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: P438282

Luminaire Tested: **ISW-SA1B-830-U-SLR-HSS**

Issue Date: 12/10/2020

Report Generated By 670245982

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P438282
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-23)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISW-SA1B-830-U-SLR-HSS
Description:	IMPACT ELITE LED WEDGE LUMINAIRE
	(1) 80 CRI, 3000K, 450mA 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:	2059 lumens
Efficiency:	N/A
Efficacy:	81.1 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):	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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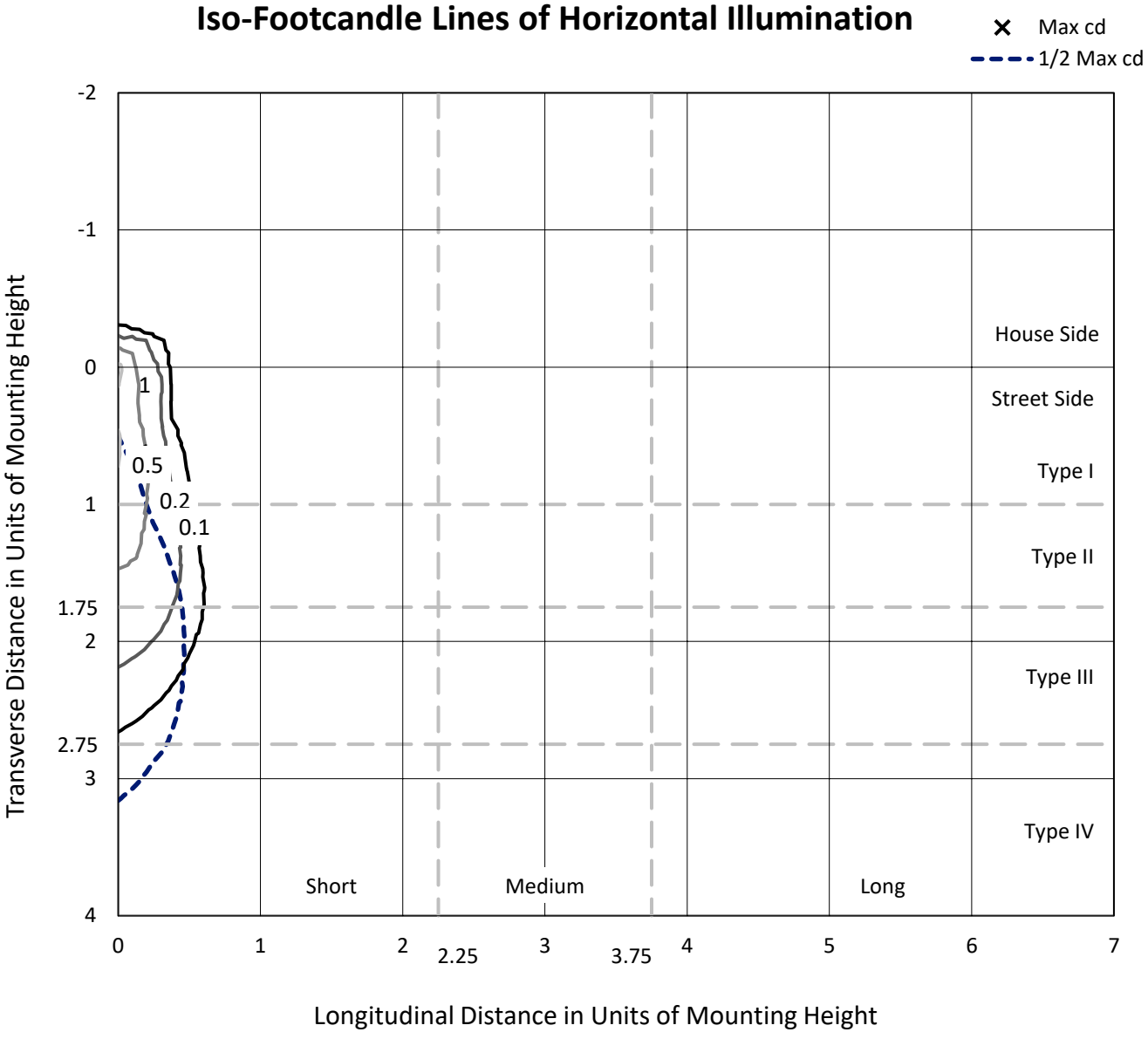
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type IV - Short - N/A

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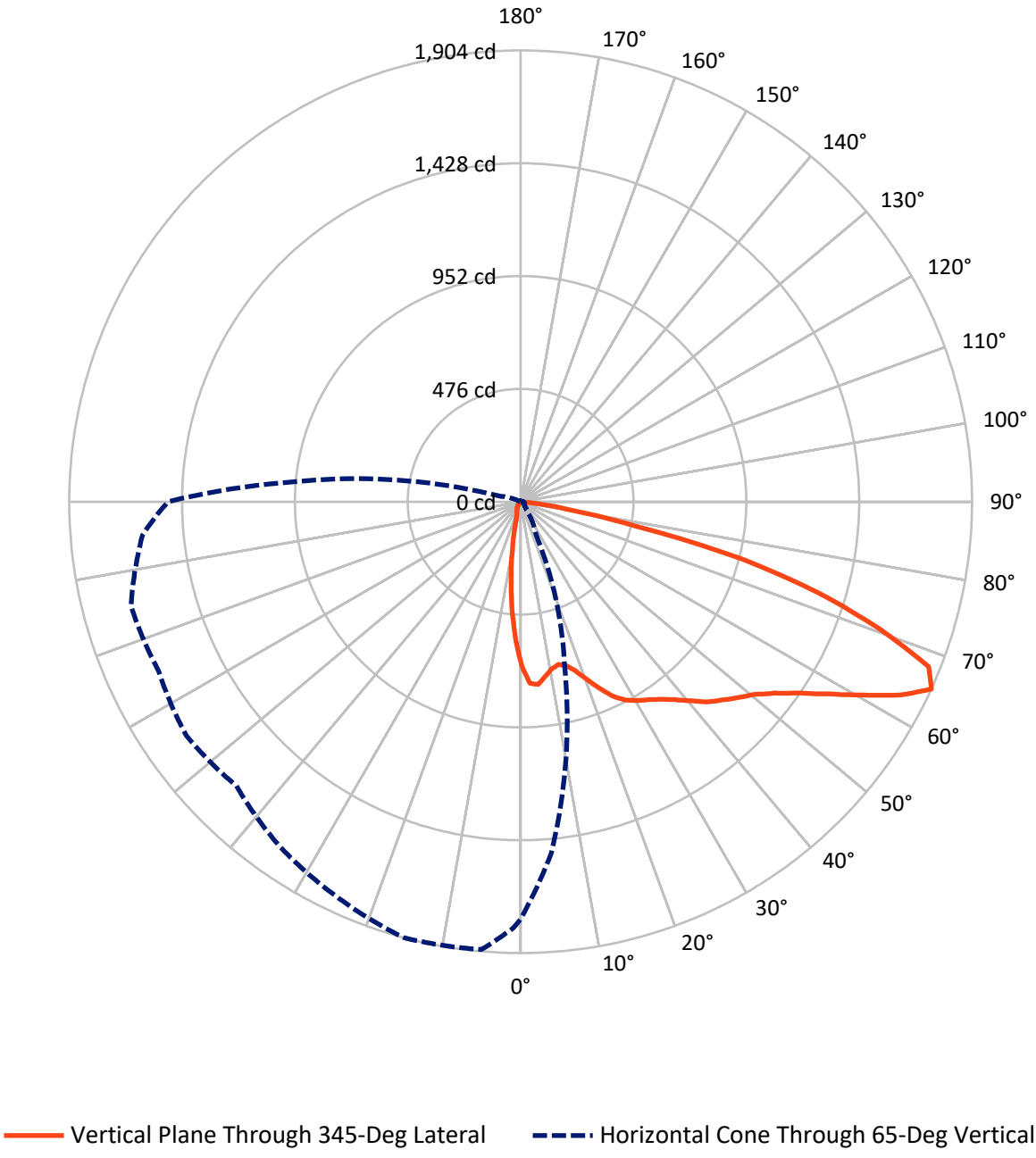
Luminous Intensity Polar Plot



