

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: P633534

Luminaire Tested: GWS-SA2E-830-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633534
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-SA2E-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: 9068.7 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

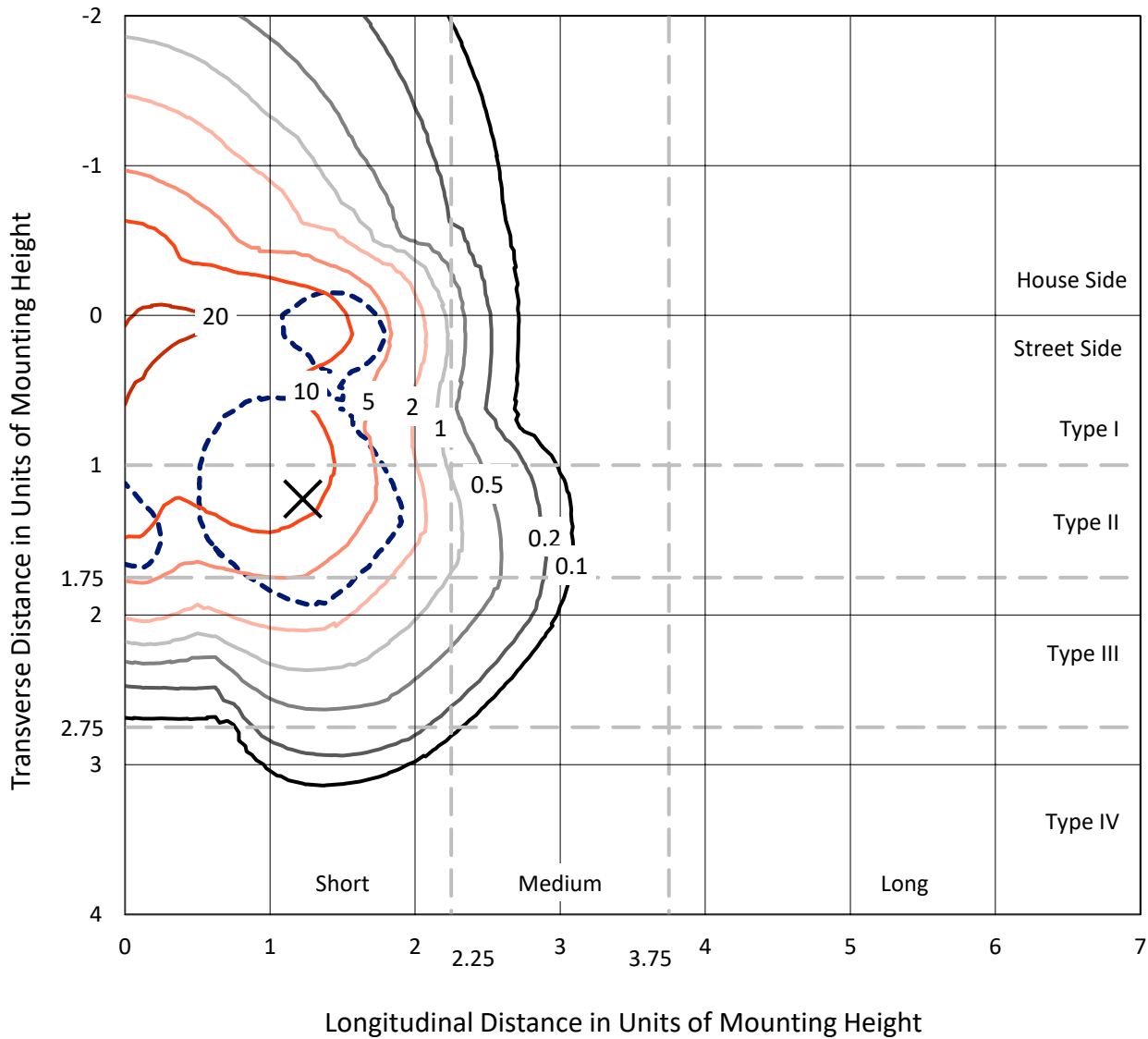
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

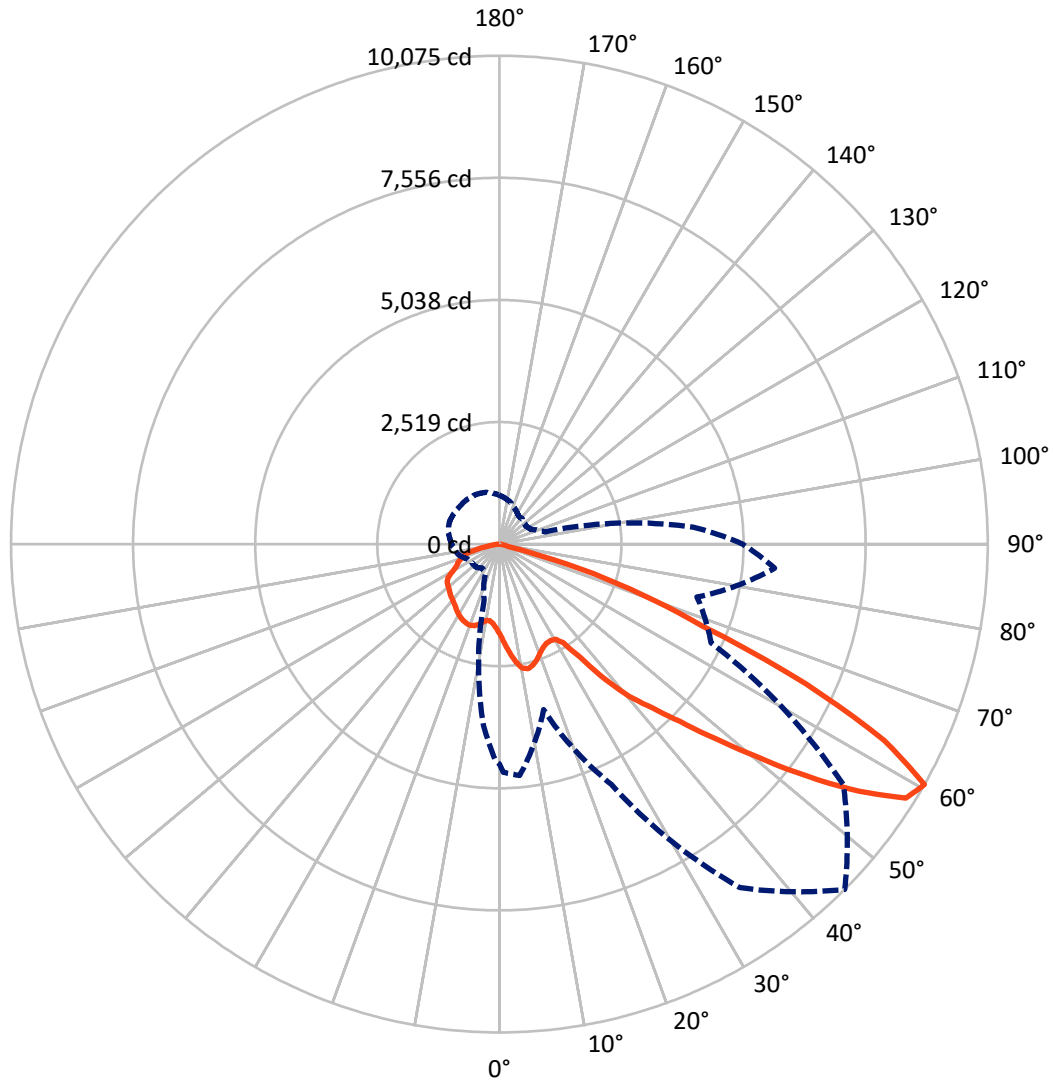
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 24.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3178.9	0.0	3178.9
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	5889.8	0.0	5889.8
	% Fixture	64.9	0.0	64.9
Total	Lumens	9068.7	0.0	9068.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	2.0
10°-20°	574.4	6.3
20°-30°	933.0	10.3
30°-40°	1315.8	14.5
40°-50°	1818.4	20.1
50°-60°	2340.8	25.8
60°-70°	1483.2	16.4
70°-80°	380.6	4.2
80°-90°	40.7	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°	9068.7	100.0
0°-180°	9068.7	100.0

Coefficient of Utilization



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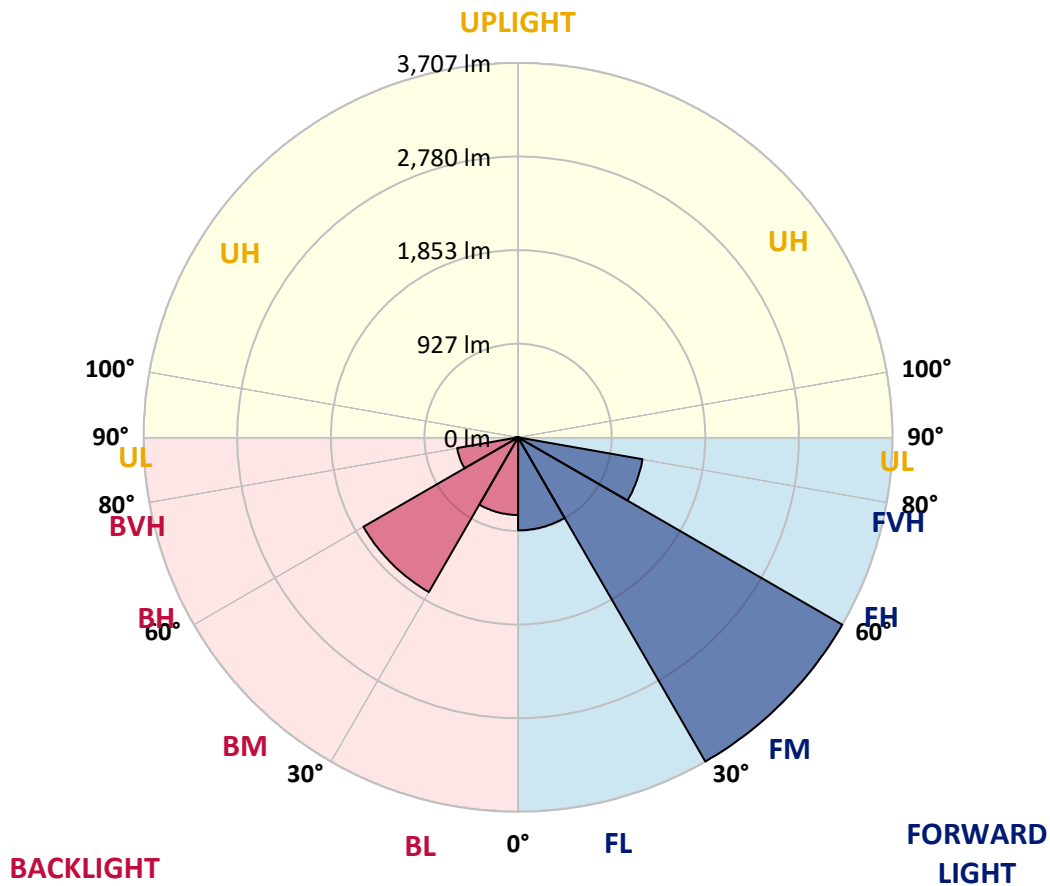
CATALOG NUMBER: GWS-SA2E-830-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	920.8	10.2			
FM (30°-60°)	3706.8	40.9			
FH (60°-80°)	1251.2	13.8			G1/1800
FVH (80°-90°)	11.1	0.1			G1/100
BL (0°-30°)	768.3	8.5	B2/1000		
BM (30°-60°)	1768.3	19.5	B2/2500		
BH (60°-80°)	612.6	6.8	B2/1000		G2/1000
BVH (80°-90°)	29.6	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1948.6	1961.9	1970.2	1986.0	2014.2	2030.0	2047.4	2028.3	2033.3	2030.8	2000.1
