

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: P643916

Luminaire Tested: GWS-SA6F-830-U-SL2-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SAGF-830-U-SL2-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

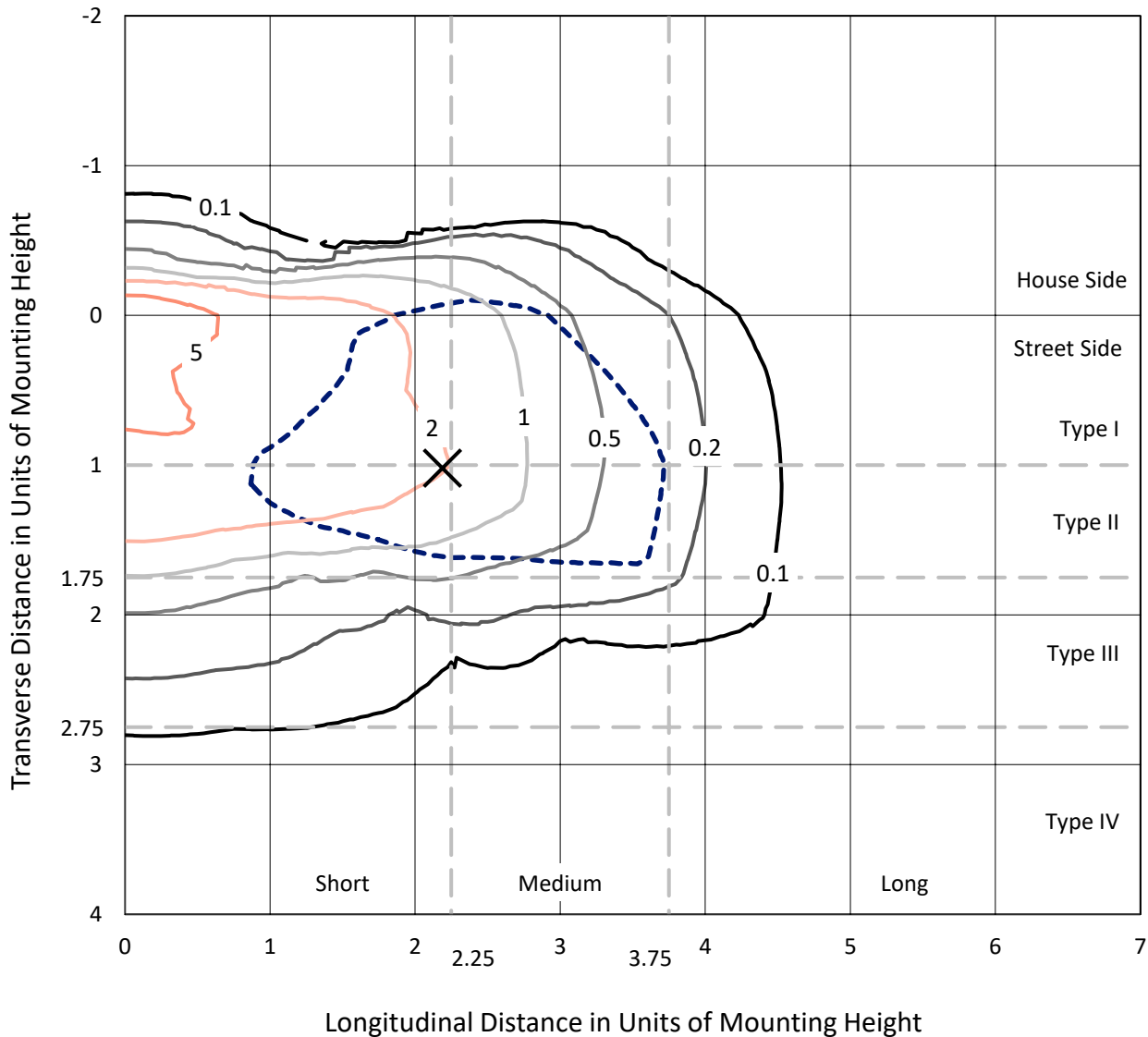
Lumens per Lamp: N/A  
Luminaire Lumens: 31341.4 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 372.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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: P643916  
 CATALOG NUMBER: GWS-SA6F-830-U-SL2-W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

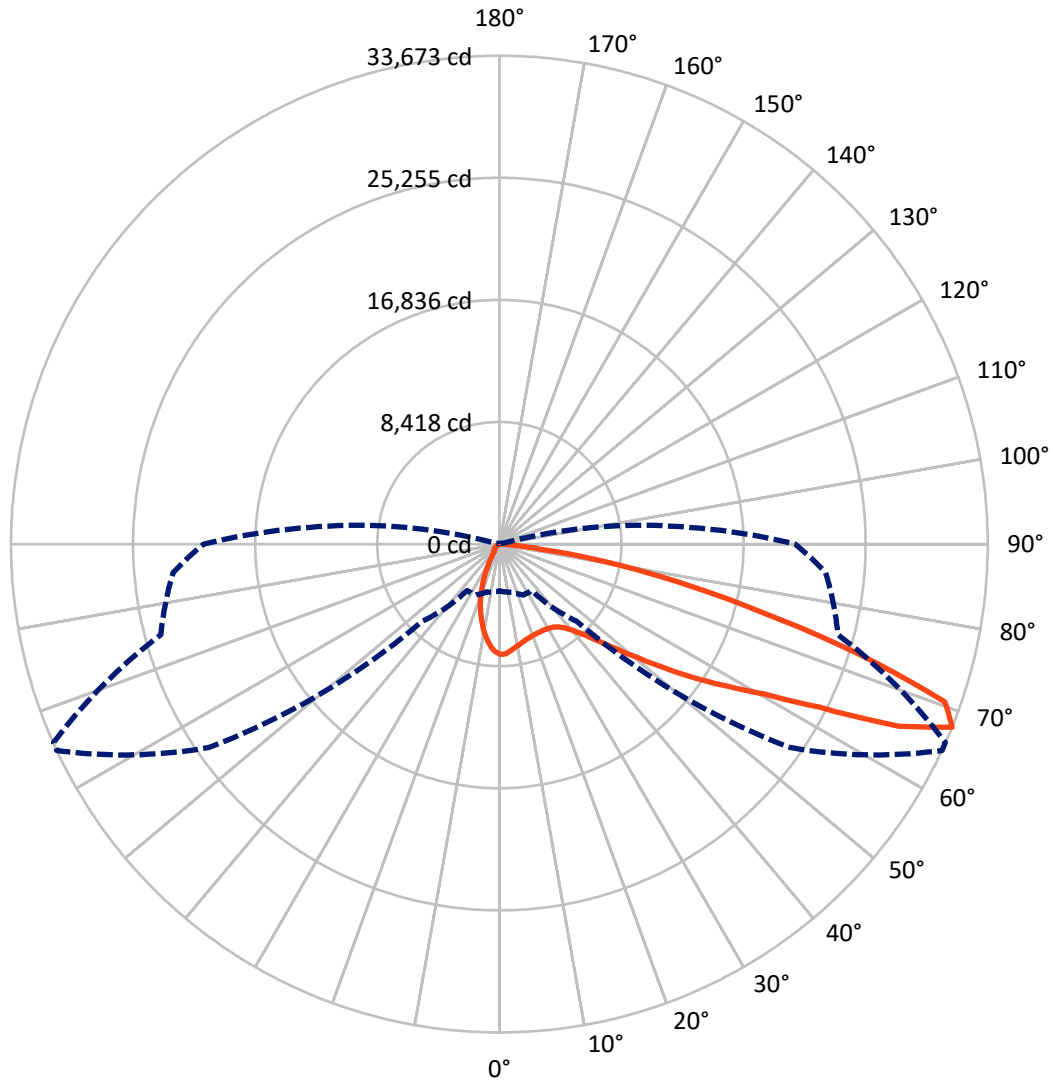
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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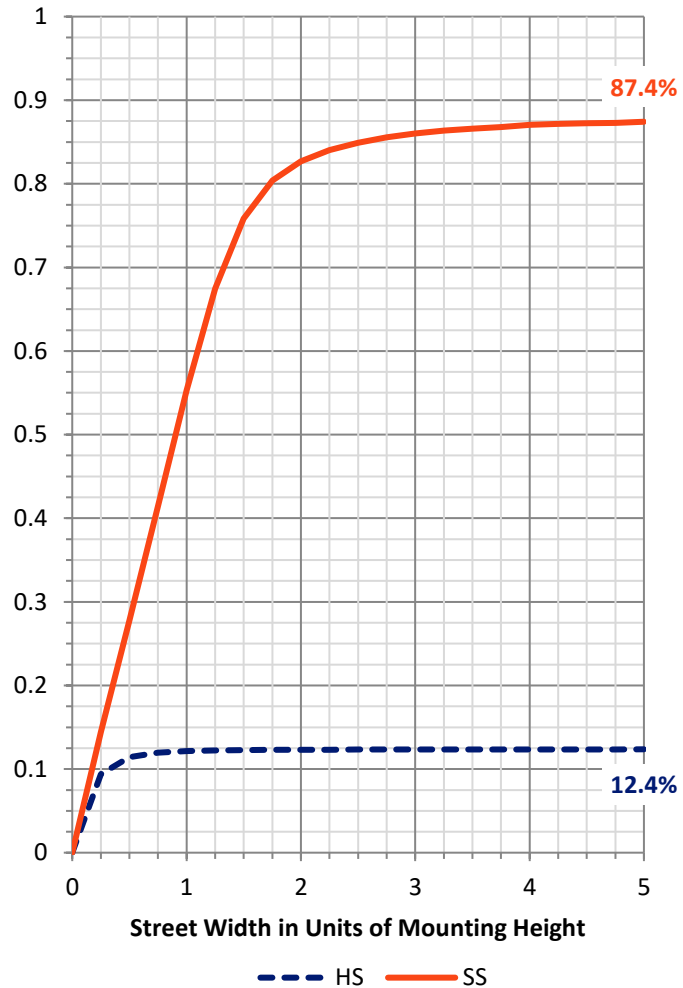
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3913.6	0.0	3913.6
	% Fixture	12.5	0.0	12.5
<b>Street Side</b>	Lumens	27427.8	0.0	27427.8
	% Fixture	87.5	0.0	87.5
<b>Total</b>	Lumens	31341.4	0.0	31341.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	631.3	2.0
10°-20°	1419.2	4.5
20°-30°	2027.9	6.5
30°-40°	2950.4	9.4
40°-50°	4620.8	14.7
50°-60°	7208.6	23.0
60°-70°	7918.3	25.3
70°-80°	4214.1	13.4
80°-90°	350.8	1.1
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°	31341.4	100.0
