

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: P639992

Luminaire Tested: GWS-SA5C-830-U-T4W-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5C-830-U-T4W-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18754.3 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

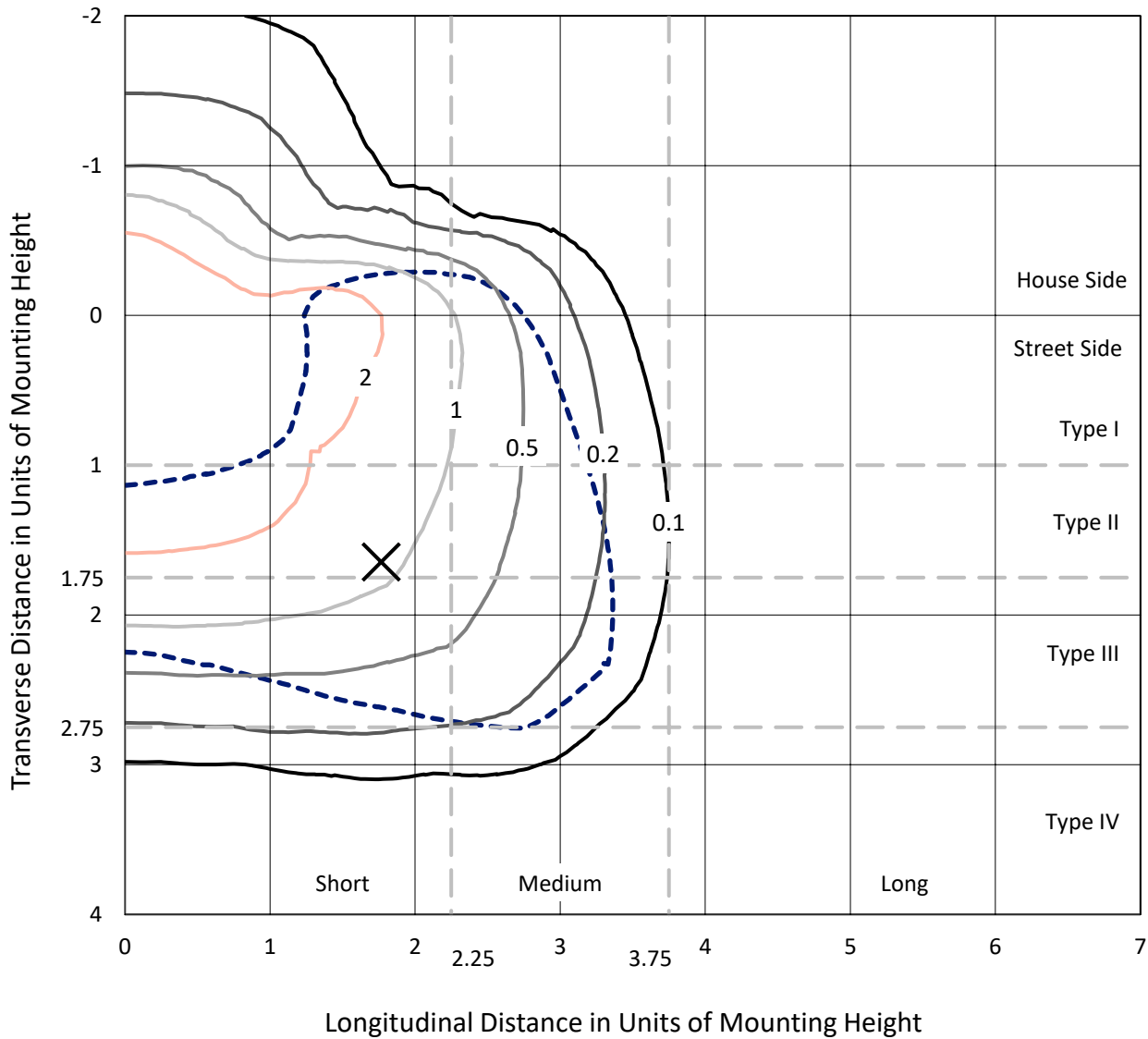
Input Watts (W): 157.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639992
 CATALOG NUMBER: GWS-SA5C-830-U-T4W-W

