

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: P437949

Luminaire Tested: **ISS-SA1F-830-U-T4W**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437949  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISS-SA1F-830-U-T4W  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6224 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

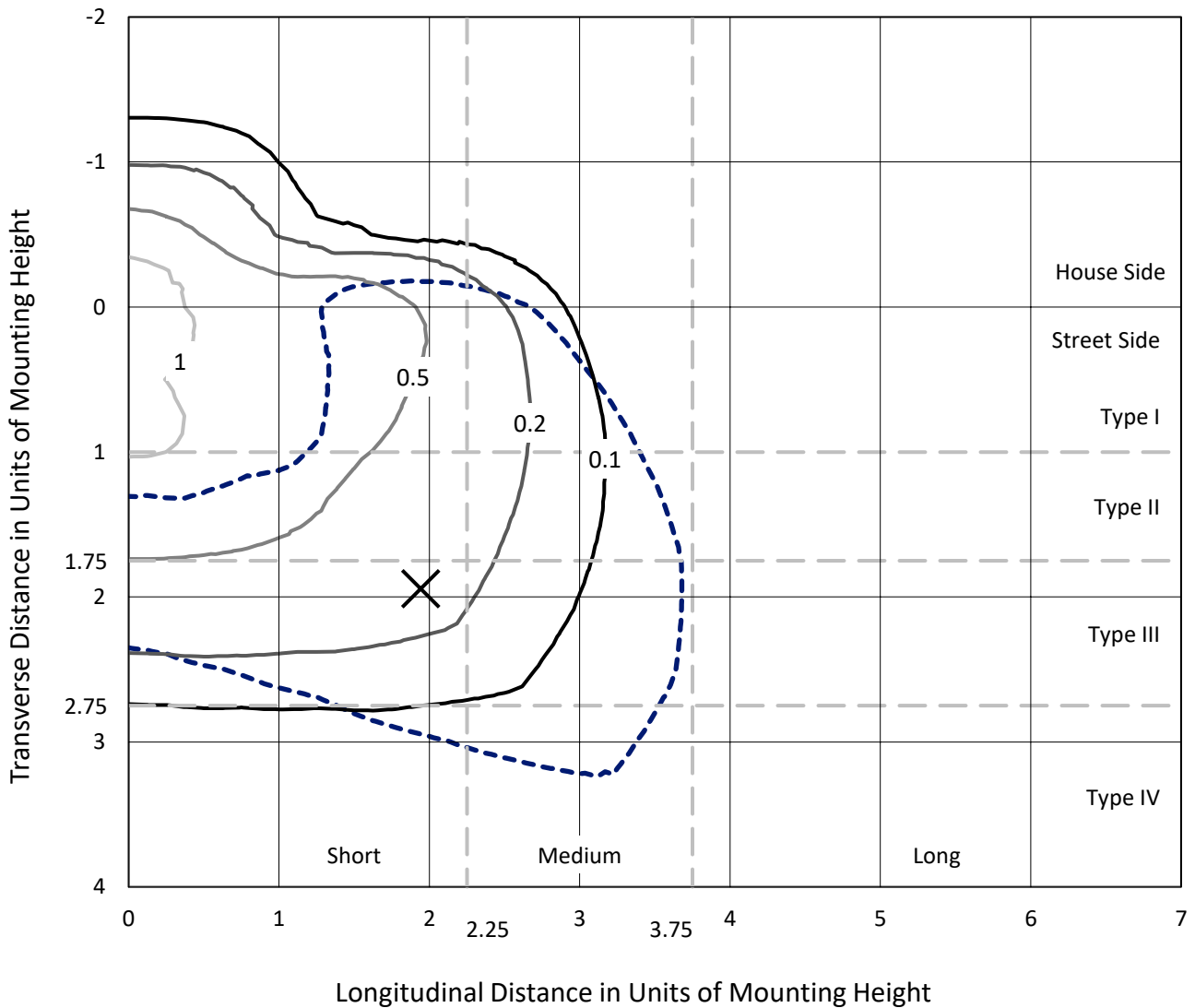
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