0°-180°	31341.4	100.0

**Coefficient of Utilization**



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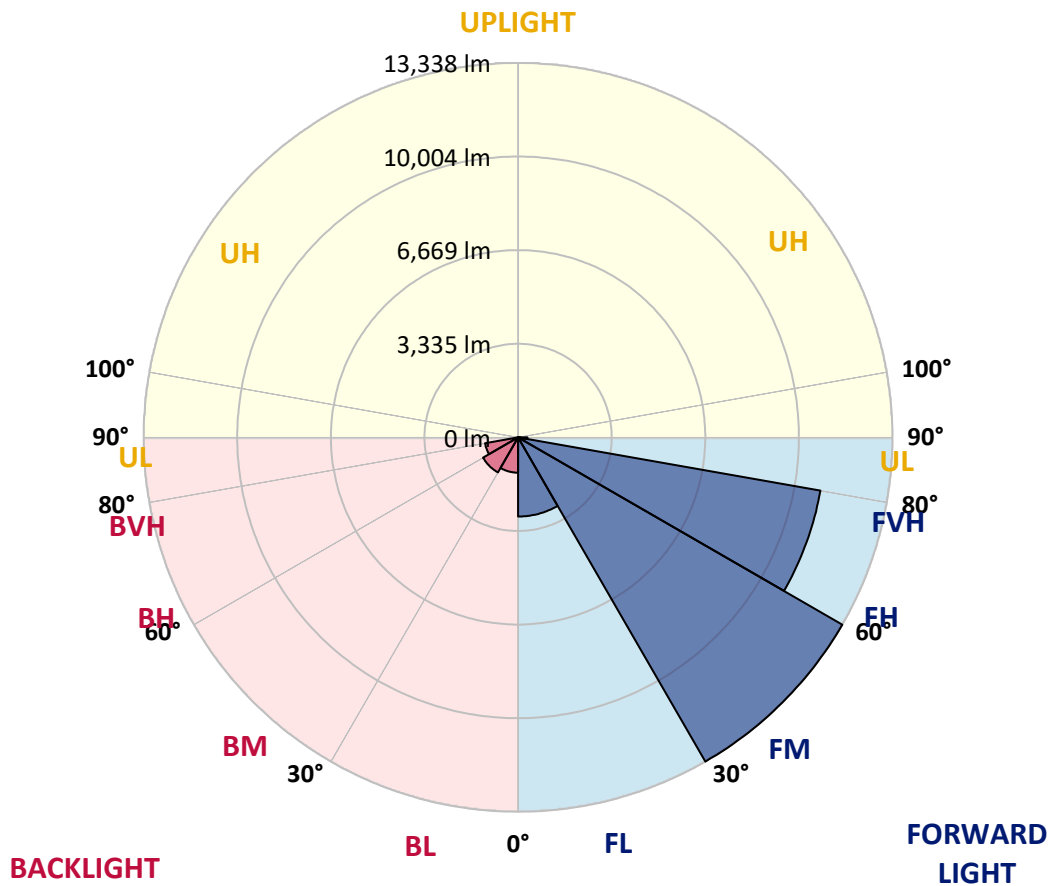
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2820.5	9.0			
FM (30°-60°)	13338.2	42.6			
FH (60°-80°)	10936.9	34.9			G4/12000
FVH (80°-90°)	332.1	1.1			G3/500
BL (0°-30°)	1257.9	4.0	B3/2500		
BM (30°-60°)	1441.5	4.6	B2/2500		
BH (60°-80°)	1195.4	3.8	B3/2500		G3/2500
BVH (80°-90°)	18.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3
2.5°	7337.7	7360.4	7329.2	7405.7	7419.9	7504.9	7553.1	7587.1	7584.3	7626.8	7626.8
5°	6906.9	6929.6	6912.6	6994.8	7059.9	7193.2	7303.7	7431.2	7436.9	7567.3	7615.4
7.5°	6541.3	6544.1	6544.1	6646.2	6731.2	6895.6	7059.9	7255.5	7278.2	7479.4	7606.9
10°	6240.9	6249.4	6252.2	6368.4	6461.9	6660.3	6870.1	7105.3	7130.8	7402.9	7601.3
12.5°	6034.0	6036.8	6048.1	6170.0	6272.0	6478.9	6691.5	6960.8	6994.8	7315.0	7575.8
15°	5934.8	5929.1	5934.8	6036.8	6138.8	6337.2	6555.5	6844.6	6881.4	7241.3	7578.6
17.5°	5929.1	5920.6	5914.9	5991.5	6056.6	6232.4	6453.4	6768.0	6807.7	7207.3	7609.8
20°	6011.3	6005.6	5977.3	6011.3	6025.5	6170.0	6388.2	6708.5	6748.2	7201.7	7677.8
22.5°	6226.7	6212.5	6170.0	6138.8	6062.3	6147.3	6342.9	6666.0	6711.3	7215.8	7765.7
