Table 2. Coordinates, Velocities and Magnitudes of Emission–Line Galaxies

#	Name (1)	α (1950) (2)	δ (1950) (3)	$v_0{}^a$ (4)	m$_B$ (5)	M$_B{}^b$ (6)	Type (7)	Other Names from NED (8)
	HS 0940+3737*	$09^h40^m10.7^s$	$37°37'14''$	15867 ± 90	16.1	–20.5	Sy	IRAS F09401+3737
	HS 0948+3723	09 48 19.0	37 23 05	4806 ± 30	+17.8	–16.2	NON	
	HS 0954+3612	09 54 01.1	36 12 12	13602 ± 24	17.3	–19.0	BCG?	
	HS 0956+3847	09 56 51.0	38 47 54	15785 ± 21	16.7	–19.9	BCG	
	HS 1012+3655	10 12 49.0	36 55 31	10097 ± 12	18.3	–17.4	BCG	
	HS 1015+3737*	10 15 23.3	37 37 44	14745 ± 32	16.4	–20.1	Sy	IRAS F10154+3737 ?
	HS 1018+3619*	10 18 11.8	36 19 16	22456 ± 30	17.3	–20.1	BCG	
	HS 1024+3648*	10 24 56.4	36 48 54	11396 ± 36	16.6	–19.3	Sy	FIRST J102749.9+363334
	HS 1053+3722*	10 53 43.0	37 22 55	13223 ± 18	16.7	–19.5	SBN?	
	HS 1058+3553	10 58 12.5	35 53 15	9366 ± 12	17.0	–18.5	BCG	
	HS 1103+3627*	11 03 15.9	36 27 30	14044 ± 33	15.5	–20.9	BCG	CG 810, IRAS
	HS 1103+3758*	11 03 03.4	37 58 24	13876 ± 15	18.1	–18.2	SBN	
	HS 1106+3621	11 06 35.6	36 21 52	6526 ± 60	18.4	–16.3	BCG	
	HS 1107+3524	11 07 53.1	35 24 36	8362 ± 48	17.4	–17.8	BCG	
	HS 1107+3637	11 07 04.0	36 37 16	8206 ± 18	19.5	–15.7	NON	
	HS 1107+3710*	11 07 31.5	37 10 49	8962 ± 60	17.0	–18.4	SBN	
	HS 1107+3712	11 07 17.7	37 12 21	9639 ± 13	17.6	–17.9	BCG?	
	HS 1133+3852	11 33 50.2	38 52 37	6631 ± 27	+19.8	–14.9	BCG?	
	HS 1134+3805*	11 34 28.0	38 05 10	9790 ± 39	+18.6	–17.0	BCG	
	HS 1139+3712*	11 39 01.3	37 12 19	6735 ± 15	17.0	–17.8	BCG	
	HS 1148+3827*	11 48 00.3	38 27 00	10546 ± 30	18.7	–17.0	BCG	
	HS 1158+3837	11 58 21.5	38 37 41	6898 ± 15	17.9	–16.9	BCG	CG 1493
	HS 1159+3940	11 59 52.5	39 40 59	6350 ± 41	+17.4	–17.2	NON	
	HS 1207+3957	12 07 14.2	39 57 57	11700 ± 30	18.5	–17.5	BCG	
	HS 1209+3726	12 09 20.2	37 26 57	7273 ± 54	16.9	–18.0	BCG?	
	HS 1210+3759*	12 10 13.4	37 59 40	7087 ± 60	+17.2	–17.7	DANS?	
	HS 1214+3922	12 14 30.6	39 22 22	4438 ± 12	18.2	–15.5	BCG	
	HS 1214+3801*	12 14 39.6	38 01 32	488 ± 34	+16.5	–12.6	SA in SpG	part of NGC 4244
	HS 1237+3900	12 37 04.0	39 00 00	11199 ± 21	+18.6	–17.3	BCG	
	HS 1248+3523	12 48 53.0	35 23 06	10025 ± 15	17.4	–18.2	BCG	
	HS 1249+4021*	12 49 25.1	40 21 04	10094 ± 33	17.0	–18.7	SBN?	
	HS 1254+3740	12 54 55.2	37 40 46	7635 ± 15	18.0	–17.0	BCG	
	HS 1257+3658*	12 57 45.0	36 58 05	8870 ± 60	17.1	–18.3	BCG	NGP9 F269-0458422
	HS 1302+3607	13 02 49.9	36 07 49	9561 ± 27	17.1	–18.4	BCG	CG 1080
	HS 1309+3701	13 09 50.6	37 01 54	7211 ± 30	18.1	–16.8	BCG	NGP9 F269-0480622
	HS 1311+3641*	13 11 54.7	36 41 48	28897 ± 100	17.5	–20.4	SBN	NGP9 F269-0606354
	HS 1323+3851*	13 23 43.1	38 51 25	6792 ± 20	17.5	–17.3	BCG	
	HS 1327+3731*	13 27 26.8	37 31 28	4399 ± 27	16.5	–17.3	BCG	NGP9 F270-0319016
	HS 1331+3545*	13 31 59.8	35 45 05	17873 ± 72	18.1	–18.8	BCG	
	HS 1331+3657	13 31 46.5	36 57 21	18351 ± 15	18.0	–18.9	BCG	
	HS 1333+3717*	13 33 34.6	37 17 04	17008 ± 33	18.0	–18.8	BCG	HS 1333+3717
	HS 1341+3700*	13 41 00.9	37 00 01	6094 ± 57	15.8	–18.8	SBN	CG 1181=IRAS
	HS 1347+3811	13 47 02.3	38 11 35	2828 ± 32	18.8	–14.1	NON	HS 1347+3811