5°	2064.1	2079.9	2101.5	2148.0	2200.3	2229.4	2256.8	2252.7	2226.9	2183.7	2153.0
7.5°	2172.1	2190.4	2227.8	2303.4	2380.7	2425.5	2458.8	2437.2	2415.6	2347.4	2270.1
10°	2256.8	2267.6	2318.3	2419.7	2509.5	2560.1	2600.9	2595.9	2566.0	2489.5	2385.6
12.5°	2336.6	2344.1	2398.9	2500.3	2580.9	2603.3	2636.6	2647.4	2637.4	2580.1	2477.9
15°	2422.2	2436.3	2487.0	2564.3	2600.9	2577.6	2589.2	2619.1	2647.4	2647.4	2553.5
17.5°	2502.0	2514.4	2566.0	2599.2	2564.3	2502.8	2506.1	2544.4	2611.7	2682.3	2622.5
20°	2572.6	2584.2	2634.9	2603.3	2492.8	2403.1	2400.6	2447.1	2556.0	2704.7	2696.4
22.5°	2649.9	2666.5	2708.9	2606.7	2426.4	2312.5	2311.7	2359.9	2507.0	2727.2	2781.2
25°	2759.6	2785.3	2806.9	2635.8	2390.6	2253.5	2264.3	2310.0	2491.2	2763.7	2906.6
27.5°	2922.4	2943.2	2941.5	2696.4	2389.0	2229.4	2251.9	2305.0	2519.4	2828.5	3038.8
30°	3098.6	3109.4	3091.9	2781.2	2427.2	2244.4	2277.6	2340.8	2590.9	2935.7	3233.2
32.5°	3293.9	3307.2	3273.9	2908.3	2516.1	2354.9	2428.0	2458.8	2691.4	3090.3	3439.3
35°	3518.2	3544.0	3475.0	3076.2	2777.8	2757.9	2864.3	2824.4	2905.0	3273.1	3659.5
37.5°	3754.2	3755.0	3656.2	3324.6	3291.4	3325.4	3538.2	3413.5	3357.8	3476.7	3883.8
40°	3954.5	3949.5	3797.4	3659.5	3738.4	3873.9	4130.6	3939.5	3793.3	3750.1	4070.0
42.5°	4154.7	4136.4	3982.7	3872.2	4046.7	4325.1	4615.1	4380.7	4072.5	3998.5	4253.6
45°	4410.7	4404.8	4219.5	3957.0	4325.1	4830.3	5215.0	4835.3	4237.8	4143.1	4559.4
47.5°	4823.6	4795.4	4450.5	3950.3	4586.0	5503.3	5989.4	5407.8	4353.3	4146.4	5053.0
