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: P639461

Luminaire Tested: GWS-SA5B-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:	P639461
	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-SA5B-830-U-SL2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11181.3 lumens
Efficiency:	N/A
Efficacy:	96.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	115.7
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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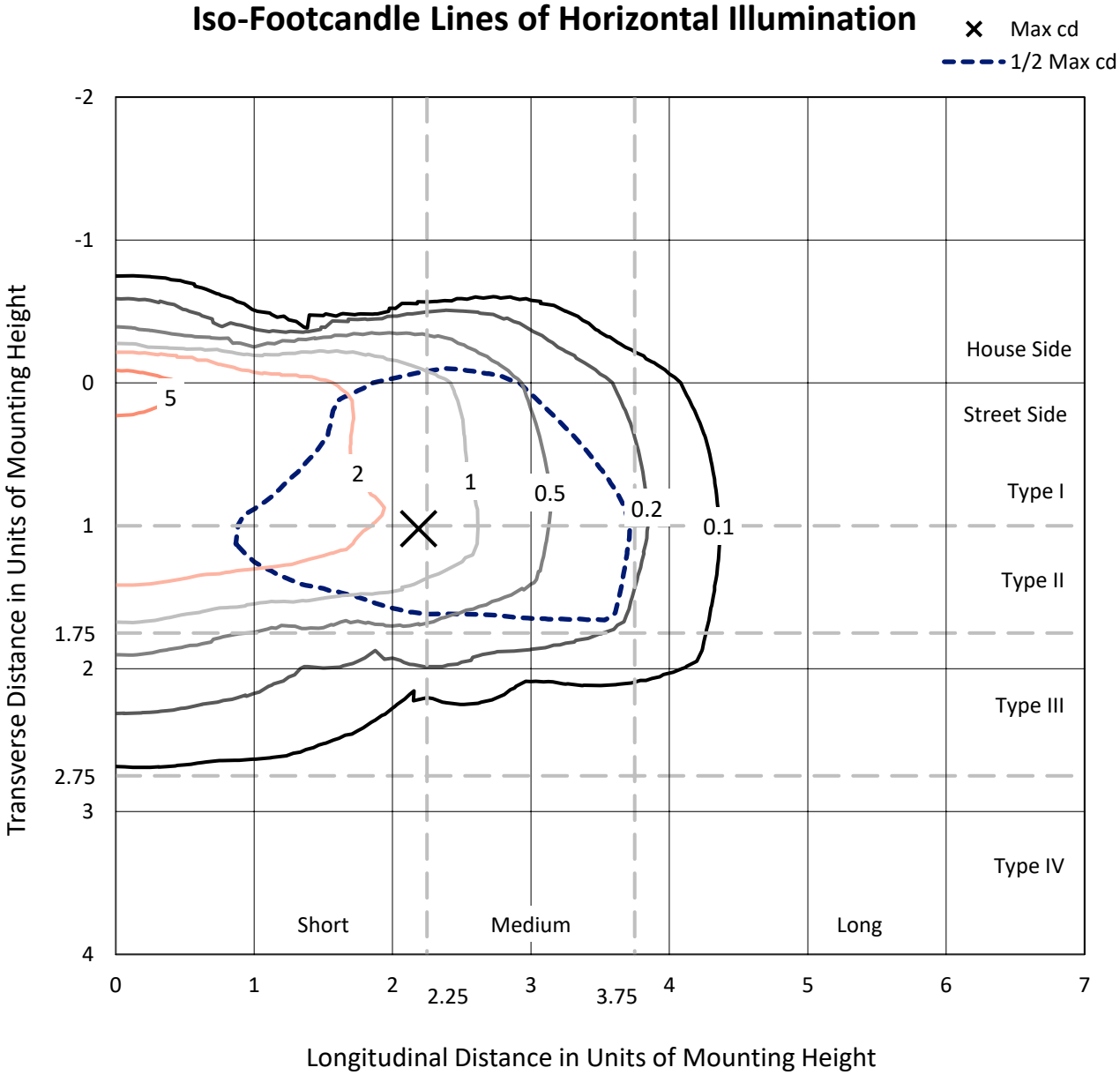
Scaled Data Report

