

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: P642442

Luminaire Tested: GWS-SA6C-830-U-SLL-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P642442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA6C-830-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21140.7 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

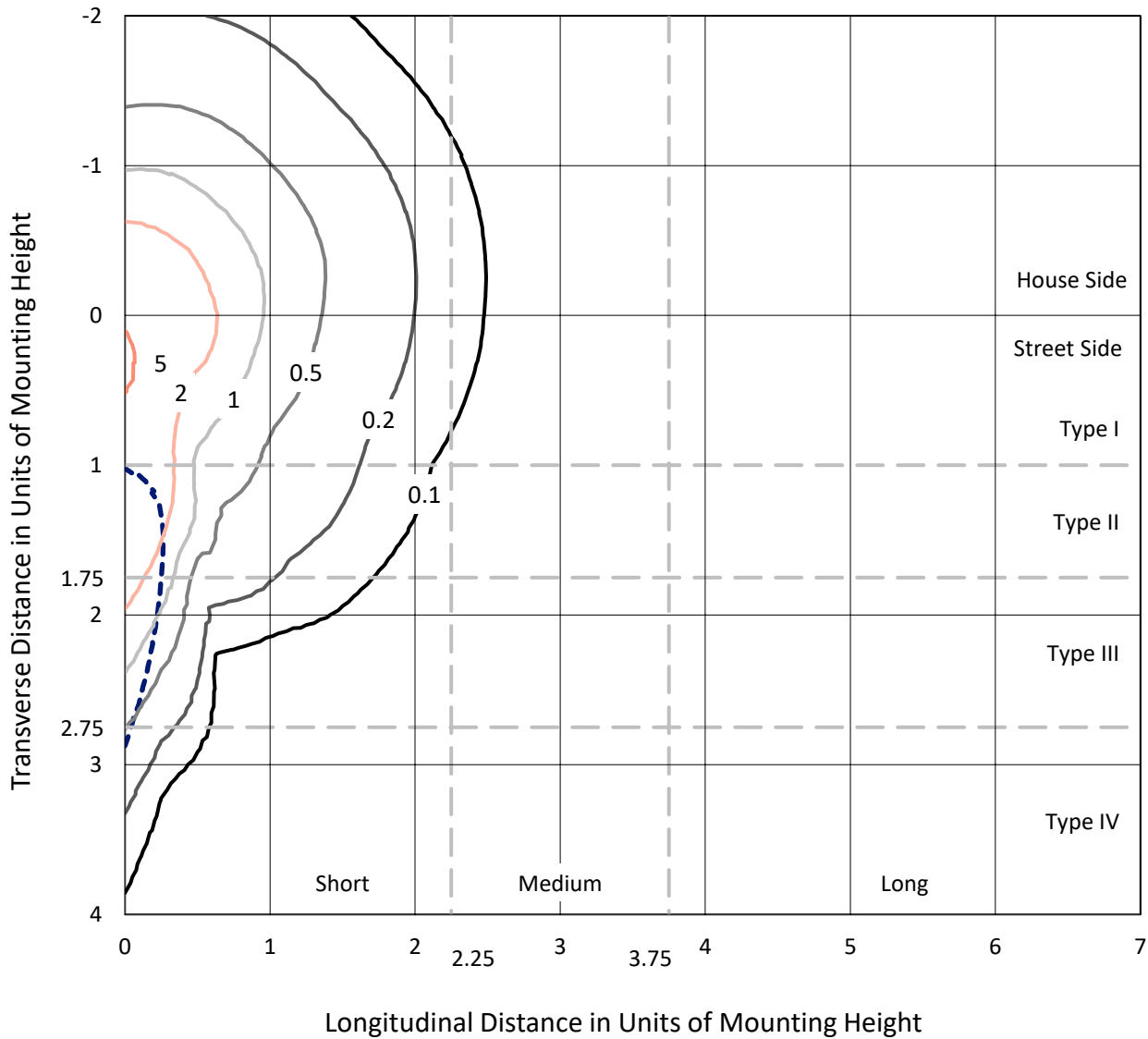
Input Watts (W): 189.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

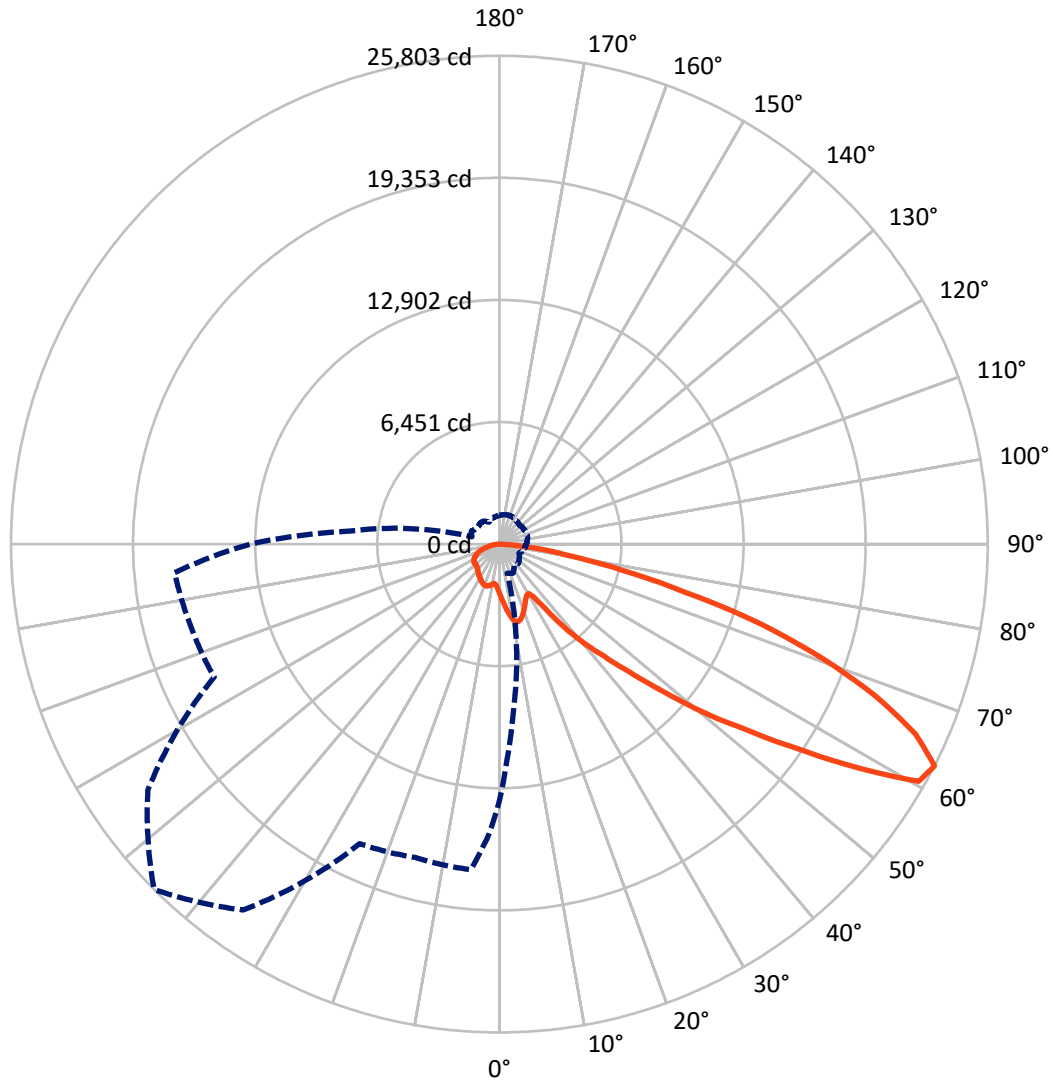
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5054.8	0.0	5054.8
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	16085.9	0.0	16085.9
	% Fixture	76.1	0.0	76.1
Total	Lumens	21140.7	0.0	21140.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.7	1.2
10°-20°	843.9	4.0
20°-30°	1328.5	6.3
30°-40°	1821.0	8.6
40°-50°	2841.3	13.4
50°-60°	4899.0	23.2
60°-70°	5677.3	26.9
70°-80°	2996.7	14.2
80°-90°	473.4	2.2
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°	21140.7	100.0
0°-180°	21140.7	100.0

Coefficient of Utilization



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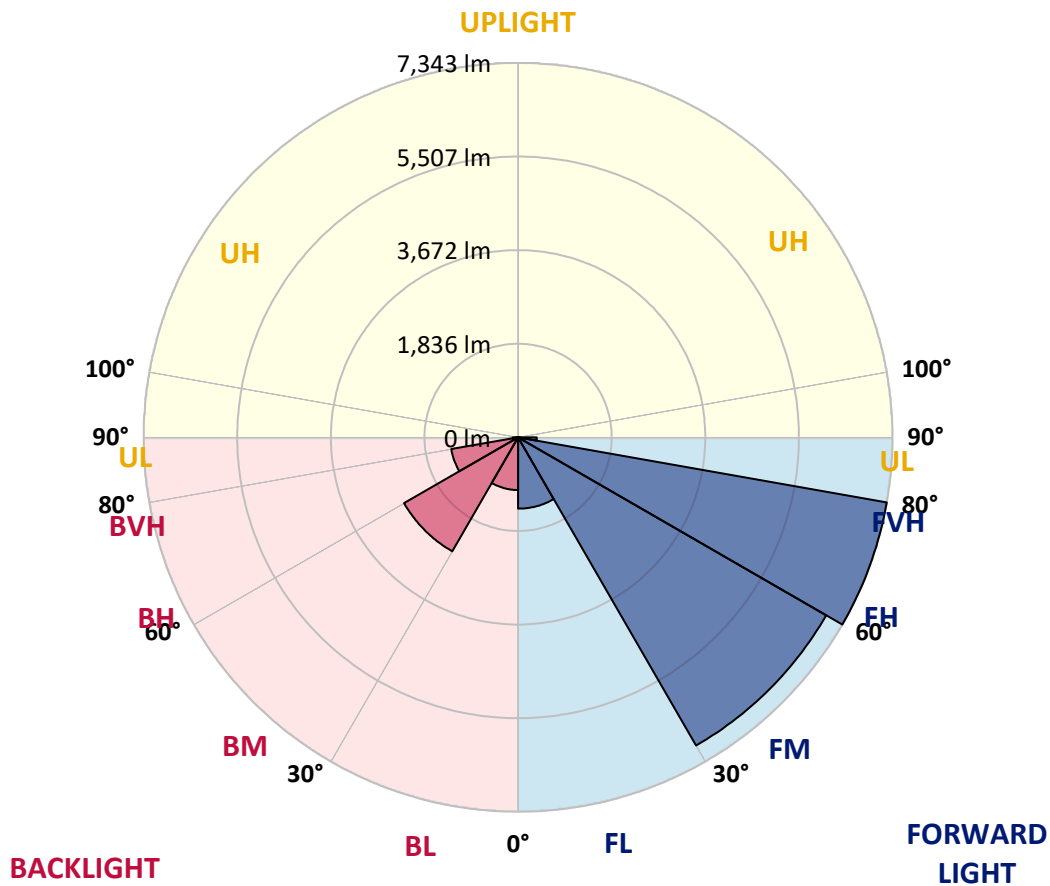
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1398.2	6.6			
FM (30°-60°)	6979.3	33.0			
FH (60°-80°)	7343.1	34.7			G3/7500
FVH (80°-90°)	365.4	1.7			G3/500
BL (0°-30°)	1033.9	4.9	B3/2500		
BM (30°-60°)	2581.9	12.2	B3/5000		
BH (60°-80°)	1330.9	6.3	B3/2500		G3/2500
BVH (80°-90°)	108.0	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8
2.5°	2863.8	2852.5	2836.3	2781.3	2747.4	2708.6	2668.1	2621.3	2567.9	2530.7	2493.5
5°	3106.4	3088.6	3049.8	2918.8	2828.2	2729.6	2647.1	2553.3	2461.2	2398.1	2335.0
