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: P637507

Luminaire Tested: GWS-SA4C-830-U-T3-W-GRSWH

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:	P637507
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-25)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-T3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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:	13161.4 lumens
Efficiency:	N/A
Efficacy:	102.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - 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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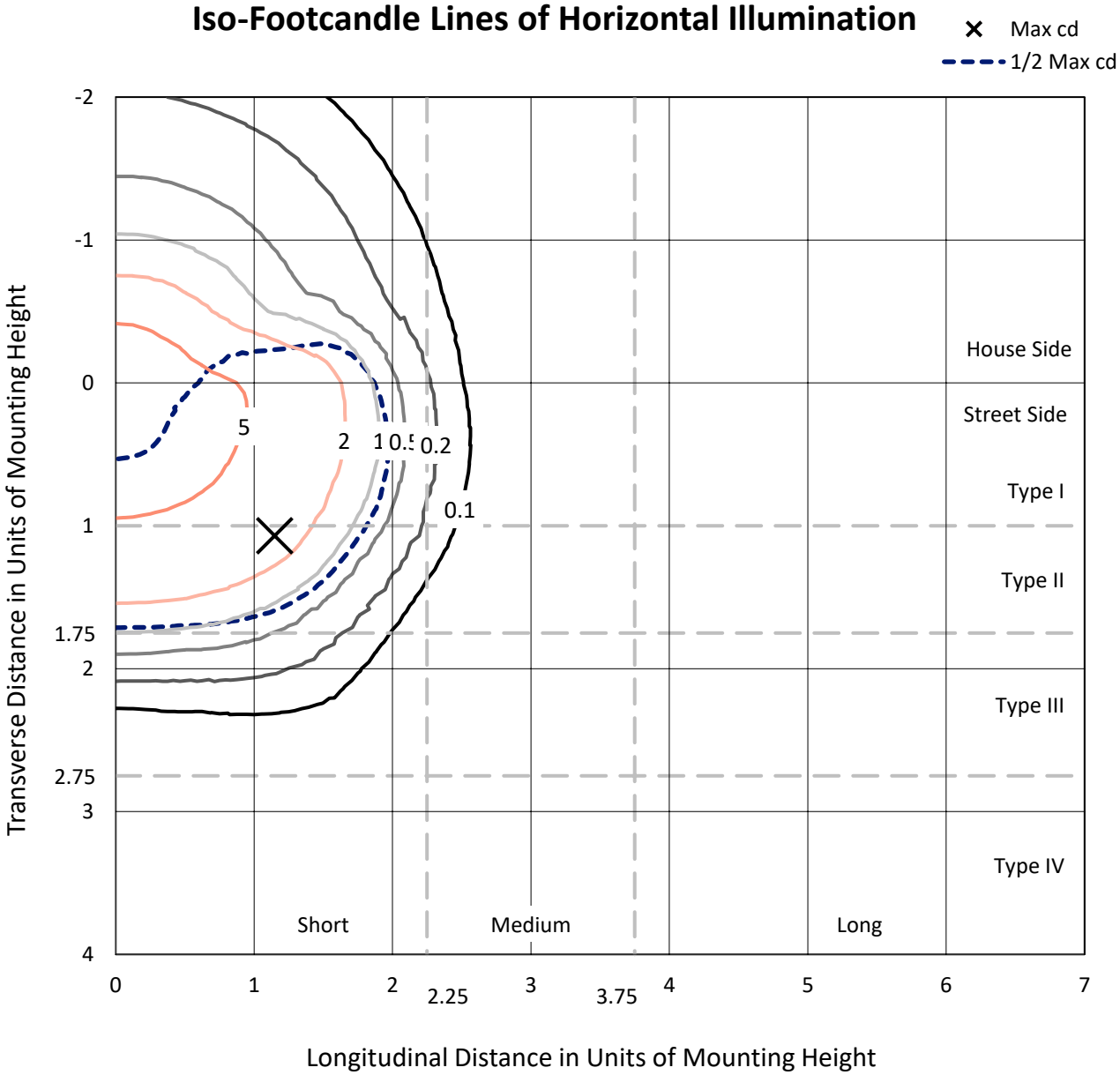
REPORT NUMBER: P637507
CATALOG NUMBER: GWS-SA4C-830-U-T3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.8 fc
Type II - Short - N/A

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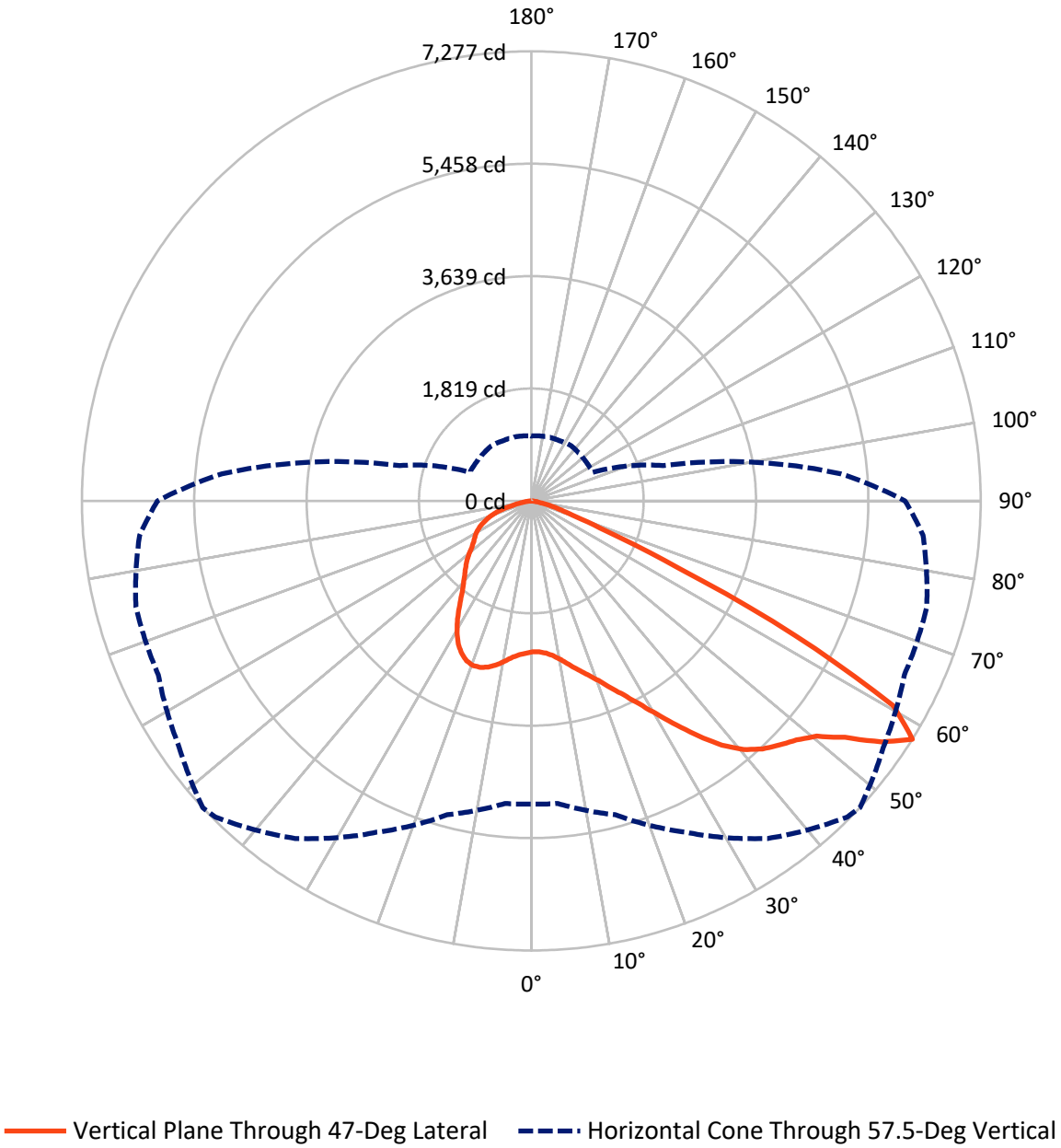
Luminous Intensity Polar Plot



