

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: P632049

Luminaire Tested: GWS-SA2B-830-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632049
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2B-830-U-SLR-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT 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: 4289.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

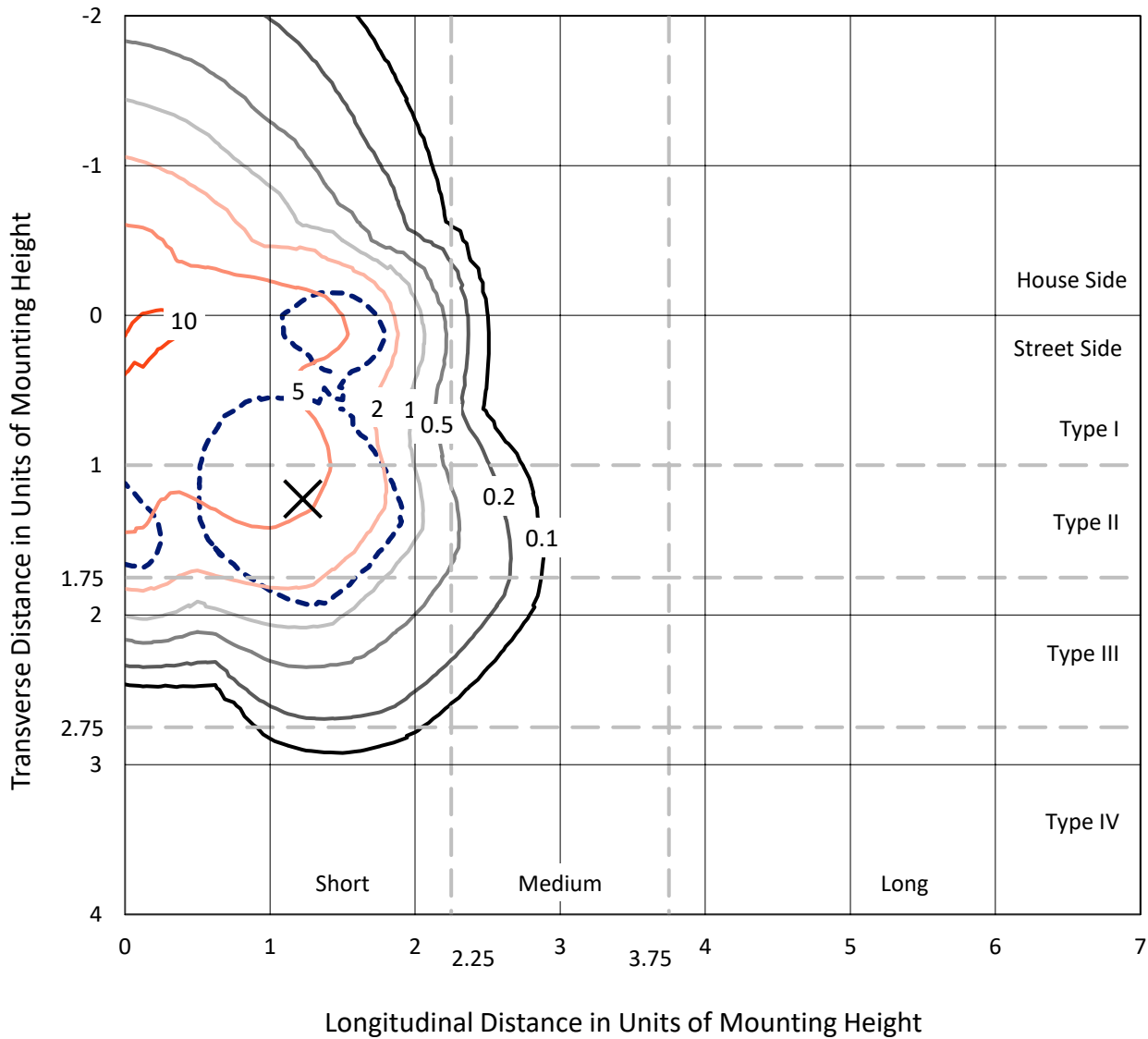
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P632049
 CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

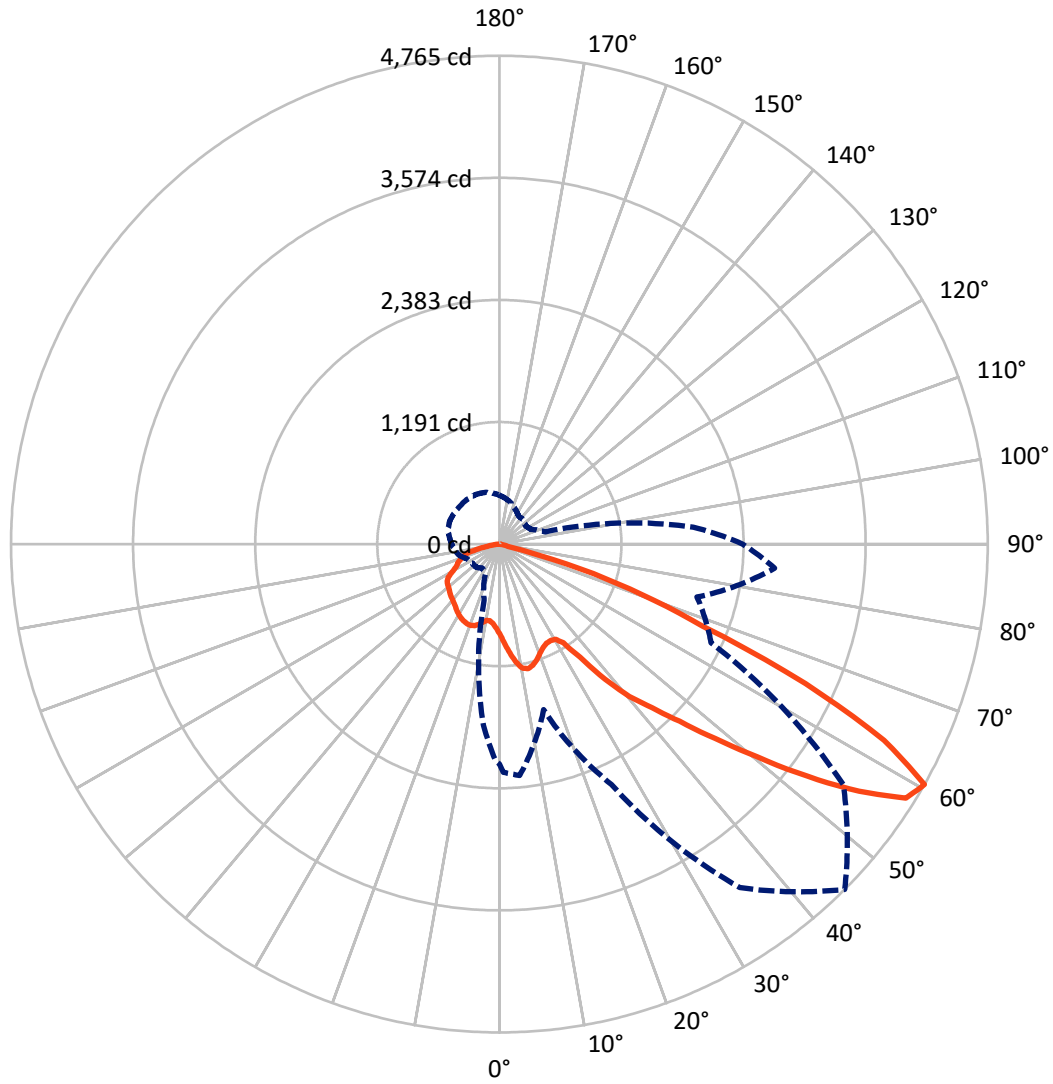
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
 Type III - Short - N/A

