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: P638480

Luminaire Tested: GWS-SA4E-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:	P638480
	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-SA4E-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT 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:	18922.7 lumens
Efficiency:	N/A
Efficacy:	93.4 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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REPORT NUMBER: P638480
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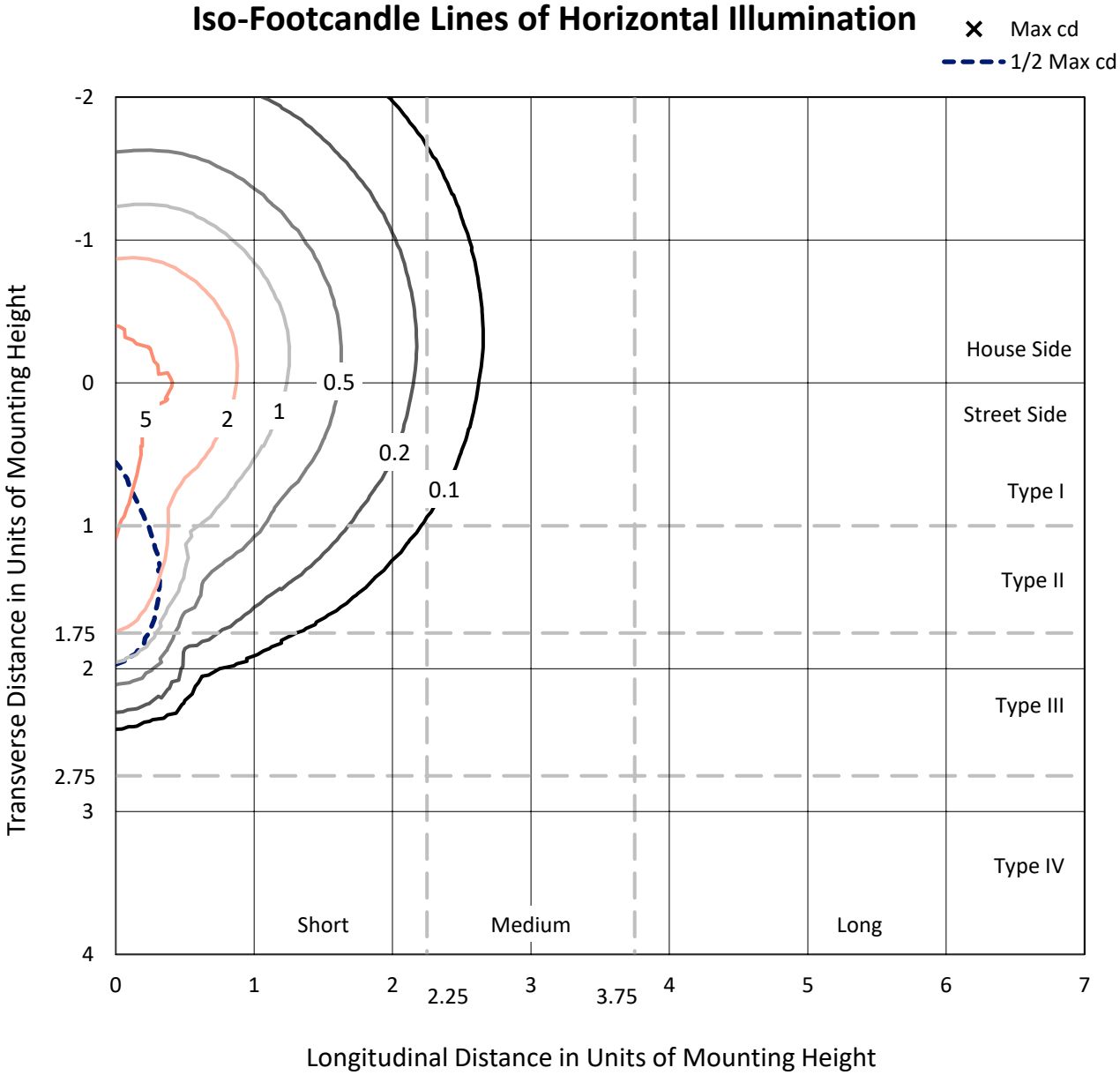
Iso-Footcandle Lines of Horizontal Illumination



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

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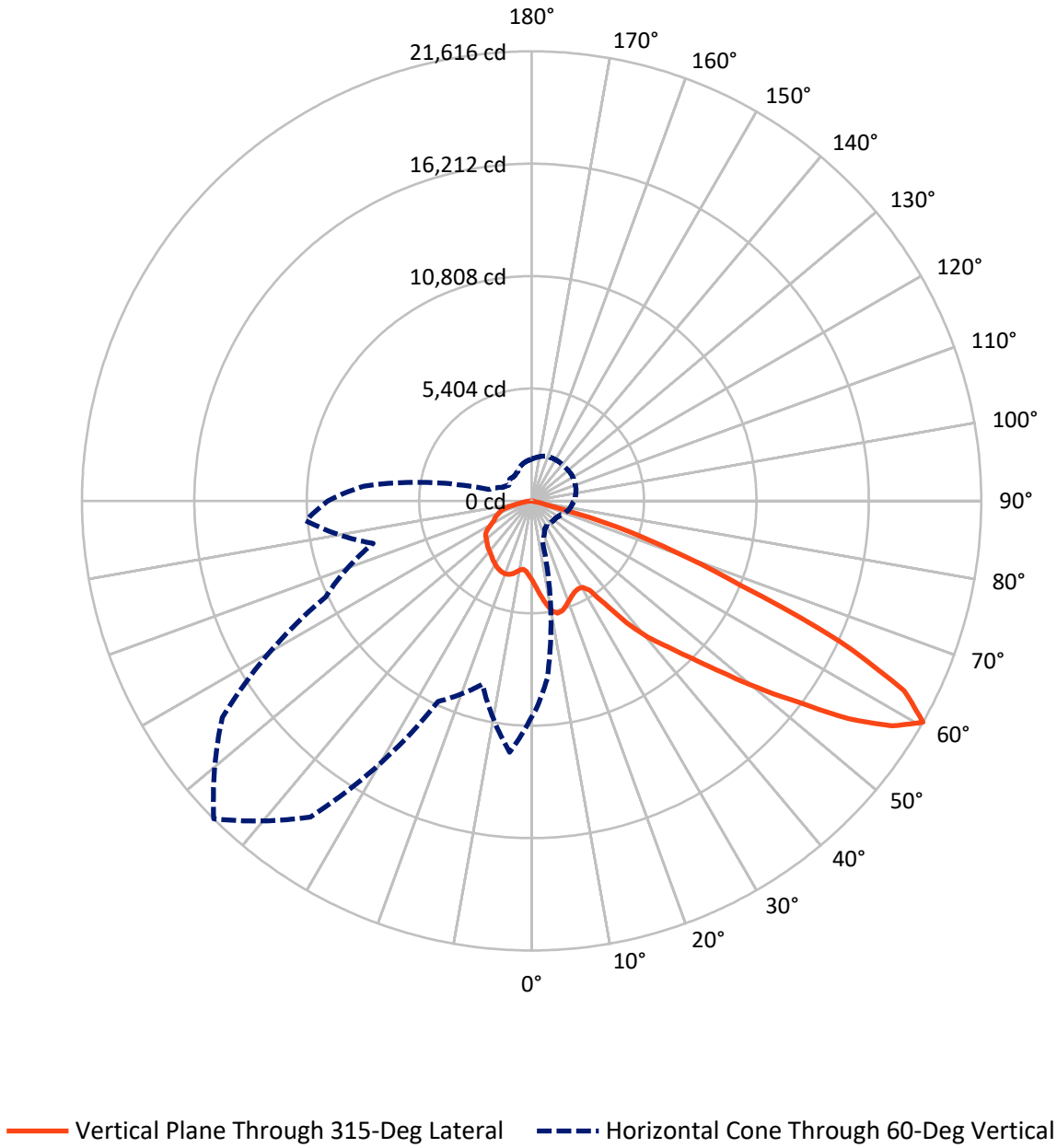
Luminous Intensity Polar Plot



