

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: P643924

Luminaire Tested: GWS-SA6F-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P643924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SAGF-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21200.4 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

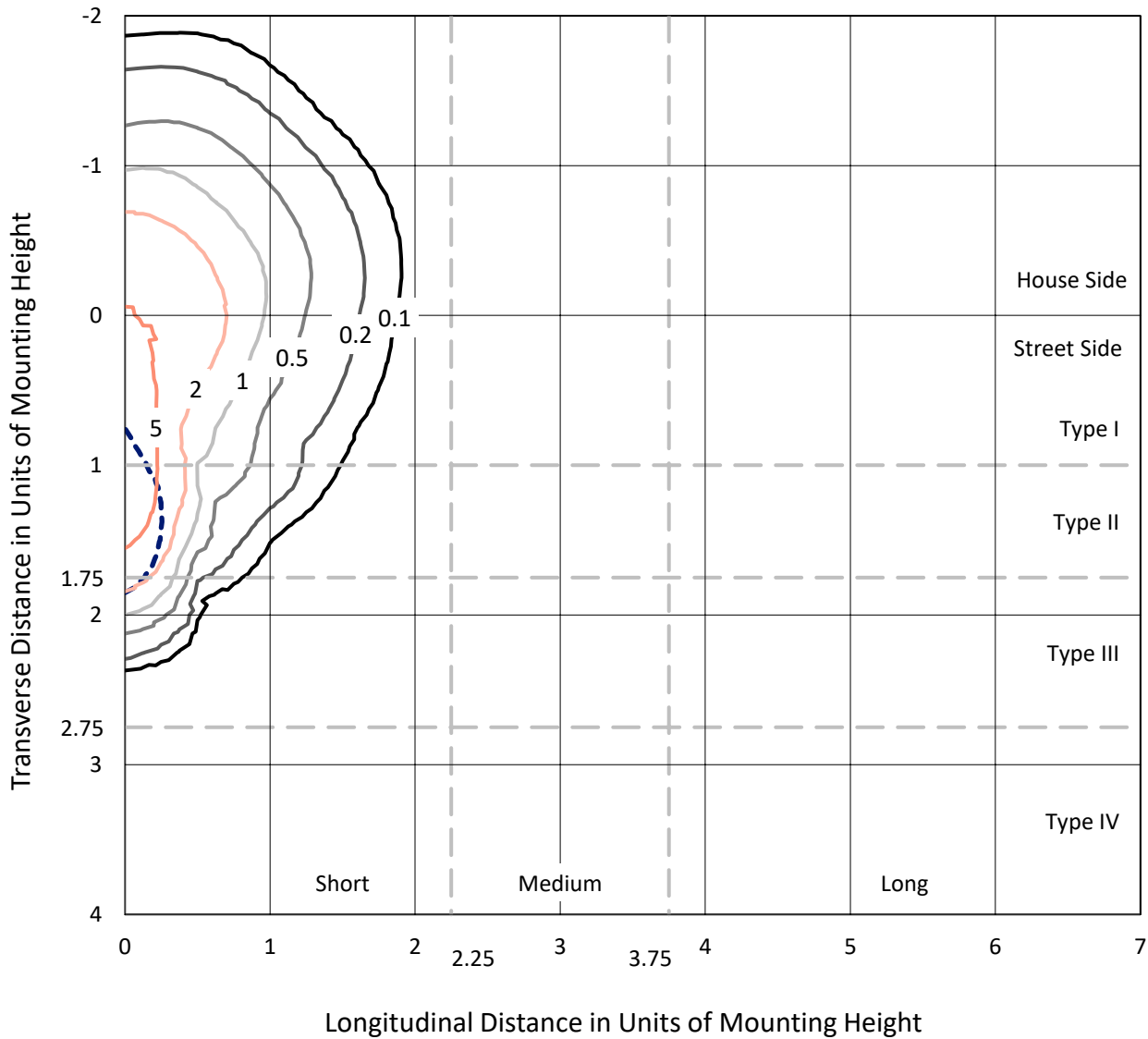
Input Watts (W): 372.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

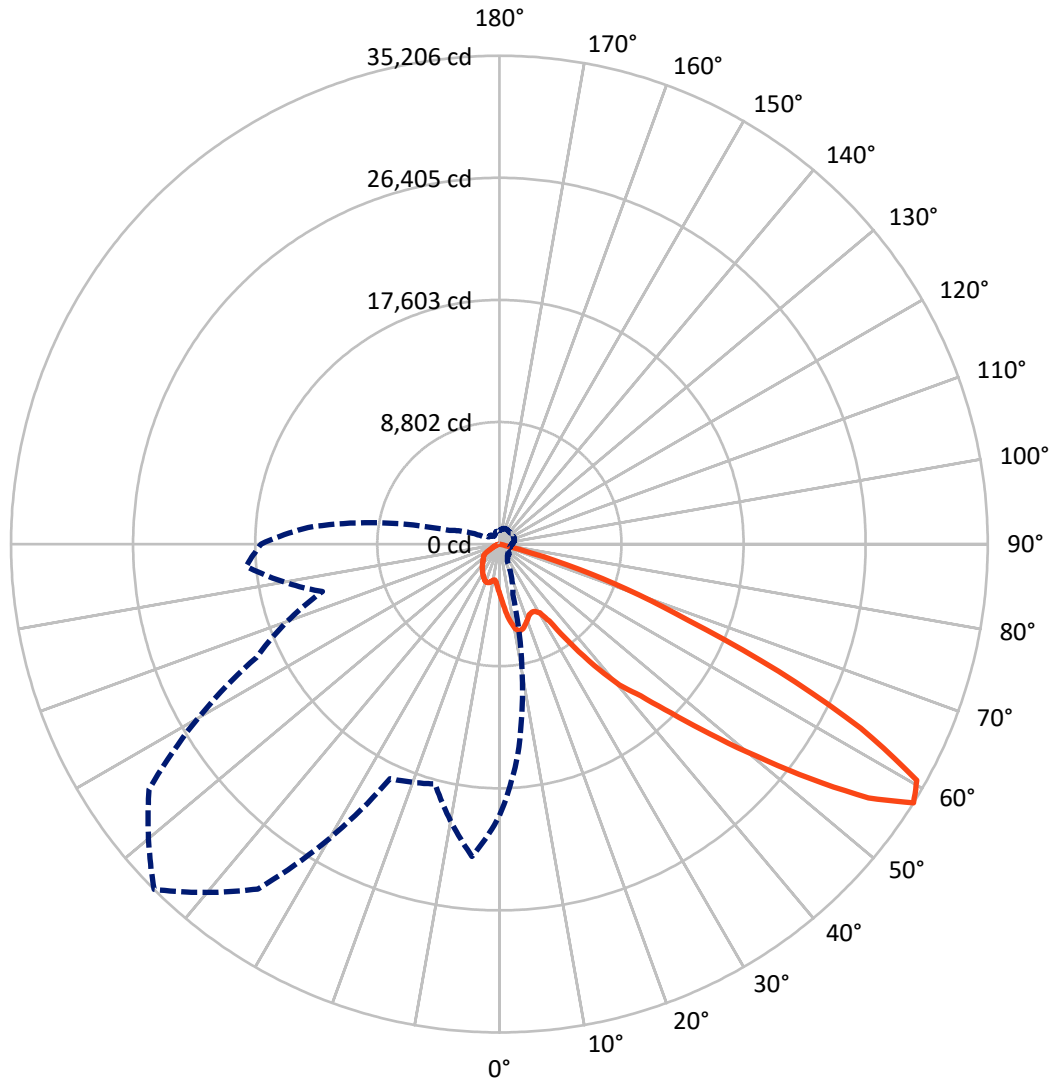
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4567.3	0.0	4567.3
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	16633.1	0.0	16633.1
	% Fixture	78.5	0.0	78.5
Total	Lumens	21200.4	0.0	21200.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.0	1.7
10°-20°	1171.5	5.5
20°-30°	1901.3	9.0
30°-40°	2918.1	13.8
40°-50°	4660.3	22.0
50°-60°	6525.3	30.8
60°-70°	3345.7	15.8
70°-80°	322.1	1.5
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°	21200.4	100.0
0°-180°	21200.4	100.0

Coefficient of Utilization



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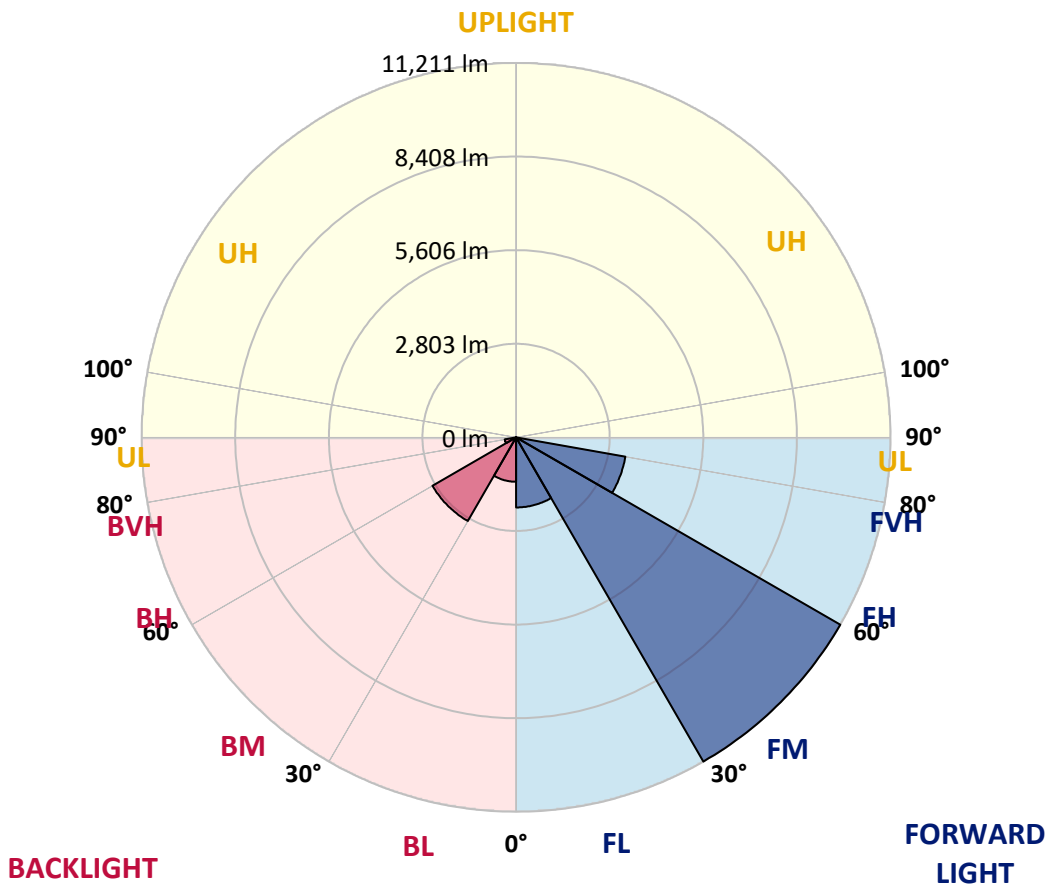
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2099.0	9.9			
FM (30°-60°)	11211.3	52.9			
FH (60°-80°)	3322.9	15.7			G2/5000
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	1329.9	6.3	B3/2500		
BM (30°-60°)	2892.4	13.6	B3/5000		
BH (60°-80°)	344.9	1.6	B1/500		G1/500
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: B3-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3
2.5°	4001.9	3993.4	3965.0	3868.7	3809.2	3715.6	3647.6	3559.7	3463.4	3403.9	3344.4
5°	4427.0	4404.3	4327.8	4106.7	3936.7	3752.5	3605.1	3443.5	3270.7	3157.3	3052.4
