

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: P633035

Luminaire Tested: GWS-SA2D-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2D-830-U-SLL-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT 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: 7219.7 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

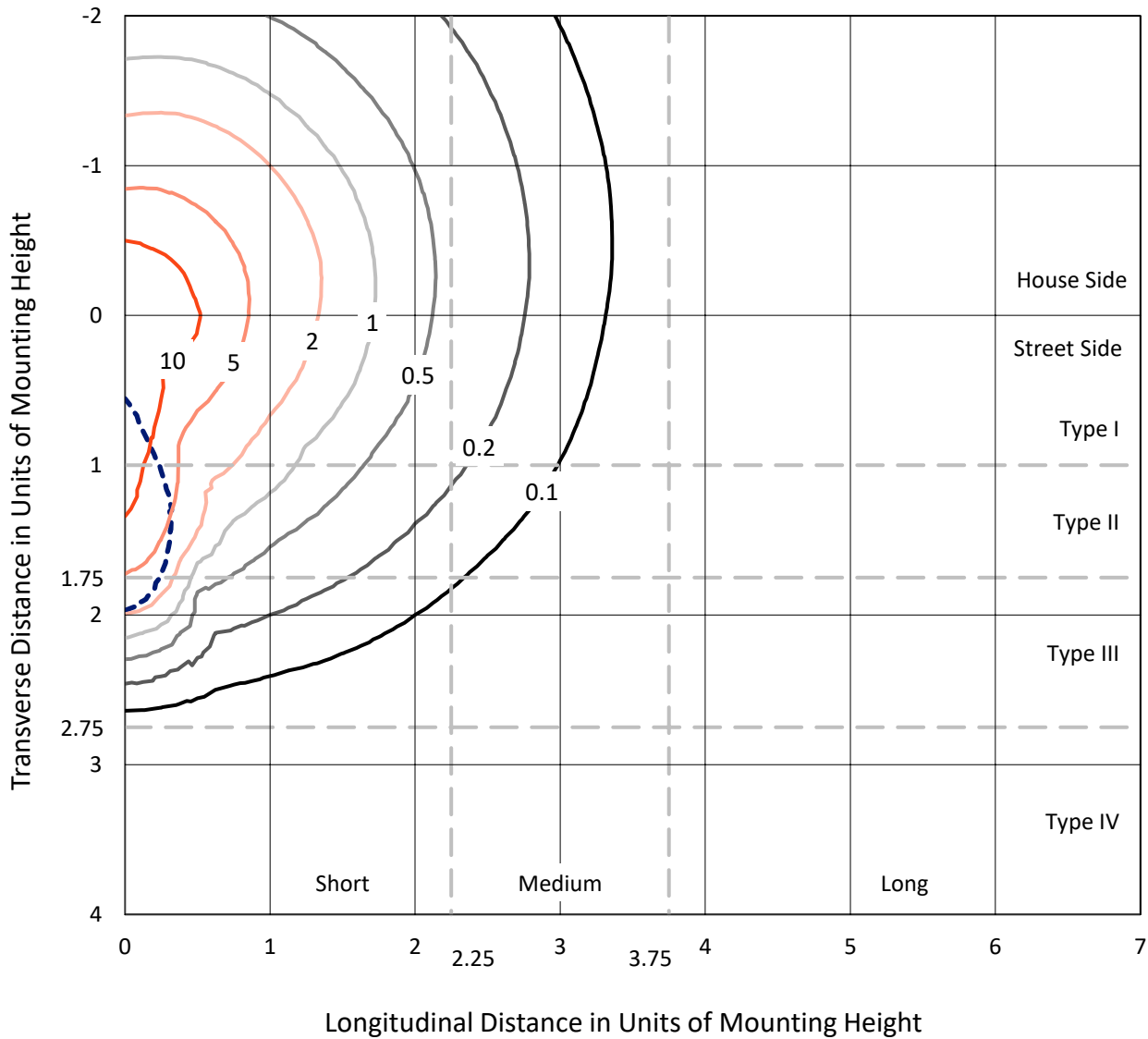
Input Watts (W): 82.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

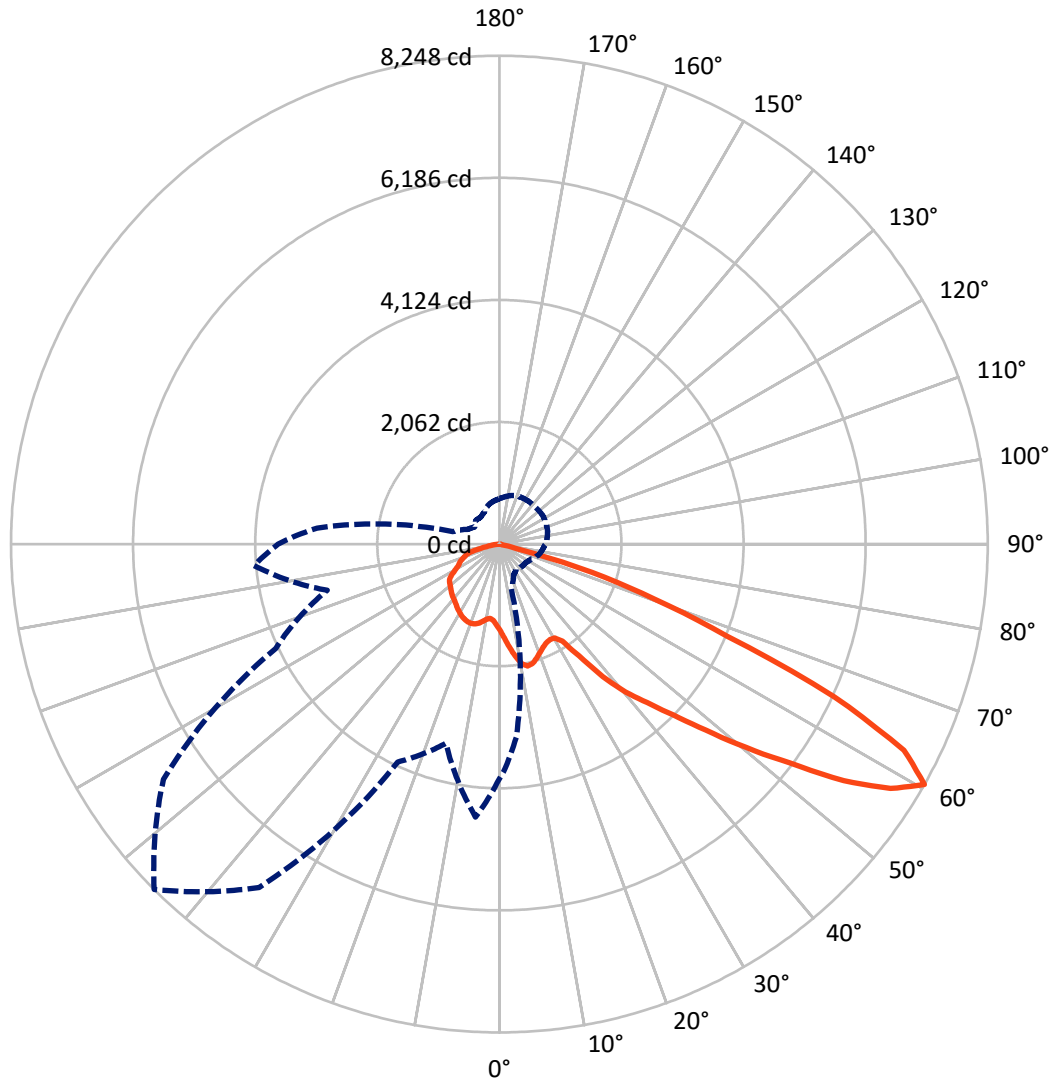
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2469.8	0.0	2469.8
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	4749.9	0.0	4749.9
	% Fixture	65.8	0.0	65.8
Total	Lumens	7219.7	0.0	7219.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	2.0
10°-20°	456.3	6.3
20°-30°	743.1	10.3
30°-40°	1044.0	14.5
40°-50°	1428.6	19.8
50°-60°	1832.8	25.4
60°-70°	1234.1	17.1
70°-80°	308.5	4.3
80°-90°	30.1	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°	7219.7	100.0
0°-180°	7219.7	100.0

Coefficient of Utilization



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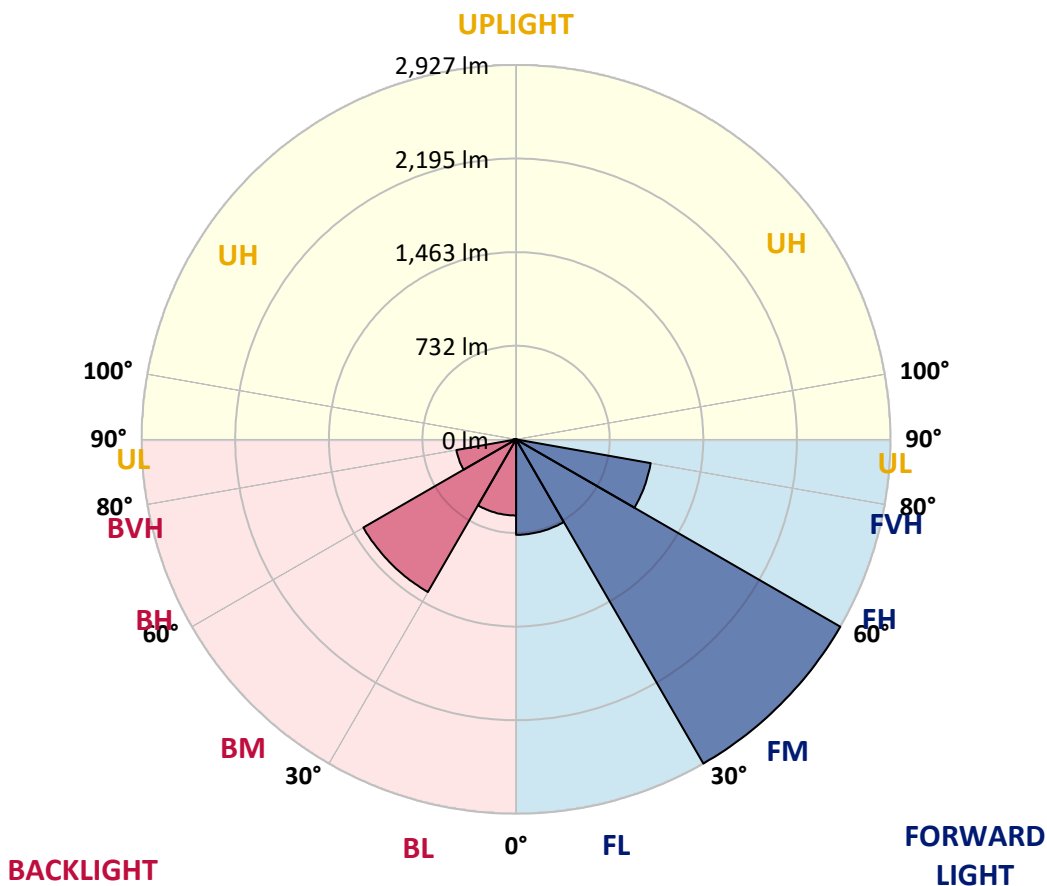
CATALOG NUMBER: GWS-SA2D-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	746.4	10.3			
FM (30°-60°)	2926.9	40.5			
FH (60°-80°)	1068.8	14.8			G1/1800
FVH (80°-90°)	7.8	0.1			G0/10
BL (0°-30°)	595.4	8.2	B2/1000		
BM (30°-60°)	1378.3	19.1	B2/2500		
BH (60°-80°)	473.8	6.6	B1/500		G1/500
BVH (80°-90°)	22.3	0.3			G1/100
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





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1
