

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: P634526

Luminaire Tested: GWS-SA3B-830-U-SLR-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3B-830-U-SLR-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7823.6 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

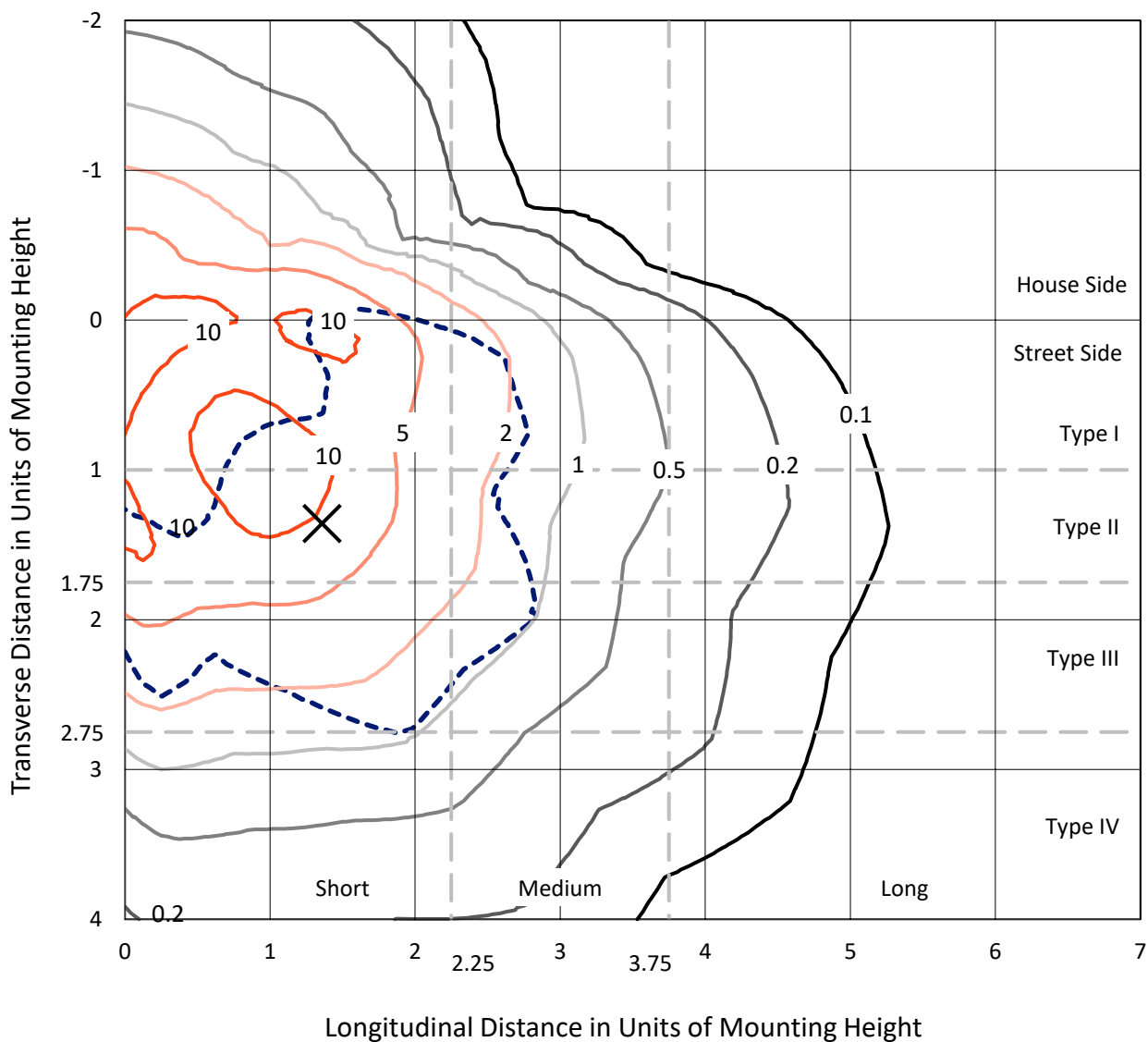
Input Watts (W): 68.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

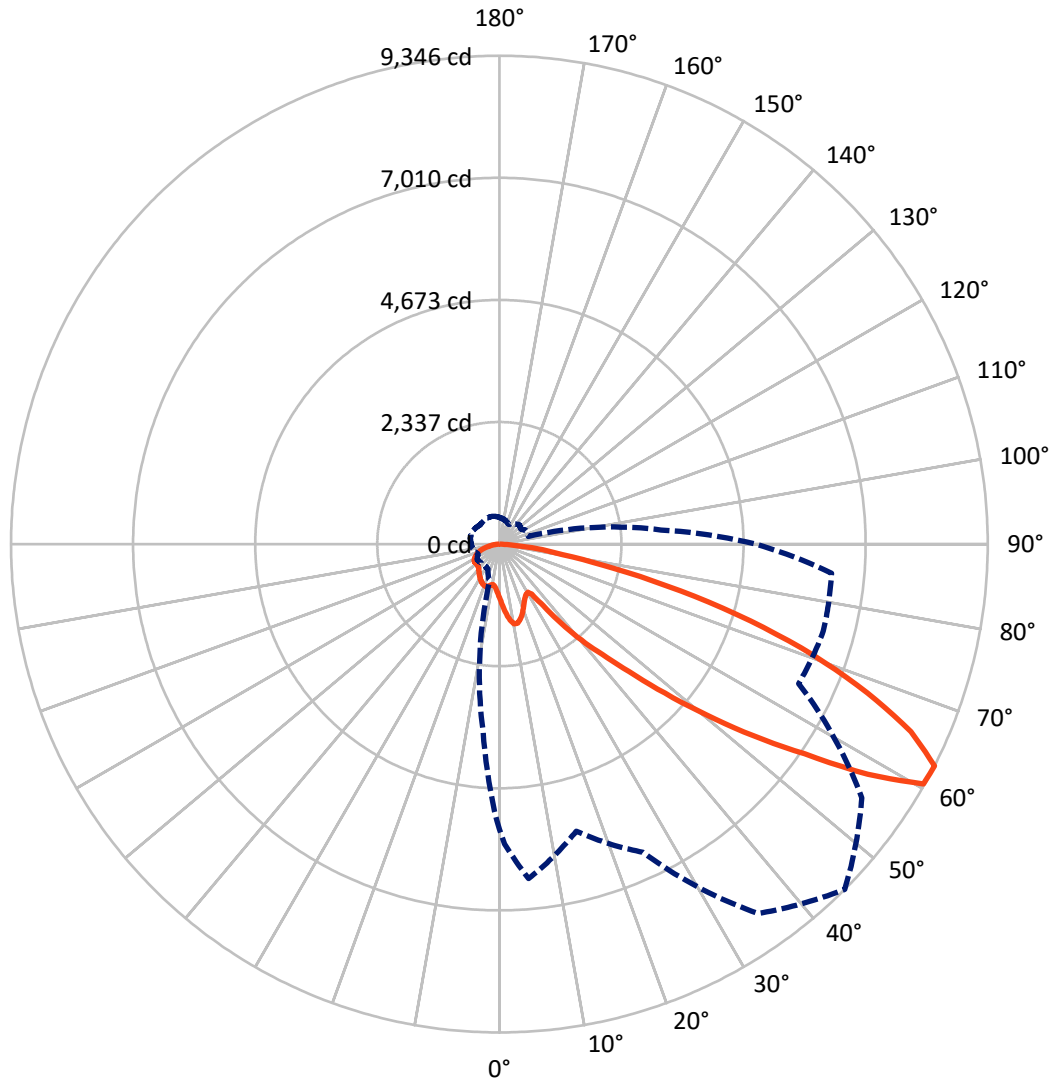
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1866.9	0.0	1866.9
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	5956.7	0.0	5956.7
	% Fixture	76.1	0.0	76.1
Total	Lumens	7823.6	0.0	7823.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.4	1.3
10°-20°	317.9	4.1
20°-30°	493.8	6.3
30°-40°	670.4	8.6
40°-50°	1062.5	13.6
50°-60°	1874.3	24.0
60°-70°	2085.5	26.7
70°-80°	1057.7	13.5
80°-90°	160.1	2.0
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°	7823.6	100.0
0°-180°	7823.6	100.0

Coefficient of Utilization



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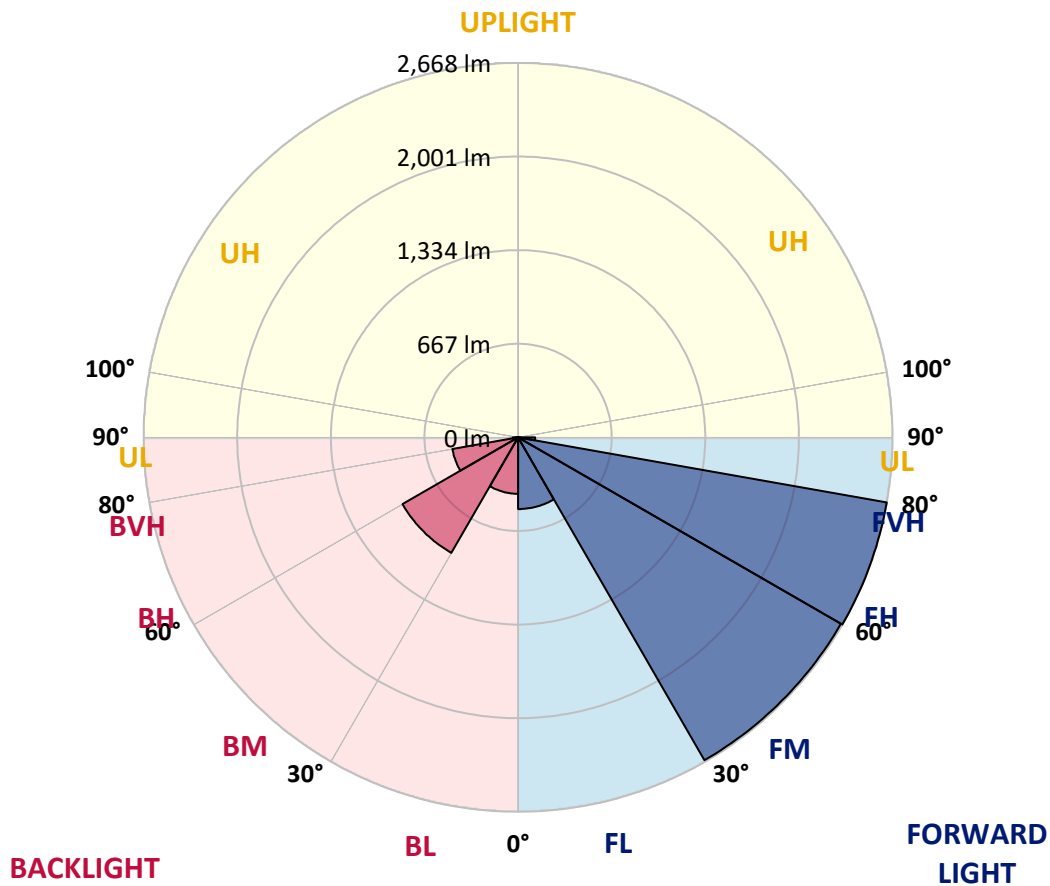
CATALOG NUMBER: GWS-SA3B-830-U-SLR-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	510.8	6.5			
FM (30°-60°)	2656.5	34.0			
FH (60°-80°)	2667.9	34.1			G2/5000
FVH (80°-90°)	121.6	1.6			G2/225
BL (0°-30°)	402.3	5.1	B1/500		
BM (30°-60°)	950.8	12.2	B1/1000		
BH (60°-80°)	475.2	6.1	B1/500		G1/500
BVH (80°-90°)	38.6	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°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4
2.5°	1115.9	1115.4	1126.6	1143.8	1159.8	1166.9	1178.7	1177.5	1168.1	1155.6	1151.5
5°	1203.6	1206.0	1225.5	1263.4	1305.5	1323.3	1331.0	1328.0	1310.8	1288.9	1250.4
7.5°	1283.0	1287.1	1317.3	1374.2	1426.3	1450.0	1469.0	1465.4	1440.5	1399.7	1342.8
