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: P438281

Luminaire Tested: **IST-SA1B-830-U-SLL**

Issue Date: 12/10/2020

Report Generated By 670245982

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P438281
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-20)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	IST-SA1B-830-U-SLL
Description:	IMPACT ELITE LED TRAPEZOID LUMINAIRE
	(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2450 lumens
Efficiency:	N/A
Efficacy:	96.5 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):	25.4
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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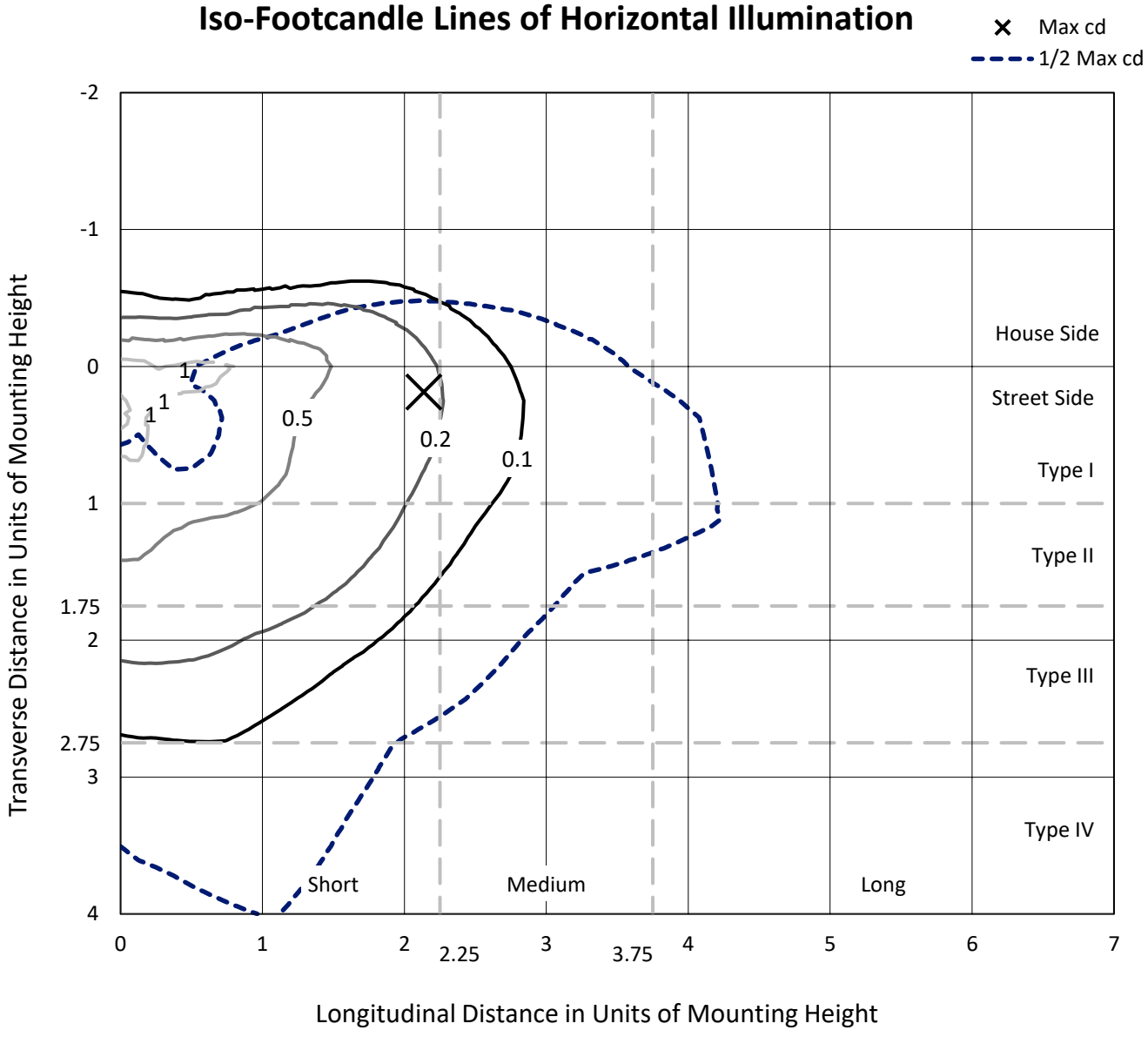
Iso-Footcandle Lines of Horizontal Illumination



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

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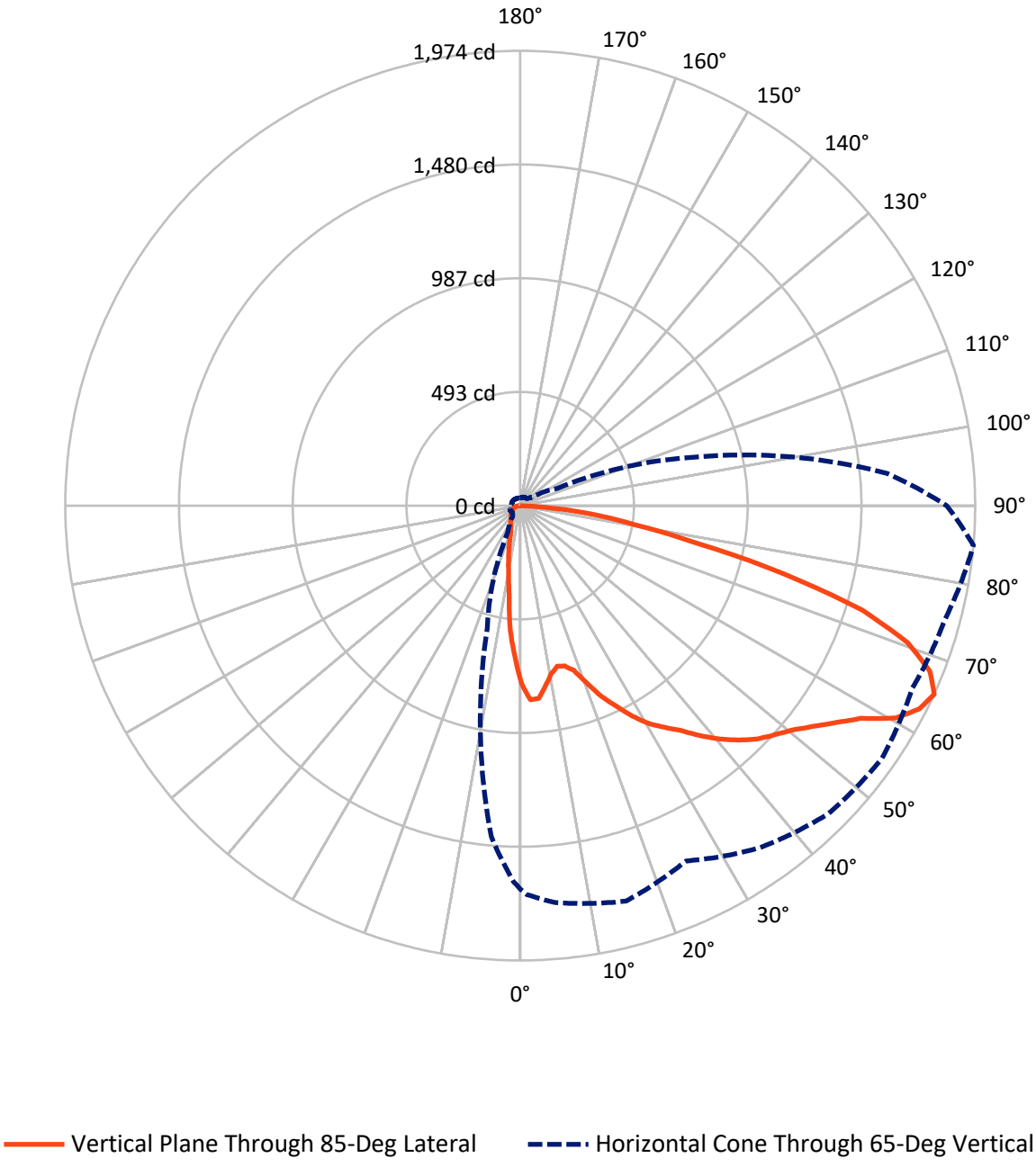
Luminous Intensity Polar Plot



