

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: P632542

Luminaire Tested: GWS-SA2C-830-U-SLL-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2C-830-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6890.8 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

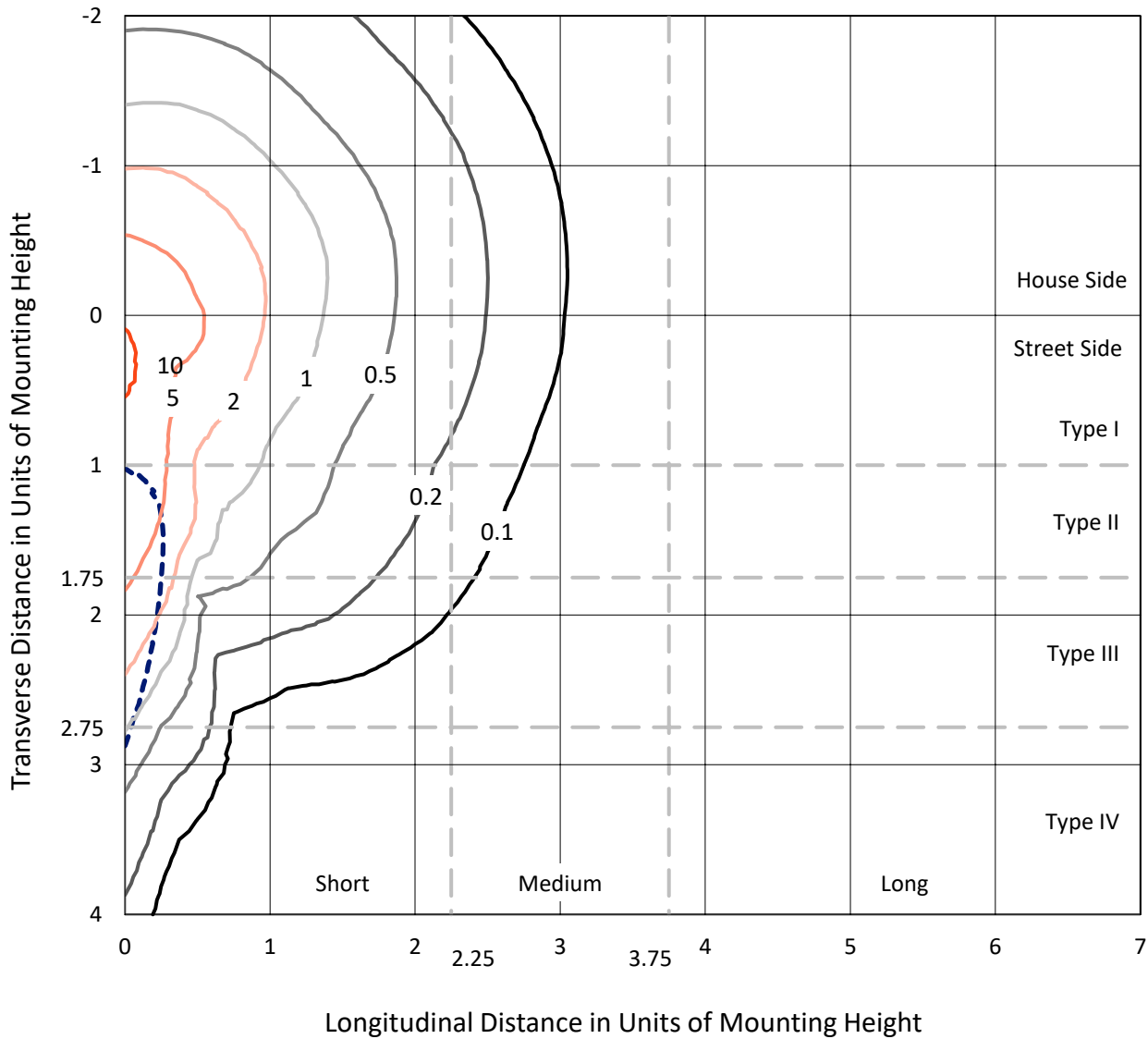
Input Watts (W): 63.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

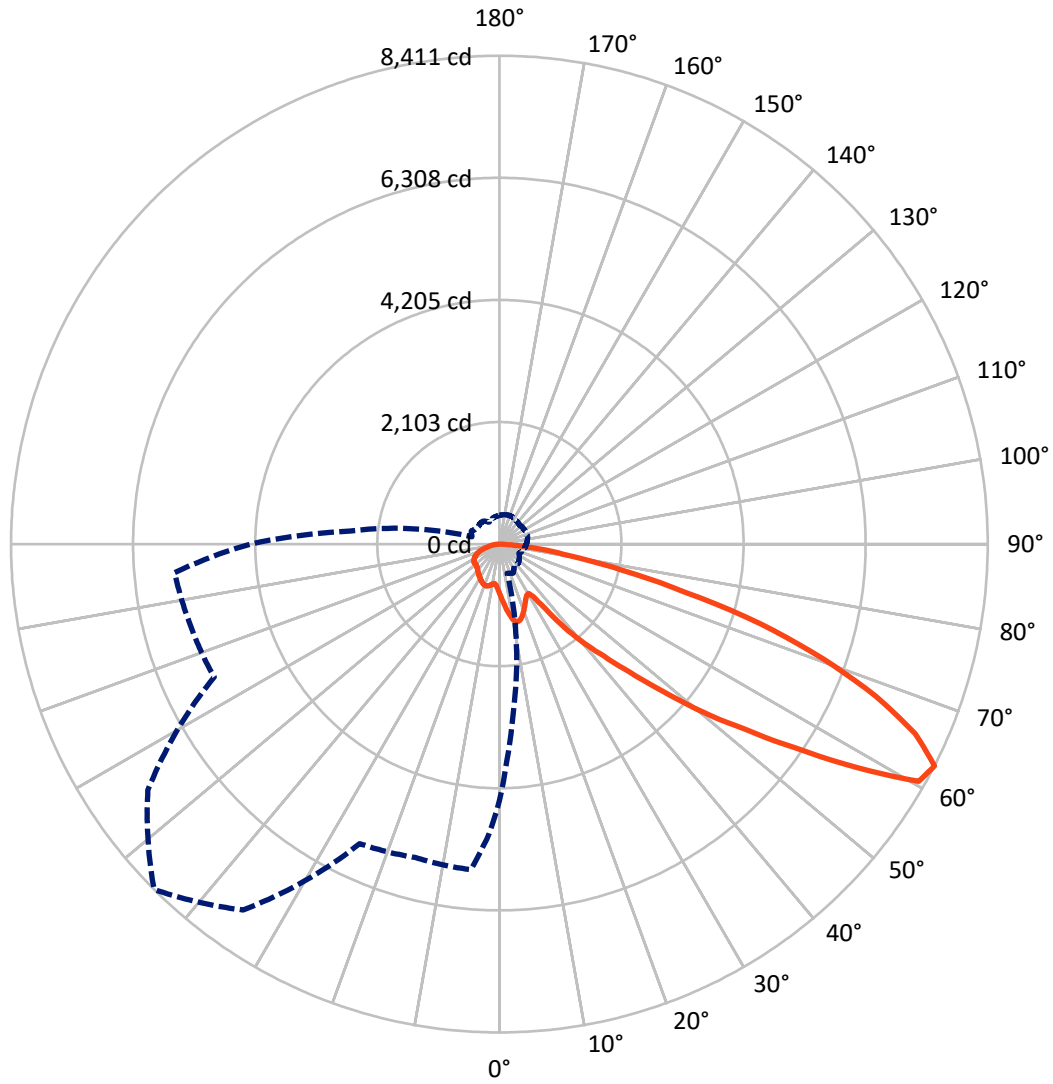
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1647.6	0.0	1647.6
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	5243.2	0.0	5243.2
	% Fixture	76.1	0.0	76.1
Total	Lumens	6890.8	0.0	6890.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	1.2
10°-20°	275.1	4.0
20°-30°	433.0	6.3
30°-40°	593.6	8.6
40°-50°	926.1	13.4
50°-60°	1596.8	23.2
60°-70°	1850.5	26.9
70°-80°	976.8	14.2
80°-90°	154.3	2.2
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°	6890.8	100.0
0°-180°	6890.8	100.0

Coefficient of Utilization



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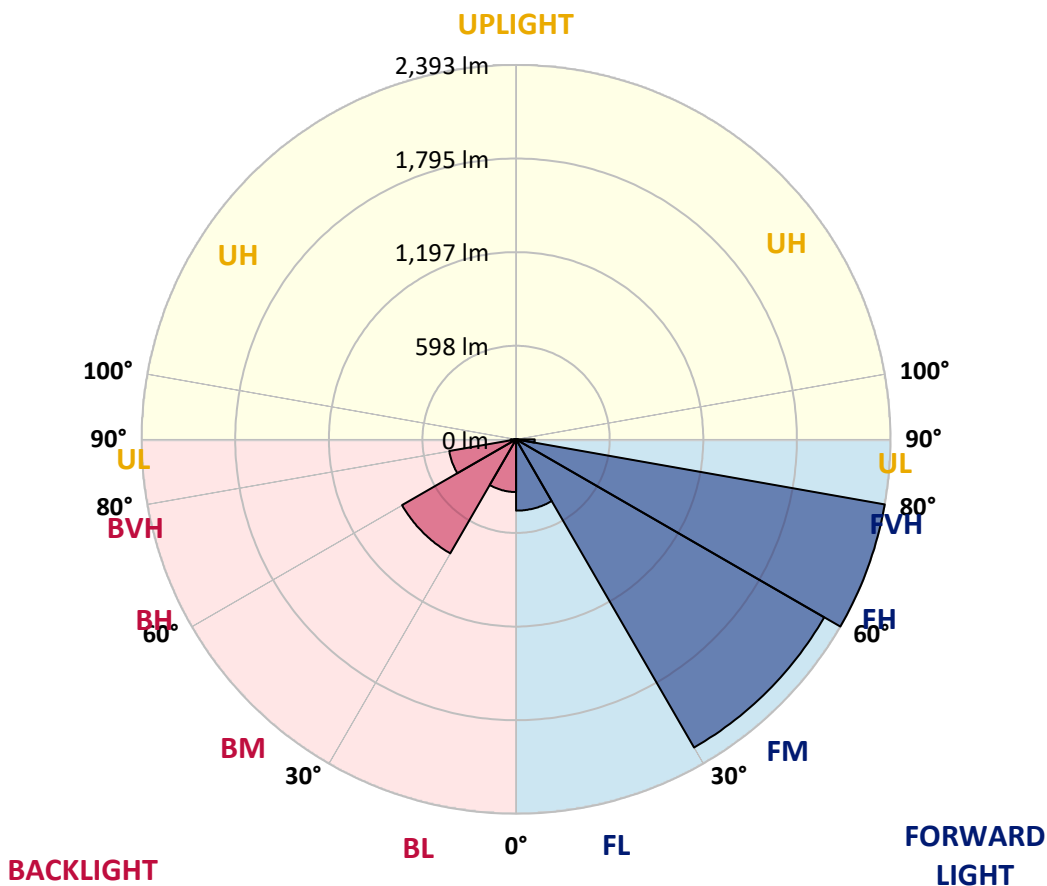
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	455.7	6.6			
FM (30°-60°)	2274.9	33.0			
FH (60°-80°)	2393.5	34.7			G2/5000
FVH (80°-90°)	119.1	1.7			G2/225
BL (0°-30°)	337.0	4.9	B1/500		
BM (30°-60°)	841.6	12.2	B1/1000		
BH (60°-80°)	433.8	6.3	B1/500		G1/500
BVH (80°-90°)	35.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	933.5	929.8	924.5	906.6	895.5	882.9	869.7	854.4	837.0	824.9	812.8
5°	1012.5	1006.7	994.1	951.4	921.9	889.7	862.8	832.3	802.2	781.7	761.1
7.5°	1088.4	1081.0	1061.5	996.2	948.2	901.8	861.2	817.0	772.2	741.6	717.4
10°	1164.3	1149.0	1124.3	1038.9	975.6	921.9	875.5	821.2	761.6	720.0	694.2
12.5°	1222.3	1208.1	1181.2	1077.9	1003.0	935.6	883.4	833.3	782.7	738.4	712.1