10°	1341.0	1345.8	1381.9	1448.8	1506.9	1527.6	1551.9	1553.1	1531.2	1476.1	1418.0
12.5°	1399.1	1403.8	1437.6	1498.6	1536.5	1537.1	1551.3	1559.0	1560.2	1534.7	1476.7
15°	1459.5	1463.6	1494.4	1528.8	1527.0	1493.9	1493.9	1508.7	1541.2	1559.6	1519.3
17.5°	1511.0	1516.4	1540.1	1528.8	1476.1	1416.3	1409.1	1428.1	1485.0	1555.5	1551.3
20°	1553.7	1557.8	1570.9	1496.2	1400.3	1322.1	1308.5	1330.4	1407.4	1530.0	1575.6
22.5°	1594.5	1596.9	1589.8	1453.6	1318.5	1229.1	1212.5	1235.6	1318.5	1485.0	1596.3
25°	1643.1	1640.7	1607.0	1409.1	1243.9	1155.6	1138.5	1164.5	1251.0	1425.1	1618.8
27.5°	1699.4	1690.5	1621.8	1361.2	1186.4	1101.1	1089.3	1117.1	1197.7	1370.1	1636.6
30°	1747.4	1730.2	1624.2	1318.5	1156.8	1078.0	1070.9	1097.0	1171.6	1332.7	1659.1
32.5°	1800.7	1777.0	1637.8	1307.3	1173.4	1133.7	1143.2	1145.0	1178.7	1322.1	1692.9
35°	1877.1	1846.3	1675.1	1339.8	1344.0	1410.9	1445.3	1399.1	1285.9	1345.8	1756.8
37.5°	1992.6	1953.5	1750.9	1480.8	1696.4	1846.3	1929.2	1823.8	1611.7	1435.2	1853.4
40°	2133.0	2083.2	1848.1	1741.4	2025.8	2265.7	2413.1	2258.5	1947.0	1658.5	1989.0
42.5°	2329.0	2276.9	2036.4	1997.3	2330.8	2688.0	2880.5	2650.1	2242.6	1947.0	2206.4
45°	2670.8	2620.5	2381.8	2253.8	2688.0	3208.0	3478.2	3157.7	2542.9	2236.6	2612.8
47.5°	3302.2	3243.0	2894.7	2538.1	3095.5	3883.3	4261.2	3794.5	2855.0	2568.3	3295.1
50°	4060.4	4003.5	3538.6	2874.6	3545.7	4605.4	5130.7	4542.6	3214.6	2971.7	4110.8
52.5°	4972.6	4961.9	4457.3	3299.9	4014.2	5375.4	6095.7	5371.2	3608.5	3514.9	5034.8
55°	5794.7	5899.0	5624.2	3948.5	4619.6	6342.7	7087.8	6275.1	4142.7	4412.8	6117.0
57.5°	6237.8	6518.0	6940.3	5271.7	5499.8	7498.9	8312.1	7378.6	5060.9	5907.9	7120.4
60°	5945.2	6262.7	7028.0	6268.0	6372.9	8425.3	9322.7	8306.2	5962.4	6945.6	7063.5
