

Project Number
17.01541



HUBBELL
Lighting

Date
5/22/2017

LAB 4

Test Sample Description

Catalog Number: P81082830K
Description: 5.5" Round Ceiling LED w/ Sabic Polycarbonate Refractor

Test Method: IES LM-79-08 § 10
Preburn Time: 0:45
Time To Stabilize: 0:30
Total Operating Time: 1:30

Input Voltage (Volts): 120.0
Input Current (Amps): 0.104
Input Wattage (Watts): 12.4
Ambient Temp (°C): P 24.2



Hubbell Lighting, Inc.

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

Checked: R. HALL
Approved: P. McCARTHY





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LUMINAIRE: 5.5" Round Ceiling LED w/ Sabic
Polycarbonate Refractor

LAMP CAT. NO.: 757DRT-V1

LAMP: 20- Nichia 3000K LEDs

PAGE: 2 OF 7



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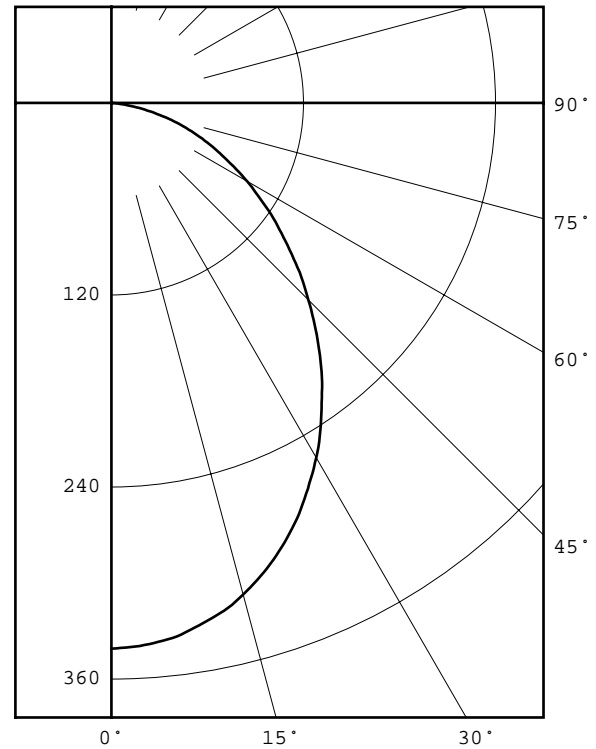
PAGE: 3 OF 7

DEG	CANDELA	LUMENS
0	341	
5	338	32
15	318	89
25	280	129
35	229	143
45	174	134
55	122	109
65	75	75
75	35	37
85	3	5
90	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	250	33.2
0- 40	394	52.2
0- 60	637	84.5
0- 90	754	100.0
90-180	0	0.0
0-180	754	100.0

EFFICACY = 60.6 lm/W
CIE TYPE - DIRECT
LUMINAIRE SPACING CRITERION = 1.13
LUMINOUS DIAMETER: 2.906

LUMINANCE DATA IN CANDELA/SQ M	
ANGLE	AVERAGE
IN DEG	
45	57506.
55	49707.
65	41473.
75	31603.
85	8044.





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PAGE: 4 OF 7

CANDELA DISTRIBUTION

0.0	341
2.5	340
5.0	338
7.5	335
10.0	330
12.5	325
15.0	318
17.5	310
20.0	301
22.5	291
25.0	280
27.5	268
30.0	256
32.5	243
35.0	229
37.5	216
40.0	202
42.5	188
45.0	174
47.5	161
50.0	147
52.5	134
55.0	122
57.5	109
60.0	98
62.5	86
65.0	75
67.5	65
70.0	55
72.5	45
75.0	35
77.5	25
80.0	16
82.5	8
85.0	3
87.5	0
90.0	0



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PAGE: 5 OF 7

5-DEGREE		
ZONAL	LUMEN	SUMMARY
0-	5	8
5-	10	24
10-	15	38
15-	20	51
20-	25	61
25-	30	68
30-	35	71
35-	40	72
40-	45	70
45-	50	65
50-	55	58
55-	60	51
60-	65	42
65-	70	33
70-	75	24
75-	80	14
80-	85	5
85-	90	0

10-DEGREE		
ZONAL	LUMEN	SUMMARY
0-	10	32
10-	20	89
20-	30	129
30-	40	143
40-	50	134
50-	60	109
60-	70	75
70-	80	37
80-	90	5



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PAGE: 6 OF 7

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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	65	57	52	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	42	35	30	41	34	30	40	34	30	28

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: Osram ST8-HA4-250-840 22 W/4000 K

Lamp Number: RM B6-28

Ballast: Vossloh Schwabe LN 36.149

Ballast Number: RM B6-28

Calibration Voltage/Frequency: 220Vac / 50hz

Total Luminous Flux: 2463

Calibration Date: 01/19/2017

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	LMT/GO-DS 1600 Lab 4- Test Dist.: 31.0'	10B6231	02/17/2019
<i>Power Analyzer</i>	Yokogawa / WT 332	C2QA27074V	11/02/2017
<i>Power Source</i>	Chroma / 61604	616040003897	N/A
<i>Thermometer</i>	LMT / ATS-4Ch	10B623-3	12/14/2017

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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.