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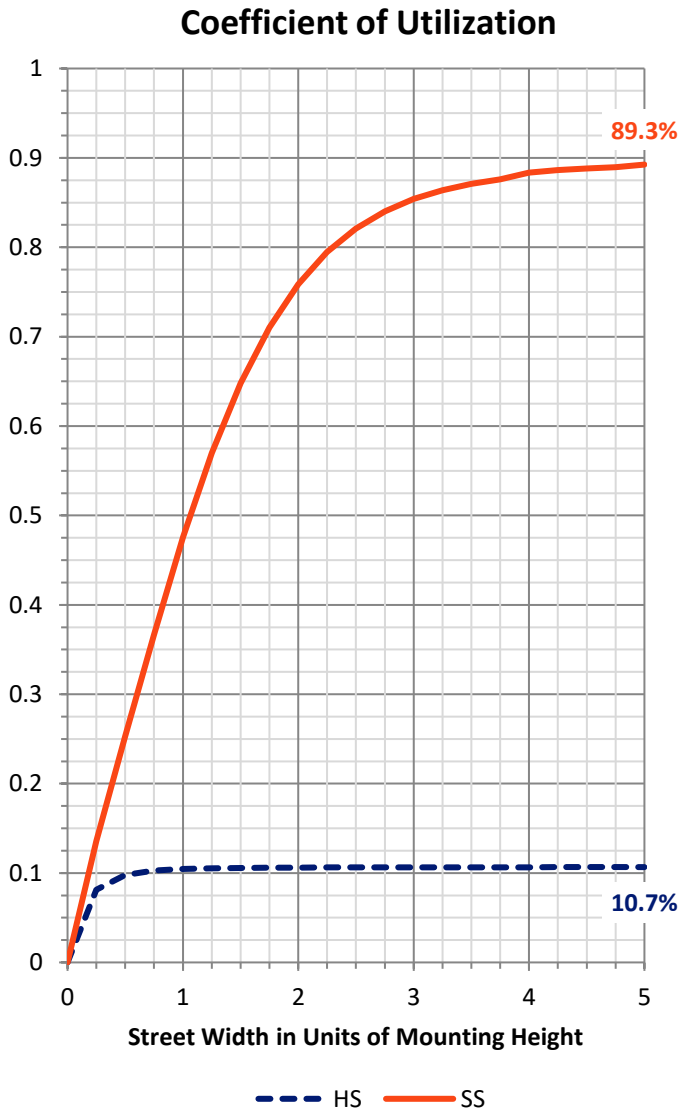
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	222.0	0.0	222.0
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	1837.0	0.0	1837.0
	% Fixture	89.2	0.0	89.2
Total	Lumens	2059.0	0.0	2059.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	2.5
10°-20°	100.4	4.9
20°-30°	146.4	7.1
30°-40°	217.6	10.6
40°-50°	319.1	15.5
50°-60°	459.1	22.3
60°-70°	515.1	25.0
70°-80°	226.0	11.0
80°-90°	23.8	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°	2059.0	100.0
0°-180°	2059.0	100.0



