

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



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P642953

Luminaire Tested: GWS-SA6D-830-U-T3-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642953  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6D-830-U-T3-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

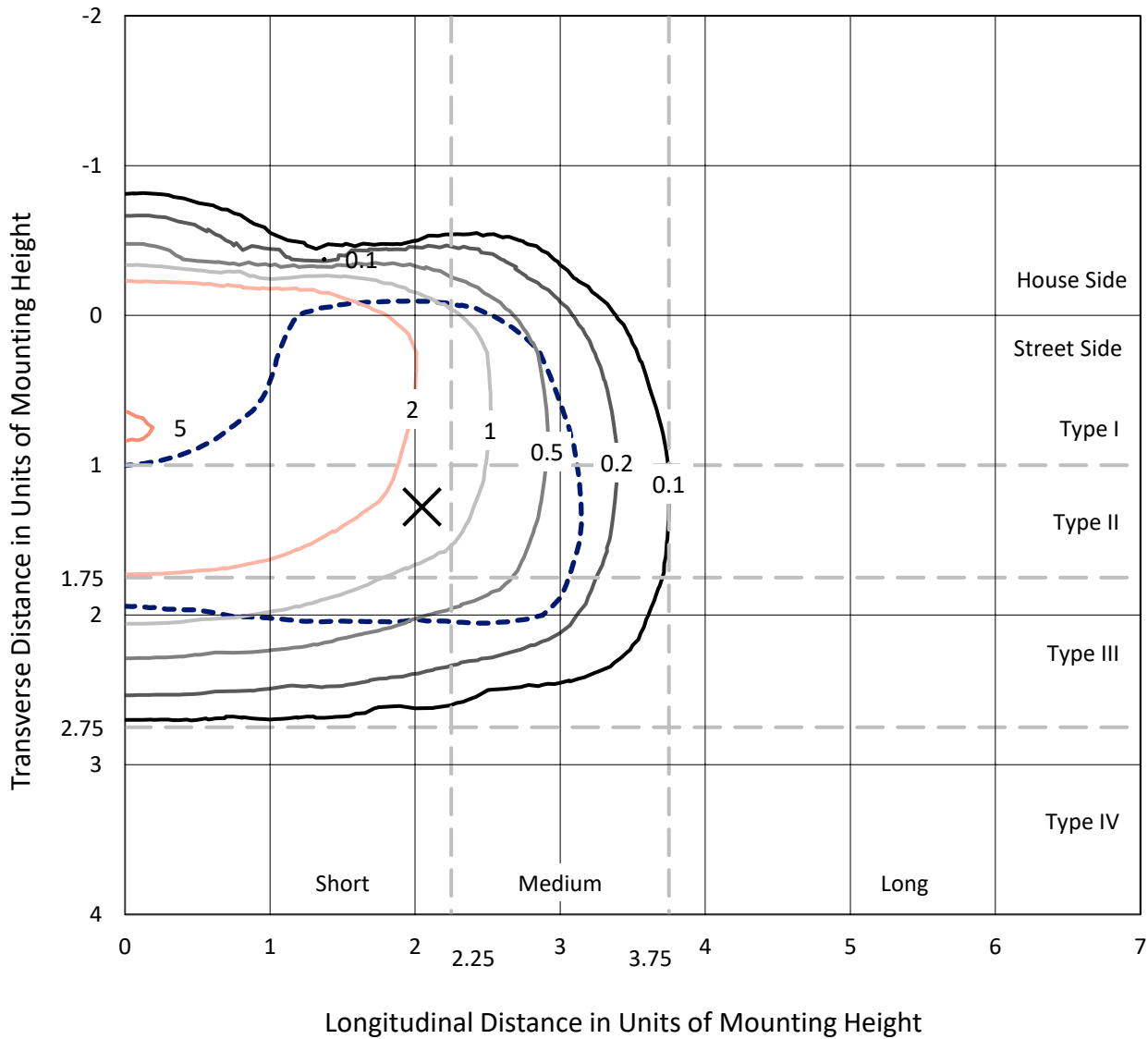
Lumens per Lamp: N/A  
Luminaire Lumens: 20891.2 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 245.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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 CATALOG NUMBER: GWS-SA6D-830-U-T3-W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

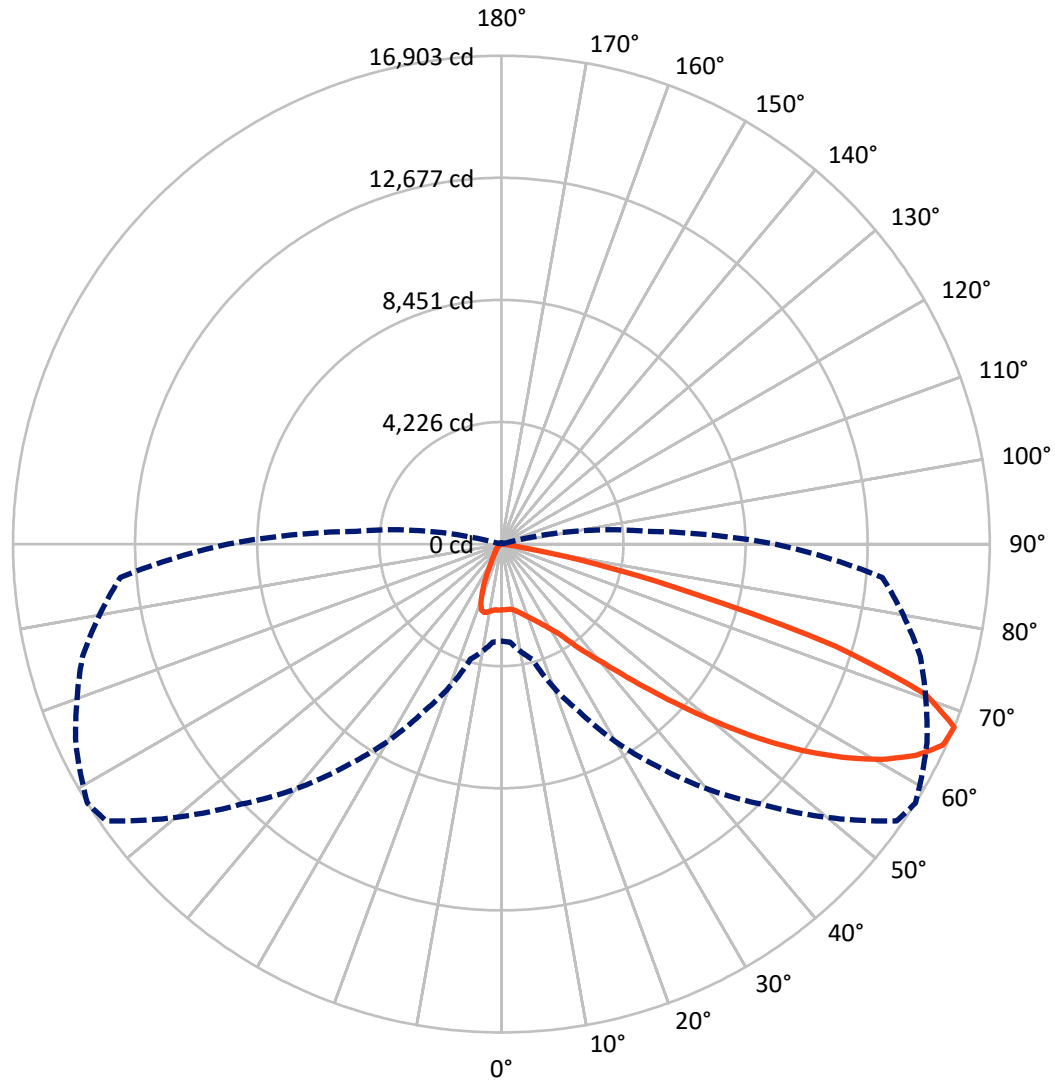
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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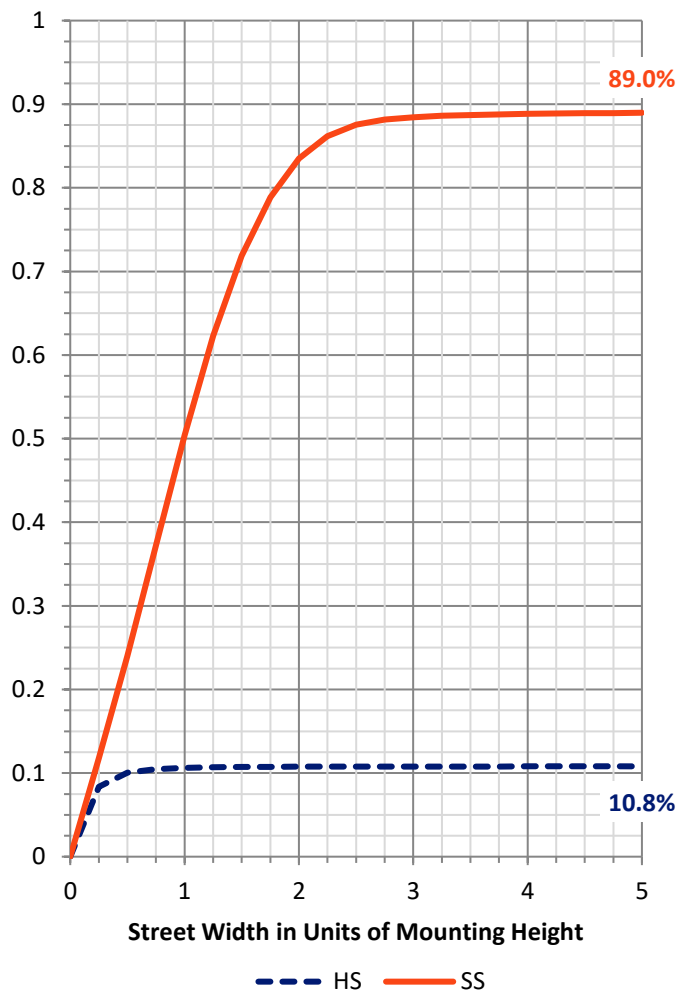
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2279.2	0.0	2279.2
	% Fixture	10.9	0.0	10.9
<b>Street Side</b>	Lumens	18612.0	0.0	18612.0
	% Fixture	89.1	0.0	89.1
<b>Total</b>	Lumens	20891.2	0.0	20891.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.8	1.0
10°-20°	600.4	2.9
20°-30°	1048.1	5.0
30°-40°	1871.7	9.0
40°-50°	3421.2	16.4
50°-60°	5689.7	27.2
60°-70°	6180.0	29.6
70°-80°	1814.5	8.7