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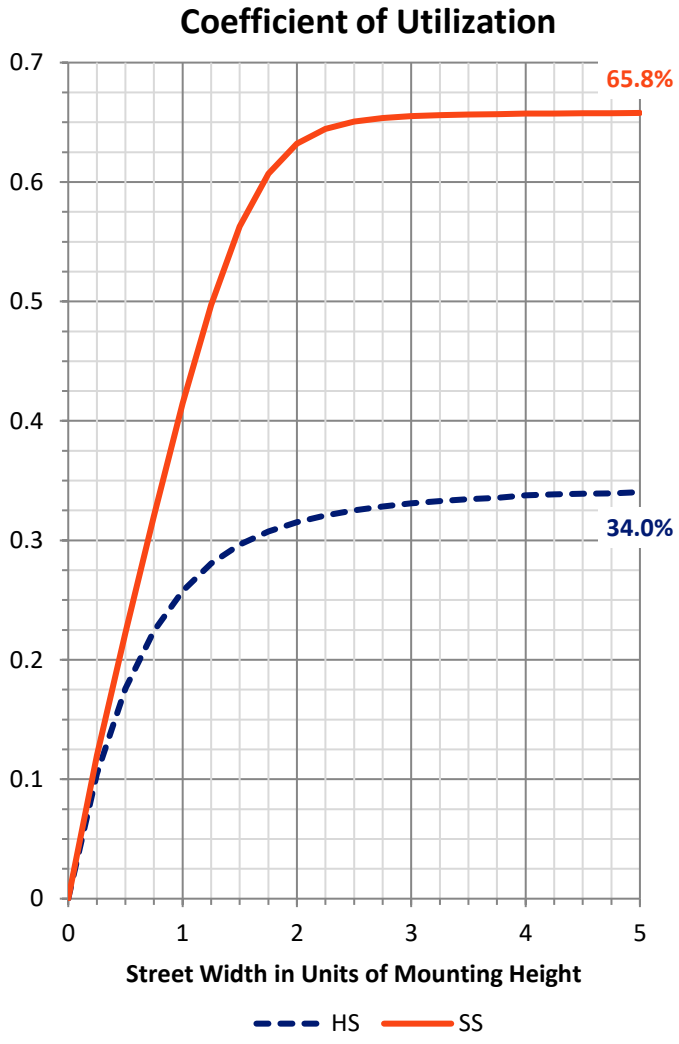
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6473.3	0.0	6473.3
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	12449.4	0.0	12449.4
	% Fixture	65.8	0.0	65.8
Total	Lumens	18922.7	0.0	18922.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.9	2.0
10°-20°	1196.0	6.3
20°-30°	1947.8	10.3
30°-40°	2736.2	14.5
40°-50°	3744.2	19.8
50°-60°	4803.6	25.4
60°-70°	3234.6	17.1
70°-80°	808.6	4.3
80°-90°	78.8	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°	18922.7	100.0
0°-180°	18922.7	100.0



