

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: P634042

Luminaire Tested: GWS-SA2F-830-U-T3-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-25)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2F-830-U-T3-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10999.2 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

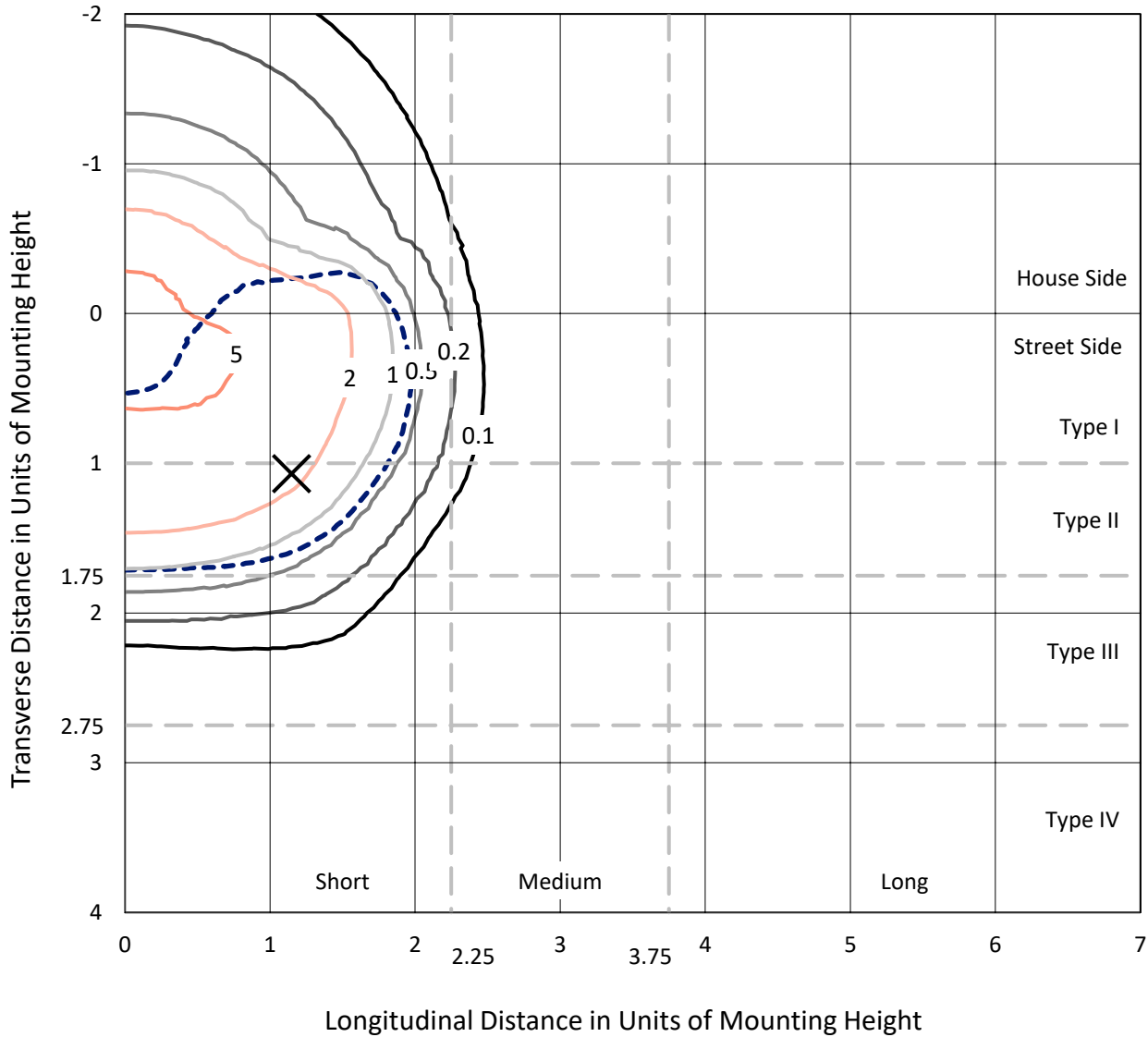
Input Watts (W): 124.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634042
 CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