7.5°	4835.1	4801.1	4699.1	4325.0	4067.1	3803.5	3593.8	3358.5	3114.8	2944.7	2814.4
10°	5234.8	5158.2	4996.7	4537.5	4188.9	3871.5	3624.9	3355.7	3069.4	2854.0	2709.5
12.5°	5563.5	5506.8	5285.8	4738.8	4291.0	3885.7	3582.4	3333.0	3140.3	2995.7	2862.5
15°	5846.9	5784.6	5574.9	4920.2	4378.8	3829.0	3403.9	3185.6	3216.8	3273.5	3160.1
17.5°	6107.7	6042.5	5815.8	5070.4	4412.8	3690.1	3154.5	3049.6	3222.5	3435.0	3392.5
20°	6376.9	6303.3	6025.5	5192.2	4401.5	3471.9	2902.2	2933.4	3177.1	3420.9	3443.5
22.5°	6691.5	6615.0	6291.9	5348.1	4393.0	3211.1	2684.0	2831.4	3092.1	3299.0	3338.7
25°	7108.2	7017.5	6663.2	5577.7	4415.7	2973.1	2528.1	2732.2	2947.6	3134.6	3157.3
27.5°	7658.0	7541.8	7091.2	5861.1	4463.9	2786.0	2460.1	2596.1	2763.3	2930.6	2950.4
30°	8375.0	8227.7	7581.5	6107.7	4441.2	2655.6	2414.7	2460.1	2559.3	2695.3	2698.2
32.5°	9214.0	9012.7	8131.3	6320.3	4245.6	2559.3	2352.4	2321.2	2343.9	2448.7	2468.6
35°	10200.3	9939.5	8737.8	6521.5	3888.5	2372.2	2239.0	2134.1	2125.6	2176.7	2224.8
37.5°	11331.1	11019.4	9503.1	6779.4	3466.2	2176.7	2071.8	1966.9	1921.6	1947.1	2020.8
40°	12374.1	12028.3	10302.3	7091.2	3035.4	2000.9	1876.2	1768.5	1714.7	1723.2	1813.9
42.5°	13598.5	13241.4	11280.1	7499.3	2678.3	1881.9	1672.2	1561.6	1490.8	1530.5	1635.3
45°	15457.7	15052.4	12705.7	7853.6	2394.9	1853.6	1493.6	1337.7	1303.7	1371.8	1496.5
47.5°	17997.1	17501.2	14664.1	8069.0	2154.0	1879.1	1368.9	1156.4	1164.9	1241.4	1366.1
50°	20516.7	19981.1	16928.6	7785.5	1955.6	1828.1	1306.6	1014.6	1068.5	1136.5	1249.9
52.5°	22248.4	21551.2	18031.1	6966.5	1774.2	1635.3	1300.9	881.4	983.5	1006.1	1102.5
55°	22316.5	21457.7	17467.1	5492.7	1527.6	1380.3	1241.4	770.9	889.9	898.4	980.6
57.5°	19561.6	18785.0	15265.0	3772.3	1357.6	1011.8	989.1	674.5	731.2	802.1	853.1