7.5°	3339.2	3316.6	3256.8	3056.2	2909.1	2766.8	2642.3	2506.4	2369.0	2275.2	2200.8
10°	3572.1	3525.2	3449.2	3187.2	2993.2	2828.2	2685.9	2519.4	2336.7	2208.9	2129.7
12.5°	3750.0	3706.3	3623.8	3306.9	3077.3	2870.3	2710.2	2556.6	2401.3	2265.5	2184.6
15°	3916.5	3859.9	3766.1	3418.5	3146.8	2868.7	2661.7	2527.5	2504.8	2470.9	2365.8
17.5°	4036.2	3984.4	3887.4	3509.0	3185.6	2818.5	2527.5	2448.2	2550.1	2653.6	2553.3
20°	4141.3	4081.5	3982.8	3572.1	3193.7	2707.0	2364.1	2365.8	2525.8	2668.1	2643.9
22.5°	4230.2	4163.9	4076.6	3643.2	3190.5	2551.7	2221.8	2318.9	2479.0	2590.5	2593.8
25°	4340.2	4285.2	4212.4	3748.3	3190.5	2393.2	2118.3	2262.3	2399.7	2493.5	2490.3
27.5°	4474.4	4437.2	4377.4	3908.4	3219.6	2260.6	2060.1	2189.5	2297.8	2378.7	2377.1
30°	4624.8	4590.8	4545.6	4078.2	3269.7	2162.0	2027.8	2098.9	2178.2	2242.9	2242.9
32.5°	4778.4	4765.5	4717.0	4214.1	3230.9	2131.3	2000.3	2008.4	2050.4	2103.8	2098.9
35°	4991.9	4978.9	4917.5	4319.2	3062.7	2087.6	1956.6	1916.2	1921.1	1955.0	1966.3
37.5°	5304.0	5284.6	5194.0	4442.1	2808.8	1977.7	1885.5	1819.2	1804.6	1819.2	1840.2
40°	5680.7	5651.6	5528.7	4608.6	2516.1	1828.9	1773.9	1718.9	1694.7	1699.5	1723.8
42.5°	6152.9	6091.5	5915.2	4784.9	2226.7	1697.9	1649.4	1615.4	1588.0	1584.7	1631.6
45°	6919.4	6751.2	6471.5	4941.7	1982.5	1628.4	1537.8	1513.6	1490.9	1503.9	1558.8
47.5°	8258.3	7947.8	7402.9	5076.0	1833.7	1630.0	1448.9	1423.0	1421.4	1447.3	1508.7
50°	10098.5	9650.6	8809.7	5166.5	1756.1	1649.4	1395.5	1353.5	1384.2	1410.1	1468.3
52.5°	11861.1	11177.1	10176.2	5164.9	1722.2	1652.6	1410.1	1288.8	1384.2	1390.7	1445.7
