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: P637987

Luminaire Tested: GWS-SA4D-830-U-SLL-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P637987
	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-SA4D-830-U-SLL-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18232.8 lumens
Efficiency:	N/A
Efficacy:	112.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	162.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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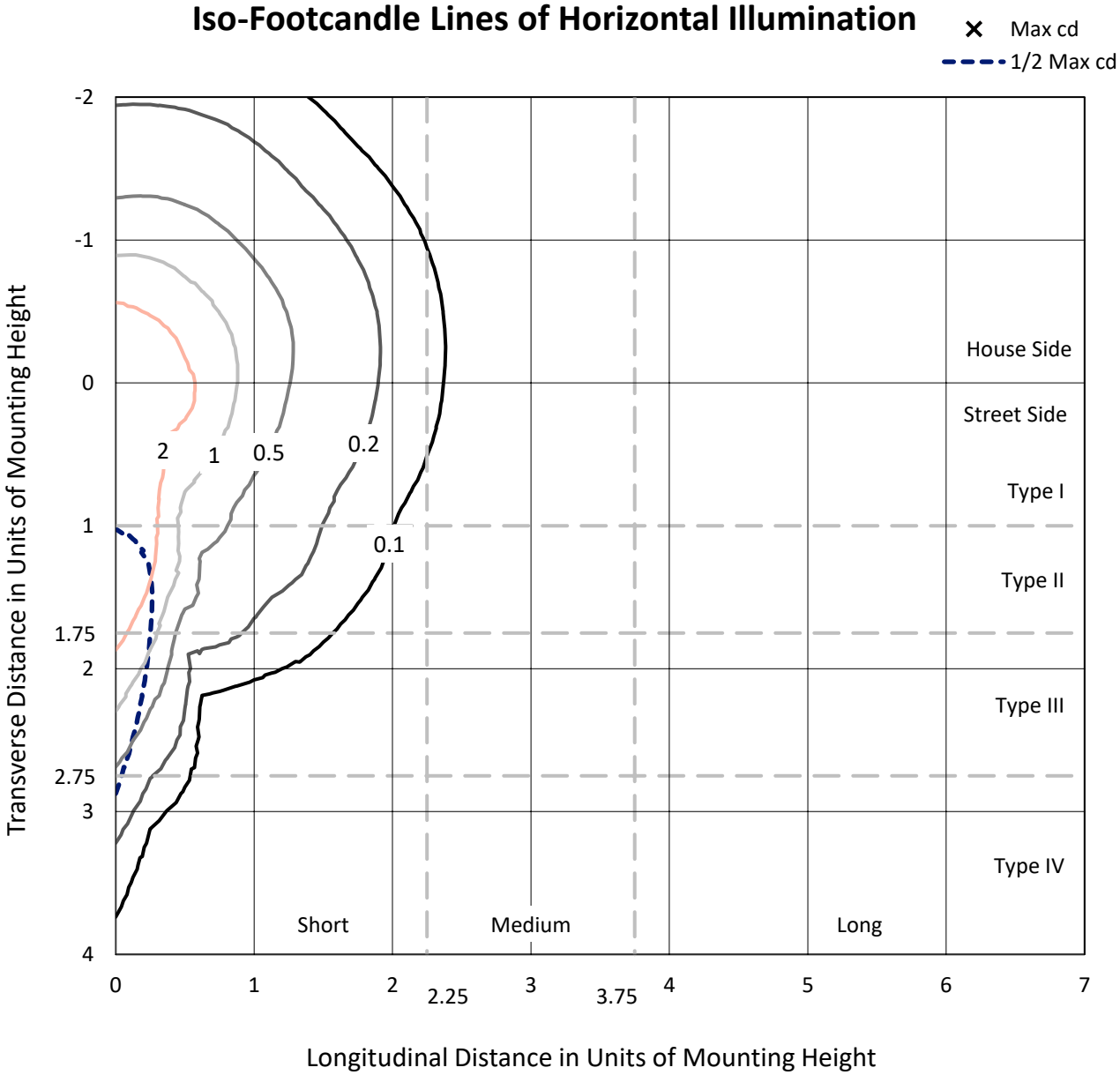
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type III - Short - N/A

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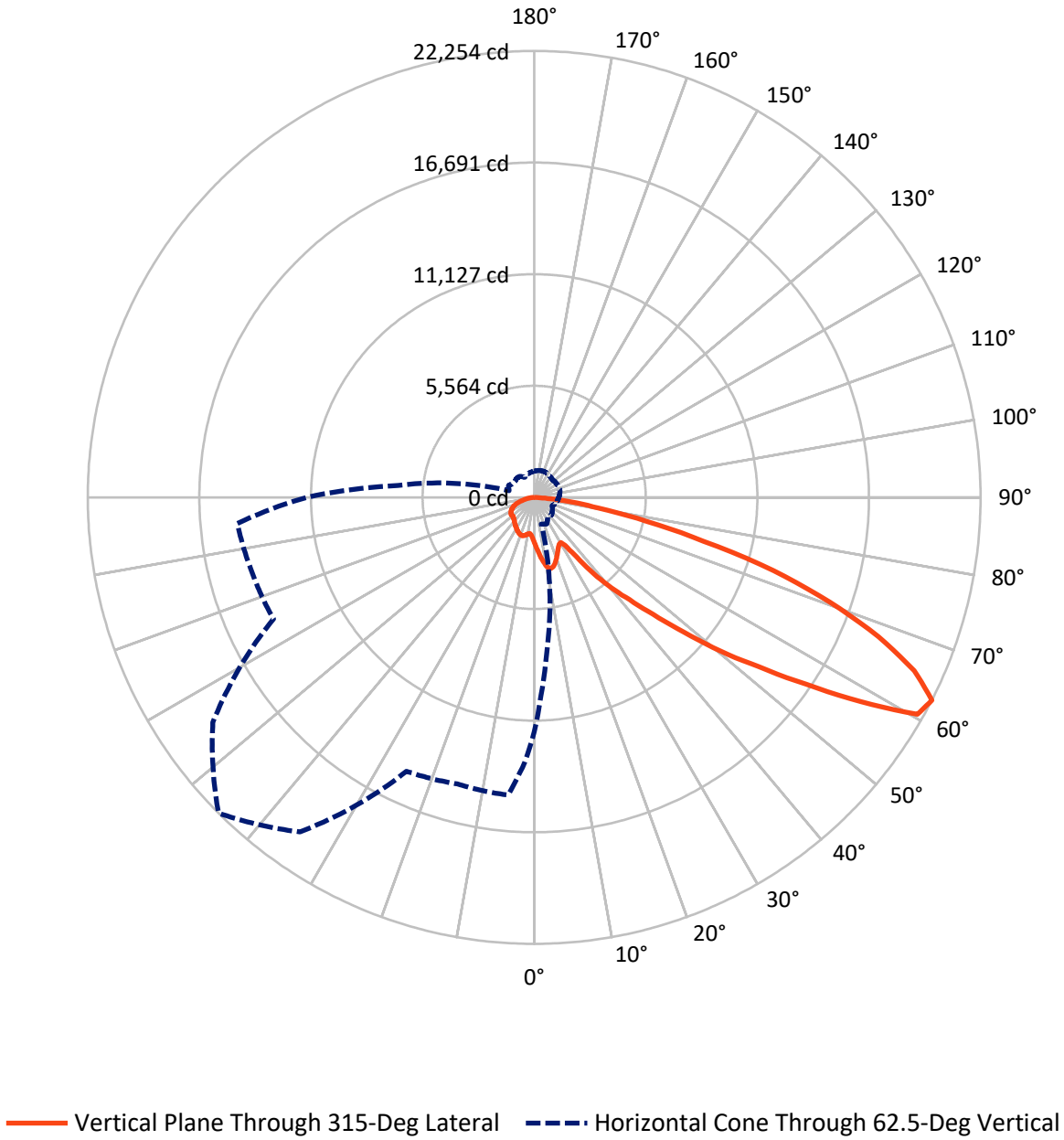
Luminous Intensity Polar Plot



