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: P437770

Luminaire Tested: **ISS-SA1E-830-U-SLR**

Issue Date: 12/9/2020

Report Generated By 670245982

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437770
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-22)
Test Lab:	INNOVATION CENTER
Issue Date:	12/9/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISS-SA1E-830-U-SLR
Description:	IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
	(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT 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 - G2

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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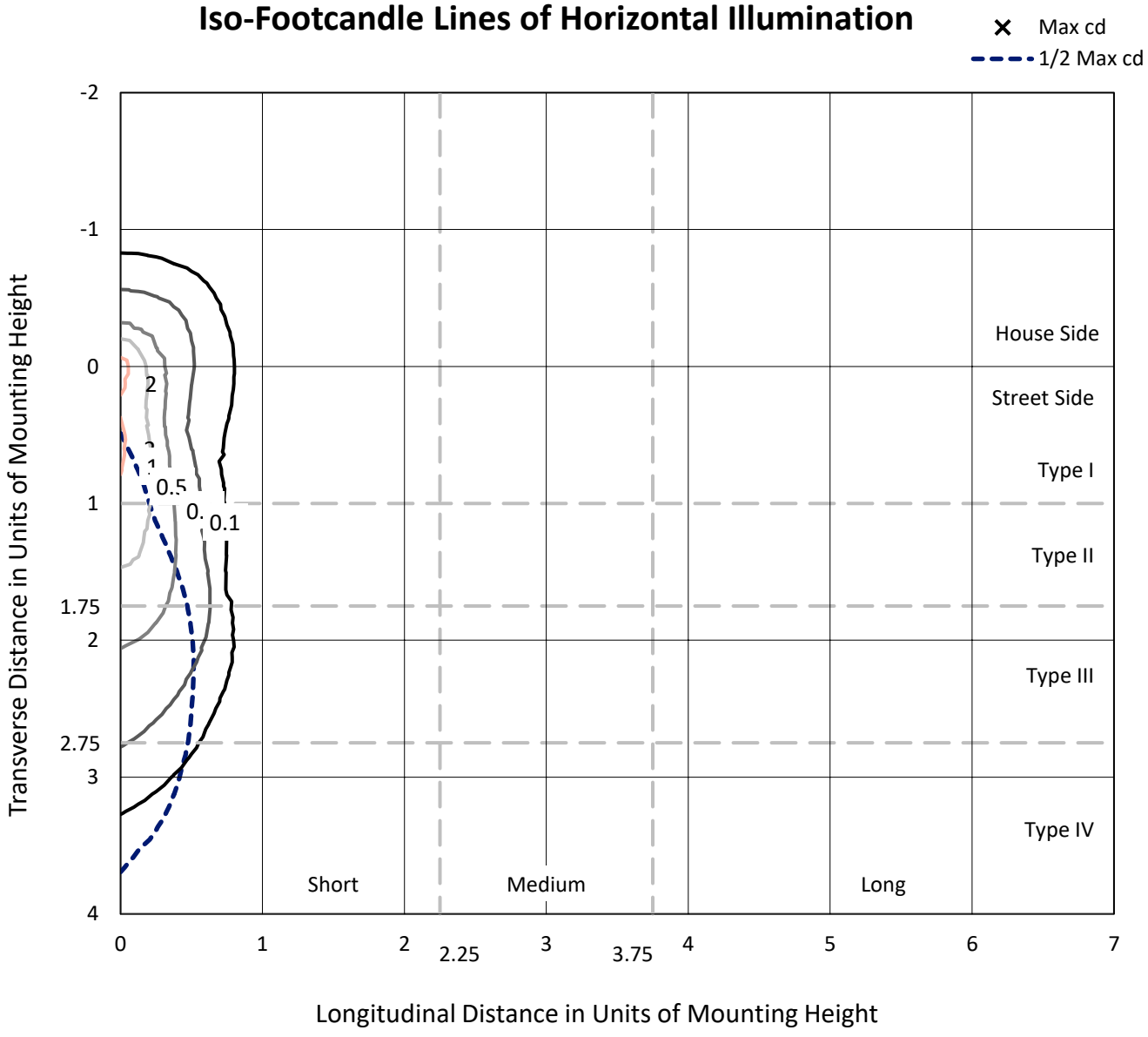
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type IV - Short - N/A

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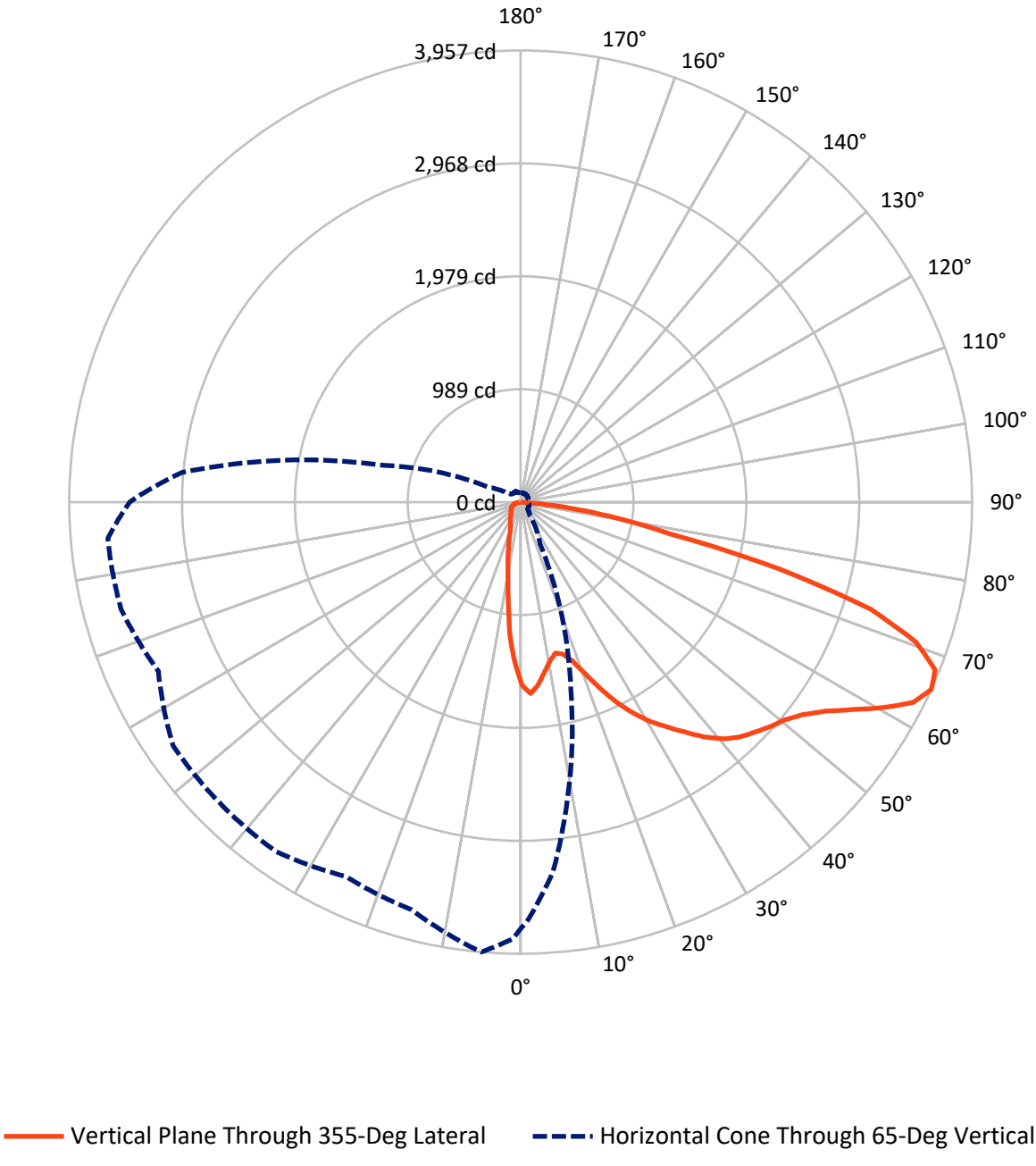
Luminous Intensity Polar Plot



