

Project Number
17.00842



Date
3/29/2017

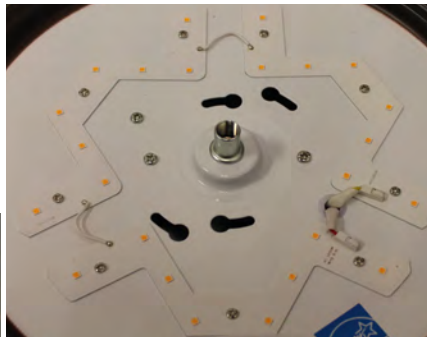
LAB 1

Test Sample Description

Catalog Number: P350002-020-30
Description: 13" 1-Lt. DC LED Flush Mount w/ Etched Alabaster Refractor

Test Method: IES LM-79-08 § 10
Preburn Time: 0:00
Time To Stabilize: 0:60
Total Operating Time: 1:47

Input Voltage (Volts): 120.2
Input Current (Amps): 0.170
Input Wattage (Watts): 20.4
Ambient Temp (°C): 24.3



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Checked: M. HALL / D. ROBBINS
Approved: D. BLACK



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LUMINAIRE: 13" 1-Lt. DC LED Flush Mount w/ Etched Alabaster Refractor

LAMP CAT. NO.: LG/LEDLEMS36X90LZ3A00

LAMP: 24 - LG 3000K LEDs

INPUT ELECTRICAL: 120.2 VOLTS, 20.4 WATTS, 0.170 AMPS

MOUNTING: Ceiling

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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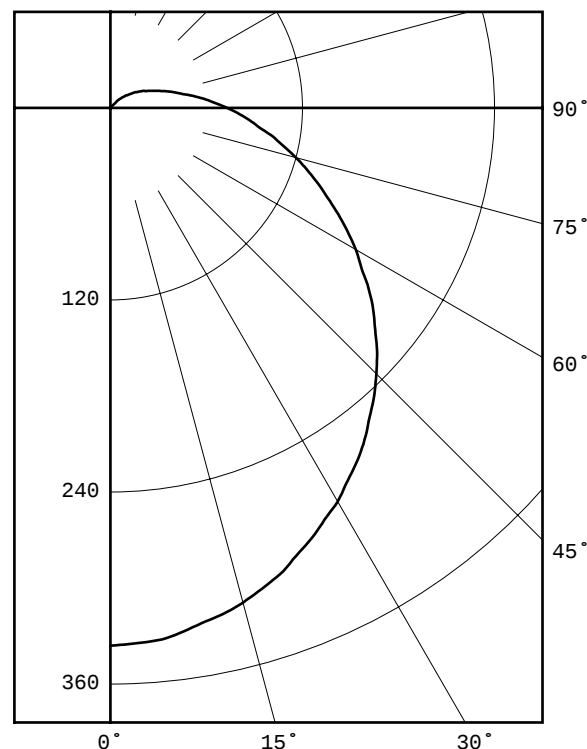
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DEG	CANDELA	LUMENS
0	336	
5	334	32
15	320	90
25	297	137
35	269	168
45	235	181
55	197	176
65	157	156
75	120	127
85	87	95
90	73	
95	60	66
105	39	41
115	25	25
125	15	14
135	7	4
145	0	0
155	0	0
165	0	0
175	0	0
180	0	

ZONAL ZONE	LUMEN	SUMMARY LUMENS	%FIXT
0- 30		259	19.7
0- 40		427	32.5
0- 60		785	59.8
0- 90		1163	88.5
90-120		132	10.1
90-130		146	11.1
90-150		151	11.5
90-180		151	11.5
0-180		1313	100.0

EFFICACY = 64.4 lm/W
CIE TYPE - SEMI-DIRECT
LUMINAIRE SPACING CRITERION = 1.26





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LUMINOUS DIAMETER: 11.000

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	5421.
55	5602.
65	6059.
75	7562.
85	16281.



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CANDELA DISTRIBUTION

0.0	336
5.0	334
10.0	327
15.0	320
20.0	310
25.0	297
30.0	284
35.0	269
40.0	252
45.0	235
50.0	216
55.0	197
60.0	177
65.0	157
70.0	138
75.0	120
80.0	103
85.0	87
90.0	73
95.0	60
100.0	48
105.0	39
110.0	31
115.0	25
120.0	20
125.0	15
130.0	11
135.0	7
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		8
5- 10		24
10- 15		38
15- 20		52
20- 25		64
25- 30		73
30- 35		81
35- 40		87
40- 45		90
45- 50		91
50- 55		90
55- 60		86
60- 65		81
65- 70		75
70- 75		67
75- 80		60
80- 85		51
85- 90		44
90- 95		36
95-100		29
100-105		23
105-110		18
110-115		14
115-120		11
120-125		8
125-130		6
130-135		4
135-140		1
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		32
10- 20		90
20- 30		137
30- 40		168
40- 50		181
50- 60		176
60- 70		156
70- 80		127
80- 90		95
90-100		66
100-110		41
110-120		25
120-130		14
130-140		4
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 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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	103	97	92	87	99	94	89	85	87	84	80	81	78	75	76	74	71	68
2	93	83	76	69	89	80	73	67	75	69	64	70	65	61	65	61	58	55
3	84	72	63	56	81	70	62	55	65	58	53	61	55	50	57	52	48	45
4	77	64	54	47	73	62	53	46	58	50	44	54	47	42	50	45	41	38
5	70	57	47	40	67	55	46	39	51	44	38	48	42	36	45	39	35	32
6	65	51	41	35	62	49	40	34	46	39	33	43	37	32	41	35	30	28
7	60	46	37	30	57	45	36	30	42	34	29	39	33	28	37	31	27	25
8	56	42	33	27	53	41	32	27	38	31	26	36	30	25	34	28	24	22
9	52	38	30	24	50	37	29	24	35	28	23	33	27	22	31	26	22	20
10	49	35	27	22	47	34	27	21	32	26	21	31	25	20	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: 09/09/2016

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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