

## BG3

Reflection factor	
$P_d$	0.92

Reference thickness	
d [mm]	1

Spectral values guaranteed	
$\tau_i$ (365 nm)	$\geq 0.94$
$\tau_i$ (633 nm)	$\leq 5 \cdot 10^{-5}$

Refractive index n		
$\lambda$ [nm]	Element	n
302.1	Hg	1.55
435.8	Hg	1.52
587.6	He	1.51
1014	Hg	1.50

Density	
$\rho$ [g/cm <sup>3</sup> ]	2.56

Bubble content	
Bubble class	1

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
$T_g$ [°C]	478

Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	8.8
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	10.2
$\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K]	

Temperature coefficient	
$T_k$ [nm/°C]	

### Notes

Ionically colored glass

Band pass filter

V

Transmission changes are possible under the action of intense ultraviolet radiation

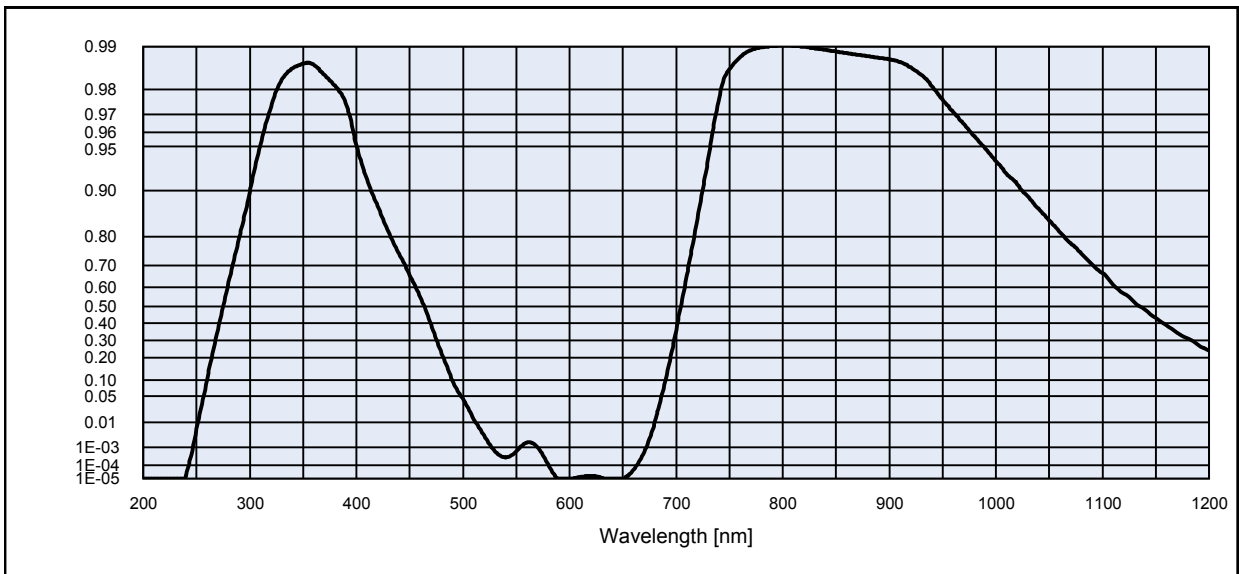
**All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".**

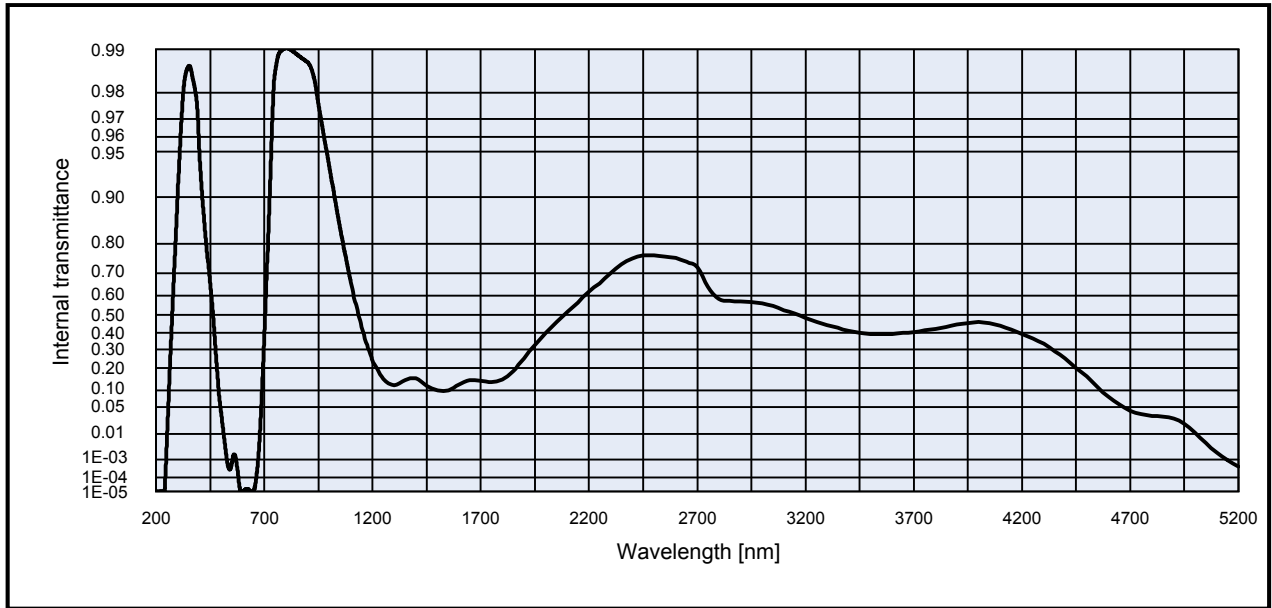
### Colorimetric evaluation

Illuminant	A ( Planck T = 2856 K )		
	1	2	3
$x$	0.160	0.166	0.170
$y$	0.042	0.024	0.020
Y	1	0	0
$\lambda_d$ [nm]	458	447	440
$P_e$	0.96	0.98	0.98

