

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: P437600

Luminaire Tested: **ISS-SA1D-830-U-T2-HSS**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437600  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISS-SA1D-830-U-T2-HSS  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3503 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B0 - U0 - G1

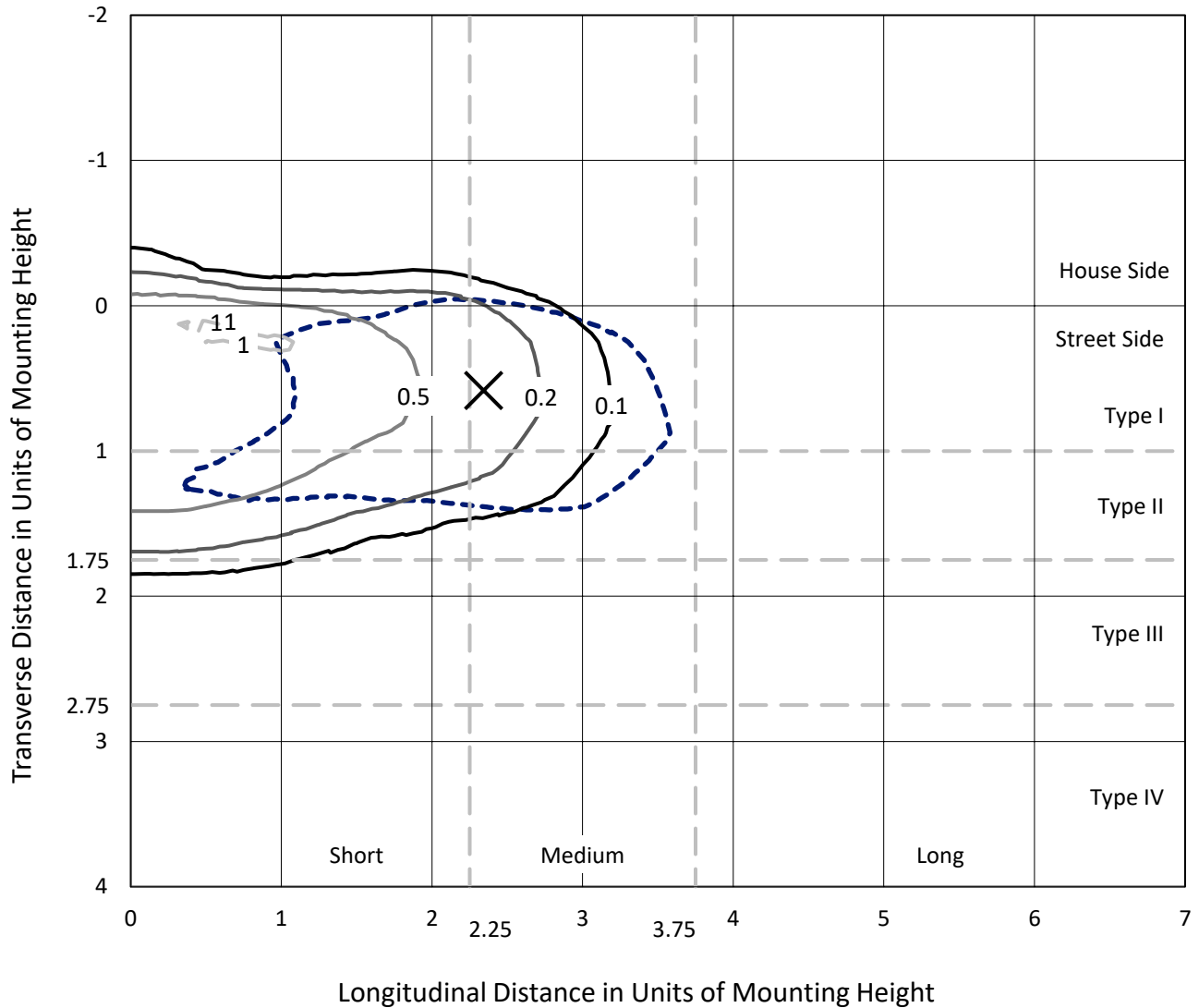
Input Watts (W): 45.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

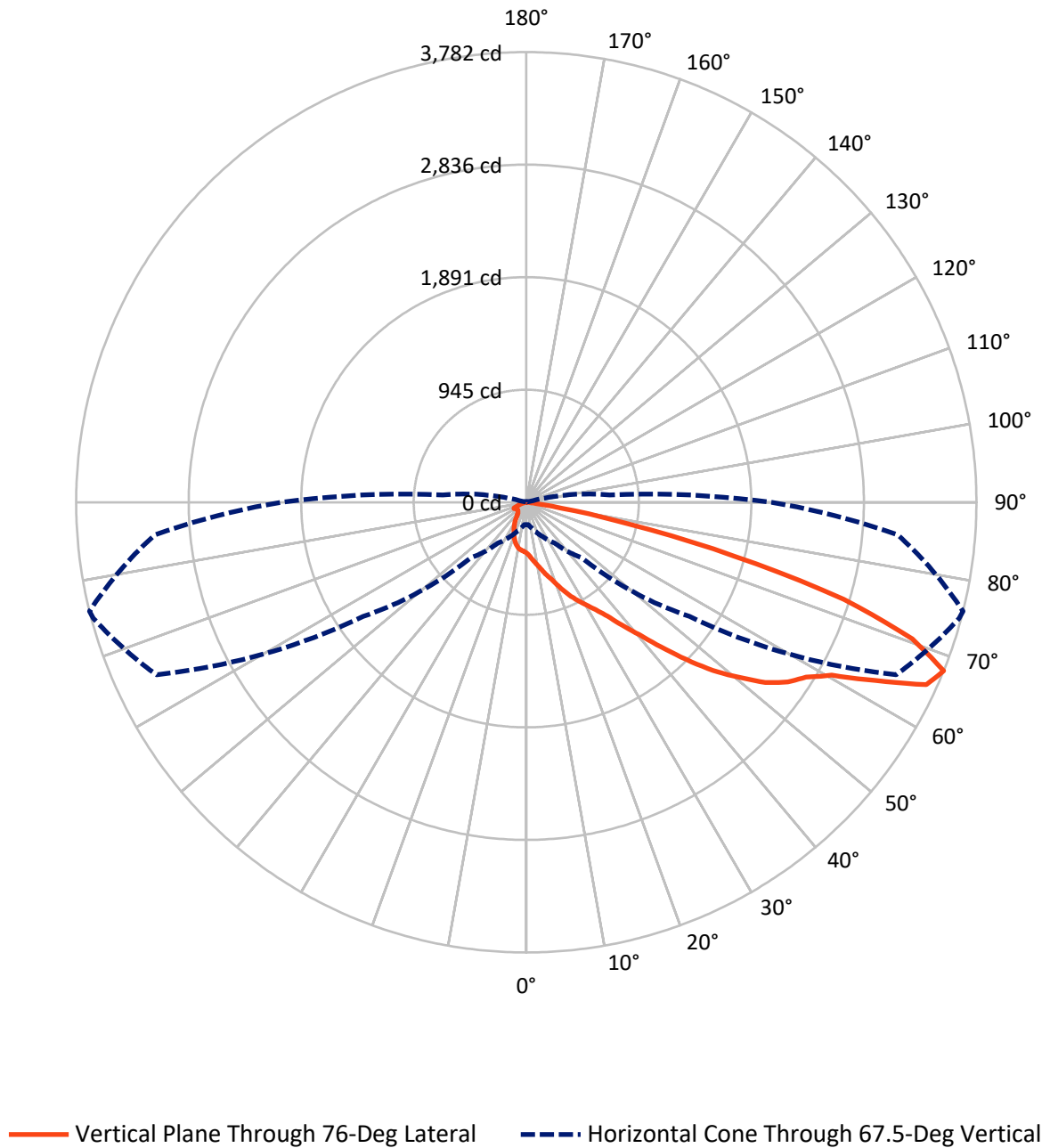
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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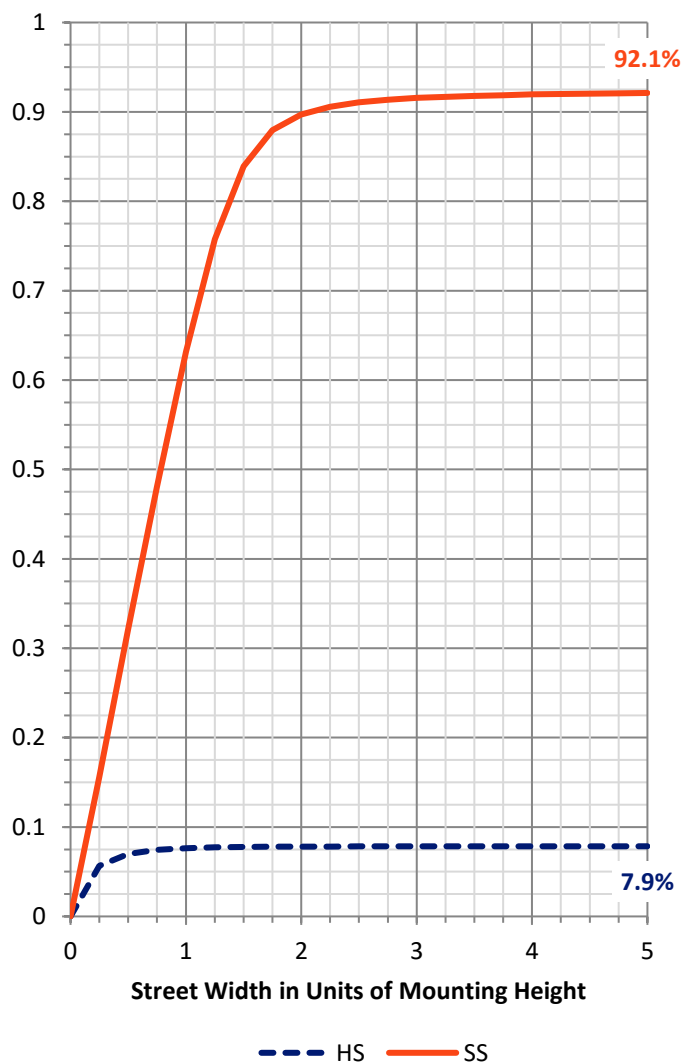
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	277.1	0.0	277.1
	% Fixture	7.9	0.0	7.9
<b>Street Side</b>	Lumens	3225.9	0.0	3225.9
	% Fixture	92.1	0.0	92.1
<b>Total</b>	Lumens	3503.0	0.0	3503.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.9	1.2
10°-20°	113.8	3.2
20°-30°	196.4	5.6
30°-40°	349.9	10.0
40°-50°	623.2	17.8
50°-60°	934.4	26.7
60°-70°	885.1	25.3
70°-80°	345.0	9.8
80°-90°	14.3	0.4
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°	3503.0	100.0
