

Project Number
15.00488



HUBBELL
Lighting

Date
3/27/2015

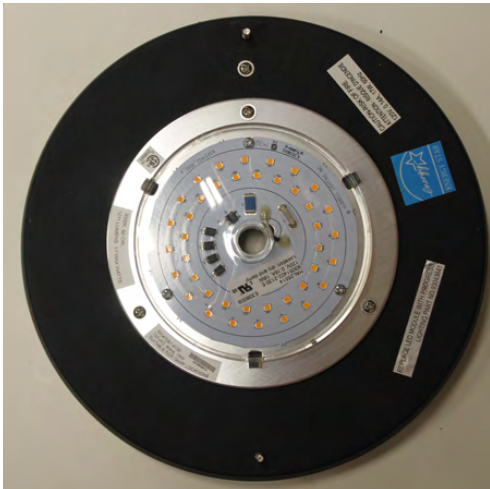
LAB 6

Test Sample Description

Catalog Number: P3883-3130K9
Description: Westport CLOSE TO CEILING

Test Method: IES LM-79-08 § 10
Preburn Time: 00:00
Time To Stabilize: 2:36
Total Operating Time: 4:00

Input Voltage (Volts): 120.1
Input Current (Amps): 0.152
Input Wattage (Watts): 16.9
Ambient Temp (°C): 24.5



Hubbell Lighting, Inc.

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Greenville, SC 29607
www.hubbellighting.com

Checked: B. FLAUM
Approved: M. WASHBURN

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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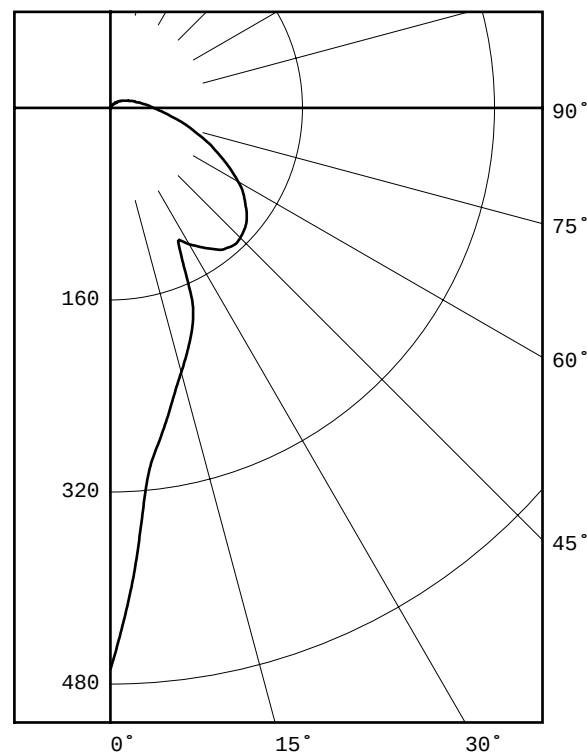
REPORT NUMBER: 15.00488
ISSUE DATE: 03/27/15
PREPARED FOR: PROGRESS
CATALOG NUMBER: P3883-3130K9
LUMINAIRE: Westport CTC
LAMP CAT. NO.: 93047261-4130
LAMP: 40 - NICHIA 3000K LEDs
HAL 17W 120V Module
MOUNTING: Ceiling
NOTE: DATA SHOWN IS ABSOLUTE FOR THE
SAMPLE PROVIDED.

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DEG	CANDELA	LUMENS
0	468	
5	326	30
15	228	64
25	144	70
35	143	90
45	153	118
55	137	122
65	105	104
75	71	76
85	45	49
90	36	
95	30	33
105	21	22
115	14	14
125	10	9
135	6	5
145	3	2
155	0	0
165	0	0
175	0	0
180	0	

ZONAL ZONE	LUMEN	SUMMARY LUMENS	%FIXT
0- 30		164	20.3
0- 40		254	31.4
0- 60		494	61.1
0- 90		723	89.5
90-120		69	8.6
90-130		78	9.7
90-150		85	10.5
90-180		85	10.5
0-180		808	100.0

TOTAL INPUT WATTS = 16.9
EFFICACY = 47.8 Lm/W
CIE TYPE - SEMI-DIRECT
LUMINAIRE SPACING CRITERION = 0.4





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LUMINOUS DIAMETER: 5.000
HEIGHT OF SIDE : 5.000

LUMINANCE DATA IN CANDELA/SQ METER
ANGLE AVERAGE
IN DEG

45	7511.
55	6688.
65	5256.
75	3764.
85	2620.



