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: P636500

Luminaire Tested: GWS-SA3F-830-U-SLL-W-GRSWH

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:	P636500
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	15118.7 lumens
Efficiency:	N/A
Efficacy:	82.5 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	183.2
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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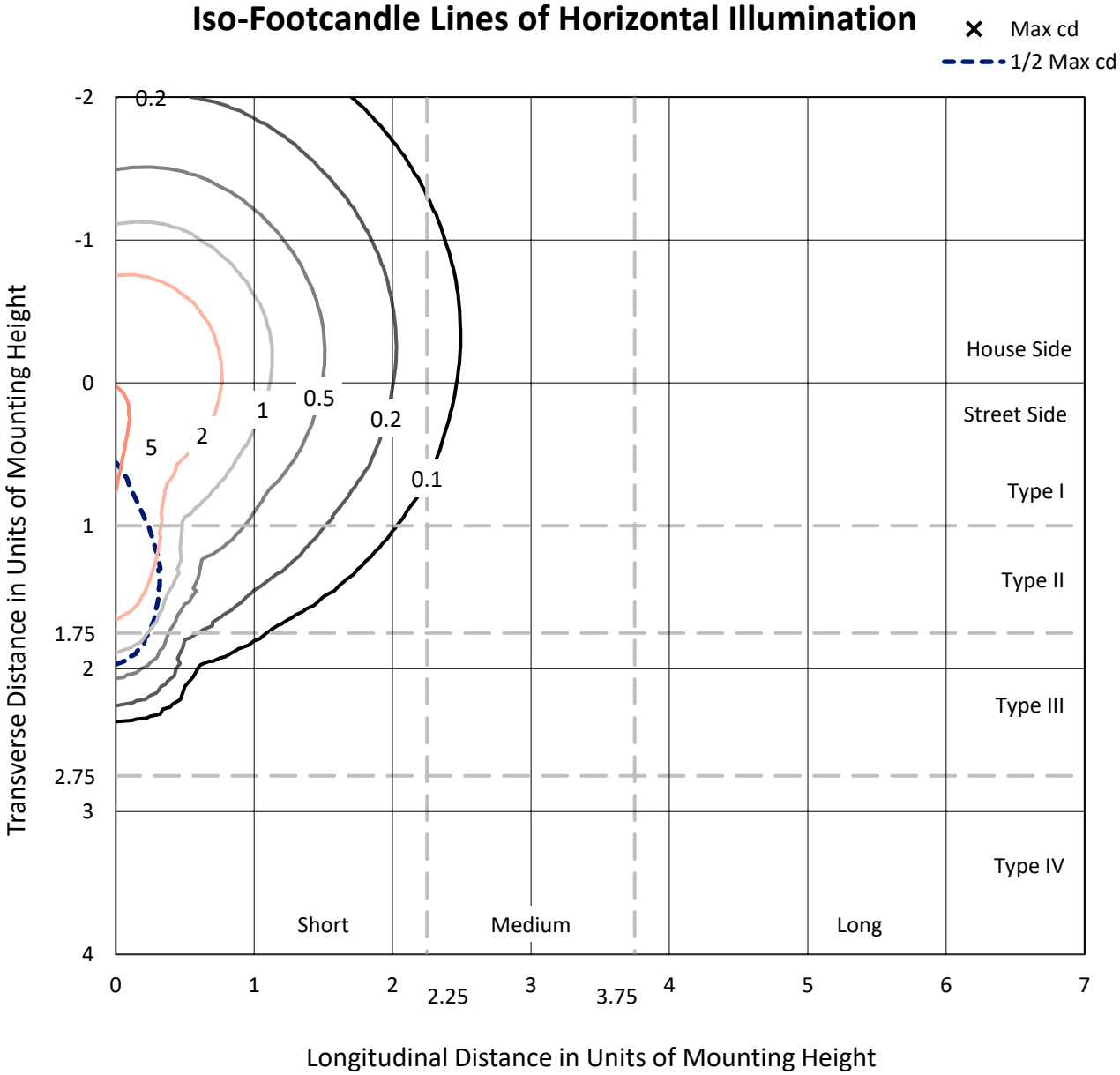
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
Type III - Short - N/A

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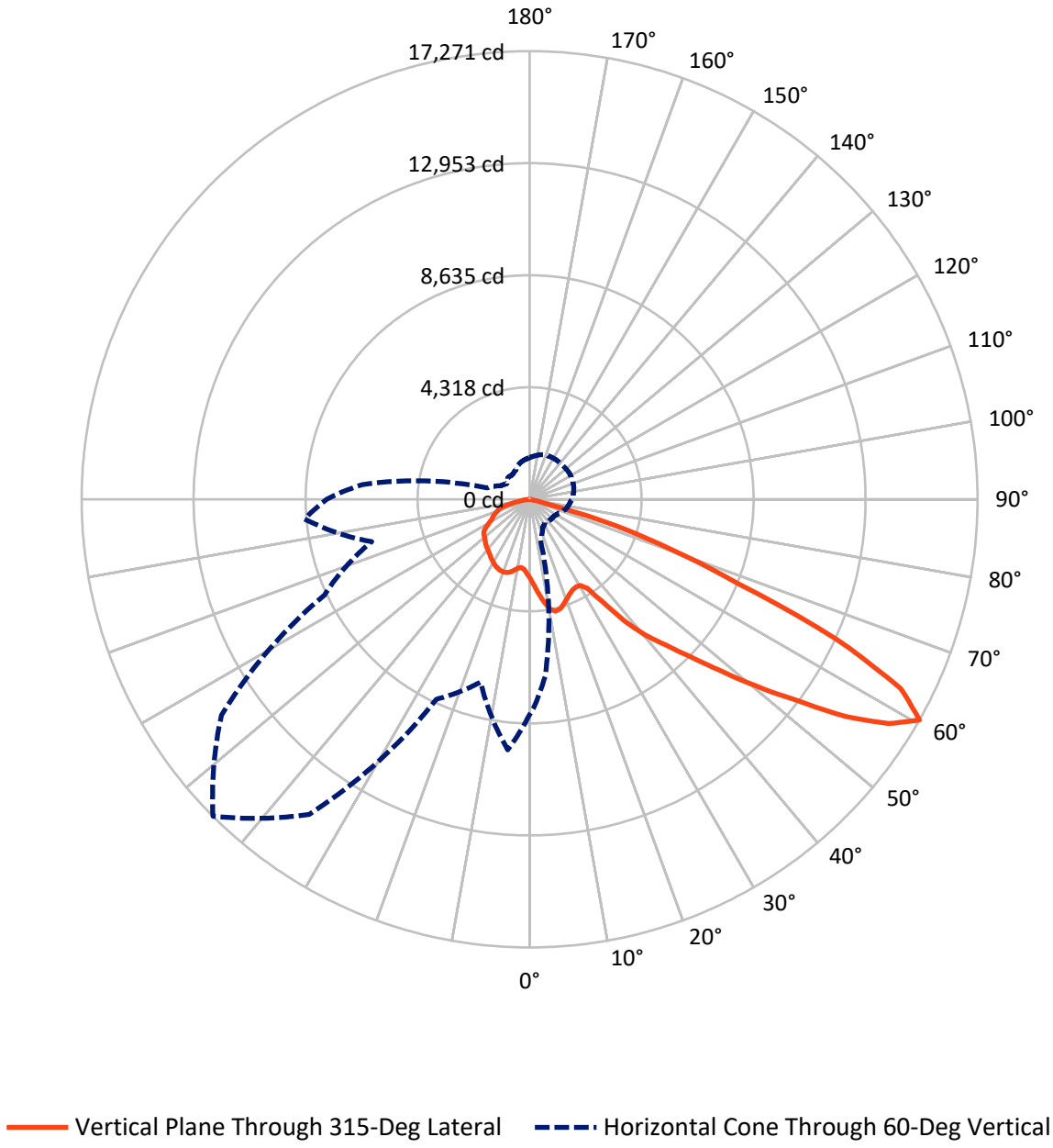
Luminous Intensity Polar Plot



