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: P437426

Luminaire Tested: **ISS-SA1C-830-U-SLL**

Issue Date: 12/9/2020

Report Generated By 670245982

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P437426
	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-SA1C-830-U-SLL
Description:	IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
	(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3205 lumens
Efficiency:	N/A
Efficacy:	93.7 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):	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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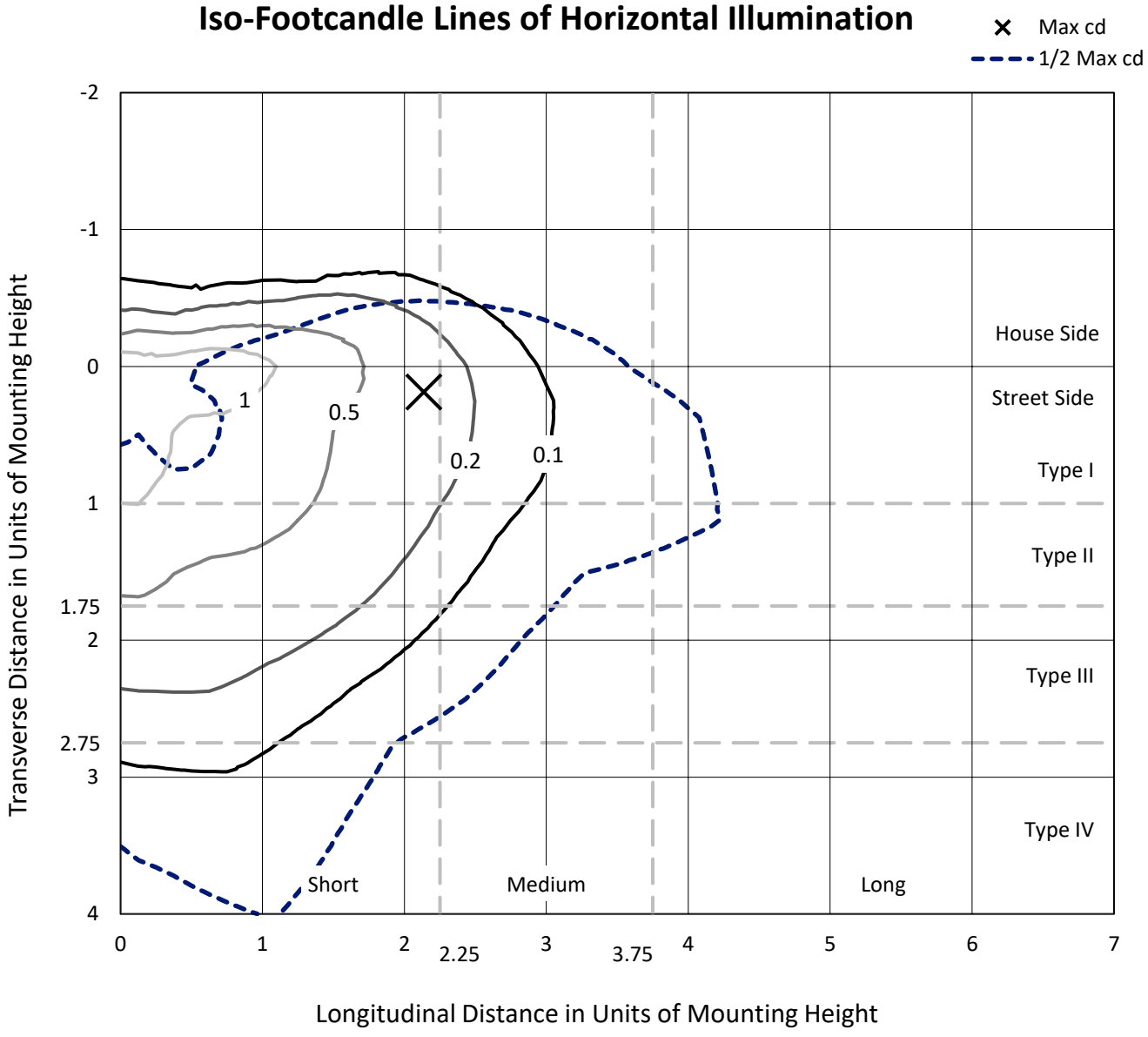
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type IV - Short - N/A

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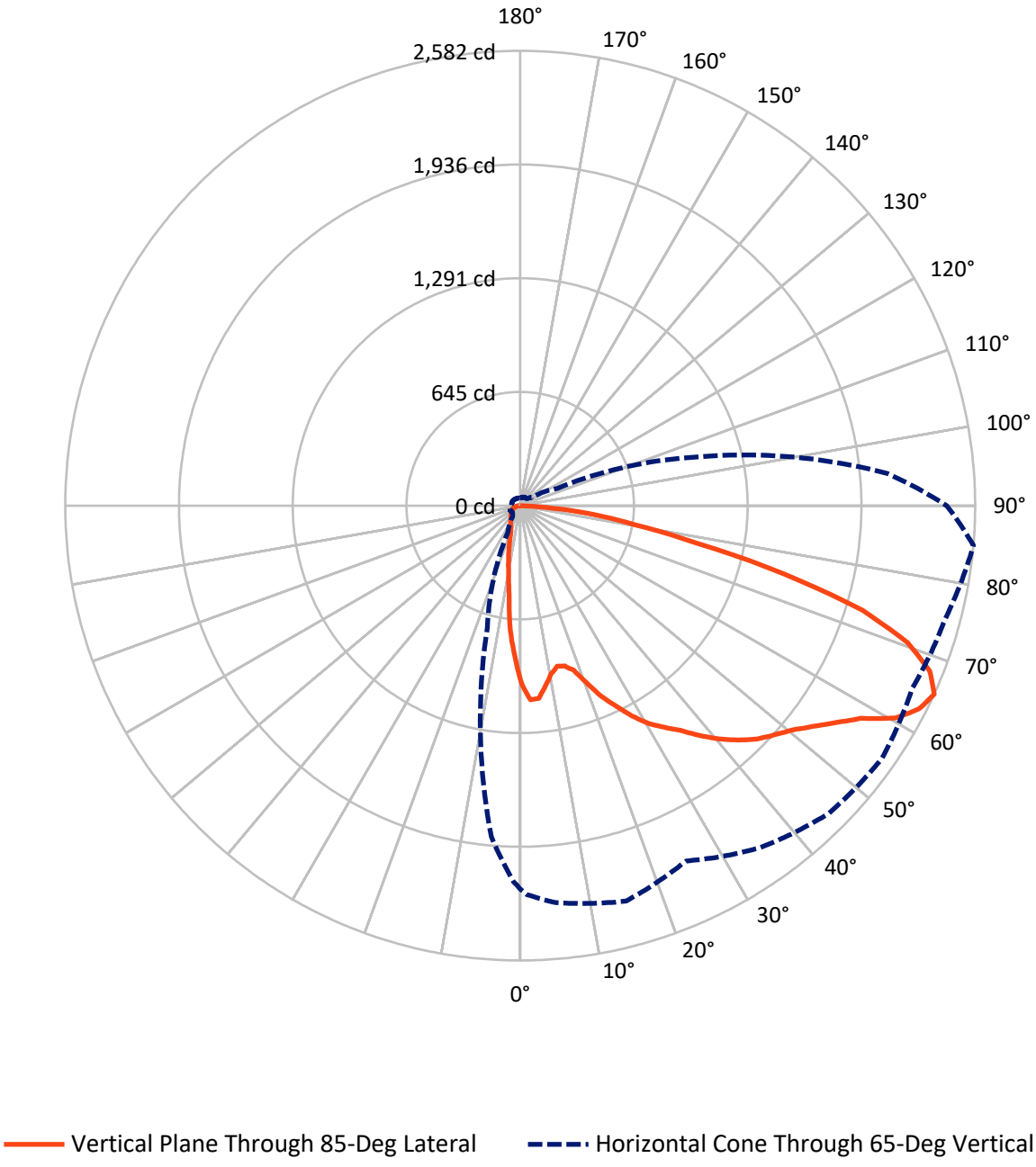
Luminous Intensity Polar Plot



