

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: P637489

Luminaire Tested: GWS-SA4C-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637489
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-SA4C-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8268.7 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

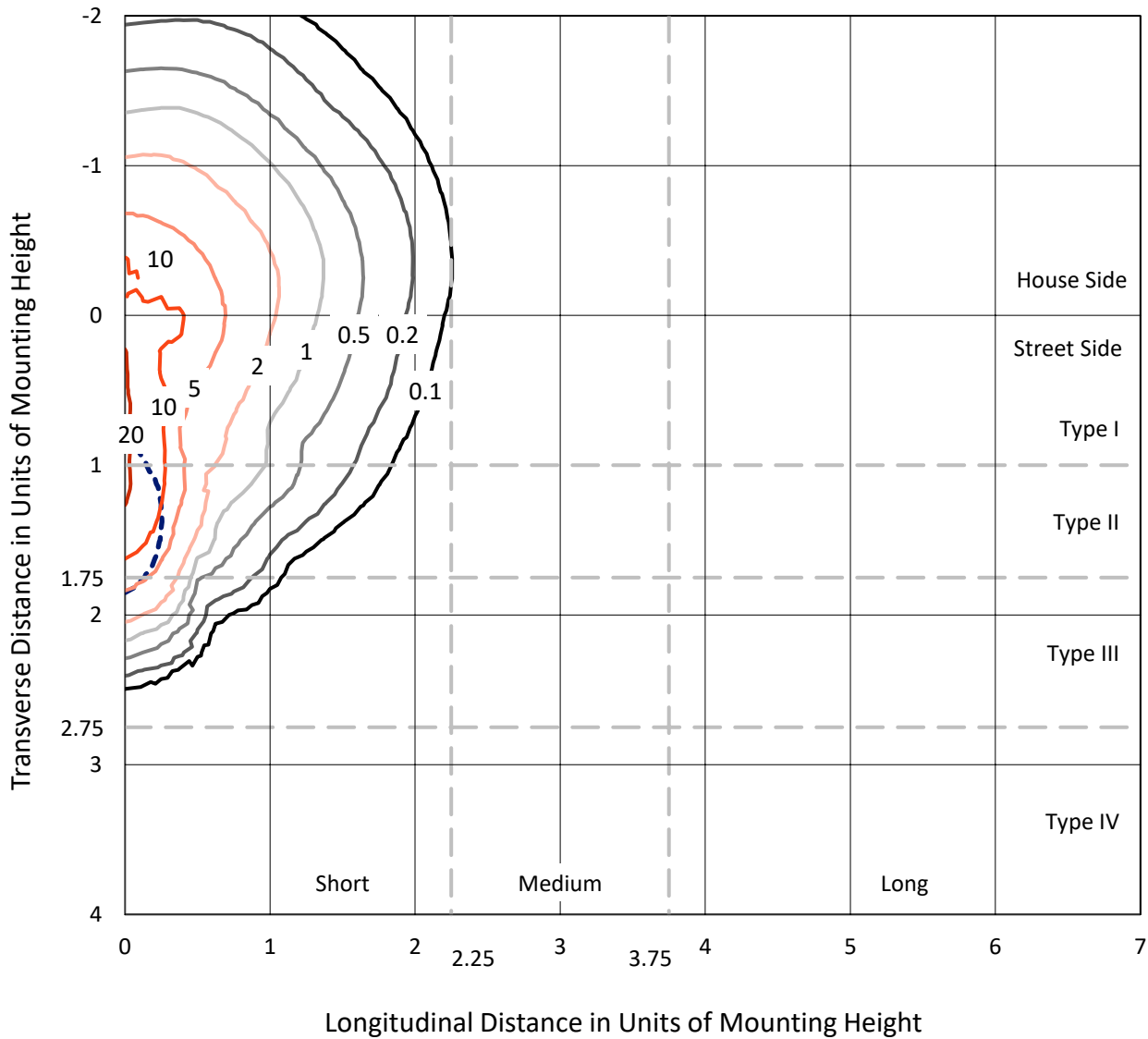
Input Watts (W): 128.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637489
 CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

