

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: P642923

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

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)  
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  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

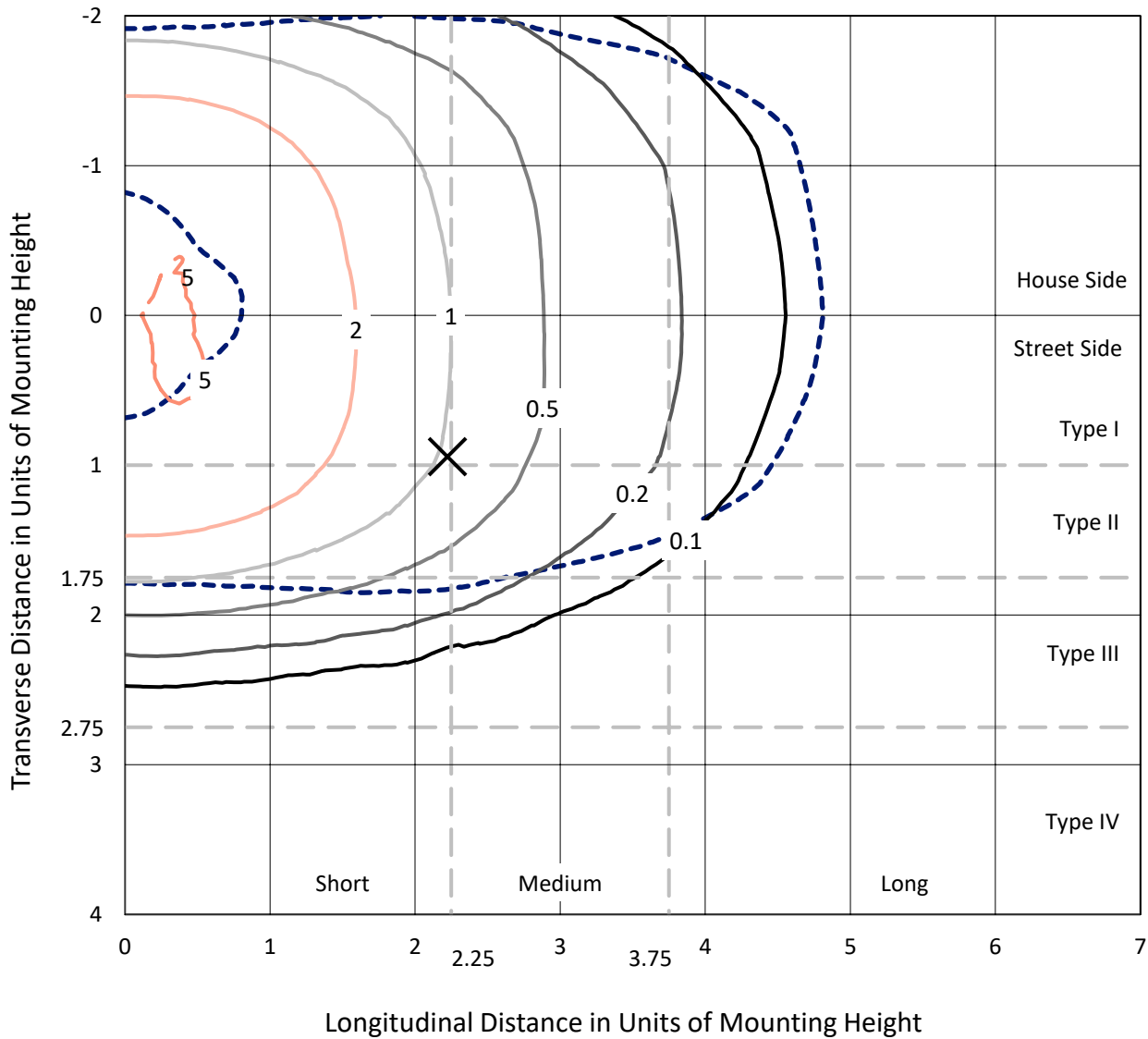
Lumens per Lamp: N/A  
Luminaire Lumens: 29293.7 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 245.7  
Input Voltage (V): 120  
Input Current (Ain): 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: P642923  
 CATALOG NUMBER: GWS-SA6D-830-U-RW-W

