REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103179539 Date: August 7, 2017

REPORT NO. 103179539LAX-001

TEST OF ONE LED LUMINAIRE

MODEL NO. QDF-22-LED35-SO-FWA-D9
LED MODEL NO. NICHIA NFSL757D
DRIVER MODEL NO. OSRAM 79399

RENDERED TO

PRUDENTIAL LIGHTING
1774 EAST 21ST STREET
LOS ANGELES, CA 90058-1008

TEST: Electrical and Photometric tests as required to the IESNA test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00710638-6.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number QDF-22-LED35-SO-FWA-D9. The sample was received by Intertek on August 3, 2017, in undamaged condition and one sample was tested as received. The sample designation was LAN1708030934-001.

DATES OF TESTS: August 3, 2017

SUMMARY

Model No.:	QDF-22-LED35-SO-FWA-D9
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	5296
Total Power (W)	81.27
Luminaire Efficacy (LPW)	65.17
Power Factor	0.997

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	07/31/17	08/31/17	08/03/17
AC Source	CW1251P	000944	VBU	VBU	08/03/17
Power Analyzer	WT210	000945	12/05/16	12/05/17	08/03/17
Tape Measure	33-428	001491	01/06/17	01/06/18	08/03/17
Magnetic Level	581-9	001610	09/28/16	09/28/17	08/03/17
Temp. & RH Meter	971	001178	12/22/16	12/22/17	08/03/17

TEST METHODS

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IESNA LM-79.

Photometric and Electrical Measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

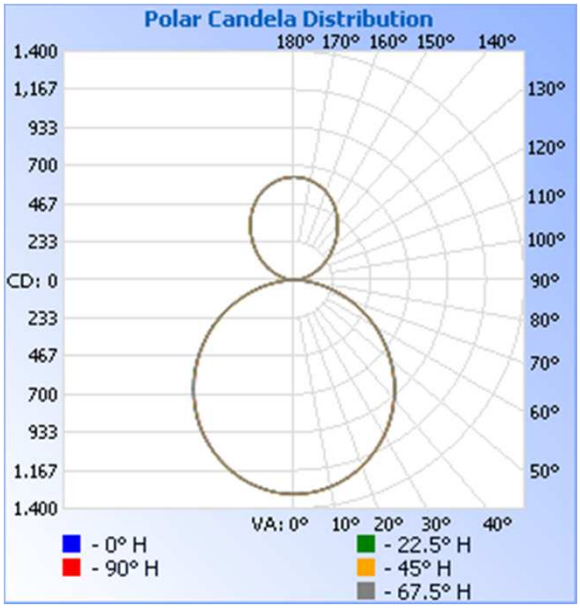
RESULTS OF TEST (cont'd)

Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (LPW)
LAN1708030934-001	Up	120.0	679.1	81.27	0.997	5296	65.17

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	1312	1312	1312	1312	1312
5	1305	1305	1306	1305	1304
10	1284	1285	1286	1285	1284
15	1255	1254	1254	1254	1253
20	1212	1212	1213	1211	1210
25	1160	1160	1159	1158	1157
30	1099	1099	1098	1096	1094
35	1029	1027	1027	1025	1024
40	949	948	946	945	943
45	863	862	859	858	857
50	771	769	765	765	764
55	672	670	668	667	667
60	574	571	566	566	568
65	469	465	463	464	465
70	365	361	359	358	361
75	261	258	257	256	257
80	163	161	159	159	158
85	69	67	68	67	67
90	0	0	0	0	0
95	21	21	22	22	22
100	50	50	51	51	50
105	87	87	88	87	87
110	129	129	129	130	129
115	172	172	173	173	173
120	217	218	219	219	218
125	266	266	267	267	266
130	313	314	315	315	315
135	362	363	365	364	364
140	412	413	415	413	414
145	459	459	462	459	459
150	503	503	505	503	503
155	541	541	543	541	541
160	574	573	574	573	574
165	598	597	599	598	598
170	618	616	618	616	616
175	627	628	629	628	629
180	632	632	632	632	632