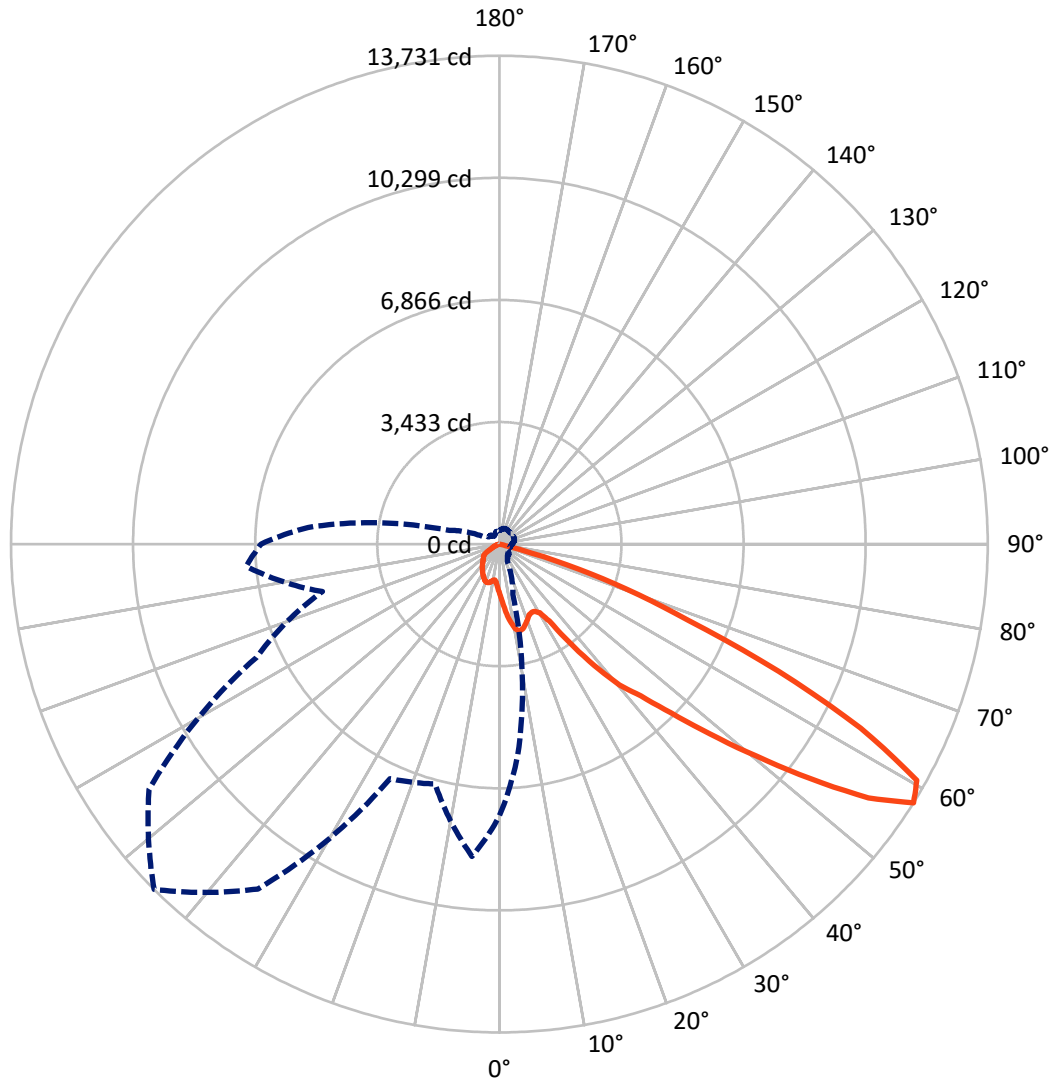
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
 Type III - Short - N/A

