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: P643432

Luminaire Tested: GWS-SA6E-830-U-SLL-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P643432
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA6E-830-U-SLL-W
Description:	GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	(96) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	33328.6 lumens
Efficiency:	N/A
Efficacy:	102.9 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G4

Input Watts (W):	323.8
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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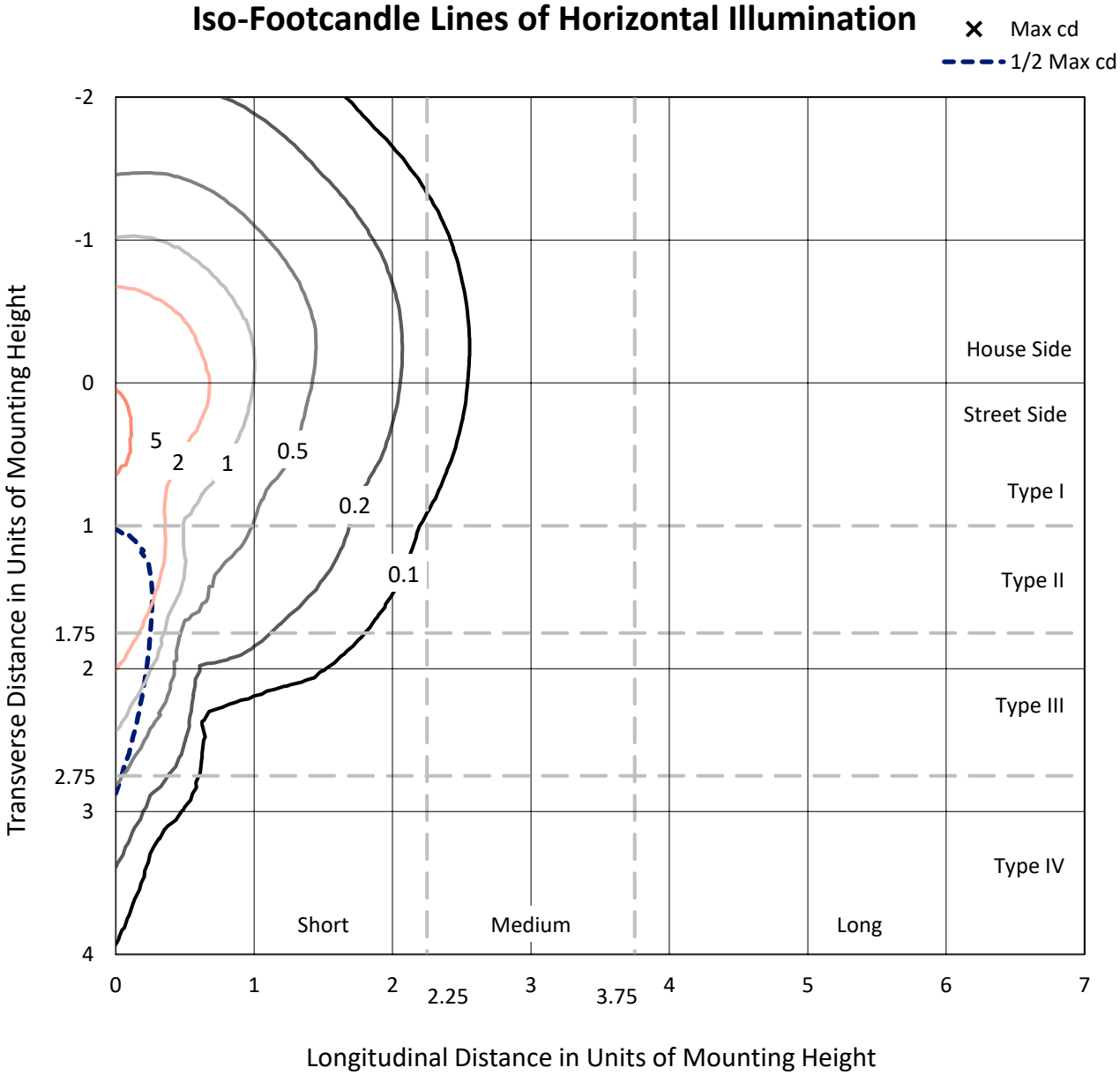
Iso-Footcandle Lines of Horizontal Illumination



Based on 30 foot mounting height. Maximum calculated value = 6.2 fc
Type III - Short - N/A

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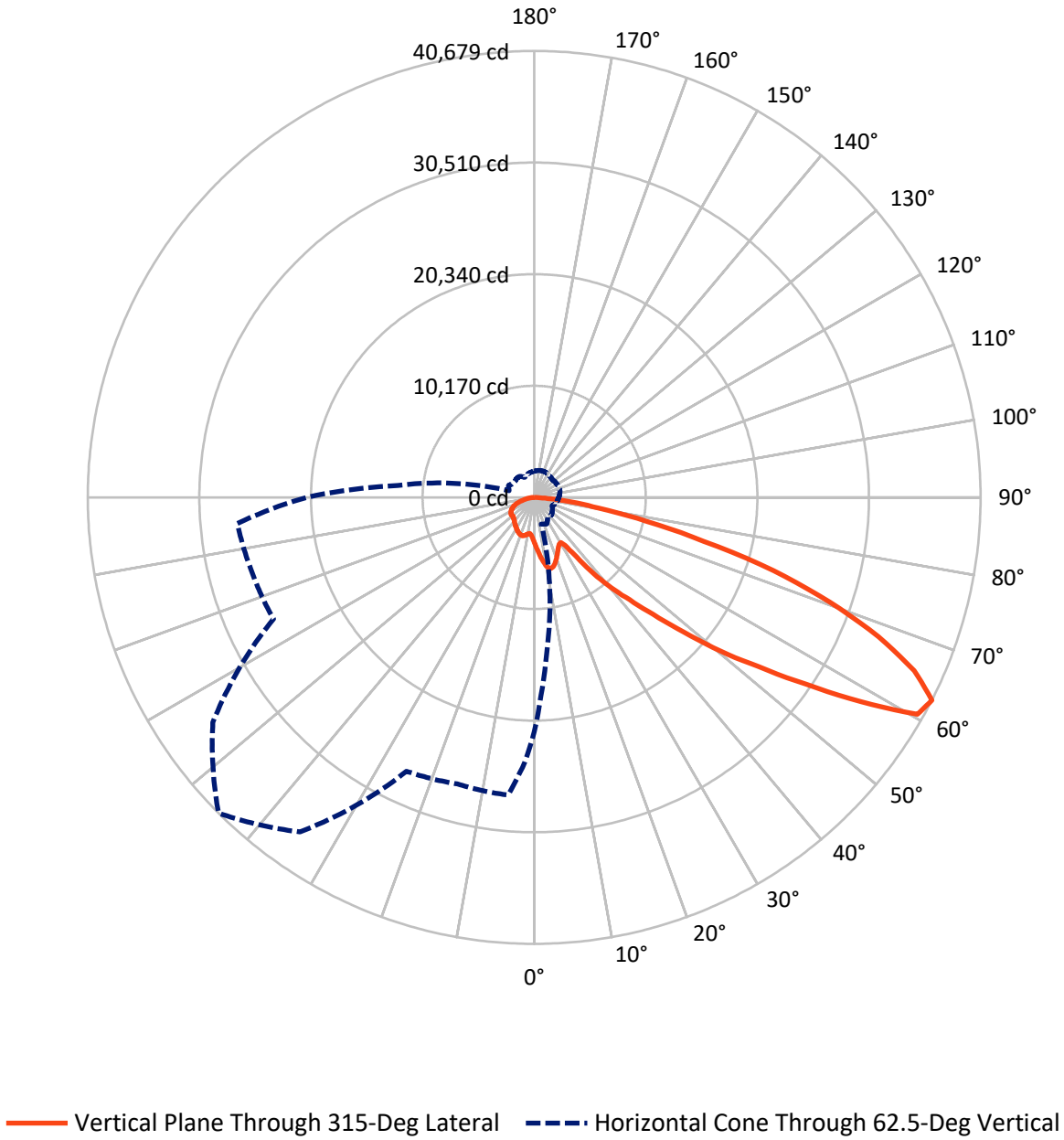
Luminous Intensity Polar Plot



