

Project Number
16.00014



HUBBELL
Lighting

Date
1/8/2016

LAB 6

Test Sample Description

Catalog Number: 5801-12930K9

Description: 1-Lt. LED Wall Lantern w/ 17W AC LED Module

Test Method: IES LM-79-08 § 10

Preburn Time: 0:20

Time To Stabilize: 1:18

Total Operating Time: 1:56

Input Voltage (Volts): 120.3

Input Current (Amps): 0.154

Input Wattage (Watts): 17.1

Ambient Temp (°C): 24.4



Hubbell Lighting, Inc.

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

Checked: B. FLAUM
Approved: P. McCARTHY

NVLAP
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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REPORT NUMBER: 16.00014
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PREPARED FOR: PROGRESS
CATALOG NUMBER: 5801-12930K9
LUMINAIRE: 1-Lt. LED Wall Lantern w/ 17W AC LED Module
LAMP CAT. NO.: 93047261-4130
LAMP: 40- Nichia 3000K LEDs
MOUNTING: wall
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

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CANDELA DISTRIBUTION

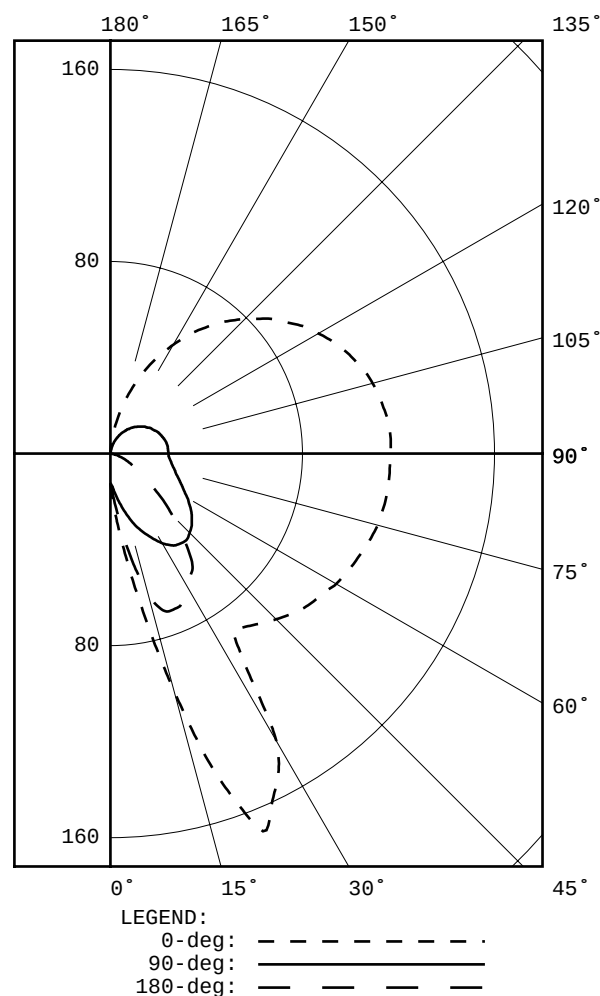
	0.0	45.0	90.0	135.0	180.0
0	12	12	12	12	12
5	26	22	15	19	21
15	102	64	26	45	60
25	160	134	38	66	70
35	90	132	47	61	59
45	98	82	47	47	37
55	105	85	41	29	17
65	111	89	33	19	8
75	115	91	28	14	3
85	117	91	25	11	0
90	118	92	24	10	0
95	117	91	24	10	0
105	113	88	23	10	0
115	105	82	22	9	0
125	94	73	19	8	0
135	79	62	16	6	0
145	62	47	12	5	0
155	43	32	8	3	0
165	22	16	4	1	0
175	4	2	0	0	0
180	0	0	0	0	0

FLUX

2
16
39
48
49
49
50
51
51
51
48
42
33
24
15
8
2
0

ZONAL ZONE	LUMEN LUMENS	SUMMARY %FIXT
0- 30	58	10.0
0- 40	106	18.3
0- 60	205	35.2
0- 90	358	61.6
90-120	140	24.1
90-130	173	29.9
90-150	213	36.7
90-180	223	38.4
0-180	580	100.0

TOTAL INPUT WATTS = 17.1
EFFICACY = 33.9 Lm/W
CIE TYPE - SEMI-DIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 4.9 3.1 2.5





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PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 3.000 8.500
HEIGHT OF SIDE : 9.250 9.250

LUMINANCE DATA IN CANDELA/SQ METER
ANGLE AVERAGE AVERAGE AVERAGE
IN DEG 0-DEG 90-DEG 180-DEG
45 2054. 1922. 770.
55 2062. 1701. 329.
65 2097. 1432. 155.
75 2164. 1294. 62.
85 2243. 1287. 2.



