

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: P642433

Luminaire Tested: GWS-SA6C-830-U-SL3-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642433  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6C-830-U-SL3-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

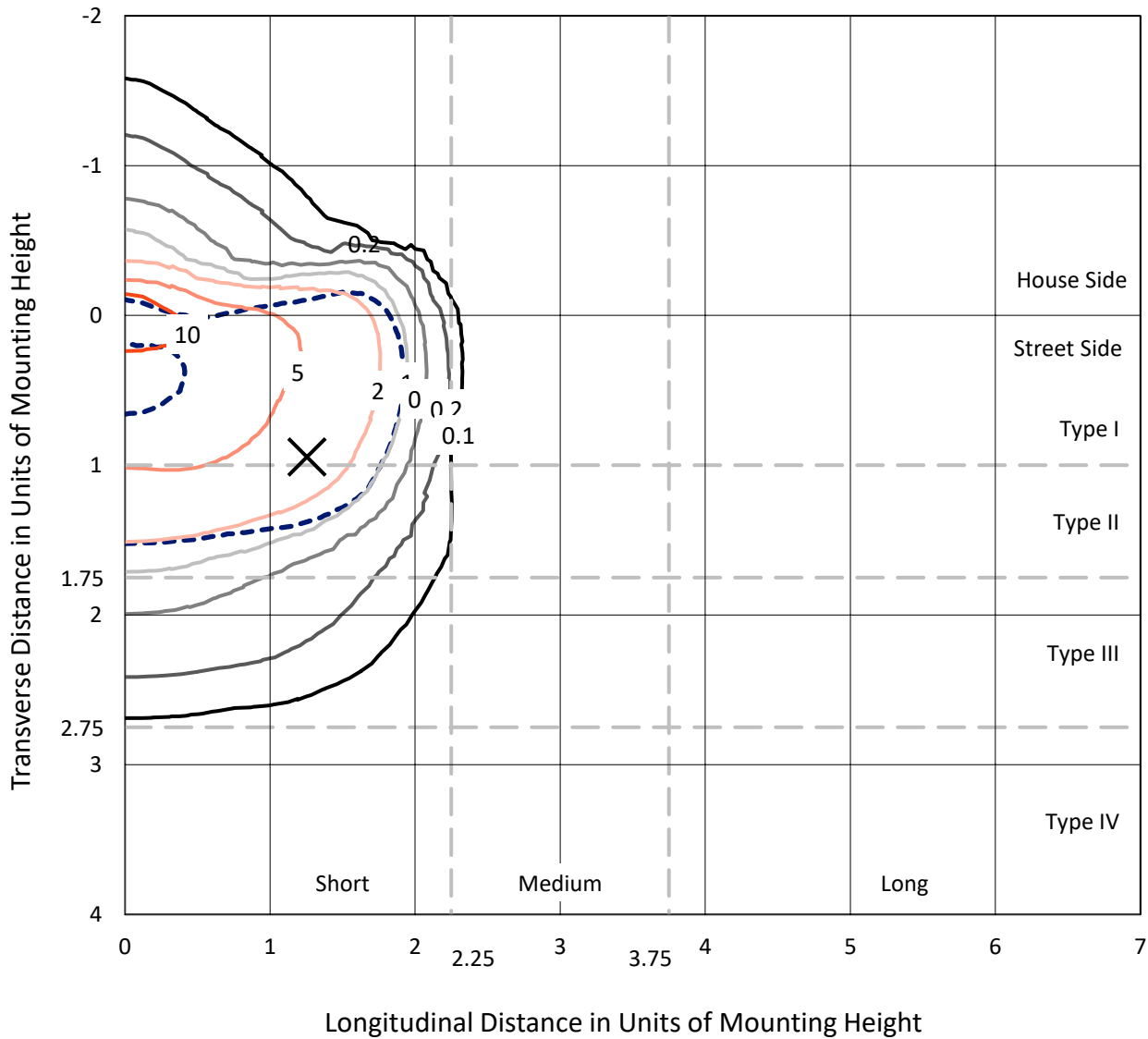
Lumens per Lamp: N/A  
Luminaire Lumens: 13193.2 lumens  
Efficiency: N/A  
Efficacy: 69.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G1  
  