### Iso-Footcandle Lines of Horizontal Illumination

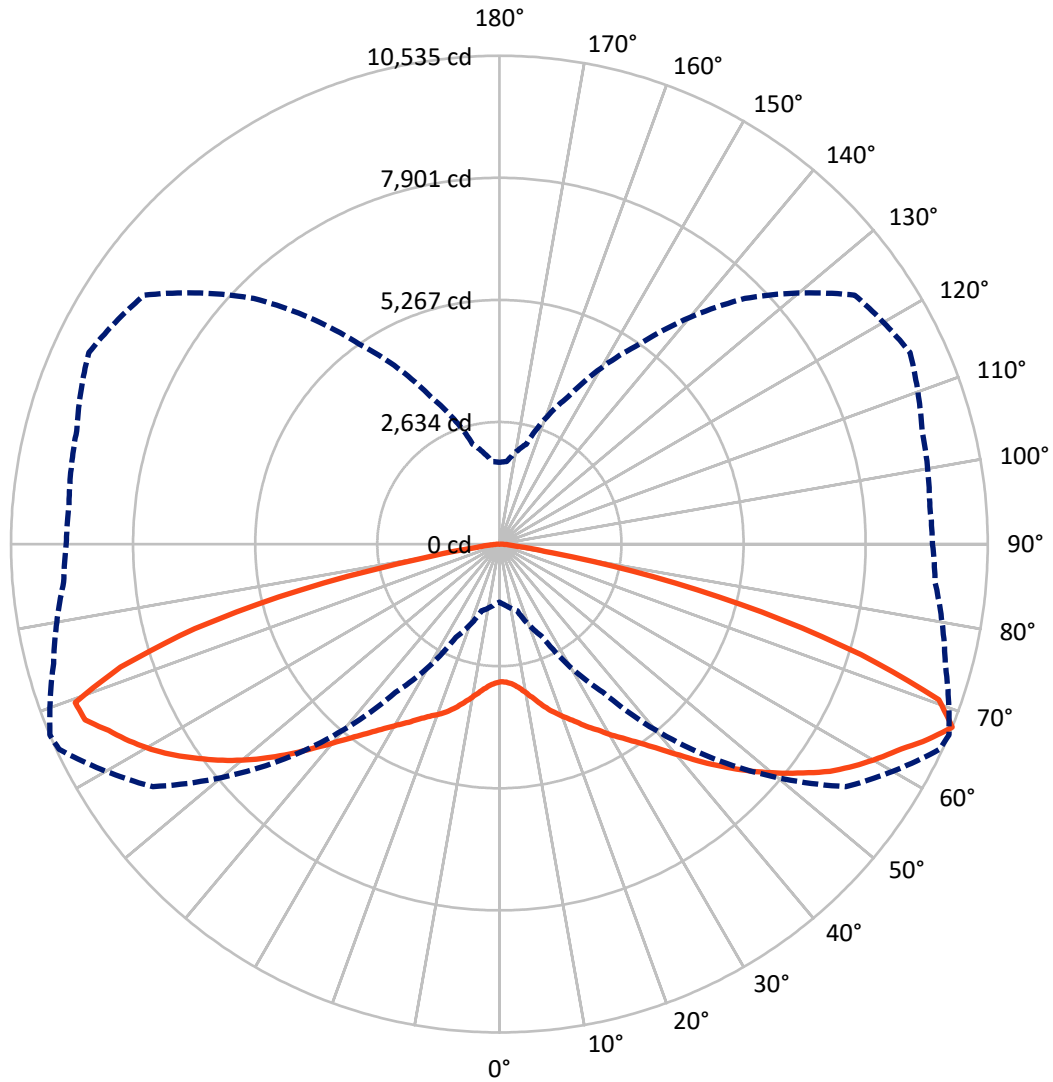
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type III - Short - N/A

