

Spectral directional emissivity ϵ_{λ} determined under various angles with respect to the surface normal
Sample: Akhtar Fractal Black 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
500.46	0.9030	0.0197	0.9004	0.0206	0.8919	0.0198	0.8842	0.0212	0.8717	0.0215	0.8328	0.0231	0.7589	0.0271	19.982
510.11	0.8959	0.0232	0.8926	0.0227	0.8959	0.0229	0.8831	0.0231	0.8724	0.0255	0.8389	0.0249	0.7606	0.0301	19.604
519.75	0.8958	0.0218	0.8936	0.0207	0.8899	0.0212	0.8827	0.0213	0.8724	0.0216	0.8314	0.0234	0.7531	0.0282	19.240
529.39	0.9023	0.0204	0.9024	0.0214	0.8976	0.0214	0.8924	0.0214	0.8724	0.0214	0.8351	0.0219	0.7599	0.0293	18.930
539.03	0.9081	0.0189	0.9098	0.0181	0.8927	0.0186	0.8821	0.0191	0.8718	0.0203	0.8275	0.0214	0.7487	0.0265	18.552
548.68	0.8903	0.0222	0.8969	0.0225	0.8853	0.0229	0.8795	0.0241	0.8609	0.0239	0.8222	0.0250	0.7450	0.0294	18.226
558.32	0.8939	0.0227	0.8915	0.0232	0.8936	0.0226	0.8833	0.0228	0.8664	0.0236	0.8364	0.0242	0.7435	0.0295	17.911
567.96	0.8939	0.0239	0.8978	0.0236	0.8921	0.0236	0.8758	0.0228	0.8657	0.0239	0.8295	0.0251	0.7440	0.0287	17.607
577.61	0.9049	0.0183	0.9040	0.0175	0.8886	0.0192	0.8859	0.0190	0.8722	0.0184	0.8352	0.0217	0.7459	0.0251	17.313
587.25	0.9055	0.0188	0.9091	0.0185	0.8954	0.0202	0.8861	0.0193	0.8689	0.0203	0.8397	0.0216	0.7529	0.0256	17.029
596.89	0.8991	0.0232	0.9068	0.0229	0.8969	0.0228	0.8863	0.0238	0.8686	0.0236	0.8314	0.0249	0.7531	0.0289	16.753
606.53	0.8965	0.0201	0.8947	0.0195	0.8899	0.0200	0.8793	0.0200	0.8628	0.0210	0.8259	0.0219	0.7423	0.0225	16.487
616.18	0.8978	0.0210	0.8979	0.0214	0.8940	0.0212	0.8818	0.0212	0.8623	0.0234	0.8271	0.0234	0.7427	0.0273	16.229
625.82	0.8996	0.0210	0.9034	0.0212	0.8950	0.0212	0.8820	0.0215	0.8717	0.0212	0.8297	0.0233	0.7460	0.0271	15.979
635.46	0.9036	0.0231	0.9062	0.0219	0.9000	0.0220	0.8922	0.0220	0.8736	0.0224	0.8324	0.0239	0.7504	0.0281	15.737
645.11	0.9034	0.0203	0.9058	0.0184	0.8949	0.0186	0.8842	0.0196	0.8688	0.0203	0.8308	0.0210	0.7481	0.0256	15.501
654.75	0.9019	0.0185	0.9048	0.0185	0.8993	0.0189	0.8904	0.0187	0.8711	0.0195	0.8346	0.0204	0.7468	0.0254	15.273
664.39	0.9063	0.0194	0.9112	0.0184	0.9073	0.0188	0.8925	0.0197	0.8783	0.0194	0.8373	0.0206	0.7508	0.0248	15.051
674.03	0.9050	0.0182	0.9021	0.0184	0.8998	0.0194	0.8906	0.0187	0.8725	0.0191	0.8339	0.0205	0.7436	0.0251	14.836
683.68	0.9064	0.0164	0.9119	0.0160	0.9032	0.0165	0.8914	0.0167	0.8761	0.0174	0.8403	0.0187	0.7436	0.0219	14.627
693.32	0.9059	0.0231	0.9147	0.0230	0.9061	0.0231	0.9001	0.0232	0.8774	0.0238	0.8391	0.0251	0.7501	0.0284	14.423