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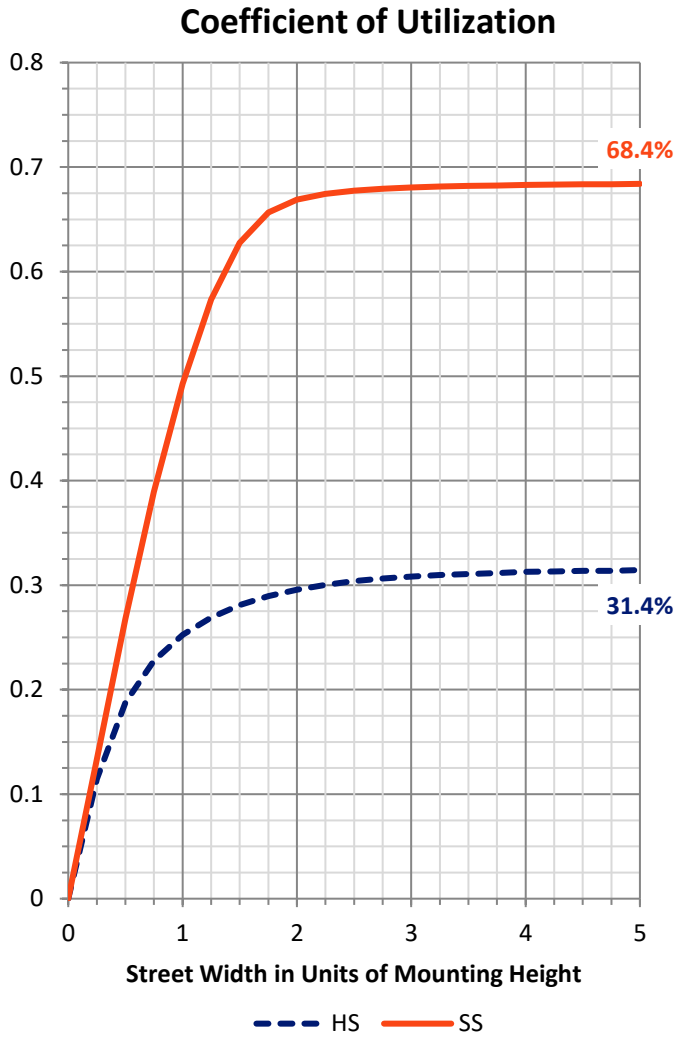
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4165.6	0.0	4165.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	8995.9	0.0	8995.9
	% Fixture	68.4	0.0	68.4
Total	Lumens	13161.4	0.0	13161.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.7	1.8
10°-20°	791.8	6.0
20°-30°	1425.7	10.8
30°-40°	2153.4	16.4
40°-50°	2899.8	22.0
50°-60°	3484.5	26.5
60°-70°	1697.0	12.9
70°-80°	418.1	3.2
80°-90°	50.2	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°	13161.4	100.0
0°-180°	13161.4	100.0