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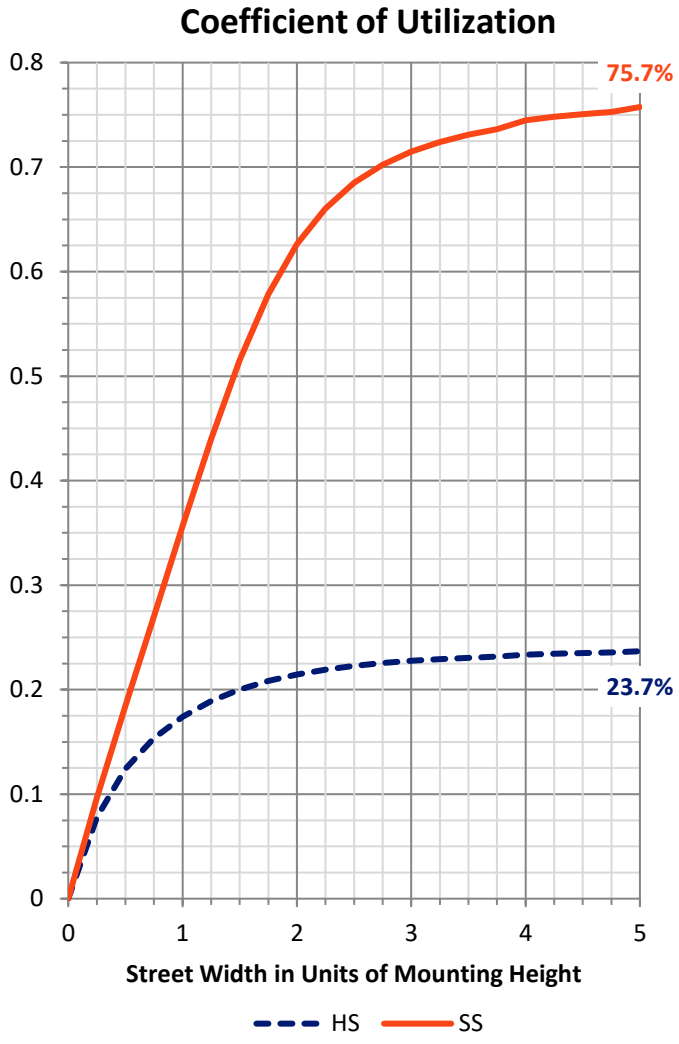
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4359.5	0.0	4359.5
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	13873.3	0.0	13873.3
	% Fixture	76.1	0.0	76.1
Total	Lumens	18232.8	0.0	18232.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.9	1.2
10°-20°	727.8	4.0
20°-30°	1145.8	6.3
30°-40°	1570.5	8.6
40°-50°	2450.5	13.4
50°-60°	4225.1	23.2
60°-70°	4896.4	26.9
70°-80°	2584.5	14.2
80°-90°	408.3	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°	18232.8	100.0
0°-180°	18232.8	100.0



