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: P640957

Luminaire Tested: GWS-SA5E-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:	P640957
	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-SA5E-830-U-SLL-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	27950.2 lumens
Efficiency:	N/A
Efficacy:	103.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - 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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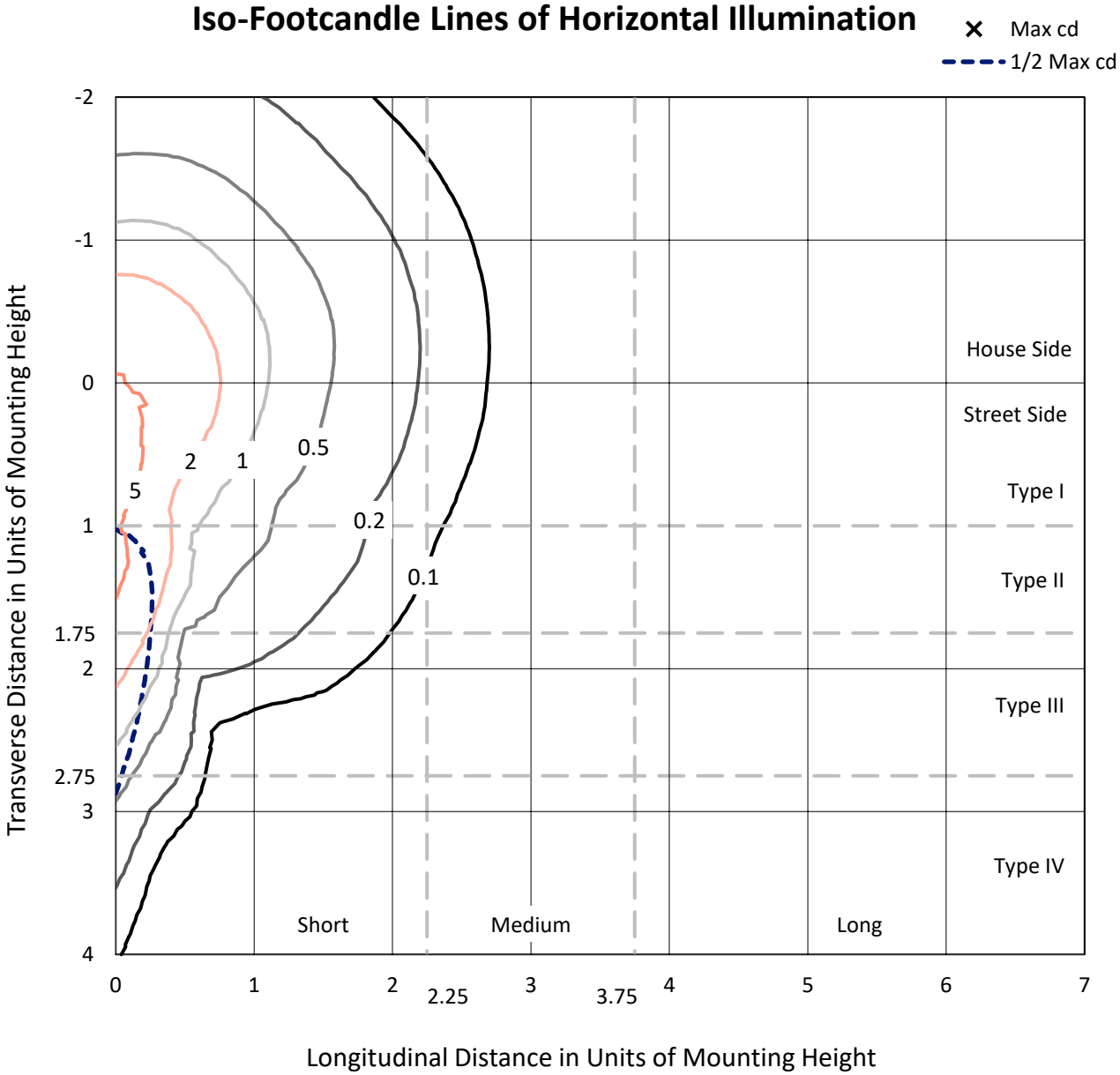
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type III - Short - N/A

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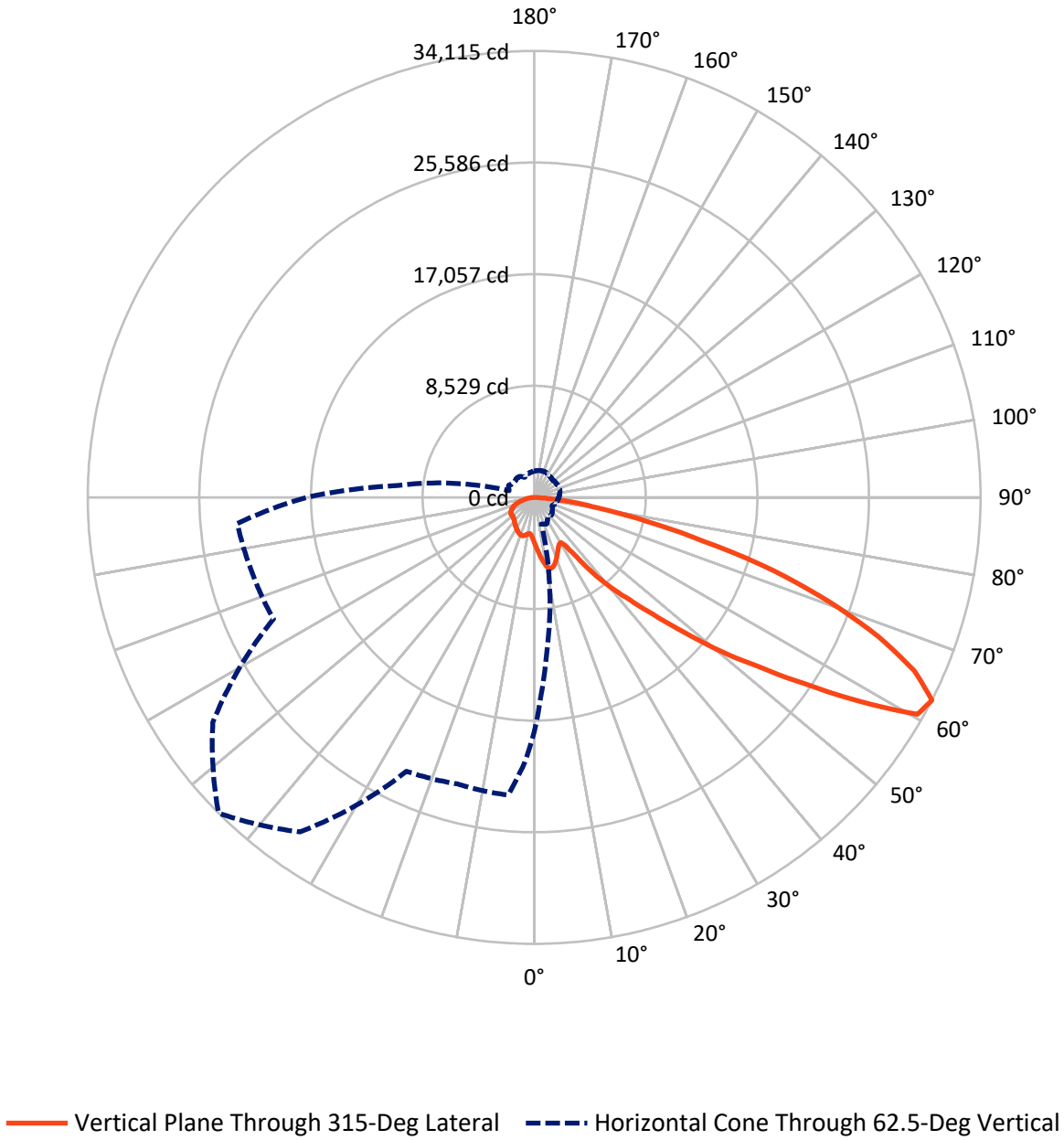
Luminous Intensity Polar Plot