REPORT NUMBER: P642923  
CATALOG NUMBER: GWS-SA6D-830-U-RW-W

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P642923

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

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14485.2	0.0	14485.2
	% Fixture	49.4	0.0	49.4
<b>Street Side</b>	Lumens	14808.5	0.0	14808.5
	% Fixture	50.6	0.0	50.6
<b>Total</b>	Lumens	29293.7	0.0	29293.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	291.0	1.0
10°-20°	983.2	3.4
20°-30°	1929.0	6.6
30°-40°	3286.3	11.2
40°-50°	5277.2	18.0
50°-60°	7170.6	24.5
60°-70°	6859.1	23.4
70°-80°	3261.1	11.1
80°-90°	236.3	0.8
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°	29293.7	100.0
0°-180°	29293.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P642923

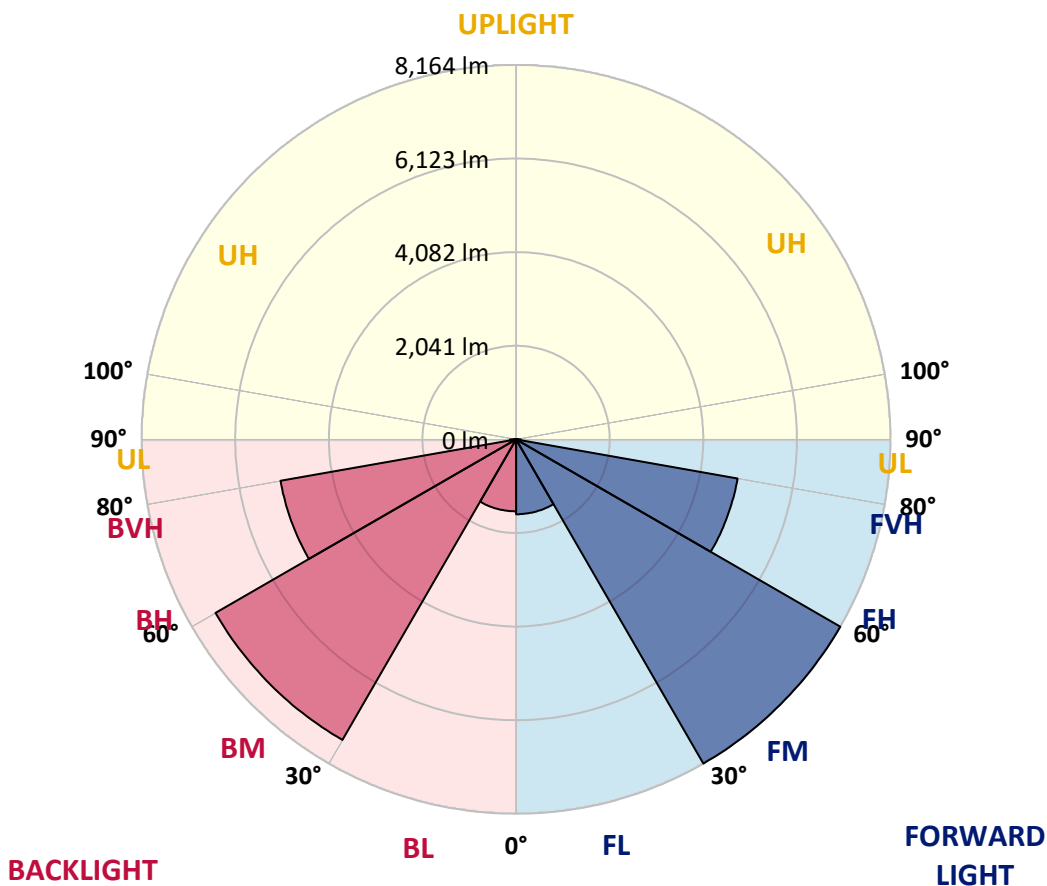
CATALOG NUMBER: GWS-SA6D-830-U-RW-W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1633.3	5.6			
FM (30°-60°)	8164.4	27.9			
FH (60°-80°)	4904.5	16.7			G2/5000
FVH (80°-90°)	106.2	0.4			G2/225
BL (0°-30°)	1569.8	5.4	B3/2500		
BM (30°-60°)	7569.6	25.8	B4/8500		
BH (60°-80°)	5215.7	17.8	B5		G5
BVH (80°-90°)	130.1	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type III Short





