

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: P641951

Luminaire Tested: GWS-SA6B-830-U-SLR-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641951  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6B-830-U-SLR-W  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR RIGHT OPTICS  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

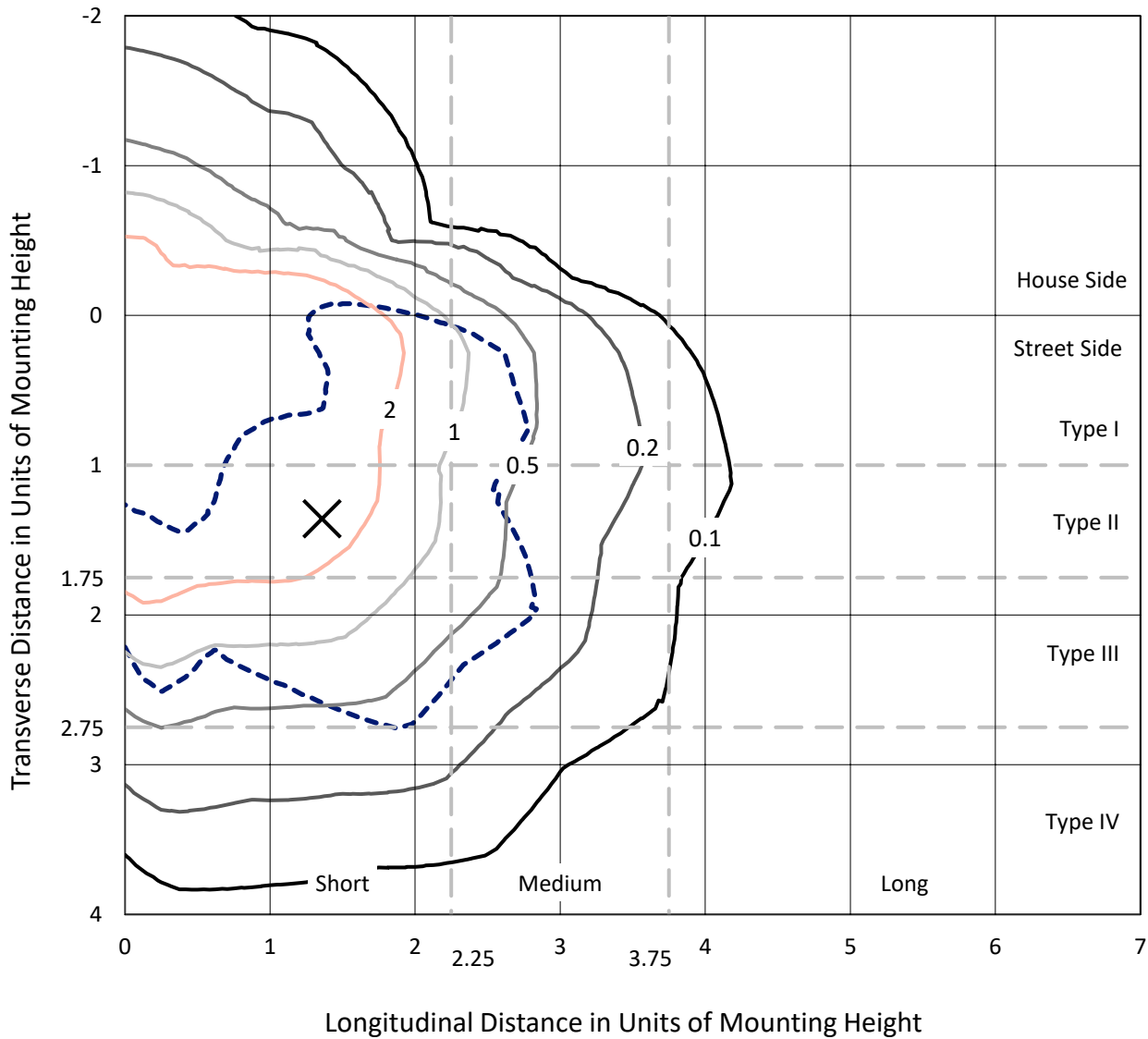
Lumens per Lamp: N/A  
Luminaire Lumens: 15925.2 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 138.9  
Input Voltage (V): 120  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

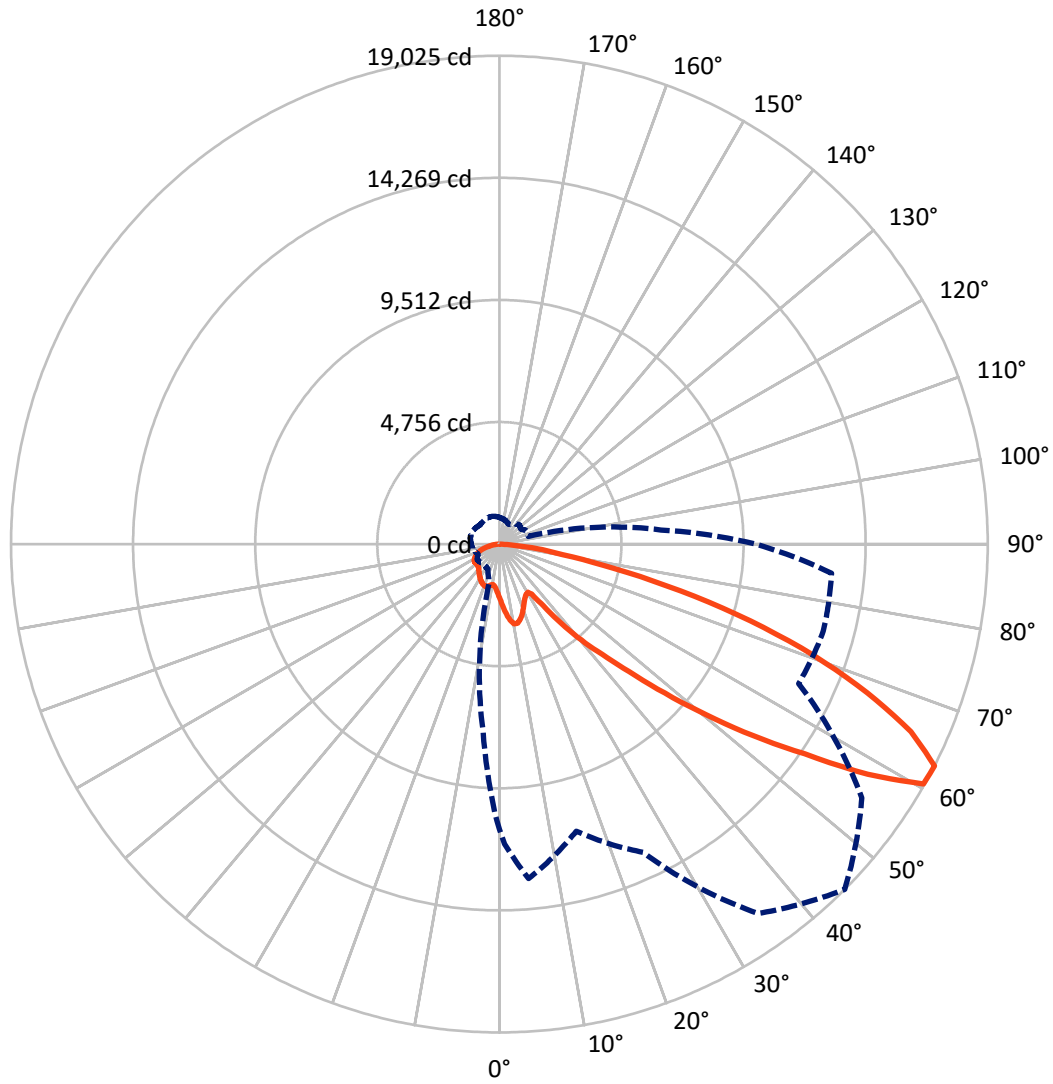
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3800.0	0.0	3800.0
	% Fixture	23.9	0.0	23.9
<b>Street Side</b>	Lumens	12125.1	0.0	12125.1
	% Fixture	76.1	0.0	76.1
<b>Total</b>	Lumens	15925.2	0.0	15925.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.4	1.3
10°-20°	647.1	4.1
20°-30°	1005.1	6.3
30°-40°	1364.6	8.6
40°-50°	2162.8	13.6
50°-60°	3815.2	24.0
60°-70°	4245.0	26.7
70°-80°	2152.9	13.5
80°-90°	326.0	2.0
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°	15925.2	100.0
0°-180°	15925.2	100.0

**Coefficient of Utilization**



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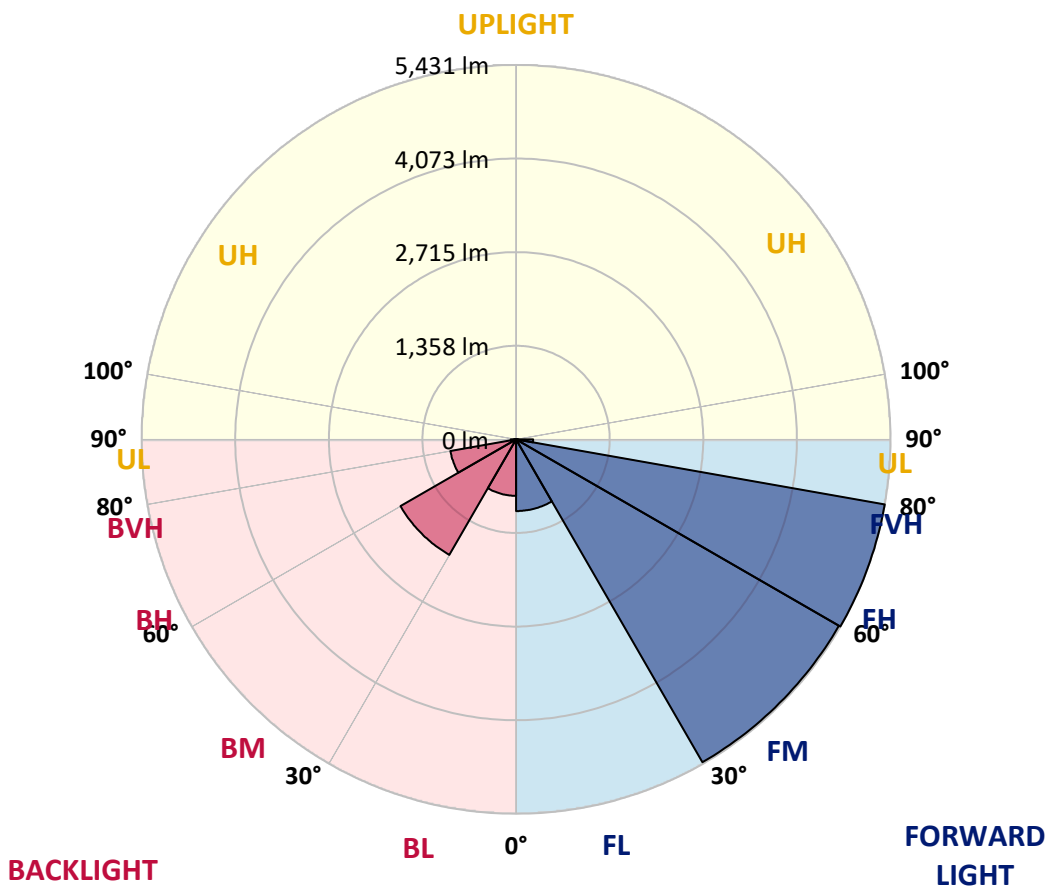
CATALOG NUMBER: GWS-SA6B-830-U-SLR-W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1039.8	6.5			
FM (30°-60°)	5407.3	34.0			
FH (60°-80°)	5430.6	34.1			G3/7500
FVH (80°-90°)	247.4	1.6			G3/500
BL (0°-30°)	818.8	5.1	B2/1000		
BM (30°-60°)	1935.4	12.2	B2/2500		
BH (60°-80°)	967.3	6.1	B2/1000		G2/1000
BVH (80°-90°)	78.6	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6
