

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: P642925

Luminaire Tested: GWS-SA6D-830-U-SL2-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642925  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-29)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6D-830-U-SL2-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

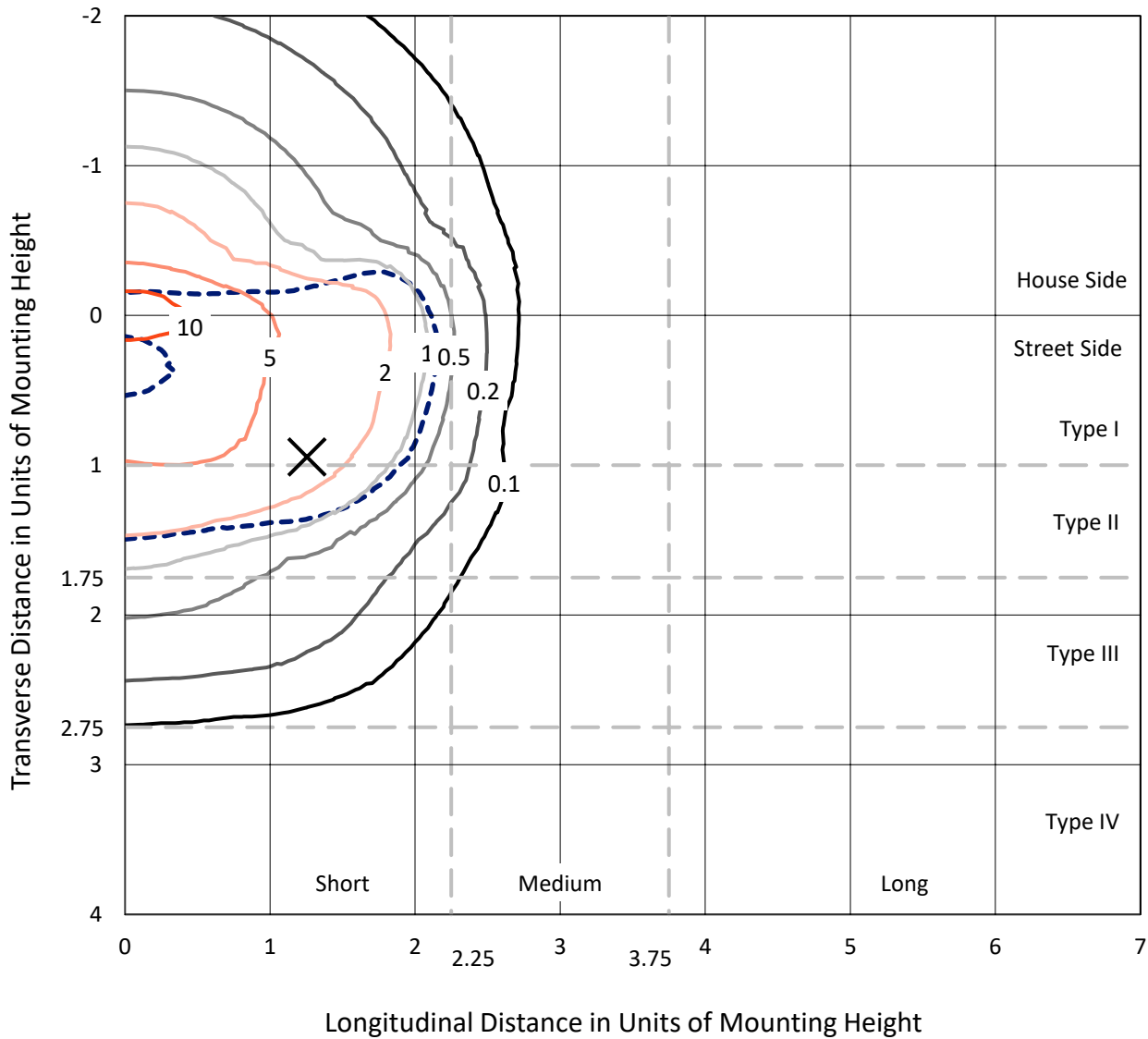
Lumens per Lamp: N/A  
Luminaire Lumens: 24236.7 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 245.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
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-SL2-W-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