702.96	0.9112	0.0200	0.9161	0.0189	0.9076	0.0191	0.8982	0.0194	0.8807	0.0207	0.8410	0.0209	0.7464	0.0258	14.226
712.61	0.9148	0.0180	0.9204	0.0183	0.9132	0.0181	0.9041	0.0183	0.8852	0.0187	0.8430	0.0199	0.7517	0.0241	14.033
722.25	0.9204	0.0163	0.9216	0.0173	0.9170	0.0166	0.9077	0.0176	0.8876	0.0179	0.8456	0.0195	0.7545	0.0231	13.846
731.89	0.9205	0.0186	0.9228	0.0187	0.9155	0.0185	0.9097	0.0190	0.8895	0.0195	0.8483	0.0214	0.7555	0.0249	13.663
741.53	0.9178	0.0216	0.9261	0.0215	0.9189	0.0217	0.9084	0.0217	0.8872	0.0221	0.8505	0.0237	0.7498	0.0268	13.486
751.18	0.9235	0.0181	0.9251	0.0180	0.9228	0.0180	0.9093	0.0182	0.8895	0.0189	0.8538	0.0197	0.7555	0.0236	13.312
760.82	0.9266	0.0181	0.9278	0.0177	0.9226	0.0181	0.9141	0.0183	0.8917	0.0185	0.8533	0.0196	0.7547	0.0238	13.144
770.46	0.9245	0.0141	0.9284	0.0159	0.9225	0.0146	0.9137	0.0150	0.8961	0.0153	0.8528	0.0167	0.7583	0.0212	12.979
780.10	0.9263	0.0171	0.9315	0.0164	0.9234	0.0162	0.9142	0.0165	0.8955	0.0166	0.8541	0.0181	0.7555	0.0225	12.819
789.75	0.9275	0.0172	0.9332	0.0177	0.9283	0.0178	0.9154	0.0178	0.8935	0.0178	0.8568	0.0189	0.7554	0.0228	12.662
799.39	0.9281	0.0171	0.9338	0.0171	0.9256	0.0176	0.9194	0.0172	0.8975	0.0175	0.8555	0.0190	0.7580	0.0227	12.510
809.03	0.9290	0.0187	0.9370	0.0189	0.9294	0.0189	0.9209	0.0188	0.8990	0.0192	0.8548	0.0202	0.7624	0.0235	12.360
818.68	0.9363	0.0170	0.9402	0.0169	0.9341	0.0167	0.9220	0.0167	0.9029	0.0171	0.8604	0.0179	0.7604	0.0223	12.215
828.32	0.9365	0.0167	0.9402	0.0167	0.9376	0.0166	0.9201	0.0170	0.9039	0.0172	0.8572	0.0188	0.7597	0.0223	12.073
837.96	0.9361	0.0159	0.9428	0.0158	0.9383	0.0161	0.9209	0.0163	0.9070	0.0162	0.8570	0.0175	0.7612	0.0212	11.934
847.60	0.9338	0.0136	0.9437	0.0140	0.9345	0.0136	0.9247	0.0139	0.9041	0.0147	0.8574	0.0155	0.7586	0.0195	11.798
857.25	0.9392	0.0178	0.9469	0.0175	0.9398	0.0175	0.9262	0.0175	0.9067	0.0181	0.8575	0.0190	0.7577	0.0231	11.665
866.89	0.9461	0.0142	0.9489	0.0141	0.9407	0.0139	0.9308	0.0145	0.9087	0.0145	0.8586	0.0159	0.7569	0.0199	11.535
876.53	0.9468	0.0165	0.9498	0.0163	0.9473	0.0164	0.9318	0.0170	0.9108	0.0167	0.8624	0.0179	0.7581	0.0217	11.409
886.18	0.9484	0.0172	0.9579	0.0169	0.9498	0.0170	0.9334	0.0169	0.9107	0.0173	0.8643	0.0181	0.7581	0.0219	11.284
895.82	0.9531	0.0153	0.9595	0.0154	0.9515	0.0154	0.9413	0.0155	0.9167	0.0158	0.8681	0.0175	0.7638	0.0210	11.163
905.46	0.9556	0.0183	0.9638	0.0175	0.9574	0.0182	0.9460	0.0176	0.9236	0.0181	0.8717	0.0188	0.7669	0.0224	11.044
915.10	0.9609	0.0177	0.9690	0.0177	0.9600	0.0177	0.9505	0.0174	0.9270	0.0181	0.8777	0.0185	0.7724	0.0219	10.928
