

Spectral directional emissivity ϵ_λ determined under various angles with respect to the surface normal
Sample: Aerogel Z306 at 25 °C
Uncertainty is given as standard uncertainty ($k=1$)

Wavenumber / cm ⁻¹	$\epsilon_\lambda(10^\circ)$	$\epsilon_\lambda(10^\circ)$	$\epsilon_\lambda(20^\circ)$	$\epsilon_\lambda(20^\circ)$	$\epsilon_\lambda(30^\circ)$	$\epsilon_\lambda(30^\circ)$	$\epsilon_\lambda(40^\circ)$	$\epsilon_\lambda(40^\circ)$	$\epsilon_\lambda(50^\circ)$	$\epsilon_\lambda(50^\circ)$	$\epsilon_\lambda(60^\circ)$	$\epsilon_\lambda(60^\circ)$	$\epsilon_\lambda(70^\circ)$	$\epsilon_\lambda(70^\circ)$	Wavelength / μm
601.75	0.9143	0.0128	0.9007	0.0133	0.9089	0.0128	0.9142	0.0132	0.9123	0.0130	0.8795	0.0162	0.8088	0.0140	16.618
611.39	0.9144	0.0271	0.9007	0.0278	0.9097	0.0272	0.9174	0.0268	0.9093	0.0271	0.8821	0.0279	0.8077	0.0276	16.356
621.04	0.9142	0.0110	0.9004	0.0117	0.9124	0.0113	0.9178	0.0110	0.9117	0.0116	0.8826	0.0135	0.8058	0.0125	16.102
630.68	0.9157	0.0084	0.9014	0.0102	0.9099	0.0099	0.9181	0.0084	0.9120	0.0094	0.8835	0.0116	0.8091	0.0111	15.856
640.32	0.9183	0.0077	0.8998	0.0092	0.9115	0.0079	0.9194	0.0071	0.9133	0.0083	0.8832	0.0117	0.8082	0.0091	15.617
649.97	0.9190	0.0074	0.9004	0.0091	0.9128	0.0087	0.9183	0.0068	0.9129	0.0081	0.8834	0.0112	0.8110	0.0092	15.385
659.61	0.9162	0.0094	0.9025	0.0109	0.9113	0.0086	0.9181	0.0083	0.9143	0.0091	0.8842	0.0131	0.8095	0.0100	15.160
669.25	0.9191	0.0074	0.9029	0.0094	0.9117	0.0080	0.9180	0.0074	0.9144	0.0090	0.8829	0.0113	0.8104	0.0099	14.942
678.90	0.9182	0.0072	0.9023	0.0090	0.9106	0.0081	0.9195	0.0066	0.9148	0.0082	0.8809	0.0119	0.8116	0.0087	14.730
688.54	0.9198	0.0086	0.9029	0.0103	0.9118	0.0098	0.9182	0.0081	0.9127	0.0095	0.8849	0.0122	0.8090	0.0098	14.523
698.18	0.9166	0.0083	0.9021	0.0100	0.9107	0.0083	0.9194	0.0079	0.9125	0.0087	0.8821	0.0118	0.8092	0.0095	14.323
707.83	0.9170	0.0108	0.9033	0.0109	0.9107	0.0110	0.9192	0.0103	0.9122	0.0108	0.8807	0.0131	0.8091	0.0115	14.128
717.47	0.9168	0.0101	0.9030	0.0116	0.9090	0.0105	0.9168	0.0100	0.9117	0.0103	0.8821	0.0133	0.8106	0.0117	13.938
727.11	0.9151	0.0074	0.9026	0.0073	0.9079	0.0075	0.9169	0.0067	0.9085	0.0078	0.8796	0.0111	0.8081	0.0087	13.753
736.76	0.9135	0.0067	0.9011	0.0072	0.9076	0.0071	0.9123	0.0074	0.9069	0.0069	0.8787	0.0097	0.8078	0.0083	13.573
746.40	0.9145	0.0071	0.9007	0.0075	0.9064	0.0076	0.9158	0.0070	0.9066	0.0078	0.8781	0.0100	0.8059	0.0085	13.398
756.05	0.9136	0.0136	0.9031	0.0136	0.9072	0.0138	0.9151	0.0139	0.9055	0.0139	0.8784	0.0150	0.8061	0.0144	13.227
765.69	0.9167	0.0071	0.9040	0.0068	0.9070	0.0071	0.9145	0.0071	0.9053	0.0069	0.8796	0.0099	0.8075	0.0079	13.060
775.33	0.9161	0.0066	0.9051	0.0103	0.9075	0.0102	0.9150	0.0102	0.9057	0.0104	0.8808	0.0127	0.8079	0.0111	12.898
