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: P637481

Luminaire Tested: GWS-SA4C-830-U-SL2-W-HSS

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:	P637481
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-SL2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	12224 lumens
Efficiency:	N/A
Efficacy:	95.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	128.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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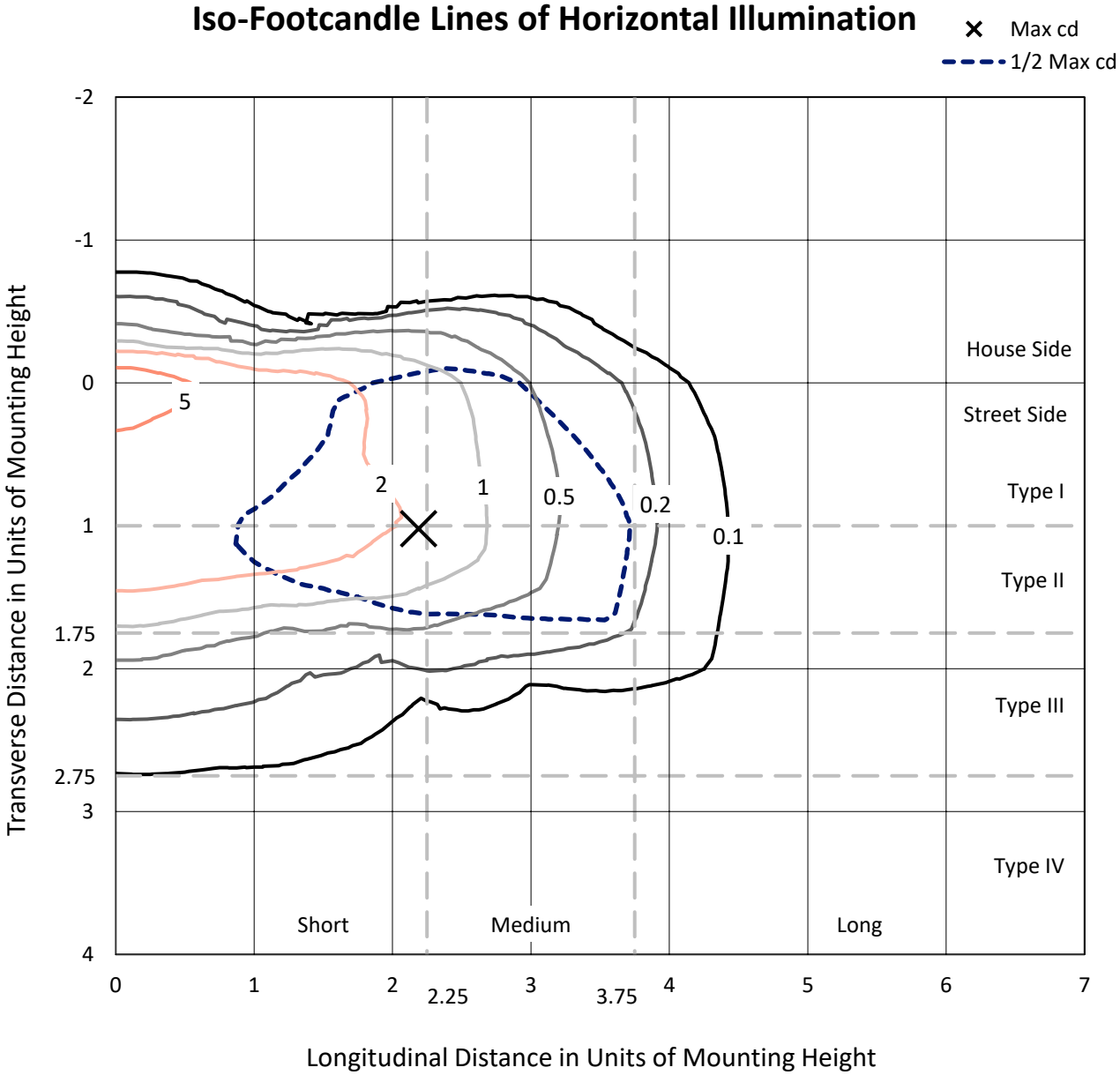
Scaled Data Report

REPORT NUMBER: P637481
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 7.4 fc
Type II - Short - N/A

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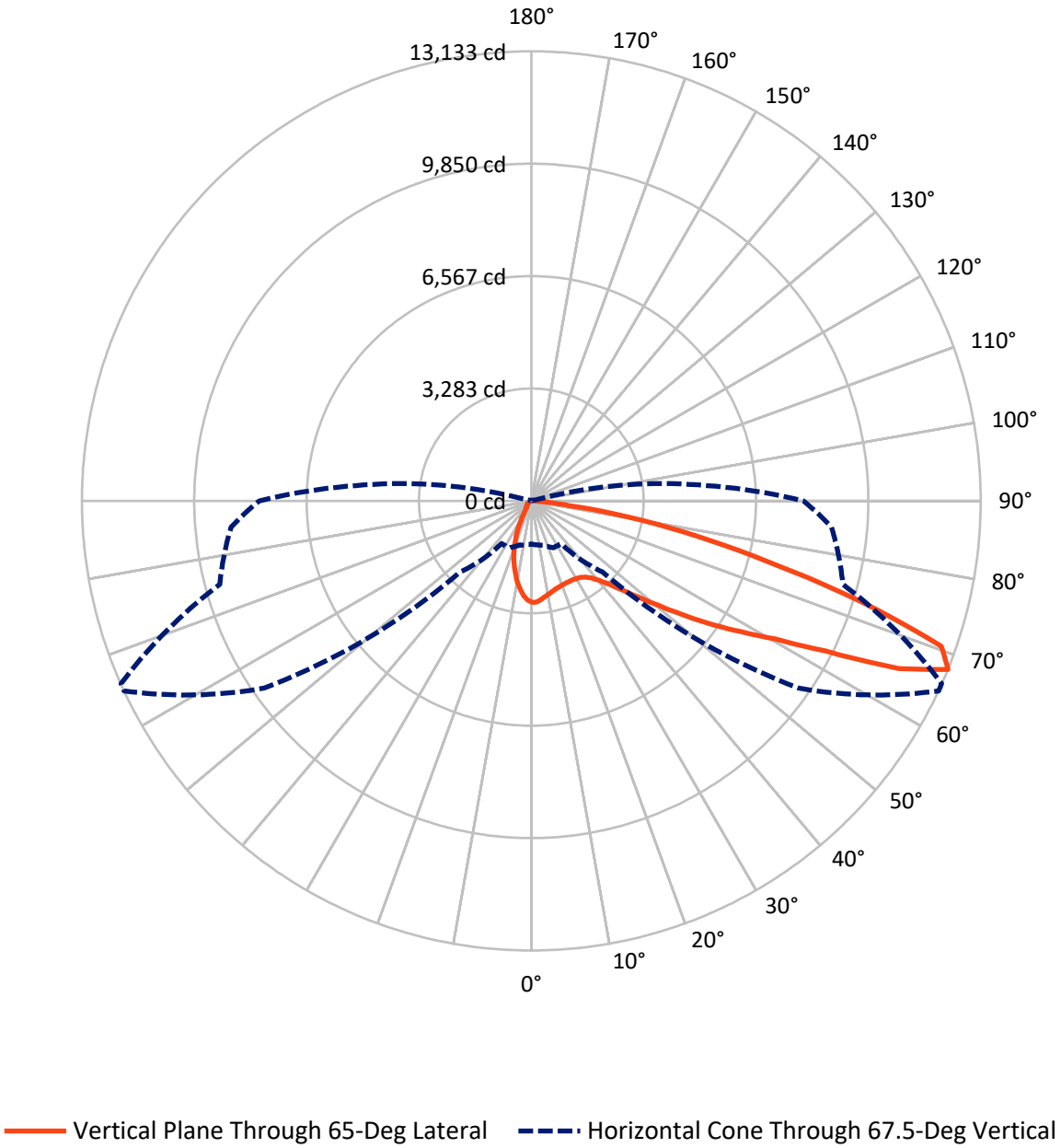
Luminous Intensity Polar Plot



