Supplemental material for "Extracting Stellar Emissivity via Machine Learning Analysis of MSX and LAMOST Catalog Data"

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I. CALCULATION OF STELLAR EMISSIVITY IN THE INPUT BANDS

The radiation flux data for a small sample of stars in certain bands (Band 1: 6.8 - 10.8 μm, Band 3: 4.24 - 4.45 μm, and Band 5: 13.5 - 15.9 μm) of the MSX catalog served as model input, and the SPSO algorithm was used to determine the model parameters. The emissivity values of a larger set of 361 stars in the same spectral bands are listed in Table S1; the radiation fluxes computed by means of our algorithm and those extracted from the MSX catalog are also reported in the table.

II. CALCULATION OF STELLAR RADIATION FLUXES IN OTHER BANDS WITH OBSERVATIONAL DATA

Radiation fluxes and emissivity were computed for the remaining bands of the MSX catalog (Band 2: 4.22 - 4.36 μm, Band 4: 11.1 - 13.2 μm, and Band 6: 18.2 - 25.1 μm) by using the previously optimized model parameters. Our numerical results for the 361 stars of Table S1 are listed in Table S2.

III. PREDICTION OF STELLAR RADIATION FLUXES IN THE ABSENCE OF OBSERVATIONAL DATA

In the MSX catalog, stellar data for the band 4.0 - 5.0 μm are very sparse. On assuming that the spectral emissivity in this band is not much different from the emissivity in the overlapping Band 3 (4.24 - 4.45 μm), the corresponding radiation fluxes for the sampled 361 stars were numerically predicted as solutions of the direct problem in the wavelength range 4.0 - 5.0 μm, see Table S3. For 351 stars the effective temperature was found in Refs. [1–56], while for 10 stars it is not available in the current literature. The existing data from the MSX catalog, the Bonner Durchmusterung (BD), and the Henry Draper (HD) catalog are also listed in Table S3 for a comparison.

TABLE S1: Calculation of stellar radiation fluxes of 361 stars in Band 1 (6.8 - 10.8 μm), Band 3 (4.24 - 4.45 μm), and Band 5 (13.5 - 15.9 μm) of the MSX catalog. ε_λ is the star emissivity at wavelength λ. E_c is the calculated radiation flux, and E_m is the radiation flux extracted from the MSX stellar catalog (unit: $\times 10^{-13}$W/m^2).

	Row number	Band 1			Band 3			Band 5		
	(MSX catalog)	ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
1	258	0.97	2.935	2.931	0.90	1.772	1.768	0.93	0.199	0.198
2	548	0.96	1.598	1.604	0.93	0.974	0.977	0.90	0.108	0.108
3	603	1.00	0.092	0.092	0.92	0.057	0.057	0.96	0.006	0.006
4	618	0.98	0.468	0.469	0.91	0.278	0.278	0.94	0.032	0.032
5	665	0.96	0.121	0.122	0.93	0.074	0.074	0.90	0.008	0.008
6	699	0.97	1.896	1.895	0.92	1.142	1.140	0.92	0.129	0.128
7	973	1.00	1.107	1.103	0.96	0.686	0.683	0.94	0.074	0.073
8	999	0.97	0.096	0.096	0.96	0.058	0.059	0.90	0.006	0.006
9	3459	0.97	0.576	0.576	0.94	0.347	0.347	0.91	0.039	0.039
10	3522	0.99	0.194	0.194	1.00	0.119	0.119	0.91	0.013	0.013
11	3927	1.00	0.105	0.106	0.94	0.065	0.065	0.95	0.007	0.007
12	4359	0.98	0.115	0.115	0.99	0.071	0.071	0.90	0.008	0.008
13	4365	0.97	13.438	13.480	0.90	8.038	8.057	0.93	0.914	0.917
14	5142	0.97	0.122	0.122	0.96	0.075	0.075	0.90	0.008	0.008
15	5145	0.99	1.521	1.519	1.00	0.933	0.931	0.91	0.102	0.102
16	5512	0.97	3.667	3.668	0.92	2.196	2.195	0.92	0.249	0.249
17	5596	0.98	18.034	18.020	0.95	10.989	10.970	0.92	1.216	1.214
18	5715	1.00	2.592	2.595	0.92	1.610	1.611	0.96	0.173	0.173
19	6030	1.00	4.198	4.201	0.94	2.583	2.583	0.95	0.281	0.281
20	6297	1.00	0.118	0.119	0.99	0.071	0.071	0.93	0.008	0.008
21	6398	0.98	12.151	12.160	0.93	7.178	7.179	0.93	0.832	0.832
22	6909	0.98	1.359	1.362	0.95	0.815	0.816	0.92	0.092	0.093
23	7144	0.98	0.500	0.501	0.93	0.300	0.300	0.93	0.034	0.034
24	7179	0.98	0.382	0.382	0.95	0.229	0.229	0.92	0.026	0.026
25	7275	0.98	0.247	0.248	0.91	0.147	0.148	0.94	0.017	0.017
26	7734	0.98	4.785	4.784	0.97	2.899	2.896	0.91	0.323	0.323
27	7877	0.95	0.318	0.319	0.90	0.196	0.196	0.90	0.021	0.021
28	7890	1.00	0.197	0.197	0.97	0.117	0.117	0.94	0.013	0.013
29	7893	0.95	3.241	3.239	0.91	1.853	1.850	0.90	0.226	0.226
30	7944	0.98	1.944	1.949	0.99	1.198	1.200	0.90	0.130	0.130
31	8450	1.00	1.531	1.527	0.94	0.954	0.951	0.95	0.102	0.102
32	9733	0.98	0.513	0.516	1.00	0.300	0.301	0.90	0.035	0.036
33	10478	0.97	0.264	0.264	0.90	0.157	0.157	0.93	0.018	0.018
34	10932	1.00	7.562	7.574	0.94	4.686	4.691	0.95	0.504	0.505
35	11515	0.99	4.220	4.225	1.00	2.577	2.578	0.91	0.284	0.284
36	11600	0.97	4.721	4.724	0.94	2.847	2.846	0.91	0.320	0.320
37	11782	0.96	22.551	22.600	0.91	13.646	13.670	0.91	1.524	1.527
38	11878	0.97	1.420	1.422	0.94	0.860	0.860	0.91	0.096	0.096
39	12164	1.00	2.166	2.172	0.92	1.333	1.336	0.96	0.145	0.145
40	14635	0.95	0.121	0.121	0.90	0.074	0.074	0.90	0.008	0.008
41	14884	0.98	2.329	2.324	0.95	1.441	1.437	0.92	0.155	0.155
42	14968	1.00	6.165	6.167	0.94	3.675	3.673	0.95	0.420	0.420
43	15158	0.96	0.161	0.161	0.91	0.099	0.099	0.91	0.011	0.011
44	15333	0.98	0.262	0.262	0.99	0.159	0.159	0.90	0.018	0.018
45	15459	1.00	2.191	2.196	0.94	1.350	1.352	0.95	0.147	0.147
46	16343	0.97	0.419	0.419	0.92	0.252	0.251	0.92	0.028	0.028
47	16651	0.95	1.547	1.543	0.90	0.952	0.948	0.90	0.104	0.103
48	16879	0.99	2.926	2.923	0.96	1.737	1.734	0.93	0.200	0.200
49	17370	0.95	0.737	0.738	0.90	0.453	0.453	0.90	0.049	0.049
50	17727	1.00	0.398	0.398	0.94	0.247	0.247	0.95	0.026	0.026
51	18364	1.00	8.608	8.616	0.94	5.297	5.299	0.95	0.576	0.576
52	19194	1.00	0.605	0.605	0.99	0.361	0.360	0.93	0.041	0.041
53	19248	0.98	2.421	2.428	0.95	1.455	1.459	0.92	0.164	0.165
54	20167	0.99	3.387	3.389	0.98	2.024	2.024	0.92	0.230	0.230
55	20250	0.98	1.055	1.055	0.99	0.648	0.647	0.90	0.071	0.071
56	20293	0.95	0.760	0.761	0.90	0.468	0.468	0.90	0.051	0.051

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
57	21325	0.98	3.477	3.485	0.99	2.144	2.147	0.90	0.233	0.233
58	21891	0.97	0.719	0.719	0.90	0.426	0.425	0.93	0.049	0.049
59	21906	0.98	0.220	0.220	0.91	0.131	0.131	0.94	0.015	0.015
60	21969	0.97	4.849	4.856	0.96	2.975	2.977	0.90	0.325	0.326
61	22365	0.97	1.764	1.768	0.94	1.066	1.068	0.91	0.119	0.120
62	22940	0.95	0.225	0.225	0.90	0.138	0.137	0.90	0.015	0.015
63	23368	0.98	22.456	22.470	0.93	13.481	13.480	0.93	1.526	1.526
64	23772	0.98	6.972	6.972	0.99	4.305	4.301	0.90	0.466	0.466
65	24139	1.00	0.761	0.763	0.94	0.470	0.470	0.95	0.051	0.051
66	24814	0.98	0.743	0.744	0.95	0.431	0.431	0.92	0.051	0.051
67	24850	1.00	0.596	0.596	0.93	0.359	0.359	0.96	0.040	0.040
68	25647	0.97	1.481	1.486	0.90	0.885	0.887	0.93	0.101	0.101
69	26695	0.95	0.182	0.182	0.90	0.112	0.113	0.90	0.012	0.012
70	26717	0.99	0.257	0.257	0.94	0.152	0.152	0.94	0.018	0.018
71	27281	0.99	0.331	0.332	1.00	0.203	0.203	0.91	0.022	0.022
72	27739	0.98	0.486	0.486	0.99	0.282	0.282	0.90	0.034	0.034
73	30591	0.97	0.357	0.358	0.94	0.212	0.212	0.91	0.024	0.024
74	30982	0.98	0.253	0.253	0.91	0.154	0.154	0.94	0.017	0.017
75	31757	0.98	1.021	1.021	0.99	0.632	0.632	0.90	0.068	0.068
76	31985	1.00	0.631	0.632	0.94	0.386	0.386	0.95	0.042	0.042
77	33865	0.98	4.577	4.574	0.99	2.808	2.803	0.90	0.307	0.307
78	34177	0.97	0.092	0.092	0.94	0.056	0.056	0.91	0.006	0.006
79	34407	0.96	0.624	0.624	0.93	0.385	0.385	0.90	0.042	0.042
80	34561	0.99	0.084	0.084	1.00	0.051	0.051	0.91	0.006	0.006
81	35295	0.95	5.474	5.479	0.90	3.356	3.356	0.90	0.367	0.367
82	35882	0.98	4.043	4.051	0.99	2.473	2.476	0.90	0.272	0.272
83	36699	0.97	0.192	0.193	0.96	0.117	0.117	0.90	0.013	0.013
84	37935	0.98	2.741	2.739	0.97	1.578	1.575	0.91	0.190	0.190
85	38561	1.00	0.146	0.146	0.93	0.089	0.089	0.96	0.010	0.010
86	38681	1.00	1.936	1.938	0.93	1.172	1.172	0.96	0.131	0.131
87	39687	0.96	6.804	6.809	0.93	4.150	4.150	0.90	0.458	0.458
88	40064	0.98	0.111	0.111	0.97	0.068	0.068	0.91	0.007	0.007
89	40812	0.95	0.080	0.080	0.90	0.049	0.049	0.90	0.005	0.005
90	41044	0.99	0.458	0.458	0.94	0.269	0.269	0.94	0.031	0.031
91	41233	0.98	0.482	0.483	0.93	0.286	0.286	0.93	0.033	0.033
92	42376	0.96	2.887	2.891	0.93	1.783	1.785	0.90	0.193	0.193
93	42472	1.00	1.755	1.752	0.94	1.087	1.084	0.95	0.117	0.117
94	42541	0.95	0.133	0.133	0.90	0.081	0.081	0.90	0.009	0.009
95	42550	0.97	0.982	0.982	0.96	0.599	0.599	0.90	0.066	0.066
96	42931	1.00	0.521	0.522	0.94	0.310	0.311	0.95	0.036	0.036
97	44038	0.97	0.422	0.422	0.94	0.253	0.253	0.91	0.029	0.029
98	44547	0.99	0.305	0.305	1.00	0.187	0.186	0.91	0.020	0.020
99	44887	0.98	0.177	0.177	0.91	0.108	0.108	0.94	0.012	0.012
100	45622	0.97	3.372	3.371	0.96	2.012	2.010	0.90	0.230	0.230
101	47212	0.98	0.289	0.290	0.99	0.177	0.177	0.90	0.019	0.019
102	47541	0.97	1.683	1.683	0.90	1.051	1.050	0.93	0.112	0.112
103	48152	0.95	0.673	0.674	0.90	0.408	0.408	0.90	0.045	0.045
104	48761	0.96	0.182	0.182	0.91	0.111	0.111	0.91	0.012	0.012
105	48784	1.00	1.131	1.132	0.96	0.702	0.702	0.94	0.075	0.075
106	49019	0.95	1.103	1.099	0.90	0.678	0.675	0.90	0.074	0.074
107	49783	1.00	0.127	0.127	0.96	0.079	0.079	0.94	0.008	0.008
108	50484	0.99	0.160	0.160	1.00	0.098	0.098	0.91	0.011	0.011
109	51436	1.00	2.358	2.355	0.94	1.448	1.445	0.95	0.158	0.158
110	53599	0.98	0.152	0.153	0.99	0.094	0.094	0.90	0.010	0.010
111	53862	1.00	1.854	1.853	0.94	1.133	1.131	0.95	0.125	0.125
112	54231	1.00	0.093	0.093	0.94	0.058	0.058	0.95	0.006	0.006
113	54876	0.96	0.987	0.986	0.93	0.581	0.580	0.90	0.068	0.068
114	54931	0.96	188.424	188.600	0.91	117.678	117.700	0.91	12.495	12.500
115	57132	0.98	0.277	0.278	0.99	0.170	0.170	0.90	0.019	0.019
116	57142	0.99	0.701	0.703	0.94	0.421	0.421	0.94	0.048	0.048