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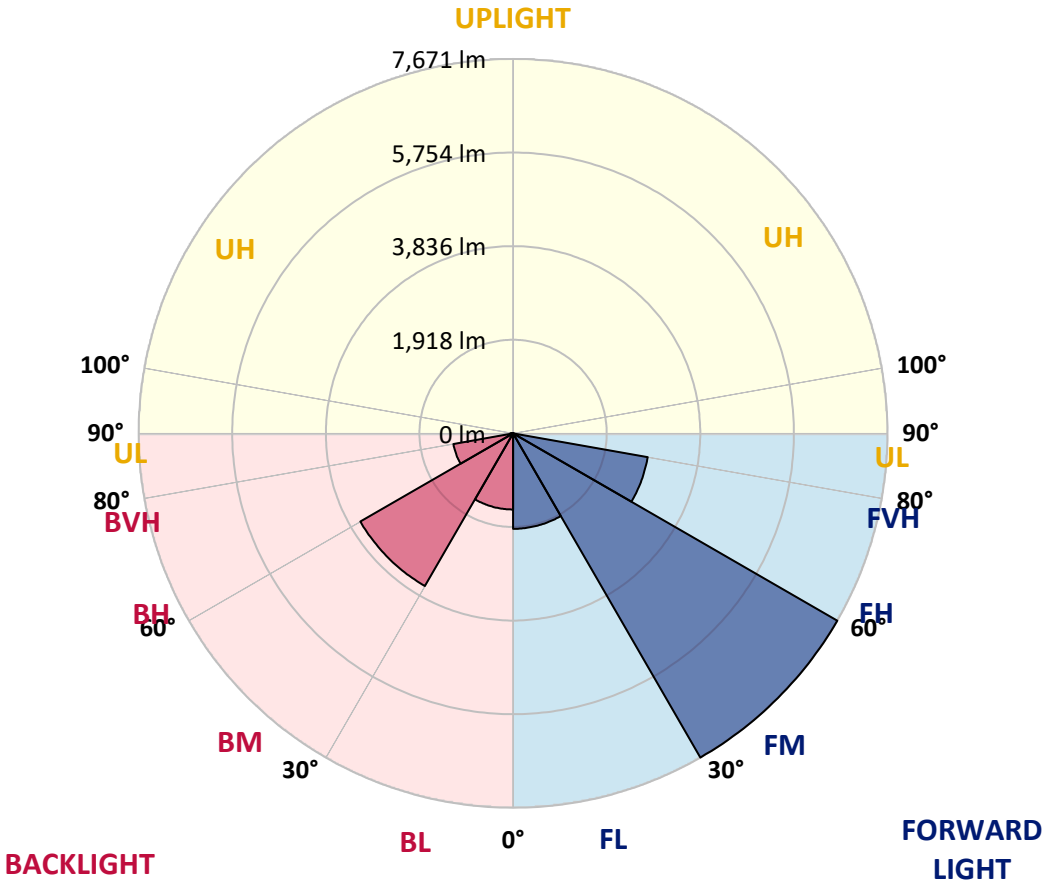
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1956.2	10.3			
FM	(30°-60°)	7671.4	40.5			
FH	(60°-80°)	2801.3	14.8			G2/5000
FVH	(80°-90°)	20.5	0.1			G1/100
BL	(0°-30°)	1560.5	8.2	B3/2500		
BM	(30°-60°)	3612.6	19.1	B3/5000		
BH	(60°-80°)	1241.9	6.6	B3/2500		G3/2500
BVH	(80°-90°)	58.3	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°	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	4037.8	4029.1	4020.4	3952.4	3935.0	3886.2	3851.4	3807.8	3745.1	3710.2	3680.6
5°	4290.5	4276.6	4229.5	4090.1	3999.5	3900.2	3818.3	3727.6	3631.8	3569.0	3520.2
7.5°	4529.3	4525.8	4445.6	4215.6	4069.2	3926.3	3814.8	3682.3	3544.6	3450.5	3387.8
10°	4750.6	4724.5	4628.6	4328.9	4137.2	3973.4	3853.1	3706.7	3546.4	3419.2	3335.5
12.5°	4945.8	4912.7	4780.2	4433.4	4196.4	3994.3	3863.6	3743.3	3637.0	3530.7	3434.9
15°	5106.1	5066.0	4931.8	4531.0	4248.7	3982.1	3799.1	3705.0	3741.6	3788.6	3682.3
17.5°	5256.0	5214.2	5050.3	4602.5	4264.4	3907.1	3640.5	3600.4	3785.1	3999.5	3950.7
20°	5381.4	5334.4	5144.4	4637.3	4236.5	3764.2	3434.9	3504.6	3748.5	4004.7	4083.1
22.5°	5517.4	5479.0	5250.7	4687.9	4201.6	3567.3	3262.3	3433.1	3685.8	3910.6	4029.1
25°	5735.2	5688.2	5416.3	4776.7	4184.2	3382.6	3138.6	3363.4	3598.7	3802.6	3894.9
27.5°	6050.6	5963.5	5642.9	4931.8	4203.4	3208.3	3060.2	3278.0	3497.6	3671.9	3746.8
30°	6394.0	6289.4	5893.8	5092.2	4231.3	3102.0	3018.4	3180.4	3342.5	3516.8	3598.7
32.5°	6800.0	6707.6	6162.2	5212.4	4172.0	3053.2	2987.0	3074.1	3203.1	3342.5	3410.5
35°	7284.5	7118.9	6455.0	5310.0	3980.3	2981.8	2959.1	2957.4	3025.3	3161.3	3237.9
37.5°	7805.5	7627.8	6815.7	5414.6	3682.3	2868.5	2892.9	2819.7	2882.4	2990.5	3077.6
40°	8232.5	8046.0	7179.9	5557.5	3309.4	2690.7	2746.5	2668.1	2706.4	2817.9	2915.5
42.5°	8650.8	8452.1	7519.7	5719.5	2948.6	2516.5	2544.3	2514.7	2526.9	2643.7	2779.6
45°	9199.7	8976.6	7938.0	5834.6	2624.5	2378.8	2352.6	2302.1	2366.6	2518.2	2662.8
47.5°	10116.4	9849.7	8622.9	5909.5	2389.2	2300.4	2180.1	2150.5	2230.7	2399.7	2549.6
50°	11188.1	10958.1	9717.3	5906.0	2213.2	2234.1	2012.8	1986.7	2119.1	2289.9	2448.5
52.5°	12066.4	11832.9	10653.1	5731.7	2068.6	2093.0	1915.2	1842.0	2023.3	2181.9	2340.4
55°	12775.7	12512.6	11083.6	5003.3	1885.6	1868.2	1808.9	1674.7	1903.0	2073.8	2221.9
57.5°	12394.1	12080.4	10562.5	3804.3	1697.4	1587.6	1625.9	1526.6	1739.2	1953.6	2096.5
60°	*10391.7*	*10109.4*	*8581.0*	*2025.0*	*1493.5*	*1326.2*	*1406.4*	*1422.0*	*1559.7*	*1808.9*	*1955.3*
62.5°	7138.1	6932.5	5815.4	1228.6	1178.1	1064.8	1190.3	1303.5	1406.4	1617.2	1744.4
65°	3492.4	3431.4	2908.6	787.7	824.3	860.9	986.4	1124.0	1275.7	1460.4	1594.6
67.5°	962.0	968.9	881.8	615.2	650.0	751.1	850.4	960.2	1111.8	1282.6	1418.6
70°	423.5	430.4	444.4	474.0	540.2	632.6	735.4	848.7	988.1	1131.0	1261.7
72.5°	294.5	301.5	322.4	360.7	420.0	507.1	604.7	712.8	857.4	977.7	1085.7
75°	181.2	186.5	205.6	238.7	278.8	345.1	440.9	540.2	667.5	777.2	873.1
77.5°	95.8	92.4	104.6	127.2	162.1	196.9	261.4	324.1	414.8	503.6	583.8
80°	52.3	50.5	57.5	69.7	80.2	108.0	151.6	193.4	245.7	296.3	339.8
82.5°	22.7	20.9	22.7	29.6	36.6	52.3	76.7	106.3	135.9	170.8	198.7
85°	0.0	0.0	0.0	1.7	8.7	13.9	26.1	38.3	55.8	76.7	94.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	15.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	3663.2	3619.6	3616.1	3581.2	3584.7	3586.5	3551.6	3537.7	3549.9	3563.8	3556.8
5°	3502.8	3457.5	3438.3	3405.2	3401.7	3386.1	3372.1	3354.7	3366.9	3379.1	3386.1
7.5°	3363.4	3333.8	3321.6	3312.9	3316.4	3309.4	3281.5	3265.8	3264.1	3269.3	3276.3
10°	3318.1	3293.7	3309.4	3333.8	3351.2	3363.4	3333.8	3307.6	3283.2	3272.8	3272.8
12.5°	3415.7	3384.3	3415.7	3441.8	3476.7	3485.4	3452.3	3424.4	3415.7	3426.1	3447.1
15°	3631.8	3558.6	3556.8	3572.5	3600.4	3614.4	3583.0	3569.0	3569.0	3635.3	3687.5
17.5°	3847.9	3727.6	3677.1	3668.4	3685.8	3691.0	3664.9	3652.7	3684.1	3813.0	3910.6
20°	3999.5	3853.1	3743.3	3722.4	3727.6	3729.4	3708.5	3699.7	3745.1	3901.9	3983.8