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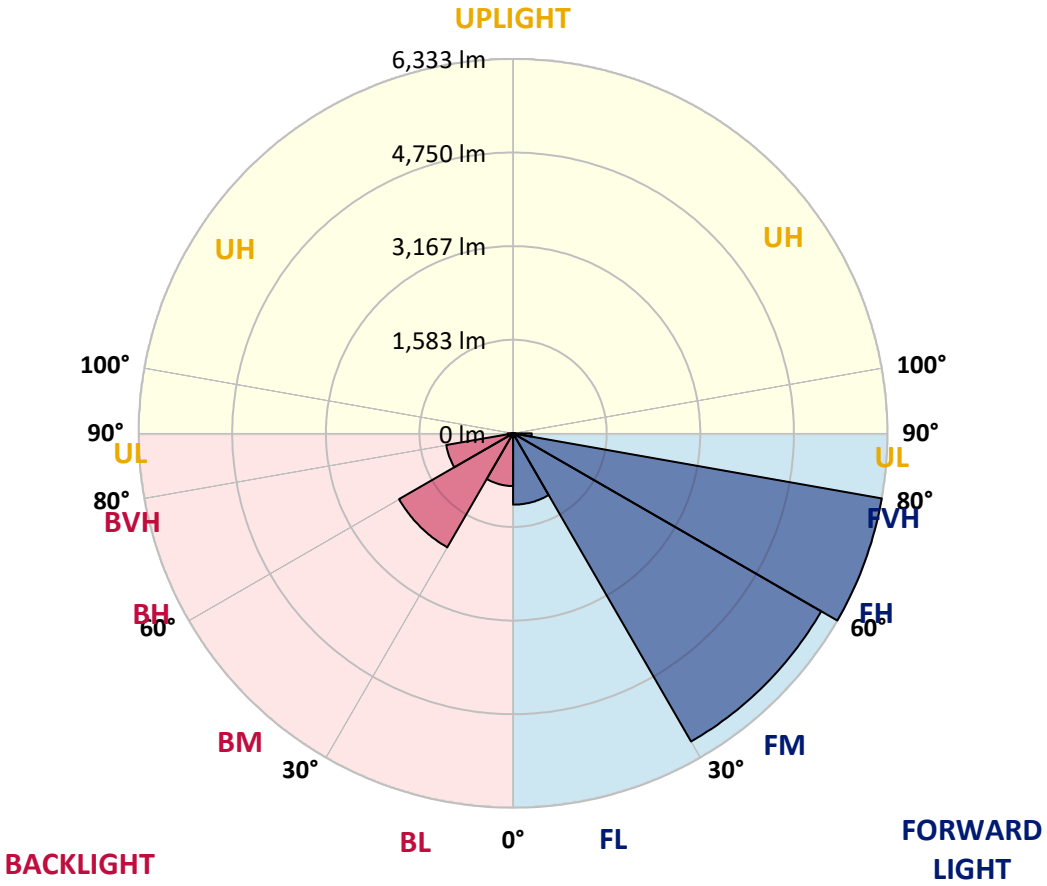
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1205.9	6.6			
FM	(30°-60°)	6019.3	33.0			
FH	(60°-80°)	6333.0	34.7			G3/7500
FVH	(80°-90°)	315.1	1.7			G3/500
BL	(0°-30°)	891.7	4.9	B2/1000		
BM	(30°-60°)	2226.8	12.2	B2/2500		
BH	(60°-80°)	1147.9	6.3	B3/2500		G3/2500
BVH	(80°-90°)	93.1	0.5			G1/100
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°	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3
2.5°	2469.9	2460.1	2446.2	2398.8	2369.5	2336.0	2301.1	2260.7	2214.7	2182.6	2150.5
5°	2679.1	2663.8	2630.3	2517.3	2439.2	2354.1	2283.0	2202.1	2122.6	2068.2	2013.9
7.5°	2879.9	2860.4	2808.8	2635.9	2508.9	2386.2	2278.8	2161.7	2043.1	1962.2	1898.1
10°	3080.7	3040.3	2974.8	2748.8	2581.5	2439.2	2316.5	2172.8	2015.2	1905.1	1836.7
12.5°	3234.2	3196.5	3125.4	2852.0	2654.0	2475.5	2337.4	2204.9	2071.0	1953.9	1884.1
15°	3377.8	3329.0	3248.1	2948.3	2714.0	2474.1	2295.6	2179.8	2160.3	2131.0	2040.3
17.5°	3481.0	3436.4	3352.7	3026.4	2747.4	2430.8	2179.8	2111.5	2199.3	2288.6	2202.1
20°	3571.7	3520.1	3435.0	3080.7	2754.4	2334.6	2039.0	2040.3	2178.4	2301.1	2280.2
22.5°	3648.4	3591.2	3515.9	3142.1	2751.6	2200.7	1916.2	1999.9	2138.0	2234.2	2237.0
25°	3743.2	3695.8	3633.0	3232.8	2751.6	2064.1	1827.0	1951.1	2069.6	2150.5	2147.7
27.5°	3859.0	3826.9	3775.3	3370.8	2776.7	1949.7	1776.8	1888.3	1981.8	2051.5	2050.1
30°	3988.7	3959.4	3920.3	3517.3	2819.9	1864.6	1748.9	1810.2	1878.6	1934.4	1934.4
32.5°	4121.1	4110.0	4068.1	3634.4	2786.5	1838.1	1725.2	1732.1	1768.4	1814.4	1810.2
35°	4305.2	4294.1	4241.1	3725.1	2641.4	1800.5	1687.5	1652.6	1656.8	1686.1	1695.9
37.5°	4574.4	4557.7	4479.6	3831.1	2422.5	1705.6	1626.1	1569.0	1556.4	1569.0	1587.1
40°	4899.3	4874.2	4768.3	3974.7	2170.0	1577.3	1529.9	1482.5	1461.6	1465.8	1486.7
42.5°	5306.6	5253.6	5101.6	4126.7	1920.4	1464.4	1422.5	1393.2	1369.5	1366.7	1407.2
45°	5967.6	5822.6	5581.3	4262.0	1709.8	1404.4	1326.3	1305.4	1285.9	1297.0	1344.4
47.5°	7122.4	6854.6	6384.6	4377.8	1581.5	1405.8	1249.6	1227.3	1225.9	1248.2	1301.2
50°	8709.5	8323.2	7598.0	4455.9	1514.6	1422.5	1203.6	1167.3	1193.8	1216.1	1266.3
52.5°	10229.6	9639.7	8776.4	4454.5	1485.3	1425.3	1216.1	1111.5	1193.8	1199.4	1246.8
55°	11528.0	10459.8	9094.4	3997.0	1443.4	1414.2	1264.9	1068.3	1178.5	1199.4	1237.0
57.5°	12560.1	10981.3	9070.7	3228.6	1570.4	1352.8	1294.2	1058.5	1133.8	1202.2	1245.4
60°	12445.7	10742.9	8486.3	1981.8	1557.8	1244.0	1290.0	1076.7	1058.5	1164.5	1235.6
62.5°	*11685.6*	*9888.0*	*7480.8*	*1375.1*	*1463.0*	*1181.3*	*1221.7*	*1108.7*	*988.8*	*1110.1*	*1188.2*
65°	10621.5	8784.8	6234.0	1054.3	1211.9	1184.0	1105.9	1086.4	927.4	1023.7	1107.3
67.5°	9214.3	7416.7	4921.7	835.4	845.1	1025.1	1004.1	965.1	870.3	947.0	1022.3
70°	6927.1	5412.6	3386.2	672.2	640.1	856.3	902.3	867.5	814.5	836.8	916.3
72.5°	4881.2	3534.0	1854.9	532.8	493.7	658.3	783.8	778.2	719.6	736.4	814.5
75°	3627.4	2500.6	1158.9	421.2	401.7	471.4	656.9	673.6	624.8	644.3	704.3
77.5°	2414.1	1619.2	644.3	312.4	312.4	344.5	489.5	567.6	531.4	546.7	588.5
80°	1331.9	824.2	322.2	205.0	210.6	237.1	357.0	408.6	410.0	447.7	458.8
82.5°	421.2	262.2	143.6	119.9	113.0	135.3	230.1	292.9	273.3	348.7	320.8
85°	96.2	61.4	26.5	26.5	29.3	44.6	87.9	156.2	199.4	239.9	174.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	61.4	90.7	80.9
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°	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3
2.5°	2131.0	2103.1	2094.7	2071.0	2068.2	2045.9	2037.6	2037.6	2047.3	2047.3	2057.1
5°	1991.5	1956.7	1937.1	1909.3	1902.3	1885.5	1874.4	1875.8	1888.3	1896.7	1913.4
7.5°	1868.8	1845.1	1831.2	1818.6	1815.8	1813.0	1800.5	1799.1	1803.3	1815.8	1828.4
10°	1817.2	1800.5	1804.7	1814.4	1829.8	1838.1	1827.0	1821.4	1817.2	1825.6	1836.7
12.5°	1867.4	1850.7	1859.0	1875.8	1896.7	1905.1	1900.9	1899.5	1903.7	1935.8	1959.5
15°	1977.6	1945.5	1934.4	1941.3	1958.1	1966.4	1962.2	1967.8	1994.3	2078.0	2138.0
17.5°	2114.3	2036.2	1991.5	1979.0	1986.0	1992.9	1992.9	2006.9	2052.9	2175.6	2250.9
20°	2188.2	2086.4	2011.1	1980.4	1983.2	1990.1	1990.1	2009.7	2061.3	2192.4	2241.2
22.5°	2168.7	2075.2	1983.2	1949.7	1951.1	1956.7	1956.7	1973.4	2019.4	2135.2	2157.5
25°	2092.0	2009.7	1919.0	1889.7	1892.5	1902.3	1899.5	1909.3	1944.1	2039.0	2051.5
27.5°	1999.9	1927.4	1838.1	1815.8	1828.4	1847.9	1831.2	1832.5	1864.6	1944.1	1945.5
30°	1900.9	1840.9	1761.4	1744.7	1768.4	1778.2	1762.8	1762.8	1794.9	1849.3	1847.9
32.5°	1793.5	1755.8	1698.7	1680.5	1707.0	1722.4	1702.8	1705.6	1730.7	1767.0	1753.1
35°	1693.1	1673.6	1647.1	1634.5	1651.2	1665.2	1652.6	1658.2	1681.9	1691.7	1672.2