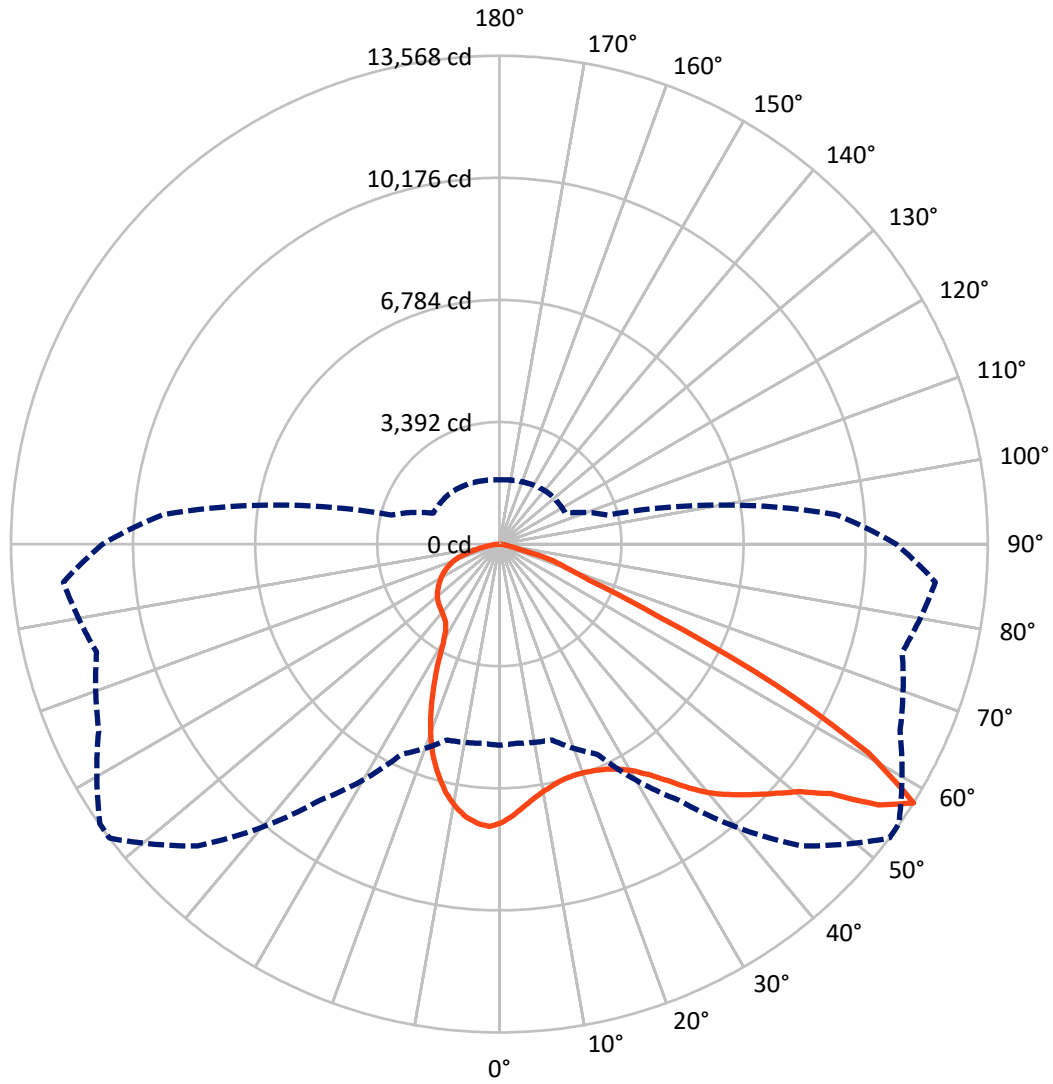
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7577.9	0.0	7577.9
	% Fixture	31.3	0.0	31.3
<b>Street Side</b>	Lumens	16658.8	0.0	16658.8
	% Fixture	68.7	0.0	68.7
<b>Total</b>	Lumens	24236.7	0.0	24236.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	699.9	2.9
10°-20°	1836.2	7.6
20°-30°	2705.3	11.2
30°-40°	3786.7	15.6
40°-50°	4977.9	20.5
50°-60°	5836.6	24.1
60°-70°	3438.4	14.2
70°-80°	855.4	3.5
80°-90°	100.4	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°	24236.7	100.0
0°-180°	24236.7	100.0

