

Spectral directional emissivity ϵ_{λ} determined under various angles with respect to the surface normal
Sample: Herberbs at 1534 at 25 °C
Uncertainty is given as standard uncertainty ($k=1$)

Wavenumber / cm-1	$\epsilon_{\lambda}(10^{\circ})$	$u(10^{\circ})$	$\epsilon_{\lambda}(20^{\circ})$	$u(20^{\circ})$	$\epsilon_{\lambda}(30^{\circ})$	$u(30^{\circ})$	$\epsilon_{\lambda}(40^{\circ})$	$u(40^{\circ})$	$\epsilon_{\lambda}(50^{\circ})$	$u(50^{\circ})$	$\epsilon_{\lambda}(60^{\circ})$	$u(60^{\circ})$	$\epsilon_{\lambda}(70^{\circ})$	$u(70^{\circ})$	Wavelength / μm
549.68	0.9252	0.0242	0.9360	0.0203	0.9298	0.0187	0.9243	0.0188	0.8875	0.0192	0.8863	0.0192	0.8332	0.0190	18.193
559.32	0.9190	0.0182	0.9216	0.0177	0.9245	0.0183	0.9214	0.0174	0.8884	0.0177	0.8851	0.0184	0.8295	0.0179	17.879
568.96	0.9175	0.0145	0.9155	0.0161	0.9191	0.0158	0.9170	0.0146	0.8834	0.0142	0.8789	0.0146	0.8261	0.0153	17.576
578.61	0.9082	0.0194	0.9071	0.0162	0.9122	0.0165	0.9095	0.0149	0.8752	0.0150	0.8749	0.0159	0.8221	0.0152	17.283
588.25	0.9031	0.0270	0.9051	0.0266	0.9086	0.0268	0.9122	0.0266	0.8766	0.0269	0.8732	0.0271	0.8254	0.0267	17.000
597.89	0.9073	0.0187	0.9015	0.0177	0.9089	0.0181	0.9059	0.0176	0.8790	0.0177	0.8685	0.0177	0.8221	0.0179	16.725
607.54	0.9078	0.0114	0.9059	0.0094	0.9135	0.0116	0.9082	0.0090	0.8773	0.0094	0.8721	0.0099	0.8238	0.0102	16.460
617.18	0.9101	0.0114	0.9076	0.0093	0.9131	0.0121	0.9115	0.0096	0.8805	0.0095	0.8767	0.0107	0.8273	0.0106	16.203
626.82	0.9109	0.0203	0.9093	0.0206	0.9127	0.0207	0.9130	0.0197	0.8824	0.0202	0.8792	0.0206	0.8275	0.0204	15.953
636.47	0.9075	0.0217	0.9114	0.0209	0.9171	0.0215	0.9117	0.0205	0.8794	0.0209	0.8769	0.0212	0.8257	0.0210	15.712
646.11	0.9078	0.0217	0.9058	0.0209	0.9151	0.0218	0.9090	0.0214	0.8810	0.0208	0.8773	0.0214	0.8270	0.0211	15.477
655.75	0.9101	0.0155	0.9105	0.0141	0.9127	0.0154	0.9102	0.0140	0.8813	0.0141	0.8765	0.0147	0.8299	0.0147	15.250
665.40	0.9089	0.0228	0.9076	0.0214	0.9138	0.0221	0.9115	0.0213	0.8794	0.0214	0.8781	0.0218	0.8294	0.0216	15.029
675.04	0.9076	0.0244	0.9079	0.0226	0.9107	0.0234	0.9117	0.0225	0.8804	0.0227	0.8775	0.0232	0.8305	0.0229	14.814
684.68	0.9091	0.0252	0.9076	0.0246	0.9131	0.0250	0.9089	0.0241	0.8819	0.0244	0.8742	0.0246	0.8307	0.0245	14.605
