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: P438623

Luminaire Tested: **IST-SA1D-830-U-SLL**

Issue Date: 12/10/2020

Report Generated By 670245982

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P438623
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-20)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	IST-SA1D-830-U-SLL
Description:	IMPACT ELITE LED TRAPEZOID LUMINAIRE
	(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4041 lumens
Efficiency:	N/A
Efficacy:	89.4 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):	45.2
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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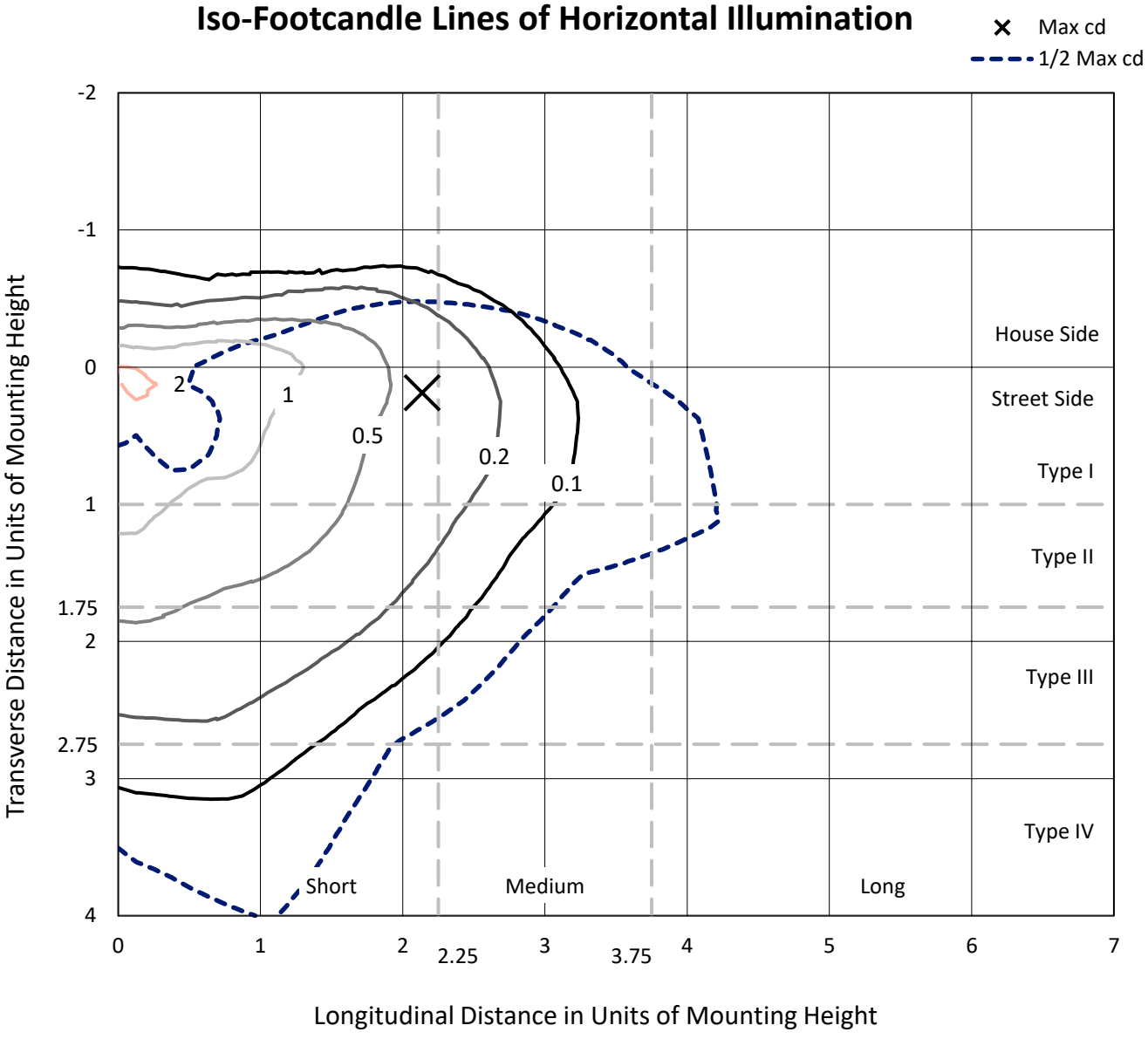
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type IV - Short - N/A

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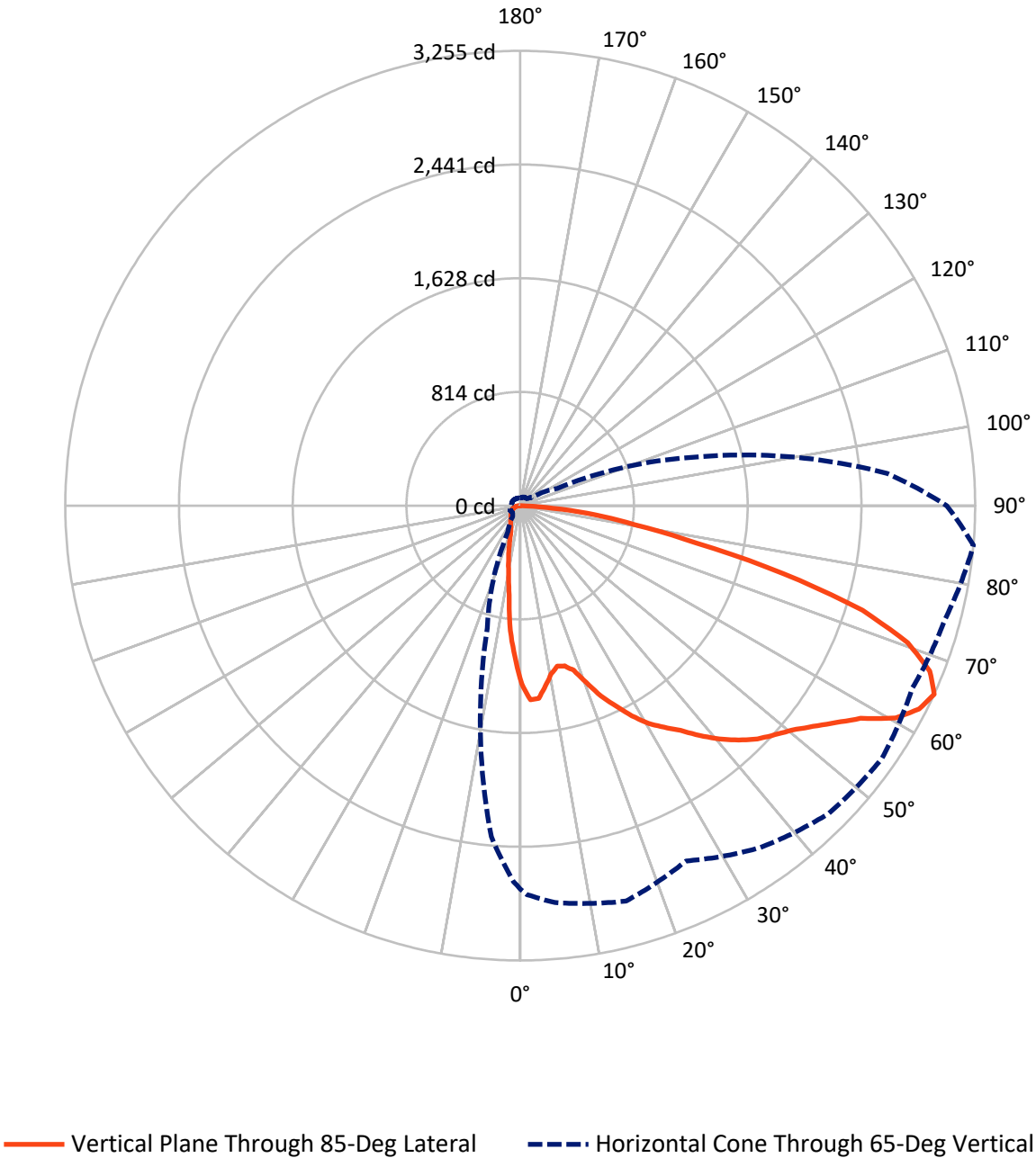
Luminous Intensity Polar Plot