25°	6547.0	6541.3	6487.4	6410.9	6215.4	6181.4	6345.7	6666.0	6708.5	7232.8	7859.2
27.5°	7028.8	6994.8	6926.7	6793.5	6513.0	6314.6	6402.4	6683.0	6725.5	7255.5	7935.7
30°	7519.1	7516.3	7493.6	7357.5	6940.9	6569.6	6521.5	6728.3	6768.0	7275.3	8006.6
32.5°	8026.4	8034.9	8091.6	7986.7	7530.4	6949.4	6736.9	6821.9	6850.2	7315.0	8068.9
35°	8508.2	8525.2	8675.4	8712.3	8247.5	7524.8	7088.3	7008.9	7011.8	7402.9	8151.1
37.5°	8970.2	9026.9	9267.8	9446.3	9140.2	8222.0	7595.6	7326.4	7303.7	7578.6	8275.8
40°	9494.5	9602.2	9905.5	10208.7	10112.4	9143.1	8287.1	7813.8	7765.7	7901.7	8499.7
42.5°	10075.5	10191.7	10594.2	11019.3	11064.6	10256.9	9151.6	8525.2	8443.0	8445.9	8919.2
45°	10699.0	10854.9	11322.6	11934.7	12209.7	11498.3	10217.2	9486.0	9403.8	9281.9	9593.7
47.5°	11518.1	11654.2	12104.8	12810.5	13337.7	12830.3	11614.5	10721.7	10571.5	10392.9	10642.4
50°	12223.8	12342.9	12731.1	13615.4	14712.2	14547.9	13198.8	12266.3	12121.8	11818.5	12025.4
52.5°	12379.7	12473.2	12830.3	13825.1	15763.7	16716.0	15140.2	14134.1	14032.0	13470.9	13550.2
55°	11679.7	11821.4	12141.6	13247.0	16038.6	18836.0	17659.8	16239.9	16027.3	15131.7	15273.4
57.5°	9911.1	10163.4	10463.8	11900.7	15293.2	19964.0	21179.8	18470.4	18277.6	16730.2	16733.0
60°	7264.0	7468.1	7669.3	8984.4	13524.7	19887.5	24374.0	20975.8	20624.3	18036.7	17988.6
