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: P630565

Luminaire Tested: GWS-SA1D-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:	P630565
	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-SA1D-830-U-SLR-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2989.4 lumens
Efficiency:	N/A
Efficacy:	67.5 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):	44.3
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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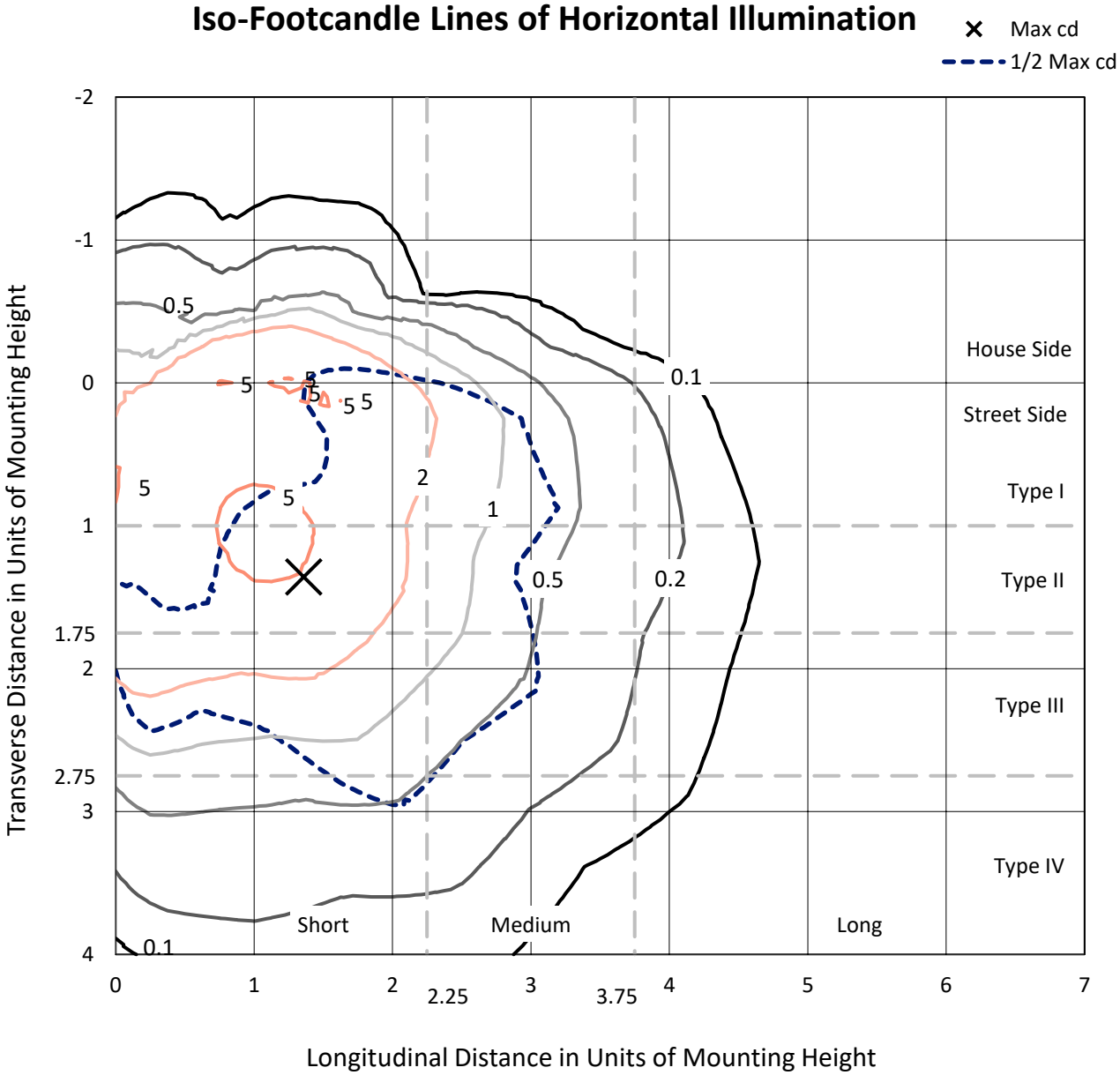
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
Type IV - Short - N/A

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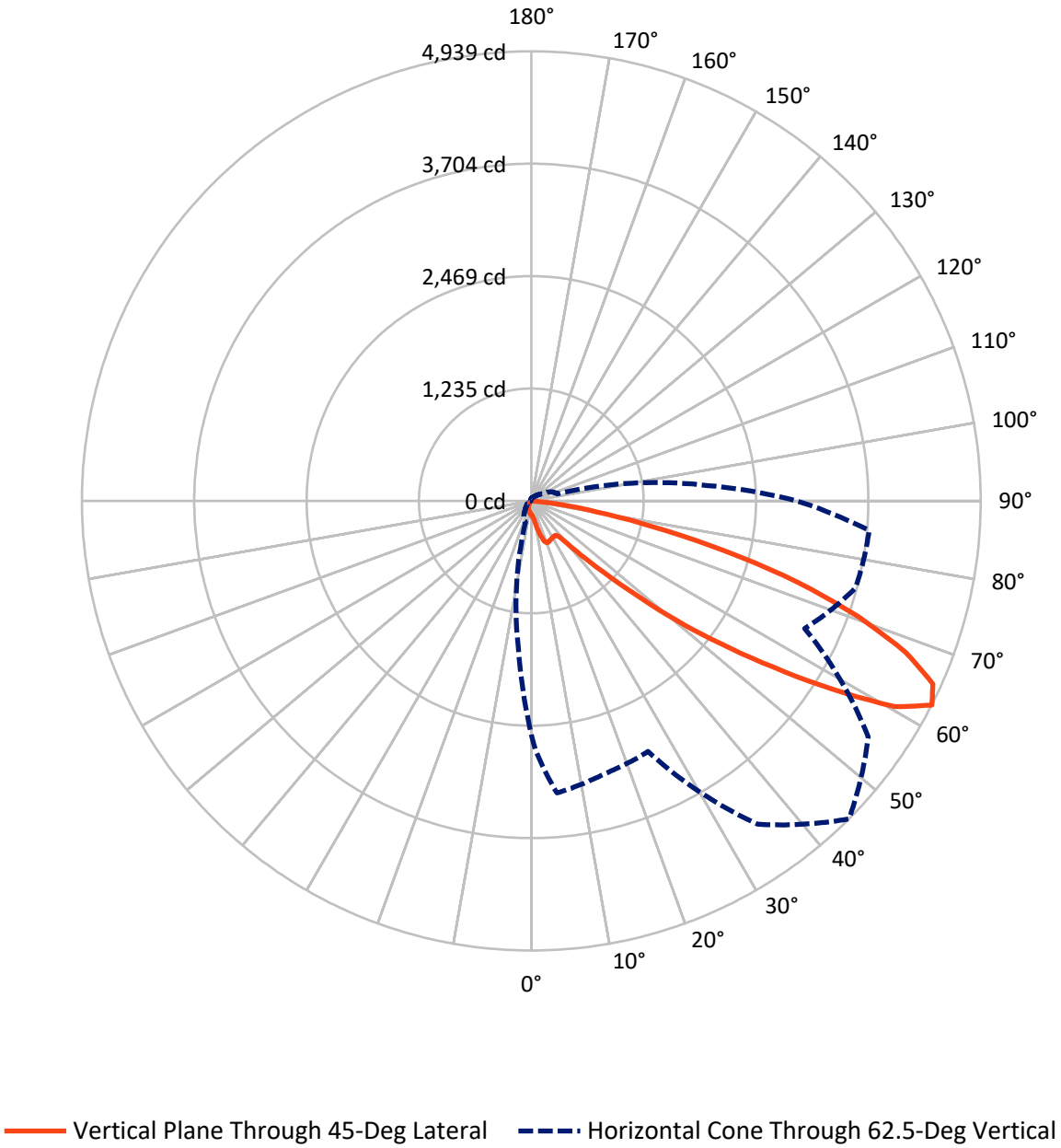
Luminous Intensity Polar Plot



