



Report No: L121706418 Issue Date: 1/5/2018

Report Prepared For: Number Eight Lighting Company

526 Portal Street, Cotati, CA 94931

Model Number: 803/J2-HI-40/DIM1-8-700 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: 1/5/18 - 1/5/18

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.



Test Summary	
Manufacturer:	Number Eight Lighting Company
Model Number:	803/J2-HI-40/DIM1-8-700 with FR-LG-P-1-WH/NL trim
Driver Model Number:	IntuitiveSystems ISD-701-1000-15-D
Total Lumens:	621.73
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.082
Input Power (W):	9.52
Input Power Factor:	0.98
Current ATHD @ 120V(%):	8%
Current ATHD @ 277V(%):	N/A
Efficacy:	65
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	1:20

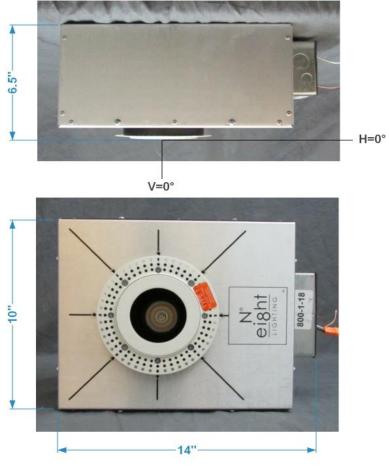


FIG. 1 LUMINAIRE

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





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 ceragency of Federal Government.	tification, approval or endorsement by NVLAP, NIST or any
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.



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Photometric Test Report

IES INDOOR REPORT

PHOTOMETRIC FILENAME: L121706418.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121706418

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

[ISSUEDATE] 1/5/2018

[MANUFAC] Number Eight Lighting Company

[LUMCAT] 803/J2-HI-40/DIM1-8-700 with FR-LG-P-1-WH/NL trim

[LUMINAIRE] LED Recessed Downlight, 40° Beam Spread, 0° Aiming Angle,

[MORE] 2.75" Dia. Aperture Trim

[BALLASTCAT] IntuitiveSystems ISD-701-1000-15-D

[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND

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

[INPUT] 120VAC, 9.52W

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	622
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	9.52
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.66
Spacing Criterion (90-270)	0.66
Spacing Criterion (Diagonal)	0.66
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.23 ft (Diameter)
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	12812	12812	12812
55	1354	1354	1354
65	0	0	0
75	0	0	0
85	0	0	Ω

PHOTOMETRIC FILENAME: L121706418.IES

CANDELA TABULATION

0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 12.0	<u>0</u> 1143 1141 1137 1129 1119 1105 1089 1069 1046 1021 992 927
14.0	853
16.0	768
18.0	674
20.0	580
22.5	469
25.0 27.5	376 301
30.0	237
35.0	135
40.0	71
45.0	35
50.0	15
55.0	3
60.0 65.0	0 0
70.0	0
75.0	0
80.0	Ö
85.0	0
90.0	0

PHOTOMETRIC FILENAME: L121706418.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	322.97	N.A.	51.90
0-30	498.24	N.A.	80.10
0-40	587.39	N.A.	94.50
0-60	621.73	N.A.	100.00
0-80	621.73	N.A.	100.00
0-90	621.73	N.A.	100.00
10-90	519.82	N.A.	83.60
20-40	264.42	N.A.	42.50
20-50	294.15	N.A.	47.30
40-70	34.34	N.A.	5.50
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	621.73	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Lumens
101.90
221.07
175.27
89.15
29.73
4.61
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00

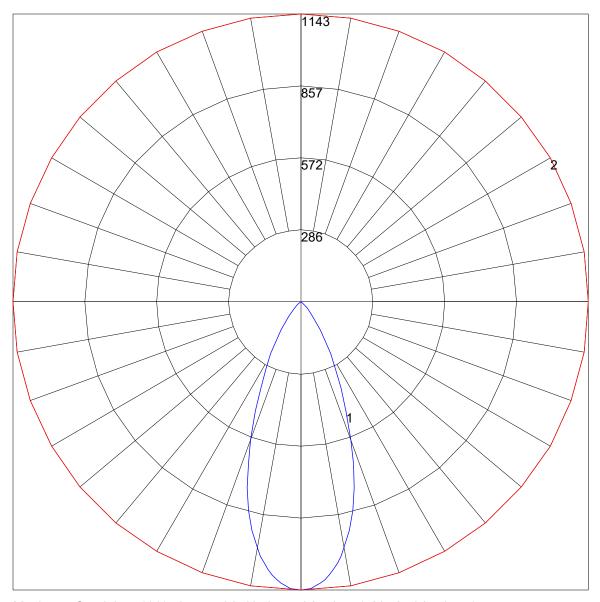
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	116 116 116 116	111 111 111	106 106 106	102 102 102	100
U	119 119 119 119	110 110 110 110	111 111 111		102 102 102	100
1	114 111 109 107	112 109 107 105	105 104 102	102 100 99	98 97 96	95
2	109 105 101 98	107 103 100 97	10097 95	97 95 93	94 92 91	89
3	10498 94 90	10297 93 89	94 91 88	92 89 87	90 87 85	84
4	10093 88 84	98 92 87 83	90 86 82	88 84 81	86 83 81	79
5	95 88 82 78	94 87 82 78	85 81 77	83 80 77	82 79 76	75
6	91 83 78 74	90 82 77 74	81 76 73	79 76 73	78 75 72	71
7	87 79 73 70	86 78 73 69	77 72 69	76 72 69	75 71 68	67
8	84 75 70 66	82 74 69 66	73 69 65	72 68 65	71 68 65	64
9	80 71 66 63	79 71 66 62	70 65 62	69 65 62	68 65 62	61
10	77 68 63 60	76 68 63 59	67 62 59	66 62 59	66 62 59	58

POLAR GRAPH



Maximum Candela = 1143 Located At Horizontal Angle = 0, Vertical Angle = 0 # 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) # 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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

	Illuminance at a	
	Center Beam fc	Beam Width
2.0 R	286 fc	1.5 ft
4.0ft	71.4 fc	2.9 ft
6.0R	31.8 fc	4.4 ft
8.0 R	17.9 fc	5.9 ft
10.0R	11.4 fc	7.4 ft
12.0R	7.94 fc	8.8 ft
	Beam Spread: 40.4°	