REPORT NUMBER: P637489
CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

Luminous Intensity Polar Plot



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

REPORT NUMBER: P637489

CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

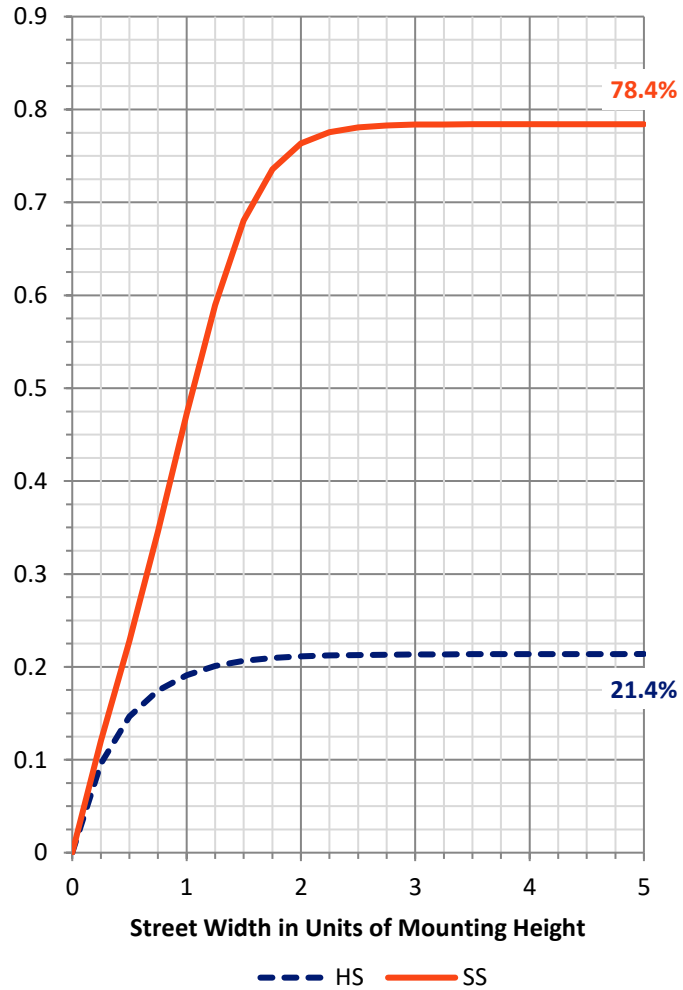
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1781.4	0.0	1781.4
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	6487.3	0.0	6487.3
	% Fixture	78.5	0.0	78.5
Total	Lumens	8268.7	0.0	8268.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.9	1.7
10°-20°	456.9	5.5
20°-30°	741.6	9.0
30°-40°	1138.1	13.8
40°-50°	1817.6	22.0
50°-60°	2545.0	30.8
60°-70°	1304.9	15.8
70°-80°	125.6	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°	8268.7	100.0
0°-180°	8268.7	100.0