50°	5227.5	5192.6	4726.4	3949.5	4855.2	6201.3	6903.5	6103.3	4471.3	4166.4	5554.9
52.5°	5635.5	5635.5	5179.3	4043.4	5137.7	6980.8	7959.6	6970.0	4672.4	4427.3	6172.3
55°	5878.1	5942.9	5688.6	4202.1	5468.4	7898.1	9004.1	7905.6	4983.2	4898.4	6742.3
57.5°	5569.8	5691.1	5654.6	4091.6	5663.7	8572.0	9889.9	8615.2	5136.9	4954.1	6656.7
60°	4538.6	4707.3	4791.2	3533.2	5470.9	8650.1	10075.2	8661.8	4819.5	4218.7	5701.9
62.5°	3017.2	3155.9	3283.9	2524.4	4736.4	7781.8	8911.0	7784.3	4025.1	3148.4	3950.3
65°	1479.9	1582.9	1720.9	1492.4	3700.2	6502.1	6947.5	6290.2	2911.6	1762.4	2015.0
67.5°	387.2	416.3	435.4	579.2	2650.7	4671.6	4531.1	4600.9	1870.5	575.8	526.8
70°	201.1	202.8	201.9	239.3	1791.5	2969.0	3122.7	2889.2	1305.4	241.0	207.7
72.5°	143.8	144.6	142.1	161.2	865.0	1700.9	1762.4	1743.3	683.9	142.9	142.1
75°	93.9	94.7	93.1	94.7	130.5	193.6	178.7	187.8	113.8	90.6	90.6
77.5°	55.7	56.5	55.7	57.3	55.7	55.7	51.5	51.5	49.0	49.0	49.9
80°	37.4	37.4	36.6	38.2	34.9	34.9	33.2	32.4	29.9	29.1	29.1
82.5°	22.4	23.3	22.4	22.4	20.8	20.8	19.1	18.3	15.8	15.8	15.0
85°	11.6	11.6	10.8	10.8	9.1	8.3	6.6	6.6	5.0	4.2	4.2
87.5°	1.7	1.7	0.8	0.8	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1991.8	1975.2	1950.2	1926.1	1903.7	1880.4	1853.8	1826.4	1803.1	1779.1	1766.6
5°	2112.3	2078.2	2013.4	1956.0	1904.5	1862.1	1816.4	1777.4	1740.8	1710.9	1696.0
7.5°	2221.1	2167.9	2069.9	1979.3	1909.5	1851.3	1788.2	1730.0	1681.0	1644.4	1630.3
10°	2321.7	2258.5	2129.7	2015.0	1933.6	1868.8	1791.5	1712.6	1647.8	1599.6	1587.9
12.5°	2403.1	2330.8	2177.1	2044.1	1947.7	1877.9	1809.8	1741.7	1677.7	1615.4	1605.4