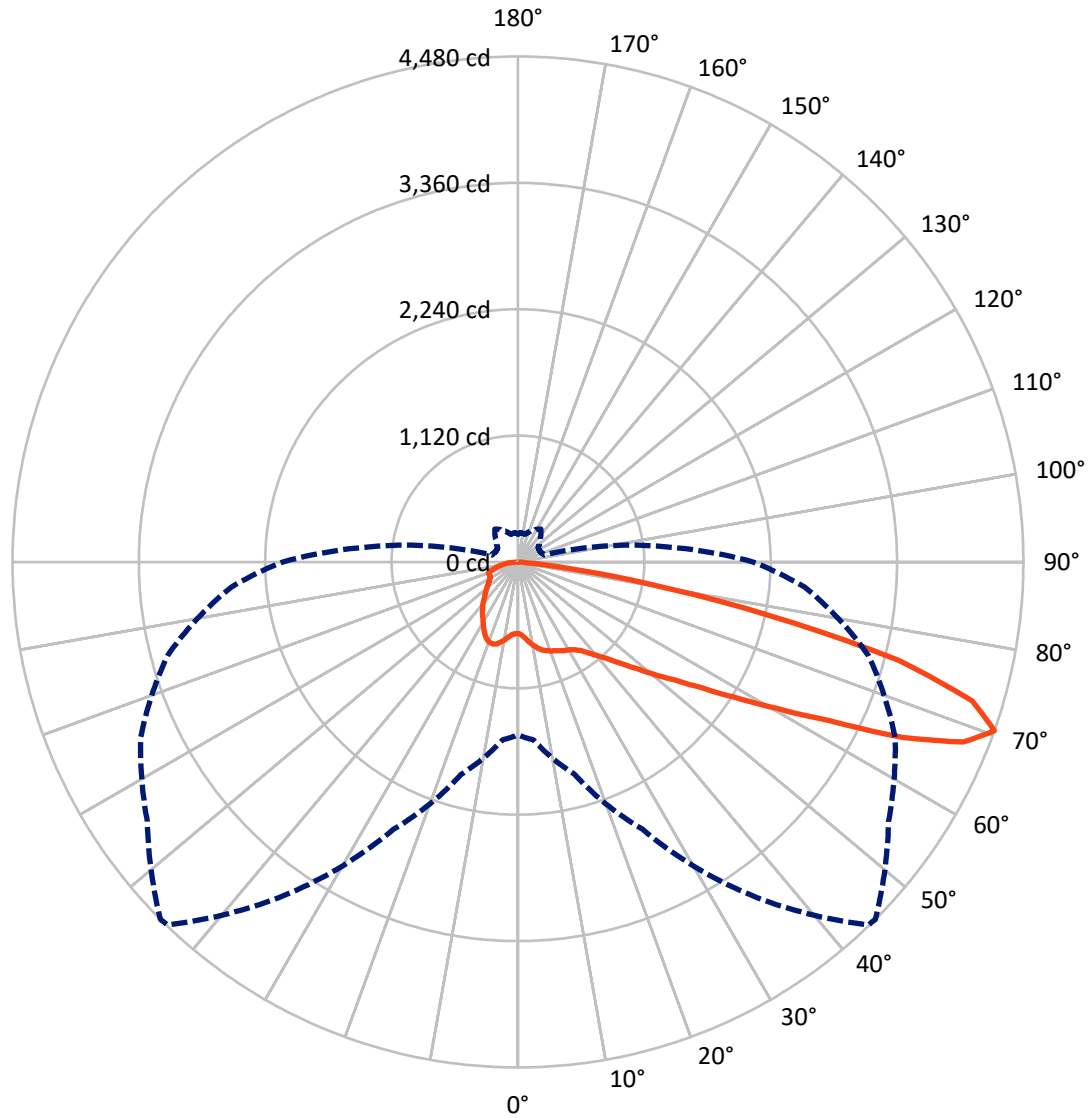
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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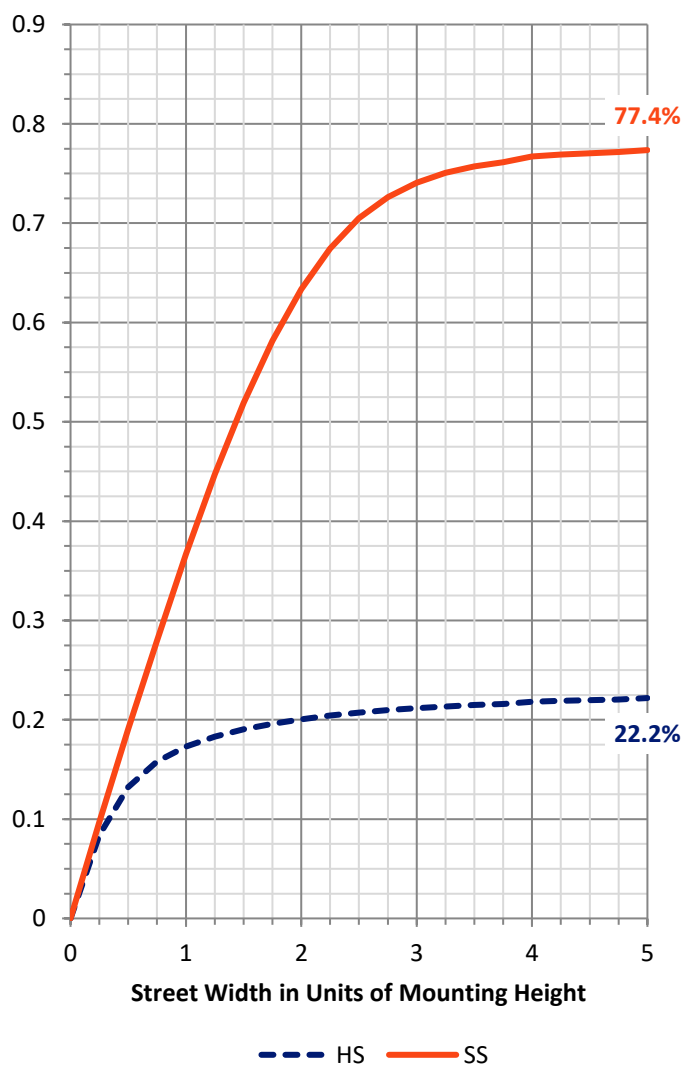
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1405.3	0.0	1405.3
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	4818.7	0.0	4818.7
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	6224.0	0.0	6224.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	1.0
10°-20°	218.6	3.5
20°-30°	370.2	5.9
30°-40°	535.2	8.6
40°-50°	771.8	12.4
50°-60°	1265.8	20.3
60°-70°	1813.6	29.1
70°-80°	1077.9	17.3
80°-90°	105.5	1.7
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°	6224.0	100.0
0°-180°	6224.0	100.0

