

RG830

| Reflection factor | |
|-------------------|------|
| P_d | 0.91 |

| Reference thickness | |
|---------------------|---|
| d [mm] | 3 |

| Spectral values guaranteed | |
|--|-----------|
| λ_c ($\tau_i = 0.50$) [nm] | = 830 ± 9 |
| λ_s ($\tau_{is} = 1 \cdot 10^{-5}$) [nm] | = 670 |
| λ_p ($\tau_{ip} = 0.97$) [nm] | = 950 |

| Refractive index n | | |
|--------------------|---------|------|
| λ [nm] | Element | n |
| 587.6 | He | 1.56 |
| 852.1 | Cs | 1.55 |
| 1014 | Hg | 1.55 |

| Density | |
|-----------------------------|------|
| ρ [g/cm ³] | 2.94 |

| Bubble content | |
|----------------|---|
| Bubble class | 3 |

| Chemical resistance | |
|---------------------|------|
| FR class | 5 |
| SR class | 53.4 |
| AR class | 1.3 |

| Transformation temperature | |
|----------------------------|-----|
| T_g [°C] | 554 |

| Thermal expansion | |
|--|------|
| $\alpha_{-30/+70^\circ\text{C}}$ [10 ⁻⁶ /K] | 9.5 |
| $\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K] | 10.5 |
| $\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K] | |

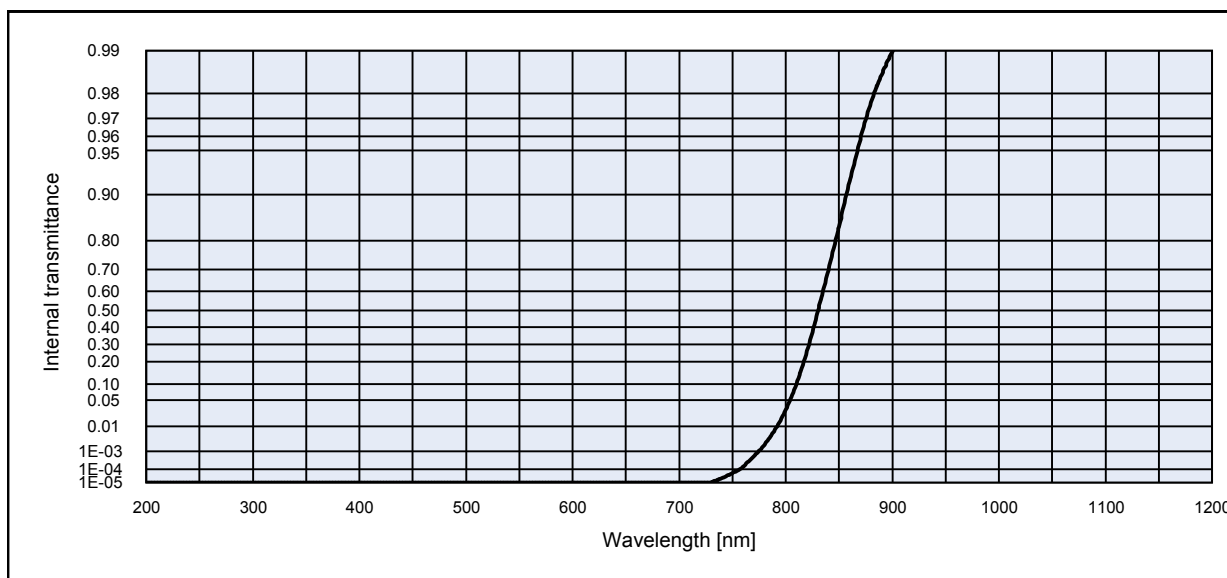
| Temperature coefficient | |
|-------------------------|------|
| T_k [nm/°C] | 0.23 |

