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: P636003

Luminaire Tested: GWS-SA3E-830-U-SL4-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P636003
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16777.9 lumens
Efficiency:	N/A
Efficacy:	105.4 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G3

Input Watts (W):	159.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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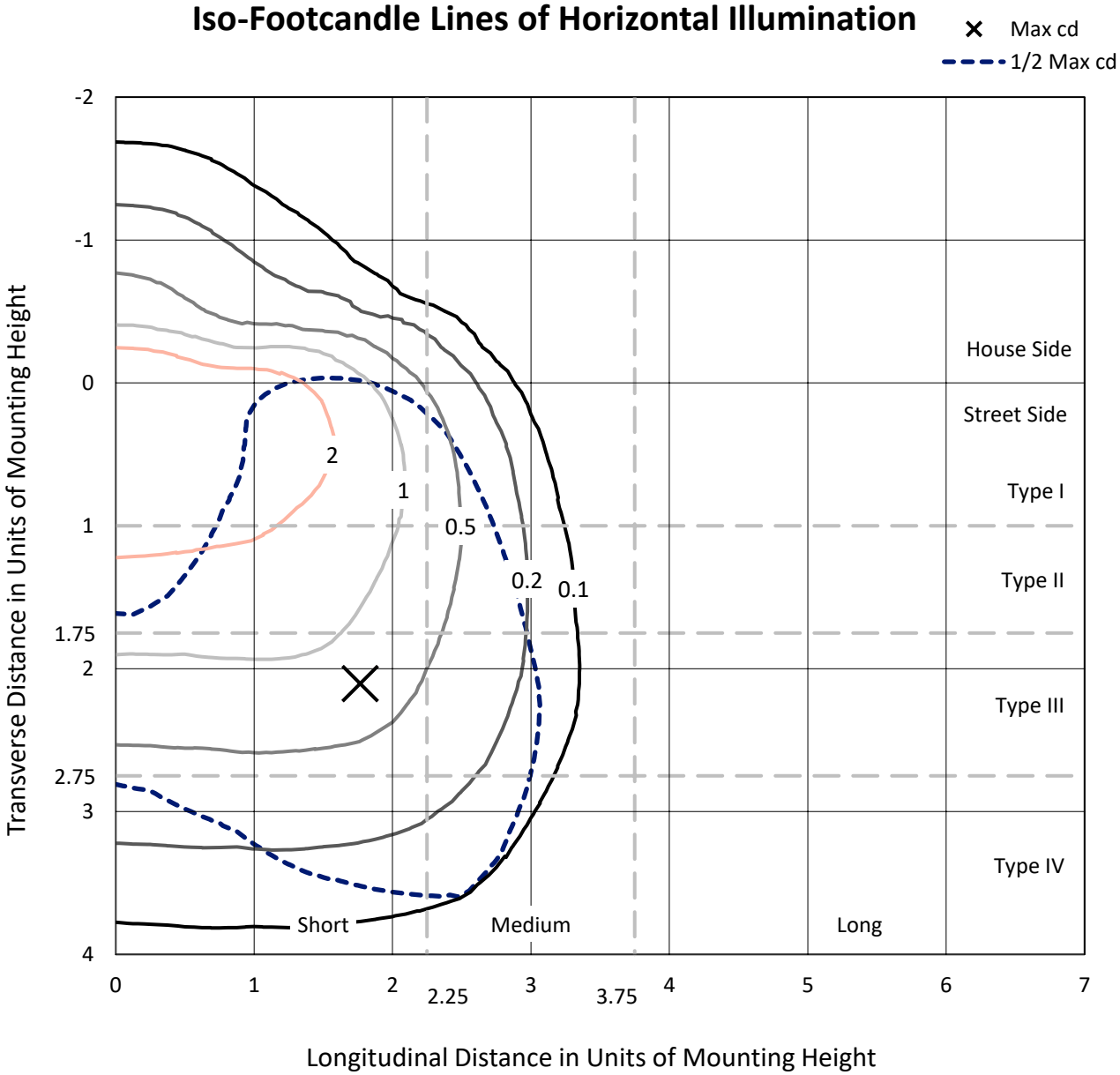
Scaled Data Report

REPORT NUMBER: P636003
CATALOG NUMBER: GWS-SA3E-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type IV - Short - N/A

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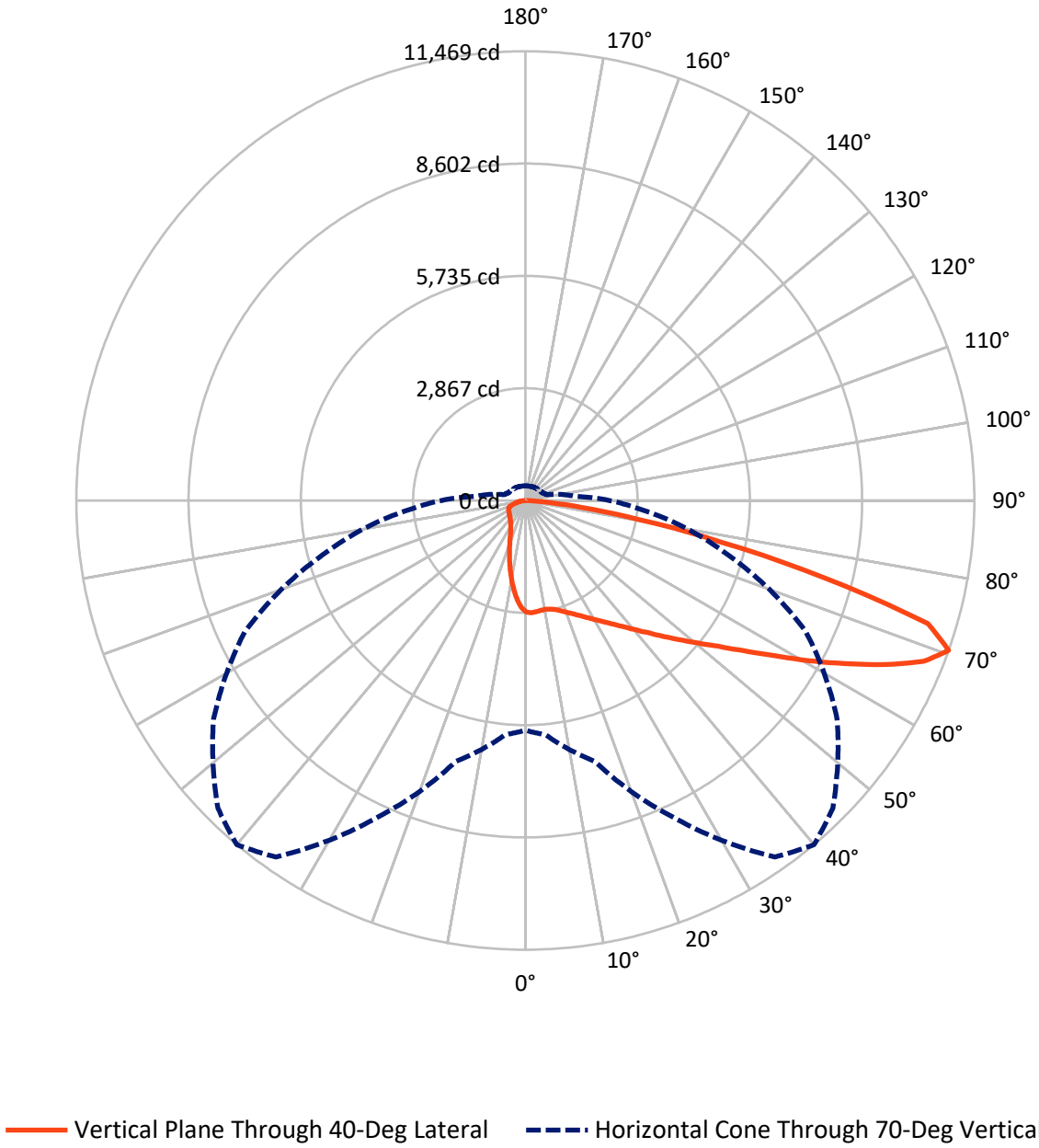
Luminous Intensity Polar Plot



