

Project Number
17.01053



HUBBELL
Lighting

Date
4/12/2017

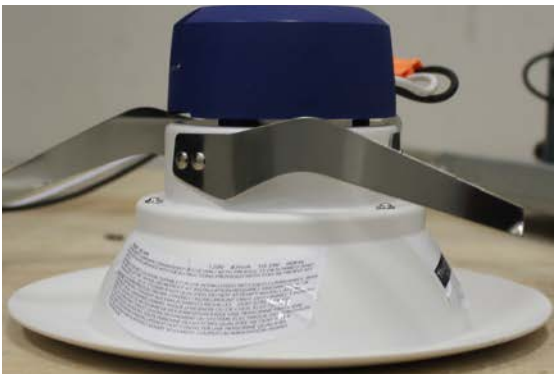
LAB 1

Test Sample Description

Catalog Number: P8061-2830K
Description: 5" ROUND LED RETROFIT - 600LM

Test Method: IES LM-79-08 § 10
Preburn Time: 0:05
Time To Stabilize: 0:45
Total Operating Time: 1:40

Input Voltage (Volts): 120.3
Input Current (Amps): 0.086
Input Wattage (Watts): 10.1
Ambient Temp (°C): 24.1
PF @ 277V: 0.978
THD @ 277V (%): 8.76



Hubbell Lighting, Inc.

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

Checked: J. TAYLOR
Approved: P. McCARTHY



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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PREPARED FOR: PROGRESS

CATALOG NUMBER: P8061-2830K

LUMINAIRE: 5" ROUND LED RETROFIT

LAMP: 1- 3000K LED

MOUNTING: Ceiling

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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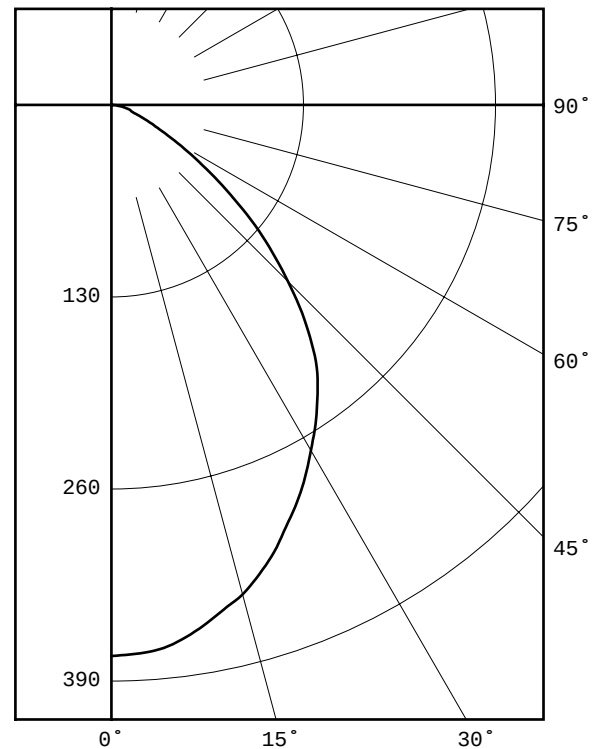
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DEG	CANDELA	LUMENS
0	373	
5	370	35
15	343	96
25	297	137
35	243	152
45	169	130
55	85	77
65	30	31
75	13	13
85	3	4
90	0	
95	0	0
105	0	0
115	0	0
125	0	0
135	0	0
145	0	0
155	0	0
165	0	0
175	0	0
180	0	

ZONAL ZONE	LUMEN	SUMMARY LUMENS	%FIXT
0- 30		268	39.7
0- 40		419	62.2
0- 60		627	92.9
0- 90		674	100.0
90-120		0	0.0
90-130		0	0.0
90-150		0	0.0
90-180		0	0.0
0-180		674	100.0

EFFICACY = 66.7 lm/W
CIE TYPE - DIRECT
LUMINAIRE SPACING CRITERION = 1.10





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LUMINOUS DIAMETER: 5.000

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	18867.
55	11699.
65	5604.
75	3965.
85	2717.



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PAGE: 5 OF 8**CANDELA DISTRIBUTION**

0.0	373
5.0	370
10.0	358
15.0	343
20.0	322
25.0	297
30.0	270
35.0	243
40.0	211
45.0	169
50.0	127
55.0	85
60.0	52
65.0	30
70.0	17
75.0	13
80.0	8
85.0	3
90.0	0
95.0	0
100.0	0
105.0	0
110.0	0
115.0	0
120.0	0
125.0	0
130.0	0
135.0	0
140.0	0
145.0	0
150.0	0
155.0	0
160.0	0
165.0	0
170.0	0
175.0	0
180.0	0



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5-DEGREE		
ZONAL	LUMEN	SUMMARY
0- 5		9
5- 10		26
10- 15		42
15- 20		55
20- 25		65
25- 30		72
30- 35		76
35- 40		76
40- 45		70
45- 50		60
50- 55		46
55- 60		31
60- 65		19
65- 70		12
70- 75		8
75- 80		5
80- 85		3
85- 90		1
90- 95		0
95-100		0
100-105		0
105-110		0
110-115		0
115-120		0
120-125		0
125-130		0
130-135		0
135-140		0
140-145		0
145-150		0
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		35
10- 20		96
20- 30		137
30- 40		152
40- 50		130
50- 60		77
60- 70		31
70- 80		13
80- 90		4
90-100		0
100-110		0
110-120		0
120-130		0
130-140		0
140-150		0
150-160		0
160-170		0
170-180		0



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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	105	102	100	101	99	96	97	95	94	94	92	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69
4	89	79	71	66	87	77	71	65	75	69	64	73	68	64	71	66	63	61
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

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 TEST 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: 25889.0 Lumens

Calibration Date: 12/05/2016

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	ITL / HLI LAB 1 - Test Distance: 31.75'	N/A	N/A
<i>Power Analyzer</i>	Yokogawa / WT 332	C2QA27071V	11/2/2017
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	176F47B	11/7/2017

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