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
117	58584	0.97	0.317	0.318	0.90	0.189	0.189	0.93	0.022	0.022
118	59034	0.98	3.315	3.315	0.92	2.030	2.028	0.93	0.223	0.223
119	59429	0.99	2.820	2.824	1.00	1.708	1.710	0.91	0.190	0.191
120	60323	0.98	0.144	0.145	0.99	0.088	0.088	0.90	0.010	0.010
121	60522	0.97	2.144	2.141	0.94	1.301	1.298	0.91	0.145	0.144
122	60761	0.99	2.970	2.971	1.00	1.837	1.837	0.91	0.198	0.198
123	60791	0.96	1.248	1.253	0.93	0.773	0.776	0.90	0.083	0.084
124	63695	0.95	1.099	1.101	0.90	0.637	0.637	0.90	0.076	0.076
125	64796	0.95	0.444	0.444	0.90	0.259	0.259	0.90	0.031	0.031
126	65062	1.00	0.125	0.126	0.94	0.076	0.076	0.95	0.008	0.008
127	65374	1.00	2.288	2.288	0.94	1.360	1.359	0.95	0.156	0.156
128	66220	1.00	0.170	0.171	0.95	0.106	0.106	0.95	0.011	0.011
129	67164	1.00	0.646	0.646	0.99	0.384	0.384	0.93	0.044	0.044
130	67324	0.98	0.241	0.242	0.99	0.148	0.149	0.90	0.016	0.016
131	67477	1.00	0.116	0.116	0.96	0.072	0.072	0.94	0.008	0.008
132	68151	0.99	3.507	3.511	0.90	2.156	2.157	0.96	0.235	0.235
133	70836	0.98	0.797	0.802	0.91	0.490	0.493	0.94	0.053	0.054
134	70897	0.96	0.100	0.101	0.93	0.063	0.063	0.90	0.007	0.007
135	70949	0.98	3.469	3.474	0.97	2.110	2.112	0.91	0.234	0.234
136	71025	1.00	0.595	0.595	0.96	0.350	0.350	0.94	0.041	0.041
137	71756	0.97	0.092	0.092	0.96	0.056	0.056	0.90	0.006	0.006
138	71809	0.98	0.155	0.155	0.99	0.095	0.096	0.90	0.010	0.010
139	72488	1.00	3.632	3.634	0.96	2.232	2.232	0.94	0.243	0.243
140	72529	0.96	0.133	0.133	0.93	0.081	0.081	0.90	0.009	0.009
141	73125	0.99	0.257	0.257	0.94	0.152	0.152	0.94	0.018	0.018
142	73982	0.96	2.841	2.843	0.93	1.746	1.746	0.90	0.190	0.190
143	74424	0.98	1.356	1.356	0.99	0.847	0.847	0.90	0.090	0.090
144	74436	0.99	0.257	0.257	0.94	0.152	0.152	0.94	0.018	0.018
145	75030	0.98	1.418	1.419	0.99	0.871	0.871	0.90	0.095	0.095
146	75578	0.95	0.361	0.361	0.90	0.221	0.221	0.90	0.024	0.024
147	75613	0.98	0.395	0.396	0.99	0.235	0.235	0.90	0.027	0.027
148	75614	0.99	1.418	1.423	0.94	0.871	0.873	0.94	0.095	0.095
149	75826	0.95	1.081	1.079	0.90	0.659	0.657	0.90	0.073	0.073
150	75909	1.00	1.620	1.619	0.90	0.997	0.996	0.97	0.108	0.108
151	76508	0.95	1.492	1.494	0.90	0.921	0.922	0.90	0.100	0.100
152	78104	0.98	0.728	0.728	0.91	0.458	0.458	0.94	0.048	0.048
153	78124	0.98	1.671	1.670	0.99	1.037	1.035	0.90	0.111	0.111
154	79297	0.98	0.237	0.237	0.99	0.141	0.141	0.90	0.016	0.016
155	79731	0.95	0.191	0.191	0.90	0.118	0.118	0.90	0.013	0.013
156	80613	0.98	3.770	3.770	0.99	2.317	2.315	0.90	0.253	0.252
157	80719	0.98	1.381	1.384	0.99	0.848	0.849	0.90	0.093	0.093
158	82244	0.99	0.425	0.425	0.95	0.256	0.256	0.93	0.029	0.029
159	82466	1.00	0.090	0.090	0.94	0.056	0.056	0.95	0.006	0.006
160	83658	1.00	2.570	2.574	0.96	1.517	1.519	0.94	0.176	0.176
161	83897	0.98	1.121	1.125	0.95	0.706	0.708	0.92	0.074	0.074
162	84812	0.98	0.625	0.628	0.99	0.355	0.357	0.90	0.044	0.044
163	86044	0.98	7.072	7.090	0.99	4.177	4.184	0.90	0.484	0.485
164	86226	0.97	12.370	12.410	0.92	7.643	7.663	0.92	0.826	0.828
165	86342	0.99	0.318	0.319	0.94	0.194	0.194	0.94	0.021	0.021
166	86462	1.00	2.157	2.157	0.90	1.286	1.285	0.97	0.147	0.147
167	86714	0.97	0.309	0.310	0.95	0.182	0.183	0.91	0.021	0.021
168	87202	0.97	0.220	0.220	0.90	0.131	0.131	0.93	0.015	0.015
169	87667	0.97	0.127	0.127	0.96	0.078	0.078	0.90	0.009	0.008
170	88117	0.96	0.092	0.092	0.93	0.056	0.056	0.90	0.006	0.006
171	88130	0.97	0.249	0.249	0.92	0.151	0.151	0.92	0.017	0.017
172	88248	0.99	0.252	0.253	0.96	0.152	0.152	0.93	0.017	0.017
173	88749	1.00	1.135	1.136	0.96	0.705	0.705	0.94	0.076	0.076
174	89794	0.99	0.240	0.241	1.00	0.147	0.148	0.91	0.016	0.016
175	90004	0.99	0.253	0.253	1.00	0.155	0.155	0.91	0.017	0.017
176	90449	0.97	0.083	0.084	0.90	0.051	0.051	0.93	0.006	0.006

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
177	90733	0.99	8.016	8.026	0.96	4.922	4.925	0.93	0.537	0.538
178	91392	0.97	0.740	0.739	0.90	0.424	0.423	0.93	0.052	0.051
179	91874	0.97	1.661	1.667	0.94	1.018	1.021	0.91	0.111	0.112
180	92249	1.00	1.325	1.323	0.94	0.808	0.806	0.95	0.089	0.089
181	92515	0.97	0.456	0.457	0.90	0.272	0.273	0.93	0.031	0.031
182	92706	0.98	0.183	0.183	0.99	0.113	0.113	0.90	0.012	0.012
183	93566	0.95	0.229	0.230	0.90	0.141	0.141	0.90	0.015	0.015
184	94066	0.98	0.148	0.148	0.91	0.087	0.087	0.94	0.010	0.010
185	94243	1.00	0.518	0.517	0.99	0.309	0.308	0.93	0.035	0.035
186	94598	0.98	6.846	6.848	0.99	4.233	4.230	0.90	0.457	0.457
187	94646	0.98	0.475	0.475	0.99	0.292	0.292	0.90	0.032	0.032
188	95090	1.00	0.257	0.257	0.94	0.152	0.152	0.95	0.018	0.018
189	95097	0.96	2.983	2.989	0.94	1.841	1.843	0.90	0.199	0.200
190	95283	0.99	6.128	6.136	1.00	3.734	3.736	0.91	0.413	0.413
191	95638	0.96	0.098	0.098	0.93	0.061	0.061	0.90	0.007	0.007
192	95727	0.98	0.213	0.213	0.99	0.132	0.132	0.90	0.014	0.014
193	96292	0.97	5.388	5.400	0.96	3.271	3.276	0.90	0.364	0.364
194	96765	0.99	3.440	3.444	0.94	2.030	2.031	0.94	0.236	0.236
195	97321	0.98	0.289	0.290	0.99	0.172	0.173	0.90	0.020	0.020
196	97927	0.99	0.220	0.220	1.00	0.131	0.131	0.91	0.015	0.015
197	98326	1.00	4.629	4.634	0.94	2.883	2.884	0.95	0.308	0.308
198	98772	0.96	0.306	0.306	0.93	0.186	0.186	0.90	0.021	0.021
199	98968	0.97	0.092	0.092	0.94	0.056	0.056	0.91	0.006	0.006
200	99015	0.99	0.105	0.105	1.00	0.064	0.064	0.91	0.007	0.007
201	99094	1.00	31.530	31.540	0.94	19.429	19.420	0.95	2.110	2.109
202	99750	0.98	0.108	0.108	0.99	0.067	0.067	0.90	0.007	0.007
203	99900	0.98	1.385	1.386	0.99	0.849	0.849	0.90	0.093	0.093
204	100015	0.98	1.857	1.856	0.91	1.128	1.127	0.94	0.125	0.125
205	100159	0.95	0.192	0.192	0.90	0.118	0.118	0.90	0.013	0.013
206	100187	1.00	1.662	1.662	0.95	0.970	0.969	0.95	0.115	0.115
207	101073	0.98	0.206	0.206	0.91	0.123	0.123	0.94	0.014	0.014
208	101149	0.97	1.841	1.846	0.90	1.142	1.144	0.93	0.123	0.123
209	101358	1.00	7.311	7.320	0.94	4.539	4.541	0.95	0.487	0.487
210	101581	0.96	1.362	1.363	0.93	0.826	0.826	0.90	0.092	0.092
211	101956	0.99	0.408	0.408	0.91	0.241	0.241	0.95	0.028	0.028
212	102495	0.95	0.122	0.122	0.90	0.075	0.075	0.90	0.008	0.008
213	102532	0.98	0.096	0.096	0.99	0.058	0.059	0.90	0.006	0.006
214	102669	0.99	4.393	4.391	0.96	2.622	2.618	0.93	0.299	0.299
215	102778	1.00	1.158	1.157	0.94	0.712	0.711	0.95	0.078	0.078
216	103326	1.00	3.805	3.810	0.94	2.393	2.395	0.95	0.252	0.252
217	103541	0.97	0.410	0.410	0.96	0.250	0.249	0.90	0.028	0.028
218	104104	0.98	0.146	0.146	0.91	0.089	0.089	0.94	0.010	0.010
219	104106	0.98	0.108	0.108	0.97	0.066	0.066	0.91	0.007	0.007
220	104165	0.97	0.118	0.118	0.96	0.072	0.072	0.90	0.008	0.008
221	105118	0.97	9.620	9.627	0.96	5.805	5.806	0.90	0.651	0.651
222	105353	1.00	2.892	2.891	0.99	1.732	1.730	0.93	0.196	0.196
223	105542	0.96	0.426	0.426	0.93	0.257	0.257	0.90	0.029	0.029
224	106026	1.00	0.110	0.110	0.94	0.068	0.068	0.95	0.007	0.007
225	106547	0.96	0.111	0.112	0.91	0.068	0.068	0.91	0.007	0.007
226	106752	1.00	0.258	0.259	0.93	0.151	0.151	0.96	0.018	0.018
227	106849	0.98	0.198	0.198	0.99	0.122	0.122	0.90	0.013	0.013
228	106894	0.97	0.408	0.408	0.90	0.245	0.244	0.93	0.028	0.028
229	106907	0.98	0.339	0.340	0.97	0.206	0.206	0.91	0.023	0.023
230	107458	0.96	0.087	0.087	0.93	0.052	0.052	0.90	0.006	0.006
231	107476	1.00	0.990	0.991	0.98	0.611	0.611	0.93	0.066	0.066
232	107611	0.98	2.970	2.975	0.99	1.839	1.841	0.90	0.198	0.199
233	108467	0.97	0.083	0.083	0.90	0.051	0.051	0.93	0.006	0.006
234	108525	0.95	3.603	3.613	0.90	2.224	2.228	0.90	0.241	0.241
235	108827	0.98	1.033	1.037	0.97	0.637	0.638	0.91	0.069	0.069
236	110727	0.96	0.585	0.585	0.91	0.357	0.356	0.91	0.039	0.039