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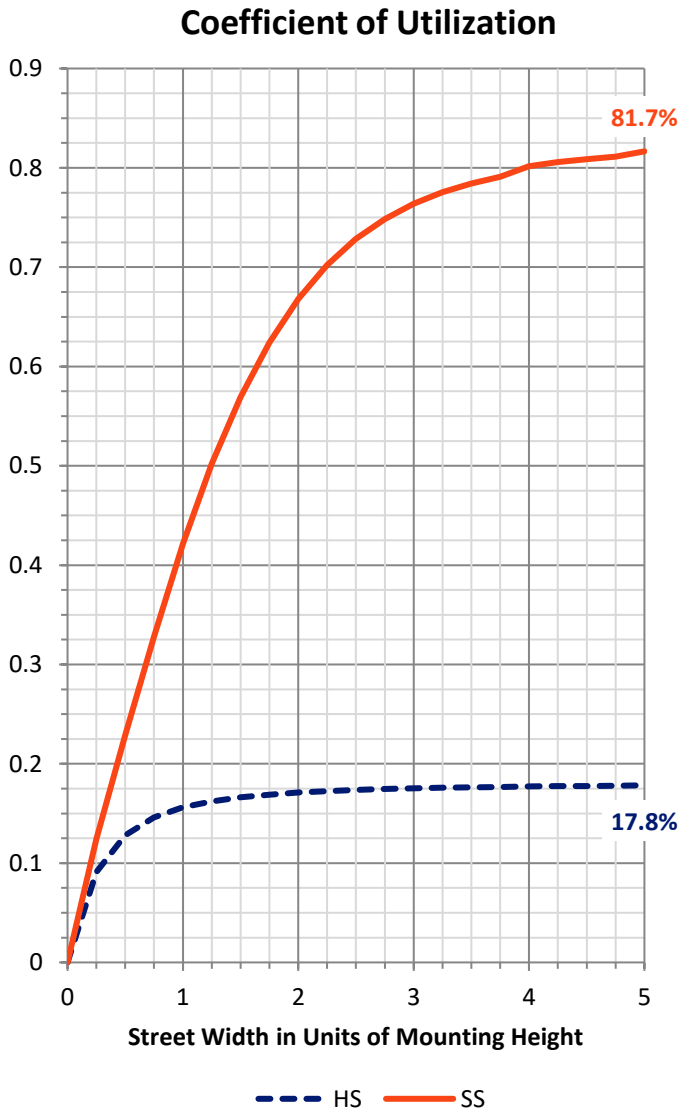
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	904.6	0.0	904.6
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	4113.4	0.0	4113.4
	% Fixture	82.0	0.0	82.0
Total	Lumens	5018.0	0.0	5018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	2.4
10°-20°	250.3	5.0
20°-30°	356.8	7.1
30°-40°	509.9	10.2
40°-50°	712.1	14.2
50°-60°	990.4	19.7
60°-70°	1206.5	24.0
70°-80°	743.1	14.8
80°-90°	127.7	2.5
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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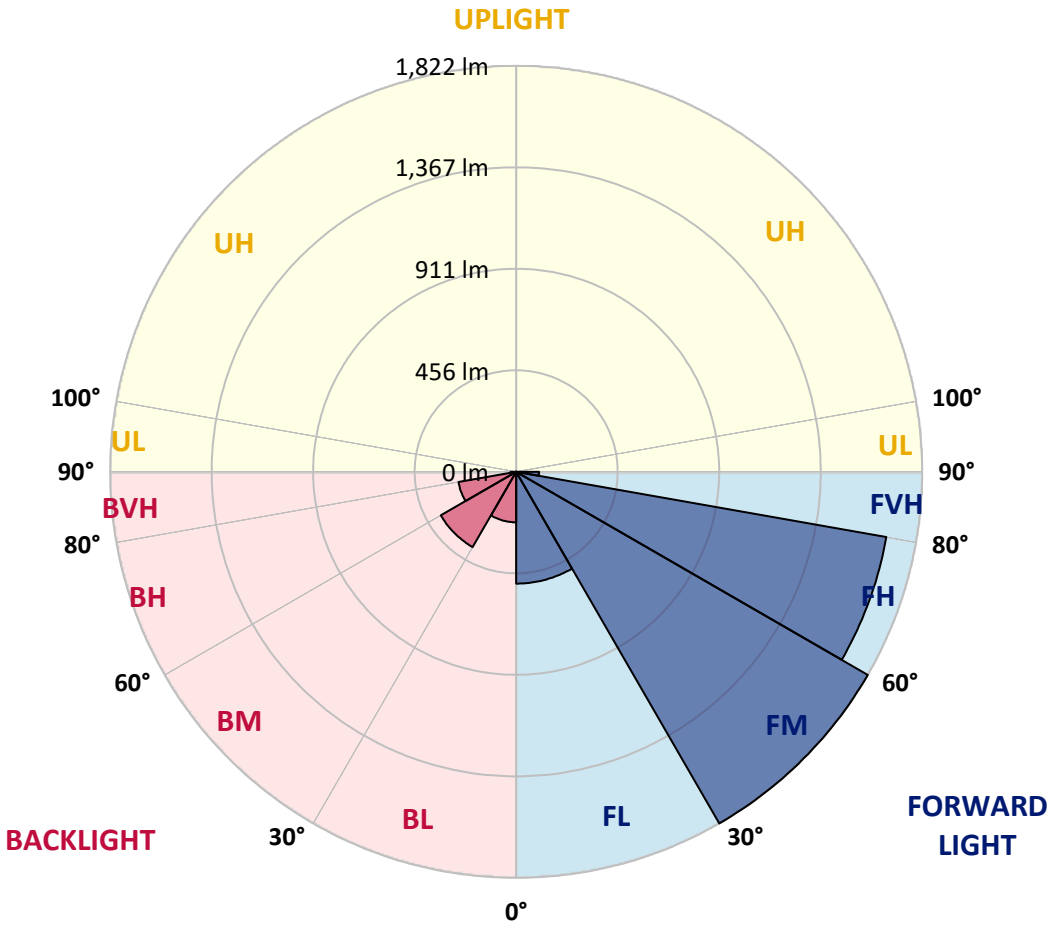
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	501.7	10.0			
FM	(30°-60°)	1822.1	36.3			
FH	(60°-80°)	1686.9	33.6			G1/1800
FVH	(80°-90°)	102.6	2.0			G2/225
BL	(0°-30°)	226.5	4.5	B1/500		
BM	(30°-60°)	390.3	7.8	B1/1000		
BH	(60°-80°)	262.7	5.2	B1/500		G1/500
BVH	(80°-90°)	25.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6
2.5°	1646.2	1646.2	1625.9	1575.1	1528.3	1479.6	1463.3	1418.6	1390.1	1363.7	1373.9
5°	1550.7	1544.6	1508.0	1402.3	1321.0	1241.8	1193.0	1119.8	1111.7	1046.7	1042.6
7.5°	1422.7	1418.6	1363.7	1243.8	1150.3	1026.3	953.2	890.2	835.3	796.7	784.5
10°	1335.3	1321.0	1254.0	1107.6	971.5	882.1	841.4	786.5	739.8	691.0	650.4
12.5°	1278.4	1262.1	1195.0	1034.5	902.4	841.4	784.5	719.5	656.5	599.6	558.9
15°	1288.5	1262.1	1186.9	1016.2	878.0	790.6	711.3	634.1	560.9	497.9	447.1
17.5°	1361.7	1329.2	1245.8	1028.4	839.4	723.5	615.8	526.4	437.0	371.9	331.3
20°	1489.7	1443.0	1337.3	1062.9	810.9	660.5	518.3	400.4	306.9	262.2	250.0
22.5°	1646.2	1605.6	1461.3	1091.4	780.4	589.4	410.5	288.6	241.9	219.5	213.4
25°	1808.8	1764.1	1603.5	1138.1	756.0	524.4	323.1	229.7	207.3	197.1	193.1
27.5°	1975.5	1930.8	1743.8	1213.3	727.6	455.3	260.1	201.2	184.9	176.8	176.8
30°	2093.3	2056.8	1869.8	1280.4	695.1	400.4	229.7	187.0	172.8	164.6	162.6
32.5°	2225.5	2174.6	1987.7	1325.1	670.7	357.7	209.3	174.8	162.6	152.4	152.4
35°	2373.8	2316.9	2097.4	1369.8	646.3	337.4	195.1	166.7	154.5	144.3	142.3
37.5°	2536.4	2463.2	2209.2	1408.4	619.9	327.2	187.0	158.5	146.3	138.2	134.1
40°	2715.3	2638.0	2357.6	1441.0	601.6	315.0	180.9	152.4	140.2	130.1	128.0
42.5°	2865.6	2796.5	2461.2	1461.3	593.5	298.8	178.8	146.3	136.2	124.0	119.9
45°	2942.9	2883.9	2587.2	1467.4	589.4	288.6	168.7	146.3	132.1	119.9	113.8
47.5°	3009.9	2967.3	2678.7	1497.9	579.2	278.4	156.5	154.5	130.1	113.8	107.7
50°	3123.8	3079.0	2820.9	1554.8	567.0	266.2	144.3	148.4	130.1	109.7	103.7
52.5°	3259.9	3247.7	3007.9	1644.2	548.7	250.0	132.1	140.2	130.1	107.7	99.6
55°	3459.1	3440.8	3255.9	1760.0	526.4	227.6	119.9	128.0	128.0	101.6	93.5
57.5°	3627.8	3629.8	3483.5	1841.3	506.1	191.0	111.8	109.7	121.9	95.5	87.4
60°	3705.0	3705.0	3556.7	1871.8	479.6	160.6	105.7	97.6	126.0	89.4	81.3
62.5°	3753.8	3713.2	3455.0	1843.4	449.2	144.3	95.5	89.4	101.6	83.3	75.2
65°	*3739.6*	*3662.3*	*3251.8*	*1699.1*	*404.4*	*140.2*	*89.4*	*81.3*	*81.3*	*77.2*	*71.1*
67.5°	3611.5	3491.6	2953.0	1455.2	357.7	138.2	81.3	75.2	73.2	69.1	65.0
70°	3264.0	3178.6	2597.4	1186.9	327.2	138.2	75.2	67.1	65.0	61.0	58.9
72.5°	2668.5	2542.5	2073.0	890.2	302.8	138.2	69.1	58.9	56.9	54.9	52.8
75°	1823.0	1678.7	1457.2	546.7	237.8	119.9	61.0	48.8	48.8	46.7	44.7
77.5°	1006.0	973.5	821.1	288.6	148.4	73.2	46.7	38.6	40.6	38.6	36.6
80°	583.3	548.7	487.8	140.2	85.4	42.7	28.5	28.5	30.5	30.5	28.5
82.5°	282.5	245.9	252.0	56.9	30.5	18.3	12.2	14.2	16.3	20.3	20.3
85°	10.2	10.2	20.3	4.1	0.0	0.0	0.0	0.0	0.0	4.1	6.1
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°	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6
2.5°	1341.4	1341.4	1349.5	1384.0	1355.6	1351.5	1359.7	1373.9	1380.0	1408.4	1406.4
5°	1034.5	1028.4	1052.8	1085.3	1103.6	1113.7	1130.0	1166.6	1152.4	1174.7	1170.6
7.5°	764.2	774.3	764.2	800.8	829.2	871.9	904.4	896.3	898.3	880.0	906.4
