(0.22)	0.21	Y	2	2			
144	10978	0 3 49.7	63 55 5	5.59	-0.03	B9IIIe	C	0.78	-0.46	-1.24	11400	(0.11)	(0.24)	0.18	Y	2	2		10 Cas	
232107	21100	0 4 25.5	54 37 6	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.70)	0.53	N	0	0			
315	128595	0 5 10.3	-2 49 37	6.42	-0.13	B8IIIpSi	C	-1.16	-0.72	-1.88	12250	(0.13)	(0.29)	0.31	Y	4	4			
236309	21121	0 5 36.0	58 56 16	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N	0	0			
470	21137	0 6 45.6	58 23 16	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y	0	0			
560	91750	0 7 27.9	10 52 3	5.51	-0.07	B9Vn	A	0.36	-0.50	-0.14	11200	(0.04)	(0.08)	0.06	Y	2	2		34 Psc	
593	21164	0 7 56.3	59 23 43	6.69	0.03	B1V	C	-3.20	-2.50	-5.70	24150	0.87	1.93	0.64	Y	0	1			
594	21166	0 7 59.0	58 28 13	8.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.37)	(0.83)	0.61	Y	0	0			
236327	21168	0 8 3.8	58 28 6	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N	0	0			
627	21171	0 8 8.0	58 29 29	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.39	Y	0	0		$\gamma$ Peg	
886	91781	0 10 39.4	14 54 21	2.84	-0.23	B2IV	C	-3.10	-1.60	-4.70	18000	0.03	0.07	0.15	Y	0	1			
1082	36202	0 12 40.1	43 55 32	6.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.10)	(0.23)	0.17	Y	0	0			
1438	36256	0 16 3.4	43 30 49	6.11	-0.08	B8V	C	-0.02	-0.70	-0.72	12200	(0.10)	(0.22)	0.16	Y	2	2		26 And	
1939	11165	0 21 29.9	64 1 24	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y	0	0			
2729	11243	0 28 31.4	66 14 37	6.18	-0.10	B6V	A	-0.66	-1.20	-1.86	14300	(0.13)	(0.30)	0.22	Y	2	2		13 Cas	
3038	11265	0 31 28.8	66 28 30	6.48	-0.08	B9III	C	-0.78	-0.46	-1.24	11400	(0.16)	(0.35)	0.26	Y	2	2		16 Cas	
3240	21551	0 33 20.5	53 53 36	5.08	-0.11	B7III	C	-1.54	-1.07	-2.61	13200	(0.12)	(0.27)	0.20	Y	2	2			
3369	54033	0 34 12.2	33 26 40	4.36	-0.16	B5V	C	-1.00	-1.30	-2.30	15300	(0.07)	(0.15)	0.11	Y	4	4		$\pi$ And	
4253	21680	0 42 42.0	57 45 56	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y	0	0			
236534	21731	0 46 2.8	57 55 47	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.61)	0.45	N	0	0			
236541	21744	0 46 51.6	57 20 15	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N	0	0			
6182	11554	1 0 56.6	61 32 33	8.23	0.47	B0.5IIP STG n	C	-5.96	-2.50	-8.46	25900	2.19	4.86	2.51	Y	33	1			
6832	11604	1 6 59.6	61 32 33	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.32	Y	0	0			
7103	11630	1 9 21.0	61 37 14	8.35	0.53	B3Ib	C	-5.78	-1.15	-6.93	16300	2.13	4.73	2.51	Y	33	1			
236655	11633	1 9 28.7	60 2 53	9.06	0.49	B8Ib	C	-5.80	-0.51	-6.31	10900	1.56	3.46	4.57	N	0	1			
7157	11637	1 9 58.0	61 26 28	6.41	0.01	B9V	C	0.36	-0.50	-0.14	11200	(0.04)	(0.08)	0.06	Y	2	2			
8803	109895	1 24 18.3	3 16 35	6.58	-0.04	B9V+A8V	D	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y	0	0			
8736	11768	1 24 23.5	62 30 52	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y	0	0			
236745	22294	1 24 44.4	58 5 50	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.52)	(1.15)	0.86	N	0	0			
236758	22336	1 26 53.1	57 43 35	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N	0	0			
236761	22345	1 27 27.3	57 58 36	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N	0	0			
9105	11793	1 27 54.0	63 5 25	7.47	0.55	B3Ia	C	-7.20	-1.15	-8.35	16300	2.07	4.59	3.31	Y	0	1			
9267	22371	1 29 17.4	54 13 36	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.53	N	0	0			
236785	22395	1 30 33.8	58 16 40	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N	0	0			
236788	22402	1 31 18.8	57 55 45	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N	0	0			
10516	22554	1 40 30.8	50 26 16	4.06	-0.04	B2Vep	C	-2.50	-2.00	-4.50	19700	0.60	1.33	0.16	Y	0	1		$\phi$ Per	
12301	12097	1 59 16.6	64 8 59	5.58	0.38	B8Ib	C	-5.80	-0.51	-6.31	10900	1.23	2.73	1.07	Y	0	1		53 Cas	
12567	12118	2 1 47.2	64 2 54	8.30	0.38	B0.5III	C	-5.00	-2.50	-7.50	25900	1.98	4.40	1.84	Y	0	1			
12882	12145	2 4 56.6	64 48 3	7.50	0.38	B2.5III:ne+	C	-3.55	-1.55	-5.10	17600	1.80	4.00	0.69	Y	0	1			
13310	23020	2 8 27.9	54 43 59	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.63)	0.47	N	0	0			
13429	23035	2 9 35.0	54 52 38	8.70	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.42)	(0.94)	0.72	N	0	0			
13621	23065	2 11 6.6	55 5 3	8.11	0.06	B0.5III-IV((n))	C	-4.71	-2.50	-7.21	25900	1.02	2.26	2.29	Y	36	1			
13661	23073	2 11 28.1	54 17 57	8.60	...	B3Vne	D	-2.32	-1.80	-4.12	18700	0.63	1.39	1.14	N	3	3			
13669	23079	2 11 35.0	55 33 39	8.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.53)	(1.18)	0.91	Y	0	0			
13659	23081	2 11 36.6	56 41 38	8.65	0.56	B1Ib	C	-5.40	-1.70	-7.10	20260	2.25	4.99	2.29	Y	36	1			

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	Comment	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
13746A	55383	2 11 46.8	30 9 44	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.41)	0.37	Y	0		
13746B	55384	2 11 47.3	30 9 48	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.41)	0.37	Y	0		
13717	23091	2 11 59.7	55 21 47	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y	0		
13736	23098	2 12 15.1	55 53 55	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N	0		
13841	23113	2 13 15.7	56 47 53	7.37	0.23	B2Ib	C	-5.66	-1.35	-7.01	18000	1.23	2.73	2.29	Y	36	1	OOS 3
13854	23115	2 13 20.9	56 49 26	6.47	0.28	B1Iab	C	-6.83	-1.70	-8.53	20260	1.50	3.33	2.29	Y	36	1	OOS 16
+56 473	23116	2 13 26.7	56 53 56	9.07	0.24	B1II	C	-4.17	-2.00	-6.17	21100	1.44	3.20	2.29	N	36	1	OOS 146
13900	23126	2 13 44.9	56 40 1	9.17	0.16	B1III	C	-3.89	-2.00	-5.89	21100	1.26	2.80	2.29	N	36	1	OOS 260
+56 482	23135	2 14 7.7	56 58 7	9.36	0.30	B1IIIp	C	-4.12	-2.00	-6.12	21100	1.68	3.73	2.29	N	36	1	OOS 339
+56 484	23136	2 14 13.8	56 40 9	9.62	0.32	B1Ve	C	-4.05	-2.50	-6.55	24150	1.87	4.15	2.29	N	36	1	VAR
13970	23138	2 14 16.1	56 24 39	8.29	0.14	B2V	C	-2.50	-2.00	-4.50	19700	1.14	2.53	0.85	Y	0	1	OOS 339
13969	23139	2 14 18.6	56 51 35	8.83	0.29	B1IV	C	-4.62	-2.60	-6.90	25400	1.26	2.80	2.29	Y	36	1	$\phi$ Eri
14014	23147	2 14 30.5	56 0 8	8.76	0.14	B0.5V	C	-4.30	-2.60	-6.92	25400	1.26	2.80	2.29	N	36	1	OOS 612
14228	232696	2 14 43.4	-51 44 35	3.56	-0.12	B8V	C	-0.02	-0.70	-0.72	12200	(0.03)	(0.07)	0.05	Y	4		OOS 662
+56 497	23157	2 14 51.6	56 48 33	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	0		OOS 717
14053	23158	2 14 51.7	56 46 48	8.43	0.24	B0.5III	C	-4.93	-2.50	-7.43	25900	1.56	3.46	2.29	Y	36	1	OOS 847
14052	23161	2 14 56.4	56 58 42	8.18	0.30	B1Ib	C	-5.18	-1.70	-6.88	20260	1.56	3.46	2.29	Y	36	1	OOS 1057
+56 502	23165	2 15 1.0	56 58 51	9.28	0.30	B1V	C	-4.20	-2.50	-6.70	24150	1.68	3.73	2.29	N	36	1	OOS 1162
+56 504	23167	2 15 8.7	56 52 15	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.52)	(1.15)	0.86	N	0		OOS 1268
+56 508	23170	2 15 16.0	57 3 20	8.80	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.87)	(1.94)	1.52	N	0		OOS 1586
+56 511	23171	2 15 16.4	56 50 14	9.11	0.38	B3III	C	-4.43	-1.50	-5.93	17100	1.74	3.86	2.29	N	36	1	OOS 1899
14134	23178	2 15 32.6	56 54 20	6.55	0.47	B3Ia	C	-7.08	-1.15	-8.23	16300	1.83	4.06	2.29	Y	36	1	$\chi$ Per
14143	23182	2 15 42.0	56 56 22	6.70	0.48	B2Ia	C	-7.08	-1.35	-8.43	18000	1.98	4.40	2.29	Y	36	1	OOS 2296
14162	23187	2 15 55.5	56 54 31	9.37	0.38	B0.5V	C	-4.41	-2.60	-7.01	25400	1.98	4.40	2.29	N	36	1	OOS 2296
+56 538	23196	2 16 8.1	56 51 45	9.10	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.95)	(2.11)	1.68	N	0		OOS 2296
14250	23202	2 16 43.5	56 52 11	8.96	0.32	B1III	C	-4.58	-2.00	-6.58	21100	1.74	3.86	2.29	Y	36	1	OOS 2296
14299	23213	2 17 10.2	59 22 40	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y	0		OOS 2296
14357	23249	2 17 38.4	56 38 14	8.52	0.31	B2II	C	-4.90	-1.60	-6.50	18000	1.62	3.60	2.29	Y	36	1	OOS 2296
14443	23244	2 18 27.7	56 55 3	8.04	0.35	B2Ibp	C	-5.35	-1.35	-6.70	18000	1.59	3.53	2.29	Y	36	1	OOS 2296
+56 572	23246	2 18 29.8	56 54 45	9.20	...	B	...	...	...	...	...	...	...	...	...	...	...	...
+56 574	23249	2 18 34.5	56 53 3	8.53	0.30	B1III	C	-4.95	-2.00	-6.95	21100	1.68	3.73	2.29	Y	36	1	OOS 2296
14557	12263	2 19 56.2	62 11 24	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N	0		OOS 2296
14618	12265	2 20 17.6	60 3 25	9.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.55)	(1.21)	0.89	N	0		OOS 2296
236960	23292	2 20 49.9	59 0 10	9.76	0.45	B0.5III	C	-4.23	-2.50	-6.73	25900	2.19	4.86	2.29	N	36	1	OOS 2296
14795	23307	2 21 45.2	59 46 50	7.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.34)	0.25	Y	0		OOS 2296
14817	12277	2 21 54.2	61 19 28	7.01	0.21	B8V+A0V	D	-0.02	-0.70	-0.72	12200	(0.15)	(0.32)	0.24	Y	2		V559 Cas
15239	12303	2 25 52.8	60 26 3	8.20	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.59)	(1.31)	0.97	Y	0		MWC 47
15238	12304	2 25 58.5	60 27 18	8.50	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.83)	(1.83)	1.35	Y	0		MWC 47
15251	12307	2 26 1.8	60 28 59	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.59	N	0		MWC 47
16218	12369	2 35 3.1	62 22 35	6.66	-0.02	B9V	D	0.36	-0.50	-0.14	11200	(0.11)	(0.23)	0.17	Y	2		$\delta$ Cet
16567	130039	2 36 47.5	-2 17 15	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.29)	0.29	Y	0		$\delta$ Cet
16582	110665	2 36 55.0	0 6 50	4.06	-0.21	B2IV	C	-3.10	-1.60	-4.70	18000	0.09	0.20	0.26	Y	0		$\pi$ Cet
16772	38265	2 39 19.2	40 2 57	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.41)	0.32	Y	0		$\pi$ Cet
17081	148575	2 41 44.5	-14 4 10	4.24	-0.14	B7V	C	-0.32	-1.10	-1.42	12500	(0.05)	(0.11)	0.08	Y	4		$\pi$ Cet
17259	55875	2 44 3.0	31 11 12	7.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.41)	0.35	Y	0		$\pi$ Cet
17444	23644	2 46 25.1	56 27 47	8.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.45)	(1.01)	0.74	N	0		$\pi$ Cet
17907	110807	2 50 0.6	6 16 15	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.29)	0.26	Y	0		$\pi$ Cet

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	(19)	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)		
18883	110921	2 59 45.2	4 9 25	5.61	-0.10	B7V	C	-0.32	-1.10	-1.42	12500	(0.08)	(0.19)	0.15	Y		2	93 Cet		
19374	93284	3 4 36.5	17 41 18	6.10	-0.12	B1.5V	C	-2.80	-2.20	-5.00	21800	0.39	0.87	0.50	Y	0	1	53 Ari		
19356	38592	3 4 54.4	40 45 52	2.12	-0.05	B8V	C	-0.02	-0.70	-0.72	12200	(0.01)	(0.03)	0.02	Y		2	Algol		
20017	38672	3 11 25.0	48 30 38	7.91	...	B7Ve	D	-0.40	-1.10	-1.50	12500	1.23	2.73	0.26	Y		3			
275056	38686	3 12 42.7	40 48 56	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.47	N		0			
21996	168614	3 29 51.8	-21 24 58	8.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.20)	(0.44)	0.83	N		0			
22586	233173	3 34 14.8	-52 43 16	8.03	-0.19	B2III	C	-3.70	-1.60	-5.30	18000	0.15	0.33	2.07	Y	0	1			
22928	39053	3 39 21.2	47 37 46	3.01	-0.13	B5III	C	-2.30	-1.30	-3.60	16300	(0.04)	(0.08)	0.06	Y		2	$\delta$ Per		
23016	93557	3 39 25.6	19 32 30	5.69	-0.01	B9Vne	C	0.36	-0.50	-0.14	11200	(0.07)	(0.15)	0.11	Y		2	13 Tau		
23288	76126	3 41 49.5	24 8 2	5.46	-0.04	B7IV	C	-1.00	-1.07	-2.07	13200	(0.05)	(0.11)	0.08	Y		2	16 Tau		
23219	39079	3 41 53.1	47 30 17	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.28	Y		0			
23302	76131	3 41 54.1	23 57 28	3.70	-0.11	B6IIe	C	-1.92	-1.20	-3.12	14500	(0.03)	(0.07)	0.05	Y		2	17 Tau		
23324	76137	3 42 10.4	24 41 2	5.64	-0.07	B8V	C	-0.02	-0.70	-0.72	12200	(0.08)	(0.18)	0.13	Y		2	18 Tau		
23338	76140	3 42 13.6	24 18 43	4.30	-0.11	B6IV	C	-1.40	-1.20	-2.60	14500	(0.08)	(0.18)	0.13	Y		2	19 Tau		
23408	76155	3 42 50.8	24 12 47	3.87	-0.07	B8III	C	-1.16	-0.72	-1.88	12250	(0.06)	(0.13)	0.10	Y		2	20 Tau		
23432	76159	3 42 55.4	24 24 0	5.76	-0.04	B8V	C	-0.02	-0.70	-0.72	12200	(0.08)	(0.18)	0.14	Y		2	21 Tau		
23480	76172	3 44 21.2	23 47 39	4.18	-0.06	B6Ive	C	-1.40	-1.20	-2.60	14500	(0.08)	(0.17)	0.13	Y		2	23 Tau		
23568	76183	3 44 0.3	24 22 0	6.81	-0.02	B9.5V	C	0.53	-0.30	0.23	10500	(0.10)	(0.23)	0.17	Y		2			
23630	76199	3 44 30.4	23 57 8	2.87	-0.09	B7IIe	C	-1.54	-1.07	-2.61	13200	(0.08)	(0.17)	0.13	Y		2	25 Tau		
23753	76215	3 45 22.9	23 16 9	5.45	-0.07	B8V	C	-0.02	-0.70	-0.72	12200	(0.07)	(0.16)	0.12	Y		2			
23850	76228	3 46 11.0	23 54 8	3.65	-0.10	B8III	C	-1.16	-0.72	-1.88	12250	(0.05)	(0.14)	0.09	Y		4	27 Tau		
23862	76229	3 46 12.4	23 59 8	5.09	-0.08	B8Vnn	D	-0.02	-0.70	-0.72	12200	(0.06)	(0.14)	0.10	Y		4	28 Tau		
23873	76236	3 46 22.6	24 13 47	6.57	-0.02	B9.5V	C	0.53	-0.30	0.23	10500	(0.09)	(0.21)	0.15	Y		2			
24072	194551	3 46 45.0	-37 46 20	4.86	-0.01	B9V	C	0.36	-0.50	-0.14	11200	(0.03)	(0.06)	0.04	Y		2			
23923	76244	3 46 45.2	23 33 40	6.17	-0.05	B8V	C	-0.02	-0.70	-0.72	12200	(0.10)	(0.22)	0.17	Y		2			
23662	12929	3 46 45.7	68 21 27	6.32	-0.08	B9IVp	C	-0.20	-0.46	-0.66	11400	(0.11)	(0.25)	0.19	Y		2	$\zeta$ Per		
24398	56799	3 50 59.0	31 44 13	2.85	0.12	B1Ib	C	-5.78	-1.70	-7.48	20260	(0.06)	(0.14)	0.10	Y		2			
24899	76358	3 55 21.5	23 56 22	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.36)	0.29	Y		0			
25201	76388	3 57 58.3	23 3 44	6.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.11)	(0.25)	0.19	Y		0			
25330	111566	3 59 2.2	9 51 33	5.67	0.02	B5V	C	-1.00	-1.30	-2.30	15300	(0.12)	(0.26)	0.20	Y		2			
25413	130887	3 59 45.4	0 4 16	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.46)	0.53	N		0			
26676	93821	4 10 50.2	10 5 12	6.23	0.05	B8Vn	C	-0.02	-0.70	-0.72	12200	(0.10)	(0.22)	0.17	Y		2			
26793	111680	4 11 52.1	9 53 11	5.22	-0.09	B9Vn	C	0.36	-0.50	-0.14	11200	(0.06)	(0.12)	0.09	Y		4			
27026	39447	4 14 40.0	42 1 12	6.22	-0.08	B9V	C	0.36	-0.50	-0.14	11200	(0.09)	(0.19)	0.14	Y		2	53 Tau		
27295	76548	4 16 29.0	21 1 23	5.35	-0.08	B9IV	C	-0.20	-0.46	-0.66	11400	(0.08)	(0.17)	0.12	Y		2			
28087	111813	4 23 21.4	0 55 10	7.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.37)	0.34	Y		0			
28365	149655	4 25 37.3	-13 34 30	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.34	Y		0	228 Eri		
28497	149674	4 26 47.5	-13 9 26	5.59	-0.24	B1.5Ve	C	-2.80	-2.20	-5.00	21800	0.03	0.07	0.47	Y		1			
28436	93967	4 26 54.8	17 34 10	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.32	Y		0			
28715	111876	4 29 10.5	5 39 32	6.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.10)	(0.23)	0.18	Y		0			
28867	94002	4 30 39.1	17 54 46	6.25	0.07	B9IVn	C	0.36	-0.50	-0.14	11200	(0.10)	(0.23)	0.18	Y		0			
29227	131344	4 33 31.9	-3 42 46	6.33	-0.10	B7III	C	-0.20	-0.46	-0.66	11400	(0.25)	(0.56)	0.50	N		2			
-3 832	131345	4 33 45.3	-3 38 12	8.30	...	B9V	C	-1.54	-1.07	-2.61	13200	(0.17)	(0.38)	0.35	Y		2			
232980	24724	4 33 46.5	53 21 46	8.80	...	B0V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.39)	0.36	N		0			
29248	131346	4 33 49.1	-3 27 12	3.90	-0.21	B2III	C	-4.30	-3.00	-7.30	29600	(1.13)	(2.50)	2.48	Y		0	$\nu$ Eri		
29433	169617	4 35 5.8	-22 42 54	7.60	...	B9V	C	-3.70	-1.60	-5.30	18000	0.09	0.20	0.32	Y		0			
232987	24756	4 36 48.8	52 31 13	8.40	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.60)	(1.34)	1.06	Y		0			

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$NH$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	(19)	Comment	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)			
276803	57403	4 41 25.2	39 28 23	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	0	0	0			
276792	39736	4 42 30.1	40 19 52	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N	0	0	0			
276931	57433	4 44 41.0	39 52 45	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N	0	0	0			
30584	39800	4 47 27.7	44 53 4	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y	0	0	0			
30836	112142	4 48 32.4	5 31 16	3.68	-0.17	B2III	C	-3.70	-1.60	-5.30	18000	0.21	0.47	0.27	Y	0	1	0			$\pi^4$ Ori
31089	149955	4 50 12.9	-10 34 15	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.33	Y	0	0	0			
31407	233719	4 51 28.2	-55 46 44	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.14)	(0.32)	0.29	Y	0	0	0			
31237	112197	4 51 38.7	2 21 37	3.70	-0.19	B2III	C	-3.70	-1.60	-5.30	18000	0.15	0.33	0.28	Y	0	1	0			$\pi^5$ Ori
282633	57528	4 54 15.9	30 5 52	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.59	N	0	0	0			
31919	131662	4 56 57.8	-2 8 26	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.44	N	0	0	0			
277249	39944	4 57 40.8	41 11 20	8.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.42)	(0.93)	0.69	N	0	0	0			
32145	112316	4 58 28.1	3 38 42	6.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.13)	(0.29)	0.23	Y	0	0	0			
32050	39967	4 59 4.5	46 35 22	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y	0	0	0			
32273	112340	4 59 24.5	1 32 15	6.24	-0.04	B8V	C	-0.02	-0.70	-0.72	12200	(0.05)	(0.10)	0.08	Y	0	2	0			
284093	76919	4 59 59.3	24 46 33	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.75)	0.60	N	0	0	0			
32359	112356	5 0 6.9	3 23 14	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.26	Y	0	0	0			
32282	39986	5 0 24.7	40 36 51	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y	0	0	0			
32431	112364	5 0 38.8	3 56 45	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.48)	0.42	Y	0	0	0			
32330	39992	5 0 48.1	41 32 0	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N	0	0	0			11 Cam
32343	25001	5 1 47.1	58 54 18	5.22	...	B2.5Ve	C	-3.60	-1.90	-5.50	19200	0.45	1.00	0.50	Y	3	0	0			
282870	57632	5 2 55.9	30 13 41	9.00	-0.06	B8V+AIIV	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.73)	0.55	N	0	0	0			
32964	131777	5 4 17.2	-4 43 14	5.12	...	B9V	D	0.36	-0.50	-0.14	11200	(0.03)	(0.06)	0.04	Y	2	0	0			66 Eri
33486	249185	5 5 14.5	-68 9 9	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.29	Y	0	0	0			
33467	94373	5 8 8.0	14 51 40	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.37	Y	0	0	0			
33742	217212	5 8 42.0	-44 55 16	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.45)	0.51	N	0	0	0			
33853	40167	5 11 47.3	46 21 1	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.41)	0.31	Y	0	0	0			IM Aur
34085	131907	5 12 8.0	-8 15 29	0.08	-0.03	B8Ia	C	-8.42	-5.1	-8.93	10900	(0.22)	(0.49)	0.45	Y	47	1	0			$\beta$ Ori
33988	40183	5 12 44.6	46 21 41	6.88	...	B2Ve	D	-3.60	-2.00	-5.60	19700	1.47	3.26	0.60	Y	3	0	0			12 Aur
34543	249221	5 13 13.7	-65 17 34	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.44)	0.46	Y	0	0	0			$\tau$ Ori
34503	131952	5 15 10.6	-6 53 49	3.60	-0.11	B5III	C	-2.30	-1.30	-3.60	16300	(0.10)	(0.22)	0.17	Y	2	0	0			
34511	131959	5 15 27.3	0 5 23	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.36)	0.29	Y	0	0	0			
34736	131980	5 16 56.0	-7 23 52	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.39)	0.33	Y	0	0	0			
35051	94500	5 19 40.9	16 45 25	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.43	Y	0	0	0			
35349	94531	5 21 56.4	17 9 10	7.90	...	B5Vn	D	-1.00	-1.30	-2.30	15300	0.30	0.67	0.52	Y	3	0	0			$\eta$ Ori
35411	132071	5 21 57.7	-2 26 30	3.36	-0.17	B1V+B2e	D	-3.64	-2.50	-6.14	24150	(0.09)	(0.19)	0.14	Y	2	0	0			
35456	132075	5 22 9.5	-2 32 31	6.94	-0.05	B8V	D	-0.02	-0.70	-0.72	12200	(0.14)	(0.30)	0.23	Y	2	0	0			
35502	132081	5 22 30.7	-2 51 34	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.44)	0.37	Y	0	0	0			
244328	58140	5 28 1.4	30 8 27	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N	0	0	0			
36263	94602	5 28 6.1	10 13 3	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y	0	0	0			
36313	132196	5 28 11.9	0 24 38	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.52)	0.44	N	0	0	0			
36312	132197	5 28 14.9	0 0 30	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.59)	0.51	N	0	0	0			
36485	132221	5 29 27.0	0 19 12	6.86	-0.16	B2V STG n	C	-1.88	-2.00	-3.88	19700	0.24	0.53	0.50	Y	47	1	0			$\delta$ Ori
36549	112888	5 30 3.3	2 3 27	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N	0	0	0			
36605	132238	5 30 16.8	0 44 51	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N	0	0	0			
36629	132244	5 30 28.7	-4 36 2	7.69	0.03	B2V	C	-1.62	-2.00	-3.62	19700	0.81	1.80	0.50	Y	47	1	0			P 1044
36655	132249	5 30 39.9	-5 22 29	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.39	Y	0	0	0			
36645	112898	5 30 45.4	2 20 34	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.47	N	0	0	0			

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
36760	132267	5 31 29.1	0 30 34	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.45	Y		0	
36779	132269	5 31 31.3	-1 4 7	6.22	-0.17	B2.5V	C	-2.65	-1.90	-4.55	19200	(0.27)	(0.60)	0.52	Y		2	
36842	132279	5 31 57.6	-4 24 13	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.48	N		0	
36865	132282	5 32 3.9	-4 31 13	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.39)	0.31	Y		0	
36882	112914	5 32 4.4	9 27 27	4.40	-0.17	B0.5IV-V	D	-4.43	-2.55	-6.98	25600	0.33	0.73	0.50	Y	47	1	$\phi^1$ Ori
36883	132285	5 32 14.7	-4 25 28	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.45)	0.37	Y		0	
36917	132288	5 32 19.7	-5 36 11	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.35	Y		0	V372 Ori
36916	132292	5 32 24.9	-4 8 32	6.73	-0.05	B9IVpSi	C	-0.20	-0.46	-0.66	11400	(0.14)	(0.30)	0.23	Y		2	
36915	132293	5 32 27.5	0 50 51	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N		2	
36881	94671	5 32 27.6	10 12 31	5.60	0.12	B9IIpHg:Mn:	C	-0.78	-0.46	-1.24	11400	(0.11)	(0.24)	0.18	Y		0	
36895	112922	5 32 27.9	9 34 54	6.74	-0.13	B2IV-V	D	-2.09	-1.80	-3.89	18800	0.33	0.73	0.50	Y	47	1	
36938	132294	5 32 28.0	-4 47 52	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.67)	0.64	N		0	
245203	132294	5 32 28.7	9 39 56	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.41	Y		0	
36936	132296	5 32 30.3	-4 23 10	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.45	Y		0	
36894	112926	5 32 31.5	9 44 46	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.37	Y		0	
36959	132298	5 32 34.2	-6 2 28	5.67	-0.23	B1Vv	C	-3.64	-2.50	-6.14	24150	(0.12)	(0.26)	0.20	Y		2	
36960	132301	5 32 35.9	-6 2 2	4.78	-0.25	B0.5V	C	-4.00	-2.60	-6.60	25400	(0.12)	(0.26)	0.20	Y		2	
36958	132302	5 32 36.5	-4 45 49	8.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.28)	(0.61)	0.56	Y		0	KX Ori
36981	132303	5 32 38.5	-5 14 10	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.50)	0.42	Y		0	
36954	132305	5 32 39.9	0 46 1	6.97	-0.11	B3V	C	-2.32	-1.80	-4.12	18700	(0.31)	(0.68)	0.63	Y		2	
36983	132306	5 32 40.7	-5 54 2	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.48	N		0	LP Ori
36982	132308	5 32 42.5	-5 29 47	8.45	0.10	B1.5Vp	A	-2.80	-2.20	-5.00	21800	1.05	2.33	1.10	Y	0	1	
37000	132311	5 32 44.2	-5 57 30	8.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.30)	(0.66)	0.63	Y		0	
36999	132313	5 32 47.0	-5 51 30	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.48	N		0	
37025	132315	5 32 49.0	-6 3 51	8.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.29)	(0.64)	0.61	Y		0	
37017	132317	5 32 53.3	-4 31 31	6.57	-0.13	B2IV STG He	C	-2.26	-1.60	-3.86	18000	0.33	0.73	0.50	Y	47	1	P 1933
37016	132319	5 32 53.8	-4 27 22	6.24	-0.15	B2.5V	C	-2.65	-1.90	-4.55	19200	(0.27)	(0.60)	0.53	Y		2	
37018	132320	5 32 55.1	-4 52 11	4.59	-0.19	B1V	C	-3.64	-2.50	-6.14	24150	(0.10)	(0.22)	0.17	Y		2	42 Ori
37042	132322	5 32 58.9	-5 26 52	6.40	-0.11	B0.5Vp	C	-2.61	-2.60	-5.21	25400	0.51	1.13	0.50	Y	47	1	$\theta^2$ Ori
37040	132325	5 33 2.4	-4 23 44	6.30	-0.14	B2IV	C	-2.50	-1.60	-4.10	18000	0.30	0.67	0.50	Y	47	1	$\nu$ Ori
37061	132328	5 33 3.7	-5 17 55	6.80	0.27	B0.5V	C	-3.35	-2.60	-5.95	25400	1.65	3.66	0.50	Y	47	1	V361 Ori
37062	132329	5 33 4.0	-5 27 8	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.61)	0.56	N		0	V359 Ori
37058	132331	5 33 5.2	-4 52 7	7.25	-0.09	B2Vp STG n	C	-1.70	-2.00	-3.70	19700	0.45	1.00	0.50	Y	47	1	
37035	112941	5 33 13.4	9 30 3	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.38	Y		0	
37076	132337	5 33 15.4	-1 1 5	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.37	Y		0	
37051	112942	5 33 18.9	9 48 4	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.40	N		0	
245310	77308	5 33 23.5	21 9 21	9.10	...	B	...	...	...	...	...	...	...	...	...	...	0	MWC 503
37112	132342	5 33 30.7	0 48 39	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.37	Y		0	
37131	132344	5 33 32.8	-6 18 20	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.35	Y		0	
37129	132345	5 33 37.6	-4 27 22	7.18	-0.14	B2Vp	C	-1.62	-2.00	-3.62	19700	0.30	0.67	0.50	Y	47	1	P 2314
37128	132346	5 33 40.5	-1 13 56	1.70	-0.19	B0Iae	C	-6.20	-2.75	-8.95	28600	(0.26)	(0.59)	0.50	Y		2	$\epsilon$ Ori
37149	132350	5 33 46.0	-1 39 57	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.47	N		0	
37150	132351	5 33 47.9	-5 40 42	6.54	-0.21	B2V	C	-2.05	-2.00	-4.05	19700	0.09	0.20	0.50	Y	47	1	P 2366
37187	132356	5 34 4.5	-1 3 29	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N		0	
37210	132357	5 34 4.7	-6 29 1	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.41)	0.32	Y		0	
37209	132359	5 34 9.0	-6 5 41	5.72	-0.22	B1V	C	-3.64	-2.50	-6.14	24150	(0.30)	(0.67)	0.65	Y		2	
37235	132364	5 34 24.4	0 43 54	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
37202	77336	5 34 39.3	21 6 50	3	-0.19	B4IIIpe	C	-2.84	-1.40	-4.24	16700	(0.08)	(0.17)	0.13	Y		2	ζ Tau
37272	132369	5 34 42.7	-1 41 49	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.44	N	0	0	
37303	132375	5 35 0.6	-5 58 2	6.08	-0.21	B2V	A	-2.50	-0.00	-4.50	19700	(0.09)	(0.20)	0.50	Y	0	1	
37321	132376	5 35 2.7	-1 27 2	7.09	-0.08	B3/4V	D	-1.99	-1.70	-3.69	17800	(0.29)	(0.65)	0.57	Y	47	2	
37334	132378	5 35 8.7	-4 57 46	7.19	-0.17	B1.5V	C	-1.55	-2.20	-3.75	21800	(0.24)	(0.53)	0.50	Y	47	1	
37332	132382	5 35 13.0	0 48 24	8.60	...	B8V	A	0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.47	N	0	0	
37373	132386	5 35 24.9	-6 45 2	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.40	N	0	0	
37356	132387	5 35 25.3	-4 50 32	6.18	-0.04	B2IV	C	-2.92	-1.60	-4.52	18000	(0.60)	(1.33)	0.50	Y	47	1	
37397	132390	5 35 41.4	-1 11 50	6.85	-0.16	B2V	C	-1.89	-2.00	-3.89	19700	(0.24)	(0.53)	0.50	Y	47	1	
-2 1323	132400	5 36 4.0	-2 35 57	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.46	N	0	0	
-2 1324	132401	5 36 5.6	-2 34 51	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.40	N	0	0	
37470	132402	5 36 8.1	-6 11 29	0.00	0.00	B8Vp(Si)	D	-0.02	-0.70	-0.72	12200	(0.01)	(0.01)	0.01	Y	4	4	P 2711
37481	132405	5 36 11.8	-6 36 4	5.95	-0.24	B1.5IV	C	-2.58	-1.80	-4.38	20000	(0.03)	(0.07)	0.50	Y	47	1	
37525	132412	5 36 30.8	-2 40 34	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.42	Y	0	0	
37526	132414	5 36 34.7	-5 13 16	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.36)	0.28	Y	0	0	
37524	132416	5 36 34.8	-2 1 44	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.48	N	0	0	
37635	132425	5 37 8.5	-9 43 58	6.50	-0.10	B7V	C	-0.32	-1.10	-1.42	12500	(0.13)	(0.29)	0.22	Y	2	2	
-2 1333	132428	5 37 25.0	-1 57 9	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.38	Y	0	0	
37674	132436	5 37 41.5	-1 29 17	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.41	Y	0	0	
37686	132437	5 37 42.2	-2 32 25	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.48	N	0	0	
37699	132438	5 37 49.2	-2 27 40	9.00	...	B6V	A	-1.00	-1.30	-2.30	15300	(0.37)	(0.83)	0.84	N	0	0	
37744	132441	5 38 6.9	-2 51 1	6.22	-0.21	B1.5V	C	-2.40	-2.20	-4.60	21800	(0.12)	(0.27)	0.50	Y	47	1	V901 Ori
37776	132446	5 38 24.3	-1 31 55	6.99	-0.15	B2IV	C	-1.78	-1.60	-3.38	18000	(0.27)	(0.60)	0.50	Y	47	0	
37886	132460	5 39 1.7	-2 16 58	7.82	0.10	B1.5V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.48	N	0	0	
37903	132464	5 39 7.3	-2 16 58	8.70	...	B9V	C	-1.73	-2.20	-3.93	21800	(1.05)	(2.33)	0.50	Y	47	1	NGC 2023
37927	132469	5 39 22.3	-2 49 20	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.42	N	0	0	
38366	113108	5 42 48.0	9 17 52	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.43	N	0	0	
38563	113125	5 44 9.6	0 3 34	9.40	...	B6V	A	-1.00	-1.30	-2.30	15300	(0.44)	(0.97)	0.98	N	0	0	
38771	132542	5 45 23.0	-9 41 9	2.05	-0.18	B0.5Iae	C	-6.66	-2.00	-8.66	23100	(0.21)	(0.47)	0.50	Y	47	1	κ Ori
39033	113182	5 47 24.5	0 8 23	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.40	N	0	0	
39291	132591	5 48 57.1	-7 31 48	5.35	-0.22	B2IV-V	D	-3.21	-1.80	-5.01	18800	(0.06)	(0.13)	0.50	Y	47	1	55 Ori
39285	77654	5 49 24.3	20 41 8	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y	0	0	
39286	94942	5 49 25.6	19 51 25	6.06	0.54	B8III+G2IIIe	D	-1.16	-0.72	-1.88	12250	(0.16)	(0.35)	0.26	Y	2	2	
39376	132599	5 49 32.1	-7 19 17	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.43)	0.34	Y	0	0	
39844	249368	5 49 56.6	-66 54 49	5.11	-0.14	B6V	C	-0.66	-1.20	-1.86	14300	(0.05)	(0.11)	0.08	Y	2	2	ε Dor
39417	77680	5 50 20.6	20 17 22	6.71	-0.07	B9V	D	0.36	-0.50	-0.14	11200	(0.11)	(0.24)	0.21	Y	2	2	
39647	132622	5 51 14.6	-5 42 50	7.09	-0.01	B9V	D	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y	2	2	
39777	132635	5 52 5.7	-4 4 21	6.56	-0.19	B1.5V	C	-2.12	-2.20	-4.32	21800	(0.18)	(0.40)	0.50	Y	47	1	
39773	113267	5 52 14.9	5 51 10	6.80	0.00	B9V	D	0.36	-0.50	-0.14	11200	(0.11)	(0.25)	0.18	Y	2	2	
40111	77775	5 54 53.4	25 56 59	4.82	-0.06	B1Ib	C	-5.80	-1.70	-7.50	20260	(0.48)	(1.07)	1.07	Y	0	1	139 Tau
40681	95117	5 58 11.5	16 59 28	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y	0	0	
40893	58692	5 59 52.5	31 3 15	8.90	0.16	B0IV	C	-4.50	-2.90	-7.40	30300	(1.38)	(3.06)	2.54	N	0	1	
41040	95166	6 0 29.7	19 41 36	5.14	-0.12	B8V	C	-0.02	-0.70	-0.72	12200	(0.06)	(0.14)	0.10	Y	4	4	64 Ori
41117	77911	6 0 57.0	20 8 29	4.63	0.28	B2Ia	C	-7.65	-1.35	-9.00	18000	(1.38)	(3.06)	1.51	Y	45	1	χ <sup>2</sup> Ori
41335	132793	6 1 47.6	-6 42 19	5.20	-0.06	B2Ve+n	C	-2.50	-2.00	-4.50	19700	(0.54)	(1.20)	0.27	Y	0	1	
41382	132801	6 2 5.6	-6 20 33	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.51	N	0	0	
41534	196459	6 2 28.6	-32 10 12	5.65	-0.19	B2.5V	C	-2.65	-1.90	-4.55	19200	(0.21)	(0.47)	0.41	Y	2	2	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
41419	77952	6 2 59.0	23 31 11	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
41455	77961	6 3 21.0	27 3 42	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.60)	0.45	Y		0	
41583	132825	6 3 22.0	-6 20 21	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.43	N		0	
41883	196493	6 4 25.6	-31 39 51	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.50	N		0	
42400	78077	6 8 23.9	20 55 3	6.84	0.18	B5II	C	-5.02	-1.30	-6.32	16300	0.96	2.13	1.51	Y	45	1	
42748	171361	6 9 28.6	-21 27 32	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.57)	0.49	N		0	
43078	78145	6 12 14.3	22 19 4	8.78	0.35	B0IV	C	-4.07	-2.90	-6.97	30300	1.95	4.33	1.51	Y	45	1	
254346	78178	6 13 56.4	22 12 50	9.67	0.46	B2.5III	C	-3.55	-1.55	-5.10	17600	2.22	4.93	1.55	Y	0	1	
254577	78193	6 14 53.1	22 25 45	9.08	0.82	B0.5III-III	C	-5.09	-2.50	-7.59	25900	3.27	7.26	1.51	Y	45	1	
43582	78194	6 14 58.8	22 40 42	9.12	0.81	B0IIIIn	C	-5.11	-2.90	-8.01	30300	3.33	7.39	1.51	Y	45	1	
43703	78205	6 15 37.3	23 1 44	8.62	0.42	B1IV:pne	C	-4.32	-2.00	-6.32	21100	2.04	4.53	1.51	Y	45	1	
43753	78211	6 15 57.7	23 1 20	7.90	0.30	B0.5III-III	C	-4.68	-2.50	-7.18	25900	1.68	3.73	1.51	Y	45	1	
44179	151362	6 17 37.0	-10 36 52	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.64)	0.51	N		0	
44743	151428	6 20 29.8	-17 55 47	1.98	-0.25	B1II-III	C	-4.50	-2.00	-6.50	21100	0.12	0.27	0.20	Y	0	1	$\beta$ CMa
256856	95650	6 22 19.7	14 54 7	8.80	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.73)	(1.61)	1.20	N		0	
257473	95701	6 24 40.5	18 17 42	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.65)	0.49	N		0	
45719	234506	6 25 0.1	-52 37 20	8.10	...	B9V	A	0.02	-0.70	-0.72	12200	(0.18)	(0.39)	0.33	Y		0	
45515	133280	6 25 14.7	-2 37 39	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.39	Y		0	
45530	113926	6 25 34.1	5 18 17	7.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.30)	0.22	Y		0	
45803	133330	6 26 58.7	-2 49 35	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.48	N		0	
46212	234529	6 27 49.9	-55 52 60	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.33	Y		0	AX Mon
45910	113974	6 27 52.4	5 54 8	6.59	0.33	B2IIp+Shell	C	-3.92	-1.60	-5.52	18000	(0.15)	(0.34)	0.25	Y		0	
46005	113984	6 28 24.0	9 58 34	7.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.42)	0.31	Y		0	
259012	113996	6 28 54.1	4 52 51	9.00	...	B4V	D	-1.66	-1.60	-3.26	16900	0.62	1.38	1.02	N		3	
46106	114001	6 28 58.8	5 3 48	7.93	0.15	B0V	C	-4.32	-3.00	-7.32	29600	1.35	3.00	1.51	Y	48	1	NGC 2244
259105	114008	6 29 12.5	4 58 10	9.20	...	B4V	D	-1.66	-1.60	-3.26	16900	0.67	1.48	1.09	N		3	
46179	114013	6 29 26.4	6 4 22	6.69	-0.04	B9V	C	0.36	-0.50	-0.14	11200	(0.11)	(0.24)	0.18	Y		2	
46328	171895	6 29 46.3	-23 22 52	4.33	-0.24	B1III	C	-4.30	-2.00	-6.30	21100	0.06	0.13	0.52	Y	0	1	$\xi^1$ CMa
259440	114036	6 30 18.7	5 50 19	8.70	...	B0V	A	-4.30	-3.00	-7.30	29600	(1.31)	(2.91)	2.18	N		0	
259431	95823	6 30 19.4	10 21 38	8.80	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.73)	(1.62)	1.20	N		0	
259697	114053	6 31 4.7	4 48 17	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
46469	114055	6 31 8.6	5 31 11	8.50	...	B2V	C	-2.50	-2.00	-4.50	19700	0.70	1.56	1.15	Y		3	
46583	171935	6 31 12.0	-23 42 49	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.38	Y		0	
46484	114058	6 31 15.2	4 42 7	7.74	0.36	B1V	C	-3.20	-2.50	-5.70	24150	1.86	4.13	0.65	Y	0	1	
259865	114067	6 31 34.4	4 46 35	8.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.45)	(1.01)	0.74	N		0	
259991	114083	6 32 2.6	8 6 59	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
260302	114105	6 33 2.4	8 1 37	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
46932	171988	6 33 6.5	-20 21 3	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.36)	0.27	Y		0	
46846	114109	6 33 12.8	5 53 3	8.80	...	B3Vn	D	-2.32	-1.80	-4.12	18700	0.73	1.63	1.20	N		3	
46867	114112	6 33 15.2	5 21 4	8.30	0.22	B0.5III-IV	C	-4.10	-2.50	-6.60	25900	1.50	3.33	1.51	Y	48	1	
46868	114113	6 33 17.2	5 20 58	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
46885	114115	6 33 21.1	4 32 23	6.55	-0.06	B9III	C	-0.78	-0.46	-1.24	11400	(0.17)	(0.37)	0.27	Y		2	
46883	95893	6 33 23.9	10 19 37	7.80	0.41	B1IVnnK	C	-3.50	-2.00	-5.50	21100	2.01	4.46	0.72	Y	46	1	
260537	114122	6 33 49.5	7 45 12	8.80	...	B5V	D	-1.00	-1.30	-2.30	15300	0.45	1.00	0.74	N		3	
47032	114129	6 34 7.4	4 44 14	8.83	0.45	B0III	C	-4.32	-2.90	-7.22	30300	2.25	4.99	1.51	Y	48	1	
260672	114130	6 34 11.1	5 27 10	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
47088	114140	6 34 29.7	6 6 9	7.58	-0.03	B1III	C	-4.00	-2.00	-6.00	21100	0.69	1.53	1.51	Y	48	1	
47104	95913	6 34 50.1	18 26 44	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.43)	0.32	Y		0	
47370	172043	6 35 15.1	-20 32 35	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.58)	0.49	N		0	
47292	114174	6 35 29.8	7 11 34	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
47314	114177	6 35 38.0	6 2 3	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
47417	114192	6 36 6.2	6 56 50	6.97	0.01	B0IV	C	-4.86	-2.90	-7.76	30300	0.93	2.06	1.51	Y	48	1	
47430	114195	6 36 11.2	5 43 52	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y	0	3	
47469	114204	6 36 26.2	9 41 30	7.80	...	B5V	D	-1.00	-1.30	-2.30	15300	0.30	0.67	0.50	Y	0	3	
261490	114221	6 36 50.8	8 23 49	8.60	...	B3V	D	-2.32	-1.80	-4.12	18700	0.68	1.50	1.12	N	3		
47732	114241	6 37 43.4	9 51 55	8.11	-0.12	B1.5IV+B2	D	-3.17	-1.80	-4.97	20000	0.39	0.87	1.51	N	48	1	V641 Mon
47754	95986	6 37 50.7	10 26 22	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.61)	0.45	N		0	
47756	114244	6 37 50.8	6 25 7	6.50	-0.15	B9V	C	0.36	-0.50	-0.14	11200	(0.10)	(0.22)	0.16	Y		4	
47755	114246	6 37 53.2	9 50 8	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
261811	114247	6 37 54.3	8 32 52	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N		0	
47777	114250	6 37 57.3	9 42 13	7.94	-0.16	B2.5IV:He	C	-3.13	-1.55	-4.68	17600	0.18	0.40	1.51	N	48	1	NGC 2264
261810	114252	6 37 58.1	9 48 53	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.47	N		0	
261903	114261	6 38 18.2	9 30 16	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	Y		3	
47887	114264	6 38 24.9	9 30 49	7.14	...	B2III:	C	-3.60	-1.60	-5.20	18000	0.18	0.40	1.30	N		3	
262013	114267	6 38 28.1	9 38 43	9.00	...	B5Vn	D	-1.00	-1.30	-2.30	15300	0.48	1.07	0.80	N		3	
262042	114271	6 38 34.3	9 15 43	8.98	0.09	B2V	C	-2.90	-2.00	-4.90	19700	0.99	2.20	1.51	N	48	1	
47934	114273	6 38 37.0	9 46 46	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
47961	114274	6 38 42.1	9 54 10	7.47	-0.14	B2V	C	-2.10	-2.00	-4.10	19700	0.30	0.67	0.71	Y	46	1	W 212
48055	114286	6 39 5.0	9 33 26	8.60	...	B8V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
48537	114337	6 41 28.6	6 14 45	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.39	Y		0	
48829	133639	6 42 41.2	-2 2 34	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
48785	114367	6 42 42.0	5 53 33	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N		0	
48999	151892	6 43 27.3	-17 7 24	6.94	-0.07	B9V	D	0.36	-0.50	-0.14	11200	(0.12)	(0.27)	0.20	Y		2	
48955	114385	6 43 38.9	5 46 54	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.48	N		0	
263775	114401	6 44 12.4	5 39 26	9.50	...	B3V	D	-2.32	-1.80	-4.12	18700	0.91	2.01	1.52	N	3		
49246	114418	6 45 5.6	6 21 11	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
49330	114432	6 45 22.6	0 49 56	8.88	...	B0V:pnne	D	-4.40	-3.00	-7.40	29600	1.68	3.73	2.10	Y		3	
289186	114455	6 46 8.3	1 39 58	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	Y		0	
49567	114465	6 46 28.8	1 3 35	6.14	-0.14	B3II-III	C	-4.00	-1.50	-5.50	17100	0.12	0.27	1.01	Y	0	1	
289229	114470	6 46 49.5	0 47 31	9.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.51)	(1.13)	0.83	N		0	
49715	133726	6 47 5.9	-6 32 17	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N		0	
49711	114484	6 47 24.9	6 18 54	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.39	Y		0	
50138	133781	6 49 7.6	-6 54 22	6.67	0.01	B8Ve	D	-0.02	-0.70	-0.72	12200	(0.13)	(0.28)	0.21	Y		2	MWC 158
50251	133799	6 49 44.8	-5 35 3	7.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.35)	0.26	Y		0	
50252	133802	6 49 47.1	-6 24 15	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0	
-5 1854	133827	6 50 45.9	-5 33 15	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
50646	172511	6 51 8.6	-24 6 16	7.70	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.44)	(0.97)	0.83	Y		0	
50680	172512	6 51 10.8	-24 3 13	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.47	N		0	
50740	172519	6 51 22.9	-24 2 55	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.43	N		0	
50707	172520	6 51 23.1	-20 9 40	4.83	-0.21	B1III	C	-4.30	-2.00	-6.30	21100	0.15	0.33	0.63	Y	0	1	15 CMA
-24 4556	172522	6 51 28.9	-24 21 12	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.70)	0.56	N		0	
-23 4550	172533	6 51 54.0	-23 38 34	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.86)	0.70	N		0	
51013	172558	6 52 36.7	-24 11 28	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.47	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
51036	172562	6 52 40.2	-24 15 4	8.40	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.36)	(0.80)	0.64	Y		0	
50984	152094	6 52 42.0	-11 42 21	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
50981	133896	6 52 43.2	-8 26 3	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y		0	
51079	133902	6 53 7.4	-8 21 8	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
51176	172575	6 53 19.8	-24 17 46	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.78)	0.62	N		0	
51196	152119	6 53 39.2	-11 28 25	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
51223	133915	6 53 47.1	-8 32 24	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
51379	133931	6 54 21.1	-8 56 56	8.80	...	B9V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
51426	152143	6 54 34.1	-10 55 22	8.70	...	B8V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
51477	133941	6 54 45.4	-8 28 29	8.10	-0.08	B3IIIn:e?	C	-3.00	-1.50	-4.50	17100	0.36	0.80	1.41	N	0	1	VAR
51479	152147	6 54 45.9	-10 12 46	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.45	Y		0	
51511	133951	6 54 55.9	-5 21 6	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.48	N		0	
51537	133952	6 54 57.8	-7 12 51	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.48	N		0	
51542	152159	6 55 0.2	-11 3 0	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
51541	152160	6 55 0.2	-10 52 40	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.28	Y		0	
51569	133959	6 55 11.9	-5 23 11	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
51502	96325	6 55 16.4	14 17 49	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.32)	0.24	Y		0	
51593	78939	6 56 2.9	29 20 33	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.46	N		0	
51913	133984	6 56 24.1	-9 16 16	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
52300	234813	6 56 29.3	-55 35 57	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.12)	(0.28)	0.21	Y		0	
51961	152196	6 56 39.0	-10 48 46	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
51978	152197	6 56 45.2	-10 42 52	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.35	Y		0	
52012	133998	6 56 55.8	-7 22 48	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		0	
52113	134006	6 57 11.4	-9 39 7	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
52356	172706	6 57 45.7	-28 19 44	6.97	-0.18	B3III	C	-3.00	-1.50	-4.50	17100	0.06	0.13	0.96	Y	0	1	
51637	14055	6 57 57.7	64 1 9	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.49	N		0	
52463	172727	6 58 12.5	-27 43 44	8.50	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.63)	(1.39)	1.48	Y		0	
267822	78978	6 58 19.5	29 18 41	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.48	N		0	
52618	172754	6 58 46.4	-27 52 46	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.42	N		0	
52731	172772	6 59 12.3	-27 36 54	8.50	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.54)	(1.20)	1.14	Y		0	
53048	234852	6 59 15.7	-56 50 7	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.40)	0.32	Y		0	
52849	172796	6 59 42.0	-23 23 10	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.55)	0.41	Y		0	
-28 3844	172821	7 0 21.0	-28 12 29	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.43)	0.32	Y	0	1	
52942	152277	7 0 21.9	-11 22 46	8.12	0.15	B2Vn	C	-2.50	-2.00	-4.50	19700	1.17	2.60	0.78	Y		0	
53010	152287	7 0 41.1	-11 2 34	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
53035	152288	7 0 46.7	-11 7 29	8.20	...	dB2	D	-2.50	-2.00	-4.50	19700	0.63	1.39	1.03	Y		3	
53138	172839	7 0 56.1	-23 45 32	3.04	-0.09	B3Ia	C	-6.31	-1.15	-7.46	16300	0.15	0.33	0.69	Y	51	1	$\sigma^2$ CMa
53214	172848	7 1 8.4	-27 35 45	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.49	N		0	
53179	152302	7 1 22.6	-11 28 36	9.33	1.22	Bep	...	...	...	...	...	...	...	...	...	...	4	
53240	152308	7 1 35.1	-10 2 55	6.44	-0.08	B9IIIIn	C	-0.78	-0.46	-1.24	11400	(0.16)	(0.35)	0.26	Y		4	
-24 4783	172870	7 1 38.5	-24 5 51	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.67)	0.51	N		0	
53342	172873	7 1 40.2	-24 14 8	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.37	Y		0	
53303	152311	7 1 42.9	-12 12 46	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.35	Y		0	
53339	152316	7 1 55.1	-11 19 33	9.10	...	B5V	D	-1.00	-1.30	-2.30	15300	0.51	1.13	0.83	N		3	MWC 166
53367	152320	7 2 3.6	-10 22 44	6.97	...	B0Ive	C	-5.00	-2.90	-7.90	30300	2.22	4.93	0.90	Y		3	
53456	152324	7 2 17.6	-11 26 53	7.40	...	B5V	D	-1.00	-1.30	-2.30	15300	0.69	1.53	0.30	Y		3	
53457	152326	7 2 18.4	-11 54 34	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ 10 <sup>21</sup> cm <sup>-2</sup>	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
53623	152349	7 2 57.0	-12 14 57	7.93	-0.06	B2V	C	-2.50	-2.00	-4.50	19700	0.54	1.20	0.95	Y	0	1	
53668	152351	7 3 1.2	-16 26 37	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N	0	0	
53691	152358	7 3 16.5	-11 4 49	9.37	-0.01	B2IV	A	3.10	-1.60	-4.70	18000	0.69	1.53	2.27	N	0	1	
53755	152363	7 3 28.0	-10 34 59	6.48	...	B0V:	D	4.40	-3.00	-7.40	29600	0.75	1.67	1.00	Y	0	3	
53931	152388	7 4 9.8	-11 27 35	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N	0	0	
54224	172989	7 4 58.4	-26 34 41	6.60	-0.18	B2IV-V	D	-2.78	-1.80	-4.58	18800	0.18	0.40	0.69	Y	51	1	
54258	172994	7 5 2.6	-26 19 55	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.67)	0.51	N	0	0	
54307	152422	7 5 25.6	-16 37 38	9.20	...	B6Ve	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N	0	0	
54575	152458	7 6 31.9	-15 51 11	8.47	...	B6Ve	D	-0.70	-1.20	-1.90	14300	1.26	2.80	0.40	Y	0	3	
54764	152477	7 7 18.1	-16 9 10	6.02	0.06	B1II	C	-5.10	-2.00	-7.10	21100	0.90	2.00	1.11	Y	0	1	VAR
55420	152554	7 10 5.5	-10 54 14	8.60	0.81	B3Ja	C	-7.20	-1.15	-8.35	16300	2.85	6.33	3.89	Y	0	1	
55901	152603	7 12 11.2	-10 12 18	8.40	...	B5V	D	-1.00	-1.30	-2.30	15300	0.39	0.86	0.63	Y	0	3	
56039	152613	7 12 39.5	-11 46 57	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	0	0	
56139	173282	7 12 46.9	-26 41 5	3.82	-0.18	B2IV-Ve	D	-3.00	-1.80	-4.80	18800	0.18	0.40	0.21	Y	0	1	28 CMa
56373	173317	7 13 36.5	-26 46 4	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N	0	0	
56654	173378	7 15 5.1	-24 15 40	8.40	-0.18	B4V	C	-1.66	-1.60	-3.26	16900	(0.30)	(0.66)	0.50	Y	0	4	
56908	173401	7 15 31.8	-24 43 30	8.80	...	B8V	A	-1.00	-1.30	-2.30	15300	(0.38)	(0.85)	0.64	Y	0	0	
57120	197827	7 16 37.0	-30 42 23	6.90	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.35)	(0.77)	0.60	Y	0	0	
57090	173450	7 16 45.4	-24 6 58	9.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.53)	(1.17)	0.90	N	0	0	
57192	173464	7 17 8.3	-24 51 45	6.81	-0.18	B3III	C	-4.15	-1.50	-5.65	17100	0.06	0.13	1.51	Y	52	1	NGC 2362
-24 5190	173469	7 17 16.0	-24 35 39	9.30	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.30)	(0.66)	0.49	N	0	0	
57347	173481	7 17 47.7	-24 54 11	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N	0	0	
57393	173491	7 18 0.2	-23 59 29	9.39	-0.01	B2Vnne	C	-2.50	-2.00	-4.50	19700	0.75	1.67	1.69	N	0	1	MWC 556
57503	173506	7 18 31.4	-25 4 46	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.48)	(1.06)	0.80	N	0	0	
57432	134551	7 18 36.6	-5 8 27	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N	0	0	
-24 5234	173512	7 18 41.2	-24 28 37	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.51)	(1.14)	0.87	N	0	0	
57103	26312	7 18 47.7	55 22 41	5.45	...	B8V	C	-0.02	-0.70	-0.72	12200	(0.05)	(0.12)	0.09	Y	0	2	19 Lyn
57616	173528	7 19 0.3	-26 1 12	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N	0	0	
57821	152776	7 20 1.4	-18 55 12	4.96	-0.04	B7IV	C	-1.00	-1.07	-2.07	13200	(0.09)	(0.20)	0.15	Y	2	0	
57909	152785	7 20 21.3	-18 56 1	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N	0	0	
58011	173581	7 20 40.0	-25 54 50	7.21	-0.09	B1Ve	C	-3.20	-2.50	-5.70	24150	0.51	1.13	0.95	Y	0	1	MWC 175
-25 4447	173595	7 20 59.8	-25 26 2	8.90	...	B	...	...	...	...	...	...	...	...	...	0	0	
58197	173625	7 21 30.2	-25 17 20	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N	0	0	
58285	197939	7 21 38.8	-31 12 6	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y	0	0	
-26 4296	173634	7 21 43.9	-26 8 52	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.86)	0.64	N	0	0	
58282	173639	7 21 52.6	-25 25 43	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N	0	0	
-29 4323	173645	7 21 59.1	-29 33 34	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.71)	0.53	N	0	0	
58350	173651	7 22 7.0	-29 12 16	2.44	-0.09	B5Ia	C	-7.00	-0.82	-7.82	13700	(0.38)	(0.85)	0.65	Y	0	4	$\eta$ CMa
58377	173654	7 22 8.6	-28 43 45	6.81	-0.17	B5IV	C	-1.80	-1.30	-3.10	16300	(0.28)	(0.62)	0.46	Y	2	0	
58615	173689	7 23 10.4	-29 8 7	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.73)	0.55	N	0	0	
58644	134662	7 23 43.5	-8 59 45	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.62)	(0.62)	0.47	N	0	0	
58624	96906	7 24 11.2	16 12 4	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.62)	0.56	N	0	0	
58729	96914	7 24 35.1	15 25 6	7.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.14)	(0.31)	0.24	Y	0	0	
59129	152919	7 25 55.5	-11 9 44	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y	0	0	
59767	152992	7 28 50.3	-10 10 38	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.75)	0.57	N	0	0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
59723	96986	7 28 56.6	10 10 50	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.37	Y		0	
60000	97003	7 30 5.9	10 40 53	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.45	Y		0	
60114	134821	7 30 18.5	-9 33 40	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
60945	153129	7 34 1.8	-17 4 47	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.61)	0.45	N		0	
61093	115719	7 35 5.7	2 2 30	6.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.11)	(0.25)	0.18	Y		0	
61258	153175	7 35 32.9	-17 18 24	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
61350	153182	7 35 56.2	-17 14 7	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.68)	0.51	N		0	
61680	115792	7 38 7.0	9 15 1	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.39	Y		0	
61822	153231	7 38 13.0	-17 45 10	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.33)	(0.74)	0.55	N		0	
61770	115804	7 38 30.1	5 42 39	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.52)	0.43	Y		0	
61954	153244	7 38 50.6	-14 44 24	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.68)	0.51	N		0	
61957	153246	7 38 54.9	-17 1 38	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.53)	0.39	Y		0	
62002	153248	7 38 58.5	-19 4 34	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
62001	153249	7 39 0.9	-18 52 34	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
62053	153252	7 39 10.9	-19 2 46	9.00	...	B9V	D	-2.20	-1.30	-3.50	16300	0.74	1.64	1.24	N		3	
62445	174364	7 40 53.0	-28 38 33	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	Y		0	
62640	174406	7 41 56.9	-28 18 38	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
63073	174484	7 43 54.2	-28 5 15	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.38	Y		0	
62979	115913	7 44 5.9	3 45 14	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
63444	174553	7 45 52.3	-24 8 3	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	Y		0	
64026	174656	7 48 47.0	-26 1 5	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
63975	116043	7 49 6.4	1 53 45	5.14	-0.12	B8II	C	-3.56	-0.72	-4.28	12250	(0.05)	(0.11)	0.08	Y		2	ζ CMi
64175	174681	7 49 37.0	-26 32 2	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
64455	174730	7 51 0.2	-26 17 1	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
64745	97378	7 53 3.1	10 34 37	7.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.25	Y		0	
65364	235626	7 54 31.5	-52 36 38	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.66	N		0	
65575	235635	7 55 30.4	-52 50 51	3.47	-0.18	B3IVp	C	-3.00	-1.50	-4.50	17100	(0.15)	(0.34)	0.25	Y		2	χ Car
65548	174897	7 56 13.2	-23 27 34	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.79)	0.59	N		0	
65818	219226	7 56 48.1	-49 6 30	4.50	...	B2Vn	D	-2.50	-2.00	-4.50	19700	0.18	0.40	0.20	Y		3	V Pup
65986	219248	7 57 46.6	-49 11 21	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.59)	0.45	N		0	
66022	219255	7 57 56.3	-48 58 56	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.59)	0.45	N		0	
66236	219285	7 58 53.4	-48 57 51	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.86)	0.70	N		0	
67215	175165	8 3 53.5	-24 1 36	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.37)	(0.81)	0.62	N		0	
67642	219432	8 5 18.6	-47 24 55	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.55)	0.41	Y		0	
67632	175233	8 5 53.8	-24 26 25	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.67	N		0	
67820	219449	8 6 8.5	-47 6 31	7.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.37)	0.27	Y		0	
68092	219488	8 7 18.5	-47 1 37	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.38)	0.28	Y		0	
68157	219492	8 7 37.9	-46 51 2	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.60)	0.45	N		0	
68395	219529	8 8 30.2	-47 40 11	8.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.33)	(0.74)	0.57	Y		0	
68365	198885	8 8 46.0	-34 50 10	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
68473	198900	8 9 17.8	-35 39 40	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
68555	219550	8 9 19.0	-46 45 56	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.46)	(1.03)	0.82	N		0	
68194	42232	8 9 51.2	48 25 56	6.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.10)	(0.22)	0.19	Y		0	
68504	116481	8 10 12.0	5 4 47	7.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.22	Y		0	
68164	14470	8 10 27.6	62 11 20	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.35)	0.36	Y		0	
68861	198940	8 11 1.0	-34 59 55	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
68946	219610	8 11 2.9	-47 23 0	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.46)	(1.03)	0.82	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_0$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
69891	235847	8 14 58.1	-57 6 52	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.48)	0.36	Y		0	
69890	235848	8 15 0.6	-56 58 15	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.68	N		0	
69930	219741	8 15 49.3	-43 27 45	9.10	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.77)	(1.70)	1.35	N		0	
69989	219747	8 16 10.0	-43 23 20	9.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.45)	(1.00)	0.75	N		0	
69868	80099	8 16 48.8	21 4 34	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.30	Y		0	
70307	219788	8 17 45.4	-41 51 1	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	
70583	219814	8 19 18.2	-43 26 47	8.60	...	B	...	...	...	...	...	...	...	...	...	...	...	...
70614	219816	8 19 26.3	-42 15 6	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
70715	219830	8 19 58.3	-42 40 32	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0	
70948	219857	8 21 14.4	-43 3 58	7.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.15)	(0.34)	0.25	Y		0	
71019	219864	8 21 41.6	-42 38 41	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		0	
71059	219870	8 21 55.7	-43 34 24	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.49)	(1.08)	0.81	N		0	
71123	219873	8 22 10.4	-42 23 32	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y		0	
71218	219881	8 22 43.3	-44 15 14	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.87)	0.64	N		0	
71302	219890	8 23 13.3	-42 36 21	5.98	...	B3V	C	-1.70	-1.80	-3.50	18700	0.06	0.13	0.30	Y		3	
-43 2550	219893	8 23 15.4	-44 8 6	11.30	...	B0V	A	-4.30	-3.00	-7.30	29600	(1.97)	(4.38)	5.32	N		0	
71336	219898	8 23 24.1	-43 12 4	8.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.55)	(1.21)	0.90	Y		0	
71459	219910	8 24 6.9	-41 59 19	5.30	...	B3V	C	-1.70	-1.80	-3.50	18700	0.14	0.32	0.24	Y		3	
71470	219911	8 24 17.2	-43 51 27	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
71508	219914	8 24 24.9	-42 41 52	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.49)	(1.09)	0.80	N		0	
71609	219923	8 24 55.2	-43 14 36	7.80	0.10	B0V	C	-3.80	-3.00	-6.80	29600	1.20	2.66	1.20	Y	0		
71627	219925	8 24 57.2	-42 42 24	9.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.46)	(1.01)	0.75	N		0	
71786	219952	8 25 50.0	-43 41 51	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N		0	
71946	175928	8 27 6.9	-27 36 24	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.48)	(1.06)	0.78	N		0	
72034	219978	8 27 8.9	-45 34 4	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.59)	0.45	N		0	
72067	219982	8 27 25.5	-43 59 34	5.90	...	B2Ven	C	-1.70	-2.00	-3.70	19700	(0.39)	(0.87)	0.65	N		0	
72089	219983	8 27 27.4	-45 23 23	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		3	
72088	219988	8 27 31.8	-44 43 1	10.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.51)	(1.13)	0.84	N		0	
72126	219991	8 27 38.0	-43 40 28	9.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.65)	(1.44)	1.07	N		0	
72127	219996	8 27 46.4	-44 33 25	4.99	-0.16	B2IV	C	-3.10	-1.60	-4.70	18000	0.24	0.53	0.37	Y	0		
72161	219999	8 27 53.3	-43 9 56	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0	
72179	220001	8 27 55.5	-43 55 52	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
72177	220004	8 28 3.9	-41 44 52	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
72178	220005	8 28 4.6	-41 45 5	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
72232	220007	8 28 7.5	-46 9 49	5.99	-0.15	B5III	C	-2.30	-1.30	-3.60	16300	(0.25)	(0.55)	0.41	Y		2	
72271	220016	8 28 24.6	-44 7 30	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N		0	
72350	220025	8 28 57.9	-44 34 5	6.37	...	B4IV	C	-1.80	-1.40	-3.20	16700	0.24	0.53	0.39	Y		3	
72423	220031	8 29 16.9	-43 0 0	10.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.46)	(1.02)	0.75	N		0	
72453	220034	8 29 30.5	-44 19 43	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.87)	0.64	N		0	
72501	220038	8 29 34.3	-49 0 59	9.80	...	B8V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.86)	0.65	N		0	
72537	220048	8 29 57.1	-45 36 53	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
72515	220049	8 29 57.1	-44 14 47	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
72466	176027	8 29 58.5	-27 19 23	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.45)	0.34	Y		0	
72535	220050	8 30 1.2	-41 51 47	7.70	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.29)	(0.65)	0.48	Y		0	
72554	220053	8 30 6.3	-45 57 23	8.18	0.37	B1III	C	-4.30	-2.00	-6.30	21100	1.89	4.20	1.31	Y	0	1	
72576	220055	8 30 7.6	-43 39 6	8.37	0.41	B2Ib-II	D	-4.70	-1.50	-6.20	18000	1.77	3.93	1.82	Y	55	1	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
72648	220063	8 30 35.9	-43 45 38	7.62	0.13	B2.5II-III	C	-4.67	-1.55	-6.22	17600	0.99	2.20	1.82	Y	55	1	
72754	220069	8 30 51.4	-49 25 50	6.84	0.19	B2IaepShell	C	-6.52	-1.35	-7.87	18000	(1.15)	(2.55)	2.77	Y		2	FY Vel
72734	220078	8 31 0.2	-44 7 37	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
72798	220086	8 31 21.9	-45 34 53	6.45	...	B5III	C	-2.20	-1.30	-3.50	16300	0.06	0.13	0.50	Y		3	
72836	220097	8 31 37.8	-42 54 22	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0	
72898	220104	8 31 53.1	-42 27 40	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
72918	220106	8 31 57.5	-43 16 39	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.37)	(0.81)	0.60	N		0	
72919	220107	8 32 1.1	-44 46 27	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0	
-44 2744	220109	8 32 5.4	-44 44 51	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
72997	220117	8 32 25.7	-44 22 20	7.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.28)	(0.63)	0.46	Y		0	
73009	220120	8 32 30.5	-44 37 49	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
73010	220121	8 32 30.7	-45 27 50	7.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.40)	0.29	Y		0	
73059	220126	8 32 47.6	-44 20 1	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.37)	(0.81)	0.60	N		0	
73076	220130	8 32 53.2	-44 15 55	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
-44 2762	220131	8 32 53.9	-44 15 50	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
73090	220133	8 32 58.1	-44 21 18	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0	
73186	220147	8 33 33.7	-44 7 24	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
73222	220149	8 33 36.4	-49 41 33	9.40	...	B	...	...	...	...	...	...	...	...	...	...	...	...
73202	220153	8 33 41.8	-43 6 53	10.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.53)	(1.18)	0.87	N		0	
73271	220156	8 33 52.5	-49 42 28	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.48)	(1.06)	0.81	N		0	
73303	220166	8 34 19.3	-44 13 19	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
73420	220176	8 34 53.5	-43 54 18	8.84	0.14	B0III	C	-3.78	-2.90	-6.68	30300	1.32	2.93	1.82	N	55	1	
73550	220193	8 35 35.4	-41 20 3	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
73589	220196	8 35 37.1	-47 1 24	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.59	N		0	
73568	220197	8 35 37.7	-45 1 54	8.33	0.31	B0.5III	C	-4.74	-2.50	-7.24	25900	1.77	3.93	1.82	Y	55	1	T Vel
73567	220198	8 35 40.5	-42 10 48	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
-44 2840	220214	8 36 17.7	-45 9 59	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
73774	220223	8 36 36.7	-44 7 15	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.37)	(0.81)	0.60	N		0	
-46 2761	220224	8 36 46.1	-46 36 2	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
73813	220225	8 36 47.6	-46 35 59	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
73811	220227	8 36 53.7	-42 16 12	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y		0	
73831	220228	8 36 53.7	-45 45 3	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.39	Y		0	
73868	220234	8 37 6.8	-43 34 55	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
73903	220235	8 37 18.8	-46 2 59	9.00	0.19	B1.5IV	C	-3.62	-1.80	-5.42	20000	1.32	2.93	1.82	N	55	1	
73986	220240	8 37 50.0	-42 18 33	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y		0	
73957	136172	8 38 26.1	-3 59 39	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.46	N		0	
74106	220251	8 38 28.9	-45 26 16	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
74319	220293	8 39 52.1	-44 48 44	6.69	-0.10	B3V	C	-2.32	-1.80	-4.12	18700	(0.33)	(0.74)	0.54	Y		2	
74371	220300	8 40 14.7	-45 13 51	5.20	0.23	B5Iab	C	-7.03	-0.82	-7.85	13700	0.93	2.06	1.82	Y	55	1	
74478	236194	8 40 28.0	-54 47 11	...	...	B9V	A	0.36	-0.50	-0.14	11200	...	...	...	...	...	...	...
74454	220315	8 40 42.6	-46 23 57	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0	
74528	220322	8 41 1.6	-45 22 28	8.44	0.16	B2Vn	C	-2.50	-2.00	-4.50	19700	1.20	2.66	0.89	Y	0	1	
74602	220338	8 41 24.6	-46 50 6	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
74677	220353	8 41 55.4	-45 55 12	8.62	0.22	B1III	C	-4.12	-2.00	-6.12	21100	1.44	3.20	1.82	Y	55	1	
74695	220354	8 41 57.1	-46 45 2	10.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.59)	(1.32)	0.98	N		0	
74711	220362	8 42 7.5	-46 37 2	7.12	0.08	B0.5V	C	-3.80	-2.60	-6.40	25400	1.08	2.40	0.93	Y	0	1	
74773	220368	8 42 30.3	-46 56 2	7.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.31)	(0.68)	0.50	Y		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	(19)	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)		
-8 2480	136253	8 43 29.9	-9 15 47	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.68	N		0			
74936	220399	8 43 31.6	-45 43 26	8.26	0.22	B3III	C	-3.00	-1.50	-4.50	17100	1.26	2.80	1.00	Y	0				
74968	220404	8 43 43.0	-46 30 13	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0			
75009	220412	8 44 2.6	-44 3 53	6.70	-0.09	B8IV/V	D	-0.31	-0.71	-1.02	12200	(0.14)	(0.32)	0.24	Y		2			
75026	220416	8 44 10.6	-46 6 39	8.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.55)	(1.22)	0.90	Y		0			
75062	220421	8 44 18.3	-43 34 3	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0			
75083	220430	8 44 30.0	-42 34 29	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0			
75126	220439	8 44 45.2	-42 22 56	7.09	-0.13	B4V	C	-1.66	-1.60	-3.26	16900	(0.30)	(0.66)	0.49	Y		2			
75127	220441	8 44 46.7	-42 36 22	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0			
75149	220442	8 44 48.4	-45 43 42	5.45	0.27	B4Ia	C	-7.08	-1.05	-8.13	15600	1.23	2.73	1.82	Y		1			
75241	220452	8 45 21.7	-44 53 26	6.59	-0.12	B4/5III/IV	D	-2.33	-1.35	-3.68	16500	(0.32)	(0.71)	0.52	Y		2			
75275	220469	8 45 38.6	-43 52 54	9.10	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.81)	(1.80)	1.32	N		0			
75309	220477	8 45 46.6	-46 15 59	7.84	0.02	B0V	C	-4.42	-3.00	-7.42	29600	0.96	2.13	1.82	Y		1			
75324	220484	8 45 59.4	-42 5 16	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y		0			
75446	220504	8 46 42.3	-42 12 53	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.32)	0.24	Y		0			
75477	220506	8 46 52.8	-42 18 51	10.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.42)	(0.94)	0.70	N		0			
75549	220517	8 47 16.9	-43 34 28	7.31	...	B3V	C	-1.70	-1.80	-3.50	18700	0.18	0.40	0.58	Y		3			
75607	220529	8 47 41.7	-41 22 39	9.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.54)	(1.20)	0.89	N		0			
75655	220538	8 47 57.7	-41 33 23	7.89	-0.03	B2III	C	-4.04	-1.60	-5.64	18000	0.63	1.40	1.82	Y		55			
75724	220543	8 48 16.4	-41 55 10	7.70	-0.07	B2III	C	-4.11	-1.60	-5.71	18000	0.51	1.13	1.82	Y		55			
75758	220550	8 48 30.9	-41 42 0	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0			
75821	220561	8 48 51.6	-46 20 29	5.10	-0.21	B0Ib	C	-6.38	-2.75	-9.13	28600	0.18	0.4	1.82	Y		55			
75860	220566	8 49 6.5	-43 33 49	7.59	...	B2IK	C	-6.30	-1.35	-7.65	18000	2.67	5.93	1.74	Y		3			
75850	220569	8 49 10.4	-41 45 33	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.71)	0.53	N		0			
75872	220570	8 49 12.5	-44 13 51	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0			
75871	220575	8 49 21.0	-41 28 24	8.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.42)	(0.92)	0.69	N		0			
75927	220577	8 49 29.0	-44 13 20	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0			
-41 3079	220579	8 49 36.9	-41 40 13	10.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.69)	(1.54)	1.15	N		0			
75925	220580	8 49 38.2	-41 40 8	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.48)	(1.07)	0.80	N		0		Hen 219	
75968	220585	8 49 50.9	-46 25 16	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0			
76031	220596	8 50 17.6	-43 49 14	8.99	0.50	B0.5IV	C	-4.65	-2.50	-7.15	25900	2.34	5.20	1.82	Y		55			
76306	220622	8 51 47.5	-45 6 10	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0			
76439	220646	8 52 40.0	-45 15 47	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.32	Y		0			
76566	220664	8 53 33.8	-44 50 59	6.25	...	B3IV	C	-1.70	-1.50	-3.20	17100	0.09	0.20	0.40	Y		3			
76589	220668	8 53 40.7	-46 41 56	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0			
76650	220670	8 54 4.6	-46 40 32	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0			
76649	220671	8 54 7.1	-46 8 58	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y		0			
76725	220674	8 54 30.3	-45 12 20	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0			
76898	220696	8 55 41.2	-44 4 18	7.39	...	B5Vn	C	-1.00	-1.30	-2.30	15300	0.03	0.07	0.50	Y		3			
77645	199917	9 0 47.8	-32 14 29	6.93	...	B9.5V	C	0.53	-0.30	0.23	10500	(0.11)	(0.24)	0.18	Y		2			
77922	199944	9 2 7.2	-37 56 2	9.30	...	B8V	C	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.62	N		0			
78316	98378	9 5 2.4	10 52 14	5.24	-0.11	B8IIpMn	A	-1.16	-0.72	-1.88	12250	(0.10)	(0.22)	0.18	Y		4		$\kappa$ Cnc	
79931	136728	9 14 14.3	-8 32 6	5.46	-0.09	B9III	C	-0.78	-0.46	-1.24	11400	(0.10)	(0.21)	0.17	Y		4		24 Hya	
80598	236839	9 17 12.2	-53 23 60	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0			
-53 2300	236845	9 17 39.8	-53 48 55	...	...	B3V	A	-2.32	-1.80	-4.12	18700	...	...	...	...		0			
-53 2333	236883	9 20 8.6	-53 21 37	...	...	B9V	A	0.36	-0.50	-0.14	11200	...	...	...	...		0			
83914	177833	9 38 40.4	-23 55 26	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.46)	0.42	Y		0			

