

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: P633523

Luminaire Tested: GWS-SA2E-830-U-SL3-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2E-830-U-SL3-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6779.5 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

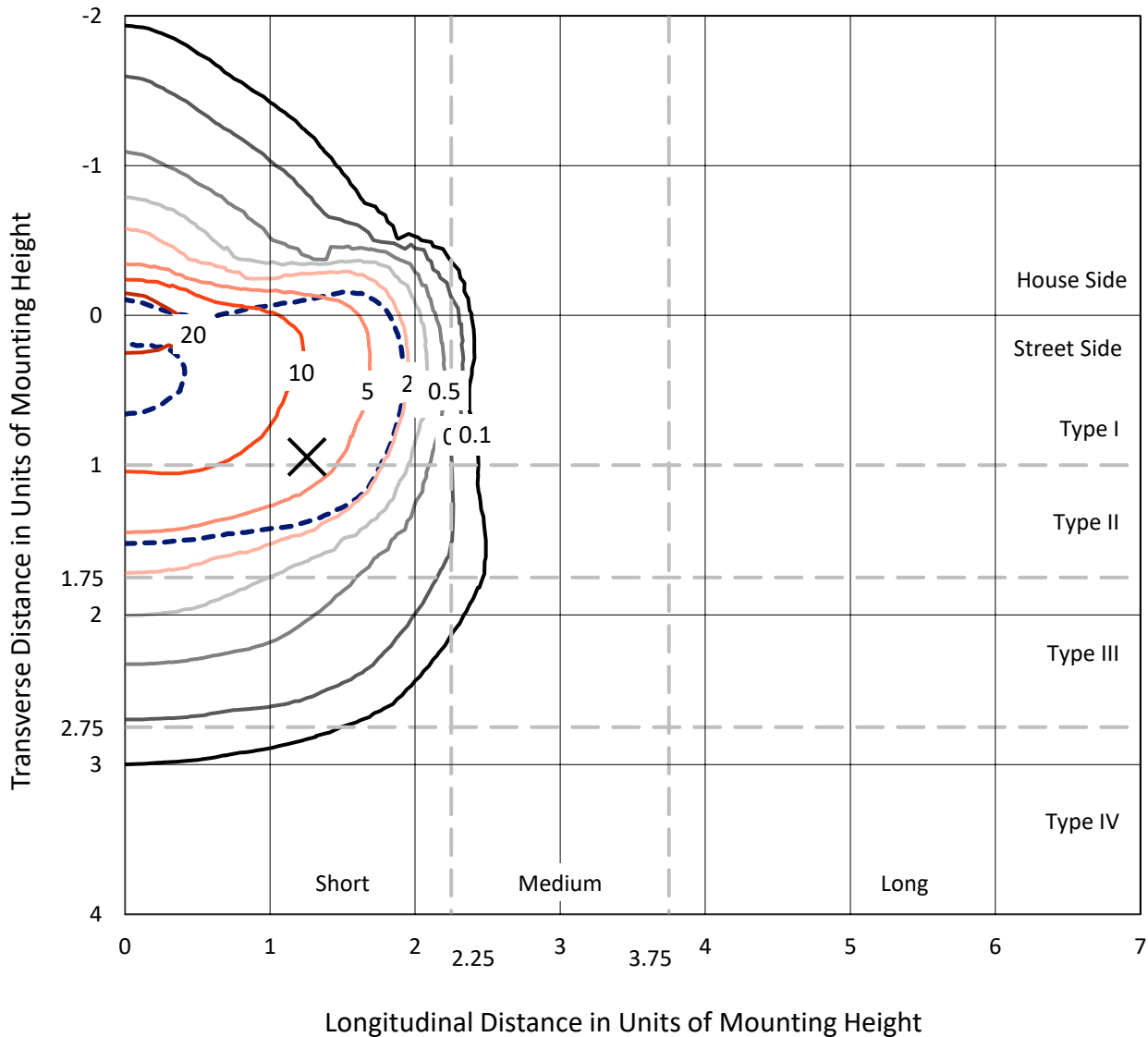
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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 CATALOG NUMBER: GWS-SA2E-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

