

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: P634507

Luminaire Tested: GWS-SA3B-830-U-RW-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3B-830-U-RW-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7284 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

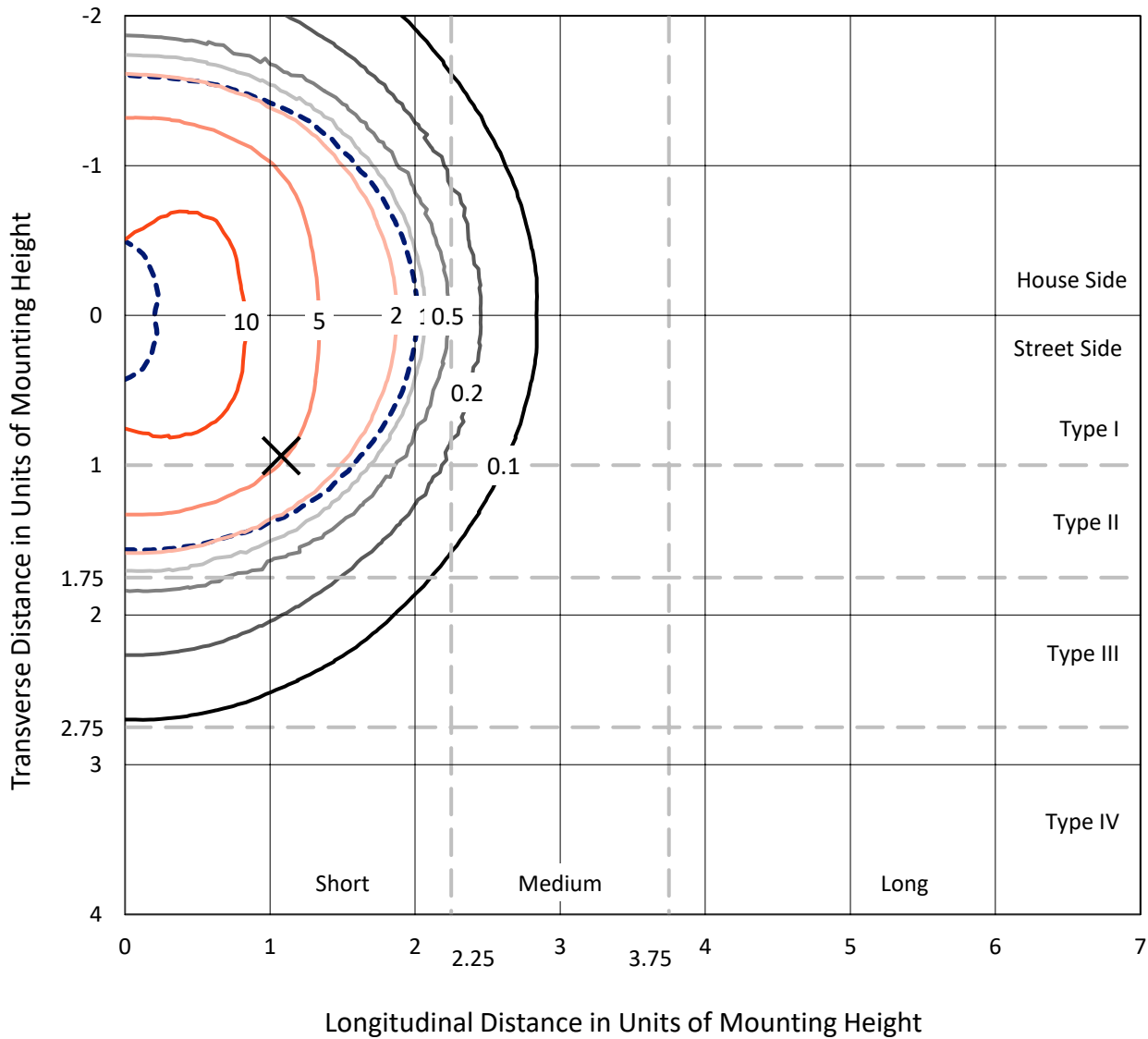
Input Watts (W): 68.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634507
 CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

