Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P437768

Luminaire Tested: **ISC-SA1E-830-U-SLL**

Issue Date: 12/9/2020

Report Generated By 670245982

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437768
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-20)
Test Lab:	INNOVATION CENTER
Issue Date:	12/9/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISC-SA1E-830-U-SLL
Description:	IMPACT ELITE LED CYLINDER LUMINAIRE
	(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5018 lumens
Efficiency:	N/A
Efficacy:	86.2 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G1

Input Watts (W):	58.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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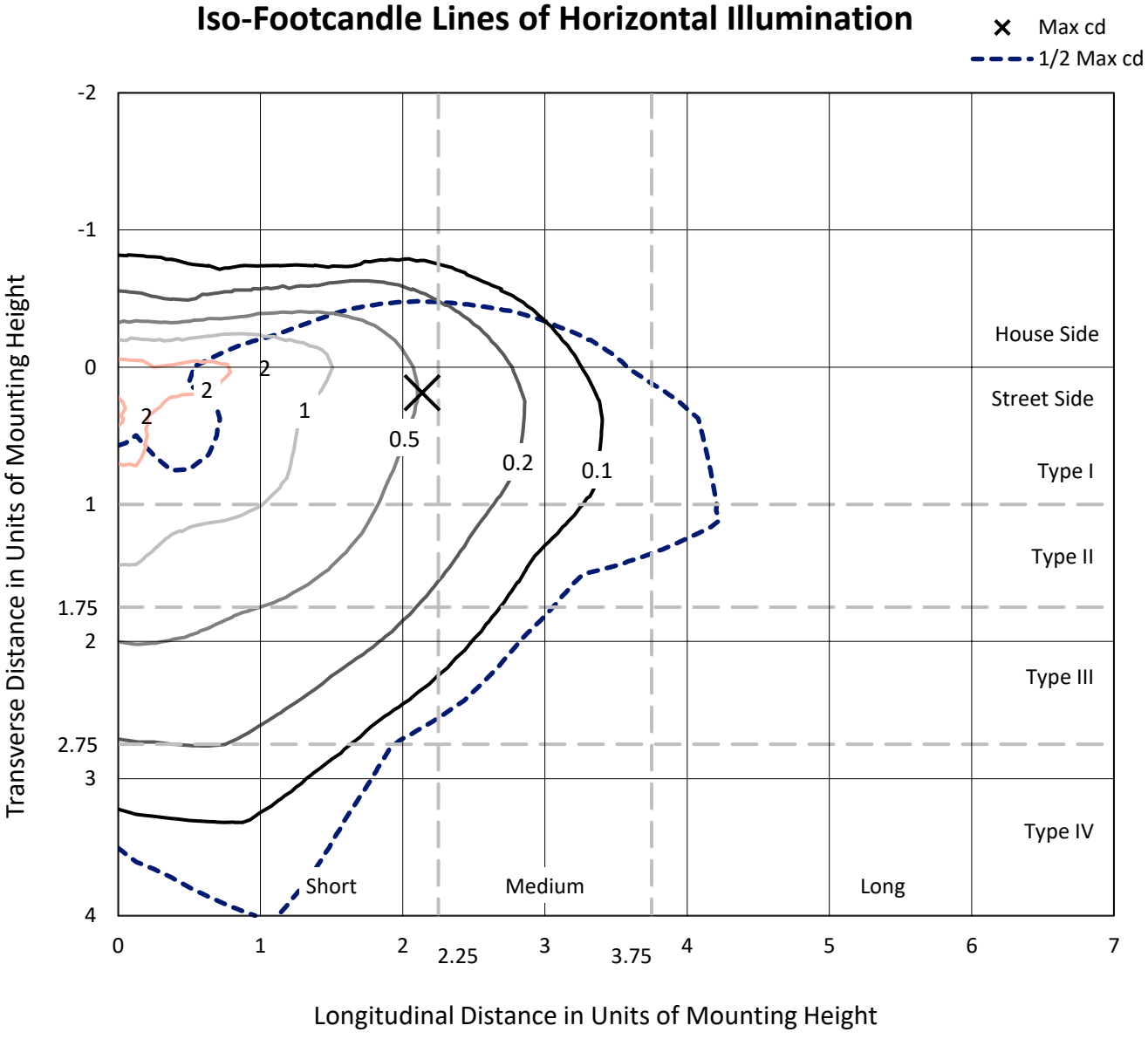
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type IV - Short - N/A

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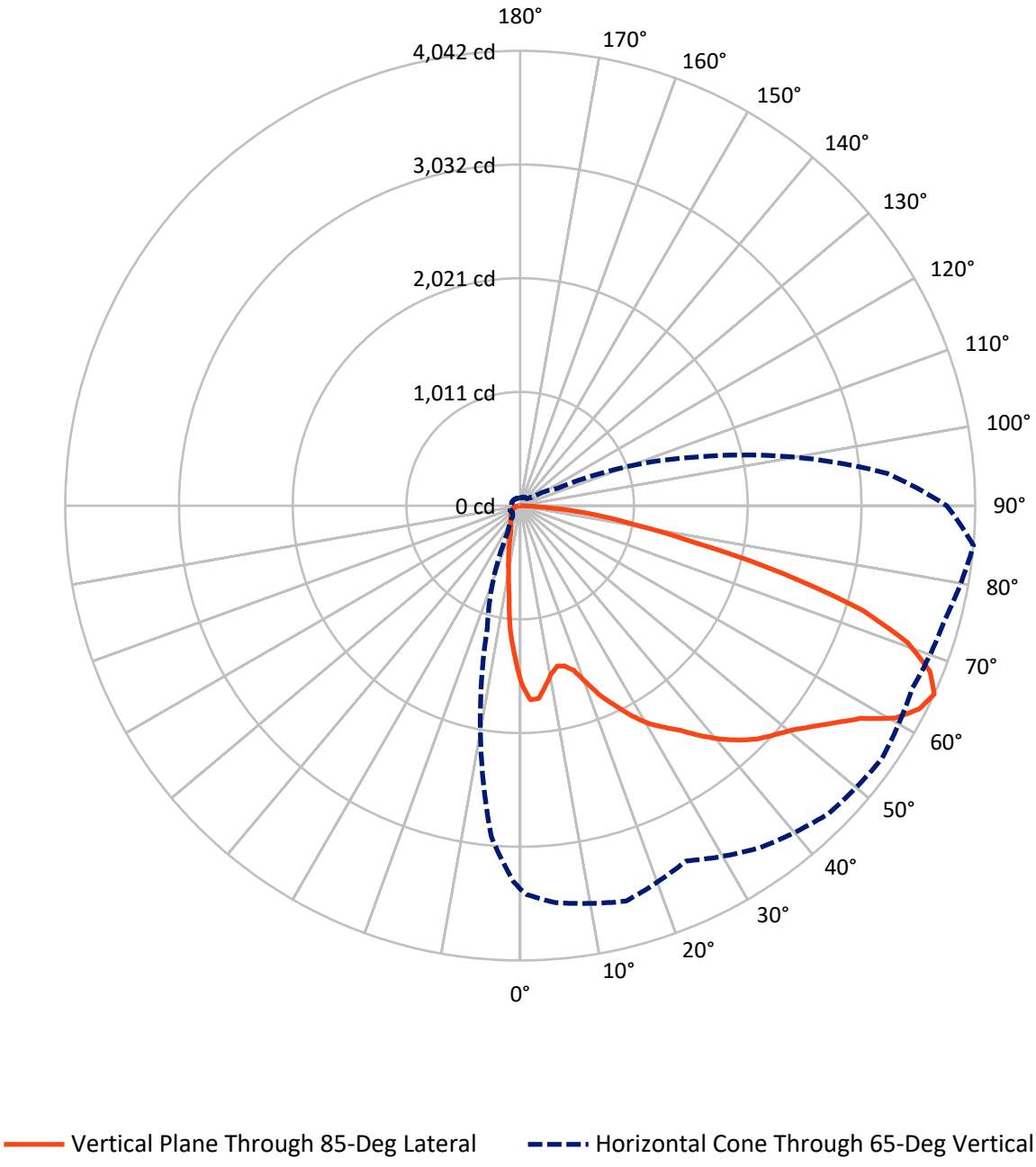
Luminous Intensity Polar Plot



