

Table 2. Calculated Group Galaxy and Absorption Properties

(1) QSO <sup>a</sup>	(2) J-Name <sup>a</sup>	Mg II Absorption					B-band					K-band				
		(3) $z_{\text{gal}}$	(4) $z_{\text{abs}}$	(5) $W_r(2796)$ Å	(6) $DR$	(7) Ref <sup>b</sup>	(8) $D$ (kpc)	(9) $K_{By}^c$	(10) $M_B^d$	(11) $L_B/L_B^*$	(12) $K_{Ky}^e$	(13) $M_K^d$	(14) $L_K/L_K^*$	(15) $B-K$		
SDSS	J003340.21-005525.53	0.1760	0.1759	0.19 ± 0.04	...	6	32.3	0.40	-19.07	0.23	0.31	-21.26	0.29	2.18		
		0.1758					56.4	0.02	-18.66	0.16	-0.05	-19.27	0.04	0.61		
SDSS	J005244.23-005721.7	0.13429	0.1346	1.46 ± 0.04	1.190 ± 0.05	10	31.7	-0.94	-21.22	1.74	-0.26	-23.39	2.14	2.16		
		0.13465					84.3	0.03	-19.01	0.23	0.05	-19.99	0.09	0.97		
		0.38260					59.6	-1.02	-19.49	0.27	...	...	...	...		
		0.38024					83.8	-1.02	-17.81	0.06	...	...	...	...		
<b>0150-202<sup>k</sup></b>	<b>J015227.32-200107.10</b>	0.38146	0.383074	0.168 ± 0.015	1.17 ± 0.17	14	91.4	-1.02	-18.00	0.07	...	...	...	...		
		0.38140					144.4	-1.02	-18.97	0.17	...	...	...	...		
		0.38135					163.3	-1.02	-19.72	0.33	...	...	...	...		
0151+045	J015427.99+044818.69	0.160	0.1602	1.55 ± 0.05	1.00 ± 0.09	1	17.5	-0.99	-19.42	0.32	...	...	...	...		
		0.160					29.8	-0.99	-18.32	0.12	...	...	...	...		
0226-4110 <sup>k</sup>	J022815.17-405714.3	0.2065	0.2067	< 0.02	...	5	33.6	-1.13	-16.96	0.03	0.52	-19.36	0.05	2.40		
		0.2078					108.9	-1.13	-18.63	0.15	0.52	-21.19	0.27	2.56		
		0.2678					62.8	-1.06	-19.43	0.29	0.56	-21.90	0.49	2.47		
0226-4110 <sup>k</sup>	J022815.17-405714.3	0.2690	0.2678	0.03 ± 0.01	...	5	153.6	-1.06	-16.78	0.02	0.56	-20.08	0.09	3.30		
		0.2680					164.4	-1.06	-18.01	0.08	0.56	-20.27	0.11	2.26		
0349-146 <sup>k</sup>	J035128.54-142908.71	0.324180 <sup>g</sup>	0.3244	< 0.015	...	14	125.5	-1.00	-20.15	0.52	-0.54	-22.21	0.63	2.02		
		0.324651 <sup>g</sup>					161.9	-0.70	-20.95	1.09	-0.55	-22.50	0.82	1.55		
<b>0405-123</b>	<b>J040748.43-121136.65</b>	0.16699 <sup>g</sup>	0.167120	0.274 ± 0.002	1.26 ± 0.01	14	99.4	-0.44	-18.04	0.09	-0.36	-18.16	0.02	0.12		
		0.16699 <sup>g</sup>					115.3	-0.44	-21.65	2.49	-0.36	-22.56	0.97	0.91		
<b>0450-131</b>	<b>J045313.48-130555.84</b>	0.4941	0.493936	0.674 ± 0.024	1.194 ± 0.059	3	49.7	-1.05	-19.72	0.29	-0.51	-22.25	0.59	2.53		
		0.4931					62.2	-1.05	-19.74	0.30	-0.51	-22.24	0.59	2.50		
		0.2835					46.9	-0.71	-17.36	0.04	...	...	...	...		
		0.2821					84.6	-0.71	-19.27	0.24	...	...	...	...		
<b>0515-4414</b>	<b>J051707.61-441056.2</b>	0.2825	0.281772	0.733 ± 0.002	1.478 ± 0.007	14	85.1	-0.71	-21.02	1.23	...	...	...	...		
		0.2823					100.4	-0.71	-21.36	1.67	...	...	...	...		
		0.2826					128.8	-0.71	-21.37	1.69	...	...	...	...		

