

Project Number
17.00222



Date
1/24/2017

LAB 6

Test Sample Description

Catalog Number: P350056-00930
Description: 1-Lt. DCLED Flush Mount

Test Method: IES LM-79-08 § 10
Preburn Time: 0:30
Time To Stabilize: 0:50
Total Operating Time: 2:10

Input Voltage (Volts): 119.8
Input Current (Amps): 0.198
Input Wattage (Watts): 23.4
Ambient Temp (°C): 26.0



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Checked: M. ELLMANN
Approved: D. BLACK





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LUMINAIRE: 1-Lt. DCLED Flush Mount

LAMP: 20- Nichia 3000K LEDs

REFRACTOR : Etched White Linen

MOUNTING: Ceiling

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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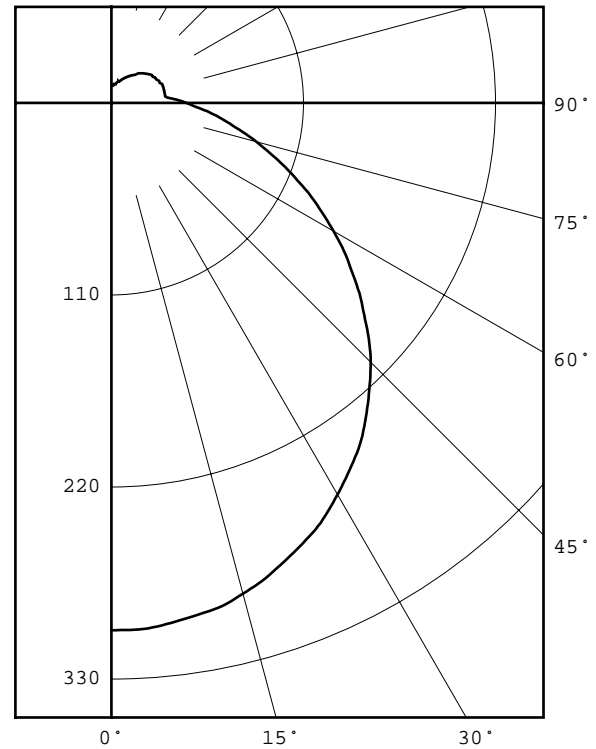
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DEG	CANDELA	LUMENS
0	302	
5	301	29
15	291	82
25	272	125
35	245	153
45	210	162
55	168	151
65	126	125
75	86	91
85	55	60
90	43	
95	33	38
105	31	33
115	30	30
125	28	25
135	24	19
145	19	12
155	15	7
165	12	3
175	10	1
180	10	

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	236	20.6
0- 40	389	34.0
0- 60	702	61.3
0- 90	977	85.4
90-120	100	8.8
90-130	125	10.9
90-150	156	13.6
90-180	167	14.6
0-180	1144	100.0

EFFICACY = 48.9 lm/W
CIE TYPE - SEMI-DIRECT
LUMINAIRE SPACING CRITERION = 1.28





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LUMINOUS DIAMETER: 16.000
HEIGHT OF SIDE : 3.500

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	1791.
55	1615.
65	1439.
75	1256.
85	1163.



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CANDELA DISTRIBUTION

0.0	302
5.0	301
10.0	297
15.0	291
20.0	282
25.0	272
30.0	259
35.0	245
40.0	228
45.0	210
50.0	189
55.0	168
60.0	147
65.0	126
70.0	105
75.0	86
80.0	69
85.0	55
90.0	43
95.0	33
100.0	31
105.0	31
110.0	31
115.0	30
120.0	29
125.0	28
130.0	26
135.0	24
140.0	21
145.0	19
150.0	17
155.0	15
160.0	13
165.0	12
170.0	11
175.0	10
180.0	10



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5-DEGREE ZONAL LUMEN SUMMARY		
0- 5		7
5- 10		21
10- 15		35
15- 20		47
20- 25		58
25- 30		67
30- 35		74
35- 40		79
40- 45		81
45- 50		81
50- 55		78
55- 60		73
60- 65		66
65- 70		58
70- 75		50
75- 80		41
80- 85		34
85- 90		27
90- 95		21
95-100		17
100-105		17
105-110		16
110-115		15
115-120		14
120-125		13
125-130		12
130-135		10
135-140		8
140-145		7
145-150		5
150-155		4
155-160		3
160-165		2
165-170		1
170-175		1
175-180		0

10-DEGREE ZONAL LUMEN SUMMARY		
0- 10		29
10- 20		82
20- 30		125
30- 40		153
40- 50		162
50- 60		151
60- 70		125
70- 80		91
80- 90		60
90-100		38
100-110		33
110-120		30
120-130		25
130-140		19
140-150		12
150-160		7
160-170		3
170-180		1



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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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	85
1	104	98	93	89	99	94	90	86	87	84	81	81	78	76	75	73	71	68
2	94	85	77	71	90	82	75	69	76	70	65	70	66	62	65	61	58	55
3	85	74	65	59	81	71	63	57	66	60	54	61	56	51	57	53	49	46
4	78	65	56	49	74	63	55	48	59	51	46	54	48	44	51	46	41	39
5	71	58	49	42	68	56	48	41	52	45	39	49	42	38	45	40	36	33
6	66	52	43	36	63	50	42	36	47	40	34	44	38	33	41	36	31	29
7	61	47	38	32	58	46	37	31	43	35	30	40	34	29	37	32	28	26
8	57	43	34	28	54	42	33	28	39	32	27	37	30	26	34	29	25	23
9	53	39	31	25	51	38	30	25	36	29	24	34	28	23	32	26	22	20
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	18

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: 09/02/2016

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	ITL / HLI LAB 6 - Test Distance: 31.3'	N/A	N/A
<i>Power Analyzer</i>	Yokogawa / WT 332	C2QA27076V	11/2/2017
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	1912745	11/2/2017

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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.