Signify Classified - Internal

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: P639965

Luminaire Tested: GWS-SA5C-830-U-SLL-W-GRSWH

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:	P639965
	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-SA5C-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14724.1 lumens
Efficiency:	N/A
Efficacy:	93.5 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	157.5
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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REPORT NUMBER: P639965
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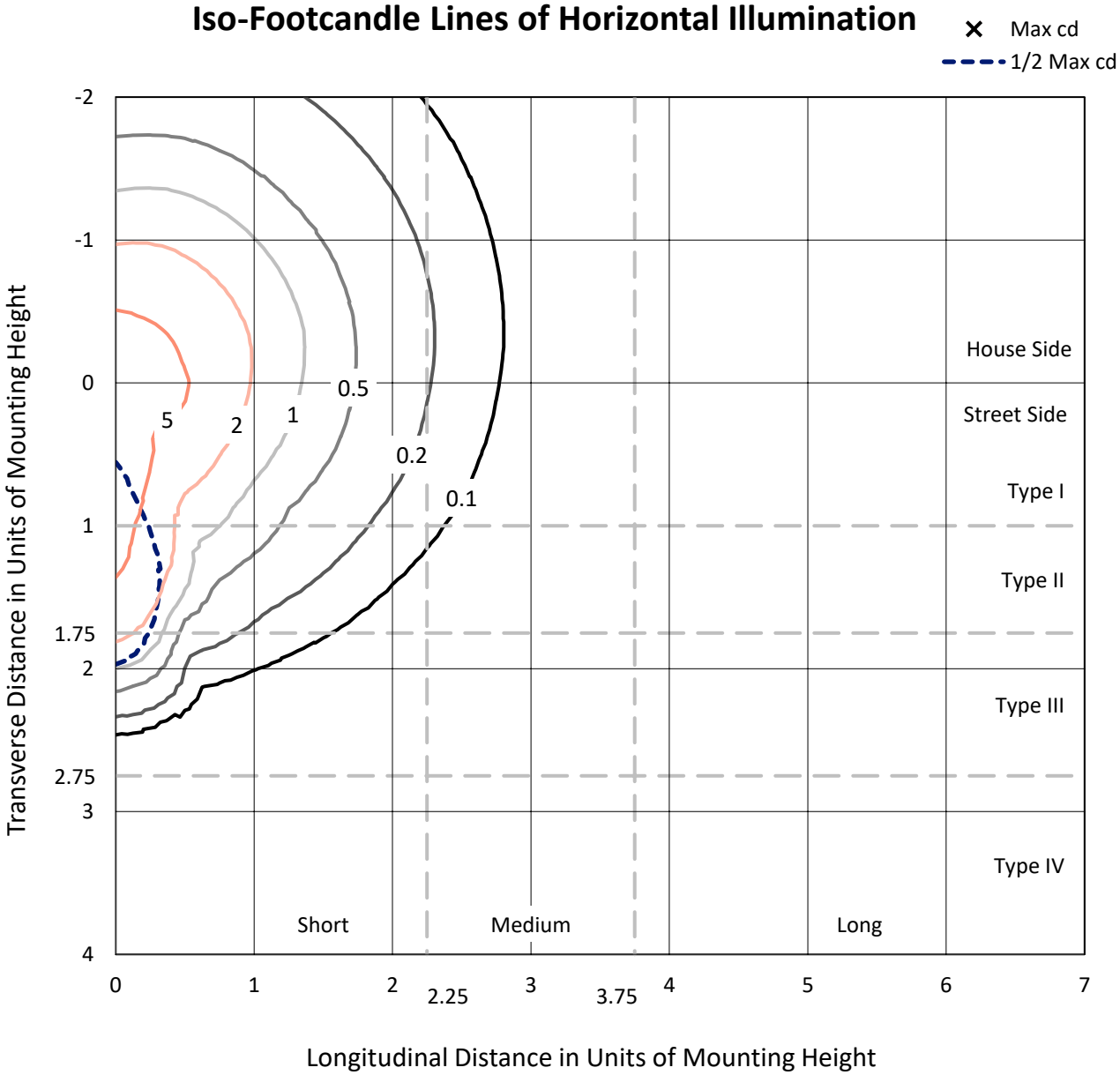
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 9 fc
Type III - Short - N/A

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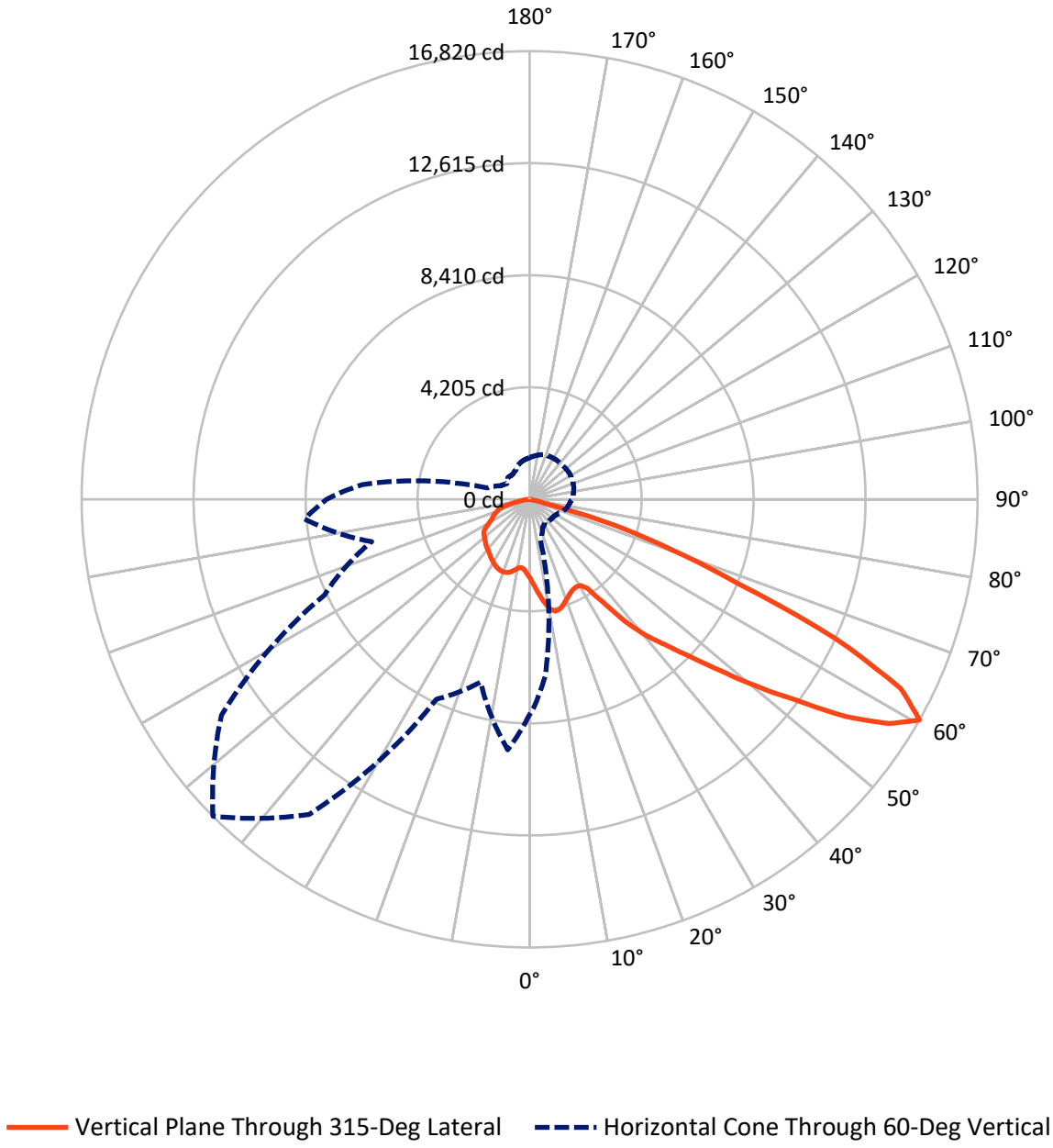
Luminous Intensity Polar Plot



