

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: P641927

Luminaire Tested: GWS-SA6B-830-U-AFL-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641927  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6B-830-U-AFL-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

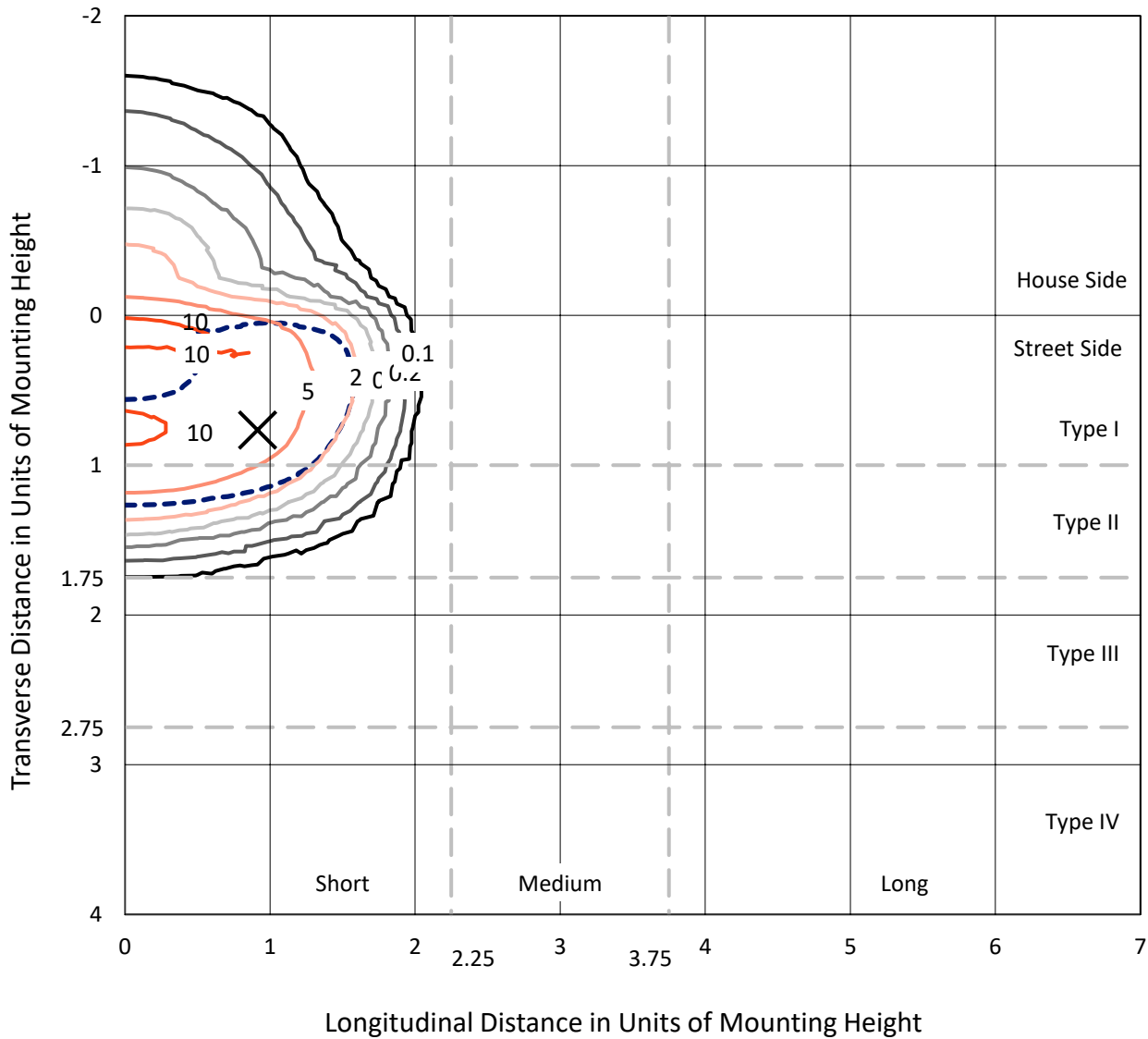
Lumens per Lamp: N/A  
Luminaire Lumens: 12667.3 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G0  
  
Input Watts (W): 138.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
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: P641927  
 CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

