

APPENDIX A: IR INTENSITIES AND ADDITIONAL DATA FOR SELECTED 27 LOCATIONS

Table A1. IR intensities in selected 27 locations. See Sec. 2 for details of calculations.

Location No	l (degrees)	b (degrees)	$I_{4.5\mu\text{m}}$ (MJy sr ⁻¹)	$I_{5.8\mu\text{m}}$ (MJy sr ⁻¹)	$I_{8\mu\text{m}}$ (MJy sr ⁻¹)	$I_{24\mu\text{m}}$ (MJy sr ⁻¹)	$I_{70\mu\text{m}}$ (MJy sr ⁻¹)	$I_{100\mu\text{m}}$ (MJy sr ⁻¹)	$I_{160\mu\text{m}}$ (MJy sr ⁻¹)
1	144.2731	32.6844	0.0611 ± 0.0159	0.0421 ± 0.0101	0 ± 0	0.0333 ± 0.0100	1.9079 ± 0.0742	0.2300 ± 0.526	3.5553 ± 0.3761
2	144.2898	32.6750	0.0439 ± 0.0049	0.0141 ± 0.0074	0 ± 0	0.1092 ± 0.0121	5.2336 ± 0.4443	7.2000 ± 0.5544	3.8332 ± 0.4575
3	144.2512	32.6607	0.0159 ± 0.0012	0.0148 ± 0.0045	0 ± 0	0.6279 ± 0.1453	7.7358 ± 1.2877	14.4400 ± 2.5546	1.6263 ± 0.5952
4	144.2952	32.7203	0.0259 ± 0.0015	0.0243 ± 0.0042	0 ± 0	0.3012 ± 0.0467	5.9099 ± 0.1316	8.7800 ± 0.8157	3.7606 ± 0.1606
5	144.2699	32.6985	0.0586 ± 0.0037	0.0421 ± 0.0053	0 ± 0	0.1225 ± 0.0153	4.5948 ± 0.4802	1.9600 ± 0.4780	4.5118 ± 0.3977
6	144.2882	32.6942	0.0511 ± 0.0021	0.0253 ± 0.0038	0 ± 0	0.0694 ± 0.0077	1.8620 ± 0.1317	2.4400 ± 0.4311	2.8699 ± 0.0896
7	144.2960	32.6858	0.0325 ± 0.0014	0.0178 ± 0.0047	0 ± 0	0.0376 ± 0.0119	2.3811 ± 0.1101	3.8800 ± 0.3801	3.0756 ± 0.2645
8	144.2816	32.6822	0.0516 ± 0.0690	0.0769 ± 0.0099	0.0468 ± 0.0357	0.3235 ± 0.0269	5.0719 ± 0.3350	10.6100 ± 0.4589	5.0871 ± 0.0997
11	144.2757	32.6922	0.0587 ± 0.0029	0.0340 ± 0.0042	0 ± 0	0.1135 ± 0.0067	4.9482 ± 0.3170	4.1600 ± 0.7900	1.8229 ± 0.7535
12	144.2774	32.6973	0.1393 ± 0.0088	0.0971 ± 0.0231	0.1746 ± 0.0750	1.8455 ± 0.2469	14.7611 ± 1.0000	22.1000 ± 1.2138	5.3792 ± 0.3122
19	144.2630	32.6846	0.0533 ± 0.0042	0.0219 ± 0.0060	0 ± 0	0.1034 ± 0.0222	1.9352 ± 0.1041	1.2400 ± 0.4014	3.6667 ± 0.4822
21	144.2754	32.7183	0.0375 ± 0.0045	0.0298 ± 0.0052	0 ± 0	0.5014 ± 0.1046	9.3478 ± 0.7582	10.7500 ± 0.3933	5.1692 ± 0.1822
24	144.2618	32.7021	0.0651 ± 0.0169	0.0645 ± 0.0114	0 ± 0	0.1520 ± 0.0269	3.0249 ± 0.2186	3.8500 ± 0.6202	3.1424 ± 0.8492
27	144.3054	32.6733	0.0183 ± 0.0316	0.0345 ± 0.0171	0 ± 0	0.0246 ± 0.0077	1.6464 ± 0.0832	3.5500 ± 0.4701	1.9316 ± 0.1883
30	144.2863	32.7213	0.0440 ± 0.0052	0.0080 ± 0.0910	0.0073 ± 0.0092	0.7002 ± 0.0429	8.0550 ± 0.3701	10.9100 ± 0.4139	2.9251 ± 0.2354
32	144.2768	32.6716	0.0342 ± 0.0033	0.0363 ± 0.0048	0 ± 0	0.0328 ± 0.0076	1.7242 ± 0.2066	0.5300 ± 0.4317	2.0164 ± 0.3426
33	144.2595	32.6931	0.0423 ± 0.0049	0.0423 ± 0.0055	0 ± 0	0.0184 ± 0.0074	1.4919 ± 0.1011	0.8100 ± 0.3886	1.9019 ± 0.1035
35	144.2949	32.6935	0.0305 ± 0.0025	0.0375 ± 0.0057	0 ± 0	0.0258 ± 0.0092	1.2994 ± 0.2115	0.3400 ± 0.4879	2.8701 ± 0.4514
36	144.3222	32.6821	0.0245 ± 0.0028	0.0133 ± 0.0046	0 ± 0	0.0269 ± 0.0070	0.3790 ± 0.1105	0.4800 ± 0.3691	0.9162 ± 0.2116
37	144.2812	32.7059	0.0754 ± 0.0153	0.0187 ± 0.0139	0.0522 ± 0.0128	0.4197 ± 0.0166	4.7531 ± 0.1707	8.4700 ± 0.6406	5.6591 ± 0.2748
41	144.2905	32.7123	0.0286 ± 0.0019	0.0044 ± 0.0570	0 ± 0	0.1141 ± 0.0109	3.0536 ± 0.3157	2.2200 ± 0.3941	2.5669 ± 0.1019
42	144.2438	32.6674	0.0072 ± 0.0016	0.0050 ± 0.0045	0 ± 0	0.0256 ± 0.0064	1.2904 ± 0.1688	0.4700 ± 0.3980	1.2432 ± 0.3501
44	144.2809	32.6760	0.0483 ± 0.0156	0.0323 ± 0.0108	0 ± 0	0.2634 ± 0.0461	4.4406 ± 0.3565	6.1000 ± 0.7717	3.7378 ± 0.2591
46	144.2714	32.7231	0.0144 ± 0.0068	0.0325 ± 0.0089	0 ± 0	1.5858 ± 0.5204	8.9976 ± 1.1983	7.2400 ± 1.3546	3.6638 ± 0.4835
47	144.2778	32.7236	0.0520 ± 0.0031	0.0332 ± 0.0057	0 ± 0	0.7442 ± 0.0395	9.7106 ± 0.5049	14.3700 ± 0.7789	5.2882 ± 0.1123
49	144.2435	32.7246	0.0184 ± 0.0478	0.0486 ± 0.0235	0 ± 0	0.2938 ± 0.0202	1.8468 ± 0.1020	2.6500 ± 0.3166	1.7170 ± 0.0706
50	144.2854	32.6877	0.0429 ± 0.0018	0.0121 ± 0.0055	0 ± 0	0.0306 ± 0.0075	3.2687 ± 0.3817	2.9900 ± 0.4238	3.0087 ± 0.4635