2.5°	1540.6	1537.3	1533.9	1508.0	1501.4	1482.7	1469.4	1452.8	1428.9	1415.6	1404.3
5°	1637.0	1631.7	1613.7	1560.5	1526.0	1488.1	1456.8	1422.2	1385.7	1361.7	1343.1
7.5°	1728.1	1726.8	1696.2	1608.4	1552.5	1498.0	1455.5	1404.9	1352.4	1316.5	1292.6
10°	1812.5	1802.6	1766.0	1651.6	1578.5	1516.0	1470.1	1414.2	1353.1	1304.5	1272.6
12.5°	1887.0	1874.4	1823.8	1691.5	1601.1	1524.0	1474.1	1428.2	1387.7	1347.1	1310.5
15°	1948.2	1932.9	1881.7	1728.7	1621.0	1519.3	1449.5	1413.6	1427.5	1445.5	1404.9
17.5°	2005.3	1989.4	1926.9	1756.0	1627.0	1490.7	1389.0	1373.7	1444.2	1526.0	1507.3
20°	2053.2	2035.3	1962.8	1769.3	1616.4	1436.2	1310.5	1337.1	1430.2	1527.9	1557.9
22.5°	2105.1	2090.5	2003.4	1788.6	1603.1	1361.1	1244.7	1309.9	1406.3	1492.0	1537.3
25°	2188.2	2170.2	2066.5	1822.5	1596.4	1290.6	1197.5	1283.3	1373.0	1450.8	1486.1
27.5°	2308.5	2275.3	2153.0	1881.7	1603.7	1224.1	1167.6	1250.7	1334.5	1400.9	1429.5
30°	2439.5	2399.6	2248.7	1942.8	1614.4	1183.5	1151.6	1213.4	1275.3	1341.8	1373.0
32.5°	2594.5	2559.2	2351.1	1988.7	1591.8	1164.9	1139.6	1172.9	1222.1	1275.3	1301.2
35°	2779.3	2716.1	2462.8	2026.0	1518.6	1137.6	1129.0	1128.3	1154.3	1206.1	1235.4
37.5°	2978.1	2910.3	2600.4	2065.9	1404.9	1094.4	1103.7	1075.8	1099.7	1141.0	1174.2
40°	3141.0	3069.9	2739.4	2120.4	1262.7	1026.6	1047.9	1018.0	1032.6	1075.1	1112.4
42.5°	3300.6	3224.8	2869.1	2182.2	1125.0	960.1	970.8	959.5	964.1	1008.7	1060.5
45°	3510.0	3424.9	3028.6	2226.1	1001.3	907.6	897.6	878.3	902.9	960.8	1016.0
47.5°	3859.8	3758.0	3289.9	2254.7	911.6	877.7	831.8	820.5	851.1	915.6	972.8
50°	4268.7	4180.9	3707.5	2253.4	844.4	852.4	768.0	758.0	808.5	873.7	934.2