Input Watts (W): 189.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
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: P642433  
 CATALOG NUMBER: GWS-SA6C-830-U-SL3-W-GRSBK

### Iso-Footcandle Lines of Horizontal Illumination

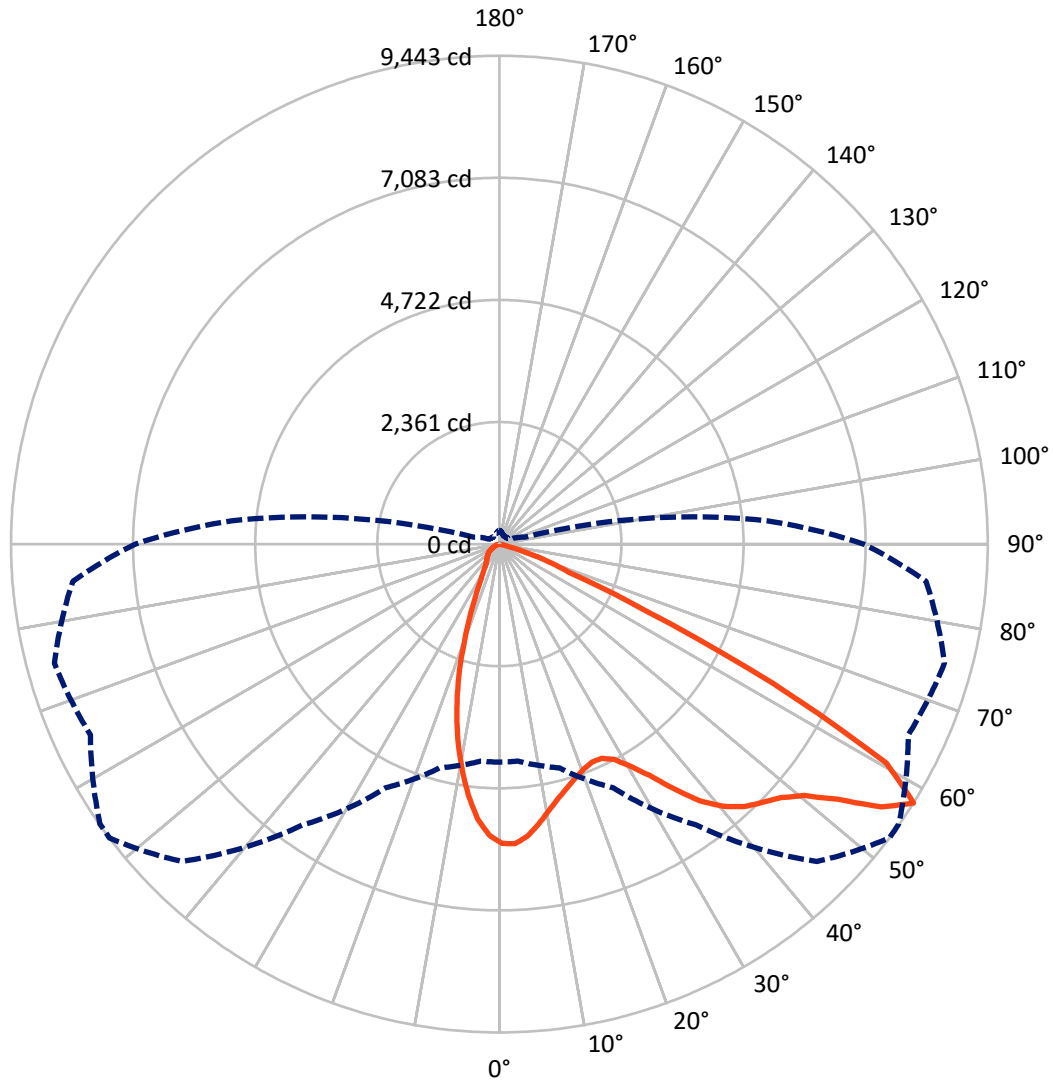
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 14.5 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	2179.3	0.0	2179.3
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	11013.9	0.0	11013.9
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	13193.2	0.0	13193.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	495.1	3.8
10°-20°	1087.0	8.2
20°-30°	1416.1	10.7
30°-40°	2054.1	15.6
40°-50°	2963.9	22.5
50°-60°	3584.6	27.2
60°-70°	1460.9	11.1
70°-80°	131.3	1.0
80°-90°	0.0	0.0
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°	13193.2	100.0
0°-180°	13193.2	100.0