10°	623.9	619.9	595.5	607.7	623.9	650.4	672.7	676.8	697.1	664.6	686.9
12.5°	532.5	516.2	491.8	479.6	475.6	495.9	502.0	512.2	524.4	534.5	538.6
15°	426.8	414.6	398.3	380.1	376.0	376.0	390.2	404.4	420.7	424.8	439.0
17.5°	319.1	313.0	306.9	306.9	306.9	306.9	319.1	325.2	333.3	345.5	343.5
20°	241.9	241.9	243.9	254.0	260.1	264.2	272.3	274.4	272.3	274.4	274.4
22.5°	213.4	211.4	217.5	221.5	231.7	241.9	245.9	243.9	237.8	233.7	237.8
25°	193.1	195.1	197.1	203.2	211.4	221.5	223.6	221.5	215.4	215.4	215.4
27.5°	176.8	178.8	182.9	189.0	197.1	205.3	207.3	203.2	197.1	199.2	197.1
30°	164.6	168.7	170.7	176.8	182.9	191.0	191.0	187.0	182.9	182.9	182.9
32.5°	150.4	154.5	158.5	164.6	172.8	176.8	176.8	174.8	170.7	168.7	168.7
35°	142.3	142.3	146.3	154.5	158.5	162.6	164.6	162.6	158.5	154.5	152.4
37.5°	134.1	134.1	136.2	140.2	148.4	152.4	154.5	150.4	146.3	142.3	142.3
40°	126.0	126.0	128.0	130.1	138.2	144.3	144.3	138.2	134.1	136.2	134.1
42.5°	119.9	119.9	121.9	121.9	126.0	136.2	134.1	130.1	128.0	128.0	126.0
45°	113.8	111.8	113.8	113.8	115.8	126.0	126.0	119.9	119.9	121.9	119.9
47.5°	107.7	105.7	107.7	107.7	109.7	115.8	115.8	113.8	113.8	113.8	115.8
50°	101.6	101.6	101.6	101.6	103.7	105.7	109.7	107.7	107.7	107.7	109.7
52.5°	95.5	95.5	95.5	97.6	97.6	101.6	103.7	101.6	103.7	103.7	103.7
55°	91.5	89.4	89.4	93.5	93.5	97.6	99.6	97.6	99.6	99.6	99.6
57.5°	85.4	85.4	85.4	87.4	89.4	93.5	97.6	93.5	95.5	95.5	97.6
60°	79.3	79.3	79.3	83.3	85.4	89.4	91.5	89.4	91.5	91.5	91.5
62.5°	73.2	75.2	75.2	77.2	79.3	85.4	87.4	85.4	87.4	87.4	87.4
65°	*69.1*	*69.1*	*71.1*	*73.2*	*75.2*	*79.3*	*81.3*	*81.3*	*81.3*	*83.3*	*81.3*
67.5°	63.0	63.0	65.0	67.1	69.1	75.2	75.2	75.2	77.2	75.2	75.2
70°	56.9	56.9	58.9	61.0	63.0	69.1	69.1	69.1	71.1	67.1	67.1
72.5°	50.8	50.8	52.8	54.9	58.9	65.0	63.0	63.0	63.0	61.0	61.0
75°	44.7	44.7	46.7	48.8	50.8	58.9	56.9	54.9	54.9	52.8	52.8
77.5°	36.6	36.6	38.6	42.7	44.7	50.8	48.8	46.7	44.7	44.7	44.7
80°	28.5	30.5	32.5	34.6	36.6	40.6	38.6	36.6	34.6	34.6	34.6
82.5°	20.3	22.4	24.4	26.4	28.5	28.5	28.5	28.5	26.4	24.4	24.4
85°	8.1	12.2	16.3	16.3	18.3	16.3	18.3	16.3	14.2	14.2	12.2
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	4.1	6.1	6.1	6.1	6.1
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°	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6
2.5°	1422.7	1455.2	1473.5	1506.0	1540.5	1587.3	1625.9	1680.8	1729.6	1739.7	1751.9
5°	1178.8	1221.5	1241.8	1294.6	1375.9	1426.7	1508.0	1593.4	1699.1	1731.6	1774.3
7.5°	886.1	918.6	971.5	1018.2	1113.7	1199.1	1308.9	1432.8	1556.8	1627.9	1697.0
10°	674.7	715.4	772.3	827.2	920.7	1006.0	1136.1	1274.3	1432.8	1497.9	1571.0
12.5°	560.9	593.5	650.4	725.6	813.0	894.2	991.8	1142.2	1308.9	1392.2	1481.6
15°	453.2	487.8	558.9	642.2	727.6	819.0	912.5	1056.8	1260.1	1345.4	1430.8
17.5°	361.8	392.2	453.2	542.6	636.1	737.8	851.6	1034.5	1270.2	1375.9	1475.5
20°	280.5	306.9	353.6	434.9	530.5	650.4	796.7	1026.3	1331.2	1479.6	1579.2
22.5°	241.9	252.0	278.4	335.3	432.9	573.1	745.9	1032.4	1428.8	1619.8	1733.6
25°	215.4	223.6	233.7	268.3	345.5	493.9	701.2	1044.6	1532.4	1778.3	1908.4
27.5°	199.2	203.2	209.3	225.6	282.5	428.8	656.5	1060.9	1672.6	1938.9	2064.9
30°	182.9	182.9	189.0	205.3	247.9	382.1	623.9	1093.4	1810.8	2077.1	2201.1
32.5°	166.7	166.7	176.8	191.0	225.6	343.5	591.4	1103.6	1914.5	2199.0	2298.6
35°	152.4	156.5	164.6	180.9	211.4	315.0	560.9	1085.3	1989.7	2302.7	2404.3
37.5°	144.3	146.3	156.5	170.7	193.1	288.6	530.5	1060.9	2091.3	2440.9	2520.1
40°	134.1	138.2	148.4	162.6	180.9	268.3	495.9	1034.5	2180.7	2595.3	2636.0
42.5°	128.0	132.1	140.2	154.5	172.8	243.9	463.4	1014.2	2276.3	2727.4	2755.9
45°	121.9	126.0	136.2	148.4	172.8	225.6	430.9	999.9	2369.8	2829.1	2851.4
47.5°	115.8	119.9	130.1	146.3	170.7	215.4	408.5	985.7	2428.7	2916.5	2922.6
50°	111.8	115.8	128.0	150.4	164.6	211.4	398.3	999.9	2528.3	2985.6	2967.3
52.5°	105.7	111.8	126.0	156.5	156.5	207.3	390.2	1050.7	2652.3	3087.2	3040.4
