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: P638484

Luminaire Tested: GWS-SA4E-830-U-SLR-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:	P638484
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-SLR-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19020.3 lumens
Efficiency:	N/A
Efficacy:	93.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3
Input Watts (W):	202.6
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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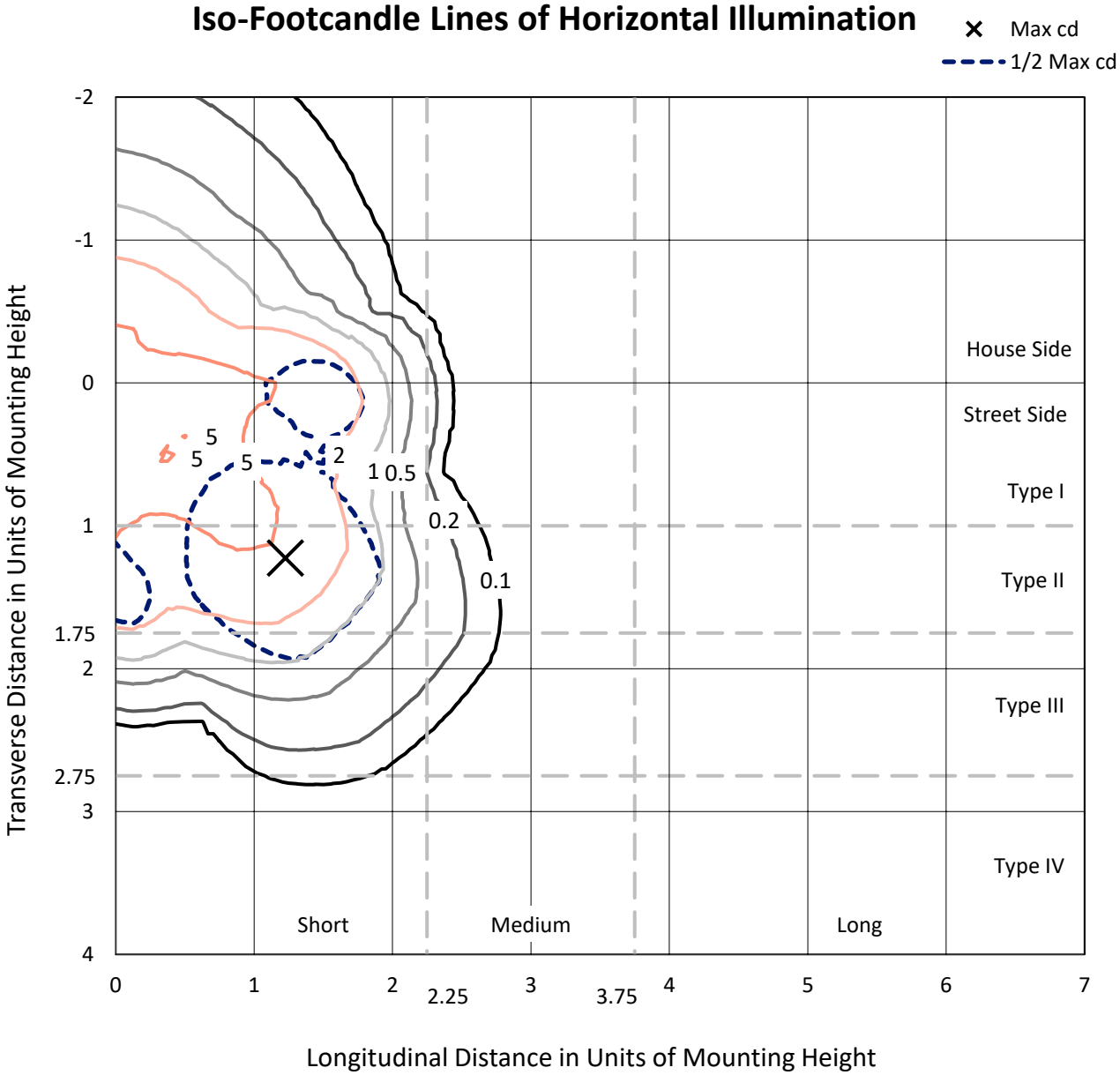
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
Type III - Short - N/A

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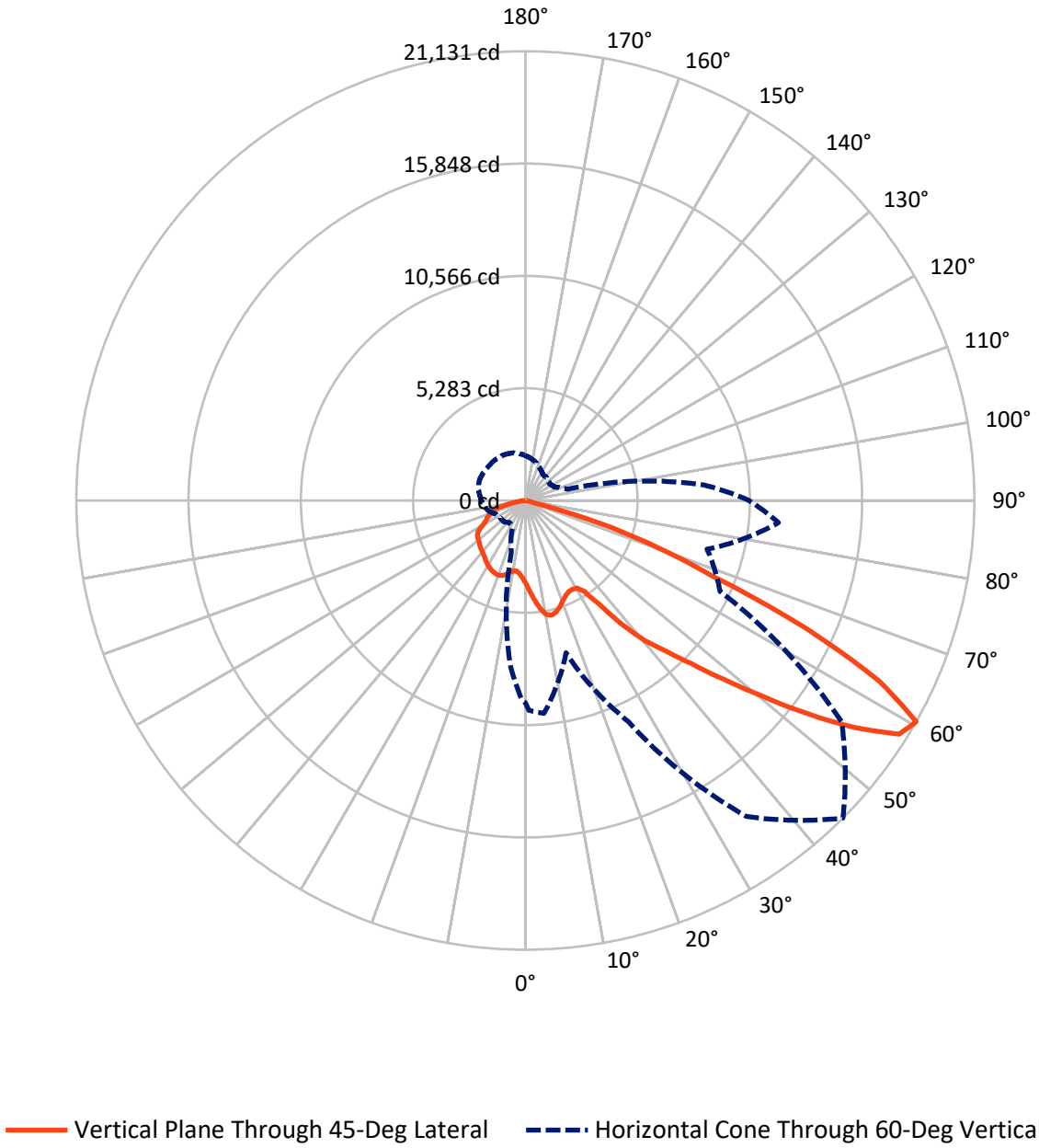
Luminous Intensity Polar Plot