0°-180°	3503.0	100.0

**Coefficient of Utilization**



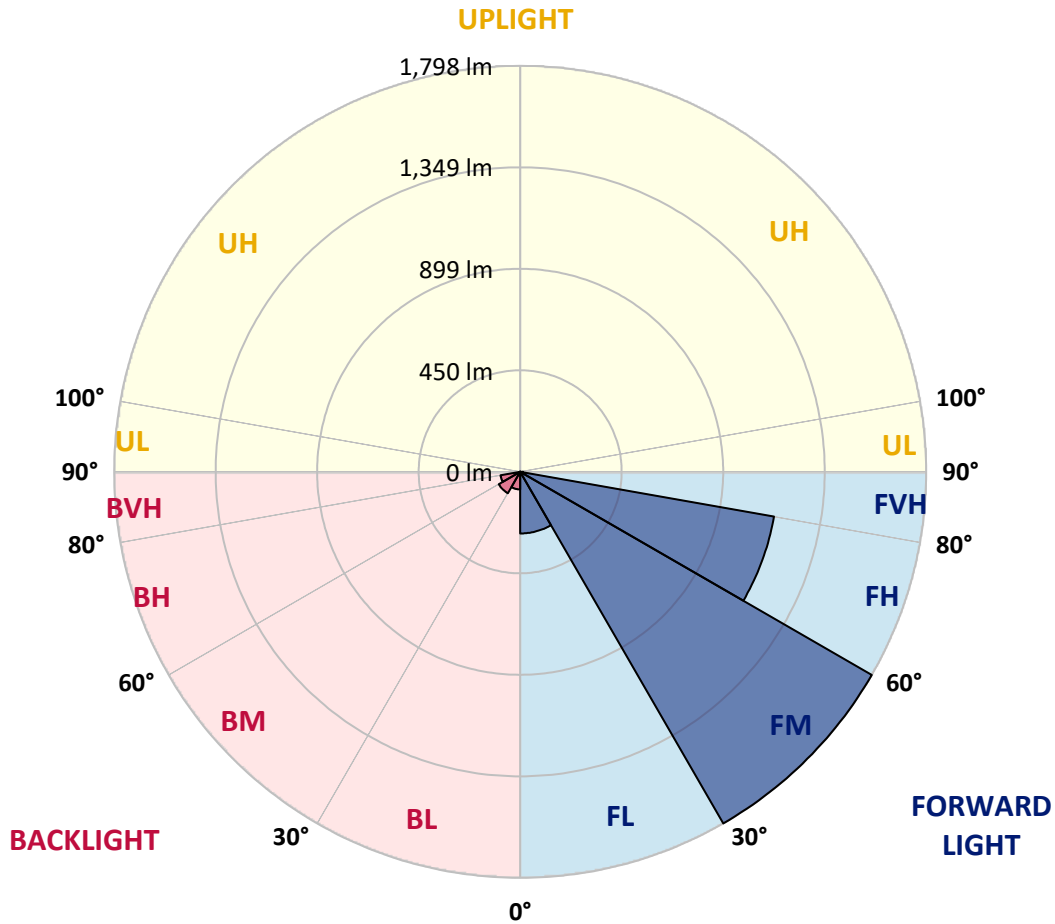
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	273.1	7.8			
FM (30°-60°)	1798.2	51.3			
FH (60°-80°)	1141.6	32.6			G1/1800
FVH (80°-90°)	13.0	0.4			G1/100
BL (0°-30°)	78.0	2.2	B0/110		
BM (30°-60°)	109.4	3.1	B0/220		
BH (60°-80°)	88.5	2.5	B0/110		G0/110
BVH (80°-90°)	1.3	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0
2.5°	504.6	499.7	496.5	494.8	491.5	481.7	473.5	458.8	445.7	445.7	437.5
5°	550.5	548.9	542.3	539.1	537.4	530.9	516.1	498.1	476.8	475.2	455.5
7.5°	563.6	565.3	565.3	568.5	570.2	566.9	553.8	537.4	509.6	506.3	476.8
10°	558.7	558.7	563.6	573.5	586.6	593.1	591.5	578.4	545.6	542.3	501.4
12.5°	540.7	544.0	552.2	568.5	593.1	612.8	624.3	619.3	586.6	583.3	534.1
15°	516.1	519.4	534.1	557.1	589.8	627.5	653.7	668.5	635.7	632.4	568.5
17.5°	481.7	485.0	501.4	535.8	581.7	634.1	684.9	714.4	686.5	676.7	604.6
20°	468.6	471.9	485.0	512.8	566.9	634.1	712.7	768.4	747.1	738.9	650.5
22.5°	521.0	519.4	507.9	511.2	552.2	629.2	734.0	835.6	819.2	807.8	699.6
25°	616.1	622.6	606.2	568.5	562.0	624.3	748.8	888.0	886.4	874.9	750.4