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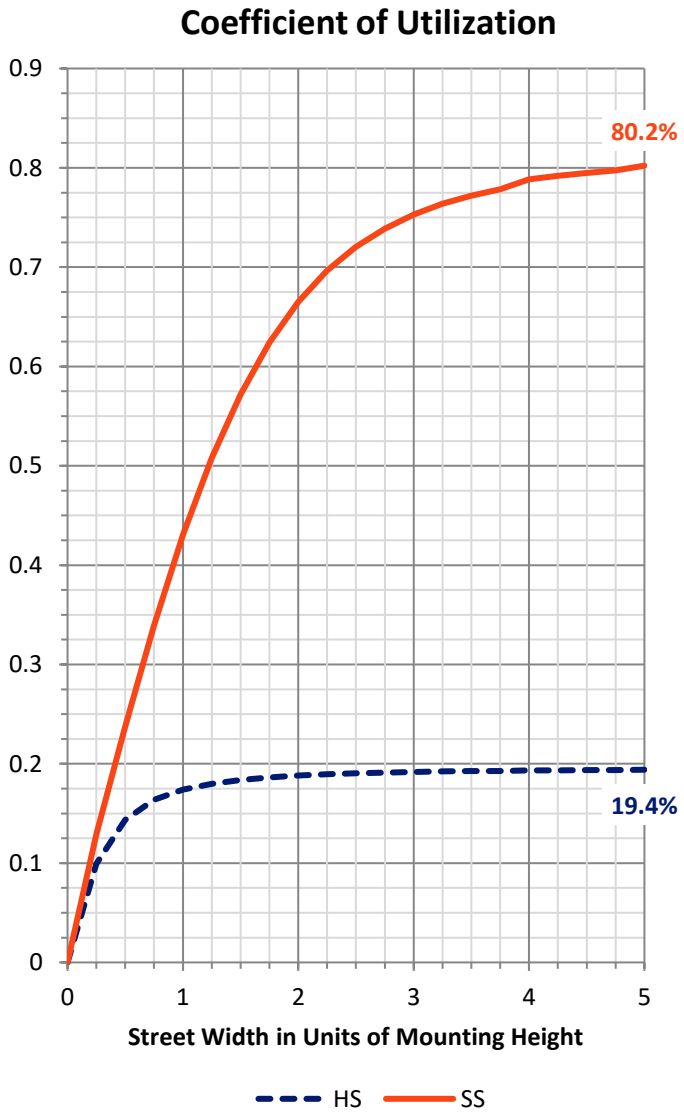
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	982.0	0.0	982.0
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	4035.9	0.0	4035.9
	% Fixture	80.4	0.0	80.4
Total	Lumens	5018.0	0.0	5018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	2.4
10°-20°	251.0	5.0
20°-30°	360.9	7.2
30°-40°	518.2	10.3
40°-50°	733.5	14.6
50°-60°	1019.9	20.3
60°-70°	1214.6	24.2
70°-80°	702.0	14.0
80°-90°	97.1	1.9
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°	5018.0	100.0
0°-180°	5018.0	100.0