15°	1276.6	1258.1	1227.6	1114.2	1025.7	935.0	867.6	823.8	816.4	805.4	771.1
17.5°	1315.6	1298.7	1267.1	1143.8	1038.3	918.7	823.8	798.0	831.2	864.9	832.3
20°	1349.9	1330.3	1298.2	1164.3	1041.0	882.3	770.6	771.1	823.3	869.7	861.8
22.5°	1378.8	1357.2	1328.8	1187.5	1039.9	831.7	724.2	755.8	808.0	844.4	845.4
25°	1414.7	1396.8	1373.0	1221.8	1039.9	780.1	690.5	737.4	782.2	812.8	811.7
27.5°	1458.4	1446.3	1426.8	1274.0	1049.4	736.9	671.5	713.7	749.0	775.3	774.8
30°	1507.4	1496.4	1481.6	1329.3	1065.8	704.7	661.0	684.1	710.0	731.1	731.1
32.5°	1557.5	1553.3	1537.5	1373.6	1053.1	694.7	652.0	654.6	668.3	685.7	684.1
35°	1627.1	1622.9	1602.8	1407.8	998.3	680.5	637.8	624.6	626.2	637.2	640.9
37.5°	1728.8	1722.5	1693.0	1447.9	915.5	644.6	614.6	593.0	588.2	593.0	599.8
40°	1851.6	1842.1	1802.1	1502.2	820.1	596.1	578.2	560.3	552.4	554.0	561.9
42.5°	2005.5	1985.5	1928.1	1559.6	725.8	553.4	537.6	526.6	517.6	516.5	531.8
45°	2255.4	2200.6	2109.4	1610.8	646.2	530.8	501.3	493.3	486.0	490.2	508.1
47.5°	2691.8	2590.6	2413.0	1654.5	597.7	531.3	472.3	463.8	463.3	471.7	491.8
50°	3291.6	3145.6	2871.5	1684.0	572.4	537.6	454.9	441.2	451.2	459.6	478.6
52.5°	3866.1	3643.2	3316.9	1683.5	561.3	538.7	459.6	420.1	451.2	453.3	471.2
55°	4356.8	3953.1	3437.1	1510.6	545.5	534.5	478.1	403.7	445.4	453.3	467.5
57.5°	4746.9	4150.2	3428.1	1220.2	593.5	511.3	489.1	400.1	428.5	454.3	470.7
60°	4703.7	4060.1	3207.3	749.0	588.7	470.2	487.5	406.9	400.1	440.1	467.0
62.5°	4416.4	3737.0	2827.3	519.7	552.9	446.4	461.7	419.0	373.7	419.6	449.1
65°	4014.2	3320.1	2356.0	398.5	458.0	447.5	418.0	410.6	350.5	386.9	418.5
67.5°	3482.4	2803.0	1860.1	315.7	319.4	387.4	379.5	364.7	328.9	357.9	386.3
70°	2618.0	2045.6	1279.7	254.1	241.9	323.6	341.0	327.8	307.8	316.2	346.3