55°	103.7	107.7	121.9	150.4	142.3	197.1	390.2	1089.4	2816.9	3288.4	3211.2
57.5°	97.6	101.6	117.9	140.2	130.1	180.9	386.2	1152.4	3050.6	3509.9	3440.8
60°	91.5	97.6	113.8	126.0	117.9	160.6	367.9	1221.5	3211.2	3629.8	3642.0
62.5°	87.4	93.5	113.8	109.7	107.7	140.2	339.4	1264.1	3194.9	3591.2	3707.1
65°	*81.3*	*87.4*	*103.7*	*99.6*	*101.6*	*126.0*	*302.8*	*1243.8*	*2981.5*	*3428.6*	*3631.9*
67.5°	75.2	81.3	89.4	89.4	93.5	121.9	264.2	1125.9	2749.8	3231.5	3465.2
70°	69.1	73.2	77.2	81.3	85.4	119.9	233.7	965.4	2483.6	3042.5	3227.4
72.5°	61.0	63.0	67.1	71.1	79.3	113.8	221.5	784.5	2115.7	2634.0	2920.5
75°	52.8	54.9	58.9	63.0	69.1	107.7	203.2	595.5	1743.8	2081.2	2359.6
77.5°	44.7	46.7	50.8	52.8	58.9	95.5	174.8	430.9	1357.6	1499.9	1725.5
80°	34.6	36.6	40.6	40.6	48.8	71.1	136.2	300.8	953.2	1062.9	1180.8
82.5°	24.4	26.4	28.5	30.5	36.6	48.8	89.4	180.9	646.3	729.6	709.3
85°	14.2	16.3	16.3	20.3	22.4	32.5	50.8	93.5	422.7	333.3	329.2
87.5°	6.1	6.1	6.1	8.1	8.1	12.2	16.3	18.3	40.6	14.2	10.2
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: P437770
CATALOG NUMBER: ISS-SA1E-830-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	1605.6	*1605.6*	1605.6	1605.6
2.5°	1770.2	1784.4	1794.6	1790.5	1784.4	1749.9	1715.3	*1678.7*	1646.2	1646.2
5°	1843.4	1902.3	1926.7	1906.4	1861.7	1790.5	1701.1	*1607.6*	1562.9	1550.7
7.5°	1804.7	1916.5	1975.5	1949.0	1890.1	1760.0	1623.9	*1501.9*	1434.9	1422.7
10°	1727.5	1873.9	1940.9	1932.8	1867.8	1717.4	1552.7	*1414.5*	1343.4	1335.3
12.5°	1638.1	1780.4	1865.7	1869.8	1827.1	1695.0	1522.2	*1357.6*	1294.6	1278.4
15°	1583.2	1707.2	1766.1	1751.9	1764.1	1676.7	1534.4	*1380.0*	1302.8	1288.5
17.5°	1585.3	1638.1	1652.3	1630.0	1676.7	1672.6	1603.5	*1461.3*	1375.9	1361.7
20°	1638.1	1593.4	1548.7	1544.6	1605.6	1686.9	1713.3	*1597.4*	1499.9	1489.7
22.5°	1729.6	1581.2	1487.7	1473.5	1550.7	1701.1	1819.0	*1764.1*	1672.6	1646.2
25°	1831.2	1593.4	1449.1	1430.8	1499.9	1711.3	1932.8	*1934.8*	1833.2	1808.8
27.5°	1940.9	1632.0	1449.1	1428.8	1501.9	1727.5	2008.0	*2089.3*	1995.8	1975.5
30°	2038.5	1686.9	1463.3	1441.0	1526.3	1743.8	2058.8	*2227.5*	2121.8	2093.3
32.5°	2097.4	1733.6	1497.9	1457.2	1569.0	1776.3	2105.5	*2345.4*	2264.1	2225.5
35°	2144.2	1788.5	1554.8	1501.9	1632.0	1829.1	2144.2	*2473.4*	2396.2	2373.8
37.5°	2178.7	1853.5	1613.7	1562.9	1715.3	1900.3	2199.0	*2609.6*	2585.2	2536.4
40°	2235.6	1894.2	1719.4	1701.1	1859.6	2012.1	2264.1	*2727.4*	2743.7	2715.3
42.5°	2286.4	1973.4	1869.8	1890.1	2044.6	2136.0	2351.5	*2814.8*	2902.2	2865.6
45°	2327.1	2083.2	2058.8	2125.9	2258.0	2294.6	2400.2	*2875.8*	2967.3	2942.9
47.5°	2384.0	2227.5	2310.8	2398.2	2508.0	2459.2	2451.0	*2940.8*	3034.3	3009.9
50°	2465.3	2396.2	2562.8	2676.6	2747.8	2593.3	2514.0	*2999.8*	3138.0	3123.8
52.5°	2548.6	2591.3	2818.9	2924.6	2971.3	2760.0	2603.5	*3093.3*	3259.9	3259.9
55°	2703.1	2782.3	3091.2	3158.3	3221.3	2910.4	2723.4	*3233.5*	3448.9	3459.1
57.5°	2928.7	2987.6	3298.5	3375.8	3392.0	3079.0	2912.4	*3428.6*	3609.5	3627.8
60°	3162.4	3190.8	3503.8	3572.9	3518.0	3296.5	3133.9	*3656.2*	3715.2	3705.0
62.5°	3420.5	3388.0	3646.1	3694.9	3680.6	3487.6	3412.4	*3863.5*	3792.4	3753.8
65°	*3625.8*	*3503.8*	*3719.2*	*3729.4*	*3737.5*	*3619.7*	*3696.9*	*3957.0*	*3824.9*	*3739.6*
67.5°	3749.7	3522.1	3570.9	3524.1	3556.7	3585.1	3890.0	*3918.4*	3686.7	3611.5
70°	3721.3	3264.0	3044.5	2991.7	2993.7	3192.9	3766.0	*3676.6*	3371.7	3264.0
72.5°	3459.1	2743.7	2424.6	2353.5	2367.7	2386.0	3166.4	*3209.1*	2725.4	2668.5
75°	2912.4	2113.7	1745.8	1729.6	1709.2	1788.5	2532.3	*2345.4*	1808.8	1823.0
77.5°	2375.8	1556.8	1282.4	1199.1	1186.9	1199.1	1727.5	*1339.3*	1050.7	1006.0
80°	1713.3	1036.5	957.2	939.0	882.1	709.3	904.4	*861.7*	593.5	583.3
82.5°	1128.0	715.4	731.7	609.7	573.1	449.2	548.7	*439.0*	296.7	282.5
85°	585.3	371.9	306.9	134.1	150.4	126.0	119.9	*97.6*	10.2	10.2
87.5°	20.3	8.1	6.1	6.1	4.1	2.0	2.0	*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