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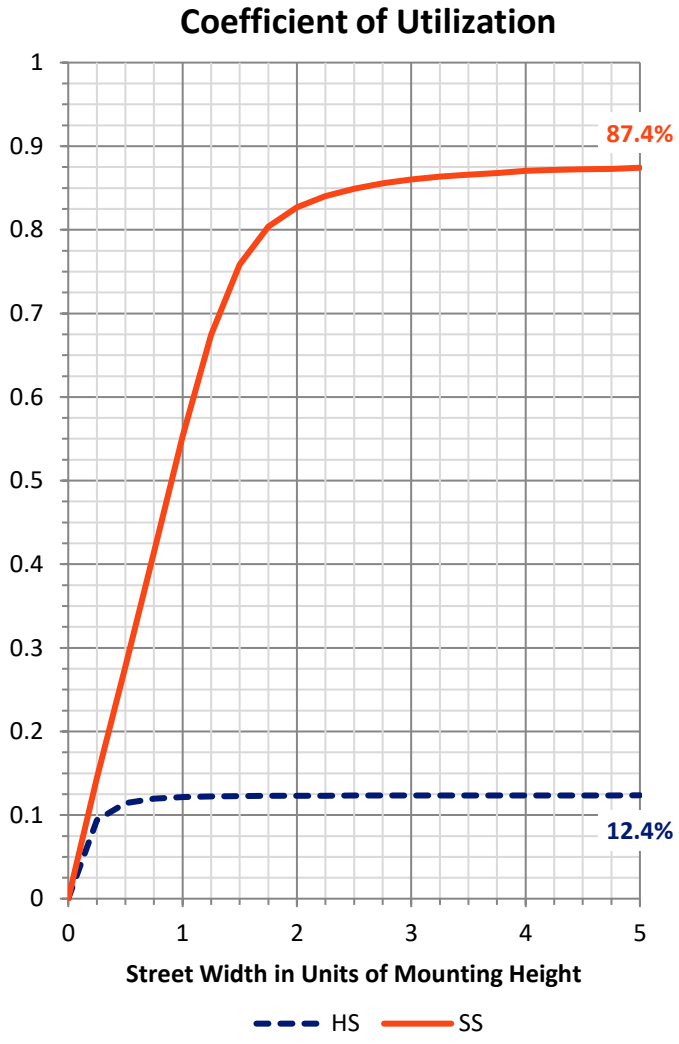
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1526.4	0.0	1526.4
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	10697.6	0.0	10697.6
	% Fixture	87.5	0.0	87.5
Total	Lumens	12224.0	0.0	12224.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.2	2.0
10°-20°	553.5	4.5
20°-30°	791.0	6.5
30°-40°	1150.7	9.4
40°-50°	1802.2	14.7
50°-60°	2811.6	23.0
60°-70°	3088.3	25.3
70°-80°	1643.6	13.4
80°-90°	136.8	1.1
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°	12224.0	100.0
0°-180°	12224.0	100.0



