

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: P636991

Luminaire Tested: GWS-SA4B-830-U-SL3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4B-830-U-SL3-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11266.2 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

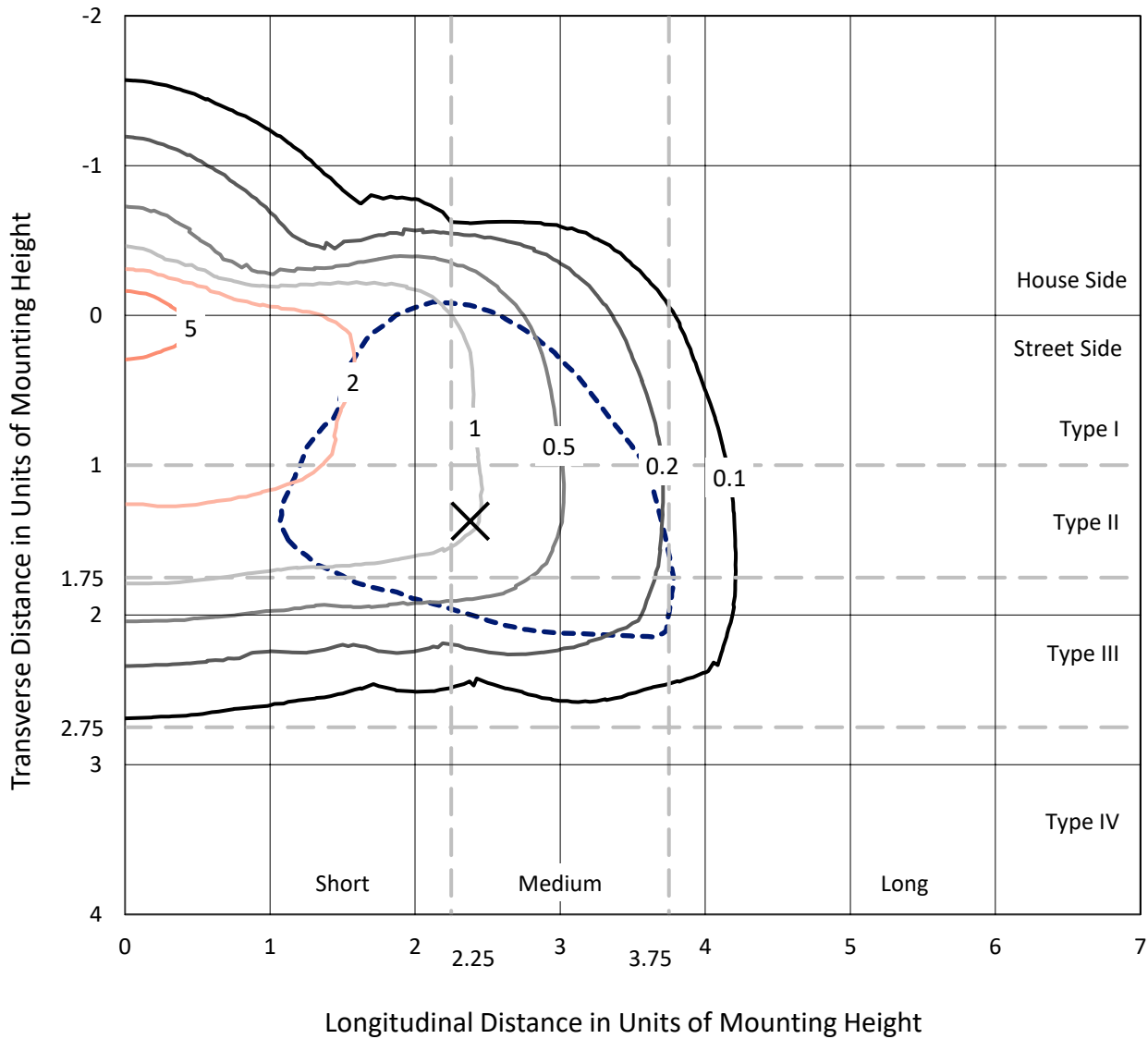
Input Watts (W): 94.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

