

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: P639457

Luminaire Tested: GWS-SA5B-830-U-RW-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639457
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-SA5B-830-U-RW-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12434.1 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

Input Watts (W): 115.7
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

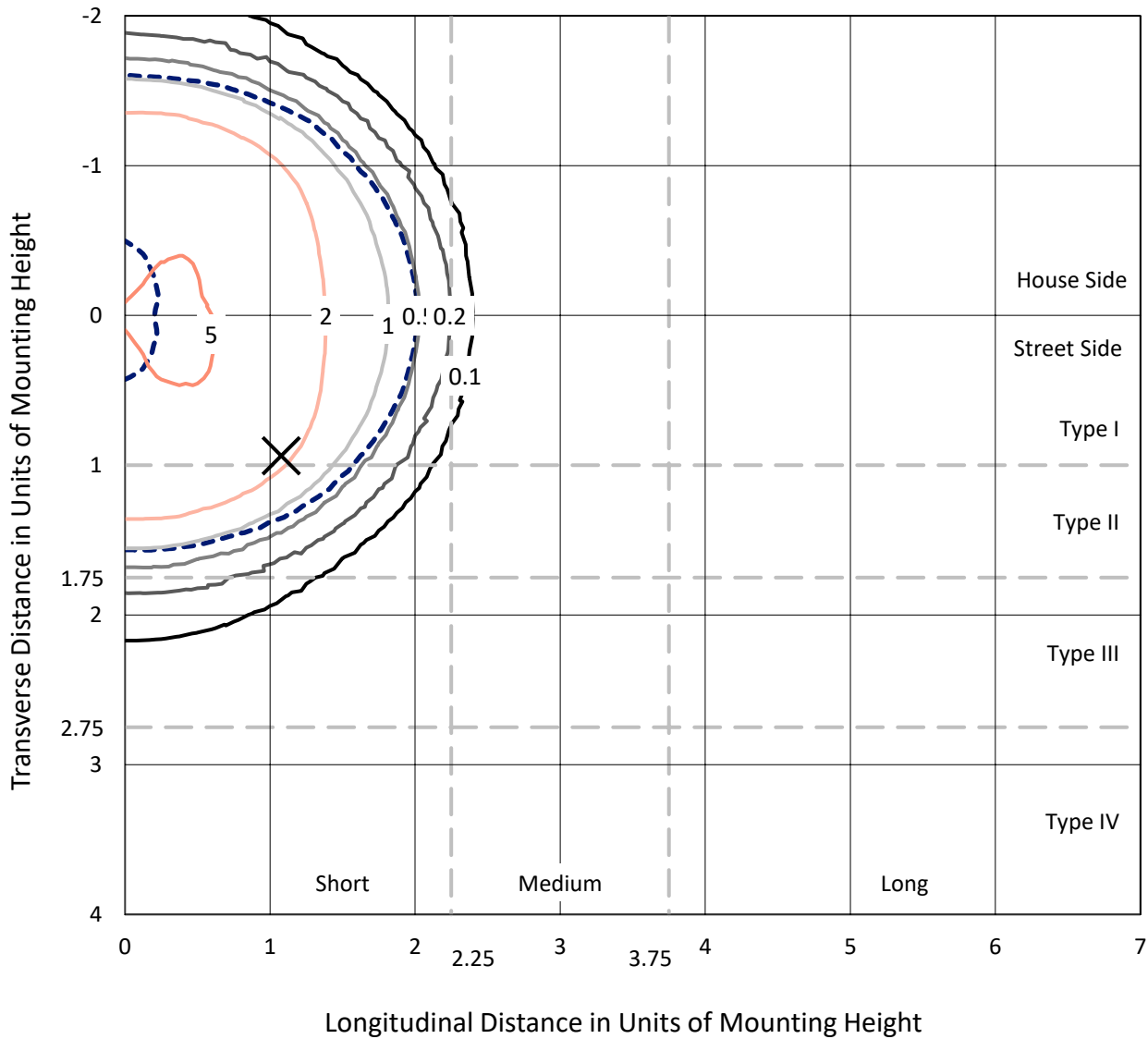


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Iso-Footcandle Lines of Horizontal Illumination