37.5°	1596.9	1594.1	1596.9	1596.9	1601.0	1605.2	1596.9	1610.8	1631.7	1619.2	1596.9
40°	1513.2	1524.3	1550.8	1543.9	1539.7	1543.9	1538.3	1562.0	1582.9	1560.6	1534.1
42.5°	1443.4	1464.4	1504.8	1504.8	1496.4	1499.2	1496.4	1525.7	1541.1	1510.4	1481.1
45°	1383.5	1414.2	1465.8	1472.7	1458.8	1458.8	1464.4	1500.6	1506.2	1464.4	1433.7
47.5°	1341.6	1379.3	1437.9	1450.4	1429.5	1428.1	1443.4	1482.5	1482.5	1433.7	1398.8
50°	1312.4	1354.2	1423.9	1440.7	1419.7	1414.2	1439.3	1476.9	1468.5	1410.0	1375.1
52.5°	1292.8	1336.1	1422.5	1446.2	1432.3	1426.7	1451.8	1478.3	1457.4	1394.6	1358.4
55°	1280.3	1327.7	1426.7	1446.2	1430.9	1421.1	1446.2	1469.9	1458.8	1386.3	1351.4
57.5°	1287.2	1334.7	1421.1	1430.9	1412.8	1396.0	1425.3	1458.8	1454.6	1389.1	1354.2
60°	1276.1	1319.3	1390.4	1393.2	1362.6	1336.1	1379.3	1429.5	1429.5	1379.3	1348.6
62.5°	*1224.5*	*1267.7*	*1330.5*	*1333.3*	*1298.4*	*1269.1*	*1319.3*	*1379.3*	*1377.9*	*1337.5*	*1305.4*
65°	1139.4	1179.9	1251.0	1258.0	1223.1	1192.4	1244.0	1299.8	1304.0	1267.7	1239.8
67.5°	1046.0	1082.2	1135.2	1163.1	1133.8	1101.8	1149.2	1202.2	1200.8	1157.5	1128.3
70°	934.4	967.9	1016.7	1040.4	1022.3	991.6	1034.8	1062.7	1050.2	1029.2	1009.7
72.5°	824.2	856.3	902.3	902.3	882.8	853.5	866.1	916.3	931.6	916.3	903.7
75°	708.5	736.4	768.4	775.4	732.2	679.2	737.8	781.0	799.1	792.2	776.8
77.5°	589.9	610.8	658.3	645.7	564.8	536.9	584.4	648.5	661.1	656.9	636.0
80°	454.7	467.2	517.4	492.3	429.5	411.4	432.3	482.5	485.3	471.4	444.9
82.5°	305.4	322.2	355.6	306.8	305.4	288.7	272.0	277.5	302.6	299.8	281.7
85°	156.2	164.6	196.6	184.1	157.6	136.7	129.7	138.1	124.1	113.0	97.6
87.5°	65.5	71.1	97.6	54.4	16.7	0.0	0.0	8.4	12.6	18.1	19.5
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3
2.5°	2079.4	2094.7	2132.4	2179.8	2225.8	2273.3	2324.9	2356.9	2396.0	2446.2	2447.6
5°	1934.4	1969.2	2023.6	2096.1	2171.4	2257.9	2358.3	2442.0	2542.4	2621.9	2654.0
7.5°	1845.1	1895.3	1963.6	2055.7	2154.7	2262.1	2393.2	2534.0	2698.6	2804.6	2867.4
10°	1853.5	1930.2	1998.5	2076.6	2165.9	2281.6	2450.4	2637.3	2839.5	2978.9	3057.0
12.5°	2002.7	2083.6	2071.0	2066.8	2126.8	2267.7	2496.4	2741.8	2988.7	3128.2	3221.6
15°	2191.0	2221.7	2103.1	2013.9	2050.1	2217.5	2521.5	2835.3	3112.8	3283.0	3375.0
17.5°	2287.2	2225.8	2082.2	1948.3	1938.5	2140.8	2534.0	2930.1	3252.3	3422.4	3520.1
20°	2242.6	2153.3	2032.0	1905.1	1835.3	2036.2	2527.1	3005.4	3379.2	3568.9	3648.4
22.5°	2146.3	2068.2	1973.4	1852.1	1751.7	1921.8	2508.9	3080.7	3492.2	3683.2	3753.0
25°	2041.7	1983.2	1905.1	1799.1	1704.2	1821.4	2496.4	3181.2	3621.9	3804.6	3849.2
27.5°	1937.1	1893.9	1829.8	1747.5	1693.1	1751.7	2500.6	3312.3	3789.2	3962.2	3944.0
30°	1833.9	1796.3	1751.7	1715.4	1691.7	1734.9	2489.4	3451.7	3973.3	4133.7	4026.3
32.5°	1736.3	1701.5	1673.6	1679.1	1693.1	1741.9	2432.2	3578.6	4142.1	4278.7	4115.6
35°	1652.6	1616.4	1616.4	1635.9	1687.5	1718.2	2284.4	3677.6	4328.9	4465.6	4242.5
37.5°	1574.5	1542.5	1563.4	1595.5	1644.3	1654.0	2094.7	3773.9	4600.9	4729.2	4439.1
40°	1506.2	1474.1	1511.8	1552.2	1577.3	1573.1	1902.3	3907.8	4921.7	5054.2	4699.9
42.5°	1451.8	1422.5	1456.0	1507.6	1511.8	1516.0	1761.4	4036.1	5294.0	5462.8	5149.0
45°	1407.2	1386.3	1403.0	1454.6	1454.6	1518.8	1673.6	4143.5	5854.7	6153.1	5973.2
47.5°	1372.3	1359.8	1368.1	1384.9	1412.8	1569.0	1617.8	4225.7	6875.5	7461.3	7280.0
50°	1352.8	1340.2	1351.4	1316.5	1400.2	1594.1	1599.6	4288.5	8221.4	9139.0	8914.5
52.5°	1336.1	1331.9	1338.8	1258.0	1428.1	1577.3	1585.7	4204.8	9123.7	10790.3	11012.0
55°	1330.5	1333.3	1299.8	1214.7	1461.6	1521.5	1543.9	3606.5	9369.1	12214.2	13590.7
57.5°	1333.3	1324.9	1239.8	1218.9	1463.0	1410.0	1603.8	2573.1	9012.1	12833.4	16113.6
60°	1323.5	1281.7	1167.3	1256.6	1398.8	1278.9	1560.6	1677.7	8070.7	12357.8	16260.0
62.5°	*1280.3*	*1218.9*	*1104.5*	*1277.5*	*1284.5*	*1200.8*	*1416.9*	*1292.8*	*6815.6*	*11339.8*	*14848.7*
65°	1217.5	1135.2	1051.6	1234.3	1168.7	1164.5	1065.5	1036.2	5480.9	10127.8	13509.8
67.5°	1114.3	1032.0	1012.5	1135.2	1051.6	1032.0	856.3	859.1	4373.6	8836.4	12164.0
70°	997.2	914.9	930.2	1026.5	935.8	857.7	693.1	715.4	3317.8	7362.3	10349.6
72.5°	920.5	810.3	811.7	903.7	822.8	694.5	570.4	589.9	2105.9	5549.2	8228.3
75°	776.8	714.1	683.4	732.2	698.7	541.1	479.8	475.6	1248.2	3977.5	6161.5
77.5°	648.5	599.7	584.4	603.9	521.6	400.3	386.3	379.3	707.1	2548.0	4037.5
80°	470.0	457.4	456.0	465.8	401.7	294.3	294.3	295.7	380.7	1383.5	2276.0
82.5°	298.5	326.3	288.7	320.8	273.3	209.2	195.2	221.7	219.0	589.9	959.5
85°	124.1	170.1	159.0	168.8	129.7	114.4	122.7	132.5	126.9	227.3	373.8
87.5°	23.7	27.9	30.7	29.3	29.3	36.3	40.4	48.8	48.8	65.5	113.0
90°	0.0	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