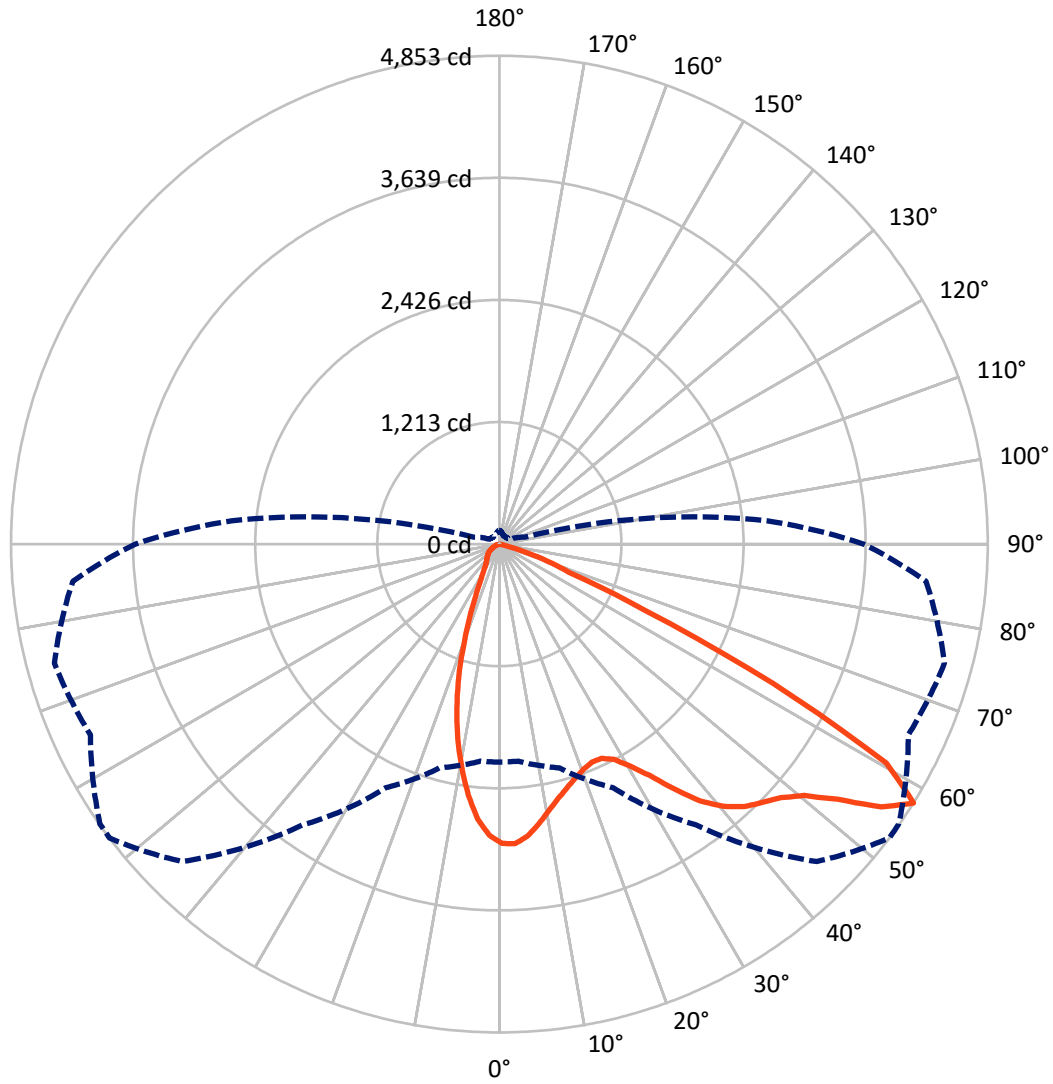
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 29.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1119.9	0.0	1119.9
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	5659.6	0.0	5659.6
	% Fixture	83.5	0.0	83.5
Total	Lumens	6779.5	0.0	6779.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.4	3.8
10°-20°	558.6	8.2
20°-30°	727.7	10.7
30°-40°	1055.5	15.6
40°-50°	1523.1	22.5
50°-60°	1842.0	27.2
60°-70°	750.7	11.1
70°-80°	67.5	1.0
80°-90°	0.0	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°	6779.5	100.0
0°-180°	6779.5	100.0