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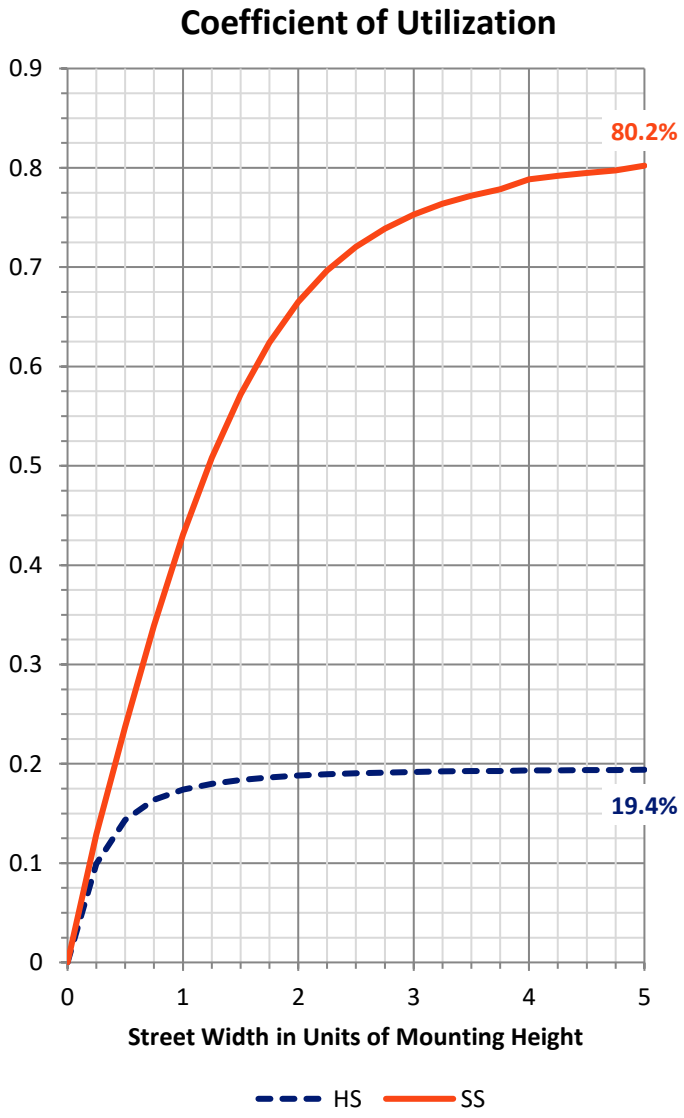
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	479.5	0.0	479.5
	% Fixture	19.6	0.0	19.6
Street Side	Lumens	1970.5	0.0	1970.5
	% Fixture	80.4	0.0	80.4
Total	Lumens	2450.0	0.0	2450.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	2.4
10°-20°	122.6	5.0
20°-30°	176.2	7.2
30°-40°	253.0	10.3
40°-50°	358.1	14.6
50°-60°	498.0	20.3
60°-70°	593.0	24.2
70°-80°	342.7	14.0
80°-90°	47.4	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°	2450.0	100.0
0°-180°	2450.0	100.0