**Coefficient of Utilization**



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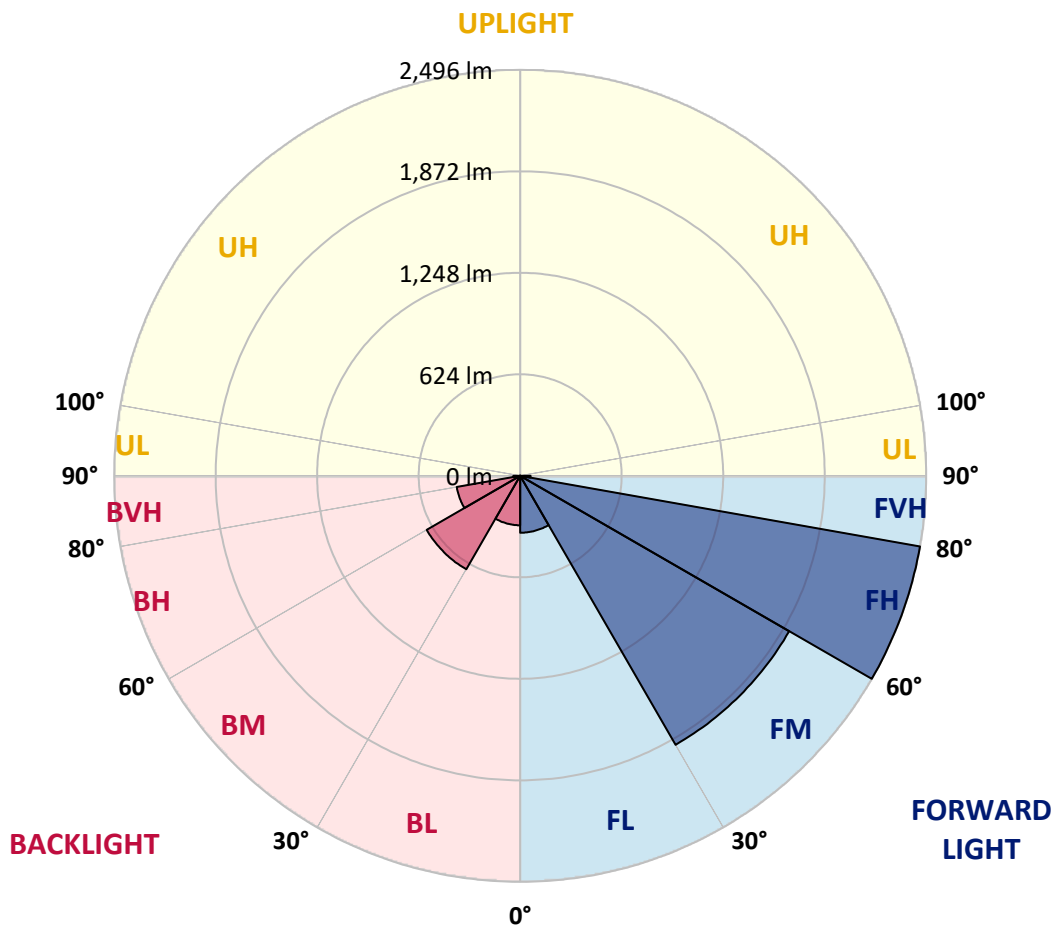
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	350.0	5.6			
FM (30°-60°)	1909.5	30.7			
FH (60°-80°)	2495.7	40.1			G2/5000
FVH (80°-90°)	63.5	1.0			G1/100
BL (0°-30°)	304.1	4.9	B1/500		
BM (30°-60°)	663.3	10.7	B1/1000		
BH (60°-80°)	395.8	6.4	B1/500		G1/500
BVH (80°-90°)	42.0	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
2.5°	664.9	664.9	662.7	660.5	656.0	651.5	649.3	642.5	642.5	640.3	635.8
5°	714.2	709.7	707.5	698.5	691.8	680.6	678.4	662.7	653.7	647.0	642.5
7.5°	765.7	767.9	759.0	747.8	732.1	716.4	716.4	698.5	682.8	667.2	653.7
10°	814.9	814.9	803.7	790.3	774.6	754.5	750.0	729.9	711.9	691.8	676.1
12.5°	853.0	850.8	837.3	823.9	803.7	788.1	783.6	759.0	743.3	718.7	696.3
15°	879.9	879.9	866.4	846.3	826.1	810.5	810.5	792.5	770.2	745.5	718.7
17.5°	895.5	893.3	882.1	859.7	841.8	828.4	826.1	812.7	799.3	774.6	741.1
20°	895.5	891.1	882.1	864.2	848.5	839.6	841.8	830.6	821.6	792.5	765.7
22.5°	893.3	891.1	875.4	861.9	857.5	855.2	853.0	848.5	832.8	810.5	788.1
25°	913.4	911.2	893.3	875.4	866.4	866.4	870.9	861.9	853.0	830.6	810.5
27.5°	969.4	960.5	935.8	902.2	888.8	886.6	888.8	877.6	870.9	855.2	837.3
30°	1063.4	1059.0	1020.9	958.2	922.4	904.5	902.2	900.0	891.1	879.9	864.2
32.5°	1186.6	1182.1	1123.9	1043.3	967.2	926.9	929.1	917.9	917.9	902.2	888.8
35°	1338.8	1329.9	1271.7	1157.5	1034.3	967.2	962.7	947.0	949.3	922.4	909.0
37.5°	1473.1	1464.2	1408.2	1273.9	1119.4	1032.1	1025.4	987.3	962.7	929.1	931.4
40°	1587.3	1589.6	1549.3	1414.9	1229.1	1103.7	1092.5	1018.7	989.6	960.5	973.9
42.5°	1703.7	1710.5	1683.6	1540.3	1341.1	1182.1	1177.6	1072.4	1047.8	1025.4	1056.7
45°	1817.9	1831.4	1809.0	1674.6	1466.4	1300.8	1282.8	1159.7	1144.0	1130.6	1224.6
47.5°	1918.7	1923.2	1920.9	1815.7	1605.2	1435.1	1410.5	1273.9	1294.0	1329.9	1486.6
50°	2044.0	2050.8	2014.9	1956.7	1793.3	1587.3	1564.9	1417.2	1500.0	1616.4	1853.7
52.5°	2229.9	2238.8	2138.1	2102.3	2026.1	1770.9	1737.3	1627.6	1806.7	1981.4	2263.5
55°	2337.3	2323.9	2279.1	2283.6	2241.1	1990.3	1961.2	1885.1	2140.3	2348.5	2726.9