52.5°	4603.8	4514.7	4064.5	2186.9	789.2	798.5	730.7	702.8	772.0	832.5	893.0
55°	4874.4	4774.0	4228.8	1908.9	719.4	712.8	690.2	639.0	726.1	791.2	847.8
57.5°	4728.8	4609.1	4030.0	1451.5	647.6	605.7	620.4	582.5	663.6	745.4	799.9
60°	3964.8	3857.1	3274.0	772.6	569.8	506.0	536.6	542.6	595.1	690.2	746.0
62.5°	2723.4	2645.0	2218.8	468.8	449.5	406.3	454.1	497.3	536.6	617.0	665.6
65°	1332.5	1309.2	1109.7	300.5	314.5	328.5	376.3	428.9	486.7	557.2	608.4
67.5°	367.0	369.7	336.4	234.7	248.0	286.6	324.5	366.4	424.2	489.4	541.2
70°	161.6	164.2	169.6	180.9	206.1	241.4	280.6	323.8	377.0	431.5	481.4
72.5°	112.4	115.0	123.0	137.6	160.2	193.5	230.7	271.9	327.1	373.0	414.2
75°	69.1	71.1	78.5	91.1	106.4	131.7	168.2	206.1	254.7	296.5	333.1
77.5°	36.6	35.2	39.9	48.5	61.8	75.1	99.7	123.7	158.2	192.2	222.7
80°	19.9	19.3	21.9	26.6	30.6	41.2	57.8	73.8	93.8	113.0	129.7
82.5°	8.6	8.0	8.6	11.3	14.0	19.9	29.3	40.6	51.9	65.2	75.8
85°	0.0	0.0	0.0	0.7	3.3	5.3	10.0	14.6	21.3	29.3	35.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	6.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1
2.5°	1397.6	1381.0	1379.7	1366.4	1367.7	1368.4	1355.1	1349.8	1354.4	1359.7	1357.1
5°	1336.5	1319.2	1311.9	1299.2	1297.9	1291.9	1286.6	1279.9	1284.6	1289.2	1291.9
7.5°	1283.3	1272.0	1267.3	1264.0	1265.3	1262.7	1252.0	1246.0	1245.4	1247.4	1250.0
10°	1266.0	1256.7	1262.7	1272.0	1278.6	1283.3	1272.0	1262.0	1252.7	1248.7	1248.7
12.5°	1303.2	1291.2	1303.2	1313.2	1326.5	1329.8	1317.2	1306.5	1303.2	1307.2	1315.2
15°	1385.7	1357.7	1357.1	1363.1	1373.7	1379.0	1367.0	1361.7	1361.7	1387.0	1406.9