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
83953	177840	9 38 60.0	-23 21 48	4.77	-0.12	B6Ve	C	-0.66	-1.20	-1.86	14300	(0.07)	(0.16)	0.12	Y		2	
85767	237434	9 50 34.9	-56 45 30	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.98)	0.72	N		0	
86008	237469	9 52 17.8	-57 22 53	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.57	N		0	
86117	237482	9 52 59.2	-56 55 59	9.22	0.33	B3III	C	-3.00	-1.50	-4.50	17100	1.59	3.53	1.34	Y	0	1	
86199	237497	9 53 26.6	-57 8 45	6.76	-0.14	B6V	C	-0.66	-1.20	-1.86	14300	(0.17)	(0.38)	0.28	Y		2	
86441	237521	9 55 5.7	-57 24 58	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.24	Y		0	
86889	221690	9 58 21.9	-44 11 32	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.46)	(1.01)	0.89	N		0	
87901	98967	10 5 42.6	12 12 45	1.35	-0.11	B7V	C	-0.32	-1.10	-1.42	12500	(0.01)	(0.03)	0.02	Y		2	$\alpha$ Leo
88674	250861	10 10 3.6	-60 35 14	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
-60 1769	250874	10 11 40.7	-60 30 40	...	...	B5V	A	-1.00	-1.30	-2.30	15300	...	...	...	...		0	
89096	250891	10 13 12.3	-60 29 33	9.10	...	B0V	A	-4.30	-3.00	-7.30	29600	(1.34)	(2.98)	2.58	N		0	
89140	237837	10 13 31.8	-57 36 15	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	
89201	237850	10 14 4.9	-57 7 31	7.84	0.71	B1Ia	C	-7.00	-1.70	-8.70	20260	2.79	6.19	2.57	Y	0	1	
89330	237861	10 14 52.7	-58 35 60	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
89359	237867	10 15 15.3	-57 50 41	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.98)	0.72	N		0	
89402	237879	10 15 41.3	-58 16 55	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
89430	237882	10 15 50.7	-58 30 40	9.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.51)	(1.13)	0.83	N		0	
89740	237922	10 17 54.7	-58 53 39	6.91	...	B3Vn	C	-1.70	-1.80	-3.50	18700	0.21	0.47	0.50	Y	3	0	
89802	237936	10 18 30.5	-57 24 22	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
-57 3075	237994	10 20 29.8	-58 1 28	9.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.38)	(0.84)	0.62	N		0	
90102	237999	10 20 46.6	-57 25 4	8.66	0.17	B2III	C	-3.70	-1.60	-5.30	18000	1.23	2.73	1.68	Y	0	1	
90187	238007	10 21 18.2	-57 44 39	8.68	0.30	B1Inne	C	-4.94	-2.00	-6.94	21100	1.62	3.60	2.51	N	56	1	Hen 408
90288	238024	10 22 6.0	-57 12 38	8.30	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.61)	(1.36)	1.00	Y	0	0	
90434	238045	10 23 9.2	-56 49 56	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y	0	0	
90553	238055	10 23 54.5	-58 9 19	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N		0	
90578	238057	10 24 9.0	-57 34 19	9.32	0.08	B0.5IV-V	D	-3.72	-2.55	-6.31	25600	1.08	2.40	2.51	N	56	1	
90615	238063	10 24 29.4	-57 3 44	8.21	0.25	B0.5II	C	-5.36	-2.50	-7.82	25900	1.53	3.40	2.51	Y	56	1	IC 2581
90766	238072	10 25 3.6	-57 21 6	7.06	0.47	B3Ia	C	-6.77	-1.15	-7.92	16300	1.83	4.06	2.51	Y	56	1	
90988	238103	10 26 57.9	-58 8 50	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
91053	238110	10 27 20.1	-58 54 54	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
91052	238113	10 27 26.0	-56 33 7	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N		0	
91198	238129	10 28 28.1	-58 45 47	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
91188	238130	10 28 28.3	-56 49 14	6.65	-0.13	B3III(e)	C	-3.00	-1.50	-4.50	17100	0.21	0.47	0.77	Y	0	1	
91316	118355	10 30 10.8	9 33 52	3.85	-0.14	B1Ib	C	-5.78	-1.70	-7.48	20260	(0.05)	(0.12)	0.09	Y	2	2	$\rho$ Leo
91477	238159	10 30 28.4	-58 17 16	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y	0	0	
91596	238175	10 31 15.9	-59 31 15	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
91619	238182	10 31 31.6	-57 55 55	6.15	0.34	B7Iae	C	-7.05	-2.00	-7.69	12000	1.20	2.66	2.51	Y	56	1	NGC 3293
91765	238200	10 32 26.7	-58 21 10	8.97	0.26	B2II	C	-4.47	-1.60	-6.07	18000	1.44	3.20	2.51	N	56	1	
91764	238201	10 32 33.6	-57 5 20	8.76	0.23	B1II	C	-4.65	-2.00	-6.65	21100	1.41	3.13	2.51	N	56	1	
91825	238208	10 32 52.3	-59 38 42	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
91943	238225	10 33 47.3	-57 56 0	6.71	0.07	B0.5Ib	C	-6.25	-2.00	-8.25	23100	0.96	2.13	2.51	Y	56	1	NGC 3293
92044	238238	10 34 21.2	-58 1 4	8.27	...	B0.5III	C	-4.90	-2.50	-7.40	25900	1.29	2.86	2.40	Y	3	3	
92060	238243	10 34 28.2	-57 40 57	8.56	0.37	B2Ib-II	D	-5.09	-1.50	-6.59	18000	1.65	3.66	2.51	Y	56	1	
92190	238270	10 35 27.9	-58 55 12	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
92274	238276	10 36 2.9	-59 46 20	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
92383	238289	10 36 40.2	-57 46 51	9.35	0.07	B0.5Vn	C	-3.70	-2.60	-6.30	25400	1.05	2.33	2.51	N	56	1	
92420	238302	10 37 2.6	-57 31 3	8.77	0.28	B1Ve	C	-3.20	-2.50	-5.70	24150	1.62	3.60	1.17	Y	0	1	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s (3)	DEC (1950) ° ' " (4)	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K (12)	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$ (14)	$R_{sun}$ kpc (15)	Volume Limited Flag (16)	Ass. Ref. (17)	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
92421	238303	10 37 2.8	-59 0 29	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0	
92467	251043	10 37 6.6	-64 14 15	6.99	0.03	B9Vn	C	0.36	-0.50	-0.14	11200	(0.12)	(0.27)	0.20	Y		2	
92451	251044	10 37 14.5	-60 4 48	8.99	-0.06	B1.5II-III	C	-4.50	-1.80	-6.30	20000	0.51	1.13	3.94	N	0	1	
92536	251050	10 37 36.9	-63 51 3	6.33	-0.07	B8IV/V	D	-0.31	-0.71	-1.02	12300	(0.12)	(0.27)	0.20	Y		2	
92725	238349	10 39 13.6	-58 59 12	8.23	0.09	B0III::	C	-4.94	-2.90	-7.84	30300	1.17	2.60	2.51	N	56	1	
92739	238350	10 39 17.0	-58 53 27	8.61	0.06	B1II-III	C	-4.29	-2.00	-6.29	21100	0.90	2.00	2.51	N	56	1	
92741	238351	10 39 17.9	-59 42 43	7.26	-0.01	B1II	C	-5.43	-2.00	-7.43	21100	0.69	1.53	2.51	Y	56	1	
92743	251064	10 39 20.1	-60 24 29	9.33	0.00	B3III	C	-3.27	-1.50	-4.77	17100	0.60	1.33	2.51	N	56	1	
92783	251066	10 39 20.3	-64 12 46	6.74	-0.05	B8.5Vn	C	0.17	-0.60	-0.43	11700	(0.12)	(0.27)	0.20	Y		2	
92837	251070	10 39 47.9	-63 50 41	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.24	Y		0	
92876	238368	10 40 10.1	-59 17 44	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
92877	238370	10 40 12.7	-59 38 41	8.50	-0.02	B2III	C	-4.16	-1.60	-5.76	18000	0.66	1.46	2.51	N	56	1	
92938	251078	10 40 27.3	-64 12 16	4.80	...	B4V	C	-1.70	-1.60	-3.30	16900	0.18	0.40	0.20	Y		3	
92964	238379	10 40 44.3	-58 57 12	5.36	0.27	B2.5Ia	C	-7.93	-1.25	-9.18	17100	1.29	2.86	2.51	Y		1	$\theta$ Car
93030	251083	10 41 10.1	-64 7 55	2.76	-0.22	B0.5Vp	C	-3.80	-2.60	-6.40	25400	0.18	0.40	0.19	Y		1	
93009	251084	10 41 11.6	-60 18 29	6.63	0.00	B5Ib	C	-5.67	-0.82	-6.49	13700	0.30	0.67	2.51	Y		1	
93163	251095	10 42 3.1	-63 59 10	5.76	...	B2.5V	C	-1.00	-1.90	-2.90	19200	0.51	1.13	0.20	Y		3	
93190	238412	10 42 22.8	-59 1 12	8.57	0.32	B0.IV:pe	C	-5.29	-2.90	-8.19	30300	1.86	4.13	2.51	Y		1	
93500	238459	10 44 27.4	-59 10 53	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	
93540	251115	10 44 27.5	-64 15 4	5.34	-0.10	B6V	C	-0.66	-1.20	-1.86	14300	(0.09)	(0.21)	0.15	Y		2	
93549	251117	10 44 40.0	-63 59 58	5.23	-0.07	B7IV	C	-1.00	-1.07	-2.07	13200	(0.10)	(0.23)	0.17	Y		2	
93607	251120	10 45 1.6	-64 7 10	4.84	...	B3IV	C	-2.10	-1.50	-3.60	17100	0.09	0.20	0.20	Y		3	
93695	238483	10 45 46.6	-59 36 39	6.47	-0.13	B5V	C	-1.00	-1.30	-2.30	15300	(0.18)	(0.39)	0.29	Y		2	
93714	251126	10 45 50.1	-64 16 58	6.57	0.00	B2IV-Vn	D	-3.00	-1.80	-4.80	18800	0.72	1.60	0.59	Y		1	IC 2602
93723	238490	10 46 3.6	-59 23 12	8.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.42)	(0.93)	0.69	N		0	
93795	238497	10 46 24.6	-59 16 34	8.56	0.79	B9Iab	C	-5.78	-0.38	-6.16	10250	2.34	5.20	2.51	Y	56	1	
93873	238507	10 46 56.5	-59 10 57	7.82	0.46	B0.5Iab	C	-6.31	-2.00	-8.31	23100	2.13	4.73	2.51	Y	56	1	
93898	238510	10 47 10.5	-57 42 17	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.32	Y		0	
93924	251141	10 47 23.6	-61 34 0	8.82	-0.01	B2II-III	C	-4.20	-1.60	-5.80	18000	0.63	1.40	3.01	N	0	1	
94054	238520	10 48 10.6	-59 16 59	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
94097	251145	10 48 18.4	-62 22 13	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.38)	0.28	Y		0	
94129	238526	10 48 41.4	-58 56 50	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y		0	
94290	251153	10 49 33.7	-66 32 58	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.24	Y		0	
94258	238537	10 49 37.5	-57 59 1	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
94288	251154	10 49 44.0	-61 25 39	9.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.59)	(1.30)	0.96	N		0	
94330	238549	10 50 7.4	-56 36 59	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N	56	1	
94369	238556	10 50 22.6	-57 59 11	7.37	0.25	B0.5Ia	C	-6.13	-2.00	-8.13	23100	1.50	3.33	2.51	Y		1	
94393	238561	10 50 41.7	-56 51 46	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
94677	238592	10 52 42.8	-52 17 15	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.40)	(0.88)	0.70	N		0	
94857	238608	10 54 0.2	-56 10 1	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.33)	(0.74)	0.55	N		0	
94873	238609	10 54 5.1	-52 19 48	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.43	Y		0	
94987	238620	10 54 51.0	-57 18 35	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N		0	
95012	238625	10 55 4.6	-52 47 18	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.49	N		0	
-59 2934	251217	10 58 54.2	-60 15 32	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
95826	251229	11 0 20.0	-60 14 49	8.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.40)	(0.90)	0.66	Y		0	Hen 552
95863	251230	11 0 32.7	-60 22 36	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.57	N		0	
-60 2476	251232	11 0 45.1	-60 57 41	9.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.61)	(1.35)	1.00	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
96060	251242	11 1 41.0	-60 18 35	8.56	0.14	B2II	C	-4.27	-1.60	-5.87	18000	1.08	2.40	2.24	N	61	1	
96263	251254	11 2 54.2	-60 13 50	8.60	0.08	B1III	C	-4.17	-2.00	-6.17	21100	1.02	2.26	2.24	N	61	1	
96447	251261	11 3 55.9	-60 54 20	9.30	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.87)	(1.93)	1.41	N	0	1	
96446	238766	11 3 59.4	-59 40 46	6.68	-0.16	B1Vp wk	C	-3.20	-2.50	-5.70	24150	0.30	0.67	0.82	Y	0	0	
96492	251262	11 4 2.7	-60 47 2	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N	0	0	
96491	251263	11 4 8.5	-60 21 58	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.57	N	0	0	
96671	251273	11 5 5.0	-60 1 32	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y	0	0	
96669	238794	11 5 12.0	-59 32 46	8.53	0.14	B0.5Ib	C	-6.00	-2.00	-8.00	23100	1.17	2.60	4.70	N	0	1	
96829	251278	11 6 0.2	-60 33 17	7.30	0.23	B2II	C	-5.80	-1.60	-7.40	18000	1.35	3.00	2.24	Y	61	1	
96945	251287	11 6 39.6	-60 6 27	8.73	0.23	B1.5III	C	-4.46	-1.80	-6.26	20000	1.44	3.20	2.24	N	61	1	
-59 3099	251293	11 7 41.8	-60 11 52	9.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.61)	(1.35)	1.00	N	0	0	
97151	238831	11 7 54.2	-59 49 25	7.74	-0.08	B2Ve	C	-2.50	-2.00	-4.50	19700	0.48	1.07	0.90	Y	0	1	MWC 217
97165	238834	11 7 59.6	-59 12 49	8.70	...	B	...	...	...	...	...	...	...	...	...	...	0	
97223	251297	11 8 23.4	-60 18 47	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.48	N	0	0	
97368	238848	11 9 17.0	-59 4 28	8.52	0.19	B1II	C	-4.52	-2.00	-6.52	21100	1.29	2.86	2.24	N	61	1	
97381	251305	11 9 24.0	-60 6 19	8.37	0.06	B1III	C	-4.34	-2.00	-6.34	21100	0.96	2.13	2.24	N	61	1	
97400A	251306	11 9 30.4	-60 10 18	7.70	...	B	...	...	...	...	...	...	...	...	...	...	0	
97400B	251307	11 9 30.5	-60 10 17	7.90	...	B	...	...	...	...	...	...	...	...	...	...	0	
97399	251309	11 9 32.1	-60 9 25	8.60	...	B	...	...	...	...	...	...	...	...	...	...	0	
97522	251315	11 10 13.0	-64 56 49	7.73	0.31	B0.5II	C	-5.10	-2.50	-7.60	25900	1.71	3.80	1.67	Y	0	1	
97557	238864	11 10 34.4	-59 24 19	7.22	0.01	B2III	C	-3.70	-1.60	-5.30	18000	0.75	1.67	1.08	Y	0	1	
97581	251319	11 10 39.0	-60 27 56	8.86	0.26	B1III	C	-4.45	-2.00	-6.45	21100	1.56	3.46	2.24	N	61	1	
97670	238877	11 11 20.5	-59 20 49	5.75	-0.10	B1.5Ve	C	-2.80	-2.00	-5.00	21800	0.45	1.00	0.42	Y	0	1	
97707	251325	11 11 29.1	-60 28 8	8.06	0.47	B2Ib	C	-5.64	-1.35	-6.99	18000	1.95	4.33	2.24	Y	61	1	
97913	238900	11 12 43.2	-58 54 8	8.79	0.03	B0.5IVn	C	-3.89	-2.50	-6.39	25900	0.93	2.06	2.24	N	61	1	
97969	238906	11 13 3.9	-59 53 30	7.76	-0.01	B1Vn	C	-3.20	-2.50	-5.70	24150	0.75	1.67	1.10	Y	0	1	
98143	256818	11 13 42.8	-77 14 43	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.36)	0.27	Y	0	0	
98169	251338	11 14 30.0	-60 33 12	9.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.38)	(0.84)	0.62	N	0	0	
98911	251373	11 20 3.4	-60 27 25	8.80	-0.01	B2IV	C	-3.10	-1.60	-4.70	18000	0.69	1.53	1.75	N	0	1	
98927	251374	11 20 6.3	-60 47 56	9.06	0.14	B1III::me	C	-4.30	-2.00	-6.30	21100	1.20	2.66	2.70	N	0	1	
98955	239009	11 20 20.8	-58 40 45	9.06	0.14	B2Ib-IIne	D	-5.10	-1.50	-6.60	18000	0.96	2.13	4.37	N	0	1	
99000	251377	11 20 34.7	-61 48 13	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N	0	0	
99025	251379	11 20 50.1	-61 21 37	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N	0	0	
99068	251381	11 21 8.5	-60 18 6	9.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.65)	(1.45)	1.07	N	0	0	
99146	239032	11 21 37.4	-59 1 48	8.20	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.58)	(1.30)	0.97	Y	0	0	
99158	251386	11 21 41.3	-60 35 29	8.62	0.00	B3III	C	-3.00	-1.50	-4.50	17100	0.60	1.33	1.60	N	0	1	
99193	251390	11 21 53.1	-63 24 22	8.90	0.23	B2III	C	-3.70	-1.60	-5.30	18000	1.41	3.13	1.73	N	0	1	
99204	239040	11 22 5.6	-59 0 40	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.61)	0.45	N	0	0	
99316	251397	11 22 42.4	-63 9 25	7.44	0.32	B8Ib	C	-5.80	-0.51	-6.31	10900	1.05	2.33	2.74	Y	0	1	
99555	239072	11 24 21.2	-59 22 35	8.90	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.47)	(1.04)	0.77	N	0	0	
99944	251421	11 26 57.3	-63 35 6	9.07	-0.08	B1V	C	-3.59	-2.50	-6.09	24150	0.66	1.46	2.51	N	64	1	
-62 2126	251468	11 33 21.2	-62 38 13	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N	0	0	
100841	251472	11 33 27.8	-62 44 35	3.13	-0.04	B9III	C	-0.78	-0.46	-1.24	11400	(0.04)	(0.08)	0.06	Y	2	$\lambda$ Cen	
101070	251491	11 35 2.6	-62 52 21	8.96	0.00	B2III	C	-3.76	-1.60	-5.36	18000	0.72	1.60	2.51	N	64	1	IC 2944
-62 2148	251492	11 35 4.1	-62 59 56	9.80	...	B3V	A	-2.32	-1.80	-4.12	18700	(1.01)	(2.25)	1.67	N	0	0	
101085	251493	11 35 8.3	-63 24 21	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y	0	0	
101084	251495	11 35 11.9	-63 4 14	9.21	0.08	B1Ve	C	-3.81	-2.50	-6.31	24150	1.02	2.26	2.51	N	64	1	LW Cen

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_0$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H^{1021}$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
101174	251504	11 35 45.1	-65 22 44	7.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.35)	0.26	Y		0	
-62 2188	251517	11 36 49.3	-63 2 14	9.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.59)	(1.31)	0.96	N		0	
101333	251518	11 36 51.8	-63 14 35	9.00	0.09	B0III	C	-4.17	-2.90	-7.07	30300	1.17	2.60	2.51	N	64	1	IC 2944
101753	99749	11 40 8.5	18 31 10	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.10)	(0.22)	0.23	Y		0	
-60 3278	251552	11 40 42.2	-60 27 24	...	...	B3V	A	-2.32	-1.80	-4.12	18700	...	...	...	...			
102101	251566	11 42 16.4	-60 7 24	7.62	0.08	B2.5III	C	-3.55	-1.55	-5.10	17600	0.90	2.00	1.11	Y	0	1	
102370	251582	11 44 11.8	-64 29 16	6.88	0.09	B8V	C	-0.02	-0.70	-0.72	12200	(0.14)	(0.31)	0.23	Y		2	
102399	251585	11 44 26.4	-60 45 49	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		0	
102463	251588	11 44 49.9	-60 36 49	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.40)	(0.90)	0.67	N		0	
102475	251590	11 44 52.3	-62 9 29	8.53	-0.01	B0.5II	C	-4.22	-2.50	-6.72	25900	0.75	1.67	2.51	N	64	1	
102503	251592	11 45 6.2	-60 20 41	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y		0	
102567	251595	11 45 33.6	-61 55 44	9.39	0.06	B1Vne	C	-3.57	-2.50	-6.07	24150	0.96	2.13	2.51	N	64	1	Hen 715
102893	251606	11 48 4.3	-60 30 56	...	...	B5V	A	-1.00	-1.30	-2.30	15300	...	...	...	...			LZ Cen
102923	251607	11 48 12.1	-62 16 26	8.51	0.00	B3II-III	C	-4.03	-1.50	-5.53	17100	0.54	1.20	2.51	N	64	1	
102997	251611	11 48 44.8	-61 34 4	6.55	0.30	B5Ia	C	-6.65	-0.82	-7.47	13700	1.20	2.66	2.51	Y	64	1	
103006	251612	11 48 50.5	-61 31 39	8.30	...	B	...	...	...	...	...	...	...	...	...			
103146	251619	11 49 59.8	-61 14 45	8.32	0.02	B2III-IV	C	-3.30	-1.60	-4.90	18000	0.78	1.73	1.47	Y	0	1	VZ Cen
103169	251622	11 50 6.0	-62 30 7	9.65	0.04	B3III	C	-3.19	-1.50	-4.69	17100	0.84	1.86	2.51	N	64	1	
103182	251623	11 50 10.0	-61 57 24	7.22	-0.02	B3III	C	-3.00	-1.50	-4.50	17100	0.54	1.20	0.86	Y	0	1	
103466	251635	11 52 9.5	-62 9 0	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	
104047	251665	11 56 19.1	-62 41 45	8.86	0.02	B2II	C	-4.80	-1.60	-6.40	18000	0.72	1.60	3.87	N	0	1	
104465	251687	11 59 3.5	-63 17 5	9.08	-0.05	B2II-III	C	-4.20	-1.60	-5.80	18000	0.51	1.13	3.58	N	0	1	
-62 2531	251690	11 59 30.3	-62 58 39	...	...	B	...	...	...	...	...	...	...	...	...			
104553	251696	11 59 50.1	-62 8 5	7.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.27)	(0.60)	0.44	Y	0	0	
104567	251697	11 59 55.6	-62 47 32	8.47	0.07	B1III	C	-4.30	-2.00	-6.30	21100	0.99	2.20	2.27	N	0	1	
104631	251702	12 0 21.7	-61 53 49	6.81	0.07	B0.5Ib-II	D	-5.50	-2.25	-7.75	24500	0.96	2.13	1.86	Y	0	1	
104705	251709	12 0 49.1	-62 25 3	7.90	...	B0V	A	-4.30	-3.00	-7.30	29600	(1.04)	(2.32)	1.70	Y	0	0	
104809	251715	12 1 33.0	-62 1 23	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.87)	0.64	N		0	$\theta^2$ Cru
104841	251717	12 1 43.9	-62 53 14	4.72	-0.08	B2V	C	-2.50	-2.00	-4.50	19700	0.48	1.07	0.22	Y	0	1	
104901	251721	12 2 11.3	-61 43 6	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.43)	0.32	Y		0	
105245	251745	12 4 24.6	-62 14 10	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
105257	251747	12 4 36.8	-62 51 52	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
105542	251761	12 6 37.0	-61 45 13	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.41)	(0.90)	0.66	N		0	
105562	251764	12 6 43.7	-61 56 5	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
105610	239706	12 6 59.8	-51 51 58	7.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.25	Y	0	0	$\rho$ Cen
105937	239737	12 9 1.7	-52 5 25	3.96	-0.15	B3V	C	-2.32	-1.80	-4.12	18700	(0.02)	(0.04)	0.03	Y	2	0	
106970	239822	12 15 31.1	-52 1 43	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y	0	0	$\zeta$ Cru
106983	251841	12 15 42.6	-63 43 31	4.04	...	B2.5V	C	-1.70	-1.90	-3.60	19200	0.06	0.13	0.10	Y	2	2	
108355	251911	12 24 35.8	-63 30 44	6.00	0.07	B8IV	C	-0.60	-0.72	-1.32	12250	(0.12)	(0.27)	0.20	Y	2	0	
108398	251913	12 24 47.2	-63 56 46	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
110373	251999	12 39 26.8	-62 41 58	9.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.46)	(1.01)	0.75	N		0	
110433	252003	12 39 55.0	-62 54 40	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
110736	252011	12 41 53.4	-62 41 50	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0	
110975	252023	12 43 37.4	-62 52 19	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.98)	0.72	N		0	
111024	252028	12 44 7.2	-62 48 45	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
113807	252157	13 4 23.0	-65 36 42	7.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.45)	0.33	Y		0	
116314	252296	13 21 2.6	-62 19 15	...	...	B9V	A	0.36	-0.50	-0.14	11200	...	...	...	...			