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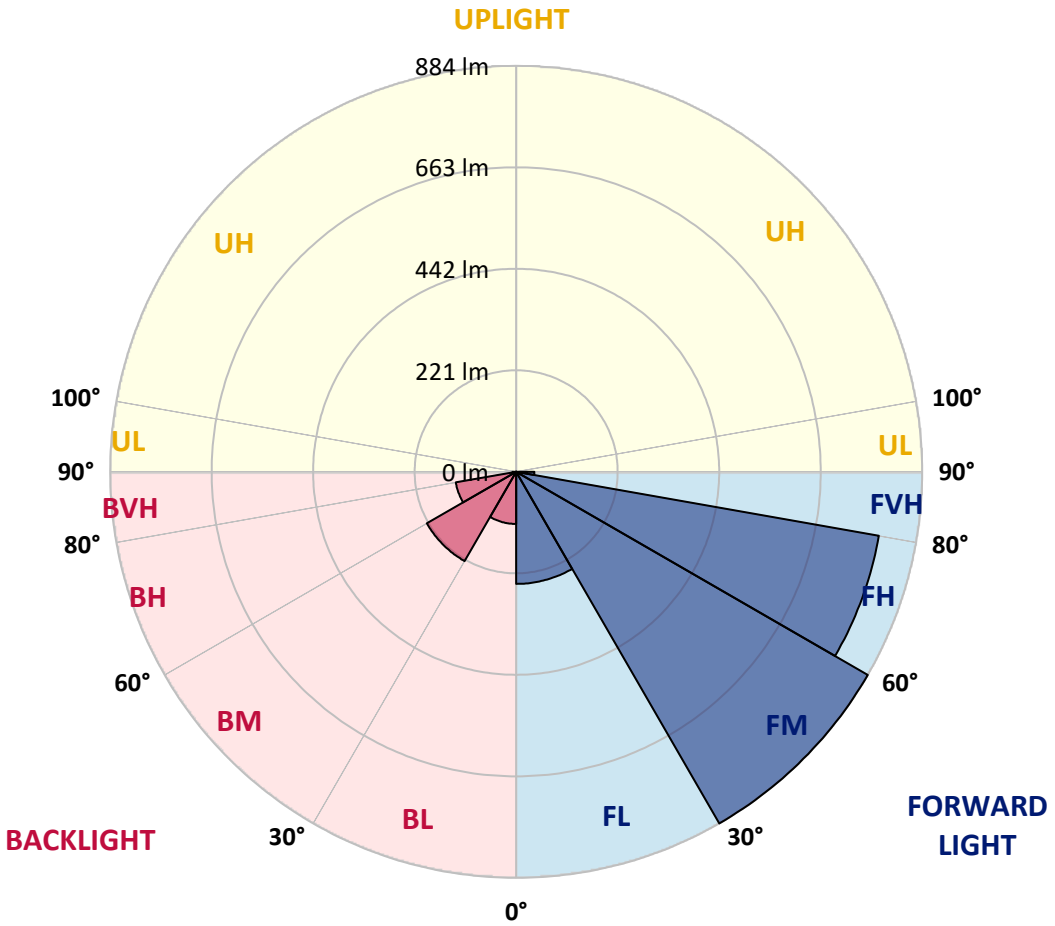
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	244.1	10.0			
FM	(30°-60°)	884.5	36.1			
FH	(60°-80°)	802.3	32.7			G1/1800
FVH	(80°-90°)	39.6	1.6			G1/100
BL	(0°-30°)	113.6	4.6	B1/500		
BM	(30°-60°)	224.7	9.2	B1/1000		
BH	(60°-80°)	133.5	5.4	B1/500		G1/500
BVH	(80°-90°)	7.7	0.3			G0/10
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°	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	*774.0*
2.5°	811.0	814.0	821.0	845.1	860.1	872.1	887.1	872.1	868.1	848.1	*844.1*
5°	782.0	789.0	809.0	854.1	891.1	930.2	950.2	933.2	910.2	875.1	*840.1*
7.5°	724.9	733.9	760.0	830.0	900.1	953.2	979.2	961.2	914.2	852.1	*789.0*
10°	666.8	680.9	711.9	800.0	874.1	933.2	973.2	954.2	897.1	816.0	*740.9*
12.5°	631.8	641.8	676.9	769.0	847.1	906.1	936.2	925.2	872.1	795.0	*714.9*
15°	623.8	633.8	668.8	758.0	827.0	871.1	878.1	881.1	861.1	802.0	*721.9*
17.5°	645.8	653.8	701.9	776.0	804.0	813.0	824.0	837.1	847.1	816.0	*750.9*
20°	698.9	714.9	757.0	813.0	798.0	777.0	783.0	799.0	837.1	857.1	*818.0*
22.5°	770.0	788.0	841.1	864.1	802.0	757.0	752.0	766.0	836.1	902.1	*898.1*
25°	849.1	874.1	931.2	932.2	819.0	742.9	732.9	745.9	834.1	942.2	*962.2*
27.5°	931.2	954.2	1016.3	985.2	852.1	743.9	731.9	744.9	839.1	985.2	*1033.3*
30°	992.3	1022.3	1076.4	1035.3	873.1	757.0	738.9	756.0	850.1	1007.3	*1096.4*
32.5°	1054.3	1073.4	1130.4	1064.3	896.1	777.0	754.0	780.0	878.1	1028.3	*1146.4*
35°	1109.4	1134.4	1192.5	1081.4	930.2	811.0	781.0	815.0	918.2	1058.3	*1197.5*
37.5°	1179.5	1203.5	1256.6	1105.4	958.2	854.1	829.0	873.1	967.2	1085.4	*1265.6*
40°	1241.6	1279.6	1319.7	1135.4	990.3	917.2	901.1	961.2	1033.3	1122.4	*1331.7*
42.5°	1302.6	1334.7	1378.7	1169.5	1031.3	994.3	1001.3	1064.3	1113.4	1178.5	*1390.8*
45°	1346.7	1383.7	1422.8	1196.5	1084.4	1077.4	1124.4	1177.5	1195.5	1237.6	*1443.8*
47.5°	1389.8	1418.8	1453.8	1223.5	1148.5	1170.5	1252.6	1293.6	1275.6	1290.6	*1485.9*
50°	1446.8	1477.9	1487.9	1266.6	1229.6	1288.6	1377.7	1404.8	1352.7	1332.7	*1529.9*
52.5°	1528.9	1544.0	1538.9	1317.7	1306.7	1411.8	1484.9	1525.9	1432.8	1372.7	*1591.0*
55°	1639.1	1665.1	1633.1	1400.8	1385.8	1529.9	1615.0	1635.1	1521.9	1422.8	*1661.1*
57.5°	1744.2	1767.2	1757.2	1501.9	1488.9	1632.1	1714.2	1733.2	1609.0	1515.9	*1741.2*
60°	1783.3	1790.3	1826.3	1609.0	1592.0	1719.2	1812.3	1815.3	1713.2	1628.1	*1871.4*
62.5°	1741.2	1769.2	1804.3	1709.2	1654.1	1794.3	1877.4	1896.4	1812.3	1764.2	*1942.5*
65°	*1663.1*	*1688.1*	*1729.2*	*1776.2*	*1701.2*	*1812.3*	*1890.4*	*1914.4*	*1876.4*	*1907.4*	*1973.5*
67.5°	1573.0	1604.0	1632.1	1787.3	1695.1	1709.2	1774.2	1789.3	1842.3	1970.5	*1916.4*
70°	1456.8	1491.9	1515.9	1744.2	1552.0	1412.8	1458.8	1499.9	1581.0	1858.3	*1783.3*
72.5°	1206.5	1262.6	1322.7	1549.0	1255.6	1097.4	1133.4	1160.5	1218.5	1587.0	*1553.0*
75°	849.1	890.1	964.2	1247.6	964.2	777.0	833.1	833.1	906.1	1303.6	*1179.5*
77.5°	507.6	508.6	580.7	821.0	586.7	523.7	555.7	570.7	592.7	923.2	*783.0*
80°	287.4	291.4	315.4	530.7	347.4	357.5	395.5	435.6	402.5	572.7	*503.6*
82.5°	134.2	118.1	125.2	250.3	197.2	233.3	239.3	257.3	259.3	366.5	*330.4*
85°	11.0	9.0	12.0	45.1	35.0	32.0	23.0	44.1	69.1	160.2	*142.2*
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°	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0
2.5°	831.1	821.0	799.0	782.0	766.0	735.9	723.9	706.9	697.9	681.9	685.9
5°	814.0	791.0	740.9	706.9	662.8	626.8	604.8	584.7	576.7	559.7	553.7