Table 2. (Continued)

#	Name (1)	α (1950) (2)	δ (1950) (3)	v_0 [a] (4)	m$_B$ (5)	M$_B$ [b] (6)	Type (7)	Other Names from NED (8)
	HS 1402+3945	$14^h02^m55.0^s$	$39°45'11''$	19654 ± 18	16.6	–20.5	SBN	
	HS 1414+3605*	14 14 50.8	36 05 01	43715 ± 119	18.3	–20.5	Sy?	
	HS 1424+3836	14 24 25.9	38 36 26	6708 ± 15	+18.4	–16.4	BCG	CG 428=HS 1424+3836
	HS 1425+3847*	14 25 33.8	38 47 17	6790 ± 24	16.0	–18.8	SBN?	CG 436
	HS 1428+3545	14 28 23.3	35 45 24	11858 ± 27	+18.5	–17.5	BCG	
	HS 1434+3644*	14 34 20.1	36 44 26	9597 ± 66	+18.1	–17.4	BCG	
	HS 1437+4002	14 37 58.5	40 02 29	11068 ± 31	+19.2	–16.7	BCG?	
	HS 1447+3636*	14 47 48.0	36 36 03	2073 ± 33	17.7	–14.5	BCG	
	HS 1449+3647	14 49 02.3	36 47 24	10086 ± 15	+18.6	–17.1	BCG	
	HS 1457+3652	14 57 59.6	36 52 39	11768 ± 18	+19.8	–16.2	BCG	
	HS 1458+3726*	14 58 32.4	37 26 02	32417 ± 300	+20.7	–17.5	NON	
	HS 1513+3612*	15 13 04.1	36 12 05	18678 ± 33	+17.8	–19.2	BCG	
	HS 1519+4007*	15 19 30.0	40 07 39	2837 ± 15	+16.5	–16.4	BCG	CG 691
	HS 1520+3717	15 20 30.6	37 17 56	11144 ± 78	+18.1	–17.8	NON	
	HS 1524+3536*	15 24 48.8	35 36 39	8770 ± 12	18.0	–17.3	BCG	CG 720
	HS 1526+3729*	15 26 18.7	37 29 36	10004 ± 27	+16.5	–19.1	Sy?	IRAS F15263+3729
	HS 1526+3634	15 26 27.2	36 34 29	18825 ± 20	+19.1	–17.9	BCG	
	HS 1527+3912	15 27 46.2	39 12 30	23004 ± 38	+15.7	–21.7	SBN	CG 734
	HS 1529+4003*	15 29 45.1	40 03 21	8591 ± 15	+16.7	–18.6	BCG?	CG 749
	HS 1530+3617	15 30 57.5	36 17 40	4666 ± 24	+17.0	–17.0	DANS?	
	HS 1535+3747*	15 35 40.6	37 47 47	7872 ± 25	+19.1	–16.0	BCG	
	HS 1536+3958	15 36 52.3	39 58 10	4367 ± 18	18.0	–15.8	BCG	
	HS 1543+3830	15 43 44.8	38 30 30	7862 ± 18	19.2	–15.9	BCG	
