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

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P639475

Luminaire Tested: GWS-SA5B-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P639475
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-SLR-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8753.5 lumens
Efficiency:	N/A
Efficacy:	75.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	115.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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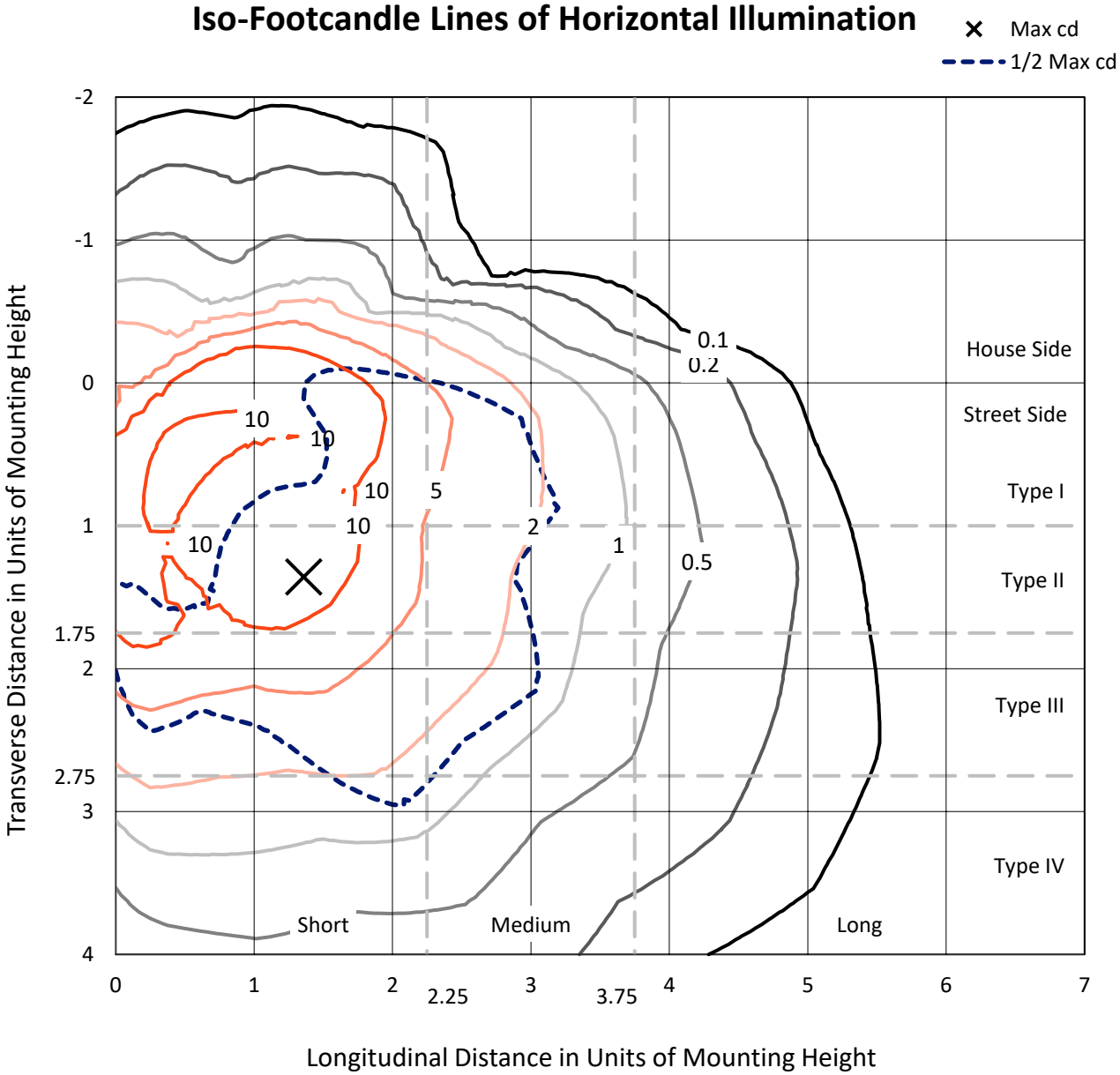
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 17.8 fc
Type IV - Short - N/A

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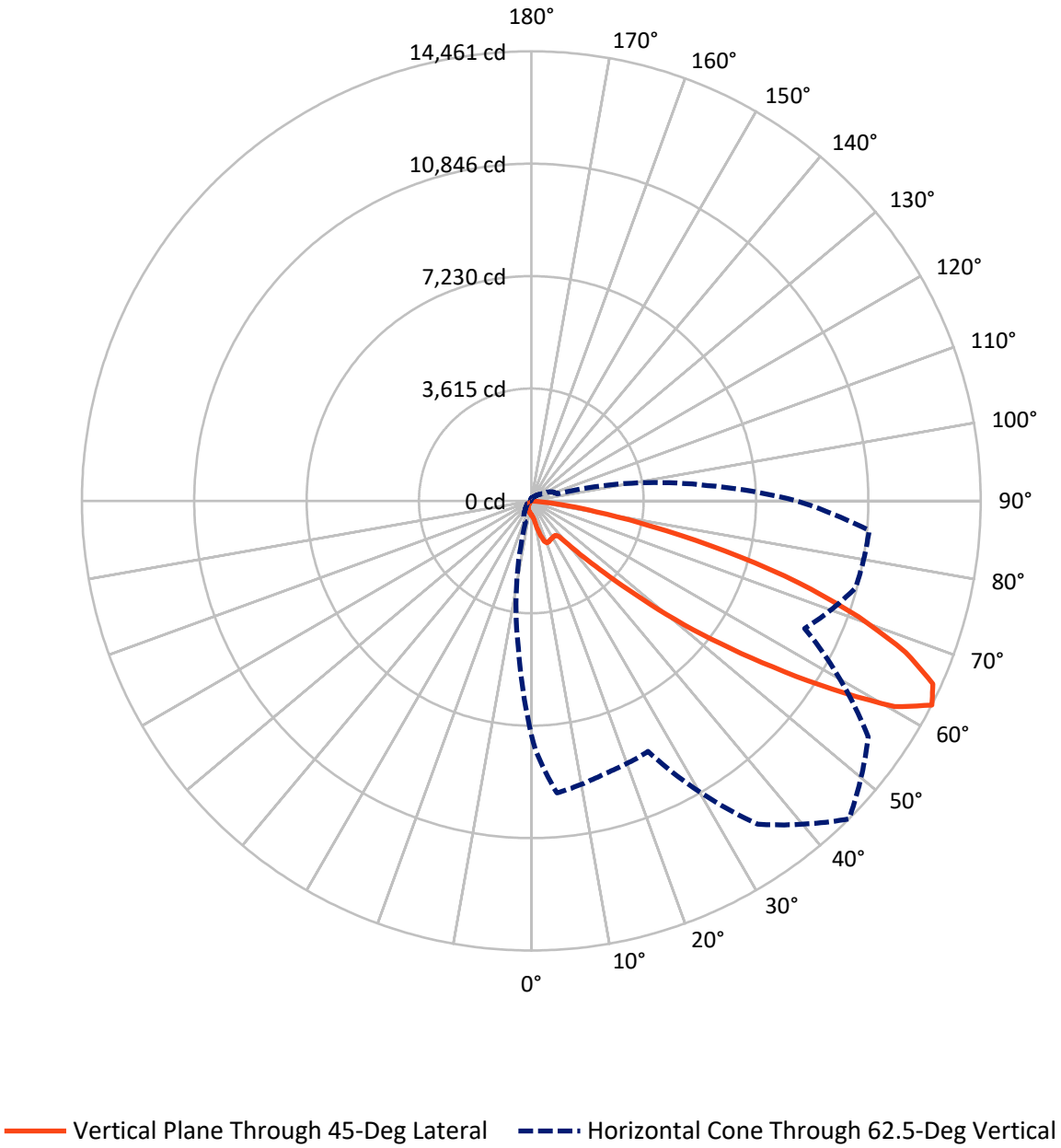
Luminous Intensity Polar Plot