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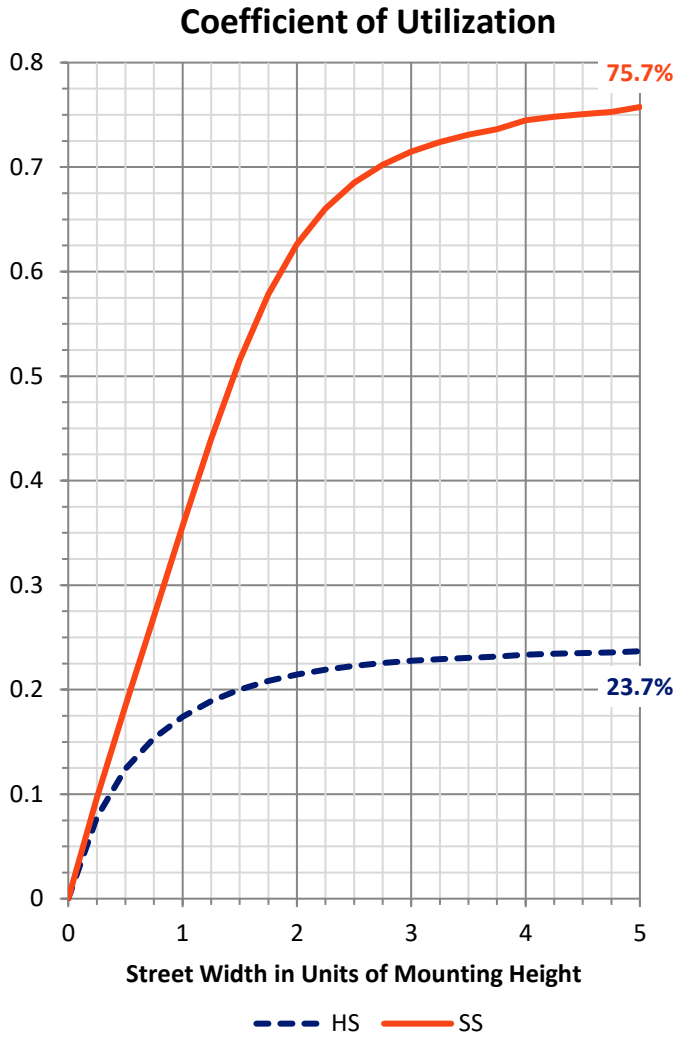
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7968.9	0.0	7968.9
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	25359.7	0.0	25359.7
	% Fixture	76.1	0.0	76.1
Total	Lumens	33328.6	0.0	33328.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.4	1.2
10°-20°	1330.4	4.0
20°-30°	2094.4	6.3
30°-40°	2870.8	8.6
40°-50°	4479.3	13.4
50°-60°	7723.3	23.2
60°-70°	8950.3	26.9
70°-80°	4724.4	14.2
80°-90°	746.3	2.2
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°	33328.6	100.0
0°-180°	33328.6	100.0