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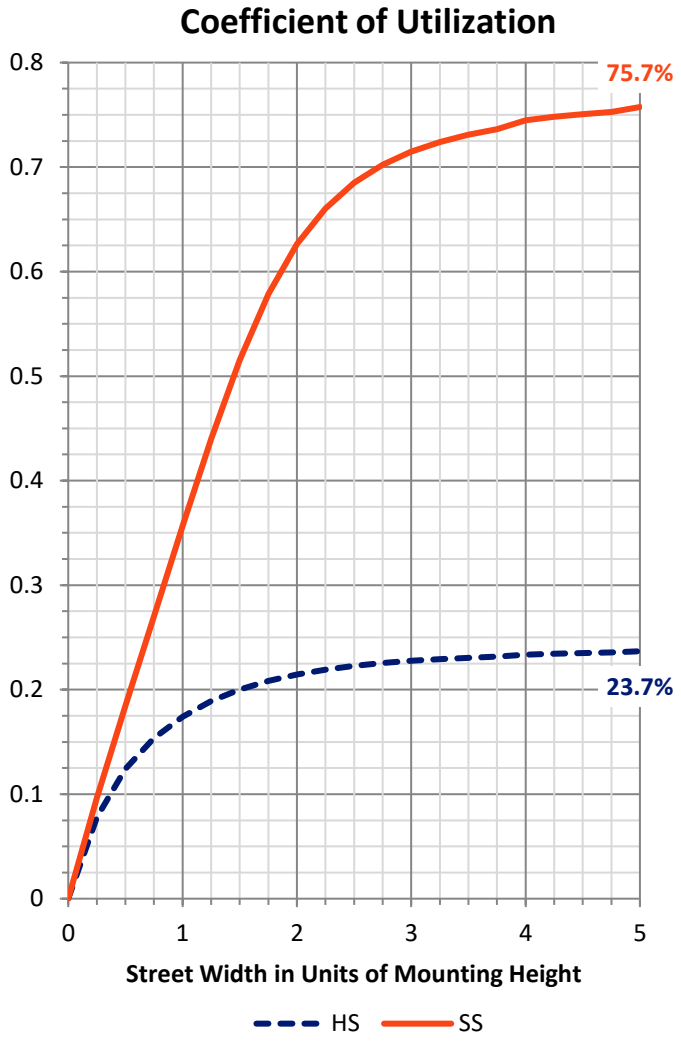
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6682.9	0.0	6682.9
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	21267.3	0.0	21267.3
	% Fixture	76.1	0.0	76.1
Total	Lumens	27950.2	0.0	27950.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.3	1.2
10°-20°	1115.7	4.0
20°-30°	1756.4	6.3
30°-40°	2407.5	8.6
40°-50°	3756.5	13.4
50°-60°	6476.9	23.2
60°-70°	7505.9	26.9
70°-80°	3962.0	14.2
80°-90°	625.9	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°	27950.2	100.0
0°-180°	27950.2	100.0



