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: P437427

Luminaire Tested: **ISS-SA1C-830-U-SLR-HSS**

Issue Date: 12/9/2020

Report Generated By 670245982

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1121 Highway 74 South
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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437427
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-23)
Test Lab:	INNOVATION CENTER
Issue Date:	12/9/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISS-SA1C-830-U-SLR-HSS
Description:	IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
	(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2714 lumens
Efficiency:	N/A
Efficacy:	79.4 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B0 - U0 - G1

Input Watts (W):	34.2
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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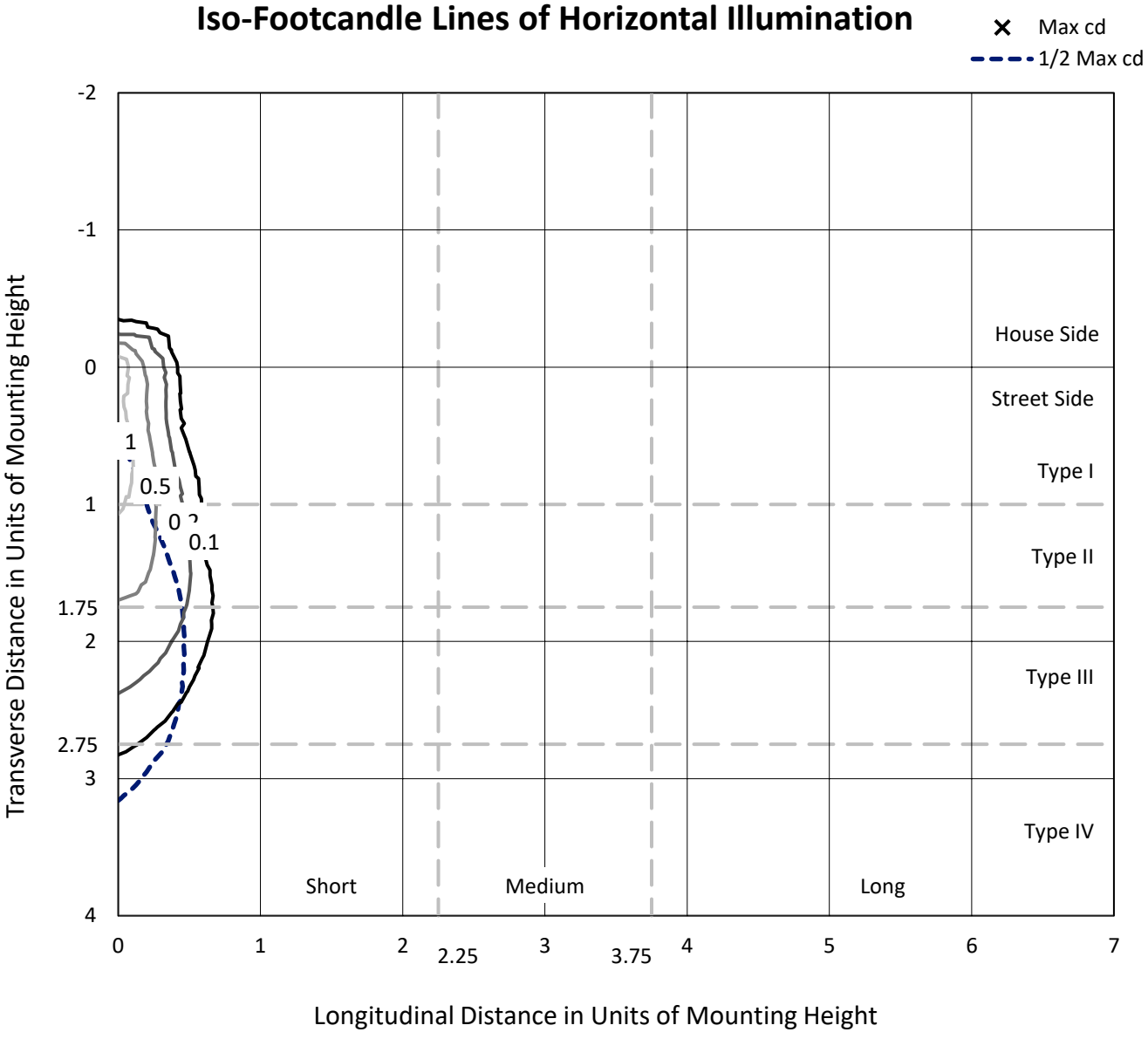
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
Type IV - Short - N/A

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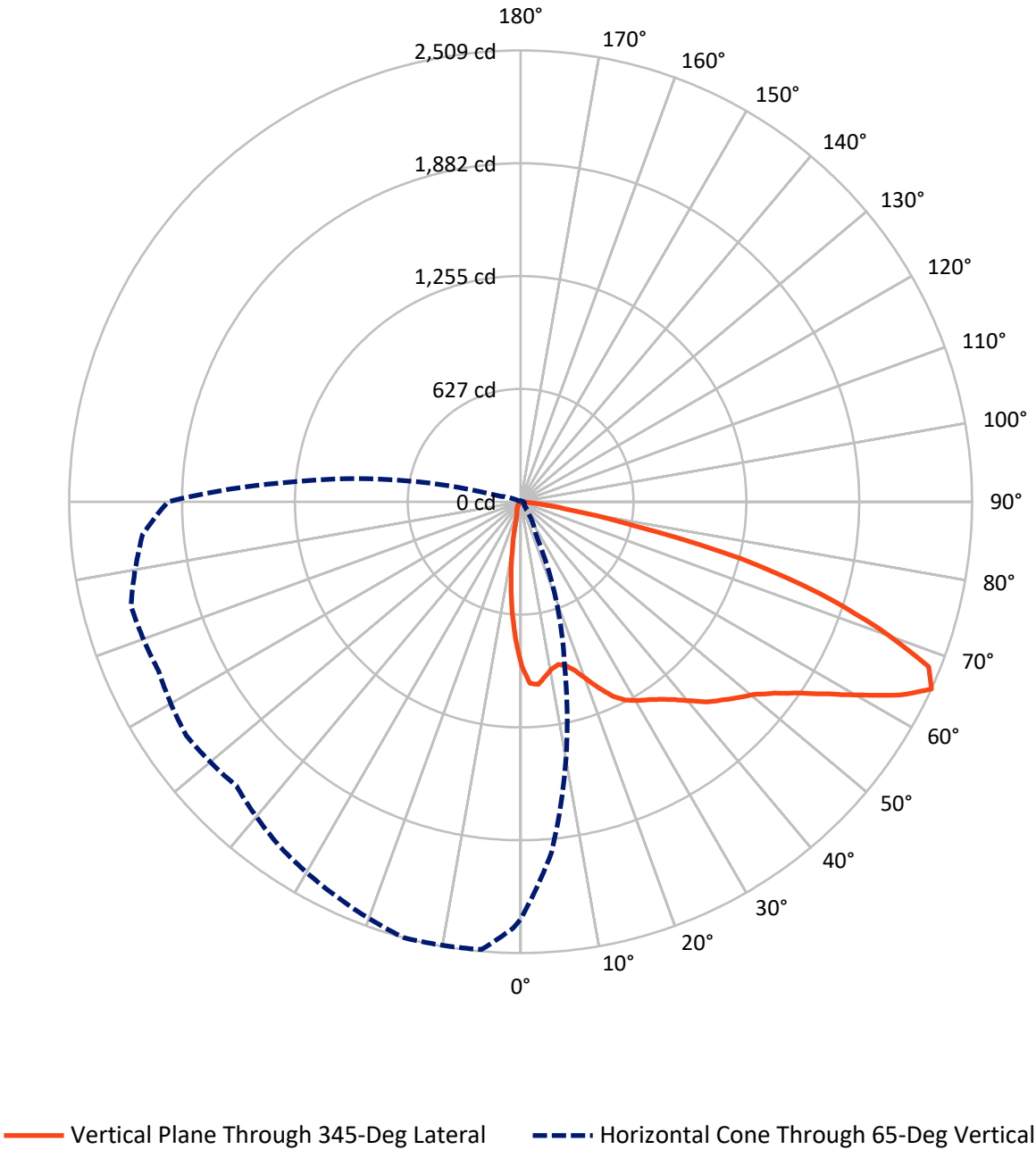
Luminous Intensity Polar Plot



