

### Test Sample Description

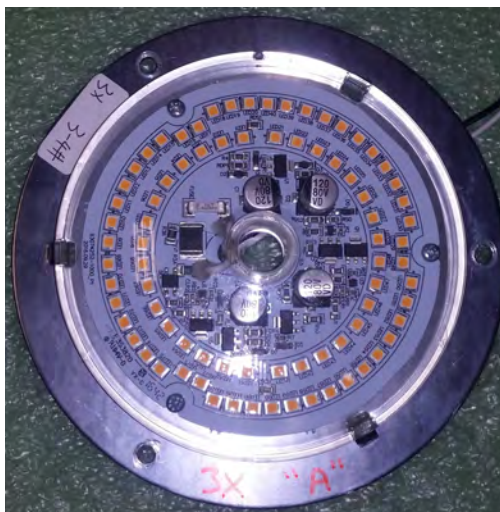
Catalog Number: p350054-02030  
Description: 1-Lt. LED Flush Mount. Use 24W Sample "A" with CLEAR LENS

### Photometry

Test Method: IES LM-79-08 § 10  
Preburn Time: 1:00  
Time To Stabilize: 2:00  
Total Operating Time: 3:15  
  
Input Voltage (Volts): 120.0  
Input Current (Amps): 0.207  
Input Wattage (Watts): 24.6  
Ambient Temp (°C): 25.3

### Sphere

Test Method: IES LM-79-08 § 9.1 & 12.1  
Preburn Time: 0:10  
Time To Stabilize: 1:19  
Total Operating Time: 1:29  
  
Input Voltage (Volts): 120.0  
Input Current (Amps): 0.207  
Input Wattage (Watts): 24.6  
Ambient Temp (°C): 24.0  
PF @ 120V: 0.988  
THD @ 120V (%): 15.0



