

A MULTIFREQUENCY CATALOG OF LINERs

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RESUMEN

Presentamos el primer Catálogo de LINERs (de las siglas en inglés “Low Ionization Emission Nuclear Regions”), o galaxias con espectro nuclear de líneas en emisión de baja ionización. Aquí adoptaremos el nombre mas simple: Liners. El catálogo “MCL” (por las siglas en inglés: Multifrequency Catalog of Liners) contiene 476 objetos y contiene información de la emisión en banda ancha y monocromática desde radio hasta rayos X, colores y otros datos recopilados de la literatura y de bancos de datos, como se indica en las referencias. La mayoría de las galaxias pueden considerarse Liners “puros” con base en la clasificación de Veilleux & Osterbrock (1987), como lo sugirieron Ho, Filippenko, & Sargent (1997). Sin embargo, se incluye también un número considerable de objetos de transición Liner–H II. Una de las interrogantes no resueltas, es si los Liners deben considerarse como una clase de galaxias (como por ejemplo las galaxias Seyfert), o por el contrario, representan un grupo heterogéneo. Pensamos que el estudio de los Liners como grupo, es sumamente interesante precisamente porque representan la transición entre actividad nuclear no térmica y de brote estelar, e incluso, probablemente, la transición entre galaxias “activas” y “no activas”. Este catálogo podrá usarse como base para estudios estadísticos; aquí presentamos un análisis preliminar de las propiedades estadísticas de los Liners en el rango de radio a rayos X.

ABSTRACT

We present the first Catalog of Low Ionization Emission Line Galaxies (LINERs or Liners, which is the simplest name, and which we shall adopt in what follows). The Catalog “MCL” (Multifrequency Catalog of Liners), contains 476 entries and contains both broad-band and monochromatic emission data (ranging from radio to X-ray frequencies) of colors, and other data compiled from the literature and various data bases, as indicated in the references. Most of the galaxies can be considered “pure” Liners on the basis of the Veilleux & Osterbrock (1987) classification as suggested by Ho, Filippenko, & Sargent (1997). However, a considerable number of transition (Liners–H II or Liners–Starburst) objects are also included. One of the open questions, is whether Liners should be considered as a class of galaxies (like Seyfert galaxies for instance) or rather, as an heterogeneous group of objects. We believe the study of Liners as a group is very interesting, precisely because they very likely represent a transition between non-thermal and starburst activity, and probably also between “active” and “non- active” galaxies. This catalog may be used as a basis for statistical research. A preliminary discussion of the main statistical properties of Liners, in the range from radio to X-ray frequencies, is given here.

Key words: CATALOGS — GALAXIES: ACTIVE — GALAXIES: FUNDAMENTAL PARAMETERS — GALAXIES: NUCLEI — GALAXIES: STARBURST

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1. INTRODUCTION

Almost two decades ago, Heckman (1980) found quite a large amount of Active Galactic Nuclei

(AGN) with spectroscopic properties which depart from those of either "normal" H II regions or AGN. Their principal signature was the enhancement of the low ionization lines and, therefore, the name proposed for these new objects was: "Low Ionization Nuclear Emission Regions" (LINER galaxies or Liners). These nuclei were described as systems with optical spectra dominated by lines arising from low ionization states, with moderate emission line luminosity (comparable to Giant H II Regions), and with line widths approaching those of the Narrow Line Regions (NLR) of Seyfert galaxies. In some of them, a compact nuclear radio source was also detected. In that early work, Heckman noticed that a sequence between Liners and AGN could be drawn in which Liners occupy the low luminosity end. However, whereas AGN were broadly recognized as regions ionized by a power-law continuum (i.e., where lines result from soft X-ray ionization by the AGN, Halpern & Steiner 1983), Liners were best explained in the context of shock ionization (Fosbury et al. 1978; Dopita et al. 1996), and photoionization by post-AGB stars in the case of weak Liners in Ellipticals (Binette et al. 1994). Another problem in relating Liners to other AGN was the overabundance of Liner characteristics in early type spiral nuclei (Keel 1983a,b).

The puzzling physical nature of these objects has been pointed out by many authors. Among them, the results by Filippenko & Halpern (1984) on the Liner galaxy NGC 7213 are particularly interesting. These authors noticed that broad permitted lines were also present in the optical spectrum, which suggested the possibility that at least in some Liners the source of ionization could be a power-law continuum. On the other hand, in the work by Filippenko & Terlevich (1992) on weak OI Liners, they invoked stellar photoionization as the origin of the emission, stressing the complicated nature of Liners and opening the discussion of whether their nature has any physical meaning in terms of class of galaxies (such as Seyfert galaxies). More recent surveys at optical frequencies by Ho et al. (1997) have not solved these controversial issues. Their extensive survey of Emission Line Nuclei lead them to similar results as those in the original work by Heckman (1980). Around 20% of the nuclei of Spirals have Liner characteristic, many with broad Balmer emission lines (the so called Liner 1 using the analogy with Seyferts). The most important new result of these surveys is that Liners constitute not a class, but rather a variety of objects ranging from Liners with properties similar to Seyfert galaxies, to ("transition") Liners with properties more similar to H II regions.

Normally, we would expect that information coming from all spectral ranges could help to disentangle and perhaps taxonomize the Liner family. But new data at different wavelengths have provoked even more discussion. The study at UV frequencies by

Maoz et al. (1998), has shown that the UV spectrum is more consistent with Starburst than with a non-thermal nature. Moreover, the lack of detection of UV sources in most of the Liners searched for by Barth et al. (1998) cast further doubt about the AGN nature of most Liners. However, different possibilities have been explored to reconcile these results with the view of Liners as quiescent AGN (see *The Physics of LINERS in View of Recent Observations*, 1996). Eracleous, Livio, & Binette (1995) have developed a very suggestive hypothesis to explain the lack of a compact UV source as a consequence of a duty cycle variability in the UV source, which is only switched on 20% of the time. Other more conservative explanation developed by Binette, Wilson, & Storchi-Bergmann (1996), has been to understand the Liner optical spectrum as a result of soft X-ray ionization from an AGN. In both cases, the UV spectrum cannot be fully explained.

We want to emphasize that most of the work on Liners has been concentrated in optical selected samples, and the results from FIR selected samples have been overlooked. The work by Kim et al. (1995) and Veilleux et al. (1995) on Luminous FIR galaxies and more recently by Kim, Veilleux, & Sanders (1998) and Kim & Sanders (1998), allows us to draw some important conclusions from both set of data. In particular, the reported evidence that the IR source of energy in Liner-like spectra (38% of the ULIGs) is of stellar origin rather than AGNs.

The above considerations motivated us to compile a multifrequency catalog of Liners selected from different sources in the literature. The main purpose of this catalog is to construct a large sample of Liners, as unbiased as possible, and to provide a basis for multifrequency statistical analysis. In the next section, it will be shown that this catalog does not unduly favor optical selected samples as it includes all the objects classified as Liners in the current literature.

2. THE CATALOG

The Multifrequency Catalog of liners (MCL), includes all objects from the various Liner samples known at the time of writing (1998), plus various objects compiled from the literature. It contains objects extracted from the main AGN catalogs: Lipovetsky, Netzvestny, & Neizvestnaya (1987) (LNN), Veron & Veron-Cetty, 6th & 7th editions, (VCV y VCV7), Huchra (1995) (HUC), as well as NASA extragalactic data base (NED), and lists that have appeared in various recent papers such as: Ho et al. (Ho93, Ho97), Kim et al. (K95), Veilleux et al. (VK95), and Wu et al. (Wu98). The MCL is presented in Tables 1 through 6, and was constructed following the style of the Catalog of the Second Byurakan Survey Seyfert Galaxies by LNN. We describe next the content of each table.

Table 1 contains the list of Liners including: IAU name (column 1); alternative name (2); 1950 right ascension and declination (3 and 4); properties of host galaxy such as: redshift (5); B magnitude (whenever more than one determination was found, we chose the one for the large major axis) in 6; $Ext(B)$ in 7; Hubble type (8); references to: Liner identification (9); redshift determination (10); and finally references to B & $Ext(B)$ in column 11. Tables 2 through 6, contain data at various frequencies and bands from radio to X-rays, and are described below.

Table 2 contains *IRAS* and radio data. In all tables, the IAU name is in column (1); data are ordered as follows: *IRAS* fluxes in Jys for 12, 25, 60, and 100 μm , respectively, are in cols. (2) through (5); FIR flux in $\text{erg s}^{-1} \text{cm}^{-2}$ in (6); fluxes at 6 cm and 11 cm in Jys are in (7) and (8); fluxes at 21 cm (HI) in $\text{erg s}^{-1} \text{cm}^{-2}$ in (9), and references to radio data are in (10). *IRAS* data comes from the *IRAS* Point Source Catalog and were taken from Kim et al. (1995), Ho et al. (1997), and NED.

Table 3 includes photometric properties of the underlying galaxy ordered as follows: dereddened V magnitude (2); dereddened optical colors ($U - B$), ($B - V$), and ($V - R$) in cols. (3) through (5); references to optical magnitudes and colors are in (6); infrared magnitudes and colors J , ($J - H$), ($H - K$), and L are in (7) through (10). All references to IR data are from NED and in a few cases from Duc, Mirabel, & Maza (1997).

Table 4 contains optical spectroscopic data ordered as follows, dereddened line ratios: $[\text{O III}] 5007/\text{H}\beta$, $[\text{O I}] 6003/\text{H}\alpha$, $[\text{N II}] 6583/\text{H}\alpha$, and $[\text{S II}] 6716+6731/\text{H}\alpha$ in cols. (2) through (5), and references (6). In (1) the following marks have been used: B for Liners with broad $\text{H}\alpha$ emission (Ho et al. 1997); H II and Sy for galaxies that we found to be probably misclassified on the basis of the diagnostic diagrams shown in Figure 5 (this objects do not lie within the Liner region in all three diagrams simultaneously), and that are probably Starburst (H II) or Seyfert 2 galaxies, respectively or both. The listed ratios were dereddened using Miller & Mathews (1972) parameterization for the dereddening curve given by Whitford (1958).

Table 5 contains IR spectroscopic data ordered as follows: $[\text{Fe II}] 1.2567 \mu\text{m}$ (2); $\text{Pa}\beta 1.2818 \mu\text{m}$ (3); $\text{Pa}\alpha 1.875 \mu\text{m}$ (4); $\text{Br}\delta 1.945 \mu\text{m}$ (5); $\text{Br}\gamma 2.1655 \mu\text{m}$ (6); $\text{H}_2 1.835 \mu\text{m}$ (7); $\text{H}_2+[\text{Si VI}] 1.958$ and $1.962 \mu\text{m}$ (8); $\text{H}_2 2.033$ and $2.1218 \mu\text{m}$ in (9) and (10) respectively, and references in (11).

Table 6 contains UV and X-ray data in the following order: short and long wavelength UV fluxes (2) and (3), from the SW (1150–2000 $\text{\AA}$) and LW (1850–3300 $\text{\AA}$) cameras on board of *IUE*. Data were obtained following the access guide to ULDA (Ultraviolet Low-Dispersion Archive) No. 4, and also from NED. The entries are in units of $10^{14} \text{ ergs cm}^{-2} \text{ s}^{-1}$

$\text{\AA}^{-1}$. X-ray fluxes are in $10^{-13} \text{ ergs cm}^{-2} \text{ s}^{-1}$ (4) with references in (5).

3. PRELIMINARY COMMENTS

We present some histograms and plots, which give us a first insight into the global properties of the compiled Liner sample. A detailed statistical analysis of these properties will be presented in a forthcoming paper.

In Figure 1, the z distribution is shown in which one can see that most Liners cluster around $z = 0.006$. The most distant confirmed Liner is at $z = 0.39$, and only 2 sources have $z > 0.2$. It is expected that IR selected Liners will increase the population at higher redshifts (i.e., Wu et al. 1998, see also the redshift distribution of the 1 Jy sample, reported by Kim & Sanders 1998). The M_B and Hubble type histograms are shown in Figures 2 and 3. It has to be noticed that the host galaxies of Liners (“pures” + “transitions”) are mostly normal spirals with a median M_B value of -20.7 . Ho (1996), found a median $M_B = -20.2$ for “pure” Liners. Liner type spectra do not appear very often in dwarf systems. The morphological distribution point out that Liners are preferentially in early type galaxies. The later Hubble types hosting Liner nuclei are mostly related to perturbed systems as judged from the Digitized Sky Survey (DSS).

Two color (optical and near IR) diagrams are shown in Figure 4, upon which the locus of normal galaxies has been overlaid. While the optical colors do not show strong departures from those of normal galaxies, the near-IR show a strong scatter of $H - K$ colors, larger than 0.4. From the galaxies producing the large scatter that we were able to identify (19), 8 come from the ULIRG class (Duc, Mirabel, & Maza 1997), 2 are strong radio galaxies, in four of them an apparent distortion in the morphology is visible in the DSS. Therefore, the large spread in Figure 4b can be attributed to peculiar colors produced by a merging process.

Diagnostic Diagrams (following Veilleux & Osterbrock 1987) to separate misclassified Liners are presented in Figure 5. Squares denote the values for line ratios of Liners. We also show the regions (loci) corresponding to the ratios of nuclear spectra of Seyfert 2 galaxies or to H II and blue compact galaxies (and/or spectra of giant H II regions in galaxies). We can see that several objects do not lie within the Liner region in all three diagrams simultaneously, but this should not be surprising if we take into account that we have included all the so called “transition” objects (circles) from Ho et al. 1997. Still, there are objects which lie out of the liners loci in all three diagrams, and thus, on the basis of the ratios $[\text{O II}] \lambda 3727/[\text{O III}] \lambda 5007$, $[\text{O I}] \lambda 6300/[\text{O III}] \lambda 5007$, and $[\text{N II}] \lambda 6583/\text{H}\alpha$, they should be classified rather as Seyfert 2 galaxies (16 objects) and H II galaxies (6 objects).

TABLE 1
GENERAL LIST OF LINERS

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
0000+1552	NGC7814	0 00 40.9	15 52 01	0.003502	11.56	0.10	SAB(s)ab,sp	Ho97	NED	NED
0004+0804W	NGC7837	0 04 17.4	08 04 23	0.036910	14.5	0.31	S	KK85	KK85	KK85
0004+0804E	NGC7838	0 04 19.7	08 04 18	0.035870	14.0	0.31	S	KK85	KK85	KK85
0017-5132	ESO194-G004	0 17 12.6	-51 32 40	0.021969	14.48	...	(R')SB(s)a	957	957	...
0018+3747B ^b	MCG+06-01-029	0 18 53.0	37 47 59	0.034685	15.0	0.27	...	Wu98	Wu98	NED
0018+3748A ^b	ARK008	0 18 55.7	37 48 57	0.036385	15.3	0.27	...	Wu98	NED	NED
0023-0341	MRK0945	0 23 21.5	-03 41 51	0.014780	15.0	0.13	S0	443	888	832
0023+1652C	ZwCl0023+169C	0 23 54.7	16 52 21	0.397600	21.36	0.14	Sd	171	171	171
0024+1652	ZwCl0023+169	0 24 03.3	16 52 54	0.399000	21.30	0.14	Scd	171	171	171
0026+3016A	MRK0551A	0 26 46.7	30 16 53	0.050000	...	0.18	PairG	Wu98	NED	NED
0026+3016B ^b	MRK0551B	0 26 46.7	30 16 53	0.050000	...	0.18	PairG	Wu98	NED	NED
0040+4059	NGC0224(M31)	0 40 00.1	40 59 43	-0.001001	4.36	0.10	SA(s)b	NED	NED	NED
0045-2533	NGC0253	0 45 05.7	-25 33 40	0.000817	8.04	0.05	SAB(s)c	648	634	634
0047+3200	NGC0266	0 47 05.5	32 00 18	0.015547	12.54	0.22	SB(rs)ab	Ho97	NED	NED
0052+2858	UGC00556	0 52 08.0	28 58 31	0.015441	15.12	0.17	S?	VK95	NED	NED
0052-3218	ESO411-G029	0 52 30.4	-32 18 09	0.032046	14.9	...	S,pec;sp	957	957	895
0053-1432	MRK1149	0 53 42.7	-14 32 45	0.021141	16.0	0.01	SB	443	746	832
0055+3004	NGC0315	0 55 05.6	30 04 57	0.016465	12.2	0.26	E	Ho93	NED	NED
0056-3523	NGC0334	0 56 27.8	-35 23 05	0.030721	14.6	...	(R')SB(s)b;p	957	957	895
0105+2147	IRAS0105+2147	1 05 22.0	21 47 57	0.055000	16.76	0.18	pec	VCV7	VCV7	...
0106+3527	NGC0404	1 06 39.2	35 27 05	-0.000160	11.21	0.22	SA(s)0	924	634	924
0108+3253	NGC0410	1 08 12.1	32 53 12	0.017666	12.52	0.19	E+	NED	NED	NED
0110+0043	NGC0428	1 10 21.5	00 43 01	0.003876	11.91	0.03	SAB(s)m	Ho97	NED	NED
0116+1211A	MRK984A	1 16 45.5	12 11 04	0.047583	14.74	0.09	Sdm	VCV	VCV	RC3f
0117+1405 ^b	CGCG436-030	1 17 23.4	14 05 59	0.031228	14.9	0.07	...	Wu98	NED	NED
0117+0309	NGC0474	1 17 31.7	03 09 17	0.007912	12.37	0.05	(R')SAB(s)0	Ho97	NED	NED
0119+0459 ^a	NGC0488	1 19 11.0	04 59 44	0.007579	11.15	0.09	SA(r)b	Ho97	NED	NED
0121+3154	UGC0959	1 21 56.4	31 54 20	0.035131	14.41	0.18	Sa	673	737	417
0121+0128 ^a	NGC0521	1 21 59.4	01 28 15	0.016812	12.55	0.08	SB(r)bc	Ho97	NED	NED
0122+0916 ^a	NGC0524	1 22 10.1	09 16 45	0.008076	11.3	0.13	SA(rs)0+	Ho97	NED	NED
0125-5836	ESO113-G048	1 25 14.4	-58 36 55	0.046659	15.04	0.00	SA(nr)bc	39	267	37
0129+1719	UGC01093	1 29 07.2	17 19 08	0.026395	14.4	0.14	...	VCV7	VCV7	...
0130-0734	NGC0600	1 30 35.0	-07 34 04	0.006144	12.92	0.09	(R')SB(rs)d	HUC	NED	RC3
0132+3447	MRK1158	1 32 07.1	34 47 02	0.015294	15.03	0.16	Compact	VCV	VCV	HUC
0132+2138 ^b	CGCG481-011	1 32 26.2	21 38 44	0.047243	15.3	0.22	Sb	Wu98	NED	NED
0132-3644	NGC0619	1 32 37.7	-36 44 40	0.028393	14.30	...	(R'1)SAB(rs)b	957	957	895
0136-1042	IRAS0136-1042	1 36 24.3	-10 42 24	0.048433	...	0.01	...	VCV7	VCV7	...
0140+1323	NGC0660	1 40 21.1	13 23 25	0.002835	12.02	0.14	SB(s)a,pec	VCV7	VCV7	RC3
0141+1650S	IIIZW35S	1 41 47.7	16 50 58	0.028153	16.6	0.14	...	VK95	NED	NED
0144+2704 ^a	IC1727	1 44 41.6	27 04 55	0.001127	12.07	0.25	SB(s)m	Ho97	NED	NED
0150+0357	NGC0718	1 50 36.5	03 57 03	0.005781	12.59	0.07	SAB(s)a	Ho97	NED	NED

0201+1430B	IO196	2 01 07.4	14 30 00	0.011788	13.65	0.14	SBb:	KK85	NED	NED
0206-1022B	ARP318B(N0833)	2 06 53.5	-10 22 10	0.012889	13.69	0.00	(R')Sap;pec	KK85	NED	NED
0206-1022A ^c	ARP318A(N0835)	2 06 57.3	-10 22 20	0.013586	12.91	0.00	SAB(r)ab;pec	KK85	NED	NED
0206-4931	ESO197-IG025	2 06 59.3	-49 31 30	0.065539	17.25	...	...	VCV7	313	...
0208+3715	NGC0841	2 08 16.0	37 15 43	0.015144	13.42	0.15	(R')SAB(s)ab	Ho97	NED	NED
0218+3908A	ARP273A	2 18 23.7	39 08 50	0.025227	13.42	0.18	SA(s)b;pec	KK85	NED	NED
0220+3158A ^b	MRK1034A	2 20 23.5	31 58 07	0.033830	...	0.25	GPair	Wu98	NED	NED
0225+1922	NGC0935	2 25 23.0	19 22 35	0.013816	13.63	0.34	Scd:	KK85	NED	NED
0233+3845	IC0239	2 33 20.4	38 45 10	0.003012	11.80	0.23	SAB(rs)cd	Ho97	NED	NED
0238-0828	NGC1052	2 38 37.3	-08 28 09	0.004903	11.41	0.06	E4	209	RC36	...
0239+0013 ^a	NGC1055	2 39 11.2	00 13 44	0.003322	11.40	0.07	SBb;sp	Ho97	NED	NED
0240-3032	ESO416-G009	2 40 15.9	-30 32 00	0.021702	14.16	...	S0?;pec	957	895	...
0243+1253	UGO2238	2 43 33.5	12 53 11	0.021468	14.61	0.32	IM?	NED	NED	NED
0243+2122	IRAS0243+2122	2 43 48.0	21 22 38	0.023306	16.0	0.48	...	VK95	NED	NED
0248+4302	AN0248+43A	2 48 19.4	43 02 53	0.051300	16.52	0.52	Gpair	VCV	VCV	...
0257+4441 ^a	NGC1161	2 57 53.6	44 41 59	0.006518	12.05	0.81	S0	Ho97	NED	NED
0258+3500	NGC1167	2 58 35.4	35 00 33	0.016495	13.38	0.51	SAO	288	634	...
0300+4611	NGC1169	3 00 11.0	46 11 24	0.007962	12.2	0.97	SAB(r)b	Ho97	NED	NED
0302-1232	NGC1204	3 02 17.3	-12 32 04	0.014977	15.0	0.17	S0/a	VK95	NED	NED
0302-7253	IRAS0302-729	3 02 40.5	-72 53 58	0.043100	14.8	0.08	...	dGK92	NED	NED
0308-0906A	NGC1241	3 08 48.8	-09 06 37	0.013515	11.99	0.22	SB(rs)b	KK85	NED	NED
0312-3053	IC1904	3 12 56.9	-30 53 33	0.015487	14.37	0.00	(R'.1)SB(rs)b	957	895	...
0313-0236	NGC1266	3 13 29.3	-02 36 40	0.007318	13.93	0.20	(R?)SB(rs)0;p	VK95	NED	NED
0314-2302	ESO481-G017	3 14 51.9	-23 02 52	0.012942	13.17	0.00	SAB(r)ab	957	895	...
0318-1853	NGC1301	3 18 19.0	-18 53 42	0.013172	14.10	0.10	SB(rs)b?	957	895	...
0320-0806 ^d	IRASF0320-0806	3 20 57.1	-08 06 53	0.167000	...	0.17	...	VS97	NED	...
0322-3638	NGC1326	3 22 01.0	-36 38 24	0.004537	11.41	0.00	(R.1)SB(rl)0/a	957	895	...
0323-4925	ESO200-G016	3 23 29.1	-49 25 54	0.037803	15.25	0.00	SB0?	189	122	122
0325+1606	IRASF0325+1606	3 25 00.6	16 06 37	0.129000	...	0.43	...	VS97	NED	...
0335+0948	[SOM92]	3 35 57.3	09 48 27	0.034584	16.0	1.02	cD	HUC	288	567
0352+0028	IRASF0352+0028	3 52 07.8	00 28 20	0.151910	18.0	0.58	...	VS97	NED	NED
0354-1855	ESO549-G040	3 54 56.1	-18 55 16	0.025131	14.20	0.02	Sb-c	957	895	...
0401-4332	NGC1510	4 01 53.9	-43 32 14	0.003045	13.47	0.00	SA0;pec?	646	162	356
0402-8112	ESO015-G005	4 02 09.0	-81 12 06	0.016074	13.36	0.32	(R'.2)SB(rs)bc	957	895	...
0402+6940 ^a	IC0356	4 02 34.5	69 40 46	0.002985	11.39	1.11	SA(s)ab;pec	Ho97	NED	NED
0419-1855N	ESO550-IG025N	4 19 06.9	-18 55 42	0.032422	15.24	0.10	...	VK95	NED	NED
0419-1855S	ESO550-IG025S	4 19 07.0	-18 55 59	0.031989	16.89	0.10	...	VK95	NED	NED
0425-0440	IRAS0425-0440	4 25 57.2	-04 40 24	0.015500	14.6	0.06	E/S0	920	946	946
0428-0944	IRAS0428-0944	4 28 10.0	-09 44 11	0.046900	15.4	0.18	...	920	946	946
0428-5355	IRAS0428-5355	4 28 10.0	-53 55 29	0.042616	14.0	0.00	E	155	606	653
0438-6619	FAIRALL0304	4 38 28.0	-66 19 48	0.048867	...	0.08	(R')SAB(s)b	189	189	...
0445-1741	ESO552-G004	4 45 17.1	-17 41 05	0.030044	14.58	0.07	SA(rl)0	957	895	...
0446-2349	ESO485-G016	4 46 50.3	-23 49 01	0.027115	15.25	0.02	SAB(rs)ab:	957	895	...
0457-1732	ESO552-G045	4 57 46.0	-17 32 00	0.021882	14.30	0.18	(R)SB(rl)a	957	895	...
0503-2839	ESO422-G028	5 03 50.9	-28 39 18	0.038100	14.58	0.00	S0?	VCV	RC3f	...
0504-4939	ESO203-G019	5 04 16.6	-49 39 49	0.014640	14.04	0.00	SAB(rl)0	189	189	...
0505-3734	NGC1808	5 05 58.6	-37 34 37	0.003336	10.76	0.06	(R'.1)SAB(s);b	447	645	634
0509-2218	ESO553-G018	5 09 16.0	-22 18 24	0.033063	14.60	0.03	S?	957	895	...
0518-1017	IRAS0518-1017	5 18 44.7	-10 17 41	0.028266	16.27	0.45	...	VK95	NED	NED

