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: P635510

Luminaire Tested: GWS-SA3D-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P635510
	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-SA3D-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10881.6 lumens
Efficiency:	N/A
Efficacy:	90.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B2 - U0 - G2

Input Watts (W):	120.8
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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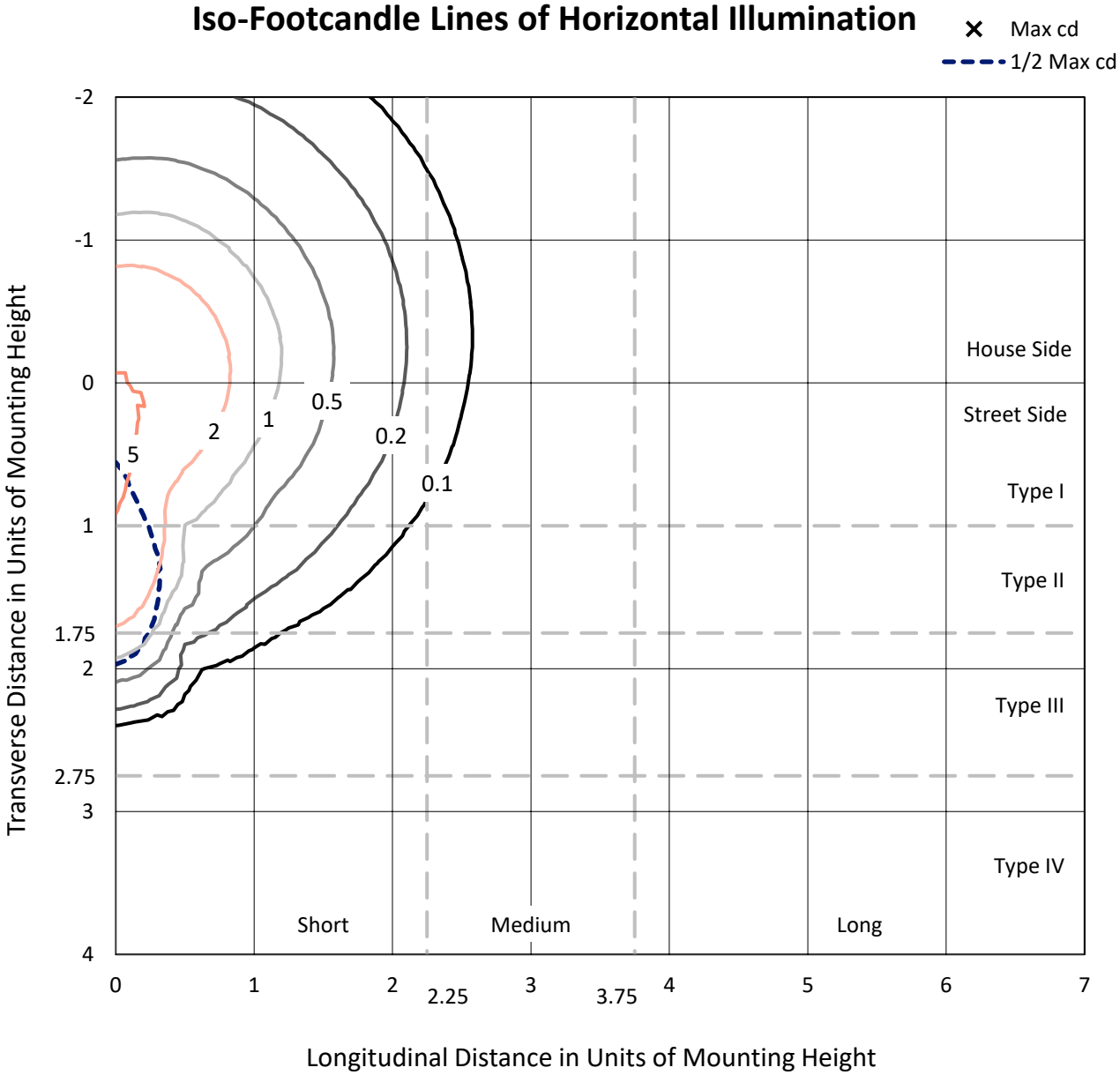
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
Type III - Short - N/A

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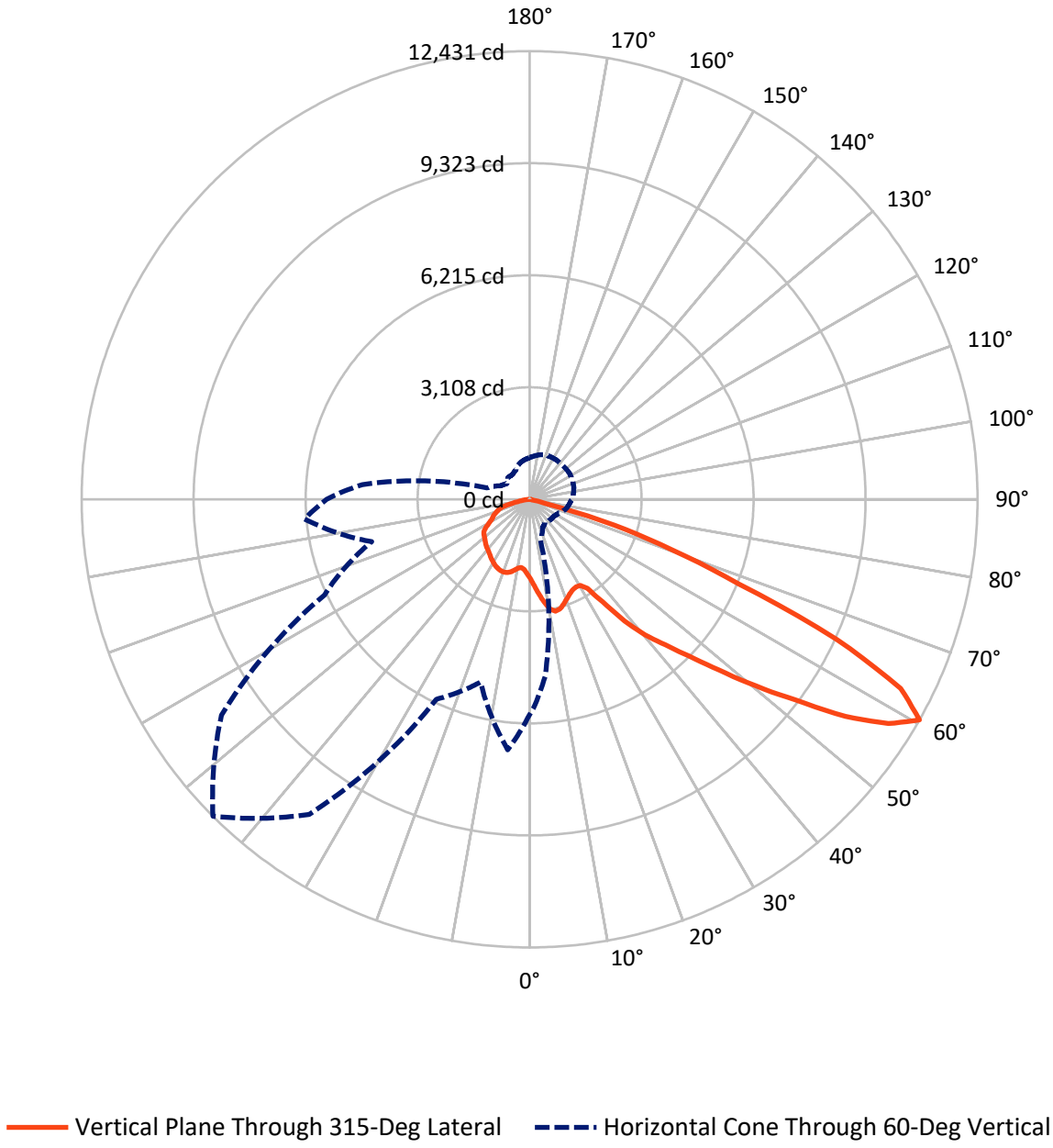
Luminous Intensity Polar Plot



