

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: P633530

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633530
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-SA2E-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: 9022.2 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

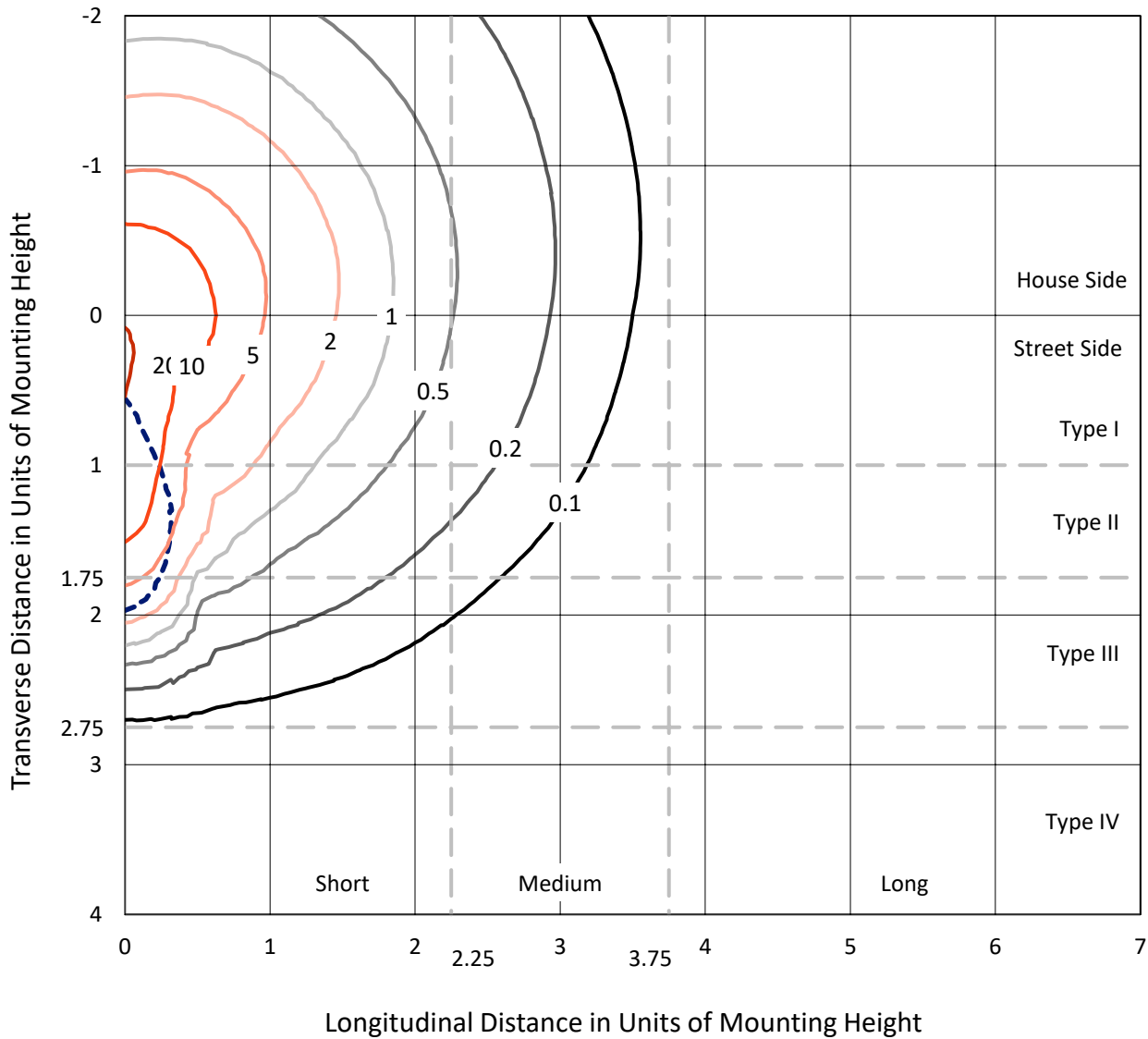
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