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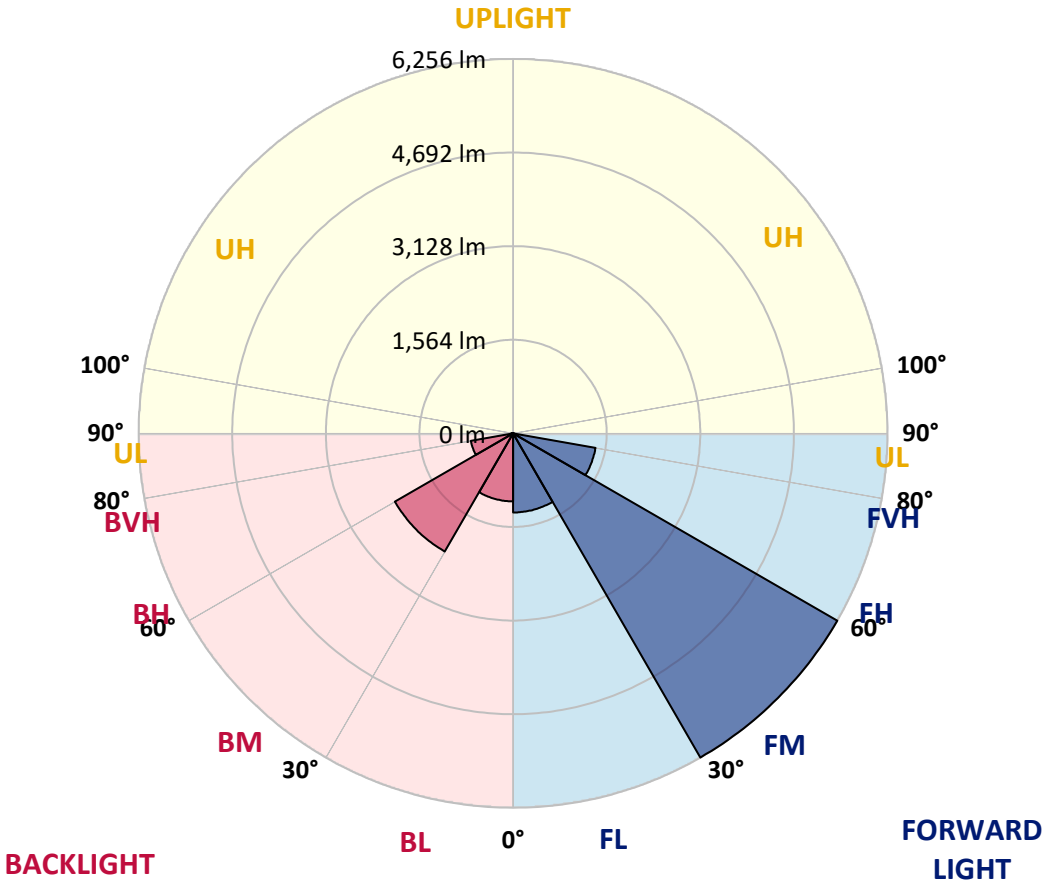
REPORT NUMBER: P637507
CATALOG NUMBER: GWS-SA4C-830-U-T3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1322.0	10.0			
FM	(30°-60°)	6256.3	47.5			
FH	(60°-80°)	1398.7	10.6			G1/1800
FVH	(80°-90°)	18.9	0.1			G1/100
BL	(0°-30°)	1136.3	8.6	B3/2500		
BM	(30°-60°)	2281.5	17.3	B2/2500		
BH	(60°-80°)	716.5	5.4	B2/1000		G2/1000
BVH	(80°-90°)	31.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type II Short