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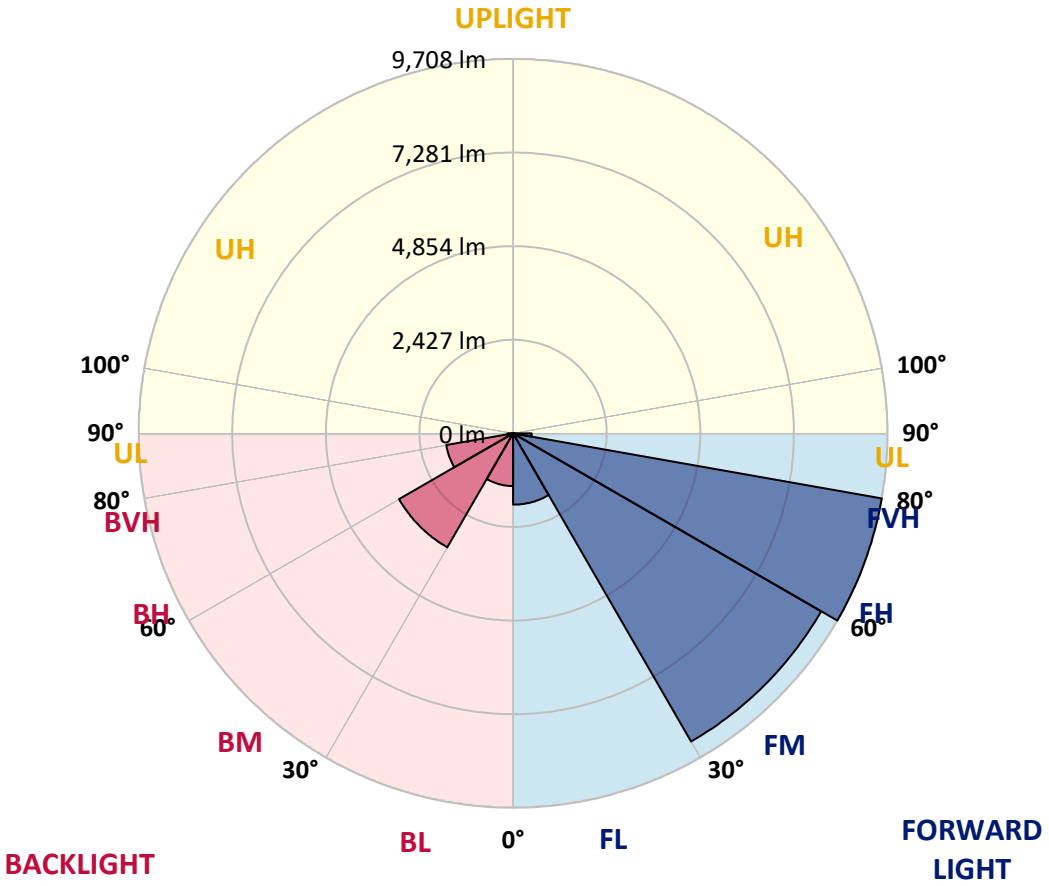
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1848.6	6.6			
FM	(30°-60°)	9227.3	33.0			
FH	(60°-80°)	9708.3	34.7			G4/12000
FVH	(80°-90°)	483.1	1.7			G3/500
BL	(0°-30°)	1366.9	4.9	B3/2500		
BM	(30°-60°)	3413.6	12.2	B3/5000		
BH	(60°-80°)	1759.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	142.8	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°	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8
2.5°	3786.3	3771.3	3749.9	3677.2	3632.3	3581.0	3527.6	3465.6	3395.0	3345.8	3296.7
5°	4106.9	4083.4	4032.1	3858.9	3739.2	3608.8	3499.8	3375.8	3253.9	3170.5	3087.2
7.5°	4414.8	4384.9	4305.8	4040.7	3846.1	3658.0	3493.4	3313.8	3132.1	3008.1	2909.7
10°	4722.7	4660.7	4560.2	4213.8	3957.3	3739.2	3551.1	3330.9	3089.3	2920.4	2815.6
12.5°	4957.8	4900.1	4791.1	4372.0	4068.5	3794.8	3583.2	3380.1	3174.8	2995.2	2888.3
15°	5178.0	5103.2	4979.2	4519.6	4160.4	3792.7	3519.0	3341.6	3311.6	3266.7	3127.8
17.5°	5336.3	5267.8	5139.6	4639.3	4211.7	3726.4	3341.6	3236.8	3371.5	3508.3	3375.8
20°	5475.2	5396.1	5265.7	4722.7	4222.4	3578.9	3125.6	3127.8	3339.4	3527.6	3495.5
22.5°	5592.8	5505.1	5389.7	4816.7	4218.1	3373.6	2937.5	3065.8	3277.4	3424.9	3429.2
25°	5738.2	5665.5	5569.3	4955.7	4218.1	3164.1	2800.7	2991.0	3172.7	3296.7	3292.4
27.5°	5915.6	5866.5	5787.4	5167.4	4256.6	2988.8	2723.7	2894.7	3038.0	3144.9	3142.7
30°	6114.5	6069.6	6009.7	5391.8	4322.9	2858.4	2681.0	2775.0	2879.8	2965.3	2965.3
32.5°	6317.6	6300.5	6236.3	5571.4	4271.6	2817.8	2644.6	2655.3	2710.9	2781.4	2775.0
35°	6599.8	6582.7	6501.4	5710.4	4049.2	2760.1	2586.9	2533.4	2539.9	2584.7	2599.7
37.5°	7012.4	6986.7	6867.0	5872.9	3713.6	2614.7	2492.8	2405.2	2385.9	2405.2	2433.0
40°	7510.5	7472.0	7309.6	6093.1	3326.6	2418.0	2345.3	2272.6	2240.5	2247.0	2279.0
42.5°	8134.8	8053.5	7820.5	6326.1	2943.9	2244.8	2180.7	2135.8	2099.4	2095.2	2157.2
45°	9148.2	8925.8	8556.0	6533.5	2621.1	2152.9	2033.2	2001.1	1971.2	1988.3	2061.0
47.5°	10918.4	10507.9	9787.4	6710.9	2424.4	2155.0	1915.6	1881.4	1879.2	1913.4	1994.7
50°	13351.3	12759.1	11647.4	6830.7	2321.8	2180.7	1845.0	1789.4	1830.1	1864.3	1941.2
52.5°	15681.7	14777.3	13453.9	6828.5	2276.9	2185.0	1864.3	1703.9	1830.1	1838.6	1911.3
55°	17672.1	16034.4	13941.4	6127.3	2212.7	2167.9	1939.1	1637.6	1806.5	1838.6	1896.3
57.5°	19254.1	16834.0	13905.0	4949.3	2407.3	2073.8	1984.0	1622.7	1738.1	1842.9	1909.2
60°	19078.8	16468.4	13009.2	3038.0	2388.1	1907.0	1977.6	1650.5	1622.7	1785.2	1894.2
62.5°	*17913.6*	*15157.9*	*11467.8*	*2108.0*	*2242.7*	*1810.8*	*1872.8*	*1699.6*	*1515.8*	*1701.8*	*1821.5*
65°	16282.4	13466.8	9556.5	1616.3	1857.9	1815.1	1695.4	1665.4	1421.7	1569.2	1697.5
67.5°	14125.2	11369.5	7544.7	1280.6	1295.6	1571.4	1539.3	1479.4	1334.1	1451.6	1567.1
70°	10619.1	8297.3	5190.9	1030.5	981.3	1312.7	1383.2	1329.8	1248.5	1282.8	1404.6
72.5°	7482.7	5417.5	2843.4	816.7	756.8	1009.1	1201.5	1193.0	1103.2	1128.8	1248.5
75°	5560.7	3833.3	1776.6	645.7	615.7	722.6	1007.0	1032.6	957.8	987.7	1079.7
77.5°	3700.7	2482.1	987.7	478.9	478.9	528.1	750.4	870.1	814.5	838.1	902.2
80°	2041.7	1263.5	493.9	314.3	322.8	363.4	547.3	626.4	628.5	686.3	703.4
82.5°	645.7	401.9	220.2	183.9	173.2	207.4	352.8	449.0	419.0	534.5	491.7
85°	147.5	94.1	40.6	40.6	44.9	68.4	134.7	239.4	305.7	367.7	267.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	94.1	139.0	124.0
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°	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8
2.5°	3266.7	3224.0	3211.2	3174.8	3170.5	3136.3	3123.5	3123.5	3138.5	3138.5	3153.4
5°	3053.0	2999.5	2969.6	2926.8	2916.1	2890.5	2873.4	2875.5	2894.7	2907.6	2933.2
7.5°	2864.8	2828.5	2807.1	2787.8	2783.6	2779.3	2760.1	2757.9	2764.3	2783.6	2802.8
10°	2785.7	2760.1	2766.5	2781.4	2805.0	2817.8	2800.7	2792.1	2785.7	2798.5	2815.6
12.5°	2862.7	2837.0	2849.8	2875.5	2907.6	2920.4	2914.0	2911.8	2918.3	2967.4	3003.8
15°	3031.6	2982.4	2965.3	2976.0	3001.6	3014.5	3008.1	3016.6	3057.2	3185.5	3277.4
17.5°	3241.1	3121.4	3053.0	3033.7	3044.4	3055.1	3055.1	3076.5	3147.0	3335.2	3450.6