55°	13366.6	12127.9	10544.8	4634.5	1673.7	1639.7	1466.7	1238.7	1366.4	1390.7	1434.3
57.5°	14563.2	12732.7	10517.4	3743.5	1820.8	1568.5	1500.6	1227.3	1314.7	1393.9	1444.0
60°	14430.6	12456.2	9839.8	2297.8	1806.3	1442.4	1495.8	1248.4	1227.3	1350.2	1432.7
62.5°	13549.3	11465.0	8673.9	1594.4	1696.3	1369.6	1416.5	1285.6	1146.5	1287.2	1377.7
65°	12315.5	10185.9	7228.3	1222.5	1405.2	1372.9	1282.3	1259.7	1075.3	1186.9	1283.9
67.5°	10683.9	8599.5	5706.6	968.6	979.9	1188.5	1164.3	1119.0	1009.0	1098.0	1185.3
70°	8031.9	6275.8	3926.2	779.4	742.2	992.9	1046.2	1005.8	944.4	970.2	1062.4
72.5°	5659.7	4097.6	2150.7	617.7	572.4	763.3	908.8	902.3	834.4	853.8	944.4
75°	4206.0	2899.4	1343.8	488.4	465.7	546.6	761.6	781.0	724.4	747.1	816.6
77.5°	2799.1	1877.4	747.1	362.2	362.2	399.4	567.6	658.1	616.1	633.9	682.4
80°	1544.3	955.7	373.5	237.7	244.2	274.9	414.0	473.8	475.4	519.1	532.0
82.5°	488.4	304.0	166.6	139.1	131.0	156.9	266.8	339.6	316.9	404.3	371.9
85°	111.6	71.2	30.7	30.7	34.0	51.7	101.9	181.1	231.2	278.1	202.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	71.2	105.1	93.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8
2.5°	2470.9	2438.5	2428.8	2401.3	2398.1	2372.2	2362.5	2362.5	2373.8	2373.8	2385.2
5°	2309.2	2268.7	2246.1	2213.8	2205.7	2186.3	2173.3	2174.9	2189.5	2199.2	2218.6
7.5°	2166.9	2139.4	2123.2	2108.6	2105.4	2102.2	2087.6	2086.0	2090.9	2105.4	2120.0
10°	2107.0	2087.6	2092.5	2103.8	2121.6	2131.3	2118.3	2111.9	2107.0	2116.7	2129.7
12.5°	2165.2	2145.8	2155.5	2174.9	2199.2	2208.9	2204.1	2202.4	2207.3	2244.5	2272.0
15°	2293.0	2255.8	2242.9	2250.9	2270.4	2280.1	2275.2	2281.7	2312.4	2409.4	2479.0