Scaled Data Report

REPORT NUMBER: P637987
CATALOG NUMBER: GWS-SA4D-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3
2.5°	2500.6	2541.0	2532.7	2550.8	2527.1	2535.4	2488.0	2475.5	2467.1	2469.9
5°	2757.2	2839.5	2854.8	2885.5	2864.6	2864.6	2780.9	2718.1	2695.8	2679.1
7.5°	3018.0	3136.5	3214.6	3223.0	3211.8	3189.5	3068.2	2955.2	2914.8	2879.9
10°	3249.5	3391.7	3479.6	3521.4	3500.5	3465.7	3315.0	3160.2	3111.4	3080.7
12.5°	3426.6	3552.1	3610.7	3638.6	3635.8	3623.3	3500.5	3333.2	3281.6	3234.2
15°	3541.0	3603.7	3581.4	3580.0	3599.5	3649.8	3612.1	3481.0	3421.0	3377.8
17.5°	3614.9	3554.9	3455.9	3409.9	3451.7	3570.3	3656.7	3582.8	3528.4	3481.0
20°	3641.4	3428.0	3284.4	3199.3	3248.1	3419.6	3633.0	3656.7	3610.7	3571.7
22.5°	3610.7	3273.2	3078.0	2977.5	3025.0	3230.0	3563.3	3716.7	3686.0	3648.4
25°	3535.4	3111.4	2877.1	2786.5	2838.1	3047.3	3439.2	3772.5	3773.9	3743.2
27.5°	3442.0	2962.2	2736.3	2651.2	2701.4	2896.7	3317.8	3821.3	3870.1	3859.0
30°	3347.1	2872.9	2669.3	2609.4	2647.0	2819.9	3193.7	3871.5	3969.1	3988.7
32.5°	3303.9	2916.2	2826.9	2853.4	2804.6	2864.6	3149.1	3942.6	4089.1	4121.1
35°	3361.1	3299.7	3525.6	3630.2	3457.3	3230.0	3206.3	4050.0	4257.8	4305.2
37.5°	3638.6	4121.1	4458.6	4826.8	4527.0	4026.3	3489.4	4232.7	4499.1	4574.4
40°	4242.5	4838.0	5447.4	5923.0	5469.8	4796.1	4027.7	4504.7	4831.0	4899.3
42.5°	4811.5	5510.2	6349.8	6964.8	6376.3	5425.1	4607.9	4962.1	5268.9	5306.6
45°	5369.3	6169.9	7441.8	8296.7	7497.5	6023.4	5200.6	5734.7	5966.2	5967.6
47.5°	6023.4	6913.2	8811.3	10028.8	8985.6	6685.9	5757.0	6957.8	7280.0	7122.4
50°	6805.8	7652.4	10221.3	12044.1	10800.0	7500.3	6464.1	8448.7	8888.0	8709.5
52.5°	7853.2	8466.8	11774.9	14009.1	12777.6	8427.8	7489.2	10417.9	10563.0	10229.6
55°	9327.3	9642.5	13769.2	16435.8	14985.3	9570.0	8988.4	12889.2	12483.4	11528.0
57.5°	12684.2	11502.9	16329.8	19204.1	17483.1	11645.2	12274.2	15614.3	14170.9	12560.1
60°	15493.0	13762.2	18699.2	21951.5	19623.9	13932.4	15359.1	16088.5	14108.1	12445.7
62.5°	14546.0	14338.2	19554.2	22254.2	20354.7	15057.9	14785.9	14893.3	13187.7	11685.6
65°	12762.3	13226.7	18791.3	20819.1	19544.4	14049.5	13374.5	13788.7	12134.7	10621.5
67.5°	11709.3	12051.0	17434.3	18522.1	18071.7	12958.9	12277.0	11977.1	10500.2	9214.3
70°	10632.7	10915.8	15529.2	15639.4	15774.7	11145.9	10038.6	9146.0	7826.7	6927.1
72.5°	9187.8	9203.2	13120.7	12482.0	12738.6	8722.0	8080.5	6837.9	5697.1	4881.2
75°	7708.1	7287.0	10385.8	8724.8	9239.4	6784.9	6709.6	5153.2	4296.9	3627.4
77.5°	5877.0	5384.7	7586.8	5737.5	6489.2	4518.6	5044.4	3495.0	3023.6	2414.1
80°	3945.4	3638.6	4192.3	3238.3	4245.3	3114.2	3289.9	1980.4	1716.8	1331.9
82.5°	2080.8	1776.8	2591.2	1920.4	2560.5	1711.2	1234.3	612.2	521.6	421.2
85°	806.1	933.0	1270.5	683.4	993.0	610.8	357.0	152.0	126.9	96.2
87.5°	156.2	241.3	132.5	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.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

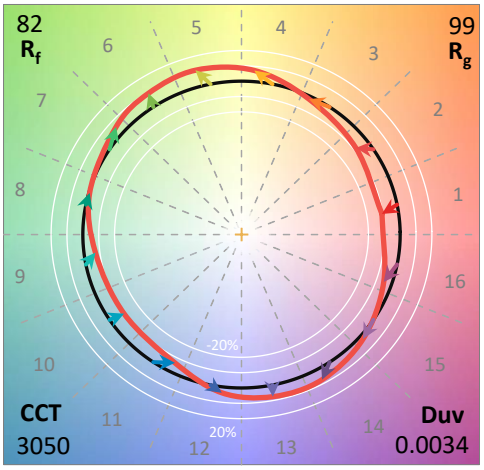
Test Information

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	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



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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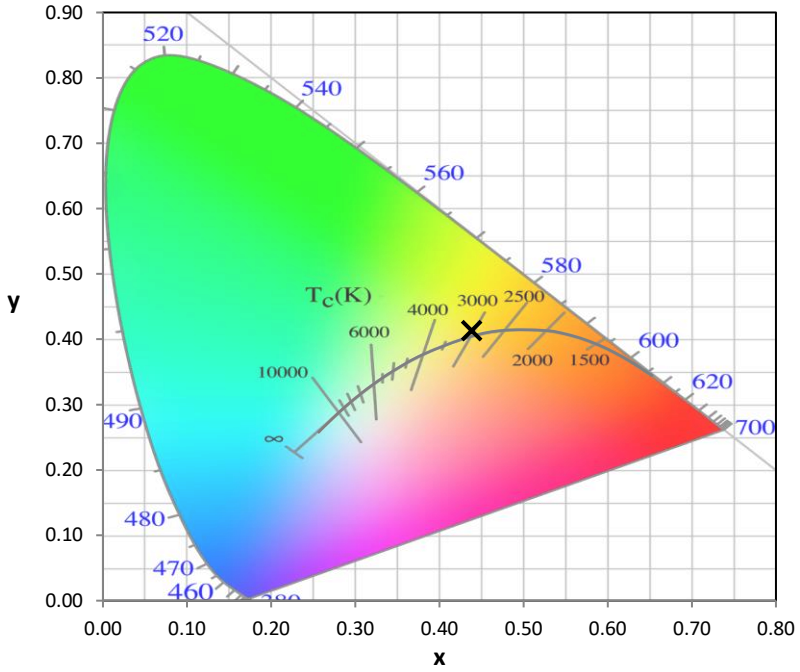
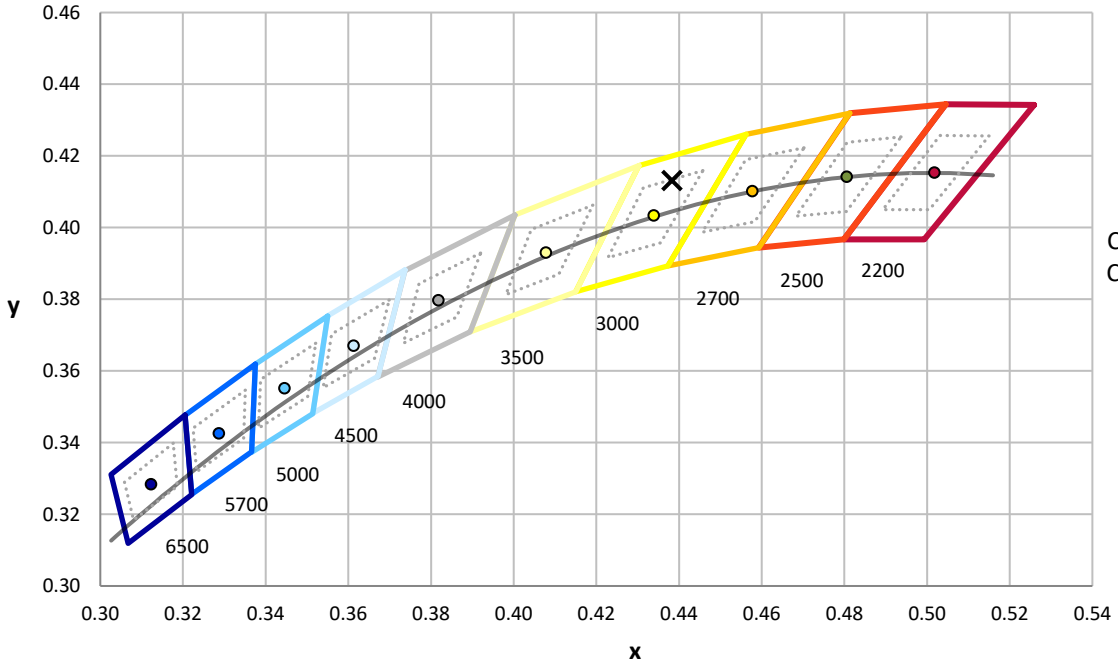
CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