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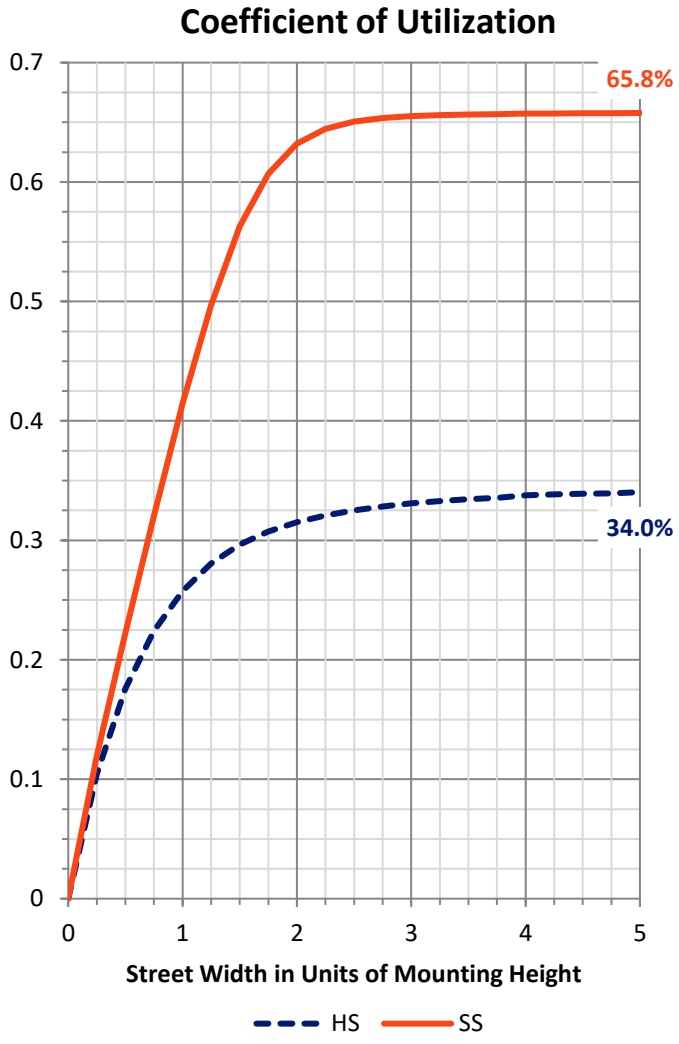
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5172.0	0.0	5172.0
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	9946.7	0.0	9946.7
	% Fixture	65.8	0.0	65.8
Total	Lumens	15118.7	0.0	15118.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.9	2.0
10°-20°	955.6	6.3
20°-30°	1556.2	10.3
30°-40°	2186.2	14.5
40°-50°	2991.5	19.8
50°-60°	3838.0	25.4
60°-70°	2584.3	17.1
70°-80°	646.1	4.3
80°-90°	63.0	0.4
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°	15118.7	100.0
0°-180°	15118.7	100.0