17.5°	2451.5	2360.9	2309.2	2294.6	2302.7	2310.8	2310.8	2326.9	2380.3	2522.6	2609.9
20°	2537.2	2419.1	2331.8	2296.2	2299.5	2307.5	2307.5	2330.2	2390.0	2542.0	2598.6
22.5°	2514.5	2406.2	2299.5	2260.6	2262.3	2268.7	2268.7	2288.1	2341.5	2475.7	2501.6
25°	2425.6	2330.2	2225.1	2191.1	2194.4	2205.7	2202.4	2213.8	2254.2	2364.1	2378.7
27.5°	2318.9	2234.8	2131.3	2105.4	2120.0	2142.6	2123.2	2124.8	2162.0	2254.2	2255.8
30°	2204.1	2134.5	2042.3	2022.9	2050.4	2061.8	2044.0	2044.0	2081.2	2144.2	2142.6
32.5°	2079.5	2035.9	1969.6	1948.6	1979.3	1997.1	1974.4	1977.7	2006.8	2048.8	2032.6
35°	1963.1	1940.5	1909.7	1895.2	1914.6	1930.8	1916.2	1922.7	1950.2	1961.5	1938.9
37.5°	1851.5	1848.3	1851.5	1851.5	1856.4	1861.2	1851.5	1867.7	1892.0	1877.4	1851.5
40°	1754.5	1767.4	1798.2	1790.1	1785.2	1790.1	1783.6	1811.1	1835.4	1809.5	1778.8
42.5°	1673.7	1697.9	1744.8	1744.8	1735.1	1738.3	1735.1	1769.1	1786.9	1751.3	1717.3
45°	1604.1	1639.7	1699.5	1707.6	1691.4	1691.4	1697.9	1740.0	1746.4	1697.9	1662.3
47.5°	1555.6	1599.3	1667.2	1681.7	1657.5	1655.9	1673.7	1718.9	1718.9	1662.3	1621.9
50°	1521.7	1570.2	1651.0	1670.4	1646.2	1639.7	1668.8	1712.5	1702.8	1634.8	1594.4
52.5°	1499.0	1549.1	1649.4	1676.9	1660.7	1654.3	1683.4	1714.1	1689.8	1617.1	1575.0
55°	1484.5	1539.4	1654.3	1676.9	1659.1	1647.8	1676.9	1704.4	1691.4	1607.4	1566.9
57.5°	1492.5	1547.5	1647.8	1659.1	1638.1	1618.7	1652.6	1691.4	1686.6	1610.6	1570.2
60°	1479.6	1529.7	1612.2	1615.4	1579.9	1549.1	1599.3	1657.5	1657.5	1599.3	1563.7
62.5°	1419.8	1469.9	1542.7	1545.9	1505.5	1471.5	1529.7	1599.3	1597.7	1550.8	1513.6
65°	1321.1	1368.0	1450.5	1458.6	1418.2	1382.6	1442.4	1507.1	1512.0	1469.9	1437.6