924.75	0.9651	0.0167	0.9750	0.0164	0.9677	0.0161	0.9542	0.0160	0.9338	0.0162	0.8850	0.0175	0.7799	0.0207	10.814
934.39	0.9688	0.0175	0.9774	0.0173	0.9720	0.0171	0.9604	0.0174	0.9388	0.0171	0.8970	0.0177	0.7883	0.0210	10.702
944.03	0.9757	0.0189	0.9856	0.0190	0.9799	0.0187	0.9718	0.0186	0.9502	0.0188	0.9065	0.0194	0.8028	0.0220	10.593
953.68	0.9779	0.0201	0.9902	0.0203	0.9839	0.0205	0.9756	0.0202	0.9585	0.0203	0.9193	0.0208	0.8189	0.0225	10.486
963.32	0.9868	0.0155	0.9960	0.0154	0.9909	0.0155	0.9823	0.0154	0.9658	0.0155	0.9314	0.0167	0.8383	0.0178	10.381
972.96	0.9875	0.0162	0.9952	0.0158	0.9888	0.0158	0.9845	0.0157	0.9733	0.0157	0.9413	0.0163	0.8579	0.0183	10.278
982.60	0.9913	0.0164	0.9978	0.0165	0.9949	0.0163	0.9885	0.0161	0.9781	0.0165	0.9553	0.0166	0.8796	0.0178	10.177
992.25	0.9914	0.0189	1.0009	0.0190	0.9990	0.0191	0.9905	0.0190	0.9845	0.0193	0.9588	0.0189	0.8934	0.0195	10.078
1001.89	0.9922	0.0175	1.0037	0.0174	0.9990	0.0176	0.9888	0.0175	0.9857	0.0174	0.9687	0.0179	0.9090	0.0180	9.981
1011.53	0.9944	0.0143	1.0047	0.0143	1.0011	0.0144	0.9967	0.0144	0.9898	0.0143	0.9712	0.0147	0.9163	0.0151	9.886
1021.17	0.9942	0.0163	1.0024	0.0161	0.9996	0.0162	0.9955	0.0161	0.9893	0.0162	0.9706	0.0162	0.9216	0.0166	9.793
1030.82	0.9944	0.0167	1.0023	0.0160	0.9975	0.0155	0.9939	0.0151	0.9860	0.0152	0.9722	0.0160	0.9239	0.0161	9.701
1040.46	0.9956	0.0153	1.0073	0.0155	0.9999	0.0157	0.9968	0.0153	0.9890	0.0156	0.9750	0.0153	0.9267	0.0156	9.611
1050.10	0.9939	0.0181	1.0047	0.0179	1.0005	0.0181	0.9954	0.0180	0.9879	0.0179	0.9770	0.0180	0.9310	0.0183	9.523
1059.75	0.9934	0.0166	1.0047	0.0168	1.0001	0.0165	0.9951	0.0168	0.9876	0.0175	0.9753	0.0166	0.9333	0.0170	9.436
1069.39	0.9941	0.0167	1.0054	0.0166	0.9983	0.0166	0.9948	0.0165	0.9896	0.0171	0.9744	0.0168	0.9329	0.0170	9.351
1079.03	0.9919	0.0165	1.0059	0.0166	0.9986	0.0169	0.9963	0.0169	0.9875	0.0170	0.9753	0.0169	0.9328	0.0170	9.268
1088.67	0.9970	0.0164	1.0042	0.0160	1.0024	0.0161	1.0007	0.0160	0.9907	0.0158	0.9815	0.0162	0.9372	0.0161	9.186
1098.32	0.9938	0.0155	1.0029	0.0150	0.9994	0.0151	0.9932	0.0152	0.9896	0.0151	0.9724	0.0152	0.9354	0.0153	9.105
1107.96	0.9944	0.0168	1.0024	0.0168	1.0029	0.0169	0.9936	0.0169	0.9903	0.0168	0.9774	0.0168	0.9386	0.0172	9.026
1117.60	0.9952	0.0132	1.0014	0.0131	1.0003	0.0134	0.9962	0.0130	0.9927	0.0131	0.9812	0.0132	0.9388	0.0142	8.948
1127.25	0.9953	0.0156	1.0038	0.0154	1.0019	0.0149	0.9988	0.0153	0.9900	0.0151	0.9767	0.0154	0.9373	0.0164	8.871
1136.89	0.9939	0.0144	0.9992	0.0144	0.9977	0.0144	0.9965	0.0148							