**Coefficient of Utilization**



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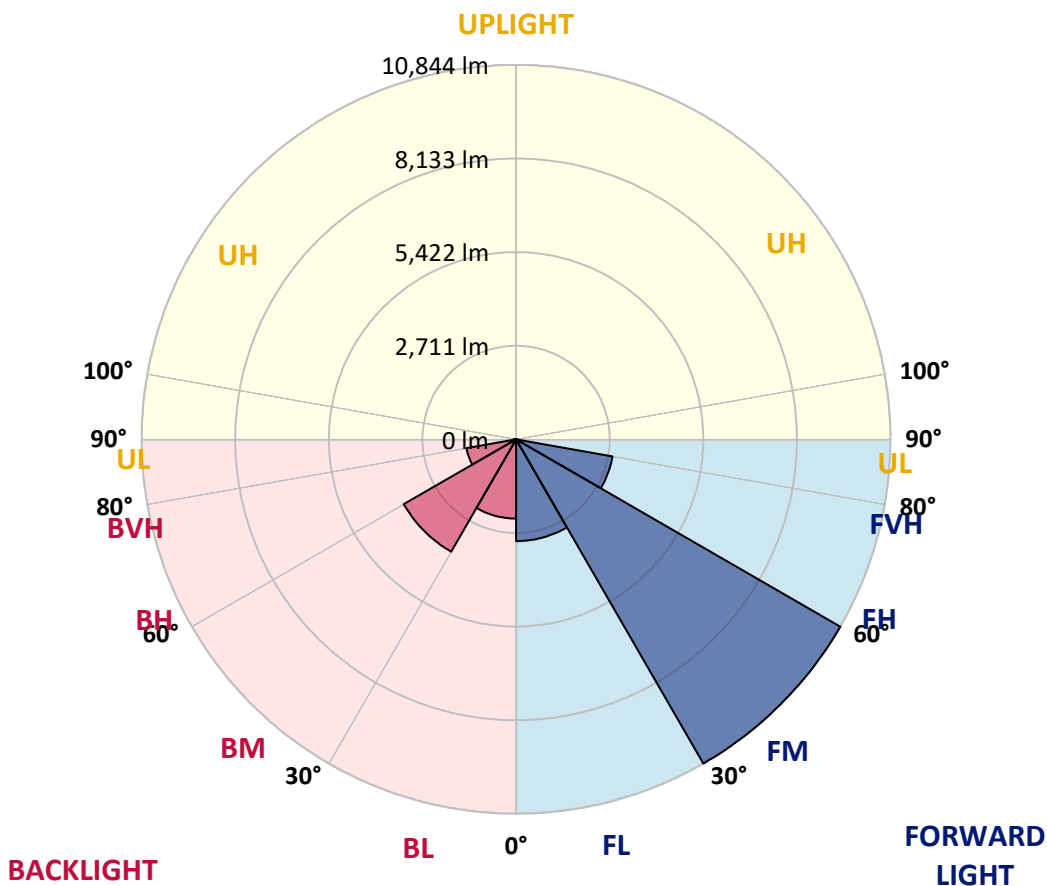
CATALOG NUMBER: GWS-SA6D-830-U-SL2-W-GRSWH

