

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: P637515

Luminaire Tested: GWS-SA4C-830-U-T4FT-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637515
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4C-830-U-T4FT-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14894.7 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

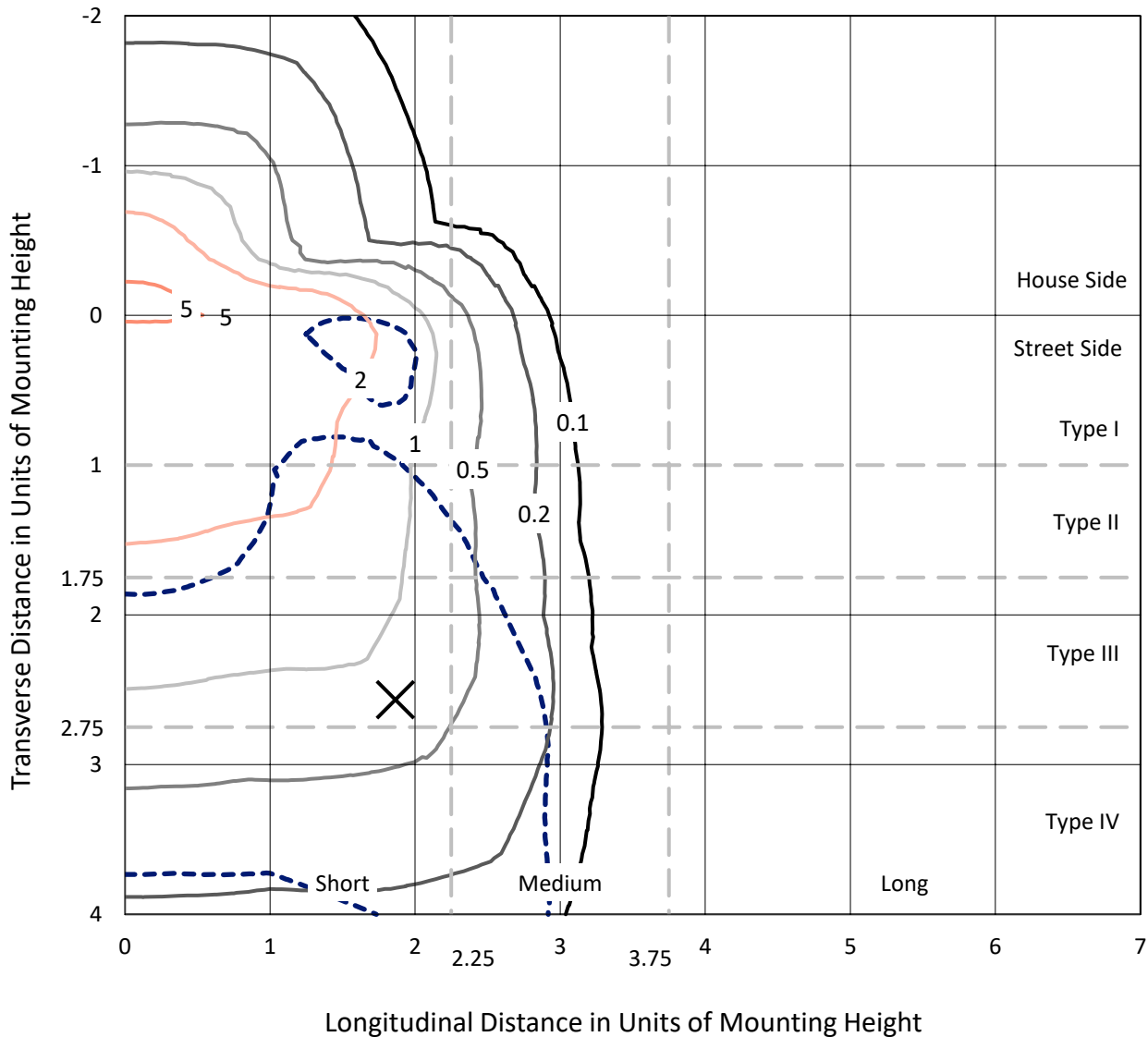
Input Watts (W): 128.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637515
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Iso-Footcandle Lines of Horizontal Illumination

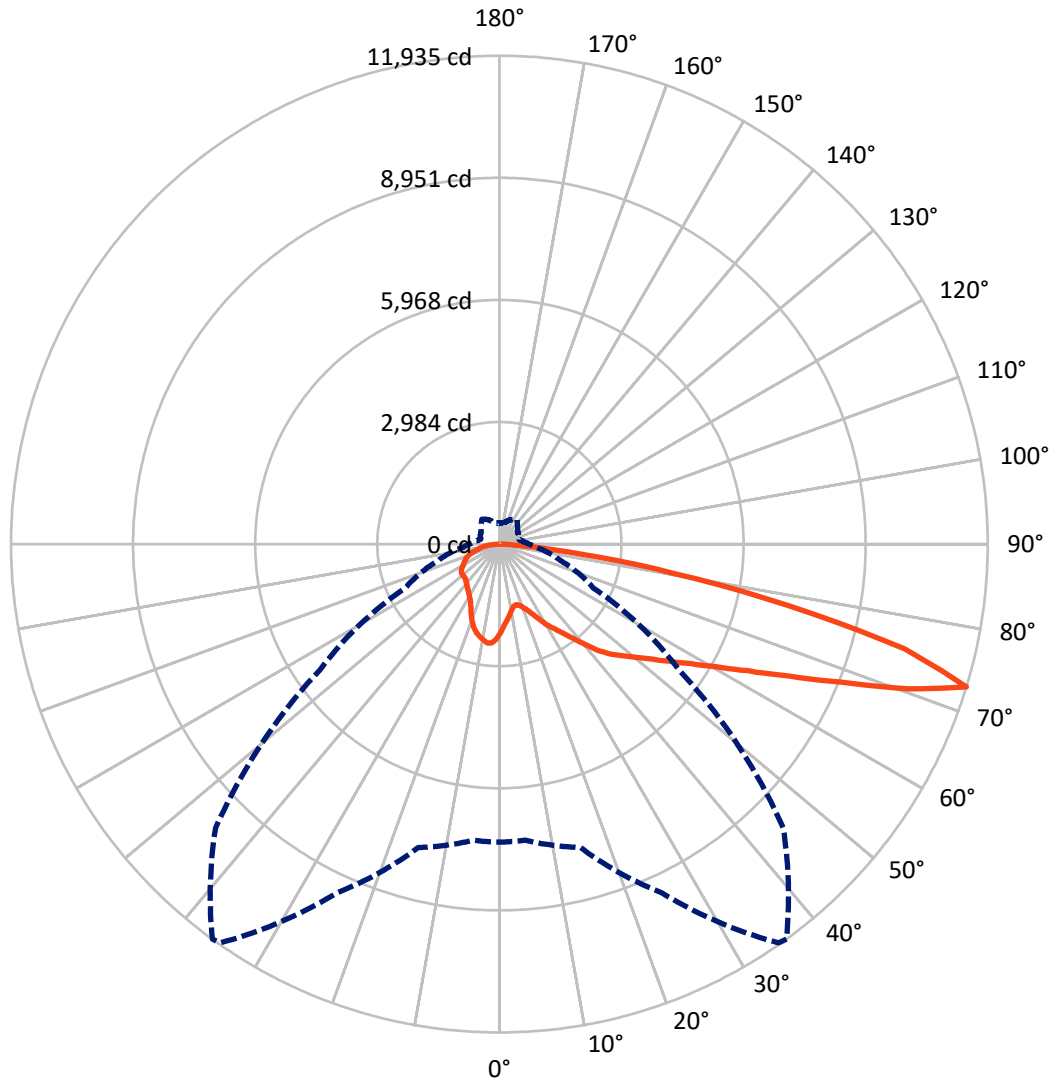
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3433.9	0.0	3433.9
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	11460.8	0.0	11460.8
	% Fixture	76.9	0.0	76.9
Total	Lumens	14894.7	0.0	14894.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.8	1.4
10°-20°	574.9	3.9
20°-30°	952.1	6.4
30°-40°	1425.8	9.6
40°-50°	2080.2	14.0
50°-60°	2960.7	19.9
60°-70°	3740.7	25.1
70°-80°	2665.5	17.9
80°-90°	291.0	2.0
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°	14894.7	100.0
0°-180°	14894.7	100.0

Coefficient of Utilization



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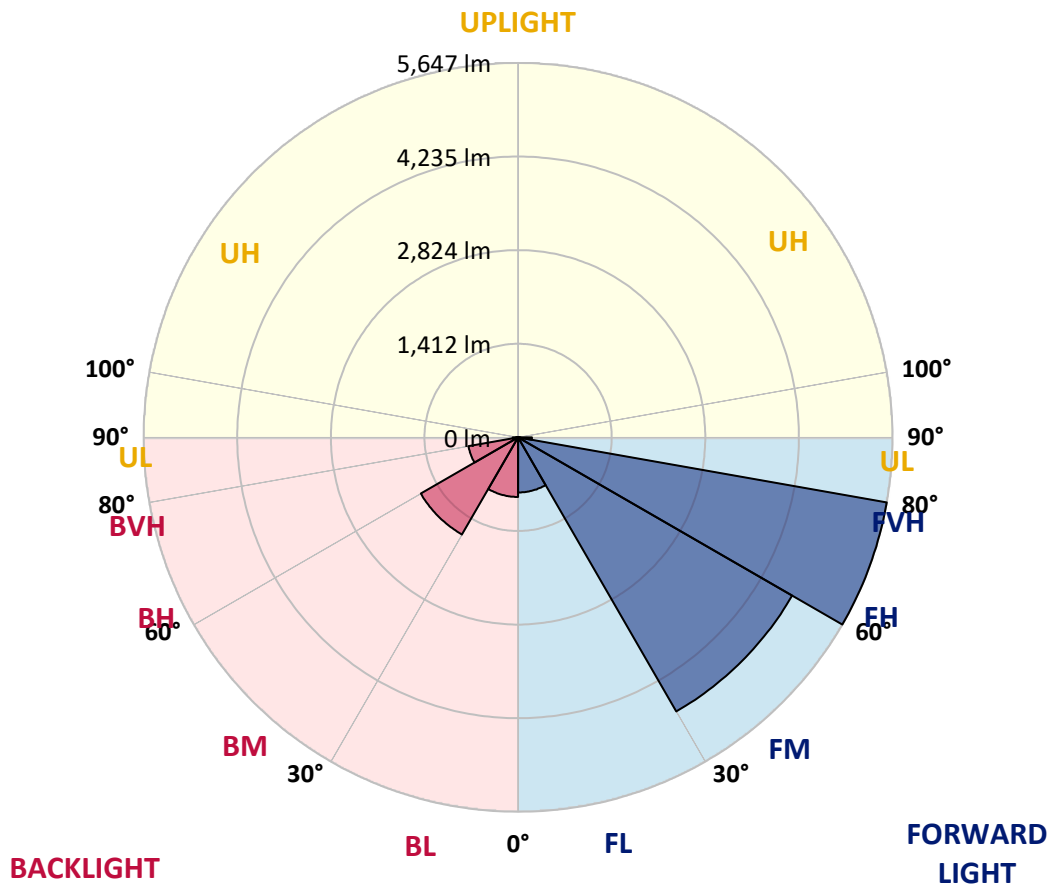
CATALOG NUMBER: GWS-SA4C-830-U-T4FT-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	831.5	5.6			
FM (30°-60°)	4773.4	32.0			
FH (60°-80°)	5647.1	37.9			G3/7500
FVH (80°-90°)	208.9	1.4			G2/225
BL (0°-30°)	899.2	6.0	B2/1000		
BM (30°-60°)	1693.4	11.4	B2/2500		