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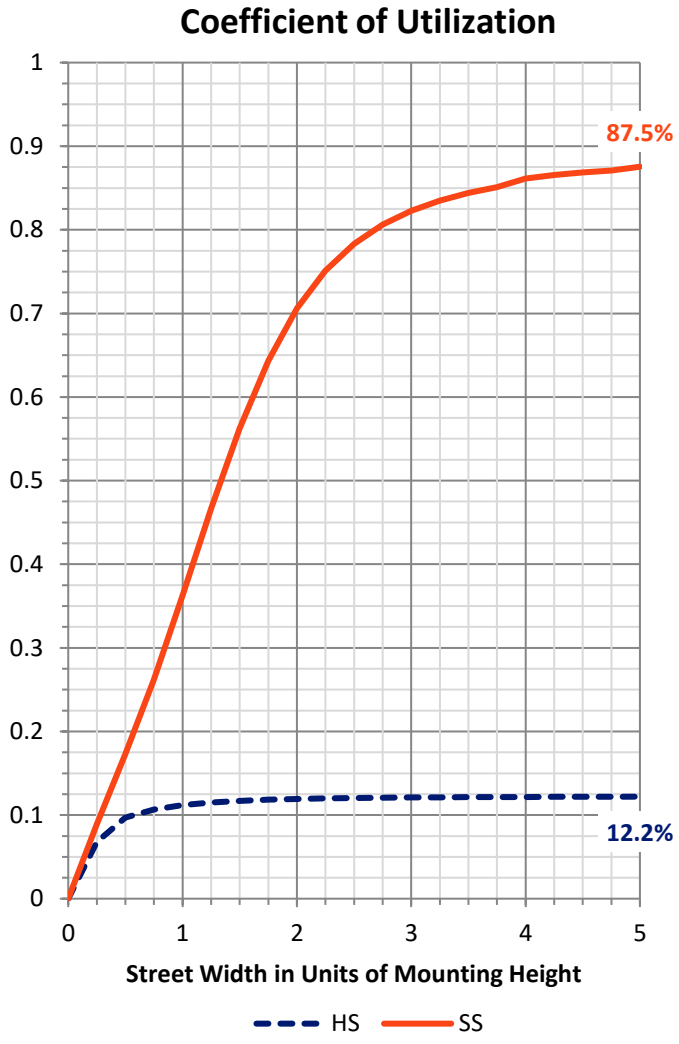
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1080.2	0.0	1080.2
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	7673.3	0.0	7673.3
	% Fixture	87.7	0.0	87.7
Total	Lumens	8753.5	0.0	8753.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	0.5
10°-20°	152.6	1.7
20°-30°	331.8	3.8
30°-40°	544.5	6.2
40°-50°	1001.0	11.4
50°-60°	2149.7	24.6
60°-70°	2887.4	33.0
70°-80°	1503.5	17.2
80°-90°	142.6	1.6
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°	8753.5	100.0
0°-180°	8753.5	100.0