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REPORT NUMBER: P637507
CATALOG NUMBER: GWS-SA4C-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2436.4	2435.3	2435.3	2441.9	2441.9	2444.1	2447.4	2450.7	2451.9	2446.3	2434.2
5°	2462.9	2462.9	2462.9	2468.4	2468.4	2470.6	2475.1	2476.2	2475.1	2466.2	2454.1
7.5°	2504.9	2504.9	2506.0	2512.7	2518.2	2521.5	2529.2	2528.1	2524.8	2510.4	2495.0
10°	2573.5	2576.8	2580.1	2587.8	2598.9	2606.6	2612.1	2612.1	2607.7	2585.6	2565.7
12.5°	2670.7	2675.2	2678.5	2685.1	2693.9	2707.2	2719.4	2719.4	2713.8	2686.2	2656.4
15°	2784.6	2789.0	2787.9	2790.1	2806.7	2825.5	2835.4	2842.1	2844.3	2805.6	2759.2
17.5°	2915.0	2919.5	2915.0	2908.4	2910.6	2940.5	2958.1	2982.5	2996.8	2944.9	2870.8
20°	3033.3	3028.9	3028.9	3033.3	3039.9	3076.4	3103.0	3142.8	3160.4	3097.4	2982.5
22.5°	3158.2	3168.2	3163.8	3163.8	3190.3	3251.1	3283.1	3335.1	3353.9	3272.1	3117.3
25°	3319.6	3328.5	3326.3	3328.5	3359.4	3445.6	3477.7	3573.9	3592.7	3475.5	3266.6
27.5°	3496.5	3510.9	3517.5	3515.3	3565.0	3677.8	3717.6	3851.3	3885.6	3703.2	3425.7
30°	3726.4	3741.9	3747.4	3745.2	3803.8	3957.5	4002.8	4155.3	4204.0	3972.9	3628.0
32.5°	3992.8	4008.3	4024.9	4031.5	4106.7	4263.7	4328.9	4487.0	4556.6	4284.7	3872.3
35°	4257.0	4270.3	4302.4	4354.3	4457.1	4617.4	4674.9	4830.8	4898.2	4608.6	4167.5
37.5°	4548.9	4557.7	4585.3	4657.2	4805.3	4957.9	5015.4	5164.6	5172.3	4921.4	4501.3
40°	4868.3	4868.3	4862.8	4933.6	5088.3	5242.0	5291.7	5377.9	5332.6	5162.4	4826.3
42.5°	5139.2	5134.7	5139.2	5205.5	5320.5	5445.4	5488.5	5471.9	5414.4	5347.0	5120.4
45°	5383.5	5386.8	5426.6	5477.4	5537.1	5611.2	5636.6	5542.7	5490.7	5495.1	5355.8
47.5°	5549.3	5552.6	5645.5	5730.6	5767.1	5790.3	5779.2	5648.8	5622.2	5672.0	5537.1
50°	5571.4	5589.1	5749.4	5924.0	6014.7	6018.0	5987.0	5827.9	5820.1	5876.5	5634.4
52.5°	5575.8	5593.5	5793.6	6108.6	6344.1	6393.8	6358.5	6192.6	6112.0	6055.6	5753.8
55°	5559.2	5579.1	5800.2	6232.4	6683.5	6882.4	6885.8	6651.4	6393.8	6356.3	6094.3
57.5°	4908.1	4915.9	5258.6	5917.4	6670.2	7234.0	7277.1	6958.7	6664.7	6629.3	6367.3
60°	3419.1	3450.1	3822.6	4692.6	5603.5	6597.2	6736.5	6643.7	6446.9	6189.3	5463.1
62.5°	1712.3	1738.8	2112.5	2934.9	3864.6	4649.5	4798.7	4897.1	4943.5	4667.1	3719.8
65°	737.3	757.2	989.4	1533.2	2187.7	2566.8	2618.8	2737.1	3026.7	2700.6	2004.2
67.5°	493.0	506.3	624.6	935.2	1288.9	1313.3	1305.5	1330.9	1394.0	1150.8	905.4
70°	378.1	389.1	468.7	685.4	926.4	792.6	750.6	680.9	739.5	753.9	734.0
72.5°	274.1	283.0	342.7	467.6	580.4	506.3	499.7	535.0	614.6	636.7	624.6
75°	176.9	181.3	217.8	256.5	299.6	325.0	338.3	402.4	483.1	499.7	485.3
77.5°	118.3	121.6	142.6	164.7	170.2	171.3	175.8	204.5	259.8	290.7	287.4
80°	61.9	61.9	69.6	69.6	79.6	95.1	99.5	118.3	143.7	159.2	160.3
82.5°	24.3	25.4	29.8	33.2	39.8	48.6	52.0	61.9	75.2	86.2	96.2
85°	9.9	11.1	12.2	14.4	17.7	22.1	23.2	26.5	35.4	44.2	49.7
87.5°	0.0	0.0	1.1	1.1	2.2	3.3	3.3	4.4	5.5	9.9	13.3
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: P637507
CATALOG NUMBER: GWS-SA4C-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2448.5	2434.2	2448.5	2453.0	2465.1	2469.5	2461.8	2460.7	2460.7	2449.6	2446.3
5°	2465.1	2451.9	2466.2	2472.9	2490.5	2501.6	2503.8	2512.7	2518.2	2513.8	2512.7
7.5°	2506.0	2489.4	2504.9	2514.9	2538.1	2555.8	2563.5	2583.4	2597.8	2595.6	2594.5
10°	2577.9	2555.8	2573.5	2590.0	2615.5	2636.5	2637.6	2648.6	2663.0	2658.6	2656.4
12.5°	2660.8	2639.8	2659.7	2676.3	2706.1	2714.9	2700.6	2696.2	2698.4	2692.8	2688.4
15°	2762.5	2732.6	2750.3	2769.1	2785.7	2775.7	2744.8	2732.6	2731.5	2723.8	2719.4
17.5°	2864.2	2826.6	2839.9	2849.8	2842.1	2811.1	2772.4	2751.4	2741.5	2726.0	2721.6
20°	2964.8	2917.2	2915.0	2907.3	2871.9	2815.5	2763.6	2721.6	2696.2	2675.2	2667.4
22.5°	3079.7	3013.4	2980.3	2944.9	2867.5	2775.7	2697.3	2637.6	2596.7	2570.1	2561.3
25°	3203.6	3109.6	3041.1	2970.3	2823.3	2690.6	2581.2	2499.4	2450.7	2422.0	2412.1
27.5°	3326.3	3196.9	3094.1	2973.6	2734.8	2567.9	2420.9	2310.4	2261.7	2238.5	2230.8
30°	3492.1	3313.0	3157.1	2930.5	2618.8	2397.7	2214.2	2102.5	2070.5	2053.9	2047.3
32.5°	3683.3	3460.0	3241.1	2839.9	2470.6	2198.7	2005.3	1927.9	1905.8	1873.7	1872.6
35°	3935.3	3670.0	3320.7	2706.1	2283.8	1985.4	1845.0	1789.7	1749.9	1699.1	1694.6
37.5°	4229.4	3932.0	3363.8	2535.9	2066.1	1809.6	1725.6	1663.7	1599.6	1532.1	1523.3
40°	4533.4	4238.2	3367.2	2334.7	1852.7	1693.5	1622.8	1542.1	1462.5	1387.3	1377.4
42.5°	4852.9	4523.4	3308.6	2102.5	1678.1	1592.9	1521.1	1419.4	1329.8	1279.0	1273.5
45°	5138.1	4753.4	3175.9	1858.2	1548.7	1508.9	1417.2	1307.7	1260.2	1223.7	1216.0
47.5°	5362.5	4905.9	2996.8	1639.4	1443.7	1422.7	1303.3	1246.9	1210.5	1177.3	1169.6
50°	5473.0	4940.2	2763.6	1461.4	1346.4	1321.0	1239.2	1196.1	1171.8	1145.2	1138.6
52.5°	5610.1	4978.9	2562.4	1312.2	1251.4	1217.1	1186.1	1151.9	1134.2	1117.6	1112.1
55°	5925.1	5124.8	2456.3	1192.8	1160.7	1145.2	1140.8	1112.1	1106.5	1095.5	1085.5
57.5°	*6053.4*	*5030.8*	*2205.3*	*1095.5*	*1088.9*	*1091.1*	*1102.1*	*1075.6*	*1070.1*	*1056.8*	*1050.2*
60°	4868.3	3802.7	1493.4	1011.5	1029.2	1043.5	1054.6	1028.1	1020.3	1018.1	1009.3
62.5°	3119.5	2339.1	1042.4	933.0	959.5	977.2	983.8	958.4	952.9	970.6	971.7
65°	1623.9	1274.6	845.7	849.0	871.1	897.6	910.9	902.0	899.8	918.6	919.7
67.5°	829.1	779.3	737.3	749.5	767.2	801.4	832.4	871.1	884.3	886.6	887.7
70°	706.4	684.3	663.3	671.0	689.8	708.6	738.4	757.2	735.1	729.6	727.4
72.5°	601.4	584.8	574.8	583.7	593.6	590.3	581.5	590.3	593.6	594.7	595.8
75°	467.6	455.4	447.7	448.8	448.8	436.6	420.1	410.1	399.1	390.2	390.2
77.5°	286.3	288.5	296.3	295.2	294.0	289.6	273.0	264.2	237.7	229.9	229.9
80°	163.6	166.9	174.7	176.9	176.9	171.3	154.8	144.8	132.7	127.1	126.0
82.5°	99.5	103.9	108.3	110.5	111.6	105.0	90.6	82.9	76.3	70.7	70.7
85°	52.0	54.2	58.6	59.7	56.4	49.7	42.0	38.7	32.1	31.0	31.0
87.5°	14.4	15.5	17.7	14.4	13.3	9.9	5.5	4.4	2.2	1.1	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

