

Y10 Miniprism Refractor



Y10 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

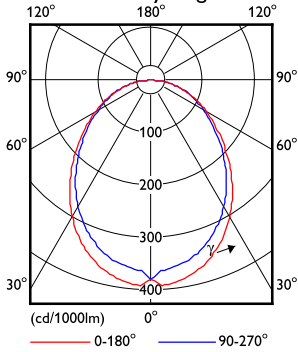
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Photometric Data

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

Polar intensity diagram

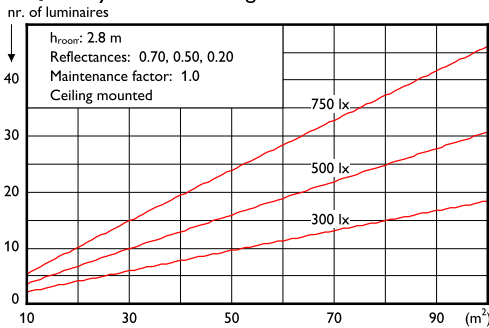


Light output ratio 0.90
 Service upward 0.00
 Service downward 0.90

CIE flux code 51 80 95 100 90

SHR NOM (square) 1.25
 SHR MAX (square) 1.32
 SHR MAX (continuous) 1.66
 UGRcen (4Hx8H, 0.25H) 19

Quantity estimation diagram

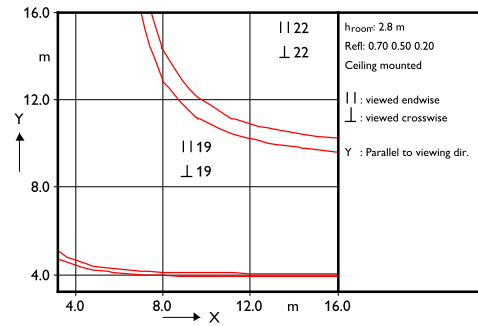


Utilisation factor table

Reflectances			Room Index								
C	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)