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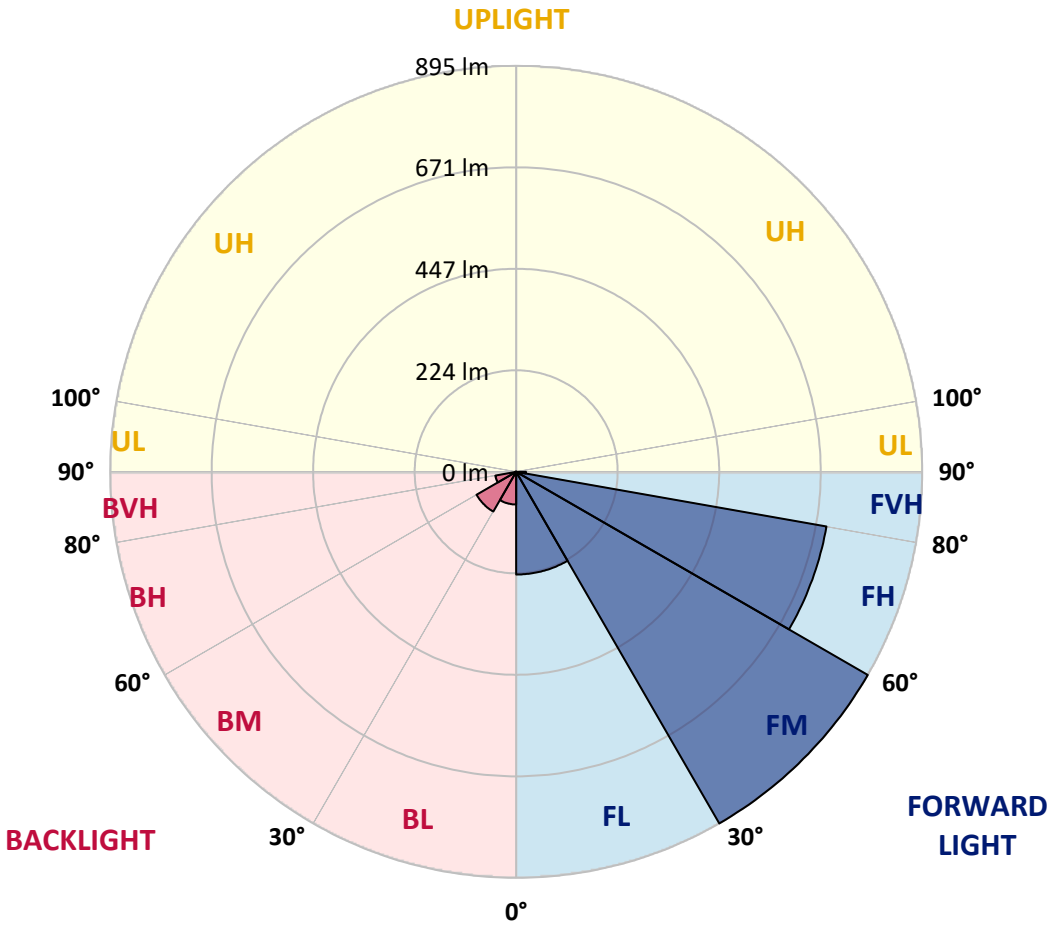
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	226.4	11.0			
FM	(30°-60°)	894.8	43.5			
FH	(60°-80°)	694.4	33.7			G1/1800
FVH	(80°-90°)	21.5	1.0			G1/100
BL	(0°-30°)	72.0	3.5	B0/110		
BM	(30°-60°)	101.0	4.9	B0/220		
BH	(60°-80°)	46.7	2.3	B0/110		G0/110
BVH	(80°-90°)	2.3	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°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	735.4	735.4	724.5	698.8	675.1	646.4	630.6	615.8	600.0	589.1	572.3
5°	700.8	693.9	678.1	630.6	580.2	546.6	520.9	475.4	453.7	437.9	430.9
7.5°	643.5	639.5	613.8	558.5	498.2	443.8	409.2	371.6	342.0	330.1	309.4
10°	603.9	600.0	567.4	492.2	422.1	382.5	354.8	328.2	299.5	270.8	249.1
12.5°	584.2	576.2	544.6	459.6	399.3	360.8	329.1	296.5	260.9	229.3	203.6
15°	589.1	576.2	540.7	453.7	382.5	335.1	294.5	247.1	211.5	174.0	150.2
17.5°	623.7	609.9	566.4	458.6	360.8	300.5	247.1	193.7	146.3	111.7	99.8
20°	687.9	673.1	613.8	469.5	346.9	265.9	190.8	133.4	96.9	81.1	74.1
22.5°	770.0	750.2	680.0	487.3	331.1	231.3	144.3	94.9	74.1	64.2	59.3
25°	856.0	836.2	758.1	514.0	321.2	201.6	111.7	74.1	60.3	54.4	51.4
27.5°	934.1	909.3	828.3	553.5	309.4	174.9	92.9	64.2	54.4	47.4	45.5
30°	1005.2	976.6	898.5	587.1	292.6	151.2	80.1	59.3	50.4	44.5	41.5
32.5°	1065.5	1042.8	955.8	610.8	278.7	138.4	71.2	52.4	43.5	38.5	36.6
35°	1137.7	1115.9	1011.2	630.6	269.8	132.4	65.2	49.4	40.5	35.6	31.6
37.5°	1235.5	1203.9	1072.4	648.4	260.0	127.5	60.3	46.5	38.5	32.6	29.7
40°	1323.5	1288.9	1143.6	661.3	255.0	123.6	59.3	44.5	36.6	30.6	27.7
42.5°	1401.6	1369.9	1200.9	666.2	251.1	116.6	58.3	43.5	36.6	29.7	25.7
45°	1451.0	1422.3	1269.1	679.0	251.1	111.7	54.4	43.5	35.6	28.7	24.7
47.5°	1496.5	1468.8	1328.4	692.9	247.1	107.7	49.4	47.4	35.6	27.7	22.7
50°	1562.7	1540.9	1403.6	734.4	240.2	101.8	44.5	46.5	36.6	26.7	22.7
52.5°	1646.7	1636.8	1514.3	790.7	230.3	90.9	39.5	43.5	36.6	25.7	21.7
55°	1739.6	1735.7	1629.9	842.1	218.4	78.1	36.6	39.5	35.6	23.7	19.8
57.5°	1796.0	1796.0	1705.0	870.8	208.6	62.3	32.6	32.6	34.6	21.7	17.8
60°	1816.7	1795.0	1696.1	867.8	191.8	51.4	29.7	26.7	36.6	18.8	15.8
62.5°	1814.7	1767.3	1613.1	820.4	169.0	47.4	25.7	22.7	26.7	16.8	13.8
65°	*1761.4*	*1704.0*	*1486.6*	*714.6*	*152.2*	*47.4*	*21.7*	*18.8*	*17.8*	*14.8*	*10.9*
67.5°	1614.1	1579.5	1301.7	605.9	140.4	47.4	18.8	15.8	13.8	11.9	9.9
70°	1370.9	1325.5	1048.7	467.5	131.5	47.4	15.8	13.8	12.8	9.9	7.9
72.5°	893.5	867.8	641.5	321.2	107.7	46.5	13.8	12.8	11.9	8.9	6.9
75°	486.3	449.7	352.9	114.7	77.1	33.6	11.9	10.9	8.9	7.9	5.9
77.5°	210.5	202.6	179.9	30.6	22.7	9.9	6.9	6.9	5.9	5.9	4.0
80°	27.7	20.8	23.7	8.9	7.9	4.9	4.0	3.0	3.0	3.0	2.0
82.5°	1.0	1.0	0.0	1.0	3.0	2.0	0.0	0.0	1.0	1.0	1.0
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°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	580.2	568.3	559.4	559.4	571.3	564.4	572.3	567.4	581.2	588.1	586.1
5°	416.1	421.1	416.1	424.0	436.9	443.8	447.8	457.6	456.6	460.6	467.5
7.5°	301.5	301.5	303.4	301.5	313.3	326.2	333.1	330.1	328.2	324.2	331.1
10°	242.2	231.3	218.4	218.4	220.4	227.3	228.3	223.4	216.5	203.6	207.6
12.5°	189.8	181.9	174.0	157.2	156.2	152.2	151.2	137.4	126.5	122.6	122.6
15°	139.4	134.4	125.5	117.6	109.7	105.8	98.8	82.0	71.2	70.2	71.2
17.5°	92.9	89.9	87.0	87.0	84.0	77.1	70.2	59.3	54.4	52.4	53.4
20°	69.2	68.2	65.2	66.2	66.2	60.3	53.4	48.4	46.5	46.5	47.4
22.5°	57.3	56.3	53.4	53.4	53.4	50.4	45.5	42.5	41.5	41.5	41.5
25°	49.4	48.4	46.5	45.5	45.5	43.5	39.5	37.6	36.6	36.6	36.6
27.5°	44.5	43.5	41.5	39.5	39.5	37.6	35.6	32.6	32.6	32.6	32.6
30°	39.5	38.5	37.6	35.6	34.6	32.6	30.6	29.7	28.7	28.7	28.7
32.5°	35.6	34.6	33.6	32.6	30.6	28.7	26.7	25.7	24.7	24.7	24.7
35°	30.6	28.7	27.7	28.7	27.7	24.7	23.7	21.7	20.8	20.8	20.8
37.5°	27.7	25.7	23.7	22.7	22.7	22.7	20.8	18.8	17.8	16.8	17.8
40°	25.7	23.7	21.7	19.8	18.8	19.8	17.8	15.8	14.8	13.8	14.8
42.5°	23.7	21.7	18.8	16.8	14.8	16.8	14.8	12.8	11.9	10.9	11.9
45°	22.7	20.8	17.8	14.8	12.8	12.8	12.8	10.9	8.9	8.9	8.9
47.5°	21.7	19.8	15.8	12.8	10.9	9.9	9.9	7.9	6.9	5.9	5.9
50°	20.8	18.8	14.8	10.9	8.9	7.9	7.9	5.9	4.9	4.9	4.9
52.5°	19.8	17.8	13.8	9.9	7.9	5.9	4.9	4.0	4.0	3.0	3.0
55°	17.8	15.8	11.9	8.9	6.9	4.9	4.0	3.0	3.0	2.0	3.0
57.5°	16.8	14.8	10.9	7.9	5.9	4.0	3.0	2.0	2.0	2.0	2.0
60°	14.8	12.8	8.9	5.9	4.0	3.0	2.0	2.0	2.0	1.0	1.0
62.5°	11.9	10.9	7.9	4.9	3.0	2.0	1.0	1.0	1.0	1.0	1.0
65°	*10.9*	*9.9*	*6.9*	*4.0*	*2.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
67.5°	8.9	7.9	4.9	3.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0
70°	6.9	6.9	4.0	2.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0
72.5°	5.9	5.9	4.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0
75°	4.9	4.9	4.0	2.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
77.5°	4.0	3.0	2.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
80°	2.0	2.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	2.0
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°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	591.1	606.9	624.7	635.6	659.3	680.0	704.7	726.5	752.2	766.0	771.0
