

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: P437430

Luminaire Tested: **ISC-SA1C-830-U-T2**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437430  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISC-SA1C-830-U-T2  
Description: IMPACT ELITE LED CYLINDER LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3670 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

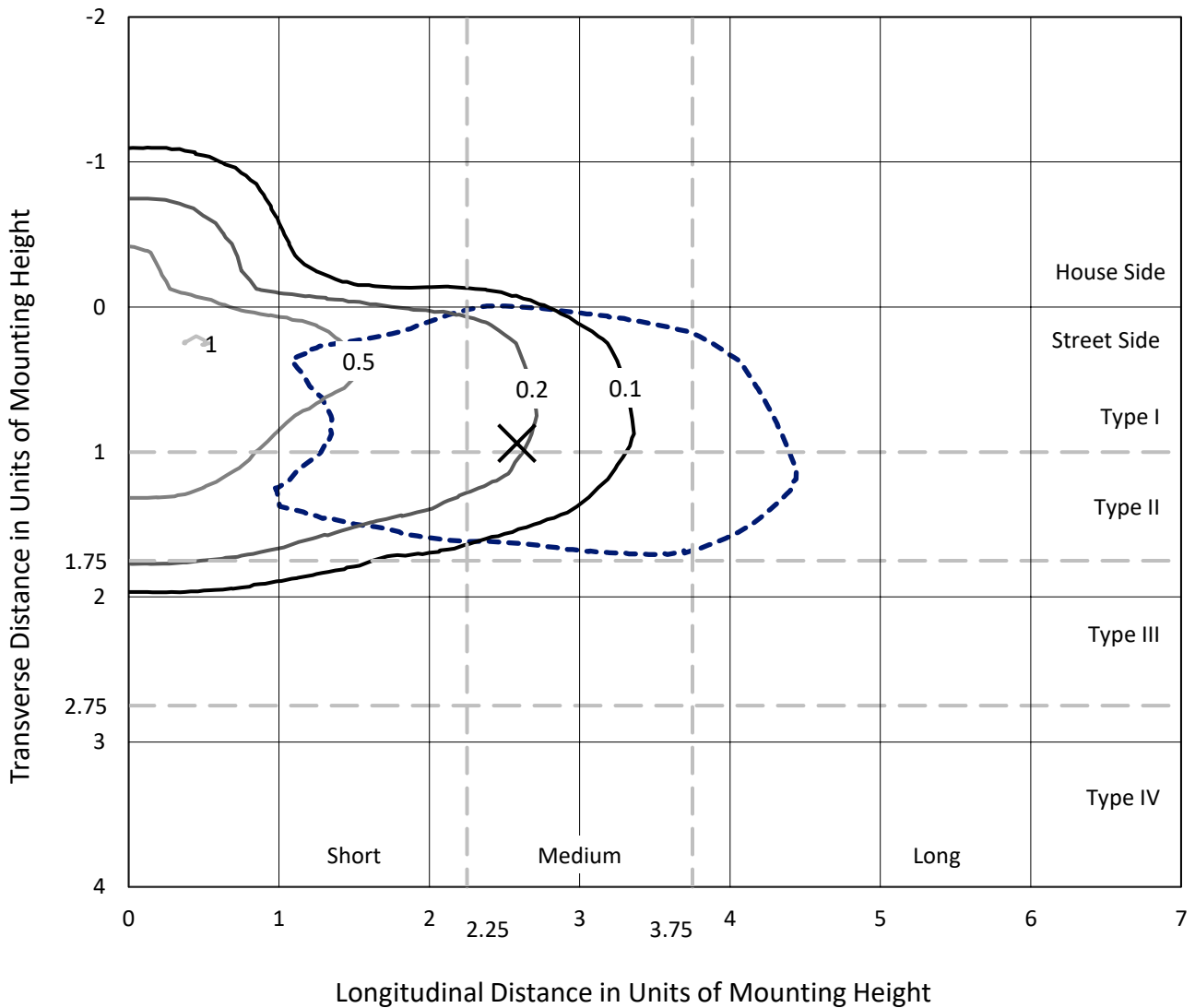
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P437430  
 CATALOG NUMBER: ISC-SA1C-830-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