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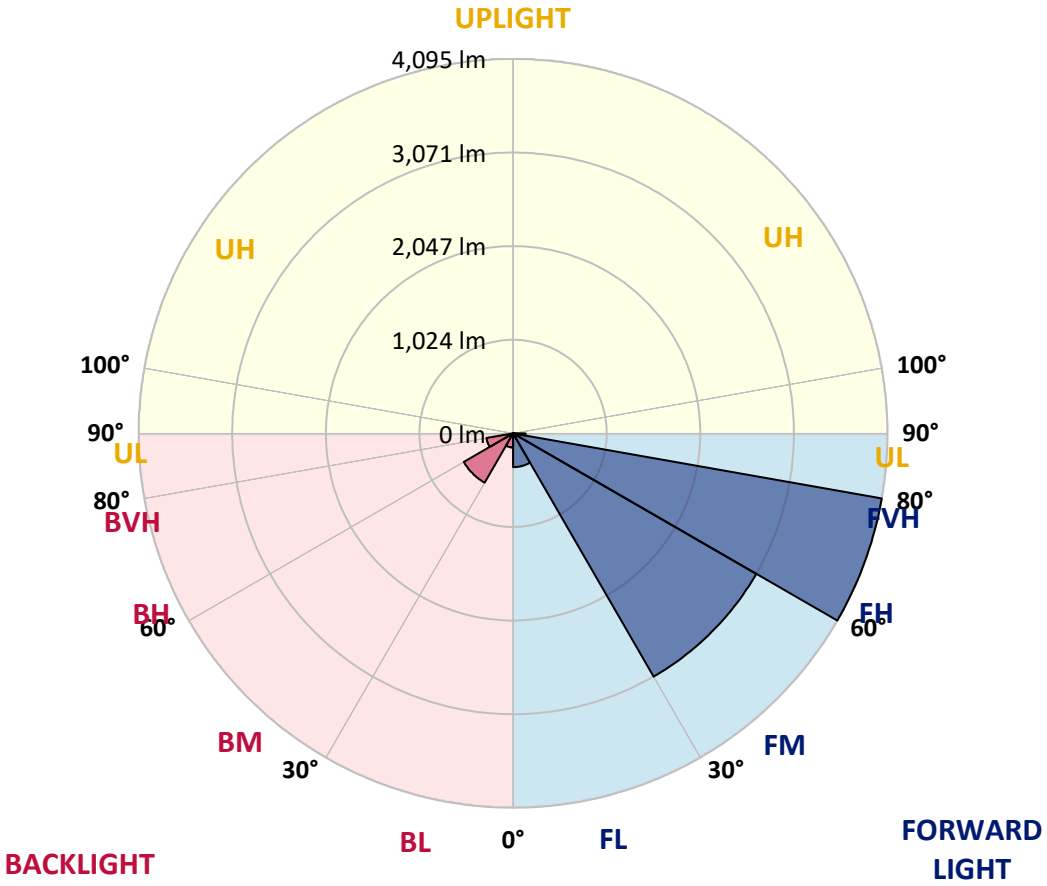
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	369.8	4.2			
FM	(30°-60°)	3072.4	35.1			
FH	(60°-80°)	4095.0	46.8			G2/5000
FVH	(80°-90°)	136.2	1.6			G2/225
BL	(0°-30°)	154.9	1.8	B1/500		
BM	(30°-60°)	622.9	7.1	B1/1000		
BH	(60°-80°)	296.0	3.4	B1/500		G1/500
BVH	(80°-90°)	6.4	0.1			G0/10
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°	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0
2.5°	464.1	466.1	468.1	475.2	480.3	484.3	485.3	482.3	475.2	468.1	458.0
5°	449.9	452.0	459.0	478.3	497.5	512.6	517.7	514.7	497.5	475.2	452.0
7.5°	448.9	453.0	470.2	510.6	552.1	583.4	591.5	584.4	552.1	507.6	460.1
10°	485.3	492.4	517.7	590.5	666.3	721.9	744.2	713.8	662.3	581.4	503.5
12.5°	580.4	592.5	641.0	747.2	864.5	938.3	968.6	931.2	850.3	733.1	609.7
15°	730.0	748.2	821.0	979.8	1118.3	1184.0	1194.1	1172.9	1078.9	949.4	783.6
17.5°	941.3	967.6	1080.9	1242.7	1342.8	1366.0	1363.0	1340.7	1272.0	1183.0	1026.3
20°	1194.1	1225.5	1336.7	1470.2	1480.3	1453.0	1437.8	1424.7	1401.4	1386.2	1263.9
22.5°	1448.9	1487.3	1603.6	1637.0	1546.0	1467.1	1429.7	1439.8	1474.2	1549.0	1499.5
25°	1702.7	1739.1	1848.3	1758.3	1576.3	1444.9	1397.4	1421.6	1503.5	1665.3	1729.0
27.5°	1999.0	2026.3	2091.0	1841.2	1581.4	1426.7	1380.2	1417.6	1517.7	1738.1	1980.8
30°	2307.3	2323.5	2292.2	1863.5	1564.2	1399.4	1363.0	1417.6	1541.9	1786.6	2169.8
32.5°	2533.8	2536.9	2434.7	1865.5	1555.1	1377.1	1346.8	1411.5	1565.2	1827.1	2352.8
35°	2767.4	2752.2	2571.2	1895.8	1579.4	1385.2	1358.9	1428.7	1601.6	1874.6	2513.6
37.5°	3004.0	2976.7	2723.9	1945.4	1642.0	1473.2	1457.0	1516.7	1660.2	1940.3	2690.6
40°	3246.7	3209.3	2882.7	2020.2	1781.6	1772.5	1828.1	1821.0	1821.0	2024.2	2872.6
42.5°	3542.9	3499.4	3117.2	2231.5	2107.1	2310.4	2462.0	2368.0	2194.1	2217.4	3109.2
45°	3934.2	3896.8	3523.7	2636.0	2617.8	3084.9	3289.1	3103.1	2670.3	2663.3	3504.5
47.5°	4560.1	4553.0	4171.8	3105.1	3242.6	4070.7	4465.1	4107.1	3213.3	3135.4	4252.7
50°	5439.8	5418.5	4979.7	3655.2	3985.8	5292.1	5995.9	5399.3	3869.5	3686.5	5254.7
52.5°	6430.6	6452.9	6111.1	4255.8	4775.5	6651.1	7630.8	6879.6	4582.3	4387.2	6515.6
55°	7363.9	7491.3	7401.3	4958.5	5546.9	8151.6	9426.6	8503.4	5465.0	5304.3	7929.1
57.5°	8093.9	8452.9	9083.8	5979.7	6453.9	9906.8	11431.6	10263.8	6495.4	6793.6	9853.3
60°	8134.4	8609.6	10074.7	8116.2	7620.7	11412.4	13433.6	11983.7	8115.2	9322.4	11360.8
62.5°	7524.7	8034.3	9429.6	9086.8	8891.7	12693.5	14460.9	13237.4	9708.7	10803.7	10913.9
65°	6827.0	7341.7	8709.7	7985.7	8744.1	12638.9	14200.0	13266.8	9853.3	9796.6	10114.1
67.5°	5772.4	6234.5	7473.1	7068.7	8059.5	12029.2	12994.8	12430.6	9077.7	9162.7	9304.2
70°	4213.3	4658.2	5807.8	5828.0	7038.3	10930.1	11165.7	11087.8	8359.8	8449.8	8045.4
72.5°	3043.4	3418.6	4410.5	4779.5	5618.7	9165.7	9002.9	9303.2	7172.8	7525.7	6462.0
75°	2188.0	2469.1	3235.5	4157.7	4453.9	6806.8	6444.8	7205.2	5755.2	6480.2	4858.4
77.5°	887.8	986.8	1273.0	2800.8	2927.2	4579.3	3945.3	5233.5	4103.1	4257.8	2354.9
80°	36.4	40.4	52.6	1445.9	2007.1	2576.3	2111.2	2797.7	2709.8	1714.8	556.1
82.5°	4.0	4.0	9.1	416.6	878.7	1421.6	994.9	1611.7	1372.1	727.0	252.8
85°	1.0	1.0	2.0	47.5	206.3	227.5	134.5	494.4	638.0	297.3	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	9.1	10.1	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°	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0
2.5°	458.0	453.0	446.9	440.8	437.8	429.7	426.7	424.7	422.6	423.7	423.7
5°	442.9	431.7	418.6	405.5	398.4	390.3	386.2	384.2	385.2	389.3	389.3
7.5°	440.8	419.6	391.3	374.1	366.0	360.0	355.9	353.9	354.9	360.0	362.0
