

# Y3E One Lamp



## Applications

- For energy efficient lighting especially in corridors and smaller offices.

## Architectural specifications

Y3E clear acrylic

In a nominal 300mm x 1200mm with one 28 watt T5 lamp centered in the luminaire with the lamp centre 70mm above the bottom of the lens, minimum luminaire efficiency is 83%.

## Thickness

3.5mm lenses are 3.2mm – 3.6mm thick with prestressed arch to span up to 305mm x 1220mm.

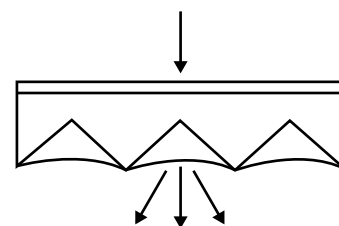
## Standard Sizes

310mm x 1600mm

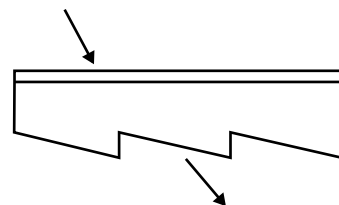
310mm x 1220mm

## Acrylic material used in Y3E

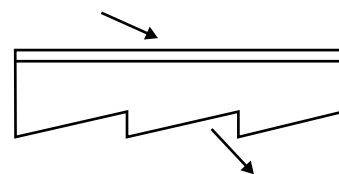
The acrylic used in Y3E prismatic lighting is 100% high molecular weight polymethyl methacrylate (PMMA) virgin material meeting grade requirements as set forth in table 2 of ASTM D-788-69a. It exceeds IES-NEMA-SPI standards for acrylic material by 100%. Under normal conditions these lenses will perform satisfactorily for 20 years.



Female prisms



Elevating prisms

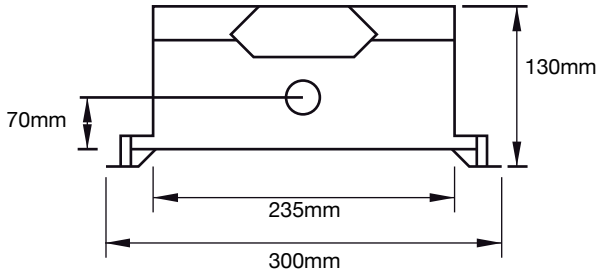


Depressing prisms

# Y3E One Lamp



## Commercially available troffer



## Sample test

### Room dimensions

Width	8.00 m
Length	6.00 m
Height	2.70 m
Working Plane Height	0.70 m
Maintenance Factor	0.80

### Unified Glare Rating (CIE): 19

### Calculation Results

Luminance calculations:

Calculation	Type	Unit	Ave	Min/Ave	Min/Max	Result
Working plane	Surface illuminance	lux	334	0.79	0.64	Total

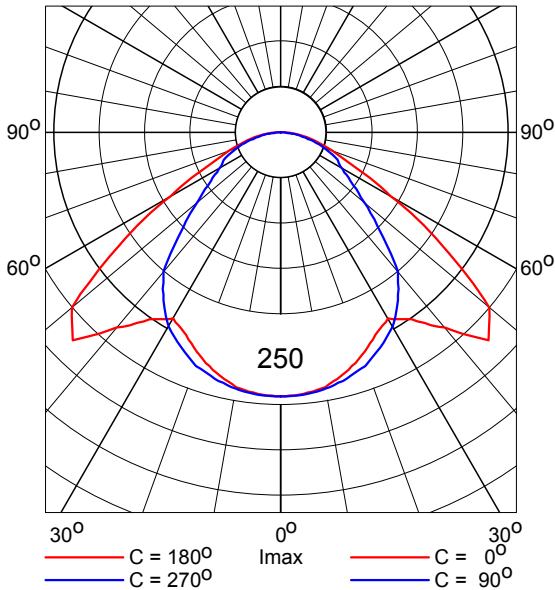
## Luminaire Details

FSN128 Y3E 1xT5 28W/840

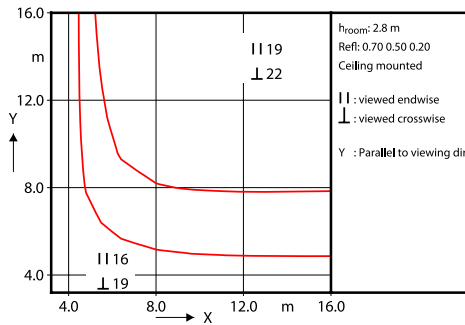
Light output ratios

DLOR	: 0.83
ULOR	: 0.00
TLOR	: 0.83
Lamp flux	: 2600 lm
Luminaire wattage	: 32.0 W
Measurement code	: PH1122

Luminous Intensity Diagram (candela/1000 lumen)



## UGR Diagram



Cone	60.0	75.0	90.0
45.0	3692	3446	2920
50.0	3765	3580	3175
55.0	3053	3164	2931
60.0	2255	2620	2598
65.0	1685	2125	2213
70.0	1422	1768	1888
75.0	1322	1633	1529
80.0	1204	1462	1159
85.0	1013	1048	817
90.0	-	-	-

(cd/m<sup>2</sup>)

Refr. Plane			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	49	57	63	68	74	78	81	84	87
0.70	0.30	0.20	43	51	58	62	69	74	77	81	84
0.70	0.10	0.20	39	46	53	58	65	70	73	78	82
0.50	0.50	0.20	48	55	61	66	71	75	78	81	83
0.50	0.30	0.20	43	50	56	61	67	71	74	78	81
0.50	0.10	0.20	39	46	52	57	64	68	72	76	79
0.30	0.50	0.20	47	54	60	64	69	72	75	78	80
0.30	0.30	0.20	42	49	55	60	65	69	72	76	78
0.30	0.10	0.20	38	45	52	56	63	67	70	74	77
0.00	0.00	0.00	36	43	49	54	60	64	67	70	73

Ceiling mounted