22.5°	3983.8	3875.8	3741.6	3715.4	3724.1	3720.7	3701.5	3698.0	3734.6	3870.5	3908.9
25°	3875.8	3792.1	3678.8	3661.4	3675.3	3673.6	3654.4	3645.7	3661.4	3752.0	3755.5
27.5°	3752.0	3678.8	3581.2	3576.0	3598.7	3610.9	3577.8	3551.6	3546.4	3607.4	3593.4
30°	3603.9	3549.9	3471.5	3474.9	3516.8	3523.7	3483.7	3445.3	3434.9	3468.0	3448.8
32.5°	3427.9	3410.5	3368.6	3377.3	3417.4	3431.4	3389.5	3349.5	3337.3	3347.7	3307.6
35°	3278.0	3271.0	3274.5	3290.2	3325.1	3335.5	3300.7	3269.3	3251.9	3215.3	3163.0
37.5°	3122.9	3142.1	3192.6	3222.2	3241.4	3237.9	3218.8	3196.1	3168.2	3100.3	3035.8
40°	2978.3	3027.1	3117.7	3150.8	3157.8	3159.5	3145.6	3126.4	3091.5	3000.9	2927.7
42.5°	2866.7	2920.8	3041.0	3091.5	3095.0	3098.5	3084.6	3068.9	3020.1	2899.8	2828.4
45°	2750.0	2821.4	2962.6	3023.6	3020.1	3018.4	3006.2	2999.2	2941.7	2802.3	2723.8
47.5°	2650.6	2734.3	2885.9	2938.2	2936.4	2934.7	2926.0	2926.0	2868.5	2716.9	2628.0
50°	2553.1	2648.9	2807.5	2851.1	2854.5	2851.1	2847.6	2852.8	2784.8	2622.8	2535.6
52.5°	2446.7	2554.8	2720.4	2760.4	2781.3	2790.1	2790.1	2777.9	2697.7	2528.7	2432.8
55°	2330.0	2432.8	2624.5	2678.5	2696.0	2711.6	2711.6	2687.2	2612.3	2441.5	2338.7
57.5°	2185.3	2276.0	2427.6	2481.6	2523.4	2533.9	2533.9	2493.8	2432.8	2269.0	2185.3
60°	*2028.5*	*2106.9*	*2209.7*	*2267.2*	*2298.6*	*2277.7*	*2293.4*	*2282.9*	*2234.1*	*2082.5*	*2012.8*
62.5°	1819.4	1899.5	2012.8	2072.1	2086.0	2065.1	2086.0	2084.3	2018.0	1882.1	1798.5
65°	1669.5	1747.9	1859.5	1936.1	1958.8	1953.6	1967.5	1946.6	1864.7	1735.7	1655.6
67.5°	1491.7	1575.4	1704.4	1789.8	1836.8	1842.0	1861.2	1817.6	1734.0	1592.8	1491.7
70°	1322.7	1394.2	1493.5	1573.7	1639.9	1673.0	1676.5	1613.7	1509.2	1392.4	1319.2
72.5°	1145.0	1218.1	1338.4	1425.5	1509.2	1547.5	1547.5	1470.8	1357.6	1228.6	1150.2
75°	928.9	996.8	1106.6	1200.7	1296.6	1345.4	1343.6	1277.4	1151.9	1029.9	948.0
77.5°	629.1	679.7	749.4	820.8	834.8	873.1	892.3	808.6	738.9	672.7	599.5
80°	366.0	397.3	435.7	475.8	484.5	496.7	465.3	433.9	397.3	353.8	320.7
82.5°	214.4	235.3	254.4	285.8	291.0	294.5	266.6	252.7	223.1	196.9	176.0
85°	104.6	111.5	129.0	144.6	137.7	134.2	122.0	108.0	95.8	85.4	74.9
87.5°	20.9	20.9	31.4	29.6	24.4	20.9	12.2	15.7	3.5	3.5	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°	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	3579.5	3609.1	3645.7	3694.5	3750.3	3809.5	3867.0	3910.6	3954.2	4018.7	4008.2
5°	3396.5	3447.1	3504.6	3579.5	3670.1	3772.9	3888.0	4003.0	4126.7	4231.3	4276.6
7.5°	3290.2	3346.0	3413.9	3511.5	3628.3	3753.8	3915.8	4102.3	4302.7	4440.4	4525.8
10°	3290.2	3361.7	3450.5	3544.6	3647.5	3776.4	3976.8	4210.4	4468.3	4649.5	4748.9
12.5°	3480.2	3551.6	3570.8	3567.3	3624.8	3767.7	4025.6	4323.6	4632.1	4823.8	4945.8
15°	3776.4	3800.8	3656.2	3523.7	3532.4	3705.0	4048.3	4414.3	4773.2	5003.3	5135.7
17.5°	3975.1	3910.6	3652.7	3420.9	3372.1	3598.7	4048.3	4501.4	4923.1	5182.8	5306.5
20°	3990.8	3830.4	3563.8	3321.6	3196.1	3457.5	4020.4	4567.6	5067.8	5355.3	5487.8
22.5°	3853.1	3694.5	3469.7	3236.2	3051.5	3286.7	3975.1	4618.1	5191.5	5517.4	5681.2
25°	3696.3	3563.8	3373.9	3149.1	2952.1	3114.2	3933.3	4703.5	5364.0	5737.0	5902.5
27.5°	3542.9	3431.4	3258.8	3075.9	2896.4	2964.3	3907.1	4829.0	5569.7	6048.9	6191.8
30°	3393.0	3292.0	3135.1	3006.2	2866.7	2866.7	3884.5	4973.7	5841.5	6399.2	6542.1
32.5°	3241.4	3145.6	3018.4	2938.2	2849.3	2828.4	3821.7	5109.6	6122.1	6782.6	6929.0
35°	3100.3	3004.4	2906.8	2873.7	2840.6	2798.8	3666.6	5215.9	6395.7	7230.5	7355.9
37.5°	2967.8	2875.5	2802.3	2793.5	2797.0	2718.6	3422.7	5304.8	6737.3	7688.8	7755.0
40°	2852.8	2750.0	2692.5	2690.7	2708.2	2589.6	3114.2	5432.0	7127.6	8077.4	8049.5
42.5°	2750.0	2641.9	2572.2	2587.9	2577.4	2460.7	2812.7	5548.7	7467.5	8441.6	8385.9
45°	2648.9	2544.3	2446.7	2469.4	2457.2	2380.5	2556.5	5634.1	7843.9	8879.0	8886.0
47.5°	2551.3	2448.5	2350.9	2323.0	2321.3	2356.1	2359.6	5662.0	8457.3	9583.1	9424.5
50°	2460.7	2357.9	2256.8	2162.7	2199.3	2307.3	2213.2	5641.1	9375.7	10360.3	9917.7
52.5°	2366.6	2269.0	2157.5	1988.4	2084.3	2190.6	2082.5	5566.2	9936.9	11047.0	10782.1