694.33	0.9063	0.0188	0.9037	0.0182	0.9113	0.0188	0.9089	0.0179	0.8821	0.0179	0.8764	0.0183	0.8318	0.0182	14.402
703.97	0.9081	0.0159	0.9045	0.0152	0.9098	0.0157	0.9110	0.0145	0.8814	0.0144	0.8772	0.0153	0.8338	0.0148	14.205
713.61	0.9073	0.0203	0.9064	0.0195	0.9097	0.0201	0.9105	0.0196	0.8801	0.0196	0.8776	0.0200	0.8319	0.0198	14.013
723.26	0.9069	0.0194	0.9026	0.0188	0.9087	0.0191	0.9089	0.0188	0.8789	0.0188	0.8748	0.0193	0.8321	0.0190	13.826
732.90	0.9065	0.0222	0.9029	0.0216	0.9085	0.0224	0.9047	0.0217	0.8792	0.0217	0.8718	0.0220	0.8304	0.0218	13.644
742.54	0.9038	0.0230	0.8989	0.0226	0.9067	0.0231	0.9061	0.0225	0.8793	0.0227	0.8758	0.0229	0.8312	0.0228	13.467
752.19	0.9064	0.0209	0.9016	0.0204	0.9080	0.0207	0.9066	0.0201	0.8793	0.0203	0.8758	0.0205	0.8303	0.0205	13.295
761.83	0.9056	0.0235	0.9033	0.0229	0.9073	0.0235	0.9060	0.0229	0.8795	0.0230	0.8744	0.0233	0.8308	0.0232	13.126
771.47	0.9079	0.0212	0.9059	0.0209	0.9076	0.0216	0.9077	0.0210	0.8818	0.0210	0.8768	0.0213	0.8329	0.0211	12.962
781.12	0.9074	0.0230	0.9060	0.0227	0.9119	0.0229	0.9101	0.0228	0.8828	0.0229	0.8774	0.0229	0.8346	0.0228	12.802
790.76	0.9063	0.0191	0.9039	0.0186	0.9069	0.0191	0.9089	0.0186	0.8802	0.0186	0.8753	0.0190	0.8309	0.0190	12.646
800.40	0.9068	0.0174	0.9031	0.0171	0.9096	0.0174	0.9074	0.0173	0.8810	0.0173	0.8727	0.0177	0.8293	0.0174	12.494
810.05	0.9051	0.0298	0.9039	0.0298	0.9061	0.0298	0.9070	0.0296	0.8809	0.0296	0.8756	0.0298	0.8327	0.0297	12.345
819.69	0.9065	0.0269	0.9041	0.0268	0.9096	0.0269	0.9076	0.0268	0.8816	0.0269	0.8781	0.0271	0.8315	0.0269	12.200
829.34	0.9049	0.0223	0.9041	0.0214	0.9096	0.0219	0.9071	0.0214	0.8828	0.0215	0.8784	0.0216	0.8339	0.0215	12.058
838.98	0.9064	0.0184	0.9042	0.0183	0.9063	0.0186	0.9069	0.0182	0.8828	0.0183	0.8745	0.0183	0.8352	0.0184	11.919
848.62	0.9036	0.0198	0.9016	0.0193	0.9056	0.0197	0.9083	0.0192	0.8795	0.0193	0.8734	0.0197	0.8348	0.0194	11.784
858.27	0.9043	0.0218	0.9013	0.0214	0.9065	0.0215	0.9057	0.0213	0.8798	0.0215	0.8733	0.0215	0.8329	0.0214	11.651
867.91	0.9060	0.0208	0.9029	0.0207	0.9070	0.0209	0.9074	0.0206	0.8801	0.0206	0.8746	0.0208	0.8337	0.0207	11.522
877.55	0.9032	0.0252	0.8985	0.0251	0.9057	0.0252	0.9065	0.0250	0.8786	0.0250	0.8719	0.0252	0.8332	0.0251	11.395
887.20	0.9030	0.0221	0.9002	0.0219	0.9050	0.0220	0.9045	0.0217	0.8787	0.0217	0.8732	0.0221	0.8342	0.0217	11.271