784.98	0.9159	0.0150	0.9042	0.0153	0.9091	0.0152	0.9159	0.0151	0.9064	0.0151	0.8826	0.0164	0.8085	0.0156	12.739
794.62	0.9143	0.0203	0.9047	0.0205	0.9069	0.0203	0.9164	0.0204	0.9043	0.0203	0.8796	0.0211	0.8076	0.0208	12.585
804.26	0.9156	0.0130	0.9049	0.0131	0.9070	0.0133	0.9140	0.0130	0.9041	0.0131	0.8793	0.0144	0.8069	0.0136	12.434
813.91	0.9155	0.0138	0.9054	0.0140	0.9083	0.0142	0.9151	0.0142	0.9054	0.0138	0.8819	0.0151	0.8086	0.0144	12.286
823.55	0.9199	0.0087	0.9105	0.0091	0.9090	0.0091	0.9170	0.0089	0.9062	0.0086	0.8831	0.0111	0.8105	0.0096	12.143
833.19	0.9191	0.0160	0.9116	0.0161	0.9132	0.0160	0.9180	0.0163	0.9089	0.0160	0.8849	0.0173	0.8151	0.0165	12.002
842.84	0.9179	0.0153	0.9097	0.0155	0.9118	0.0156	0.9178	0.0156	0.9089	0.0153	0.8809	0.0168	0.8132	0.0158	11.865
852.48	0.9205	0.0084	0.9096	0.0087	0.9131	0.0088	0.9180	0.0086	0.9094	0.0083	0.8829	0.0100	0.8124	0.0092	11.730
862.12	0.9201	0.0097	0.9111	0.0099	0.9116	0.0100	0.9180	0.0098	0.9097	0.0097	0.8842	0.0116	0.8137	0.0104	11.599
871.77	0.9214	0.0084	0.9114	0.0088	0.9147	0.0085	0.9194	0.0085	0.9103	0.0085	0.8854	0.0098	0.8143	0.0093	11.471
881.41	0.9167	0.0084	0.9058	0.0083	0.9093	0.0084	0.9158	0.0084	0.9069	0.0084	0.8804	0.0102	0.8101	0.0090	11.345
891.05	0.9159	0.0064	0.9055	0.0069	0.9072	0.0067	0.9151	0.0064	0.9067	0.0066	0.8788	0.0098	0.8082	0.0073	11.223
900.70	0.9168	0.0090	0.9057	0.0091	0.9108	0.0090	0.9168	0.0090	0.9083	0.0096	0.8808	0.0118	0.8104	0.0096	11.103
910.34	0.9167	0.0127	0.9096	0.0129	0.9111	0.0127	0.9161	0.0127	0.9106	0.0128	0.8806	0.0141	0.8098	0.0132	10.985
919.98	0.9176	0.0090	0.9083	0.0089	0.9121	0.0092	0.9174	0.0089	0.9113	0.0089	0.8808	0.0113	0.8116	0.0094	10.870
929.63	0.9209	0.0067	0.9084	0.0070	0.9143	0.0070	0.9199	0.0062	0.9133	0.0067	0.8836	0.0099	0.8142	0.0073	10.757
939.27	0.9210	0.0065	0.9101	0.0064	0.9122	0.0068	0.9189	0.0063	0.9138	0.0068	0.8824	0.0093	0.8151	0.0071	10.647
948.91	0.9203	0.0068	0.9100	0.0070	0.9155	0.0063	0.9186	0.0064	0.9134	0.0069	0.8815	0.0093	0.8119	0.0073	10.538
958.56	0.9175	0.0184	0.9024	0.0185	0.9114	0.0184	0.9144	0.0182	0.9110	0.0186	0.8790	0.0198	0.8107	0.0186	10.432
968.20	0.9142	0.0092	0.9038	0.0096	0.9108	0.0093	0.9145	0.0091	0.9115	0.0099	0.8779	0.0115	0.8094	0.0098	10.328
977.84	0.9147	0.0106	0.9017	0.0108	0.9084	0.0108	0.9146	0.0102	0.9120	0.0108	0.8766	0.0124	0.8077	0.0108	10.227
987.49	0.9115	0.0182	0.8999	0.0187	0.9081	0.0183	0.9112	0.0180	0.9108	0.0184	0.8749	0.0193	0.8069	0.0183	10.127
997.13	0.9121	0.0143	0.8992	0.0149	0.9069	0.0146	0.9103	0.0144	0.9088	0.0146	0.8721	0.0155	0.8046	0.0147	10.029
1006.77	0.9114	0.0141	0.8992	0.0145	0.9076	0.0141	0.9128	0.0139	0.9110	0.0145	0.8738	0.0160	0.8039	0.0142	9.933
