

## RG9

Reflection factor	
$P_d$	0.92

Reference thickness	
d [mm]	3

Spectral values guaranteed	
$\tau_i$ (720 nm)	$\leq 0.45$
$\tau_i$ (800 nm)	$\geq 0.92$
$\tau_i$ (1060 nm)	$\leq 0.40$

Refractive index n		
$\lambda$ [nm]	Element	n
587.6	He	1.52
852.1	Cs	1.51
1014	Hg	1.50

Density	
$\rho$ [g/cm <sup>3</sup> ]	2.58

Bubble content	
Bubble class	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
$T_g$ [°C]	519

Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	7.9
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	9.0
$\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K]	

Temperature coefficient	
$T_k$ [nm/°C]	0.06

### Notes

Ionically / Colloidally colored glass

Band pass filter / long pass filter

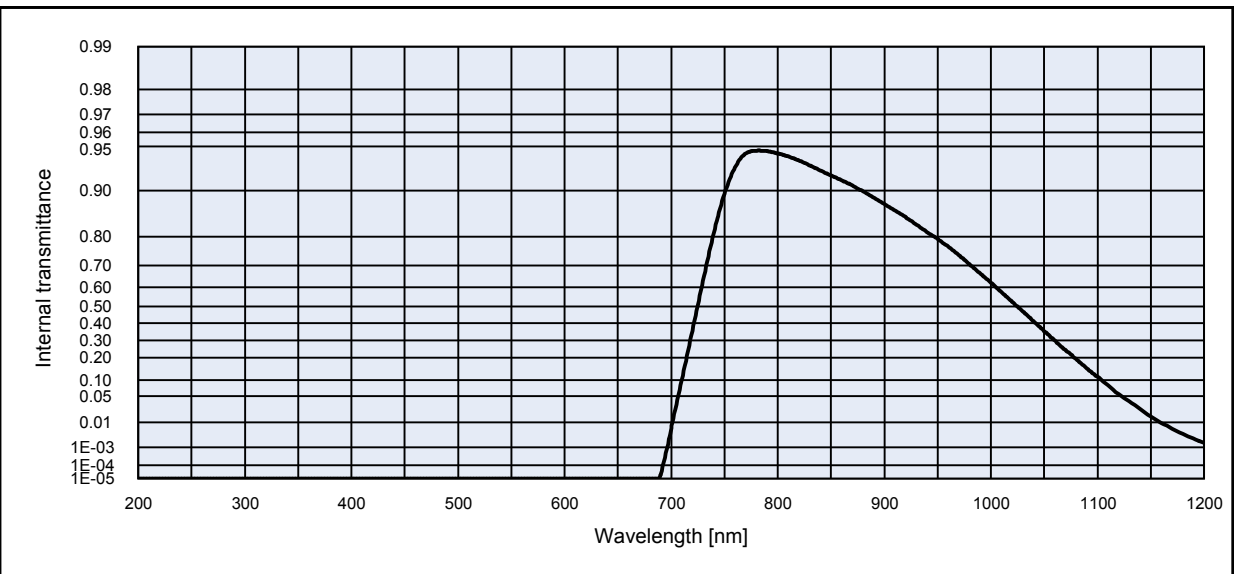
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

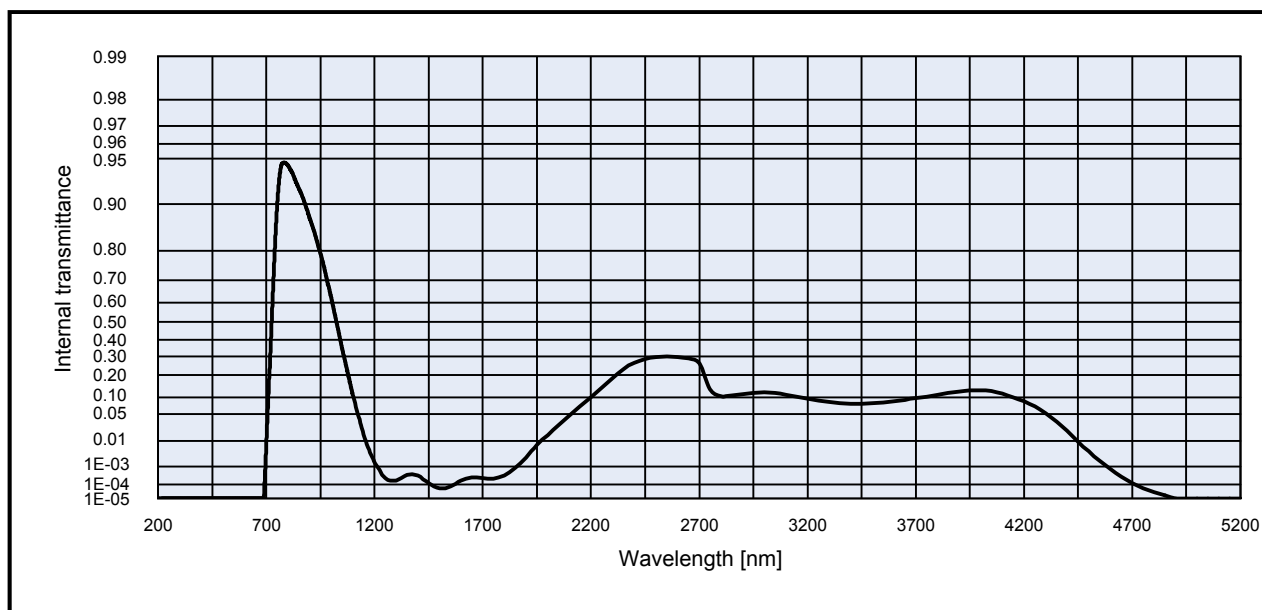
### Colorimetric evaluation

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

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

Illuminant	D65 ( $T_c = 6504$ K )		
	1	2	3
d [mm]			
x			
y			
Y			
$\lambda_d$ [nm]			
$P_e$			





