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: P636506

Luminaire Tested: GWS-SA3F-830-U-SLR-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:	P636506
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-SLR-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18390.8 lumens
Efficiency:	N/A
Efficacy:	100.4 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	183.2
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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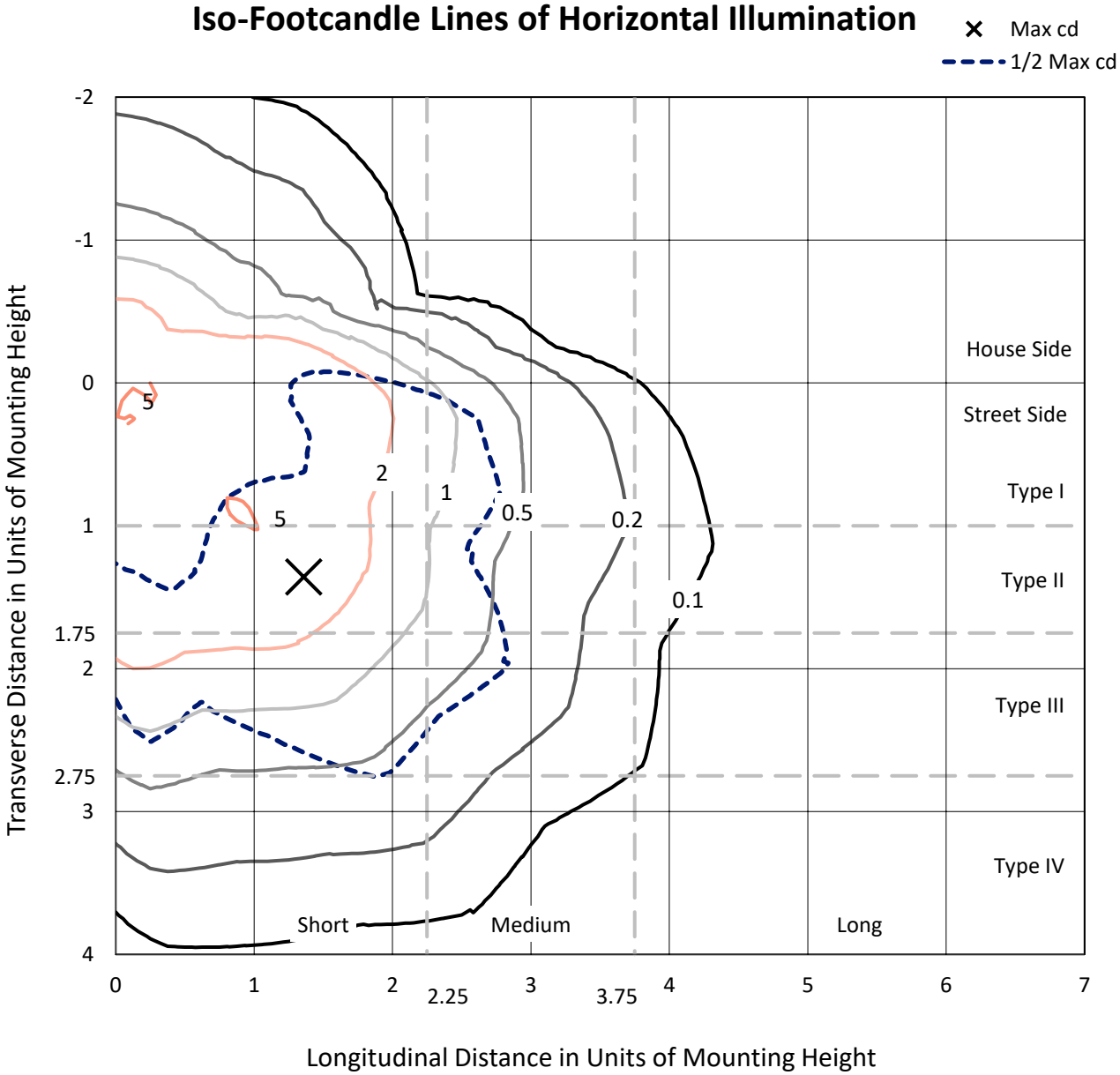
Iso-Footcandle Lines of Horizontal Illumination



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

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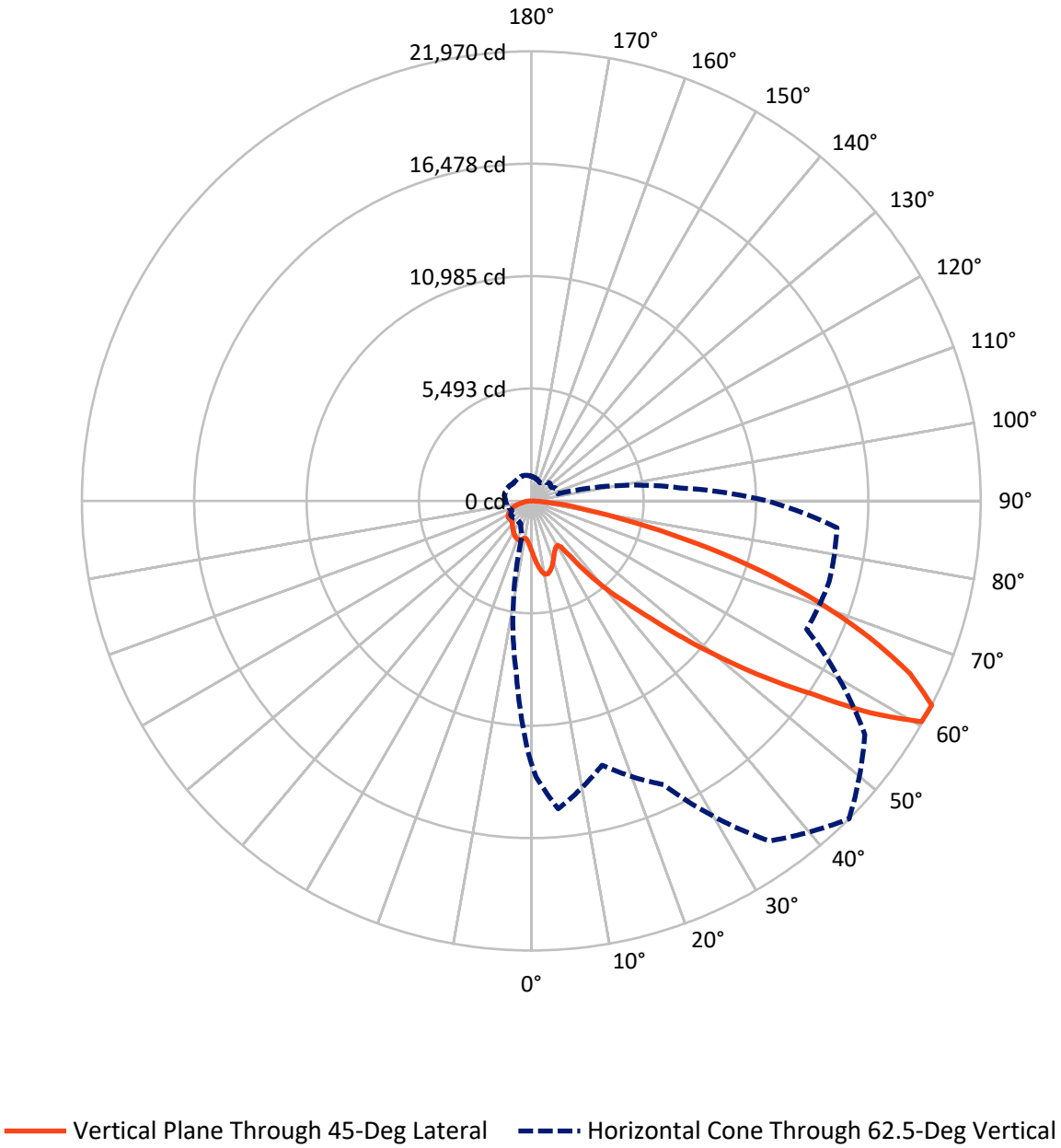
Luminous Intensity Polar Plot



