

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P437606

Luminaire Tested: **ISC-SA1D-830-U-T4W-HSS**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437606  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISC-SA1D-830-U-T4W-HSS  
Description: IMPACT ELITE LED CYLINDER LUMINAIRE  
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3389 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

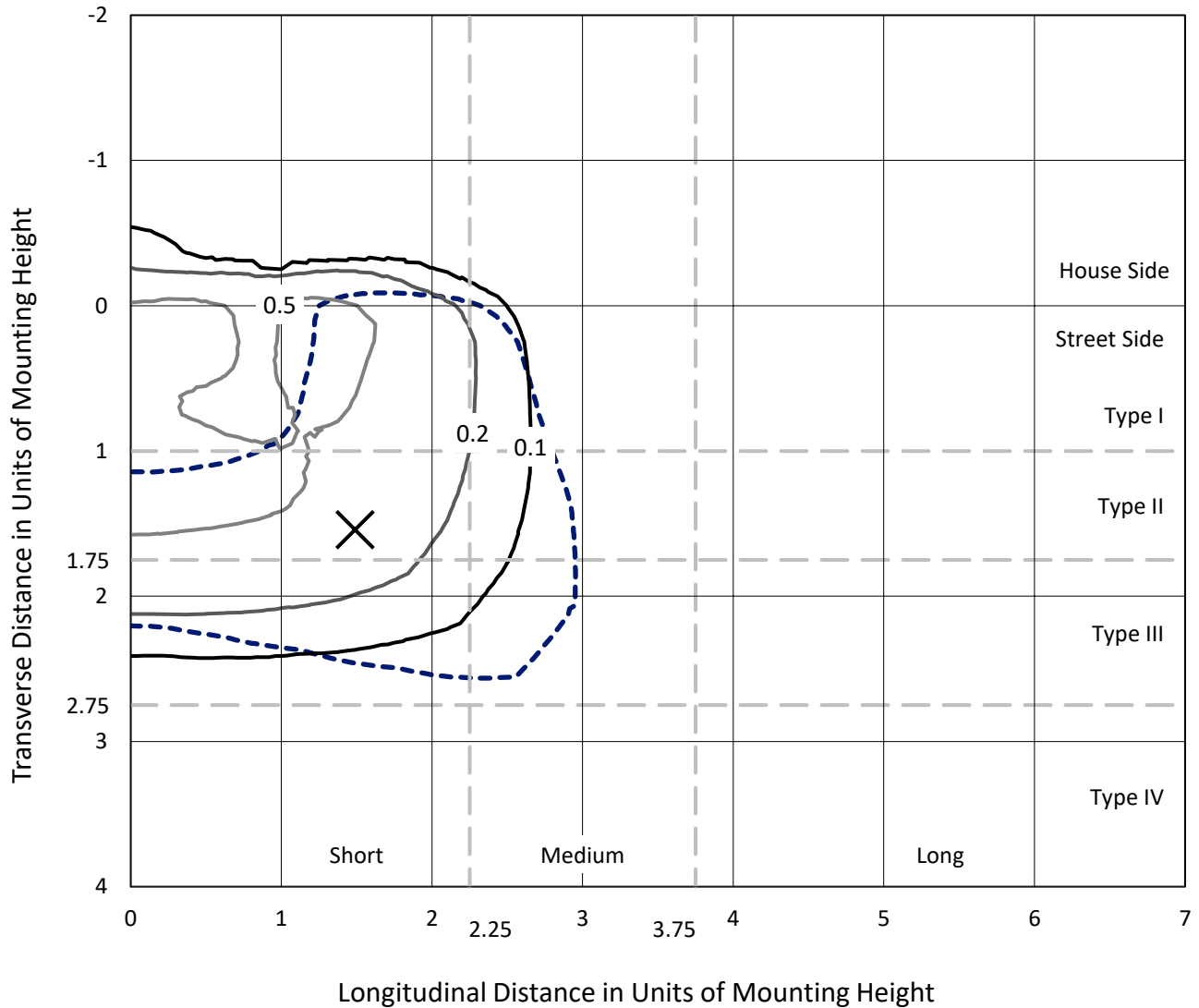
Input Watts (W): 45.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P437606  
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### Iso-Footcandle Lines of Horizontal Illumination

