

Report of Test LL13675

Harcroft Lighting 1 x 28 W T5 Recessed T-Bar Troffer. Product ID: TB128.

Metal body, 1170 mm x 295 mm x 52 mm deep, with a gloss white finish.

Clear plastic K19 prismatic diffuser resting on T-Bar frame, forming a luminous opening of 1170 mm x 272 mm.

One Osram FH 28W/840 HE lamp centred 50 mm above the luminous opening.

Metal reflectors with a gloss white finish either side of the lamp. Tested in a standard T-Bar frame.

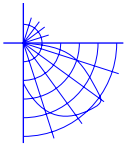
One Tridonic.Atco PC 1/14-21-28-35 T5 PRO Ip 220-240 V 50/60/0 Hz electronic ballast operated @ 240V/50Hz.



Performance Summary

Light Output Ratio	87.9 %
Luminaire Power	31.5 W
SHR Nominal	1.50
SHR Maximum	1.68

PREPARED FOR : Harcroft Lighting Pty. Ltd., Seven Hills, N.S.W, 2147.



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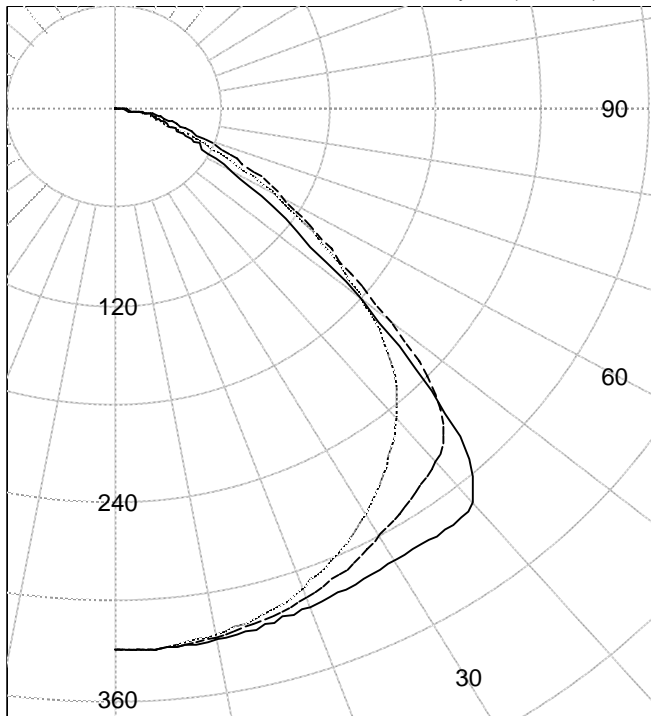
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LEGEND : C0-Solid, C45-Dashed, C90-Grey (cd / klm)



INTENSITY SUMMARY (cd / klm)

Gamma	C-Plane					Output Lumens
	C0	C22.5	C45	C67.5	C90	
0.0	331	331	331	331	331	
5.0	331	330	330	330	330	31
10.0	329	329	328	327	326	
15.0	326	326	323	321	320	91
20.0	323	321	317	313	311	
25.0	320	317	310	302	299	143
30.0	318	313	301	290	284	
35.0	318	310	291	275	267	183
40.0	313	305	282	257	246	
45.0	263	269	260	236	221	190
50.0	182	193	203	198	184	
55.0	117	129	148	142	142	125
60.0	75	86	111	106	102	
65.0	51	55	79	79	65	69
70.0	37	39	54	54	39	
75.0	26	30	35	37	25	34
80.0	20	22	24	25	17	
85.0	10	13	12	13	9	12
90.0	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	266	26.6	30.2
0-40	449	44.9	51.0
0-60	764	76.4	86.9
0-90	879	87.9	100.0
40-90	430	43.0	49.0
60-90	115	11.5	13.1
90-180	0	0.0	0.0
0-180	879	87.9	100.0

Light Output Ratio = 87.9 %

AVERAGE LUMINANCE (cd / sq.m / klm)

Gamma	C0	C45	C90
45.0	1169	1155	981
55.0	638	812	779
65.0	383	590	484
75.0	319	430	304
85.0	345	433	330

SHR-NOM = 1.50
SHR-MAX = 1.68

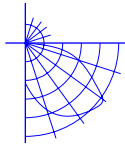
Calculated using the TM5
fine grid method.