**Coefficient of Utilization**



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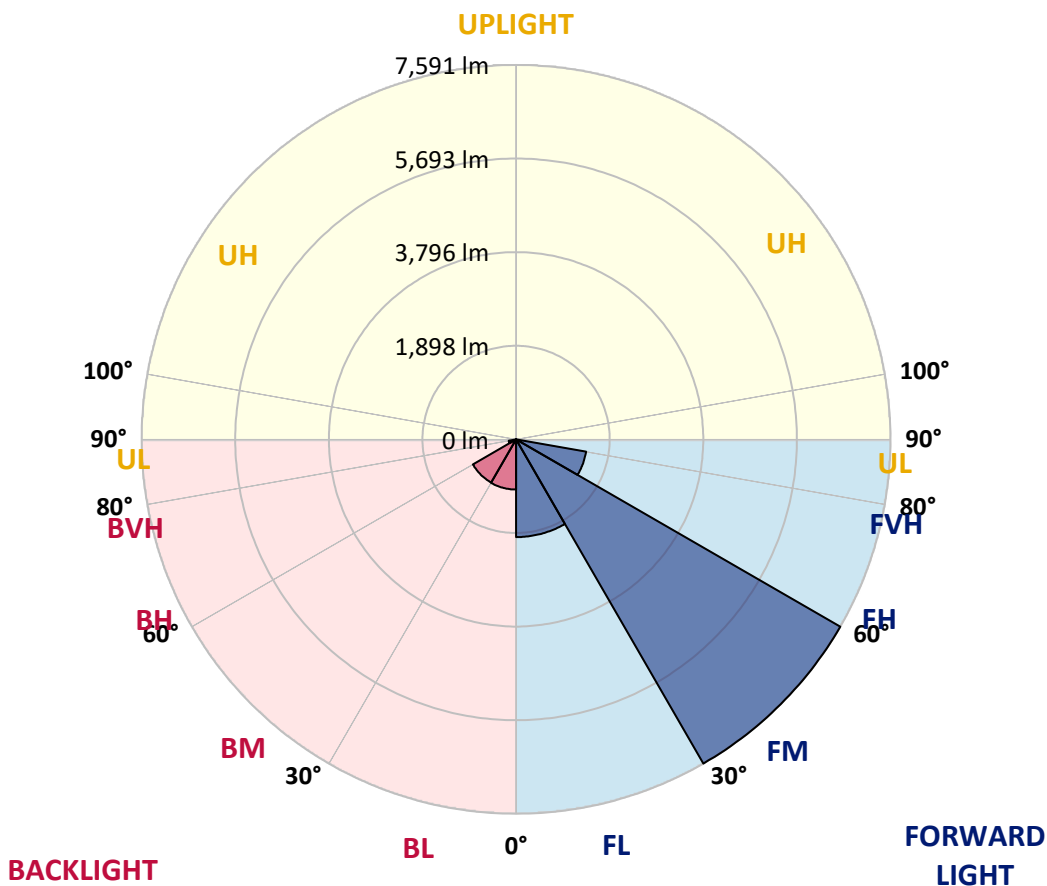
CATALOG NUMBER: GWS-SA6C-830-U-SL3-W-GRSBK