Table A2. Additional insights to the selected locations.

Location No.	Nearby HII regions	Star forming complex ^a	Distance to the closest HII region (arcsec) ^b	Age of HII regions (Myr) ^c
Peak intensity at 100 μm				
2	HSK 10, 16, 20	NW	3.74 (HSK 20)	3.5 - 6.3
3	HSK 4, 6, 7		1.80 (HSK 7)	2.5 - 3.5, 4.5 - 6.3
4	HSK 61, 65, 67	SE	2.52 (HSK 65)	2.5 - 4.5
7	HSK 26	NW	3.96 (HSK 7)	3.5 - 4.5
21	HSK 71, 73	NE	4.15 (HSK 73)	2.5 - 3.5
24	HSK 50, 52	N	5.77 (HSK 50)	3.5 - 4.5
27	HSK 13	NW	6.13 (HSK 13)	2.5 - 3.5
44	HSK 15, 17	NW	2.17 (HSK 15)	3.5 - 6.3
47	HSK 73, 74	NE	2.88 (HSK 74)	2.5 - 3.5
49	HSK 80, 81, 82	Ext NE	2.52 (HSK 80)	3.5 - 4.5
Peak intensity at 70 μm				
5	HSK 45	N	17.28 (HSK 45)	3.7 ^d
6	HSK 35	N	12.60 (HSK 35)	4.5 - 6.3
41	HSK 57, 58	SE	1.87 (HSK 58)	3.5 - 4.5
42	HSK 7		17.31 (HSK 7)	2.5 - 3.5
46	HSK 71	NE	2.24 (HSK 71)	3.5 ^d
50	HSK 31	NW	12.24 (HSK 31)	6.3 ^d
Voids (N(HI) < $1 \times 10^{21} \text{ cm}^{-2}$)				
1	HSK 25, 31, 32	NW	9.11 (HSK 32)	4.5 - 6.3
11	HSK 31, 32, 35	NW	13.83 (HSK 31)	4.5 - 6.3
19	HSK 30	NW	0.73 (HSK 30)	3.5 - 4.5
32	HSK 10, 12	NW	20.16 (HSK 12)	3.5 - 4.5
33	HSK 47	N	13.38 (HSK 47)	3.5 - 4.5
35	HSK 35	NW	32.04 (HSK 35)	4.5 - 6.3
36	HSK 3, 5, 11	Int. Shell	26.28 (HSK 3)	2.5 - 4.5
Peak intensity at 100 μm with PAH emission				
8	HSK 25	NW	5.76 (HSK 25)	6.2 ^d
12	HSK 39, 41, 45	N	4.43 (HSK 45)	2.5 - 3.5
30	HSK 63, 64, 70	SE	0.60 (HSK 70)	3.5 - 4.5
37	HSK 49, 51	N	1.45 (HSK 49)	4.5 - 6.3

^a The star forming complexes have been adopted from [Egorov et al. \(2017\)](#).^b The nearest HII region is indicated inside the parentheses.^c Estimated from [Stewart et al. \(2000\)](#).^d Taken from [Wiebe et al. \(2014\)](#).