

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: P642922

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

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642922  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6D-830-U-RW-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

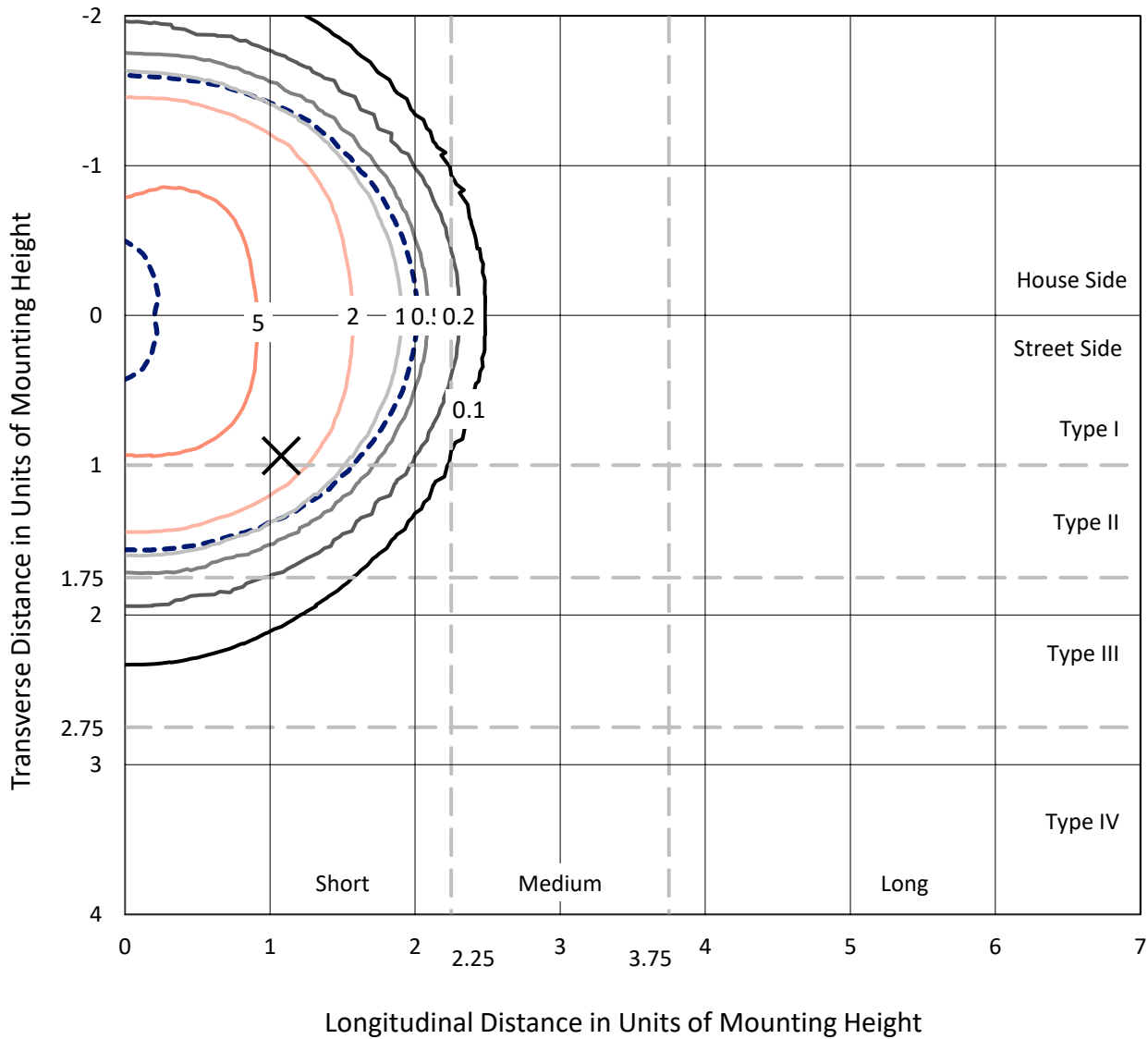
Lumens per Lamp: N/A  
Luminaire Lumens: 25085.3 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G1  
  