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

$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$
200	< 1.0E-05	500	< 1.0E-05	800	9.4E-01	1100	1.1E-01	2200	1.0E-01
210	< 1.0E-05	510	< 1.0E-05	810	9.4E-01	1110	8.1E-02	2250	1.4E-01
220	< 1.0E-05	520	< 1.0E-05	820	9.4E-01	1120	5.6E-02	2300	1.8E-01
230	< 1.0E-05	530	< 1.0E-05	830	9.3E-01	1130	3.9E-02	2350	2.3E-01
240	< 1.0E-05	540	< 1.0E-05	840	9.3E-01	1140	2.5E-02	2400	2.6E-01
250	< 1.0E-05	550	< 1.0E-05	850	9.2E-01	1150	1.6E-02	2450	2.9E-01
260	< 1.0E-05	560	< 1.0E-05	860	9.1E-01	1160	9.6E-03	2500	3.0E-01
270	< 1.0E-05	570	< 1.0E-05	870	9.1E-01	1170	6.1E-03	2550	3.0E-01
280	< 1.0E-05	580	< 1.0E-05	880	9.0E-01	1180	3.9E-03	2600	3.0E-01
290	< 1.0E-05	590	< 1.0E-05	890	8.9E-01	1190	2.5E-03	2650	2.9E-01
300	< 1.0E-05	600	< 1.0E-05	900	8.8E-01	1200	1.6E-03	2700	2.6E-01
310	< 1.0E-05	610	< 1.0E-05	910	8.7E-01	1250	2.5E-04	2750	1.3E-01
320	< 1.0E-05	620	< 1.0E-05	920	8.5E-01	1300	1.8E-04	2800	1.0E-01
330	< 1.0E-05	630	< 1.0E-05	930	8.3E-01	1350	3.7E-04	2850	1.1E-01
340	< 1.0E-05	640	< 1.0E-05	940	8.1E-01	1400	3.4E-04	2900	1.1E-01
350	< 1.0E-05	650	< 1.0E-05	950	7.9E-01	1450	1.3E-04	2950	1.2E-01
360	< 1.0E-05	660	< 1.0E-05	960	7.7E-01	1500	5.7E-05	3000	1.2E-01
370	< 1.0E-05	670	< 1.0E-05	970	7.4E-01	1550	7.8E-05	3050	1.2E-01
380	< 1.0E-05	680	< 1.0E-05	980	7.1E-01	1600	1.7E-04	3100	1.1E-01
390	< 1.0E-05	690	1.9E-05	990	6.7E-01	1650	2.7E-04	3150	1.0E-01
400	< 1.0E-05	700	6.4E-03	1000	6.2E-01	1700	2.4E-04	3200	9.5E-02
410	< 1.0E-05	710	9.9E-02	1010	5.8E-01	1750	2.2E-04	3250	8.9E-02
420	< 1.0E-05	720	3.6E-01	1020	5.2E-01	1800	3.3E-04	3300	8.4E-02
430	< 1.0E-05	730	6.3E-01	1030	4.7E-01	1850	8.6E-04	3350	8.0E-02
440	< 1.0E-05	740	8.1E-01	1040	4.1E-01	1900	2.5E-03	3400	7.7E-02
450	< 1.0E-05	750	9.0E-01	1050	3.5E-01	1950	7.4E-03	3450	7.8E-02
460	< 1.0E-05	760	9.3E-01	1060	3.0E-01	2000	1.5E-02	3500	7.9E-02
470	< 1.0E-05	770	9.4E-01	1070	2.4E-01	2050	2.8E-02	3550	8.2E-02
480	< 1.0E-05	780	9.5E-01	1080	1.9E-01	2100	4.6E-02	3600	8.7E-02
490	< 1.0E-05	790	9.5E-01	1090	1.5E-01	2150	7.0E-02	3650	9.2E-02
								3700	9.7E-02
								3750	1.0E-01
								3800	1.1E-01
								3850	1.2E-01
								3900	1.2E-01
								3950	1.3E-01
								4000	1.3E-01
								4050	1.3E-01
								4100	1.1E-01
								4150	1.0E-01
								4200	8.6E-02
								4250	7.0E-02
								4300	5.2E-02
								4350	3.4E-02
								4400	2.0E-02
								4450	9.8E-03
								4500	4.4E-03
								4550	1.8E-03
								4600	7.2E-04
								4650	2.8E-04
								4700	1.2E-04
								4750	5.8E-05
								4800	3.2E-05
								4850	1.7E-05
								4900	< 1.0E-05
								4950	< 1.0E-05
								5000	< 1.0E-05
								5050	< 1.0E-05
								5100	< 1.0E-05
								5150	< 1.0E-05