



REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103179539

Date: August 7, 2017

REPORT NO. 103179539LAX-003

TEST OF ONE LED LUMINAIRE

MODEL NO. RZ-LED35-PROG (1196MA)-SAL
LED MODEL NO. SAMSUNG SLED-13-007
DRIVER MODEL NO. UNIVERSAL D15CC55UNVTW-C

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 RZ-LED35-PROG (1196mA)-SAL . The sample was received by Intertek on August 7, 2017, in undamaged condition and one sample was tested as received. The sample designation was LAN1708070843-001.

DATES OF TESTS: August 7, 2017



SUMMARY

Model No.:	RZ-LED35-PROG (1196mA)-SAL
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	4240
Total Power (W)	39.61
Luminaire Efficacy (LPW)	107.0
Power Factor	0.998

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	08/07/17
AC Source	CW1251P	000944	VBU	VBU	08/07/17
Power Analyzer	WT210	000945	12/05/16	12/05/17	08/07/17
Tape Measure	33-428	001491	01/06/17	01/06/18	08/07/17
Magnetic Level	581-9	001610	09/28/16	09/28/17	08/07/17
Temp. & RH Meter	971	001178	12/22/16	12/22/17	08/07/17

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.

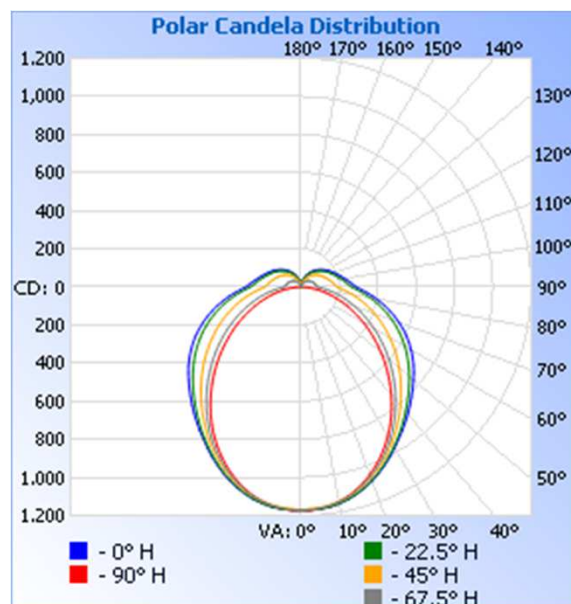
RESULTS OF TEST (cont'd)

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)
LAN1708070843-001	Up	120.0	331.1	39.61	0.998	4240	107.0

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	1170	1170	1170	1170	1170
5	1169	1168	1161	1165	1168
10	1154	1153	1144	1144	1143
15	1125	1122	1112	1108	1103
20	1083	1079	1066	1059	1048
25	1032	1027	1010	997	981
30	975	968	945	927	904
35	919	909	877	849	820
40	867	849	807	768	731
45	814	792	737	684	641
50	765	736	668	601	550
55	716	682	601	520	463
60	662	625	536	443	378
65	606	567	471	369	299
70	543	505	407	300	226
75	479	443	347	237	159
80	412	379	289	180	100
85	347	319	236	130	48
90	289	265	190	88	0
95	259	239	174	82	0
100	236	219	162	78	0
105	216	201	150	73	0
110	199	185	140	69	0
115	184	171	129	64	0
120	170	158	119	60	0
125	156	145	109	55	0
130	143	132	99	50	0
135	129	119	89	45	0
140	115	106	79	39	0
145	100	92	68	34	0
150	85	78	55	28	0
155	70	64	43	21	0
160	55	48	34	18	0
165	40	33	22	15	0
170	21	18	17	12	0
175	11	12	12	10	0
180	0	0	0	0	0

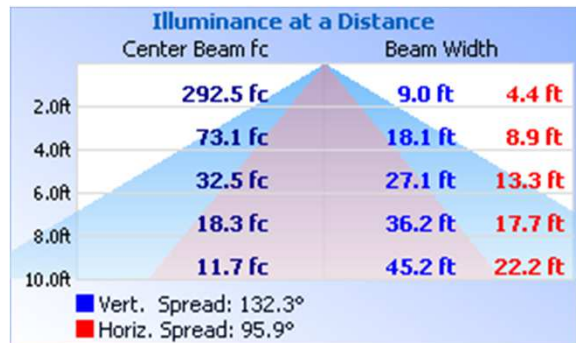


RESULTS OF TEST (cont'd)

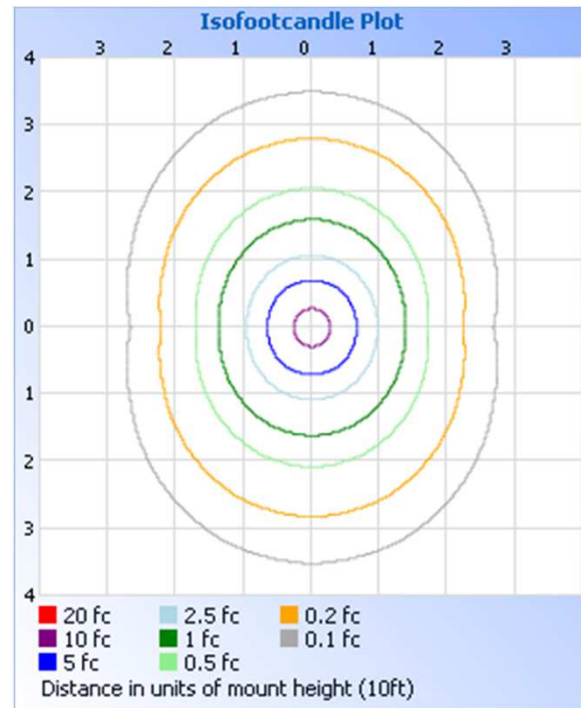
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	889.5	21.0
0-40	1438	33.9
0-60	2541	59.9
60-90	1058	25.0
0-90	3600	84.9
90-180	640	15.1
0-180	4240	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	110.7	2.6
10-20	313.8	7.4
20-30	465.0	11.0
30-40	548.3	12.9
40-50	567.9	13.4
50-60	535.5	12.6
60-70	460.7	10.9
70-80	355.9	8.4
80-90	241.7	5.7
90-100	171.0	4.0
100-110	141.3	3.3
110-120	113.6	2.7
120-130	87.1	2.1
130-140	61.6	1.5
140-150	38.4	0.9
150-160	19.2	0.5
160-170	6.7	0.2
170-180	1.1	0.0

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:



Ameet Alawi
Technician
Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak
Engineering Supervisor
Lighting Division