	HS 1557+3549*	15 57 35.8	35 49 45	13064 ± 78	16.8	–19.4	BCG?	
	HS 1558+3543	15 58 27.3	35 43 15	20377 ± 84	18.3	18.9	NON	
	HS 1558+3636*	15 58 34.1	36 36 34	12707 ± 21	17.8	–18.4	BCG	
	HS 1608+3654	16 08 31.5	36 54 42	9587 ± 18	17.3	–18.2	NON	
	HS 1613+3701	16 13 50.6	37 01 13	8844 ± 21	17.1	–18.3	BCG	
	HS 1615+3521*	16 15 48.4	35 21 07	8719 ± 39	17.5	–17.8	BCG	
	HS 1619+3557*	16 19 11.3	35 57 35	15092 ± 42	17.4	–19.1	BCG	
	HS 1624+3618	16 24 22.3	36 18 25	9484 ± 12	19.0	–16.5	BCG	
	HS 1638+3938	16 38 01.8	39 38 17	8969 ± 15	18.2	–17.2	BCG	
	HS 1643+4015	16 43 39.0	40 15 07	11617 ± 18	17.4	–18.6	BCG	
	HS 1645+3551*	16 45 51.9	35 51 57	6932 ± 18	17.7	–17.1	BCG	
	HS 1653+3634	16 53 07.2	36 34 55	845 ± 24	+16.0	–14.3	BCG	
	HS 1656+3927	16 56 34.7	39 27 58	10290 ± 42	17.7	–18.0	Sy?	FIRST J165815.4+392329
	HS 1711+3756*	17 11 41.5	37 56 12	8485 ± 12	17.6	–17.7	BCG	
	HS 1721+3615	17 21 47.5	36 15 43	15596 ± 15	18.1	–18.5	BCG	

[a] Heliocentric velocities.
[b] Absolute magnitudes are not corrected for the Galaxy extinction.
* Objects observed with the 2.2 m Calar Alto telescope.
\+ APM magnitudes.

Table 3. Coordinates, Redshifts and Magnitudes of QSO

1cName 1c (1)	1cα (1950) 1c (2)	1cδ (1950) 1c (3)	1cz [a] 1c (4)	1cm_B 1c (5)	1cDetected Emission Lines 1c (6)
HS 1003+3719	$10^h03^m12.5^s$	$37°19\ '51''$	3.204	17.7	Lyα 1216 Å, SiIV/OIV] 1400 Å, CIV 1549 Å
HS 1024+3558	10 24 21.7	35 58 36	3.106	16.9	Lyα 1216 Å, SiIV/OIV] 1400 Å, CIV 1549 Å
HS 1152+3700	11 52 50.0	37 00 20	3.069	20.0	Lyα 1216 Å
HS 1649+3905	16 49 02.6	39 05 46	3.166	18.3	Lyα 1216 Å, CIV 1549 Å