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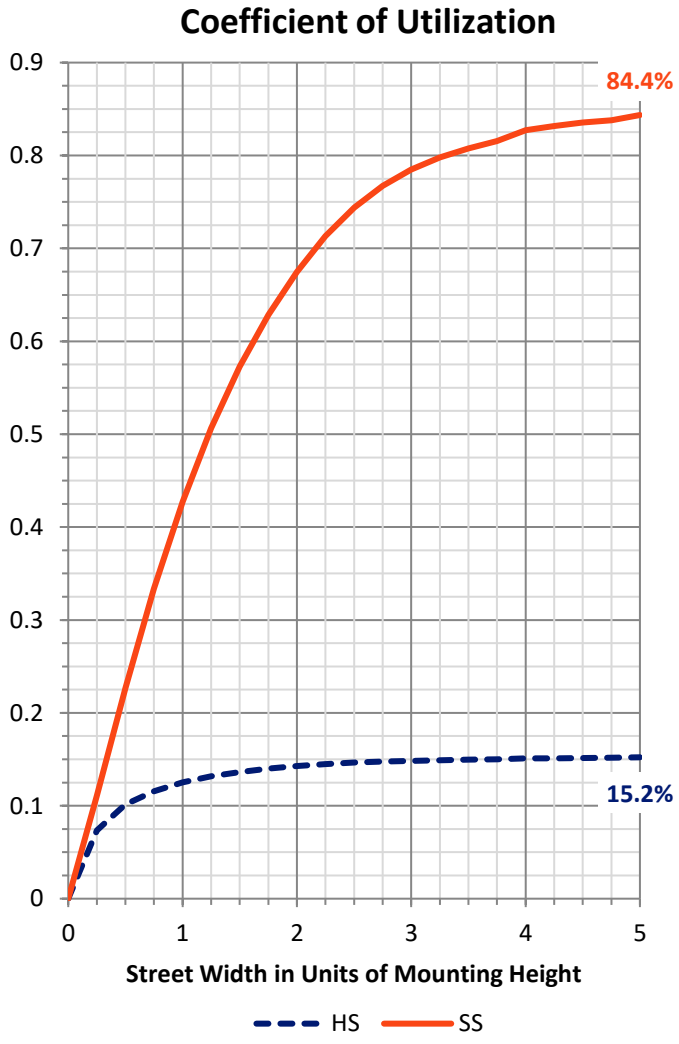
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2584.2	0.0	2584.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	14193.7	0.0	14193.7
	% Fixture	84.6	0.0	84.6
Total	Lumens	16777.9	0.0	16777.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.7	1.5
10°-20°	656.1	3.9
20°-30°	1030.1	6.1
30°-40°	1548.8	9.2
40°-50°	2390.7	14.2
50°-60°	3550.3	21.2
60°-70°	4475.1	26.7
70°-80°	2587.9	15.4
80°-90°	287.2	1.7
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°	16777.9	100.0
0°-180°	16777.9	100.0



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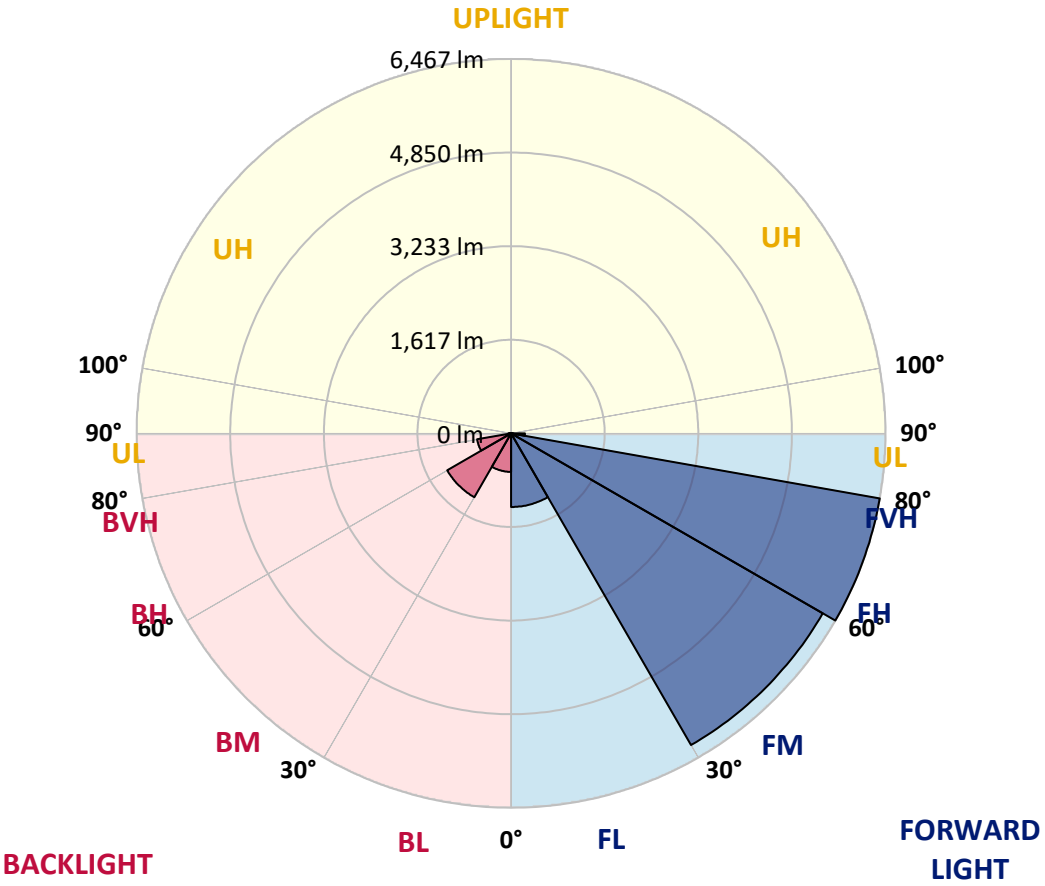
REPORT NUMBER: P636003
CATALOG NUMBER: GWS-SA3E-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1271.9	7.6			
FM	(30°-60°)	6216.0	37.0			
FH	(60°-80°)	6466.6	38.5			G3/7500
FVH	(80°-90°)	239.2	1.4			G3/500
BL	(0°-30°)	666.0	4.0	B2/1000		
BM	(30°-60°)	1273.8	7.6	B2/2500		
BH	(60°-80°)	596.4	3.6	B2/1000		G2/1000
BVH	(80°-90°)	48.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type IV Short