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REPORT NUMBER: P637481
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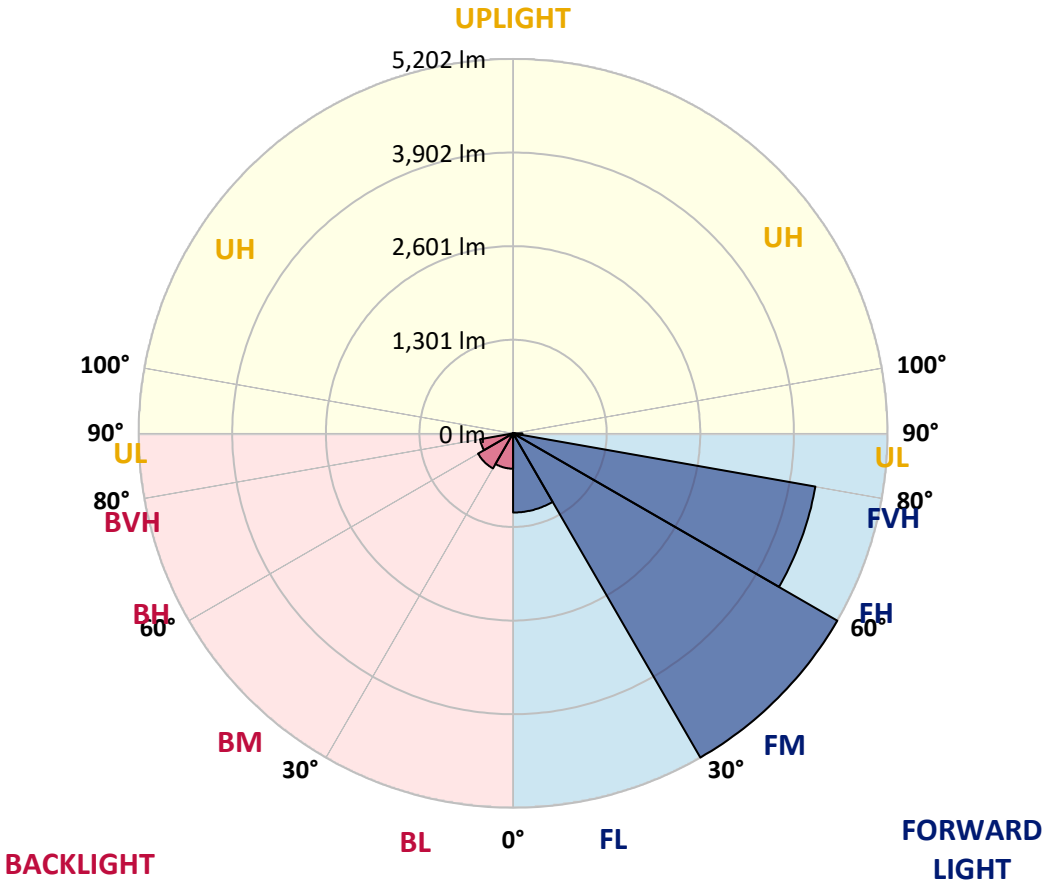
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1100.1	9.0			
FM	(30°-60°)	5202.3	42.6			
FH	(60°-80°)	4265.7	34.9			G2/5000
FVH	(80°-90°)	129.5	1.1			G2/225
BL	(0°-30°)	490.6	4.0	B1/500		
BM	(30°-60°)	562.2	4.6	B1/1000		
BH	(60°-80°)	466.2	3.8	B1/500		G1/500
BVH	(80°-90°)	7.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P637481
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7
2.5°	2861.9	2870.7	2858.6	2888.4	2894.0	2927.1	2945.9	2959.2	2958.1	2974.7	2974.7
5°	2693.9	2702.7	2696.1	2728.1	2753.6	2805.5	2848.6	2898.4	2900.6	2951.4	2970.2
7.5°	2551.3	2552.4	2552.4	2592.2	2625.3	2689.5	2753.6	2829.8	2838.7	2917.2	2966.9
10°	2434.1	2437.4	2438.5	2483.9	2520.3	2597.7	2679.5	2771.3	2781.2	2887.3	2964.7
12.5°	2353.4	2354.5	2358.9	2406.5	2446.3	2527.0	2609.9	2714.9	2728.1	2853.1	2954.8
15°	2314.7	2312.5	2314.7	2354.5	2394.3	2471.7	2556.8	2669.6	2683.9	2824.3	2955.9
17.5°	2312.5	2309.2	2307.0	2336.8	2362.3	2430.8	2517.0	2639.7	2655.2	2811.1	2968.0
20°	2344.6	2342.4	2331.3	2344.6	2350.1	2406.5	2491.6	2616.5	2632.0	2808.8	2994.6
22.5°	2428.6	2423.1	2406.5	2394.3	2364.5	2397.6	2473.9	2599.9	2617.6	2814.4	3028.8
25°	2553.5	2551.3	2530.3	2500.4	2424.2	2410.9	2475.0	2599.9	2616.5	2821.0	3065.3
27.5°	2741.4	2728.1	2701.6	2649.7	2540.2	2462.8	2497.1	2606.6	2623.1	2829.8	3095.1
30°	2932.6	2931.5	2922.7	2869.6	2707.1	2562.3	2543.5	2624.2	2639.7	2837.6	3122.8
32.5°	3130.5	3133.8	3155.9	3115.0	2937.1	2710.5	2627.6	2660.7	2671.8	2853.1	3147.1
35°	3318.4	3325.1	3383.7	3398.0	3216.7	2934.9	2764.6	2733.7	2734.8	2887.3	3179.2
37.5°	3498.6	3520.7	3614.7	3684.3	3564.9	3206.8	2962.5	2857.5	2848.6	2955.9	3227.8
40°	3703.1	3745.1	3863.4	3981.7	3944.1	3566.0	3232.2	3047.6	3028.8	3081.9	3315.1
42.5°	3929.7	3975.0	4132.0	4297.8	4315.5	4000.5	3569.4	3325.1	3293.0	3294.1	3478.7
45°	4172.9	4233.7	4416.1	4654.9	4762.1	4484.6	3985.0	3699.8	3667.7	3620.2	3741.8
47.5°	4492.4	4545.4	4721.2	4996.4	5202.1	5004.2	4530.0	4181.8	4123.2	4053.5	4150.8
50°	4767.6	4814.1	4965.5	5310.4	5738.2	5674.1	5147.9	4784.2	4727.8	4609.6	4690.2
52.5°	4828.4	4864.9	5004.2	5392.2	6148.3	6519.7	5905.1	5512.7	5472.9	5254.0	5285.0
55°	4555.4	4610.7	4735.6	5166.7	6255.5	7346.5	6887.8	6334.0	6251.1	5901.8	5957.0
57.5°	3865.6	3964.0	4081.2	4641.6	5964.8	7786.5	8260.7	7203.9	7128.8	6525.2	6526.3
60°	2833.2	2912.8	2991.2	3504.1	5275.0	7756.7	9506.5	8181.1	8044.1	7034.8	7016.0
62.5°	2060.5	2101.4	2100.3	2282.7	3622.4	7246.0	10160.9	9653.5	9334.1	7579.8	7472.6
65°	1620.5	1619.4	1667.0	1726.6	2022.9	5593.4	10241.6	11803.5	11458.7	8310.5	8087.2
67.5°	1261.3	1285.6	1333.1	1508.9	1519.9	2927.1	9531.9	13133.4	13126.7	9425.8	8806.8
70°	972.8	1005.9	1073.4	1329.8	1403.9	1638.2	7132.1	12712.2	12819.4	9924.4	8297.2
72.5°	624.6	622.3	721.8	1074.5	1348.6	1365.2	3944.1	10097.9	10219.5	8989.2	6708.7
75°	349.3	351.5	407.9	657.7	1256.8	1284.5	1953.3	7200.6	7296.8	7008.3	5154.5