TABLE 1 (CONTINUED)

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
0536+6921	NGC1961	5 36 33.9	69 21 16	0.013122	11.73	0.39	SAB(rs)c	VCV7	VCV7	RC3
0603-7102W	IRAS060-7102W	6 03 34.6	-71 02 58	0.079465	15.6	0.41	...	DM97	NED	NED
0603-7102E	IRAS060-7102E	6 03 34.6	-71 02 58	0.079465	...	0.41	...	DM97	...	...
0626-6319	FAIRALL0251	6 26 32.0	-63 19 30	0.039294	...	0.17	Sy?	188	188	66
0636-3250	ESO366-G002	6 36 06.0	-32 50 06	0.037259	15.62	0.36	S(r):	NED	NED	HUC
0715-5715	ESO162-G017	7 14 59.0	-57 15 12	0.003653	13.65	0.46	Sb?;pec;sp	354	354	356
0718+8016	NGC2336	7 18 26.7	80 16 37	0.007352	11.05	0.12	SAB(r)bc	Ho97	NED	NED
0722-0933	NGC2377	7 22 33.6	-09 33 39	0.008196	13.54	...	SA(s)c:	HUC	100	606
0803+0744B	MRK1211B	8 03 04.3	07 44 05	0.053200	...	0.09	Gpair	VCV7	VCV7	...
0811+4912 ^a	NGC2541	8 11 01.8	49 12 51	0.001855	12.26	0.17	SA(s)cd	Ho97	NED	NED
0840+5023	NGC2639	8 40 03.0	50 23 11	0.011128	12.56	0.10	(R)SA(r)a:?	VCV7	VCV7	HUC
0848+7340 ^e	IC0520	8 48 22.0	73 40 50	0.011768	12.55	0.06	SAB(rs)ab?	Ho97	NED	NED
0849+7824	NGC2655	8 49 08.3	78 24 48	0.004683	10.96	0.03	SAB(s)0/a	HUC	VCV	HUC
0849+3336	NGC2683	8 49 35.2	33 36 34	0.001368	10.64	0.07	SA(rs)b	Ho97	NED	NED
0849+5130	NGC2681	8 49 58.0	51 30 14	0.002308	11.09	0.09	(R')SAB(rs)0/a	924	634	924
0850+3520A	ARP195A	8 50 42.0	35 20 00	0.056836	15.8	0.05	SB(s)b	KK85	NED	NED
0851+5855	NGC2685	8 51 41.2	58 55 30	0.002945	12.12	0.15	(R)SB0+;pec	924	634	924
0857+3915	IRAS0857+3915	8 57 12.9	39 15 39	0.058207	...	0.03	...	VK95	NED	NED
0903+0503	IRASF09039+050	9 03 55.6	05 03 34	0.125000	...	0.10	...	VS97	NED	...
0906-1248N	IRAS0906-1248N	9 06 11.8	-12 48 50	0.073628	15.8	0.16	...	DM97	NED	NED
0907+6014	NGC2768	9 07 45.2	60 14 40	0.004620	10.84	0.16	S0	924	634	924
0911-1007E	IRAS0911-1007E	9 11 10.7	-10 07 03	...	15.7	0.17	...	DM97	...	NED
0911+0334	IRASF0911+0334	9 11 38.4	03 34 22	0.146000	...	0.10	...	VS97	NED	...
0912-6034	ESO126-G002	9 12 16.1	-60 34 56	0.009533	13.58	...	(R' 2)SB(rs)ab	637	188	...
0912+4432A ^b	UGC04881A	9 12 38.5	44 32 28	0.039327	14.9	0.00	S	Wu98	NED	NED
0914+6924	NGC2787	9 14 49.7	69 24 50	0.002322	11.82	0.16	SB(r)0+	924	634	924
0915-1153	3C218(Hydra A)	9 15 41.2	-11 53 05	0.053841	13.9	0.18	(R')SA0-;	H/VC	VCV	HUC
0916+3357	NGC2832	9 16 44.0	33 57 42	0.022913	12.87	0.00	E+2;cD	Ho97	NED	NED
0918+5111	NGC2841	9 18 35.8	51 11 24	0.002128	10.09	0.00	SA(r)b:	924	634	634
0925+3124	IRAS0925+3124	9 25 17.6	31 24 03	0.079755	...	0.00	...	VK95	NED	...
0927+4918	Zw238.066	9 27 45.8	49 18 01	0.034157	15.3	0.01	...	VK95	NED	NED
0931+1022	NGC2911	9 31 05.1	10 22 30	0.010617	12.5	0.08	SA(s)0;pec	924	634	895
0931+2734	MCG-05-23-016	9 31 11.8	27 34 22	0.044200	16.0	0.00	...	VCV7	443	443
0932+6134	UGC05101	9 32 04.8	61 34 37	0.039390	15.2	0.10	S?	Wu98	NED	NED
0936-3338	ESO373-G013	9 36 12.7	-33 38 14	0.009006	...	0.74	S0/a?; sp	853	...	853
0936-0437C	ARP321C	9 36 22.7	-04 37 59	0.022983	13.77	0.12	Sbc	KK85	NED	NED
0938+0348	MRK1419	9 38 00.3	03 48 17	0.016451	13.29	0.06	Sa?	VCV7	VCV7	RC3f
0945+7230	NGC2985	9 45 52.6	72 30 45	0.004410	11.18	0.06	(R')SA(rs)ab	924	634	634
0951+3443 ^e	NGC2859	9 51 15.5	34 43 44	0.005627	11.83	0.00	(R)SB(r)0+	Ho97	NED	NED
0951+6918	NGC3031(M81)	9 51 27.3	69 18 08	-0.000113	7.89	0.14	SA(s)ab	HUC	574	634
0958+5555	NGC3079	9 58 35.0	55 55 15	0.003753	11.54	0.00	SB(s)c	924	634	634
0959+6858	NGC3077	9 59 19.9	68 58 30	0.000047	10.61	0.21	I0;pec	158	101	634
1003+3508	3C236	10 03 05.4	35 08 48	0.100500	15.97	0.02	Radio galaxy	VCV7	VCV7	...

1004-2941	NGC3125	10 04 18.2	-29 41 29	0.002885	13.50	0.25	S	464	464	257
1005-3343	IRAS1005-3343	10 05 46.6	-33 43 22	0.033557	15.80	0.43	S0	VCV	VCV	...
1007-6647	IC2554	10 07 30.2	-66 47 02	0.004917	12.51	...	SB(s)bc;pec:	354	354	526
1011+0340	NGC3166	10 11 09.3	03 40 25	0.004486	11.32	0.01	SAB(rs)0/a	Ho97	NED	NED
1011+0342	NGC3169	10 11 39.4	03 42 52	0.004113	11.08	0.04	SA(s)a;pec	924	634	634
1014+2156	NGC3185	10 14 53.3	21 56 19	0.004063	12.99	0.09	(R)SB(r)a	HUC	634	634
1015+2204	NGC3189	10 15 20.6	22 04 55	0.004313	12.12	0.09	SA(s)a;pec;sp	Ho97	NED	NED
1015+2208	NGC3193	10 15 39.5	22 08 37	0.004667	11.83	0.08	E2	Ho97	NED	NED
1020+5235	UGC05613	10 20 22.1	52 35 47	0.032179	15.08	0.00	Sdm	Wu98	NED	NED
1020+2009	NGC3226	10 20 43.1	20 09 06	0.003839	12.3	0.02	E2;pec	VCV7	514	634
1022-2317	ESO500-G034	10 22 09.6	-23 17 57	0.012215	14.41	0.26	(R,1)SB(s)0/a	VCV	VCV	RC3f
1024+2845 ^a	NGC3245	10 24 30.1	28 45 45	0.004530	11.7	0.05	SA(r)0	Ho97	NED	NED
1034+2208	NGC3301	10 34 12.1	22 08 33	0.004406	12.31	0.01	(R')SB(rs)0/a	Ho97	NED	NED
1034+1823	NGC3303A	10 34 17.9	18 23 48	0.019907	14.5	0.03	Sb	VCV7	VCV7	...
1034-2718	NGC3312	10 34 41.3	-27 18 19	0.009570	12.68	...	Sab(r)p	931	931	634
1043+1400	NGC3367	10 43 55.4	14 00 58	0.010130	12.05	0.05	SB(rs)c	931	931	631
1044+1205	NGC3368(M96)	10 44 07.3	12 05 07	0.002992	10.11	0.05	SAB(rs)ab	924	634	634
1045+1250	NGC3379(M105)	10 45 11.0	12 50 48	0.003069	10.24	0.05	E1	Ho97	NED	NED
1045-7209	FAIRALL0285	10 46 14.0	-72 09 54	0.024931	16.20	0.55	SB(r)0	188	648	...
1048+2814	NGC3414	10 48 31.8	28 14 24	0.004717	11.96	0.00	S0;pec	Ho97	NED	NED
1049+1024	NGC3433	10 49 26.1	10 24 56	0.009073	12.29	0.04	SA(s)c	Ho97	NED	NED
1056+2448 ^b	IRAS1056+2448	10 56 36.2	24 48 40	0.043100	15.7	0.00	...	Wu98	NED	NED
1057+1410 ^a	NGC3489	10 57 40.0	14 10 15	0.002362	11.12	0.02	SAB(rs)0+	Ho97	NED	NED
1100+1824	NGC3507	11 00 46.3	18 24 25	0.003266	11.73	0.00	SB(s)b	Ho97	NED	NED
1103+0014	NGC3521	11 03 15.5	00 14 11	0.002685	9.83	0.06	SAB(rs)bc	NED	NED	NED
1108+2858	UGC06224	11 08 31.3	28 58 32	0.028540	...	0.00	Gpair	HUC	VCV7	...
1109-0238	IRAS1109-0238	11 09 30.3	-02 38 04	0.106554	17.45	0.13	Merger	DM97	NED	NED
1114+1819	NGC3607	11 14 16.1	18 19 35	0.003119	10.82	0.00	SA(s)0	Ho97	NED	NED
1114+1825	NGC3608	11 14 20.7	18 25 20	0.003696	11.7	0.00	E2	Ho97	NED	NED
1116+1322	NGC3623(M65)	11 16 18.6	13 22 00	0.002692	10.25	0.02	SAB(rs)a	924	634	634
1116-2909	ESO438-G020	11 16 27.0	-29 09 06	0.030424	14.75	0.36	S?	957	957	895
1117+1837	NGC3626	11 17 25.9	18 37 56	0.004980	11.78	0.00	(R)SA(rs)0+	Ho97	NED	NED
1117+1315 ^a	NGC3627(M66)	11 17 38.5	13 15 56	0.002425	9.65	0.01	SAB(s)b	Ho97	NED	NED
1117+1351	NGC3628	11 17 40.3	13 51 46	0.002812	14.8	0.02	Sb;pec;sp	Ho97	NED	NED
1119+5921	NGC3642	11 19 25.6	59 21 01	0.005297	11.65	0.00	SA(r)bc:	924	634	634
1123+1457A ^b	UGC2810A	11 23 08.6	14 57 07	0.034167	14.9	0.05	SB?	Wu98	NED	NED
1123+1456B ^b	UGC2810B	11 23 13.0	14 56 37	0.034157	15.4	0.05	...	Wu98	NED	NED
1123+4351 ^a	NGC3675	11 23 24.4	43 51 28	0.002558	11.0	0.00	SA(s)b	Ho97	NED	NED
1123+1708 ^a	NGC3681	11 23 52.6	17 08 22	0.004133	11.9	0.01	SAB(r)bc	Ho97	NED	NED
1125+1126 ^b	IC2846	11 25 24.8	11 26 01	0.041008	14.8	0.12	Sp	Wu98	NED	NED
1125+5850B ^b	NGC3690B	11 25 42.4	58 50 17	0.010411	...	0.00	GPair	Wu98	NED	NED
1125+0940 ^a	NGC3692	11 25 48.9	09 40 55	0.005757	12.94	0.11	Sb	Ho97	NED	NED
1126+3011	CG0109	11 26 10.1	30 11 31	0.050448	16.05	0.00	Compact	VCV7	VCV7	...
1127+0936 ^a	NGC3705	11 27 31.5	09 33 09	0.003392	11.86	0.11	SAB(r)ab	Ho97	NED	NED
1129+5320	NGC3718	11 29 49.9	53 20 39	0.003316	11.59	0.00	SB(s)a;pec	Ho97	NED	NED
1133+2828	MRK0738	11 33 19.4	28 28 25	0.039000	15.0	0.00	Compact	194	746	769
1135-3202	ESO439-G018	11 35 31.0	-32 02 54	0.029417	14.06	0.28	SAB(r)b	957	957	895
1136+5632	NGC3780	11 36 40.1	56 32 52	0.008002	12.16	0.00	SA(s)c	Ho97	NED	NED

TABLE 1 (CONTINUED)

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
1138+2243	NGC3808	11 38 09.2	22 43 12	0.023726	...	0.00	GPair	KK85	NED	NED
1138+4116 ^d	IRASF1138+4116	11 38 43.2	41 16 29	0.148000	...	0.00	...	VS97	NED	...
1143+2040	NGC3884	11 43 36.9	20 40 11	0.023169	13.50	0.00	SA(r)0/a	VCV	861	861
1143+3046	CG0125	11 43 45.2	30 46 17	0.039611	16.34	0.04	Spiral	VCV7	VCV7	...
1146+3304	IRAS1146-3304	11 46 23.1	-33 04 00	0.028400	16.42	0.34	E/S0?;pec	VCV	VCV	...
1146+2718	NGC3900	11 46 34.1	27 18 01	0.005999	12.2	0.06	SA(r)0+	Ho97	NED	NED
1146+5621	NGC3898	11 46 36.1	56 21 42	0.003923	11.6	0.00	SA(s)ab	924	634	634
1148+5206 ^a	NGC3917	11 48 07.7	52 06 09	0.003229	12.51	0.01	SAcd	Ho97	NED	NED
1148+5521	NGC3921	11 48 28.6	55 21 26	0.019473	13.06	0.00	(R')SA(s)0/a;p	HUC	NED	HUC
1150+6057	NGC3945	11 50 36.7	60 57 17	0.004069	11.8	0.07	SB(rs)0+	Ho97	NED	NED
1151+5236 ^a	NGC3953	11 51 12.4	52 36 18	0.003516	10.84	0.01	SB(r)bc	Ho97	NED	NED
1154+0124 ^b	IRAS1154+0124	11 54 ---	01 24 --	0.039700	...	...	...	Wu98	Wu98	...
1155+5339	NGC3992(M109)	11 55 00.9	53 39 11	0.003496	10.6	0.01	SA(rs)bc	924	634	634
1155+3233	NGC3994	11 55 02.4	32 33 21	0.010401	13.3	0.02	SA(r)c;pec?	VCV7	VCV7	RC3
1155+5543	NGC3998	11 55 20.9	55 43 55	0.003469	11.61	0.00	SA(r)0?	160	160	634
1155+4413 ^a	NGC4013	11 55 56.6	44 13 31	0.002785	12.19	0.00	Sb	Ho97	NED	NED
1158+6210	NGC4036	11 58 53.6	62 10 23	0.004660	11.47	0.03	S0-	924	634	634
1159+0441	IRAS1159+046	11 59 59.0	04 41 33	0.021000	...	0.00	IrS	dGK92	dGK92	...
1200+6048	SBS1200+6048	12 00 00.0	60 48 00	0.065500	17.0	0.00	...	VCV7	VCV7	...
1203+4745	NGC4096	12 03 28.5	47 45 20	0.001888	11.48	0.00	SAB(rs)c	924	634	634
1203+5259	NGC4102	12 03 51.6	52 59 24	0.002792	11.99	0.01	SAB(s)b?	VCV	VCV	RC3
1204+4320	NGC4111	12 04 31.0	43 20 37	0.002692	11.63	0.00	SA(r)0+;sp	924	634	634
1205+6527	NGC4125	12 05 36.3	65 27 06	0.004523	10.65	0.04	E6;pec	924	634	634
1207+4248	NGC4143	12 07 04.8	42 48 43	0.003286	11.65	0.00	SAB(s)0	Ho97	NED	NED
1207+4009 ^a	NGC4145	12 07 30.0	40 09 40	0.003389	11.78	0.00	SAB(rs)d	Ho97	NED	NED
1208+3040 ^a	NGC4150	12 08 01.2	30 40 53	0.000754	12.44	0.04	SA(r)0	Ho97	NED	NED
1211+0305A ^b	IRAS1211+0305A	12 11 12.5	03 05 22	0.072393	16.9	0.04	...	Wu98	NED	NED
1211+0305C ^b	IRAS1211+0305C	12 11 ---	03 05 --	0.074093	...	0.04	...	Wu98	Wu98	...
1211+1510	NGC4192(M98)	12 11 15.5	15 10 42	-0.000474	10.95	0.14	SAB(s)ab	924	634	634
1212+6838A ^b	IRAS1212+6838A	12 12 04.9	68 38 02	0.060762	15.4	0.03	...	Wu98	NED	NED
1212+6838C ^b	IRAS1212+6838C	12 12 ---	68 38 --	0.061662	...	0.03	...	Wu98	Wu98	...
1212+3328	NGC4203	12 12 33.9	33 28 29	0.003623	11.8	0.00	SAB0-	Ho97	NED	NED
1213+1325	NGC4216	12 13 21.5	13 25 40	0.000437	10.99	0.32	SAB(s)b:	924	634	634
1213+4809 ^a	NGC4220	12 13 42.9	48 09 38	0.003182	12.27	0.00	SA(r)0+	Ho97	NED	NED
1216+4734	NGC4258(M106)	12 16 29.4	47 34 53	0.001494	9.1	0.00	SAB(s)bc	VCV	417	634
1216+0606	NGC4261	12 16 50.0	06 06 10	0.007372	11.41	0.00	E2-3	Ho97	NED	NED
1217+2933	NGC4278	12 17 36.1	29 33 29	0.002165	11.2	0.10	E1-2	Ho97	NED	NED
1217+0539 ^a	NGC4281	12 17 48.4	05 39 51	0.009043	12.25	0.00	S0+;sp	Ho97	NED	NED
1218+1839	NGC4293	12 18 40.9	18 39 35	0.002979	11.26	0.07	(R)SB(s)0/a	Ho97	NED	NED
1219+0445	NGC4303(M61)	12 19 21.6	04 45 03	0.005224	10.18	0.00	SAB(rs)bc	924	634	634
1220+3010	NGC4314	12 20 01.8	30 10 21	0.003212	11.43	0.08	SB(rs)a	Ho97	NED	NED
1220+1605 ^a	NGC4321(M100)	12 20 22.9	16 05 58	0.005240	10.05	0.05	SAB(s)bc	Ho97	NED	NED
1220+0531 ^a	NGC4324	12 20 33.0	05 31 38	0.005561	12.51	0.00	SA(r)0+	Ho97	NED	NED

1221+4716	NGC4346	12 21 01.2	47 16 12	0.002568	12.14	0.00	S0	Ho97	NED
1221+1658 ^a	NGC4350	12 21 26.1	16 58 16	0.004140	11.94	0.03	SA0	Ho97	NED
1222-0624	IRAS1222-0624	12 22 29.4	-06 24 16	0.026358	15.53	0.05	...	VK95	NED
1222+1309	NGC4374(M84)	12 22 31.5	13 09 51	0.003336	12.1	0.12	I	Ho97	NED
1223+1829	NGC4394	12 23 24.3	18 29 26	0.003075	11.73	0.03	(R)SB(r)b	Ho97	NED
1223+0917A	NGC4410A	12 23 55.3	09 17 54	0.024190	13.8	0.00	Sab [?] ;pec	MB93	NED
1223+0917B	NGC4410B	12 23 57.4	09 17 44	0.025174	14.92	0.00	S0;pec	MB93	NED
1223+3130 ^a	NGC4350	12 23 57.9	31 30 00	0.002388	10.96	0.02	SA(rs)c?	Ho97	NED
1224+1519	NGC4419	12 24 24.6	15 19 24	-0.000871	12.08	0.03	SB(s)a	924	634
1224+1123 ^a	NGC4429	12 24 54.1	11 23 05	0.003769	11.02	0.05	SA(r)0+	Ho97	NED
1225+1321 ^a	NGC4435	12 25 08.5	13 21 20	0.002669	11.74	0.09	SB(s)0	Ho97	NED
1225+1317	NGC4438	12 25 13.6	13 17 07	0.000237	11.02	0.09	SA(s)0/a;p:	648	231
1225+1721	NGC4450	12 25 58.0	17 21 42	0.006518	10.9	0.03	SA(s)ab	924	634
1226+0350	NGC4457	12 26 26.0	03 50 51	0.002942	11.76	0.04	(R)SAB(s)0/a	Ho97	NED
1226+1415 ^a	NGC4459	12 26 28.3	14 15 20	0.004036	11.32	0.08	SA(r)0+	Ho97	NED
1228+1240	NGC4486(M87)	12 28 17.6	12 40 02	0.004276	9.59	0.09	E+0-1;pec	924	634
1228+2603	NGC4494	12 28 54.6	26 03 04	0.004416	10.71	0.05	E1-2	Ho97	NED
1229+1441	NGC4501(M88)	12 29 27.5	14 41 43	0.007609	10.36	0.09	SA(rs)b	924	634
1231+0255 ^a	NGC4527	12 31 35.2	02 55 43	0.005791	11.38	0.02	SAB(s)bc	Ho97	NED
1232+1549A ^b	NGC4540	12 32 19.5	15 49 37	0.004290	12.44	0.05	SAB(rs)cd	Wu98	NED
1232+1446	NGC4548	12 32 55.2	14 46 20	0.001621	10.96	0.06	SBb(rs)	Ho97	NED
1232+1229	NGC4550	12 32 59.3	12 29 48	0.001271	12.56	0.15	SB0:sp	Ho97	NED
1233+1249 ^a	NGC4552(M89)	12 33 08.4	12 49 56	0.001071	10.73	0.14	E	Ho97	NED
1233+2615	NGC4565	12 33 52.0	26 15 46	0.004276	10.42	0.03	SA(s)b [?] ;sp	924	634
1234+1326	NGC4569(M90)	12 34 18.5	13 26 16	-0.000784	10.26	0.09	SAB(rs)ab	924	634
1235+1205	NGC4579(M58)	12 35 12.0	12 05 34	0.005067	10.48	0.14	SAB(rs)b	288	634
1235+7427	NGC4589	12 35 28.6	74 27 59	0.006605	11.69	0.03	E2	924	634
1237-1121	NGC4594(M104)	12 37 22.8	-11 21 00	0.003639	8.98	0.12	SA(s)a	Ho97	NED
1237+1027	NGC4596	12 37 24.2	10 27 03	0.006251	11.35	0.00	SB(r)0+	Ho97	NED
1240+0257	NGC4636	12 40 16.5	02 57 44	0.003653	10.43	0.05	E/S0.1	Ho97	NED
1240+0215	NGC4643	12 40 46.9	02 15 06	0.004667	11.72	0.00	SB(rs)0/a	NED	NED
1240-0540	IRAS1240-0540	12 40 48.8	-05 40 55	...	15.38	0.03	IrS	510	510
1241+1640	NGC4651	12 41 12.4	16 40 00	0.002685	11.39	0.03	SA(rs)c	Ho97	NED
1242-0011	NGC4666	12 42 34.7	-00 11 18	0.005070	11.49	0.05	SABc	VK95	NED
1243+3100A	NGC4676A	12 43 44.1	31 00 18	0.022059	14.7	0.01	Irr	KK85	NED
1243+3059B	NGC4676B	12 43 45.3	30 59 46	0.022039	14.4	0.01	SB(s)0/a;pec	KK85	NED
1245+3401	IRAS1245+3401	12 45 02.6	34 01 34	0.158843	...	0.01	...	VK95	NED
1246-4102	NGC4696	12 46 03.5	-41 02 19	0.009867	11.39	0.46	E+I;pec	957	895
1247+0534 ^a	NGC4713	12 47 25.4	05 34 59	0.002178	12.19	0.00	SAB(rs)d	Ho97	NED
1248+7308	NGC4750	12 48 19.4	73 08 51	0.005397	12.07	0.03	(R)SA(rs)ab	Ho97	NED
1248+4123	NGC4736(M94)	12 48 31.9	41 23 32	0.001027	8.99	0.00	(R)SA(r)ab	924	614
1250+1130	NGC4762	12 50 25.2	11 30 07	0.003282	11.12	0.01	SB(r)0;sp	Ho97	NED
1250-4121	ESO323-G023	12 50 33.3	-41 21 57	0.015998	13.86	0.45	(R)SAB(l)0+	189	643
1250+0226	NGC4772	12 50 55.9	02 26 27	0.003469	11.96	0.00	SA(s)a	Ho97	NED
1254+2157	NGC4826(M64)	12 54 16.9	21 57 18	0.001361	9.36	0.15	(R)SA(rs)ab	924	614
1255-2929	ESO443-G017	12 55 01.9	-29 29 47	0.010190	13.81	0.38	(R)SB(r)0/a	957	895
1256+1426	NGC4866	12 56 57.7	14 26 26	0.006631	12.14	0.02	SA(r)0+;sp	Ho97	NED
1258-3207	ESO443-G029	12 58 36.0	-32 07 54	0.031345	14.61	0.30	SA(r)c	957	895
1258-3039	NGC4903	12 58 39.0	-30 39 54	0.016461	13.72	0.39	SB(rs)c	957	895