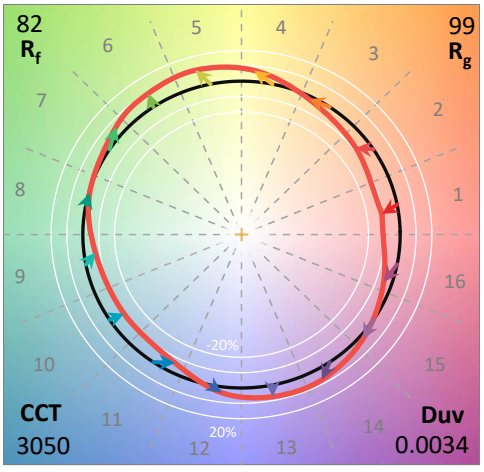
Test Information

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

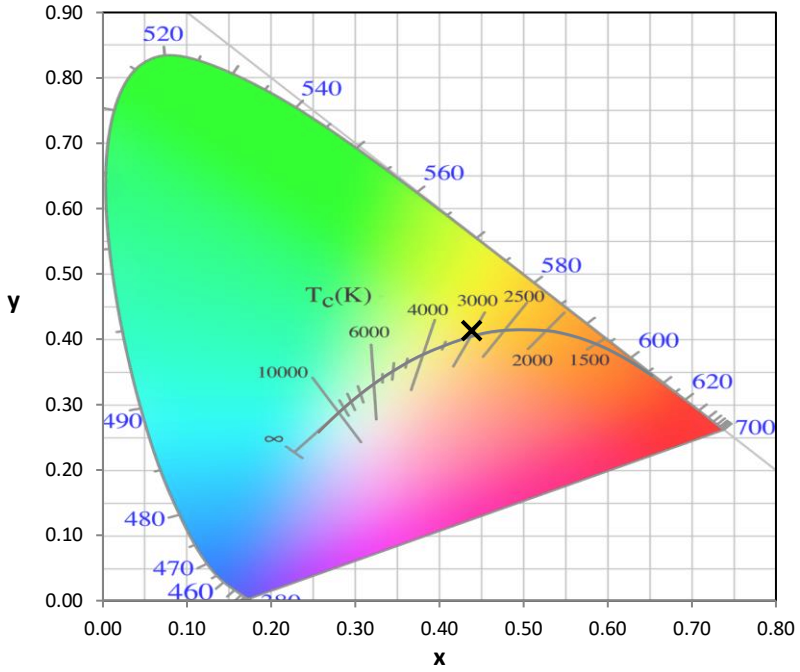
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

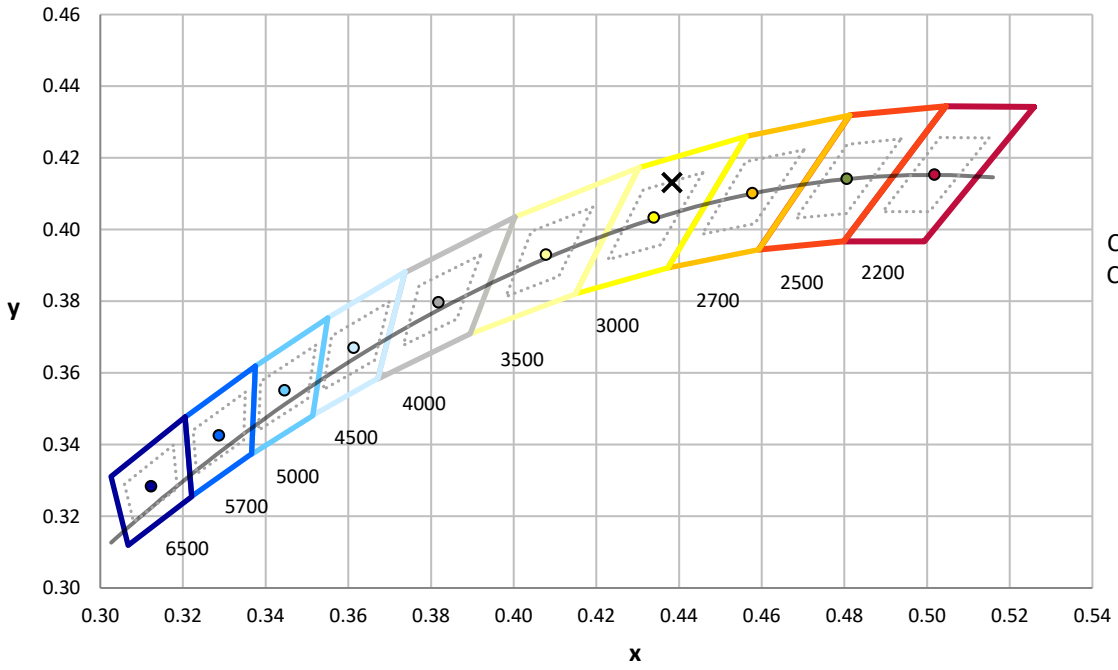
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

