

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: P642430

Luminaire Tested: GWS-SA6C-830-U-SL2-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642430  
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-SA6C-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**

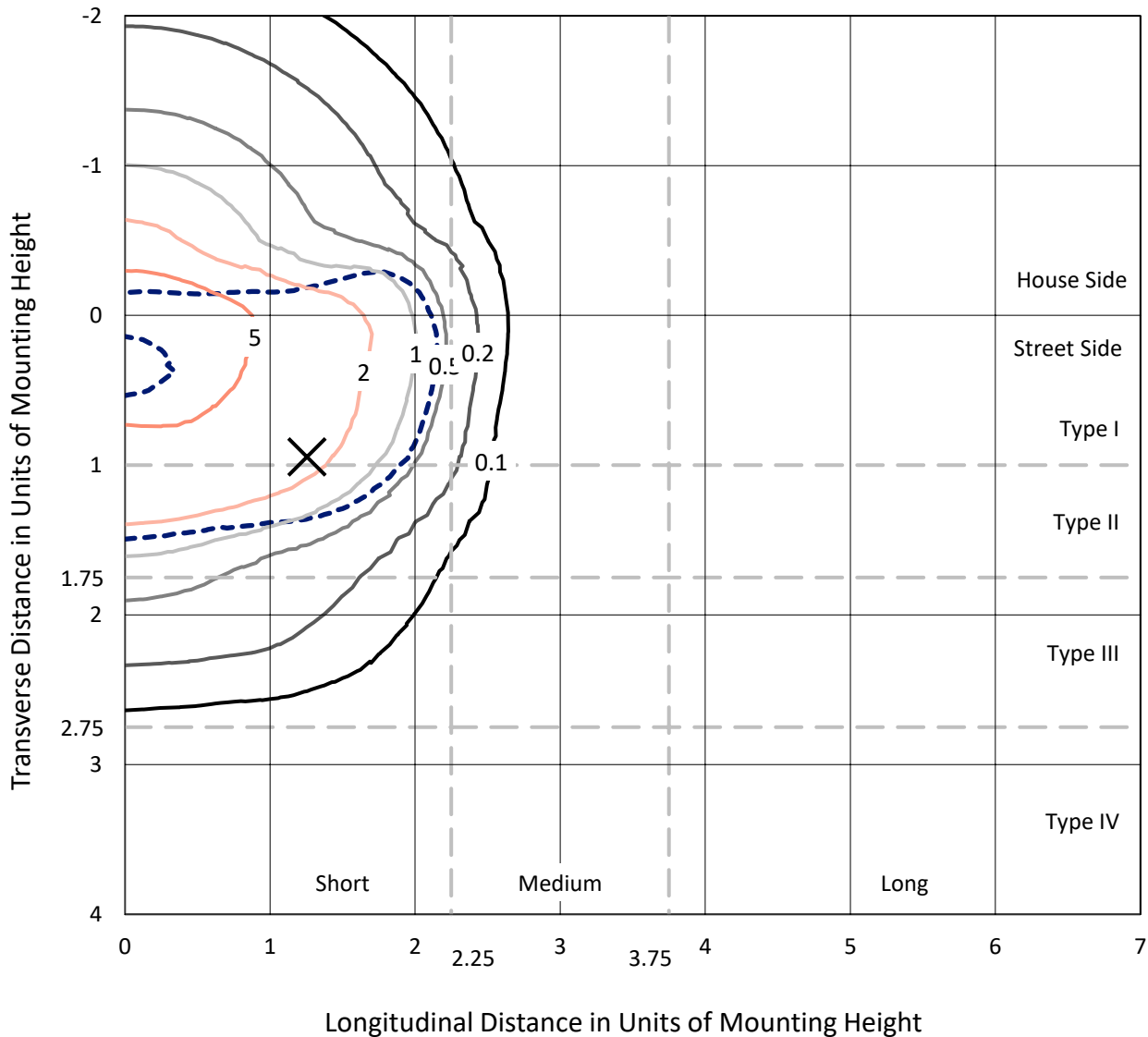
Lumens per Lamp: N/A  
Luminaire Lumens: 19211.6 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 189.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