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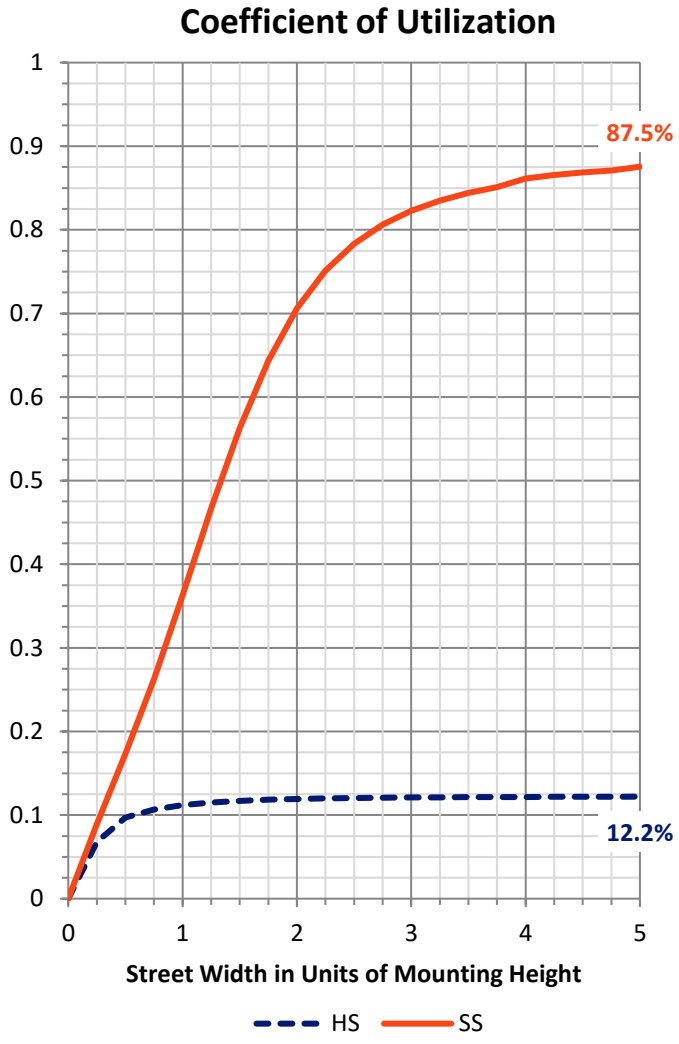
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	368.9	0.0	368.9
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	2620.5	0.0	2620.5
	% Fixture	87.7	0.0	87.7
Total	Lumens	2989.4	0.0	2989.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.8	0.5
10°-20°	52.1	1.7
20°-30°	113.3	3.8
30°-40°	186.0	6.2
40°-50°	341.9	11.4
50°-60°	734.2	24.6
60°-70°	986.1	33.0
70°-80°	513.5	17.2
80°-90°	48.7	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°	2989.4	100.0
0°-180°	2989.4	100.0