62.5°	5458.3	5743.2	6423.8	5686.4	6507.9	8629.0	9346.3	8467.9	6320.7	6419.1	6380.6
65°	4880.8	5168.1	5888.9	4963.7	6078.5	8145.1	8656.9	7992.3	5676.9	5799.5	5813.7
67.5°	4113.7	4379.1	5113.0	4413.4	5540.6	7434.9	7598.4	7314.7	5227.9	5423.4	5219.0
70°	3073.6	3312.9	3960.9	3586.5	4670.5	6509.7	6377.6	6419.7	4723.8	4918.1	4359.5
72.5°	2100.4	2280.5	2836.1	2818.3	3576.5	5211.3	5027.1	5425.7	3945.5	4203.2	3323.6
75°	1469.0	1609.4	2050.0	2226.6	2703.4	3862.6	3580.0	4061.0	3081.3	3449.1	2425.0
77.5°	901.5	994.5	1294.8	1649.6	1739.1	2643.6	2223.6	3055.8	2163.8	2515.6	1617.6
80°	450.8	495.8	629.1	1037.2	1153.3	1557.8	1227.9	1774.0	1464.2	1557.8	895.0
82.5°	136.2	150.5	184.2	393.9	597.7	896.8	725.6	1030.7	799.6	730.3	352.4
85°	36.1	40.9	50.9	116.7	209.7	321.6	245.2	499.3	383.2	269.5	132.7
87.5°	3.0	3.0	2.4	2.4	1.2	0.0	0.0	35.5	71.7	40.9	23.1
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°	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4
2.5°	1130.8	1128.4	1104.1	1086.3	1065.6	1045.5	1024.7	1006.4	985.6	964.9	959.0
5°	1222.0	1205.4	1153.9	1110.6	1068.0	1030.7	998.1	964.3	937.1	910.4	900.3
7.5°	1302.5	1273.5	1198.9	1133.1	1073.9	1027.7	979.7	930.5	892.0	854.1	844.7
10°	1375.4	1336.9	1242.7	1159.8	1094.0	1041.3	985.0	919.3	863.6	817.4	805.0
12.5°	1429.3	1387.2	1280.6	1185.2	1110.6	1051.4	995.7	937.7	879.0	819.2	805.6
15°	1471.9	1428.1	1312.0	1204.8	1111.2	1034.8	980.9	960.8	942.4	883.8	858.9
17.5°	1506.3	1460.1	1339.3	1216.6	1095.2	984.4	937.7	967.3	1014.1	977.3	930.5
20°	1537.7	1490.9	1360.0	1224.9	1059.7	915.1	889.1	951.9	1022.4	1021.2	979.1
22.5°	1572.0	1526.4	1390.2	1229.7	1009.9	844.7	860.1	929.4	986.8	1004.0	977.9
25°	1615.9	1575.6	1432.2	1240.3	953.6	796.1	838.7	900.3	948.3	952.5	937.1
