Data Sheet

SCHOTT

GG400

Density	
ρ [g/cm³]	2.55

Reflection factor	
P_d	0.92

Bubble content	
Bubble class	3

Reference thickness	
d [mm]	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Spectral values guaranteed			
λc (τi = 0.50) [nm]	=	400	± 6
λs (τis = 1·10-5) [nm]	=	340	
λp (τip = 0.93) [nm]	=	480	

Transformation temperature	
Tg [°C]	537

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{20/300°C}$ [10^{-6}/K]	9.1
$\alpha_{20/200°C}$ [10^{-6}/K]	

Refractive index n		
λ [nm]	Element	n
546	Hg	1.53
587.6	He	1.52
852.1	Cs	1.52
1014	Hg	1.51

Temperature coefficient	
T_k [nm/°C]	0.07

Notes

Colloidally colored glass

Long pass filter

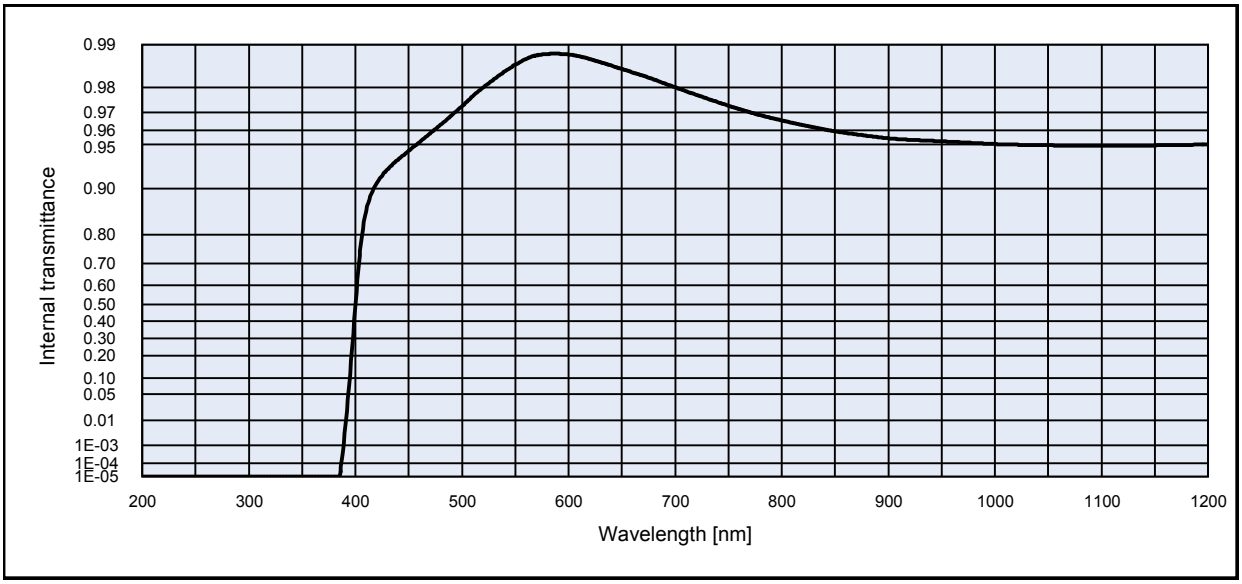
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x	0.448	0.449	0.450
y	0.408	0.409	0.410
Y	91	91	90
λ_d [nm]	581	581	581
P_e	0.01	0.02	0.03

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.424	0.425	0.426
y	0.400	0.401	0.402
Y	91	91	90
λ_d [nm]	579	579	579
P_e	0.01	0.02	0.03

Illuminant	D65 (T_c = 6504 K)		
d [mm]	1	2	3
x	0.314	0.315	0.316
y	0.331	0.333	0.335
Y	91	91	90
λ_d [nm]	570	571	571
P_e	0.01	0.02	0.03



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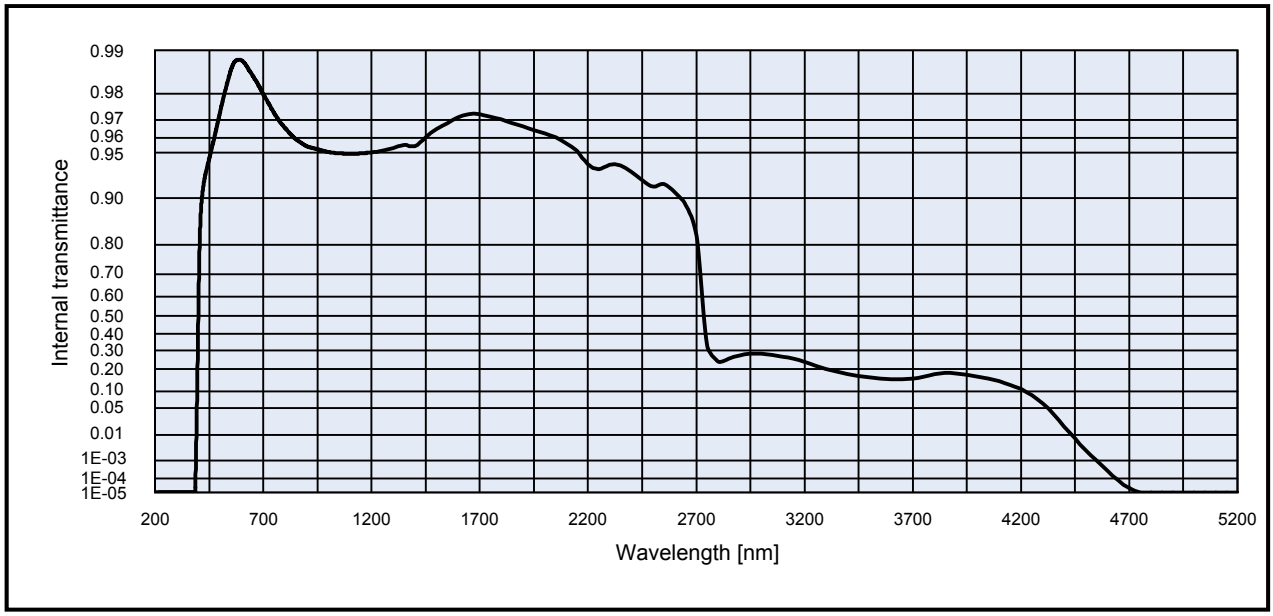