BH (60°-80°)	759.1	5.1	B2/1000		G2/1000
BVH (80°-90°)	82.1	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9
2.5°	1988.7	1985.4	1978.7	1998.6	2018.5	2016.3	2043.9	2070.5	2099.2	2129.1	2168.9
5°	1829.5	1827.3	1821.7	1851.6	1881.4	1880.3	1925.7	1968.8	2027.4	2091.5	2171.1
7.5°	1670.3	1664.8	1672.5	1710.1	1752.1	1756.5	1818.4	1889.2	1974.3	2070.5	2183.2
10°	1529.9	1528.8	1532.1	1574.1	1637.1	1641.6	1721.2	1819.5	1932.3	2060.5	2210.9
12.5°	1493.4	1491.2	1482.4	1503.4	1550.9	1557.5	1644.9	1765.4	1903.5	2066.0	2248.4
15°	1553.1	1547.6	1516.6	1506.7	1529.9	1535.4	1609.5	1733.3	1887.0	2076.0	2296.0
17.5°	1655.9	1652.6	1594.0	1553.1	1568.6	1573.0	1628.3	1727.8	1882.5	2095.9	2354.6
20°	1806.3	1791.9	1700.1	1638.2	1638.2	1644.9	1678.0	1752.1	1888.1	2120.2	2420.9
22.5°	2005.2	1976.5	1847.2	1763.2	1741.1	1749.9	1764.3	1812.9	1911.3	2161.1	2503.8
25°	2228.5	2202.0	2048.4	1930.1	1899.1	1902.4	1890.3	1899.1	1962.1	2217.5	2606.6
27.5°	2466.2	2448.5	2284.9	2134.6	2085.9	2085.9	2042.8	2021.8	2032.9	2281.6	2721.6
30°	2678.5	2654.1	2516.0	2351.2	2287.1	2287.1	2205.3	2160.0	2133.5	2360.1	2875.2
32.5°	2790.1	2775.7	2684.0	2558.0	2479.5	2467.3	2396.6	2343.5	2281.6	2476.2	3083.0
35°	2936.0	2932.7	2877.4	2779.0	2679.6	2661.9	2613.2	2571.2	2464.0	2621.0	3359.4
37.5°	3119.5	3114.0	3105.2	3046.6	2927.2	2923.9	2880.7	2829.9	2690.6	2829.9	3694.3
40°	3325.1	3315.2	3304.1	3303.0	3231.2	3219.0	3215.7	3158.2	2963.7	3081.9	4043.7
42.5°	3608.1	3573.9	3469.9	3516.4	3569.4	3558.4	3600.4	3514.2	3304.1	3381.5	4374.2