896.84	0.9058	0.0248	0.9022	0.0247	0.9080	0.0250	0.9051	0.0246	0.8798	0.0248	0.8741	0.0249	0.8342	0.0249	11.150
906.48	0.9085	0.0104	0.9054	0.0090	0.9105	0.0099	0.9088	0.0089	0.8840	0.0092	0.8766	0.0098	0.8369	0.0095	11.032
916.13	0.9097	0.0150	0.9071	0.0142	0.9094	0.0146	0.9069	0.0139	0.8822	0.0142	0.8753	0.0143	0.8373	0.0143	10.916
925.77	0.9114	0.0152	0.9069	0.0145	0.9113	0.0148	0.9108	0.0143	0.8839	0.0146	0.8769	0.0148	0.8387	0.0144	10.802
935.41	0.9118	0.0119	0.9104	0.0112	0.9112	0.0124	0.9111	0.0112	0.8845	0.0110	0.8788	0.0119	0.8399	0.0113	10.690
945.06	0.9131	0.0137	0.9102	0.0128	0.9129	0.0140	0.9103	0.0127	0.8844	0.0127	0.8778	0.0131	0.8414	0.0127	10.581
954.70	0.9115	0.0137	0.9084	0.0127	0.9109	0.0134	0.9101	0.0125	0.8831	0.0126	0.8764	0.0130	0.8386	0.0126	10.475
964.34	0.9123	0.0119	0.9075	0.0104	0.9113	0.0108	0.9099	0.0102	0.8822	0.0102	0.8772	0.0104	0.8386	0.0103	10.370
973.99	0.9112	0.0106	0.9064	0.0092	0.9097	0.0103	0.9081	0.0090	0.8815	0.0095	0.8761	0.0101	0.8407	0.0093	10.267
983.63	0.9114	0.0150	0.9070	0.0140	0.9088	0.0151	0.9077	0.0141	0.8821	0.0142	0.8764	0.0150	0.8401	0.0143	10.166
993.27	0.9098	0.0141	0.9067	0.0128	0.9091	0.0134	0.9090	0.0126	0.8808	0.0127	0.8758	0.0130	0.8406	0.0127	10.068
1002.92	0.9126	0.0141	0.9095	0.0130	0.9106	0.0138	0.9086	0.0127	0.8842	0.0130	0.8772	0.0131	0.8407	0.0129	9.971
1012.56	0.9123	0.0145	0.9105	0.0132	0.9122	0.0136	0.9101	0.0128	0.8852	0.0130	0.8776	0.0134	0.8413	0.0128	9.876
1022.20	0.9125	0.0176	0.9074	0.0164	0.9114	0.0174	0.9113	0.0161	0.8834	0.0162	0.8798	0.0165	0.8422	0.0163	9.783
1031.85	0.9112	0.0135	0.9083	0.0119	0.9098	0.0125	0.9091	0.0116	0.8817	0.0120	0.8757	0.0122	0.8406	0.0119	9.691
1041.49	0.9094	0.0156	0.9075	0.0142	0.9094	0.0149	0.9082	0.0142	0.8828	0.0143	0.8762	0.0150	0.8406	0.0143	9.602
1051.13	0.9090	0.0127	0.9051	0.0108	0.9082	0.0114	0.9061	0.0105	0.8798	0.0107	0.8755	0.0110	0.8399	0.0108	9.514
1060.78	0.9088	0.0129	0.9059	0.0112	0.9072	0.0124	0.9051	0.0109	0.8820	0.0112	0.8744	0.0117	0.8383	0.0112	9.427
1070.42	0.9118	0.0112	0.9068	0.0083	0.9078	0.0095	0.9082	0.0083	0.8821	0.0083	0.8761	0.0091	0.8421	0.0087	9.342
1080.06	0.9144	0.0139	0.9093	0.0124	0.9145	0.0131	0.9122	0.0121	0.8855	0.0126	0.8801	0.0131	0.8444	0.0125	9.259
1089.71	0.9189	0.0126	0.9168	0.0110	0.9165	0.0121	0.9165	0.0106	0.8905	0.0109	0.8832	0.0115	0.8475	0.0107	9.177