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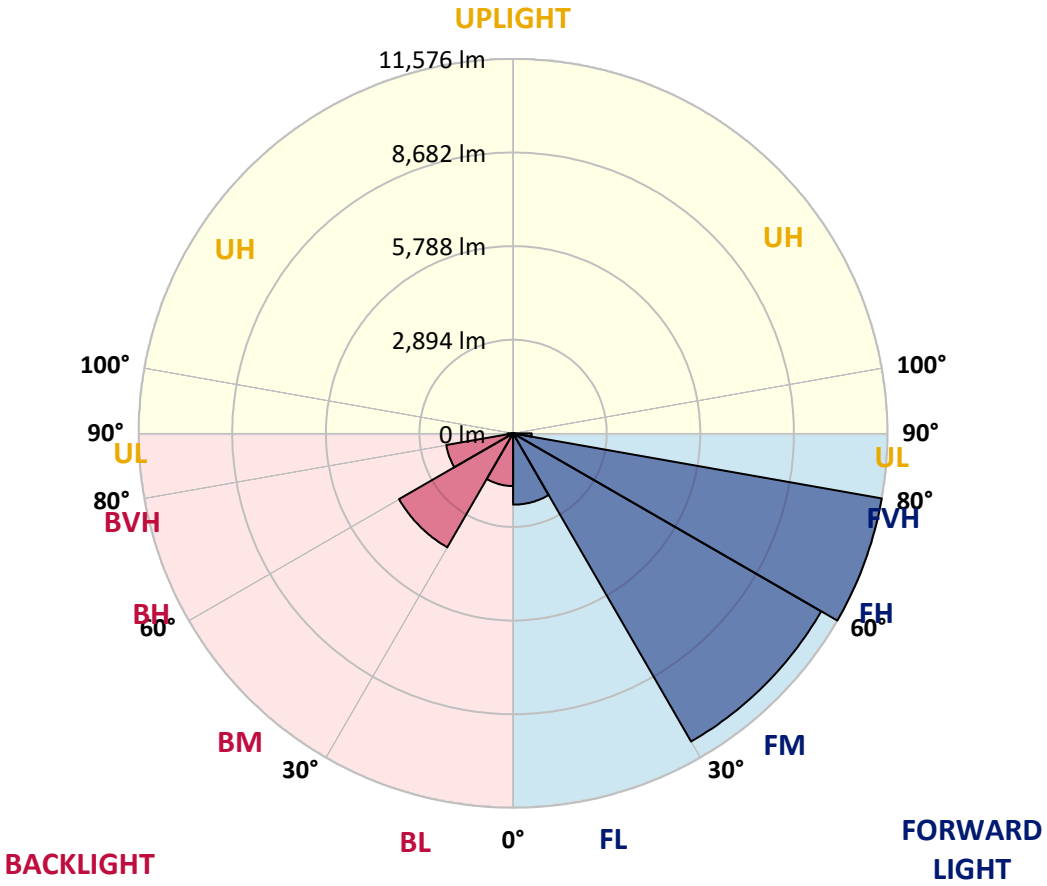
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2204.3	6.6			
FM	(30°-60°)	11002.9	33.0			
FH	(60°-80°)	11576.4	34.7			G4/12000
FVH	(80°-90°)	576.0	1.7			G4/750
BL	(0°-30°)	1629.9	4.9	B3/2500		
BM	(30°-60°)	4070.5	12.2	B3/5000		
BH	(60°-80°)	2098.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	170.3	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4
2.5°	4514.8	4497.0	4471.5	4384.8	4331.3	4270.1	4206.4	4132.4	4048.3	3989.7	3931.0
5°	4897.2	4869.2	4808.0	4601.5	4458.8	4303.2	4173.2	4025.4	3880.1	3780.6	3681.2
7.5°	5264.3	5228.6	5134.3	4818.2	4586.2	4361.9	4165.6	3951.4	3734.7	3586.9	3469.6
10°	5631.4	5557.5	5437.7	5024.7	4718.8	4458.8	4234.4	3971.8	3683.8	3482.4	3357.5
12.5°	5911.9	5843.0	5713.0	5213.4	4851.3	4525.0	4272.7	4030.5	3785.7	3571.6	3444.1
15°	6174.4	6085.2	5937.4	5389.3	4961.0	4522.5	4196.2	3984.6	3948.9	3895.4	3729.7
17.5°	6363.1	6281.5	6128.6	5532.0	5022.2	4443.5	3984.6	3859.7	4020.3	4183.4	4025.4
20°	6528.8	6434.5	6279.0	5631.4	5034.9	4267.6	3727.1	3729.7	3982.0	4206.4	4168.1
22.5°	6669.0	6564.5	6426.8	5743.6	5029.8	4022.8	3502.8	3655.7	3908.1	4084.0	4089.1
25°	6842.4	6755.7	6641.0	5909.3	5029.8	3773.0	3339.6	3566.5	3783.2	3931.0	3925.9
27.5°	7054.0	6995.3	6901.0	6161.7	5075.7	3563.9	3247.8	3451.8	3622.6	3750.0	3747.5
30°	7291.0	7237.5	7166.1	6429.4	5154.7	3408.4	3196.8	3309.0	3433.9	3535.9	3535.9
32.5°	7533.2	7512.8	7436.4	6643.5	5093.5	3360.0	3153.5	3166.3	3232.5	3316.7	3309.0
35°	7869.7	7849.3	7752.5	6809.2	4828.4	3291.2	3084.7	3020.9	3028.6	3082.1	3100.0
37.5°	8361.8	8331.2	8188.4	7003.0	4428.2	3117.8	2972.5	2868.0	2845.0	2868.0	2901.1
40°	8955.7	8909.9	8716.1	7265.6	3966.7	2883.3	2796.6	2709.9	2671.7	2679.3	2717.6
42.5°	9700.2	9603.3	9325.4	7543.4	3510.4	2676.8	2600.3	2546.8	2503.4	2498.3	2572.3
45°	10908.5	10643.4	10202.4	7790.7	3125.5	2567.2	2424.4	2386.2	2350.5	2370.9	2457.5
47.5°	13019.4	12529.9	11670.8	8002.3	2890.9	2569.7	2284.2	2243.4	2240.8	2281.6	2378.5
50°	15920.5	15214.3	13888.7	8145.1	2768.6	2600.3	2200.1	2133.8	2182.2	2223.0	2314.8
52.5°	18699.2	17620.9	16042.9	8142.5	2715.0	2605.4	2223.0	2031.8	2182.2	2192.4	2279.1
55°	21072.7	19119.9	16624.1	7306.3	2638.5	2585.0	2312.2	1952.8	2154.2	2192.4	2261.2
57.5°	22959.1	20073.3	16580.8	5901.7	2870.5	2472.8	2365.8	1934.9	2072.6	2197.5	2276.5
60°	22750.1	19637.4	15512.6	3622.6	2847.6	2274.0	2358.1	1968.1	1934.9	2128.7	2258.7
62.5°	*21360.7*	*18074.7*	*13674.5*	*2513.6*	*2674.2*	*2159.3*	*2233.2*	*2026.7*	*1807.5*	*2029.3*	*2172.0*
65°	19415.6	16058.1	11395.4	1927.3	2215.4	2164.4	2021.6	1985.9	1695.3	1871.2	2024.2
67.5°	16843.3	13557.3	8996.5	1527.0	1544.9	1873.7	1835.5	1764.1	1590.8	1731.0	1868.6
70°	12662.5	9893.9	6189.7	1228.8	1170.1	1565.3	1649.4	1585.7	1488.8	1529.6	1674.9
72.5°	8922.6	6460.0	3390.6	973.8	902.5	1203.3	1432.7	1422.5	1315.4	1346.0	1488.8
75°	6630.8	4570.9	2118.5	769.9	734.2	861.7	1200.7	1231.3	1142.1	1177.8	1287.4
77.5°	4412.9	2959.8	1177.8	571.0	571.0	629.7	894.8	1037.6	971.3	999.3	1075.8
80°	2434.6	1506.6	588.9	374.7	384.9	433.4	652.6	746.9	749.5	818.3	838.7
82.5°	769.9	479.3	262.6	219.2	206.5	247.3	420.6	535.4	499.7	637.3	586.3
85°	175.9	112.2	48.4	48.4	53.5	81.6	160.6	285.5	364.6	438.5	318.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	112.2	165.7	147.9
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°	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4
2.5°	3895.4	3844.4	3829.1	3785.7	3780.6	3739.8	3724.6	3724.6	3742.4	3742.4	3760.2
5°	3640.4	3576.7	3541.0	3490.0	3477.3	3446.7	3426.3	3428.8	3451.8	3467.1	3497.7
7.5°	3416.1	3372.7	3347.3	3324.3	3319.2	3314.1	3291.2	3288.6	3296.3	3319.2	3342.2
10°	3321.8	3291.2	3298.8	3316.7	3344.7	3360.0	3339.6	3329.4	3321.8	3337.1	3357.5
12.5°	3413.5	3382.9	3398.2	3428.8	3467.1	3482.4	3474.7	3472.2	3479.8	3538.5	3581.8
15°	3614.9	3556.3	3535.9	3548.6	3579.2	3594.5	3586.9	3597.1	3645.5	3798.5	3908.1
17.5°	3864.8	3722.0	3640.4	3617.5	3630.2	3643.0	3643.0	3668.5	3752.6	3976.9	4114.6
20°	3999.9	3813.8	3676.1	3620.0	3625.1	3637.9	3637.9	3673.6	3767.9	4007.5	4096.8
