

Lab 1
Sphere

Test Sample Description

Catalog Number: P563001-030-30K
Description: 3" Wall-Mount Up / Down Cylinder, White w/ Textured, Opal Glass Lens

Photometry

Test Method: IES LM-79-08 § 10
Preburn Time: 00:55
Time To Stabilize: 0:55
Total Operating Time: 3:40

Input Voltage (Volts): 120.1
Input Current (Amps): 0.204
Input Wattage (Watts): 24.3
Ambient Temp (°C): 25.3

Sphere

Test Method: IES LM-79-08 § 9.1 & 12.1
Preburn Time: 2:00
Time To Stabilize: 1:19
Total Operating Time: 3:19

Input Voltage (Volts): 120.0
Input Current (Amps): 0.201
Input Wattage (Watts): 24.0
Ambient Temp (°C): 24.0



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Checked (sphere): B. LEE
Checked (photometry): D. ROBBINS
Approved: P. McCARTHY

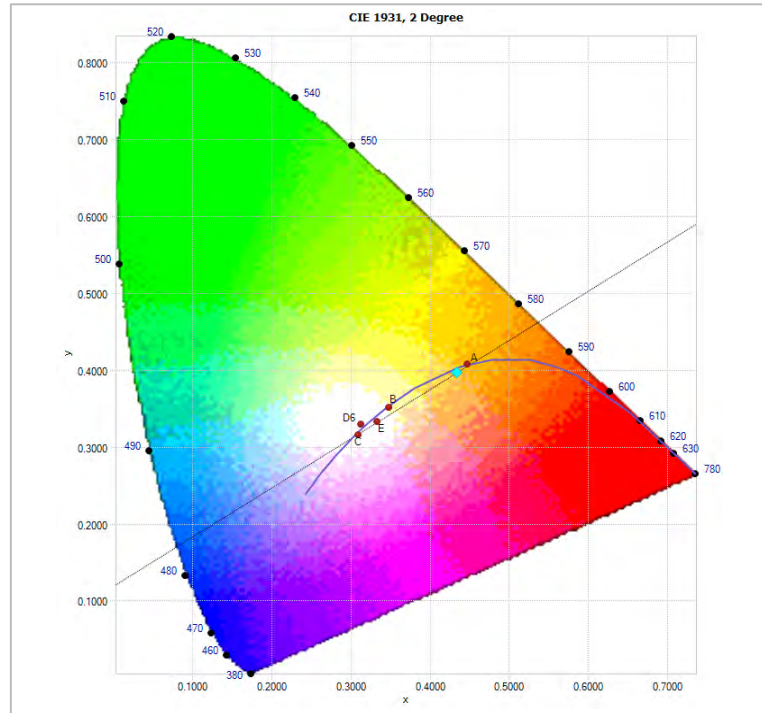




Lamp Cat#: NF2L757GRT-V1
 Lamp Desc: 44 - Nichia 3000K LEDs
 Driver Desc: NA

Efficacy: 84.1 LPW S/P Ratio: 1.5 LM/LM

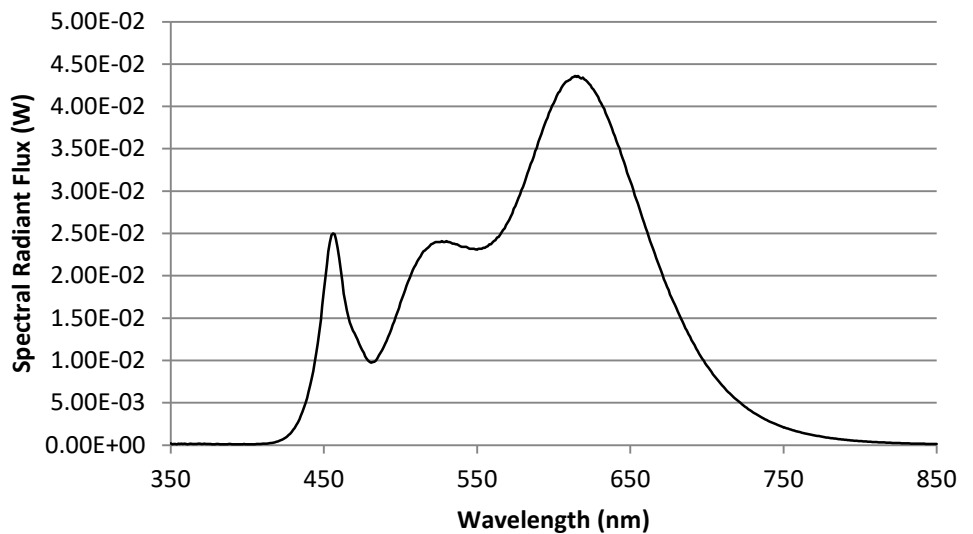
Chromaticity Diagram



Spectral Results

Name	Value	Unit
Φ	6.80	watts
$\Phi(v)$	2019	lumens
$\Phi(v')$	3033	lm'
Chrom x	0.4338	
Chrom y	0.3976	
Chrom u	0.2514	
Chrom v	0.3456	