72.5°	1844.8	1335.6	701.0	201.3	186.6	248.8	296.2	294.1	272.0	278.3	307.8
75°	1370.9	945.1	438.0	159.2	151.8	178.2	248.3	254.6	236.1	243.5	266.2
77.5°	912.4	611.9	243.5	118.1	118.1	130.2	185.0	214.5	200.8	206.6	222.4
80°	503.4	311.5	121.8	77.5	79.6	89.6	134.9	154.4	155.0	169.2	173.4
82.5°	159.2	99.1	54.3	45.3	42.7	51.1	87.0	110.7	103.3	131.8	121.2
85°	36.4	23.2	10.0	10.0	11.1	16.9	33.2	59.0	75.4	90.7	65.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	23.2	34.3	30.6
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°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	805.4	794.8	791.7	782.7	781.7	773.2	770.1	770.1	773.8	773.8	777.4
5°	752.7	739.5	732.1	721.6	718.9	712.6	708.4	708.9	713.7	716.8	723.2
7.5°	706.3	697.3	692.1	687.3	686.3	685.2	680.5	679.9	681.5	686.3	691.0
10°	686.8	680.5	682.0	685.7	691.5	694.7	690.5	688.4	686.8	689.9	694.2
12.5°	705.8	699.4	702.6	708.9	716.8	720.0	718.4	717.9	719.5	731.6	740.5
15°	747.4	735.3	731.1	733.7	740.0	743.2	741.6	743.7	753.7	785.3	808.0
17.5°	799.1	769.5	752.7	747.9	750.6	753.2	753.2	758.5	775.9	822.2	850.7
20°	827.0	788.5	760.0	748.5	749.5	752.1	752.1	759.5	779.0	828.6	847.0
22.5°	819.6	784.3	749.5	736.9	737.4	739.5	739.5	745.8	763.2	807.0	815.4
25°	790.6	759.5	725.3	714.2	715.2	718.9	717.9	721.6	734.7	770.6	775.3
27.5°	755.8	728.4	694.7	686.3	691.0	698.4	692.1	692.6	704.7	734.7	735.3
30°	718.4	695.7	665.7	659.4	668.3	672.0	666.2	666.2	678.4	698.9	698.4
32.5°	677.8	663.6	642.0	635.1	645.1	650.9	643.6	644.6	654.1	667.8	662.5
35°	639.9	632.5	622.5	617.7	624.1	629.3	624.6	626.7	635.7	639.3	632.0
37.5°	603.5	602.5	603.5	603.5	605.1	606.7	603.5	608.8	616.7	611.9	603.5
40°	571.9	576.1	586.1	583.5	581.9	583.5	581.4	590.3	598.2	589.8	579.8
42.5°	545.5	553.4	568.7	568.7	565.6	566.6	565.6	576.6	582.4	570.8	559.8