Iso-Footcandle Lines of Horizontal Illumination

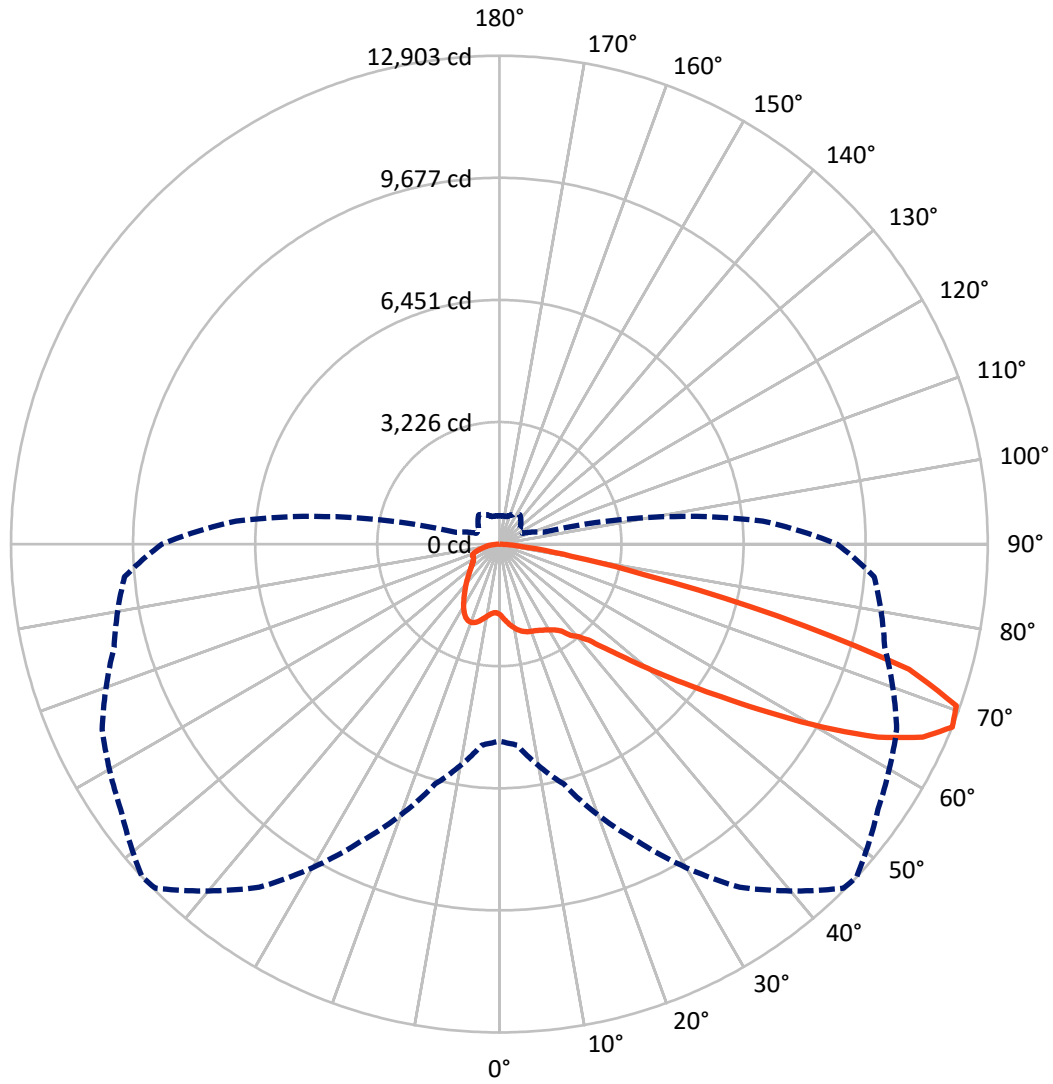
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type III - Short - N/A

REPORT NUMBER: P639992
CATALOG NUMBER: GWS-SA5C-830-U-T4W-W

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P639992

CATALOG NUMBER: GWS-SA5C-830-U-T4W-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4274.2	0.0	4274.2
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	14480.1	0.0	14480.1
	% Fixture	77.2	0.0	77.2
Total	Lumens	18754.3	0.0	18754.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.0	1.0
10°-20°	633.0	3.4
20°-30°	1076.0	5.7
30°-40°	1576.2	8.4
40°-50°	2401.5	12.8
50°-60°	4296.9	22.9
60°-70°	5733.7	30.6
70°-80°	2592.9	13.8
80°-90°	254.0	1.4
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°	18754.3	100.0
0°-180°	18754.3	100.0

