Project Number
16.00445

Date
2/24/2016

LAB 6

Test Sample Description

Catalog Number: P5340-2030K9

Description: 1-Lt. 10" Round Pendant with Aluminum Shade - (Antigue Bronze/Gold inside) Reflector and Acrylic Diffuser.

Test Method:	IES LM-79-08 § 10
Preburn Time:	0:00
Time To Stabilize:	1:17
Total Operating Time:	2:48
Input Voltage (Volts):	119.9
Input Current (Amps):	0.067
Input Wattage (Watts):	7.5
Ambient Temp (°C):	24.2

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701 Millennium Boulevard
Greenville, SC 29607
www.hubbelllighting.com

Checked: D. BLACK
Approved: M.WASHBURN

NVLAP LAB CODE: 201003-0

This report shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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ISSUE DATE: 02/24/16
PREPARED FOR: PROGRESS
CATALOG NUMBER: P5340-2030K9
LUMINAIRE: 1-Lt. 10" Round Pendant with Aluminum Shade - (Antigue Bronze/Gold inside) Reflector and Acrylic Diffuser.
LAMP CAT. NO.: 93049180-3130
LAMP: 20- Nichia 3000K LEDs w/HAL 9W AC LED Module
MOUNTING: Pole
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

DEG	CANDELA	LUMENS
0	173	
5	174	17
15	170	48
25	156	72
35	138	86
45	116	89
55	72	62
65	6	10
75	3	3
85	1	1
90	0	

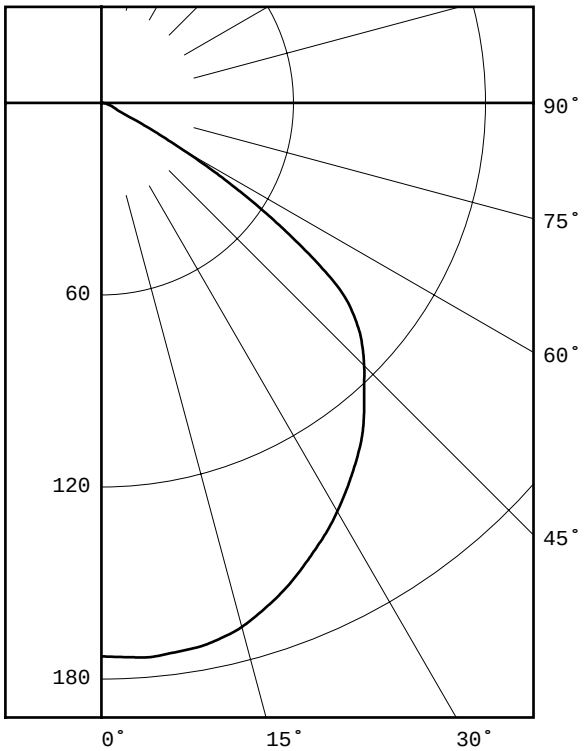
ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	136	35.0
0- 40	222	57.3
0- 60	374	96.3
0- 90	388	100.0
90-180	0	0.0
0-180	388	100.0

TOTAL INPUT WATTS = 7.5
EFFICACY = 51.7 Lm/W
CIE TYPE - DIRECT
LUMINAIRE SPACING CRITERION = 1.3
LUMINOUS DIAMETER: 10.000

LUMINANCE DATA IN CANDELA/SQ METER

ANGLE IN DEG	AVERAGE
45	3239.
55	2463.
65	271.
75	206.
85	204.



THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.

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CANDELA DISTRIBUTION

	0.0
0.0	173
2.5	173
5.0	174
7.5	173
10.0	173
12.5	171
15.0	170
17.5	167
20.0	163
22.5	160
25.0	156
27.5	152
30.0	147
32.5	143
35.0	138
37.5	133
40.0	128
42.5	122
45.0	116
47.5	110
50.0	103
52.5	91
55.0	72
57.5	51
60.0	30
62.5	15
65.0	6
67.5	5
70.0	4
72.5	3
75.0	3
77.5	2
80.0	2
82.5	1
85.0	1
87.5	0
90.0	0

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ZONAL LUMEN SUMMARY

0- 5	4.
5- 10	12.
10- 15	20.
15- 20	27.
20- 25	33.
25- 30	38.
30- 35	42.
35- 40	44.
40- 45	45.
45- 50	44.
50- 55	39.
55- 60	23.
60- 65	8.
65- 70	2.
70- 75	2.
75- 80	1.
80- 85	1.
85- 90	0.

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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	4
5- 10	12
10- 15	20
15- 20	27
20- 25	33
25- 30	38
30- 35	42
35- 40	44
40- 45	45
45- 50	44
50- 55	39
55- 60	23
60- 65	8
65- 70	2
70- 75	2
75- 80	1
80- 85	1
85- 90	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	17
0- 20	64
0- 30	136
0- 40	222
0- 50	312
0- 60	374
0- 70	384
0- 80	387
0- 90	388

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	66	62	60
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	70	58	50	45	69	57	50	44	56	49	44	55	48	44	53	48	44	42
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.

Goniophotometer Calibration

Calibration Lamp: GE 1000W, 120V, T6, CL (FEL)
Lamp Number: ITL78966-1000-14
Calibration Current: 8.300 Amps DC
Total Luminous Flux: 23413.0 Lumens
Calibration Date: 07/18/2015

Test Equipment Used			
Instrument	*Manufacturer / Model*	*S/N*	*Calibration Due:*
Goniophotometer	ITL / HLI LAB 6 - Test Distance: 31.3'	N/A	N/A
Power Analyzer	Yokogawa / WT 332	C2QA27076V	11/10/2016
Power Source	Voltage-Regulated House Power	N/A	N/A
Thermometer	National Instruments / USB-TC01	1912745	11/10/2016

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