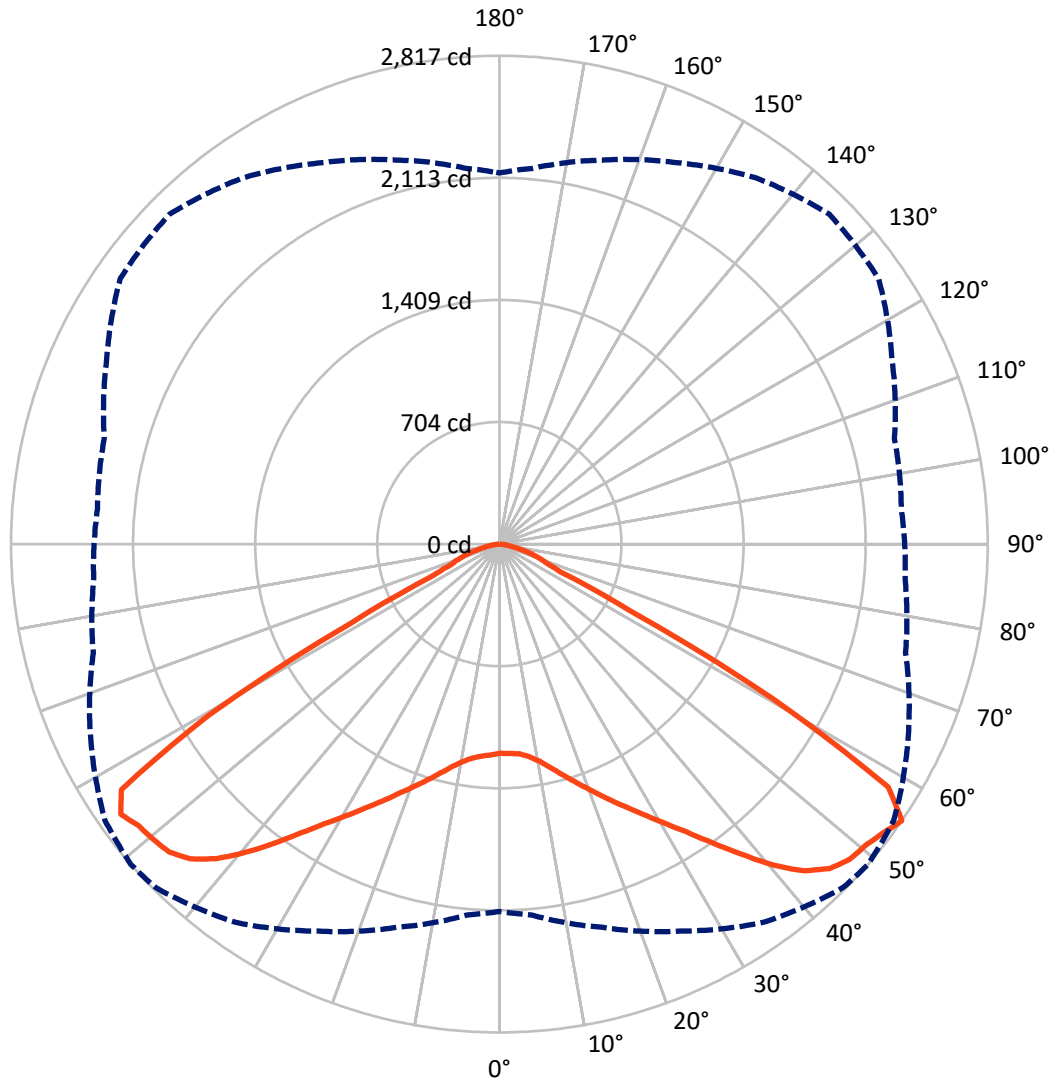
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.4 fc
 Type V - Short - N/A

REPORT NUMBER: P634507
CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 49-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P634507

CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3606.3	0.0	3606.3
	% Fixture	49.5	0.0	49.5
Street Side	Lumens	3677.7	0.0	3677.7
	% Fixture	50.5	0.0	50.5
Total	Lumens	7284.0	0.0	7284.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	1.6
10°-20°	388.3	5.3
20°-30°	739.5	10.2
30°-40°	1253.6	17.2
40°-50°	1886.6	25.9
50°-60°	2065.1	28.4
60°-70°	653.0	9.0
70°-80°	156.7	2.2
80°-90°	23.5	0.3
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°	7284.0	100.0
0°-180°	7284.0	100.0