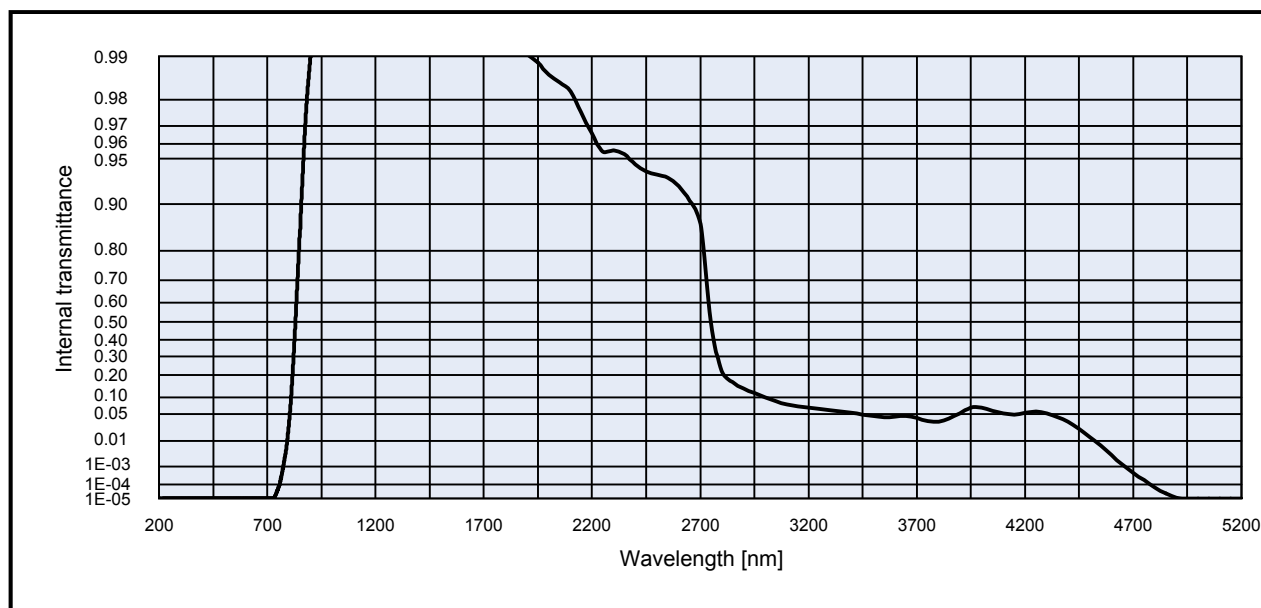
Notes

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|---------------------------|
| Colloidally colored glass |
| Long pass filter |
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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] |
| x | | | | x | | | | x | | | |
| y | | | | y | | | | y | | | |
| Y | | | | Y | | | | Y | | | |
| λ_d [nm] | | | | λ_d [nm] | | | | λ_d [nm] | | | |
| P_e | | | | P_e | | | | P_e | | | |