1099.35	0.9186	0.0199	0.9151	0.0184	0.9184	0.0189	0.9166	0.0182	0.8915	0.0186	0.8838	0.0188	0.8506	0.0184	9.096
1108.99	0.9190	0.0136	0.9146	0.0124	0.9166	0.0131	0.9170	0.0121	0.8903	0.0123	0.8842	0.0129	0.8518	0.0122	9.017
1118.64	0.9201	0.0151	0.9149	0.0136	0.9180	0.0141	0.9162	0.0134	0.8928	0.0135	0.8835	0.0141	0.8496	0.0137	8.939
1128.28	0.9232	0.0097	0.9159	0.0070	0.9192	0.0085	0.9187	0.0073	0.8917	0.0074	0.8858	0.0081	0.8529	0.0073	8.863
1137.92	0.9209	0.0123	0.9200	0.0105	0.9201	0.0117	0.9166	0.0103	0.8930	0.0107	0.8858	0.0115	0.8543	0.0105	8.788
1147.57	0.9232	0.0130	0.9196	0.0107	0.9212	0.0114	0.9202	0.0104	0.8937	0.0110	0.8893	0.0116	0.8562	0.0106	8.714
1157.21	0.9229	0.0104	0.9189	0.0086	0.9211	0.0090	0.9181	0.0081	0.8921	0.0083	0.8888	0.0096	0.8529	0.0084	8.641
1166.85	0.9210	0.0115	0.9169	0.0104	0.9192	0.0112	0.9192	0.0100	0.8916	0.0107	0.8869	0.0109	0.8546	0.0104	8.570
1176.50	0.9219	0.0110	0.9145	0.0085	0.9177	0.0092	0.9160	0.0080	0.8906	0.0085	0.8849	0.0091	0.8528	0.0080	8.500
1186.14	0.9224	0.0093	0.9160	0.0066	0.9167	0.0082	0.9161	0.							

1716.53	0.9291	0.0117	0.9267	0.0079	0.9231	0.0094	0.9230	0.0075	0.9002	0.0104	0.8993	0.0100	0.8716	0.0095	5.826
1726.17	0.9301	0.0135	0.9253	0.0114	0.9287	0.0117	0.9237	0.0112	0.9014	0.0137	0.9013	0.0129	0.8709	0.0102	5.793
1735.82	0.9411	0.0124	0.9375	0.0077	0.9366	0.0093	0.9370	0.0080	0.9039	0.0123	0.9054	0.0103	0.8830	0.0096	5.761
1745.46	0.9501	0.0216	0.9520	0.0200	0.9462	0.0191	0.9528	0.0182	0.9145	0.0192	0.9276	0.0183	0.8986	0.0192	5.729
1755.10	0.9483	0.0135	0.9460	0.0094	0.9538	0.0086	0.9486	0.0074	0.9160	0.0099	0.9201	0.0078	0.8996	0.0071	5.698
1764.75	0.9568	0.0537	0.9378	0.0531	0.9489	0.0530	0.9428	0.0529	0.9101	0.0531	0.9124	0.0535	0.8872	0.0531	5.667
1774.39	0.9454	0.0183	0.9450	0.0156	0.9369	0.0163	0.9297	0.0145	0.9166	0.0153	0.9046	0.0158	0.8901	0.0156	5.636
1784.03	0.9523	0.0993	0.9368	0.0980	0.9402	0.0981	0.9355	0.0975	0.9153	0.0978	0.9054	0.0983	0.8792	0.0977	5.605
1793.68	0.9461	0.0641	0.9327	0.0629	0.9254	0.0627	0.9333	0.0624	0.8867	0.0624	0.9003	0.0623	0.8741	0.0625	5.575
1803.32	0.9436	0.0725	0.9278	0.0698	0.9347	0.0712	0.9359	0.0698	0.9000	0.0699	0.8869	0.0700	0.8817	0.0699	5.545
