

## GG495

Reflection factor	
$P_d$	0.92

Reference thickness	
d [mm]	3

Spectral values guaranteed	
$\lambda_c$ ( $\tau_i = 0.50$ ) [nm]	= 495 ± 6
$\lambda_s$ ( $\tau_{is} = 1 \cdot 10^{-5}$ ) [nm]	= 430
$\lambda_p$ ( $\tau_{ip} = 0.92$ ) [nm]	= 560

Refractive index n		
$\lambda$ [nm]	Element	n
546	Hg	1.53
587.6	He	1.52
852.1	Cs	1.52
1014	Hg	1.51

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

Bubble content	
Bubble class	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
$T_g$ [°C]	535

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

Temperature coefficient	
$T_k$ [nm/°C]	0.10

### Notes

Colloidally colored glass

Long pass filter

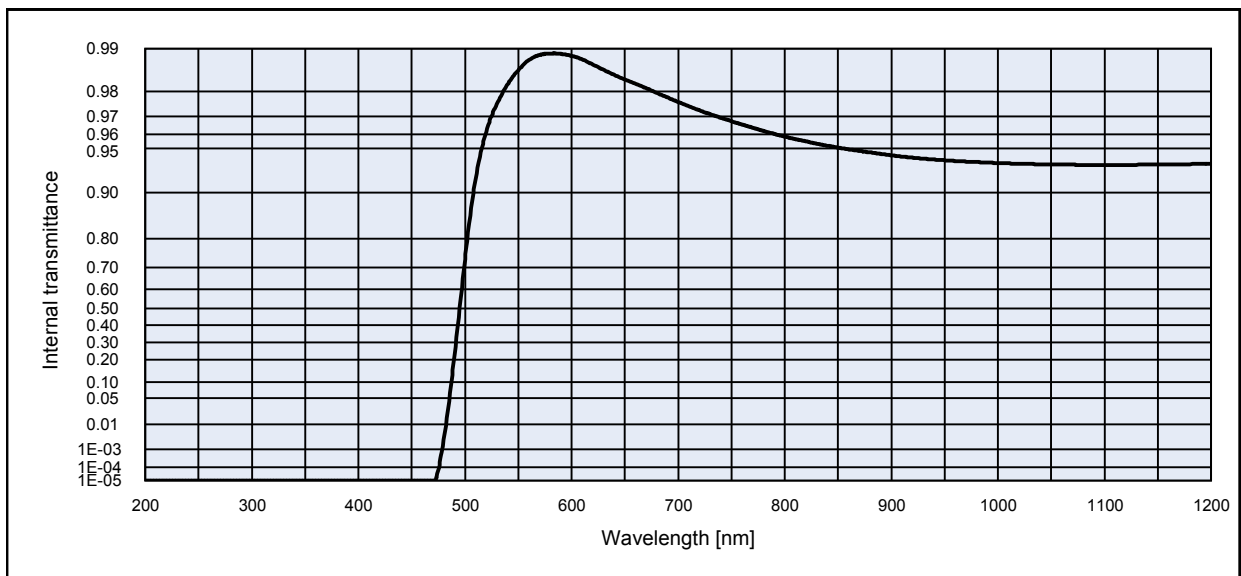
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

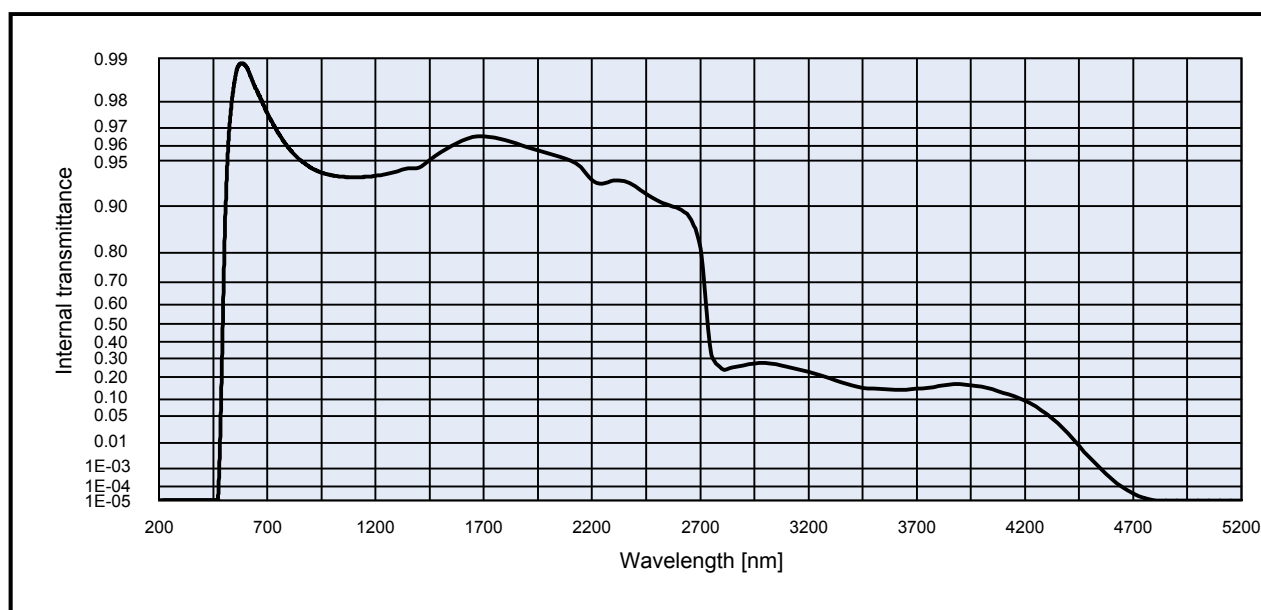
### Colorimetric evaluation

Illuminant	A ( Planck T = 2856 K )		
	1	2	3
$x$	0.502	0.507	0.509
$y$	0.469	0.472	0.472
Y	89	88	88
$\lambda_d$ [nm]	580	581	581
$P_e$	0.81	0.86	0.88