2.5°	2271.5	2270.3	2293.2	2328.2	2360.8	2375.2	2399.4	2396.9	2377.6	2352.3	2343.9
5°	2450.0	2454.8	2494.6	2571.8	2657.4	2693.5	2709.2	2703.2	2668.2	2623.6	2545.2
7.5°	2611.6	2620.0	2681.5	2797.2	2903.3	2951.6	2990.1	2982.9	2932.3	2849.1	2733.3
10°	2729.7	2739.4	2812.9	2949.2	3067.3	3109.5	3158.9	3161.4	3116.7	3004.6	2886.5
12.5°	2847.9	2857.5	2926.2	3050.4	3127.6	3128.8	3157.7	3173.4	3175.8	3124.0	3005.8
15°	2970.9	2979.3	3042.0	3111.9	3108.3	3040.8	3040.8	3070.9	3137.2	3174.6	3092.6
17.5°	3075.8	3086.6	3134.8	3111.9	3004.6	2882.8	2868.4	2907.0	3022.7	3166.2	3157.7
20°	3162.6	3171.0	3197.5	3045.6	2850.3	2691.1	2663.4	2708.0	2864.8	3114.3	3207.2
22.5°	3245.8	3250.6	3236.1	2958.8	2683.9	2501.8	2468.1	2515.1	2683.9	3022.7	3249.4
25°	3344.6	3339.8	3271.1	2868.4	2532.0	2352.3	2317.4	2370.4	2546.4	2900.9	3295.2
27.5°	3459.2	3441.1	3301.2	2770.7	2415.0	2241.4	2217.3	2274.0	2437.9	2788.8	3331.4
30°	3556.8	3521.9	3306.0	2683.9	2354.7	2194.4	2179.9	2233.0	2384.9	2712.8	3377.2
32.5°	3665.3	3617.1	3333.8	2661.0	2388.5	2307.7	2327.0	2330.6	2399.4	2691.1	3445.9
35°	3820.9	3758.2	3409.7	2727.3	2735.7	2872.0	2941.9	2847.9	2617.6	2739.4	3576.1
37.5°	4056.0	3976.4	3564.1	3014.3	3453.1	3758.2	3927.0	3712.4	3280.7	2921.4	3772.6
40°	4341.7	4240.5	3761.8	3544.8	4123.5	4611.8	4912.0	4597.3	3963.1	3376.0	4048.8
42.5°	4740.8	4634.7	4145.2	4065.6	4744.4	5471.5	5863.3	5394.3	4564.8	3963.1	4491.2
45°	5436.5	5334.0	4848.1	4587.7	5471.5	6530.1	7079.9	6427.6	5176.1	4552.7	5318.4
47.5°	6721.8	6601.2	5892.3	5166.4	6301.0	7904.6	8673.8	7723.7	5811.5	5227.9	6707.3
50°	8265.1	8149.4	7202.9	5851.3	7217.3	9374.3	10443.8	9246.5	6543.4	6049.0	8367.6