45°	3956.3	3872.3	3666.7	3680.0	3813.7	3835.8	3981.8	3960.8	3678.9	3727.5	4722.4
47.5°	4165.3	4092.3	3901.1	3890.0	4056.9	4084.6	4401.8	4441.6	4082.3	4144.3	5152.4
50°	4336.6	4285.7	4128.8	4144.3	4321.1	4348.8	4818.6	4903.7	4462.6	4570.9	5652.1
52.5°	4543.3	4470.4	4348.8	4421.7	4638.4	4671.5	5281.7	5373.5	4805.3	5039.7	6169.4
55°	4659.4	4629.5	4631.7	4743.4	5015.3	5060.7	5767.0	5751.5	5119.2	5440.9	6558.5
57.5°	4926.9	4915.8	5017.5	5059.5	5455.3	5513.9	6252.3	6119.7	5404.4	5751.5	6745.3
60°	5398.9	5371.3	5459.7	5523.8	5999.2	6082.1	6794.0	6480.0	5597.9	5982.6	6682.3
62.5°	6062.2	6027.9	6031.2	6132.9	6727.6	6815.0	7396.4	6780.7	5657.6	6018.0	6283.3
65°	6886.8	6837.1	6780.7	6918.9	7694.9	7767.8	8051.9	6999.6	5515.0	5677.5	5449.8
67.5°	7756.8	7715.9	7649.6	7939.2	8947.3	8991.6	8787.1	6980.8	5062.9	4766.6	3822.6
70°	7807.6	7817.6	8131.5	9179.5	10582.3	10593.3	9482.4	6602.7	4100.0	3089.7	1904.7
72.5°	7283.7	7267.1	7676.1	9406.1	11897.7	11935.3	9810.7	5349.2	2533.6	1541.0	893.2
75°	5916.3	5945.0	6375.0	8229.9	10197.6	10230.7	7997.8	3153.8	1203.8	753.9	571.5
77.5°	2546.9	2707.2	3555.1	5798.0	7303.6	7200.8	4122.1	1277.9	642.3	537.2	437.7
80°	735.1	798.1	1266.8	2756.9	4376.4	4299.0	1631.6	478.7	447.7	403.5	313.9
82.5°	237.7	263.1	464.3	1097.7	1961.0	1958.8	619.0	283.0	292.9	274.1	202.3
85°	66.3	76.3	142.6	332.7	606.9	594.7	179.1	133.8	155.9	158.1	100.6
87.5°	0.0	0.0	1.1	2.2	2.2	2.2	4.4	19.9	45.3	57.5	40.9