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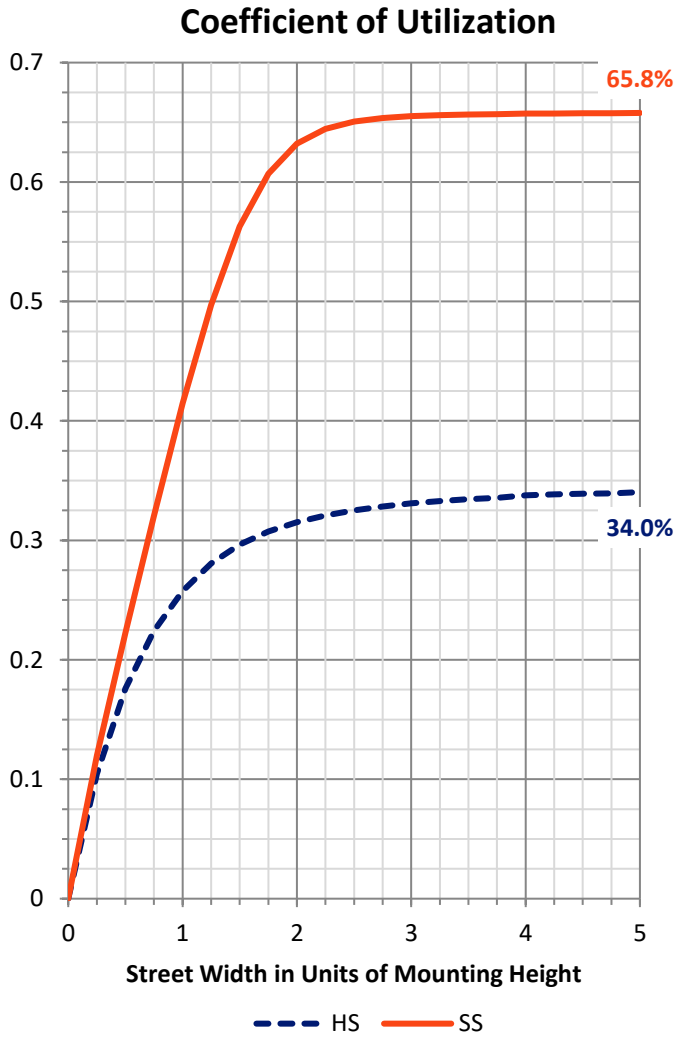
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3722.5	0.0	3722.5
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	7159.1	0.0	7159.1
	% Fixture	65.8	0.0	65.8
Total	Lumens	10881.6	0.0	10881.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	2.0
10°-20°	687.8	6.3
20°-30°	1120.1	10.3
30°-40°	1573.5	14.5
40°-50°	2153.1	19.8
50°-60°	2762.3	25.4
60°-70°	1860.1	17.1
70°-80°	465.0	4.3
80°-90°	45.3	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°	10881.6	100.0
0°-180°	10881.6	100.0