52.5°	10121.9	10100.2	9072.9	6717.0	8171.1	10941.8	12407.9	10933.3	7345.1	7154.6	10248.5
55°	11795.4	12007.6	11448.2	8037.2	9403.3	12910.7	14427.5	12773.2	8432.7	8982.5	12451.3
57.5°	12697.3	13267.6	14127.2	10730.8	11195.0	15264.2	16919.6	15019.5	10301.5	12025.7	14493.8
60°	12101.7	12747.9	14305.7	12758.8	12972.2	17149.9	18976.6	16907.6	12136.6	14138.1	14378.0
62.5°	11110.6	11690.5	13075.9	11574.8	13247.1	17564.7	19024.8	17236.7	12866.1	13066.2	12987.8
65°	9935.0	10519.8	11987.1	10103.8	12372.9	16579.6	17621.4	16268.6	11555.5	11805.0	11834.0
67.5°	8373.6	8913.8	10407.6	8983.7	11278.2	15134.0	15466.8	14889.2	10641.5	11039.4	10623.5
70°	6256.4	6743.5	8062.5	7300.5	9507.0	13250.7	12981.8	13067.4	9615.5	10011.0	8874.0
72.5°	4275.4	4642.0	5772.9	5736.7	7280.0	10607.8	10232.8	11044.2	8031.2	8555.7	6765.2
75°	2990.1	3275.9	4172.9	4532.2	5502.8	7862.4	7287.3	8266.3	6272.1	7020.8	4936.2
77.5°	1835.1	2024.4	2635.7	3357.9	3539.9	5381.1	4526.2	6220.2	4404.4	5120.6	3292.8
80°	917.5	1009.2	1280.5	2111.2	2347.5	3171.0	2499.4	3611.1	2980.5	3171.0	1821.8
82.5°	277.3	306.2	375.0	801.8	1216.6	1825.4	1477.0	2097.9	1627.7	1486.6	717.4
85°	73.5	83.2	103.7	237.5	426.8	654.7	499.2	1016.4	780.1	548.6	270.1
87.5°	6.0	6.0	4.8	4.8	2.4	0.0	0.0	72.3	145.9	83.2	47.0
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°	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6
2.5°	2301.7	2296.9	2247.4	2211.3	2169.1	2128.1	2085.9	2048.5	2006.3	1964.1	1952.0
5°	2487.4	2453.6	2348.7	2260.7	2173.9	2097.9	2031.6	1962.9	1907.4	1853.2	1832.7
7.5°	2651.3	2592.3	2440.3	2306.5	2185.9	2091.9	1994.2	1894.2	1815.8	1738.6	1719.3