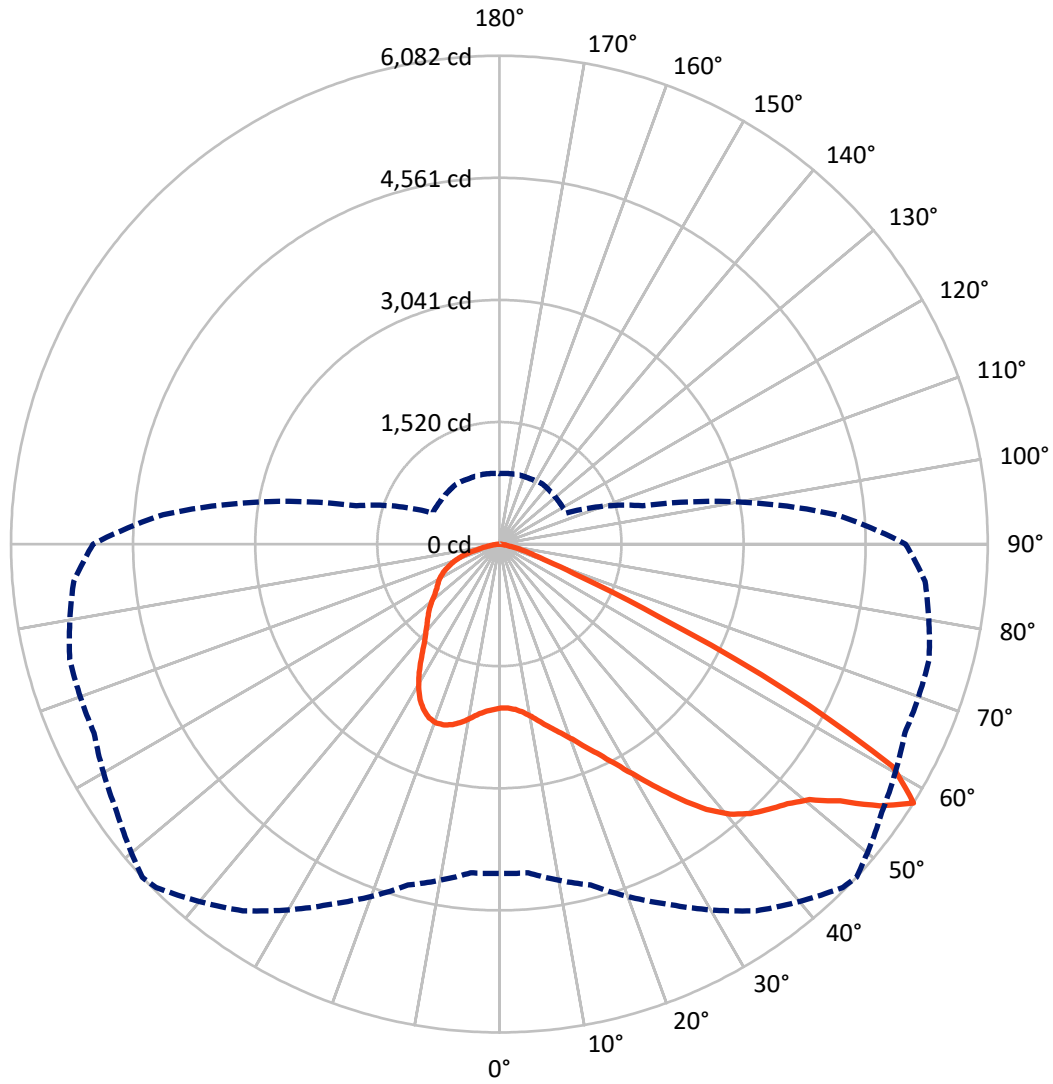
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - N/A

REPORT NUMBER: P634042
CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P634042
 CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3481.2	0.0	3481.2
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	7518.0	0.0	7518.0
	% Fixture	68.4	0.0	68.4
Total	Lumens	10999.2	0.0	10999.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.2	1.8
10°-20°	661.7	6.0
20°-30°	1191.5	10.8
30°-40°	1799.6	16.4
40°-50°	2423.4	22.0
50°-60°	2912.1	26.5
60°-70°	1418.2	12.9
70°-80°	349.4	3.2
80°-90°	42.0	0.4
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°	10999.2	100.0
0°-180°	10999.2	100.0