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1981.2	15.0			
FM (30°-60°)	7591.1	57.5			
FH (60°-80°)	1441.6	10.9			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	1017.1	7.7	B3/2500		
BM (30°-60°)	1011.5	7.7	B2/2500		
BH (60°-80°)	150.6	1.1	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3
2.5°	5706.4	5719.4	5742.0	5771.1	5790.5	5800.2	5800.2	5827.7	5809.9	5795.4	5779.2
5°	5462.3	5475.2	5505.9	5552.8	5599.7	5633.7	5672.5	5701.6	5712.9	5712.9	5685.4
7.5°	5117.8	5135.6	5155.0	5219.7	5321.6	5397.6	5463.9	5505.9	5567.4	5586.8	5548.0
10°	4747.6	4765.3	4809.0	4897.9	5014.4	5127.5	5240.7	5294.1	5399.2	5454.2	5410.5
12.5°	4433.8	4441.9	4500.1	4606.9	4755.6	4910.9	5048.3	5103.3	5252.1	5334.5	5282.8
15°	4175.1	4180.0	4238.2	4356.2	4527.6	4718.4	4891.5	4948.1	5130.8	5255.3	5177.7
17.5°	3979.5	3981.1	4031.2	4159.0	4338.4	4550.3	4755.6	4825.2	5061.3	5211.6	5095.2
20°	3880.8	3876.0	3911.6	4023.1	4192.9	4404.7	4647.3	4733.0	5022.4	5205.2	5032.1
22.5°	3882.4	3871.1	3885.7	3964.9	4108.8	4307.7	4579.4	4676.4	5025.7	5232.7	4978.8
25°	3974.6	3958.4	3961.7	4003.7	4105.6	4286.7	4589.1	4692.6	5090.4	5324.8	4959.4
27.5°	4129.9	4112.1	4112.1	4133.1	4188.1	4353.0	4710.4	4828.4	5263.4	5504.3	4999.8
30°	4330.4	4312.6	4306.1	4327.1	4372.4	4524.4	4980.4	5103.3	5559.3	5798.6	5129.2
32.5°	4560.0	4539.0	4550.3	4579.4	4623.0	4833.3	5328.1	5491.4	5929.6	6194.8	5362.0
35°	4802.5	4784.7	4836.5	4899.5	4967.5	5261.8	5808.3	5950.6	6384.0	6688.0	5717.8
37.5°	5033.8	5025.7	5134.0	5266.6	5407.3	5776.0	6296.6	6406.6	6773.7	7224.8	6152.7
40°	5265.0	5263.4	5449.3	5682.2	5906.9	6288.6	6666.9	6757.5	7011.4	7642.0	6569.9
42.5°	5523.7	5523.7	5780.8	6091.3	6390.4	6721.9	6938.6	6979.0	7118.1	7882.9	6883.6
45°	5771.1	5785.7	6083.2	6443.8	6797.9	7059.9	7126.2	7129.4	7161.8	8025.2	7144.0
47.5°	5966.8	5979.7	6335.5	6751.0	7132.6	7317.0	7326.7	7312.1	7276.6	8161.1	7344.5
50°	6125.2	6144.6	6516.6	6956.4	7362.3	7564.4	7638.8	7624.2	7533.7	8306.6	7485.2
52.5°	6202.9	6230.4	6579.6	7058.3	7617.7	7988.0	8195.0	8229.0	7918.5	8387.4	7619.4
55°	5581.9	5622.4	5944.1	6599.0	7760.0	8642.9	8968.0	8961.5	8335.7	8628.4	7946.0
57.5°	4215.6	4212.3	4479.1	5195.5	6628.1	8680.1	9443.4	9430.4	8725.4	8908.1	8280.7
60°	2870.2	2850.8	2921.9	3268.0	4634.4	7071.2	8594.4	8769.1	8448.9	8229.0	7030.8
62.5°	2362.5	2344.7	2322.0	2226.6	2661.6	4404.7	5937.7	6202.9	6160.8	5719.4	4409.6
65°	1933.9	1948.5	2011.6	1971.1	1851.5	2259.0	3082.0	3238.9	2960.8	2491.8	1541.0
67.5°	1426.2	1432.7	1515.1	1728.6	1663.9	1503.8	1450.5	1476.3	865.1	397.8	257.1
70°	842.5	847.3	923.3	1209.5	1350.2	1154.5	979.9	965.4	342.8	106.7	116.4