REPORT NUMBER: P632049
CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P632049

CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

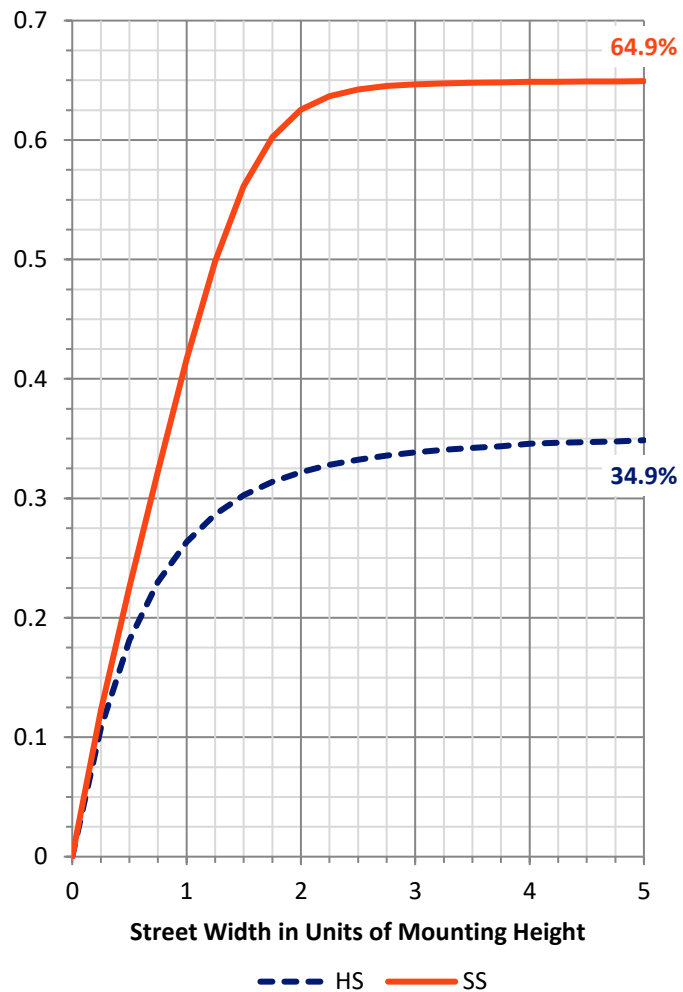
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1503.6	0.0	1503.6
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	2785.7	0.0	2785.7
	% Fixture	64.9	0.0	64.9
Total	Lumens	4289.3	0.0	4289.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	2.0
10°-20°	271.7	6.3
20°-30°	441.3	10.3
30°-40°	622.4	14.5
40°-50°	860.1	20.1
50°-60°	1107.2	25.8
60°-70°	701.5	16.4
70°-80°	180.0	4.2
80°-90°	19.3	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°	4289.3	100.0
0°-180°	4289.3	100.0

Coefficient of Utilization



REPORT NUMBER: P632049

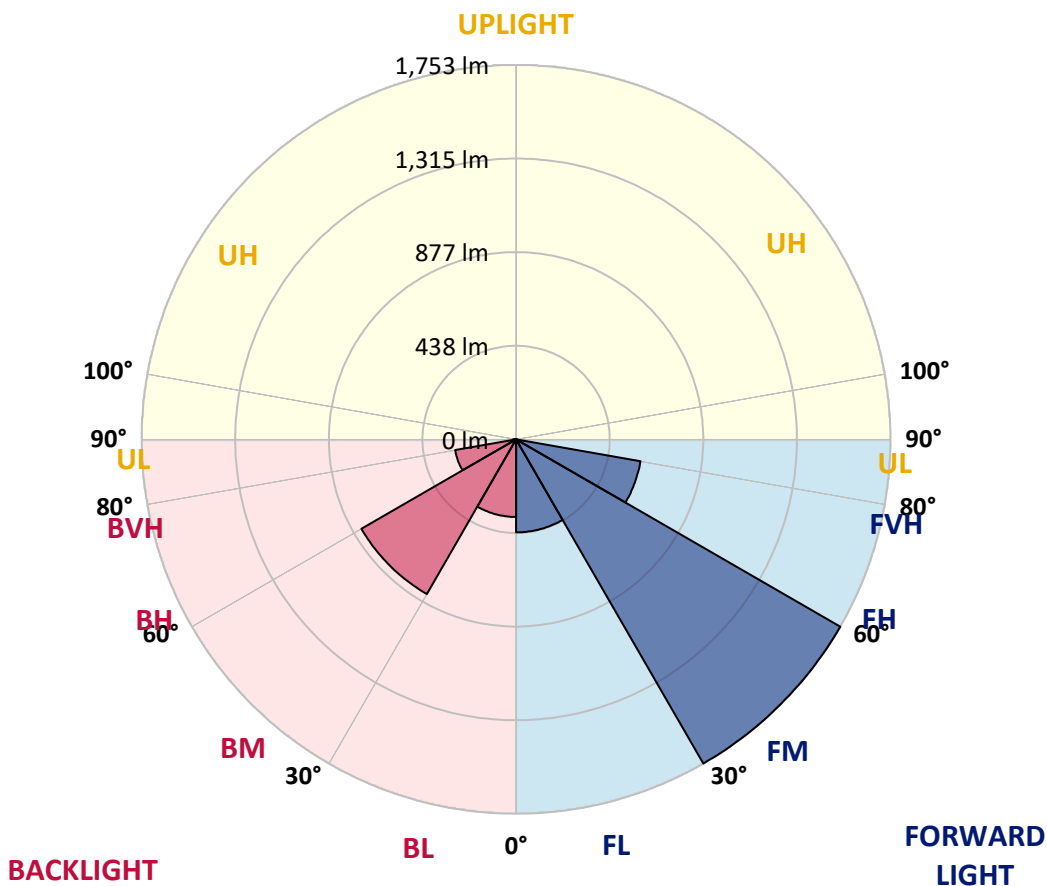
CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	435.5	10.2			
FM (30°-60°)	1753.2	40.9			
FH (60°-80°)	591.8	13.8			G0/660
FVH (80°-90°)	5.2	0.1			G0/10
BL (0°-30°)	363.4	8.5	B1/500		
BM (30°-60°)	836.4	19.5	B1/1000		
BH (60°-80°)	289.7	6.8	B1/500		G1/500
BVH (80°-90°)	14.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