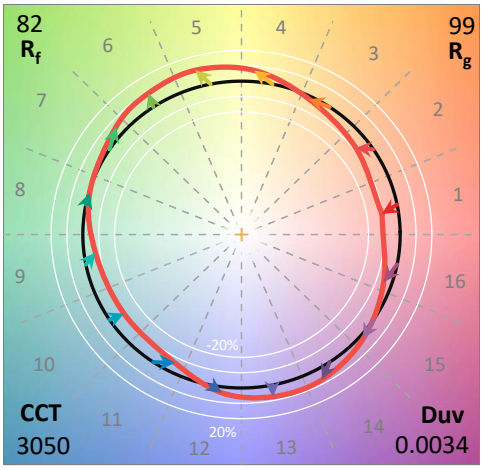
Test Information

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

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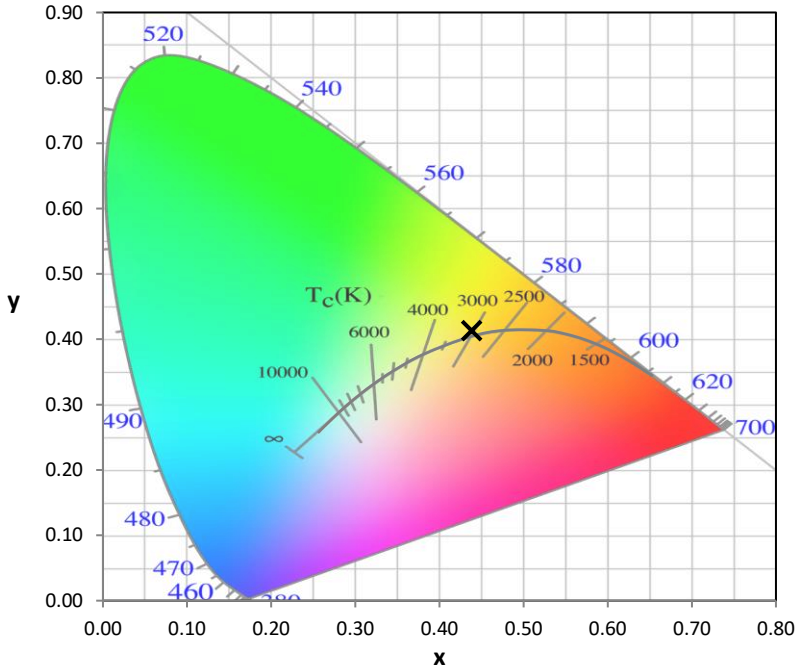
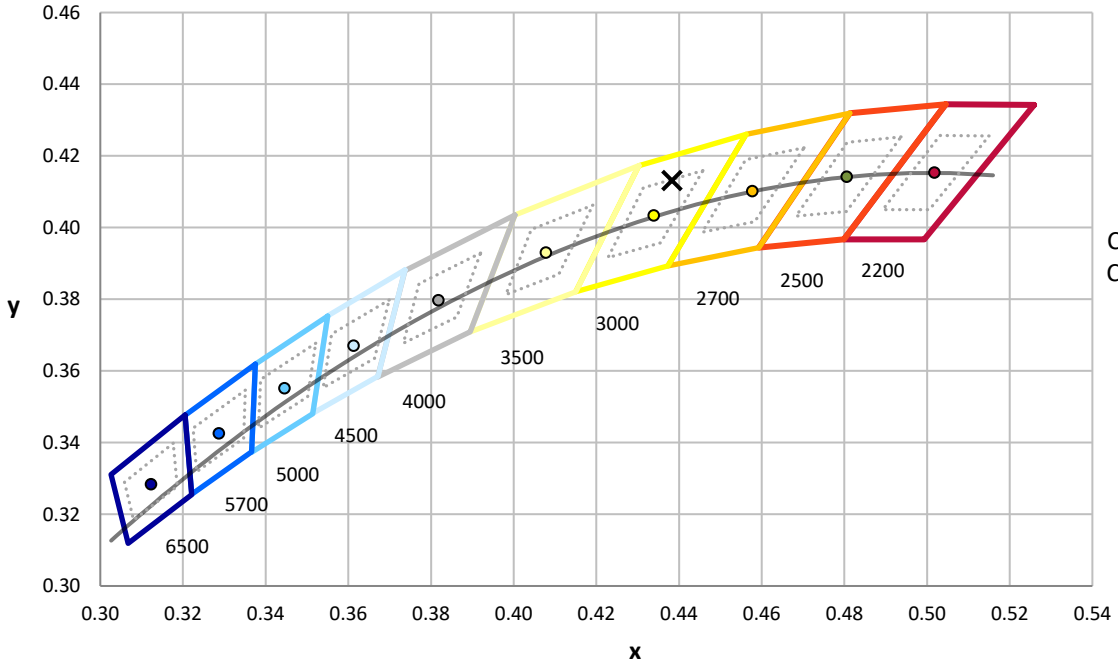
CIE 1931 Chromaticity Diagram