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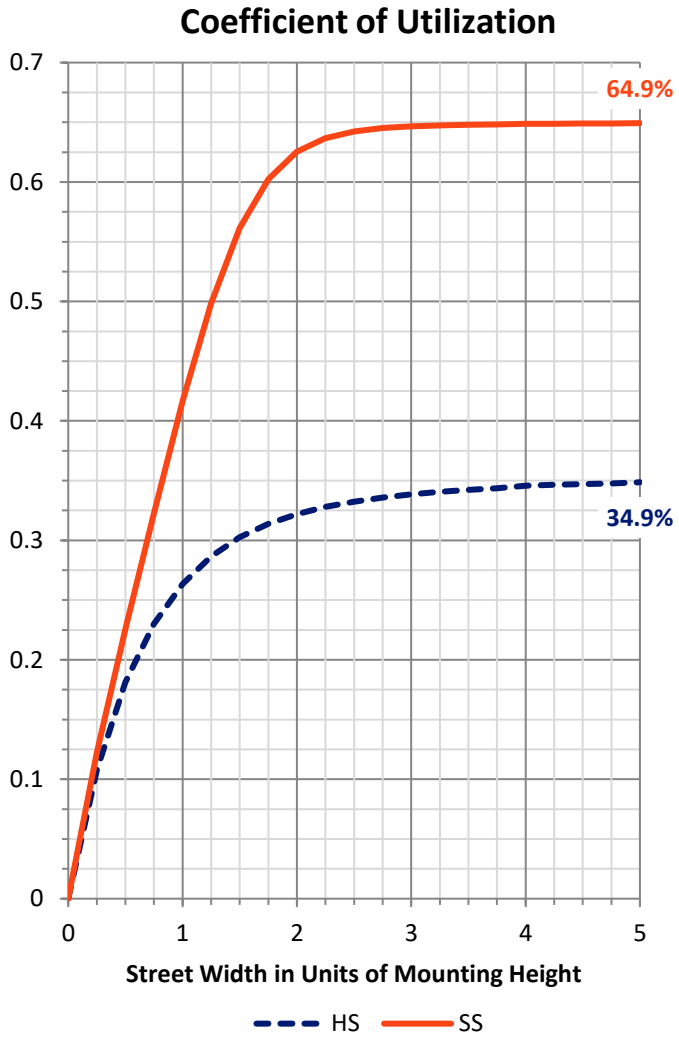
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6667.3	0.0	6667.3
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	12353.0	0.0	12353.0
	% Fixture	64.9	0.0	64.9
Total	Lumens	19020.3	0.0	19020.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.2	2.0
10°-20°	1204.7	6.3
20°-30°	1956.9	10.3
30°-40°	2759.7	14.5
40°-50°	3813.9	20.1
50°-60°	4909.6	25.8
60°-70°	3110.8	16.4
70°-80°	798.2	4.2
80°-90°	85.4	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°	19020.3	100.0
0°-180°	19020.3	100.0