27.5°	1666.8	1636.6	1495.0	1265.2	899.2	771.2	813.9	859.5	903.3	905.1	886.7
30°	1722.5	1702.4	1553.1	1285.9	858.3	763.5	781.9	818.6	846.4	851.2	835.2
32.5°	1793.6	1775.8	1604.6	1272.3	834.0	761.7	752.3	771.2	794.3	794.3	781.9
35°	1891.3	1866.4	1659.1	1220.2	804.4	754.6	720.9	726.2	736.3	738.0	730.9
37.5°	2029.9	1989.0	1714.2	1117.1	755.8	729.2	684.7	678.2	681.8	686.5	684.7
40°	2201.7	2134.8	1794.8	993.3	697.8	680.0	647.4	635.0	632.0	641.5	645.0
42.5°	2417.9	2315.4	1881.2	877.8	645.0	623.7	603.6	592.9	588.2	604.2	613.7
45°	2763.2	2594.4	1964.2	763.5	615.4	575.7	562.1	554.4	556.8	575.7	587.6
47.5°	3359.7	3020.3	2042.9	691.2	613.1	541.4	524.8	526.6	533.1	553.2	567.5
50°	4114.3	3590.7	2095.7	661.0	620.2	520.7	498.7	508.2	518.3	537.8	554.4
52.5°	4882.6	4122.0	2032.9	644.5	619.6	521.2	474.5	502.9	507.6	527.2	544.9
55°	5410.9	4181.2	1756.3	619.0	610.1	544.9	455.5	500.5	503.5	521.2	537.2
57.5°	5612.3	3978.7	1339.3	626.1	581.7	563.3	447.2	483.9	505.3	520.7	537.2
60°	5368.9	3596.6	813.9	644.5	536.1	562.1	452.5	453.7	490.4	516.5	533.1
62.5°	4909.8	3106.2	571.6	592.3	502.9	530.7	465.0	418.2	464.4	495.8	510.6
65°	4383.8	2529.2	436.0	510.0	486.9	482.2	469.1	386.8	428.8	459.6	472.7
67.5°	3835.9	1965.9	354.2	380.3	440.1	436.0	428.8	359.0	386.8	408.7	423.5
70°	3145.9	1375.4	299.1	285.5	377.3	390.9	374.9	324.0	332.9	355.4	367.2
72.5°	2301.2	857.1	245.8	235.7	303.3	341.8	333.5	285.5	289.6	311.0	320.4
75°	1655.0	490.4	197.2	194.3	231.6	292.6	276.0	245.8	250.6	266.5	273.1
77.5°	1052.0	273.1	152.2	156.4	165.9	218.6	235.7	210.3	210.3	219.8	225.1
80°	563.3	156.4	111.4	113.1	116.1	167.0	186.0	162.9	162.9	156.4	162.9
82.5°	229.8	90.0	76.4	71.1	77.6	114.3	130.3	103.7	108.4	97.7	100.1