Input Watts (W): 245.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



REPORT NUMBER: P642922  
 CATALOG NUMBER: GWS-SA6D-830-U-RW-W-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

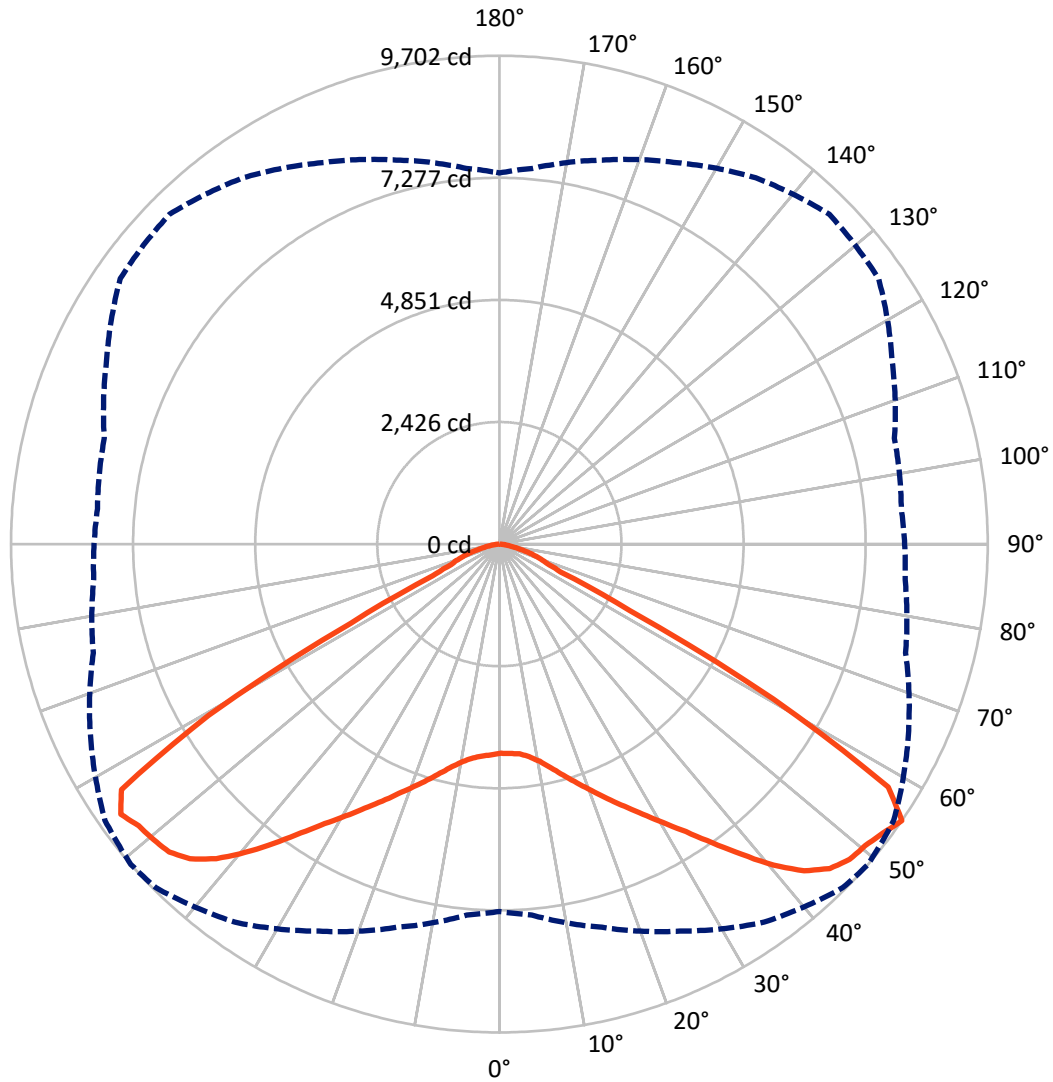
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type V - Short - N/A

REPORT NUMBER: P642922  
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### Luminous Intensity Polar Plot



— Vertical Plane Through 49-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P642922

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

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12419.6	0.0	12419.6
	% Fixture	49.5	0.0	49.5
<b>Street Side</b>	Lumens	12665.7	0.0	12665.7
	% Fixture	50.5	0.0	50.5
<b>Total</b>	Lumens	25085.3	0.0	25085.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	405.4	1.6
10°-20°	1337.1	5.3
20°-30°	2546.8	10.2
30°-40°	4317.3	17.2
40°-50°	6497.3	25.9
50°-60°	7111.9	28.4
60°-70°	2248.8	9.0
70°-80°	539.7	2.2
80°-90°	81.0	0.3
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°	25085.3	100.0
0°-180°	25085.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P642922