TABLE 1 (CONTINUED)

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
1259+2934	NGC4922	12 59 01.3	29 34 57	0.023860	15.0	0.01	Sb	VK95	NED	NED
1259+0436	VV283	12 59 17.5	04 36 09	0.037483	15.28	0.01	GPair	Wu98	NED	NED
1300-2339	ESO507-G070	13 00 10.8	-23 39 11	0.021502	15.0	0.28	10 ⁺ ;pec	VCV	VCV	...
1300-3158	ESO443-G041	13 00 39.0	-31 58 00	0.016185	13.95	0.30	(R')SAB?(r)ab	957	957	895
1301-1114A	NGC4933A	13 01 17.1	-11 14 18	0.010978	15.0	0.10	E;pec	KK85	NED	NED
1305-2407	IRAS1305-2407	13 05 59.6	-24 07 00	0.013926	16.0	0.47	...	261	261	...
1308+3719	NGC5005	13 08 37.6	37 19 29	0.003156	10.61	0.00	SAB(rs)bc	VCV7	634	HUC
1309+2310 ^a	NGC5012	13 09 11.7	23 10 51	0.008736	12.88	0.03	SAB(rs)c	Ho97	NED	NED
1313+4217	NGC5055(M63)	13 13 34.8	42 17 39	0.001681	9.31	0.00	SA(rs)bc	924	634	634
1313+6223B ^b	UGC08335B	13 13 42.1	62 23 16	0.031065	15.0	0.03	Sc	Wu98	NED	NED
1314-3150	IC4214	13 14 55.3	-31 50 12	0.007609	12.16	0.24	(R'1)SAB(r)a	957	957	895
1315-0949	IRAS1315-0949	13 15 31.4	-09 49 23	0.104000	...	0.06	IrS	VCV7	VCV7	...
1316-1223	NGC5077	13 16 52.9	-12 23 38	0.009447	12.38	0.07	E3-4	HUC	634	HUC
1318+3423	IC0883	13 18 17.0	34 24 05	0.023350	14.40	0.00	IM;pec	NED	NED	NED
1318+0036	NGC5104	13 18 49.4	00 36 17	0.018606	14.56	0.07	Sa	VK95	NED	NED
1319-2710	NGC5101	13 19 00.7	-27 10 06	0.006208	11.6	0.32	(R'1R_2)SB(r)0/a	957	957	634
1324-2741	IC4249	13 24 20.0	-27 41 48	0.006051	14.44	0.18	S?	648	648	648
1326-3759	TOL0106	13 26 25.0	-37 59 32	0.029200	15.0	0.23	Radio galaxy	VCV7	952	...
1327+4727	NGC5194(M51a)	13 27 46.0	47 27 22	0.001544	8.96	0.00	SA(s)bc;pec	511	512	591
1327+4731	NGC5195(M51b)	13 27 52.4	47 31 32	0.001551	10.45	0.00	SB0.1;pec	924	634	634
1330+6301	NGC5218	13 30 27.8	63 01 27	0.009540	13.1	0.03	SB(s)b?	VK95	NED	NED
1332-2746	IC4290	13 32 32.0	27 46 00	0.016241	14.21	0.19	(R')SB(r)a	957	957	895
1336+4831	MRK0266NE	13 36 15.0	48 31 54	0.028053	14.1	0.00	Compact;pec	VCV7	834	286
1337+0105A ^b	ARP240	13 37 21.6	01 05 19	0.022716	...	0.01	GPair	Wu98	NED	NED
1338+2332	MCG+04-32-025	13 38 46.3	23 32 04	0.027129	...	0.00	Gpair	VCV	VCV	RC3f
1339+5555A ^c	ARP239A(N5278)	13 39 47.9	55 55 18	0.025154	13.6	0.00	SA(s)b?;pec	KK85	NED	NED
1339+5555B ^c	ARP239B(N5279)	13 39 51.8	55 55 29	0.025284	15.0	0.00	SB(s)a;pec	KK85	NED	NED
1342+5608	UGC08696	13 42 51.7	56 08 14	0.037780	15.07	0.00	Ring galaxy	729	729	634
1344+4407	NGC5297	13 44 18.4	44 07 18	0.008029	12.47	0.00	SAB(s)c;sp	Ho97	NED	NED
1345-2956	IRAS1345-2956	13 45 28.4	-29 56 58	0.129300	18.62	0.14	...	VCV	VCV	...
1345-3010	NGC5298	13 45 45.1	-30 10 48	0.014510	14.0	0.14	SB(r)bc	957	957	895
1346-2757	ESO0445-G051	13 46 31.0	-27 57 06	0.016608	14.56	0.18	(R')SAB(r)ab;	957	957	...
1346+2650	CGCG162-010	13 46 33.9	26 50 27	0.063260	15.2	0.00	cD;S0?	VCV7	VCV7	RC3
1347+6026	NGC5322	13 47 34.8	60 26 18	0.006388	11.14	0.00	E3-4	Ho97	NED	NED
1348-4750	ESO221-G012	13 48 24.0	-47 50 06	0.009840	14.02	0.63	SB(s)bc;	189	189	...
1351+4036	NGC5350	13 51 14.7	40 36 35	0.007742	12.15	0.00	SB(r)b	KK85	NED	NED
1351+4031	NGC5353	13 51 19.7	40 31 43	0.007705	11.96	0.00	S0	Ho97	NED	NED
1351+4032 ^a	NGC5354	13 51 19.7	40 32 54	0.008789	12.33	0.00	E2	Ho97	NED	NED
1353+4042	NGC5371	13 53 34.0	40 42 20	0.008516	11.32	0.00	SAB(rs)bc	920	634	634
1353+0529	NGC5363	13 53 36.3	05 29 58	0.003799	11.05	0.04	I0?	Ho97	NED	NED
1354+4728	NGC5377	13 54 17.9	47 28 46	0.005981	12.24	0.01	(R')SB(s)a	Ho97	NED	NED
1354-2022	IRAS1354-2022	13 54 33.4	-20 22 30	0.035988	16.13	0.21	...	920	920	...
1356-1848	ESO578-G011	13 56 18.0	-18 48 54	0.031228	14.59	0.23	SB?	VCV7	VCV7	...

1356+3740	NGC5395	13 56 29.8	37 40 05	0.011645	12.1	0.00	SA(s)b;pec	KK85	NED
1356-1759	IRAS1356-1759	13 56 38.1	-17 59 53	0.034477	...	0.26	STARBURST	920	...
1357-2838	NGC5393	13 57 41.0	-28 38 00	0.020077	13.97	0.18	(R_1R'_2)SB(r)b	957	895
1359+3404A	NGC5421A	13 59 29.6	34 04 12	0.026372	14.5	0.00	Sc	KK85	NED
1359+3403B	NGC5421B	13 59 31.0	34 03 45	0.026245	15.0	0.00	E	KK85	NED
1400-4108	NGC5408	14 00 17.5	-41 08 19	0.001698	12.2	0.27	IB(s)m	194	895
1400+4924	NGC5448	14 00 55.3	49 24 45	0.006765	11.93	0.04	(R)SAB(r)a	Ho97	NED
1403+5354	NGC5474	14 03 14.6	53 54 03	0.000924	11.28	0.00	SA(s)cd;pec	924	634
1404-2646	IC4374	14 04 38.3	-26 46 50	0.021795	13.59	0.18	SA(rs)0-;	957	895
1405+5514	NGC5485	14 05 27.9	55 14 21	0.006621	12.31	0.00	SA0;pec	Ho97	NED
1408+1347	CGCG074-129	14 08 16.3	13 47 35	0.016131	15.2	0.00	...	VCV7	946
1411+0753	NGC5514	14 11 11.3	07 53 31	0.023500	13.7	0.05	GPair	dGK92	NED
1414+3648	NGC5544:	14 14 56.5	36 48 08	0.010140	14.0	0.00	(R)SB(rs)0/a	KK85	NED
1414+3648	NGC5545	14 14 59.0	36 48 20	0.010270	14.0	0.00	SA(s)bc;	KK85	NED
1415+2705A ^b	IC4395	14 15 06.2	27 95 18	0.036512	14.67	0.00	S?	Wu98	NED
1417+0409	NGC5566	14 17 48.8	04 09 45	0.005027	11.46	0.06	SB(r)ab	Ho97	NED
1417+4927 ^b	MRK1490	14 17 53.8	49 27 55	0.025571	15.4	0.04	...	Wu98	NED
1422+3505	NGC5614:	14 22 01.1	35 05 04	0.012982	12.52	0.00	SA(r)ab;pec	KK85	NED
1425-4943	ESO222-G006	14 25 12.0	-49 43 42	0.015677	...	...	Sa?	952	...
1426+2737	NGC5635	14 26 18.9	27 37 54	0.014397	13.46	0.00	S;pec	648	417
1428+3532 ^a	NGC5656	14 28 20.6	35 32 34	0.010647	12.73	0.00	Sab	Ho97	NED
1430+3631	NGC5675	14 30 36.3	36 31 19	0.013252	13.7	0.00	S?	700	700
1430+5808 ^a	NGC5678	14 30 37.3	58 08 25	0.006411	12.13	0.02	SAB(rs)b	Ho97	NED
1431+5259	MRK0816	14 31 40.8	52 59 27	0.088300	16.5	0.00	Compact	194	808
1434+3017NW	IRAS1434+303NW	14 34 07.4	30 17 15	0.034390	...	0.00	...	VK95	NED
1434-1447NE	IRAS1434-148NE	14 34 53.4	-14 47 25	0.082314	16.58	0.37	Merger	VK95	NED
1434-1447SW	IRAS1434-148SW	14 34 53.4	-14 47 25	0.082314	...	0.37	...	VK95	...
1436+0534 ^a	NGC5701	14 36 41.5	05 34 50	0.005023	11.76	0.09	(R)SB(rs)0/a	Ho97	NED
1442+0209 ^a	NGC5746	14 42 24.2	02 09 53	0.005751	11.29	0.12	SAB(rs)b?;sp	Ho97	NED
1443+5133	UGC09511	14 43 14.8	51 33 03	0.089495	16.5	0.03	Pec	646	417
1454+2448A	UGC09618	14 54 48.6	24 49 02	0.033669	14.6	0.13	(Sb)	Wu98	NED
1456+4504 ^b	UGC09639	14 56 49.0	45 04 56	0.035741	14.44	0.03	Sab	Wu98	NED
1458+0153	NGC5813	14 58 38.9	01 53 57	0.006418	11.45	0.15	E1-2	Ho97	NED
1502+0217 ^a	NGC5838	15 02 54.6	02 17 37	0.004546	11.92	0.12	SA0	Ho97	NED
1503+0147 ^a	NGC5846	15 03 56.9	01 47 53	0.006078	11.05	0.14	E0-1	Ho97	NED
1504+1303	NGC5851	15 04 30.8	13 03 03	0.021635	15.04	0.11	S?	288	417
1504+0144	NGC5850	15 04 35.5	01 44 17	0.008526	11.54	0.14	SB(r)b	Ho97	NED
1505+5557 ^a	NGC5866(M102)	15 05 07.0	55 57 20	0.002242	10.74	0.00	S0.3	Ho97	NED
1508+5711 ^a	NGC5879	15 08 29.2	57 11 25	0.002575	12.22	0.02	SA(rs)bc	Ho97	NED
1513+4213	NGC5899	15 13 14.6	42 13 57	0.008546	12.5	0.08	SAB(rs)c	HUC	HUC
1514+0026	CGCG021-063	15 14 06.7	00 26 01	0.052326	15.6	0.14	Radio galaxy	H/VC	HUC
1515+5535	NGC5908	15 15 23.0	55 35 37	0.011028	12.79	0.01	SA(s)b;sp	KK85	NED
1516+4255	MRK0848B	15 16 19.6	42 55 31	0.039360	...	0.05	...	VCV7	VCV7
1519+0514	NGC5921	15 19 27.2	05 14 53	0.004937	11.49	0.06	SB(r)bc	NED	NED
1524+4150	NGC5929	15 24 18.9	41 50 41	0.008543	14.1	0.06	Sab;pec	VCV7	360
1525+3609	IRAS1525+3609	15 25 03.7	36 09 01	0.055378	16.0	0.04	Ring galaxy	VK95	NED
1532+1521	NGC5953	15 32 13.2	15 21 40	0.006555	13.3	0.09	SAa;pec	VCV7	634
1533-0513	IRAS1533-0513	15 33 32.1	-05 13 56	0.027306	...	0.42	...	VK95	NED
1536+1220	NGC5970	15 36 08.2	12 20 57	0.006527	12.24	0.07	SB(r)c	Ho97	NED

TABLE 1 (CONTINUED)

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
1537+5931	NGC5982	15 37 38.5	59 31 03	0.009687	12.04	0.01	E3	Ho97	NED	NED
1538+5929	NGC5985	15 38 36.3	59 29 35	0.008396	11.87	...	SAB(r)b	Ho97	NED	NED
1540+3228	IRAS1540+3228	15 40 27.1	32 28 29	0.069348	...	...	...	VK95	NED	NED
1542+4116B ^b	NGC5993	15 42 42.3	41 16 36	0.031905	13.9	0.05	SB(r)b	Wu98	NED	NED
1544+0602	UGC10029	15 44 26.2	06 02 46	0.041300	14.35	0.11	S0	dGK92	NED	NED
1544+3312	IRAS1544+3312	15 44 32.1	33 12 57	0.155808	...	0.07	...	VK95	NED	...
1546+2853	IRAS1546+3312	15 46 54.7	28 53 30	0.032686	15.6	0.10	...	VK95	NED	NED
1548+2920	IRAS1546+2920	15 48 07.5	29 20 08	0.083391	16.62	0.09	...	VK95	NED	NED
1551+1216	UGC10082	15 51 57.0	12 16 16	0.035048	15.14	0.09	SB?	VCV7	VCV7	RC3f
1556+2807W	IRAS1556+2807W	15 56 55.8	28 07 42	0.052336	...	0.07	...	VK95	NED	...
1600+3743	IRAS1600+3743	16 00 43.8	37 43 09	0.184828	...	0.00	...	VK95	NED	...
1603+1756	MRK298(IC1182)	16 03 21.9	17 56 12	0.033780	15.17	0.07	SA0+;pec	DDR88	NED	...
1609-0139	IRASF1609-0139	16 09 04.9	-01 39 25	0.133580	16.6	0.48	...	VS97	NED	NED
1616-0746	IRAS1616-0746	16 16 29.7	-07 46 51	0.027152	15.49	0.76	...	VK95	NED	NED
1616+6819	KAZ069(IC1218)	16 16 34.2	68 19 28	0.003700	14.52	0.13	S?	VCV	VCV7	RC3f
1618+0651	IRAS1618+0651	16 18 30.1	06 51 49	0.060000	...	0.19	...	920	920	...
1627+2433	MRK883	16 27 47.1	24 33 06	0.037496	15.5	0.12	...	DDR88	NED	NED
1628+0411 ^b	CGCG052-037	16 58 27.0	04 11 24	0.024490	15.04	0.26	S?	Wu88	NED	NED
1630-6030	NGC6156	16 30 29.0	-60 30 48	0.011008	12.3	...	(R' ₁)SAB(rs)c	952	952	...
1633+4603	IRASF1633+4603	16 33 24.3	46 30 58	0.191020	17.66	0.01	...	VS97	NED	NED
1637+8238	NGC6251	16 37 56.9	82 38 19	0.023016	13.64	0.30	E	574	574	108
1647+3618	UGC10567	16 47 22.4	36 18 34	0.031348	15.2	0.06	Compact	HUC	...	HUC
1650+0228	NGC6240	16 50 27.8	02 28 58	0.024480	13.8	0.29	IO;pec	215	210	634
1657+5901B ^b	NGC6285	16 57 37.3	59 01 49	0.018613	15.3	0.02	S0	Wu98	NED	NED
1657+5900A	NGC6286	16 57 44.7	59 00 40	0.018349	14.06	0.02	Sb;pec	NED	NED	NED
1701+3131	MRK0700	17 01 21.6	31 31 39	0.033356	15.41	0.14	S0	H/VC	888	832
1703+4306	UGC10695NED02	17 03 32.4	43 06 36	0.027779	14.88	0.00	...	VCV7	VCV7	...
1711+7221	NGC6340	17 11 16.9	72 21 55	0.003996	11.87	0.20	SA(s)0/a	Ho97	NED	NED
1718-6457	NGC6328	17 18 46.1	-64 57 48	0.014210	13.16	0.29	SA(s)b	H/VC	595	194
1720-0014	IRAS1720-0014	17 20 47.8	-00 14 15	0.042810	15.1	0.58	...	DM97	NED	NED
1729+0705 ^a	NGC6384	17 29 59.0	07 05 43	0.005547	11.14	0.41	SAB(r)bc	Ho97	NED	NED
1748+6843	MRK0507	17 48 55.8	68 43 05	0.055900	16.0	0.17	Compact	891	805	888
1749+2305 ^a	NGC6482	17 49 43.6	23 05 00	0.013176	12.35	0.42	E	Ho97	NED	NED
1749+7009 ^a	NGC6503	17 49 58.2	70 09 28	0.000147	10.91	0.14	SA(s)cd	Ho97	NED	NED
1750+6824B ^b	MCG+11-22-005	17 50 02.9	68 24 45	0.052025	17.0	0.18	...	Wu98	Wu98	NED
1750+6823D ^b	KUG1750+683A	17 50 05.3	68 23 54	0.050825	16.0	0.18	Spiral	Wu98	Wu98	NED
1753+1820	NGC6500	17 53 48.1	18 20 41	0.010017	13.05	0.37	SAab	648	648	...
1753+1822	NGC6501	17 53 52.1	18 22 45	0.010234	13.03	0.39	SA0+	Ho97	NED	NED
1755-6343	FAIRALL0332	17 55 20.0	-63 43 30	0.015677	...	0.27	Bright nucleus	189	189	...
1831-4659	ESO281-G012	18 31 49.0	-46 59 06	0.022589	13.02	0.23	SAB(rs)a;NELG	952	952	...
1845+4538	NGC6702	18 45 30.8	45 38 59	0.015718	13.23	0.23	E	Ho97	NED	NED
1845+4529	NGC6703	18 45 51.7	45 29 40	0.007889	12.32	0.26	SA0-	Ho97	NED	NED
1846-7857	ESO025-G002	18 46 34.0	-78 57 30	0.028486	14.56	0.50	(R;)SAB(r)b	194	194	...