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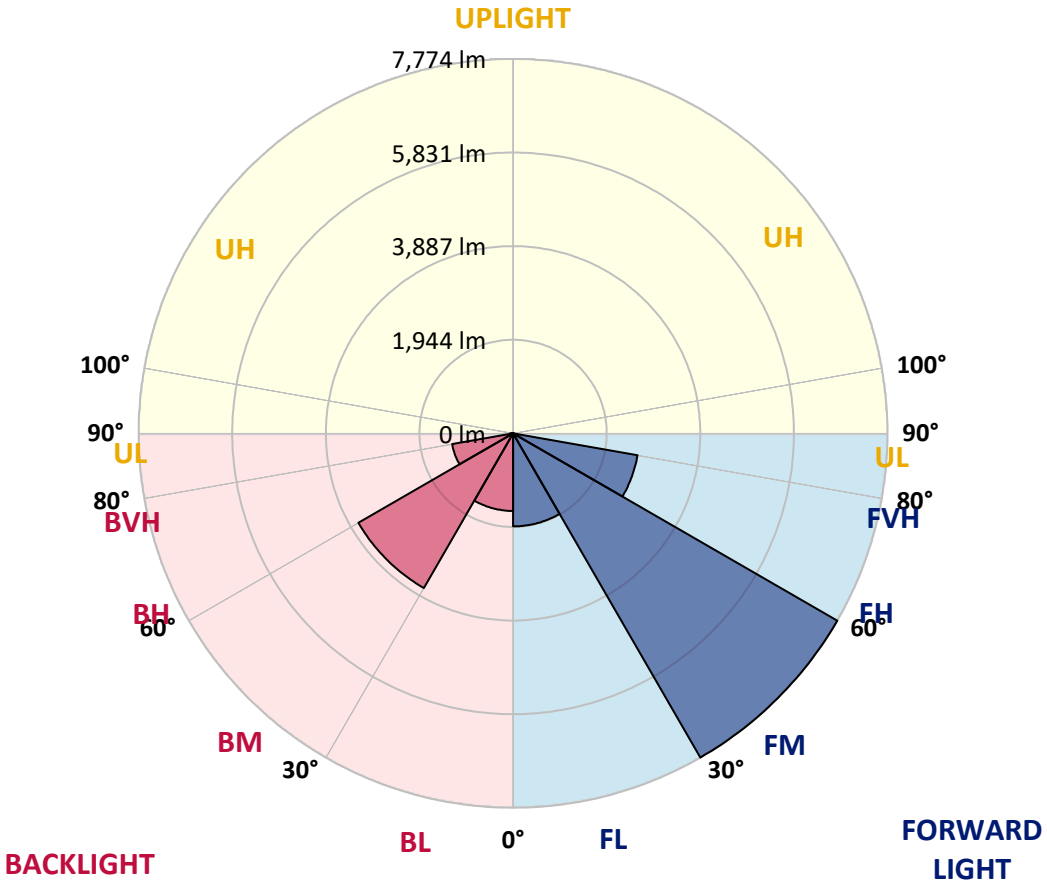
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1931.3	10.2			
FM	(30°-60°)	7774.4	40.9			
FH	(60°-80°)	2624.1	13.8			G2/5000
FVH	(80°-90°)	23.2	0.1			G1/100
BL	(0°-30°)	1611.5	8.5	B3/2500		
BM	(30°-60°)	3708.8	19.5	B3/5000		
BH	(60°-80°)	1284.9	6.8	B3/2500		G3/2500
BVH	(80°-90°)	62.2	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-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	*3907.3*	3907.3	3907.3	3907.3	3907.3
2.5°	4086.8	4114.7	4132.1	4165.3	4224.5	4257.6	*4294.2*	4254.1	4264.6	4259.4	4194.9
5°	4329.1	4362.2	4407.5	4505.1	4614.9	4675.9	*4733.4*	4724.7	4670.7	4580.0	4515.6
7.5°	4555.6	4594.0	4672.4	4831.0	4993.1	5087.2	*5156.9*	5111.6	5066.3	4923.4	4761.3
10°	4733.4	4756.1	4862.4	5075.0	5263.2	5369.5	*5454.9*	5444.5	5381.7	5221.4	5003.5
12.5°	4900.7	4916.4	5031.4	5244.0	5413.1	5460.1	*5529.9*	5552.5	5531.6	5411.4	5197.0
15°	5080.2	5109.8	5216.2	5378.2	5454.9	5406.1	*5430.5*	5493.3	5552.5	5552.5	5355.6
17.5°	5247.5	5273.7	5381.7	5451.4	5378.2	5249.3	*5256.2*	5336.4	5477.6	5625.7	5500.2
20°	5395.7	5420.1	5526.4	5460.1	5228.4	5040.1	*5034.9*	5132.5	5360.8	5672.8	5655.3
22.5°	5557.7	5592.6	5681.5	5467.1	5088.9	4850.2	*4848.4*	4949.5	5258.0	5719.8	5833.1
25°	5787.8	5841.8	5887.1	5528.1	5014.0	4726.4	*4749.1*	4844.9	5224.9	5796.5	6096.3
27.5°	6129.4	6172.9	6169.5	5655.3	5010.5	4675.9	*4723.0*	4834.5	5284.1	5932.4	6373.4
30°	6498.9	6521.5	6484.9	5833.1	5090.7	4707.3	*4777.0*	4909.4	5434.0	6157.3	6781.2
32.5°	6908.4	6936.3	6866.6	6099.8	5277.2	4939.1	*5092.4*	5156.9	5644.9	6481.4	7213.4
35°	7379.0	7433.0	7288.3	6451.8	5826.1	5784.3	*6007.4*	5923.7	6092.8	6864.8	7675.2
37.5°	7873.9	7875.7	7668.3	6972.9	6903.2	6974.6	*7420.8*	7159.4	7042.6	7291.8	8145.8
40°	8293.9	8283.5	7964.5	7675.2	7840.8	8124.9	*8663.4*	8262.6	7955.8	7865.2	8536.2
42.5°	8713.9	8675.6	8353.2	8121.4	8487.4	9071.2	*9679.4*	9188.0	8541.4	8386.3	8921.3
45°	9250.7	9238.5	8849.9	8299.1	9071.2	10130.8	*10937.7*	10141.3	8888.2	8689.5	9562.7
47.5°	10116.9	10057.6	9334.4	8285.2	9618.4	11542.5	*12562.0*	11342.1	9130.5	8696.5	10597.9
50°	10963.9	10890.7	9913.0	8283.5	10183.1	13006.4	*14479.1*	12800.8	9377.9	8738.3	11650.5
52.5°	11819.6	11819.6	10862.8	8480.4	10775.6	14641.1	*16694.2*	14618.5	9799.7	9285.6	12945.4
55°	12328.5	12464.4	11931.1	8813.3	11469.3	16565.2	*18884.8*	16580.9	10451.5	10273.7	14141.0
57.5°	11681.9	11936.3	11859.7	8581.5	11878.8	17978.6	*20742.6*	18069.2	10773.9	10390.5	13961.5
60°	*9519.1*	*9872.9*	*10048.9*	*7410.3*	*11474.5*	*18142.4*	*21131.3*	*18166.8*	*10108.2*	*8848.1*	*11959.0*
62.5°	6328.1	6619.1	6887.5	5294.6	9933.9	16321.2	*18689.6*	16326.4	8442.1	6603.4	8285.2
65°	3103.9	3320.0	3609.3	3130.0	7760.6	13637.3	*14571.4*	13192.9	6106.7	3696.4	4226.3
67.5°	812.1	873.1	913.2	1214.7	5559.5	9797.9	*9503.4*	9649.8	3923.0	1207.8	1104.9
70°	421.8	425.2	423.5	501.9	3757.4	6227.0	*6549.4*	6059.7	2737.9	505.4	435.7
72.5°	301.5	303.2	298.0	338.1	1814.2	3567.5	*3696.4*	3656.4	1434.3	299.8	298.0
75°	196.9	198.7	195.2	198.7	273.6	406.1	*374.7*	393.9	238.8	190.0	190.0
77.5°	116.8	118.5	116.8	120.3	116.8	116.8	*108.1*	108.1	102.8	102.8	104.6
80°	78.4	78.4	76.7	80.2	73.2	73.2	*69.7*	68.0	62.7	61.0	61.0
82.5°	47.1	48.8	47.1	47.1	43.6	43.6	*40.1*	38.3	33.1	33.1	31.4
85°	24.4	24.4	22.7	22.7	19.2	17.4	*13.9*	13.9	10.5	8.7	8.7
87.5°	3.5	3.5	1.7	1.7	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	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3
2.5°	4177.5	4142.6	4090.3	4039.8	3992.7	3943.9	3888.2	3830.6	3781.8	3731.3	3705.2
5°	4430.2	4358.7	4222.8	4102.5	3994.5	3905.6	3809.7	3727.8	3651.1	3588.4	3557.0
7.5°	4658.5	4546.9	4341.3	4151.3	4004.9	3882.9	3750.5	3628.5	3525.7	3449.0	3419.3
10°	4869.3	4736.9	4466.8	4226.3	4055.5	3919.5	3757.4	3591.9	3455.9	3354.9	3330.5
12.5°	5040.1	4888.5	4566.1	4287.3	4085.1	3938.7	3795.8	3652.9	3518.7	3388.0	3367.1
15°	5191.8	5012.3	4641.0	4325.6	4074.6	3888.2	3767.9	3750.5	3750.5	3602.3	3560.5