15°	2475.4	2389.8	2212.8	2062.4	1942.7	1853.8	1796.5	1788.2	1788.2	1717.6	1697.6
17.5°	2537.7	2443.8	2241.9	2070.7	1911.2	1782.4	1747.5	1819.8	1901.2	1850.5	1805.6
20°	2609.2	2495.3	2266.0	2070.7	1853.0	1691.8	1688.5	1811.5	1931.9	1932.8	1885.4
22.5°	2681.5	2555.2	2294.2	2063.2	1773.2	1587.1	1648.6	1778.2	1885.4	1931.1	1898.7
25°	2798.6	2638.2	2339.1	2057.4	1680.2	1515.6	1612.9	1734.2	1824.8	1872.9	1852.2
27.5°	2947.4	2747.9	2407.2	2066.6	1587.9	1473.3	1574.6	1676.8	1759.1	1801.5	1786.5
30°	3113.5	2874.2	2480.4	2082.3	1521.5	1451.7	1528.9	1611.2	1684.3	1726.7	1720.1
32.5°	3325.4	3011.3	2543.5	2060.7	1484.1	1440.9	1480.7	1539.7	1610.4	1637.0	1642.8
35°	3578.9	3162.6	2591.7	1976.0	1450.0	1429.2	1428.4	1465.0	1514.8	1557.2	1561.3
37.5°	3812.4	3339.6	2644.9	1830.6	1388.5	1400.1	1366.9	1388.5	1437.5	1479.9	1496.5
40°	4043.4	3519.0	2718.8	1645.3	1307.9	1335.3	1296.3	1311.2	1350.3	1406.0	1432.5
42.5°	4267.7	3681.1	2797.0	1455.8	1227.3	1244.8	1215.7	1230.6	1271.3	1341.1	1371.1
45°	4512.0	3900.5	2857.6	1277.2	1157.5	1150.0	1126.8	1148.4	1209.9	1286.3	1322.0
47.5°	4974.0	4246.1	2897.5	1158.3	1120.1	1066.1	1039.5	1086.0	1155.8	1233.1	1276.3
50°	5538.2	4746.4	2885.9	1082.7	1087.7	979.7	970.5	1032.0	1106.8	1187.4	1234.8
52.5°	5985.3	5237.4	2753.7	1010.4	1024.6	924.8	898.3	988.0	1059.5	1141.7	1190.7
55°	6326.8	5402.8	2348.2	924.8	921.5	885.0	829.3	942.3	1012.1	1088.5	1141.7
57.5°	6048.4	5034.7	1740.8	806.8	786.9	806.0	752.0	865.0	953.9	1029.5	1076.9
60°	5019.7	4014.3	969.7	714.6	658.1	704.6	696.3	783.6	890.8	970.5	1011.3