67.5°	1212.8	1254.8	1316.3	1348.6	1314.7	1277.5	1332.5	1393.9	1392.3	1342.2	1308.2
70°	1083.4	1122.2	1178.8	1206.3	1185.3	1149.7	1199.9	1232.2	1217.6	1193.4	1170.8
72.5°	955.7	992.9	1046.2	1046.2	1023.6	989.6	1004.2	1062.4	1080.2	1062.4	1047.9
75°	821.5	853.8	891.0	899.1	849.0	787.5	855.4	905.6	926.6	918.5	900.7
77.5°	684.0	708.3	763.3	748.7	654.9	622.6	677.5	751.9	766.5	761.6	737.4
80°	527.2	541.7	599.9	570.8	498.1	477.0	501.3	559.5	562.7	546.6	515.8
82.5°	354.1	373.5	412.4	355.8	354.1	334.7	315.3	321.8	350.9	347.7	326.6
85°	181.1	190.8	228.0	213.5	182.7	158.5	150.4	160.1	143.9	131.0	113.2
87.5°	76.0	82.5	113.2	63.1	19.4	0.0	0.0	9.7	14.6	21.0	22.6
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°	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8
2.5°	2411.0	2428.8	2472.5	2527.5	2580.8	2635.8	2695.6	2732.8	2778.1	2836.3	2837.9
5°	2242.9	2283.3	2346.4	2430.4	2517.8	2618.0	2734.4	2831.5	2947.9	3040.1	3077.3
7.5°	2139.4	2197.6	2276.8	2383.5	2498.4	2622.9	2774.9	2938.2	3129.0	3251.9	3324.7
10°	2149.1	2238.0	2317.2	2407.8	2511.3	2645.5	2841.2	3057.9	3292.3	3454.0	3544.6
12.5°	2322.1	2415.9	2401.3	2396.5	2466.0	2629.3	2894.5	3179.1	3465.4	3627.1	3735.4
15°	2540.4	2576.0	2438.5	2335.0	2377.1	2571.1	2923.6	3287.5	3609.3	3806.6	3913.3
17.5°	2652.0	2580.8	2414.3	2259.0	2247.7	2482.2	2938.2	3397.4	3771.0	3968.3	4081.5
20°	2600.2	2496.7	2356.1	2208.9	2128.1	2360.9	2930.1	3484.8	3918.1	4138.1	4230.2
22.5°	2488.7	2398.1	2288.1	2147.5	2031.0	2228.3	2909.1	3572.1	4049.1	4270.7	4351.5
25°	2367.4	2299.5	2208.9	2086.0	1976.0	2111.9	2894.5	3688.5	4199.5	4411.3	4463.1