7.5°	752.0	731.9	668.8	612.8	558.7	515.7	474.6	444.6	430.5	415.5	414.5
10°	698.9	665.8	593.8	527.7	465.6	425.5	395.5	370.5	348.4	329.4	318.4
12.5°	668.8	627.8	547.7	467.6	424.5	396.5	363.5	332.4	307.4	285.4	272.3
15°	668.8	620.8	525.7	447.6	404.5	362.5	324.4	292.4	259.3	233.3	225.3
17.5°	699.9	640.8	530.7	434.5	373.5	326.4	278.4	236.3	204.3	181.2	173.2
20°	761.0	689.9	542.7	419.5	343.4	278.4	220.3	175.2	146.2	135.2	133.2
22.5°	832.1	748.9	560.7	405.5	312.4	227.3	165.2	133.2	120.2	116.1	116.1
25°	910.2	815.0	583.7	390.5	280.4	180.2	126.2	111.1	106.1	104.1	104.1
27.5°	983.2	887.1	624.8	384.5	250.3	146.2	110.1	99.1	96.1	94.1	95.1
30°	1054.3	951.2	666.8	372.5	217.3	127.2	99.1	91.1	87.1	86.1	87.1
32.5°	1115.4	1006.3	695.9	354.4	194.2	114.1	92.1	84.1	80.1	79.1	80.1
35°	1185.5	1060.3	724.9	341.4	182.2	106.1	87.1	79.1	75.1	73.1	73.1
37.5°	1267.6	1125.4	746.9	322.4	174.2	98.1	83.1	75.1	70.1	68.1	68.1
40°	1377.7	1204.5	765.0	307.4	165.2	94.1	78.1	71.1	66.1	64.1	63.1
42.5°	1453.8	1273.6	780.0	297.4	156.2	92.1	75.1	69.1	63.1	60.1	59.1
45°	1505.9	1334.7	790.0	292.4	148.2	87.1	73.1	67.1	60.1	56.1	56.1
47.5°	1556.0	1384.8	791.0	285.4	142.2	81.1	76.1	64.1	57.1	53.1	53.1
50°	1612.0	1447.8	810.0	278.4	135.2	74.1	75.1	63.1	55.1	51.1	50.1
52.5°	1668.1	1533.9	847.1	268.3	125.2	68.1	71.1	64.1	53.1	49.1	48.1
55°	1768.2	1641.1	893.1	253.3	112.1	62.1	66.1	63.1	50.1	46.1	45.1
57.5°	1833.3	1741.2	929.2	237.3	93.1	58.1	58.1	61.1	47.1	43.1	42.1
60°	1870.4	1760.2	936.2	218.3	76.1	52.1	50.1	62.1	44.1	39.0	39.0
62.5°	1869.4	1695.1	901.1	200.3	66.1	48.1	45.1	54.1	41.1	37.0	36.0
65°	*1850.3*	*1599.0*	*822.0*	*177.2*	*62.1*	*44.1*	*40.1*	*41.1*	*38.0*	*34.0*	*33.0*
67.5°	1768.2	1432.8	695.9	154.2	60.1	40.1	37.0	35.0	33.0	30.0	29.0
70°	1569.0	1245.6	542.7	143.2	59.1	35.0	32.0	30.0	28.0	26.0	26.0
72.5°	1275.6	971.2	414.5	137.2	60.1	32.0	27.0	26.0	24.0	23.0	22.0
75°	883.1	717.9	300.4	121.2	58.1	27.0	23.0	21.0	20.0	18.0	18.0
77.5°	567.7	469.6	199.3	97.1	47.1	22.0	17.0	16.0	15.0	14.0	14.0
80°	373.5	319.4	116.1	69.1	29.0	15.0	12.0	12.0	11.0	9.0	9.0
82.5°	237.3	241.3	60.1	32.0	17.0	9.0	7.0	6.0	6.0	4.0	4.0
85°	52.1	91.1	27.0	13.0	6.0	1.0	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0
2.5°	671.8	663.8	660.8	660.8	647.8	648.8	648.8	656.8	655.8	662.8	659.8
5°	546.7	538.7	538.7	540.7	542.7	533.7	536.7	528.7	543.7	532.7	524.7
7.5°	403.5	402.5	409.5	425.5	422.5	419.5	413.5	398.5	390.5	398.5	394.5
10°	309.4	312.4	310.4	317.4	318.4	317.4	307.4	304.4	300.4	304.4	309.4
12.5°	259.3	247.3	234.3	233.3	241.3	241.3	240.3	241.3	244.3	244.3	248.3
15°	216.3	208.3	191.2	183.2	189.2	185.2	186.2	190.2	193.2	197.2	195.2
17.5°	172.2	165.2	157.2	152.2	155.2	152.2	151.2	150.2	150.2	149.2	153.2
20°	131.2	130.2	133.2	131.2	132.2	130.2	127.2	123.2	120.2	122.2	124.2
22.5°	114.1	115.1	117.1	119.2	119.2	117.1	112.1	108.1	107.1	107.1	108.1
25°	105.1	105.1	108.1	109.1	110.1	107.1	101.1	98.1	98.1	98.1	98.1
27.5°	95.1	97.1	99.1	101.1	102.1	99.1	94.1	91.1	91.1	90.1	89.1
30°	88.1	89.1	91.1	92.1	93.1	90.1	87.1	84.1	84.1	84.1	83.1
32.5°	80.1	83.1	84.1	85.1	86.1	84.1	81.1	79.1	78.1	77.1	75.1
35°	74.1	75.1	78.1	78.1	79.1	78.1	76.1	74.1	71.1	70.1	70.1
37.5°	68.1	68.1	70.1	72.1	74.1	73.1	70.1	67.1	66.1	66.1	66.1
40°	64.1	63.1	64.1	67.1	69.1	69.1	65.1	63.1	63.1	62.1	62.1
42.5°	59.1	59.1	59.1	62.1	66.1	64.1	60.1	60.1	60.1	59.1	59.1
45°	56.1	55.1	56.1	56.1	61.1	58.1	57.1	56.1	57.1	56.1	57.1
