

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: P641944

Luminaire Tested: GWS-SA6B-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA6B-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9018.8 lumens
Efficiency: N/A
Efficacy: 64.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

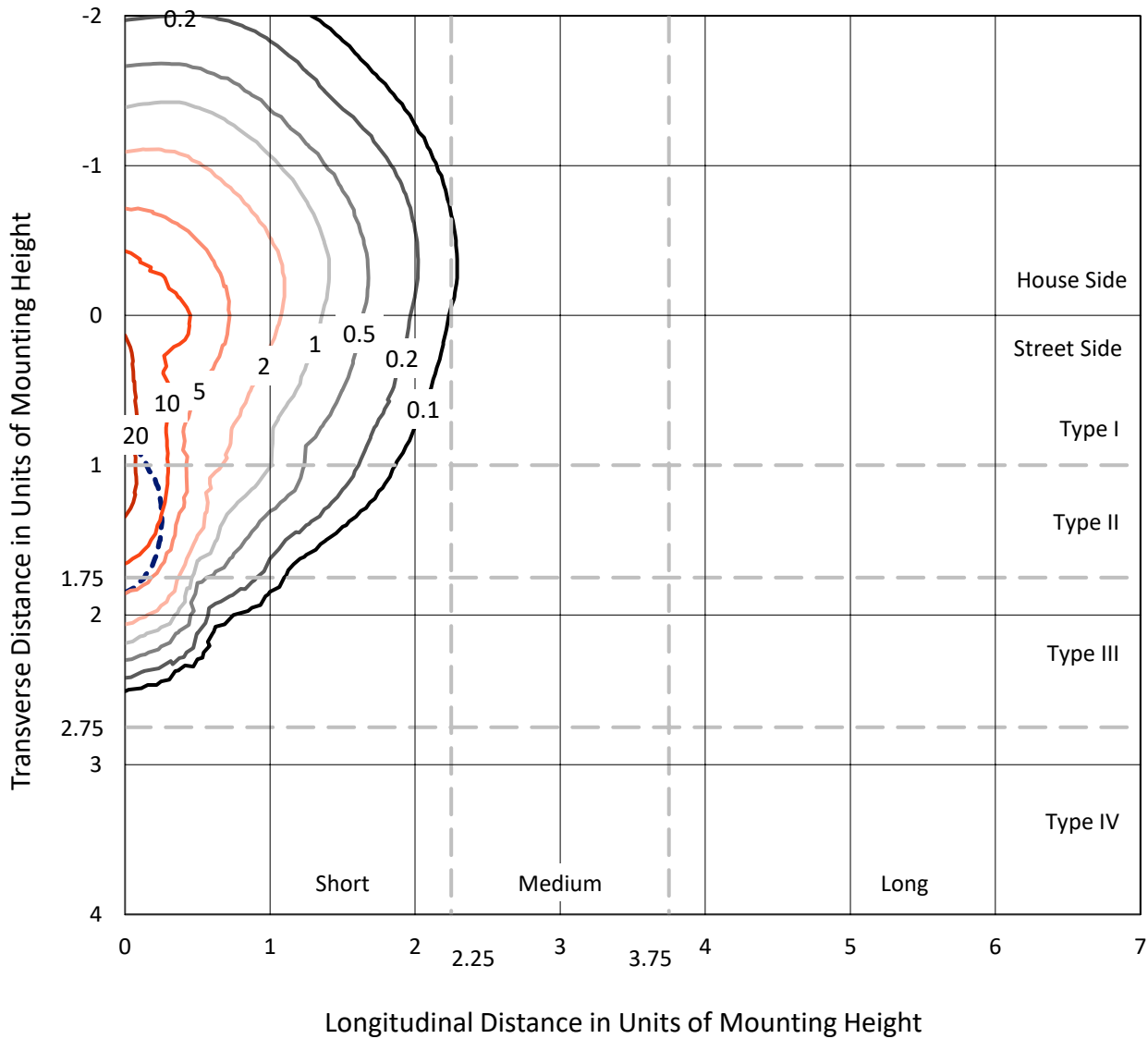
Input Watts (W): 138.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P641944
 CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