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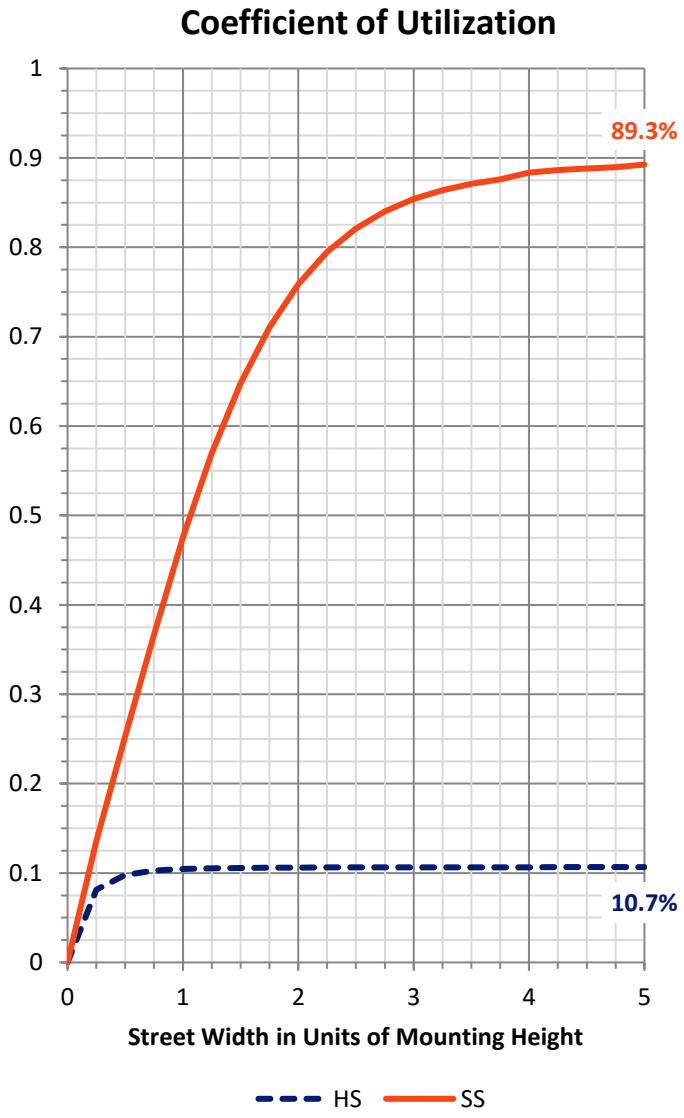
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	292.6	0.0	292.6
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	2421.4	0.0	2421.4
	% Fixture	89.2	0.0	89.2
Total	Lumens	2714.0	0.0	2714.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	2.5
10°-20°	132.3	4.9
20°-30°	193.0	7.1
30°-40°	286.9	10.6
40°-50°	420.5	15.5
50°-60°	605.2	22.3
60°-70°	678.9	25.0
70°-80°	297.9	11.0
80°-90°	31.3	1.2
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°	2714.0	100.0
0°-180°	2714.0	100.0