62.5°	3407.7	2673.1	575.0	565.0	533.5	599.9	644.0	701.3	806.8	871.7	909.9
65°	1698.4	1298.8	382.2	423.0	427.1	493.6	576.7	639.8	727.9	794.4	832.6
67.5°	492.7	403.8	290.8	323.2	368.1	421.3	487.8	562.5	648.1	727.1	771.9
70°	212.7	215.2	231.0	269.2	313.3	368.1	434.6	507.7	580.0	640.7	674.7
72.5°	150.4	156.2	173.7	212.7	254.3	306.6	373.1	443.7	496.1	557.6	593.3
75°	96.4	100.5	114.7	144.6	175.3	226.0	289.2	354.0	408.0	452.0	486.1
77.5°	53.2	54.0	65.6	83.1	103.9	136.3	182.8	233.5	273.4	298.3	329.1
80°	30.7	30.7	36.6	47.4	59.8	79.8	105.5	130.5	154.6	170.3	185.3
82.5°	16.6	16.6	19.1	25.8	32.4	44.0	59.0	71.5	86.4	94.7	104.7
85°	5.0	5.0	6.6	9.1	11.6	16.6	23.3	29.9	36.6	42.4	48.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1764.1	1752.5	1745.8	1737.5	1740.0	1732.5	1728.4	1730.9	1715.9	1730.9	1745.8
5°	1690.1	1673.5	1660.2	1649.4	1644.4	1634.5	1628.7	1628.7	1619.5	1634.5	1652.7
7.5°	1625.3	1612.0	1605.4	1598.7	1591.3	1582.1	1572.1	1568.8	1563.0	1578.8	1594.6
10°	1582.1	1583.8	1587.9	1597.1	1595.4	1589.6	1574.6	1566.3	1566.3	1584.6	1608.7
12.5°	1602.1	1619.5	1629.5	1646.1	1649.4	1644.4	1629.5	1622.8	1639.5	1666.9	1706.8
15°	1679.3	1691.0	1699.3	1712.6	1711.7	1707.6	1696.0	1700.9	1755.8	1809.0	1844.7
17.5°	1763.3	1750.0	1748.3	1756.6	1759.1	1754.1	1747.5	1769.9	1860.5	1910.3	1928.6
20°	1823.9	1778.2	1768.2	1771.6	1778.2	1775.7	1775.7	1812.3	1906.2	1929.5	1906.2
22.5°	1842.2	1777.4	1762.4	1763.3	1772.4	1773.2	1777.4	1815.6	1870.5	1871.3	1835.6
25°	1813.1	1750.8	1740.0	1741.7	1752.5	1751.6	1753.3	1774.9	1799.0	1789.0	1762.4