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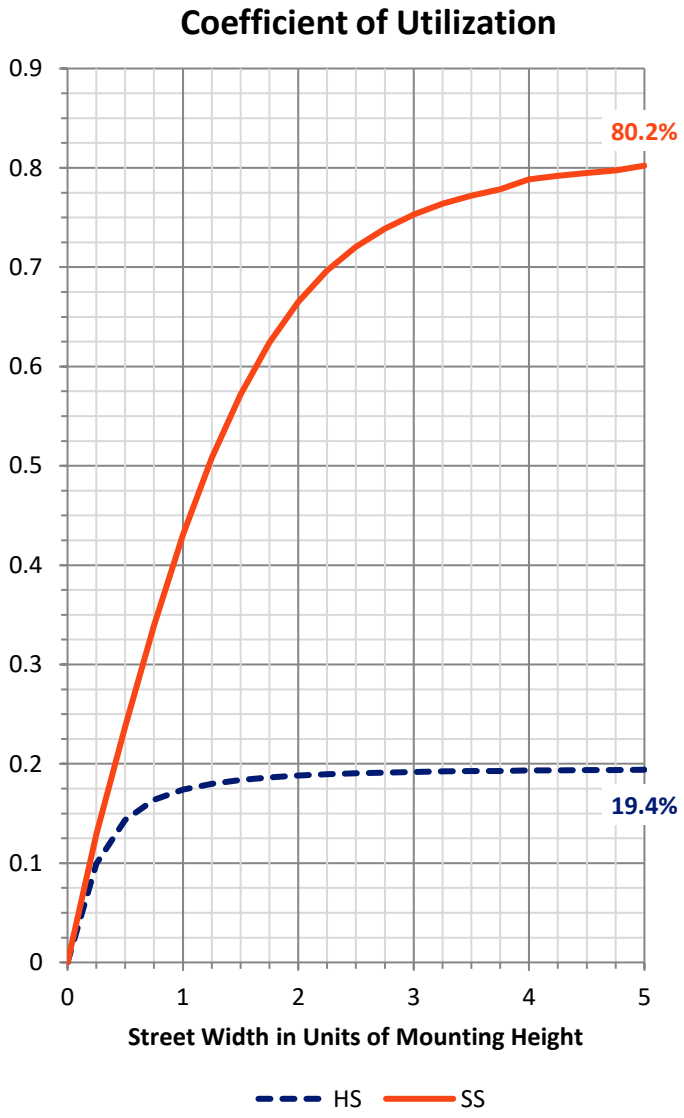
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	790.8	0.0	790.8
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	3250.2	0.0	3250.2
	% Fixture	80.4	0.0	80.4
Total	Lumens	4041.0	0.0	4041.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	2.4
10°-20°	202.1	5.0
20°-30°	290.6	7.2
30°-40°	417.3	10.3
40°-50°	590.7	14.6
50°-60°	821.4	20.3
60°-70°	978.1	24.2
70°-80°	565.3	14.0
80°-90°	78.2	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°	4041.0	100.0
0°-180°	4041.0	100.0