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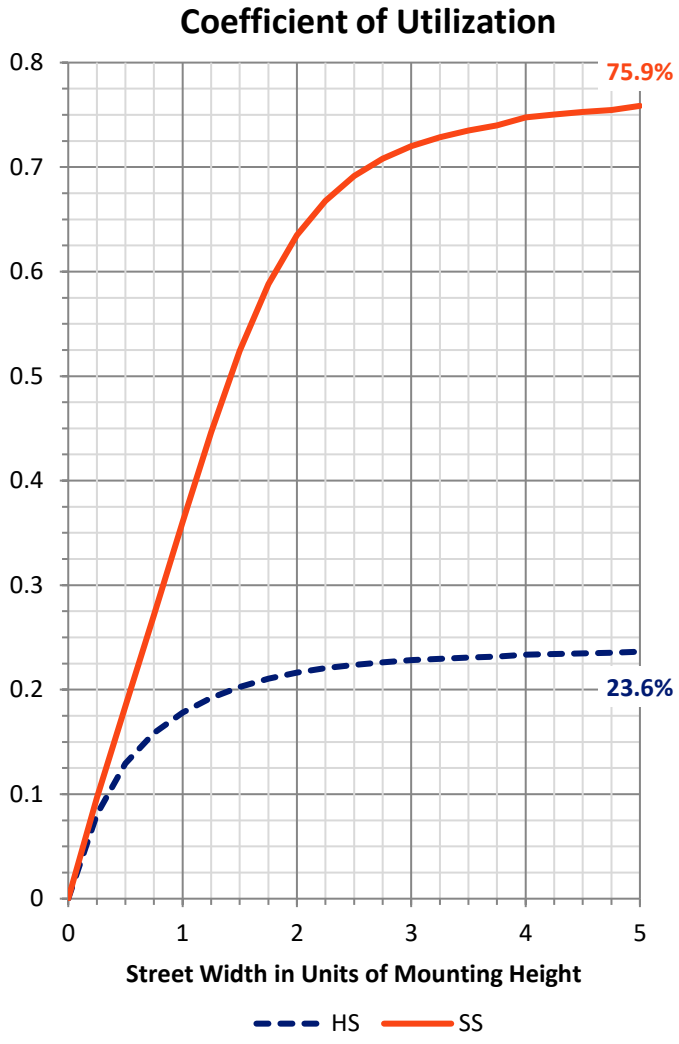
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4388.4	0.0	4388.4
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	14002.4	0.0	14002.4
	% Fixture	76.1	0.0	76.1
Total	Lumens	18390.8	0.0	18390.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.4	1.3
10°-20°	747.3	4.1
20°-30°	1160.7	6.3
30°-40°	1575.9	8.6
40°-50°	2497.7	13.6
50°-60°	4405.9	24.0
60°-70°	4902.2	26.7
70°-80°	2486.2	13.5
80°-90°	376.5	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18390.8	100.0
0°-180°	18390.8	100.0



