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: P640960

Luminaire Tested: GWS-SA5E-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:	P640960
	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-SA5E-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:	18507.3 lumens
Efficiency:	N/A
Efficacy:	68.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G4

Input Watts (W):	269.6
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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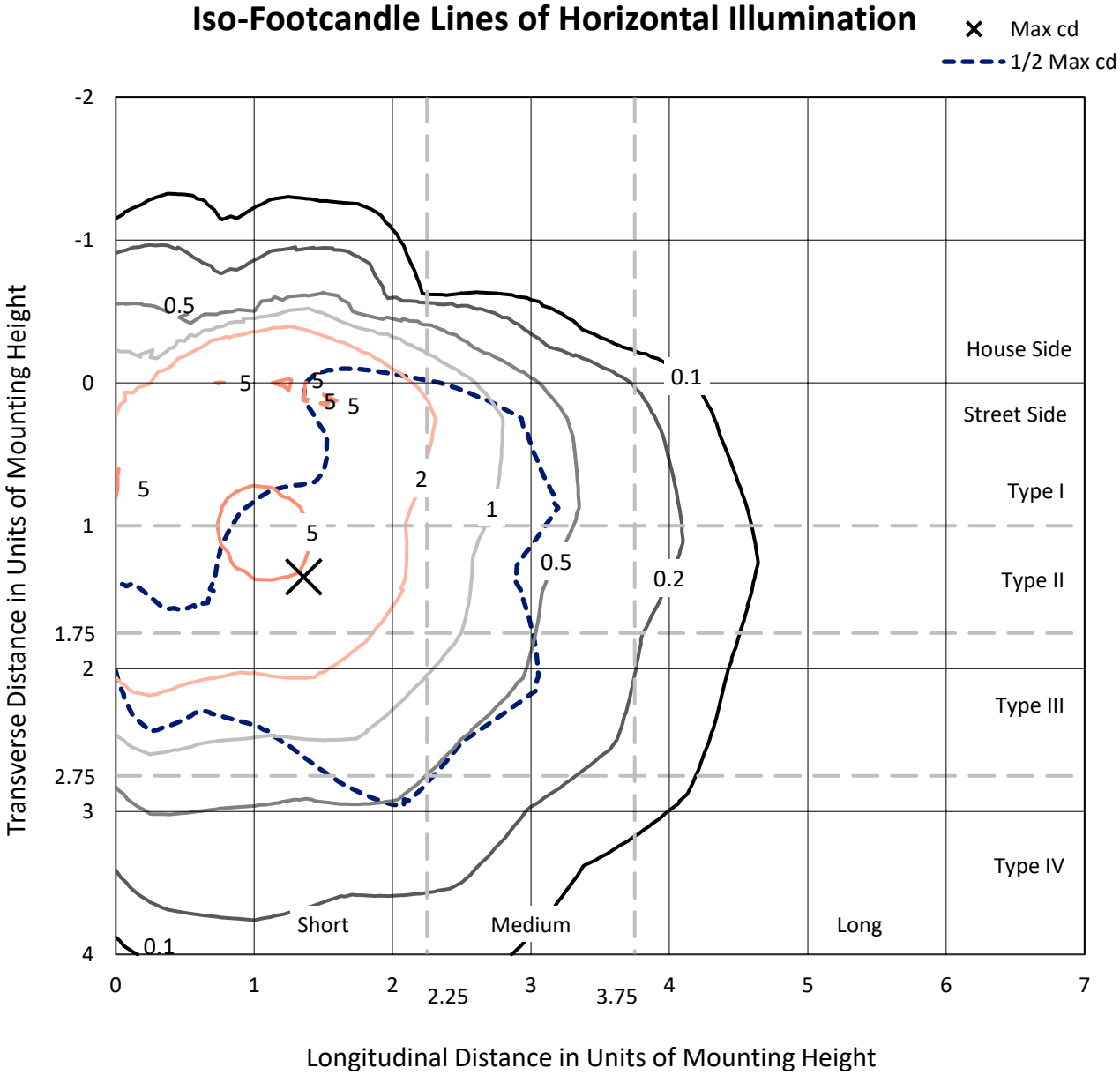
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6 fc
Type IV - Short - N/A

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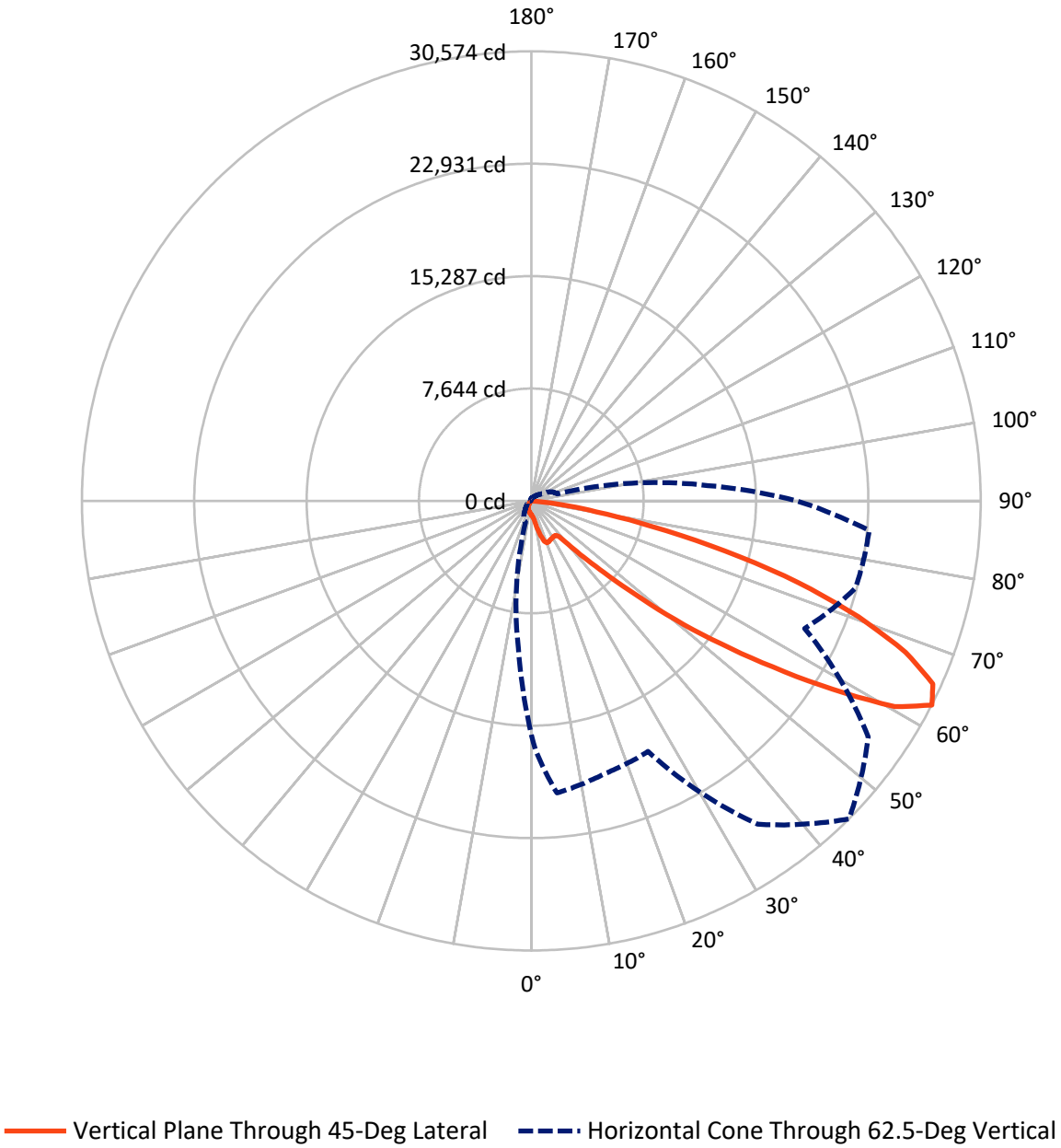
Luminous Intensity Polar Plot