REPORT NUMBER: P642430  
 CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

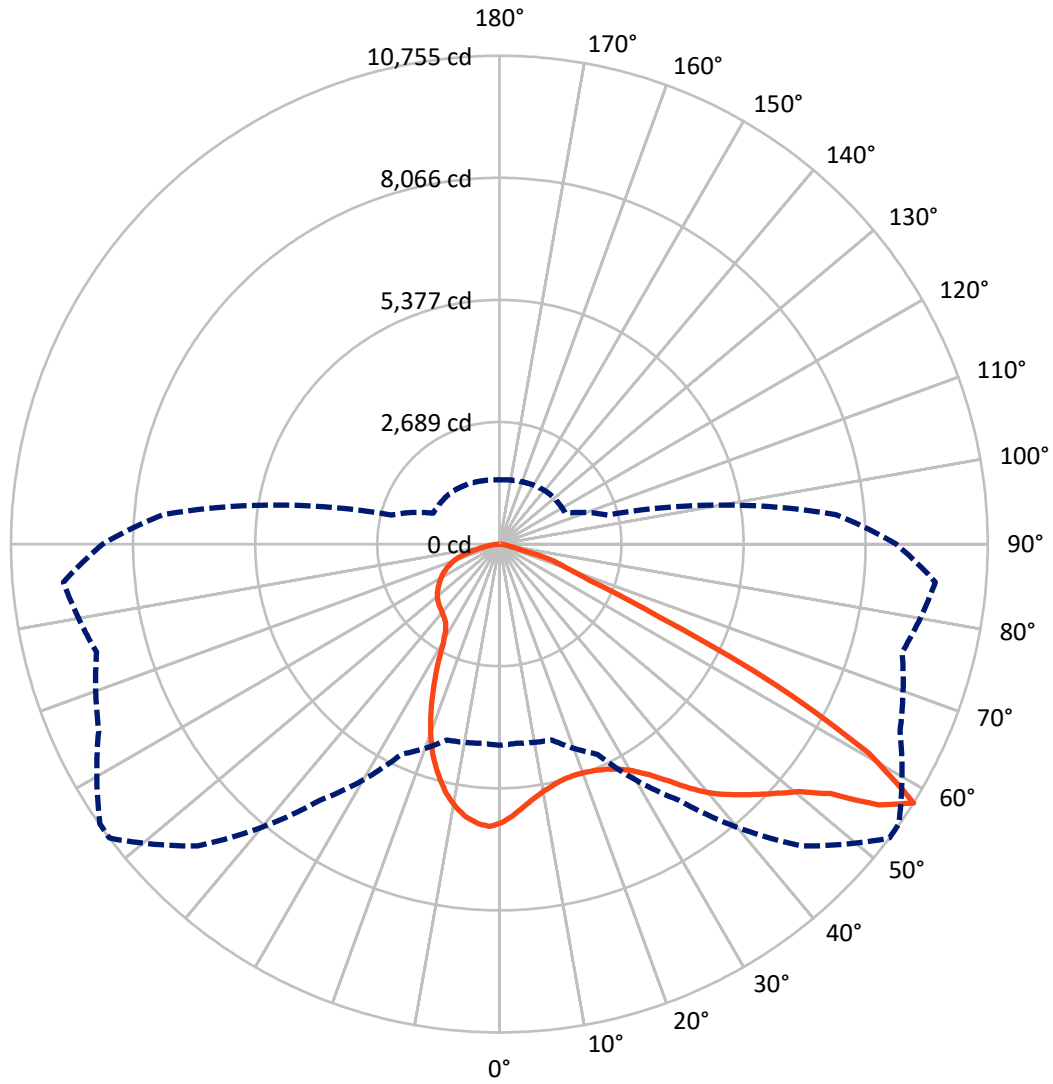
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P642430  
CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P642430

CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6006.8	0.0	6006.8
	% Fixture	31.3	0.0	31.3
<b>Street Side</b>	Lumens	13204.8	0.0	13204.8
	% Fixture	68.7	0.0	68.7
<b>Total</b>	Lumens	19211.6	0.0	19211.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	554.8	2.9
10°-20°	1455.5	7.6
20°-30°	2144.4	11.2
30°-40°	3001.6	15.6
40°-50°	3945.8	20.5
50°-60°	4626.5	24.1
60°-70°	2725.5	14.2
70°-80°	678.0	3.5
80°-90°	79.6	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°	19211.6	100.0
0°-180°	19211.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P642430