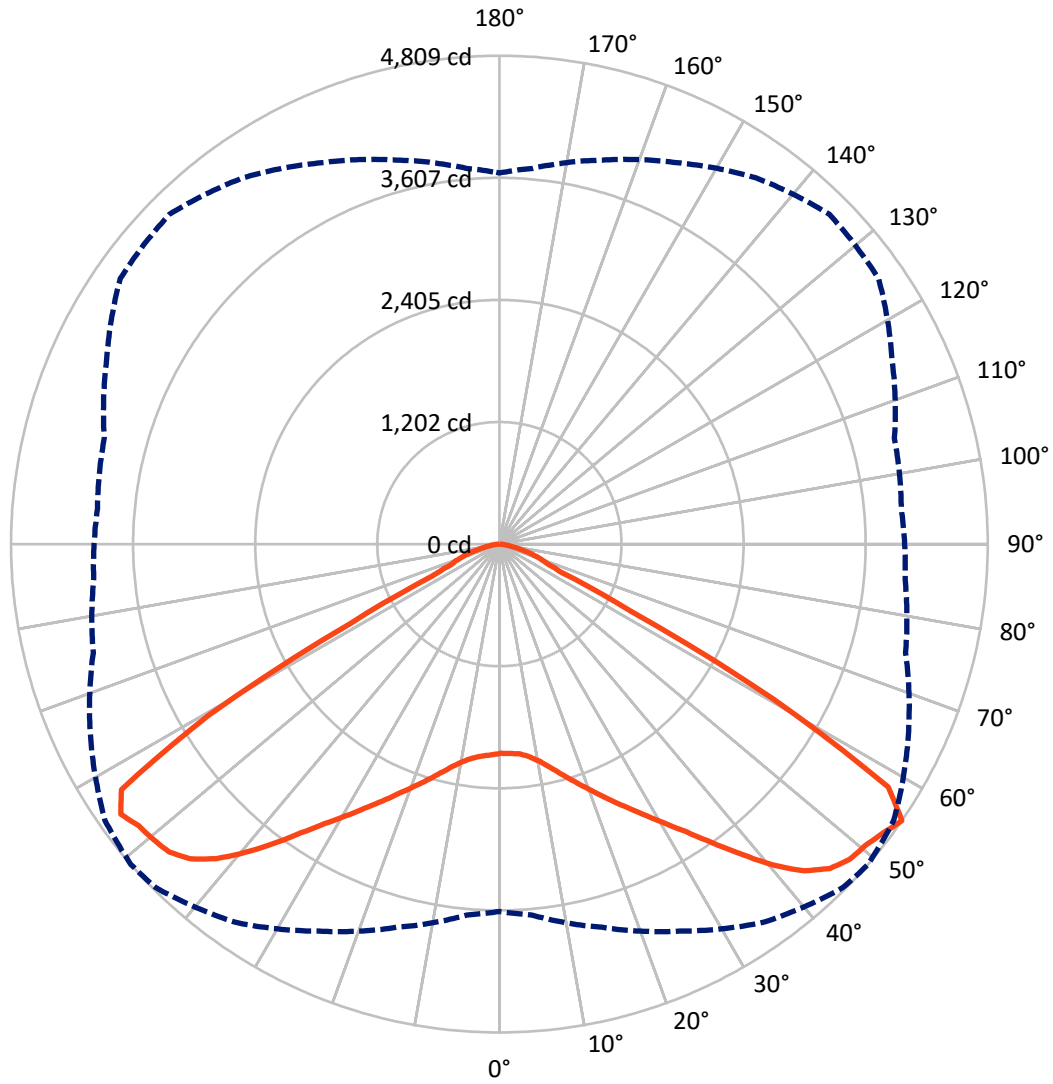
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6156.1	0.0	6156.1
	% Fixture	49.5	0.0	49.5
Street Side	Lumens	6278.0	0.0	6278.0
	% Fixture	50.5	0.0	50.5
Total	Lumens	12434.1	0.0	12434.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.9	1.6
10°-20°	662.8	5.3
20°-30°	1262.4	10.2
30°-40°	2140.0	17.2
40°-50°	3220.5	25.9
50°-60°	3525.2	28.4
60°-70°	1114.7	9.0
70°-80°	267.5	2.2
80°-90°	40.1	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°	12434.1	100.0
0°-180°	12434.1	100.0