80°-90°	51.7	0.2
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°	20891.2	100.0
0°-180°	20891.2	100.0

**Coefficient of Utilization**



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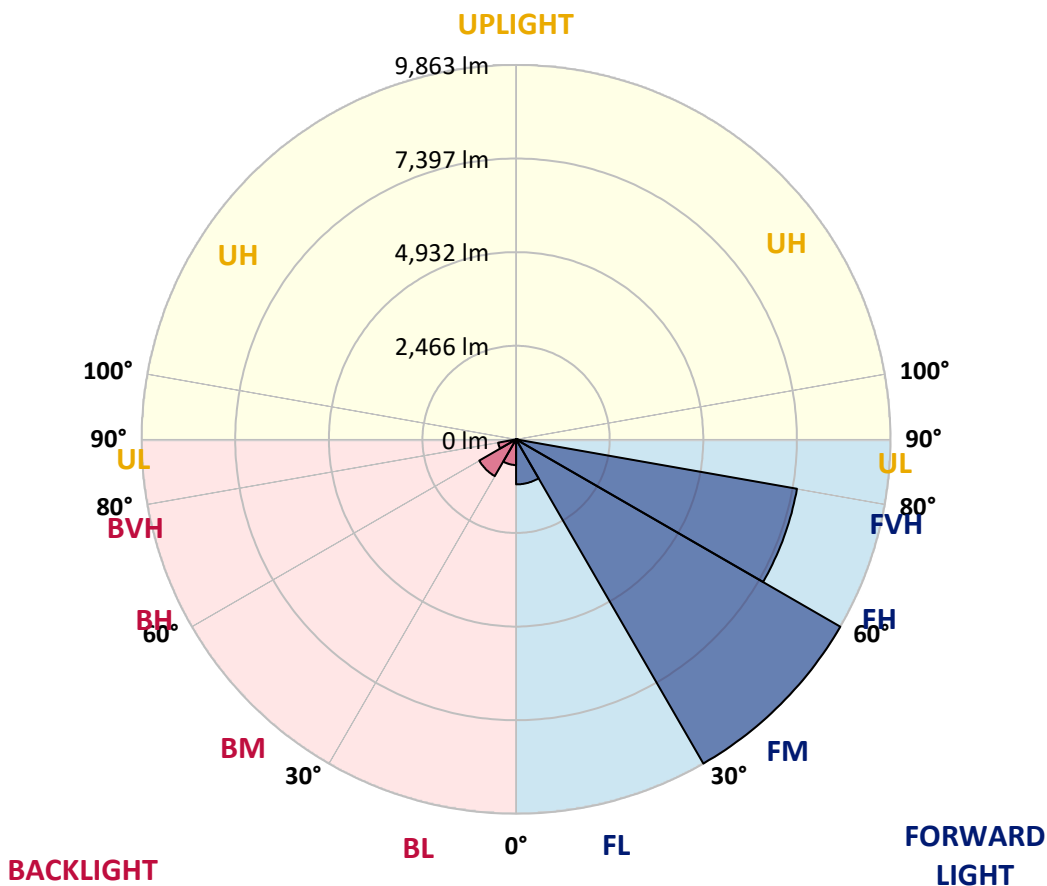
CATALOG NUMBER: GWS-SA6D-830-U-T3-W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1186.3	5.7			
FM (30°-60°)	9863.2	47.2			
FH (60°-80°)	7513.4	36.0			G4/12000
FVH (80°-90°)	49.1	0.2			G1/100
BL (0°-30°)	676.1	3.2	B2/1000		
BM (30°-60°)	1119.5	5.4	B2/2500		
BH (60°-80°)	481.1	2.3	B1/500		G1/500
BVH (80°-90°)	2.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5
2.5°	2233.7	2229.6	2229.6	2245.9	2248.0	2256.1	2274.5	2276.5	2286.7	2282.6	2268.4
5°	2117.4	2119.4	2131.7	2160.2	2184.7	2215.3	2260.2	2270.4	2292.8	2305.1	2296.9
7.5°	2009.3	2011.3	2029.7	2074.6	2121.5	2182.7	2256.1	2276.5	2321.4	2354.0	2356.1
10°	1968.5	1966.5	1984.8	2035.8	2097.0	2182.7	2288.8	2315.3	2382.6	2439.7	2449.9
12.5°	1980.7	1978.7	1997.1	2044.0	2111.3	2219.4	2345.9	2382.6	2468.3	2556.0	2574.3
15°	2029.7	2027.7	2039.9	2078.6	2152.1	2264.3	2419.3	2474.4	2582.5	2688.6	2717.1
17.5°	2176.6	2166.4	2154.1	2158.2	2201.0	2317.3	2513.1	2580.5	2715.1	2841.6	2866.0
20°	2437.7	2411.1	2378.5	2335.7	2315.3	2394.8	2621.3	2698.8	2862.0	3006.8	3010.9