47.5°	52.1	52.1	52.1	53.1	56.1	54.1	53.1	53.1	54.1	54.1	54.1
50°	49.1	49.1	49.1	50.1	51.1	51.1	51.1	51.1	51.1	52.1	52.1
52.5°	47.1	46.1	47.1	47.1	48.1	49.1	48.1	49.1	49.1	49.1	50.1
55°	45.1	44.1	45.1	45.1	47.1	46.1	46.1	47.1	47.1	48.1	49.1
57.5°	42.1	41.1	43.1	43.1	45.1	45.1	44.1	45.1	45.1	46.1	46.1
60°	39.0	39.0	40.1	40.1	42.1	43.1	43.1	43.1	43.1	43.1	43.1
62.5°	36.0	36.0	37.0	38.0	40.1	40.1	41.1	41.1	41.1	41.1	40.1
65°	*33.0*	*34.0*	*35.0*	*35.0*	*37.0*	*38.0*	*38.0*	*38.0*	*38.0*	*38.0*	*38.0*
67.5°	29.0	31.0	32.0	33.0	35.0	35.0	36.0	36.0	35.0	35.0	35.0
70°	26.0	27.0	28.0	29.0	32.0	32.0	33.0	33.0	32.0	32.0	33.0
72.5°	22.0	23.0	24.0	26.0	29.0	29.0	30.0	30.0	29.0	29.0	29.0
75°	19.0	19.0	20.0	22.0	26.0	26.0	26.0	27.0	26.0	26.0	25.0
77.5°	14.0	15.0	16.0	19.0	22.0	23.0	23.0	23.0	22.0	22.0	21.0
80°	9.0	10.0	12.0	14.0	17.0	18.0	19.0	19.0	18.0	18.0	17.0
82.5°	4.0	6.0	7.0	9.0	11.0	14.0	14.0	15.0	14.0	13.0	13.0
85°	0.0	0.0	1.0	3.0	5.0	8.0	9.0	10.0	9.0	8.0	8.0
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	1.0	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438281
CATALOG NUMBER: IST-SA1B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0	774.0
2.5°	670.8	681.9	698.9	708.9	731.9	753.0	775.0	804.0	810.0	811.0
5°	532.7	545.7	577.7	590.7	632.8	666.8	716.9	766.0	779.0	782.0
7.5°	406.5	416.5	451.6	476.6	522.7	570.7	634.8	692.9	721.9	724.9
10°	317.4	344.4	371.5	408.5	448.6	495.6	562.7	636.8	668.8	666.8
12.5°	267.3	295.4	328.4	365.5	406.5	448.6	509.6	591.7	623.8	631.8
15°	214.3	248.3	284.4	322.4	370.5	411.5	482.6	573.7	612.8	623.8
17.5°	166.2	193.2	228.3	277.4	324.4	382.5	472.6	590.7	634.8	645.8
20°	131.2	151.2	176.2	223.3	283.4	355.4	467.6	622.8	682.9	698.9
22.5°	112.1	120.2	138.2	179.2	242.3	326.4	464.6	667.8	742.9	770.0
25°	100.1	105.1	115.1	141.2	201.3	301.4	469.6	723.9	827.0	849.1
27.5°	91.1	95.1	100.1	119.2	174.2	279.4	478.6	787.0	899.1	931.2
30°	83.1	86.1	93.1	106.1	152.2	257.3	481.6	849.1	963.2	992.3
32.5°	77.1	81.1	87.1	98.1	139.2	242.3	473.6	896.1	1022.3	1054.3
35°	71.1	76.1	82.1	91.1	128.2	229.3	455.6	935.2	1078.4	1109.4
37.5°	68.1	71.1	77.1	84.1	120.2	216.3	439.6	974.2	1136.4	1179.5
40°	64.1	67.1	73.1	79.1	110.1	202.3	428.5	1024.3	1202.5	1241.6
42.5°	61.1	65.1	70.1	77.1	102.1	187.2	417.5	1064.3	1261.6	1302.6
45°	59.1	63.1	68.1	77.1	95.1	175.2	405.5	1099.4	1306.7	1346.7
47.5°	56.1	61.1	68.1	74.1	92.1	167.2	405.5	1141.4	1347.7	1389.8
50°	55.1	60.1	71.1	72.1	90.1	164.2	422.5	1189.5	1406.8	1446.8
52.5°	54.1	59.1	71.1	68.1	88.1	166.2	448.6	1276.6	1482.9	1528.9
55°	51.1	58.1	68.1	63.1	83.1	168.2	477.6	1390.8	1596.0	1639.1
57.5°	49.1	57.1	64.1	58.1	76.1	165.2	516.7	1492.9	1714.2	1744.2
60°	46.1	56.1	56.1	54.1	68.1	156.2	560.7	1558.0	1759.2	1783.3
62.5°	44.1	55.1	50.1	50.1	62.1	142.2	575.7	1541.9	1715.2	1741.2
65°	*41.1*	*48.1*	*45.1*	*46.1*	*57.1*	*126.2*	*549.7*	*1441.8*	*1632.1*	*1663.1*
67.5°	38.0	41.1	40.1	42.1	55.1	110.1	479.6	1322.7	1524.9	1573.0
70°	34.0	36.0	36.0	38.0	52.1	99.1	400.5	1169.5	1385.8	1456.8
72.5°	31.0	32.0	32.0	35.0	49.1	93.1	316.4	992.3	1162.5	1206.5
75°	26.0	28.0	28.0	30.0	44.1	79.1	216.3	726.9	813.0	849.1
77.5°	23.0	23.0	24.0	25.0	35.0	53.1	127.2	447.6	488.6	507.6
80°	18.0	19.0	18.0	18.0	22.0	35.0	69.1	262.3	297.4	287.4
82.5°	13.0	13.0	11.0	11.0	13.0	19.0	30.0	136.2	139.2	134.2
85°	7.0	5.0	4.0	4.0	4.0	4.0	4.0	29.0	14.0	11.0
87.5°	0.0	0.0	0.0	1.0	1.0	1.0	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