20°	3354.4	3198.3	3082.9	3035.8	3040.1	3050.8	3050.8	3080.7	3159.8	3360.8	3435.6
22.5°	3324.5	3181.2	3040.1	2988.8	2991.0	2999.5	2999.5	3025.2	3095.7	3273.2	3307.4
25°	3206.9	3080.7	2941.8	2896.9	2901.2	2916.1	2911.8	2926.8	2980.3	3125.6	3144.9
27.5°	3065.8	2954.6	2817.8	2783.6	2802.8	2832.7	2807.1	2809.2	2858.4	2980.3	2982.4
30°	2914.0	2822.1	2700.2	2674.5	2710.9	2725.8	2702.3	2702.3	2751.5	2834.9	2832.7
32.5°	2749.4	2691.6	2604.0	2576.2	2616.8	2640.3	2610.4	2614.7	2653.2	2708.7	2687.4
35°	2595.4	2565.5	2524.9	2505.6	2531.3	2552.7	2533.4	2542.0	2578.3	2593.3	2563.4
37.5°	2447.9	2443.6	2447.9	2447.9	2454.3	2460.7	2447.9	2469.3	2501.4	2482.1	2447.9
40°	2319.6	2336.7	2377.4	2366.7	2360.3	2366.7	2358.1	2394.5	2426.5	2392.3	2351.7
42.5°	2212.7	2244.8	2306.8	2306.8	2294.0	2298.3	2294.0	2338.9	2362.4	2315.4	2270.5
45°	2120.8	2167.9	2247.0	2257.6	2236.3	2236.3	2244.8	2300.4	2309.0	2244.8	2197.8
47.5°	2056.7	2114.4	2204.2	2223.4	2191.4	2189.2	2212.7	2272.6	2272.6	2197.8	2144.3
50°	2011.8	2075.9	2182.8	2208.5	2176.4	2167.9	2206.3	2264.1	2251.2	2161.4	2108.0
52.5°	1981.9	2048.1	2180.7	2217.0	2195.6	2187.1	2225.6	2266.2	2234.1	2137.9	2082.3
55°	1962.6	2035.3	2187.1	2217.0	2193.5	2178.5	2217.0	2253.4	2236.3	2125.1	2071.6
57.5°	1973.3	2046.0	2178.5	2193.5	2165.7	2140.1	2185.0	2236.3	2229.9	2129.4	2075.9
60°	1956.2	2022.5	2131.5	2135.8	2088.7	2048.1	2114.4	2191.4	2191.4	2114.4	2067.4
62.5°	*1877.1*	*1943.4*	*2039.6*	*2043.9*	*1990.4*	*1945.5*	*2022.5*	*2114.4*	*2112.3*	*2050.3*	*2001.1*
65°	1746.7	1808.7	1917.7	1928.4	1875.0	1827.9	1907.0	1992.5	1999.0	1943.4	1900.6
67.5°	1603.4	1659.0	1740.3	1783.0	1738.1	1689.0	1761.6	1842.9	1840.7	1774.5	1729.6
70°	1432.4	1483.7	1558.5	1594.9	1567.1	1520.1	1586.3	1629.1	1609.9	1577.8	1547.9
72.5°	1263.5	1312.7	1383.2	1383.2	1353.3	1308.4	1327.6	1404.6	1428.1	1404.6	1385.4
75°	1086.1	1128.8	1178.0	1188.7	1122.4	1041.2	1131.0	1197.2	1225.0	1214.3	1190.8
77.5°	904.3	936.4	1009.1	989.9	865.9	823.1	895.8	994.1	1013.4	1007.0	974.9
80°	697.0	716.2	793.2	754.7	658.5	630.7	662.8	739.7	744.0	722.6	682.0
82.5°	468.2	493.9	545.2	470.3	468.2	442.5	416.9	425.4	463.9	459.7	431.9
85°	239.4	252.3	301.4	282.2	241.6	209.5	198.8	211.7	190.3	173.2	149.7
87.5°	100.5	109.0	149.7	83.4	25.7	0.0	0.0	12.8	19.2	27.8	29.9
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8
2.5°	3187.6	3211.2	3268.9	3341.6	3412.1	3484.8	3563.9	3613.1	3672.9	3749.9	3752.1
5°	2965.3	3018.7	3102.1	3213.3	3328.7	3461.3	3615.2	3743.5	3897.4	4019.3	4068.5
7.5°	2828.5	2905.4	3010.2	3151.3	3303.1	3467.7	3668.7	3884.6	4136.9	4299.4	4395.6
10°	2841.3	2958.9	3063.6	3183.4	3320.2	3497.6	3756.3	4042.8	4352.8	4566.6	4686.3
12.5°	3070.1	3194.1	3174.8	3168.4	3260.3	3476.3	3826.9	4203.2	4581.6	4795.4	4938.6
15°	3358.7	3405.7	3224.0	3087.2	3142.7	3399.3	3865.4	4346.4	4771.8	5032.7	5173.8
17.5°	3506.2	3412.1	3191.9	2986.7	2971.7	3281.7	3884.6	4491.8	4985.6	5246.5	5396.1
20°	3437.8	3300.9	3115.0	2920.4	2813.5	3121.4	3873.9	4607.2	5180.2	5470.9	5592.8
22.5°	3290.3	3170.5	3025.2	2839.2	2685.2	2946.1	3846.1	4722.7	5353.4	5646.2	5753.1
25°	3129.9	3040.1	2920.4	2757.9	2612.5	2792.1	3826.9	4876.6	5552.2	5832.2	5900.7
27.5°	2969.6	2903.3	2805.0	2678.8	2595.4	2685.2	3833.3	5077.6	5808.7	6073.8	6046.0
30°	2811.4	2753.6	2685.2	2629.6	2593.3	2659.6	3816.2	5291.4	6090.9	6336.8	6172.2
32.5°	2661.7	2608.3	2565.5	2574.1	2595.4	2670.3	3728.5	5485.9	6349.6	6559.1	6309.0
35°	2533.4	2477.9	2477.9	2507.8	2586.9	2633.9	3501.9	5637.7	6636.1	6845.6	6503.6
37.5°	2413.7	2364.5	2396.6	2445.8	2520.6	2535.6	3211.2	5785.2	7053.0	7249.7	6805.0
40°	2309.0	2259.8	2317.5	2379.5	2418.0	2411.6	2916.1	5990.5	7544.7	7747.8	7204.8
42.5°	2225.6	2180.7	2232.0	2311.1	2317.5	2323.9	2700.2	6187.1	8115.5	8374.2	7893.2
45°	2157.2	2125.1	2150.7	2229.9	2229.9	2328.2	2565.5	6351.8	8975.0	9432.5	9156.7
47.5°	2103.7	2084.5	2097.3	2123.0	2165.7	2405.2	2480.0	6477.9	10540.0	11437.9	11159.9
50°	2073.8	2054.5	2071.6	2018.2	2146.5	2443.6	2452.2	6574.1	12603.0	14009.8	13665.6
52.5°	2048.1	2041.7	2052.4	1928.4	2189.2	2418.0	2430.8	6445.8	13986.3	16541.1	16881.0