Table 2—Continued

(1) QSO <sup>a</sup>	(2) J-Name <sup>a</sup>	Mg II Absorption					B-band					K-band				
		(3) $z_{\text{gal}}$	(4) $z_{\text{abs}}$	(5) $W_r(2796)$ Å	(6) $DR$	(7) Ref <sup>b</sup>	(8) $D$ (kpc)	(9) $K_{By}$ <sup>c</sup>	(10) $M_B^d$	(11) $L_B/L_B^*$	(12) $K_{Ky}$ <sup>e</sup>	(13) $M_K^d$	(14) $L_K/L_K^*$	(15) $B-K$		
SDSS	J074528.15+191952.68	0.4582	0.4549	$0.65 \pm 0.1$	...	6	92.6	0.73	-21.84	2.13	0.25	-23.04	1.25	1.19		
		0.4582					96.8	0.38	-21.29	1.28	-0.01	-22.07	0.51	0.78		
		0.171224 <sup>g</sup>					61.1	0.01	-19.62	0.38	-0.05	-20.25	0.11	0.63		
SDSS	J083220.74+043416.78	0.1678	0.1684	$0.20 \pm 0.04$	...	6	120.0	0.35	-21.07	1.46	0.30	-23.05	1.53	1.97		
		0.168222 <sup>g</sup>					144.9	0.14	-20.56	0.91	0.15	-22.32	0.78	1.76		
<b>SDSS</b>	<b>J092554.71+400414.17</b>	0.2475	0.247604	$1.18 \pm 0.14$	$1.23 \pm 0.22$	14	84.0	0.76	-21.25	1.57	1.37	-23.21	1.67	1.96		
		0.2467					95.6	0.36	-20.52	0.80	1.06	-21.98	0.54	1.46		
		0.1537					39.5	0.07	-18.76	0.18	0.47	-19.75	0.07	0.99		
<b>SDSS</b>	<b>J092837.98+602521.02</b>	0.1542	0.153783	$1.16 \pm 0.16$	$1.10 \pm 0.22$	14	51.3	0.07	-19.84	0.48	0.47	-20.81	0.20	0.97		
		0.1540					94.5	0.28	-20.14	0.63	1.23	-22.16	0.68	2.02		
<b>SDSS</b>	<b>J100902.06+071343.87</b>	0.35585 <sup>g</sup>	0.355871	$1.33 \pm 0.17$	$1.25 \pm 0.25$	14	15.6	0.59	-17.87	0.06	0.21	-18.39	0.02	0.52		
		0.35587 <sup>g</sup>					47.0	0.24	-19.98	0.43	0.23	-20.66	0.15	0.68		
1038+064	J104117.16+061016.92	0.306088 <sup>g</sup>	0.3054	$< 0.0419$	...	14	92.8	-1.03	-21.58	1.99	-0.52	-23.35	1.82	1.76		
		0.304858 <sup>g</sup>					123.3	-1.06	-19.15	0.21	...	...	...	...		
		0.31207 <sup>g</sup>					17.3	-1.46	-18.13	0.08	...	...	...	...		
		0.3132					45.6	-1.89	-20.45	0.70	-0.53	-22.56	0.87	2.10		
<b>1127-145</b>	<b>J113007.05-144927.38</b>	0.3124	0.312709	$1.769 \pm 0.004$	$1.05 \pm 0.09$	13	80.8	-1.46	-21.04	1.20	...	...	...	...		
		0.31139 <sup>g</sup>					98.8	-1.46	-19.88	0.41	...	...	...	...		
1127-145	J113007.05-144927.38	0.32839	0.328279	$0.028 \pm 0.003$	$1.560 \pm 0.246$	3	76.3	-1.46	-19.62	0.32	...	...	...	...		
		0.32847					90.7	-1.46	-20.92	1.06	...	...	...	...		
<b>SDSS</b>	<b>J113327.78+032719.17</b>	0.2367	0.237514	$0.759 \pm 0.005$	$1.456 \pm 0.018$	14	18.0	0.71	-21.24	1.58	1.35	-23.10	1.52	1.86		
		0.2364					39.0	0.33	-20.54	0.83	1.05	-22.41	0.80	1.87		
SDSS	J114830.12+021829.78	0.3206	0.3215	$0.53 \pm 0.02$	...	6	116.2	1.11	-20.79	0.94	0.55	-22.67	0.96	1.88		
		0.3206					139.1	1.11	-20.96	1.10	0.55	-22.81	1.10	1.85		
SDSS	J121347.52+000129.99	0.2259	0.2258	$0.54 \pm 0.08$	...	6	31.4	0.66	-20.32	0.69	0.38	-22.41	0.80	2.08		
		0.2258					46.7	0.23	-19.42	0.30	0.06	-20.56	0.14	1.14		