22.5°	2831.4	2821.2	2745.7	2621.3	2533.5	2535.6	2747.7	2837.5	3037.4	3196.5	3174.1
25°	3380.1	3374.0	3257.7	3053.7	2825.2	2747.7	2908.9	3000.7	3245.5	3414.8	3343.4
27.5°	4061.4	4018.6	3881.9	3606.5	3265.9	3023.1	3112.9	3194.5	3465.8	3624.9	3490.3
30°	4655.0	4657.1	4528.6	4240.9	3857.4	3437.2	3361.7	3433.1	3667.7	3835.0	3671.8
32.5°	5226.2	5244.6	5103.8	4844.7	4424.5	3977.8	3718.7	3731.0	3926.8	4108.3	3910.5
35°	5756.6	5770.8	5672.9	5452.6	5061.0	4542.8	4216.5	4210.3	4316.4	4502.0	4243.0
37.5°	6350.2	6364.5	6268.6	6070.7	5703.5	5189.5	4781.5	4773.3	4816.2	4967.1	4671.3
40°	6982.5	7009.1	6903.0	6735.7	6384.9	5950.4	5438.3	5364.9	5322.1	5499.5	5226.2
42.5°	7623.1	7663.9	7627.1	7459.9	7160.0	6801.0	6291.0	6176.8	6085.0	6307.3	6017.7
45°	8418.6	8467.6	8451.3	8322.7	8090.2	7798.5	7317.1	7184.5	7141.7	7347.7	7002.9
47.5°	9183.6	9236.6	9295.8	9267.2	9102.0	8967.4	8432.9	8357.4	8345.2	8565.5	8031.0
50°	9752.7	9801.7	10028.1	10191.3	10303.5	10274.9	9811.9	9699.7	9681.3	9822.1	9116.3
52.5°	10160.7	10207.6	10519.7	11029.7	11441.7	11666.1	11199.0	11174.5	11074.6	11025.6	10132.1
55°	10476.9	10542.1	10870.6	11641.6	12471.9	12969.6	12677.9	12590.2	12333.2	12051.7	11074.6
57.5°	10540.1	10566.6	11029.7	12070.0	13271.5	14077.3	14077.3	13924.3	13428.6	13039.0	12163.9