[a] Observed redshift.
[+] APM magnitudes

Table 4. Parameters of Emission Lines of Galaxies

#	Name (1)	F(Hβ)[a] (2)	$\frac{F(\lambda3727)}{F(H\beta)}$ (3)	$\frac{F(\lambda5007)}{F(H\beta)}$ (4)	$\frac{F(H\alpha)}{F(H\beta)}$ (5)	$\frac{F(\lambda6583)}{F(H\alpha)}$ (6)	$\frac{F([SII])}{F(H\alpha)}$ (7)	$W_{\lambda3727}$(Å) (8)	$W_{H\beta}$(Å) (9)	$W_{\lambda5007}$(Å) (10)
	HS 0940+3737*	48:	–	14.00	22.17	0.64	0.21	–	5	73
	HS 0948+3723	+20	–	–	–	–	–	–	+76	58
	HS 0954+3612	84	1.71	3.21	3.16	0.11	0.30	55	21	72
	HS 0956+3847	68	3.02	4.06	2.93	0.09	0.06:	295	59	225
	HS 1012+3655	49	1.50	4.53	3.42	0.11	0.16:	67	55	302
	HS 1015+3737*	+133:	–	–	–	0.58	0.73	–	+27	94
	HS 1018+3619*	68:	3.78	4.15	3.38	0.06:	0.17	98	47	212
	HS 1024+3648*	40:	–	4.20	8.61	0.59	0.33	–	8	37
	HS 1053+3722*	39:	–	3.35	5.76	0.23	0.31	–	15	53
	HS 1058+3553	36	4.14	5.72	5.47	0.12	0.29	43	11	68
	HS 1103+3627*	109:	–	2.92	5.47	0.25	0.13	–	12	35
	HS 1103+3758*	25:	–	1.51	1.96	0.10:	0.39	–	20	33
	HS 1106+3621	14	1.04	10.51	4.92	–	–	58	17	197
	HS 1107+3524	13	5.69	4.04	4.37	–	0.39:	33	7	28
	HS 1107+3637	+45	–	–	–	–	–	–	+316	144
	HS 1107+3710*	+117:	–	–	–	0.65	0.23	–	+44	–
	HS 1107+3712	27	3.28	4.64	4.00	–	–	23	12	60
	HS 1133+3852	15	4.04	13.92	5.04	0.07	–	146	22	332
	HS 1134+3805*	77:	2.81	4.20	2.65	–	0.18	440	65	253
	HS 1139+3712*	32:	–	3.45	3.75	0.12	0.18	–	71	259
	HS 1148+3827*	49:	0.72	5.70	4.05	0.05:	0.09	147	79	469
	HS 1158+3837	93	2.37	3.67	3.37	0.05	0.08	75	27	105
	HS 1159+3940	+31	–	–	–	–	–	–	+74	22
	HS 1207+3957	79	1.47	3.86	2.29	–	0.07:	69	42	165
	HS 1209+3726	9	–	11.65	9.18	–	–	–	4	45
	HS 1210+3759*	+32:	–	–	–	0.15	–	–	+20	9
	HS 1214+3922	621	0.85	4.73	2.79	–	0.03:	136	105	522
	HS 1214+3801*	683:	0.49	5.44	2.74	0.05:	0.07	101	313	1557
	HS 1237+3900	28	0.68	3.79	2.52	0.20:	–	39	36	138
	HS 1248+3523	82	1.67	3.29	3.39	–	0.06	56	38	136
	HS 1249+4021*	28:	–	3.25	5.66	0.29	0.51	–	7	24
	HS 1254+3740	75	1.06	6.33	3.57	–	–	46	53	336
	HS 1257+3658*	15:	–	6.21	2.94	0.10	0.17	–	36	255
	HS 1302+3607	88	1.70	4.05	3.25	0.14	0.17:	19	21	88
	HS 1309+3701	26	2.15	4.77	5.04	–	0.09:	43	25	128
	HS 1311+3641*	+49:	–	–	–	0.32	0.43	–	+36	–
	HS 1323+3851*	15:	–	4.28	4.27	0.03	0.11	–	13	56
	HS 1327+3731*	36:	–	5.90	7.26	–	0.17	–	9	53
	HS 1331+3545*	74:	3.27	4.64	2.89	0.02:	0.16	114	62	295
	HS 1331+3657	21	2.13	6.43	3.39	–	0.13:	328	140	962
	HS 1333+3717*	193:	2.30	4.72	3.27	0.09	0.13	161	149	648
	HS 1341+3700*	54:	–	1.93	4.51	0.30	0.39	–	15	31
	HS 1347+3811	+28	–	–	–	–	–	249	+51	85