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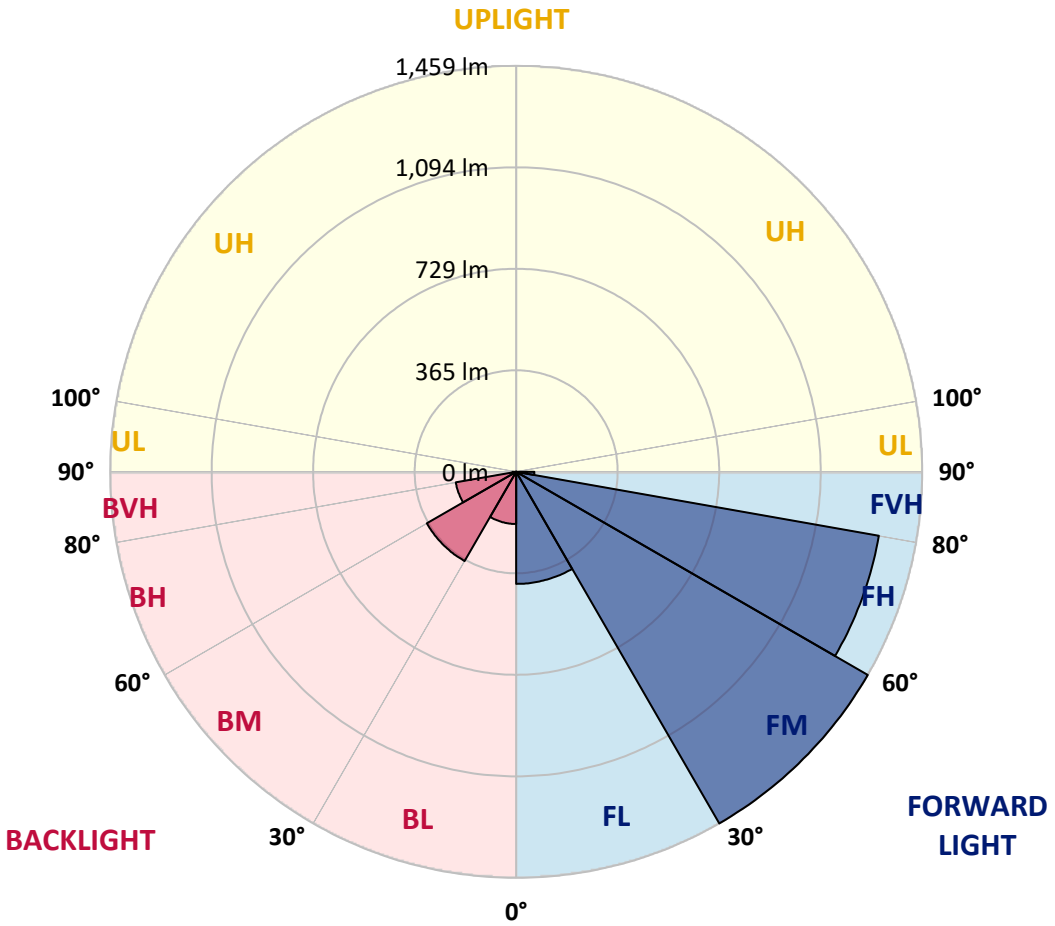
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	402.7	10.0			
FM	(30°-60°)	1458.8	36.1			
FH	(60°-80°)	1323.2	32.7			G1/1800
FVH	(80°-90°)	65.4	1.6			G1/100
BL	(0°-30°)	187.3	4.6	B1/500		
BM	(30°-60°)	370.5	9.2	B1/1000		
BH	(60°-80°)	220.2	5.4	B1/500		G1/500
BVH	(80°-90°)	12.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	*1276.6*
2.5°	1337.7	1342.7	1354.2	1393.8	1418.6	1438.4	1463.2	1438.4	1431.8	1398.8	*1392.2*
5°	1289.8	1301.4	1334.4	1408.7	1469.8	1534.2	1567.3	1539.2	1501.2	1443.4	*1385.6*
7.5°	1195.7	1210.5	1253.5	1369.1	1484.7	1572.2	1615.1	1585.4	1507.8	1405.4	*1301.4*
10°	1099.9	1123.0	1174.2	1319.5	1441.7	1539.2	1605.2	1573.9	1479.7	1346.0	*1222.1*
12.5°	1042.1	1058.6	1116.4	1268.3	1397.1	1494.6	1544.1	1526.0	1438.4	1311.3	*1179.2*
15°	1028.9	1045.4	1103.2	1250.2	1364.1	1436.8	1448.3	1453.3	1420.3	1322.8	*1190.7*
17.5°	1065.2	1078.4	1157.7	1279.9	1326.1	1341.0	1359.2	1380.6	1397.1	1346.0	*1238.6*
20°	1152.7	1179.2	1248.5	1341.0	1316.2	1281.5	1291.5	1317.9	1380.6	1413.7	*1349.3*
22.5°	1270.0	1299.7	1387.2	1425.2	1322.8	1248.5	1240.3	1263.4	1379.0	1488.0	*1481.4*
25°	1400.5	1441.7	1535.9	1537.5	1350.9	1225.4	1208.9	1230.3	1375.7	1554.0	*1587.1*
27.5°	1535.9	1573.9	1676.2	1625.1	1405.4	1227.0	1207.2	1228.7	1383.9	1625.1	*1704.3*
30°	1636.6	1686.2	1775.3	1707.6	1440.1	1248.5	1218.8	1246.9	1402.1	1661.4	*1808.4*
32.5°	1739.0	1770.4	1864.5	1755.5	1478.1	1281.5	1243.6	1286.5	1448.3	1696.1	*1890.9*
35°	1829.8	1871.1	1966.9	1783.6	1534.2	1337.7	1288.2	1344.3	1514.4	1745.6	*1975.2*
37.5°	1945.4	1985.1	2072.6	1823.2	1580.5	1408.7	1367.4	1440.1	1595.3	1790.2	*2087.5*
40°	2047.8	2110.6	2176.6	1872.8	1633.3	1512.8	1486.3	1585.4	1704.3	1851.3	*2196.5*
42.5°	2148.6	2201.4	2274.1	1928.9	1701.0	1639.9	1651.5	1755.5	1836.4	1943.8	*2293.9*
45°	2221.2	2282.3	2346.7	1973.5	1788.5	1777.0	1854.6	1942.1	1971.9	2041.2	*2381.4*
47.5°	2292.2	2340.1	2397.9	2018.1	1894.2	1930.6	2066.0	2133.7	2104.0	2128.8	*2450.8*
50°	2386.4	2437.6	2454.1	2089.1	2028.0	2125.4	2272.4	2317.0	2231.1	2198.1	*2523.5*
52.5°	2521.8	2546.6	2538.3	2173.3	2155.2	2328.6	2449.1	2516.8	2363.3	2264.2	*2624.2*
55°	2703.5	2746.4	2693.6	2310.4	2285.6	2523.5	2663.8	2696.9	2510.2	2346.7	*2739.8*
57.5°	2876.9	2914.9	2898.3	2477.2	2455.7	2691.9	2827.3	2858.7	2653.9	2500.3	*2871.9*
60°	2941.3	2952.8	3012.3	2653.9	2625.8	2835.6	2989.2	2994.1	2825.7	2685.3	*3086.6*
62.5°	2871.9	2918.2	2976.0	2819.1	2728.2	2959.4	3096.5	3127.9	2989.2	2909.9	*3203.9*
65°	*2743.1*	*2784.4*	*2852.1*	*2929.7*	*2805.9*	*2989.2*	*3118.0*	*3157.6*	*3094.9*	*3146.1*	*3255.1*
67.5°	2594.5	2645.7	2691.9	2947.9	2795.9	2819.1	2926.4	2951.2	3038.7	3250.1	*3160.9*
70°	2402.9	2460.7	2500.3	2876.9	2559.8	2330.2	2406.2	2473.9	2607.7	3065.1	*2941.3*
72.5°	1990.0	2082.5	2181.6	2554.8	2071.0	1810.0	1869.5	1914.1	2009.8	2617.6	*2561.4*
75°	1400.5	1468.2	1590.4	2057.7	1590.4	1281.5	1374.0	1374.0	1494.6	2150.2	*1945.4*
77.5°	837.3	838.9	957.9	1354.2	967.8	863.7	916.6	941.3	977.7	1522.7	*1291.5*
80°	474.0	480.6	520.2	875.3	573.1	589.6	652.3	718.4	663.9	944.6	*830.7*
82.5°	221.3	194.9	206.4	412.9	325.3	384.8	394.7	424.4	427.7	604.4	*545.0*
85°	18.2	14.9	19.8	74.3	57.8	52.8	38.0	72.7	114.0	264.2	*234.5*
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°	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6
2.5°	1370.7	1354.2	1317.9	1289.8	1263.4	1213.8	1194.0	1165.9	1151.1	1124.7	1131.3
5°	1342.7	1304.7	1222.1	1165.9	1093.3	1033.8	997.5	964.5	951.3	923.2	913.3