55°	2258.5	2166.2	2014.6	1808.9	1925.7	1948.3	1948.3	4841.2	10175.6	11726.6	11890.4
57.5°	2113.9	1991.9	1751.4	1585.9	1690.4	1603.3	1805.4	3387.8	9781.8	11512.3	12148.3
60°	*1950.1*	*1819.4*	*1564.9*	*1446.4*	*1477.8*	*1324.5*	*1538.8*	*2124.3*	*8107.0*	*9795.7*	*10897.1*
62.5°	1734.0	1613.7	1402.9	1310.5	1246.0	1080.5	1239.1	1343.6	5557.5	7274.0	8025.1
65°	1589.3	1456.9	1268.7	1146.7	1014.2	869.6	822.6	881.8	2988.7	4070.9	4578.1
67.5°	1418.6	1287.9	1110.1	956.7	850.4	745.9	664.0	643.1	1024.7	1355.8	1467.4
70°	1256.5	1131.0	982.9	840.0	733.7	630.9	550.7	493.2	474.0	470.5	463.6
72.5°	1090.9	974.2	850.4	718.0	601.2	507.1	435.7	369.5	341.6	332.9	324.1
75°	894.0	801.6	677.9	535.0	440.9	353.8	298.0	254.4	230.0	221.3	210.9
77.5°	575.1	533.3	425.2	345.1	266.6	210.9	181.2	153.4	137.7	134.2	125.5
80°	306.7	285.8	235.3	198.7	158.6	129.0	113.3	97.6	88.9	85.4	81.9
82.5°	170.8	155.1	130.7	115.0	92.4	78.4	69.7	62.7	57.5	55.8	54.0
85°	76.7	66.2	52.3	48.8	43.6	40.1	38.3	34.9	33.1	31.4	29.6
87.5°	3.5	7.0	8.7	7.0	7.0	10.5	12.2	12.2	10.5	10.5	8.7
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: P638480
CATALOG NUMBER: GWS-SA4E-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3816.5	3816.5	3816.5	*3816.5*	3816.5	3816.5	3816.5	3816.5	3816.5	3816.5
2.5°	4072.7	4125.0	4130.2	*4147.6*	4125.0	4119.7	4083.1	4062.2	4043.1	4037.8
5°	4389.9	4494.4	4536.2	*4565.9*	4538.0	4524.0	4443.9	4360.2	4313.2	4290.5
7.5°	4715.7	4872.6	4954.5	*4991.1*	4994.6	4931.8	4794.2	4637.3	4558.9	4529.3
10°	5006.8	5200.2	5308.3	*5378.0*	5353.6	5276.9	5088.7	4876.1	4776.7	4750.6
12.5°	5222.9	5407.6	5491.2	*5536.5*	5534.8	5493.0	5315.2	5085.2	4971.9	4945.8
15°	5362.3	5472.1	5477.3	*5487.8*	5517.4	5573.1	5480.8	5268.2	5142.7	5106.1
17.5°	5472.1	5428.5	5346.6	*5318.7*	5384.9	5540.0	5595.8	5423.3	5287.3	5256.0
20°	5541.8	5322.2	5177.6	*5123.5*	5200.2	5452.9	5665.5	5562.7	5421.5	5381.4
22.5°	5595.8	5222.9	4989.3	*4952.7*	5032.9	5358.8	5737.0	5728.2	5573.1	5517.4
25°	5681.2	5156.6	4856.9	*4830.8*	4905.7	5313.5	5832.8	5953.1	5815.4	5735.2
27.5°	5815.4	5149.7	4788.9	*4780.2*	4883.0	5353.6	5970.5	6282.4	6109.9	6050.6
30°	6001.9	5215.9	4804.6	*4822.0*	4947.5	5498.2	6184.8	6658.8	6486.3	6394.0
32.5°	6270.2	5393.6	5043.4	*5118.3*	5210.7	5730.0	6498.5	7066.6	6935.9	6800.0
35°	6624.0	5881.6	5749.2	*6068.1*	5980.9	6237.1	6876.7	7561.6	7403.0	7284.5
37.5°	7096.3	6881.9	7003.9	*7443.1*	7232.2	7195.6	7338.5	8011.2	7924.0	7805.5
40°	7758.5	7802.1	8026.9	*8603.7*	8298.7	8063.5	7904.9	8349.3	8378.9	8232.5
42.5°	8197.6	8398.1	8940.0	*9595.3*	9175.3	8612.4	8378.9	8781.5	8783.2	8650.8
45°	8361.5	8886.0	10018.8	*10773.4*	10071.0	8926.1	8640.3	9368.7	9351.3	9199.7
47.5°	8302.2	9297.3	11139.3	*12293.0*	11221.2	9149.2	8603.7	10205.2	10346.4	10116.4
50°	8178.5	9710.3	12448.1	*14154.2*	12632.8	9386.2	8547.9	11132.4	11365.9	11188.1
52.5°	8304.0	10170.4	13995.6	*16078.1*	14403.4	9764.3	8924.4	12322.6	12280.8	12066.4
55°	8701.3	10714.1	15876.0	*18495.2*	16348.2	10403.9	9891.6	13457.1	13031.9	12775.7
57.5°	8682.1	11102.7	17524.6	*20407.0*	18040.4	10928.5	10227.9	13577.4	12718.2	12394.1
60°	*7880.5*	*10925.0*	*18151.9*	*21616.4*	*18551.0*	*10639.2*	*9121.3*	*12127.4*	*10731.5*	*10391.7*
62.5°	5881.6	9694.6	16935.5	*20102.0*	17106.3	9189.2	6859.3	8704.8	7711.4	7138.1
65°	3762.5	7584.2	14237.8	*16285.5*	14100.2	7028.3	4084.9	4666.9	3656.2	3492.4
67.5°	1601.5	5353.6	11067.9	*10884.9*	10548.5	4553.7	1577.1	1314.0	979.4	962.0
70°	529.8	3642.2	6822.7	*7260.1*	6299.9	3136.9	521.1	440.9	439.2	423.5
72.5°	346.8	1955.3	3840.9	*4276.6*	4053.5	1805.4	315.4	294.5	301.5	294.5
75°	207.4	425.2	646.5	*840.0*	646.5	303.2	190.0	186.5	190.0	181.2
77.5°	122.0	118.5	115.0	*115.0*	113.3	104.6	95.8	92.4	94.1	95.8
80°	78.4	74.9	71.5	*69.7*	61.0	57.5	54.0	50.5	50.5	52.3
82.5°	50.5	47.1	43.6	*38.3*	31.4	26.1	24.4	20.9	20.9	22.7
85°	26.1	20.9	15.7	*12.2*	7.0	3.5	0.0	0.0	0.0	0.0
87.5°	5.2	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.