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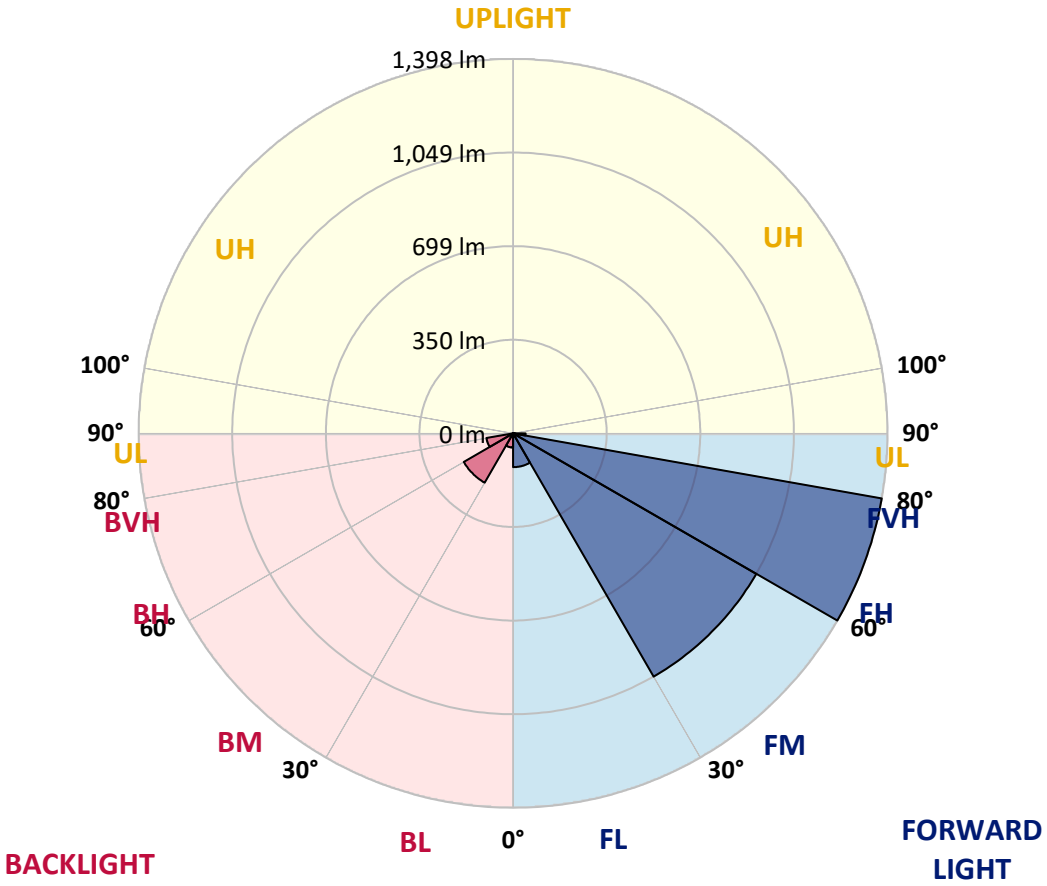
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	126.3	4.2			
FM	(30°-60°)	1049.2	35.1			
FH	(60°-80°)	1398.5	46.8			G1/1800
FVH	(80°-90°)	46.5	1.6			G1/100
BL	(0°-30°)	52.9	1.8	B0/110		
BM	(30°-60°)	212.7	7.1	B0/220		
BH	(60°-80°)	101.1	3.4	B0/110		G0/110
BVH	(80°-90°)	2.2	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°	155.4	155.4	155.4	155.4	155.4	155.4	*155.4*	155.4	155.4	155.4	155.4
2.5°	158.5	159.2	159.9	162.3	164.0	165.4	*165.7*	164.7	162.3	159.9	156.4
5°	153.7	154.4	156.8	163.3	169.9	175.1	*176.8*	175.8	169.9	162.3	154.4
7.5°	153.3	154.7	160.6	174.4	188.5	199.2	*202.0*	199.6	188.5	173.3	157.1
10°	165.7	168.2	176.8	201.7	227.6	246.5	*254.1*	243.8	226.2	198.5	172.0
12.5°	198.2	202.3	218.9	255.2	295.2	320.4	*330.8*	318.0	290.4	250.3	208.2
15°	249.3	255.5	280.4	334.6	381.9	404.3	*407.8*	400.6	368.4	324.2	267.6
17.5°	321.5	330.5	369.1	424.4	458.6	466.5	*465.5*	457.9	434.4	404.0	350.5
20°	407.8	418.5	456.5	502.1	505.5	496.2	*491.0*	486.5	478.6	473.4	431.6
22.5°	494.8	507.9	547.7	559.0	528.0	501.0	*488.3*	491.7	503.5	529.0	512.1
25°	581.5	593.9	631.2	600.5	538.3	493.4	*477.2*	485.5	513.5	568.7	590.5
27.5°	682.7	692.0	714.1	628.8	540.1	487.2	*471.3*	484.1	518.3	593.6	676.4
30°	788.0	793.5	782.8	636.4	534.2	477.9	*465.5*	484.1	526.6	610.1	741.0
32.5°	865.3	866.4	831.5	637.1	531.1	470.3	*459.9*	482.0	534.5	624.0	803.5
35°	945.1	939.9	878.1	647.4	539.4	473.1	*464.1*	487.9	547.0	640.2	858.4
37.5°	1025.9	1016.6	930.2	664.4	560.8	503.1	*497.6*	518.0	567.0	662.6	918.9
40°	1108.8	1096.0	984.5	689.9	608.4	605.3	*624.3*	621.9	621.9	691.3	981.0
42.5°	1209.9	1195.1	1064.6	762.1	719.6	789.0	*840.8*	808.7	749.3	757.2	1061.8
45°	1343.6	1330.8	1203.4	900.2	894.0	1053.5	*1123.3*	1059.7	911.9	909.5	1196.8
47.5°	1557.3	1554.9	1424.7	1060.4	1107.4	1390.2	*1524.9*	1402.6	1097.4	1070.8	1452.3
50°	1857.7	1850.5	1700.6	1248.3	1361.2	1807.3	*2047.6*	1843.9	1321.5	1259.0	1794.5
52.5°	2196.1	2203.7	2087.0	1453.4	1630.9	2271.4	*2606.0*	2349.4	1564.9	1498.3	2225.1
55°	2514.8	2558.3	2527.6	1693.4	1894.3	2783.8	*3219.3*	2904.0	1866.4	1811.5	2707.9
57.5°	2764.1	2886.7	3102.2	2042.1	2204.1	3383.3	*3904.0*	3505.2	2218.2	2320.1	3365.0
60°	2778.0	2940.3	3440.6	2771.7	2602.5	3897.4	*4587.7*	4092.5	2771.4	3183.7	3879.8
62.5°	*2569.7*	*2743.8*	*3220.3*	*3103.2*	*3036.6*	*4334.9*	*4938.5*	*4520.7*	*3315.6*	*3689.6*	*3727.2*
65°	2331.5	2507.2	2974.4	2727.2	2986.2	4316.3	*4849.4*	4530.7	3365.0	3345.6	3454.1
67.5°	1971.3	2129.1	2552.1	2414.0	2752.4	4108.1	*4437.8*	4245.2	3100.1	3129.1	3177.5
70°	1438.9	1590.8	1983.4	1990.3	2403.7	3732.7	*3813.2*	3786.6	2855.0	2885.7	2747.6
72.5°	1039.4	1167.5	1506.2	1632.2	1918.8	3130.2	*3074.6*	3177.1	2449.6	2570.1	2206.8
75°	747.2	843.2	1105.0	1419.9	1521.1	2324.6	*2201.0*	2460.6	1965.5	2213.0	1659.2
77.5°	303.2	337.0	434.7	956.5	999.7	1563.9	*1347.4*	1787.3	1401.2	1454.1	804.2
80°	12.4	13.8	18.0	493.8	685.4	879.8	*721.0*	955.5	925.4	585.6	189.9
82.5°	1.4	1.4	3.1	142.3	300.1	485.5	*339.8*	550.4	468.6	248.3	86.3
85°	0.3	0.3	0.7	16.2	70.4	77.7	*45.9*	168.9	217.9	101.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	1.7	3.1	3.5	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°	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4
2.5°	156.4	154.7	152.6	150.6	149.5	146.8	145.7	145.0	144.3	144.7	144.7