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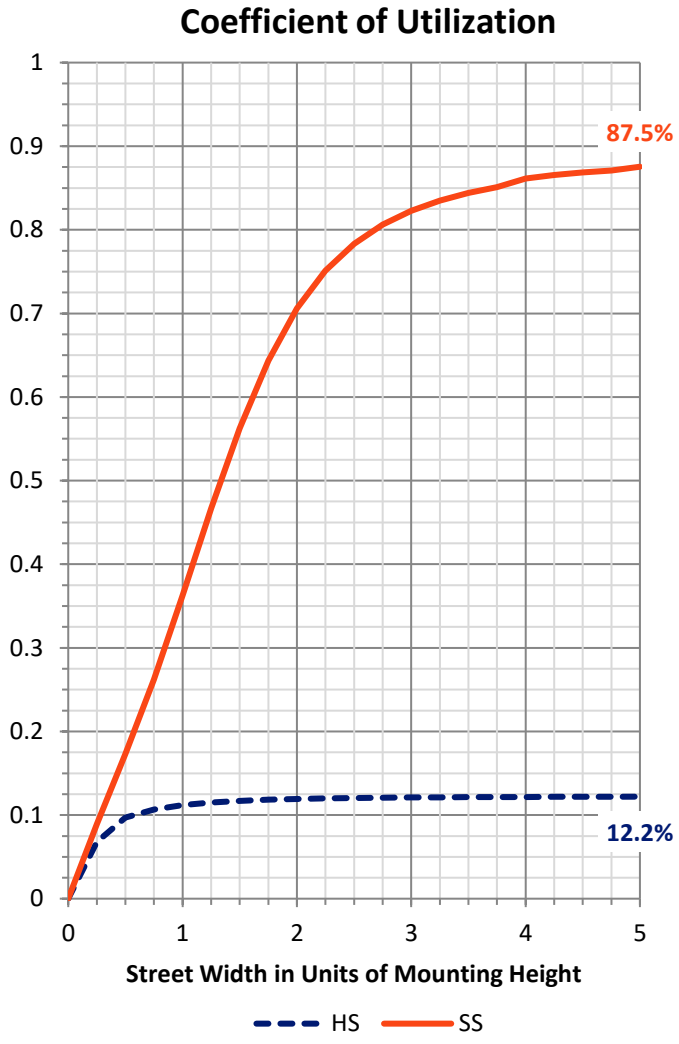
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2283.8	0.0	2283.8
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	16223.5	0.0	16223.5
	% Fixture	87.7	0.0	87.7
Total	Lumens	18507.3	0.0	18507.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	0.5
10°-20°	322.7	1.7
20°-30°	701.4	3.8
30°-40°	1151.3	6.2
40°-50°	2116.4	11.4
50°-60°	4545.1	24.6
60°-70°	6104.8	33.0
70°-80°	3178.8	17.2
80°-90°	301.4	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°	18507.3	100.0
0°-180°	18507.3	100.0