Coefficient of Utilization



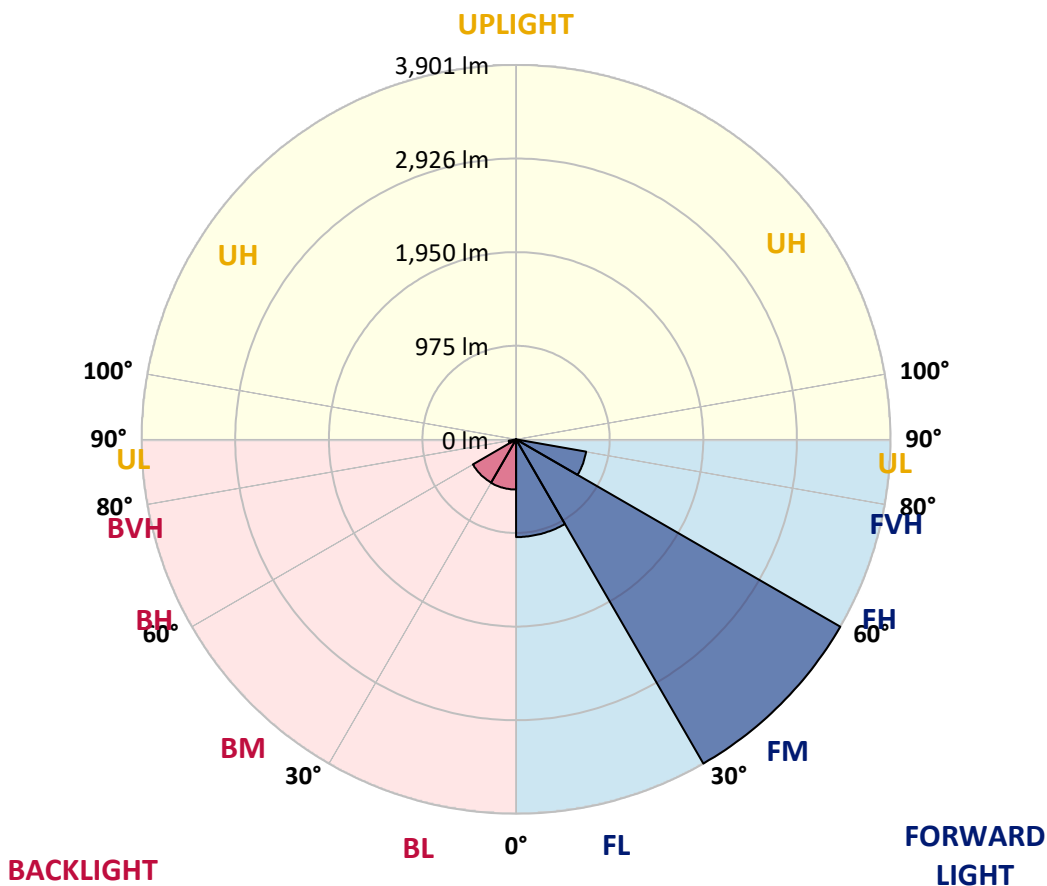
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1018.1	15.0			
FM (30°-60°)	3900.8	57.5			
FH (60°-80°)	740.8	10.9			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	522.7	7.7	B2/1000		
BM (30°-60°)	519.8	7.7	B1/1000		
BH (60°-80°)	77.4	1.1	B0/110		G0/110
BVH (80°-90°)	0.0	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-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9
2.5°	2932.3	2939.0	2950.6	2965.6	2975.5	2980.5	2980.5	2994.6	2985.5	2978.0	2969.7
5°	2806.9	2813.5	2829.3	2853.4	2877.5	2894.9	2914.9	2929.8	2935.7	2935.7	2921.5
7.5°	2629.9	2639.0	2649.0	2682.2	2734.6	2773.6	2807.7	2829.3	2860.9	2870.8	2850.9
10°	2439.6	2448.7	2471.2	2516.9	2576.7	2634.9	2693.0	2720.4	2774.5	2802.7	2780.3
12.5°	2278.4	2282.5	2312.5	2367.3	2443.7	2523.5	2594.1	2622.4	2698.8	2741.2	2714.6
15°	2145.4	2147.9	2177.9	2238.5	2326.6	2424.6	2513.5	2542.6	2636.5	2700.5	2660.6
17.5°	2044.9	2045.7	2071.5	2137.1	2229.4	2338.2	2443.7	2479.5	2600.8	2678.1	2618.2
20°	1994.2	1991.7	2010.0	2067.3	2154.6	2263.4	2388.1	2432.1	2580.8	2674.7	2585.8
22.5°	1995.0	1989.2	1996.7	2037.4	2111.4	2213.6	2353.2	2403.0	2582.5	2688.9	2558.4
25°	2042.4	2034.1	2035.8	2057.4	2109.7	2202.8	2358.2	2411.3	2615.7	2736.2	2548.4
27.5°	2122.2	2113.0	2113.0	2123.8	2152.1	2236.8	2420.5	2481.1	2704.7	2828.5	2569.2
30°	2225.2	2216.1	2212.7	2223.6	2246.8	2324.9	2559.2	2622.4	2856.7	2979.7	2635.7
32.5°	2343.2	2332.4	2338.2	2353.2	2375.6	2483.6	2737.9	2821.8	3047.0	3183.3	2755.3
35°	2467.8	2458.7	2485.3	2517.7	2552.6	2703.8	2984.7	3057.8	3280.5	3436.7	2938.1
37.5°	2586.7	2582.5	2638.2	2706.3	2778.6	2968.1	3235.6	3292.1	3480.7	3712.6	3161.7
40°	2705.5	2704.7	2800.2	2919.9	3035.4	3231.5	3425.9	3472.4	3602.9	3926.9	3376.0
42.5°	2838.4	2838.4	2970.6	3130.1	3283.8	3454.1	3565.5	3586.3	3657.7	4050.8	3537.2
45°	2965.6	2973.0	3125.9	3311.2	3493.2	3627.8	3661.9	3663.5	3680.2	4123.9	3671.0
47.5°	3066.1	3072.8	3255.6	3469.1	3665.2	3759.9	3764.9	3757.4	3739.2	4193.7	3774.1
50°	3147.5	3157.5	3348.6	3574.6	3783.2	3887.1	3925.3	3917.8	3871.3	4268.5	3846.3
52.5°	3187.4	3201.5	3381.0	3627.0	3914.5	4104.8	4211.1	4228.6	4069.0	4310.0	3915.3
55°	2868.3	2889.1	3054.5	3391.0	3987.6	4441.3	4608.3	4605.0	4283.4	4433.8	4083.2
57.5°	2166.2	2164.6	2301.7	2669.8	3406.0	4460.4	4852.6	4845.9	4483.7	4577.6	4255.2
60°	1474.9	1464.9	1501.5	1679.3	2381.4	3633.6	4416.4	4506.1	4341.6	4228.6	3612.9
62.5°	1214.0	1204.8	1193.2	1144.2	1367.7	2263.4	3051.2	3187.4	3165.8	2939.0	2265.9
65°	993.8	1001.3	1033.7	1012.9	951.4	1160.8	1583.7	1664.3	1521.4	1280.5	791.9
67.5°	732.9	736.2	778.6	888.3	855.0	772.8	745.3	758.6	444.5	204.4	132.1
70°	432.9	435.4	474.5	621.5	693.8	593.3	503.5	496.1	176.2	54.8	59.8
72.5°	245.1	240.1	247.6	295.8	378.1	314.9	259.2	236.0	53.2	30.7	30.7
75°	116.3	113.0	97.2	91.4	83.1	53.2	33.2	28.3	13.3	12.5	12.5
77.5°	0.8	2.5	1.7	2.5	2.5	1.7	0.8	0.8	2.5	2.5	3.3
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



