

Y10 Miniprism Refractor





YIO is pearl in appearance and is an excellent diffusing panel for light control of T5 lamps and T8 fluorescent lamps.

Applications

- General offices
- Computer rooms
- Schools and colleges
- Hospitals
- Supermarkets

Description

Y10 Acrylic lenses have a raised prismatic pattern of 3.1mm square base male cones running parallel and perpendicular to the length and width of the lens. The overall pattern provides a soft surface appearance, good lamp obscurity and very low brightness at angles close to the horizontal. The special optical properties of Y10 are obtained by incorporating spherical, high molecular weight polymer beads with a different refractive index into the acrylic matrix.

The difference in refractive indices changes the direction of light travel within the manufactured part. The net result is an even distribution of light exiting the part.

Quality

Acrylic material used in Y10 meets or exceeds recognised standards.

Under normal interior conditions these lenses will perform satisfactorily for 20 years.

Y10 is manufactured from 100% Acrylic (Polymethylmethacrylate). Flammability Rating-UL94 HB.

Performance

(Based on 1x28w T5 photometric tests on reverse)

- Light output ratio of 90%
- Typical unified glare rating of 19

Dimensions

Thickness

Y10 is 3.4mm thick with prestressed arch to span 1200mm x 600mm



Standard Sizes (nominal)

1500mm x 600mm 1200mm x 600mm 1200mm x 300mm

600mm x 600mm

Photopia performance evaluation



File no.: YORKY10



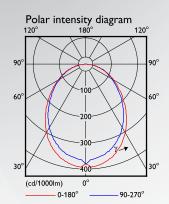




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Photometric Data

FSN128 1 x T5 28W / 840 Y10 with internal reflector

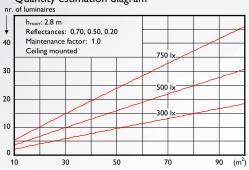


0.90 Light output ratio Service upward Service downward

51 80 95 100 90 CIE flux code

SHR NOM (square) SHR MAX (square) SHR MAX (continuous) 1.25 1.66 UGRcen (4Hx8H, 0.25H)

Quantity estimation diagram

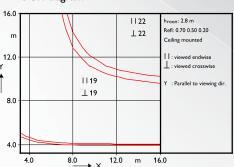


Utilisation factor table

| Ref | Reflectances | | | Room Index | | | | | | | | |
|------|--------------|------|------|------------|------|------|------|------|------|------|------|--|
| С | w | F | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 | |
| 0.70 | 0.50 | 0.20 | 54 | 62 | 69 | 73 | 79 | 84 | 87 | 91 | 93 | |
| 0.70 | 0.30 | 0.20 | 47 | 56 | 62 | 67 | 74 | 79 | 82 | 87 | 90 | |
| 0.70 | 0.10 | 0.20 | 42 | 51 | 57 | 62 | 70 | 75 | 79 | 84 | 87 | |
| 0.50 | 0.50 | 0.20 | 52 | 61 | 67 | 71 | 77 | 81 | 83 | 87 | 89 | |
| 0.50 | 0.30 | 0.20 | 46 | 55 | 61 | 66 | 72 | 77 | 80 | 84 | 87 | |
| 0.50 | 0.10 | 0.20 | 42 | 50 | 57 | 61 | 68 | 73 | 77 | 81 | 85 | |
| 0.30 | 0.50 | 0.20 | 51 | 59 | 65 | 69 | 74 | 78 | 80 | 84 | 86 | |
| 0.30 | 0.30 | 0.20 | 45 | 54 | 60 | 64 | 70 | 74 | 77 | 81 | 84 | |
| 0.30 | 0.10 | 0.20 | 41 | 50 | 56 | 60 | 67 | 71 | 75 | 79 | 82 | |
| 0.00 | 0.00 | 0.00 | 39 | 48 | 53 | 58 | 64 | 68 | 71 | 75 | 78 | |

Ceiling mounted

UGR diagram



Luminance Table

| Plane Cone | 0.0 | 15.0 | 30.0 | 45.0 | 60.0 | 75.0 | 90.0 |
|---------------|------|------|------|------|------|------|------|
| 45.0 | 2347 | 2330 | 2300 | 2267 | 2245 | 2201 | 2195 |
| 50.0 | 2203 | 2178 | 2154 | 2126 | 2111 | 2069 | 2073 |
| 55.0 | 2081 | 2050 | 2018 | 1994 | 1985 | 1959 | 1960 |
| 60.0 | 1981 | 1951 | 1912 | 1874 | 1878 | 1873 | 1887 |
| 65.0 | 1913 | 1879 | 1835 | 1793 | 1799 | 1818 | 1841 |
| 70.0 | 1870 | 1830 | 1778 | 1752 | 1757 | 1786 | 1820 |
| 75.0 | 1851 | 1806 | 1770 | 1757 | 1759 | 1780 | 1825 |
| 80.0 | 1828 | 1841 | 1845 | 1813 | 1831 | 1838 | 1840 |
| 85.0 | 1776 | 2011 | 2012 | 1931 | 2023 | 2076 | 1850 |
| 90.0 | | | | | | | |
| | | | | | | | |

(cd/m²)