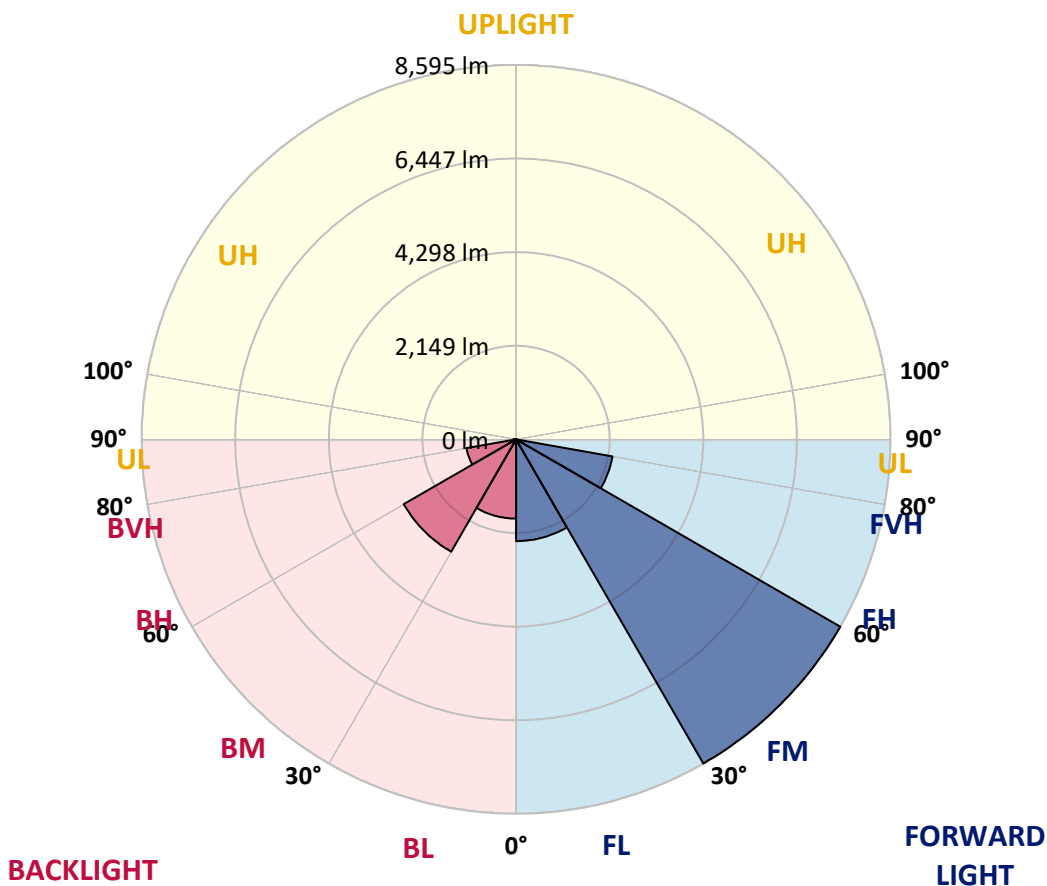
CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2335.8	12.2			
FM (30°-60°)	8595.4	44.7			
FH (60°-80°)	2247.0	11.7			G2/5000
FVH (80°-90°)	26.6	0.1			G1/100
BL (0°-30°)	1818.9	9.5	B3/2500		
BM (30°-60°)	2978.5	15.5	B3/5000		
BH (60°-80°)	1156.5	6.0	B3/2500		G3/2500
BVH (80°-90°)	52.9	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