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
237	111092	0.97	6.080	6.088	0.94	3.758	3.760	0.91	0.406	0.407
238	111445	0.97	0.315	0.315	0.94	0.183	0.183	0.91	0.022	0.022
239	111793	0.97	5.603	5.606	0.90	3.444	3.442	0.93	0.375	0.375
240	112021	1.00	0.090	0.089	0.94	0.056	0.056	0.95	0.006	0.006
241	112172	0.98	9.181	9.193	0.99	5.697	5.700	0.90	0.612	0.612
242	112567	0.97	0.475	0.476	0.90	0.283	0.283	0.93	0.032	0.032
243	112692	0.97	2.674	2.670	0.96	1.645	1.641	0.90	0.179	0.179
244	113339	0.99	0.318	0.319	1.00	0.194	0.194	0.91	0.021	0.021
245	113392	0.98	1.200	1.198	0.99	0.738	0.736	0.90	0.080	0.080
246	114187	0.96	0.871	0.873	0.93	0.515	0.517	0.90	0.060	0.060
247	116012	0.95	0.081	0.082	0.90	0.050	0.050	0.90	0.005	0.005
248	116028	0.98	0.352	0.353	0.99	0.218	0.218	0.90	0.023	0.023
249	116113	1.00	0.539	0.540	0.92	0.333	0.333	0.96	0.036	0.036
250	116665	1.00	3.454	3.456	0.91	2.074	2.073	0.97	0.235	0.235
251	116887	0.98	0.160	0.160	0.99	0.098	0.098	0.90	0.011	0.011
252	117056	1.00	1.124	1.122	0.90	0.690	0.688	0.97	0.075	0.075
253	118248	1.00	4.505	4.503	0.94	2.792	2.789	0.95	0.300	0.300
254	119017	0.95	3.691	3.685	0.90	2.294	2.288	0.90	0.246	0.245
255	120600	0.98	0.414	0.415	0.99	0.256	0.256	0.90	0.028	0.028
256	121847	1.00	1.972	1.974	0.99	1.187	1.187	0.93	0.134	0.134
257	121948	1.00	2.989	2.987	0.92	1.831	1.828	0.96	0.201	0.200
258	122021	0.98	0.623	0.623	0.99	0.383	0.383	0.90	0.042	0.042
259	122197	0.98	0.676	0.676	0.99	0.417	0.417	0.90	0.045	0.045
260	122728	0.97	0.159	0.159	0.92	0.097	0.097	0.92	0.011	0.011
261	122914	0.98	0.084	0.084	0.99	0.051	0.051	0.90	0.006	0.006
262	123325	0.99	0.253	0.254	1.00	0.157	0.157	0.91	0.017	0.017
263	123480	1.00	0.101	0.101	0.96	0.062	0.062	0.94	0.007	0.007
264	123738	0.98	0.166	0.167	0.99	0.102	0.102	0.90	0.011	0.011
265	124384	1.00	0.166	0.167	0.94	0.102	0.102	0.95	0.011	0.011
266	124823	1.00	0.105	0.106	0.94	0.065	0.065	0.95	0.007	0.007
267	125297	1.00	20.496	20.540	0.90	12.502	12.520	0.97	1.380	1.382
268	125480	0.96	0.102	0.102	0.93	0.062	0.062	0.90	0.007	0.007
269	125707	0.95	3.144	3.142	0.90	1.949	1.946	0.90	0.210	0.209
270	126962	0.99	0.129	0.129	1.00	0.079	0.079	0.91	0.009	0.009
271	127011	0.98	0.090	0.089	0.97	0.056	0.056	0.91	0.006	0.006
272	127810	0.95	2.742	2.739	0.90	1.569	1.566	0.90	0.191	0.191
273	127921	1.00	17.376	17.340	0.92	10.392	10.360	0.96	1.181	1.178
274	128174	0.95	3.660	3.660	0.90	2.239	2.237	0.90	0.246	0.246
275	128587	1.00	0.566	0.567	0.99	0.338	0.338	0.93	0.039	0.039
276	129165	0.96	3.169	3.170	0.93	1.965	1.964	0.90	0.211	0.211
277	129387	0.95	1.124	1.128	0.90	0.690	0.693	0.90	0.075	0.076
278	129508	0.99	0.220	0.220	1.00	0.135	0.135	0.91	0.015	0.015
279	130013	1.00	0.867	0.868	0.94	0.525	0.526	0.95	0.059	0.059
280	132043	0.98	0.294	0.294	0.99	0.181	0.182	0.90	0.020	0.020
281	133692	1.00	6.874	6.873	0.94	4.262	4.257	0.95	0.459	0.458
282	133898	1.00	0.882	0.883	0.94	0.528	0.529	0.95	0.060	0.060
283	134526	1.00	0.505	0.507	0.94	0.314	0.314	0.95	0.034	0.034
284	134973	0.96	0.092	0.093	0.91	0.056	0.057	0.91	0.006	0.006
285	135843	1.00	0.130	0.130	0.96	0.080	0.080	0.94	0.009	0.009
286	137019	1.00	1.808	1.815	0.90	1.113	1.116	0.97	0.121	0.122
287	138184	0.96	0.996	0.996	0.94	0.619	0.619	0.90	0.066	0.066
288	138400	0.98	1.157	1.157	0.97	0.716	0.716	0.91	0.077	0.077
289	138844	0.98	1.309	1.311	0.99	0.799	0.799	0.90	0.088	0.088
290	139416	0.95	1.295	1.297	0.90	0.793	0.794	0.90	0.087	0.087
291	139642	0.96	3.663	3.665	0.91	2.245	2.244	0.91	0.246	0.246
292	140823	0.97	7.810	7.825	0.90	4.719	4.725	0.93	0.528	0.529
293	140982	0.98	0.958	0.959	0.99	0.587	0.587	0.90	0.064	0.064
294	141127	0.98	0.408	0.408	0.99	0.249	0.249	0.90	0.027	0.027
295	141803	0.96	0.104	0.105	0.93	0.060	0.060	0.90	0.007	0.007
296	142411	0.96	1.415	1.413	0.93	0.863	0.862	0.90	0.095	0.095

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
297	142425	0.95	1.598	1.604	0.90	0.974	0.977	0.90	0.108	0.108
298	142634	1.00	0.813	0.815	0.96	0.501	0.502	0.94	0.054	0.055
299	142959	1.00	0.241	0.241	0.96	0.142	0.142	0.94	0.017	0.017
300	143138	1.00	3.258	3.260	0.94	2.020	2.019	0.95	0.217	0.217
301	143498	0.99	1.846	1.848	1.00	1.047	1.048	0.91	0.129	0.129
302	143868	0.95	3.165	3.165	0.90	1.949	1.947	0.90	0.212	0.212
303	144516	0.98	0.156	0.156	0.97	0.095	0.095	0.91	0.011	0.011
304	145452	0.98	0.359	0.359	0.99	0.221	0.221	0.90	0.024	0.024
305	145463	0.96	4.327	4.328	0.93	2.315	2.315	0.91	0.313	0.313
306	145956	0.98	1.801	1.802	0.99	1.105	1.105	0.90	0.121	0.121
307	146215	0.98	0.253	0.253	0.97	0.153	0.153	0.91	0.017	0.017
308	146750	0.98	18.156	18.170	0.97	11.072	11.070	0.91	1.223	1.223
309	147072	0.95	0.133	0.133	0.90	0.081	0.081	0.90	0.009	0.009
310	148013	0.97	0.152	0.153	0.94	0.094	0.094	0.91	0.010	0.010
311	148144	0.98	2.108	2.114	0.99	1.285	1.288	0.90	0.142	0.142
312	149170	0.98	0.145	0.145	0.99	0.090	0.089	0.90	0.010	0.010
313	149632	0.98	0.151	0.152	0.99	0.094	0.094	0.90	0.010	0.010
314	149981	0.95	0.746	0.745	0.90	0.459	0.458	0.90	0.050	0.050
315	150646	0.97	0.181	0.181	0.90	0.111	0.111	0.93	0.012	0.012
316	150710	0.98	0.963	0.965	0.99	0.581	0.582	0.90	0.065	0.065
317	151714	1.00	7.831	7.830	0.91	4.669	4.665	0.97	0.534	0.533
318	151961	0.95	1.086	1.090	0.90	0.667	0.669	0.90	0.073	0.073
319	151965	0.95	0.233	0.233	0.90	0.143	0.143	0.90	0.016	0.016
320	151971	0.97	0.182	0.182	0.96	0.112	0.113	0.90	0.012	0.012
321	155051	0.96	1.184	1.184	0.93	0.731	0.730	0.90	0.079	0.079
322	155072	0.97	0.126	0.126	0.90	0.075	0.075	0.93	0.009	0.009
323	155283	0.97	0.220	0.220	0.90	0.131	0.131	0.93	0.015	0.015
324	155572	0.95	0.220	0.220	0.90	0.136	0.136	0.90	0.015	0.015
325	155776	0.98	1.476	1.476	0.99	0.904	0.903	0.90	0.099	0.099
326	156452	0.99	0.426	0.426	0.92	0.250	0.251	0.95	0.029	0.029
327	156712	0.95	0.434	0.434	0.90	0.267	0.267	0.90	0.029	0.029
328	156713	0.95	0.276	0.276	0.90	0.169	0.169	0.90	0.019	0.019
329	158839	1.00	0.503	0.503	0.94	0.300	0.300	0.95	0.034	0.034
330	159242	0.96	0.177	0.177	0.93	0.108	0.108	0.90	0.012	0.012
331	160335	0.98	0.127	0.126	0.95	0.078	0.078	0.92	0.008	0.008
332	161335	0.98	0.192	0.193	0.99	0.117	0.117	0.90	0.013	0.013
333	162415	1.00	1.911	1.910	0.94	1.182	1.180	0.95	0.128	0.128
334	163249	0.98	0.797	0.795	0.97	0.491	0.490	0.91	0.053	0.053
335	164668	0.99	1.246	1.246	0.92	0.756	0.755	0.95	0.084	0.084
336	164688	0.98	0.192	0.193	0.93	0.114	0.114	0.93	0.013	0.013
337	164981	1.00	2.410	2.405	0.92	1.489	1.485	0.96	0.161	0.161
338	168264	0.98	0.130	0.130	0.99	0.080	0.080	0.90	0.009	0.009
339	169301	0.99	7.395	7.400	0.99	4.567	4.568	0.92	0.494	0.494
340	169316	0.98	0.342	0.343	0.99	0.203	0.204	0.90	0.023	0.023
341	169679	1.00	0.391	0.391	0.94	0.250	0.249	0.95	0.026	0.026
342	169751	0.99	0.621	0.622	1.00	0.370	0.370	0.91	0.042	0.042
343	169953	0.98	2.472	2.471	0.99	1.540	1.538	0.90	0.164	0.164
344	170547	0.97	2.559	2.564	0.96	1.565	1.567	0.90	0.172	0.172
345	170655	1.00	1.446	1.450	0.94	0.885	0.887	0.95	0.097	0.097
346	170896	1.00	0.180	0.180	0.99	0.107	0.107	0.93	0.012	0.012
347	171842	1.00	1.482	1.488	0.96	0.924	0.927	0.94	0.098	0.099
348	171925	1.00	0.106	0.106	0.90	0.066	0.066	0.97	0.007	0.007
349	172040	0.99	0.487	0.487	0.92	0.284	0.284	0.95	0.034	0.034
350	172252	0.98	0.247	0.248	0.91	0.147	0.148	0.94	0.017	0.017
351	172443	0.97	0.087	0.087	0.96	0.052	0.052	0.90	0.006	0.006
352	172546	1.00	0.191	0.191	0.96	0.117	0.117	0.94	0.013	0.013
353	172548	1.00	0.102	0.102	0.94	0.062	0.062	0.95	0.007	0.007
354	172854	0.97	1.798	1.797	0.94	1.110	1.108	0.91	0.120	0.120
355	172900	0.96	0.183	0.183	0.93	0.113	0.113	0.90	0.012	0.012
356	173378	0.98	1.394	1.396	0.99	0.869	0.870	0.90	0.093	0.093