10°	474.2	436.8	386.2	356.9	347.8	341.8	337.7	334.7	332.7	336.7	337.7
12.5°	546.0	494.4	410.5	354.9	338.7	330.6	327.6	321.5	318.5	320.5	321.5
15°	694.6	605.7	459.0	363.0	330.6	321.5	316.5	311.4	306.4	305.4	306.4
17.5°	888.8	761.4	532.9	382.2	324.6	313.4	306.4	299.3	292.2	291.2	290.2
20°	1129.4	952.5	636.0	412.5	319.5	306.4	296.3	286.1	277.0	274.0	274.0
22.5°	1348.8	1183.0	768.4	449.9	312.4	296.3	284.1	272.0	261.9	256.8	255.8
25°	1616.8	1427.7	927.2	493.4	302.3	283.1	270.0	257.8	247.7	241.7	239.6
27.5°	1886.7	1685.5	1107.2	550.0	290.2	270.0	257.8	246.7	235.6	228.5	226.5
30°	2148.6	1963.6	1309.4	620.8	281.1	256.8	246.7	235.6	225.5	214.4	211.3
32.5°	2429.7	2247.7	1535.9	699.7	274.0	247.7	236.6	226.5	213.3	203.2	198.2
35°	2700.7	2540.9	1785.6	776.5	266.9	239.6	227.5	217.4	203.2	192.1	185.0
37.5°	2973.7	2839.2	2046.5	823.0	256.8	228.5	217.4	209.3	193.1	180.0	171.9
40°	3262.8	3147.6	2328.6	803.8	247.7	216.4	210.3	201.2	183.0	167.8	157.7
42.5°	3580.3	3441.8	2615.7	730.0	239.6	206.3	200.2	191.1	173.9	155.7	142.6
45°	3979.7	3764.4	2851.3	618.8	243.7	196.2	184.0	182.0	165.8	142.6	126.4
47.5°	4666.3	4259.8	3034.3	547.0	271.0	185.0	170.9	175.9	158.7	129.4	111.2
50°	5716.8	5080.8	3205.2	542.0	312.4	180.0	158.7	171.9	151.7	116.3	98.1
52.5°	6717.8	5915.0	3314.4	586.4	348.8	193.1	146.6	166.8	146.6	107.2	89.0
55°	7675.3	6396.3	3119.3	618.8	383.2	232.6	137.5	158.7	140.5	102.1	85.9
57.5°	8707.7	6610.6	2456.0	684.5	407.5	265.9	139.5	146.6	132.5	99.1	84.9
60°	9016.1	6336.6	1482.3	770.5	394.3	276.0	154.7	130.4	121.3	93.0	81.9
62.5°	*8536.8*	*5686.5*	*874.6*	*701.7*	*383.2*	*260.9*	*176.9*	*120.3*	*110.2*	*84.9*	*75.8*
65°	7819.9	4803.8	570.3	592.5	406.5	232.6	188.1	115.3	100.1	76.8	66.7
67.5°	7000.9	3869.5	399.4	349.8	375.1	209.3	158.7	114.3	90.0	64.7	54.6
70°	5896.8	2897.8	281.1	231.5	312.4	186.0	123.4	111.2	78.9	52.6	42.5
72.5°	4556.1	1813.9	209.3	149.6	222.4	151.7	98.1	94.0	63.7	43.5	32.4
75°	3359.9	1034.4	147.6	108.2	146.6	115.3	72.8	66.7	54.6	41.5	29.3
77.5°	1754.3	517.7	92.0	82.9	83.9	71.8	52.6	48.5	50.6	41.5	27.3
80°	336.7	103.1	55.6	60.7	45.5	45.5	38.4	40.4	44.5	33.4	23.3
82.5°	140.5	22.2	30.3	34.4	28.3	31.3	31.3	32.4	31.3	24.3	17.2
85°	0.0	0.0	13.1	14.2	19.2	19.2	16.2	16.2	16.2	14.2	10.1
87.5°	0.0	0.0	0.0	0.0	1.0	3.0	6.1	7.1	8.1	6.1	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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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0
2.5°	422.6	420.6	423.7	425.7	427.7	427.7	425.7	423.7	420.6	423.7	420.6
5°	390.3	393.3	398.4	400.4	402.4	398.4	396.4	390.3	385.2	386.2	384.2
7.5°	365.0	368.0	374.1	378.2	378.2	376.1	370.1	364.0	355.9	355.9	354.9
10°	341.8	345.8	352.9	357.9	360.0	357.9	351.9	343.8	336.7	336.7	333.7
12.5°	322.5	327.6	335.7	342.8	344.8	342.8	336.7	328.6	320.5	320.5	318.5
15°	306.4	312.4	321.5	329.6	332.7	329.6	322.5	312.4	304.3	305.4	302.3
17.5°	291.2	296.3	308.4	317.5	320.5	317.5	308.4	295.2	287.2	289.2	287.2
20°	274.0	280.1	292.2	302.3	305.4	302.3	292.2	278.1	270.0	270.0	271.0
22.5°	255.8	261.9	274.0	281.1	285.1	282.1	272.0	258.8	250.8	250.8	251.8
25°	239.6	242.7	251.8	258.8	259.9	256.8	248.7	238.6	232.6	235.6	236.6
27.5°	224.5	224.5	228.5	232.6	231.5	228.5	225.5	217.4	216.4	219.4	222.4
30°	208.3	203.2	201.2	198.2	197.2	196.2	199.2	199.2	201.2	205.3	208.3
32.5°	194.1	184.0	174.9	165.8	160.8	164.8	172.9	180.0	187.1	193.1	196.2
35°	178.0	161.8	146.6	134.5	126.4	132.5	145.6	158.7	170.9	179.0	184.0
37.5°	161.8	138.5	120.3	105.2	99.1	104.1	118.3	136.5	154.7	164.8	171.9
40°	144.6	115.3	94.0	81.9	75.8	80.9	95.0	113.2	137.5	150.7	159.8