17.5°	1468.1	1422.2	1402.9	1399.6	1406.3	1408.3	1398.3	1393.6	1405.6	1454.8	1492.0
20°	1526.0	1470.1	1428.2	1420.2	1422.2	1422.9	1414.9	1411.6	1428.9	1488.7	1520.0
22.5°	1520.0	1478.7	1427.5	1417.6	1420.9	1419.6	1412.3	1410.9	1424.9	1476.7	1491.4
25°	1478.7	1446.8	1403.6	1397.0	1402.3	1401.6	1394.3	1391.0	1397.0	1431.5	1432.9
27.5°	1431.5	1403.6	1366.4	1364.4	1373.0	1377.7	1365.0	1355.1	1353.1	1376.3	1371.0
30°	1375.0	1354.4	1324.5	1325.8	1341.8	1344.4	1329.1	1314.5	1310.5	1323.2	1315.8
32.5°	1307.9	1301.2	1285.3	1288.6	1303.9	1309.2	1293.2	1277.9	1273.3	1277.3	1262.0
35°	1250.7	1248.0	1249.4	1255.3	1268.6	1272.6	1259.3	1247.4	1240.7	1226.7	1206.8
37.5°	1191.5	1198.8	1218.1	1229.4	1236.7	1235.4	1228.1	1219.4	1208.8	1182.9	1158.3
40°	1136.3	1154.9	1189.5	1202.1	1204.8	1205.5	1200.1	1192.8	1179.5	1145.0	1117.0
42.5°	1093.8	1114.4	1160.3	1179.5	1180.9	1182.2	1176.9	1170.9	1152.3	1106.4	1079.1
45°	1049.2	1076.5	1130.3	1153.6	1152.3	1151.6	1147.0	1144.3	1122.4	1069.2	1039.2
47.5°	1011.3	1043.2	1101.1	1121.0	1120.4	1119.7	1116.4	1116.4	1094.4	1036.6	1002.7
50°	974.1	1010.7	1071.2	1087.8	1089.1	1087.8	1086.5	1088.4	1062.5	1000.7	967.4
52.5°	933.5	974.7	1037.9	1053.2	1061.2	1064.5	1064.5	1059.9	1029.3	964.8	928.2
55°	889.0	928.2	1001.3	1022.0	1028.6	1034.6	1034.6	1025.3	996.7	931.5	892.3
57.5°	833.8	868.4	926.2	946.8	962.8	966.8	966.8	951.5	928.2	865.7	833.8
60°	773.9	803.9	843.1	865.0	877.0	869.0	875.0	871.0	852.4	794.6	768.0
62.5°	694.2	724.7	768.0	790.6	795.9	787.9	795.9	795.2	770.0	718.1	686.2
65°	637.0	666.9	709.5	738.7	747.4	745.4	750.7	742.7	711.4	662.2	631.7