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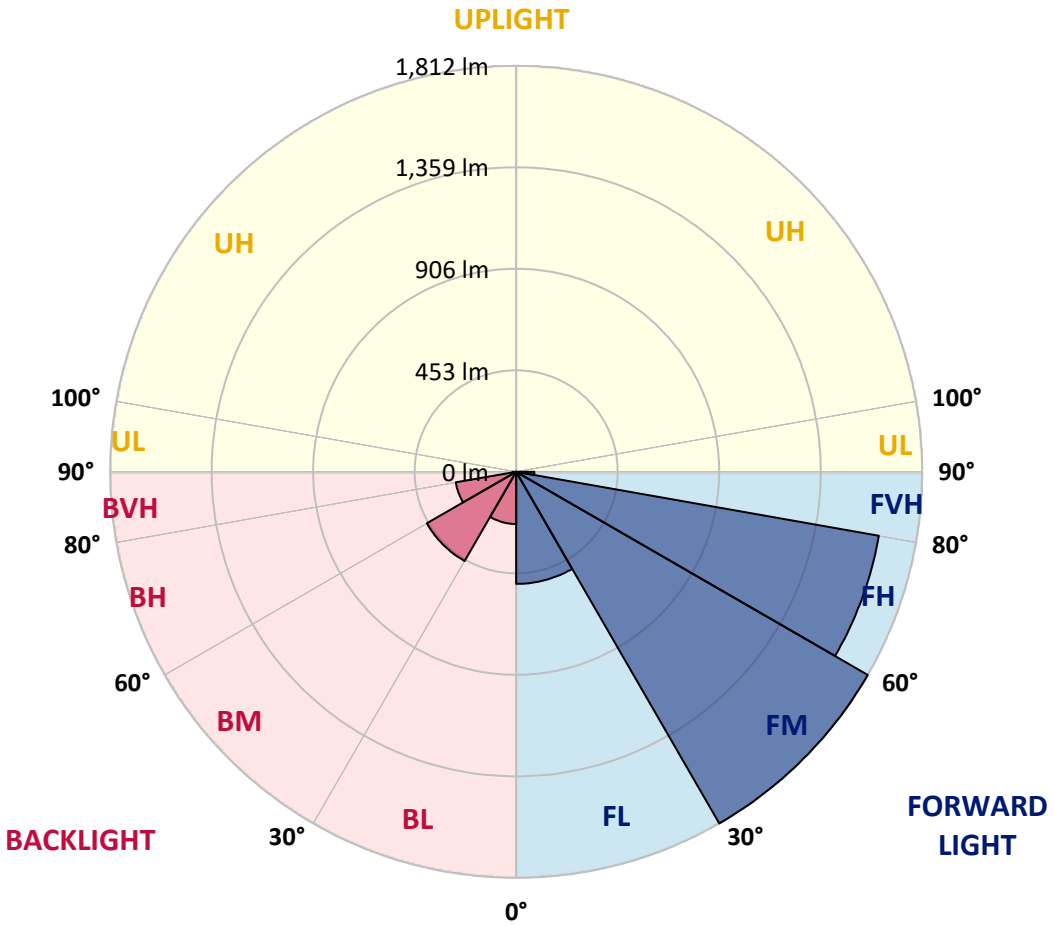
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	500.1	10.0			
FM	(30°-60°)	1811.5	36.1			
FH	(60°-80°)	1643.1	32.7			G1/1800
FVH	(80°-90°)	81.2	1.6			G1/100
BL	(0°-30°)	232.6	4.6	B1/500		
BM	(30°-60°)	460.1	9.2	B1/1000		
BH	(60°-80°)	273.4	5.4	B1/500		G1/500
BVH	(80°-90°)	15.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	*1585.2*
2.5°	1661.1	1667.3	1681.6	1730.8	1761.6	1786.2	1817.0	1786.2	1778.0	1737.0	*1728.8*
5°	1601.6	1616.0	1657.0	1749.3	1825.2	1905.2	1946.2	1911.3	1864.1	1792.4	*1720.6*
7.5°	1484.7	1503.2	1556.5	1700.1	1843.6	1952.3	2005.6	1968.7	1872.3	1745.2	*1616.0*
10°	1365.8	1394.5	1458.1	1638.6	1790.3	1911.3	1993.3	1954.4	1837.5	1671.4	*1517.6*
12.5°	1294.0	1314.5	1386.3	1575.0	1734.9	1855.9	1917.5	1894.9	1786.2	1628.3	*1464.2*
15°	1277.6	1298.1	1369.9	1552.4	1693.9	1784.2	1798.5	1804.7	1763.7	1642.7	*1478.6*
17.5°	1322.7	1339.1	1437.6	1589.3	1646.8	1665.2	1687.8	1714.4	1734.9	1671.4	*1538.1*
20°	1431.4	1464.2	1550.4	1665.2	1634.5	1591.4	1603.7	1636.5	1714.4	1755.4	*1675.5*
22.5°	1577.0	1613.9	1722.6	1769.8	1642.7	1550.4	1540.1	1568.8	1712.4	1847.7	*1839.5*
25°	1739.0	1790.3	1907.2	1909.3	1677.5	1521.7	1501.2	1527.8	1708.3	1929.8	*1970.8*
27.5°	1907.2	1954.4	2081.5	2017.9	1745.2	1523.7	1499.1	1525.8	1718.5	2017.9	*2116.4*
30°	2032.3	2093.8	2204.6	2120.5	1788.3	1550.4	1513.5	1548.3	1741.1	2063.1	*2245.6*
32.5°	2159.4	2198.4	2315.3	2180.0	1835.4	1591.4	1544.2	1597.5	1798.5	2106.1	*2348.1*
35°	2272.2	2323.5	2442.5	2214.8	1905.2	1661.1	1599.6	1669.3	1880.5	2167.6	*2452.7*
37.5°	2415.8	2465.0	2573.7	2264.0	1962.6	1749.3	1698.0	1788.3	1981.0	2223.0	*2592.2*
40°	2542.9	2620.9	2702.9	2325.6	2028.2	1878.5	1845.7	1968.7	2116.4	2298.9	*2727.5*
42.5°	2668.0	2733.7	2823.9	2395.3	2112.3	2036.4	2050.8	2180.0	2280.4	2413.7	*2848.5*
45°	2758.3	2834.1	2914.1	2450.7	2221.0	2206.6	2303.0	2411.7	2448.6	2534.7	*2957.2*
47.5°	2846.4	2905.9	2977.7	2506.0	2352.2	2397.3	2565.5	2649.6	2612.7	2643.4	*3043.3*
50°	2963.3	3026.9	3047.4	2594.2	2518.3	2639.3	2821.8	2877.2	2770.6	2729.6	*3133.6*
52.5°	3131.5	3162.3	3152.0	2698.8	2676.2	2891.6	3041.3	3125.4	2934.6	2811.6	*3258.7*
55°	3357.1	3410.4	3344.8	2869.0	2838.2	3133.6	3307.9	3348.9	3117.1	2914.1	*3402.2*
57.5°	3572.4	3619.6	3599.1	3076.1	3049.5	3342.7	3510.9	3549.9	3295.6	3104.8	*3566.3*
60°	3652.4	3666.8	3740.6	3295.6	3260.7	3521.1	3711.9	3718.0	3508.8	3334.5	*3832.9*
62.5°	3566.3	3623.7	3695.5	3500.6	3387.8	3675.0	3845.2	3884.1	3711.9	3613.4	*3978.5*
65°	*3406.3*	*3457.6*	*3541.7*	*3638.0*	*3484.2*	*3711.9*	*3871.8*	*3921.0*	*3843.1*	*3906.7*	*4042.0*
67.5°	3221.7	3285.3	3342.7	3660.6	3471.9	3500.6	3633.9	3664.7	3773.4	4035.9	*3925.1*
70°	2983.9	3055.6	3104.8	3572.4	3178.7	2893.6	2988.0	3072.0	3238.1	3806.2	*3652.4*
72.5°	2471.2	2586.0	2709.0	3172.5	2571.6	2247.6	2321.5	2376.8	2495.8	3250.4	*3180.7*
75°	1739.0	1823.1	1974.9	2555.2	1974.9	1591.4	1706.2	1706.2	1855.9	2670.1	*2415.8*