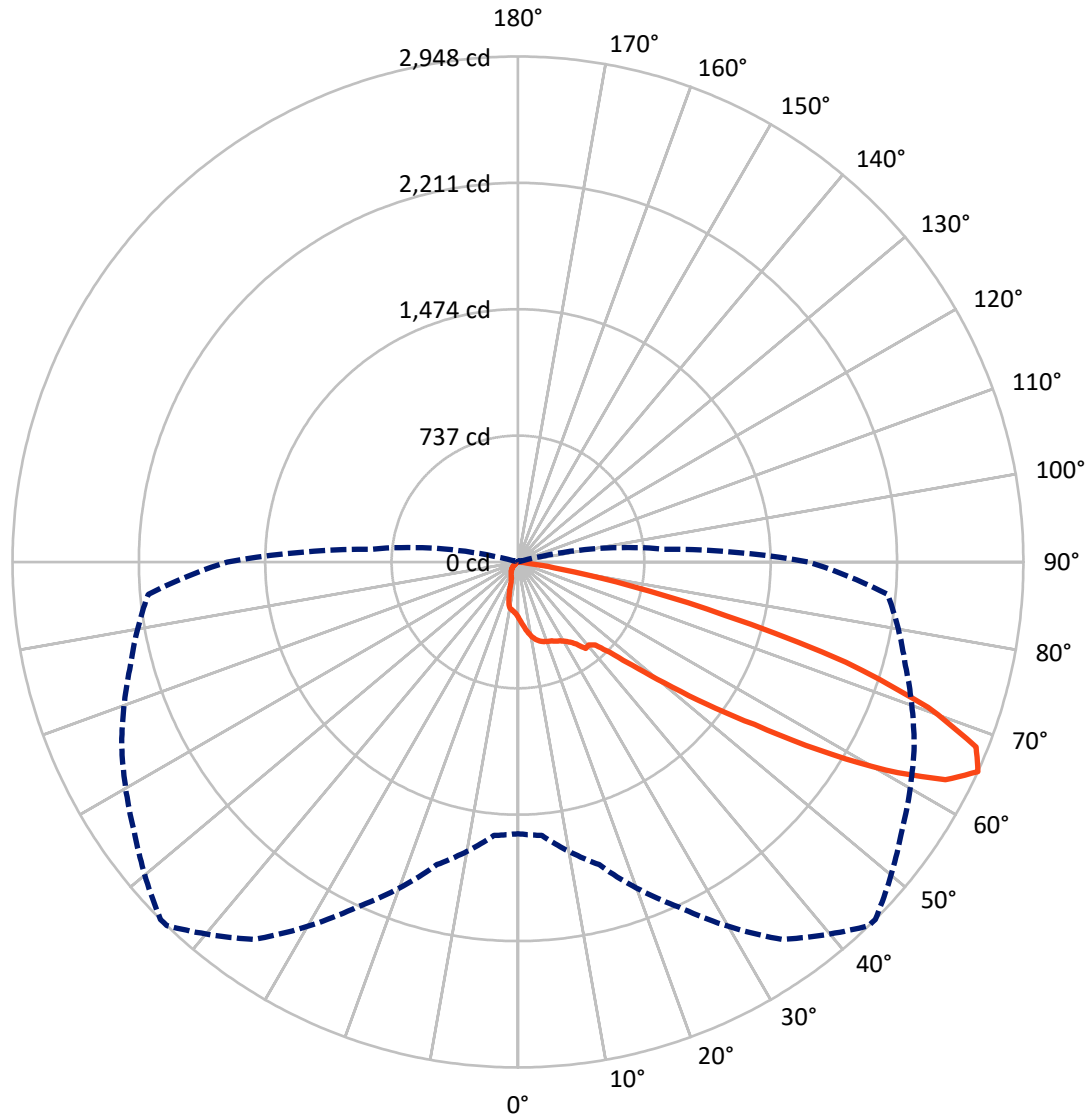
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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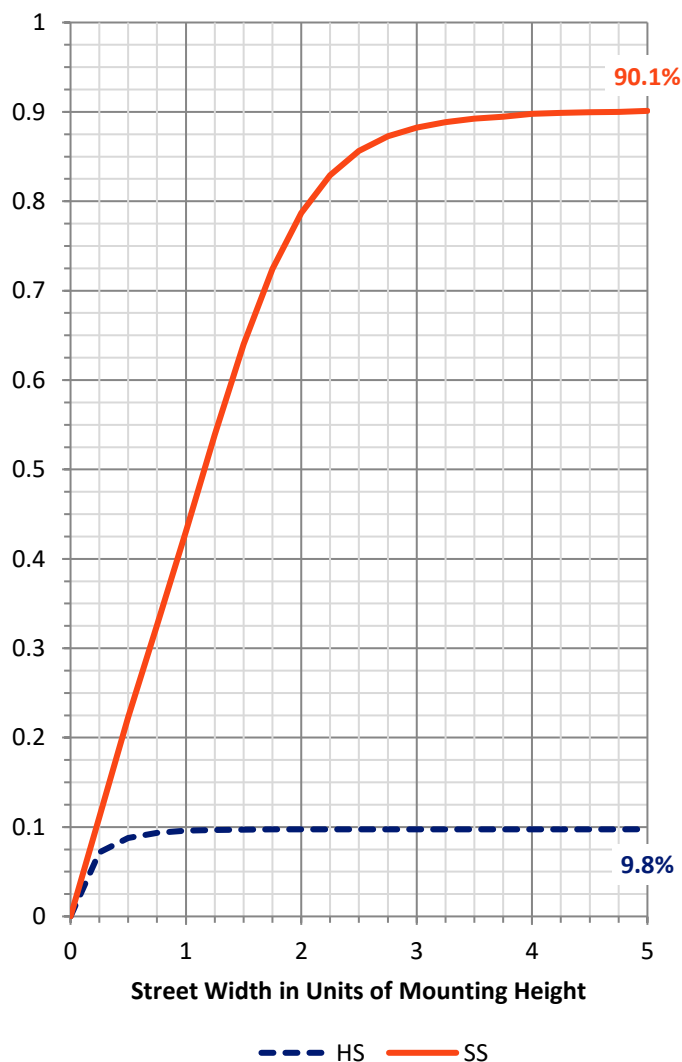
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	333.3	0.0	333.3
	% Fixture	9.8	0.0	9.8
<b>Street Side</b>	Lumens	3055.6	0.0	3055.6
	% Fixture	90.2	0.0	90.2
<b>Total</b>	Lumens	3389.0	0.0	3389.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.8	1.0
10°-20°	98.7	2.9
20°-30°	157.9	4.7
30°-40°	234.5	6.9
40°-50°	427.6	12.6
50°-60°	896.5	26.5
60°-70°	1141.0	33.7
70°-80°	383.0	11.3
80°-90°	17.1	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3389.0	100.0
0°-180°	3389.0	100.0