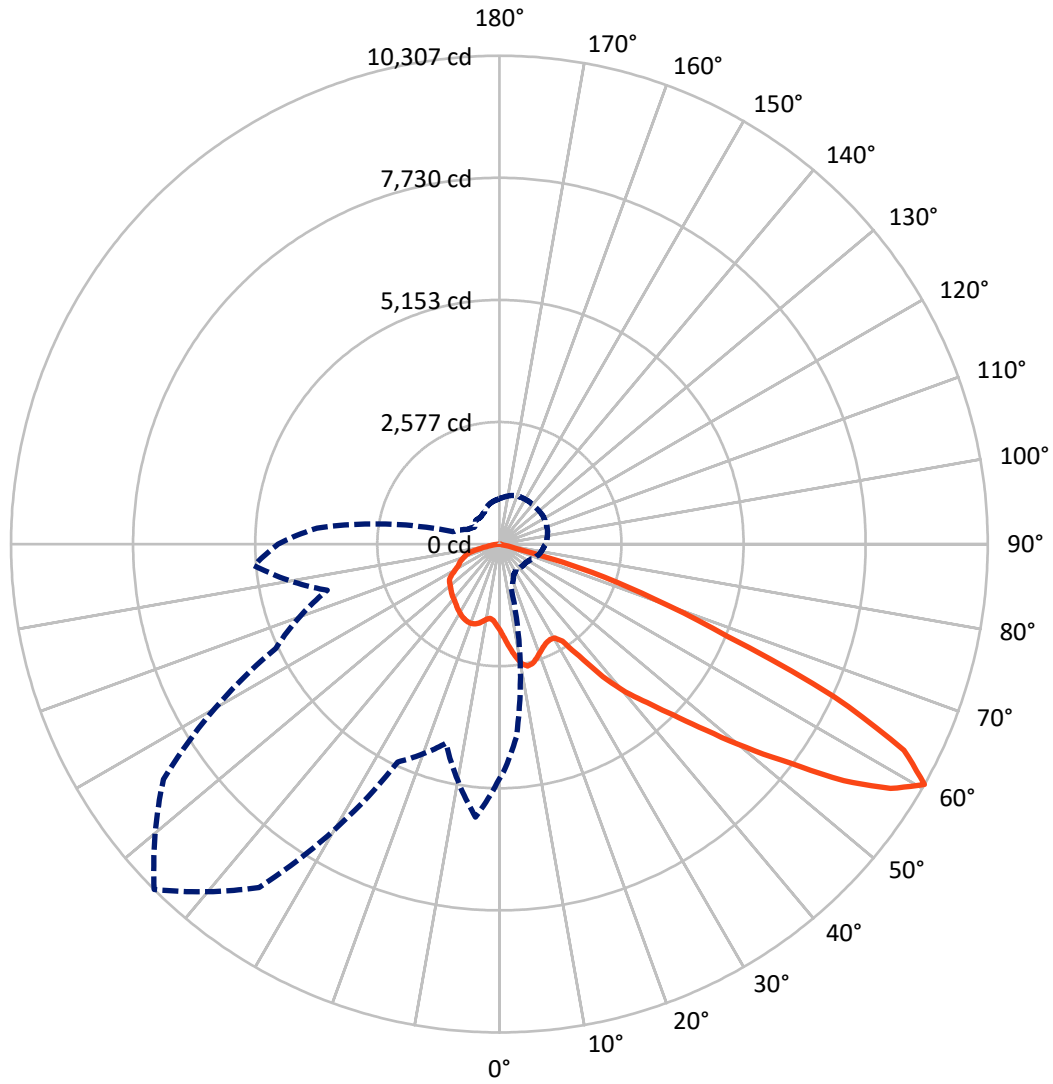
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22 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	3086.4	0.0	3086.4
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	5935.8	0.0	5935.8
	% Fixture	65.8	0.0	65.8
Total	Lumens	9022.2	0.0	9022.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.8	2.0
10°-20°	570.2	6.3
20°-30°	928.7	10.3
30°-40°	1304.6	14.5
40°-50°	1785.2	19.8
50°-60°	2290.3	25.4
60°-70°	1542.2	17.1
70°-80°	385.6	4.3
80°-90°	37.6	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°	9022.2	100.0
0°-180°	9022.2	100.0