27.5°	2246.1	2196.0	2121.6	2026.2	1963.1	2031.0	2899.4	3840.5	4393.6	4594.1	4573.0
30°	2126.4	2082.8	2031.0	1989.0	1961.5	2011.6	2886.5	4002.2	4607.0	4793.0	4668.5
32.5°	2013.2	1972.8	1940.5	1946.9	1963.1	2019.7	2820.2	4149.4	4802.7	4961.1	4771.9
35°	1916.2	1874.2	1874.2	1896.8	1956.6	1992.2	2648.7	4264.2	5019.4	5177.8	4919.1
37.5°	1825.7	1788.5	1812.7	1849.9	1906.5	1917.8	2428.8	4375.8	5334.7	5483.4	5147.1
40°	1746.4	1709.2	1752.9	1799.8	1828.9	1824.0	2205.7	4531.0	5706.6	5860.2	5449.5
42.5°	1683.4	1649.4	1688.2	1748.0	1752.9	1757.7	2042.3	4679.8	6138.4	6334.0	5970.2
45°	1631.6	1607.4	1626.8	1686.6	1686.6	1761.0	1940.5	4804.3	6788.4	7134.5	6925.9
47.5°	1591.2	1576.6	1586.3	1605.7	1638.1	1819.2	1875.8	4899.7	7972.1	8651.3	8441.1
50°	1568.5	1554.0	1566.9	1526.5	1623.5	1848.3	1854.8	4972.5	9532.6	10596.6	10336.2
52.5°	1549.1	1544.3	1552.4	1458.6	1655.9	1828.9	1838.6	4875.4	10578.8	12511.2	12768.3
55°	1542.7	1545.9	1507.1	1408.5	1694.7	1764.2	1790.1	4181.7	10863.4	14162.2	15758.2
57.5°	1545.9	1536.2	1437.6	1413.3	1696.3	1634.8	1859.6	2983.5	10449.4	14880.2	18683.5
60°	1534.6	1486.1	1353.5	1457.0	1621.9	1482.8	1809.5	1945.3	9357.9	14328.8	18853.3
62.5°	1484.5	1413.3	1280.7	1481.2	1489.3	1392.3	1642.9	1499.0	7902.6	13148.3	17216.8
65°	1411.7	1316.3	1219.3	1431.1	1355.1	1350.2	1235.4	1201.5	6355.0	11743.1	15664.5
67.5°	1292.0	1196.6	1174.0	1316.3	1219.3	1196.6	992.9	996.1	5071.1	10245.7	14104.0
70°	1156.2	1060.8	1078.6	1190.2	1085.0	994.5	803.7	829.6	3847.0	8536.5	12000.2
72.5°	1067.3	939.5	941.1	1047.9	954.1	805.3	661.4	684.0	2441.8	6434.3	9540.7
75°	900.7	827.9	792.4	849.0	810.1	627.4	556.3	551.4	1447.3	4611.9	7144.2