Coefficient of Utilization



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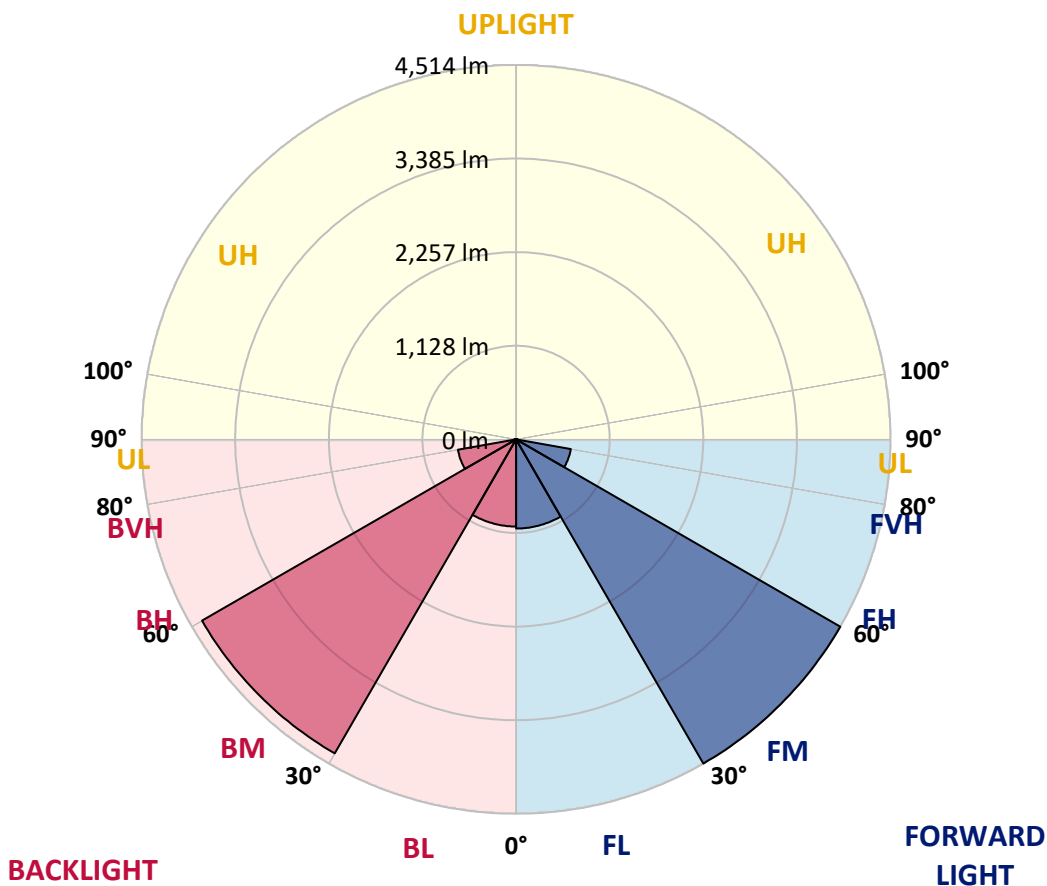
CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1075.0	8.6			
FM (30°-60°)	4513.9	36.3			
FH (60°-80°)	670.5	5.4			G1/1800
FVH (80°-90°)	18.6	0.1			G1/100
BL (0°-30°)	1051.0	8.5	B3/2500		
BM (30°-60°)	4371.8	35.2	B3/5000		
BH (60°-80°)	711.7	5.7	B2/1000		G1/1800
BVH (80°-90°)	21.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0 </tr			