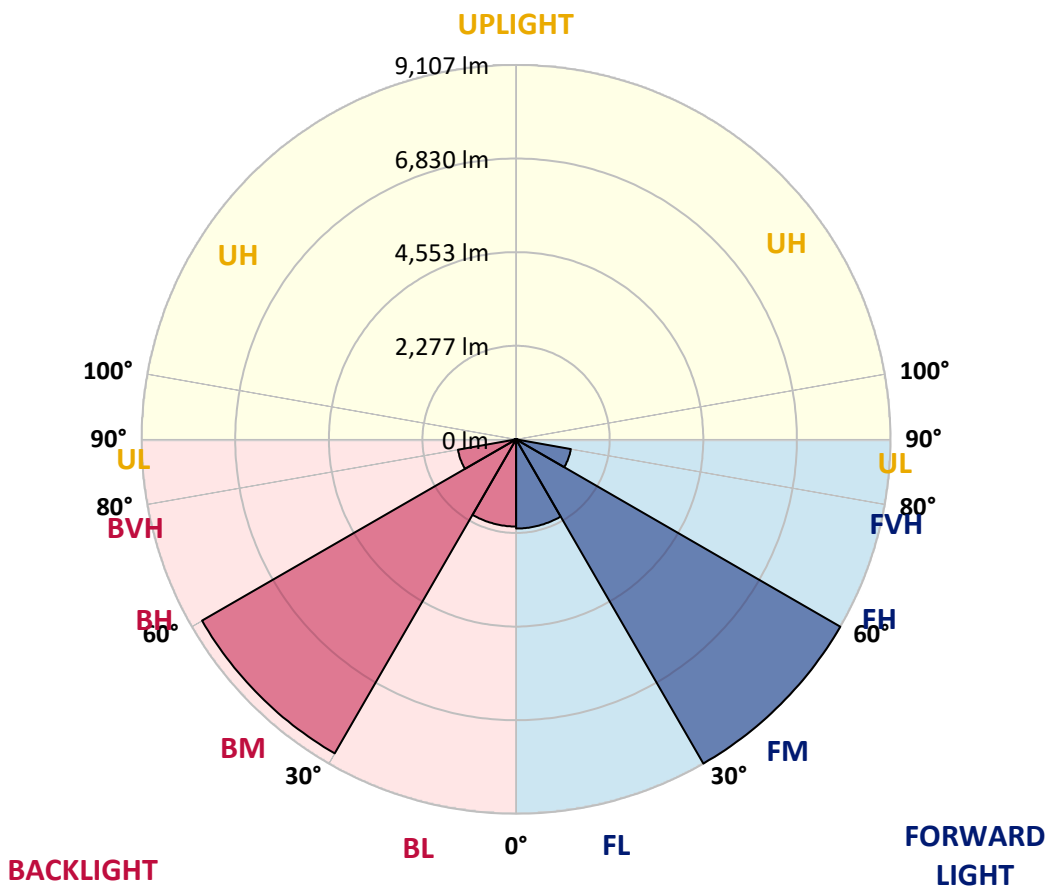
CATALOG NUMBER: GWS-SA6D-830-U-RW-W-GRSWH

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2168.9	8.6			
FM (30°-60°)	9106.7	36.3			
FH (60°-80°)	1352.7	5.4			G1/1800
FVH (80°-90°)	37.5	0.1			G1/100
BL (0°-30°)	2120.4	8.5	B3/2500		
BM (30°-60°)	8819.9	35.2	B5		
BH (60°-80°)	1435.8	5.7	B3/2500		G1/1800
BVH (80°-90°)	43.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G1**