5°	151.2	147.4	143.0	138.5	136.0	133.3	131.9	131.2	131.6	132.9	132.9
7.5°	150.6	143.3	133.6	127.8	125.0	122.9	121.5	120.9	121.2	122.9	123.6
10°	161.9	149.2	131.9	121.9	118.8	116.7	115.3	114.3	113.6	115.0	115.3
12.5°	186.5	168.9	140.2	121.2	115.7	112.9	111.9	109.8	108.8	109.5	109.8
15°	237.2	206.8	156.8	124.0	112.9	109.8	108.1	106.4	104.6	104.3	104.6
17.5°	303.5	260.0	182.0	130.5	110.8	107.0	104.6	102.2	99.8	99.4	99.1
20°	385.7	325.3	217.2	140.9	109.1	104.6	101.2	97.7	94.6	93.6	93.6
22.5°	460.6	404.0	262.4	153.7	106.7	101.2	97.0	92.9	89.4	87.7	87.4
25°	552.1	487.6	316.6	168.5	103.2	96.7	92.2	88.1	84.6	82.5	81.8
27.5°	644.3	575.6	378.1	187.8	99.1	92.2	88.1	84.3	80.5	78.0	77.3
30°	733.8	670.6	447.2	212.0	96.0	87.7	84.3	80.5	77.0	73.2	72.2
32.5°	829.8	767.6	524.5	238.9	93.6	84.6	80.8	77.3	72.9	69.4	67.7
35°	922.3	867.7	609.8	265.2	91.2	81.8	77.7	74.2	69.4	65.6	63.2
37.5°	1015.5	969.6	698.9	281.1	87.7	78.0	74.2	71.5	66.0	61.5	58.7
40°	1114.3	1074.9	795.2	274.5	84.6	73.9	71.8	68.7	62.5	57.3	53.9
42.5°	1222.7	1175.4	893.3	249.3	81.8	70.4	68.4	65.3	59.4	53.2	48.7
45°	1359.1	1285.6	973.8	211.3	83.2	67.0	62.8	62.2	56.6	48.7	43.2
47.5°	1593.6	1454.8	1036.3	186.8	92.5	63.2	58.4	60.1	54.2	44.2	38.0
50°	1952.3	1735.1	1094.6	185.1	106.7	61.5	54.2	58.7	51.8	39.7	33.5
52.5°	2294.2	2020.0	1131.9	200.3	119.1	66.0	50.1	57.0	50.1	36.6	30.4
55°	2621.2	2184.4	1065.3	211.3	130.9	79.4	47.0	54.2	48.0	34.9	29.4
57.5°	2973.7	2257.6	838.7	233.8	139.2	90.8	47.7	50.1	45.2	33.8	29.0
60°	3079.1	2164.0	506.2	263.1	134.7	94.3	52.8	44.5	41.4	31.8	28.0
62.5°	*2915.4*	*1942.0*	*298.7*	*239.6*	*130.9*	*89.1*	*60.4*	*41.1*	*37.6*	*29.0*	*25.9*
65°	2670.6	1640.5	194.8	202.3	138.8	79.4	64.2	39.4	34.2	26.2	22.8
67.5°	2390.9	1321.5	136.4	119.5	128.1	71.5	54.2	39.0	30.7	22.1	18.6
70°	2013.8	989.6	96.0	79.1	106.7	63.5	42.1	38.0	26.9	18.0	14.5
72.5°	1555.9	619.5	71.5	51.1	76.0	51.8	33.5	32.1	21.8	14.8	11.0
75°	1147.4	353.2	50.4	36.9	50.1	39.4	24.9	22.8	18.6	14.2	10.0
77.5°	599.1	176.8	31.4	28.3	28.7	24.5	18.0	16.6	17.3	14.2	9.3
80°	115.0	35.2	19.0	20.7	15.5	15.5	13.1	13.8	15.2	11.4	7.9
82.5°	48.0	7.6	10.4	11.7	9.7	10.7	10.7	11.0	10.7	8.3	5.9
85°	0.0	0.0	4.5	4.8	6.6	6.6	5.5	5.5	5.5	4.8	3.5
87.5°	0.0	0.0	0.0	0.0	0.3	1.0	2.1	2.4	2.8	2.1	1.4
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°	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4
2.5°	144.3	143.6	144.7	145.4	146.1	146.1	145.4	144.7	143.6	144.7	143.6
5°	133.3	134.3	136.0	136.7	137.4	136.0	135.4	133.3	131.6	131.9	131.2
7.5°	124.7	125.7	127.8	129.1	129.1	128.5	126.4	124.3	121.5	121.5	121.2
10°	116.7	118.1	120.5	122.2	122.9	122.2	120.2	117.4	115.0	115.0	113.9
12.5°	110.2	111.9	114.6	117.1	117.7	117.1	115.0	112.2	109.5	109.5	108.8
15°	104.6	106.7	109.8	112.6	113.6	112.6	110.2	106.7	103.9	104.3	103.2
17.5°	99.4	101.2	105.3	108.4	109.5	108.4	105.3	100.8	98.1	98.8	98.1
20°	93.6	95.6	99.8	103.2	104.3	103.2	99.8	95.0	92.2	92.2	92.5
22.5°	87.4	89.4	93.6	96.0	97.4	96.3	92.9	88.4	85.6	85.6	86.0
25°	81.8	82.9	86.0	88.4	88.7	87.7	84.9	81.5	79.4	80.5	80.8
27.5°	76.7	76.7	78.0	79.4	79.1	78.0	77.0	74.2	73.9	74.9	76.0
30°	71.1	69.4	68.7	67.7	67.3	67.0	68.0	68.0	68.7	70.1	71.1
32.5°	66.3	62.8	59.7	56.6	54.9	56.3	59.0	61.5	63.9	66.0	67.0
35°	60.8	55.2	50.1	45.9	43.2	45.2	49.7	54.2	58.4	61.1	62.8
37.5°	55.2	47.3	41.1	35.9	33.8	35.6	40.4	46.6	52.8	56.3	58.7
40°	49.4	39.4	32.1	28.0	25.9	27.6	32.5	38.7	47.0	51.5	54.6