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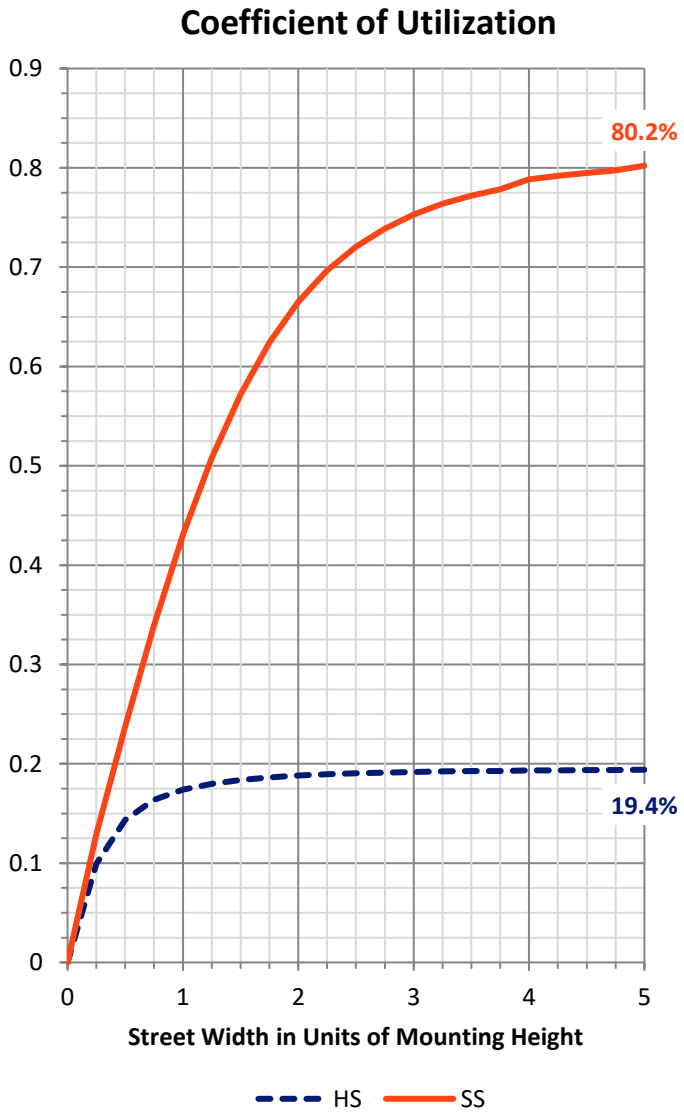
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	627.2	0.0	627.2
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	2577.8	0.0	2577.8
	% Fixture	80.4	0.0	80.4
Total	Lumens	3205.0	0.0	3205.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	2.4
10°-20°	160.3	5.0
20°-30°	230.5	7.2
30°-40°	331.0	10.3
40°-50°	468.5	14.6
50°-60°	651.4	20.3
60°-70°	775.7	24.2
70°-80°	448.4	14.0
80°-90°	62.0	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°	3205.0	100.0
0°-180°	3205.0	100.0