BUG Rating: B3-U0-G1

Type V Short





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CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8
2.5°	2029.4	2031.5	2035.5	2042.6	2049.7	2059.8	2063.8	2068.9	2067.9	2073.9	2073.9
5°	2019.3	2022.4	2028.4	2038.5	2050.7	2069.9	2075.0	2087.1	2099.2	2114.4	2119.4
7.5°	2031.5	2035.5	2042.6	2058.8	2077.0	2102.3	2112.4	2132.6	2155.8	2183.1	2194.3
10°	2054.7	2059.8	2071.9	2098.2	2127.5	2166.0	2175.1	2200.3	2237.8	2275.2	2297.4
12.5°	2081.0	2089.1	2111.4	2152.8	2196.3	2246.9	2261.0	2292.4	2332.8	2381.3	2411.7
15°	2111.4	2118.4	2152.8	2211.5	2279.2	2345.9	2362.1	2392.5	2438.0	2485.5	2528.0
17.5°	2175.1	2187.2	2227.6	2295.4	2374.3	2453.1	2471.3	2505.7	2542.1	2579.5	2620.0
20°	2262.0	2272.1	2323.7	2407.6	2500.7	2572.5	2590.7	2621.0	2638.2	2657.4	2691.8
22.5°	2349.0	2363.1	2421.8	2520.9	2630.1	2708.0	2722.1	2750.4	2738.3	2732.2	2754.5
25°	2457.2	2476.4	2534.0	2642.2	2753.5	2849.5	2860.6	2884.9	2864.7	2833.3	2832.3
27.5°	2591.7	2608.9	2668.5	2779.7	2890.0	2990.1	3011.3	3043.7	2999.2	2960.8	2933.4
30°	2751.4	2762.6	2828.3	2946.6	3059.8	3154.9	3182.2	3214.6	3181.2	3117.5	3090.2
32.5°	2937.5	2952.7	3028.5	3152.9	3254.0	3349.0	3376.3	3416.8	3380.4	3308.6	3274.2
35°	3161.0	3176.1	3256.0	3391.5	3494.7	3592.7	3612.0	3645.3	3599.8	3516.9	3489.6
37.5°	3403.6	3422.9	3524.0	3652.4	3760.6	3874.9	3875.9	3886.0	3821.3	3718.1	3687.8
40°	3676.7	3701.9	3803.1	3936.5	4067.0	4160.0	4159.0	4130.7	4021.5	3861.7	3815.2
42.5°	3946.7	3966.9	4069.0	4206.5	4337.0	4424.9	4398.7	4329.9	4172.1	3954.7	3893.1
45°	4141.8	4157.0	4264.2	4418.9	4551.3	4605.9	4558.4	4475.5	4262.1	4013.4	3922.4
47.5°	4233.8	4254.1	4362.3	4516.0	4665.6	4697.0	4640.3	4562.5	4314.7	4068.0	3945.6
50°	4184.3	4210.6	4332.9	4475.5	4644.4	4709.1	4668.6	4590.8	4370.3	4121.6	3987.1
52.5°	4055.9	4081.1	4235.9	4408.8	4599.9	4728.3	4727.3	4663.6	4434.0	4136.8	3989.1
55°	3617.0	3666.6	3907.2	4205.5	4545.3	4784.9	4809.2	4741.4	4444.2	4140.8	4010.4
57.5°	2354.0	2441.0	2669.5	3057.8	3739.4	4352.1	4516.0	4532.1	4371.4	4123.6	4014.4
60°	982.9	1052.6	1233.6	1491.5	2054.7	2783.8	3101.3	3419.8	3804.1	3943.6	3977.0
62.5°	610.8	616.8	635.0	693.7	881.8	1237.7	1441.9	1740.2	2311.6	2797.9	3022.4
65°	551.1	554.1	558.2	554.1	563.2	606.7	661.3	765.5	998.0	1239.7	1526.9
67.5°	485.4	489.4	492.4	489.4	492.4	494.5	500.5	509.6	552.1	586.5	612.8
70°	392.3	398.4	403.5	401.4	413.6	413.6	419.6	426.7	448.0	473.2	491.4
72.5°	299.3	294.3	300.3	302.3	313.5	319.5	328.6	336.7	361.0	376.2	399.4
75°	194.1	189.1	198.2	203.2	218.4	226.5	234.6	242.7	259.9	270.0	292.2
77.5°	105.2	104.2	113.3	120.3	136.5	146.6	152.7	158.8	172.9	175.9	190.1
80°	60.7	60.7	66.7	71.8	81.9	93.0	99.1	104.2	114.3	117.3	123.4
82.5°	33.4	33.4	36.4	39.4	47.5	53.6	58.6	62.7	71.8	74.8	77.9
85°	16.2	15.2	17.2	19.2	22.2	25.3	28.3	30.3	37.4	39.4	43.5
87.5°	2.0	2.0	2.0	3.0	4.0	6.1	7.1	7.1	11.1	13.1	15.2