1812.96	0.9366	0.0212	0.9369	0.0184	0.9359	0.0168	0.9326	0.0210	0.8954	0.0179	0.9019	0.0247	0.8811	0.0153	5.516
1822.61	0.9340	0.0166	0.9340	0.0135	0.9265	0.0086	0.9260	0.0125	0.8983	0.0083	0.8953	0.0113	0.8740	0.0113	5.487
1832.25	0.9230	0.0216	0.9280	0.0190	0.9235	0.0172	0.9256	0.0184	0.8893	0.0181	0.8927	0.0197	0.8769	0.0201	5.458
1841.89	0.9218	0.0233	0.9152	0.0208	0.9407	0.0202	0.9213	0.0233	0.8887	0.0201	0.9044	0.0213	0.8717	0.0213	5.429
1851.54	0.9344	0.0632	0.9266	0.0615	0.9291	0.0623	0.9360	0.0615	0.8945	0.0623	0.9004	0.0619	0.8832	0.0620	5.401
1861.18	0.9195	0.0957	0.9275	0.0948	0.9324	0.0958	0.9362	0.0951	0.8910	0.0948	0.9050	0.0950	0.8879	0.0952	5.373
1870.82	0.9326	0.0122	0.9278	0.0127	0.9186	0.0089	0.9162	0.0128	0.8978	0.0174	0.8985	0.0150	0.8784	0.0110	5.345
1880.47	0.9346	0.0321	0.9260	0.0257	0.9240	0.0282	0.9239	0.0262	0.8804	0.0270	0.8836	0.0258	0.8744	0.0265	5.318
1890.11	0.9403	0.0519	0.9375	0.0521	0.9077	0.0518	0.9204	0.0500	0.8817	0.0502	0.8911	0.0519	0.8679	0.0520	5.291
1899.75	0.9277	0.0219	0.9287	0.0190	0.9118	0.0175	0.9259	0.0153	0.8987	0.0163	0.8977	0.0186	0.8590	0.0172	5.264
1909.40	0.9197	0.0743	0.9210	0.0721	0.9338	0.0723	0.9262	0.0736	0.8887	0.0718	0.8986	0.0715	0.8636	0.0724	5.237
1919.04	0.9345	0.0279	0.9234	0.0175	0.9159	0.0206	0.9351	0.0148	0.8757	0.0269	0.9043	0.0172	0.8777	0.0198	5.211
1928.69	0.9333	0.0581	0.9356	0.0506	0.9352	0.0500	0.9456	0.0540	0.9026	0.0516	0.8811	0.0500	0.8697	0.0509	5.185
1938.33	0.9123	0.1251	0.9364	0.1240	0.9353	0.1242	0.9193	0.1244	0.8710	0.1236	0.9103	0.1226	0.8886	0.1234	5.159
1947.97	0.9403	0.0434	0.9420	0.0178	0.9364	0.0195	0.9297	0.0194	0.9040	0.0321	0.8858	0.0182	0.8910	0.0322	5.134
1957.62	0.9215	0.1095	0.9270	0.1088	0.9097	0.1083	0.9121	0.1100	0.8848	0.1077	0.9011	0.1089	0.8780	0.1091	5.108
1967.26	0.9268	0.0584	0.9024	0.0647	0.9369	0.0594	0.9366	0.0592	0.8665	0.0592	0.8874	0.0581	0.8890	0.0582	5.083
1976.90	0.9278	0.0383	0.9497	0.0352	0.9233	0.0366	0.9544	0.0428	0.8811	0.0318	0.8791	0.0345	0.8840	0.0341	5.058
1986.55	0.9265	0.0350	0.9331	0.0362	0.9410	0.0262	0.9421	0.0155	0.9127	0.0264	0.8919	0.0246	0.8673	0.0139	5.034
1996.19	0.9383	0.1583	0.9549	0.1554	0.9375	0.1554	0.9221	0.1552	0.8750	0.1578	0.8900	0.1571	0.8557	0.1560	5.010
2005.83	0.9593	0.0279	0.9665	0.0098	0.9093	0.0106	0.9208	0.0152	0.8841	0.0387	0.8780	0.0236	0.8669	0.0251	4.985