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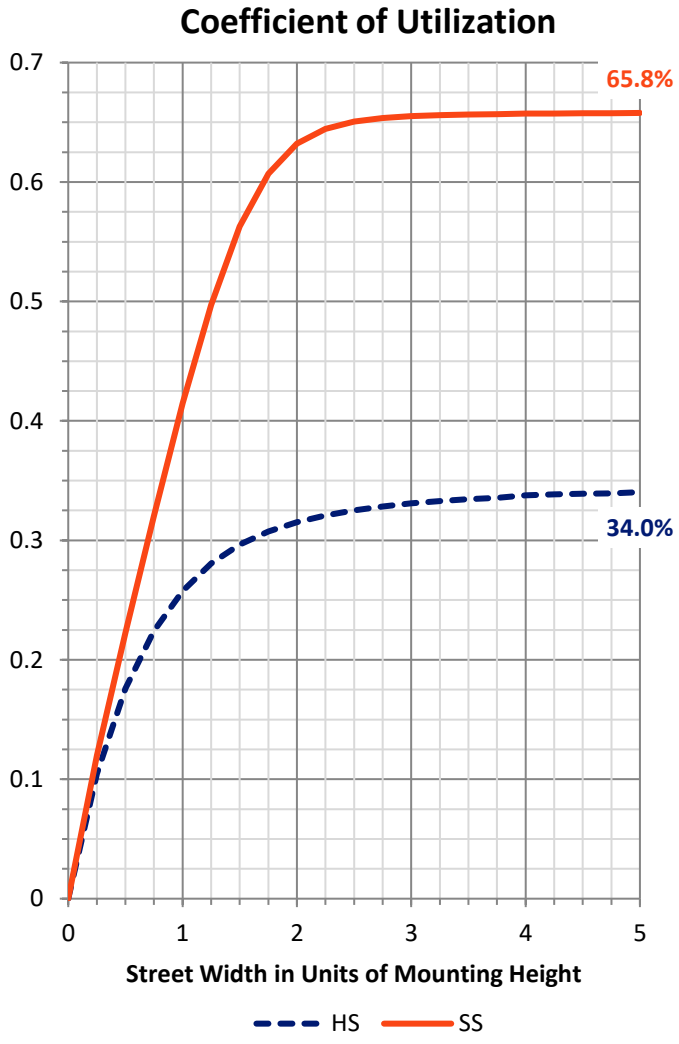
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5037.0	0.0	5037.0
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	9687.1	0.0	9687.1
	% Fixture	65.8	0.0	65.8
Total	Lumens	14724.1	0.0	14724.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.1	2.0
10°-20°	930.6	6.3
20°-30°	1515.6	10.3
30°-40°	2129.1	14.5
40°-50°	2913.4	19.8
50°-60°	3737.8	25.4
60°-70°	2516.9	17.1
70°-80°	629.2	4.3
80°-90°	61.3	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°	14724.1	100.0
0°-180°	14724.1	100.0