62.5°	5282.9	5387.8	5384.9	5852.6	9287.6	18578.1	26051.8	24750.9	23931.8	19434.0	19159.1
65°	4154.9	4152.1	4273.9	4427.0	5186.6	14341.0	26258.7	30263.4	29379.1	21307.4	20734.9
67.5°	3233.8	3296.2	3418.0	3868.7	3897.0	7504.9	24439.2	33672.9	33655.9	24167.1	22579.9
70°	2494.1	2579.1	2752.0	3409.5	3599.4	4200.3	18286.1	32593.1	32868.0	25445.3	21273.4
72.5°	1601.3	1595.6	1850.7	2754.8	3457.7	3500.2	10112.4	25890.3	26202.0	23047.6	17200.7
75°	895.6	901.3	1045.8	1686.3	3222.5	3293.3	5008.0	18461.9	18708.4	17968.7	13215.8
77.5°	351.4	362.8	490.3	887.1	2125.6	2941.9	2975.9	12589.4	12626.3	11135.5	8105.8
80°	141.7	150.2	249.4	549.8	1295.2	1981.1	2125.6	7417.1	7266.8	4310.8	2358.0
82.5°	42.5	45.3	99.2	311.8	677.4	1408.6	1434.1	2845.5	2686.8	926.8	600.8
85°	2.8	2.8	22.7	96.4	240.9	354.3	955.1	926.8	821.9	232.4	266.4
87.5°	0.0	0.0	2.8	2.8	5.7	11.3	102.0	170.1	172.9	42.5	119.0
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: P643916

CATALOG NUMBER: GWS-SA6F-830-U-SL2-W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3	7601.3
2.5°	7626.8	7524.8	7516.3	7436.9	7357.5	7258.3	7142.1	7057.1	6997.6	6892.7	6872.9
5°	7615.4	7479.4	7351.9	7125.1	6872.9	6600.8	6362.7	6141.7	6002.8	5909.3	5869.6
7.5°	7592.8	7419.9	7125.1	6697.2	6274.9	5798.7	5427.5	5087.4	4855.0	4718.9	4659.4
