



8165 E Kaiser Blvd. Anaheim, CA 92808  
 p. 714.282.2270  
 f. 714.676.5558

Report No: L101605117

Date: 12/1/2016



NVLAP LAB CODE 200927-0

**Report No:** L101605117

**Prepared For:** Number Eight Lighting Company  
 526 Portal Street, Cotati, CA 94931

**Model Number:** 803/J2-HI-15-XX/DIM1-8-1000/FS-P-1-WH

**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. Catalog number is 803/J2-HI-15-XX/DIM1-8-1000/FS-P-1-WH . Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** Fixture is tested with no special conditions.

**Sample Arrival Date:** 10/31/16

**Date of Tests:** 12/1/16 - 12/1/16

**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-S1	11/18/16
Xitron Power Analyzer	2503AH	MT-EL01	11/30/16
ITECH DC Power Supply	IT6122	PSDC-03-S1	11/17/16
Fluke Digital Thermometer	52k/J	MT-TP02-GC	11/24/16
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**

<b>Manufacturer:</b>	Number Eight Lighting Company
<b>Model Number:</b>	803/J2-HI-15-XX/DIM1-8-1000/FS-P-1-WH
<b>Driver Model Number:</b>	INTUITIVE SYSTEMS ISD-601-1050-15-D
<b>Total Lumens:</b>	878.00
<b>Input Voltage (VAC/60Hz):</b>	120.00
<b>Input Current (Amp):</b>	0.13
<b>Input Power (W):</b>	14.99
<b>Input Power Factor:</b>	0.98
<b>Current ATHD @ 120V(%):</b>	8%
<b>Current ATHD @ 277V(%):</b>	N/A
<b>Efficacy:</b>	59
<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	0:45
<b>Total Operating Time (Hours):</b>	1:35
<b>Off State Power(W):</b>	0.00

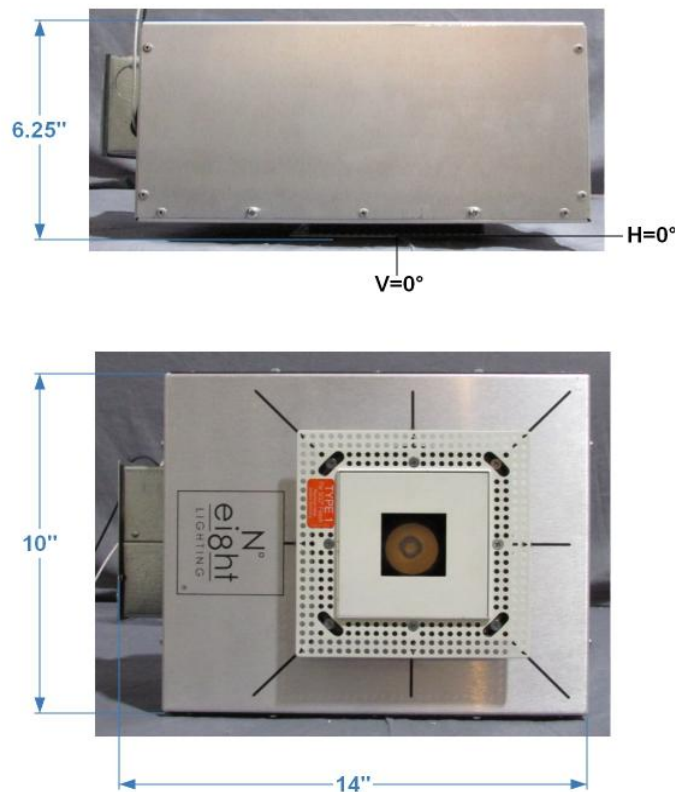


FIG.1 LUMINAIRE

\*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 certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Dennis Malonzo

Test Report Released by:



Jeff Ahn  
Engineering Manager

Test Report Reviewed by:



Steve Kang  
Quality Assurance

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



8165 E. Kaiser Blvd. Anaheim, CA 92808  
 p. 714.282.2270  
 f. 714.676.5558

# Photometric Test Report

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L101605117.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L101605117  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUEDATE] 12/1/2016  
 [MANUFAC] Number Eight Lighting Company  
 [LUMCAT] 803/J2-HI-15-XX/DIM1-8-1000/FS-P-1-WH  
 [LUMINAIRE] LED Recessed Adjustable 15° Beam Spread, 0°Aiming Angle, 1.75" x 1.75" Aperture Trim  
 [BALLASTCAT] INTUITIVE SYSTEMS ISD-601-1050-15-D  
 [LAMPPOSITION] 0,0  
 [LAMPCAT] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [INPUT] 120VAC, 14.99  
 [TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	878
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	59
Total Luminaire Watts	14.99
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.32
Spacing Criterion (90-270)	0.32
Spacing Criterion (Diagonal)	0.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.15 ft
Luminous Width (90-270)	0.15 ft
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2028	3042	2028
55	1667	1667	1667
65	1131	1131	1131
75	1847	1847	1847
85	5484	5484	5484