27.5°	725.8	729.1	711.1	671.8	617.7	634.1	765.2	940.5	948.7	938.8	789.7
30°	816.0	827.4	814.3	778.3	720.9	676.7	776.6	988.0	1015.8	1002.7	827.4
32.5°	945.4	950.3	937.2	884.8	825.8	758.6	797.9	1028.9	1089.6	1078.1	871.7
35°	1081.4	1087.9	1063.4	1006.0	933.9	858.6	848.7	1084.7	1196.1	1173.1	938.8
37.5°	1202.6	1209.2	1197.7	1127.3	1056.8	976.5	938.8	1160.0	1325.5	1310.8	1022.4
40°	1299.3	1315.7	1312.4	1251.8	1186.2	1114.1	1068.3	1248.5	1474.6	1461.5	1128.9
42.5°	1397.6	1409.1	1402.5	1358.3	1312.4	1268.2	1210.8	1371.4	1666.3	1659.8	1261.6
45°	1520.5	1538.5	1530.3	1494.3	1438.6	1428.7	1374.7	1518.8	1894.1	1884.2	1422.2
47.5°	1702.4	1718.7	1705.6	1656.5	1592.6	1574.6	1528.7	1686.0	2116.9	2112.0	1581.1
50°	1800.7	1817.0	1851.5	1859.6	1817.0	1720.4	1666.3	1844.9	2316.8	2308.6	1733.5
52.5°	1766.3	1781.0	1864.6	1943.2	2036.6	1954.7	1833.4	2016.9	2500.3	2515.0	1882.6
55°	1618.8	1638.5	1758.1	1884.2	2110.3	2220.1	2080.8	2211.9	2644.5	2665.8	1980.9
57.5°	1320.6	1343.5	1497.5	1692.5	1997.3	2287.3	2387.2	2480.6	2742.8	2770.6	2107.1
60°	791.4	827.4	986.3	1245.2	1667.9	2128.4	2605.1	2867.3	2934.5	2947.6	2375.8