55°	2039.6	2043.9	1992.5	1862.1	2240.5	2332.5	2366.7	5528.7	14362.6	18723.9	20834.0
57.5°	2043.9	2031.0	1900.6	1868.5	2242.7	2161.4	2458.6	3944.5	13815.2	19673.1	24701.5
60°	2028.9	1964.7	1789.4	1926.3	2144.3	1960.5	2392.3	2571.9	12372.1	18944.1	24926.0
62.5°	*1962.6*	*1868.5*	*1693.2*	*1958.3*	*1969.0*	*1840.7*	*2172.1*	*1981.9*	*10448.0*	*17383.4*	*22762.4*
65°	1866.4	1740.3	1612.0	1892.1	1791.6	1785.2	1633.4	1588.5	8402.0	15525.6	20710.0
67.5°	1708.2	1582.1	1552.1	1740.3	1612.0	1582.1	1312.7	1317.0	6704.5	13545.9	18646.9
70°	1528.6	1402.5	1426.0	1573.5	1434.5	1314.8	1062.5	1096.8	5086.1	11286.1	15865.5
72.5°	1411.0	1242.1	1244.3	1385.4	1261.4	1064.7	874.4	904.3	3228.3	8506.8	12613.7
75°	1190.8	1094.6	1047.6	1122.4	1071.1	829.5	735.4	729.0	1913.4	6097.4	9445.3
77.5°	994.1	919.3	895.8	925.7	799.6	613.6	592.2	581.5	1083.9	3906.0	6189.3
80°	720.5	701.2	699.1	714.1	615.7	451.1	451.1	453.2	583.7	2120.8	3489.1
82.5°	457.5	500.3	442.5	491.7	419.0	320.7	299.3	339.9	335.7	904.3	1470.9
85°	190.3	260.8	243.7	258.7	198.8	175.3	188.1	203.1	194.6	348.5	573.0
87.5°	36.3	42.8	47.0	44.9	44.9	55.6	62.0	74.8	74.8	100.5	173.2
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: P640957
CATALOG NUMBER: GWS-SA5E-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8	3484.8
2.5°	3833.3	3895.3	3882.5	3910.3	3873.9	3886.7	3814.1	3794.8	3782.0	3786.3
5°	4226.7	4352.8	4376.3	4423.4	4391.3	4391.3	4263.0	4166.8	4132.6	4106.9
7.5°	4626.5	4808.2	4927.9	4940.7	4923.6	4889.4	4703.4	4530.3	4468.3	4414.8
10°	4981.4	5199.4	5334.1	5398.3	5366.2	5312.7	5081.8	4844.5	4769.7	4722.7
12.5°	5252.9	5445.3	5535.1	5577.8	5573.6	5554.3	5366.2	5109.6	5030.5	4957.8
15°	5428.2	5524.4	5490.2	5488.0	5518.0	5594.9	5537.2	5336.3	5244.3	5178.0
17.5°	5541.5	5449.6	5297.8	5227.2	5291.4	5473.1	5605.6	5492.3	5408.9	5336.3
20°	5582.1	5255.0	5034.8	4904.4	4979.2	5242.2	5569.3	5605.6	5535.1	5475.2
22.5°	5535.1	5017.7	4718.4	4564.5	4637.2	4951.4	5462.4	5697.6	5650.5	5592.8
25°	5419.6	4769.7	4410.5	4271.6	4350.7	4671.4	5272.1	5783.1	5785.2	5738.2
27.5°	5276.4	4540.9	4194.6	4064.2	4141.2	4440.5	5086.1	5857.9	5932.7	5915.6
30°	5131.0	4404.1	4092.0	4000.1	4057.8	4322.9	4895.8	5934.9	6084.5	6114.5
32.5°	5064.7	4470.4	4333.6	4374.2	4299.4	4391.3	4827.4	6043.9	6268.4	6317.6
35°	5152.4	5058.3	5404.7	5565.0	5299.9	4951.4	4915.1	6208.5	6527.1	6599.8
37.5°	5577.8	6317.6	6834.9	7399.3	6939.7	6172.2	5349.1	6488.6	6896.9	7012.4
40°	6503.6	7416.4	8350.7	9079.8	8384.9	7352.3	6174.3	6905.5	7405.8	7510.5
42.5°	7375.8	8446.9	9734.0	10676.8	9774.6	8316.5	7063.7	7606.7	8077.1	8134.8
45°	8231.0	9458.2	11407.9	12718.5	11493.5	9233.7	7972.3	8791.1	9146.0	9148.2
47.5°	9233.7	10597.7	13507.4	15373.8	13774.6	10249.2	8825.3	10666.1	11159.9	10918.4
50°	10433.1	11730.8	15668.8	18463.1	16556.1	11497.7	9909.3	12951.5	13625.0	13351.3
52.5°	12038.6	12979.3	18050.5	21475.4	19587.6	12919.5	11480.6	15970.3	16192.6	15681.7
55°	14298.4	14781.6	21107.7	25195.4	22972.0	14670.4	13778.9	19758.7	19136.5	17672.1
57.5°	19444.4	17633.6	25032.9	29439.2	26801.0	17851.6	18815.8	23936.2	21723.4	19254.1
60°	23750.2	21097.0	28665.2	33650.9	30082.7	21357.8	23544.9	24663.1	21627.2	19078.8
62.5°	22298.5	21980.0	29975.8	34114.8	31203.0	23083.1	22666.2	22830.9	20216.2	17913.6
65°	19564.1	20276.0	28806.3	31914.9	29960.8	21537.4	20502.7	21137.6	18602.1	16282.4
67.5°	17950.0	18473.8	26726.2	28393.7	27703.2	19865.6	18820.1	18360.5	16096.4	14125.2
70°	16299.5	16733.5	23805.8	23974.6	24182.0	17086.3	15388.8	14020.5	11998.0	10619.1
72.5°	14084.6	14108.1	20113.6	19134.4	19527.8	13370.6	12387.1	10482.2	8733.4	7482.7
75°	11816.3	11170.6	15921.1	13374.8	14163.7	10401.0	10285.5	7899.6	6586.9	5560.7
77.5°	9009.2	8254.5	11630.3	8795.4	9947.7	6926.9	7732.9	5357.6	4635.0	3700.7
80°	6048.2	5577.8	6426.6	4964.3	6507.8	4774.0	5043.4	3035.8	2631.8	2041.7
82.5°	3189.8	2723.7	3972.3	2943.9	3925.2	2623.2	1892.1	938.5	799.6	645.7
85°	1235.7	1430.3	1947.6	1047.6	1522.2	936.4	547.3	233.0	194.6	147.5
87.5°	239.4	369.9	203.1	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.