### Hubbell Lighting, Inc.

701 Millennium Boulevard  
Greenville, SC 29607  
www.hubbellighting.com

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

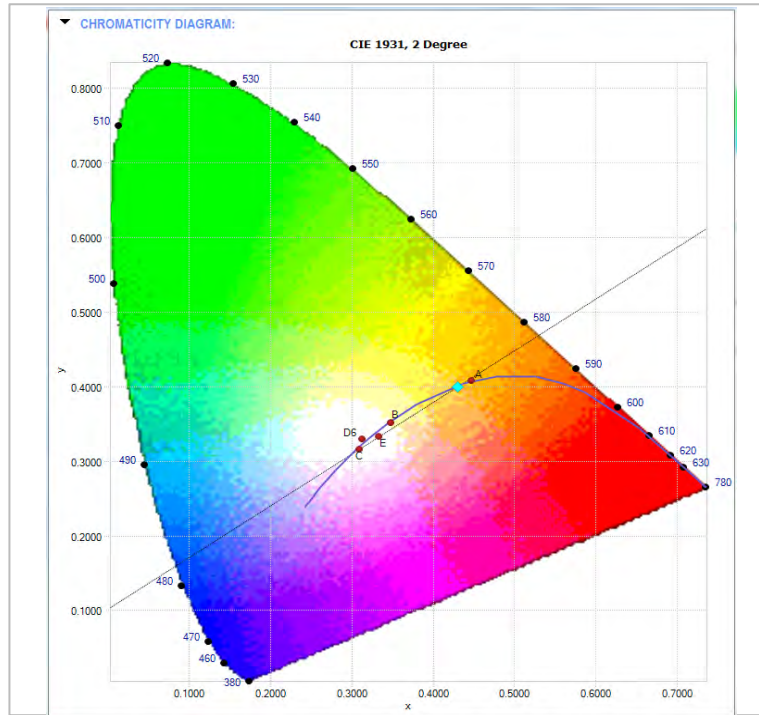


Lamp Cat#: 93058664-4130  
Lamp Desc: 40 - Nichia 3000K LEDs  
Driver Desc: n/a

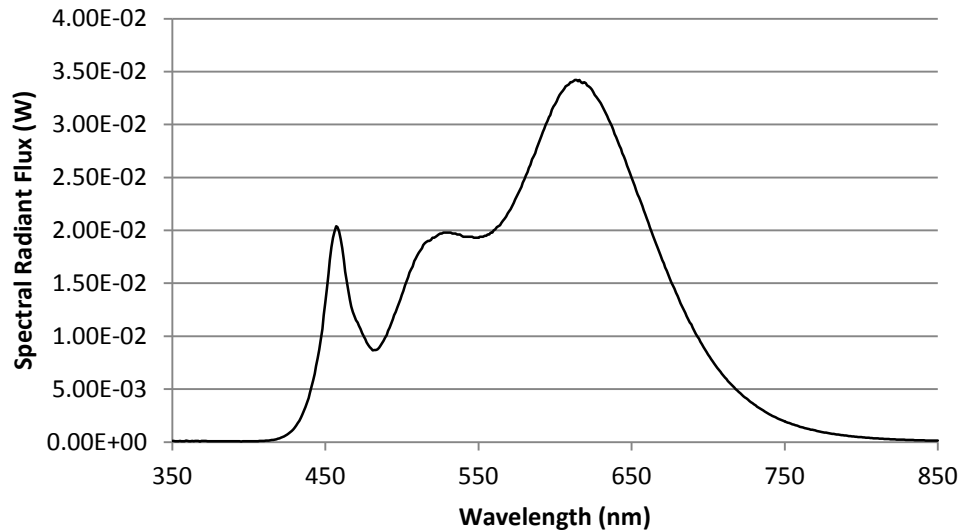
Efficacy: 67.0 LPW      S/P Ratio: 1.5 LM'/LM

**Spectral Results**

Name	Value	Unit
Φ	5.56	watts
Φ(v)	1642	lumens
Φ(v')	2516	lm'
Chrom x	0.4296	
Chrom y	0.4	
Chrom u	0.2476	
Chrom v	0.3458	
Duv	0.0011	
Chrom u'	0.2476	
Chrom v'	0.5187	
CCT	3091	K
Purity	49	%
λ (dom)	582.7	nm
FWHM	162.3	nm
λ (peak)	614.7	nm
λ (center)	589.2	nm
λ (centroid)	588.0	nm
SDCM	Cool White	
RA	94	
Corr. Coef.	0.000616818	
Correlation	0.0054	
R1	98.4	
R2	98.4	
R3	96.1	
R4	98.4	
R5	98.1	
R6	93.1	
R7	90.4	
R8	82.6	
R9	62.8	
R10	96.9	
R11	95.2	
R12	83.3	
R13	99.0	
R14	98.5	



**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.*



®

**HUBBELL**  
**Lighting**

701 Millennium Blvd  
Greenville, SC 29607  
[www.hubbellighting.com](http://www.hubbellighting.com)

**REPORT NUMBER:** 17.00304

**PAGE:** 3 OF 9

**ISSUE DATE:** 02/02/17

**PREPARED FOR:** HUBBELL INDUSTRIAL

**CATALOG NUMBER:** p350054-02030

**LUMINAIRE:** 1-Lt. LED Flush Mount

**LAMP CAT. NO.:** 93058664-4130

**LAMP:** 40 - 3000K Nichia LEDs

**REFRACTOR:** Etched White

**MOUNTING:** Ceiling

**NOTE:** NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



**HUBBELL**  
Lighting

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbellighting.com

REPORT NUMBER: 17.00304

PAGE: 4 OF 9

ISSUE DATE: 02/02/17

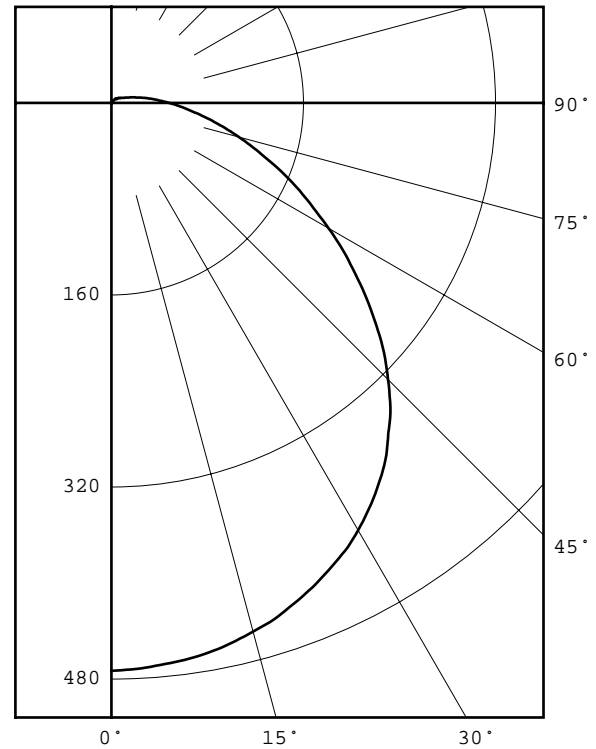
PREPARED FOR: HUBBELL INDUSTRIAL

CATALOG NUMBER: p350054-02030

DEG	CANDELA	LUMENS
0	473	
5	470	45
15	456	129
25	429	198
35	388	242
45	326	251
55	248	222
65	173	172
75	110	117
85	64	71
90	48	
95	35	39
105	18	19
115	10	10
125	7	6
135	4	3
145	2	1
155	0	0
165	0	0
175	0	0
180	0	