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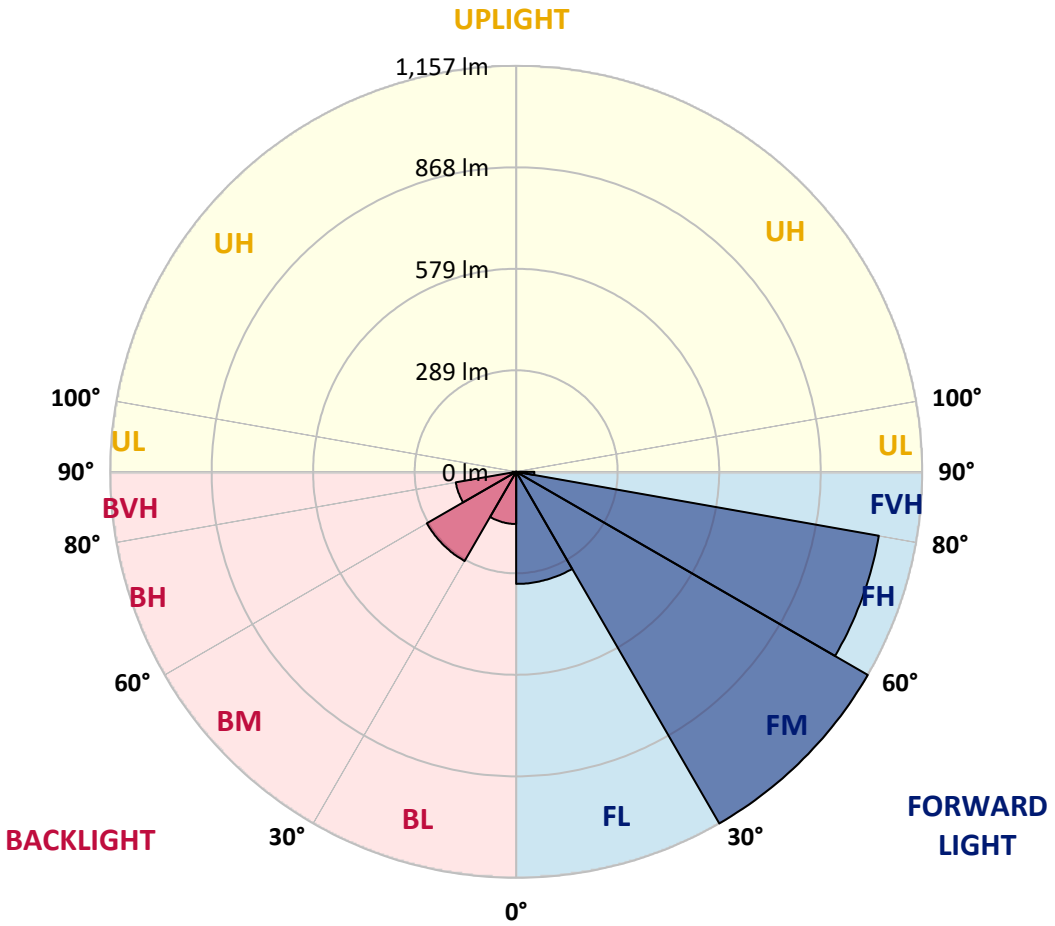
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	319.4	10.0			
FM	(30°-60°)	1157.0	36.1			
FH	(60°-80°)	1049.5	32.7			G1/1800
FVH	(80°-90°)	51.9	1.6			G1/100
BL	(0°-30°)	148.6	4.6	B1/500		
BM	(30°-60°)	293.9	9.2	B1/1000		
BH	(60°-80°)	174.6	5.4	B1/500		G1/500
BVH	(80°-90°)	10.1	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°	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	*1012.5*
2.5°	1061.0	1064.9	1074.1	1105.5	1125.1	1140.9	1160.5	1140.9	1135.6	1109.4	*1104.2*
5°	1023.0	1032.1	1058.3	1117.3	1165.7	1216.8	1243.0	1220.8	1190.6	1144.8	*1098.9*
7.5°	948.3	960.1	994.2	1085.8	1177.5	1246.9	1281.0	1257.4	1195.9	1114.7	*1032.1*
10°	872.3	890.7	931.3	1046.5	1143.5	1220.8	1273.1	1248.3	1173.6	1067.5	*969.3*
12.5°	826.5	839.6	885.4	1005.9	1108.1	1185.4	1224.7	1210.3	1140.9	1040.0	*935.2*
15°	816.0	829.1	875.0	991.5	1081.9	1139.5	1148.7	1152.6	1126.4	1049.2	*944.4*
17.5°	844.8	855.3	918.2	1015.1	1051.8	1063.6	1078.0	1095.0	1108.1	1067.5	*982.4*
20°	914.3	935.2	990.2	1063.6	1043.9	1016.4	1024.3	1045.2	1095.0	1121.2	*1070.1*
22.5°	1007.3	1030.8	1100.2	1130.4	1049.2	990.2	983.7	1002.0	1093.7	1180.1	*1174.9*
25°	1110.7	1143.5	1218.1	1219.4	1071.4	971.9	958.8	975.8	1091.1	1232.5	*1258.7*
27.5°	1218.1	1248.3	1329.5	1288.9	1114.7	973.2	957.5	974.5	1097.6	1288.9	*1351.7*
30°	1298.0	1337.3	1408.1	1354.4	1142.2	990.2	966.6	988.9	1112.0	1317.7	*1434.3*
32.5°	1379.2	1404.1	1478.8	1392.3	1172.3	1016.4	986.3	1020.3	1148.7	1345.2	*1499.7*
35°	1451.3	1484.0	1560.0	1414.6	1216.8	1061.0	1021.7	1066.2	1201.1	1384.5	*1566.5*
37.5°	1543.0	1574.4	1643.8	1446.0	1253.5	1117.3	1084.5	1142.2	1265.3	1419.8	*1655.6*
40°	1624.2	1673.9	1726.3	1485.3	1295.4	1199.8	1178.8	1257.4	1351.7	1468.3	*1742.1*
42.5°	1704.1	1746.0	1803.6	1529.9	1349.1	1300.7	1309.8	1392.3	1456.5	1541.7	*1819.3*
45°	1761.7	1810.2	1861.3	1565.2	1418.5	1409.4	1470.9	1540.3	1563.9	1618.9	*1888.8*
47.5°	1818.0	1856.0	1901.9	1600.6	1502.4	1531.2	1638.6	1692.3	1668.7	1688.4	*1943.8*
50°	1892.7	1933.3	1946.4	1656.9	1608.5	1685.7	1802.3	1837.7	1769.6	1743.4	*2001.4*
52.5°	2000.1	2019.7	2013.2	1723.7	1709.3	1846.8	1942.5	1996.2	1874.4	1795.8	*2081.3*
55°	2144.2	2178.2	2136.3	1832.4	1812.8	2001.4	2112.7	2138.9	1990.9	1861.3	*2173.0*
57.5°	2281.7	2311.8	2298.7	1964.7	1947.7	2135.0	2242.4	2267.3	2104.9	1983.1	*2277.8*
60°	2332.8	2342.0	2389.1	2104.9	2082.6	2249.0	2370.8	2374.7	2241.1	2129.8	*2448.1*
62.5°	2277.8	2314.5	2360.3	2235.9	2163.8	2347.2	2455.9	2480.8	2370.8	2307.9	*2541.0*
65°	*2175.6*	*2208.4*	*2262.1*	*2323.6*	*2225.4*	*2370.8*	*2472.9*	*2504.4*	*2454.6*	*2495.2*	*2581.7*
67.5°	2057.7	2098.3	2135.0	2338.0	2217.5	2235.9	2321.0	2340.6	2410.1	2577.7	*2507.0*
70°	1905.8	1951.6	1983.1	2281.7	2030.2	1848.2	1908.4	1962.1	2068.2	2431.0	*2332.8*
72.5°	1578.3	1651.7	1730.3	2026.3	1642.5	1435.6	1482.7	1518.1	1594.1	2076.1	*2031.5*
75°	1110.7	1164.4	1261.4	1632.0	1261.4	1016.4	1089.8	1089.8	1185.4	1705.4	*1543.0*
77.5°	664.1	665.4	759.7	1074.1	767.6	685.0	726.9	746.6	775.4	1207.7	*1024.3*
80°	375.9	381.2	412.6	694.2	454.5	467.6	517.4	569.8	526.5	749.2	*658.8*
82.5°	175.5	154.6	163.7	327.5	258.0	305.2	313.0	336.6	339.2	479.4	*432.2*
85°	14.4	11.8	15.7	58.9	45.8	41.9	30.1	57.6	90.4	209.6	*186.0*
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°	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5
2.5°	1087.2	1074.1	1045.2	1023.0	1002.0	962.7	947.0	924.7	912.9	892.0	897.2
5°	1064.9	1034.8	969.3	924.7	867.1	819.9	791.1	764.9	754.5	732.2	724.3