22.5°	3964.2	3793.4	3625.1	3563.9	3566.5	3576.7	3576.7	3607.3	3691.4	3903.0	3943.8
25°	3824.0	3673.6	3507.9	3454.3	3459.4	3477.3	3472.2	3490.0	3553.7	3727.1	3750.0
27.5°	3655.7	3523.2	3360.0	3319.2	3342.2	3377.8	3347.3	3349.8	3408.4	3553.7	3556.3
30°	3474.7	3365.1	3219.8	3189.2	3232.5	3250.4	3222.3	3222.3	3281.0	3380.4	3377.8
32.5°	3278.4	3209.6	3105.1	3071.9	3120.4	3148.4	3112.7	3117.8	3163.7	3230.0	3204.5
35°	3094.9	3059.2	3010.7	2987.8	3018.4	3043.9	3020.9	3031.1	3074.5	3092.3	3056.6
37.5°	2919.0	2913.9	2919.0	2919.0	2926.6	2934.3	2919.0	2944.5	2982.7	2959.8	2919.0
40°	2766.0	2786.4	2834.8	2822.1	2814.4	2822.1	2811.9	2855.2	2893.5	2852.7	2804.2
42.5°	2638.5	2676.8	2750.7	2750.7	2735.4	2740.5	2735.4	2789.0	2817.0	2760.9	2707.4
45°	2528.9	2585.0	2679.3	2692.1	2666.6	2666.6	2676.8	2743.1	2753.3	2676.8	2620.7
47.5°	2452.4	2521.3	2628.3	2651.3	2613.0	2610.5	2638.5	2709.9	2709.9	2620.7	2557.0
50°	2398.9	2475.4	2602.9	2633.4	2595.2	2585.0	2630.9	2699.7	2684.4	2577.4	2513.6
52.5°	2363.2	2442.2	2600.3	2643.6	2618.1	2608.0	2653.8	2702.3	2664.0	2549.3	2483.0
55°	2340.3	2426.9	2608.0	2643.6	2615.6	2597.8	2643.6	2687.0	2666.6	2534.0	2470.3
57.5°	2353.0	2439.7	2597.8	2615.6	2582.5	2551.9	2605.4	2666.6	2658.9	2539.1	2475.4
60°	2332.6	2411.7	2541.7	2546.8	2490.7	2442.2	2521.3	2613.0	2613.0	2521.3	2465.2
62.5°	*2238.3*	*2317.3*	*2432.0*	*2437.1*	*2373.4*	*2319.9*	*2411.7*	*2521.3*	*2518.7*	*2444.8*	*2386.2*
65°	2082.8	2156.7	2286.7	2299.5	2235.8	2179.7	2274.0	2376.0	2383.6	2317.3	2266.3
67.5°	1912.0	1978.3	2075.1	2126.1	2072.6	2014.0	2100.6	2197.5	2195.0	2115.9	2062.4
70°	1708.0	1769.2	1858.5	1901.8	1868.6	1812.6	1891.6	1942.6	1919.6	1881.4	1845.7
72.5°	1506.6	1565.3	1649.4	1649.4	1613.7	1560.2	1583.1	1674.9	1702.9	1674.9	1652.0
75°	1295.1	1346.0	1404.7	1417.4	1338.4	1241.5	1348.6	1427.6	1460.8	1448.0	1420.0
77.5°	1078.4	1116.6	1203.3	1180.3	1032.5	981.5	1068.2	1185.4	1208.4	1200.7	1162.5
80°	831.1	854.0	945.8	899.9	785.2	752.0	790.3	882.1	887.2	861.7	813.2
82.5°	558.3	588.9	650.1	560.8	558.3	527.7	497.1	507.3	553.2	548.1	515.0
85°	285.5	300.8	359.5	336.5	288.1	249.8	237.1	252.4	226.9	206.5	178.5
87.5°	119.8	130.0	178.5	99.4	30.6	0.0	0.0	15.3	22.9	33.1	35.7
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°	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4
2.5°	3801.0	3829.1	3897.9	3984.6	4068.7	4155.4	4249.7	4308.3	4379.7	4471.5	4474.1
5°	3535.9	3599.6	3699.1	3831.6	3969.3	4127.3	4310.9	4463.9	4647.4	4792.7	4851.3
7.5°	3372.7	3464.5	3589.4	3757.7	3938.7	4135.0	4374.6	4632.1	4932.9	5126.7	5241.4
10°	3388.0	3528.3	3653.2	3795.9	3959.1	4170.7	4479.1	4820.8	5190.4	5445.3	5588.1
12.5°	3660.8	3808.7	3785.7	3778.1	3887.7	4145.2	4563.3	5012.0	5463.2	5718.1	5888.9
15°	4005.0	4061.1	3844.4	3681.2	3747.5	4053.4	4609.2	5182.8	5690.1	6001.1	6169.3
17.5°	4180.9	4068.7	3806.1	3561.4	3543.6	3913.2	4632.1	5356.1	5945.0	6256.0	6434.5
20°	4099.3	3936.1	3714.4	3482.4	3354.9	3722.0	4619.4	5493.8	6177.0	6523.7	6669.0
22.5°	3923.4	3780.6	3607.3	3385.5	3201.9	3513.0	4586.2	5631.4	6383.5	6732.7	6860.2
25°	3732.2	3625.1	3482.4	3288.6	3115.3	3329.4	4563.3	5815.0	6620.6	6954.5	7036.1
27.5°	3541.0	3462.0	3344.7	3194.3	3094.9	3201.9	4570.9	6054.6	6926.5	7242.6	7209.5
30°	3352.4	3283.5	3201.9	3135.7	3092.3	3171.4	4550.5	6309.6	7263.0	7556.2	7359.9
32.5°	3173.9	3110.2	3059.2	3069.4	3094.9	3184.1	4446.0	6541.5	7571.5	7821.3	7523.0
35°	3020.9	2954.7	2954.7	2990.3	3084.7	3140.8	4175.8	6722.5	7913.1	8162.9	7755.0
37.5°	2878.2	2819.5	2857.8	2916.4	3005.6	3023.5	3829.1	6898.5	8410.2	8644.7	8114.5
40°	2753.3	2694.6	2763.5	2837.4	2883.3	2875.6	3477.3	7143.2	8996.5	9238.7	8591.2
42.5°	2653.8	2600.3	2661.5	2755.8	2763.5	2771.1	3219.8	7377.7	9677.2	9985.7	9412.1
45°	2572.3	2534.0	2564.6	2658.9	2658.9	2776.2	3059.2	7574.0	10702.0	11247.6	10918.7
47.5°	2508.5	2485.6	2500.9	2531.5	2582.5	2868.0	2957.2	7724.4	12568.1	13638.8	13307.4
50°	2472.8	2449.9	2470.3	2406.6	2559.5	2913.9	2924.1	7839.1	15028.2	16705.7	16295.2
52.5°	2442.2	2434.6	2447.3	2299.5	2610.5	2883.3	2898.6	7686.2	16677.6	19724.1	20129.4