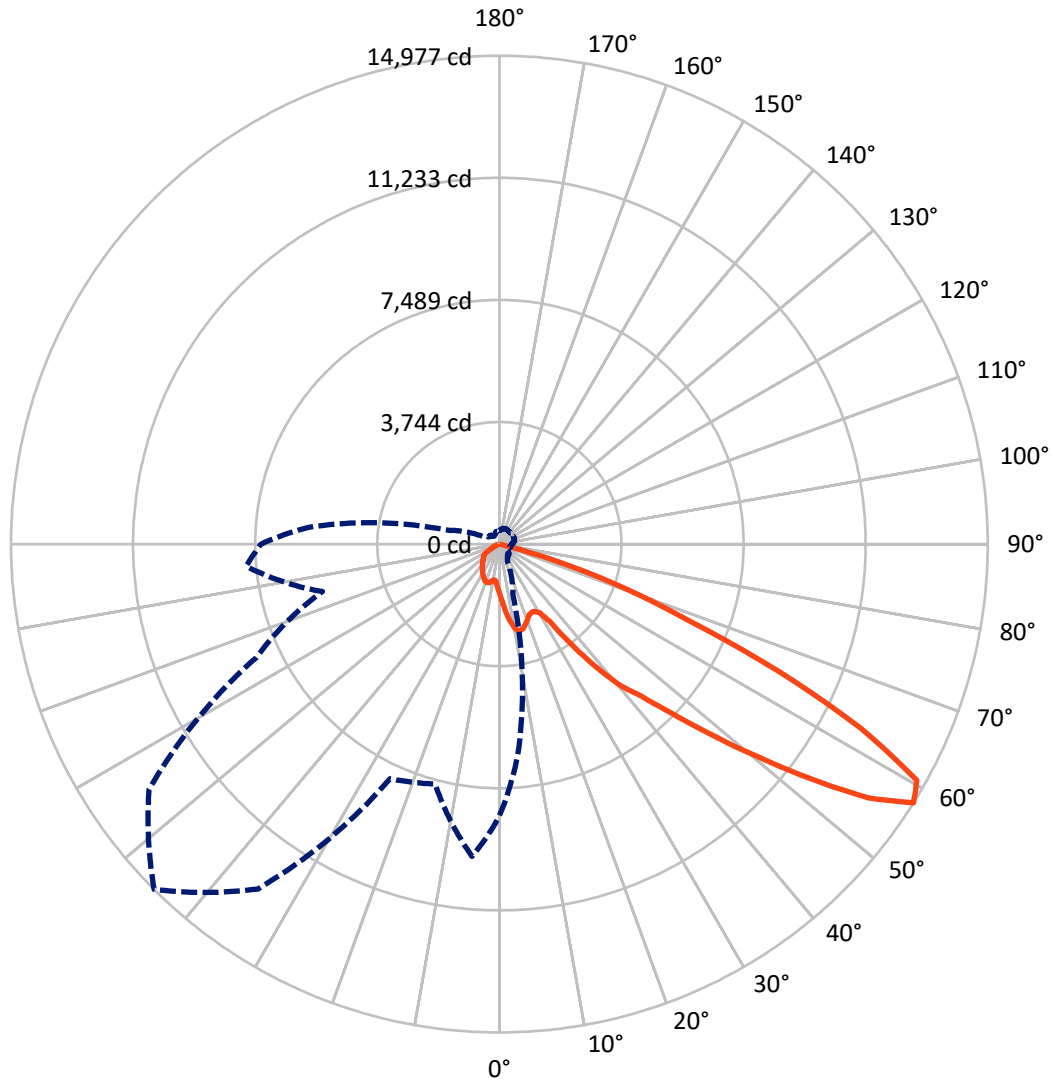
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 24.1 fc
 Type III - Short - N/A

REPORT NUMBER: P641944
CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P641944

CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

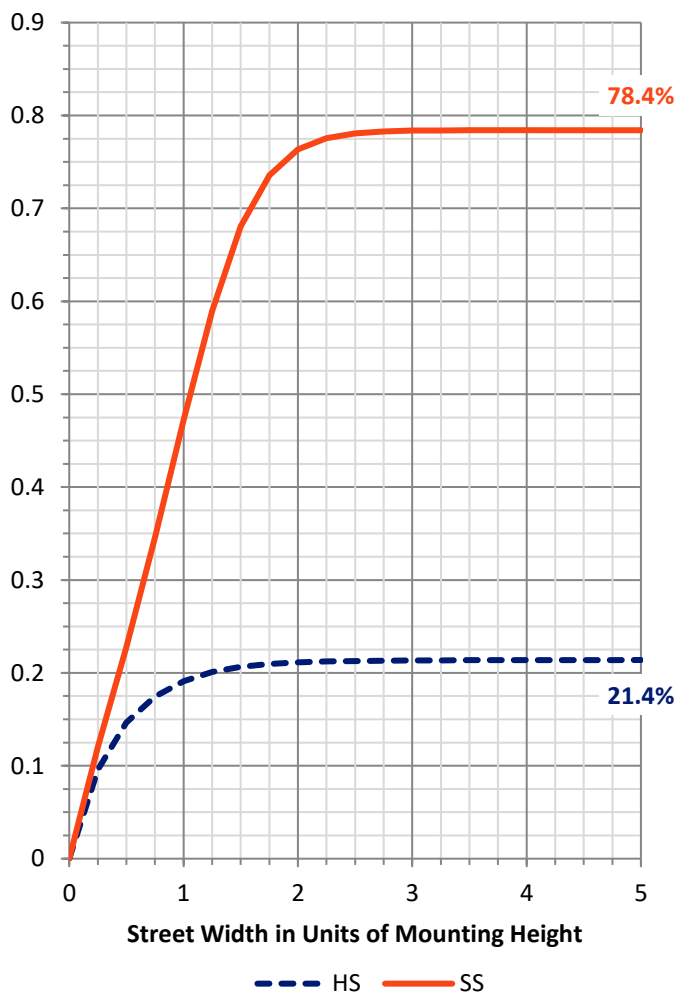
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1943.0	0.0	1943.0
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	7075.9	0.0	7075.9
	% Fixture	78.5	0.0	78.5
Total	Lumens	9018.8	0.0	9018.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	1.7
10°-20°	498.4	5.5
20°-30°	808.8	9.0
30°-40°	1241.4	13.8
40°-50°	1982.5	22.0
50°-60°	2775.9	30.8
60°-70°	1423.3	15.8
70°-80°	137.0	1.5
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°	9018.8	100.0
0°-180°	9018.8	100.0

Coefficient of Utilization



REPORT NUMBER: P641944

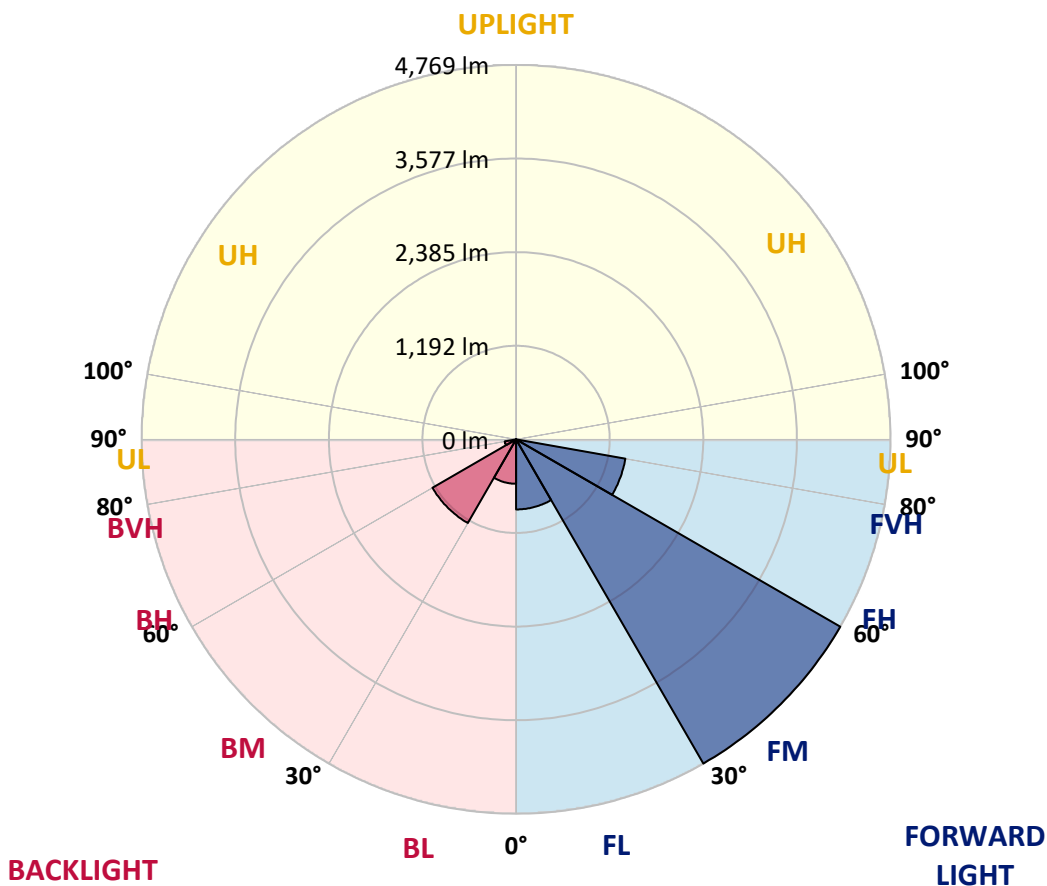
CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	892.9	9.9			
FM (30°-60°)	4769.4	52.9			
FH (60°-80°)	1413.6	15.7			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	565.8	6.3	B2/1000		
BM (30°-60°)	1230.5	13.6	B2/2500		
BH (60°-80°)	146.7	1.6	B1/500		G1/500
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: B2-U0-G1