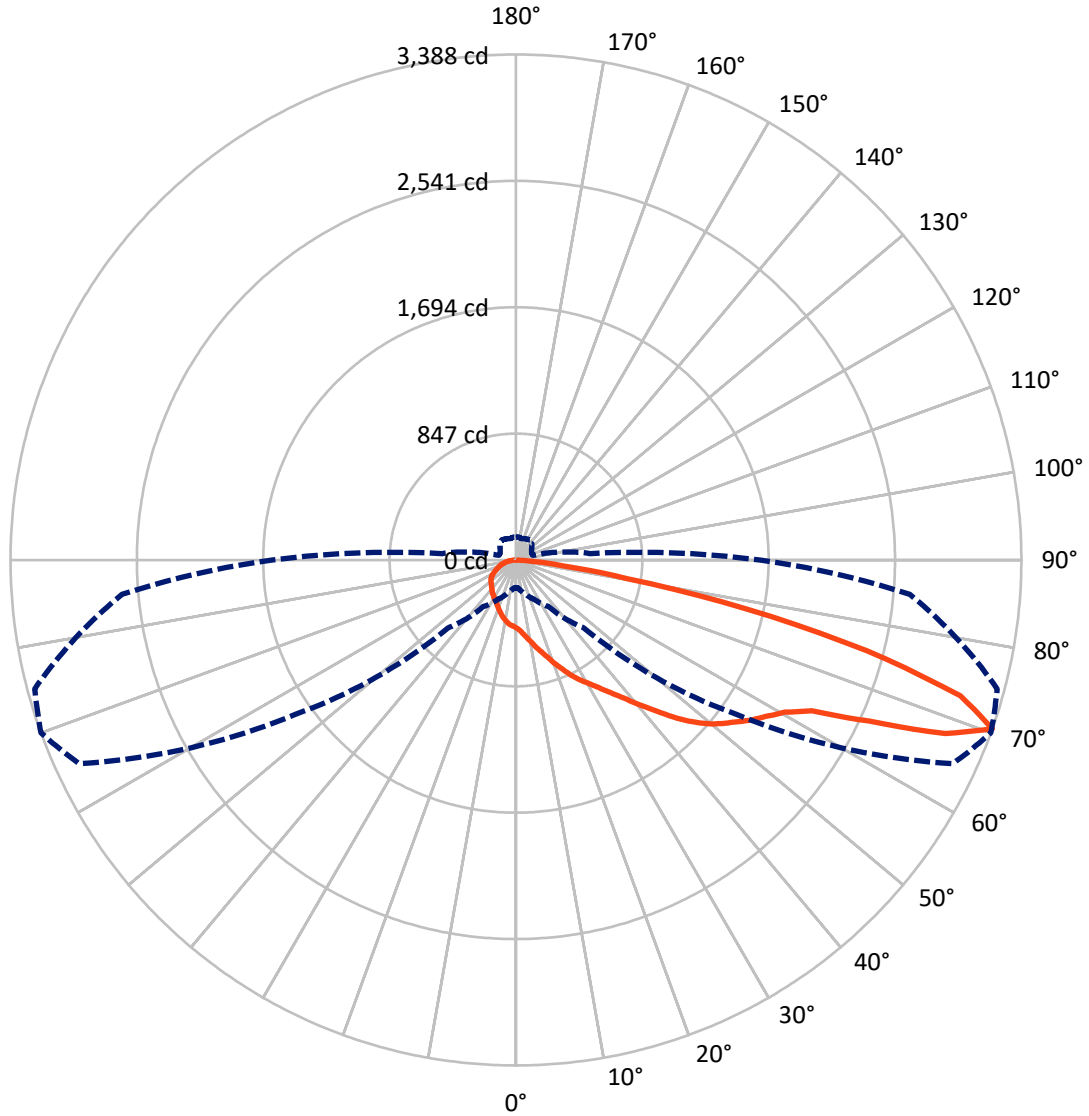
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type II - Medium - N/A