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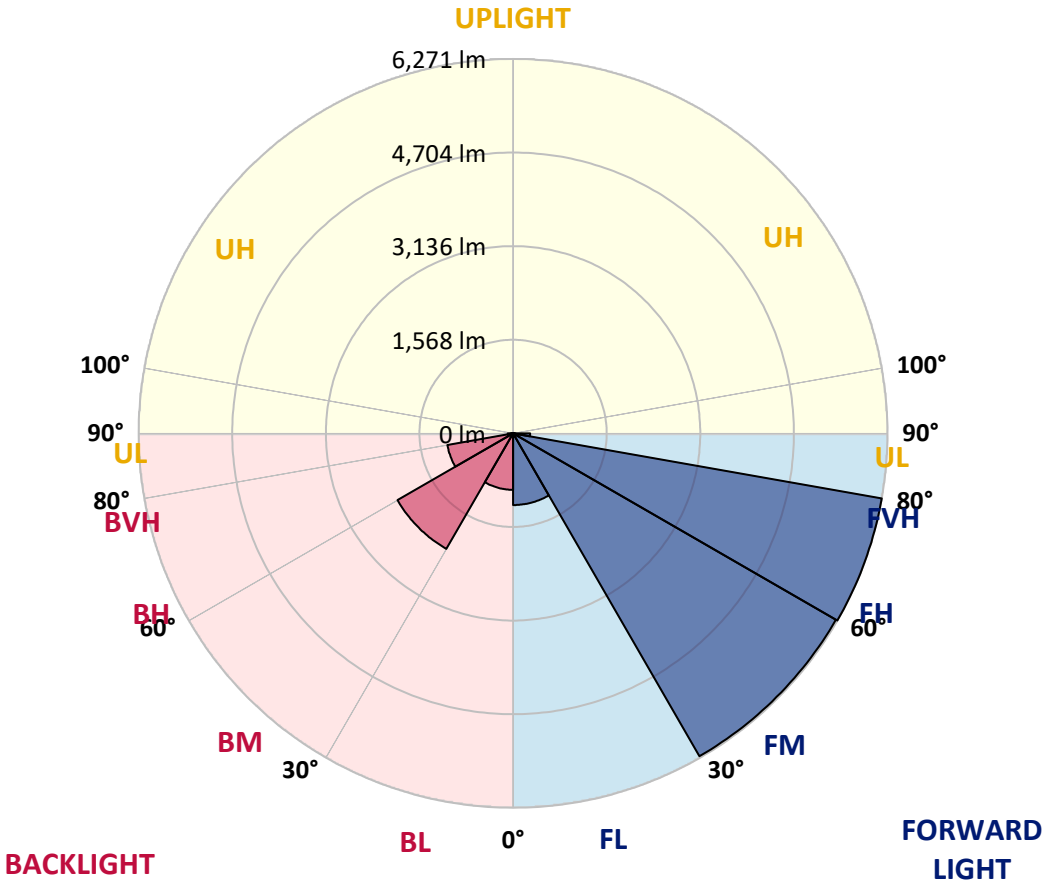
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1200.8	6.5			
FM	(30°-60°)	6244.5	34.0			
FH	(60°-80°)	6271.4	34.1			G3/7500
FVH	(80°-90°)	285.7	1.6			G3/500
BL	(0°-30°)	945.6	5.1	B2/1000		
BM	(30°-60°)	2235.0	12.2	B2/2500		
BH	(60°-80°)	1117.0	6.1	B3/2500		G3/2500
BVH	(80°-90°)	90.7	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°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	*2440.8*	2440.8	2440.8	2440.8	2440.8
2.5°	2623.2	2621.8	2648.3	2688.7	2726.3	2743.0	*2770.8*	2768.0	2745.8	2716.5	2706.8
5°	2829.3	2834.9	2880.8	2969.9	3068.8	3110.6	*3128.7*	3121.7	3081.3	3029.8	2939.3
7.5°	3015.9	3025.6	3096.6	3230.3	3352.8	3408.5	*3453.1*	3444.7	3386.3	3290.2	3156.5
10°	3152.3	3163.5	3248.4	3405.8	3542.2	3590.9	*3648.0*	3650.8	3599.3	3469.8	3333.3
12.5°	3288.8	3299.9	3379.3	3522.7	3611.8	3613.2	*3646.6*	3664.7	3667.5	3607.6	3471.2
15°	3430.8	3440.6	3513.0	3593.7	3589.5	3511.6	*3511.6*	3546.4	3623.0	3666.1	3571.4
17.5°	3552.0	3564.5	3620.2	3593.7	3469.8	3329.2	*3312.5*	3357.0	3490.7	3656.4	3646.6
20°	3652.2	3661.9	3692.6	3517.1	3291.6	3107.8	*3075.8*	3127.3	3308.3	3596.5	3703.7
22.5°	3748.3	3753.8	3737.1	3416.9	3099.4	2889.2	*2850.2*	2904.5	3099.4	3490.7	3752.5
25°	3862.5	3856.9	3777.5	3312.5	2924.0	2716.5	*2676.1*	2737.4	2940.7	3350.1	3805.4
27.5°	3994.7	3973.8	3812.3	3199.7	2788.9	2588.4	*2560.6*	2626.0	2815.4	3220.6	3847.1
30°	4107.5	4067.1	3817.9	3099.4	2719.3	2534.1	*2517.4*	2578.7	2754.1	3132.8	3900.0
32.5°	4232.8	4177.1	3849.9	3073.0	2758.3	2665.0	*2687.3*	2691.5	2770.8	3107.8	3979.4
35°	4412.4	4340.0	3937.6	3149.6	3159.3	3316.6	*3397.4*	3288.8	3022.8	3163.5	4129.8
37.5°	4684.0	4592.1	4115.9	3480.9	3987.8	4340.0	*4535.0*	4287.1	3788.7	3373.7	4356.7
40°	5013.9	4897.0	4344.2	4093.6	4761.9	5325.8	*5672.5*	5309.1	4576.7	3898.7	4675.6
42.5°	5474.8	5352.3	4787.0	4695.1	5479.0	6318.6	*6771.1*	6229.5	5271.5	4576.7	5186.6
45°	6278.2	6159.9	5598.7	5298.0	6318.6	7541.1	*8176.0*	7422.8	5977.5	5257.6	6141.8
47.5°	7762.5	7623.3	6804.5	5966.3	7276.6	9128.4	*10016.8*	8919.6	6711.3	6037.3	7745.8
50°	9544.7	9411.1	8318.1	6757.2	8334.8	10825.7	*12060.8*	10678.1	7556.4	6985.5	9663.1
52.5°	11689.0	11663.9	10477.6	7756.9	9436.1	12635.8	*14328.9*	12626.1	8482.4	8262.4	11835.2
55°	13621.6	13866.7	13220.6	9281.6	10859.1	14909.6	*16661.2*	14750.8	9738.3	10373.2	14379.1
57.5°	14663.1	15321.7	16314.5	12392.1	12928.2	17627.5	*19539.2*	17344.8	11896.5	13887.6	16737.7
60°	13975.3	14721.6	16520.5	14734.1	14980.6	19805.2	*21914.6*	19525.3	14015.7	16327.0	16604.1
62.5°	*12830.7*	*13500.5*	*15100.3*	*13366.8*	*15298.0*	*20284.1*	*21970.3*	*19905.4*	*14858.0*	*15089.2*	*14998.7*
65°	11473.2	12148.5	13843.0	11668.1	14288.6	19146.6	*20349.6*	18787.3	13344.5	13632.8	13666.2
67.5°	9670.0	10293.8	12019.0	10374.6	13024.3	17477.1	*17861.4*	17194.4	12289.1	12748.6	12268.2
70°	7225.0	7787.6	9310.8	8430.8	10978.9	15302.2	*14991.7*	15090.6	11104.2	11560.9	10247.9
72.5°	4937.4	5360.6	6666.7	6624.9	8407.2	12250.1	*11817.1*	12754.2	9274.6	9880.3	7812.6
75°	3453.1	3783.1	4819.0	5233.9	6354.8	9079.7	*8415.5*	9546.1	7243.1	8107.8	5700.4
77.5°	2119.2	2337.8	3043.7	3877.8	4088.0	6214.2	*5227.0*	7183.3	5086.3	5913.4	3802.6
80°	1059.6	1165.4	1478.7	2438.0	2711.0	3661.9	*2886.4*	4170.2	3442.0	3661.9	2103.9
82.5°	320.2	353.7	433.0	925.9	1404.9	2108.1	*1705.7*	2422.7	1879.7	1716.8	828.5
85°	84.9	96.1	119.7	274.3	492.9	756.1	*576.4*	1173.8	900.9	633.5	311.9
87.5°	7.0	7.0	5.6	5.6	2.8	0.0	*0.0*	83.5	168.5	96.1	54.3
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°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2658.0	2652.5	2595.4	2553.6	2504.9	2457.5	2408.8	2365.6	2316.9	2268.2	2254.3
5°	2872.5	2833.5	2712.3	2610.7	2510.5	2422.7	2346.2	2266.8	2202.7	2140.1	2116.4
7.5°	3061.8	2993.6	2818.2	2663.6	2524.4	2415.8	2303.0	2187.4	2096.9	2007.8	1985.5
10°	3233.1	3142.6	2921.2	2726.3	2571.7	2447.8	2315.5	2161.0	2030.1	1921.5	1892.2
12.5°	3359.8	3260.9	3010.3	2786.1	2610.7	2471.5	2340.6	2204.1	2066.3	1925.7	1893.6