17.5°	5322.5	5125.5	4702.0	4343.0	4008.4	3738.3	3665.1	3816.7	3987.5	3881.2	3787.1
20°	5472.3	5233.6	4752.6	4343.0	3886.4	3548.3	3541.3	3799.3	4052.0	4053.7	3954.4
22.5°	5624.0	5359.1	4811.8	4327.3	3719.1	3328.7	3457.7	3729.6	3954.4	4050.2	3982.3
25°	5869.7	5533.3	4905.9	4315.1	3523.9	3178.8	3382.7	3637.2	3827.2	3928.2	3884.7
27.5°	6181.7	5763.4	5048.9	4334.3	3330.5	3090.0	3302.6	3516.9	3689.5	3778.4	3747.0
30°	6530.2	6028.3	5202.2	4367.4	3191.0	3044.6	3206.7	3379.3	3532.6	3621.5	3607.6
32.5°	6974.6	6315.9	5334.7	4322.1	3112.6	3022.0	3105.6	3229.4	3377.5	3433.3	3445.5
35°	7506.2	6633.0	5435.8	4144.3	3041.2	2997.6	2995.8	3072.5	3177.1	3266.0	3274.7
37.5°	7995.9	7004.3	5547.3	3839.4	2912.2	2936.6	2866.9	2912.2	3015.0	3103.9	3138.8
40°	8480.4	7380.7	5702.4	3450.7	2743.1	2800.7	2718.7	2750.1	2832.0	2948.8	3004.6
42.5°	8951.0	7720.5	5866.2	3053.4	2574.1	2610.7	2549.7	2581.1	2666.5	2812.9	2875.6
45°	9463.3	8180.6	5993.4	2678.7	2427.7	2412.0	2363.2	2408.5	2537.5	2697.8	2772.8
47.5°	10432.3	8905.6	6077.1	2429.4	2349.3	2236.0	2180.2	2277.8	2424.2	2586.3	2676.9
50°	11615.7	9954.8	6052.7	2270.9	2281.3	2054.7	2035.6	2164.5	2321.4	2490.4	2589.8
52.5°	12553.3	10984.8	5775.6	2119.2	2148.9	1939.7	1884.0	2072.2	2222.1	2394.6	2497.4
55°	13269.6	11331.6	4925.1	1939.7	1932.8	1856.1	1739.3	1976.3	2122.7	2283.1	2394.6
57.5°	12685.7	10559.5	3651.1	1692.2	1650.4	1690.5	1577.2	1814.2	2000.7	2159.3	2258.7
60°	*10528.2*	*8419.4*	*2033.8*	*1498.8*	*1380.3*	*1477.9*	*1460.5*	*1643.4*	*1868.3*	*2035.6*	*2121.0*
62.5°	7147.2	5606.5	1206.0	1185.1	1118.9	1258.3	1350.7	1470.9	1692.2	1828.2	1908.4
65°	3562.3	2724.0	801.7	887.1	895.8	1035.2	1209.5	1341.9	1526.7	1666.1	1746.3
67.5°	1033.5	847.0	610.0	677.9	772.1	883.6	1023.0	1179.9	1359.4	1524.9	1619.0
70°	446.2	451.4	484.5	564.7	657.0	772.1	911.5	1064.8	1216.5	1343.7	1415.1
72.5°	315.4	327.6	364.2	446.2	533.3	643.1	782.5	930.6	1040.4	1169.4	1244.3
75°	202.2	210.9	240.5	303.2	367.7	474.0	606.5	742.4	855.7	948.1	1019.5
77.5°	111.5	113.3	137.7	174.3	217.8	285.8	383.4	489.7	573.4	625.7	690.1
80°	64.5	64.5	76.7	99.3	125.5	167.3	221.3	273.6	324.2	357.3	388.6
82.5°	34.9	34.9	40.1	54.0	68.0	92.4	123.7	149.9	181.2	198.7	219.6
85°	10.5	10.5	13.9	19.2	24.4	34.9	48.8	62.7	76.7	88.9	101.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
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°	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3
2.5°	3699.9	3675.5	3661.6	3644.2	3649.4	3633.7	3625.0	3630.2	3598.9	3630.2	3661.6
5°	3544.8	3510.0	3482.1	3459.4	3449.0	3428.1	3415.9	3415.9	3396.7	3428.1	3466.4
7.5°	3408.9	3381.0	3367.1	3353.1	3337.4	3318.3	3297.4	3290.4	3278.2	3311.3	3344.4
10°	3318.3	3321.8	3330.5	3349.6	3346.1	3334.0	3302.6	3285.2	3285.2	3323.5	3374.0
12.5°	3360.1	3396.7	3417.6	3452.5	3459.4	3449.0	3417.6	3403.7	3438.5	3496.0	3579.7
15°	3522.2	3546.6	3564.0	3591.9	3590.1	3581.4	3557.0	3567.5	3682.5	3794.0	3869.0
17.5°	3698.2	3670.3	3666.8	3684.3	3689.5	3679.0	3665.1	3712.1	3902.1	4006.7	4045.0
20°	3825.4	3729.6	3708.6	3715.6	3729.6	3724.3	3724.3	3801.0	3998.0	4046.8	3998.0
22.5°	3863.8	3727.8	3696.4	3698.2	3717.4	3719.1	3727.8	3808.0	3923.0	3924.8	3849.8
25°	3802.8	3672.1	3649.4	3652.9	3675.5	3673.8	3677.3	3722.6	3773.1	3752.2	3696.4
27.5°	3687.7	3574.5	3567.5	3586.7	3616.3	3600.6	3590.1	3602.3	3626.7	3600.6	3551.8
30°	3557.0	3461.2	3464.7	3501.3	3532.6	3506.5	3480.3	3487.3	3489.1	3461.2	3405.4
32.5°	3419.3	3347.9	3360.1	3398.4	3435.0	3407.1	3379.3	3375.8	3342.7	3309.6	3255.5
35°	3281.7	3253.8	3269.5	3300.8	3332.2	3309.6	3292.1	3281.7	3210.2	3161.4	3116.1
37.5°	3156.2	3177.1	3205.0	3224.2	3234.6	3232.9	3222.4	3198.0	3103.9	3046.4	2987.1
40°	3044.6	3109.1	3138.8	3147.5	3163.2	3159.7	3157.9	3123.1	2999.3	2938.3	2870.4
42.5°	2943.6	3034.2	3084.7	3093.4	3102.2	3103.9	3098.7	3048.1	2907.0	2835.5	2771.0
45°	2846.0	2964.5	3029.0	3020.2	3032.4	3032.4	3037.7	2971.5	2816.3	2743.1	2675.2
47.5°	2760.6	2900.0	2959.3	2948.8	2955.8	2961.0	2966.2	2889.5	2717.0	2647.3	2577.6
