

RG610

Reflection factor	
P_d	0.92

Reference thickness	
d [mm]	3

Spectral values guaranteed	
λ_c ($\tau_i = 0.50$) [nm]	= 610 ± 6
λ_s ($\tau_{is} = 1 \cdot 10^{-5}$) [nm]	= 530
λ_p ($\tau_{ip} = 0.94$) [nm]	= 690

Refractive index n		
λ [nm]	Element	n
587.6	He	1.52
852.1	Cs	1.52
1014	Hg	1.51

Density	
ρ [g/cm ³]	2.65

Bubble content	
Bubble class	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
T _g [°C]	520

Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	8.0
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	9.2
$\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K]	

Temperature coefficient	
T _k [nm/°C]	0.14

Notes

Colloidally colored glass

Long pass filter

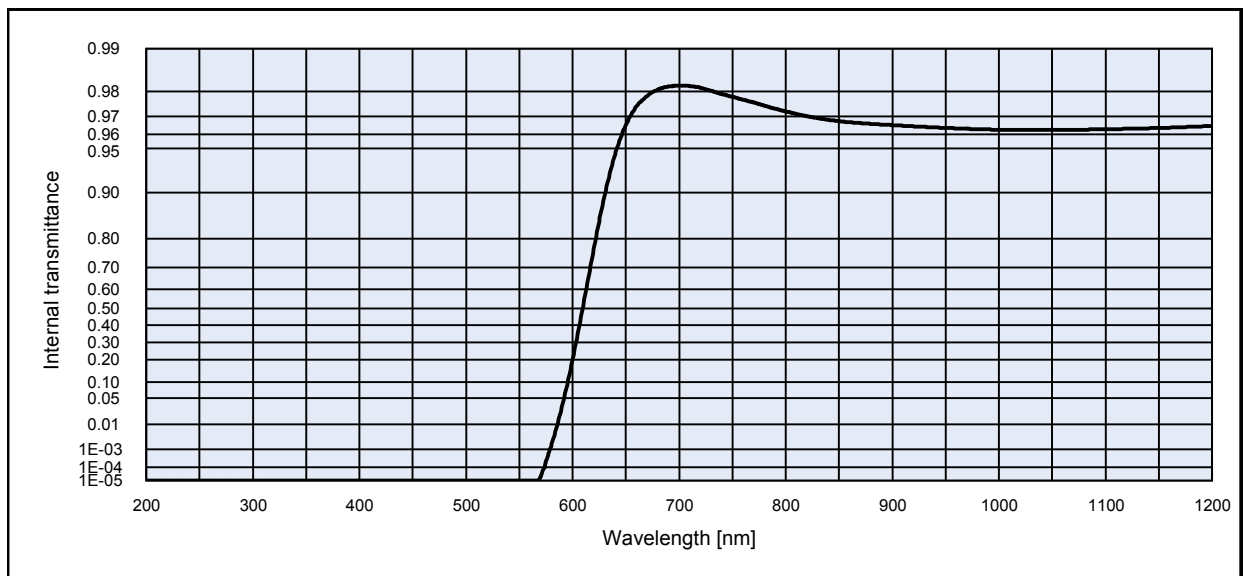
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

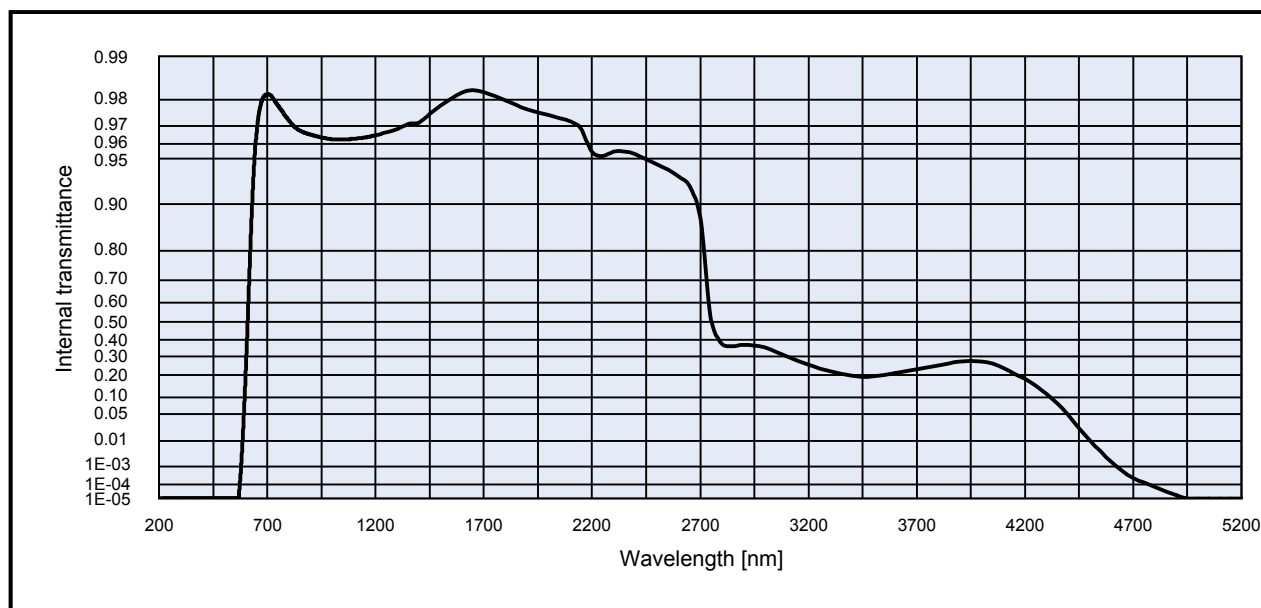
Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
	1	2	3
d [mm]			
x	0.663	0.690	0.697
y	0.328	0.310	0.303
Y	27	20	17
λ_d [nm]	614	619	623
P _e	0.94	1.00	1.00