Coefficient of Utilization



REPORT NUMBER: P634042

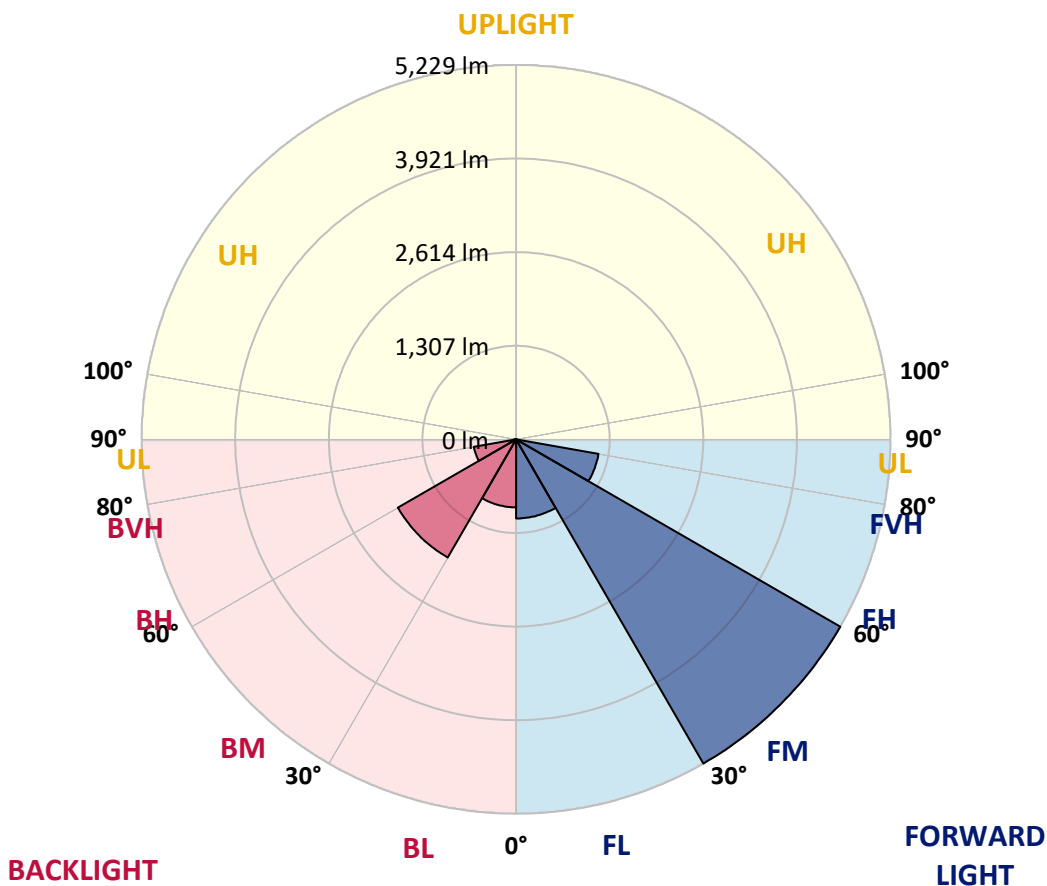
CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1104.8	10.0			
FM (30°-60°)	5228.5	47.5			
FH (60°-80°)	1168.9	10.6			G1/1800
FVH (80°-90°)	15.8	0.1			G1/100
BL (0°-30°)	949.6	8.6	B2/1000		
BM (30°-60°)	1906.7	17.3	B2/2500		
BH (60°-80°)	598.7	5.4	B2/1000		G2/1000
BVH (80°-90°)	26.2	0.2			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 II Short





