Report of Test

LL16170

LCL Manufacturing, LED Emergency Luminaire (Mains Mode). Product ID: AUS80GREENSTARLED. Extruded aluminium housing 1130 x 800 x 800 mm deep. Translucent diffuser forming luminous opening of 1125 x 75 mm. Three Tridonic Stark-LLE24-1250-840-CLA LED boards and one Stark-LLE24-1250-840-CLE EM board mounted on white tray 35 mm above luminous opening. One Tridonic LCAI 080/350 IO10 one4all 220-240V 0/50/60 Hz LED driver. Operated with battery disconnected. Tested at 240 V / 50 Hz. Measured; I = 225 mA. Efficacy of 67.0 lm/W.

Performance Summary

Luminous flux	3369 lm
Luminaire Power	50.3 W
SHR Nominal	1.50
SHR Maximum	1.63

PREPARED FOR : LCL Manufacturing Pty. Ltd., Seven Hills, NSW. 2147.

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LightLab INTERNATIONAL

Accredited for compliance with ISO/IEC 17025. The results of the tests, calibrations and / or measurements included in this document are traceable to Australian / national standards. Accreditation No. 2258.

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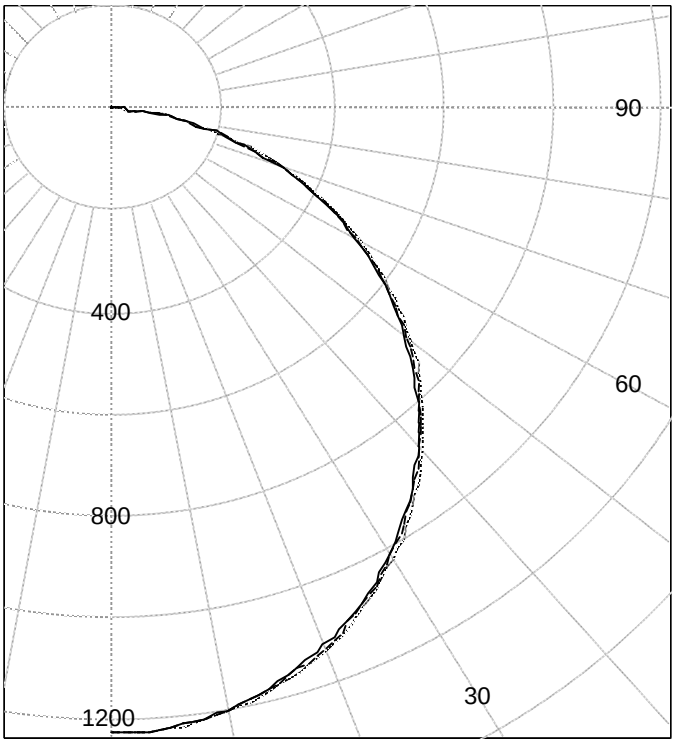
Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



(Two plane symmetry) C0-C90

INTENSITY SUMMARY (cd)

	C-Plane					Flux
Gamma	C0	C22.5	C45	C67.5	C90	(lm)
0.0	1225	1225	1225	1225	1225	
5.0	1219	1219	1219	1220	1220	116
10.0	1199	1199	1201	1202	1202	
15.0	1168	1168	1170	1172	1173	330
20.0	1123	1125	1127	1130	1131	
25.0	1072	1072	1075	1080	1081	496
30.0	1010	1011	1013	1020	1021	
35.0	938	940	945	950	953	591
40.0	861	864	867	875	877	
45.0	779	782	785	794	795	607
50.0	694	695	697	707	708	
55.0	602	604	606	617	617	544
60.0	507	508	511	520	519	
65.0	411	410	411	420	420	410
70.0	308	310	311	318	315	
75.0	212	213	214	215	217	226
80.0	118	118	117	119	117	
85.0	41	41	39	39	38	50
90.0	0	0	0	0	0	

AVERAGE LUMINANCE (cd / sq.m)

Gamma	C0	C45	C90
45.0	9410	9490	9604
55.0	8978	9028	9191
65.0	8316	8310	8493
75.0	6988	7064	7174
85.0	4003	3820	3710

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	941	N / A	27.9
0-40	1532	N / A	45.5
0-60	2683	N / A	79.6
0-90	3369	N / A	100.0
40-90	1837	N / A	54.5
60-90	686	N / A	20.4
90-180	0	N / A	0.0
0-180	3369	N / A	100.0

Light Output Ratio = N / A

SHR-NOM = 1.50
SHR-MAX = 1.63

Calculated using the TM5 fine grid method.