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
116374	252300	13 21 26.4	-62 5 44	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
116658	157923	13 22 33.3	-10 54 3	0.98	-0.23	B1III-IV+B2V	D	-4.33	-1.97	-6.30	21100	(0.03)	(0.06)	0.04	Y		2	$\alpha$ Vir
116663	224135	13 22 49.2	-47 15 55	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.50)	0.42	N		0	
117134	252334	13 26 36.4	-62 9 33	9.40	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.89)	(1.98)	1.46	N		0	
117240	252337	13 27 15.6	-61 53 11	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.97)	0.72	N		0	
118242	252388	13 33 54.3	-64 40 54	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.28	Y		0	
118845	252409	13 37 37.3	-61 23 36	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
118968	252416	13 38 30.3	-60 44 7	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
118993	252420	13 38 50.5	-62 33 52	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
-61 3926	252421	13 39 14.1	-61 29 9	6.90	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.21)	(0.47)	0.35	Y		0	
119163	252425	13 39 45.0	-60 57 50	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
119330	252430	13 40 54.6	-61 51 28	9.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.59)	(1.30)	0.96	N		0	
119489	252432	13 41 44.6	-60 34 56	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.37)	(0.83)	0.62	N		0	
119490	252433	13 41 49.0	-61 39 34	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
119698	252440	13 43 1.0	-61 5 58	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
119815	252446	13 43 38.5	-60 26 55	8.85	0.05	B2IV-V	D	-3.00	-1.80	-4.80	18800	0.87	1.93	1.57	N	0	1	
119861	252452	13 44 1.8	-62 5 36	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
119910	252455	13 44 26.5	-60 37 58	8.40	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.63)	(1.40)	1.04	Y		0	
120113	252462	13 45 45.0	-61 51 6	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
120132	252464	13 45 47.7	-60 30 15	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.35)	0.26	Y		0	
120211	252470	13 46 26.6	-62 1 37	7.93	0.11	B2III	C	-3.70	-1.60	-5.30	18000	1.05	2.33	1.31	Y	0	1	
120227	252473	13 46 32.7	-62 9 42	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N		0	
120473	252483	13 47 59.3	-60 51 39	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
120798	252503	13 50 1.7	-61 24 25	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
121743	224577	13 55 13.3	-41 51 27	3.83	-0.21	B2IV	C	-3.10	-1.60	-4.70	18000	0.09	0.20	0.23	Y	0	1	$\phi$ Cen
122142	252565	13 58 22.1	-60 33 7	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
122163	252569	13 58 28.8	-60 33 2	9.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.45)	(1.01)	0.75	N		0	
122179	252571	13 58 34.6	-61 43 1	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
-61 4292	252580	14 0 13.4	-62 4 19	8.80	...	B	...	...	...	...	...	...	...	...	...	...	...	...
122451	252582	14 0 16.5	-60 7 58	0.61	-0.23	B1III	C	-4.46	-2.00	-6.46	21100	(0.07)	(0.15)	0.11	Y	2	2	$\beta$ Cen
122669	252590	14 1 42.8	-62 16 6	8.97	0.33	B0.5IIfep	C	-5.10	-2.50	-7.60	25900	1.77	3.93	2.88	N	0	1	Hen 961
122792	252594	14 2 18.2	-61 29 40	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
122811	252595	14 2 30.0	-61 16 33	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0	
122980	224673	14 2 59.0	-40 56 28	4.35	-0.20	B2IV	C	-3.10	-1.60	-4.70	18000	0.12	0.27	0.29	Y	0	1	$\chi$ Cen
123057	252604	14 3 48.1	-61 7 0	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.49)	(1.09)	0.80	N		0	
123131	252611	14 4 18.9	-61 16 17	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
123149	252612	14 4 22.9	-60 57 55	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.87)	0.64	N		0	
123169	252613	14 4 24.4	-60 32 17	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y		0	
123250	252622	14 4 59.0	-63 10 44	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
123471	83177	14 5 3.0	22 41 58	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.12)	(0.28)	0.48	N		0	
123359	224714	14 5 6.9	-45 6 32	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.70)	0.70	N		0	
123362	252627	14 5 42.7	-62 36 3	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.38)	(0.84)	0.61	N		0	
123506	252633	14 6 33.1	-62 8 32	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.38)	(0.84)	0.61	N		0	
123490	252634	14 6 34.2	-63 21 57	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.38)	(0.84)	0.61	N		0	
123553	252635	14 6 49.9	-61 1 49	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0	
123590	252638	14 7 2.2	-62 14 36	7.70	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.29)	(0.65)	0.48	Y		0	
123656	252642	14 7 28.2	-62 53 23	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
123779	252644	14 8 6.9	-61 47 30	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.28	Y		0	
123927	252647	14 9 4.4	-63 16 51	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
124298	252664	14 11 16.7	-61 0 20	9.48	0.21	B2V	C	-2.50	-2.00	-4.50	19700	1.35	3.00	1.34	N	0	1	
124327	252667	14 11 23.9	-61 25 13	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
124488	252676	14 12 31.2	-62 14 50	9.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.42)	(0.94)	0.69	N		0	
124788	252687	14 14 1.2	-60 33 27	9.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.78)	(1.73)	1.28	N		0	
124749	252689	14 14 4.0	-63 10 56	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0	
124878	252693	14 14 39.3	-61 54 41	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
124909	252695	14 14 46.1	-60 40 4	9.08	0.26	B0V	C	-3.80	-3.00	-6.80	29600	1.68	3.73	1.74	Y	0	1	
125238	244833	14 16 11.4	-45 49 42	3.55	-0.18	B2.5IV	C	-3.15	-1.55	-4.70	17600	0.12	0.27	0.20	Y	0	1	α Lup
125207	252706	14 16 36.4	-62 11 10	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.57	N		0	
125331	252709	14 17 11.1	-61 3 41	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N		0	
125466	252718	14 18 6.5	-62 21 29	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
125515	252721	14 18 28.1	-62 10 59	9.70	...	B5V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0	
126138	29117	14 20 18.5	53 44 54	7.40	...	B9V	A	-1.00	-1.30	-2.30	15300	(0.63)	(1.40)	1.03	N		0	
126549	252752	14 24 46.5	-61 59 8	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.48	N		0	
126843	252766	14 26 32.8	-61 57 31	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
127208	182611	14 27 50.1	-22 14 22	6.90	...	B9V:e+F:	D	0.36	-0.50	-0.14	11200	(0.10)	(0.23)	0.19	Y	2		
127145	252775	14 28 25.7	-62 47 39	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
127200	252779	14 28 43.9	-62 28 54	9.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.47)	(1.05)	0.77	N		0	
127493	182646	14 29 30.9	-22 26 12	9.40	...	B0V	A	-4.30	-3.00	-7.30	29600	(0.24)	(0.54)	4.91	N		0	
127503	252792	14 30 23.1	-62 9 43	9.60	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.61)	(1.35)	1.00	N		0	
127756	252809	14 31 45.0	-60 47 24	7.56	0.15	B1.5Vne	C	-2.80	-2.20	-5.00	21800	1.20	2.66	0.68	Y	0	1	Hen 1010
127838	252814	14 32 6.8	-60 35 22	9.11	0.36	B1III	C	-4.30	-2.00	-6.30	21100	1.86	4.13	2.04	Y	0	1	
127926	252817	14 32 37.4	-60 50 12	9.19	0.39	B2II	C	-4.80	-1.60	-6.40	18000	1.83	4.06	2.70	N	0	1	
128137	252828	14 33 51.5	-60 8 21	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
128521	241879	14 35 54.6	-57 57 34	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N		0	
128697	252843	14 37 6.4	-61 44 6	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.41)	(0.91)	0.67	N		0	
128765	252847	14 37 32.0	-62 17 39	10.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.44)	(0.98)	0.72	N		0	
128840	241905	14 37 45.3	-57 28 33	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.68)	0.51	N		0	
128960	225121	14 38 7.5	-47 13 54	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.56	N		0	
129056	225128	14 38 35.5	-47 10 29	2.30	-0.20	B1.5III	C	-3.90	-1.80	-5.70	20000	0.15	0.33	0.16	Y	0	1	α Lup
129092	252860	14 39 29.9	-62 45 17	6.41	...	B3V:	D	-1.70	-1.80	-3.50	18700	0.36	0.80	0.40	Y	3		
129281	225145	14 39 54.4	-47 21 30	6.92	-0.05	B9II/III	C	-2.03	-0.46	-2.49	11400	(0.29)	(0.65)	0.54	Y	2	2	
130767	101233	14 47 11.1	19 43 1	6.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.09)	(0.20)	0.19	Y	0	0	
130764	252932	14 48 53.0	-64 7 14	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.45	Y	0	0	
130912	252944	14 49 39.8	-63 34 11	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		4	
131120	206037	14 49 42.2	-37 35 55	5.02	-0.17	B7IIIp	C	-1.54	-1.07	-2.61	13200	(0.11)	(0.25)	0.19	Y	0	0	
131356	252962	14 52 28.1	-68 38 17	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.42	N		0	
132955	206239	14 59 55.2	-32 26 51	5.44	-0.12	B8V	A	-2.32	-1.80	-4.12	18700	(0.17)	(0.38)	0.33	Y	2	2	
134119	225493	15 6 20.0	-44 22 17	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.45	Y	0	0	
134557	225528	15 8 41.2	-44 49 27	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.31	Y	0	0	
134526	242313	15 9 4.6	-58 5 40	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.98)	0.72	N		0	
134687	225539	15 9 27.4	-44 18 47	4.82	-0.17	B3IV	C	-3.00	-1.50	-4.50	17100	(0.19)	(0.43)	0.34	Y	2	2	
134844	242337	15 10 47.4	-58 9 38	9.15	0.24	B2V	C	-2.50	-2.00	-4.50	19700	1.44	3.20	1.10	Y	0	1	
134958	242346	15 11 22.3	-57 59 15	8.12	0.32	B1IIIne	C	-4.30	-2.00	-6.30	21100	1.74	3.86	1.37	Y	0	1	Hen 1059

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
134959	242348	15 11 27.3	-58 53 23	8.18	1.03	B2Ia+	C	-8.45	-1.35	-9.80	18000	3.63	8.06	3.98	Y	67	1	
135041	242354	15 11 47.4	-57 59 15	9.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.38)	(0.84)	0.62	N		0	
135540	242392	15 14 23.8	-58 30 40	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0	
136353	242455	15 18 43.9	-51 14 34	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.60	N		0	
136651	242476	15 20 22.6	-51 58 18	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.37	Y		0	
137005	120974	15 21 1.2	7 49 21	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.40	Y		0	
136787	242487	15 21 3.9	-51 48 53	8.50	0.42	B5II	C	-4.60	-1.30	-5.90	16300	1.56	3.46	2.96	Y	0	1	
136972	242513	15 22 19.8	-57 23 25	9.32	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.38	N		0	
137217	242537	15 23 18.6	-51 45 36	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.47	Y		0	
137569	101555	15 24 0.8	14 52 4	7.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.14)	(0.31)	0.47	Y		0	
137327	242551	15 24 6.8	-57 58 54	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
138527	101600	15 29 51.3	16 13 28	6.22	-0.05	B9V	C	0.36	-0.50	-0.14	11200	(0.08)	(0.17)	0.14	Y		2	$\tau^2$ Ser
138749	64769	15 30 54.7	31 31 36	4.14	-0.13	B6Vnne	C	-0.66	-1.20	-1.86	14300	(0.02)	(0.05)	0.04	Y		2	$\theta$ CrB
138923	206795	15 33 2.7	-32 55 39	6.24	...	B8V	C	-0.02	-0.70	-0.72	12200	(0.10)	(0.22)	0.17	Y		2	
140037	206892	15 39 31.9	-32 1 38	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.35)	0.28	Y		0	
140680	242970	15 43 44.0	-55 55 11	9.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.47)	(0.88)	0.67	N		0	
141066	226237	15 45 28.0	-48 25 44	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.40)	(1.04)	0.81	N		0	
141016	243009	15 45 29.2	-55 25 58	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
141318	243044	15 47 12.8	-54 54 18	5.72	...	B2II	C	-3.60	-1.60	-5.20	18000	0.78	1.73	0.50	Y		3	
141486	243056	15 48 4.9	-56 12 7	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
141603	243060	15 48 35.7	-53 9 44	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.41)	(0.91)	0.67	N		0	
-54 6732	243084	15 49 34.5	-54 29 6	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
141782	243085	15 49 34.6	-54 3 13	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N		0	
-54 6733	243086	15 49 35.0	-54 30 21	9.80	...	B8V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N		0	
141944	226343	15 50 15.5	-48 27 52	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.73)	0.55	N		0	
141926	243098	15 50 26.4	-55 10 54	8.62	0.56	B2III:mep	C	-3.70	-1.60	-5.30	18000	2.40	5.33	0.96	Y	0	1	Hen 1110
142064	243109	15 51 5.9	-53 20 13	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y		0	
-53 6768	243112	15 51 10.9	-53 51 21	9.21	0.64	B1Ib	C	-5.80	-1.70	-7.50	20260	2.58	5.73	3.06	N	0	1	
142152	243123	15 51 39.7	-54 37 50	9.62	0.41	B0.5III	C	-5.15	-2.50	-7.65	25900	2.07	4.59	3.47	N	68	1	
142170	243125	15 51 41.1	-52 39 30	10.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.42)	(0.94)	0.70	N		0	
142237	243135	15 52 11.2	-54 48 25	8.83	0.10	B2Vne	C	-2.50	-2.00	-4.50	19700	1.02	2.26	1.15	N	0	1	Hen 1114
142338	243141	15 52 49.3	-56 21 13	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.37)	(0.81)	0.60	N		0	
142364	243144	15 52 58.2	-55 51 32	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
142468	243156	15 53 31.4	-54 11 17	7.87	0.61	B0.5Ia	C	-7.41	-2.00	-9.41	23100	2.58	5.73	3.47	Y	68	1	
142548	243164	15 53 52.5	-55 55 43	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
143275	184014	15 57 22.3	-22 28 51	2.32	-0.12	B0.3IV	C	-4.50	-2.50	-7.00	25900	(0.12)	(0.27)	0.22	Y		2	$\delta$ Sco
143600	184045	15 59 15.7	-22 32 56	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.31	Y		0	
144217	159682	16 2 31.5	-19 40 12	2.62	-0.07	B1V	C	-3.64	-2.50	-6.14	24150	(0.07)	(0.15)	0.11	Y		2	$\beta^1$ Sco
144218	159683	16 2 31.9	-19 40 0	4.92	-0.02	B2IV-V	D	-1.74	-1.80	-3.54	18800	0.66	1.46	0.16	Y		1	$\beta^2$ Sco
144828	226546	16 6 25.1	-49 7 40	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N		0	
144969	226558	16 7 8.1	-48 39 55	8.31	0.96	B0.5Ia	C	-6.32	-2.00	-8.32	23100	3.63	8.06	1.59	Y	71	1	$\phi$ Her
145389	45911	16 7 11.5	45 3 54	4.26	-0.07	B9Vp:Mn:	D	0.36	-0.50	-0.14	11200	(0.03)	(0.07)	0.05	Y		2	
145519	159767	16 9 11.8	-18 56 3	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.27	Y		0	
145488	243464	16 9 52.2	-50 28 23	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.49)	(1.09)	0.80	N		0	
145579	243476	16 10 20.9	-51 20 1	9.80	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.65)	(1.45)	1.07	N		0	
145637	243482	16 10 37.7	-51 3 29	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
145828	243508	16 11 40.1	-50 51 32	9.75	0.37	B0III	C	-5.26	-2.90	-8.16	30300	2.01	4.46	3.98	N	70	1	LY 407

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat.	Ref.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
146058	243528	16 12 51.1	-50 29 2	9.56	0.46	BIII	C	-5.54	-2.00	-7.54	21100	2.10	4.66	3.98	N	70	1	
146125	243537	16 13 16.2	-50 53 21	10.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.49)	(1.09)	0.80	N	0	0	
146332	184280	16 13 44.6	-29 37 16	7.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.39)	0.31	Y	0	0	
146373	243585	16 14 41.6	-51 18 40	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.78)	0.57	N	0	0	
146445	243598	16 14 59.6	-50 59 44	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.44)	(0.98)	0.72	N	0	0	
146461	243600	16 15 4.2	-50 20 56	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N	0	0	
146479	243606	16 15 8.9	-50 16 15	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y	0	0	
-50 9212	243607	16 15 9.5	-50 16 25	10.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.51)	(1.14)	0.84	N	0	0	
146521	243614	16 15 20.8	-50 1 54	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y	0	0	
146523	243617	16 15 22.5	-51 6 47	9.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.38)	(0.84)	0.62	N	0	0	
146726	243650	16 16 21.7	-51 7 2	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N	0	0	
146748	243656	16 16 28.5	-50 21 51	9.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.46)	(1.01)	0.75	N	0	0	
146780	243660	16 16 38.4	-51 11 19	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N	0	0	
146803	243663	16 16 46.7	-51 22 27	9.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.39)	(0.88)	0.64	N	0	0	
147301	226708	16 19 43.6	-49 55 44	9.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.41)	(0.91)	0.67	N	0	0	
147889	184376	16 22 22.8	-24 21 7	8.10	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.36)	(0.79)	1.03	Y	0	0	
148579	184425	16 26 56.6	-25 2 21	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.30)	0.23	Y	0	0	
148605	184429	16 27 9.9	-25 0 24	4.79	-0.07	B2V	C	-1.72	-2.00	-3.72	19700	0.51	1.13	0.16	Y	76	1	22 Sco
148851	226878	16 29 32.9	-48 19 57	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N	0	0	
148921	226887	16 30 0.8	-47 45 59	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.36)	(0.81)	0.60	N	0	0	
148954	226894	16 30 16.1	-48 13 42	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	0	0	
149098	226920	16 31 10.0	-47 53 11	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.32	Y	0	0	
149438	184481	16 32 45.9	-28 6 51	2.83	-0.26	B0V	C	-3.29	-3.00	-6.29	29600	0.12	0.27	0.16	Y	76	1	$\tau$ Sco
149464	184484	16 32 55.3	-28 15 26	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.37	Y	0	0	
149572	244017	16 34 39.3	-57 1 9	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.68)	0.51	N	2	0	V600 Her
149881	102273	16 34 40.6	-14 34 30	7.05	-0.18	B0.5III	C	-4.73	-2.50	-7.23	25900	(0.23)	(0.51)	2.04	Y	0	0	
149711	226989	16 34 53.6	-43 17 57	5.82	-0.02	B2.5IV	C	-3.15	-1.55	-4.70	17600	0.60	1.33	0.46	Y	0	0	R Ara
149730	244037	16 35 34.8	-56 53 46	6.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.11)	(0.25)	0.18	Y	0	0	
149770	253648	16 36 10.3	-62 27 27	8.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.32)	(0.72)	0.57	Y	0	0	
149838	253653	16 36 38.7	-62 37 13	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.70)	0.56	N	0	0	
150084	244069	16 37 44.7	-56 48 31	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.37	Y	0	0	
150043	253666	16 37 50.2	-62 31 1	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.60	N	0	0	
150112	244073	16 37 55.8	-56 55 11	10.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.42)	(0.94)	0.73	N	0	0	
150497	207951	16 39 33.1	-32 35 37	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.53	N	0	0	
150499	227102	16 39 49.8	-43 22 29	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.40)	(0.90)	0.67	N	0	0	
151067	17187	16 40 32.6	62 24 8	7.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.13)	(0.28)	0.26	Y	0	0	
150925	207997	16 42 16.5	-32 24 45	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.42	N	0	0	
151683	227294	16 47 12.0	-41 22 18	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y	0	0	
151805	227315	16 48 5.1	-41 41 34	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.48	N	0	0	
151911	227327	16 48 47.5	-41 31 19	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	0	0	
152042	227341	16 49 27.1	-41 28 59	8.16	0.12	B0.5III	C	-4.44	-2.50	-6.94	25900	1.20	2.66	1.91	Y	75	1	NGC 6231
152076	227343	16 49 36.7	-41 38 50	8.47	0.21	B0III	C	-4.46	-2.90	-7.36	30300	1.53	3.40	1.91	Y	75	1	NGC 6231
152096	227349	16 49 45.1	-41 17 19	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N	0	0	
152182	227360	16 50 11.6	-41 14 47	9.12	0.11	B1III	C	-3.39	-2.00	-5.39	21100	1.11	2.46	1.91	N	75	1	NGC 6231
152198	227367	16 50 21.1	-41 13 45	8.28	0.16	B0IVn	C	-4.50	-2.90	-7.40	30300	1.38	3.06	1.91	Y	75	1	
152217	227369	16 50 23.9	-41 10 26	8.44	0.16	B0III	C	-4.34	-2.90	-7.24	30300	1.38	3.06	1.91	Y	75	1	
152235	227374	16 50 27.6	-41 54 48	6.34	0.55	B0.5Ia wk n	C	-7.46	-2.00	-9.46	23100	2.40	5.33	1.91	Y	75	1	NGC 6231

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s (3)	DEC (1950) ° ' " (4)	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{\text{bot}}$	$T_{\text{eff}}$ °K (12)	$A_v$	$N_H$ $10^{21}$ $\text{cm}^{-2}$ (14)	$R_{\text{sun}}$ kpc (15)	Volume Limited Flag (16)	Ass. Ref. (17)	Cat. (18)	Comment (19)
152234	227377	16 50 31.0	-41 43 31	5.44	0.20	B0.5Ia wk n	C	-7.31	-2.00	-9.31	23100	1.35	3.00	1.91	Y	75	1	NGC 6231
152268	227388	16 50 47.3	-40 54 9	8.10	0.11	B0IV	C	-4.53	-2.90	-7.43	30300	1.23	2.73	1.91	Y	75	1	
152269	227389	16 50 48.0	-41 27 34	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N	75	0	NGC 6231
152292	227391	16 50 54.5	-40 56 57	8.53	0.12	B2II-III	A	-3.89	-1.60	-5.49	18000	1.02	2.26	1.91	N	75	0	
-41 7744	227394	16 50 55.6	-41 45 2	9.20	...	B	...	...	...	...	...	...	...	...	...	...	...	...
152291	227395	16 50 55.6	-40 34 19	8.84	0.10	B2(II)e	C	-3.53	-1.60	-5.13	18000	0.96	2.13	1.91	N	75	1	NGC 6231
152385	227422	16 51 25.1	-40 59 9	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.48)	(1.07)	0.80	N	75	0	
152436	227434	16 51 40.2	-40 14 41	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.60)	0.45	Y	75	0	
152459	227437	16 51 50.7	-41 28 39	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N	75	0	
152457	227438	16 51 51.6	-40 51 21	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.40)	(0.90)	0.67	N	75	0	
-40 7608	227441	16 51 52.9	-40 51 26	10.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.53)	(1.17)	0.87	N	75	0	
152560	227449	16 52 25.8	-40 56 47	8.27	0.13	B0.5IVn	C	-4.36	-2.50	-6.86	25900	1.23	2.73	1.91	Y	75	1	NGC 6231
152591	227455	16 52 33.5	-40 35 39	8.43	0.11	B0IV	C	-4.20	-2.90	-7.10	30300	1.23	2.73	1.91	Y	75	1	V861 Sco
152667	227475	16 53 6.9	-40 44 44	6.22	0.25	B0Ia	C	-6.68	-2.75	-9.43	28600	1.50	3.33	1.91	Y	75	1	
152686	227475	16 53 12.0	-42 17 7	8.97	0.23	B0V	C	-3.80	-3.00	-6.80	29600	1.59	3.53	1.72	Y	75	1	
152685	227477	16 53 15.5	-41 4 35	7.43	0.17	B2I	C	-5.08	-1.35	-6.43	18000	1.11	2.46	1.91	Y	75	1	
152755	227485	16 53 35.7	-40 52 41	8.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.40)	(0.89)	0.66	Y	75	0	
152940	227506	16 54 48.3	-41 0 0	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.60)	0.45	Y	75	0	
153105	227527	16 55 49.5	-41 19 48	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y	75	0	
153222	227543	16 56 40.3	-49 10 49	8.84	0.28	B1.5Vnep	C	-2.80	-2.20	-5.00	21800	1.59	3.53	1.02	Y	0	1	MWC 244
153382	227552	16 57 34.1	-41 59 56	7.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.37)	0.27	Y	75	0	
153487	208310	16 58 6.7	-37 55 27	9.40	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.56)	(1.23)	0.93	N	75	0	
153519	227562	16 58 26.1	-41 7 57	8.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.40)	(0.89)	0.66	Y	75	0	
153575	208319	16 58 32.4	-37 13 46	7.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.45)	0.33	Y	75	0	
153904	208353	17 0 17.8	-30 4 2	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.47	N	75	0	
153947	208361	17 0 45.5	-37 41 54	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.53	N	75	0	
154008	227602	17 1 27.4	-48 22 13	8.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.40)	(0.89)	0.66	Y	75	0	
154110	227614	17 2 7.8	-48 57 59	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N	75	0	
154445	141513	17 2 57.5	0 49 30	5.63	0.16	B1.5V	C	-2.80	-2.20	-5.00	21800	1.23	2.73	0.28	Y	0	1	
154535	208435	17 4 13.6	-34 26 31	8.33	0.05	B1IVn	C	-3.80	-2.00	-5.80	21100	0.93	2.06	1.74	Y	0	1	
154664	208454	17 5 3.6	-33 48 5	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.67)	0.51	N	75	0	
154970	244505	17 7 42.6	-55 34 10	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.54)	0.41	Y	75	0	$\zeta$ Dra
155763	17365	17 8 38.1	65 46 34	3.17	-0.12	B6III	C	-1.92	-1.20	-3.12	14500	(0.03)	(0.06)	0.04	Y	75	2	
155321	208528	17 9 4.6	-37 5 6	9.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.38)	(0.84)	0.62	N	75	0	
155440	253849	17 11 5.0	-62 35 35	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.54)	0.43	Y	75	0	
155960	227775	17 13 17.1	-46 43 26	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	75	0	
156247	122226	17 13 59.4	1 15 53	5.88	0.06	B5Vnm+B5V	D	-1.00	-1.30	-2.30	15300	(0.23)	(0.51)	0.50	Y	75	2	U Oph
-45 8441	227796	17 14 24.3	-46 2 26	10.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.53)	(1.19)	0.91	N	75	0	
156137	227798	17 14 25.2	-46 2 18	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N	75	0	
156779	160469	17 17 19.6	-18 46 25	9.28	0.17	B3III	C	-3.00	-1.50	-4.50	17100	1.11	2.46	1.71	N	75	1	
156726	244669	17 18 18.4	-56 15 26	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.41	Y	75	0	
156940	244696	17 19 29.1	-56 47 9	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.42	N	75	0	
157246	244726	17 21 10.7	-56 19 59	3.33	-0.14	B1Ib	C	-5.80	-1.70	-7.50	20260	0.24	0.53	0.60	Y	75	1	$\gamma$ Ara
157645	208807	17 22 42.0	-38 32 54	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N	75	0	
157865	185404	17 23 44.3	-26 17 24	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.32)	0.24	Y	75	0	
158073	208855	17 25 22.4	-33 32 34	9.00	0.21	B2V::	C	-2.50	-2.00	-4.50	19700	1.35	3.00	1.07	Y	75	1	
238698	30392	17 26 1.3	59 47 22	9.71	-0.14	B3III	C	-3.00	-1.50	-4.50	17100	0.18	0.4	3.21	N	75	1	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
158287	208880	17 26 39.9	-37 0 56	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.45	Y		0	
158320	208881	17 26 47.6	-33 40 42	6.67	0.13	B0.5Ibe	C	-6.00	-2.00	-8.00	23100	1.14	2.53	2.02	Y	0	1	
-33 12118	208883	17 26 49.8	-33 39 50	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0	
158408	208896	17 27 21.7	-37 15 29	2.68	-0.23	B2IV	C	-3.10	-1.60	-4.70	18000	0.03	0.07	0.14	Y	0	1	ν Sco
158601	208922	17 28 31.2	-37 38 45	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
158926	208954	17 30 12.6	-37 4 10	1.63	-0.22	B1.5IV	C	-3.30	-1.80	-5.10	20000	0.09	0.20	0.09	Y	0	1	λ Sco
-32 12924	208972	17 31 8.4	-32 28 18	...	...	B5V	A	-1.00	-1.30	-2.30	15300	...	...	...	...	...	0	
159097	244876	17 31 52.8	-56 52 57	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.68)	0.56	N		0	
159379	209006	17 32 36.3	-33 49 3	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
-33 12242	209013	17 32 54.9	-33 51 53	9.36	1.16	B1Ia	C	-7.00	-1.70	-8.70	20260	4.14	9.19	2.78	Y	0	1	
-33 12244	209014	17 32 55.1	-33 27 27	8.70	...	B	...	...	...	...	...	...	...	...	...	...	0	
159631	209032	17 33 53.2	-32 11 8	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.45	N		0	
159975	141772	17 35 7.5	-8 5 24	4.62	0.11	B8II-IIIp:Mn	C	-2.36	-0.72	-3.08	12250	(0.14)	(0.31)	0.23	Y		2	μ Oph
-27 11769	185579	17 35 14.4	-27 20 50	9.30	...	B	...	...	...	...	...	...	...	...	...	...	0	
160038	141776	17 35 25.8	-8 6 22	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.31	Y		0	
160140	122584	17 35 34.3	6 30 42	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.50)	0.46	Y		0	
159772	244922	17 35 35.2	-56 50 55	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.42	N		0	
160095	209086	17 36 12.5	-33 31 34	8.64	0.01	B1Vne	C	-3.20	-2.50	-5.70	24150	0.81	1.80	1.61	N	0	1	
160109	185594	17 36 14.8	-29 55 58	7.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.40)	0.29	Y		0	
160167	209095	17 36 37.6	-32 20 57	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
160188	209097	17 36 38.2	-32 0 43	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
160189	209102	17 36 43.4	-32 25 1	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0	
160348	160731	17 37 6.6	-11 26 25	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.28	Y		0	
160319	185604	17 37 13.5	-28 53 50	7.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.14)	(0.32)	0.24	Y		0	
160281	209118	17 37 14.1	-32 43 44	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		0	
-30 14571	209129	17 37 37.0	-30 7 7.00	9.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.47)	(1.05)	0.77	N		0	
160762	46872	17 38 3.1	46 1 55	3.80	-0.18	B3IV	C	-3.00	-1.50	-4.50	17100	(0.11)	(0.24)	0.20	Y		2	ι Her
160525	160743	17 38 12.4	-18 7 23	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.61)	0.47	N		0	
160490	185619	17 38 14.6	-28 40 41	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N		0	
160578	209163	17 39 1.5	-39 0 23	2.41	-0.21	B1.5III	C	-3.90	-1.80	-5.70	20000	0.12	0.27	0.17	Y	0	1	κ Sco
160644	209166	17 39 14.3	-34 17 47	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
160648	228325	17 39 40.1	-46 33 56	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y		0	
160649	228328	17 39 42.3	-47 12 20	9.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.41)	(0.90)	0.73	N		0	
-28 13463	185647	17 39 44.4	-28 25 44	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.59	N		0	
160808	185649	17 39 54.9	-29 54 45	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
160886	160774	17 40 15.4	-18 16 48	9.70	...	B5V	D	-1.00	-1.30	-2.30	15300	0.96	2.13	0.90	N		3	MWC 885
160958	185664	17 40 49.7	-29 29 4	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
160974	209206	17 41 3.20	-34 35 42	8.76	0.39	B1II	C	-5.10	-2.00	-7.10	21100	1.89	4.20	2.48	Y	0	1	
161084	185682	17 41 37.9	-29 43 34	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
-28 13537	185695	17 42 10.9	-28 24 12	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.08)	0.80	N		0	
161229	185705	17 42 22.3	-28 2 45	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
161248	209228	17 42 38.2	-33 11 2	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
161277	209236	17 43 2.5	-39 14 46	7.08	...	B9VpSi	D	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y		2	
-29 13979	185752	17 44 11.9	-29 37 19	9.00	...	B	...	...	...	...	...	...	...	...	...	...	0	
161561	209261	17 44 21.0	-35 12 19	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.35)	0.26	Y		0	
161531	228426	17 44 25.6	-40 57 57	9.05	-0.03	B2Ib-II	D	-5.10	-1.50	-6.60	18000	0.45	1.00	5.50	N	0	1	
161610	185758	17 44 27.1	-26 19 50	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA h m s (3)	DEC ° ' " (4)	$m_v$	B - V	MK Sp. Type	LC Flag	$M_b$	BC	$M_{bol}$	$T_{eff}$ °K (12)	$A_v$	$N_H$ 10 <sup>21</sup> cm <sup>-2</sup> (14)	$R_{sun}$ kpc (15)	Volume Limited Flag (16)	Ass. Ref. (17)	Cat. (18)	Comment (19)
161530	228427	17 44 28.2	-40 7 20	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.37)	(0.82)	0.62	N		0	
-25 12299	185761	17 44 34.4	-25 55 11	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N		0	
-29 14001	185769	17 44 50.3	-29 18 46	9.10	...	B2V	A	-2.98	-2.00	-4.98	19700	(1.01)	(2.23)	1.64	N		0	
161631	209275	17 44 58.3	-39 14 18	9.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.35)	(0.77)	0.57	N		0	
161667	209282	17 45 13.2	-39 52 59	6.99	-0.03	B8Ib/II	D	-4.48	-0.62	-5.10	11500	(0.74)	(1.63)	1.40	Y		2	
161774	209293	17 45 32.8	-33 50 49	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	MWC 890
161805	209299	17 45 46.8	-31 3 22	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.38)	(0.84)	0.61	N		0	
161854	209308	17 46 5.0	-34 4 47	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
161876	228460	17 46 20.2	-40 49 28	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.73)	0.55	N		0	
161877	228462	17 46 26.4	-41 21 54	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.38	Y		0	
161946	209319	17 46 29.0	-30 19 4	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.37)	(0.81)	0.60	N		0	
162064	160841	17 46 53.6	-19 53 31	9.26	0.72	B0Ia	C	-6.95	-2.75	-9.70	28600	2.97	6.59	4.55	Y		1	
162067	209333	17 47 18.0	-35 42 50	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
162085	209337	17 47 22.2	-35 31 8	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.39)	0.28	Y		0	
162144	209345	17 47 41.5	-35 3 28	7.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.34)	0.25	Y		0	
162145	209346	17 47 44.9	-35 20 3	6.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.12)	(0.26)	0.19	Y		0	
162225	228495	17 48 17.8	-40 43 46	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.63)	0.47	N		0	
162694	185896	17 50 14.4	-22 20 5	9.50	...	B2V	A	-0.02	-0.70	-0.72	12200	(0.40)	(0.89)	0.67	N		0	
162717	185898	17 50 22.1	-24 15 21	9.35	0.50	B2III	C	-3.87	-1.60	-5.47	18000	2.22	4.93	1.59	Y		1	
-23 13647	185921	17 51 32.5	-23 39 32	9.50	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.58)	(1.30)	0.96	N		0	
163161	185948	17 52 39.3	-24 31 3	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
163442	122929	17 53 33.5	5 10 5	7.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.18)	(0.39)	0.31	Y		0	
163254	228569	17 53 36.5	-41 58 21	6.72	-0.08	B2Vn	C	-2.50	-2.00	-4.50	19700	0.48	1.07	0.56	Y		0	
163592	122944	17 54 18.5	4 22 57	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.45)	0.37	Y		0	
163591	122945	17 54 19.6	4 50 31	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.45)	0.37	Y		0	
163522	228590	17 55 0.2	-42 28 56	8.43	-0.01	B1Ia	C	-7.00	-1.70	-8.70	20260	0.63	1.40	9.12	N		1	
163774	122963	17 55 15.4	4 26 39	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.48	N		0	
-23 13708	186020	17 55 24.5	-24 0 54	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.53)	(1.17)	0.86	N		0	
163703	186022	17 55 27.8	-24 24 49	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.53)	(1.17)	0.86	N		0	
163862	122969	17 55 46.5	3 55 56	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.64)	0.56	N		0	
163811	186044	17 56 6.0	-23 18 47	8.40	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.39)	(0.86)	0.63	Y		0	
163745	228606	17 56 8.1	-41 29 5	6.50	-0.11	B7IIPShell	A	-4.00	-1.07	-5.07	13200	0.61	1.36	1.26	Y		1	
164002	186069	17 56 59.3	-22 32 47	7.15	...	B0.5V	C	-4.00	-2.60	-6.60	25400	0.93	2.06	1.10	Y		3	
164018	186071	17 57 2.6	-23 7 31	9.18	0.65	B0.5III	C	-4.61	-2.50	-7.11	25900	2.79	6.19	1.59	Y		2	
-23 13751	186081	17 57 22.1	-23 30 3	9.40	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.57)	(1.26)	0.93	N		0	
164106	186088	17 57 43.7	-29 54 5	8.80	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.72)	(1.59)	1.20	N		0	
164284	123005	17 57 47.1	4 22 12	4.70	-0.05	B2Ve	C	-2.50	-2.00	-4.50	19700	0.57	1.27	0.21	Y		1	66 Oph
164169	186094	17 57 52.2	-22 15 16	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
164194	186096	17 57 57.2	-24 9 12	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
164225	186103	17 58 5.6	-22 35 51	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.48	N		0	
164226	186104	17 58 7.4	-23 33 13	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		2	67 Oph
164353	123013	17 58 8.3	2 55 57	3.97	0.02	B5Ib	C	-5.70	-0.82	-6.52	13700	(0.27)	(0.60)	0.50	Y		0	
164352	123015	17 58 11.7	3 9 0	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.56	N		0	
-23 13779	186108	17 58 14.8	-23 56 42	9.40	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.90)	(1.99)	1.46	N		0	
164359	186126	17 58 38.1	-22 7 53	7.53	0.01	B0IV	C	-4.40	-2.90	-7.30	30300	0.93	2.06	1.59	Y		2	
164384	186131	17 58 43.0	-23 10 43	8.27	-0.03	B1.5V:nnn	C	-3.39	-2.20	-5.59	21800	0.66	1.46	1.59	N		2	
164385	186132	17 58 46.7	-24 9 27	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.45	Y		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{\text{bol}}$	$T_{\text{eff}}$ °K	$A_v$	$N_H$ $10^{21}$ $\text{cm}^{-2}$	$R_{\text{sun}}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	
164402	186135	17 58 52.5	-22 46 51	5.73	...	B0Ib	C	-6.20	-2.75	-8.95	28600	0.69	1.53	1.70	Y		3		
164496	209635	17 59 32.6	-30 58 16	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0		
164536	186152	17 59 34.7	-24 15 25	6.87	...	B3V	D	-1.70	-1.80	-3.50	18700	0.51	1.13	0.40	Y		3		
164535	186153	17 59 34.9	-24 3 6	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0		
-23 13807	186155	17 59 35.9	-23 15 19	9.30	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.55)	(1.21)	0.89	N		0		
164516	186156	17 59 36.2	-29 22 5	7.91	-0.03	B2V	C	-2.50	-2.00	-4.50	19700	0.63	1.40	0.90	Y	0	1		
164606	186166	17 59 57.2	-29 31 52	8.90	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.47)	(1.04)	0.77	N		0		
164637	186169	17 59 60.0	-22 43 13	6.73	-0.05	B0.5III	C	-5.02	-2.50	-7.52	25900	0.75	1.67	1.59	Y	2	1	NGC 6531	
164704	186179	18 0 16.9	-22 53 12	8.27	0.01	B1.5III	C	-3.51	-1.80	-5.31	20000	0.78	1.73	1.59	Y	2	1		
164739	186191	18 0 35.7	-23 8 26	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y		0		
164766	186196	18 0 40.0	-23 20 59	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0		
-23 13841	186202	18 0 46.4	-23 18 10	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.09)	0.80	N		0		
164906	186220	18 1 21.8	-24 23 22	7.46	0.21	B1IVpe	C	-4.95	-2.00	-6.95	21100	1.41	3.13	1.59	Y	2	1		
164933	186225	18 1 29.3	-24 9 52	8.55	0.13	B0.5V	A	-1.00	-1.30	-2.30	15300	(0.51)	(1.13)	0.83	N		0		
-24 13835	186224	18 1 25.2	-24 19 37	9.10	...	B5V	C	-3.68	-2.60	-6.28	25400	1.23	2.73	1.59	Y	2	1		
-24 13841	186227	18 1 31.9	-24 20 5	8.90	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.76)	(1.68)	1.24	N		0		
164973	186232	18 1 37.5	-26 7 16	9.40	...	B8V	A	-0.82	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0		
165024	245242	18 2 44.2	-50 5 50	3.66	-0.09	B2Ib	C	-5.00	-1.35	-7.15	18000	0.27	0.60	0.69	Y	0	1	$\theta$ Ara	
165617	228742	18 5 18.2	-42 39 56	7.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.16)	(0.35)	0.26	Y		0		
165892	186359	18 6 4.8	-21 24 58	8.90	...	B	...	...	...	...	...	...	...	...	...	...	...	...	
166053	161118	18 6 39.4	-19 22 2	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0		
166167	186396	18 7 14.3	-21 20 16	8.29	0.56	B9Ib	C	-4.42	-0.38	-4.80	10250	1.71	3.80	1.59	Y	2	1		
166291	161140	18 7 41.2	-19 10 41	9.06	...	B1.5V	C	-3.00	-2.20	-5.20	21800	1.35	3.00	1.40	N		3		
166294	186415	18 7 50.8	-22 54 45	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.75)	0.55	N		0		
166417	161154	18 8 17.9	-15 54 24	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0		
166501	161160	18 8 49.4	-19 3 24	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.61)	(0.61)	0.45	N		0		
166539	161163	18 8 50.9	-15 35 43	8.83	0.25	B0IV	C	-4.32	-2.90	-7.22	30300	1.65	3.66	2.00	Y	5	1		
166569	161165	18 8 56.9	-19 4 11	8.88	0.45	B1II	C	-5.09	-2.00	-7.09	21100	2.07	4.59	2.40	Y	4	1		
166566	161166	18 8 58.4	-15 41 33	7.84	0.29	B0.5IIIe	C	-5.37	-2.50	-7.87	25900	1.71	3.80	2.00	Y	5	1	MWC 284	
166628	161172	18 9 17.4	-19 26 45	7.17	0.59	B3Ia	C	-6.92	-1.15	-8.07	16300	2.19	4.86	2.40	Y	4	1		
166693	186466	18 9 40.7	-21 0 4	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.38	N		0		
166805	186483	18 10 14.1	-21 16 35	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0		
166790	209873	18 10 22.0	-31 58 54	6.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.12)	(0.27)	0.20	Y		0		
166937	186497	18 10 46.3	-21 4 25	3.86	0.23	B8Iape	C	-7.06	-0.51	-7.57	10900	(0.05)	(0.11)	0.08	Y	2	2	$\mu$ Sgr	
167091	186521	18 11 33.3	-20 53 60	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.55	N		0		
167054	209904	18 11 39.5	-31 24 1	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.48	N		0		
167311	161219	18 12 23.3	-12 31 5	8.61	1.01	B0Ib	C	-6.73	-2.75	-9.48	28600	3.84	8.52	2.00	Y	8	1		
167321	209934	18 12 56.9	-38 56 17	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.43)	(0.96)	0.82	N		0		
167441	209941	18 13 17.9	-30 25 22	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.43)	0.32	Y		0		
167599	209953	18 14 1.9	-31 18 58	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.38)	0.28	Y		0		
167965	47342	18 14 5.4	-42 8 29	5.59	-0.10	B7IV	C	-1.00	-1.07	-2.07	13200	(0.11)	(0.25)	0.20	Y	2	2		
167789	161266	18 14 32.1	-12 15 5	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0		
167834	161274	18 14 43.4	-12 7 28	8.90	...	B	...	...	...	...	...	...	...	...	...	...	...	...	
167881	161277	18 14 53.2	-11 15 57	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0		
-12 4970	161280	18 14 58.4	-12 31 9	8.78	1.02	B0.5Ia	C	-6.53	-2.00	-8.53	23100	3.81	8.46	2.00	Y	8	1		
167925	161287	18 15 6.0	-12 44 58	8.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.52	N		0		
-12 4982	161293	18 15 21.7	-12 12 0	9.26	0.67	B0II	C	-5.15	-2.90	-8.05	30300	2.91	6.46	2.00	Y	8	1	NGC 6604	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s (3)	DEC (1950) ° ' " (4)	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K (12)	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$ (14)	$R_{sun}$ kpc (15)	Volume Limited Flag (16)	Ass. Ref. (17)	Cat. (18)	Comment (19)
168135	161312	18 16 2.2	-12 28 30	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0	
168114	161314	18 16 3.3	-16 40 57	9.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.38)	(0.84)	0.61	N		0	
168163	161321	18 16 10.7	-16 19 23	8.77	...	B6IV	C	-1.50	-1.20	-2.70	14500	0.96	2.13	0.70	Y		3	
168302	161334	18 16 46.5	-16 2 40	9.26	...	B5V	C	-1.00	-1.30	-2.30	15300	1.08	2.40	0.70	Y		3	
168696	85939	18 18 10.0	21 3 1	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.30	Y		0	
168508	210032	18 18 14.3	-32 16 29	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.30)	(0.66)	0.51	N		0	
168585	161373	18 18 17.4	-16 1 47	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.59	N		0	
168607	161374	18 18 21.5	-16 23 59	8.29	1.60	B9Ia+pe	C	-7.94	-0.38	-8.32	10250	4.83	10.72	1.91	Y	6	1	MWC 291
168625	161375	18 18 26.2	-16 23 53	8.41	1.46	B8Ia+e	C	-7.46	-0.51	-7.97	10900	4.47	9.92	1.91	Y	6	1	VAR
168852	85955	18 18 57.9	20 54 37	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.24	Y		0	
-22 12893	186715	18 19 1.1	-22 56 47	7.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.44)	0.32	Y		0	
168708	186717	18 19 1.2	-22 56 48	7.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.15)	(0.34)	0.25	Y		0	
169031	85969	18 19 40.9	21 28 58	6.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.12)	(0.26)	0.20	Y		0	
168900	186743	18 20 2.7	-22 38 7	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
168989	186754	18 20 30.9	-23 5 16	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
-34 12776	210084	18 20 31.7	-34 24 34	10.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.40)	(0.90)	0.74	N		0	
169021	210088	18 20 44.8	-34 21 39	7.01	-0.01	B9VpSi	D	0.36	-0.50	-0.14	11200	(0.12)	(0.27)	0.20	Y		2	
169227	161430	18 21 22.8	-12 15 33	8.62	1.22	B1.5Ia	C	-7.04	-1.55	-8.59	19400	4.26	9.46	1.91	Y	6	1	
169226	161431	18 21 23.6	-12 14 30	8.50	...	B	...	...	...	...	...	...	...	...	...	...	0	
169313	161445	18 21 51.3	-12 42 12	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.37	Y		0	
169398	210135	18 22 36.1	-33 58 29	6.30	-0.08	B5IV	C	-1.80	-1.30	-3.10	16300	(0.22)	(0.50)	0.38	Y		2	
169587	210161	18 23 29.5	-34 1 44	9.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.34)	(0.76)	0.60	N		0	
169726	161475	18 23 51.2	-12 18 39	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.64)	0.47	N		0	
170062	186856	18 25 25.2	-22 51 9	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.76)	0.57	N		0	
-9 4742	142335	18 25 35.1	-9 37 3	10.44	0.75	B2.V::	C	-2.56	-2.00	-4.56	19700	3.00	6.66	1.00	Y	9	1	
170702	186924	18 28 54.1	-29 8 56	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.55	N		0	
170906	186950	18 29 48.0	-23 55 1	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.70)	0.53	N		0	
170992	186962	18 30 16.7	-23 33 40	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.29)	(0.65)	0.48	N		0	
171461	31032	18 31 2.6	52 4 38	6.56	-0.05	B9.5V	C	0.53	-0.30	0.23	10500	(0.09)	(0.20)	0.15	Y		2	
171151	186987	18 31 3.0	-22 50 52	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.71)	0.53	N		0	
171466	161640	18 32 37.7	-10 11 35	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
171572	187039	18 33 38.4	-24 6 19	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.62)	0.47	N		0	
171737	187059	18 34 21.0	-23 39 26	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.65)	0.49	N		0	
171961	187080	18 35 28.2	-23 32 58	5.81	0.02	B8III	C	-1.16	-0.72	-1.88	12250	(0.14)	(0.32)	0.23	Y		2	
172252	161701	18 36 52.2	-11 55 29	9.50	0.66	B2.V::pne	C	-3.26	-2.00	-5.26	19700	2.76	6.13	1.00	Y	9	1	
172367	142483	18 37 27.5	-7 17 51	9.50	0.45	B0V	C	-2.75	-3.00	-5.75	29600	2.25	4.99	1.00	Y	9	1	
-13 5065	161710	18 37 35.5	-13 27 25	8.90	...	B	...	...	...	...	...	...	...	...	...	...	0	
171405	257622	18 37 53.6	-79 16 31	8.30	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.34)	(0.75)	1.14	Y		0	
-8 4674	142488	18 38 1.6	-8 1 15	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
172789	142520	18 39 39.5	-6 51 18	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
172771	161748	18 39 41.9	-11 9 37	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
172947	142537	18 40 28.5	-6 53 18	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
173011	161769	18 40 51.8	-11 32 46	8.90	...	B0.5V	C	-4.00	-2.60	-6.60	25400	1.19	2.64	2.20	N		3	
173219	142567	18 41 51.4	-7 9 46	7.81	0.21	B1Vne	C	-3.60	-2.50	-6.10	24150	1.41	3.13	1.00	Y	9	1	
173319	142580	18 42 15.2	-7 37 36	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
173528	123887	18 43 3.9	7 19 8	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N		0	
174237	31165	18 45 36.0	52 55 56	5.88	-0.09	B2.5Ve	C	-2.65	-1.90	-4.55	19200	(0.22)	(0.48)	0.46	Y		2	CX Dra