55°	2432.0	2437.1	2376.0	2220.5	2671.7	2781.3	2822.1	6592.5	17126.3	22326.9	24843.1
57.5°	2437.1	2421.9	2266.3	2228.1	2674.2	2577.4	2931.7	4703.5	16473.7	23458.8	29454.8
60°	2419.3	2342.8	2133.8	2296.9	2557.0	2337.7	2852.7	3066.8	14752.9	22589.5	29722.5
62.5°	*2340.3*	*2228.1*	*2019.1*	*2335.2*	*2347.9*	*2195.0*	*2590.1*	*2363.2*	*12458.5*	*20728.5*	*27142.6*
65°	2225.6	2075.1	1922.2	2256.1	2136.3	2128.7	1947.7	1894.1	10018.8	18513.1	24695.2
67.5°	2036.9	1886.5	1850.8	2075.1	1922.2	1886.5	1565.3	1570.4	7994.7	16152.5	22235.1
70°	1822.8	1672.4	1700.4	1876.3	1710.6	1567.8	1267.0	1307.8	6064.8	13457.8	18918.5
72.5°	1682.5	1481.2	1483.7	1652.0	1504.1	1269.6	1042.7	1078.4	3849.5	10143.7	15041.0
75°	1420.0	1305.3	1249.2	1338.4	1277.2	989.1	877.0	869.3	2281.6	7270.7	11262.9
77.5°	1185.4	1096.2	1068.2	1103.9	953.4	731.7	706.2	693.4	1292.5	4657.6	7380.3
80°	859.1	836.2	833.6	851.5	734.2	537.9	537.9	540.5	696.0	2528.9	4160.5
82.5°	545.6	596.5	527.7	586.3	499.7	382.4	356.9	405.3	400.2	1078.4	1753.9
85°	226.9	311.0	290.6	308.5	237.1	209.0	224.3	242.2	232.0	415.5	683.2
87.5°	43.3	51.0	56.1	53.5	53.5	66.3	73.9	89.2	89.2	119.8	206.5
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: P643432
CATALOG NUMBER: GWS-SA6E-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4	4155.4
2.5°	4570.9	4644.9	4629.6	4662.7	4619.4	4634.7	4548.0	4525.0	4509.7	4514.8
5°	5040.0	5190.4	5218.5	5274.5	5236.3	5236.3	5083.3	4968.6	4927.8	4897.2
7.5°	5516.7	5733.4	5876.2	5891.5	5871.1	5830.3	5608.5	5402.0	5328.1	5264.3
10°	5939.9	6199.9	6360.5	6437.0	6398.8	6335.1	6059.7	5776.8	5687.5	5631.4
12.5°	6263.7	6493.1	6600.2	6651.2	6646.1	6623.1	6398.8	6092.9	5998.5	5911.9
15°	6472.7	6587.4	6546.6	6544.1	6579.8	6671.6	6602.7	6363.1	6253.5	6174.4
17.5°	6607.8	6498.2	6317.2	6233.1	6309.6	6526.3	6684.3	6549.2	6449.8	6363.1
20°	6656.3	6266.2	6003.6	5848.1	5937.4	6250.9	6641.0	6684.3	6600.2	6528.8
22.5°	6600.2	5983.2	5626.3	5442.8	5529.5	5904.2	6513.5	6793.9	6737.8	6669.0
25°	6462.5	5687.5	5259.2	5093.5	5187.9	5570.3	6286.6	6895.9	6898.5	6842.4
27.5°	6291.7	5414.7	5001.8	4846.3	4938.0	5294.9	6064.8	6985.1	7074.4	7054.0
30°	6118.4	5251.6	4879.4	4769.8	4838.6	5154.7	5837.9	7076.9	7255.4	7291.0
32.5°	6039.3	5330.6	5167.5	5215.9	5126.7	5236.3	5756.4	7206.9	7474.6	7533.2
35°	6143.9	6031.7	6444.7	6635.9	6319.8	5904.2	5860.9	7403.2	7783.1	7869.7
37.5°	6651.2	7533.2	8150.2	8823.2	8275.1	7359.9	6378.4	7737.2	8224.1	8361.8
40°	7755.0	8843.6	9957.6	10826.9	9998.4	8767.1	7362.4	8234.3	8830.8	8955.7
42.5°	8795.1	10072.4	11607.0	12731.3	11655.5	9916.8	8422.9	9070.5	9631.3	9700.2
45°	9814.9	11278.2	13603.2	15165.9	13705.1	11010.5	9506.4	10482.8	10906.0	10908.5
47.5°	11010.5	12637.0	16106.6	18332.1	16425.2	12221.4	10523.6	12718.5	13307.4	13019.4
50°	12440.7	13988.1	18683.9	22015.9	19741.9	13710.2	11816.1	15443.8	16246.8	15920.5
52.5°	14355.2	15476.9	21523.9	25607.9	23356.8	15405.5	13689.8	19043.4	19308.5	18699.2
55°	17049.8	17626.0	25169.4	30043.7	27392.4	17493.4	16430.3	23560.8	22818.9	21072.7
57.5°	23186.0	21026.8	29849.9	35104.1	31958.2	21286.8	22436.5	28542.2	25903.6	22959.1
60°	28320.4	25156.7	34181.2	40126.2	35871.4	25467.7	28075.6	29408.9	25788.9	22750.1
62.5°	26589.4	26209.5	35744.0	40679.4	37207.3	27525.0	27027.9	27224.2	24106.3	21360.7
65°	23328.8	24177.7	34349.5	38056.2	35726.1	25681.8	24447.9	25205.1	22181.6	19415.6
67.5°	21404.1	22028.6	31869.0	33857.5	33034.0	23688.3	22441.6	21893.5	19193.8	16843.3
70°	19436.0	19953.5	28386.6	28588.0	28835.3	20374.1	18350.0	16718.4	14306.8	12662.5
72.5°	16794.9	16822.9	23984.0	22816.4	23285.5	15943.4	14770.7	12499.3	10414.0	8922.6
75°	14090.1	13320.2	18984.8	15948.5	16889.2	12402.4	12264.8	9419.7	7854.4	6630.8
77.5°	10742.8	9842.9	13868.3	10487.9	11862.0	8259.8	9220.9	6388.6	5526.9	4412.9
80°	7212.0	6651.2	7663.2	5919.5	7760.1	5692.6	6013.8	3620.0	3138.2	2434.6
82.5°	3803.6	3247.8	4736.6	3510.4	4680.5	3128.0	2256.1	1119.2	953.4	769.9
85°	1473.5	1705.5	2322.4	1249.2	1815.1	1116.6	652.6	277.9	232.0	175.9
87.5°	285.5	441.0	242.2	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