Coefficient of Utilization



REPORT NUMBER: P639992

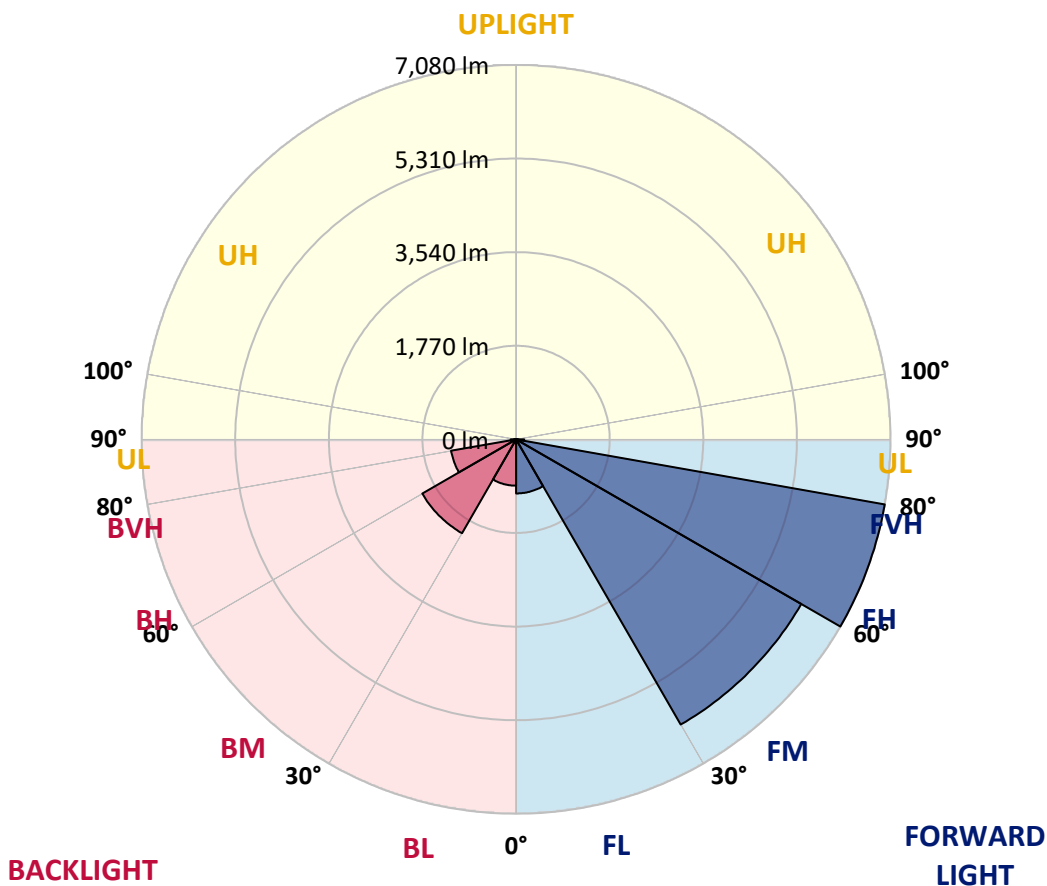
CATALOG NUMBER: GWS-SA5C-830-U-T4W-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1022.8	5.5			
FM (30°-60°)	6226.6	33.2			
FH (60°-80°)	7079.5	37.7			G3/7500
FVH (80°-90°)	151.1	0.8			G2/225
BL (0°-30°)	876.2	4.7	B2/1000		
BM (30°-60°)	2048.0	10.9	B2/2500		
BH (60°-80°)	1247.1	6.6	B3/2500		G3/2500
BVH (80°-90°)	102.9	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