Table 4. (Continued)

#	Name (1)	F(Hβ)^a (2)	$\frac{F(\lambda3727)}{F(H\beta)}$ (3)	$\frac{F(\lambda5007)}{F(H\beta)}$ (4)	$\frac{F(H\alpha)}{F(H\beta)}$ (5)	$\frac{F(\lambda6583)}{F(H\alpha)}$ (6)	$\frac{F([SII])}{F(H\alpha)}$ (7)	W$_{\lambda3727}$(Å) (8)	W$_{H\beta}$(Å) (9)	W$_{\lambda5007}$(Å) (10)
	HS 1402+3945	19	2.05	1.53	9.37	0.48	0.30	13	6	11
	HS 1414+3605*	+8:	–	–	–	1.76	–	–	+40	61
	HS 1424+3836	51	0.92	7.01	3.37	–	0.05:	184	73	556
	HS 1425+3847*	59:	–	3.17	4.36	0.13	0.23	–	16	50
	HS 1428+3545	47	2.26	6.20	3.87	–	–	94	41	271
	HS 1434+3644*	27:	–	5.93	3.02	0.02:	0.13	–	48	290
	HS 1437+4002	12	–	4.60	3.00	–	–	–	30	128
	HS 1447+3636*	61:	–	4.59	1.95	0.06	0.10	–	79	408
	HS 1449+3647	83	1.10	5.51	3.24	–	0.11	33	84	414
	HS 1457+3652	100	–	3.82	1.66	–	–	–	67	279
	HS 1458+3726*	+12:	–	–	–	–	–	–	+11	–
	HS 1513+3612*	45:	2.20	5.47	5.55	–	0.16	89	53	273
	HS 1519+4007*	72:	0.66	5.77	2.90	–	0.10	19	34	200
	HS 1520+3717	11	–	6.79	4.64	–	–	–	6	47
	HS 1524+3536*	86:	1.54	5.41	2.70	0.08	0.09	84	74	320
	HS 1526+3634	110	1.14	4.65	2.36	–	0.23	136	77	385
	HS 1526+3729*	+29:	–	–	–	1.52	0.94	–	+6	10
	HS 1527+3912	36	3.39	1.17	3.77	0.17	0.22	28	10	13
	HS 1529+4003*	30:	–	3.03	5.19	0.24	0.20	–	9	29
	HS 1530+3617	12	–	4.29	3.38	–	–	–	4	19
	HS 1535+3747*	14:	–	5.20	2.95	–	–	–	33	178
	HS 1536+3958	90	–	4.52	4.01	–	0.27	–	24	114
	HS 1558+3543	+42	–	–	–	–	–	49	+73	17
	HS 1543+3830	115	2.33	4.21	3.01	0.09	0.08:	78	27	123
	HS 1557+3549*	13:	–	3.72	3.98	–	0.24	–	14	54
	HS 1558+3636*	49:	–	2.64	3.63	0.04:	0.25	–	24	68
	HS 1608+3654	+105	–	–	–	–	0.22	–	+60	80
	HS 1613+3701	49	3.13	4.10	5.61	0.10	0.18	48	14	62
	HS 1615+3521*	7:	–	5.30	5.72	0.06	0.16	–	5	26
	HS 1619+3557*	22:	–	4.22	4.27	0.06	0.22	–	21	89
	HS 1624+3618	31	1.07	5.96	–	–	–	67	70	390
	HS 1638+3938	87	1.58	6.13	3.74	0.04:	0.19	77	62	367
	HS 1643+4015	87	2.45	3.32	3.46	0.08	0.17	49	23	81
	HS 1645+3551*	16:	–	5.34	3.41	0.05:	0.09	–	23	133
	HS 1653+3634	346	1.08	5.16	2.37	0.03	0.11	124	102	561
	HS 1656+3927	31:	–	21.41	3.33	1.59	0.58	–	4:	81
	HS 1711+3756*	89:	3.46	4.38	3.98	–	0.20	108	33	146
	HS 1721+3615	57	1.72	7.25	4.28	0.10	0.16	54	45	363