45°	522.9	534.5	554.0	556.6	551.3	551.3	553.4	567.1	569.2	553.4	541.8
47.5°	507.1	521.3	543.4	548.2	540.3	539.7	545.5	560.3	560.3	541.8	528.7
50°	496.0	511.8	538.1	544.5	536.6	534.5	543.9	558.2	555.0	532.9	519.7
52.5°	488.6	504.9	537.6	546.6	541.3	539.2	548.7	558.7	550.8	527.1	513.4
55°	483.9	501.8	539.2	546.6	540.8	537.1	546.6	555.5	551.3	523.9	510.7
57.5°	486.5	504.4	537.1	540.8	533.9	527.6	538.7	551.3	549.7	525.0	511.8
60°	482.3	498.6	525.5	526.6	515.0	504.9	521.3	540.3	540.3	521.3	509.7
62.5°	462.8	479.1	502.8	503.9	490.7	479.6	498.6	521.3	520.8	505.5	493.3
65°	430.6	445.9	472.8	475.4	462.2	450.7	470.2	491.2	492.8	479.1	468.6
67.5°	395.3	409.0	429.0	439.6	428.5	416.4	434.3	454.3	453.8	437.5	426.4
70°	353.1	365.8	384.2	393.2	386.3	374.8	391.1	401.6	396.9	389.0	381.6
72.5°	311.5	323.6	341.0	341.0	333.6	322.6	327.3	346.3	352.1	346.3	341.5
75°	267.8	278.3	290.4	293.1	276.7	256.7	278.8	295.2	302.0	299.4	293.6
77.5°	223.0	230.9	248.8	244.0	213.5	202.9	220.8	245.1	249.8	248.3	240.3
80°	171.8	176.6	195.5	186.1	162.3	155.5	163.4	182.4	183.4	178.2	168.1
82.5°	115.4	121.8	134.4	116.0	115.4	109.1	102.8	104.9	114.4	113.3	106.5
85°	59.0	62.2	74.3	69.6	59.6	51.7	49.0	52.2	46.9	42.7	36.9
87.5°	24.8	26.9	36.9	20.6	6.3	0.0	0.0	3.2	4.7	6.9	7.4
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°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	785.9	791.7	805.9	823.8	841.2	859.1	878.6	890.8	905.5	924.5	925.0
5°	731.1	744.2	764.8	792.2	820.7	853.3	891.3	922.9	960.9	990.9	1003.0
7.5°	697.3	716.3	742.1	776.9	814.3	854.9	904.5	957.7	1019.9	1060.0	1083.7
10°	700.5	729.5	755.3	784.8	818.6	862.3	926.1	996.7	1073.1	1125.8	1155.4
12.5°	756.9	787.5	782.7	781.1	803.8	857.0	943.5	1036.2	1129.5	1182.2	1217.6
15°	828.0	839.6	794.8	761.1	774.8	838.1	953.0	1071.6	1176.4	1240.7	1275.5