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	Row number (MSX catalog)	Band 1			Band 3			Band 5		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
357	174089	1.00	0.233	0.232	0.99	0.139	0.139	0.93	0.016	0.016
358	174355	0.98	0.382	0.382	0.94	0.234	0.234	0.92	0.026	0.026
359	174555	0.98	0.434	0.434	0.95	0.268	0.268	0.92	0.029	0.029
360	175589	0.97	7.201	7.211	0.96	4.464	4.468	0.90	0.480	0.480
361	175978	1.00	0.729	0.729	0.96	0.445	0.445	0.94	0.049	0.049

TABLE S2: Calculation of stellar radiation fluxes of 361 stars in Band 2 (4.22 - 4.36 μm), Band 4 (11.1 - 13.2 μm), Band 6 (18.2 - 25.1 μm) of the MSX catalog. ε_λ is the star emissivity at wavelength λ. E_c is the calculated radiation flux, and E_m is the radiation flux extracted from the MSX stellar catalog (unit: $\times 10^{-13}$W/m^2).

	Row number	Band 2			Band 4			Band 6		
	(MSX catalog)	ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
1	258	0.90	1.237	1.237	0.93	0.367	0.363	0.93	0.133	0.128
2	548	0.93	0.679	0.684	0.90	0.198	0.198	0.90	0.072	0.070
3	603	0.92	0.040	0.040	0.96	0.011	0.011	0.96	0.004	0.004
4	618	0.91	0.194	0.195	0.94	0.059	0.058	0.94	0.021	0.021
5	665	0.93	0.052	0.052	0.90	0.015	0.015	0.90	0.005	0.005
6	699	0.92	0.797	0.798	0.92	0.237	0.235	0.92	0.086	0.083
7	973	0.96	0.479	0.478	0.94	0.136	0.135	0.94	0.049	0.047
8	999	0.96	0.041	0.041	0.90	0.012	0.012	0.90	0.004	0.004
9	3459	0.94	0.242	0.243	0.91	0.072	0.071	0.91	0.026	0.025
10	3522	1.00	0.083	0.083	0.91	0.024	0.024	0.91	0.009	0.008
11	3927	0.94	0.045	0.045	0.95	0.013	0.013	0.95	0.005	0.005
12	4359	0.99	0.049	0.049	0.90	0.014	0.014	0.90	0.005	0.005
13	4365	0.90	5.611	5.638	0.93	1.687	1.674	0.93	0.611	0.593
14	5142	0.96	0.052	0.052	0.90	0.015	0.015	0.90	0.006	0.005
15	5145	1.00	0.650	0.652	0.91	0.187	0.187	0.91	0.069	0.066
16	5512	0.92	1.531	1.536	0.92	0.458	0.455	0.92	0.168	0.161
17	5596	0.95	7.670	7.679	0.92	2.242	2.221	0.92	0.813	0.783
18	5715	0.92	1.126	1.129	0.96	0.320	0.317	0.96	0.114	0.111
19	6030	0.94	1.804	1.809	0.95	0.519	0.515	0.95	0.187	0.181
20	6297	0.99	0.049	0.049	0.93	0.015	0.015	0.93	0.005	0.005
21	6398	0.93	5.006	5.022	0.93	1.529	1.517	0.93	0.559	0.540
22	6909	0.95	0.568	0.571	0.92	0.169	0.169	0.92	0.062	0.060
23	7144	0.93	0.209	0.210	0.93	0.063	0.062	0.93	0.023	0.022
24	7179	0.95	0.159	0.160	0.92	0.048	0.047	0.92	0.017	0.017
25	7275	0.91	0.103	0.103	0.94	0.031	0.031	0.94	0.011	0.011
26	7734	0.97	2.021	2.027	0.91	0.593	0.591	0.91	0.218	0.208
27	7877	0.90	0.137	0.137	0.90	0.039	0.039	0.90	0.014	0.014
28	7890	0.97	0.082	0.082	0.94	0.025	0.025	0.94	0.009	0.009
29	7893	0.91	1.291	1.292	0.90	0.413	0.410	0.90	0.153	0.147
30	7944	0.99	0.835	0.841	0.90	0.238	0.239	0.90	0.088	0.084
31	8450	0.94	0.666	0.666	0.95	0.189	0.186	0.95	0.068	0.065
32	9733	1.00	0.209	0.210	0.90	0.064	0.065	0.90	0.024	0.023
33	10478	0.90	0.110	0.110	0.93	0.033	0.033	0.93	0.012	0.012
34	10932	0.94	3.273	3.285	0.95	0.933	0.926	0.95	0.335	0.324
35	11515	1.00	1.796	1.805	0.91	0.520	0.520	0.91	0.192	0.183
36	11600	0.94	1.985	1.992	0.91	0.587	0.584	0.91	0.215	0.207
37	11782	0.91	9.518	9.569	0.91	2.802	2.791	0.91	1.024	0.985
38	11878	0.94	0.600	0.602	0.91	0.177	0.176	0.91	0.064	0.062
39	12164	0.92	0.932	0.936	0.96	0.269	0.266	0.96	0.096	0.093
40	14635	0.90	0.052	0.052	0.90	0.015	0.015	0.90	0.005	0.005
41	14884	0.95	1.006	1.007	0.92	0.287	0.284	0.92	0.103	0.100
42	14968	0.94	2.562	2.570	0.95	0.771	0.767	0.95	0.283	0.272
43	15158	0.91	0.069	0.069	0.91	0.020	0.020	0.91	0.007	0.007
44	15333	0.99	0.111	0.111	0.90	0.033	0.032	0.90	0.012	0.011
45	15459	0.94	0.943	0.947	0.95	0.271	0.269	0.95	0.098	0.094
46	16343	0.92	0.176	0.176	0.92	0.052	0.052	0.92	0.019	0.018
47	16651	0.90	0.665	0.664	0.90	0.191	0.189	0.90	0.069	0.066
48	16879	0.96	1.211	1.213	0.93	0.366	0.364	0.93	0.135	0.129
49	17370	0.90	0.316	0.317	0.90	0.091	0.091	0.90	0.033	0.032
50	17727	0.94	0.173	0.173	0.95	0.049	0.049	0.95	0.018	0.017
51	18364	0.94	3.699	3.712	0.95	1.065	1.056	0.95	0.384	0.371
52	19194	0.99	0.251	0.252	0.93	0.075	0.075	0.93	0.028	0.027
53	19248	0.95	1.015	1.021	0.92	0.302	0.301	0.92	0.111	0.106
54	20167	0.98	1.411	1.416	0.92	0.422	0.421	0.92	0.156	0.149
55	20250	0.99	0.452	0.453	0.90	0.130	0.130	0.90	0.048	0.045
56	20293	0.90	0.326	0.327	0.90	0.094	0.093	0.90	0.034	0.033

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	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
57	21325	0.99	1.494	1.504	0.90	0.426	0.427	0.90	0.157	0.150
58	21891	0.90	0.297	0.297	0.93	0.091	0.090	0.93	0.033	0.032
59	21906	0.91	0.092	0.092	0.94	0.028	0.027	0.94	0.010	0.010
60	21969	0.96	2.074	2.085	0.90	0.597	0.596	0.90	0.219	0.210
61	22365	0.94	0.744	0.748	0.91	0.219	0.219	0.91	0.080	0.077
62	22940	0.90	0.096	0.096	0.90	0.028	0.028	0.90	0.010	0.010
63	23368	0.93	9.407	9.432	0.93	2.809	2.786	0.93	1.023	0.986
64	23772	0.99	3.001	3.013	0.90	0.854	0.854	0.90	0.314	0.299
65	24139	0.94	0.328	0.329	0.95	0.094	0.093	0.95	0.034	0.033
66	24814	0.95	0.301	0.301	0.92	0.094	0.094	0.92	0.035	0.033
67	24850	0.93	0.250	0.251	0.96	0.074	0.074	0.96	0.027	0.026
68	25647	0.90	0.618	0.621	0.93	0.186	0.185	0.93	0.067	0.065
69	26695	0.90	0.079	0.079	0.90	0.022	0.022	0.90	0.008	0.008
70	26717	0.94	0.106	0.106	0.94	0.032	0.032	0.94	0.012	0.011
71	27281	1.00	0.141	0.142	0.91	0.041	0.041	0.91	0.015	0.014
72	27739	0.99	0.196	0.197	0.90	0.062	0.061	0.90	0.023	0.022
73	30591	0.94	0.148	0.148	0.91	0.045	0.045	0.91	0.016	0.016
74	30982	0.91	0.107	0.108	0.94	0.031	0.031	0.94	0.011	0.011
75	31757	0.99	0.442	0.443	0.90	0.126	0.125	0.90	0.045	0.044
76	31985	0.94	0.269	0.271	0.95	0.078	0.078	0.95	0.029	0.027
77	33865	0.99	1.957	1.963	0.90	0.562	0.562	0.90	0.207	0.197
78	34177	0.94	0.039	0.039	0.91	0.011	0.011	0.91	0.004	0.004
79	34407	0.93	0.269	0.270	0.90	0.077	0.076	0.90	0.028	0.027
80	34561	1.00	0.036	0.036	0.91	0.010	0.010	0.91	0.004	0.004
81	35295	0.90	2.339	2.351	0.90	0.672	0.673	0.90	0.248	0.237
82	35882	0.99	1.724	1.734	0.90	0.499	0.498	0.90	0.183	0.175
83	36699	0.96	0.082	0.082	0.90	0.024	0.024	0.90	0.009	0.008
84	37935	0.97	1.100	1.101	0.91	0.350	0.346	0.91	0.128	0.124
85	38561	0.93	0.062	0.062	0.96	0.018	0.018	0.96	0.007	0.006
86	38681	0.93	0.817	0.820	0.96	0.240	0.239	0.96	0.088	0.084
87	39687	0.93	2.895	2.906	0.90	0.842	0.838	0.90	0.307	0.295
88	40064	0.97	0.047	0.047	0.91	0.014	0.014	0.91	0.005	0.005
89	40812	0.90	0.034	0.034	0.90	0.010	0.010	0.90	0.004	0.003
90	41044	0.94	0.188	0.188	0.94	0.058	0.057	0.94	0.021	0.020
91	41233	0.93	0.199	0.200	0.93	0.061	0.060	0.93	0.022	0.021
92	42376	0.93	1.246	1.251	0.90	0.357	0.354	0.90	0.128	0.124
93	42472	0.94	0.759	0.759	0.95	0.217	0.214	0.95	0.078	0.075
94	42541	0.90	0.057	0.057	0.90	0.016	0.016	0.90	0.006	0.006
95	42550	0.96	0.417	0.419	0.90	0.121	0.121	0.90	0.045	0.043
96	42931	0.94	0.217	0.217	0.95	0.066	0.065	0.95	0.024	0.023
97	44038	0.94	0.177	0.177	0.91	0.053	0.052	0.91	0.019	0.018
98	44547	1.00	0.130	0.130	0.91	0.038	0.037	0.91	0.014	0.013
99	44887	0.91	0.075	0.076	0.94	0.022	0.022	0.94	0.008	0.008
100	45622	0.96	1.405	1.406	0.90	0.424	0.419	0.90	0.153	0.149
101	47212	0.99	0.124	0.124	0.90	0.036	0.036	0.90	0.013	0.013
102	47541	0.90	0.734	0.736	0.93	0.207	0.205	0.93	0.075	0.072
103	48152	0.90	0.285	0.286	0.90	0.084	0.083	0.90	0.030	0.029
104	48761	0.91	0.078	0.078	0.91	0.023	0.022	0.91	0.008	0.008
105	48784	0.96	0.490	0.492	0.94	0.139	0.138	0.94	0.050	0.048
106	49019	0.90	0.472	0.473	0.90	0.135	0.135	0.90	0.050	0.047
107	49783	0.96	0.055	0.055	0.94	0.016	0.016	0.94	0.006	0.005
108	50484	1.00	0.068	0.068	0.91	0.020	0.020	0.91	0.007	0.007
109	51436	0.94	1.011	1.012	0.95	0.292	0.289	0.95	0.105	0.102
110	53599	0.99	0.065	0.066	0.90	0.019	0.019	0.90	0.007	0.007
111	53862	0.94	0.791	0.792	0.95	0.230	0.228	0.95	0.083	0.080
112	54231	0.94	0.040	0.040	0.95	0.011	0.011	0.95	0.004	0.004
113	54876	0.93	0.405	0.406	0.90	0.124	0.123	0.90	0.046	0.044
114	54931	0.91	82.224	82.500	0.91	23.149	22.960	0.91	8.300	8.016
115	57132	0.99	0.118	0.119	0.90	0.034	0.034	0.90	0.013	0.012
116	57142	0.94	0.293	0.295	0.94	0.087	0.087	0.94	0.032	0.031