27.5°	1758.3	1704.3	1700.9	1710.1	1724.2	1716.7	1711.7	1717.6	1729.2	1716.7	1693.5
30°	1696.0	1650.3	1651.9	1669.4	1684.3	1671.9	1659.4	1662.7	1663.6	1650.3	1623.7
32.5°	1630.3	1596.2	1602.1	1620.3	1637.8	1624.5	1611.2	1609.5	1593.8	1578.0	1552.2
35°	1564.7	1551.4	1558.9	1573.8	1588.8	1578.0	1569.7	1564.7	1530.6	1507.3	1485.7
37.5°	1504.8	1514.8	1528.1	1537.2	1542.2	1541.4	1536.4	1524.8	1479.9	1452.5	1424.2
40°	1451.7	1482.4	1496.5	1500.7	1508.2	1506.5	1505.7	1489.1	1430.1	1401.0	1368.6
42.5°	1403.5	1446.7	1470.8	1474.9	1479.1	1479.9	1477.4	1453.3	1386.0	1351.9	1321.2
45°	1356.9	1413.4	1444.2	1440.0	1445.8	1445.8	1448.3	1416.8	1342.8	1307.9	1275.5
47.5°	1316.2	1382.7	1410.9	1406.0	1409.3	1411.8	1414.3	1377.7	1295.4	1262.2	1229.0
50°	1278.8	1349.5	1373.6	1375.2	1375.2	1381.0	1380.2	1344.5	1255.6	1219.8	1186.6
52.5°	1238.9	1315.4	1341.1	1351.9	1355.3	1357.8	1346.1	1304.6	1214.8	1171.6	1140.9
55°	1192.4	1280.5	1303.8	1317.9	1324.5	1322.9	1307.1	1264.7	1173.3	1130.1	1095.2
57.5°	1121.8	1205.7	1238.9	1245.6	1256.4	1249.7	1231.5	1195.7	1106.8	1063.6	1027.9
60°	1044.5	1105.2	1131.7	1137.6	1129.3	1131.7	1129.3	1095.2	1017.9	983.8	947.3
62.5°	943.1	997.1	1025.4	1032.9	1018.7	1027.9	1024.6	982.2	904.9	869.2	836.8
65°	866.7	925.7	958.9	963.1	958.9	963.1	951.4	899.9	826.8	790.2	757.0
67.5°	806.8	867.5	902.4	914.0	909.9	909.1	890.8	830.9	755.3	715.4	673.1
70°	703.8	757.0	801.9	830.1	830.1	814.3	779.4	723.8	663.1	629.0	595.8
72.5°	623.2	690.5	734.6	763.6	769.5	760.3	711.3	652.3	582.5	548.4	513.5
75°	513.5	579.2	626.5	664.8	672.2	662.3	605.8	547.6	482.8	449.5	414.6
