

Spectral directional emissivity ε_λ determined under various angles with respect to the surface normal

Sample: Aeroglaze Z306 at 150 °C. Coating thickness: 99 μm

Uncertainty is given as standard uncertainty ($k=1$)

Wavenumber / cm^{-1}	$\varepsilon_\lambda(10^\circ)$	$u(10^\circ)$	$\varepsilon_\lambda(30^\circ)$	$u(30^\circ)$	$\varepsilon_\lambda(50^\circ)$	$u(50^\circ)$	$\varepsilon_\lambda(70^\circ)$	$u(70^\circ)$	Wavelength / μm
100.29	0.8809	0.0336	0.7791	0.0343	0.6899	0.0344	0.6971	0.0345	99.711
109.93	0.7723	0.0219	0.8952	0.0204	0.8125	0.0205	0.6832	0.0211	90.964
119.58	0.6888	0.0115	0.7257	0.0114	0.9155	0.0098	0.7330	0.0101	83.629
129.22	0.8808	0.0259	0.7712	0.0266	0.7600	0.0270	0.8105	0.0262	77.387
138.86	0.8256	0.0306	0.9212	0.0302	0.7739	0.0309	0.7308	0.0311	72.013
148.51	0.7312	0.0128	0.7970	0.0113	0.9195	0.0103	0.7154	0.0125	67.337
158.15	0.8769	0.0278	0.7716	0.0282	0.8649	0.0279	0.7771	0.0281	63.232
167.79	0.8509	0.0348	0.9076	0.0346	0.7689	0.0350	0.8086	0.0348	59.597
177.44	0.7633	0.0073	0.8567	0.0057	0.8604	0.0058	0.7539	0.0076	56.358
187.08	0.8755	0.0269	0.7839	0.0268	0.9251	0.0264	0.7461	0.0271	53.453
196.72	0.8641	0.0308	0.8952	0.0307	0.8244	0.0311	0.8066	0.0309	50.833
206.37	0.8008	0.0075	0.8965	0.0068	0.8326	0.0073	0.8100	0.0074	48.458
216.01	0.8921	0.0286	0.8198	0.0288	0.9274	0.0285	0.7711	0.0289	46.294
225.65	0.8910	0.0223	0.8949	0.0220	0.8924	0.0218	0.7803	0.0221	44.316
235.30	0.8383	0.0102	0.9253	0.0101	0.8454	0.0102	0.8269	0.0103	42.500
244.94	0.8997	0.0204	0.8609	0.0206	0.8994	0.0208	0.8100	0.0207	40.826
254.58	0.9064	0.0096	0.8946	0.0097	0.9273	0.0101	0.7783	0.0105	39.280
264.23	0.8761	0.0085	0.9299	0.0086	0.8703	0.0097	0.7907	0.0090	37.847
273.87	0.9119	0.0120	0.8909	0.0121	0.8867	0.0121	0.8201	0.0123	36.514
283.51	0.9212	0.0059	0.9031	0.0059	0.9314	0.0069	0.8072	0.0078	35.272
293.16	0.9030	0.0079	0.9379	0.0080	0.9113	0.0083	0.8001	0.0082	34.112
302.80	0.9220	0.0120	0.9110	0.0114	0.8937	0.0111	0.8158	0.0118	33.025
312.44	0.9339	0.0057	0.9105	0.0047	0.9219	0.0050	0.8248	0.0051	32.006
322.09	0.9206	0.0068	0.9427	0.0069	0.9372	0.0061	0.8256	0.0074	31.048
331.73	0.9363	0.0056	0.9281	0.0066	0.9104	0.0054	0.8202	0.0053	30.145
341.37	0.9380	0.0047	0.9358	0.0043	0.9240	0.0041	0.8320	0.0069	29.294
351.02	0.9395	0.0043	0.9467	0.0046	0.9342	0.0042	0.8353	0.0049	28.489
360.66	0.9368	0.0057	0.9403	0.0057	0.9293	0.0053	0.8257	0.0058	27.727
370.30	0.9425	0.0042	0.9391	0.0056	0.9316	0.0055	0.8290	0.0054	27.005
379.94	0.9456	0.0096	0.9511	0.0075	0.9469	0.0061	0.8297	0.0078	26.320
389.59	0.9541	0.0092	0.9479	0.0088	0.9341	0.0097	0.8246	0.0088	25.668
399.23	0.9490	0.0095	0.9487	0.0098	0.9290	0.0099	0.8305	0.0097	25.048
408.87	0.9497	0.0038	0.9528	0.0046	0.9360	0.0051	0.8325	0.0042	24.457
418.52	0.9571	0.0122	0.9497	0.0123	0.9392	0.0119	0.8323	0.0122	23.894
428.16	0.9580	0.0087	0.9441	0.0087	0.9334	0.0094	0.8324	0.0090	23.356
437.80	0.9594	0.0143	0.9487	0.0128	0.9341	0.0121	0.8243	0.0124	22.841
447.45	0.9590	0.0112	0.9510	0.0110	0.9367	0.0116	0.8271	0.0113	22.349
457.09	0.9579	0.0079	0.9582	0.0066	0.9363	0.0069	0.8329	0.0075	21.878
466.73	0.9589	0.0090	0.9528	0.0089	0.9388	0.0083	0.8278	0.0096	21.425
476.38	0.9571	0.0045	0.9581	0.0044	0.9395	0.0042	0.8355	0.0045	20.992
486.02	0.9647	0.0128	0.9573	0.0130	0.9365	0.0129	0.8385	0.0136	20.575
495.66	0.9603	0.0060	0.9600	0.0065	0.9418	0.0060	0.8406	0.0053	20.175