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	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
117	58584	0.90	0.132	0.132	0.93	0.040	0.039	0.93	0.014	0.014
118	59034	0.92	1.415	1.420	0.93	0.408	0.408	0.93	0.150	0.143
119	59429	1.00	1.192	1.197	0.91	0.350	0.348	0.91	0.128	0.123
120	60323	0.99	0.062	0.062	0.90	0.018	0.018	0.90	0.006	0.006
121	60522	0.94	0.908	0.908	0.91	0.267	0.264	0.91	0.097	0.093
122	60761	1.00	1.283	1.287	0.91	0.367	0.363	0.91	0.132	0.127
123	60791	0.93	0.540	0.544	0.90	0.154	0.153	0.90	0.055	0.054
124	63695	0.90	0.444	0.446	0.90	0.139	0.139	0.90	0.051	0.050
125	64796	0.90	0.181	0.181	0.90	0.056	0.056	0.90	0.020	0.020
126	65062	0.94	0.053	0.053	0.95	0.015	0.015	0.95	0.006	0.005
127	65374	0.94	0.949	0.950	0.95	0.288	0.285	0.95	0.105	0.101
128	66220	0.95	0.074	0.074	0.95	0.021	0.021	0.95	0.008	0.007
129	67164	0.99	0.268	0.268	0.93	0.081	0.080	0.93	0.030	0.029
130	67324	0.99	0.103	0.104	0.90	0.030	0.030	0.90	0.011	0.010
131	67477	0.96	0.050	0.051	0.94	0.014	0.014	0.94	0.005	0.005
132	68151	0.90	1.505	1.511	0.96	0.433	0.431	0.96	0.157	0.151
133	70836	0.91	0.342	0.345	0.94	0.098	0.098	0.94	0.036	0.034
134	70897	0.93	0.044	0.044	0.90	0.012	0.012	0.90	0.004	0.004
135	70949	0.97	1.472	1.479	0.91	0.430	0.428	0.91	0.157	0.151
136	71025	0.96	0.244	0.245	0.94	0.075	0.074	0.94	0.027	0.026
137	71756	0.96	0.039	0.039	0.90	0.011	0.011	0.90	0.004	0.004
138	71809	0.99	0.067	0.067	0.90	0.019	0.019	0.90	0.007	0.007
139	72488	0.96	1.556	1.563	0.94	0.446	0.446	0.94	0.164	0.157
140	72529	0.93	0.057	0.057	0.90	0.016	0.016	0.90	0.006	0.006
141	73125	0.94	0.106	0.106	0.94	0.032	0.032	0.94	0.012	0.011
142	73982	0.93	1.219	1.223	0.90	0.352	0.349	0.90	0.127	0.123
143	74424	0.99	0.593	0.594	0.90	0.168	0.165	0.90	0.059	0.058
144	74436	0.94	0.106	0.106	0.94	0.032	0.032	0.94	0.012	0.011
145	75030	0.99	0.607	0.610	0.90	0.174	0.174	0.90	0.064	0.061
146	75578	0.90	0.154	0.155	0.90	0.045	0.044	0.90	0.016	0.016
147	75613	0.99	0.164	0.164	0.90	0.050	0.049	0.90	0.018	0.018
148	75614	0.94	0.607	0.612	0.94	0.174	0.175	0.94	0.064	0.061
149	75826	0.90	0.459	0.460	0.90	0.133	0.133	0.90	0.049	0.047
150	75909	0.90	0.695	0.697	0.97	0.199	0.198	0.97	0.073	0.070
151	76508	0.90	0.642	0.645	0.90	0.183	0.183	0.90	0.067	0.064
152	78104	0.91	0.320	0.321	0.94	0.089	0.088	0.94	0.032	0.031
153	78124	0.99	0.724	0.725	0.90	0.206	0.204	0.90	0.074	0.071
154	79297	0.99	0.098	0.099	0.90	0.030	0.030	0.90	0.011	0.010
155	79731	0.90	0.082	0.083	0.90	0.024	0.023	0.90	0.009	0.008
156	80613	0.99	1.615	1.621	0.90	0.463	0.462	0.90	0.170	0.162
157	80719	0.99	0.591	0.595	0.90	0.170	0.170	0.90	0.062	0.060
158	82244	0.95	0.179	0.179	0.93	0.053	0.053	0.93	0.019	0.019
159	82466	0.94	0.039	0.039	0.95	0.011	0.011	0.95	0.004	0.004
160	83658	0.96	1.058	1.062	0.94	0.324	0.321	0.94	0.118	0.114
161	83897	0.95	0.494	0.496	0.92	0.138	0.137	0.92	0.049	0.048
162	84812	0.99	0.247	0.249	0.90	0.080	0.080	0.90	0.030	0.029
163	86044	0.99	2.911	2.926	0.90	0.888	0.885	0.90	0.327	0.315
164	86226	0.92	5.336	5.369	0.92	1.523	1.518	0.92	0.552	0.532
165	86342	0.94	0.135	0.136	0.94	0.039	0.039	0.94	0.015	0.014
166	86462	0.90	0.898	0.899	0.97	0.271	0.268	0.97	0.098	0.095
167	86714	0.95	0.127	0.128	0.91	0.039	0.039	0.91	0.014	0.014
168	87202	0.90	0.091	0.092	0.93	0.028	0.027	0.93	0.010	0.010
169	87667	0.96	0.055	0.055	0.90	0.016	0.016	0.90	0.006	0.005
170	88117	0.93	0.039	0.039	0.90	0.011	0.011	0.90	0.004	0.004
171	88130	0.92	0.105	0.105	0.92	0.031	0.031	0.92	0.011	0.011
172	88248	0.96	0.106	0.106	0.93	0.031	0.031	0.93	0.011	0.011
173	88749	0.96	0.492	0.494	0.94	0.140	0.139	0.94	0.050	0.049
174	89794	1.00	0.103	0.103	0.91	0.030	0.030	0.91	0.011	0.010
175	90004	1.00	0.108	0.109	0.91	0.031	0.031	0.91	0.011	0.011
176	90449	0.90	0.036	0.036	0.93	0.010	0.010	0.93	0.004	0.004

Continued on next page

	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
177	90733	0.96	3.430	3.449	0.93	0.984	0.985	0.93	0.363	0.346
178	91392	0.90	0.295	0.296	0.93	0.094	0.093	0.93	0.035	0.034
179	91874	0.94	0.711	0.715	0.91	0.206	0.205	0.91	0.074	0.072
180	92249	0.94	0.563	0.565	0.95	0.163	0.163	0.95	0.060	0.057
181	92515	0.90	0.190	0.191	0.93	0.057	0.057	0.93	0.021	0.020
182	92706	0.99	0.079	0.079	0.90	0.023	0.022	0.90	0.008	0.008
183	93566	0.90	0.098	0.099	0.90	0.028	0.028	0.90	0.010	0.010
184	94066	0.91	0.061	0.061	0.94	0.019	0.018	0.94	0.007	0.007
185	94243	0.99	0.215	0.216	0.93	0.065	0.064	0.93	0.024	0.023
186	94598	0.99	2.951	2.963	0.90	0.838	0.838	0.90	0.308	0.294
187	94646	0.99	0.203	0.204	0.90	0.058	0.058	0.90	0.021	0.020
188	95090	0.94	0.106	0.106	0.95	0.032	0.032	0.95	0.012	0.011
189	95097	0.94	1.283	1.291	0.90	0.366	0.366	0.90	0.134	0.128
190	95283	1.00	2.602	2.616	0.91	0.755	0.756	0.91	0.279	0.266
191	95638	0.93	0.043	0.043	0.90	0.012	0.012	0.90	0.004	0.004
192	95727	0.99	0.092	0.093	0.90	0.026	0.026	0.90	0.009	0.009
193	96292	0.96	2.281	2.294	0.90	0.669	0.666	0.90	0.244	0.235
194	96765	0.94	1.417	1.421	0.94	0.434	0.430	0.94	0.158	0.153
195	97321	0.99	0.120	0.121	0.90	0.036	0.036	0.90	0.013	0.013
196	97927	1.00	0.091	0.092	0.91	0.028	0.027	0.91	0.010	0.010
197	98326	0.94	2.014	2.020	0.95	0.570	0.565	0.95	0.205	0.198
198	98772	0.93	0.130	0.130	0.90	0.038	0.038	0.90	0.014	0.013
199	98968	0.94	0.039	0.039	0.91	0.011	0.011	0.91	0.004	0.004
200	99015	1.00	0.045	0.045	0.91	0.013	0.013	0.91	0.005	0.005
201	99094	0.94	13.543	13.600	0.95	3.866	3.865	0.95	1.423	1.356
202	99750	0.99	0.047	0.047	0.90	0.013	0.013	0.90	0.005	0.005
203	99900	0.99	0.592	0.595	0.90	0.170	0.170	0.90	0.063	0.060
204	100015	0.91	0.788	0.789	0.94	0.231	0.229	0.94	0.084	0.081
205	100159	0.90	0.082	0.082	0.90	0.024	0.024	0.90	0.009	0.008
206	100187	0.95	0.676	0.678	0.95	0.210	0.209	0.95	0.077	0.075
207	101073	0.91	0.086	0.086	0.94	0.026	0.026	0.94	0.009	0.009
208	101149	0.90	0.797	0.801	0.93	0.227	0.226	0.93	0.082	0.079
209	101358	0.94	3.171	3.182	0.95	0.902	0.894	0.95	0.324	0.313
210	101581	0.93	0.576	0.578	0.90	0.169	0.168	0.90	0.062	0.059
211	101956	0.91	0.168	0.168	0.95	0.052	0.051	0.95	0.019	0.018
212	102495	0.90	0.052	0.052	0.90	0.015	0.015	0.90	0.006	0.005
213	102532	0.99	0.041	0.041	0.90	0.012	0.012	0.90	0.004	0.004
214	102669	0.96	1.827	1.832	0.93	0.548	0.546	0.93	0.202	0.194
215	102778	0.94	0.497	0.497	0.95	0.143	0.142	0.95	0.052	0.050
216	103326	0.94	1.671	1.679	0.95	0.464	0.463	0.95	0.168	0.161
217	103541	0.96	0.174	0.175	0.90	0.051	0.050	0.90	0.019	0.018
218	104104	0.91	0.062	0.062	0.94	0.018	0.018	0.94	0.007	0.006
219	104106	0.97	0.046	0.046	0.91	0.013	0.013	0.91	0.005	0.005
220	104165	0.96	0.051	0.051	0.90	0.015	0.014	0.90	0.005	0.005
221	105118	0.96	4.046	4.063	0.90	1.193	1.191	0.90	0.439	0.421
222	105353	0.99	1.208	1.211	0.93	0.361	0.359	0.93	0.132	0.127
223	105542	0.93	0.179	0.180	0.90	0.053	0.053	0.90	0.019	0.019
224	106026	0.94	0.047	0.048	0.95	0.014	0.013	0.95	0.005	0.005
225	106547	0.91	0.048	0.048	0.91	0.014	0.014	0.91	0.005	0.005
226	106752	0.93	0.105	0.106	0.96	0.033	0.033	0.96	0.012	0.012
227	106849	0.99	0.085	0.085	0.90	0.024	0.024	0.90	0.009	0.009
228	106894	0.90	0.171	0.171	0.93	0.051	0.051	0.93	0.019	0.018
229	106907	0.97	0.144	0.145	0.91	0.042	0.042	0.91	0.015	0.015
230	107458	0.93	0.036	0.036	0.90	0.011	0.011	0.90	0.004	0.004
231	107476	0.98	0.427	0.428	0.93	0.122	0.121	0.93	0.044	0.043
232	107611	0.99	1.282	1.290	0.90	0.364	0.364	0.90	0.134	0.128
233	108467	0.90	0.035	0.036	0.93	0.010	0.010	0.93	0.004	0.004
234	108525	0.90	1.550	1.560	0.90	0.442	0.442	0.90	0.162	0.155
235	108827	0.97	0.444	0.447	0.91	0.127	0.127	0.91	0.046	0.045
236	110727	0.91	0.249	0.250	0.91	0.073	0.072	0.91	0.026	0.025