Coefficient of Utilization



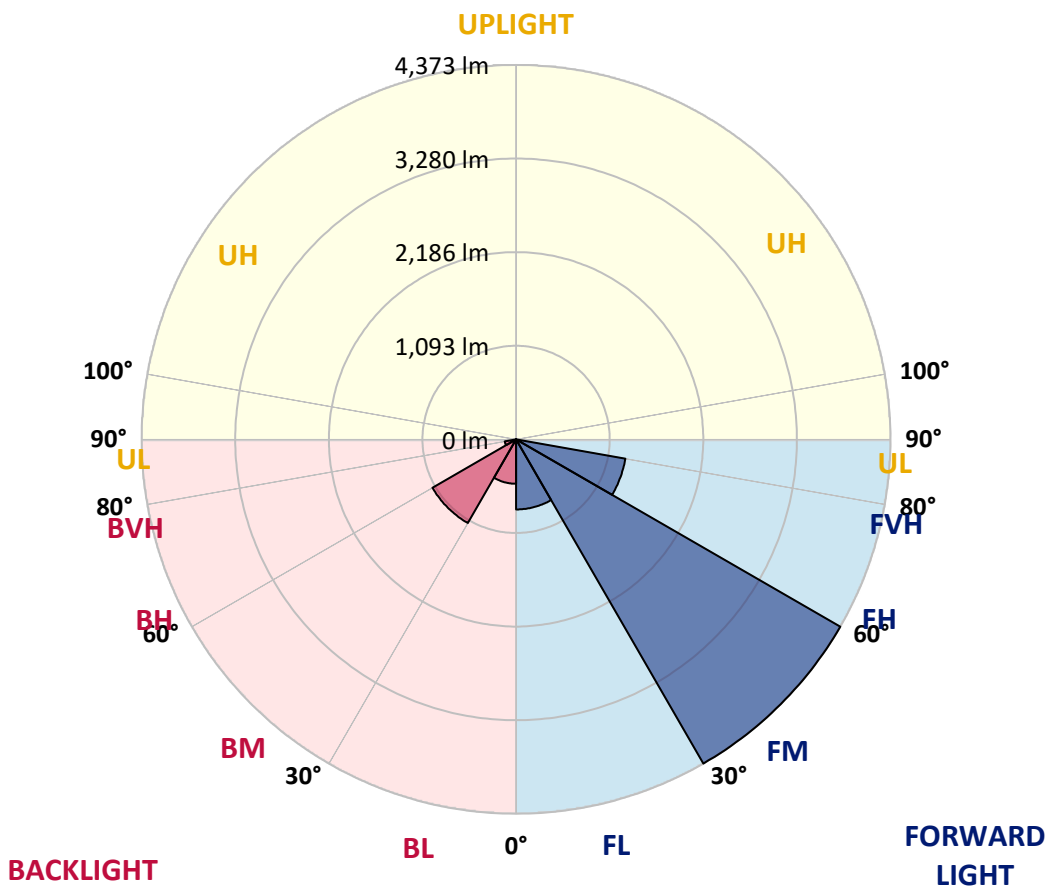
REPORT NUMBER: P637489

CATALOG NUMBER: GWS-SA4C-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°)	818.7	9.9			
FM (30°-60°)	4372.7	52.9			
FH (60°-80°)	1296.0	15.7			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	518.7	6.3	B2/1000		
BM (30°-60°)	1128.1	13.6	B2/2500		
BH (60°-80°)	134.5	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: P637489

CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1560.8	1557.5	1546.5	1508.9	1485.7	1449.2	1422.7	1388.4	1350.8	1327.6	1304.4
5°	1726.6	1717.8	1688.0	1601.7	1535.4	1463.6	1406.1	1343.1	1275.6	1231.4	1190.5
7.5°	1885.8	1872.6	1832.8	1686.9	1586.3	1483.5	1401.7	1309.9	1214.8	1148.5	1097.7
10°	2041.7	2011.8	1948.8	1769.8	1633.8	1510.0	1413.8	1308.8	1197.2	1113.1	1056.8
12.5°	2169.9	2147.8	2061.6	1848.2	1673.6	1515.5	1397.2	1300.0	1224.8	1168.4	1116.5
15°	2280.5	2256.1	2174.3	1919.0	1707.9	1493.4	1327.6	1242.5	1254.6	1276.7	1232.5
17.5°	2382.2	2356.7	2268.3	1977.6	1721.1	1439.2	1230.3	1189.4	1256.8	1339.8	1323.2
20°	2487.2	2458.4	2350.1	2025.1	1716.7	1354.1	1131.9	1144.1	1239.2	1334.2	1343.1
22.5°	2609.9	2580.0	2454.0	2085.9	1713.4	1252.4	1046.8	1104.3	1206.0	1286.7	1302.2
25°	2772.4	2737.0	2598.8	2175.4	1722.2	1159.6	986.0	1065.6	1149.6	1222.6	1231.4
27.5°	2986.8	2941.5	2765.7	2286.0	1741.0	1086.6	959.5	1012.6	1077.8	1143.0	1150.7
30°	3266.5	3209.0	2957.0	2382.2	1732.2	1035.8	941.8	959.5	998.2	1051.2	1052.3
32.5°	3593.7	3515.2	3171.4	2465.1	1655.9	998.2	917.5	905.3	914.2	955.1	962.8
35°	3978.4	3876.7	3408.0	2543.5	1516.6	925.2	873.3	832.4	829.1	849.0	867.7
37.5°	4419.4	4297.8	3706.4	2644.1	1351.9	849.0	808.1	767.2	749.5	759.4	788.2
40°	4826.2	4691.4	4018.2	2765.7	1183.9	780.4	731.8	689.8	668.8	672.1	707.5
42.5°	5303.8	5164.5	4399.5	2924.9	1044.6	734.0	652.2	609.1	581.4	596.9	637.8
45°	6028.9	5870.8	4955.5	3063.1	934.1	722.9	582.6	521.8	508.5	535.0	583.7
47.5°	7019.3	6825.9	5719.4	3147.1	840.1	732.9	533.9	451.0	454.3	484.2	532.8
50°	8002.1	7793.1	6602.6	3036.6	762.7	713.0	509.6	395.7	416.7	443.3	487.5
52.5°	8677.5	8405.5	7032.6	2717.1	692.0	637.8	507.4	343.8	383.6	392.4	430.0
55°	8704.0	8369.1	6812.6	2142.3	595.8	538.3	484.2	300.7	347.1	350.4	382.5
57.5°	7629.5	7326.6	5953.7	1471.3	529.5	394.6	385.8	263.1	285.2	312.8	332.7
60°	5804.5	5546.9	4452.6	674.3	402.4	250.9	264.2	226.6	213.3	254.2	274.1
62.5°	3555.0	3390.3	2670.7	298.5	256.5	133.8	160.3	180.2	160.3	175.8	192.3
65°	1411.6	1338.7	1013.7	127.1	105.0	67.4	73.0	105.0	112.8	123.8	139.3
67.5°	245.4	232.1	170.2	56.4	43.1	40.9	35.4	48.6	68.5	76.3	88.4
70°	32.1	31.0	27.6	23.2	22.1	19.9	15.5	31.0	46.4	48.6	56.4
72.5°	7.7	6.6	6.6	5.5	6.6	2.2	2.2	16.6	33.2	34.3	39.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	21.0	23.2	27.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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: P637489

CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1285.6	1263.5	1255.7	1244.7	1230.3	1234.7	1214.8	1208.2	1218.2	1231.4	1228.1
5°	1168.4	1144.1	1127.5	1102.1	1097.7	1087.7	1081.1	1072.2	1083.3	1098.8	1102.1
7.5°	1075.6	1054.6	1038.0	1030.2	1024.7	1020.3	1007.0	1000.4	1000.4	1007.0	1012.6
10°	1035.8	1020.3	1017.0	1019.2	1028.0	1026.9	1014.8	1005.9	994.9	989.3	996.0
12.5°	1091.0	1065.6	1061.2	1062.3	1073.4	1072.2	1059.0	1047.9	1045.7	1047.9	1068.9
15°	1185.0	1146.3	1117.6	1112.0	1117.6	1115.4	1105.4	1098.8	1102.1	1134.1	1169.5
17.5°	1269.0	1209.3	1157.4	1137.5	1136.4	1133.0	1123.1	1120.9	1137.5	1197.2	1249.1
20°	1293.3	1234.7	1160.7	1135.3	1129.7	1126.4	1115.4	1118.7	1139.7	1211.5	1255.7
22.5°	1261.3	1204.9	1127.5	1102.1	1097.7	1096.6	1085.5	1089.9	1107.6	1170.6	1207.1
25°	1200.5	1152.9	1072.2	1050.1	1050.1	1047.9	1038.0	1040.2	1051.2	1106.5	1141.9
27.5°	1126.4	1081.1	1013.7	991.6	994.9	998.2	986.0	982.7	991.6	1043.5	1064.5
30°	1041.3	1009.2	956.2	936.3	935.2	948.4	931.9	927.4	939.6	980.5	984.9
32.5°	958.4	942.9	905.3	889.9	891.0	893.2	884.3	884.3	895.4	917.5	916.4
35°	877.7	867.7	861.1	850.1	849.0	844.5	844.5	846.7	858.9	866.6	852.3
37.5°	800.3	810.3	818.0	806.9	798.1	798.1	798.1	808.1	819.1	815.8	791.5
40°	731.8	752.8	777.1	764.9	743.9	742.8	747.3	763.8	780.4	760.5	738.4
42.5°	673.2	699.7	734.0	727.4	704.1	700.8	704.1	725.1	738.4	713.0	688.7
45°	615.7	648.9	689.8	689.8	664.4	661.0	662.1	689.8	697.5	667.7	636.7
47.5°	567.1	603.6	646.7	646.7	625.7	619.0	624.6	653.3	658.8	616.8	588.1
50°	520.6	560.4	608.0	604.7	590.3	584.8	594.7	625.7	619.0	572.6	542.8
52.5°	462.1	504.1	569.3	572.6	564.9	566.0	578.1	598.0	579.2	522.9	497.4
55°	409.0	452.1	517.3	535.0	535.0	533.9	539.4	554.9	539.4	472.0	441.1
57.5°	351.5	388.0	442.2	446.6	449.9	437.7	445.5	466.5	458.7	401.3	383.6
60°	288.5	319.5	350.4	353.7	339.4	313.9	328.3	352.6	358.2	315.0	295.1
62.5°	204.5	234.3	270.8	270.8	256.5	231.0	249.8	270.8	263.1	218.9	206.7
65°	152.5	180.2	207.8	220.0	207.8	190.1	204.5	220.0	207.8	171.3	153.7
67.5°	98.4	117.2	133.8	143.7	145.9	143.7	150.3	145.9	131.5	107.2	97.3
70°	59.7	69.6	78.5	87.3	94.0	97.3	100.6	90.6	76.3	63.0	59.7
72.5°	43.1	52.0	59.7	66.3	74.1	76.3	76.3	69.6	56.4	44.2	40.9
75°	29.8	37.6	44.2	48.6	55.3	57.5	57.5	52.0	42.0	32.1	28.7
77.5°	1.1	7.7	7.7	6.6	8.8	11.1	11.1	13.3	12.2	8.8	7.7
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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1234.7	1274.5	1285.6	1326.5	1363.0	1399.4	1443.7	1470.2	1510.0	1537.6	1553.1