67.5°	569.2	601.1	650.3	682.9	700.8	702.8	710.1	693.5	661.6	607.7	569.2
70°	504.7	531.9	569.8	600.4	625.7	638.3	639.6	615.7	575.8	531.3	503.3
72.5°	436.8	464.8	510.6	543.9	575.8	590.4	590.4	561.2	518.0	468.8	438.8
75°	354.4	380.3	422.2	458.1	494.7	513.3	512.6	487.4	439.5	393.0	361.7
77.5°	240.0	259.3	285.9	313.2	318.5	333.1	340.4	308.5	281.9	256.7	228.7
80°	139.6	151.6	166.2	181.5	184.8	189.5	177.5	165.6	151.6	135.0	122.3
82.5°	81.8	89.8	97.1	109.0	111.0	112.4	101.7	96.4	85.1	75.1	67.2
85°	39.9	42.6	49.2	55.2	52.5	51.2	46.5	41.2	36.6	32.6	28.6
87.5°	8.0	8.0	12.0	11.3	9.3	8.0	4.7	6.0	1.3	1.3	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°	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1
2.5°	1365.7	1377.0	1391.0	1409.6	1430.9	1453.5	1475.4	1492.0	1508.7	1533.3	1529.3
5°	1295.9	1315.2	1337.1	1365.7	1400.3	1439.5	1483.4	1527.3	1574.5	1614.4	1631.7
7.5°	1255.3	1276.6	1302.5	1339.8	1384.3	1432.2	1494.0	1565.2	1641.6	1694.2	1726.8
10°	1255.3	1282.6	1316.5	1352.4	1391.6	1440.8	1517.3	1606.4	1704.8	1774.0	1811.9
12.5°	1327.8	1355.1	1362.4	1361.1	1383.0	1437.5	1535.9	1649.6	1767.3	1840.5	1887.0
15°	1440.8	1450.2	1395.0	1344.4	1347.8	1413.6	1544.6	1684.2	1821.2	1908.9	1959.5
17.5°	1516.6	1492.0	1393.6	1305.2	1286.6	1373.0	1544.6	1717.4	1878.3	1977.4	2024.6
20°	1522.6	1461.5	1359.7	1267.3	1219.4	1319.2	1533.9	1742.7	1933.5	2043.2	2093.8
22.5°	1470.1	1409.6	1323.8	1234.7	1164.2	1254.0	1516.6	1762.0	1980.7	2105.1	2167.6
25°	1410.3	1359.7	1287.3	1201.5	1126.3	1188.2	1500.7	1794.6	2046.6	2188.9	2252.0