Type V Short





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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5
2.5°	4094.3	4098.4	4106.6	4120.9	4135.1	4155.5	4163.7	4173.9	4171.9	4184.1	4184.1
5°	4073.9	4080.1	4092.3	4112.7	4137.2	4175.9	4186.1	4210.6	4235.1	4265.7	4275.9
7.5°	4098.4	4106.6	4120.9	4153.5	4190.2	4241.2	4261.6	4302.4	4349.3	4404.4	4426.9
10°	4145.3	4155.5	4180.0	4233.1	4292.2	4369.7	4388.1	4439.1	4514.6	4590.1	4634.9
12.5°	4198.4	4214.7	4259.6	4343.2	4430.9	4532.9	4561.5	4624.7	4706.3	4804.3	4865.5
15°	4259.6	4273.9	4343.2	4461.5	4598.2	4732.9	4765.5	4826.7	4918.5	5014.4	5100.1
17.5°	4388.1	4412.6	4494.2	4630.9	4790.0	4949.1	4985.8	5055.2	5128.6	5204.1	5285.7
20°	4563.5	4583.9	4688.0	4857.3	5045.0	5189.8	5226.5	5287.7	5322.4	5361.2	5430.5
22.5°	4739.0	4767.5	4885.9	5085.8	5306.1	5463.2	5491.7	5548.9	5524.4	5512.1	5557.0
25°	4957.3	4996.0	5112.3	5330.6	5555.0	5748.8	5771.2	5820.2	5779.4	5716.2	5714.1
27.5°	5228.6	5263.3	5383.6	5608.0	5830.4	6032.4	6075.2	6140.5	6050.7	5973.2	5918.1
30°	5550.9	5573.3	5706.0	5944.6	6173.1	6364.9	6420.0	6485.2	6417.9	6289.4	6234.3
32.5°	5926.3	5956.9	6109.9	6360.8	6564.8	6756.6	6811.6	6893.2	6819.8	6675.0	6605.6
35°	6377.1	6407.7	6568.9	6842.2	7050.3	7248.2	7287.0	7354.3	7262.5	7095.2	7040.1
37.5°	6866.7	6905.5	7109.5	7368.6	7586.9	7817.4	7819.4	7839.8	7709.3	7501.2	7440.0
40°	7417.5	7468.5	7672.5	7941.8	8205.0	8392.7	8390.6	8333.5	8113.2	7790.9	7697.0
42.5°	7962.2	8003.0	8209.1	8486.5	8749.7	8927.2	8874.1	8735.4	8417.1	7978.5	7854.1
45°	8355.9	8386.5	8602.8	8914.9	9182.2	9292.3	9196.4	9029.2	8598.7	8096.9	7913.3
47.5°	8541.6	8582.4	8800.7	9110.8	9412.7	9475.9	9361.7	9204.6	8704.8	8207.0	7960.2
50°	8441.6	8494.7	8741.5	9029.2	9369.8	9500.4	9418.8	9261.7	8817.0	8315.1	8043.8
52.5°	8182.5	8233.5	8545.7	8894.5	9280.1	9539.2	9537.1	9408.6	8945.5	8345.7	8047.9
55°	7297.2	7397.1	7882.7	8484.5	9169.9	9653.4	9702.4	9565.7	8965.9	8353.9	8090.7
57.5°	4749.2	4924.6	5385.7	6169.0	7544.0	8780.3	9110.8	9143.4	8819.0	8319.2	8098.9
60°	1982.9	2123.7	2488.8	3009.0	4145.3	5616.2	6256.8	6899.4	7674.6	7956.1	8023.4
62.5°	1232.2	1244.4	1281.1	1399.5	1778.9	2497.0	2909.1	3510.9	4663.5	5644.8	6097.6
65°	1111.8	1117.9	1126.1	1117.9	1136.3	1224.0	1334.2	1544.3	2013.5	2501.1	3080.4
67.5°	979.2	987.4	993.5	987.4	993.5	997.6	1009.8	1028.2	1113.9	1183.2	1236.3
70°	791.5	803.8	814.0	809.9	834.4	834.4	846.6	860.9	903.7	954.7	991.5
72.5°	603.8	593.6	605.9	610.0	632.4	644.6	663.0	679.3	728.3	758.9	805.8
75°	391.7	381.5	399.8	410.0	440.6	457.0	473.3	489.6	524.3	544.7	589.6
77.5°	212.2	210.1	228.5	242.8	275.4	295.8	308.0	320.3	348.8	355.0	383.5
80°	122.4	122.4	134.6	144.8	165.2	187.7	199.9	210.1	230.5	236.6	248.9
82.5°	67.3	67.3	73.4	79.6	95.9	108.1	118.3	126.5	144.8	151.0	157.1
85°	32.6	30.6	34.7	38.8	44.9	51.0	57.1	61.2	75.5	79.6	87.7
87.5°	4.1	4.1	4.1	6.1	8.2	12.2	14.3	14.3	22.4	26.5	30.6
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: P642922

