

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: P632038

Luminaire Tested: GWS-SA2B-830-U-SL3-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632038
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2B-830-U-SL3-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3206.5 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G0

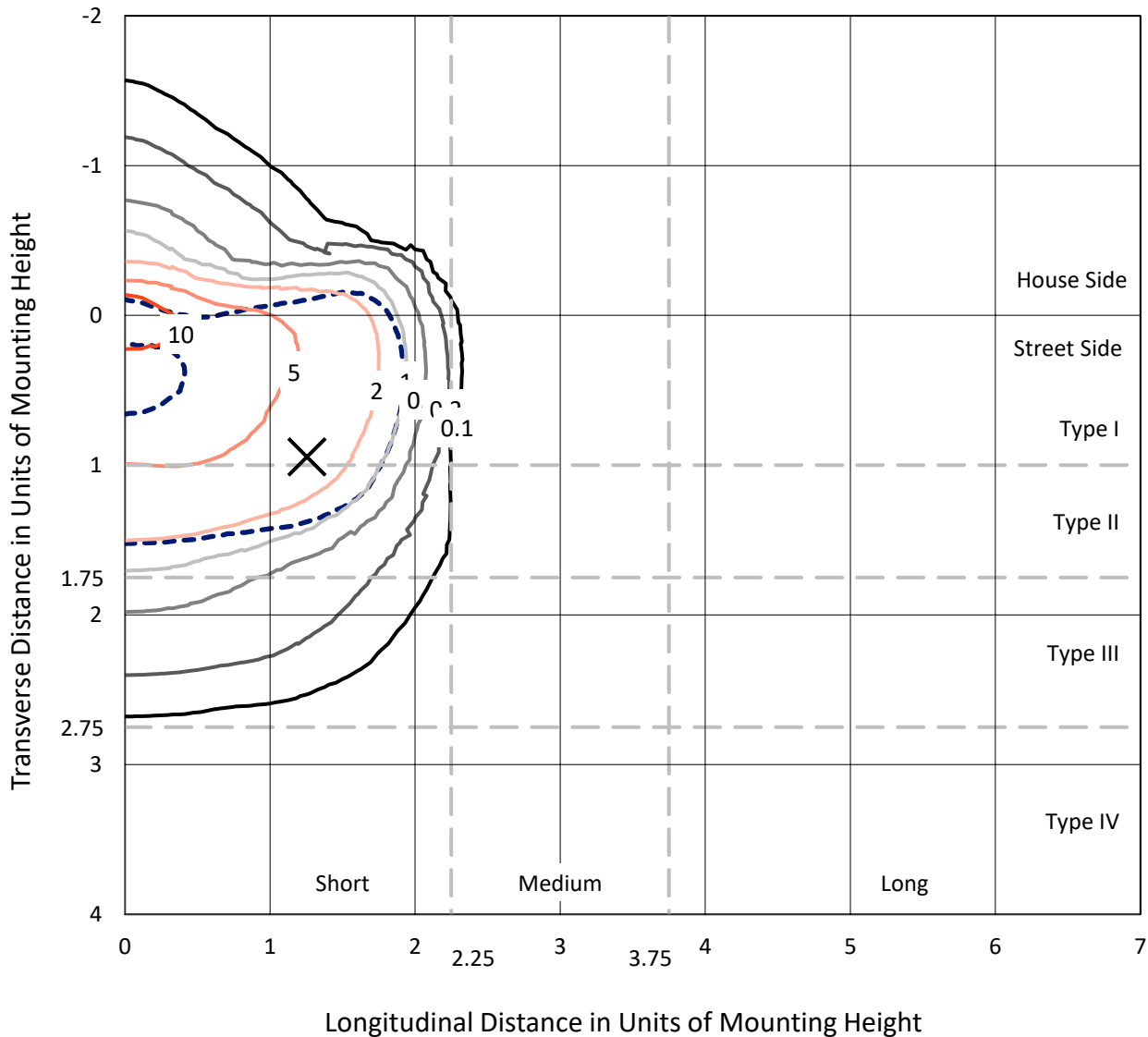
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P632038
 CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