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REPORT NUMBER: P636003
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2849.1	2849.1	2849.1	2849.1	2849.1	*2849.1*	2849.1	2849.1	2849.1	2849.1	2849.1
2.5°	2866.6	2871.6	2875.4	2880.4	2877.9	*2870.4*	2876.6	2876.6	2862.9	2847.8	2834.1
5°	2870.4	2876.6	2875.4	2874.1	2864.1	*2851.6*	2851.6	2844.1	2820.3	2796.5	2773.9
7.5°	2862.9	2861.6	2860.4	2856.6	2845.3	*2831.5*	2829.0	2814.0	2782.7	2750.1	2717.6
10°	2829.0	2827.8	2831.5	2840.3	2837.8	*2825.3*	2825.3	2811.5	2775.2	2735.1	2692.5
12.5°	2801.5	2801.5	2816.5	2840.3	2849.1	*2844.1*	2845.3	2835.3	2794.0	2746.4	2696.3
15°	2805.2	2806.5	2839.1	2877.9	2894.2	*2890.4*	2891.7	2880.4	2834.1	2786.5	2718.8
17.5°	2830.3	2836.6	2892.9	2946.8	2968.1	*2963.0*	2954.3	2935.5	2882.9	2829.0	2746.4
20°	2882.9	2892.9	2965.5	3033.2	3058.2	*3046.9*	3031.9	2994.4	2936.7	2877.9	2776.4
22.5°	2986.8	2993.1	3073.2	3139.6	3159.7	*3145.9*	3115.8	3062.0	2995.6	2934.2	2812.8
25°	3133.4	3140.9	3217.3	3278.6	3273.6	*3257.3*	3216.0	3149.6	3070.7	3005.6	2865.4
27.5°	3307.4	3320.0	3395.1	3443.9	3411.4	*3387.6*	3341.3	3261.1	3172.2	3113.3	2945.5
30°	3497.8	3502.8	3566.7	3615.5	3565.4	*3532.9*	3476.5	3390.1	3309.9	3266.1	3065.7
32.5°	3681.9	3686.9	3742.0	3769.6	3717.0	*3693.2*	3644.3	3552.9	3496.5	3472.7	3244.8
35°	3876.0	3874.7	3919.8	3943.6	3889.8	*3879.8*	3829.7	3759.5	3749.5	3780.8	3506.6
37.5°	4070.1	4058.8	4082.6	4113.9	4083.9	*4093.9*	4061.3	4037.6	4076.4	4157.8	3854.7
40°	4225.4	4225.4	4250.5	4289.3	4299.3	*4343.1*	4324.3	4355.6	4480.9	4675.0	4285.5
42.5°	4363.2	4364.4	4417.0	4477.1	4549.8	*4617.4*	4632.4	4713.8	4973.1	5277.4	4826.5
45°	4507.2	4508.4	4579.8	4667.5	4821.5	*4950.5*	4980.6	5163.4	5534.1	5904.8	5413.9
47.5°	4673.7	4660.0	4758.9	4905.4	5124.6	*5309.9*	5387.6	5646.8	6115.2	6571.0	5967.4
50°	4861.6	4832.8	4943.0	5196.0	5466.5	*5720.7*	5850.9	6147.8	6738.9	7185.9	6488.4
52.5°	5073.2	5057.0	5172.2	5480.3	5893.5	*6186.6*	6363.2	6752.6	7345.0	7798.3	6901.7
55°	5336.2	5297.4	5464.0	5856.0	6394.5	*6767.7*	6976.8	7351.3	8007.5	8354.4	7217.3
57.5°	5624.3	5581.7	5804.6	6325.6	7045.7	*7455.2*	7716.9	8025.0	8631.1	8780.2	7402.6
60°	5934.9	5921.1	6185.3	6876.6	7822.1	*8298.0*	8487.1	8766.4	9173.4	9026.9	7356.3
62.5°	6219.1	6214.1	6598.6	7474.0	8644.9	*9168.4*	9318.7	9392.6	9564.1	9010.6	6988.1
65°	6518.4	6561.0	7080.7	8166.5	9587.9	*10101.4*	10164.0	9976.2	9695.6	8583.6	6234.2
67.5°	6556.0	6638.7	7383.8	8815.2	10482.1	*10966.8*	10916.7	10197.8	9307.4	7395.1	4886.6
70°	*5863.5*	*6007.5*	*6900.4*	*8914.2*	*11112.0*	*11469.0*	*11107.0*	*9720.7*	*7898.5*	*5357.5*	*3073.2*
72.5°	4899.2	5023.1	5812.1	7601.7	10299.3	*10753.9*	10264.2	8227.9	5581.7	3073.2	1565.4
75°	3813.4	3957.4	4685.0	6042.6	7710.7	*7892.3*	7646.8	5738.2	3068.2	1267.4	711.3
77.5°	2326.9	2430.8	2996.9	4093.9	5395.1	*5123.3*	4341.9	3217.3	1346.3	607.4	439.6
80°	1029.4	1093.3	1476.5	2199.1	3117.1	*2946.8*	2323.1	1373.8	736.4	385.7	306.8
82.5°	552.3	593.6	727.6	870.4	1368.8	*1431.4*	1160.9	791.5	395.7	220.4	175.3
85°	243.0	266.7	330.6	315.6	449.6	*442.1*	445.8	543.5	189.1	101.4	114.0
87.5°	0.0	0.0	0.0	0.0	1.3	*1.3*	13.8	72.6	18.8	30.1	26.3
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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Scaled Data Report