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

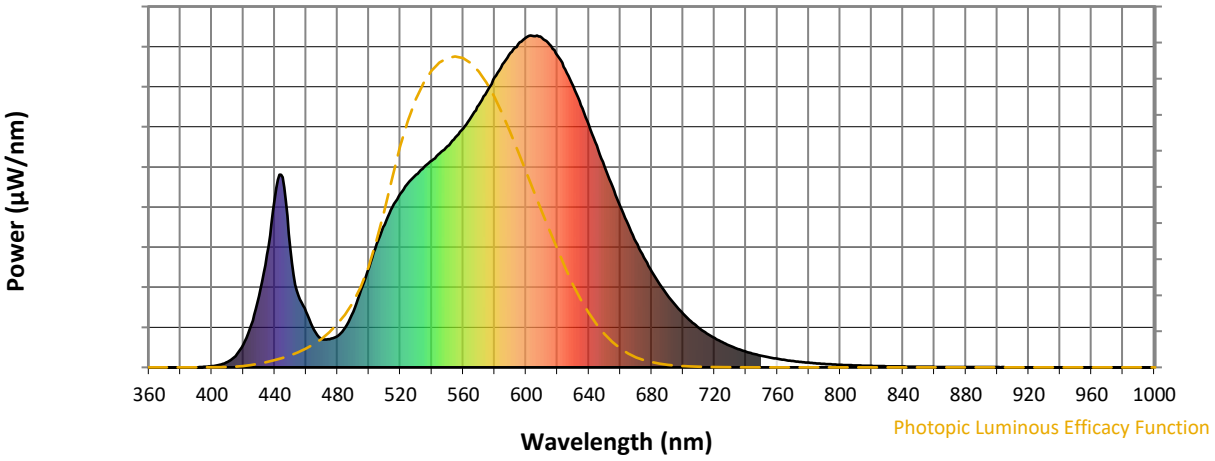


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

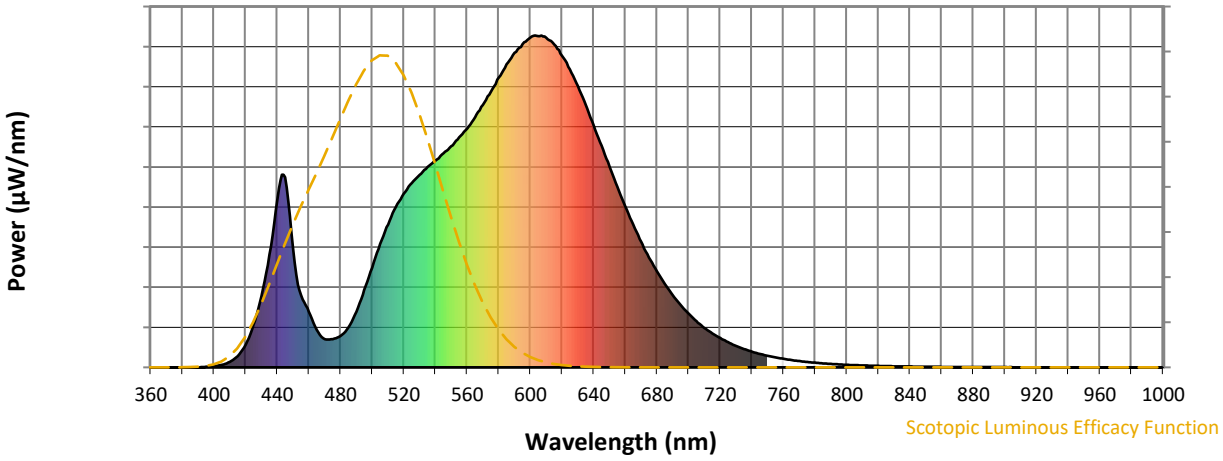


Photopic Lumens: NR

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

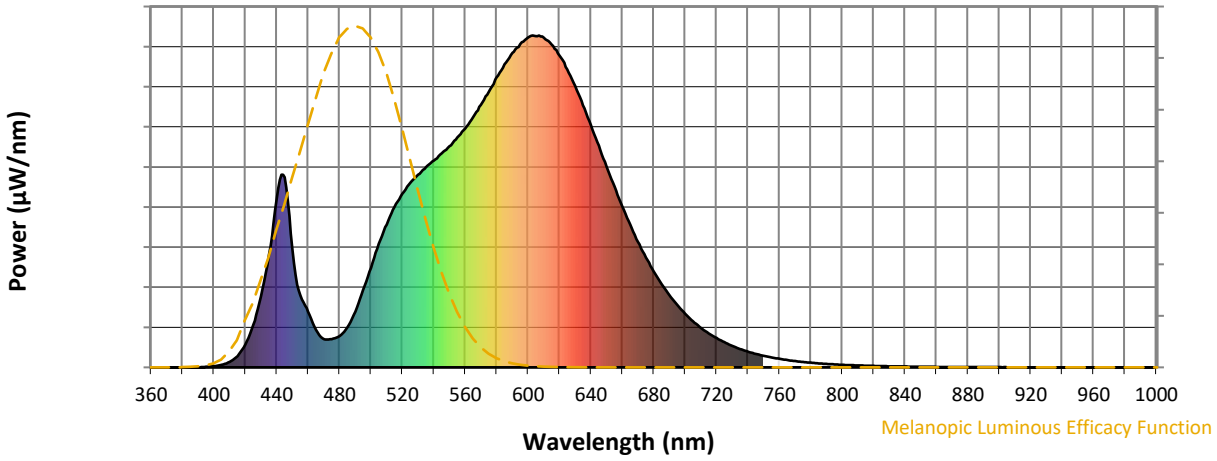


Scotopic Lumens: NR **S/P: 1.27**

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			

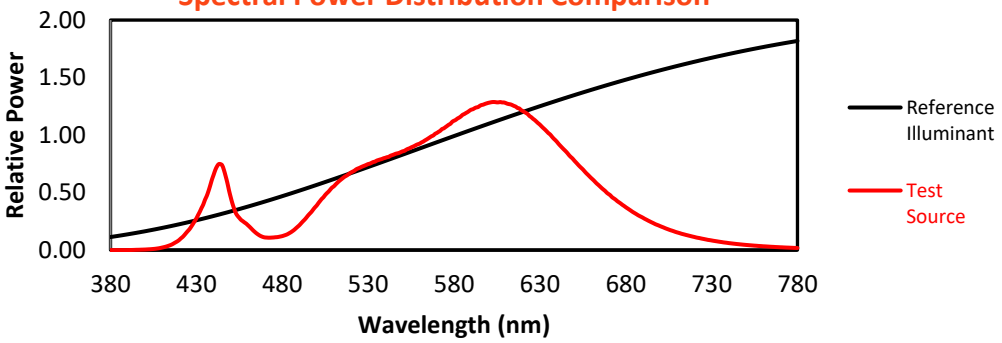
REPORT NUMBER: SP1-2408-195-9