42.5°	43.5	32.5	25.9	21.8	20.7	21.8	25.6	31.8	40.7	46.3	50.4
45°	37.6	26.9	20.7	17.6	16.6	17.6	20.7	25.9	34.9	41.1	45.9
47.5°	32.5	22.8	17.3	14.5	13.8	14.8	17.3	21.8	29.4	35.6	41.1
50°	28.3	20.0	14.8	12.4	11.7	12.8	14.8	18.3	24.9	30.4	36.3
52.5°	25.6	18.6	13.1	10.7	10.4	11.0	12.8	15.5	21.1	25.9	31.4
55°	24.9	18.6	12.1	9.7	9.3	10.0	11.4	13.5	18.3	22.4	27.3
57.5°	25.6	20.0	11.4	8.3	7.9	8.6	10.0	11.7	15.9	19.3	23.8
60°	25.6	20.4	10.0	6.6	6.2	6.9	8.3	10.4	14.2	16.9	20.7
62.5°	*23.1*	*18.6*	*8.3*	*5.2*	*4.5*	*5.2*	*6.9*	*8.6*	*12.4*	*15.2*	*18.3*
65°	20.0	15.9	6.9	3.8	3.1	3.8	5.5	7.3	10.7	13.1	16.6
67.5°	16.2	12.1	5.2	2.8	2.1	2.8	4.1	5.9	9.0	11.4	14.8
70°	12.1	8.6	4.1	2.4	2.1	2.4	3.8	5.5	7.9	10.4	13.8
72.5°	9.0	5.9	3.5	2.4	1.7	2.4	3.5	5.2	7.6	10.0	13.1
75°	7.6	4.8	3.1	2.1	1.7	2.1	3.1	4.8	6.9	9.3	12.4
77.5°	7.3	4.5	2.8	1.7	1.4	1.7	2.8	4.1	6.2	8.6	12.1
80°	6.2	3.8	2.4	1.4	1.0	1.4	2.4	3.5	4.8	6.6	9.3
82.5°	4.8	3.1	1.7	0.7	0.3	0.7	1.7	2.1	3.1	3.8	5.5
85°	3.1	1.7	0.7	0.0	0.0	0.0	0.7	1.4	1.4	1.7	2.8
87.5°	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.0
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: P630565
CATALOG NUMBER: GWS-SA1D-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4
2.5°	145.7	146.1	146.8	147.8	150.2	152.3	154.4	157.1	158.5	158.5
5°	131.9	132.3	132.6	134.0	137.4	140.2	144.7	150.2	153.0	153.7
7.5°	121.2	121.9	122.6	123.6	127.1	130.9	136.7	147.1	152.3	153.3
10°	115.0	116.0	117.4	119.5	122.6	126.7	136.7	155.4	164.0	165.7
12.5°	110.2	111.9	113.3	115.7	119.5	126.0	146.1	178.9	194.1	198.2
15°	105.3	107.4	109.5	111.9	116.0	128.5	164.0	221.0	246.2	249.3
17.5°	100.5	102.9	105.7	108.4	113.6	134.3	192.3	279.3	314.6	321.5
20°	95.0	98.1	101.9	105.3	111.2	143.6	231.7	348.8	393.0	407.8
22.5°	89.1	92.9	97.4	101.9	108.4	155.0	279.3	423.3	485.2	494.8
25°	84.3	88.1	92.2	96.7	103.9	168.9	337.0	515.9	572.2	581.5
27.5°	79.8	83.6	87.4	91.5	99.4	186.8	406.4	614.3	673.0	682.7
30°	74.9	79.4	83.2	87.4	95.3	208.9	486.5	723.4	779.0	788.0
32.5°	70.8	75.3	79.1	83.2	92.2	233.1	570.8	820.1	865.3	865.3
35°	67.3	72.2	74.9	80.5	89.8	248.6	650.6	912.3	946.5	945.1
37.5°	63.5	69.4	71.5	75.3	86.7	250.3	725.5	1009.7	1034.9	1025.9
40°	59.7	66.0	69.1	71.1	83.2	236.2	807.7	1099.1	1120.5	1108.8
42.5°	56.3	61.1	65.6	68.0	81.1	211.3	873.6	1194.7	1220.3	1209.9
45°	52.8	57.0	59.7	64.2	82.5	194.1	930.2	1306.3	1351.2	1343.6
47.5°	49.4	52.8	54.6	61.5	91.9	186.1	964.8	1478.9	1563.5	1557.3
50°	45.6	49.7	49.7	60.8	105.7	188.9	994.8	1728.9	1859.8	1857.7
52.5°	41.8	46.3	45.6	66.0	116.4	201.7	1029.0	1949.6	2177.1	2196.1
55°	38.0	42.1	42.8	76.3	122.6	212.7	896.8	2042.5	2448.2	2514.8
57.5°	33.8	36.3	44.5	84.3	120.5	244.8	614.3	2059.4	2621.2	2764.1
60°	29.4	31.4	50.4	82.5	113.9	226.2	386.7	1907.5	2596.7	2778.0
62.5°	*25.6*	*29.0*	*53.2*	*72.9*	*116.0*	*196.1*	*246.5*	*1625.7*	*2362.9*	*2569.7*
65°	22.4	28.0	48.3	66.0	117.4	132.9	166.4	1322.5	2134.7	2331.5
67.5°	20.0	31.1	39.7	58.7	100.8	93.6	114.3	1027.6	1794.9	1971.3
70°	18.3	31.8	32.5	50.4	78.0	60.1	75.3	691.6	1237.2	1438.9
72.5°	16.6	23.5	24.5	40.4	50.4	36.6	48.7	395.7	901.9	1039.4
75°	15.9	15.9	16.9	26.2	28.0	26.6	31.4	236.2	646.8	747.2
77.5°	14.8	12.1	10.7	16.9	15.2	19.0	18.6	105.0	280.4	303.2
80°	11.7	8.6	7.3	10.7	10.4	12.8	11.0	8.6	12.8	12.4
82.5°	7.3	5.5	5.2	6.6	5.9	6.6	5.2	1.4	1.4	1.4
85°	3.5	3.1	2.8	2.8	3.1	2.8	2.1	0.7	0.3	0.3
87.5°	1.7	1.7	1.4	1.0	1.4	1.4	1.0	0.3	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

