

Project Number
17.02758



Date
10/12/2017
Rev 1: 11/14/2017

LAB 1
Sphere

Test Sample Description

Catalog Number: P5641-2030K
Description: 6" Diameter LED Wall-Mount, Down-Light Cylinder

Revision 1: Changed report format from roadway

Photometry

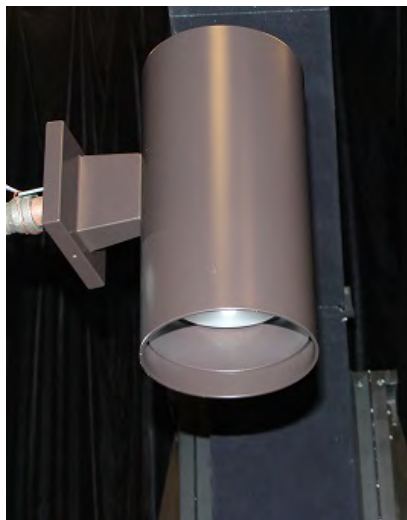
Test Method: IES LM-79-08 § 10
Preburn Time: 00:10
Time To Stabilize: 0:85
Total Operating Time: 2:18

Input Voltage (Volts): 120.0
Input Current (Amps): 0.267
Input Wattage (Watts): 30.0
Ambient Temp (°C): 25.8
PF @ 120V: 0.935

Sphere

Test Method: IES LM-79-08 § 9.1 & 12.1
Preburn Time: 2:00
Time To Stabilize: 1:13
Total Operating Time: 3:13

Input Voltage (Volts): 120.0
Input Current (Amps): 0.265
Input Wattage (Watts): 29.5
Ambient Temp (°C): 24.0



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Revised By: D. ROBBINS
Revision Approval: P. McCARTHY