Coefficient of Utilization



REPORT NUMBER: P634507

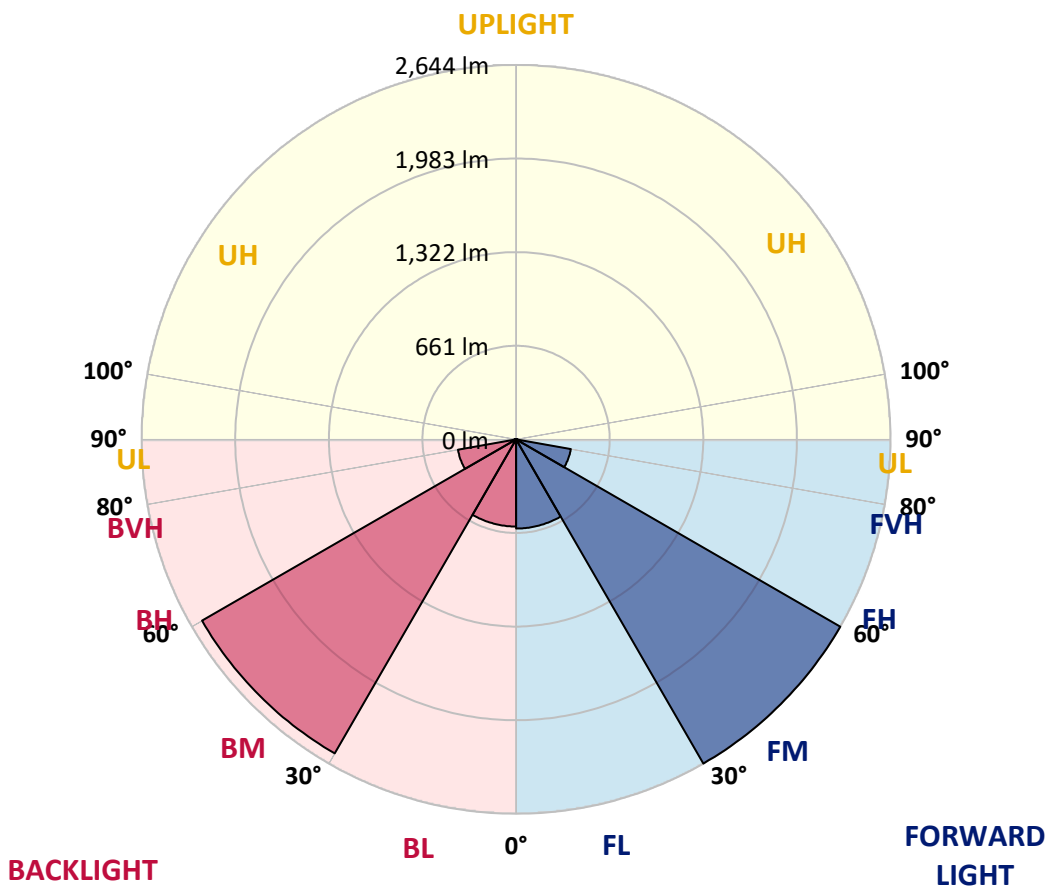
CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	629.8	8.6			
FM (30°-60°)	2644.3	36.3			
FH (60°-80°)	392.8	5.4			G0/660
FVH (80°-90°)	10.9	0.1			G1/100
BL (0°-30°)	615.7	8.5	B2/1000		
BM (30°-60°)	2561.0	35.2	B3/5000		
BH (60°-80°)	416.9	5.7	B1/500		G0/660
BVH (80°-90°)	12.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P634507

CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6
2.5°	1188.9	1190.1	1192.4	1196.6	1200.7	1206.6	1209.0	1212.0	1211.4	1214.9	1214.9
5°	1182.9	1184.7	1188.3	1194.2	1201.3	1212.6	1215.5	1222.6	1229.7	1238.6	1241.6
7.5°	1190.1	1192.4	1196.6	1206.0	1216.7	1231.5	1237.4	1249.3	1262.9	1278.9	1285.4
10°	1203.7	1206.6	1213.7	1229.1	1246.3	1268.8	1274.2	1289.0	1310.9	1332.8	1345.8
12.5°	1219.1	1223.8	1236.8	1261.1	1286.6	1316.2	1324.5	1342.9	1366.6	1395.0	1412.8
15°	1236.8	1241.0	1261.1	1295.5	1335.2	1374.3	1383.8	1401.5	1428.2	1456.0	1480.9
17.5°	1274.2	1281.3	1305.0	1344.7	1390.9	1437.1	1447.7	1467.9	1489.2	1511.1	1534.8
20°	1325.1	1331.0	1361.2	1410.4	1464.9	1507.0	1517.6	1535.4	1545.5	1556.7	1576.9
22.5°	1376.1	1384.3	1418.7	1476.8	1540.7	1586.3	1594.6	1611.2	1604.1	1600.6	1613.6
25°	1439.4	1450.7	1484.5	1547.8	1613.0	1669.3	1675.8	1690.0	1678.2	1659.8	1659.2
27.5°	1518.2	1528.3	1563.2	1628.4	1693.0	1751.6	1764.1	1783.0	1756.9	1734.4	1718.4
30°	1611.8	1618.3	1656.8	1726.1	1792.5	1848.2	1864.2	1883.1	1863.6	1826.2	1810.3
32.5°	1720.8	1729.7	1774.1	1847.0	1906.2	1961.9	1977.9	2001.6	1980.3	1938.2	1918.1
35°	1851.7	1860.6	1907.4	1986.8	2047.2	2104.7	2115.9	2135.5	2108.8	2060.2	2044.2
37.5°	1993.9	2005.1	2064.4	2139.6	2203.0	2269.9	2270.5	2276.4	2238.5	2178.1	2160.3
40°	2153.8	2168.6	2227.9	2306.1	2382.5	2437.0	2436.4	2419.8	2355.8	2262.2	2235.0
42.5°	2312.0	2323.8	2383.7	2464.2	2540.6	2592.2	2576.8	2536.5	2444.1	2316.7	2280.6
45°	2426.3	2435.2	2498.0	2588.6	2666.2	2698.2	2670.4	2621.8	2496.8	2351.1	2297.8
47.5°	2480.2	2492.1	2555.4	2645.5	2733.2	2751.5	2718.3	2672.7	2527.6	2383.1	2311.4
50°	2451.2	2466.6	2538.3	2621.8	2720.7	2758.6	2734.9	2689.3	2560.2	2414.5	2335.7
52.5°	2376.0	2390.8	2481.4	2582.7	2694.6	2769.9	2769.3	2732.0	2597.5	2423.3	2336.9
55°	2118.9	2147.9	2288.9	2463.6	2662.7	2803.1	2817.3	2777.6	2603.4	2425.7	2349.3
57.5°	1379.0	1430.0	1563.8	1791.3	2190.5	2549.5	2645.5	2655.0	2560.8	2415.6	2351.7
60°	575.8	616.6	722.7	873.7	1203.7	1630.8	1816.8	2003.4	2228.5	2310.2	2329.8
62.5°	357.8	361.3	372.0	406.4	516.5	725.0	844.7	1019.5	1354.1	1639.1	1770.6
65°	322.8	324.6	327.0	324.6	329.9	355.4	387.4	448.4	584.7	726.2	894.5
67.5°	284.3	286.7	288.5	286.7	288.5	289.7	293.2	298.5	323.4	343.6	359.0
70°	229.8	233.4	236.4	235.2	242.3	242.3	245.8	250.0	262.4	277.2	287.9
72.5°	175.3	172.4	175.9	177.1	183.6	187.2	192.5	197.3	211.5	220.4	234.0
75°	113.7	110.8	116.1	119.1	127.9	132.7	137.4	142.2	152.2	158.2	171.2
77.5°	61.6	61.0	66.3	70.5	80.0	85.9	89.4	93.0	101.3	103.1	111.4
80°	35.5	35.5	39.1	42.1	48.0	54.5	58.1	61.0	66.9	68.7	72.3
82.5°	19.5	19.5	21.3	23.1	27.8	31.4	34.4	36.7	42.1	43.8	45.6
85°	9.5	8.9	10.1	11.3	13.0	14.8	16.6	17.8	21.9	23.1	25.5
87.5°	1.2	1.2	1.2	1.8	2.4	3.6	4.1	4.1	6.5	7.7	8.9
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: P634507