CERTIFIED BY:

Toby Southgate
Authorised Signatory

Date of test 19-Dec-2012
Date of report 20-Dec-2012

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Intensity data (cd)

	C-Plane				
Gamma	**C0**	**C22.5**	**C45**	**C67.5**	**C90**
0.0	1225	1225	1225	1225	1225
2.5	1224	1224	1224	1224	1225
5.0	1219	1219	1219	1220	1220
7.5	1211	1211	1212	1213	1213
10.0	1199	1199	1201	1202	1202
12.5	1185	1186	1187	1189	1190
15.0	1168	1168	1170	1172	1173
17.5	1148	1148	1151	1152	1154
20.0	1123	1125	1127	1130	1131
22.5	1100	1100	1103	1107	1108
25.0	1072	1072	1075	1080	1081
27.5	1040	1042	1045	1050	1052
30.0	1010	1011	1013	1020	1021
32.5	975	977	978	985	987
35.0	938	940	945	950	953
37.5	901	903	906	914	915
40.0	861	864	867	875	877
42.5	821	824	826	834	836
45.0	779	782	785	794	795
47.5	736	738	742	750	751
50.0	694	695	697	707	708
52.5	648	650	654	663	663
55.0	602	604	606	617	617
57.5	555	557	558	569	570
60.0	507	508	511	520	519
62.5	458	462	463	471	473
65.0	411	410	411	420	420
67.5	360	363	363	367	370
70.0	308	310	311	318	315
72.5	260	260	261	266	267
75.0	212	213	214	215	217
77.5	163	163	163	166	166
80.0	118	118	117	119	117
82.5	75	75	75	75	75
85.0	41	41	39	39	38
87.5	15	14	14	12	12
90.0	0	0	0	0	0

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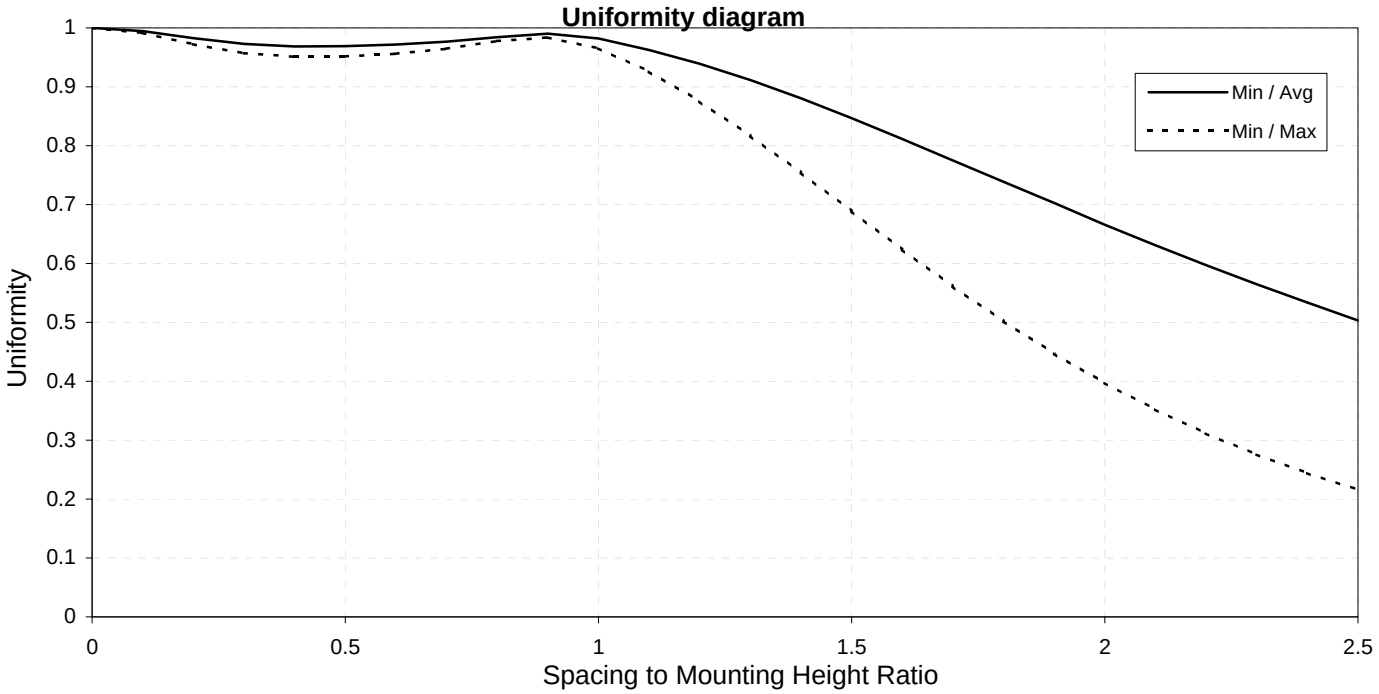

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Test Distance: 8.0 metres

Test Temperature: 24.7 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. When using these values in calculations the appropriate Ballast Factor and 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 Luminaire" 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 121; and with reference to Australian Standard AS1680, Part 3, 1991.

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