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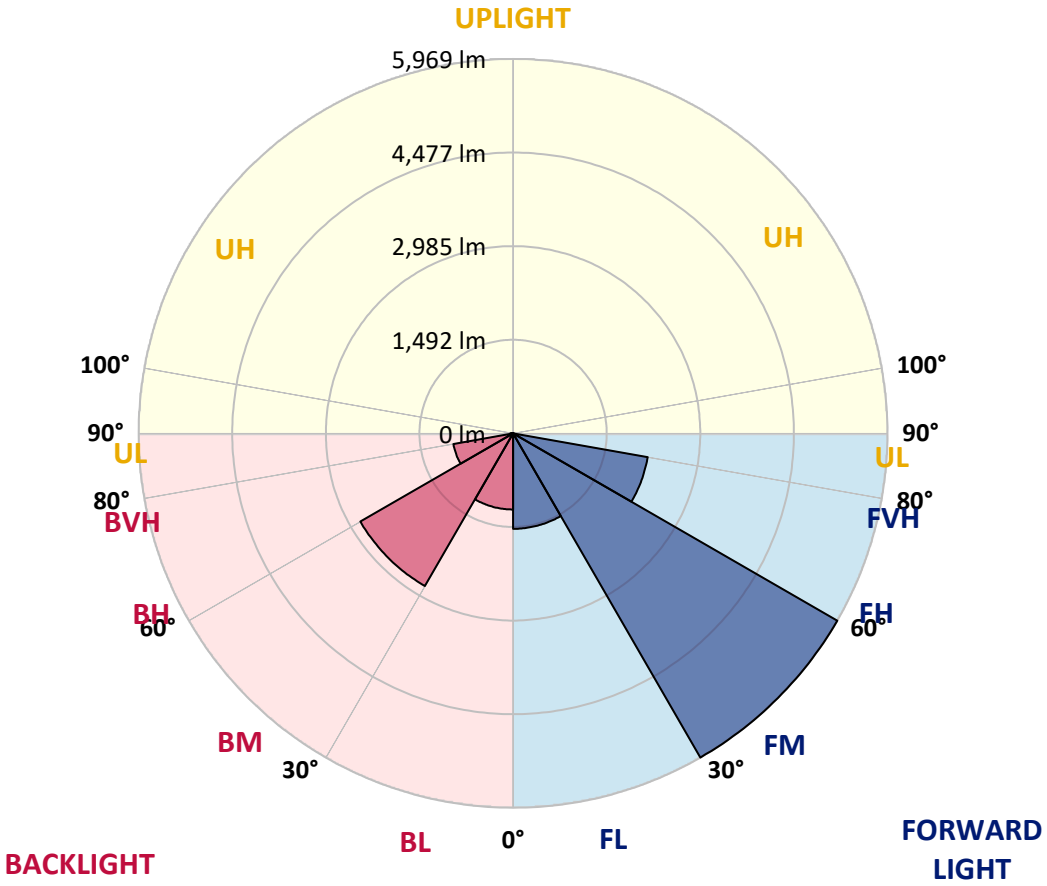
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1522.1	10.3			
FM	(30°-60°)	5969.3	40.5			
FH	(60°-80°)	2179.8	14.8			G2/5000
FVH	(80°-90°)	15.9	0.1			G1/100
BL	(0°-30°)	1214.2	8.2	B3/2500		
BM	(30°-60°)	2811.0	19.1	B3/5000		
BH	(60°-80°)	966.3	6.6	B2/1000		G2/1000
BVH	(80°-90°)	45.4	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°	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7
2.5°	3141.9	3135.1	3128.3	3075.5	3061.9	3023.9	2996.8	2962.9	2914.1	2887.0	2863.9
5°	3338.5	3327.7	3291.1	3182.6	3112.1	3034.8	2971.1	2900.5	2826.0	2777.1	2739.2
7.5°	3524.3	3521.6	3459.2	3280.2	3166.3	3055.1	2968.3	2865.3	2758.2	2684.9	2636.1
10°	3696.5	3676.2	3601.6	3368.4	3219.2	3091.7	2998.2	2884.3	2759.5	2660.5	2595.4
12.5°	3848.4	3822.6	3719.6	3449.7	3265.3	3108.0	3006.3	2912.7	2830.0	2747.3	2672.7
15°	3973.2	3942.0	3837.6	3525.7	3306.0	3098.5	2956.1	2882.9	2911.4	2948.0	2865.3
17.5°	4089.8	4057.2	3929.8	3581.3	3318.2	3040.2	2832.7	2801.5	2945.3	3112.1	3074.1
20°	4187.4	4150.8	4003.0	3608.4	3296.5	2929.0	2672.7	2727.0	2916.8	3116.1	3177.2
22.5°	4293.2	4263.3	4085.7	3647.7	3269.4	2775.8	2538.5	2671.4	2868.0	3042.9	3135.1
25°	4462.7	4426.1	4214.5	3716.9	3255.8	2632.0	2442.2	2617.1	2800.2	2958.8	3030.7
27.5°	4708.1	4640.3	4390.8	3837.6	3270.7	2496.4	2381.2	2550.7	2721.5	2857.1	2915.5
30°	4975.3	4893.9	4586.1	3962.3	3292.4	2413.7	2348.6	2474.7	2600.9	2736.5	2800.2
32.5°	5291.2	5219.3	4794.9	4055.9	3246.3	2375.8	2324.2	2392.0	2492.4	2600.9	2653.7
35°	5668.2	5539.4	5022.7	4131.8	3097.2	2320.2	2302.5	2301.2	2354.1	2459.8	2519.5
37.5°	6073.6	5935.3	5303.4	4213.2	2865.3	2232.0	2251.0	2194.0	2242.9	2326.9	2394.7
40°	6405.9	6260.8	5586.8	4324.4	2575.1	2093.7	2137.1	2076.1	2105.9	2192.7	2268.6
42.5°	6731.3	6576.7	5851.2	4450.5	2294.4	1958.1	1979.8	1956.7	1966.2	2057.1	2162.9
45°	7158.5	6984.9	6176.7	4540.0	2042.2	1851.0	1830.6	1791.3	1841.5	1959.5	2072.0
47.5°	7871.7	7664.3	6709.6	4598.3	1859.1	1790.0	1696.4	1673.3	1735.7	1867.2	1983.9
50°	8705.7	8526.7	7561.2	4595.6	1722.2	1738.4	1566.2	1545.9	1648.9	1781.8	1905.2
52.5°	9389.1	9207.4	8289.4	4460.0	1609.6	1628.6	1490.3	1433.3	1574.3	1697.7	1821.1
55°	9941.0	9736.3	8624.3	3893.1	1467.2	1453.7	1407.6	1303.1	1480.8	1613.7	1728.9
57.5°	9644.0	9400.0	8218.9	2960.2	1320.8	1235.3	1265.2	1187.9	1353.3	1520.1	1631.3
60°	*8086.0*	*7866.3*	*6677.1*	*1575.7*	*1162.1*	*1031.9*	*1094.3*	*1106.5*	*1213.6*	*1407.6*	*1521.5*
62.5°	5554.3	5394.3	4525.1	956.0	916.7	828.5	926.2	1014.3	1094.3	1258.4	1357.4
65°	2717.5	2670.0	2263.2	612.9	641.4	669.9	767.5	874.6	992.6	1136.3	1240.8
67.5°	748.5	753.9	686.1	478.7	505.8	584.4	661.7	747.2	865.1	998.0	1103.8
70°	329.5	334.9	345.8	368.8	420.4	492.2	572.2	660.4	768.9	880.1	981.8
72.5°	229.2	234.6	250.9	280.7	326.8	394.6	470.5	554.6	667.2	760.7	844.8
75°	141.0	145.1	160.0	185.8	217.0	268.5	343.1	420.4	519.4	604.8	679.4
77.5°	74.6	71.9	81.4	99.0	126.1	153.2	203.4	252.2	322.7	391.9	454.3
80°	40.7	39.3	44.7	54.2	62.4	84.1	118.0	150.5	191.2	230.5	264.4
82.5°	17.6	16.3	17.6	23.1	28.5	40.7	59.7	82.7	105.8	132.9	154.6
85°	0.0	0.0	0.0	1.4	6.8	10.8	20.3	29.8	43.4	59.7	73.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	12.2
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°	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7
2.5°	2850.4	2816.5	2813.8	2786.6	2789.3	2790.7	2763.6	2752.7	2762.2	2773.1	2767.6
5°	2725.6	2690.4	2675.4	2649.7	2647.0	2634.8	2623.9	2610.3	2619.8	2629.3	2634.8
7.5°	2617.1	2594.1	2584.6	2577.8	2580.5	2575.1	2553.4	2541.2	2539.8	2543.9	2549.3
10°	2581.9	2562.9	2575.1	2594.1	2607.6	2617.1	2594.1	2573.7	2554.8	2546.6	2546.6
12.5°	2657.8	2633.4	2657.8	2678.1	2705.3	2712.0	2686.3	2664.6	2657.8	2665.9	2682.2
15°	2826.0	2769.0	2767.6	2779.9	2801.5	2812.4	2788.0	2777.1	2777.1	2828.7	2869.3
17.5°	2994.1	2900.5	2861.2	2854.4	2868.0	2872.1	2851.7	2842.2	2866.6	2967.0	3042.9