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

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5	4155.5
2.5°	4196.3	4169.8	4186.1	4192.3	4192.3	4186.1	4159.6	4151.5	4139.2	4120.9	4120.9
5°	4290.2	4269.8	4273.9	4263.7	4239.2	4208.6	4159.6	4135.1	4114.7	4092.3	4090.3
7.5°	4451.3	4424.8	4420.7	4382.0	4316.7	4251.4	4178.0	4133.1	4102.5	4073.9	4071.9
10°	4661.5	4637.0	4606.4	4528.9	4433.0	4337.1	4237.1	4175.9	4131.1	4090.3	4088.2
12.5°	4896.1	4867.5	4810.4	4696.1	4575.8	4481.9	4367.7	4273.9	4206.5	4151.5	4141.3
15°	5151.1	5110.3	5012.3	4877.7	4759.4	4659.4	4537.0	4402.4	4300.4	4212.7	4202.5
17.5°	5346.9	5293.9	5187.8	5061.3	4963.4	4863.4	4704.3	4535.0	4388.1	4277.9	4261.6
20°	5481.5	5438.7	5318.3	5224.5	5167.4	5079.7	4894.0	4702.3	4537.0	4398.3	4390.1
22.5°	5606.0	5555.0	5436.7	5381.6	5381.6	5322.4	5144.9	4918.5	4724.7	4563.5	4543.1
25°	5746.8	5691.7	5601.9	5595.8	5624.4	5597.8	5383.6	5140.9	4914.4	4732.9	4700.2
27.5°	5942.6	5881.4	5828.4	5865.1	5905.9	5877.3	5638.6	5357.1	5118.4	4934.8	4906.3
30°	6254.7	6179.2	6130.3	6175.2	6254.7	6171.1	5912.0	5614.2	5373.4	5171.5	5157.2
32.5°	6617.8	6532.2	6481.2	6552.6	6624.0	6493.4	6236.4	5950.8	5697.8	5485.6	5461.1
35°	7054.4	6946.3	6870.8	6966.7	7040.1	6911.6	6656.6	6385.3	6103.8	5883.4	5850.8
37.5°	7442.0	7311.5	7260.5	7395.1	7493.0	7409.4	7131.9	6876.9	6568.9	6328.2	6313.9
40°	7723.5	7595.0	7558.3	7780.7	7952.0	7931.6	7682.7	7391.0	7101.3	6823.9	6797.4
42.5°	7845.9	7756.2	7764.3	8064.2	8329.4	8460.0	8237.6	7925.5	7646.0	7358.4	7340.0
45°	7872.5	7817.4	7882.7	8258.0	8606.9	8874.1	8684.4	8423.3	8107.1	7829.6	7821.5
47.5°	7901.0	7870.4	7970.4	8368.2	8782.3	9092.4	8986.3	8717.0	8396.7	8125.4	8105.0
50°	7968.3	7956.1	8068.3	8445.7	8866.0	9151.6	9031.2	8763.9	8435.5	8168.3	8119.3
52.5°	7988.7	7968.3	8129.5	8566.1	9004.7	9149.5	8890.4	8541.6	8211.1	7913.3	7862.3
55°	8052.0	8015.3	8125.4	8610.9	9196.4	9267.8	8882.3	8360.0	7899.0	7493.0	7372.7
57.5°	8068.3	8027.5	8098.9	8537.5	8988.4	8925.1	7807.2	6746.4	5877.3	5426.5	5477.5
60°	7980.6	7992.8	7870.4	7821.5	7209.5	6364.9	4779.8	3821.0	3000.9	2654.1	2729.6
62.5°	6075.2	6126.2	5708.0	4963.4	3816.9	3025.4	2001.3	1554.5	1315.8	1254.6	1264.8
65°	3066.2	3135.5	2701.0	2233.8	1660.6	1342.3	1160.8	1124.1	1111.8	1097.5	1097.5
67.5°	1213.8	1234.2	1217.9	1140.4	1060.8	1032.3	1024.1	1020.0	1005.7	997.6	999.6
70°	975.1	991.5	967.0	918.0	885.4	883.3	879.3	871.1	860.9	860.9	867.0
72.5°	795.6	811.9	777.2	746.6	722.2	703.8	693.6	687.5	673.2	673.2	679.3
75°	585.5	595.7	567.1	563.0	536.5	518.2	501.8	493.7	475.3	467.2	473.3
77.5°	389.6	387.6	373.3	373.3	363.1	340.7	322.3	304.0	279.5	263.2	267.2
80°	253.0	253.0	246.8	246.8	236.6	218.3	195.8	177.5	163.2	151.0	151.0
82.5°	161.2	159.1	157.1	155.0	151.0	132.6	116.3	104.0	93.8	85.7	87.7
85°	89.8	89.8	85.7	85.7	77.5	67.3	59.2	51.0	44.9	42.8	42.8
87.5°	30.6	30.6	28.6	28.6	24.5	18.4	14.3	12.2	10.2	8.2	10.2
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 (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			

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)