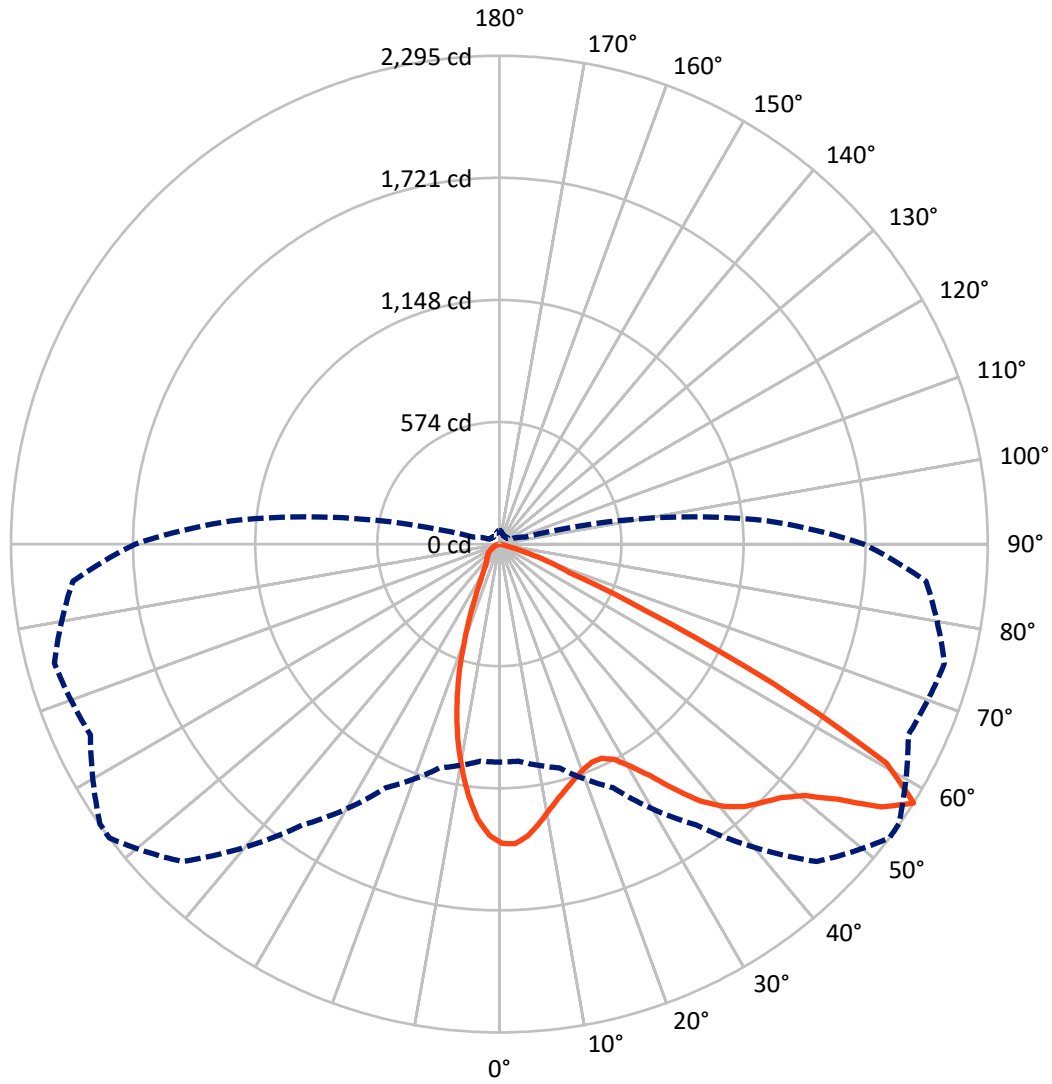
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.1 fc
 Type II - Short - N/A

REPORT NUMBER: P632038
CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P632038
 CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	529.7	0.0	529.7
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	2676.8	0.0	2676.8
	% Fixture	83.5	0.0	83.5
Total	Lumens	3206.5	0.0	3206.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.8
10°-20°	264.2	8.2
20°-30°	344.2	10.7
30°-40°	499.2	15.6
40°-50°	720.4	22.5
50°-60°	871.2	27.2
60°-70°	355.1	11.1
70°-80°	31.9	1.0
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°	3206.5	100.0
0°-180°	3206.5	100.0