7.5°	983.7	957.5	875.0	801.6	730.9	674.6	620.9	581.6	563.2	543.6	542.3
10°	914.3	871.0	776.7	690.3	609.1	556.7	517.4	484.6	455.8	430.9	416.5
12.5°	875.0	821.3	716.5	611.7	555.4	518.7	475.5	434.9	402.1	373.3	356.3
15°	875.0	812.1	687.7	585.5	529.2	474.2	424.4	382.5	339.2	305.2	294.7
17.5°	915.6	838.3	694.2	568.5	488.6	427.0	364.1	309.1	267.2	237.1	226.6
20°	995.5	902.5	709.9	548.8	449.3	364.1	288.2	229.2	191.2	176.8	174.2
22.5°	1088.5	979.7	733.5	530.5	408.7	297.3	216.1	174.2	157.2	151.9	151.9
25°	1190.6	1066.2	763.6	510.8	366.7	235.8	165.0	145.4	138.8	136.2	136.2
27.5°	1286.2	1160.5	817.3	503.0	327.5	191.2	144.1	129.7	125.7	123.1	124.4
30°	1379.2	1244.3	872.3	487.3	284.2	166.3	129.7	119.2	114.0	112.6	114.0
32.5°	1459.1	1316.4	910.3	463.7	254.1	149.3	120.5	110.0	104.8	103.5	104.8
35°	1550.8	1387.1	948.3	446.6	238.4	138.8	114.0	103.5	98.2	95.6	95.6
37.5°	1658.2	1472.2	977.1	421.8	227.9	128.4	108.7	98.2	91.7	89.1	89.1
40°	1802.3	1575.7	1000.7	402.1	216.1	123.1	102.2	93.0	86.4	83.8	82.5
42.5°	1901.9	1666.1	1020.3	389.0	204.3	120.5	98.2	90.4	82.5	78.6	77.3
45°	1970.0	1746.0	1033.4	382.5	193.9	114.0	95.6	87.8	78.6	73.3	73.3
47.5°	2035.5	1811.5	1034.8	373.3	186.0	106.1	99.5	83.8	74.7	69.4	69.4
50°	2108.8	1894.0	1059.6	364.1	176.8	96.9	98.2	82.5	72.0	66.8	65.5
52.5°	2182.2	2006.6	1108.1	351.0	163.7	89.1	93.0	83.8	69.4	64.2	62.9
55°	2313.1	2146.8	1168.4	331.4	146.7	81.2	86.4	82.5	65.5	60.3	58.9
57.5°	2398.3	2277.8	1215.5	310.4	121.8	76.0	76.0	79.9	61.6	56.3	55.0
60°	2446.7	2302.7	1224.7	285.5	99.5	68.1	65.5	81.2	57.6	51.1	51.1
62.5°	2445.4	2217.5	1178.8	262.0	86.4	62.9	58.9	70.7	53.7	48.5	47.2
65°	*2420.5*	*2091.8*	*1075.4*	*231.8*	*81.2*	*57.6*	*52.4*	*53.7*	*49.8*	*44.5*	*43.2*
67.5°	2313.1	1874.4	910.3	201.7	78.6	52.4	48.5	45.8	43.2	39.3	38.0
70°	2052.5	1629.4	709.9	187.3	77.3	45.8	41.9	39.3	36.7	34.1	34.1
72.5°	1668.7	1270.5	542.3	179.4	78.6	41.9	35.4	34.1	31.4	30.1	28.8
75°	1155.3	939.1	392.9	158.5	76.0	35.4	30.1	27.5	26.2	23.6	23.6
77.5°	742.7	614.3	260.7	127.1	61.6	28.8	22.3	21.0	19.6	18.3	18.3
80°	488.6	417.8	151.9	90.4	38.0	19.6	15.7	15.7	14.4	11.8	11.8
82.5°	310.4	315.7	78.6	41.9	22.3	11.8	9.2	7.9	7.9	5.2	5.2
85°	68.1	119.2	35.4	17.0	7.9	1.3	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°	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5
2.5°	878.9	868.4	864.5	864.5	847.5	848.8	848.8	859.2	857.9	867.1	863.2
5°	715.2	704.7	704.7	707.3	709.9	698.1	702.1	691.6	711.2	696.8	686.3
7.5°	527.9	526.5	535.7	556.7	552.7	548.8	541.0	521.3	510.8	521.3	516.1
10°	404.7	408.7	406.0	415.2	416.5	415.2	402.1	398.2	392.9	398.2	404.7
12.5°	339.2	323.5	306.5	305.2	315.7	315.7	314.4	315.7	319.6	319.6	324.8
15°	282.9	272.4	250.2	239.7	247.6	242.3	243.6	248.9	252.8	258.0	255.4
17.5°	225.3	216.1	205.6	199.1	203.0	199.1	197.8	196.5	196.5	195.2	200.4
20°	171.6	170.3	174.2	171.6	172.9	170.3	166.3	161.1	157.2	159.8	162.4
22.5°	149.3	150.6	153.2	155.9	155.9	153.2	146.7	141.5	140.2	140.2	141.5
25°	137.5	137.5	141.5	142.8	144.1	140.2	132.3	128.4	128.4	128.4	128.4
27.5°	124.4	127.1	129.7	132.3	133.6	129.7	123.1	119.2	119.2	117.9	116.6
30°	115.3	116.6	119.2	120.5	121.8	117.9	114.0	110.0	110.0	110.0	108.7
32.5°	104.8	108.7	110.0	111.3	112.6	110.0	106.1	103.5	102.2	100.9	98.2
35°	96.9	98.2	102.2	102.2	103.5	102.2	99.5	96.9	93.0	91.7	91.7
37.5°	89.1	89.1	91.7	94.3	96.9	95.6	91.7	87.8	86.4	86.4	86.4
40°	83.8	82.5	83.8	87.8	90.4	90.4	85.1	82.5	82.5	81.2	81.2
42.5°	77.3	77.3	77.3	81.2	86.4	83.8	78.6	78.6	78.6	77.3	77.3
