DATA SHEET

SCHOTT RG1000

RG1000

Reflection factor	
P_d	0.913

Reference thickness	
d [mm]	3

Spectral values guaranteed		
λ_c (τ_i = 0.5) [nm]	=	1000 ± 6
λ_s ($\tau_{i,U}$ = 0.00001) [nm]	=	730
λ_p ($\tau_{i,L}$ = 0.9) [nm]	=	1300

Refractive Index n
n_h (404.7 nm) = 1.558
n_g (435.8 nm) = 1.554
$n_{F'}$ (480.0 nm) = 1.549
n_F (486.1 nm) = 1.548

Density	
ρ [g/cm^3]	2.73

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
Tg [°C]	476

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{20/300°C}$ [10^{-6}/K]	10.3
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_K [nm/°C]	0.41

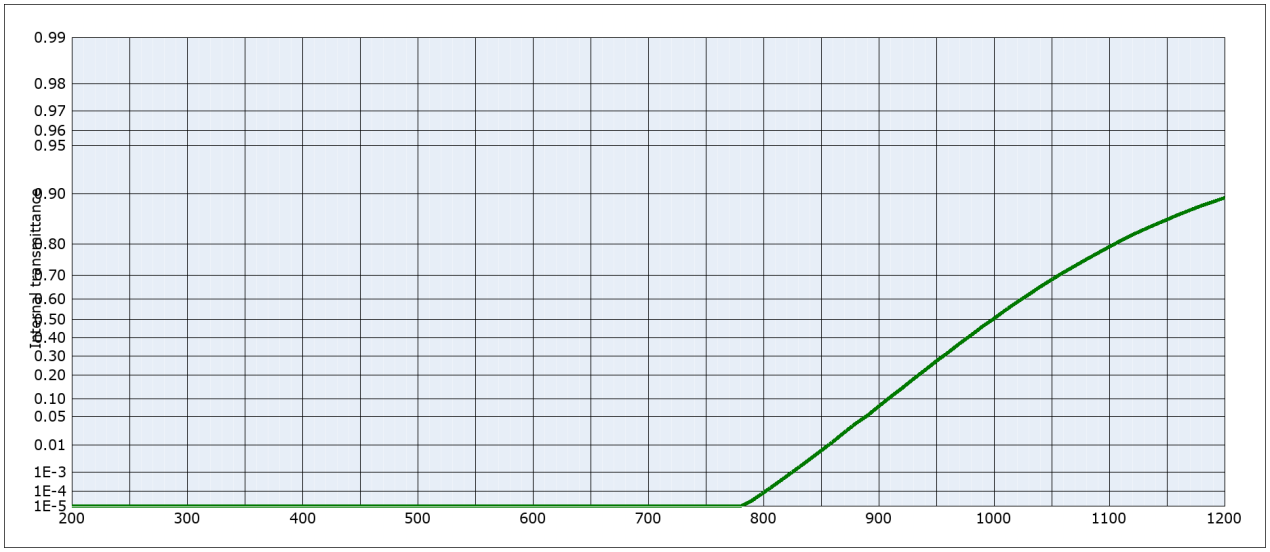
Notes
Ionically colored glass
Longpass filter
All data wihout tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	D65 (T_C = 6504 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			



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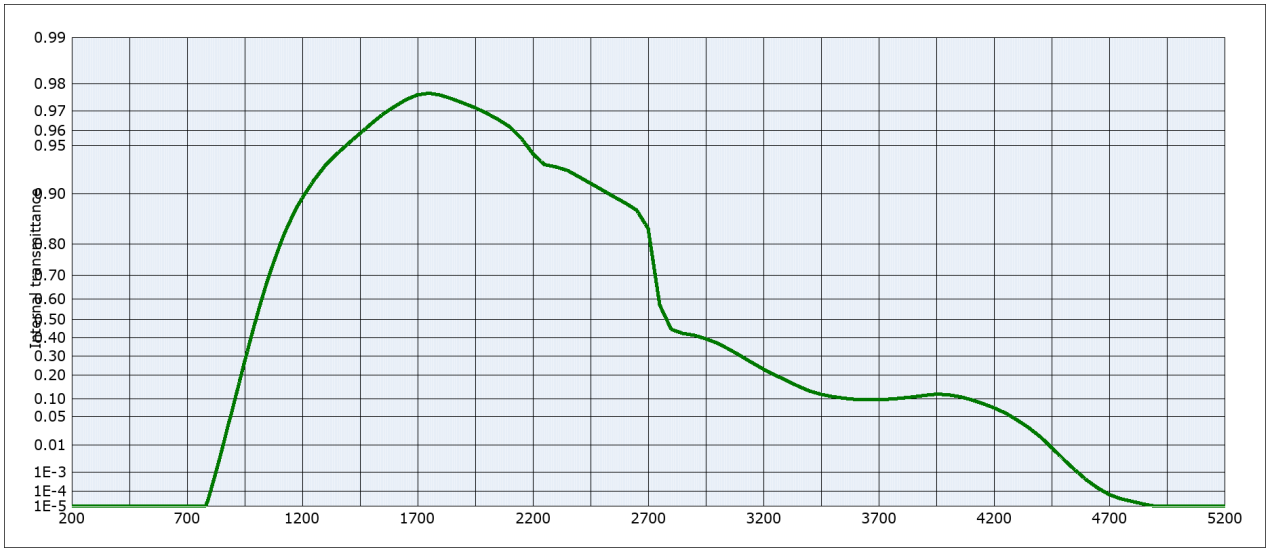

