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: P437597

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

Issue Date: 12/9/2020

Report Generated By 670245982

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437597
	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:	ISS-SA1D-830-U-SLL
Description:	IMPACT ELITE LED QUARTER SPHERE 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:	4010 lumens
Efficiency:	N/A
Efficacy:	88.7 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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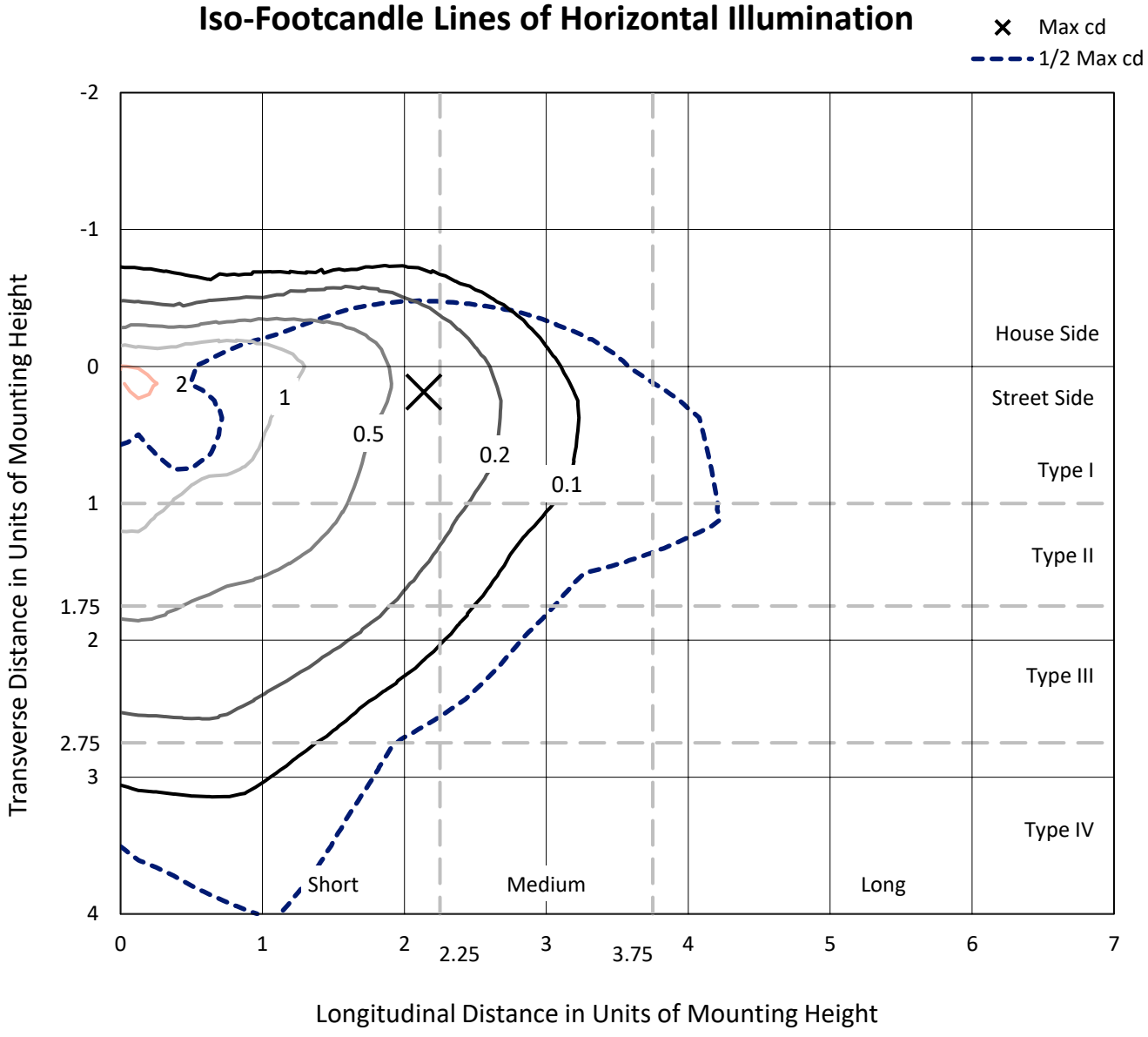
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
Type IV - Short - N/A

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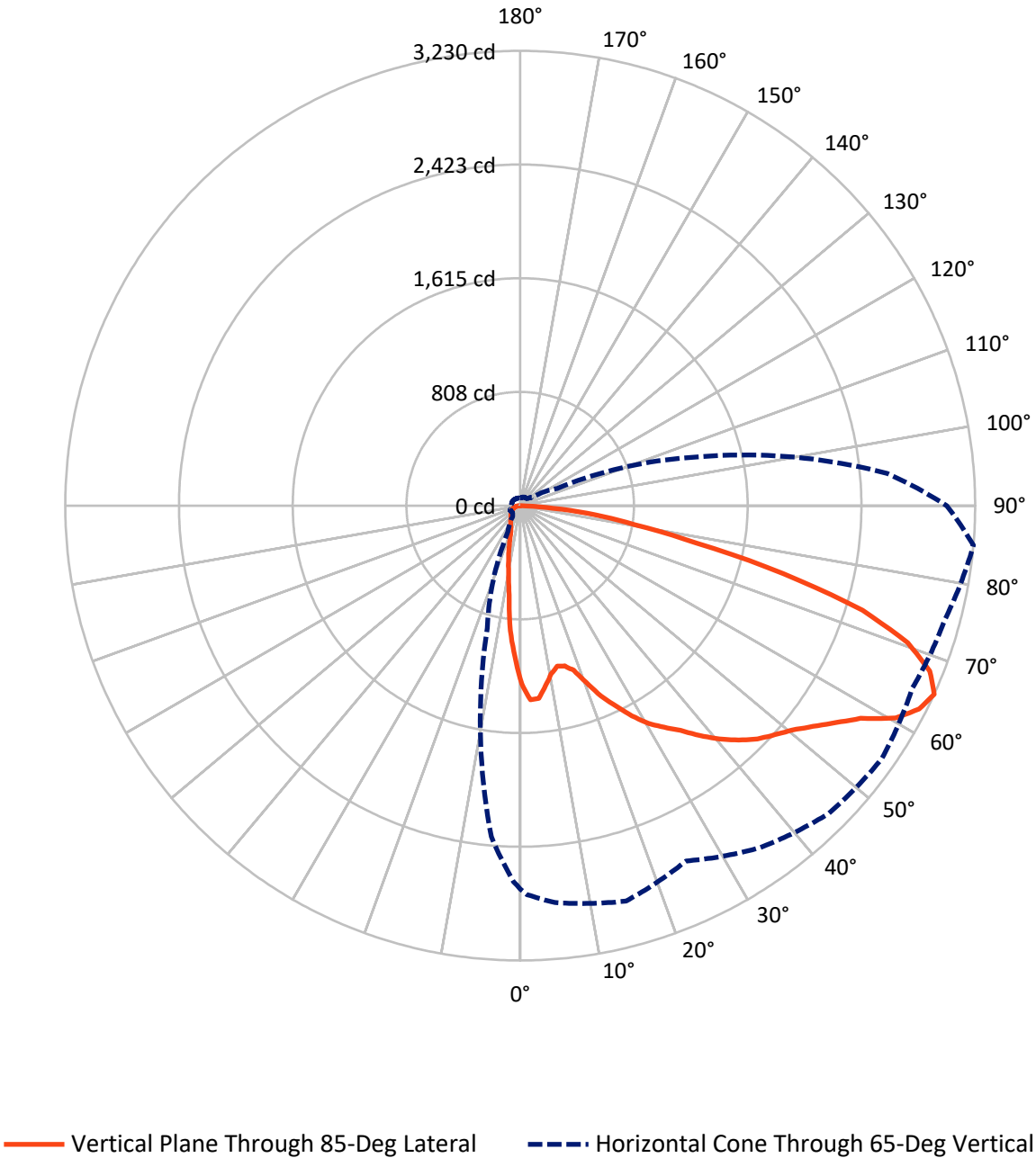
Luminous Intensity Polar Plot