77.5°	1039.7	1041.8	1189.4	1681.6	1201.7	1072.5	1138.2	1168.9	1214.0	1890.8	*1603.7*
80°	588.6	596.8	646.0	1086.9	711.6	732.1	810.0	892.1	824.4	1173.0	*1031.5*
82.5°	274.8	242.0	256.3	512.7	404.0	477.8	490.1	527.0	531.1	750.6	*676.7*
85°	22.6	18.5	24.6	92.3	71.8	65.6	47.2	90.2	141.5	328.1	*291.2*
87.5°	0.0	0.0	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	*0.0*

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1702.1	1681.6	1636.5	1601.6	1568.8	1507.3	1482.7	1447.8	1429.4	1396.6	1404.8
5°	1667.3	1620.1	1517.6	1447.8	1357.6	1283.8	1238.7	1197.6	1181.2	1146.4	1134.1
7.5°	1540.1	1499.1	1369.9	1255.1	1144.3	1056.1	972.1	910.5	881.8	851.1	849.0
10°	1431.4	1363.8	1216.1	1080.7	953.6	871.6	810.0	758.8	713.7	674.7	652.1
12.5°	1369.9	1285.8	1121.8	957.7	869.5	812.1	744.4	680.9	629.6	584.5	557.8
15°	1369.9	1271.5	1076.6	916.7	828.5	742.4	664.4	598.8	531.1	477.8	461.4
17.5°	1433.5	1312.5	1086.9	890.0	764.9	668.5	570.1	484.0	418.4	371.2	354.8
20°	1558.6	1413.0	1111.5	859.3	703.4	570.1	451.2	358.9	299.4	276.9	272.8
22.5°	1704.2	1534.0	1148.4	830.6	639.8	465.5	338.4	272.8	246.1	237.9	237.9
25°	1864.1	1669.3	1195.6	799.8	574.2	369.1	258.4	227.6	217.4	213.3	213.3
27.5°	2013.8	1817.0	1279.7	787.5	512.7	299.4	225.6	203.0	196.9	192.8	194.8
30°	2159.4	1948.2	1365.8	762.9	445.0	260.4	203.0	186.6	178.4	176.4	178.4
32.5°	2284.5	2061.0	1425.3	726.0	397.8	233.8	188.7	172.3	164.1	162.0	164.1
35°	2428.1	2171.8	1484.7	699.3	373.2	217.4	178.4	162.0	153.8	149.7	149.7
37.5°	2596.3	2305.1	1529.9	660.3	356.8	201.0	170.2	153.8	143.6	139.5	139.5
40°	2821.8	2467.1	1566.8	629.6	338.4	192.8	160.0	145.6	135.3	131.2	129.2
42.5°	2977.7	2608.6	1597.5	609.1	319.9	188.7	153.8	141.5	129.2	123.0	121.0
45°	3084.3	2733.7	1618.0	598.8	303.5	178.4	149.7	137.4	123.0	114.8	114.8
47.5°	3186.9	2836.2	1620.1	584.5	291.2	166.1	155.9	131.2	116.9	108.7	108.7
50°	3301.7	2965.4	1659.1	570.1	276.9	151.8	153.8	129.2	112.8	104.6	102.5
52.5°	3416.6	3141.8	1734.9	549.6	256.3	139.5	145.6	131.2	108.7	100.5	98.4
55°	3621.6	3361.2	1829.3	518.8	229.7	127.1	135.3	129.2	102.5	94.3	92.3
57.5°	3754.9	3566.3	1903.1	486.0	190.7	118.9	118.9	125.1	96.4	88.2	86.1
60°	3830.8	3605.2	1917.5	447.1	155.9	106.6	102.5	127.1	90.2	80.0	80.0
62.5°	3828.8	3471.9	1845.7	410.2	135.3	98.4	92.3	110.7	84.1	75.9	73.8
65°	*3789.8*	*3275.1*	*1683.7*	*363.0*	*127.1*	*90.2*	*82.0*	*84.1*	*77.9*	*69.7*	*67.7*
67.5°	3621.6	2934.6	1425.3	315.8	123.0	82.0	75.9	71.8	67.7	61.5	59.5
70°	3213.5	2551.1	1111.5	293.3	121.0	71.8	65.6	61.5	57.4	53.3	53.3
72.5°	2612.7	1989.2	849.0	281.0	123.0	65.6	55.4	53.3	49.2	47.2	45.1
75°	1808.8	1470.4	615.2	248.1	118.9	55.4	47.2	43.1	41.0	36.9	36.9
77.5°	1162.8	961.8	408.1	198.9	96.4	45.1	34.9	32.8	30.8	28.7	28.7
80°	764.9	654.2	237.9	141.5	59.5	30.8	24.6	24.6	22.6	18.5	18.5
82.5°	486.0	494.2	123.0	65.6	34.9	18.5	14.4	12.3	12.3	8.2	8.2
85°	106.6	186.6	55.4	26.7	12.3	2.1	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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	0.0