REPORT NUMBER: P639992
 CATALOG NUMBER: GWS-SA5C-830-U-T4W-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1
2.5°	1982.5	1989.3	1988.0	1977.1	1970.3	1958.1	1959.5	1940.5	1912.0	1893.0	1871.3
5°	2157.5	2168.3	2154.8	2137.1	2110.0	2070.7	2066.6	2023.2	1969.0	1931.0	1891.7
7.5°	2309.4	2316.1	2299.9	2270.0	2230.7	2177.8	2168.3	2116.8	2049.0	1989.3	1932.4
10°	2427.3	2435.5	2413.8	2374.4	2322.9	2270.0	2263.2	2210.4	2138.5	2068.0	1996.1
12.5°	2527.7	2530.4	2507.3	2454.5	2398.9	2344.6	2337.8	2289.0	2222.6	2150.7	2072.0
15°	2586.0	2587.3	2558.9	2500.6	2447.7	2400.2	2396.1	2354.1	2293.1	2225.3	2141.2
17.5°	2581.9	2584.6	2564.3	2512.8	2466.7	2438.2	2434.1	2407.0	2359.5	2298.5	2214.4
20°	2531.7	2534.5	2520.9	2487.0	2462.6	2454.5	2455.8	2447.7	2419.2	2369.0	2283.6
22.5°	2492.4	2496.5	2484.3	2459.9	2457.2	2476.1	2480.2	2484.3	2470.7	2426.0	2343.3
25°	2511.4	2518.2	2499.2	2465.3	2470.7	2512.8	2520.9	2534.5	2523.6	2485.6	2413.8
27.5°	2642.9	2647.0	2598.2	2529.0	2512.8	2557.5	2569.7	2591.4	2583.3	2548.0	2492.4
30°	2948.1	2945.3	2840.9	2671.4	2603.6	2621.2	2630.7	2661.9	2664.6	2641.6	2588.7
32.5°	3377.9	3364.4	3203.0	2933.1	2736.5	2693.1	2704.0	2746.0	2777.2	2752.8	2680.9
35°	3832.2	3820.0	3642.4	3326.4	2982.0	2831.4	2819.2	2851.8	2899.2	2831.4	2728.4
37.5°	4264.8	4245.8	4064.1	3673.5	3284.4	3074.2	3056.5	3024.0	2995.5	2865.3	2786.7
40°	4744.8	4723.1	4564.5	4122.4	3617.9	3259.9	3215.2	3086.4	3060.6	2977.9	2938.6
42.5°	5257.4	5257.4	5125.9	4690.6	4020.7	3525.7	3467.4	3273.5	3300.6	3246.4	3200.3
45°	5770.0	5784.9	5680.5	5262.8	4559.0	4027.5	3933.9	3658.6	3723.7	3699.3	3676.3
47.5°	6206.6	6235.1	6214.8	5847.3	5218.1	4637.7	4495.3	4209.2	4348.9	4407.2	4472.3
50°	6677.2	6708.4	6688.0	6542.9	5989.7	5376.7	5249.3	4953.7	5193.7	5368.6	5581.5
52.5°	7375.6	7420.3	7250.8	7195.2	6926.7	6216.1	6102.2	5765.9	6201.2	6491.4	6966.0
55°	7965.4	7964.1	7904.4	8031.9	7932.9	7242.7	7116.6	6811.4	7367.4	7675.2	8369.5
57.5°	8239.4	8271.9	8476.7	8837.4	9035.4	8497.0	8376.3	8064.4	8619.1	8779.1	9529.0
60°	8380.4	8421.1	8817.0	9530.3	10063.2	9866.6	9819.2	9421.8	9733.7	9714.7	10506.7
62.5°	8182.4	8263.8	8899.8	9847.6	10796.9	11243.0	11228.1	10627.4	10681.6	10495.8	11112.8
65°	7273.9	7362.0	8360.0	9689.0	11215.9	12289.9	12293.9	11719.0	11409.8	10875.5	11011.1
67.5°	5201.8	5327.9	6561.9	8669.2	11068.1	12855.4	12902.8	12213.9	11580.7	10539.2	9942.6
70°	2835.5	2927.7	3894.6	6301.6	9736.4	12719.7	12807.9	11975.3	10826.7	9116.7	7653.5
72.5°	1288.2	1318.1	1811.7	3457.9	6651.4	10948.7	11317.6	10687.0	8891.6	6734.1	4866.9
75°	589.9	603.4	789.2	1654.4	3475.6	7326.7	7585.7	7960.0	6187.7	4252.6	2537.2
77.5°	370.2	374.3	448.9	756.7	1733.0	3657.3	3929.8	4739.4	3623.4	2104.6	1060.4
80°	218.3	222.4	279.3	409.5	813.6	1673.4	1932.4	1874.1	1703.2	908.6	482.8
82.5°	109.8	113.9	161.4	233.2	443.4	665.8	783.8	787.9	634.6	492.2	272.6
85°	39.3	40.7	52.9	92.2	188.5	219.7	245.4	299.7	310.5	286.1	131.5
87.5°	0.0	0.0	1.4	2.7	5.4	21.7	23.1	43.4	90.9	101.7	52.9