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2946.7	12.2			
FM (30°-60°)	10843.7	44.7			
FH (60°-80°)	2834.8	11.7			G2/5000
FVH (80°-90°)	33.6	0.1			G1/100
BL (0°-30°)	2294.6	9.5	B3/2500		
BM (30°-60°)	3757.5	15.5	B3/5000		
BH (60°-80°)	1459.0	6.0	B3/2500		G3/2500
BVH (80°-90°)	66.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4
2.5°	7294.7	7315.1	7319.2	7382.4	7386.5	7478.3	7539.5	7527.3	7590.5	7668.0	7729.2
5°	6945.9	6947.9	6968.3	7043.8	7084.6	7205.0	7307.0	7307.0	7429.4	7588.5	7725.2
7.5°	6658.3	6656.2	6674.6	6758.2	6825.6	6970.4	7109.1	7125.4	7296.8	7529.3	7751.7
10°	6391.1	6405.3	6425.7	6527.7	6613.4	6792.9	6958.1	6984.7	7200.9	7488.5	7788.4
12.5°	6219.7	6221.7	6252.3	6366.6	6476.7	6668.5	6841.9	6874.5	7123.4	7449.8	7814.9
15°	6109.5	6111.6	6144.2	6270.7	6399.2	6593.0	6770.5	6807.2	7078.5	7443.6	7865.9
17.5°	6060.6	6058.5	6089.1	6215.6	6356.4	6558.3	6748.0	6792.9	7098.9	7490.6	7955.7
20°	6060.6	6062.6	6078.9	6193.2	6336.0	6550.2	6770.5	6825.6	7178.5	7596.6	8094.4
22.5°	6146.3	6154.4	6162.6	6240.1	6352.3	6562.4	6829.6	6903.1	7349.8	7774.1	8275.9
25°	6313.5	6315.6	6323.7	6387.0	6438.0	6597.1	6927.5	7037.7	7617.0	8033.2	8504.4
27.5°	6537.9	6566.5	6574.6	6615.4	6615.4	6682.8	7080.5	7239.7	7978.1	8406.5	8796.1
30°	6852.1	6862.3	6876.5	6921.4	6872.5	6843.9	7304.9	7508.9	8396.3	8857.3	9147.0
32.5°	7127.5	7149.9	7227.4	7300.9	7213.1	7123.4	7635.4	7876.1	8798.1	9326.5	9520.3
35°	7362.0	7417.1	7566.0	7729.2	7668.0	7578.3	8074.0	8324.9	9128.6	9663.1	9850.7
37.5°	7645.6	7688.4	7892.4	8157.6	8212.7	8169.9	8608.4	8787.9	9348.9	9748.7	10030.3
40°	7933.2	7998.5	8261.7	8628.8	8838.9	8869.5	9102.1	9222.5	9424.4	9581.5	9995.6
42.5°	8227.0	8339.2	8700.2	9128.6	9501.9	9571.3	9518.2	9569.2	9399.9	9351.0	9834.4
45°	8586.0	8718.6	9126.6	9673.3	10164.9	10273.0	9926.2	9879.3	9395.8	9263.2	9734.5
47.5°	9010.3	9142.9	9532.5	10169.0	10797.3	10876.8	10344.4	10258.7	9538.6	9397.9	9869.1
50°	9385.6	9477.4	9826.3	10538.2	11386.8	11433.7	10805.4	10701.4	9893.6	9771.2	10289.3
52.5°	9004.2	8994.0	9361.2	10238.3	11692.8	12257.8	11515.3	11415.4	10579.0	10391.3	10940.1
55°	7639.5	7523.2	7851.6	8714.5	10838.1	12990.2	12788.2	12588.3	11492.9	11015.5	11550.0
57.5°	5585.3	5552.6	5632.2	6442.0	8681.9	11856.0	13567.5	13549.1	12282.3	11586.7	12157.9
60°	4367.5	4318.5	4106.3	4128.8	5917.8	9261.2	11774.4	12315.0	12771.9	11929.4	12582.2
62.5°	3877.9	3841.2	3731.0	3427.1	3525.0	6209.5	8630.9	9126.6	11160.4	10536.2	10807.5
65°	3210.8	3200.6	3292.4	3280.2	2953.8	3429.1	4871.3	5371.1	7017.3	7105.0	7017.3
67.5°	2333.7	2315.3	2547.9	3006.8	2843.6	2588.7	2715.1	2888.5	3598.4	3231.2	2908.9
70°	1517.7	1491.2	1625.8	2172.5	2545.8	2256.1	1956.3	1927.7	1978.7	1230.1	1330.0
72.5°	1017.9	987.3	985.3	1195.4	1538.1	1519.7	1515.7	1501.4	1340.2	971.0	1077.1
75°	567.1	542.6	536.5	516.1	550.8	561.0	597.7	618.1	669.1	736.4	816.0
77.5°	95.9	93.8	118.3	151.0	208.1	267.2	330.5	348.8	430.4	510.0	561.0
80°	53.0	55.1	71.4	87.7	116.3	159.1	204.0	216.2	265.2	308.0	348.8
82.5°	28.6	28.6	36.7	46.9	63.2	83.6	110.2	120.4	153.0	179.5	208.1
85°	10.2	10.2	14.3	18.4	26.5	34.7	42.8	49.0	67.3	91.8	104.0
87.5°	0.0	0.0	0.0	0.0	2.0	4.1	8.2	8.2	10.2	18.4	26.5
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: P642925