REPORT NUMBER: P632049

CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1
2.5°	921.6	927.9	931.8	939.3	952.7	960.1	968.4	959.4	961.7	960.5	946.0
5°	976.3	983.7	993.9	1016.0	1040.7	1054.5	1067.4	1065.5	1053.3	1032.9	1018.3
7.5°	1027.4	1036.0	1053.7	1089.4	1126.0	1147.2	1162.9	1152.7	1142.5	1110.3	1073.7
10°	1067.4	1072.5	1096.5	1144.5	1186.9	1210.9	1230.1	1227.8	1213.6	1177.5	1128.4
12.5°	1105.2	1108.7	1134.6	1182.6	1220.7	1231.3	1247.0	1252.2	1247.4	1220.3	1172.0
15°	1145.6	1152.3	1176.3	1212.9	1230.1	1219.1	1224.6	1238.8	1252.2	1252.2	1207.7
17.5°	1183.4	1189.3	1213.6	1229.4	1212.9	1183.8	1185.3	1203.4	1235.3	1268.7	1240.4
20°	1216.8	1222.3	1246.3	1231.3	1179.1	1136.6	1135.4	1157.4	1208.9	1279.3	1275.3
22.5°	1253.3	1261.2	1281.2	1232.9	1147.6	1093.8	1093.4	1116.2	1185.7	1289.9	1315.4
25°	1305.2	1317.4	1327.6	1246.7	1130.7	1065.9	1071.0	1092.6	1178.3	1307.2	1374.8
27.5°	1382.2	1392.1	1391.3	1275.3	1129.9	1054.5	1065.1	1090.2	1191.6	1337.8	1437.3
30°	1465.6	1470.7	1462.4	1315.4	1148.0	1061.5	1077.3	1107.1	1225.4	1388.5	1529.2
32.5°	1557.9	1564.2	1548.5	1375.6	1190.1	1113.8	1148.4	1162.9	1273.0	1461.6	1626.7
35°	1664.0	1676.2	1643.6	1455.0	1313.9	1304.4	1354.7	1335.9	1374.0	1548.1	1730.9
37.5°	1775.7	1776.1	1729.3	1572.5	1556.7	1572.9	1673.5	1614.5	1588.2	1644.4	1837.0
40°	1870.4	1868.0	1796.1	1730.9	1768.2	1832.3	1953.7	1863.3	1794.1	1773.7	1925.0
42.5°	1965.1	1956.4	1883.7	1831.5	1914.0	2045.7	2182.8	2072.0	1926.2	1891.2	2011.9
45°	2086.1	2083.4	1995.7	1871.6	2045.7	2284.6	2466.6	2287.0	2004.4	1959.6	2156.5
47.5°	2281.5	2268.1	2105.0	1868.4	2169.1	2603.0	2832.9	2557.8	2059.0	1961.2	2389.9
50°	2472.5	2456.0	2235.5	1868.0	2296.4	2933.1	3265.2	2886.7	2114.8	1970.6	2627.3
52.5°	2665.5	2665.5	2449.7	1912.4	2430.0	3301.8	3764.7	3296.6	2209.9	2094.0	2919.3
55°	2780.2	2810.9	2690.6	1987.5	2586.5	3735.6	4258.8	3739.2	2356.9	2316.8	3189.0
57.5°	2634.4	2691.8	2674.5	1935.2	2678.8	4054.4	4677.7	4074.8	2429.6	2343.2	3148.5
60°	2146.7	2226.5	2266.1	1671.1	2587.6	4091.3	4765.4	4096.8	2279.5	1995.4	2696.9
62.5°	1427.1	1492.7	1553.2	1194.0	2240.2	3680.6	4214.7	3681.8	1903.8	1489.1	1868.4
65°	700.0	748.7	813.9	705.9	1750.1	3075.4	3286.0	2975.2	1377.1	833.6	953.1
67.5°	183.1	196.9	205.9	273.9	1253.7	2209.6	2143.1	2176.1	884.7	272.4	249.2
70°	95.1	95.9	95.5	113.2	847.3	1404.3	1477.0	1366.5	617.4	114.0	98.3
72.5°	68.0	68.4	67.2	76.2	409.1	804.5	833.6	824.6	323.5	67.6	67.2
75°	44.4	44.8	44.0	44.8	61.7	91.6	84.5	88.8	53.8	42.8	42.8
77.5°	26.3	26.7	26.3	27.1	26.3	26.3	24.4	24.4	23.2	23.2	23.6
80°	17.7	17.7	17.3	18.1	16.5	16.5	15.7	15.3	14.1	13.8	13.8
82.5°	10.6	11.0	10.6	10.6	9.8	9.8	9.0	8.6	7.5	7.5	7.1
85°	5.5	5.5	5.1	5.1	4.3	3.9	3.1	3.1	2.4	2.0	2.0
87.5°	0.8	0.8	0.4	0.4	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: P632049

CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1
2.5°	942.1	934.2	922.4	911.0	900.4	889.4	876.8	863.9	852.9	841.5	835.6
5°	999.1	982.9	952.3	925.2	900.8	880.8	859.1	840.7	823.4	809.2	802.2
7.5°	1050.5	1025.4	979.0	936.2	903.2	875.6	845.8	818.3	795.1	777.8	771.1
10°	1098.1	1068.2	1007.3	953.1	914.6	883.9	847.3	810.0	779.4	756.6	751.1
12.5°	1136.6	1102.4	1029.7	966.8	921.2	888.2	856.0	823.8	793.5	764.0	759.3
15°	1170.8	1130.3	1046.6	975.5	918.9	876.8	849.7	845.8	845.8	812.4	802.9
17.5°	1200.3	1155.9	1060.4	979.4	903.9	843.0	826.5	860.7	899.2	875.3	854.0
20°	1234.1	1180.2	1071.8	979.4	876.4	800.2	798.6	856.8	913.8	914.2	891.8
22.5°	1268.3	1208.5	1085.1	975.9	838.7	750.7	779.7	841.1	891.8	913.4	898.0
25°	1323.7	1247.8	1106.3	973.1	794.7	716.9	762.8	820.2	863.1	885.9	876.0
27.5°	1394.0	1299.7	1138.6	977.4	751.1	696.8	744.8	793.1	832.0	852.1	845.0
30°	1472.6	1359.5	1173.2	984.9	719.6	686.6	723.2	762.1	796.6	816.7	813.5
32.5°	1572.9	1424.3	1203.0	974.7	701.9	681.5	700.4	728.3	761.7	774.2	777.0
35°	1692.7	1495.8	1225.8	934.6	685.8	676.0	675.6	692.9	716.5	736.5	738.5
37.5°	1803.2	1579.5	1251.0	865.8	656.7	662.2	646.5	656.7	679.9	700.0	707.8
40°	1912.4	1664.4	1286.0	778.2	618.6	631.6	613.1	620.2	638.7	665.0	677.6
42.5°	2018.5	1741.1	1322.9	688.6	580.5	588.7	575.0	582.1	601.3	634.3	648.5
45°	2134.1	1844.8	1351.6	604.1	547.5	543.9	532.9	543.2	572.2	608.4	625.3
47.5°	2352.6	2008.3	1370.5	547.9	529.8	504.2	491.7	513.7	546.7	583.2	603.7
50°	2619.5	2244.9	1365.0	512.1	514.5	463.4	459.0	488.1	523.5	561.6	584.0
52.5°	2830.9	2477.2	1302.5	477.9	484.6	437.4	424.9	467.3	501.1	540.0	563.2
55°	2992.4	2555.4	1110.7	437.4	435.9	418.6	392.2	445.7	478.7	514.9	540.0
57.5°	2860.8	2381.3	823.4	381.6	372.2	381.2	355.7	409.1	451.2	487.0	509.4
60°	2374.2	1898.7	458.7	338.0	311.3	333.3	329.3	370.6	421.3	459.0	478.3
62.5°	1611.8	1264.3	272.0	267.3	252.3	283.8	304.6	331.7	381.6	412.3	430.4
65°	803.3	614.3	180.8	200.0	202.0	233.5	272.8	302.6	344.3	375.7	393.8
67.5°	233.1	191.0	137.6	152.9	174.1	199.3	230.7	266.1	306.6	343.9	365.1
70°	100.6	101.8	109.3	127.3	148.2	174.1	205.5	240.1	274.3	303.0	319.1
72.5°	71.1	73.9	82.1	100.6	120.3	145.0	176.5	209.9	234.6	263.7	280.6
75°	45.6	47.6	54.2	68.4	82.9	106.9	136.8	167.4	193.0	213.8	229.9
77.5°	25.2	25.5	31.0	39.3	49.1	64.5	86.5	110.4	129.3	141.1	155.6
80°	14.5	14.5	17.3	22.4	28.3	37.7	49.9	61.7	73.1	80.6	87.6
82.5°	7.9	7.9	9.0	12.2	15.3	20.8	27.9	33.8	40.9	44.8	49.5
85°	2.4	2.4	3.1	4.3	5.5	7.9	11.0	14.1	17.3	20.0	22.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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: P632049

CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1
2.5°	834.4	828.9	825.7	821.8	823.0	819.4	817.5	818.7	811.6	818.7	825.7
5°	799.4	791.5	785.3	780.1	777.8	773.1	770.3	770.3	766.0	773.1	781.7
7.5°	768.7	762.5	759.3	756.2	752.6	748.3	743.6	742.0	739.3	746.7	754.2
10°	748.3	749.1	751.1	755.4	754.6	751.8	744.8	740.8	740.8	749.5	760.9
12.5°	757.7	766.0	770.7	778.6	780.1	777.8	770.7	767.6	775.4	788.4	807.3
15°	794.3	799.8	803.7	810.0	809.6	807.7	802.2	804.5	830.4	855.6	872.5
17.5°	834.0	827.7	826.9	830.8	832.0	829.7	826.5	837.1	880.0	903.6	912.2
20°	862.7	841.1	836.3	837.9	841.1	839.9	839.9	857.2	901.6	912.6	901.6
22.5°	871.3	840.7	833.6	834.0	838.3	838.7	840.7	858.7	884.7	885.1	868.2
25°	857.6	828.1	823.0	823.8	828.9	828.5	829.3	839.5	850.9	846.2	833.6
27.5°	831.6	806.1	804.5	808.8	815.5	812.0	809.6	812.4	817.9	812.0	801.0
30°	802.2	780.5	781.3	789.6	796.6	790.8	784.9	786.4	786.8	780.5	768.0
32.5°	771.1	755.0	757.7	766.4	774.6	768.4	762.1	761.3	753.8	746.3	734.2
35°	740.1	733.8	737.3	744.4	751.5	746.3	742.4	740.1	723.9	712.9	702.7
37.5°	711.8	716.5	722.8	727.1	729.4	729.0	726.7	721.2	700.0	687.0	673.6
40°	686.6	701.1	707.8	709.8	713.3	712.5	712.1	704.3	676.4	662.6	647.3
42.5°	663.8	684.2	695.6	697.6	699.6	700.0	698.8	687.4	655.6	639.4	624.9
45°	641.8	668.5	683.1	681.1	683.9	683.9	685.0	670.1	635.1	618.6	603.3
47.5°	622.5	654.0	667.3	665.0	666.6	667.7	668.9	651.6	612.7	597.0	581.3
50°	604.9	638.3	649.7	650.4	650.4	653.2	652.8	635.9	593.9	577.0	561.2
52.5°	586.0	622.1	634.3	639.4	641.0	642.2	636.7	617.0	574.6	554.2	539.6
55°	564.0	605.6	616.6	623.3	626.5	625.7	618.2	598.2	554.9	534.5	518.0
57.5°	530.6	570.3	586.0	589.1	594.2	591.1	582.5	565.6	523.5	503.1	486.2
60°	494.0	522.7	535.3	538.0	534.1	535.3	534.1	518.0	481.4	465.3	448.0
62.5°	446.1	471.6	485.0	488.5	481.8	486.2	484.6	464.5	428.0	411.1	395.8
65°	409.9	437.8	453.5	455.5	453.5	455.5	450.0	425.6	391.1	373.8	358.0
67.5°	381.6	410.3	426.8	432.3	430.4	430.0	421.3	393.0	357.3	338.4	318.3
70°	332.9	358.0	379.3	392.6	392.6	385.2	368.7	342.3	313.6	297.5	281.8
72.5°	294.8	326.6	347.4	361.2	363.9	359.6	336.4	308.5	275.5	259.4	242.9
75°	242.9	273.9	296.3	314.4	318.0	313.2	286.5	259.0	228.3	212.6	196.1
77.5°	162.3	180.8	198.9	215.4	211.8	215.0	196.9	176.1	157.2	145.4	137.9
80°	91.6	103.8	109.3	118.3	118.3	118.3	106.5	96.7	86.1	79.4	71.9
82.5°	51.9	59.7	62.1	69.6	71.5	71.9	64.1	57.8	51.1	47.6	42.4
85°	24.0	28.3	28.7	33.0	34.6	37.7	34.2	29.9	25.9	24.4	21.2
87.5°	0.8	2.4	3.1	5.9	7.9	9.0	9.8	9.8	8.3	7.5	6.3
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: P632049
 CATALOG NUMBER: GWS-SA2B-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1	881.1
2.5°	834.4	843.8	854.8	862.7	876.8	888.6	900.8	914.2	924.0	921.6
5°	792.3	808.0	828.1	846.6	872.9	899.6	929.1	959.4	977.0	976.3
7.5°	768.7	791.1	815.5	840.3	871.3	909.8	955.0	1002.2	1026.2	1027.4
10°	781.3	805.3	821.8	842.6	875.3	923.6	977.8	1034.4	1061.9	1067.4
12.5°	821.0	819.1	817.9	832.8	872.1	933.4	999.8	1067.4	1098.5	1105.2
15°	858.7	818.3	793.9	804.1	858.0	939.7	1021.5	1103.6	1138.6	1145.6
17.5°	865.8	804.5	759.3	766.4	835.6	941.7	1042.3	1139.0	1176.7	1183.4
20°	846.2	786.8	734.2	724.3	807.3	936.6	1055.3	1168.4	1209.7	1216.8
22.5°	821.4	771.1	715.3	689.7	772.7	931.5	1069.8	1199.5	1247.0	1253.3
25°	795.5	751.1	697.6	658.7	733.4	928.3	1094.2	1240.4	1297.7	1305.2
27.5°	768.0	726.7	682.3	643.8	697.2	932.2	1128.7	1306.4	1371.6	1382.2
30°	738.5	702.3	672.5	638.7	672.5	935.8	1166.9	1374.0	1450.6	1465.6
32.5°	707.8	679.9	662.2	641.0	657.1	927.5	1200.3	1449.8	1545.0	1557.9
35°	677.2	657.1	649.3	645.3	636.7	897.3	1227.4	1526.5	1652.6	1664.0
37.5°	648.5	633.5	631.2	635.5	605.2	847.7	1258.8	1624.0	1758.4	1775.7
40°	621.8	608.0	607.6	606.8	570.7	780.1	1301.3	1723.0	1862.5	1870.4
42.5°	597.0	579.7	582.8	573.4	542.4	707.0	1341.4	1807.5	1959.6	1965.1
45°	575.0	552.2	555.7	543.9	529.0	630.4	1376.7	1907.3	2082.6	2086.1
47.5°	553.8	529.4	519.6	518.8	526.6	559.7	1411.3	2099.5	2275.2	2281.5
50°	534.1	507.8	479.9	497.2	512.1	506.6	1454.6	2305.4	2474.1	2472.5
52.5°	515.2	480.7	441.0	474.4	474.4	467.3	1442.4	2430.4	2638.3	2665.5
55°	493.6	437.0	400.5	436.3	419.0	431.9	1226.6	2471.3	2741.7	2780.2
57.5°	450.8	383.2	351.4	370.6	344.7	400.5	881.1	2268.5	2566.0	2634.4
60°	409.5	343.5	322.7	319.1	285.3	326.6	571.1	1776.1	2112.1	2146.7
62.5°	361.2	309.3	291.6	264.5	229.5	237.8	345.9	1168.8	1419.2	1427.1
65°	324.6	280.2	246.4	214.2	187.9	172.5	204.4	563.6	709.4	700.0
67.5°	278.7	240.1	207.9	184.7	163.1	143.8	136.0	167.4	189.4	183.1
70°	248.0	211.1	180.0	158.0	137.9	118.7	104.9	98.6	96.7	95.1
72.5°	213.8	181.6	149.3	128.1	109.3	91.6	79.0	71.5	69.6	68.0
75°	170.6	140.3	110.8	90.8	74.3	61.7	53.5	47.2	46.0	44.4
77.5°	112.8	90.0	66.0	53.8	44.0	37.3	31.8	27.9	27.1	26.3
80°	62.1	51.9	40.5	32.6	26.3	22.8	20.8	18.5	18.1	17.7
82.5°	36.9	31.0	23.2	18.5	15.3	13.8	12.6	11.4	11.0	10.6
85°	18.5	14.5	10.2	8.6	7.9	7.1	7.1	5.9	5.5	5.5
87.5°	4.7	3.9	2.4	2.0	2.0	2.0	1.6	1.2	1.2	0.8
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