5°	474.4	483.3	506.1	535.7	562.4	600.0	643.5	691.9	744.3	769.0	786.8
7.5°	327.2	335.1	367.7	395.4	439.8	488.3	547.6	613.8	682.0	716.6	748.2
10°	213.5	224.4	252.0	290.6	346.9	406.2	466.5	535.7	614.8	655.3	697.8
12.5°	123.6	136.4	170.0	220.4	275.8	339.0	401.3	477.4	565.4	609.9	653.3
15°	71.2	76.1	95.9	140.4	202.6	279.7	352.9	434.9	537.7	587.1	638.5
17.5°	53.4	56.3	62.3	81.1	129.5	214.5	317.3	422.1	540.7	606.9	652.4
20°	47.4	49.4	52.4	59.3	82.0	152.2	273.8	413.2	569.3	654.3	709.7
22.5°	42.5	44.5	47.4	52.4	62.3	102.8	228.3	412.2	616.8	724.5	786.8
25°	37.6	39.5	42.5	47.4	55.4	74.1	176.9	409.2	676.1	801.6	879.7
27.5°	32.6	34.6	37.6	42.5	49.4	61.3	134.4	400.3	747.2	884.6	967.7
30°	28.7	30.6	33.6	37.6	44.5	53.4	102.8	385.5	808.5	958.8	1027.0
32.5°	24.7	26.7	29.7	33.6	39.5	46.5	83.0	353.9	856.0	1017.1	1075.4
35°	20.8	22.7	25.7	29.7	34.6	39.5	68.2	302.5	904.4	1077.4	1133.7
37.5°	17.8	19.8	21.7	25.7	30.6	35.6	56.3	269.8	940.0	1152.5	1207.8
40°	14.8	16.8	19.8	22.7	26.7	33.6	45.5	226.3	975.6	1224.6	1276.0
42.5°	11.9	13.8	16.8	20.8	24.7	29.7	36.6	186.8	1011.2	1289.9	1338.3
45°	8.9	10.9	13.8	18.8	24.7	25.7	29.7	159.1	1020.0	1351.2	1392.7
47.5°	6.9	7.9	10.9	15.8	23.7	22.7	24.7	138.4	1036.8	1399.6	1446.1
50°	4.9	5.9	8.9	14.8	20.8	18.8	21.7	130.5	1060.6	1437.2	1461.9
52.5°	4.0	4.9	6.9	12.8	16.8	16.8	19.8	138.4	1091.2	1481.6	1502.4
55°	3.0	4.0	5.9	8.9	12.8	14.8	18.8	149.3	1150.5	1559.7	1555.8
57.5°	2.0	3.0	4.9	6.9	9.9	12.8	17.8	166.1	1210.8	1647.7	1651.6
60°	2.0	3.0	4.0	5.9	8.9	10.9	15.8	168.0	1200.9	1660.5	1718.9
62.5°	1.0	2.0	4.0	4.9	6.9	8.9	13.8	141.3	1106.0	1598.3	1683.3
65°	*1.0*	*2.0*	*3.0*	*4.9*	*5.9*	*7.9*	*10.9*	*89.9*	*962.7*	*1487.6*	*1600.2*
67.5°	1.0	2.0	3.0	4.0	4.9	6.9	8.9	46.5	816.4	1372.9	1481.6
70°	1.0	2.0	3.0	4.0	4.9	5.9	7.9	22.7	618.7	1157.4	1297.8
72.5°	1.0	2.0	3.0	4.0	4.0	4.9	6.9	15.8	397.3	869.8	1005.2
75°	1.0	2.0	2.0	3.0	4.0	4.9	5.9	10.9	257.0	585.1	762.1
77.5°	1.0	2.0	2.0	3.0	4.0	4.9	6.9	9.9	187.8	401.3	526.8
80°	1.0	2.0	2.0	3.0	4.0	4.0	4.9	6.9	100.8	265.9	335.1
82.5°	2.0	2.0	3.0	3.0	3.0	4.0	4.9	4.9	52.4	170.0	226.3
85°	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.9	22.7	71.2	112.7
87.5°	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
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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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438282
CATALOG NUMBER: ISW-SA1B-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	694.9	694.9	694.9	694.9	694.9	694.9	*694.9*	694.9	694.9	694.9
2.5°	785.8	798.6	804.6	799.6	795.7	783.8	*767.0*	750.2	736.4	735.4
5°	827.3	855.0	876.7	865.9	851.0	816.4	*773.9*	726.5	708.7	700.8
7.5°	818.4	878.7	915.3	905.4	875.7	810.5	*744.3*	682.0	653.3	643.5
10°	777.9	858.9	907.4	904.4	876.7	799.6	*717.6*	642.5	611.8	603.9
12.5°	740.3	820.4	866.8	868.8	858.9	787.8	*704.7*	624.7	588.1	584.2
15°	720.6	788.8	816.4	822.4	826.3	786.8	*716.6*	636.5	598.0	589.1
17.5°	724.5	757.1	764.0	759.1	785.8	787.8	*750.2*	678.1	634.6	623.7
20°	748.2	736.4	713.6	718.6	748.2	791.7	*800.6*	751.2	701.8	687.9
22.5°	793.7	735.4	689.9	686.0	724.5	798.6	*855.0*	829.3	777.9	770.0
25°	860.9	750.2	680.0	672.1	705.7	805.6	*910.3*	911.3	870.8	856.0
27.5°	926.1	773.9	679.0	671.1	705.7	814.5	*947.9*	992.4	949.9	934.1
30°	963.7	801.6	694.9	680.0	718.6	822.4	*972.6*	1056.6	1019.1	1005.2
32.5°	998.3	831.3	711.7	693.9	743.3	844.1	*995.3*	1114.9	1082.3	1065.5
35°	1027.0	865.9	743.3	715.6	779.9	875.7	*1023.0*	1179.2	1158.4	1137.7
37.5°	1054.6	900.4	787.8	772.0	841.1	921.2	*1059.6*	1246.4	1256.3	1235.5
40°	1094.2	940.0	863.9	851.0	931.1	990.4	*1104.1*	1313.6	1346.2	1323.5
42.5°	1131.7	990.4	941.0	952.8	1039.8	1070.5	*1154.5*	1374.9	1411.5	1401.6
45°	1166.3	1052.7	1052.7	1081.3	1157.4	1158.4	*1193.0*	1417.4	1455.9	1451.0
47.5°	1211.8	1129.8	1168.3	1247.4	1287.9	1234.5	*1234.5*	1457.9	1510.3	1496.5
50°	1256.3	1232.6	1321.5	1393.7	1429.3	1326.5	*1277.0*	1512.3	1574.5	1562.7
52.5°	1304.7	1332.4	1464.8	1536.0	1556.8	1431.2	*1341.3*	1566.6	1646.7	1646.7
55°	1382.8	1417.4	1616.1	1675.4	1705.0	1518.2	*1423.3*	1643.7	1734.7	1739.6
57.5°	1462.9	1499.4	1701.1	1776.2	1814.7	1646.7	*1529.1*	1746.5	1796.9	1796.0
60°	1546.9	1585.4	1767.3	1841.4	1897.8	1778.2	*1654.6*	1840.4	1826.6	1816.7
62.5°	1650.7	1650.7	1792.0	1826.6	1894.8	1861.2	*1796.0*	1893.8	1837.5	1814.7
65°	*1701.1*	*1685.3*	*1720.8*	*1695.1*	*1773.2*	*1837.5*	*1903.7*	*1895.8*	*1798.9*	*1761.4*
67.5°	1674.4	1578.5	1517.2	1478.7	1495.5	1606.2	*1856.2*	1801.9	1642.7	1614.1
70°	1491.5	1262.2	1204.9	1143.6	1111.0	1225.6	*1604.2*	1591.4	1397.6	1370.9
72.5°	1215.8	911.3	772.9	835.2	803.6	933.1	*1314.6*	1122.8	917.3	893.5
75°	1009.2	678.1	504.1	505.1	510.0	612.8	*960.7*	667.2	504.1	486.3
77.5°	730.4	477.4	407.2	364.7	368.7	391.4	*500.1*	284.7	232.3	210.5
80°	445.8	295.5	329.1	292.6	282.7	217.5	*215.5*	41.5	27.7	27.7
82.5°	243.2	187.8	174.9	63.3	97.9	118.6	*97.9*	2.0	1.0	1.0
85°	123.6	75.1	35.6	10.9	12.8	10.9	*2.0*	0.0	0.0	0.0
87.5°	4.0	3.0	3.0	2.0	2.0	1.0	*1.0*	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.