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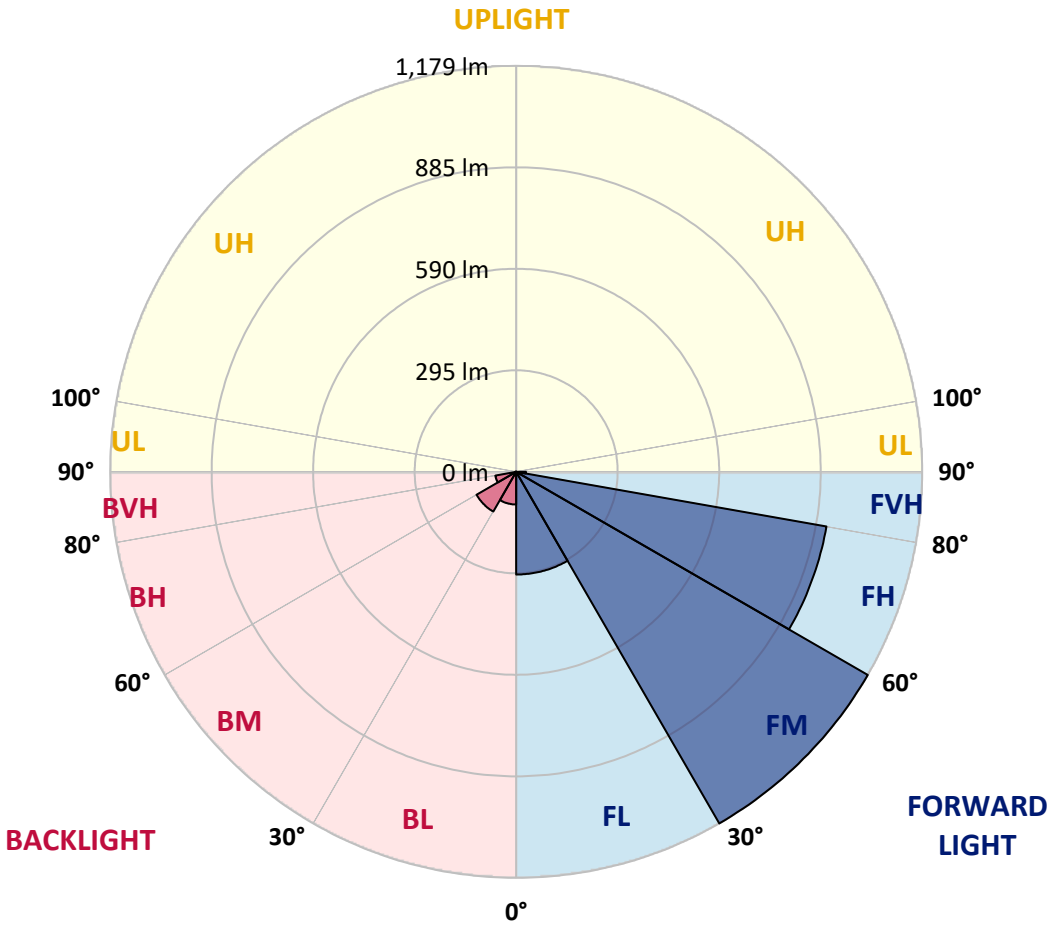
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	298.4	11.0			
FM	(30°-60°)	1179.4	43.5			
FH	(60°-80°)	915.3	33.7			G1/1800
FVH	(80°-90°)	28.3	1.0			G1/100
BL	(0°-30°)	94.9	3.5	B0/110		
BM	(30°-60°)	133.2	4.9	B0/220		
BH	(60°-80°)	61.5	2.3	B0/110		G0/110
BVH	(80°-90°)	3.0	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9
2.5°	969.3	969.3	955.0	921.1	889.8	852.1	831.2	811.7	790.8	776.5	754.3
5°	923.7	914.6	893.8	831.2	764.8	720.5	686.6	626.7	598.0	577.2	568.0
7.5°	848.2	842.9	809.1	736.1	656.6	585.0	539.4	489.9	450.8	435.2	407.8
10°	796.0	790.8	747.8	648.8	556.3	504.2	467.7	432.5	394.8	357.0	328.3
12.5°	770.0	759.6	717.9	605.8	526.4	475.5	433.8	390.9	344.0	302.3	268.4
15°	776.5	759.6	712.7	598.0	504.2	441.7	388.2	325.7	278.8	229.3	198.0
17.5°	822.1	803.9	746.5	604.5	475.5	396.1	325.7	255.4	192.8	147.2	131.6
20°	906.8	887.2	809.1	618.9	457.3	350.5	251.4	175.9	127.7	106.8	97.7
22.5°	1014.9	988.9	896.4	642.3	436.5	304.9	190.2	125.1	97.7	84.7	78.2
25°	1128.3	1102.2	999.3	677.5	423.4	265.8	147.2	97.7	79.5	71.7	67.7
27.5°	1231.2	1198.6	1091.8	729.6	407.8	230.6	122.5	84.7	71.7	62.5	59.9
30°	1325.0	1287.2	1184.3	773.9	385.6	199.3	105.5	78.2	66.4	58.6	54.7
32.5°	1404.5	1374.5	1259.9	805.2	367.4	182.4	93.8	69.1	57.3	50.8	48.2
35°	1499.6	1470.9	1332.8	831.2	355.7	174.6	86.0	65.1	53.4	46.9	41.7
37.5°	1628.6	1586.9	1413.6	854.7	342.6	168.1	79.5	61.2	50.8	43.0	39.1
40°	1744.5	1698.9	1507.4	871.6	336.1	162.9	78.2	58.6	48.2	40.4	36.5
42.5°	1847.4	1805.7	1583.0	878.1	330.9	153.7	76.9	57.3	48.2	39.1	33.9
45°	1912.6	1874.8	1672.9	895.1	330.9	147.2	71.7	57.3	46.9	37.8	32.6
47.5°	1972.5	1936.0	1751.0	913.3	325.7	142.0	65.1	62.5	46.9	36.5	30.0
50°	2059.8	2031.1	1850.0	968.0	316.6	134.2	58.6	61.2	48.2	35.2	30.0
52.5°	2170.5	2157.5	1996.0	1042.3	303.6	119.9	52.1	57.3	48.2	33.9	28.7
55°	2293.0	2287.8	2148.4	1110.0	287.9	102.9	48.2	52.1	46.9	31.3	26.1
57.5°	2367.3	2367.3	2247.4	1147.8	274.9	82.1	43.0	43.0	45.6	28.7	23.5
60°	2394.6	2366.0	2235.7	1143.9	252.8	67.7	39.1	35.2	48.2	24.8	20.8
62.5°	2392.0	2329.5	2126.2	1081.4	222.8	62.5	33.9	30.0	35.2	22.1	18.2
65°	*2321.7*	*2246.1*	*1959.5*	*942.0*	*200.6*	*62.5*	*28.7*	*24.8*	*23.5*	*19.5*	*14.3*
67.5°	2127.6	2082.0	1715.9	798.6	185.0	62.5	24.8	20.8	18.2	15.6	13.0
70°	1807.1	1747.1	1382.3	616.2	173.3	62.5	20.8	18.2	16.9	13.0	10.4
72.5°	1177.8	1143.9	845.5	423.4	142.0	61.2	18.2	16.9	15.6	11.7	9.1
75°	641.0	592.8	465.1	151.1	101.6	44.3	15.6	14.3	11.7	10.4	7.8
77.5°	277.5	267.1	237.1	40.4	30.0	13.0	9.1	9.1	7.8	7.8	5.2
80°	36.5	27.4	31.3	11.7	10.4	6.5	5.2	3.9	3.9	3.9	2.6
82.5°	1.3	1.3	0.0	1.3	3.9	2.6	0.0	0.0	1.3	1.3	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9
2.5°	764.8	749.1	737.4	737.4	753.0	743.9	754.3	747.8	766.1	775.2	772.6
5°	548.5	555.0	548.5	558.9	575.9	585.0	590.2	603.2	601.9	607.1	616.2
7.5°	397.4	397.4	400.0	397.4	413.0	429.9	439.1	435.2	432.5	427.3	436.5
10°	319.2	304.9	287.9	287.9	290.5	299.7	301.0	294.4	285.3	268.4	273.6
12.5°	250.1	239.7	229.3	207.2	205.8	200.6	199.3	181.1	166.8	161.6	161.6
15°	183.7	177.2	165.5	155.0	144.6	139.4	130.3	108.1	93.8	92.5	93.8
17.5°	122.5	118.6	114.7	114.7	110.7	101.6	92.5	78.2	71.7	69.1	70.4
20°	91.2	89.9	86.0	87.3	87.3	79.5	70.4	63.8	61.2	61.2	62.5
22.5°	75.6	74.3	70.4	70.4	70.4	66.4	59.9	56.0	54.7	54.7	54.7