Coefficient of Utilization



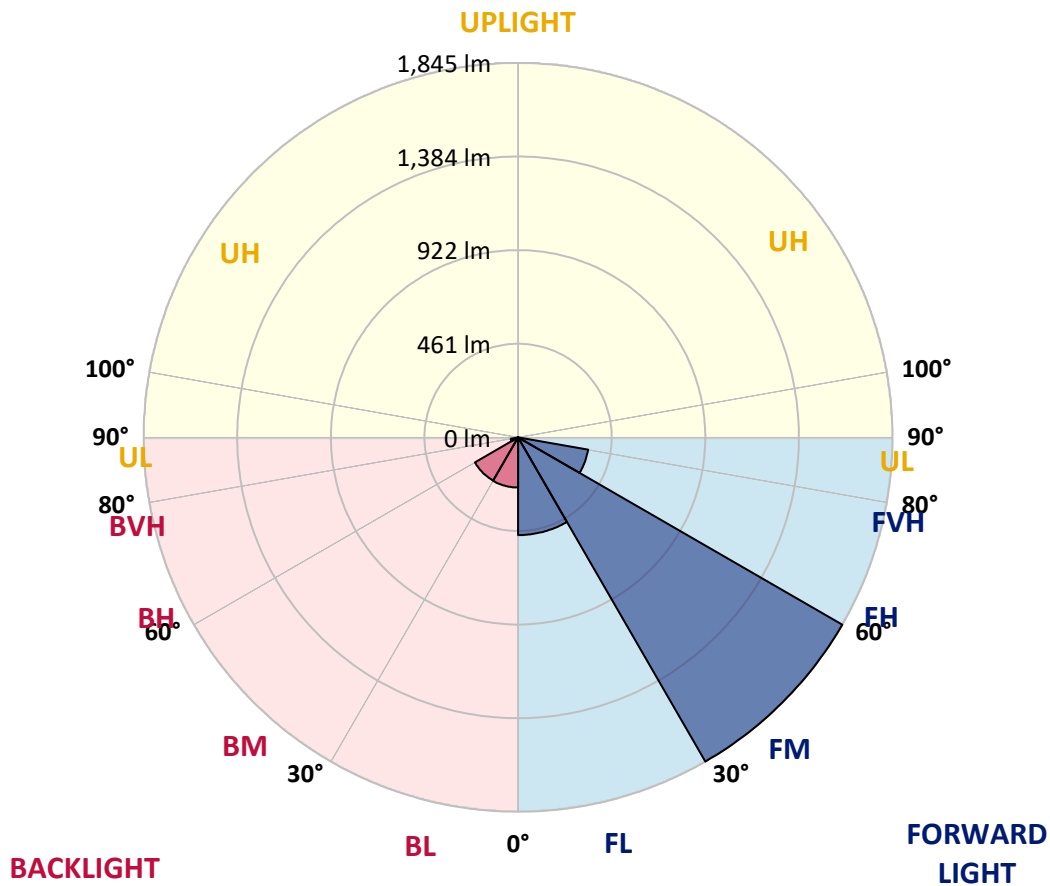
REPORT NUMBER: P632038

CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	481.5	15.0			
FM (30°-60°)	1845.0	57.5			
FH (60°-80°)	350.4	10.9			G0/660
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	247.2	7.7	B1/500		
BM (30°-60°)	245.8	7.7	B1/1000		
BH (60°-80°)	36.6	1.1	B0/110		G0/110
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: B1-U0-G0
 Type II Short