77.5°	343.2	382.2	420.5	455.4	447.9	454.5	416.3	372.3	332.4	307.4	291.7
80°	193.6	219.4	231.0	250.1	250.1	250.1	225.2	204.4	182.0	167.9	152.1
82.5°	109.7	126.3	131.3	147.1	151.2	152.1	135.4	122.1	108.0	100.5	89.7
85°	50.7	59.8	60.7	69.8	73.1	79.8	72.3	63.2	54.8	51.5	44.9
87.5°	1.7	5.0	6.6	12.5	16.6	19.1	20.8	20.8	17.4	15.8	13.3
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: P633534

CATALOG NUMBER: GWS-SA2E-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1764.1	1784.0	1807.3	1823.9	1853.8	1878.8	1904.5	1932.8	1953.5	1948.6
5°	1675.2	1708.4	1750.8	1789.9	1845.5	1902.0	1964.4	2028.3	2065.7	2064.1
7.5°	1625.3	1672.7	1724.2	1776.6	1842.2	1923.6	2019.2	2118.9	2169.6	2172.1
10°	1651.9	1702.6	1737.5	1781.5	1850.5	1952.7	2067.4	2187.0	2245.2	2256.8
12.5°	1735.8	1731.7	1729.2	1760.8	1843.9	1973.5	2113.9	2256.8	2322.5	2336.6
15°	1815.6	1730.0	1678.5	1700.1	1814.0	1986.8	2159.6	2333.3	2407.2	2422.2
17.5°	1830.6	1700.9	1605.4	1620.3	1766.6	1990.9	2203.7	2408.1	2487.8	2502.0
20°	1789.0	1663.6	1552.2	1531.4	1706.8	1980.1	2231.1	2470.4	2557.6	2572.6
22.5°	1736.7	1630.3	1512.3	1458.3	1633.6	1969.3	2261.8	2536.0	2636.6	2649.9
25°	1681.8	1587.9	1474.9	1392.7	1550.5	1962.7	2313.3	2622.5	2743.8	2759.6
27.5°	1623.7	1536.4	1442.5	1361.1	1474.1	1971.0	2386.5	2762.1	2900.0	2922.4
30°	1561.3	1484.9	1421.7	1350.3	1421.7	1978.5	2467.1	2905.0	3067.0	3098.6
32.5°	1496.5	1437.5	1400.1	1355.3	1389.3	1961.0	2537.7	3065.4	3266.4	3293.9
35°	1431.7	1389.3	1372.7	1364.4	1346.1	1897.0	2595.0	3227.4	3494.1	3518.2
37.5°	1371.1	1339.5	1334.5	1343.6	1279.7	1792.3	2661.5	3433.5	3717.6	3754.2
