

Project Number  
15.00035



**HUBBELL**  
Lighting

Date  
1/27/2015

LAB 5

### Test Sample Description

**Catalog Number:** P5644-31  
**Description:** 6" Sq. Outdoor Wall Mount- up/down light- Fixture oriented with socket assembly biased toward top of fixture.

**Test Method:** IES LM-79-08 § 10  
**Preburn Time:** 0:00  
**Time To Stabilize:** 1:00  
**Total Operating Time:** 2:00  
  
**Input Voltage (Volts):** 117.7  
**Input Current (Amps):** 0.840  
**Input Wattage (Watts):** 98.8  
**Ambient Temp (°C):** 24.8



### Hubbell Lighting, Inc.

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

Checked: D. BLACK  
Approved: P. McCARTHY





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CATALOG NUMBER: P5644-31

LUMINAIRE: 6" Sq. Outdoor Wall Mount- up/down light- Fixture oriented with socket assembly biased toward top of fixture.

LAMP CAT. NO.: 50PAR38/IRCE/UT4/FL25 120V

LAMPS:2- PHILIPS HALOGEN MED BASE 50W PAR 38 (BASE UP/BASE DOWN)

MOUNTING: WALL

REPORT IS BASED ON 850 LUMENS PER LAMP.

DEG	CANDELA	LUMENS
0	1616	
5	1478	125
15	525	147
25	97	48
35	9	8
45	2	2
55	1	1
65	0	0
75	0	0
85	0	0
90	0	0
95	0	0
105	0	0
115	0	0
125	2	2
135	9	7
145	34	22
155	125	62
165	506	142
175	1462	121
180	1569	

ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	320	18.8	46.7
0- 40	328	19.3	47.7
0- 60	330	19.4	48.1
0- 90	330	19.4	48.1
90-120	0	0.0	0.0
90-130	2	0.1	0.2
90-150	31	1.8	4.5
90-180	356	20.9	51.9
0-180	686	40.4	100.0

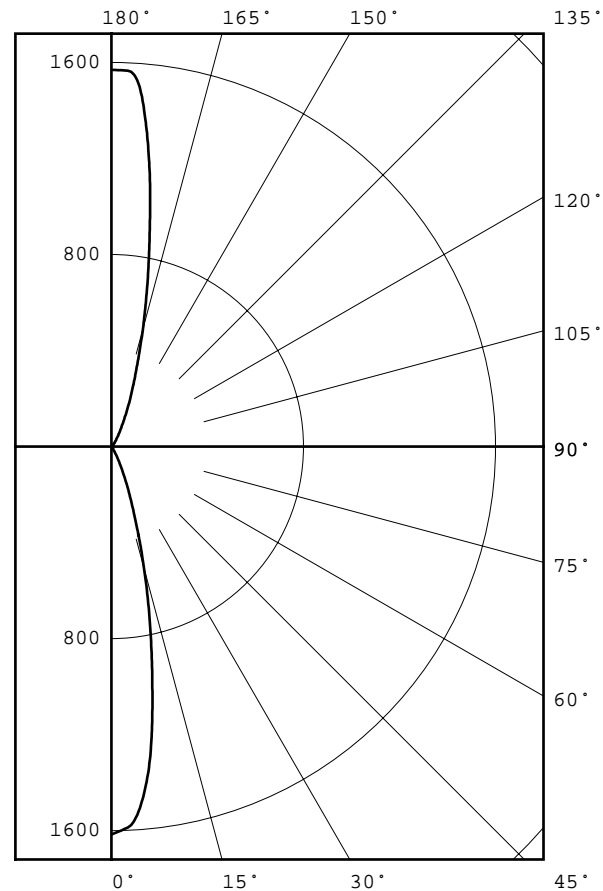
TOTAL LUMINAIRE EFFICIENCY = 40.4 %

TOTAL INPUT WATTS = 98.8

EFFICACY = 6.9 Lm/W

CIE TYPE - DIRECT-INDIRECT

LUMINAIRE SPACING CRITERION = 0.4





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PLANE : 0-DEG 90-DEG  
LUMINOUS LENGTH : 6.000 6.000

LUMINANCE DATA IN CANDELA/SQ METER

ANGLE AVERAGE

IN DEG

45	122.
55	75.
65	0.
75	0.
85	0.