REPORT NUMBER: P632038
 CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6
2.5°	1386.9	1390.0	1395.5	1402.6	1407.3	1409.7	1409.7	1416.4	1412.1	1408.5	1404.6
5°	1327.6	1330.7	1338.2	1349.6	1361.0	1369.2	1378.7	1385.7	1388.5	1388.5	1381.8
7.5°	1243.9	1248.2	1252.9	1268.6	1293.4	1311.8	1328.0	1338.2	1353.1	1357.8	1348.4
10°	1153.9	1158.2	1168.8	1190.4	1218.7	1246.2	1273.7	1286.7	1312.2	1325.6	1315.0
12.5°	1077.6	1079.6	1093.7	1119.7	1155.8	1193.5	1227.0	1240.3	1276.5	1296.5	1283.9
15°	1014.7	1015.9	1030.1	1058.7	1100.4	1146.8	1188.8	1202.6	1247.0	1277.3	1258.4
17.5°	967.2	967.6	979.8	1010.8	1054.4	1105.9	1155.8	1172.7	1230.1	1266.6	1238.3
20°	943.2	942.0	950.7	977.8	1019.1	1070.5	1129.5	1150.3	1220.7	1265.1	1223.0
22.5°	943.6	940.8	944.4	963.6	998.6	1047.0	1113.0	1136.6	1221.4	1271.8	1210.1
25°	966.0	962.1	962.9	973.1	997.8	1041.8	1115.3	1140.5	1237.2	1294.2	1205.3
27.5°	1003.7	999.4	999.4	1004.5	1017.9	1058.0	1144.8	1173.5	1279.2	1337.8	1215.2
30°	1052.5	1048.1	1046.6	1051.7	1062.7	1099.6	1210.4	1240.3	1351.1	1409.3	1246.6
32.5°	1108.3	1103.2	1105.9	1113.0	1123.6	1174.7	1294.9	1334.6	1441.1	1505.6	1303.2
35°	1167.2	1162.9	1175.5	1190.8	1207.3	1278.8	1411.7	1446.2	1551.6	1625.5	1389.7
37.5°	1223.4	1221.4	1247.8	1280.0	1314.2	1403.8	1530.3	1557.1	1646.3	1755.9	1495.4
40°	1279.6	1279.2	1324.4	1381.0	1435.6	1528.4	1620.3	1642.4	1704.1	1857.3	1596.8
42.5°	1342.5	1342.5	1405.0	1480.4	1553.1	1633.7	1686.4	1696.2	1730.0	1915.9	1673.0
45°	1402.6	1406.2	1478.5	1566.1	1652.2	1715.8	1732.0	1732.7	1740.6	1950.5	1736.3
47.5°	1450.2	1453.3	1539.8	1640.8	1733.5	1778.3	1780.7	1777.2	1768.5	1983.5	1785.0
50°	1488.7	1493.4	1583.8	1690.7	1789.3	1838.5	1856.5	1853.0	1831.0	2018.9	1819.2
52.5°	1507.6	1514.2	1599.1	1715.5	1851.4	1941.4	1991.7	2000.0	1924.5	2038.5	1851.8
55°	1356.6	1366.5	1444.7	1603.8	1886.0	2100.6	2179.6	2178.0	2025.9	2097.1	1931.2
57.5°	1024.6	1023.8	1088.6	1262.7	1610.9	2109.6	2295.1	2292.0	2120.6	2165.0	2012.6
60°	697.6	692.9	710.2	794.3	1126.3	1718.6	2088.8	2131.2	2053.4	2000.0	1708.8
62.5°	574.2	569.9	564.4	541.2	646.9	1070.5	1443.1	1507.6	1497.3	1390.0	1071.7
65°	470.0	473.6	488.9	479.1	450.0	549.0	749.1	787.2	719.6	605.6	374.5
67.5°	346.6	348.2	368.2	420.1	404.4	365.5	352.5	358.8	210.3	96.7	62.5
70°	204.8	205.9	224.4	294.0	328.2	280.6	238.2	234.6	83.3	25.9	28.3
72.5°	115.9	113.6	117.1	139.9	178.8	148.9	122.6	111.6	25.2	14.5	14.5
75°	55.0	53.4	46.0	43.2	39.3	25.2	15.7	13.4	6.3	5.9	5.9
77.5°	0.4	1.2	0.8	1.2	1.2	0.8	0.4	0.4	1.2	1.2	1.6
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