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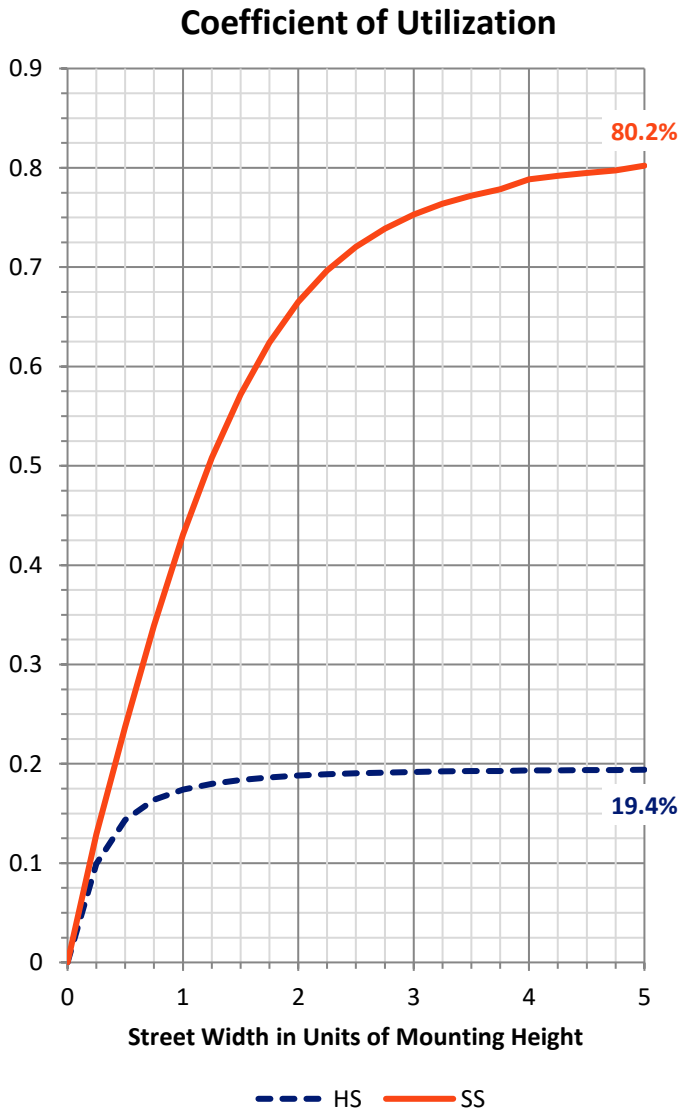
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	784.8	0.0	784.8
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	3225.2	0.0	3225.2
	% Fixture	80.4	0.0	80.4
Total	Lumens	4010.0	0.0	4010.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	2.4
10°-20°	200.6	5.0
20°-30°	288.4	7.2
30°-40°	414.1	10.3
40°-50°	586.2	14.6
50°-60°	815.1	20.3
60°-70°	970.6	24.2
70°-80°	561.0	14.0
80°-90°	77.6	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°	4010.0	100.0
0°-180°	4010.0	100.0