Coefficient of Utilization



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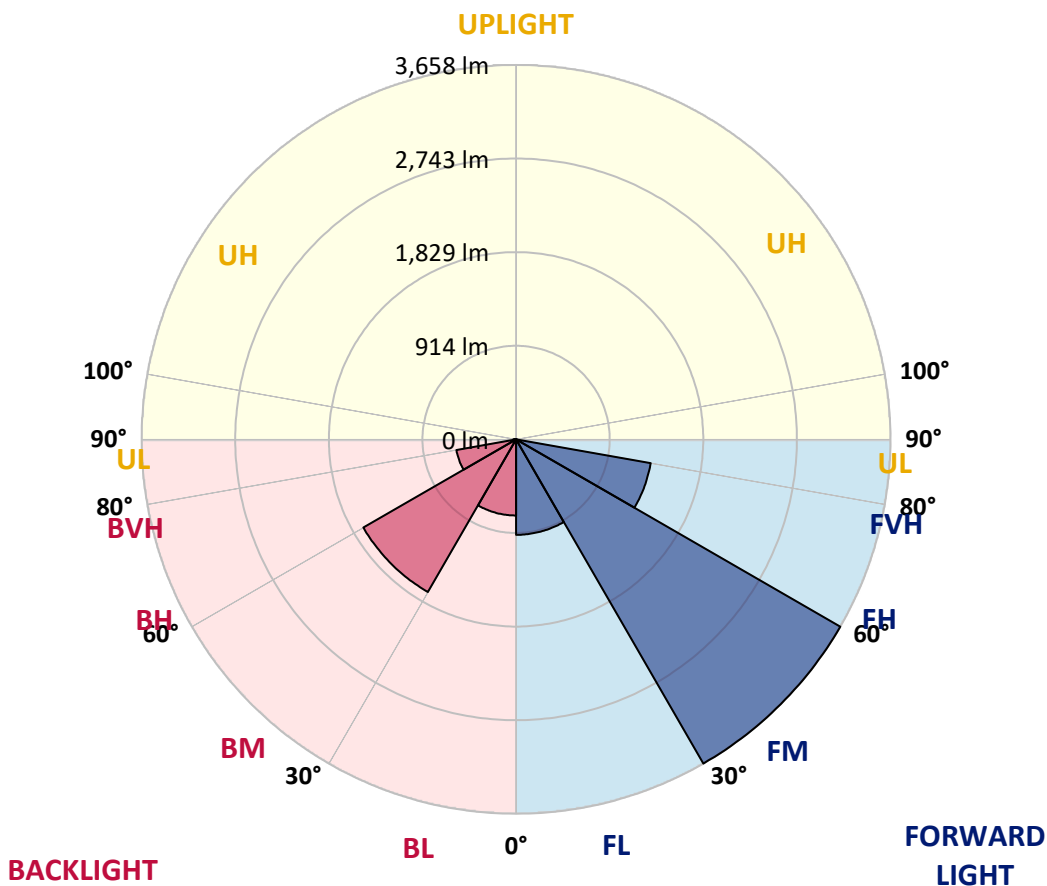
CATALOG NUMBER: GWS-SA2E-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	932.7	10.3			
FM (30°-60°)	3657.7	40.5			
FH (60°-80°)	1335.7	14.8			G1/1800
FVH (80°-90°)	9.8	0.1			G0/10
BL (0°-30°)	744.0	8.2	B2/1000		
BM (30°-60°)	1722.5	19.1	B2/2500		
BH (60°-80°)	592.1	6.6	B2/1000		G2/1000
BVH (80°-90°)	27.8	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°	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1925.2	1921.1	1916.9	1884.5	1876.2	1852.9	1836.3	1815.5	1785.6	1769.0	1754.9
5°	2045.7	2039.0	2016.6	1950.1	1906.9	1859.6	1820.5	1777.3	1731.6	1701.7	1678.4
7.5°	2159.5	2157.9	2119.6	2010.0	1940.2	1872.0	1818.9	1755.7	1690.1	1645.2	1615.3
10°	2265.0	2252.6	2206.9	2064.0	1972.6	1894.5	1837.1	1767.3	1690.9	1630.2	1590.4
12.5°	2358.1	2342.3	2279.2	2113.8	2000.8	1904.4	1842.1	1784.8	1734.1	1683.4	1637.7
15°	2434.6	2415.4	2351.5	2160.4	2025.7	1898.6	1811.4	1766.5	1784.0	1806.4	1755.7
17.5°	2506.0	2486.1	2408.0	2194.4	2033.2	1862.9	1735.8	1716.6	1804.7	1906.9	1883.7
20°	2565.8	2543.4	2452.8	2211.0	2019.9	1794.8	1637.7	1670.9	1787.3	1909.4	1946.8
22.5°	2630.6	2612.4	2503.5	2235.1	2003.3	1700.9	1555.5	1636.9	1757.4	1864.6	1921.1
25°	2734.5	2712.1	2582.5	2277.5	1995.0	1612.8	1496.5	1603.6	1715.8	1813.0	1857.1
27.5°	2884.9	2843.4	2690.5	2351.5	2004.1	1529.7	1459.1	1562.9	1667.6	1750.7	1786.4
30°	3048.6	2998.7	2810.1	2427.9	2017.4	1479.0	1439.1	1516.4	1593.7	1676.8	1715.8
32.5°	3242.2	3198.2	2938.1	2485.2	1989.2	1455.7	1424.2	1465.7	1527.2	1593.7	1626.1
35°	3473.2	3394.2	3077.7	2531.8	1897.8	1421.7	1410.9	1410.0	1442.5	1507.3	1543.8
37.5°	3721.6	3636.9	3249.7	2581.6	1755.7	1367.7	1379.3	1344.4	1374.3	1425.8	1467.4
40°	3925.2	3836.3	3423.3	2649.8	1577.9	1282.9	1309.5	1272.1	1290.4	1343.6	1390.1
42.5°	4124.6	4029.9	3585.4	2727.0	1405.9	1199.8	1213.1	1199.0	1204.8	1260.5	1325.3
45°	4386.3	4280.0	3784.8	2781.9	1251.3	1134.2	1121.7	1097.6	1128.4	1200.7	1269.6
47.5°	4823.4	4696.3	4111.3	2817.6	1139.2	1096.8	1039.5	1025.3	1063.6	1144.2	1215.6
50°	5334.4	5224.7	4633.1	2815.9	1055.2	1065.2	959.7	947.2	1010.4	1091.8	1167.4
52.5°	5753.2	5641.8	5079.3	2732.8	986.3	997.9	913.2	878.3	964.7	1040.3	1115.9
55°	6091.4	5965.9	5284.6	2385.5	899.0	890.7	862.5	798.5	907.3	988.8	1059.4
57.5°	5909.4	5759.8	5036.1	1813.9	809.3	757.0	775.2	727.9	829.2	931.4	999.6
60°	4954.7	4820.1	4091.4	965.5	712.1	632.3	670.5	678.0	743.7	862.5	932.3
62.5°	3403.4	3305.3	2772.7	585.8	561.7	507.7	567.5	621.5	670.5	771.1	831.7
65°	1665.1	1636.1	1386.8	375.6	393.0	410.5	470.3	535.9	608.2	696.3	760.3
67.5°	458.7	462.0	420.4	293.3	309.9	358.1	405.5	457.8	530.1	611.5	676.4
70°	201.9	205.2	211.9	226.0	257.6	301.6	350.6	404.7	471.1	539.3	601.6
72.5°	140.4	143.7	153.7	172.0	200.2	241.8	288.3	339.8	408.8	466.1	517.7
75°	86.4	88.9	98.0	113.8	132.9	164.5	210.2	257.6	318.2	370.6	416.3
77.5°	45.7	44.0	49.9	60.7	77.3	93.9	124.6	154.5	197.8	240.1	278.4