REPORT NUMBER: P636003
CATALOG NUMBER: GWS-SA3E-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1	2849.1
2.5°	2819.0	2796.5	2790.2	2782.7	2768.9	2745.1	2727.6	2707.6	2698.8	2688.8	2690.0
5°	2748.9	2721.3	2695.0	2661.2	2618.6	2571.1	2538.5	2500.9	2480.9	2462.1	2467.1
7.5°	2688.8	2646.2	2592.3	2521.0	2444.6	2359.4	2290.5	2236.7	2200.4	2175.3	2187.8
10°	2651.2	2601.1	2507.2	2390.7	2261.7	2131.5	2032.6	1939.9	1882.3	1837.2	1834.7
12.5°	2643.7	2578.6	2442.1	2273.0	2086.4	1912.3	1767.1	1641.8	1565.4	1509.1	1530.4
15°	2651.2	2568.6	2385.7	2164.0	1928.6	1693.2	1512.8	1368.8	1277.4	1226.0	1222.3
17.5°	2660.0	2558.5	2321.8	2046.3	1763.3	1494.0	1284.9	1132.1	1038.2	986.8	988.1
20°	2667.5	2543.5	2246.7	1917.3	1595.5	1308.7	1092.0	946.8	862.9	825.3	831.6
22.5°	2680.0	2528.5	2166.6	1779.6	1423.9	1129.6	939.3	821.5	771.4	746.4	747.6
25°	2703.8	2519.7	2083.9	1629.3	1254.8	986.8	834.1	755.2	723.9	708.8	707.6
27.5°	2752.6	2527.2	1997.5	1484.0	1102.1	877.9	766.4	715.1	693.8	683.8	682.5
30°	2834.1	2557.3	1922.3	1336.2	970.6	792.7	720.1	688.8	676.3	667.5	666.2
32.5°	2958.0	2613.6	1840.9	1198.5	864.1	730.1	683.8	667.5	658.7	653.7	653.7
35°	3145.9	2716.3	1760.8	1078.3	781.5	681.3	655.0	648.7	641.2	638.7	641.2
37.5°	3416.4	2880.4	1688.2	973.1	722.6	643.7	623.7	626.2	619.9	623.7	627.4
40°	3759.5	3099.5	1626.8	886.7	678.8	616.2	596.1	604.9	601.1	604.9	611.1
42.5°	4194.1	3371.3	1580.5	819.0	647.5	593.6	574.8	583.6	581.1	586.1	592.4
45°	4678.8	3729.5	1559.2	771.4	624.9	577.3	557.3	563.6	561.0	564.8	571.1
47.5°	5143.4	4055.1	1578.0	743.9	606.1	563.6	542.3	544.8	543.5	542.3	546.0
50°	5544.1	4314.3	1631.8	735.1	593.6	549.8	529.7	531.0	527.2	519.7	522.2
52.5°	5871.0	4522.2	1664.4	735.1	587.3	534.8	516.0	517.2	509.7	499.7	500.9
55°	6086.4	4606.1	1638.1	733.9	584.8	522.2	502.2	503.4	495.9	483.4	484.7
57.5°	6147.8	4524.7	1527.9	720.1	582.3	512.2	488.4	490.9	485.9	472.1	472.1
60°	5976.2	4226.7	1326.2	688.8	576.1	505.9	478.4	482.2	479.6	465.9	465.9
62.5°	5526.6	3696.9	1085.8	641.2	558.5	498.4	469.6	477.1	483.4	475.9	474.6
65°	4685.0	2961.8	882.9	588.6	536.0	485.9	457.1	475.9	489.7	499.7	499.7
67.5°	3515.3	2120.2	720.1	533.5	502.2	460.9	440.8	458.4	468.4	474.6	478.4
70°	*2142.8*	*1247.3*	*567.3*	*469.6*	*453.3*	*423.3*	*408.3*	*390.7*	*377.0*	*374.5*	*375.7*
72.5°	1048.2	713.8	460.9	399.5	387.0	359.4	325.6	318.1	311.8	308.1	306.8
75°	577.3	497.2	380.7	331.9	309.3	275.5	268.0	255.5	253.0	248.0	249.2
77.5°	408.3	392.0	314.3	269.3	235.4	217.9	221.7	212.9	212.9	209.1	207.9
80°	306.8	308.1	241.7	196.6	174.1	167.8	171.6	171.6	169.1	167.8	166.6
82.5°	194.1	219.2	162.8	126.5	124.0	125.2	124.0	122.7	125.2	121.5	120.2
85°	134.0	157.8	98.9	75.1	75.1	73.9	76.4	75.1	77.6	73.9	73.9
87.5°	30.1	70.1	36.3	22.5	23.8	22.5	23.8	25.0	27.6	28.8	28.8
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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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