**IES INDOOR REPORT  
PHOTOMETRIC FILENAME : L101605117.IES**

**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0.0</b>	5715	5715	5715	5715	5715	5715	5715	5715	5715	5715
<b>1.0</b>	5688	5688	5688	5687	5687	5687	5687	5686	5687	5686
<b>3.0</b>	5336	5335	5335	5335	5333	5333	5331	5330	5328	5327
<b>5.0</b>	4633	4632	4632	4633	4633	4633	4634	4632	4631	4629
<b>7.0</b>	3764	3766	3770	3774	3778	3781	3784	3785	3784	3782
<b>9.0</b>	2872	2874	2879	2888	2898	2906	2913	2915	2917	2913
<b>11.0</b>	2117	2119	2126	2138	2151	2165	2176	2185	2190	2188
<b>13.0</b>	1563	1567	1575	1587	1602	1615	1628	1638	1643	1646
<b>15.0</b>	1172	1174	1181	1192	1206	1218	1228	1237	1243	1244
<b>17.0</b>	886	887	892	902	911	919	928	935	941	943
<b>19.5</b>	617	616	617	625	630	637	642	649	654	654
<b>22.5</b>	378	377	378	385	389	394	401	406	408	410
<b>25.5</b>	220	220	222	225	229	236	243	250	254	256
<b>29.0</b>	106	109	110	112	116	122	129	136	142	144
<b>33.0</b>	38	38	40	42	45	49	54	59	63	65
<b>37.5</b>	11	11	12	12	13	14	16	18	20	21
<b>42.5</b>	4	4	4	4	5	5	5	6	6	6
<b>47.5</b>	2	2	2	3	3	3	3	3	3	3
<b>55.0</b>	2	2	2	2	2	2	2	2	2	2
<b>65.0</b>	1	1	1	1	1	1	1	1	1	1
<b>75.0</b>	1	1	1	1	1	1	1	1	1	1
<b>85.0</b>	1	1	1	1	1	1	1	1	1	1
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0

**Vert. Angles      Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
<b>0.0</b>	5715	5715	5715	5715	5715	5715	5715	5715	5715
<b>1.0</b>	5686	5686	5687	5687	5688	5687	5688	5688	5687
<b>3.0</b>	5325	5324	5323	5321	5322	5321	5322	5320	5318
<b>5.0</b>	4626	4624	4620	4615	4609	4608	4604	4601	4604
<b>7.0</b>	3777	3771	3762	3755	3744	3734	3730	3724	3720
<b>9.0</b>	2907	2899	2887	2874	2860	2849	2838	2831	2829
<b>11.0</b>	2184	2175	2164	2149	2132	2117	2105	2096	2095
<b>13.0</b>	1642	1635	1622	1607	1589	1572	1560	1552	1549
<b>15.0</b>	1240	1233	1223	1210	1196	1182	1169	1161	1159
<b>17.0</b>	939	933	924	913	902	892	884	877	875
<b>19.5</b>	649	644	636	626	618	613	610	607	607
<b>22.5</b>	407	400	396	388	382	376	371	367	365
<b>25.5</b>	254	248	240	230	224	217	212	209	208
<b>29.0</b>	141	134	126	119	113	108	105	103	103
<b>33.0</b>	64	58	52	47	44	40	38	37	37
<b>37.5</b>	20	18	16	14	13	12	12	11	11
<b>42.5</b>	6	6	6	5	5	4	4	4	4
<b>47.5</b>	3	3	3	3	3	3	2	2	2
<b>55.0</b>	2	2	2	2	2	2	2	2	2
<b>65.0</b>	1	1	1	1	1	1	1	1	1
<b>75.0</b>	1	1	1	1	1	1	1	1	1
<b>85.0</b>	1	1	1	1	1	1	1	1	1
<b>90.0</b>	0	0	0	0	0	0	0	0	0

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L101605117.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	707.21	N.A.	80.50
0-30	839.90	N.A.	95.60
0-40	868.00	N.A.	98.80
0-60	874.45	N.A.	99.60
0-80	876.91	N.A.	99.80
0-90	878.26	N.A.	100.00
10-90	556.97	N.A.	63.40
20-40	160.79	N.A.	18.30
20-50	165.73	N.A.	18.90
40-70	7.88	N.A.	0.90
60-80	2.45	N.A.	0.30
70-80	1.03	N.A.	0.10
80-90	1.35	N.A.	0.20
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	878.26	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	321.29
10-20	385.93
20-30	132.69
30-40	28.10
40-50	4.94
50-60	1.51
60-70	1.42
70-80	1.03
80-90	1.35
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