80°	24.9	24.1	27.4	33.2	38.2	51.5	72.3	92.2	117.2	141.3	162.0
82.5°	10.8	10.0	10.8	14.1	17.4	24.9	36.6	50.7	64.8	81.4	94.7
85°	0.0	0.0	0.0	0.8	4.2	6.6	12.5	18.3	26.6	36.6	44.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	7.5
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°	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1746.6	1725.8	1724.1	1707.5	1709.2	1710.0	1693.4	1686.7	1692.6	1699.2	1695.9
5°	1670.1	1648.5	1639.4	1623.6	1621.9	1614.4	1607.8	1599.5	1605.3	1611.1	1614.4
7.5°	1603.6	1589.5	1583.7	1579.6	1581.2	1577.9	1564.6	1557.1	1556.3	1558.8	1562.1
10°	1582.0	1570.4	1577.9	1589.5	1597.8	1603.6	1589.5	1577.1	1565.4	1560.4	1560.4
12.5°	1628.6	1613.6	1628.6	1641.0	1657.7	1661.8	1646.0	1632.7	1628.6	1633.6	1643.5
15°	1731.6	1696.7	1695.9	1703.4	1716.6	1723.3	1708.3	1701.7	1701.7	1733.3	1758.2
17.5°	1834.6	1777.3	1753.2	1749.1	1757.4	1759.9	1747.4	1741.6	1756.5	1818.0	1864.6
20°	1906.9	1837.1	1784.8	1774.8	1777.3	1778.1	1768.2	1764.0	1785.6	1860.4	1899.4
22.5°	1899.4	1847.9	1784.0	1771.5	1775.6	1774.0	1764.8	1763.2	1780.6	1845.4	1863.7
25°	1847.9	1808.0	1754.0	1745.7	1752.4	1751.5	1742.4	1738.3	1745.7	1788.9	1790.6
27.5°	1788.9	1754.0	1707.5	1705.0	1715.8	1721.6	1705.8	1693.4	1690.9	1720.0	1713.3
30°	1718.3	1692.6	1655.2	1656.8	1676.8	1680.1	1661.0	1642.7	1637.7	1653.5	1644.4
32.5°	1634.4	1626.1	1606.1	1610.3	1629.4	1636.1	1616.1	1597.0	1591.2	1596.2	1577.1
35°	1562.9	1559.6	1561.3	1568.7	1585.4	1590.4	1573.7	1558.8	1550.5	1533.0	1508.1
37.5°	1489.0	1498.1	1522.2	1536.3	1545.5	1543.8	1534.7	1523.9	1510.6	1478.2	1447.4
40°	1420.0	1443.3	1486.5	1502.3	1505.6	1506.4	1499.8	1490.6	1474.0	1430.8	1395.9
42.5°	1366.8	1392.6	1449.9	1474.0	1475.7	1477.3	1470.7	1463.2	1440.0	1382.6	1348.6
45°	1311.2	1345.2	1412.5	1441.6	1440.0	1439.1	1433.3	1430.0	1402.6	1336.1	1298.7
47.5°	1263.8	1303.7	1376.0	1400.9	1400.1	1399.2	1395.1	1395.1	1367.7	1295.4	1253.0
50°	1217.3	1263.0	1338.6	1359.4	1361.0	1359.4	1357.7	1360.2	1327.8	1250.5	1209.0
52.5°	1166.6	1218.1	1297.0	1316.2	1326.1	1330.3	1330.3	1324.5	1286.2	1205.6	1159.9
55°	1110.9	1159.9	1251.3	1277.1	1285.4	1292.9	1292.9	1281.3	1245.5	1164.1	1115.1
57.5°	1042.0	1085.2	1157.5	1183.2	1203.2	1208.1	1208.1	1189.0	1159.9	1081.8	1042.0
60°	967.2	1004.6	1053.6	1081.0	1096.0	1086.0	1093.5	1088.5	1065.2	992.9	959.7
62.5°	867.5	905.7	959.7	987.9	994.6	984.6	994.6	993.8	962.2	897.4	857.5
65°	796.0	833.4	886.6	923.1	933.9	931.4	938.1	928.1	889.1	827.6	789.4
67.5°	711.3	751.1	812.6	853.3	875.8	878.3	887.4	866.6	826.8	759.4	711.3
70°	630.7	664.7	712.1	750.3	781.9	797.7	799.3	769.4	719.6	663.9	629.0
72.5°	545.9	580.8	638.1	679.7	719.6	737.8	737.8	701.3	647.3	585.8	548.4
75°	442.9	475.3	527.6	572.5	618.2	641.5	640.6	609.1	549.2	491.1	452.0
77.5°	300.0	324.1	357.3	391.4	398.0	416.3	425.4	385.5	352.3	320.7	285.8
80°	174.5	189.4	207.7	226.8	231.0	236.8	221.9	206.9	189.4	168.7	152.9
82.5°	102.2	112.2	121.3	136.3	138.8	140.4	127.1	120.5	106.4	93.9	83.9