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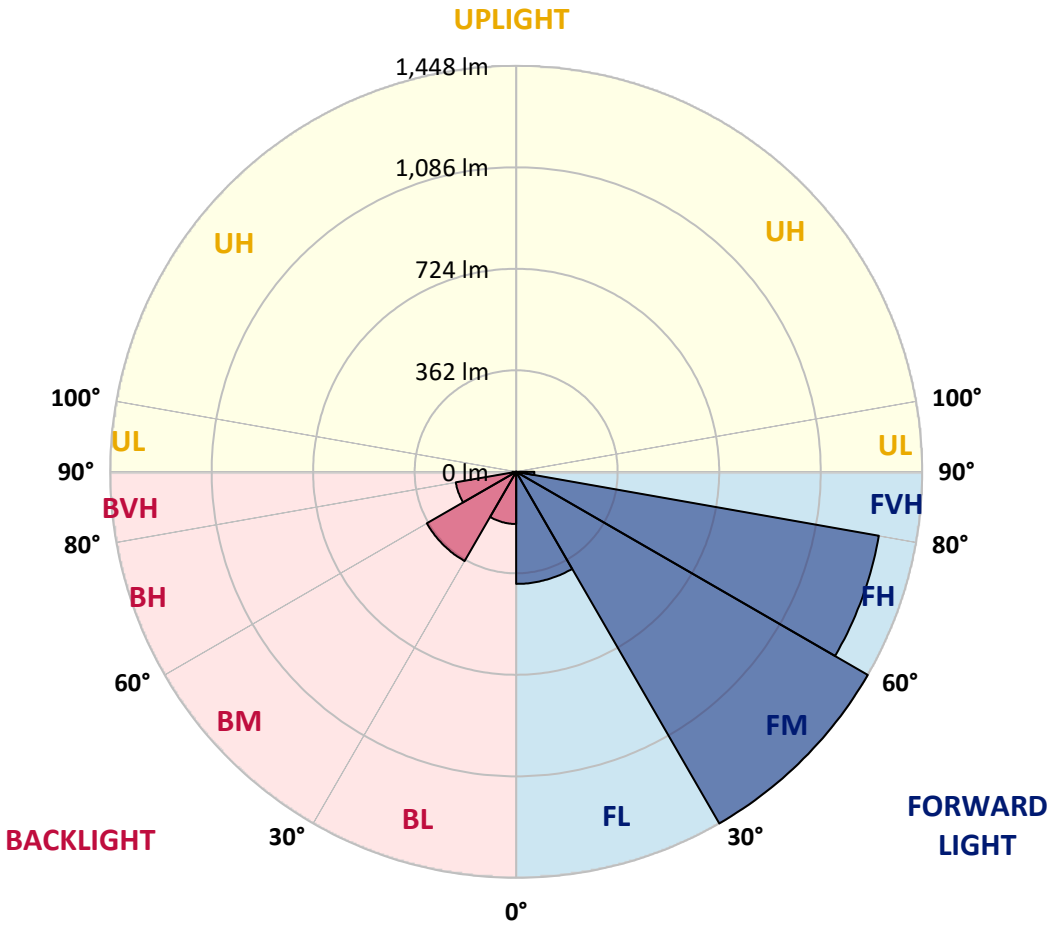
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	399.6	10.0			
FM	(30°-60°)	1447.6	36.1			
FH	(60°-80°)	1313.1	32.7			G1/1800
FVH	(80°-90°)	64.9	1.6			G1/100
BL	(0°-30°)	185.9	4.6	B1/500		
BM	(30°-60°)	367.7	9.2	B1/1000		
BH	(60°-80°)	218.5	5.4	B1/500		G1/500
BVH	(80°-90°)	12.7	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°	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	*1266.8*
2.5°	1327.4	1332.4	1343.8	1383.2	1407.7	1427.4	1452.0	1427.4	1420.8	1388.1	*1381.5*
5°	1279.9	1291.4	1324.2	1397.9	1458.5	1522.5	1555.2	1527.4	1489.7	1432.3	*1375.0*
7.5°	1186.5	1201.2	1243.9	1358.6	1473.3	1560.1	1602.8	1573.3	1496.2	1394.6	*1291.4*
10°	1091.4	1114.4	1165.2	1309.4	1430.7	1527.4	1592.9	1561.8	1468.4	1335.6	*1212.7*
12.5°	1034.1	1050.5	1107.8	1258.6	1386.4	1483.1	1532.3	1514.3	1427.4	1301.2	*1170.1*
15°	1021.0	1037.4	1094.7	1240.6	1353.7	1425.8	1437.2	1442.2	1409.4	1312.7	*1181.6*
17.5°	1057.0	1070.1	1148.8	1270.1	1316.0	1330.7	1348.7	1370.0	1386.4	1335.6	*1229.1*
20°	1143.9	1170.1	1238.9	1330.7	1306.1	1271.7	1281.5	1307.8	1370.0	1402.8	*1338.9*
22.5°	1260.2	1289.7	1376.6	1414.3	1312.7	1238.9	1230.7	1253.7	1368.4	1476.6	*1470.0*
25°	1389.7	1430.7	1524.1	1525.7	1340.5	1216.0	1199.6	1220.9	1365.1	1542.1	*1574.9*
27.5°	1524.1	1561.8	1663.4	1612.6	1394.6	1217.6	1198.0	1219.3	1373.3	1612.6	*1691.2*
30°	1624.1	1673.2	1761.7	1694.5	1429.0	1238.9	1209.4	1237.3	1391.3	1648.6	*1794.5*
32.5°	1725.7	1756.8	1850.2	1742.1	1466.7	1271.7	1234.0	1276.6	1437.2	1683.1	*1876.4*
35°	1815.8	1856.8	1951.8	1769.9	1522.5	1327.4	1278.3	1334.0	1502.8	1732.2	*1960.0*
37.5°	1930.5	1969.8	2056.7	1809.2	1568.3	1397.9	1356.9	1429.0	1583.1	1776.5	*2071.5*
40°	2032.1	2094.4	2159.9	1858.4	1620.8	1501.1	1474.9	1573.3	1691.2	1837.1	*2179.6*
42.5°	2132.1	2184.5	2256.6	1914.1	1688.0	1627.3	1638.8	1742.1	1822.4	1928.9	*2276.3*
45°	2204.2	2264.8	2328.7	1958.4	1774.8	1763.4	1840.4	1927.2	1956.7	2025.6	*2363.2*
47.5°	2274.7	2322.2	2379.5	2002.6	1879.7	1915.8	2050.1	2117.3	2087.8	2112.4	*2432.0*
50°	2368.1	2418.9	2435.3	2073.1	2012.5	2109.1	2255.0	2299.2	2214.0	2181.3	*2504.1*
52.5°	2502.5	2527.0	2518.8	2156.7	2138.6	2310.7	2430.4	2497.5	2345.1	2246.8	*2604.1*
55°	2682.7	2725.3	2672.9	2292.7	2268.1	2504.1	2643.4	2676.2	2491.0	2328.7	*2718.8*
57.5°	2854.8	2892.5	2876.1	2458.2	2436.9	2671.3	2805.6	2836.8	2633.6	2481.2	*2849.9*
60°	2918.7	2930.2	2989.2	2633.6	2605.7	2813.8	2966.2	2971.2	2804.0	2664.7	*3062.9*
62.5°	2849.9	2895.8	2953.1	2797.4	2707.3	2936.7	3072.8	3103.9	2966.2	2887.6	*3179.3*
65°	*2722.1*	*2763.0*	*2830.2*	*2907.2*	*2784.3*	*2966.2*	*3094.1*	*3133.4*	*3071.1*	*3121.9*	*3230.1*
67.5°	2574.6	2625.4	2671.3	2925.3	2774.5	2797.4	2904.0	2928.5	3015.4	3225.2	*3136.7*
70°	2384.5	2441.8	2481.2	2854.8	2540.2	2312.4	2387.7	2454.9	2587.7	3041.6	*2918.7*
72.5°	1974.8	2066.5	2164.9	2535.2	2055.1	1796.1	1855.1	1899.4	1994.4	2597.5	*2541.8*
75°	1389.7	1456.9	1578.2	2042.0	1578.2	1271.7	1363.5	1363.5	1483.1	2133.7	*1930.5*
77.5°	830.9	832.5	950.5	1343.8	960.3	857.1	909.5	934.1	970.2	1511.0	*1281.5*
80°	470.3	476.9	516.2	868.6	568.7	585.1	647.3	712.9	658.8	937.4	*824.3*
82.5°	219.6	193.4	204.9	409.7	322.8	381.8	391.7	421.2	424.5	599.8	*540.8*
85°	18.0	14.7	19.7	73.7	57.4	52.4	37.7	72.1	113.1	262.2	*232.7*
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°	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8
2.5°	1360.2	1343.8	1307.8	1279.9	1253.7	1204.5	1184.9	1157.0	1142.2	1116.0	1122.6
5°	1332.4	1294.7	1212.7	1157.0	1084.9	1025.9	989.8	957.1	944.0	916.1	906.3