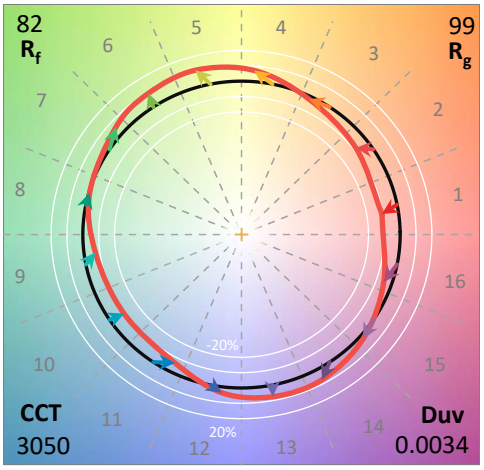
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

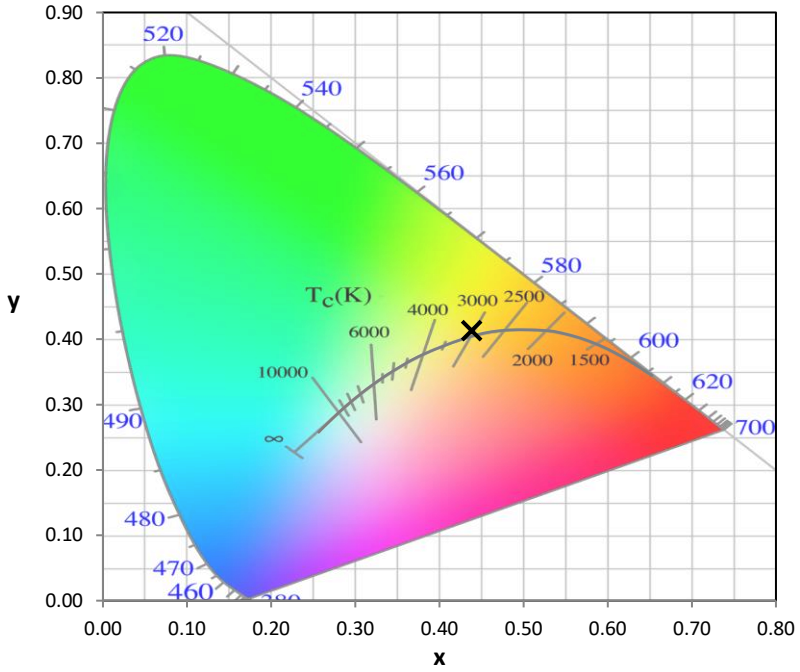
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

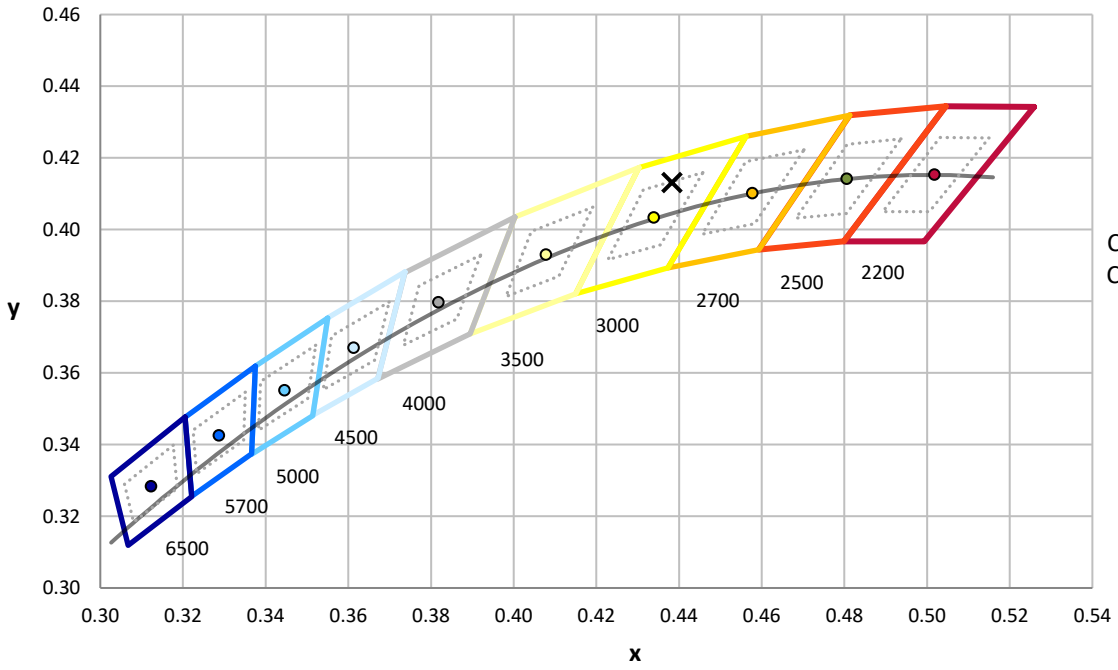
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

