REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G104283100 Date: March 19, 2020

REPORT NO. 104283100LAX-002

TEST OF ONE MW-PRO-MO-4 LED LUMINAIRE

MODEL NO. MW-PRO-LED35-MO
LED MODEL NO. LUMILEDS 2835E 9V 3500K 80 CRI
DRIVER MODEL NO. OSRAM OPTOTRONIC OTI 30/120-277/1A0 DIM-1 L G2 @ 670MA

RENDERED TO

PRUDENTIAL LIGHTING
1774 EAST 21ST
LOS ANGELES, CA 90058

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-01019626-1.

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 MW-PRO-LED35-MO. The sample was received by Intertek on March 17, 2020, in undamaged condition and one sample was tested as received. The sample designation was LAN2003171300-002.

DATES OF TESTS: March 18, 2020

SUMMARY

Model No.:	MW-PRO-LED35-MO
Description:	MW-PRO-MO-4 LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	3065
Total Power (W)	25.28
Luminaire Efficacy (LPW)	121.2
Power Factor	0.987

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	03/18/20
AC Source	CW1251P	000944	VBU	VBU	03/18/20
Power Analyzer	WT210	000945	10/02/19	10/02/20	03/18/20
Tape Measure	33-428	001491	VBU	VBU	03/18/20
Magnetic Level	581-9	001610	10/11/19	10/11/20	03/18/20
Thermometer	DPi8-C24	001782	10/15/19	10/15/20	03/18/20
Temp. & RH Meter	971	001867	06/03/19	06/03/20	03/18/20

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.

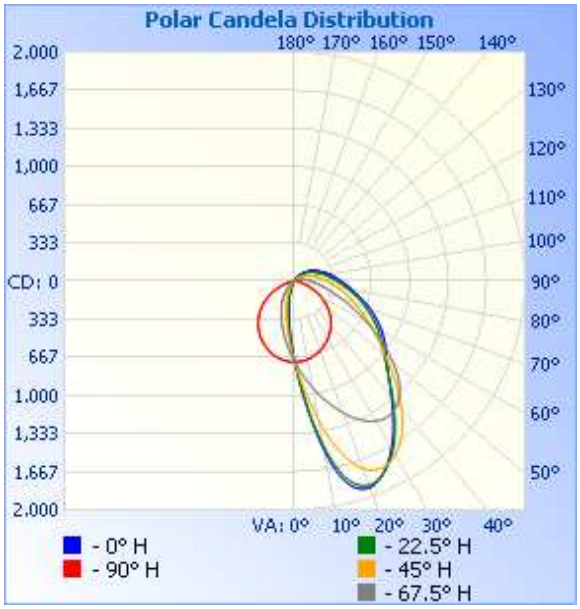
RESULTS OF TEST

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)
LAN2003171300-002	Up	119.9	213.7	25.28	0.987	3065	121.2

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	702	702	702	702	702
5	1049	1047	946	825	702
10	1510	1471	1247	955	692
15	1840	1795	1549	1090	673
20	1917	1896	1744	1222	647
25	1838	1841	1799	1334	616
30	1685	1706	1750	1411	580
35	1498	1521	1625	1433	538
40	1308	1324	1444	1394	492
45	1153	1150	1236	1289	441
50	1042	1021	1040	1123	384
55	960	924	882	930	322
60	875	834	757	735	255
65	784	741	648	563	188
70	696	654	552	422	127
75	604	572	470	317	76
80	523	492	401	240	38
85	459	426	337	186	13
90	403	369	282	144	0
95	357	323	238	110	0
100	318	283	202	85	0
105	281	247	171	62	0
110	243	213	144	42	0
115	211	185	120	25	0
120	184	160	88	11	0
125	155	130	60	6	0
130	123	97	39	0	0
135	95	66	20	0	0
140	67	35	12	0	0
145	39	18	5	0	0
150	20	7	5	0	0
155	8	0	0	0	0
160	6	0	0	0	0
165	0	0	0	0	0
170	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

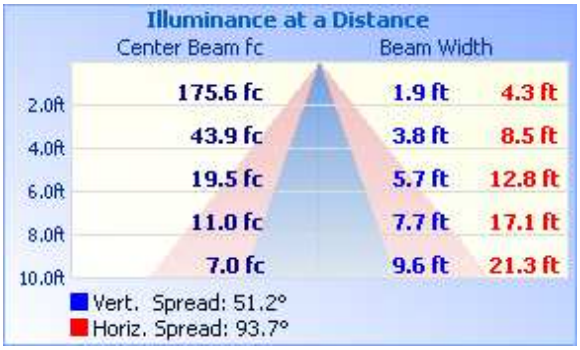


RESULTS OF TEST (cont'd)

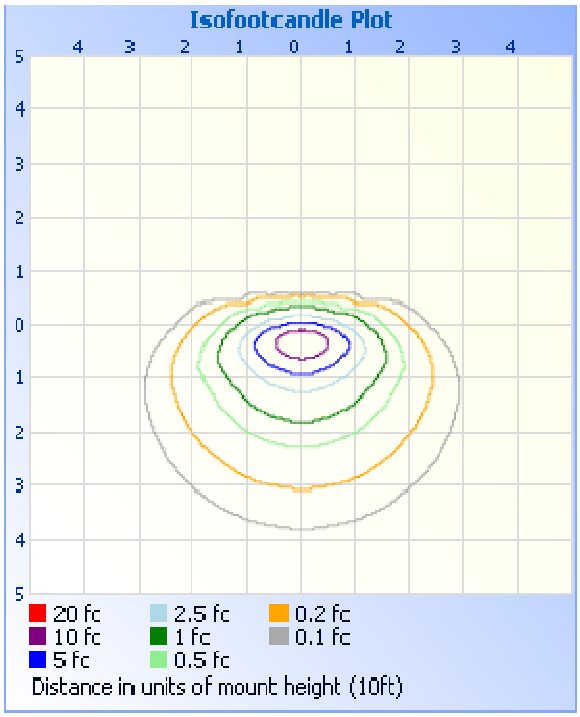
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	722.3	23.6
0-40	1197	39.0
0-60	2055	67.1
60-90	708.3	23.1
0-90	2764	90.2
90-180	301.0	9.8
0-180	3065	100.0

Spacing Criterion at 25°C

Spacing Criterion (0-180)	2.16
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.56

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	72.3	2.4
10-20	247.4	8.1
20-30	402.7	13.1
30-40	474.2	15.5
40-50	460.7	15.0
50-60	398.1	13.0
60-70	314.4	10.3
70-80	230.6	7.5
80-90	163.3	5.3
90-100	116.4	3.8
100-110	82.3	2.7
110-120	54.1	1.8
120-130	30.7	1.0
130-140	13.4	0.4
140-150	3.7	0.1
150-160	0.4	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:

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Report Reviewed By:

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Attachment: None