TM-30-18

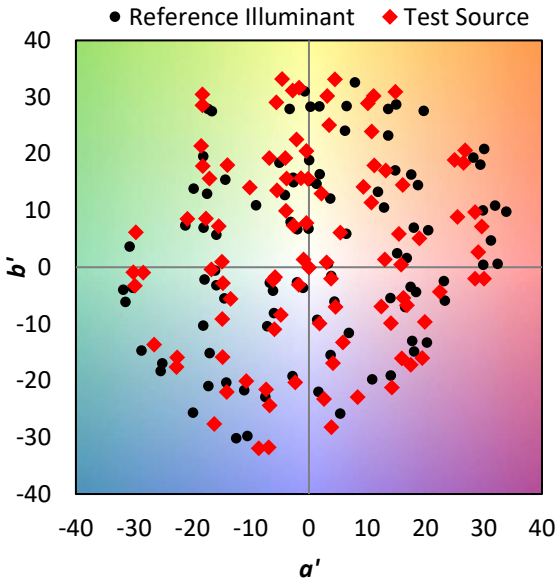
Summary

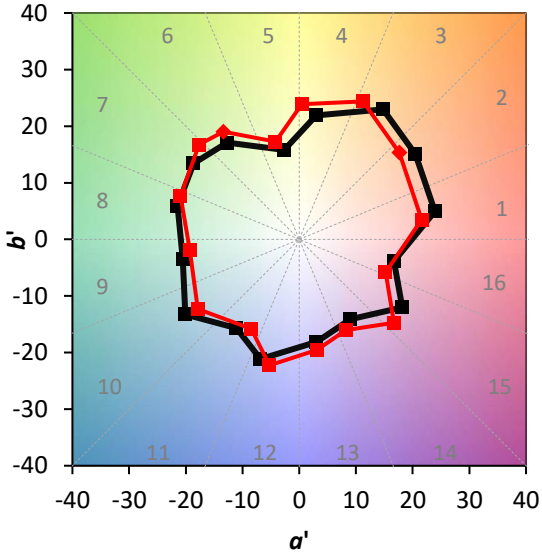
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

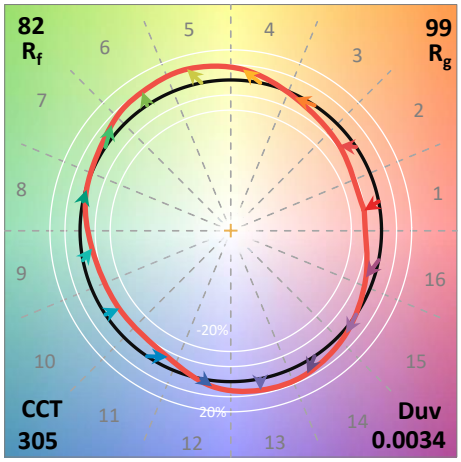
Spectral Power Distribution Comparison

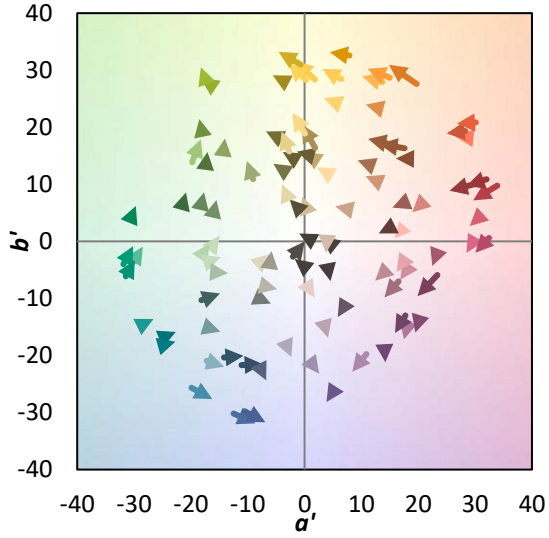


Color Vector Graphics









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
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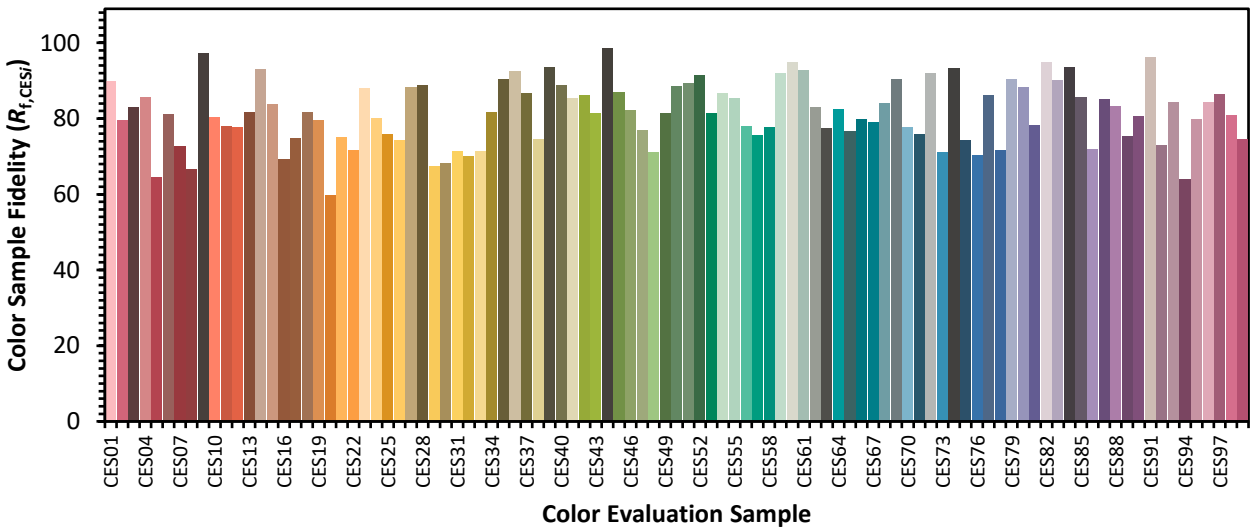