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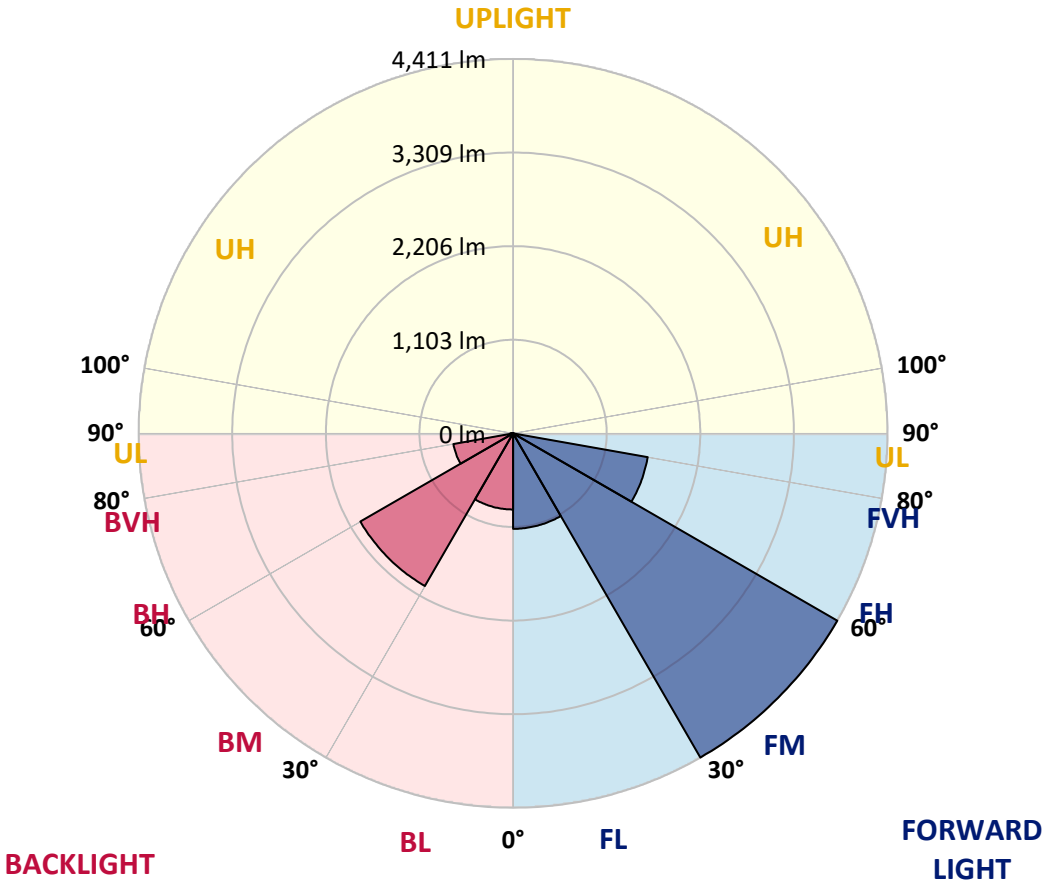
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1124.9	10.3			
FM	(30°-60°)	4411.5	40.5			
FH	(60°-80°)	1610.9	14.8			G1/1800
FVH	(80°-90°)	11.8	0.1			G1/100
BL	(0°-30°)	897.3	8.2	B2/1000		
BM	(30°-60°)	2077.5	19.1	B2/2500		
BH	(60°-80°)	714.1	6.6	B2/1000		G2/1000
BVH	(80°-90°)	33.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7
2.5°	2322.0	2317.0	2312.0	2272.9	2262.8	2234.8	2214.7	2189.7	2153.6	2133.6	2116.5
5°	2467.3	2459.3	2432.2	2352.0	2299.9	2242.8	2195.7	2143.6	2088.5	2052.4	2024.3
7.5°	2604.6	2602.6	2556.5	2424.2	2340.0	2257.8	2193.7	2117.5	2038.4	1984.3	1948.2
10°	2731.9	2716.8	2661.7	2489.3	2379.1	2284.9	2215.7	2131.6	2039.4	1966.2	1918.1
12.5°	2844.1	2825.1	2748.9	2549.5	2413.2	2296.9	2221.8	2152.6	2091.5	2030.4	1975.2
15°	2936.3	2913.2	2836.1	2605.6	2443.2	2289.9	2184.7	2130.6	2151.6	2178.7	2117.5
17.5°	3022.5	2998.4	2904.2	2646.7	2452.3	2246.8	2093.5	2070.4	2176.7	2299.9	2271.9
20°	3094.6	3067.6	2958.3	2666.7	2436.2	2164.6	1975.2	2015.3	2155.6	2302.9	2348.0
22.5°	3172.8	3150.8	3019.5	2695.8	2416.2	2051.4	1876.0	1974.2	2119.5	2248.8	2317.0
25°	3298.1	3271.0	3114.7	2746.9	2406.2	1945.2	1804.9	1934.1	2069.4	2186.7	2239.8
27.5°	3479.5	3429.3	3245.0	2836.1	2417.2	1845.0	1759.8	1885.0	2011.3	2111.5	2154.6
30°	3676.9	3616.8	3389.3	2928.3	2433.2	1783.8	1735.7	1828.9	1922.1	2022.3	2069.4
32.5°	3910.4	3857.3	3543.6	2997.4	2399.1	1755.8	1717.7	1767.8	1841.9	1922.1	1961.2
35°	4189.0	4093.8	3712.0	3053.5	2288.9	1714.7	1701.6	1700.6	1739.7	1817.9	1862.0
37.5°	4488.6	4386.4	3919.4	3113.7	2117.5	1649.5	1663.6	1621.5	1657.6	1719.7	1769.8
40°	4734.1	4626.9	4128.8	3195.8	1903.1	1547.3	1579.4	1534.3	1556.3	1620.5	1676.6
42.5°	4974.7	4860.4	4324.3	3289.0	1695.6	1447.1	1463.1	1446.1	1453.1	1520.3	1598.4
45°	5290.3	5162.1	4564.8	3355.2	1509.2	1367.9	1352.9	1323.8	1360.9	1448.1	1531.3
47.5°	5817.5	5664.1	4958.6	3398.3	1373.9	1322.8	1253.7	1236.7	1282.7	1380.0	1466.1
50°	6433.8	6301.5	5588.0	3396.3	1272.7	1284.8	1157.5	1142.4	1218.6	1316.8	1408.0
52.5°	6938.9	6804.6	6126.1	3296.1	1189.5	1203.6	1101.4	1059.3	1163.5	1254.7	1345.9
55°	7346.7	7195.4	6373.7	2877.2	1084.3	1074.3	1040.2	963.1	1094.3	1192.6	1277.7
57.5°	7127.3	6946.9	6074.0	2187.7	976.1	913.0	935.0	877.9	1000.1	1123.4	1205.6
60°	*5975.8*	*5813.5*	*4934.6*	*1164.5*	*858.8*	*762.6*	*808.7*	*817.8*	*896.9*	*1040.2*	*1124.4*
62.5°	4104.8	3986.5	3344.2	706.5	677.5	612.3	684.5	749.6	808.7	930.0	1003.1
65°	2008.3	1973.2	1672.6	453.0	474.0	495.1	567.2	646.4	733.6	839.8	917.0
67.5°	553.2	557.2	507.1	353.8	373.8	431.9	489.0	552.2	639.4	737.6	815.7
70°	243.5	247.5	255.5	272.6	310.7	363.8	422.9	488.0	568.2	650.4	725.6
72.5°	169.4	173.4	185.4	207.4	241.5	291.6	347.7	409.9	493.1	562.2	624.3
75°	104.2	107.2	118.3	137.3	160.3	198.4	253.5	310.7	383.8	447.0	502.1
77.5°	55.1	53.1	60.1	73.2	93.2	113.2	150.3	186.4	238.5	289.6	335.7
80°	30.1	29.1	33.1	40.1	46.1	62.1	87.2	111.2	141.3	170.4	195.4
82.5°	13.0	12.0	13.0	17.0	21.0	30.1	44.1	61.1	78.2	98.2	114.2
85°	0.0	0.0	0.0	1.0	5.0	8.0	15.0	22.0	32.1	44.1	54.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	9.0
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°	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7
2.5°	2106.5	2081.5	2079.5	2059.4	2061.4	2062.4	2042.4	2034.4	2041.4	2049.4	2045.4
5°	2014.3	1988.3	1977.2	1958.2	1956.2	1947.2	1939.2	1929.1	1936.1	1943.2	1947.2
7.5°	1934.1	1917.1	1910.1	1905.1	1907.1	1903.1	1887.0	1878.0	1877.0	1880.0	1884.0
10°	1908.1	1894.1	1903.1	1917.1	1927.1	1934.1	1917.1	1902.1	1888.0	1882.0	1882.0
12.5°	1964.2	1946.2	1964.2	1979.2	1999.3	2004.3	1985.3	1969.2	1964.2	1970.2	1982.2
15°	2088.5	2046.4	2045.4	2054.4	2070.4	2078.5	2060.4	2052.4	2052.4	2090.5	2120.5
17.5°	2212.7	2143.6	2114.5	2109.5	2119.5	2122.5	2107.5	2100.5	2118.5	2192.7	2248.8
