Data Sheet

SCHOTT

RG665

Reflection factor	
P_d	0.91

Reference thickness	
d [mm]	3

Spectral values guaranteed			
λc (τi = 0.50) [nm]	=	665	± 6
λs (τis = 1·10-5) [nm]	=	580	
λp (τip = 0.96) [nm]	=	750	

Refractive index n		
λ [nm]	Element	n
587.6	He	1.54
852.1	Cs	1.53
1014	Hg	1.53

Density	
ρ [g/cm^3]	2.77

Bubble content	
Bubble class	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
Tg [°C]	527

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{20/300°C}$ [10^{-6}/K]	9.4
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_k [nm/°C]	0.17

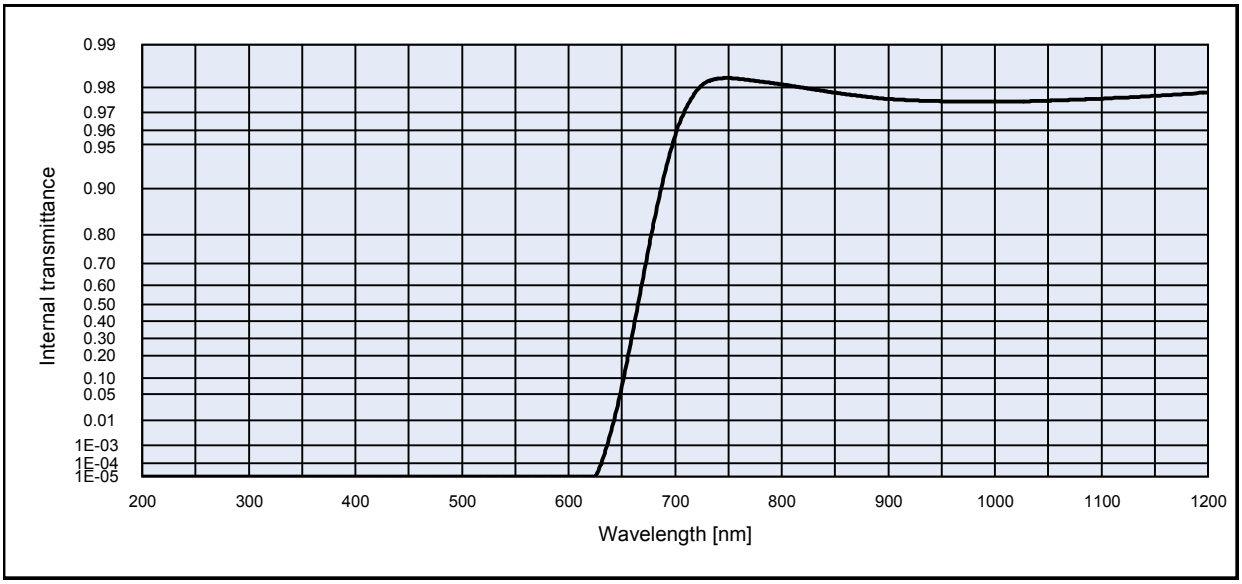
Notes
Colloidally colored glass
Long pass filter
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x	0.631	0.726	0.732
y	0.318	0.272	0.268
Y	4	2	1
λ_d [nm]	656	664	671
P_e	0.65	0.98	1.00

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.612	0.724	0.732
y	0.320	0.272	0.268
Y	4	1	1
λ_d [nm]	656	664	670
P_e	0.62	0.98	1.00

Illuminant	D65 (T_c = 6504 K)		
d [mm]	1	2	3
x	0.487	0.711	0.731
y	0.305	0.272	0.268
Y	3	1	1
λ_d [nm]	654	662	668
P_e	0.42	0.95	1.00



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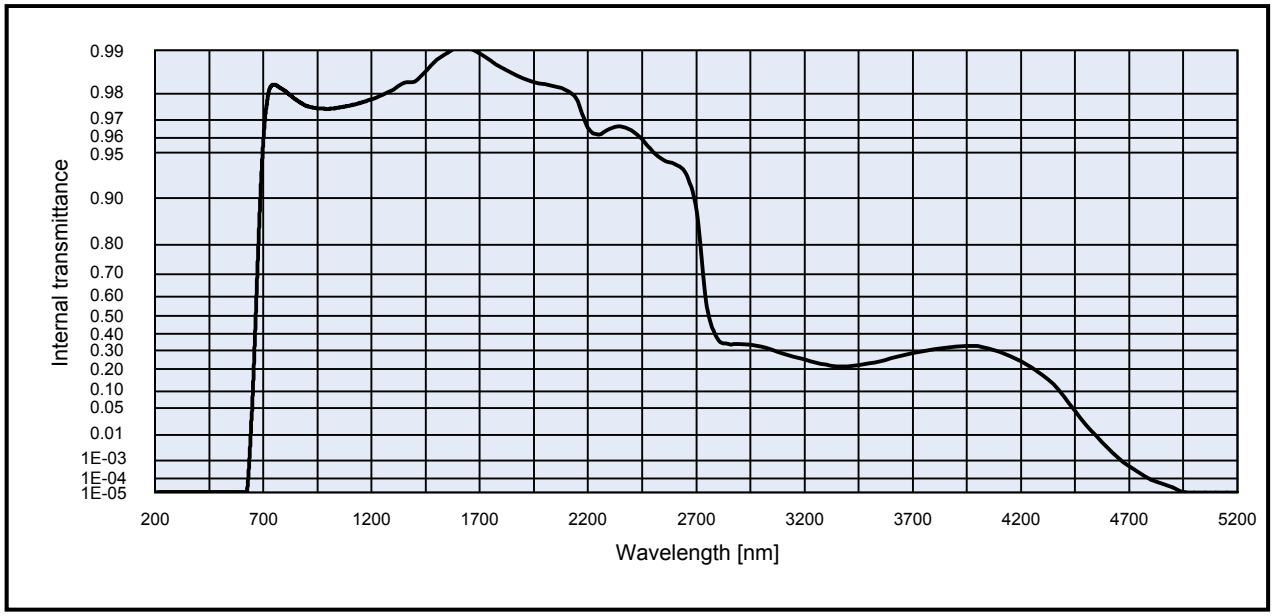