77.5°	137.1	141.5	191.2	346.0	829.1	1147.4	1160.7	4910.2	4924.6	4343.1	3161.5
80°	55.3	58.6	97.3	214.4	505.2	772.7	829.1	2892.9	2834.3	1681.3	919.7
82.5°	16.6	17.7	38.7	121.6	264.2	549.4	559.3	1109.8	1047.9	361.5	234.3
85°	1.1	1.1	8.8	37.6	94.0	138.2	372.5	361.5	320.6	90.6	103.9
87.5°	0.0	0.0	1.1	1.1	2.2	4.4	39.8	66.3	67.4	16.6	46.4
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: P637481
CATALOG NUMBER: GWS-SA4C-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7	2964.7
2.5°	2974.7	2934.9	2931.5	2900.6	2869.6	2831.0	2785.6	2752.5	2729.3	2688.4	2680.6
5°	2970.2	2917.2	2867.4	2779.0	2680.6	2574.5	2481.6	2395.4	2341.3	2304.8	2289.3
7.5°	2961.4	2894.0	2779.0	2612.1	2447.4	2261.7	2116.9	1984.2	1893.6	1840.5	1817.3
10°	2954.8	2864.1	2677.3	2424.2	2168.8	1912.4	1692.4	1495.6	1386.2	1300.0	1285.6
12.5°	2941.5	2821.0	2546.9	2204.2	1874.8	1534.3	1253.5	1012.6	845.6	770.5	743.9
15°	2928.2	2775.7	2416.4	1972.0	1554.2	1134.1	793.7	561.5	446.6	411.2	409.0
17.5°	2926.0	2734.8	2274.9	1752.1	1218.2	742.8	452.1	363.7	339.4	330.5	330.5
20°	2932.6	2700.5	2135.6	1498.9	887.6	452.1	337.1	315.0	300.7	292.9	292.9
22.5°	2939.3	2665.1	2001.9	1243.6	589.2	330.5	297.4	278.6	262.0	253.1	248.7
25°	2943.7	2626.5	1853.8	987.1	384.7	287.4	260.9	236.6	216.7	205.6	205.6
27.5°	2942.6	2580.0	1704.5	736.2	298.5	255.3	223.3	197.9	178.0	165.8	166.9
30°	2933.8	2529.2	1549.8	514.0	260.9	223.3	191.2	164.7	144.8	134.9	133.8
32.5°	2927.1	2475.0	1370.7	361.5	234.3	195.7	162.5	137.1	120.5	112.8	111.6
35°	2919.4	2421.9	1200.5	275.2	211.1	169.1	137.1	116.1	102.8	96.2	96.2
37.5°	2921.6	2366.7	1015.9	236.6	187.9	147.0	117.2	99.5	88.4	81.8	80.7
40°	2955.9	2333.5	834.6	214.4	166.9	127.1	101.7	86.2	75.2	68.5	67.4
42.5°	3041.0	2334.6	661.0	197.9	148.1	108.3	88.4	74.1	64.1	56.4	55.3
45°	3211.2	2381.0	507.4	180.2	128.2	94.0	76.3	63.0	53.1	46.4	45.3
47.5°	3489.8	2519.2	384.7	164.7	111.6	81.8	65.2	53.1	44.2	38.7	37.6
50°	3933.0	2769.0	302.9	145.9	94.0	70.7	55.3	44.2	36.5	31.0	29.8
52.5°	4465.8	3143.8	259.8	129.3	80.7	61.9	47.5	36.5	29.8	25.4	24.3
55°	5078.2	3591.5	239.9	112.8	68.5	53.1	38.7	29.8	24.3	21.0	18.8
57.5°	5639.8	3994.9	238.8	96.2	58.6	45.3	32.1	25.4	21.0	16.6	15.5
60°	6187.0	4332.1	224.4	79.6	50.8	37.6	27.6	21.0	17.7	14.4	13.3
62.5°	6683.3	4606.2	187.9	64.1	43.1	31.0	23.2	18.8	15.5	12.2	12.2
65°	7306.7	4955.5	143.7	52.0	35.4	25.4	19.9	16.6	14.4	11.1	11.1
67.5°	*7951.2*	*5140.1*	*102.8*	*43.1*	*28.7*	*22.1*	*17.7*	*15.5*	*12.2*	*9.9*	*9.9*
70°	7201.7	4343.1	74.1	35.4	24.3	18.8	15.5	14.4	12.2	9.9	8.8
72.5°	5624.3	3131.6	55.3	27.6	21.0	17.7	14.4	13.3	11.1	8.8	8.8
75°	4170.7	1826.1	42.0	22.1	16.6	14.4	14.4	13.3	11.1	8.8	7.7
77.5°	2267.2	636.7	32.1	17.7	13.3	11.1	12.2	12.2	9.9	7.7	6.6
80°	600.2	174.7	22.1	13.3	11.1	8.8	8.8	11.1	8.8	6.6	6.6
82.5°	174.7	50.8	15.5	11.1	8.8	7.7	7.7	7.7	6.6	5.5	4.4
85°	85.1	18.8	11.1	8.8	7.7	6.6	5.5	5.5	4.4	3.3	3.3
87.5°	37.6	7.7	8.8	7.7	7.7	5.5	4.4	3.3	3.3	2.2	1.1
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