60°	14882.4	14222.0	11416.1	1728.9	1031.6	643.4	677.4	581.0	547.0	651.9	702.9
62.5°	9114.8	8692.5	6847.4	765.2	657.5	342.9	411.0	462.0	411.0	450.6	493.1
65°	3619.3	3432.2	2599.0	325.9	269.2	172.9	187.1	269.2	289.1	317.4	357.1
67.5°	629.2	595.2	436.5	144.5	110.5	104.9	90.7	124.7	175.7	195.6	226.7
70°	82.2	79.4	70.9	59.5	56.7	51.0	39.7	79.4	119.0	124.7	144.5
72.5°	19.8	17.0	17.0	14.2	17.0	5.7	5.7	42.5	85.0	87.9	102.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	53.8	59.5	70.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3
2.5°	3296.2	3239.5	3219.6	3191.3	3154.5	3165.8	3114.8	3097.8	3123.3	3157.3	3148.8
5°	2995.7	2933.4	2890.9	2825.7	2814.4	2788.8	2771.8	2749.2	2777.5	2817.2	2825.7
7.5°	2757.7	2703.8	2661.3	2641.5	2627.3	2616.0	2582.0	2564.9	2564.9	2582.0	2596.1
10°	2655.6	2616.0	2607.5	2613.1	2635.8	2633.0	2601.8	2579.1	2550.8	2536.6	2553.6
12.5°	2797.4	2732.2	2720.8	2723.7	2752.0	2749.2	2715.2	2686.8	2681.1	2686.8	2740.7
15°	3038.3	2939.1	2865.4	2851.2	2865.4	2859.7	2834.2	2817.2	2825.7	2907.9	2998.6
17.5°	3253.7	3100.6	2967.4	2916.4	2913.6	2905.1	2879.5	2873.9	2916.4	3069.4	3202.6
20°	3316.0	3165.8	2975.9	2910.7	2896.5	2888.0	2859.7	2868.2	2922.1	3106.3	3219.6
22.5°	3233.8	3089.3	2890.9	2825.7	2814.4	2811.5	2783.2	2794.5	2839.9	3001.4	3094.9
25°	3077.9	2956.1	2749.2	2692.5	2692.5	2686.8	2661.3	2667.0	2695.3	2837.0	2927.7
27.5°	2888.0	2771.8	2599.0	2542.3	2550.8	2559.3	2528.1	2519.6	2542.3	2675.5	2729.3
30°	2669.8	2587.6	2451.6	2400.6	2397.7	2431.7	2389.2	2377.9	2409.1	2513.9	2525.3
32.5°	2457.2	2417.6	2321.2	2281.5	2284.4	2290.0	2267.4	2267.4	2295.7	2352.4	2349.5
35°	2250.4	2224.8	2207.8	2179.5	2176.7	2165.3	2165.3	2171.0	2202.2	2222.0	2185.2