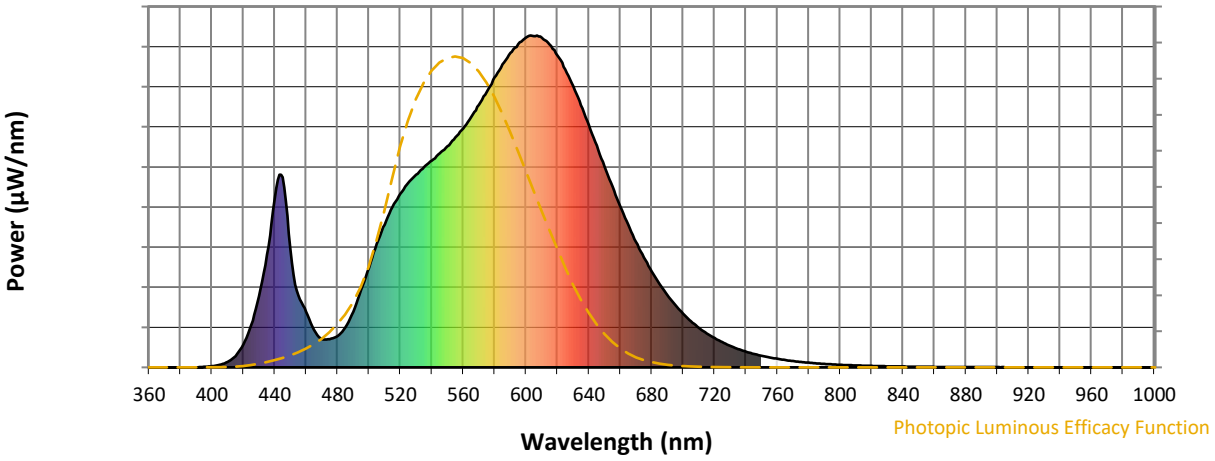


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

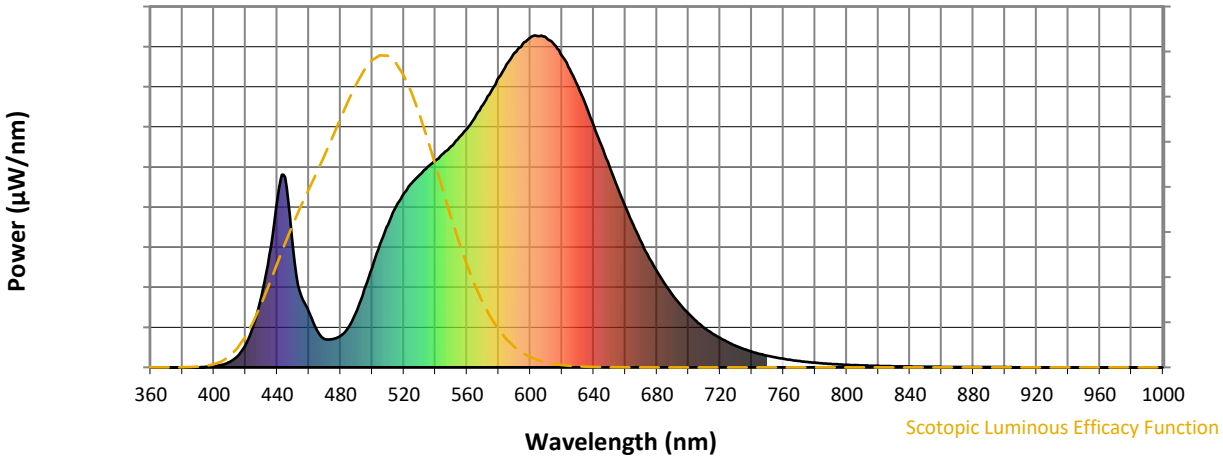


Photopic Lumens: NR

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

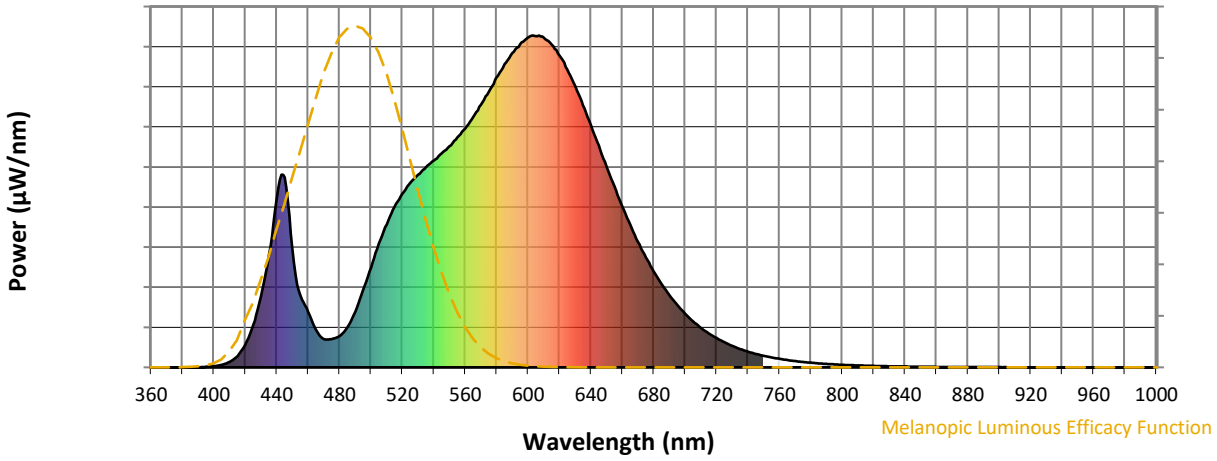


Scotopic Lumens: NR **S/P: 1.27**

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			

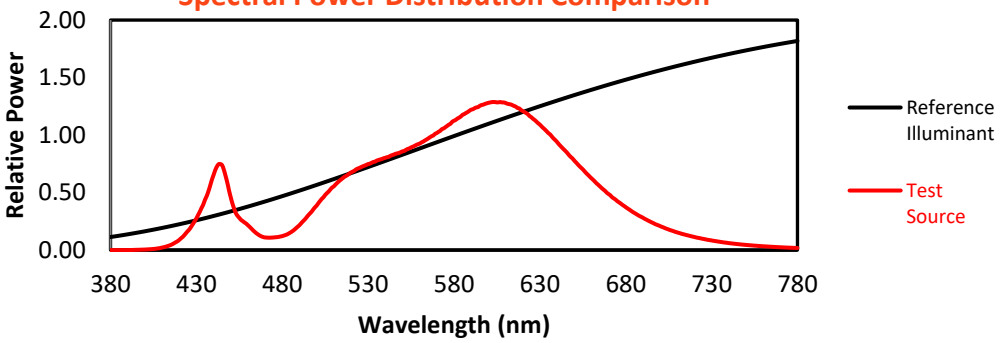
REPORT NUMBER: SP1-2408-195-9

TM-30-18

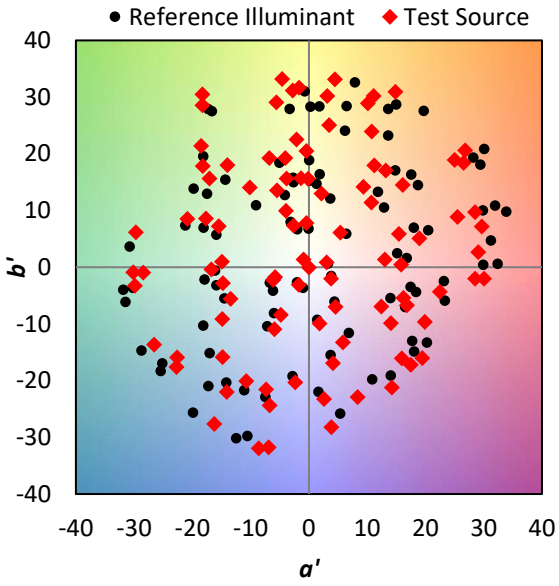
Summary

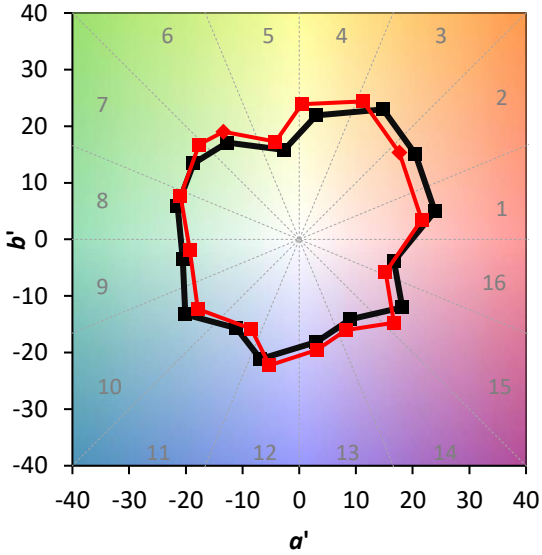
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