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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CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8	2059.8
2.5°	2080.0	2066.9	2075.0	2078.0	2078.0	2075.0	2061.8	2057.8	2051.7	2042.6	2042.6
5°	2126.5	2116.4	2118.4	2113.4	2101.2	2086.1	2061.8	2049.7	2039.6	2028.4	2027.4
7.5°	2206.4	2193.3	2191.2	2172.0	2139.7	2107.3	2070.9	2048.7	2033.5	2019.3	2018.3
10°	2310.6	2298.4	2283.3	2244.8	2197.3	2149.8	2100.2	2069.9	2047.6	2027.4	2026.4
12.5°	2426.8	2412.7	2384.4	2327.7	2268.1	2221.6	2164.9	2118.4	2085.1	2057.8	2052.7
15°	2553.2	2533.0	2484.5	2417.7	2359.1	2309.5	2248.9	2182.1	2131.6	2088.1	2083.0
17.5°	2650.3	2624.0	2571.4	2508.8	2460.2	2410.7	2331.8	2247.9	2175.1	2120.5	2112.4
20°	2717.1	2695.8	2636.2	2589.6	2561.3	2517.9	2425.8	2330.8	2248.9	2180.1	2176.1
22.5°	2778.7	2753.5	2694.8	2667.5	2667.5	2638.2	2550.2	2438.0	2341.9	2262.0	2251.9
25°	2848.5	2821.2	2776.7	2773.7	2787.8	2774.7	2668.5	2548.2	2435.9	2345.9	2329.8
27.5°	2945.6	2915.2	2889.0	2907.2	2927.4	2913.2	2794.9	2655.4	2537.1	2446.1	2431.9
30°	3100.3	3062.9	3038.6	3060.9	3100.3	3058.8	2930.4	2782.8	2663.5	2563.4	2556.3
32.5°	3280.3	3237.8	3212.5	3247.9	3283.3	3218.6	3091.2	2949.6	2824.2	2719.1	2706.9
35°	3496.7	3443.1	3405.7	3453.2	3489.6	3425.9	3299.5	3165.0	3025.5	2916.3	2900.1
37.5°	3688.8	3624.1	3598.8	3665.5	3714.1	3672.6	3535.1	3408.7	3256.0	3136.7	3129.6
40°	3828.3	3764.6	3746.4	3856.7	3941.6	3931.5	3808.1	3663.5	3519.9	3382.4	3369.3
42.5°	3889.0	3844.5	3848.6	3997.2	4128.7	4193.4	4083.2	3928.5	3789.9	3647.3	3638.2
45°	3902.2	3874.9	3907.2	4093.3	4266.2	4398.7	4304.6	4175.2	4018.4	3880.9	3876.9
47.5°	3916.3	3901.2	3950.7	4147.9	4353.2	4506.9	4454.3	4320.8	4162.0	4027.6	4017.4
50°	3949.7	3943.6	3999.2	4186.3	4394.6	4536.2	4476.5	4344.1	4181.3	4048.8	4024.5
52.5°	3959.8	3949.7	4029.6	4246.0	4463.4	4535.2	4406.7	4233.8	4070.0	3922.4	3897.1
55°	3991.1	3972.9	4027.6	4268.2	4558.4	4593.8	4402.7	4143.8	3915.3	3714.1	3654.4
57.5°	3999.2	3979.0	4014.4	4231.8	4455.3	4423.9	3869.8	3344.0	2913.2	2689.8	2715.0
60°	3955.8	3961.8	3901.2	3876.9	3573.5	3154.9	2369.2	1893.9	1487.5	1315.6	1353.0
62.5°	3011.3	3036.6	2829.3	2460.2	1891.9	1499.6	992.0	770.5	652.2	621.9	626.9
65°	1519.8	1554.2	1338.8	1107.2	823.1	665.4	575.4	557.2	551.1	544.0	544.0
67.5°	601.7	611.8	603.7	565.3	525.8	511.7	507.6	505.6	498.5	494.5	495.5
70°	483.3	491.4	479.3	455.0	438.9	437.8	435.8	431.8	426.7	426.7	429.8
72.5°	394.4	402.5	385.3	370.1	358.0	348.9	343.8	340.8	333.7	333.7	336.7
75°	290.2	295.3	281.1	279.1	265.9	256.8	248.8	244.7	235.6	231.6	234.6
77.5°	193.1	192.1	185.0	185.0	180.0	168.9	159.8	150.7	138.5	130.4	132.5
80°	125.4	125.4	122.4	122.4	117.3	108.2	97.1	88.0	80.9	74.8	74.8
82.5°	79.9	78.9	77.9	76.9	74.8	65.7	57.6	51.6	46.5	42.5	43.5
85°	44.5	44.5	42.5	42.5	38.4	33.4	29.3	25.3	22.2	21.2	21.2
87.5°	15.2	15.2	14.2	14.2	12.1	9.1	7.1	6.1	5.1	4.0	5.1
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