REPORT NUMBER: P642923  
 CATALOG NUMBER: GWS-SA6D-830-U-RW-W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2
2.5°	2905.0	2909.0	2915.2	2927.4	2939.6	2958.0	2976.4	2974.3	2982.5	2988.6	2994.7
5°	2888.6	2892.7	2902.9	2919.2	2937.6	2968.2	3007.0	3023.3	3035.5	3058.0	3078.4
7.5°	2923.3	2931.5	2945.8	2968.2	2996.8	3035.5	3088.6	3117.1	3135.5	3176.3	3210.9
10°	2970.2	2980.4	3009.0	3051.8	3094.7	3153.8	3221.1	3264.0	3276.2	3329.3	3394.5
12.5°	3015.1	3027.4	3074.3	3151.8	3229.3	3308.9	3388.4	3441.5	3445.5	3516.9	3590.4
15°	3086.5	3096.7	3159.9	3259.9	3378.2	3488.4	3586.3	3623.0	3639.3	3690.3	3782.1
17.5°	3243.6	3255.8	3337.4	3445.5	3570.0	3686.3	3784.2	3814.8	3814.8	3857.6	3933.1
20°	3412.9	3425.1	3533.3	3672.0	3822.9	3941.3	4016.7	3988.2	3978.0	3990.2	4043.3
22.5°	3602.6	3625.1	3729.1	3890.3	4075.9	4220.7	4259.5	4173.8	4145.3	4116.7	4128.9
25°	3845.4	3871.9	3973.9	4145.3	4326.8	4479.8	4502.3	4369.7	4353.3	4253.4	4216.7
27.5°	4124.9	4145.3	4271.7	4441.1	4610.4	4738.9	4763.4	4600.2	4545.1	4406.4	4320.7
30°	4485.9	4504.3	4614.5	4781.7	4928.6	5018.4	5049.0	4824.6	4781.7	4569.6	4437.0
32.5°	4879.7	4887.8	5000.0	5161.2	5291.7	5377.4	5334.6	5073.5	5010.2	4771.5	4590.0
35°	5330.5	5330.5	5475.3	5605.9	5709.9	5734.4	5652.8	5355.0	5281.5	5022.5	4796.0
37.5°	5773.2	5785.4	5920.1	6075.1	6166.9	6162.8	6013.9	5687.5	5603.9	5322.3	5071.4
40°	6252.6	6279.1	6413.7	6587.1	6674.9	6662.6	6434.1	6071.0	5985.3	5652.8	5408.0
42.5°	6693.2	6736.1	6893.1	7070.6	7166.5	7158.3	6919.7	6511.7	6428.0	6052.7	5807.9
45°	7044.1	7089.0	7284.8	7531.7	7684.7	7670.4	7429.7	6968.6	6866.6	6472.9	6203.6
47.5°	7352.1	7399.1	7617.3	7878.5	8121.2	8145.7	7925.4	7429.7	7321.5	6923.7	6619.8
50°	7588.8	7611.2	7856.0	8141.6	8423.1	8559.8	8368.1	7892.7	7762.2	7368.5	7025.7
52.5°	7570.4	7601.0	7902.9	8290.5	8667.9	8892.3	8759.7	8329.3	8202.8	7774.4	7439.9
55°	7197.1	7227.7	7586.7	8151.8	8804.6	9135.1	9120.8	8745.5	8653.7	8188.5	7870.3
57.5°	6652.4	6719.7	7076.7	7686.7	8625.1	9328.9	9386.0	9124.9	9029.0	8594.5	8296.7
60°	5677.3	5767.1	6179.1	6970.7	8049.8	9263.6	9669.6	9445.2	9386.0	8971.9	8682.2