REPORT NUMBER: P437430  
CATALOG NUMBER: ISC-SA1C-830-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P437430  
 CATALOG NUMBER: ISC-SA1C-830-U-T2

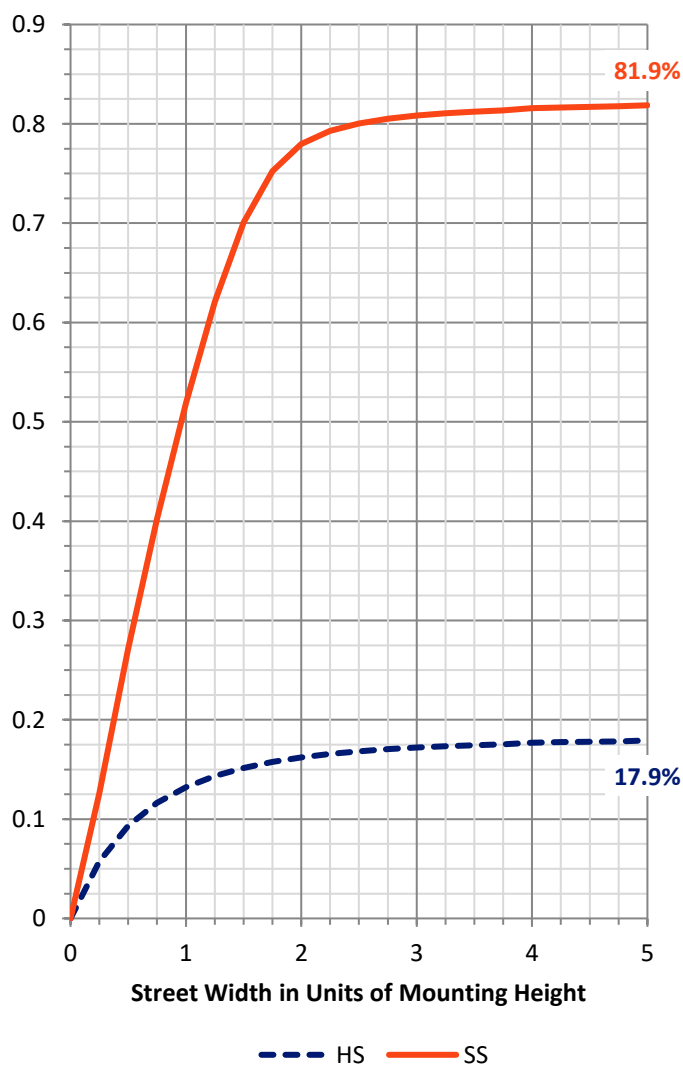
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	663.8	0.0	663.8
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	3006.2	0.0	3006.2
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	3670.0	0.0	3670.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	1.2
10°-20°	146.8	4.0
20°-30°	256.8	7.0
30°-40°	382.1	10.4
40°-50°	565.0	15.4
50°-60°	796.1	21.7
60°-70°	886.0	24.1
70°-80°	535.9	14.6
80°-90°	55.6	1.5
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°	3670.0	100.0
0°-180°	3670.0	100.0