Internal transmittance τ_i at reference thickness d = 3 mm
The internal transmittance values, tabulated and graphically represented, are reference values only

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	$< 10^{-5}$	500	$< 10^{-5}$	800	$8.4 \cdot 10^{-5}$	1100	0.792	2200	0.944	3700	$9.8 \cdot 10^{-2}$
210	$< 10^{-5}$	510	$< 10^{-5}$	810	$2.5 \cdot 10^{-4}$	1110	0.808	2250	0.934	3750	0.100
220	$< 10^{-5}$	520	$< 10^{-5}$	820	$6.5 \cdot 10^{-4}$	1120	0.823	2300	0.932	3800	0.104
230	$< 10^{-5}$	530	$< 10^{-5}$	830	$1.6 \cdot 10^{-3}$	1130	0.835	2350	0.928	3850	0.108
240	$< 10^{-5}$	540	$< 10^{-5}$	840	$3.4 \cdot 10^{-3}$	1140	0.846	2400	0.922	3900	0.114
250	$< 10^{-5}$	550	$< 10^{-5}$	850	$6.8 \cdot 10^{-3}$	1150	0.856	2450	0.914	3950	0.118
260	$< 10^{-5}$	560	$< 10^{-5}$	860	$1.3 \cdot 10^{-2}$	1160	0.866	2500	0.905	4000	0.116
270	$< 10^{-5}$	570	$< 10^{-5}$	870	$2.2 \cdot 10^{-2}$	1170	0.874	2550	0.896	4050	0.109
280	$< 10^{-5}$	580	$< 10^{-5}$	880	$3.6 \cdot 10^{-2}$	1180	0.882	2600	0.886	4100	$9.8 \cdot 10^{-2}$
290	$< 10^{-5}$	590	$< 10^{-5}$	890	$5.2 \cdot 10^{-2}$	1190	0.888	2650	0.874	4150	$8.6 \cdot 10^{-2}$
300	$< 10^{-5}$	600	$< 10^{-5}$	900	$7.7 \cdot 10^{-2}$	1200	0.894	2700	0.837	4200	$7.2 \cdot 10^{-2}$
310	$< 10^{-5}$	610	$< 10^{-5}$	910	0.107	1250	0.918	2750	0.572	4250	$5.9 \cdot 10^{-2}$
320	$< 10^{-5}$	620	$< 10^{-5}$	920	0.141	1300	0.934	2800	0.446	4300	$4.3 \cdot 10^{-2}$
330	$< 10^{-5}$	630	$< 10^{-5}$	930	0.182	1350	0.944	2850	0.424	4350	$2.9 \cdot 10^{-2}$
340	$< 10^{-5}$	640	$< 10^{-5}$	940	0.225	1400	0.952	2900	0.414	4400	$1.8 \cdot 10^{-2}$
350	$< 10^{-5}$	650	$< 10^{-5}$	950	0.273	1450	0.958	2950	0.394	4450	$8.5 \cdot 10^{-3}$
360	$< 10^{-5}$	660	$< 10^{-5}$	960	0.318	1500	0.964	3000	0.370	4500	$3.5 \cdot 10^{-3}$
370	$< 10^{-5}$	670	$< 10^{-5}$	970	0.368	1550	0.969	3050	0.337	4550	$1.3 \cdot 10^{-3}$
380	$< 10^{-5}$	680	$< 10^{-5}$	980	0.413	1600	0.972	3100	0.302	4600	$4.4 \cdot 10^{-4}$
390	$< 10^{-5}$	690	$< 10^{-5}$	990	0.461	1650	0.975	3150	0.264	4650	$1.6 \cdot 10^{-4}$
400	$< 10^{-5}$	700	$< 10^{-5}$	1000	0.503	1700	0.976	3200	0.230	4700	$6.4 \cdot 10^{-5}$
410	$< 10^{-5}$	710	$< 10^{-5}$	1010	0.546	1750	0.977	3250	0.201	4750	$3.4 \cdot 10^{-5}$
420	$< 10^{-5}$	720	$< 10^{-5}$	1020	0.585	1800	0.976	3300	0.175	4800	$2.2 \cdot 10^{-5}$
430	$< 10^{-5}$	730	$< 10^{-5}$	1030	0.619	1850	0.975	3350	0.151	4850	$1.4 \cdot 10^{-5}$
440	$< 10^{-5}$	740	$< 10^{-5}$	1040	0.653	1900	0.973	3400	0.130	4900	$< 10^{-5}$
450	$< 10^{-5}$	750	$< 10^{-5}$	1050	0.682	1950	0.971	3450	0.117	4950	$< 10^{-5}$
460	$< 10^{-5}$	760	$< 10^{-5}$	1060	0.708	2000	0.969	3500	0.109	5000	$< 10^{-5}$
470	$< 10^{-5}$	770	$< 10^{-5}$	1070	0.732	2050	0.966	3550	0.103	5050	$< 10^{-5}$
480	$< 10^{-5}$	780	$< 10^{-5}$	1080	0.754	2100	0.962	3600	$9.9 \cdot 10^{-2}$	5100	$< 10^{-5}$
490	$< 10^{-5}$	790	$2.6 \cdot 10^{-5}$	1090	0.773	2150	0.955	3650	$9.8 \cdot 10^{-2}$	5150	$< 10^{-5}$

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