REPORT NUMBER: P634042

CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8
2.5°	2036.1	2035.2	2035.2	2040.7	2040.7	2042.6	2045.4	2048.1	2049.1	2044.4	2034.3
5°	2058.3	2058.3	2058.3	2062.9	2062.9	2064.8	2068.5	2069.4	2068.5	2061.1	2050.9
7.5°	2093.4	2093.4	2094.3	2099.9	2104.5	2107.3	2113.7	2112.8	2110.0	2098.0	2085.1
10°	2150.7	2153.4	2156.2	2162.7	2171.9	2178.4	2183.0	2183.0	2179.3	2160.8	2144.2
12.5°	2232.0	2235.7	2238.4	2244.0	2251.4	2262.5	2272.6	2272.6	2268.0	2244.9	2220.0
15°	2327.1	2330.8	2329.9	2331.7	2345.6	2361.3	2369.6	2375.2	2377.0	2344.7	2305.9
17.5°	2436.1	2439.8	2436.1	2430.6	2432.4	2457.4	2472.2	2492.5	2504.5	2461.1	2399.2
20°	2535.0	2531.3	2531.3	2535.0	2540.5	2571.0	2593.2	2626.4	2641.2	2588.6	2492.5
22.5°	2639.4	2647.7	2644.0	2644.0	2666.2	2717.0	2743.8	2787.2	2802.9	2734.5	2605.2
25°	2774.3	2781.7	2779.8	2781.7	2807.5	2879.6	2906.4	2986.7	3002.4	2904.5	2729.9
27.5°	2922.1	2934.1	2939.6	2937.8	2979.4	3073.6	3106.8	3218.6	3247.3	3094.8	2863.0
30°	3114.2	3127.2	3131.8	3129.9	3178.9	3307.3	3345.2	3472.7	3513.3	3320.2	3032.0
32.5°	3336.9	3349.8	3363.7	3369.2	3432.0	3563.2	3617.7	3749.8	3808.0	3580.8	3236.2
35°	3557.7	3568.8	3595.5	3639.0	3724.9	3858.8	3906.9	4037.1	4093.5	3851.4	3482.8
37.5°	3801.6	3809.0	3832.0	3892.1	4015.9	4143.4	4191.4	4316.1	4322.6	4112.9	3761.8
40°	4068.5	4068.5	4063.9	4123.1	4252.4	4380.8	4422.4	4494.4	4456.6	4314.3	4033.4
42.5°	4294.9	4291.2	4294.9	4350.3	4446.4	4550.8	4586.8	4573.0	4524.9	4468.6	4279.2
45°	4499.1	4501.8	4535.1	4577.6	4627.5	4689.4	4710.6	4632.1	4588.7	4592.4	4476.0
47.5°	4637.6	4640.4	4718.0	4789.1	4819.6	4839.0	4829.8	4720.8	4698.6	4740.2	4627.5
50°	4656.1	4670.9	4804.8	4950.8	5026.6	5029.3	5003.5	4870.4	4864.0	4911.1	4708.8
52.5°	4659.8	4674.6	4841.8	5105.1	5301.9	5343.4	5313.9	5175.3	5107.9	5060.7	4808.5
55°	4645.9	4662.6	4847.3	5208.6	5585.5	5751.8	5754.5	5558.7	5343.4	5312.0	5093.1
57.5°	4101.8	4108.3	4394.7	4945.3	5574.4	6045.5	6081.6	5815.5	5569.8	5540.2	5321.3
60°	2857.4	2883.3	3194.6	3921.7	4682.9	5513.4	5629.8	5552.2	5387.8	5172.5	4565.6
62.5°	1431.0	1453.2	1765.4	2452.8	3229.7	3885.6	4010.3	4092.6	4131.4	3900.4	3108.7
65°	616.2	632.8	826.8	1281.4	1828.3	2145.1	2188.6	2287.4	2529.4	2256.9	1674.9
67.5°	412.0	423.1	522.0	781.6	1077.2	1097.5	1091.0	1112.3	1165.0	961.7	756.6
70°	315.9	325.2	391.7	572.8	774.2	662.4	627.3	569.1	618.0	630.1	613.4
72.5°	229.1	236.5	286.4	390.8	485.0	423.1	417.6	447.1	513.6	532.1	522.0
75°	147.8	151.5	182.0	214.3	250.4	271.6	282.7	336.3	403.7	417.6	405.6
77.5°	98.8	101.6	119.2	137.7	142.3	143.2	146.9	170.9	217.1	243.0	240.2
80°	51.7	51.7	58.2	58.2	66.5	79.4	83.1	98.8	120.1	133.0	134.0
82.5°	20.3	21.2	24.9	27.7	33.3	40.6	43.4	51.7	62.8	72.1	80.4
85°	8.3	9.2	10.2	12.0	14.8	18.5	19.4	22.2	29.6	37.0	41.6
87.5°	0.0	0.0	0.9	0.9	1.8	2.8	2.8	3.7	4.6	8.3	11.1
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: P634042