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

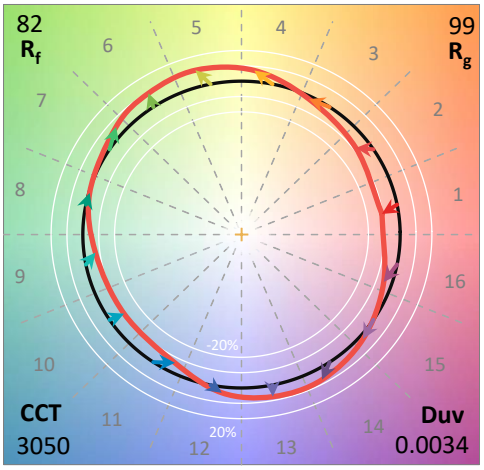
Test Information

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

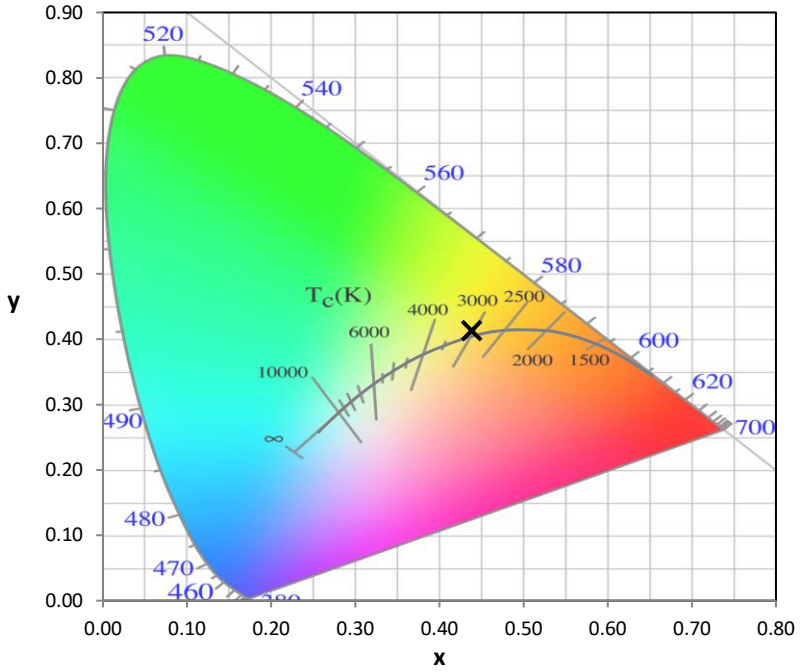
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

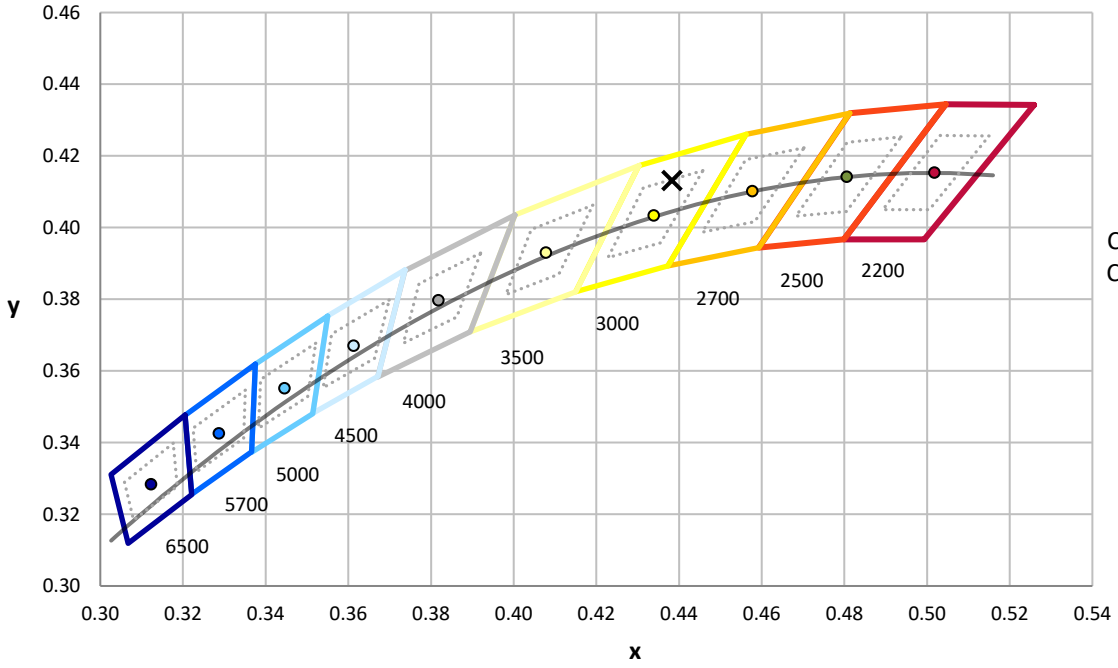
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