27.5°	1351.7	1309.2	1243.4	1173.6	1105.1	1131.0	1490.7	1842.4	2125.0	2307.9	2362.4
30°	1294.6	1256.0	1196.2	1147.0	1093.8	1093.8	1482.1	1897.6	2228.8	2441.5	2496.0
32.5°	1236.7	1200.1	1151.6	1121.0	1087.1	1079.1	1458.1	1949.5	2335.8	2587.8	2643.7
35°	1182.9	1146.3	1109.1	1096.4	1083.8	1067.8	1399.0	1990.1	2440.2	2758.7	2806.6
37.5°	1132.3	1097.1	1069.2	1065.8	1067.2	1037.2	1305.9	2024.0	2570.5	2933.6	2958.8
40°	1088.4	1049.2	1027.3	1026.6	1033.3	988.0	1188.2	2072.5	2719.5	3081.8	3071.2
42.5°	1049.2	1008.0	981.4	987.4	983.4	938.8	1073.2	2117.0	2849.1	3220.8	3199.5
45°	1010.7	970.8	933.5	942.2	937.5	908.3	975.4	2149.6	2992.7	3387.7	3390.3
47.5°	973.4	934.2	897.0	886.3	885.7	898.9	900.3	2160.3	3226.8	3656.3	3595.8
50°	938.8	899.6	861.0	825.1	839.1	880.3	844.4	2152.3	3577.2	3952.8	3784.0
52.5°	902.9	865.7	823.1	758.7	795.2	835.8	794.6	2123.7	3791.3	4214.8	4113.8
55°	861.7	826.5	768.6	690.2	734.7	743.4	743.4	1847.1	3882.4	4474.1	4536.6
57.5°	806.5	760.0	668.2	605.1	645.0	611.7	688.8	1292.6	3732.1	4392.3	4635.0
60°	744.0	694.2	597.1	551.9	563.8	505.3	587.1	810.5	3093.1	3737.4	4157.6
62.5°	661.6	615.7	535.2	500.0	475.4	412.2	472.7	512.6	2120.4	2775.3	3061.9
65°	606.4	555.9	484.0	437.5	387.0	331.8	313.8	336.4	1140.3	1553.2	1746.7
67.5°	541.2	491.4	423.5	365.0	324.5	284.6	253.3	245.3	391.0	517.3	559.8
70°	479.4	431.5	375.0	320.5	279.9	240.7	210.1	188.2	180.9	179.5	176.9
72.5°	416.2	371.7	324.5	273.9	229.4	193.5	166.2	141.0	130.3	127.0	123.7
75°	341.1	305.9	258.6	204.1	168.2	135.0	113.7	97.1	87.8	84.4	80.5
77.5°	219.4	203.5	162.2	131.7	101.7	80.5	69.1	58.5	52.5	51.2	47.9