25°	65.1	63.8	61.2	59.9	59.9	57.3	52.1	49.5	48.2	48.2	48.2
27.5°	58.6	57.3	54.7	52.1	52.1	49.5	46.9	43.0	43.0	43.0	43.0
30°	52.1	50.8	49.5	46.9	45.6	43.0	40.4	39.1	37.8	37.8	37.8
32.5°	46.9	45.6	44.3	43.0	40.4	37.8	35.2	33.9	32.6	32.6	32.6
35°	40.4	37.8	36.5	37.8	36.5	32.6	31.3	28.7	27.4	27.4	27.4
37.5°	36.5	33.9	31.3	30.0	30.0	30.0	27.4	24.8	23.5	22.1	23.5
40°	33.9	31.3	28.7	26.1	24.8	26.1	23.5	20.8	19.5	18.2	19.5
42.5°	31.3	28.7	24.8	22.1	19.5	22.1	19.5	16.9	15.6	14.3	15.6
45°	30.0	27.4	23.5	19.5	16.9	16.9	16.9	14.3	11.7	11.7	11.7
47.5°	28.7	26.1	20.8	16.9	14.3	13.0	13.0	10.4	9.1	7.8	7.8
50°	27.4	24.8	19.5	14.3	11.7	10.4	10.4	7.8	6.5	6.5	6.5
52.5°	26.1	23.5	18.2	13.0	10.4	7.8	6.5	5.2	5.2	3.9	3.9
55°	23.5	20.8	15.6	11.7	9.1	6.5	5.2	3.9	3.9	2.6	3.9
57.5°	22.1	19.5	14.3	10.4	7.8	5.2	3.9	2.6	2.6	2.6	2.6
60°	19.5	16.9	11.7	7.8	5.2	3.9	2.6	2.6	2.6	1.3	1.3
62.5°	15.6	14.3	10.4	6.5	3.9	2.6	1.3	1.3	1.3	1.3	1.3
65°	*14.3*	*13.0*	*9.1*	*5.2*	*2.6*	*1.3*	*1.3*	*1.3*	*1.3*	*1.3*	*1.3*
67.5°	11.7	10.4	6.5	3.9	1.3	1.3	0.0	1.3	1.3	0.0	0.0
70°	9.1	9.1	5.2	2.6	1.3	0.0	0.0	1.3	1.3	0.0	0.0
72.5°	7.8	7.8	5.2	1.3	0.0	0.0	0.0	1.3	1.3	1.3	0.0
75°	6.5	6.5	5.2	2.6	0.0	0.0	0.0	1.3	1.3	1.3	1.3
77.5°	5.2	3.9	2.6	1.3	0.0	0.0	0.0	1.3	1.3	1.3	1.3
80°	2.6	2.6	1.3	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	1.3	2.6	2.6	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.6	2.6	2.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.6	2.6	2.6	2.6
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°	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9	915.9
2.5°	779.1	799.9	823.4	837.7	869.0	896.4	928.9	957.6	991.5	1009.7	1016.2
5°	625.4	637.1	667.1	706.1	741.3	790.8	848.2	912.0	981.0	1013.6	1037.1
7.5°	431.2	441.7	484.7	521.1	579.8	643.6	721.8	809.1	899.0	944.6	986.3
10°	281.4	295.7	332.2	383.0	457.3	535.5	614.9	706.1	810.4	863.8	919.8
12.5°	162.9	179.8	224.1	290.5	363.5	446.9	529.0	629.3	745.2	803.9	861.2
15°	93.8	100.3	126.4	185.0	267.1	368.7	465.1	573.3	708.7	773.9	841.6
17.5°	70.4	74.3	82.1	106.8	170.7	282.7	418.2	556.3	712.7	799.9	859.9
20°	62.5	65.1	69.1	78.2	108.1	200.6	360.9	544.6	750.4	862.5	935.4
22.5°	56.0	58.6	62.5	69.1	82.1	135.5	301.0	543.3	813.0	955.0	1037.1
25°	49.5	52.1	56.0	62.5	73.0	97.7	233.2	539.4	891.1	1056.6	1159.5
27.5°	43.0	45.6	49.5	56.0	65.1	80.8	177.2	527.7	985.0	1166.0	1275.5
30°	37.8	40.4	44.3	49.5	58.6	70.4	135.5	508.1	1065.7	1263.8	1353.7
32.5°	32.6	35.2	39.1	44.3	52.1	61.2	109.4	466.4	1128.3	1340.6	1417.5
35°	27.4	30.0	33.9	39.1	45.6	52.1	89.9	398.7	1192.1	1420.1	1494.4
37.5°	23.5	26.1	28.7	33.9	40.4	46.9	74.3	355.7	1239.0	1519.1	1592.1
40°	19.5	22.1	26.1	30.0	35.2	44.3	59.9	298.4	1285.9	1614.2	1682.0
42.5°	15.6	18.2	22.1	27.4	32.6	39.1	48.2	246.2	1332.8	1700.2	1764.1
45°	11.7	14.3	18.2	24.8	32.6	33.9	39.1	209.8	1344.5	1781.0	1835.7
47.5°	9.1	10.4	14.3	20.8	31.3	30.0	32.6	182.4	1366.7	1844.8	1906.1
50°	6.5	7.8	11.7	19.5	27.4	24.8	28.7	172.0	1398.0	1894.3	1926.9
52.5°	5.2	6.5	9.1	16.9	22.1	22.1	26.1	182.4	1438.3	1953.0	1980.3
55°	3.9	5.2	7.8	11.7	16.9	19.5	24.8	196.7	1516.5	2055.9	2050.7
57.5°	2.6	3.9	6.5	9.1	13.0	16.9	23.5	218.9	1596.0	2171.8	2177.1
60°	2.6	3.9	5.2	7.8	11.7	14.3	20.8	221.5	1583.0	2188.8	2265.7
62.5°	1.3	2.6	5.2	6.5	9.1	11.7	18.2	186.3	1457.9	2106.7	2218.7
65°	*1.3*	*2.6*	*3.9*	*6.5*	*7.8*	*10.4*	*14.3*	*118.6*	*1269.0*	*1960.8*	*2109.3*