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

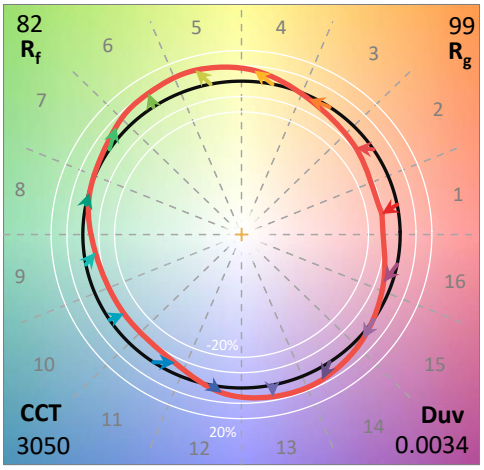
Test Information

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

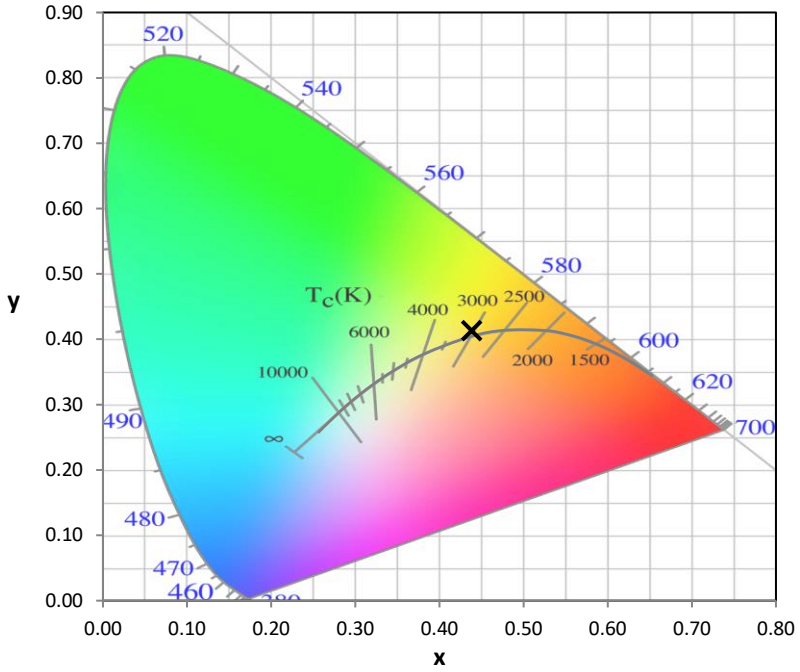
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

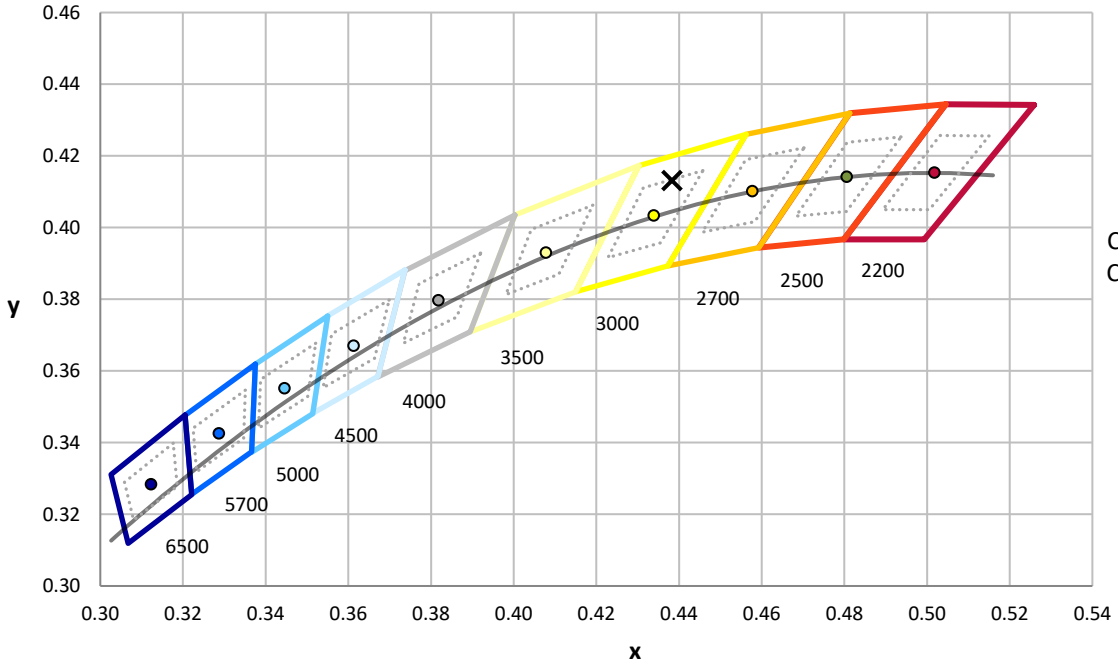
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