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-SA5C-830-U-T4W-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1	1859.1
2.5°	1864.6	1844.2	1837.4	1830.7	1819.8	1815.8	1807.6	1799.5	1799.5	1791.3	1787.3
5°	1874.1	1846.9	1829.3	1821.2	1814.4	1818.5	1818.5	1821.2	1830.7	1825.2	1828.0
7.5°	1908.0	1876.8	1852.4	1845.6	1845.6	1861.9	1872.7	1886.3	1903.9	1906.6	1906.6
10°	1967.6	1931.0	1905.3	1901.2	1908.0	1931.0	1947.3	1963.6	1985.3	1986.6	1989.3
12.5°	2032.7	1996.1	1970.3	1975.8	1982.5	2012.4	2030.0	2043.6	2065.3	2065.3	2063.9
15°	2100.5	2059.8	2038.1	2049.0	2069.3	2103.2	2105.9	2107.3	2118.2	2115.4	2114.1
17.5°	2171.0	2127.6	2111.4	2127.6	2149.3	2165.6	2152.1	2133.1	2129.0	2123.6	2120.9
20°	2240.2	2195.4	2188.7	2200.9	2207.6	2194.1	2152.1	2116.8	2100.5	2092.4	2089.7
22.5°	2299.9	2261.9	2257.8	2257.8	2223.9	2176.5	2114.1	2066.6	2044.9	2034.1	2031.4
25°	2370.4	2335.1	2328.3	2291.7	2204.9	2118.2	2034.1	1990.7	1973.1	1967.6	1969.0
27.5°	2453.1	2428.7	2407.0	2302.6	2150.7	2015.1	1920.2	1901.2	1894.4	1901.2	1905.3
30°	2554.8	2530.4	2481.6	2289.0	2063.9	1880.8	1790.0	1788.6	1809.0	1826.6	1829.3
32.5°	2637.5	2626.7	2546.7	2245.6	1941.9	1733.0	1655.7	1661.2	1697.8	1722.2	1726.3
35°	2702.6	2720.2	2600.9	2173.7	1796.8	1593.4	1532.3	1535.0	1555.4	1589.3	1590.6
37.5°	2794.8	2854.5	2649.7	2063.9	1630.0	1472.7	1417.1	1396.7	1394.0	1403.5	1406.2
40°	2980.6	3070.1	2685.0	1903.9	1468.6	1364.2	1301.8	1262.5	1228.6	1202.8	1194.7
42.5°	3261.3	3364.4	2705.3	1710.0	1324.9	1257.1	1186.5	1136.4	1076.7	1022.5	1003.5
45°	3776.6	3810.5	2705.3	1503.9	1197.4	1156.7	1086.2	1026.5	950.6	886.9	873.3
47.5°	4601.1	4492.6	2708.0	1304.5	1084.8	1068.6	1007.5	939.7	855.7	802.8	794.6
50°	5843.2	5462.2	2763.6	1139.1	991.3	994.0	949.2	874.7	798.7	759.4	752.6
52.5°	7250.8	6656.8	2912.8	1017.0	912.6	933.0	908.6	836.7	768.9	735.0	728.2
55°	8574.3	7755.3	3040.3	930.3	846.2	881.4	880.1	813.6	752.6	718.7	714.6
57.5°	9699.8	8507.9	3021.3	859.7	789.2	834.0	854.3	798.7	741.8	713.3	709.2
60°	10399.5	8906.5	2751.4	794.6	745.8	800.1	839.4	794.6	747.2	740.4	741.8
62.5°	10703.3	8833.3	2233.4	745.8	717.4	783.8	855.7	823.1	797.4	813.6	823.1
65°	10231.4	8204.1	1643.5	709.2	690.2	787.9	893.6	867.9	797.4	808.2	812.3
67.5°	8921.5	6983.7	1187.9	672.6	656.3	800.1	947.9	861.1	751.3	751.3	743.1
70°	6429.0	5022.8	862.4	636.0	622.4	782.4	950.6	815.0	698.4	694.3	674.0
72.5°	3868.8	2963.0	672.6	595.3	570.9	694.3	890.9	760.7	646.8	612.9	588.5
75°	2009.7	1484.9	564.1	550.6	489.5	588.5	815.0	676.7	553.3	523.4	509.9
77.5°	861.1	694.3	484.1	490.9	406.8	495.0	657.7	585.8	490.9	452.9	440.7
80°	424.4	394.6	382.4	393.3	325.5	382.4	566.8	512.6	416.3	372.9	355.3
82.5°	242.7	230.5	275.3	279.3	231.9	320.0	478.7	433.9	344.4	297.0	268.5
85°	112.6	120.7	166.8	168.2	143.7	219.7	313.2	244.1	183.1	151.9	145.1
87.5°	44.7	52.9	73.2	71.9	42.0	40.7	27.1	14.9	12.2	10.8	9.5
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)