### Iso-Footcandle Lines of Horizontal Illumination

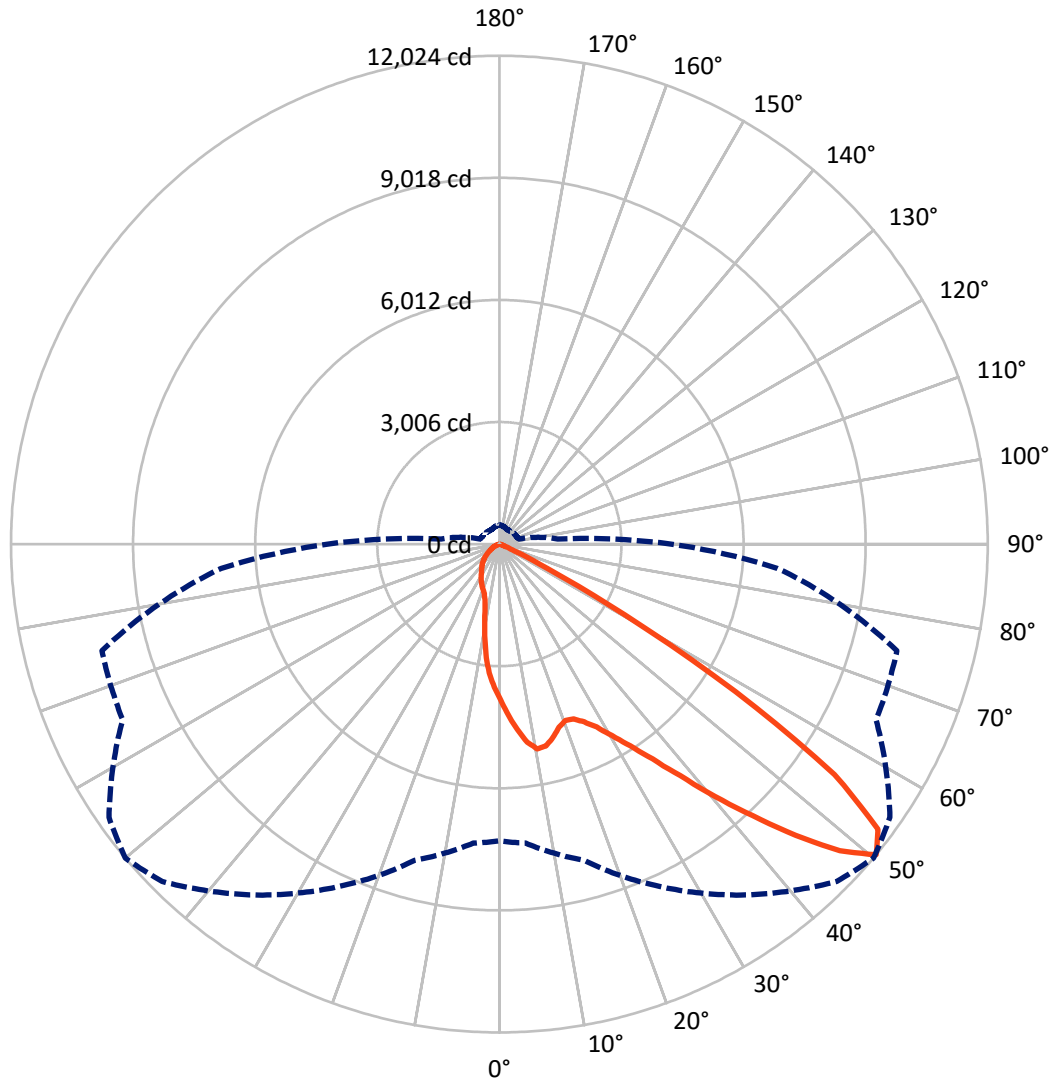
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 12.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P641927  
CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

### Luminous Intensity Polar Plot



— Vertical Plane Through 50-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P641927  
 CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