20°	3112.1	2998.2	2912.7	2896.5	2900.5	2901.9	2885.6	2878.8	2914.1	3036.1	3099.9
22.5°	3099.9	3015.8	2911.4	2891.0	2897.8	2895.1	2880.2	2877.5	2906.0	3011.7	3041.6
25°	3015.8	2950.7	2862.6	2849.0	2859.9	2858.5	2843.6	2836.8	2849.0	2919.5	2922.2
27.5°	2919.5	2862.6	2786.6	2782.6	2800.2	2809.7	2783.9	2763.6	2759.5	2807.0	2796.1
30°	2804.3	2762.2	2701.2	2703.9	2736.5	2741.9	2710.7	2680.9	2672.7	2698.5	2683.6
32.5°	2667.3	2653.7	2621.2	2628.0	2659.2	2670.0	2637.5	2606.3	2596.8	2604.9	2573.7
35°	2550.7	2545.3	2548.0	2560.2	2587.3	2595.4	2568.3	2543.9	2530.3	2501.9	2461.2
37.5°	2430.0	2444.9	2484.2	2507.3	2522.2	2519.5	2504.6	2486.9	2465.3	2412.4	2362.2
40°	2317.4	2355.4	2425.9	2451.7	2457.1	2458.5	2447.6	2432.7	2405.6	2335.1	2278.1
42.5°	2230.7	2272.7	2366.3	2405.6	2408.3	2411.0	2400.2	2388.0	2350.0	2256.4	2200.8
45°	2139.8	2195.4	2305.2	2352.7	2350.0	2348.6	2339.1	2333.7	2289.0	2180.5	2119.5
47.5°	2062.5	2127.6	2245.6	2286.3	2284.9	2283.5	2276.8	2276.8	2232.0	2114.0	2044.9
50°	1986.6	2061.2	2184.6	2218.5	2221.2	2218.5	2215.7	2219.8	2166.9	2040.8	1973.0
52.5°	1903.9	1987.9	2116.8	2147.9	2164.2	2171.0	2171.0	2161.5	2099.1	1967.6	1893.0
55°	1813.0	1893.0	2042.2	2084.2	2097.8	2110.0	2110.0	2091.0	2032.7	1899.8	1819.8
57.5°	1700.5	1771.0	1888.9	1931.0	1963.5	1971.7	1971.7	1940.5	1893.0	1765.5	1700.5
60°	*1578.4*	*1639.4*	*1719.4*	*1764.2*	*1788.6*	*1772.3*	*1784.5*	*1776.4*	*1738.4*	*1620.4*	*1566.2*
62.5°	1415.7	1478.1	1566.2	1612.3	1623.2	1606.9	1623.2	1621.8	1570.3	1464.5	1399.4
65°	1299.1	1360.1	1446.9	1506.5	1524.2	1520.1	1531.0	1514.7	1450.9	1350.6	1288.2
67.5°	1160.8	1225.8	1326.2	1392.6	1429.3	1433.3	1448.2	1414.3	1349.2	1239.4	1160.8
70°	1029.2	1084.8	1162.1	1224.5	1276.0	1301.8	1304.5	1255.7	1174.3	1083.5	1026.5
72.5°	890.9	947.9	1041.4	1109.2	1174.3	1204.2	1204.2	1144.5	1056.3	956.0	895.0
75°	722.8	775.6	861.1	934.3	1008.9	1046.9	1045.5	994.0	896.3	801.4	737.7
77.5°	489.5	528.8	583.1	638.7	649.5	679.4	694.3	629.2	575.0	523.4	466.5
80°	284.8	309.2	339.0	370.2	377.0	386.5	362.1	337.7	309.2	275.3	249.5
82.5°	166.8	183.1	198.0	222.4	226.5	229.2	207.5	196.6	173.6	153.2	137.0
85°	81.4	86.8	100.3	112.6	107.1	104.4	94.9	84.1	74.6	66.4	58.3
87.5°	16.3	16.3	24.4	23.1	19.0	16.3	9.5	12.2	2.7	2.7	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°	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7
2.5°	2785.3	2808.3	2836.8	2874.8	2918.2	2964.3	3009.0	3042.9	3076.8	3127.0	3118.9
5°	2642.9	2682.2	2727.0	2785.3	2855.8	2935.8	3025.3	3114.8	3211.1	3292.4	3327.7
7.5°	2560.2	2603.6	2656.5	2732.4	2823.2	2920.9	3047.0	3192.1	3348.0	3455.2	3521.6
10°	2560.2	2615.8	2684.9	2758.2	2838.2	2938.5	3094.4	3276.2	3476.8	3617.9	3695.2
12.5°	2708.0	2763.6	2778.5	2775.8	2820.5	2931.7	3132.4	3364.3	3604.3	3753.5	3848.4
15°	2938.5	2957.5	2844.9	2741.9	2748.7	2882.9	3150.0	3434.8	3714.2	3893.1	3996.2
17.5°	3093.1	3042.9	2842.2	2661.9	2623.9	2800.2	3150.0	3502.6	3830.8	4032.8	4129.1
20°	3105.3	2980.5	2773.1	2584.6	2486.9	2690.4	3128.3	3554.1	3943.3	4167.1	4270.1
22.5°	2998.2	2874.8	2699.8	2518.1	2374.4	2557.5	3093.1	3593.5	4039.6	4293.2	4420.6
25°	2876.1	2773.1	2625.3	2450.3	2297.1	2423.2	3060.5	3659.9	4173.8	4464.0	4592.9
27.5°	2756.8	2670.0	2535.8	2393.4	2253.7	2306.6	3040.2	3757.5	4333.9	4706.8	4818.0
30°	2640.2	2561.5	2439.5	2339.1	2230.7	2230.7	3022.6	3870.1	4545.4	4979.3	5090.5
32.5°	2522.2	2447.6	2348.6	2286.3	2217.1	2200.8	2973.8	3975.9	4763.7	5277.6	5391.6
35°	2412.4	2337.8	2261.8	2236.1	2210.3	2177.8	2853.1	4058.6	4976.6	5626.1	5723.8
37.5°	2309.3	2237.4	2180.5	2173.7	2176.4	2115.4	2663.2	4127.7	5242.4	5982.8	6034.3
40°	2219.8	2139.8	2095.1	2093.7	2107.3	2015.1	2423.2	4226.7	5546.1	6285.2	6263.5
42.5°	2139.8	2055.7	2001.5	2013.7	2005.6	1914.7	2188.6	4317.6	5810.6	6568.6	6525.2
45°	2061.2	1979.8	1903.9	1921.5	1912.0	1852.3	1989.3	4384.0	6103.5	6908.9	6914.4
47.5°	1985.2	1905.2	1829.3	1807.6	1806.2	1833.3	1836.1	4405.7	6580.8	7456.8	7333.4