80°	117.0	109.0	89.8	75.8	60.5	49.2	43.2	37.2	33.9	32.6	31.3
82.5°	65.2	59.2	49.9	43.9	35.2	29.9	26.6	23.9	21.9	21.3	20.6
85°	29.3	25.3	19.9	18.6	16.6	15.3	14.6	13.3	12.6	12.0	11.3
87.5°	1.3	2.7	3.3	2.7	2.7	4.0	4.7	4.7	4.0	4.0	3.3
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: P633035

CATALOG NUMBER: GWS-SA2D-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1	1456.1
2.5°	1553.9	1573.8	1575.8	1582.5	1573.8	1571.8	1557.9	1549.9	1542.6	1540.6
5°	1674.9	1714.8	1730.7	1742.0	1731.4	1726.1	1695.5	1663.6	1645.6	1637.0
7.5°	1799.2	1859.1	1890.3	1904.3	1905.6	1881.7	1829.1	1769.3	1739.4	1728.1
10°	1910.3	1984.1	2025.3	2051.9	2042.6	2013.3	1941.5	1860.4	1822.5	1812.5
12.5°	1992.7	2063.2	2095.1	2112.4	2111.7	2095.8	2028.0	1940.2	1897.0	1887.0
15°	2045.9	2087.8	2089.8	2093.8	2105.1	2126.4	2091.1	2010.0	1962.1	1948.2
17.5°	2087.8	2071.2	2039.9	2029.3	2054.5	2113.7	2135.0	2069.2	2017.3	2005.3
20°	2114.4	2030.6	1975.4	1954.8	1984.1	2080.5	2161.6	2122.4	2068.5	2053.2
22.5°	2135.0	1992.7	1903.6	1889.7	1920.2	2044.6	2188.9	2185.5	2126.4	2105.1
25°	2167.6	1967.4	1853.1	1843.1	1871.7	2027.3	2225.4	2271.3	2218.8	2188.2
27.5°	2218.8	1964.8	1827.2	1823.8	1863.1	2042.6	2278.0	2397.0	2331.1	2308.5
30°	2289.9	1990.1	1833.1	1839.8	1887.7	2097.8	2359.7	2540.6	2474.8	2439.5
32.5°	2392.3	2057.9	1924.2	1952.8	1988.1	2186.2	2479.4	2696.2	2646.3	2594.5
35°	2527.3	2244.0	2193.5	2315.2	2281.9	2379.7	2623.7	2885.0	2824.5	2779.3
37.5°	2707.5	2625.7	2672.2	2839.8	2759.3	2745.4	2799.9	3056.6	3023.3	2978.1
40°	2960.1	2976.8	3062.5	3282.6	3166.3	3076.5	3016.0	3185.5	3196.9	3141.0