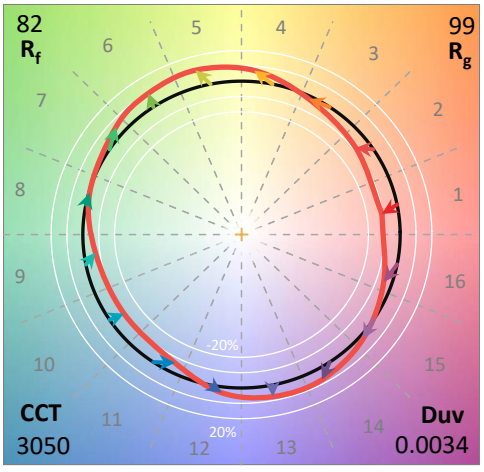
Test Information

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

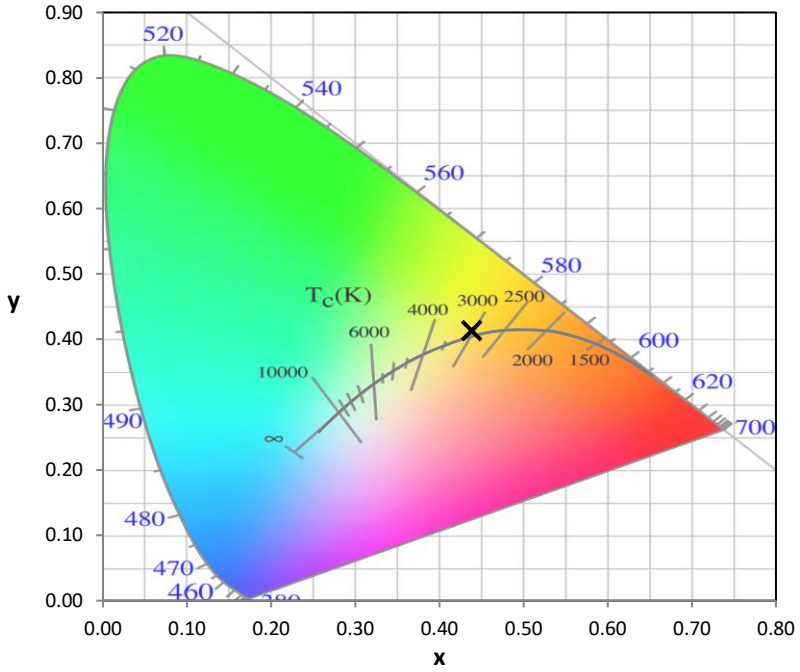
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

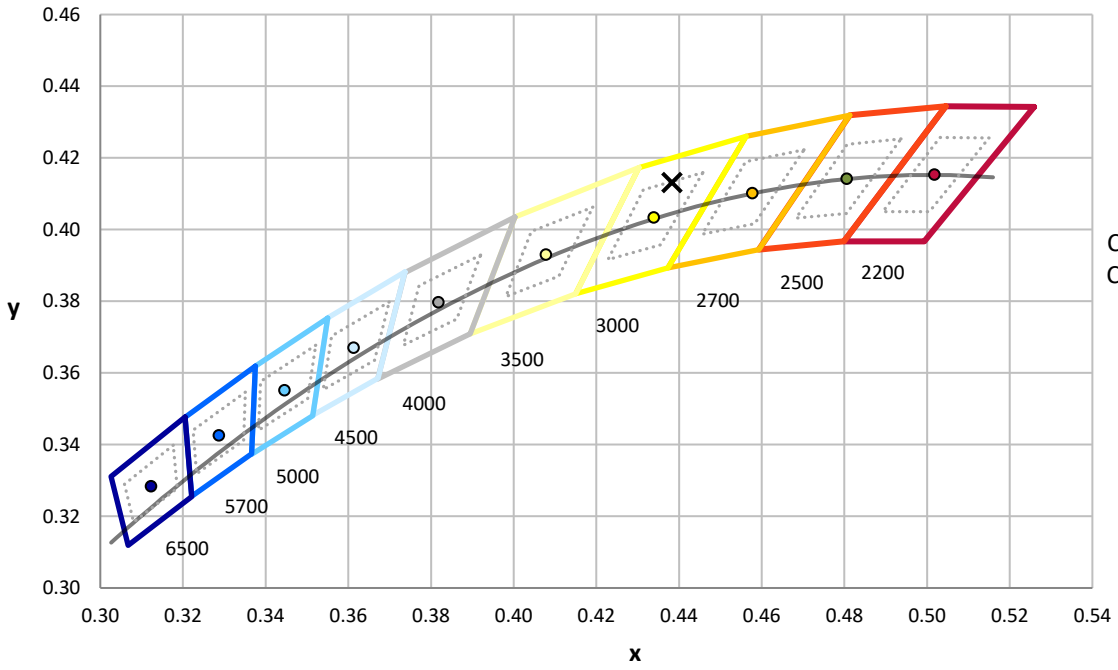
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

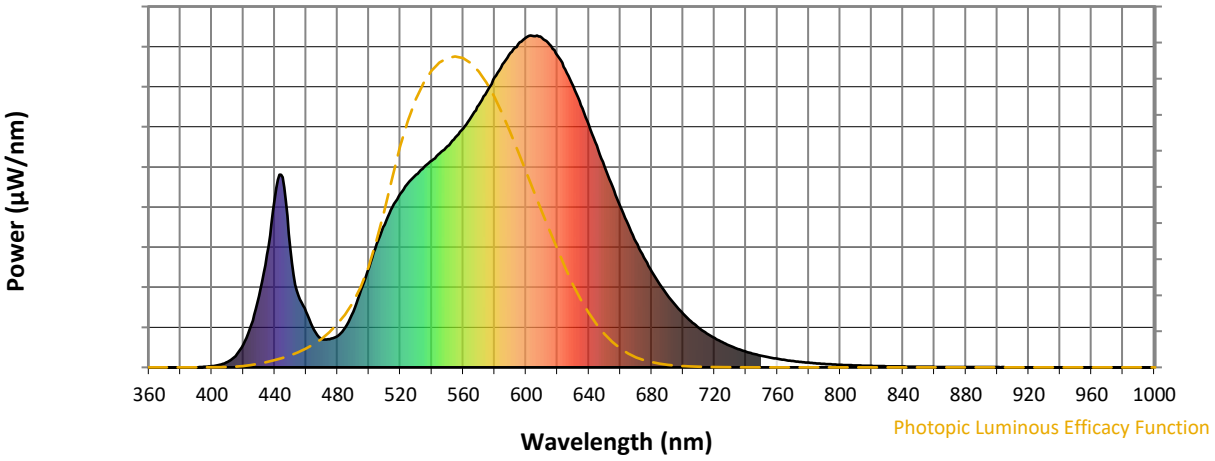


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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			

