



Report No: L121706434 Issue Date: 1/10/2018

Report Prepared For: Number Eight Lighting Company

526 Portal Street, Cotati, CA 94931

Model Number: 804/J2-HI-15/DIM1-8-1400 with FR-LG-P-1-WH/NL trim

Test: Photometric/Electrical Test

Standards Used: Appropriate part or all test guidelines were used for test performed: *IESNA LM79: 2008* Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products *ANSI NEMA ANSLG C78.377: 2008* Specification of the Chromaticity of Solid State Lighting Products *ANSI C82.77:2002:* Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Received in working and undamaged condition. No

modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 1/2/18

Date of Tests: 1/7/18 - 1/10/18

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	
Yokogawa Digital Power Meter	WT210	MT-EL06-S4	1/9/19
BK PRECISION	1747	PS-DC04	1/10/19
Fluke Digital Thermometer	52K/J	MT-TP05	1/10/19
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	
LLI 2M Sphere	2MR97	CD-SN03-S2	
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

^{*}All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

NVLAP LAB CODE 200927-0

Number Eight Lighting Company		
804/J2-HI-15/DIM1-8-1400 with FR-LG-P-1-WH/NL trim		
IntuitiveSystems ISD-701-1400-20-D		
1105.63		
120.00		
0.17		
20.48		
0.99		
8%		
N/A		
54		
25.0		
0:40		
1:15		

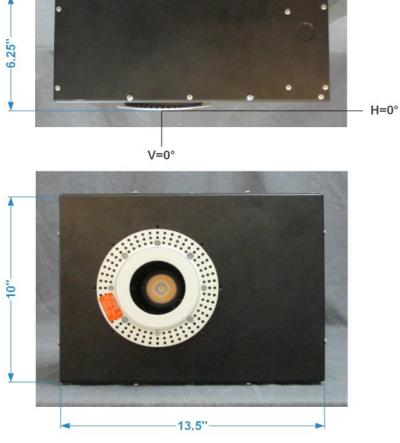


FIG. 1 LUMINAIRE

^{*}All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.



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TESTING

NVLAP LAB CODE 200927-0

Test Methods

Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers: This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST agency of Federal Government.		
Report Prepared by : Joseph Shin		
Test Report Released by:	Test Report Reviewed by:	

Jeff Ahn Engineering Manager

Um

Steve Kang Quality Assurance

Steveling

*Attached are photometric data reports. Total number of pages: 9

^{*}All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.



8165 E. Kaiser Blvd. Anaheim, CA 92808 www.lightlaboratory.com

Photometric Test Report

IES INDOOR REPORT

PHOTOMETRIC FILENAME: L121706434.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121706434

[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)

[ISSUEDATE] 1/10/2018

[MANUFAC] Number Eight Lighting Company

[LUMCAT] 804/J2-HI-15/DIM1-8-1400 with FR-LG-P-1-WH/NL trim

[LUMINAIRE] LED Recessed Downlight, 15° Beam Spread, 0° Aiming Angle,

[MORE] 2.75" Dia. Aperture Trim

[BALLASTCAT] IntuitiveSystems ISD-701-1400-20-D

[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND

[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.

[INPUT] 120VAC, 20.48W

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1106
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	54
Total Luminaire Watts	20.48
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.30
Spacing Criterion (90-270)	0.30
Spacing Criterion (Diagonal)	0.34
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.23 ft (Diamete
	0.00 (1.75)

er) Luminous Width (90-270) 0.23 ft (Diameter)

Luminous Height 0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1830	1830	1830
55	451	451	451
65	0	0	0
75	0	0	0
85	0	0	0

PHOTOMETRIC FILENAME: L121706434.IES

CANDELA TABULATION

	<u>0</u>
0.0	7385
1.0	7411
2.0	7178
3.0	6812
4.0	6340
5.0	5791
6.0	5204
7.0	4611
8.0	4042
9.0	3512
10.0	3039
12.0	2274
14.0	1711
16.0 18.0	1297
	979
20.0 22.5	728 490
25.0	328
27.5	225
30.0	155
35.0	66
40.0	20
45.0	5
50.0	2
55.0	1
60.0	Ö
65.0	Ö
70.0	Ö
75.0	Ö
80.0	Ö
85.0	Ō
90.0	0