42.5°	127.4	95.0	75.8	63.7	60.7	63.7	74.8	93.0	119.3	135.5	147.6
45°	110.2	78.9	60.7	51.6	48.5	51.6	60.7	75.8	102.1	120.3	134.5
47.5°	95.0	66.7	50.6	42.5	40.4	43.5	50.6	63.7	85.9	104.1	120.3
50°	82.9	58.6	43.5	36.4	34.4	37.4	43.5	53.6	72.8	89.0	106.2
52.5°	74.8	54.6	38.4	31.3	30.3	32.4	37.4	45.5	61.7	75.8	92.0
55°	72.8	54.6	35.4	28.3	27.3	29.3	33.4	39.4	53.6	65.7	79.9
57.5°	74.8	58.6	33.4	24.3	23.3	25.3	29.3	34.4	46.5	56.6	69.8
60°	74.8	59.7	29.3	19.2	18.2	20.2	24.3	30.3	41.5	49.5	60.7
62.5°	*67.7*	*54.6*	*24.3*	*15.2*	*13.1*	*15.2*	*20.2*	*25.3*	*36.4*	*44.5*	*53.6*
65°	58.6	46.5	20.2	11.1	9.1	11.1	16.2	21.2	31.3	38.4	48.5
67.5°	47.5	35.4	15.2	8.1	6.1	8.1	12.1	17.2	26.3	33.4	43.5
70°	35.4	25.3	12.1	7.1	6.1	7.1	11.1	16.2	23.3	30.3	40.4
72.5°	26.3	17.2	10.1	7.1	5.1	7.1	10.1	15.2	22.2	29.3	38.4
75°	22.2	14.2	9.1	6.1	5.1	6.1	9.1	14.2	20.2	27.3	36.4
77.5°	21.2	13.1	8.1	5.1	4.0	5.1	8.1	12.1	18.2	25.3	35.4
80°	18.2	11.1	7.1	4.0	3.0	4.0	7.1	10.1	14.2	19.2	27.3
82.5°	14.2	9.1	5.1	2.0	1.0	2.0	5.1	6.1	9.1	11.1	16.2
85°	9.1	5.1	2.0	0.0	0.0	0.0	2.0	4.0	4.0	5.1	8.1
87.5°	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0
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: P639475
CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0	455.0
2.5°	426.7	427.7	429.7	432.8	439.8	445.9	452.0	460.1	464.1	464.1
5°	386.2	387.3	388.3	392.3	402.4	410.5	423.7	439.8	447.9	449.9
7.5°	354.9	356.9	358.9	362.0	372.1	383.2	400.4	430.7	445.9	448.9
10°	336.7	339.7	343.8	349.8	358.9	371.1	400.4	455.0	480.3	485.3
12.5°	322.5	327.6	331.6	338.7	349.8	369.1	427.7	523.8	568.2	580.4
15°	308.4	314.5	320.5	327.6	339.7	376.1	480.3	647.1	720.9	730.0
17.5°	294.2	301.3	309.4	317.5	332.7	393.3	563.2	818.0	921.1	941.3
20°	278.1	287.2	298.3	308.4	325.6	420.6	678.5	1021.2	1150.6	1194.1
22.5°	260.9	272.0	285.1	298.3	317.5	454.0	818.0	1239.6	1420.6	1448.9
25°	246.7	257.8	270.0	283.1	304.3	494.4	986.8	1510.6	1675.4	1702.7
27.5°	233.6	244.7	255.8	267.9	291.2	547.0	1190.1	1798.8	1970.7	1999.0
30°	219.4	232.6	243.7	255.8	279.1	611.7	1424.7	2118.3	2281.1	2307.3
32.5°	207.3	220.4	231.5	243.7	270.0	682.5	1671.4	2401.4	2533.8	2533.8
35°	197.2	211.3	219.4	235.6	262.9	728.0	1904.9	2671.3	2771.4	2767.4
37.5°	186.0	203.2	209.3	220.4	253.8	733.1	2124.3	2956.5	3030.3	3004.0
40°	174.9	193.1	202.2	208.3	243.7	691.6	2365.0	3218.4	3281.0	3246.7
42.5°	164.8	179.0	192.1	199.2	237.6	618.8	2558.1	3498.4	3573.3	3542.9
45°	154.7	166.8	174.9	188.1	241.7	568.2	2723.9	3825.0	3956.5	3934.2
47.5°	144.6	154.7	159.8	180.0	269.0	545.0	2825.0	4330.6	4578.3	4560.1
50°	133.5	145.6	145.6	178.0	309.4	553.1	2913.0	5062.6	5445.8	5439.8
52.5°	122.3	135.5	133.5	193.1	340.7	590.5	3013.1	5708.7	6375.0	6430.6
55°	111.2	123.4	125.4	223.5	358.9	622.8	2625.8	5980.7	7168.8	7363.9
57.5°	99.1	106.2	130.4	246.7	352.9	716.9	1798.8	6030.3	7675.3	8093.9
60°	85.9	92.0	147.6	241.7	333.7	662.3	1132.4	5585.4	7603.5	8134.4
62.5°	*74.8*	*84.9*	*155.7*	*213.3*	*339.7*	*574.3*	*721.9*	*4760.3*	*6919.0*	*7524.7*
65°	65.7	81.9	141.6	193.1	343.8	389.3	487.4	3872.5	6250.7	6827.0
67.5°	58.6	91.0	116.3	171.9	295.2	274.0	334.7	3009.1	5255.7	5772.4
70°	53.6	93.0	95.0	147.6	228.5	175.9	220.4	2025.3	3622.8	4213.3
72.5°	48.5	68.8	71.8	118.3	147.6	107.2	142.6	1158.7	2641.0	3043.4
75°	46.5	46.5	49.5	76.8	81.9	77.9	92.0	691.6	1893.8	2188.0
77.5°	43.5	35.4	31.3	49.5	44.5	55.6	54.6	307.4	821.0	887.8
80°	34.4	25.3	21.2	31.3	30.3	37.4	32.4	25.3	37.4	36.4
82.5°	21.2	16.2	15.2	19.2	17.2	19.2	15.2	4.0	4.0	4.0
85°	10.1	9.1	8.1	8.1	9.1	8.1	6.1	2.0	1.0	1.0
87.5°	5.1	5.1	4.0	3.0	4.0	4.0	3.0	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