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
174069	142648	18 46 15.5	-8 30 58	7.60	...	B2V	D	-2.98	-2.00	-4.98	19700	0.60	1.33	0.99	Y		3	
174182	142657	18 46 46.1	0 27 13	8.30	...	B3Vn	D	-1.00	-2.30	-3.50	15300	0.37	0.83	0.61	Y		3	
174585	67441	18 47 54.2	32 45 14	5.96	-0.22	B2V	C	-2.50	-2.00	-4.50	19700	0.06	0.13	0.48	Y	0	1	$\nu^1$ Lyr
174638	67451	18 48 13.9	33 18 13	3.45	0.00	B7Ve+A8p	D	-0.32	-1.10	-1.42	12500	0.03	0.08	0.06	Y		2	$\beta$ Lyr
174509	142693	18 48 14.8	0 37 5	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	0.33	0.74	0.55	N		0	
174664	67453	18 48 15.8	33 17 33	7.80	...	B3V	A	-2.32	-1.80	-4.12	18700	0.37	0.81	0.89	Y		0	
174632	210663	18 49 29.1	-30 47 44	6.63	-0.05	B8V	C	-2.02	-0.70	-0.72	12200	0.12	0.27	0.20	Y		2	
174933	86521	18 50 8.2	21 21 49	5.48	-0.07	B9I-IIIpHg	C	-2.03	-0.46	-2.49	11400	0.09	0.19	0.14	Y		2	112 Her
175249	142788	18 52 2.5	-9 3 42	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	0.31	0.68	0.50	N		0	
175428	104253	18 52 32.3	15 16 41	7.00	...	B9V	A	0.36	-0.50	-0.14	11200	0.12	0.27	0.20	Y		0	
175362	210734	18 53 17.1	-37 24 32	5.38	-0.14	B8IVSi	C	-0.60	-0.72	-1.32	12250	0.09	0.20	0.15	Y		2	
175677	124069	18 53 45.1	7 52 11	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	0.20	0.45	0.34	Y		0	
175885	67597	18 54 11.2	33 43 9	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	0.21	0.46	0.37	Y		0	
176258	124129	18 56 51.6	1 20 12	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	0.20	0.44	0.32	Y		0	
176269	210815	18 57 40.6	-37 7 54	6.69	...	B9V	C	0.36	-0.50	-0.14	11200	0.11	0.24	0.18	Y		2	
176270	210816	18 57 41.6	-37 7 58	6.40	-0.03	B8V-IV	D	-0.31	-0.71	-1.02	12200	0.12	0.28	0.21	Y		2	
-37 13024	210829	18 58 18.5	-36 56 52	...	...	B2V	A	-2.98	-2.00	-4.98	19700	...	...	...	...	...	0	
176819	86704	18 59 13.3	20 45 39	6.68	0.02	B2IV-V	D	-3.00	-1.80	-4.80	18800	0.78	1.73	0.60	Y	0	1	
176739	142936	18 59 13.8	-4 24 22	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	0.23	0.52	0.38	Y		0	
176745	162112	18 59 24.4	-13 19 36	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	0.19	0.42	0.31	Y		0	
176767	162114	18 59 28.3	-12 44 7	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	0.26	0.58	0.43	N		0	
176873	104379	18 59 29.1	12 28 6	6.60	...	B9V	A	0.36	-0.50	-0.14	11200	0.10	0.23	0.17	Y		0	
176829	162123	18 59 49.1	-13 14 7	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	0.27	0.60	0.45	N		0	
176919	142951	19 0 0.1	-4 52 8	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	0.29	0.63	0.47	N		0	
177012	162143	19 0 33.8	-12 47 2	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	0.17	0.37	0.27	Y		0	
+2 3771	124218	19 1 39.4	3 1 19	9.00	...	B2V	A	-2.98	-2.00	-4.98	19700	0.97	2.15	1.59	N		0	
178060	48066	19 3 40.2	41 20 40	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	0.23	0.50	0.42	N		0	
178329	48084	19 4 39.7	41 20 7	6.49	-0.15	B3V	C	-2.32	-1.80	-4.12	18700	0.26	0.58	0.51	Y		2	
178162	124285	19 4 46.8	8 16 13	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	0.25	0.56	0.41	N		0	
178399	48090	19 4 59.7	41 26 12	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	0.18	0.41	0.32	Y		0	
178591	48102	19 5 41.1	40 58 28	6.90	...	B5V	A	-1.00	-1.30	-2.30	15300	0.19	0.43	0.35	Y		0	
178479	124312	19 6 1.7	9 3 12	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	0.27	0.61	0.45	N		0	
178847	48123	19 6 36.3	43 57 21	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	0.15	0.33	0.26	Y		0	
178803	104540	19 7 16.3	10 59 11	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	0.29	0.63	0.47	N		0	
178774	124335	19 7 18.2	5 35 43	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	0.12	0.26	0.19	Y		0	
178893	104547	19 7 40.0	10 48 45	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	0.26	0.59	0.43	N		0	
178929	187789	19 8 21.8	-20 25 51	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	0.27	0.61	0.45	Y		2	
179124	124358	19 8 38.4	5 11 28	6.90	...	B9V	A	0.36	-0.50	-0.14	11200	0.18	0.39	0.30	Y		0	
179511	124391	19 10 17.3	4 40 8	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	0.12	0.26	0.19	Y		0	
179588	104602	19 10 19.8	16 45 40	6.73	-0.01	B9IV	C	-0.20	-0.46	-0.66	11400	0.09	0.19	0.14	Y		2	
179587	104603	19 10 20.7	17 5 54	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	0.29	0.65	0.49	N		0	
179793	124411	19 11 17.0	4 54 1	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	0.26	0.59	0.43	N		0	
179938	104628	19 11 47.0	10 22 27	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	0.28	0.63	0.46	N		0	
179968	124426	19 11 55.1	6 12 7	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	0.26	0.59	0.43	N		0	
180125	104642	19 12 35.8	10 19 17	7.10	...	B8V	A	-0.02	-0.70	-0.72	12200	0.15	0.34	0.25	Y		0	
180192	143193	19 13 9.4	-5 24 2	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	0.28	0.62	0.47	N		0	
231005	104657	19 13 10.3	18 56 48	8.50	...	B5V	A	-1.00	-1.30	-2.30	15300	0.39	0.88	0.66	Y		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_e$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
180288	124445	19 13 22.3	6 22 0	9.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.32)	(0.72)	0.53	N		0	
180291	143202	19 13 36.8	-5 50 3	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.62)	0.47	N		0	
180715	104683	19 14 47.9	15 59 51	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y		0	
180811	87027	19 15 3.4	22 20 7	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.35)	0.26	Y		0	
180812	104686	19 15 19.0	10 15 39	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.59)	0.43	N		0	
180874	143246	19 15 53.0	-7 37 4	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.51	N		0	
181182	104711	19 16 37.1	19 31 4	6.58	0.03	B8III+K:	D	-1.16	-0.72	-1.88	12250	(0.20)	(0.43)	0.32	Y		2	U Sge
181167	124500	19 16 42.3	9 57 11	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
181231	143268	19 17 8.5	0 8 36	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N		0	
181440	143292	19 18 0.8	0 59 12	5.49	-0.04	B9III	C	-0.78	-0.46	-1.24	11400	(0.08)	(0.17)	0.13	Y		2	27 Aql
181442	143293	19 18 1.4	-5 39 40	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.35	Y		0	
181690	143306	19 18 50.8	0 0 22	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.63)	0.47	N		0	
-5 4943	143313	19 19 14.8	-5 11 37	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.32)	(0.71)	0.55	N		0	
182146	87129	19 20 22.5	22 5 28	8.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.22)	(0.49)	0.36	Y		0	
182198	143347	19 20 57.2	0 38 18	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0	
182221	124576	19 21 3.4	4 6 43	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.43	N		0	
231285	104783	19 21 7.1	15 7 5	9.50	...	B0III	C	-5.40	-2.90	-8.30	30300	3.15	6.99	2.30	Y		3	
182691	31623	19 22 5.1	50 10 22	6.50	-0.08	B9III	C	-0.78	-0.46	-1.24	11400	(0.15)	(0.34)	0.27	Y		2	2 Cyg
182568	87159	19 22 9.2	29 31 20	4.86	...	B3IV	C	-2.50	-1.50	-4.00	17100	0.17	0.37	0.27	Y		3	
234893	31650	19 24 40.3	50 47 58	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.55)	0.48	N		0	
183144	104862	19 25 15.8	14 10 48	6.26	...	B4III	C	-1.00	-1.40	-2.40	16700	0.33	0.73	0.20	Y		3	
183261	87240	19 25 43.1	20 8 40	6.92	-0.04	B3III	C	-3.00	-1.50	-4.50	17100	0.48	1.07	0.77	Y		0	1
183680	68391	19 27 35.8	31 16 10	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.43)	0.32	Y		0	
183888	104926	19 29 0.3	11 3 53	8.30	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.25)	(0.56)	0.41	Y		0	
184829	87402	19 33 21.3	20 42 38	8.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.26)	(0.58)	0.43	Y		0	
+29 3660	87433	19 34 11.8	29 42 32	9.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.08)	0.84	N		0	
185224	68578	19 34 54.0	30 12 43	7.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.18)	(0.40)	0.30	Y		0	
185418	105087	19 36 12.5	17 8 33	7.45	0.22	B0.5V	C	-3.80	-2.60	-6.40	25400	1.50	3.33	0.89	Y		0	1
185487	162862	19 37 1.9	-15 16 59	6.75	...	B8V	D	-0.02	-0.70	-0.72	12200	(0.13)	(0.28)	0.21	Y		2	
185755	68641	19 37 31.5	30 17 33	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y		0	
185835	48684	19 37 34.6	43 43 25	7.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.20)	(0.45)	0.35	Y		0	
185757	87529	19 37 48.9	21 27 6	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.46	N		0	
185803	105122	19 38 6.5	16 12 60	7.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.38)	0.28	Y		0	
331099	68670	19 38 24.6	31 14 25	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.38	Y		0	
185936	105132	19 38 46.6	13 41 54	8.84	...	B5V	C	-1.00	-1.30	-2.30	15300	0.57	1.27	0.20	Y		3	QS Aql
350461	105182	19 40 39.4	17 23 21	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
186567	31913	19 41 27.7	50 14 29	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.60)	0.51	N		0	
186549	105203	19 42 24.6	10 4 58	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0	
186587	105207	19 42 34.4	10 39 13	7.36	...	B3V	D	-1.60	-1.80	-3.40	18700	1.14	2.53	0.40	Y		3	
344873	87666	19 43 5.6	23 55 44	8.77	0.77	B0III:(n)	C	-4.44	-2.90	-7.34	30300	3.21	7.13	1.00	Y		1	
186994	48806	19 44 4.0	44 50 28	8.10	...	B0V	A	-4.30	-3.00	-7.30	29600	(0.65)	(1.44)	2.24	Y		0	
338889	87715	19 44 53.3	26 35 0	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
332701	87727	19 45 27.2	29 19 28	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N		0	
332690	87736	19 46 5.3	29 44 5	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.40	N		0	
331246	68904	19 47 9.6	32 29 42	9.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.74)	(1.65)	1.31	N		0	
187613	48866	19 47 25.2	44 15 9	7.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.39)	0.29	Y		0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat.	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
187569	125118	19 48 3.6	0 35 49	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.42	N		0	
187688	68922	19 48 8.3	32 30 46	8.14	-0.01	B0.5V	C	-3.80	-2.60	-6.40	25400	0.81	1.80	1.68	Y	0	1	
226117	68952	19 48 58.3	35 40 2	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.53)	0.40	N		0	
226151	68961	19 49 14.4	35 49 46	9.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.33)	(0.73)	0.55	N		0	
188062	105371	19 50 25.0	18 36 39	7.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.47)	0.35	Y		0	
332857	87860	19 50 25.9	29 1 32	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.61)	0.45	N		0	
188306	48929	19 51 6.3	43 51 49	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.50)	0.38	Y		0	
188459	48941	19 51 48.8	44 17 45	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.45	N		0	
189160	49005	19 55 13.2	44 8 11	7.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.46)	0.35	Y		0	
189159	49007	19 55 18.5	44 12 24	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.45	N		0	
189178	49011	19 55 29.6	40 13 57	5.43	...	B5V	C	-1.20	-1.30	-2.50	15300	0.51	1.13	0.20	Y		3	
189103	211716	19 56 29.1	-35 24 48	4.35	-0.16	B2.5IV	C	-3.15	-1.55	-4.70	17600	0.18	0.40	0.28	Y		0	$\theta^1$ Sgr
189528	69205	19 57 15.1	35 23 57	8.50	...	B9V	C	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.38	Y		0	
190066	88105	20 0 11.8	22 0 40	6.48	0.18	B1Iab	C	-6.50	-1.70	-8.20	20260	1.20	2.66	2.27	Y		0	
227244	69297	20 0 27.7	36 16 46	8.90	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.89)	(1.97)	1.58	N		0	
190467	69334	20 1 50.1	36 17 1	8.21	0.17	B9Iab	C	-4.52	-0.38	-4.90	10250	0.54	1.20	6.82	N		0	V1362 Cyg
331759	69342	20 2 13.8	32 0 48	8.70	0.46	B1Ib	C	-5.80	-1.70	-7.50	20260	2.04	4.53	3.10	N		0	
190603	69362	20 2 38.4	32 0 48	8.70	...	B1.5Iae	C	-6.80	-1.55	-8.35	19400	2.10	4.66	1.20	Y		0	
227536	69375	20 3 16.0	36 0 44	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.76)	0.57	N		0	
191139	69434	20 5 5.7	36 15 4	7.97	0.22	B0.5II	C	-5.27	-2.50	-7.77	25900	1.44	3.20	2.29	Y		13	
191396	69486	20 6 29.8	37 59 2	8.13	0.25	B0.2III	C	-5.00	-2.50	-7.50	25900	1.47	3.26	2.15	Y		0	
191456	69491	20 6 44.4	36 31 30	7.45	0.05	B0.5II-III	C	-5.28	-2.50	-7.78	25900	0.93	2.06	2.29	Y		13	
191473	69498	20 6 54.9	37 5 24	8.57	0.10	B1III	C	-3.81	-2.00	-5.81	21100	1.08	2.40	1.82	Y		14	
191610	69518	20 7 34.1	36 41 29	4.99	...	B2.5Ve	C	-3.60	-1.90	-5.50	19200	0.12	0.27	0.50	Y		3	28 Cyg
228004	69526	20 7 44.9	37 15 57	9.10	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.79)	(1.74)	1.34	N		0	
191721	88299	20 8 32.4	20 20 15	7.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.15)	(0.32)	0.24	Y		0	
351582	105789	20 8 35.0	19 37 28	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.72)	0.55	N		0	
228101	69557	20 8 46.0	37 18 34	8.44	0.07	B1V	C	-3.20	-2.50	-5.70	24150	0.99	2.20	1.35	Y		0	
191466	246485	20 8 58.0	-56 59 49	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.45	N		0	
191917	69564	20 9 4.1	35 48 14	7.81	0.14	B1III	C	-5.19	-2.00	-7.19	21100	1.20	2.66	2.29	Y		13	NGC 6883
228140	69565	20 9 5.8	37 12 24	9.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.30)	(0.66)	0.49	N		0	
192003	69572	20 9 27.3	38 4 48	8.88	0.12	B2IV	C	-3.50	-1.60	-5.10	18000	1.08	2.40	1.82	N		14	
228187	69573	20 9 28.3	37 12 33	9.68	0.12	B3II	C	-4.70	-1.50	-6.20	17100	0.90	2.00	4.97	N		0	
191946	105815	20 9 32.3	19 55 10	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.47)	0.35	Y		0	
228199	69575	20 9 35.0	36 20 57	9.25	0.13	B0.5V	C	-3.78	-2.60	-6.38	25400	1.23	2.73	2.29	N		13	
192907	9665	20 10 36.6	77 33 42	4.39	-0.05	B9III	C	-0.78	-0.46	-1.24	11400	(0.29)	(0.65)	1.00	N		2	$\kappa$ Cep
192303	69613	20 10 58.1	38 4 34	8.93	0.33	B1III	C	-4.14	-2.00	-6.14	21100	1.77	3.93	1.82	Y		14	
192444	69638	20 11 39.6	38 19 39	8.40	0.56	B1III	C	-4.30	-2.00	-6.30	21100	2.46	5.46	1.12	Y		0	
192445	69639	20 11 40.1	36 10 35	7.26	-0.09	B0.5IIIe	C	-5.11	-2.50	-7.61	25900	0.57	1.27	2.29	Y		13	
192579	49338	20 12 4.6	46 33 33	6.99	-0.15	B5V	C	-1.00	-1.30	-2.30	15300	(0.21)	(0.47)	0.36	Y		2	31 CygB
192599	49341	20 12 14.8	45 57 54	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.48)	0.37	Y		0	
228599	69706	20 13 37.2	37 33 12	8.80	...	B8V	A	-1.00	-1.30	-2.30	15300	(0.45)	(1.00)	0.74	N		0	
192987	69725	20 14 36.2	36 54 4	6.32	...	B8V	C	-1.60	-0.70	-2.30	12200	0.21	0.47	0.30	Y		3	
193007	69728	20 14 40.3	37 29 13	8.01	0.36	B0.2III	C	-5.00	-2.50	-7.50	25900	1.95	4.33	1.63	Y		0	IC 4996
193076	69754	20 15 7.8	37 31 33	7.62	0.33	B0.5II	C	-5.45	-2.50	-7.95	25900	1.77	3.93	1.82	Y		14	
193183	69763	20 15 32.4	38 4 47	7.01	0.44	B1.5Ib	C	-6.21	-1.55	-7.76	19400	1.92	4.26	1.82	Y		14	
193237	69773	20 15 56.5	37 52 36	4.81	0.42	B2Vpe	D	-2.98	-2.00	-4.98	19700	(0.15)	(0.34)	0.25	Y		2	$\pi$ Cyg

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	(17)	(18)	Comment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	
228807	69782	20 16 9.4	38 16 10	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N		0		
193289	69789	20 16 17.9	38 34 6	8.90	0.19	B3III	C	-3.57	-1.50	-5.07	17100	1.17	2.60	1.82	N	14	1		
334039	69795	20 16 25.4	30 39 51	8.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.24)	(0.54)	0.39	Y		0		
193444	69816	20 17 2.4	37 41 7	8.45	0.50	B0.5III	C	-5.19	-2.50	-7.69	25900	2.34	5.20	1.82	Y	14	1		
193516	69824	20 17 16.3	37 36 42	8.61	0.56	B3II	C	-4.91	-1.50	-6.41	17100	2.22	4.93	1.82	Y	14	1		
193594	49465	20 17 35.2	41 13 60	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0		
193491	105978	20 17 45.7	10 3 52	8.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.51)	0.40	N	2	2		
193553	88528	20 17 47.2	29 34 6	6.72	-0.16	gB2.5	D	-3.65	-1.55	-5.20	17600	(0.55)	(1.23)	0.92	Y	0	0		
193634	69834	20 17 58.8	38 11 4	7.46	0.30	B3III	C	-3.00	-1.50	-4.50	17100	1.50	3.33	0.62	Y		0		
193633	49476	20 17 58.9	40 58 48	7.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.12)	(0.27)	0.20	Y	0	1		
193666	49480	20 18 9.1	41 26 37	7.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.41)	0.31	Y		0		
229074	49495	20 18 55.7	41 18 54	8.90	...	B9V	A	0.36	-0.50	-0.14	11200	(0.27)	(0.60)	0.45	N	0	0		
193814	69867	20 18 57.6	38 5 49	7.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.38)	0.28	Y		0		
193945	49514	20 19 39.8	41 2 3	8.46	0.67	B0Vnn	C	-3.80	-3.00	-6.80	29600	2.91	6.46	0.74	Y	0	1		
194009	69901	20 20 0.6	38 28 9	8.66	0.61	B3II	C	-5.01	-1.50	-6.51	17100	2.37	5.26	1.82	Y	14	1		
194057	49520	20 20 0.6	44 39 13	7.51	0.86	B0.7Iab:	C	-6.50	-2.00	-8.50	23100	3.33	7.39	1.37	Y	0	1		
194092	49525	20 20 18.9	40 49 30	8.26	0.13	B0.5V	C	-3.80	-2.60	-6.40	25400	1.23	2.73	1.47	Y	0	1		
193924	246574	20 21 42.3	-56 53 50	1.94	-0.20	B2IV	C	-3.10	-1.60	-4.70	18000	0.12	0.27	0.10	Y	0	1		$\alpha$ Pav
194335	69951	20 21 52.0	37 18 50	5.93	-0.21	B2Vpe	C	-2.50	-2.00	-4.50	19700	0.09	0.20	0.47	Y	0	1		
194670	69999	20 23 39.6	39 37 46	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y		0		
195629	49729	20 29 13.9	40 15 25	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y		0		
195810	106230	20 30 49.4	11 7 56	4.03	-0.13	B6III	C	-1.92	-1.20	-3.12	14500	(0.02)	(0.05)	0.04	Y		2		$\epsilon$ Del
235298	32741	20 36 17.5	51 17 22	8.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.50)	(1.12)	0.92	Y		0		
197419	70406	20 40 24.6	35 16 34	6.68	-0.16	B2IV-Ve	D	-3.00	-1.80	-4.80	18800	0.24	0.53	0.77	Y	0	1		
197619	32818	20 41 14.7	52 26 59	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.41)	0.31	Y		0		
235330	32822	20 41 24.7	52 59 9	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.76)	0.60	N	0	0		
197702	70442	20 42 23.9	31 30 49	8.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.52)	(1.14)	0.91	Y		0		
235347	32847	20 42 59.6	50 50 56	8.80	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.57)	0.43	N		0		
235350	32856	20 43 39.2	51 1 39	9.27	0.29	B0.5IV	C	-4.50	-2.50	-7.00	25900	1.71	3.80	2.58	N	0	1		
235352	32859	20 43 57.4	50 35 48	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.75)	0.57	N	0	0		
198056	70480	20 44 45.3	32 14 9	7.04	-0.04	B9V	D	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.20	Y	2	2		55 Cyg
198478	50099	20 47 14.0	45 55 40	4.84	0.41	B3Iae	C	-6.68	-1.15	-7.83	16300	(0.04)	(0.08)	0.06	Y		2		
198895	32938	20 49 47.4	55 18 1	8.09	0.66	B1Ve	C	-3.20	-2.50	-5.70	24150	2.76	6.13	0.51	Y	0	1		
198820	70596	20 49 58.1	32 39 37	6.44	-0.14	B3III	C	-3.00	-1.50	-4.50	17100	0.18	0.40	0.71	Y	0	1		
198946	89238	20 50 49.8	29 8 32	8.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.19)	(0.42)	0.31	Y		0		
199042	70633	20 51 28.0	30 45 41	7.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.17)	(0.37)	0.27	Y		0		
199102	89259	20 51 50.3	29 18 33	7.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.34)	0.25	Y		0		
199140	89265	20 52 14.9	28 19 52	6.52	-0.12	B2III	C	-3.70	-1.60	-5.30	18000	0.36	0.80	0.94	Y		0		
199206	50205	20 52 20.8	44 55 10	7.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.16)	(0.35)	0.26	Y		0		
199312	50219	20 53 0.0	44 56 41	8.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.32	Y		0		
199479	50247	20 54 12.2	44 10 53	6.80	-0.05	B9V	C	0.36	-0.50	-0.14	11200	(0.11)	(0.25)	0.18	Y		2		
199837	70743	20 56 39.2	31 27 10	7.20	...	B9V	C	0.36	-0.50	-0.14	11200	(0.13)	(0.30)	0.22	Y		0		
199955	33034	20 56 53.9	50 16 2	5.61	-0.15	B5Vn	C	-1.00	-1.30	-2.30	15300	(0.08)	(0.17)	0.13	Y		2		
200170	106761	20 59 0.7	16 15 31	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.26)	(0.58)	0.52	N		0		
200775	19158	21 0 59.7	67 57 55	7.36	0.37	B2Ve	C	-2.50	-2.00	-4.50	19700	1.83	4.06	0.40	Y	0	1		NGC 7039
201666	50510	21 7 47.3	45 32 4	7.64	-0.02	B2V(n)	C	-2.52	-2.00	-4.52	19700	0.66	1.46	0.79	Y	19	1		
201733	50521	21 8 10.8	45 17 53	6.64	-0.13	B2Vnn	C	-3.19	-2.00	-5.19	19700	0.33	0.73	0.79	Y	19	1		

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_e$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Cat. Ref.	Comment	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
201976	33193	21 9 29.4	55 4 5	8.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.22)	(0.49)	0.37	Y	0	0	
202000	33196	21 9 32.9	55 7 37	7.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.19)	(0.41)	0.31	Y	0	0	V1425 Cyg
201912	89520	21 9 40.3	29 30 22	6.86	-0.13	B5III	C	-2.30	-1.30	-3.60	16300	(0.32)	(0.71)	0.59	Y	2	0	
202068	50561	21 10 19.0	45 29 51	7.90	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.21)	(0.47)	0.35	Y	0	0	
202163	50573	21 10 49.5	45 35 19	8.59	-0.04	B2V	C	-1.51	-2.00	-3.51	19700	0.60	1.33	0.79	Y	19	1	NGC 7039
202347	50592	21 11 53.4	45 24 14	7.49	-0.11	B1.5V	C	-2.43	-2.20	-4.63	21800	0.42	0.93	0.79	Y	19	1	NGC 7039
-39 14181	212846	21 12 53.7	-38 42 28	...	...	B9V	A	0.36	-0.50	-0.14	11200	...	...	...	...	0	0	
235501	33355	21 20 9.9	55 12 37	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.34)	(0.76)	0.57	N	0	0	
203664	126757	21 21 2.4	9 43 1	8.53	-0.20	B0.5IIIIn	C	-5.00	-2.50	-7.50	25900	0.24	0.53	4.55	N	0	1	
203883	33373	21 21 22.8	55 26 8	8.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.60)	0.45	Y	0	0	
204001	33386	21 22 17.3	51 26 29	7.10	-0.11	B9IV	C	-0.20	-0.46	-0.66	11400	(0.16)	(0.36)	0.27	Y	2	0	
204116	33401	21 22 57.3	55 9 2	7.84	0.47	B1.5IV(n)e	C	-3.30	-1.80	-5.10	20000	2.16	4.79	0.63	Y	0	1	
204375	50859	21 24 52.5	43 35 41	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y	0	0	
204710	50925	21 27 13.4	44 42 13	6.95	0.26	B8Ib	C	-5.80	-0.51	-6.31	10900	0.87	1.93	2.38	Y	0	1	
205021	10057	21 28 1.3	70 20 28	3.23	-0.22	B1V	C	-4.20	-2.00	-6.20	21100	(0.04)	(0.10)	0.07	Y	2	2	$\beta$ Cep
235536	33514	21 30 51.9	53 32 39	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N	0	0	
235538	33517	21 30 56.9	53 35 4	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y	0	0	
239697	33531	21 32 22.8	57 4 14	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.28)	(0.63)	0.47	N	0	0	
205794	33562	21 34 11.7	57 14 35	8.43	0.34	B0.5V	C	-3.23	-2.60	-5.83	25400	1.86	4.13	0.91	Y	22	1	
239710	33573	21 35 8.7	57 16 38	9.00	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.73)	(1.62)	1.31	N	0	0	
205948	33574	21 35 15.7	57 21 31	8.65	0.25	B2V	C	-2.62	-2.00	-4.62	19700	1.47	3.26	0.91	Y	22	1	
206165	19541	21 36 34.7	61 51 21	4.74	0.30	B2Ib	C	-6.50	-1.35	-7.85	18000	1.44	3.20	0.91	Y	22	1	9 Cep
239724	33621	21 37 6.1	57 8 26	9.14	0.37	B1III	C	-4.30	-2.00	-6.30	21100	1.89	4.20	2.04	Y	0	1	
239725	33627	21 37 30.2	56 43 23	9.15	0.26	B2V	C	-2.15	-2.00	-4.15	19700	1.50	3.33	0.91	Y	22	1	
235579	33628	21 37 30.4	53 55 33	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.08)	0.80	N	0	0	
239729	33637	21 37 54.0	57 15 23	8.34	0.39	B0V	C	-3.53	-3.00	-6.53	29600	2.07	4.59	0.91	Y	22	1	
239732	33648	21 38 24.2	57 22 38	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.79)	0.59	Y	0	0	
235586	33651	21 38 43.3	53 48 8	8.70	...	B2V	A	-2.98	-2.00	-4.98	19700	(0.87)	(1.94)	1.45	N	0	0	
206773	33677	21 40 50.3	57 30 25	6.94	0.20	B0V:pec	C	-4.36	-3.00	-7.36	29600	1.50	3.33	0.91	Y	22	1	MWC 376
209162	19776	21 57 36.7	63 1 22	8.60	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.27)	(0.61)	0.47	N	0	0	
209178	19777	21 57 38.9	63 45 31	8.70	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.28)	(0.63)	0.49	N	0	0	
209469	51589	22 0 40.9	42 34 21	7.10	...	B9V	A	0.36	-0.50	-0.14	11200	(0.13)	(0.28)	0.21	Y	0	0	
209952	230992	22 5 5.5	-47 12 15	1.74	-0.13	B7IV	C	-1.00	-1.07	-2.07	13200	(0.01)	(0.02)	0.02	Y	2	2	$\alpha$ Gru
239886	34170	22 10 46.9	57 1 6	8.84	0.85	B9Iab	C	-6.84	-0.38	-7.22	10250	2.58	5.73	4.17	N	24	1	NGC 7235
211057	34189	22 11 24.6	55 3 56	7.40	...	B9V	A	0.36	-0.50	-0.14	11200	(0.15)	(0.33)	0.24	Y	0	0	
239895	34193	22 11 30.6	57 25 5	8.63	1.02	B8Ia	C	-7.22	-0.51	-7.73	10900	3.15	6.99	3.47	Y	23	1	NGC 7235
211242	19948	22 12 15.0	62 54 50	6.11	-0.08	B8Vn	C	-0.02	-0.70	-0.72	12200	(0.10)	(0.22)	0.16	Y	2	2	
239900	34222	22 12 58.6	56 37 2	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.25)	(0.56)	0.41	N	0	0	
211430	34238	22 13 39.1	55 34 9	7.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.14)	(0.31)	0.23	Y	0	0	
211880	19993	22 16 50.9	62 58 19	7.75	0.32	B0.5V	C	-3.85	-2.60	-6.45	25400	1.80	4.00	0.91	Y	22	1	
239945	34402	22 21 49.1	55 52 50	9.50	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.41)	(0.90)	0.66	N	0	0	
212986	34460	22 25 5.3	56 10 42	6.57	-0.10	B5III	C	-2.30	-1.30	-3.60	16300	(0.31)	(0.70)	0.51	Y	2	2	
239954	34462	22 25 14.2	57 14 12	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.08)	0.80	N	0	0	
239955	34465	22 25 22.5	57 34 20	9.20	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.36)	(0.80)	0.59	N	0	0	
239956	34467	22 25 27.2	58 41 11	9.00	...	B9V	A	0.36	-0.50	-0.14	11200	(0.29)	(0.63)	0.47	N	0	0	
213087	20075	22 25 28.6	64 52 37	5.46	0.37	B0.5Ib	C	-6.00	-2.00	-8.00	23100	1.86	4.13	0.83	Y	0	1	26 Cep
213209	34489	22 26 31.5	57 24 21	8.30	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.48)	0.35	Y	0	0	

TABLE 1—Continued

HD/BD Number	SAO Number	RA (1950) h m s	DEC (1950) ° ' "	$m_v$	B - V	MK Sp. Type	LC Flag	$M_v$	BC	$M_{bol}$	$T_{eff}$ °K	$A_v$	$N_H$ $10^{21}$ $cm^{-2}$	$R_{sun}$ kpc	Volume Limited Flag	Ass. Ref.	Cat. (18)	Comment (19)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
213231	34495	22 26 48.3	58 35 23	8.00	...	B0V	A	-4.30	-3.00	-7.30	29600	(1.06)	(2.36)	1.77	Y		0	
239967	34499	22 27 2.4	56 20 49	9.36	0.33	B3II	C	-4.70	-1.50	-6.20	17100	1.53	(3.40)	3.21	N	0	1	
+55 2757	34505	22 27 15.8	56 18 40	9.20	...	B2V	A	-2.98	-2.00	-4.98	19700	(1.04)	(2.30)	1.69	N		0	
213405	20100	22 27 39.4	64 51 24	7.95	0.47	B1III(n)	C	-4.30	-2.00	-6.30	21100	2.19	4.86	1.03	Y	0	1	
239984	34538	22 28 52.5	57 9 45	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
239989	20131	22 30 10.2	60 26 37	10.09	...	B3.5V	C	-1.50	-1.80	-3.30	18700	1.98	4.40	0.91	N	22	3	
213757	20135	22 30 31.8	60 4 36	8.38	0.26	B1V	C	-2.98	-2.50	-5.48	24150	1.56	3.46	0.91	Y		1	
240002	34589	22 33 12.0	55 58 11	9.10	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.51)	(1.13)	0.83	N		0	
+57 2596	34767	22 43 18.4	57 37 1	9.30	...	B	...	...	...	...	...	...	...	...	...	...	0	
215806	34802	22 44 40.8	58 1 54	9.20	0.42	B0Ib	C	-5.57	-2.75	-8.32	28600	2.07	4.59	3.47	N	23	1	NGC 7380
215868	34816	22 45 7.8	57 19 52	8.50	...	B9V	A	0.36	-0.50	-0.14	11200	(0.23)	(0.52)	0.38	Y		0	
240068	34822	22 45 19.1	58 13 30	9.64	0.49	B0III	C	-5.43	-2.90	-8.33	30300	2.37	5.26	3.47	N	23	1	
216711	20305	22 51 57.1	62 19 49	9.05	0.62	B1V	C	-3.29	-2.50	-5.79	24150	2.64	5.86	0.87	Y	26	1	BROD 221
240110	34943	22 52 42.1	58 4 5	9.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.31)	(0.69)	0.51	N		0	
216927	34973	22 54 5.5	58 37 13	8.31	0.86	B9Ia	C	-7.00	-0.38	-7.38	10250	2.61	5.79	3.47	Y	23	1	
217035	20332	22 54 33.1	62 36 5	7.74	0.46	B0IV:(n)	C	-4.24	-2.90	-7.14	30300	2.28	5.06	0.87	Y	26	1	
217061	20334	22 54 44.3	62 21 27	8.79	0.70	B1Vn	C	-3.20	-2.50	-5.70	24150	2.88	6.39	0.66	Y	0	1	BROD 395
240132	34999	22 55 22.4	58 36 35	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.69)	0.50	N		0	
217463	20358	22 57 43.1	62 30 33	9.02	0.54	B1.5Vn	C	-3.05	-2.20	-5.25	21800	2.37	5.26	0.87	Y	26	1	BROD 591
240153	35046	22 58 12.8	58 13 1	8.90	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.47)	(1.05)	0.77	N		0	
217657	20365	22 59 11.7	62 40 24	8.14	0.49	B0.5V	C	-3.87	-2.60	-6.47	25400	2.31	5.13	0.87	Y	26	1	BROD 690
217672	35060	22 59 21.1	57 59 43	8.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.23)	(0.51)	0.38	Y		0	
217943	20393	23 1 19.1	60 10 33	6.57	...	B2V	C	-1.70	-2.00	-3.70	19700	0.87	1.93	0.30	Y	3		
240179	35112	23 1 52.8	59 49 5	9.00	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.49)	(1.08)	0.80	N		0	
240183	35115	23 2 4.9	59 49 8	9.20	...	B5V	A	-1.00	-1.30	-2.30	15300	(0.53)	(1.17)	0.86	N		0	
240182	35119	23 2 6.9	58 26 10	9.30	...	B3V	A	-2.32	-1.80	-4.12	18700	(0.87)	(1.92)	1.42	N		0	
218624	108432	23 6 53.9	18 27 54	6.60	...	B9V	A	0.36	-0.50	-0.14	11200	(0.10)	(0.21)	0.17	Y		0	
240203	35175	23 7 7.5	59 53 27	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.39)	(0.87)	0.64	N		0	
240206	35185	23 7 34.9	59 41 13	9.10	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.35)	(0.77)	0.57	N		0	
218970	191720	23 9 51.2	-21 23 5	9.40	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.17)	(0.38)	0.71	N	0		
219634	20531	23 14 17.3	61 41 24	6.53	0.21	B0Vn	C	-3.80	-3.00	-6.80	29600	1.53	3.40	0.58	Y	0	1	
240271	35350	23 19 14.7	58 5 40	9.00	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.33)	(0.74)	0.55	N		0	
236150	35494	23 28 46.6	55 28 19	8.80	...	B8V	A	-0.02	-0.70	-0.72	12200	(0.31)	(0.68)	0.50	N		0	
221515	53132	23 30 8.0	48 5 47	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.42	N		0	
221507	214615	23 30 17.7	-38 5 42	4.37	-0.11	B9IIIMn	D	-1.70	-1.80	-3.50	18700	0.99	2.20	0.42	Y	4		$\beta$ Scl
221711	35554	23 31 46.9	55 12 45	7.41	...	B3V	C	-1.70	-1.80	-3.50	18700	0.99	2.20	0.42	Y	3		
221775	53161	23 32 22.4	48 48 40	8.70	...	B9V	A	0.36	-0.50	-0.14	11200	(0.24)	(0.54)	0.42	N		0	
222046	53190	23 34 35.7	48 17 58	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.20)	(0.44)	0.34	Y		0	
223980	35877	23 51 36.6	56 55 19	8.20	...	B9V	A	0.36	-0.50	-0.14	11200	(0.21)	(0.46)	0.34	Y		0	
224103	128466	23 52 34.2	6 47 35	6.20	-0.07	B9V	C	0.36	-0.50	-0.14	11200	(0.08)	(0.18)	0.14	Y	4		26 Psc
224151	35899	23 53 2.6	57 8 2	6	0.22	B0.5II-III+B0:	D	-5.00	-2.50	-7.50	25900	1.44	3.20	0.82	Y	0	1	V373 Cas

(taken from Flower 1977). Columns (13) and (14) give the adopted value for visual extinction and deduced value for column hydrogen density, respectively. A value in parenthesis indicates a column hydrogen density,  $N_{\text{H}}$ , computed integrating a model of hydrogen particle distribution (Lockman 1984), properly normalized to reproduce measured value of  $A_v$  (see the following for further details). In such a case  $A_v = N_{\text{H}}/(2.22 \times 10^{21})$  according to the relation of Gorenstein (1975). Column (15) indicates the adopted heliocentric star distance,  $R_{\text{Sun}}$ . Column (16) is a logical flag, indicating if the distance the star would have if its apparent magnitude were 8.5, i.e., the completeness limit of the SAO catalog, is greater or smaller than the actual source distance  $R_{\text{Sun}}$ . When  $R_{\text{Sun}}$  is smaller than the 8.5 mag limited distance the star is a likely member of a pseudo volume-limited sample (see § 4). Column (17) reports the association reference number according to Humphreys (1978). To the field stars we have assigned the “association number” 0. Column (18) provides reference to the optical catalog source of optical data. This key is coded as follows: SAO catalog (0), Humphreys catalog (1), BSC 4 and addendum (2), Rubin catalog (3), and Kennedy catalog (4). MK spectral types,  $B - V$ , apparent visual magnitudes, and other relevant optical properties (where available) are from the above mentioned catalogs. For stars with unknown luminosity class, we assume class V, since stars spend a large part of their life-time on the main sequence (these stars are flagged with A in column (8) of Table 1).

For the most luminous and nearest stars, the Bright Star Catalog (Hoffleit & Jaschek 1982; Hoffleit et al. 1984) provides trigonometric or dynamical parallaxes, which have been used to compute stellar distances. The Luminous Star Catalogue (Humphreys 1978) lists individual distances of the field stars, i.e., stars not recognized as members of associations. For the other stars of our sample, we have derived the distance according to the classical relation:

$$R_{\text{Sun}} = 10^{m_v - M_v - A_v + 5/5} \text{pc} . \quad (1)$$

When available, we have adopted the cataloged values of  $m_v$ ,  $M_v$ , and  $A_v$ . When the last two are unknown we have adopted the value  $M_v$  as function of spectral type and luminosity class from the Table 3-2 of Mihalas & Binney (1981) and have estimated  $A_v$  from the relation  $A_v = N_{\text{H}}/(2.22 \times 10^{21})$  (Gorenstein 1975), evaluating the hydrogen column density,  $N_{\text{H}}$ , by integrating a model of the hydrogen particle spatial distribution in the Galaxy. The adopted model has the same spatial distribution of Lockman's (1984), but a different normalization. The adopted normalization has been computed comparing, in the (0.0, 1.0)  $A_v$  range, predicted and measured  $A_v$  values and is equivalent to changing the particle density on the plane from 0.3—the value adopted by Lockman—to  $0.45 \text{ cm}^{-3}$ , i.e., still in the range of admissible values (Allen 1976). Distance in such a case has been determined solving equation (1) for  $R_{\text{Sun}}$ , where  $A_v$  is itself an integral function of  $R_{\text{Sun}}$ .

In Figure 2a we show the sky projection of X-ray sample stars with distance less than 500 pc. The angular distribution of these stars is rather uniform and quite different from that of sample stars with distance greater than 500 pc (Fig. 2b) which, due to projection effect, are concentrated at low Galactic latitude. Given that the SAO catalog is magnitude-limited, this

finding is expected; stars intrinsically more luminous (largely of spectral types B0–B4) dominate at larger distances, and we expect them to be more concentrated in the Galactic plane than stars of spectral type later than B4.

## 2.2. Sample Comparisons

To determine whether our X-ray sample is representative of the optical parent population, we have built and compared their spectral-type and  $m_v$  integral cumulative distribution functions (Figs. 3 and 4). We find that the proportion of early B-type stars (B0–B3) in our sample is greater than for the entire sample, and this situation is reversed, for the later B-type stars. Application of a two-sample, nonparametric Kolmogorov-Smirnov (K-S) test suggests that the  $m_v$  fractional distributions of the optical parent and X-ray samples are different (rejection of the null hypothesis that they are drawn from the same population at the  $\sim 0.985$  significance level).

To explore possible differences between the two samples, we have subdivided each of the above samples into two subsamples comprising stars with  $m_v \geq 5$  and  $m_v < 5$ , and have compared their resulting  $m_v$  cumulative distribution functions (Figs. 5a and 5b, respectively). Again applying the K-S test, we find that the  $m_v < 5$  subsamples are indeed different (null hypothesis rejected at the  $\sim 0.9998$  confidence level), while the  $m_v \geq 5$  subsamples are indistinguishable (only  $\sim 0.23$  confidence for null hypothesis rejection). This evident excess of bright stars in the X-ray sample can easily be understood as a consequence of the fact that the *Einstein* telescope was preferentially pointed at optically luminous, relatively nearby stars (within a few hundreds of parsecs). This pointing bias also explains the aforementioned oversampling of B0–B3 stars in the X-ray sample.

Adopting pointing bias as a working hypothesis to explain sample differences, we can test this idea by subdividing the X-ray sample on the criterion of whether each star was targeted or was serendipitously observed. This distinction was made on the basis of offset from telescope axis, the stars falling in a circle 3' radius around telescope axis having been considered as pointed. We have compared the X-ray and optical parent samples, via the  $m_v$  cumulative distribution functions for each of the resulting subsamples, in Figs. 6a and 6b. Our working hypothesis is strongly confirmed: the targeted stars are unambiguously differentiated from the parent sample (K-S test confidence of  $1-10^{-28}$ ), while the  $m_v$  distribution of the serendipitous stars is indistinguishable from that of B-type stars listed in the SAO Star Catalog (null-hypothesis rejected with only  $\sim 0.88$  confidence). Therefore, because of the bias introduced by targeting procedures, we must be very cautious in extending conclusions drawn from the X-ray sample to the entire population of B stars. The proper use of the present catalog for characterizing general properties of Galactic B-type stars will be discussed elsewhere (Grillo et al. 1991, 1992).

## 3. DATA REDUCTION

### 3.1. Source Detection

The IPC data reduction system (Rev-1; Harnden et al. 1984) detects X-ray sources in three distinct energy bands, but to be more restrictive and to reduce the number of spurious sources

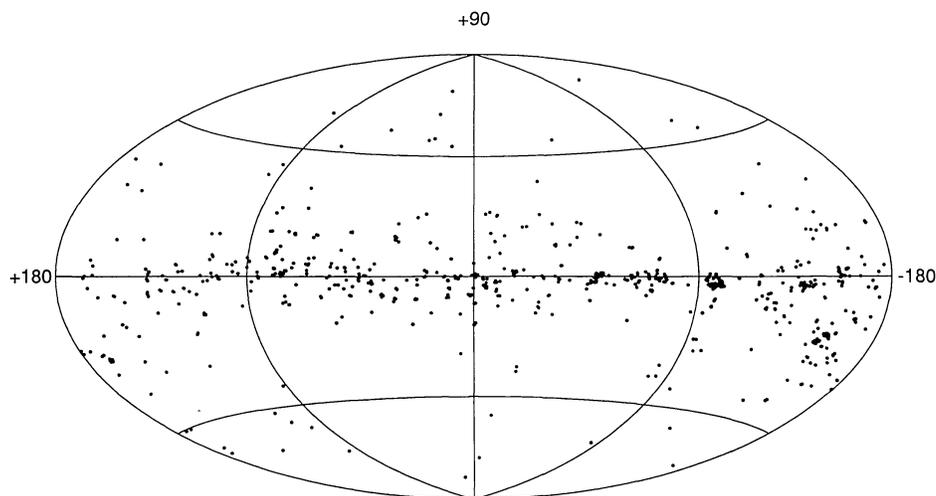


FIG. 2a

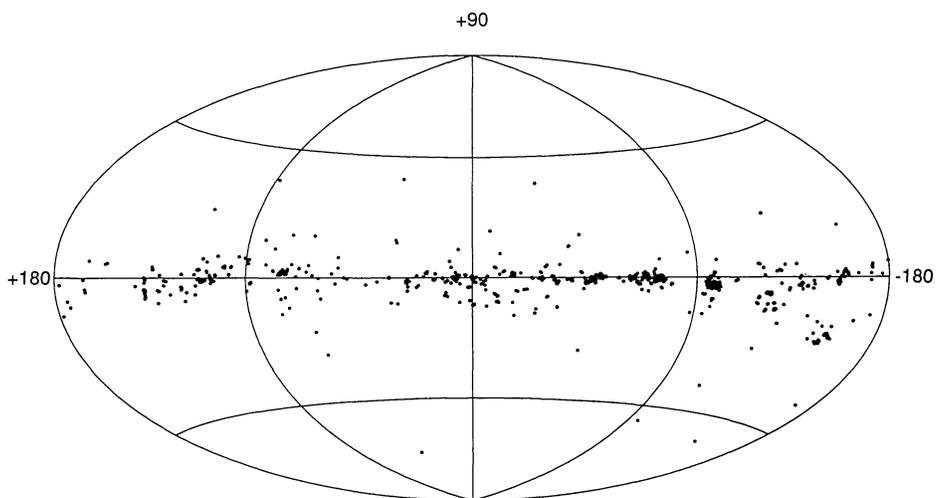


FIG. 2b

FIG. 2.—Sky distribution (Galactic coordinates) of the X-ray sample, segregated according distance from the Sun: (a) stars within 500 pc, and (b) more distant stars. Note the greater concentration of more distant stars in the Galactic plane (b) due to the selection of more luminous stars at greater distances.

(see § 3.3), we have followed the Hyades survey technique of Micela et al. (1988) and have here retained only those X-ray sources detected in the broad-band (0.16–3.50 keV). The Rev-1 detection algorithm employs two different methods of background determination: (1) the “local method” uses a sliding-cell source window, surrounded by its background frame (for the broad band, the inner cell has a width of  $2'4$  and the contiguous, background-determination frame is a square of width  $4'$ ), whereas (2) the “map method” derives background from normalized reference maps prepared from source-subtracted, long-exposure “calibration” images (see Harnden et al. 1984; Harris et al. 1992).

### 3.2. Source Identification

The Rev-1 Processing system automatically proposes a tentative identification for each X-ray detection whose position

lies within a  $3'$  radius of a cataloged celestial objects; this process is based on the *Einstein* master catalog, a collection of 60 distinct catalogs (Harris & Irwin 1984), including both stellar and extragalactic catalogs. For the present paper we have adopted a more stringent criterion in identifying optical counterparts for our X-ray sources. We have compared the Rev-1 derived X-ray coordinates with optical candidate position, whenever the angular separation between them was less than  $2'$ , we identified the X-ray source with that star. We defer to a subsequent analysis (Grillo et al. 1991, 1992) the very important question of whether the detected X-ray emission is physically associated with the B-type star or rather is due to the presence of another, fainter star (or stars) in a multiple system (with the B star as its primary).

Occasionally an X-ray source has more than one single optical counterpart in the adopted,  $2'$ -radius, identification circle. Due to our inability to determine the fraction of X-rays emit-

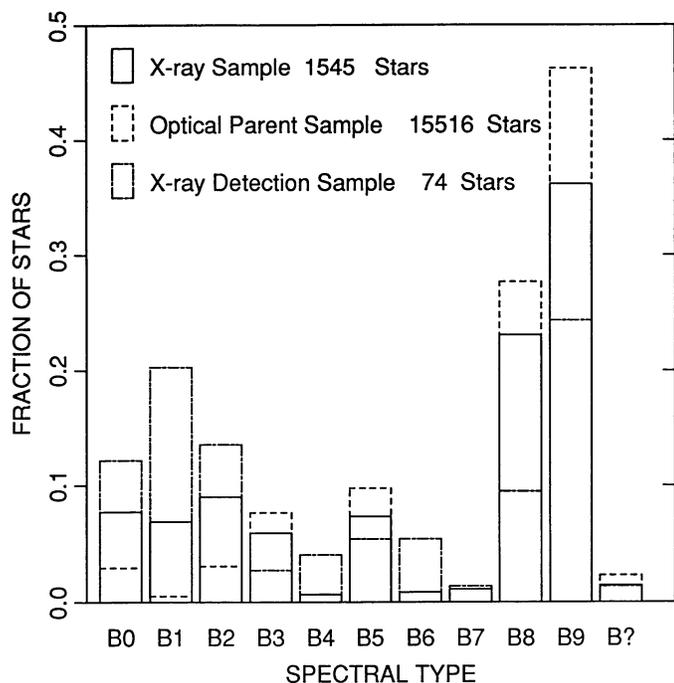


FIG. 3.—Fraction of B-type stars in each spectral subrange for the optical parent sample (*short-dashed line*), the X-ray sample (*solid line*), and the subsample of detected B stars (*dotted-dashed line*). The distributions are normalized to the total number of stars in each sample.

ted by the various optical counterparts, in these cases we have considered the source flux as the upper limit to the effective emission of the B star(s); a complete list of these cases is given in Table 2.

The results of our detection/identification procedure are summarized in Table 3, where we report, for each distinct spectral type, the number of B stars identified with X-ray detections and the number of B stars for which we have evaluated only X-ray emission upper bounds. It is noteworthy that the fraction of detected stars decreases drastically at later spectral types, a conclusion demonstrated in Figure 3, where the fraction of B stars identified with X-ray sources is compared with the fraction of B stars in the X-ray sample, and in Figure 4, where the fraction of B stars identified with X-ray sources is greatest for  $m_v$  less than  $\sim 6$ .

A set of Monte Carlo simulations gauging the performance of the Rev-1 detection algorithms (T. Maccacaro, private communication) has shown that for each method and for each band  $\sim 0.3$  spurious sources are found per IPC field. Given that we have restricted our analysis to the broad band, the total number of spurious sources are found per IPC field. Given that we have restricted our analysis to the broad band, the total number of spurious sources falling within  $2'$  radius circles of the positions of surveyed B stars is about three in 74 detections, i.e., three sources may have been spuriously misidentified with B stars. Adopting the Medium Sensitivity Survey (Maccacaro et al. 1982; Gioia et al. 1984)  $\log N$ - $\log S$  relation for extragalactic X-ray sources— $N(>S) = 2.4 \times 10^{-15} S^{-1.45}$ —and the Galactic X-ray absorption model suggested by Hertz & Grindlay (1984), we expect that about five extragalactic sources could be misidentified as B stars. Finally, following an updated

version (Sciortino et al. 1989) of the procedure given by Favata et al. (1988), we estimate that about seven X-ray sources associated with stars of later spectral type ( $B - V > 0$ ) may be misidentified with B stars.

Of the 74 X-ray sources we identify with B stars, we recognize that  $\sim 15$  could be false identifications, i.e., our identifications could be wrong in  $\sim 20\%$  of the cases. For a better understanding of this result, we have to consider in more detail the composition of the X-ray sample. We note that this sample is largely ( $\sim 60\%$ ) composed of stars in the B8–B9 spectral type range (see Fig. 3); hence the a priori probability for misidentification is greater for those X-ray detections identified with stars in this spectral type range. In fact, we expect nine (i.e.,  $15 \times 0.6$ ) misidentifications in 25 identified X-ray detections. Only  $\sim 30\%$  of the X-ray sample stars belong to the B0–B3 spectral type range, for which we expect only five misidentifications among the 36 identified X-ray detections. In summary, our identification process could be wrong for  $\sim 14\%$  and  $36\%$  of the X-ray sources in the B0–B3 and B8–B9 spectral-type ranges, respectively.

### 3.3. Flux Determination

In deriving X-ray fluxes from corrected count rates (see Appendix for a discussion of the various corrections employed), we have applied a conversion factor that depends upon (assumed) interstellar absorption and plasma temperature. Like Chlebowski et al. (1989) in their O-type star analysis, we have assumed that our (B-type star) X-ray spectra can be described by a thermal-bremsstrahlung model for a hot, optically thin plasma (Raymond & Smith 1977) with solar abundances and  $kT = 0.5$  keV. For the hydrogen column density  $N_H$  that parameterizes interstellar absorption, we have adopted the empir-

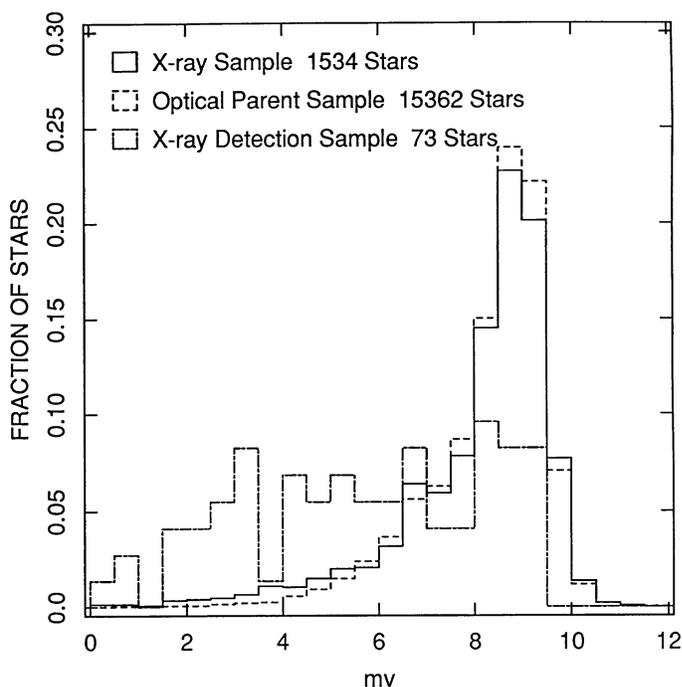


FIG. 4.—Histogram of  $m_v$  fractional distributions for the same samples and normalizations as presented in Fig. 3.

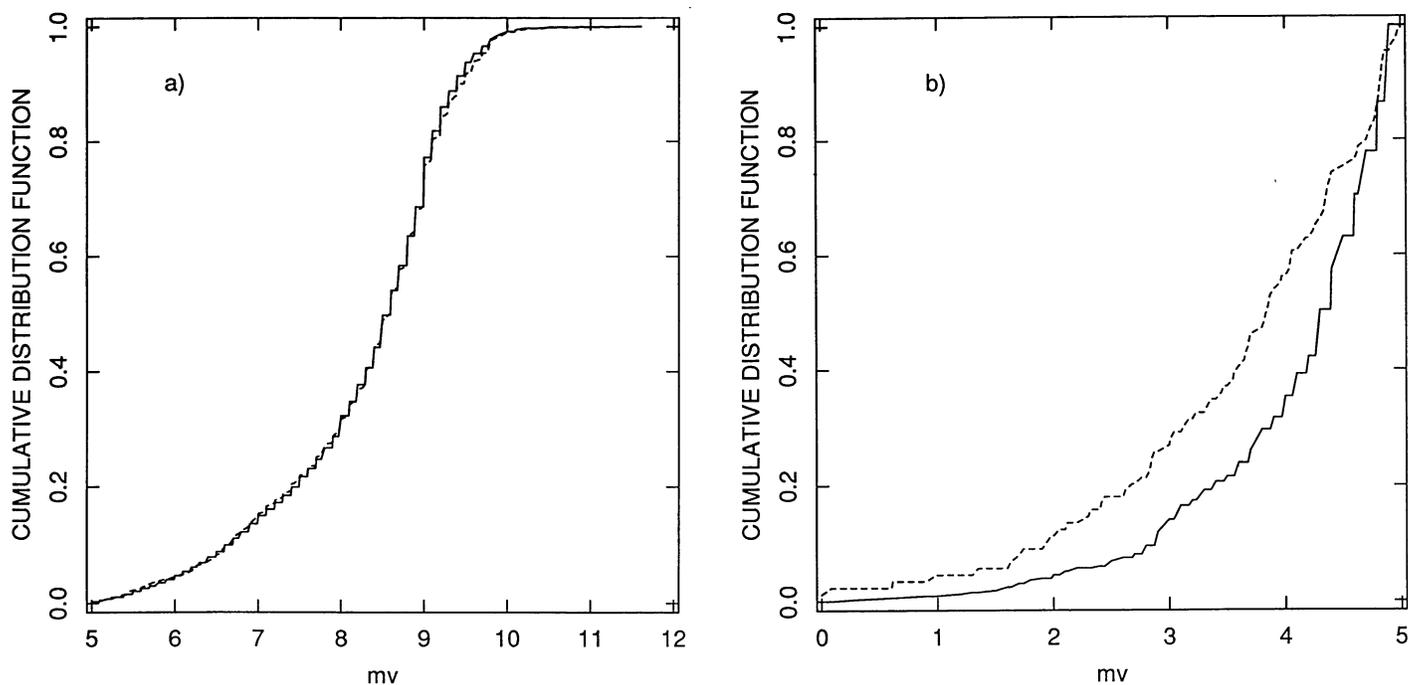


FIG. 5.—B-star cumulative distribution functions of apparent magnitude ( $m_v$ ) for the optical parent sample (*solid lines*) and the X-ray sample (*dotted lines*), segregated into subsamples for  $m_v \geq 5$  (*a*) and  $m_v < 5$  (*b*). Although the two distributions of (*a*) are indistinguishable, those in (*b*) differ at a high level of statistical confidence.

ical relationship with optical extinction,  $N_H = 2.22 \times 10^{21} A_v$ , described by Gorenstein (1975). In the absence of published measurements of optical extinction, we have evaluated  $N_H$  integrating  $n_H$  spatial distribution as discussed in § 2.1. We note that for the assumed temperature, the flux-conversion factor

varies by only  $\sim 10\%$  for  $\log(N_H)$  between 18 and 21.5. Fortunately, the majority of stars for which we have no explicit, absorption-related data are relatively nearby (and hence their absorption, virtually negligible), and we therefore can have confidence that our procedure is a good approximation. The

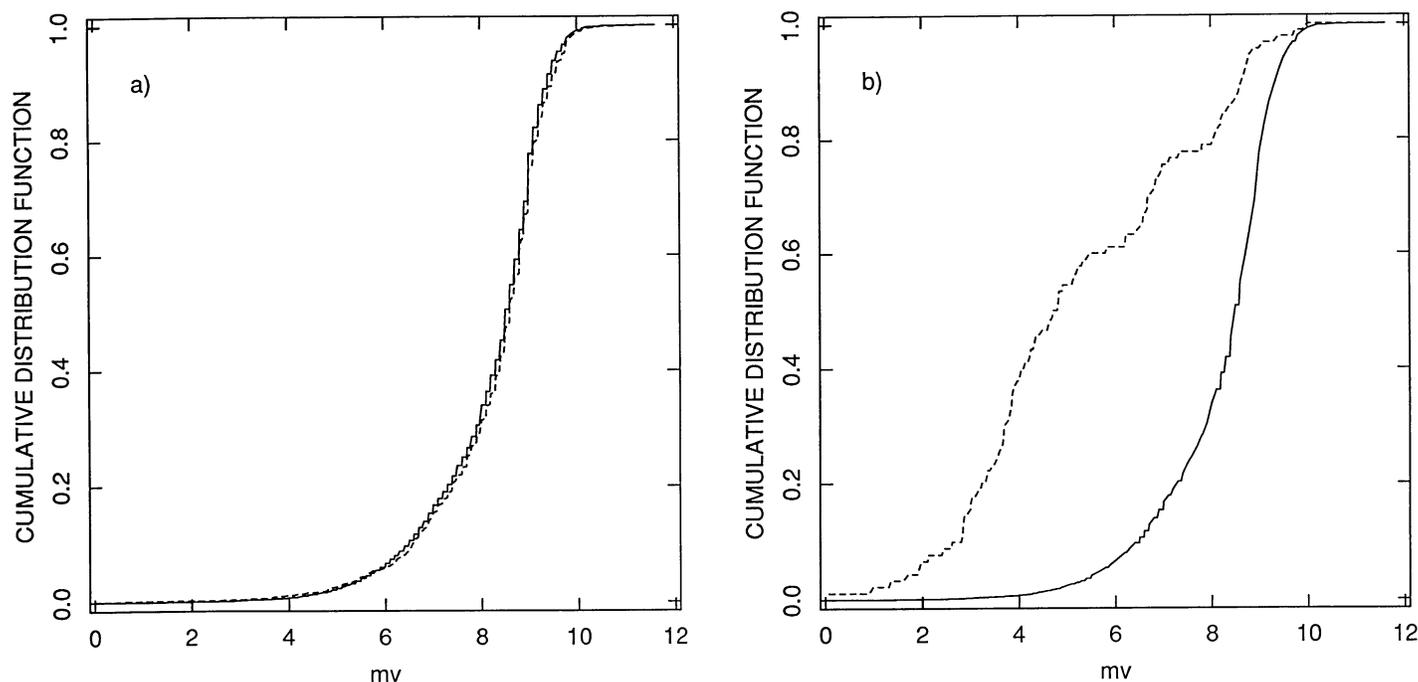


FIG. 6.—Cumulative distribution functions like those of Figure 5, but with the subsamples chosen on the basis of whether the stars were serendipitously observed (*a*) or intentionally targeted (*b*).