37.5°	2052.0	2077.5	2097.3	2069.0	2046.3	2046.3	2046.3	2071.8	2100.1	2091.6	2029.3
40°	1876.2	1930.1	1992.4	1961.3	1907.4	1904.6	1915.9	1958.4	2000.9	1949.9	1893.2
42.5°	1726.0	1794.0	1881.9	1864.9	1805.4	1796.9	1805.4	1859.2	1893.2	1828.1	1765.7
45°	1578.6	1663.7	1768.5	1768.5	1703.4	1694.8	1697.7	1768.5	1788.4	1711.9	1632.5
47.5°	1453.9	1547.5	1658.0	1658.0	1604.2	1587.1	1601.3	1675.0	1689.2	1581.5	1507.8
50°	1334.9	1436.9	1558.8	1550.3	1513.5	1499.3	1524.8	1604.2	1587.1	1468.1	1391.6
52.5°	1184.7	1292.4	1459.6	1468.1	1448.3	1451.1	1482.3	1533.3	1485.1	1340.6	1275.4
55°	1048.7	1159.2	1326.4	1371.8	1371.8	1368.9	1383.1	1422.8	1383.1	1210.2	1130.8
57.5°	901.3	994.8	1133.7	1145.0	1153.5	1122.3	1142.2	1196.0	1176.2	1028.8	983.5
60°	739.7	819.1	898.4	906.9	870.1	804.9	841.8	904.1	918.3	807.7	756.7
62.5°	524.3	600.8	694.4	694.4	657.5	592.3	640.5	694.4	674.5	561.2	530.0
65°	391.1	462.0	532.8	564.0	532.8	487.5	524.3	564.0	532.8	439.3	394.0
67.5°	252.2	300.4	342.9	368.4	374.1	368.4	385.5	374.1	337.3	274.9	249.4
70°	153.0	178.6	201.2	223.9	240.9	249.4	257.9	232.4	195.6	161.5	153.0
72.5°	110.5	133.2	153.0	170.1	189.9	195.6	195.6	178.6	144.5	113.4	104.9
75°	76.5	96.4	113.4	124.7	141.7	147.4	147.4	133.2	107.7	82.2	73.7
77.5°	2.8	19.8	19.8	17.0	22.7	28.3	28.3	34.0	31.2	22.7	19.8
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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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3
2.5°	3165.8	3267.8	3296.2	3401.0	3494.6	3588.1	3701.5	3769.5	3871.5	3942.4	3982.0
5°	2854.0	2939.1	3041.1	3197.0	3358.5	3537.1	3752.5	3939.5	4174.8	4347.7	4404.3
7.5°	2627.3	2737.8	2856.9	3052.4	3273.5	3511.6	3814.8	4120.9	4480.9	4716.1	4866.3