**Coefficient of Utilization**

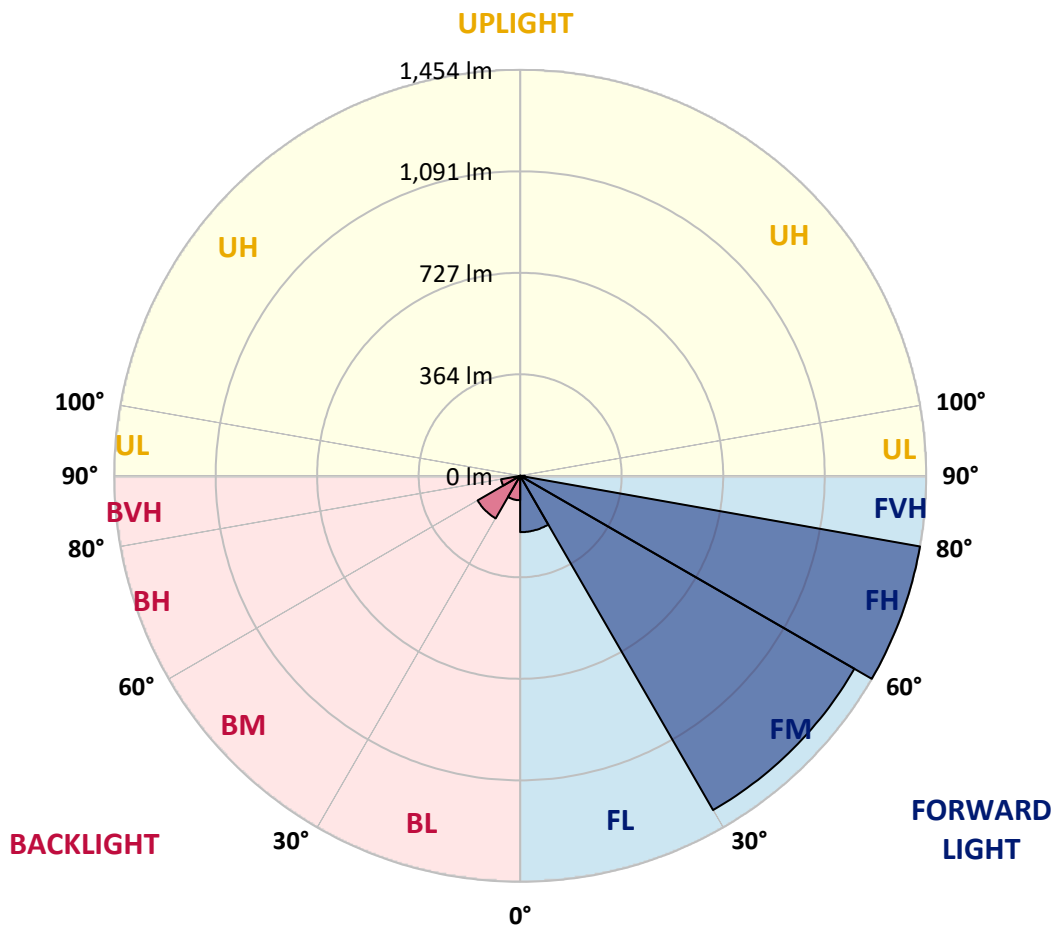


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	201.8	6.0			
FM (30°-60°)	1382.7	40.8			
FH (60°-80°)	1454.5	42.9			G1/1800
FVH (80°-90°)	16.7	0.5			G1/100
BL (0°-30°)	87.5	2.6	B0/110		
BM (30°-60°)	175.9	5.2	B0/220		
BH (60°-80°)	69.5	2.1	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8
2.5°	363.8	365.4	358.9	360.5	357.2	350.7	349.0	344.1	337.6	332.7	327.7
5°	411.3	409.7	406.4	399.8	391.6	381.8	378.5	368.7	357.2	344.1	334.3
7.5°	450.6	450.6	445.7	439.2	426.1	412.9	409.7	396.6	380.2	362.1	344.1
10°	485.0	483.4	478.5	470.3	453.9	442.4	437.5	421.1	401.5	381.8	360.5
12.5°	511.3	511.3	504.7	493.2	475.2	463.7	460.5	445.7	426.1	403.1	373.6
15°	526.0	524.4	519.5	504.7	491.6	478.5	476.9	463.7	447.4	422.8	391.6
17.5°	526.0	527.7	519.5	511.3	499.8	488.3	486.7	476.9	460.5	439.2	406.4
20°	519.5	519.5	512.9	506.3	499.8	494.9	493.2	486.7	473.6	455.6	422.8
22.5°	511.3	509.6	508.0	503.1	501.4	499.8	501.4	498.2	490.0	470.3	439.2
25°	509.6	508.0	504.7	501.4	503.1	511.3	511.3	512.9	504.7	488.3	458.8
27.5°	516.2	516.2	511.3	506.3	509.6	521.1	521.1	526.0	521.1	509.6	480.1
30°	544.0	537.5	529.3	519.5	522.7	535.8	537.5	547.3	547.3	539.1	514.5
32.5°	581.7	575.2	553.9	540.8	540.8	557.1	557.1	573.5	588.3	571.9	534.2
35°	611.2	607.9	583.4	567.0	571.9	586.6	591.6	617.8	630.9	589.9	544.0
37.5°	709.5	704.6	657.1	596.5	599.8	640.7	644.0	655.5	644.0	598.1	563.7
40°	840.6	843.9	794.8	694.8	617.8	635.8	635.8	655.5	662.0	634.2	611.2
42.5°	1038.9	1019.3	970.1	834.1	698.1	662.0	663.7	691.5	725.9	709.5	712.8
45°	1211.0	1196.2	1143.8	1012.7	827.5	748.9	742.3	778.4	845.6	860.3	898.0
47.5°	1363.4	1348.6	1325.7	1202.8	1020.9	901.3	876.7	912.7	1029.1	1106.1	1132.3
50°	1546.9	1550.2	1497.7	1427.3	1232.3	1106.1	1099.5	1101.2	1284.7	1348.6	1386.3
52.5°	1779.6	1774.7	1682.9	1645.2	1525.6	1374.8	1337.2	1360.1	1542.0	1587.9	1650.1
55°	1945.1	1940.2	1895.9	1889.4	1850.1	1673.1	1663.3	1661.6	1825.5	1845.1	1918.9