**Coefficient of Utilization**

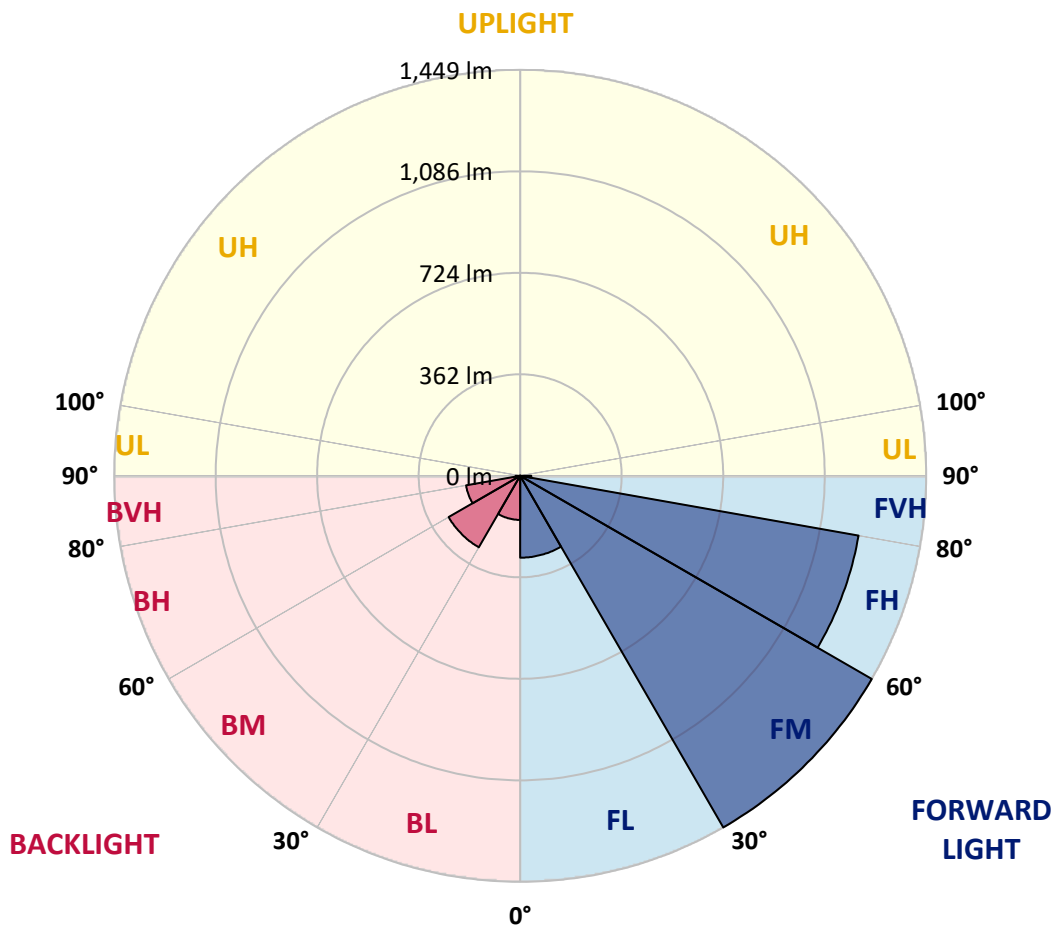


REPORT NUMBER: P437430  
 CATALOG NUMBER: ISC-SA1C-830-U-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	292.0	8.0			
FM (30°-60°)	1448.5	39.5			
FH (60°-80°)	1226.0	33.4			G1/1800
FVH (80°-90°)	39.7	1.1			G1/100
BL (0°-30°)	157.2	4.3	B1/500		
BM (30°-60°)	294.6	8.0	B1/1000		
BH (60°-80°)	196.0	5.3	B1/500		G1/500
BVH (80°-90°)	16.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Medium