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.

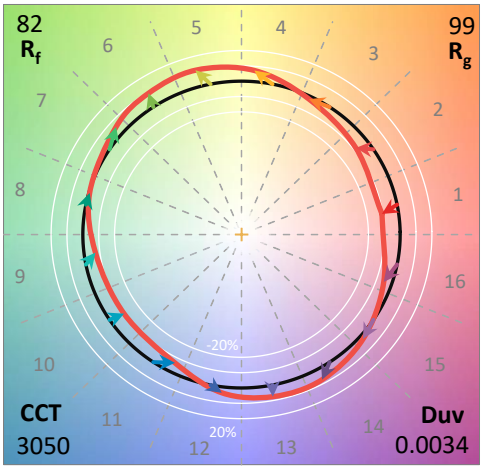
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

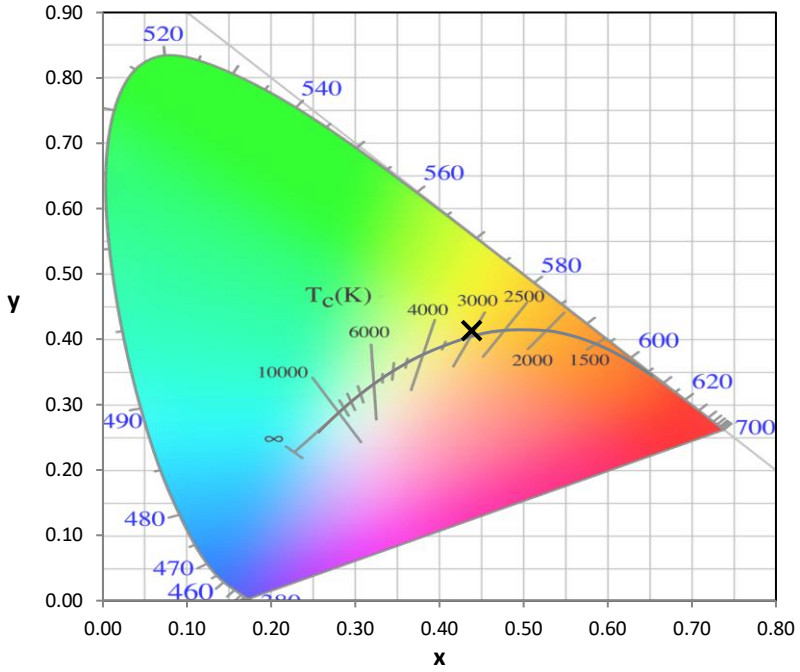
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

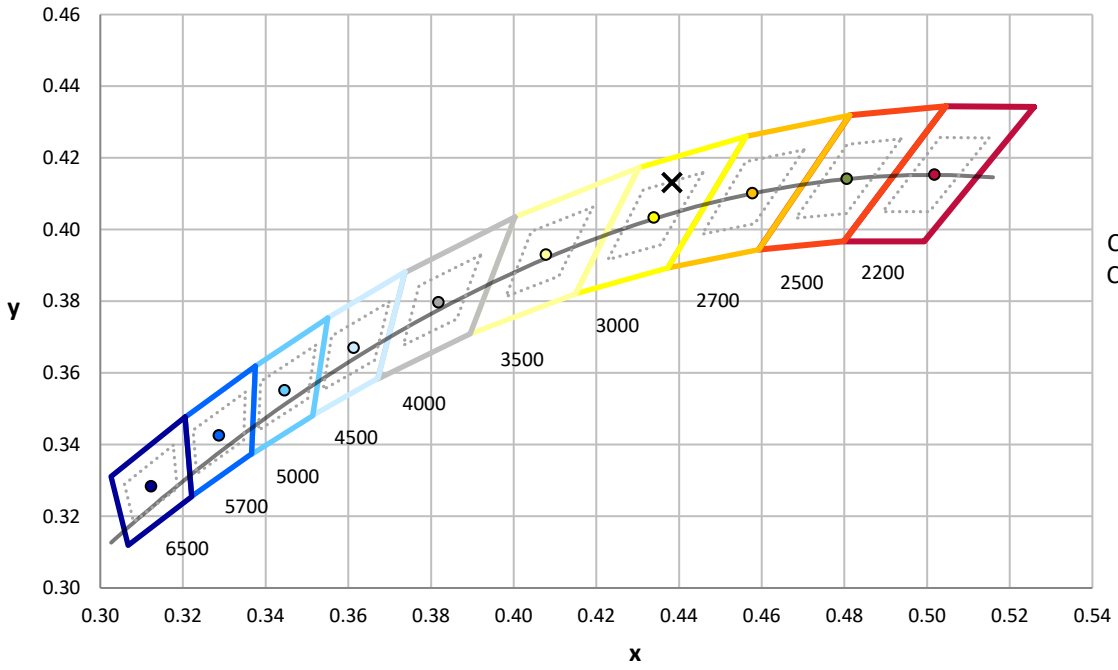
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