TABLE 2  
POSSIBLE B-STAR DETECTIONS QUOTED AS UPPER LIMITS

SAO Number	Name	Spectral Type	Catalog <sup>a</sup>	Other Counterparts	Spectral Type
12369 .....	...	B9	0	12371	A0
54033 .....	$\pi$ And	B5V	0	54034	
			1	IC 2979	
67451 .....	$\beta$ Lyr	B7Ve+A8p	0	67453	B3
76388 .....	...	B9	0	76387	F0
				76389	
			2	493 P173	
113108 .....	...	B9	0	113105	G0
114261 .....	...	B9	0	114264	B2III:
			3	989	
			4	Mon MN	
			4	Mon OQ	
			4	Mon OS	
			4	Mon V361	
			4	Mon V363	
			4	Mon V364	
			4	Mon V367	
			4	Mon V426	
			4	Mon V427	
			5	195K6 LHa54	
			5	196 LHa55	
			5	211 W183/L	
			5	214G ? LHa61	
			5	215F2V W189/V	
			5	221 LHa64	
			5	225 LHa65	
132221 .....	$\delta$ Ori	B2V STG N	0	132220	O9.5II
			6	177	
			4	Ori 04	
132298 .....	...	B1Vv	0	132301	B0.5V
132344 .....	...	B9	7	Ori V393	K6:VeA
			4	Ori V818	late K
132356 .....	...	B9	4	Ori V583	late K
132357 .....	...	B9	4	Ori V582	late K
159682 .....	$\beta^1$ Sco	B1V	0	159683	B2IV-V
			7	-20 305	
184376 .....	...	B3	0	184375	
210815 .....	...	B9V	0	210816	B8V-IV

<sup>a</sup> Catalog code (col. [4]) indicates from which subcatalog (of the *Einstein* Master List Catalog; Harris & Irwin 1984), we extract the names of other possible counterparts, according to the following scheme: (0) SAO Catalog; (1) Index Catalog; (2) Pleiades; (3) AFGL Catalog; (4) Kukarkin Catalog; (5) S Mon; (6) Batten Catalog; (7) Micron Catalog.

TABLE 3  
SAMPLE COMPOSITION OF SURVEYED B STARS FROM THE SAO CATALOG

Spectral Type	Detections	Upper Limits	Total
B0 .....	9	110	119
B1 .....	15	91	106
B2 .....	10	129	139
B3 .....	2	89	91
B4 .....	3	7	10
B5 .....	4	109	113
B6 .....	4	9	13
B7 .....	1	16	17
B8 .....	7	349	356
B9 .....	18	541	559
Unclassified <sup>a</sup> .....	1	21	22
Total .....	74	1471	1545

<sup>a</sup> In this group we include all those stars whose detailed spectral type is uncertain. Only one star, SAO 161274, belonging to this group has been detected.

adopted conversion factor for each star in the X-ray sample is listed in Table 4.

#### 4. RESULTS

The previous *Einstein* studies of X-ray emission from B stars were limited by the poor statistics and selection effects often associated with samples of few (and very often, targeted) stars (Harnden et al. 1979; Long & White 1980; Cassinelli et al. 1981; Pallavicini et al. 1981). It has only been with the ready availability of new facilities (e.g., more sophisticated, faster computers, stellar catalogs in machine-readable data bases) and with the organization of all *Einstein* IPC results in a purposely built data base (Sciortino et al. 1988; Harnden et al. 1990) that we could tackle the task of cataloging the X-ray emission of the numerous B-type stars surveyed with the IPC. In addition to available optical data (see Table 1), the present catalog provides the following X-ray-related quantities in Table 4: HD/BD number (col. [1]); assumed counts-to-flux

TABLE 4  
SUMMARY OF X-RAY DATA OF SURVEYED B STARS

HD/BD Number (1)	$C_f \times 10^{11}$ $erg\ cm^{-2}\ cts\ s^{-1}$ (2)	Rate $cts\ s^{-1}$ (3)	Err $cts\ s^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $erg\ cm^{-2}$ (7)	$\log f_v$ $s^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $erg\ s^{-1}$ (10)	$\log L_{bol}$ $erg\ s^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
225094	6.259	0.005	...	UPL	LB	-12.505	-7.428	-5.077	32.386	38.823	-6.436
225187	2.349	0.017	...	UPL	LBR	-12.399	-8.296	-4.103	30.335	35.539	-5.204
144	2.378	0.004	...	UPL	LBCR	-13.022	-7.688	-5.333	29.561	35.979	-6.418
232107	2.920	0.004	...	UPL	LBCR	-12.933	-8.931	-4.002	30.588	35.771	-5.183
315	2.446	0.005	...	UPL	LB	-12.913	-8.012	-4.900	30.146	36.235	-6.089
236309	2.914	0.008	...	UPL	LB	-12.632	-9.052	-3.581	30.857	35.539	-4.682
470	2.589	0.012	...	UPL	LB	-12.508	-8.583	-3.924	30.514	35.539	-5.025
560	2.114	0.048	0.003	RIV	ML	-11.994	-7.686	-4.308	29.626	35.539	-5.913
593	4.573	0.029	...	UPL	LBR	-11.877	-7.824	-4.053	31.813	37.763	-5.950
594	3.068	0.021	...	UPL	LB	-12.191	-8.667	-3.524	31.458	36.403	-4.945
236327	2.744	0.020	...	UPL	LB	-12.261	-8.839	-3.422	31.016	35.539	-4.523
627	2.739	0.021	...	UPL	LB	-12.240	-8.679	-3.561	31.029	35.771	-4.742
886	2.084	0.006	...	UPL	LB	-12.903	-6.620	-6.283	29.527	37.363	-7.836
1082	2.354	0.004	...	UPL	LBCR	-13.026	-8.095	-4.931	29.507	35.539	-6.032
1438	2.338	0.008	...	UPL	LB	-12.728	-7.901	-4.827	29.763	35.771	-6.008
1939	2.648	0.015	...	UPL	LB	-12.401	-8.694	-3.707	30.731	35.539	-4.808
2729	2.460	0.013	...	UPL	LB	-12.495	-7.915	-4.581	30.265	36.227	-5.961
3038	2.533	0.009	...	UPL	LB	-12.642	-8.024	-4.618	30.276	35.979	-5.703
3240	2.422	0.010	...	UPL	LBC	-12.616	-7.479	-5.137	30.061	36.527	-6.466
3369	2.243	0.011	...	UPL	MAP	-12.608	-7.212	-5.395	29.587	36.403	-6.816
4253	2.695	0.004	...	UPL	LBCR	-12.967	-8.766	-4.201	30.237	35.539	-5.302
236534	2.823	0.008	...	UPL	LBR	-12.646	-8.946	-3.700	30.738	35.539	-4.801
236541	2.908	0.009	...	UPL	LB	-12.582	-9.053	-3.530	30.908	35.539	-4.630
6182	13.071	0.002	...	UPL	LBCR	-12.583	-7.912	-4.671	32.295	38.867	-6.571
6832	2.629	0.009	...	UPL	LB	-12.626	-8.657	-3.969	30.469	35.539	-5.070
7103	12.542	0.011	...	UPL	LB	-11.860	-7.984	-3.876	33.018	38.255	-5.237
236655	7.506	0.007	...	UPL	LB	-12.279	-8.496	-3.783	33.118	38.007	-4.888
7157	2.331	0.012	...	UPL	LB	-12.553	-8.022	-4.531	29.907	35.539	-5.632
8803	2.123	0.014	...	UPL	LB	-12.527	-8.113	-4.414	29.136	35.539	-6.403
8736	2.671	0.007	...	UPL	LB	-12.728	-8.730	-3.998	30.440	35.539	-5.099
236745	3.473	0.016	...	UPL	LBR	-12.255	-8.969	-3.286	31.696	36.403	-4.707
236758	2.851	0.016	...	UPL	LBR	-12.341	-8.982	-3.359	31.079	35.539	-4.460
236761	3.002	0.010	...	UPL	LB	-12.523	-8.998	-3.525	31.065	35.771	-4.706
9105	12.009	0.004	...	UPL	LBC	-12.318	-7.656	-4.662	32.799	38.823	-6.024
9267	2.917	0.011	...	UPL	LB	-12.494	-8.931	-3.563	31.027	35.771	-4.743
236785	3.004	0.017	...	UPL	LBR	-12.292	-8.997	-3.295	31.295	35.771	-4.475
236788	2.824	0.022	...	UPL	LBR	-12.207	-8.946	-3.261	31.177	35.539	-4.362
10516	3.731	0.006	...	UPL	LB	-12.650	-6.880	-5.770	29.836	37.283	-7.447
12301	5.698	0.009	...	UPL	MLR	-12.290	-7.236	-5.054	31.847	38.007	-6.160
12567	11.217	0.023	...	UPL	LBR	-11.588	-8.024	-3.564	33.019	38.483	-5.464
12882	9.626	0.009	...	UPL	MLR	-12.062	-7.776	-4.286	31.693	37.523	-5.829
13310	2.846	0.008	...	UPL	LB	-12.643	-8.982	-3.660	30.778	35.539	-4.761
13429	3.198	0.007	...	UPL	LB	-12.650	-8.806	-3.844	31.138	36.403	-5.264
13621	5.041	0.033	...	UPL	LBR	-11.779	-8.332	-3.447	33.019	38.367	-5.348
13661	3.815	0.006	...	UPL	LBCR	-12.640	-8.685	-3.955	31.555	37.131	-5.576
13669	3.517	0.018	...	UPL	LB	-12.199	-8.483	-3.715	31.795	37.131	-5.336
13659	13.600	0.017	...	UPL	LB	-11.636	-8.056	-3.580	33.162	38.323	-5.161
13746A	2.595	0.021	...	UPL	LBR	-12.264	-8.622	-3.641	30.949	35.771	-4.822
13746B	2.595	0.019	...	UPL	LBR	-12.307	-8.622	-3.685	30.905	35.771	-4.866
13717	2.551	0.009	...	UPL	LBR	-12.639	-8.509	-4.130	30.308	35.539	-5.231
13736	2.880	0.016	...	UPL	LB	-12.337	-9.017	-3.319	31.118	35.539	-4.420
13841	5.698	0.011	...	UPL	LB	-12.203	-7.952	-4.251	32.595	38.287	-5.692
13854	6.977	0.012	...	UPL	LBC	-12.077	-7.484	-4.593	32.721	38.895	-6.174
+56 473	6.448	0.012	...	UPL	LB	-12.111	-8.548	-3.563	32.687	37.951	-5.264
13900	5.791	0.010	...	UPL	LB	-12.237	-8.660	-3.577	32.561	37.839	-5.278
+56 482	8.568	0.014	...	UPL	LBC	-11.921	-8.568	-3.353	32.877	37.931	-5.054
+56 484	10.243	0.010	...	UPL	LB	-11.990	-8.596	-3.394	32.808	38.103	-5.294
13970	5.417	0.022	...	UPL	LB	-11.924	-8.356	-3.568	32.013	37.283	-5.270
13969	8.302	0.007	...	UPL	LB	-12.236	-8.368	-3.868	32.562	38.131	-5.569
14014	5.791	0.007	...	UPL	LBCR	-12.392	-8.496	-3.896	32.406	38.243	-5.837
14228	2.090	0.007	...	UPL	LB	-12.835	-6.908	-5.927	28.663	35.771	-7.108
14053	7.506	0.013	...	UPL	LB	-12.011	-8.244	-3.767	32.787	38.455	-5.667
+56 497	2.970	0.012	...	UPL	LB	-12.448	-8.963	-3.485	31.105	35.771	-4.666
14052	7.506	0.013	...	UPL	LB	-12.011	-8.144	-3.867	32.787	38.235	-5.447
+56 502	8.568	0.012	...	UPL	LB	-11.988	-8.536	-3.452	32.810	38.163	-5.353

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
+56 504	3.480	0.013	...	UPL	LB	-12.344	-8.968	-3.376	31.606	36.403	-4.797
+56 508	4.585	0.013	...	UPL	LBC	-12.225	-8.667	-3.558	32.216	37.475	-5.259
+56 511	9.097	0.018	...	UPL	LB	-11.786	-8.444	-3.342	33.012	37.855	-4.843
14134	9.893	0.017	...	UPL	LB	-11.774	-7.384	-4.390	33.024	38.775	-5.751
14143	11.217	0.014	...	UPL	LB	-11.804	-7.384	-4.420	32.994	38.855	-5.861
14162	11.217	0.012	...	UPL	LBC	-11.871	-8.452	-3.419	32.927	38.287	-5.360
+56 538	4.818	0.012	...	UPL	LB	-12.238	-8.757	-3.481	32.293	37.475	-5.182
14250	9.097	0.010	...	UPL	LBCR	-12.041	-8.384	-3.657	32.757	38.115	-5.358
14299	2.695	0.010	...	UPL	LBCR	-12.569	-8.766	-3.803	30.635	35.539	-4.904
14357	8.035	0.006	...	UPL	LBCR	-12.317	-8.256	-4.061	32.481	38.083	-5.602
14443	7.773	0.027	...	UPL	LBR	-11.678	-8.076	-3.602	33.120	38.163	-5.043
+56 572	2.000	0.034	...	UPL	LBR	-12.167	...	...	...	...	...
+56 574	8.568	0.050	...	UPL	LBR	-11.368	-8.236	-3.132	33.430	38.263	-4.833
14557	2.844	0.004	...	UPL	LB	-12.944	-8.823	-4.121	30.469	35.771	-5.302
14618	3.565	0.010	...	UPL	LBR	-12.448	-8.997	-3.451	31.531	36.403	-4.871
236960	13.071	0.015	...	UPL	LBCR	-11.708	-8.524	-3.184	33.090	38.175	-5.084
14795	2.516	0.005	...	UPL	LB	-12.900	-8.435	-4.465	29.973	35.539	-5.566
14817	2.498	0.007	...	UPL	LBR	-12.757	-8.242	-4.516	30.074	35.771	-5.696
15239	3.705	0.012	...	UPL	LB	-12.352	-8.539	-3.813	31.697	37.131	-5.434
15238	4.437	0.010	...	UPL	LB	-12.353	-8.566	-3.787	31.987	37.475	-5.488
15251	3.041	0.010	...	UPL	LB	-12.517	-9.031	-3.486	31.104	35.771	-4.666
16218	2.367	0.011	...	UPL	MLR	-12.584	-8.118	-4.467	29.971	35.539	-5.568
16567	2.450	0.048	...	UPL	LBR	-11.930	-8.564	-3.366	31.072	35.539	-4.467
16582	2.314	0.005	...	UPL	LB	-12.937	-7.084	-5.853	29.971	37.363	-7.392
16772	2.599	0.006	...	UPL	LB	-12.807	-8.662	-4.145	30.293	35.539	-5.246
17081	2.171	0.007	...	UPL	LB	-12.818	-7.173	-5.645	29.065	36.051	-6.986
17259	2.598	0.013	...	UPL	LBR	-12.471	-8.582	-3.890	30.700	35.771	-5.070
17444	3.272	0.005	...	UPL	LBR	-12.786	-8.835	-3.951	31.031	36.403	-5.372
17907	2.447	0.003	...	UPL	LBCR	-13.134	-8.484	-4.650	29.788	35.539	-5.751
18883	2.293	0.004	...	UPL	LB	-13.038	-7.706	-5.331	29.379	36.051	-6.672
19374	3.112	0.010	...	UPL	LBR	-12.507	-7.780	-4.727	30.969	37.483	-6.514
19356	1.997	1.209	0.031	RIV	LOC	-10.617	-6.339	-4.279	30.146	35.771	-5.625
20017	5.698	0.042	...	UPL	LBR	-11.621	-8.168	-3.453	31.297	36.083	-4.786
275056	2.797	0.006	...	UPL	LBR	-12.775	-8.990	-3.785	30.653	35.539	-4.886
21996	2.632	0.017	...	UPL	LBR	-12.349	-8.936	-3.413	31.569	36.403	-4.834
22586	2.509	0.011	...	UPL	LBR	-12.559	-8.648	-3.911	32.151	37.603	-5.452
22928	2.126	0.006	...	UPL	LB	-12.894	-6.685	-6.210	28.768	36.923	-8.154
23016	2.240	0.012	...	UPL	LBR	-12.571	-7.745	-4.826	29.612	35.539	-5.927
23288	2.182	0.005	...	UPL	ML	-12.962	-7.660	-5.303	28.954	36.311	-7.357
23219	2.569	0.013	...	UPL	LBR	-12.476	-8.546	-3.930	30.508	35.539	-5.031
23302	2.088	0.005	...	UPL	ML	-12.981	-6.964	-6.018	28.494	36.731	-8.236
23324	2.277	0.005	...	UPL	LB	-12.944	-7.720	-5.223	29.367	35.771	-6.404
23338	2.281	0.010	0.001	RIV	ML	-12.642	-7.184	-5.458	29.684	36.523	-6.839
23408	2.213	0.007	...	UPL	ML	-12.810	-7.020	-5.790	29.256	36.235	-6.979
23432	2.291	0.006	...	UPL	ML	-12.862	-7.767	-5.095	29.495	35.771	-6.276
23480	2.268	0.010	0.001	RIV	ML	-12.644	-7.137	-5.507	29.635	36.523	-6.888
23568	2.356	0.011	0.004	RIV	MAP	-12.587	-8.179	-4.407	29.962	35.391	-5.428
23630	2.266	0.004	...	UPL	ML	-13.043	-6.614	-6.429	29.229	36.527	-7.298
23753	2.256	0.005	...	UPL	MLR	-12.948	-7.647	-5.301	29.289	35.771	-6.482
23850	2.194	0.010	...	UPL	MLR	-12.659	-6.934	-5.725	29.321	36.235	-6.913
23862	2.220	0.012	...	UPL	LB	-12.574	-7.507	-5.067	29.523	35.771	-6.248
23873	2.323	0.008	...	UPL	MLR	-12.731	-8.087	-4.644	29.726	35.391	-5.665
23923	2.343	0.004	...	UPL	LB	-13.028	-7.925	-5.104	29.486	35.771	-6.284
24072	2.062	0.019	...	UPL	LBR	-12.407	-7.430	-4.977	28.917	35.539	-6.621
23662	2.395	0.016	...	UPL	LBR	-12.417	-7.978	-4.438	30.224	35.747	-5.523
24398	2.217	0.023	0.004	RIV	MAP	-12.293	-6.612	-5.681	29.785	38.475	-8.689
24899	2.539	0.011	...	UPL	LB	-12.554	-8.551	-4.003	30.435	35.539	-5.104
25201	2.396	0.011	...	UPL	MAP	-12.579	-8.210	-4.369	30.069	35.539	-5.470
25330	2.402	0.011	0.004	RIV	MAP	-12.578	-7.718	-4.861	30.121	36.403	-6.281
25413	2.651	0.012	...	UPL	ML	-12.497	-8.933	-3.564	31.026	35.771	-4.745
26676	2.346	0.010	...	UPL	LB	-12.630	-7.948	-4.681	29.908	35.771	-5.862
26793	2.198	0.011	...	UPL	LBR	-12.617	-7.562	-5.055	29.383	35.539	-6.156
27026	2.305	0.022	...	UPL	LBR	-12.295	-7.949	-4.346	30.092	35.539	-5.447
27295	2.266	0.029	0.006	RIV	MAP	-12.182	-7.606	-4.577	30.085	35.747	-5.662
28087	2.560	0.022	...	UPL	LB	-12.249	-8.548	-3.701	30.888	35.771	-4.882

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bot}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bot}}$ (12)
28365	2.549	0.006	...	UPL	MLR	-12.815	-8.750	-4.066	30.372	35.539	-5.167
28497	2.084	0.009	...	UPL	LB	-12.727	-7.720	-5.007	30.695	37.483	-6.787
28436	2.589	0.006	...	UPL	LBR	-12.809	-8.663	-4.145	30.292	35.539	-5.246
28715	2.360	0.004	...	UPL	LB	-13.025	-8.135	-4.891	29.547	35.539	-5.991
28867	2.771	0.131	0.006	RIV	ML	-11.440	-7.894	-3.546	32.036	35.747	-3.711
29227	2.565	0.008	...	UPL	LB	-12.688	-7.959	-4.729	30.469	36.527	-6.058
-3 832	2.574	0.004	...	UPL	LB	-12.987	-8.746	-4.242	30.196	35.539	-5.342
232980	5.377	0.006	...	UPL	LB	-12.491	-8.565	-3.926	32.376	38.403	-6.027
29248	2.314	0.006	...	UPL	LB	-12.858	-7.020	-5.838	30.231	37.603	-7.372
29433	2.465	0.010	...	UPL	LBR	-12.608	-8.482	-4.126	30.312	35.539	-5.227
232987	3.739	0.011	...	UPL	LBR	-12.386	-8.615	-3.771	31.739	37.131	-5.392
276803	2.970	0.006	...	UPL	LBR	-12.749	-8.963	-3.786	30.803	35.771	-4.967
276792	2.825	0.004	...	UPL	LB	-12.947	-8.946	-4.001	30.437	35.539	-5.102
276931	2.908	0.007	...	UPL	LB	-12.691	-8.893	-3.799	30.791	35.771	-4.980
30584	2.607	0.006	...	UPL	LB	-12.806	-8.620	-4.185	30.253	35.539	-5.286
30836	2.660	0.008	...	UPL	LB	-12.672	-6.884	-5.788	30.269	37.603	-7.334
31089	2.550	0.034	...	UPL	LBR	-12.062	-8.669	-3.392	31.045	35.539	-4.493
31407	2.491	0.004	...	UPL	LB	-13.002	-8.399	-4.603	29.987	35.771	-5.784
31237	2.509	0.009	...	UPL	ML	-12.646	-6.916	-5.730	30.326	37.603	-7.277
282633	3.008	0.007	...	UPL	LBR	-12.677	-9.037	-3.640	30.950	35.771	-4.821
31919	2.673	0.010	...	UPL	LB	-12.573	-8.930	-3.643	30.795	35.539	-4.744
277249	3.187	0.008	...	UPL	LB	-12.593	-8.768	-3.825	31.156	36.403	-5.246
32145	2.457	0.004	...	UPL	LB	-13.008	-8.203	-4.805	29.785	35.771	-5.985
32050	2.585	0.010	...	UPL	LB	-12.588	-8.584	-4.004	30.434	35.539	-5.104
32273	2.169	0.013	...	UPL	LBR	-12.550	-7.973	-4.577	29.301	35.771	-6.470
284093	2.984	0.007	...	UPL	LB	-12.680	-9.040	-3.640	30.950	35.771	-4.820
32359	2.509	0.008	...	UPL	LB	-12.697	-8.476	-4.221	30.217	35.539	-5.322
32282	2.791	0.038	...	UPL	LBR	-11.974	-8.751	-3.223	31.367	35.771	-4.404
32431	2.679	0.011	...	UPL	LBR	-12.531	-8.729	-3.802	30.788	35.771	-4.982
32330	2.743	0.023	...	UPL	LBR	-12.200	-8.839	-3.361	31.077	35.539	-4.462
32343	3.263	0.015	...	UPL	LB	-12.310	-7.404	-4.906	31.166	37.683	-6.517
282870	2.958	0.005	...	UPL	LBC	-12.830	-8.965	-3.865	30.724	35.771	-5.046
32964	2.062	0.015	0.004	RIV	MAP	-12.510	-7.534	-4.976	28.815	35.539	-6.724
33486	2.503	0.016	...	UPL	LB	-12.397	-8.557	-3.840	30.597	35.539	-4.941
33467	2.667	0.010	...	UPL	LBR	-12.574	-8.771	-3.803	30.635	35.539	-4.904
33742	2.645	0.010	...	UPL	LB	-12.578	-9.054	-3.523	30.915	35.539	-4.624
33853	2.602	0.011	...	UPL	LB	-12.543	-8.621	-3.922	30.516	35.539	-5.023
34085	2.685	0.032	0.004	RIV	MAP	-12.066	-5.440	-6.626	31.324	39.055	-7.731
33988	6.711	0.013	...	UPL	LB	-12.059	-7.660	-4.399	31.575	37.723	-6.148
34543	2.629	0.009	...	UPL	LB	-12.626	-8.817	-3.809	30.781	35.771	-4.990
34503	2.346	0.024	0.003	RIV	MAP	-12.250	-6.896	-5.353	30.274	36.923	-6.649
34511	2.542	0.008	...	UPL	LB	-12.692	-8.551	-4.141	30.297	35.539	-5.242
34736	2.577	0.012	0.004	RIV	MAP	-12.510	-8.665	-3.844	30.593	35.539	-4.945
35051	2.766	0.007	...	UPL	LBR	-12.713	-8.755	-3.958	30.632	35.771	-5.139
35349	2.892	0.012	...	UPL	LB	-12.460	-8.535	-3.925	31.057	36.403	-5.345
35411	2.302	0.010	0.002	RIV	MAP	-12.638	-6.805	-5.832	29.751	37.939	-8.188
35456	2.468	0.004	...	UPL	LB	-13.006	-8.218	-4.788	29.802	35.771	-5.969
35502	2.636	0.006	...	UPL	LBR	-12.801	-8.616	-4.185	30.405	35.771	-5.366
244328	2.947	0.007	...	UPL	LB	-12.686	-9.086	-3.599	30.839	35.539	-4.700
36263	2.478	0.012	...	UPL	LBR	-12.527	-8.361	-4.166	30.272	35.539	-5.267
36313	2.726	0.007	...	UPL	MLR	-12.719	-8.922	-3.798	30.640	35.539	-4.899
36312	2.803	0.010	...	UPL	LBR	-12.552	-8.909	-3.643	30.947	35.771	-4.824
36485	2.735	0.401	...	UPL	ML	-10.960	-8.144	-2.816	32.518	37.035	-4.517
36549	2.737	0.008	...	UPL	LB	-12.660	-8.920	-3.740	30.698	35.539	-4.841
36605	2.728	0.006	...	UPL	ML	-12.786	-8.921	-3.865	30.573	35.539	-4.966
36629	4.386	0.006	...	UPL	LB	-12.580	-8.248	-4.332	30.898	36.931	-6.033
36655	2.660	0.009	...	UPL	LB	-12.621	-8.812	-3.809	30.629	35.539	-4.910
36645	2.780	0.009	...	UPL	LB	-12.602	-8.993	-3.609	30.829	35.539	-4.710
36760	2.746	0.015	...	UPL	LB	-12.385	-8.798	-3.587	31.003	35.771	-4.768
36779	2.815	0.008	...	UPL	LBR	-12.647	-7.875	-4.772	30.870	37.303	-6.433
36842	2.756	0.004	...	UPL	LB	-12.958	-8.997	-3.961	30.477	35.539	-5.062
36865	2.578	0.008	...	UPL	ML	-12.686	-8.625	-4.061	30.377	35.539	-5.161
36822	2.962	0.020	0.005	RIV	MAP	-12.227	-7.124	-5.103	31.250	38.275	-7.025
36883	2.642	0.010	0.002	RIV	MAP	-12.578	-8.615	-3.963	30.627	35.771	-5.144
36917	2.626	0.010	...	UPL	ML	-12.581	-8.737	-3.843	30.595	35.539	-4.944

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
36916	2.466	0.004	...	UPL	LBR	-13.006	-8.134	-4.872	29.790	35.747	-5.957
36915	2.731	0.007	0.002	RIV	MAP	-12.719	-8.921	-3.798	30.640	35.539	-4.899
36881	2.380	0.008	...	UPL	LBR	-12.720	-7.692	-5.028	29.866	35.979	-6.113
36895	2.962	0.013	...	UPL	LBR	-12.415	-8.060	-4.355	31.063	37.039	-5.976
36938	2.887	0.009	...	UPL	LBR	-12.585	-9.096	-3.489	31.100	35.771	-4.670
245203	2.737	0.008	...	UPL	LB	-12.660	-8.720	-3.940	30.650	35.771	-5.121
36936	2.734	0.004	0.001	RIV	MAP	-12.961	-8.800	-4.161	30.429	35.771	-5.342
36894	2.676	0.035	0.004	RIV	MAP	-12.028	-8.769	-3.259	31.179	35.539	-4.360
36959	2.412	0.035	...	UPL	ML	-12.074	-7.716	-4.357	30.606	37.939	-7.332
36960	2.412	0.035	...	UPL	ML	-12.074	-7.360	-4.713	30.606	38.123	-7.516
36958	2.825	0.025	...	UPL	LBR	-12.151	-8.586	-3.565	31.417	36.403	-4.986
36981	2.695	0.005	...	UPL	ML	-12.871	-8.726	-4.144	30.446	35.771	-5.325
36954	2.907	0.020	...	UPL	LB	-12.235	-8.161	-4.075	31.435	37.131	-5.696
36983	2.752	0.008	...	UPL	ML	-12.657	-8.997	-3.660	30.778	35.539	-4.761
36982	5.136	0.014	...	UPL	ML	-12.143	-8.456	-3.687	32.017	37.483	-5.465
37000	2.877	0.011	...	UPL	ML	-12.500	-8.697	-3.802	31.180	36.403	-5.223
36999	2.752	0.007	...	UPL	ML	-12.715	-8.997	-3.718	30.720	35.539	-4.819
37025	2.857	0.007	...	UPL	ML	-12.699	-8.661	-4.038	30.944	36.403	-5.459
37017	2.962	0.003	...	UPL	LB	-13.051	-7.992	-5.059	30.426	37.027	-6.601
37016	2.806	0.007	0.001	RIV	MAP	-12.707	-7.885	-4.822	30.820	37.303	-6.483
37018	2.350	0.008	0.002	RIV	ML	-12.726	-7.292	-5.434	29.797	37.939	-8.141
37042	3.450	0.032	...	UPL	LB	-11.957	-7.852	-4.105	31.521	37.567	-6.046
37040	2.886	0.010	0.002	RIV	MAP	-12.540	-7.896	-4.644	30.938	37.123	-6.185
37061	8.302	0.034	0.003	RIV	ML	-11.549	-7.556	-3.993	31.928	37.863	-5.935
37062	2.827	0.022	...	UPL	LB	-12.206	-8.985	-3.221	31.369	35.771	-4.402
37058	3.263	0.005	...	UPL	ML	-12.787	-8.216	-4.571	30.690	36.963	-6.273
37035	2.698	0.003	...	UPL	LBCR	-13.092	-8.806	-4.286	30.152	35.539	-5.387
37076	2.654	0.004	0.001	RIV	ML	-12.974	-8.773	-4.201	30.237	35.539	-5.302
37051	2.720	0.007	...	UPL	LBR	-12.720	-8.842	-3.878	30.560	35.539	-4.979
245310	2.000	0.008	...	UPL	LBR	-12.796	...	...	...	...	...
37112	2.655	0.007	...	UPL	ML	-12.731	-8.773	-3.958	30.480	35.539	-5.059
37131	2.626	0.024	...	UPL	MAP	-12.200	-8.737	-3.463	30.975	35.539	-4.564
37129	2.886	0.004	...	UPL	LB	-12.938	-8.248	-4.690	30.540	36.931	-6.391
37128	2.796	0.290	0.006	RIV	ML	-11.091	-6.070	-5.021	32.385	39.063	-6.678
37149	2.766	0.006	...	UPL	ML	-12.780	-8.835	-3.945	30.645	35.771	-5.126
37150	2.314	0.008	...	UPL	ML	-12.733	-8.076	-4.657	30.745	37.103	-6.358
37187	2.732	0.006	...	UPL	ML	-12.785	-8.920	-3.865	30.573	35.539	-4.966
37210	2.593	0.011	...	UPL	MAP	-12.545	-8.663	-3.882	30.556	35.539	-4.983
37209	2.892	0.006	0.002	RIV	ML	-12.761	-7.663	-5.098	30.940	37.939	-6.998
37235	2.734	0.007	...	UPL	LBR	-12.718	-8.920	-3.798	30.640	35.539	-4.899
37202	2.269	0.009	0.002	RIV	LOC	-12.690	-6.665	-6.025	29.582	37.179	-7.597
37272	2.731	0.006	0.002	RIV	MAP	-12.785	-8.921	-3.865	30.573	35.539	-4.966
37303	2.314	0.004	...	UPL	LB	-13.034	-7.892	-5.142	30.442	37.283	-6.841
37321	2.865	0.010	...	UPL	LBR	-12.543	-8.215	-4.328	31.050	36.959	-5.908
37334	2.735	0.011	0.003	RIV	LOC	-12.522	-8.276	-4.246	30.956	36.983	-6.027
37332	2.772	0.003	...	UPL	LBC	-13.080	-8.834	-4.246	30.344	35.771	-5.427
37373	2.680	0.004	...	UPL	ML	-12.970	-8.849	-4.121	30.317	35.539	-5.222
37356	3.731	0.007	...	UPL	LB	-12.583	-7.728	-4.855	30.895	37.291	-6.396
37397	2.735	0.022	...	UPL	LBR	-12.221	-8.140	-4.081	31.257	37.039	-5.782
-2 1323	2.750	0.015	...	UPL	LB	-12.385	-8.958	-3.427	31.011	35.539	-4.528
-2 1324	2.692	0.012	...	UPL	LB	-12.491	-8.847	-3.644	30.794	35.539	-4.745
37470	1.948	0.012	...	UPL	LB	-12.631	-5.494	-7.138	27.452	35.771	-8.319
37481	2.084	0.010	...	UPL	LBR	-12.681	-7.864	-4.817	30.797	37.235	-6.438
37525	2.707	0.007	...	UPL	LB	-12.722	-8.724	-3.998	30.592	35.771	-5.179
37526	2.544	0.016	...	UPL	LBR	-12.390	-8.390	-4.000	30.590	35.771	-5.181
37524	2.774	0.010	...	UPL	LB	-12.557	-8.994	-3.563	30.875	35.539	-4.664
37635	2.444	0.007	...	UPL	LB	-12.767	-8.045	-4.722	29.988	36.051	-6.063
-2 1333	2.676	0.007	...	UPL	LB	-12.727	-8.810	-3.918	30.520	35.539	-5.019
37674	2.712	0.022	...	UPL	LBR	-12.224	-8.724	-3.501	31.089	35.771	-4.681
37686	2.774	0.009	...	UPL	LB	-12.603	-8.994	-3.609	30.829	35.539	-4.710
37699	3.067	0.009	...	UPL	LB	-12.559	-8.947	-3.612	31.370	36.403	-5.033
37744	2.415	0.009	...	UPL	LB	-12.663	-7.936	-4.727	30.815	37.323	-6.508
37776	2.811	0.007	...	UPL	LB	-12.706	-8.184	-4.522	30.772	36.835	-6.063
37886	2.774	0.007	...	UPL	LBCR	-12.712	-8.994	-3.718	30.720	35.539	-4.819
37903	5.136	0.015	...	UPL	LB	-12.113	-8.204	-3.909	31.364	37.055	-5.690

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
37927	2.715	0.011	...	UPL	LB	-12.525	-8.883	-3.642	30.796	35.539	-4.742
38366	2.775	0.003	...	UPL	MAP	-13.080	-8.914	-4.166	30.272	35.539	-5.267
38563	3.227	0.011	0.001	RIV	MAP	-12.450	-9.082	-3.368	31.614	36.403	-4.789
38771	2.660	0.109	0.003	RIV	ML	-11.538	-6.232	-5.306	31.940	38.947	-7.007
39033	2.712	0.008	...	UPL	LB	-12.664	-8.844	-3.820	30.618	35.539	-4.921
39291	2.213	0.004	...	UPL	ML	-13.053	-7.612	-5.441	30.425	37.487	-7.062
39285	2.651	0.028	...	UPL	LBR	-12.130	-8.694	-3.436	31.002	35.539	-4.537
39286	2.530	0.335	0.031	RIV	MAP	-11.072	-7.857	-3.215	31.831	36.235	-4.404
39376	2.621	0.015	0.001	RIV	ML	-12.405	-8.698	-3.707	30.731	35.539	-4.808
39844	2.181	0.011	...	UPL	LB	-12.620	-7.520	-5.100	29.296	36.227	-6.931
39417	2.376	0.015	...	UPL	LBR	-12.448	-8.137	-4.311	30.126	35.539	-5.412
39647	2.435	0.004	...	UPL	LBCR	-13.011	-8.282	-4.730	29.708	35.539	-5.831
39777	2.585	0.017	0.004	RIV	MAP	-12.357	-8.048	-4.309	31.120	37.211	-6.090
39773	2.390	0.024	...	UPL	LB	-12.241	-8.171	-4.070	30.367	35.539	-5.171
40111	3.357	0.005	...	UPL	ML	-12.775	-7.232	-5.543	31.362	38.483	-7.121
40681	2.589	0.007	...	UPL	LB	-12.742	-8.583	-4.158	30.279	35.539	-5.259
40893	6.166	0.009	...	UPL	LBR	-12.256	-8.504	-3.752	32.632	38.443	-5.811
41040	2.226	0.007	...	UPL	LB	-12.807	-7.526	-5.281	29.309	35.771	-6.462
41117	6.166	0.004	...	UPL	LB	-12.608	-6.796	-5.812	31.830	39.083	-7.253
41335	3.544	0.009	...	UPL	LB	-12.496	-7.360	-5.136	30.444	37.283	-6.838
41382	2.850	0.011	...	UPL	LBR	-12.504	-9.062	-3.442	30.996	35.539	-4.543
41534	2.666	0.006	...	UPL	LB	-12.796	-7.671	-5.125	30.517	37.303	-6.786
41419	2.717	0.008	...	UPL	LBR	-12.663	-8.803	-3.860	30.578	35.539	-4.961
41455	2.811	0.007	...	UPL	LBR	-12.706	-8.788	-3.918	30.672	35.771	-5.099
41583	2.759	0.004	...	UPL	LBCR	-12.957	-8.916	-4.041	30.397	35.539	-5.142
41883	2.743	0.028	...	UPL	LBR	-12.115	-9.039	-3.076	31.362	35.539	-4.177
42400	4.854	0.006	...	UPL	LB	-12.536	-7.848	-4.688	31.902	38.011	-6.108
42748	2.781	0.008	...	UPL	LBR	-12.653	-8.873	-3.780	30.810	35.771	-4.961
43078	10.951	0.011	...	UPL	LB	-11.919	-8.228	-3.691	32.519	38.271	-5.752
254346	13.333	0.020	...	UPL	LB	-11.574	-8.476	-3.098	32.885	37.523	-4.638
254577	22.605	0.026	...	UPL	ML	-11.231	-7.820	-3.411	33.207	38.519	-5.311
43582	23.138	0.043	...	UPL	ML	-11.002	-7.812	-3.190	33.436	38.687	-5.251
43703	11.746	0.010	...	UPL	LB	-11.930	-8.128	-3.802	32.508	38.011	-5.503
43753	8.568	0.020	...	UPL	LBR	-11.766	-7.984	-3.782	32.672	38.355	-5.683
44179	2.859	0.002	...	UPL	LB	-13.243	-8.900	-4.342	30.247	35.771	-5.523
44172	2.811	0.007	...	UPL	LB	-12.706	-8.304	-4.402	30.326	36.203	-5.877
44743	2.419	0.061	0.008	RIV	MAP	-11.831	-6.240	-5.592	30.849	38.083	-7.234
256856	4.122	0.006	...	UPL	LB	-12.607	-8.726	-3.881	31.629	37.131	-5.502
257473	2.873	0.071	...	UPL	LBR	-11.690	-9.018	-2.672	31.766	35.539	-3.773
45719	2.573	0.007	...	UPL	MLR	-12.744	-8.666	-4.079	30.359	35.539	-5.179
45515	2.735	0.003	...	UPL	LBCR	-13.086	-8.680	-4.406	30.184	35.771	-5.587
45530	2.463	0.003	...	UPL	LBCR	-13.131	-8.322	-4.809	29.629	35.539	-5.910
45803	2.868	0.008	...	UPL	LB	-12.639	-8.859	-3.780	30.809	35.771	-4.961
46212	2.572	0.004	...	UPL	LB	-12.988	-8.666	-4.322	30.116	35.539	-5.423
45910	2.517	0.008	...	UPL	ML	-12.696	-8.071	-4.625	30.178	37.691	-7.513
46005	2.603	0.018	...	UPL	LB	-12.329	-8.461	-3.868	30.722	35.771	-5.049
259012	3.797	0.005	...	UPL	LB	-12.722	-8.848	-3.874	31.372	36.787	-5.415
46106	6.072	0.006	...	UPL	LB	-12.439	-8.128	-4.311	32.000	38.411	-6.411
259105	3.939	0.029	0.003	RIV	MAP	-11.942	-8.909	-3.033	32.213	36.787	-4.574
46179	2.373	0.011	...	UPL	LB	-12.583	-8.129	-4.454	29.984	35.539	-5.555
46328	2.213	0.049	0.003	RIV	MAP	-11.965	-7.204	-4.761	31.545	38.003	-6.458
259440	5.954	0.019	...	UPL	LBR	-11.946	-8.451	-3.495	32.807	38.403	-5.596
259431	4.131	0.009	...	UPL	LB	-12.430	-8.725	-3.705	31.805	37.131	-5.326
259697	2.908	0.009	...	UPL	LB	-12.582	-8.892	-3.690	30.900	35.771	-4.870
46469	4.051	0.006	...	UPL	LB	-12.614	-8.615	-3.999	31.583	37.283	-5.700
46583	2.687	0.005	...	UPL	LB	-12.872	-8.808	-4.064	30.374	35.539	-5.165
46484	10.155	0.007	...	UPL	LB	-12.148	-7.848	-4.300	31.556	37.763	-6.207
259865	3.274	0.006	...	UPL	LBR	-12.707	-8.835	-3.872	31.110	36.403	-5.293
259991	2.971	0.009	...	UPL	LBR	-12.573	-8.962	-3.610	30.980	35.771	-4.791
260302	2.796	0.007	...	UPL	LB	-12.708	-8.910	-3.798	30.640	35.539	-4.899
46932	2.544	0.004	...	UPL	LB	-12.992	-8.511	-4.482	29.956	35.539	-5.583
46846	4.146	0.026	...	UPL	LBR	-11.967	-8.723	-3.245	32.265	37.131	-4.865
46867	6.977	0.011	...	UPL	LBR	-12.115	-8.216	-3.899	32.323	38.123	-5.800
46868	2.940	0.010	...	UPL	LBR	-12.532	-8.927	-3.604	30.986	35.771	-4.785
46885	2.549	0.008	...	UPL	LB	-12.690	-8.050	-4.641	30.253	35.979	-5.726

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bol}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bol}}$ (12)
46883	11.480	0.014	...	UPL	LBR	-11.794	-7.812	-3.982	32.000	37.683	-5.683
260537	3.270	0.010	...	UPL	LBR	-12.485	-8.835	-3.650	31.332	36.403	-5.071
47032	13.600	0.013	...	UPL	LBR	-11.753	-8.128	-3.625	32.686	38.371	-5.685
260672	2.908	0.013	...	UPL	LBR	-12.422	-8.893	-3.530	31.060	35.771	-4.711
47088	4.012	0.008	...	UPL	LB	-12.494	-8.252	-4.242	31.941	37.883	-5.942
47104	2.616	0.011	...	UPL	LBR	-12.541	-8.499	-4.042	30.548	35.771	-5.223
47370	2.835	0.003	...	UPL	LB	-13.070	-9.024	-4.046	30.392	35.539	-5.147
47292	2.790	0.010	...	UPL	LBR	-12.554	-8.751	-3.803	30.787	35.771	-4.984
47314	2.847	0.008	...	UPL	ML	-12.643	-8.822	-3.820	30.770	35.771	-5.001
47417	4.762	0.015	...	UPL	LBR	-12.146	-7.912	-4.234	32.292	38.587	-6.295
47430	2.719	0.006	...	UPL	LB	-12.788	-8.803	-3.985	30.453	35.539	-5.086
47469	2.896	0.018	...	UPL	ML	-12.283	-8.494	-3.788	31.193	36.403	-5.209
261490	3.969	0.007	...	UPL	LB	-12.556	-8.665	-3.891	31.619	37.131	-5.512
47732	3.112	0.009	...	UPL	ML	-12.553	-8.584	-3.969	31.881	37.471	-5.589
47754	2.818	0.009	...	UPL	LB	-12.596	-8.947	-3.649	30.789	35.539	-4.750
47756	2.343	0.020	...	UPL	LBR	-12.329	-8.057	-4.273	30.165	35.539	-5.374
47755	2.740	0.015	...	UPL	ML	-12.386	-8.839	-3.547	30.891	35.539	-4.648
261811	2.903	0.006	...	UPL	LB	-12.759	-8.893	-3.866	30.724	35.771	-5.047
47777	2.585	0.005	...	UPL	ML	-12.889	-8.600	-4.289	31.546	37.355	-5.809
261810	2.842	0.008	...	UPL	ML	-12.643	-8.823	-3.820	30.770	35.771	-5.001
261903	2.792	0.030	...	UPL	ML	-12.077	-8.911	-3.166	31.272	35.539	-4.267
47887	2.585	0.030	...	UPL	ML	-12.110	-8.280	-3.830	32.195	37.563	-5.367
262013	3.363	0.005	...	UPL	LB	-12.774	-8.903	-3.871	31.111	36.403	-5.292
262042	4.949	0.005	...	UPL	LBR	-12.607	-8.692	-3.915	31.828	37.443	-5.615
47934	2.740	0.007	...	UPL	ML	-12.717	-8.839	-3.878	30.560	35.539	-4.979
49761	2.886	0.007	...	UPL	ML	-12.695	-8.364	-4.331	31.091	37.123	-6.032
48055	2.740	0.007	...	UPL	ML	-12.717	-8.839	-3.878	30.560	35.539	-4.979
48533	2.737	0.007	...	UPL	LB	-12.718	-8.680	-4.038	30.552	35.771	-5.219
48829	2.884	0.006	...	UPL	LBR	-12.762	-9.016	-3.745	30.692	35.539	-4.846
48785	2.794	0.009	...	UPL	LB	-12.600	-8.911	-3.689	30.749	35.539	-4.790
48999	2.414	0.004	...	UPL	MLR	-13.015	-8.224	-4.791	29.647	35.539	-5.892
48955	2.873	0.009	...	UPL	LBR	-12.587	-8.858	-3.729	30.861	35.771	-4.910
263775	4.689	0.008	...	UPL	LB	-12.426	-8.933	-3.493	32.017	37.131	-5.113
49246	2.715	0.007	...	UPL	LB	-12.721	-8.803	-3.918	30.520	35.539	-5.019
49330	8.568	0.009	...	UPL	LB	-12.113	-8.376	-3.737	32.609	38.443	-5.833
289186	3.005	0.008	...	UPL	LBR	-12.619	-8.997	-3.622	30.968	35.771	-4.803
49567	2.415	0.008	...	UPL	LBR	-12.714	-7.904	-4.810	31.373	37.683	-6.310
289229	3.442	0.019	...	UPL	LBR	-12.184	-8.933	-3.251	31.731	36.403	-4.672
49715	2.908	0.026	...	UPL	LBR	-12.122	-8.893	-3.229	31.361	35.771	-4.410
49711	2.734	0.008	...	UPL	LB	-12.660	-8.680	-3.980	30.610	35.771	-5.161
50138	2.435	0.003	...	UPL	ML	-13.136	-8.114	-5.023	29.567	35.771	-6.204
50251	2.530	0.013	...	UPL	LBR	-12.483	-8.313	-4.170	30.420	35.771	-5.351
50252	2.551	0.011	...	UPL	LBR	-12.552	-8.509	-4.043	30.395	35.539	-5.143
-5 1854	2.909	0.012	...	UPL	LB	-12.457	-8.892	-3.565	31.025	35.771	-4.746
50646	3.227	0.004	...	UPL	LB	-12.889	-8.402	-4.487	31.023	37.131	-6.108
50680	2.818	0.005	...	UPL	ML	-12.851	-8.827	-4.024	30.566	35.771	-5.205
50740	2.774	0.004	...	UPL	ML	-12.955	-8.914	-4.041	30.397	35.539	-5.142
50707	2.509	0.006	...	UPL	LB	-12.822	-7.368	-5.454	30.854	38.003	-7.148
-24 4556	2.930	0.007	...	UPL	MLR	-12.688	-9.129	-3.559	30.879	35.539	-4.660
-23 4550	3.107	0.004	...	UPL	ML	-12.906	-9.181	-3.725	30.865	35.771	-4.906
51013	2.820	0.020	...	UPL	LBR	-12.249	-8.827	-3.422	31.168	35.771	-4.603
51036	3.037	0.006	...	UPL	ML	-12.739	-8.712	-4.027	30.955	36.403	-5.448
50984	2.719	0.007	...	UPL	LB	-12.720	-8.803	-3.918	30.520	35.539	-5.019
50981	2.589	0.013	...	UPL	LBR	-12.473	-8.583	-3.890	30.548	35.539	-4.990
51079	2.715	0.011	...	UPL	LBR	-12.525	-8.643	-3.882	30.708	35.771	-5.062
51176	3.015	0.007	...	UPL	MLR	-12.676	-9.076	-3.600	30.990	35.771	-4.781
51196	2.770	0.021	...	UPL	LBR	-12.235	-8.875	-3.361	31.077	35.539	-4.462
51223	2.940	0.008	...	UPL	LB	-12.629	-8.927	-3.701	30.889	35.771	-4.882
51379	2.908	0.004	...	UPL	LBCR	-12.934	-8.893	-4.042	30.548	35.771	-5.223
51426	2.770	0.007	...	UPL	LB	-12.712	-8.874	-3.838	30.600	35.539	-4.939
51477	3.037	0.006	...	UPL	LB	-12.739	-8.592	-4.147	31.637	37.283	-5.646
51479	2.819	0.008	...	UPL	LBR	-12.647	-8.787	-3.860	30.730	35.771	-5.041
51511	2.877	0.007	...	UPL	LBR	-12.696	-8.857	-3.838	30.751	35.771	-5.019
51537	2.884	0.013	...	UPL	LB	-12.426	-9.016	-3.410	31.028	35.539	-4.511
51542	3.004	0.008	...	UPL	LBR	-12.619	-8.997	-3.622	30.968	35.771	-4.803