20°	2299.9	2215.7	2152.6	2140.6	2143.6	2144.6	2132.6	2127.6	2153.6	2243.8	2290.9
22.5°	2290.9	2228.8	2151.6	2136.6	2141.6	2139.6	2128.6	2126.6	2147.6	2225.8	2247.8
25°	2228.8	2180.7	2115.5	2105.5	2113.5	2112.5	2101.5	2096.5	2105.5	2157.6	2159.6
27.5°	2157.6	2115.5	2059.4	2056.4	2069.4	2076.4	2057.4	2042.4	2039.4	2074.4	2066.4
30°	2072.4	2041.4	1996.3	1998.3	2022.3	2026.3	2003.3	1981.2	1975.2	1994.3	1983.2
32.5°	1971.2	1961.2	1937.2	1942.2	1965.2	1973.2	1949.2	1926.1	1919.1	1925.1	1902.1
35°	1885.0	1881.0	1883.0	1892.1	1912.1	1918.1	1898.1	1880.0	1870.0	1849.0	1818.9
37.5°	1795.8	1806.9	1835.9	1853.0	1864.0	1862.0	1851.0	1837.9	1821.9	1782.8	1745.7
40°	1712.7	1740.7	1792.8	1811.9	1815.9	1816.9	1808.9	1797.9	1777.8	1725.7	1683.6
42.5°	1648.5	1679.6	1748.7	1777.8	1779.8	1781.8	1773.8	1764.8	1736.7	1667.6	1626.5
45°	1581.4	1622.5	1703.7	1738.7	1736.7	1735.7	1728.7	1724.7	1691.6	1611.5	1566.4
47.5°	1524.3	1572.4	1659.6	1689.6	1688.6	1687.6	1682.6	1682.6	1649.5	1562.3	1511.2
50°	1468.1	1523.3	1614.5	1639.5	1641.5	1639.5	1637.5	1640.5	1601.4	1508.2	1458.1
52.5°	1407.0	1469.1	1564.4	1587.4	1599.4	1604.4	1604.4	1597.4	1551.3	1454.1	1399.0
55°	1339.9	1399.0	1509.2	1540.3	1550.3	1559.3	1559.3	1545.3	1502.2	1404.0	1344.9
57.5°	1256.7	1308.8	1396.0	1427.1	1451.1	1457.1	1457.1	1434.1	1399.0	1304.8	1256.7
60°	*1166.5*	*1211.6*	*1270.7*	*1303.8*	*1321.8*	*1309.8*	*1318.8*	*1312.8*	*1284.8*	*1197.6*	*1157.5*
62.5°	1046.2	1092.3	1157.5	1191.6	1199.6	1187.5	1199.6	1198.6	1160.5	1082.3	1034.2
65°	960.1	1005.2	1069.3	1113.4	1126.4	1123.4	1131.4	1119.4	1072.3	998.1	952.0
67.5°	857.8	905.9	980.1	1029.2	1056.3	1059.3	1070.3	1045.2	997.1	916.0	857.8
70°	760.6	801.7	858.8	904.9	943.0	962.1	964.1	928.0	867.9	800.7	758.6
72.5°	658.4	700.5	769.6	819.8	867.9	889.9	889.9	845.8	780.7	706.5	661.4
75°	534.1	573.2	636.4	690.5	745.6	773.7	772.7	734.6	662.4	592.3	545.2
77.5°	361.8	390.8	430.9	472.0	480.0	502.1	513.1	465.0	424.9	386.8	344.7
80°	210.5	228.5	250.5	273.6	278.6	285.6	267.6	249.5	228.5	203.4	184.4
82.5°	123.3	135.3	146.3	164.4	167.4	169.4	153.3	145.3	128.3	113.2	101.2
85°	60.1	64.1	74.2	83.2	79.2	77.2	70.2	62.1	55.1	49.1	43.1
87.5°	12.0	12.0	18.0	17.0	14.0	12.0	7.0	9.0	2.0	2.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7
2.5°	2058.4	2075.4	2096.5	2124.6	2156.6	2190.7	2223.8	2248.8	2273.9	2311.0	2304.9
5°	1953.2	1982.2	2015.3	2058.4	2110.5	2169.6	2235.8	2301.9	2373.1	2433.2	2459.3
7.5°	1892.1	1924.1	1963.2	2019.3	2086.5	2158.6	2251.8	2359.1	2474.3	2553.5	2602.6
10°	1892.1	1933.1	1984.3	2038.4	2097.5	2171.7	2286.9	2421.2	2569.5	2673.7	2730.9
12.5°	2001.3	2042.4	2053.4	2051.4	2084.5	2166.6	2315.0	2486.3	2663.7	2773.9	2844.1
15°	2171.7	2185.7	2102.5	2026.3	2031.4	2130.6	2328.0	2538.4	2744.9	2877.2	2953.3
17.5°	2285.9	2248.8	2100.5	1967.2	1939.2	2069.4	2328.0	2588.5	2831.1	2980.4	3051.5
20°	2294.9	2202.7	2049.4	1910.1	1837.9	1988.3	2312.0	2626.6	2914.2	3079.6	3155.8
22.5°	2215.7	2124.6	1995.3	1861.0	1754.8	1890.1	2285.9	2655.7	2985.4	3172.8	3267.0
25°	2125.6	2049.4	1940.2	1810.9	1697.6	1790.8	2261.8	2704.8	3084.6	3299.1	3394.3
27.5°	2037.4	1973.2	1874.0	1768.8	1665.6	1704.7	2246.8	2777.0	3202.9	3478.5	3560.6
30°	1951.2	1893.1	1802.9	1728.7	1648.5	1648.5	2233.8	2860.1	3359.2	3679.9	3762.1
32.5°	1864.0	1808.9	1735.7	1689.6	1638.5	1626.5	2197.7	2938.3	3520.5	3900.4	3984.5
35°	1782.8	1727.7	1671.6	1652.5	1633.5	1609.4	2108.5	2999.4	3677.9	4157.9	4230.1
37.5°	1706.7	1653.5	1611.5	1606.4	1608.4	1563.4	1968.2	3050.5	3874.3	4421.5	4459.6
40°	1640.5	1581.4	1548.3	1547.3	1557.3	1489.2	1790.8	3123.7	4098.8	4645.0	4628.9
42.5°	1581.4	1519.3	1479.2	1488.2	1482.2	1415.0	1617.5	3190.8	4294.2	4854.4	4822.3
45°	1523.3	1463.1	1407.0	1420.0	1413.0	1368.9	1470.2	3239.9	4510.7	5105.9	5110.0
47.5°	1467.1	1408.0	1351.9	1335.9	1334.9	1354.9	1356.9	3256.0	4863.4	5510.8	5419.6