85°	75.8	45.0	37.9	37.3	36.7	50.3	62.8	51.5	61.6	39.1	40.9
87.5°	10.1	8.3	4.7	3.6	4.1	1.8	3.6	4.1	4.1	3.0	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4
2.5°	954.8	950.1	932.9	937.1	934.1	929.4	934.1	925.2	932.3	934.7	949.5
5°	892.6	881.4	864.8	856.5	854.7	850.0	850.6	846.4	847.6	857.7	874.3
7.5°	837.0	826.3	813.3	807.3	802.0	796.7	796.1	795.5	800.2	809.1	825.1
10°	796.7	790.8	785.4	787.8	785.4	783.1	778.9	778.9	786.6	802.6	822.2
12.5°	796.7	795.5	796.7	803.8	803.2	803.8	798.5	801.4	822.7	850.0	877.8
15°	839.3	829.9	829.9	833.4	832.2	832.2	832.2	844.7	893.2	935.3	964.9
17.5°	891.5	863.6	851.8	850.0	849.4	849.4	851.8	878.4	954.2	998.7	1015.8
20°	927.6	874.9	855.3	847.6	848.2	849.4	856.5	893.2	976.7	999.3	995.1
22.5°	934.1	866.0	842.3	831.0	832.8	834.0	844.7	883.8	945.9	949.5	941.2
25°	903.9	841.1	815.6	806.8	809.1	808.5	818.0	846.4	890.9	889.7	884.9
27.5°	858.9	801.4	782.5	776.5	780.7	776.0	778.9	800.8	835.2	834.0	832.2
30°	812.7	762.9	745.7	742.8	748.1	741.0	741.6	760.0	783.7	782.5	781.9
32.5°	766.5	724.4	709.0	709.0	714.3	706.6	707.8	723.8	739.8	735.1	735.1
35°	722.6	693.0	680.6	678.2	682.4	677.0	679.4	694.2	700.1	693.6	689.5
37.5°	684.1	671.1	658.7	650.4	651.0	651.6	658.7	669.9	666.4	656.9	651.6
40°	648.6	648.6	636.8	621.4	619.6	623.7	635.6	648.0	637.9	627.3	620.8
42.5°	623.1	628.5	617.2	601.8	598.3	605.4	618.4	627.3	615.4	603.6	594.7
45°	599.4	612.5	604.8	587.6	582.9	591.1	607.7	611.3	595.3	584.0	577.5
47.5°	582.9	600.6	595.3	578.7	571.6	583.4	600.6	600.0	579.9	568.0	562.7
50°	571.0	593.5	592.9	578.7	571.0	585.8	601.2	593.5	571.6	559.2	553.8
52.5°	561.5	592.9	597.1	588.8	583.4	596.5	606.0	591.1	565.7	552.6	548.5
55°	557.4	595.3	598.3	590.6	585.8	597.7	606.0	595.9	565.7	553.8	550.3
