



Y12 Prismatic Panel

An economical diffuser for standard lighting applications.

Applications

- General offices
- Clinical facilities
- Retail areas
- Skylights
- Schools

Description

Y12 is the original prismatic pattern lighting panel whose overall efficiencies and lamp concealment qualities have become the benchmarks against which other prismatic panels are judged. With a 5mm diagonal female prism pattern, Y12 provides maximum efficiency and good brightness control in the direct glare zone.

Quality

Acrylic material used in Y12 meets or exceeds recognised standards.

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

Y12 is manufactured from 100% Acrylic (Polymethylmethacrylate). Flammability Rating-UL94 HB.

Performance

(Based on photometric tests on reverse)

- Light output ratio of 74%
- Typical unified glare rating of 22

Dimensions

Thickness

Prism depth 1.8mm

Thickness 2.5, 2.8, 3.0, 4.0mm

2.5 - 4mm

Prism size 5mm x 5mm

Prism config. Female at a 45° axis

Prism depth 1.8mm

Max width 1270mm

Max length 2540mm

Standard Sizes (nominal)

1500mm x 600mm

1200mm x 600mm

1200mm x 300mm

600mm x 600mm

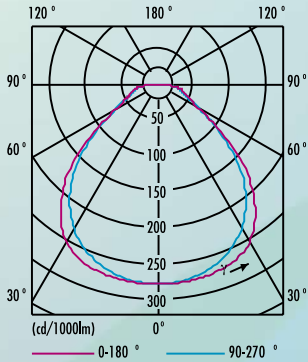
Cut to size upon request.

Y12 Prismatic Panel

Photometric Data (2.5mm Y12 used in tests)

2x36W T8 Lamps in a commodity troffer

Polar intensity diagram

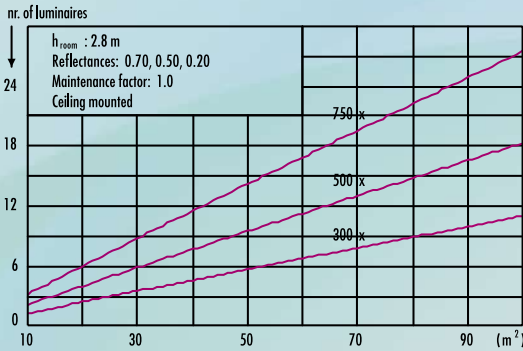


Light output ratio 0.66
Service upward 0.00
Service downward 0.66

CIE flux code 57 86 96 100 66

SHR NOM (square) 1.25
SHR MAX (square) 1.43

Quality estimation diagram



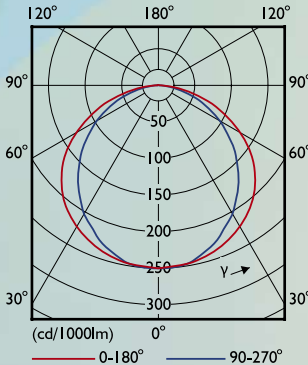
Utilisation factor table

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	42	48	53	56	60	63	65	68	69
0.70	0.30	0.20	37	44	48	52	56	60	62	65	67
0.70	0.10	0.20	34	40	45	49	54	57	60	63	65
0.50	0.50	0.20	41	47	51	54	58	61	63	65	67
0.50	0.30	0.20	36	43	47	51	55	58	60	63	65
0.50	0.10	0.20	33	40	44	48	52	56	58	61	63
0.30	0.50	0.20	40	46	50	52	56	59	60	63	64
0.30	0.30	0.20	36	42	46	50	54	56	58	61	63
0.30	0.10	0.20	33	39	44	47	51	55	57	60	61
0.00	0.00	0.00	32	38	42	45	49	52	54	57	58

Ceiling mounted

2x28W T5 Lamps in a project troffer

Polar intensity diagram

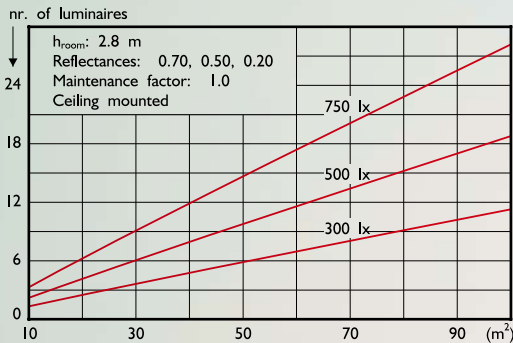


Light output ratio 0.74
Service upward 0.00
Service downward 0.74

CIE flux code 46 78 96 100 74

SHR NOM (square) 1.50
SHR MAX (square) 1.50
SHR MAX (continuous) 1.93
UGRcn (4Hx8H, 0.25H) 22

Quantity estimation diagram

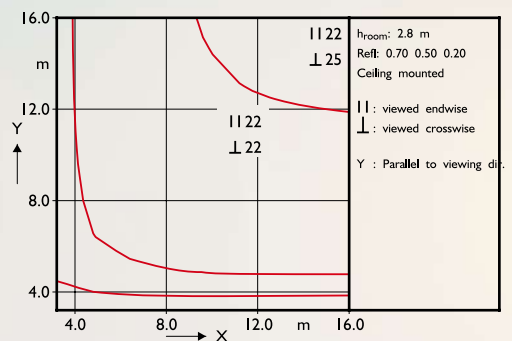


Utilisation factor table

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	44	50	56	59	65	68	71	74	76
0.70	0.30	0.20	38	44	50	54	60	64	67	71	74
0.70	0.10	0.20	34	40	46	50	56	61	64	68	71
0.50	0.50	0.20	43	48	54	57	62	66	68	71	73
0.50	0.30	0.20	38	43	49	53	59	62	65	69	71
0.50	0.10	0.20	34	40	45	49	55	59	62	66	69
0.30	0.50	0.20	41	47	52	56	60	63	66	68	70
0.30	0.30	0.20	37	43	48	52	57	61	63	66	69
0.30	0.10	0.20	34	39	45	49	54	58	61	65	67
0.00	0.00	0.00	32	37	43	46	52	55	58	61	63

Ceiling mounted

UGR diagram



Luminance Table

Plane Cone	0.0	15.0	30.0	45.0	60.0	75.0	90.0
45.0	4256	4227	4142	3972	3755	3545	3471
50.0	4281	4262	4182	3974	3730	3481	3393
55.0	4265	4237	4152	3921	3620	3360	3226
60.0	4152	4192	4119	3886	3557	3275	3138
65.0	3998	3998	3923	3675	3350	3045	2915
70.0	3905	3882	3788	3517	3200	2919	2777
75.0	3544	3482	3327	3062	2800	2519	2364
80.0	3152	3106	2920	2665	2410	2202	2038
85.0	2400	2400	2218	1940	1661	1522	1296
90.0	-	-	-	-	-	-	-

(cd/m²)



ALLPLASTICS ENGINEERING PTY LTD
Unit 20, 380 Eastern Valley Way
CHATSWOOD NSW 2067

P: (02) 9417 6111
F: (02) 9417 6169
E: sales@allplastics.com.au

W: www.ALLPLASTICS.com.au