7.5°	1230.7	1198.0	1094.7	1002.9	914.5	844.0	776.8	727.6	704.7	680.1	678.5
10°	1143.9	1089.8	971.8	863.7	762.0	696.5	647.3	606.4	570.3	539.2	521.1
12.5°	1094.7	1027.5	896.4	765.3	694.9	649.0	594.9	544.1	503.1	467.1	445.8
15°	1094.7	1016.1	860.4	732.5	662.1	593.2	531.0	478.5	424.5	381.8	368.7
17.5°	1145.5	1048.8	868.6	711.2	611.3	534.3	455.6	386.8	334.3	296.6	283.5
20°	1245.5	1129.1	888.2	686.7	562.1	455.6	360.5	286.8	239.3	221.2	218.0
22.5°	1361.8	1225.8	917.7	663.7	511.3	372.0	270.4	218.0	196.7	190.1	190.1
25°	1489.7	1334.0	955.4	639.1	458.9	295.0	206.5	181.9	173.7	170.4	170.4
27.5°	1609.3	1452.0	1022.6	629.3	409.7	239.3	180.3	162.2	157.3	154.0	155.7
30°	1725.7	1556.9	1091.4	609.6	355.6	208.1	162.2	149.1	142.6	140.9	142.6
32.5°	1825.6	1647.0	1139.0	580.1	317.9	186.8	150.8	137.7	131.1	129.5	131.1
35°	1940.3	1735.5	1186.5	558.8	298.3	173.7	142.6	129.5	122.9	119.6	119.6
37.5°	2074.7	1842.0	1222.6	527.7	285.2	160.6	136.0	122.9	114.7	111.4	111.4
40°	2255.0	1971.5	1252.0	503.1	270.4	154.0	127.8	116.4	108.2	104.9	103.2
42.5°	2379.5	2084.6	1276.6	486.7	255.7	150.8	122.9	113.1	103.2	98.3	96.7
45°	2464.8	2184.5	1293.0	478.5	242.5	142.6	119.6	109.8	98.3	91.8	91.8
47.5°	2546.7	2266.5	1294.7	467.1	232.7	132.7	124.5	104.9	93.4	86.9	86.9
50°	2638.5	2369.7	1325.8	455.6	221.2	121.3	122.9	103.2	90.1	83.6	81.9
52.5°	2730.3	2510.7	1386.4	439.2	204.9	111.4	116.4	104.9	86.9	80.3	78.7
55°	2894.1	2686.0	1461.8	414.6	183.5	101.6	108.2	103.2	81.9	75.4	73.7
57.5°	3000.7	2849.9	1520.8	388.4	152.4	95.1	95.1	100.0	77.0	70.5	68.8
60°	3061.3	2881.0	1532.3	357.3	124.5	85.2	81.9	101.6	72.1	63.9	63.9
62.5°	3059.7	2774.5	1474.9	327.8	108.2	78.7	73.7	88.5	67.2	60.6	59.0
65°	*3028.5*	*2617.2*	*1345.5*	*290.1*	*101.6*	*72.1*	*65.6*	*67.2*	*62.3*	*55.7*	*54.1*
67.5°	2894.1	2345.1	1139.0	252.4	98.3	65.6	60.6	57.4	54.1	49.2	47.5
70°	2568.0	2038.7	888.2	234.3	96.7	57.4	52.4	49.2	45.9	42.6	42.6
72.5°	2087.8	1589.6	678.5	224.5	98.3	52.4	44.2	42.6	39.3	37.7	36.1
75°	1445.4	1175.0	491.6	198.3	95.1	44.2	37.7	34.4	32.8	29.5	29.5
77.5°	929.2	768.6	326.1	159.0	77.0	36.1	27.9	26.2	24.6	22.9	22.9
80°	611.3	522.8	190.1	113.1	47.5	24.6	19.7	19.7	18.0	14.7	14.7
82.5°	388.4	395.0	98.3	52.4	27.9	14.7	11.5	9.8	9.8	6.6	6.6
85°	85.2	149.1	44.2	21.3	9.8	1.6	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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	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8
2.5°	1099.6	1086.5	1081.6	1081.6	1060.3	1061.9	1061.9	1075.1	1073.4	1084.9	1080.0
5°	894.8	881.7	881.7	885.0	888.2	873.5	878.4	865.3	889.9	871.8	858.7
7.5°	660.4	658.8	670.3	696.5	691.6	686.7	676.8	652.2	639.1	652.2	645.7
10°	506.4	511.3	508.0	519.5	521.1	519.5	503.1	498.2	491.6	498.2	506.4
12.5°	424.5	404.8	383.5	381.8	395.0	395.0	393.3	395.0	399.9	399.9	406.4
15°	354.0	340.9	313.0	299.9	309.7	303.2	304.8	311.4	316.3	322.8	319.6
17.5°	281.9	270.4	257.3	249.1	254.0	249.1	247.5	245.8	245.8	244.2	250.7
20°	214.7	213.0	218.0	214.7	216.3	213.0	208.1	201.6	196.7	199.9	203.2
22.5°	186.8	188.5	191.7	195.0	195.0	191.7	183.5	177.0	175.4	175.4	177.0
25°	172.1	172.1	177.0	178.6	180.3	175.4	165.5	160.6	160.6	160.6	160.6
27.5°	155.7	159.0	162.2	165.5	167.2	162.2	154.0	149.1	149.1	147.5	145.9
30°	144.2	145.9	149.1	150.8	152.4	147.5	142.6	137.7	137.7	137.7	136.0
32.5°	131.1	136.0	137.7	139.3	140.9	137.7	132.7	129.5	127.8	126.2	122.9
35°	121.3	122.9	127.8	127.8	129.5	127.8	124.5	121.3	116.4	114.7	114.7
37.5°	111.4	111.4	114.7	118.0	121.3	119.6	114.7	109.8	108.2	108.2	108.2
40°	104.9	103.2	104.9	109.8	113.1	113.1	106.5	103.2	103.2	101.6	101.6
42.5°	96.7	96.7	96.7	101.6	108.2	104.9	98.3	98.3	98.3	96.7	96.7