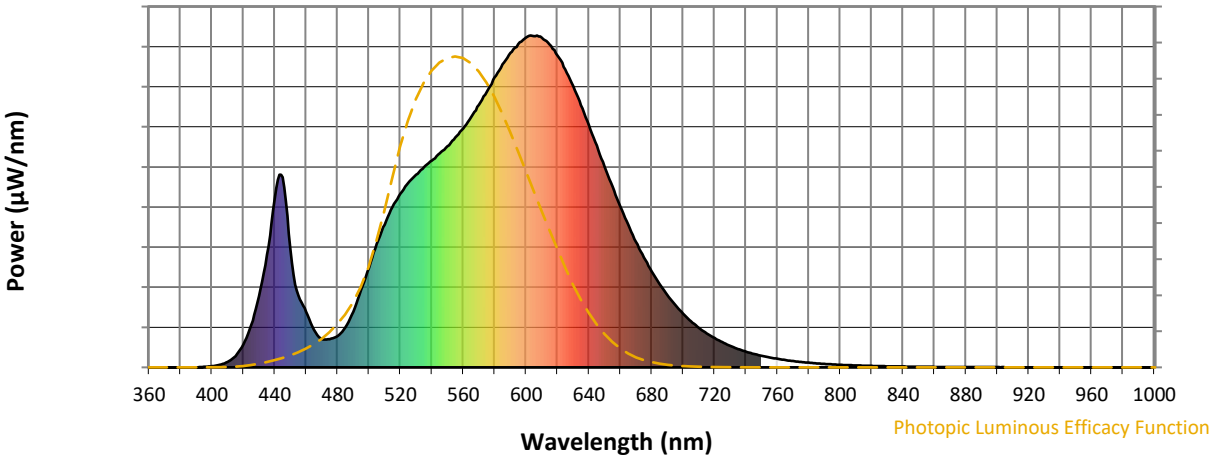


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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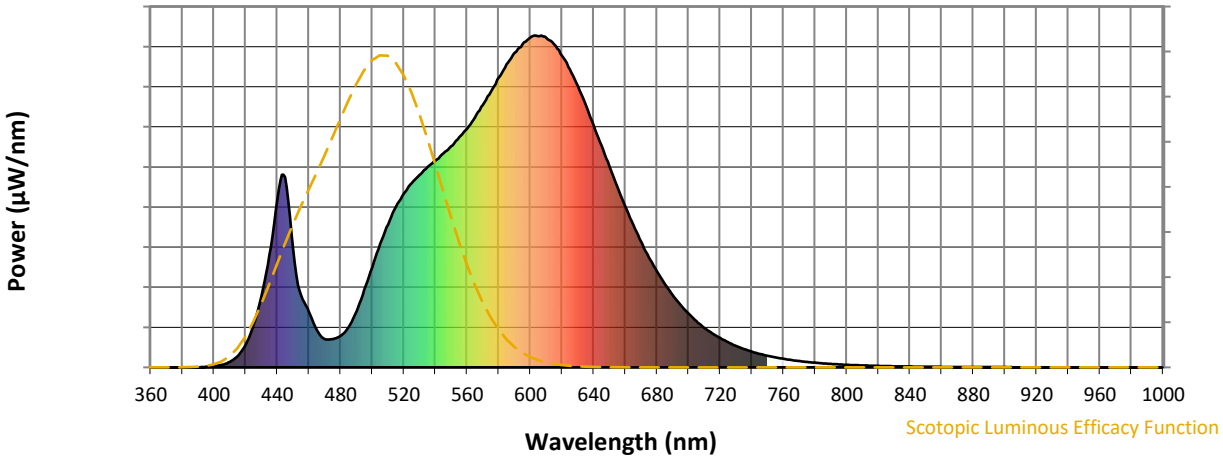
Scotopic Flux vs. Wavelength



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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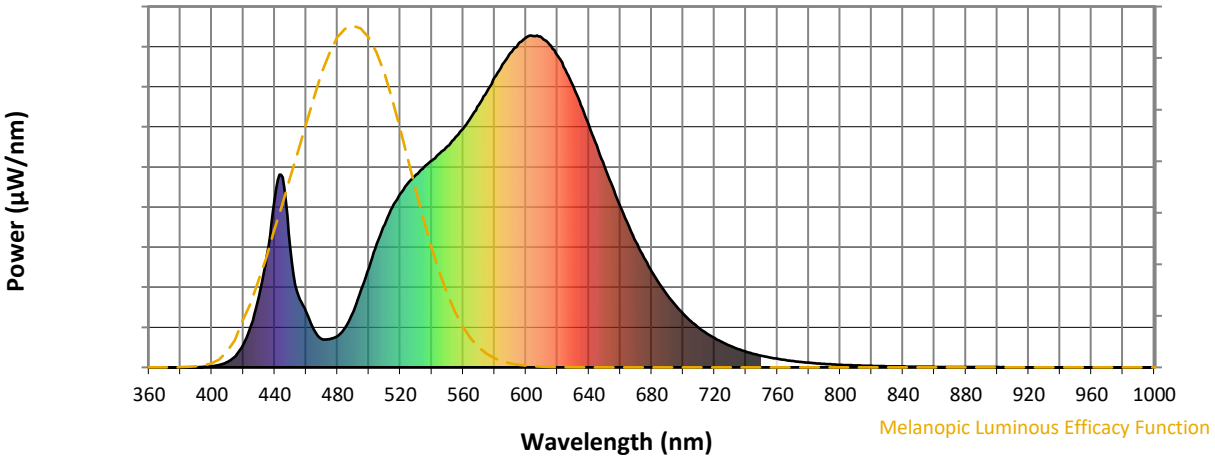
Melanopic Flux vs. Wavelength



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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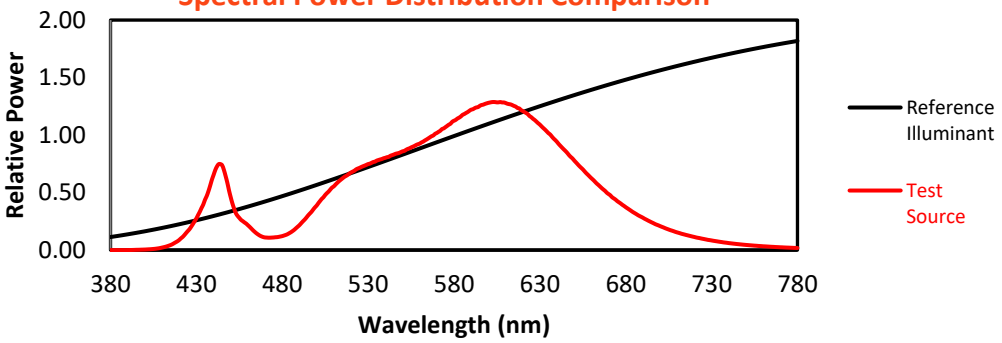
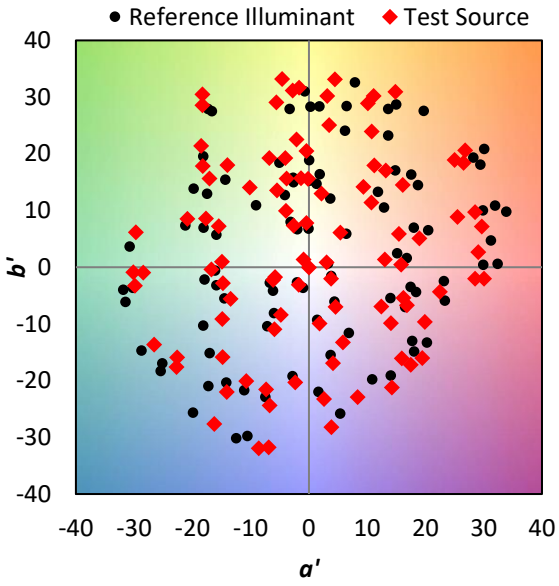
Summary

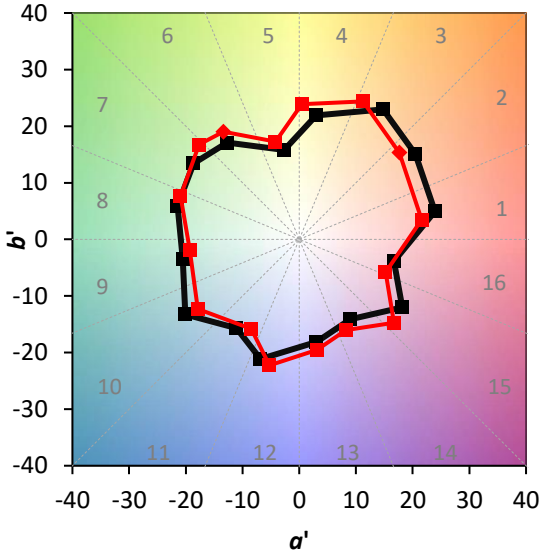
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