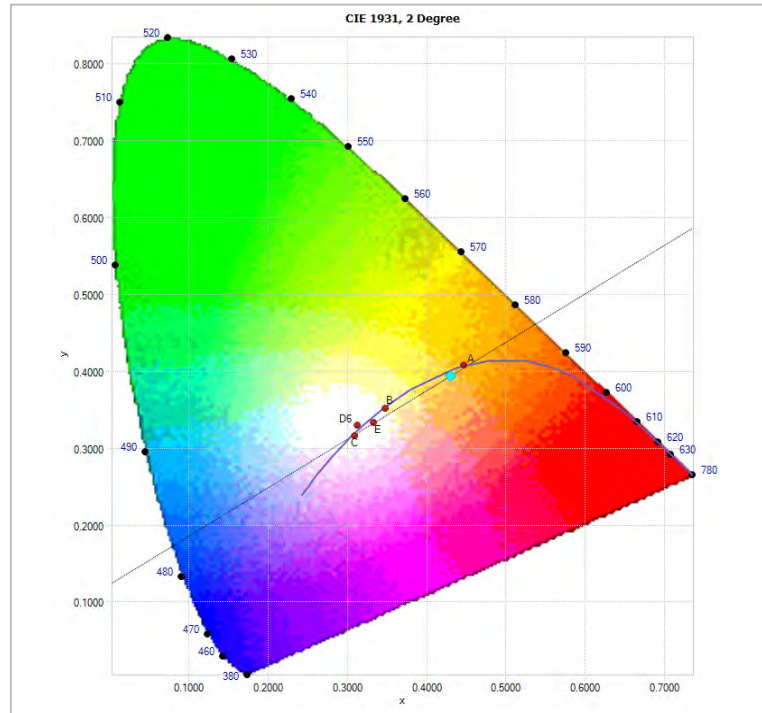




Lamp Cat#: n/a
 Lamp Desc: 1 - 3000K LEDs
 Driver Desc: n/a

Efficacy: 31.6 LPW S/P Ratio: 1.5 LM/LM

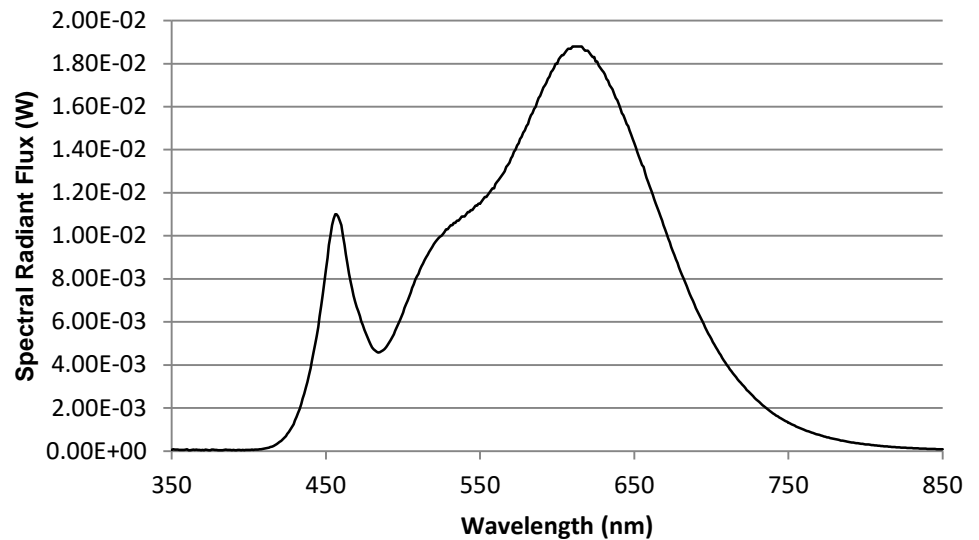
Chromaticity Diagram



Spectral Results

Name	Value	Unit
Φ	3.19	watts
$\Phi(v)$	933	lumens
$\Phi(v')$	1355	lm'
Chrom x	0.4299	
Chrom y	0.3941	
Chrom u	0.2503	
Chrom v	0.3442	
Duv	0.0031	
Chrom u'	0.2503	
Chrom v'	0.5163	
CCT	3038	K
Purity	47.3	%
λ (dom)	583.8	nm
FWHM	155.9	nm
λ (peak)	613.2	nm
λ (center)	596.4	nm
λ (centroid)	589.7	nm
SDCM	Cool White	
RA	91	
Corr. Coef.	0.003034241	
Correlation	0.0054	
R1	92.6	
R2	97.5	
R3	97.1	
R4	91.1	
R5	92.5	
R6	95.6	
R7	88.5	
R8	76.9	
R9	50.3	
R10	93.3	
R11	92.3	
R12	81.1	
R13	94.4	
R14	99.5	

Spectral Distribution of Radiant Flux



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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REPORT NUMBER: 17.02758

PAGE: 3 OF 8

ISSUE DATE: 10/11/17

PREPARED FOR: PROGRESS

CATALOG NUMBER: P5641-2030K

LUMINAIRE: 6" Diameter LED Wall-Mount, Down-Light Cylinder

LAMP: 1- 3000K LEDs

MOUNTING: Wall

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

DEG	CANDELA	LUMENS
0	634	
5	632	60
15	605	170
25	528	240
35	346	217
45	187	145
55	71	64
65	9	11
75	1	2
85	0	0
90	0	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	469	51.6
0- 40	686	75.5
0- 60	896	98.6
0- 90	909	100.0
90-180	0	0.0
0-180	909	100.0