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bol}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bol}}$ (12)
51541	2.570	0.007	...	UPL	LB	-12.745	-8.546	-4.199	30.239	35.539	-5.299
51569	2.973	0.007	...	UPL	LB	-12.682	-8.962	-3.720	30.870	35.771	-4.900
51502	2.493	0.005	...	UPL	LBCR	-12.904	-8.399	-4.506	29.932	35.539	-5.607
51593	2.743	0.005	...	UPL	LB	-12.863	-8.959	-3.904	30.534	35.539	-5.005
51913	2.848	0.010	...	UPL	LBR	-12.545	-8.822	-3.723	30.867	35.771	-4.904
52300	2.429	0.009	...	UPL	LB	-12.660	-8.286	-4.374	30.064	35.539	-5.475
51961	2.797	0.012	...	UPL	LB	-12.474	-8.910	-3.564	30.874	35.539	-4.665
51978	2.673	0.009	...	UPL	LB	-12.619	-8.730	-3.889	30.549	35.539	-4.990
52012	2.765	0.009	...	UPL	LB	-12.604	-8.715	-3.889	30.701	35.771	-5.070
52113	2.797	0.009	...	UPL	LBR	-12.599	-8.910	-3.689	30.749	35.539	-4.790
52356	2.213	0.012	...	UPL	LBR	-12.576	-8.260	-4.316	31.467	37.283	-5.816
51637	2.657	0.004	0.001	RIV	MAP	-12.974	-9.013	-3.961	30.477	35.539	-5.062
52463	3.811	0.007	...	UPL	LBR	-12.574	-8.646	-3.928	31.846	37.475	-5.629
267822	2.759	0.007	...	UPL	LBR	-12.714	-8.996	-3.718	30.720	35.539	-4.819
52618	2.749	0.008	...	UPL	LB	-12.658	-8.878	-3.780	30.658	35.539	-4.881
52731	3.552	0.005	...	UPL	LB	-12.751	-8.679	-4.072	31.438	37.131	-5.692
53048	2.583	0.015	...	UPL	LBR	-12.412	-8.504	-3.908	30.682	35.771	-5.088
52849	2.754	0.019	...	UPL	LBR	-12.281	-8.717	-3.564	31.026	35.771	-4.745
-28 3844	2.617	0.008	...	UPL	LBR	-12.679	-8.499	-4.180	30.410	35.771	-5.361
52942	5.509	0.009	...	UPL	LBR	-12.305	-8.276	-4.029	31.557	37.283	-5.725
53010	2.797	0.013	...	UPL	LBR	-12.439	-8.910	-3.529	30.909	35.539	-4.630
53035	3.818	0.005	...	UPL	LB	-12.719	-8.525	-4.194	31.388	37.283	-5.895
53138	2.509	0.006	...	UPL	LB	-12.822	-6.652	-6.170	30.936	38.467	-7.531
53214	2.853	0.004	...	UPL	LBCR	-12.943	-9.021	-3.921	30.517	35.539	-5.022
53179	2.367	0.005	...	UPL	LB	-12.927	...	...	...	...	...
53240	2.530	0.006	...	UPL	LB	-12.819	-8.009	-4.810	30.084	35.979	-5.895
-24 4783	2.891	0.005	...	UPL	LBCR	-12.840	-9.055	-3.785	30.653	35.539	-4.886
53342	2.688	0.004	...	UPL	LBCR	-12.968	-8.767	-4.201	30.237	35.539	-5.302
53303	2.673	0.004	...	UPL	LB	-12.971	-8.730	-4.241	30.197	35.539	-5.342
53339	3.440	0.005	...	UPL	LB	-12.764	-8.933	-3.831	31.151	36.403	-5.252
53367	13.333	0.006	...	UPL	ML	-12.097	-7.396	-4.701	31.889	38.643	-6.753
53456	4.012	0.004	...	UPL	LB	-12.795	-8.180	-4.615	30.238	36.403	-6.165
53457	2.825	0.004	...	UPL	LB	-12.947	-8.946	-4.001	30.437	35.539	-5.102
53623	3.544	0.010	0.002	RIV	MAP	-12.451	-8.452	-3.999	31.583	37.283	-5.700
53668	2.744	0.007	...	UPL	LBR	-12.717	-8.839	-3.878	30.560	35.539	-4.979
53691	4.012	0.006	...	UPL	LB	-12.618	-8.968	-3.650	32.172	37.363	-5.191
53755	4.199	0.015	...	UPL	LBR	-12.201	-7.788	-4.413	31.877	38.443	-6.566
53931	2.770	0.032	...	UPL	LBR	-12.052	-8.874	-3.178	31.260	35.539	-4.279
54224	2.585	0.012	...	UPL	LBR	-12.508	-8.064	-4.444	31.250	37.315	-6.065
54258	2.889	0.004	...	UPL	LB	-12.937	-9.056	-3.882	30.556	35.539	-4.982
54307	2.912	0.004	...	UPL	LB	-12.934	-9.052	-3.882	30.556	35.539	-4.983
54575	5.791	0.007	...	UPL	MLR	-12.392	-8.380	-4.012	30.890	36.243	-5.353
54764	4.667	0.007	...	UPL	LB	-12.486	-7.544	-4.942	31.683	38.323	-6.640
55420	18.898	0.005	...	UPL	LBCR	-12.025	-7.796	-4.229	33.233	38.823	-5.590
55901	3.106	0.014	...	UPL	LB	-12.362	-8.701	-3.661	31.321	36.403	-5.081
-10 1935	2.971	0.015	...	UPL	LBR	-12.351	-8.963	-3.388	31.201	35.771	-4.569
56039	2.791	0.013	...	UPL	LB	-12.440	-8.751	-3.689	30.901	35.771	-4.870
56139	2.585	0.009	...	UPL	LB	-12.633	-6.952	-5.681	30.089	37.403	-7.314
56373	2.763	0.008	...	UPL	LB	-12.656	-8.876	-3.780	30.658	35.539	-4.881
56554	2.878	0.011	...	UPL	LB	-12.500	-8.233	-4.266	30.980	36.787	-5.807
56694	3.091	0.011	...	UPL	LBR	-12.469	-8.703	-3.765	31.217	36.403	-5.186
56808	2.900	0.014	...	UPL	LBR	-12.391	-8.894	-3.498	31.092	35.771	-4.678
57120	3.005	0.009	...	UPL	LB	-12.568	-8.117	-4.451	31.059	37.131	-6.072
57090	3.506	0.012	...	UPL	LBR	-12.376	-9.005	-3.371	31.611	36.403	-4.792
57192	2.213	0.006	...	UPL	ML	-12.877	-8.196	-4.681	31.561	37.743	-6.182
-24 5190	4.329	0.003	...	UPL	ML	-12.886	-8.899	-3.987	31.523	37.131	-5.608
57347	2.878	0.007	...	UPL	ML	-12.696	-9.017	-3.679	30.759	35.539	-4.779
57393	4.199	0.019	...	UPL	LBR	-12.098	-8.952	-3.146	32.436	37.283	-4.847
57503	3.342	0.009	...	UPL	LB	-12.522	-8.906	-3.616	31.366	36.403	-5.037
57432	2.785	0.007	...	UPL	LB	-12.710	-8.912	-3.798	30.640	35.539	-4.899
-24 5234	3.456	0.014	...	UPL	ML	-12.315	-8.971	-3.344	31.638	36.403	-4.765
57103	2.193	0.028	...	UPL	LB	-12.212	-7.654	-4.557	29.784	35.771	-5.987
57616	2.793	0.022	...	UPL	LBR	-12.211	-8.911	-3.301	31.137	35.539	-4.402
57821	2.318	0.005	...	UPL	LB	-12.936	-7.443	-5.492	29.490	36.311	-6.821
57909	2.940	0.006	...	UPL	LB	-12.753	-8.927	-3.826	30.764	35.771	-5.007

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ (11)	$\log L_x/L_{bol}$ (12)
58011	3.450	0.011	...	UPL	LBR	-12.421	-8.176	-4.245	31.613	37.763	-6.150
-25 4447	2.000	0.009	...	UPL	LB	-12.745	...	...	...	...	...
58197	2.910	0.013	...	UPL	LBR	-12.422	-9.052	-3.370	31.068	35.539	-4.471
58285	2.606	0.015	...	UPL	LBR	-12.408	-8.621	-3.787	30.651	35.539	-4.888
-26 4296	3.102	0.013	...	UPL	LBR	-12.394	-9.102	-3.293	31.297	35.771	-4.474
58282	2.935	0.018	...	UPL	LBR	-12.277	-8.928	-3.349	31.241	35.771	-4.530
-29 4323	2.931	0.010	...	UPL	LBR	-12.533	-9.089	-3.444	30.994	35.539	-4.545
58350	3.096	0.007	...	UPL	ML	-12.664	-6.319	-6.345	31.036	38.611	-7.574
58377	2.837	0.014	...	UPL	LB	-12.401	-8.108	-4.293	31.009	36.723	-5.714
58615	2.958	0.005	...	UPL	LB	-12.830	-8.965	-3.865	30.724	35.771	-5.046
58644	2.837	0.040	...	UPL	LBR	-11.945	-8.824	-3.121	31.469	35.771	-4.302
58624	2.834	0.005	...	UPL	LB	-12.849	-8.984	-3.864	30.726	35.771	-5.045
58729	2.477	0.009	...	UPL	LBR	-12.652	-8.241	-4.411	30.179	35.771	-5.592
59129	2.480	0.005	...	UPL	LBR	-12.907	-8.360	-4.546	29.892	35.539	-5.647
59767	2.987	0.005	...	UPL	LBCR	-12.826	-9.000	-3.826	30.764	35.771	-5.007
59723	2.652	0.008	...	UPL	LB	-12.673	-8.773	-3.900	30.538	35.539	-5.001
60000	2.743	0.008	...	UPL	LB	-12.659	-8.799	-3.860	30.730	35.771	-5.041
60114	2.705	0.009	...	UPL	LBR	-12.614	-8.645	-3.969	30.621	35.771	-5.150
60945	2.820	0.006	...	UPL	LB	-12.772	-8.947	-3.825	30.613	35.539	-4.926
61093	2.382	0.003	...	UPL	LBC	-13.146	-8.172	-4.974	29.464	35.539	-6.075
61258	2.908	0.022	...	UPL	LBR	-12.194	-9.053	-3.141	31.296	35.539	-4.242
61350	2.907	0.010	...	UPL	LBR	-12.537	-9.053	-3.484	30.954	35.539	-4.585
61680	2.662	0.010	...	UPL	LBR	-12.575	-8.812	-3.763	30.675	35.539	-4.864
61822	2.970	0.007	...	UPL	LB	-12.682	-9.123	-3.559	30.878	35.539	-4.660
61770	2.726	0.011	...	UPL	LBR	-12.523	-8.762	-3.762	30.828	35.771	-4.942
61954	2.899	0.005	...	UPL	LB	-12.839	-9.054	-3.785	30.653	35.539	-4.886
61957	2.733	0.005	...	UPL	LBR	-12.864	-8.680	-4.184	30.406	35.771	-5.365
62002	2.766	0.004	...	UPL	LB	-12.956	-8.875	-4.081	30.357	35.539	-5.182
62001	2.766	0.003	...	UPL	LB	-13.081	-8.875	-4.206	30.232	35.539	-5.307
62053	4.161	0.004	...	UPL	LB	-12.779	-8.801	-3.978	31.484	36.883	-5.399
62445	2.745	0.005	...	UPL	LBCR	-12.863	-8.839	-4.024	30.414	35.539	-5.125
62640	2.720	0.006	...	UPL	ML	-12.787	-8.802	-3.985	30.453	35.539	-5.086
63073	2.770	0.013	...	UPL	LB	-12.444	-8.874	-3.569	30.869	35.539	-4.670
62979	2.668	0.006	...	UPL	MLR	-12.796	-8.811	-3.985	30.453	35.539	-5.086
63444	2.970	0.011	...	UPL	LBR	-12.486	-8.963	-3.523	31.067	35.771	-4.704
64026	2.743	0.009	...	UPL	LBR	-12.608	-8.839	-3.769	30.669	35.539	-4.870
63975	2.180	0.005	...	UPL	LB	-12.963	-7.532	-5.431	28.953	37.195	-8.241
64175	2.852	0.009	...	UPL	LBR	-12.591	-8.981	-3.609	30.829	35.539	-4.710
64455	2.713	0.004	...	UPL	LB	-12.964	-8.644	-4.321	30.269	35.771	-5.502
64745	2.488	0.019	...	UPL	LBR	-12.325	-8.439	-3.886	30.552	35.539	-4.987
65364	3.017	0.007	...	UPL	LB	-12.675	-9.275	-3.400	31.038	35.539	-4.501
65575	2.512	0.015	0.003	RIV	MAP	-12.424	-6.824	-5.600	30.450	37.283	-6.833
65548	3.027	0.006	...	UPL	LBR	-12.741	-9.034	-3.707	30.883	35.771	-4.888
65818	2.585	0.031	0.005	RIV	MAP	-12.096	-7.224	-4.872	30.584	37.283	-6.699
65986	2.799	0.008	...	UPL	LB	-12.650	-8.950	-3.700	30.738	35.539	-4.801
66022	2.800	0.012	0.004	RIV	MAP	-12.474	-8.950	-3.524	30.914	35.539	-4.625
66236	3.109	0.005	...	UPL	LBCR	-12.808	-9.181	-3.628	30.962	35.771	-4.809
67215	3.053	0.011	...	UPL	LBR	-12.474	-9.069	-3.404	31.185	35.771	-4.585
67642	2.754	0.013	...	UPL	MLR	-12.446	-8.717	-3.729	30.861	35.771	-4.910
67632	3.123	0.011	...	UPL	LBR	-12.464	-9.138	-3.326	31.264	35.771	-4.507
67820	2.546	0.009	...	UPL	LBR	-12.640	-8.350	-4.290	30.300	35.771	-5.471
68092	2.564	0.010	...	UPL	ML	-12.591	-8.387	-4.204	30.386	35.771	-5.385
68157	2.813	0.006	...	UPL	LBCR	-12.773	-8.948	-3.825	30.613	35.539	-4.926
68395	2.971	0.011	...	UPL	LB	-12.486	-8.603	-3.883	31.099	36.403	-5.304
68365	2.914	0.009	...	UPL	LB	-12.581	-9.052	-3.530	30.908	35.539	-4.631
68473	2.980	0.011	...	UPL	LB	-12.484	-9.121	-3.363	31.075	35.539	-4.464
68555	3.306	0.010	...	UPL	LB	-12.481	-9.310	-3.170	31.420	35.771	-4.351
68194	2.351	0.004	...	UPL	LB	-13.027	-8.176	-4.851	29.587	35.539	-5.952
68504	2.433	0.015	...	UPL	LBR	-12.438	-8.326	-4.112	30.326	35.539	-5.213
68164	2.530	0.010	...	UPL	LBR	-12.597	-8.753	-3.844	30.594	35.539	-4.945
68861	2.853	0.005	...	UPL	LBCR	-12.846	-8.981	-3.864	30.573	35.539	-4.965
68946	3.304	0.003	...	UPL	LBCR	-13.004	-9.311	-3.693	30.897	35.771	-4.874
69891	2.672	0.008	...	UPL	LB	-12.670	-8.610	-4.060	30.530	35.771	-5.241
69890	3.049	0.009	...	UPL	LBR	-12.562	-9.310	-3.252	31.186	35.539	-4.352
69930	4.249	0.008	...	UPL	LBR	-12.469	-8.830	-3.639	31.871	37.131	-5.260

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ (11)	$\log L_x/L_{bol}$ (12)
69989	3.264	0.019	...	UPL	LBR	-12.208	-9.236	-2.972	31.618	35.771	-4.152
69868	2.511	0.005	...	UPL	LBR	-12.901	-8.596	-4.305	30.132	35.539	-5.406
70307	2.825	0.007	...	UPL	LBR	-12.704	-8.946	-3.758	30.680	35.539	-4.859
70583	2.000	0.007	...	UPL	LB	-12.854	...	...	...	...	...
70614	2.979	0.009	...	UPL	ML	-12.572	-9.121	-3.450	30.987	35.539	-4.551
70715	2.609	0.062	...	UPL	LB	-11.791	-8.620	-3.171	31.267	35.539	-4.272
70948	2.514	0.047	...	UPL	LB	-11.928	-8.275	-3.652	30.938	35.771	-4.833
71019	2.765	0.100	...	UPL	LB	-11.558	-8.715	-2.843	31.747	35.771	-4.024
71059	3.381	0.012	...	UPL	MLR	-12.392	-9.301	-3.091	31.499	35.771	-4.272
71123	2.696	0.009	...	UPL	LB	-12.615	-8.766	-3.849	30.589	35.539	-4.950
71218	3.118	0.007	...	UPL	LB	-12.661	-9.259	-3.402	31.036	35.539	-4.503
71302	2.213	0.014	...	UPL	LB	-12.509	-7.864	-4.645	30.523	36.883	-6.360
-43 2550	11.140	0.008	...	UPL	LB	-12.050	-9.227	-2.823	33.479	38.403	-4.923
71336	3.561	0.009	...	UPL	LB	-12.494	-8.478	-4.016	31.494	37.131	-5.637
71459	2.494	0.024	...	UPL	LBR	-12.223	-7.558	-4.664	30.597	36.883	-6.285
71470	2.939	0.028	...	UPL	LBR	-12.085	-8.928	-3.157	31.433	35.771	-4.338
71508	3.391	0.015	...	UPL	LB	-12.294	-9.300	-2.994	31.596	35.771	-4.175
71609	5.604	0.019	...	UPL	LB	-11.973	-8.136	-3.837	32.264	38.203	-5.939
71627	3.282	0.016	...	UPL	LB	-12.280	-9.234	-3.046	31.544	35.771	-4.227
71693	3.192	0.017	...	UPL	MLR	-12.265	-9.167	-3.098	31.492	35.771	-4.279
71786	3.350	0.019	...	UPL	LBR	-12.196	-9.425	-2.771	31.667	35.539	-3.872
71946	2.801	0.005	...	UPL	LBCR	-12.854	-8.950	-3.904	30.534	35.539	-5.005
72034	3.117	0.044	...	UPL	LBR	-11.863	-9.259	-2.604	31.834	35.539	-3.704
72067	2.601	0.025	...	UPL	LB	-12.187	-7.781	-4.406	30.856	36.963	-6.106
72089	2.551	0.043	...	UPL	LBR	-11.960	-8.509	-3.450	30.987	35.539	-4.551
72088	3.450	0.027	...	UPL	MLR	-12.031	-9.492	-2.539	31.899	35.539	-3.640
72126	3.880	0.023	...	UPL	LB	-12.049	-9.157	-2.893	32.089	36.403	-4.313
72127	2.735	0.033	...	UPL	MLR	-12.044	-7.396	-4.648	31.170	37.363	-6.193
72161	2.650	0.019	...	UPL	MLR	-12.298	-8.694	-3.604	30.834	35.539	-4.705
72179	2.848	0.026	...	UPL	LB	-12.131	-8.822	-3.308	31.282	35.771	-4.489
72177	2.884	0.013	...	UPL	LB	-12.426	-9.016	-3.410	31.028	35.539	-4.511
72178	2.915	0.013	...	UPL	LB	-12.421	-9.051	-3.370	31.068	35.539	-4.471
72232	2.757	0.036	...	UPL	LBR	-12.003	-7.793	-4.211	31.291	36.923	-5.632
72271	3.193	0.037	...	UPL	LB	-11.928	-9.167	-2.760	31.829	35.771	-3.941
72350	2.727	0.025	...	UPL	LBR	-12.166	-7.949	-4.217	31.085	36.763	-5.678
72423	3.295	0.025	...	UPL	LB	-12.084	-9.392	-2.692	31.746	35.539	-3.793
72453	3.123	0.024	...	UPL	ML	-12.125	-9.258	-2.867	31.571	35.539	-3.968
72501	3.104	0.020	...	UPL	LB	-12.207	-9.261	-2.946	31.492	35.539	-4.047
72537	2.715	0.029	...	UPL	LB	-12.104	-8.643	-3.461	31.129	35.771	-4.641
72515	2.908	0.025	...	UPL	ML	-12.138	-8.892	-3.246	31.344	35.771	-4.427
72466	2.636	0.018	...	UPL	LBR	-12.324	-8.696	-3.628	30.810	35.539	-4.729
72535	2.872	0.018	...	UPL	LB	-12.287	-8.458	-3.828	31.154	36.403	-5.249
72554	10.422	0.024	...	UPL	LB	-11.602	-8.012	-3.590	32.711	38.003	-5.292
72576	9.360	0.083	...	UPL	LBR	-11.110	-8.136	-2.974	33.488	37.963	-4.474
72648	4.949	0.070	...	UPL	MLR	-11.460	-8.148	-3.312	33.138	37.971	-4.833
72754	5.443	0.016	...	UPL	LB	-12.060	-7.773	-4.287	32.902	38.631	-5.728
72734	2.980	0.025	...	UPL	LB	-12.128	-9.121	-3.007	31.431	35.539	-4.108
72798	2.213	0.031	...	UPL	LB	-12.164	-8.052	-4.112	31.312	36.883	-5.571
72836	3.117	0.033	...	UPL	LB	-11.988	-9.099	-2.888	31.701	35.771	-4.069
72898	2.854	0.068	...	UPL	LB	-11.712	-8.981	-2.731	31.707	35.539	-3.832
72918	3.050	0.043	...	UPL	LB	-11.882	-9.190	-2.692	31.746	35.539	-3.793
72919	2.651	0.029	...	UPL	LB	-12.114	-8.694	-3.421	31.017	35.539	-4.522
-44 2744	2.854	0.030	...	UPL	LB	-12.067	-8.981	-3.086	31.352	35.539	-4.187
72997	2.842	0.038	...	UPL	LB	-11.967	-8.423	-3.544	31.438	36.403	-4.964
73009	3.124	0.024	...	UPL	ML	-12.125	-9.258	-2.867	31.571	35.539	-3.968
73010	2.585	0.027	...	UPL	ML	-12.156	-8.424	-3.732	30.858	35.771	-4.913
73059	3.050	0.039	...	UPL	LB	-11.925	-9.190	-2.735	31.703	35.539	-3.836
73076	2.771	0.044	...	UPL	LBR	-11.914	-8.874	-3.040	31.398	35.539	-4.140
-44 2762	3.124	0.043	...	UPL	LBR	-11.872	-9.258	-2.614	31.824	35.539	-3.715
73090	2.650	0.038	...	UPL	LB	-11.997	-8.694	-3.303	31.135	35.539	-4.404
73186	3.124	0.025	...	UPL	ML	-12.107	-9.258	-2.849	31.589	35.539	-3.950
73222	2.000	0.030	...	UPL	LB	-12.222	...	...	...	...	...
73202	3.516	0.038	...	UPL	LB	-11.874	-9.364	-2.511	32.079	35.771	-3.691
73271	3.346	0.005	...	UPL	LBCR	-12.777	-9.305	-3.471	31.119	35.771	-4.652
73303	2.884	0.047	...	UPL	LBR	-11.868	-9.016	-2.852	31.586	35.539	-3.952

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bol}}$ (11)	$\log L_x/L_{\text{bol}}$ (12)
73420	5.978	0.019	...	UPL	LB	-11.945	-8.504	-3.441	32.653	38.155	-5.501
73550	2.914	0.010	...	UPL	LBR	-12.536	-9.052	-3.484	30.954	35.539	-4.585
73589	3.039	0.023	...	UPL	LB	-12.156	-9.032	-3.124	31.466	35.771	-4.305
73568	9.360	0.019	...	UPL	LBR	-11.750	-8.120	-3.630	32.848	38.379	-5.531
73567	2.847	0.026	...	UPL	LB	-12.131	-8.822	-3.308	31.282	35.771	-4.489
-44 2840	2.915	0.047	...	UPL	LBR	-11.863	-9.051	-2.812	31.626	35.539	-3.913
73774	3.050	0.019	...	UPL	LB	-12.237	-9.190	-3.047	31.391	35.539	-4.148
-46 2761	2.914	0.043	...	UPL	LBR	-11.902	-9.052	-2.850	31.587	35.539	-3.951
73813	2.720	0.059	...	UPL	LBR	-11.795	-8.803	-2.992	31.446	35.539	-4.093
73811	2.695	0.049	...	UPL	LB	-11.879	-8.766	-3.113	31.325	35.539	-4.214
73831	2.740	0.029	...	UPL	LB	-12.100	-8.679	-3.421	31.169	35.771	-4.601
73868	2.980	0.021	...	UPL	LB	-12.204	-9.121	-3.082	31.355	35.539	-4.183
73903	5.978	0.016	...	UPL	LB	-12.019	-8.568	-3.451	32.579	37.651	-5.072
73986	2.672	0.038	...	UPL	MLR	-11.993	-8.730	-3.263	31.175	35.539	-4.364
73957	2.675	0.006	...	UPL	LB	-12.795	-8.970	-3.825	30.613	35.539	-4.926
74106	2.797	0.039	...	UPL	LBR	-11.962	-8.910	-3.052	31.386	35.539	-4.153
74319	2.970	0.016	...	UPL	LB	-12.323	-8.039	-4.284	31.225	37.131	-5.905
74371	4.762	0.016	...	UPL	LBR	-12.118	-7.204	-4.914	32.480	38.623	-6.143
74478	2.000	0.011	...	UPL	LBR	-12.658	...	...	...	35.539	...
74454	2.609	0.017	...	UPL	LB	-12.353	-8.620	-3.733	30.705	35.539	-4.834
74528	5.604	0.065	...	UPL	LBR	-11.439	-8.392	-3.047	32.538	37.283	-4.745
74602	3.049	0.018	...	UPL	LB	-12.261	-9.190	-3.070	31.367	35.539	-4.171
74677	6.448	0.023	...	UPL	LBR	-11.829	-8.368	-3.461	32.769	37.931	-5.162
74695	3.708	0.015	...	UPL	LB	-12.255	-9.619	-2.636	31.802	35.539	-3.737
74711	5.230	0.016	...	UPL	LB	-12.077	-7.912	-4.165	31.937	38.043	-6.105
74773	2.902	0.040	...	UPL	LBR	-11.935	-8.493	-3.442	31.540	36.403	-4.863
-8 2480	2.819	0.005	...	UPL	LBC	-12.851	-9.147	-3.704	30.886	35.771	-4.885
74936	5.791	0.018	...	UPL	LB	-11.982	-8.296	-3.686	32.096	37.283	-5.187
74968	3.124	0.051	...	UPL	MLR	-11.798	-9.258	-2.540	31.898	35.539	-3.640
75009	2.495	0.060	...	UPL	LBR	-11.825	-8.118	-3.707	30.999	35.891	-4.891
75026	3.576	0.034	...	UPL	LBR	-11.915	-8.476	-3.439	32.071	37.131	-5.060
75062	2.608	0.053	...	UPL	LBR	-11.859	-8.620	-3.239	31.199	35.539	-4.340
75083	2.769	0.017	...	UPL	LB	-12.327	-8.875	-3.453	30.985	35.539	-4.553
75126	2.884	0.021	...	UPL	LBR	-12.218	-8.212	-4.005	31.240	36.787	-5.546
75127	2.743	0.015	...	UPL	LB	-12.386	-8.839	-3.547	30.891	35.539	-4.648
75149	5.698	0.031	0.008	RIV	LOC	-11.753	-7.184	-4.569	32.845	38.735	-5.890
75241	2.940	0.029	...	UPL	LB	-12.069	-8.003	-4.066	31.448	36.955	-5.507
75275	4.390	0.021	...	UPL	LB	-12.035	-8.812	-3.224	32.286	37.131	-4.845
75309	4.854	0.129	...	UPL	LBR	-11.203	-8.248	-2.955	33.395	38.451	-5.056
75324	2.482	0.016	...	UPL	LBR	-12.401	-8.360	-4.041	30.397	35.539	-5.142
75446	2.500	0.016	...	UPL	LBR	-12.398	-8.398	-4.000	30.437	35.539	-5.101
75477	3.199	0.063	...	UPL	LBR	-11.696	-9.326	-2.369	32.068	35.539	-3.470
75549	2.585	0.018	...	UPL	LB	-12.332	-8.348	-3.984	31.265	36.883	-5.618
75607	3.547	0.010	...	UPL	LBR	-12.450	-9.000	-3.451	31.531	36.403	-4.871
75655	3.825	0.012	...	UPL	LBR	-12.338	-8.400	-3.938	32.260	37.739	-5.479
75724	3.450	0.008	...	UPL	LB	-12.559	-8.372	-4.187	32.039	37.767	-5.728
75758	2.935	0.007	...	UPL	LB	-12.687	-8.928	-3.759	30.831	35.771	-4.940
75821	2.585	0.042	...	UPL	LBR	-11.964	-7.464	-4.500	32.634	39.135	-6.501
75860	17.307	0.020	...	UPL	LB	-11.461	-7.464	-3.997	33.097	38.543	-5.445
75850	2.941	0.008	...	UPL	LB	-12.628	-9.087	-3.541	30.897	35.539	-4.642
75872	3.123	0.048	...	UPL	LBR	-11.824	-9.258	-2.566	31.872	35.539	-3.667
75871	3.178	0.012	...	UPL	LBR	-12.419	-8.770	-3.649	31.333	36.403	-5.070
75927	3.048	0.038	...	UPL	LBR	-11.936	-9.190	-2.746	31.692	35.539	-3.847
-41 3079	4.019	0.005	...	UPL	LBCR	-12.697	-9.219	-3.478	31.504	36.403	-4.899
75925	3.370	0.005	...	UPL	LBCR	-12.773	-8.902	-3.871	31.111	36.403	-5.292
75968	2.792	0.112	...	UPL	LBR	-11.505	-8.751	-2.754	31.836	35.771	-3.935
76031	14.395	0.030	...	UPL	LBR	-11.365	-8.156	-3.209	33.233	38.343	-5.109
76306	3.049	0.187	...	UPL	LBR	-11.244	-9.190	-2.054	32.384	35.539	-3.155
76439	2.628	0.065	...	UPL	LBR	-11.767	-8.657	-3.110	31.328	35.539	-4.211
76566	2.314	0.058	...	UPL	MLR	-11.872	-7.960	-3.912	31.410	36.763	-5.353
76589	2.650	0.094	...	UPL	LBR	-11.604	-8.694	-2.910	31.528	35.539	-4.011
76650	2.719	0.035	...	UPL	LBR	-12.021	-8.803	-3.219	31.219	35.539	-4.320
76649	2.690	0.023	...	UPL	LB	-12.208	-8.607	-3.601	30.989	35.771	-4.782
76725	2.796	0.033	...	UPL	LB	-12.035	-8.910	-3.125	31.313	35.539	-4.225
76898	2.084	0.011	...	UPL	LBR	-12.640	-8.440	-4.200	30.836	36.403	-5.567

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ <i>erg cm<sup>-2</sup> cts s<sup>-1</sup></i> (2)	Rate <i>cts s<sup>-1</sup></i> (3)	Err <i>cts s<sup>-1</sup></i> (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ <i>erg cm<sup>-2</sup></i> (7)	$\log f_v$ <i>s<sup>-1</sup></i> (8)	$\log f_x/f_v$ (9)	$\log L_x$ <i>erg s<sup>-1</sup></i> (10)	$\log L_{bol}$ <i>erg s<sup>-1</sup></i> (11)	$\log L_x/L_{bol}$ (12)
77645	2.378	0.008	...	UPL	LB	-12.721	-8.224	-4.496	29.874	35.391	-5.517
77922	3.036	0.005	...	UPL	LBCR	-12.819	-9.072	-3.747	30.843	35.771	-4.927
78316	2.343	0.005	...	UPL	LB	-12.931	-7.553	-5.379	29.667	36.235	-6.568
79931	2.335	0.011	...	UPL	LBR	-12.590	-7.641	-4.949	29.945	35.979	-6.034
80598	2.792	0.009	...	UPL	LB	-12.600	-8.751	-3.849	30.741	35.771	-5.030
-53 2300	2.000	0.005	...	UPL	LBCR	-13.000	...	...	...	37.131	...
-53 2333	2.000	0.011	...	UPL	LBR	-12.658	...	...	...	35.539	...
83914	2.650	0.003	...	UPL	LBR	-13.100	-8.734	-4.366	30.224	35.771	-5.547
83953	2.247	0.016	0.001	RIV	MAP	-12.444	-7.376	-5.068	29.778	36.227	-6.449
85767	3.238	0.011	...	UPL	LB	-12.448	-9.200	-3.248	31.342	35.771	-4.429
86008	3.014	0.006	...	UPL	LB	-12.743	-9.156	-3.587	30.851	35.539	-4.688
86117	7.773	0.007	...	UPL	LB	-12.264	-8.548	-3.716	32.068	37.283	-5.215
86199	2.566	0.011	...	UPL	LB	-12.549	-8.131	-4.418	30.428	36.227	-5.799
86441	2.501	0.010	...	UPL	ML	-12.602	-8.397	-4.205	30.233	35.539	-5.305
86889	3.284	0.006	...	UPL	LBCR	-12.705	-8.993	-3.712	31.270	36.403	-5.133
87901	1.996	0.006	...	UPL	LB	-12.922	-6.031	-6.891	27.841	36.051	-8.210
88674	2.945	0.005	...	UPL	LB	-12.832	-9.087	-3.745	30.693	35.539	-4.846
-60 1769	2.000	0.007	...	UPL	LBR	-12.854	...	...	...	36.403	...
89096	6.050	0.009	...	UPL	LBR	-12.264	-8.599	-3.665	32.637	38.403	-5.766
89140	2.825	0.008	...	UPL	LBR	-12.646	-8.946	-3.700	30.738	35.539	-4.801
89201	18.369	0.015	...	UPL	LB	-11.560	-7.516	-4.044	33.338	38.963	-5.625
89330	2.854	0.011	...	UPL	LB	-12.503	-8.981	-3.522	30.916	35.539	-4.623
89359	3.238	0.009	...	UPL	LB	-12.535	-9.200	-3.335	31.254	35.771	-4.516
89402	2.940	0.010	...	UPL	LB	-12.532	-8.927	-3.604	30.986	35.771	-4.785
89430	3.444	0.005	...	UPL	LB	-12.764	-8.933	-3.831	31.151	36.403	-5.252
89740	2.660	0.011	...	UPL	LB	-12.534	-8.176	-4.358	30.942	36.883	-5.941
89802	2.853	0.013	...	UPL	LB	-12.431	-8.981	-3.449	30.988	35.539	-4.550
-57 3075	3.086	0.018	...	UPL	LBR	-12.255	-9.224	-3.031	31.407	35.539	-4.132
90102	5.698	0.004	...	UPL	LB	-12.642	-8.468	-4.174	31.886	37.603	-5.716
90187	8.035	0.009	...	UPL	LB	-12.141	-8.320	-3.821	32.737	38.259	-5.522
90288	3.774	0.004	...	UPL	LB	-12.821	-8.571	-4.251	31.259	37.131	-5.871
90434	2.671	0.022	...	UPL	LBR	-12.231	-8.730	-3.501	30.937	35.539	-4.601
90553	3.196	0.003	...	UPL	LBCR	-13.018	-9.167	-3.852	30.738	35.771	-5.032
90578	5.230	0.047	0.004	RIV	ML	-11.609	-8.792	-2.817	33.269	38.007	-4.738
90615	7.244	0.019	...	UPL	LBR	-11.861	-8.168	-3.693	33.017	38.611	-5.594
90706	9.893	0.007	...	UPL	MLR	-12.160	-7.588	-4.572	32.718	38.651	-5.932
90988	3.007	0.010	...	UPL	LB	-12.522	-8.997	-3.525	31.065	35.771	-4.706
91053	2.980	0.014	...	UPL	MLR	-12.380	-9.121	-3.259	31.179	35.539	-4.359
91052	2.851	0.005	...	UPL	LBCR	-12.846	-8.982	-3.864	30.573	35.539	-4.965
91198	2.973	0.008	...	UPL	LB	-12.624	-8.962	-3.662	30.928	35.771	-4.842
91188	2.660	0.009	...	UPL	LB	-12.621	-8.072	-4.549	31.230	37.283	-6.053
91316	2.186	0.006	...	UPL	ML	-12.882	-7.015	-5.867	29.114	38.475	-9.361
91477	2.690	0.012	...	UPL	LB	-12.491	-8.607	-3.884	30.706	35.771	-5.065
91596	2.770	0.012	...	UPL	LBR	-12.478	-8.874	-3.604	30.834	35.539	-4.705
91619	5.604	0.011	...	UPL	LB	-12.210	-7.476	-4.734	32.668	38.559	-5.891
91765	6.448	0.018	...	UPL	LBR	-11.935	-8.508	-3.427	32.943	37.911	-4.968
91764	6.259	0.023	...	UPL	LBR	-11.842	-8.436	-3.406	33.036	38.143	-5.107
91825	3.125	0.022	...	UPL	LBR	-12.163	-9.258	-2.905	31.533	35.539	-4.006
91943	4.854	0.012	...	UPL	LBR	-12.235	-7.796	-4.439	32.643	38.783	-6.139
92044	5.885	0.012	...	UPL	LBR	-12.151	-8.288	-3.863	32.687	38.443	-5.756
92060	8.302	0.008	...	UPL	LB	-12.178	-8.260	-3.918	32.700	38.119	-5.419
92190	2.744	0.026	...	UPL	LBR	-12.147	-8.839	-3.308	31.130	35.539	-4.409
92274	2.973	0.017	...	UPL	LBR	-12.296	-8.962	-3.334	31.256	35.771	-4.515
92383	5.136	0.012	...	UPL	LB	-12.210	-8.816	-3.394	32.668	38.003	-5.335
92420	8.035	0.014	...	UPL	LBR	-11.949	-8.356	-3.593	32.265	37.763	-5.497
92421	2.551	0.009	...	UPL	LB	-12.639	-8.509	-4.130	30.308	35.539	-5.231
92467	2.424	0.008	...	UPL	LB	-12.712	-8.243	-4.469	29.968	35.539	-5.570
92451	3.450	0.011	...	UPL	LBR	-12.421	-8.888	-3.533	32.848	38.003	-5.155
92536	2.426	0.012	...	UPL	LB	-12.536	-7.979	-4.557	30.149	35.891	-5.742
92725	5.509	0.011	...	UPL	LBR	-12.217	-8.320	-3.897	32.660	38.619	-5.958
92739	4.667	0.020	...	UPL	LBR	-12.030	-8.580	-3.450	32.848	37.999	-5.151
92741	4.012	0.013	...	UPL	LB	-12.283	-8.124	-4.159	32.595	38.455	-5.859
92743	3.731	0.021	...	UPL	LBR	-12.106	-8.988	-3.118	32.772	37.391	-4.619
92783	2.413	0.005	...	UPL	LB	-12.918	-8.144	-4.774	29.740	35.655	-5.915
92837	2.501	0.004	...	UPL	LBCR	-13.000	-8.397	-4.603	29.835	35.539	-5.703

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ <i>erg cm<sup>-2</sup> cts s<sup>-1</sup></i> (2)	Rate <i>cts s<sup>-1</sup></i> (3)	Err <i>cts s<sup>-1</sup></i> (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ <i>erg cm<sup>-2</sup> s<sup>-1</sup></i> (7)	$\log f_v$ <i>erg cm<sup>-2</sup> s<sup>-1</sup></i> (8)	$\log f_x/f_v$ (9)	$\log L_x$ <i>erg s<sup>-1</sup></i> (10)	$\log L_{bot}$ <i>erg s<sup>-1</sup></i> (11)	$\log L_x/L_{bot}$ (12)
92876	2.791	0.009	...	UPL	ML	-12.600	-8.751	-3.849	30.741	35.771	-5.030
92877	3.918	0.009	...	UPL	LB	-12.453	-8.632	-3.821	32.425	37.787	-5.361
92938	2.585	0.006	...	UPL	LB	-12.809	-7.344	-5.465	29.871	36.803	-6.932
92964	5.885	0.013	...	UPL	LB	-12.116	-7.124	-4.992	32.762	39.155	-6.393
93030	2.585	0.089	0.006	RIV	MAP	-11.638	-6.528	-5.110	30.997	38.043	-7.046
93009	2.886	0.023	...	UPL	LBR	-12.178	-8.028	-4.150	32.700	38.079	-5.379
93163	3.450	0.006	...	UPL	LB	-12.684	-7.596	-5.088	29.996	36.643	-6.647
93190	10.155	0.033	...	UPL	LBR	-11.475	-8.180	-3.295	33.403	38.759	-5.356
93500	2.824	0.007	...	UPL	LBR	-12.704	-8.946	-3.758	30.680	35.539	-4.859
93540	2.324	0.013	0.004	RIV	MAP	-12.520	-7.595	-4.925	29.921	36.227	-6.306
93549	2.358	0.032	0.005	RIV	MAP	-12.122	-7.547	-4.576	30.406	36.311	-5.904
93607	2.314	0.008	...	UPL	LBR	-12.733	-7.396	-5.337	29.947	36.923	-6.975
93695	2.575	0.010	...	UPL	LB	-12.589	-8.014	-4.576	30.406	36.403	-5.997
93714	4.105	0.003	...	UPL	LBCR	-12.910	-7.836	-5.074	30.710	37.403	-6.693
93723	3.187	0.053	...	UPL	LBR	-11.772	-8.768	-3.004	31.978	36.403	-4.425
93795	14.395	0.038	...	UPL	LBR	-11.262	-7.984	-3.278	33.616	37.947	-4.331
93873	12.542	0.025	...	UPL	LBR	-11.504	-7.772	-3.732	33.374	38.807	-5.432
93898	2.627	0.021	...	UPL	LBR	-12.258	-8.657	-3.601	30.837	35.539	-4.702
93924	3.825	0.003	...	UPL	LBCR	-12.940	-8.772	-4.168	32.095	37.803	-5.708
94054	2.939	0.004	...	UPL	LBCR	-12.930	-8.928	-4.002	30.588	35.771	-5.183
94097	2.566	0.007	...	UPL	LBR	-12.746	-8.387	-4.359	30.231	35.771	-5.540
94129	2.694	0.017	...	UPL	LBR	-12.339	-8.767	-3.573	30.865	35.539	-4.673
94290	2.500	0.022	...	UPL	LBR	-12.260	-8.397	-3.862	30.576	35.539	-4.963
94258	3.003	0.007	...	UPL	LB	-12.677	-8.997	-3.680	30.910	35.771	-4.861
94288	3.691	0.013	...	UPL	LBR	-12.319	-9.061	-3.258	31.724	36.403	-4.679
94330	2.765	0.014	...	UPL	LB	-12.412	-8.875	-3.537	30.901	35.539	-4.638
94369	6.977	0.008	...	UPL	LB	-12.253	-7.844	-4.409	32.625	38.735	-6.110
94393	2.715	0.011	...	UPL	LBR	-12.525	-8.803	-3.722	30.716	35.539	-4.822
94677	3.131	0.004	...	UPL	LB	-12.902	-9.177	-3.725	30.865	35.771	-4.906
94857	2.967	0.012	...	UPL	LB	-12.448	-9.123	-3.325	31.113	35.539	-4.426
94873	2.771	0.004	...	UPL	LB	-12.955	-8.754	-4.201	30.389	35.771	-5.382
94987	3.006	0.149	...	UPL	LBR	-11.349	-9.157	-2.192	32.246	35.539	-3.293
95012	2.857	0.005	...	UPL	LB	-12.845	-9.021	-3.824	30.613	35.539	-4.925
-59 2934	3.124	0.005	...	UPL	LB	-12.806	-9.258	-3.548	30.890	35.539	-4.649
95826	3.147	0.004	...	UPL	LBR	-12.900	-8.734	-4.166	30.816	36.403	-5.586
95863	3.014	0.004	...	UPL	LBR	-12.919	-9.156	-3.763	30.675	35.539	-4.864
-60 2476	3.763	0.007	...	UPL	LBR	-12.579	-9.092	-3.487	31.494	36.403	-4.908
96060	5.230	0.006	...	UPL	LBR	-12.503	-8.488	-4.015	32.275	37.831	-5.556
96263	5.041	0.017	...	UPL	LBR	-12.067	-8.528	-3.539	32.711	37.951	-5.240
96447	4.565	0.006	...	UPL	LBR	-12.562	-8.869	-3.693	31.817	37.131	-5.314
96446	2.886	0.014	...	UPL	LB	-12.394	-8.048	-4.346	31.512	37.763	-6.251
96492	2.847	0.002	...	UPL	LBCR	-13.245	-8.822	-4.422	30.168	35.771	-5.603
96491	3.013	0.008	...	UPL	MLR	-12.618	-9.156	-3.462	30.976	35.539	-4.563
96671	2.718	0.009	...	UPL	LB	-12.611	-8.803	-3.809	30.629	35.539	-4.910
96669	5.509	0.014	...	UPL	LBR	-12.113	-8.440	-3.673	33.309	38.683	-5.373
96829	6.072	0.017	...	UPL	LBR	-11.986	-7.876	-4.110	32.792	38.443	-5.651
96945	6.448	0.010	...	UPL	LB	-12.191	-8.412	-3.779	32.587	37.987	-5.399
-59 3099	3.759	0.007	...	UPL	MLR	-12.580	-9.092	-3.487	31.495	36.403	-4.908
97151	3.357	0.010	...	UPL	LB	-12.474	-8.400	-4.074	31.512	37.283	-5.770
97165	2.000	0.009	...	UPL	LB	-12.745	...	...	...	...	...
97223	2.876	0.007	...	UPL	ML	-12.696	-8.858	-3.838	30.751	35.771	-5.019
97368	5.885	0.009	...	UPL	LBR	-12.276	-8.388	-3.888	32.502	38.091	-5.589
97381	4.854	0.010	...	UPL	MLR	-12.314	-8.460	-3.854	32.464	38.019	-5.555
97400A	2.000	0.007	...	UPL	ML	-12.854	...	...	...	...	...
97400B	2.000	0.007	...	UPL	ML	-12.854	...	...	...	...	...
97399	2.000	0.007	...	UPL	ML	-12.854	...	...	...	...	...
97522	8.831	0.086	...	UPL	LBR	-11.120	-7.904	-3.216	33.404	38.523	-5.119
97557	4.199	0.005	...	UPL	LB	-12.678	-8.084	-4.594	31.467	37.603	-6.136
97581	7.506	0.006	...	UPL	LB	-12.346	-8.416	-3.930	32.432	38.063	-5.631
97670	3.263	0.006	...	UPL	LB	-12.708	-7.616	-5.092	30.616	37.483	-6.867
97707	10.951	0.006	...	UPL	LB	-12.182	-7.940	-4.242	32.596	38.279	-5.683
97913	4.762	0.064	...	UPL	LBR	-11.516	-8.640	-2.876	33.262	38.039	-4.777
97969	4.199	0.013	...	UPL	LBR	-12.263	-8.300	-3.963	31.898	37.763	-5.865
98143	2.538	0.009	...	UPL	LB	-12.641	-8.511	-4.130	30.308	35.539	-5.231
98169	3.085	0.007	...	UPL	MLR	-12.666	-9.224	-3.441	30.997	35.539	-4.542

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
98911	4.012	0.006	...	UPL	LB	-12.618	-8.740	-3.878	31.946	37.363	-5.417
98927	5.604	0.010	...	UPL	LBR	-12.252	-8.640	-3.612	32.689	38.003	-5.314
98955	4.854	0.005	...	UPL	LBCR	-12.615	-8.736	-3.879	32.744	38.123	-5.379
99000	2.908	0.012	...	UPL	LBR	-12.457	-8.893	-3.565	31.025	35.771	-4.746
99025	3.196	0.023	...	UPL	LBR	-12.134	-9.167	-2.967	31.623	35.771	-4.148
99068	3.895	0.006	...	UPL	LB	-12.631	-9.155	-3.476	31.506	36.403	-4.897
99146	3.683	0.038	...	UPL	LB	-11.854	-8.542	-3.312	32.198	37.131	-4.933
99158	3.731	0.008	...	UPL	LB	-12.525	-8.704	-3.821	31.961	37.283	-5.322
99193	6.259	0.010	...	UPL	LBR	-12.204	-8.492	-3.712	32.350	37.603	-5.252
99204	2.820	0.141	...	UPL	LB	-11.401	-8.947	-2.454	31.984	35.539	-3.555
99316	5.136	0.003	...	UPL	LBCR	-12.812	-8.052	-4.760	32.141	38.007	-5.866
99555	3.315	0.014	...	UPL	LB	-12.333	-8.869	-3.464	31.518	36.403	-4.885
99944	3.918	0.009	...	UPL	LBR	-12.453	-8.860	-3.593	32.425	37.919	-5.493
-62 2126	2.940	0.006	...	UPL	LBR	-12.753	-8.927	-3.826	30.764	35.771	-5.007
100841	2.117	0.013	0.002	RIV	MAP	-12.560	-6.733	-5.827	29.067	35.979	-6.912
101070	4.105	0.004	...	UPL	LB	-12.785	-8.792	-3.993	32.093	37.627	-5.533
-62 2148	5.016	0.004	...	UPL	LB	-12.698	-9.011	-3.686	31.824	37.131	-5.307
101085	2.792	0.004	...	UPL	LBR	-12.952	-8.751	-4.201	30.389	35.771	-5.382
101084	5.041	0.005	...	UPL	LB	-12.598	-8.772	-3.826	32.279	38.007	-5.727
101174	2.530	0.038	...	UPL	LBR	-12.017	-8.313	-3.704	30.886	35.771	-4.885
-62 2188	3.695	0.004	...	UPL	LB	-12.830	-9.061	-3.770	31.212	36.403	-5.191
101333	5.509	0.004	...	UPL	LB	-12.657	-8.628	-4.029	32.221	38.311	-6.090
101753	2.338	0.012	...	UPL	LBR	-12.552	-8.377	-4.175	30.263	35.539	-5.276
-60 3278	2.000	0.005	...	UPL	LBCR	-13.000	...	...	...	37.131	...
102101	4.667	0.011	...	UPL	ML	-12.290	-8.184	-4.106	31.879	37.523	-5.644
102370	2.475	0.006	...	UPL	LB	-12.828	-8.193	-4.635	29.954	35.771	-5.816
102399	2.763	0.009	...	UPL	ML	-12.604	-8.716	-3.889	30.701	35.771	-5.070
102463	3.150	0.008	...	UPL	LB	-12.599	-9.134	-3.465	31.125	35.771	-4.645
102475	4.199	0.022	...	UPL	LBR	-12.034	-8.608	-3.426	32.844	38.171	-5.327
102503	2.688	0.009	...	UPL	LB	-12.616	-8.608	-4.009	30.581	35.771	-5.190
102567	4.854	0.366	0.028	RIV	MLR	-10.750	-8.868	-1.882	34.128	37.911	-3.783
102893	2.000	0.032	...	UPL	LBR	-12.194	...	...	...	36.403	...
102923	3.544	0.018	...	UPL	ML	-12.195	-8.684	-3.511	32.683	37.695	-5.012
102997	5.604	0.010	...	UPL	LB	-12.252	-7.636	-4.616	32.626	38.471	-5.844
103006	2.000	0.012	...	UPL	LB	-12.620	...	...	...	...	...
103146	4.293	0.028	...	UPL	LBR	-11.920	-8.512	-3.408	32.492	37.443	-4.950
103169	4.480	0.010	...	UPL	LB	-12.349	-9.020	-3.329	32.529	37.359	-4.829
103182	3.544	0.016	...	UPL	ML	-12.246	-8.168	-4.078	31.701	37.283	-5.582
103466	2.824	0.005	...	UPL	LB	-12.850	-8.946	-3.904	30.534	35.539	-5.005
104047	4.105	0.020	...	UPL	LBR	-12.086	-8.752	-3.334	33.168	38.043	-4.875
104465	3.450	0.014	...	UPL	LBR	-12.316	-8.924	-3.392	32.870	37.803	-4.933
-62 2531	2.000	0.010	...	UPL	LBR	-12.699	...	...	...	...	...
104553	2.812	0.007	...	UPL	LBR	-12.706	-8.388	-4.318	30.664	36.403	-5.739
104567	4.949	0.008	...	UPL	LB	-12.402	-8.488	-3.914	32.388	38.003	-5.615
104631	4.854	0.006	...	UPL	LBR	-12.536	-7.836	-4.700	32.081	38.583	-6.502
104705	5.116	0.012	...	UPL	LB	-12.212	-8.239	-3.973	32.329	38.403	-6.074
104809	3.123	0.004	...	UPL	LB	-12.903	-9.258	-3.645	30.793	35.539	-4.746
104841	3.357	0.008	...	UPL	LB	-12.571	-7.192	-5.379	30.192	37.283	-7.091
104901	2.623	0.004	...	UPL	LB	-12.979	-8.498	-4.481	30.109	35.771	-5.662
105245	3.123	0.008	...	UPL	LBR	-12.602	-9.258	-3.344	31.094	35.539	-4.445
105257	2.914	0.014	...	UPL	LBR	-12.389	-9.052	-3.338	31.100	35.539	-4.439
105542	3.153	0.007	...	UPL	LBR	-12.656	-9.134	-3.523	31.067	35.771	-4.703
105562	2.882	0.011	...	UPL	LBR	-12.499	-9.017	-3.482	30.956	35.539	-4.583
105610	2.505	0.011	...	UPL	ML	-12.560	-8.437	-4.123	30.315	35.539	-5.224
105937	2.027	0.013	...	UPL	LB	-12.579	-7.072	-5.507	28.481	37.131	-8.649
106970	2.434	0.011	...	UPL	LBR	-12.572	-8.286	-4.287	30.151	35.539	-5.387
106983	2.213	0.012	...	UPL	LBR	-12.576	-7.088	-5.488	29.502	36.923	-7.421
108355	2.418	0.005	...	UPL	LB	-12.918	-7.848	-5.070	29.752	36.011	-6.259
108398	2.947	0.009	...	UPL	MLR	-12.576	-9.086	-3.490	30.948	35.539	-4.591
110373	3.283	0.045	...	UPL	LBR	-11.831	-9.233	-2.597	31.993	35.771	-3.778
110433	2.972	0.008	...	UPL	LBR	-12.624	-8.962	-3.662	30.928	35.771	-4.842
110736	3.115	0.007	...	UPL	LB	-12.661	-9.100	-3.562	31.028	35.771	-4.743
110975	3.237	0.007	...	UPL	LB	-12.645	-9.200	-3.445	31.145	35.771	-4.625
111024	3.006	0.008	...	UPL	LB	-12.619	-8.997	-3.622	30.968	35.771	-4.803
113807	2.646	0.012	...	UPL	LB	-12.498	-8.534	-3.964	30.626	35.771	-5.145