45°	73.3	72.0	73.3	73.3	79.9	76.0	74.7	73.3	74.7	73.3	74.7
47.5°	68.1	68.1	68.1	69.4	73.3	70.7	69.4	69.4	70.7	70.7	70.7
50°	64.2	64.2	64.2	65.5	66.8	66.8	66.8	66.8	66.8	68.1	68.1
52.5°	61.6	60.3	61.6	61.6	62.9	64.2	62.9	64.2	64.2	64.2	65.5
55°	58.9	57.6	58.9	58.9	61.6	60.3	60.3	61.6	61.6	62.9	64.2
57.5°	55.0	53.7	56.3	56.3	58.9	58.9	57.6	58.9	58.9	60.3	60.3
60°	51.1	51.1	52.4	52.4	55.0	56.3	56.3	56.3	56.3	56.3	56.3
62.5°	47.2	47.2	48.5	49.8	52.4	52.4	53.7	53.7	53.7	53.7	52.4
65°	*43.2*	*44.5*	*45.8*	*45.8*	*48.5*	*49.8*	*49.8*	*49.8*	*49.8*	*49.8*	*49.8*
67.5°	38.0	40.6	41.9	43.2	45.8	45.8	47.2	47.2	45.8	45.8	45.8
70°	34.1	35.4	36.7	38.0	41.9	41.9	43.2	43.2	41.9	41.9	43.2
72.5°	28.8	30.1	31.4	34.1	38.0	38.0	39.3	39.3	38.0	38.0	38.0
75°	24.9	24.9	26.2	28.8	34.1	34.1	34.1	35.4	34.1	34.1	32.7
77.5°	18.3	19.6	21.0	24.9	28.8	30.1	30.1	30.1	28.8	28.8	27.5
80°	11.8	13.1	15.7	18.3	22.3	23.6	24.9	24.9	23.6	23.6	22.3
82.5°	5.2	7.9	9.2	11.8	14.4	18.3	18.3	19.6	18.3	17.0	17.0
85°	0.0	0.0	1.3	3.9	6.5	10.5	11.8	13.1	11.8	10.5	10.5
87.5°	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	1.3	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: P437426
CATALOG NUMBER: ISS-SA1C-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5	1012.5
2.5°	877.6	892.0	914.3	927.4	957.5	985.0	1013.8	1051.8	1059.6	1061.0
5°	696.8	713.9	755.8	772.8	827.8	872.3	937.8	1002.0	1019.0	1023.0
7.5°	531.8	544.9	590.7	623.5	683.7	746.6	830.4	906.4	944.4	948.3
10°	415.2	450.6	485.9	534.4	586.8	648.4	736.1	833.0	875.0	872.3
12.5°	349.7	386.4	429.6	478.1	531.8	586.8	666.7	774.1	816.0	826.5
15°	280.3	324.8	372.0	421.8	484.6	538.3	631.3	750.5	801.6	816.0
17.5°	217.4	252.8	298.6	362.8	424.4	500.4	618.2	772.8	830.4	844.8
20°	171.6	197.8	230.5	292.1	370.7	465.0	611.7	814.7	893.3	914.3
22.5°	146.7	157.2	180.8	234.5	317.0	427.0	607.8	873.6	971.9	1007.3
25°	131.0	137.5	150.6	184.7	263.3	394.3	614.3	947.0	1081.9	1110.7
27.5°	119.2	124.4	131.0	155.9	227.9	365.4	626.1	1029.5	1176.2	1218.1
30°	108.7	112.6	121.8	138.8	199.1	336.6	630.0	1110.7	1260.0	1298.0
32.5°	100.9	106.1	114.0	128.4	182.1	317.0	619.5	1172.3	1337.3	1379.2
35°	93.0	99.5	107.4	119.2	167.7	299.9	596.0	1223.4	1410.7	1451.3
37.5°	89.1	93.0	100.9	110.0	157.2	282.9	575.0	1274.5	1486.6	1543.0
40°	83.8	87.8	95.6	103.5	144.1	264.6	560.6	1339.9	1573.1	1624.2
42.5°	79.9	85.1	91.7	100.9	133.6	244.9	546.2	1392.3	1650.4	1704.1
45°	77.3	82.5	89.1	100.9	124.4	229.2	530.5	1438.2	1709.3	1761.7
47.5°	73.3	79.9	89.1	96.9	120.5	218.7	530.5	1493.2	1763.0	1818.0
50°	72.0	78.6	93.0	94.3	117.9	214.8	552.7	1556.1	1840.3	1892.7
52.5°	70.7	77.3	93.0	89.1	115.3	217.4	586.8	1670.0	1939.8	2000.1
55°	66.8	76.0	89.1	82.5	108.7	220.0	624.8	1819.3	2087.9	2144.2
57.5°	64.2	74.7	83.8	76.0	99.5	216.1	675.9	1952.9	2242.4	2281.7
60°	60.3	73.3	73.3	70.7	89.1	204.3	733.5	2038.1	2301.4	2332.8
62.5°	57.6	72.0	65.5	65.5	81.2	186.0	753.1	2017.1	2243.7	2277.8
65°	*53.7*	*62.9*	*58.9*	*60.3*	*74.7*	*165.0*	*719.1*	*1886.1*	*2135.0*	*2175.6*
67.5°	49.8	53.7	52.4	55.0	72.0	144.1	627.4	1730.3	1994.9	2057.7
70°	44.5	47.2	47.2	49.8	68.1	129.7	523.9	1529.9	1812.8	1905.8
72.5°	40.6	41.9	41.9	45.8	64.2	121.8	413.9	1298.0	1520.7	1578.3
75°	34.1	36.7	36.7	39.3	57.6	103.5	282.9	950.9	1063.6	1110.7
77.5°	30.1	30.1	31.4	32.7	45.8	69.4	166.3	585.5	639.2	664.1
80°	23.6	24.9	23.6	23.6	28.8	45.8	90.4	343.2	389.0	375.9
82.5°	17.0	17.0	14.4	14.4	17.0	24.9	39.3	178.1	182.1	175.5
85°	9.2	6.5	5.2	5.2	5.2	5.2	5.2	38.0	18.3	14.4
87.5°	0.0	0.0	0.0	1.3	1.3	1.3	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

