

Report No: L101605123

Date: 12/1/2016

NVLAP LAB CODE 200927-0

Report No: L101605123

Prepared For: Number Eight Lighting Company

526 Portal Street, Cotati, CA 94931

Model Number: 803/J2-HI-15-XX/DIM1-8-1000/FR-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/FR-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: 11/23/16 - 12/1/16

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

Equipment List

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-GB	2/10/17	
Xitron Power Analyzer	2802	MT-EL02-2	12/22/16	
BK PRECISION	1747	PS-DC04	12/8/16	
Fluke Digital Thermometer	52k/J	MT-TP02-GB	12/8/16	
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.

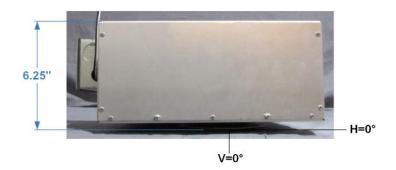


Report No: L101605123

Date: 12/1/2016

NVLAP LAB CODE 200927-0

Test Summary			
Manufacturer:	Number Eight Lighting Company		
Model Number:	803/J2-HI-15-XX/DIM1-8-1000/FR-P-1-WH		
Driver Model Number:	INTUITIVE SYSTEMS ISD-601-1050-15-D		
Total Lumens:	850.18		
Input Voltage (VAC/60Hz):	120.00		
Input Current (Amp):	0.13		
Input Power (W):	14.98		
Input Power Factor:	0.98		
Current ATHD @ 120V(%):	8%		
Current ATHD @ 277V(%):	N/A		
Efficacy:	57		
Ambient Temperature (°C):	25.0		
Stabilization Time (Hours):	0:30		
Total Operating Time (Hours):	1:15		
Off State Power(W):	0.00		



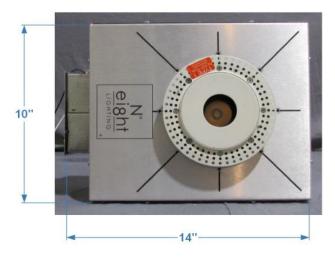


FIG.1 LUMINAIRE

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



Report No: L101605123

Date: 12/1/2016

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 or any agency of Federal Government.

Report Prepared by : Keyur Patel

Test Report Released by: Test Report Reviewed by:

Jeff Ahn Engineering Manager

Quality Assurance

Steve Kang

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

UM



8165 E. Kaiser Blvd. Anaheim, CA 92808

p. 714.282.2270 f. 714.676.5558

Photometric Test Report

IES INDOOR REPORT

PHOTOMETRIC FILENAME: L101605123.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L101605123

[TESTLAB] LIGHT LABORATORY, INC.

[ISSUEDATE] 12/1/2016

[MANUFAC] NUMBER EIGHT LIGHTING COMPANY

[LUMCAT] 803/J2-HI-15-XX/DIM1-8-1000/FR-P-1-WH

[LUMINAIRE] LED RECESSED ADJUSTABLE DOWNLIGHT, 90+ CRI,

[MORE] 15° BEAM SPREAD, 0° AIMING ANGLE, ?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, 14.98W

[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp N.A. (absolute) **Total Lamp Lumens** N.A. (absolute) **Luminaire Lumens** 850 Total Luminaire Efficiency N.A. Luminaire Efficacy Rating (LER) 57 **Total Luminaire Watts** 14.98 **Ballast Factor** 1.00 CIE Type Direct Spacing Criterion (0-180) 0.32 Spacing Criterion (90-270) 0.32Spacing Criterion (Diagonal) 0.34 Basic Luminous Shape Circular Luminous Length (0-180)

Luminous Length (0-180) 0.15 ft (Diameter) Luminous Width (90-270) 0.15 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	2582	2582	2582
55	2122	2122	2122
65	1440	1440	1440
75	0	0	0
85	0	0	0

IES INDOOR REPORT

PHOTOMETRIC FILENAME: L101605123.IES

CANDELA TABULATION

9 5724 5688 5275 4557 3697 2829 2109 1576 1189 900 622 375 212 99 34 10 4 2 2
0
0
0

IES INDOOR REPORT

PHOTOMETRIC FILENAME: L101605123.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	696.69	N.A.	81.90
0-30	822.05	N.A.	96.70
0-40	843.34	N.A.	99.20
0-60	848.25	N.A.	99.80
0-80	850.18	N.A.	100.00
0-90	850.18	N.A.	100.00
10-90	533.36	N.A.	62.70
20-40	146.64	N.A.	17.20
20-50	150.27	N.A.	17.70
40-70	6.33	N.A.	0.70
60-80	1.94	N.A.	0.20
70-80	0.51	N.A.	0.10
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	850.18	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	316.83
10-20	379.86
20-30	125.36
30-40	21.28
40-50	3.63
50-60	1.28
60-70	1.42
70-80	0.51
80-90	0.00
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

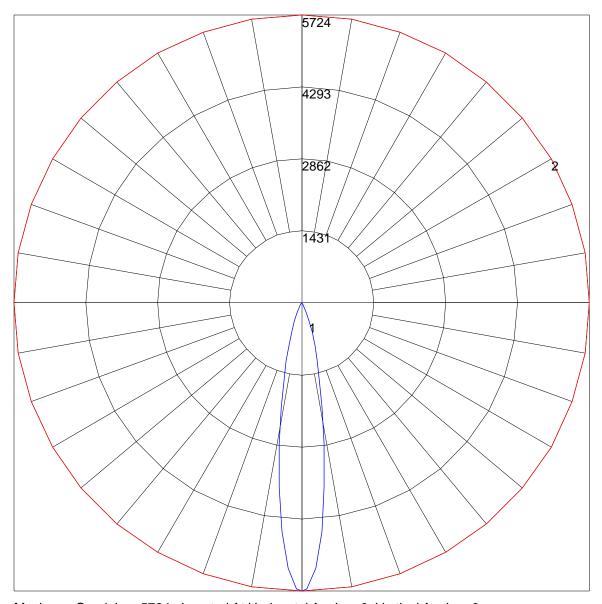
PHOTOMETRIC FILENAME: L101605123.IES

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	100 99 99	97
2	111 108 105 103	109 106 104 101	103 101 99	100 102 101	98 96 95	94
3	108 104 100 97	10610299 96	100 97 95	98 95 94	95 94 92	91
4	10510096 93	10399 95 92	97 94 91	95 92 90	93 91 89	88
5	10296 92 89	10195 92 89	94 91 88	92 90 87	91 89 87	86
6	99 93 89 86	98 92 89 86	91 88 85	90 87 85	89 86 84	83
7	96 90 86 83	95 90 86 83	89 85 83	87 85 82	87 84 82	81
8	94 88 84 81	93 87 83 81	86 83 80	85 82 80	84 82 80	79
9	92 85 81 79	91 85 81 78	84 81 78	83 80 78	83 80 78	77
10	89 83 79 76	89 83 79 76	82 78 76	81 78 76	81 78 76	75

POLAR GRAPH



Maximum Candela = 5724 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.

Illuminance at a Distance Center Beam fc Beam Width			
2.0 R	1,431 fc	0.6 ft	
4.0ft	358 fc	1.3 ft	
6.0R	159 fc	1.9 ft	
8.08	89.4 fc	2.5 ft	
10.0ft	57.2 fc	3.2 ft	
12.0ft	39.8 fc	3.8 ft	
Beam Spread: 18.1°			