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bol}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bol}}$ (12)
116314	2.000	0.009	...	UPL	LB	-12.745	...	...	...	35.539	...
116374	2.852	0.006	...	UPL	LB	-12.767	-8.981	-3.785	30.653	35.539	-4.886
116658	2.062	0.183	0.009	RIV	MAP	-11.423	-5.878	-5.546	29.922	38.003	-8.081
116663	2.700	0.003	...	UPL	LBR	-13.091	-8.886	-4.206	30.232	35.539	-5.307
117134	4.648	0.009	...	UPL	LBR	-12.378	-8.898	-3.480	32.030	37.131	-5.101
117240	3.234	0.003	...	UPL	LBCR	-13.013	-9.201	-3.813	30.777	35.771	-4.993
118242	2.570	0.006	...	UPL	LBCR	-12.812	-8.546	-4.266	30.172	35.539	-5.366
118845	3.046	0.004	...	UPL	LBCR	-12.914	-9.191	-3.724	30.714	35.539	-4.824
118968	2.767	0.020	...	UPL	LBR	-12.257	-8.875	-3.382	31.056	35.539	-4.483
118993	3.049	0.036	...	UPL	LBR	-11.960	-9.190	-2.769	31.668	35.539	-3.870
-61 3926	2.662	0.005	...	UPL	LBR	-12.876	-8.172	-4.704	30.278	36.403	-6.125
119163	3.045	0.005	...	UPL	LB	-12.817	-9.191	-3.627	30.811	35.539	-4.728
119330	3.691	0.040	...	UPL	LBR	-11.831	-9.061	-2.770	32.212	36.403	-4.190
119489	3.072	0.011	...	UPL	MLR	-12.471	-9.066	-3.405	31.185	35.771	-4.586
119490	2.790	0.012	...	UPL	LBR	-12.475	-8.751	-3.724	30.866	35.771	-4.905
119698	2.943	0.012	...	UPL	LBR	-12.452	-9.087	-3.365	31.073	35.539	-4.466
119815	4.573	0.010	...	UPL	ML	-12.340	-8.688	-3.652	32.130	37.403	-5.273
119861	3.048	0.014	...	UPL	LBR	-12.370	-9.190	-3.180	31.258	35.539	-4.280
119910	3.826	0.007	...	UPL	LB	-12.572	-8.604	-3.968	31.542	37.131	-5.589
120113	2.790	0.009	...	UPL	LB	-12.600	-8.751	-3.849	30.741	35.771	-5.030
120132	2.532	0.006	...	UPL	LBC	-12.818	-8.472	-4.346	30.092	35.539	-5.447
120211	5.136	0.008	...	UPL	LBR	-12.386	-8.248	-4.138	31.926	37.603	-5.677
120227	3.195	0.011	...	UPL	LBR	-12.454	-9.167	-3.287	31.303	35.771	-4.468
120473	2.911	0.015	...	UPL	LBR	-12.360	-9.052	-3.308	31.130	35.539	-4.409
120798	2.882	0.013	...	UPL	LBR	-12.426	-9.017	-3.410	31.028	35.539	-4.511
121743	2.314	0.016	...	UPL	LB	-12.432	-6.992	-5.440	30.370	37.363	-6.993
122142	2.712	0.008	...	UPL	LBR	-12.664	-8.644	-4.020	30.570	35.771	-5.201
122163	3.277	0.009	...	UPL	LBR	-12.530	-9.234	-3.296	31.294	35.771	-4.477
122179	2.719	0.009	...	UPL	LB	-12.611	-8.803	-3.809	30.629	35.539	-4.910
-61 4292	2.000	0.008	...	UPL	LBR	-12.796	...	...	...	...	...
122451	2.239	0.182	0.013	RIV	MAP	-11.390	-5.713	-5.677	30.779	38.067	-7.288
122669	9.360	0.036	...	UPL	LBR	-11.472	-8.376	-3.096	33.524	38.523	-4.998
122792	3.123	0.008	...	UPL	ML	-12.602	-9.258	-3.344	31.094	35.539	-4.445
122811	2.938	0.009	...	UPL	ML	-12.578	-8.928	-3.650	30.940	35.771	-4.831
122980	2.415	0.018	...	UPL	LBR	-12.362	-7.188	-5.174	30.641	37.363	-6.722
123057	3.393	0.010	...	UPL	LBR	-12.469	-9.299	-3.170	31.420	35.771	-4.351
123131	2.714	0.009	...	UPL	LBR	-12.612	-8.643	-3.969	30.621	35.771	-5.150
123149	3.122	0.013	...	UPL	LBR	-12.392	-9.259	-3.133	31.305	35.539	-4.234
123169	2.689	0.009	...	UPL	LB	-12.616	-8.607	-4.009	30.581	35.771	-5.190
123250	2.947	0.038	...	UPL	LBR	-11.951	-9.086	-2.865	31.573	35.539	-3.965
123471	2.428	0.008	...	UPL	LB	-12.712	-9.006	-3.705	30.733	35.539	-4.806
123359	2.928	0.016	...	UPL	LB	-12.329	-9.329	-3.000	31.438	35.539	-4.101
123362	3.079	0.007	...	UPL	LB	-12.666	-9.065	-3.601	30.989	35.771	-4.782
123506	3.079	0.007	...	UPL	ML	-12.666	-9.065	-3.601	30.989	35.771	-4.782
123490	3.079	0.011	...	UPL	MLR	-12.470	-9.065	-3.405	31.185	35.771	-4.586
123553	3.115	0.004	...	UPL	LBCR	-12.905	-9.100	-3.805	30.785	35.771	-4.986
123590	2.871	0.007	0.002	RIV	MAP	-12.697	-8.458	-4.238	30.743	36.403	-5.659
123656	2.854	0.008	...	UPL	MLR	-12.641	-8.981	-3.660	30.778	35.539	-4.761
123779	2.569	0.013	...	UPL	LB	-12.476	-8.546	-3.930	30.508	35.539	-5.031
123927	2.854	0.009	...	UPL	ML	-12.590	-8.981	-3.609	30.829	35.539	-4.710
124298	6.072	0.008	...	UPL	ML	-12.314	-8.748	-3.566	32.019	37.283	-5.264
124327	2.847	0.011	...	UPL	LB	-12.504	-8.822	-3.682	30.908	35.771	-4.863
124488	3.197	0.010	...	UPL	LBR	-12.495	-9.167	-3.329	31.261	35.771	-4.510
124788	4.298	0.011	...	UPL	ML	-12.325	-8.783	-3.542	31.968	37.131	-5.163
124749	2.551	0.010	...	UPL	LB	-12.593	-8.509	-4.084	30.354	35.539	-5.185
124878	3.125	0.005	...	UPL	LB	-12.806	-9.258	-3.548	30.890	35.539	-4.649
124909	8.568	0.012	...	UPL	LBR	-11.988	-8.456	-3.532	32.571	38.203	-5.632
125238	2.415	0.023	...	UPL	LB	-12.255	-6.868	-5.387	30.425	37.363	-6.938
125207	3.014	0.007	...	UPL	LB	-12.676	-9.156	-3.520	30.918	35.539	-4.621
125318	3.049	0.009	...	UPL	LB	-12.562	-9.190	-3.372	31.066	35.539	-4.472
125331	2.973	0.011	...	UPL	LB	-12.485	-8.962	-3.523	31.067	35.771	-4.704
125466	2.551	0.012	...	UPL	LB	-12.514	-8.509	-4.005	30.433	35.539	-5.106
125515	3.832	0.007	...	UPL	LB	-12.571	-9.123	-3.448	31.533	36.403	-4.869
126138	2.363	0.012	...	UPL	LBR	-12.547	-8.414	-4.133	30.305	35.539	-5.234
126549	2.878	0.006	...	UPL	LBR	-12.763	-8.857	-3.905	30.684	35.771	-5.086

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
126843	3.125	0.006	...	UPL	LBR	-12.727	-9.258	-3.469	30.969	35.539	-4.570
127208	2.360	0.009	...	UPL	LB	-12.673	-8.214	-4.458	29.980	35.539	-5.559
127145	2.745	0.005	...	UPL	LB	-12.863	-8.839	-4.024	30.414	35.539	-5.125
127200	3.339	0.005	...	UPL	LB	-12.777	-9.266	-3.511	31.079	35.771	-4.692
127493	2.748	0.008	...	UPL	LB	-12.658	-9.158	-3.500	32.802	38.403	-5.601
127503	3.760	0.013	...	UPL	LBR	-12.311	-9.092	-3.219	31.763	36.403	-4.639
127756	5.604	0.015	...	UPL	LBR	-12.075	-8.040	-4.035	31.667	37.483	-5.815
127838	10.155	0.006	...	UPL	LB	-12.215	-8.396	-3.819	32.482	38.003	-5.521
127926	9.893	0.006	...	UPL	LBR	-12.227	-8.440	-3.787	32.714	38.043	-5.329
128137	3.006	0.010	...	UPL	LBR	-12.522	-8.997	-3.525	31.065	35.771	-4.706
128521	3.007	0.005	...	UPL	LBCR	-12.823	-9.157	-3.666	30.772	35.539	-4.767
128697	3.164	0.015	...	UPL	LBR	-12.324	-9.292	-3.032	31.406	35.539	-4.133
128765	3.246	0.031	...	UPL	LB	-11.997	-9.359	-2.639	31.799	35.539	-3.739
128840	2.907	0.020	...	UPL	LBR	-12.235	-9.053	-3.183	31.255	35.539	-4.284
128960	2.881	0.009	...	UPL	LB	-12.586	-8.977	-3.609	30.981	35.771	-4.790
129056	2.509	0.011	...	UPL	LB	-12.559	-6.356	-6.203	29.927	37.763	-7.836
129092	3.037	0.015	...	UPL	LBR	-12.341	-7.916	-4.425	30.941	36.883	-5.942
129281	2.867	0.005	...	UPL	LBCR	-12.844	-8.147	-4.697	30.697	36.479	-5.781
130767	2.318	0.007	...	UPL	LB	-12.790	-8.219	-4.570	29.868	35.539	-5.671
130764	2.817	0.008	...	UPL	LB	-12.647	-8.787	-3.860	30.730	35.771	-5.041
130912	2.970	0.016	...	UPL	LB	-12.323	-8.963	-3.360	31.229	35.771	-4.541
131120	2.391	0.016	...	UPL	LBR	-12.417	-7.459	-4.958	30.239	36.527	-6.287
131356	2.757	0.005	...	UPL	ML	-12.861	-8.877	-3.984	30.454	35.539	-5.085
132955	2.562	0.003	...	UPL	LBCR	-13.114	-7.604	-5.511	29.999	37.131	-7.132
134119	2.762	0.009	...	UPL	LBR	-12.605	-8.796	-3.809	30.781	35.771	-4.990
134557	2.587	0.014	...	UPL	LBR	-12.441	-8.624	-3.817	30.620	35.539	-4.918
134526	3.237	0.012	...	UPL	LBR	-12.411	-9.200	-3.211	31.379	35.771	-4.391
134687	2.619	0.014	0.005	RIV	LOC	-12.436	-7.347	-5.089	30.693	37.283	-6.590
134844	6.448	0.009	...	UPL	LB	-12.236	-8.580	-3.656	31.924	37.283	-5.358
134958	9.097	0.007	...	UPL	LB	-12.196	-8.048	-4.148	32.155	38.003	-5.847
134959	25.787	0.011	...	UPL	ML	-11.547	-7.316	-4.231	33.731	39.403	-5.672
135041	3.086	0.007	...	UPL	LB	-12.666	-9.224	-3.441	30.997	35.539	-4.542
135540	2.980	0.015	...	UPL	LBR	-12.350	-9.121	-3.229	31.209	35.539	-4.329
136353	3.021	0.024	...	UPL	LBR	-12.140	-9.195	-2.945	31.493	35.539	-4.046
136651	2.688	0.007	...	UPL	LBCR	-12.725	-8.768	-3.958	30.480	35.539	-5.059
137005	2.477	0.010	...	UPL	MLR	-12.606	-8.841	-3.765	30.672	35.539	-4.866
136787	2.711	0.007	...	UPL	LB	-12.722	-8.804	-3.918	30.520	35.539	-5.019
136972	7.506	0.022	...	UPL	LBC	-11.782	-8.600	-3.182	33.238	37.843	-4.604
137217	2.711	0.015	...	UPL	LBR	-12.391	-8.804	-3.587	30.851	35.539	-4.688
137569	2.488	0.012	...	UPL	LBR	-12.525	-8.439	-4.086	30.896	36.403	-5.506
137327	2.884	0.048	...	UPL	LB	-11.859	-9.016	-2.842	31.596	35.539	-3.943
138527	2.269	0.007	...	UPL	LB	-12.799	-7.953	-4.846	29.592	35.539	-5.947
138749	2.044	0.007	...	UPL	ML	-12.844	-7.143	-5.701	28.370	36.227	-7.857
138923	2.348	0.018	...	UPL	LB	-12.374	-7.952	-4.422	30.168	35.771	-5.603
140037	2.530	0.024	...	UPL	LB	-12.217	-8.393	-3.824	30.766	35.771	-5.005
140680	3.341	0.006	...	UPL	LBR	-12.698	-9.266	-3.432	31.158	35.771	-4.613
141066	3.128	0.010	...	UPL	LBC	-12.505	-9.298	-3.207	31.231	35.539	-4.308
141016	2.719	0.007	...	UPL	LBR	-12.720	-8.803	-3.918	30.520	35.539	-5.019
141318	4.293	0.012	...	UPL	LBR	-12.288	-7.472	-4.816	31.188	37.563	-6.375
141486	2.915	0.010	...	UPL	ML	-12.535	-9.051	-3.484	30.954	35.539	-4.585
141603	3.160	0.014	...	UPL	ML	-12.354	-9.292	-3.062	31.376	35.539	-4.163
-54 6732	2.914	0.006	...	UPL	LB	-12.757	-9.052	-3.706	30.732	35.539	-4.807
141782	2.907	0.008	...	UPL	LB	-12.633	-8.893	-3.741	30.849	35.771	-4.922
-54 6733	3.124	0.006	...	UPL	LBR	-12.727	-9.258	-3.469	30.969	35.539	-4.570
141944	2.954	0.029	...	UPL	LBR	-12.067	-8.965	-3.102	31.488	35.771	-4.283
141926	14.924	0.015	0.003	RIV	MAP	-11.650	-7.984	-3.666	32.392	37.603	-5.210
142064	2.482	0.009	...	UPL	ML	-12.651	-8.360	-4.291	30.147	35.539	-5.392
-53 6768	16.515	0.010	...	UPL	LB	-11.782	-8.148	-3.634	33.267	38.483	-5.216
142152	12.009	0.008	...	UPL	LB	-12.017	-8.516	-3.501	33.140	38.543	-5.402
142170	3.200	0.016	...	UPL	LB	-12.291	-9.326	-2.965	31.473	35.539	-4.066
142237	5.041	0.007	...	UPL	LBR	-12.452	-8.620	-3.832	31.747	37.283	-5.536
142338	3.050	0.007	...	UPL	LB	-12.671	-9.190	-3.481	30.957	35.539	-4.582
142364	2.770	0.008	...	UPL	MLR	-12.654	-8.874	-3.780	30.658	35.539	-4.881
142468	16.515	0.011	...	UPL	LBR	-11.741	-7.612	-4.129	33.417	39.247	-5.830
142548	3.007	0.007	...	UPL	LB	-12.677	-8.997	-3.680	30.910	35.771	-4.861

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ (11)	$\log L_x/L_{bol}$ (12)
143275	2.425	0.025	0.004	RIV	MAP	-12.217	-6.375	-5.843	30.539	38.283	-7.743
143600	2.547	0.040	0.006	RIV	MAP	-11.992	-8.630	-3.362	31.076	35.539	-4.463
144217	2.232	0.057	...	UPL	LOC	-11.895	-6.518	-5.378	30.273	37.939	-7.666
144218	3.918	0.057	...	UPL	LOC	-11.651	-7.200	-4.451	30.824	36.899	-6.075
144828	3.007	0.009	...	UPL	LBR	-12.568	-9.157	-3.411	31.027	35.539	-4.512
144969	25.787	0.010	...	UPL	LB	-11.589	-7.368	-4.221	32.889	38.811	-5.921
145389	2.084	0.032	...	UPL	LB	-12.176	-7.188	-4.988	29.300	35.539	-6.239
145519	2.504	0.005	0.001	RIV	MLR	-12.902	-8.517	-4.386	30.052	35.539	-5.486
145488	3.392	0.014	...	UPL	LBR	-12.323	-9.299	-3.024	31.566	35.771	-4.205
145579	3.902	0.022	...	UPL	LBR	-12.066	-9.154	-2.912	32.070	36.403	-4.333
145637	2.972	0.007	...	UPL	LB	-12.682	-8.962	-3.720	30.870	35.771	-4.900
145828	11.480	0.008	...	UPL	LB	-12.037	-8.592	-3.445	33.241	38.747	-5.506
146058	12.275	0.009	...	UPL	ML	-11.957	-8.480	-3.477	33.321	38.499	-5.178
146125	3.396	0.042	...	UPL	ML	-11.846	-9.299	-2.547	32.043	35.771	-3.728
146332	2.572	0.007	...	UPL	LB	-12.745	-8.466	-4.279	30.311	35.771	-5.459
146373	3.014	0.014	...	UPL	LB	-12.375	-9.156	-3.219	31.219	35.539	-4.320
146445	3.237	0.012	...	UPL	LB	-12.411	-9.200	-3.211	31.379	35.771	-4.391
146461	2.824	0.012	...	UPL	LB	-12.470	-8.946	-3.524	30.914	35.539	-4.625
146479	2.718	0.010	...	UPL	LB	-12.566	-8.803	-3.763	30.675	35.539	-4.864
-50 9212	3.465	0.011	...	UPL	LB	-12.419	-9.490	-2.929	31.509	35.539	-4.030
146521	2.649	0.009	...	UPL	LB	-12.623	-8.694	-3.929	30.509	35.539	-5.030
146523	3.086	0.012	...	UPL	LBR	-12.431	-9.224	-3.207	31.231	35.539	-4.308
146726	2.853	0.011	...	UPL	LB	-12.503	-8.981	-3.522	30.916	35.539	-4.623
146748	3.283	0.008	...	UPL	LB	-12.581	-9.233	-3.347	31.243	35.771	-4.528
146780	3.124	0.024	...	UPL	LBR	-12.125	-9.258	-2.867	31.571	35.539	-3.968
146803	3.125	0.031	...	UPL	LBR	-12.014	-9.258	-2.756	31.682	35.539	-3.857
147301	3.163	0.014	...	UPL	LBR	-12.354	-9.292	-3.062	31.376	35.539	-4.163
147889	3.029	0.036	...	UPL	ML	-11.962	-8.593	-3.369	32.141	37.131	-4.990
148579	2.460	0.024	...	UPL	ML	-12.229	-8.363	-3.866	30.572	35.539	-4.967
148605	3.450	0.041	...	UPL	LB	-11.849	-7.208	-4.641	30.626	36.971	-6.345
148851	2.907	0.014	...	UPL	LBR	-12.390	-8.893	-3.498	31.092	35.771	-4.679
148921	3.048	0.006	...	UPL	ML	-12.738	-9.190	-3.548	30.890	35.539	-4.648
148954	2.972	0.004	...	UPL	LB	-12.925	-8.962	-3.963	30.627	35.771	-5.143
149098	2.628	0.005	...	UPL	ML	-12.881	-8.657	-4.224	30.214	35.539	-5.325
149438	2.415	0.511	0.015	RIV	ML	-10.909	-6.580	-4.329	31.567	37.999	-6.432
149464	2.656	0.005	...	UPL	ML	-12.877	-8.773	-4.104	30.334	35.539	-5.205
149572	2.900	0.009	...	UPL	LB	-12.583	-9.054	-3.530	30.908	35.539	-4.630
149881	2.707	0.030	...	UPL	LBR	-12.090	-8.225	-3.866	32.608	38.375	-5.767
149711	3.731	0.030	...	UPL	LBR	-11.951	-7.584	-4.367	31.452	37.363	-5.910
149730	2.391	0.054	0.006	RIV	MAP	-11.889	-8.171	-3.718	30.720	35.539	-4.819
149770	2.945	0.016	...	UPL	LB	-12.327	-8.607	-3.720	31.262	36.403	-5.141
149838	2.927	0.012	...	UPL	LBR	-12.454	-9.130	-3.325	31.113	35.539	-4.426
150084	2.691	0.010	...	UPL	LB	-12.570	-8.767	-3.803	30.635	35.539	-4.904
150043	2.983	0.010	...	UPL	LBR	-12.525	-9.201	-3.325	31.113	35.539	-4.426
150112	3.196	0.011	...	UPL	LBR	-12.454	-9.367	-3.087	31.351	35.539	-4.188
150497	2.885	0.013	...	UPL	LBR	-12.426	-8.936	-3.490	31.100	35.771	-4.671
150499	3.146	0.009	...	UPL	LBR	-12.548	-9.135	-3.413	31.177	35.771	-4.594
151067	2.432	0.027	0.005	RIV	MAP	-12.183	-8.326	-3.857	30.733	35.771	-5.038
150925	2.741	0.007	...	UPL	LB	-12.717	-8.879	-3.838	30.600	35.539	-4.939
151683	2.716	0.006	...	UPL	ML	-12.788	-8.803	-3.985	30.453	35.539	-5.086
151805	2.872	0.007	...	UPL	LB	-12.697	-8.858	-3.838	30.751	35.771	-5.019
151911	2.967	0.009	...	UPL	LB	-12.573	-8.963	-3.610	30.980	35.771	-4.791
152042	5.604	0.008	...	UPL	MLR	-12.348	-8.280	-4.068	32.289	38.259	-5.969
152076	7.244	0.009	...	UPL	ML	-12.186	-8.272	-3.914	32.452	38.427	-5.975
152096	3.007	0.012	...	UPL	LB	-12.443	-9.157	-3.286	31.152	35.539	-4.387
152182	5.323	0.007	...	UPL	MLR	-12.429	-8.700	-3.729	32.209	37.639	-5.430
152198	6.166	0.009	...	UPL	ML	-12.256	-8.256	-4.000	32.382	38.443	-6.061
152217	6.166	0.008	...	UPL	ML	-12.307	-8.320	-3.987	32.331	38.379	-6.048
152235	14.924	0.009	...	UPL	LB	-11.872	-7.072	-4.800	32.766	39.267	-6.501
152234	6.072	0.023	...	UPL	LB	-11.855	-7.132	-4.723	32.783	39.207	-6.424
152268	5.698	0.019	...	UPL	LB	-11.966	-8.244	-3.722	32.672	38.455	-5.783
152269	2.850	0.014	...	UPL	MLR	-12.399	-8.982	-3.417	31.021	35.539	-4.518
152292	5.041	0.025	...	UPL	LBR	-11.900	-8.500	-3.400	32.738	37.679	-4.941
-41 7744	2.000	0.020	...	UPL	LB	-12.398	...	...	...	...	...
152291	4.854	0.019	...	UPL	LBR	-12.035	-8.648	-3.387	32.607	37.535	-4.928

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bot}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bot}}$ (12)
152385	3.370	0.017	...	UPL	LBR	-12.242	-8.902	-3.340	31.642	36.403	-4.760
152436	2.814	0.014	...	UPL	LBR	-12.405	-8.788	-3.617	30.973	35.771	-4.798
152459	2.850	0.037	...	UPL	LBR	-11.977	-8.982	-2.995	31.443	35.539	-4.096
152457	3.147	0.014	...	UPL	LB	-12.356	-9.135	-3.221	31.368	35.771	-4.402
-40 7608	3.497	0.015	...	UPL	LB	-12.280	-9.366	-2.914	31.676	35.771	-4.095
152560	5.698	0.015	...	UPL	LB	-12.068	-8.312	-3.756	32.570	38.227	-5.657
152591	5.698	0.012	...	UPL	LB	-12.165	-8.376	-3.789	32.473	38.323	-5.850
152667	6.977	0.007	...	UPL	LB	-12.311	-7.384	-4.927	32.326	39.255	-6.928
152686	7.773	0.002	...	UPL	LBCR	-12.808	-8.448	-4.360	31.741	38.203	-6.462
152685	5.323	0.002	...	UPL	LBCR	-12.973	-8.024	-4.949	31.665	38.055	-6.390
152755	3.141	0.010	...	UPL	LB	-12.503	-8.736	-3.767	31.214	36.403	-5.188
152940	2.816	0.006	...	UPL	LBCR	-12.772	-8.787	-3.985	30.605	35.771	-5.166
153105	2.607	0.011	...	UPL	ML	-12.542	-8.620	-3.922	30.516	35.539	-5.023
153222	7.773	0.042	...	UPL	LBR	-11.486	-8.396	-3.090	32.609	37.483	-4.874
153382	2.547	0.014	...	UPL	LB	-12.448	-8.350	-4.098	30.492	35.771	-5.279
153487	3.591	0.006	...	UPL	LBR	-12.667	-9.034	-3.633	31.349	36.403	-5.054
153519	3.145	0.014	...	UPL	LBR	-12.356	-8.735	-3.621	31.360	36.403	-5.042
153575	2.642	0.011	...	UPL	LBR	-12.537	-8.535	-4.002	30.588	35.771	-5.183
153904	2.825	0.013	...	UPL	LB	-12.435	-8.986	-3.449	30.989	35.539	-4.550
153947	2.932	0.003	...	UPL	LB	-13.056	-8.929	-4.127	30.463	35.771	-5.308
154008	3.137	0.096	...	UPL	LBR	-11.521	-8.736	-2.785	32.197	36.403	-4.206
154110	2.850	0.068	...	UPL	LBR	-11.713	-8.982	-2.731	31.707	35.539	-3.832
154445	5.698	0.018	...	UPL	LB	-11.989	-7.256	-4.733	30.983	37.483	-6.500
154535	4.762	0.014	...	UPL	LBR	-12.176	-8.456	-3.720	32.383	37.803	-5.420
154664	2.893	0.013	...	UPL	LB	-12.425	-8.895	-3.530	31.060	35.771	-4.711
154970	2.749	0.008	...	UPL	LB	-12.658	-8.718	-3.940	30.650	35.771	-5.121
155763	2.063	0.011	...	UPL	LB	-12.644	-6.754	-5.890	28.701	36.731	-8.030
155321	3.080	0.007	...	UPL	LB	-12.666	-9.225	-3.441	30.997	35.539	-4.542
155440	2.749	0.007	...	UPL	LB	-12.716	-8.758	-3.958	30.632	35.771	-5.139
155960	2.965	0.006	...	UPL	LBR	-12.750	-8.963	-3.786	30.804	35.771	-4.967
156247	2.705	0.013	...	UPL	LB	-12.454	-7.757	-4.697	31.022	36.403	-5.381
-45 8441	3.527	0.009	...	UPL	LBR	-12.498	-9.402	-3.096	31.494	35.771	-4.277
156137	2.966	0.009	...	UPL	LBR	-12.574	-8.963	-3.610	30.980	35.771	-4.791
156779	5.323	0.014	...	UPL	LBR	-12.128	-8.764	-3.364	32.416	37.283	-4.867
156726	2.742	0.007	...	UPL	LB	-12.717	-8.719	-3.998	30.592	35.771	-5.179
156940	2.744	0.009	...	UPL	LBR	-12.607	-8.879	-3.729	30.709	35.539	-4.830
157246	2.735	0.021	0.002	RIV	MAP	-12.241	-6.732	-5.509	31.393	38.483	-7.089
157645	2.884	0.010	...	UPL	LB	-12.540	-9.016	-3.524	30.914	35.539	-4.624
157865	2.497	0.013	...	UPL	LBR	-12.489	-8.398	-4.091	30.347	35.539	-5.192
158073	6.072	0.013	...	UPL	LB	-12.103	-8.556	-3.547	32.034	37.283	-5.249
238698	2.585	0.009	...	UPL	LB	-12.633	-9.308	-3.325	32.458	37.283	-4.825
158287	2.819	0.012	...	UPL	LB	-12.471	-8.787	-3.684	30.906	35.771	-4.865
158320	5.417	0.014	...	UPL	LB	-12.120	-7.708	-4.412	32.568	38.683	-6.114
-33 12118	3.114	0.014	...	UPL	LB	-12.361	-9.100	-3.261	31.329	35.771	-4.442
158408	2.084	0.023	0.005	RIV	MAP	-12.319	-6.556	-5.763	30.051	37.363	-7.312
158601	2.848	0.009	...	UPL	LB	-12.591	-8.822	-3.769	30.821	35.771	-4.950
158926	2.314	0.027	0.009	RIV	MAP	-12.204	-6.112	-6.092	29.782	37.523	-7.741
-32 12924	2.000	0.009	...	UPL	LB	-12.745	...	...	...	36.403	...
159097	2.902	0.011	...	UPL	LBR	-12.496	-9.133	-3.362	31.075	35.539	-4.463
159379	2.744	0.017	...	UPL	LBR	-12.331	-8.839	-3.493	30.945	35.539	-4.593
-33 12242	30.289	0.012	...	UPL	LB	-11.440	-7.584	-3.856	33.526	38.963	-5.436
-33 12244	2.000	0.015	...	UPL	LB	-12.523	...	...	...	...	...
159631	2.824	0.007	...	UPL	LB	-12.704	-8.946	-3.758	30.680	35.539	-4.859
159975	2.475	0.004	...	UPL	LB	-13.004	-7.289	-5.716	29.810	36.715	-6.904
-27 11769	2.000	0.012	...	UPL	LB	-12.620	...	...	...	...	...
160038	2.583	0.004	...	UPL	LB	-12.986	-8.624	-4.362	30.076	35.539	-5.462
160140	2.697	0.010	...	UPL	LB	-12.569	-8.806	-3.763	30.827	35.771	-4.944
159772	2.734	0.010	...	UPL	LB	-12.563	-8.880	-3.683	30.755	35.539	-4.784
160095	4.386	0.020	...	UPL	LBR	-12.057	-8.628	-3.429	32.435	37.763	-5.328
160109	2.583	0.023	...	UPL	LBR	-12.226	-8.424	-3.802	30.788	35.771	-4.983
160167	2.770	0.013	...	UPL	LBR	-12.444	-8.875	-3.569	30.869	35.539	-4.670
160188	2.946	0.061	...	UPL	LBR	-11.745	-9.086	-2.659	31.779	35.539	-3.760
160189	2.608	0.010	...	UPL	LBR	-12.584	-8.620	-3.963	30.474	35.539	-5.064
160348	2.554	0.013	...	UPL	LBR	-12.479	-8.549	-3.930	30.508	35.539	-5.031
160319	2.496	0.042	...	UPL	LBR	-11.979	-8.238	-3.741	30.849	35.771	-4.922

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
160281	2.765	0.008	...	UPL	LB	-12.655	-8.715	-3.940	30.650	35.771	-5.121
-30 14571	3.336	0.012	...	UPL	LB	-12.398	-9.267	-3.131	31.459	35.771	-4.312
160762	2.376	0.007	...	UPL	LB	-12.779	-6.973	-5.806	29.901	37.283	-7.382
160525	2.827	0.007	...	UPL	LB	-12.704	-8.985	-3.718	30.720	35.539	-4.819
160490	2.851	0.010	...	UPL	LB	-12.545	-8.982	-3.563	30.875	35.539	-4.664
160578	2.415	0.014	...	UPL	LB	-12.471	-6.412	-6.059	30.068	37.763	-7.695
160644	2.715	0.020	...	UPL	LB	-12.265	-8.643	-3.622	30.968	35.771	-4.803
160648	2.683	0.016	...	UPL	LB	-12.367	-8.608	-3.759	30.831	35.771	-4.940
160649	3.155	0.012	...	UPL	LB	-12.422	-9.213	-3.209	31.381	35.771	-4.389
-28 13463	3.039	0.009	...	UPL	LB	-12.563	-9.032	-3.531	31.059	35.771	-4.712
160808	2.972	0.010	...	UPL	LBR	-12.527	-8.962	-3.565	31.025	35.771	-4.745
160886	4.854	0.013	...	UPL	LBR	-12.200	-8.992	-3.208	31.786	36.403	-4.616
160958	2.882	0.009	...	UPL	LB	-12.586	-9.017	-3.569	30.869	35.539	-4.670
160974	10.422	0.013	...	UPL	LBC	-11.868	-8.244	-3.624	32.999	38.323	-5.324
161084	2.853	0.015	...	UPL	LBR	-12.369	-8.981	-3.387	31.051	35.539	-4.488
-28 13537	3.381	0.006	...	UPL	LB	-12.693	-8.901	-3.792	31.190	36.403	-5.213
161229	2.795	0.010	...	UPL	LBR	-12.554	-8.911	-3.643	30.795	35.539	-4.744
161248	2.947	0.013	...	UPL	LB	-12.417	-9.086	-3.330	31.108	35.539	-4.431
161277	2.441	0.022	...	UPL	LBR	-12.270	-8.277	-3.993	30.445	35.539	-5.094
-29 13979	2.000	0.002	...	UPL	LBCR	-13.398	...	...	...	...	...
161561	2.534	0.010	...	UPL	LB	-12.596	-8.472	-4.124	30.314	35.539	-5.225
161531	3.263	0.011	...	UPL	LB	-12.445	-8.936	-3.509	33.114	38.123	-5.009
161610	2.969	0.014	...	UPL	LBR	-12.381	-8.963	-3.418	31.171	35.771	-4.599
161530	3.057	0.015	...	UPL	LB	-12.339	-9.069	-3.270	31.320	35.771	-4.451
-25 12299	3.009	0.010	...	UPL	LBR	-12.522	-9.156	-3.365	31.073	35.539	-4.466
-29 14001	4.997	0.016	...	UPL	MLR	-12.097	-8.734	-3.363	32.410	37.475	-5.064
161631	3.000	0.011	...	UPL	LBR	-12.482	-9.158	-3.324	31.114	35.539	-4.424
161667	4.156	0.011	...	UPL	LB	-12.340	-7.998	-4.342	32.032	37.523	-5.491
161774	2.848	0.039	...	UPL	LBR	-11.954	-8.822	-3.132	31.458	35.771	-4.313
161805	3.079	0.012	...	UPL	LBR	-12.432	-9.065	-3.367	31.223	35.771	-4.548
161854	2.853	0.028	...	UPL	LBR	-12.097	-8.981	-3.116	31.322	35.539	-4.217
161876	2.954	0.008	...	UPL	LB	-12.626	-8.965	-3.661	30.929	35.771	-4.842
161877	2.714	0.011	...	UPL	LBR	-12.525	-8.803	-3.722	30.716	35.539	-4.822
161946	3.050	0.021	...	UPL	LBR	-12.193	-9.190	-3.004	31.434	35.539	-4.104
162064	19.956	0.010	...	UPL	LB	-11.700	-8.012	-3.688	33.694	39.363	-5.669
162067	2.911	0.024	...	UPL	LBR	-12.156	-9.052	-3.104	31.334	35.539	-4.205
162085	2.570	0.024	...	UPL	LBR	-12.210	-8.546	-3.664	30.774	35.539	-4.764
162144	2.517	0.025	...	UPL	LBR	-12.201	-8.435	-3.766	30.671	35.539	-4.867
162145	2.408	0.021	...	UPL	LBR	-12.296	-8.209	-4.087	30.351	35.539	-5.188
162225	2.842	0.018	...	UPL	LBR	-12.291	-8.983	-3.308	31.130	35.539	-4.409
162694	3.145	0.006	...	UPL	LB	-12.724	-9.135	-3.589	31.001	35.771	-4.770
162717	13.333	0.010	...	UPL	LBR	-11.875	-8.348	-3.527	32.603	37.671	-5.068
-23 13647	3.681	0.018	...	UPL	LBR	-12.179	-9.062	-3.116	31.866	36.403	-4.537
163161	2.882	0.004	...	UPL	LBCR	-12.938	-9.017	-3.922	30.516	35.539	-5.022
163442	2.572	0.007	...	UPL	ML	-12.745	-8.466	-4.279	30.311	35.771	-5.459
163254	3.357	0.020	...	UPL	LB	-12.173	-7.992	-4.181	31.401	37.283	-5.881
163592	2.612	0.009	...	UPL	LB	-12.629	-8.700	-3.929	30.509	35.539	-5.030
163591	2.647	0.005	...	UPL	ML	-12.878	-8.774	-4.104	30.334	35.539	-5.205
163522	3.825	0.020	...	UPL	LB	-12.116	-8.616	-3.500	33.882	38.963	-5.081
163774	2.768	0.008	...	UPL	LB	-12.655	-8.995	-3.660	30.778	35.539	-4.761
-23 13708	3.501	0.023	...	UPL	MLR	-12.094	-8.966	-3.129	31.853	36.403	-4.549
163703	3.502	0.018	...	UPL	LBR	-12.200	-8.965	-3.235	31.747	36.403	-4.656
163862	2.853	0.045	...	UPL	LBR	-11.892	-8.981	-2.910	31.680	35.771	-4.091
163811	3.107	0.009	...	UPL	LB	-12.553	-8.701	-3.853	31.129	36.403	-5.273
163745	3.772	0.015	...	UPL	LB	-12.247	-7.851	-4.397	32.031	37.511	-5.479
164002	4.762	0.006	...	UPL	LB	-12.544	-7.984	-4.560	31.617	38.123	-6.506
164018	18.369	0.009	...	UPL	LB	-11.782	-8.052	-3.730	32.696	38.327	-5.630
-23 13751	3.627	0.021	...	UPL	ML	-12.118	-9.029	-3.089	31.893	36.403	-4.510
164106	4.091	0.004	...	UPL	LBCR	-12.786	-8.730	-4.056	31.454	37.131	-5.677
164284	3.637	0.008	...	UPL	LB	-12.536	-7.148	-5.388	30.186	37.283	-7.097
164169	2.970	0.013	...	UPL	LBR	-12.413	-8.963	-3.451	31.139	35.771	-4.631
164194	2.847	0.018	...	UPL	LB	-12.290	-8.822	-3.468	31.122	35.771	-4.649
164225	2.876	0.006	...	UPL	LB	-12.763	-8.858	-3.905	30.684	35.771	-5.086
164226	2.764	0.021	...	UPL	ML	-12.236	-8.715	-3.521	31.069	35.771	-4.702
164353	2.807	0.008	...	UPL	ML	-12.649	-6.977	-5.672	30.827	38.091	-7.263

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
164352	2.864	0.008	...	UPL	ML	-12.640	-8.979	-3.660	30.930	35.771	-4.841
-23 13779	4.655	0.012	...	UPL	ML	-12.253	-8.898	-3.355	32.155	37.131	-4.976
164359	4.762	0.016	...	UPL	LBR	-12.118	-8.136	-3.982	32.360	38.403	-6.043
164384	3.918	0.010	...	UPL	LB	-12.407	-8.540	-3.867	32.071	37.719	-5.648
164385	2.819	0.009	...	UPL	LB	-12.596	-8.787	-3.809	30.781	35.771	-4.990
164402	4.012	0.010	...	UPL	ML	-12.397	-7.512	-4.885	32.142	39.063	-6.921
164496	2.744	0.004	...	UPL	LB	-12.960	-8.839	-4.121	30.317	35.539	-5.222
164536	3.450	0.013	...	UPL	LB	-12.348	-8.040	-4.308	30.934	36.883	-5.949
164535	2.980	0.009	...	UPL	MLR	-12.572	-9.121	-3.450	30.987	35.539	-4.551
-23 13807	3.565	0.013	...	UPL	ML	-12.334	-8.997	-3.337	31.645	36.403	-4.758
164516	3.825	0.014	...	UPL	LB	-12.271	-8.408	-3.863	31.715	37.283	-5.568
164606	3.316	0.012	...	UPL	LB	-12.400	-8.869	-3.531	31.451	36.403	-4.952
164637	4.199	0.007	...	UPL	LB	-12.532	-7.888	-4.644	31.946	38.491	-6.545
164704	4.293	0.026	...	UPL	LBR	-11.952	-8.492	-3.460	32.526	37.607	-5.081
164739	2.672	0.011	...	UPL	LBR	-12.532	-8.730	-3.802	30.636	35.539	-4.903
164766	2.744	0.016	...	UPL	LBR	-12.358	-8.839	-3.519	30.919	35.539	-4.620
-23 13841	3.385	0.002	...	UPL	LBCR	-13.169	-8.900	-4.269	30.713	36.403	-5.690
164906	6.259	0.013	...	UPL	LB	-12.090	-7.916	-4.174	32.388	38.263	-5.874
-24 13835	3.444	0.010	...	UPL	LB	-12.463	-8.933	-3.530	31.452	36.403	-4.951
164933	5.698	0.007	...	UPL	LB	-12.399	-8.424	-3.975	32.079	37.995	-5.916
-24 13841	4.223	0.009	...	UPL	LB	-12.420	-8.753	-3.667	31.843	37.131	-5.288
164973	3.117	0.013	...	UPL	LB	-12.392	-9.099	-3.293	31.297	35.771	-4.474
165024	2.811	0.009	...	UPL	LB	-12.597	-6.852	-5.745	31.159	38.343	-7.184
165617	2.526	0.017	...	UPL	LBR	-12.367	-8.313	-4.054	30.536	35.771	-5.235
165892	2.000	0.007	...	UPL	LB	-12.854	...	...	...	...	...
166053	2.796	0.019	...	UPL	LB	-12.275	-8.910	-3.364	31.074	35.539	-4.465
166167	8.831	0.011	...	UPL	LBR	-12.013	-8.128	-3.885	32.465	37.403	-4.937
166291	6.072	0.025	...	UPL	LBR	-11.819	-8.580	-3.239	32.551	37.563	-5.011
166294	2.980	0.014	...	UPL	LB	-12.380	-9.121	-3.259	31.179	35.539	-4.359
166417	2.788	0.006	...	UPL	LBCR	-12.777	-8.752	-4.025	30.565	35.771	-5.206
166501	2.824	0.016	...	UPL	LB	-12.345	-8.946	-3.399	31.039	35.539	-4.500
166539	8.302	0.012	...	UPL	LB	-12.002	-8.368	-3.634	32.676	38.371	-5.695
166569	12.009	0.009	...	UPL	LBCR	-11.966	-8.220	-3.746	32.872	38.319	-5.447
166566	8.831	0.016	...	UPL	LB	-11.850	-7.948	-3.902	32.828	38.631	-5.803
166628	13.071	0.016	...	UPL	LB	-11.680	-7.488	-4.192	33.158	38.711	-5.552
166693	2.878	0.011	...	UPL	LB	-12.500	-8.857	-3.642	30.948	35.771	-4.823
166805	2.720	0.011	...	UPL	ML	-12.524	-8.803	-3.722	30.716	35.539	-4.822
166790	2.422	0.009	...	UPL	LB	-12.662	-8.087	-4.574	30.015	35.771	-5.755
166937	2.182	0.010	...	UPL	ML	-12.661	-7.020	-5.642	29.255	38.511	-9.256
167091	2.973	0.008	...	UPL	ML	-12.624	-8.962	-3.662	30.928	35.771	-4.842
167054	2.866	0.019	...	UPL	LB	-12.264	-8.859	-3.405	31.185	35.771	-4.586
167311	27.640	0.007	...	UPL	LB	-11.713	-7.404	-4.309	32.964	39.275	-6.310
167321	3.219	0.010	...	UPL	LBR	-12.492	-8.923	-3.569	31.413	36.403	-4.990
167441	2.623	0.018	...	UPL	LB	-12.326	-8.498	-3.828	30.762	35.771	-5.009
167599	2.565	0.027	...	UPL	LBR	-12.160	-8.387	-3.772	30.817	35.771	-4.953
167965	2.387	0.011	...	UPL	MLR	-12.581	-7.687	-4.893	30.088	36.311	-6.222
167789	2.740	0.005	...	UPL	LB	-12.863	-8.839	-4.024	30.414	35.539	-5.125
167834	2.000	0.017	0.004	RIV	LOC	-12.469	...	...	...	...	...
167881	2.765	0.008	...	UPL	LB	-12.655	-8.875	-3.780	30.658	35.539	-4.881
-12 4970	27.374	0.006	...	UPL	LB	-11.785	-7.484	-4.301	32.893	38.895	-6.001
167925	2.935	0.008	...	UPL	LB	-12.629	-8.928	-3.701	30.889	35.771	-4.882
-12 4982	19.427	0.008	...	UPL	LB	-11.809	-8.036	-3.773	32.869	38.703	-5.833
168135	2.648	0.014	...	UPL	LBR	-12.431	-8.694	-3.737	30.701	35.539	-4.838
168114	3.079	0.008	...	UPL	LB	-12.609	-9.065	-3.543	31.047	35.771	-4.724
168163	4.854	0.008	...	UPL	LB	-12.411	-8.620	-3.791	31.357	36.563	-5.205
168302	5.230	0.007	...	UPL	LB	-12.436	-8.768	-3.668	31.332	36.403	-5.071
168696	2.555	0.003	...	UPL	LB	-13.116	-8.589	-4.527	29.911	35.539	-5.628
168508	2.885	0.011	...	UPL	LBR	-12.498	-8.896	-3.602	30.988	35.771	-4.783
168585	3.042	0.008	...	UPL	LB	-12.614	-9.031	-3.583	31.007	35.771	-4.763
168607	49.256	0.006	...	UPL	LB	-11.529	-6.880	-4.649	33.108	38.811	-5.702
168625	33.201	0.007	...	UPL	LB	-11.634	-7.072	-4.562	33.004	38.671	-5.667
168852	2.478	0.004	...	UPL	LB	-13.004	-8.400	-4.603	29.835	35.539	-5.704
-22 12893	2.625	0.005	...	UPL	LB	-12.882	-8.498	-4.384	30.206	35.771	-5.565
168708	2.514	0.005	...	UPL	LB	-12.901	-8.275	-4.625	29.964	35.771	-5.806
169031	2.405	0.006	...	UPL	LBR	-12.841	-8.089	-4.752	29.838	35.771	-5.932

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
168900	2.852	0.005	...	UPL	LBR	-12.846	-8.981	-3.864	30.573	35.539	-4.965
168989	2.851	0.004	...	UPL	LB	-12.943	-8.982	-3.961	30.477	35.539	-5.062
-34 12776	3.150	0.008	...	UPL	LB	-12.599	-9.374	-3.225	31.213	35.539	-4.325
169021	2.426	0.010	...	UPL	LB	-12.615	-8.251	-4.364	30.073	35.539	-5.465
169227	31.347	0.013	...	UPL	LB	-11.390	-7.240	-4.150	33.248	38.919	-5.671
169226	2.000	0.012	...	UPL	LB	-12.620	...	...	...	...	...
169313	2.694	0.006	...	UPL	LB	-12.791	-8.767	-4.025	30.413	35.539	-5.126
169398	2.697	0.012	...	UPL	LB	-12.490	-7.926	-4.564	30.738	36.723	-5.985
169587	2.990	0.015	...	UPL	LB	-12.348	-9.199	-3.149	31.289	35.539	-4.250
169726	2.853	0.018	...	UPL	LB	-12.289	-8.981	-3.308	31.130	35.539	-4.409
170062	2.996	0.018	...	UPL	LB	-12.268	-8.999	-3.270	31.320	35.771	-4.450
-9 4742	20.222	0.014	...	UPL	LBR	-11.548	-8.472	-3.076	32.530	37.307	-4.777
170702	2.937	0.011	...	UPL	LBR	-12.491	-8.968	-3.523	31.067	35.771	-4.704
170906	2.930	0.009	...	UPL	LB	-12.579	-9.089	-3.490	30.948	35.539	-4.591
170992	2.866	0.008	...	UPL	LBR	-12.640	-8.859	-3.780	30.809	35.771	-4.961
171461	2.312	0.007	...	UPL	LB	-12.791	-8.084	-4.707	29.663	35.391	-5.728
171151	2.932	0.008	...	UPL	LBR	-12.630	-9.089	-3.541	30.897	35.539	-4.642
171466	2.797	0.013	...	UPL	LBR	-12.439	-8.910	-3.529	30.909	35.539	-4.630
171572	2.839	0.004	...	UPL	LBR	-12.945	-8.984	-3.961	30.477	35.539	-5.062
171737	2.867	0.003	...	UPL	LB	-13.065	-9.019	-4.046	30.392	35.539	-5.147
171961	2.489	0.009	...	UPL	LBR	-12.650	-7.763	-4.887	30.159	36.235	-6.075
172252	18.102	0.014	...	UPL	LBR	-11.596	-8.192	-3.404	32.482	37.587	-5.105
172367	13.600	0.007	...	UPL	LB	-12.021	-8.396	-3.625	32.057	37.783	-5.726
-13 5065	2.000	0.004	...	UPL	LBR	-13.097	...	...	...	...	...
171405	2.976	0.008	...	UPL	LBCR	-12.623	-8.682	-3.942	31.568	37.131	-5.562
-8 4674	3.007	0.006	...	UPL	LB	-12.744	-8.997	-3.747	30.843	35.771	-4.928
172789	2.973	0.008	...	UPL	LB	-12.624	-8.962	-3.662	30.928	35.771	-4.842
172771	2.792	0.009	...	UPL	LBR	-12.600	-8.751	-3.849	30.741	35.771	-5.030
172947	2.744	0.012	...	UPL	LB	-12.482	-8.839	-3.644	30.794	35.539	-4.745
173011	5.570	0.004	...	UPL	LB	-12.652	-8.580	-4.072	32.110	38.123	-6.013
173219	6.259	0.007	...	UPL	LB	-12.358	-8.056	-4.302	31.720	37.923	-6.203
173319	2.909	0.019	...	UPL	LB	-12.258	-8.892	-3.365	31.225	35.771	-4.546
173528	2.783	0.004	...	UPL	LB	-12.953	-8.912	-4.041	30.397	35.539	-5.142
174237	2.673	0.032	0.004	RIV	MAP	-12.068	-7.762	-4.306	31.336	37.303	-5.967
174069	3.722	0.008	...	UPL	LBR	-12.526	-8.297	-4.229	31.545	37.475	-5.930
174182	3.069	0.005	...	UPL	LBCR	-12.814	-8.667	-4.147	30.835	36.403	-5.568
174585	2.213	0.003	...	UPL	LBCR	-13.178	-7.856	-5.322	30.262	37.283	-7.020
174638	2.108	0.038	...	UPL	MAP	-12.096	-6.862	-5.234	29.493	36.051	-6.557
174509	2.972	0.005	...	UPL	LBCR	-12.828	-8.962	-3.866	30.724	35.771	-5.046
174664	3.053	0.038	...	UPL	MAP	-11.936	-8.469	-3.466	32.044	37.131	-5.087
174632	2.423	0.012	...	UPL	LB	-12.536	-8.099	-4.437	30.152	35.771	-5.618
174933	2.302	0.007	...	UPL	LB	-12.793	-7.653	-5.139	29.596	36.479	-6.883
175249	2.904	0.006	...	UPL	LBCR	-12.759	-8.893	-3.866	30.724	35.771	-5.047
175428	2.421	0.004	...	UPL	LB	-13.014	-8.247	-4.767	29.671	35.539	-5.868
175362	2.319	0.014	...	UPL	LB	-12.489	-7.611	-4.877	29.945	36.011	-6.066
175677	2.646	0.007	...	UPL	LB	-12.732	-8.694	-4.038	30.400	35.539	-5.139
175885	2.650	0.013	...	UPL	LBR	-12.463	-8.774	-3.689	30.749	35.539	-4.790
176258	2.629	0.006	...	UPL	LB	-12.802	-8.657	-4.145	30.293	35.539	-5.246
176269	2.368	0.014	...	UPL	ML	-12.480	-8.130	-4.350	30.088	35.539	-5.451
176270	2.429	0.015	...	UPL	ML	-12.438	-8.006	-4.432	30.274	35.891	-5.617
-37 13024	2.000	0.040	0.005	RIV	MAP	-12.097	...	...	...	37.475	...
176819	4.293	0.005	0.002	RIV	MAP	-12.668	-7.856	-4.812	30.966	37.403	-6.437
176739	2.719	0.006	...	UPL	LB	-12.787	-8.803	-3.985	30.453	35.539	-5.086
176745	2.605	0.010	...	UPL	LB	-12.584	-8.621	-3.963	30.474	35.539	-5.064
176767	2.784	0.011	...	UPL	LBR	-12.514	-8.912	-3.602	30.836	35.539	-4.703
176873	2.357	0.009	...	UPL	LBR	-12.673	-8.095	-4.579	29.859	35.539	-5.679
176829	2.809	0.009	...	UPL	LB	-12.597	-8.948	-3.649	30.789	35.539	-4.750
176919	2.851	0.012	...	UPL	LB	-12.466	-8.982	-3.484	30.954	35.539	-4.585
177012	2.549	0.026	...	UPL	LBR	-12.179	-8.510	-3.669	30.769	35.539	-4.770
+2 3771	4.888	0.008	...	UPL	LB	-12.408	-8.708	-3.700	32.074	37.475	-5.401
178060	2.699	0.010	...	UPL	LB	-12.569	-8.886	-3.683	30.755	35.539	-4.784
178329	2.792	0.009	...	UPL	LB	-12.600	-7.987	-4.613	30.897	37.131	-6.234
178162	2.769	0.006	...	UPL	LB	-12.780	-8.875	-3.905	30.533	35.539	-5.006
178399	2.591	0.012	...	UPL	LB	-12.507	-8.663	-3.844	30.594	35.539	-4.945
178591	2.620	0.026	...	UPL	LBR	-12.167	-8.178	-3.988	30.994	36.403	-5.409