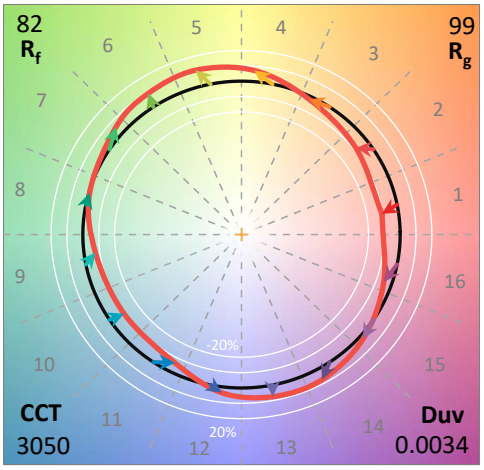
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

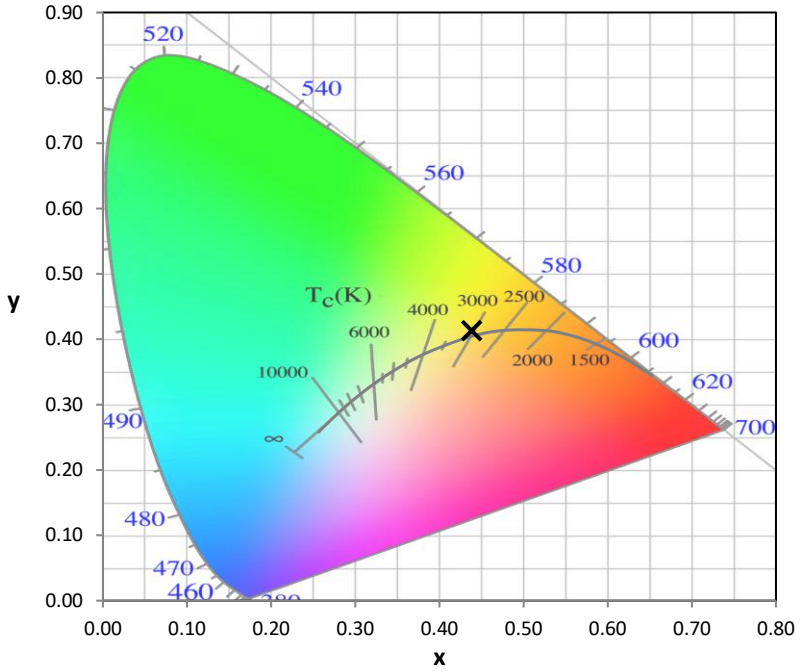
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

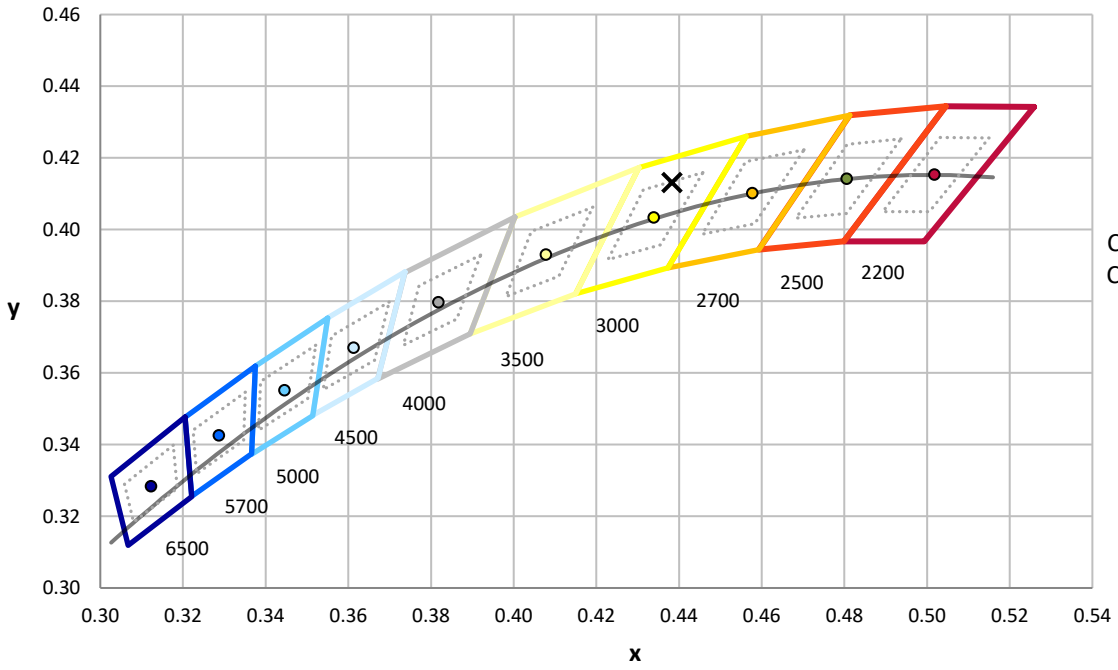
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