50°	2682.1	2830.3	2880.8	2884.3	2884.3	2896.5	2894.8	2819.8	2633.4	2558.4	2488.7
52.5°	2598.5	2758.8	2812.9	2835.5	2842.5	2847.7	2823.3	2736.2	2548.0	2457.3	2392.8
55°	2500.9	2685.6	2734.4	2764.1	2778.0	2774.5	2741.4	2652.5	2460.8	2370.2	2297.0
57.5°	2352.8	2528.8	2598.5	2612.4	2635.1	2621.2	2582.8	2507.9	2321.4	2230.8	2155.8
60°	*2190.7*	*2317.9*	*2373.7*	*2385.9*	*2368.4*	*2373.7*	*2368.4*	*2297.0*	*2134.9*	*2063.5*	*1986.8*
62.5°	1978.1	2091.3	2150.6	2166.3	2136.7	2155.8	2148.9	2060.0	1897.9	1823.0	1755.0
65°	1817.7	1941.5	2011.2	2019.9	2011.2	2019.9	1995.5	1887.4	1734.1	1657.4	1587.7
67.5°	1692.2	1819.5	1892.7	1917.1	1908.4	1906.6	1868.3	1742.8	1584.2	1500.5	1411.7
70°	1476.1	1587.7	1681.8	1741.0	1741.0	1707.9	1634.7	1518.0	1390.7	1319.3	1249.6
72.5°	1307.1	1448.3	1540.6	1601.6	1613.8	1594.6	1491.8	1368.1	1221.7	1150.2	1077.0
75°	1077.0	1214.7	1314.1	1394.2	1409.9	1389.0	1270.5	1148.5	1012.6	942.8	869.7
77.5°	719.8	801.7	881.8	955.0	939.4	953.3	873.1	780.8	697.1	644.8	611.7
80°	406.1	460.1	484.5	524.6	524.6	524.6	472.3	428.7	381.7	352.0	318.9
82.5°	230.0	264.9	275.4	308.5	317.2	318.9	284.1	256.2	226.6	210.9	188.2
85°	106.3	125.5	127.2	146.4	153.4	167.3	151.6	132.5	115.0	108.1	94.1
87.5°	3.5	10.5	13.9	26.1	34.9	40.1	43.6	43.6	36.6	33.1	27.9
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: P638484
CATALOG NUMBER: GWS-SA4E-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3	3907.3
2.5°	3699.9	3741.8	3790.6	3825.4	3888.2	3940.4	3994.5	4053.7	4097.3	4086.8
5°	3513.5	3583.2	3672.1	3754.0	3870.7	3989.2	4119.9	4254.1	4332.6	4329.1
7.5°	3408.9	3508.2	3616.3	3726.1	3863.8	4034.6	4235.0	4444.1	4550.4	4555.6
10°	3464.7	3571.0	3644.2	3736.5	3881.2	4095.5	4336.1	4587.0	4709.0	4733.4
12.5°	3640.7	3632.0	3626.7	3693.0	3867.2	4139.1	4433.6	4733.4	4871.1	4900.7
15°	3808.0	3628.5	3520.4	3565.7	3804.5	4167.0	4529.5	4893.7	5048.9	5080.2
17.5°	3839.4	3567.5	3367.1	3398.4	3705.2	4175.7	4621.9	5050.6	5217.9	5247.5
20°	3752.2	3489.1	3255.5	3212.0	3579.7	4153.1	4679.4	5181.3	5364.3	5395.7
22.5°	3642.4	3419.3	3171.9	3058.6	3426.3	4130.4	4743.9	5319.0	5529.9	5557.7
25°	3527.4	3330.5	3093.4	2920.9	3252.0	4116.5	4851.9	5500.2	5754.7	5787.8
27.5°	3405.4	3222.4	3025.5	2854.7	3091.7	4133.9	5005.3	5793.0	6082.3	6129.4
30°	3274.7	3114.4	2981.9	2832.0	2981.9	4149.6	5174.3	6092.8	6432.6	6498.9
32.5°	3138.8	3015.0	2936.6	2842.5	2913.9	4113.0	5322.5	6429.1	6850.9	6908.4
35°	3002.8	2913.9	2879.1	2861.7	2823.3	3978.8	5442.7	6769.0	7328.4	7379.0
37.5°	2875.6	2809.4	2798.9	2818.1	2683.9	3759.2	5582.1	7201.2	7797.2	7873.9
40°	2757.1	2696.1	2694.3	2690.9	2530.5	3459.4	5770.4	7640.4	8259.1	8293.9
42.5°	2647.3	2570.6	2584.6	2542.7	2405.0	3135.3	5948.1	8015.1	8689.5	8713.9
45°	2549.7	2448.6	2464.3	2412.0	2345.8	2795.4	6105.0	8457.7	9235.0	9250.7
47.5°	2455.6	2347.5	2304.0	2300.5	2335.3	2481.7	6258.3	9310.0	10089.0	10116.9
50°	2368.4	2251.7	2127.9	2204.6	2270.9	2246.5	6450.1	10223.2	10970.8	10963.9
52.5°	2284.8	2131.4	1955.4	2103.5	2103.5	2072.2	6396.0	10777.4	11699.3	11819.6
55°	2188.9	1938.0	1775.9	1934.5	1857.8	1915.3	5439.2	10958.6	12157.7	12328.5
57.5°	1999.0	1699.2	1558.1	1643.4	1528.4	1775.9	3907.3	10059.4	11378.7	11681.9
60°	*1816.0*	*1523.2*	*1430.8*	*1415.1*	*1265.3*	*1448.3*	*2532.3*	*7875.7*	*9365.7*	*9519.1*
62.5°	1601.6	1371.6	1293.1	1172.9	1017.8	1054.4	1533.7	5183.0	6293.2	6328.1
65°	1439.5	1242.6	1092.7	949.8	833.1	765.1	906.2	2499.2	3145.7	3103.9
67.5°	1235.6	1064.8	921.9	819.1	723.3	637.9	603.0	742.4	840.0	812.1
70°	1099.7	935.9	798.2	700.6	611.7	526.3	465.3	437.4	428.7	421.8
72.5°	948.1	805.2	662.3	568.1	484.5	406.1	350.3	317.2	308.5	301.5
75°	756.4	622.2	491.5	402.6	329.4	273.6	237.0	209.1	203.9	196.9
77.5°	500.2	399.1	292.8	238.8	195.2	165.6	141.2	123.7	120.3	116.8
80°	275.4	230.0	179.5	144.7	116.8	101.1	92.4	81.9	80.2	78.4
82.5°	163.8	137.7	102.8	81.9	68.0	61.0	55.8	50.5	48.8	47.1
85°	81.9	64.5	45.3	38.3	34.9	31.4	31.4	26.1	24.4	24.4
87.5°	20.9	17.4	10.5	8.7	8.7	8.7	7.0	5.2	5.2	3.5
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.