5°	1113.1	1146.3	1186.1	1246.9	1309.9	1379.6	1463.6	1536.5	1628.3	1695.7	1717.8
7.5°	1024.7	1067.8	1114.3	1190.5	1276.7	1369.6	1487.9	1607.3	1747.7	1839.4	1898.0
10°	1008.1	1052.3	1114.3	1189.4	1280.1	1386.2	1531.0	1685.7	1861.5	1973.2	2039.5
12.5°	1087.7	1135.3	1161.8	1196.1	1264.6	1382.9	1568.6	1765.3	1972.0	2093.6	2164.4
15°	1204.9	1246.9	1203.8	1160.7	1204.9	1347.5	1589.6	1831.7	2069.3	2209.7	2282.7
17.5°	1285.6	1288.9	1194.9	1103.2	1115.4	1283.4	1597.3	1898.0	2173.2	2320.3	2396.5
20°	1277.9	1251.3	1156.3	1054.6	1017.0	1200.5	1588.5	1956.6	2278.2	2431.9	2507.1
22.5°	1218.2	1187.2	1106.5	1007.0	934.1	1102.1	1573.0	2009.6	2374.4	2549.1	2619.8
25°	1146.3	1113.1	1046.8	959.5	881.0	1007.0	1560.8	2082.6	2496.0	2701.6	2756.9
27.5°	1062.3	1033.6	977.2	914.2	858.9	935.2	1557.5	2178.8	2643.0	2887.3	2926.0
30°	980.5	954.0	909.8	873.3	850.1	893.2	1546.5	2281.6	2818.8	3100.7	3142.7
32.5°	902.0	875.5	847.8	842.3	843.4	877.7	1508.9	2383.3	3027.7	3410.2	3441.1
35°	834.6	803.6	792.6	805.8	830.2	851.2	1402.8	2467.3	3252.1	3747.3	3772.8
37.5°	770.5	739.5	738.4	770.5	797.0	810.3	1277.9	2550.2	3555.0	4090.0	4122.1
40°	711.9	680.9	692.0	730.7	751.7	758.3	1126.4	2676.2	3875.6	4451.5	4433.8
42.5°	662.1	630.1	636.7	686.5	705.3	722.9	987.1	2781.2	4184.0	4794.2	4788.6
45°	613.5	589.2	584.8	638.9	655.5	726.3	885.4	2861.9	4580.8	5230.8	5239.6
47.5°	566.0	547.2	548.3	571.5	612.4	742.8	799.2	2915.0	5156.7	5922.8	5769.1
50°	522.9	508.5	520.6	494.1	584.8	721.8	725.1	2903.9	5800.1	6586.0	6277.6
52.5°	475.3	472.0	477.5	413.4	540.5	636.7	655.5	2756.9	6101.9	7039.2	6863.5
55°	426.7	425.6	381.4	330.5	452.1	508.5	561.5	2300.4	6091.9	7280.2	7493.6
57.5°	369.2	360.4	289.6	269.7	351.5	353.7	511.8	1506.7	5398.8	6703.2	7145.4
60°	279.7	273.0	212.2	218.9	245.4	226.6	407.9	750.6	4034.7	5222.0	5720.5
62.5°	193.4	184.6	158.1	169.1	158.1	129.3	249.8	371.4	2444.1	3297.4	3749.5
65°	141.5	131.5	108.3	92.9	74.1	74.1	95.1	142.6	946.2	1401.7	1690.2
67.5°	87.3	82.9	64.1	46.4	45.3	48.6	49.7	70.7	152.5	243.2	297.4
70°	56.4	52.0	43.1	29.8	27.6	28.7	29.8	33.2	38.7	42.0	50.8
72.5°	38.7	36.5	31.0	16.6	13.3	14.4	15.5	15.5	18.8	17.7	21.0
75°	27.6	25.4	22.1	7.7	4.4	5.5	6.6	5.5	6.6	4.4	5.5
77.5°	7.7	7.7	5.5	1.1	0.0	1.1	2.2	2.2	1.1	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	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: P637489