Duv	0.0023	
Chrom u'	0.2514	
Chrom v'	0.5183	
CCT	2998	K
Purity	49.5	%
λ (dom)	583.6	nm
FWHM	156.3	nm
λ (peak)	614.9	nm
λ (center)	589.5	nm
λ (centroid)	587.5	nm
SDCM	Cool White	
RA	94	
Corr. Coef.	0.002180171	
Correlation	0.0054	
R1	98.6	
R2	97.6	
R3	95.4	
R4	99.3	
R5	98.3	
R6	91.4	
R7	89.7	
R8	81.8	
R9	61.7	
R10	95.2	
R11	92.8	
R12	84.6	
R13	98.1	
R14	98.3	

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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ISSUE DATE: 09/22/17

PREPARED FOR: PROGRESS

CATALOG NUMBER: P563001-030-30K

LUMINAIRE: 3" Wall-Mount Up/Down Cylinder, White w/ Textured,
Opal Glass Lenses

LAMP CAT. NO.: NF2L757GRT-V1

LAMP: 44- Nichia 3000K LEDs

MOUNTING: Wall

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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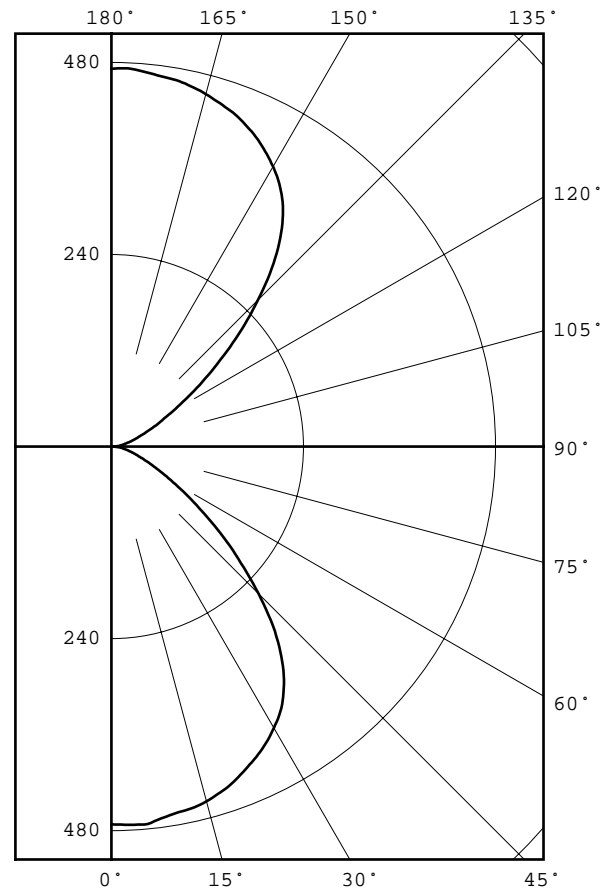
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DEG	CANDELA	LUMENS
0	472	
5	474	45
15	459	129
25	428	197
35	375	233
45	260	200
55	134	122
65	58	59
75	25	27
85	9	10
90	0	
95	10	10
105	25	27
115	59	60
125	135	122
135	259	199
145	373	231
155	427	197
165	456	129
175	470	45
180	472	