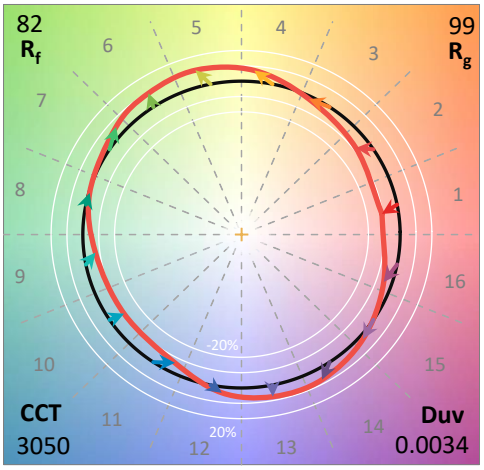
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

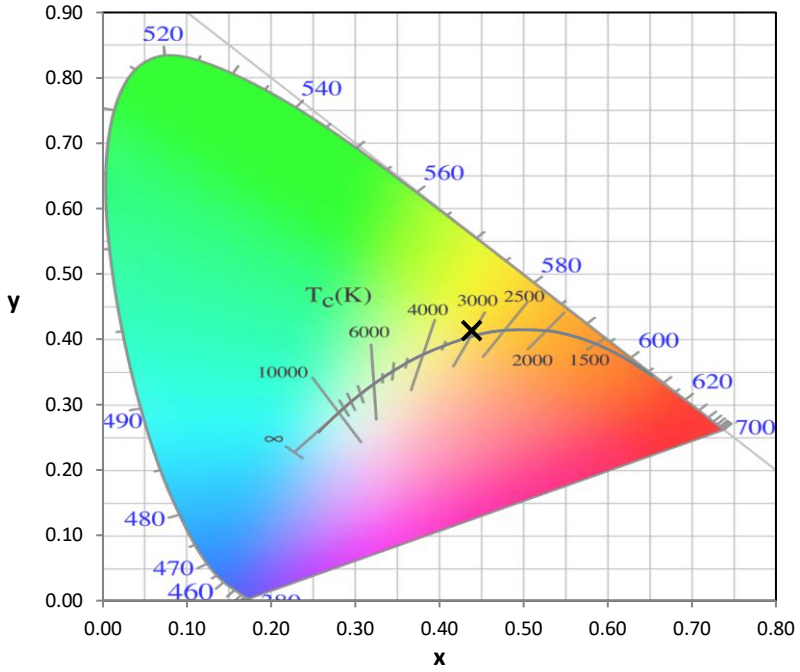
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

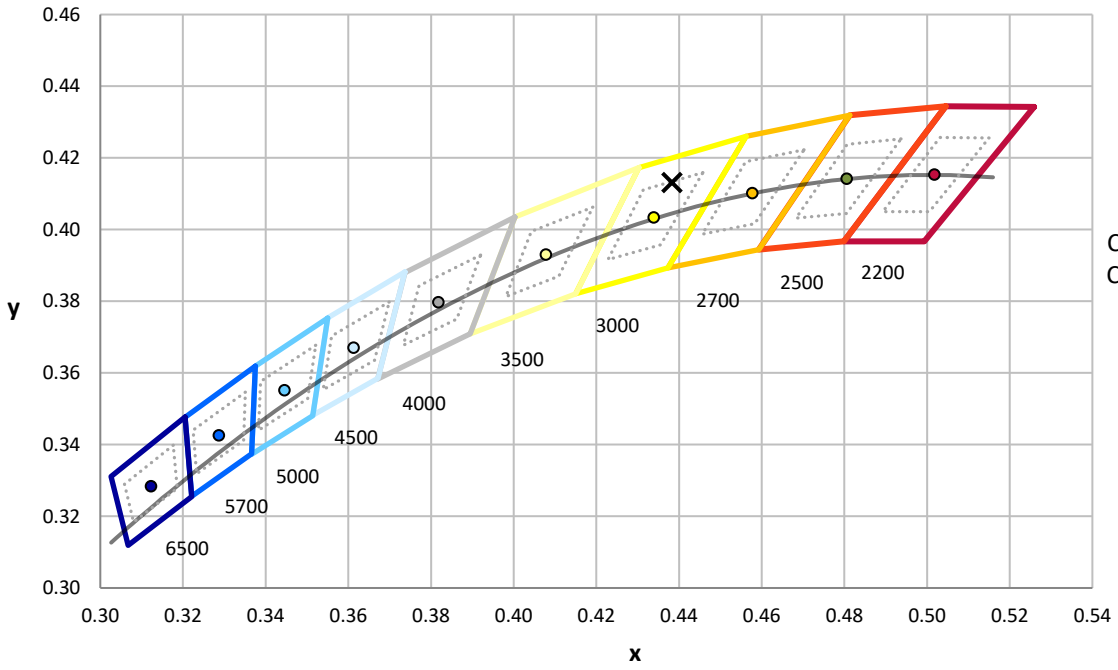
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