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-SA4C-830-U-T4FT-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9	2179.9
2.5°	2193.2	2189.9	2235.2	2270.6	2303.7	2325.8	2332.5	2336.9	2345.7	2350.1	2345.7
5°	2208.6	2225.2	2300.4	2355.7	2399.9	2426.4	2427.5	2425.3	2431.9	2426.4	2423.1
7.5°	2241.8	2273.9	2368.9	2427.5	2456.3	2457.4	2430.8	2399.9	2384.4	2371.1	2366.7
10°	2286.0	2333.6	2437.5	2476.2	2467.3	2426.4	2367.8	2319.2	2291.6	2271.7	2267.2
12.5°	2346.8	2399.9	2498.3	2497.2	2441.9	2368.9	2300.4	2241.8	2202.0	2178.8	2171.1
15°	2404.3	2471.7	2542.5	2490.5	2403.2	2314.8	2226.3	2147.8	2094.8	2058.3	2051.7
17.5°	2475.1	2546.9	2574.5	2469.5	2354.6	2240.7	2122.4	2019.6	1947.8	1904.7	1901.3
20°	2556.9	2621.0	2590.0	2433.0	2291.6	2142.3	1982.0	1867.1	1789.7	1747.7	1751.0
22.5°	2651.9	2698.4	2594.4	2383.3	2204.2	2003.0	1824.0	1713.4	1661.5	1639.4	1640.5
25°	2753.6	2783.5	2586.7	2315.9	2070.5	1832.8	1661.5	1610.6	1606.2	1600.7	1602.9
27.5°	2874.1	2867.5	2563.5	2220.8	1890.3	1634.9	1547.6	1560.9	1578.6	1576.3	1578.6
30°	3035.5	2972.5	2533.6	2089.3	1675.8	1469.1	1480.2	1517.8	1541.0	1543.2	1549.8
32.5°	3220.1	3088.6	2486.1	1910.2	1471.3	1376.3	1417.2	1462.5	1490.1	1495.6	1504.5
35°	3440.1	3221.2	2402.1	1686.9	1324.3	1321.0	1358.6	1389.5	1419.4	1421.6	1421.6
37.5°	3693.2	3353.9	2268.3	1440.4	1233.7	1273.5	1308.8	1315.5	1323.2	1316.6	1319.9
40°	3925.4	3482.1	2078.2	1216.0	1159.6	1231.4	1261.3	1239.2	1214.9	1198.3	1201.6
42.5°	4119.9	3569.4	1826.2	1059.0	1084.4	1193.9	1217.1	1171.8	1124.2	1093.3	1097.7