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	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
237	111092	0.94	2.619	2.632	0.91	0.745	0.745	0.91	0.274	0.261
238	111445	0.94	0.128	0.128	0.91	0.040	0.040	0.91	0.015	0.014
239	111793	0.90	2.400	2.411	0.93	0.688	0.688	0.93	0.253	0.242
240	112021	0.94	0.039	0.039	0.95	0.011	0.011	0.95	0.004	0.004
241	112172	0.99	3.982	3.992	0.90	1.135	1.123	0.90	0.405	0.393
242	112567	0.90	0.198	0.198	0.93	0.060	0.059	0.93	0.022	0.021
243	112692	0.96	1.149	1.150	0.90	0.331	0.327	0.90	0.119	0.115
244	113339	1.00	0.135	0.136	0.91	0.039	0.039	0.91	0.015	0.014
245	113392	0.99	0.515	0.515	0.90	0.148	0.147	0.90	0.054	0.052
246	114187	0.93	0.359	0.361	0.90	0.109	0.109	0.90	0.040	0.039
247	116012	0.90	0.035	0.035	0.90	0.010	0.010	0.90	0.004	0.004
248	116028	0.99	0.153	0.153	0.90	0.044	0.043	0.90	0.016	0.015
249	116113	0.92	0.232	0.233	0.96	0.066	0.066	0.96	0.024	0.023
250	116665	0.91	1.447	1.451	0.97	0.432	0.428	0.97	0.157	0.152
251	116887	0.99	0.068	0.068	0.90	0.020	0.020	0.90	0.007	0.007
252	117056	0.90	0.481	0.482	0.97	0.138	0.138	0.97	0.051	0.048
253	118248	0.94	1.951	1.954	0.95	0.556	0.550	0.95	0.200	0.193
254	119017	0.90	1.604	1.603	0.90	0.457	0.450	0.90	0.162	0.157
255	120600	0.99	0.179	0.179	0.90	0.051	0.051	0.90	0.019	0.018
256	121847	0.99	0.827	0.831	0.93	0.245	0.244	0.93	0.090	0.086
257	121948	0.92	1.278	1.280	0.96	0.370	0.367	0.96	0.134	0.129
258	122021	0.99	0.267	0.268	0.90	0.077	0.076	0.90	0.028	0.027
259	122197	0.99	0.292	0.292	0.90	0.084	0.083	0.90	0.030	0.029
260	122728	0.92	0.068	0.068	0.92	0.020	0.020	0.92	0.007	0.007
261	122914	0.99	0.036	0.036	0.90	0.010	0.010	0.90	0.004	0.004
262	123325	1.00	0.109	0.110	0.91	0.031	0.031	0.91	0.011	0.011
263	123480	0.96	0.043	0.043	0.94	0.012	0.012	0.94	0.005	0.004
264	123738	0.99	0.071	0.071	0.90	0.021	0.020	0.90	0.007	0.007
265	124384	0.94	0.071	0.071	0.95	0.021	0.020	0.95	0.007	0.007
266	124823	0.94	0.045	0.045	0.95	0.013	0.013	0.95	0.005	0.005
267	125297	0.90	8.727	8.763	0.97	2.546	2.530	0.97	0.922	0.891
268	125480	0.93	0.044	0.044	0.90	0.013	0.013	0.90	0.005	0.004
269	125707	0.90	1.361	1.363	0.90	0.388	0.384	0.90	0.139	0.135
270	126962	1.00	0.055	0.055	0.91	0.016	0.016	0.91	0.006	0.006
271	127011	0.97	0.039	0.039	0.91	0.011	0.011	0.91	0.004	0.004
272	127810	0.90	1.093	1.094	0.90	0.348	0.346	0.90	0.130	0.124
273	127921	0.92	7.242	7.248	0.96	2.162	2.152	0.96	0.798	0.762
274	128174	0.90	1.563	1.567	0.90	0.454	0.450	0.90	0.164	0.158
275	128587	0.99	0.235	0.236	0.93	0.071	0.071	0.93	0.026	0.025
276	129165	0.93	1.370	1.376	0.90	0.388	0.388	0.90	0.142	0.136
277	129387	0.90	0.482	0.485	0.90	0.139	0.139	0.90	0.050	0.049
278	129508	1.00	0.094	0.094	0.91	0.027	0.027	0.91	0.010	0.009
279	130013	0.94	0.367	0.368	0.95	0.108	0.107	0.95	0.039	0.038
280	132043	0.99	0.126	0.127	0.90	0.036	0.036	0.90	0.013	0.013
281	133692	0.94	2.972	2.981	0.95	0.841	0.840	0.95	0.309	0.294
282	133898	0.94	0.369	0.370	0.95	0.111	0.110	0.95	0.040	0.039
283	134526	0.94	0.219	0.220	0.95	0.062	0.062	0.95	0.022	0.022
284	134973	0.91	0.039	0.040	0.91	0.011	0.011	0.91	0.004	0.004
285	135843	0.96	0.056	0.056	0.94	0.016	0.016	0.94	0.006	0.006
286	137019	0.90	0.777	0.781	0.97	0.224	0.223	0.97	0.081	0.078
287	138184	0.94	0.432	0.434	0.90	0.122	0.122	0.90	0.044	0.043
288	138400	0.97	0.500	0.501	0.91	0.143	0.142	0.91	0.051	0.050
289	138844	0.99	0.557	0.560	0.90	0.161	0.161	0.90	0.060	0.057
290	139416	0.90	0.554	0.556	0.90	0.161	0.159	0.90	0.058	0.056
291	139642	0.91	1.564	1.571	0.91	0.450	0.450	0.91	0.166	0.158
292	140823	0.90	3.291	3.308	0.93	0.971	0.967	0.93	0.355	0.342
293	140982	0.99	0.409	0.411	0.90	0.118	0.118	0.90	0.043	0.041
294	141127	0.99	0.174	0.175	0.90	0.051	0.050	0.90	0.018	0.018
295	141803	0.93	0.042	0.042	0.90	0.013	0.013	0.90	0.005	0.005
296	142411	0.93	0.603	0.603	0.90	0.176	0.174	0.90	0.064	0.061

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	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
297	142425	0.90	0.679	0.684	0.90	0.198	0.198	0.90	0.072	0.070
298	142634	0.96	0.349	0.351	0.94	0.100	0.100	0.94	0.037	0.035
299	142959	0.96	0.099	0.099	0.94	0.030	0.030	0.94	0.011	0.011
300	143138	0.94	1.412	1.414	0.95	0.403	0.399	0.95	0.144	0.140
301	143498	1.00	0.728	0.732	0.91	0.235	0.235	0.91	0.088	0.085
302	143868	0.90	1.359	1.363	0.90	0.388	0.388	0.90	0.143	0.136
303	144516	0.97	0.066	0.067	0.91	0.019	0.019	0.91	0.007	0.007
304	145452	0.99	0.154	0.155	0.90	0.044	0.044	0.90	0.016	0.015
305	145463	0.93	1.610	1.614	0.91	0.567	0.563	0.91	0.215	0.207
306	145956	0.99	0.771	0.774	0.90	0.222	0.221	0.90	0.081	0.078
307	146215	0.97	0.107	0.107	0.91	0.031	0.031	0.91	0.012	0.011
308	146750	0.97	7.720	7.752	0.91	2.243	2.238	0.91	0.823	0.788
309	147072	0.90	0.057	0.057	0.90	0.016	0.016	0.90	0.006	0.006
310	148013	0.94	0.065	0.066	0.91	0.019	0.019	0.91	0.007	0.007
311	148144	0.99	0.897	0.902	0.90	0.261	0.260	0.90	0.095	0.092
312	149170	0.99	0.062	0.063	0.90	0.018	0.018	0.90	0.007	0.006
313	149632	0.99	0.065	0.066	0.90	0.019	0.019	0.90	0.007	0.007
314	149981	0.90	0.320	0.321	0.90	0.092	0.091	0.90	0.034	0.032
315	150646	0.90	0.077	0.078	0.93	0.022	0.022	0.93	0.008	0.008
316	150710	0.99	0.405	0.408	0.90	0.120	0.119	0.90	0.044	0.042
317	151714	0.91	3.259	3.262	0.97	0.984	0.974	0.97	0.357	0.345
318	151961	0.90	0.465	0.468	0.90	0.133	0.134	0.90	0.049	0.047
319	151965	0.90	0.099	0.100	0.90	0.029	0.029	0.90	0.011	0.010
320	151971	0.96	0.079	0.079	0.90	0.022	0.022	0.90	0.008	0.008
321	155051	0.93	0.511	0.511	0.90	0.146	0.145	0.90	0.053	0.051
322	155072	0.90	0.052	0.053	0.93	0.016	0.016	0.93	0.006	0.006
323	155283	0.90	0.091	0.092	0.93	0.028	0.027	0.93	0.010	0.010
324	155572	0.90	0.095	0.095	0.90	0.027	0.027	0.90	0.010	0.009
325	155776	0.99	0.631	0.632	0.90	0.183	0.181	0.90	0.066	0.064
326	156452	0.92	0.175	0.175	0.95	0.054	0.053	0.95	0.020	0.019
327	156712	0.90	0.186	0.187	0.90	0.054	0.053	0.90	0.019	0.019
328	156713	0.90	0.118	0.118	0.90	0.034	0.034	0.90	0.012	0.012
329	158839	0.94	0.209	0.210	0.95	0.063	0.063	0.95	0.023	0.022
330	159242	0.93	0.075	0.076	0.90	0.022	0.022	0.90	0.008	0.008
331	160335	0.95	0.055	0.055	0.92	0.016	0.015	0.92	0.006	0.005
332	161335	0.99	0.082	0.082	0.90	0.024	0.024	0.90	0.009	0.008
333	162415	0.94	0.824	0.826	0.95	0.234	0.234	0.95	0.086	0.082
334	163249	0.97	0.342	0.343	0.91	0.098	0.097	0.91	0.036	0.034
335	164668	0.92	0.526	0.529	0.95	0.154	0.154	0.95	0.057	0.054
336	164688	0.93	0.079	0.080	0.93	0.024	0.024	0.93	0.009	0.009
337	164981	0.92	1.040	1.040	0.96	0.298	0.294	0.96	0.107	0.103
338	168264	0.99	0.056	0.056	0.90	0.016	0.016	0.90	0.006	0.006
339	169301	0.99	3.190	3.198	0.92	0.914	0.906	0.92	0.329	0.318
340	169316	0.99	0.142	0.143	0.90	0.043	0.043	0.90	0.016	0.015
341	169679	0.94	0.174	0.175	0.95	0.047	0.047	0.95	0.017	0.016
342	169751	1.00	0.258	0.259	0.91	0.078	0.077	0.91	0.029	0.027
343	169953	0.99	1.075	1.078	0.90	0.304	0.301	0.90	0.110	0.105
344	170547	0.96	1.092	1.097	0.90	0.317	0.315	0.90	0.115	0.111
345	170655	0.94	0.617	0.621	0.95	0.178	0.178	0.95	0.065	0.063
346	170896	0.99	0.075	0.075	0.93	0.022	0.022	0.93	0.008	0.008
347	171842	0.96	0.645	0.650	0.94	0.182	0.181	0.94	0.066	0.063
348	171925	0.90	0.046	0.046	0.97	0.013	0.013	0.97	0.005	0.005
349	172040	0.92	0.198	0.198	0.95	0.062	0.061	0.95	0.023	0.022
350	172252	0.91	0.103	0.103	0.94	0.031	0.031	0.94	0.011	0.011
351	172443	0.96	0.036	0.036	0.90	0.011	0.011	0.90	0.004	0.004
352	172546	0.96	0.082	0.082	0.94	0.023	0.023	0.94	0.009	0.008
353	172548	0.94	0.044	0.044	0.95	0.013	0.013	0.95	0.005	0.004
354	172854	0.94	0.773	0.776	0.91	0.220	0.220	0.91	0.081	0.077
355	172900	0.93	0.079	0.079	0.90	0.023	0.022	0.90	0.008	0.008
356	173378	0.99	0.607	0.609	0.90	0.172	0.170	0.90	0.061	0.059