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

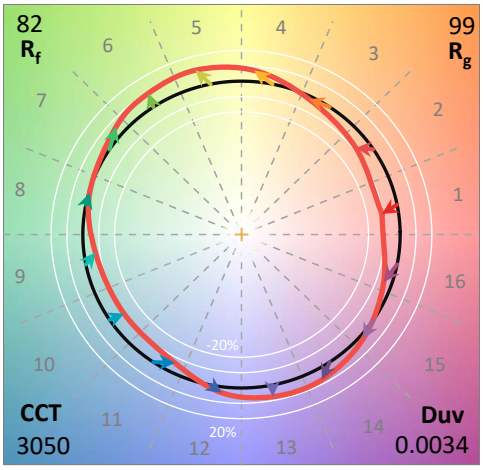
Test Information

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

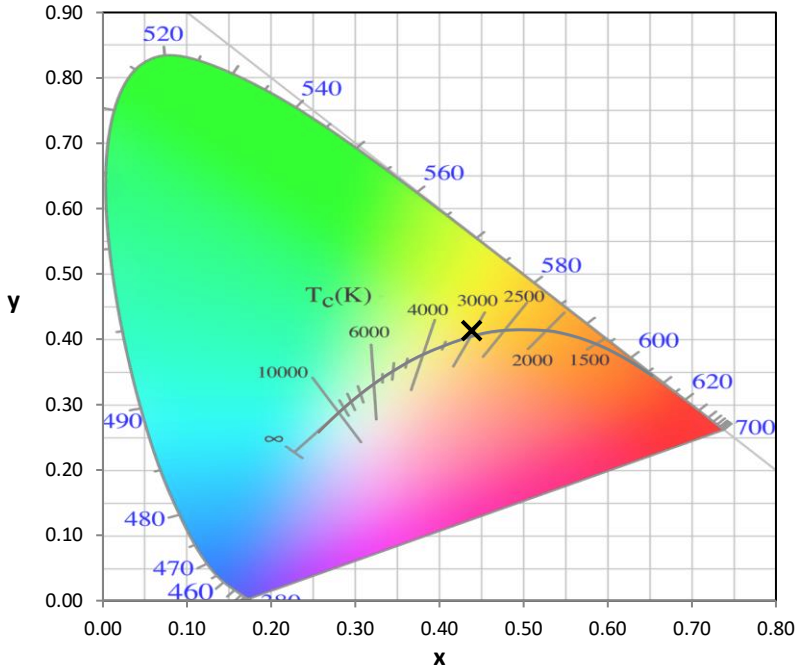
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

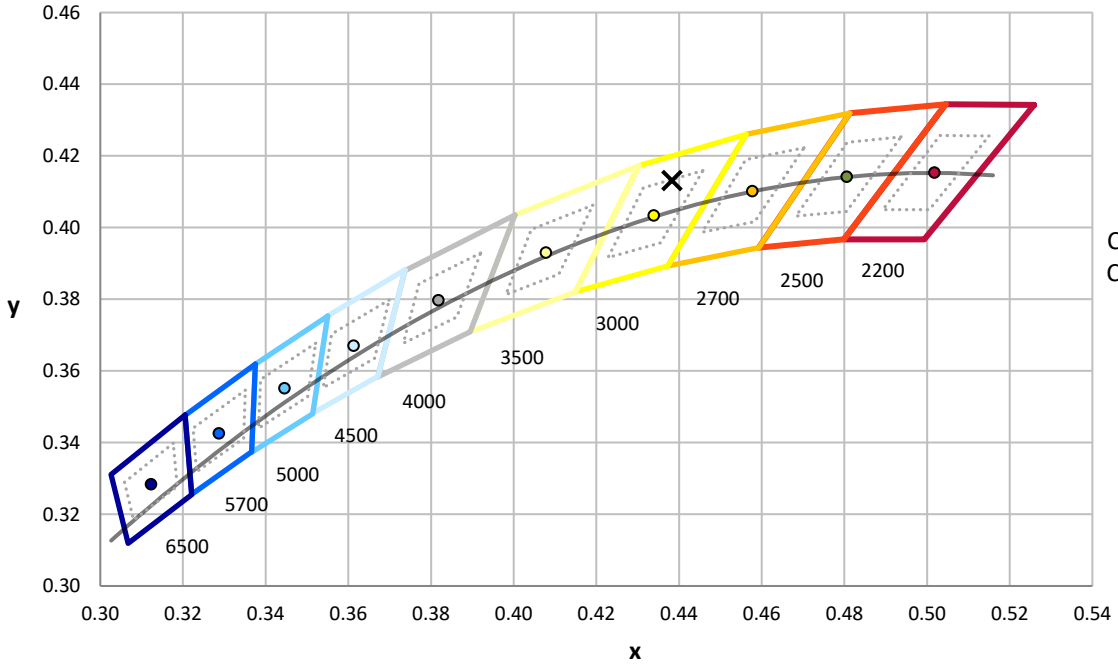
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