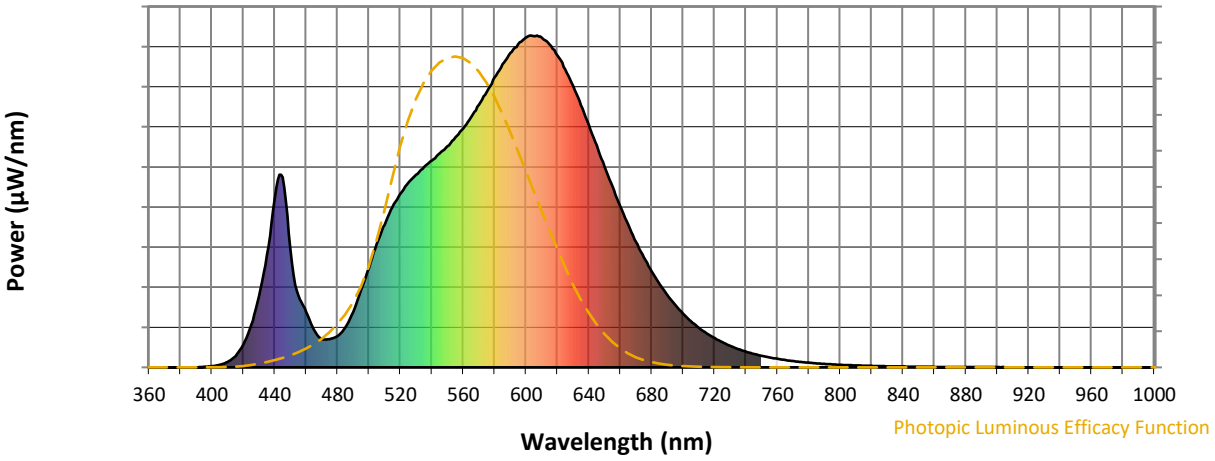


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

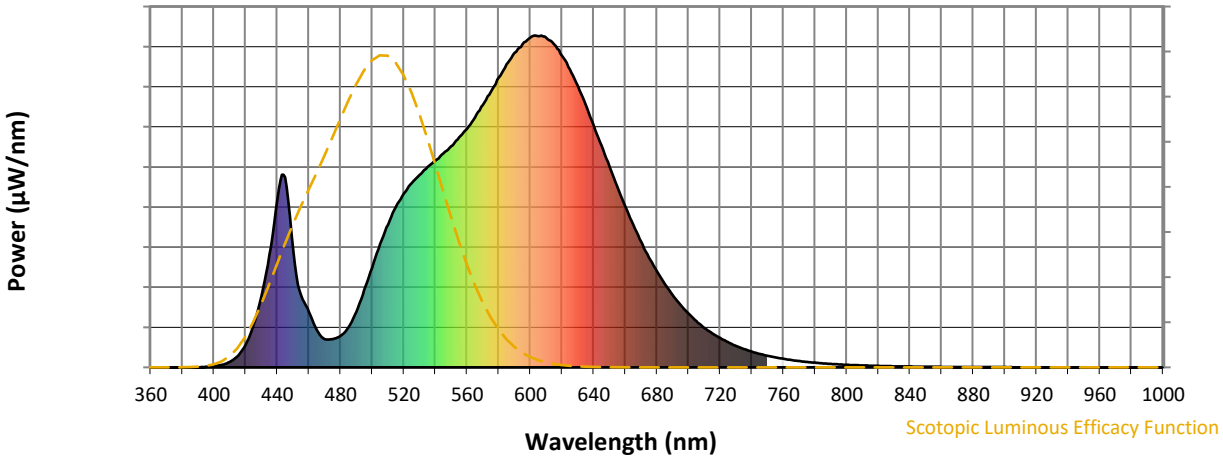


Photopic Lumens: NR

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

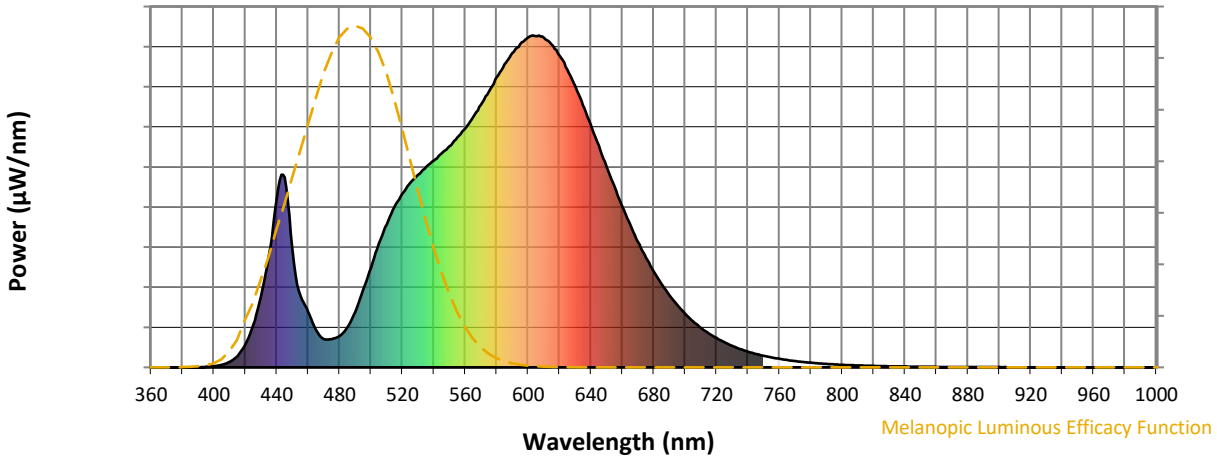


Scotopic Lumens: NR **S/P: 1.27**

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			

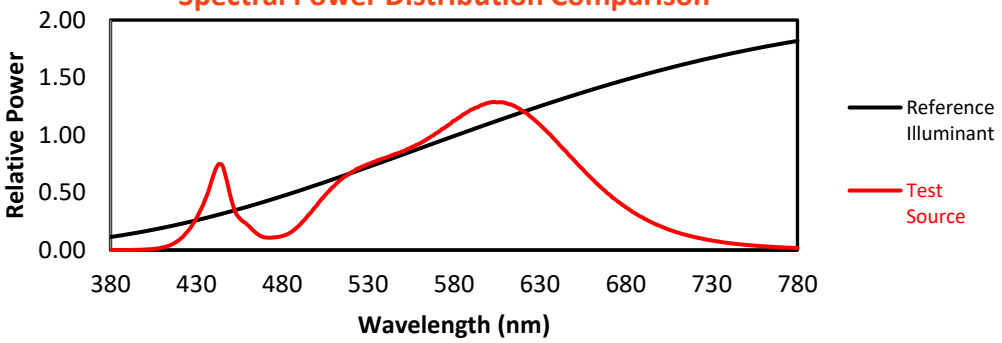
REPORT NUMBER: SP1-2408-195-9

TM-30-18

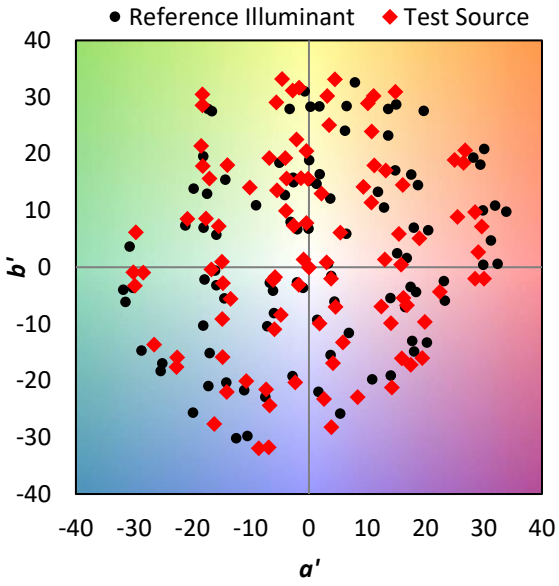
Summary

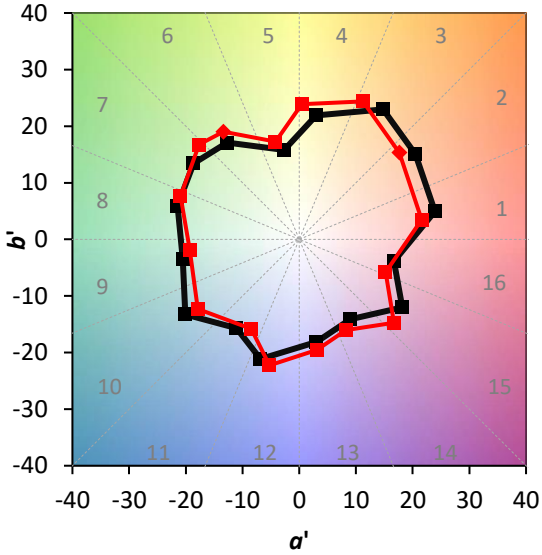
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

