

Project Number
17.02586



Date
10/10/2017

LAB 5
Sphere

Test Sample Description

Catalog Number: P563001-020-30K
Description: 3" Wall Mount Up/Down Cylinder - Bronze

Photometry

Test Method: IES LM-79-08 § 10
Preburn Time: 00:00
Time To Stabilize: 0:45
Total Operating Time: 2:00

Input Voltage (Volts): 120.3
Input Current (Amps): 0.202
Input Wattage (Watts): 24.1
Ambient Temp (°C): 26.0

Sphere

Test Method: IES LM-79-08 § 9.1 & 12.1
Preburn Time: 1:00
Time To Stabilize: 0:59
Total Operating Time: 1:59

Input Voltage (Volts): 120.0
Input Current (Amps): 0.200
Input Wattage (Watts): 23.8
Ambient Temp (°C): 24.0



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Checked (sphere): B. LEE
Checked (photometry): R. WILLIAMS
Approved: _____

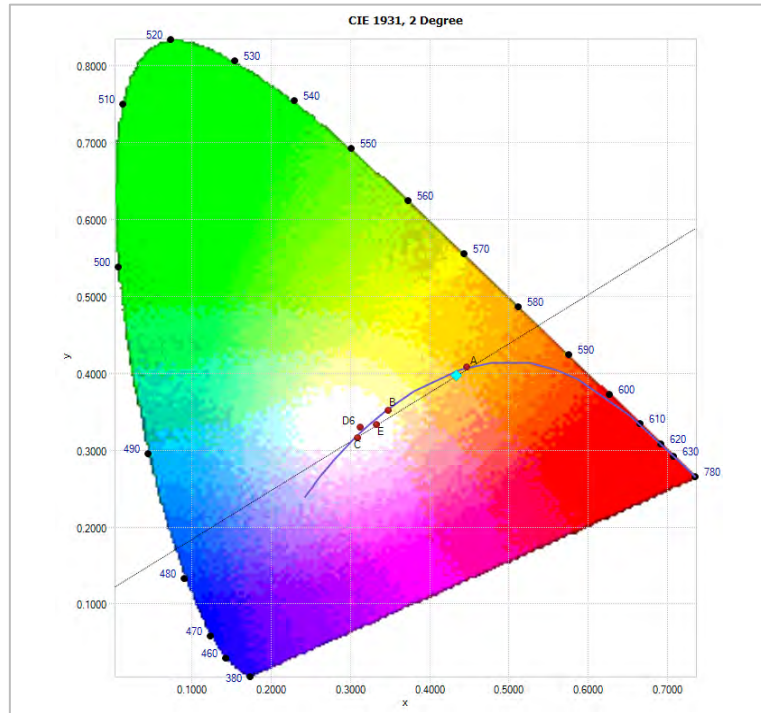


Lamp Cat#: NF2L757GRT-V1
 Lamp Desc: 44 - Nichia 3000K LEDs
 Driver Desc: NA

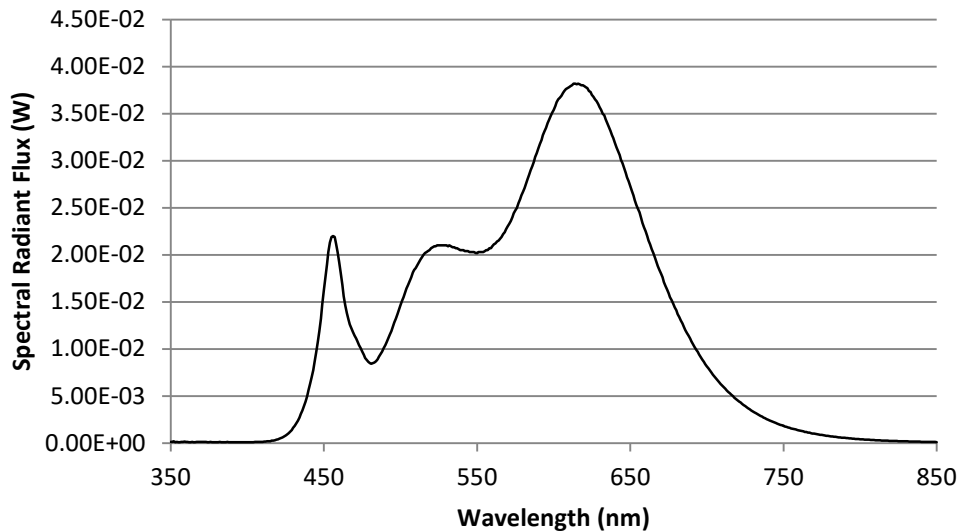
Efficacy: 74.2 LPW S/P Ratio: 1.5 LM/LM