CATALOG NUMBER: GWS-SA2F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8	2039.8
2.5°	2046.3	2034.3	2046.3	2050.0	2060.1	2063.8	2057.4	2056.4	2056.4	2047.2	2044.4
5°	2060.1	2049.1	2061.1	2066.6	2081.4	2090.6	2092.5	2099.9	2104.5	2100.8	2099.9
7.5°	2094.3	2080.5	2093.4	2101.7	2121.1	2135.9	2142.4	2159.0	2171.0	2169.2	2168.2
10°	2154.4	2135.9	2150.7	2164.5	2185.8	2203.3	2204.3	2213.5	2225.5	2221.8	2220.0
12.5°	2223.7	2206.1	2222.7	2236.6	2261.5	2268.9	2256.9	2253.2	2255.1	2250.5	2246.8
15°	2308.7	2283.7	2298.5	2314.2	2328.1	2319.7	2293.9	2283.7	2282.8	2276.3	2272.6
17.5°	2393.6	2362.2	2373.3	2381.6	2375.2	2349.3	2317.0	2299.4	2291.1	2278.2	2274.5
20°	2477.7	2438.0	2436.1	2429.7	2400.1	2353.0	2309.6	2274.5	2253.2	2235.7	2229.2
22.5°	2573.8	2518.4	2490.6	2461.1	2396.4	2319.7	2254.1	2204.3	2170.1	2147.9	2140.5
25°	2677.3	2598.7	2541.5	2482.3	2359.5	2248.6	2157.1	2088.8	2048.1	2024.1	2015.8
27.5°	2779.8	2671.7	2585.8	2485.1	2285.6	2146.1	2023.2	1930.8	1890.2	1870.8	1864.3
30°	2918.4	2768.7	2638.5	2449.1	2188.6	2003.8	1850.4	1757.1	1730.3	1716.5	1710.9
32.5°	3078.2	2891.6	2708.7	2373.3	2064.8	1837.5	1675.8	1611.2	1592.7	1565.9	1565.0
35°	3288.8	3067.1	2775.2	2261.5	1908.6	1659.2	1541.9	1495.7	1462.4	1419.9	1416.2
37.5°	3534.6	3286.1	2811.2	2119.3	1726.6	1512.3	1442.1	1390.4	1336.8	1280.4	1273.0
40°	3788.6	3542.0	2814.0	1951.1	1548.3	1415.3	1356.2	1288.7	1222.2	1159.4	1151.1
42.5°	4055.6	3780.3	2765.0	1757.1	1402.4	1331.2	1271.2	1186.2	1111.4	1068.9	1064.3
45°	4294.0	3972.5	2654.2	1553.0	1294.3	1261.0	1184.4	1092.9	1053.2	1022.7	1016.2
47.5°	4481.5	4100.0	2504.5	1370.0	1206.5	1189.0	1089.2	1042.1	1011.6	983.9	977.4
50°	4573.9	4128.6	2309.6	1221.3	1125.2	1104.0	1035.6	999.6	979.3	957.1	951.5
52.5°	4688.4	4160.9	2141.4	1096.6	1045.8	1017.1	991.3	962.6	947.8	934.0	929.4
55°	4951.7	4282.9	2052.8	996.8	970.0	957.1	953.4	929.4	924.8	915.5	907.2
57.5°	5058.9	4204.4	1843.0	915.5	910.0	911.8	921.1	898.9	894.3	883.2	877.6
60°	4068.5	3178.0	1248.1	845.3	860.1	872.1	881.3	859.2	852.7	850.8	843.5
62.5°	2607.0	1954.8	871.2	779.7	801.9	816.7	822.2	801.0	796.3	811.1	812.0
65°	1357.1	1065.2	706.7	709.5	728.0	750.2	761.2	753.8	752.0	767.7	768.6
67.5°	692.9	651.3	616.2	626.4	641.1	669.8	695.6	728.0	739.1	740.9	741.8
70°	590.3	571.9	554.3	560.8	576.5	592.2	617.1	632.8	614.3	609.7	607.9
72.5°	502.6	488.7	480.4	487.8	496.1	493.3	485.9	493.3	496.1	497.0	497.9
75°	390.8	380.6	374.2	375.1	375.1	364.9	351.1	342.7	333.5	326.1	326.1
77.5°	239.3	241.1	247.6	246.7	245.7	242.0	228.2	220.8	198.6	192.2	192.2
80°	136.7	139.5	146.0	147.8	147.8	143.2	129.3	121.0	110.9	106.2	105.3
82.5°	83.1	86.8	90.5	92.4	93.3	87.8	75.8	69.3	63.7	59.1	59.1
85°	43.4	45.3	49.0	49.9	47.1	41.6	35.1	32.3	26.8	25.9	25.9
87.5°	12.0	12.9	14.8	12.0	11.1	8.3	4.6	3.7	1.8	0.9	0.9
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

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

REPORT NUMBER: SP1-2408-195-9

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

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)