15°	3460.1	3357.0	3084.1	2832.1	2612.1	2432.5	2305.8	2258.4	2215.3	2077.4	2018.9
17.5°	3540.8	3432.2	3148.2	2859.9	2574.5	2314.1	2204.1	2273.7	2383.7	2297.4	2187.4
20°	3614.6	3504.6	3196.9	2879.4	2491.0	2151.2	2090.0	2237.5	2403.2	2400.5	2301.6
22.5°	3695.4	3588.2	3267.9	2890.6	2374.0	1985.5	2021.7	2184.6	2319.7	2360.1	2298.8
25°	3798.4	3703.7	3366.8	2915.6	2241.7	1871.4	1971.6	2116.4	2229.2	2238.9	2202.7
27.5°	3918.1	3847.1	3514.4	2974.1	2113.6	1812.9	1913.1	2020.3	2123.4	2127.6	2084.4
30°	4049.0	4001.7	3650.8	3022.8	2017.6	1794.8	1837.9	1924.3	1989.7	2000.8	1963.2
32.5°	4216.1	4174.3	3771.9	2990.8	1960.5	1790.6	1768.3	1812.9	1867.2	1867.2	1837.9
35°	4445.9	4387.4	3900.0	2868.3	1890.8	1773.9	1694.5	1707.1	1730.7	1734.9	1718.2
37.5°	4771.7	4675.6	4029.5	2626.0	1776.7	1714.0	1609.6	1594.3	1602.6	1613.8	1609.6
40°	5175.5	5018.1	4218.9	2335.0	1640.2	1598.4	1521.9	1492.6	1485.7	1507.9	1516.3
42.5°	5683.7	5442.8	4422.2	2063.5	1516.3	1466.2	1418.8	1393.8	1382.6	1420.2	1442.5
45°	6495.4	6098.6	4617.1	1794.8	1446.7	1353.4	1321.4	1303.3	1308.8	1353.4	1381.2
47.5°	7897.6	7099.7	4802.3	1624.9	1441.1	1272.6	1233.6	1237.8	1253.1	1300.5	1333.9
50°	9671.4	8440.6	4926.2	1553.9	1457.8	1223.9	1172.4	1194.7	1218.3	1264.3	1303.3
52.5°	11477.4	9689.5	4778.6	1514.9	1456.4	1225.3	1115.3	1182.1	1193.3	1239.2	1281.0
55°	12719.4	9828.8	4128.4	1455.0	1434.1	1281.0	1070.7	1176.6	1183.5	1225.3	1262.9
57.5°	13192.8	9352.6	3148.2	1471.7	1367.3	1324.1	1051.2	1137.6	1187.7	1223.9	1262.9
60°	12620.5	8454.5	1913.1	1514.9	1260.1	1321.4	1063.8	1066.6	1152.9	1214.2	1253.1
62.5°	*11541.4*	*7301.6*	*1343.6*	*1392.4*	*1182.1*	*1247.6*	*1093.0*	*983.0*	*1091.6*	*1165.4*	*1200.2*
65°	10305.0	5945.4	1024.8	1198.8	1144.5	1133.4	1102.8	909.2	1008.1	1080.5	1111.1
67.5°	9017.0	4621.3	832.6	893.9	1034.5	1024.8	1008.1	843.8	909.2	960.7	995.5
70°	7394.9	3233.1	703.1	671.1	886.9	919.0	881.4	761.6	782.5	835.4	863.3
72.5°	5409.4	2014.8	577.8	554.2	712.9	803.4	783.9	671.1	680.9	731.0	753.3
75°	3890.3	1152.9	463.7	456.7	544.4	687.8	648.8	577.8	589.0	626.6	641.9
77.5°	2472.9	641.9	357.8	367.6	389.9	513.8	554.2	494.3	494.3	516.6	529.1
80°	1324.1	367.6	261.8	265.9	272.9	392.6	437.2	382.9	382.9	367.6	382.9
82.5°	540.2	211.6	179.6	167.1	182.4	268.7	306.3	243.7	254.8	229.7	235.3
85°	178.2	105.8	89.1	87.7	86.3	118.4	147.6	121.1	144.8	91.9	96.1
87.5°	23.7	19.5	11.1	8.4	9.7	4.2	8.4	9.7	9.7	7.0	7.0
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°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2244.5	2233.4	2193.0	2202.7	2195.8	2184.6	2195.8	2174.9	2191.6	2197.2	2232.0
5°	2098.3	2071.9	2032.9	2013.4	2009.2	1998.1	1999.5	1989.7	1992.5	2016.2	2055.1
7.5°	1967.4	1942.4	1911.7	1897.8	1885.3	1872.7	1871.4	1870.0	1881.1	1902.0	1939.6
10°	1872.7	1858.8	1846.3	1851.9	1846.3	1840.7	1831.0	1831.0	1849.1	1886.7	1932.6
12.5°	1872.7	1870.0	1872.7	1889.5	1888.1	1889.5	1876.9	1883.9	1934.0	1998.1	2063.5
15°	1973.0	1950.7	1950.7	1959.1	1956.3	1956.3	1956.3	1985.5	2099.7	2198.6	2268.2
17.5°	2095.5	2030.1	2002.2	1998.1	1996.7	1996.7	2002.2	2064.9	2243.1	2347.5	2387.9
20°	2180.5	2056.5	2010.6	1992.5	1993.9	1996.7	2013.4	2099.7	2296.0	2348.9	2339.2
22.5°	2195.8	2035.7	1980.0	1953.5	1957.7	1960.5	1985.5	2077.4	2223.6	2232.0	2212.5
25°	2124.8	1977.2	1917.3	1896.4	1902.0	1900.6	1922.9	1989.7	2094.1	2091.3	2080.2
27.5°	2018.9	1883.9	1839.3	1825.4	1835.2	1824.0	1831.0	1882.5	1963.2	1960.5	1956.3
30°	1910.3	1793.4	1753.0	1746.0	1758.6	1741.9	1743.3	1786.4	1842.1	1839.3	1837.9
32.5°	1801.7	1702.9	1666.7	1666.7	1679.2	1661.1	1663.9	1701.5	1739.1	1727.9	1727.9
35°	1698.7	1629.1	1599.8	1594.3	1604.0	1591.5	1597.1	1631.9	1645.8	1630.5	1620.7
37.5°	1608.2	1577.6	1548.3	1528.8	1530.2	1531.6	1548.3	1574.8	1566.4	1544.1	1531.6
40°	1524.7	1524.7	1496.8	1460.6	1456.4	1466.2	1494.0	1523.3	1499.6	1474.5	1459.2
42.5°	1464.8	1477.3	1450.9	1414.7	1406.3	1423.0	1453.6	1474.5	1446.7	1418.8	1397.9
45°	1409.1	1439.7	1421.6	1381.2	1370.1	1389.6	1428.6	1436.9	1399.3	1372.9	1357.6
47.5°	1370.1	1411.9	1399.3	1360.4	1343.6	1371.5	1411.9	1410.5	1363.1	1335.3	1322.8