10°	7575.8	7343.4	6864.4	6215.4	5560.7	4903.1	4339.1	3834.6	3554.1	3333.0	3296.2
12.5°	7541.8	7232.8	6530.0	5651.4	4806.8	3933.8	3214.0	2596.1	2168.1	1975.4	1907.4
15°	7507.7	7116.6	6195.5	5056.2	3984.9	2907.9	2034.9	1439.8	1145.0	1054.3	1048.6
17.5°	7502.1	7011.8	5832.7	4492.2	3123.3	1904.6	1159.2	932.4	870.1	847.4	847.4
20°	7519.1	6923.9	5475.6	3843.2	2275.8	1159.2	864.4	807.7	770.9	751.1	751.1
22.5°	7536.1	6833.2	5132.7	3188.5	1510.6	847.4	762.4	714.2	671.7	649.0	637.7
25°	7547.4	6734.0	4752.9	2530.9	986.3	736.9	668.9	606.5	555.5	527.2	527.2
27.5°	7544.6	6615.0	4370.3	1887.6	765.2	654.7	572.5	507.3	456.3	425.1	428.0
30°	7521.9	6484.6	3973.5	1317.9	668.9	572.5	490.3	422.3	371.3	345.8	342.9
32.5°	7504.9	6345.7	3514.4	926.8	600.8	501.7	416.6	351.4	308.9	289.1	286.3
35°	7485.1	6209.7	3077.9	705.7	541.3	433.6	351.4	297.6	263.6	246.6	246.6
37.5°	7490.7	6068.0	2604.6	606.5	481.8	376.9	300.4	255.1	226.7	209.7	206.9
40°	7578.6	5983.0	2139.8	549.8	428.0	325.9	260.7	221.1	192.7	175.7	172.9
42.5°	7796.8	5985.8	1694.8	507.3	379.8	277.7	226.7	189.9	164.4	144.5	141.7
45°	8233.3	6104.8	1300.9	462.0	328.8	240.9	195.6	161.5	136.0	119.0	116.2
47.5°	8947.5	6459.1	986.3	422.3	286.3	209.7	167.2	136.0	113.4	99.2	96.4