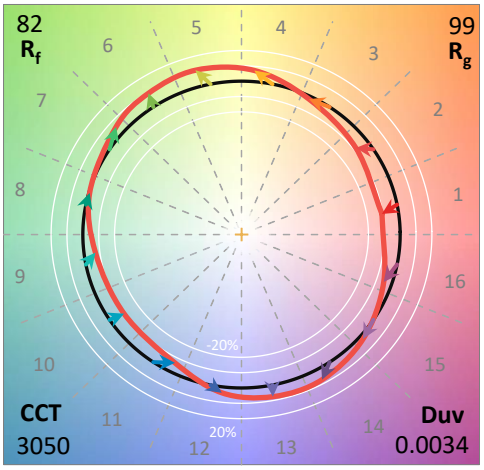
Test Information

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

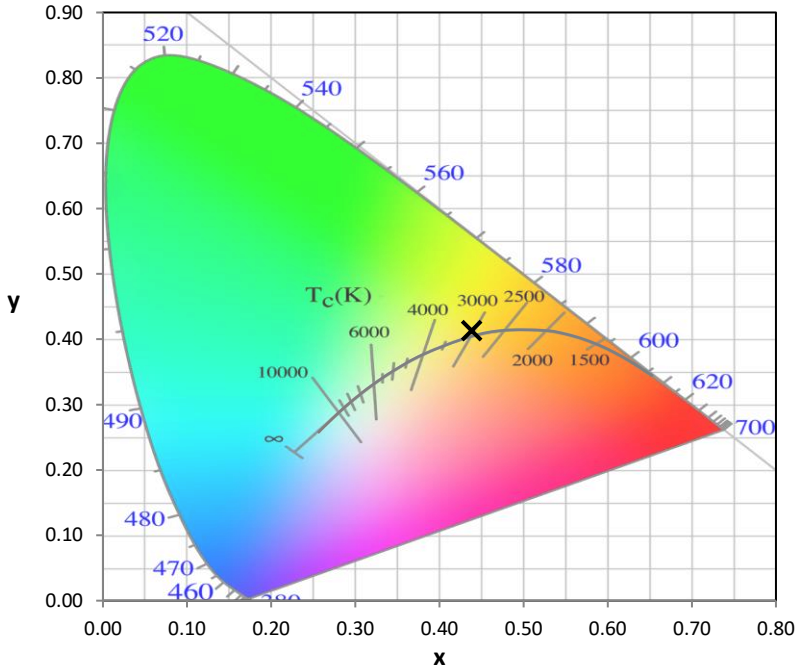
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

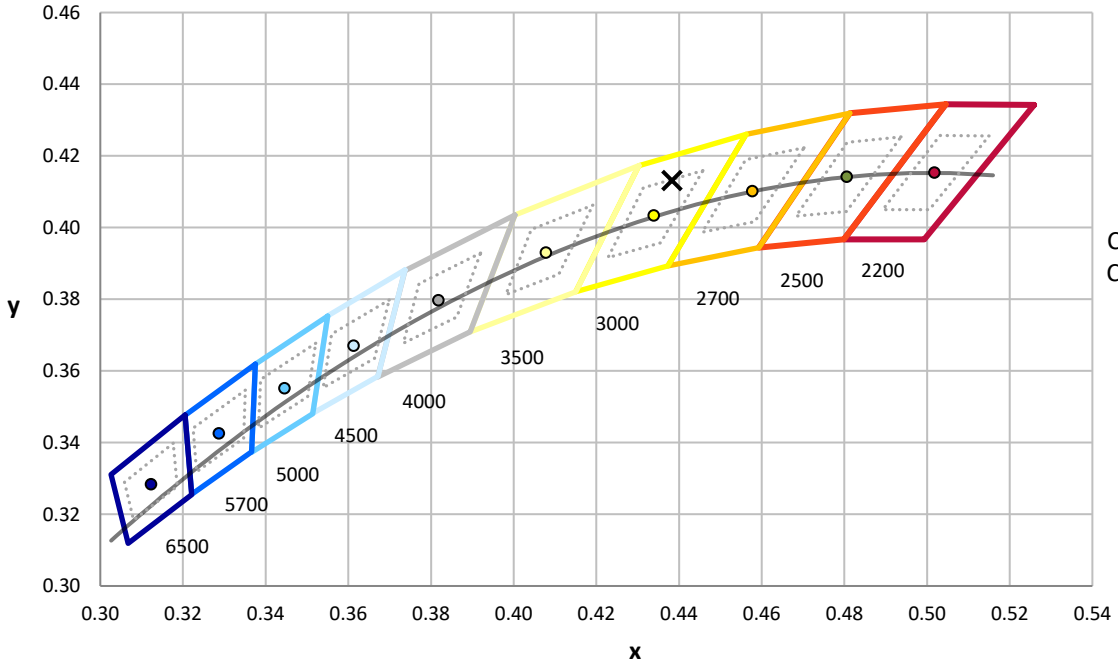
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