REPORT NUMBER: P642430

CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8
2.5°	5782.3	5798.5	5801.7	5851.8	5855.0	5927.8	5976.3	5966.6	6016.7	6078.2	6126.7
5°	5505.8	5507.4	5523.6	5583.4	5615.7	5711.1	5792.0	5792.0	5889.0	6015.1	6123.5
7.5°	5277.8	5276.2	5290.7	5357.0	5410.4	5525.2	5635.1	5648.1	5783.9	5968.2	6144.5
10°	5066.0	5077.3	5093.5	5174.3	5242.2	5384.5	5515.5	5536.5	5707.9	5935.9	6173.6
12.5°	4930.1	4931.8	4956.0	5046.6	5133.9	5285.9	5423.3	5449.2	5646.5	5905.2	6194.6
15°	4842.8	4844.4	4870.3	4970.6	5072.4	5226.0	5366.7	5395.8	5610.9	5900.3	6235.0
17.5°	4804.0	4802.4	4826.7	4926.9	5038.5	5198.6	5348.9	5384.5	5627.1	5937.5	6306.2
20°	4804.0	4805.6	4818.6	4909.1	5022.3	5192.1	5366.7	5410.4	5690.1	6021.6	6416.1
22.5°	4871.9	4878.4	4884.9	4946.3	5035.2	5201.8	5413.6	5471.8	5825.9	6162.3	6560.0
25°	5004.5	5006.1	5012.6	5062.7	5103.2	5229.3	5491.2	5578.5	6037.8	6367.6	6741.1
27.5°	5182.4	5205.0	5211.5	5243.8	5243.8	5297.2	5612.5	5738.6	6324.0	6663.5	6972.4
30°	5431.4	5439.5	5450.8	5486.4	5447.6	5424.9	5790.4	5952.1	6655.4	7020.9	7250.5
32.5°	5649.7	5667.5	5728.9	5787.1	5717.6	5646.5	6052.3	6243.1	6974.0	7392.8	7546.4
35°	5835.6	5879.3	5997.3	6126.7	6078.2	6007.0	6400.0	6598.9	7235.9	7659.6	7808.3
37.5°	6060.4	6094.4	6256.1	6466.3	6509.9	6476.0	6823.6	6965.9	7410.6	7727.5	7950.6
40°	6288.4	6340.1	6548.7	6839.8	7006.3	7030.6	7214.9	7310.3	7470.4	7594.9	7923.2
42.5°	6521.2	6610.2	6896.4	7235.9	7531.8	7586.8	7544.8	7585.2	7451.0	7412.2	7795.4
45°	6805.8	6910.9	7234.3	7667.7	8057.4	8143.1	7868.2	7831.0	7447.8	7342.7	7716.2
47.5°	7142.2	7247.3	7556.1	8060.6	8558.6	8621.7	8199.7	8131.7	7561.0	7449.4	7822.9
50°	7439.7	7512.4	7788.9	8353.3	9025.9	9063.1	8565.1	8482.6	7842.3	7745.3	8156.0
52.5°	7137.3	7129.2	7420.3	8115.6	9268.5	9716.4	9127.8	9048.6	8385.6	8236.8	8671.8
55°	6055.6	5963.4	6223.7	6907.7	8591.0	10296.9	10136.8	9978.3	9110.0	8731.6	9155.3
57.5°	4427.3	4401.4	4464.5	5106.4	6881.8	9397.8	10754.5	10739.9	9735.8	9184.4	9637.1
60°	3461.9	3423.1	3255.0	3272.7	4690.8	7341.0	9333.1	9761.6	10123.8	9456.0	9973.5
62.5°	3073.9	3044.8	2957.4	2716.5	2794.1	4922.1	6841.4	7234.3	8846.4	8351.6	8566.7
65°	2545.1	2537.0	2609.8	2600.1	2341.4	2718.1	3861.3	4257.5	5562.4	5631.9	5562.4
67.5°	1849.8	1835.3	2019.6	2383.4	2254.1	2051.9	2152.2	2289.6	2852.3	2561.3	2305.8
70°	1203.0	1182.0	1288.7	1722.1	2018.0	1788.4	1550.7	1528.0	1568.5	975.0	1054.3
72.5°	806.9	782.6	781.0	947.5	1219.2	1204.6	1201.4	1190.1	1062.3	769.7	853.8
75°	449.5	430.1	425.3	409.1	436.6	444.7	473.8	489.9	530.4	583.7	646.8
77.5°	76.0	74.4	93.8	119.7	164.9	211.8	261.9	276.5	341.2	404.2	444.7
80°	42.0	43.7	56.6	69.5	92.2	126.1	161.7	171.4	210.2	244.2	276.5
82.5°	22.6	22.6	29.1	37.2	50.1	66.3	87.3	95.4	121.3	142.3	164.9
85°	8.1	8.1	11.3	14.6	21.0	27.5	34.0	38.8	53.4	72.8	82.5
87.5°	0.0	0.0	0.0	0.0	1.6	3.2	6.5	6.5	8.1	14.6	21.0
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: P642430