45°	91.8	90.1	91.8	91.8	100.0	95.1	93.4	91.8	93.4	91.8	93.4
47.5°	85.2	85.2	85.2	86.9	91.8	88.5	86.9	86.9	88.5	88.5	88.5
50°	80.3	80.3	80.3	81.9	83.6	83.6	83.6	83.6	83.6	85.2	85.2
52.5°	77.0	75.4	77.0	77.0	78.7	80.3	78.7	80.3	80.3	80.3	81.9
55°	73.7	72.1	73.7	73.7	77.0	75.4	75.4	77.0	77.0	78.7	80.3
57.5°	68.8	67.2	70.5	70.5	73.7	73.7	72.1	73.7	73.7	75.4	75.4
60°	63.9	63.9	65.6	65.6	68.8	70.5	70.5	70.5	70.5	70.5	70.5
62.5°	59.0	59.0	60.6	62.3	65.6	65.6	67.2	67.2	67.2	67.2	65.6
65°	*54.1*	*55.7*	*57.4*	*57.4*	*60.6*	*62.3*	*62.3*	*62.3*	*62.3*	*62.3*	*62.3*
67.5°	47.5	50.8	52.4	54.1	57.4	57.4	59.0	59.0	57.4	57.4	57.4
70°	42.6	44.2	45.9	47.5	52.4	52.4	54.1	54.1	52.4	52.4	54.1
72.5°	36.1	37.7	39.3	42.6	47.5	47.5	49.2	49.2	47.5	47.5	47.5
75°	31.1	31.1	32.8	36.1	42.6	42.6	42.6	44.2	42.6	42.6	41.0
77.5°	22.9	24.6	26.2	31.1	36.1	37.7	37.7	37.7	36.1	36.1	34.4
80°	14.7	16.4	19.7	22.9	27.9	29.5	31.1	31.1	29.5	29.5	27.9
82.5°	6.6	9.8	11.5	14.7	18.0	22.9	22.9	24.6	22.9	21.3	21.3
85°	0.0	0.0	1.6	4.9	8.2	13.1	14.7	16.4	14.7	13.1	13.1
87.5°	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3	1.6	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: P437597
CATALOG NUMBER: ISS-SA1D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8	1266.8
2.5°	1098.0	1116.0	1143.9	1160.3	1198.0	1232.4	1268.4	1316.0	1325.8	1327.4
5°	871.8	893.1	945.6	966.9	1035.7	1091.4	1173.4	1253.7	1275.0	1279.9
7.5°	665.4	681.7	739.1	780.1	855.5	934.1	1039.0	1134.1	1181.6	1186.5
10°	519.5	563.7	608.0	668.6	734.2	811.2	921.0	1042.3	1094.7	1091.4
12.5°	437.6	483.4	537.5	598.2	665.4	734.2	834.2	968.5	1021.0	1034.1
15°	350.7	406.4	465.4	527.7	606.4	673.5	789.9	939.0	1002.9	1021.0
17.5°	272.0	316.3	373.6	453.9	531.0	626.0	773.5	966.9	1039.0	1057.0
20°	214.7	247.5	288.4	365.5	463.8	581.8	765.3	1019.3	1117.7	1143.9
22.5°	183.5	196.7	226.2	293.3	396.6	534.3	760.4	1093.1	1216.0	1260.2
25°	163.9	172.1	188.5	231.1	329.4	493.3	768.6	1184.9	1353.7	1389.7
27.5°	149.1	155.7	163.9	195.0	285.2	457.2	783.3	1288.1	1471.6	1524.1
30°	136.0	140.9	152.4	173.7	249.1	421.2	788.3	1389.7	1576.5	1624.1
32.5°	126.2	132.7	142.6	160.6	227.8	396.6	775.2	1466.7	1673.2	1725.7
35°	116.4	124.5	134.4	149.1	209.8	375.3	745.7	1530.6	1765.0	1815.8
37.5°	111.4	116.4	126.2	137.7	196.7	354.0	719.4	1594.6	1860.0	1930.5
40°	104.9	109.8	119.6	129.5	180.3	331.0	701.4	1676.5	1968.2	2032.1
42.5°	100.0	106.5	114.7	126.2	167.2	306.5	683.4	1742.1	2064.9	2132.1
45°	96.7	103.2	111.4	126.2	155.7	286.8	663.7	1799.4	2138.6	2204.2
47.5°	91.8	100.0	111.4	121.3	150.8	273.7	663.7	1868.2	2205.8	2274.7
50°	90.1	98.3	116.4	118.0	147.5	268.8	691.6	1946.9	2302.5	2368.1
52.5°	88.5	96.7	116.4	111.4	144.2	272.0	734.2	2089.5	2427.1	2502.5
55°	83.6	95.1	111.4	103.2	136.0	275.3	781.7	2276.3	2612.3	2682.7
57.5°	80.3	93.4	104.9	95.1	124.5	270.4	845.6	2443.5	2805.6	2854.8
60°	75.4	91.8	91.8	88.5	111.4	255.7	917.7	2550.0	2879.4	2918.7
62.5°	72.1	90.1	81.9	81.9	101.6	232.7	942.3	2523.8	2807.3	2849.9
65°	*67.2*	*78.7*	*73.7*	*75.4*	*93.4*	*206.5*	*899.7*	*2359.9*	*2671.3*	*2722.1*
67.5°	62.3	67.2	65.6	68.8	90.1	180.3	785.0	2164.9	2495.9	2574.6
70°	55.7	59.0	59.0	62.3	85.2	162.2	655.5	1914.1	2268.1	2384.5
72.5°	50.8	52.4	52.4	57.4	80.3	152.4	517.9	1624.1	1902.7	1974.8
75°	42.6	45.9	45.9	49.2	72.1	129.5	354.0	1189.8	1330.7	1389.7
77.5°	37.7	37.7	39.3	41.0	57.4	86.9	208.1	732.5	799.7	830.9
80°	29.5	31.1	29.5	29.5	36.1	57.4	113.1	429.4	486.7	470.3
82.5°	21.3	21.3	18.0	18.0	21.3	31.1	49.2	222.9	227.8	219.6
85°	11.5	8.2	6.6	6.6	6.6	6.6	6.6	47.5	22.9	18.0
87.5°	0.0	0.0	0.0	1.6	1.6	1.6	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.