Illuminant	Planck T = 3200 K		
	1	2	3
d [mm]			
x	0.659	0.689	0.696
y	0.329	0.311	0.304
Y	25	18	15
λ_d [nm]	613	619	623
P _e	0.93	1.00	1.00

Illuminant	D65 (T _c = 6504 K)		
	1	2	3
d [mm]			
x	0.629	0.684	0.693
y	0.330	0.315	0.307
Y	17	12	10
λ_d [nm]	611	617	621
P _e	0.89	1.00	1.00





Internal transmittance τ_i at reference thickness d [mm] = 3
The internal transmittance values, tabulated and graphically represented, are reference values only

λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i
200	< 1.0E-05	500	< 1.0E-05	800	9.7E-01	1100	9.6E-01	2200	9.5E-01	3700	2.3E-01
210	< 1.0E-05	510	< 1.0E-05	810	9.7E-01	1110	9.6E-01	2250	9.5E-01	3750	2.4E-01
220	< 1.0E-05	520	< 1.0E-05	820	9.7E-01	1120	9.6E-01	2300	9.6E-01	3800	2.5E-01
230	< 1.0E-05	530	< 1.0E-05	830	9.7E-01	1130	9.6E-01	2350	9.6E-01	3850	2.6E-01
240	< 1.0E-05	540	< 1.0E-05	840	9.7E-01	1140	9.6E-01	2400	9.5E-01	3900	2.7E-01
250	< 1.0E-05	550	< 1.0E-05	850	9.7E-01	1150	9.6E-01	2450	9.5E-01	3950	2.8E-01
260	< 1.0E-05	560	< 1.0E-05	860	9.7E-01	1160	9.6E-01	2500	9.5E-01	4000	2.7E-01
270	< 1.0E-05	570	2.1E-05	870	9.7E-01	1170	9.6E-01	2550	9.4E-01	4050	2.6E-01
280	< 1.0E-05	580	1.5E-03	880	9.7E-01	1180	9.6E-01	2600	9.3E-01	4100	2.4E-01
290	< 1.0E-05	590	3.1E-02	890	9.7E-01	1190	9.6E-01	2650	9.2E-01	4150	2.1E-01
300	< 1.0E-05	600	2.0E-01	900	9.7E-01	1200	9.7E-01	2700	8.7E-01	4200	1.8E-01
310	< 1.0E-05	610	5.2E-01	910	9.7E-01	1250	9.7E-01	2750	5.2E-01	4250	1.5E-01
320	< 1.0E-05	620	7.7E-01	920	9.6E-01	1300	9.7E-01	2800	3.7E-01	4300	1.1E-01
330	< 1.0E-05	630	8.9E-01	930	9.6E-01	1350	9.7E-01	2850	3.6E-01	4350	7.8E-02
340	< 1.0E-05	640	9.5E-01	940	9.6E-01	1400	9.7E-01	2900	3.7E-01	4400	4.8E-02
350	< 1.0E-05	650	9.7E-01	950	9.6E-01	1450	9.8E-01	2950	3.7E-01	4450	2.4E-02
360	< 1.0E-05	660	9.7E-01	960	9.6E-01	1500	9.8E-01	3000	3.5E-01	4500	1.1E-02
370	< 1.0E-05	670	9.8E-01	970	9.6E-01	1550	9.8E-01	3050	3.3E-01	4550	4.5E-03
380	< 1.0E-05	680	9.8E-01	980	9.6E-01	1600	9.8E-01	3100	3.0E-01	4600	1.6E-03
390	< 1.0E-05	690	9.8E-01	990	9.6E-01	1650	9.8E-01	3150	2.8E-01	4650	5.7E-04
400	< 1.0E-05	700	9.8E-01	1000	9.6E-01	1700	9.8E-01	3200	2.5E-01	4700	2.5E-04
410	< 1.0E-05	710	9.8E-01	1010	9.6E-01	1750	9.8E-01	3250	2.3E-01	4750	1.3E-04
420	< 1.0E-05	720	9.8E-01	1020	9.6E-01	1800	9.8E-01	3300	2.2E-01	4800	6.7E-05
430	< 1.0E-05	730	9.8E-01	1030	9.6E-01	1850	9.8E-01	3350	2.1E-01	4850	3.4E-05
440	< 1.0E-05	740	9.8E-01	1040	9.6E-01	1900	9.8E-01	3400	2.0E-01	4900	1.7E-05
450	< 1.0E-05	750	9.8E-01	1050	9.6E-01	1950	9.8E-01	3450	1.9E-01	4950	< 1.0E-05
460	< 1.0E-05	760	9.8E-01	1060	9.6E-01	2000	9.7E-01	3500	1.9E-01	5000	< 1.0E-05
470	< 1.0E-05	770	9.8E-01	1070	9.6E-01	2050	9.7E-01	3550	2.0E-01	5050	< 1.0E-05
480	< 1.0E-05	780	9.7E-01	1080	9.6E-01	2100	9.7E-01	3600	2.1E-01	5100	< 1.0E-05
490	< 1.0E-05	790	9.7E-01	1090	9.6E-01	2150	9.7E-01	3650	2.2E-01	5150	< 1.0E-05