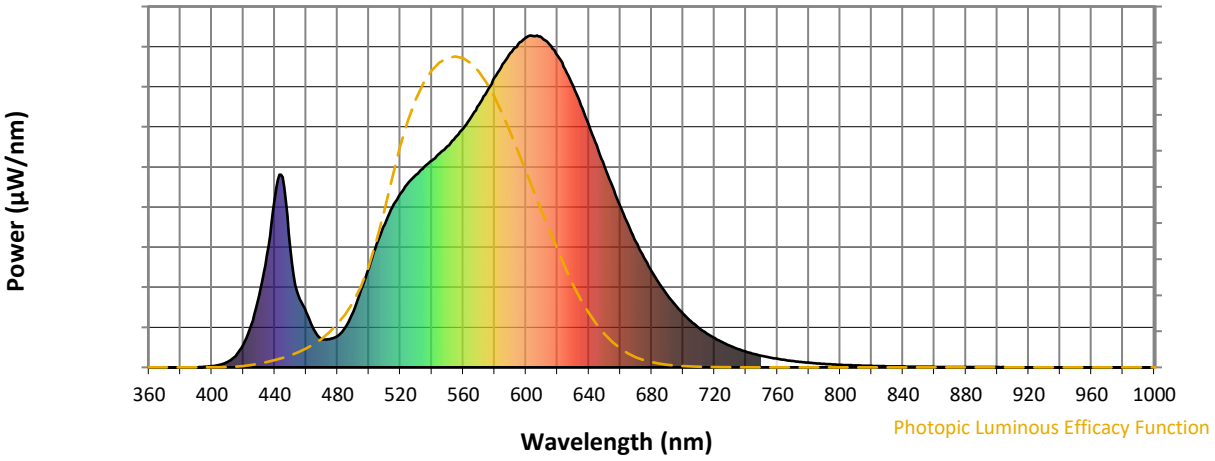


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

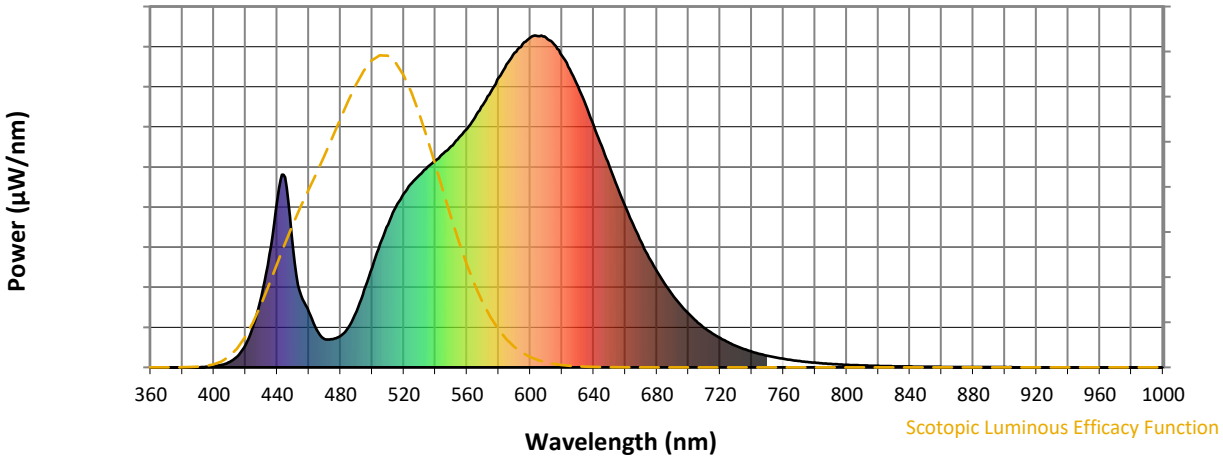


Photopic Lumens: NR

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

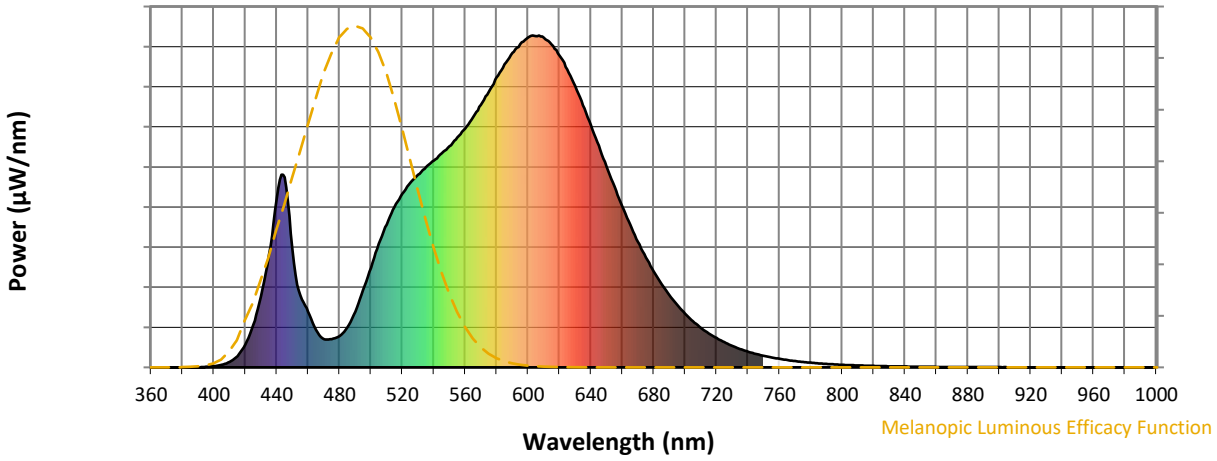


Scotopic Lumens: NR **S/P: 1.27**

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			

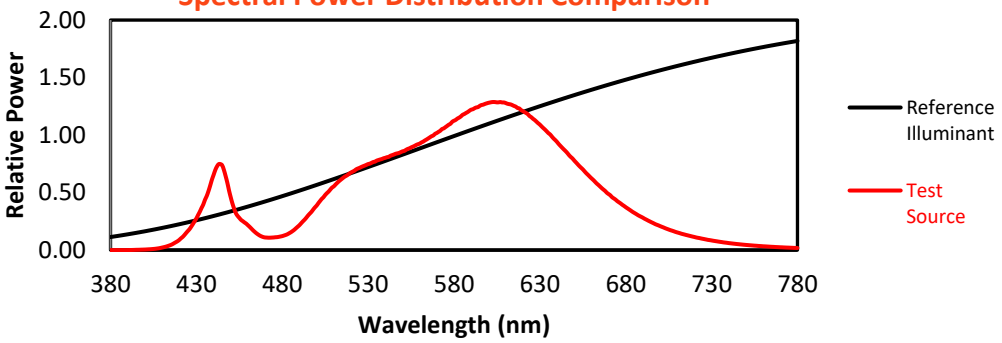
REPORT NUMBER: SP1-2408-195-9

TM-30-18

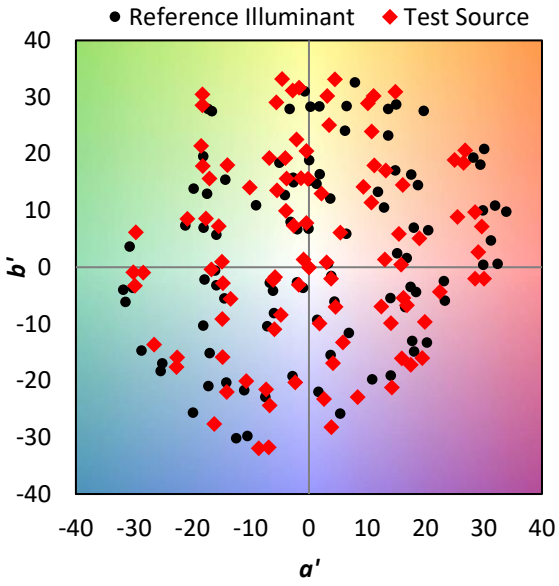
Summary

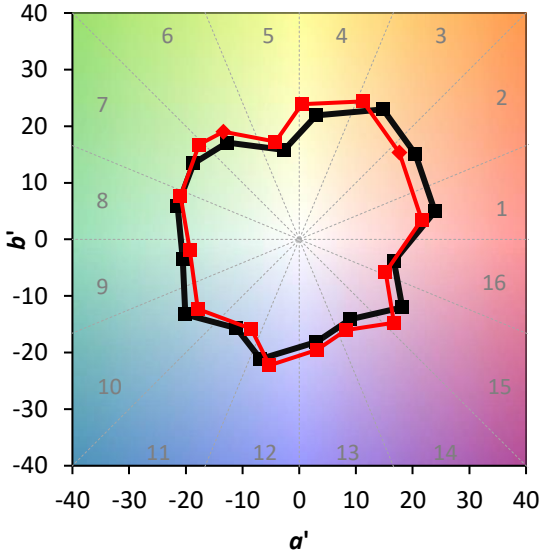
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