50°	1415.0	1355.9	1297.8	1243.7	1264.7	1326.8	1272.7	3244.0	5391.6	5957.8	5703.2
52.5°	1360.9	1304.8	1240.7	1143.5	1198.6	1259.7	1197.6	3200.9	5714.2	6352.6	6200.3
55°	1298.8	1245.7	1158.5	1040.2	1107.4	1120.4	1120.4	2784.0	5851.5	6743.5	6837.7
57.5°	1215.6	1145.5	1007.2	912.0	972.1	922.0	1038.2	1948.2	5625.1	6620.2	6986.0
60°	*1121.4*	*1046.2*	*899.9*	*831.8*	*849.8*	*761.6*	*884.9*	*1221.6*	*4662.0*	*5633.1*	*6266.4*
62.5°	997.1	928.0	806.7	753.6	716.5	621.3	712.5	772.7	3195.8	4183.0	4614.9
65°	914.0	837.8	729.6	659.4	583.2	500.1	473.0	507.1	1718.7	2341.0	2632.6
67.5°	815.7	740.6	638.4	550.2	489.0	428.9	381.8	369.8	589.3	779.7	843.8
70°	722.5	650.4	565.2	483.0	421.9	362.8	316.7	283.6	272.6	270.6	266.6
72.5°	627.3	560.2	489.0	412.9	345.7	291.6	250.5	212.5	196.4	191.4	186.4
75°	514.1	461.0	389.8	307.7	253.5	203.4	171.4	146.3	132.3	127.3	121.3
77.5°	330.7	306.7	244.5	198.4	153.3	121.3	104.2	88.2	79.2	77.2	72.2
80°	176.4	164.4	135.3	114.2	91.2	74.2	65.1	56.1	51.1	49.1	47.1
82.5°	98.2	89.2	75.2	66.1	53.1	45.1	40.1	36.1	33.1	32.1	31.1
85°	44.1	38.1	30.1	28.1	25.1	23.0	22.0	20.0	19.0	18.0	17.0
87.5°	2.0	4.0	5.0	4.0	4.0	6.0	7.0	7.0	6.0	6.0	5.0
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: P635510
CATALOG NUMBER: GWS-SA3D-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7	2194.7
2.5°	2342.0	2372.1	2375.1	2385.1	2372.1	2369.1	2348.0	2336.0	2325.0	2322.0
5°	2524.4	2584.5	2608.6	2625.6	2609.6	2601.6	2555.5	2507.4	2480.3	2467.3
7.5°	2711.8	2802.0	2849.1	2870.2	2872.2	2836.1	2756.9	2666.7	2621.6	2604.6
10°	2879.2	2990.4	3052.5	3092.6	3078.6	3034.5	2926.3	2804.0	2746.9	2731.9
12.5°	3003.4	3109.7	3157.8	3183.8	3182.8	3158.8	3056.5	2924.3	2859.1	2844.1
15°	3083.6	3146.7	3149.7	3155.8	3172.8	3204.9	3151.8	3029.5	2957.3	2936.3
17.5°	3146.7	3121.7	3074.6	3058.6	3096.6	3185.8	3217.9	3118.7	3040.5	3022.5
20°	3186.8	3060.6	2977.4	2946.3	2990.4	3135.7	3258.0	3198.9	3117.7	3094.6
22.5°	3217.9	3003.4	2869.1	2848.1	2894.2	3081.6	3299.1	3294.1	3204.9	3172.8
25°	3267.0	2965.4	2793.0	2778.0	2821.0	3055.5	3354.2	3423.3	3344.2	3298.1
27.5°	3344.2	2961.3	2753.9	2748.9	2808.0	3078.6	3433.4	3612.7	3513.5	3479.5
30°	3451.4	2999.4	2762.9	2772.9	2845.1	3161.8	3556.6	3829.2	3730.0	3676.9
32.5°	3605.7	3101.6	2900.2	2943.3	2996.4	3295.1	3737.0	4063.7	3988.5	3910.4
35°	3809.2	3382.2	3306.1	3489.5	3439.4	3586.7	3954.5	4348.3	4257.1	4189.0
37.5°	4080.7	3957.5	4027.6	4280.2	4158.9	4137.9	4220.0	4606.9	4556.8	4488.6
40°	4461.6	4486.6	4615.9	4947.6	4772.2	4636.9	4545.7	4801.3	4818.3	4734.1
42.5°	4714.1	4829.3	5141.0	5517.8	5276.3	4952.6	4818.3	5049.8	5050.8	4974.7
45°	4808.3	5110.0	5761.3	6195.3	5791.4	5133.0	4968.6	5387.5	5377.5	5290.3
47.5°	4774.2	5346.5	6405.7	7069.1	6452.8	5261.3	4947.6	5868.6	5949.7	5817.5
50°	4703.1	5584.0	7158.3	8139.4	7264.6	5397.6	4915.5	6401.7	6536.0	6433.8
52.5°	4775.2	5848.5	8048.2	9245.8	8282.7	5615.0	5132.0	7086.2	7062.1	6938.9
55°	5003.7	6161.2	9129.6	10635.8	9401.1	5982.8	5688.2	7738.6	7494.1	7346.7
57.5°	4992.7	6384.7	10077.6	11735.1	10374.2	6284.5	5881.6	7807.7	7313.7	7127.3
60°	4531.7	6282.5	10438.4	12430.6	10667.9	6118.1	5245.2	6973.9	6171.2	5975.8
62.5°	3382.2	5574.9	9738.9	11559.8	9837.1	5284.3	3944.5	5005.7	4434.5	4104.8
65°	2163.6	4361.3	8187.5	9365.1	8108.4	4041.7	2349.0	2683.8	2102.5	2008.3
67.5°	921.0	3078.6	6364.6	6259.4	6066.0	2618.6	906.9	755.6	563.2	553.2
70°	304.7	2094.5	3923.4	4174.9	3622.8	1803.9	299.6	253.5	252.5	243.5
72.5°	199.4	1124.4	2208.7	2459.3	2331.0	1038.2	181.4	169.4	173.4	169.4
75°	119.3	244.5	371.8	483.0	371.8	174.4	109.2	107.2	109.2	104.2
77.5°	70.2	68.1	66.1	66.1	65.1	60.1	55.1	53.1	54.1	55.1
80°	45.1	43.1	41.1	40.1	35.1	33.1	31.1	29.1	29.1	30.1
82.5°	29.1	27.1	25.1	22.0	18.0	15.0	14.0	12.0	12.0	13.0
85°	15.0	12.0	9.0	7.0	4.0	2.0	0.0	0.0	0.0	0.0
87.5°	3.0	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.