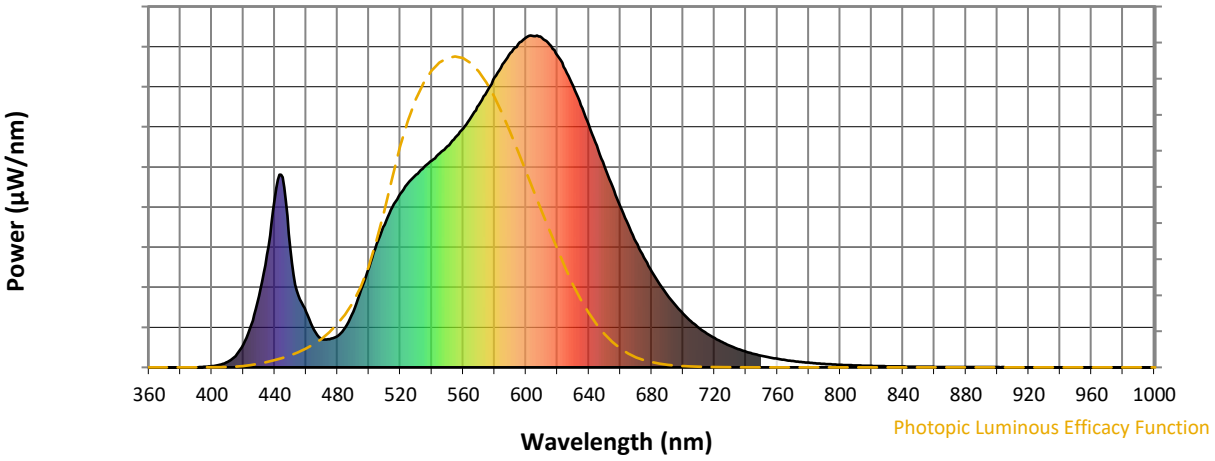


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

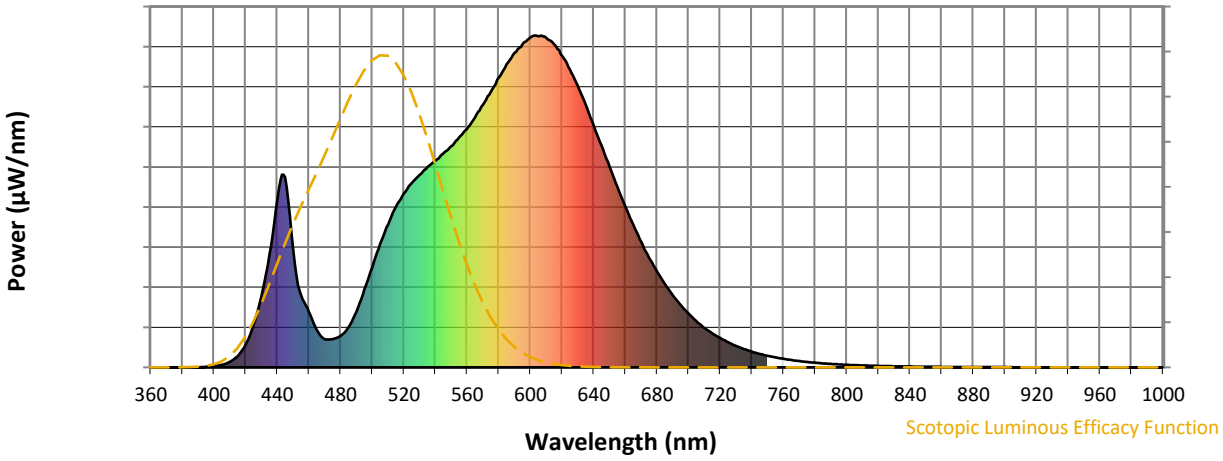


Photopic Lumens: NR

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

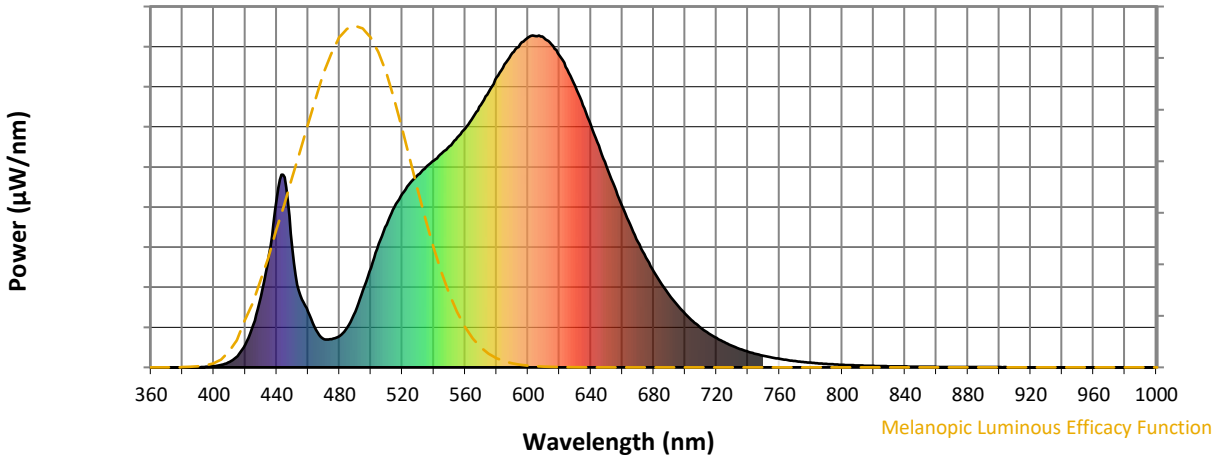


Scotopic Lumens: NR **S/P: 1.27**

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			

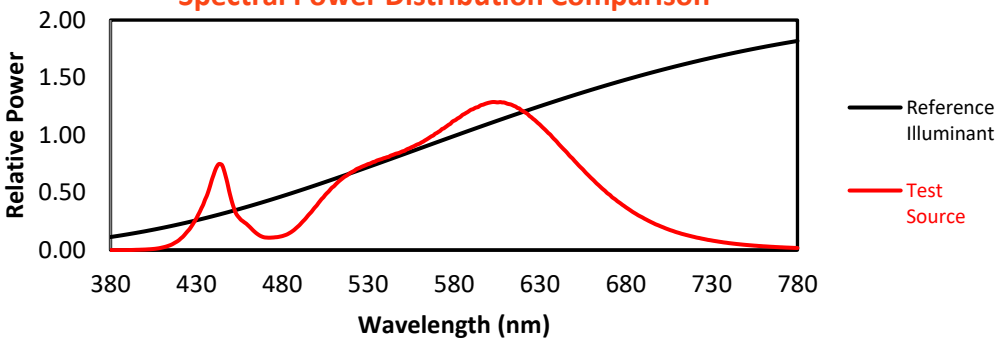
REPORT NUMBER: SP1-2408-195-9

TM-30-18

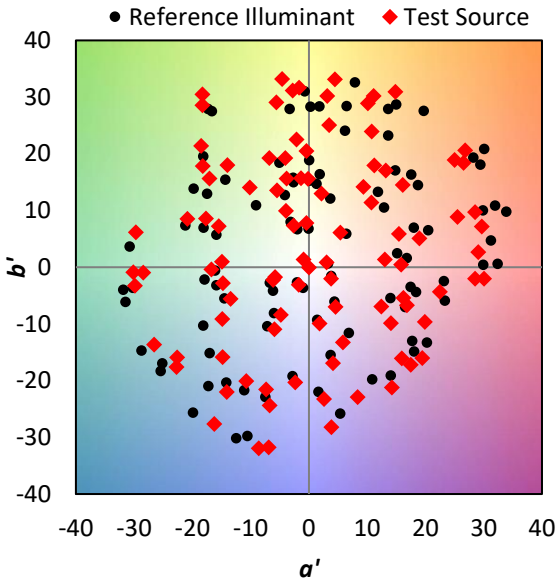
Summary

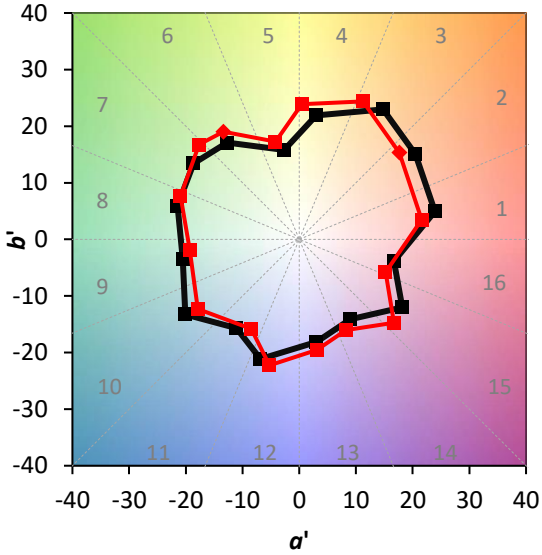
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

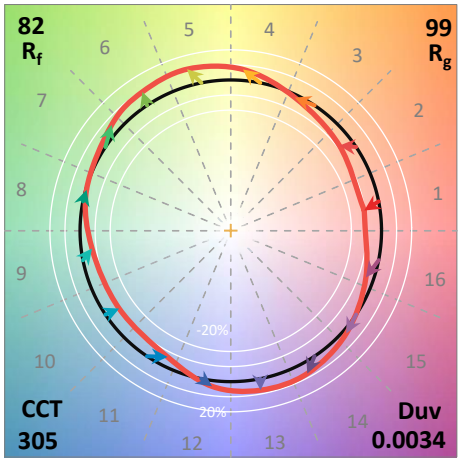
Spectral Power Distribution Comparison

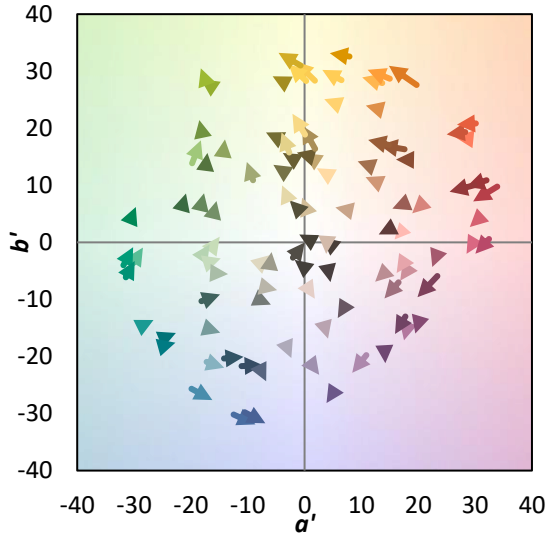


Color Vector Graphics









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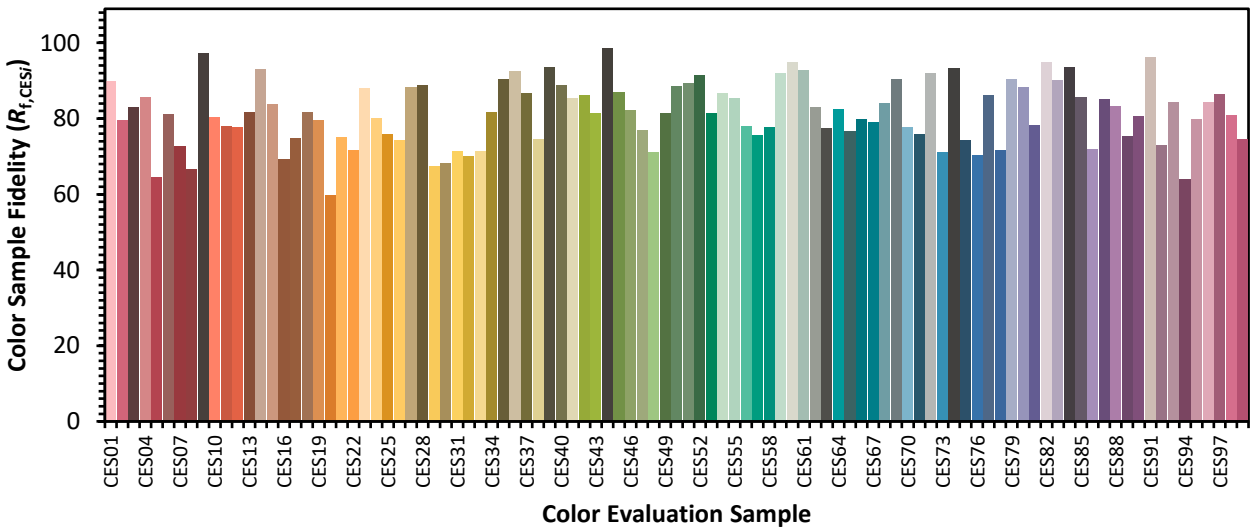
Individual Sample Fidelity Index ($R_{f,i}$)