1859+5048 ^b	CGCG255-024	18 59 33.6	50 48 32	0.027075	15.00	0.16	Sc	Wu98	NED	NED
1907+5051	NGC6764	19 07 01.2	50 51 08	0.008059	12.56	0.24	SB(s)bc	441	517	767
1908+6056	IC4827	19 08 53.0	-60 56 42	0.014673	13.24	0.17	SA(s)ab,sp	dGK92	NED	NED
1911-2124	ESO593-IG008S	19 11 32.3	-21 24 22	0.043697	...	0.66	...	VK95	NED	...
1932-6555	IC4870	19 32 48.0	-65 55 30	0.002965	13.89	0.34	IBm ² ;pec	681	681	57
1934-6349	PKS1934-6349	19 34 47.6	-63 49 38	0.183000	18.4	0.25	Radio Galaxy	465	465	108
1941-5422	ESO185-IG013	19 41 03.0	-54 22 18	0.018680	15.0	0.18	Compact:	681	681	681
2003-2803	IRAS2003-2803	20 03 21.8	-28 03 16	0.047299	16.11	0.46	S0/a;pec	VCV	VCV	VCV ^v
2006-5636	...	20 06 22.2	-56 36 50	0.057600	17.5	0.20	E4	155	244	606
2010-4156	IRAS2010-4156	20 10 05.8	-41 56 40	0.129583	...	0.17	...	VCV	VCV	...
2027-3050	ESO462-G027	20 27 52.0	-30 50 12	0.019764	15.5	0.25	Sb	572	249	249
2036+6555	NGC6951	20 36 37.0	65 55 46	0.004757	11.64	0.88	SAB(rs)bc	HUC	VCV	HUC
2037-3822	ESO341-IG004	20 37 59.8	-38 22 20	0.020204	13.38	0.10	S0+;pec	dGK92	NED	NED
2041-1651 ^e	IRAS2041-1651	20 41 28.3	-16 51 08	0.087084	17.1	0.20	...	DM97	NED	NED
2051-7025	FAIRALL0350	20 51 05.0	-70 25 12	0.057706	...	0.17	(R'1)SB(s)b	189	189	...
2054-4334	ESO286-G018	20 54 30.3	-43 34 10	0.030511	14.26	0.07	SB(s)bc ² ;sp	957	957	895
2055-4250	ESO286-IG019	20 55 08.8	-42 50 45	0.042830	14.74	0.07	Merger	HUC	681	57
2120-2242	ESO530-G042	21 20 11.3	-22 42 55	0.032212	15.35	0.09	SA(l)0+;	957	957	895
2132-2346	IRASF2132-2346	21 32 54.2	-23 46 03	0.125066	...	0.10	...	VS97	NED	...
2142+4201	UGC11085SW	21 42 17.0	42 01 27	0.017495	15.1	...	...	VCV7	VCV7	...
2145-3511	NGC7130	21 45 19.9	-35 11 07	0.016151	12.98	0.00	Sa;pec	VK95	NED	NED
2146-3506	NGC7135	21 46 46.3	-35 06 34	0.090666	12.71	0.00	SAO-;pec	VCV7	313	895
2153-2159	PKS2153-2159	21 53 12.6	-21 59 50	0.098000	17.2	0.05	N galaxy	VCV	VCV	...
2153+0707	MRK516	21 53 52.9	07 07 44	0.028416	15.3	0.16	...	DDR88	NED	NED
2154-1206NW	IRAS2154-121NW	21 54 54.3	-12 06 07	0.050368	...	0.09	...	VK95	957	895
2157-3336	ESO404-G015	21 57 33.0	-33 36 42	0.014887	14.5	0.00	S?	951	957	...
2158+1729 ^a	NGC7177	21 58 18.5	17 29 50	0.003836	12.01	0.23	SA(r)b	Ho97	NED	NED
2159-2243	ESO532-G012	21 59 03.7	-22 43 33	0.017722	14.73	0.05	(R'1)(SAB(r)0/a	957	957	895
2205+3106	NGC7217	22 05 37.8	31 06 50	0.003156	11.02	0.41	(R)SA(r)ab	924	634	634
2213-2144	IC1439	22 13 55.0	-21 44 12	0.032136	14.64	0.06	(R1R'2)SB(s)a	957	957	895
2214-5246	FAIRALL0355	22 14 32.6	-52 46 06	0.053537	15.96	0.00	SAB(s)b	952	952	...
2220-3817	IC5212	22 20 34.6	-38 17 28	0.027713	14.59	0.00	Sbc;	957	957	...
2224-3524	NGC7279	22 24 19.9	-35 24 44	0.030111	14.34	0.00	SB(rs)c	957	957	895
2225-2505	NGC7285	22 25 52.0	-25 05 48	0.014500	12.81	0.00	SB(rs)a;pec	KK85	NED	NED
2226-6555	IC5222	22 26 22.3	-65 55 01	0.010564	13.46	0.00	(R)SB(rs)b	189	189	...
2227-1112SE	IRAS2227-112SE	22 27 55.6	-11 12 54	0.087660	...	0.15	...	VK95	NED	...
2228-1917	ESO602-G025	22 28 42.9	-19 17 31	0.025041	14.23	0.09	SA(r)b	GJ97	NED	NED
2234+3409	NGC7331	22 34 46.6	34 09 21	0.002739	10.35	0.33	SA(s)b	NED	NED	NED
2235-2606	ESO534-G009	22 35 56.3	-26 06 44	0.011318	13.51	0.00	SA(s)ab ² ;sp	VK95	NED	NED
2238+3359 ^b	UGC12150	22 38 53.9	33 59 15	0.021391	14.88	0.35	SB0/a	Wu98	NED	NED
2243+3925	3C452	22 43 32.9	39 25 27	0.081100	16.0	0.52	Radio galaxy	541	595	367
2247+3439	IRAS2247+3439	22 47 12.5	34 39 16	0.023423	16.2	0.38	Starburst	VK95	NED	NED
2248-1917	ESO602-G025	22 48 42.9	-19 17 31	0.025041	14.23	0.09	SA(r)b	VK95	NED	NED
2254-3643	IC1459	22 54 23.1	-36 43 47	0.005641	10.97	...	E3	931	931	943
2259+1541	NGC7465	22 59 32.0	15 41 44	0.006565	13.31	0.19	(R')SB(s)0;	VCV7	VCV7	RC3
2259+2647	NGC7466	22 59 38.3	26 47 01	0.024871	14.35	0.17	Sb	443	888	832
2302+1203	NGC7479	23 02 26.4	12 03 11	0.007945	11.6	0.16	SB(s)c	924	634	634
2302+1916	CGCG453-062	23 02 28.5	19 16 57	0.025097	15.1	0.13	...	NED	NED	NED

TABLE 1 (CONTINUED)

IAU Name	Other Name	α (1950)	δ (1950)	z	B	Ext(B)	Morph. Type	Ref(Ident.)	Ref(z)	Ref(B ,Ext(B))
2311-4259	ESO291-G009	23 11 12.2	-42 59 59	0.056396	14.64	...	SA0-	957	957	895
2312-5919N	ESO148-IG002N	23 12 51.0	-59 19 40	0.044601	15.17	0.00	Merger	DM97	NED	NED
2313+2516 ^b	IC5298	23 13 33.1	25 17 01	0.027342	14.94	0.27	Spiral	Wu98	NED	NED
2315+0618	NGC7591	23 15 43.9	06 18 45	0.016531	13.86	0.18	SBbc	K95	NED	NED
2315-0441B	NGC7592B	23 15 47.3	-04 41 22	0.024617	11.4	0.10	Sab?,p	MB93	NED	NED
2316+0537	IC1481	23 16 52.6	05 37 57	0.020407	14.39	0.21	S?	VCV7	VCV7	HUC
2318+0756	NGC7626	23 18 10.3	07 56 35	0.011418	12.16	0.16	E:pec	Ho97	NED	NED
2322-1223	NPM1G-12.0625	23 22 43.8	-12 23 56	0.082200	15.4	0.08	E	559	559	108
2322+2813	UGC12591	23 22 53.5	28 13 14	0.023179	13.90	0.29	S0/a	K84	NED	NED
2323-6926	IRAS2323-6926	23 23 02.7	-69 26 47	0.106307	16.6	0.06	Merger	DM97	NED	NED
2336+3604	IRAS2336+3604	23 36 32.2	36 04 32	0.064480	16.3	0.52	...	NED	NED	NED
2339-0356A	ARP195A	23 39 13.2	-03 56 42	0.022856	14.5	0.09	Sc	KK85	NED	NED
2341+1029 ^a	NGC7742	23 41 43.1	10 29 25	0.005514	12.35	0.10	SA(r)b	Ho97	NED	NED
2341+0939	NGC7743	23 41 48.6	09 39 25	0.005704	12.38	0.17	(R)SB(s)0+	HUC	VCV	HUC
2344+2912	NGC7753	23 44 33.3	29 12 21	0.017239	12.83	0.19	SAB(rs)bc	KK85	NED	NED
2348+1949C ^b	NGC7769	23 48 31.2	19 52 19	0.014036	12.77	0.11	(R)SA(rs)b	Wu98	NED	NED
2350+0326	UM011	23 50 45.1	03 26 23	0.038000	14.9	0.17	...	VCV	VCV	...
2354-3502	ESO349-G010	23 54 25.9	-35 02 12	0.049051	13.86	...	E+4:cd	957	NED	ESO
2354-3457	ESO349-G009	23 54 26.0	-34 57 32	0.042069	14.6	...	(R'1)SB(rs)b	957	NED	895
2358+3109	NGC7805	23 58 53.1	31 09 20	0.016178	14.2	0.16	SAB0:pec	KK85	NED	NED

Particular classification preferences expressed by the respective authors of the cited data:

^a Transition objects that are Liner/HII-nucleus systems; Ho et al. 1993; Ho et al. 1997.

^b Mixture type with properties of both Liner and HII galaxy; Wu et al. 1998.

^c L/H emission class; Keel et al. 1985.

^d Ambiguous objects between HII galaxies and Liners; Veilleux, Sanders & Kim 1997.

^e Two criteria favor Liner and one to Starburst; Duc, Mirabel & Maza 1997.

TABLE 2

IRAS AND RADIO FLUX OF THE HOST GALAXIES

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
0000+1552	0.1269	<0.2034	1.566	5.725	1.23E-10	...	...	1.00E-18	NED
0004+0804	0.1056	<0.2793	0.5659	1.908	4.24E-11	...	...	...	...
0018+3748A	0.1219	0.2786	2.657	5.547	1.56E-10	...	...	...	...
0026+3016	0.2415	0.7986	4.659	5.686	2.23E-10	...	...	...	...
0040+4059	163.23	107.71	536.18	2928.40	5.43E-08	0.032	...	1.51E-15	NED
0045-2533	24.02	119.7	784.2	993.1	3.8E-08	2.08	3.52	6.49E-17	VCV
0047+3200	<0.1492	<0.1557	0.8141	3.294	6.80E-11	...	...	5.65E-19	NED
0052+2858	0.3550	0.4253	5.584	10.07	3.08E-10	...	...	2.33E-19	NED
0053-1432	<0.1118	<0.402	0.5928	<1.704	...	...	...	...	...
0055+3004	<0.0804	<0.149	0.2703	<0.706	...	1.18	...	<6.08E-20	NED
0056-3523	<0.1248	<0.1868	0.6571	1.756	4.35E-11	...	...	...	...
0105+2147	<0.119	0.434	1.632	1.277	6.88E-11	...	...	...	...
0106+3527	<0.108	0.2041	2.143	3.982	1.20E-10	...	...	1.96E-18	NED
0110+0043	<0.0886	0.2425	1.798	4.313	1.13E-10	...	...	3.87E-18	NED
0116+1211	<0.1118	<0.1960	0.5153	1.688	3.80E-11	...	...	5.81E-20	NED
0117+1405	0.2653	1.436	11.14	9.333	4.80E-10	...	...	>4.35E-20	NED
0117+0309	<0.10	<0.16	<0.08	<0.26	...	...	...	2.88E-19	NED
0119+0459	0.1566	<0.2779	1.599	8.928	1.64E-10	...	...	8.79E-19	NED
0121+3154	<0.1717	<0.1637	1.261	2.869	7.71E-11	...	...	<1.32E-20	NED
0121+0128	<0.1722	<0.2053	0.6522	3.163	6.11E-11	...	...	6.31E-19	NED
0122+0916	0.1862	<0.1871	0.7406	1.804	4.68E-11	...	...	<1.72E-19	NED
0130-0734	<0.1211	<0.168	0.5625	2.57	5.07E-11	...	...	9.32E-19	NED
0132+3447	<0.1937	0.2185	0.9662	1.019	4.42E-11	...	...	3.73E-20	NED
0132+2138	0.1317	0.3376	2.224	3.791	1.20E-10	...	...	...	...
0132-3644	<0.1422	<0.0932	0.289	1.379	2.68E-11	...	...	...	...
0136-1042	<0.0772	0.3963	6.163	6.7	2.85E-10	...	...	...	...
0140+1323	2.421	7.526	65.54	102	3.4E-09	0.156	0.18	7.66E-18	VCV7
0141+1650	0.10	1.00	11.86	13.75	5.59E-10	...	...	3.80E-20	NED
0144+2704	<0.0551	<0.0758	0.5834	1.794	4.16E-11	...	...	2.94E-18	NED
0150+0357	<0.1246	<0.2409	0.5874	1.135	3.34E-11	...	...	1.00E-20	NED
0201+1430	<0.1186	<0.1806	0.3879	<1.279	...	...	...	...	...
0206-1022A	0.3448	0.4507	5.309	<17.68	...	...	...	5.01E-19	NED
0208+3715	<0.1032	<0.121	0.8627	2.595	6.07E-11	...	...	3.60E-19	NED
0218+3908	<0.177	0.2398	1.873	3.851	1.09E-10	...	...	5.92E-19	NED
0220+3158	0.2451	0.6944	6.475	11.45	3.55E-10	...	...	3.27E-20	NED
0225+1922	0.2606	0.2881	3.138	9.528	2.22E-10	...	...	6.55E-19	NED
0233+3845	<0.25	<0.25	0.72	4.87	8.48E-11	...	...	4.97E-18	NED
0238-0828	0.2031	0.4906	0.9027	1.515	4.84E-11	1.4	0.58	4.49E-19	654
0239+0013	1.393	1.831	19.51	57.48	1.3E-09	0.082	0.15	5.30E-18	NED
0240-3032	...	...	...	...	...	0.93	1.31	4.36E-19	453
0243+1253	0.4035	0.565	7.703	15.28	4.43E-10	0.042	...	2.88E-19	NED
0243+2122	0.12	0.70	5.50	6.25	2.58E-10	0.037	...	3.19E-20	NED
0248+4302	<0.0654	0.19	4.023	6.916	2.18E-10	...	...	...	...
0257+4441	0.1446	0.1351	1.945	<9.358	...	...	...	...	...
0300+4611	<0.25	<0.25	3.00	5.16	1.63E-10	...	...	2.19E-18	NED
0302-7253	0.06614	0.2317	0.7794	1.32	4.20E-11	...	...	...	...
0302-1232	0.2651	0.9875	7.765	10.62	3.86E-10	...	...	...	...
0308-0906	...	...	...	...	...	0.067	...	1.26E-18	NED
0312-3053	<0.1157	0.2992	1.801	3.275	9.98E-11	...	...	...	...
0313-0236	0.1235	1.104	12.83	17.07	6.32E-10	...	...	...	...
0314-2302	0.0944	0.1498	0.7113	1.961	4.78E-11	...	...	...	...
0318-1853	<0.0939	0.1045	0.5169	2.01	4.21E-11	...	...	...	...
0320-0806	<0.1003	<0.1343	1.005	1.692	5.40E-11	...	...	...	...
0322-3638	0.3149	0.7814	8.061	13.31	4.30E-10	...	...	1.34E-18	NED
0323-4925	<0.0729	0.0659	0.3856	0.8667	2.35E-11	...	...	...	...
0325+1606	<0.0982	<0.1524	1.381	1.771	6.72E-11	...	...	...	...
0352+0028	<0.25	0.233	2.638	3.833	1.34E-10	...	...	...	...

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
0354–1855	0.1299	0.1057	1.031	3.247	7.44E-11	...	...	...	...
0401–4332	...	0.25	0.89	1.41	4.70E-11	...	...	...	...
0402–8112	0.1196	0.1216	1.118	3.963	8.63E-11	...	...	...	...
0402+6940	0.2317	0.1644	3.842	24.61	4.35E-10	...	...	4.83E-18	NED
0419–1855	0.1852	0.4301	5.753	8.201	2.90E-10	...	...	...	...
0425–0440	0.1566	1.405	4.129	3.304	1.76E-10	...	...	...	...
0428–0944	0.0734	0.2781	0.5536	<1.973	...	...	...	...	...
0457–1732	<0.0892	<0.0784	0.2418	1.519	2.70E-11	...	...	...	...
0504–4939	0.36	0.67	2.53	3.67	1.28E-10	...	...	...	...
0505–3734	4.435	16.14	87.81	137.2	4.50E-09	0.213	0.35	2.96E-18	75
0509–2218	<0.0726	0.0641	0.4356	1.024	2.71E-11	...	...	...	...
0518–1017	<0.0592	0.1797	4.961	8.103	2.63E-10	...	...	...	...
0536+6921	0.5511	0.5545	6.382	21.61	4.80E-10	0.06	...	3.66E-18	NED
0603–7102	0.1159	0.5741	5.127	5.651	2.38E-10	...	...	...	...
0626–6319	<0.0671	0.0672	0.2727	<0.8557	...	...	...	...	...
0715–5715	<0.0825	0.1751	2.193	4.815	1.32E-10	...	...	...	...
0718+8016	0.1099	<0.1369	1.265	9.690	1.63E-10	...	...	3.56E-18	NED
0722–0933	...	...	...	...	...	0.35	0.7	2.33E-18	PKS
0811+4912	<0.1409	<0.0992	1.375	4.073	9.60E-11	...	...	6.49E-18	NED
0840+5023	0.1617	0.209	1.988	7.056	1.54E-10	0.05	0.08	...	VCV7
0848+7340	0.1443	0.1141	0.9073	4.091	8.10E-11	...	...	1.98E-19	NED
0849+7824	0.1762	0.2106	1.673	4.983	1.17E-10	0.027	...	1.87E-18	NED
0849+3336	0.3136	0.1952	5.798	25.35	5.08E-10	...	...	3.73E-18	NED
0849+5130	0.2685	0.5614	6.186	11.77	3.49E-10	...	...	...	...
0850+3520	<0.1124	0.1559	2.181	4.776	1.31E-10	...	...	...	...
0851+5855	0.09841	<0.0975	0.3156	1.694	3.16E-11	...	...	1.20E-18	NED
0857+3915	0.3178	1.703	7.433	4.588	2.99E-10	...	...	...	...
0903+0503	<0.1681	<0.2077	1.484	2.063	7.42E-11	...	...	...	...
0906–1248	<0.1159	0.1908	3.634	5.316	1.85E-10	...	...	...	...
0907+6014	0.0903	<0.0768	0.3694	1.163	2.67E-11	...	...	...	...
0911–1007E	0.17	0.47	7.08	11.06	3.70E-10	...	...	...	...
0911+0334	<0.0859	<0.1406	1.092	1.822	5.85E-11	...	...	...	...
0912–6034	0.5	2.04	11.91	15.21	5.79E-10	...	...	...	...
0912+4432	0.1348	0.5991	5.961	10.23	3.23E-10	...	...	1.42E-19	NED
0914+6924	0.1179	<0.1180	0.6437	<3.009	...	...	...	8.17E-19	NED
0915–1153	...	...	...	...	...	13.1	23.5	...	PKS
0916+3357	0.08	<0.13	0.44	1.33	3.11E-11	...	...	...	...
0918+5111	0.2817	0.2184	3.034	18.77	3.35E-10	0.03	...	6.61E-18	NED
0925+3124	<0.0894	<0.0826	0.4311	0.9497	2.60E-11	...	...	...	...
0927+4918	0.14	0.4494	1.652	2.295	8.29E-11	...	...	...	...
0931+1022	<0.0807	<0.2413	0.2192	<0.8109	...	0.19	0.24	2.25E-19	VCV
0932+6134	0.2499	1.034	11.54	20.23	6.30E-10	0.079	...	...	NED
0938+0348	<0.1325	<0.2602	0.708	1.657	4.39E-11	0.011	...	9.12E-20	NED
0945+7230	0.4157	0.4549	5.004	19.94	4.14E-10	...	...	4.06E-18	NED
0951+3443	<0.1102	<0.0953	0.2672	0.7994	1.88E-11	...	...	5.65E-20	NED
0951+6918	0.7459	0.7845	6.806	32.03	6.25E-10	...	...	4.41E-17	NED
0958+5555	1.523	2.272	44.5	89.22	2.50E-09	0.33	...	5.97E-18	NED
0959+6858	0.5513	1.906	13.65	26.43	7.77E-10	...	...	1-64E-17	NED
1003+3508	...	...	...	...	...	1.34	2.01	...	VCV7
1004–2941	0.1996	0.7909	5.042	5.134	2.29E-10	...	...	...	...
1005–3343	<0.1506	0.4235	2.615	3.172	1.25E-10	...	...	...	...
1007–6647	...	...	...	...	...	...	...	1.41E-18	NED
1011+0340	0.299	0.4008	5.514	13.47	3.49E-10	...	...	2.56E-19	NED
1011+0342	0.5879	0.5572	6.508	20.55	4.71E-10	0.023	...	3.66E-18	NED
1014+2156	0.1547	0.1404	1.427	3.669	9.26E-11	...	...	2.99E-19	NED
1015+2204	0.3154	0.351	3.188	10.11	2.31E-10	...	...	2.47E-19	NED
1015+2208	<0.10	<0.13	<0.08	<0.93	...	...	...	...	...
1020+5235	0.1951	0.4185	4.372	7.64	2.38E-10	...	...	...	...

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
1020+2009	...	...	...	...	...	0.004	...	3.18E-19	NED
1022-2317	0.2964	1.198	11.25	14.84	5.53E-10	...	...	...	...
1024+2845	0.176	0.2334	2.094	3.453	1.12E-10	...	...	<6.88E-20	NED
1034+2208	<0.1148	<0.1331	0.4804	0.7299	2.48E-11	...	...	2.63E-20	NED
1034+1823	...	...	...	...	...	...	...	8.11E-20	NED
1034-2718	<0.1831	<0.1708	0.8172	3.357	6.89E-11	...	...	4.53E-19	NED
1043+1400	0.4758	1.094	6.005	12.56	3.53E-10	0.035	0.13	7.18E-19	PKS
1044+1205	0.5347	0.5438	8.261	25.93	5.95E-10	...	...	3.40E-18	NED
1045+1250	0.25	<0.14	<0.13	<0.29	...	...	...	<2.91E-19	NED
1045-7209	<0.250	<0.250	0.643	1.542	4.03E-11	...	...	...	...
1048+2814	0.08	<0.12	0.26	0.50	1.48E-11	...	...	4.79E-20	NED
1049+1024	...	...	...	...	...	...	...	1.31E-18	NED
1056+2448	0.217	1.138	12.12	15.13	5.85E-10	...	...	>4.33E-21	NED
1057+1410	...	...	...	...	...	...	...	4.57E-20	NED
1100+1824	...	...	...	...	...	...	...	1.01E-18	NED
1103+0014	1.854	1.695	31.64	93.42	2.20E-09	0.222	0.3	1.37E-17	NED
1109-0238	<0.1347	0.418	3.249	2.531	1.38E-10	...	...	...	...
1114+1819	...	...	...	...	...	...	...	<2.57E-19	NED
1114+1825	...	...	...	...	...	...	...	1.74E-20	NEI
1116+1322	0.1498	<0.4002	2.241	14.16	2.51E-10	...	...	9.12E-19	NED
1117+1315	1.377	<2.236	41.67	110.8	2.70E-09	0.137	...	1.87E-18	NED
1117+1351	2.491	4.969	49.56	103.5	2.90E-09	0.283	...	1.21E-17	NED
1119+5921	0.1272	0.09902	1.436	4.577	1.04E-10	...	...	2.19E-18	NED
1123+1456A	<0.191	0.5796	5.925	10.29	3.22E-10	...	...	8.32E-20	NED
1123+4351	0.7009	0.6865	9.030	32.91	7.08E-10	...	...	2.65E-18	NED
1123+1708	0.117	<0.2207	0.6683	2.581	5.43E-11	...	...	1.74E-18	NED
1125+1126	<0.1728	0.3829	4.217	6.729	2.22E-10	...	...	...	...
1125+0940	<0.254	0.2496	1.102	3.239	7.66E-11	...	...	5.55E-19	NED
1127+0936	0.3961	0.3126	3.536	10.24	2.44E-10	...	...	2.51E-18	NED
1129+5320	0.168	0.09744	0.6972	2.292	5.15E-11	...	...	4.66E-18	NED
1135-3202	<0.1157	<0.1266	0.4706	1.394	3.29E-11	...	...	...	...
1136+5632	0.1647	0.1837	1.873	7.748	1.59E-10	0.026	...	1.03E-18	NED
1138+2243	<0.2022	0.2182	2.89	5.871	1.68E-10	...	...	1.89E-19	NED
1138+4116	<0.2003	<0.1376	1.025	1.513	5.24E-11	...	...	...	...
1143+2040	...	...	...	...	...	...	...	2.07E-19	NED
1146+2718	0.1655	0.1055	0.3352	2.153	3.80E-11	...	...	8.71E-19	NED
1146+5621	0.1085	<0.0746	0.4155	2.019	3.89E-11	...	...	1.79E-18	NED
1148+5206	0.1023	0.08719	0.6117	3.156	5.97E-11	...	...	1.12E-18	NED
1148+5521	<0.1167	0.1084	0.8279	<2.030	...	...	...	2.73E-19	NED
1150+6057	<0.250	<0.250	<0.429	1.273	...	...	...	...	...
1151+5236	1.06	1.25	7.13	31.67	6.31E-10	...	...	1.46E-18	NED
1155+5339	<0.1124	<0.0961	1.123	10.35	1.70E-10	...	...	3.47E-18	NED
1155+3233	...	...	...	...	...	0.035	...	6.61E-19	NED
1155+5543	0.138	0.1594	0.4385	0.9342	2.60E-11	0.073	0.11	3.05E-19	919
1155+4413	0.2397	0.2986	5.702	20.13	4.39E-10	...	...	1.64E-18	NED
1158+6210	0.0861	<0.097	0.5007	1.445	3.45E-11	0.085	...	3.05E-19	NED
1159+0441	<0.17	0.18	0.66	1.28	3.76E-11	...	...	...	...
1203+4745	0.2987	0.3393	4.55	21.25	4.16E-10	...	...	2.68E-18	NED
1203+5259	1.509	6.76	46.93	69.74	2.40E-09	...	...	5.92E-19	NED
1204+4320	...	...	...	...	...	...	...	5.55E-19	NED
1205+6527	0.0895	<0.0918	0.5966	1.51	3.84E-11	...	...	...	...
1207+4248	...	...	...	...	...	...	...	<4.84E-19	NED
1207+4009	...	...	...	...	...	...	...	3.08E-18	NED
1208+3040	<0.11	<0.0981	1.208	2.394	6.94E-11	...	...	<5.28E-19	NED
1211+0305A	<0.11	0.5093	8.503	9.976	4.02E-10	...	...	...	...
1211+1510	0.3553	0.4395	5.924	19.58	4.39E-10	0.033	...	3.73E-18	NED
1212+6838A	<0.0979	0.1781	2.992	5.724	1.69E-10	...	...	...	...
1212+3328	0.08308	<0.1832	0.5998	2.031	4.51E-11	...	...	1.13E-18	NED