10°	2799.6	2721.3	2529.6	2360.8	2226.9	2119.6	2005.1	1871.3	1757.9	1663.9	1638.6
12.5°	2909.4	2823.8	2606.7	2412.6	2260.7	2140.1	2026.8	1908.6	1789.3	1667.5	1639.8
15°	2996.2	2907.0	2670.6	2452.4	2261.9	2106.4	1996.6	1955.7	1918.3	1798.9	1748.3
17.5°	3066.1	2972.1	2726.1	2476.5	2229.3	2003.9	1908.6	1968.9	2064.2	1989.4	1894.2
20°	3130.0	3034.8	2768.3	2493.4	2157.0	1862.8	1809.8	1937.6	2081.0	2078.6	1993.0
22.5°	3199.9	3107.1	2829.8	2503.0	2055.7	1719.3	1750.7	1891.7	2008.7	2043.7	1990.6
25°	3289.2	3207.2	2915.4	2524.7	1941.2	1620.5	1707.3	1832.7	1930.3	1938.8	1907.4
27.5°	3392.9	3331.4	3043.2	2575.4	1830.3	1569.8	1656.6	1749.5	1838.7	1842.3	1804.9
30°	3506.2	3465.2	3161.4	2617.6	1747.1	1554.2	1591.5	1666.3	1723.0	1732.6	1700.0
32.5°	3650.9	3614.7	3266.3	2589.9	1697.6	1550.5	1531.2	1569.8	1616.8	1616.8	1591.5
35°	3849.8	3799.2	3377.2	2483.8	1637.3	1536.1	1467.3	1478.2	1498.7	1502.3	1487.8
37.5°	4131.9	4048.8	3489.3	2274.0	1538.5	1484.2	1393.8	1380.5	1387.8	1397.4	1393.8
40°	4481.6	4345.4	3653.3	2022.0	1420.3	1384.1	1317.8	1292.5	1286.5	1305.8	1313.0
42.5°	4921.7	4713.1	3829.3	1786.9	1313.0	1269.6	1228.6	1206.9	1197.3	1229.8	1249.1
45°	5624.6	5281.0	3998.1	1554.2	1252.7	1171.9	1144.2	1128.5	1133.4	1171.9	1196.1
47.5°	6838.8	6147.9	4158.5	1407.1	1247.9	1102.0	1068.3	1071.9	1085.1	1126.1	1155.1
50°	8374.8	7309.0	4265.8	1345.6	1262.4	1059.8	1015.2	1034.5	1055.0	1094.8	1128.5
52.5°	9938.6	8390.5	4138.0	1311.8	1261.2	1061.0	965.8	1023.6	1033.3	1073.1	1109.2
55°	11014.1	8511.1	3574.9	1260.0	1241.9	1109.2	927.2	1018.8	1024.8	1061.0	1093.6
57.5°	11424.0	8098.7	2726.1	1274.4	1184.0	1146.6	910.3	985.1	1028.5	1059.8	1093.6
60°	10928.5	7321.0	1656.6	1311.8	1091.2	1144.2	921.2	923.6	998.3	1051.4	1085.1