85°	49.9	53.2	61.5	69.0	65.6	64.0	58.2	51.5	45.7	40.7	35.7
87.5°	10.0	10.0	15.0	14.1	11.6	10.0	5.8	7.5	1.7	1.7	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°	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1706.7	1720.8	1738.3	1761.5	1788.1	1816.4	1843.8	1864.6	1885.3	1916.1	1911.1
5°	1619.4	1643.5	1670.9	1706.7	1749.9	1798.9	1853.7	1908.6	1967.6	2017.4	2039.0
7.5°	1568.7	1595.3	1627.7	1674.3	1729.9	1789.8	1867.0	1956.0	2051.5	2117.1	2157.9
10°	1568.7	1602.8	1645.2	1690.1	1739.1	1800.6	1896.1	2007.5	2130.4	2216.9	2264.2
12.5°	1659.3	1693.4	1702.5	1700.9	1728.3	1796.4	1919.4	2061.5	2208.5	2299.9	2358.1
15°	1800.6	1812.2	1743.2	1680.1	1684.2	1766.5	1930.2	2104.7	2275.8	2385.5	2448.7
17.5°	1895.3	1864.6	1741.6	1631.1	1607.8	1715.8	1930.2	2146.2	2347.3	2471.1	2530.1
20°	1902.8	1826.3	1699.2	1583.7	1523.9	1648.5	1916.9	2177.8	2416.3	2553.4	2616.5
22.5°	1837.1	1761.5	1654.3	1543.0	1454.9	1567.1	1895.3	2201.9	2475.3	2630.6	2708.8
25°	1762.3	1699.2	1608.6	1501.4	1407.6	1484.8	1875.4	2242.6	2557.5	2735.3	2814.3
27.5°	1689.2	1636.1	1553.8	1466.5	1381.0	1413.4	1862.9	2302.4	2655.6	2884.1	2952.2
30°	1617.8	1569.6	1494.8	1433.3	1366.8	1366.8	1852.1	2371.4	2785.2	3051.1	3119.2
32.5°	1545.5	1499.8	1439.1	1400.9	1358.5	1348.6	1822.2	2436.2	2919.0	3233.9	3303.7
35°	1478.2	1432.5	1385.9	1370.2	1354.4	1334.4	1748.2	2486.9	3049.4	3447.4	3507.2
37.5°	1415.0	1371.0	1336.1	1331.9	1333.6	1296.2	1631.9	2529.3	3212.3	3666.0	3697.5
40°	1360.2	1311.2	1283.7	1282.9	1291.2	1234.7	1484.8	2589.9	3398.4	3851.2	3837.9
42.5°	1311.2	1259.7	1226.4	1233.9	1228.9	1173.2	1341.1	2645.6	3560.4	4024.9	3998.3
45°	1263.0	1213.1	1166.6	1177.4	1171.6	1135.0	1218.9	2686.3	3739.9	4233.5	4236.8
47.5°	1216.4	1167.4	1120.9	1107.6	1106.8	1123.4	1125.0	2699.6	4032.4	4569.1	4493.5
50°	1173.2	1124.2	1076.0	1031.2	1048.6	1100.1	1055.2	2689.6	4470.3	4939.7	4728.7
52.5°	1128.4	1081.8	1028.7	948.1	993.8	1044.4	992.9	2653.9	4737.8	5267.1	5140.8
55°	1076.9	1032.8	960.5	862.5	918.1	929.0	929.0	2308.3	4851.7	5591.2	5669.3
57.5°	1007.9	949.7	835.1	756.1	806.0	764.4	860.8	1615.3	4663.9	5489.0	5792.2
60°	929.8	867.5	746.2	689.7	704.6	631.5	733.7	1012.9	3865.4	4670.5	5195.6
62.5°	826.8	769.4	668.9	624.8	594.1	515.2	590.8	640.6	2649.8	3468.2	3826.3
65°	757.8	694.6	604.9	546.7	483.6	414.6	392.2	420.4	1425.0	1941.0	2182.8
67.5°	676.4	614.0	529.3	456.2	405.5	355.6	316.6	306.6	488.6	646.4	699.6
70°	599.1	539.3	468.6	400.5	349.8	300.8	262.6	235.1	226.0	224.3	221.0
72.5°	520.1	464.5	405.5	342.3	286.7	241.8	207.7	176.2	162.9	158.7	154.5
75°	426.3	382.2	323.2	255.1	210.2	168.7	142.1	121.3	109.7	105.5	100.5
77.5°	274.2	254.3	202.7	164.5	127.1	100.5	86.4	73.1	65.6	64.0	59.8
80°	146.2	136.3	112.2	94.7	75.6	61.5	54.0	46.5	42.4	40.7	39.1
82.5°	81.4	74.0	62.3	54.8	44.0	37.4	33.2	29.9	27.4	26.6	25.8
85°	36.6	31.6	24.9	23.3	20.8	19.1	18.3	16.6	15.8	15.0	14.1
87.5°	1.7	3.3	4.2	3.3	3.3	5.0	5.8	5.8	5.0	5.0	4.2
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: P633530