62.5°	439.1	430.9	558.7	771.7	1150.2	1728.6	2572.4	3337.5	3296.6	3296.6	2834.5
65°	263.8	272.0	337.5	458.8	668.5	1140.4	2293.8	3627.5	3681.6	3693.1	3206.5
67.5°	186.8	188.4	235.9	314.6	417.8	657.0	1672.9	3427.6	3765.2	3781.6	3132.7
70°	121.2	122.9	168.8	224.5	298.2	362.1	1022.4	2824.7	3448.9	3440.8	2770.6
72.5°	73.7	77.0	106.5	165.5	229.4	204.8	550.5	2041.5	2732.9	2788.6	2174.2
75°	45.9	49.2	63.9	114.7	160.6	139.3	242.5	1363.2	1763.0	1805.6	1404.2
77.5°	26.2	29.5	41.0	65.5	114.7	96.7	114.7	716.0	853.6	881.5	563.6
80°	9.8	11.5	21.3	32.8	70.5	59.0	52.4	242.5	272.0	304.8	172.0
82.5°	1.6	3.3	9.8	19.7	27.9	27.9	22.9	73.7	75.4	80.3	45.9
85°	0.0	0.0	3.3	4.9	4.9	4.9	8.2	14.7	22.9	22.9	13.1
87.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.3	3.3	3.3	3.3
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°	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0
2.5°	429.3	426.0	412.9	399.8	390.0	381.8	368.7	368.7	363.7	358.8	360.5
5°	440.7	430.9	406.3	381.8	358.8	337.5	319.5	311.3	299.8	296.6	294.9
7.5°	455.5	437.5	396.5	357.2	319.5	291.6	268.7	254.0	240.9	237.6	239.2
10°	473.5	447.3	385.0	324.4	278.5	244.1	217.9	206.4	191.7	186.8	181.9