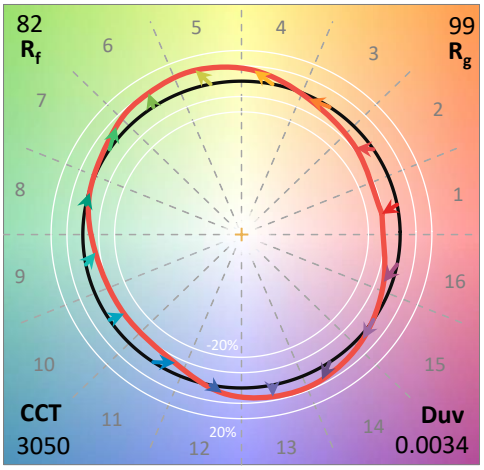
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

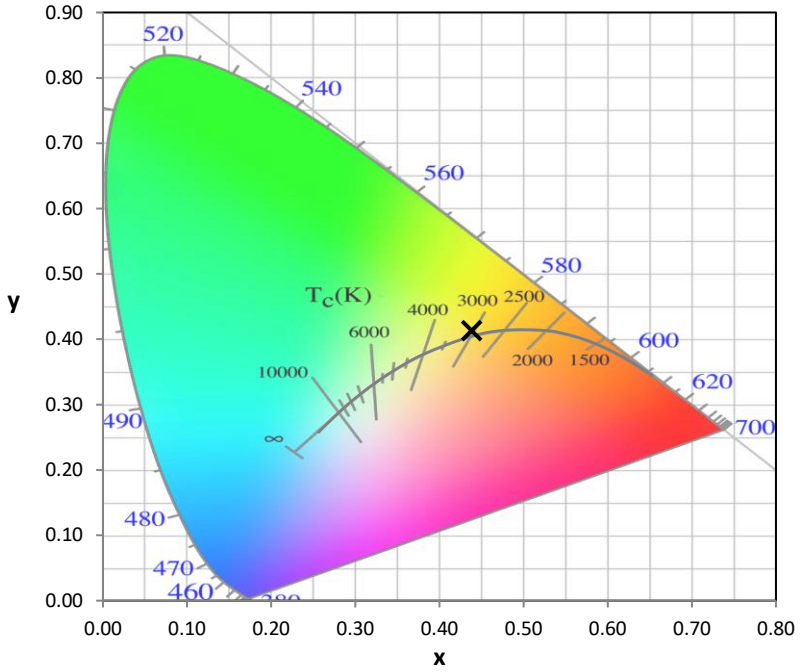
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

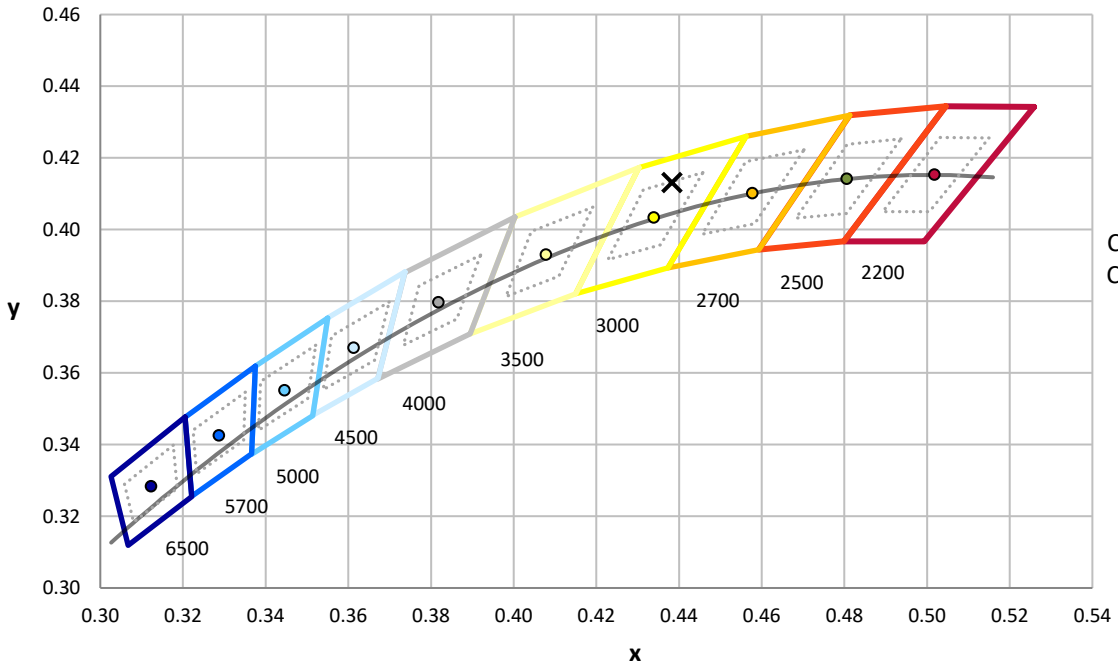
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