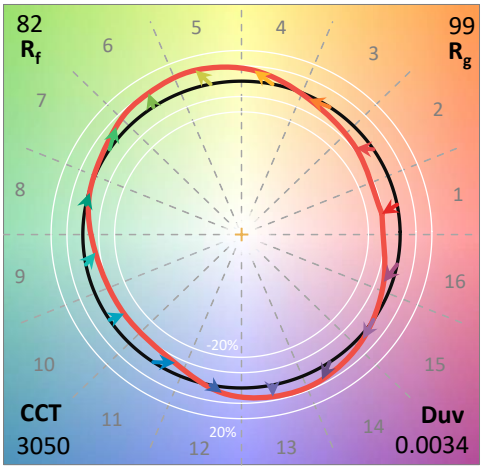
Test Information

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

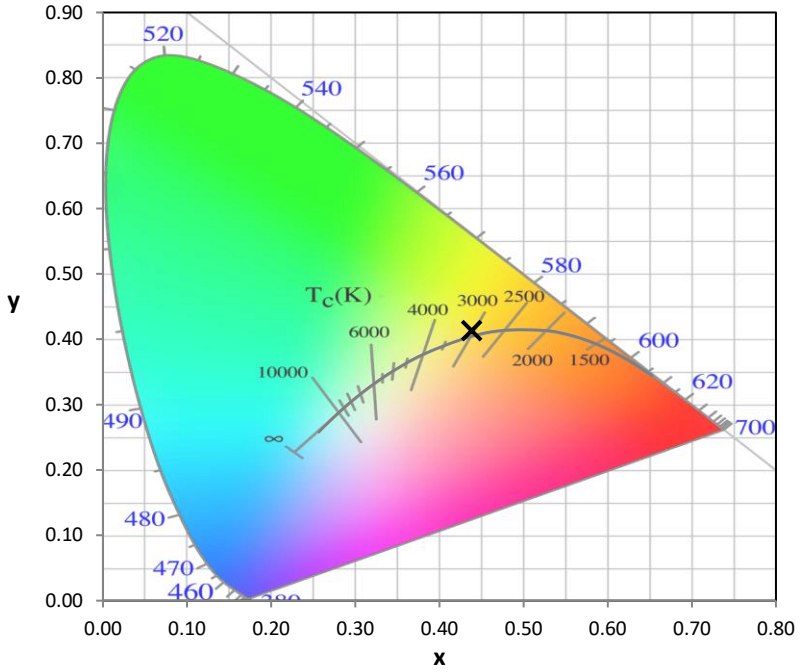
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

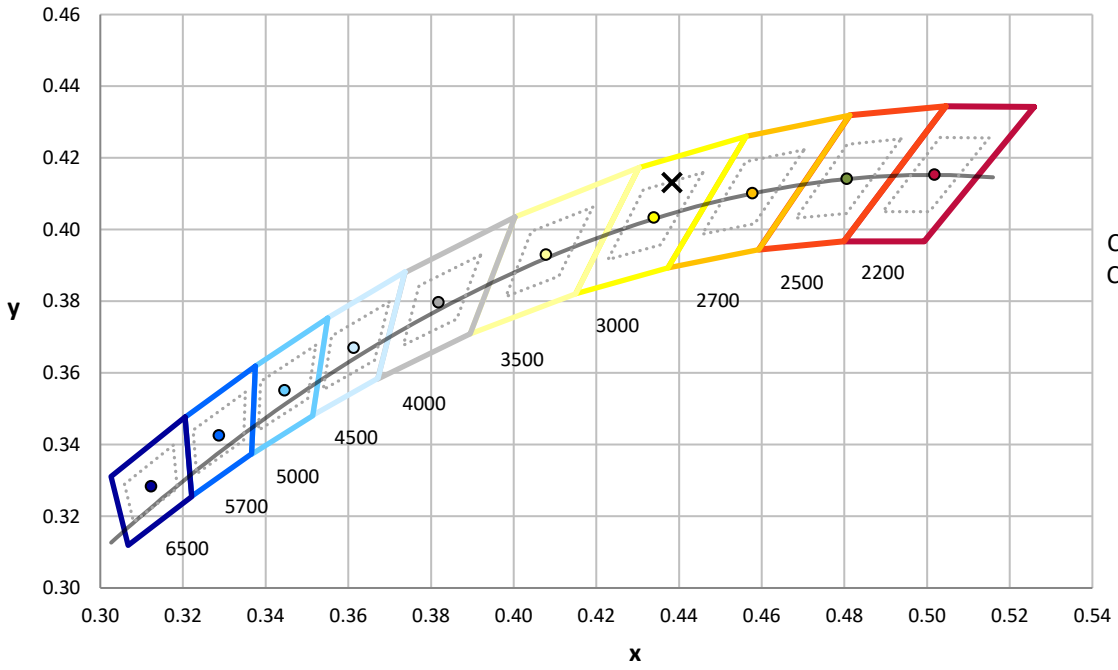
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