Table 2—Continued

(1) QSO <sup>a</sup>	(2) J-Name <sup>a</sup>	(3) $z_{\text{gal}}$	MgII Absorption				B-band					K-band				
			(4) $z_{\text{abs}}$	(5) $W_r(2796)$ Å	(6) $DR$	(7) Ref <sup>b</sup>	(8) $D$ (kpc)	(9) $K_{By}$ <sup>c</sup>	(10) $M_B^d$	(11) $L_B/L_B^*$	(12) $K_{Ky}$ <sup>e</sup>	(13) $M_K^d$	(14) $L_K/L_K^*$	(15) $B-K$		
		0.2537					71.2	0.79	-19.59	0.34	0.42	-21.30	0.28	1.70		
SDSS	J132831.08+075942.01	0.2537	0.2545	0.79 ± 0.03	...	6	94.8	0.79	-20.94	1.17	0.42	-22.76	1.09	1.81		
		0.2549					132.6	0.29	-20.64	0.89	0.07	-21.77	0.43	1.13		
SDSS	J144033.82+044830.9	0.11271	0.11304	1.18 ± 0.04	1.280 ± 0.06	10	25.4	-0.01	-19.86	0.51	0.05	-20.99	0.24	1.12		
		0.11277					65.2	0.00	-20.98	1.43	0.12	-22.69	1.16	1.71		
<b>1556-245</b>	<b>J155941.40-244238.83</b>	0.769	0.771483	2.49 ± 0.09	1.20 ± 0.07	14	41.2	-0.23	-20.55	0.46	...	...	...	...		
		0.771					55.2	-0.23	-21.86	1.53	...	...	...	...		
<b>1622+238</b>	<b>J162439.08+234512.20</b>	0.36809 <sup>g</sup>	0.368112	0.247 ± 0.005	1.248 ± 0.046	3	113.5	-1.29	-20.81	0.92	-0.53	-23.21	1.54	2.39		
		0.368					124.8	-1.29	-17.01	0.03	-0.53	-19.59	0.05	2.57		
<b>1623+269</b>	<b>J162548.79+264658.75</b>	0.888	0.887679	0.903 ± 0.004	1.245 ± 0.01	3	47.9	0.12	-20.36	0.34	-0.64	-23.01	1.02	2.65		
		0.888					71.4	-0.28	-19.99	0.24	...	...	...	...		
SDSS	J204431.46+011312.43	0.1921	0.1927	0.50 ± 0.08	...	6	22.5	0.21	-18.67	0.15	0.16	-19.98	0.08	1.31		
		0.1927					24.8	0.49	-20.20	0.64	0.33	-22.20	0.68	2.00		
		0.6668					49.7	-0.74	-21.49	1.22	...	...	...	...		
		0.6643					60.1	-0.74	-21.93	1.82	...	...	...	...		
<b>2126-158</b>	<b>J212912.17-153841.04</b>	0.6647	0.662742	1.903 ± 0.014	1.14 ± 0.02	14	86.7	-0.74	-20.19	0.37	...	...	...	...		
		0.6648					167.2	-0.74	-21.39	1.11	...	...	...	...		
		0.430200 <sup>g</sup>					48.1	-1.18	-20.35	0.56	-0.51	-22.41	0.71	2.06		
		0.43072					59.1	-0.99	-15.25	0.01	...	...	...	...		
<b>2128-123<sup>k</sup></b>	<b>J213135.26-120704.79</b>	0.43006	0.429735	0.395 ± 0.01	1.16 ± 0.05	3	144.5	...	-16.38 <sup>f</sup>	0.01 <sup>f</sup>	...	...	...	...		
		0.42982					170.8	...	-16.25 <sup>f</sup>	0.01 <sup>f</sup>	...	...	...	...		

<sup>a</sup>Groups included in the kinematics analysis are marked with bold-faced field names. We have the HIRES/Keck or UVES/VLT spectra for each bolded group, and have measurable MgII above our detection threshold.

<sup>b</sup>MgII Absorption Measurements: (1) Guillemin & Bergeron (1997), (3) Kacprzak et al. (2011b), (6) Chen et al. (2010), (10) Kacprzak et al. (2011a), (13) Evans (2011), and (14) This work.

<sup>c</sup> $K$ -correction used to obtain  $M_B$  from column (8) in Table 1 – Observed Galaxy Properties.

<sup>d</sup>Absolute magnitudes are AB magnitudes.

<sup>e</sup> $K$ -correction used to obtain  $M_K$  from column (11) in Table 1 – Observed Galaxy Properties.

<sup>f</sup> $R$ -band absolute magnitude,  $M_R$ , and luminosity,  $L_R/L_R^*$ , obtained from P eroux et al. (2017)

<sup>g</sup>Redshift measured from Keck/ESI spectrum (this work).

<sup>k</sup>Originally included as an isolated galaxy in MAGPIECAT (Nielsen et al. 2013a,b).