40°	1314.6	1285.5	1284.6	1283.0	1206.5	1649.4	2751.3	3642.9	3937.8	3954.5
42.5°	1262.2	1225.6	1232.3	1212.3	1146.7	1494.9	2836.0	3821.5	4143.1	4154.7
45°	1215.7	1167.5	1175.0	1150.0	1118.5	1332.8	2910.8	4032.6	4403.2	4410.7
47.5°	1170.8	1119.3	1098.5	1096.8	1113.5	1183.3	2983.9	4438.9	4810.3	4823.6
50°	1129.3	1073.6	1014.6	1051.1	1082.7	1071.1	3075.3	4874.3	5230.8	5227.5
52.5°	1089.4	1016.2	932.3	1002.9	1002.9	988.0	3049.6	5138.6	5578.1	5635.5
55°	1043.7	924.0	846.7	922.3	885.8	913.2	2593.4	5225.0	5796.7	5878.1
57.5°	953.1	810.2	742.9	783.6	728.7	846.7	1863.0	4796.2	5425.2	5569.8
60°	865.8	726.2	682.2	674.7	603.3	690.5	1207.4	3755.0	4465.5	4538.6
62.5°	763.6	654.0	616.6	559.2	485.3	502.7	731.2	2471.2	3000.5	3017.2
65°	686.4	592.5	521.0	452.9	397.2	364.8	432.1	1191.6	1499.9	1479.9
67.5°	589.1	507.7	439.6	390.5	344.8	304.1	287.5	354.0	400.5	387.2
70°	524.3	446.2	380.6	334.0	291.7	250.9	221.9	208.6	204.4	201.1
72.5°	452.0	383.9	315.8	270.9	231.0	193.6	167.0	151.2	147.1	143.8
75°	360.6	296.6	234.3	191.9	157.0	130.5	113.0	99.7	97.2	93.9
77.5°	238.5	190.3	139.6	113.8	93.1	78.9	67.3	59.0	57.3	55.7
80°	131.3	109.7	85.6	69.0	55.7	48.2	44.0	39.1	38.2	37.4
82.5°	78.1	65.6	49.0	39.1	32.4	29.1	26.6	24.1	23.3	22.4
85°	39.1	30.7	21.6	18.3	16.6	15.0	15.0	12.5	11.6	11.6
87.5°	10.0	8.3	5.0	4.2	4.2	4.2	3.3	2.5	2.5	1.7
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

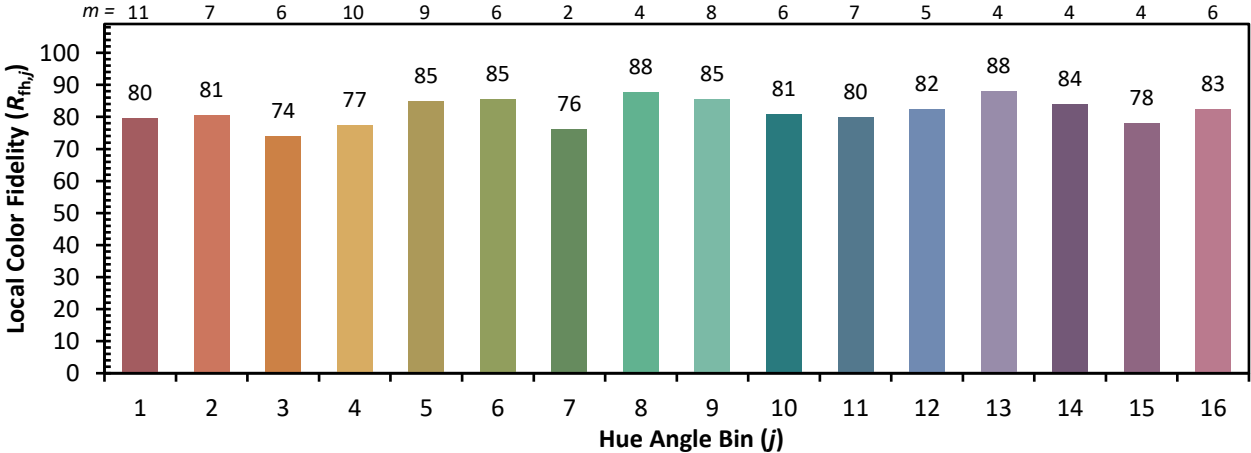


Individual Sample Fidelity Index ($R_{f,i}$)

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)