TOTAL INPUT WATTS = 30.0

EFFICACY = 30.3 Lm/W

CIE TYPE - DIRECT

LUMINAIRE SPACING CRITERION = 1.1

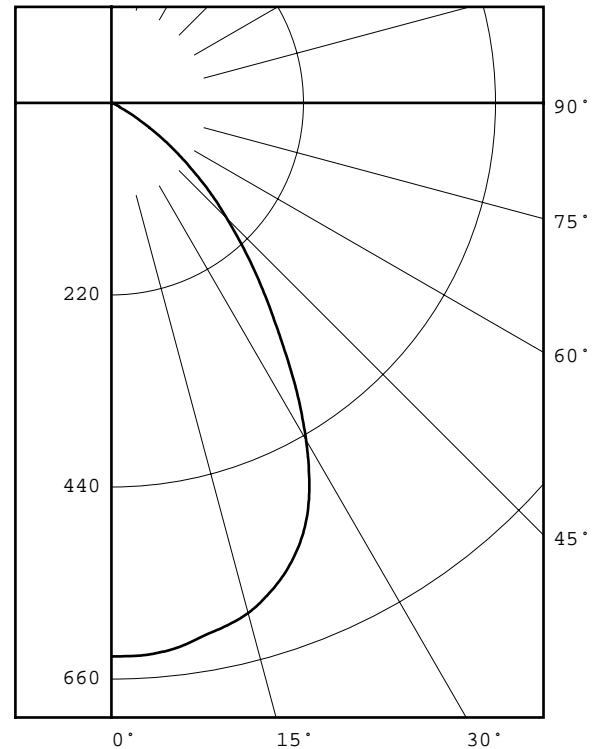
LUMINOUS DIAMETER: 6.000

LUMINANCE DATA IN CANDELA/SQ METER

ANGLE AVERAGE

IN DEG

45	14492.
55	6783.
65	1167.
75	212.
85	0.





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PAGE: 4 OF 8

CANDELA DISTRIBUTION

	0.0
0.0	634
2.5	634
5.0	632
7.5	627
10.0	619
12.5	613
15.0	605
17.5	592
20.0	576
22.5	555
25.0	528
27.5	491
30.0	446
32.5	397
35.0	346
37.5	300
40.0	260
42.5	222
45.0	187
47.5	156
50.0	125
52.5	97
55.0	71
57.5	47
60.0	27
62.5	12
65.0	9
67.5	7
70.0	5
72.5	3
75.0	1
77.5	1
80.0	1
82.5	0
85.0	0
87.5	0
90.0	0



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PAGE: 5 OF 8

ZONAL LUMEN SUMMARY

0- 5	15.
5- 10	45.
10- 15	73.
15- 20	97.
20- 25	116.
25- 30	124.
30- 35	117.
35- 40	100.
40- 45	82.
45- 50	63.
50- 55	42.
55- 60	22.
60- 65	7.
65- 70	4.
70- 75	2.
75- 80	1.
80- 85	0.
85- 90	0.



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PAGE: 6 OF 8

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	15
5- 10	45
10- 15	73
15- 20	97
20- 25	116
25- 30	124
30- 35	117
35- 40	100
40- 45	82
45- 50	63
50- 55	42
55- 60	22
60- 65	7
65- 70	4
70- 75	2
75- 80	1
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	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	60
0- 20	230
0- 30	469
0- 40	686
0- 50	832
0- 60	896
0- 70	907
0- 80	909
0- 90	909
0-100	909
0-110	909
0-120	909
0-130	909
0-140	909
0-150	909
0-160	909
0-170	909
0-180	909



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ISSUE DATE: 10/11/17

PAGE: 7 OF 8

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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	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100	
1	113	109	106	104	110	107	105	102	103	101	99	99	98	96	96	95	93	96	95	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	89	87	85	83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	82	79	76	75
4	93	84	77	72	91	83	77	72	80	75	71	78	74	70	76	73	69	76	73	69	68
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	71	67	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	66	61	58	56
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	61	56	53	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	57	52	49	47
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	53	49	45	53	49	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	50	45	42	40

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 LUMINAIRE SAMPLE.

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10/12/2017

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: 07/10/2017

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: 31.74'	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	176F4E3	11/7/2017

Sphere Calibration

Calibration Lamp: EIKO 28V75W/E10

Lamp Number: SCL-1400-J136

Calibration Current: 2.679 Amps

Total Luminous Flux: 1427 Lumens

Test Equipment Used - Color & SPD; THD & Power Factor

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>3-Meter Sphere</i>	Labsphere / LMS-3M	N/A	Calibrated Weekly
<i>Thermometer</i>	National Instruments / USB TC01	1912751	11/2/2017
<i>LAMP Power Meter</i>	Yokogawa / WT332	C2QA27075V	11/1/2017
<i>Power Supply</i>	Chroma / 61602	616020002113	N/A
<i>Aux Lamp Supply</i>	Labsphere / LPS-100-0833	0331159372	10/31/2017
<i>Cal Lamp Supply</i>	Labsphere / LPS-150-0268	1218148505	12/1/2017
<i>Spectrometer</i>	Labsphere / CDS 1100	0624117792	N/A

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