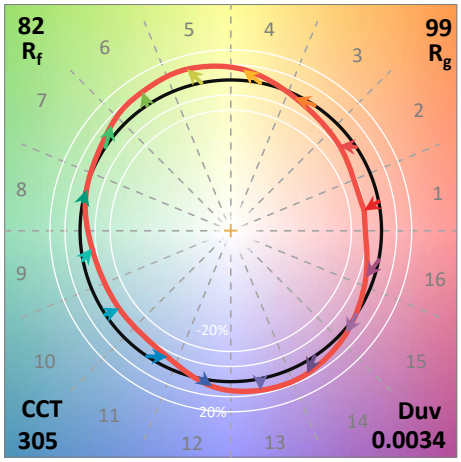
Spectral Power Distribution Comparison

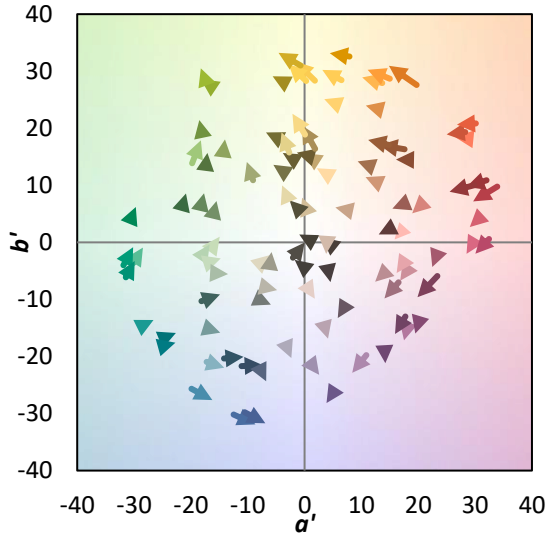


Color Vector Graphics









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

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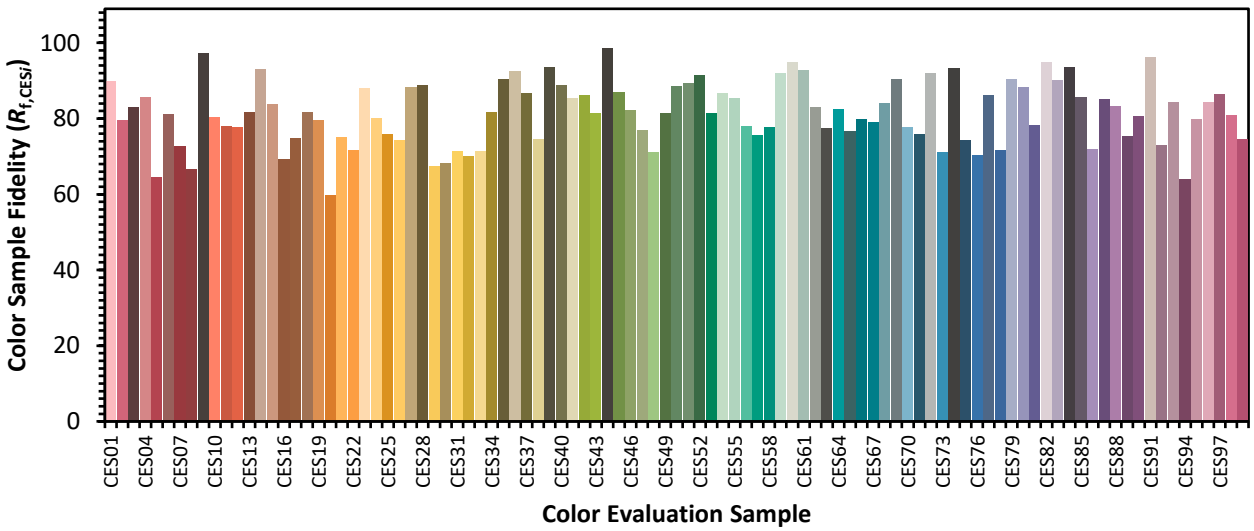
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 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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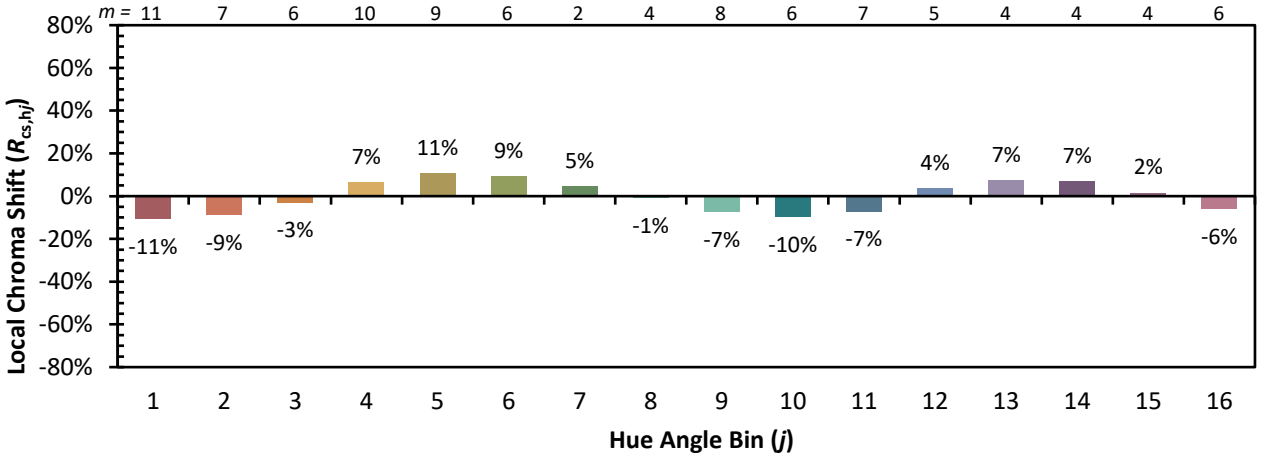
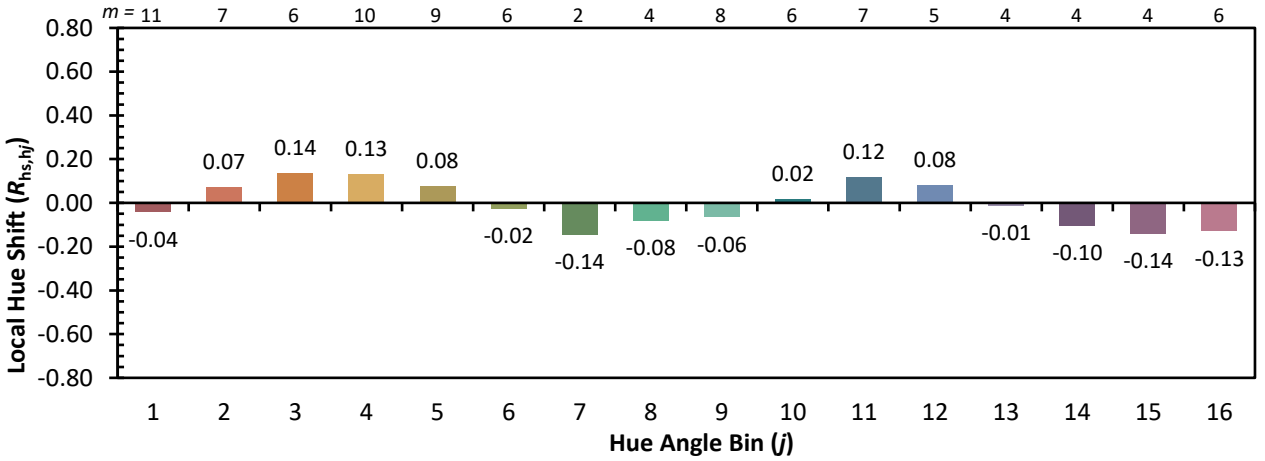
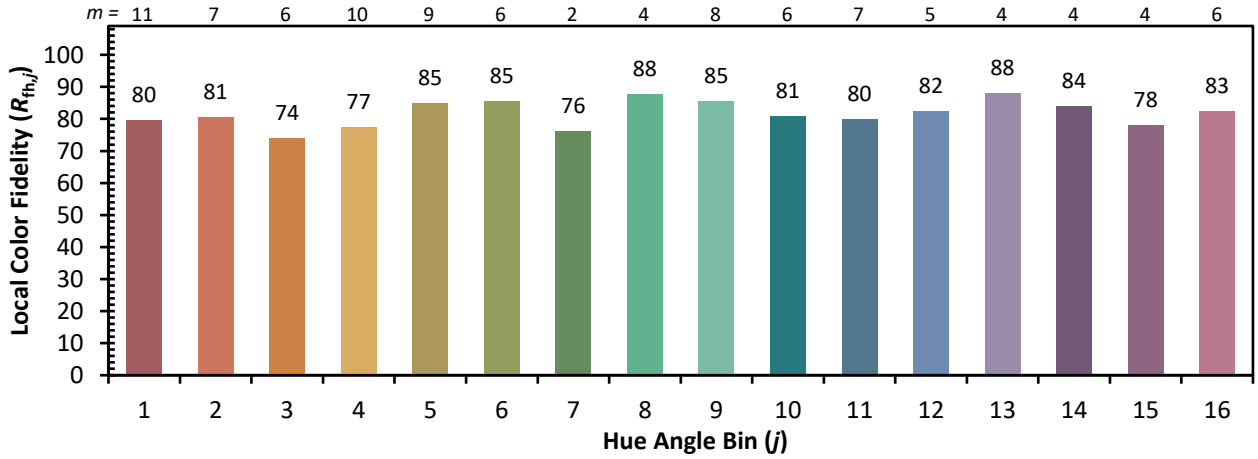
Color Rendition by Hue-Angle Bin







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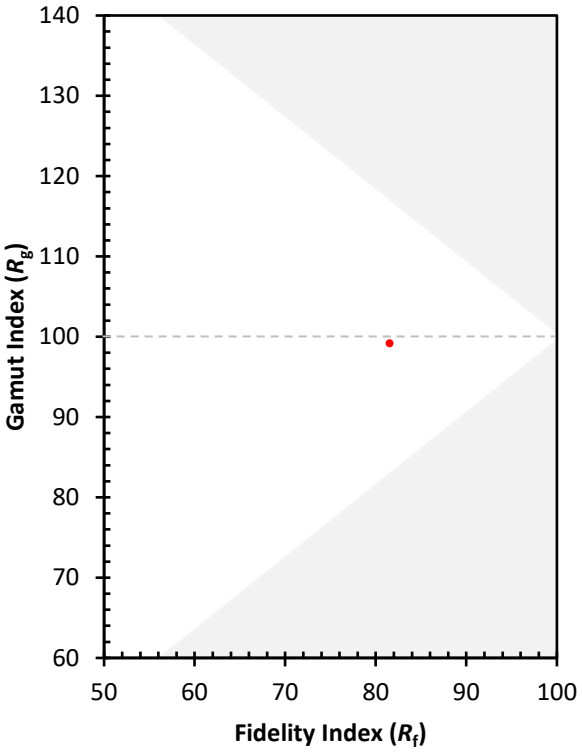
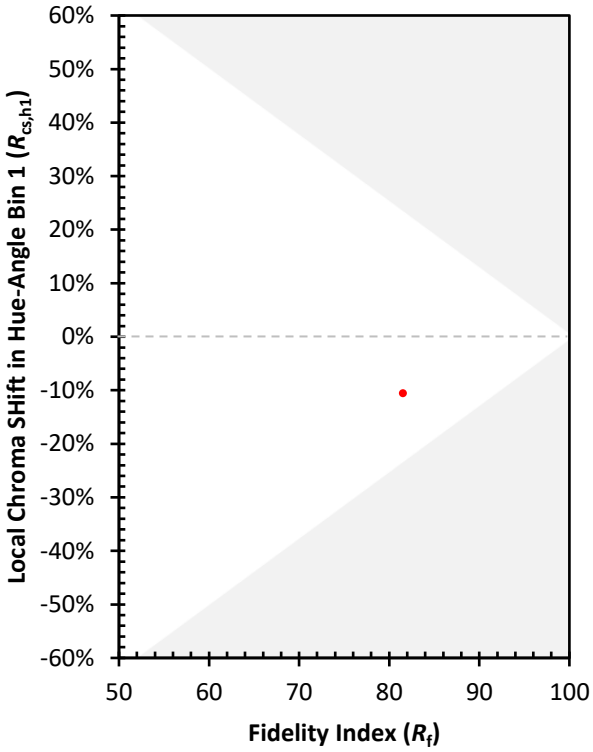
Measure Comparisons





(END OF REPORT)