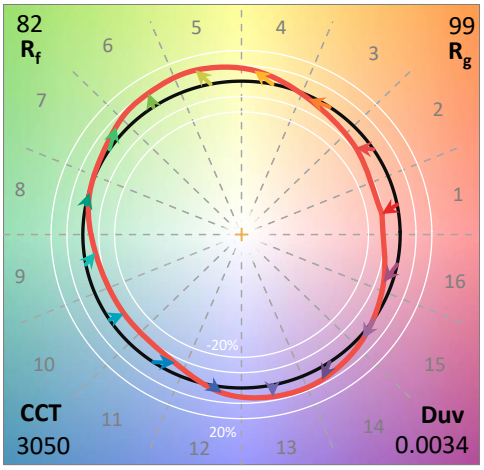
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

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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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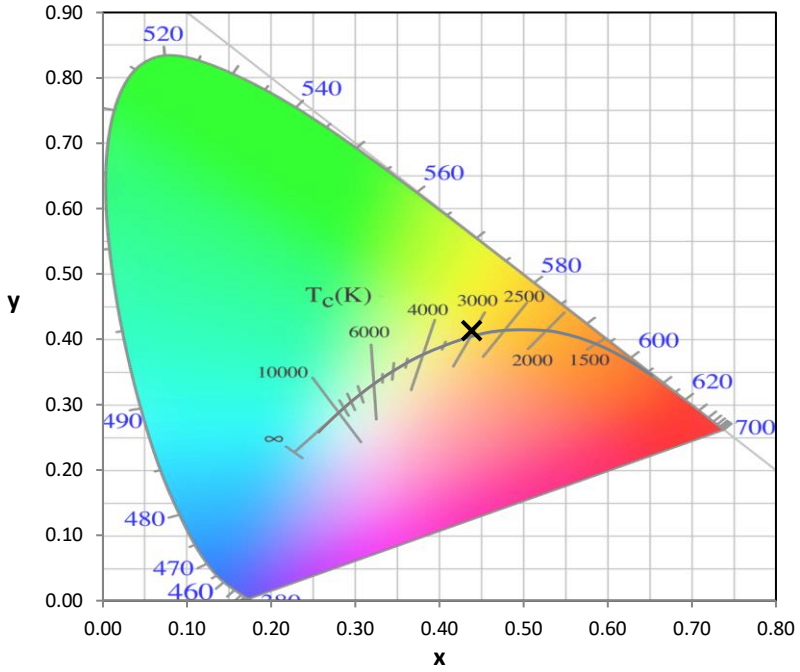
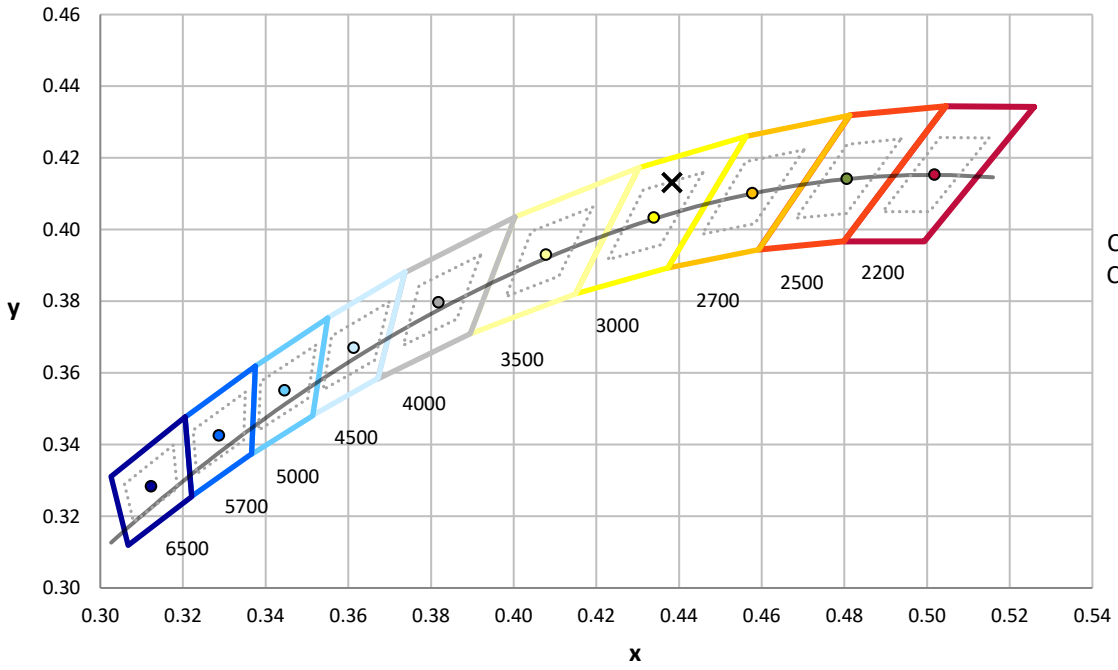
CIE 1931 Chromaticity Diagram