77.5°	751.9	695.3	677.5	700.2	604.8	464.1	447.9	439.8	819.8	2954.4	4681.4
80°	544.9	530.4	528.8	540.1	465.7	341.2	341.2	342.8	441.5	1604.1	2639.0
82.5°	346.1	378.4	334.7	371.9	316.9	242.6	226.4	257.1	253.9	684.0	1112.5
85°	143.9	197.3	184.3	195.7	150.4	132.6	142.3	153.6	147.2	263.6	433.4
87.5°	27.5	32.3	35.6	34.0	34.0	42.0	46.9	56.6	56.6	76.0	131.0
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: P642442

CATALOG NUMBER: GWS-SA6C-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8	2635.8
2.5°	2899.4	2946.3	2936.6	2957.6	2930.1	2939.8	2884.8	2870.3	2860.6	2863.8
5°	3196.9	3292.3	3310.1	3345.7	3321.4	3321.4	3224.4	3151.6	3125.8	3106.4
7.5°	3499.3	3636.8	3727.3	3737.0	3724.1	3698.2	3557.5	3426.5	3379.7	3339.2
10°	3767.7	3932.7	4034.6	4083.1	4058.8	4018.4	3843.8	3664.3	3607.7	3572.1
12.5°	3973.1	4118.7	4186.6	4218.9	4215.7	4201.1	4058.8	3864.8	3804.9	3750.0
15°	4105.7	4178.5	4152.6	4151.0	4173.6	4231.8	4188.2	4036.2	3966.6	3916.5
17.5°	4191.4	4121.9	4007.1	3953.7	4002.2	4139.7	4239.9	4154.2	4091.2	4036.2
20°	4222.1	3974.7	3808.2	3709.5	3766.1	3965.0	4212.4	4239.9	4186.6	4141.3
22.5°	4186.6	3795.2	3568.9	3452.4	3507.4	3745.1	4131.6	4309.5	4273.9	4230.2
25°	4099.2	3607.7	3336.0	3230.9	3290.7	3533.3	3987.7	4374.1	4375.8	4340.2
27.5°	3990.9	3434.6	3172.7	3074.0	3132.2	3358.6	3847.0	4430.7	4487.3	4474.4
30°	3880.9	3331.1	3095.1	3025.5	3069.2	3269.7	3703.1	4489.0	4602.2	4624.8
32.5°	3830.8	3381.3	3277.8	3308.5	3251.9	3321.4	3651.3	4571.4	4741.2	4778.4
35°	3897.1	3826.0	4087.9	4209.2	4008.7	3745.1	3717.6	4695.9	4936.9	4991.9
37.5°	4218.9	4778.4	5169.7	5596.6	5249.0	4668.5	4045.9	4907.8	5216.6	5304.0