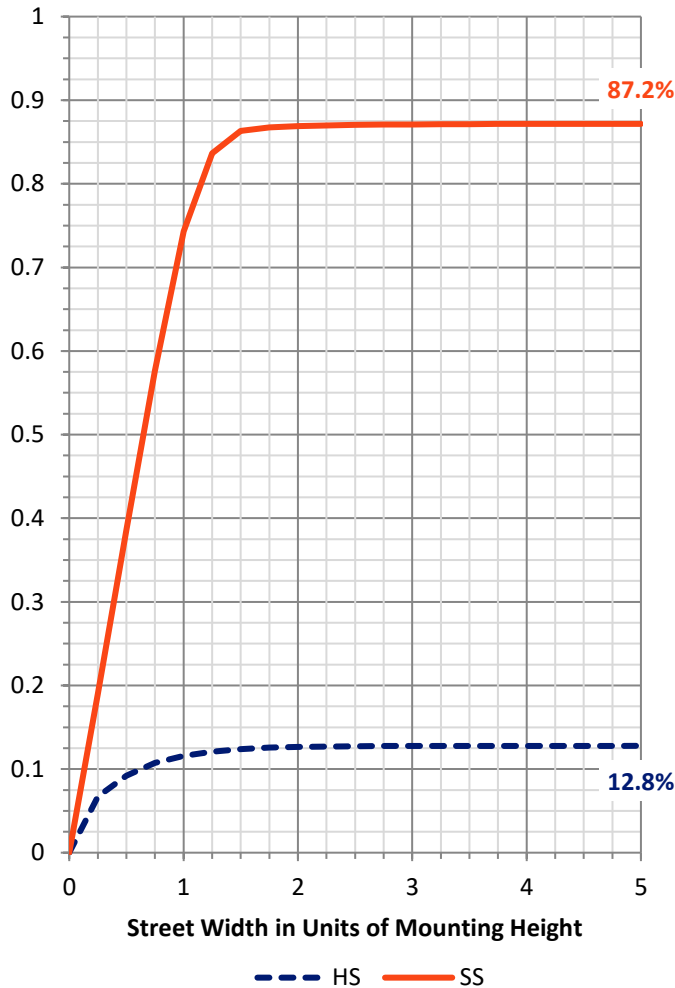
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1627.5	0.0	1627.5
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	11039.7	0.0	11039.7
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	12667.3	0.0	12667.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.0	2.8
10°-20°	918.5	7.3
20°-30°	1515.9	12.0
30°-40°	2501.5	19.7
40°-50°	3958.0	31.2
50°-60°	2996.7	23.7
60°-70°	375.1	3.0
70°-80°	42.4	0.3
80°-90°	3.2	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°	12667.3	100.0
0°-180°	12667.3	100.0

