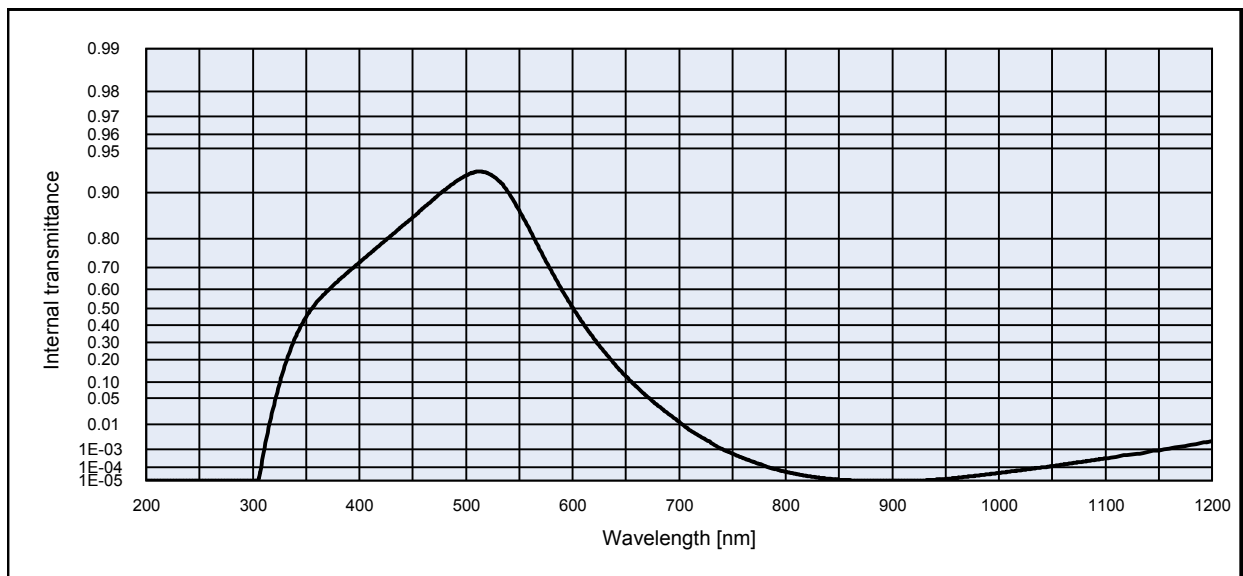


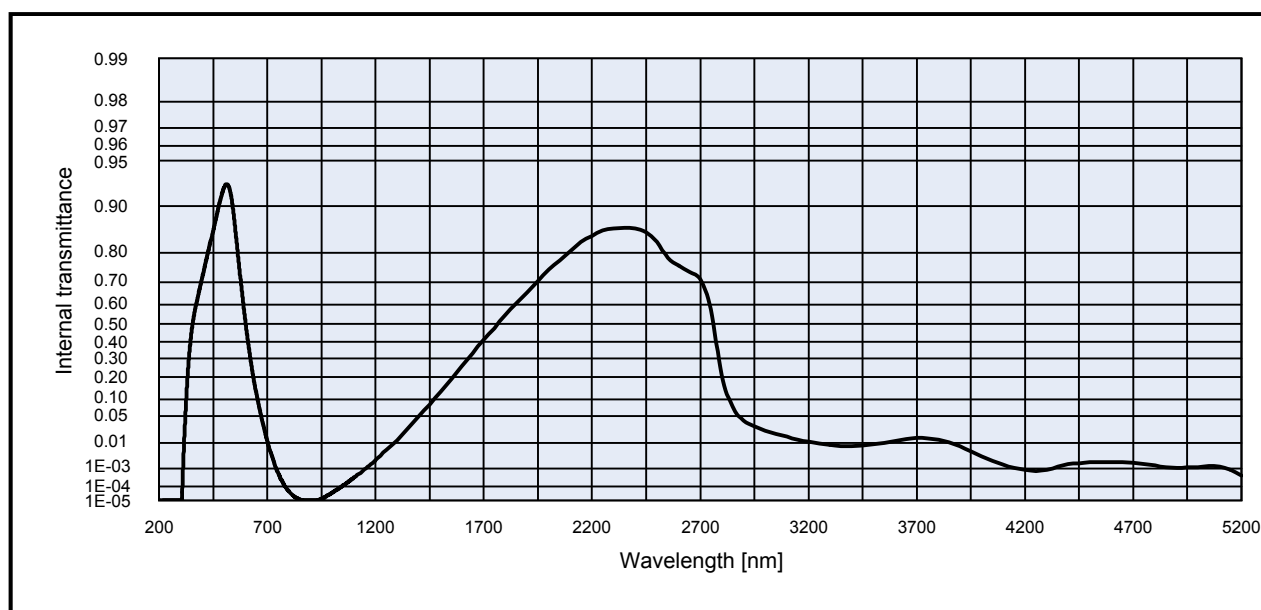
BG42

Density		Notes	
ρ [g/cm ³]	2.69	Ionically colored glass	
Bubble content		Band pass filter / short pass filter	
Reflection factor			
P_d	0.91		
Reference thickness			
d [mm]	1		
Spectral values guaranteed			
τ_i (350 nm)	≥ 0.40		
τ_i (405 nm)	≥ 0.65		
τ_i (514 nm)	≥ 0.88		
τ_i (633 nm)	≤ 0.27		
τ_i (694 nm)	≤ 0.03		
τ_i (1060 nm)	≤ 0.002		
Chemical resistance			
FR class	0		
SR class	2.0		
AR class	2.0		
Transformation temperature			
T_g [°C]	475		
Thermal expansion			
$\alpha_{-30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	7.3		
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	8.7		
$\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K]			
Temperature coefficient			
T_k [nm/°C]			
Refractive index n			
λ [nm]	Element	n	
405	Hg	1.55	
588	He	1.54	