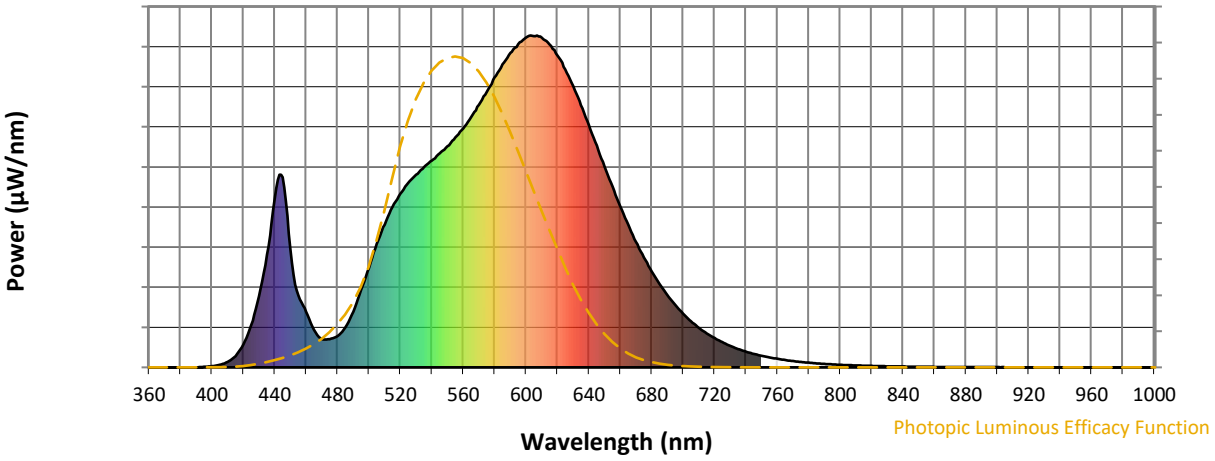


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

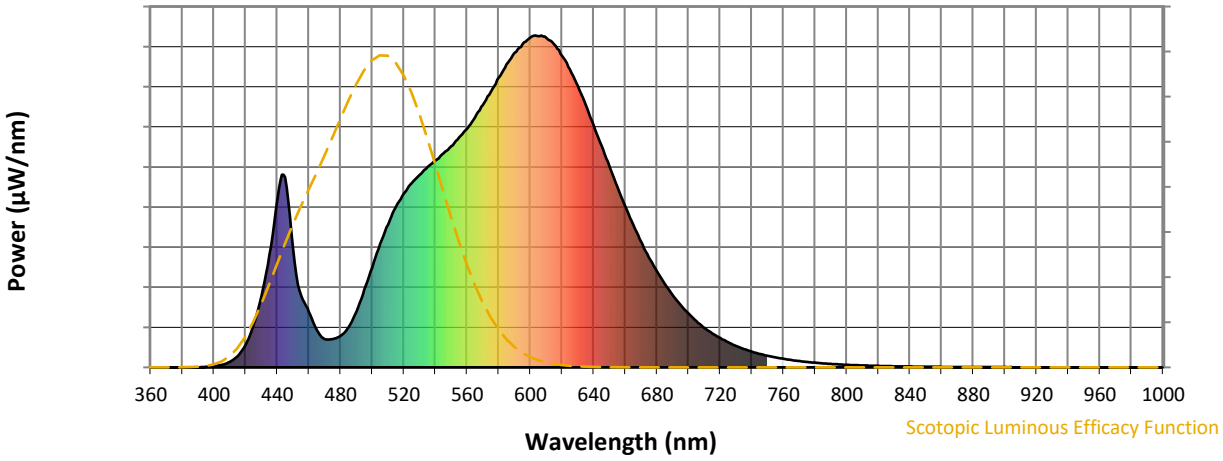


Photopic Lumens: NR

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

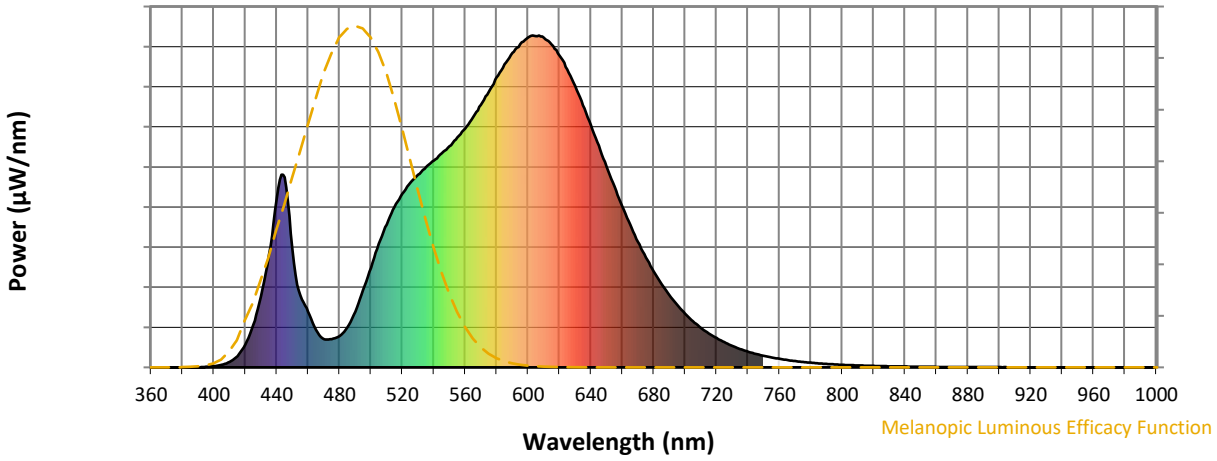


Scotopic Lumens: NR **S/P: 1.27**

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			

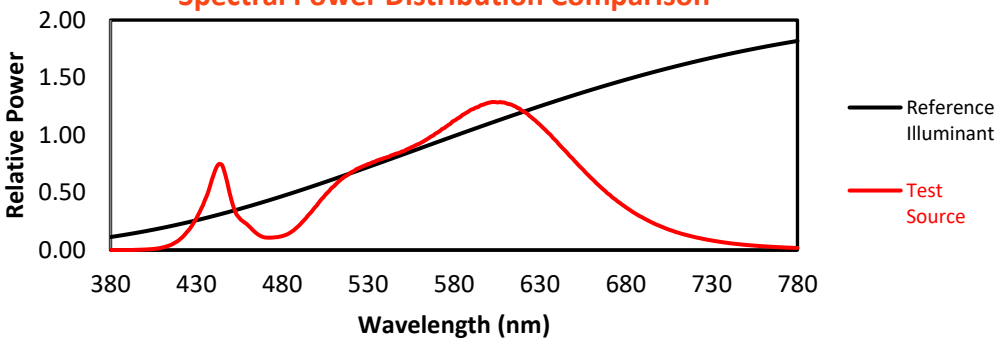
REPORT NUMBER: SP1-2408-195-9

TM-30-18

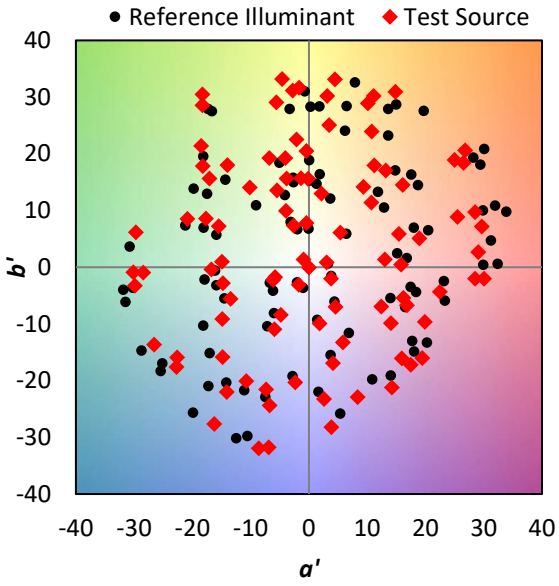
Summary

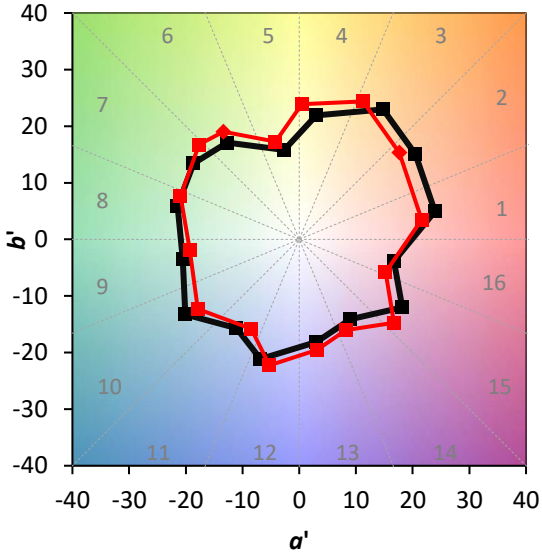
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

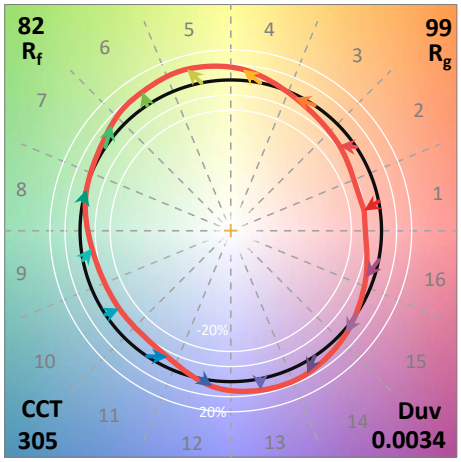
Spectral Power Distribution Comparison

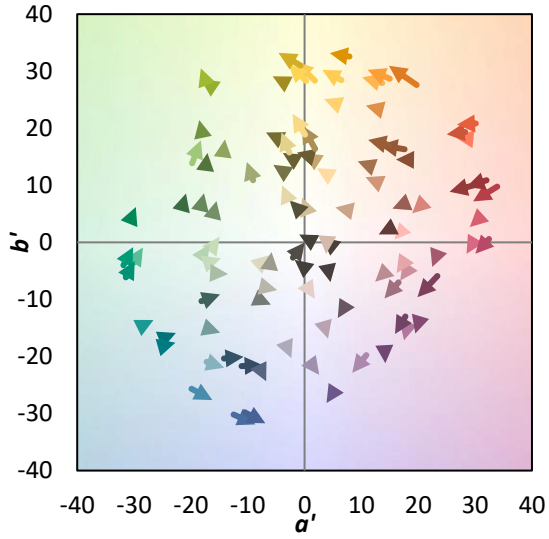


Color Vector Graphics









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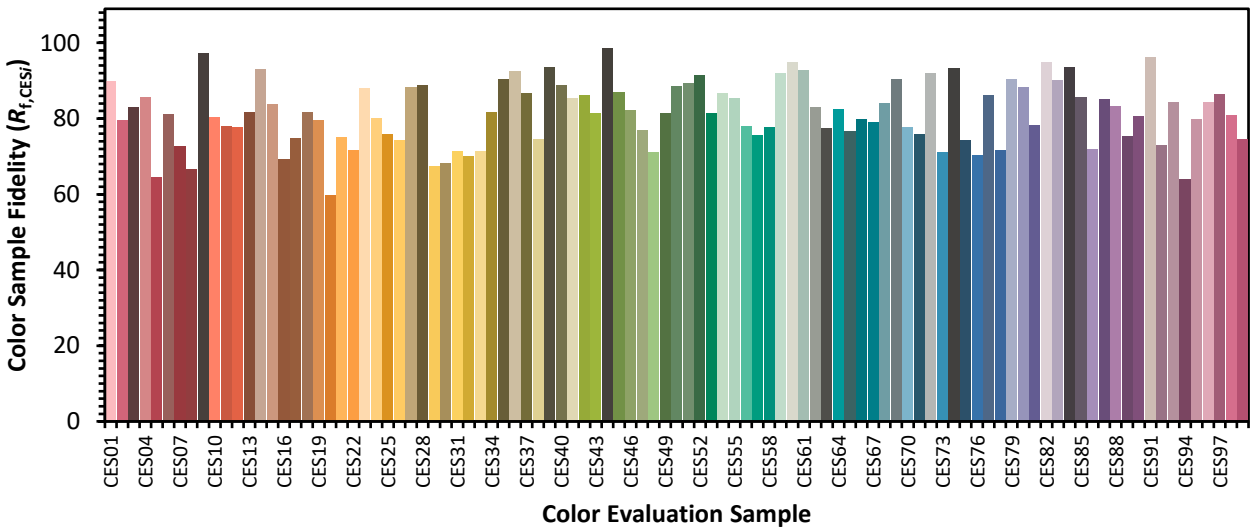
Individual Sample Fidelity Index ($R_{f,i}$)