**Coefficient of Utilization**



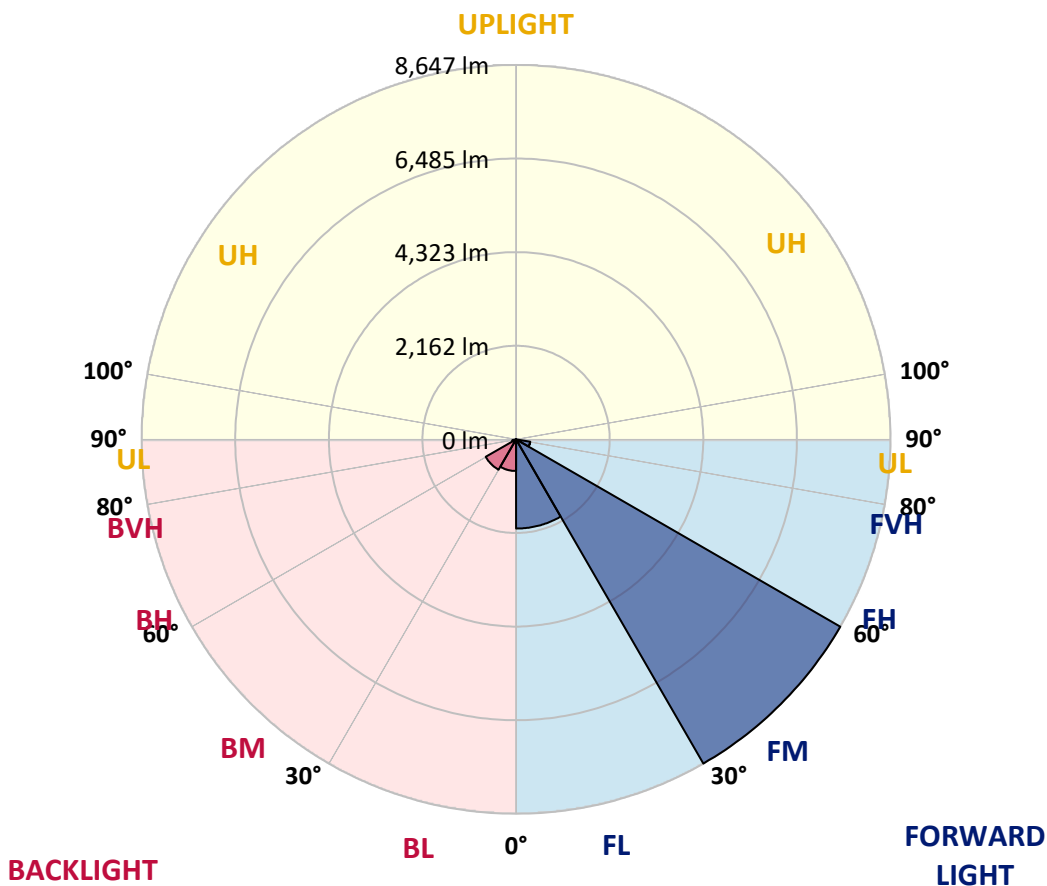
REPORT NUMBER: P641927

CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2059.9	16.3			
FM (30°-60°)	8646.8	68.3			
FH (60°-80°)	331.6	2.6			G0/660
FVH (80°-90°)	1.5	0.0			G0/10
BL (0°-30°)	730.5	5.8	B2/1000		
BM (30°-60°)	809.4	6.4	B1/1000		
BH (60°-80°)	85.9	0.7	B0/110		G0/110
BVH (80°-90°)	1.7	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-G0**  
 Type II Short





REPORT NUMBER: P641927

CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7
2.5°	4373.0	4408.0	4398.3	4352.5	4303.1	4268.1	4213.9	4197.0	4074.0	3988.4	3898.0
5°	4901.1	4912.0	4899.9	4844.4	4757.6	4674.4	4585.2	4533.4	4327.2	4141.5	3952.2
7.5°	5027.7	5014.4	5037.3	5065.1	5053.0	5016.8	4922.8	4866.1	4620.2	4317.6	4030.6
10°	4632.2	4602.1	4687.7	4831.2	4981.9	5151.9	5127.8	5132.6	4905.9	4539.4	4133.1
12.5°	4107.8	4095.7	4159.6	4326.0	4621.4	5007.2	5100.0	5255.6	5167.6	4779.3	4250.0
15°	3877.5	3883.5	3922.1	4027.0	4239.2	4719.0	4942.1	5223.0	5401.5	5012.0	4379.0
17.5°	3912.4	3934.1	3932.9	3967.9	4096.9	4481.5	4742.0	5120.5	5582.3	5279.7	4527.3
20°	4150.0	4171.7	4139.1	4112.6	4156.0	4421.2	4637.1	5016.8	5704.1	5549.8	4684.1
22.5°	4505.6	4531.0	4453.8	4377.8	4350.1	4520.1	4676.8	4974.6	5796.9	5796.9	4823.9
25°	4936.1	4971.0	4851.7	4716.6	4639.5	4728.7	4846.8	5069.9	5892.2	6018.8	4919.2
27.5°	5417.1	5418.3	5315.9	5163.9	5019.3	5030.1	5101.2	5284.5	5997.1	6257.5	4993.9
30°	5958.5	5962.1	5825.9	5643.8	5461.7	5412.3	5472.6	5611.2	6215.3	6557.7	5097.6
32.5°	6657.8	6674.7	6479.3	6211.7	5975.4	5882.5	5917.5	6063.4	6562.5	6933.9	5253.2