57.5°	2041.8	2050.0	2081.1	2164.7	2197.5	2069.6	2041.8	1987.7	2079.5	2074.6	2154.9
60°	2058.2	2071.3	2159.8	2351.5	2535.0	2466.2	2428.5	2287.6	2312.2	2271.2	2320.4
62.5°	1925.4	1963.1	2120.4	2390.8	2705.4	2797.2	2766.1	2548.1	2490.8	2405.6	2343.3
65°	1584.6	1601.0	1827.1	2220.4	2687.4	2948.0	2948.0	2733.3	2549.8	2340.0	2164.7
67.5°	1094.6	1102.8	1378.1	1791.1	2412.1	2882.4	2907.0	2730.0	2446.5	2082.8	1764.8
70°	621.1	666.9	834.1	1251.9	1900.9	2538.3	2564.5	2484.2	2048.3	1543.6	1156.9
72.5°	258.9	288.4	406.4	729.2	1292.9	1999.2	2045.1	1969.7	1530.5	942.2	547.3
75°	80.3	83.6	134.4	317.9	706.3	1255.2	1332.2	1329.0	914.4	440.8	222.9
77.5°	44.2	45.9	63.9	129.5	309.7	670.2	717.7	678.4	452.3	190.1	68.8
80°	21.3	22.9	34.4	62.3	136.0	250.7	295.0	273.7	157.3	90.1	22.9
82.5°	6.6	8.2	16.4	27.9	54.1	59.0	59.0	104.9	80.3	59.0	11.5
85°	0.0	0.0	4.9	9.8	9.8	9.8	9.8	22.9	37.7	36.1	4.9
87.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: ISC-SA1D-830-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8	322.8
2.5°	324.5	322.8	316.3	309.7	306.4	303.2	299.9	296.6	296.6	298.2	296.6
5°	327.7	322.8	313.0	303.2	296.6	291.7	285.1	283.5	281.9	283.5	283.5
7.5°	335.9	329.4	314.6	299.9	290.0	281.9	276.9	275.3	272.0	272.0	272.0
10°	349.0	337.6	317.9	301.5	288.4	276.9	262.2	245.8	236.0	229.4	224.5
12.5°	362.1	349.0	322.8	303.2	288.4	255.6	219.6	188.4	172.1	163.9	162.2
15°	376.9	360.5	332.7	309.7	270.4	209.7	160.6	134.4	127.8	127.8	126.2
17.5°	388.4	373.6	340.8	311.3	237.6	157.3	121.3	113.1	114.7	118.0	118.0
20°	406.4	388.4	352.3	296.6	183.5	118.0	106.5	108.2	109.8	111.4	113.1
22.5°	422.8	403.1	365.4	263.8	134.4	101.6	101.6	103.2	104.9	106.5	108.2
25°	442.4	424.4	378.5	216.3	103.2	93.4	95.0	98.3	100.0	101.6	101.6
27.5°	465.4	445.7	378.5	170.4	90.1	86.8	86.8	90.1	91.8	95.0	95.0
30°	496.5	475.2	368.7	126.2	83.6	80.3	78.7	81.9	83.6	86.8	86.8
32.5°	516.2	503.1	347.4	95.0	77.0	73.7	72.1	72.1	73.7	77.0	77.0
35°	535.8	529.3	314.6	81.9	72.1	68.8	65.5	62.3	62.3	62.3	62.3
37.5°	567.0	576.8	267.1	75.4	68.8	63.9	59.0	54.1	50.8	49.2	47.5