10°	2584.8	2698.2	2856.9	3049.6	3282.0	3554.1	3925.4	4322.1	4772.8	5059.0	5229.1
12.5°	2788.8	2910.7	2978.7	3066.6	3242.3	3545.6	4021.7	4526.2	5056.2	5368.0	5549.4
15°	3089.3	3197.0	3086.4	2975.9	3089.3	3454.9	4075.6	4696.3	5305.6	5665.6	5852.6
17.5°	3296.2	3304.7	3063.8	2828.5	2859.7	3290.5	4095.4	4866.3	5572.0	5949.0	6144.5
20°	3276.3	3208.3	2964.6	2703.8	2607.5	3077.9	4072.7	5016.5	5841.3	6235.2	6428.0
22.5°	3123.3	3043.9	2837.0	2582.0	2394.9	2825.7	4033.1	5152.6	6087.9	6535.7	6717.0
25°	2939.1	2854.0	2684.0	2460.1	2258.9	2582.0	4001.9	5339.6	6399.6	6926.8	7068.5
27.5°	2723.7	2650.0	2505.4	2343.9	2202.2	2397.7	3993.4	5586.2	6776.6	7402.9	7502.1
30°	2513.9	2445.9	2332.5	2239.0	2179.5	2290.0	3965.0	5849.8	7227.2	7949.9	8057.6
32.5°	2312.7	2244.7	2173.8	2159.7	2162.5	2250.4	3868.7	6110.5	7762.9	8743.5	8822.8
35°	2139.8	2060.5	2032.1	2066.1	2128.5	2182.3	3596.6	6325.9	8338.2	9607.9	9673.1
37.5°	1975.4	1896.1	1893.2	1975.4	2043.5	2077.5	3276.3	6538.5	9114.8	10486.5	10568.7
40°	1825.2	1745.9	1774.2	1873.4	1927.3	1944.3	2888.0	6861.6	9936.7	11413.3	11368.0
42.5°	1697.7	1615.5	1632.5	1760.0	1808.2	1853.6	2530.9	7130.8	10727.4	12291.9	12277.7
45°	1573.0	1510.6	1499.3	1638.2	1680.7	1862.1	2270.2	7337.7	11744.9	13411.4	13434.1
47.5°	1451.1	1402.9	1405.8	1465.3	1570.1	1904.6	2049.1	7473.8	13221.5	15185.6	14791.7
50°	1340.6	1303.7	1334.9	1266.9	1499.3	1850.7	1859.2	7445.4	14871.0	16886.1	16095.4
52.5°	1218.7	1210.2	1224.4	1060.0	1385.9	1632.5	1680.7	7068.5	15644.8	18048.2	17597.5
55°	1094.0	1091.2	977.8	847.4	1159.2	1303.7	1439.8	5898.0	15619.2	18666.0	19213.0
57.5°	946.6	923.9	742.6	691.5	901.3	906.9	1312.2	3863.0	13842.2	17186.6	18320.2