57.5°	558.6	592.3	592.9	582.3	574.0	588.8	601.8	598.8	572.2	558.6	554.4
60°	551.5	576.3	577.5	560.9	551.5	569.2	592.3	590.6	569.2	555.0	547.3
62.5°	527.8	549.7	550.3	534.9	521.2	546.7	572.2	571.6	552.0	537.8	528.9
65°	488.1	511.2	517.1	502.3	491.6	518.9	545.5	544.3	524.8	511.8	502.9
67.5°	438.9	463.8	475.0	465.0	460.8	485.7	510.6	510.0	494.0	481.6	473.9
70°	379.1	399.8	418.8	418.8	415.8	444.2	470.9	468.5	453.7	444.2	438.3
72.5°	329.3	345.3	351.3	357.2	366.1	395.7	418.2	420.0	409.3	404.6	409.3
75°	280.2	290.2	295.6	290.8	306.2	337.0	366.7	369.6	358.4	350.7	352.4
77.5°	230.4	241.7	247.0	236.3	235.2	274.2	310.4	316.9	307.4	295.6	299.1
80°	166.4	181.3	190.1	183.0	180.7	197.8	247.6	254.7	245.8	236.3	241.7
82.5°	101.9	110.2	112.5	119.7	134.5	141.6	159.3	183.0	176.5	168.2	183.0
85°	40.3	48.0	53.3	60.4	70.5	83.5	98.3	117.3	106.6	103.1	121.4
87.5°	2.4	0.6	0.0	1.2	10.1	19.5	42.1	58.0	48.6	52.1	62.8
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4	1038.4
2.5°	961.3	976.7	997.5	1014.7	1036.6	1057.3	1078.6	1100.0	1111.2	1115.9
5°	893.2	921.7	954.8	991.6	1034.2	1079.2	1124.8	1171.6	1201.2	1203.6
7.5°	852.4	893.2	938.8	985.0	1037.8	1100.0	1172.2	1244.5	1274.7	1283.0
10°	865.4	911.0	947.1	990.4	1048.4	1126.0	1211.3	1296.0	1331.0	1341.0
12.5°	917.5	926.4	937.7	977.3	1048.4	1148.5	1251.6	1352.3	1389.6	1399.1
15°	960.8	918.1	898.0	940.0	1034.2	1168.1	1294.2	1405.6	1450.6	1459.5
17.5°	964.3	890.9	847.0	884.9	1009.3	1181.7	1335.1	1464.8	1502.7	1511.0
20°	928.2	861.8	805.0	828.1	975.6	1187.6	1364.7	1508.1	1545.4	1553.7
22.5°	887.3	838.1	776.5	775.4	934.7	1194.1	1400.3	1548.9	1589.2	1594.5
25°	848.8	805.6	753.4	736.9	887.3	1206.6	1448.2	1610.5	1641.3	1643.1
27.5°	803.8	770.6	735.1	719.1	845.8	1230.3	1519.3	1684.0	1702.4	1699.4