REPORT NUMBER: P437430  
 CATALOG NUMBER: ISC-SA1C-830-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6
2.5°	508.3	507.0	500.4	503.0	499.1	491.3	483.4	478.2	471.6	470.3	463.7
5°	560.7	559.4	555.4	550.2	542.3	533.2	518.8	505.7	495.2	486.0	474.2
7.5°	597.4	594.7	594.7	592.1	588.2	577.7	558.1	541.0	525.3	513.5	487.3
10°	618.3	618.3	618.3	623.6	623.6	615.7	600.0	576.4	558.1	543.7	505.7
12.5°	627.5	627.5	630.1	638.0	649.8	649.8	636.7	618.3	600.0	575.1	525.3
15°	634.0	635.4	639.3	651.1	668.1	679.9	679.9	662.9	638.0	614.4	550.2
17.5°	640.6	641.9	649.8	664.2	683.8	706.1	719.2	707.4	685.1	658.9	573.8
20°	641.9	640.6	653.7	673.3	702.2	728.4	761.1	763.7	740.2	702.2	601.3
22.5°	655.0	655.0	660.2	679.9	711.3	749.3	799.1	813.5	792.6	759.8	635.4
25°	681.2	686.4	690.4	696.9	720.5	766.4	831.9	872.5	852.8	816.1	670.7
27.5°	729.7	729.7	733.6	732.3	740.2	780.8	865.9	928.8	909.1	860.7	693.0
30°	776.8	774.2	778.1	778.1	775.5	797.8	890.8	981.2	960.2	913.1	719.2
32.5°	838.4	839.7	837.1	825.3	821.4	829.2	910.5	1031.0	1019.2	964.2	742.8
35°	922.2	923.6	909.1	884.3	871.2	872.5	936.7	1089.9	1091.2	1033.6	771.6
37.5°	995.6	1002.2	1000.8	955.0	932.7	927.5	976.0	1150.2	1173.8	1113.5	816.1
40°	1063.7	1072.9	1070.3	1032.3	1003.5	990.4	1037.5	1219.6	1274.6	1213.1	869.8
42.5°	1113.5	1118.7	1121.4	1095.2	1069.0	1075.5	1101.7	1298.2	1384.7	1323.1	941.9
45°	1167.2	1169.8	1173.8	1159.4	1141.0	1172.5	1181.6	1383.4	1513.1	1464.6	1027.0
47.5°	1222.2	1232.7	1236.6	1220.9	1209.1	1260.2	1268.1	1465.9	1627.0	1603.4	1112.2
50°	1311.3	1321.8	1317.9	1299.5	1289.0	1328.3	1345.4	1540.6	1727.9	1743.6	1194.7
52.5°	1426.6	1433.1	1450.2	1418.7	1395.2	1380.7	1409.6	1623.1	1809.1	1866.8	1282.5
55°	1448.9	1458.0	1519.6	1548.4	1568.1	1459.3	1477.7	1696.5	1896.9	1983.3	1380.7
57.5°	1357.2	1362.4	1462.0	1549.7	1691.2	1653.2	1574.6	1790.8	1978.1	2103.9	1480.3
60°	1129.2	1148.9	1278.6	1433.1	1657.2	1851.0	1826.1	1912.6	2069.8	2224.4	1624.4
62.5°	736.2	754.6	892.1	1154.1	1469.8	1853.7	2186.4	2161.5	2225.7	2371.1	1805.2
65°	376.0	382.5	501.7	699.5	1059.8	1657.2	2402.5	2675.0	2601.7	2664.5	2196.9
67.5°	250.2	255.5	309.2	403.5	630.1	1147.6	2331.8	3193.8	3104.7	3138.8	2613.5
70°	184.7	190.0	234.5	292.1	381.2	643.2	1803.9	3230.5	3387.7	3339.2	2650.1
72.5°	137.6	138.9	166.4	225.3	281.7	345.8	1066.3	2665.9	3113.9	3289.4	2462.8
75°	104.8	104.8	119.2	166.4	220.1	222.7	594.7	1968.9	2428.7	2751.0	2054.1
77.5°	78.6	81.2	87.8	115.3	163.8	159.8	280.3	1303.5	1579.9	1793.4	1264.2
80°	56.3	57.6	61.6	70.7	108.7	103.5	141.5	628.8	753.3	801.7	516.1
82.5°	35.4	35.4	43.2	43.2	61.6	64.2	64.2	254.1	303.9	340.6	172.9
85°	6.6	6.6	13.1	17.0	19.7	22.3	19.7	64.2	87.8	103.5	59.0
87.5°	0.0	0.0	0.0	1.3	1.3	2.6	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P437430  
 CATALOG NUMBER: ISC-SA1C-830-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6	454.6