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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	12	12	12	12	12	12	12	12	12
5.0	26	25	22	18	15	16	19	20	21
10.0	54	50	40	28	20	24	30	36	39
15.0	102	91	64	40	26	32	45	57	60
20.0	155	145	97	54	33	41	60	68	70
25.0	160	164	134	62	38	48	66	69	70
30.0	138	148	142	71	43	54	66	67	64
35.0	90	101	132	77	47	56	61	61	59
40.0	93	91	111	80	48	55	53	56	49
45.0	98	94	82	75	47	50	47	42	37
50.0	102	98	83	61	44	45	39	32	26
55.0	105	102	85	60	41	39	29	20	17
60.0	109	105	87	59	37	33	23	15	12
65.0	111	107	89	58	33	28	19	12	8
70.0	113	109	90	58	30	24	16	9	5
75.0	115	111	91	58	28	22	14	7	3
80.0	116	112	91	58	26	20	12	5	1
85.0	117	112	91	57	25	18	11	4	0
90.0	118	113	92	57	24	17	10	3	0
95.0	117	112	91	57	24	17	10	3	0
100.0	115	111	90	57	24	17	10	3	0
105.0	113	109	88	55	23	17	10	3	0
110.0	110	105	86	53	22	16	9	3	0
115.0	105	101	82	51	22	15	9	3	0
120.0	100	96	78	49	20	14	8	2	0
125.0	94	90	73	45	19	13	8	2	0
130.0	87	84	68	42	18	13	7	2	0
135.0	79	76	62	38	16	11	6	2	0
140.0	71	68	55	33	14	10	6	1	0
145.0	62	59	47	29	12	9	5	1	0
150.0	52	50	39	24	10	7	4	1	0
155.0	43	40	32	19	8	6	3	1	0
160.0	32	30	24	14	6	4	2	0	0
165.0	22	20	16	9	4	3	1	0	0
170.0	12	11	8	5	2	1	0	0	0
175.0	4	3	2	1	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0



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ZONAL LUMEN SUMMARY

0- 5	0.
5- 10	2.
10- 15	5.
15- 20	11.
20- 25	17.
25- 30	22.
30- 35	24.
35- 40	24.
40- 45	25.
45- 50	24.
50- 55	25.
55- 60	25.
60- 65	25.
65- 70	25.
70- 75	26.
75- 80	26.
80- 85	26.
85- 90	26.
90- 95	26.
95-100	25.
100-105	24.
105-110	23.
110-115	22.
115-120	20.
120-125	18.
125-130	16.
130-135	13.
135-140	11.
140-145	9.
145-150	7.
150-155	5.
155-160	3.
160-165	2.
165-170	1.
170-175	0.
175-180	0.



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	2
10- 15	5
15- 20	11
20- 25	17
25- 30	22
30- 35	24
35- 40	24
40- 45	25
45- 50	24
50- 55	25
55- 60	25
60- 65	25
65- 70	25
70- 75	26
75- 80	26
80- 85	26
85- 90	26
90- 95	26
95-100	25
100-105	24
105-110	23
110-115	22
115-120	20
120-125	18
125-130	16
130-135	13
135-140	11
140-145	9
145-150	7
150-155	5
155-160	3
160-165	2
165-170	1
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	2
0- 20	18
0- 30	58
0- 40	106
0- 50	155
0- 60	205
0- 70	255
0- 80	306
0- 90	358
0-100	408
0-110	456
0-120	498
0-130	531
0-140	555
0-150	570
0-160	578
0-170	580
0-180	580



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	96	90	85	80	89	84	79	75	73	69	65	62	59	56	53	50	48	43
2	86	77	69	62	80	71	64	58	62	56	51	52	48	44	44	41	38	33
3	78	66	57	50	72	62	54	47	53	47	41	45	40	36	38	34	31	27
4	71	58	49	41	65	54	46	39	47	40	34	40	34	30	33	29	25	22
5	65	51	42	35	60	48	39	33	41	34	29	35	30	25	30	25	22	18
6	59	46	36	30	55	43	34	28	37	30	25	32	26	22	27	22	19	16
7	55	41	32	26	51	38	30	24	33	26	21	28	23	19	24	20	16	13
8	51	37	28	22	47	35	27	21	30	23	19	26	20	16	22	17	14	12
9	47	34	25	20	44	31	24	19	27	21	17	24	18	15	20	16	13	10
10	44	31	23	17	41	29	21	17	25	19	15	22	17	13	19	14	11	9

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.

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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

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

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