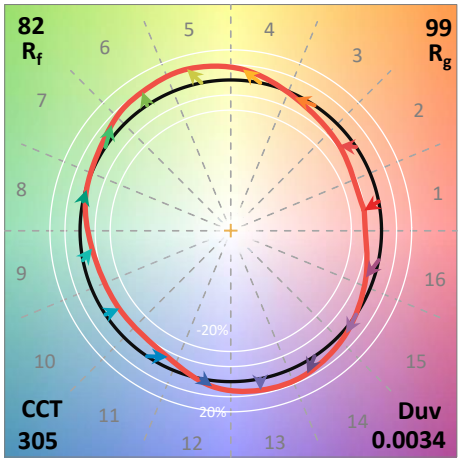
Spectral Power Distribution Comparison

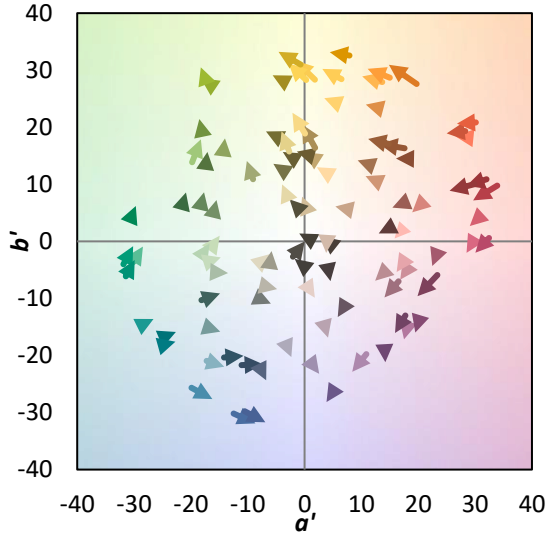


Color Vector Graphics







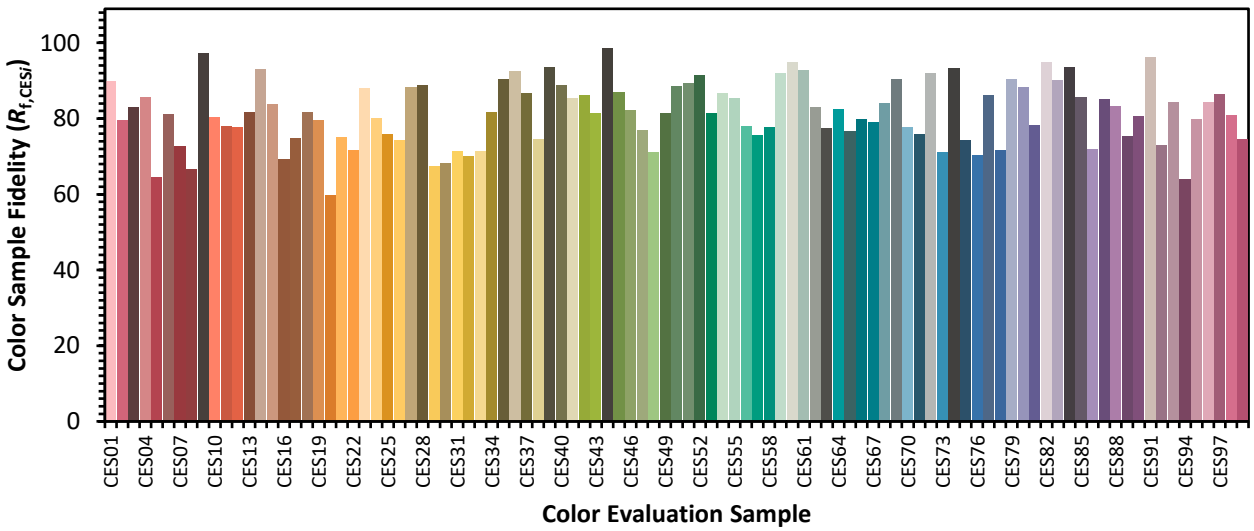


REPORT NUMBER: SP1-2408-195-9

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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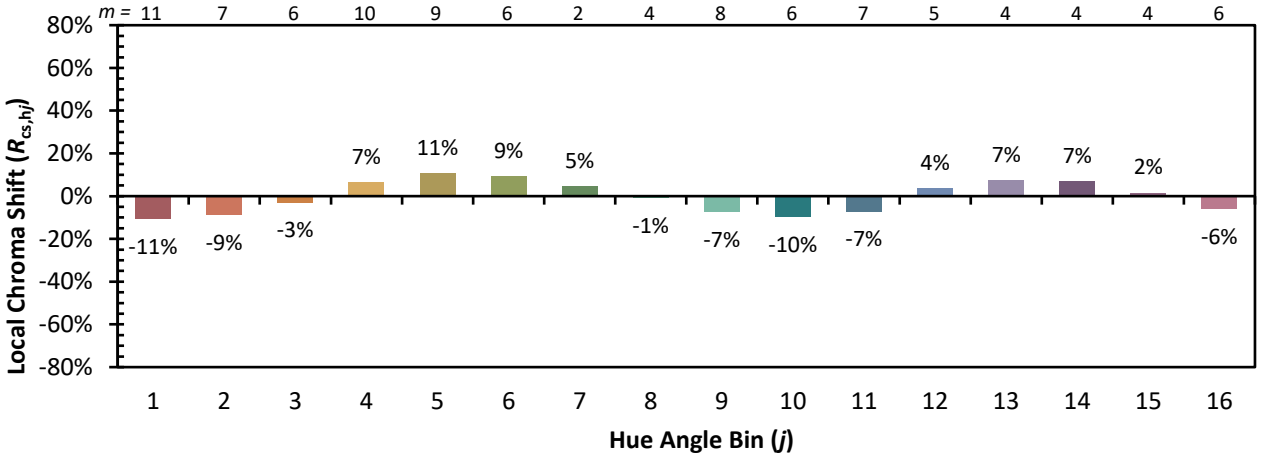
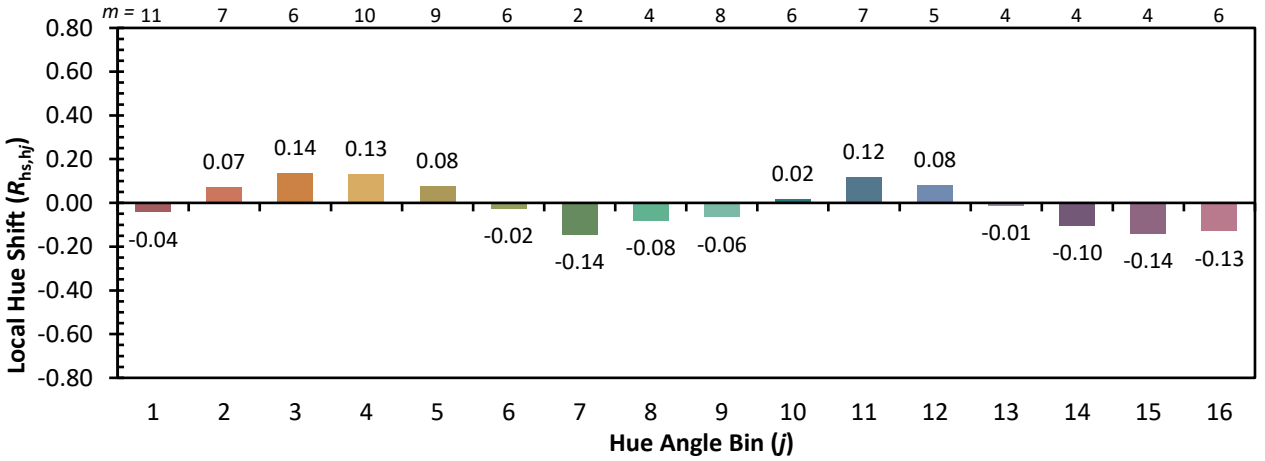
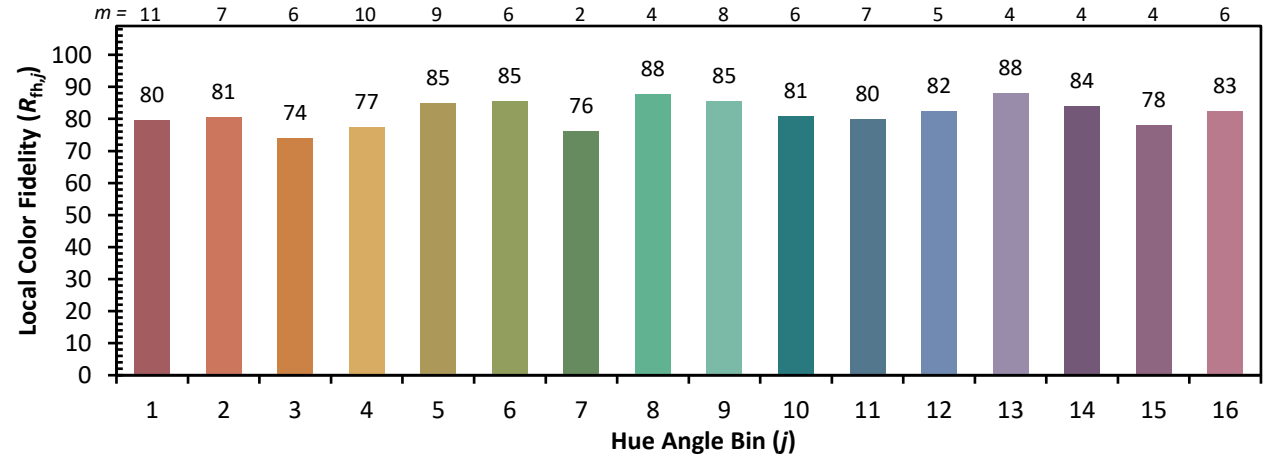
Color Rendition by Hue-Angle Bin







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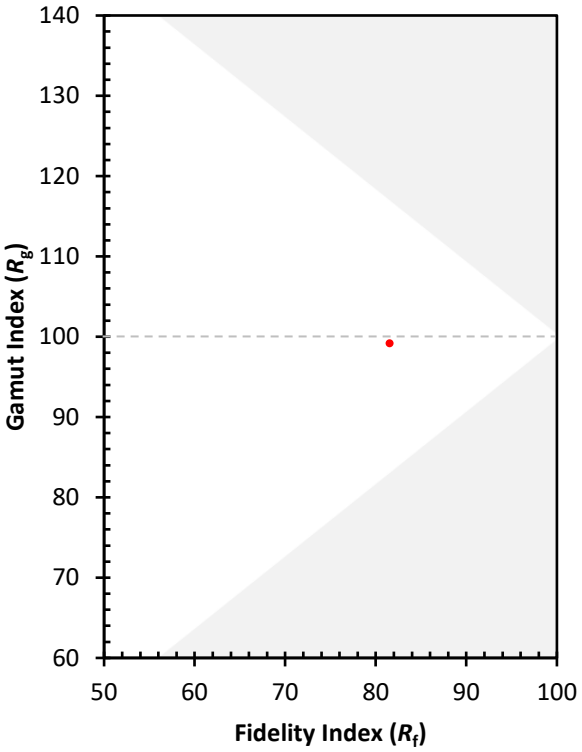
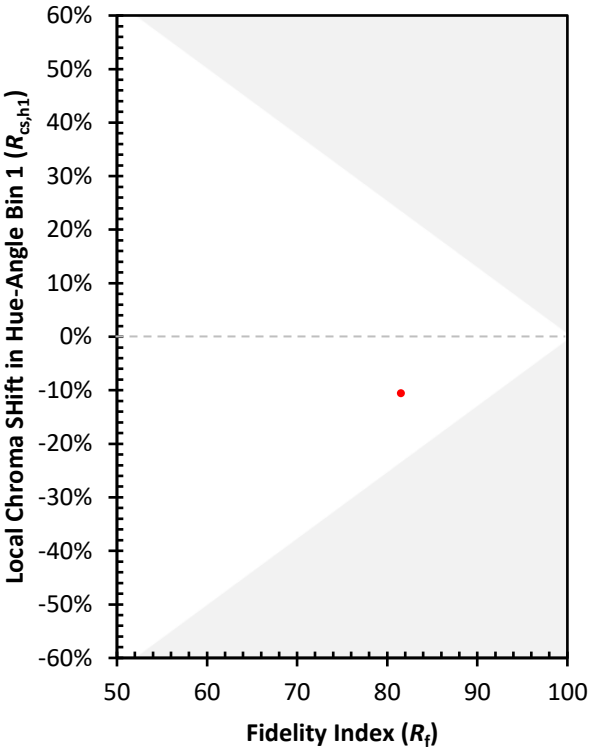
Measure Comparisons





(END OF REPORT)