* Objects observed under poor photometric conditions.

[a] Flux in 10^{-16} ergs s^{-1} sm^{-2} Å^{-1} .

[+] Parameters for Hα emission line .

: Parameters with less confident values.

Table 5. Galaxies with Nondetected Emission Lines

Name 1c (1)	α (1950) 1c (2)	δ (1950) 1c (3)	v_0^a 1c (4)	m$_B$ 1c (5)	M$_B^b$ 1c (6)	Absorption lines 1c (7)
HS 1639+3535	$16^h\ 39^m\ 25.7^s$	$+35°\ 35'\ 49''$	21285:	18.0	−19.3	G$_{band}$, NaD, Hα
HS 1711+3619	17 11 05.4	+36 19 50	5696	+19.2	−15.2	Hβ, Mgb, NaD, Hα

[a] Heliocentric velocities.

[b] Absolute magnitudes are not corrected for the Galaxy extinction.

[+] APM magnitude.

: less confident values.

Table 6. Stars

#	Name	α (1950)	δ (1950)	m_B	Type	Spectral features
	1c (1)	1c (2)	1c (3)	1c (4)	1c (5)	1c (6)
	HS 1002+3900	10 02 47.5	39 00 24	16.9	A-F	CaK, CaH, G_{band}, H_β, NaD?, H_α
	HS 1202+4023	12 02 04.0	40 23 23	+19.0	M	
	HS 1207+3818	12 07 51.5	38 18 18	+19.5	A	H_δ, H_γ, H_β, Mgb, H_α
	HS 1207+4007	12 07 44.9	40 07 52	+20.0	M	
	HS 1218+3857	12 18 15.0	38 57 12	+19.9	K	TiI,II4533, Mgb, NaD, TiO 6156-6180, H_α
	HS 1334+3521	13 34 37.6	35 21 39	+19.3	M	
	HS 1513+3616	15 13 14.5	36 16 58	17.9	F-G	CaK, CaH, G_{band}, H_β, NaD, H_α
	HS 1514+3908	15 14 23.3	39 08 43	+18.5	F-G	CaK, CaH, G_{band}, Mgb
	HS 1518+3600	15 18 55.1	36 00 44	+18.7	F-G	H_β, Mgb, NaD, H_α
	HS 1609+3909	16 09 57.3	39 09 13	18.5	F-G	CaK, H_β, Mgb, NaD, H_α
	HS 1652+3851	16 52 15.1	38 51 39	19.1		MgFe 4703, Mgb, NaD
	HS 1726+3514	17 26 47.6	35 14 42	17.4	A-F	CaK, CaH, G_{band}, H_β, Mgb, NaD, H_α
	HS 1730+3607	17 30 36.1	36 07 22	18.3	F-G	CaK, CaH, H_β, H_α

$^+$ APM magnitude.