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	Row number (MSX catalog)	Band 2			Band 4			Band 6		
		ε_λ	E_c	E_m	ε_λ	E_c	E_m	ε_λ	E_c	E_m
357	174089	0.99	0.097	0.097	0.93	0.029	0.029	0.93	0.011	0.010
358	174355	0.94	0.164	0.164	0.92	0.047	0.047	0.92	0.017	0.016
359	174555	0.95	0.187	0.188	0.92	0.053	0.053	0.92	0.020	0.019
360	175589	0.96	3.117	3.130	0.90	0.886	0.881	0.90	0.320	0.309
361	175978	0.96	0.310	0.311	0.94	0.090	0.090	0.94	0.033	0.032

TABLE S3: Prediction of stellar radiation fkuxes in the band 4 - 5 μm (361 stars). ε_λ is the star emissivity at wavelength λ. E_c is the calculated radiation flux (unit: $\times 10^{-13}$W/m^2).

	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
1	258	HD 224930	0.9	7.66	6190	5370
2	548	HD 225239	0.93	4.216	5010	5528
3	603	HD 20	0.92	0.247	5870	5475
4	618	HD 26	0.91	1.203	5520	5170
5	665	HD 97	0.93	0.32	5000	5064
6	699	HD 123	0.92	4.941	5280	5571
7	973	HD 400	0.96	2.966	5850	6123
8	999	HD 245	0.96	0.253	4530	5400
9	3459	HD 2665	0.94	1.502	4690	5000
10	3522	HD 2796	1	0.514	4140	4869
11	3927	HD 3179	0.94	0.281	6470	5280
12	4359	HD 3567	0.99	0.307	4180	6041
13	4365	HD 3546	0.9	34.766	5810	5400
14	5142	HD 4306	0.96	0.324	4570	4800
15	5145	HD 4307	1	4.043	4190	5773
16	5512	HD 4628	0.92	47.533	5680	5044
17	5596	HD 4614	0.95	9.514	4550	5806
18	5715	HD 4813	0.92	6.954	8460	6146
19	6030	HD 5015	0.94	11.164	6460	5965
20	6297	HD 5426	0.99	0.306	4040	4900
21	6398	HD 5395	0.93	31.086	4730	4800
22	6909	HD 5916	0.95	3.529	4580	4863
23	7144	HD 6268	0.93	1.298	5120	4750
24	7179	HD 6229	0.95	0.99	4550	5262
25	7275	HD 6348	0.91	0.638	5670	4998
26	7734	HD 6582	0.97	12.562	4350	5240
27	7877	HD 6755	0.9	0.847	6140	5175
28	7890	HD 7041	0.97	0.508	4400	5079
29	7893	HD 6833	0.91	8.037	3890	4300
30	7944	HD 6920	0.99	5.19	4280	5845
31	8450	HD 7476	0.94	4.121	7130	6486
32	9733	HD 8724	1	1.303	3320	4535
33	10478	HD 9430	0.9	0.68	5680	-
34	10932	HD 9826	0.94	20.252	6830	6110
35	11515	HD 10307	1	11.173	4110	5776
36	11600	HD 10476	0.94	12.328	4720	5242
37	11782	HD 10700	0.91	3.719	5460	5290
38	11878	HD 10697	0.94	59.092	4810	5442
39	12164	HD 10780	0.92	5.759	7750	5369
40	14635	BD +29 366	0.9	0.32	5860	5757
41	14884	HD 13555	0.95	15.924	4450	6366
42	14968	HD 13530	0.94	6.227	6750	4750
43	15158	HD 13979	0.91	0.686	5520	5023
44	15333	HD 13783	0.99	0.427	4140	5451
45	15459	HD 14214	0.94	5.835	6520	6100
46	16343	HD 15096	0.92	1.089	5210	5375
47	16651	HD 15335	0.9	4.115	6100	5785
48	16879	HD 15596	0.96	7.528	4360	4788
49	17370	HD 16141	0.9	1.96	6070	5805
50	17727	HD 16397	0.94	1.069	7020	5750
51	18364	HD 16895	0.94	22.897	6470	6219
52	19194	HD 17820	0.99	1.563	4040	5750
53	19248	HD 17925	0.95	6.304	4640	5051
54	20167	HD 18907	0.98	8.777	4090	5015
55	20250	HD 18803	0.99	2.808	4210	5658
56	20293	HD 18768	0.9	2.022	6100	5750
57	21325	HD 19994	0.99	9.292	4290	5916

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	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
58	21891	HD 20512	0.9	0.568	5740	5193
59	21906	HD 20039	0.91	1.841	5420	5107
60	21969	HD 20630	0.96	12.885	4630	5723
61	22365	HD 21019	0.94	4.616	4780	5261
62	22940	HD 21581	0.9	0.595	5870	4978
63	23368	HD 22049	0.93	58.35	5170	5086
64	23772	HD 22484	0.99	18.655	4320	5915
65	24139	HD 22879	0.94	2.03	6580	5868
66	24814	HD 23798	0.95	1.554	4670	4450
67	24850	HD 23439B	0.93	1.867	4790	5100
68	25647	HD 24616	0.9	3.828	5770	5014
69	26695	HD 25532	0.9	0.486	6330	5525
70	26717	HD 25673	0.94	0.657	4710	5008
71	27281	HD 26297	1	0.88	4160	4300
72	27739	BD +06 648	0.99	0.509	4230	4522
73	30591	HD 29574	0.94	0.666	4910	4320
74	30982	HD 29400	0.91	0.917	5530	-
75	31757	HD 30743	0.99	1.673	4140	6222
76	31985	HD 30649	0.94	2.733	6830	5695
77	33865	HD 32923	0.99	12.17	4190	5835
78	34177	HD 241253	0.94	2.517	4740	5850
79	34407	HD 33636	0.93	0.242	5110	5930
80	34561	HD 34328	1	0.223	6070	5724
81	35295	HD 34411	0.9	1.664	6240	5774
82	35882	HD 35296	0.99	14.547	4180	6015
83	36699	HD 36283	0.96	10.713	4560	5475
84	37935	HD 37828	0.97	0.508	4470	4350
85	38561	HD 247297	0.93	1.22	4760	5758
86	38681	HD 38529	0.93	6.834	4590	5675
87	39687	HD 39587	0.93	0.387	5120	5805
88	40064	HD 40057	0.97	5.078	4330	-
89	40812	HD 250792	0.9	0.211	5960	5600
90	41044	HD 41667	0.94	1.166	4600	4605
91	41233	HD 40891	0.93	1.237	4810	5000
92	42376	HD 43042	0.93	17.965	5030	6485
93	42472	HD 43318	0.94	7.708	6670	6212
94	42541	BD +37 1458	0.9	0.352	5860	5521
95	42550	HD 43094	0.96	0.293	4560	-
96	42931	HD 44007	0.94	4.697	6790	4850
97	44038	HD 45282	0.94	1.097	4630	5150
98	44547	HD 45205	1	2.597	4090	5921
99	44887	HD 46341	0.91	1.342	5640	5789
100	45622	HD 46480	0.96	0.808	4560	4800
101	47212	HD 49409	0.99	0.468	4130	5770
102	47541	HD 49933	0.9	8.705	5720	6635
103	48152	HD 50554	0.9	0.766	5970	6026
104	48761	HD 51754	0.91	1.767	5530	5830
105	48784	HD 51530	0.96	4.544	6170	6017
106	49019	HD 52265	0.9	0.481	5880	6100
107	49783	HD 53545	0.96	0.342	6060	6300
108	50484	HD 53871	1	0.424	6140	6250
109	51436	HD 55575	0.94	3.032	6910	5802
110	53599	HD 59374	0.99	2.937	4230	5840
111	53862	HD 59984	0.94	6.258	6360	5907
112	54231	HD 60319	0.94	0.405	6470	5843
113	54876	BD -01 0306	0.93	0.27	5120	5771
114	54931	HD 61421	0.91	4.899	5790	6563
115	57132	HD 63791	0.99	0.249	4410	4823
116	57142	HD 64606	0.94	2.518	4660	5182
117	58584	HD 66553	0.9	0.818	5670	5200

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	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
118	59034	HD 67228	0.92	508.401	7360	5732
119	59429	HD 67767	1	0.735	4140	5264
120	60323	BD +00 2245	0.99	4.809	4310	-
121	60522	HD 69830	0.94	1.822	4590	5443
122	60761	HD 69897	1	8.799	4160	6130
123	60791	HD 70110	0.93	7.397	4850	5949
124	63695	HD 73394	0.9	0.381	5870	4552
125	64796	HD 74462	0.9	5.628	5570	4700
126	65062	HD 75530	0.94	7.941	6740	5311
127	65374	HD 75732	0.94	3.342	6830	5172
128	66220	HD 76910	0.95	2.759	4280	6397
129	67164	HD 78050	0.99	1.667	4010	5000
130	67324	HD 78747	0.99	0.644	4260	5684
131	67477	HD 78737	0.96	0.311	6070	6350
132	68151	HD 79028	0.9	1.122	5670	5874
133	70836	HD 82943	0.91	5.884	5550	6008
134	70897	HD 83220	0.93	9.332	5270	6470
135	70949	HD 82885	0.97	0.329	4360	5376
136	71025	HD 83212	0.96	0.456	5840	4543
137	71756	HD 233666	0.96	3.834	4570	5161
138	71809	HD 83888	0.99	2.126	4250	-
139	72488	HD 84737	0.96	0.271	6150	5872
140	72529	HD 84937	0.93	9.136	4960	6356
141	73125	HD 85773	0.94	1.517	4620	4373
142	73982	HD 86728	0.93	0.242	5110	5619
143	74424	HD 87141	0.99	0.414	4260	6351
144	74436	HD 87140	0.94	0.657	4710	4950
145	75030	HD 88218	0.99	3.775	5210	5720
146	75578	HD 88725	0.9	0.352	5860	5658
147	75613	HD 88609	0.99	9.675	4230	4400
148	75614	HD 88737	0.94	0.657	4710	6129
149	75826	HD 88986	0.9	7.551	6070	5766
150	75909	HD 89125	0.9	3.655	11800	6038
151	76508	HD 89744	0.9	0.956	5910	6281
152	78104	HD 91752	0.91	1.015	5490	6483
153	78124	HD 91889	0.99	3.775	4210	6051
154	79297	HD 93529	0.99	2.858	4080	4840
155	79731	HD 94028	0.9	0.509	6220	6061
156	80613	HD 95128	0.99	4.321	4260	5731
157	80719	HD 95241	0.99	3.992	4320	5808
158	82244	HD 97560	0.95	1.98	6560	5328
159	82466	HD 97916	0.94	0.24	6820	6450
160	83658	HD 99491	0.96	4.484	5900	5456
161	83897	HD 99747	0.95	0.611	4400	6631
162	84812	HD 101063	0.99	10.043	4230	5070
163	86044	HD 102634	0.99	3.678	4220	6333
164	86226	HD 102870	0.92	1.109	5340	6070
165	86342	HD 103036	0.94	6.572	4710	4223
166	86462	HD 103095	0.9	3.044	13200	5189
167	86714	HD 103545	0.95	1.543	3500	4725
168	87202	HD 233891	0.9	0.225	5680	4925
169	87667	HD 104893	0.96	0.339	4720	4500
170	88117	BD +22 2442	0.93	0.242	5110	5476
171	88130	HD 105546	0.92	0.652	5410	5300
172	88248	HD 105755	0.96	18.103	4250	5700
173	88749	HD 106516	0.96	33.06	5750	6069
174	89794	HD 108076	1	0.84	4040	5723
175	90004	HD 108317	1	0.671	4140	5100
176	90449	HD 108976	0.9	5.563	5690	6405
177	90733	HD 109358	0.96	0.79	4240	5750