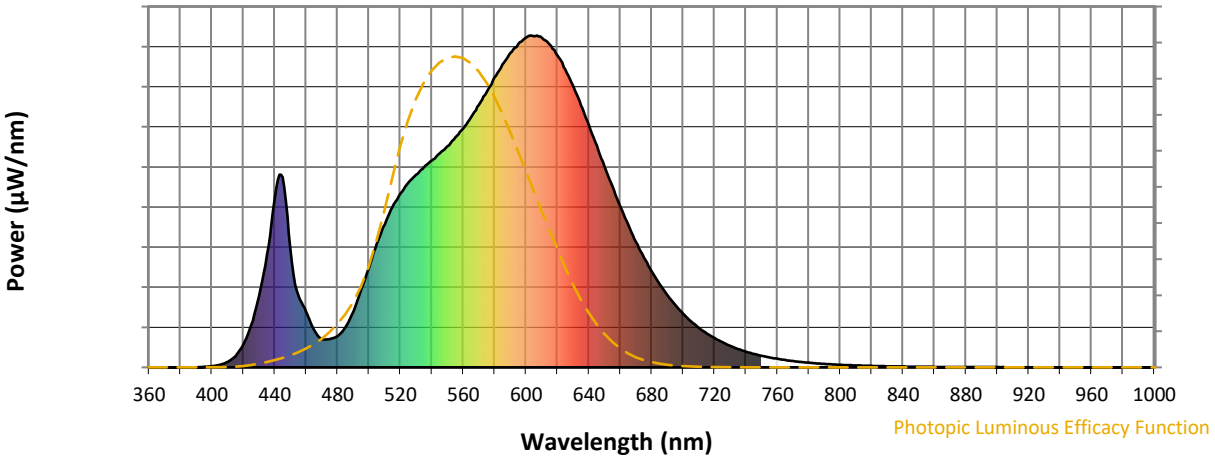


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

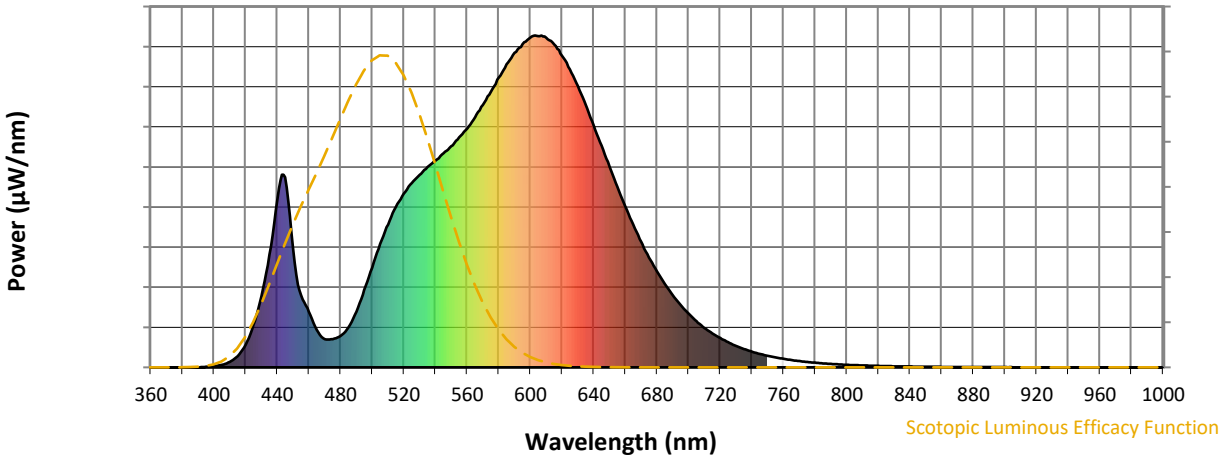


Photopic Lumens: NR

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

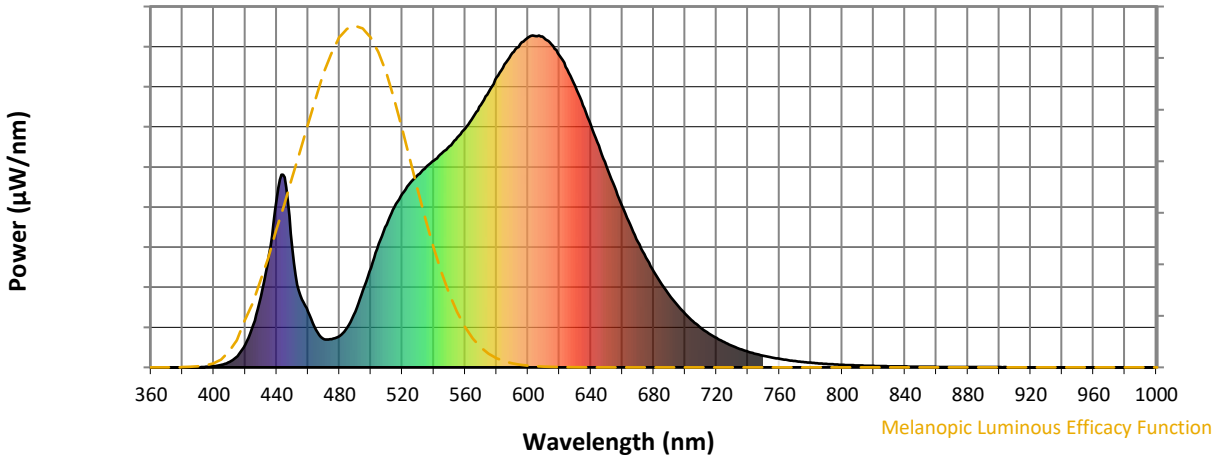


Scotopic Lumens: NR **S/P: 1.27**

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			

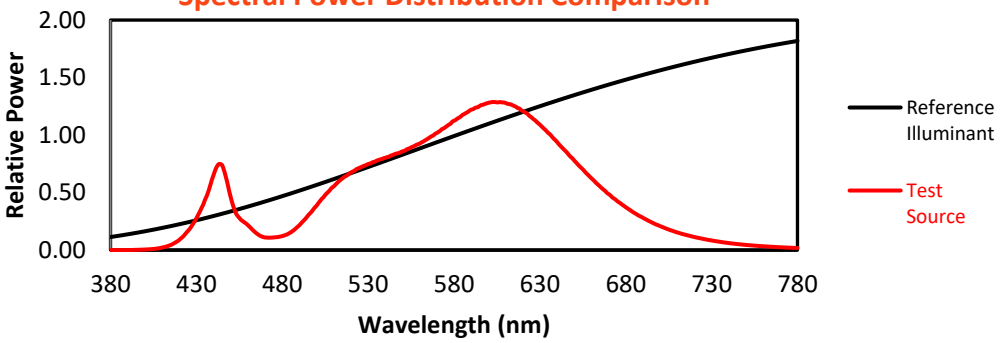
REPORT NUMBER: SP1-2408-195-9

TM-30-18