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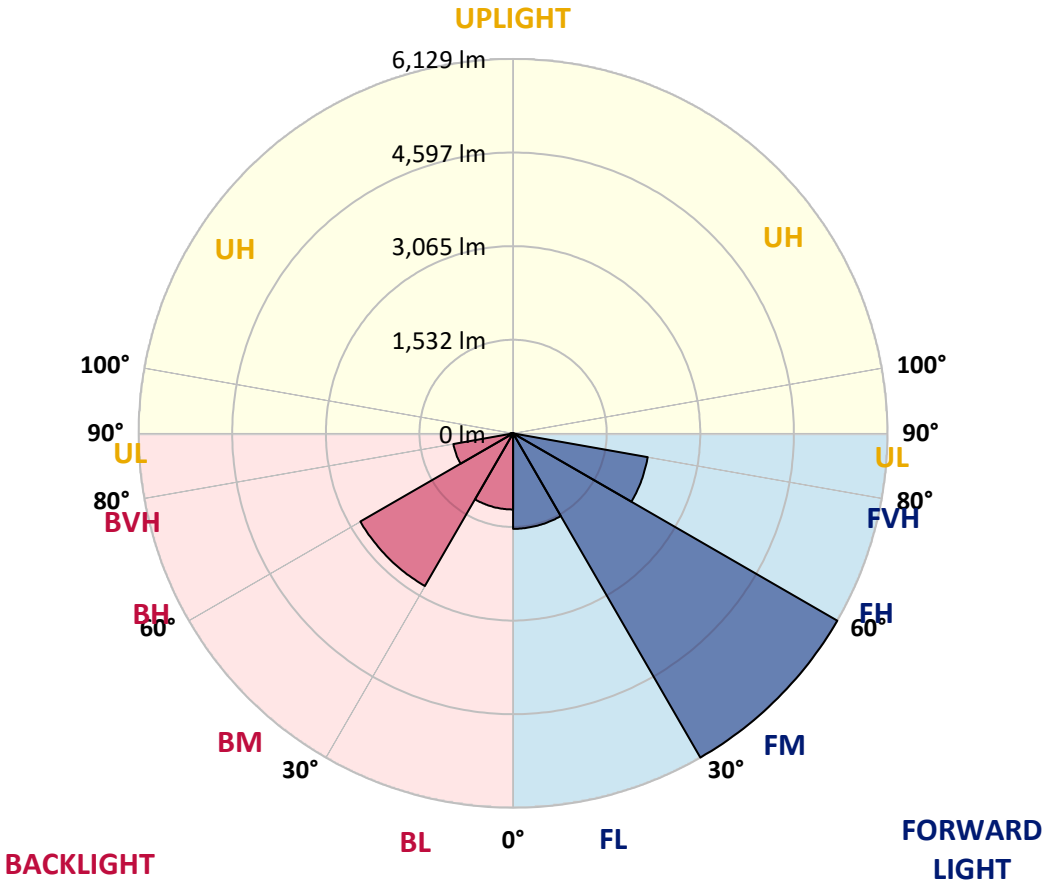
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1562.9	10.3			
FM	(30°-60°)	6129.2	40.5			
FH	(60°-80°)	2238.2	14.8			G2/5000
FVH	(80°-90°)	16.4	0.1			G1/100
BL	(0°-30°)	1246.8	8.2	B3/2500		
BM	(30°-60°)	2886.4	19.1	B3/5000		
BH	(60°-80°)	992.2	6.6	B2/1000		G2/1000
BVH	(80°-90°)	46.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3
2.5°	3226.1	3219.1	3212.2	3157.9	3144.0	3105.0	3077.1	3042.3	2992.2	2964.3	2940.7
5°	3428.0	3416.9	3379.3	3267.9	3195.5	3116.1	3050.7	2978.3	2901.7	2851.6	2812.6
7.5°	3618.8	3616.0	3551.9	3368.1	3251.2	3137.0	3047.9	2942.1	2832.1	2756.9	2706.8
10°	3795.6	3774.7	3698.1	3458.6	3305.5	3174.6	3078.5	2961.6	2833.5	2731.8	2665.0
12.5°	3951.5	3925.1	3819.3	3542.2	3352.8	3191.3	3086.9	2990.8	2905.9	2820.9	2744.4
15°	4079.6	4047.6	3940.4	3620.2	3394.6	3181.6	3035.4	2960.2	2989.4	3027.0	2942.1
17.5°	4199.4	4166.0	4035.1	3677.2	3407.1	3121.7	2908.7	2876.6	3024.2	3195.5	3156.5
20°	4299.6	4262.0	4110.3	3705.1	3384.8	3007.5	2744.4	2800.0	2995.0	3199.7	3262.3
22.5°	4408.2	4377.6	4195.2	3745.5	3357.0	2850.2	2606.5	2743.0	2944.9	3124.5	3219.1
25°	4582.3	4544.7	4327.5	3816.5	3343.1	2702.6	2507.7	2687.3	2875.2	3038.1	3111.9
27.5°	4834.3	4764.7	4508.5	3940.4	3358.4	2563.3	2445.0	2619.0	2794.5	2933.7	2993.6
30°	5108.6	5025.0	4709.0	4068.5	3380.7	2478.4	2411.6	2541.1	2670.6	2809.8	2875.2
32.5°	5433.0	5359.2	4923.4	4164.6	3333.3	2439.4	2386.5	2456.1	2559.2	2670.6	2724.9
35°	5820.1	5687.8	5157.3	4242.5	3180.2	2382.3	2364.2	2362.8	2417.1	2525.8	2587.0
37.5°	6236.4	6094.4	5445.5	4326.1	2942.1	2291.8	2311.3	2252.8	2303.0	2389.3	2458.9
40°	6577.5	6428.6	5736.5	4440.3	2644.1	2149.8	2194.4	2131.7	2162.3	2251.5	2329.4
42.5°	6911.7	6753.0	6008.1	4569.7	2355.9	2010.6	2032.9	2009.2	2018.9	2112.2	2220.8
45°	7350.3	7172.1	6342.2	4661.6	2096.9	1900.6	1879.7	1839.3	1890.8	2012.0	2127.5
47.5°	8082.7	7869.7	6889.4	4721.5	1908.9	1837.9	1741.8	1718.2	1782.2	1917.3	2037.0
50°	8939.0	8755.2	7763.8	4718.7	1768.3	1785.0	1608.2	1587.3	1693.1	1829.6	1956.3
52.5°	9640.7	9454.2	8511.5	4579.5	1652.7	1672.2	1530.2	1471.7	1616.5	1743.2	1869.9
55°	10207.4	9997.2	8855.4	3997.5	1506.5	1492.6	1445.3	1338.1	1520.5	1656.9	1775.3
57.5°	9902.5	9651.9	8439.1	3039.5	1356.2	1268.4	1299.1	1219.7	1389.6	1560.8	1675.0
60°	*8302.7*	*8077.1*	*6856.0*	*1617.9*	*1193.3*	*1059.6*	*1123.6*	*1136.2*	*1246.2*	*1445.3*	*1562.2*
62.5°	5703.1	5538.8	4646.3	981.6	941.2	850.7	951.0	1041.5	1123.6	1292.1	1393.8
65°	2790.3	2741.6	2323.9	629.3	658.6	687.8	788.1	898.1	1019.2	1166.8	1274.0
67.5°	768.6	774.2	704.5	491.5	519.4	600.1	679.5	767.2	888.3	1024.8	1133.4
70°	338.3	343.9	355.1	378.7	431.6	505.4	587.6	678.1	789.5	903.6	1008.1
72.5°	235.3	240.9	257.6	288.2	335.6	405.2	483.2	569.5	685.0	781.1	867.4
75°	144.8	149.0	164.3	190.8	222.8	275.7	352.3	431.6	533.3	621.0	697.6
77.5°	76.6	73.8	83.5	101.6	129.5	157.3	208.9	259.0	331.4	402.4	466.4
80°	41.8	40.4	45.9	55.7	64.0	86.3	121.1	154.6	196.3	236.7	271.5
82.5°	18.1	16.7	18.1	23.7	29.2	41.8	61.3	84.9	108.6	136.5	158.7
85°	0.0	0.0	0.0	1.4	7.0	11.1	20.9	30.6	44.6	61.3	75.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	12.5
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°	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3
2.5°	2926.8	2891.9	2889.2	2861.3	2864.1	2865.5	2837.6	2826.5	2836.2	2847.4	2841.8
5°	2798.7	2762.5	2747.1	2720.7	2717.9	2705.4	2694.2	2680.3	2690.1	2699.8	2705.4
7.5°	2687.3	2663.6	2653.8	2646.9	2649.7	2644.1	2621.8	2609.3	2607.9	2612.1	2617.6
10°	2651.1	2631.6	2644.1	2663.6	2677.5	2687.3	2663.6	2642.7	2623.2	2614.9	2614.9
12.5°	2729.0	2704.0	2729.0	2749.9	2777.8	2784.7	2758.3	2736.0	2729.0	2737.4	2754.1
15°	2901.7	2843.2	2841.8	2854.3	2876.6	2887.8	2862.7	2851.6	2851.6	2904.5	2946.2
17.5°	3074.3	2978.3	2937.9	2930.9	2944.9	2949.0	2928.1	2918.4	2943.5	3046.5	3124.5