7.5°	1240.3	1207.2	1103.2	1010.7	921.5	850.5	782.8	733.3	710.1	685.4	683.7
10°	1152.7	1098.2	979.3	870.3	767.9	701.9	652.3	611.0	574.7	543.3	525.2
12.5°	1103.2	1035.5	903.4	771.2	700.2	654.0	599.5	548.3	507.0	470.7	449.2
15°	1103.2	1023.9	867.0	738.2	667.2	597.8	535.1	482.2	427.7	384.8	371.6
17.5°	1154.4	1056.9	875.3	716.7	616.0	538.4	459.1	389.7	336.9	298.9	285.7
20°	1255.1	1137.9	895.1	692.0	566.5	459.1	363.3	289.0	241.1	222.9	219.6
22.5°	1372.4	1235.3	924.8	668.8	515.3	374.9	272.5	219.6	198.2	191.6	191.6
25°	1501.2	1344.3	962.8	644.1	462.4	297.3	208.1	183.3	175.1	171.8	171.8
27.5°	1621.7	1463.2	1030.5	634.2	412.9	241.1	181.7	163.5	158.5	155.2	156.9
30°	1739.0	1568.9	1099.9	614.3	358.4	209.7	163.5	150.3	143.7	142.0	143.7
32.5°	1839.7	1659.7	1147.8	584.6	320.4	188.3	151.9	138.7	132.1	130.5	132.1
35°	1955.3	1748.9	1195.7	563.2	300.6	175.1	143.7	130.5	123.9	120.6	120.6
37.5°	2090.8	1856.3	1232.0	531.8	287.4	161.8	137.1	123.9	115.6	112.3	112.3
40°	2272.4	1986.7	1261.7	507.0	272.5	155.2	128.8	117.3	109.0	105.7	104.0
42.5°	2397.9	2100.7	1286.5	490.5	257.6	151.9	123.9	114.0	104.0	99.1	97.4
45°	2483.8	2201.4	1303.0	482.2	244.4	143.7	120.6	110.6	99.1	92.5	92.5
47.5°	2566.4	2284.0	1304.7	470.7	234.5	133.8	125.5	105.7	94.1	87.5	87.5
50°	2658.9	2388.0	1336.0	459.1	222.9	122.2	123.9	104.0	90.8	84.2	82.6
52.5°	2751.4	2530.1	1397.1	442.6	206.4	112.3	117.3	105.7	87.5	80.9	79.3
55°	2916.5	2706.8	1473.1	417.8	185.0	102.4	109.0	104.0	82.6	76.0	74.3
57.5°	3023.9	2871.9	1532.6	391.4	153.6	95.8	95.8	100.7	77.6	71.0	69.4
60°	3085.0	2903.3	1544.1	360.0	125.5	85.9	82.6	102.4	72.7	64.4	64.4
62.5°	3083.3	2795.9	1486.3	330.3	109.0	79.3	74.3	89.2	67.7	61.1	59.5
65°	*3051.9*	*2637.4*	*1355.9*	*292.3*	*102.4*	*72.7*	*66.1*	*67.7*	*62.8*	*56.2*	*54.5*
67.5°	2916.5	2363.3	1147.8	254.3	99.1	66.1	61.1	57.8	54.5	49.5	47.9
70°	2587.9	2054.4	895.1	236.2	97.4	57.8	52.8	49.5	46.2	42.9	42.9
72.5°	2104.0	1601.9	683.7	226.3	99.1	52.8	44.6	42.9	39.6	38.0	36.3
75°	1456.6	1184.1	495.4	199.8	95.8	44.6	38.0	34.7	33.0	29.7	29.7
77.5°	936.4	774.5	328.6	160.2	77.6	36.3	28.1	26.4	24.8	23.1	23.1
80°	616.0	526.8	191.6	114.0	47.9	24.8	19.8	19.8	18.2	14.9	14.9
82.5°	391.4	398.0	99.1	52.8	28.1	14.9	11.6	9.9	9.9	6.6	6.6
85°	85.9	150.3	44.6	21.5	9.9	1.7	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°	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6
2.5°	1108.1	1094.9	1090.0	1090.0	1068.5	1070.2	1070.2	1083.4	1081.7	1093.3	1088.3
5°	901.7	888.5	888.5	891.8	895.1	880.2	885.2	872.0	896.8	878.6	865.4
7.5°	665.5	663.9	675.5	701.9	696.9	692.0	682.1	657.3	644.1	657.3	650.7
10°	510.3	515.3	512.0	523.5	525.2	523.5	507.0	502.0	495.4	502.0	510.3
12.5°	427.7	407.9	386.4	384.8	398.0	398.0	396.4	398.0	403.0	403.0	409.6
15°	356.7	343.5	315.4	302.2	312.1	305.5	307.2	313.8	318.7	325.3	322.0
17.5°	284.1	272.5	259.3	251.0	256.0	251.0	249.4	247.7	247.7	246.1	252.7
20°	216.3	214.7	219.6	216.3	218.0	214.7	209.7	203.1	198.2	201.5	204.8
22.5°	188.3	189.9	193.2	196.5	196.5	193.2	185.0	178.4	176.7	176.7	178.4
25°	173.4	173.4	178.4	180.0	181.7	176.7	166.8	161.8	161.8	161.8	161.8
27.5°	156.9	160.2	163.5	166.8	168.5	163.5	155.2	150.3	150.3	148.6	147.0
30°	145.3	147.0	150.3	151.9	153.6	148.6	143.7	138.7	138.7	138.7	137.1
32.5°	132.1	137.1	138.7	140.4	142.0	138.7	133.8	130.5	128.8	127.2	123.9
35°	122.2	123.9	128.8	128.8	130.5	128.8	125.5	122.2	117.3	115.6	115.6
37.5°	112.3	112.3	115.6	118.9	122.2	120.6	115.6	110.6	109.0	109.0	109.0
40°	105.7	104.0	105.7	110.6	114.0	114.0	107.3	104.0	104.0	102.4	102.4
42.5°	97.4	97.4	97.4	102.4	109.0	105.7	99.1	99.1	99.1	97.4	97.4