CATALOG NUMBER: GWS-SA4C-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1592.9	1618.3	1628.3	1613.9	1626.1	1606.2	1598.4	1568.6	1566.4	1560.8
5°	1807.3	1864.8	1899.1	1920.1	1895.8	1869.2	1829.5	1760.9	1739.9	1726.6
7.5°	2018.5	2108.0	2166.6	2194.2	2187.6	2133.4	2061.6	1946.6	1905.7	1885.8
10°	2202.0	2311.4	2382.2	2416.4	2402.1	2354.5	2251.7	2108.0	2053.8	2041.7
12.5°	2330.2	2430.8	2479.4	2509.3	2510.4	2491.6	2394.3	2249.5	2185.4	2169.9
15°	2410.9	2454.0	2455.1	2472.8	2503.8	2545.8	2500.4	2372.2	2303.7	2280.5
17.5°	2461.7	2414.2	2365.6	2370.0	2420.8	2532.5	2578.9	2480.5	2407.6	2382.2
20°	2498.2	2347.9	2257.2	2258.4	2310.3	2479.4	2633.1	2585.6	2510.4	2487.2
22.5°	2521.4	2289.3	2160.0	2156.7	2211.9	2416.4	2682.8	2710.5	2636.4	2609.9
25°	2569.0	2261.7	2101.4	2120.2	2168.8	2396.5	2750.3	2876.3	2807.7	2772.4
27.5°	2654.1	2289.3	2095.9	2139.0	2194.2	2455.1	2867.4	3097.4	3026.6	2986.8
30°	2801.1	2393.2	2181.0	2240.7	2307.0	2608.8	3064.2	3405.8	3304.1	3266.5
32.5°	3037.7	2608.8	2444.1	2572.3	2636.4	2860.8	3359.3	3751.8	3668.9	3593.7
35°	3363.8	3100.7	3081.9	3380.3	3364.9	3338.3	3721.9	4176.2	4051.3	3978.4
37.5°	3812.6	3892.1	4031.4	4327.7	4317.7	4115.4	4198.3	4577.5	4513.4	4419.4
40°	4373.0	4542.1	4778.7	5203.2	5070.5	4816.3	4783.1	4988.7	4936.8	4826.2
42.5°	4703.5	4995.3	5446.3	5827.7	5721.6	5277.2	5239.6	5538.1	5424.2	5303.8
45°	4857.2	5364.5	6248.9	6765.1	6443.4	5583.4	5569.0	6254.4	6190.3	6028.9
47.5°	4927.9	5737.1	7188.5	7970.0	7368.7	5852.0	5800.1	7293.5	7209.5	7019.3
50°	5006.4	6251.1	8320.4	9366.1	8486.2	6156.0	6193.6	8261.8	8226.5	8002.1
52.5°	5178.8	6794.9	9714.3	10962.3	9841.5	6632.5	6869.0	9174.9	8936.1	8677.5
55°	5437.5	7387.4	11164.6	12592.8	11224.3	7272.5	7599.7	9660.2	8990.3	8704.0
57.5°	5151.2	7535.6	12023.5	13731.4	11837.8	7274.7	6981.8	8819.0	7907.0	7629.5
60°	4087.8	7010.5	11693.0	13484.9	11315.0	6460.0	5345.8	6885.6	5990.2	5804.5
62.5°	2763.5	5879.7	10293.6	11404.5	9684.5	5081.6	3474.3	4478.0	3708.6	3555.0
65°	1514.4	4386.3	8317.1	8627.7	7579.8	3549.5	1787.4	1943.3	1480.1	1411.6
67.5°	417.8	3053.1	6119.5	5723.8	5318.1	2311.4	462.1	347.1	247.6	245.4
70°	105.0	2019.6	3666.6	3779.4	3261.0	1480.1	88.4	42.0	33.2	32.1
72.5°	44.2	868.9	1739.9	1999.7	1669.2	685.4	32.1	12.2	9.9	7.7
75°	5.5	69.6	148.1	224.4	153.7	74.1	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)