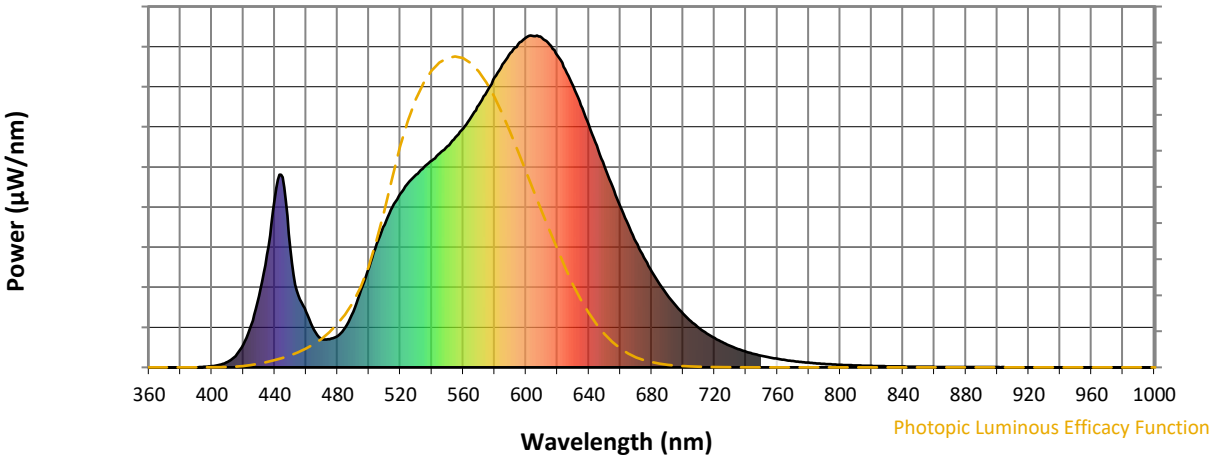


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

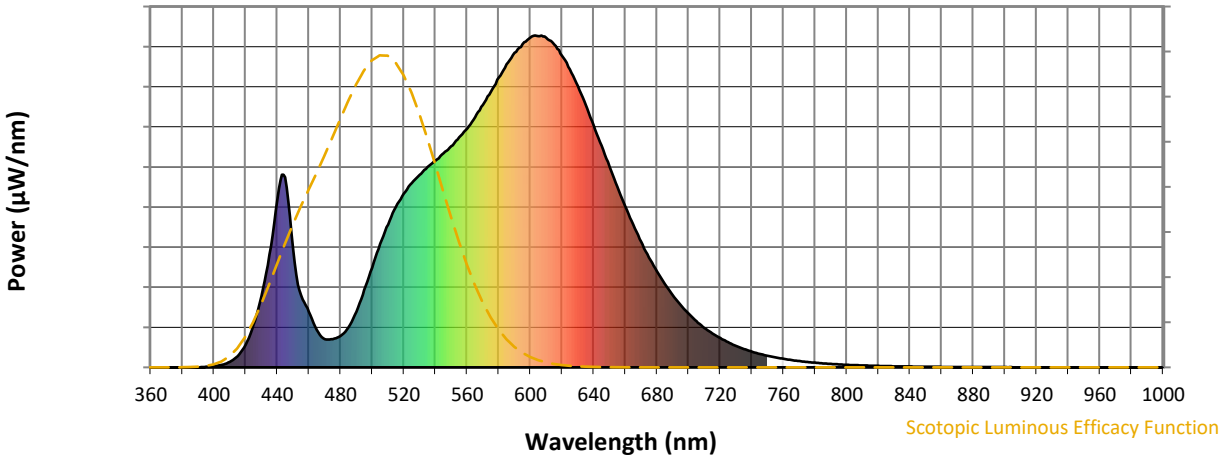


Photopic Lumens: NR

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

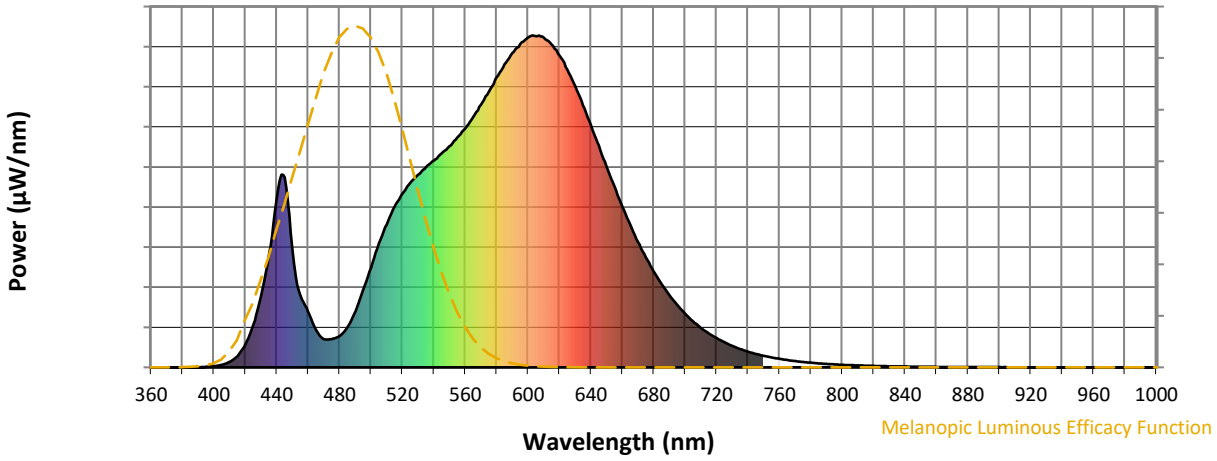


Scotopic Lumens: NR **S/P: 1.27**

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			

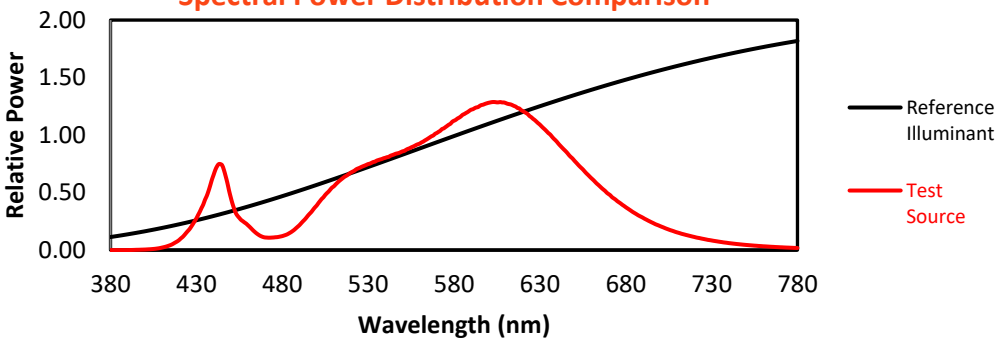
REPORT NUMBER: SP1-2408-195-9

TM-30-18

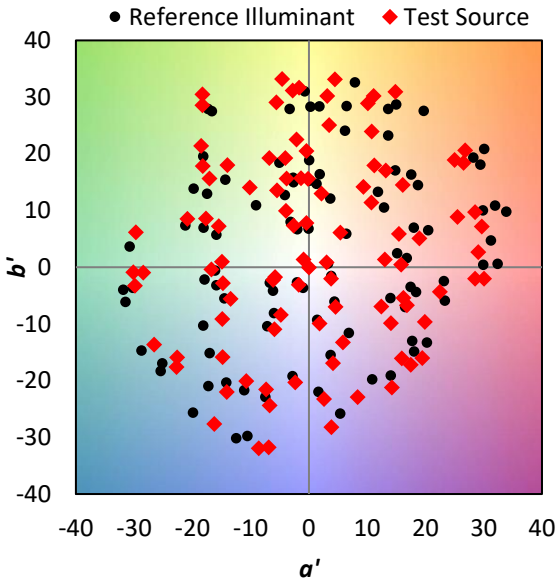
Summary

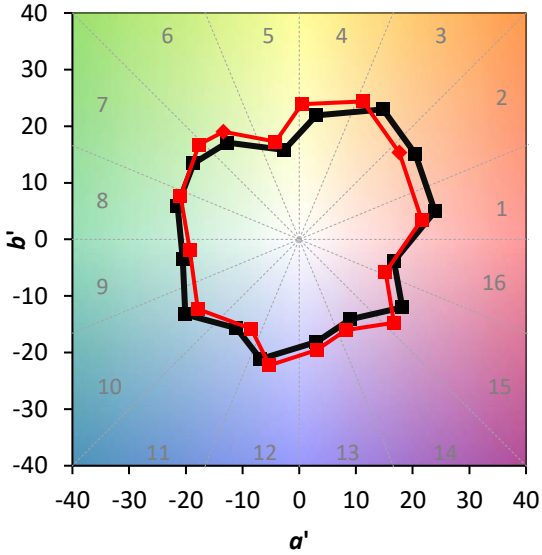
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