50°	1914.7	1834.7	1756.1	1682.8	1711.3	1795.4	1722.2	4389.5	7295.4	8061.6	7717.1
52.5°	1841.5	1765.5	1678.8	1547.2	1621.8	1704.5	1620.4	4331.1	7732.1	8595.8	8389.7
55°	1757.4	1685.5	1567.6	1407.6	1498.4	1516.0	1516.0	3767.0	7917.8	9124.7	9252.2
57.5°	1644.9	1549.9	1362.8	1234.0	1315.3	1247.5	1404.8	2636.1	7611.4	8957.9	9452.8
60°	*1517.4*	*1415.7*	*1217.7*	*1125.5*	*1149.9*	*1030.6*	*1197.4*	*1653.0*	*6308.2*	*7622.2*	*8479.2*
62.5°	1349.2	1255.7	1091.6	1019.7	969.6	840.7	964.1	1045.5	4324.4	5660.0	6244.5
65°	1236.7	1133.6	987.2	892.3	789.2	676.7	640.0	686.1	2325.6	3167.7	3562.3
67.5°	1103.8	1002.1	863.8	744.5	661.7	580.4	516.6	500.4	797.3	1055.0	1141.8
70°	977.7	880.1	764.8	653.6	570.9	490.9	428.5	383.8	368.8	366.1	360.7
72.5°	848.9	758.0	661.7	558.7	467.8	394.6	339.0	287.5	265.8	259.0	252.2
75°	695.6	623.8	527.5	416.3	343.1	275.3	231.9	198.0	179.0	172.2	164.1
77.5°	447.5	414.9	330.9	268.5	207.5	164.1	141.0	119.3	107.1	104.4	97.6
80°	238.7	222.4	183.1	154.6	123.4	100.3	88.1	75.9	69.2	66.4	63.7
82.5°	132.9	120.7	101.7	89.5	71.9	61.0	54.2	48.8	44.7	43.4	42.0
85°	59.7	51.5	40.7	38.0	33.9	31.2	29.8	27.1	25.8	24.4	23.1
87.5°	2.7	5.4	6.8	5.4	5.4	8.1	9.5	9.5	8.1	8.1	6.8
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: P639965
CATALOG NUMBER: GWS-SA5C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7	2969.7
2.5°	3169.0	3209.7	3213.8	3227.3	3209.7	3205.6	3177.2	3160.9	3146.0	3141.9
5°	3415.8	3497.2	3529.7	3552.8	3531.1	3520.2	3457.9	3392.8	3356.2	3338.5
7.5°	3669.4	3791.4	3855.2	3883.7	3886.4	3837.6	3730.4	3608.4	3547.4	3524.3
10°	3895.9	4046.4	4130.5	4184.7	4165.7	4106.0	3959.6	3794.2	3716.9	3696.5
12.5°	4064.0	4207.7	4272.8	4308.1	4306.7	4274.2	4135.9	3956.9	3868.7	3848.4
15°	4172.5	4257.9	4262.0	4270.1	4293.2	4336.6	4264.7	4099.3	4001.6	3973.2
17.5°	4257.9	4224.0	4160.3	4138.6	4190.1	4310.8	4354.2	4219.9	4114.2	4089.8
20°	4312.2	4141.3	4028.7	3986.7	4046.4	4243.0	4408.4	4328.4	4218.6	4187.4
22.5°	4354.2	4064.0	3882.3	3853.8	3916.2	4169.8	4464.0	4457.3	4336.6	4293.2
25°	4420.6	4012.5	3779.2	3758.9	3817.2	4134.5	4538.6	4632.2	4525.1	4462.7
27.5°	4525.1	4007.1	3726.4	3719.6	3799.6	4165.7	4645.7	4888.5	4754.2	4708.1
30°	4670.1	4058.6	3738.6	3752.1	3849.8	4278.3	4812.5	5181.4	5047.1	4975.3
32.5°	4879.0	4196.9	3924.3	3982.6	4054.5	4458.6	5056.6	5498.7	5397.0	5291.2
35°	5154.3	4576.6	4473.5	4721.7	4653.9	4853.2	5350.9	5883.8	5760.4	5668.2
37.5°	5521.7	5354.9	5449.9	5791.6	5627.5	5599.0	5710.2	6233.6	6165.8	6073.6
40°	6037.0	6070.9	6245.9	6694.7	6457.4	6274.3	6150.9	6496.7	6519.8	6405.9
42.5°	6378.7	6534.7	6956.4	7466.3	7139.5	6701.5	6519.8	6833.0	6834.4	6731.3
45°	6506.2	6914.4	7795.8	8382.9	7836.5	6945.6	6723.2	7290.0	7276.4	7158.5
47.5°	6460.1	7234.4	8667.7	9565.4	8731.4	7119.1	6694.7	7940.9	8050.7	7871.7
50°	6363.8	7555.8	9686.1	11013.6	9829.8	7303.5	6651.3	8662.3	8844.0	8705.7
52.5°	6461.5	7913.8	10890.2	12510.7	11207.5	7597.8	6944.2	9588.5	9555.9	9389.1
55°	6770.6	8336.8	12353.4	14391.5	12720.9	8095.5	7696.8	10471.2	10140.4	9941.0
57.5°	6755.7	8639.2	13636.2	15879.1	14037.6	8503.6	7958.5	10564.8	9896.3	9644.0
60°	6131.9	8500.9	14124.4	16820.1	14434.9	8278.5	7097.4	9436.6	8350.4	8086.0
62.5°	4576.6	7543.6	13177.8	15641.7	13310.7	7150.3	5337.3	6773.3	6000.4	5554.3
65°	2927.7	5901.4	11078.7	12672.1	10971.6	5468.8	3178.5	3631.4	2844.9	2717.5
67.5°	1246.2	4165.7	8612.1	8469.7	8208.0	3543.3	1227.2	1022.4	762.1	748.5
70°	412.2	2834.1	5308.8	5649.2	4902.0	2440.8	405.5	343.1	341.7	329.5
72.5°	269.8	1521.5	2988.7	3327.7	3154.1	1404.8	245.4	229.2	234.6	229.2
75°	161.4	330.9	503.1	653.6	503.1	235.9	147.8	145.1	147.8	141.0
77.5°	94.9	92.2	89.5	89.5	88.1	81.4	74.6	71.9	73.2	74.6
80°	61.0	58.3	55.6	54.2	47.5	44.7	42.0	39.3	39.3	40.7
82.5°	39.3	36.6	33.9	29.8	24.4	20.3	19.0	16.3	16.3	17.6
85°	20.3	16.3	12.2	9.5	5.4	2.7	0.0	0.0	0.0	0.0
87.5°	4.1	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.