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

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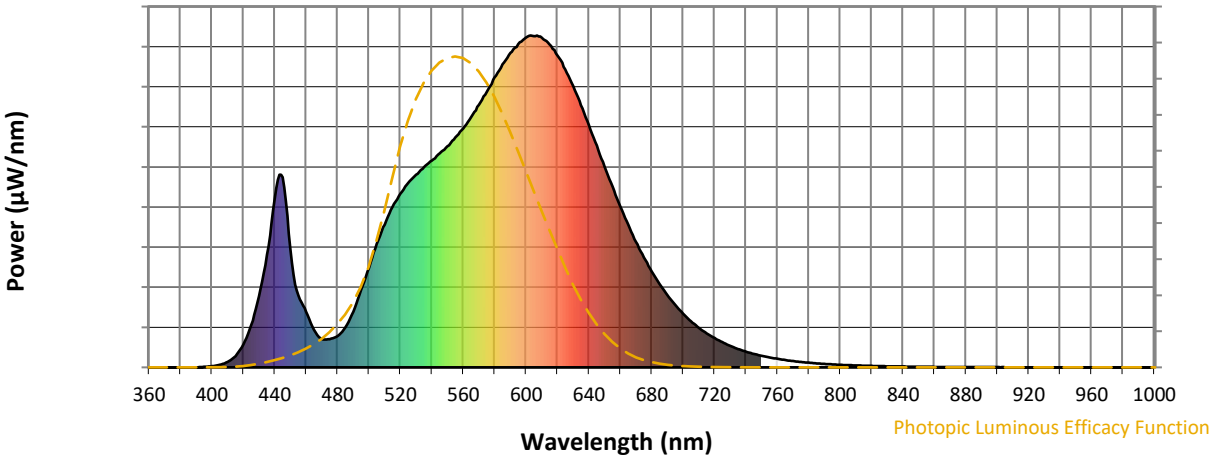
Photopic Flux vs. Wavelength



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			

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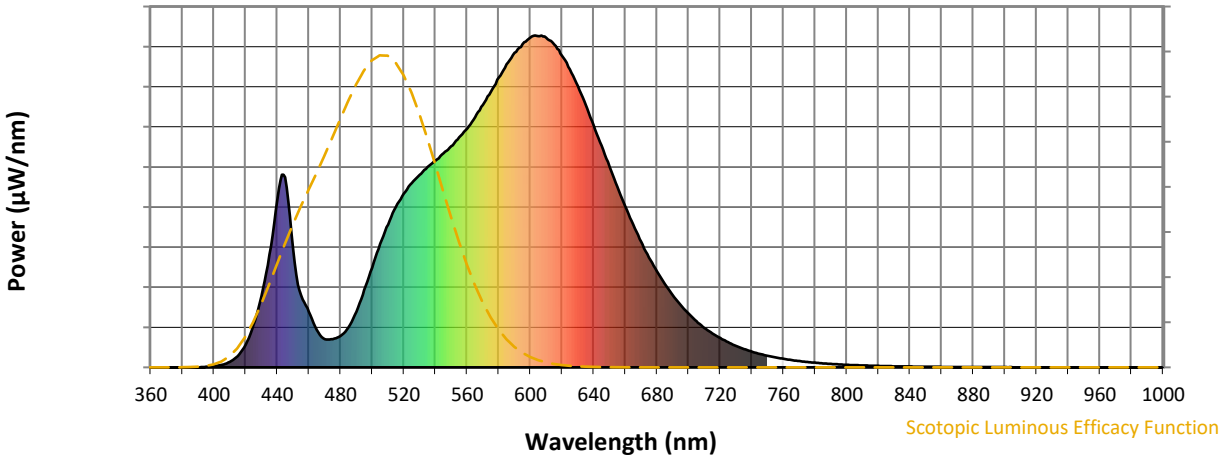
Scotopic Flux vs. Wavelength



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			

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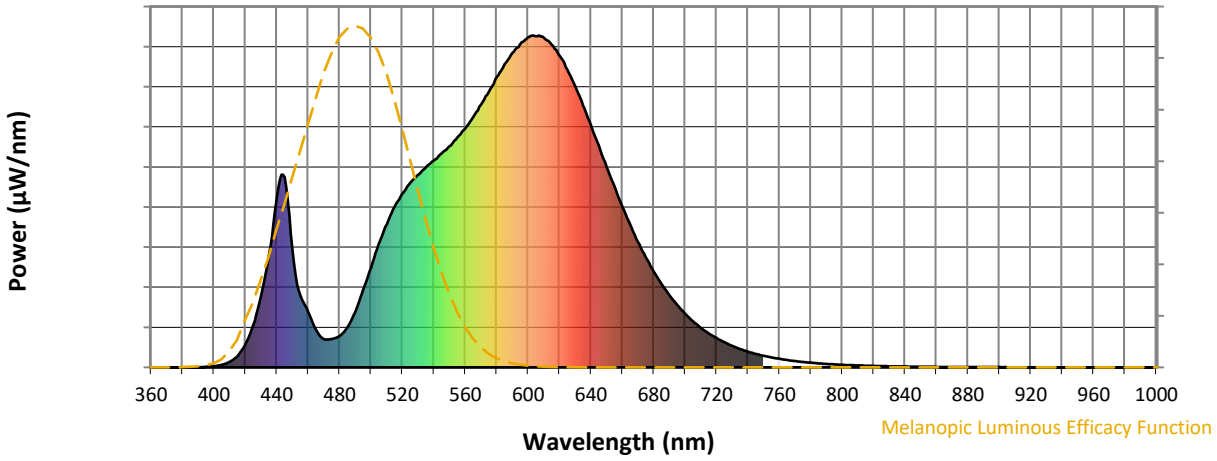
Melanopic Flux vs. Wavelength



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			

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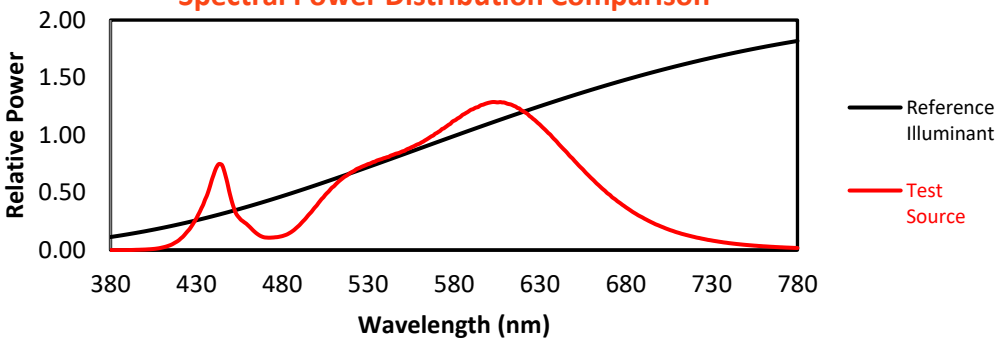
TM-30-18