72.5°	477.0	467.3	481.9	575.7	735.7	612.8	504.5	459.2	103.5	59.8	59.8
75°	226.4	219.9	189.2	177.9	161.7	103.5	64.7	55.0	25.9	24.3	24.3
77.5°	1.6	4.9	3.2	4.9	4.9	3.2	1.6	1.6	4.9	4.9	6.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3	5787.3
2.5°	5750.1	5701.6	5690.3	5687.0	5641.8	5593.2	5543.1	5523.7	5494.6	5476.8	5491.4
5°	5641.8	5572.2	5510.8	5454.2	5353.9	5244.0	5148.6	5087.1	5028.9	4990.1	4999.8
7.5°	5488.1	5397.6	5256.9	5113.0	4928.7	4763.7	4579.4	4466.2	4361.1	4302.9	4330.4
10°	5324.8	5205.2	4980.4	4736.2	4446.8	4188.1	3924.5	3709.4	3584.9	3466.9	3479.8
12.5°	5164.7	5006.3	4669.9	4299.6	3934.2	3552.6	3154.8	2857.3	2653.5	2506.4	2483.7
15°	5016.0	4812.2	4367.6	3879.2	3381.2	2873.4	2365.7	1940.4	1704.3	1558.8	1549.1
17.5°	4883.4	4631.1	4053.9	3439.4	2815.2	2165.2	1581.4	1262.9	1127.1	1064.0	1057.5
20°	4755.6	4448.4	3733.7	2993.1	2197.5	1520.0	1091.5	944.3	900.7	874.8	878.0
22.5°	4632.7	4249.5	3397.3	2498.3	1647.7	1067.2	845.7	789.1	784.3	787.5	789.1
25°	4529.3	4066.8	3051.3	2021.3	1175.6	813.4	706.6	690.5	705.0	726.0	729.3
27.5°	4475.9	3918.0	2713.3	1541.0	850.5	661.4	612.8	619.3	645.2	667.8	671.1
30°	4490.4	3806.4	2364.1	1117.4	654.9	557.9	541.7	554.6	580.5	601.5	604.8
32.5°	4593.9	3749.9	2006.7	813.4	538.5	486.7	480.3	490.0	512.6	528.8	530.4
35°	4799.3	3762.8	1667.1	622.6	462.5	433.4	431.7	438.2	449.5	460.8	462.5
37.5°	5101.7	3867.9	1332.4	517.4	418.8	397.8	391.3	391.3	399.4	404.3	407.5
40°	5426.7	4026.4	1067.2	457.6	388.1	365.4	352.5	347.7	354.1	360.6	362.2
42.5°	5695.1	4184.8	866.7	415.6	363.8	333.1	316.9	313.7	321.8	333.1	336.3
45°	5900.5	4307.7	722.8	381.6	336.3	302.4	284.6	284.6	299.1	318.6	321.8
47.5°	6088.1	4406.4	616.1	350.9	310.5	274.9	257.1	260.3	284.6	310.5	315.3
50°	6215.8	4485.6	536.8	323.4	289.4	252.3	236.1	242.6	271.7	302.4	307.2
52.5°	6353.2	4582.6	485.1	299.1	270.0	234.5	219.9	224.8	257.1	291.1	297.5
55°	6733.2	4907.6	483.5	266.8	236.1	210.2	203.7	205.4	237.7	276.5	284.6
57.5°	7043.7	5193.8	515.8	224.8	197.3	184.3	181.1	182.7	211.8	255.5	265.2
60°	5827.7	4036.1	426.9	186.0	164.9	161.7	156.9	160.1	187.6	226.4	234.5
62.5°	3449.1	2307.5	203.7	142.3	140.7	137.4	132.6	139.1	164.9	198.9	203.7
65°	1178.8	684.0	129.4	116.4	119.7	114.8	110.0	116.4	139.1	158.5	160.1
67.5°	226.4	181.1	103.5	97.0	98.6	88.9	87.3	93.8	106.7	110.0	108.3
70°	118.0	105.1	79.2	79.2	76.0	63.1	63.1	69.5	69.5	64.7	63.1
72.5°	61.4	58.2	51.7	58.2	48.5	38.8	38.8	42.0	38.8	32.3	32.3
75°	24.3	24.3	22.6	29.1	21.0	17.8	16.2	19.4	14.6	11.3	11.3
77.5°	6.5	6.5	6.5	8.1	4.9	4.9	3.2	3.2	1.6	0.0	0.0
80°	0.0	1.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (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)