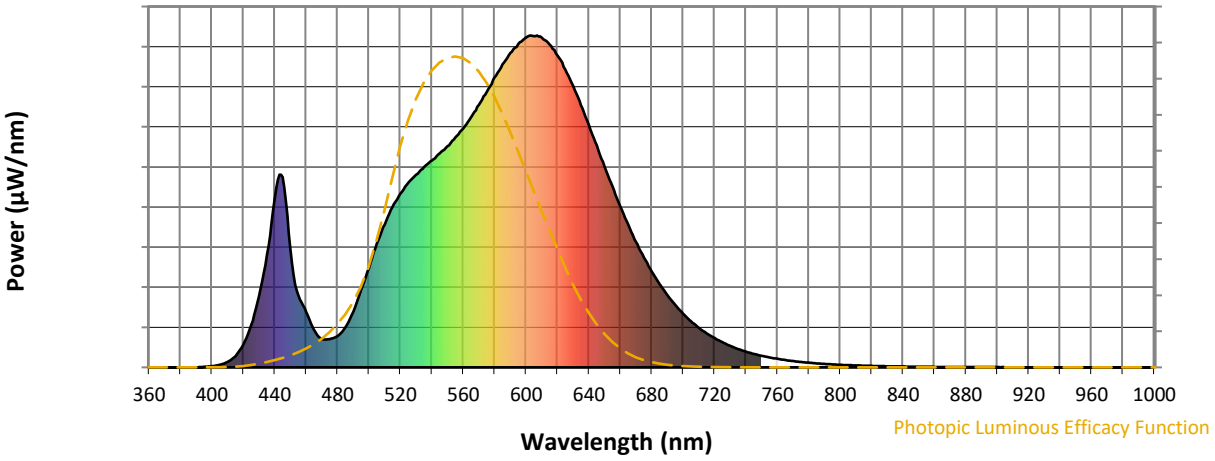


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

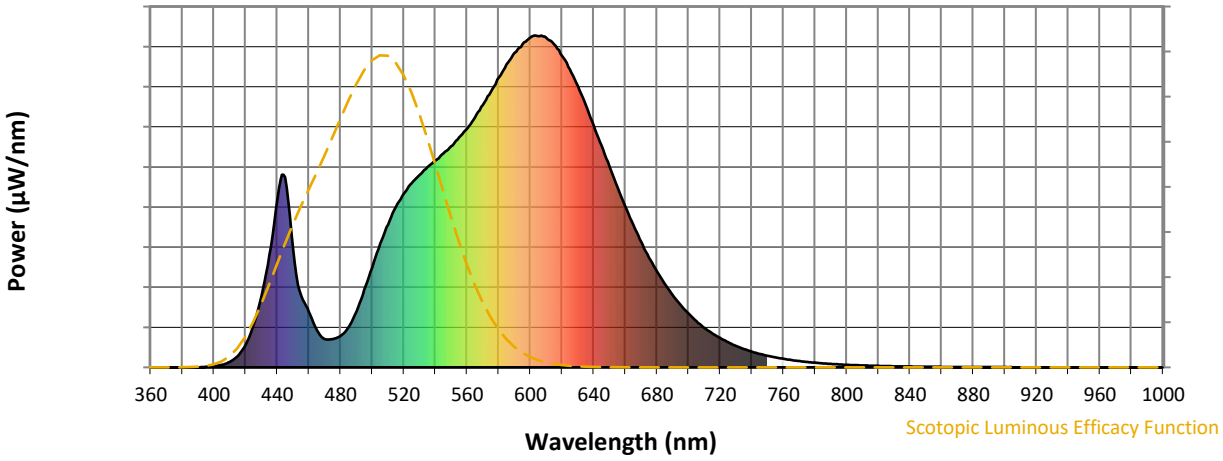


Photopic Lumens: NR

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

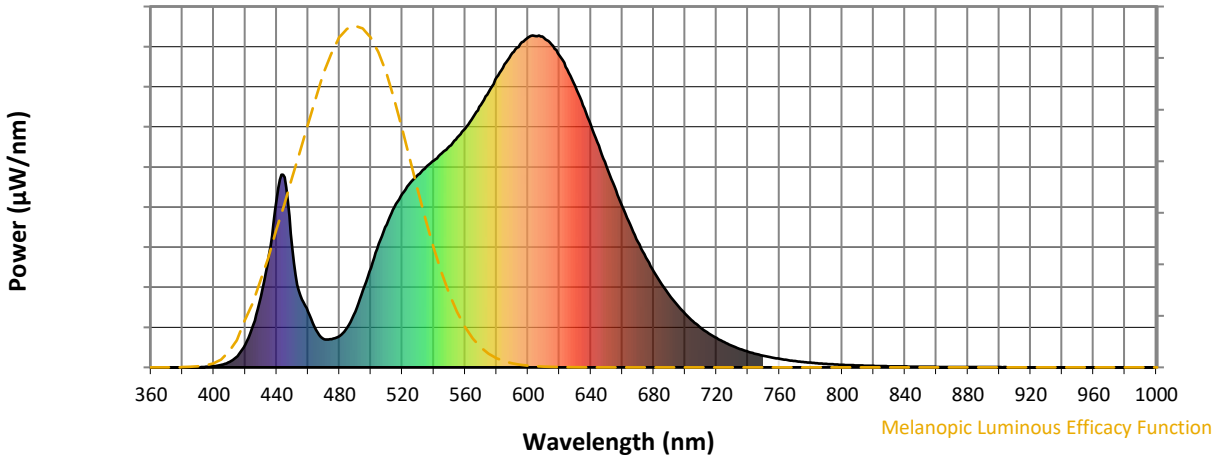


Scotopic Lumens: NR **S/P: 1.27**

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			

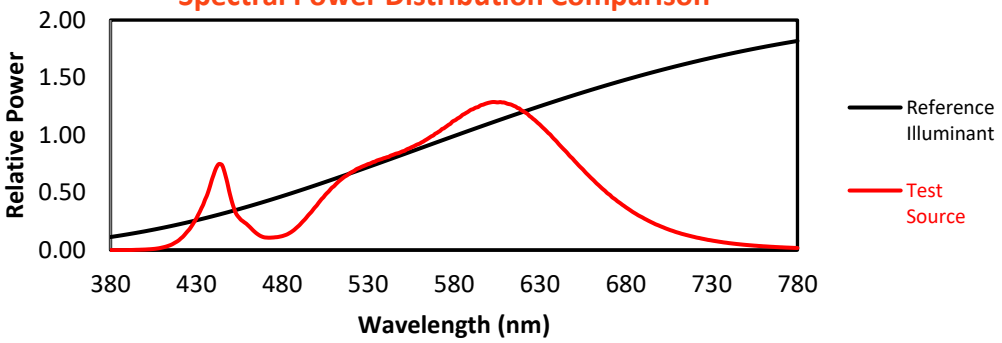
REPORT NUMBER: SP1-2408-195-9

TM-30-18

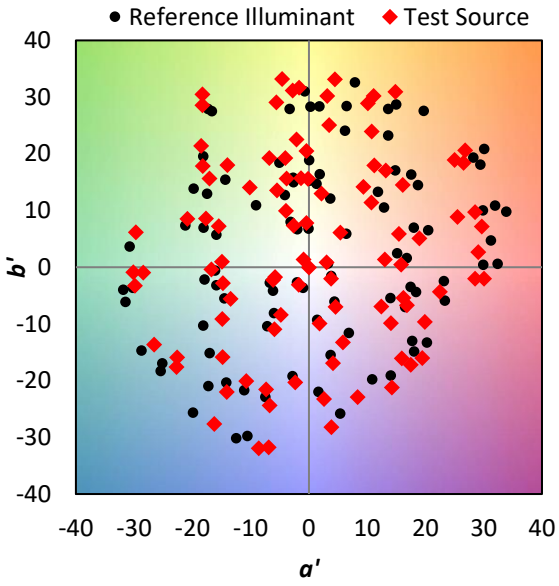
Summary

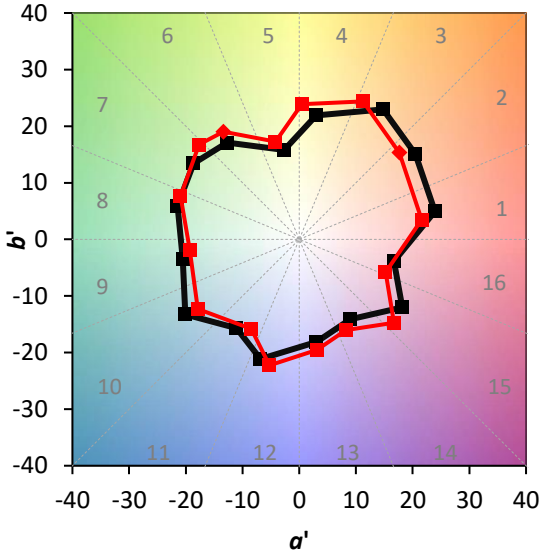
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

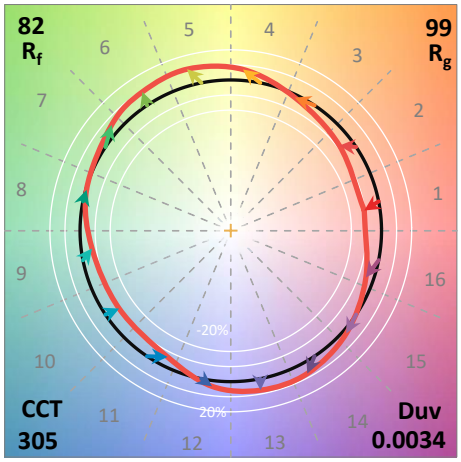
Spectral Power Distribution Comparison

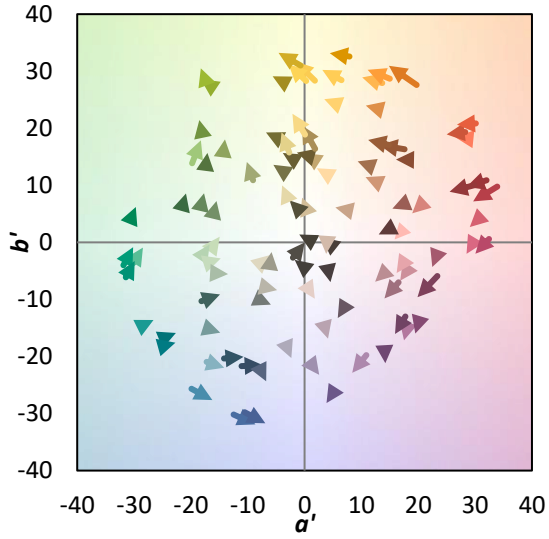


Color Vector Graphics









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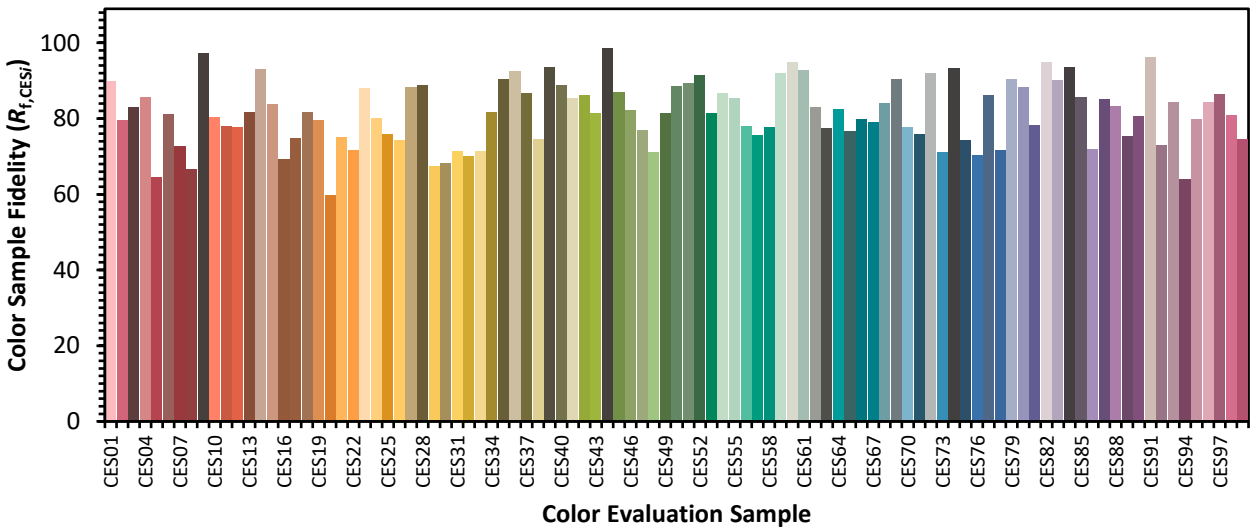
Individual Sample Fidelity Index ($R_{f,i}$)