50°	1342.3	1395.2	1393.8	1360.4	1342.3	1377.1	1413.3	1395.2	1343.6	1314.4	1301.9
52.5°	1320.0	1393.8	1403.5	1384.0	1371.5	1402.1	1424.4	1389.6	1329.7	1299.1	1289.3
55°	1310.2	1399.3	1406.3	1388.2	1377.1	1404.9	1424.4	1400.7	1329.7	1301.9	1293.5
57.5°	1313.0	1392.4	1393.8	1368.7	1349.2	1384.0	1414.7	1407.7	1345.0	1313.0	1303.3
60°	1296.3	1354.8	1357.6	1318.6	1296.3	1338.1	1392.4	1388.2	1338.1	1304.7	1286.6
62.5°	*1240.6*	*1292.1*	*1293.5*	*1257.3*	*1225.3*	*1285.2*	*1345.0*	*1343.6*	*1297.7*	*1264.3*	*1243.4*
65°	1147.3	1201.6	1215.5	1180.7	1155.7	1219.7	1282.4	1279.6	1233.6	1203.0	1182.1
67.5°	1031.8	1090.2	1116.7	1093.0	1083.3	1141.7	1200.2	1198.8	1161.2	1132.0	1113.9
70°	891.1	939.9	984.4	984.4	977.4	1044.3	1106.9	1101.4	1066.6	1044.3	1030.4
72.5°	774.2	811.8	825.7	839.6	860.5	930.1	983.0	987.2	962.1	951.0	962.1
75°	658.6	682.3	694.8	683.7	719.9	792.3	861.9	868.8	842.4	824.3	828.5
77.5°	541.6	568.1	580.6	555.6	552.8	644.7	729.6	744.9	722.6	694.8	703.1
80°	391.3	426.1	447.0	430.2	424.7	465.1	582.0	598.7	577.8	555.6	568.1
82.5°	239.5	259.0	264.6	281.3	316.1	332.8	374.5	430.2	414.9	395.4	430.2
85°	94.7	112.8	125.3	142.0	165.7	196.3	231.1	275.7	250.6	242.3	285.4
87.5°	5.6	1.4	0.0	2.8	23.7	45.9	98.9	136.5	114.2	122.5	147.6
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: P636506
CATALOG NUMBER: GWS-SA3F-830-U-SLR-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2259.8	2296.0	2344.8	2385.1	2436.7	2485.4	2535.5	2585.6	2612.1	2623.2
5°	2099.7	2166.5	2244.5	2330.8	2431.1	2536.9	2644.1	2754.1	2823.7	2829.3
7.5°	2003.6	2099.7	2206.9	2315.5	2439.4	2585.6	2755.5	2925.4	2996.4	3015.9
10°	2034.3	2141.5	2226.4	2328.1	2464.5	2646.9	2847.4	3046.5	3128.7	3152.3
12.5°	2156.8	2177.7	2204.1	2297.4	2464.5	2699.8	2942.1	3178.8	3266.5	3288.8
15°	2258.4	2158.2	2110.8	2209.7	2431.1	2745.8	3042.3	3304.1	3409.9	3430.8
17.5°	2266.8	2094.1	1991.1	2080.2	2372.6	2777.8	3138.4	3443.3	3532.5	3552.0
20°	2181.9	2025.9	1892.2	1946.5	2293.2	2791.7	3208.0	3545.0	3632.7	3652.2
22.5°	2085.8	1970.2	1825.4	1822.6	2197.2	2807.0	3291.6	3641.1	3735.7	3748.3
25°	1995.3	1893.6	1771.1	1732.1	2085.8	2836.3	3404.4	3785.9	3858.3	3862.5
27.5°	1889.5	1811.5	1727.9	1690.3	1988.3	2892.0	3571.4	3958.5	4001.7	3994.7
30°	1793.4	1734.9	1697.3	1686.2	1927.0	2933.7	3730.2	4128.4	4131.2	4107.5
32.5°	1691.7	1669.5	1669.5	1705.7	1876.9	2924.0	3859.7	4294.1	4267.6	4232.8
35°	1601.2	1605.4	1634.6	1719.6	1793.4	2826.5	3983.6	4501.6	4462.6	4412.4
37.5°	1514.9	1546.9	1588.7	1670.9	1683.4	2681.7	4128.4	4795.3	4746.6	4684.0
40°	1441.1	1489.8	1538.6	1579.0	1566.4	2475.6	4330.3	5140.7	5086.3	5013.9
42.5°	1382.6	1430.0	1484.3	1488.4	1492.6	2261.2	4544.7	5563.9	5554.2	5474.8
45°	1345.0	1375.7	1427.2	1420.2	1488.4	2024.5	4742.4	6210.0	6338.1	6278.2
47.5°	1320.0	1343.6	1349.2	1378.5	1524.7	1812.9	4997.2	7474.3	7830.7	7762.5
50°	1306.0	1329.7	1267.1	1381.2	1530.2	1676.4	5349.5	9061.6	9635.2	9544.7
52.5°	1304.7	1299.1	1204.4	1410.5	1499.6	1592.9	5533.3	10220.0	11492.7	11689.0
55°	1307.4	1237.8	1172.4	1418.8	1438.3	1562.2	4917.9	10777.0	13206.7	13621.6
57.5°	1282.4	1171.0	1190.5	1385.4	1322.8	1644.4	3635.5	10577.9	13891.7	14663.1
60°	1235.0	1106.9	1223.9	1294.9	1204.4	1503.8	2503.5	9689.5	13181.6	13975.3
62.5°	*1166.8*	*1062.4*	*1219.7*	*1177.9*	*1161.2*	*1230.9*	*1721.0*	*8446.2*	*12055.2*	*12830.7*
65°	1090.2	1026.2	1154.3	1065.2	1074.9	946.8	1216.9	7042.6	10710.2	11473.2
67.5°	1008.1	1003.9	1058.2	948.2	907.8	750.5	886.9	5644.7	8982.2	9670.0
70°	914.8	945.4	962.1	842.4	736.6	589.0	658.6	3947.4	6626.3	7225.0
72.5°	821.5	824.3	848.0	732.4	551.4	472.0	494.3	2390.7	4501.6	4937.4
75°	726.8	700.4	722.6	595.9	410.8	387.1	381.5	1477.3	3109.2	3453.1
77.5°	625.2	595.9	566.7	448.3	330.0	299.4	292.4	828.5	1907.6	2119.2
80°	508.2	469.2	423.3	328.6	240.9	214.4	213.0	403.8	951.0	1059.6
82.5°	395.4	321.6	309.1	204.7	149.0	130.9	139.2	154.6	286.8	320.2
85°	277.1	233.9	164.3	82.2	66.8	54.3	52.9	45.9	76.6	84.9
87.5°	154.6	101.6	52.9	9.7	11.1	12.5	9.7	7.0	7.0	7.0
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.