62.5°	4124.9	4190.1	4738.9	5777.3	7197.1	8798.5	9908.2	9775.6	9730.8	9310.5	9031.1
65°	2470.4	2619.4	3060.0	4086.1	5805.8	7921.3	9777.7	10208.1	10161.2	9659.4	9328.9
67.5°	1250.5	1317.8	1491.2	2215.4	3904.5	6554.5	9122.9	10477.4	10534.5	9957.2	9435.0
70°	775.2	793.6	842.5	1093.4	1950.2	4306.4	7460.3	9775.6	10055.1	9910.3	9159.6
72.5°	622.2	626.3	634.4	681.4	936.4	2013.5	4716.5	7656.1	8160.0	9255.5	8765.9
75°	516.1	518.2	520.2	534.5	583.4	822.1	2295.0	5261.1	5850.7	7866.2	8127.3
77.5°	414.1	403.9	412.1	418.2	430.4	459.0	791.5	2807.0	3404.7	5163.2	6285.2
80°	269.3	265.2	281.5	287.6	299.9	318.2	422.3	952.7	1156.7	1878.8	1999.2
82.5°	144.8	136.7	171.4	165.2	171.4	185.6	248.9	348.8	391.7	567.1	479.4
85°	44.9	44.9	46.9	55.1	67.3	65.3	108.1	171.4	189.7	242.8	179.5
87.5°	8.2	8.2	8.2	8.2	8.2	10.2	22.4	34.7	46.9	83.6	63.2
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: P642923  
 CATALOG NUMBER: GWS-SA6D-830-U-RW-W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2	2966.2
2.5°	3007.0	2988.6	2998.8	3004.9	3002.9	2998.8	2978.4	2974.3	2964.1	2947.8	2943.7
5°	3096.7	3076.3	3078.4	3072.2	3051.8	3025.3	2980.4	2958.0	2939.6	2919.2	2917.2
7.5°	3237.5	3215.0	3208.9	3180.3	3123.2	3062.0	2990.6	2949.8	2919.2	2892.7	2888.6
10°	3417.0	3394.5	3374.1	3306.8	3213.0	3131.4	3037.6	2978.4	2933.5	2900.9	2894.8
12.5°	3616.9	3598.5	3547.5	3449.6	3337.4	3241.5	3145.7	3072.2	3007.0	2958.0	2951.9
15°	3839.3	3798.5	3720.9	3594.5	3488.4	3410.9	3294.6	3194.6	3090.6	3025.3	3011.0
17.5°	3994.3	3959.6	3867.8	3745.4	3661.8	3594.5	3457.8	3315.0	3174.2	3078.4	3058.0
20°	4104.5	4067.7	3963.7	3873.9	3847.4	3790.3	3631.2	3465.9	3302.7	3184.4	3157.9
22.5°	4184.0	4145.3	4039.2	3994.3	4031.0	4020.8	3865.8	3678.1	3484.3	3343.5	3310.9
25°	4259.5	4222.8	4128.9	4145.3	4243.2	4273.8	4106.5	3888.2	3667.9	3502.7	3463.9
27.5°	4330.9	4284.0	4241.1	4330.9	4469.6	4526.7	4349.3	4102.4	3863.7	3694.4	3663.8
30°	4441.1	4386.0	4379.9	4510.4	4730.7	4779.7	4583.9	4337.0	4100.4	3929.0	3890.3