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1376.1	1359.7	1353.5	1353.5	1326.8	1328.9	1328.9	1345.3	1343.2	1357.6	1351.4
5°	1119.7	1103.3	1103.3	1107.4	1111.5	1093.1	1099.2	1082.8	1113.6	1091.0	1074.6
7.5°	826.5	824.4	838.8	871.6	865.4	859.3	847.0	816.2	799.8	816.2	808.0
10°	633.7	639.8	635.7	650.1	652.1	650.1	629.6	623.4	615.2	623.4	633.7
12.5°	531.1	506.5	479.9	477.8	494.2	494.2	492.2	494.2	500.4	500.4	508.6
15°	443.0	426.6	391.7	375.3	387.6	379.4	381.4	389.6	395.8	404.0	399.9
17.5°	352.7	338.4	322.0	311.7	317.9	311.7	309.7	307.6	307.6	305.6	313.8
20°	268.6	266.6	272.8	268.6	270.7	266.6	260.4	252.2	246.1	250.2	254.3
22.5°	233.8	235.8	239.9	244.0	244.0	239.9	229.7	221.5	219.4	219.4	221.5
25°	215.3	215.3	221.5	223.5	225.6	219.4	207.1	201.0	201.0	201.0	201.0
27.5°	194.8	198.9	203.0	207.1	209.2	203.0	192.8	186.6	186.6	184.6	182.5
30°	180.5	182.5	186.6	188.7	190.7	184.6	178.4	172.3	172.3	172.3	170.2
32.5°	164.1	170.2	172.3	174.3	176.4	172.3	166.1	162.0	160.0	157.9	153.8
35°	151.8	153.8	160.0	160.0	162.0	160.0	155.9	151.8	145.6	143.6	143.6
37.5°	139.5	139.5	143.6	147.7	151.8	149.7	143.6	137.4	135.3	135.3	135.3
40°	131.2	129.2	131.2	137.4	141.5	141.5	133.3	129.2	129.2	127.1	127.1
42.5°	121.0	121.0	121.0	127.1	135.3	131.2	123.0	123.0	123.0	121.0	121.0
45°	114.8	112.8	114.8	114.8	125.1	118.9	116.9	114.8	116.9	114.8	116.9
47.5°	106.6	106.6	106.6	108.7	114.8	110.7	108.7	108.7	110.7	110.7	110.7
50°	100.5	100.5	100.5	102.5	104.6	104.6	104.6	104.6	104.6	106.6	106.6
52.5°	96.4	94.3	96.4	96.4	98.4	100.5	98.4	100.5	100.5	100.5	102.5
55°	92.3	90.2	92.3	92.3	96.4	94.3	94.3	96.4	96.4	98.4	100.5
57.5°	86.1	84.1	88.2	88.2	92.3	92.3	90.2	92.3	92.3	94.3	94.3
60°	80.0	80.0	82.0	82.0	86.1	88.2	88.2	88.2	88.2	88.2	88.2
62.5°	73.8	73.8	75.9	77.9	82.0	82.0	84.1	84.1	84.1	84.1	82.0
65°	*67.7*	*69.7*	*71.8*	*71.8*	*75.9*	*77.9*	*77.9*	*77.9*	*77.9*	*77.9*	*77.9*
67.5°	59.5	63.6	65.6	67.7	71.8	71.8	73.8	73.8	71.8	71.8	71.8
70°	53.3	55.4	57.4	59.5	65.6	65.6	67.7	67.7	65.6	65.6	67.7
72.5°	45.1	47.2	49.2	53.3	59.5	59.5	61.5	61.5	59.5	59.5	59.5
75°	39.0	39.0	41.0	45.1	53.3	53.3	53.3	55.4	53.3	53.3	51.3
77.5°	28.7	30.8	32.8	39.0	45.1	47.2	47.2	47.2	45.1	45.1	43.1
80°	18.5	20.5	24.6	28.7	34.9	36.9	39.0	39.0	36.9	36.9	34.9
82.5°	8.2	12.3	14.4	18.5	22.6	28.7	28.7	30.8	28.7	26.7	26.7
85°	0.0	0.0	2.1	6.2	10.3	16.4	18.5	20.5	18.5	16.4	16.4
87.5°	0.0	0.0	0.0	0.0	0.0	4.1	4.1	4.1	2.1	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	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P437768
CATALOG NUMBER: ISC-SA1E-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1374.0	1396.6	1431.4	1451.9	1499.1	1542.2	1587.3	1646.8	1659.1	1661.1
5°	1091.0	1117.7	1183.3	1209.9	1296.1	1365.8	1468.3	1568.8	1595.5	1601.6
7.5°	832.6	853.1	924.9	976.2	1070.5	1168.9	1300.2	1419.1	1478.6	1484.7
10°	650.1	705.5	760.8	836.7	918.7	1015.1	1152.5	1304.3	1369.9	1365.8
12.5°	547.6	605.0	672.6	748.5	832.6	918.7	1043.8	1212.0	1277.6	1294.0
15°	438.9	508.6	582.4	660.3	758.8	842.9	988.5	1175.1	1255.1	1277.6
17.5°	340.4	395.8	467.6	568.1	664.4	783.4	968.0	1209.9	1300.2	1322.7
20°	268.6	309.7	360.9	457.3	580.4	728.0	957.7	1275.6	1398.6	1431.4
22.5°	229.7	246.1	283.0	367.1	496.3	668.5	951.6	1367.9	1521.7	1577.0
25°	205.1	215.3	235.8	289.2	412.2	617.3	961.8	1482.7	1693.9	1739.0
27.5°	186.6	194.8	205.1	244.0	356.8	572.2	980.3	1611.9	1841.6	1907.2
30°	170.2	176.4	190.7	217.4	311.7	527.0	986.4	1739.0	1972.8	2032.3
32.5°	157.9	166.1	178.4	201.0	285.1	496.3	970.0	1835.4	2093.8	2159.4
35°	145.6	155.9	168.2	186.6	262.5	469.6	933.1	1915.4	2208.7	2272.2
37.5°	139.5	145.6	157.9	172.3	246.1	443.0	900.3	1995.4	2327.6	2415.8
40°	131.2	137.4	149.7	162.0	225.6	414.3	877.7	2097.9	2463.0	2542.9
42.5°	125.1	133.3	143.6	157.9	209.2	383.5	855.2	2180.0	2584.0	2668.0
45°	121.0	129.2	139.5	157.9	194.8	358.9	830.6	2251.7	2676.2	2758.3
47.5°	114.8	125.1	139.5	151.8	188.7	342.5	830.6	2337.9	2760.3	2846.4
50°	112.8	123.0	145.6	147.7	184.6	336.3	865.4	2436.3	2881.3	2963.3
52.5°	110.7	121.0	145.6	139.5	180.5	340.4	918.7	2614.7	3037.2	3131.5
55°	104.6	118.9	139.5	129.2	170.2	344.5	978.2	2848.5	3268.9	3357.1
57.5°	100.5	116.9	131.2	118.9	155.9	338.4	1058.2	3057.7	3510.9	3572.4
60°	94.3	114.8	114.8	110.7	139.5	319.9	1148.4	3191.0	3603.2	3652.4
62.5°	90.2	112.8	102.5	102.5	127.1	291.2	1179.2	3158.2	3512.9	3566.3
65°	*84.1*	*98.4*	*92.3*	*94.3*	*116.9*	*258.4*	*1125.9*	*2953.1*	*3342.7*	*3406.3*
67.5°	77.9	84.1	82.0	86.1	112.8	225.6	982.3	2709.0	3123.3	3221.7
70°	69.7	73.8	73.8	77.9	106.6	203.0	820.3	2395.3	2838.2	2983.9
72.5°	63.6	65.6	65.6	71.8	100.5	190.7	648.0	2032.3	2380.9	2471.2
75°	53.3	57.4	57.4	61.5	90.2	162.0	443.0	1488.8	1665.2	1739.0
77.5°	47.2	47.2	49.2	51.3	71.8	108.7	260.4	916.7	1000.8	1039.7
80°	36.9	39.0	36.9	36.9	45.1	71.8	141.5	537.3	609.1	588.6
82.5°	26.7	26.7	22.6	22.6	26.7	39.0	61.5	278.9	285.1	274.8
85°	14.4	10.3	8.2	8.2	8.2	8.2	8.2	59.5	28.7	22.6
87.5°	0.0	0.0	0.0	2.1	2.1	2.1	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