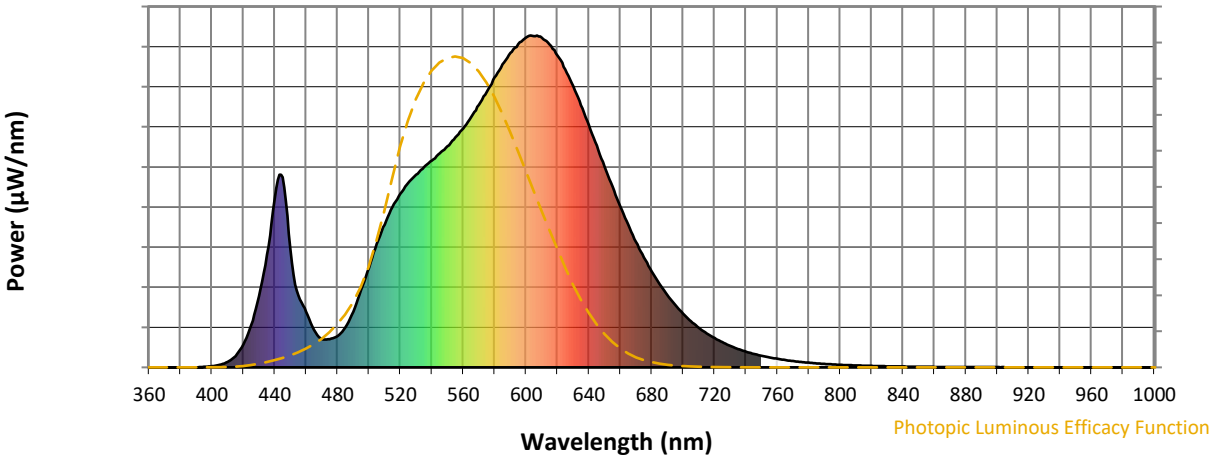


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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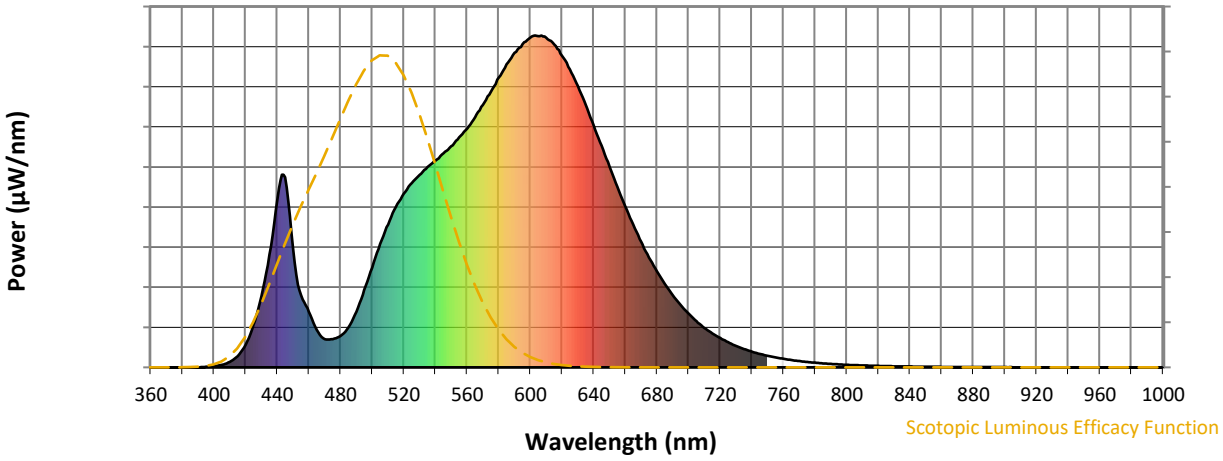
Scotopic Flux vs. Wavelength



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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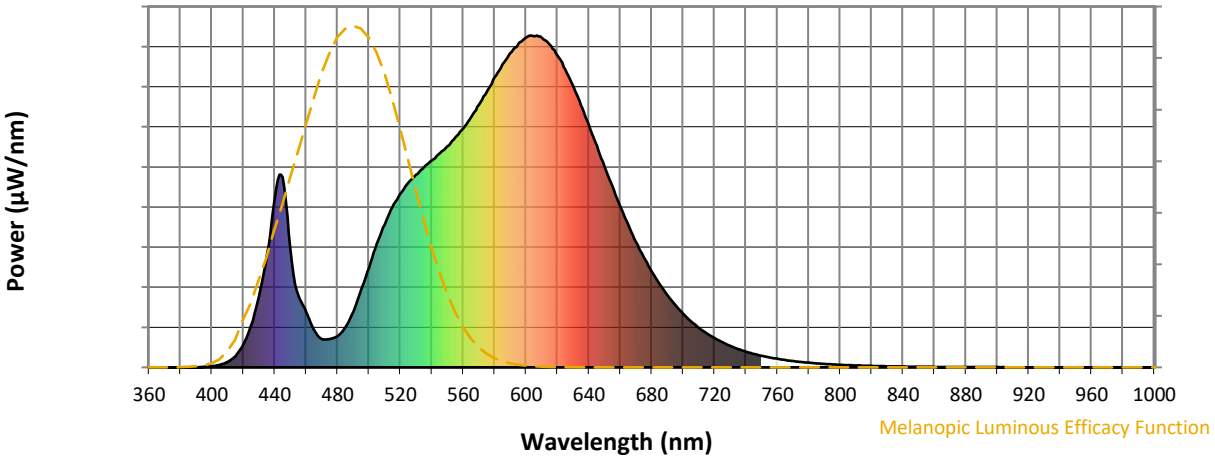
Melanopic Flux vs. Wavelength



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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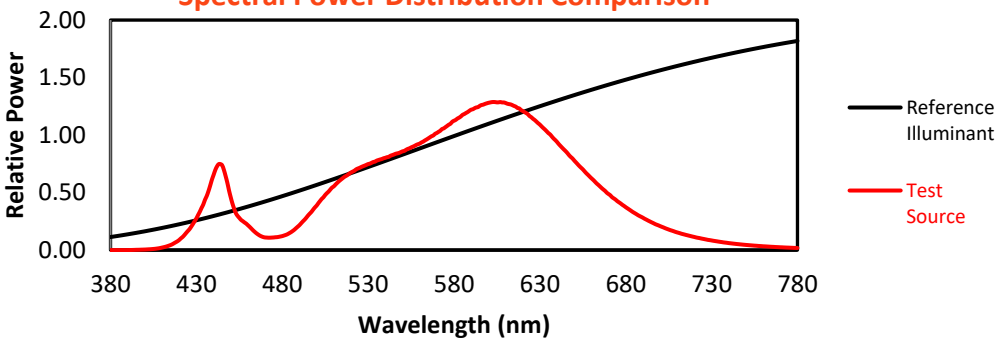
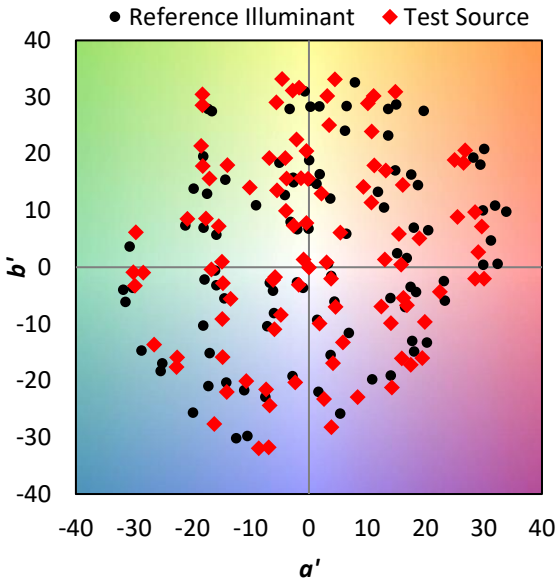
Summary

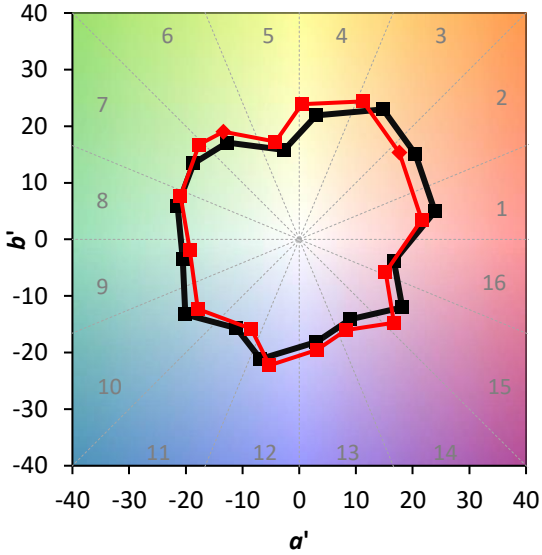
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