Type III Short





REPORT NUMBER: P641944

CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
2.5°	1702.4	1698.8	1686.8	1645.8	1620.4	1580.7	1551.7	1514.3	1473.3	1448.0	1422.7
5°	1883.3	1873.6	1841.1	1747.0	1674.7	1596.3	1533.6	1464.9	1391.4	1343.1	1298.5
7.5°	2056.9	2042.4	1999.0	1839.9	1730.2	1618.0	1528.8	1428.7	1325.0	1252.7	1197.2
10°	2226.9	2194.3	2125.6	1930.3	1782.0	1647.0	1542.1	1427.5	1305.8	1214.1	1152.6
12.5°	2366.8	2342.6	2248.6	2015.9	1825.4	1653.0	1524.0	1417.9	1335.9	1274.4	1217.7
15°	2487.3	2460.8	2371.6	2093.1	1862.8	1628.9	1448.0	1355.2	1368.5	1392.6	1344.3
17.5°	2598.3	2570.5	2474.1	2157.0	1877.3	1569.8	1341.9	1297.3	1370.9	1461.3	1443.2
20°	2712.8	2681.4	2563.3	2208.8	1872.4	1477.0	1234.6	1247.9	1351.6	1455.3	1464.9
22.5°	2846.6	2814.1	2676.6	2275.1	1868.8	1366.0	1141.8	1204.5	1315.4	1403.4	1420.3
25°	3023.9	2985.3	2834.6	2372.8	1878.5	1264.8	1075.5	1162.3	1253.9	1333.5	1343.1
27.5°	3257.8	3208.3	3016.6	2493.4	1899.0	1185.2	1046.5	1104.4	1175.5	1246.7	1255.1
30°	3562.8	3500.1	3225.2	2598.3	1889.3	1129.7	1027.2	1046.5	1088.7	1146.6	1147.8
32.5°	3919.7	3834.1	3459.1	2688.7	1806.1	1088.7	1000.7	987.5	997.1	1041.7	1050.2
35°	4339.3	4228.3	3717.1	2774.3	1654.2	1009.2	952.5	907.9	904.3	926.0	946.5
37.5°	4820.3	4687.7	4042.7	2884.0	1474.6	926.0	881.4	836.7	817.5	828.3	859.7
40°	5264.0	5116.9	4382.7	3016.6	1291.3	851.2	798.2	752.3	729.4	733.1	771.6
42.5°	5784.9	5633.0	4798.6	3190.2	1139.4	800.6	711.4	664.3	634.2	651.1	695.7
45°	6575.8	6403.4	5405.1	3341.0	1018.8	788.5	635.4	569.1	554.6	583.6	636.6
47.5°	7656.1	7445.1	6238.2	3432.6	916.3	799.4	582.3	491.9	495.5	528.1	581.1
50°	8728.0	8500.1	7201.6	3312.0	831.9	777.7	555.8	431.6	454.5	483.5	531.7
52.5°	9464.6	9168.0	7670.6	2963.6	754.8	695.7	553.4	375.0	418.4	428.0	469.0
55°	9493.6	9128.3	7430.6	2336.6	649.9	587.2	528.1	327.9	378.6	382.2	417.2
57.5°	8321.6	7991.3	6493.8	1604.8	577.5	430.4	420.8	287.0	311.1	341.2	362.9
60°	6331.1	6050.1	4856.5	735.5	438.9	273.7	288.2	247.2	232.7	277.3	299.0
62.5°	3877.5	3697.8	2912.9	325.5	279.7	145.9	174.8	196.5	174.8	191.7	209.8
65°	1539.7	1460.1	1105.6	138.7	114.5	73.5	79.6	114.5	123.0	135.0	151.9
67.5°	267.7	253.2	185.7	61.5	47.0	44.6	38.6	53.1	74.8	83.2	96.5
70°	35.0	33.8	30.1	25.3	24.1	21.7	16.9	33.8	50.6	53.1	61.5
72.5°	8.4	7.2	7.2	6.0	7.2	2.4	2.4	18.1	36.2	37.4	43.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	22.9	25.3	30.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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: P641944

CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
2.5°	1402.2	1378.1	1369.7	1357.6	1341.9	1346.8	1325.0	1317.8	1328.7	1343.1	1339.5
5°	1274.4	1247.9	1229.8	1202.1	1197.2	1186.4	1179.2	1169.5	1181.6	1198.5	1202.1
7.5°	1173.1	1150.2	1132.1	1123.7	1117.7	1112.8	1098.4	1091.1	1091.1	1098.4	1104.4
10°	1129.7	1112.8	1109.2	1111.6	1121.3	1120.1	1106.8	1097.2	1085.1	1079.1	1086.3
12.5°	1190.0	1162.3	1157.5	1158.7	1170.7	1169.5	1155.0	1143.0	1140.6	1143.0	1165.9
15°	1292.5	1250.3	1218.9	1212.9	1218.9	1216.5	1205.7	1198.5	1202.1	1237.0	1275.6
17.5°	1384.1	1319.0	1262.4	1240.7	1239.4	1235.8	1225.0	1222.6	1240.7	1305.8	1362.4
20°	1410.7	1346.8	1266.0	1238.2	1232.2	1228.6	1216.5	1220.2	1243.1	1321.4	1369.7
22.5°	1375.7	1314.2	1229.8	1202.1	1197.2	1196.0	1184.0	1188.8	1208.1	1276.8	1316.6
25°	1309.4	1257.5	1169.5	1145.4	1145.4	1143.0	1132.1	1134.6	1146.6	1206.9	1245.5
27.5°	1228.6	1179.2	1105.6	1081.5	1085.1	1088.7	1075.5	1071.9	1081.5	1138.2	1161.1
30°	1135.8	1100.8	1042.9	1021.2	1020.0	1034.5	1016.4	1011.6	1024.8	1069.4	1074.3
32.5°	1045.3	1028.5	987.5	970.6	971.8	974.2	964.5	964.5	976.6	1000.7	999.5
35°	957.3	946.5	939.2	927.2	926.0	921.1	921.1	923.6	936.8	945.3	929.6
37.5°	872.9	883.8	892.2	880.2	870.5	870.5	870.5	881.4	893.4	889.8	863.3
40°	798.2	821.1	847.6	834.3	811.4	810.2	815.0	833.1	851.2	829.5	805.4
42.5°	734.3	763.2	800.6	793.3	768.0	764.4	768.0	790.9	805.4	777.7	751.1
45°	671.6	707.7	752.3	752.3	724.6	721.0	722.2	752.3	760.8	728.2	694.5
47.5°	618.5	658.3	705.3	705.3	682.4	675.2	681.2	712.6	718.6	672.8	641.4
50°	567.9	611.3	663.1	659.5	643.8	637.8	648.7	682.4	675.2	624.5	592.0
52.5°	504.0	549.8	620.9	624.5	616.1	617.3	630.6	652.3	631.8	570.3	542.6
55°	446.1	493.1	564.3	583.6	583.6	582.3	588.4	605.3	588.4	514.8	481.1
57.5°	383.4	423.2	482.3	487.1	490.7	477.5	485.9	508.8	500.4	437.7	418.4
60°	314.7	348.4	382.2	385.8	370.1	342.4	358.1	384.6	390.6	343.6	321.9
62.5°	223.1	255.6	295.4	295.4	279.7	252.0	272.5	295.4	287.0	238.7	225.5
65°	166.4	196.5	226.7	239.9	226.7	207.4	223.1	239.9	226.7	186.9	167.6
67.5°	107.3	127.8	145.9	156.7	159.2	156.7	164.0	159.2	143.5	117.0	106.1
70°	65.1	76.0	85.6	95.2	102.5	106.1	109.7	98.9	83.2	68.7	65.1
72.5°	47.0	56.7	65.1	72.3	80.8	83.2	83.2	76.0	61.5	48.2	44.6
75°	32.6	41.0	48.2	53.1	60.3	62.7	62.7	56.7	45.8	35.0	31.3
77.5°	1.2	8.4	8.4	7.2	9.6	12.1	12.1	14.5	13.3	9.6	8.4
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: P641944

CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
2.5°	1346.8	1390.2	1402.2	1446.8	1486.6	1526.4	1574.6	1603.6	1647.0	1677.1	1694.0
5°	1214.1	1250.3	1293.7	1360.0	1428.7	1504.7	1596.3	1675.9	1776.0	1849.5	1873.6
7.5°	1117.7	1164.7	1215.3	1298.5	1392.6	1493.8	1622.9	1753.1	1906.2	2006.3	2070.2
10°	1099.6	1147.8	1215.3	1297.3	1396.2	1511.9	1669.9	1838.7	2030.4	2152.2	2224.5
12.5°	1186.4	1238.2	1267.2	1304.6	1379.3	1508.3	1710.9	1925.5	2150.9	2283.6	2360.7
15°	1314.2	1360.0	1313.0	1266.0	1314.2	1469.7	1733.8	1997.8	2257.0	2410.2	2489.7
17.5°	1402.2	1405.8	1303.3	1203.3	1216.5	1399.8	1742.2	2070.2	2370.4	2530.7	2613.9
20°	1393.8	1364.8	1261.1	1150.2	1109.2	1309.4	1732.6	2134.1	2484.9	2652.5	2734.5
22.5°	1328.7	1294.9	1206.9	1098.4	1018.8	1202.1	1715.7	2191.9	2589.8	2780.3	2857.5
25°	1250.3	1214.1	1141.8	1046.5	960.9	1098.4	1702.4	2271.5	2722.4	2946.7	3007.0
27.5°	1158.7	1127.3	1065.8	997.1	936.8	1020.0	1698.8	2376.4	2882.8	3149.3	3191.5
30°	1069.4	1040.5	992.3	952.5	927.2	974.2	1686.8	2488.5	3074.5	3382.0	3427.8
32.5°	983.8	954.9	924.8	918.7	919.9	957.3	1645.8	2599.5	3302.4	3719.5	3753.3
35°	910.3	876.5	864.5	878.9	905.5	928.4	1530.0	2691.1	3547.1	4087.3	4115.0
37.5°	840.4	806.6	805.4	840.4	869.3	883.8	1393.8	2781.5	3877.5	4461.0	4496.0
40°	776.5	742.7	754.8	797.0	819.9	827.1	1228.6	2919.0	4227.1	4855.3	4836.0
42.5°	722.2	687.2	694.5	748.7	769.2	788.5	1076.7	3033.5	4563.5	5229.1	5223.0
45°	669.2	642.6	637.8	696.9	715.0	792.1	965.8	3121.5	4996.4	5705.3	5715.0
47.5°	617.3	596.8	598.0	623.3	668.0	810.2	871.7	3179.4	5624.5	6460.1	6292.5
50°	570.3	554.6	567.9	538.9	637.8	787.3	790.9	3167.3	6326.2	7183.5	6847.1
52.5°	518.4	514.8	520.9	450.9	589.6	694.5	715.0	3007.0	6655.4	7677.8	7486.1
55°	465.4	464.2	416.0	360.5	493.1	554.6	612.5	2509.0	6644.5	7940.7	8173.3
57.5°	402.7	393.1	315.9	294.2	383.4	385.8	558.2	1643.4	5888.6	7311.3	7793.6
60°	305.0	297.8	231.5	238.7	267.7	247.2	444.9	818.7	4400.8	5695.7	6239.4
62.5°	211.0	201.3	172.4	184.5	172.4	141.1	272.5	405.1	2665.8	3596.6	4089.7
65°	154.3	143.5	118.2	101.3	80.8	80.8	103.7	155.5	1032.1	1528.8	1843.5
67.5°	95.2	90.4	69.9	50.6	49.4	53.1	54.3	77.2	166.4	265.3	324.3
70°	61.5	56.7	47.0	32.6	30.1	31.3	32.6	36.2	42.2	45.8	55.5
72.5°	42.2	39.8	33.8	18.1	14.5	15.7	16.9	16.9	20.5	19.3	22.9
75°	30.1	27.7	24.1	8.4	4.8	6.0	7.2	6.0	7.2	4.8	6.0
77.5°	8.4	8.4	6.0	1.2	0.0	1.2	2.4	2.4	1.2	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	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: P641944