62.5°	9994.1	6322.7	1163.5	1205.7	1023.6	1080.3	946.5	851.2	945.3	1009.2	1039.3
65°	8923.4	5148.4	887.4	1038.1	991.1	981.4	954.9	787.3	872.9	935.6	962.2
67.5°	7808.1	4001.7	721.0	774.1	895.8	887.4	872.9	730.7	787.3	831.9	862.1
70°	6403.5	2799.6	608.9	581.1	768.0	795.8	763.2	659.5	677.6	723.4	747.5
72.5°	4684.2	1744.7	500.4	479.9	617.3	695.7	678.8	581.1	589.6	633.0	652.3
75°	3368.7	998.3	401.5	395.5	471.4	595.6	561.9	500.4	510.0	542.6	555.8
77.5°	2141.3	555.8	309.9	318.3	337.6	444.9	479.9	428.0	428.0	447.3	458.2
80°	1146.6	318.3	226.7	230.3	236.3	340.0	378.6	331.6	331.6	318.3	331.6
82.5°	467.8	183.3	155.5	144.7	157.9	232.7	265.3	211.0	220.6	198.9	203.8
85°	154.3	91.6	77.2	76.0	74.8	102.5	127.8	104.9	125.4	79.6	83.2
87.5°	20.5	16.9	9.6	7.2	8.4	3.6	7.2	8.4	8.4	6.0	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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6
2.5°	1943.6	1933.9	1899.0	1907.4	1901.4	1891.7	1901.4	1883.3	1897.8	1902.6	1932.7
5°	1817.0	1794.1	1760.3	1743.4	1739.8	1730.2	1731.4	1723.0	1725.4	1745.9	1779.6
7.5°	1703.7	1682.0	1655.4	1643.4	1632.5	1621.7	1620.5	1619.3	1628.9	1647.0	1679.5
10°	1621.7	1609.6	1598.8	1603.6	1598.8	1593.9	1585.5	1585.5	1601.2	1633.7	1673.5
12.5°	1621.7	1619.3	1621.7	1636.1	1634.9	1636.1	1625.3	1631.3	1674.7	1730.2	1786.9
15°	1708.5	1689.2	1689.2	1696.4	1694.0	1694.0	1694.0	1719.3	1818.2	1903.8	1964.1
17.5°	1814.6	1757.9	1733.8	1730.2	1729.0	1729.0	1733.8	1788.1	1942.4	2032.8	2067.8
20°	1888.1	1780.8	1741.0	1725.4	1726.6	1729.0	1743.4	1818.2	1988.2	2034.0	2025.6
22.5°	1901.4	1762.7	1714.5	1691.6	1695.2	1697.6	1719.3	1798.9	1925.5	1932.7	1915.9