CATALOG NUMBER: GWS-SA6D-830-U-SL2-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4	7739.4
2.5°	7780.2	7725.2	7800.6	7835.3	7847.5	7855.7	7802.7	7766.0	7753.7	7715.0	7692.5
5°	7808.8	7772.1	7843.5	7843.5	7792.5	7739.4	7631.3	7555.8	7502.8	7439.6	7429.4
7.5°	7857.7	7831.2	7870.0	7790.4	7661.9	7519.1	7331.5	7184.6	7066.3	6988.7	6990.8
10°	7923.0	7890.4	7859.8	7682.3	7447.7	7184.6	6896.9	6682.8	6486.9	6397.2	6348.2
12.5°	7965.9	7918.9	7790.4	7496.7	7151.9	6799.0	6393.1	6074.9	5791.3	5662.8	5652.6
15°	8018.9	7933.2	7676.2	7256.0	6776.6	6295.2	5773.0	5330.3	4946.8	4746.9	4736.7
17.5°	8088.3	7947.5	7539.5	6980.6	6380.9	5671.0	5014.1	4457.2	4049.2	3894.2	3920.7
20°	8186.2	7963.8	7384.5	6674.6	5889.2	4961.1	4143.1	3631.0	3474.0	3463.8	3443.4
22.5°	8296.3	7974.0	7213.1	6331.9	5293.6	4204.3	3423.0	3204.7	3202.7	3253.7	3265.9
25°	8420.8	7982.2	7019.3	5932.1	4649.0	3449.5	3027.2	2962.0	3013.0	3108.8	3121.1
27.5°	8579.9	7998.5	6784.8	5493.5	3963.6	2980.3	2809.0	2792.6	2853.8	2943.6	2939.5
30°	8814.5	8057.7	6535.9	4989.6	3259.8	2758.0	2676.4	2678.4	2702.9	2745.7	2751.8
32.5°	9053.1	8149.5	6293.1	4422.5	2855.9	2631.5	2594.8	2590.7	2590.7	2609.0	2613.1
35°	9279.6	8253.5	6030.0	3831.0	2660.0	2558.1	2533.6	2521.3	2515.2	2511.1	2505.0
37.5°	9406.0	8304.5	5773.0	3247.5	2556.0	2509.1	2484.6	2468.3	2445.9	2429.5	2425.5
40°	9351.0	8245.3	5475.1	2811.0	2492.8	2462.2	2433.6	2411.2	2380.6	2366.3	2358.1
42.5°	9167.4	8061.7	5150.8	2605.0	2441.8	2411.2	2376.5	2339.8	2319.4	2307.1	2305.1
45°	8973.6	7839.4	4759.1	2484.6	2392.8	2356.1	2315.3	2274.5	2252.1	2245.9	2243.9
47.5°	8967.5	7729.2	4343.0	2388.7	2333.7	2296.9	2245.9	2205.1	2180.7	2172.5	2164.3
50°	9236.7	7841.4	3873.8	2305.1	2272.5	2233.7	2176.6	2131.7	2101.1	2090.9	2088.9
52.5°	9795.7	8263.7	3453.6	2221.5	2190.9	2146.0	2099.1	2054.2	2017.5	1999.1	1997.1
55°	10399.5	8800.2	3192.5	2135.8	2095.0	2056.2	2013.4	1964.4	1923.6	1895.1	1891.0
57.5°	11023.7	9385.6	3112.9	2027.7	1997.1	1970.6	1919.6	1866.5	1819.6	1793.1	1787.0
60°	11537.8	9889.5	3261.8	1913.4	1897.1	1862.4	1815.5	1764.5	1731.9	1711.5	1707.4
62.5°	9659.0	8051.5	2633.5	1789.0	1789.0	1752.3	1699.2	1662.5	1640.1	1625.8	1621.7
65°	6129.9	4985.5	1797.2	1664.6	1662.5	1613.6	1568.7	1544.2	1534.0	1511.6	1507.5
67.5°	2670.2	2278.6	1536.1	1538.1	1529.9	1476.9	1432.0	1413.7	1393.3	1368.8	1366.7
70°	1385.1	1411.6	1374.9	1397.3	1383.1	1319.8	1277.0	1248.4	1205.6	1181.1	1183.2
72.5°	1117.9	1146.4	1187.2	1221.9	1191.3	1140.3	1073.0	1038.3	983.2	956.7	958.8
75°	852.7	883.3	922.0	958.8	934.3	871.0	828.2	793.5	730.3	699.7	705.8
77.5°	587.5	603.8	650.7	648.7	640.5	622.2	558.9	518.1	452.9	416.1	420.2
80°	365.1	375.3	397.8	408.0	403.9	379.4	328.4	297.8	259.1	236.6	238.7
82.5°	220.3	226.4	246.8	248.9	246.8	228.5	189.7	167.3	142.8	130.6	130.6
85°	112.2	116.3	128.5	128.5	116.3	97.9	87.7	77.5	63.2	57.1	57.1
87.5°	30.6	30.6	38.8	32.6	26.5	24.5	12.2	10.2	4.1	2.0	2.0
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

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

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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)