

Report of Test LL14052

Ecopoint LED T8 Replacement Tube. Product ID: ecoLEd C-Series.

Tube is 1180 mm x 26 mm diameter, with a clear plastic reeded diffuser.

Adjustable T8 bi-pin lamp caps. 336 LEDs in 3 rows of 112. LEDs are approx. 5 mm centre to centre.

Tube was tested with an Ecopoint 1A/240V fuse in circuit.

Electrical parameters: 240.0 V / 0.11 A / 21.4 W / 50.0 Hz. Measured flux: 1747 lm.

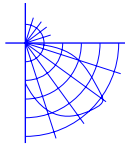
Luminous efficacy: 81.6 lm/W.



Performance Summary

Light Output Ratio	N / A
Luminaire Power	21.4 W

PREPARED FOR : Ecopoint Ltd., Wellington, 6011, New Zealand.



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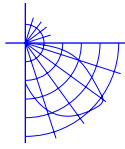
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Fuse



Label



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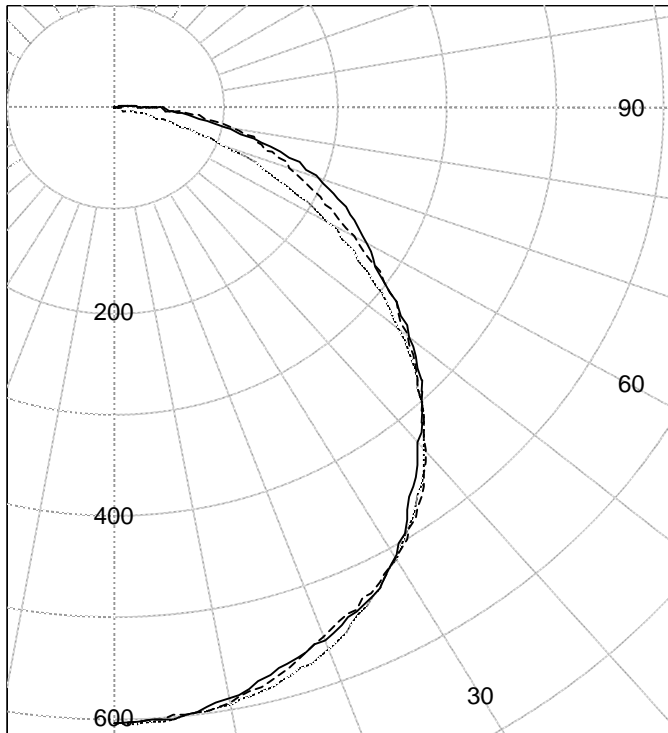
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LEGEND : C0-Solid, C45-Dashed, C90-Grey (cd)



INTENSITY SUMMARY (cd)

Gamma	C-Plane					Output Lumens
	C0	C22.5	C45	C67.5	C90	
0.0	604	604	604	604	604	
5.0	601	601	599	599	602	57
10.0	589	589	593	592	595	
15.0	571	571	576	582	582	163
20.0	555	554	554	564	564	
25.0	537	536	533	537	540	247
30.0	507	511	510	507	511	
35.0	467	472	480	473	476	296
40.0	428	432	438	440	436	
45.0	394	393	391	400	389	303
50.0	349	349	345	355	335	
55.0	298	301	298	297	281	266
60.0	263	257	249	243	220	
65.0	230	223	204	186	160	200
70.0	194	191	169	132	102	
75.0	145	149	138	87	54	126
80.0	100	104	105	59	20	
85.0	61	64	70	42	3	58
90.0	36	36	43	23	0	

ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	467	N / A	26.7
0-40	763	N / A	43.7
0-60	1333	N / A	76.3
0-90	1717	N / A	98.3
40-90	954	N / A	54.6
60-90	385	N / A	22.0
90-180	29	N / A	1.7
0-180	1747	N / A	100.0

Light Output Ratio = N / A

CERTIFIED BY: *E Southgate*

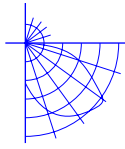
E.Southgate
 Authorised Signatory

Date of test
 Date of report

6-Oct-2010
 8-Oct-2010

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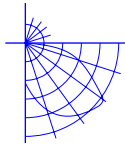
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Luminous efficacy: 81.6 lm/W.

INTENSITY DATA (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	604	604	604	604	604
2.5	601	601	602	603	604
5.0	601	601	599	599	602
7.5	596	598	598	596	599
10.0	589	589	593	592	595
12.5	581	582	584	588	589
15.0	571	571	576	582	582
17.5	563	563	566	575	574
20.0	555	554	554	564	564
22.5	546	546	542	550	552
25.0	537	536	533	537	540
27.5	526	526	522	522	525
30.0	507	511	510	507	511
32.5	489	492	495	489	494
35.0	467	472	480	473	476
37.5	449	449	460	457	457
40.0	428	432	438	440	436
42.5	411	411	414	420	414
45.0	394	393	391	400	389
47.5	372	375	368	378	365
50.0	349	349	345	355	335
52.5	325	329	323	327	308
55.0	298	301	298	297	281
57.5	279	276	272	272	250
60.0	263	257	249	243	220
62.5	247	242	225	215	188
65.0	230	223	204	186	160
67.5	212	206	185	158	132
70.0	194	191	169	132	102
72.5	172	171	152	106	75
75.0	145	149	138	87	54
77.5	123	125	123	70	35
80.0	100	104	105	59	20
82.5	80	84	86	50	9
85.0	61	64	70	42	3
87.5	47	50	55	32	0
90.0	36	36	43	23	0



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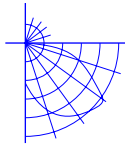
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INTENSITY DATA (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	36	36	43	23	0
92.5	28	28	29	17	0
95.0	19	20	20	11	0
97.5	16	16	15	8	0
100.0	13	14	12	6	0
102.5	11	12	10	4	0
105.0	9	10	9	3	0
107.5	8	9	7	1	0
110.0	7	7	5	1	0
112.5	6	6	4	0	0
115.0	5	5	3	0	0
117.5	4	4	2	0	0
120.0	4	3	2	0	0
122.5	3	3	1	0	0
125.0	2	2	1	0	0
127.5	2	1	0	0	0
130.0	1	1	0	0	0
132.5	1	1	0	0	0
135.0	1	0	0	0	0
137.5	0	0	0	0	0
140.0	0	0	0	0	0
142.5	0	0	0	0	0
145.0	0	0	0	0	0
147.5	0	0	0	0	0
150.0	0	0	0	0	0
152.5	0	0	0	0	0
155.0	0	0	0	0	0
157.5	0	0	0	0	0
160.0	0	0	0	0	0
162.5	0	0	0	0	0
165.0	0	0	0	0	0
167.5	0	0	0	0	0
170.0	0	0	0	0	0
172.5	0	0	0	0	0
175.0	0	0	0	0	0
177.5	0	0	0	0	0
180.0	0	0	0	0	0



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Luminous efficacy: 81.6 lm/W.

Test Distance: 8.0 metres

Test Temperature: 24.4 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 shown as tested.
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.
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.