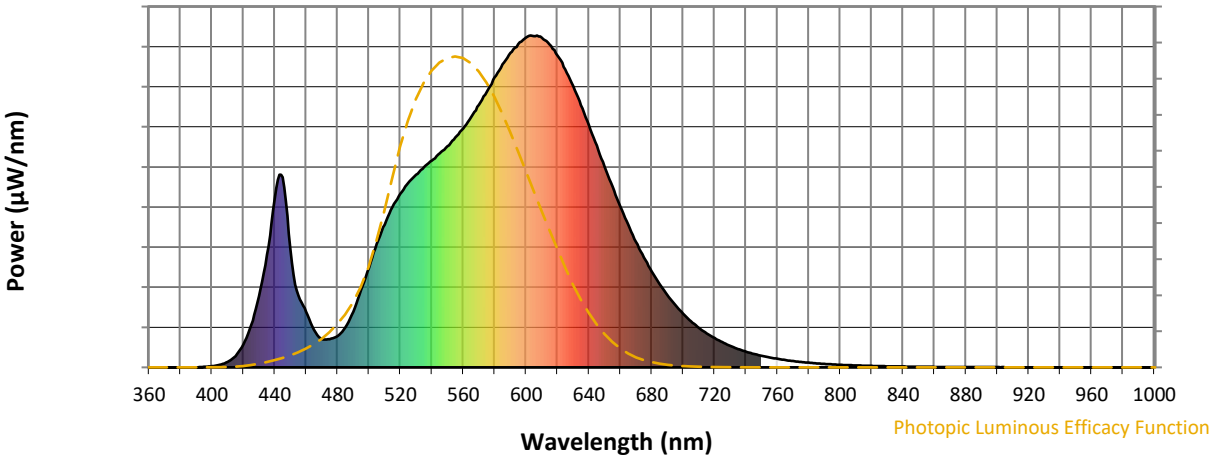


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

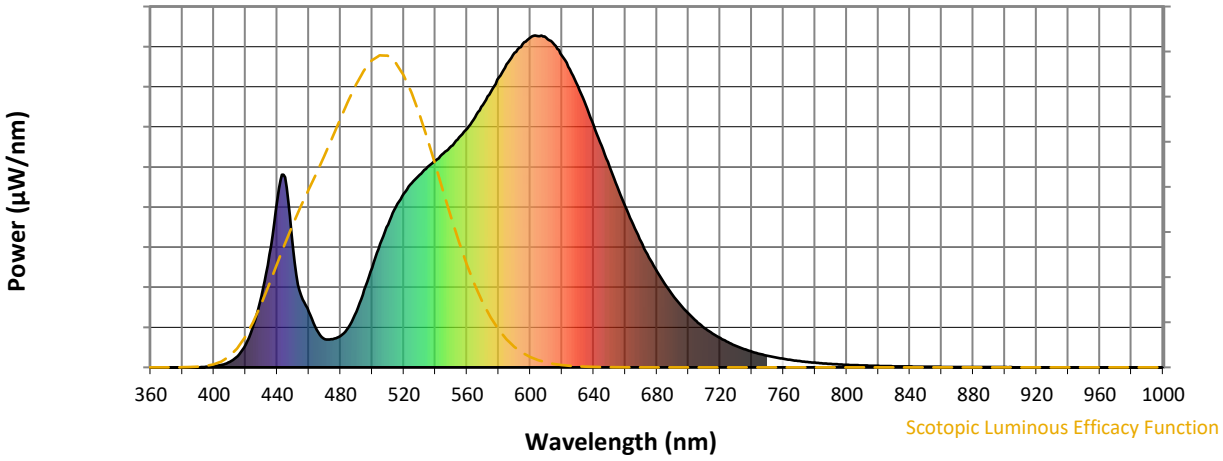


Photopic Lumens: NR

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

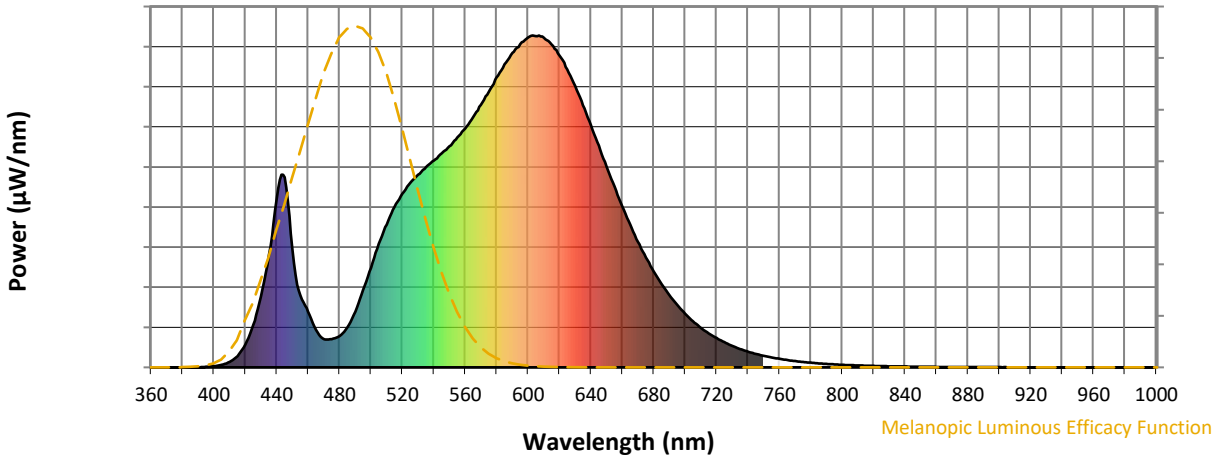


Scotopic Lumens: NR **S/P: 1.27**

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			

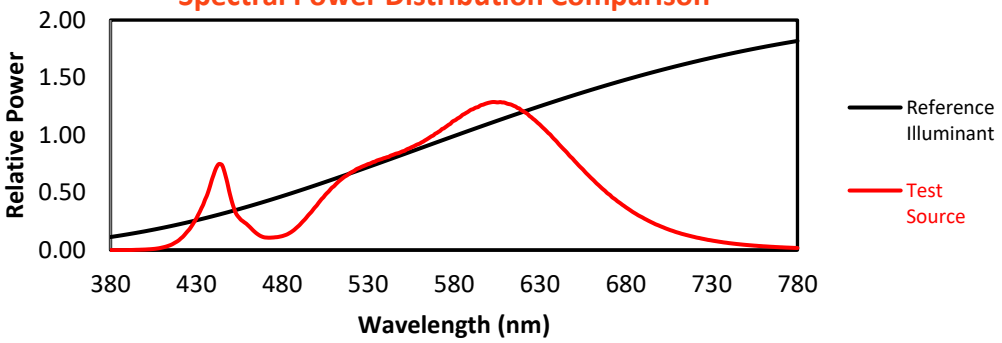
REPORT NUMBER: SP1-2408-195-9

TM-30-18

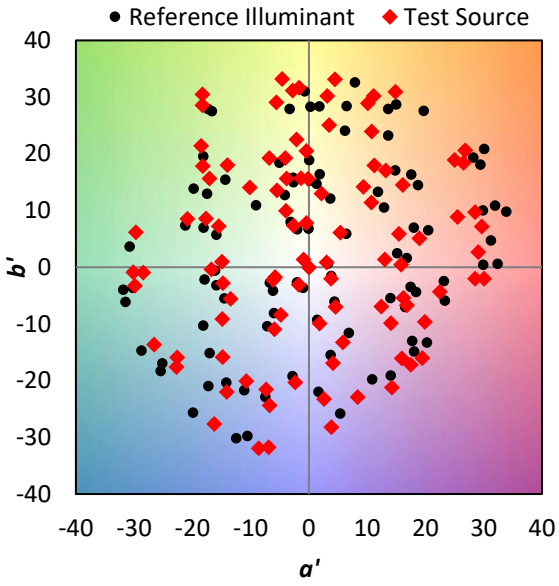
Summary

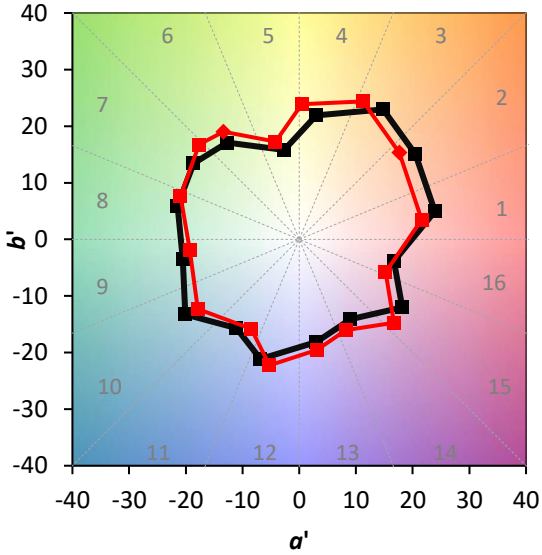
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