CATALOG NUMBER: GWS-SA6C-830-U-SL2-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8	6134.8
2.5°	6167.1	6123.5	6183.3	6210.8	6220.5	6227.0	6184.9	6155.8	6146.1	6115.4	6097.6
5°	6189.8	6160.7	6217.2	6217.2	6176.8	6134.8	6049.1	5989.3	5947.2	5897.1	5889.0
7.5°	6228.6	6207.5	6238.3	6175.2	6073.3	5960.2	5811.4	5695.0	5601.2	5539.7	5541.4
10°	6280.3	6254.4	6230.2	6089.5	5903.6	5695.0	5467.0	5297.2	5142.0	5070.8	5032.0
12.5°	6314.3	6277.1	6175.2	5942.4	5669.1	5389.4	5067.6	4815.3	4590.6	4488.7	4480.6
15°	6356.3	6288.4	6084.7	5751.6	5371.6	4990.0	4576.0	4225.1	3921.2	3762.7	3754.6
17.5°	6411.3	6299.7	5976.3	5533.3	5057.9	4495.2	3974.5	3533.1	3209.7	3086.8	3107.8
20°	6488.9	6312.6	5853.4	5290.7	4668.2	3932.5	3284.1	2878.2	2753.7	2745.6	2729.4
22.5°	6576.2	6320.7	5717.6	5019.1	4196.0	3332.6	2713.3	2540.3	2538.6	2579.1	2588.8
25°	6674.9	6327.2	5564.0	4702.1	3685.1	2734.3	2399.6	2347.8	2388.3	2464.3	2474.0
27.5°	6801.0	6340.1	5378.0	4354.5	3141.8	2362.4	2226.6	2213.6	2262.1	2333.3	2330.1
30°	6986.9	6387.0	5180.8	3955.1	2583.9	2186.1	2121.5	2123.1	2142.5	2176.4	2181.3
32.5°	7176.1	6459.8	4988.4	3505.6	2263.8	2085.9	2056.8	2053.6	2053.6	2068.1	2071.3
35°	7355.6	6542.3	4779.8	3036.7	2108.5	2027.7	2008.3	1998.6	1993.7	1990.5	1985.6
37.5°	7455.8	6582.7	4576.0	2574.2	2026.1	1988.9	1969.5	1956.5	1938.7	1925.8	1922.6
40°	7412.2	6535.8	4339.9	2228.2	1975.9	1951.7	1929.0	1911.3	1887.0	1875.7	1869.2
42.5°	7266.7	6390.3	4082.8	2064.9	1935.5	1911.3	1883.8	1854.7	1838.5	1828.8	1827.2
45°	7113.0	6214.0	3772.4	1969.5	1896.7	1867.6	1835.3	1802.9	1785.1	1780.3	1778.7
47.5°	7108.2	6126.7	3442.5	1893.5	1849.8	1820.7	1780.3	1747.9	1728.5	1722.1	1715.6
50°	7321.6	6215.6	3070.6	1827.2	1801.3	1770.6	1725.3	1689.7	1665.5	1657.4	1655.8
52.5°	7764.7	6550.3	2737.5	1760.9	1736.6	1701.1	1663.9	1628.3	1599.2	1584.6	1583.0
55°	8243.3	6975.6	2530.6	1693.0	1660.6	1629.9	1595.9	1557.1	1524.8	1502.2	1498.9
57.5°	8738.1	7439.7	2467.5	1607.3	1583.0	1562.0	1521.6	1479.5	1442.3	1421.3	1416.5
60°	9145.6	7839.1	2585.5	1516.7	1503.8	1476.3	1439.1	1398.7	1372.8	1356.6	1353.4
62.5°	7656.4	6382.2	2087.5	1418.1	1418.1	1389.0	1346.9	1317.8	1300.0	1288.7	1285.5
65°	4859.0	3951.9	1424.6	1319.4	1317.8	1279.0	1243.4	1224.0	1216.0	1198.2	1194.9
67.5°	2116.6	1806.2	1217.6	1219.2	1212.7	1170.7	1135.1	1120.6	1104.4	1085.0	1083.4
70°	1097.9	1118.9	1089.8	1107.6	1096.3	1046.2	1012.2	989.6	955.6	936.2	937.8
72.5°	886.1	908.7	941.1	968.6	944.3	903.9	850.5	823.0	779.4	758.4	760.0
75°	675.9	700.1	730.9	760.0	740.6	690.4	656.5	629.0	578.9	554.6	559.5
77.5°	465.7	478.6	515.8	514.2	507.7	493.2	443.0	410.7	359.0	329.9	333.1
80°	289.4	297.5	315.3	323.4	320.2	300.8	260.3	236.1	205.4	187.6	189.2
82.5°	174.6	179.5	195.7	197.3	195.7	181.1	150.4	132.6	113.2	103.5	103.5
85°	88.9	92.2	101.9	101.9	92.2	77.6	69.5	61.4	50.1	45.3	45.3
87.5°	24.3	24.3	30.7	25.9	21.0	19.4	9.7	8.1	3.2	1.6	1.6
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**



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 <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			

REPORT NUMBER: SP1-2408-195-9

**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			

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)