1016.42	0.9122	0.0105	0.9005	0.0116	0.9075	0.0108	0.9096	0.0104	0.9092	0.0111	0.8730	0.0126	0.8031	0.0110	9.838
1026.06	0.9123	0.0102	0.8990	0.0112	0.9079	0.0102	0.9109	0.0099	0.9100	0.0103	0.8740	0.0124	0.8022	0.0107	9.746
1035.70	0.9074	0.0142	0.8964	0.0146	0.9042	0.0143	0.9067	0.0141	0.9068	0.0144	0.8684	0.0162	0.7992	0.0146	9.655
1045.35	0.9062	0.0137	0.8943	0.0144	0.9036	0.0140	0.9061	0.0137	0.9043	0.0139	0.8688	0.0158	0.7969	0.0142	9.566
1054.99	0.9044	0.0082	0.8940	0.0086	0.9014	0.0084	0.9051	0.0077	0.9035	0.0083	0.8645	0.0116	0.7960	0.0085	9.479
1064.63	0.9063	0.0183	0.8939	0.0186	0.9022	0.0184	0.9033	0.0182	0.9030	0.0186	0.8658	0.0197	0.7941	0.0185	9.393
1074.28	0.9079	0.0151	0.8943	0.0157	0.9025	0.0159	0.9058	0.0151	0.9066	0.0153	0.8668	0.0167	0.7937	0.0154	9.309
1083.92	0.9128	0.0214	0.8987	0.0216	0.9052	0.0212	0.9067	0.0212	0.9071	0.0216	0.8676	0.0223	0.7956	0.0214	9.226
1093.56	0.9154	0.0149	0.9028	0.0154	0.9100	0.0152	0.9129	0.0150	0.9126	0.0155	0.8718	0.0166	0.7976	0.0153	9.144
1103.21	0.9180	0.0104	0.9086	0.0109	0.9128	0.0106	0.9168	0.0099	0.9162	0.0108	0.8741	0.0127	0.8021	0.0106	9.064
1112.85	0.9272	0.0181	0.9139	0.0186	0.9232	0.0180	0.9237	0.0178	0.9257	0.0180	0.8840	0.0194	0.8095	0.0180	8.986
1122.49	0.9352	0.0095	0.9240	0.0104	0.9298	0.0098	0.9358	0.0094	0.9346	0.0099	0.8961	0.0123	0.8212	0.0100	8.909
1132.14	0.9380	0.0087	0.9283	0.0096	0.9344	0.0090	0.9397	0.0086	0.9396	0.0091	0.9013	0.0108	0.8317	0.0090	8.833
1141.78	0.9394	0.0094	0.9279	0.0100	0.9358	0.0100	0.9378	0.0092	0.9413	0.0097	0.9029	0.0115	0.8325	0.0095	8.758
1151.42	0.9397	0.0081	0.9294	0.0087	0.9337	0.0083	0.9395	0.0078	0.9420	0.0083	0.9039	0.0109	0.8366	0.0086	8.685
1161.07	0.9401	0.0059	0.9293	0.0069	0.9368	0.0064	0.9399	0.0055	0.9430	0.0067	0.9044	0.0091	0.8383	0.0061	8.613
1170.71	0.9428	0.0170	0.9302	0.0177	0.9378	0.0172	0.9409	0.0169	0.9448	0.0175	0.9057	0.0186	0.8401	0.0171	8.542
1180.36	0.9408	0.0055	0.9296	0.0070	0.9350	0.0060	0.9395	0.0056	0.9418	0.0068	0.9053	0.0097	0.8395	0.0058	8.472
1190.00	0.9395	0.0163	0.9280	0.0169	0.9360	0.0167	0.9396	0.0163	0.9422	0.0169	0.9034	0.0180	0.8367	0.0165	8.403
1199.64	0.9363	0.0067	0.9232	0.0079	0.9321	0.0072	0.9356	0.0066	0.9404	0.0084	0.8985	0.0105	0.8336	0.0069	8.336
1209.29	0.9346	0.0055	0.9242	0.0064	0.9318	0.0063	0.9347	0.0052	0.9386	0.0059	0.9006	0.0087	0.8324	0.0058	8.269
1218.93	0.9378	0.0108	0.9260	0.0117	0.9364	0.0110	0.9354	0.0106	0.9397	0.0111	0.9007	0.0130	0.8294	0.0111	8.204
1228.57	0.9346	0.0110	0.9308	0.0120	0.9410	0.0117	0.9414	0.0109	0.9475	0.0114	0.9089	0.0129	0.8421	0.0111	8.140
1238.22	0.9480	0.0060	0.9383	0.0075	0.9438	0.0064	0.9460	0.0065	0.9522						

1768.60	0.9448	0.0330	0.9241	0.0344	0.9366	0.0328	0.9380	0.0330	0.9598	0.0333	0.9143	0.0338	0.8580	0.0328	5.654
