



REPORT

545 E. Algonquin Rd., Arlington Heights, IL 60005

Project No. G102503549

Date: April 5, 2016

REPORT NO. 102503549CHI-008

TEST OF ONE PENDANT

MODEL NO. WSP
LED MODEL NO. NICHIA 2X757
DRIVER MODEL NO. MEPOS KLPL40JUD-S0500P

RENDERED TO

LUMENART LTD
3333 W. 47TH ST/
CHICAGO, IL 60632

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

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.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00660984-3.

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 prototype sample of model number WSP. The sample was received by Intertek on March 8, 2016, in undamaged condition and one sample was tested as received. The sample designation was AH03082016100716-8.

DATES OF TESTS: April 5, 2016

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SUMMARY

Model No.:	WSP
Description:	PENDANT

Criteria	Result
Total Lumen Output (Lumens)	1781
Total Power (W)	29.98
Luminaire Efficacy (LPW)	59.41
Power Factor	0.987

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Yokogawa Power Meter	WT210	146919	07/14/15	07/14/16	04/05/16
Omega Newport Thermometer	DPI8-C24	146920	10/09/15	10/09/16	04/05/16
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV	04/05/16
Newport Thermohygrometer	iServer	146956	01/04/16	01/04/17	04/05/16
Pacific, AC power supply	118-ACX	CHI0358	VBV	VBV	04/05/16

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.

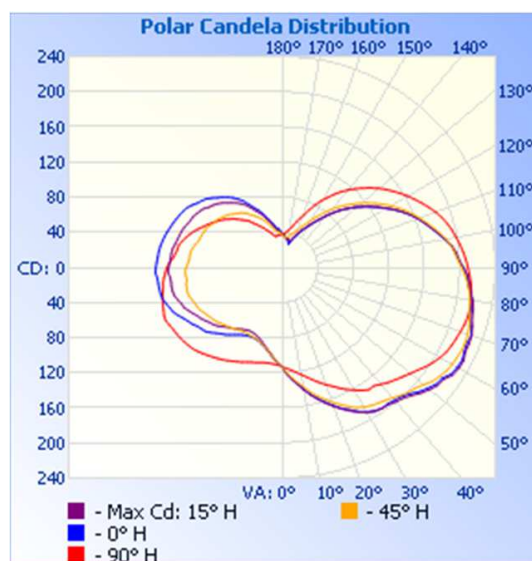
RESULTS OF TEST

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)
AH03082016100716-8	Up	120.1	252.9	29.98	0.987	1781	59.41

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	90	180	270	360
0	113	113	113	113	113
5	128	117	105	110	128
10	141	124	96	110	141
15	154	133	90	112	154
20	167	142	87	115	167
25	179	151	86	118	179
30	190	161	89	122	190
35	196	170	93	126	196
40	197	173	100	131	197
45	203	181	106	135	203
50	214	188	113	138	214
55	220	197	117	140	220
60	228	205	122	141	228
65	226	210	129	144	226
70	227	214	134	142	227
75	219	216	139	139	219
80	218	216	140	136	218
85	210	213	141	133	210
90	204	209	142	130	204
95	195	205	140	123	195
100	186	199	139	120	186
105	174	193	137	116	174
110	162	184	134	111	162
115	150	173	131	104	150
120	135	163	128	97	135
125	121	152	124	91	121
130	107	140	118	85	107
135	92	128	112	78	92
140	76	115	104	71	76
145	62	102	97	64	62
150	51	88	88	56	51
155	42	72	75	50	42
160	34	60	66	44	34
165	27	50	56	39	27
170	32	43	48	36	32
175	35	39	44	37	35
180	38	38	38	38	38

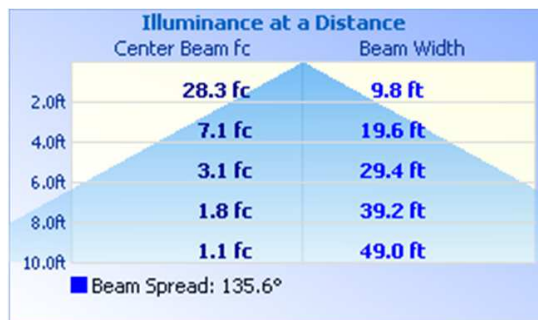


RESULTS OF TEST (cont'd)

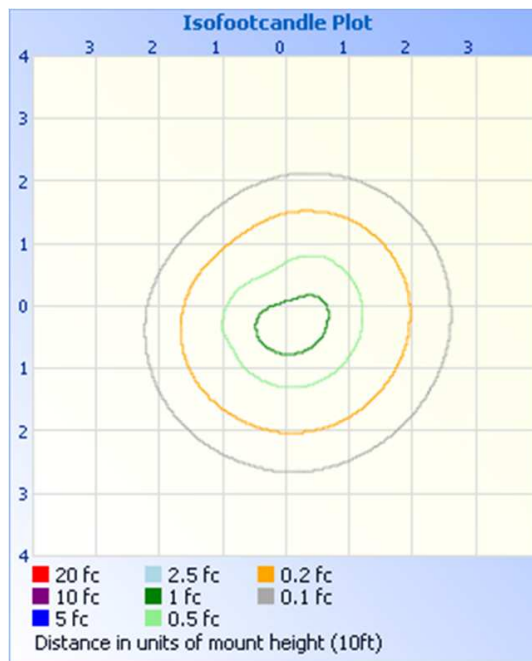
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	107.6	6.0
0-40	199.2	11.2
0-60	468.7	26.3
60-90	550.2	30.9
0-90	1019	57.2
90-180	762.2	42.8
0-180	1781	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	11.0	0.6
10-20	34.7	1.9
20-30	61.9	3.5
30-40	91.6	5.1
40-50	120.0	6.7
50-60	149.4	8.4
60-70	173.9	9.8
70-80	187.1	10.5
80-90	189.2	10.6
90-100	180.5	10.1
100-110	162.5	9.1
110-120	137.2	7.7
120-130	108.4	6.1
130-140	78.5	4.4
140-150	50.8	2.8
150-160	27.9	1.6
160-170	12.8	0.7
170-180	3.7	0.2

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.

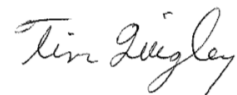
In Charge Of Tests:



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Attachment: None

Report Reviewed By:



Timothy Quigley
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