Internal transmittance τ_i at reference thickness d [mm] = 3
The internal transmittance values, tabulated and graphically represented, are reference values only

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	9.7E-01	800	9.7E-01	1100	9.5E-01	2200	9.4E-01	3700	1.5E-01
210	< 1.0E-05	510	9.8E-01	810	9.6E-01	1110	9.5E-01	2250	9.4E-01	3750	1.6E-01
220	< 1.0E-05	520	9.8E-01	820	9.6E-01	1120	9.5E-01	2300	9.4E-01	3800	1.7E-01
230	< 1.0E-05	530	9.8E-01	830	9.6E-01	1130	9.5E-01	2350	9.4E-01	3850	1.8E-01
240	< 1.0E-05	540	9.8E-01	840	9.6E-01	1140	9.5E-01	2400	9.3E-01	3900	1.8E-01
250	< 1.0E-05	550	9.9E-01	850	9.6E-01	1150	9.5E-01	2450	9.2E-01	3950	1.7E-01
260	< 1.0E-05	560	9.9E-01	860	9.6E-01	1160	9.5E-01	2500	9.2E-01	4000	1.6E-01
270	< 1.0E-05	570	9.9E-01	870	9.6E-01	1170	9.5E-01	2550	9.2E-01	4050	1.5E-01
280	< 1.0E-05	580	9.9E-01	880	9.6E-01	1180	9.5E-01	2600	9.1E-01	4100	1.4E-01
290	< 1.0E-05	590	9.9E-01	890	9.6E-01	1190	9.5E-01	2650	8.9E-01	4150	1.3E-01
300	< 1.0E-05	600	9.9E-01	900	9.5E-01	1200	9.5E-01	2700	8.2E-01	4200	1.1E-01
310	< 1.0E-05	610	9.9E-01	910	9.5E-01	1250	9.5E-01	2750	3.4E-01	4250	8.6E-02
320	< 1.0E-05	620	9.9E-01	920	9.5E-01	1300	9.5E-01	2800	2.4E-01	4300	6.1E-02
330	< 1.0E-05	630	9.9E-01	930	9.5E-01	1350	9.6E-01	2850	2.6E-01	4350	3.7E-02
340	< 1.0E-05	640	9.9E-01	940	9.5E-01	1400	9.5E-01	2900	2.7E-01	4400	1.8E-02
350	< 1.0E-05	650	9.9E-01	950	9.5E-01	1450	9.6E-01	2950	2.8E-01	4450	7.9E-03
360	< 1.0E-05	660	9.8E-01	960	9.5E-01	1500	9.7E-01	3000	2.8E-01	4500	2.8E-03
370	< 1.0E-05	670	9.8E-01	970	9.5E-01	1550	9.7E-01	3050	2.8E-01	4550	9.8E-04
380	< 1.0E-05	680	9.8E-01	980	9.5E-01	1600	9.7E-01	3100	2.7E-01	4600	3.0E-04
390	3.4E-03	690	9.8E-01	990	9.5E-01	1650	9.7E-01	3150	2.6E-01	4650	7.3E-05
400	4.9E-01	700	9.8E-01	1000	9.5E-01	1700	9.7E-01	3200	2.4E-01	4700	2.2E-05
410	8.6E-01	710	9.8E-01	1010	9.5E-01	1750	9.7E-01	3250	2.2E-01	4750	< 1.0E-05
420	9.1E-01	720	9.8E-01	1020	9.5E-01	1800	9.7E-01	3300	2.0E-01	4800	< 1.0E-05
430	9.3E-01	730	9.8E-01	1030	9.5E-01	1850	9.7E-01	3350	1.9E-01	4850	< 1.0E-05
440	9.4E-01	740	9.7E-01	1040	9.5E-01	1900	9.7E-01	3400	1.8E-01	4900	< 1.0E-05
450	9.4E-01	750	9.7E-01	1050	9.5E-01	1950	9.6E-01	3450	1.7E-01	4950	< 1.0E-05
460	9.5E-01	760	9.7E-01	1060	9.5E-01	2000	9.6E-01	3500	1.6E-01	5000	< 1.0E-05
470	9.6E-01	770	9.7E-01	1070	9.5E-01	2050	9.6E-01	3550	1.5E-01	5050	< 1.0E-05
480	9.6E-01	780	9.7E-01	1080	9.5E-01	2100	9.6E-01	3600	1.5E-01	5100	< 1.0E-05
490	9.7E-01	790	9.7E-01	1090	9.5E-01	2150	9.5E-01	3650	1.5E-01	5150	< 1.0E-05