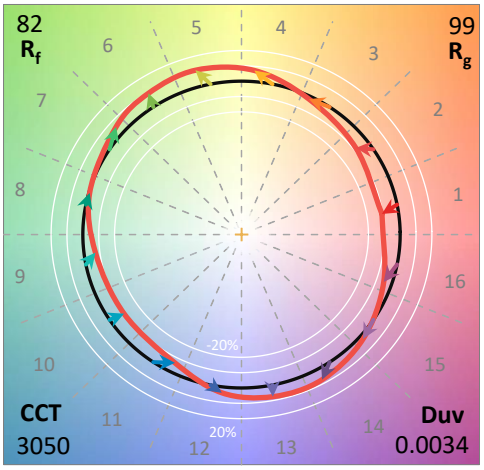
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

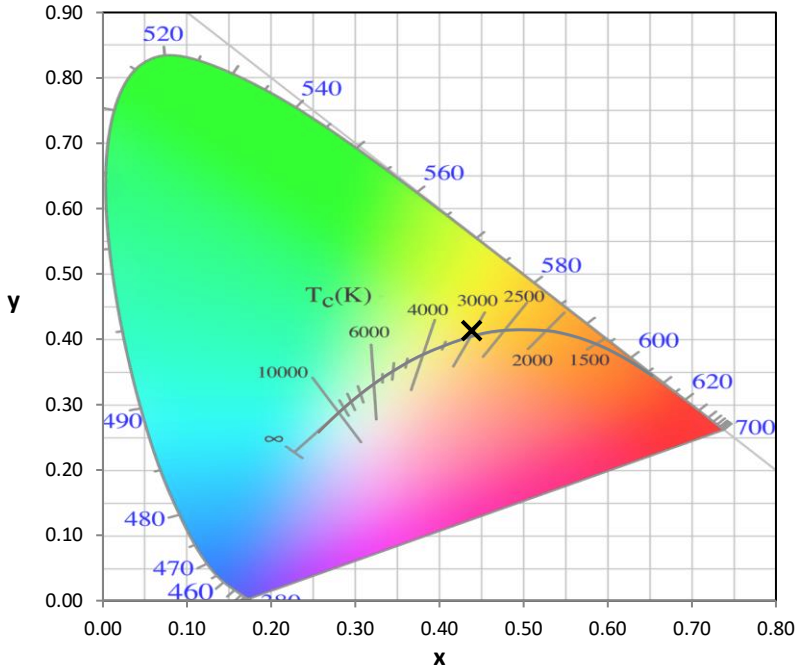
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

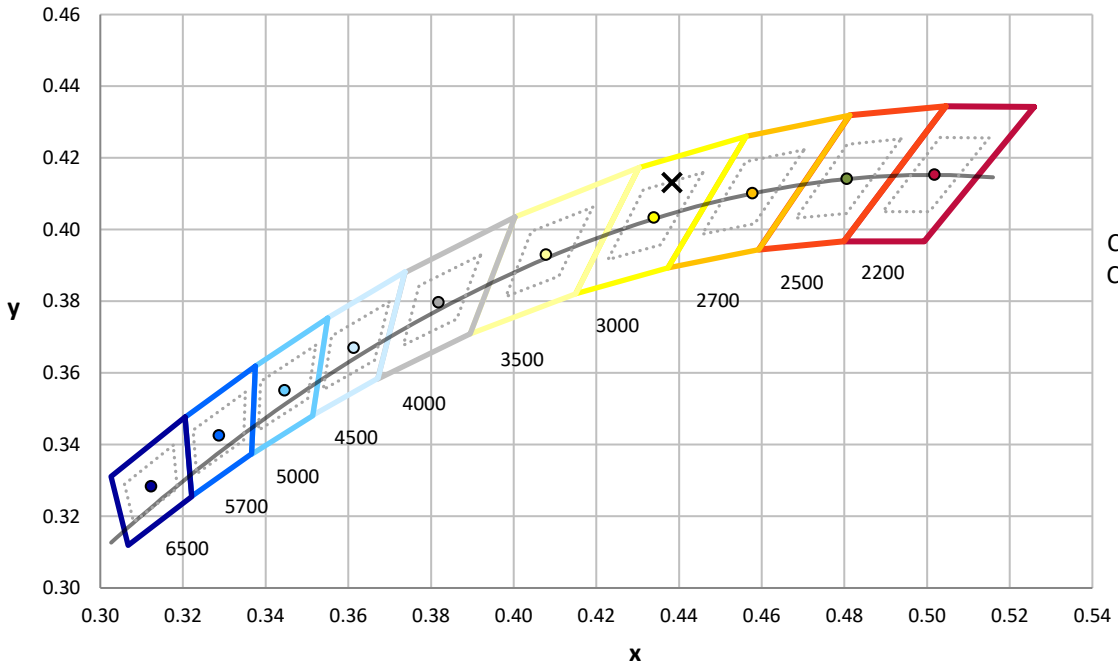
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