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
1213+1325	0.1466	<0.1951	0.9559	9.336	1.49E-10	...	...	2.23E-18	NED
1213+4809	0.1688	0.1706	1.565	5.532	1.21E-10	...	...	<3.89E-19	NED
1216+4734	2.25	2.81	21.6	78.39	1.60E-09	0.17	0.42	2.17E-17	VCV7
1216+0606	0.17	0.08	0.08	1.30	1.90E-11	4.93	9.8	...	NED
1217+2933	0.1913	0.08495	0.5568	1.568	3.79E-11	0.33	...	5.06E-19	NED
1217+0539	0.1147	<0.117	0.6352	1.460	3.91E-11	...	...	<1.40E-19	NED
1218+1839	0.1808	0.5050	4.581	10.44	2.80E-10	...	...	6.61E-19	NED
1220+3010	0.1650	0.3617	3.788	7.140	2.13E-10	...	...	<1.92E-19	NED
1220+1605	1.109	1.574	18.95	56.19	1.30E-09	0.09	...	2.96E-18	NED
1220+0531	<0.1052	<0.1325	0.3769	1.864	3.57E-11	...	...	3.77E-19	NED
1221+1658	<0.0980	<0.1181	0.3871	0.8599	2.34E-11	...	...	<1.55E-19	NED
1222-0624	<0.0909	<0.3663	5.811	7.003	2.77E-10	...	...	...	...
1222+1309	0.1649	<0.2727	0.5023	0.9804	2.87E-11	3.582	4.2	1.32E-18	NED
1223+1829	0.1543	0.1472	0.9564	4.017	8.17E-11	...	...	3.28E-19	NED
1223+0917	...	...	...	...	...	0.13	61	3.60E-20	NED
1223+3130	1.917	2.3	26.81	66.07	1.70E-09	0.078	...	3.11E-18	NED
1224+1519	0.539	1.443	7.985	16.85	4.72E-10	34	...	9.10E-20	NED
1224+1123	0.185	<0.24	1.539	4.316	1.04E-10	...	...	<2.34E-19	NED
1225+1321	0.1218	<0.2963	1.846	<7.496	...	...	...	<5.92E-19	NED
1225+1317	0.2089	0.1743	3.761	11.27	2.64E-10	0.065	0.09	2.13E-19	710
1226+0350	<0.2835	0.5366	4.897	9.649	2.81E-10	...	...	2.38E-19	NED
1226+1415	...	...	...	...	...	...	...	<2.03E-19	NED
1228+1240	0.2312	<0.2409	0.3939	<1.016	...	67.6	120	...	PKS
1228+2603	<0.1446	<0.1630	0.2110	<0.5892	...	...	...	...	...
1229+1441	1.02	1.278	13.71	54.65	1.10E-09	0.089	...	1.94E-18	NED
1231+0255	1.367	2.247	26.21	56.28	1.50E-09	0.151	...	5.20E-18	NED
1232+1549	<0.2717	<0.1403	1.523	5.515	1.19E-10	...	...	2.94E-19	NED
1232+1446	<0.1208	<0.1734	1.465	9.44	1.67E-10	...	...	5.49E-19	NED
1232+1229	<0.09	<0.19	0.14	0.22	7.32E-12	...	...	4.45E-19	NED
1233+1249	...	...	...	...	...	0.064	...	<1.20E-19	NED
1233+2615	0.7513	0.7322	6.65	30.44	6.00E-10	0.045	...	1.32E-18	NED
1234+1326	0.4789	1.053	7.562	23.66	5.44E-10	0.031	...	4.36E-19	NED
1235+1205	0.3492	0.379	4.742	18.09	3.82E-10	0.057	0.11	4.57E-19	708
1235+7427	<0.1111	<0.0957	0.2067	<0.8294	...	...	...	...	...
1237-1121	0.3863	0.4972	3.113	14.13	2.79E-10	0.156	...	7.18E-19	NED
1237+1027	0.1215	<0.1271	0.4884	1.279	3.20E-11	...	...	<3.17E-19	NED
1240+0257	0.19	<0.16	0.14	<0.46	...	0.075	...	6.98E-19	NED
1240+0215	<0.0955	<0.1077	0.5018	1.858	3.97E-11	...	...	1.21E-19	NED
1241+1640	0.4118	0.4242	5.447	15.57	3.73E-10	...	...	2.86E-18	NED
1242-0011	1.602	2.121	28.20	77.11	1.80E-09	0.013	...	3.22E-18	NED
1243+3100	...	...	...	...	...	...	...	3.66E-19	NED
1243+3059	...	...	...	...	...	...	...	2.94E-19	NED
1245+3401	<0.0560	<0.0767	0.2135	<0.5463	...	...	...	...	...
1246-4102	...	...	...	...	...	1.33	2.21	...	PKS
1247+0534	0.2120	0.1865	4.305	10.28	2.69E-10	...	...	2.78E-18	NED
1248+7308	0.3289	0.3917	4.562	13.71	3.21E-10	...	...	4.98E-19	NED
1248+4123	2.79	3.5	55.7	104	3.10E-09	0.09	...	4.17E-18	NED
1250+1130	0.14	<0.15	<0.15	<0.35	...	...	...	6.14E-20	NED
1250-4121	0.108	0.3054	0.9907	1.912	5.63E-11	...	...	...	...
1250+0226	...	...	...	...	...	...	...	7.24E-19	NED
1254+2157	1.913	2.538	34.38	74.5	2.00E-09	0.056	...	2.07E-18	NED
1255-2929	0.2408	0.9331	5.96	7.918	2.94E-10	0.015	...	...	...
1256+1426	0.29	<0.23	0.36	0.77	2.14E-11	...	...	7.73E-19	NED
1258-3207	<0.1007	<0.1872	0.592	1.666	4.02E-11	...	...	...	...
1258-3039	<0.1111	0.2875	0.7686	2.396	5.52E-11	...	...	...	...
1259+2934	0.2333	1.288	5.726	7.54	2.81E-10	...	...	3.15E-20	NED
1259+0436	0.1565	0.3857	5.068	7.955	2.65E-10	...	...	1.27E-19	NED
1300-2339	0.1372	0.8456	13.66	15.26	6.36E-10	...	...	...	...

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
1300–3158	<0.1233	<0.1454	0.577	2.16	4.60E-11	...	...	...	...
1305–2407	<0.1452	0.6713	1.44	1.49	6.59E-11	0.22	0.28	...	PKS
1308+3719	0.9514	1.209	19.65	54.26	1.30E-09	0.062	0.07	7.94E-19	VCV7
1309+2310	0.2328	<0.3179	2.66	7.801	1.85E-10	...	...	9.64E-19	NED
1313+4217	1.857	1.875	30.15	103.2	2.20E-09	0.116	...	1.89E-18	NED
1313+6223B	0.345	1.954	10.66	11.8	4.95E-10	...	...	...	...
1314–3150	0.2735	0.387	4.28	11.12	2.79E-10	...	...	...	...
1315–0949	<0.274	<0.708	0.853	<1.279	...	...	...	...	...
1318+3423	0.2628	1.362	15.44	25.18	8.19E-10	0.053	...	...	NED
1318+0036	0.2211	0.7901	6.66	2.39	2.47E-10	...	...	2.54E-19	NED
1319–2710	0.1148	<0.1702	0.8911	3.57	7.39E-11	...	...	1.49E-18	NED
1324–2741	<0.0689	<0.1548	0.5566	0.74	2.74E-11	...	...	...	...
1327+4727	1.801	2.611	32.68	137.7	2.70E-09	0.362	0.63	1.02E-17	346
1327+4731	0.7211	1.453	10.25	<74.38	...	...	...	...	...
1330+6301	0.2573	0.9109	6.908	14.11	4.02E-10	...	...	1.80E-19	NED
1336+4831	0.2307	0.9765	7.342	11.07	3.78E-10	...	...	...	...
1337+0105	0.5633	1.23	9.297	19.59	5.49E-10	...	...	...	...
1338+2332	0.125	0.67954	4.692	6.089	2.29E-10	...	...	...	...
1339+5555	0.1888	0.1892	1.525	4.473	1.06E-10	...	...	7.68E-20	NED
1342+5608	0.2352	2.282	21.74	21.38	9.75E-10	0.073	0.1	1.05E-19	NED
1344+4407	0.225	0.2542	1.811	7.99	1.60E-10	...	...	2.58E-18	NED
1345–2956	<0.0607	<0.1576	2.158	3.376	1.13E-10	...	...	...	...
1345–3010	<0.1272	<0.0939	0.4312	1.4538	3.23E-11	...	...	...	...
1346–2650	<0.1109	<0.2034	0.3013	<0.7125	...	0.23	0.52	...	NED
1347+6026	<0.0951	<0.0791	0.4064	0.8177	2.35E-11	0.047	...	...	NED
1348–4750	0.41	0.99	5.94	...	...	...	...	...	...
1351+4036	0.1411	0.3270	2.22	8.76	1.83E-10	...	...	1.41E-18	NED
1351+4031	<0.1744	<0.1019	0.2985	<2.401	...	0.035	...	8.18E-19	NED
1351+4032	...	...	...	...	...	...	...	8.78E-19	NED
1353+4042	0.2075	0.223	3.311	14.8	2.94E-10	...	...	1.94E-18	NED
1353+0529	0.1692	<0.2398	1.693	5.15	1.20E-10	0.106	...	8.24E-20	NED
1354+4728	<0.1572	<0.1593	0.9717	3.357	7.39E-11	...	...	5.25E-19	NED
1354–2022	<0.3044	<0.217	1.315	1.88	6.64E-11	...	...	...	...
1356+3740	...	...	...	...	...	...	...	1.27E-18	NED
1357–2838	<0.1481	<0.2052	0.8007	2.438	5.68E-11	...	...	...	...
1359+3404	<0.0768	0.1405	0.7616	1.606	4.50E-11	...	...	9.96E-20	NED
1400–4108	<0.1239	0.4356	2.825	2.958	1.29E-10	...	...	3.03E-18	NED
1400+4924	0.1740	0.1460	1.587	5.191	1.17E-10	...	...	1.33E-18	NED
1403+5354	<0.0884	0.07589	1.331	4.802	1.04E-10	...	...	5.25E-18	NED
1404–2646	...	...	...	...	...	0.4	0.5	...	PKS
1405+5514	<0.06	<0.06	0.15	0.85	1.56E-11	...	...	...	...
1408+1347	0.1313	1.042	3.696	2.871	1.56E-10	...	...	...	...
1411+0753	<0.1591	0.2351	1.308	2.342	7.20E-11	0.061	...	1.10E-20	NED
1414+3648	...	...	...	...	...	...	...	1.80E-19	NED
1414+3648	...	...	...	...	...	...	...	2.07E-19	NED
1415+2705	0.1065	0.3219	2.603	5.621	1.55E-10	...	...	3.13E-20	NED
1417+0409	...	...	1.07	5.61	1.06E-10	...	...	9.12E-19	NED
1417+4927	0.1543	0.8385	5.623	8.003	2.84E-10	...	...	...	...
1422+3505	0.1841	0.1744	1.263	5.067	1.05E-10	...	...	1.90E-19	NED
1426+2737	0.08383	<0.112	0.2882	1.777	3.18E-11	0.096	0.11	4.92E-19	132
1428+3532	0.2676	0.2452	2.605	8.279	1.89E-10	...	...	3.64E-19	NED
1430+3631	0.1006	<0.1217	0.4724	1.811	3.82E-11	0.135	0.2	...	132
1430+5808	0.6683	0.8968	8.885	23.54	5.85E-10	0.068	...	7.94E-19	NED
1434–1447	<0.1405	0.4947	6.87	7.068	3.12E-10	...	...	...	...
1436+0534	<0.0844	<0.141	0.2717	1.36	2.60E-11	...	...	2.42E-18	NED
1442+0209	0.1441	<0.176	1.334	8.875	1.55E-10	...	...	1.54E-18	NED
1454+2448	0.2208	0.434	5.988	15.65	3.92E-10	...	...	...	...
1456+4504	0.2136	0.4195	2.403	4.853	1.39E-10	...	...	...	...

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
1458+0153	<0.1161	<0.1556	0.1907	<0.9129	...	...	...	...	...
1502+0217	<0.1905	<0.1424	0.7409	1.466	4.26E-11	...	...	<6.55E-20	NED
1503+0147	...	...	...	...	...	...	...	1.22E-19	NED
1504+1303	<0.1338	0.1142	0.622	2.122	4.70E-11	...	...	...	...
1504+0144	0.09334	<0.1219	0.8188	4.22	7.98E-11	...	...	9.46E-19	NED
1505+5557	0.2553	0.2067	4.878	16.13	3.62E-10	...	...	<2.35E-19	NED
1508+5711	0.2485	0.2939	3.04	9.239	2.15E-10	...	...	1.47E-18	NED
1513+4213	0.2613	0.386	3.408	10.66	2.45E-10	...	...	8.32E-19	NED
1514+0026	...	...	...	...	...	1.37	1.87	...	PKS
1515+5535	0.3291	0.4651	3.989	5.73	1.99E-10	...	...	9.20E-19	NED
1516+4255	0.2098	1.393	9.212	10.7	4.27E-10	0.042	...	...	...
1519+0514	0.2088	0.2488	2.912	10.21	2.20E-10	...	...	1.82E-18	NED
1524+4150	0.43	1.62	9.14	13.69	4.62E-10	0.033	0.07	1.49E-19	VCV7
1525+3609	<0.2001	1.323	7.286	5.907	3.06E-10	...	...	...	...
1532+1521	0.5328	1.161	10.04	18.97	5.56E-10	0.036	0.06	3.44E-19	VCV7
1533-0513	0.1548	0.5081	5.616	8.986	2.91E-10	...	...	...	...
1536+1220	0.2672	0.2661	2.820	8.797	1.99E-10	...	...	8.79E-19	NED
1537+5931	<0.06	<0.06	<0.10	0.33	...	...	...	...	...
1538+5929	0.1349	0.1157	1.051	6.355	1.12E-10	...	...	1.46E-18	NED
1540+3228	<0.0478	0.115	0.8771	0.9655	4.00E-11	...	...	...	...
1542+4116	<0.25	0.266	0.933	4.667	8.77E-11	...	...	3.22E-19	NED
1544+0602	0.1409	0.266	0.9297	1.348	4.65E-11	...	...	...	...
1544+3312	<0.0486	<0.0559	0.3832	0.858	2.29E-11	...	...	...	...
1546+2853	<0.0722	0.1154	0.6069	1.369	3.64E-11	...	...	...	...
1548+2920	<0.0759	0.116	0.5321	1.231	3.28E-11	...	...	...	...
1551+1216	<0.116	0.1286	0.6319	1.199	3.57E-11	...	...	...	...
1600+3743	<0.7924	<0.0577	0.3212	0.5348	1.72E-11	...	...	...	...
1603+1756	...	...	...	...	...	...	...	1.60E-19	NED
1609-0139	0.08997	0.2643	3.609	4.874	1.79E-10	...	...	...	...
1616-0746	<0.3498	0.5625	10.18	13.72	5.04E-10	...	...	...	...
1616+6819	<0.0797	0.07345	0.848	1.635	4.82E-11	...	...	...	...
1618+0651	<0.0875	<0.1075	0.4642	<1.146	...	...	...	...	...
1627+2433	<0.0875	0.217	1.019	1.139	4.75E-11	...	...	...	...
1628+0411	0.2906	0.7699	6.946	12.12	3.79E-10	...	...	6.37E-20	NED
1633+4630	<0.0573	<0.0963	1.188	2.086	6.49E-11	...	...	...	...
1637+8238	...	...	...	...	...	0.978	1.37	...	347
1650+0228	0.5578	3.417	22.68	27.78	1.0E-08	0.179	0.3	2.35E-19	651
1657+5900A	0.3305	0.4941	7.878	22.59	5.41E-10	0.053	...	...	NED
1701+3131	<0.0695	0.2862	1.991	2.523	9.65E-11	...	...	4.87E-20	NED
1711+7221	<0.0981	<0.0387	0.2019	1.028	1.92E-11	...	...	5.18E-19	NED
1718-6457	...	...	...	...	...	3.7	4	8.09E-19	PKS
1720-0014	0.1953	1.658	31.14	34.9	1.4E-09	0.069	...	...	NED
1729+0705	0.1881	0.1908	2.287	13.07	2.39E-10	...	...	4.57E-18	NED
1748+6843	0.05308	0.1042	0.5445	0.9663	2.99E-11	...	...	...	...
1749+2305	...	...	...	...	...	...	...	<2.85E-20	NED
1749+7009	0.4462	0.5017	7.578	25.94	5.73E-10	...	...	7.31E-18	NED
1753+1820	0.1007	0.1005	0.6424	2.548	5.30E-11	0.176	0.19	6.55E-19	VCV
1753+1822	<0.07	<0.09	<0.09	<0.56	...	...	...	2.03E-19	NED
1845+4538	<0.09	<0.08	<0.15	2.38	...	...	...	...	...
1845+4529	<0.08	<0.05	<0.20	<0.53	...	...	...	...	...
1846-7857	0.06802	0.09108	0.3235	<2.327	...	...	...	...	...
1859+5048	<0.1654	0.4207	4.503	7.774	2.44E-10	...	...	...	...
1907+5051	0.3611	1.29	6.328	11.56	3.51E-10	0.047	0.08	7.18E-19	637
1908-6056	<0.2287	<0.1143	0.8756	4.253	8.21E-11	...	...	...	...
1911-2124	0.1714	0.4754	6.16	9.723	7.77E-11	...	...	...	...
1932-6555	<0.0812	0.1221	0.713	<2.3080	...	...	...	...	...
1934-6349	...	...	...	...	...	6.13	11.5	...	PKS
1941-5422	<0.7258	<0.1733	0.4247	<2.056	...	...	...	...	...

TABLE 2 (CONTINUED)

IAU NAME	F(12 μ m) ^a	F(25 μ m) ^a	F(60 μ m) ^a	F(100 μ m) ^a	f(FIR) ^b	F(6cm) ^a	F(11cm) ^a	f(HI) ^b	Ref
2003–2803	0.1166	0.2648	1.79	2.468	8.93E-11	...	...	...	...
2010–4156	<0.1348	0.3433	5.228	5.165	2.35E-10	...	...	...	...
2027–3050	0.2788	0.3232	2.187	6.383	1.52E-10	...	...	...	...
2036+6555	0.6169	1.374	13.21	37.47	9.02E-10	...	...	1.79E-18	NED
2037–3822	0.1189	0.2719	1.308	1.858	6.59E-11	...	...	...	...
2041–1651	0.65	0.35	4.36	5.25	2.08E-10	...	...	...	...
2055–4250	0.2844	1.906	12.78	9.948	5.41E-10	...	...	...	...
2120–2242	<0.1167	<0.1791	0.2499	0.7202	1.72E-11	...	...	...	...
2132–2346	<0.0799	<0.1554	1.652	2.218	8.17E-11	...	...	...	...
2145–3511	0.5882	2.117	16.48	25.57	8.58E-10	...	...	<4.85E-19	NED
2146–3506	<0.0526	<0.1345	0.218	0.7951	1.71E-11	0.004	...	<3.01E-19	NED
2153+0707	<0.0112	0.2315	1.325	2.315	7.22E-11	...	...	<2.93E-20	NED
2154–1206	<0.1083	<0.2051	0.8116	1.546	4.59E-11	...	...	...	...
2157–3336	<0.1192	<0.1620	0.4189	1.05	2.69E-11	...	...	...	...
2158+1729	...	...	...	...	...	...	...	9.18E-19	NED
2159–2243	<0.118	<0.1752	0.2456	0.6962	1.68E-11	...	...	...	...
2205+3106	0.3762	0.3007	4.964	18.45	3.94E-10	...	...	6.55E-19	...
2213–2144	<0.1504	<0.2277	0.8135	2.607	5.93E-11	...	...	...	...
2214–5246	0.07823	0.1442	1.122	1.565	5.62E-11	...	...	...	...
2220–3817	<0.0881	<0.1281	0.26	0.8831	1.96E-11	...	...	...	...
2224–3524	<0.1070	0.2059	1.078	2.558	6.73E-11	...	...	...	...
2226–6555	<0.1386	0.1934	1.825	3.571	1.04E-10	...	...	...	...
2227–1112	<0.1151	<0.2481	0.7732	0.9775	3.75E-11	...	...	...	...
2228–1917	0.2907	0.763	5.965	10.21	3.23E-10	...	...	...	...
2234+3409	0.998	1.322	23.15	81.62	1.70E-09	0.096	...	8.84E-18	NED
2235–2606	0.2684	0.4828	6.025	12.56	3.54E-10	...	...	...	...
2238+3359	<0.3635	0.7941	8.166	14.16	4.44E-10	...	...	...	...
2243+3925	...	...	...	...	...	3.24	6	...	NED
2247+3439	0.2058	0.3854	4.978	9.901	2.87E-10	...	...	...	...
2248–1917	0.2907	0.763	5.965	10.21	3.23E-10	...	...	...	...
2254–3643	0.123	<0.2105	0.4666	0.7488	2.46E-11	0.72	0.82	...	PKS
2259+1541	<0.3235	<0.4937	3.799	7.395	2.17E-10	0.004	...	9.55E-19	NED
2259+2647	0.1068	<0.1311	0.9016	2.275	5.80E-11	...	...	2.15E-19	NED
2302+1203	0.8823	3.684	12.84	23.56	7.14E-10	0.041	...	1.74E-18	NED
2302+1916	0.2014	0.5285	7.535	10.60	3.79E-10	...	...	7.84E-20	NED
2312–5919	0.24	1.59	10.80	10.99	4.90E-10	...	...	...	...
2313+2516	0.2619	1.797	9.761	11.13	4.58E-10	...	...	9.46E-20	NED
2315+0618	0.3230	0.7505	7.221	12.86	3.97E-10	...	...	7.94E-19	NED
2316+0537	<0.1342	0.275	1.41	1.509	6.49E-11	...	...	...	...
2318+0756	<0.14	<0.16	<0.13	<0.34	...	0.152	0.40	<1.8E-19	NED
2322–1223	...	...	...	...	...	0.37	0.88	...	PKS
2322+2813	...	...	...	...	...	0.076	...	7.73E-20	NED
2323–6926	<0.0585	0.2947	3.744	3.42	1.65E-10	...	...	...	...
2336+3604	<0.0955	0.8083	7.087	8.363	3.36E-10	...	...	...	...
2339–0356	0.2191	0.6388	5.149	8.024	2.69E-10	...	...	...	...
2341+1029	0.1627	0.3425	2.941	6.543	1.78E-10	...	...	5.06E-19	NED
2341+0939	<0.1125	<0.1988	0.7911	2.53	5.76E-11	...	...	1.58E-19	NED
2344+2912	...	...	...	...	...	...	...	1.12E-18	NED
2348+1949C	0.3246	0.5796	4.339	<29.63	...	...	...	2.55E-19	NED
2350+0326	<0.1101	<0.2011	0.4487	1.25	3.03E-11	...	...	...	...
2354–3502	...	...	...	...	...	0.11	0.35	...	PKS
2354–3457	<0.0917	<0.114	0.4835	1.419	3.36E-11	...	...	...	...

^a In units of Jy.^b In units of ergs s^{−1} cm^{−2}.