45°	92.5	90.8	92.5	92.5	100.7	95.8	94.1	92.5	94.1	92.5	94.1
47.5°	85.9	85.9	85.9	87.5	92.5	89.2	87.5	87.5	89.2	89.2	89.2
50°	80.9	80.9	80.9	82.6	84.2	84.2	84.2	84.2	84.2	85.9	85.9
52.5°	77.6	76.0	77.6	77.6	79.3	80.9	79.3	80.9	80.9	80.9	82.6
55°	74.3	72.7	74.3	74.3	77.6	76.0	76.0	77.6	77.6	79.3	80.9
57.5°	69.4	67.7	71.0	71.0	74.3	74.3	72.7	74.3	74.3	76.0	76.0
60°	64.4	64.4	66.1	66.1	69.4	71.0	71.0	71.0	71.0	71.0	71.0
62.5°	59.5	59.5	61.1	62.8	66.1	66.1	67.7	67.7	67.7	67.7	66.1
65°	*54.5*	*56.2*	*57.8*	*57.8*	*61.1*	*62.8*	*62.8*	*62.8*	*62.8*	*62.8*	*62.8*
67.5°	47.9	51.2	52.8	54.5	57.8	57.8	59.5	59.5	57.8	57.8	57.8
70°	42.9	44.6	46.2	47.9	52.8	52.8	54.5	54.5	52.8	52.8	54.5
72.5°	36.3	38.0	39.6	42.9	47.9	47.9	49.5	49.5	47.9	47.9	47.9
75°	31.4	31.4	33.0	36.3	42.9	42.9	42.9	44.6	42.9	42.9	41.3
77.5°	23.1	24.8	26.4	31.4	36.3	38.0	38.0	38.0	36.3	36.3	34.7
80°	14.9	16.5	19.8	23.1	28.1	29.7	31.4	31.4	29.7	29.7	28.1
82.5°	6.6	9.9	11.6	14.9	18.2	23.1	23.1	24.8	23.1	21.5	21.5
85°	0.0	0.0	1.7	5.0	8.3	13.2	14.9	16.5	14.9	13.2	13.2
87.5°	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3	1.7	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: P438623
CATALOG NUMBER: IST-SA1D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6	1276.6
2.5°	1106.5	1124.7	1152.7	1169.2	1207.2	1241.9	1278.2	1326.1	1336.0	1337.7
5°	878.6	900.1	952.9	974.4	1043.7	1099.9	1182.5	1263.4	1284.8	1289.8
7.5°	670.5	687.0	744.8	786.1	862.1	941.3	1047.0	1142.8	1190.7	1195.7
10°	523.5	568.1	612.7	673.8	739.9	817.5	928.1	1050.3	1103.2	1099.9
12.5°	440.9	487.2	541.7	602.8	670.5	739.9	840.6	976.0	1028.9	1042.1
15°	353.4	409.6	469.0	531.8	611.0	678.8	796.0	946.3	1010.7	1028.9
17.5°	274.1	318.7	376.5	457.5	535.1	630.9	779.5	974.4	1047.0	1065.2
20°	216.3	249.4	290.7	368.3	467.4	586.3	771.2	1027.2	1126.3	1152.7
22.5°	185.0	198.2	227.9	295.6	399.7	538.4	766.3	1101.5	1225.4	1270.0
25°	165.1	173.4	189.9	232.9	331.9	497.1	774.5	1194.0	1364.1	1400.5
27.5°	150.3	156.9	165.1	196.5	287.4	460.8	789.4	1298.1	1483.0	1535.9
30°	137.1	142.0	153.6	175.1	251.0	424.4	794.4	1400.5	1588.7	1636.6
32.5°	127.2	133.8	143.7	161.8	229.6	399.7	781.1	1478.1	1686.2	1739.0
35°	117.3	125.5	135.4	150.3	211.4	378.2	751.4	1542.5	1778.6	1829.8
37.5°	112.3	117.3	127.2	138.7	198.2	356.7	725.0	1606.9	1874.4	1945.4
40°	105.7	110.6	120.6	130.5	181.7	333.6	706.8	1689.5	1983.4	2047.8
42.5°	100.7	107.3	115.6	127.2	168.5	308.8	688.7	1755.5	2080.9	2148.6
45°	97.4	104.0	112.3	127.2	156.9	289.0	668.8	1813.3	2155.2	2221.2
47.5°	92.5	100.7	112.3	122.2	151.9	275.8	668.8	1882.7	2222.9	2292.2
50°	90.8	99.1	117.3	118.9	148.6	270.8	696.9	1962.0	2320.3	2386.4
52.5°	89.2	97.4	117.3	112.3	145.3	274.1	739.9	2105.6	2445.8	2521.8
55°	84.2	95.8	112.3	104.0	137.1	277.4	787.8	2293.9	2632.5	2703.5
57.5°	80.9	94.1	105.7	95.8	125.5	272.5	852.2	2462.4	2827.3	2876.9
60°	76.0	92.5	92.5	89.2	112.3	257.6	924.8	2569.7	2901.6	2941.3
62.5°	72.7	90.8	82.6	82.6	102.4	234.5	949.6	2543.3	2829.0	2871.9
65°	*67.7*	*79.3*	*74.3*	*76.0*	*94.1*	*208.1*	*906.7*	*2378.1*	*2691.9*	*2743.1*
67.5°	62.8	67.7	66.1	69.4	90.8	181.7	791.1	2181.6	2515.2	2594.5
70°	56.2	59.5	59.5	62.8	85.9	163.5	660.6	1928.9	2285.6	2402.9
72.5°	51.2	52.8	52.8	57.8	80.9	153.6	521.9	1636.6	1917.4	1990.0
75°	42.9	46.2	46.2	49.5	72.7	130.5	356.7	1199.0	1341.0	1400.5
77.5°	38.0	38.0	39.6	41.3	57.8	87.5	209.7	738.2	805.9	837.3
80°	29.7	31.4	29.7	29.7	36.3	57.8	114.0	432.7	490.5	474.0
82.5°	21.5	21.5	18.2	18.2	21.5	31.4	49.5	224.6	229.6	221.3
85°	11.6	8.3	6.6	6.6	6.6	6.6	6.6	47.9	23.1	18.2
87.5°	0.0	0.0	0.0	1.7	1.7	1.7	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.