45°	4338.8	3650.1	1529.9	952.9	1020.3	1167.3	1182.8	1124.2	1063.4	1017.0	1010.4
47.5°	4640.6	3814.8	1266.8	878.8	975.0	1153.0	1178.4	1098.8	1019.2	949.6	941.8
50°	5013.1	4048.1	1046.8	830.2	954.0	1145.2	1177.3	1071.2	976.1	894.3	888.8
52.5°	5419.9	4275.8	884.3	792.6	933.0	1122.0	1171.8	1040.2	930.8	842.3	835.7
55°	5690.7	4365.3	774.9	757.2	898.7	1085.5	1149.6	1010.4	862.2	781.5	771.6
57.5°	5770.3	4250.4	698.6	725.2	854.5	1034.7	1107.6	947.4	820.2	756.1	748.4
60°	5633.3	3960.8	651.1	698.6	805.9	969.5	1034.7	910.9	787.1	729.6	724.1
62.5°	5246.4	3514.2	614.6	671.0	756.1	900.9	988.3	866.7	750.6	705.3	697.5
65°	4468.1	2881.9	584.8	642.3	708.6	835.7	937.4	822.4	710.8	676.5	667.7
67.5°	3125.0	2024.0	552.7	608.0	661.0	772.7	884.3	781.5	669.9	644.5	635.6
70°	1527.7	1073.4	514.0	568.2	610.2	708.6	831.3	731.8	615.7	601.4	589.2
72.5°	727.4	600.2	468.7	514.0	540.6	623.5	742.8	659.9	551.6	520.7	499.7
75°	487.5	426.7	409.0	449.9	456.5	522.9	636.7	569.3	486.4	451.0	433.3
77.5°	369.2	326.1	343.8	380.3	367.0	430.0	524.0	507.4	438.9	406.8	398.0
80°	259.8	237.7	273.0	295.1	285.2	365.9	472.0	434.4	361.5	326.1	319.5
82.5°	163.6	159.2	201.2	204.5	207.8	289.6	388.0	341.6	280.8	231.0	214.5
85°	81.8	90.6	120.5	120.5	119.4	149.2	221.1	192.3	151.4	120.5	117.2
87.5°	27.6	38.7	52.0	42.0	32.1	25.4	28.7	35.4	37.6	36.5	36.5
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^{\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			

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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)