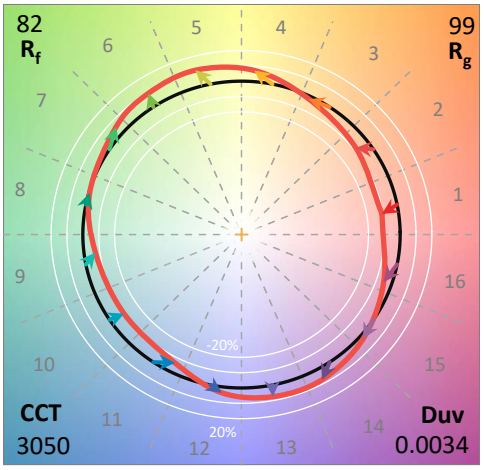
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

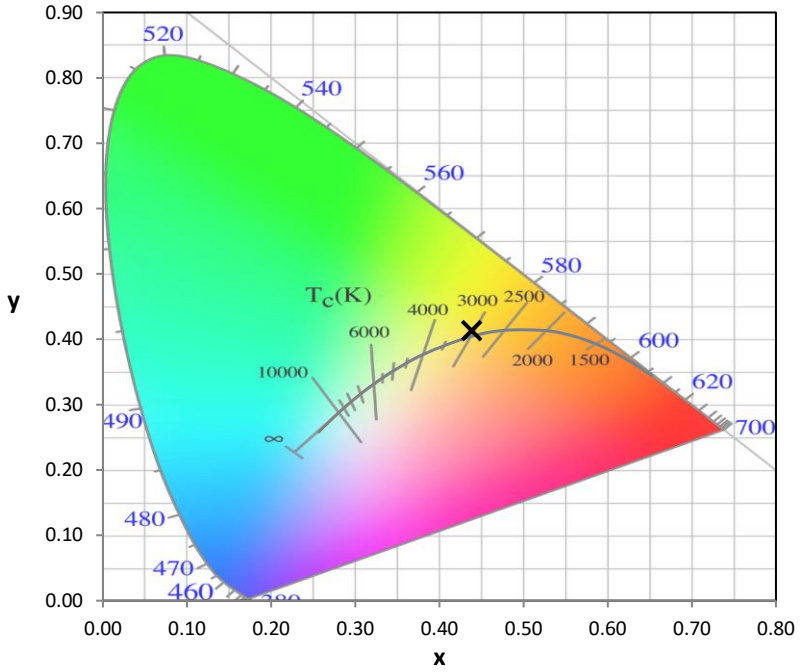
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

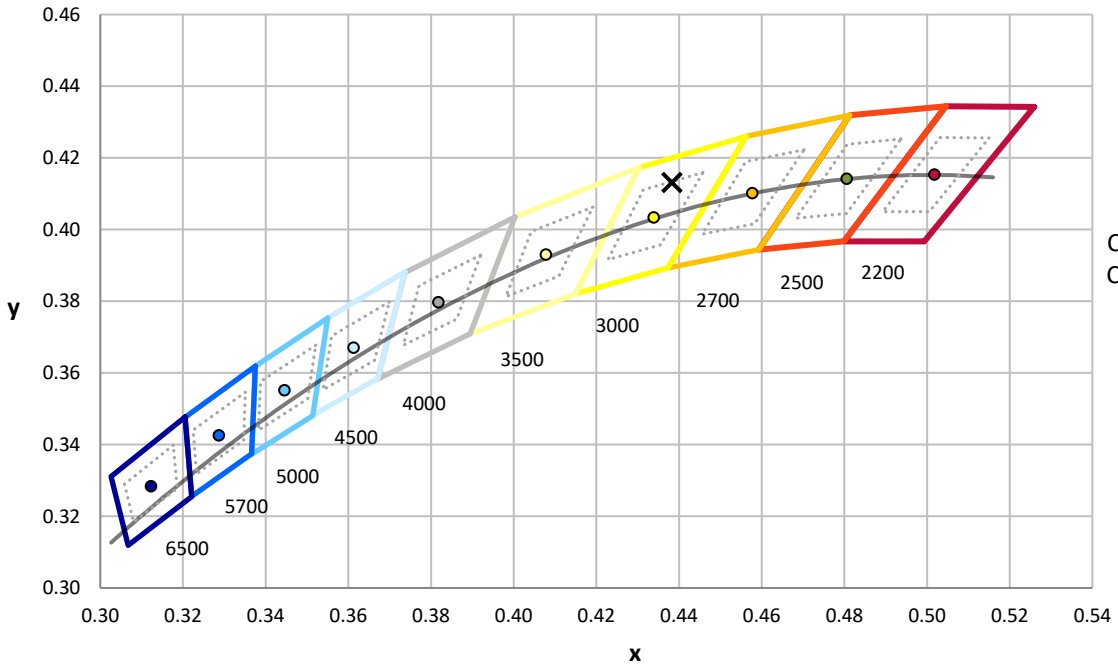
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