12.5°	499.7	458.8	367.0	288.4	237.6	203.2	165.5	137.6	127.8	124.5	124.5
15°	521.0	465.3	344.1	254.0	203.2	149.1	118.0	113.1	111.4	111.4	111.4
17.5°	545.6	470.2	316.2	221.2	157.3	109.8	103.2	103.2	101.6	101.6	99.9
20°	571.8	471.9	286.7	191.7	111.4	98.3	93.4	91.8	88.5	86.8	86.8
22.5°	601.3	470.2	254.0	157.3	98.3	90.1	81.9	78.6	75.4	72.1	72.1
25°	625.9	467.0	224.5	113.1	90.1	78.6	70.5	65.5	62.3	60.6	59.0
27.5°	647.2	448.9	195.0	96.7	81.9	70.5	60.6	55.7	52.4	50.8	50.8
30°	648.8	419.4	170.4	90.1	75.4	62.3	52.4	49.2	47.5	45.9	45.9
32.5°	658.7	390.0	144.2	85.2	67.2	55.7	47.5	44.2	41.0	41.0	41.0
35°	678.3	363.7	111.4	77.0	60.6	49.2	42.6	39.3	37.7	36.0	36.0
37.5°	709.5	345.7	91.8	70.5	55.7	44.2	39.3	36.0	34.4	32.8	32.8
40°	750.4	335.9	83.6	63.9	49.2	41.0	36.0	32.8	29.5	27.9	27.9
42.5°	820.9	335.9	77.0	57.3	44.2	37.7	32.8	29.5	26.2	24.6	24.6
45°	902.8	349.0	72.1	50.8	39.3	34.4	29.5	24.6	21.3	19.7	19.7
47.5°	992.9	373.6	67.2	45.9	36.0	31.1	26.2	19.7	16.4	14.7	14.7
50°	1097.8	409.6	63.9	41.0	32.8	27.9	21.3	14.7	13.1	11.5	11.5
52.5°	1186.2	445.7	59.0	37.7	29.5	24.6	16.4	13.1	9.8	9.8	9.8
55°	1269.8	485.0	55.7	34.4	27.9	19.7	13.1	9.8	8.2	8.2	8.2