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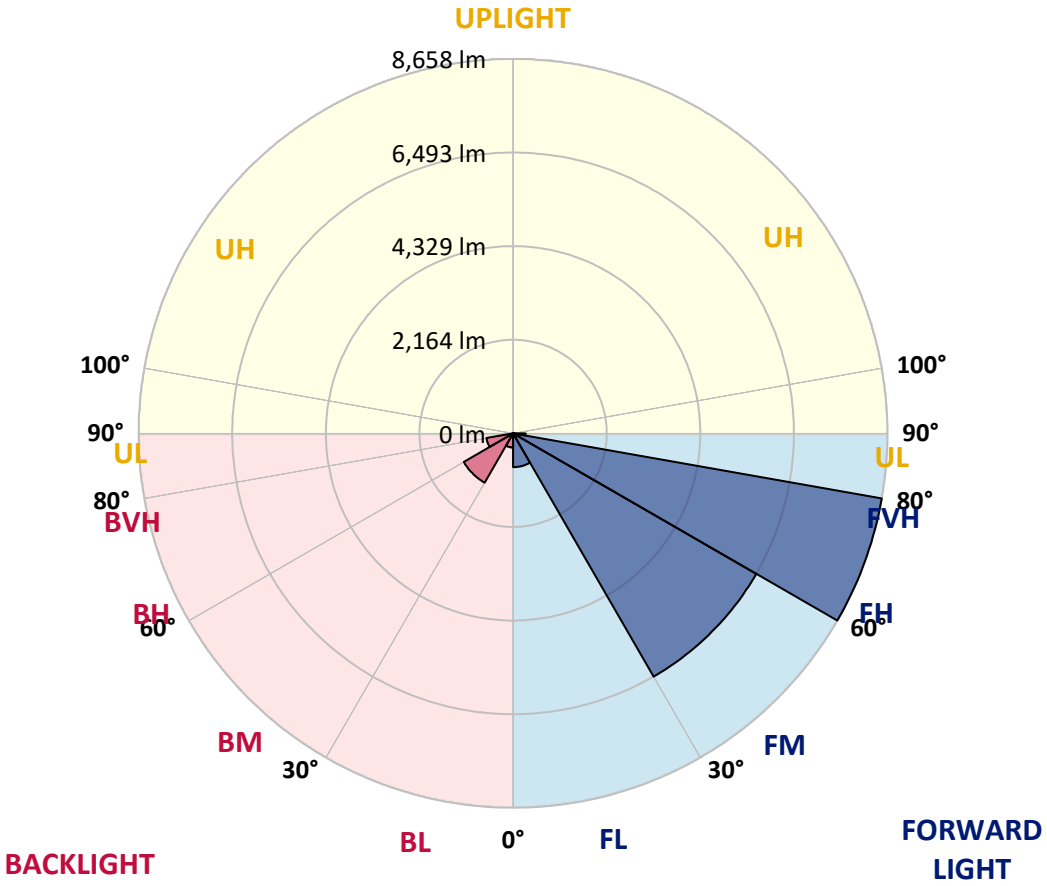
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	781.8	4.2			
FM	(30°-60°)	6495.8	35.1			
FH	(60°-80°)	8657.9	46.8			G4/12000
FVH	(80°-90°)	288.0	1.6			G3/500
BL	(0°-30°)	327.6	1.8	B1/500		
BM	(30°-60°)	1317.0	7.1	B2/2500		
BH	(60°-80°)	625.8	3.4	B2/1000		G2/1000
BVH	(80°-90°)	13.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	962.0	962.0	962.0	962.0	962.0	962.0	*962.0*	962.0	962.0	962.0	962.0
2.5°	981.2	985.5	989.8	1004.7	1015.4	1024.0	*1026.1*	1019.7	1004.7	989.8	968.4
5°	951.3	955.6	970.5	1011.2	1051.8	1083.8	*1094.5*	1088.1	1051.8	1004.7	955.6
7.5°	949.2	957.7	994.1	1079.6	1167.2	1233.5	*1250.6*	1235.6	1167.2	1073.2	972.7
10°	1026.1	1041.1	1094.5	1248.5	1408.8	1526.4	*1573.4*	1509.3	1400.2	1229.2	1064.6
12.5°	1227.1	1252.7	1355.3	1579.8	1827.8	1983.8	*2048.0*	1968.9	1797.9	1549.9	1289.1
15°	1543.5	1581.9	1735.9	2071.5	2364.4	2503.3	*2524.7*	2479.8	2281.0	2007.4	1656.8
17.5°	1990.3	2045.8	2285.3	2627.3	2838.9	2888.1	*2881.7*	2834.7	2689.3	2501.2	2169.8
20°	2524.7	2591.0	2826.1	3108.3	3129.7	3072.0	*3039.9*	3012.1	2962.9	2930.9	2672.2
22.5°	3063.4	3144.6	3390.5	3461.0	3268.6	3101.9	*3022.8*	3044.2	3116.9	3275.0	3170.3
25°	3600.0	3676.9	3907.8	3717.6	3332.8	3054.9	*2954.4*	3005.7	3178.8	3520.9	3655.6
27.5°	4226.4	4284.1	4420.9	3892.9	3343.5	3016.4	*2918.0*	2997.1	3208.8	3674.8	4187.9
30°	4878.4	4912.6	4846.3	3939.9	3307.1	2958.7	*2881.7*	2997.1	3260.1	3777.4	4587.6
32.5°	5357.2	5363.6	5147.7	3944.2	3287.9	2911.6	*2847.5*	2984.3	3309.3	3862.9	4974.6
35°	5851.1	5819.0	5436.3	4008.3	3339.2	2928.7	*2873.2*	3020.7	3386.2	3963.4	5314.5
37.5°	6351.3	6293.6	5759.1	4113.1	3471.7	3114.7	*3080.5*	3206.6	3510.2	4102.4	5688.6
40°	6864.3	6785.3	6094.8	4271.2	3766.7	3747.5	*3865.1*	3850.1	3850.1	4279.8	6073.4
42.5°	7490.7	7398.8	6590.7	4718.0	4455.1	4884.8	*5205.4*	5006.6	4638.9	4688.1	6573.6
45°	8318.0	8238.9	7450.1	5573.1	5534.7	6522.3	*6954.1*	6560.8	5645.8	5630.9	7409.5
47.5°	9641.3	9626.3	8820.4	6565.1	6855.8	8606.6	*9440.4*	8683.6	6793.8	6629.2	8991.4
50°	11501.2	11456.3	10528.5	7728.0	8427.1	11189.0	*12676.9*	11415.6	8181.2	7794.3	11109.9
52.5°	13596.2	13643.2	12920.6	8997.8	10096.6	14062.2	*16133.7*	14545.3	9688.3	9275.7	13775.7
55°	15569.3	15838.7	15648.4	10483.6	11727.8	17234.6	*19930.3*	17978.6	11554.6	11214.7	16764.3
57.5°	17112.8	17871.7	19205.6	12642.7	13645.3	20945.8	*24169.5*	21700.4	13733.0	14363.6	20832.5
60°	17198.3	18203.0	21300.6	17159.8	16112.3	24128.9	*28402.3*	25336.7	17157.7	19710.2	24019.9
62.5°	*15909.2*	*16986.6*	*19936.8*	*19212.1*	*18799.5*	*26837.4*	*30574.3*	*27987.6*	*20526.8*	*22842.0*	*23075.0*
65°	14434.2	15522.3	18414.7	16884.0	18487.4	26722.0	*30022.7*	28049.6	20832.5	20712.8	21384.0
67.5°	12204.5	13181.4	15800.2	14945.1	17040.1	25432.9	*27474.5*	26281.6	19192.8	19372.4	19671.7
70°	8908.0	9848.7	12279.3	12322.1	14881.0	23109.2	*23607.3*	23442.7	17675.0	17865.3	17010.2
72.5°	6434.7	7227.8	9324.9	10105.2	11879.5	19378.8	*19034.6*	19669.5	15165.3	15911.4	13662.4
75°	4626.1	5220.4	6840.8	8790.5	9416.8	14391.4	*13626.1*	15233.7	12168.1	13700.9	10271.9
77.5°	1877.0	2086.5	2691.4	5921.6	6188.8	9681.9	*8341.5*	11065.0	8675.0	9002.1	4978.8
80°	77.0	85.5	111.2	3057.0	4243.5	5447.0	*4463.6*	5915.2	5729.2	3625.6	1175.8
82.5°	8.6	8.6	19.2	880.8	1857.7	3005.7	*2103.6*	3407.6	2900.9	1537.0	534.4
85°	2.1	2.1	4.3	100.5	436.1	481.0	*284.3*	1045.4	1348.9	628.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	10.7	19.2	21.4	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°	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0
2.5°	968.4	957.7	944.9	932.1	925.7	908.5	902.1	897.9	893.6	895.7	895.7
5°	936.3	912.8	885.0	857.2	842.3	825.2	816.6	812.3	814.5	823.0	823.0