Internal transmittance τ_i at reference thickness d [mm] = 3
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 | < 1.0E-05 | 500 | < 1.0E-05 | 800 | 3.0E-02 | 1100 | 1.0E+00 | 2200 | 9.7E-01 | 3700 | 4.1E-02 |
| 210 | < 1.0E-05 | 510 | < 1.0E-05 | 810 | 9.9E-02 | 1110 | 1.0E+00 | 2250 | 9.6E-01 | 3750 | 3.6E-02 |
| 220 | < 1.0E-05 | 520 | < 1.0E-05 | 820 | 2.6E-01 | 1120 | 1.0E+00 | 2300 | 9.6E-01 | 3800 | 3.4E-02 |
| 230 | < 1.0E-05 | 530 | < 1.0E-05 | 830 | 4.9E-01 | 1130 | 1.0E+00 | 2350 | 9.5E-01 | 3850 | 4.1E-02 |
| 240 | < 1.0E-05 | 540 | < 1.0E-05 | 840 | 7.0E-01 | 1140 | 1.0E+00 | 2400 | 9.5E-01 | 3900 | 5.1E-02 |
| 250 | < 1.0E-05 | 550 | < 1.0E-05 | 850 | 8.4E-01 | 1150 | 1.0E+00 | 2450 | 9.4E-01 | 3950 | 6.6E-02 |
| 260 | < 1.0E-05 | 560 | < 1.0E-05 | 860 | 9.2E-01 | 1160 | 1.0E+00 | 2500 | 9.4E-01 | 4000 | 6.7E-02 |
| 270 | < 1.0E-05 | 570 | < 1.0E-05 | 870 | 9.6E-01 | 1170 | 1.0E+00 | 2550 | 9.3E-01 | 4050 | 5.9E-02 |
| 280 | < 1.0E-05 | 580 | < 1.0E-05 | 880 | 9.8E-01 | 1180 | 1.0E+00 | 2600 | 9.2E-01 | 4100 | 5.1E-02 |
| 290 | < 1.0E-05 | 590 | < 1.0E-05 | 890 | 9.9E-01 | 1190 | 1.0E+00 | 2650 | 9.0E-01 | 4150 | 4.8E-02 |
| 300 | < 1.0E-05 | 600 | < 1.0E-05 | 900 | 9.9E-01 | 1200 | 1.0E+00 | 2700 | 8.6E-01 | 4200 | 5.4E-02 |
| 310 | < 1.0E-05 | 610 | < 1.0E-05 | 910 | 9.9E-01 | 1250 | 1.0E+00 | 2750 | 5.0E-01 | 4250 | 5.6E-02 |
| 320 | < 1.0E-05 | 620 | < 1.0E-05 | 920 | 9.9E-01 | 1300 | 1.0E+00 | 2800 | 2.2E-01 | 4300 | 5.1E-02 |
| 330 | < 1.0E-05 | 630 | < 1.0E-05 | 930 | 1.0E+00 | 1350 | 1.0E+00 | 2850 | 1.7E-01 | 4350 | 4.3E-02 |
| 340 | < 1.0E-05 | 640 | < 1.0E-05 | 940 | 1.0E+00 | 1400 | 1.0E+00 | 2900 | 1.4E-01 | 4400 | 3.3E-02 |
| 350 | < 1.0E-05 | 650 | < 1.0E-05 | 950 | 1.0E+00 | 1450 | 1.0E+00 | 2950 | 1.2E-01 | 4450 | 2.2E-02 |
| 360 | < 1.0E-05 | 660 | < 1.0E-05 | 960 | 1.0E+00 | 1500 | 1.0E+00 | 3000 | 1.0E-01 | 4500 | 1.3E-02 |
| 370 | < 1.0E-05 | 670 | < 1.0E-05 | 970 | 1.0E+00 | 1550 | 1.0E+00 | 3050 | 8.6E-02 | 4550 | 7.1E-03 |
| 380 | < 1.0E-05 | 680 | < 1.0E-05 | 980 | 1.0E+00 | 1600 | 1.0E+00 | 3100 | 7.7E-02 | 4600 | 3.1E-03 |
| 390 | < 1.0E-05 | 690 | < 1.0E-05 | 990 | 1.0E+00 | 1650 | 1.0E+00 | 3150 | 7.0E-02 | 4650 | 1.2E-03 |
| 400 | < 1.0E-05 | 700 | < 1.0E-05 | 1000 | 1.0E+00 | 1700 | 1.0E+00 | 3200 | 6.6E-02 | 4700 | 4.9E-04 |
| 410 | < 1.0E-05 | 710 | < 1.0E-05 | 1010 | 1.0E+00 | 1750 | 9.9E-01 | 3250 | 6.3E-02 | 4750 | 1.8E-04 |
| 420 | < 1.0E-05 | 720 | < 1.0E-05 | 1020 | 1.0E+00 | 1800 | 9.9E-01 | 3300 | 5.9E-02 | 4800 | 6.2E-05 |
| 430 | < 1.0E-05 | 730 | 1.0E-05 | 1030 | 1.0E+00 | 1850 | 9.9E-01 | 3350 | 5.6E-02 | 4850 | 2.4E-05 |
| 440 | < 1.0E-05 | 740 | 2.3E-05 | 1040 | 1.0E+00 | 1900 | 9.9E-01 | 3400 | 5.2E-02 | 4900 | 1.1E-05 |
| 450 | < 1.0E-05 | 750 | 5.2E-05 | 1050 | 1.0E+00 | 1950 | 9.9E-01 | 3450 | 4.9E-02 | 4950 | < 1.0E-05 |
| 460 | < 1.0E-05 | 760 | 1.4E-04 | 1060 | 1.0E+00 | 2000 | 9.9E-01 | 3500 | 4.6E-02 | 5000 | < 1.0E-05 |
| 470 | < 1.0E-05 | 770 | 5.6E-04 | 1070 | 1.0E+00 | 2050 | 9.8E-01 | 3550 | 4.3E-02 | 5050 | < 1.0E-05 |
| 480 | < 1.0E-05 | 780 | 2.0E-03 | 1080 | 1.0E+00 | 2100 | 9.8E-01 | 3600 | 4.4E-02 | 5100 | < 1.0E-05 |
| 490 | < 1.0E-05 | 790 | 7.8E-03 | 1090 | 1.0E+00 | 2150 | 9.8E-01 | 3650 | 4.5E-02 | 5150 | < 1.0E-05 |