35°	7603.0	7621.1	7333.0	6979.7	6603.5	6463.7	6498.6	6645.7	7065.3	7468.0	5501.5
37.5°	8536.2	8560.3	8268.6	7939.4	7423.4	7191.9	7228.1	7367.9	7820.1	8205.9	5899.4
40°	9181.3	9213.8	9123.4	8901.6	8422.9	8119.1	8162.5	8213.1	8650.8	9088.4	6415.4
42.5°	9521.3	9567.1	9605.7	9719.0	9467.0	9212.6	9139.1	9142.7	9496.0	9987.9	6952.0
45°	9541.8	9586.4	9784.1	10221.8	10413.5	10360.4	10226.6	10136.2	10141.0	10587.1	7287.1
47.5°	8878.6	8961.8	9332.0	10189.2	10910.2	11350.3	11282.8	11068.2	10412.3	10626.9	7251.0
50°	7307.6	7389.6	8062.4	9295.8	10548.5	11745.8	12024.3	11736.1	10235.0	10131.4	6878.4
52.5°	5307.4	5315.9	5752.3	7193.1	9082.4	11016.3	11672.2	11644.5	9965.0	9530.9	6369.6
55°	2521.1	2490.9	2981.7	4059.5	6281.6	8910.0	10015.6	10329.1	9581.6	9096.9	5975.4
57.5°	734.3	748.7	967.0	1584.3	3142.0	5694.4	6859.1	7442.7	7864.7	7478.9	4634.6
60°	329.2	330.4	367.7	482.3	1046.5	2648.9	3545.9	4268.1	4702.2	4357.3	2299.2
62.5°	238.7	239.9	254.4	272.5	355.7	897.0	1329.9	1772.4	1804.9	1181.6	582.3
65°	198.9	198.9	201.3	201.3	213.4	320.7	403.9	520.9	438.9	325.5	227.9
67.5°	160.4	161.6	164.0	164.0	160.4	160.4	173.6	190.5	203.8	252.0	209.8
70°	125.4	124.2	124.2	125.4	121.8	103.7	112.1	127.8	139.9	196.5	182.1
72.5°	97.7	98.9	97.7	92.8	84.4	61.5	66.3	83.2	89.2	123.0	123.0
75°	73.5	74.8	69.9	53.1	35.0	19.3	25.3	41.0	51.8	60.3	44.6
77.5°	9.6	9.6	7.2	7.2	6.0	7.2	7.2	9.6	14.5	14.5	10.9
80°	1.2	1.2	1.2	2.4	3.6	4.8	4.8	4.8	4.8	6.0	6.0
82.5°	1.2	1.2	1.2	1.2	3.6	3.6	4.8	4.8	4.8	4.8	4.8
85°	0.0	0.0	0.0	1.2	2.4	3.6	3.6	4.8	4.8	4.8	4.8
87.5°	0.0	0.0	0.0	1.2	2.4	3.6	3.6	3.6	4.8	4.8	4.8
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: P641927