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	372	18.2
0- 40	604	29.6
0- 60	926	45.4
0- 90	1022	50.1
90-120	96	4.7
90-130	218	10.7
90-150	648	31.8
90-180	1018	49.9
0-180	2040	100.0

EFFICACY = 84.0 lm/W
CIE TYPE - GENERAL DIFFUSE
LUMINAIRE SPACING CRITERION = 1.27
PLANE : 0-DEG 90-DEG
SHIELDING ANGLES : 90 90





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LUMINOUS DIAMETER: 3.000

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE
IN DEG

45	80628.
55	51229.
65	30094.
75	21181.
85	22644.



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CANDELA DISTRIBUTION

0.0	472
5.0	474
10.0	465
15.0	459
20.0	446
25.0	428
30.0	406
35.0	375
40.0	326
45.0	260
50.0	193
55.0	134
60.0	89
65.0	58
70.0	38
75.0	25
80.0	16
85.0	9
90.0	0
95.0	10
100.0	16
105.0	25
110.0	38
115.0	59
120.0	89
125.0	135
130.0	193
135.0	259
140.0	324
145.0	373
150.0	404
155.0	427
160.0	444
165.0	456
170.0	465
175.0	470
180.0	472



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5-DEGREE ZONAL LUMEN SUMMARY		
0- 5		11
5- 10		34
10- 15		55
15- 20		75
20- 25		92
25- 30	106	
30- 35	115	
35- 40	117	
40- 45	109	
45- 50	91	
50- 55	71	
55- 60	51	
60- 65	35	
65- 70	24	
70- 75	16	
75- 80	11	
80- 85	7	
85- 90	3	
90- 95	3	
95-100	7	
100-105	11	
105-110	16	
110-115	24	
115-120	35	
120-125	51	
125-130	71	
130-135	91	
135-140	108	
140-145	117	
145-150	115	
150-155	105	
155-160	91	
160-165	74	
165-170	55	
170-175	33	
175-180	11	

10-DEGREE ZONAL LUMEN SUMMARY		
0- 10		45
10- 20		129
20- 30		197
30- 40		233
40- 50		200
50- 60		122
60- 70		59
70- 80		27
80- 90		10
90-100		10
100-110		27
110-120		60
120-130		122
130-140		199
140-150		231
150-160		197
160-170		129
170-180		45



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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	107	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	99	95	91	88	88	91	88	85	82	74	72	70	62	61	59	51	50	49	44
2	91	84	78	73	73	84	78	73	69	66	63	60	56	53	51	46	44	43	38
3	83	74	68	62	62	77	69	63	58	59	55	51	50	47	44	42	39	37	33
4	77	66	59	53	53	71	62	55	50	53	48	44	45	41	39	38	35	33	29
5	70	59	52	46	46	65	55	49	44	48	43	39	41	37	34	34	31	29	26
6	65	54	46	40	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23
7	60	49	41	36	36	56	45	39	34	40	34	30	34	30	27	29	26	23	21
8	56	44	37	32	32	52	41	35	30	36	31	27	31	27	24	26	23	21	19
9	52	40	33	28	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17
10	49	37	30	26	26	45	35	29	24	31	26	22	27	23	20	23	20	17	16

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.

Project Number
17.02587



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Date
9/22/2017

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	176F4EB	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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