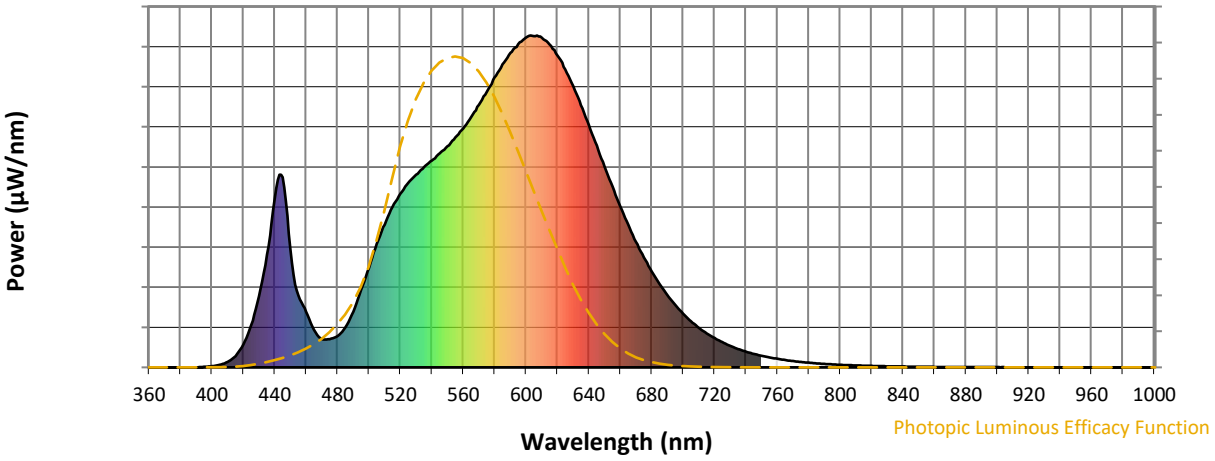


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

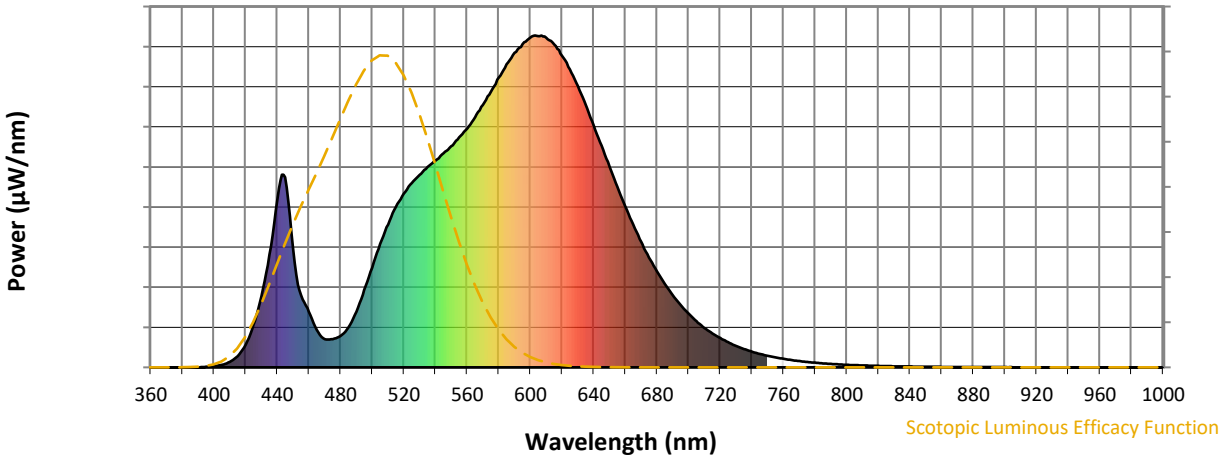


Photopic Lumens: NR

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

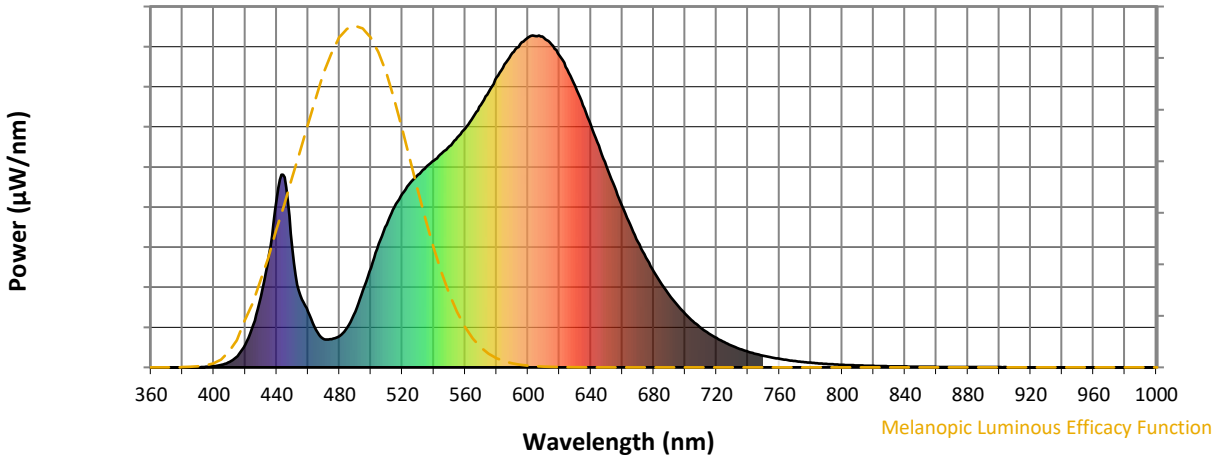


Scotopic Lumens: NR **S/P: 1.27**

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			

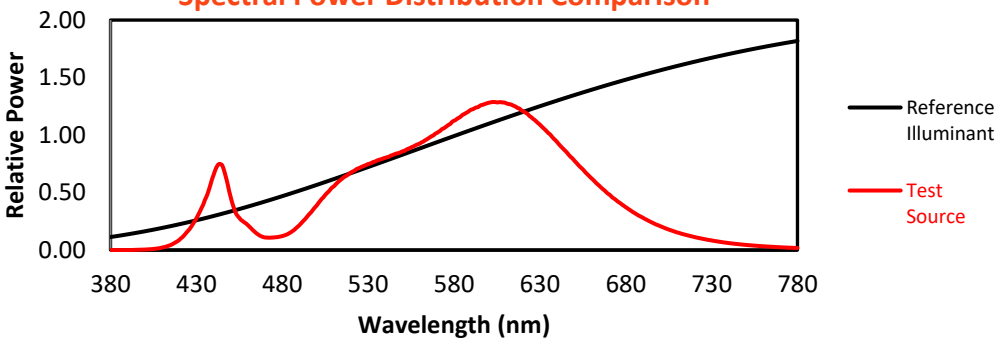
REPORT NUMBER: SP1-2408-195-9

TM-30-18

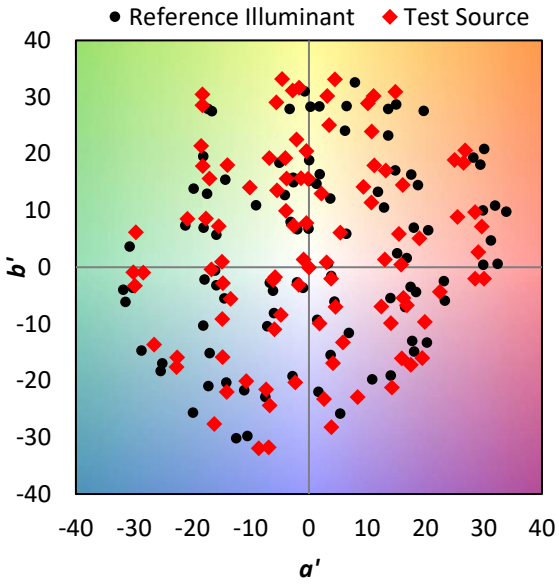
Summary

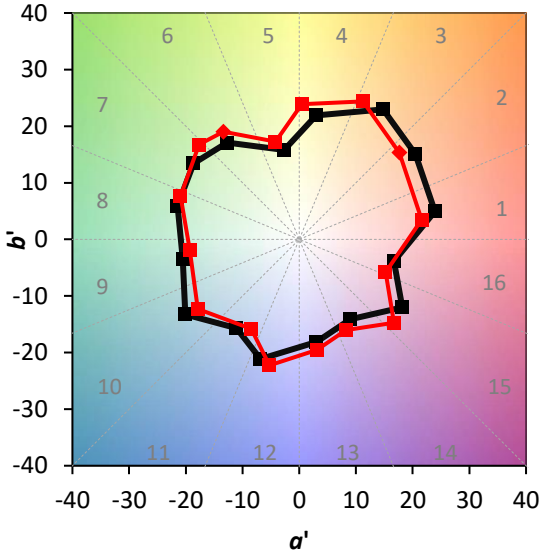
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

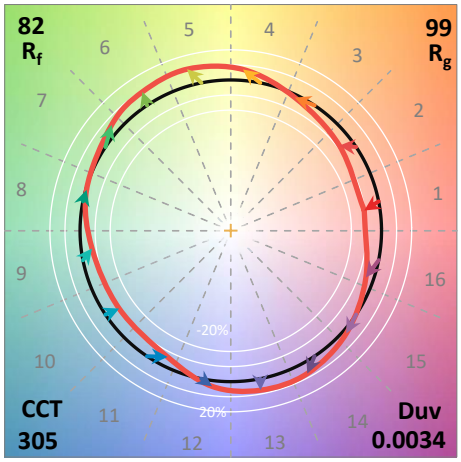
Spectral Power Distribution Comparison

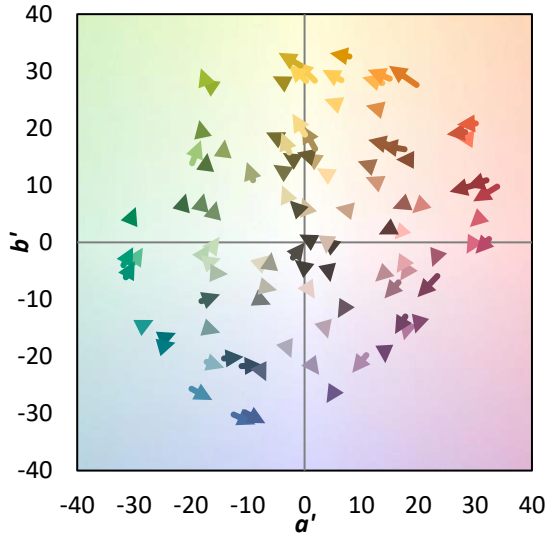


Color Vector Graphics









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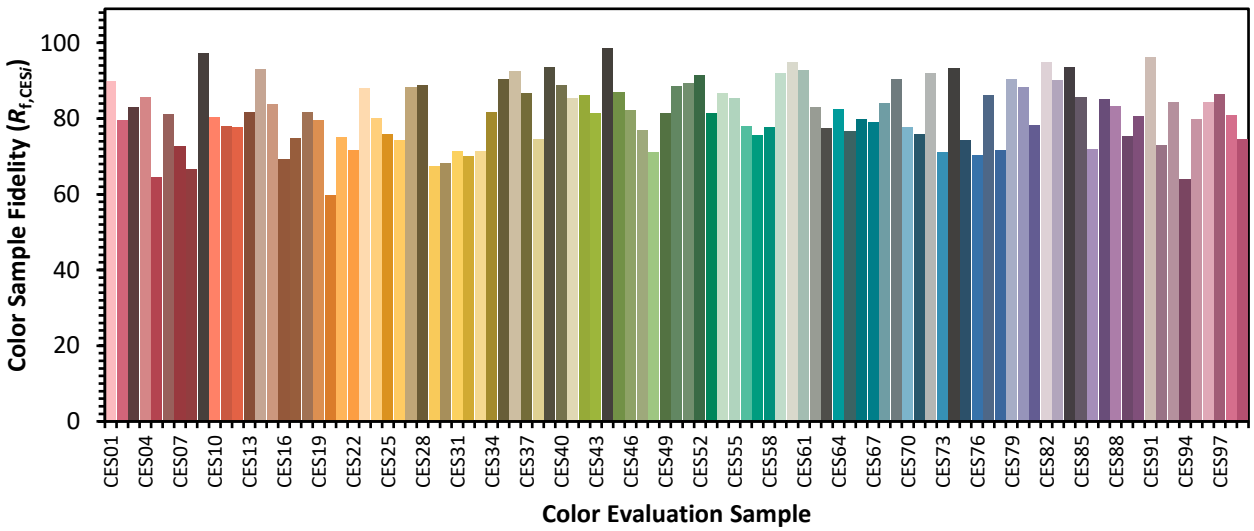
Individual Sample Fidelity Index ($R_{f,i}$)