25°	1839.9	1712.1	1660.3	1642.2	1647.0	1645.8	1665.1	1723.0	1813.4	1811.0	1801.3
27.5°	1748.3	1631.3	1592.7	1580.7	1589.1	1579.5	1585.5	1630.1	1700.0	1697.6	1694.0
30°	1654.2	1552.9	1518.0	1512.0	1522.8	1508.3	1509.5	1546.9	1595.1	1592.7	1591.5
32.5°	1560.2	1474.6	1443.2	1443.2	1454.1	1438.4	1440.8	1473.4	1505.9	1496.3	1496.3
35°	1471.0	1410.7	1385.4	1380.5	1389.0	1378.1	1382.9	1413.1	1425.1	1411.9	1403.4
37.5°	1392.6	1366.1	1340.7	1323.9	1325.1	1326.3	1340.7	1363.7	1356.4	1337.1	1326.3
40°	1320.2	1320.2	1296.1	1264.8	1261.2	1269.6	1293.7	1319.0	1298.5	1276.8	1263.6
42.5°	1268.4	1279.3	1256.3	1225.0	1217.8	1232.2	1258.8	1276.8	1252.7	1228.6	1210.5
45°	1220.2	1246.7	1231.0	1196.1	1186.4	1203.3	1237.1	1244.3	1211.7	1188.8	1175.6
47.5°	1186.4	1222.6	1211.7	1178.0	1163.5	1187.6	1222.6	1221.4	1180.4	1156.3	1145.4
50°	1162.3	1208.1	1206.9	1178.0	1162.3	1192.4	1223.8	1208.1	1163.5	1138.2	1127.3
52.5°	1143.0	1206.9	1215.3	1198.5	1187.6	1214.1	1233.4	1203.3	1151.4	1124.9	1116.5
55°	1134.6	1211.7	1217.8	1202.1	1192.4	1216.6	1233.4	1212.9	1151.4	1127.3	1120.1
57.5°	1137.0	1205.7	1206.9	1185.2	1168.3	1198.5	1225.0	1219.0	1164.7	1137.0	1128.5
60°	1122.5	1173.2	1175.6	1141.8	1122.5	1158.7	1205.7	1202.1	1158.7	1129.7	1114.1
62.5°	1074.3	1118.9	1120.1	1088.8	1061.0	1112.9	1164.7	1163.5	1123.7	1094.8	1076.7
65°	993.5	1040.5	1052.6	1022.4	1000.7	1056.2	1110.5	1108.0	1068.3	1041.7	1023.6
67.5°	893.4	944.1	967.0	946.5	938.0	988.7	1039.3	1038.1	1005.6	980.2	964.6
70°	771.7	813.9	852.4	852.4	846.4	904.3	958.5	953.7	923.6	904.3	892.2
72.5°	670.4	702.9	715.0	727.0	745.1	805.4	851.2	854.8	833.1	823.5	833.1