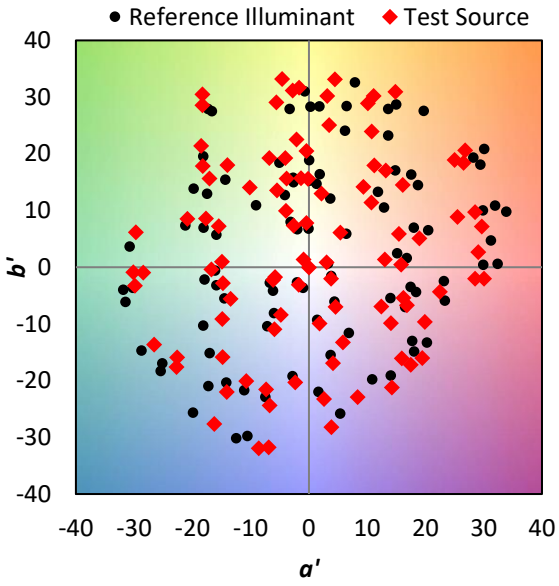
Summary

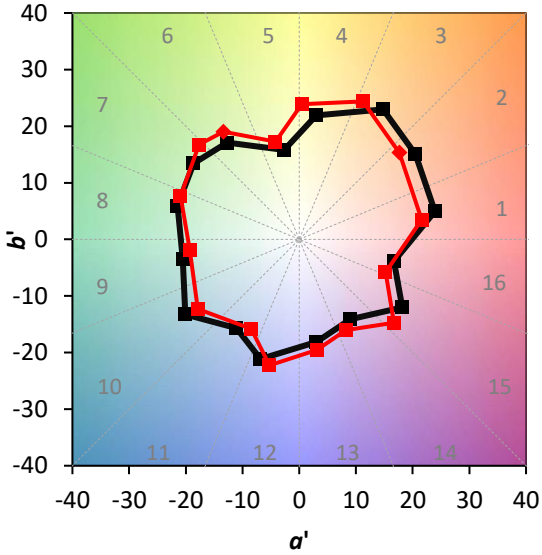
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

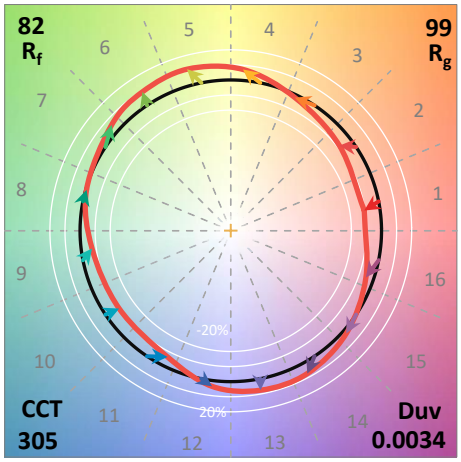
Spectral Power Distribution Comparison

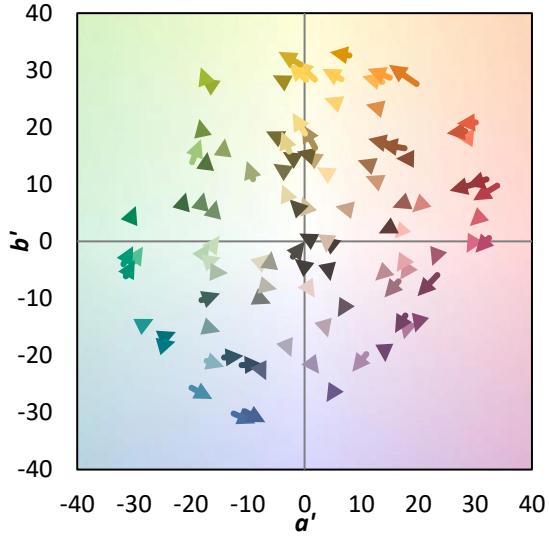


Color Vector Graphics









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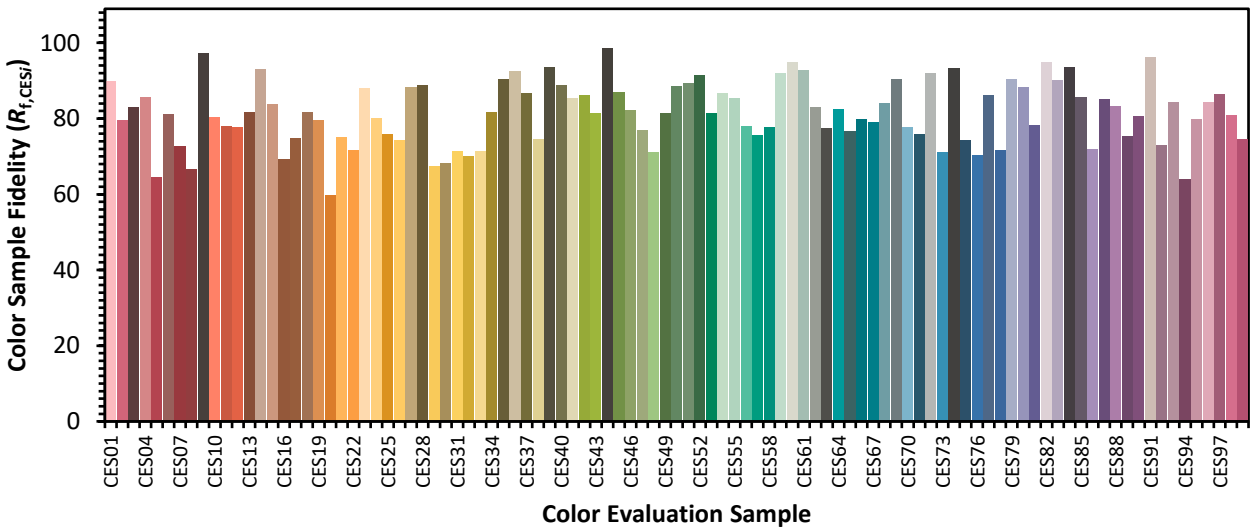
Individual Sample Fidelity Index ($R_{f,i}$)