TABLE 3

PHOTOMETRIC PROPERTIES OF THE HOST GALAXIES

IAU NAME	V	$U - B$	$B - V$	$V - R$	Ref	J	$J - H$	$H - K$	L
0000+1552	10.57	0.37	0.83	0.66	NED	10.21	0.9	0.38	...
0023-0341	14.28	0.15	1.03	0.92	832	...	...	...	...
0040+4059	7.96	0.31	0.68	0.92	...	8.4	0.8	0.4	7.2
0045-2533	9.19	0.39	1.05	...	356	6.81	0.94	0.41	6.07
0047+3200	11.63	0.38	0.82	...	NED	...	...	...	...
0052+2858	14.25	0.18	0.74	...	NED	13.02	0.73	0.32	...
0053-1432	15.08	0.2	0.81	0.73	832	...	...	...	...
0055+3004	11.16	0.56	0.93	...	NED	11.30	0.80	0.30	...
0106+3523	10.22	0.32	1.01	...	933	9.38	0.67	0.14	...
0108+3253	11.48	0.54	0.94	...	NED	...	...	...	...
0110+0043	11.47	-0.2	0.43	...	NED	...	...	...	...
0116+1211	15.96	0.05	0.48	...	VCV	...	...	...	...
0117+0309	11.51	0.38	0.82	0.56	NED	...	...	...	...
0119+0459	10.28	0.28	0.79	0.58	NED	9.25	0.75	0.22	...
0121+3154	14.05	0.14	0.82	0.93	832	...	...	...	...
0121+0128	11.73	0.19	0.76	...	NED	...	...	...	...
0122+0916	10.25	0.58	1.00	0.96	NED	9.36	0.75	0.27	...
0129+1719	14.4	...	...	...	...	...	...	...	...
0130-0734	12.57	-0.07	0.61	...	HUC	...	...	...	...
0140+1323	11.9	...	0.86	...	VCV7	...	...	...	...
0144+2704	11.50	...	0.5	...	NED	...	...	...	...
0150+0357	11.70	0.34	0.84	...	NED	...	...	...	...
0206-1022B	12.70	0.44	0.87	...	NED	...	...	...	...
0206-1022A	12.10	0.15	0.75	...	NED	...	...	...	...
0208+3715	12.58	0.18	0.69	...	NED	...	...	...	...
0233+3845	11.10	...	0.63	...	NED	...	...	...	...
0238-0828	11.5	0.49	0.96	...	634	10.39	0.76	0.3	8.73
0239+0013	10.59	0.06	0.63	0.57	NED	...	...	...	...
0248+4302	17.36	...	0.73	...	VCV	...	...	...	...
0257+4441	10.99	0.36	0.85	...	NED	...	...	...	...
0258+3500	13.4	0.64	1.06	...	634	12.98	0.75	0.3	...
0300+4611	11.25	...	0.64	...	NED	...	...	...	...
0308-0906	11.99	-0.04	0.69	...	NED	...	...	...	...
0322-3638	...	...	...	...	...	8.98	0.67	0.27	...
0401-4332	13.2	-0.07	0.35	...	356	...	...	...	...
0428-5355	13.2	0.82	1.15	...	653	...	...	...	...
0503-2839	15	...	...	...	VCV	8.71	0.82	0.38	...
0505-3734	10.06	0.28	0.84	0.61	356	...	...	...	6.7
0536+6921	12.2	...	0.74	...	VCV	9.23	0.81	0.33	...
0603-7102W	...	...	...	...	...	14.9 ^a	0.7 ^a	0.6 ^a	...
0603-7102E	...	...	...	...	...	14.4 ^a	0.8 ^a	0.8 ^a	...
0626-6319	15.75	-0.31	0.37	...	66	...	...	...	...
0715-5715	13.04	-0.02	0.62	...	356	...	...	...	...
0718+8016	10.43	-0.03	0.49	...	NED	...	...	...	...
0722-0933	14.89	0.3	1.06	...	688	...	...	...	...
0803+0744	15.4	...	...	...	VCV7	...	...	...	...
0811+4912	11.80	-0.3	0.37	...	NED	...	...	...	...
0840+5023	11.88	0.39	0.94	...	631	...	...	...	...
0848+7340	11.71	0.23	0.76	...	NED	...	...	...	...
0849+7824	11.08	0.53	0.95	...	VCV	8.86	0.69	0.24	...
0849+3336	9.75	0.08	0.65	...	NED	7.91	0.81	0.25	...
0849+5130	10.3	0.43	0.81	...	933	8.68	0.7	0.21	...
0851+5855	11.36	0.38	0.78	...	933	...	...	...	...
0906-1248N	...	...	...	...	...	15.5 ^a	0.8 ^a	0.5 ^a	...
0907+6014	11.22	0.53	1	...	631	8.36	0.69	0.19	...
0911-1007E	...	...	...	...	...	13.0 ^a	0.6 ^a	0.4 ^a	...
0914+6924	10.93	0.76	1	...	933	...	...	...	...

TABLE 3 (CONTINUED)

IAU NAME	V	$U - B$	$B - V$	$V - R$	Ref	J	$J - H$	$H - K$	L
0915-1153	14.8	...	...	...	VCV	...	...	...	...
0916+3357	11.87	0.55	0.93	0.88	NED	...	...	...	...
0918+5111	9.18	0.44	0.83	...	933	7.77	0.72	0.22	...
0931+1022	11.72	0.51	1.1	...	933	11.74	0.81	0.26	...
0938+0348	15	...	...	...	VCV7	...	...	...	...
0945+7230	10.47	...	0.75	...	933	...	...	...	...
0951+3443	10.90	0.48	0.91	...	NED	...	...	...	...
0951+6918	8.4	0.45	1	...	762	6.2	0.76	0.21	...
0958+5555	10.57	0.27	0.65	...	933	9.78	1.01	0.49	...
0959+6858	11.6	-0.04	0.54	0.7	894	9.9	0.68	0.22	...
1003+3508	16	...	...	...	VCV7	14.21	0.85	0.5	...
1004-2941	12.82	-0.36	0.53	...	257	11.9	0.63	0.28	...
1005-3343	15.8	...	0.89	...	VCV	...	...	...	...
1007-6647	13.2	-0.05	0.75	...	677	...	...	...	...
1011+0340	10.39	0.36	0.87	0.57	NED	...	...	...	...
1011+0342	10.44	0.26	0.87	...	933	...	...	...	...
1014+2156	12.15	...	0.8	...	634	...	...	...	...
1015+2204	11.15	0.35	0.82	0.88	NED	...	...	K8.86	...
1015+2208	10.88	0.45	0.92	0.86	NED	9.36	0.67	0.20	...
1020+2009	12.19	0.26	0.86	0.89	894	9.40	0.63	0.20	...
1022-2317	14.21	...	...	0.78	VCV	...	...	...	...
1024+2845	10.79	0.47	0.89	0.86	NED	9.47	0.73	0.24	...
1034+2208	11.43	0.3	0.78	...	NED	...	...	...	...
1034+1823	14.5	...	...	...	VCV7	...	...	...	...
1034-2718	13.51	0.59	1.14	...	933	...	...	...	...
1043+1400	11.5	0.55	...	...	933	...	...	...	...
1044+1205	9.25	0.27	0.89	0.9	925	7.75	0.76	0.24	...
1045+1250	9.28	0.52	0.94	0.581	NED	7.98	0.68	0.2	...
1048+2814	10.99	0.56	0.96	...	NED	...	...	...	...
1057+1410	10.29	0.34	0.82	...	NED	...	...	...	...
1103+0014	9.02	0.13	0.68	0.55	NED	7.54	0.81	0.26	...
1114+1819	9.89	0.49	0.91	...	NED	8.54	0.67	0.25	...
1114+1825	10.76	0.4	0.93	...	NED	9.38	0.69	0.22	...
1116+1322	9.37	0.37	0.74	...	933	8.79	0.72	0.20	...
1117+1837	10.96	0.3	0.81	...	NED	...	...	...	...
1117+1315	8.92	0.11	0.6	0.53	NED	8.64	0.73	0.24	...
1117+1351	9.48	...	0.54	0.88	NED	8.96	1.02	0.38	...
1119+5921	11.15	...	0.51	...	933	...	...	...	...
1123+1708	11.19	...	0.67	...	NED	...	...	...	...
1126+3011	16	...	...	...	VCV7	...	...	...	...
1127+0936	11.07	0.02	0.63	0.5	NED	...	...	...	...
1129+5320	10.78	0.22	0.72	...	NED	...	...	...	...
1133+2828	15.3	0.04	0.67	0.56	769	...	...	...	...
1143+2040	12.88	0.4	0.91	0.03	861	...	...	...	...
1143+3046	16	...	...	...	VCV7	...	...	...	...
1146+2718	11.35	...	0.82	...	NED	...	...	...	...
1146+5621	10.87	0.38	0.9	...	833	...	...	...	...
1148+5206	11.79	0.01	0.62	...	NED	...	...	...	...
1148+5521	13.35	0.39	0.79	...	HUC	...	...	...	...
1150+6057	10.85	0.54	0.92	...	NED	...	...	...	...
1151+5236	10.07	0.12	0.66	...	NED	...	...	...	...
1155+5339	9.9	0.49	0.82	...	933	...	H8.27	...	...
1155+3233	14.4	-0.14	0.61	...	VCV7	...	...	...	...
1155+5543	10.76	0.58	0.94	...	194	9.91	0.72	0.2	...
1155+4413	11.23	0.11	0.71	...	NED	...	H8.35	...	...
1158+6210	10.88	0.55	0.89	...	933	...	...	...	...
1200+6048	17	...	...	...	...	...	...	...	...
1203+4745	10.58	0.1	0.45	...	933	...	...	...	...
1203+5259	12.61	...	...	...	VCV	...	...	...	...

TABLE 3 (CONTINUED)

IAU NAME	V	$U - B$	$B - V$	$V - R$	Ref	J	$J - H$	$H - K$	L
1204+4320	10.89	0.43	0.84	...	933	...	...	...	...
1205+6527	10.33	0.55	0.91	...	933	...	...	...	...
1207+4248	11.30	...	...	...	NED	...	...	...	...
1207+4009	11.27	-0.1	0.5	...	NED	...	...	...	...
1208+3040	11.64	0.27	0.79	...	NED	...	...	...	...
1211+1510	10.14	0.28	0.76	...	933	...	$H8.06$	...	...
1212+3328	10.86	0.53	0.93	...	NED	...	...	...	...
1213+1325	9.92	0.43	1.03	...	933	...	$H7.12$	...	...
1213+4809	11.37	0.34	0.89	...	NED	...	...	...	...
1216+4734	10.88	0.23	0.89	0.83	894	10.02	0.77	0.28	8.43
1216+0606	10.42	0.53	0.97	0.81	NED	8.97	0.7	0.22	...
1217+2933	10.16	0.43	0.9	...	NED	10.41	0.7	0.22	...
1217+0539	11.29	...	0.94	...	NED	...	...	...	...
1218+1839	10.36	...	0.82	0.55	NED	...	...	...	...
1219+0445	9.59	-0.07	0.64	...	933	10.72	0.65	0.37	...
1220+3010	10.58	0.26	0.81	...	NED	...	...	...	...
1220+1605	9.35	-0.05	0.65	0.5	NED	9.68	0.71	0.26	...
1220+0531	11.61	0.33	0.88	...	NED	...	...	...	...
1221+1658	10.99	0.47	0.93	...	NED	...	...	...	...
1222+1309	9.11	0.5	0.94	0.8	NED	...	...	...	...
1223+1829	10.88	0.19	0.82	...	NED	...	...	...	...
1223+3130	10.12	0.09	0.77	...	NED	...	...	...	...
1224+1519	10.99	0.39	1.01	...	933	...	...	...	...
1224+1123	10.04	0.54	0.96	0.56	NED	8.78	0.8	0.25	...
1225+1321	10.80	0.47	0.91	...	NED	8.75	0.74	0.26	...
1225+1317	10.18	0.4	0.84	...	933	...	...	$K8.55$	...
1225+1721	10.09	0.4	0.82	...	933	...	$H7.91$	...	...
1226+0350	10.73	0.25	0.82	...	NED	...	...	...	...
1226+1415	10.37	0.48	0.92	...	NED	8.79	0.69	0.26	...
1228+1240	8.53	0.56	1.03	0.94	925	7.90	0.72	0.23	7.59
1228+2603	9.83	0.44	0.85	...	NED	8.84	0.68	0.2	...
1229+1441	9.46	0.32	0.8	...	933	8.95	0.76	0.25	...
1231+0255	10.52	0.07	0.69	0.63	NED	...	...	...	...
1232+1446	10.15	0.24	0.76	...	NED	...	...	...	...
1232+1229	11.68	0.38	0.84	...	NED	9.71	0.65	0.21	...
1233+1249	9.75	0.53	0.94	...	NED	8.35	0.68	0.25	...
1233+2615	10.43	0.59	0.98	1.08	926	7.83	0.86	0.27	...
1234+1326	9.51	0.31	0.81	...	933	8.94	0.75	0.29	7.8
1235+1205	9.59	0.34	0.83	...	634	8.15	0.75	0.23	...
1235+7427	11.24	0.63	0.93	...	933	...	...	...	...
1237-1121	8.00	0.41	0.84	0.58	NED	8.73	0.82	0.23	7.39
1237+1027	10.41	0.51	0.92	...	NED	...	...	...	...
1240+0257	9.49	0.43	0.92	0.53	NED	8.67	0.69	0.24	...
1240+0215	10.76	0.56	0.93	...	NED	9.04	0.71	0.23	...
1240-0540	15.96	0.15	0.9	0.87	510	...	...	...	...
1241+1640	10.82	...	0.51	...	NED	...	...	...	...
1242-0011	10.74	...	0.58	...	NED	...	...	...	...
1247+0534	11.72	-0.26	0.47	...	NED	...	...	...	...
1248+4123	8.26	0.48	0.76	0.84	924	6.43	0.72	0.21	6.09
1250+1130	10.26	0.41	0.85	...	NED	10.44	0.7	0.24	...
1250+0226	11.04	0.26	0.83	...	NED	...	...	...	...
1254+2157	8.49	0.29	0.87	...	933	7.89	0.82	0.28	...
1256+1426	11.22	0.5	0.9	0.48	NED	...	...	...	...
1300-2339	14.78	0.94	...	...	VCV	...	...	...	...
1301-1114	13.04	...	...	...	NED	...	...	...	...
1305-2407	13.9	0.4	0.89	...	VCV	...	...	...	...
1308+3719	9.87	0.35	0.76	...	933	7.86	0.78	0.25	...
1313+4217	8.4	0.44	0.94	1.01	925	7.59	0.8	0.24	7.86
1316-1223	10.94	0.59	1.04	0.85	918	...	...	...	...

TABLE 3 (CONTINUED)

IAU NAME	<i>V</i>	<i>U</i> − <i>B</i>	<i>B</i> − <i>V</i>	<i>V</i> − <i>R</i>	Ref	<i>J</i>	<i>J</i> − <i>H</i>	<i>H</i> − <i>K</i>	<i>L</i>
1324−2741	14.57	−0.18	0.48	...	66	...	...	...	...
1326−3759	15.02	0.2	1.08	...	VCV7	...	...	...	...
1327+4727	8.33	0.3	0.67	...	591	7.89	0.77	0.24	9.45
1327+4731	9.47	0.44	1.06	...	933	7.80	0.81	0.24	7.91
1330+6301	12.33	0.18	0.69	...	NED	...	...	...	...
1336+4831	13.42	0.06	0.77	...	286	12.73	0.77	0.29	10.14
1338+2332	15.1	...	...	...	VCV	...	...	...	...
1342+5608	14.52	−0.01	0.87	...	733	...	...	...	...
1344+4407	11.83	−0.1	0.43	...	NED	...	...	...	...
1345−2956	17.71	...	1.15	...	VCV	...	...	...	...
1347+6026	10.23	0.48	0.89	...	NED	...	...	...	...
1351+4036	11.34	0.23	0.75	...	NED	...	...	...	...
1351+4031	10.99	0.61	0.95	0.87	NED	...	...	...	...
1351+4032	11.37	0.52	0.94	0.84	NED	...	...	...	...
1353+4042	10.96	0.21	0.67	...	933	...	...	K10.24	...
1353+0529	10.08	0.4	0.92	...	NED	8.45	0.66	0.24	...
1354+4728	11.34	0.31	0.82	...	NED	...	...	...	...
1356−1848	13.4	...	...	...	VCV7	...	...	...	...
1356+3740	11.37	0.02	0.61	...	NED	...	...	...	...
1400−4108	11.64	−0.38	0.49	...	NED	14.77	0.15	0.55	...
1400+4924	...	...	...	...	...	11.56	1.05	0.44	...
1403+5354	10.89	−0.06	0.48	...	933	...	...	...	...
1405+5514	11.41	0.51	0.88	...	NED	11.58	0.7	0.21	...
1408+1347	14.6	0.16	0.94	...	VCV7	...	...	...	...
1417+0409	10.55	0.3	0.73	0.61	NED	9.0	0.72	0.32	...
1422+3505	11.66	0.39	0.8	...	NED	...	...	...	...
1434−1447NE	...	...	...	...	...	16.1 ^a	1.0 ^a	0.8 ^a	...
1434−1447SW	...	...	...	...	...	15.6 ^a	0.9 ^a	1.0 ^a	...
1436+0534	10.88	0.25	0.84	...	NED	9.76	0.71	0.28	...
1442+0209	10.32	0.18	0.67	0.5	NED	9.06	0.89	0.32	...
1458+0153	10.46	0.52	0.94	0.88	NED	9.28	0.7	0.27	...
1502+0217	10.94	0.6	0.94	...	NED	...	...	...	...
1503+0147	10.04	0.45	0.96	0.91	NED	8.98	0.79	0.27	8.06
1504+0144	10.75	0.13	0.72	0.88	NED	...	...	...	...
1505+5557	9.89	0.38	0.84	0.96	NED	8.51	0.72	0.3	...
1508+5711	11.58	−0.16	0.47	...	NED	11.64	0.7	0.3	...
1513+4213	12.08	0.26	0.8	...	HUC	...	...	...	...
1514+0026	16.5	...	...	...	VCV	...	...	...	...
1515+5535	11.83	0.18	0.79	...	NED	...	...	...	...
1516+4255	15	...	...	...	VCV7	...	...	...	...
1519+0514	10.83	...	0.6	0.49	NED	11.41	0.69	0.29	...
1524+4150	13.4	0.23	0.98	...	288	...	...	...	...
1532+1521	12.35	0.21	0.66	...	762	...	...	...	...
1536+1220	11.53	0.07	0.64	...	NED	11.98	0.67	0.24	...
1537+5931	11.13	0.5	0.88	0.82	NED	9.08	0.66	0.2	8.17
1538+5929	11.10	0.06	0.65	...	NED	...	...	...	...
1551+1216	15.3	...	...	...	VCV7	...	...	...	...
1603+1756	14.19	0.22	0.87	0.9	NED	12.94	0.73	0.35	...
1616+6819	15.3	...	...	...	VCV	...	...	...	...
1627+2433	...	...	...	...	...	13.18	0.73	0.45	...
1650+0228	13.24	0.5	0.9	...	745	...	H11.15	...	10.18
1701+3131	13.91	0.14	0.74	0.82	832	12.97	0.66	0.48	...
1703+4306	14.7	...	...	...	VCV7	...	...	...	...
1711+7221	11.01	...	0.79	...	NED	...	...	...	...
1718−6457	15.5	...	...	...	VCV	...	...	...	...
1720−0014	...	...	...	...	...	14.0 ^a	1.1 ^a	0.5 ^a	...
1729+0705	10.42	0.11	0.55	0.55	NED	9.27	0.77	0.25	...
1748+6843	15.45	0.19	0.88	...	320	...	...	...	...
1749+2305	11.45	0.29	0.76	...	NED	...	...	...	...

TABLE 3 (CONTINUED)

IAU NAME	V	$U - B$	$B - V$	$V - R$	Ref	J	$J - H$	$H - K$	L
1749+7009	10.23	-0.05	0.57	...	NED	8.64	0.74	0.18	...
1753+1820	12.55	0.43	0.87	...	762	...	...	...	...
1753+1822	12.84	...	...	...	NED	...	...	...	...
1845+4538	12.24	0.48	0.89	...	NED	10.53	0.72	0.3	...
1845+4529	11.32	0.49	0.91	...	NED	...	...	...	...
1907+5051	13.99	0.01	0.82	0.99	767	...	...	...	...
1932-6555	14.63	-0.34	0.12	...	681	...	...	...	...
1934-6349	18.4	...	...	...	VCV	15.65	0.69	0.55	...
1941-5422	14.98	-0.19	0.17	...	681	...	...	...	...
2003-2803	16.11	...	...	...	VCV	...	...	...	...
2006-5636	14.46	...	1.18	...	939	...	...	...	...
2027-3050	13.71	0.49	1.12	...	648	...	...	...	...
2036+6555	12.88	0.57	1.16	...	HUC	11.01	0.84	0.39	...
2041-1651	...	...	...	...	...	15.4 ^a	1.2 ^a	0.9 ^a	...
2055-4250	14.79	-0.02	0.53	...	57	13.4 ^a	1.2 ^a	0.2 ^a	...
2142+4201	15.2	...	...	...	VCV7	...	...	...	...
2146-3506	12.2	0.52	1.01	...	VCV7	...	...	...	...
2153-2159	17.2	...	...	...	VCV	...	...	...	...
2158+1729	11.20	0.11	0.68	...	NED	9.14	0.7	0.21	...
2205+3106	10.24	0.37	0.74	...	933	...	...	...	...
2226-6555	12.57	...	0.63	...	RC3	...	...	...	...
2234+3409	9.48	0.12	0.63	0.98	NED	7.57	0.77	0.3	...
2243+3925	16.55	...	1.13	0.93	543	...	...	...	...
2254-3643	10.48	0.55	0.97	...	933	...	...	...	...
2259+1541	14	0.04	0.75	...	VCV	10.66	0.74	0.29	...
2259+2647	13.85	0.18	0.8	0.94	832	...	...	...	...
2302+1203	11.07	0.4	0.69	...	933	...	...	...	...
2312-5919N	...	...	...	...	...	13.4 ^a	1.1 ^a	0.5 ^a	...
2315+0618	13.02	0.08	0.64	0.97	NED	...	H10.21	...	...
2316+0537	14.4	...	...	...	VCV7	...	...	...	...
2318+0756	11.11	0.54	0.98	0.93	NED	9.64	0.71	0.23	...
2322-1223	15.46	...	1	...	108	10.16	0.73	0.28	...
2323-6926	...	...	...	...	...	15.4 ^a	1.2 ^a	0.6 ^a	...
2341+1029	11.64	-0.01	0.67	...	NED	...	...	...	...
2341+0939	13.28	0.45	0.91	...	VCV	11.24	0.67	0.23	...
2348+1949C	...	...	...	...	...	11.78	0.73	0.35	...
2350+0326	16	...	...	...	VCV	...	...	...	...
2354-3502	13.26	...	1.07	...	...	...	...	...	...
2358+3109	13.29	0.46	0.83	0.89	NED	...	...	...	...

All references for the NIR from NED, except the Liners with ^a which are taken from Duc, Mirabel & Maza 1997.