Spectral Results

Name	Value	Unit
Φ	5.95	watts
$\Phi(v)$	1767	lumens
$\Phi(v')$	2650	lm'
Chrom x	0.4339	
Chrom y	0.3972	
Chrom u	0.2516	
Chrom v	0.3455	
Duv	0.0025	
Chrom u'	0.2516	
Chrom v'	0.5182	
CCT	2993	K
Purity	49.4	%
λ (dom)	583.7	nm
FWHM	155.8	nm
λ (peak)	614.7	nm
λ (center)	589.5	nm
λ (centroid)	587.4	nm
SDCM	Cool White	
RA	94	
Corr. Coef.	0.002369018	
Correlation	0.0054	
R1	98.6	
R2	97.6	
R3	95.4	
R4	99.3	
R5	98.3	
R6	91.3	
R7	89.6	
R8	81.7	
R9	61.5	
R10	95.2	
R11	92.7	
R12	84.7	
R13	98.0	
R14	98.3	



Spectral Distribution of Radiant Flux



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PREPARED FOR: PROGRESS

CATALOG NUMBER: P563000-147-30K

LUMINAIRE: 3" Wall Mount Cylinder - Satin Nickel

LAMP CAT. NO.: NF2L757GRT-V1

LAMP: 44- Nichia 3000K

MOUNTING: Wall

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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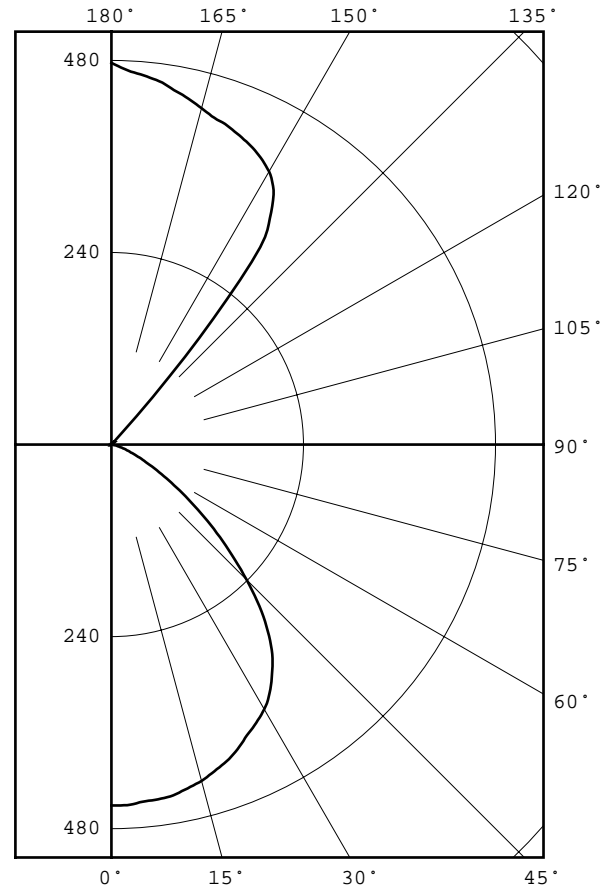
PREPARED FOR: PROGRESS