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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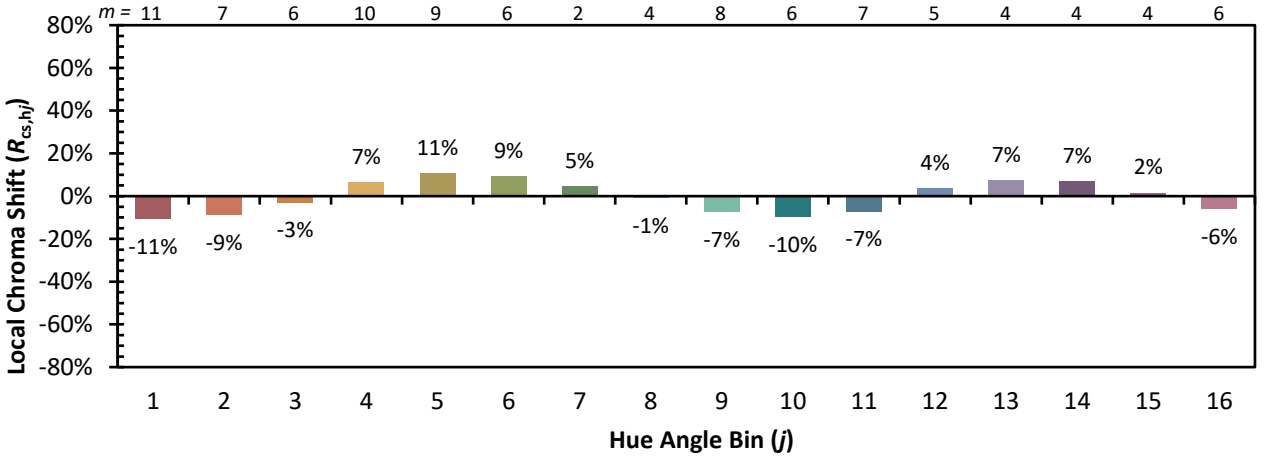
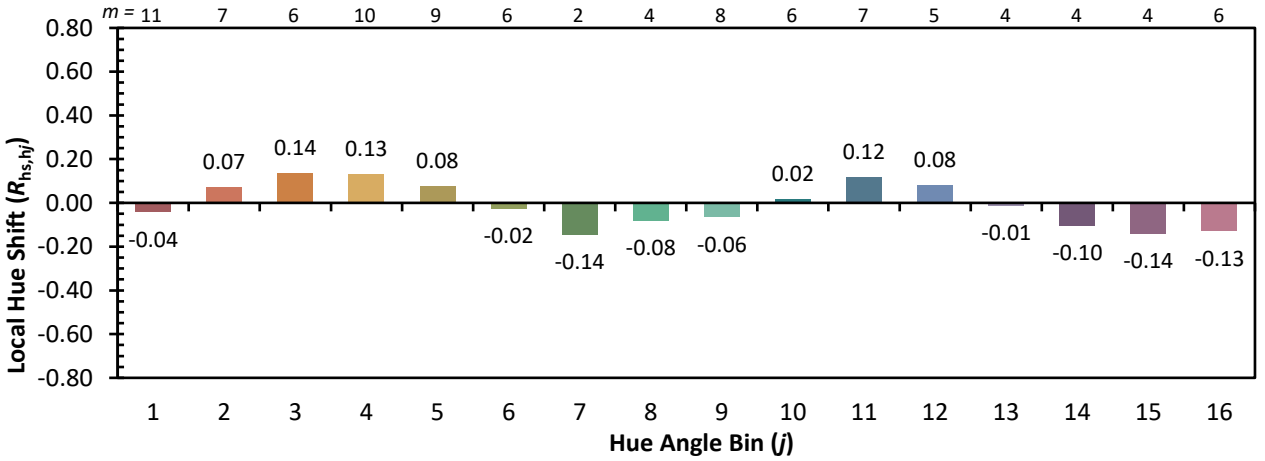
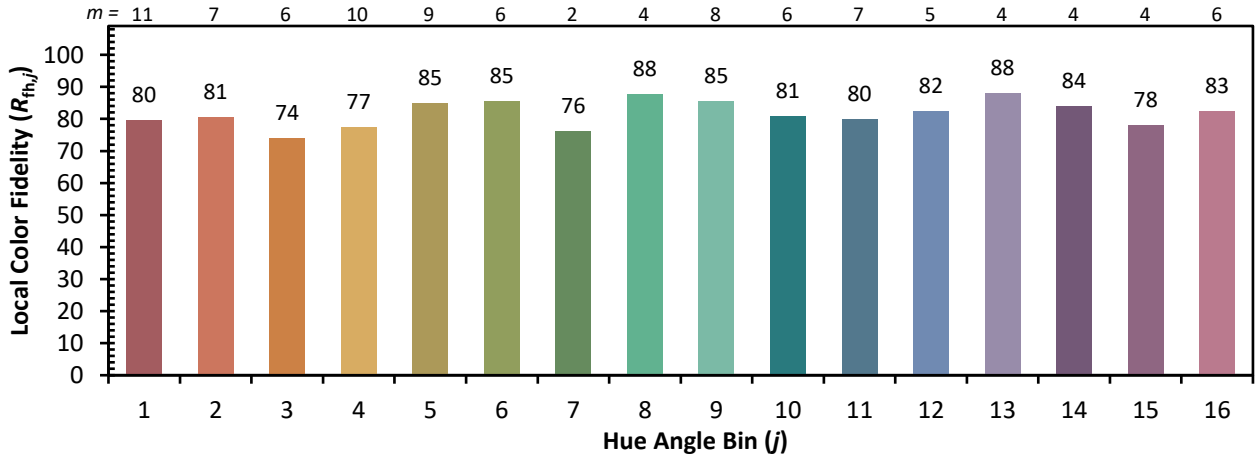
Color Rendition by Hue-Angle Bin







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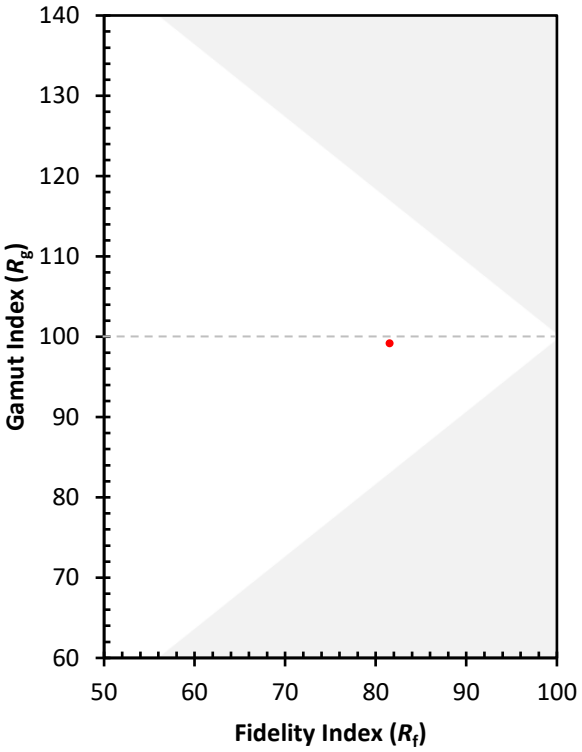
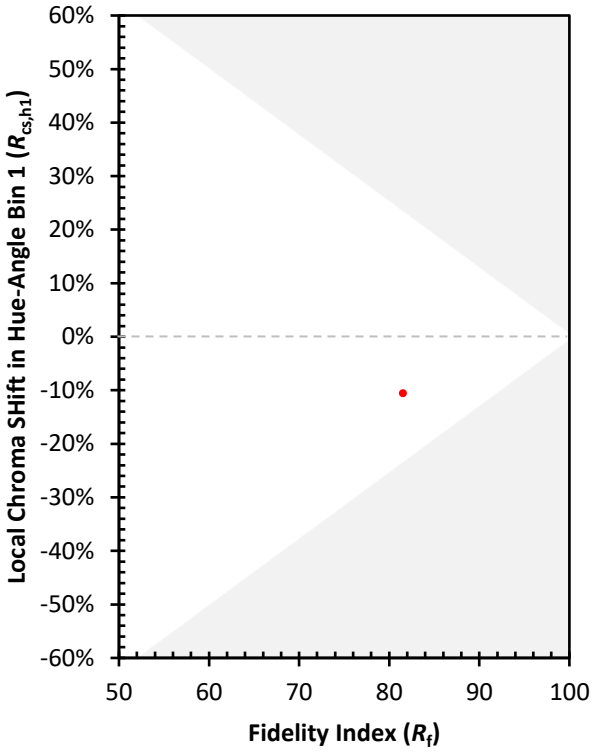
Measure Comparisons





(END OF REPORT)