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	



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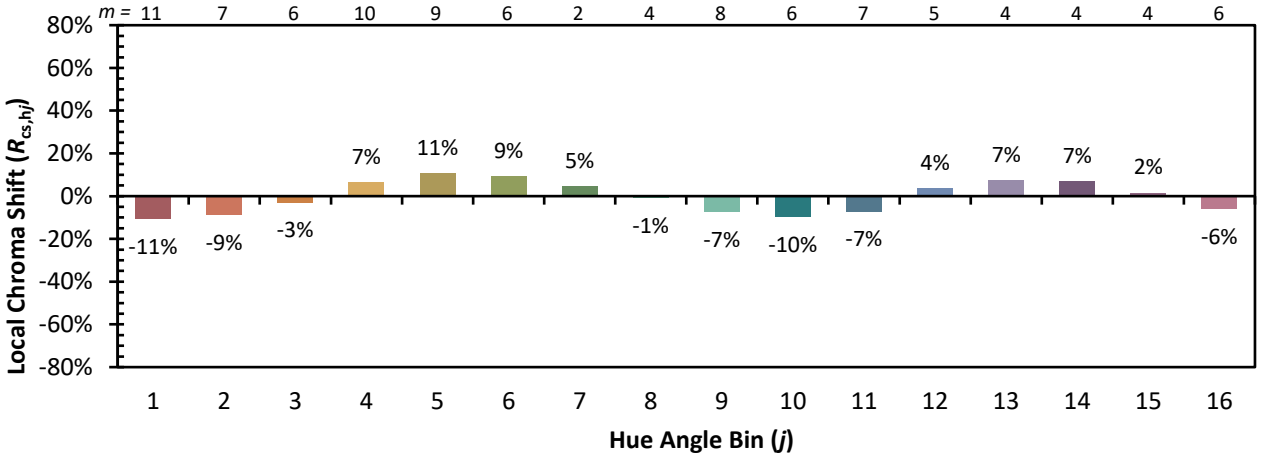
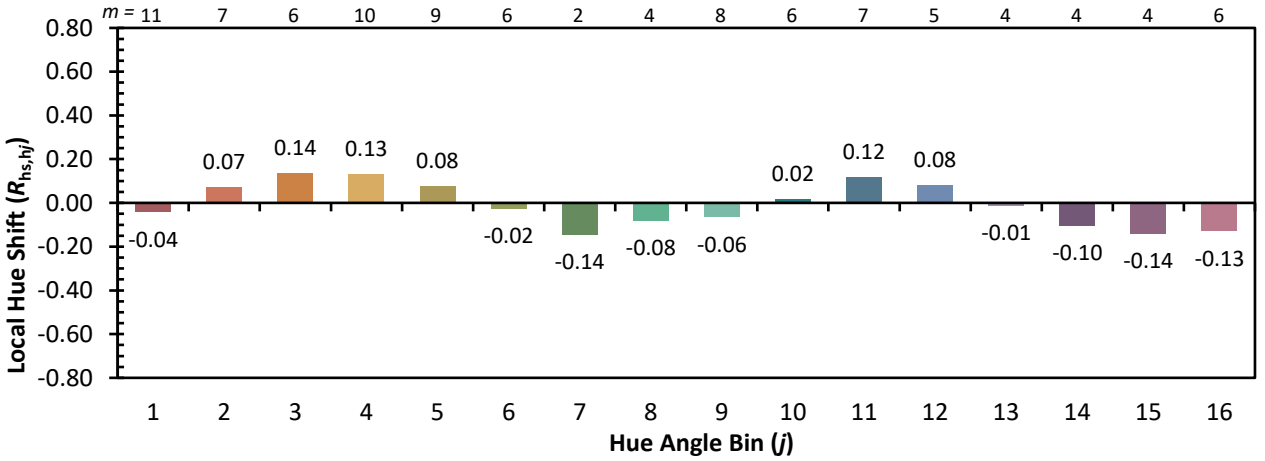
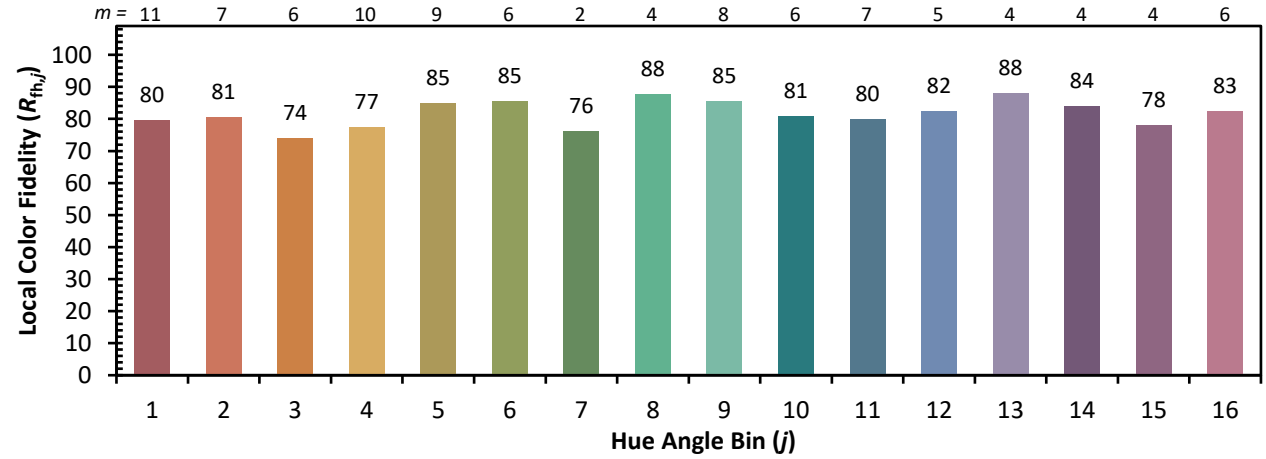
Color Rendition by Hue-Angle Bin







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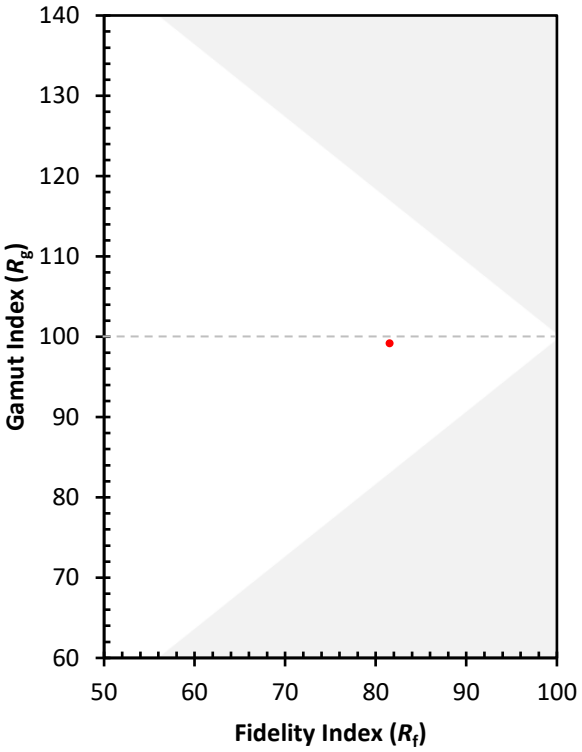
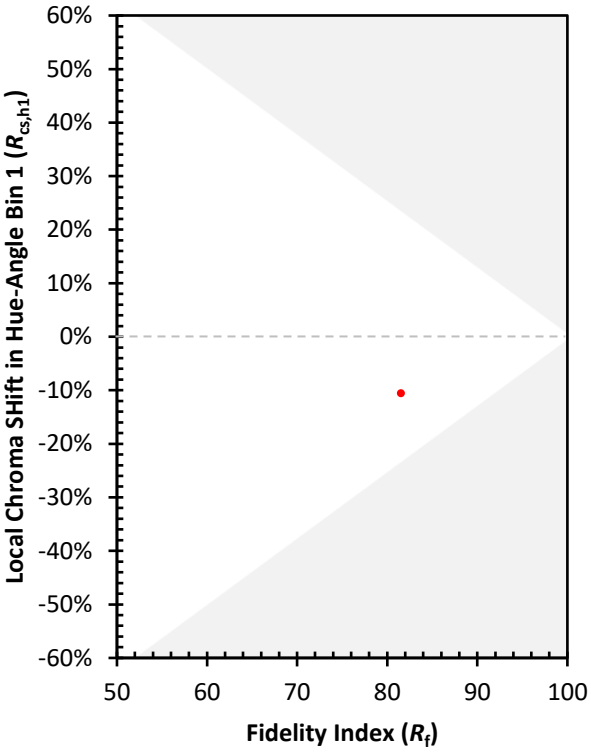
Measure Comparisons





(END OF REPORT)