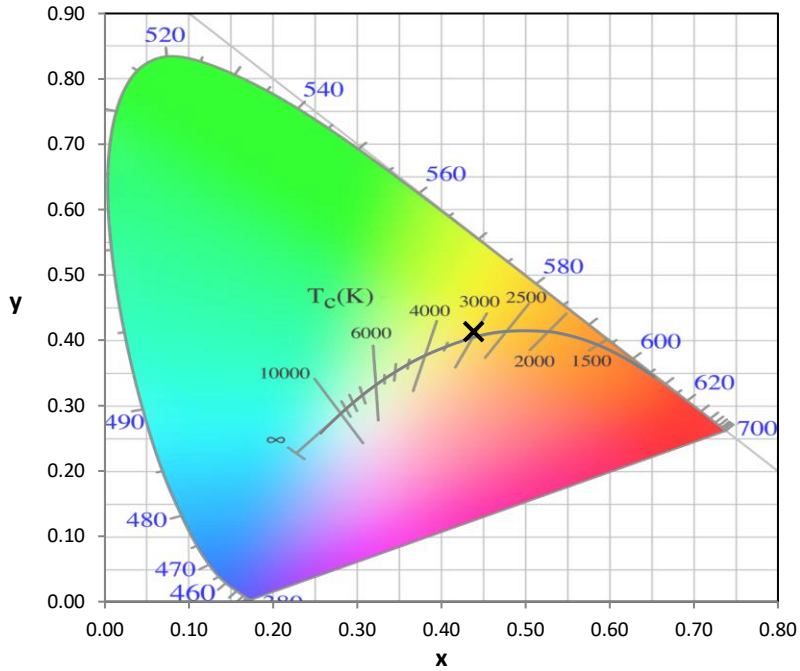
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