®

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CANDELA DISTRIBUTION

	0.0
0.0	468
5.0	326
10.0	266
15.0	228
20.0	198
25.0	144
30.0	131
35.0	143
40.0	152
45.0	153
50.0	148
55.0	137
60.0	123
65.0	105
70.0	88
75.0	71
80.0	57
85.0	45
90.0	36
95.0	30
100.0	25
105.0	21
110.0	17
115.0	14
120.0	12
125.0	10
130.0	8
135.0	6
140.0	4
145.0	3
150.0	1
155.0	0
160.0	0
165.0	0
170.0	0
175.0	0
180.0	0



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ZONAL LUMEN SUMMARY

0- 5	9.
5- 10	21.
10- 15	29.
15- 20	35.
20- 25	37.
25- 30	33.
30- 35	40.
35- 40	49.
40- 45	57.
45- 50	61.
50- 55	62.
55- 60	60.
60- 65	55.
65- 70	49.
70- 75	41.
75- 80	34.
80- 85	27.
85- 90	22.
90- 95	18.
95-100	15.
100-105	12.
105-110	10.
110-115	8.
115-120	6.
120-125	5.
125-130	4.
130-135	3.
135-140	2.
140-145	1.
145-150	1.
150-155	0.
155-160	0.
160-165	0.
165-170	0.
170-175	0.
175-180	0.



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	9
5- 10	21
10- 15	29
15- 20	35
20- 25	37
25- 30	33
30- 35	40
35- 40	49
40- 45	57
45- 50	61
50- 55	62
55- 60	60
60- 65	55
65- 70	49
70- 75	41
75- 80	34
80- 85	27
85- 90	22
90- 95	18
95-100	15
100-105	12
105-110	10
110-115	8
115-120	6
120-125	5
125-130	4
130-135	3
135-140	2
140-145	1
145-150	1
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	30
0- 20	94
0- 30	164
0- 40	254
0- 50	371
0- 60	494
0- 70	598
0- 80	673
0- 90	723
0-100	756
0-110	778
0-120	792
0-130	801
0-140	806
0-150	808
0-160	808
0-170	808
0-180	808



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	92	92	92	90
1	104	98	93	88	100	95	90	86	89	85	81	83	80	77	77	75	73	70
2	93	84	76	70	90	81	74	68	76	70	65	71	66	62	66	63	59	56
3	85	73	64	57	81	71	62	56	66	59	53	62	56	51	58	53	49	46
4	77	64	55	48	74	62	53	47	58	51	45	55	48	43	51	46	41	39
5	71	57	48	41	68	55	46	40	52	44	38	49	42	37	46	40	36	33
6	65	51	42	35	63	50	41	35	47	39	33	44	37	32	42	36	31	29
7	60	46	37	31	58	45	37	30	43	35	30	40	34	29	38	32	28	25
8	56	42	34	28	54	41	33	27	39	32	26	37	30	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	20
10	49	36	28	22	48	35	27	22	33	26	22	32	25	21	30	24	20	19

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: ITL78966-1000-38

Calibration Current: 8.300 Amps DC

Total Luminous Flux: 25753.0 Lumens

Calibration Date: 11/24/2014

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
Goniophotometer	ITL / HLI LAB 6 - Test Distance: 31.3'	N/A	N/A
Power Analyzer	Yokogawa / WT 332	C2QA27076V	11/12/2015
Power Source	Voltage-Regulated House Power	N/A	N/A
Thermometer	National Instruments / USB-TC01	1912745	11/11/2015

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