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CANDELA DISTRIBUTION

	0.0
0.0	1616
5.0	1478
10.0	980
15.0	525
20.0	237
25.0	97
30.0	32
35.0	9
40.0	4
45.0	2
50.0	1
55.0	1
60.0	0
65.0	0
70.0	0
75.0	0
80.0	0
85.0	0
90.0	0
95.0	0
100.0	0
105.0	0
110.0	0
115.0	0
120.0	1
125.0	2
130.0	3
135.0	9
140.0	18
145.0	34
150.0	64
155.0	125
160.0	258
165.0	506
170.0	921
175.0	1462
180.0	1569



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ZONAL LUMEN SUMMARY

0- 5	37.
5- 10	88.
10- 15	87.
15- 20	60.
20- 25	33.
25- 30	15.
30- 35	5.
35- 40	2.
40- 45	1.
45- 50	1.
50- 55	0.
55- 60	0.
60- 65	0.
65- 70	0.
70- 75	0.
75- 80	0.
80- 85	0.
85- 90	0.
90- 95	0.
95-100	0.
100-105	0.
105-110	0.
110-115	0.
115-120	0.
120-125	1.
125-130	1.
130-135	2.
135-140	5.
140-145	8.
145-150	14.
150-155	23.
155-160	39.
160-165	60.
165-170	82.
170-175	84.
175-180	37.



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	37
5- 10	88
10- 15	87
15- 20	60
20- 25	33
25- 30	15
30- 35	5
35- 40	2
40- 45	1
45- 50	1
50- 55	0
55- 60	0
60- 65	0
65- 70	0
70- 75	0
75- 80	0
80- 85	0
85- 90	0
90- 95	0
95-100	0
100-105	0
105-110	0
110-115	0
115-120	0
120-125	1
125-130	1
130-135	2
135-140	5
140-145	8
145-150	14
150-155	23
155-160	39
160-165	60
165-170	82
170-175	84
175-180	37

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	125
0- 20	272
0- 30	320
0- 40	328
0- 50	329
0- 60	330
0- 70	330
0- 80	330
0- 90	330
0-100	330
0-110	330
0-120	330
0-130	332
0-140	339
0-150	361
0-160	423
0-170	565
0-180	686



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	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	43	43	43	43	40	40	40	40	33	33	33	27	27	27	22	22	22	19
1	40	39	38	37	37	36	35	35	31	30	30	26	26	25	21	21	21	19
2	38	36	34	33	35	34	32	31	29	28	27	25	24	23	21	20	20	18
3	36	33	31	30	33	31	29	28	27	26	25	23	23	22	20	20	19	18
4	34	31	29	27	32	29	27	26	26	24	23	22	22	21	19	19	18	17
5	32	29	27	25	30	27	25	24	24	23	22	21	21	20	19	18	18	17
6	31	27	25	23	29	26	24	22	23	22	21	21	20	19	18	18	17	16
7	29	26	23	22	28	25	23	21	22	21	20	20	19	18	18	17	17	16
8	28	24	22	21	26	23	21	20	21	20	19	19	18	17	17	17	16	15
9	27	23	21	20	25	22	20	19	20	19	18	19	18	17	17	16	16	15
10	26	22	20	19	24	21	19	18	20	18	17	18	17	16	16	16	15	15

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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:* 11/20/2014

### *Test Equipment Used*

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	ITL / HLI LAB 5 - Test Distance: 56.0'	N/A	
<i>Power Analyzer</i>	Yokogawa / WT 330	C2QA27072V	11/12/2015
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	1912722	11/11/2015

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