PHOTOMETRIC FILENAME: L121706434.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	887.57	N.A.	80.30
0-30	1051.81	N.A.	95.10
0-40	1098.71	N.A.	99.40
0-60	1105.63	N.A.	100.00
0-80	1105.63	N.A.	100.00
0-90	1105.63	N.A.	100.00
10-90	646.81	N.A.	58.50
20-40	211.13	N.A.	19.10
20-50	217.18	N.A.	19.60
40-70	6.93	N.A.	0.60
60-80	0.00	N.A.	0.00
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1105.63	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Lumens
458.83
428.75
164.24
46.89
6.04
0.88
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00

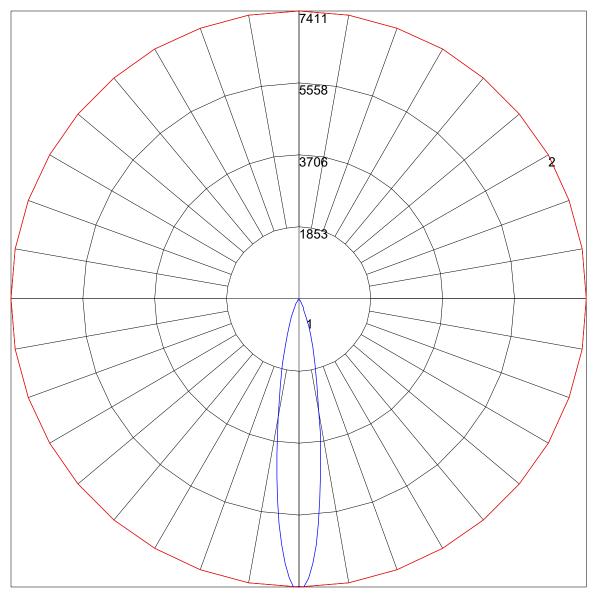
PHOTOMETRIC FILENAME: L121706434.IES

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	116 116 116 116	111 111 111	106 106 106	102 102 102	100
1	115 113 111 110	113 111 109 108	107 106 105	103 102 101	10099 99	97
2	112 108 105 103	110 106 104 102	103 101 99	10099 97	98 97 95	94
3	108 104 100 97	106 102 99 97	10097 95	98 96 94	96 94 92	91
4	10510096 93	10499 95 93	97 94 92	95 93 91	93 91 90	88
5	10296 93 90	10196 92 89	94 91 89	93 90 88	91 89 87	86
6	99 93 89 87	98 93 89 86	91 88 86	90 87 85	89 87 85	84
7	97 91 87 84	96 90 86 84	89 86 83	88 85 83	87 84 82	81
8	94 88 84 81	93 88 84 81	87 83 81	86 83 81	85 82 80	79
9	92 86 82 79	91 85 82 79	84 81 79	84 81 79	83 80 78	77
10	90 83 80 77	89 83 79 77	82 79 77	82 79 77	81 79 77	76

POLAR GRAPH



Maximum Candela = 7411 Located At Horizontal Angle = 0, Vertical Angle = 1 # 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) # 2 - Horizontal Cone Through Vertical Angle (1) (Through Max. Cd.)

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ILLUMINANCE CONE DIAGRAM: BEAM (50%) MOUNT HEIGHT(Ft): 12

Illuminance at a Distance Center Beam fc Beam Width				
2.08	1,846 fc	0.6 ft	0.6 ft	
4.0ft	462 fc	1.2 ft	1.2 ft	
6.08	205 fc	1.8 ft	1.8 ft	
8.0A	115 fc	2.4 ft	2.5 ft	
10.0R	73.9 fc	3.0 ft	3.1 ft	
12.0R	51.3 fc	3.7 ft	3.7 ft	
■ Vert. Spread: 17.3° ■ Horiz. Spread: 17.4°				