2.5°	458.5	455.9	449.3	441.5	436.2	431.0	427.1	424.4	423.1	423.1	421.8
5°	465.1	457.2	444.1	431.0	419.2	410.0	403.5	399.6	396.9	398.2	395.6
7.5°	475.5	461.1	437.5	416.6	400.9	389.1	383.8	381.2	382.5	383.8	383.8
10°	483.4	463.7	425.8	396.9	382.5	376.0	374.7	377.3	381.2	382.5	381.2
12.5°	492.6	465.1	412.7	379.9	370.7	366.8	373.4	379.9	386.5	391.7	389.1
15°	507.0	465.1	396.9	365.5	358.9	362.9	374.7	383.8	395.6	400.9	402.2
17.5°	517.5	461.1	377.3	349.8	348.5	358.9	376.0	391.7	403.5	412.7	412.7
20°	527.9	454.6	357.6	335.4	340.6	355.0	374.7	393.0	407.4	416.6	419.2
22.5°	541.0	445.4	338.0	322.3	331.4	349.8	370.7	386.5	399.6	407.4	408.7
25°	550.2	429.7	318.3	311.8	326.2	343.2	358.9	369.4	376.0	381.2	381.2
27.5°	555.4	411.3	302.6	303.9	319.6	334.1	341.9	341.9	344.5	344.5	343.2
30°	548.9	391.7	290.8	296.1	310.5	321.0	323.6	318.3	310.5	302.6	300.0
32.5°	546.3	365.5	279.0	288.2	298.7	303.9	302.6	294.8	280.3	268.6	268.6
35°	541.0	340.6	268.6	279.0	285.6	286.9	284.3	272.5	259.4	248.9	247.6
37.5°	537.1	321.0	259.4	268.6	272.5	273.8	268.6	258.1	250.2	242.4	241.0
40°	548.9	303.9	250.2	256.8	259.4	259.4	254.1	246.3	250.2	248.9	248.9
42.5°	571.2	297.4	241.0	245.0	247.6	250.2	246.3	239.7	248.9	241.0	243.7
45°	603.9	297.4	234.5	235.8	238.4	245.0	243.7	234.5	235.8	217.5	213.5
47.5°	652.4	305.2	229.3	225.3	231.9	241.0	237.1	226.6	216.2	201.7	200.4
50°	707.4	321.0	224.0	214.8	225.3	235.8	231.9	218.8	207.0	199.1	197.8
52.5°	762.4	340.6	220.1	204.4	213.5	233.2	231.9	217.5	200.4	195.2	193.9
55°	830.5	358.9	213.5	192.6	204.4	230.6	230.6	209.6	196.5	195.2	193.9
57.5°	907.8	382.5	203.1	176.9	192.6	222.7	221.4	204.4	193.9	191.3	192.6
60°	1007.4	411.3	187.3	162.4	182.1	210.9	213.5	199.1	188.6	187.3	187.3
62.5°	1176.4	465.1	169.0	149.3	169.0	195.2	201.7	190.0	182.1	183.4	184.7
65°	1501.3	565.9	148.0	137.6	155.9	178.2	191.3	180.8	172.9	178.2	178.2
67.5°	1742.3	610.5	131.0	125.8	142.8	165.1	179.5	170.3	162.4	169.0	169.0
70°	1637.5	496.5	117.9	115.3	128.4	150.7	163.8	155.9	148.0	154.6	153.3
72.5°	1454.1	394.3	103.5	103.5	114.0	133.6	148.0	140.2	129.7	132.3	131.0
75°	1273.3	365.5	90.4	90.4	99.6	115.3	127.1	123.1	112.7	111.4	108.7
77.5°	734.9	243.7	76.0	77.3	81.2	95.6	107.4	95.6	87.8	86.5	85.2
80°	289.5	119.2	61.6	60.3	60.3	72.1	77.3	72.1	65.5	64.2	61.6
82.5°	104.8	60.3	47.2	41.9	43.2	52.4	60.3	56.3	51.1	40.6	38.0
85°	40.6	30.1	31.4	24.9	27.5	27.5	31.4	26.2	18.3	13.1	13.1
87.5°	2.6	2.6	2.6	2.6	1.3	1.3	0.0	0.0	1.3	1.3	1.3
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  
1121 Highway 74 South  
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**



CCT = 3050K  
 CIE x = 0.4383  
 CIE y = 0.4131  
 Duv = 0.0034

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 $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	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)