7.5°	932.1	887.2	827.3	791.0	773.9	761.0	752.5	748.2	750.4	761.0	765.3
10°	1002.6	923.5	816.6	754.6	735.4	722.6	714.0	707.6	703.3	711.9	714.0
12.5°	1154.4	1045.4	867.9	750.4	716.1	699.0	692.6	679.8	673.4	677.7	679.8
15°	1468.6	1280.5	970.5	767.5	699.0	679.8	669.1	658.4	647.7	645.6	647.7
17.5°	1879.1	1609.7	1126.6	808.1	686.2	662.7	647.7	632.8	617.8	615.7	613.5
20°	2387.9	2013.8	1344.7	872.2	675.5	647.7	626.4	605.0	585.7	579.3	579.3
22.5°	2851.8	2501.2	1624.7	951.3	660.6	626.4	600.7	575.1	553.7	543.0	540.9
25°	3418.3	3018.5	1960.3	1043.2	639.2	598.6	570.8	545.1	523.8	510.9	506.6
27.5°	3989.1	3563.6	2340.8	1162.9	613.5	570.8	545.1	521.6	498.1	483.1	478.9
30°	4542.7	4151.5	2768.4	1312.6	594.3	543.0	521.6	498.1	476.7	453.2	446.8
32.5°	5137.0	4752.2	3247.3	1479.3	579.3	523.8	500.2	478.9	451.1	429.7	419.0
35°	5710.0	5372.2	3775.3	1641.8	564.4	506.6	481.0	459.6	429.7	406.2	391.2
37.5°	6287.2	6002.8	4326.8	1740.1	543.0	483.1	459.6	442.5	408.3	380.5	363.4
40°	6898.6	6654.8	4923.3	1699.5	523.8	457.5	444.7	425.4	386.9	354.9	333.5
42.5°	7569.8	7276.9	5530.4	1543.5	506.6	436.1	423.3	404.0	367.7	329.2	301.4
45°	8414.2	7958.9	6028.5	1308.3	515.2	414.7	389.1	384.8	350.6	301.4	267.2
47.5°	9865.8	9006.4	6415.4	1156.5	572.9	391.2	361.3	372.0	335.6	273.6	235.2
50°	12086.9	10742.2	6776.7	1145.8	660.6	380.5	335.6	363.4	320.7	245.8	207.4
52.5°	14203.3	12505.9	7007.6	1239.9	737.5	408.3	310.0	352.7	310.0	226.6	188.1
55°	16227.7	13523.5	6595.0	1308.3	810.2	491.7	290.7	335.6	297.1	215.9	181.7
57.5°	18410.4	13976.7	5192.6	1447.3	861.5	562.2	295.0	310.0	280.0	209.5	179.6
60°	19062.4	13397.3	3134.0	1629.0	833.7	583.6	327.1	275.8	256.5	196.7	173.2
62.5°	*18049.1*	*12022.8*	*1849.2*	*1483.6*	*810.2*	*551.5*	*374.1*	*254.4*	*233.0*	*179.6*	*160.3*
65°	16533.4	10156.5	1205.7	1252.7	859.4	491.7	397.6	243.7	211.6	162.5	141.1
67.5°	14801.9	8181.2	844.4	739.7	793.1	442.5	335.6	241.6	190.3	136.8	115.4
70°	12467.4	6126.8	594.3	489.5	660.6	393.3	260.8	235.2	166.7	111.2	89.8
72.5°	9632.7	3835.1	442.5	316.4	470.3	320.7	207.4	198.8	134.7	91.9	68.4
75°	7103.8	2186.9	312.1	228.7	310.0	243.7	153.9	141.1	115.4	87.6	62.0
77.5°	3709.0	1094.5	194.5	175.3	177.4	151.8	111.2	102.6	106.9	87.6	57.7
80°	711.9	218.1	117.6	128.3	96.2	96.2	81.2	85.5	94.1	70.5	49.2
82.5°	297.1	47.0	64.1	72.7	59.9	66.3	66.3	68.4	66.3	51.3	36.3
85°	0.0	0.0	27.8	29.9	40.6	40.6	34.2	34.2	34.2	29.9	21.4
87.5°	0.0	0.0	0.0	0.0	2.1	6.4	12.8	15.0	17.1	12.8	8.6
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°	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0
2.5°	893.6	889.3	895.7	900.0	904.3	904.3	900.0	895.7	889.3	895.7	889.3
5°	825.2	831.6	842.3	846.6	850.8	842.3	838.0	825.2	814.5	816.6	812.3
7.5°	771.7	778.1	791.0	799.5	799.5	795.2	782.4	769.6	752.5	752.5	750.4
10°	722.6	731.1	746.1	756.8	761.0	756.8	743.9	726.8	711.9	711.9	705.5
12.5°	681.9	692.6	709.7	724.7	729.0	724.7	711.9	694.8	677.7	677.7	673.4
15°	647.7	660.6	679.8	696.9	703.3	696.9	681.9	660.6	643.5	645.6	639.2
17.5°	615.7	626.4	652.0	671.3	677.7	671.3	652.0	624.2	607.1	611.4	607.1
20°	579.3	592.2	617.8	639.2	645.6	639.2	617.8	587.9	570.8	570.8	572.9
22.5°	540.9	553.7	579.3	594.3	602.8	596.4	575.1	547.3	530.2	530.2	532.3
25°	506.6	513.1	532.3	547.3	549.4	543.0	525.9	504.5	491.7	498.1	500.2
27.5°	474.6	474.6	483.1	491.7	489.5	483.1	476.7	459.6	457.5	463.9	470.3
30°	440.4	429.7	425.4	419.0	416.9	414.7	421.1	421.1	425.4	434.0	440.4
32.5°	410.5	389.1	369.8	350.6	339.9	348.5	365.6	380.5	395.5	408.3	414.7
35°	376.2	342.0	310.0	284.3	267.2	280.0	307.8	335.6	361.3	378.4	389.1
37.5°	342.0	292.9	254.4	222.3	209.5	220.2	250.1	288.6	327.1	348.5	363.4
40°	305.7	243.7	198.8	173.2	160.3	171.0	200.9	239.4	290.7	318.5	337.8
42.5°	269.4	200.9	160.3	134.7	128.3	134.7	158.2	196.7	252.3	286.5	312.1