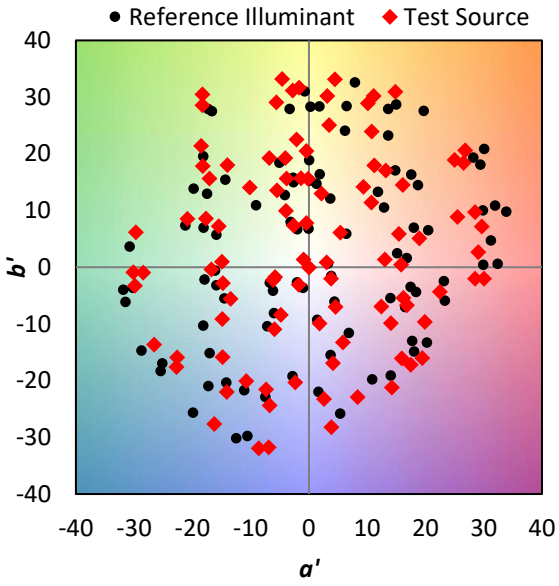
Summary

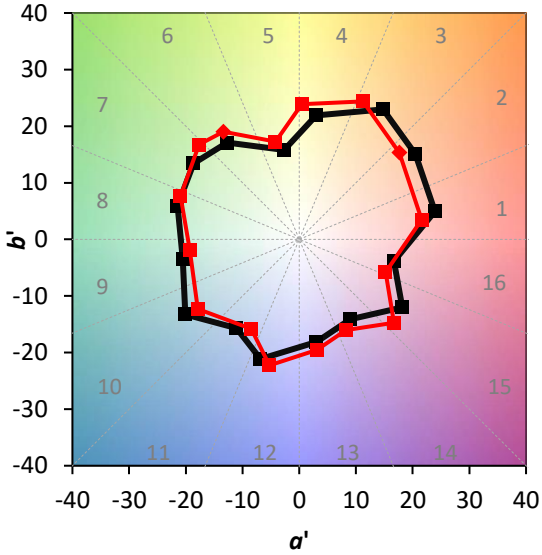
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

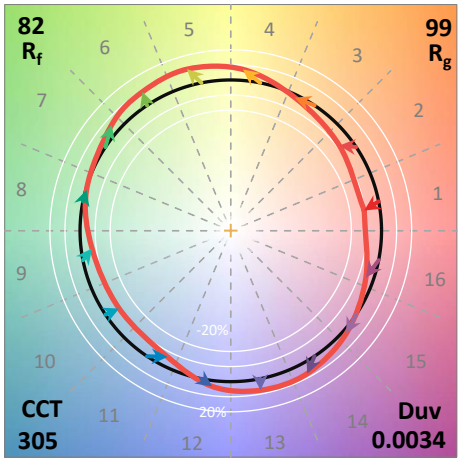
Spectral Power Distribution Comparison

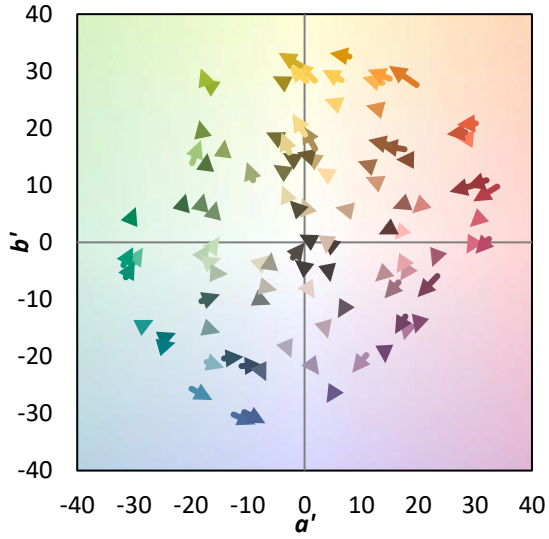


Color Vector Graphics









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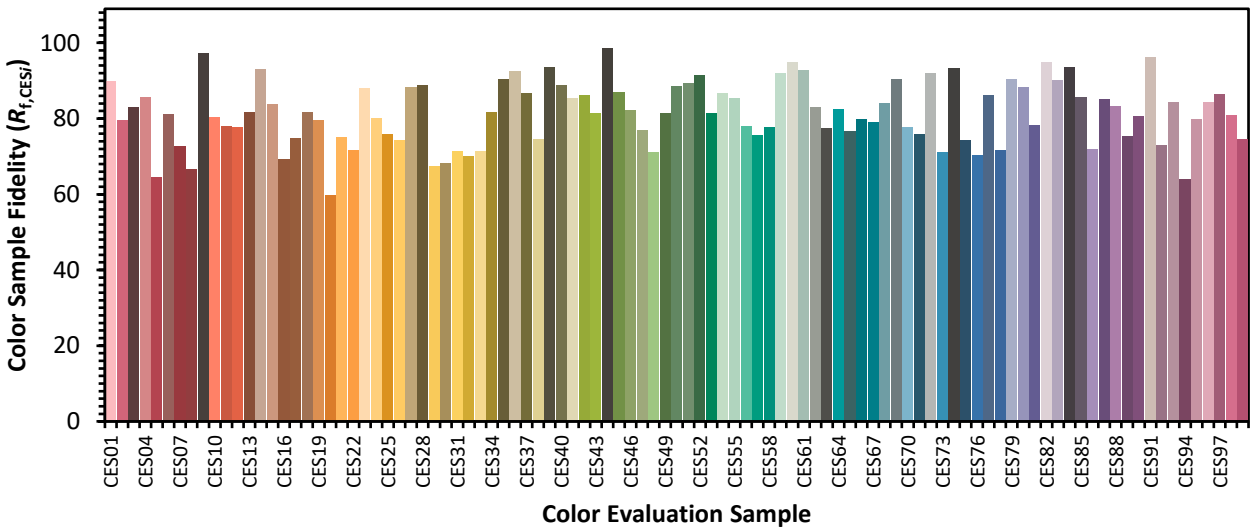
Individual Sample Fidelity Index ($R_{f,i}$)