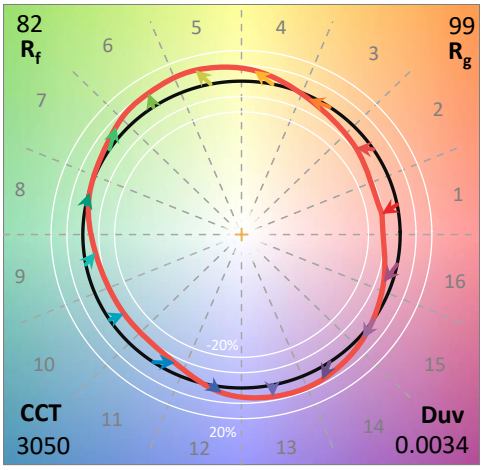
Test Information

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

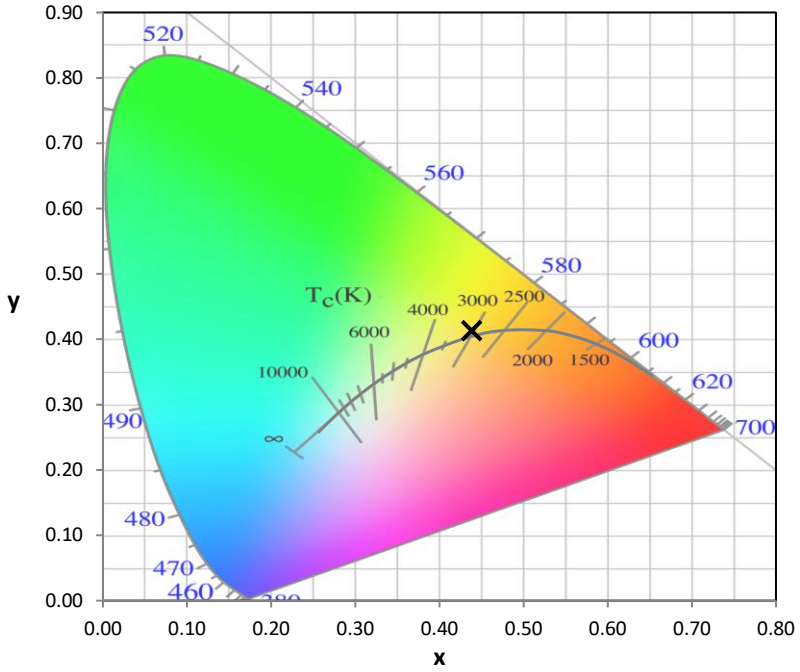
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

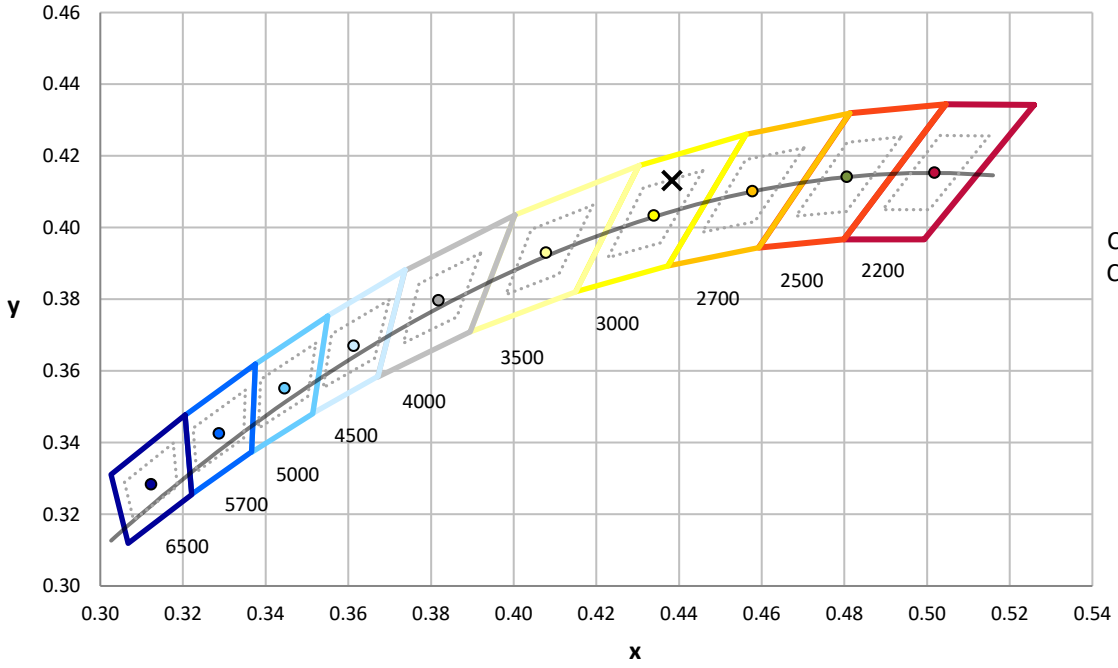
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