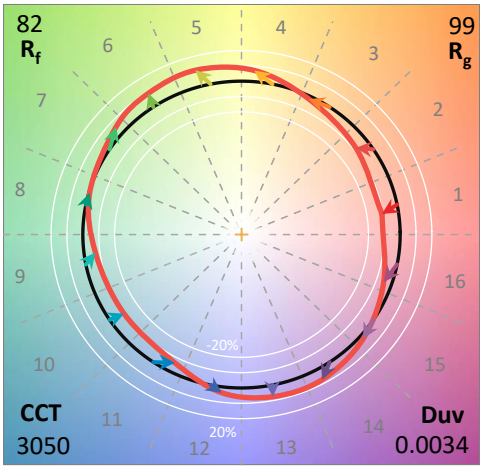
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

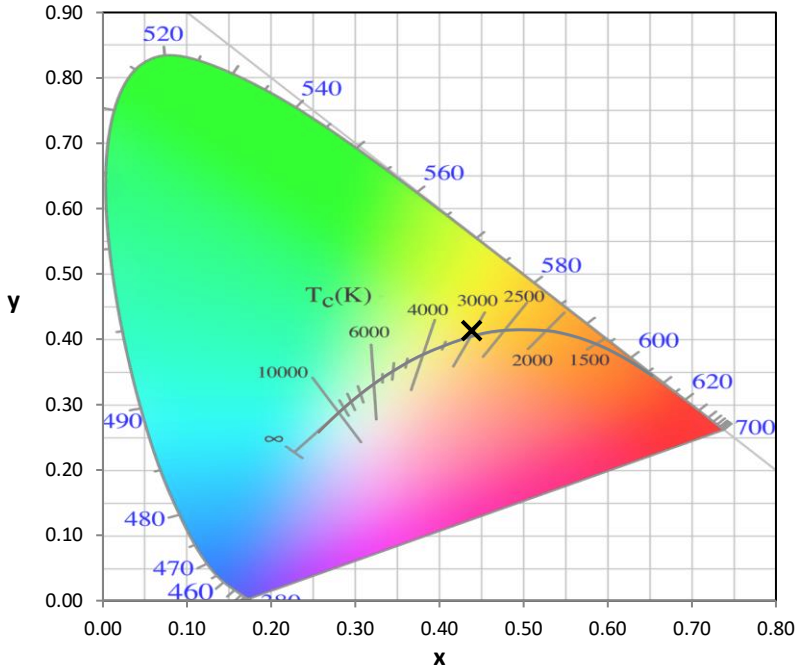
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

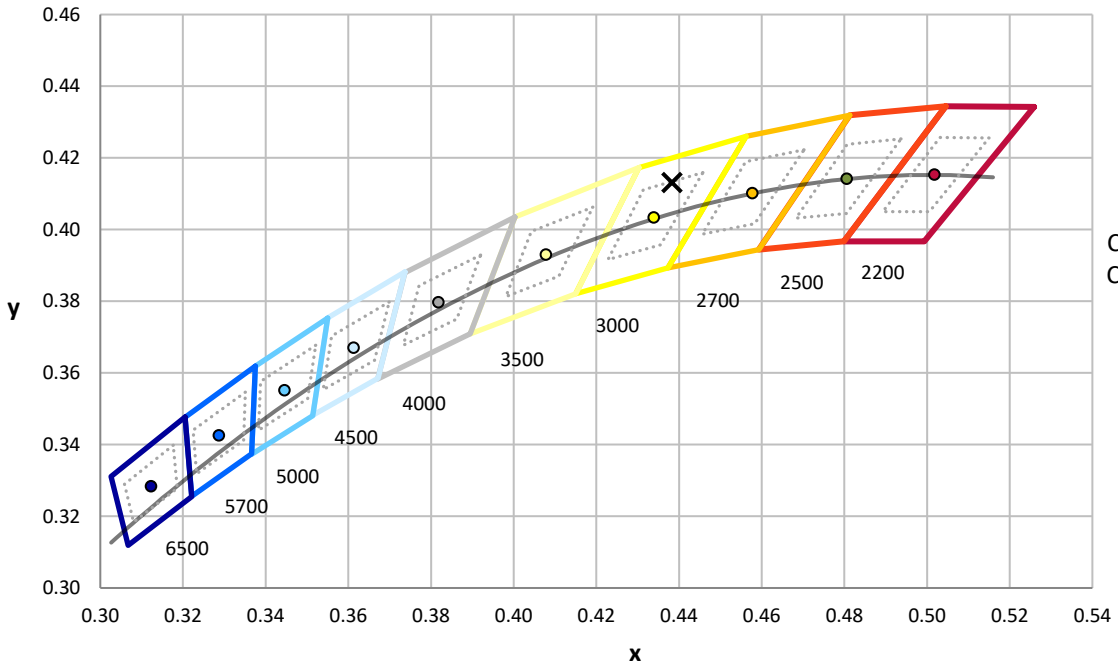
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