60°	9973.0	10054.6	10680.9	12035.3	13614.2	14801.4	15238.0	15131.9	14462.8	13983.4	13212.4
62.5°	8714.4	8806.2	9569.1	11205.1	13271.5	14950.3	16117.2	16100.8	15346.1	14764.7	14081.4
65°	6682.7	6750.0	7415.0	9373.3	11823.2	14377.1	16745.5	16790.3	16043.7	15280.8	14381.2
67.5°	3357.7	3404.6	4122.6	6403.2	9371.3	12726.9	16702.6	16902.5	16255.9	15007.5	13236.8
70°	1172.9	1219.9	1558.5	2747.7	5703.5	9718.0	15258.4	15584.8	15009.5	12810.5	9765.0
72.5°	401.9	424.3	646.6	1019.9	2219.4	5760.6	11602.9	12094.5	11064.4	8600.2	5611.7
75°	228.5	242.7	346.8	552.8	930.2	1895.1	6582.7	6884.6	6450.1	4687.7	2309.2
77.5°	155.0	167.3	216.2	314.1	514.1	609.9	2684.5	3380.1	2947.6	1529.9	589.5
80°	91.8	100.0	132.6	185.6	263.1	236.6	575.2	765.0	985.3	456.9	177.5
82.5°	42.8	49.0	85.7	122.4	132.6	100.0	169.3	206.0	277.4	224.4	73.4
85°	0.0	0.0	28.6	51.0	49.0	28.6	46.9	51.0	75.5	112.2	28.6
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	4.1	6.1	12.2	22.4	12.2
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: GWS-SA6D-830-U-T3-W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5	2276.5
2.5°	2284.7	2270.4	2286.7	2278.6	2286.7	2284.7	2268.4	2258.2	2258.2	2239.8	2233.7
5°	2313.2	2299.0	2303.0	2284.7	2280.6	2270.4	2250.0	2241.8	2241.8	2223.5	2217.4