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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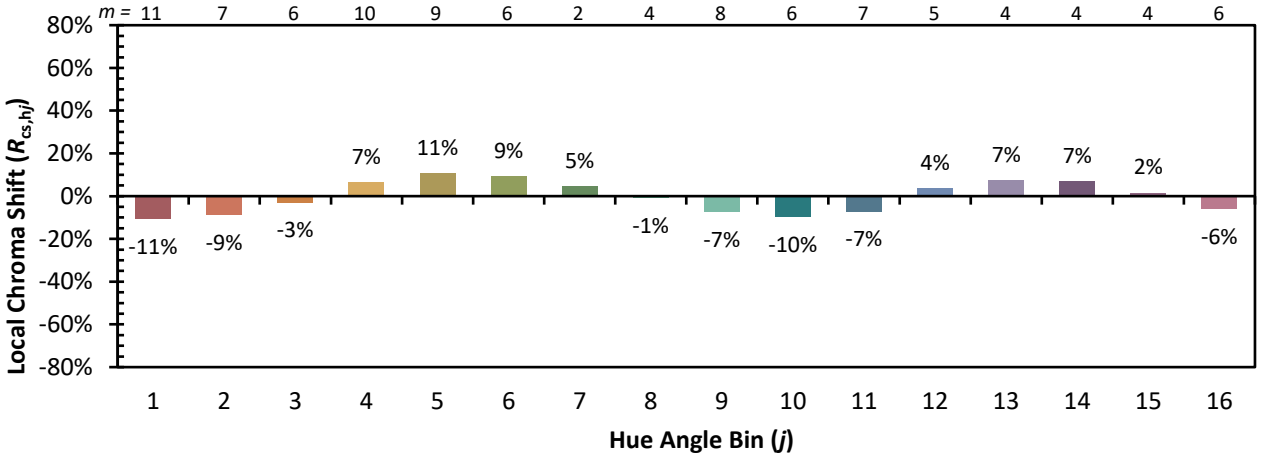
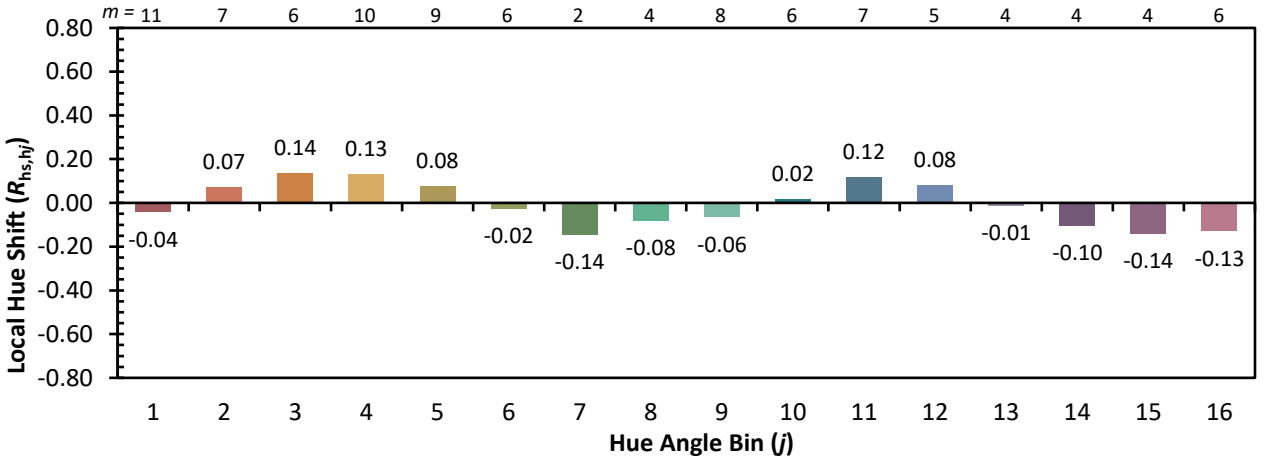
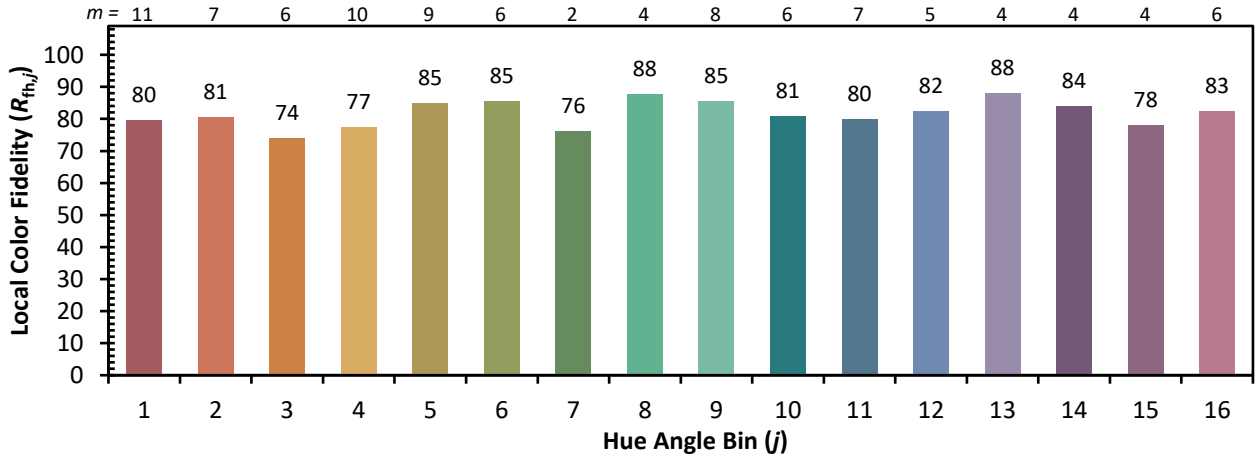
Color Rendition by Hue-Angle Bin







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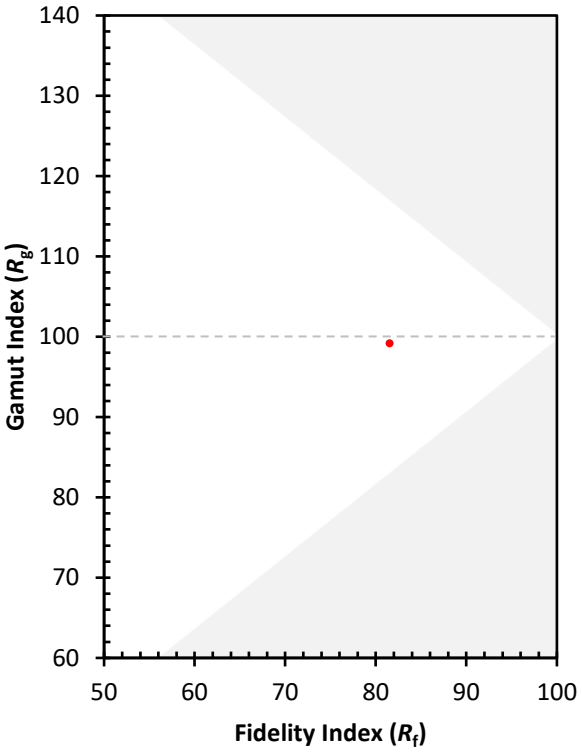
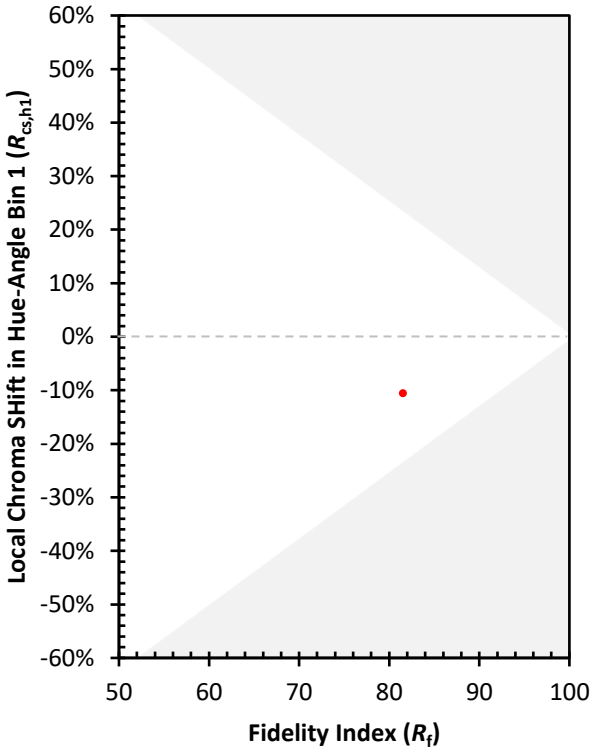
Measure Comparisons





(END OF REPORT)