40°	630.9	639.1	219.6	70.5	63.9	59.0	50.8	44.2	39.3	36.1	36.1
42.5°	730.8	724.3	167.1	67.2	59.0	52.4	42.6	36.1	29.5	26.2	26.2
45°	904.5	830.8	122.9	62.3	55.7	47.5	36.1	27.9	21.3	19.7	19.7
47.5°	1117.6	953.7	93.4	59.0	50.8	41.0	27.9	21.3	16.4	14.7	14.7
50°	1347.0	1079.9	77.0	54.1	45.9	34.4	22.9	14.7	11.5	11.5	11.5
52.5°	1563.3	1165.1	63.9	49.2	39.3	27.9	16.4	11.5	9.8	9.8	9.8
55°	1764.8	1217.5	52.4	42.6	32.8	21.3	13.1	9.8	8.2	6.6	6.6
57.5°	1902.5	1209.3	42.6	34.4	24.6	14.7	9.8	8.2	6.6	4.9	4.9
60°	1950.0	1137.2	32.8	27.9	18.0	11.5	8.2	6.6	4.9	3.3	3.3
62.5°	1882.8	994.7	26.2	21.3	13.1	9.8	6.6	4.9	3.3	1.6	1.6
65°	1694.4	855.4	19.7	14.7	9.8	6.6	4.9	3.3	1.6	0.0	0.0
67.5°	1348.6	663.7	16.4	9.8	6.6	4.9	3.3	1.6	0.0	0.0	0.0
70°	843.9	416.2	13.1	6.6	4.9	3.3	1.6	0.0	0.0	0.0	0.0
72.5°	409.7	204.8	9.8	4.9	3.3	1.6	1.6	0.0	0.0	0.0	0.0
75°	152.4	67.2	8.2	4.9	1.6	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	49.2	22.9	6.6	4.9	3.3	1.6	0.0	0.0	0.0	0.0	0.0
80°	18.0	9.8	3.3	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	4.9	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	3.3	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Cooper Lighting Solutions Photometric Lab  
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Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2408-195-9  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/07/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: MCGRAW EDISON  
 Catalog Number: **GALN-SB1A-830-U-5WQ**  
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

**Spectral Parameters**

CCT (K): 3050  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



**Test Conditions**

Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

**CIE 1931 Chromaticity Diagram**



**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

**Summary**

$R_f = 81.5$   
 $R_g = 99.2$   
 $CIE R_a = 81.0$   
 $R_9 = 7.1$



**Color Vector Graphics**





**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)