1778.25	0.9466	0.0189	0.9249	0.0206	0.9397	0.0187	0.9296	0.0183	0.9598	0.0185	0.9057	0.0183	0.8440	0.0182	5.624
1787.89	0.9358	0.0405	0.9211	0.0420	0.9362	0.0413	0.9330	0.0414	0.9608	0.0406	0.9061	0.0408	0.8504	0.0411	5.593
1797.53	0.9379	0.0437	0.9168	0.0449	0.9439	0.0447	0.9354	0.0435	0.9662	0.0444	0.9038	0.0444	0.8477	0.0444	5.563
1807.18	0.9424	0.0297	0.9256	0.0303	0.9364	0.0300	0.9276	0.0296	0.9653	0.0292	0.8964	0.0299	0.8465	0.0295	5.533
1816.82	0.9385	0.0536	0.9092	0.0541	0.9334	0.0537	0.9353	0.0534	0.9657	0.0543	0.8994	0.0538	0.8461	0.0538	5.504
1826.46	0.9366	0.1078	0.9283	0.1082	0.9355	0.1081	0.9289	0.1080	0.9568	0.1083	0.9045	0.1081	0.8281	0.1079	5.475
1836.11	0.9262	0.0963	0.9232	0.0970	0.9415	0.0962	0.9353	0.0964	0.9686	0.0960	0.9043	0.0962	0.8314	0.0966	5.446
1845.75	0.9415	0.0113	0.9213	0.0144	0.9395	0.0162	0.9349	0.0139	0.9685	0.0131	0.9041	0.0121	0.8375	0.0111	5.418
1855.40	0.9441	0.0560	0.9126	0.0564	0.9352	0.0557	0.9257	0.0559	0.9709	0.0558	0.9060	0.0562	0.8504	0.0551	5.390
1865.04	0.9307	0.0152	0.9166	0.0207	0.9219	0.0208	0.9152	0.0179	0.9626	0.0182	0.8912	0.0194	0.8382	0.0197	5.362
1874.68	0.9501	0.0105	0.8980	0.0204	0.9273	0.0122	0.9330	0.0082	0.9769	0.0154	0.8991	0.0079	0.8264	0.0139	5.334
1884.33	0.9577	0.0240	0.9186	0.0242	0.9094	0.0244	0.9200	0.0242	0.9690	0.0271	0.8975	0.0291	0.8453	0.0239	5.307
1893.97	0.9579	0.0893	0.9085	0.0893	0.9270	0.0896	0.9247	0.0890	0.9783	0.0907	0.8970	0.0892	0.8335	0.0905	5.280
1903.61	0.9422	0.0623	0.9134	0.0628	0.9502	0.0619	0.9167	0.0624	0.9827	0.0630	0.8998	0.0628	0.8381	0.0622	5.253
1913.26	0.9407	0.0821	0.8921	0.0829	0.9266	0.0827	0.9171	0.0830	0.9830	0.0819	0.8970	0.0828	0.8216	0.0828	5.227
1922.90	0.9301	0.1313	0.8959	0.1314	0.9215	0.1315	0.9231	0.1315	0.9828	0.1312	0.8918	0.1322	0.8246	0.1322	5.200
1932.54	0.9302	0.2321	0.9089	0.2322	0.9328	0.2320	0.9311	0.2324	0.9986	0.2322	0.8811	0.2321	0.8329	0.2326	5.175
1942.19	0.9594	0.0724	0.8755	0.0739	0.9334	0.0734	0.9347	0.0725	0.9871	0.0739	0.8966	0.0742	0.8413	0.0730	5.149
1951.83	0.9309	0.0265	0.8982	0.0230	0.9299	0.0277	0.9038	0.0283	0.9804	0.0296	0.8944	0.0283	0.8193	0.0318	5.123
1961.47	0.9583	0.0182	0.8921	0.0262	0.9372	0.0160	0.9078	0.0168	0.9854	0.0178	0.8891	0.0147	0.8338	0.0253	5.098
1971.12	0.9586	0.0163	0.9144	0.0187	0.9668	0.0260	0.9203	0.0093	1.0242	0.0216	0.8957	0.0144	0.8558	0.0178	5.073
1980.76	0.9558	0.0716	0.9108	0.0703	0.9346	0.0700	0.9377	0.0762	1.0270	0.0694	0.9221	0.0725	0.8401	0.0714	5.049
1990.40	0.9808	0.0747	0.8862	0.0727	0.9550	0.0708	0.9582	0.0710	1.0229	0.0743	0.8921	0.0734	0.8338	0.0706	5.024
2000.05	0.9296	0.0364	0.8816	0.0373	0.9120	0.0317	0.9502	0.0402	1.0427	0.0339	0.9026	0.0422	0.8279	0.0381	5.000