17.5°	864.4	841.2	786.9	736.3	732.6	809.1	957.7	1107.4	1229.2	1293.5	1330.3
20°	847.5	813.8	768.0	720.0	693.6	769.5	955.1	1135.9	1277.1	1348.8	1378.8
22.5°	811.2	781.7	745.8	700.0	662.0	726.3	948.2	1164.3	1319.8	1392.0	1418.4
25°	771.6	749.5	720.0	679.9	644.1	688.4	943.5	1202.3	1368.8	1437.9	1454.7
27.5°	732.1	715.8	691.5	660.4	639.9	662.0	945.1	1251.8	1432.1	1497.4	1490.6
30°	693.1	678.9	662.0	648.3	639.3	655.7	940.8	1304.5	1501.7	1562.3	1521.7
32.5°	656.2	643.0	632.5	634.6	639.9	658.3	919.2	1352.5	1565.4	1617.1	1555.4
35°	624.6	610.9	610.9	618.3	637.8	649.4	863.4	1389.9	1636.1	1687.7	1603.4
37.5°	595.1	583.0	590.9	603.0	621.4	625.1	791.7	1426.3	1738.8	1787.3	1677.7
40°	569.2	557.1	571.4	586.6	596.1	594.5	718.9	1476.9	1860.1	1910.1	1776.3
42.5°	548.7	537.6	550.3	569.8	571.4	572.9	665.7	1525.4	2000.8	2064.6	1946.0
45°	531.8	523.9	530.2	549.7	549.7	574.0	632.5	1566.0	2212.7	2325.5	2257.5
47.5°	518.6	513.9	517.1	523.4	533.9	593.0	611.4	1597.1	2598.5	2819.9	2751.4
50°	511.3	506.5	510.7	497.6	529.2	602.5	604.6	1620.8	3107.1	3454.0	3369.1
52.5°	504.9	503.4	506.0	475.4	539.7	596.1	599.3	1589.1	3448.2	4078.0	4161.8
55°	502.8	503.9	491.2	459.1	552.4	575.0	583.5	1363.0	3540.9	4616.2	5136.4
57.5°	503.9	500.7	468.6	460.7	552.9	532.9	606.1	972.5	3406.0	4850.2	6089.9
60°	500.2	484.4	441.2	474.9	528.7	483.3	589.8	634.1	3050.2	4670.5	6145.2
62.5°	483.9	460.7	417.4	482.8	485.4	453.8	535.5	488.6	2575.8	4285.7	5611.8
65°	460.1	429.0	397.4	466.5	441.7	440.1	402.7	391.6	2071.4	3827.7	5105.8
67.5°	421.1	390.0	382.7	429.0	397.4	390.0	323.6	324.7	1652.9	3339.6	4597.2
70°	376.9	345.8	351.6	387.9	353.7	324.2	262.0	270.4	1253.9	2782.5	3911.5
72.5°	347.9	306.2	306.8	341.5	311.0	262.5	215.6	223.0	795.9	2097.3	3109.8