CATALOG NUMBER: GWS-SA6B-830-U-AFL-W-GRSBK

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7	3837.7
2.5°	3843.7	3773.8	3689.4	3631.5	3549.5	3495.3	3418.1	3366.3	3321.7	3286.7	3306.0
5°	3844.9	3734.0	3561.6	3414.5	3254.1	3107.0	2949.1	2824.9	2712.8	2662.1	2689.9
7.5°	3869.0	3709.9	3445.8	3184.2	2876.8	2572.9	2288.4	2056.9	1942.4	1888.1	1905.0
10°	3916.1	3699.0	3316.8	2882.8	2383.6	1968.9	1692.8	1536.0	1472.1	1438.4	1444.4
12.5°	3959.5	3691.8	3149.2	2486.1	1880.9	1527.6	1384.1	1362.4	1375.7	1376.9	1375.7
15°	4018.5	3678.5	2941.9	2078.6	1504.7	1320.2	1323.8	1355.2	1386.5	1396.2	1393.8
17.5°	4081.2	3658.0	2674.2	1688.0	1276.8	1259.9	1302.1	1344.3	1375.7	1380.5	1381.7
20°	4146.3	3615.8	2369.2	1378.1	1170.7	1214.1	1261.1	1292.5	1315.4	1322.6	1325.0
22.5°	4176.5	3526.6	2017.1	1156.2	1099.6	1157.5	1192.4	1233.4	1240.6	1214.1	1218.9
25°	4160.8	3375.9	1673.5	1006.7	1028.4	1086.3	1138.2	1117.7	1087.5	1068.2	1074.3
27.5°	4111.4	3175.8	1337.1	897.0	952.5	1026.0	1032.1	1009.2	1004.3	988.7	993.5
30°	4058.3	2945.5	1075.5	809.0	875.3	952.5	934.4	942.8	944.0	926.0	932.0
32.5°	4025.8	2704.3	856.0	749.9	825.9	840.4	876.5	893.4	894.6	852.4	859.7
35°	4036.6	2466.8	724.6	701.7	780.1	776.5	827.1	836.7	766.8	708.9	715.0
37.5°	4124.6	2247.4	649.9	664.3	700.5	728.2	766.8	702.9	687.2	660.7	664.3
40°	4288.6	2060.5	605.3	641.4	646.2	690.9	631.8	640.2	641.4	624.5	628.2
42.5°	4480.3	1905.0	578.7	628.2	616.1	623.3	564.3	581.1	599.2	592.0	593.2
45°	4576.8	1753.1	555.8	582.3	586.0	517.2	504.0	522.1	545.0	548.6	549.8
47.5°	4491.2	1608.4	531.7	516.0	540.1	471.4	455.7	461.8	488.3	502.8	505.2
50°	4229.5	1442.0	495.5	457.0	443.7	423.2	408.7	409.9	440.1	465.4	470.2
52.5°	3861.8	1268.4	436.5	387.0	356.9	372.6	376.2	368.9	396.7	422.0	426.8
55°	3504.9	1051.4	346.0	314.7	287.0	320.7	330.4	320.7	329.2	346.0	347.2
57.5°	2468.0	594.4	265.3	260.4	237.5	274.9	290.6	276.1	261.6	272.5	274.9
60°	1144.2	311.1	203.8	203.8	197.7	236.3	262.8	242.3	214.6	219.4	223.1
62.5°	358.1	196.5	149.5	141.1	161.6	201.3	223.1	202.6	170.0	170.0	174.8
65°	202.6	168.8	118.2	108.5	131.4	161.6	174.8	153.1	124.2	121.8	121.8
67.5°	188.1	160.4	104.9	88.0	92.8	103.7	108.5	94.0	85.6	84.4	85.6
70°	155.5	133.8	84.4	60.3	56.7	55.5	57.9	54.3	51.8	53.1	56.7
72.5°	96.5	80.8	53.1	36.2	31.3	30.1	30.1	30.1	28.9	28.9	28.9
75°	35.0	30.1	24.1	18.1	15.7	14.5	14.5	15.7	14.5	13.3	12.1
77.5°	10.9	9.6	9.6	9.6	8.4	7.2	6.0	6.0	4.8	3.6	3.6
80°	6.0	6.0	6.0	6.0	4.8	4.8	3.6	2.4	1.2	1.2	0.0
82.5°	6.0	6.0	6.0	4.8	4.8	4.8	3.6	2.4	1.2	0.0	0.0
85°	4.8	4.8	4.8	4.8	4.8	4.8	3.6	2.4	1.2	0.0	0.0
87.5°	4.8	4.8	4.8	4.8	4.8	4.8	3.6	2.4	1.2	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

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**



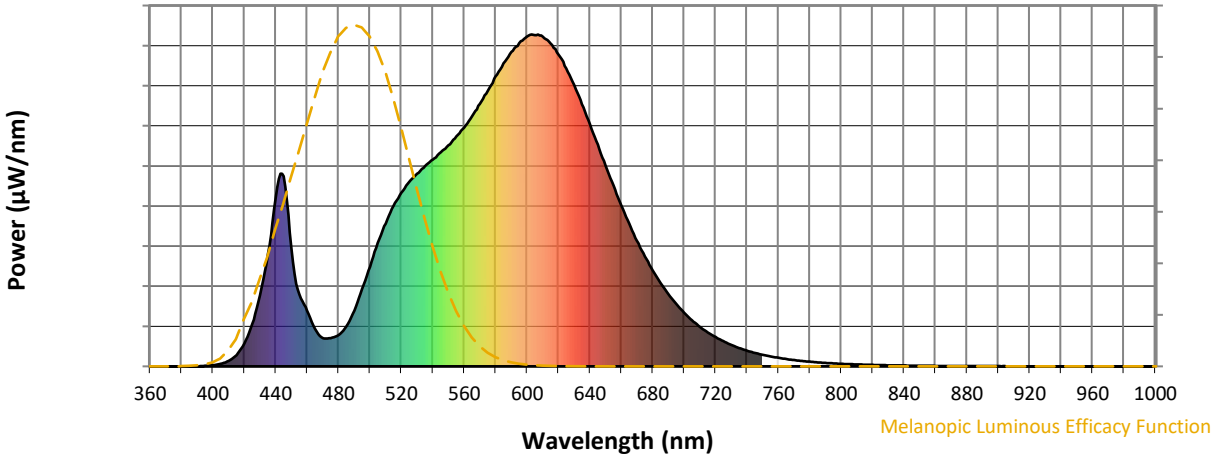
**Scotopic Lumens: NR**

**S/P: 1.27**

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			

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)