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
178479	2.823	0.016	...	UPL	LBR	-12.345	-8.946	-3.399	31.039	35.539	-4.500
178847	2.510	0.004	...	UPL	ML	-12.998	-8.476	-4.522	29.916	35.539	-5.623
178803	2.850	0.006	...	UPL	LB	-12.767	-8.982	-3.785	30.653	35.539	-4.886
178774	2.696	0.016	...	UPL	LBR	-12.365	-8.766	-3.599	30.839	35.539	-4.700
178893	2.822	0.008	...	UPL	LB	-12.646	-8.946	-3.700	30.738	35.539	-4.801
178929	2.576	0.008	...	UPL	LB	-12.686	-8.585	-4.101	30.337	35.539	-5.201
179124	2.408	0.005	...	UPL	LBR	-12.919	-8.209	-4.711	29.727	35.539	-5.811
179511	2.797	0.005	...	UPL	ML	-12.854	-8.910	-3.944	30.494	35.539	-5.045
179588	2.304	0.007	...	UPL	LB	-12.792	-8.153	-4.639	29.596	35.747	-6.151
179587	2.872	0.004	...	UPL	LBCR	-12.940	-9.018	-3.921	30.516	35.539	-5.022
179793	2.797	0.004	...	UPL	LB	-12.951	-8.910	-4.041	30.397	35.539	-5.142
179938	2.847	0.008	...	UPL	LBR	-12.643	-8.822	-3.820	30.770	35.771	-5.001
179968	2.797	0.026	...	UPL	LBR	-12.138	-8.910	-3.228	31.210	35.539	-4.329
180125	2.513	0.007	...	UPL	LBR	-12.755	-8.275	-4.479	30.111	35.771	-5.660
180192	2.838	0.008	...	UPL	LB	-12.644	-8.984	-3.660	30.778	35.539	-4.761
231005	3.124	0.009	...	UPL	LBR	-12.551	-8.738	-3.813	31.169	36.403	-5.234
180288	2.947	0.024	...	UPL	LB	-12.150	-9.086	-3.064	31.374	35.539	-4.165
180291	2.837	0.009	...	UPL	LB	-12.593	-8.984	-3.609	30.829	35.539	-4.710
180715	2.586	0.006	...	UPL	LB	-12.809	-8.584	-4.225	30.212	35.539	-5.326
180811	2.529	0.003	...	UPL	LB	-13.120	-8.473	-4.647	29.791	35.539	-5.748
180812	2.797	0.004	...	UPL	LB	-12.951	-8.910	-4.041	30.397	35.539	-5.142
180874	2.883	0.012	...	UPL	LB	-12.461	-9.057	-3.404	31.033	35.539	-4.505
181182	2.625	0.074	0.008	RIV	MAP	-11.712	-8.050	-3.662	31.384	36.235	-4.851
181167	2.744	0.004	...	UPL	LB	-12.959	-8.839	-4.121	30.317	35.539	-5.222
181231	2.791	0.006	...	UPL	ML	-12.776	-8.911	-3.865	30.573	35.539	-4.966
181440	2.269	0.010	...	UPL	LB	-12.644	-7.661	-4.983	29.628	35.979	-6.351
181442	2.665	0.004	...	UPL	LB	-12.972	-8.731	-4.241	30.197	35.539	-5.342
181690	2.844	0.006	...	UPL	ML	-12.768	-8.983	-3.785	30.653	35.539	-4.886
-5 4943	2.936	0.011	...	UPL	LB	-12.491	-8.968	-3.523	31.067	35.771	-4.704
231260	2.939	0.006	...	UPL	LB	-12.754	-8.928	-3.826	30.764	35.771	-5.007
182146	2.684	0.014	...	UPL	LBR	-12.425	-8.608	-3.817	30.773	35.771	-4.998
182198	2.606	0.008	...	UPL	LB	-12.681	-8.621	-4.060	30.378	35.539	-5.161
182221	2.794	0.012	...	UPL	LBR	-12.475	-8.911	-3.564	30.874	35.539	-4.665
231285	21.547	0.004	...	UPL	LB	-12.065	-8.036	-4.029	32.737	38.803	-6.066
182691	2.516	0.006	...	UPL	LB	-12.821	-8.035	-4.786	30.108	35.979	-5.871
182568	2.547	0.004	...	UPL	LB	-12.992	-7.374	-5.618	29.964	37.083	-7.119
234893	2.752	0.021	...	UPL	LBCR	-12.238	-8.997	-3.241	31.197	35.539	-4.342
183144	2.962	0.004	...	UPL	LB	-12.926	-7.868	-5.058	29.754	36.443	-6.689
183261	3.357	0.007	...	UPL	LB	-12.629	-8.072	-4.557	31.222	37.283	-6.061
183680	2.618	0.005	...	UPL	LB	-12.883	-8.659	-4.224	30.214	35.539	-5.325
183888	2.765	0.003	...	UPL	LB	-13.081	-8.715	-4.366	30.224	35.771	-5.547
184829	2.790	0.004	...	UPL	LB	-12.952	-8.751	-4.201	30.389	35.771	-5.382
+29 3660	3.372	0.010	...	UPL	LBR	-12.472	-8.942	-3.530	31.452	36.403	-4.951
185224	2.583	0.010	...	UPL	ML	-12.588	-8.584	-4.004	30.434	35.539	-5.104
185418	6.977	0.011	...	UPL	LB	-12.115	-7.876	-4.239	31.862	38.043	-6.181
185487	2.440	0.009	...	UPL	LB	-12.658	-8.145	-4.513	30.077	35.771	-5.694
185755	2.441	0.010	...	UPL	LB	-12.612	-8.285	-4.328	30.110	35.539	-5.428
185835	2.641	0.020	...	UPL	LBR	-12.277	-8.575	-3.702	30.888	35.771	-4.883
185757	2.847	0.004	...	UPL	LB	-12.944	-8.822	-4.121	30.469	35.771	-5.302
185803	2.566	0.012	...	UPL	LBR	-12.512	-8.387	-4.125	30.465	35.771	-5.305
331099	2.710	0.005	...	UPL	LB	-12.868	-8.804	-4.064	30.374	35.539	-5.165
185936	3.637	0.003	...	UPL	LB	-12.962	-7.604	-5.358	29.718	36.403	-6.685
350461	2.770	0.009	...	UPL	ML	-12.603	-8.874	-3.729	30.709	35.539	-4.830
186567	2.816	0.022	...	UPL	LBR	-12.208	-8.907	-3.301	31.289	35.771	-4.482
186549	2.763	0.007	...	UPL	LBR	-12.713	-8.876	-3.838	30.600	35.539	-4.939
186587	5.417	0.007	...	UPL	LBR	-12.421	-7.984	-4.437	30.861	36.843	-5.982
344873	22.076	0.006	...	UPL	LBR	-11.878	-7.720	-4.158	32.200	38.419	-6.219
186994	3.884	0.008	...	UPL	ML	-12.508	-8.476	-4.031	32.271	38.403	-6.132
338889	2.969	0.012	...	UPL	LBR	-12.448	-8.963	-3.485	31.105	35.771	-4.666
332701	2.901	0.012	...	UPL	LB	-12.458	-8.894	-3.565	31.025	35.771	-4.745
332690	2.740	0.019	...	UPL	LB	-12.284	-8.839	-3.444	30.994	35.539	-4.545
331246	4.174	0.014	...	UPL	LBR	-12.233	-8.799	-3.434	32.076	37.131	-5.055
187613	2.570	0.011	...	UPL	LB	-12.549	-8.426	-4.122	30.468	35.771	-5.303
187569	2.738	0.004	...	UPL	LBCR	-12.961	-8.880	-4.081	30.357	35.539	-5.182
187688	4.386	0.010	...	UPL	LBR	-12.358	-8.428	-3.930	32.171	38.043	-5.872

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2}$ (7)	$\log f_v$ $\text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{\text{bol}}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{\text{bol}}$ (12)
226117	2.733	0.008	...	UPL	LB	-12.660	-8.840	-3.820	30.618	35.539	-4.921
226151	2.956	0.010	...	UPL	LB	-12.529	-9.125	-3.404	31.034	35.539	-4.505
188062	2.668	0.008	...	UPL	ML	-12.671	-8.571	-4.100	30.490	35.771	-5.281
332857	2.822	0.011	...	UPL	LB	-12.508	-8.946	-3.562	30.876	35.539	-4.663
188306	2.696	0.009	...	UPL	LBR	-12.615	-8.806	-3.809	30.629	35.539	-4.910
188459	2.788	0.006	...	UPL	LB	-12.777	-8.952	-3.825	30.613	35.539	-4.926
189160	2.650	0.003	...	UPL	LBCR	-13.100	-8.574	-4.526	30.064	35.771	-5.707
189159	2.792	0.010	...	UPL	LB	-12.554	-8.951	-3.603	30.835	35.539	-4.704
189178	3.450	0.010	...	UPL	LB	-12.462	-7.464	-4.998	30.218	36.483	-6.265
189103	2.585	0.004	...	UPL	LB	-12.986	-7.164	-5.822	29.987	37.363	-7.376
189528	2.713	0.029	...	UPL	LBR	-12.104	-8.804	-3.301	31.137	35.539	-4.401
190066	5.604	0.018	...	UPL	LBR	-11.996	-7.608	-4.388	32.794	38.763	-5.969
227244	4.633	0.013	...	UPL	LB	-12.220	-8.700	-3.520	32.254	37.475	-5.221
190467	3.544	0.009	...	UPL	LB	-12.496	-8.564	-3.932	33.249	37.443	-4.194
331759	11.746	0.006	...	UPL	ML	-12.152	-8.160	-3.992	32.909	38.483	-5.574
190603	12.275	0.007	...	UPL	ML	-12.066	-6.916	-5.150	32.170	38.823	-6.652
227536	2.997	0.016	...	UPL	LB	-12.319	-8.998	-3.321	31.269	35.771	-4.502
191139	6.448	0.032	...	UPL	LBR	-11.685	-8.108	-3.577	33.113	38.591	-5.478
191396	6.711	0.055	...	UPL	LBR	-11.433	-8.160	-3.273	33.310	38.483	-5.173
191456	4.762	0.032	...	UPL	LBR	-11.817	-8.104	-3.713	32.981	38.595	-5.614
191473	5.230	0.007	...	UPL	LB	-12.436	-8.492	-3.944	32.162	37.807	-5.645
191610	2.415	0.005	...	UPL	LBC	-12.918	-7.444	-5.474	30.558	37.683	-7.125
228004	4.311	0.008	...	UPL	LBR	-12.462	-8.822	-3.641	31.869	37.131	-5.261
191721	2.497	0.005	...	UPL	LB	-12.904	-8.238	-4.666	29.924	35.771	-5.846
351582	2.950	0.010	...	UPL	LBR	-12.530	-8.966	-3.564	31.026	35.771	-4.745
228101	4.949	0.008	...	UPL	LB	-12.402	-8.476	-3.926	31.936	37.763	-5.827
191466	2.626	0.016	...	UPL	LB	-12.377	-8.937	-3.439	30.999	35.539	-4.540
191917	5.604	0.006	...	UPL	MLR	-12.473	-8.140	-4.333	32.325	38.359	-6.034
228140	2.877	0.014	...	UPL	LB	-12.395	-9.017	-3.377	31.060	35.539	-4.478
192003	5.230	0.003	...	UPL	LB	-12.804	-8.616	-4.188	31.794	37.523	-5.729
228187	4.667	0.010	...	UPL	LBR	-12.331	-9.008	-3.323	33.140	37.963	-4.823
191946	2.668	0.004	...	UPL	LB	-12.972	-8.731	-4.241	30.197	35.539	-5.342
228199	5.698	0.021	...	UPL	LB	-11.922	-8.704	-3.218	32.876	38.035	-5.159
192907	2.873	0.008	...	UPL	LB	-12.639	-7.134	-5.504	31.439	35.979	-4.539
192303	9.360	0.003	...	UPL	LB	-12.552	-8.360	-4.192	32.046	37.939	-5.892
192444	15.453	0.004	...	UPL	LBR	-12.209	-7.872	-4.337	31.967	38.003	-6.035
192445	3.637	0.005	...	UPL	LBR	-12.740	-8.172	-4.568	32.058	38.527	-6.469
192579	2.669	0.007	...	UPL	LB	-12.729	-8.207	-4.522	30.460	36.403	-5.943
192599	2.681	0.002	...	UPL	LBCR	-13.271	-8.769	-4.502	29.936	35.539	-5.603
228599	3.262	0.016	...	UPL	LB	-12.282	-8.836	-3.446	31.536	36.403	-4.867
192987	2.660	0.005	...	UPL	LB	-12.876	-7.940	-4.936	30.156	36.403	-6.247
193007	10.951	0.010	0.003	RIV	MAP	-11.961	-7.920	-4.041	32.542	38.483	-5.941
193076	9.360	0.009	...	UPL	LB	-12.074	-7.836	-4.238	32.524	38.663	-6.139
193183	10.684	0.011	...	UPL	LB	-11.930	-7.532	-4.398	32.668	38.587	-5.919
193237	2.516	0.011	...	UPL	LB	-12.558	-7.359	-5.199	30.316	37.475	-7.159
228807	2.767	0.007	...	UPL	ML	-12.713	-8.875	-3.838	30.600	35.539	-4.939
193289	5.509	0.006	...	UPL	LBR	-12.481	-8.588	-3.893	32.117	37.511	-5.393
334039	2.740	0.020	...	UPL	LBR	-12.261	-8.679	-3.582	31.008	35.771	-4.763
193444	14.395	0.017	...	UPL	LBR	-11.611	-7.940	-3.671	32.987	38.559	-5.572
193516	13.333	0.015	...	UPL	LB	-11.699	-8.052	-3.647	32.899	38.047	-5.148
193594	2.548	0.010	...	UPL	LB	-12.594	-8.510	-4.084	30.354	35.539	-5.185
193491	2.707	0.010	...	UPL	LBR	-12.567	-8.844	-3.723	30.715	35.539	-4.824
193553	3.582	0.004	...	UPL	LB	-12.844	-7.963	-4.881	31.161	37.563	-6.402
193634	6.977	0.002	...	UPL	LBCR	-12.855	-7.880	-4.975	30.807	37.283	-6.475
193633	2.423	0.011	...	UPL	LB	-12.574	-8.247	-4.327	30.111	35.539	-5.428
193666	2.600	0.008	...	UPL	LB	-12.682	-8.461	-4.220	30.370	35.771	-5.401
229024	2.817	0.008	...	UPL	LB	-12.647	-8.947	-3.700	30.738	35.539	-4.801
193814	2.568	0.017	...	UPL	LBR	-12.360	-8.547	-3.813	30.625	35.539	-4.914
193945	19.427	0.010	...	UPL	LB	-11.712	-7.716	-3.996	32.105	38.203	-6.098
194009	14.658	0.006	...	UPL	LBR	-12.056	-8.012	-4.044	32.542	38.087	-5.544
194057	23.138	0.006	...	UPL	LBR	-11.858	-7.168	-4.690	32.494	38.883	-6.389
194092	5.698	0.016	...	UPL	LBR	-12.040	-8.308	-3.732	32.372	38.043	-5.670
193924	2.415	0.011	...	UPL	LB	-12.576	-6.224	-6.352	29.502	37.363	-7.861
194335	2.314	0.008	...	UPL	LBR	-12.733	-7.832	-4.901	30.690	37.283	-6.593
194670	2.443	0.002	...	UPL	LBCR	-13.311	-8.285	-5.026	29.411	35.539	-6.127

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $\text{erg cm}^{-2} \text{cts}^{-1}$ (2)	Rate $\text{cts s}^{-1}$ (3)	Err $\text{cts s}^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $\text{erg cm}^{-2} \text{s}^{-1}$ (7)	$\log f_v$ $\text{erg cm}^{-2} \text{s}^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $\text{erg s}^{-1}$ (10)	$\log L_{bol}$ $\text{erg s}^{-1}$ (11)	$\log L_x/L_{bol}$ (12)
195629	2.443	0.005	...	UPL	ML	-12.913	-8.285	-4.628	29.809	35.539	-5.729
195810	2.056	0.023	...	UPL	LBR	-12.325	-7.098	-5.227	28.957	36.731	-7.774
235298	3.428	0.025	...	UPL	LBC	-12.067	-8.495	-3.572	31.938	37.131	-5.193
197419	2.735	0.006	...	UPL	LB	-12.785	-8.072	-4.713	31.066	37.403	-6.337
197619	2.599	0.003	...	UPL	LB	-13.108	-8.622	-4.486	29.952	35.539	-5.587
235330	2.995	0.008	...	UPL	LBR	-12.621	-9.039	-3.582	31.008	35.771	-4.763
197702	3.468	0.010	...	UPL	ML	-12.460	-8.490	-3.970	31.540	37.131	-5.591
235347	2.782	0.020	...	UPL	LBR	-12.255	-8.913	-3.342	31.096	35.539	-4.443
235350	8.831	0.012	...	UPL	MLR	-11.975	-8.520	-3.455	32.926	38.283	-5.356
235352	2.980	0.010	...	UPL	LB	-12.526	-9.001	-3.525	31.065	35.771	-4.706
198056	2.433	0.008	...	UPL	ML	-12.711	-8.262	-4.449	29.989	35.539	-5.550
198478	2.116	0.004	...	UPL	LB	-13.072	-7.418	-5.655	28.547	38.615	-10.068
198895	18.102	0.010	...	UPL	LBR	-11.742	-7.628	-4.114	31.751	37.763	-6.012
198820	2.585	0.009	...	UPL	ML	-12.633	-8.000	-4.633	31.147	37.283	-6.136
198946	2.602	0.019	...	UPL	LB	-12.306	-8.621	-3.685	30.753	35.539	-4.786
199042	2.549	0.036	...	UPL	ML	-12.037	-8.510	-3.528	30.910	35.539	-4.629
199102	2.514	0.011	...	UPL	ML	-12.558	-8.435	-4.123	30.315	35.539	-5.224
199140	3.037	0.010	...	UPL	LB	-12.518	-7.960	-4.558	31.507	37.603	-6.096
199206	2.533	0.010	...	UPL	LB	-12.596	-8.472	-4.124	30.314	35.539	-5.225
199312	2.628	0.007	...	UPL	LBR	-12.735	-8.657	-4.078	30.360	35.539	-5.179
199479	2.390	0.013	...	UPL	MLR	-12.508	-8.171	-4.337	30.101	35.539	-5.438
199837	2.462	0.007	...	UPL	ML	-12.764	-8.322	-4.441	29.997	35.539	-5.542
199955	2.267	0.012	...	UPL	LBR	-12.565	-7.709	-4.856	29.706	36.403	-6.696
200170	2.793	0.012	...	UPL	LBR	-12.475	-9.071	-3.404	31.034	35.539	-4.505
200775	9.893	0.032	0.004	RIV	ML	-11.500	-7.708	-3.792	31.782	37.283	-5.500
201666	3.918	0.023	...	UPL	LB	-12.045	-8.288	-3.757	31.832	37.291	-5.458
201733	2.962	0.004	...	UPL	LBCR	-12.926	-8.020	-4.906	30.951	37.559	-6.608
201976	2.686	0.009	...	UPL	LB	-12.617	-8.768	-3.849	30.589	35.539	-4.950
202000	2.598	0.008	...	UPL	LBR	-12.682	-8.462	-4.220	30.370	35.771	-5.401
201912	2.938	0.009	...	UPL	LB	-12.578	-8.112	-4.466	31.036	36.923	-5.887
202068	2.668	0.009	...	UPL	LBCR	-12.620	-8.571	-4.049	30.541	35.771	-5.230
202163	3.731	0.017	...	UPL	LB	-12.198	-8.692	-3.506	31.680	36.887	-5.207
202347	3.188	0.034	...	UPL	LBR	-11.965	-8.324	-3.641	31.913	37.335	-5.422
-39 14181	2.000	0.012	...	UPL	LB	-12.620	...	...	...	35.539	...
235501	2.988	0.007	...	UPL	LB	-12.680	-9.000	-3.680	30.910	35.771	-4.861
203664	2.735	0.009	...	UPL	LBR	-12.609	-8.812	-3.797	32.785	38.483	-5.698
203883	2.808	0.012	...	UPL	LB	-12.472	-8.789	-3.684	30.906	35.771	-4.865
204001	2.543	0.019	...	UPL	LB	-12.316	-8.271	-4.045	30.617	35.747	-5.130
204116	12.804	0.017	...	UPL	LBR	-11.662	-7.768	-3.894	32.014	37.523	-5.508
204375	2.484	0.007	...	UPL	LB	-12.760	-8.360	-4.400	30.038	35.539	-5.501
204710	4.573	0.019	...	UPL	LBR	-12.061	-7.928	-4.133	32.770	38.007	-5.237
205021	2.152	0.036	0.006	RIV	MAP	-12.111	-6.771	-5.340	29.670	37.963	-8.293
235536	2.849	0.003	...	UPL	LBC	-13.068	-8.982	-4.086	30.352	35.539	-5.187
235538	2.716	0.008	...	UPL	LBR	-12.663	-8.803	-3.860	30.578	35.539	-4.961
239697	2.840	0.015	...	UPL	LBR	-12.371	-8.983	-3.387	31.051	35.539	-4.488
205794	10.155	0.008	...	UPL	ML	-12.090	-8.124	-3.966	31.908	37.815	-5.907
239710	4.137	0.016	...	UPL	LB	-12.179	-8.804	-3.375	32.135	37.131	-4.996
205948	6.711	0.014	...	UPL	LB	-12.027	-8.368	-3.659	31.971	37.331	-5.360
206165	6.448	0.021	...	UPL	LBR	-11.868	-6.816	-5.052	32.130	38.623	-6.493
239724	10.422	0.010	...	UPL	ML	-11.982	-8.396	-3.586	32.715	38.003	-5.288
239725	6.977	0.016	...	UPL	MLR	-11.952	-8.556	-3.396	32.046	37.143	-5.097
235579	3.373	0.011	...	UPL	LB	-12.431	-8.902	-3.529	31.453	36.403	-4.950
239729	12.009	0.008	...	UPL	LB	-12.017	-8.004	-4.013	31.980	38.095	-6.114
239732	3.022	0.008	...	UPL	LB	-12.617	-9.034	-3.582	31.008	35.771	-4.763
235586	4.588	0.012	...	UPL	LBR	-12.259	-8.626	-3.633	32.141	37.475	-5.334
206773	6.977	0.003	...	UPL	LBCR	-12.679	-7.672	-5.007	31.319	38.427	-7.108
209162	2.821	0.017	...	UPL	LB	-12.319	-8.826	-3.493	31.097	35.771	-4.674
209178	2.844	0.022	...	UPL	LB	-12.204	-8.863	-3.341	31.249	35.771	-4.522
209469	2.443	0.008	...	UPL	LBR	-12.709	-8.285	-4.424	30.014	35.539	-5.525
209952	1.981	0.007	...	UPL	LB	-12.858	-6.188	-6.670	27.730	36.311	-8.580
239886	16.515	0.040	...	UPL	LBCR	-11.180	-8.000	-3.180	34.138	38.371	-4.233
211057	2.500	0.010	...	UPL	LB	-12.602	-8.397	-4.205	30.233	35.539	-5.305
239895	21.547	0.017	...	UPL	LBCR	-11.436	-7.688	-3.748	33.722	38.575	-4.853
211242	2.340	0.003	...	UPL	LBCR	-13.154	-7.901	-5.253	29.337	35.771	-6.434
239900	2.769	0.058	...	UPL	LBC	-11.794	-8.875	-2.920	31.518	35.539	-4.020

TABLE 4—Continued

HD/BD Number (1)	$C_f \times 10^{11}$ $erg\ cm^{-2}\ cts\ s^{-1}$ (2)	Rate $cts\ s^{-1}$ (3)	Err $cts\ s^{-1}$ (4)	Detection Flag (5)	Rate Flag (6)	$\log f_x$ $erg\ cm^{-2}\ s^{-1}$ (7)	$\log f_v$ $s^{-1}$ (8)	$\log f_x/f_v$ (9)	$\log L_x$ $erg\ s^{-1}$ (10)	$\log L_{bot}$ $erg\ s^{-1}$ (11)	$\log L_x/L_{bot}$ (12)
211430	2.483	0.009	...	UPL	LB	-12.651	-8.360	-4.291	30.147	35.539	-5.392
211880	9.626	0.003	...	UPL	ML	-12.539	-7.876	-4.663	31.458	38.063	-6.604
239945	3.156	0.002	...	UPL	LBCR	-13.200	-9.133	-4.067	30.523	35.771	-5.248
212986	2.924	0.006	...	UPL	LB	-12.756	-7.998	-4.758	30.744	36.923	-6.179
239954	3.383	0.009	...	UPL	LBR	-12.516	-8.901	-3.616	31.366	36.403	-5.037
239955	3.040	0.005	...	UPL	LB	-12.818	-9.031	-3.787	30.803	35.771	-4.967
239956	2.850	0.008	...	UPL	ML	-12.642	-8.982	-3.660	30.778	35.539	-4.761
213087	10.155	0.020	...	UPL	LB	-11.692	-6.936	-4.756	32.224	38.683	-6.459
213209	2.672	0.007	...	UPL	LB	-12.728	-8.730	-3.998	30.440	35.539	-5.099
213231	5.179	0.010	...	UPL	LB	-12.286	-8.270	-4.015	32.287	38.403	-6.116
239967	7.244	0.009	...	UPL	LB	-12.186	-8.628	-3.558	32.905	37.963	-5.058
+55 2757	5.093	0.007	...	UPL	LB	-12.448	-8.761	-3.686	32.087	37.475	-5.387
213405	13.071	0.017	...	UPL	LBC	-11.653	-7.800	-3.853	32.450	38.003	-5.552
239984	2.914	0.005	...	UPL	LBC	-12.837	-9.052	-3.785	30.653	35.539	-4.886
239989	11.217	0.006	...	UPL	LBCR	-12.172	-8.740	-3.432	31.826	36.803	-4.977
213757	7.506	0.008	...	UPL	LB	-12.221	-8.224	-3.997	31.776	37.675	-5.898
240002	3.444	0.015	...	UPL	LBR	-12.287	-8.933	-3.354	31.628	36.403	-4.775
+57 2596	2.000	0.014	...	UPL	LBR	-12.553	...	...	...	...	...
215806	12.009	0.012	...	UPL	LB	-11.841	-8.348	-3.493	33.316	38.811	-5.494
215868	2.719	0.048	...	UPL	LBR	-11.884	-8.803	-3.082	31.356	35.539	-4.183
240068	14.658	0.016	...	UPL	LBR	-11.630	-8.404	-3.226	33.528	38.815	-5.287
216711	17.044	0.007	0.003	RIV	MAP	-11.923	-8.060	-3.863	32.035	37.799	-5.764
240110	2.914	0.012	...	UPL	LBR	-12.456	-9.052	-3.405	31.033	35.539	-4.506
216927	16.778	0.008	...	UPL	LB	-11.872	-7.776	-4.096	33.286	38.435	-5.149
217035	13.866	0.005	...	UPL	LB	-12.159	-7.680	-4.479	31.799	38.339	-6.540
217061	19.164	0.008	...	UPL	LB	-11.814	-7.860	-3.954	31.903	37.763	-5.860
240132	2.908	0.010	...	UPL	ML	-12.536	-8.893	-3.644	30.946	35.771	-4.825
217463	14.658	0.008	...	UPL	ML	-11.931	-8.156	-3.775	32.027	37.583	-5.556
240153	3.329	0.009	...	UPL	ML	-12.523	-8.867	-3.656	31.326	36.403	-5.077
217657	14.129	0.013	...	UPL	LB	-11.736	-7.828	-3.908	32.222	38.071	-5.849
217672	2.715	0.032	...	UPL	LBR	-12.061	-8.643	-3.418	31.172	35.771	-4.599
217943	4.573	0.005	...	UPL	LBCR	-12.641	-7.776	-4.865	30.391	36.963	-6.571
240179	3.383	0.009	...	UPL	LB	-12.516	-8.901	-3.616	31.366	36.403	-5.037
240183	3.501	0.008	...	UPL	LB	-12.553	-8.965	-3.587	31.395	36.403	-5.008
240182	4.561	0.010	...	UPL	LBR	-12.341	-8.870	-3.471	32.039	37.131	-5.092
218624	2.335	0.012	...	UPL	LB	-12.553	-8.098	-4.455	29.983	35.539	-5.556
240203	3.116	0.012	...	UPL	LB	-12.427	-9.099	-3.328	31.262	35.771	-4.509
240206	3.006	0.013	...	UPL	LBR	-12.408	-8.997	-3.411	31.179	35.771	-4.592
218970	2.566	0.007	...	UPL	LB	-12.746	-9.187	-3.559	31.031	35.771	-4.740
219634	7.244	0.008	...	UPL	LB	-12.237	-7.496	-4.741	31.368	38.203	-6.835
240271	2.973	0.003	...	UPL	LBCR	-13.050	-8.962	-4.087	30.502	35.771	-5.268
236150	2.901	0.002	...	UPL	LBCR	-13.236	-8.894	-4.343	30.247	35.771	-5.524
221515	2.739	0.010	...	UPL	LB	-12.562	-8.879	-3.683	30.755	35.539	-4.784
221507	2.212	0.029	0.005	RIV	MAP	-12.193	-7.220	-4.973	29.921	35.979	-6.058
221711	4.949	0.006	...	UPL	LBCR	-12.527	-8.064	-4.463	30.791	36.883	-6.092
221775	2.742	0.008	...	UPL	LB	-12.659	-8.879	-3.780	30.658	35.539	-4.881
222046	2.634	0.021	...	UPL	LBR	-12.257	-8.696	-3.561	30.877	35.539	-4.662
223980	2.650	0.009	...	UPL	LB	-12.623	-8.694	-3.929	30.509	35.539	-5.030
224103	2.278	0.016	...	UPL	LBR	-12.438	-7.944	-4.494	29.944	35.539	-5.595
224151	6.448	0.012	...	UPL	LB	-12.111	-7.320	-4.791	31.794	38.483	-6.689

Detection Flag, column 5, is “DET” for detections and “UPL” for upper bounds.

Rate Flag, column 6, indicates the method adopted for evaluating count-rate (or upper bound), according to the following scheme: MAP—Rev-1 Map Method; LOC—Rev-1 Local Method; ML—Maximum Likelihood Rate; LBC—Upper Limit evaluated from typical limiting sensitivity for the given exposure time and position in the field of view. An “R” added at the ends of the above codes indicates measurements taken from partially obscured cell, i.e. with the RECO different from “0000”.

conversion factor (col. [2]); count rate (or upper limit) with associated statistical error (cols. [3] and [4]); detection/upper-bound flag (col. [5]); rate flag (col. [6]) indicating the method adopted for evaluating count rate (see note at end of Table 4); logarithm of 0.16–4.0 keV X-ray flux (col. 7); logarithm of visual-band flux (col. [8]), defined as  $\log f_v = (-m_v + A_v - 13.74)/2.5$ ; logarithm of the ratio  $f_x/f_v$  (col. [9]); logarithm of X-ray luminosity (col. [10]); logarithm of bolometric luminosity (col. 11), as derived by  $M_v$  and the bolometric correction (BC) as function of spectral type and luminosity class, according to the relation  $\log L_{\text{bol}} = (4.75 - M_v - \text{BC})/2.5 + \log L_{\odot}$  with  $L_{\odot} = 3.826 \times 10^{33}$  ergs  $\text{s}^{-1}$ ; and logarithm of the ratio between X-ray and bolometric luminosity (col. [12]).

In Figure 7 we show the H-R diagram of the B stars comprising the X-ray sample; solid circles denote stars identified with X-ray detections, and broken circles, stars for which only X-ray luminosity upper bounds could be computed (circle radius is proportional to  $\log L_x$ ). To provide an insight into the range of sensitivities attainable with the given exposure times and sky distribution of IPC images, and with the angular and distance distributions of the surveyed B stars, Figure 8 provides a histogram of limiting sensitivity, expressed in terms of X-ray luminosity at the positions of survey stars. A majority of optical positions have been sampled at X-ray luminosities in excess of  $3 \times 10^{30}$  ergs  $\text{s}^{-1}$ .

In view of the SAO catalog completeness to  $m_v$  of 8.5, for each given spectral type and luminosity class (i.e., for a given  $M_v$ , but neglecting optical extinction), there is a maximum distance (for each given Galactic latitude) at which a star may be “optically detected” (viz., included at the given limiting apparent magnitude). In this context, the SAO Catalog can

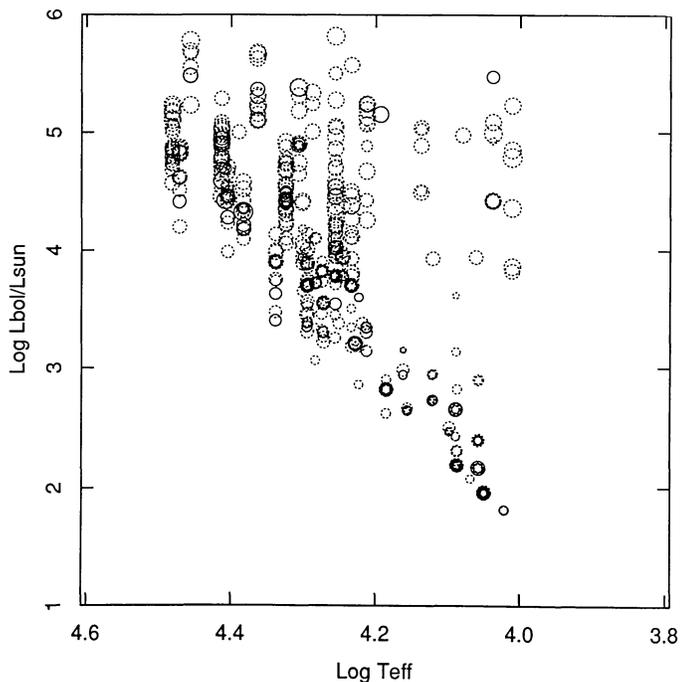


FIG. 7.—H-R diagram of the B stars in the X-ray sample. Circle size is proportional to  $\log L_x$ , with solid circles indicating detections, and dotted circles, stars for which only upper limits were determined.

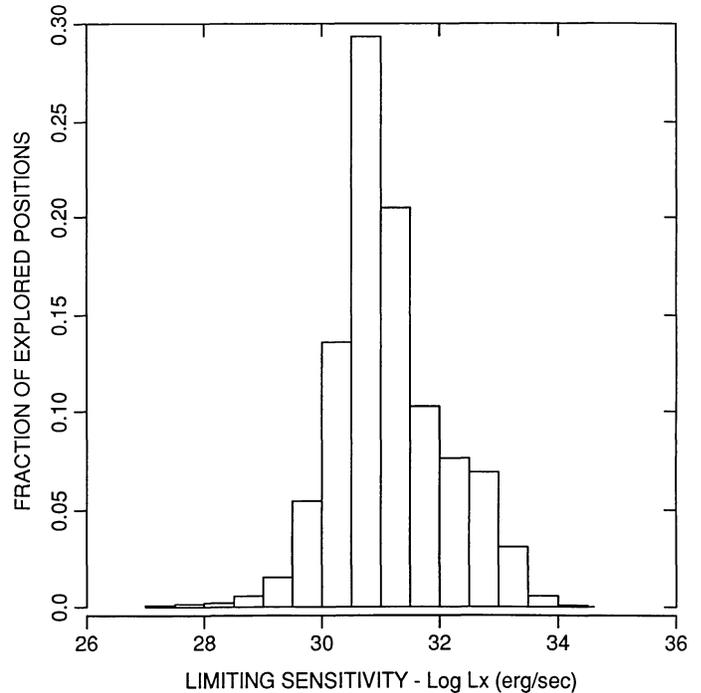


FIG. 8.—Histogram of limiting sensitivities (in terms of  $\log L_x$ ) reached in the present survey of B stars.

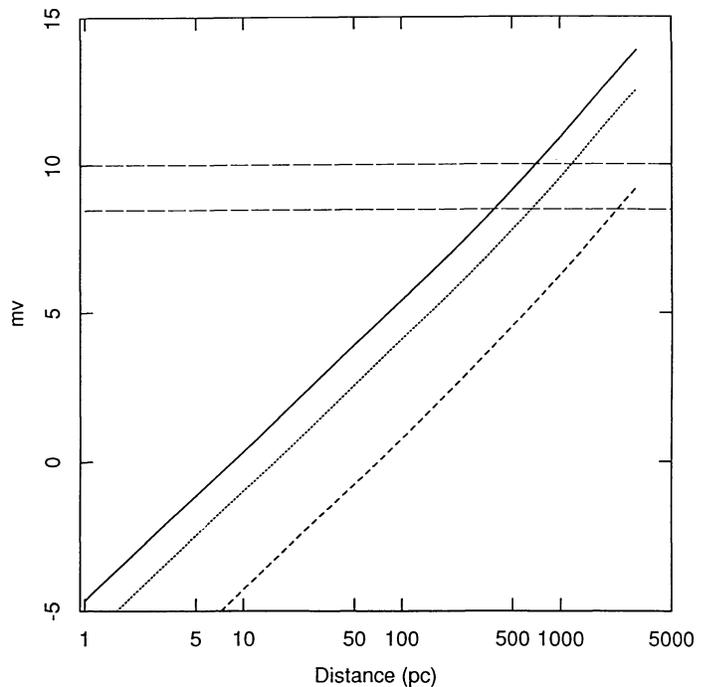


FIG. 9.—Apparent magnitude ( $m_v$ ) vs. distance for main-sequence stars having spectral types B0 (*dashed line*), B5 (*dotted line*), and B9 (*solid line*); effects of mean interstellar extinction at  $b = 5^\circ$  have been included (see text). The two horizontal lines indicate the limiting sensitivity for the SAO catalog completeness limit (mag 8.5, *lower line*) and for the faintest stars present in the SAO catalog (mag 10, *upper line*).

TABLE 5  
A. ENTIRE X-RAY SAMPLE OF B STARS WITH KNOWN DISTANCE OR  $m_v$

RECO VALUE	KNOWN DISTANCE			KNOWN $m_v$		
	Detection	Upper Limit	Total	Detection	Upper Limit	Total
RECO = 0 .....	70	842	912	71	856	927
RECO $\neq$ 0 .....	2	599	601	2	605	607
Total .....	72	1441	1513	73	1461	1534

provide “pseudo–volume-limited” samples, with distinct volumes for each spectral type/luminosity class.

For a better estimate of the maximum distance within which “optical detection” is possible for stars of a given limiting apparent magnitude (as a function of spectral type), we have derived a simple analytical expression for  $m_v$  as a function of the distance  $d$  (in parsecs) for stars of a given  $M_v$ . This relation takes into account the effects of mean interstellar optical extinction, assuming direct proportionality between optical extinction and hydrogen column density,  $N_H$ . The value of  $N_H$  is evaluated (neglecting local circumstellar absorption) integrating along the line of sight and at a given Galactic latitude,  $b$ , the spatial distribution of hydrogen particle,  $n_H(s, b)$ . As already discussed in § 2.1 this  $n_H$  distribution is based on a proper renormalization of the distribution published by Lockman (1984). Under this assumption the relation between  $m_v$ ,  $M_v$ , and distance,  $d$  is

$$m_v(\text{Sp}, \text{LC}) = M_v(\text{Sp}, \text{LC}) - 5 + 5 \log(d) + 0.45 \cdot 10^{-21} \int_0^d n_H(s, b) ds. \quad (2)$$

For luminosity class V and for a Galactic latitude equal to  $5^\circ$ , Figure 9 displays the above relation for three distinct spectral types: B0, B5, and B9, and reveals that the absorption effects introduce only a small monotonic change of slope with respect to the straight line expected in absence of absorption. The idea that the magnitude-limited SAO catalog can be used to select volume-complete samples of different limiting distances is illustrated by Figure 9. Within the limitations of the simple optical absorption model assumed, and for fixed  $M_v$ , limiting a sample in apparent visual magnitude is equivalent to limiting it in distance for a specific Galactic latitude.

We have used equation (2) to compute “magnitude 8.5” distances for all sample stars (i.e., distance assuming apparent magnitude at the catalog-completeness limit). A star falls in this “pseudo–volume-limited” subsample if its “magnitude 8.5” distance is greater than its actual stellar distance. In this way we have constructed a “pseudo–volume-limited” sample containing  $\sim 55\%$  of the surveyed B stars. In Tables 5a and 5b we summarize the number of X-ray sample stars for which we know the values of distance or  $m_v$  and distinguish stars subject to instrumental shadowing (viz., with the “RECO” value; see Appendix, and note that diminished IPC detection efficiency in the vicinity of the “window ribs” accounts for the lack of nonzero-RECO detections).

The procedure for inferring  $L_x$  necessitates assumptions of both distance and count-to-flux conversion factor, and, with

increasing distance, a resulting hydrogen-column increases will introduce a change in proper conversion factor. Hence there is a potential danger of this procedure introducing a spurious correlation between  $L_x$  and  $N_H$ . Since X-ray luminosity is a physical quantity, determined by the physical phenomena of stellar atmospheres, such a correlation is clearly intolerable, and its presence would indicate the existence of severe selection effects that could prevent the detection of soft, low-luminosity X-ray sources at high  $N_H$  values. Hence, we must require that the X-ray emission level be independent of  $N_H$  (see however, Chlebowski 1989, for a possible alternative view which invokes a peculiar mechanism that ties X-ray emission for O stars to local  $N_H$  values).

The  $L_x$  versus  $N_H$  scatter plots, shown in Figures 10a and 10b for early- and late-B stars, respectively, subject  $L_x$  to this test of independence of  $N_H$ . To interpret these plots correctly recall that the value of  $N_H$ , under the adopted model for hydrogen particle distribution in the Galaxy, increases approximately linearly (see Fig. 10) with distance, so that for a given X-ray limiting flux the limiting X-ray luminosity increase approximately as the square of  $N_H$ . Moreover the limiting apparent magnitude of the SAO catalog imposes the limiting accessible distance (as a function of spectral type and latitude) discussed earlier, and this limit distance bounds the expected maximum value of  $N_H$  (i.e., the expected maximum amount of X-ray interstellar absorption in the direction of the emitting star). The influence of this recognized selection effect can be minimized by limiting the range of accessible  $N_H$  values to  $N_H \lesssim 6 \times 10^{20} \text{ cm}^{-2}$  (distance  $\lesssim 400$  pc on the Galactic plane), in the case of late B stars, and to  $\lesssim 1.5 \times 10^{21} \text{ cm}^{-2}$  (distance  $\lesssim 1$  kpc on the Galactic plane), for early B stars. In these  $N_H$  ranges, the lack of a significant correlation has been tested by applying a linear regression analysis modified to include upper limits (see Schmitt 1985) to the  $\log L_x$  and  $\log N_H$  data points. For the early-B star subsample we have found a slope  $a = 0.19$  [0.01, 0.39], with a correlation coefficient  $r = 0.33$  [0.23, 0.68], where the errors are at  $2\sigma$  confidence level, and have been obtained using 500 bootstrap replications. The same analysis applied to the late-B star subsample results in a slope  $a = 0.42$  [0.36, 0.50], with a correlation coefficient  $r = 0.87$  [0.75, 0.94].

TABLE 5  
B. VOLUME-LIMITED X-RAY SAMPLE OF B STARS

RECO Value	Detection	Upper Limit	Total
RECO = 0 .....	63	472	535
RECO $\neq$ 0 .....	1	303	304
Total .....	64	775	839

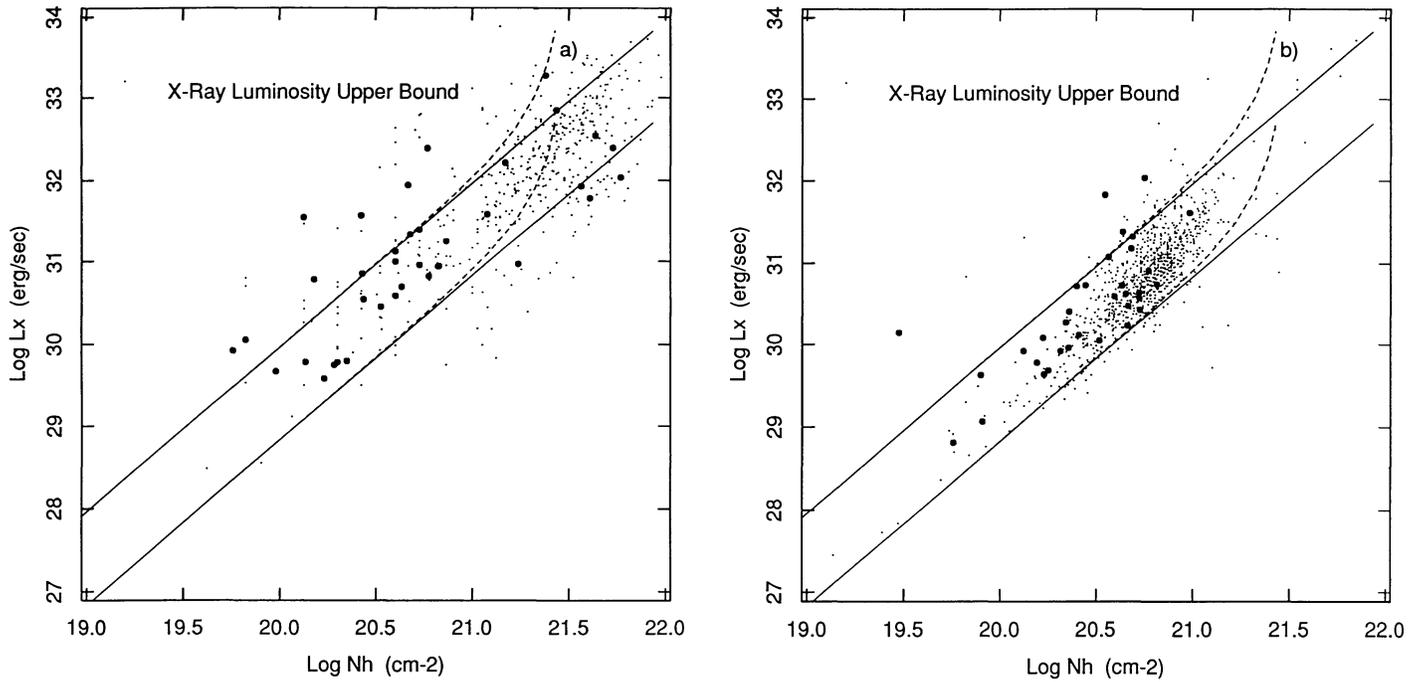


FIG. 10.— $L_x$  vs.  $N_H$  scatter plots for stars of types B0–B4 (a) and types B5–B9 (b). A small dot indicates an upper limit to the X-ray luminosity, a large dot a X-ray detection. In order to give an idea of the sensitivity bias (in term of X-ray luminosity) present in the plot, we have superimposed lines giving the expected limiting sensitivity as function of hydrogen column density,  $N_H$ , that, according to the adopted model is a function of Galactic latitude and distance. Solid lines are computed at  $b = 0^\circ$ , dashed line at  $b = 6^\circ$ ). In the upper line and lower line the X-ray limiting flux is taken equal to the 95 percentage and five percentage point of the X-ray limiting flux distribution, respectively. The region on the bottom right side of the plot has not been explored by the *Einstein* IPC observations.

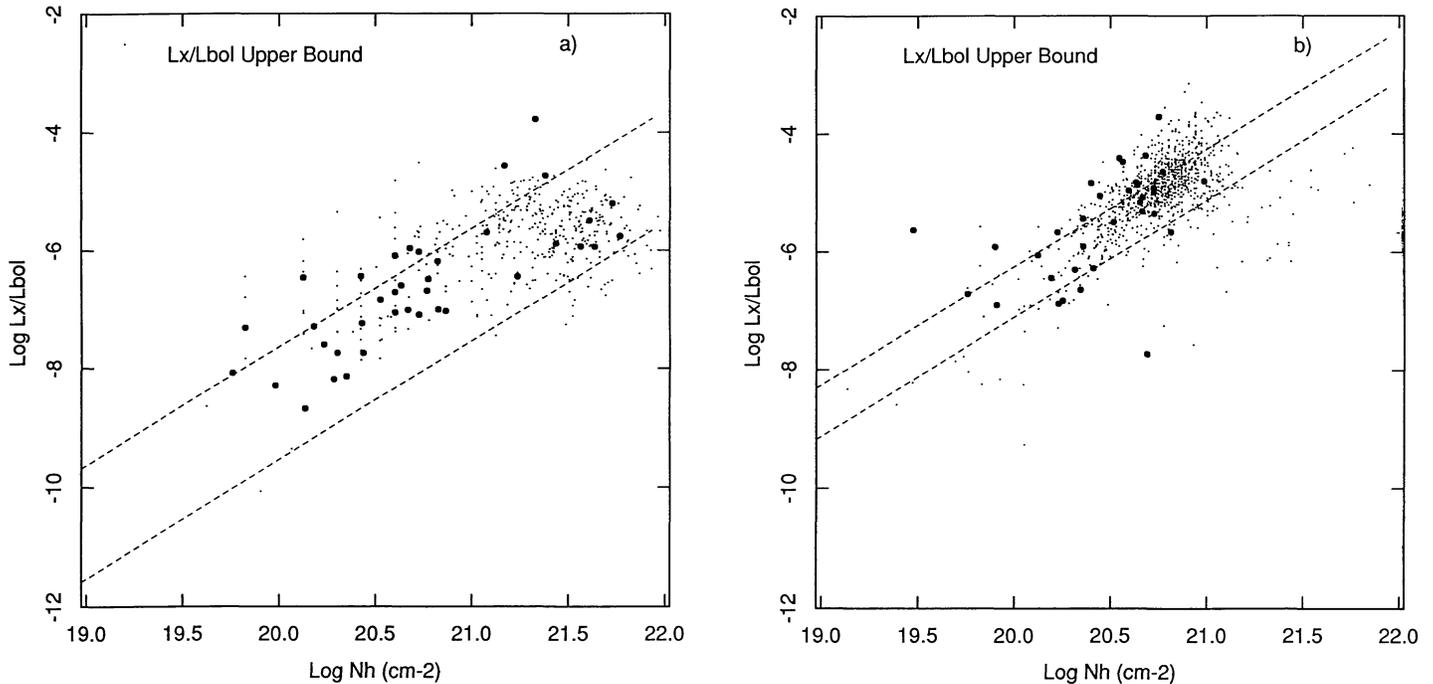


FIG. 11.— $L_x/L_{bol}$  vs.  $N_H$  scatter plots for the same spectral subtypes as presented in Fig. 10. A small dot indicates an upper limit to  $L_x/L_{bol}$ , a large dot a detection. In order to give a zeroth order estimate of the observational bias, we have superposed the expected limiting sensitivities lines for an X-ray flux equal to the median of X-ray limiting flux distribution, and a Galactic latitude,  $b = 0^\circ$ . The upper and lower lines have been evaluated for  $L_{bol}$  equal to the five percentage and 95 percentage points of the  $L_{bol}$  distributions in the two spectral type ranges considered, respectively.

Analogously, if proper absorption corrections have been applied in both the optical and X-ray bands, the luminosity ratio  $L_x/L_{\text{bol}}$  should prove independent of both distance and  $N_{\text{H}}$ . Indeed, the  $L_x/L_{\text{bol}}$  versus  $N_{\text{H}}$  scatter plots for early B and late B stars (Figs. 11a and 11b, respectively) are free of any peculiar trends, over the whole  $N_{\text{H}}$  range, as it is shown by the superimposed expected “sensitivity lines” for the mean X-ray limiting flux reached in present survey and two values of  $L_{\text{bol}}$  taken equal to the 5% point and 95% point of the  $L_{\text{bol}}$  distribution computed separately for the early and late B-type star samples shown in Figures 11a and 11b, respectively. A linear correlation analysis between  $\log L_x/L_{\text{bol}}$  and  $\log N_{\text{H}}$ , limited to the  $N_{\text{H}}$  range already discussed, results in a slope  $a = 0.29$  [0.21, 0.38] with a correlation coefficient  $r = 0.61$  [0.38, 0.82], for the early-B stars, and in a slope  $a = 0.09$  [0.00, 0.33], with a correlation coefficient  $r = 0.29$  [0.05, 0.82], for the late-B stars. Errors are at  $2\sigma$  confidence level, and have been obtained with 500 bootstrap replications.

Note that the crowding of upper limits in the region of  $N_{\text{H}} > 10^{21} \text{ cm}^{-2}$ , both for  $L_x$  and for  $L_x/L_{\text{bol}}$ , reflects the obvious consequence of detection threshold increasing with distance (i.e., with mean  $N_{\text{H}}$ ).

## 5. SUMMARY

Our catalog of X-ray fluxes (or upper bounds) contains 1545 B-type stars listed in the SAO catalog and surveyed with the *Einstein Observatory* IPC. We have found our X-ray sample to be strongly biased (by telescope-targeting procedures) toward intrinsically more luminous stars (particularly in the spectral

type range B0–B3). Stars with  $m_v > 5$  were fairly sampled: the distribution of such star in our sample is consistent with the distribution of the optical parent sample of all B stars listed in the SAO catalog.

Only 74 B-type stars were identified with X-ray detections, predominantly those in the spectral range B0–B3. We expect the number of misidentifications in this range to be significantly smaller than in later spectral types (viz., B8–B9).

We have shown that it is possible to select a “pseudo-volume-limited” sample that consists of  $\sim 55\%$  of the stars listed in our catalog and that the majority (86.5%) of the stars associated with X-ray sources belong to this subsample. We have also shown that for stars of this subsample there is no obvious dependence of X-ray luminosity, or of X-ray-to-bolometric luminosity ratio, on hydrogen column density.

While the sensitivity reached with the present survey has permitted the sampling of only a small fraction of stars at X-ray luminosities below a few times  $10^{30} \text{ ergs s}^{-1}$ , the volume limited sample is nevertheless adequate for studying the characteristics of X-ray emission from Galactic B-type stars: a detailed account of that study will be presented by Grillo et al. (1991, 1992).

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## APPENDIX COUNT-RATE CORRECTIONS

In computing count rates, the Rev-1 processing system applies various corrections for instrumental effects such as dead-time, mirror scattering, and vignetting, and detector spatial response. Once such corrections have been properly applied, off-axis observations can be treated (for many purposes) like shorter, on-axis observations. However, some of the applied corrections depend upon the intrinsic (assumed) source spectrum, and the assumptions made for the Rev-1 system were not optimized for stellar studies. Hence, for example, source hardness ratios, as inferred from detection cell rates, may appear “harder” than they really are (viz., because soft photons scatter more than hard ones, leaving the detect cell deficient in the soft band). Since X-ray spectra of late-type stars are relatively soft, the broad-band detection cell (which is optimized for harder spectra) gathers only  $\sim 50\%$  of the X-rays from many stellar sources. In the present analysis, because we have considered early-type stars which should have a rather hard X-ray spectrum, we have retained count rates as computed by the standard Rev-1 processing.

The Rev-1 system uses a Rib and Edge Code (RECO) to indicate sources potentially shadowed by the IPC entrance window (RECO=0 indicates no shadowing). In principle, partial shadowing of the detection cell reduces the number of counts collected and increases the statistical errors on estimated source rates, but in practice (primarily because of the conservatively overestimated width of the window support structure), we have seldom been able to demonstrate measurable, systematic effects on source count rates (cf. Appendix B of Micela et al. 1988). In the present analysis, we have therefore retained data for possibly obscured sources when no better data were available.

For stars observed only once, we preferentially use count rates evaluated with the Map algorithm. For the stars observed more than once, we quote a “merged” maximum likelihood (ML) count rate (Sciortino & Micela 1992) to obtain the best estimate of source rate using all available data.<sup>2</sup> This ML technique, by merging counts collected in different images, increases the statistical significance attainable. We have verified for our X-ray sample that the detection or upper limit designations derived from individual measurements are (usually) consistent with those based on the ML technique: in only a few cases did upper limits turn into detections (or vice versa) by combination of data from different images. In computing the ML rates, we retained only RECO=0 observations, whenever possible.

<sup>2</sup> The results of a variability analysis (employing the method of Sciortino & Micela 1992) show that virtually all B stars have constant X-ray emission, justifying the adoption of ML count rates as the best estimator of source rate. (Note that only RECO=0 data were considered for the variability analysis.)

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