20°	3195.5	3078.5	2990.8	2974.1	2978.3	2979.7	2963.0	2956.0	2992.2	3117.5	3182.9
22.5°	3182.9	3096.6	2989.4	2968.5	2975.5	2972.7	2957.4	2954.6	2983.8	3092.4	3123.1
25°	3096.6	3029.8	2939.3	2925.4	2936.5	2935.1	2919.8	2912.8	2925.4	2997.8	3000.5
27.5°	2997.8	2939.3	2861.3	2857.1	2875.2	2885.0	2858.5	2837.6	2833.5	2882.2	2871.1
30°	2879.4	2836.2	2773.6	2776.4	2809.8	2815.4	2783.3	2752.7	2744.4	2770.8	2755.5
32.5°	2738.8	2724.9	2691.4	2698.4	2730.4	2741.6	2708.2	2676.1	2666.4	2674.7	2642.7
35°	2619.0	2613.5	2616.3	2628.8	2656.6	2665.0	2637.1	2612.1	2598.2	2568.9	2527.1
37.5°	2495.1	2510.4	2550.8	2574.5	2589.8	2587.0	2571.7	2553.6	2531.3	2477.0	2425.5
40°	2379.6	2418.5	2490.9	2517.4	2523.0	2524.4	2513.2	2497.9	2470.1	2397.7	2339.2
42.5°	2290.4	2333.6	2429.7	2470.1	2472.8	2475.6	2464.5	2452.0	2413.0	2316.9	2259.8
45°	2197.2	2254.2	2367.0	2415.8	2413.0	2411.6	2401.8	2396.3	2350.3	2238.9	2176.3
47.5°	2117.8	2184.6	2305.8	2347.5	2346.1	2344.7	2337.8	2337.8	2291.8	2170.7	2099.7
50°	2039.8	2116.4	2243.1	2277.9	2280.7	2277.9	2275.1	2279.3	2225.0	2095.5	2025.9
52.5°	1954.9	2041.2	2173.5	2205.5	2222.2	2229.2	2229.2	2219.4	2155.4	2020.3	1943.7
55°	1861.6	1943.7	2096.9	2140.1	2154.0	2166.5	2166.5	2147.0	2087.2	1950.7	1868.6
57.5°	1746.0	1818.4	1939.6	1982.7	2016.1	2024.5	2024.5	1992.5	1943.7	1812.9	1746.0
60°	*1620.7*	*1683.4*	*1765.5*	*1811.5*	*1836.5*	*1819.8*	*1832.4*	*1824.0*	*1785.0*	*1663.9*	*1608.2*
62.5°	1453.6	1517.7	1608.2	1655.5	1666.7	1650.0	1666.7	1665.3	1612.4	1503.8	1436.9
65°	1333.9	1396.5	1485.7	1546.9	1565.0	1560.8	1572.0	1555.3	1489.8	1386.8	1322.7
67.5°	1191.9	1258.7	1361.7	1430.0	1467.6	1471.7	1487.0	1452.2	1385.4	1272.6	1191.9
70°	1056.8	1113.9	1193.3	1257.3	1310.2	1336.7	1339.5	1289.3	1205.8	1112.5	1054.0
72.5°	914.8	973.3	1069.3	1139.0	1205.8	1236.4	1236.4	1175.2	1084.7	981.6	919.0
75°	742.1	796.4	884.2	959.3	1035.9	1074.9	1073.5	1020.6	920.4	822.9	757.4
77.5°	502.6	543.0	598.7	655.8	666.9	697.6	712.9	646.1	590.4	537.5	479.0
80°	292.4	317.5	348.1	380.1	387.1	396.8	371.8	346.7	317.5	282.7	256.2
82.5°	171.3	188.0	203.3	228.3	232.5	235.3	213.0	201.9	178.2	157.3	140.6
85°	83.5	89.1	103.0	115.6	110.0	107.2	97.5	86.3	76.6	68.2	59.9
87.5°	16.7	16.7	25.1	23.7	19.5	16.7	9.7	12.5	2.8	2.8	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3
2.5°	2859.9	2883.6	2912.8	2951.8	2996.4	3043.7	3089.7	3124.5	3159.3	3210.8	3202.4
5°	2713.7	2754.1	2800.0	2859.9	2932.3	3014.5	3106.4	3198.3	3297.1	3380.7	3416.9
7.5°	2628.8	2673.3	2727.6	2805.6	2898.9	2999.2	3128.6	3277.6	3437.8	3547.7	3616.0
10°	2628.8	2685.9	2756.9	2832.1	2914.2	3017.3	3177.4	3364.0	3570.0	3714.8	3794.2
12.5°	2780.6	2837.6	2853.0	2850.2	2896.1	3010.3	3216.4	3454.5	3700.9	3854.1	3951.5
15°	3017.3	3036.7	2921.2	2815.4	2822.3	2960.2	3234.5	3526.9	3813.7	3997.5	4103.3
17.5°	3176.0	3124.5	2918.4	2733.2	2694.2	2875.2	3234.5	3596.5	3933.4	4140.9	4239.8
20°	3188.5	3060.4	2847.4	2653.8	2553.6	2762.5	3212.2	3649.4	4049.0	4278.7	4384.6
22.5°	3078.5	2951.8	2772.2	2585.6	2438.0	2626.0	3176.0	3689.8	4147.9	4408.2	4539.1
25°	2953.2	2847.4	2695.6	2516.0	2358.7	2488.2	3142.6	3758.0	4285.7	4583.7	4715.9
27.5°	2830.7	2741.6	2603.7	2457.5	2314.1	2368.4	3121.7	3858.2	4450.0	4832.9	4947.1
30°	2710.9	2630.2	2504.9	2401.8	2290.4	2290.4	3103.6	3973.8	4667.2	5112.8	5226.9
32.5°	2589.8	2513.2	2411.6	2347.5	2276.5	2259.8	3053.5	4082.4	4891.4	5419.1	5536.0
35°	2477.0	2400.4	2322.5	2296.0	2269.6	2236.1	2929.5	4167.4	5110.0	5776.9	5877.2
37.5°	2371.2	2297.4	2238.9	2232.0	2234.7	2172.1	2734.6	4238.4	5382.9	6143.1	6196.0
40°	2279.3	2197.2	2151.2	2149.8	2163.7	2069.1	2488.2	4340.0	5694.8	6453.6	6431.3
42.5°	2197.2	2110.8	2055.1	2067.7	2059.3	1966.0	2247.3	4433.3	5966.3	6744.6	6700.1
45°	2116.4	2032.9	1954.9	1973.0	1963.2	1902.0	2042.6	4501.5	6267.0	7094.1	7099.7
47.5°	2038.4	1956.3	1878.3	1856.0	1854.6	1882.5	1885.3	4523.8	6757.2	7656.6	7529.9
50°	1966.0	1883.9	1803.1	1727.9	1757.2	1843.5	1768.3	4507.1	7490.9	8277.6	7924.0