75°	293.6	269.9	258.3	276.7	264.1	204.5	181.3	179.7	471.7	1503.2	2328.6
77.5°	245.1	226.6	220.8	228.2	197.1	151.3	146.0	143.4	267.2	963.0	1525.9
80°	177.6	172.9	172.4	176.0	151.8	111.2	111.2	111.7	143.9	522.9	860.2
82.5°	112.8	123.3	109.1	121.2	103.3	79.1	73.8	83.8	82.8	223.0	362.6
85°	46.9	64.3	60.1	63.8	49.0	43.2	46.4	50.1	48.0	85.9	141.3
87.5°	9.0	10.5	11.6	11.1	11.1	13.7	15.3	18.4	18.4	24.8	42.7
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-SA2C-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	945.1	960.3	957.2	964.0	955.1	958.2	940.3	935.6	932.4	933.5
5°	1042.0	1073.1	1078.9	1090.5	1082.6	1082.6	1051.0	1027.3	1018.8	1012.5
7.5°	1140.6	1185.4	1214.9	1218.1	1213.9	1205.4	1159.6	1116.9	1101.6	1088.4
10°	1228.1	1281.9	1315.1	1330.9	1323.0	1309.8	1252.9	1194.4	1175.9	1164.3
12.5°	1295.0	1342.5	1364.6	1375.2	1374.1	1369.4	1323.0	1259.7	1240.2	1222.3
15°	1338.3	1362.0	1353.5	1353.0	1360.4	1379.4	1365.1	1315.6	1292.9	1276.6
17.5°	1366.2	1343.5	1306.1	1288.7	1304.5	1349.3	1382.0	1354.1	1333.5	1315.6
20°	1376.2	1295.6	1241.3	1209.1	1227.6	1292.4	1373.0	1382.0	1364.6	1349.9
22.5°	1364.6	1237.1	1163.3	1125.3	1143.2	1220.7	1346.7	1404.7	1393.1	1378.8
25°	1336.1	1175.9	1087.4	1053.1	1072.6	1151.7	1299.8	1425.8	1426.3	1414.7
27.5°	1300.8	1119.5	1034.1	1002.0	1021.0	1094.7	1253.9	1444.2	1462.6	1458.4
30°	1265.0	1085.8	1008.8	986.2	1000.4	1065.8	1207.0	1463.2	1500.1	1507.4
32.5°	1248.7	1102.1	1068.4	1078.4	1060.0	1082.6	1190.1	1490.1	1545.4	1557.5
35°	1270.3	1247.1	1332.5	1372.0	1306.6	1220.7	1211.8	1530.6	1609.2	1627.1
37.5°	1375.2	1557.5	1685.1	1824.2	1710.9	1521.7	1318.8	1599.7	1700.4	1728.8
40°	1603.4	1828.4	2058.8	2238.5	2067.2	1812.6	1522.2	1702.5	1825.8	1851.6
42.5°	1818.4	2082.5	2399.8	2632.2	2409.8	2050.3	1741.5	1875.3	1991.3	2005.5