60°	717.1	700.0	544.2	561.2	629.2	581.0	1045.8	1924.4	10344.8	13388.7	14667.0
62.5°	496.0	473.3	405.3	433.6	405.3	331.6	640.5	952.3	6266.4	8454.4	9613.6
65°	362.8	337.3	277.8	238.1	189.9	189.9	243.7	365.6	2426.1	3593.8	4333.5
67.5°	223.9	212.6	164.4	119.0	116.2	124.7	127.5	181.4	391.1	623.5	762.4
70°	144.5	133.2	110.5	76.5	70.9	73.7	76.5	85.0	99.2	107.7	130.4
72.5°	99.2	93.5	79.4	42.5	34.0	36.8	39.7	39.7	48.2	45.3	53.8
75°	70.9	65.2	56.7	19.8	11.3	14.2	17.0	14.2	17.0	11.3	14.2
77.5°	19.8	19.8	14.2	2.8	0.0	2.8	5.7	5.7	2.8	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	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



REPORT NUMBER: P643924

CATALOG NUMBER: GWS-SA6F-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3	3602.3
2.5°	4084.1	4149.3	4174.8	4137.9	4169.1	4118.1	4098.2	4021.7	4016.1	4001.9
5°	4633.9	4781.3	4869.1	4923.0	4860.6	4792.6	4690.6	4514.9	4461.0	4427.0
7.5°	5175.2	5404.8	5555.0	5625.9	5608.9	5470.0	5285.8	4991.0	4886.2	4835.1
10°	5645.7	5926.3	6107.7	6195.6	6158.7	6036.8	5773.3	5404.8	5265.9	5234.8
12.5°	5974.5	6232.4	6357.1	6433.6	6436.5	6388.3	6138.9	5767.6	5603.2	5563.5
15°	6181.4	6291.9	6294.7	6340.1	6419.5	6527.2	6410.9	6082.2	5906.5	5846.9
17.5°	6311.8	6189.9	6065.2	6076.5	6206.9	6493.1	6612.2	6359.9	6172.9	6107.7
20°	6405.3	6019.8	5787.4	5790.3	5923.5	6357.1	6751.1	6629.2	6436.5	6376.9
22.5°	6464.8	5869.6	5538.0	5529.5	5671.2	6195.6	6878.6	6949.4	6759.6	6691.5
25°	6586.7	5798.8	5387.8	5436.0	5560.7	6144.5	7051.5	7374.6	7198.9	7108.2
27.5°	6804.9	5869.6	5373.6	5484.2	5625.9	6294.7	7351.9	7941.4	7760.0	7658.0
30°	7181.9	6136.0	5591.9	5744.9	5915.0	6688.7	7856.4	8732.2	8471.4	8375.0
32.5°	7788.4	6688.7	6266.4	6595.2	6759.6	7334.9	8613.1	9619.3	9406.7	9214.0