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

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7	1819.7
2.5°	1941.8	1966.8	1969.2	1977.6	1966.8	1964.3	1946.8	1936.8	1927.7	1925.2
5°	2093.0	2142.9	2162.8	2177.0	2163.7	2157.0	2118.8	2078.9	2056.5	2045.7
7.5°	2248.4	2323.2	2362.3	2379.7	2381.4	2351.5	2285.8	2211.0	2173.6	2159.5
10°	2387.2	2479.4	2530.9	2564.2	2552.5	2516.0	2426.2	2324.9	2277.5	2265.0
12.5°	2490.2	2578.3	2618.2	2639.8	2639.0	2619.0	2534.3	2424.6	2370.6	2358.1
15°	2556.7	2609.0	2611.5	2616.5	2630.6	2657.2	2613.2	2511.8	2452.0	2434.6
17.5°	2609.0	2588.3	2549.2	2535.9	2567.5	2641.4	2668.0	2585.8	2521.0	2506.0
20°	2642.3	2537.6	2468.6	2442.9	2479.4	2599.9	2701.3	2652.2	2584.9	2565.8
22.5°	2668.0	2490.2	2378.9	2361.4	2399.7	2555.0	2735.3	2731.2	2657.2	2630.6
25°	2708.8	2458.6	2315.7	2303.3	2339.0	2533.4	2781.0	2838.4	2772.7	2734.5
27.5°	2772.7	2455.3	2283.3	2279.2	2328.2	2552.5	2846.7	2995.4	2913.2	2884.9
30°	2861.6	2486.9	2290.8	2299.1	2358.9	2621.5	2948.9	3174.9	3092.6	3048.6
32.5°	2989.6	2571.7	2404.6	2440.4	2484.4	2732.0	3098.4	3369.3	3307.0	3242.2
35°	3158.3	2804.3	2741.2	2893.2	2851.7	2973.8	3278.8	3605.3	3529.7	3473.2
37.5°	3383.4	3281.2	3339.4	3548.8	3448.3	3430.8	3498.9	3819.7	3778.1	3721.6
40°	3699.2	3720.0	3827.1	4102.2	3956.8	3844.6	3769.0	3980.9	3995.0	3925.2
42.5°	3908.6	4004.1	4262.5	4575.0	4374.7	4106.3	3995.0	4186.9	4187.8	4124.6
45°	3986.7	4236.8	4776.9	5136.7	4801.8	4255.9	4119.6	4466.9	4458.6	4386.3
47.5°	3958.4	4432.9	5311.1	5861.2	5350.2	4362.3	4102.2	4865.8	4933.1	4823.4
50°	3899.4	4629.8	5935.2	6748.6	6023.2	4475.3	4075.6	5307.8	5419.2	5334.4
52.5°	3959.3	4849.2	6673.0	7665.9	6867.4	4655.6	4255.1	5875.3	5855.4	5753.2
55°	4148.7	5108.4	7569.5	8818.4	7794.7	4960.5	4716.2	6416.2	6213.5	6091.4
57.5°	4139.6	5293.7	8355.6	9729.9	8601.5	5210.6	4876.6	6473.6	6063.9	5909.4
60°	3757.4	5208.9	8654.7	10306.5	8845.0	5072.7	4349.0	5782.3	5116.7	4954.7
62.5°	2804.3	4622.3	8074.7	9584.5	8156.2	4381.4	3270.4	4150.4	3676.8	3403.4
65°	1793.9	3616.1	6788.5	7764.8	6722.9	3351.0	1947.6	2225.2	1743.2	1665.1
67.5°	763.6	2552.5	5277.1	5189.8	5029.5	2171.2	752.0	626.5	467.0	458.7
70°	252.6	1736.6	3253.0	3461.6	3003.7	1495.6	248.4	210.2	209.4	201.9
72.5°	165.4	932.3	1831.3	2039.0	1932.7	860.8	150.4	140.4	143.7	140.4
75°	98.9	202.7	308.3	400.5	308.3	144.6	90.6	88.9	90.6	86.4
77.5°	58.2	56.5	54.8	54.8	54.0	49.9	45.7	44.0	44.9	45.7
80°	37.4	35.7	34.1	33.2	29.1	27.4	25.8	24.1	24.1	24.9
82.5°	24.1	22.4	20.8	18.3	15.0	12.5	11.6	10.0	10.0	10.8
85°	12.5	10.0	7.5	5.8	3.3	1.7	0.0	0.0	0.0	0.0
87.5°	2.5	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