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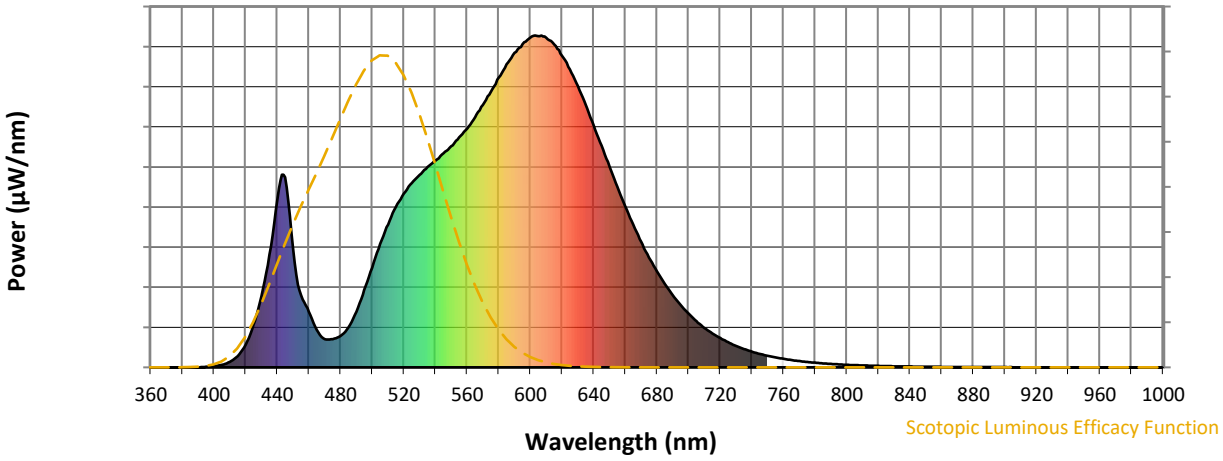
Scotopic Flux vs. Wavelength



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			

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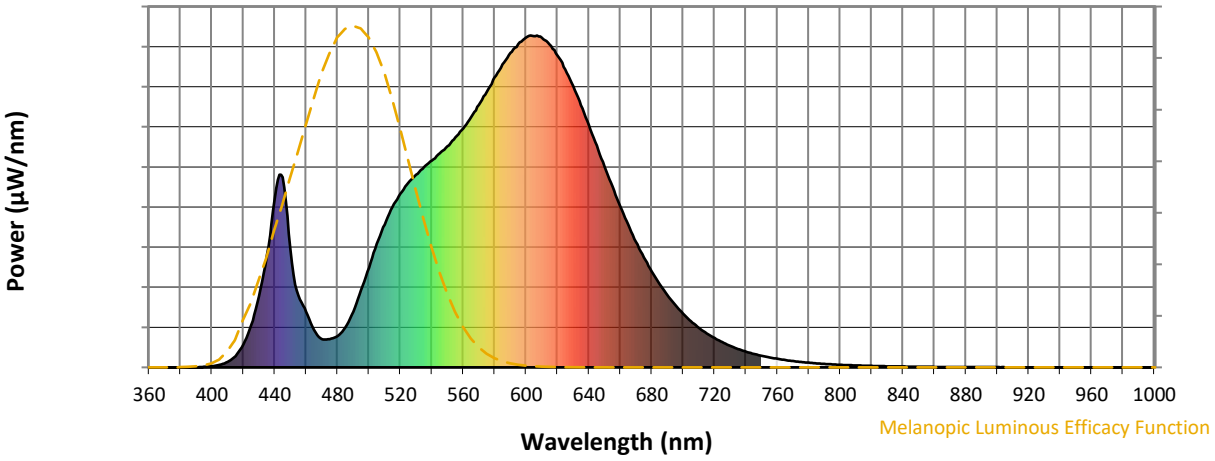
Melanopic Flux vs. Wavelength



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			

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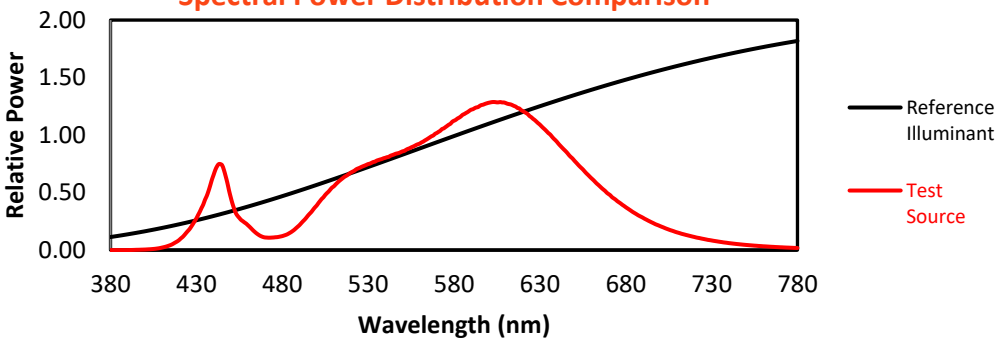
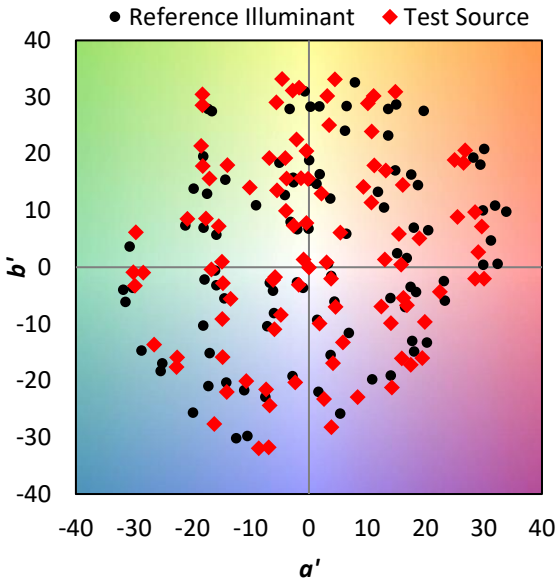
Summary

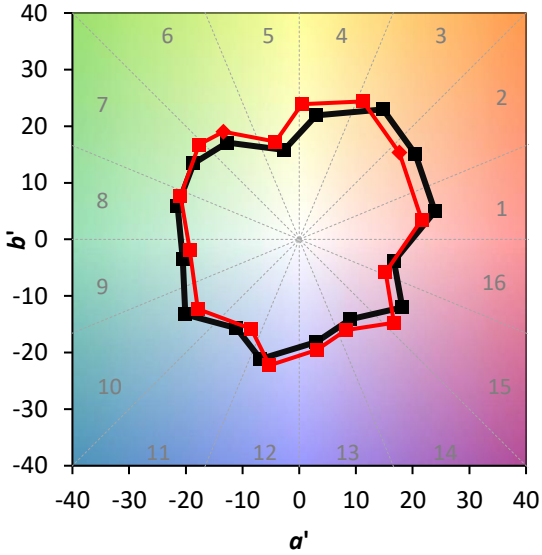
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