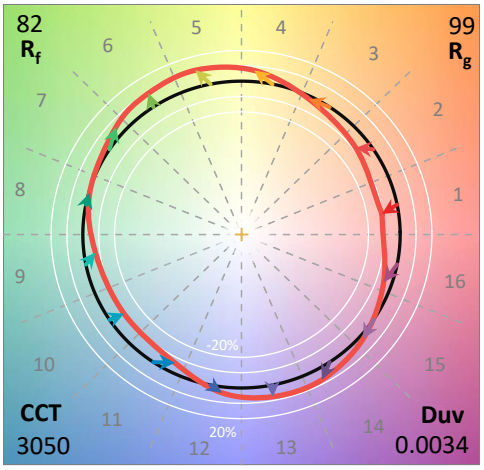
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

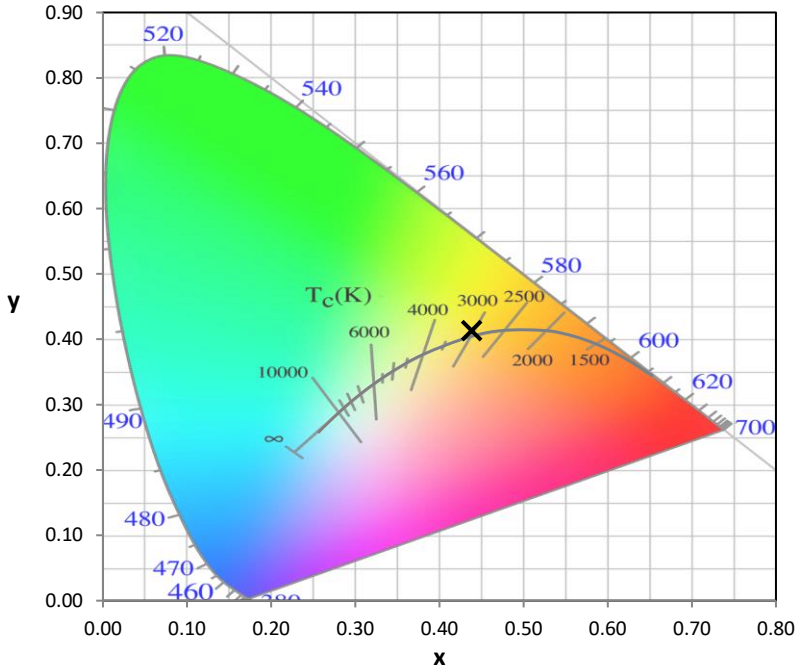
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

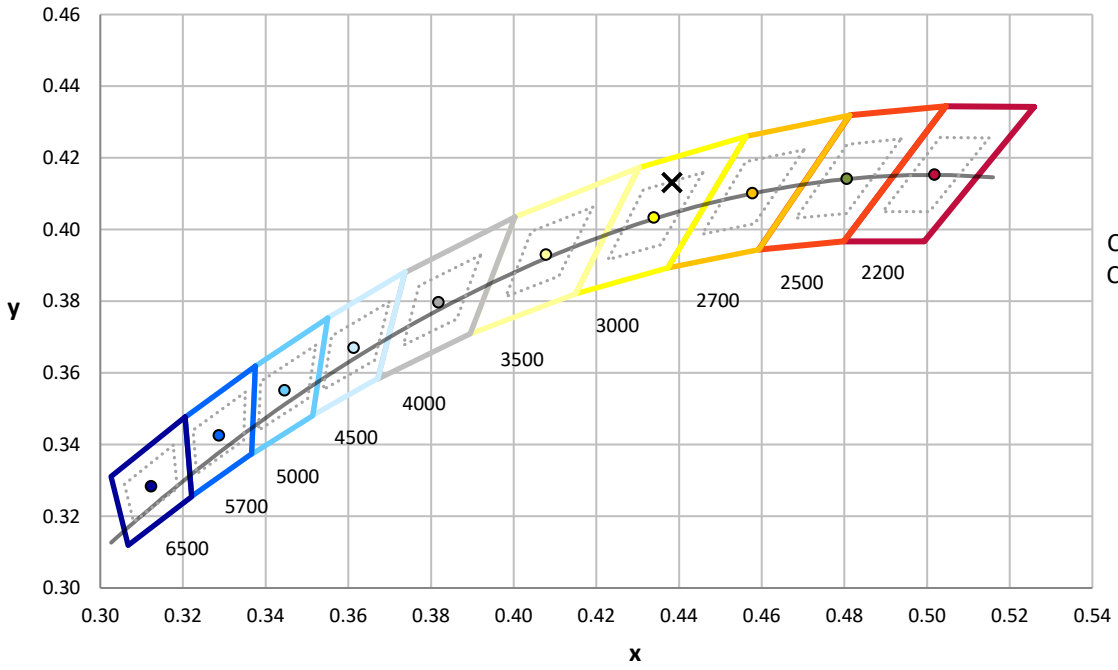
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