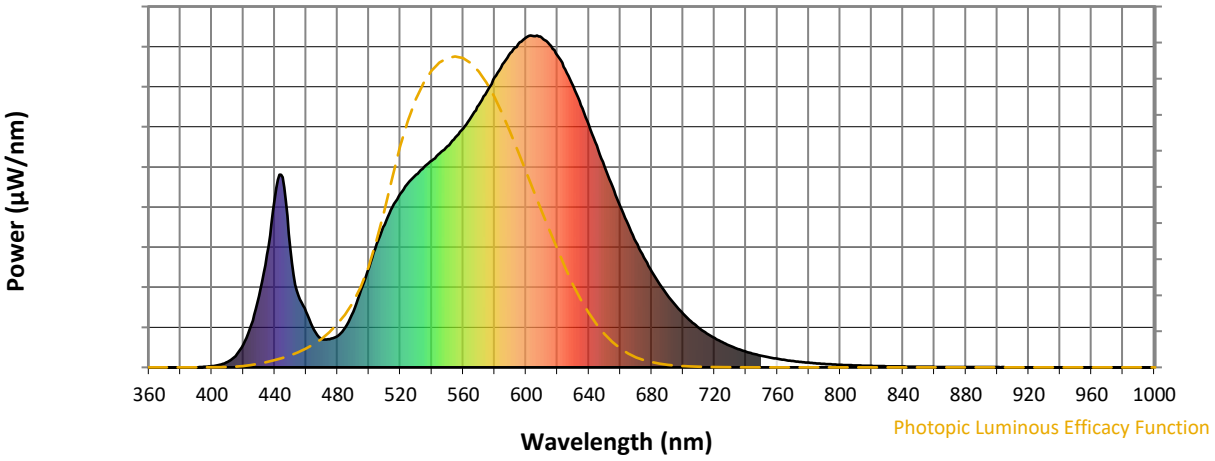


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

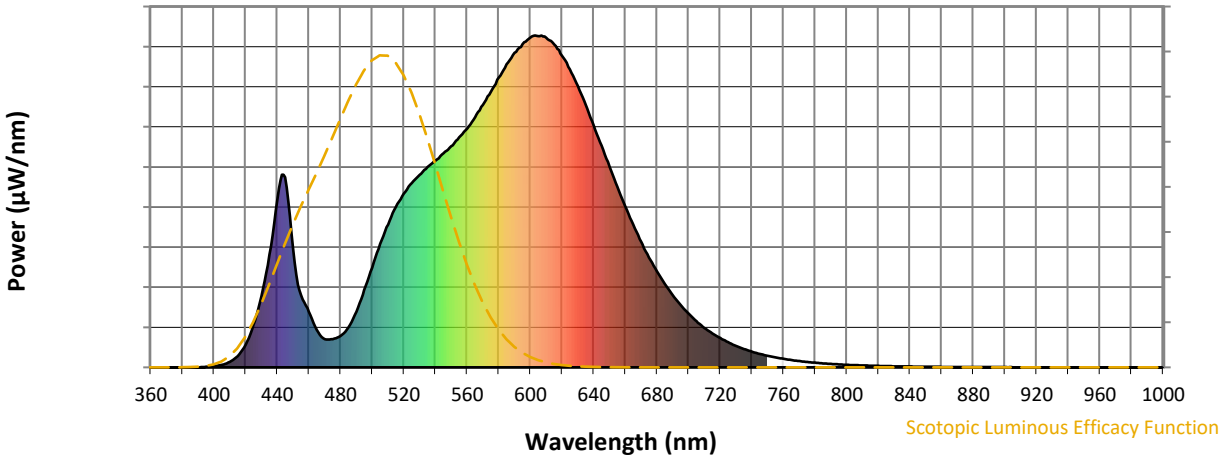


Photopic Lumens: NR

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

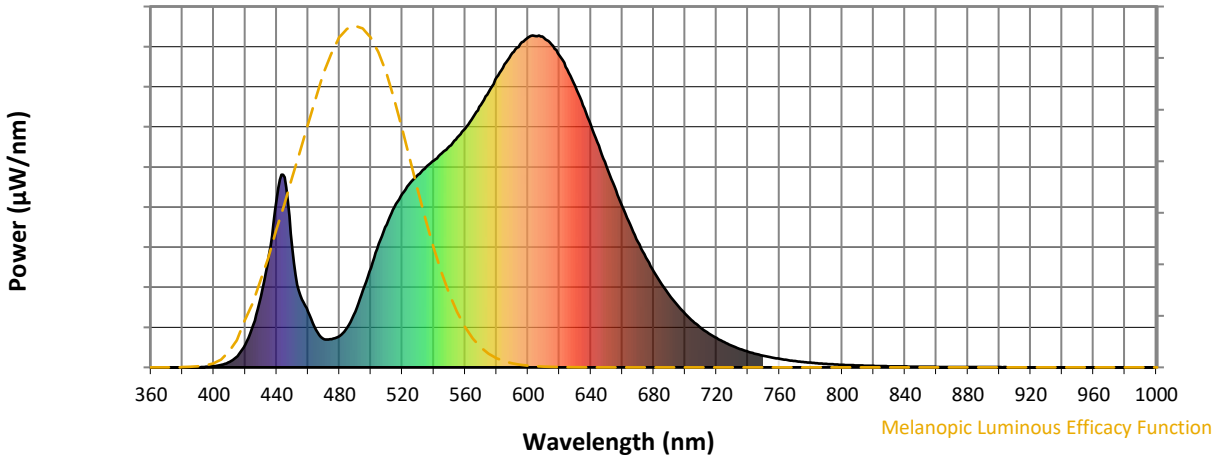


Scotopic Lumens: NR **S/P: 1.27**

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			

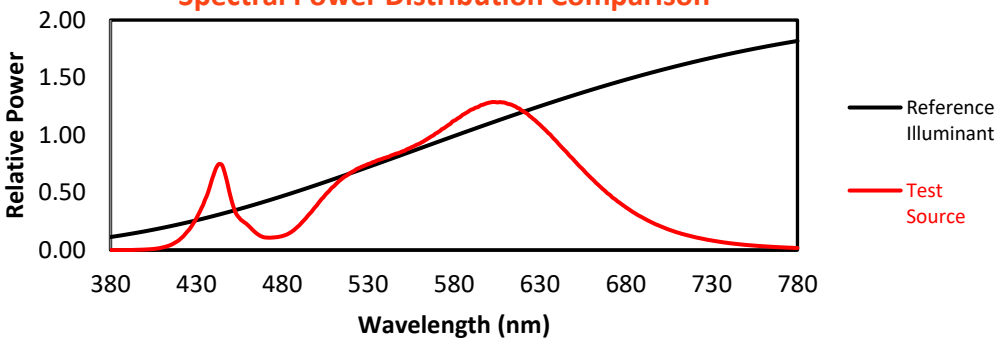
REPORT NUMBER: SP1-2408-195-9

TM-30-18

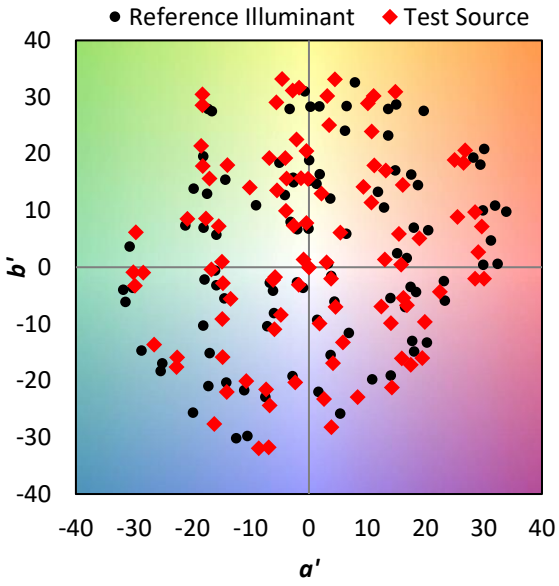
Summary

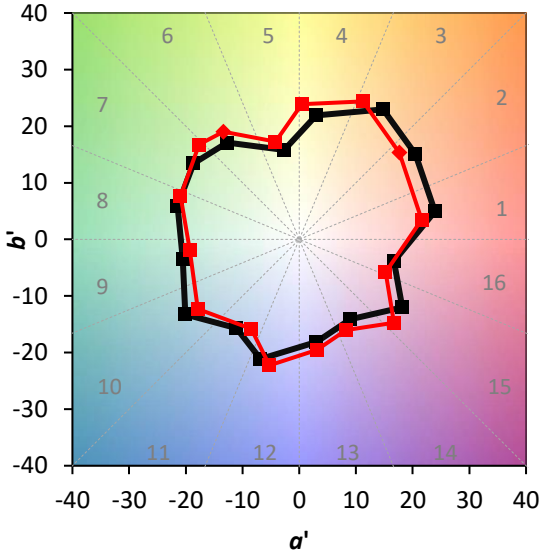
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

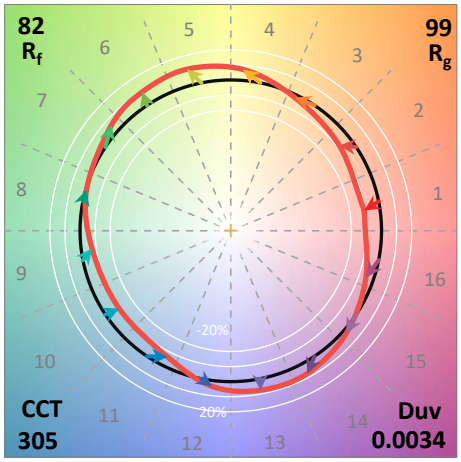
Spectral Power Distribution Comparison

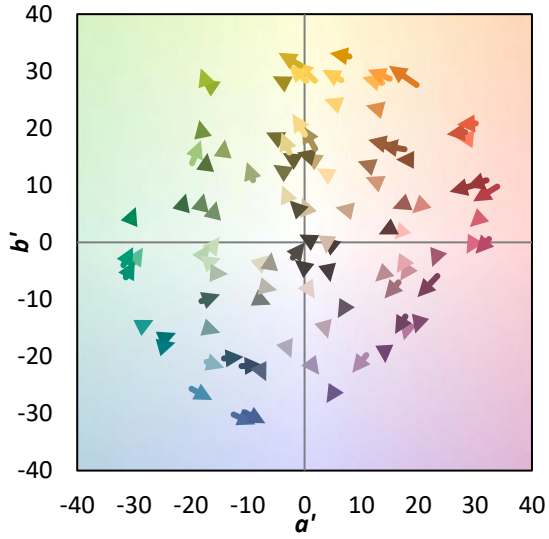


Color Vector Graphics







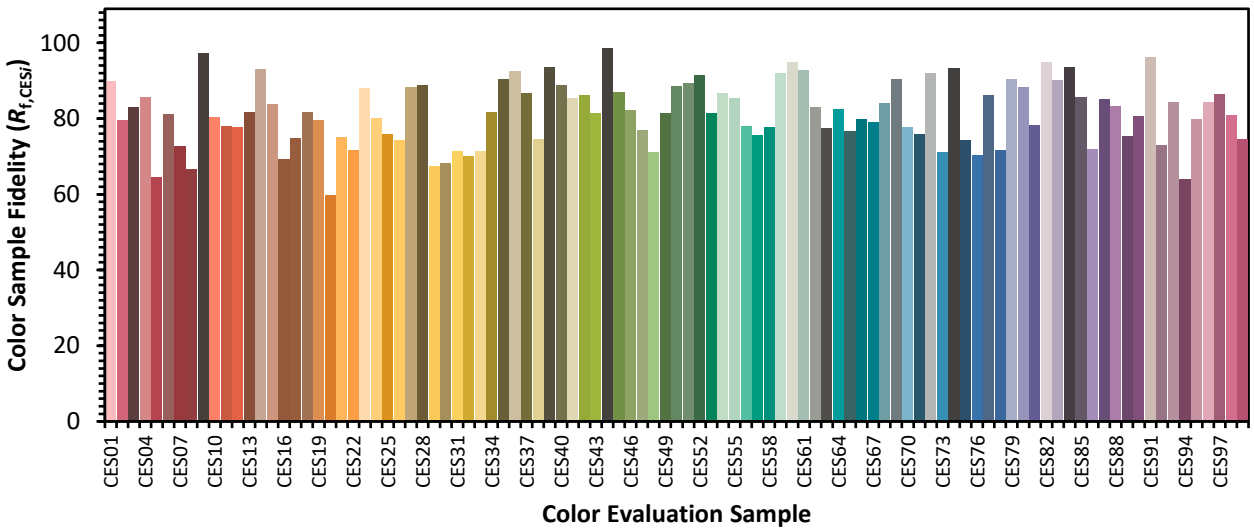


REPORT NUMBER: SP1-2408-195-9

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
CES25 = 72	CES50 = 89	CES75 = 74	