52.5°	1890.8	1812.9	1723.7	1588.7	1665.3	1750.2	1663.9	4447.2	7939.3	8826.2	8614.6
55°	1804.5	1730.7	1609.6	1445.3	1538.6	1556.7	1556.7	3868.0	8130.0	9369.2	9500.1
57.5°	1688.9	1591.5	1399.3	1267.1	1350.6	1281.0	1442.5	2706.8	7815.3	9198.0	9706.2
60°	*1558.1*	*1453.6*	*1250.3*	*1155.7*	*1180.7*	*1058.2*	*1229.5*	*1697.3*	*6477.3*	*7826.5*	*8706.5*
62.5°	1385.4	1289.3	1120.9	1047.1	995.5	863.3	990.0	1073.5	4440.3	5811.7	6411.8
65°	1269.8	1164.0	1013.6	916.2	810.4	694.8	657.2	704.5	2387.9	3252.6	3657.7
67.5°	1133.4	1029.0	886.9	764.4	679.5	595.9	530.5	513.8	818.7	1083.3	1172.4
70°	1003.9	903.6	785.3	671.1	586.2	504.0	440.0	394.0	378.7	375.9	370.4
72.5°	871.6	778.3	679.5	573.7	480.4	405.2	348.1	295.2	272.9	265.9	259.0
75°	714.3	640.5	541.6	427.5	352.3	282.7	238.1	203.3	183.8	176.8	168.5
77.5°	459.5	426.1	339.7	275.7	213.0	168.5	144.8	122.5	110.0	107.2	100.3
80°	245.1	228.3	188.0	158.7	126.7	103.0	90.5	78.0	71.0	68.2	65.4
82.5°	136.5	123.9	104.4	91.9	73.8	62.7	55.7	50.1	45.9	44.6	43.2
85°	61.3	52.9	41.8	39.0	34.8	32.0	30.6	27.8	26.5	25.1	23.7
87.5°	2.8	5.6	7.0	5.6	5.6	8.4	9.7	9.7	8.4	8.4	7.0
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: P636500
CATALOG NUMBER: GWS-SA3F-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3	3049.3
2.5°	3254.0	3295.7	3299.9	3313.8	3295.7	3291.6	3262.3	3245.6	3230.3	3226.1
5°	3507.4	3590.9	3624.3	3648.0	3625.7	3614.6	3550.5	3483.7	3446.1	3428.0
7.5°	3767.7	3893.1	3958.5	3987.7	3990.5	3940.4	3830.4	3705.1	3642.4	3618.8
10°	4000.3	4154.8	4241.1	4296.8	4277.3	4216.1	4065.7	3895.8	3816.5	3795.6
12.5°	4172.9	4320.5	4387.3	4423.5	4422.2	4388.7	4246.7	4062.9	3972.4	3951.5
15°	4284.3	4372.0	4376.2	4384.6	4408.2	4452.8	4379.0	4209.1	4108.9	4079.6
17.5°	4372.0	4337.2	4271.8	4249.5	4302.4	4426.3	4470.9	4333.0	4224.4	4199.4
20°	4427.7	4252.3	4136.7	4093.6	4154.8	4356.7	4526.6	4444.4	4331.6	4299.6
22.5°	4470.9	4172.9	3986.3	3957.1	4021.2	4281.5	4583.7	4576.7	4452.8	4408.2
25°	4539.1	4120.0	3880.5	3859.6	3919.5	4245.3	4660.2	4756.3	4646.3	4582.3
27.5°	4646.3	4114.4	3826.2	3819.3	3901.4	4277.3	4770.2	5019.5	4881.6	4834.3
30°	4795.3	4167.4	3838.8	3852.7	3952.9	4392.9	4941.5	5320.2	5182.4	5108.6
32.5°	5009.7	4309.4	4029.5	4089.4	4163.2	4578.1	5192.1	5646.0	5541.6	5433.0
35°	5292.4	4699.2	4593.4	4848.2	4778.6	4983.3	5494.3	6041.5	5914.8	5820.1
37.5°	5669.7	5498.5	5595.9	5946.8	5778.3	5749.1	5863.3	6400.7	6331.1	6236.4
40°	6198.8	6233.6	6413.2	6874.1	6630.4	6442.5	6315.8	6670.8	6694.5	6577.5
42.5°	6549.7	6709.8	7142.8	7666.4	7330.8	6881.1	6694.5	7016.1	7017.5	6911.7
45°	6680.6	7099.7	8004.7	8607.6	8046.5	7131.7	6903.3	7485.4	7471.4	7350.3
47.5°	6633.2	7428.3	8900.0	9821.7	8965.4	7309.9	6874.1	8153.7	8266.5	8082.7
50°	6534.4	7758.3	9945.7	11308.8	10093.3	7499.3	6829.6	8894.4	9081.0	8939.0
52.5°	6634.6	8125.8	11182.1	12846.0	11507.9	7801.4	7130.3	9845.4	9812.0	9640.7
55°	6952.1	8560.3	12684.5	14777.2	13061.8	8312.4	7903.1	10751.8	10412.1	10207.4
57.5°	6936.8	8870.8	14001.6	16304.6	14413.8	8731.5	8171.8	10847.9	10161.5	9902.5
60°	6296.3	8728.7	14502.9	17270.9	14821.7	8500.4	7287.6	9689.5	8574.2	8302.7
62.5°	4699.2	7745.7	13531.0	16060.9	13667.5	7341.9	5480.4	6954.9	6161.2	5703.1
65°	3006.1	6059.6	11375.6	13011.7	11265.6	5615.4	3263.7	3728.8	2921.2	2790.3
67.5°	1279.6	4277.3	8842.9	8696.7	8428.0	3638.3	1260.1	1049.8	782.5	768.6
70°	423.3	2910.0	5451.1	5800.6	5033.4	2506.3	416.3	352.3	350.9	338.3
72.5°	277.1	1562.2	3068.8	3416.9	3238.6	1442.5	252.0	235.3	240.9	235.3
75°	165.7	339.7	516.6	671.1	516.6	242.3	151.8	149.0	151.8	144.8
77.5°	97.5	94.7	91.9	91.9	90.5	83.5	76.6	73.8	75.2	76.6
80°	62.7	59.9	57.1	55.7	48.7	45.9	43.2	40.4	40.4	41.8
82.5°	40.4	37.6	34.8	30.6	25.1	20.9	19.5	16.7	16.7	18.1
85°	20.9	16.7	12.5	9.7	5.6	2.8	0.0	0.0	0.0	0.0
87.5°	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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.