CATALOG NUMBER: GWS-SA3B-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6	1206.6
2.5°	1218.5	1210.8	1215.5	1217.3	1217.3	1215.5	1207.8	1205.5	1201.9	1196.6	1196.6
5°	1245.7	1239.8	1241.0	1238.0	1230.9	1222.0	1207.8	1200.7	1194.8	1188.3	1187.7
7.5°	1292.5	1284.8	1283.6	1272.4	1253.4	1234.5	1213.2	1200.1	1191.2	1182.9	1182.4
10°	1353.5	1346.4	1337.6	1315.0	1287.2	1259.4	1230.3	1212.6	1199.5	1187.7	1187.1
12.5°	1421.7	1413.4	1396.8	1363.6	1328.7	1301.4	1268.2	1241.0	1221.4	1205.5	1202.5
15°	1495.7	1483.9	1455.4	1416.3	1382.0	1353.0	1317.4	1278.3	1248.7	1223.2	1220.3
17.5°	1552.6	1537.2	1506.4	1469.6	1441.2	1412.2	1366.0	1316.8	1274.2	1242.2	1237.4
20°	1591.7	1579.2	1544.3	1517.0	1500.4	1475.0	1421.1	1365.4	1317.4	1277.1	1274.8
22.5°	1627.8	1613.0	1578.6	1562.6	1562.6	1545.5	1493.9	1428.2	1371.9	1325.1	1319.2
25°	1668.7	1652.7	1626.6	1624.8	1633.1	1625.4	1563.2	1492.7	1427.0	1374.3	1364.8
27.5°	1725.5	1707.8	1692.4	1703.0	1714.9	1706.6	1637.3	1555.5	1486.2	1432.9	1424.6
30°	1816.2	1794.3	1780.0	1793.1	1816.2	1791.9	1716.7	1630.2	1560.3	1501.6	1497.5
32.5°	1921.6	1896.7	1881.9	1902.7	1923.4	1885.5	1810.8	1727.9	1654.5	1592.9	1585.7
35°	2048.4	2017.0	1995.1	2022.9	2044.2	2006.9	1932.9	1854.1	1772.3	1708.4	1698.9
37.5°	2160.9	2123.0	2108.2	2147.3	2175.7	2151.5	2070.9	1996.8	1907.4	1837.5	1833.4
40°	2242.7	2205.4	2194.7	2259.3	2309.0	2303.1	2230.8	2146.1	2062.0	1981.4	1973.7
42.5°	2278.2	2252.2	2254.5	2341.6	2418.6	2456.5	2392.0	2301.3	2220.2	2136.6	2131.3
45°	2285.9	2269.9	2288.9	2397.9	2499.2	2576.8	2521.7	2445.9	2354.0	2273.5	2271.1
47.5°	2294.2	2285.3	2314.4	2429.9	2550.1	2640.2	2609.3	2531.2	2438.2	2359.4	2353.4
50°	2313.8	2310.2	2342.8	2452.4	2574.4	2657.3	2622.4	2544.8	2449.4	2371.8	2357.6
52.5°	2319.7	2313.8	2360.6	2487.3	2614.7	2656.7	2581.5	2480.2	2384.3	2297.8	2283.0
55°	2338.0	2327.4	2359.4	2500.4	2670.4	2691.1	2579.1	2427.5	2293.6	2175.7	2140.8
57.5°	2342.8	2330.9	2351.7	2479.0	2609.9	2591.6	2267.0	1958.9	1706.6	1575.7	1590.5
60°	2317.3	2320.9	2285.3	2271.1	2093.4	1848.2	1387.9	1109.5	871.4	770.7	792.6
62.5°	1764.1	1778.9	1657.4	1441.2	1108.3	878.5	581.1	451.4	382.1	364.3	367.3
65°	890.3	910.5	784.3	648.6	482.2	389.8	337.1	326.4	322.8	318.7	318.7
67.5°	352.5	358.4	353.6	331.1	308.0	299.7	297.4	296.2	292.0	289.7	290.3
70°	283.1	287.9	280.8	266.6	257.1	256.5	255.3	252.9	250.0	250.0	251.8
72.5°	231.0	235.8	225.7	216.8	209.7	204.4	201.4	199.6	195.5	195.5	197.3
75°	170.0	173.0	164.7	163.5	155.8	150.5	145.7	143.4	138.0	135.7	137.4
77.5°	113.1	112.5	108.4	108.4	105.4	98.9	93.6	88.3	81.2	76.4	77.6
80°	73.5	73.5	71.7	71.7	68.7	63.4	56.9	51.5	47.4	43.8	43.8
82.5°	46.8	46.2	45.6	45.0	43.8	38.5	33.8	30.2	27.2	24.9	25.5
85°	26.1	26.1	24.9	24.9	22.5	19.5	17.2	14.8	13.0	12.4	12.4
87.5°	8.9	8.9	8.3	8.3	7.1	5.3	4.1	3.6	3.0	2.4	3.0
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



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

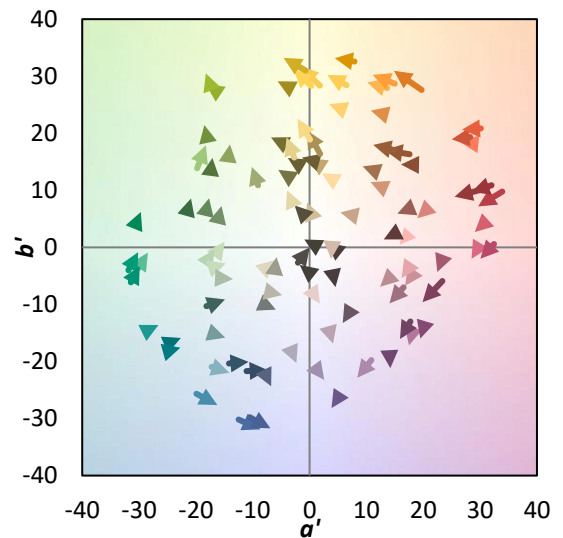
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)