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 CATALOG NUMBER: GWS-SA2E-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9	2973.9
2.5°	2954.8	2929.8	2924.0	2922.4	2899.1	2874.2	2848.4	2838.4	2823.5	2814.3	2821.8
5°	2899.1	2863.4	2831.8	2802.7	2751.2	2694.7	2645.7	2614.1	2584.2	2564.2	2569.2
7.5°	2820.2	2773.6	2701.3	2627.4	2532.7	2447.9	2353.2	2295.0	2241.0	2211.1	2225.2
10°	2736.2	2674.7	2559.2	2433.8	2285.0	2152.1	2016.7	1906.1	1842.2	1781.5	1788.1
12.5°	2654.0	2572.5	2399.7	2209.4	2021.6	1825.5	1621.1	1468.2	1363.5	1287.9	1276.3
15°	2577.5	2472.8	2244.3	1993.4	1737.5	1476.6	1215.6	997.1	875.8	801.0	796.0
17.5°	2509.4	2379.8	2083.1	1767.4	1446.6	1112.6	812.6	649.0	579.2	546.7	543.4
20°	2443.7	2285.9	1918.6	1538.0	1129.2	781.1	560.9	485.3	462.8	449.5	451.2
22.5°	2380.6	2183.7	1745.8	1283.8	846.7	548.4	434.6	405.5	403.0	404.7	405.5
25°	2327.4	2089.8	1568.0	1038.7	604.1	418.0	363.1	354.8	362.3	373.1	374.7
27.5°	2300.0	2013.3	1394.3	791.9	437.1	339.8	314.9	318.2	331.5	343.2	344.8
30°	2307.5	1956.0	1214.8	574.2	336.5	286.7	278.4	285.0	298.3	309.1	310.8
32.5°	2360.7	1926.9	1031.2	418.0	276.7	250.1	246.8	251.8	263.4	271.7	272.5
35°	2466.2	1933.6	856.7	319.9	237.6	222.7	221.9	225.2	231.0	236.8	237.6
37.5°	2621.6	1987.6	684.7	265.9	215.2	204.4	201.1	201.1	205.2	207.7	209.4
40°	2788.6	2069.0	548.4	235.2	199.4	187.8	181.1	178.6	182.0	185.3	186.1
42.5°	2926.5	2150.4	445.4	213.5	187.0	171.2	162.9	161.2	165.4	171.2	172.8
45°	3032.0	2213.6	371.4	196.1	172.8	155.4	146.2	146.2	153.7	163.7	165.4
47.5°	3128.4	2264.3	316.6	180.3	159.5	141.3	132.1	133.8	146.2	159.5	162.0
50°	3194.1	2305.0	275.9	166.2	148.7	129.6	121.3	124.6	139.6	155.4	157.9
52.5°	3264.7	2354.8	249.3	153.7	138.8	120.5	113.0	115.5	132.1	149.6	152.9
55°	3460.0	2521.9	248.4	137.1	121.3	108.0	104.7	105.5	122.1	142.1	146.2
57.5°	3619.5	2668.9	265.1	115.5	101.4	94.7	93.1	93.9	108.9	131.3	136.3
60°	2994.6	2074.0	219.4	95.6	84.8	83.1	80.6	82.3	96.4	116.3	120.5
62.5°	1772.4	1185.7	104.7	73.1	72.3	70.6	68.1	71.5	84.8	102.2	104.7
65°	605.7	351.5	66.5	59.8	61.5	59.0	56.5	59.8	71.5	81.4	82.3
67.5°	116.3	93.1	53.2	49.9	50.7	45.7	44.9	48.2	54.8	56.5	55.7
70°	60.7	54.0	40.7	40.7	39.1	32.4	32.4	35.7	35.7	33.2	32.4
72.5°	31.6	29.9	26.6	29.9	24.9	19.9	19.9	21.6	19.9	16.6	16.6
75°	12.5	12.5	11.6	15.0	10.8	9.1	8.3	10.0	7.5	5.8	5.8
77.5°	3.3	3.3	3.3	4.2	2.5	2.5	1.7	1.7	0.8	0.0	0.0
80°	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