67.5°	1.3	2.6	3.9	5.2	6.5	9.1	11.7	61.2	1076.2	1809.7	1953.0
70°	1.3	2.6	3.9	5.2	6.5	7.8	10.4	30.0	815.6	1525.6	1710.6
72.5°	1.3	2.6	3.9	5.2	5.2	6.5	9.1	20.8	523.7	1146.5	1325.0
75°	1.3	2.6	2.6	3.9	5.2	6.5	7.8	14.3	338.7	771.3	1004.5
77.5°	1.3	2.6	2.6	3.9	5.2	6.5	9.1	13.0	247.5	529.0	694.4
80°	1.3	2.6	2.6	3.9	5.2	5.2	6.5	9.1	132.9	350.5	441.7
82.5°	2.6	2.6	3.9	3.9	3.9	5.2	6.5	6.5	69.1	224.1	298.4
85°	2.6	2.6	3.9	3.9	5.2	5.2	5.2	6.5	30.0	93.8	148.5
87.5°	2.6	3.9	3.9	3.9	5.2	5.2	5.2	5.2	3.9	5.2	5.2
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: P437427
CATALOG NUMBER: ISS-SA1C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	915.9	915.9	915.9	915.9	915.9	915.9	*915.9*	915.9	915.9	915.9
2.5°	1035.8	1052.7	1060.5	1054.0	1048.8	1033.2	*1011.0*	988.9	970.6	969.3
5°	1090.5	1127.0	1155.6	1141.3	1121.8	1076.2	*1020.1*	957.6	934.1	923.7
7.5°	1078.8	1158.2	1206.4	1193.4	1154.3	1068.3	*981.0*	899.0	861.2	848.2
10°	1025.3	1132.2	1196.0	1192.1	1155.6	1054.0	*945.9*	846.9	806.5	796.0
12.5°	975.8	1081.4	1142.6	1145.2	1132.2	1038.4	*928.9*	823.4	775.2	770.0
15°	949.8	1039.7	1076.2	1084.0	1089.2	1037.1	*944.6*	839.0	788.2	776.5
17.5°	955.0	998.0	1007.1	1000.6	1035.8	1038.4	*988.9*	893.8	836.4	822.1
20°	986.3	970.6	940.7	947.2	986.3	1043.6	*1055.3*	990.2	925.0	906.8
22.5°	1046.2	969.3	909.4	904.2	955.0	1052.7	*1127.0*	1093.1	1025.3	1014.9
25°	1134.8	988.9	896.4	885.9	930.2	1061.8	*1199.9*	1201.2	1147.8	1128.3
27.5°	1220.8	1020.1	895.1	884.6	930.2	1073.5	*1249.4*	1308.1	1252.0	1231.2
30°	1270.3	1056.6	915.9	896.4	947.2	1084.0	*1282.0*	1392.7	1343.2	1325.0
32.5°	1315.9	1095.7	938.1	914.6	979.7	1112.6	*1312.0*	1469.6	1426.6	1404.5
35°	1353.7	1141.3	979.7	943.3	1027.9	1154.3	*1348.4*	1554.3	1526.9	1499.6
37.5°	1390.1	1186.9	1038.4	1017.5	1108.7	1214.3	*1396.7*	1642.9	1655.9	1628.6
40°	1442.3	1239.0	1138.7	1121.8	1227.3	1305.5	*1455.3*	1731.5	1774.5	1744.5
42.5°	1491.8	1305.5	1240.3	1255.9	1370.6	1411.0	*1521.7*	1812.3	1860.5	1847.4
45°	1537.4	1387.5	1387.5	1425.3	1525.6	1526.9	*1572.5*	1868.3	1919.1	1912.6
47.5°	1597.3	1489.2	1540.0	1644.2	1697.6	1627.3	*1627.3*	1921.7	1990.8	1972.5
50°	1655.9	1624.7	1741.9	1837.0	1883.9	1748.4	*1683.3*	1993.4	2075.4	2059.8
52.5°	1719.8	1756.2	1930.8	2024.6	2052.0	1886.5	*1768.0*	2065.0	2170.5	2170.5
55°	1822.7	1868.3	2130.2	2208.3	2247.4	2001.2	*1876.1*	2166.6	2286.5	2293.0
57.5°	1928.2	1976.4	2242.2	2341.2	2392.0	2170.5	*2015.5*	2302.1	2368.6	2367.3
60°	2039.0	2089.8	2329.5	2427.2	2501.5	2343.8	*2181.0*	2425.9	2407.7	2394.6
62.5°	2175.8	2175.8	2362.1	2407.7	2497.6	2453.3	*2367.3*	2496.3	2422.0	2392.0
65°	*2242.2*	*2221.4*	*2268.3*	*2234.4*	*2337.3*	*2422.0*	*2509.3*	*2498.9*	*2371.2*	*2321.7*
67.5°	2207.0	2080.6	1999.9	1949.1	1971.2	2117.1	*2446.7*	2375.1	2165.3	2127.6
70°	1966.0	1663.7	1588.2	1507.4	1464.4	1615.5	*2114.5*	2097.6	1842.2	1807.1
72.5°	1602.5	1201.2	1018.8	1100.9	1059.2	1229.9	*1732.8*	1480.0	1209.0	1177.8
75°	1330.2	893.8	664.5	665.8	672.3	807.8	*1266.4*	879.4	664.5	641.0
77.5°	962.8	629.3	536.8	480.8	486.0	515.9	*659.2*	375.2	306.2	277.5
80°	587.6	389.6	433.8	385.6	372.6	286.6	*284.0*	54.7	36.5	36.5
82.5°	320.5	247.5	230.6	83.4	129.0	156.3	*129.0*	2.6	1.3	1.3
85°	162.9	99.0	46.9	14.3	16.9	14.3	*2.6*	0.0	0.0	0.0
87.5°	5.2	3.9	3.9	2.6	2.6	1.3	*1.3*	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