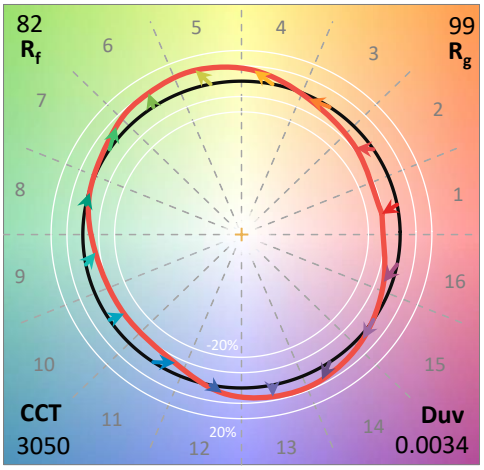
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

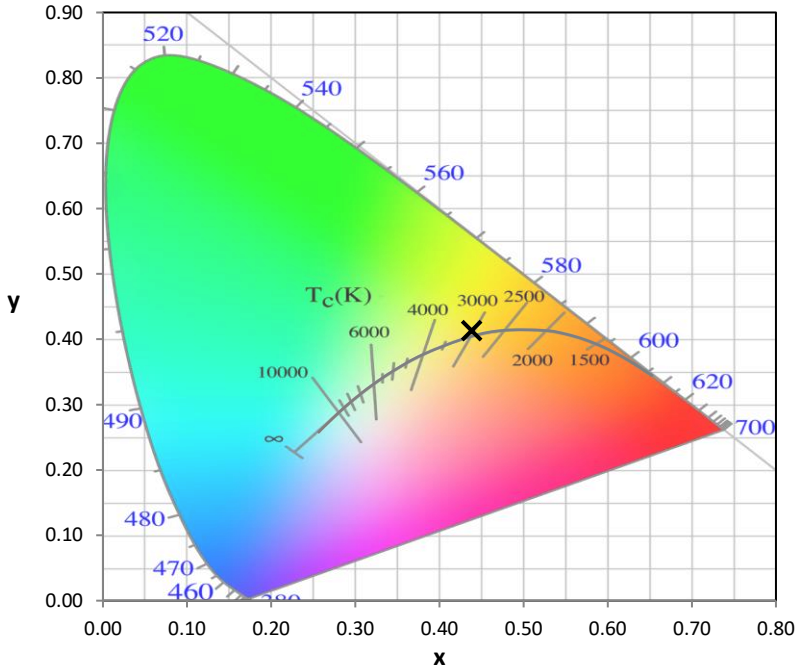
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

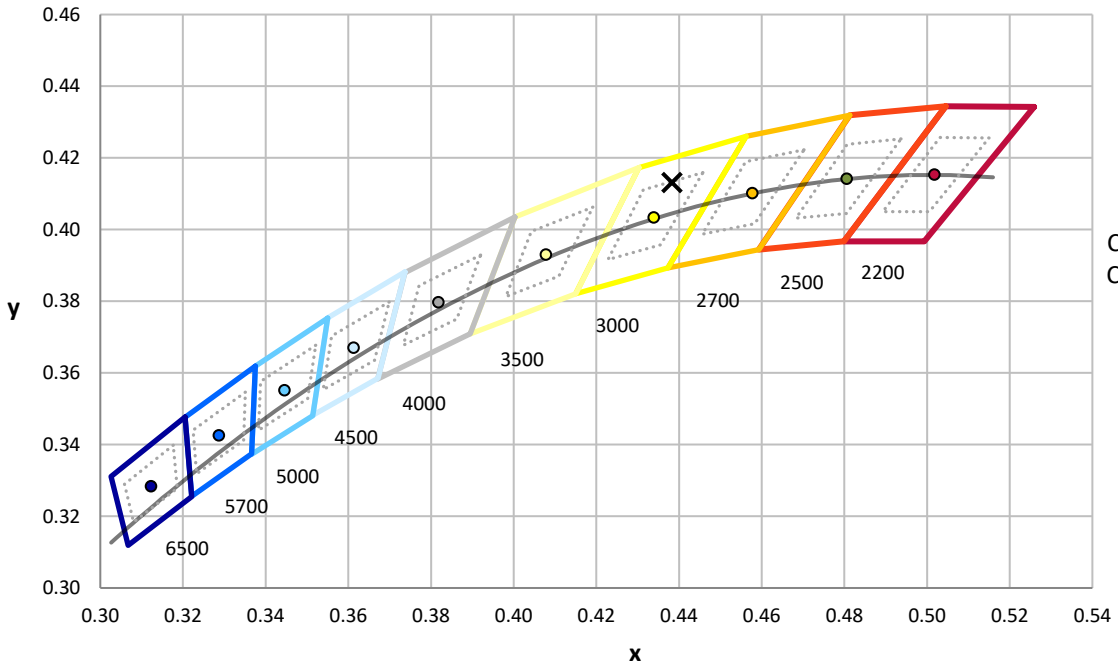
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