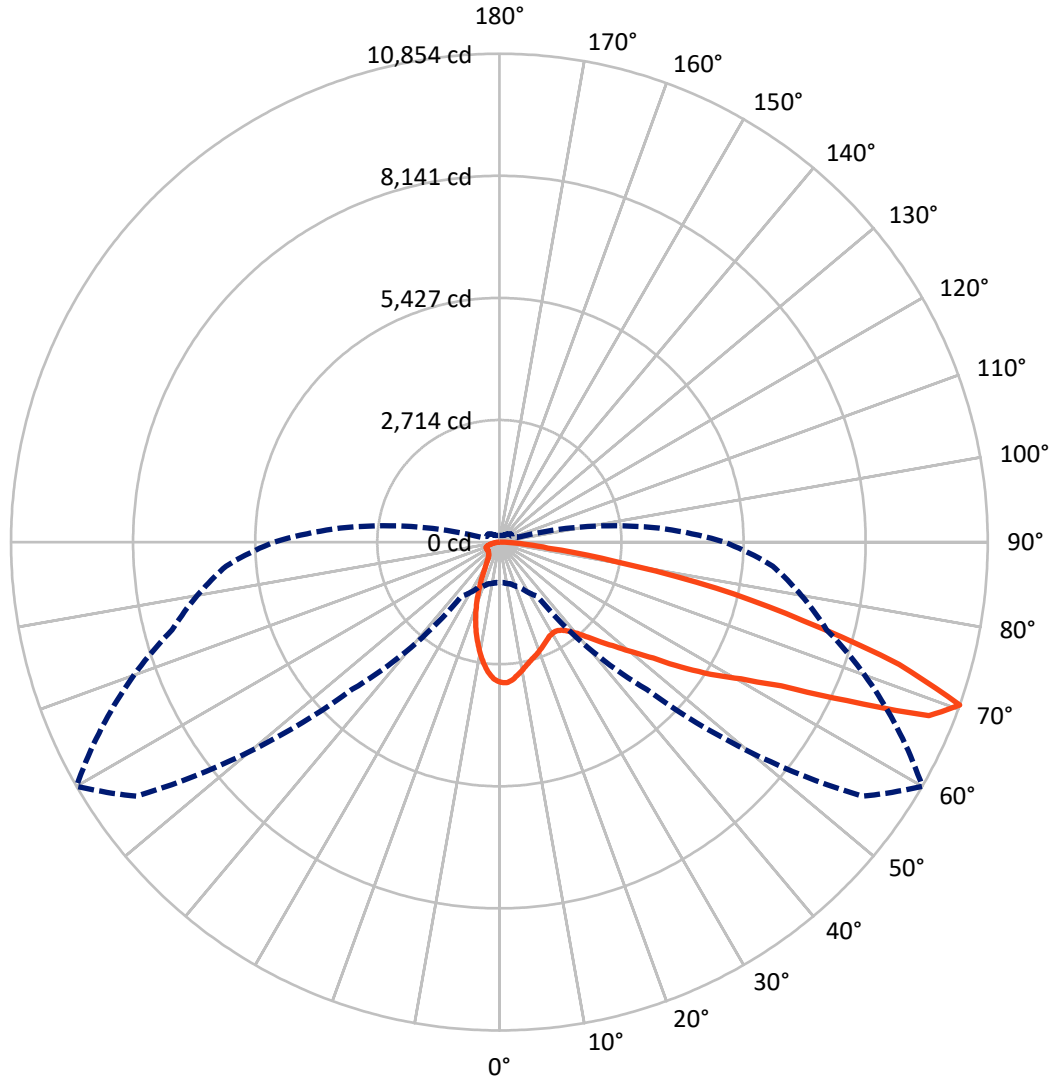
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1926.8	0.0	1926.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	9339.4	0.0	9339.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	11266.2	0.0	11266.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.7	2.4
10°-20°	602.0	5.3
20°-30°	771.0	6.8
30°-40°	1013.2	9.0
40°-50°	1470.1	13.0
50°-60°	2293.6	20.4
60°-70°	3002.8	26.7
70°-80°	1660.5	14.7
80°-90°	184.3	1.6
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°	11266.2	100.0
0°-180°	11266.2	100.0