45°	233.0	166.7	128.3	109.0	102.6	109.0	128.3	160.3	215.9	254.4	284.3
47.5°	200.9	141.1	106.9	89.8	85.5	91.9	106.9	134.7	181.7	220.2	254.4
50°	175.3	124.0	91.9	77.0	72.7	79.1	91.9	113.3	153.9	188.1	224.5
52.5°	158.2	115.4	81.2	66.3	64.1	68.4	79.1	96.2	130.4	160.3	194.5
55°	153.9	115.4	74.8	59.9	57.7	62.0	70.5	83.4	113.3	139.0	168.9
57.5°	158.2	124.0	70.5	51.3	49.2	53.4	62.0	72.7	98.3	119.7	147.5
60°	158.2	126.1	62.0	40.6	38.5	42.8	51.3	64.1	87.6	104.8	128.3
62.5°	*143.2*	*115.4*	*51.3*	*32.1*	*27.8*	*32.1*	*42.8*	*53.4*	*77.0*	*94.1*	*113.3*
65°	124.0	98.3	42.8	23.5	19.2	23.5	34.2	44.9	66.3	81.2	102.6
67.5°	100.5	74.8	32.1	17.1	12.8	17.1	25.7	36.3	55.6	70.5	91.9
70°	74.8	53.4	25.7	15.0	12.8	15.0	23.5	34.2	49.2	64.1	85.5
72.5°	55.6	36.3	21.4	15.0	10.7	15.0	21.4	32.1	47.0	62.0	81.2
75°	47.0	29.9	19.2	12.8	10.7	12.8	19.2	29.9	42.8	57.7	77.0
77.5°	44.9	27.8	17.1	10.7	8.6	10.7	17.1	25.7	38.5	53.4	74.8
80°	38.5	23.5	15.0	8.6	6.4	8.6	15.0	21.4	29.9	40.6	57.7
82.5°	29.9	19.2	10.7	4.3	2.1	4.3	10.7	12.8	19.2	23.5	34.2
85°	19.2	10.7	4.3	0.0	0.0	0.0	4.3	8.6	8.6	10.7	17.1
87.5°	8.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3	6.4
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: P640960
CATALOG NUMBER: GWS-SA5E-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0
2.5°	902.1	904.3	908.5	915.0	929.9	942.8	955.6	972.7	981.2	981.2
5°	816.6	818.8	820.9	829.5	850.8	867.9	895.7	929.9	947.0	951.3
7.5°	750.4	754.6	758.9	765.3	786.7	810.2	846.6	910.7	942.8	949.2
10°	711.9	718.3	726.8	739.7	758.9	784.6	846.6	962.0	1015.4	1026.1
12.5°	681.9	692.6	701.2	716.1	739.7	780.3	904.3	1107.4	1201.4	1227.1
15°	652.0	664.8	677.7	692.6	718.3	795.2	1015.4	1368.2	1524.2	1543.5
17.5°	622.1	637.1	654.2	671.3	703.3	831.6	1190.7	1729.4	1947.5	1990.3
20°	587.9	607.1	630.6	652.0	688.4	889.3	1434.4	2159.1	2432.8	2524.7
22.5°	551.5	575.1	602.8	630.6	671.3	959.9	1729.4	2620.9	3003.6	3063.4
25°	521.6	545.1	570.8	598.6	643.5	1045.4	2086.5	3193.8	3542.3	3600.0
27.5°	493.8	517.3	540.9	566.5	615.7	1156.5	2516.1	3803.1	4166.5	4226.4
30°	463.9	491.7	515.2	540.9	590.0	1293.3	3012.1	4478.6	4822.8	4878.4
32.5°	438.2	466.0	489.5	515.2	570.8	1443.0	3533.7	5077.2	5357.2	5357.2
35°	416.9	446.8	463.9	498.1	555.8	1539.2	4027.5	5648.0	5859.6	5851.1
37.5°	393.3	429.7	442.5	466.0	536.6	1549.9	4491.4	6250.8	6406.9	6351.3
40°	369.8	408.3	427.6	440.4	515.2	1462.2	5000.2	6804.5	6937.0	6864.3
42.5°	348.5	378.4	406.2	421.1	502.4	1308.3	5408.5	7396.7	7554.8	7490.7
45°	327.1	352.7	369.8	397.6	510.9	1201.4	5759.1	8087.1	8365.1	8318.0
47.5°	305.7	327.1	337.8	380.5	568.6	1152.3	5972.9	9156.0	9679.8	9641.3
50°	282.2	307.8	307.8	376.2	654.2	1169.4	6158.9	10703.8	11514.0	11501.2
52.5°	258.7	286.5	282.2	408.3	720.4	1248.5	6370.5	12069.8	13478.6	13596.2
55°	235.2	260.8	265.1	472.4	758.9	1316.9	5551.8	12644.9	15156.7	15569.3
57.5°	209.5	224.5	275.8	521.6	746.1	1515.7	3803.1	12749.6	16227.7	17112.8
60°	181.7	194.5	312.1	510.9	705.5	1400.2	2394.3	11809.0	16076.0	17198.3
62.5°	*158.2*	*179.6*	*329.2*	*451.1*	*718.3*	*1214.2*	*1526.4*	*10064.6*	*14628.7*	*15909.2*
65°	139.0	173.2	299.3	408.3	726.8	823.0	1030.4	8187.6	13215.6	14434.2
67.5°	124.0	192.4	245.8	363.4	624.2	579.3	707.6	6362.0	11112.1	12204.5
70°	113.3	196.7	200.9	312.1	483.1	372.0	466.0	4281.9	7659.6	8908.0
72.5°	102.6	145.4	151.8	250.1	312.1	226.6	301.4	2449.9	5583.8	6434.7
75°	98.3	98.3	104.8	162.5	173.2	164.6	194.5	1462.2	4004.0	4626.1
77.5°	91.9	74.8	66.3	104.8	94.1	117.6	115.4	649.9	1735.9	1877.0
80°	72.7	53.4	44.9	66.3	64.1	79.1	68.4	53.4	79.1	77.0
82.5°	44.9	34.2	32.1	40.6	36.3	40.6	32.1	8.6	8.6	8.6
85°	21.4	19.2	17.1	17.1	19.2	17.1	12.8	4.3	2.1	2.1
87.5°	10.7	10.7	8.6	6.4	8.6	8.6	6.4	2.1	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.