57.5°	1381.2	534.1	50.8	31.1	22.9	14.7	11.5	8.2	6.6	6.6	6.6
60°	1609.0	643.9	44.2	27.9	19.7	13.1	9.8	8.2	6.6	4.9	4.9
62.5°	1979.3	822.5	37.7	24.6	14.7	11.5	8.2	6.6	4.9	3.3	3.3
65°	2213.6	866.7	31.1	19.7	11.5	8.2	6.6	4.9	3.3	1.6	1.6
67.5°	2062.8	704.5	24.6	14.7	9.8	6.6	4.9	3.3	1.6	0.0	0.0
70°	1741.7	532.5	18.0	9.8	8.2	4.9	3.3	1.6	0.0	0.0	0.0
72.5°	1376.3	404.7	16.4	8.2	6.6	3.3	3.3	1.6	0.0	0.0	0.0
75°	902.8	208.1	13.1	8.2	4.9	3.3	1.6	1.6	0.0	0.0	0.0
77.5°	355.5	78.6	9.8	6.6	4.9	3.3	1.6	1.6	0.0	0.0	0.0
80°	96.7	26.2	4.9	3.3	3.3	1.6	1.6	1.6	0.0	0.0	0.0
82.5°	24.6	11.5	3.3	3.3	1.6	1.6	1.6	1.6	1.6	0.0	0.0
85°	8.2	3.3	3.3	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	3.3	3.3	1.6	1.6	1.6	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



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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

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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**

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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**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)