Illuminant	Planck T = 3200 K		
	1	2	3
$x$	0.488	0.494	0.497
$y$	0.478	0.482	0.482
Y	89	88	87
$\lambda_d$ [nm]	579	579	579
$P_e$	0.82	0.87	0.89

Illuminant	D65 ( $T_c = 6504$ K )		
	1	2	3
$x$	0.422	0.433	0.438
$y$	0.514	0.525	0.527
Y	87	85	84
$\lambda_d$ [nm]	570	571	571
$P_e$	0.82	0.89	0.90





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]	$\tau_i$	$\lambda$ [nm]	$\tau_i$
200	< 1.0E-05	500	7.3E-01	800	9.6E-01	1100	9.4E-01	2200	9.3E-01	3700	1.4E-01
210	< 1.0E-05	510	9.2E-01	810	9.6E-01	1110	9.4E-01	2250	9.3E-01	3750	1.5E-01
220	< 1.0E-05	520	9.6E-01	820	9.6E-01	1120	9.4E-01	2300	9.3E-01	3800	1.6E-01
230	< 1.0E-05	530	9.8E-01	830	9.5E-01	1130	9.4E-01	2350	9.3E-01	3850	1.6E-01
240	< 1.0E-05	540	9.8E-01	840	9.5E-01	1140	9.4E-01	2400	9.3E-01	3900	1.6E-01
250	< 1.0E-05	550	9.9E-01	850	9.5E-01	1150	9.4E-01	2450	9.2E-01	3950	1.6E-01
260	< 1.0E-05	560	9.9E-01	860	9.5E-01	1160	9.4E-01	2500	9.1E-01	4000	1.5E-01
270	< 1.0E-05	570	9.9E-01	870	9.5E-01	1170	9.4E-01	2550	9.0E-01	4050	1.4E-01
280	< 1.0E-05	580	9.9E-01	880	9.5E-01	1180	9.4E-01	2600	9.0E-01	4100	1.3E-01
290	< 1.0E-05	590	9.9E-01	890	9.5E-01	1190	9.4E-01	2650	8.8E-01	4150	1.1E-01
300	< 1.0E-05	600	9.9E-01	900	9.4E-01	1200	9.4E-01	2700	8.1E-01	4200	9.5E-02
310	< 1.0E-05	610	9.9E-01	910	9.4E-01	1250	9.4E-01	2750	3.4E-01	4250	7.6E-02
320	< 1.0E-05	620	9.9E-01	920	9.4E-01	1300	9.4E-01	2800	2.4E-01	4300	5.5E-02
330	< 1.0E-05	630	9.9E-01	930	9.4E-01	1350	9.4E-01	2850	2.5E-01	4350	3.5E-02
340	< 1.0E-05	640	9.8E-01	940	9.4E-01	1400	9.4E-01	2900	2.6E-01	4400	1.9E-02
350	< 1.0E-05	650	9.8E-01	950	9.4E-01	1450	9.5E-01	2950	2.7E-01	4450	8.2E-03
360	< 1.0E-05	660	9.8E-01	960	9.4E-01	1500	9.6E-01	3000	2.8E-01	4500	2.9E-03
370	< 1.0E-05	670	9.8E-01	970	9.4E-01	1550	9.6E-01	3050	2.7E-01	4550	1.0E-03
380	< 1.0E-05	680	9.8E-01	980	9.4E-01	1600	9.6E-01	3100	2.6E-01	4600	3.0E-04
390	< 1.0E-05	690	9.8E-01	990	9.4E-01	1650	9.7E-01	3150	2.4E-01	4650	9.6E-05
400	< 1.0E-05	700	9.8E-01	1000	9.4E-01	1700	9.7E-01	3200	2.3E-01	4700	3.4E-05
410	< 1.0E-05	710	9.7E-01	1010	9.4E-01	1750	9.6E-01	3250	2.1E-01	4750	1.5E-05
420	< 1.0E-05	720	9.7E-01	1020	9.4E-01	1800	9.6E-01	3300	1.9E-01	4800	< 1.0E-05
430	< 1.0E-05	730	9.7E-01	1030	9.4E-01	1850	9.6E-01	3350	1.8E-01	4850	< 1.0E-05
440	< 1.0E-05	740	9.7E-01	1040	9.4E-01	1900	9.6E-01	3400	1.6E-01	4900	< 1.0E-05
450	< 1.0E-05	750	9.7E-01	1050	9.4E-01	1950	9.6E-01	3450	1.5E-01	4950	< 1.0E-05
460	< 1.0E-05	760	9.7E-01	1060	9.4E-01	2000	9.6E-01	3500	1.4E-01	5000	< 1.0E-05
470	< 1.0E-05	770	9.6E-01	1070	9.4E-01	2050	9.5E-01	3550	1.4E-01	5050	< 1.0E-05
480	2.8E-03	780	9.6E-01	1080	9.4E-01	2100	9.5E-01	3600	1.4E-01	5100	< 1.0E-05
490	2.2E-01	790	9.6E-01	1090	9.4E-01	2150	9.4E-01	3650	1.4E-01	5150	< 1.0E-05