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	372	24.3
0- 40	614	40.2
0- 60	1087	71.2
0- 90	1447	94.8
90-120	68	4.5
90-130	75	4.9
90-150	79	5.2
90-180	80	5.2
0-180	1526	100.0

EFFICACY = 62.0 lm/W  
CIE TYPE - DIRECT  
LUMINAIRE SPACING CRITERION = 1.29





®

**HUBBELL**  
**Lighting**

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbellighting.com

**REPORT NUMBER:** 17.00304  
**ISSUE DATE:** 02/02/17  
**PREPARED FOR:** HUBBELL INDUSTRIAL  
**CATALOG NUMBER:** p350054-02030

**PAGE:** 5 OF 9

LUMINOUS DIAMETER: 13.000  
HEIGHT OF SIDE : 3.000

LUMINANCE DATA IN CANDELA/SQ M  
ANGLE AVERAGE  
IN DEG

45	4161.
55	3557.
65	2932.
75	2367.
85	1967.



**HUBBELL**  
Lighting

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbellighting.com

**REPORT NUMBER:** 17.00304  
**ISSUE DATE:** 02/02/17  
**PREPARED FOR:** HUBBELL INDUSTRIAL  
**CATALOG NUMBER:** p350054-02030

**PAGE:** 6 OF 9

CANDELA DISTRIBUTION

0.0	473
5.0	470
10.0	465
15.0	456
20.0	444
25.0	429
30.0	411
35.0	388
40.0	359
45.0	326
50.0	288
55.0	248
60.0	209
65.0	173
70.0	139
75.0	110
80.0	85
85.0	64
90.0	48
95.0	35
100.0	25
105.0	18
110.0	13
115.0	10
120.0	8
125.0	7
130.0	6
135.0	4
140.0	3
145.0	2
150.0	1
155.0	0
160.0	0
165.0	0
170.0	0
175.0	0
180.0	0



**HUBBELL**  
Lighting

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbellighting.com

**REPORT NUMBER:** 17.00304

**PAGE:** 7 OF 9

**ISSUE DATE:** 02/02/17

**PREPARED FOR:** HUBBELL INDUSTRIAL

**CATALOG NUMBER:** p350054-02030

5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	11
5- 10	33
10- 15	55
15- 20	74
20- 25	92
25- 30	106
30- 35	118
35- 40	125
40- 45	127
45- 50	124
50- 55	116
55- 60	106
60- 65	93
65- 70	79
70- 75	65
75- 80	52
80- 85	40
85- 90	31
90- 95	23
95-100	16
100-105	11
105-110	8
110-115	6
115-120	4
120-125	4
125-130	3
130-135	2
135-140	1
140-145	1
145-150	1
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	45
10- 20	129
20- 30	198
30- 40	242
40- 50	251
50- 60	222
60- 70	172
70- 80	117
80- 90	71
90-100	39
100-110	19
110-120	10
120-130	6
130-140	3
140-150	1
150-160	0
160-170	0
170-180	0



**HUBBELL**  
Lighting

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbellighting.com

**REPORT NUMBER:** 17.00304

**PAGE:** 8 OF 9

**ISSUE DATE:** 02/02/17

**PREPARED FOR:** HUBBELL INDUSTRIAL

**CATALOG NUMBER:** p350054-02030

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	118	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	106	101	96	92	92	103	98	94	90	93	89	86	88	85	83	84	81	79	77
2	96	88	80	74	74	93	85	79	73	81	75	70	77	72	68	73	69	66	63
3	88	77	68	61	61	85	75	67	61	71	64	59	67	62	57	64	59	55	53
4	80	68	59	52	52	77	66	58	51	63	56	50	60	54	49	57	52	47	45
5	74	61	51	45	45	71	59	50	44	56	49	43	54	47	42	51	46	41	39
6	68	54	45	39	39	66	53	45	38	51	43	38	49	42	37	47	41	36	34
7	63	49	40	34	34	61	48	40	34	46	39	33	44	38	33	42	37	32	30
8	59	45	36	30	30	57	44	36	30	42	35	30	41	34	29	39	33	29	27
9	55	41	33	27	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	25	50	37	30	24	36	29	24	35	28	24	33	28	23	22

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  
17.00304



**HUBBELL**  
Lighting

Date  
2/1/2017

### *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: 09/08/16

### *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	11/2/2017

### *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>Power Supply PF/THD</i>	Voltage-Regulated House Power	N/A	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

## **Hubbell Lighting, Inc.**

701 Millennium Boulevard  
Greenville, SC 29607  
www.hubbellighting.com

*This report shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.*