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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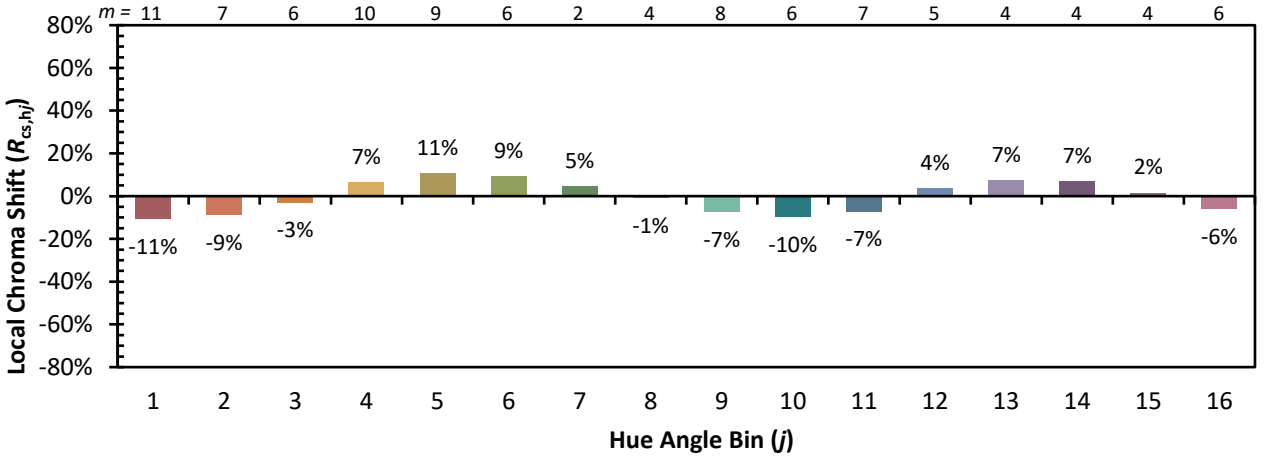
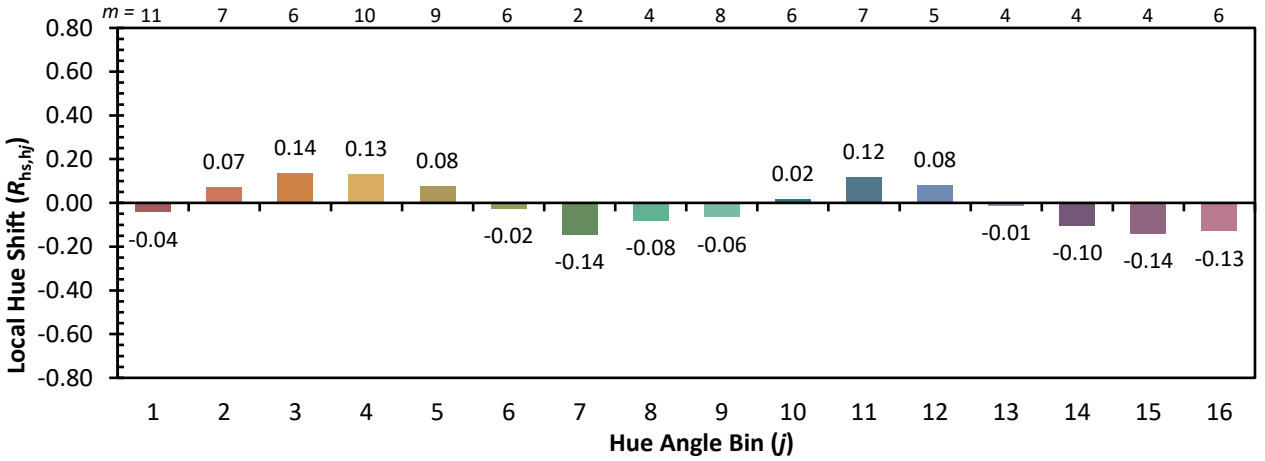
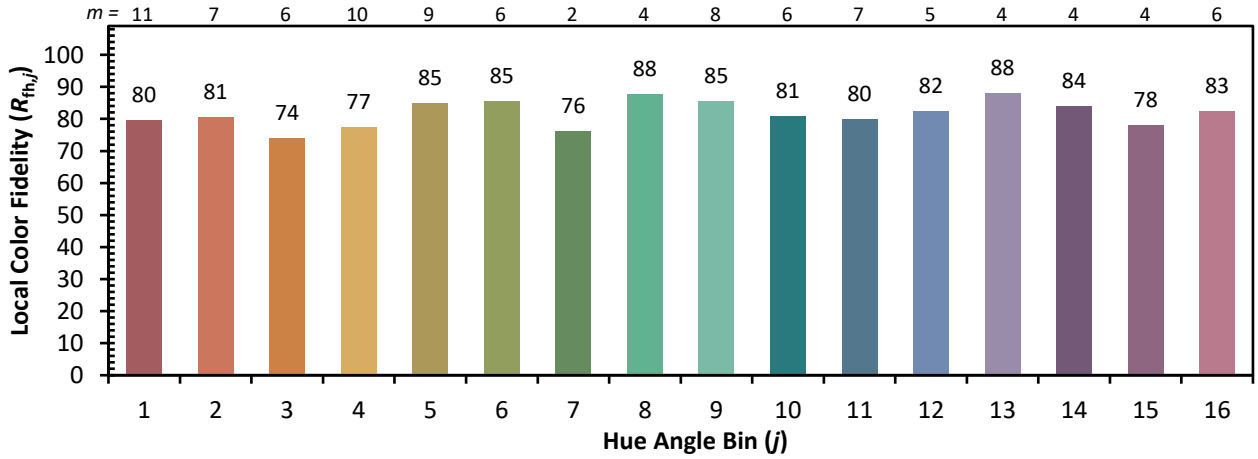
Color Rendition by Hue-Angle Bin







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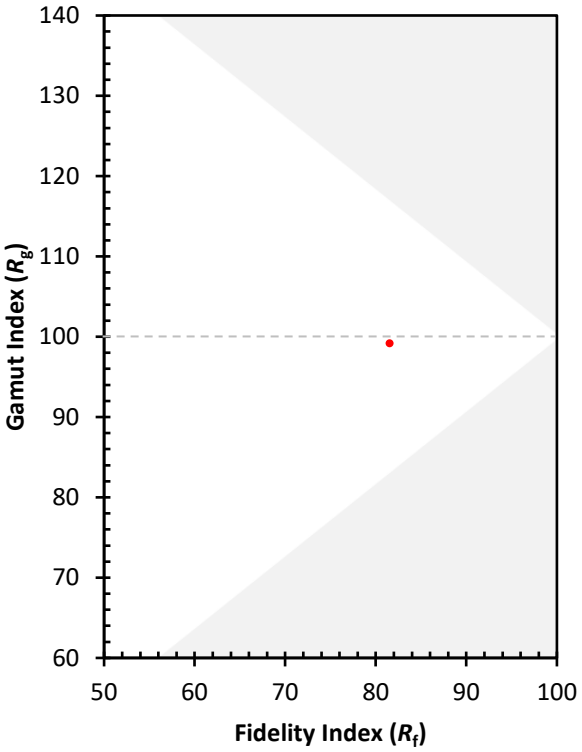
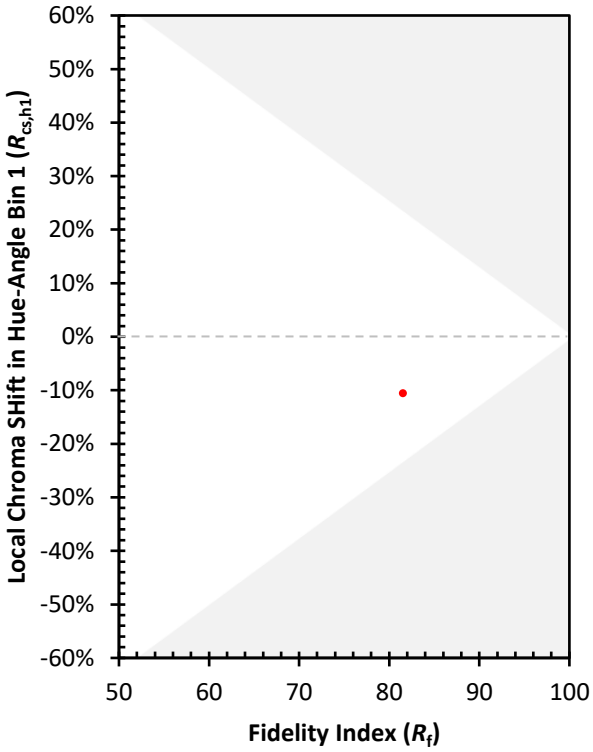
Measure Comparisons





(END OF REPORT)