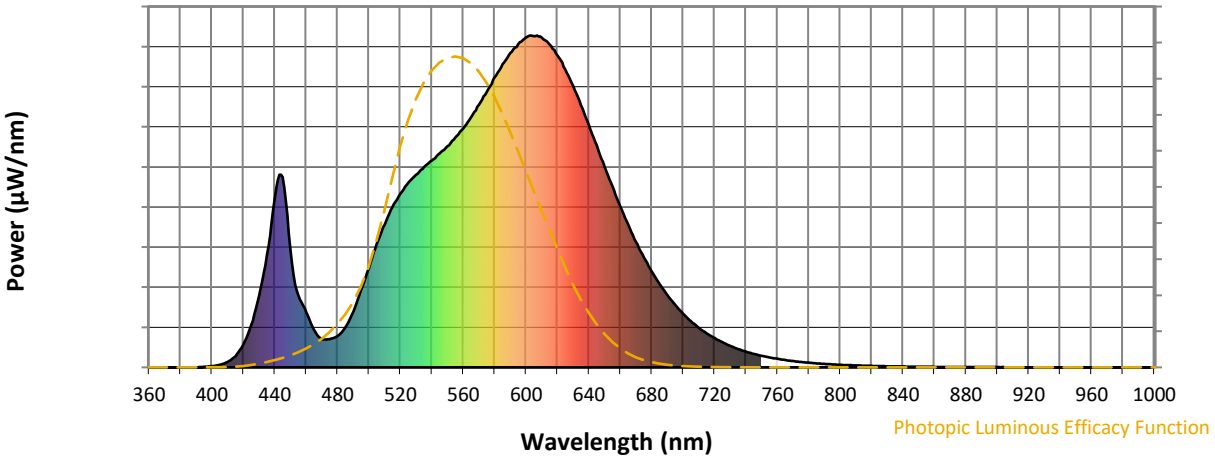


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

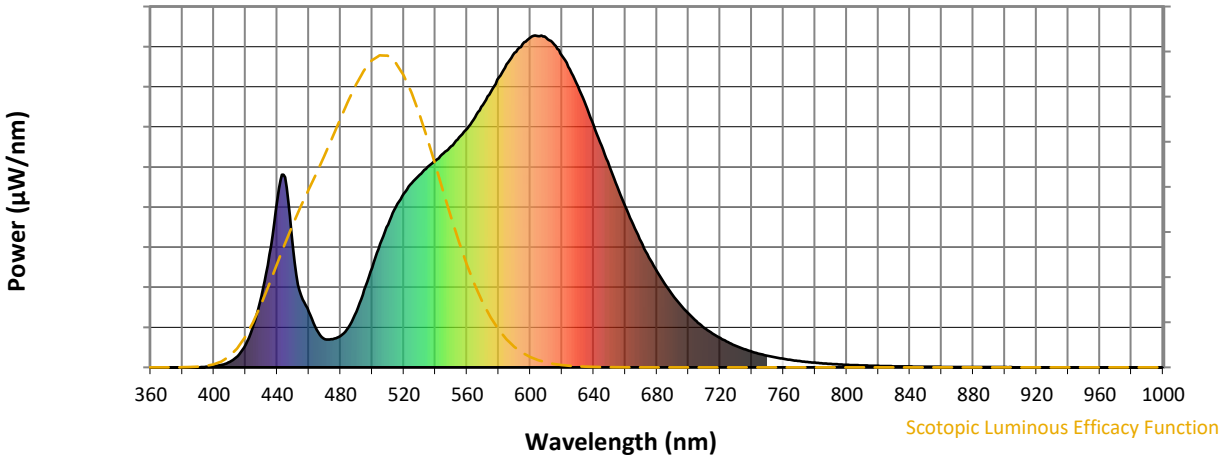


Photopic Lumens: NR

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

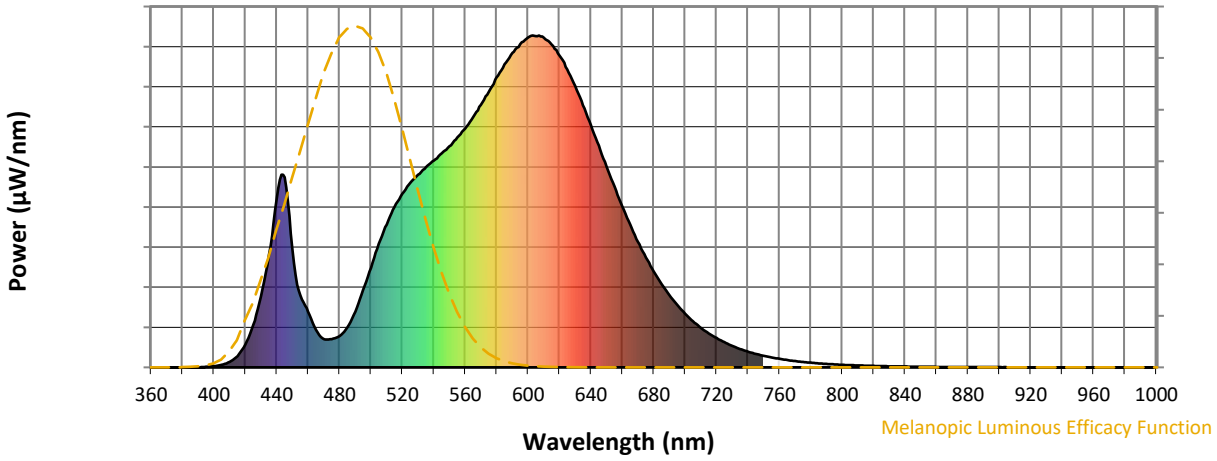


Scotopic Lumens: NR **S/P: 1.27**

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			

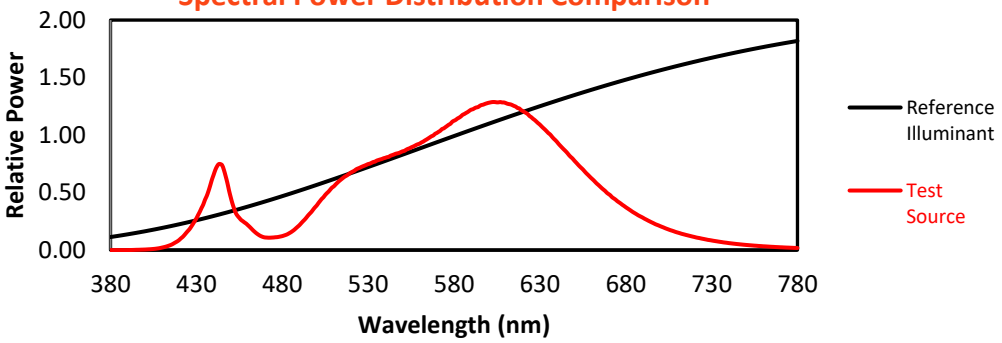
REPORT NUMBER: SP1-2408-195-9

TM-30-18

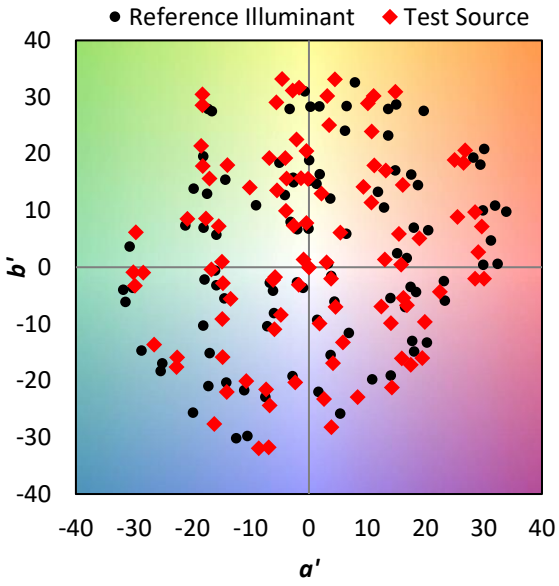
Summary

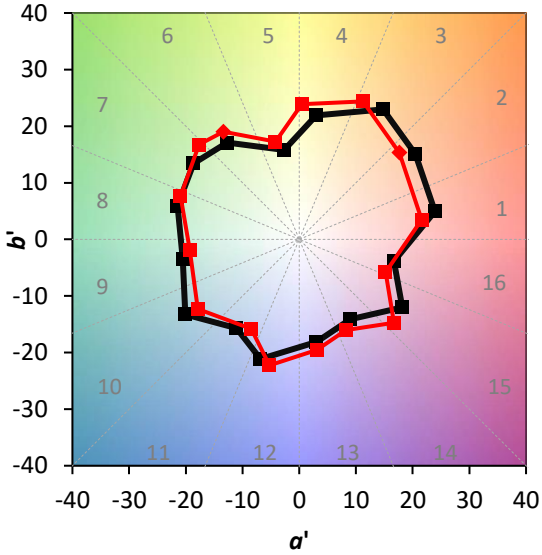
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

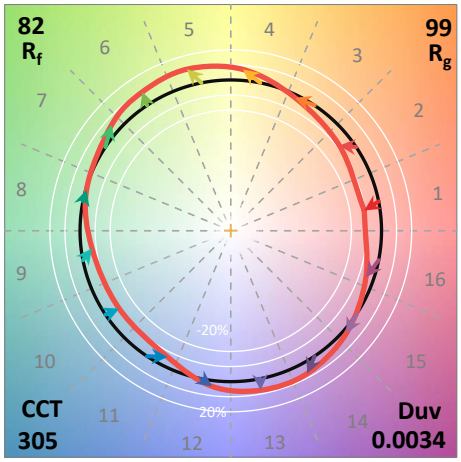
Spectral Power Distribution Comparison

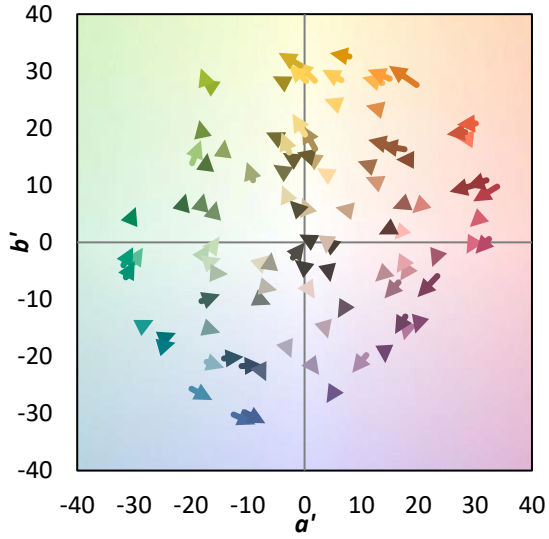


Color Vector Graphics









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
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
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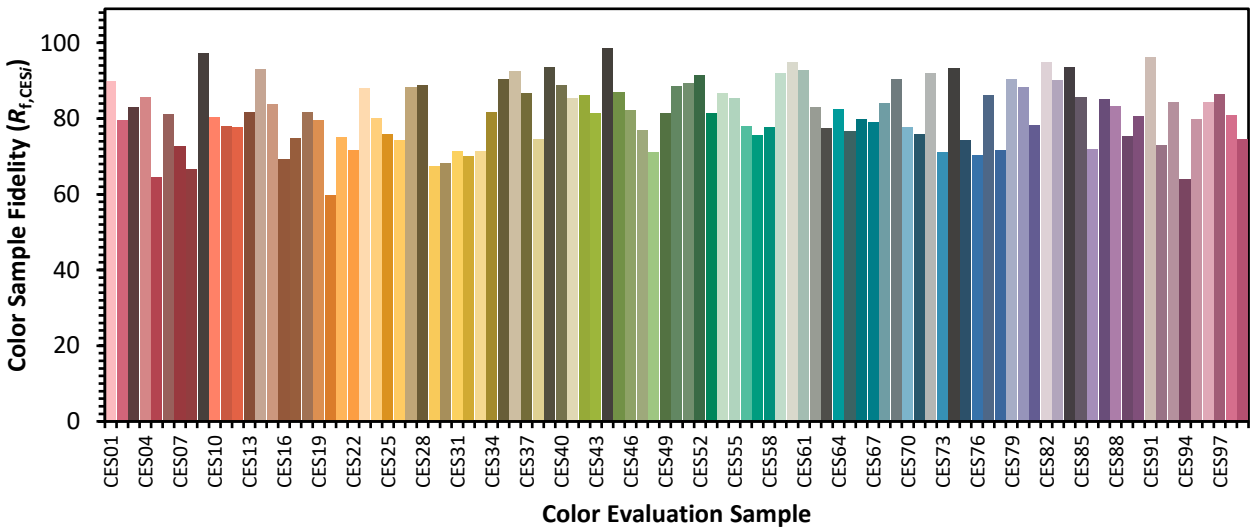