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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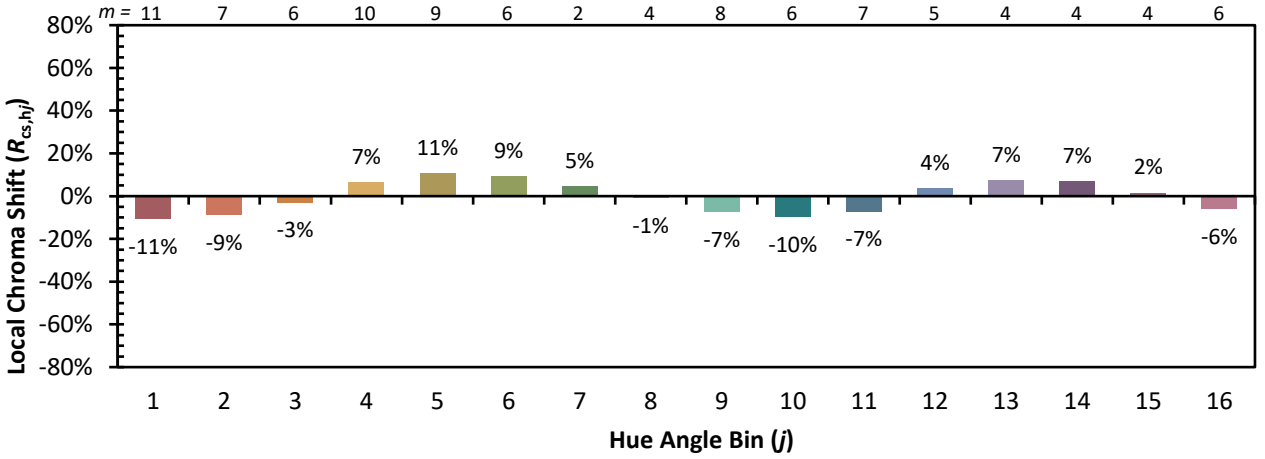
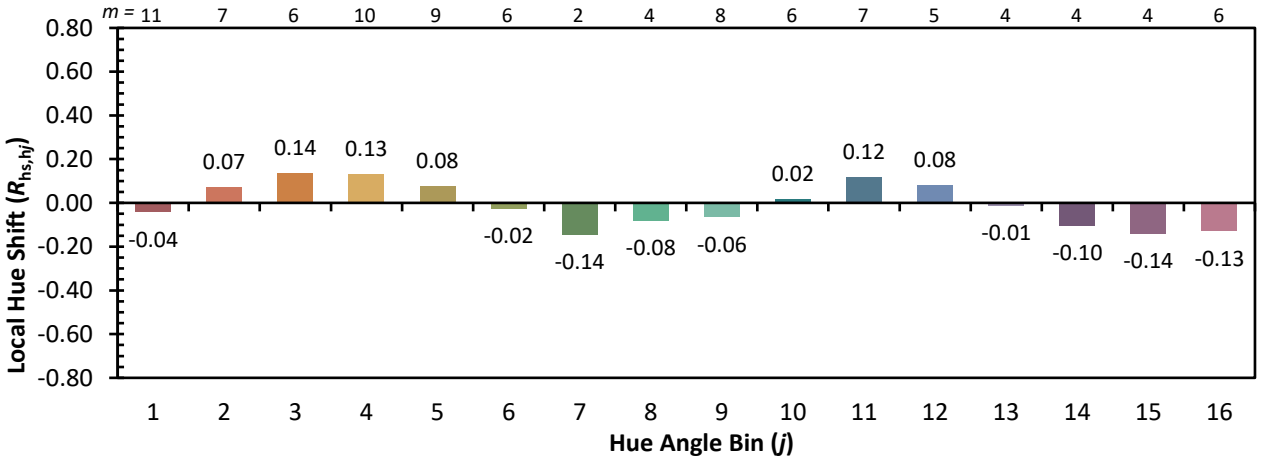
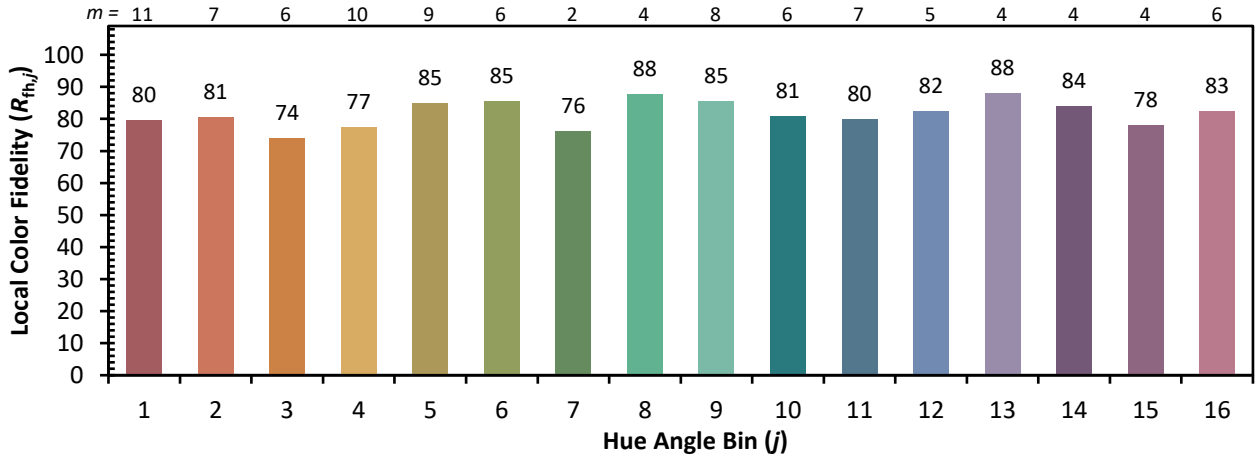
Color Rendition by Hue-Angle Bin







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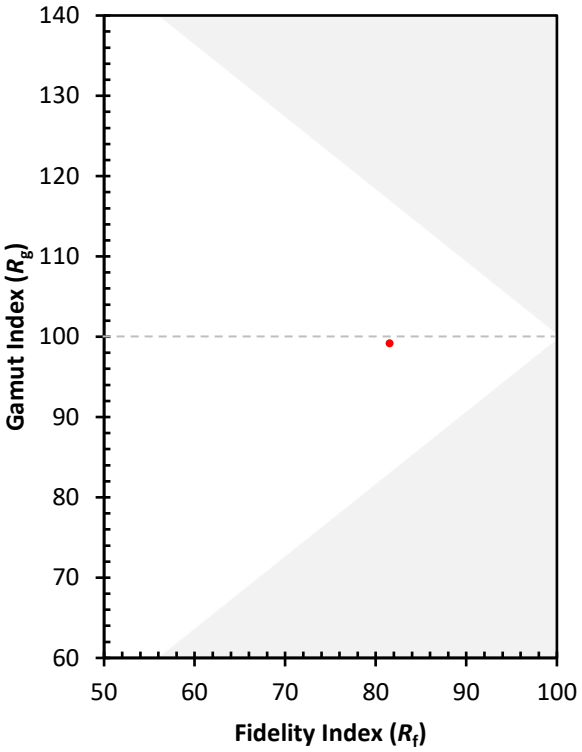
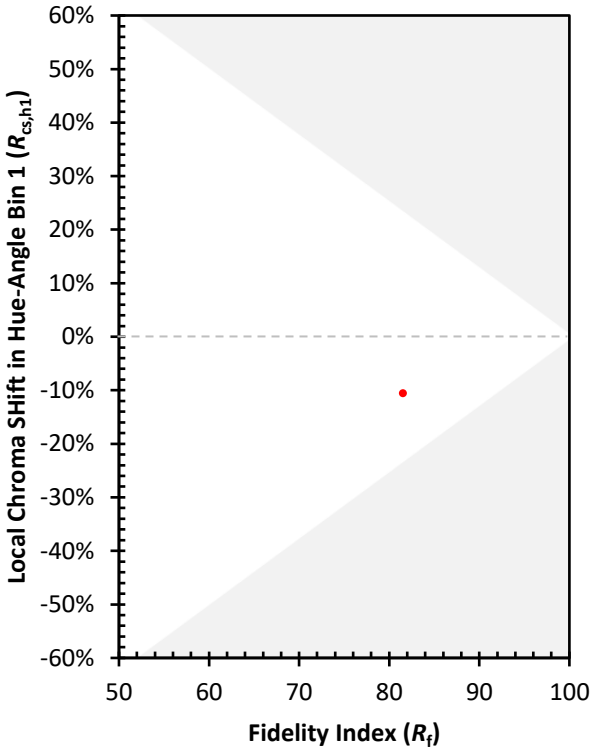
Measure Comparisons





(END OF REPORT)