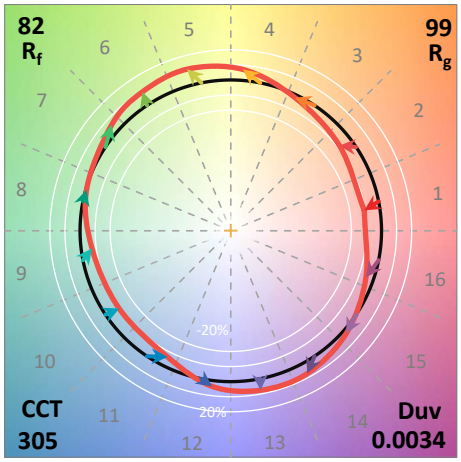
Spectral Power Distribution Comparison

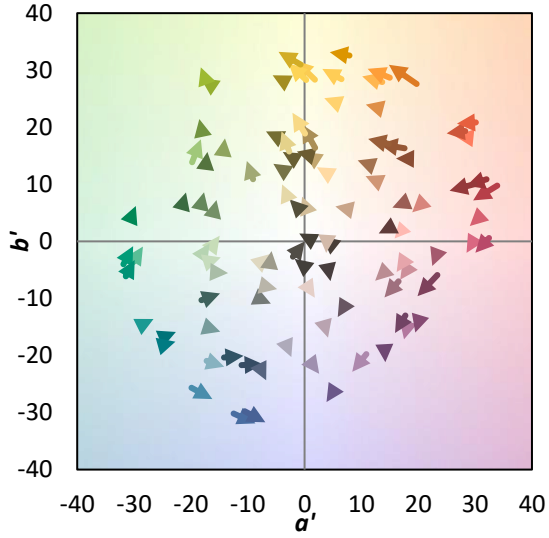


Color Vector Graphics







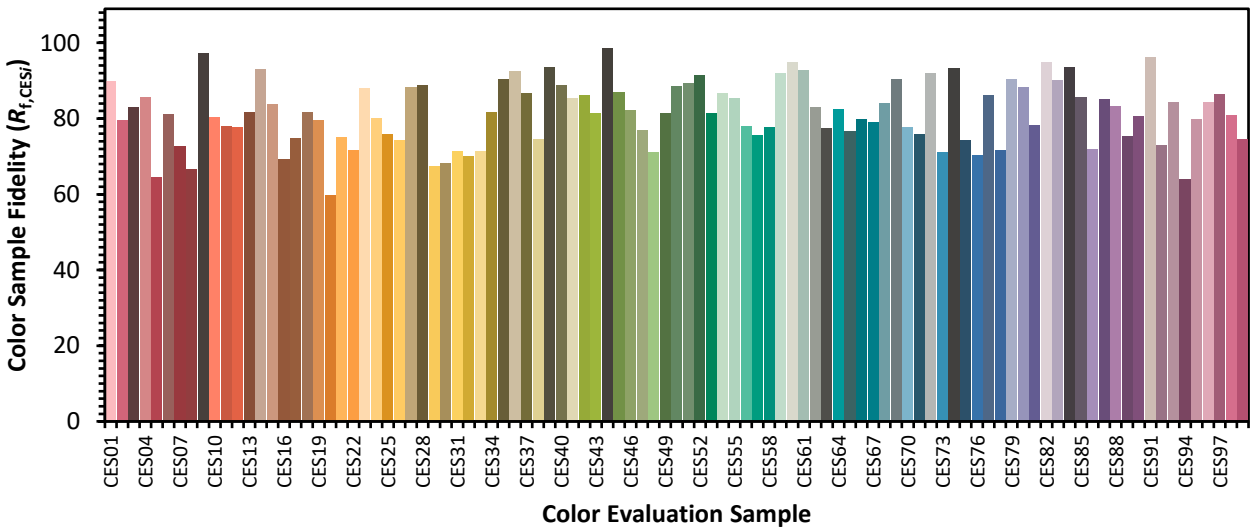


REPORT NUMBER: SP1-2408-195-9

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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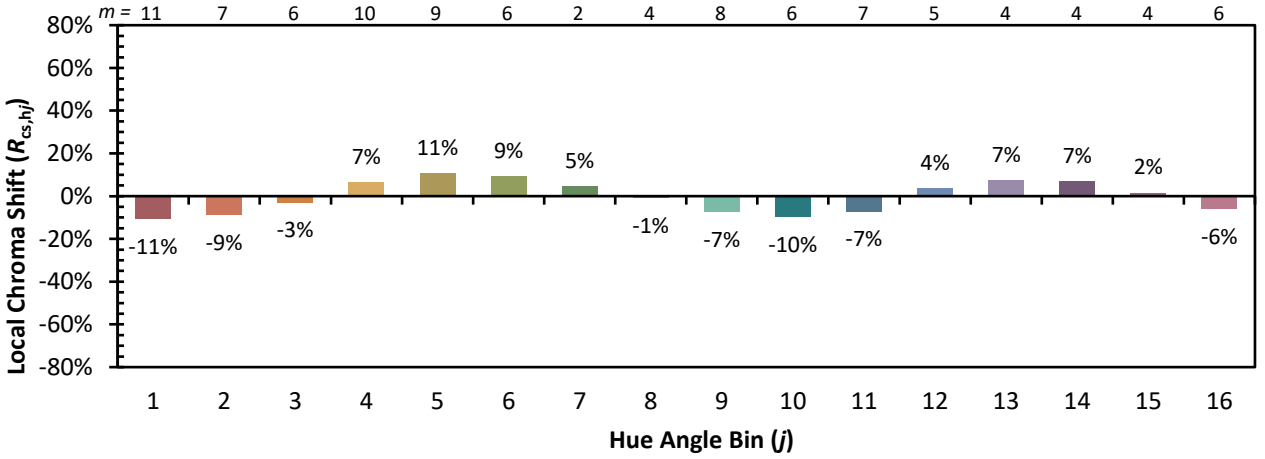
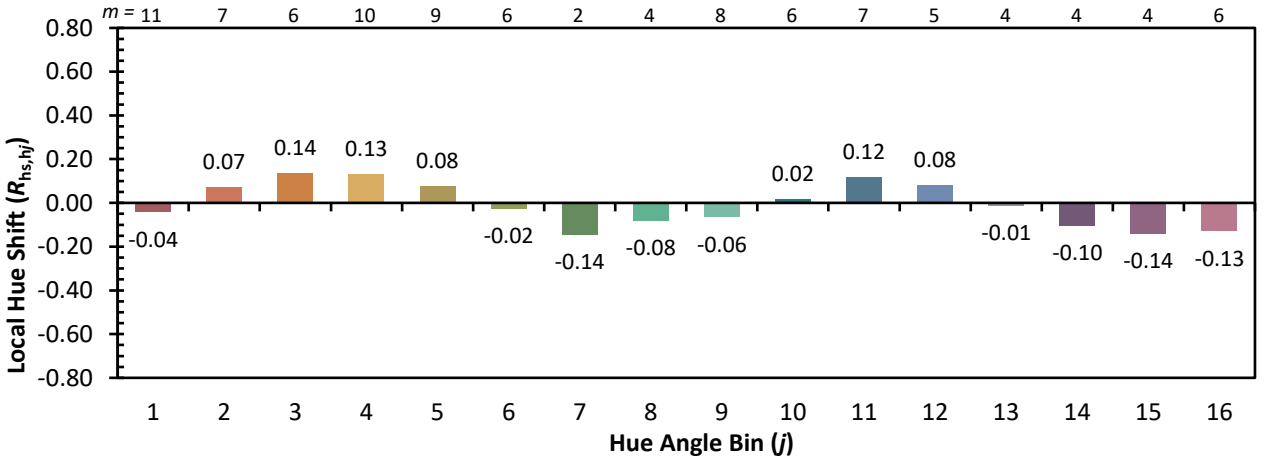
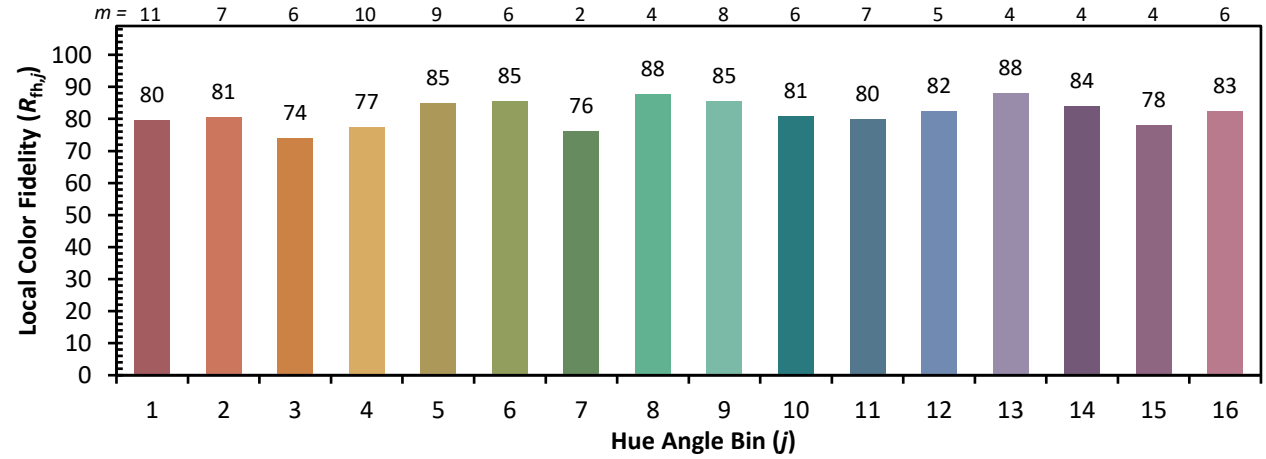
Color Rendition by Hue-Angle Bin







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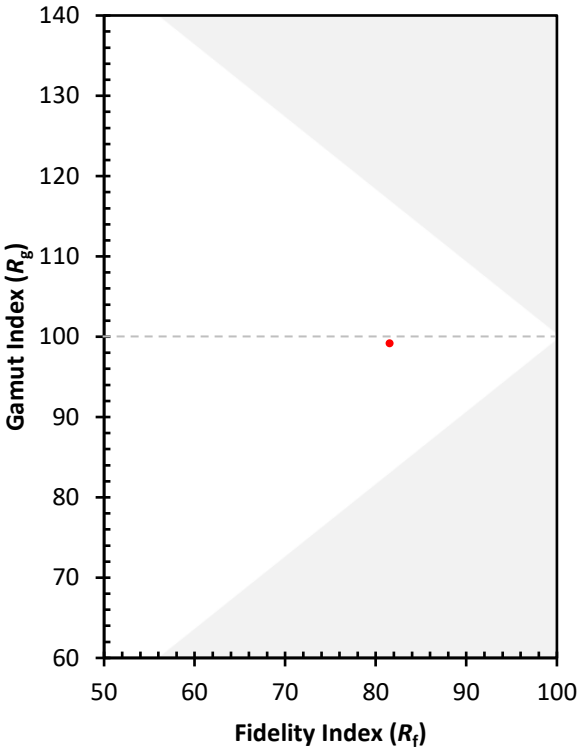
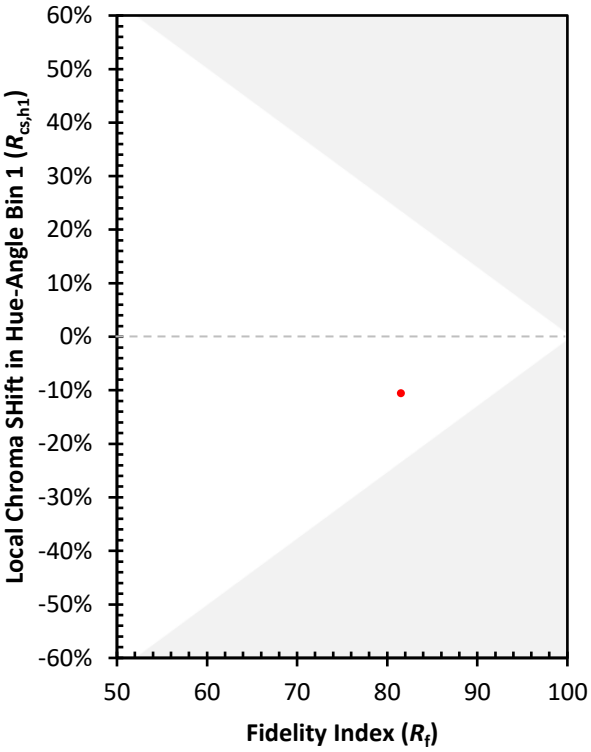
Measure Comparisons





(END OF REPORT)