CERTIFIED BY: *K Monaghan*

K.Monaghan
Authorised Signatory

Date of test 24-May-2010
Date of report 28-May-2010





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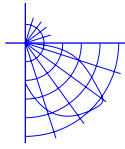
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INTENSITY DATA (cd / klm)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	331	331	331	331	331
2.5	331	331	331	331	331
5.0	331	330	330	330	330
7.5	330	330	329	329	328
10.0	329	329	328	327	326
12.5	328	327	326	324	323
15.0	326	326	323	321	320
17.5	325	324	321	317	315
20.0	323	321	317	313	311
22.5	322	319	314	308	305
25.0	320	317	310	302	299
27.5	319	315	305	296	292
30.0	318	313	301	290	284
32.5	318	311	296	283	276
35.0	318	310	291	275	267
37.5	318	309	287	266	256
40.0	313	305	282	257	246
42.5	297	294	274	248	234
45.0	263	269	260	236	221
47.5	225	231	236	221	205
50.0	182	193	203	198	184
52.5	145	158	172	169	164
55.0	117	129	148	142	142
57.5	94	106	129	122	123
60.0	75	86	111	106	102
62.5	61	69	95	92	83
65.0	51	55	79	79	65
67.5	44	46	66	66	51
70.0	37	39	54	54	39
72.5	31	34	43	45	30
75.0	26	30	35	37	25
77.5	23	25	29	31	20
80.0	20	22	24	25	17
82.5	15	18	18	19	13
85.0	10	13	12	13	9
87.5	3	5	5	6	4
90.0	0	0	0	0	0





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Utilization factors UF(F)