40°	4919.1	5609.6	6316.2	6867.7	6342.1	5561.1	4670.1	5223.1	5601.5	5680.7
42.5°	5578.9	6389.0	7362.5	8075.6	7393.2	6290.4	5342.8	5753.5	6109.3	6152.9
45°	6225.7	7153.9	8628.6	9619.9	8693.3	6984.1	6030.0	6649.4	6917.8	6919.4
47.5°	6984.1	8015.8	10216.6	11628.3	10418.7	7752.2	6675.2	8067.5	8441.1	8258.3
50°	7891.3	8872.8	11851.4	13964.9	12522.5	8696.5	7495.1	9796.1	10305.5	10098.5
52.5°	9105.7	9817.2	13652.8	16243.4	14815.5	9771.9	8683.6	12079.4	12247.6	11861.1
55°	10814.9	11180.4	15965.2	19057.1	17375.3	11096.3	10422.0	14944.9	14474.3	13366.6
57.5°	14707.2	13337.5	18934.2	22266.9	20271.5	13502.4	14231.7	18104.6	16430.9	14563.2
60°	17963.9	15957.1	21681.5	25452.5	22753.6	16154.4	17808.7	18654.4	16358.2	14430.6
62.5°	16865.9	16625.0	22672.8	25803.4	23601.0	17459.4	17144.1	17268.6	15290.9	13549.3
65°	14797.7	15336.2	21788.3	24139.5	22661.5	16290.3	15507.6	15987.9	14070.0	12315.5
67.5°	13576.8	13973.0	20214.9	21476.2	20953.9	15025.7	14235.0	13887.3	12174.8	10683.9
70°	12328.5	12656.7	18006.0	18133.7	18290.6	12923.5	11639.6	10604.7	9074.9	8031.9
72.5°	10653.2	10671.0	15213.3	14472.7	14770.2	10113.1	9369.2	7928.4	6605.7	5659.7
75°	8937.5	8449.1	12042.2	10116.3	10713.0	7867.0	7779.7	5975.0	4982.2	4206.0
77.5°	6814.3	6243.5	8796.8	6652.6	7524.2	5239.3	5848.9	4052.4	3505.8	2799.1
80°	4574.7	4218.9	4860.9	3754.8	4922.3	3610.9	3814.6	2296.2	1990.6	1544.3
82.5°	2412.7	2060.1	3004.5	2226.7	2968.9	1984.1	1431.1	709.9	604.8	488.4
85°	934.7	1081.8	1473.1	792.4	1151.3	708.3	414.0	176.3	147.2	111.6
87.5°	181.1	279.8	153.6	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)