Coefficient of Utilization



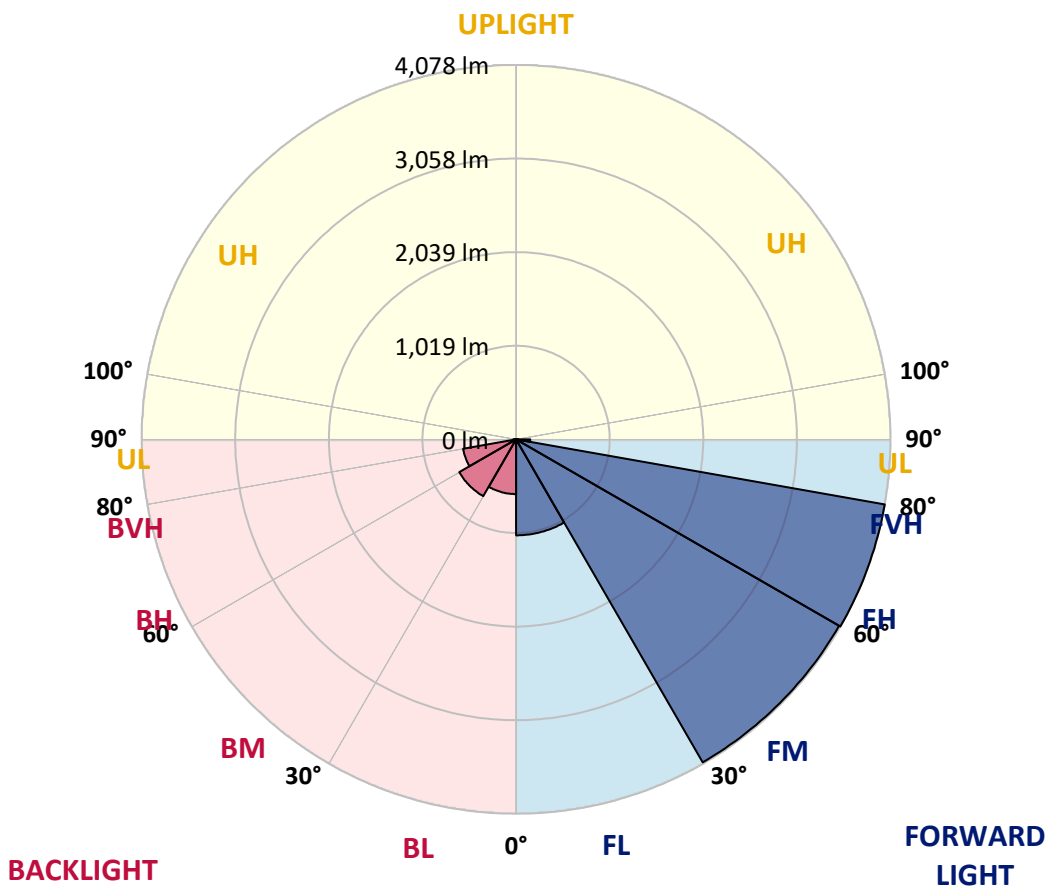
REPORT NUMBER: P636991

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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°)	1045.6	9.3			
FM (30°-60°)	4062.6	36.1			
FH (60°-80°)	4077.7	36.2			G2/5000
FVH (80°-90°)	153.5	1.4			G2/225
BL (0°-30°)	596.1	5.3	B2/1000		
BM (30°-60°)	714.4	6.3	B1/1000		
BH (60°-80°)	585.5	5.2	B2/1000		G2/1000
BVH (80°-90°)	30.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type III Medium