32.5°	4579.8	4528.8	4532.9	4728.7	4983.7	5024.5	4857.2	4626.7	4390.1	4218.7	4165.7
35°	4767.5	4704.2	4738.9	4979.6	5236.7	5312.1	5177.5	4985.7	4755.2	4579.8	4520.6
37.5°	5026.5	4934.7	5006.1	5259.1	5518.2	5630.4	5526.3	5383.5	5155.1	4977.6	4922.5
40°	5357.0	5281.5	5310.1	5589.6	5856.8	5991.5	5926.2	5785.4	5559.0	5373.3	5310.1
42.5°	5748.7	5673.2	5663.0	5960.9	6228.1	6432.1	6368.9	6240.3	6005.7	5793.6	5732.4
45°	6132.2	6062.9	6077.1	6381.1	6681.0	6903.3	6840.1	6689.1	6434.1	6189.3	6140.4
47.5°	6532.1	6474.9	6487.2	6809.5	7140.0	7362.3	7282.8	7099.2	6801.3	6540.2	6481.1
50°	6942.1	6876.8	6895.2	7233.8	7590.8	7800.9	7678.5	7407.2	7078.8	6823.8	6772.8
52.5°	7350.1	7272.6	7319.5	7639.8	8009.0	8176.3	7949.9	7621.4	7303.2	7050.2	6993.1
55°	7819.3	7737.7	7686.7	8029.4	8394.6	8463.9	8153.9	7770.3	7392.9	7105.3	7070.6
57.5°	8247.7	8178.3	8082.5	8425.2	8694.5	8643.5	8310.9	7729.5	7174.7	6805.4	6756.5
60°	8631.2	8572.1	8488.4	8780.1	8902.5	8788.3	8184.5	7246.1	6636.1	6250.5	6228.1
62.5°	8984.1	8920.9	8843.4	9092.3	9075.9	8810.7	7609.2	6503.5	5687.5	5273.4	5236.7
65°	9263.6	9206.5	9184.1	9379.9	9353.4	8372.1	6713.6	5287.7	4155.5	3688.3	3674.0
67.5°	9343.2	9320.7	9441.1	9773.6	9359.5	7490.9	5265.2	3506.7	2231.8	1789.1	1762.6
70°	9045.3	9043.3	9388.0	9863.4	8510.9	5722.2	3106.9	1581.0	1122.0	995.5	979.2
72.5°	8657.7	8651.6	8925.0	8508.8	6311.7	3131.4	1307.6	846.6	701.8	667.1	667.1
75°	8021.3	8004.9	8211.0	6472.9	3549.6	1179.1	693.6	581.4	550.8	544.7	544.7
77.5°	6538.2	6401.5	6077.1	4000.4	1238.3	579.4	459.0	457.0	438.6	436.6	436.6
80°	2150.2	2150.2	2499.0	1525.9	546.7	357.0	324.4	340.7	322.3	310.1	308.0
82.5°	350.9	483.5	687.5	436.6	295.8	222.4	199.9	212.2	222.4	177.5	177.5
85°	138.7	181.6	265.2	204.0	136.7	89.8	95.9	106.1	93.8	81.6	79.6
87.5°	53.0	65.3	93.8	49.0	28.6	16.3	10.2	10.2	8.2	8.2	8.2
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 ( $\phi$ /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

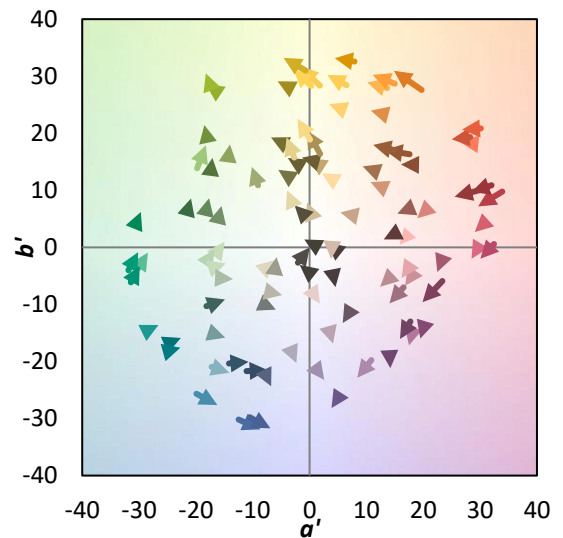
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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)