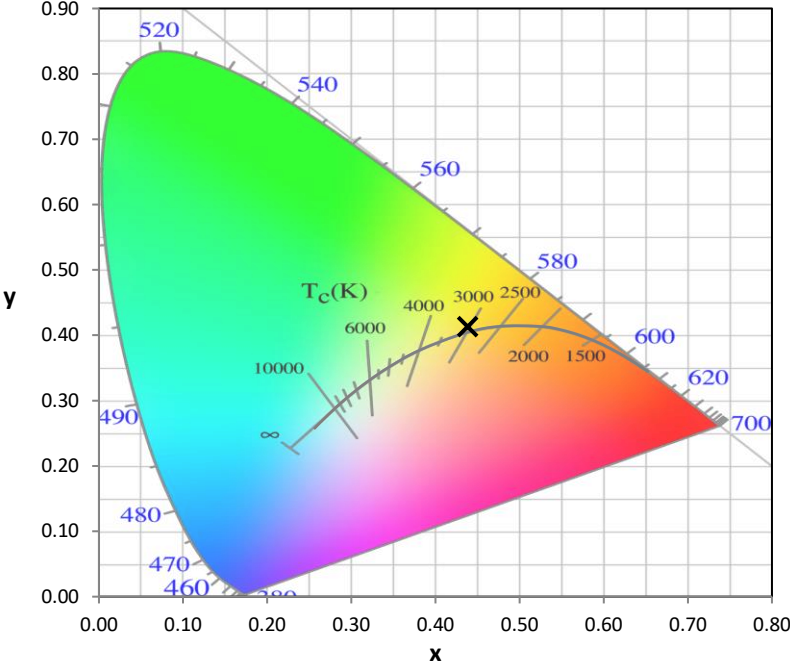
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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

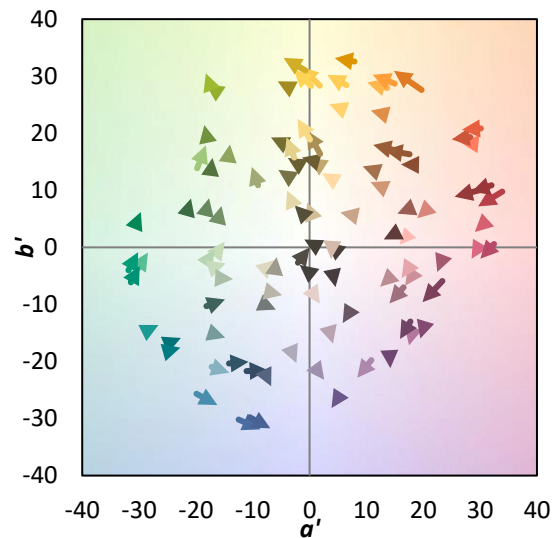
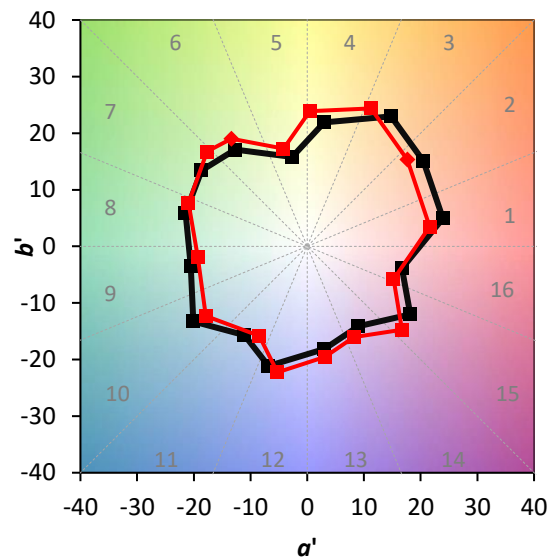
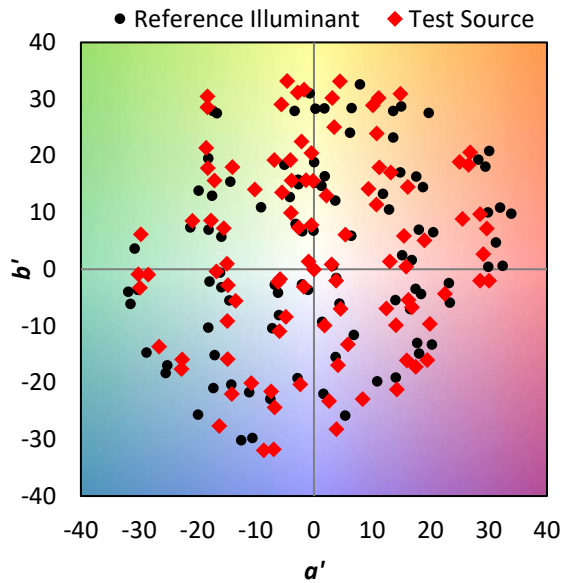
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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