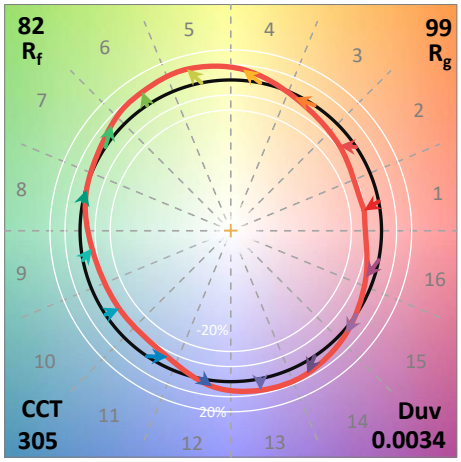
Spectral Power Distribution Comparison

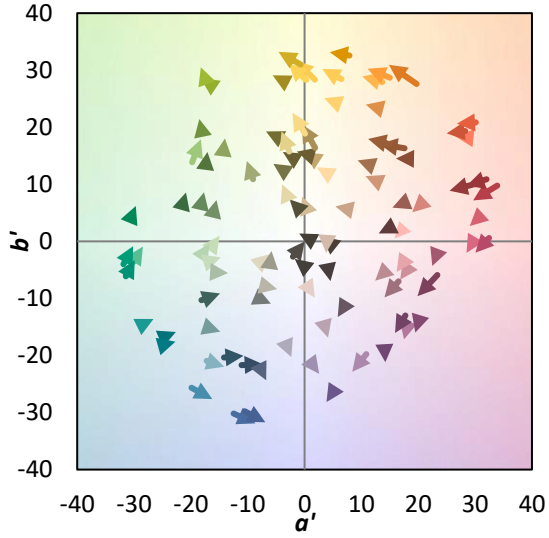


Color Vector Graphics







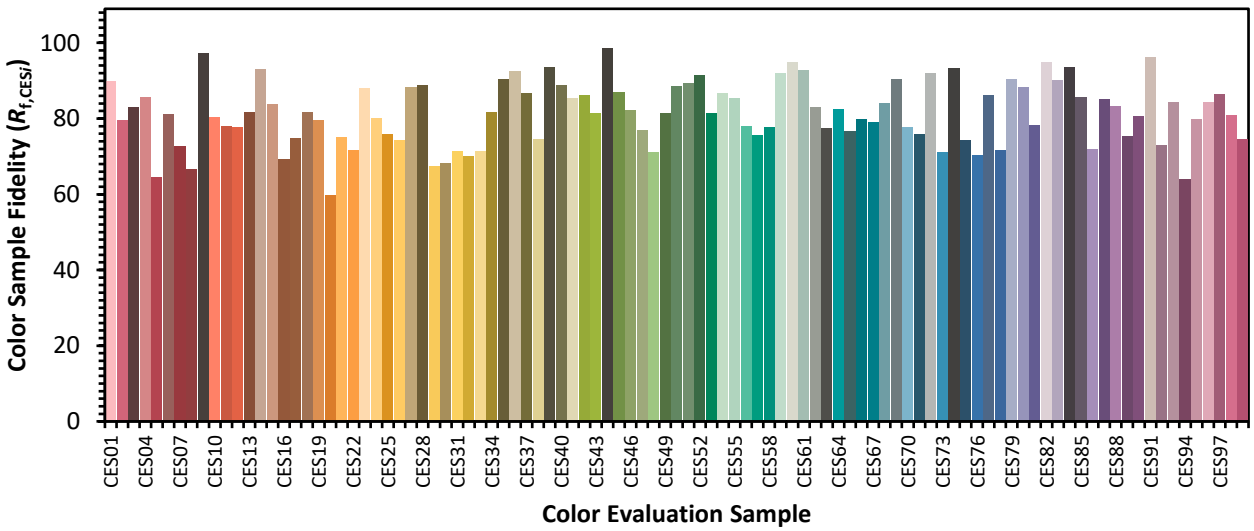


REPORT NUMBER: SP1-2408-195-9

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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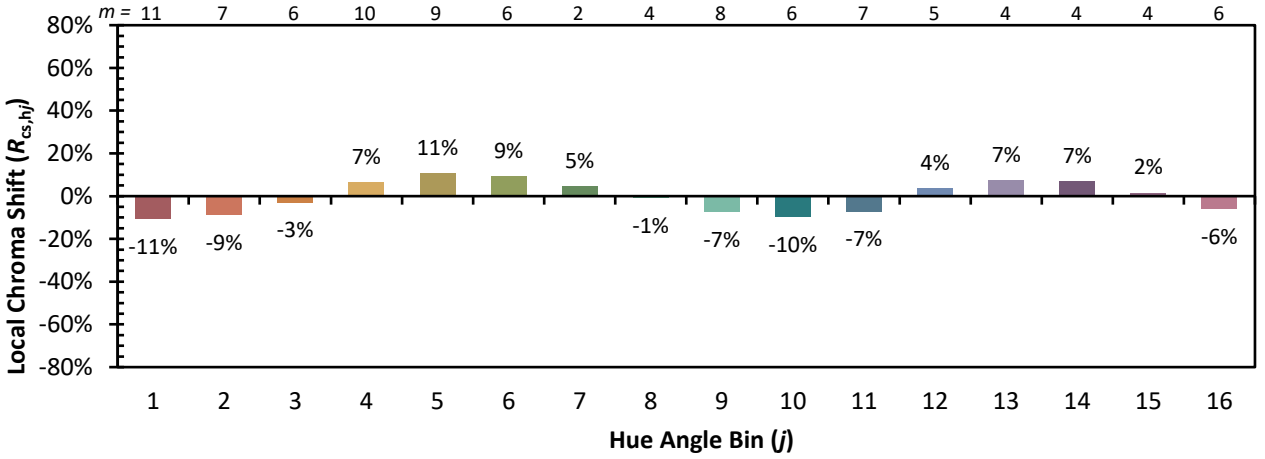
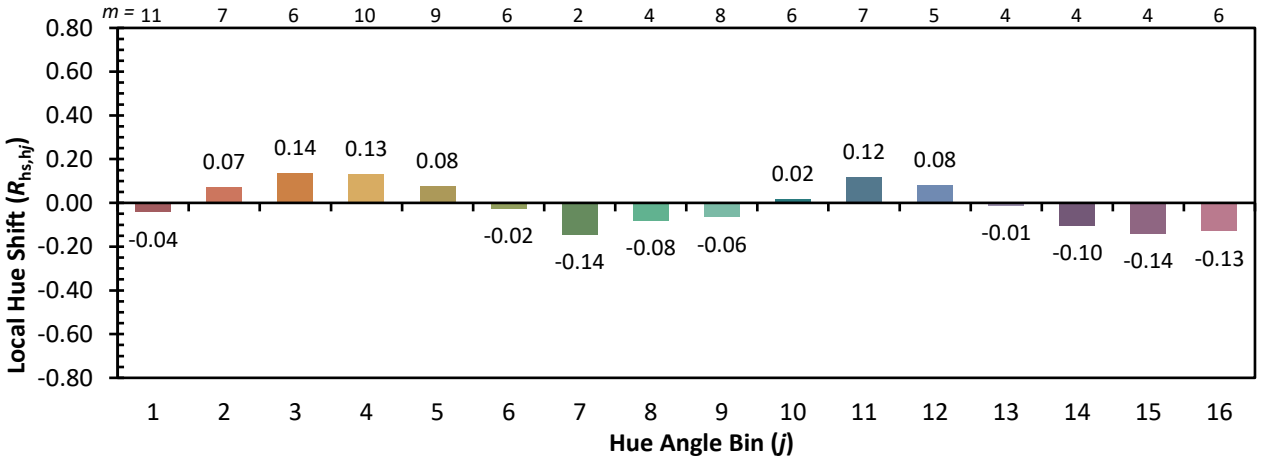
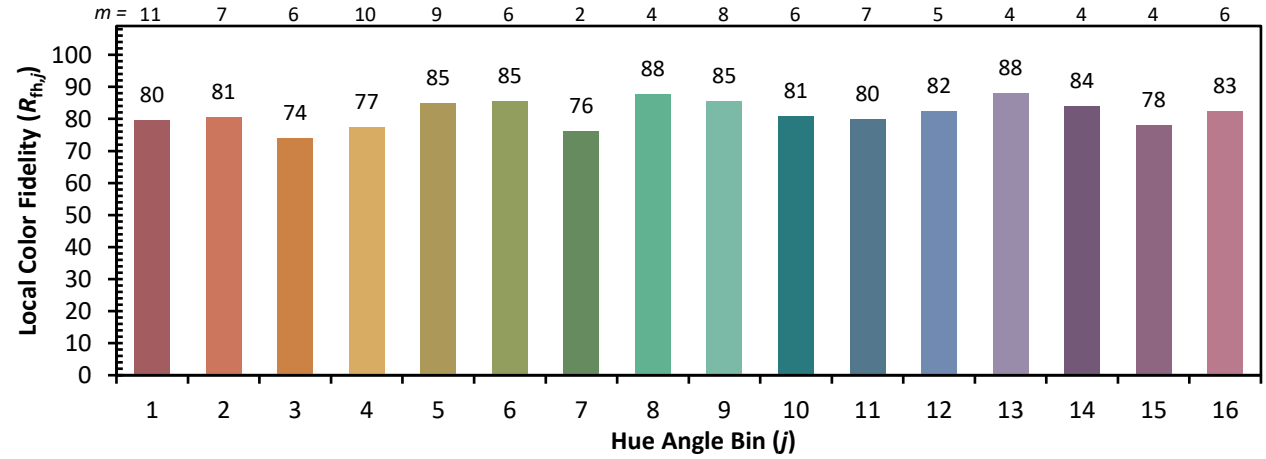
Color Rendition by Hue-Angle Bin







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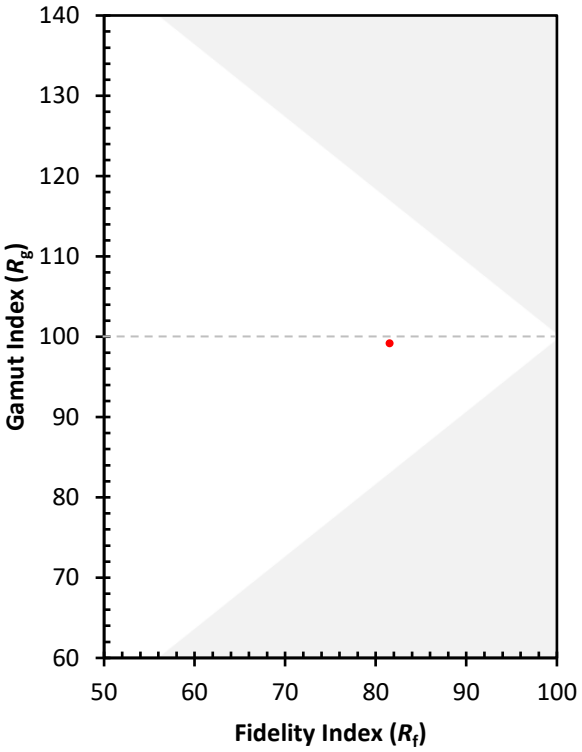
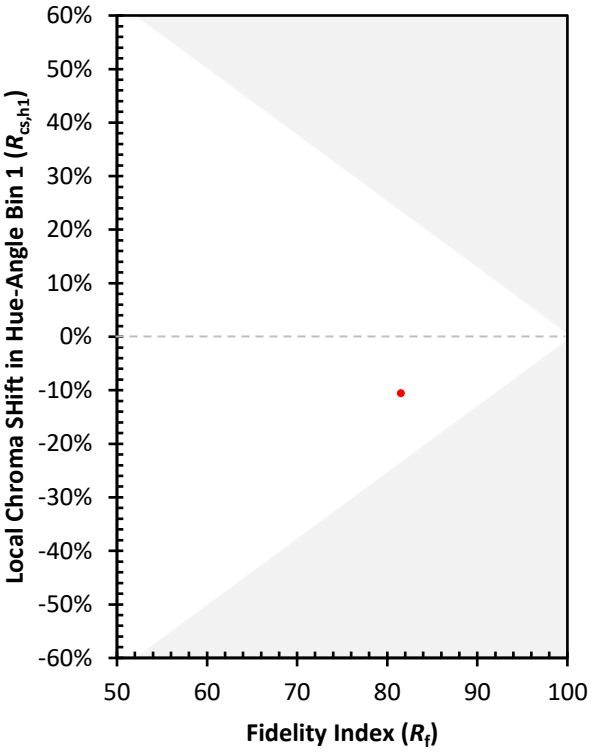
Measure Comparisons





(END OF REPORT)