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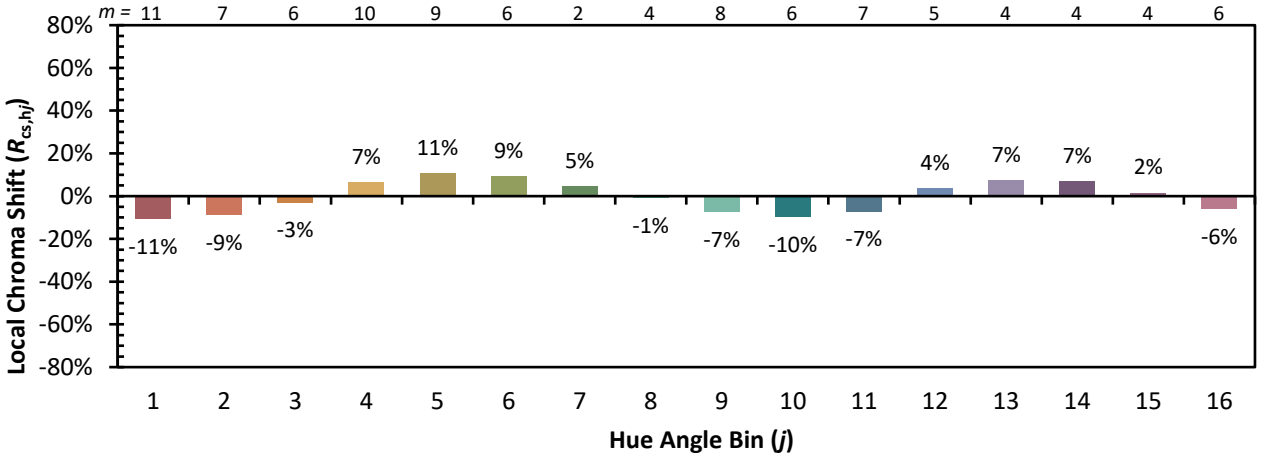
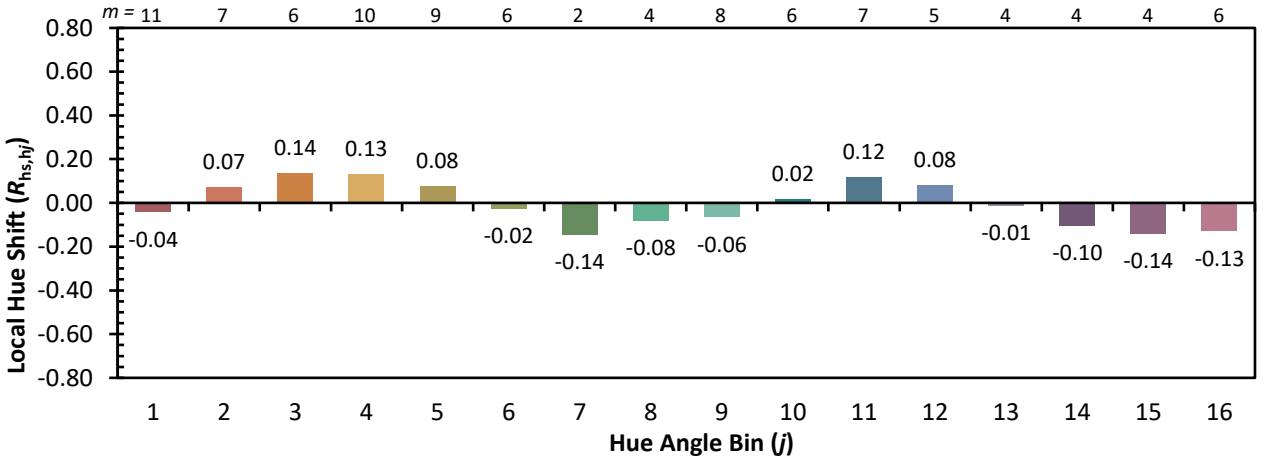
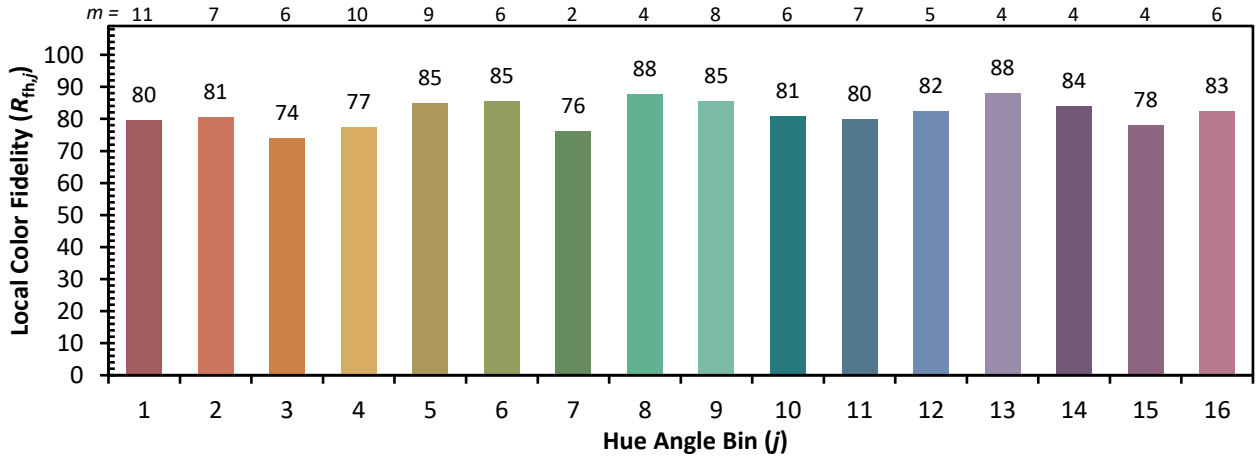
Color Rendition by Hue-Angle Bin







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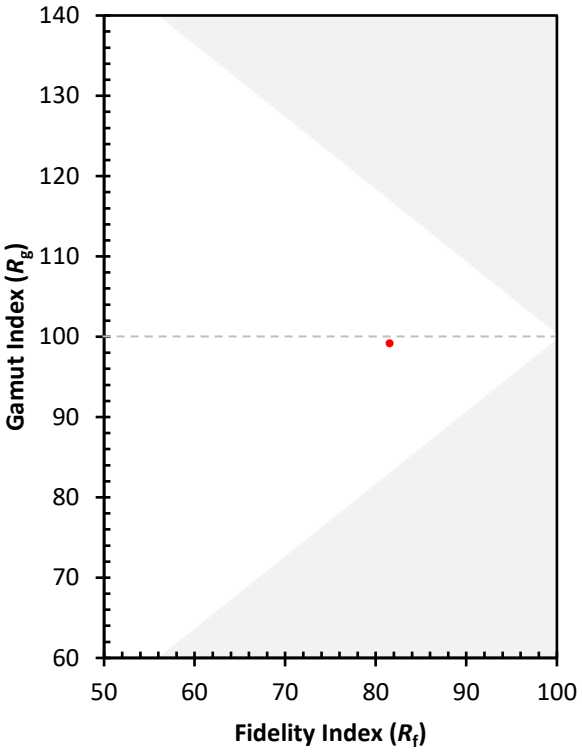
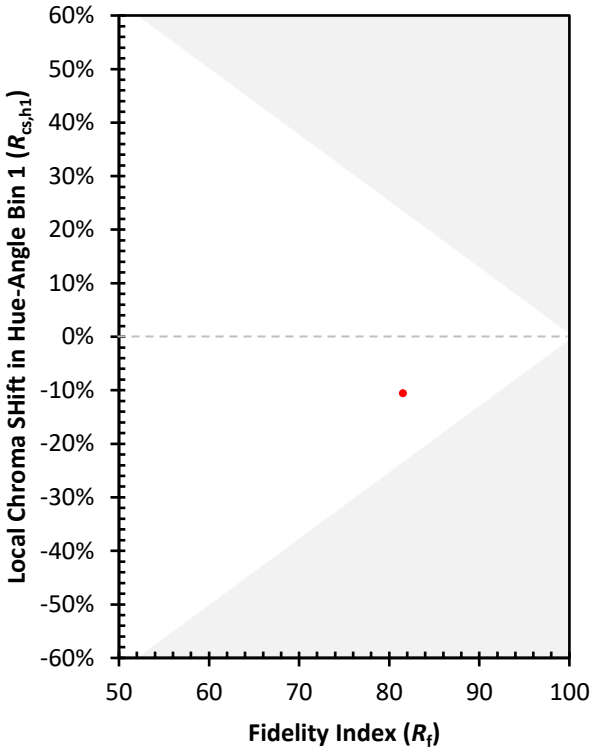
Measure Comparisons





(END OF REPORT)