TABLE 4

EMISSION-LINE INTENSITY RATIOS

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
0000+1552 ^{HII}	1.56	0.014	0.39	0.22	Ho97
0004+0804W	...	...	1.23	...	KK85
0004+0804E	...	...	1.3:	...	KK85
0018+3747B	0.48	0.065	0.56	0.37	Wu98
0018+3748A ^{HII}	0.15	0.067	0.41	0.23	Wu98
0023-0341	>2.82	...	0.87	0.74	VO87
0026+3016A	1.32	0.107	0.62	0.37	Wu98
0026+3016B	1.15	0.093	0.55	0.28	Wu98
0040+4059	0.04	...	0.34	0.41	GW97
0047+3200 ^B	2.38	0.28	2.36	1.27	Ho97
0052+2858	0.63	0.145	0.59	0.49	VK95
0053-1432 ^{HII}	0.38	0.031	0.46	0.24	VO87
0055+3004 ^B	2.05	0.59	2.91	1.69	Ho97
0106+3527	1.26	0.17	0.44	0.99	Ho97
0108+3253	0.76	0.097	1.78	0.80	Ho97
0110+0043	0.76	0.19	0.56	1.33	Ho97
0116+1211A	...	<0.065	1.91	1.12	MB93
0117+1405	0.76	0.076	0.38	0.36	Wu98
0117+0309	2.41	0.21	0.47	1.01	Ho97
0119+0459	0.95	0.13	1.50	0.47	Ho97
0121+0128	1.30	0.086	1.19	0.33	Ho97
0122+0916	0.48	0.14	1.54	0.71	Ho97
0130-0734	2.53	0.047	0.85	0.43	Ho97
0132+2138	2.69	0.079	0.76	0.32	Wu98
0136-1042	1.62	0.347	0.95	0.59	VK95
0140+1323	...	0.109	0.98	0.87	K83
0141+1650S	1.17	0.209	1.02	0.49	VK95
0150+0357	1.30	0.21	2.16	1.52	Ho97
0201+1430	...	...	2.0:	...	KK85
0206-1022B	1.3:	...	1.09	0.55	KK85
0206-1022A	...	...	0.69	0.46	KK85
0208+3715 ^B	2.06	0.58	1.43	1.33	Ho97
0220+3158A	2.40	0.072	0.72	0.28	Wu98
0225+1922	...	...	1.0:	...	KK85
0233+3845	1.00	0.59	0.59	2.00	Ho97
0238-0828 ^B	2.01	0.71	1.20	1.72	Ho97
0239+0013	...	0.064	0.66	0.41	Ho97
0243+1253	1.66	0.123	0.49	0.25	Wu98
0243+2122	1.59	0.107	0.62	0.31	VK95
0258+3500	2.77	0.378	2.06	1.64	Ho93
0300+4611	1.68	0.32	2.82	1.74	Ho97
0302-7253	>1.45	...	>0.77	...	dGK92
0302-1232	1.20	0.347	3.72	1.62	VK95
0308-0906	3:	...	0.71	0.44	KK85
0313-0236	1.20	0.347	3.72	1.62	VK95
0402+6940	2.45	0.11	1.68	0.94	Ho97
0419-1855N	0.60	0.105	0.63	0.36	VK95
0419-1855S	0.31	0.078	0.78	0.36	VK95
0425-0440	1.66	0.138	0.72	0.51	VK95
0518-1017	1.18	0.155	1.23	0.59	VK95
0536+6921	1.18	0.21	1.96	1.07	Ho97
0603-7102W	1.68	0.11	0.46	0.51	DM97
0603-7102E ^{Sv}	3.94	0.068	0.74	0.36	DM97
0718+8016	2.97	0.25	1.79	1.08	Ho97
0803+0744B	0.72	0.058	1.12	0.43	MB93
0811+4912	1.61	0.082	0.25	0.67	Ho97

TABLE 4 (CONTINUED)

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
0840+5023 ^{B Sy}	3.46	0.47	4.25	2.21	Ho97
0848+7340	2.47	0.097	1.66	0.75	Ho97
0849+7824 ^{Sy}	3.82	1.038	2.91	1.93	Ho97
0849+3336	2.93	0.33	1.49	1.39	Ho97
0849+5130 ^B	1.73	0.19	2.36	0.75	Ho97
0850+3520	...	...	1.29	...	KK85
0851+5855	3.11	0.13	0.93	0.42	Ho97
0857+3915	2.04	0.052	0.42	0.41	VK95
0906-1248N	0.38	0.059	0.63	0.37	DM97
0907+6014	1.61	0.29	1.46	1.68	Ho97
0911-1007E ^{Sy}	3.94	0.679	0.74	0.36	DM97
0912+4432A	2.18	0.141	0.62	0.30	Wu98
0914+6924 ^B	1.41	0.55	1.61	1.41	Ho97
0915-1153 ^e	<2.05	<0.73	...	<2.22	SW96
0916+3357	1.00	0.62	2.91	...	Ho97
0918+5111	1.86	0.17	1.83	1.14	Ho97
0925+3124	1.58	0.089	0.59	0.32	VK95
0927+4918	1.58	0.074	0.81	0.37	VK95
0931+1022	1.57	0.31	1.82	1.61	Ho97
0931+2734	0.40	0.525	0.77	0.85	VO87
0932+6134	1.18	0.112	1.07	0.39	Wu98
0945+7230 ^B	0.97	0.12	0.86	0.61	Ho97
0951+3443	2.70	0.092	1.85	1.06	Ho97
0951+6918 ^{B Sy}	4.11	1.27	2.23	1.37	Ho97
0958+5555 ^{Sy}	4.15	0.18	1.59	0.86	Ho97
0959+6858	0.75	0.003	0.21	0.15	Ho97
1011+0340	2.71	0.27	2.57	1.32	Ho97
1011+0342	2.88	0.28	2.07	1.45	Ho97
1014+2156 ^{Sy}	3.42	0.045	0.70	0.37	Ho97
1015+2204	...	...	1.0	0.7	KK85
1015+2208	2.48	0.30	1.27	0.64	Ho97
1020+5235	1.38	0.087	0.62	0.38	Wu98
1020+2009 ^B	2.22	0.59	1.45	1.36	Ho97
1024+2845	0.63	0.086	0.85	0.43	Ho97
1034+2208	0.33	0.26	1.16	1.94	Ho97
1034-2718	1.99	0.354	1.40	1.59	K83
1043+1400	0.50	0.031	0.83	0.28	Ho97
1044+1205	1.83	0.18	1.11	0.97	Ho97
1045+1250	1.85	0.32	1.66	2.11	Ho97
1048+2814	2.20	0.24	1.47	1.24	Ho97
1049+1024	0.27	0.87	0.67	1.74	Ho97
1056+2448	0.81	0.1	0.65	0.28	Wu98
1057+1410	2.92	0.11	1.33	0.90	Ho97
1100+1824	0.98	0.18	1.10	0.94	Ho97
1103+0014	1.00	0.23	0.64	0.88	Ho97
1109-0238	1.70	0.109	0.61	0.50	DM97
1114+1819	2.28	0.19	2.13	0.83	Ho97
1114+1825	2.94	0.19	1.30	1.35	Ho97
1116+1322	2.33	0.30	3.23	2.17	Ho97
1117+1837	1.15	0.34	1.68	0.96	Ho97
1117+1315	2.90	0.13	1.44	0.75	Ho97
1117+1351	1.77	0.12	0.95	0.78	Ho97
1119+5921 ^B	1.32	0.18	0.71	1.04	Ho97
1123+1457A	0.15	0.079	0.52	0.21	Wu98
1123+1456B	0.49	0.066	0.76	0.23	Wu98
1123+4351	1.28	0.12	1.49	0.67	Ho97
1123+1708	1.26	0.14	0.77	0.97	Ho97
1125+1126	1.59	0.069	0.85	0.26	Wu98

TABLE 4 (CONTINUED)

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
1125+5850B	1.00	0.074	0.40	0.40	Wu98
1125+0940	2.59	0.12	1.15	1.11	Ho97
1127+0936	1.10	0.079	0.88	0.73	Ho97
1129+5320 ^B	3.02	0.66	0.86	1.22	Ho97
1136+5632	0.86	0.35	3.17	2.24	Ho97
1138+2243	...	...	0.97	...	KK85
1143+2040 ^B	2.24	0.58	2.07	1.12	Ho97
1146+2718	1.64	0.58	1.48	2.01	Ho97
1146+5621	2.10	0.09	1.48	1.20	Ho97
1148+5206	1.00	0.13	0.73	0.70	Ho97
1150+6057	2.24	0.23	2.61	1.14	Ho97
1151+5236	1.56	0.12	1.21	0.68	Ho97
1154+0124	2.04	0.079	0.36	0.22	Wu98
1155+5339	1.99	0.13	1.73	0.98	Ho97
1155+3233	0.56	0.19	0.89	0.69	KK85
1155+5543 ^B	1.98	0.53	1.08	0.99	Ho97
1155+4413	0.71	0.11	1.13	0.83	Ho97
1158+6210 ^B	1.85	0.46	2.25	1.81	Ho97
1159+0441	...	...	>0.80	...	dGK92
1203+4745 ^{HII}	0.06	0.010	0.28	0.21	Ho97
1203+5259	0.99	0.041	0.92	0.31	Ho97
1204+4320	0.84	0.19	1.31	1.03	Ho97
1205+6527	1.42	0.14	2.07	1.50	Ho97
1207+4248 ^B	2.15	0.71	1.75	1.39	Ho97
1207+4009	1.09	0.13	0.61	0.80	Ho97
1208+3040	0.86	0.13	0.98	1.12	Ho97
1211+0305A	1.62	0.065	0.42	0.54	Wu98
1211+0305C	1.70	0.178	0.60	0.23	Wu98
1211+1510	1.87	0.14	1.41	1.02	Ho97
1212+6838A	0.83	0.078	0.56	0.45	Wu98
1212+6838C	0.58	0.065	0.42	0.50	Wu98
1212+3328 ^B	1.57	1.22	1.84	1.42	Ho97
1213+1325	2.09	0.12	2.04	0.71	Ho97
1213+4809	2.73	0.12	1.05	0.60	Ho97
1216+4734 ^{B Sy}	10.32	0.38	0.80	0.94	Ho97
1216+0606	2.44	0.49	2.60	1.29	Ho97
1217+2933 ^B	1.31	0.41	1.22	1.48	Ho97
1217+0539	1.48	0.19	2.11	0.56	Ho97
1218+1839	1.72	0.18	1.41	0.91	Ho97
1219+0445	1.32	0.045	0.78	0.40	Ho97
1220+3010	0.72	0.18	1.01	0.57	Ho97
1220+1605	0.79	0.11	1.18	0.48	Ho97
1220+0531	1.69	0.16	0.63	0.72	Ho97
1221+4716	1.28	0.79	3.72	1.62	Ho97
1221+1658	1.64	0.18	1.36	0.37	Ho97
1222-0624	0.72	0.871	1.12	0.22	VK95
1222+1309	1.72	0.33	1.81	1.46	Ho97
1223+1829	2.80	0.44	1.08	0.98	Ho97
1223+0917A	1.26	<0.129	0.93	0.93	MB93
1223+0917B	...	<0.028	0.72	0.47	MB93
1223+3130	0.58	0.14	0.59	0.50	Ho97
1224+1519	2.17	0.075	0.98	0.53	Ho97
1224+1123	1.06	0.097	1.32	0.37	Ho97
1225+1321	0.71	0.13	0.68	0.27	Ho97
1225+1317 ^B	1.59	0.27	1.64	1.51	Ho97
1225+1721 ^B	2.12	0.67	1.94	2.15	Ho97
1226+0350	0.87	0.19	1.04	0.90	Ho97

TABLE 4 (CONTINUED)

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
1226+1415	0.41	0.13	1.22	0.38	Ho97
1228+1240	1.89	0.30	2.12	1.30	Ho97
1228+2603	1.16	0.48	1.61	1.75	Ho97
1229+1441 ^{Sy}	5.31	0.19	2.10	0.94	Ho97
1231+0255	0.96	0.075	0.75	0.46	Ho97
1232+1549	...	0.138	0.36	0.58	Wu98
1232+1446	1.12	0.23	1.38	1.06	Ho97
1232+1229	1.86	0.17	0.55	1.13	Ho97
1233+1249	1.13	0.13	1.50	1.03	Ho97
1233+2615 ^{BSy}	8.73	0.31	2.50	0.97	Ho97
1234+1326	1.18	0.062	0.90	0.40	Ho97
1235+1205 ^B	3.07	0.48	1.89	1.52	Ho97
1235+7427	2.38	0.41	1.42	1.65	Ho97
1237-1121	1.57	0.18	2.19	1.07	Ho97
1237+1027	1.00	0.27	1.48	1.16	Ho97
1240+0257 ^B	1.88	0.22	1.84	1.45	Ho97
1240+0215	1.34	0.078	1.79	0.58	Ho97
1241+1640	1.84	0.29	1.84	1.89	Ho97
1242-0011	1.20	0.062	1.29	0.60	VK95
1243+3100A	...	...	1.0	...	KK85
1243+3059B	...	...	1.0	...	KK85
1245+3401	1.17	0.389	1.26	1.62	VK95
1247+0534	1.01	0.087	0.44	0.67	Ho97
1248+7308 ^B	1.74	0.60	2.86	2.00	Ho97
1248+4123	1.47	0.24	2.15	1.39	Ho97
1250+1130	1.24	0.48	2.20	0.67	Ho97
1250+0226 ^B	2.92	0.54	1.31	1.84	Ho97
1254+2157	...	0.117	0.83	0.64	K83
1256+1426	1.88	0.23	1.73	1.11	Ho97
1259+2934	2.69	0.079	0.72	0.32	VK95
1259+0436	0.93	0.219	0.96	0.40	Wu98
1301-1114	...	...	1.0	...	KK85
1308+3719 ^B	2.27	0.65	4.94	3.31	Ho97
1309+2310	1.47	0.081	1.07	0.56	Ho97
1313+4217	1.85	0.17	1.48	0.74	...
1313+6223B	1.78	0.068	0.56	0.48	Wu98
1316-1223 ^B	2.05	0.34	1.18	1.22	Ho97
1318+3423	2.29	0.159	0.51	0.29	Wu98
1318+0036	1.10	0.091	0.85	0.48	VK95
1327+4727 ^{Sy}	8.96	0.16	2.90	0.86	Ho97
1327+4731	1.22	0.55	5.43	2.00	Ho97
1330+6301	0.44	0.129	0.85	0.47	VK95
1336+4831	1.48	0.126	0.65	0.47	Wu98
1337+0105 ^e	...	...	0.50	0.36	Wu98
1339+5555A	1.35	0.19	1.18	0.49	KK85
1339+5555B	1.72	...	0.85	...	KK85
1342+5608	2.82	0.141	1.02	0.58	VK95
1344+4407	1.59	0.25	2.19	1.78	Ho97
1351+4036	...	...	0.88	0.15	KK85
1351+4031	1.22	0.19	1.71	0.83	Ho97
1351+4032	2.25	0.14	1.34	1.29	Ho97
1353+4042	2.07	0.28	2.36	1.48	Ho97
1353+0529	2.38	0.22	1.30	1.12	Ho97
1354+4728	2.00	0.25	2.15	1.68	Ho97
1356+3740	...	...	0.8	...	KK85
1359+3404A	1.03	...	0.83	0.23	KK85
1359+3403B	...	...	1.0	...	KK85
1400+4924	0.93	0.20	1.03	1.15	Ho97

TABLE 4 (CONTINUED)

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
1403+5354 ^{HII}	1.76	0.024	0.14	0.27	Ho97
1405+5514	2.55	0.21	1.83	0.83	Ho97
1411+0753	...	...	>0.1	1.09	dGK92
1414+3648	...	...	0.8	...	KK85
1414+3648	...	...	1.0	...	KK85
1415+2705	1.59	0.026	0.71	0.30	Wu98
1417+0409	1.85	0.20	1.75	1.37	Ho97
1417+4927	0.35	0.056	0.71	0.22	Wu98
1422+3505	...	...	1.0	...	KK85
1426+2737	1.00	...	2.73	1.17	K84
1428+3532	1.27	0.14	0.94	0.68	Ho97
1430+3631	...	0.868	1.41	2.30	K84
1430+5808	0.63	0.079	0.64	0.44	Ho97
1434+3017	1.05	0.085	0.52	0.50	VK95
1434-1447NE	1.23	0.141	0.62	0.31	VK95
1434-1447SW	1.35	0.096	0.59	0.33	VK95
1436+0534	1.57	0.14	0.76	0.75	Ho97
1442+0209	2.21	0.10	2.08	0.87	Ho97
1454+2448A	1.70	0.112	0.79	0.51	Wu98
1456+4504	1.45	0.054	0.68	0.29	Wu98
1458+0153	1.35	0.19	2.16	1.54	Ho97
1502+0217	1.19	0.053	1.16	0.56	Ho97
1503+0147	1.24	0.091	1.57	0.97	Ho97
1504+0144	2.38	0.22	1.69	1.43	Ho97
1505+5557	2.09	0.13	1.34	0.74	Ho97
1508+5711	1.94	0.16	0.94	0.97	Ho97
1516+4255	1.14	0.085	0.76	0.45	VK95
1515+5535	...	...	2.5	...	KK85
1519+0514	1.01	0.11	0.90	0.61	Ho97
1525+3609	1.29	0.074	0.47	0.36	VK95
1532+1521	1.82	0.065	0.78	0.40	VK95
1533-0513	0.56	0.204	1.18	0.46	VK95
1536+1220	1.41	0.18	1.45	1.09	Ho97
1537+5931	1.08	0.49	2.42	0.71	Ho97
1538+5929	2.65	0.30	3.08	1.51	Ho97
1540+3228	1.29	0.093	0.58	0.20	VK95
1542+4116B	...	0.263	0.60	0.23	Wu98
1544+0602	>0.73	...	>1.07	...	dGK92
1544+3312	0.79	0.234	0.87	0.52	VK95
1546+2853	1.31	...	0.59	0.29	VK95
1548+2920	2.04	0.054	0.83	0.17	VK95
1556+2807W	0.65	0.11	0.69	0.37	VK95
1600+3743	0.87	0.085	0.51	...	VK95
1616-0746	1.02	0.246	1.0	0.44	VK95
1628+0411	0.26	0.093	0.51	0.20	Wu98
1637+8238	...	0.283	2.63	0.27	SO81
1650+0228	1.53	0.43	1.08	1.21	Ho97
1657+5900A	...	0.129	0.51	0.44	Wu98
1657+5901B	0.89	0.079	0.51	0.36	Wu98
1701+3131	0.54	0.115	1.75	0.41	K78
1720-0014	1.10	0.084	0.62	0.32	DM97
1729+0705	1.51	0.15	1.73	1.08	Ho97
1748+6843	0.73	0.035	0.64	0.16	K78
1749+2305	...	0.13	2.33	1.94	Ho97
1749+7009	...	0.080	0.65	0.74	Ho97
1750+6824B	1.95	0.091	0.59	0.26	Wu98
1750+6823D	0.28	0.095	0.55	0.46	Wu98
1753+1820	1.40	0.23	0.73	0.96	Ho97

TABLE 4 (CONTINUED)

IAU NAME	[OIII] ^a /H β	[OI] ^b /H α	[NII] ^c /H α	[SII] ^d /H α	Ref
1753+1822	...	0.87	2.98	8.18	Ho97
1845+4538	...	0.62	2.41	5.14	Ho97
1845+4529	1.40	0.36	3.00	1.47	Ho97
1859+5048	1.23	0.036	0.81	0.34	Wu98
1907+5051	0.49	0.049	0.68	0.35	K78
1908-6056	...	...	>0.85	...	dGK92
1911-2124	0.65	0.1	2.82	0.59	VK95
2036+6555 ^{Sy}	6.62	0.23	2.48	0.91	Ho97
2041-1651	1.43	0.088	0.49	0.43	DM97
2054-4334 ^{Sy}	5.30	0.25	1.64	0.81	DF98
2055-4250	1.06	0.075	0.40	0.39	DM97
2145-3511	2.40	0.257	0.91	0.48	VK95
2154-1206NW	1.29	0.069	0.33	0.42	VK95
2158+1729	1.01	0.14	0.68	1.11	Ho97
2205+3106	2.17	0.25	3.13	1.48	Ho97
2225-2505	2:	...	0.9	0.6:	KK85
2227-1112SE	1.70	0.417	0.79	0.54	VK95
2234+3409	2.79	0.097	1.44	0.55	Ho97
2235-2606	1.86	0.407	1.995	1.10	VK95
2238+3359 ^e	...	0.050	0.69	0.34	Wu98
2243+3925 ^{Sy}	6.85	0.383	1.20	0.63	K78
2247+3439	0.89	0.06	0.41	0.42	VK95
2248-1917	0.91	0.068	0.66	0.20	VK95
2259+2647	>0.26	0.11	0.93	2.04	VO87
2302+1203 ^{B Sy}	3.87	0.15	1.16	0.70	Ho97
2302+1916	0.98	0.056	0.60	0.36	Wu98
2312-5919 ^{HII}	1.63	0.037	0.24	0.29	DM97
2313+2516	2.69	0.079	1.00	0.31	Wu98
2315+0618	1.10	0.105	0.96	0.39	VK95
2315-0441	2.69	<0.38	0.63	0.49	MB93
2318+0756	1.62	0.22	2.35	1.28	Ho97
2322+2813	...	...	0.52	...	K84
2323-6926	1.58	0.081	0.43	0.47	DM97
2336+3604	0.50	0.074	0.66	0.43	VK95
2339-0356	0.36	...	0.35	0.09	KK85
2341+1029	2.52	0.13	1.00	0.77	Ho97
2341+0939 ^{Sy}	5.68	0.24	1.65	0.90	Ho97
2344+2912	...	0.35	1.78	...	KK85
2348+1949C	0.13	0.077	0.40	0.20	Wu98
2358+3109	...	...	0.53	...	KK85

^a [OIII] λ 5007.^b [OI] λ 6300.^c [NII] λ 6583.^d [SII] λ 6716+ λ 6731.^e Observed emission-line ratios, no—dereddened.^B Liners with broad H α emission.^{HII} HII galaxies depending on diagrams of Figure 5.^{Sy} Seyfert 2 galaxies depending on diagrams of Figure 5.

TABLE 5
NEAR-INFRARED SPECTROSCOPY OF LINERs^a

IAU NAME	[FeII] ^b	Pa β ^c	Pa α ^d	Br δ ^e	Br γ ^f	H $_2$ ^g	H $_2$ ^h + [SiVI] ⁱ	H $_2$ ^j	H $_2$ ^k	Ref
0106+3527	7.8 $\pm$ 0.2	-1.3 $\pm$ 0.3	...	...	0 $\pm$ 1	...	...	...	2.4 $\pm$ 0.7	L98
0320-0806	...	...	45.5	...	...	3.99	39.3	...	...	VS97
0325+1606	...	...	85.3	...	1.46	...	8.53	...	7.07	VS97
0352+0028	...	...	15.4	...	...	1.65	1.69	2.63	...	VS97
0851+5855	0 $\pm$ 1	-1.5 $\pm$ 1	...	...	0 $\pm$ 1	...	...	...	0 $\pm$ 1	L98
0903+0503	...	...	20.7	3.52	...	7.2	12.5	4.5	13.3	VS97
0911+0334	...	...	56.8	...	...	...	7.53	7.07	...	VS97
1138+4116	...	...	31.7	...	...	2.95	3.83	...	...	VS97
1155+5339	0 $\pm$ 1	-2 $\pm$ 1	...	...	0 $\pm$ 0.5	...	...	...	0 $\pm$ 0.5	L98
1155+5543	3.1 $\pm$ 0.7	-1 $\pm$ 1	...	...	0 $\pm$ 1	...	...	...	0 $\pm$ 1	L98
1216+4734	3.5 $\pm$ 0.6	-0.4 $\pm$ 0.6	...	...	0 $\pm$ 0.9	...	...	...	0 $\pm$ 0.9	L98
1235+7427	0 $\pm$ 2	-2.6 $\pm$ 2	...	...	0 $\pm$ 0.8	...	...	...	0 $\pm$ 0.8	L98
1248+4123	10 $\pm$ 4	-8 $\pm$ 3	...	...	0 $\pm$ 4	...	...	...	0 $\pm$ 2	L98
1254+2157	4 $\pm$ 2	-2.6 $\pm$ 2	...	...	0 $\pm$ 2	...	...	...	0 $\pm$ 0.5	L98
1327+4727	5.8 $\pm$ 0.9	1.0 $\pm$ 0.7	...	...	0 $\pm$ 1	...	...	...	3.9 $\pm$ 0.6	L98
1434-1447SW	...	...	60.8	3.19	5.34	5.6	15.1	5.37	1.39	VS97
1609-0139	...	...	11.3	...	...	2.85	3.33	...	...	VS97
1633+4630	...	...	9.93	0.80	...	0.54	1.93	...	...	VS97
2132-2346	...	...	10.7	...	...	0.64	2.1	...	...	VS97
2205+3106	2.3 $\pm$ 0.7	-1.5 $\pm$ 0.7	...	...	...	...	...	...	...	L98
2302+1203	0 $\pm$ 0.3	1.3 $\pm$ 0.4	...	...	0 $\pm$ 0.6	...	...	...	2.8 $\pm$ 0.6	L98
2341+0939	4.5 $\pm$ 1	-1.2 $\pm$ 1	...	...	0 $\pm$ 0.5	...	...	...	3.7 $\pm$ 0.4	L98

^a Line flux in 10^{-15} ergs cm $^{-2}$ s $^{-1}$; ^b [FeII] λ 1.2567 μ m; ^c Pa β λ 1.2818 μ m; ^d Pa α λ 1.875 μ m; ^e Br δ λ 1.945 μ m;

^f Br γ λ 2.1655 μ m; ^g H $_2$ λ 1.835 μ m; ^h H $_2$ λ 1.958 μ m; ⁱ [SiVI] λ 1.962 μ m; ^j H $_2$ λ 2.033 μ m; ^k H $_2$ λ 2.1218 μ m.