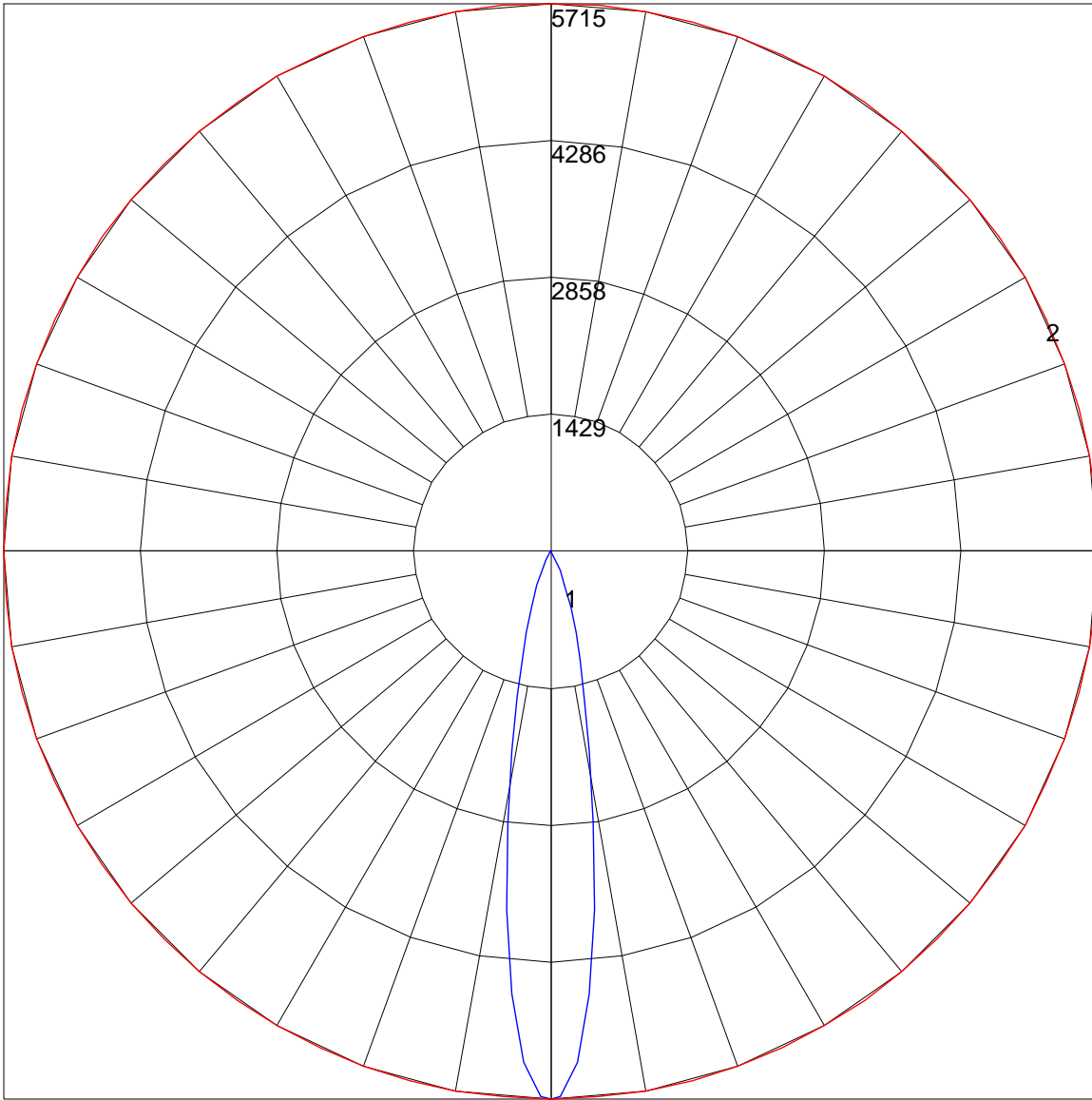
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L101605117.IES**

**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	109	113	111	109	108	107	105	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	90
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	90	88	86	85
6	99	93	88	85	97	92	88	85	91	87	85	89	86	84	88	86	84	83
7	96	90	85	83	95	89	85	82	88	85	82	87	84	82	86	83	81	80
8	93	87	83	80	92	86	83	80	86	82	80	85	82	79	84	81	79	78
9	91	84	80	78	90	84	80	78	83	80	77	83	79	77	82	79	77	76
10	89	82	78	76	88	82	78	76	81	78	75	81	77	75	80	77	75	74

POLAR GRAPH



Maximum Candela = 5715 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.)



## SAMPLE Illuminance cone diagram

Mounting Height = 12 ft.