75°	570.3	590.8	601.6	592.0	623.3	686.0	746.3	752.4	729.5	713.8	717.4
77.5°	469.0	491.9	502.8	481.1	478.7	558.2	631.8	645.1	625.8	601.6	608.9
80°	338.8	368.9	387.0	372.6	367.7	402.7	504.0	518.5	500.4	481.1	491.9
82.5°	207.4	224.3	229.1	243.6	273.7	288.2	324.3	372.6	359.3	342.4	372.6
85°	82.0	97.7	108.5	123.0	143.5	170.0	200.1	238.7	217.0	209.8	247.2
87.5°	4.8	1.2	0.0	2.4	20.5	39.8	85.6	118.2	98.9	106.1	127.8
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: P641951  
 CATALOG NUMBER: GWS-SA6B-830-U-SLR-W

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6	2113.6
2.5°	1956.9	1988.2	2030.4	2065.4	2110.0	2152.2	2195.6	2239.0	2261.9	2271.5
5°	1818.2	1876.1	1943.6	2018.3	2105.2	2196.8	2289.6	2384.9	2445.2	2450.0
7.5°	1735.0	1818.2	1911.0	2005.1	2112.4	2239.0	2386.1	2533.2	2594.7	2611.6
10°	1761.5	1854.4	1927.9	2015.9	2134.1	2292.0	2465.7	2638.1	2709.2	2729.7
12.5°	1867.6	1885.7	1908.6	1989.4	2134.1	2337.9	2547.7	2752.6	2828.6	2847.9
15°	1955.7	1868.8	1827.8	1913.5	2105.2	2377.6	2634.5	2861.1	2952.8	2970.9
17.5°	1962.9	1813.4	1724.2	1801.3	2054.5	2405.4	2717.7	2981.7	3058.9	3075.8
20°	1889.3	1754.3	1638.6	1685.6	1985.8	2417.4	2777.9	3069.7	3145.7	3162.6
22.5°	1806.1	1706.1	1580.7	1578.3	1902.6	2430.7	2850.3	3152.9	3234.9	3245.8
25°	1727.8	1639.8	1533.7	1499.9	1806.1	2456.0	2947.9	3278.3	3341.0	3344.6
27.5°	1636.1	1568.6	1496.3	1463.7	1721.7	2504.2	3092.6	3427.8	3465.2	3459.2
30°	1552.9	1502.3	1469.8	1460.1	1668.7	2540.4	3230.1	3574.9	3577.3	3556.8
32.5°	1464.9	1445.6	1445.6	1477.0	1625.3	2532.0	3342.2	3718.4	3695.5	3665.3
35°	1386.6	1390.2	1415.5	1489.0	1552.9	2447.6	3449.5	3898.0	3864.3	3820.9
37.5°	1311.8	1339.5	1375.7	1446.8	1457.7	2322.2	3574.9	4152.4	4110.2	4056.0