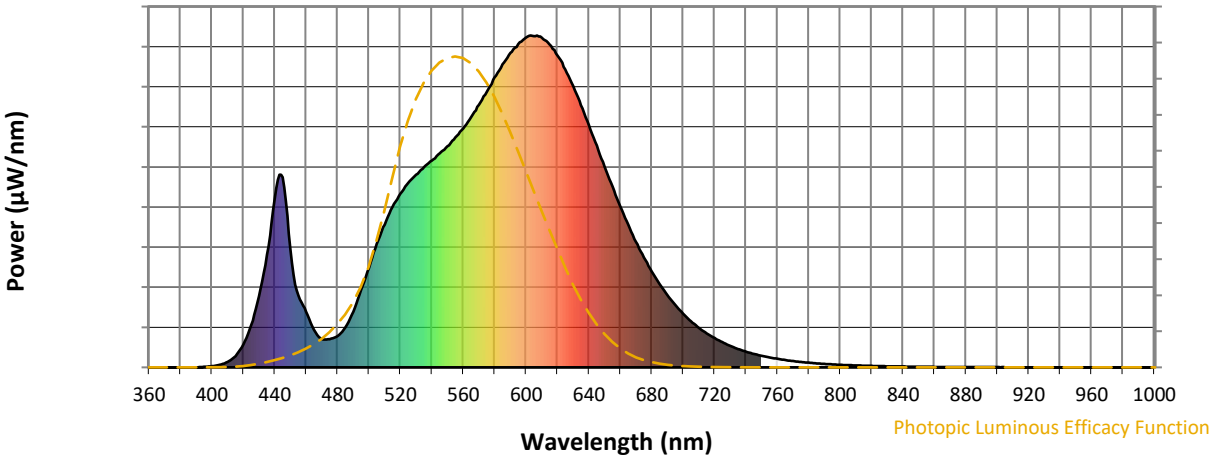


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

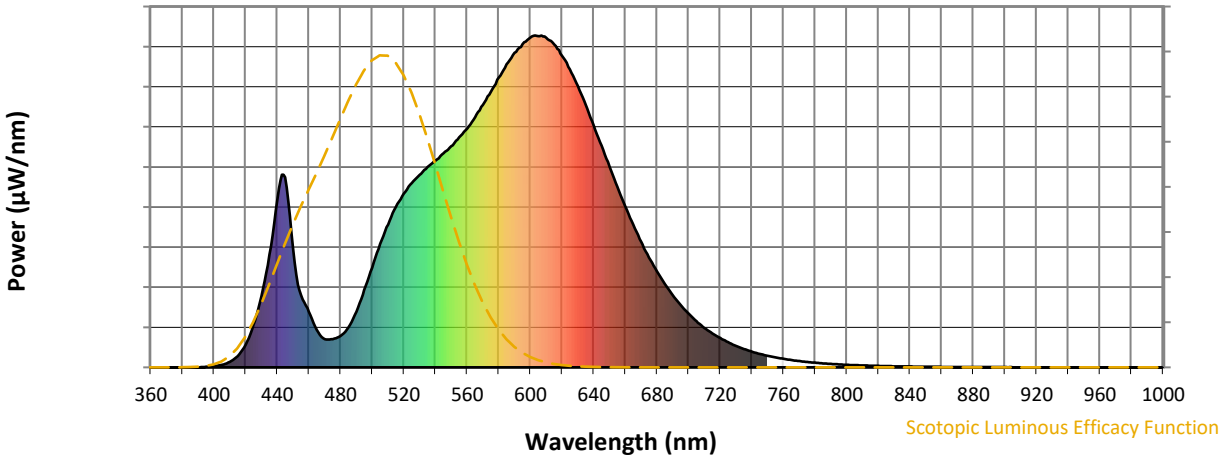


Photopic Lumens: NR

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

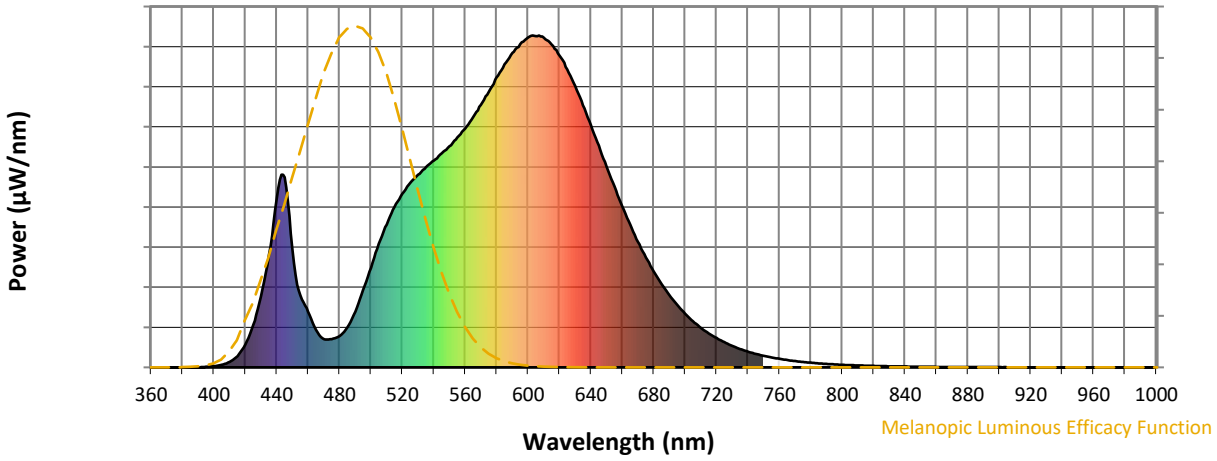


Scotopic Lumens: NR **S/P: 1.27**

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			

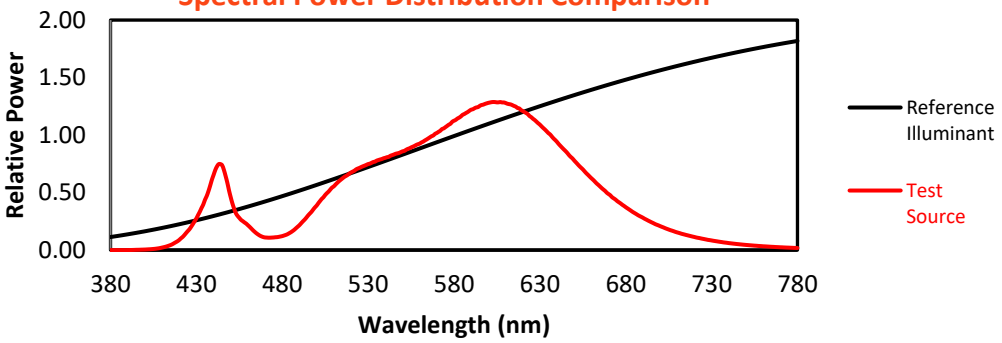
REPORT NUMBER: SP1-2408-195-9

TM-30-18

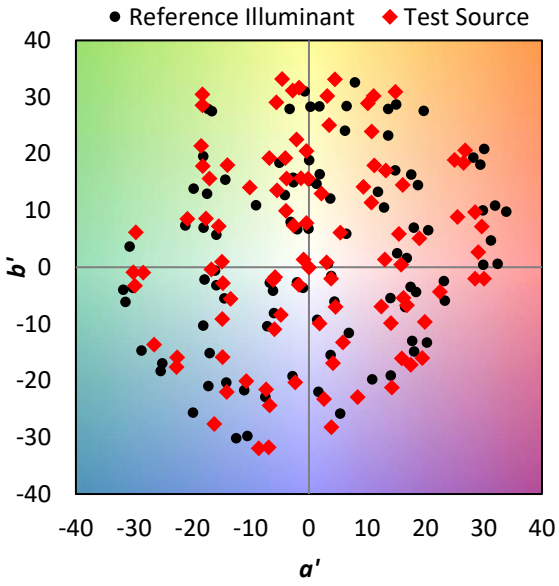
Summary

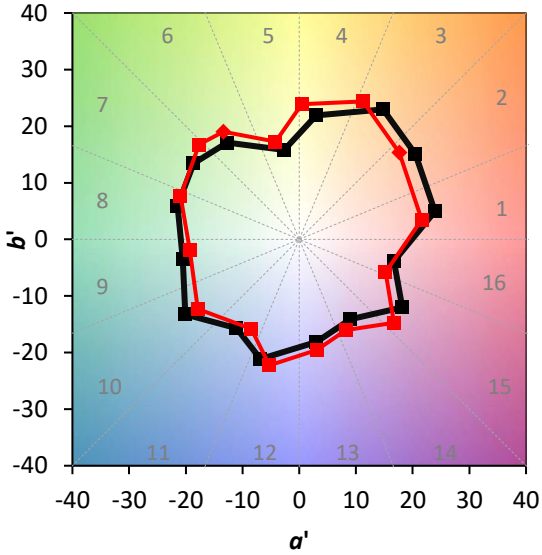
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

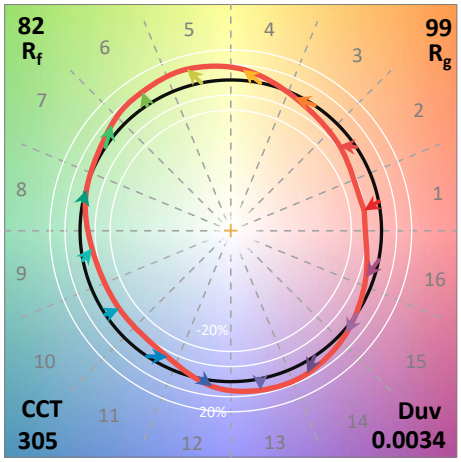
Spectral Power Distribution Comparison

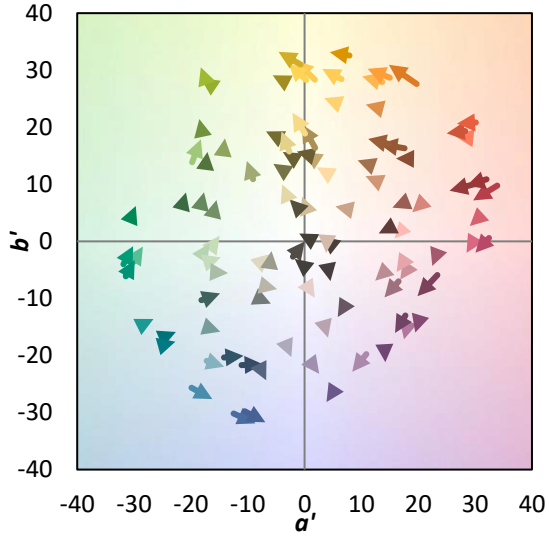


Color Vector Graphics









REPORT NUMBER: SP1-2408-195-9

TM-30-18

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
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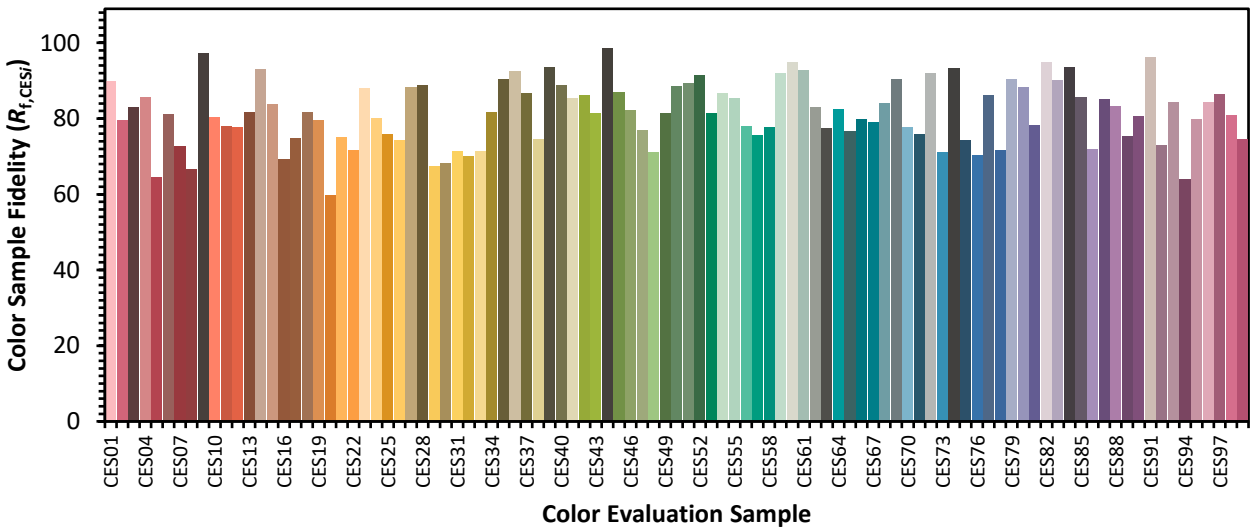