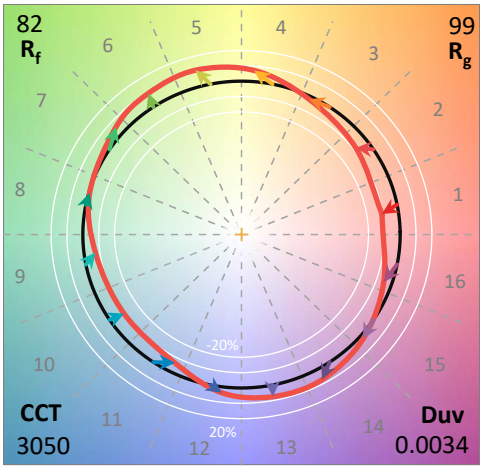
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

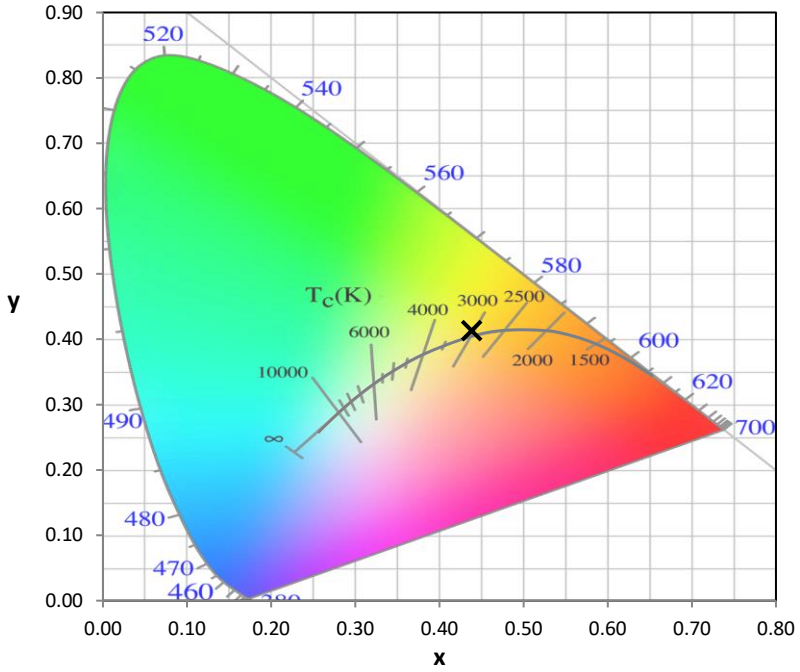
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

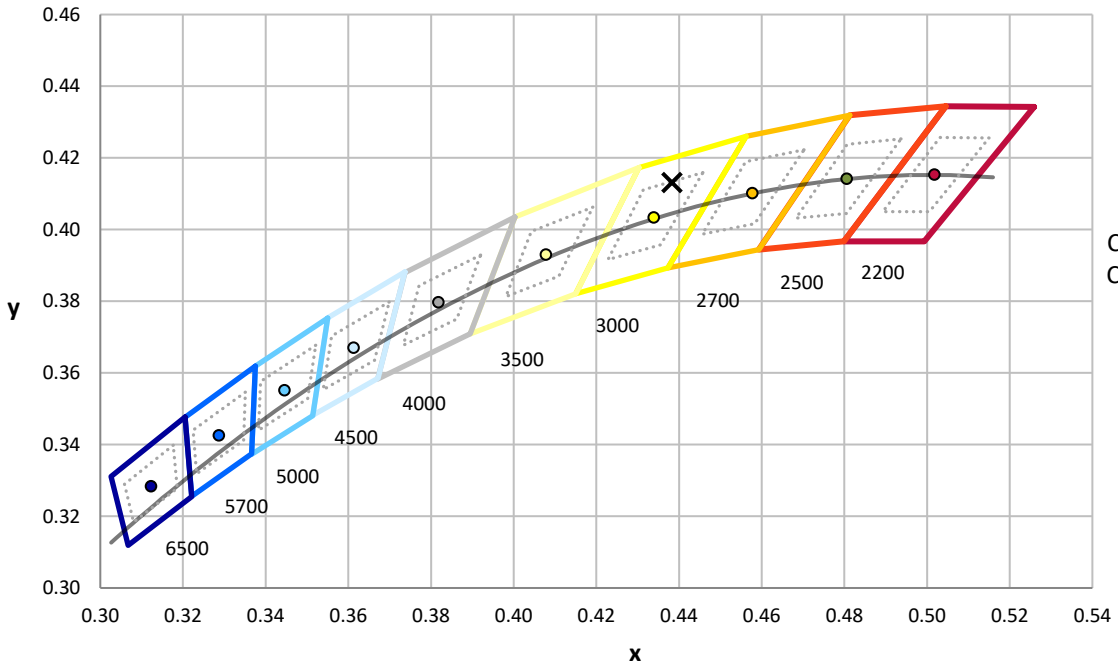
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