CATALOG NUMBER: P563000-147-30K

DEG	CANDELA	LUMENS
0	451	
5	448	43
15	435	123
25	401	185
35	350	218
45	239	183
55	113	103
65	39	40
75	10	12
85	1	1
90	0	
95	0	0
105	1	1
115	1	1
125	4	3
135	6	16
145	345	198
155	412	190
165	435	123
175	463	44
180	477	

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	351	23.6
0- 40	568	38.3
0- 60	855	57.6
0- 90	908	61.2
90-120	2	0.1
90-130	6	0.4
90-150	220	14.8
90-180	576	38.8
0-180	1484	100.0

EFFICACY = 61.6 lm/W
 CIE TYPE - SEMI-DIRECT
 LUMINAIRE SPACING CRITERION = 1.25
 PLANE : 0-DEG 90-DEG
 SHIELDING ANGLES : 90 90





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LUMINOUS DIAMETER: 2.500
HEIGHT OF SIDE : 5.000

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	30094.
55	13416.
65	4510.
75	1162.
85	120.



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CANDELA DISTRIBUTION

0.0	451
5.0	448
10.0	445
15.0	435
20.0	421
25.0	401
30.0	382
35.0	350
40.0	304
45.0	239
50.0	172
55.0	113
60.0	69
65.0	39
70.0	21
75.0	10
80.0	4
85.0	1
90.0	0
95.0	0
100.0	0
105.0	1
110.0	1
115.0	1
120.0	3
125.0	4
130.0	4
135.0	6
140.0	143
145.0	345
150.0	394
155.0	412
160.0	424
165.0	435
170.0	450
175.0	463
180.0	477



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5-DEGREE ZONAL LUMEN SUMMARY		
0- 5		11
5- 10		32
10- 15		52
15- 20		71
20- 25		86
25- 30		99
30- 35	108	
35- 40	110	
40- 45	101	
45- 50	83	
50- 55	62	
55- 60	42	
60- 65	25	
65- 70	15	
70- 75	8	
75- 80	4	
80- 85	1	
85- 90	0	
90- 95	0	
95-100	0	
100-105	0	
105-110	1	
110-115	1	
115-120	1	
120-125	2	
125-130	2	
130-135	2	
135-140	14	
140-145	88	
145-150	110	
150-155	102	
155-160	88	
160-165	71	
165-170	52	
170-175	33	
175-180	11	

10-DEGREE ZONAL LUMEN SUMMARY		
0- 10		43
10- 20		123
20- 30		185
30- 40		218
40- 50		183
50- 60		103
60- 70		40
70- 80		12
80- 90		1
90-100		0
100-110		1
110-120		1
120-130		3
130-140		16
140-150		198
150-160		190
160-170		123
170-180		44



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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	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61
1	102	98	95	92	95	92	89	87	81	79	77	71	69	68	61	60	59	55
2	94	87	82	77	88	82	77	73	73	69	66	64	61	59	56	54	52	48
3	87	78	71	66	81	74	68	63	65	61	57	58	54	51	50	48	46	42
4	80	70	63	57	75	66	60	55	59	54	50	52	48	45	46	43	41	37
5	74	63	55	50	69	60	53	48	53	48	44	47	43	40	42	39	36	33
6	68	57	49	44	64	54	47	42	48	43	39	43	39	36	38	35	32	30
7	63	52	44	39	60	49	42	37	44	39	35	40	35	32	35	32	29	27
8	59	47	40	35	55	45	38	34	41	35	31	36	32	29	33	29	26	24
9	55	43	36	31	52	41	35	30	37	32	28	34	29	26	30	27	24	22
10	52	40	33	28	49	38	32	27	35	29	26	31	27	24	28	24	22	20

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: 09/08/2016

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	ITL/HLI LAB 5 - Test Distance: 56.0'	N/A	N/A
<i>Power Analyzer</i>	Yokogawa / WT 332	C2QA27072V	11/2/2017
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	1912722	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	031159372	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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