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 CATALOG NUMBER: GWS-SA4B-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5
2.5°	3073.8	3077.1	3086.2	3099.4	3112.6	3119.2	3135.6	3130.7	3127.4	3120.8	3112.6
5°	2937.8	2944.4	2952.6	2978.2	3007.0	3030.1	3067.2	3071.3	3073.0	3076.3	3063.1
7.5°	2764.7	2766.4	2786.1	2819.9	2857.8	2897.4	2959.2	2976.5	2991.4	3007.9	2997.2
10°	2573.5	2577.6	2592.4	2641.1	2706.2	2764.7	2848.0	2876.8	2908.1	2944.4	2929.6
12.5°	2416.8	2417.7	2441.6	2493.5	2564.4	2643.5	2747.4	2782.0	2823.2	2880.1	2866.9
15°	2292.4	2292.4	2314.6	2359.1	2440.8	2533.9	2657.5	2702.1	2758.1	2834.8	2811.7
17.5°	2193.5	2194.3	2208.3	2255.3	2327.8	2430.9	2577.6	2637.8	2699.6	2801.0	2766.4
20°	2141.5	2137.4	2139.9	2168.7	2230.6	2330.3	2497.6	2567.7	2650.9	2777.9	2725.1
22.5°	2139.1	2131.6	2120.9	2123.4	2159.7	2242.1	2411.9	2496.8	2601.5	2758.9	2683.1
25°	2181.1	2172.9	2153.9	2132.5	2129.2	2178.6	2331.1	2427.6	2550.4	2750.7	2642.7
27.5°	2252.0	2246.2	2221.5	2189.3	2155.5	2153.9	2270.1	2370.7	2513.3	2758.9	2613.9
30°	2346.0	2336.1	2320.4	2279.2	2228.1	2175.3	2246.2	2340.2	2488.6	2785.3	2601.5
32.5°	2452.3	2446.5	2431.7	2390.5	2336.1	2252.0	2265.2	2346.8	2488.6	2831.5	2604.0
35°	2565.2	2564.4	2564.4	2537.2	2477.0	2372.3	2340.2	2402.8	2526.5	2905.7	2630.3
37.5°	2674.9	2674.0	2700.4	2710.3	2641.9	2529.0	2468.0	2514.9	2609.7	3015.3	2695.5
40°	2763.9	2767.2	2824.9	2874.3	2836.4	2731.7	2646.0	2669.9	2744.9	3171.1	2809.2
42.5°	2853.7	2862.8	2949.3	3036.7	3051.6	2960.9	2874.3	2888.3	2938.6	3377.2	2979.0
45°	2951.8	2955.9	3077.1	3199.1	3270.8	3217.2	3146.4	3165.3	3176.9	3631.9	3232.1
47.5°	3046.6	3057.3	3213.9	3381.3	3517.3	3512.3	3472.8	3467.0	3469.5	3941.8	3531.3
50°	3176.0	3191.7	3375.5	3577.5	3776.9	3868.4	3880.0	3836.3	3818.2	4286.4	3903.9
52.5°	3421.7	3421.7	3586.5	3785.2	4053.1	4279.8	4357.3	4285.5	4227.8	4650.7	4299.5
55°	3729.1	3742.3	3873.4	4034.1	4373.7	4712.5	4974.7	4895.5	4732.3	5047.2	4714.2
57.5°	3866.0	3882.5	4090.2	4339.9	4793.3	5204.6	5568.1	5540.1	5301.9	5459.3	5144.5
60°	3618.7	3653.3	3939.3	4358.1	5173.3	5998.4	6254.8	6173.2	5832.7	5892.1	5611.0
62.5°	3018.6	3056.5	3373.9	3958.3	5120.6	6856.5	7337.1	7036.2	6495.5	6438.6	6232.5
65°	1801.1	1799.4	2181.1	2955.9	4470.2	7094.8	9050.0	8488.6	7519.3	7188.7	6872.2
67.5°	1145.0	1142.5	1222.4	1566.2	2974.9	6511.1	10151.3	10297.2	8909.9	7740.2	6924.9
70°	903.4	902.6	960.3	1116.9	1471.4	4633.4	9844.6	10854.4	9749.8	7530.0	6097.3
72.5°	658.6	660.3	749.3	935.6	1135.1	2326.2	7971.8	9287.4	8967.6	6647.2	4949.9
75°	473.1	475.6	529.2	716.3	1046.9	1271.9	5301.1	6983.5	6822.7	5328.3	3405.2
77.5°	300.9	304.2	351.2	502.0	845.7	1027.1	3213.9	4930.1	4539.4	3002.1	1210.9
80°	183.8	194.5	234.1	374.2	675.9	770.7	1606.6	2597.4	2273.4	823.5	407.2
82.5°	94.8	103.0	141.0	231.6	465.7	676.8	909.2	1091.4	704.0	344.6	216.8
85°	29.7	34.6	49.5	94.0	221.7	419.6	601.7	542.4	323.1	162.4	100.6