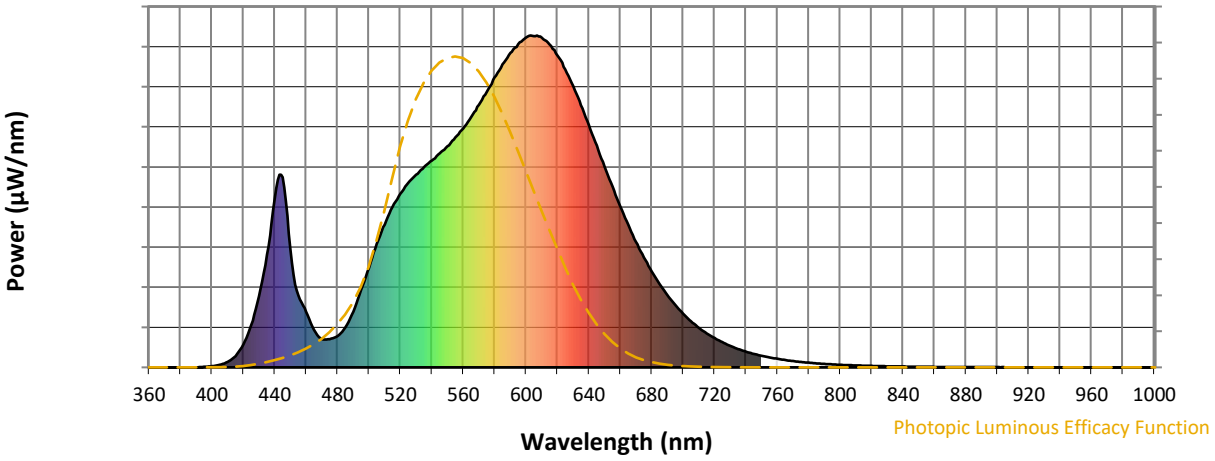


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

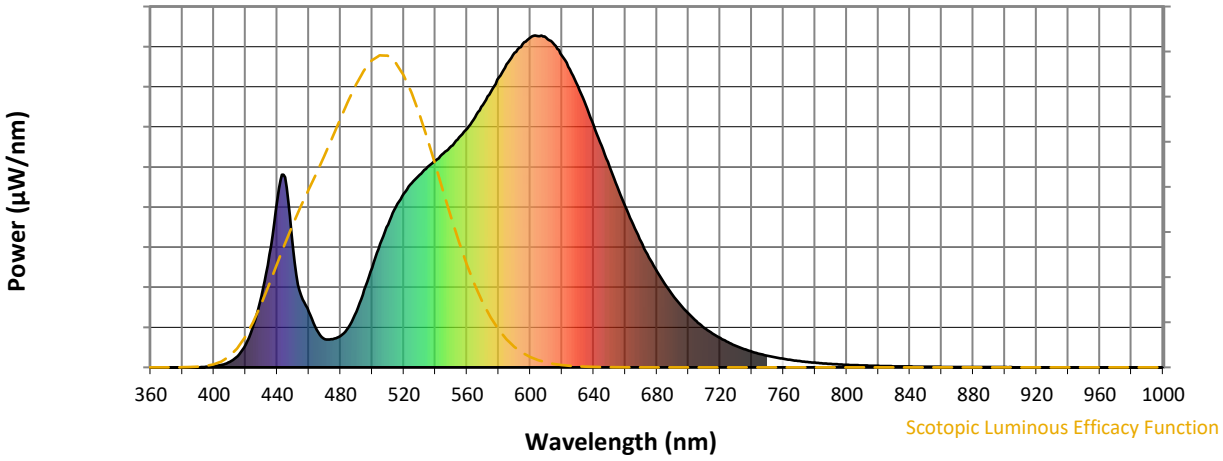


Photopic Lumens: NR

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

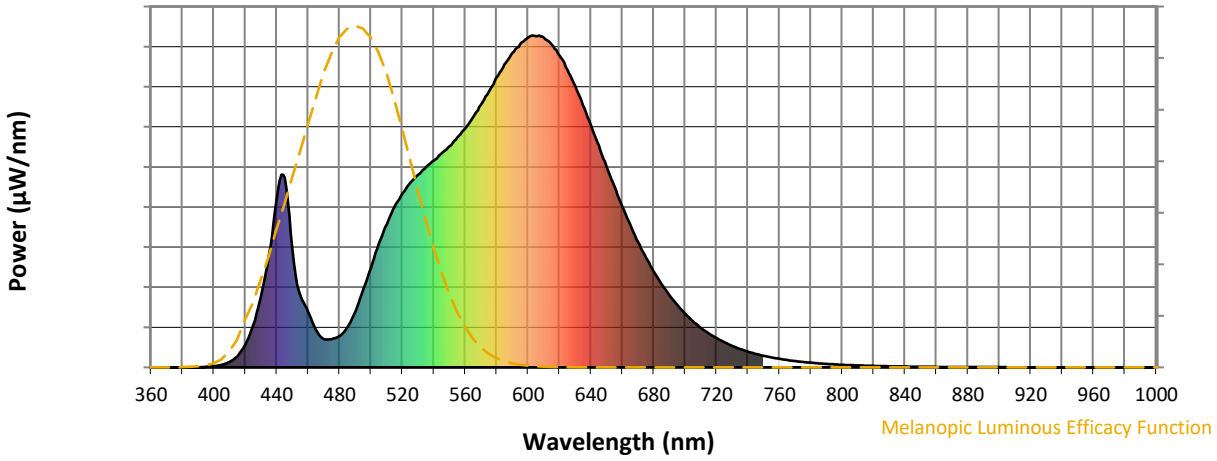


Scotopic Lumens: NR **S/P: 1.27**

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			

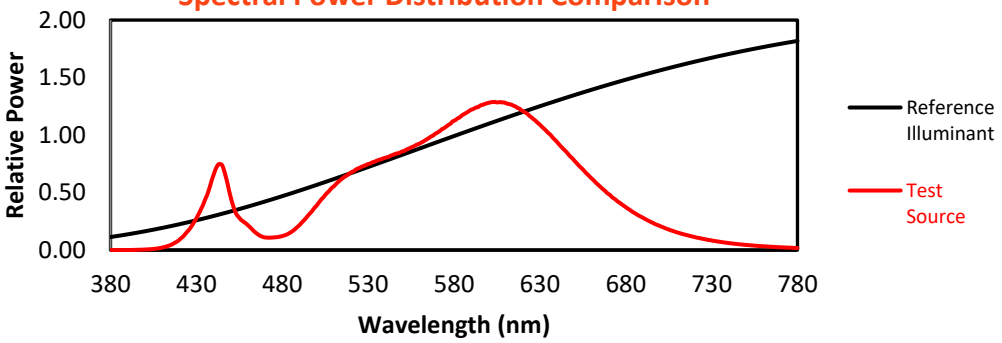
REPORT NUMBER: SP1-2408-195-9

TM-30-18

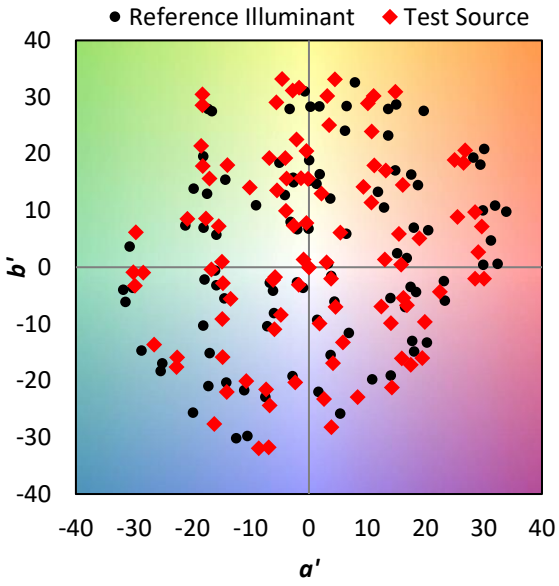
Summary

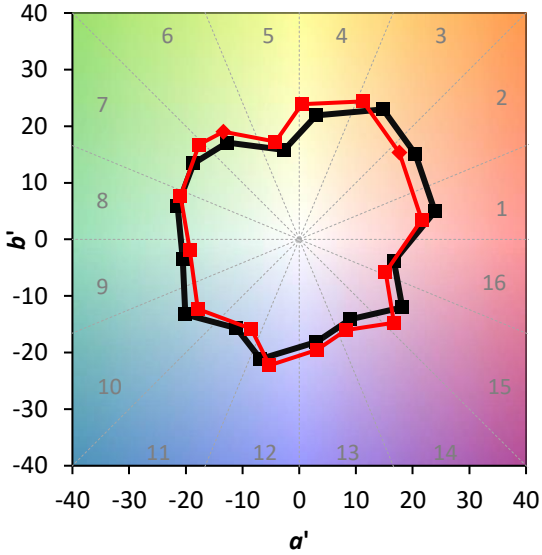
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

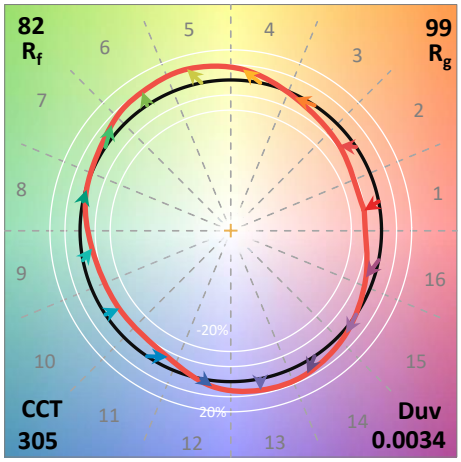
Spectral Power Distribution Comparison

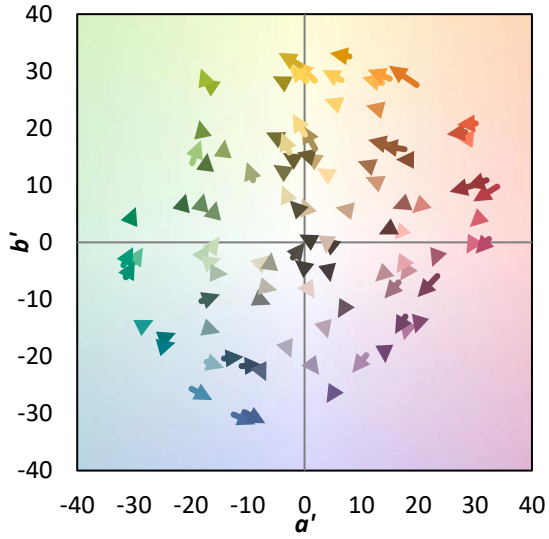


Color Vector Graphics









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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
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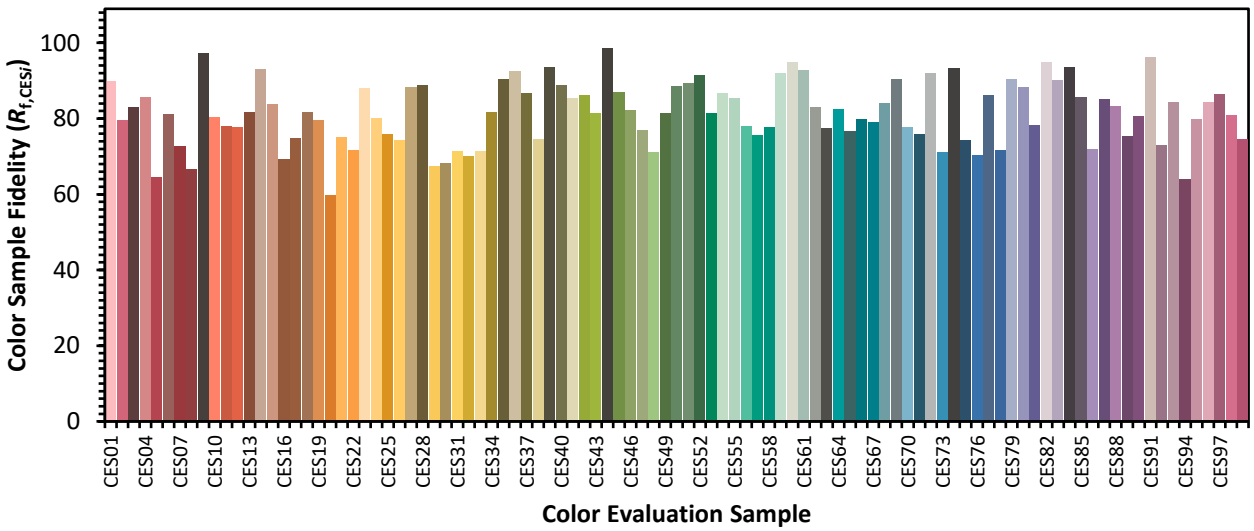