SHR NOM = 1.50

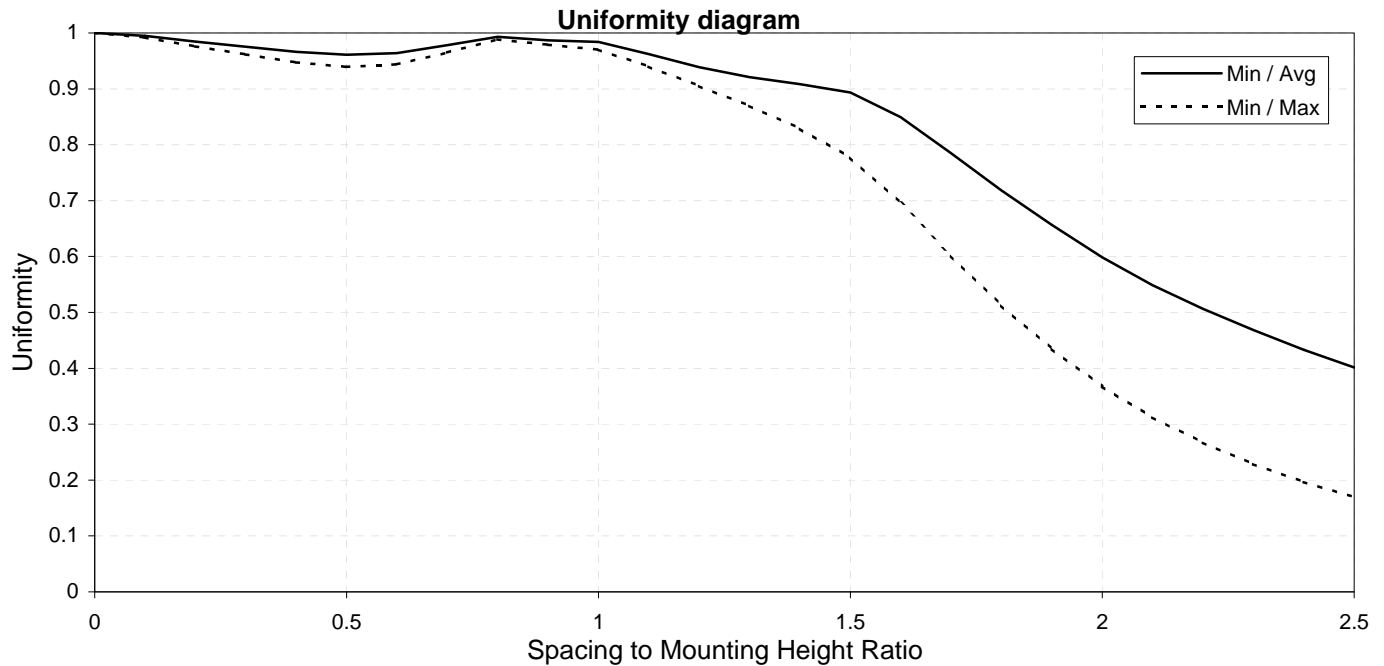
Room Reflectance.			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.57	0.65	0.71	0.75	0.81	0.85	0.87	0.91	0.93
		0.30	0.51	0.59	0.65	0.70	0.76	0.80	0.83	0.87	0.90
		0.10	0.47	0.54	0.61	0.66	0.72	0.77	0.80	0.85	0.88
0.50	0.50	0.20	0.56	0.63	0.69	0.73	0.78	0.82	0.84	0.87	0.89
		0.30	0.51	0.58	0.64	0.68	0.74	0.78	0.81	0.85	0.87
		0.10	0.47	0.54	0.60	0.65	0.71	0.75	0.78	0.82	0.85
0.30	0.50	0.20	0.55	0.62	0.67	0.71	0.76	0.79	0.81	0.84	0.86
		0.30	0.51	0.57	0.63	0.67	0.72	0.76	0.79	0.82	0.84
		0.10	0.47	0.53	0.60	0.64	0.70	0.74	0.76	0.80	0.82
0.00	0.00	0.00	0.45	0.51	0.57	0.61	0.67	0.70	0.73	0.76	0.78

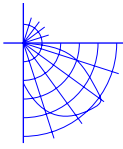
Rating : Photometrically tested without ceiling board.

Multiply values by service correction factors.

Calculated in accordance with CIBS Technical Memorandum No. 5 1980 using the fine grid method.

Luminaire discretisation employed. Ceiling/Wall/Floor reflectances not used in calculations.





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Test Distance: 8.0 metres
Test Temperature: 24.9 degrees Celsius

Significance: This laboratory has no control over the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Special Notes: The Intensity values contained in this report are based on the lamp(s) delivering 1000.0 lumens. When using these values in calculations the appropriate Manufacturer's rated lumens MUST be taken into account.
It should also be noted that prorating the lumen output for the use of other lamp/ballast combinations, or for use in different environmental conditions, than that tested may produce erroneous results.
The generic term "LOR" is used in this report, it denotes the "Light Output Ratio" as defined in Australian Standard AS1680, Part 3, 1991, Section 1.3.9.
This report is free of erasures and corrections.
Photometric intensity values are reported using the CIE Cgamma coordinate system as described in CIE Publication number 121.

Uncertainties: At the 95% confidence interval with a factor k = 2, the uncertainties for this report are :-

Temperature	+/- 1 degree Celsius
Light Output Ratio	+/- 4%
Luminous Intensity	+/- 4%
Angular displacement	+/- 0.25 degrees.

Testing Procedure: Tested in accordance with the applicable sections of CIE Publication Number 24 and Australian Standard AS1680, Part 3, 1991.