Illuminant	Planck T = 3200 K		
	1	2	3
$x$	0.157	0.163	0.167
$y$	0.038	0.022	0.018
Y	1	0	0
$\lambda_d$ [nm]	457	447	442
$P_e$	0.97	0.98	0.99

Illuminant	D65 ( $T_c = 6504$ K )		
	1	2	3
$x$	0.154	0.160	0.163
$y$	0.029	0.018	0.014
Y	2	1	0
$\lambda_d$ [nm]	455	448	444
$P_e$	0.98	0.99	1.00





**Internal transmittance  $\tau_i$  at reference thickness  $d$  [mm] = 1**  
**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]	$\tau_i$	$\lambda$ [nm]	$\tau_i$
200	< 1.0E-05	500	4.3E-02	800	9.9E-01	1100	6.7E-01	2200	6.2E-01	3700	4.0E-01
210	< 1.0E-05	510	1.3E-02	810	9.9E-01	1110	6.2E-01	2250	6.6E-01	3750	4.1E-01
220	< 1.0E-05	520	3.2E-03	820	9.9E-01	1120	5.7E-01	2300	7.0E-01	3800	4.2E-01
230	< 1.0E-05	530	6.4E-04	830	9.9E-01	1130	5.2E-01	2350	7.3E-01	3850	4.3E-01
240	1.9E-05	540	3.0E-04	840	9.9E-01	1140	4.8E-01	2400	7.5E-01	3900	4.5E-01
250	6.1E-03	550	6.2E-04	850	9.9E-01	1150	4.3E-01	2450	7.6E-01	3950	4.6E-01
260	1.0E-01	560	1.7E-03	860	9.9E-01	1160	3.9E-01	2500	7.7E-01	4000	4.6E-01
270	3.6E-01	570	1.0E-03	870	9.9E-01	1170	3.4E-01	2550	7.6E-01	4050	4.6E-01
280	6.3E-01	580	1.1E-04	880	9.9E-01	1180	3.1E-01	2600	7.6E-01	4100	4.4E-01
290	8.0E-01	590	< 1.0E-05	890	9.9E-01	1190	2.7E-01	2650	7.4E-01	4150	4.2E-01
300	9.0E-01	600	< 1.0E-05	900	9.9E-01	1200	2.4E-01	2700	7.2E-01	4200	3.9E-01
310	9.5E-01	610	1.3E-05	910	9.9E-01	1250	1.5E-01	2750	6.4E-01	4250	3.7E-01
320	9.7E-01	620	1.6E-05	920	9.9E-01	1300	1.2E-01	2800	5.9E-01	4300	3.4E-01
330	9.8E-01	630	1.2E-05	930	9.8E-01	1350	1.4E-01	2850	5.8E-01	4350	2.9E-01
340	9.9E-01	640	< 1.0E-05	940	9.8E-01	1400	1.5E-01	2900	5.7E-01	4400	2.5E-01
350	9.9E-01	650	< 1.0E-05	950	9.8E-01	1450	1.2E-01	2950	5.7E-01	4450	2.0E-01
360	9.9E-01	660	4.7E-05	960	9.7E-01	1500	1.0E-01	3000	5.6E-01	4500	1.6E-01
370	9.8E-01	670	5.9E-04	970	9.7E-01	1550	1.0E-01	3050	5.5E-01	4550	1.1E-01
380	9.8E-01	680	1.0E-02	980	9.6E-01	1600	1.2E-01	3100	5.3E-01	4600	7.8E-02
390	9.8E-01	690	1.0E-01	990	9.5E-01	1650	1.4E-01	3150	5.1E-01	4650	5.6E-02
400	9.5E-01	700	3.6E-01	1000	9.4E-01	1700	1.4E-01	3200	4.8E-01	4700	4.2E-02
410	9.2E-01	710	6.6E-01	1010	9.2E-01	1750	1.3E-01	3250	4.6E-01	4750	3.5E-02
420	8.7E-01	720	8.5E-01	1020	9.1E-01	1800	1.4E-01	3300	4.4E-01	4800	3.2E-02
430	8.2E-01	730	9.4E-01	1030	8.9E-01	1850	1.8E-01	3350	4.3E-01	4850	3.1E-02
440	7.5E-01	740	9.8E-01	1040	8.7E-01	1900	2.5E-01	3400	4.1E-01	4900	2.7E-02
450	6.6E-01	750	9.9E-01	1050	8.4E-01	1950	3.3E-01	3450	4.0E-01	4950	2.0E-02
460	5.5E-01	760	9.9E-01	1060	8.1E-01	2000	4.0E-01	3500	3.9E-01	5000	1.1E-02
470	3.9E-01	770	9.9E-01	1070	7.8E-01	2050	4.6E-01	3550	3.9E-01	5050	5.1E-03
480	2.2E-01	780	9.9E-01	1080	7.5E-01	2100	5.2E-01	3600	3.9E-01	5100	2.0E-03
490	9.7E-02	790	9.9E-01	1090	7.1E-01	2150	5.7E-01	3650	4.0E-01	5150	9.1E-04