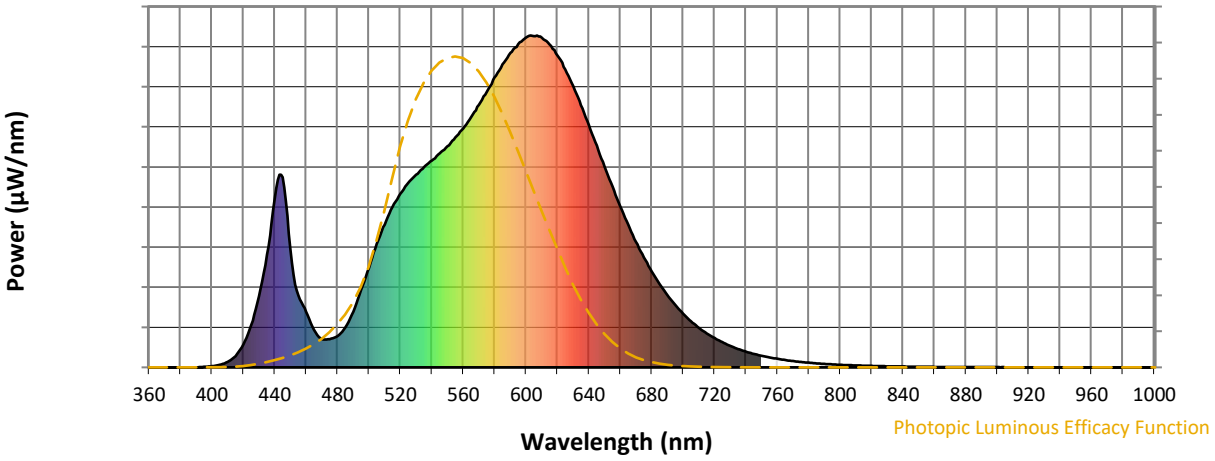


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

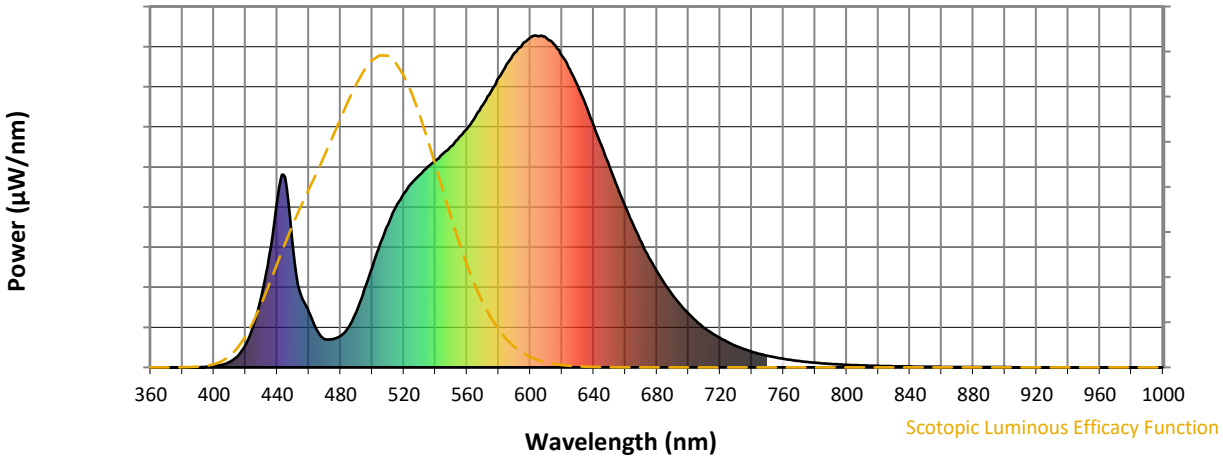


Photopic Lumens: NR

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

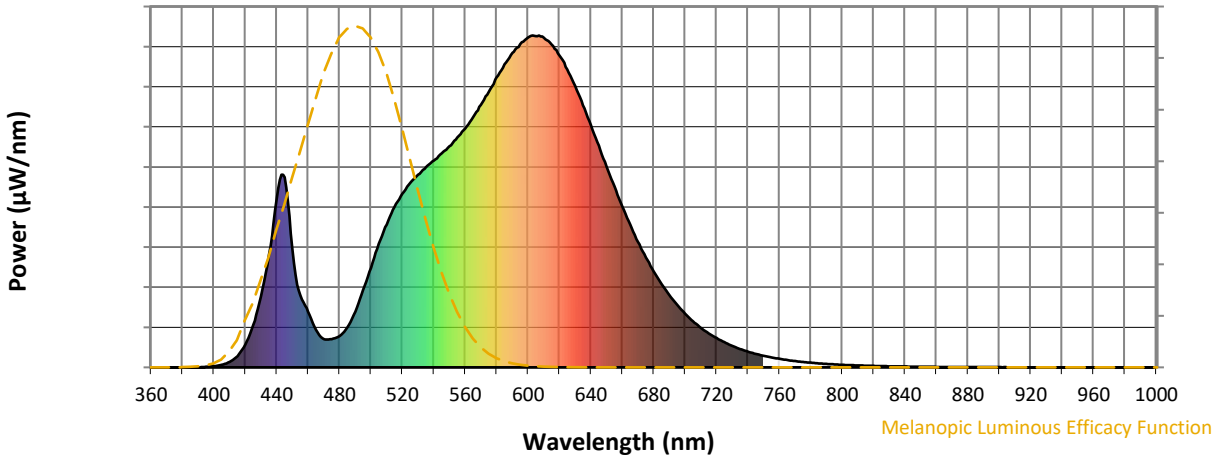


Scotopic Lumens: NR **S/P: 1.27**

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			

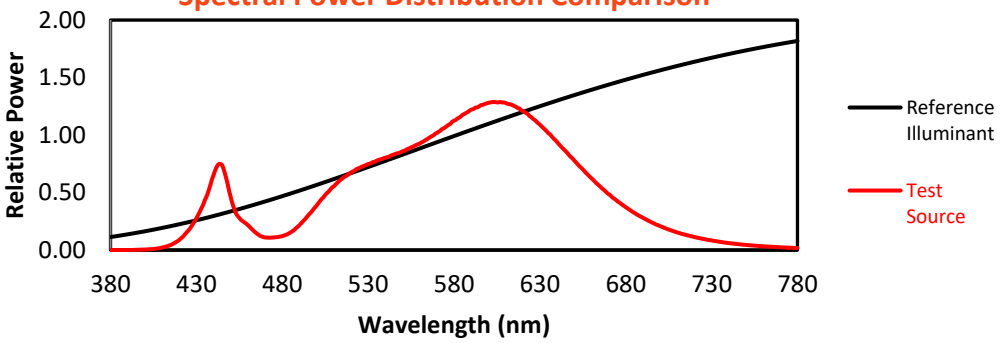
REPORT NUMBER: SP1-2408-195-9

TM-30-18

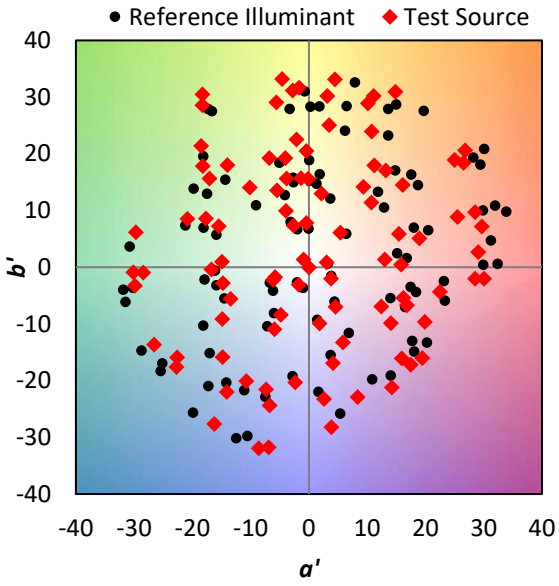
Summary

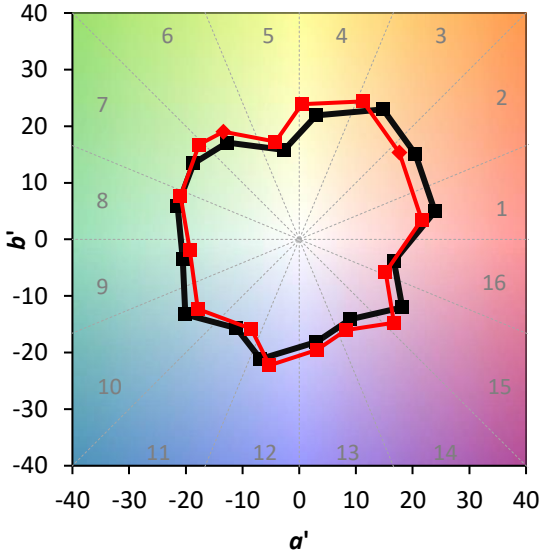
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

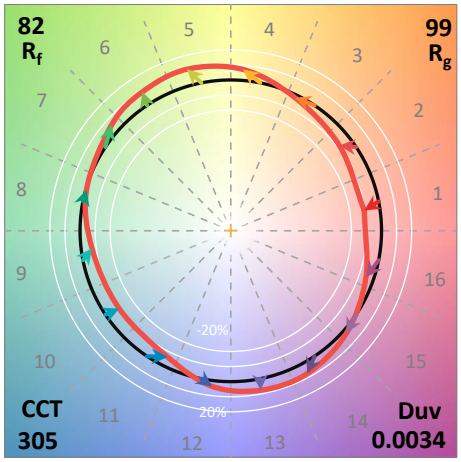
Spectral Power Distribution Comparison

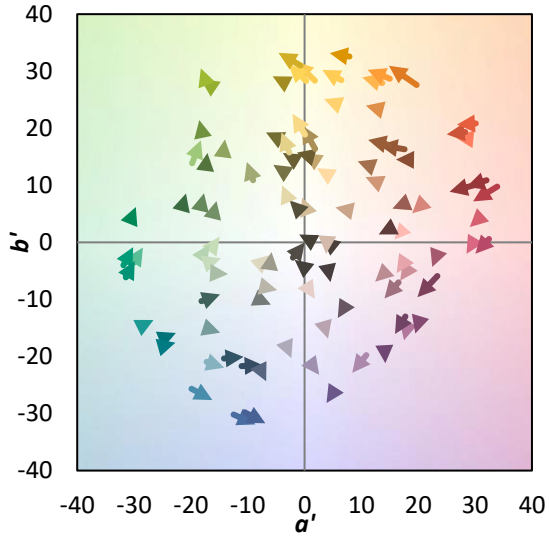


Color Vector Graphics









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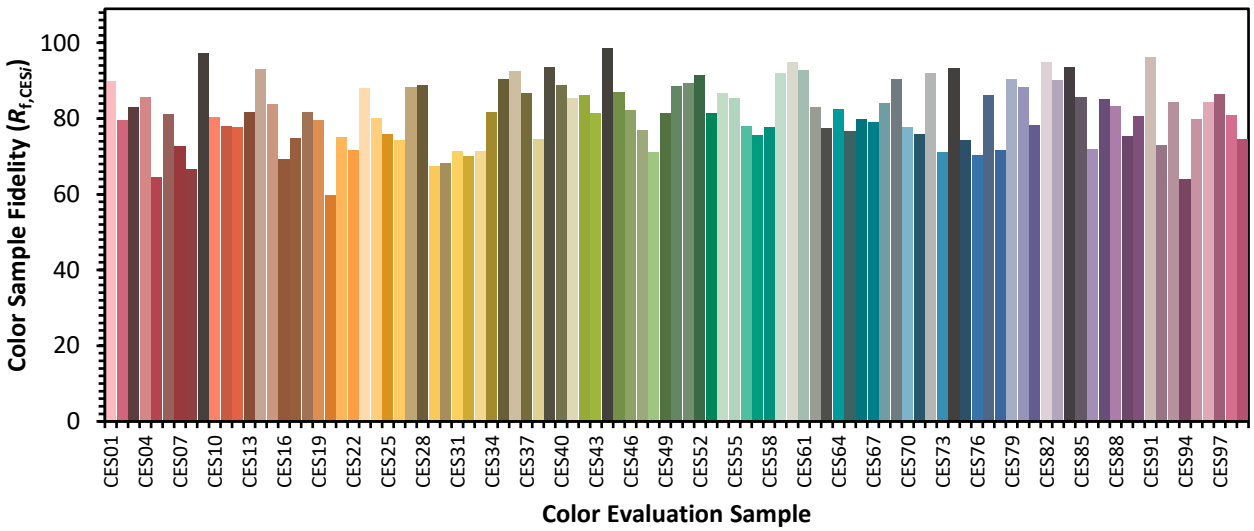
Individual Sample Fidelity Index ($R_{f,i}$)

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
CES25 = 72	CES50 = 89	CES75 = 74	