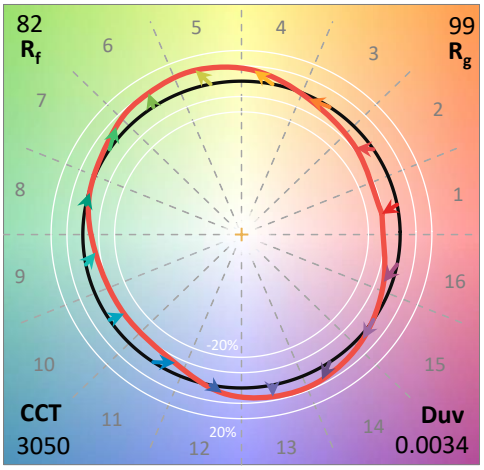
Test Information

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

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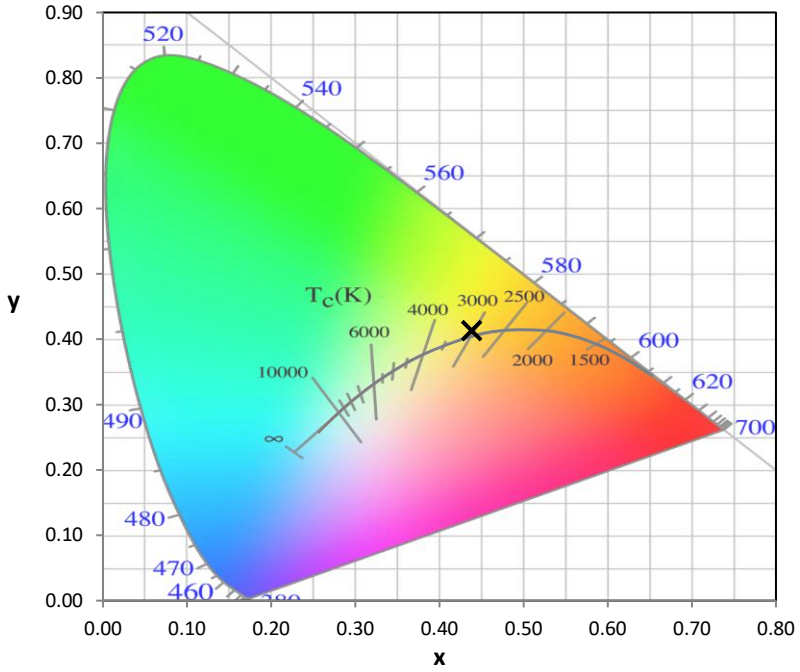
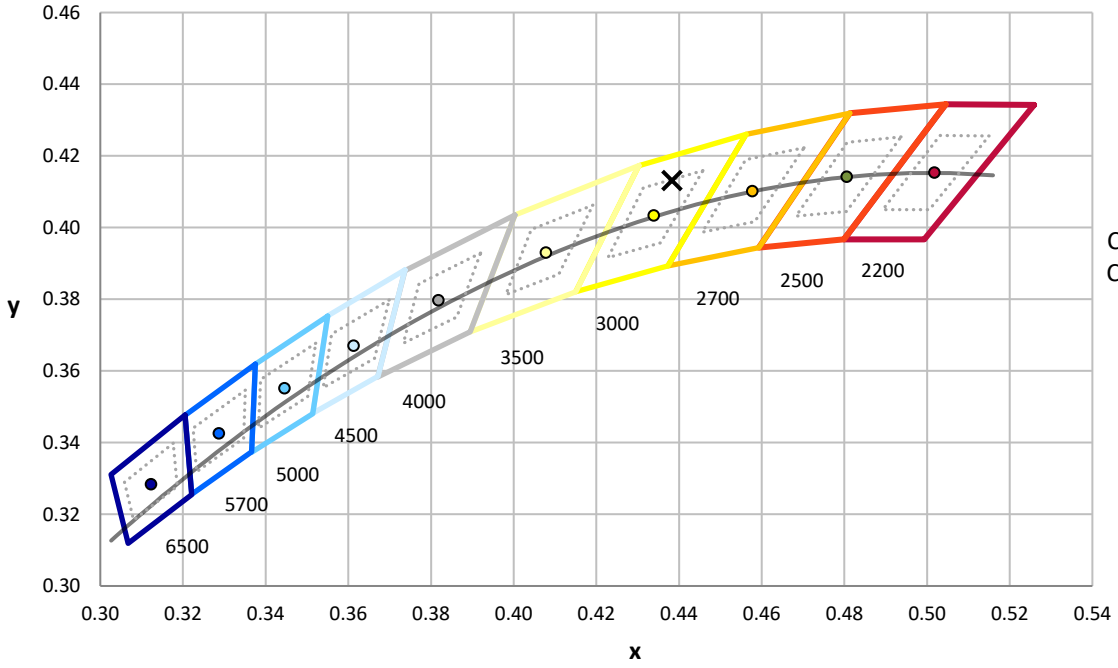
CIE 1931 Chromaticity Diagram