87.5°	7.4	7.4	8.2	8.2	9.1	19.0	116.2	122.8	85.7	51.1	41.2
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-SA4B-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5	3117.5
2.5°	3096.1	3076.3	3068.0	3067.2	3046.6	3016.9	2997.2	2983.1	2974.9	2973.3	2973.3
5°	3040.8	3015.3	2981.5	2955.9	2900.7	2844.7	2797.7	2771.3	2740.8	2736.7	2735.9
7.5°	2967.5	2930.4	2866.1	2794.4	2697.9	2604.8	2525.7	2472.1	2418.5	2408.6	2405.3
10°	2888.3	2838.1	2728.4	2602.3	2458.1	2318.8	2197.6	2102.8	2040.1	1995.6	1987.4
12.5°	2810.0	2743.3	2582.5	2394.6	2196.8	2006.3	1824.2	1669.2	1557.1	1492.0	1480.4
15°	2736.7	2643.5	2423.4	2183.6	1926.4	1665.9	1407.9	1206.8	1049.3	993.3	980.1
17.5°	2669.9	2553.7	2269.3	1965.1	1644.5	1304.0	1010.6	831.7	739.4	711.4	704.8
20°	2603.1	2461.4	2112.7	1735.2	1345.3	963.6	738.6	654.5	619.9	609.2	605.9
22.5°	2531.4	2360.0	1942.1	1508.5	1042.7	721.3	604.2	567.1	556.4	557.2	556.4
25°	2459.7	2256.9	1763.2	1262.0	776.5	585.3	527.6	513.5	516.0	523.4	525.1
27.5°	2400.4	2165.4	1587.6	991.6	606.7	503.6	476.4	475.6	484.7	494.6	496.2
30°	2357.5	2083.8	1414.5	762.5	499.5	447.6	436.9	441.8	452.5	460.0	462.4
32.5°	2327.0	2013.8	1229.9	599.3	437.7	408.0	403.1	408.0	414.6	422.0	423.7
35°	2316.3	1962.7	1048.5	488.8	395.7	379.2	375.9	378.4	381.7	385.8	387.4
37.5°	2340.2	1937.1	858.9	425.3	370.1	360.2	355.3	353.6	354.4	356.1	356.9
40°	2411.1	1948.6	704.0	388.2	353.6	344.6	336.3	333.0	332.2	333.8	333.0
42.5°	2533.1	1997.3	591.8	366.8	340.4	327.2	318.2	314.9	314.9	319.0	319.0
45°	2711.9	2092.9	511.1	351.2	328.9	312.4	302.5	300.9	304.2	310.8	311.6
47.5°	2974.1	2233.0	462.4	339.6	318.2	299.2	289.3	288.5	295.1	305.8	306.6
50°	3284.8	2435.0	436.1	331.4	310.8	288.5	278.6	279.4	286.9	298.4	300.9
52.5°	3659.1	2710.3	437.7	328.1	306.6	281.9	272.0	270.4	277.8	289.3	291.8
55°	4045.7	3045.0	469.9	328.9	300.9	278.6	265.4	259.7	266.2	274.5	275.3
57.5°	4471.0	3422.5	549.8	327.2	293.5	275.3	259.7	246.5	250.6	255.5	258.0
60°	4950.7	3866.8	722.1	330.5	290.2	267.9	248.1	230.8	230.0	233.3	234.1
62.5°	5592.1	4471.0	915.8	336.3	297.6	258.8	230.8	212.7	209.4	211.0	211.8
65°	6082.5	4759.5	854.8	331.4	313.2	252.2	214.3	195.4	188.8	187.1	187.1
67.5°	5883.0	4377.9	595.1	318.2	320.7	253.1	201.1	177.2	169.0	164.9	164.0
70°	5006.0	3556.0	413.8	305.0	312.4	251.4	187.1	162.4	151.7	145.9	145.1
72.5°	3955.0	2715.2	334.7	278.6	283.6	226.7	166.5	145.9	136.8	129.4	129.4
75°	2545.4	1656.8	279.4	248.1	231.6	176.4	144.3	130.2	121.2	113.8	113.8
77.5°	856.4	614.9	216.8	210.2	173.1	132.7	121.2	112.1	104.7	98.1	97.3
80°	347.9	291.8	159.1	159.1	121.2	101.4	94.8	90.7	85.7	77.5	77.5
82.5°	202.0	177.2	111.3	96.4	80.8	70.1	65.9	61.8	61.8	56.1	56.1
85°	97.3	98.1	66.8	59.3	46.2	40.4	38.7	36.3	35.4	32.1	31.3
87.5°	52.8	53.6	33.8	26.4	18.1	15.7	13.2	12.4	11.5	10.7	10.7
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			

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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)