40°	1247.9	1290.1	1332.3	1367.3	1356.4	2143.7	3749.7	4451.5	4404.4	4341.7
42.5°	1197.3	1238.3	1285.3	1288.9	1292.5	1958.1	3935.4	4818.0	4809.6	4740.8
45°	1164.7	1191.2	1235.8	1229.8	1288.9	1753.1	4106.6	5377.4	5488.4	5436.5
47.5°	1143.0	1163.5	1168.3	1193.6	1320.2	1569.8	4327.3	6472.2	6780.9	6721.8
50°	1131.0	1151.4	1097.2	1196.1	1325.1	1451.7	4632.3	7846.7	8343.5	8265.1
52.5°	1129.7	1124.9	1042.9	1221.4	1298.5	1379.3	4791.5	8849.9	9951.9	10121.9
55°	1132.2	1071.9	1015.2	1228.6	1245.5	1352.8	4258.5	9332.1	11436.1	11795.4
57.5°	1110.5	1014.0	1030.9	1199.7	1145.4	1423.9	3148.1	9159.7	12029.3	12697.3
60°	1069.5	958.5	1059.8	1121.3	1042.9	1302.2	2167.9	8390.5	11414.4	12101.7
62.5°	1010.4	920.0	1056.2	1020.0	1005.6	1065.8	1490.3	7313.8	10439.0	11110.6
65°	944.1	888.6	999.5	922.4	930.8	819.9	1053.8	6098.5	9274.3	9935.0
67.5°	872.9	869.3	916.3	821.1	786.1	649.9	768.0	4887.9	7778.0	8373.6
70°	792.1	818.7	833.1	729.5	637.8	510.0	570.3	3418.2	5737.9	6256.4
72.5°	711.4	713.8	734.3	634.2	477.5	408.7	428.0	2070.2	3898.0	4275.4
75°	629.4	606.5	625.8	516.0	355.7	335.2	330.4	1279.3	2692.3	2990.1
77.5°	541.4	516.0	490.7	388.2	285.8	259.2	253.2	717.4	1651.8	1835.1
80°	440.1	406.3	366.5	284.5	208.6	185.7	184.5	349.7	823.5	917.5
82.5°	342.4	278.5	267.7	177.2	129.0	113.3	120.6	133.8	248.4	277.3
85°	239.9	202.6	142.3	71.1	57.9	47.0	45.8	39.8	66.3	73.5
87.5°	133.8	88.0	45.8	8.4	9.6	10.9	8.4	6.0	6.0	6.0
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**



CCT = 3050K  
 CIE x = 0.4383  
 CIE y = 0.4131  
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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)