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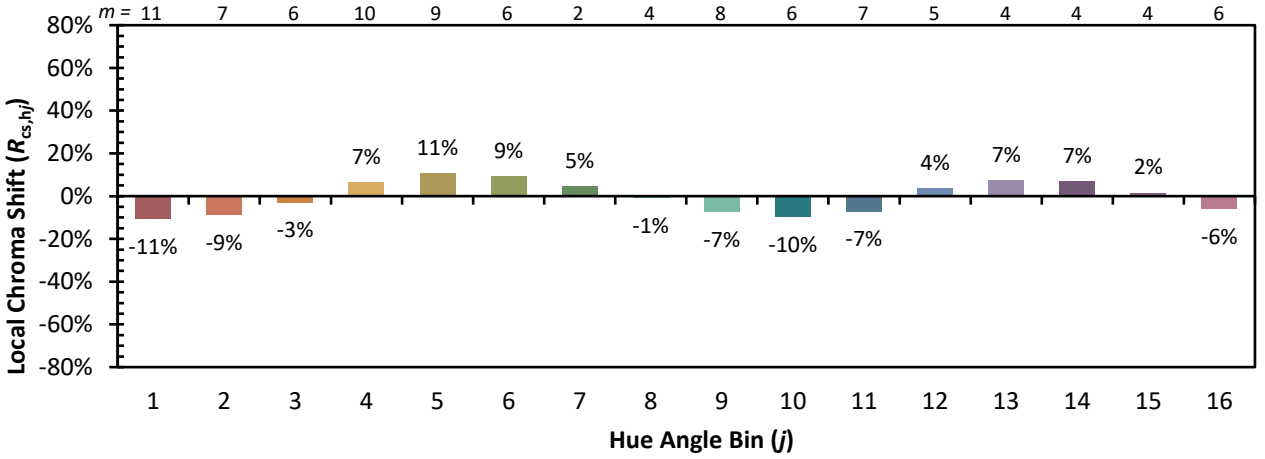
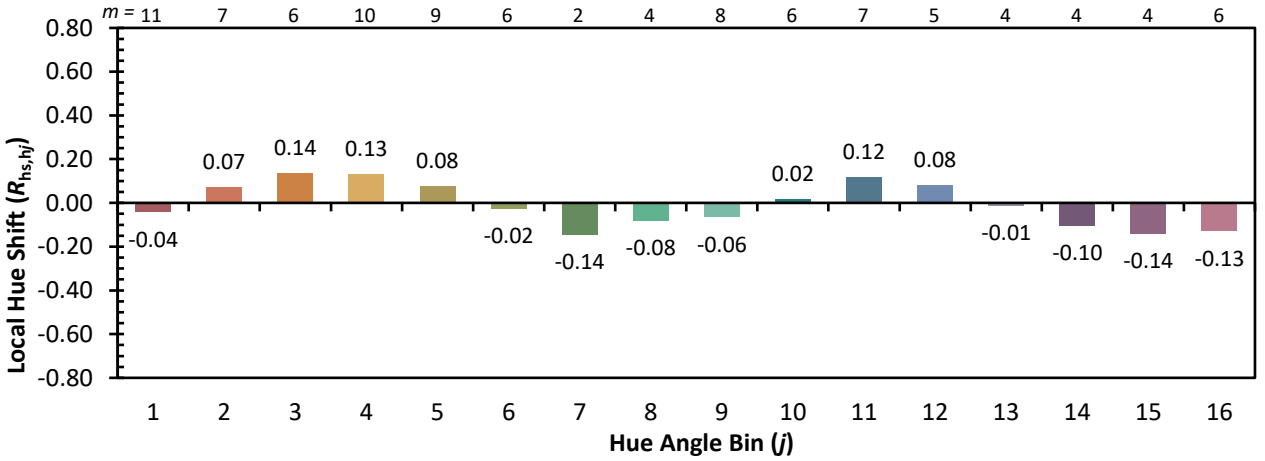
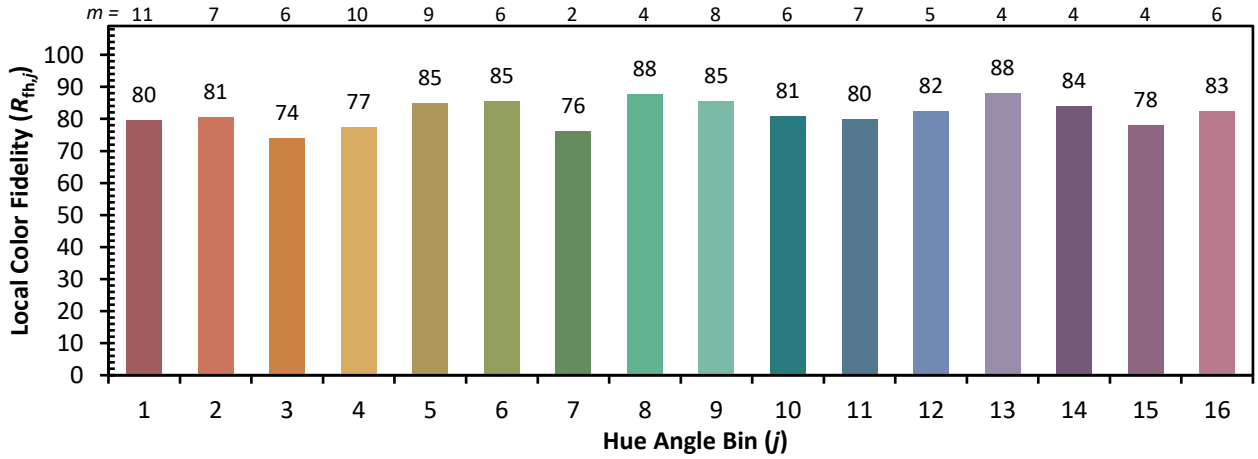
Color Rendition by Hue-Angle Bin







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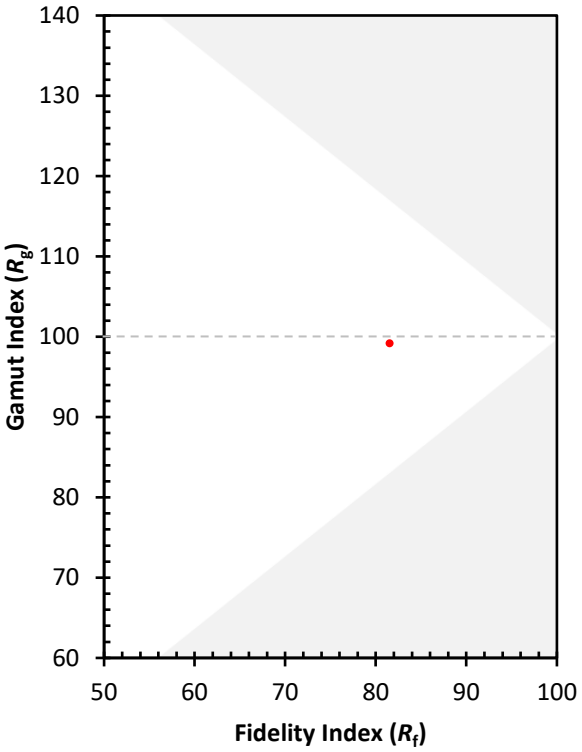
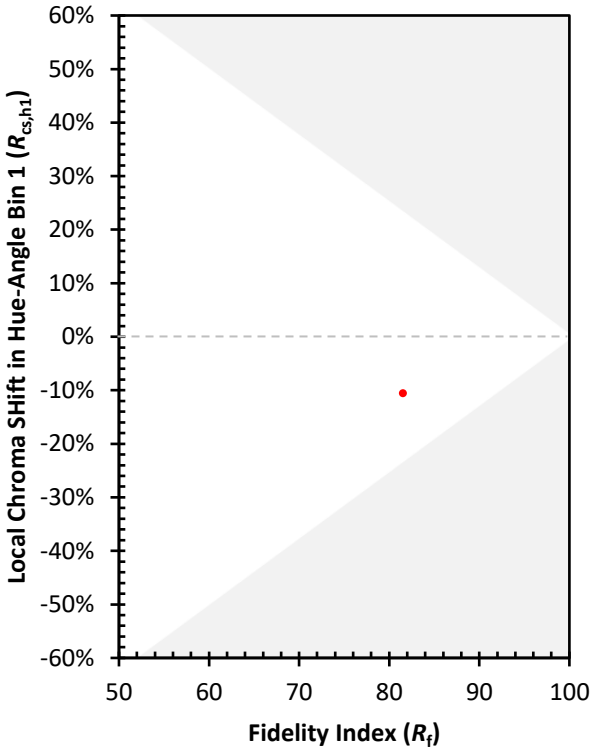
Measure Comparisons





(END OF REPORT)