57.5°	2406.7	2400.0	2426.9	2487.3	2487.3	2272.4	2261.2	2227.6	2498.5	2749.3	3094.1
60°	2518.7	2532.1	2594.8	2715.7	2780.6	2641.8	2635.1	2641.8	2901.5	3029.1	3356.0
62.5°	2588.1	2617.2	2776.1	2984.4	3120.9	3136.6	3094.1	3089.6	3215.0	3262.0	3528.4
65°	2464.9	2512.0	2771.7	3109.7	3528.4	3781.4	3750.0	3479.1	3474.7	3472.4	3494.8
67.5°	2140.3	2176.1	2552.3	3053.8	3747.8	4276.2	4258.2	3826.2	3720.9	3490.3	3181.4
70°	1533.6	1582.8	1950.0	2614.9	3606.7	4473.2	4479.9	4009.7	3689.6	3217.2	2550.0
72.5°	949.3	951.5	1188.8	1862.7	3053.8	4184.4	4211.2	3828.4	3320.2	2679.9	1802.3
75°	293.3	317.9	503.7	976.1	2066.4	3403.0	3485.9	3181.4	2657.5	1853.7	987.3
77.5°	145.5	150.0	181.3	358.2	994.0	2203.0	2265.7	2124.6	1679.1	897.8	414.2
80°	82.8	87.3	111.9	159.0	380.6	1094.8	1146.3	1119.4	680.6	324.6	176.9
82.5°	40.3	42.5	56.0	80.6	161.2	326.9	367.2	403.0	259.7	172.4	96.3
85°	11.2	11.2	15.7	26.9	42.5	67.2	67.2	73.9	91.8	87.3	47.0
87.5°	0.0	0.0	0.0	2.2	2.2	2.2	4.5	2.2	4.5	6.7	6.7
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
2.5°	635.8	635.8	631.3	633.6	633.6	635.8	635.8	638.1	640.3	642.5	642.5
5°	640.3	638.1	635.8	638.1	640.3	644.8	651.5	658.2	662.7	669.4	667.2
7.5°	653.7	647.0	649.3	649.3	658.2	667.2	680.6	689.6	698.5	703.0	703.0
10°	669.4	664.9	662.7	671.6	680.6	698.5	709.7	723.1	729.9	741.1	736.6
12.5°	691.8	680.6	682.8	694.0	711.9	725.4	734.3	745.5	752.2	761.2	759.0
15°	709.7	703.0	705.2	723.1	741.1	750.0	754.5	759.0	761.2	767.9	770.2
17.5°	732.1	729.9	732.1	747.8	759.0	761.2	759.0	754.5	752.2	759.0	756.7
20°	756.7	754.5	756.7	767.9	763.4	754.5	745.5	738.8	732.1	736.6	738.8
22.5°	776.9	779.1	781.4	776.9	759.0	736.6	720.9	709.7	705.2	709.7	714.2
25°	801.5	803.7	806.0	783.6	741.1	705.2	682.8	676.1	678.4	685.1	687.3
27.5°	832.8	839.6	832.8	781.4	716.4	664.9	647.0	644.8	647.0	653.7	660.5
30°	866.4	875.4	853.0	770.2	682.8	624.6	609.0	609.0	615.7	620.2	626.9
32.5°	895.5	913.4	870.9	750.0	635.8	586.6	575.4	570.9	570.9	575.4	577.6
35°	931.4	953.7	882.1	714.2	591.0	555.2	546.3	532.8	521.6	523.9	521.6
37.5°	967.2	1000.8	877.6	658.2	541.8	519.4	510.5	490.3	472.4	461.2	465.7