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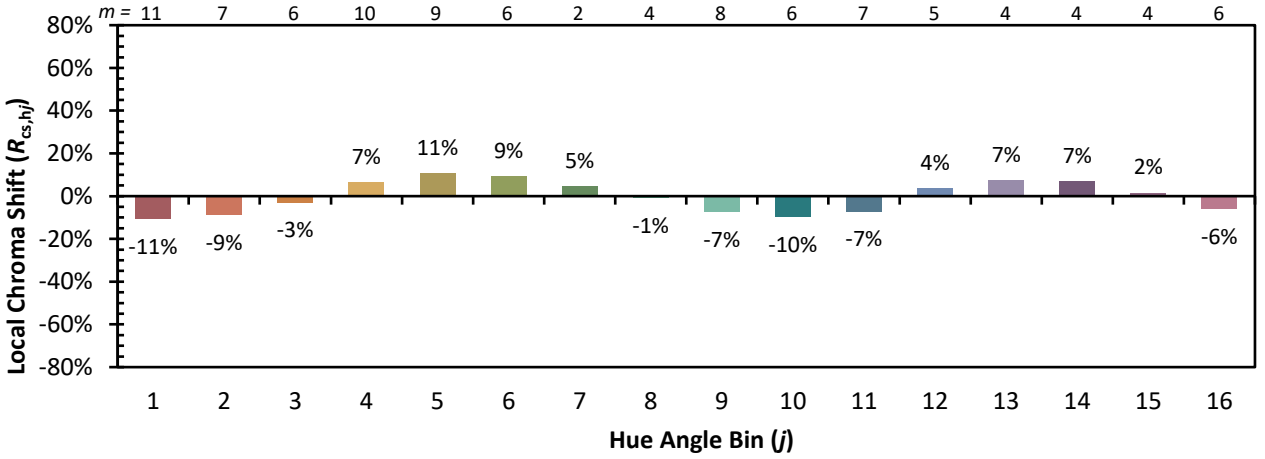
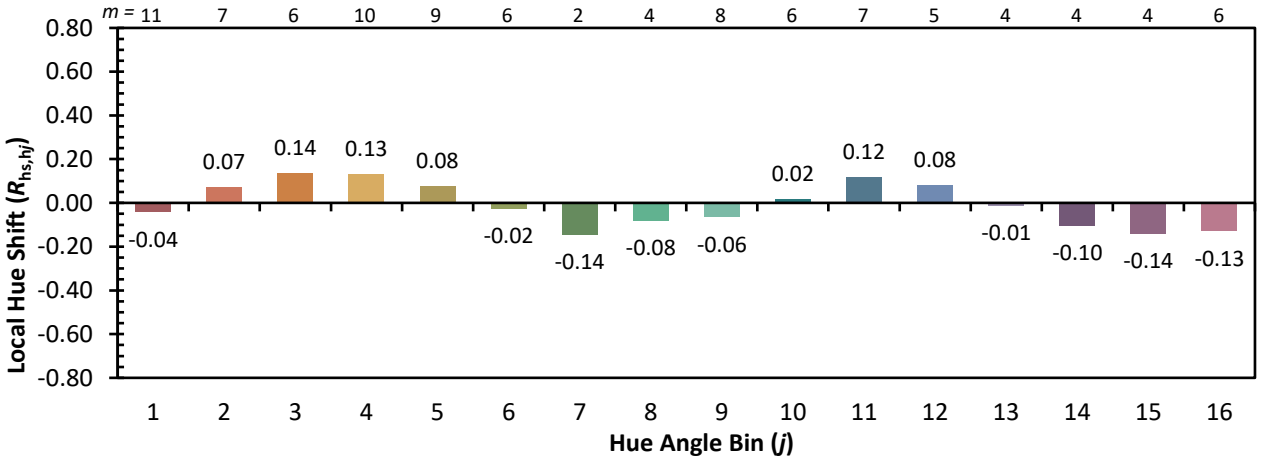
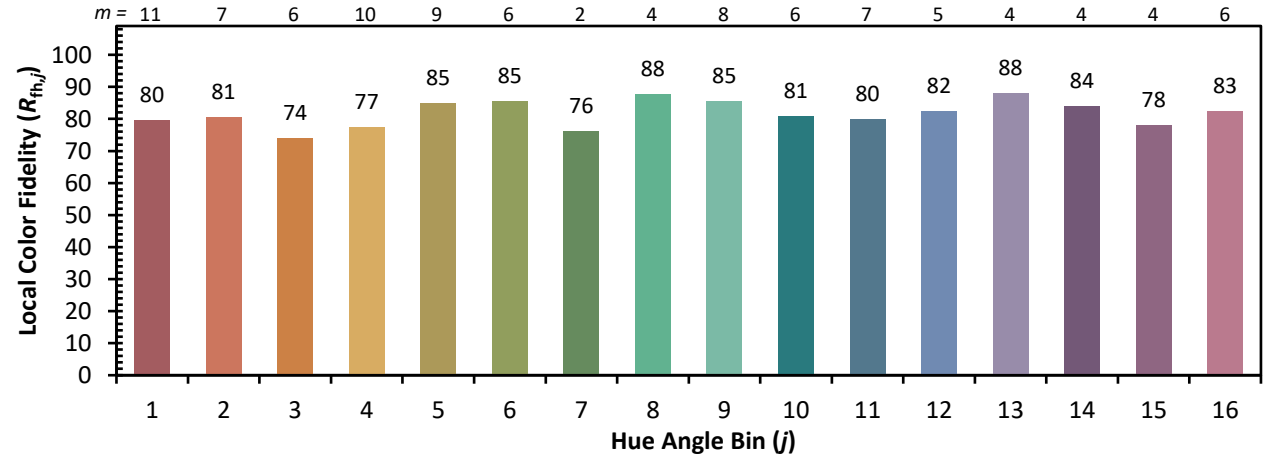
Color Rendition by Hue-Angle Bin







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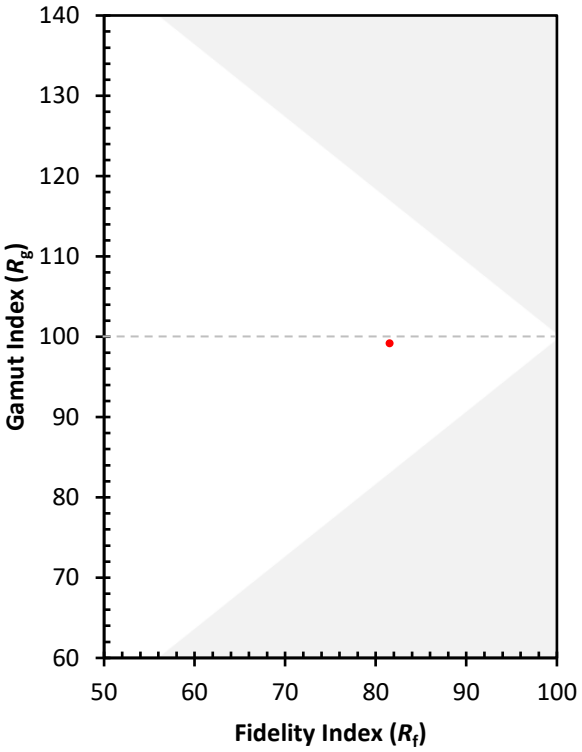
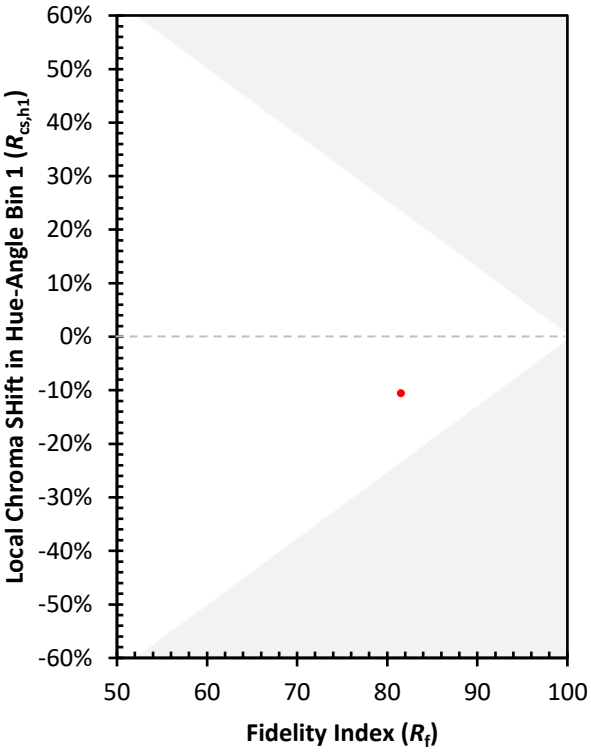
Measure Comparisons





(END OF REPORT)