30°	762.9	738.0	722.0	717.3	819.8	1248.0	1586.8	1756.3	1757.4	1747.4
32.5°	719.7	710.2	710.2	725.6	798.5	1243.9	1641.9	1826.7	1815.5	1800.7
35°	681.2	683.0	695.4	731.5	762.9	1202.4	1694.7	1915.0	1898.4	1877.1
37.5°	644.5	658.1	675.8	710.8	716.1	1140.8	1756.3	2040.0	2019.2	1992.6
40°	613.1	633.8	654.5	671.7	666.4	1053.2	1842.1	2186.9	2163.8	2133.0
42.5°	588.2	608.3	631.4	633.2	635.0	961.9	1933.4	2366.9	2362.8	2329.0
45°	572.2	585.2	607.1	604.2	633.2	861.2	2017.5	2641.8	2696.3	2670.8
47.5°	561.5	571.6	574.0	586.4	648.6	771.2	2125.9	3179.6	3331.3	3302.2
50°	555.6	565.7	539.0	587.6	651.0	713.2	2275.7	3854.9	4098.9	4060.4
52.5°	555.0	552.6	512.4	600.0	637.9	677.6	2353.9	4347.7	4889.1	4972.6
55°	556.2	526.6	498.7	603.6	611.9	664.6	2092.1	4584.6	5618.2	5794.7
57.5°	545.5	498.1	506.4	589.4	562.7	699.5	1546.6	4499.9	5909.7	6237.8
60°	525.4	470.9	520.7	550.9	512.4	639.7	1065.0	4122.0	5607.6	5945.2
62.5°	496.4	451.9	518.9	501.1	494.0	523.6	732.1	3593.1	5128.4	5458.3
65°	463.8	436.5	491.0	453.1	457.3	402.8	517.7	2996.0	4556.2	4880.8
67.5°	428.8	427.1	450.2	403.4	386.2	319.3	377.3	2401.3	3821.1	4113.7
70°	389.2	402.2	409.3	358.4	313.3	250.6	280.2	1679.3	2818.9	3073.6
72.5°	349.5	350.7	360.7	311.6	234.6	200.8	210.3	1017.0	1915.0	2100.4
75°	309.2	297.9	307.4	253.5	174.7	164.7	162.3	628.5	1322.7	1469.0
77.5°	266.0	253.5	241.1	190.7	140.4	127.4	124.4	352.4	811.5	901.5
80°	216.2	199.6	180.1	139.8	102.5	91.2	90.6	171.8	404.6	450.8
82.5°	168.2	136.8	131.5	87.1	63.4	55.7	59.2	65.7	122.0	136.2
85°	117.9	99.5	69.9	34.9	28.4	23.1	22.5	19.5	32.6	36.1
87.5°	65.7	43.2	22.5	4.1	4.7	5.3	4.1	3.0	3.0	3.0
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



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)