



# REPORT

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

Project No. G102503549

Date: March 28, 2016

REPORT NO. 102503549CHI-007

TEST OF ONE PENDANT

MODEL NO. WIP  
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 WIP. The sample was received by Intertek on March 8, 2016, in undamaged condition and one sample was tested as received. The sample designation was AH03082016100716-7.

DATES OF TESTS: March 28, 2016

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## SUMMARY

Model No.:	WIP
Description:	PENDANT

Criteria	Result
Total Lumen Output (Lumens)	2282
Total Power (W)	39.69
Luminaire Efficacy (LPW)	57.50
Power Factor	0.993

## 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	03/28/16
Omega Newport Thermometer	DPI8-C24	146920	10/09/15	10/09/16	03/28/16
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV	03/28/16
Newport Thermohygrometer	iServer	146956	01/04/16	01/04/17	03/28/16
Pacific, AC power supply	118-ACX	CHI0358	VBV	VBV	03/28/16

## 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.

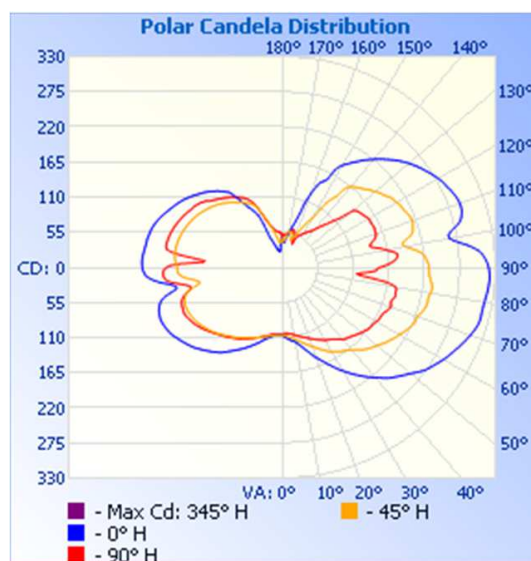
## RESULTS OF TEST

### 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)
AH03082016100716-7	Up	120.1	333.0	39.69	0.993	2282	57.50

### Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	90	180	270	360
0	105	105	105	105	105
5	113	104	106	106	113
10	119	107	111	107	119
15	131	112	119	112	131
20	149	118	129	117	149
25	167	125	140	123	167
30	187	131	150	129	187
35	206	138	162	134	206
40	225	147	172	140	225
45	243	152	181	146	243
50	259	159	189	153	259
55	276	165	196	160	276
60	288	169	202	164	288
65	299	172	205	168	299
70	310	179	203	165	310
75	317	180	192	152	317
80	318	179	168	155	318
85	321	116	205	183	321
90	320	151	216	179	320
95	305	178	216	120	305
100	263	161	214	182	263
105	286	142	212	182	286
110	293	155	207	179	293
115	287	155	200	175	287
120	279	154	193	170	279
125	267	148	185	166	267
130	254	128	176	159	254
135	238	95	167	149	238
140	221	78	156	142	221
145	202	67	144	134	202
150	184	59	113	126	184
155	149	51	92	114	149
160	113	57	45	88	113
165	70	60	31	68	70
170	52	55	27	59	52
175	40	51	29	56	40
180	47	47	47	47	47



# RESULTS OF TEST (cont'd)

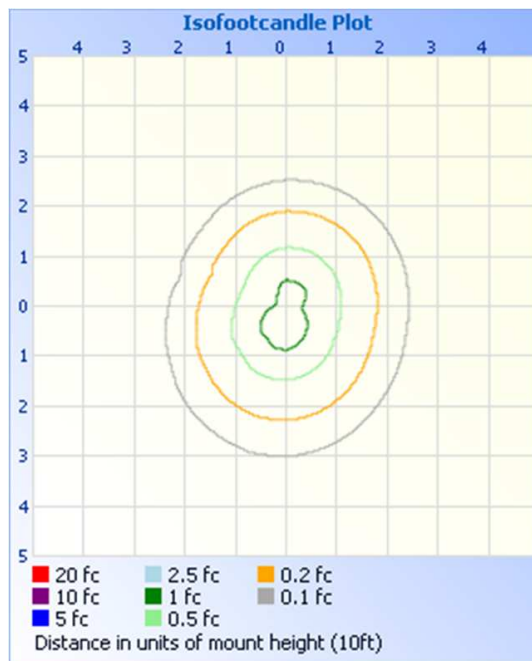
## Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	108.6	4.8
0-40	208.6	9.1
0-60	523.1	22.9
60-90	658.4	28.9
0-90	1182	51.8
90-180	1101.0	48.2
0-180	2282	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	10.3	0.5
10-20	34.0	1.5
20-30	64.2	2.8
30-40	100.0	4.4
40-50	138.5	6.1
50-60	176.0	7.7
60-70	207.0	9.1
70-80	221.5	9.7
80-90	229.9	10.1
90-100	228.8	10.0
100-110	218.2	9.6
110-120	201.5	8.8
120-130	170.0	7.4
130-140	128.0	5.6
140-150	84.2	3.7
150-160	46.4	2.0
160-170	18.9	0.8
170-180	4.7	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.

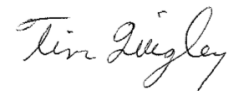
In Charge Of Tests:



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Senior Associate Engineer  
Lighting Division

Attachment: None

Report Reviewed By:



Timothy Quigley  
Engineer  
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