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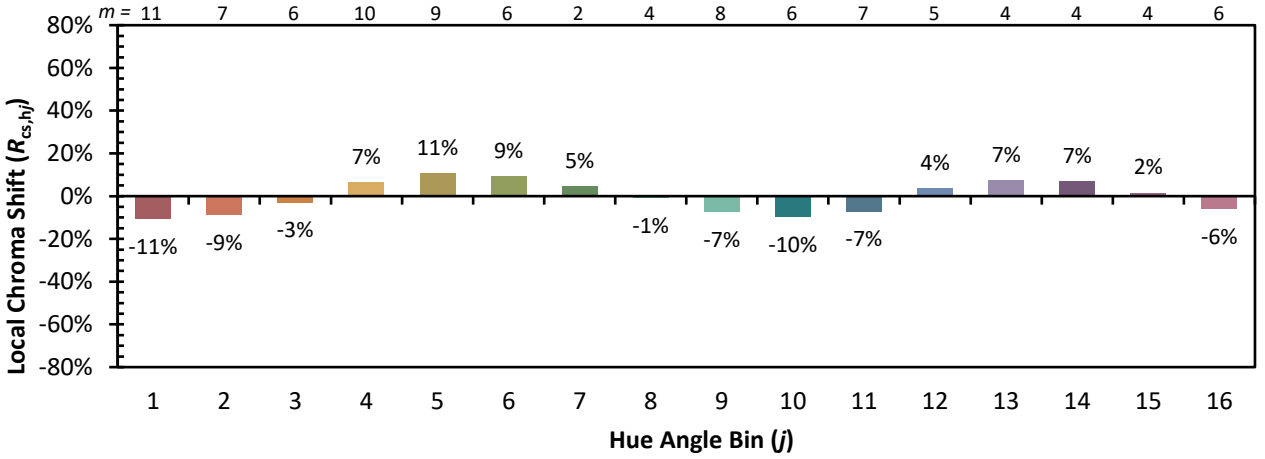
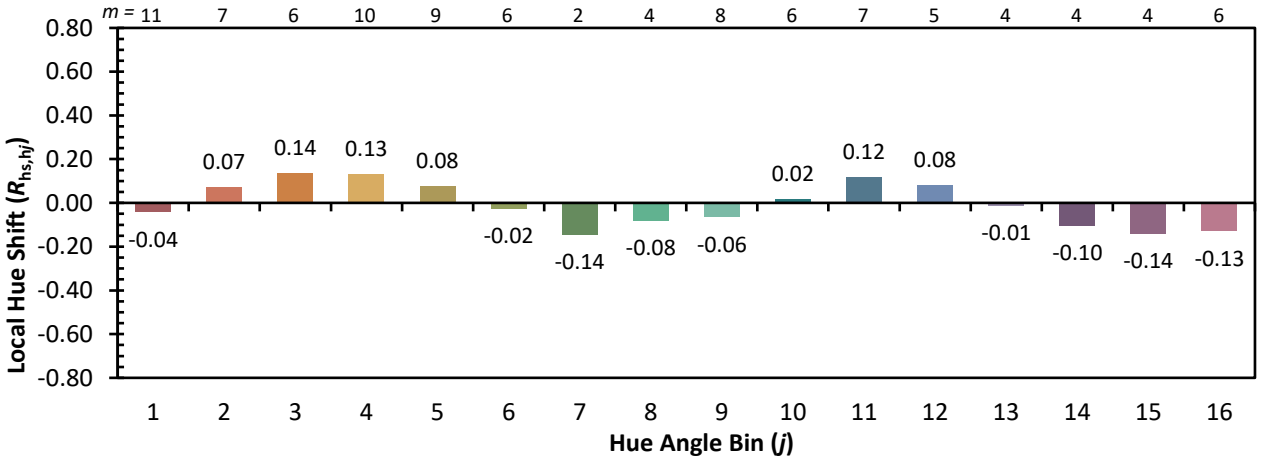
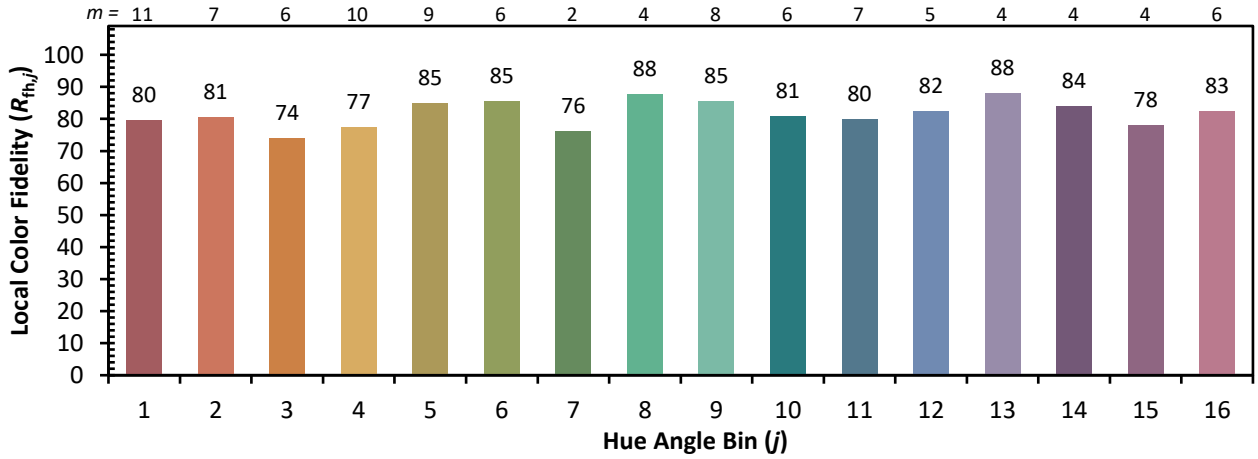
Color Rendition by Hue-Angle Bin







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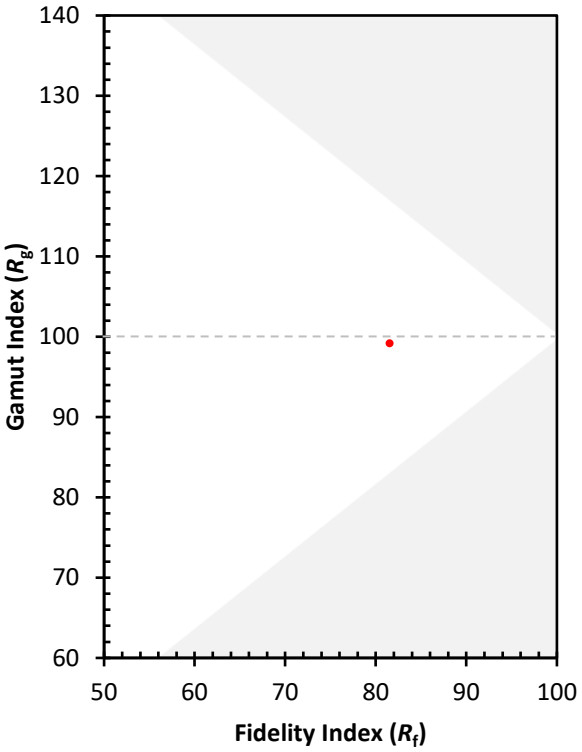
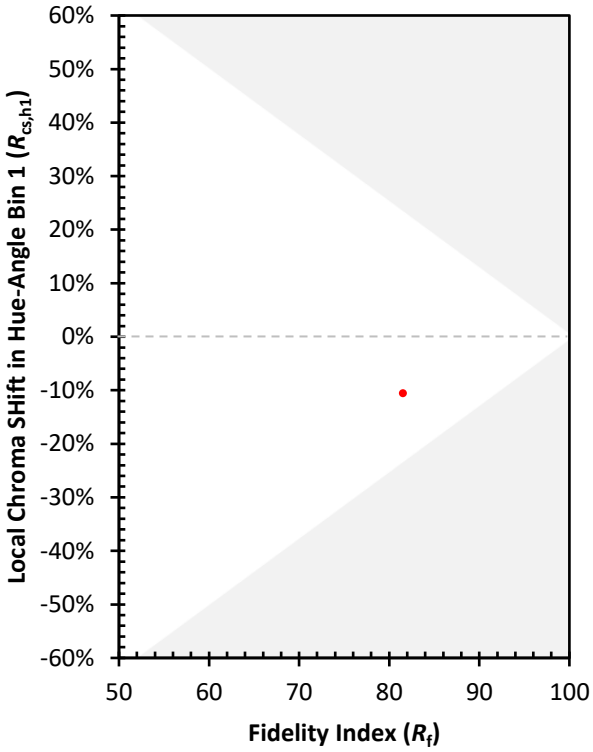
Measure Comparisons





(END OF REPORT)