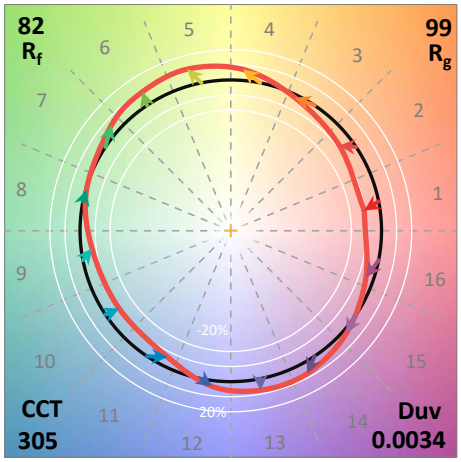
Spectral Power Distribution Comparison

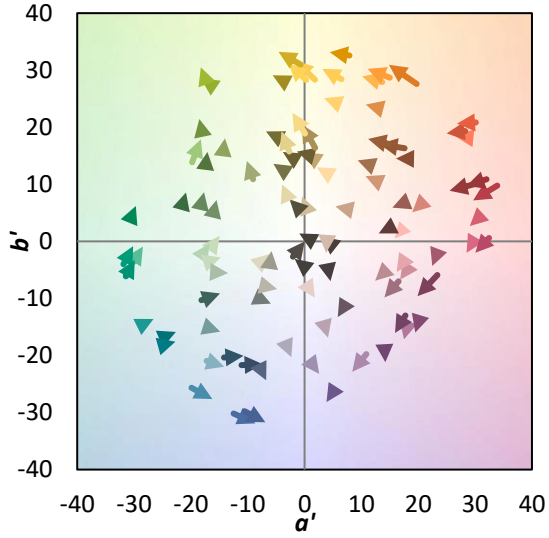


Color Vector Graphics









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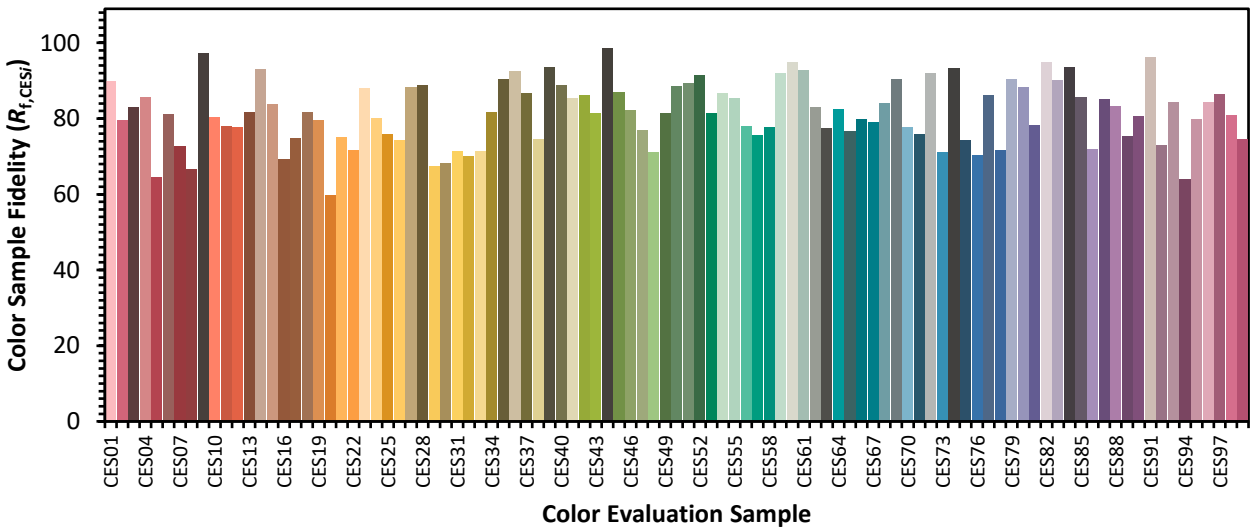
Individual Sample Fidelity Index ($R_{f,i}$)