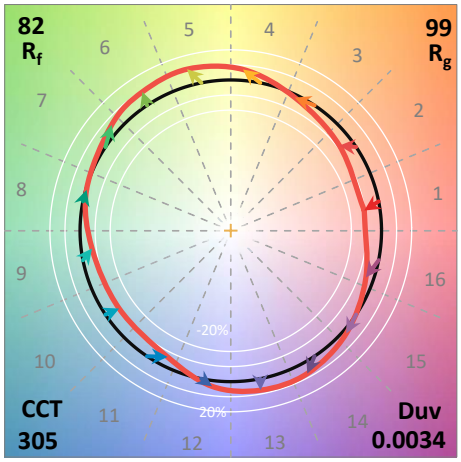
Spectral Power Distribution Comparison

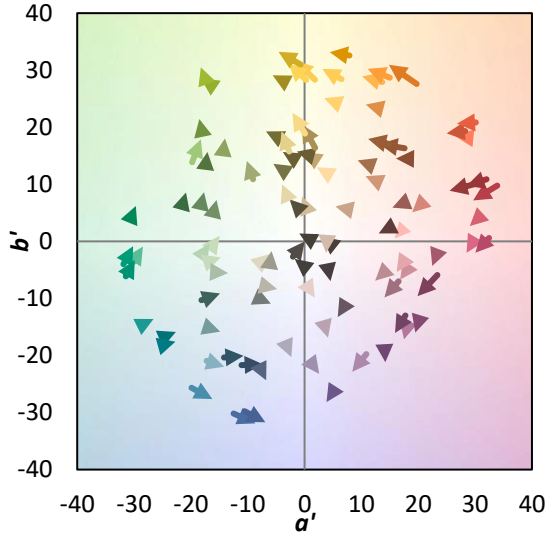


Color Vector Graphics









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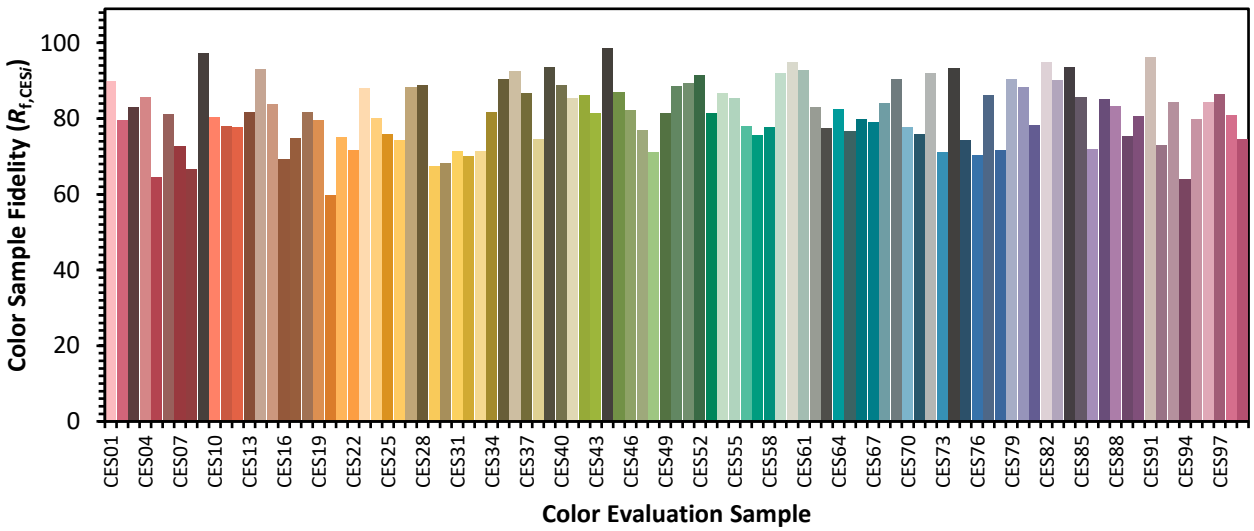
Individual Sample Fidelity Index ($R_{f,i}$)