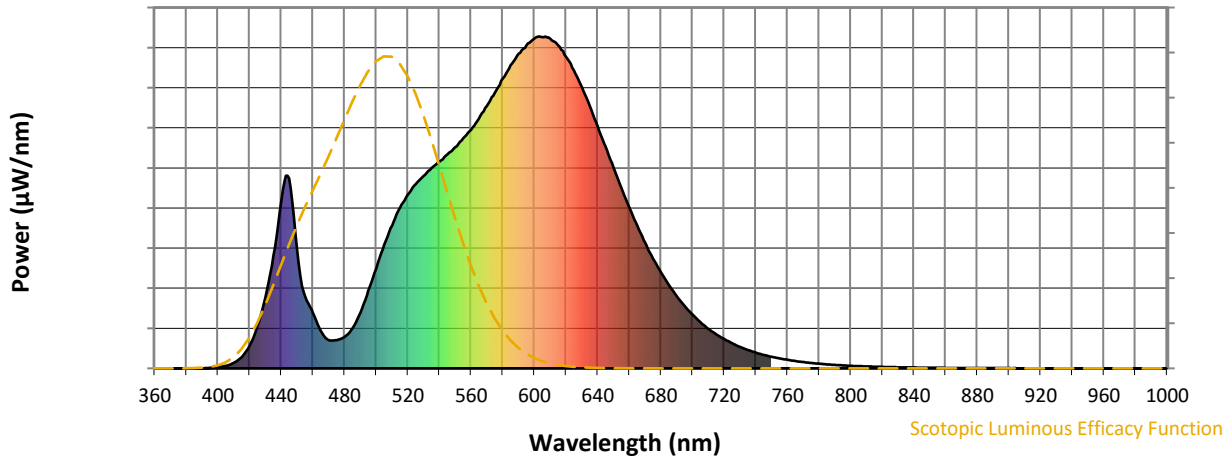


Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /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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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /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 [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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)