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

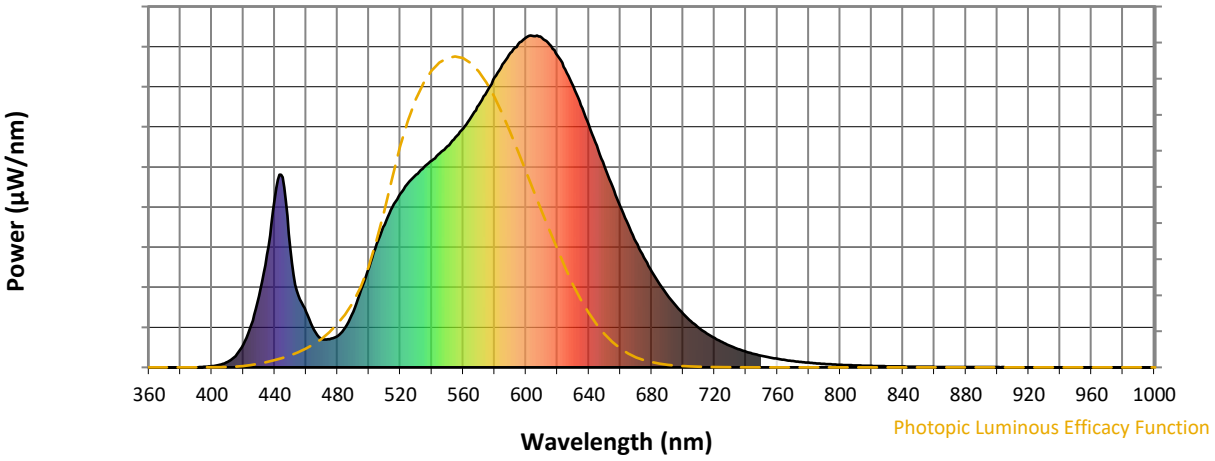


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

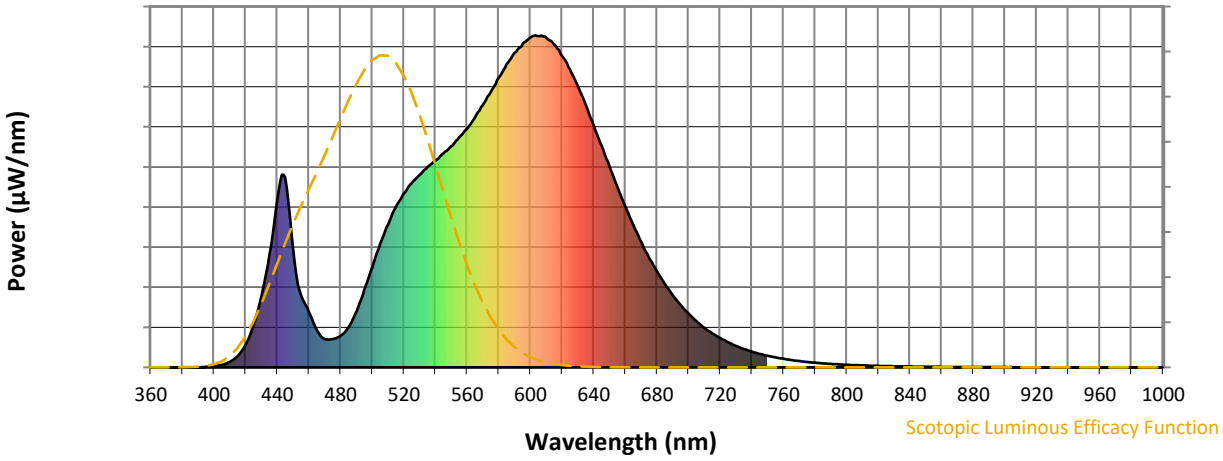


Photopic Lumens: NR

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

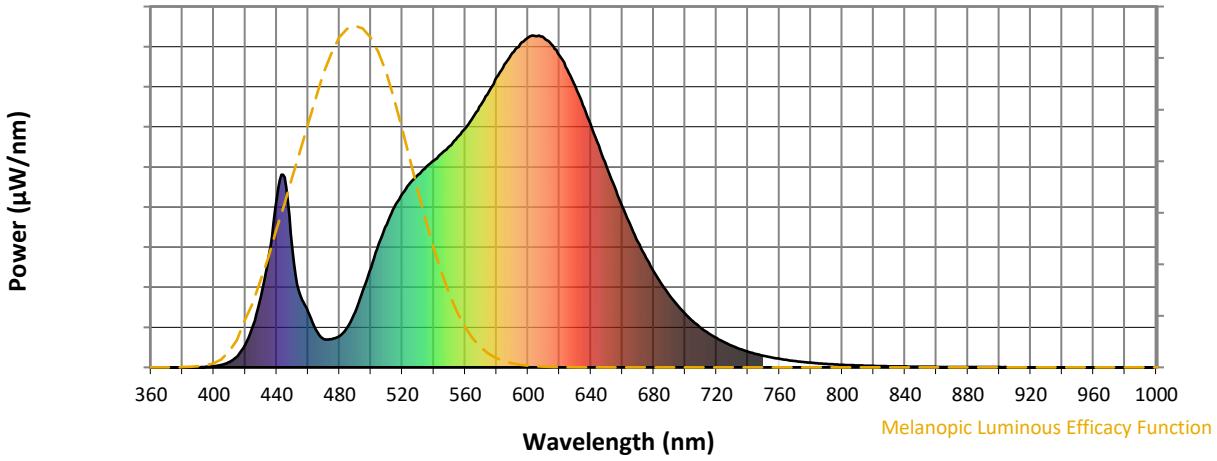


Scotopic Lumens: NR **S/P: 1.27**

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			

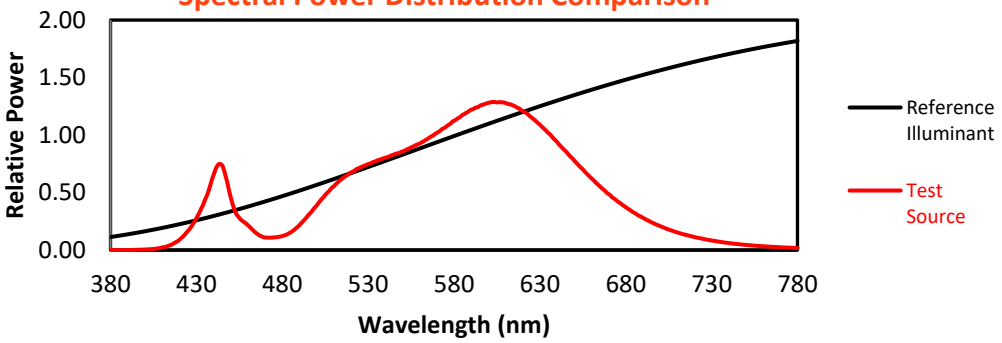
REPORT NUMBER: SP1-2408-195-9

TM-30-18

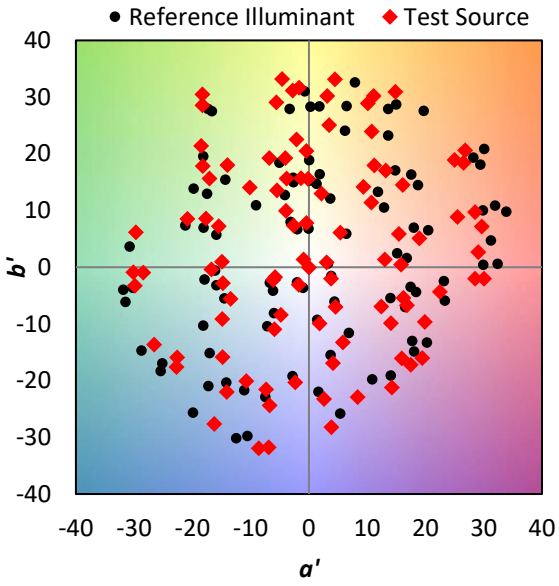
Summary

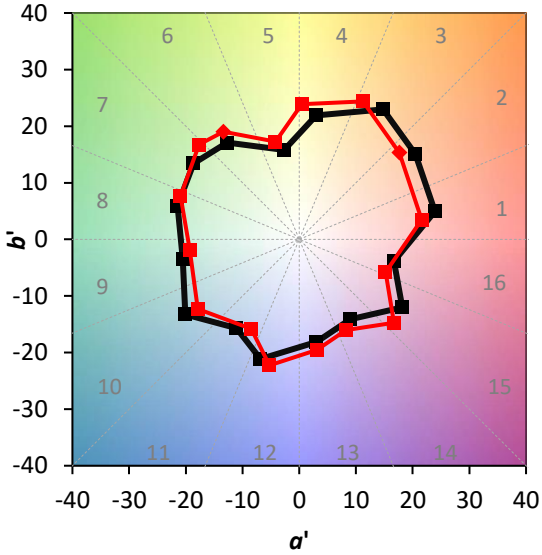
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