REPORT NUMBER: P632038

CATALOG NUMBER: GWS-SA2B-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6	1406.6
2.5°	1397.5	1385.7	1383.0	1382.2	1371.2	1359.4	1347.2	1342.5	1335.4	1331.1	1334.6
5°	1371.2	1354.3	1339.4	1325.6	1301.2	1274.5	1251.3	1236.4	1222.2	1212.8	1215.2
7.5°	1333.8	1311.8	1277.6	1242.7	1197.9	1157.8	1113.0	1085.5	1059.9	1045.8	1052.5
10°	1294.2	1265.1	1210.4	1151.1	1080.8	1017.9	953.8	901.5	871.3	842.6	845.7
12.5°	1255.2	1216.7	1135.0	1045.0	956.2	863.4	766.7	694.4	644.9	609.2	603.7
15°	1219.1	1169.6	1061.5	942.8	821.8	698.4	575.0	471.6	414.2	378.9	376.5
17.5°	1186.9	1125.6	985.3	835.9	684.2	526.2	384.4	306.9	273.9	258.6	257.0
20°	1155.8	1081.1	907.4	727.4	534.1	369.4	265.3	229.5	218.9	212.6	213.4
22.5°	1126.0	1032.8	825.7	607.2	400.5	259.4	205.5	191.8	190.6	191.4	191.8
25°	1100.8	988.4	741.6	491.3	285.7	197.7	171.7	167.8	171.3	176.5	177.2
27.5°	1087.8	952.2	659.5	374.5	206.7	160.7	148.9	150.5	156.8	162.3	163.1
30°	1091.4	925.1	574.6	271.6	159.2	135.6	131.7	134.8	141.1	146.2	147.0
32.5°	1116.5	911.4	487.7	197.7	130.9	118.3	116.7	119.1	124.6	128.5	128.9
35°	1166.4	914.5	405.2	151.3	112.4	105.3	104.9	106.5	109.3	112.0	112.4
37.5°	1239.9	940.1	323.8	125.8	101.8	96.7	95.1	95.1	97.1	98.3	99.0
40°	1318.9	978.6	259.4	111.2	94.3	88.8	85.7	84.5	86.1	87.6	88.0
42.5°	1384.2	1017.1	210.6	101.0	88.4	81.0	77.0	76.2	78.2	81.0	81.7
45°	1434.1	1047.0	175.7	92.7	81.7	73.5	69.2	69.2	72.7	77.4	78.2
47.5°	1479.7	1070.9	149.7	85.3	75.5	66.8	62.5	63.3	69.2	75.5	76.6
50°	1510.7	1090.2	130.5	78.6	70.3	61.3	57.4	59.0	66.0	73.5	74.7
52.5°	1544.1	1113.8	117.9	72.7	65.6	57.0	53.4	54.6	62.5	70.7	72.3
55°	1636.5	1192.8	117.5	64.8	57.4	51.1	49.5	49.9	57.8	67.2	69.2
57.5°	1711.9	1262.3	125.4	54.6	47.9	44.8	44.0	44.4	51.5	62.1	64.5
60°	1416.4	980.9	103.8	45.2	40.1	39.3	38.1	38.9	45.6	55.0	57.0
62.5°	838.3	560.8	49.5	34.6	34.2	33.4	32.2	33.8	40.1	48.3	49.5
65°	286.5	166.2	31.4	28.3	29.1	27.9	26.7	28.3	33.8	38.5	38.9
67.5°	55.0	44.0	25.2	23.6	24.0	21.6	21.2	22.8	25.9	26.7	26.3
70°	28.7	25.5	19.3	19.3	18.5	15.3	15.3	16.9	16.9	15.7	15.3
72.5°	14.9	14.1	12.6	14.1	11.8	9.4	9.4	10.2	9.4	7.9	7.9
75°	5.9	5.9	5.5	7.1	5.1	4.3	3.9	4.7	3.5	2.8	2.8
77.5°	1.6	1.6	1.6	2.0	1.2	1.2	0.8	0.8	0.4	0.0	0.0
80°	0.0	0.4	0.0	0.4	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

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)