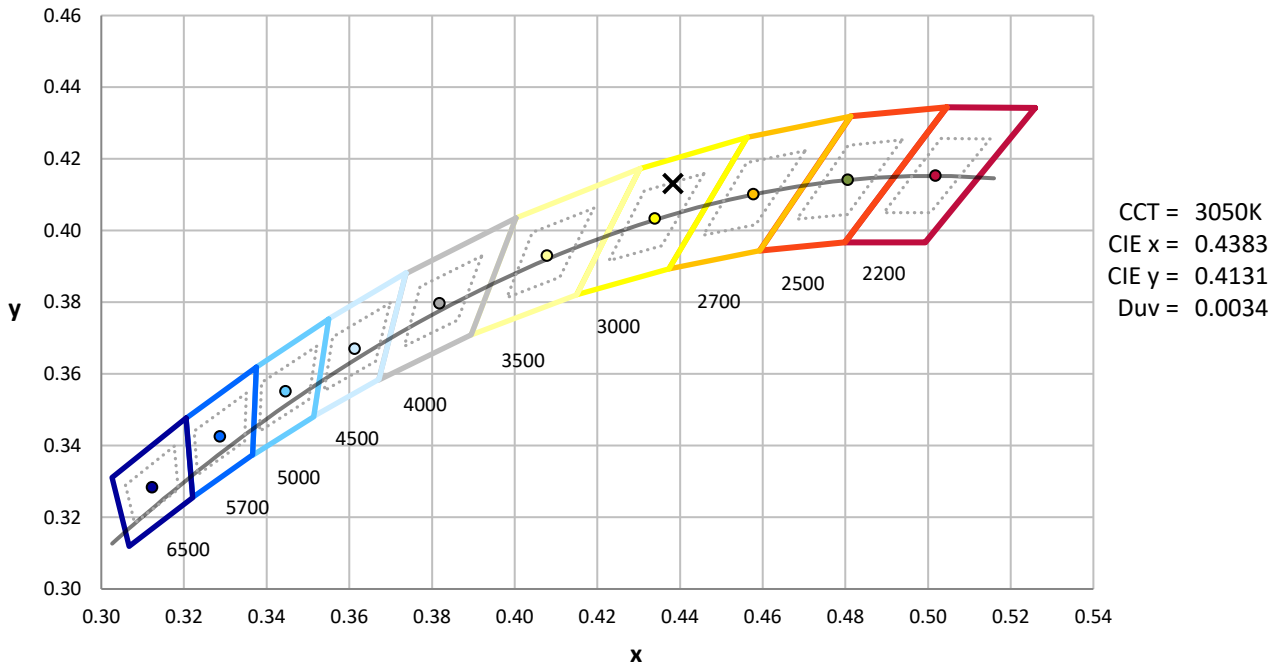
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	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



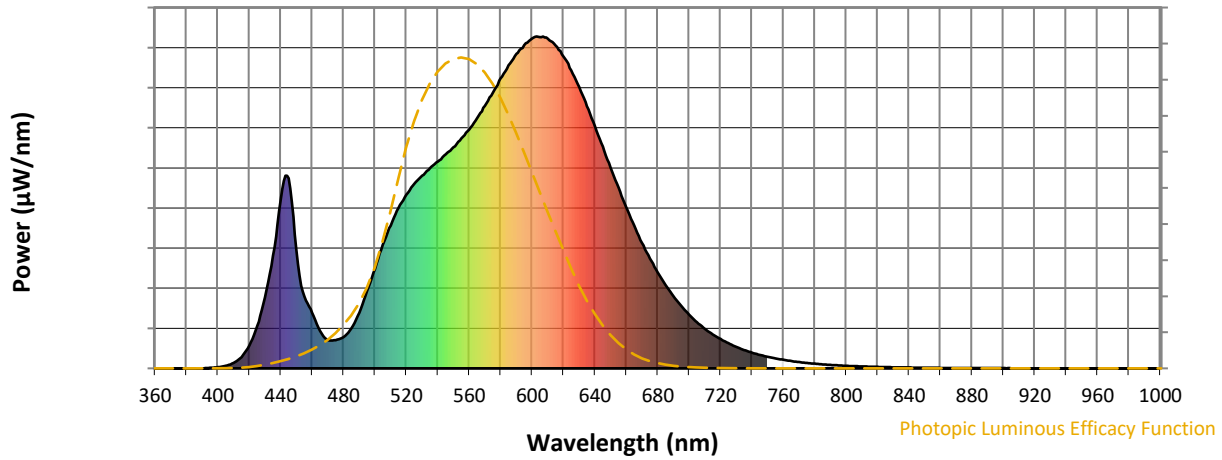
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