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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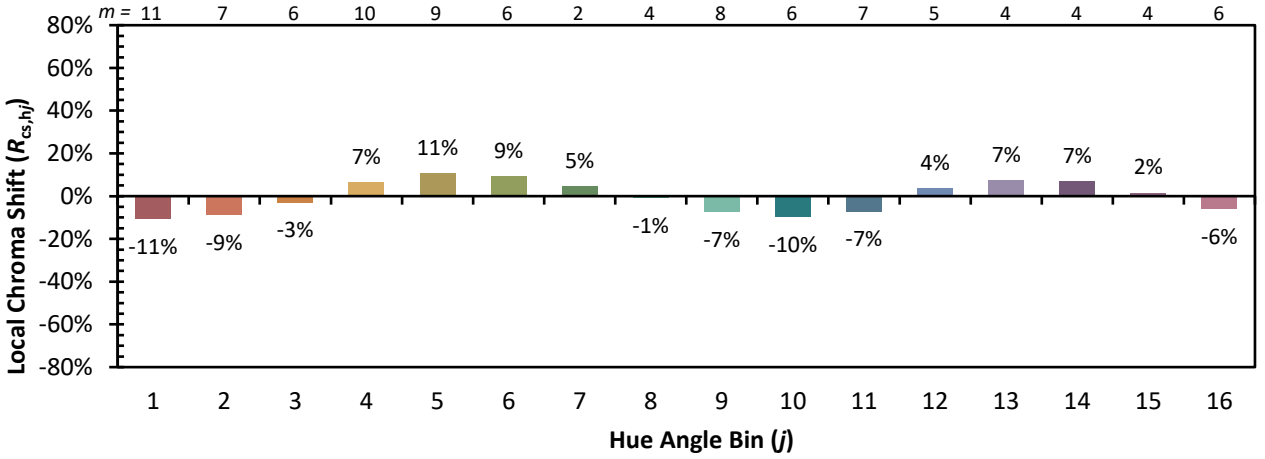
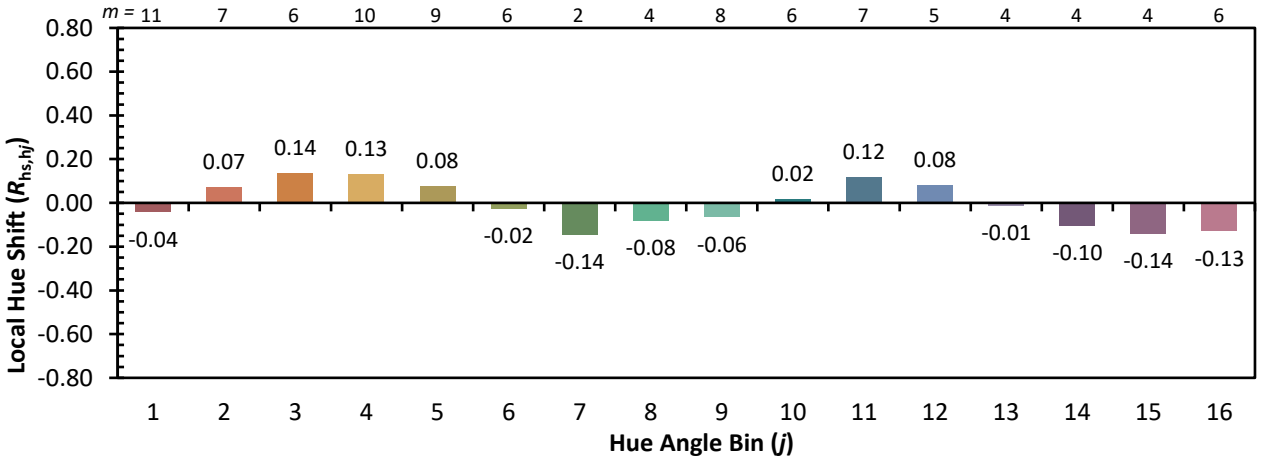
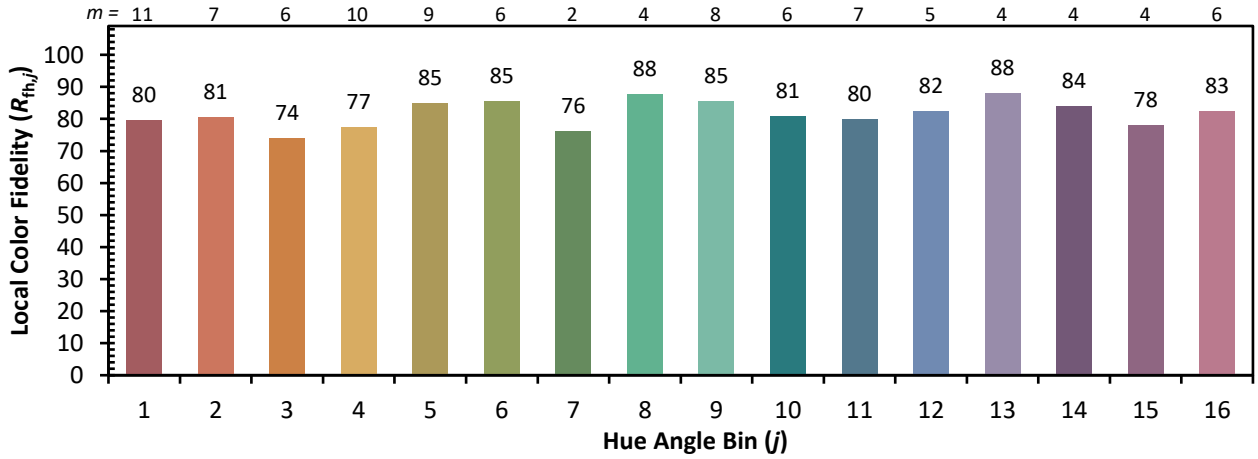
Color Rendition by Hue-Angle Bin







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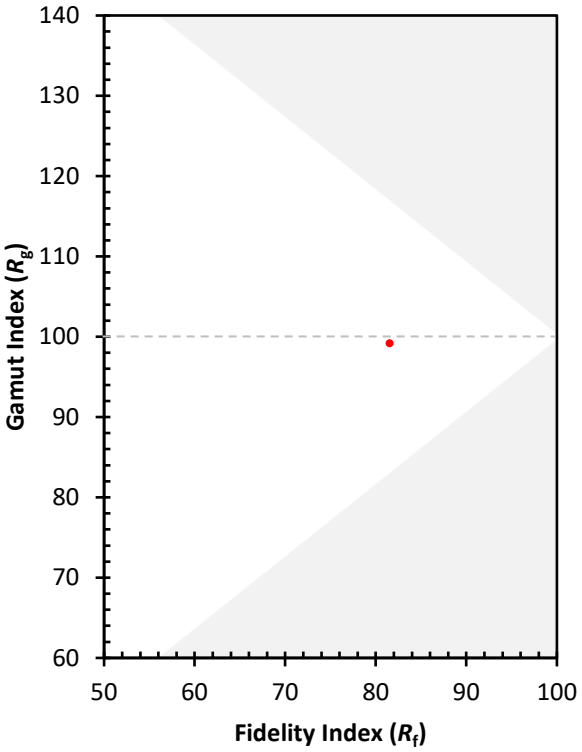
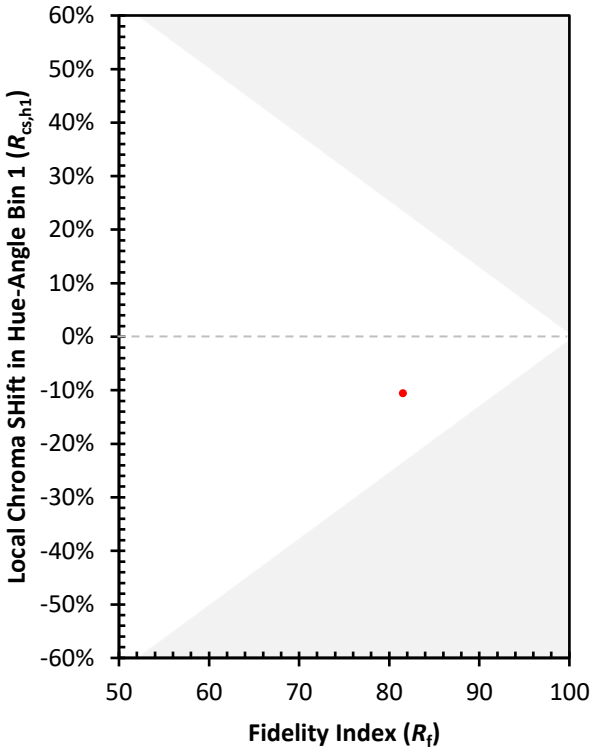
Measure Comparisons





(END OF REPORT)