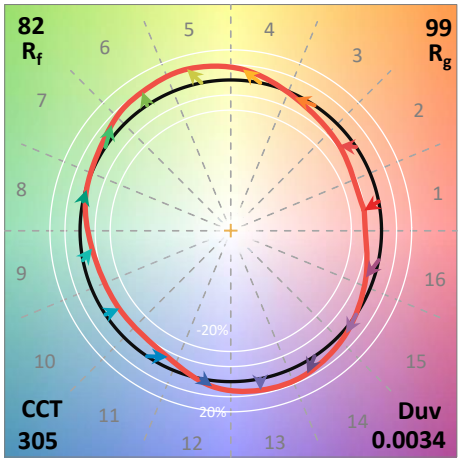
Spectral Power Distribution Comparison

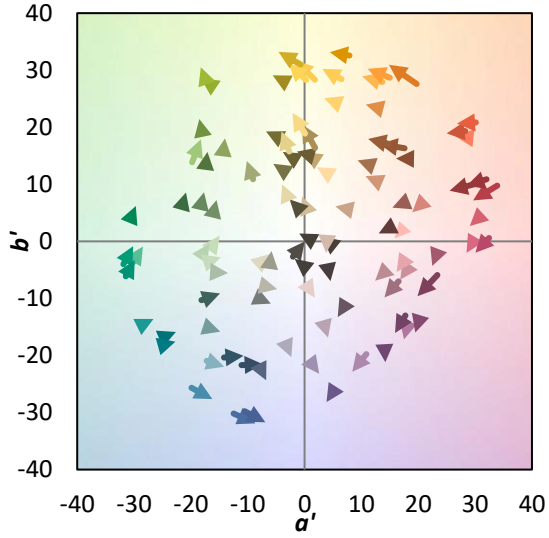


Color Vector Graphics







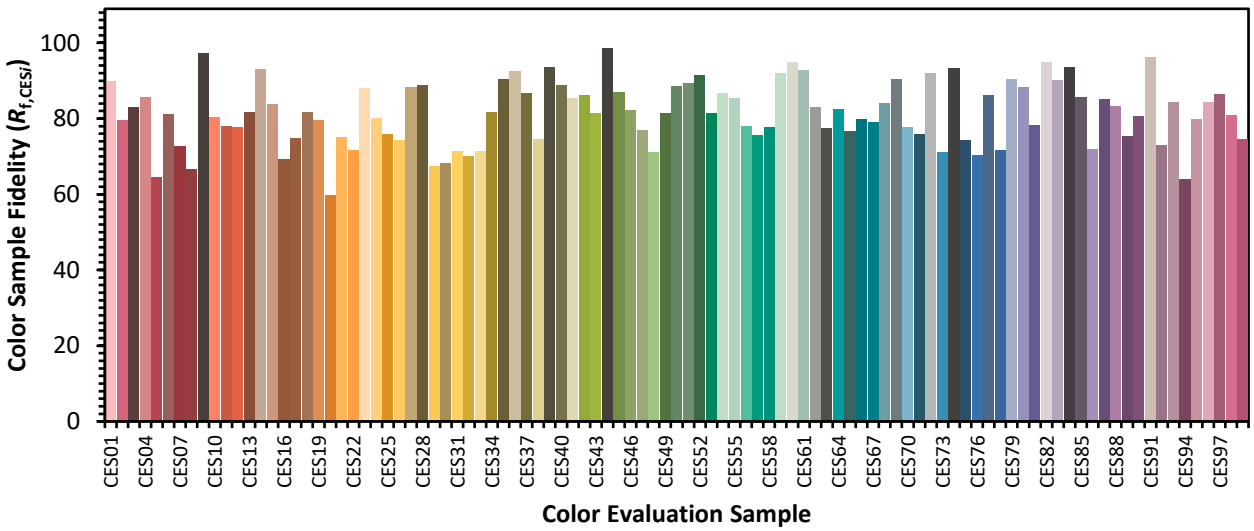


REPORT NUMBER: SP1-2408-195-9

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	



REPORT NUMBER: SP1-2408-195-9

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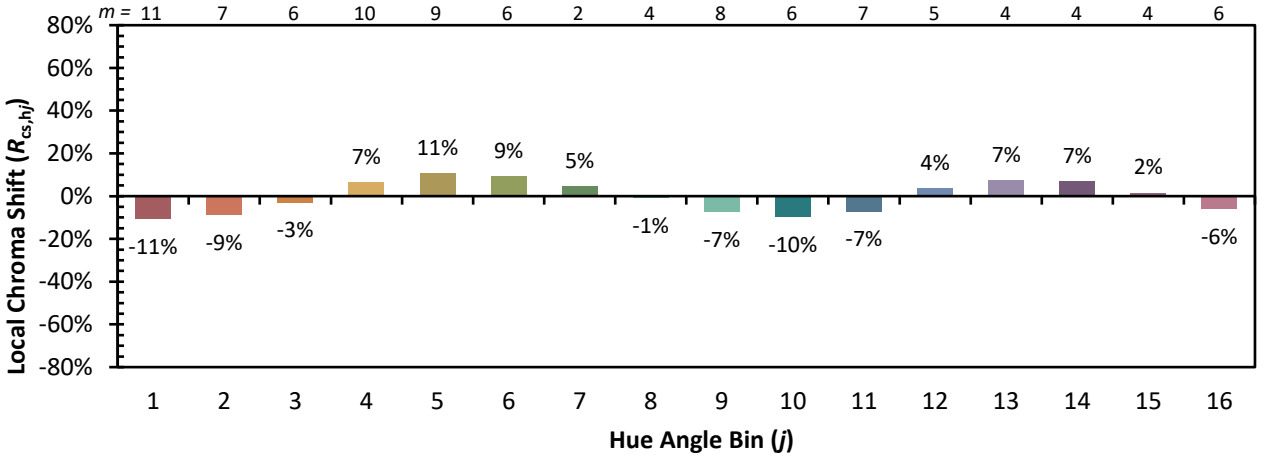
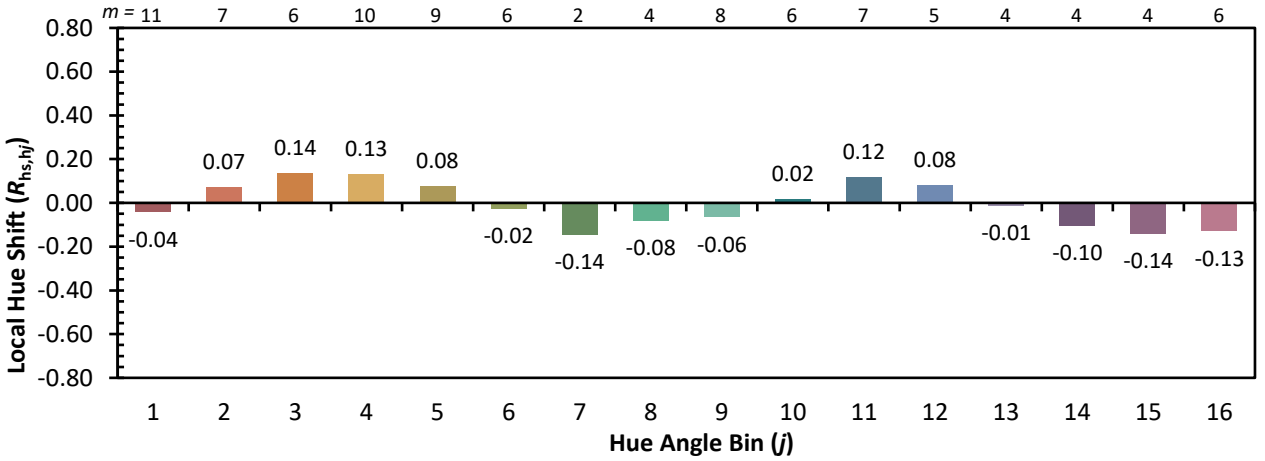
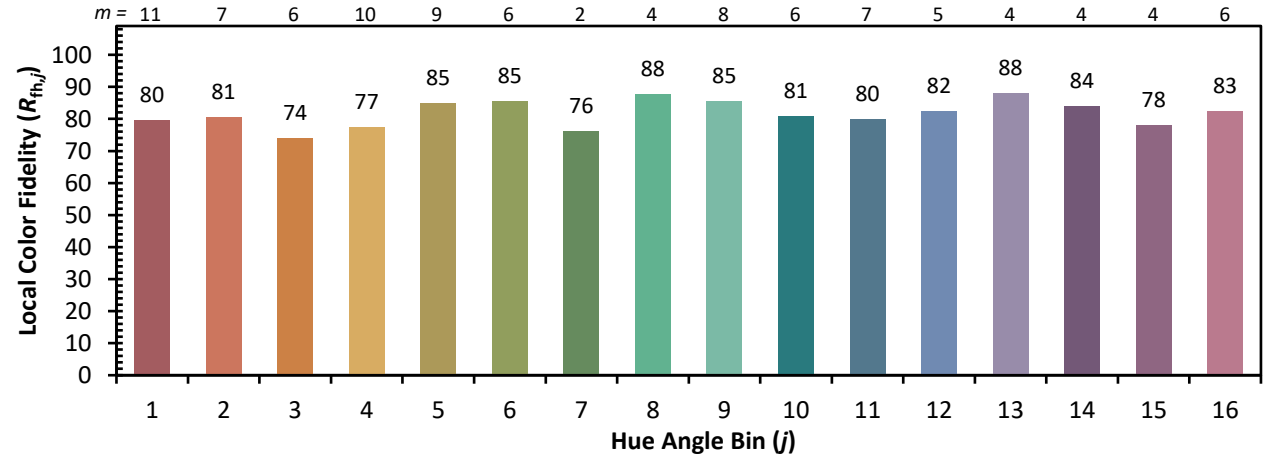
Color Rendition by Hue-Angle Bin







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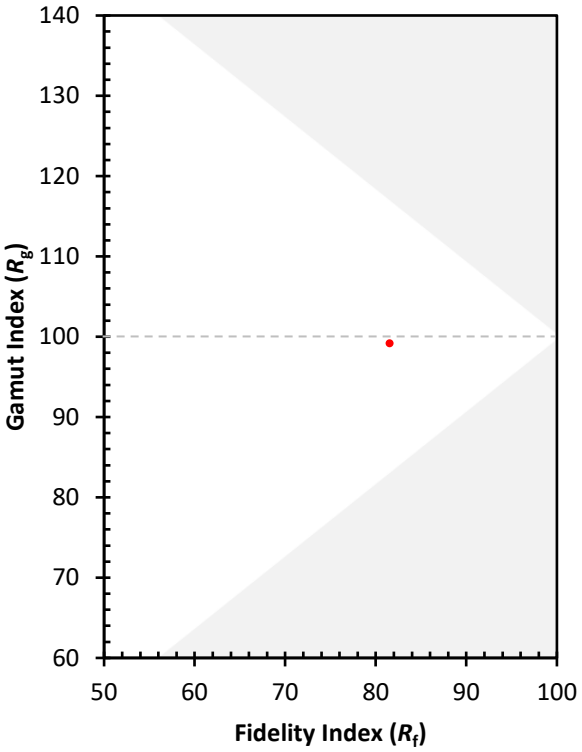
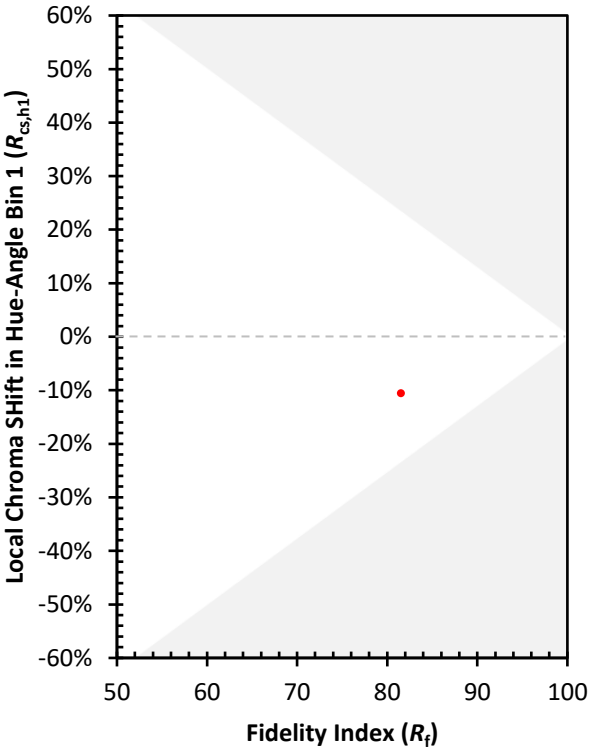
Measure Comparisons





(END OF REPORT)