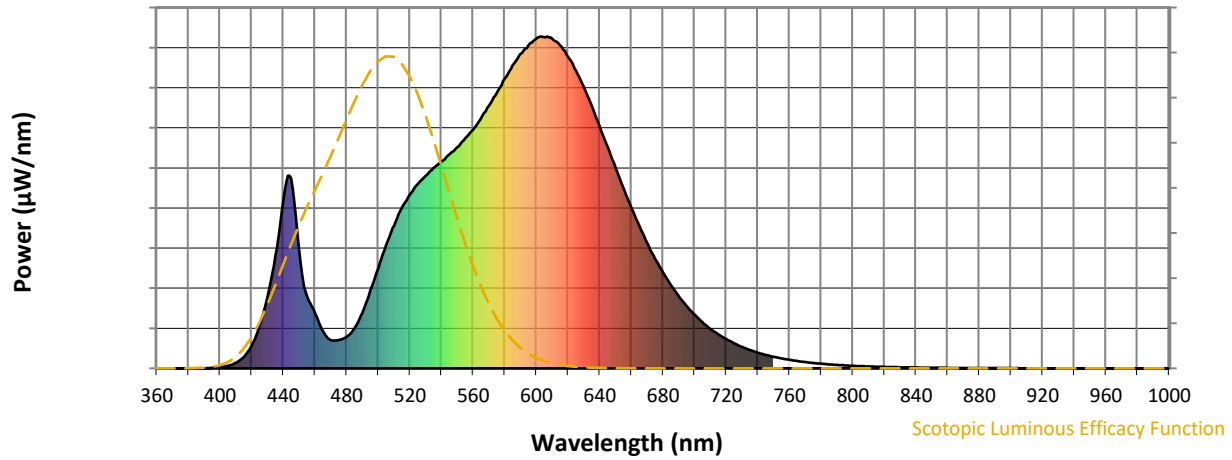


Photopic Lumens: NR

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



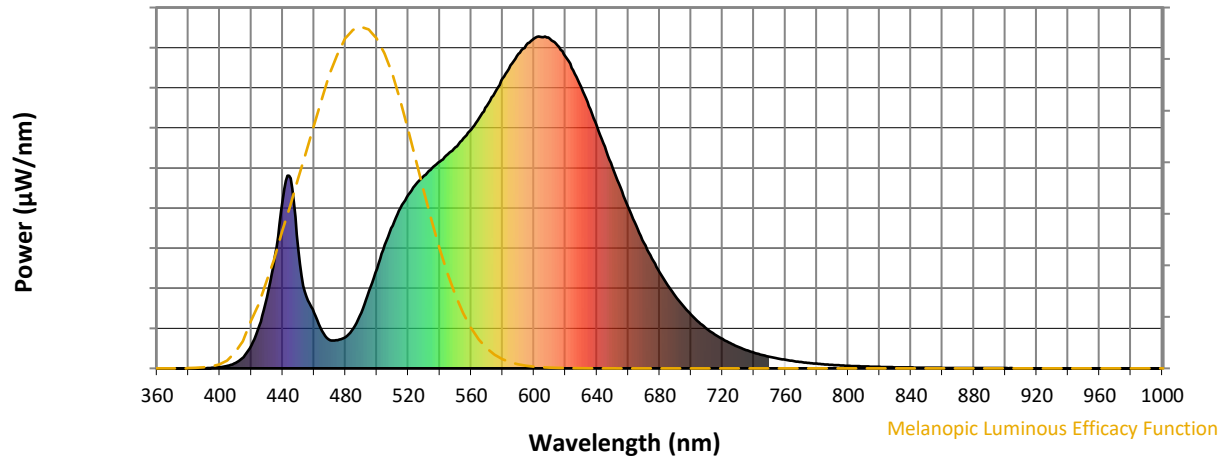
Scotopic Lumens: NR

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

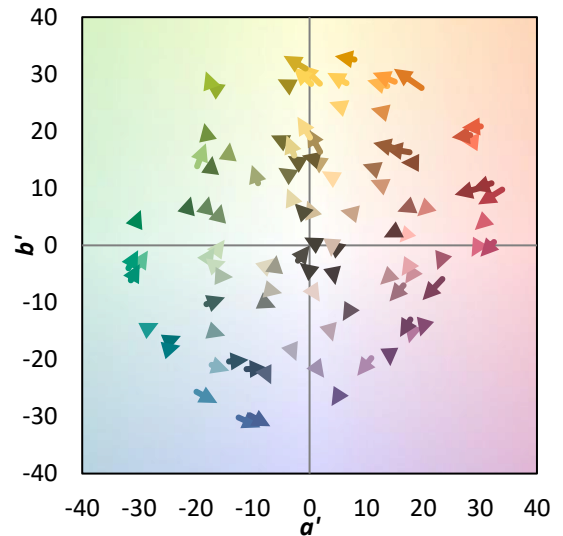
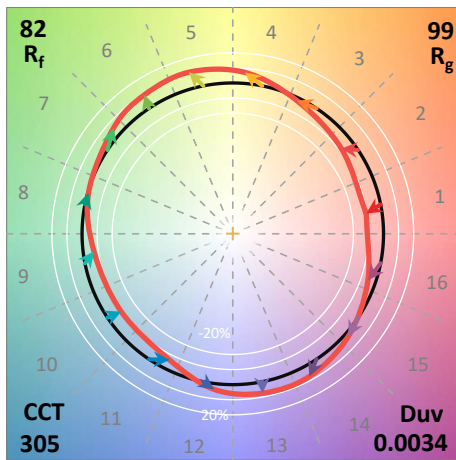
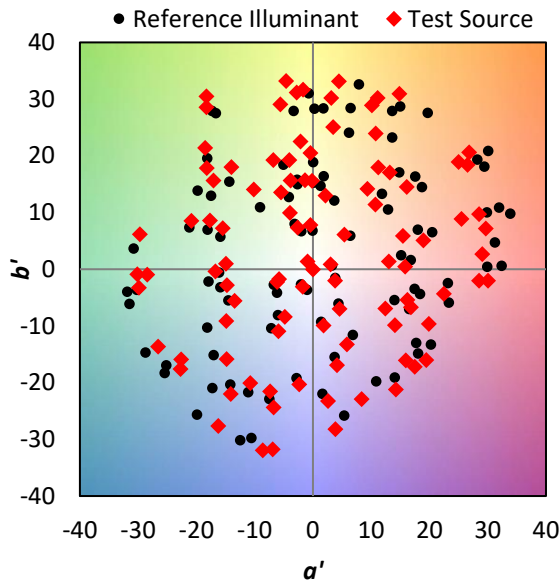
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$