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)				Illuminant Planck T = 3200 K				Illuminant D65 (T _c = 6504 K)			
d [mm]	1	2	3	d [mm]	1	2	3	d [mm]	1	2	3
x	0.359	0.305	0.270	x	0.338	0.288	0.256	x	0.254	0.222	0.203
y	0.439	0.456	0.466	y	0.424	0.437	0.445	y	0.332	0.334	0.337
Y	61	47	38	Y	63	48	39	Y	68	55	46
λ_d [nm]	501	501	501	λ_d [nm]	499	499	499	λ_d [nm]	492	492	492
P _e	0.20	0.32	0.40	P _e	0.21	0.33	0.41	P _e	0.21	0.33	0.39





Internal transmittance τ_i at reference thickness $d [\text{mm}] = 1$

The internal transmittance values, tabulated and graphically represented, are reference values only

$\lambda [\text{nm}]$	τ_i	$\lambda [\text{nm}]$	τ_i	$\lambda [\text{nm}]$	τ_i	$\lambda [\text{nm}]$	τ_i	$\lambda [\text{nm}]$	τ_i	$\lambda [\text{nm}]$	τ_i
200	< 1.0E-05	500	9.2E-01	800	4.7E-05	1100	3.3E-04	2200	8.4E-01	3700	1.4E-02
210	< 1.0E-05	510	9.3E-01	810	3.3E-05	1110	4.1E-04	2250	8.6E-01	3750	1.4E-02
220	< 1.0E-05	520	9.3E-01	820	2.3E-05	1120	5.0E-04	2300	8.6E-01	3800	1.2E-02
230	< 1.0E-05	530	9.2E-01	830	1.8E-05	1130	6.0E-04	2350	8.6E-01	3850	1.0E-02
240	< 1.0E-05	540	9.0E-01	840	1.4E-05	1140	7.7E-04	2400	8.6E-01	3900	8.0E-03
250	< 1.0E-05	550	8.7E-01	850	1.2E-05	1150	9.0E-04	2450	8.5E-01	3950	5.2E-03
260	< 1.0E-05	560	8.2E-01	860	1.1E-05	1160	1.1E-03	2500	8.3E-01	4000	3.3E-03
270	< 1.0E-05	570	7.6E-01	870	< 1.0E-05	1170	1.3E-03	2550	7.9E-01	4050	2.2E-03
280	< 1.0E-05	580	6.9E-01	880	< 1.0E-05	1180	1.6E-03	2600	7.6E-01	4100	1.5E-03
290	< 1.0E-05	590	6.0E-01	890	< 1.0E-05	1190	1.9E-03	2650	7.4E-01	4150	1.1E-03
300	< 1.0E-05	600	5.1E-01	900	< 1.0E-05	1200	2.3E-03	2700	7.1E-01	4200	8.4E-04
310	5.7E-04	610	4.1E-01	910	< 1.0E-05	1250	5.7E-03	2750	5.8E-01	4250	7.4E-04
320	3.5E-02	620	3.2E-01	920	< 1.0E-05	1300	1.2E-02	2800	2.1E-01	4300	8.4E-04
330	1.7E-01	630	2.4E-01	930	1.0E-05	1350	2.6E-02	2850	7.6E-02	4350	1.2E-03
340	3.3E-01	640	1.8E-01	940	1.2E-05	1400	5.0E-02	2900	4.0E-02	4400	1.5E-03
350	4.5E-01	650	1.2E-01	950	1.3E-05	1450	8.3E-02	2950	2.9E-02	4450	1.7E-03
360	5.3E-01	660	8.3E-02	960	1.6E-05	1500	1.3E-01	3000	2.3E-02	4500	1.9E-03
370	5.9E-01	670	5.4E-02	970	2.0E-05	1550	1.9E-01	3050	1.9E-02	4550	2.0E-03
380	6.4E-01	680	3.4E-02	980	2.5E-05	1600	2.6E-01	3100	1.5E-02	4600	2.0E-03
390	6.8E-01	690	2.1E-02	990	3.2E-05	1650	3.3E-01	3150	1.3E-02	4650	1.9E-03
400	7.2E-01	700	1.2E-02	1000	3.9E-05	1700	4.1E-01	3200	1.1E-02	4700	1.8E-03
410	7.5E-01	710	6.5E-03	1010	4.8E-05	1750	4.8E-01	3250	9.5E-03	4750	1.6E-03
420	7.8E-01	720	3.7E-03	1020	6.0E-05	1800	5.5E-01	3300	8.7E-03	4800	1.4E-03
430	8.1E-01	730	2.0E-03	1030	7.4E-05	1850	6.1E-01	3350	8.1E-03	4850	1.2E-03
440	8.3E-01	740	1.0E-03	1040	9.2E-05	1900	6.6E-01	3400	8.0E-03	4900	1.1E-03
450	8.5E-01	750	6.1E-04	1050	1.2E-04	1950	7.0E-01	3450	8.3E-03	4950	1.1E-03
460	8.7E-01	760	3.5E-04	1060	1.4E-04	2000	7.5E-01	3500	9.0E-03	5000	1.2E-03
470	8.9E-01	770	2.1E-04	1070	1.8E-04	2050	7.8E-01	3550	1.0E-02	5050	1.3E-03
480	9.0E-01	780	1.2E-04	1080	2.2E-04	2100	8.0E-01	3600	1.2E-02	5100	1.2E-03
490	9.2E-01	790	7.2E-05	1090	2.7E-04	2150	8.3E-01	3650	1.3E-02	5150	8.6E-04