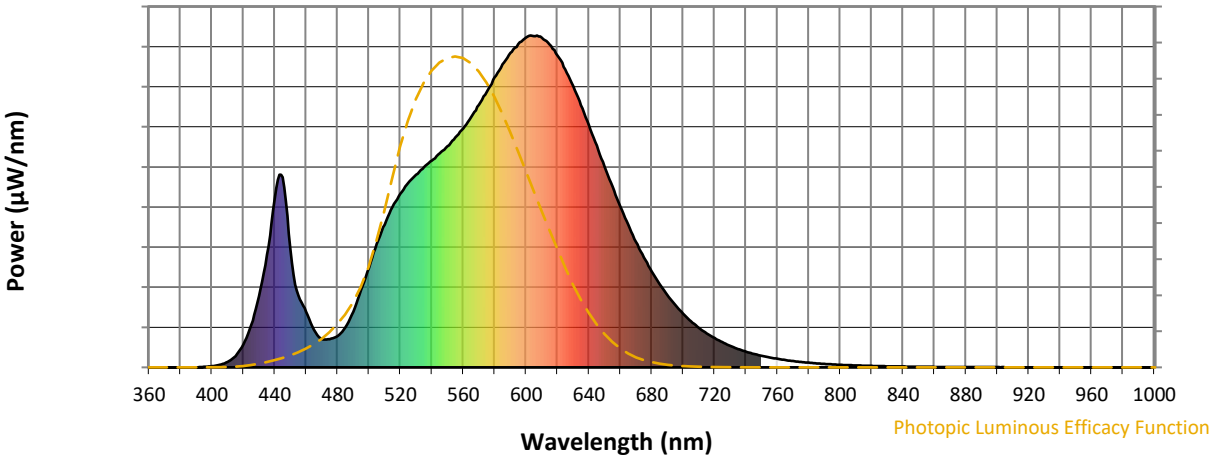


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

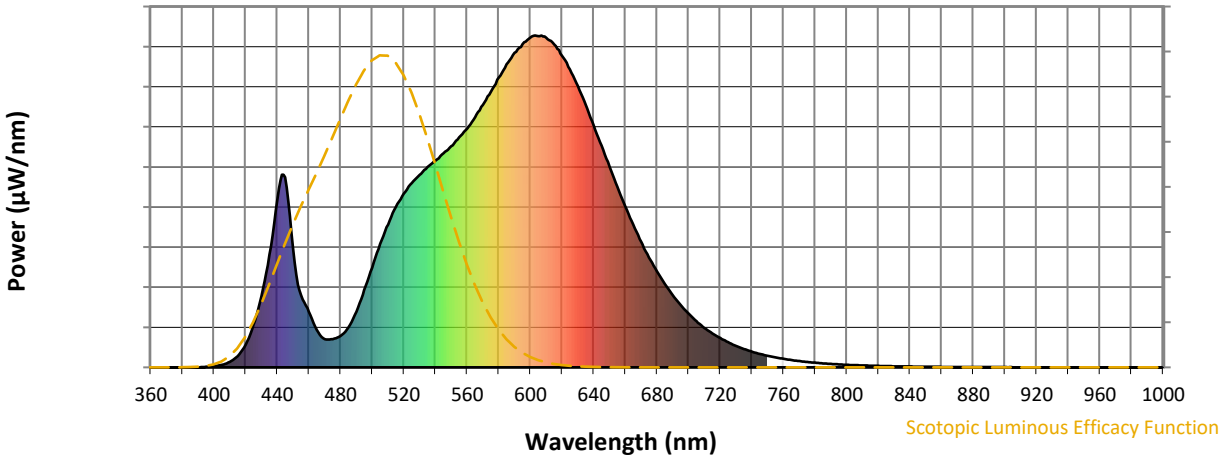


Photopic Lumens: NR

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

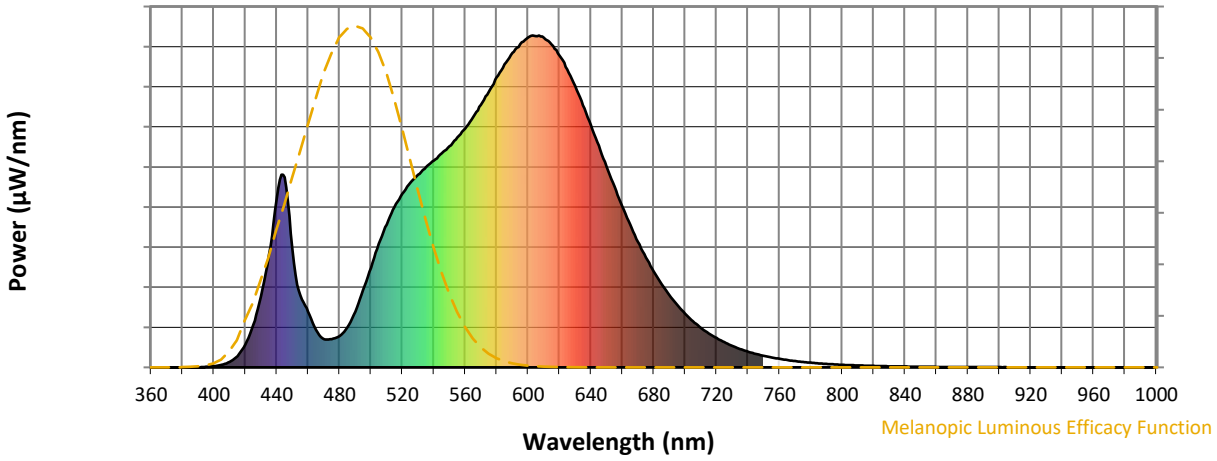


Scotopic Lumens: NR **S/P: 1.27**

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			

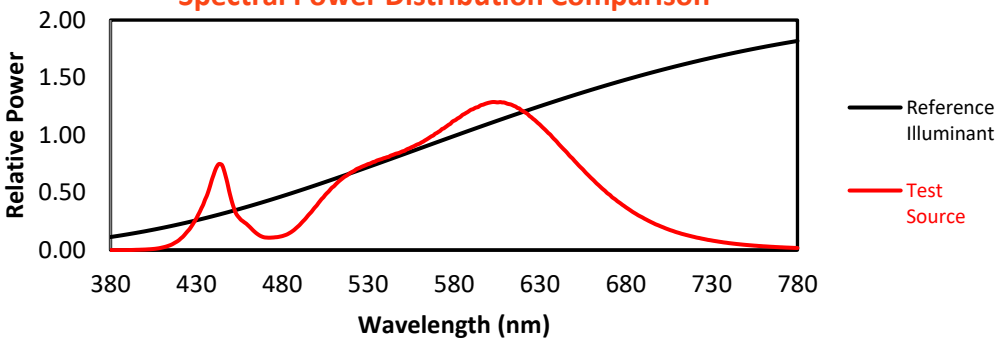
REPORT NUMBER: SP1-2408-195-9

TM-30-18

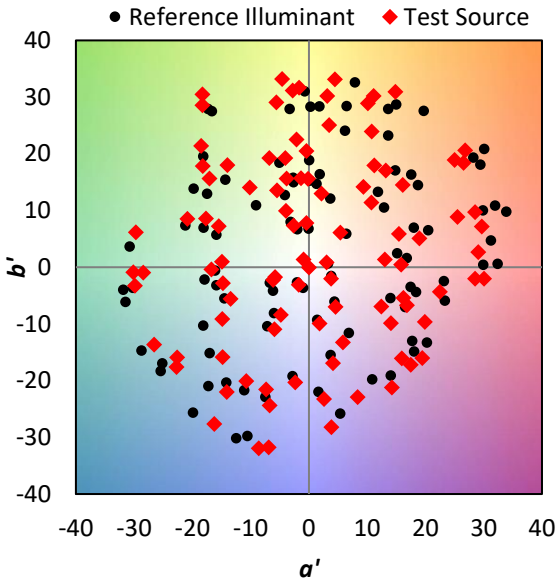
Summary

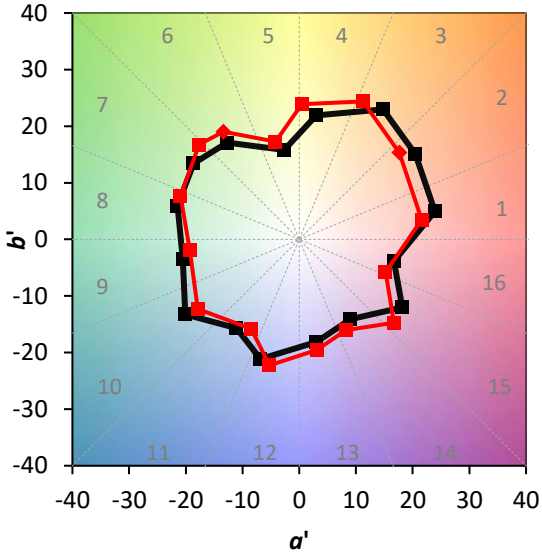
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

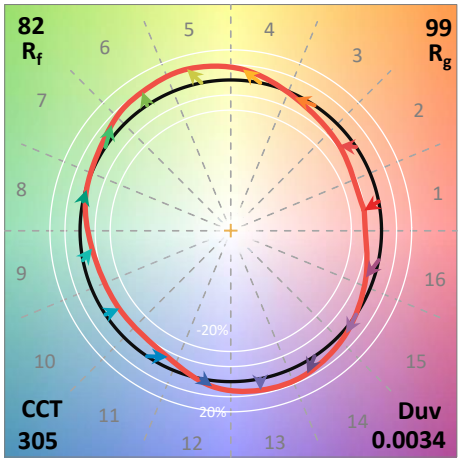
Spectral Power Distribution Comparison

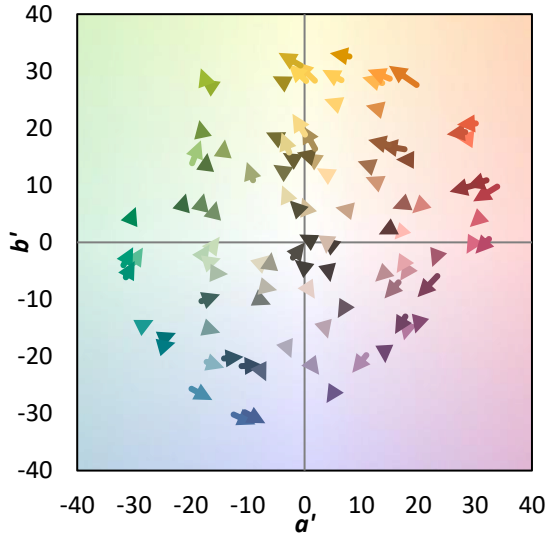


Color Vector Graphics









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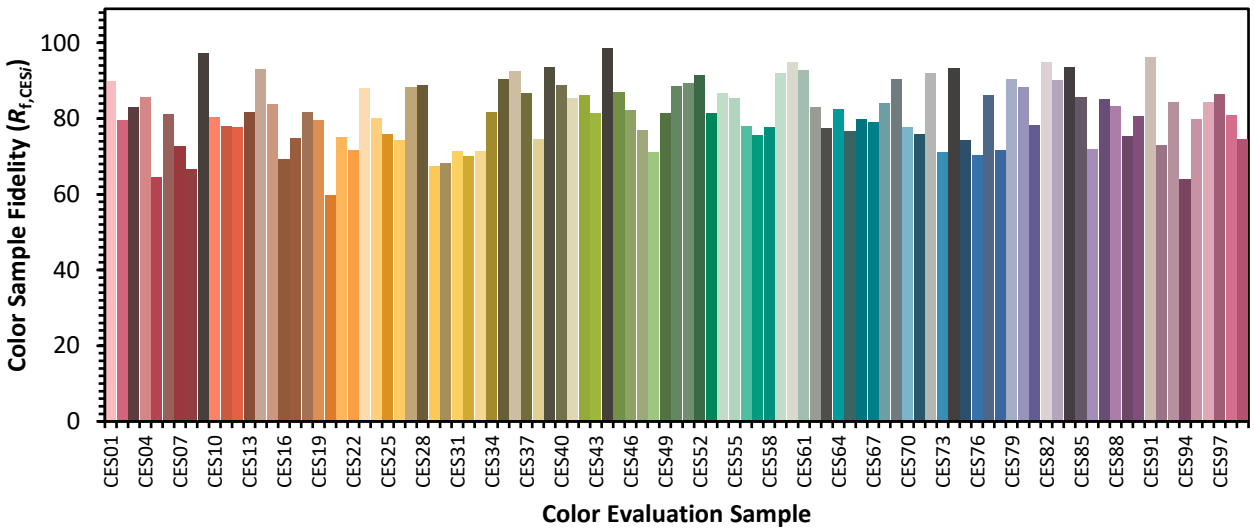
Individual Sample Fidelity Index ($R_{f,i}$)