CATALOG NUMBER: GWS-SA6B-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
2.5°	1737.4	1765.1	1776.0	1760.3	1773.6	1751.9	1743.4	1710.9	1708.5	1702.4
5°	1971.3	2034.0	2071.4	2094.3	2067.8	2038.8	1995.4	1920.7	1897.8	1883.3
7.5°	2201.6	2299.2	2363.1	2393.3	2386.1	2327.0	2248.6	2123.2	2078.6	2056.9
10°	2401.7	2521.1	2598.3	2635.6	2620.0	2568.1	2456.0	2299.2	2240.2	2226.9
12.5°	2541.6	2651.3	2704.4	2736.9	2738.1	2717.6	2611.5	2453.6	2383.6	2366.8
15°	2629.6	2676.6	2677.8	2697.1	2730.9	2776.7	2727.3	2587.4	2512.7	2487.3
17.5°	2685.1	2633.2	2580.2	2585.0	2640.5	2762.2	2812.9	2705.6	2626.0	2598.3
20°	2724.9	2560.9	2462.0	2463.2	2519.9	2704.4	2871.9	2820.1	2738.1	2712.8
22.5°	2750.2	2497.0	2355.9	2352.3	2412.6	2635.6	2926.2	2956.3	2875.6	2846.6
25°	2802.0	2466.8	2292.0	2312.5	2365.6	2613.9	2999.7	3137.2	3062.4	3023.9
27.5°	2894.9	2497.0	2286.0	2333.0	2393.3	2677.8	3127.6	3378.3	3301.2	3257.8
30°	3055.2	2610.3	2378.8	2443.9	2516.3	2845.4	3342.2	3714.7	3603.8	3562.8
32.5°	3313.2	2845.4	2665.8	2805.6	2875.6	3120.3	3664.1	4092.1	4001.7	3919.7
35°	3668.9	3382.0	3361.5	3687.0	3670.1	3641.2	4059.5	4555.1	4418.8	4339.3
37.5°	4158.4	4245.2	4397.1	4720.3	4709.4	4488.8	4579.2	4992.7	4922.8	4820.3
40°	4769.7	4954.2	5212.2	5675.2	5530.5	5253.2	5217.0	5441.3	5384.6	5264.0
42.5°	5130.2	5448.5	5940.4	6356.4	6240.6	5755.9	5715.0	6040.5	5916.3	5784.9
45°	5297.8	5851.2	6815.7	7378.8	7027.9	6089.9	6074.2	6821.8	6751.8	6575.8
47.5°	5375.0	6257.5	7840.6	8693.0	8037.1	6382.9	6326.2	7955.1	7863.5	7656.1
50°	5460.6	6818.2	9075.2	10215.8	9256.1	6714.5	6755.5	9011.3	8972.7	8728.0
52.5°	5648.6	7411.4	10595.6	11956.8	10734.2	7234.1	7492.1	10007.2	9746.8	9464.6
55°	5930.8	8057.6	12177.4	13735.2	12242.5	7932.2	8289.1	10536.5	9805.8	9493.6
57.5°	5618.5	8219.2	13114.3	14977.0	12911.7	7934.6	7615.1	9619.0	8624.3	8321.6
60°	4458.6	7646.5	12753.8	14708.2	12341.4	7046.0	5830.7	7510.2	6533.6	6331.1
62.5°	3014.2	6413.0	11227.4	12439.1	10563.0	5542.5	3789.5	4884.2	4045.1	3877.5
65°	1651.8	4784.2	9071.6	9410.4	8267.4	3871.5	1949.6	2119.6	1614.4	1539.7
67.5°	455.7	3330.1	6674.7	6243.0	5800.6	2521.1	504.0	378.6	270.1	267.7
70°	114.5	2202.8	3999.3	4122.2	3556.8	1614.4	96.5	45.8	36.2	35.0
72.5°	48.2	947.7	1897.8	2181.1	1820.6	747.5	35.0	13.3	10.9	8.4
75°	6.0	76.0	161.6	244.8	167.6	80.8	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	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
85°	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
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

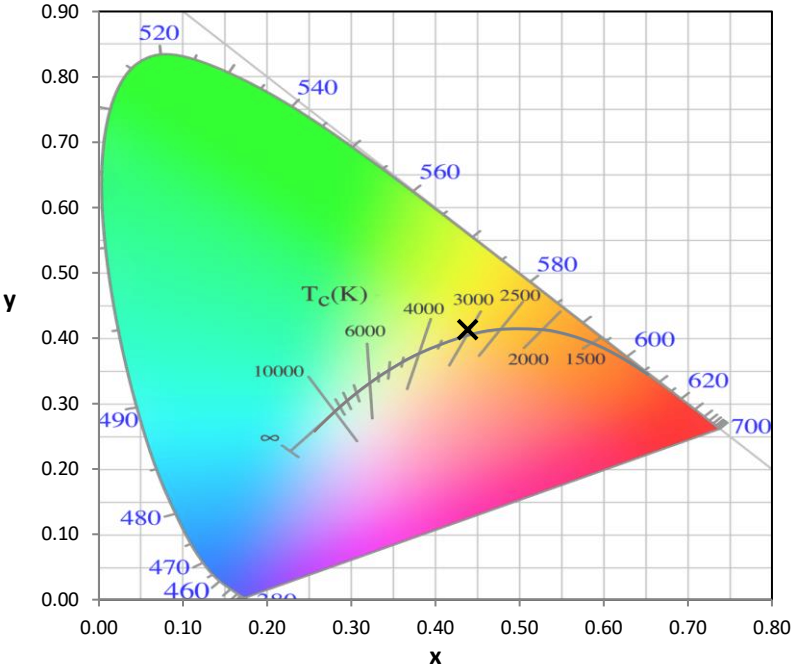
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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