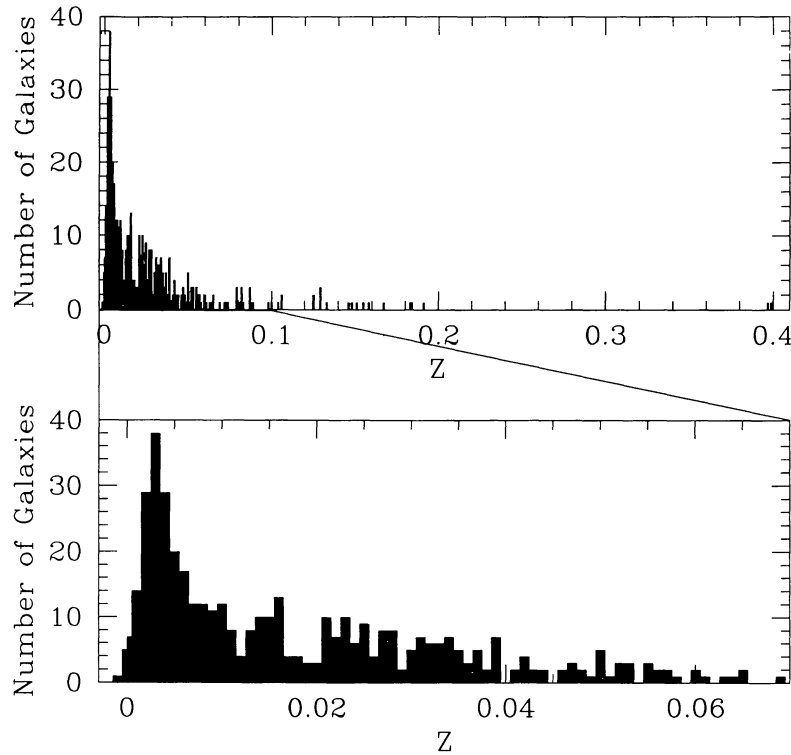


Fig. 1. Redshift distribution of the objects in the catalogue.

TABLE 6

UV AND X-RAY EMISSION OF THE HOST GALAXIES

IAU NAME	<SW ^a > ^c	<LW ^b > ^c	F(X-ray) ^d	Ref ^e	IAU NAME	<SW ^a > ^c	<LW ^b > ^c	F(X-ray) ^d	Ref ^e
0040+4059	0.72	0.77	...	...	1225+1317	...	...	12.3	<i>Eins</i>
0045-2533	...	...	57.2	<i>ROSAT</i>	1226+1415	...	...	<2.87	<i>Eins</i>
0055+3004	...	...	6.77	<i>Eins</i>	1228+1240	...	...	11.5	<i>Eins</i>
0106+3527	0.44	0.67	...	...	1229+1441	1.18	0.62	105	<i>Eins</i>
0121+0128	...	...	<4.39	<i>Eins</i>	1231+0255	...	...	<5.52	<i>Eins</i>
0122+0916	...	...	7.01	<i>Eins</i>	1232+1446	...	...	<4.85	<i>Eins</i>
0144+2704	...	...	<2.05	<i>Eins</i>	1232+1229	...	...	<1.83	<i>Eins</i>
0238-0828	0.86	0.33	6.02	<i>ROSAT</i>	1233+1249	...	...	9.60	<i>Eins</i>
0258+3500	...	...	<3.03	<i>Eins</i>	1233+2615	...	...	785	<i>Eins</i>
0401-4332	2.06	0.99	<4.2	<i>Eins</i>	1234+1326	...	1.4	6.00	<i>Eins</i>
0505-3734	...	...	14.5	<i>ROSAT</i>	1235+1205	0.31	0.31	...	...
0536+6921	...	...	2.77	<i>Eins</i>	1235+7427	...	...	<1.65	<i>Eins</i>
0840+5023	...	0.15	...	...	1237-1121	0.37	0.38	29.24	<i>Eins</i>
0849+3336	5.77	9.20	<8.24	<i>Eins</i>	1240+0257	...	...	108.94	<i>Eins</i>
0849+5130	0.33	0.52	...	...	1240+0215	...	...	2.35	<i>Eins</i>
0851+5855	...	...	23.1	<i>LIP</i>	1241+1640	...	...	<3.43	<i>Eins</i>
0915-1153	...	...	468	<i>ROSAT</i>	1246-4102	...	...	510	<i>Eins</i>
0916+3357	...	...	22.8	<i>Eins</i>	1248+4123	1.12	1.67	20.4	<i>Eins</i>
0918+5111	...	...	4.71	<i>Eins</i>	1250+1130	...	...	3.79	<i>Eins</i>
0931+1022	...	...	<3.76	<i>Eins</i>	1254+2157	0.41	0.6	7.89	<i>Eins</i>
0951+3443	...	...	<1.20	<i>Eins</i>	1308+3719	0.27	0.36	...	...
0951+6918	0.36	0.47	92.9	<i>Eins</i>	1313+4217	...	0.13	...	...
0958+5555	...	...	5.91	<i>Eins</i>	1316-1223	...	...	2.32	<i>Eins</i>
0959+6858	0.77	...	<3.1	<i>Eins</i>	1319-2710	...	...	<5.9	<i>Eins</i>
1004-2941	2.33	1.38	1.79	<i>LIP</i>	1327+4727	...	...	34.1	<i>Eins</i>
1011+0340	...	...	3.04	<i>Eins</i>	1327+4731	0.64	0.66	2.32	<i>Eins</i>
1011+0342	...	...	<4.12	<i>Eins</i>	1336+4831	0.4	0.31	...	...
1044+1205	...	...	<5.51	<i>Eins</i>	1342+5608	0.27	...	...	...
1045+1250	1.08	4.73	<6.62	<i>Eins</i>	1347+6026	...	...	<3.58	<i>Eins</i>
1057+1410	...	...	<4.6	<i>Eins</i>	1351+4036	...	...	<7.12	<i>Eins</i>
1114+1819	...	...	6.19	<i>Eins</i>	1351+4031	...	...	5.79	<i>Eins</i>
1114+1825	...	...	1.87	<i>Eins</i>	1351+4032	...	...	<4.33	<i>Eins</i>
1117+1837	1.20	2.92	...	...	1353+0529	...	...	4.02	<i>Eins</i>
1117+1315	...	...	19.6	<i>ROSAT</i>	1403+5354	...	...	<1.74	<i>Eins</i>
1117+1351	...	...	16.41	<i>Eins</i>	1405+5514	...	...	<3.59	<i>Eins</i>
1129+5320	...	...	<18.71	<i>Eins</i>	1415+2705	0.41	0.38	...	...
1143+2040	...	...	11.8	<i>Eins</i>	1417+0409	...	...	2.87	<i>Eins</i>
1155+3233	0.97	0.51	<3.39	<i>Eins</i>	1426+2737	...	0.04	...	...
1155+5543	0.85	0.76	59.9	<i>Eins</i>	1502+0217	...	...	1.42	<i>Eins</i>
1158+6210	...	...	<4.1	<i>Eins</i>	1503+0147	...	...	51.38	<i>Eins</i>
1203+5259	...	0.17	...	...	1504+0144	...	...	0.91	<i>Eins</i>
1204+4320	0.14	0.27	...	...	1505+5557	...	...	2.02	<i>Eins</i>
1211+1510	...	...	1.33	<i>Eins</i>	1508+5711	...	...	<3.90	<i>Eins</i>
1212+3328	...	...	31.42	<i>Eins</i>	1537+5931	...	...	5.12	<i>Eins</i>
1213+1325	...	...	1.14	<i>Eins</i>	1538+5929	...	...	<8.49	<i>Eins</i>
1216+4734	...	...	45.7	<i>Eins</i>	1650+0228	...	0.58	29.7	<i>ROSAT</i>
1216+0606	...	...	13.18	<i>Eins</i>	1748+6843	...	...	3.41	<i>LIP</i>
1220+3010	0.76	0.73	...	...	1749+7009	...	...	<5.46	<i>Eins</i>
1220+1605	1.79	1.76	8.43	<i>Eins</i>	1907+5051	0.32	0.43	...	...
1221+1658	...	0.18	<1.64	<i>Eins</i>	1941-5422	0.73	...	...	...
1222+1309	...	...	16.43	<i>Eins</i>	2036+6555	...	...	<5.81	NED
1223+1829	...	...	<1.43	<i>Eins</i>	2145-3511	0.78	0.71	...	...
1223+0917	...	...	7.58	<i>ROSAT</i>	2234+3409	...	...	8.81	<i>Eins</i>
1224+1123	...	...	3.2	<i>Eins</i>	2254-3643	...	...	10.3	<i>ROSAT</i>
1225+1321	...	...	<3.8	<i>Eins</i>	2311-4259	...	...	181	<i>ROSAT</i>

TABLE 6 (CONTINUED)

IAU NAME	<SW ^a > ^c	<LW ^b > ^c	F(X-ray) ^d	Ref ^e	IAU NAME	<SW ^a > ^c	<LW ^b > ^c	F(X-ray) ^d	Ref ^e
2318+0756	...	...	5.67	<i>Eins</i>	2348+1949C	...	...	<3.09	<i>Eins</i>
2322-1223	0.02	...	271	<i>ROSAT</i>	2354-3502	...	...	209	<i>ROSAT</i>

^a SW camera at 1150–2000 Å.
^b LW camera at 1850–3300 Å.
^c In units of 10^{−14} ergs cm^{−2} s^{−1} Å^{−1}.
^d In units of 10^{−13} ergs s^{−1} cm^{−2}.
^e *ROSAT* (0.1–2.4 keV); *Einstein* (0.2–4.0 keV).

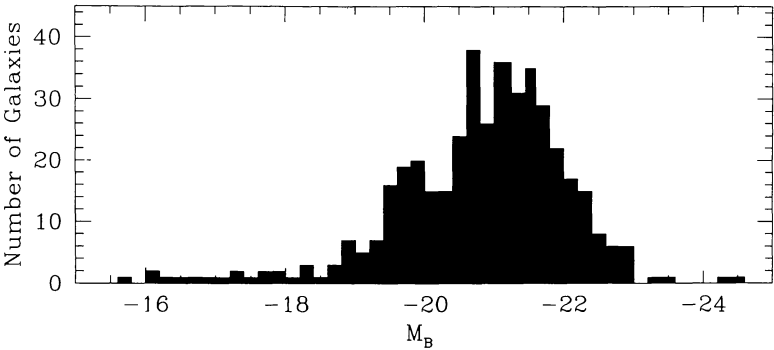


Fig. 2. M_B magnitude of underlying galaxy distribution.

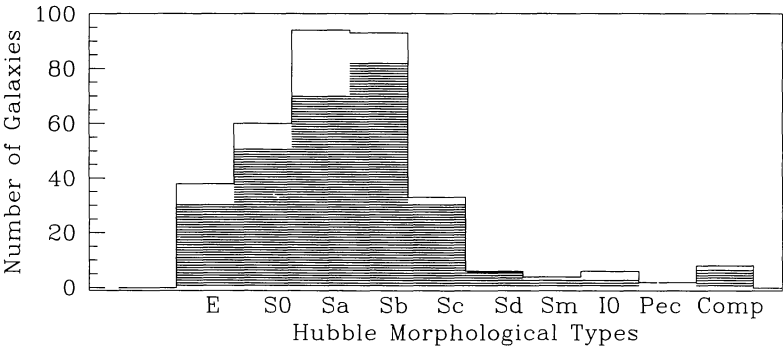


Fig. 3. Morphologic (Hubble) type distribution of underlying galaxies. The shaded zone covers those galaxies which do not show any peculiarities in their morphology.

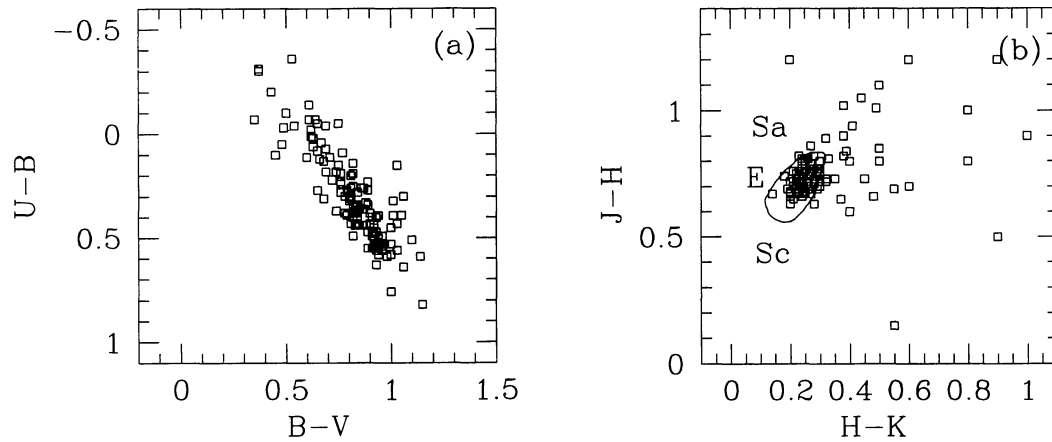


Fig. 4. Optical (a) color-color diagrams and (b) near IR color-color diagrams of underlying galaxies. In Figure 4b, the locus of “normal” Sa, Sc, and E (Hunt et al. 1997) galaxies is delineated.

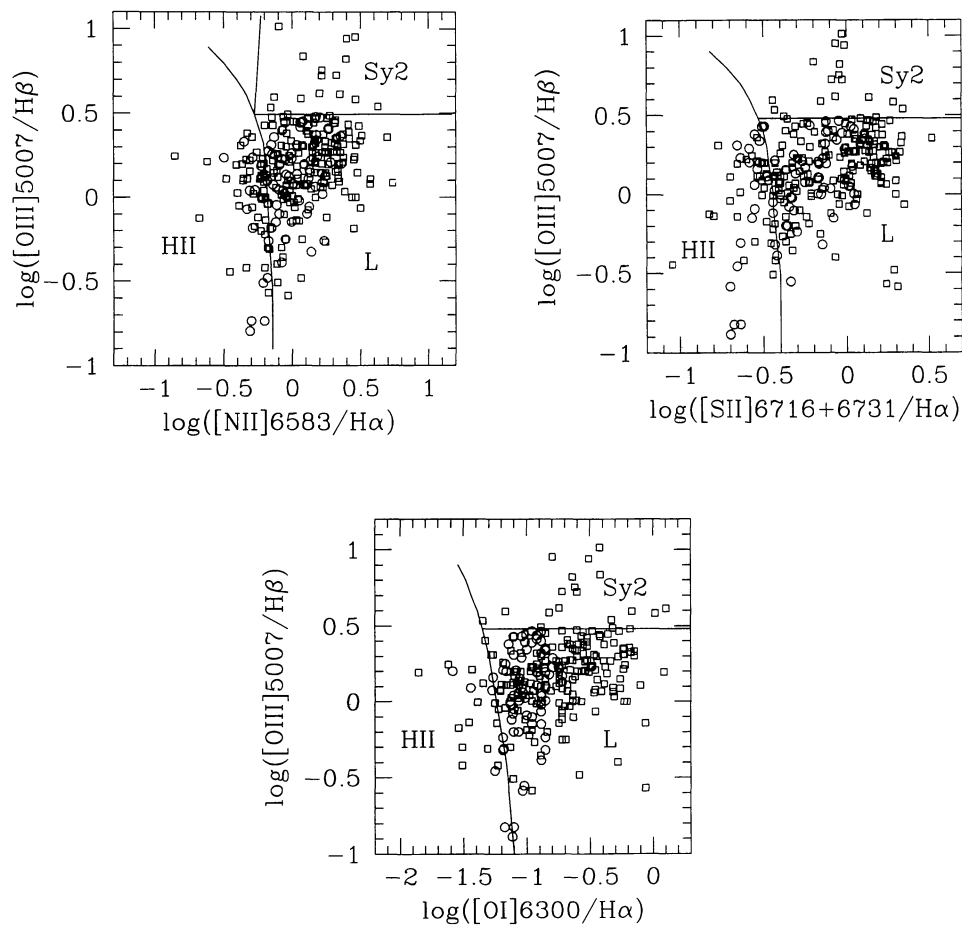


Fig. 5. Diagnostic Diagrams (following Veilleux & Osterbrock 1987). Squares denote the values for line ratios of Liners, and “transition” objects (circles) from Ho, Filippenko, & Sargent 1997. We also show the regions (loci) corresponding to the ratios of nuclear spectra of Seyfert 2 galaxies and for H II or blue compact galaxies (and/or spectra of giant H II regions in galaxies).

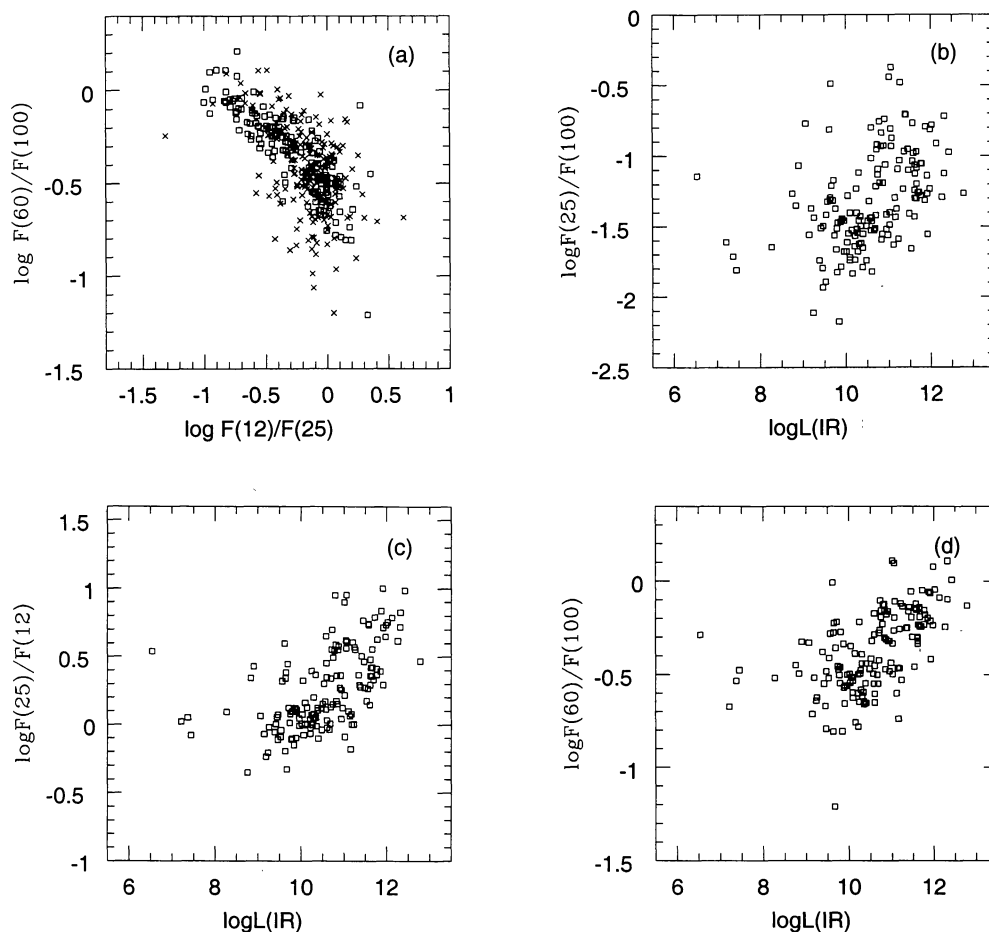


Fig. 6. The *IRAS* data. In Figure 6a, the ratio $F(60)/F(100)$ versus $F(12)/F(25)$, is shown for all objects in the catalog. Squares are for sources detected in all *IRAS* bands, and crosses for those which are not detected (or have a limit value) in at least one band. In Figures 6b, 6c, and 6d, we use only objects detected in all *IRAS* bands to plot $F(25)/F(100)$ versus $L(\text{FIR})$, $F(25)/F(12)$ versus $L(\text{FIR})$, and $F(60)/F(100)$ versus $L(\text{FIR})$.

Figure 6 shows *IRAS* data. In Fig. 6a the ratio $F(60)/F(100)$ versus $F(12)/F(25)$ is shown for all objects in the catalog. Squares are for sources detected in all *IRAS* bands, and crosses for those which are not detected (or have a limit value) in at least one band. In Fig. 6b, Fig. 6c, and Fig. 6d we use only objects detected in all *IRAS* bands (no upper limits have been included) to plot $F(25)/F(100)$ versus $L(\text{FIR})$, $F(25)/F(12)$ versus $L(\text{FIR})$, and $F(60)/F(100)$ versus $L(\text{FIR})$. The large scatter in all the diagrams seems to point out the heterogeneous character of the sample we are dealing with. Although all the colors show the same trends, dust temperatures become hottest as the IR luminosity increase.

Finally, in Figure 7 we present the histograms of the luminosities in all the bands from radio to X-ray

frequencies. The data seem to suggest that both in radio and X-ray frequencies, the range in luminosity is quite large and cannot be considered as a well defined property of the Liner population. B and FIR luminosities, however, show a lower range in luminosities which is suggestive of a better defined global property for the reported galaxies.

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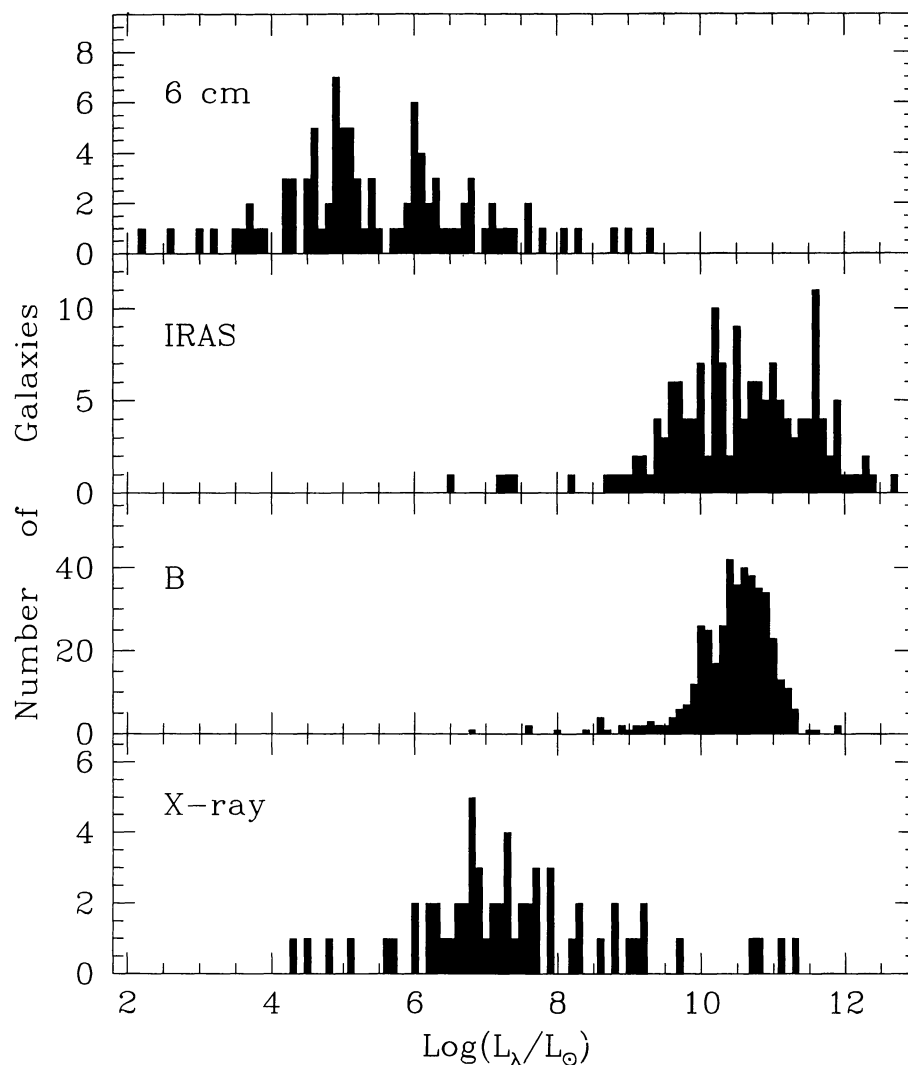


Fig. 7. The luminosity distribution in four bands: 6 cm, FIR (using sources detected in all four *IRAS* bands), *B*, and X-rays. The objects used for this figure are the same (i.e., those which have measures in all four bands from radio to X-rays).

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