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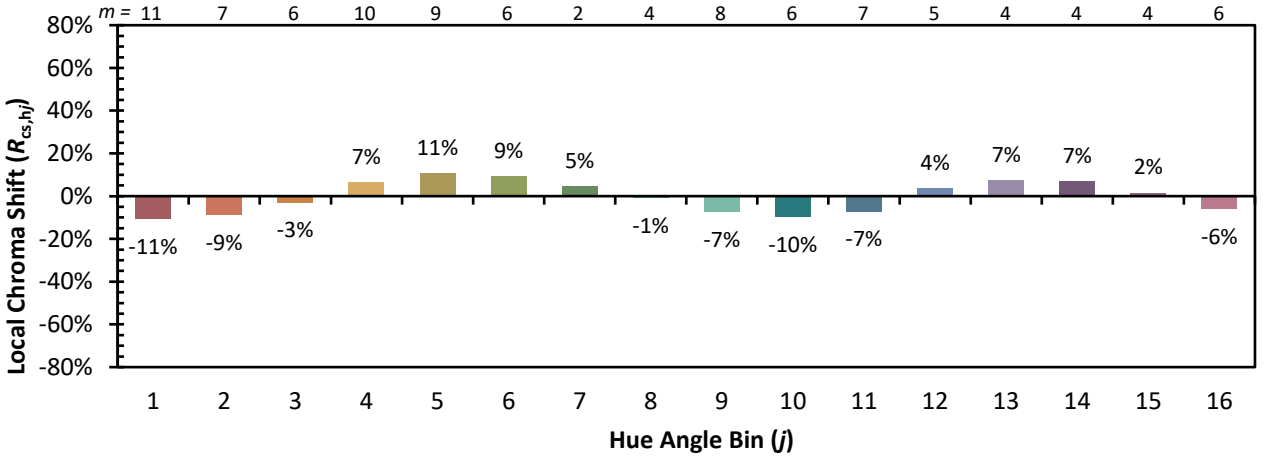
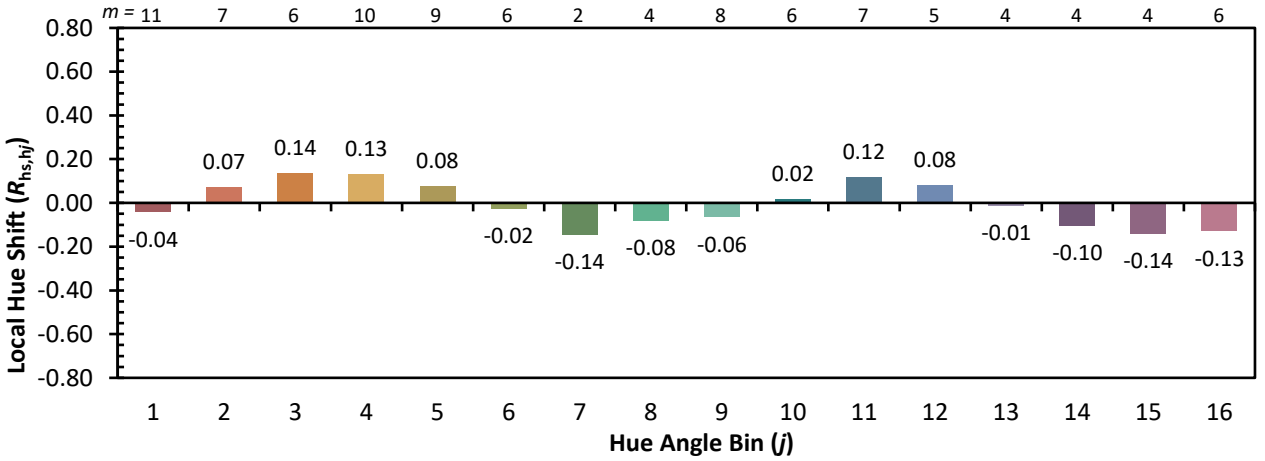
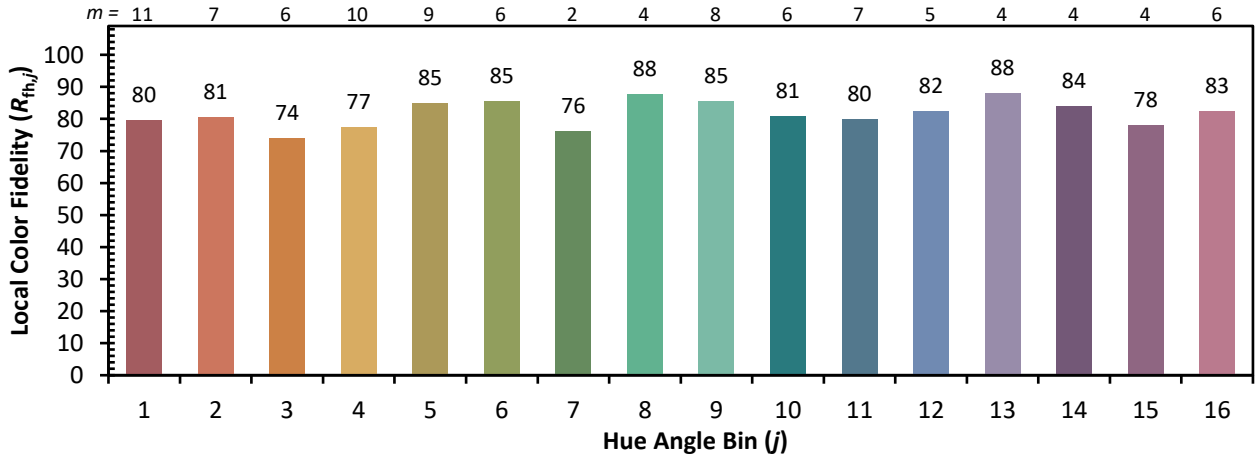
Color Rendition by Hue-Angle Bin







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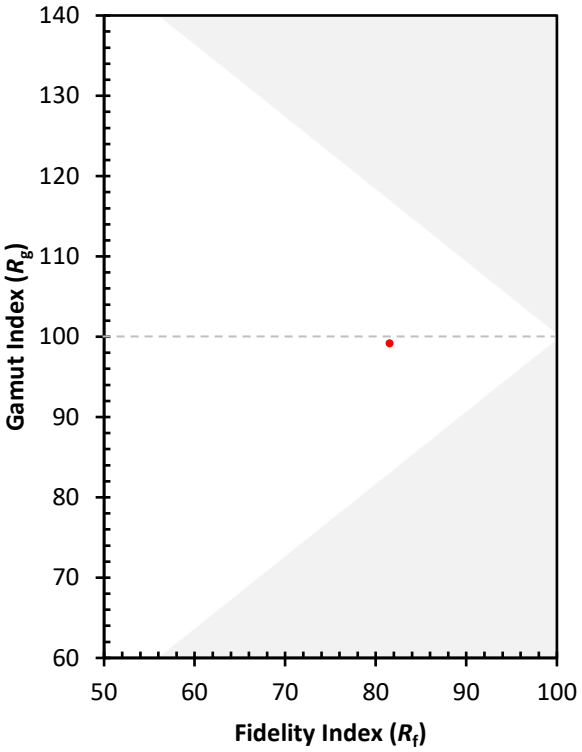
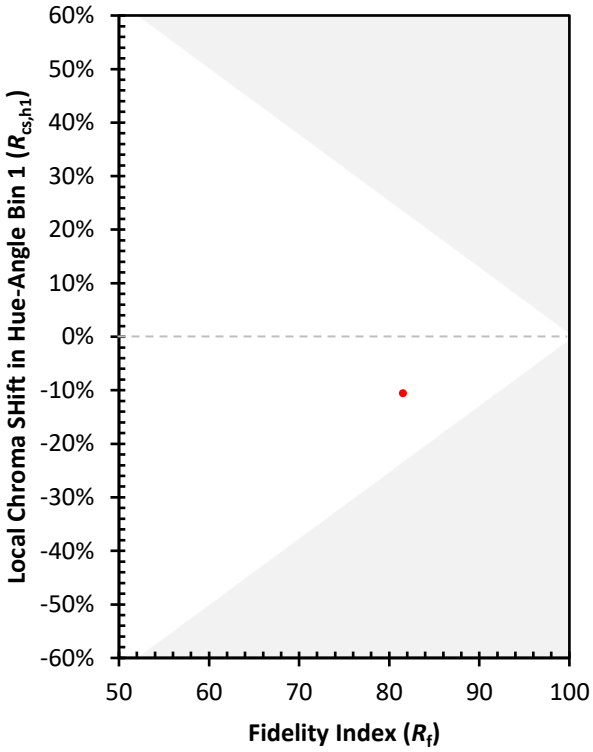
Measure Comparisons





(END OF REPORT)