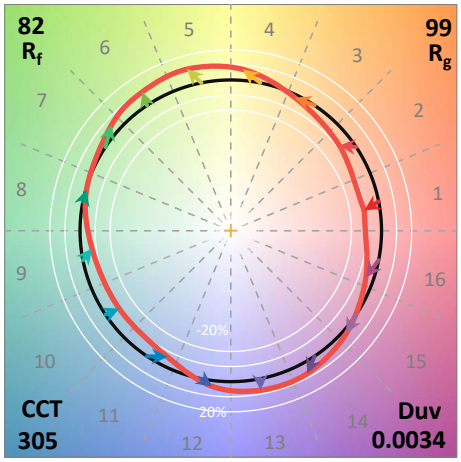
Spectral Power Distribution Comparison

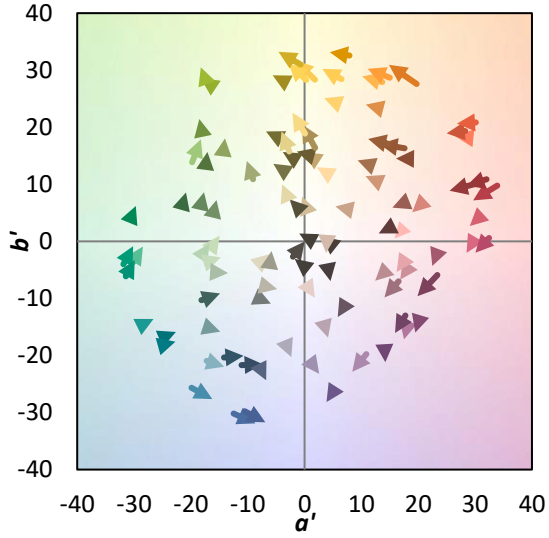


Color Vector Graphics









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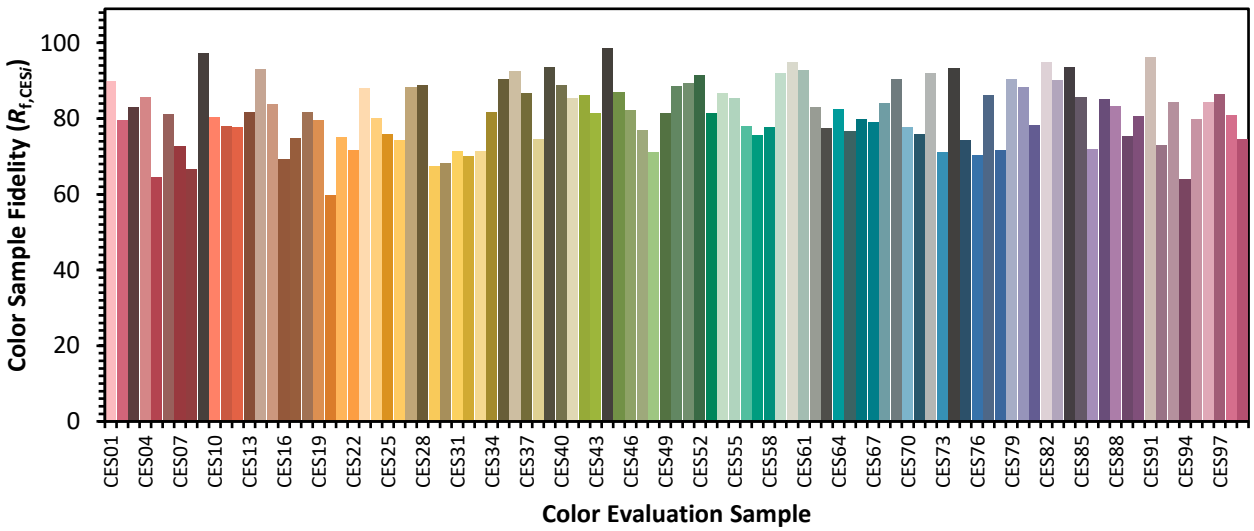
Individual Sample Fidelity Index ($R_{f,i}$)