50°	10084.0	7099.6	776.6	374.1	240.9	181.4	141.7	113.4	93.5	79.4	76.5
52.5°	11450.1	8060.4	666.0	331.6	206.9	158.7	121.9	93.5	76.5	65.2	62.4
55°	13020.2	9208.3	615.0	289.1	175.7	136.0	99.2	76.5	62.4	53.8	48.2
57.5°	14460.0	10242.7	612.2	246.6	150.2	116.2	82.2	65.2	53.8	42.5	39.7
60°	15862.9	11107.2	575.3	204.1	130.4	96.4	70.9	53.8	45.3	36.8	34.0
62.5°	17135.5	11810.0	481.8	164.4	110.5	79.4	59.5	48.2	39.7	31.2	31.2
65°	18733.9	12705.6	368.4	133.2	90.7	65.2	51.0	42.5	36.8	28.3	28.3
67.5°	20386.3	13178.9	263.6	110.5	73.7	56.7	45.3	39.7	31.2	25.5	25.5
70°	18464.7	11135.5	189.9	90.7	62.4	48.2	39.7	36.8	31.2	25.5	22.7
72.5°	14420.3	8029.2	141.7	70.9	53.8	45.3	36.8	34.0	28.3	22.7	22.7
75°	10693.4	4682.1	107.7	56.7	42.5	36.8	36.8	34.0	28.3	22.7	19.8
77.5°	5812.9	1632.5	82.2	45.3	34.0	28.3	31.2	31.2	25.5	19.8	17.0
80°	1539.0	447.8	56.7	34.0	28.3	22.7	22.7	28.3	22.7	17.0	17.0
82.5°	447.8	130.4	39.7	28.3	22.7	19.8	19.8	19.8	17.0	14.2	11.3
85°	218.2	48.2	28.3	22.7	19.8	17.0	14.2	14.2	11.3	8.5	8.5
87.5°	96.4	19.8	22.7	19.8	19.8	14.2	11.3	8.5	8.5	5.7	2.8
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**

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			

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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)