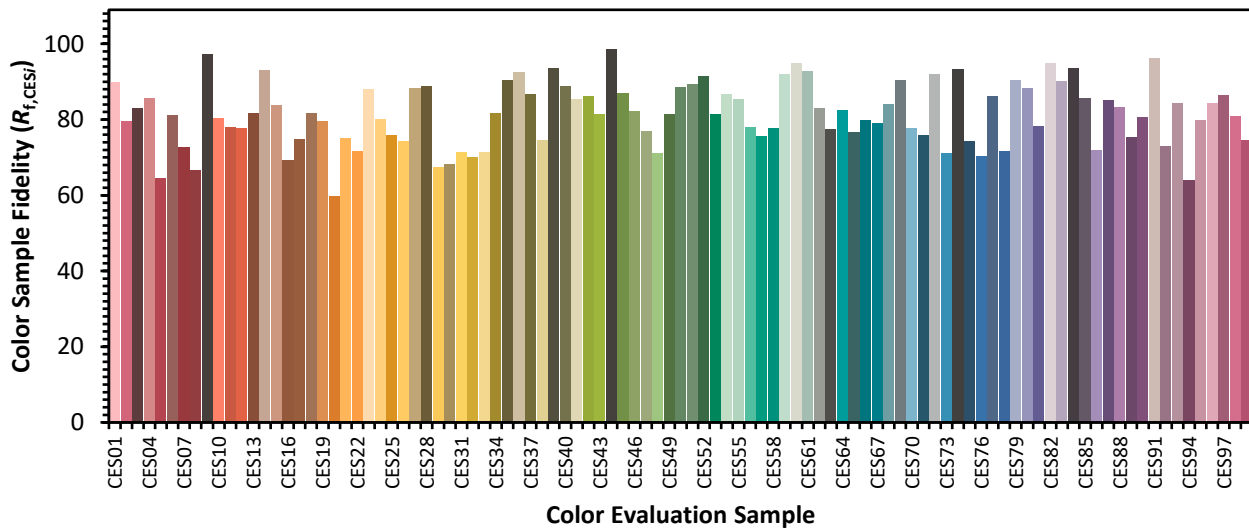


Color Vector Graphics

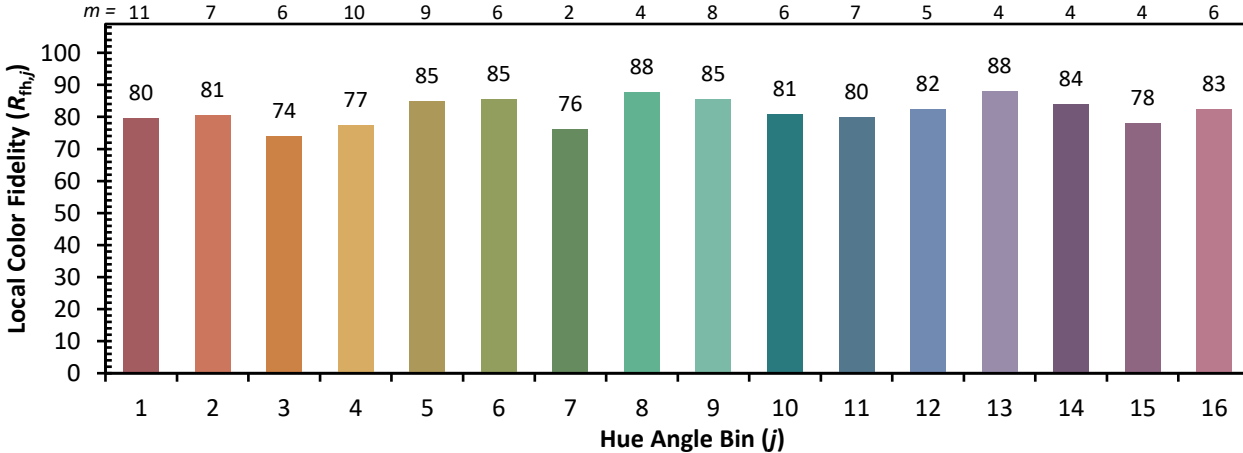
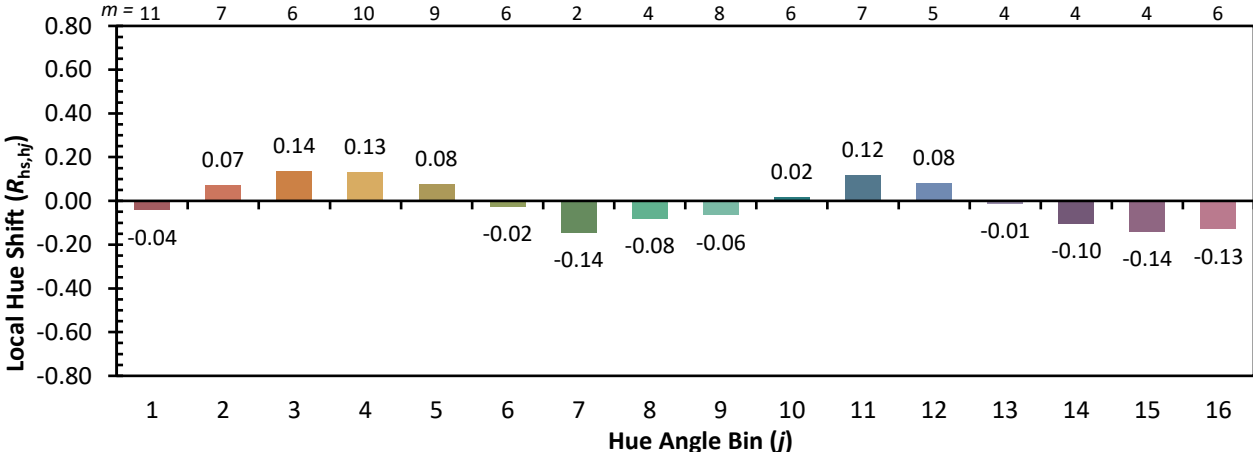
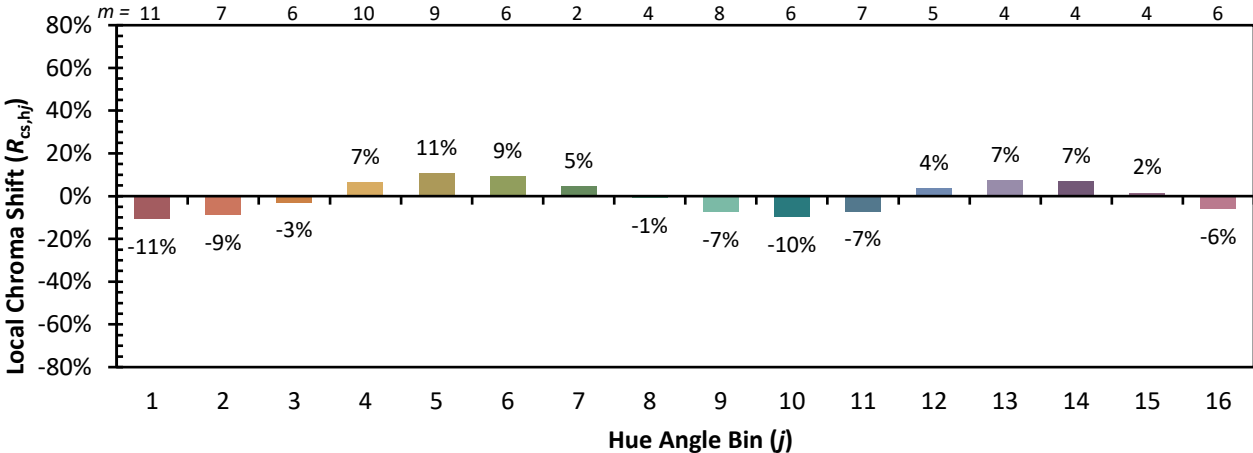


Individual Sample Fidelity Index ($R_{f,i}$)

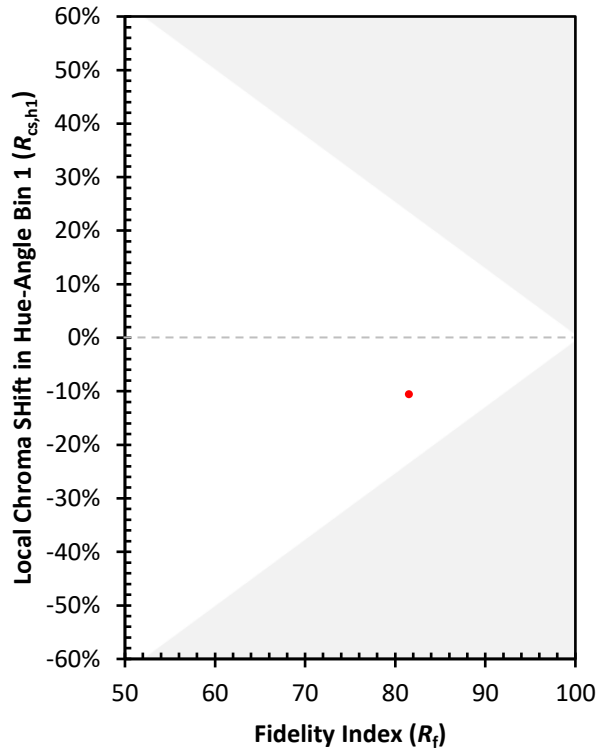
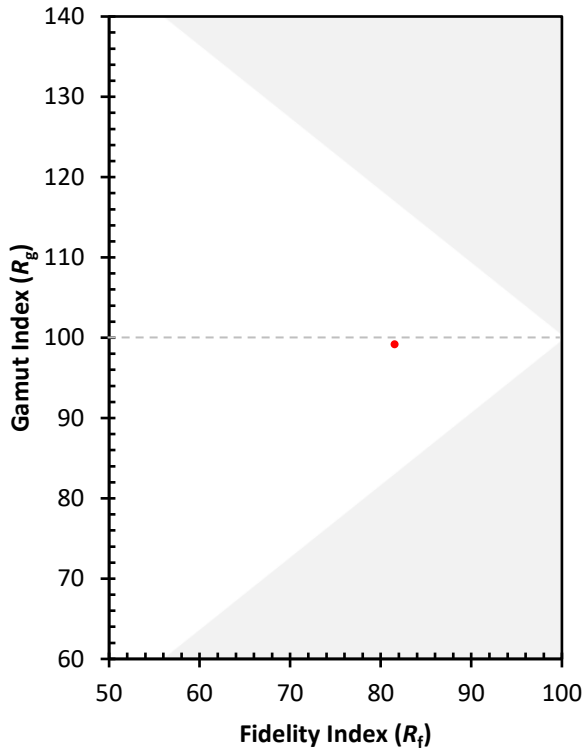
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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)