45°	2029.3	2331.8	2812.5	3135.6	2833.6	2276.5	1965.5	2167.4	2254.8	2255.4
47.5°	2276.5	2612.7	3330.1	3790.2	3396.0	2526.8	2175.8	2629.6	2751.4	2691.8
50°	2572.1	2892.1	3863.0	4551.9	4081.7	2834.6	2443.0	3193.0	3359.1	3291.6
52.5°	2968.0	3199.9	4450.1	5294.5	4829.1	3185.1	2830.4	3937.3	3992.1	3866.1
55°	3525.1	3644.2	5203.9	6211.6	5663.5	3616.8	3397.0	4871.3	4717.9	4356.8
57.5°	4793.8	4347.4	6171.6	7257.9	6607.5	4401.1	4638.8	5901.2	5355.7	4746.9
60°	5855.3	5201.2	7067.1	8296.2	7416.5	5265.5	5804.7	6080.4	5331.9	4703.7
62.5°	5497.4	5418.9	7390.2	8410.6	7692.7	5690.9	5588.1	5628.7	4984.1	4416.4
65°	4823.3	4998.8	7101.9	7868.2	7386.5	5309.8	5054.7	5211.2	4586.1	4014.2
67.5°	4425.4	4554.5	6589.0	7000.1	6829.9	4897.6	4639.9	4526.6	3968.4	3482.4
70°	4018.5	4125.5	5869.0	5910.7	5961.8	4212.4	3793.9	3456.6	2958.0	2618.0
72.5°	3472.4	3478.2	4958.8	4717.4	4814.3	3296.4	3053.9	2584.3	2153.1	1844.8
75°	2913.2	2754.0	3925.2	3297.4	3491.9	2564.2	2535.8	1947.6	1623.9	1370.9
77.5°	2221.1	2035.1	2867.3	2168.4	2452.5	1707.7	1906.4	1320.9	1142.7	912.4
80°	1491.1	1375.2	1584.4	1223.9	1604.4	1177.0	1243.4	748.5	648.8	503.4
82.5°	786.4	671.5	979.3	725.8	967.7	646.7	466.5	231.4	197.1	159.2
85°	304.7	352.6	480.2	258.3	375.3	230.9	134.9	57.5	48.0	36.4
87.5°	59.0	91.2	50.1	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

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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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

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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			

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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			

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)