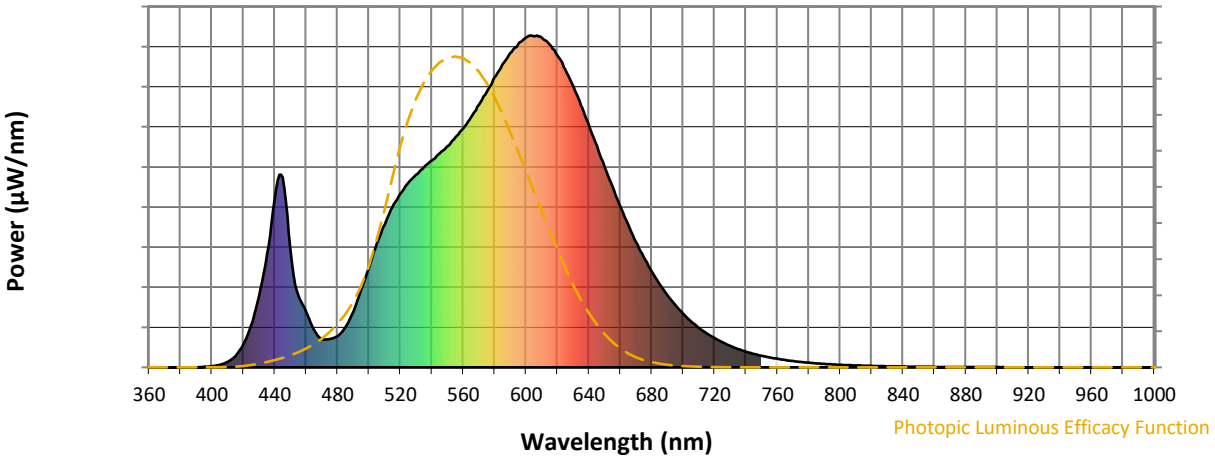


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

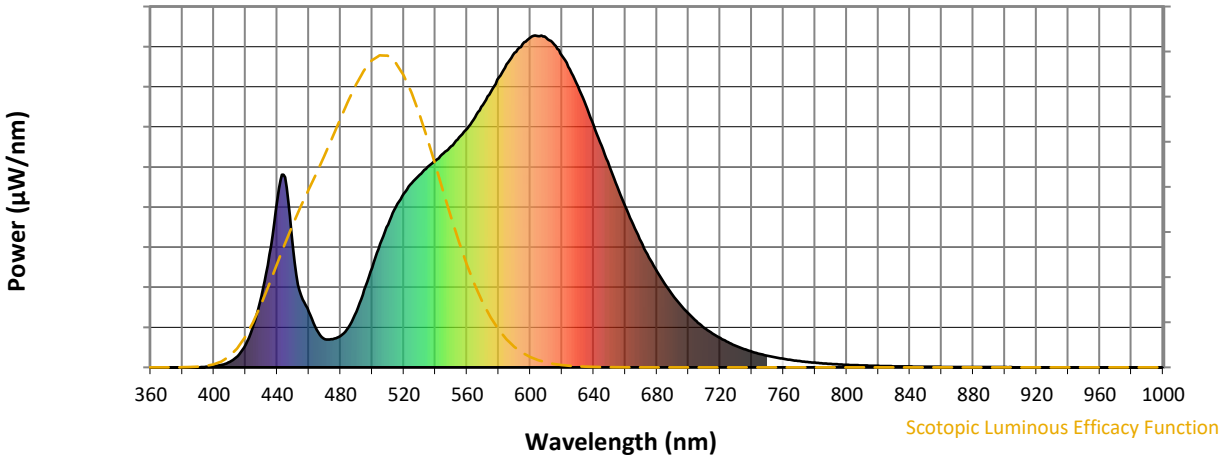


Photopic Lumens: NR

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

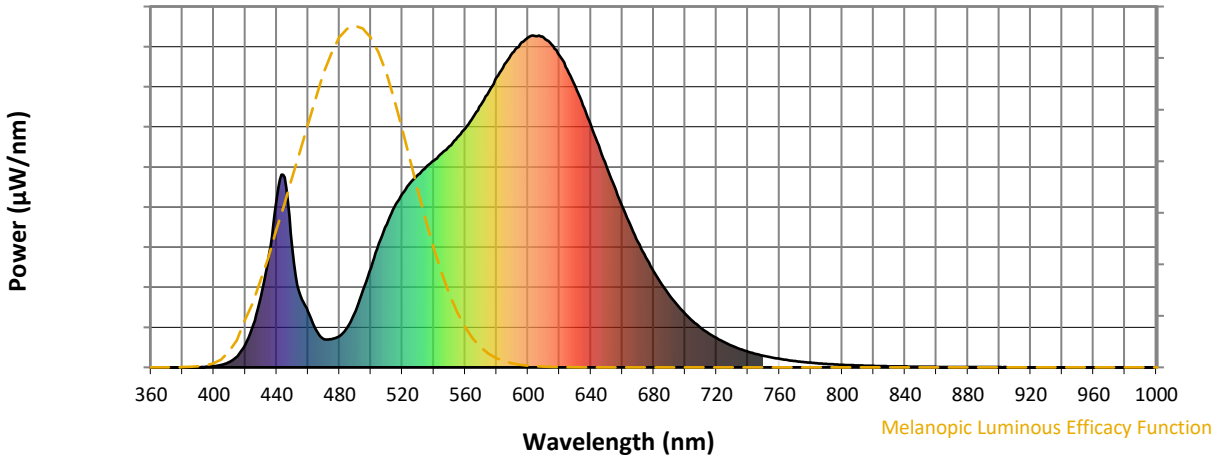


Scotopic Lumens: NR **S/P: 1.27**

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			

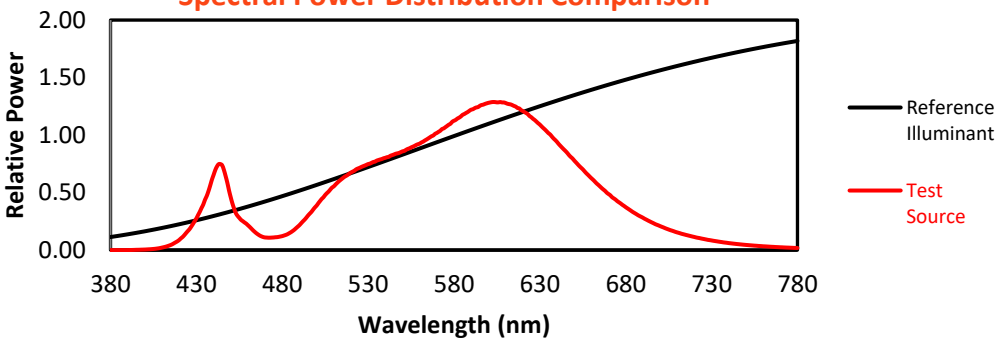
REPORT NUMBER: SP1-2408-195-9

TM-30-18

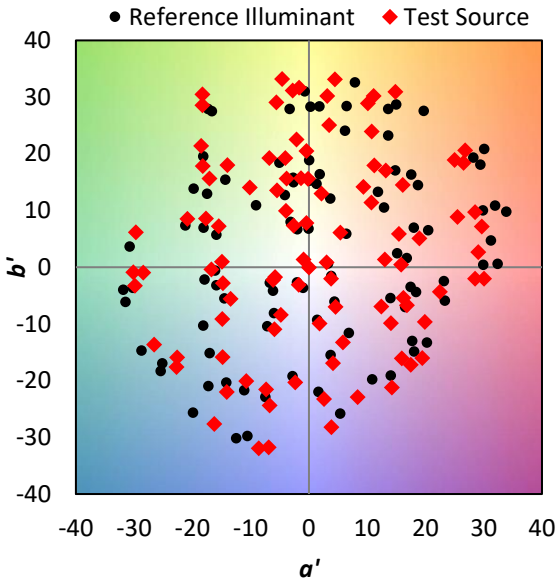
Summary

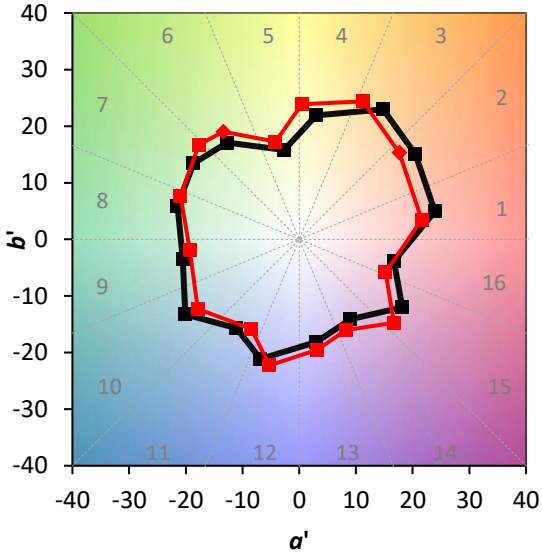
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

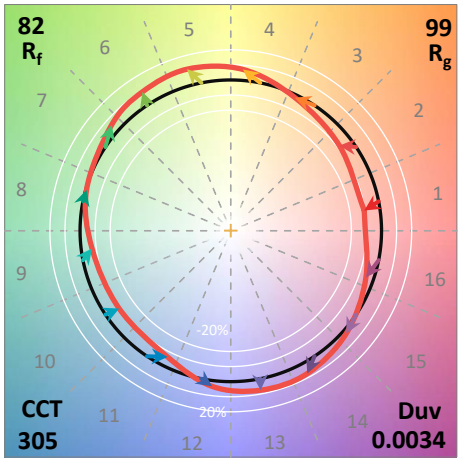
Spectral Power Distribution Comparison

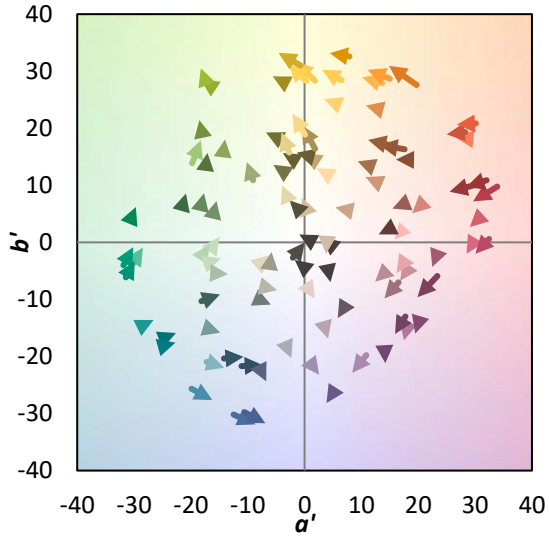


Color Vector Graphics









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
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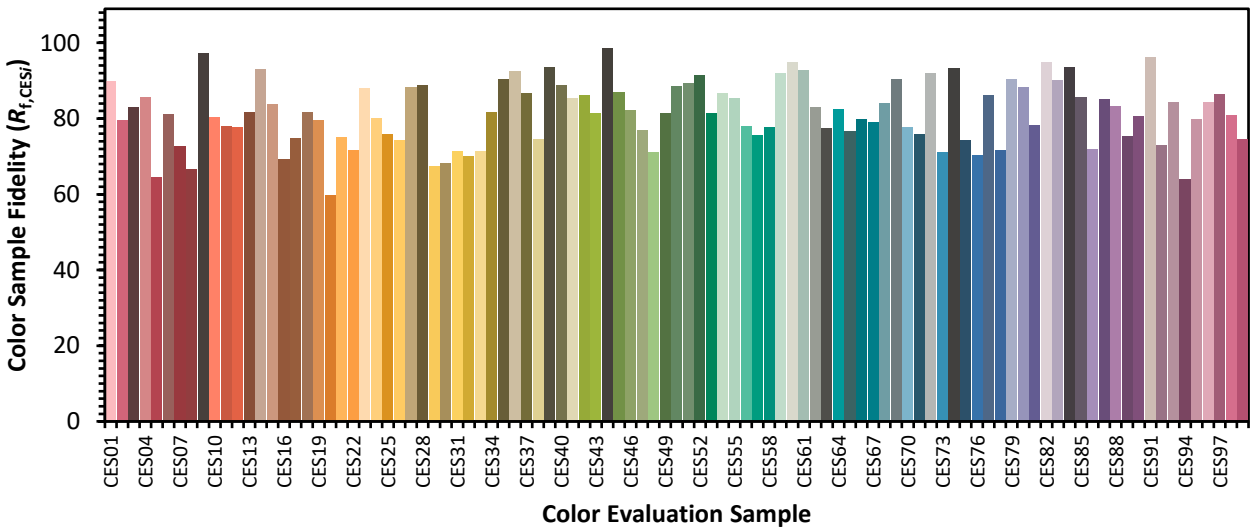