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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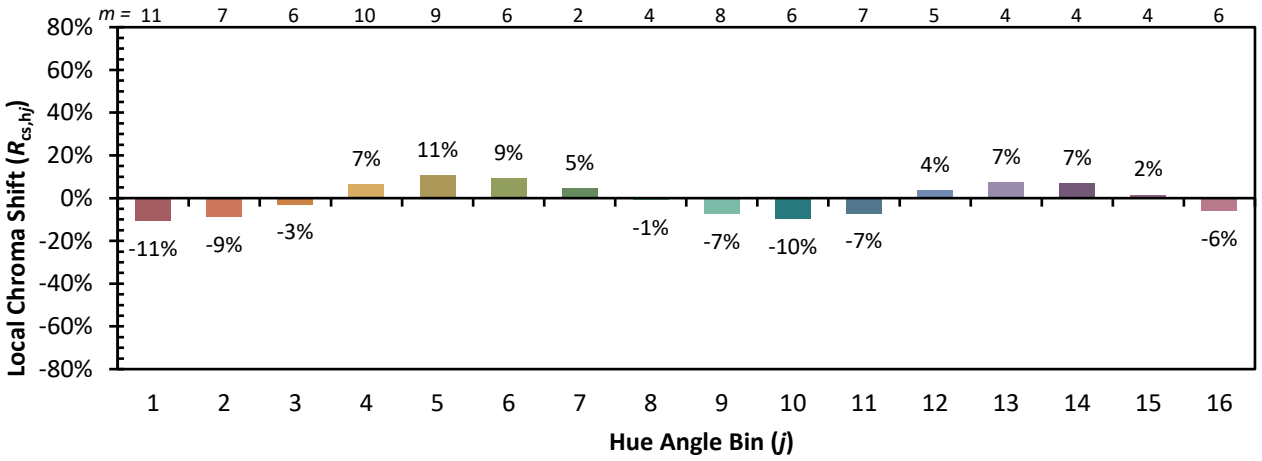
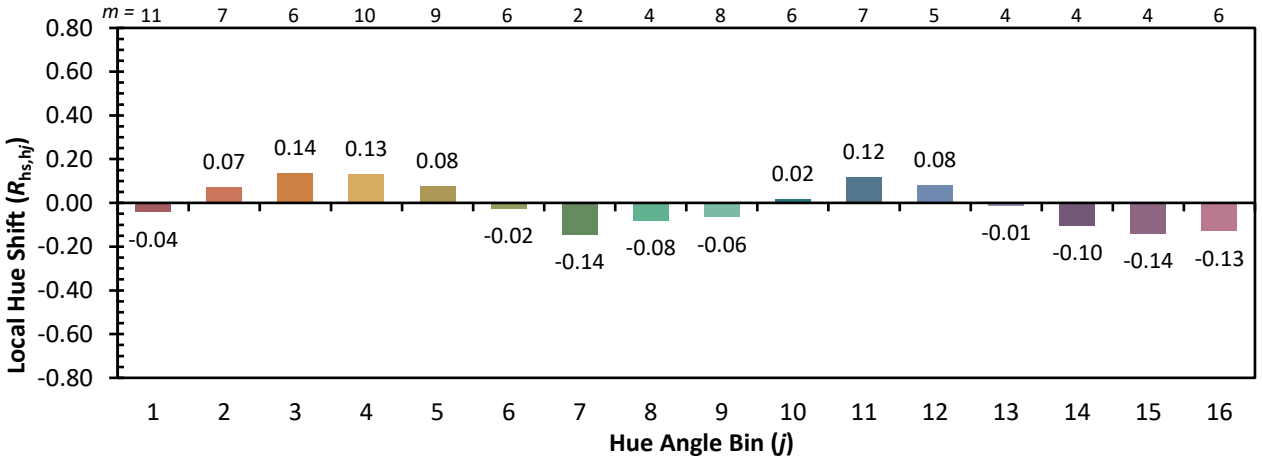
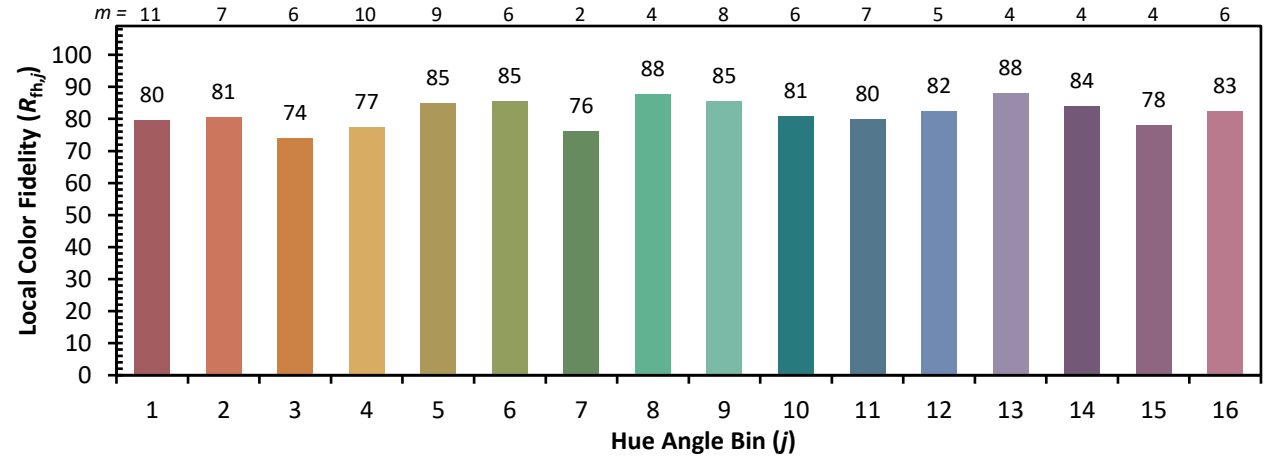
Color Rendition by Hue-Angle Bin







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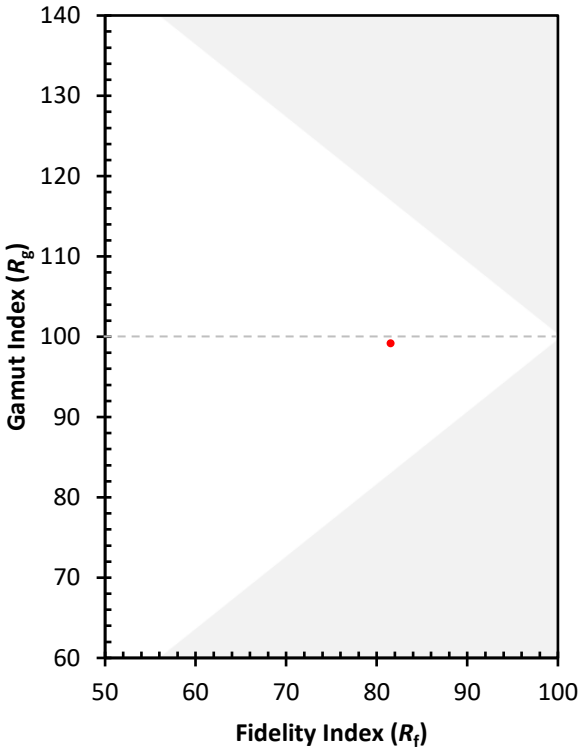
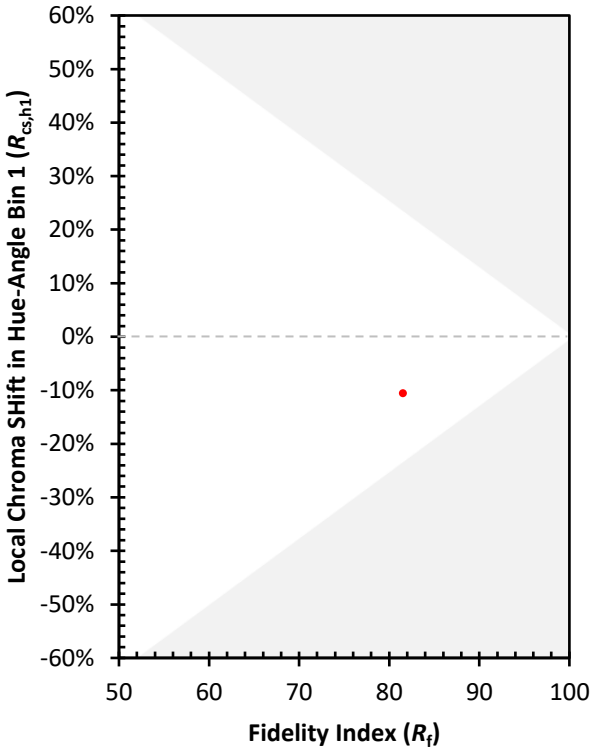
Measure Comparisons





(END OF REPORT)