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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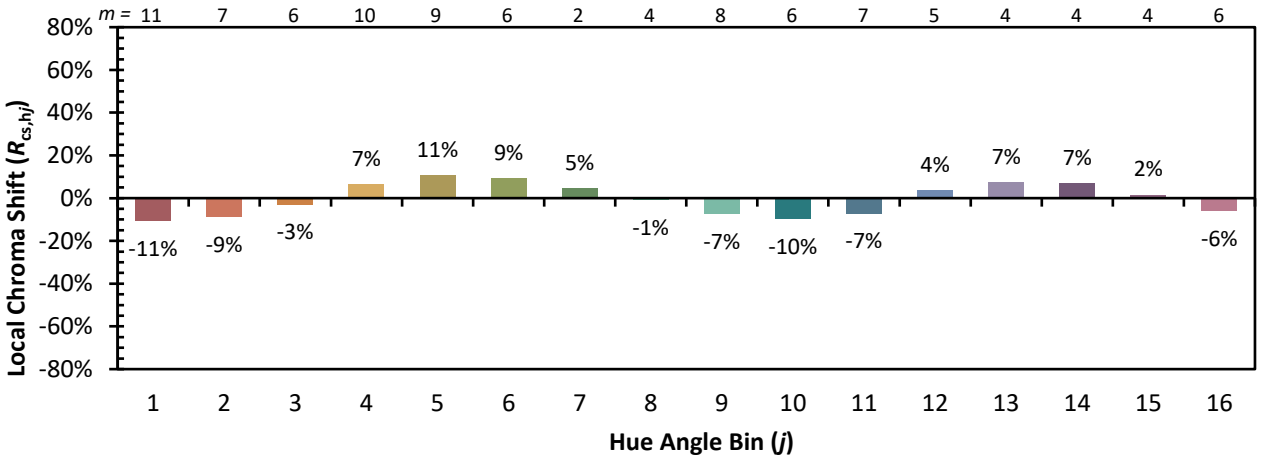
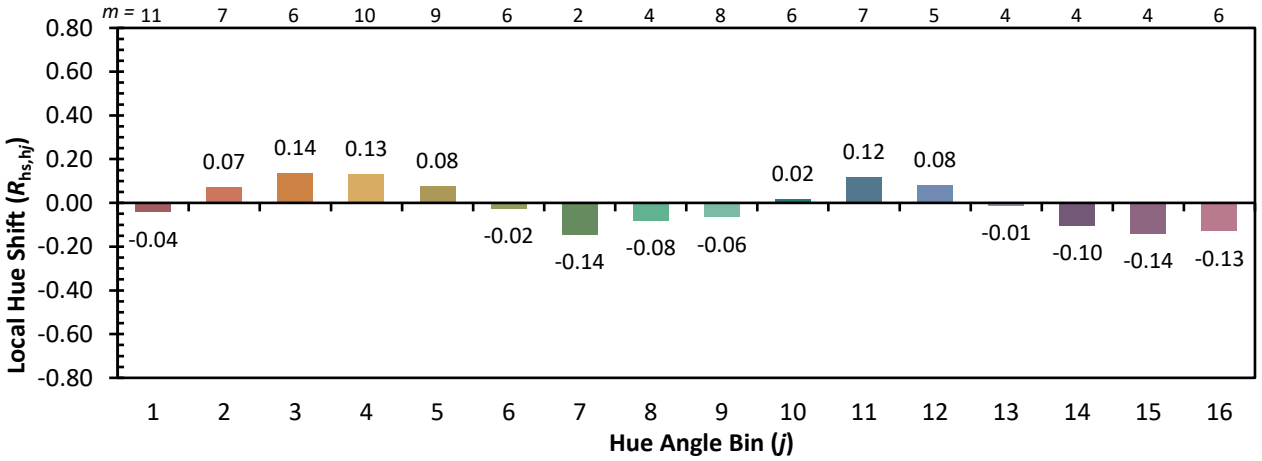
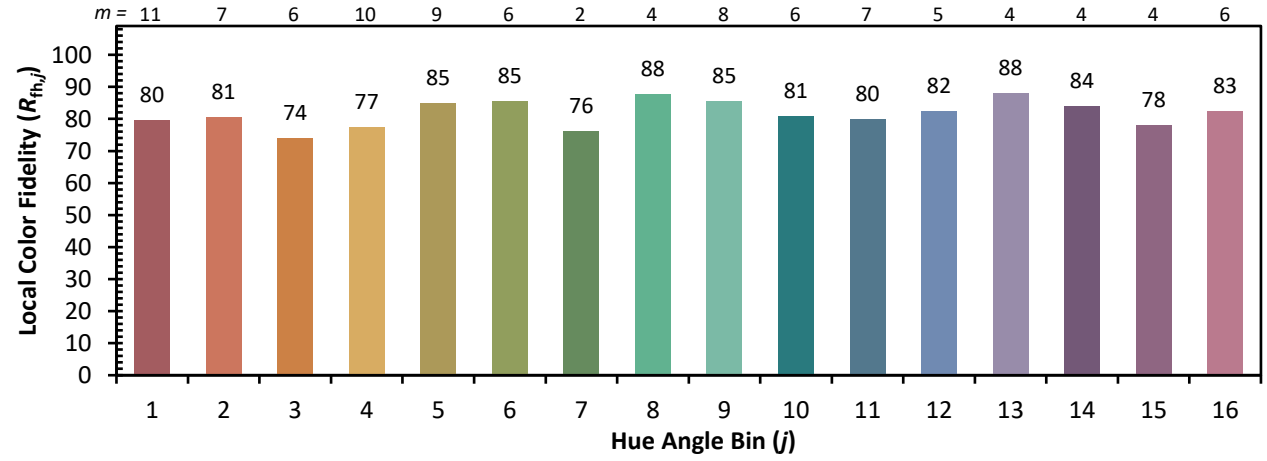
Color Rendition by Hue-Angle Bin







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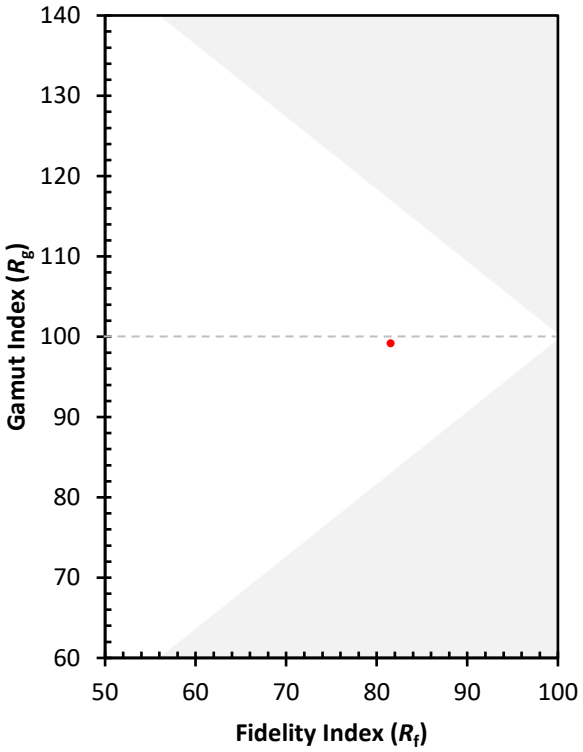
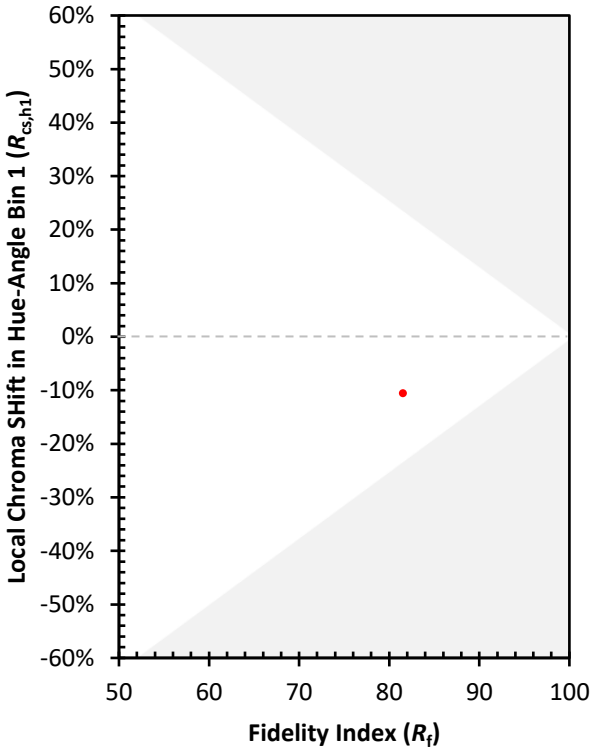
Measure Comparisons





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