42.5°	3127.7	3204.2	3411.0	3661.0	3500.7	3285.9	3196.9	3350.4	3351.1	3300.6
45°	3190.2	3390.3	3822.5	4110.4	3842.5	3405.6	3296.6	3574.5	3567.9	3510.0
47.5°	3167.6	3547.3	4250.1	4690.2	4281.3	3490.7	3282.6	3893.7	3947.5	3859.8
50°	3120.4	3704.8	4749.4	5400.3	4819.9	3581.2	3261.3	4247.4	4336.5	4268.7
52.5°	3168.3	3880.4	5339.8	6134.4	5495.4	3725.4	3405.0	4701.5	4685.6	4603.8
55°	3319.9	4087.8	6057.3	7056.6	6237.5	3969.5	3774.0	5134.4	4972.1	4874.4
57.5°	3312.5	4236.1	6686.3	7786.0	6883.1	4169.6	3902.3	5180.3	4852.5	4728.8
60°	3006.7	4168.3	6925.6	8247.5	7077.9	4059.2	3480.1	4627.1	4094.5	3964.8
62.5°	2244.0	3698.9	6461.5	7669.7	6526.7	3506.0	2617.1	3321.2	2942.2	2723.4
65°	1435.5	2893.7	5432.3	6213.5	5379.7	2681.6	1558.5	1780.6	1395.0	1332.5
67.5°	611.0	2042.6	4222.8	4153.0	4024.7	1737.4	601.7	501.3	373.7	367.0
70°	202.1	1389.6	2603.1	2770.0	2403.6	1196.8	198.8	168.2	167.6	161.6
72.5°	132.3	746.0	1465.4	1631.7	1546.6	688.8	120.3	112.4	115.0	112.4
75°	79.1	162.2	246.7	320.5	246.7	115.7	72.5	71.1	72.5	69.1
77.5°	46.5	45.2	43.9	43.9	43.2	39.9	36.6	35.2	35.9	36.6
80°	29.9	28.6	27.3	26.6	23.3	21.9	20.6	19.3	19.3	19.9
82.5°	19.3	18.0	16.6	14.6	12.0	10.0	9.3	8.0	8.0	8.6
85°	10.0	8.0	6.0	4.7	2.7	1.3	0.0	0.0	0.0	0.0
87.5°	2.0	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

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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

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

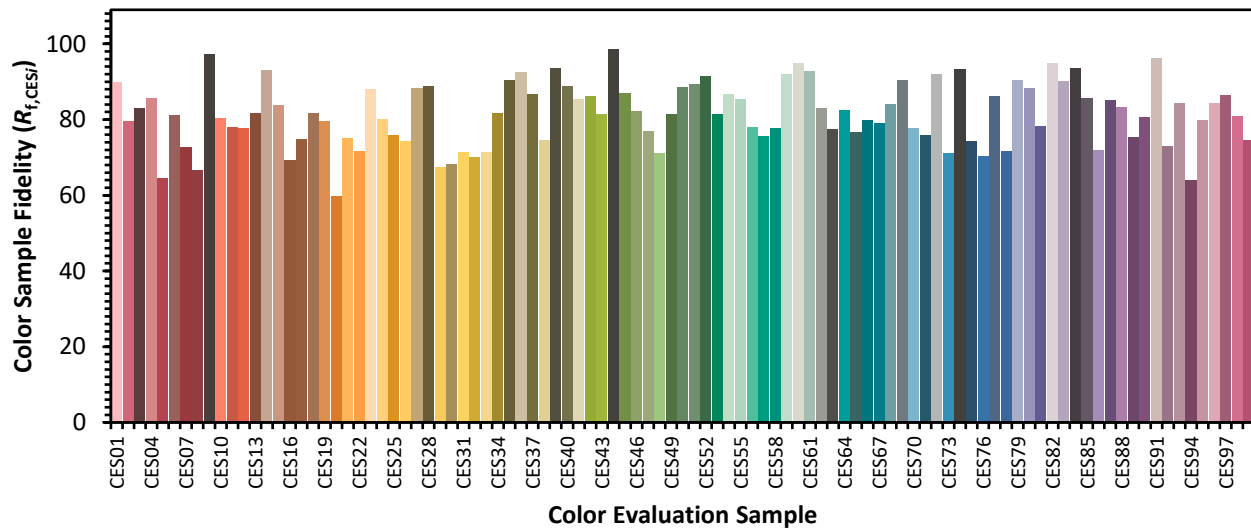


Color Vector Graphics



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)