Internal transmittance τ_i at reference thickness d [mm] = 3
The internal transmittance values, tabulated and graphically represented, are reference values only

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	< 1.0E-05	800	9.8E-01	1100	9.8E-01	2200	9.7E-01	3700	2.9E-01
210	< 1.0E-05	510	< 1.0E-05	810	9.8E-01	1110	9.8E-01	2250	9.6E-01	3750	3.0E-01
220	< 1.0E-05	520	< 1.0E-05	820	9.8E-01	1120	9.8E-01	2300	9.7E-01	3800	3.1E-01
230	< 1.0E-05	530	< 1.0E-05	830	9.8E-01	1130	9.8E-01	2350	9.7E-01	3850	3.2E-01
240	< 1.0E-05	540	< 1.0E-05	840	9.8E-01	1140	9.8E-01	2400	9.6E-01	3900	3.2E-01
250	< 1.0E-05	550	< 1.0E-05	850	9.8E-01	1150	9.8E-01	2450	9.6E-01	3950	3.3E-01
260	< 1.0E-05	560	< 1.0E-05	860	9.8E-01	1160	9.8E-01	2500	9.5E-01	4000	3.3E-01
270	< 1.0E-05	570	< 1.0E-05	870	9.8E-01	1170	9.8E-01	2550	9.4E-01	4050	3.1E-01
280	< 1.0E-05	580	< 1.0E-05	880	9.8E-01	1180	9.8E-01	2600	9.4E-01	4100	2.9E-01
290	< 1.0E-05	590	< 1.0E-05	890	9.8E-01	1190	9.8E-01	2650	9.3E-01	4150	2.7E-01
300	< 1.0E-05	600	< 1.0E-05	900	9.8E-01	1200	9.8E-01	2700	8.8E-01	4200	2.4E-01
310	< 1.0E-05	610	< 1.0E-05	910	9.8E-01	1250	9.8E-01	2750	5.5E-01	4250	2.1E-01
320	< 1.0E-05	620	< 1.0E-05	920	9.8E-01	1300	9.8E-01	2800	3.7E-01	4300	1.7E-01
330	< 1.0E-05	630	7.4E-05	930	9.8E-01	1350	9.8E-01	2850	3.4E-01	4350	1.3E-01
340	< 1.0E-05	640	4.3E-03	940	9.8E-01	1400	9.8E-01	2900	3.4E-01	4400	8.3E-02
350	< 1.0E-05	650	7.2E-02	950	9.7E-01	1450	9.9E-01	2950	3.4E-01	4450	4.4E-02
360	< 1.0E-05	660	3.3E-01	960	9.7E-01	1500	9.9E-01	3000	3.3E-01	4500	2.0E-02
370	< 1.0E-05	670	6.4E-01	970	9.7E-01	1550	9.9E-01	3050	3.1E-01	4550	9.2E-03
380	< 1.0E-05	680	8.3E-01	980	9.7E-01	1600	9.9E-01	3100	2.8E-01	4600	3.5E-03
390	< 1.0E-05	690	9.2E-01	990	9.7E-01	1650	9.9E-01	3150	2.7E-01	4650	1.3E-03
400	< 1.0E-05	700	9.6E-01	1000	9.7E-01	1700	9.9E-01	3200	2.5E-01	4700	5.0E-04
410	< 1.0E-05	710	9.7E-01	1010	9.7E-01	1750	9.9E-01	3250	2.3E-01	4750	2.0E-04
420	< 1.0E-05	720	9.8E-01	1020	9.7E-01	1800	9.9E-01	3300	2.2E-01	4800	8.7E-05
430	< 1.0E-05	730	9.8E-01	1030	9.7E-01	1850	9.9E-01	3350	2.1E-01	4850	4.5E-05
440	< 1.0E-05	740	9.8E-01	1040	9.8E-01	1900	9.8E-01	3400	2.1E-01	4900	2.5E-05
450	< 1.0E-05	750	9.8E-01	1050	9.8E-01	1950	9.8E-01	3450	2.2E-01	4950	1.2E-05
460	< 1.0E-05	760	9.8E-01	1060	9.8E-01	2000	9.8E-01	3500	2.3E-01	5000	< 1.0E-05
470	< 1.0E-05	770	9.8E-01	1070	9.8E-01	2050	9.8E-01	3550	2.4E-01	5050	< 1.0E-05
480	< 1.0E-05	780	9.8E-01	1080	9.8E-01	2100	9.8E-01	3600	2.6E-01	5100	< 1.0E-05
490	< 1.0E-05	790	9.8E-01	1090	9.8E-01	2150	9.8E-01	3650	2.7E-01	5150	< 1.0E-05