7.5°	2376.5	2354.0	2350.0	2313.2	2296.9	2268.4	2231.6	2217.4	2215.3	2197.0	2190.8
10°	2476.4	2449.9	2431.5	2384.6	2337.7	2280.6	2203.1	2137.8	2101.1	2052.1	2048.0
12.5°	2598.8	2566.2	2537.6	2466.2	2388.7	2260.2	2031.7	1793.1	1646.2	1529.9	1538.1
15°	2735.5	2704.9	2660.0	2551.9	2392.8	2058.2	1580.9	1213.7	1034.2	938.3	934.3
17.5°	2884.4	2839.5	2766.1	2619.2	2264.3	1572.8	1028.1	726.2	632.4	599.7	591.6
20°	3023.1	2968.0	2876.2	2633.5	1893.0	1064.8	642.6	563.0	546.7	536.5	536.5
22.5°	3170.0	3100.6	2964.0	2523.3	1407.5	681.3	546.7	528.3	516.1	501.8	499.8
25°	3318.9	3229.1	3043.5	2235.7	922.0	536.5	512.0	491.6	469.2	446.7	440.6
27.5°	3445.4	3329.1	3104.7	1807.3	591.6	483.5	467.1	432.5	401.9	377.4	373.3
30°	3596.3	3447.4	3131.2	1321.8	465.1	426.3	401.9	365.1	328.4	303.9	295.8
32.5°	3798.3	3635.1	3090.4	860.8	412.1	375.3	336.6	293.7	257.0	230.5	226.4
35°	4112.4	3918.6	2902.8	548.7	373.3	324.3	277.4	232.5	201.9	181.6	177.5
37.5°	4495.9	4316.4	2594.7	412.1	334.5	281.5	226.4	183.6	161.2	146.9	142.8
40°	5065.0	4814.1	2213.3	361.1	295.8	238.7	185.6	151.0	134.6	122.4	118.3
42.5°	5803.5	5401.6	1774.7	328.4	259.1	199.9	151.0	124.4	110.2	102.0	100.0
45°	6666.4	5974.8	1311.6	295.8	224.4	165.2	124.4	102.0	91.8	85.7	83.6
47.5°	7549.6	6476.6	905.7	261.1	191.7	136.7	104.0	87.7	79.6	71.4	69.4