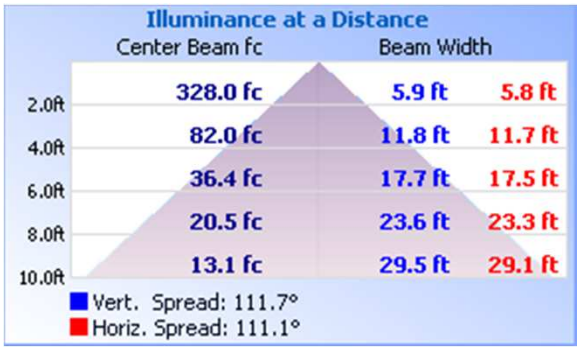


RESULTS OF TEST (cont'd)

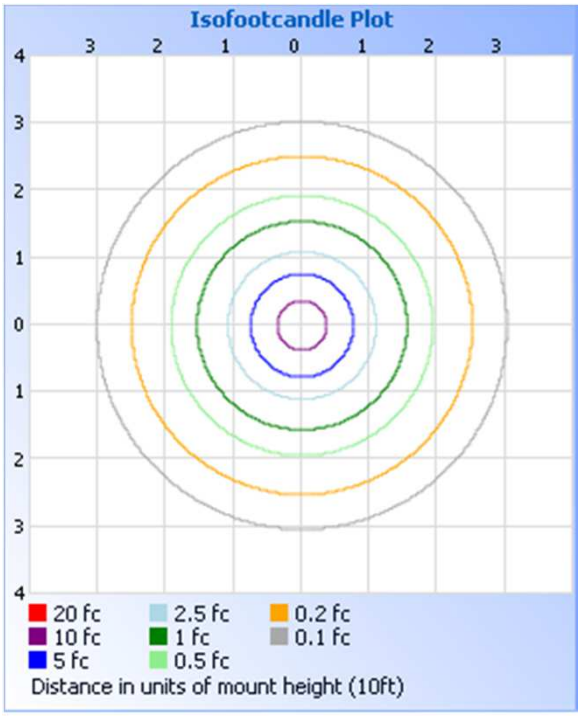
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



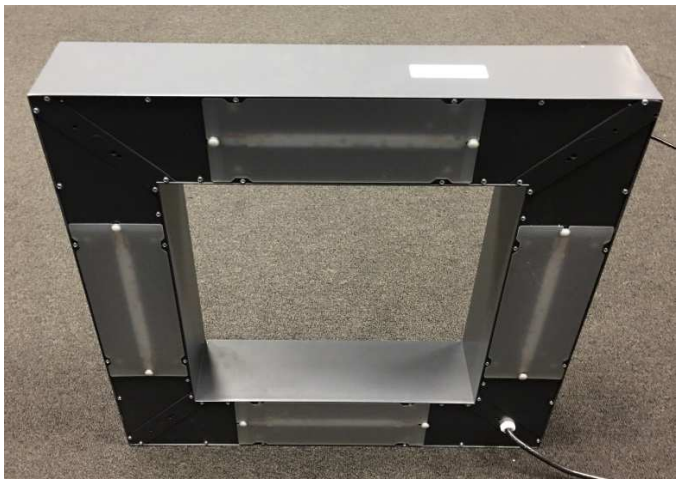
Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1012	19.1
0-40	1653	31.2
0-60	2914	55.0
60-90	810.0	15.3
0-90	3724	70.3
90-180	1572	29.7
0-180	5296	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	123.9	2.3
10-20	353.7	6.7
20-30	533.9	10.1
30-40	641.7	12.1
40-50	662.8	12.5
50-60	597.8	11.3
60-70	459.7	8.7
70-80	272.3	5.1
80-90	78.1	1.5
90-100	25.1	0.5
100-110	93.1	1.8
110-120	171.2	3.2
120-130	238.0	4.5
130-140	280.7	5.3
140-150	287.2	5.4
150-160	249.0	4.7
160-170	168.5	3.2
170-180	59.6	1.1

PICTURES (not to scale)



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

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Report Reviewed By:

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Lighting Division

Attachment: None