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	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
178	91392	HD 110184	0.9	0.566	5670	4380
179	91874	HD 110897	0.94	0.657	4680	5757
180	92249	HD 111395	0.94	3.045	6940	5625
181	92515	HD 111721	0.9	1.178	5720	5010
182	92706	HD 111980	0.99	0.639	4180	5778
183	93566	HD 113083	0.9	0.609	6060	5865
184	94066	BD +33 2300	0.91	0.377	5340	6075
185	94243	HD 114095	0.99	1.338	4040	4650
186	94598	HD 114710	0.99	0.223	4310	5957
187	94646	HD 114762	0.99	21.335	4210	5821
188	95090	HD 115444	0.94	4.402	6280	4500
189	95097	HD 115383	0.94	1.841	3600	5979
190	95283	HD 115617	1	3.503	4080	5556
191	95638	HD 116064	0.93	0.488	5320	6010
192	95727	HD 116316	0.99	18.343	4350	6195
193	96292	HD 117176	0.96	1.263	4670	5406
194	96765	HD 117876	0.94	0.657	4710	4750
195	97321	HD 118659	0.99	7.977	4310	5510
196	97927	HD 119516	1	16.19	4070	5440
197	98326	HD 120136	0.94	0.263	6830	6479
198	98772	HD 120559	0.93	0.806	5000	5383
199	98968	HD 121135	0.94	14.161	4890	4934
200	99015	HD 121004	1	0.279	4120	5583
201	99094	HD 121370	0.94	0.571	6850	6020
202	99750	HD 122196	0.99	0.29	6410	5934
203	99900	HD 122563	0.99	3.682	4180	4599
204	100015	HD 122742	0.91	8.785	5310	5459
205	100159	HD 123710	0.9	0.509	5990	5790
206	100187	HD 122956	0.95	4.201	4420	4510
207	101073	HD 124358	0.91	0.745	5660	4786
208	101149	HD 124570	0.9	0.566	5670	6350
209	101358	HD 124850	0.94	12.458	7110	6096
210	101581	HD 125184	0.93	0.242	5110	5634
211	101956	BD +01 2916	0.91	3.751	8820	4282
212	102495	HD 126587	0.9	4.881	5620	4675
213	102532	HD 126681	0.99	84.205	4280	5396
214	102669	HD 127243	0.96	0.532	4450	5000
215	102778	HD 127334	0.94	4.934	6870	5501
216	103326	HD 128167	0.94	19.614	6930	6737
217	103541	HD 128279	0.96	1.083	4460	5003
218	104104	HD 129392	0.91	1.043	5330	-
219	104106	HD 129515	0.97	3.58	4370	-
220	104165	HD 129518	0.96	0.324	4570	6272
221	105118	HD 131156	0.96	0.253	4530	5483
222	105353	HD 131511	0.99	11.368	4060	5259
223	105542	HD 132142	0.93	3.079	5260	5100
224	106026	HD 132475	0.94	0.293	6570	5838
225	106547	BD -08 3901	0.91	0.295	5860	4809
226	106752	BD +30 2611	0.93	0.653	4950	4500
227	106849	HD 134113	0.99	0.529	4230	5675
228	106894	HD 134088	0.9	1.058	5920	5674
229	106907	HD 134169	0.97	0.892	4380	5759
230	107458	HD 135148	0.93	0.387	5120	4275
231	107476	HD 134987	0.98	10.354	5650	5715
232	107611	HD 136064	0.99	0.287	4260	6144
233	108467	BD +01 3070	0.9	0.601	5780	5130
234	108525	HD 137108	0.9	0.313	6150	-
235	108827	HD 137510	0.97	25.161	4270	5872
236	110727	HD 140283	0.91	1.542	5710	5739
237	111092	HD 141004	0.94	7.504	4560	5801

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	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
238	111445	HD 141531	0.94	1.112	4730	4360
239	111793	HD 142373	0.9	0.225	5680	5920
240	112021	HD 142575	0.94	2.642	6610	6779
241	112172	HD 142860	0.99	7.969	4380	6221
242	112567	HD 142948	0.9	1.224	5660	4713
243	112692	HD 143761	0.96	0.22	4560	5698
244	113339	HD 144450	1	0.84	4040	5077
245	113392	HD 144585	0.99	9.636	4310	5850
246	114187	HD 145417	0.93	2.754	5330	4900
247	116012	BD +11 2998	0.9	1.013	5980	5527
248	116028	HD 148816	0.99	16.283	4340	5830
249	116113	HD 150706	0.92	24.6	8350	5900
250	116665	HD 149661	0.91	0.792	5540	5281
251	116887	HD 149996	0.99	14.926	4230	5665
252	117056	HD 150177	0.9	0.243	12500	6084
253	118248	HD 151769	0.94	7.11	6450	6409
254	119017	HD 153597	0.9	3.189	6070	6380
255	120600	HD 155358	0.99	1.11	4350	5809
256	121847	HD 156826	0.99	2.235	3920	5155
257	121948	HD 157214	0.92	0.943	8300	5738
258	122021	HD 157089	0.99	0.217	4260	5778
259	122197	HD 157466	0.99	1.443	4330	5935
260	122728	HD 158226	0.92	8.976	5190	5740
261	122914	BD +17 3248	0.99	1.162	4310	5200
262	123325	HD 158809	1	0.424	4140	5450
263	123480	BD +23 3130	0.96	19.308	5880	5100
264	123738	HD 159482	0.99	2.991	4210	5662
265	124384	HD 160693	0.94	12.067	6840	5648
266	124823	HD 160617	0.94	0.281	6470	6065
267	125297	HD 161797	0.9	9.896	10900	5502
268	125480	HD 161770	0.93	0.27	5120	5650
269	125707	HD 163989	0.9	7.917	5920	6240
270	126962	HD 163810	1	0.34	4100	5200
271	127011	HD 163799	0.97	5.145	4220	5859
272	127810	HD 165195	0.9	1.656	6090	4375
273	127921	HD 165341	0.92	1.803	8010	5105
274	128174	HD 165908	0.9	9.683	5870	5900
275	128587	HD 166161	0.99	1.464	4040	5100
276	129165	HD 168151	0.93	0.222	5110	6221
277	129387	HD 168009	0.9	0.42	5900	5719
278	129508	HD 166913	1	0.584	6190	6039
279	130013	HD 168443	0.94	0.677	6740	5555
280	132043	HD 171620	0.99	0.267	4140	6115
281	133692	HD 173667	0.94	0.44	6280	6296
282	133898	HD 175305	0.94	8.421	6840	5143
283	134526	HD 174912	0.94	0.44	6280	5787
284	134973	HD 175179	0.91	54.077	5740	5780
285	135843	HD 176203	0.96	0.347	5860	4820
286	137019	HD 178428	0.9	0.243	12500	5646
287	138184	HD 179949	0.94	6.812	3580	6066
288	138400	HD 181096	0.97	45.055	4100	6275
289	138844	HD 181655	0.99	8.514	4410	5676
290	139416	HD 182488	0.9	2.986	6050	5362
291	139642	HD 182572	0.91	2.273	5510	5473
292	140823	HD 185144	0.9	2.284	5860	5281
293	140982	HD 184499	0.99	18.469	4410	4340
294	141127	HD 184266	0.99	0.786	4330	5908
295	141803	HD 232078	0.93	6.776	5110	4295
296	142411	HD 186408	0.93	0.245	5110	5760
297	142425	HD 186427	0.9	4.811	6110	5678

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	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
298	142634	HD 186379	0.96	1.357	5930	5816
299	142959	HD 186478	0.96	2.678	5990	4568
300	143138	HD 187013	0.94	3.094	6750	6290
301	143498	HD 187111	1	3.463	4090	4270
302	143868	HD 187691	0.9	3.431	5920	6034
303	144516	HD 188510	0.97	0.412	4480	5325
304	145452	HD 189558	0.99	0.958	4240	5550
305	145463	HD 189711	0.93	10.074	2960	3500
306	145956	HD 190406	0.99	9.73	4170	5763
307	146215	HD 190287	0.97	0.664	4320	5206
308	146750	HD 190248	0.97	47.968	4490	5480
309	147072	HD 345957	0.9	0.352	5860	5845
310	148013	HD 192718	0.94	20.435	4770	5787
311	148144	HD 193664	0.99	2.545	4180	5945
312	149170	HD 193901	0.99	0.388	4310	5650
313	149632	HD 194598	0.99	0.406	5340	5858
314	149981	HD 195019	0.9	1.078	5850	5830
315	150646	HD 195633	0.9	20.197	5690	5956
316	150710	HD 195987	0.99	2.889	4200	4200
317	151714	HD 196755	0.91	0.26	5220	5582
318	151961	HD 197076	0.9	3.734	5780	5844
319	151965	HD 196944	0.9	0.486	6330	5250
320	151971	HD 196892	0.96	0.618	4560	6028
321	155051	HD 199960	0.93	4.216	5010	5760
322	155072	BD +33 4117	0.9	0.325	5680	5261
323	155283	BD +19 4601	0.9	0.566	5670	5528
324	155572	HD 200580	0.9	0.587	6140	5940
325	155776	HD 200790	0.99	2.17	4260	6126
326	156452	HD 201626	0.92	1.084	5200	5190
327	156712	HD 201891	0.9	1.153	6080	5991
328	156713	HD 201889	0.9	0.73	5900	5710
329	158839	HD 204155	0.94	3.159	6610	5718
330	159242	HD 204543	0.93	3.912	5140	4700
331	160335	HD 205650	0.95	1.299	4440	5815
332	161335	HD 206739	0.99	0.468	4130	4650
333	162415	HD 207978	0.94	0.338	6680	6289
334	163249	HD 208906	0.97	0.508	4470	5970
335	164668	HD 210277	0.92	0.615	5280	5575
336	164688	HD 210295	0.93	0.492	4830	4800
337	164981	HD 210855	0.92	8.721	8260	6255
338	168264	HD 214362	0.99	5.121	4350	5727
339	169301	HD 215648	0.99	4.551	3220	6090
340	169316	HD 215601	0.99	2.128	4280	4892
341	169679	HD 216174	0.94	6.436	6680	4385
342	169751	HD 216143	1	3.277	3980	4530
343	169953	HD 216385	0.99	8.448	4270	6244
344	170547	HD 217014	0.96	4.788	4640	5404
345	170655	HD 217107	0.94	0.405	6470	5431
346	170896	HD 217272	0.99	0.464	4000	4283
347	171842	HD 218470	0.96	3.997	6120	6600
348	171925	HD 218502	0.9	0.285	6200	6349
349	172040	BD -00 4470	0.92	1.229	4920	5061
350	172252	HD 218857	0.91	0.638	5670	5125
351	172443	BD +20 5292	0.96	1.929	4530	-
352	172546	HD 219175	0.96	0.347	5860	5906
353	172548	HD 219175B	0.94	19.741	6650	5365
354	172854	HD 219623	0.94	5.564	5010	6191
355	172900	HD 219617	0.93	0.488	5320	5825
356	173378	HD 220117	0.99	1.99	4240	6480
357	174089	HD 220838	0.99	0.882	4000	4300

Continued on next page

	Row number (MSX catalog)	ID number (HD/BD catalog)	4 - 5 μm		Temperature in this work	Temperature in Refs. [1–56]
			ε_λ	E_c		
358	174355	HD 221170	0.94	1.079	7420	4648
359	174555	HD 221377	0.95	1.604	4440	6348
360	175589	HD 222368	0.96	0.48	4620	6169
361	175978	HD 222794	0.96	6.659	6070	5436

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