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

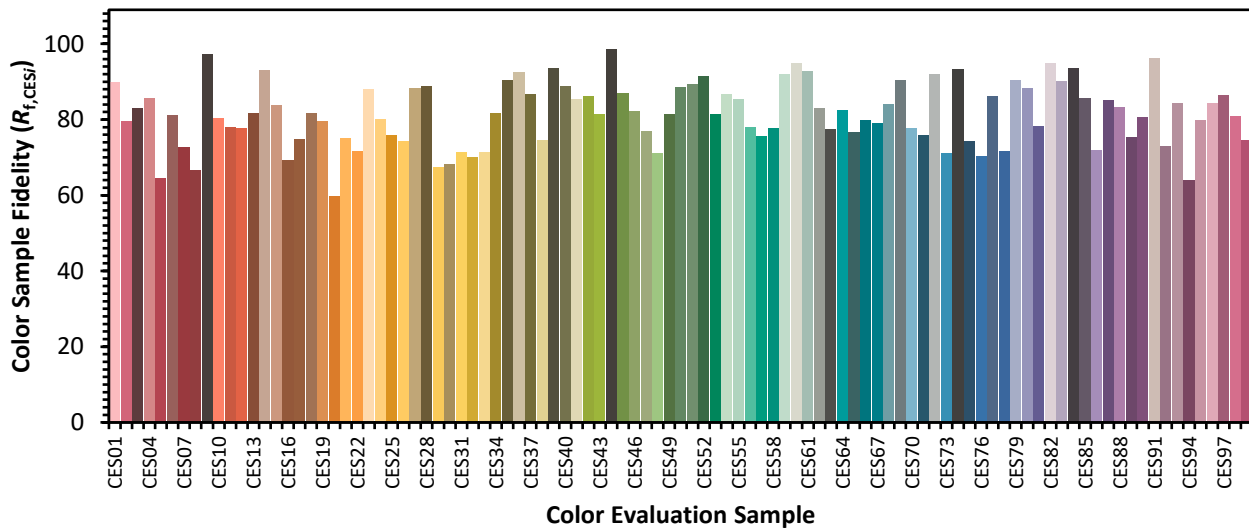


Color Vector Graphics

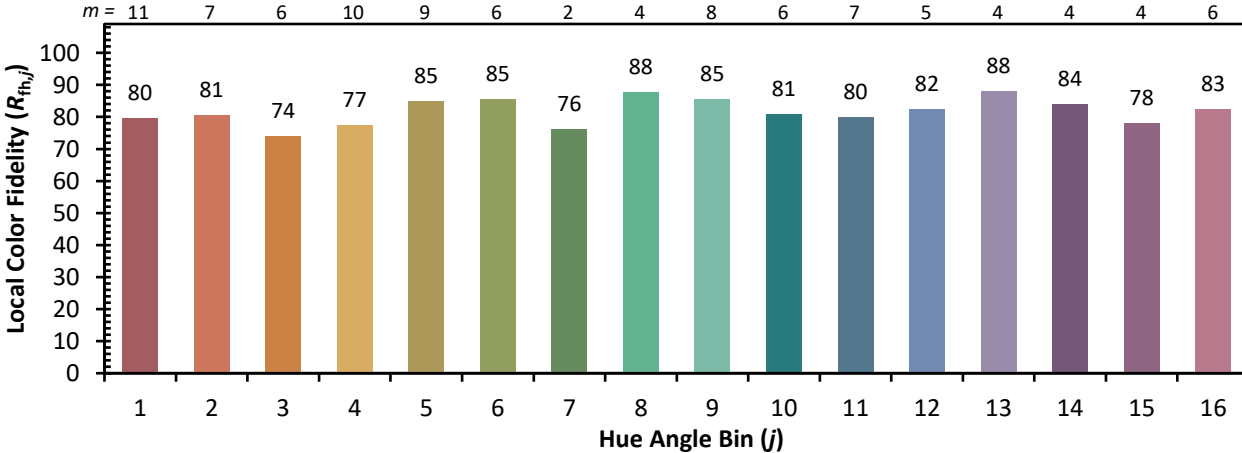


Individual Sample Fidelity Index ($R_{f,i}$)

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)