40°	1034.3	1074.6	868.7	586.6	497.0	488.1	472.4	450.0	427.6	407.5	405.2
42.5°	1153.0	1155.2	848.5	521.6	454.5	450.0	436.6	416.4	389.6	362.7	362.7
45°	1312.0	1271.7	821.6	461.2	414.2	418.7	407.5	387.3	356.0	331.3	331.3
47.5°	1551.5	1410.5	770.2	407.5	380.6	389.6	382.8	362.7	329.1	306.7	306.7
50°	1887.3	1636.6	718.7	369.4	356.0	364.9	362.7	338.1	306.7	288.8	288.8
52.5°	2276.9	1932.1	682.8	340.3	326.9	342.5	342.5	320.2	291.0	277.6	275.4
55°	2677.6	2209.7	647.0	315.7	306.7	320.2	326.9	306.7	279.9	268.7	266.4
57.5°	2962.0	2348.5	597.8	295.5	284.3	302.2	311.2	297.8	273.1	261.9	259.7
60°	3105.3	2362.0	501.5	275.4	264.2	286.6	302.2	291.0	273.1	268.7	268.7
62.5°	3138.8	2306.0	400.7	257.5	250.7	277.6	304.5	300.0	286.6	291.0	293.3
65°	2995.5	2120.2	326.9	244.0	241.8	275.4	317.9	315.7	288.8	300.0	302.2
67.5°	2653.0	1797.8	277.6	230.6	228.4	279.9	342.5	315.7	273.1	284.3	279.9
70°	2084.3	1423.9	239.6	217.2	217.2	277.6	356.0	311.2	255.2	259.7	246.3
72.5°	1370.2	933.6	212.7	203.7	197.0	253.0	347.0	302.2	246.3	232.8	217.2
75°	694.0	463.4	190.3	192.5	172.4	214.9	335.8	300.0	244.0	221.6	214.9
77.5°	286.6	217.2	170.2	174.6	145.5	183.6	315.7	277.6	219.4	197.0	190.3
80°	150.0	134.3	143.3	145.5	118.7	145.5	250.7	239.6	197.0	181.3	172.4
82.5°	87.3	85.1	109.7	111.9	82.8	118.7	221.6	208.2	165.7	147.8	143.3
85°	40.3	47.0	73.9	67.2	51.5	78.4	134.3	103.0	73.9	64.9	62.7
87.5°	4.5	6.7	15.7	15.7	11.2	6.7	2.2	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  
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

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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

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**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

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**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			

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**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			

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**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)