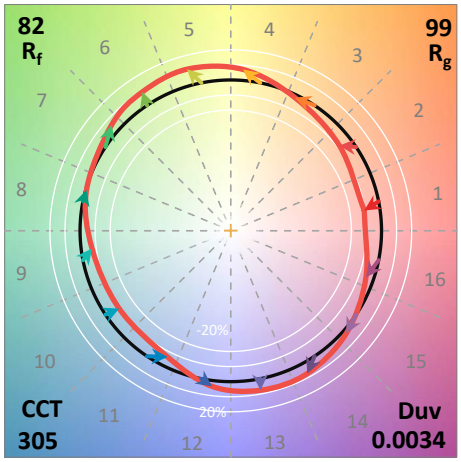
Spectral Power Distribution Comparison

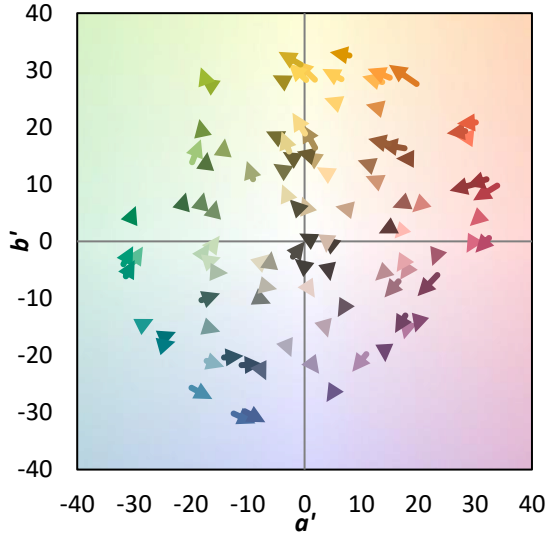


Color Vector Graphics







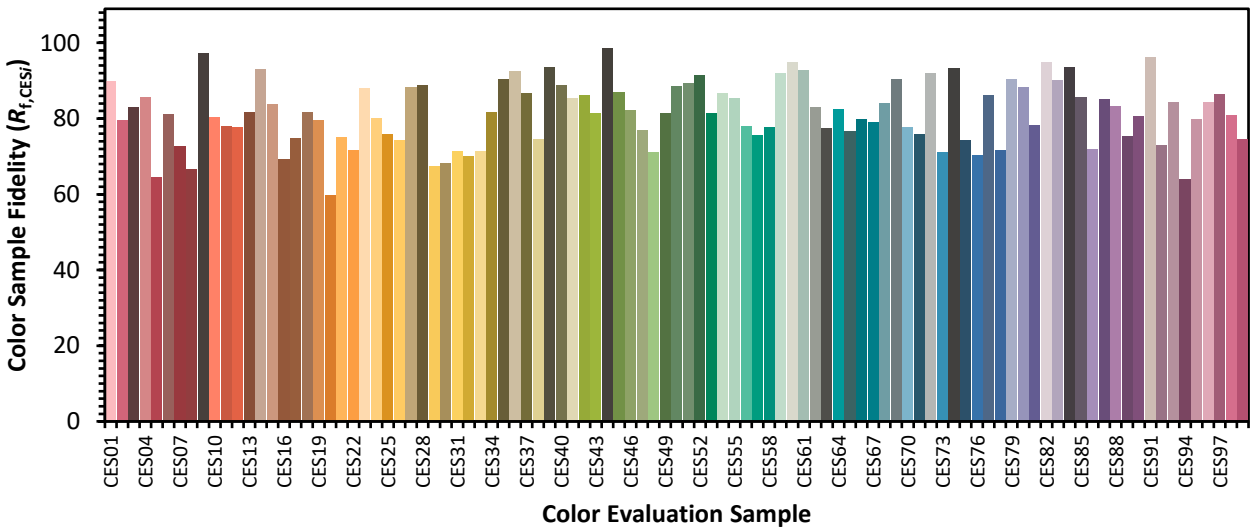


REPORT NUMBER: SP1-2408-195-9

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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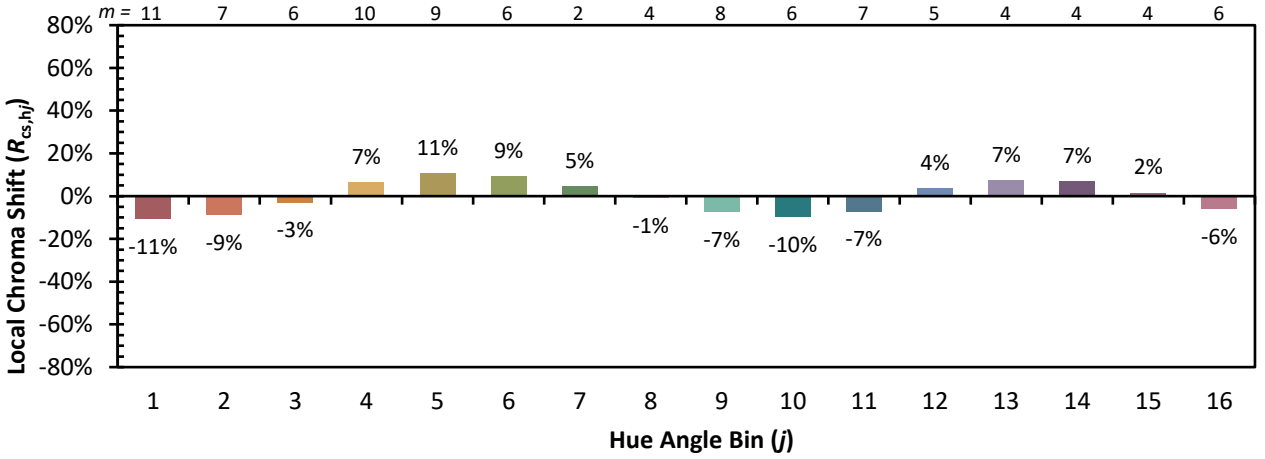
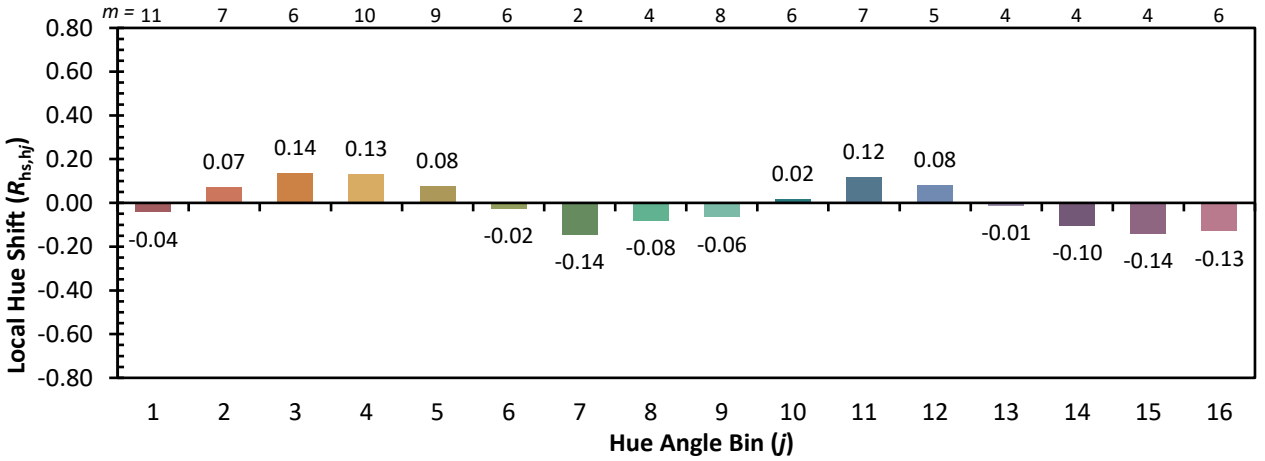
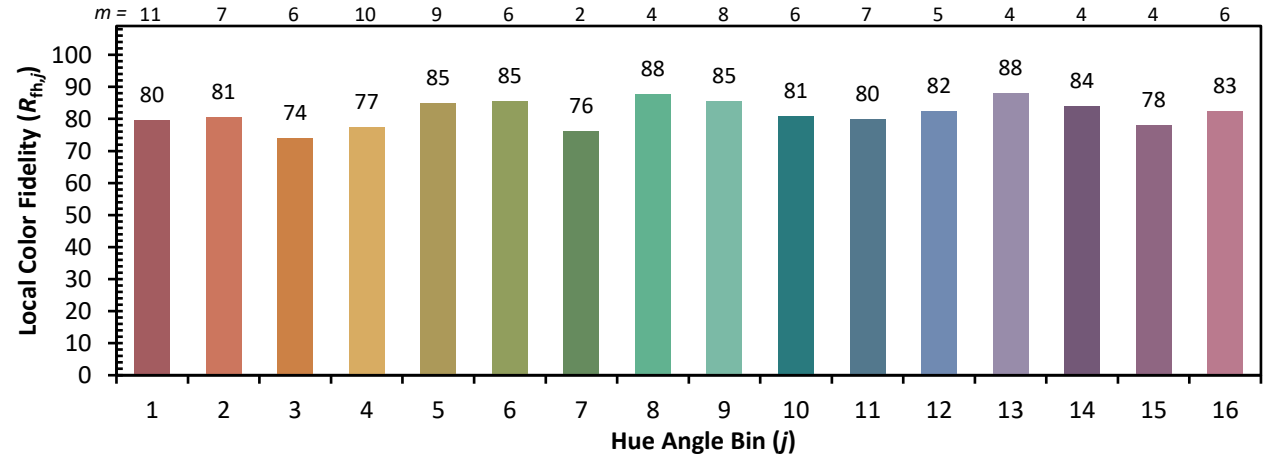
Color Rendition by Hue-Angle Bin







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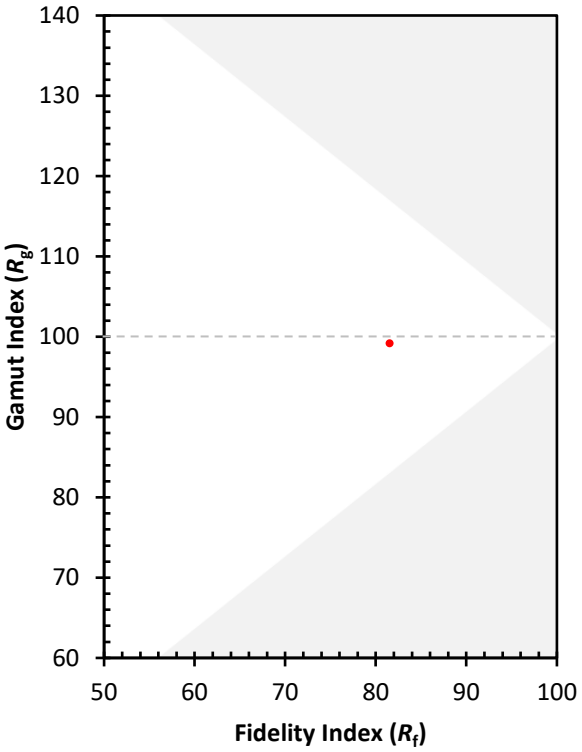
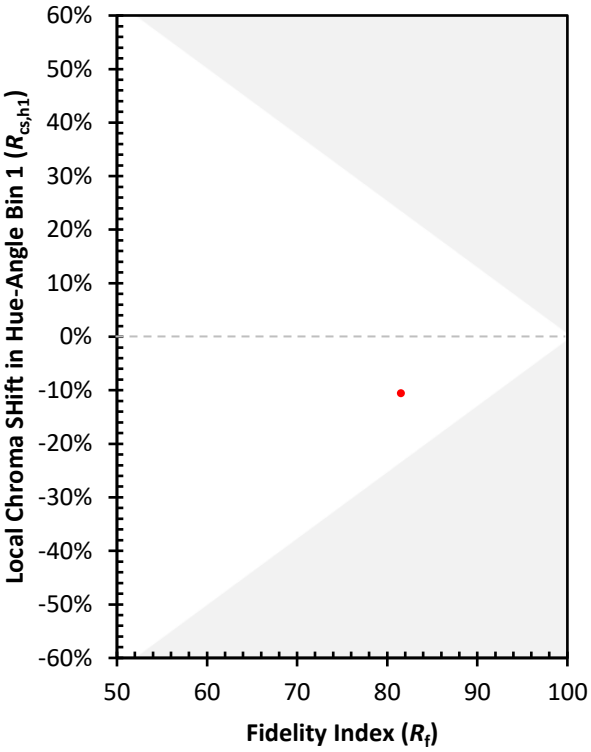
Measure Comparisons





(END OF REPORT)