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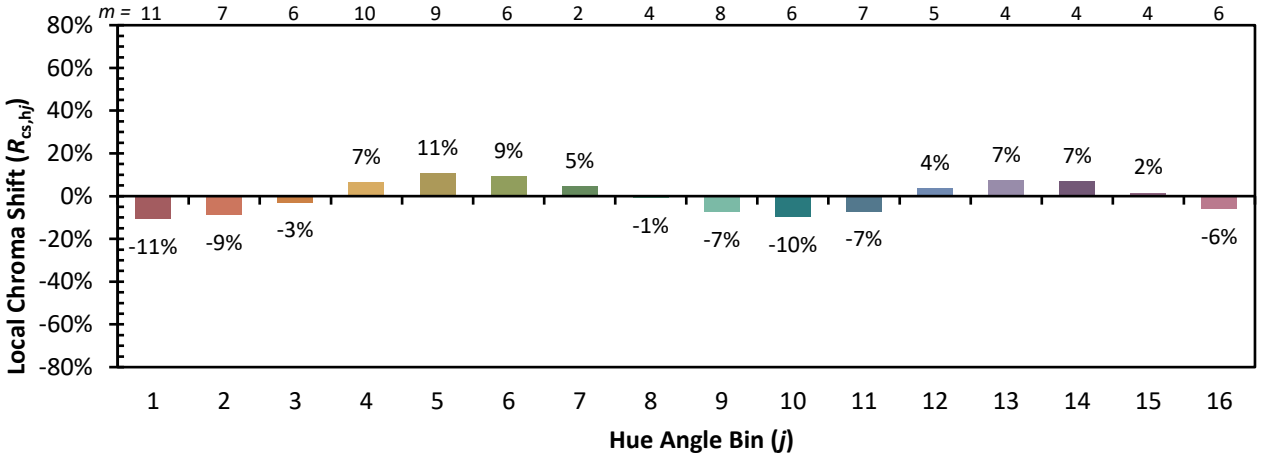
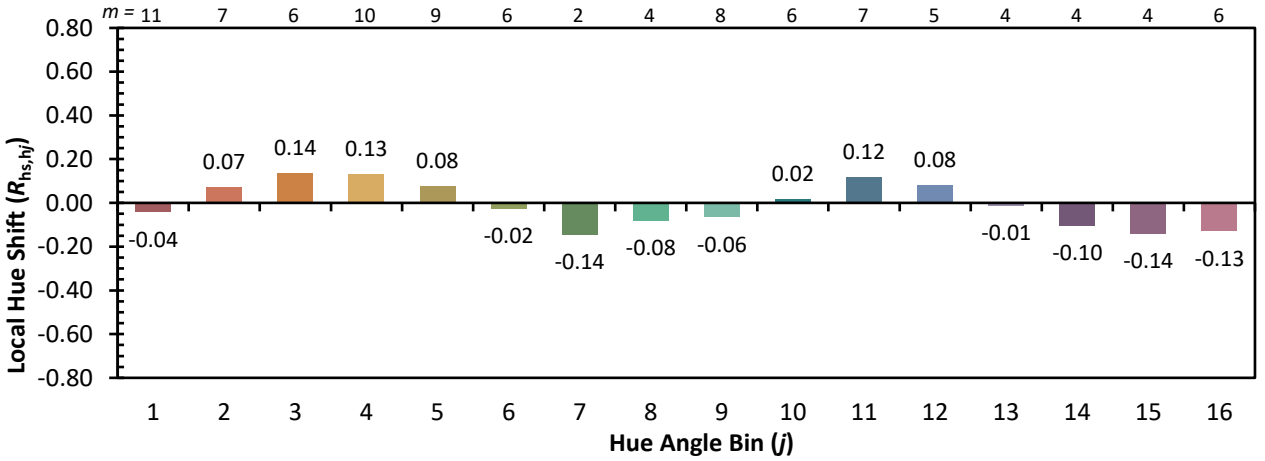
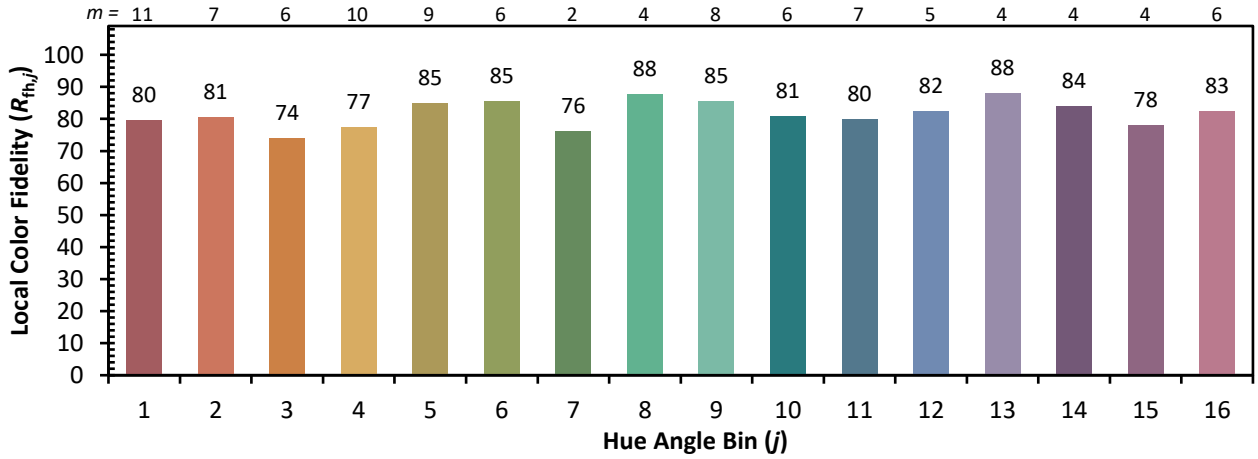
Color Rendition by Hue-Angle Bin







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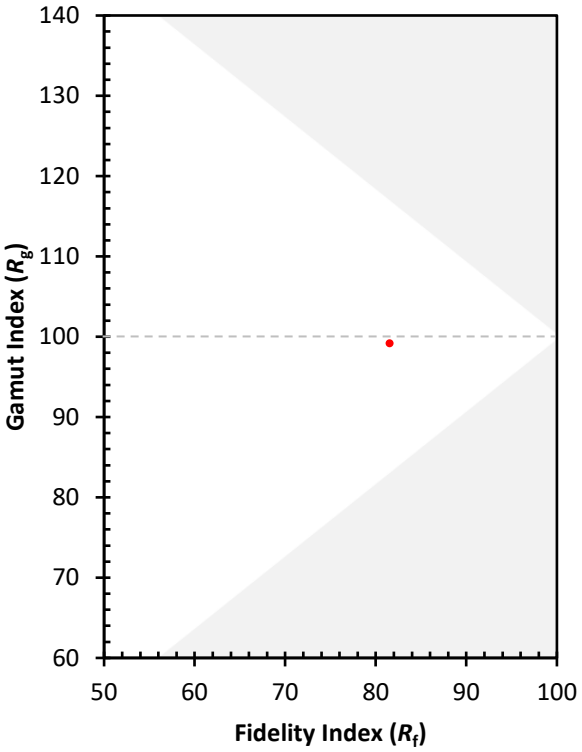
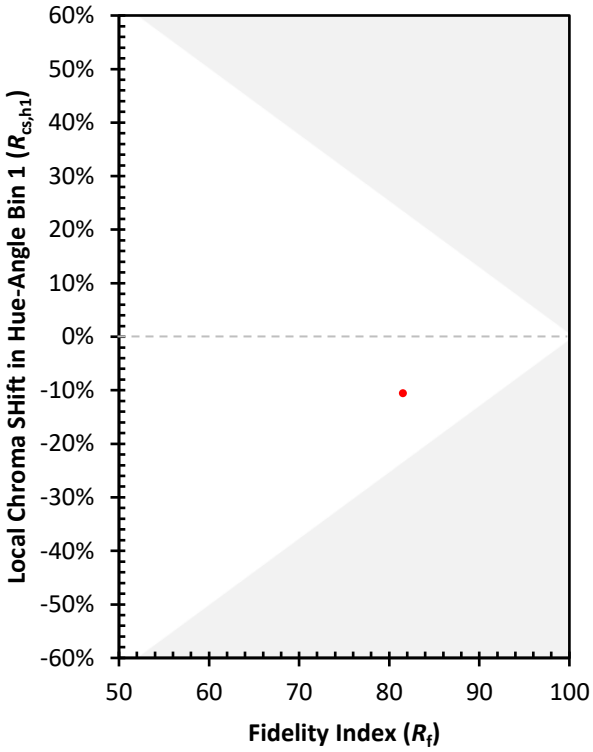
Measure Comparisons





(END OF REPORT)