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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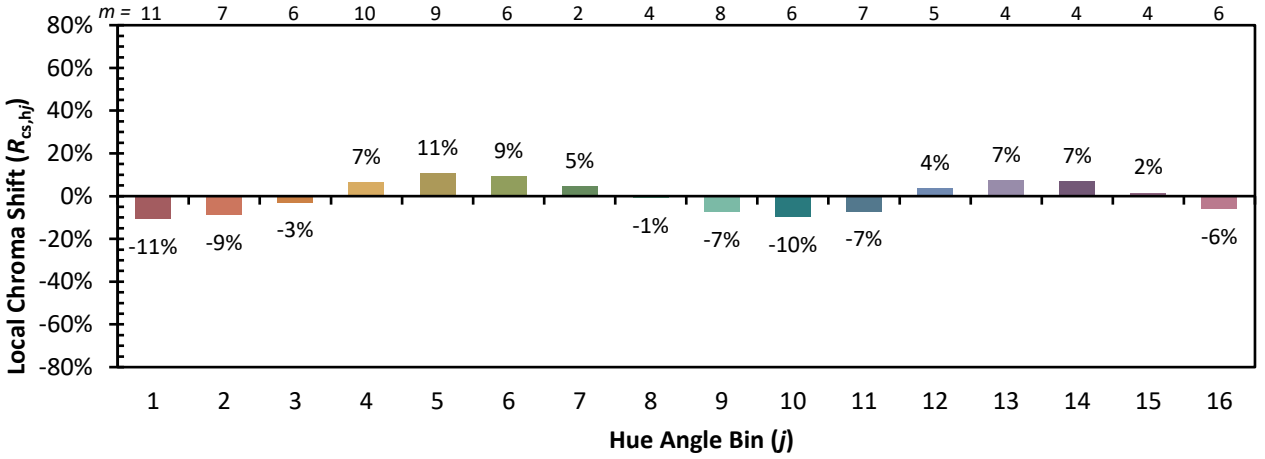
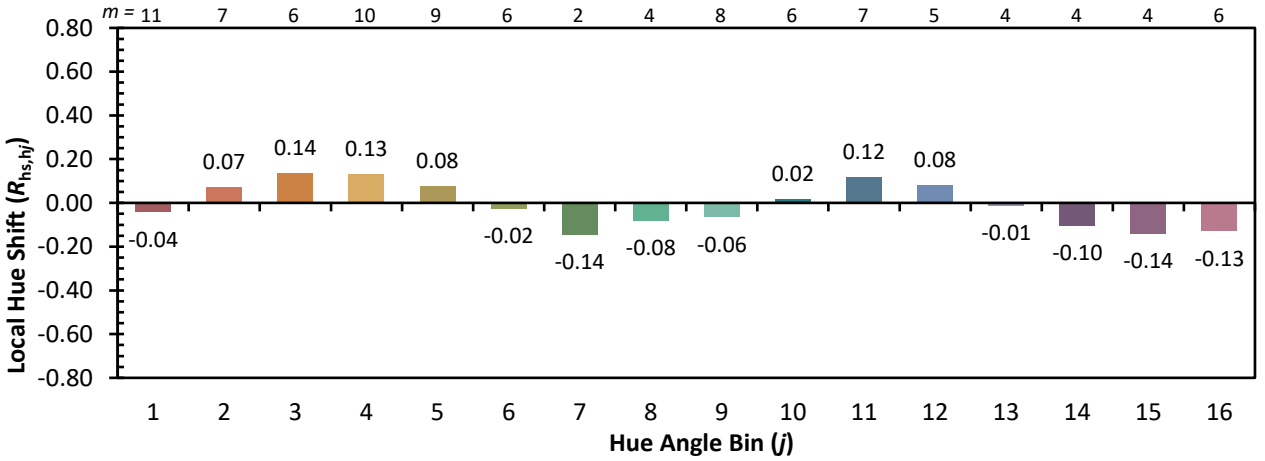
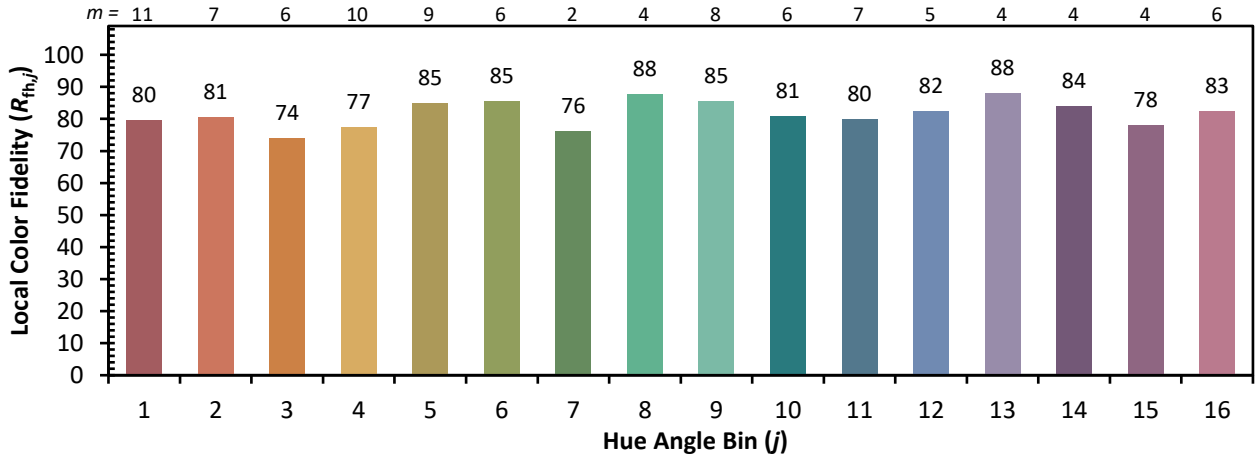
Color Rendition by Hue-Angle Bin







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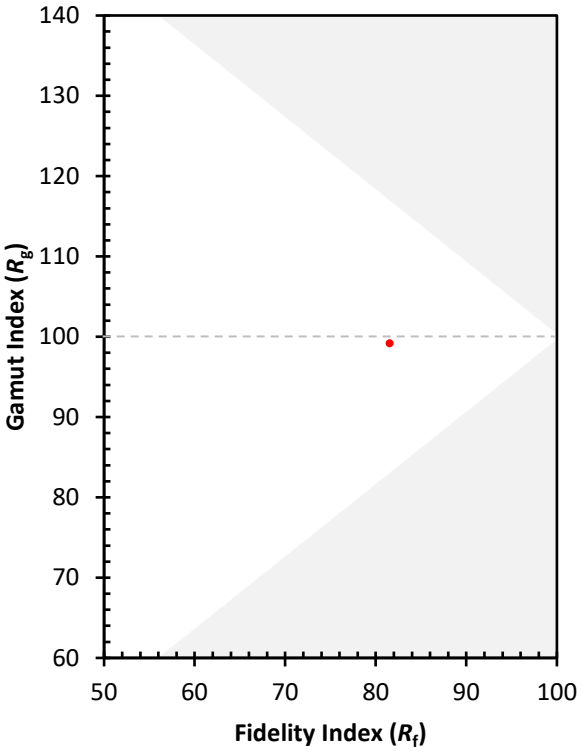
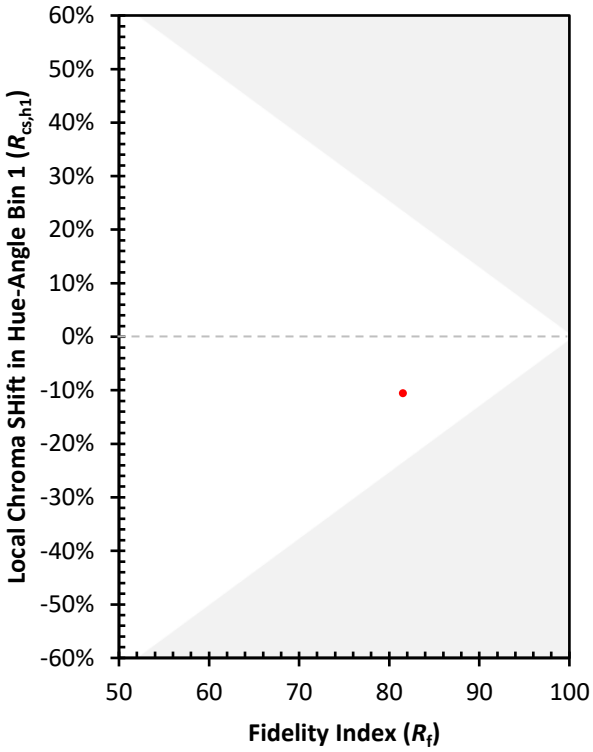
Measure Comparisons





(END OF REPORT)