50°	8492.1	6900.9	618.1	226.4	163.2	112.2	89.8	79.6	69.4	63.2	61.2
52.5°	9183.6	7058.0	430.4	195.8	138.7	95.9	79.6	71.4	63.2	55.1	53.0
55°	9822.1	7053.9	326.4	165.2	118.3	83.6	71.4	63.2	55.1	49.0	46.9
57.5°	10458.5	6998.9	257.0	140.8	102.0	75.5	63.2	55.1	51.0	42.8	40.8
60°	10870.6	6790.8	199.9	118.3	87.7	65.3	55.1	49.0	42.8	36.7	34.7
62.5°	11088.8	6501.1	153.0	93.8	71.4	57.1	49.0	42.8	36.7	30.6	28.6
65°	10793.1	5987.1	120.4	73.4	55.1	49.0	40.8	34.7	28.6	22.4	20.4
67.5°	9481.4	5048.7	93.8	59.2	42.8	36.7	34.7	28.6	20.4	16.3	14.3
70°	6701.0	3457.6	73.4	44.9	32.6	28.6	26.5	22.4	16.3	12.2	10.2
72.5°	3677.9	1744.1	53.0	32.6	24.5	22.4	20.4	18.4	14.3	10.2	10.2
75°	1415.7	479.4	38.8	22.4	16.3	16.3	14.3	14.3	12.2	8.2	8.2
77.5°	369.2	142.8	24.5	14.3	10.2	10.2	10.2	8.2	8.2	6.1	6.1
80°	118.3	46.9	14.3	10.2	8.2	6.1	6.1	4.1	6.1	4.1	4.1
82.5°	38.8	16.3	8.2	8.2	6.1	4.1	4.1	2.0	2.0	0.0	0.0
85°	14.3	8.2	6.1	4.1	4.1	4.1	2.0	0.0	0.0	0.0	0.0
87.5°	8.2	4.1	4.1	4.1	4.1	2.0	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  
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**

$\lambda$ (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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**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)