35°	8624.5	7949.9	7901.7	8667.0	8627.3	8559.3	9542.7	10707.6	10387.3	10200.3
37.5°	9775.1	9979.2	10336.3	11095.9	11070.4	10551.7	10764.3	11736.4	11572.0	11331.1
40°	11212.1	11645.7	12252.2	13340.6	13000.5	12348.6	12263.6	12790.7	12657.5	12374.1
42.5°	12059.5	12807.7	13964.1	14941.9	14669.8	13530.4	13434.1	14199.3	13907.4	13598.5
45°	12453.5	13754.3	16021.7	17345.3	16520.5	14315.5	14278.7	16035.9	15871.5	15457.7
47.5°	12634.8	14709.5	18430.8	20434.5	18892.7	15004.2	14871.0	18700.0	18484.6	17997.1
50°	12836.1	16027.4	21333.0	24014.1	21758.1	15783.6	15880.0	21182.8	21092.1	20516.7
52.5°	13278.2	17421.8	24906.9	28106.7	25232.8	17005.2	17611.7	23523.8	22911.6	22248.4
55°	13941.4	18940.9	28625.4	32287.2	28778.4	18646.2	19485.1	24768.0	23050.5	22316.5
57.5°	13207.3	19320.7	30827.5	35206.4	30351.4	18651.8	17900.8	22611.2	20273.0	19561.6
60°	10480.9	17974.5	29980.1	34574.3	29010.8	16563.0	13706.2	17654.2	15358.5	14882.4
62.5°	7085.5	15075.1	26392.0	29240.4	24830.4	13028.8	8907.9	11481.3	9508.7	9114.8
65°	3882.8	11246.1	21324.5	22120.9	19434.1	9100.6	4582.9	4982.5	3795.0	3619.3
67.5°	1071.3	7828.0	15690.1	14675.5	13635.3	5926.3	1184.7	889.9	634.9	629.2
70°	269.2	5178.1	9401.0	9690.1	8360.9	3795.0	226.7	107.7	85.0	82.2
72.5°	113.4	2227.7	4461.0	5127.1	4279.6	1757.2	82.2	31.2	25.5	19.8
75°	14.2	178.6	379.8	575.3	394.0	189.9	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	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
85°	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
90°	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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

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)