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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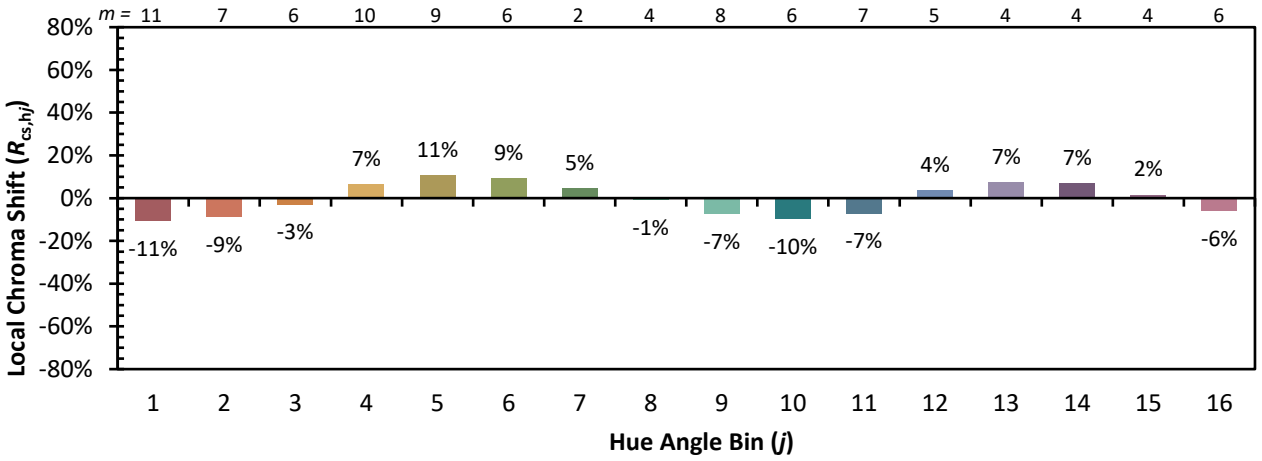
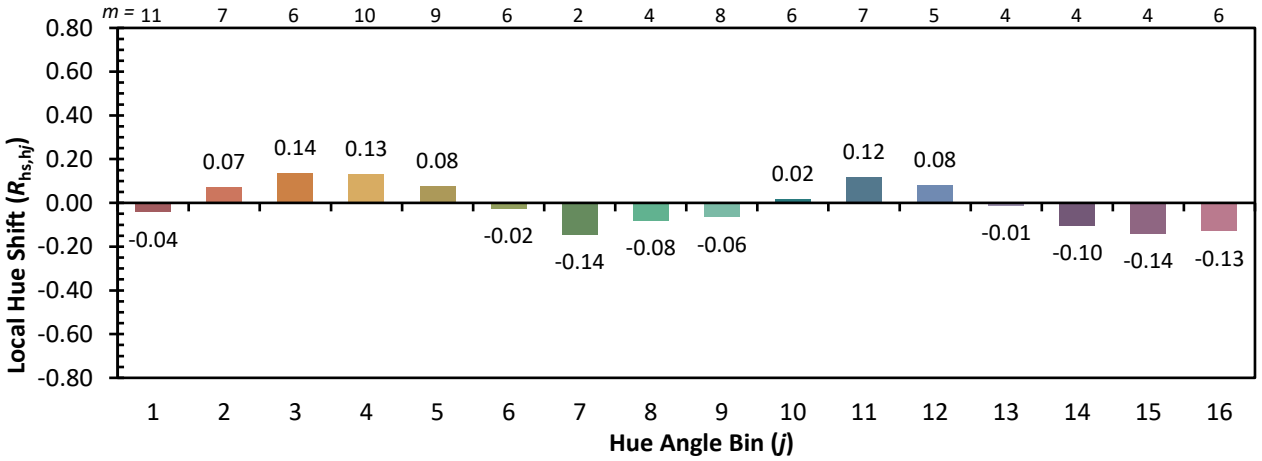
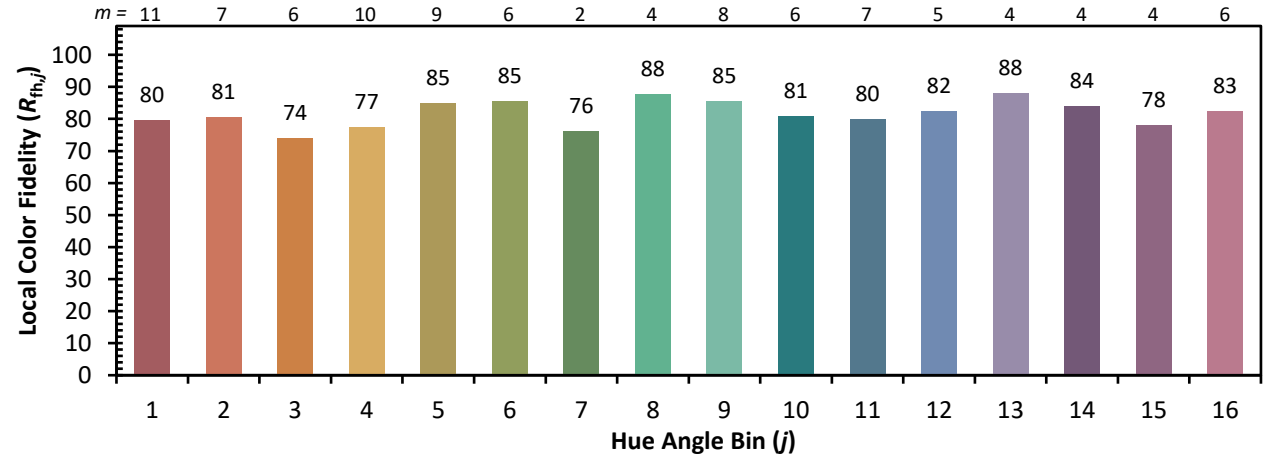
Color Rendition by Hue-Angle Bin







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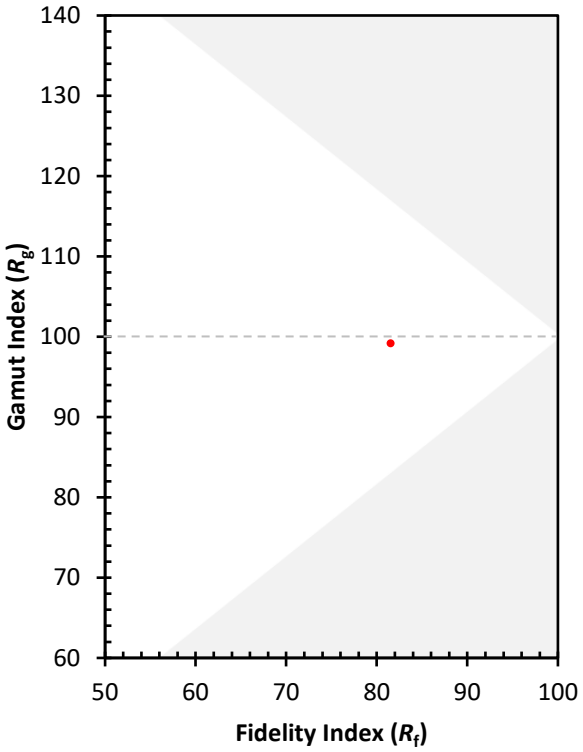
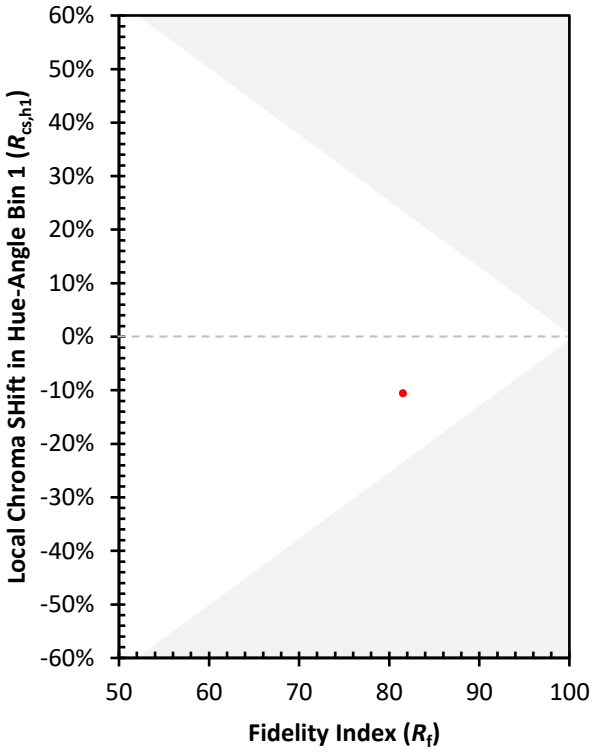
Measure Comparisons





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