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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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

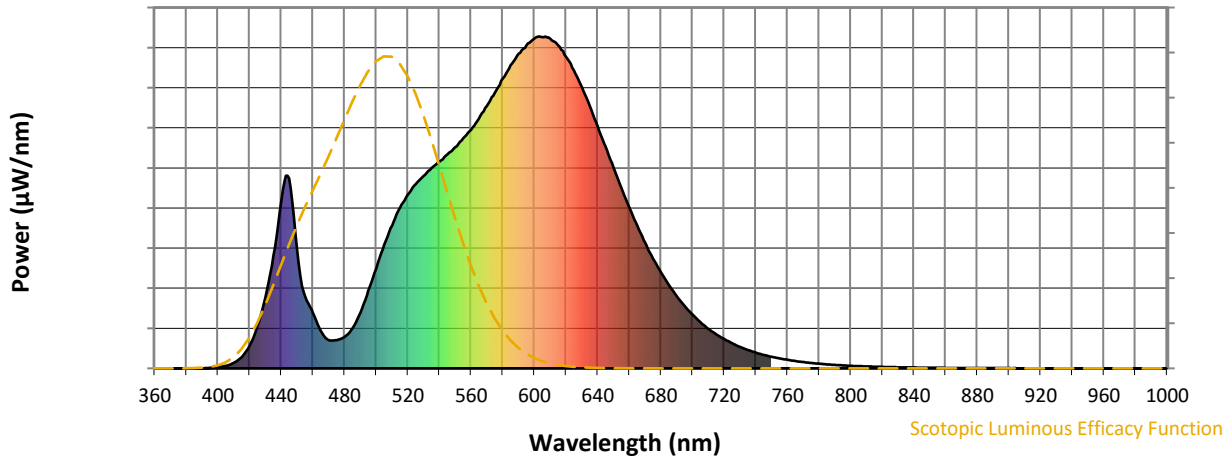


Photopic Lumens: NR

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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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)