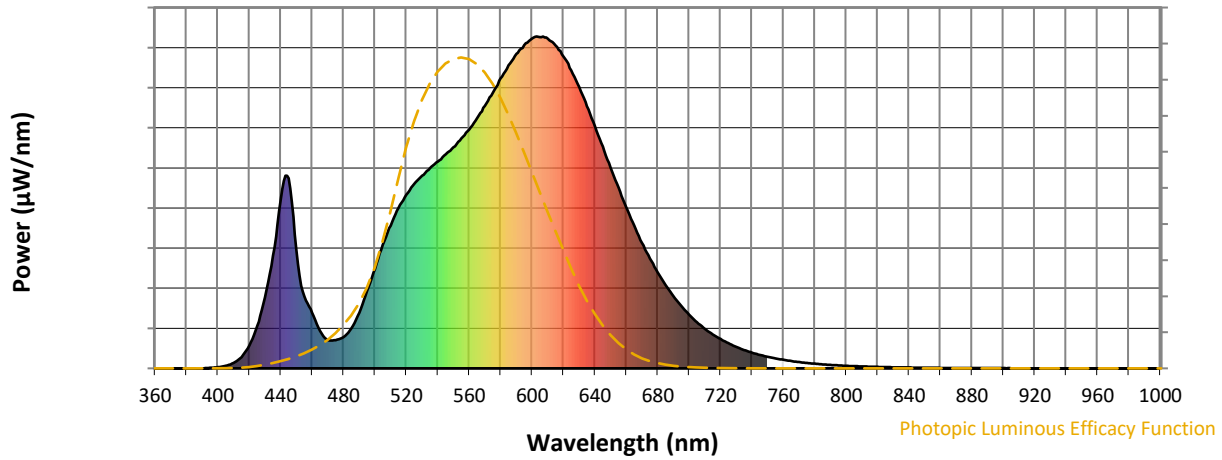
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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

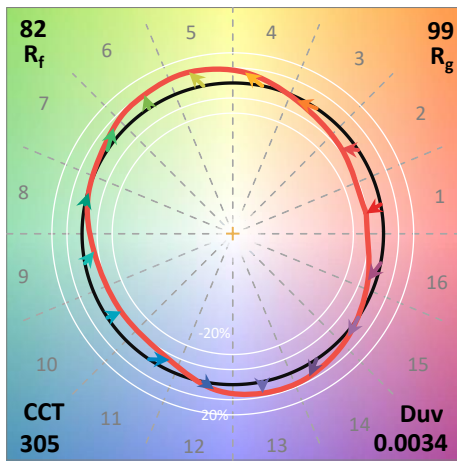
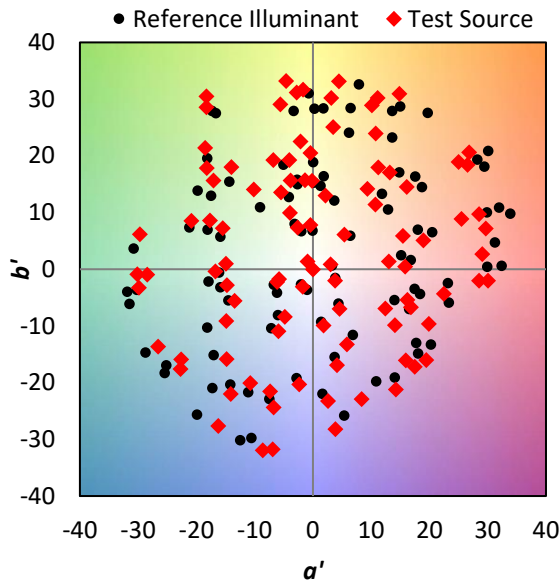
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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