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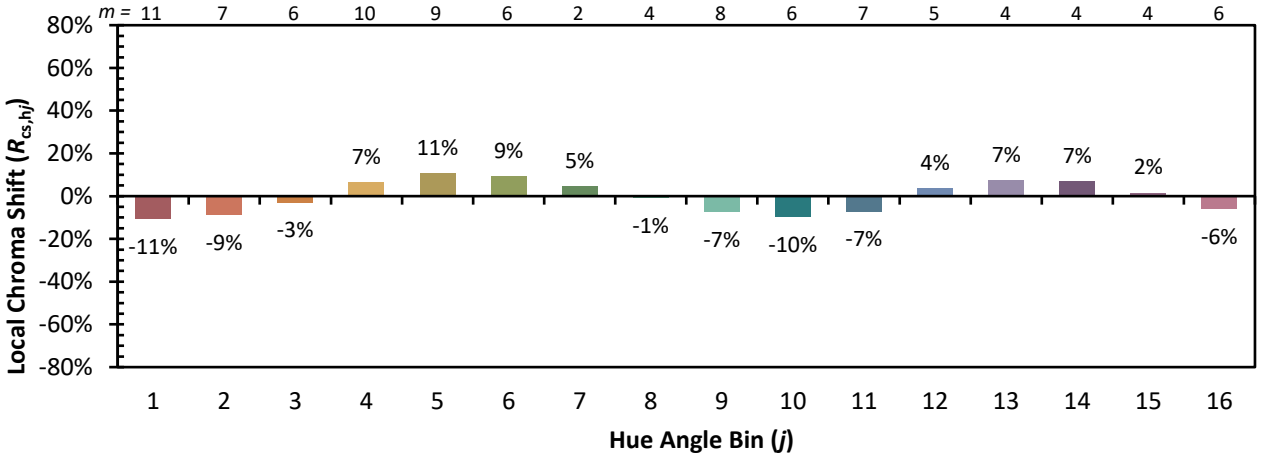
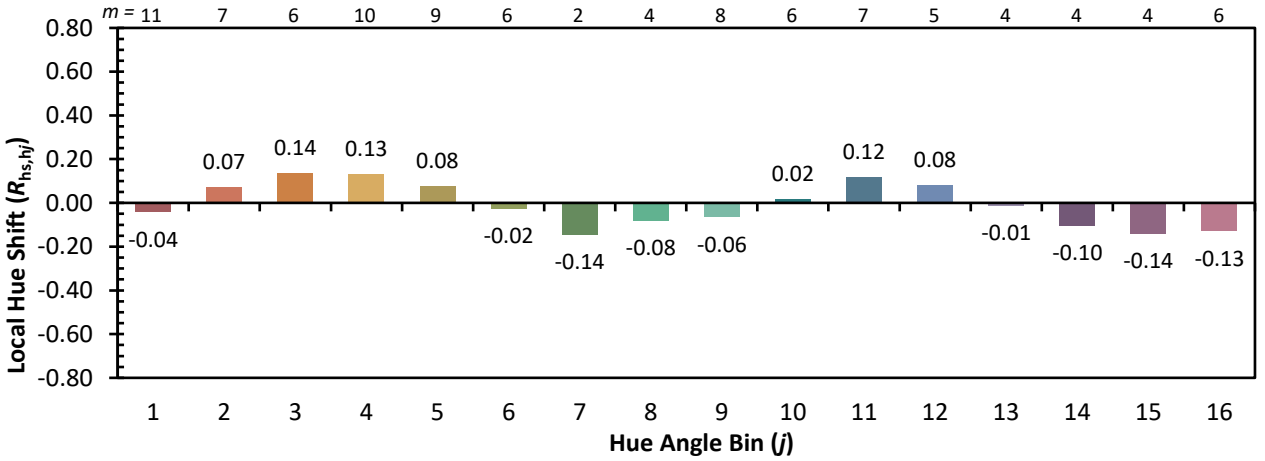
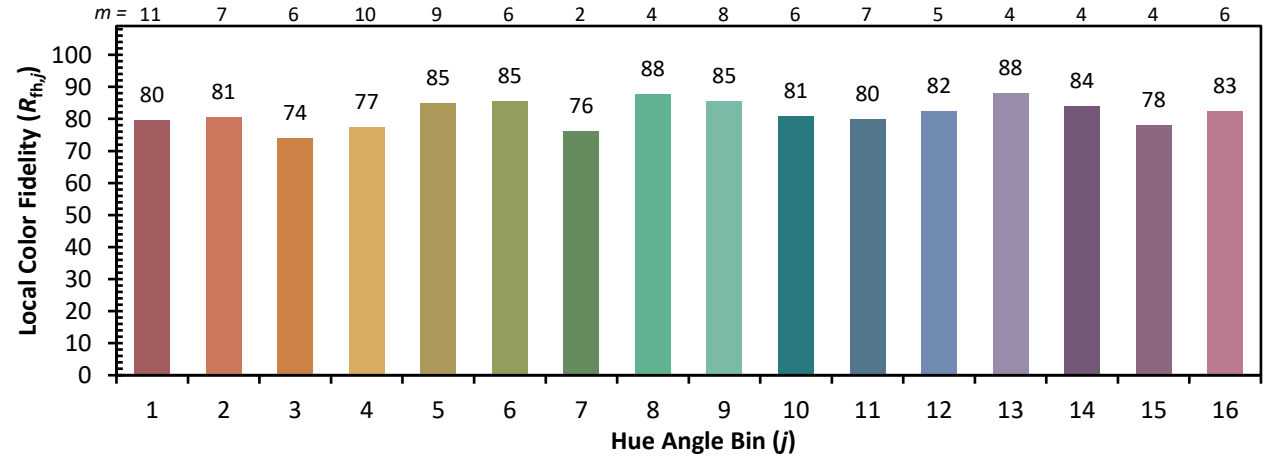
Color Rendition by Hue-Angle Bin







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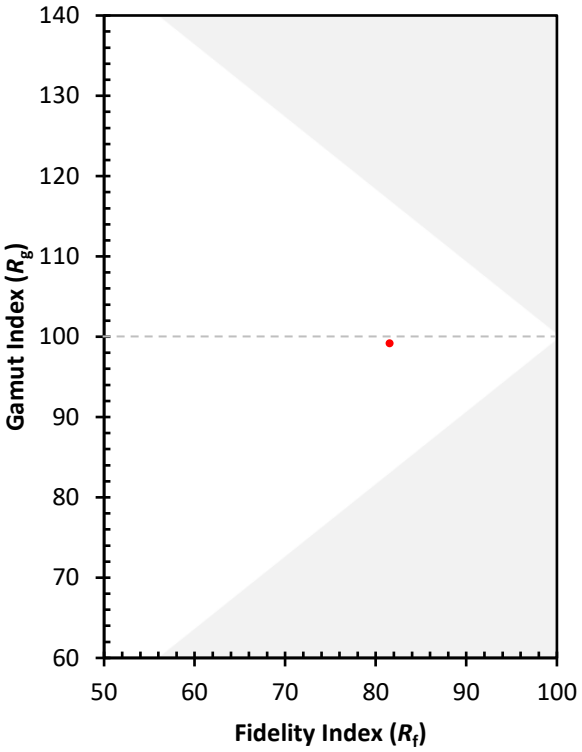
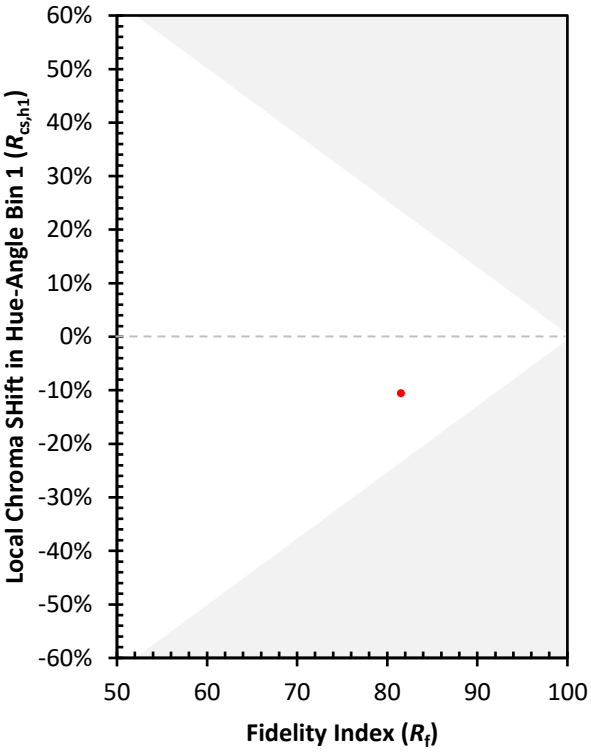
Measure Comparisons





(END OF REPORT)