REPORT NUMBER: P639461
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

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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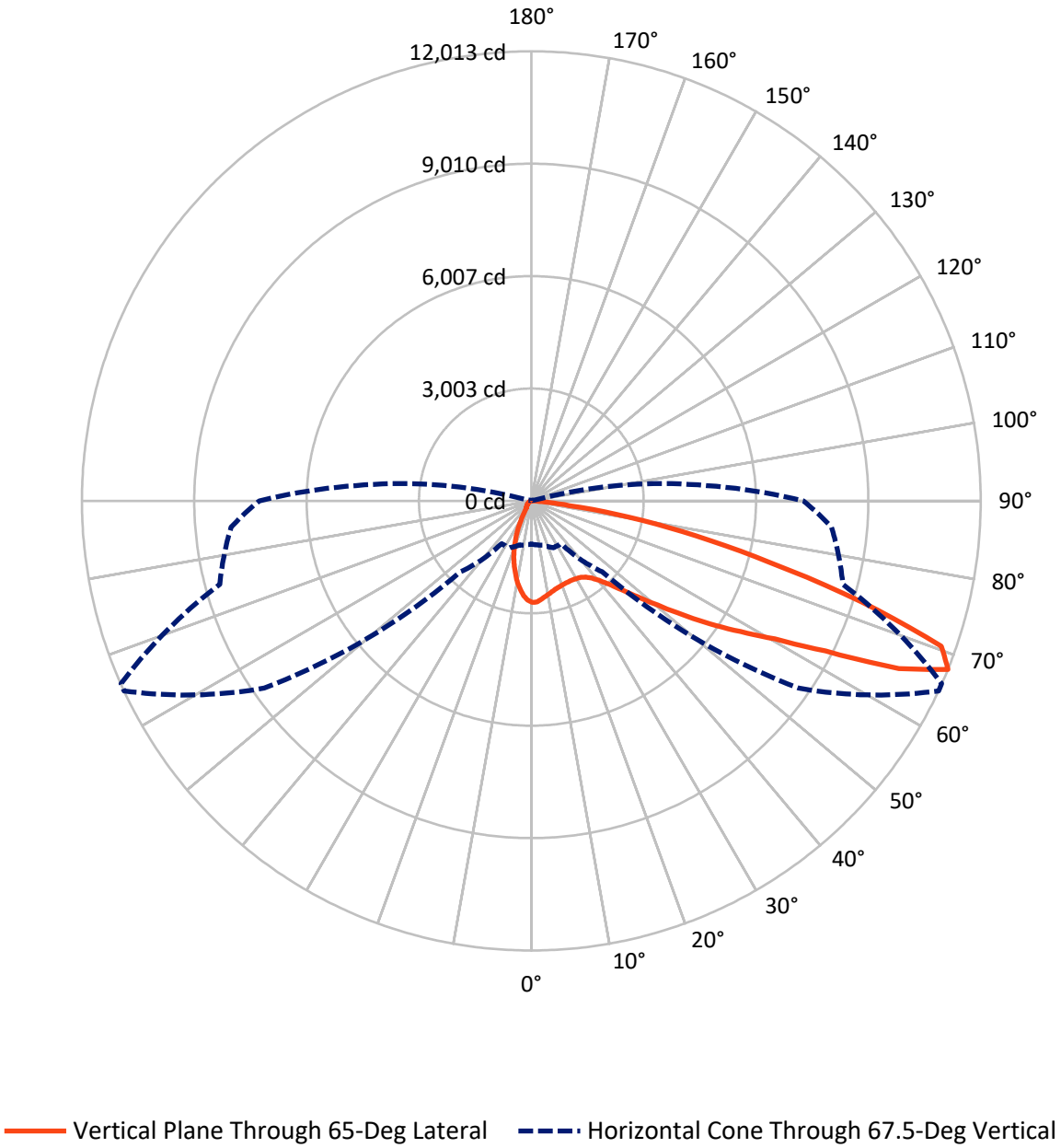
Luminous Intensity Polar Plot



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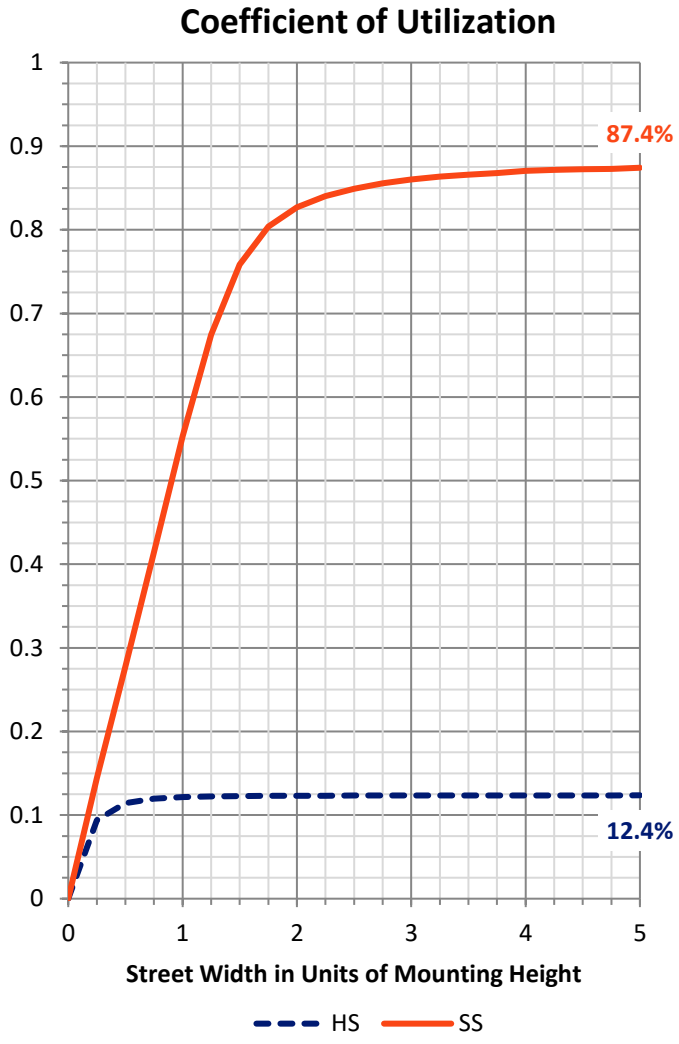
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1396.2	0.0	1396.2
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	9785.1	0.0	9785.1
	% Fixture	87.5	0.0	87.5
Total	Lumens	11181.3	0.0	11181.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.2	2.0
10°-20°	506.3	4.5
20°-30°	723.5	6.5
30°-40°	1052.6	9.4
40°-50°	1648.5	14.7
50°-60°	2571.7	23.0
60°-70°	2824.9	25.3
70°-80°	1503.4	13.4
80°-90°	125.2	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°	11181.3	100.0
0°-180°	11181.3	100.0



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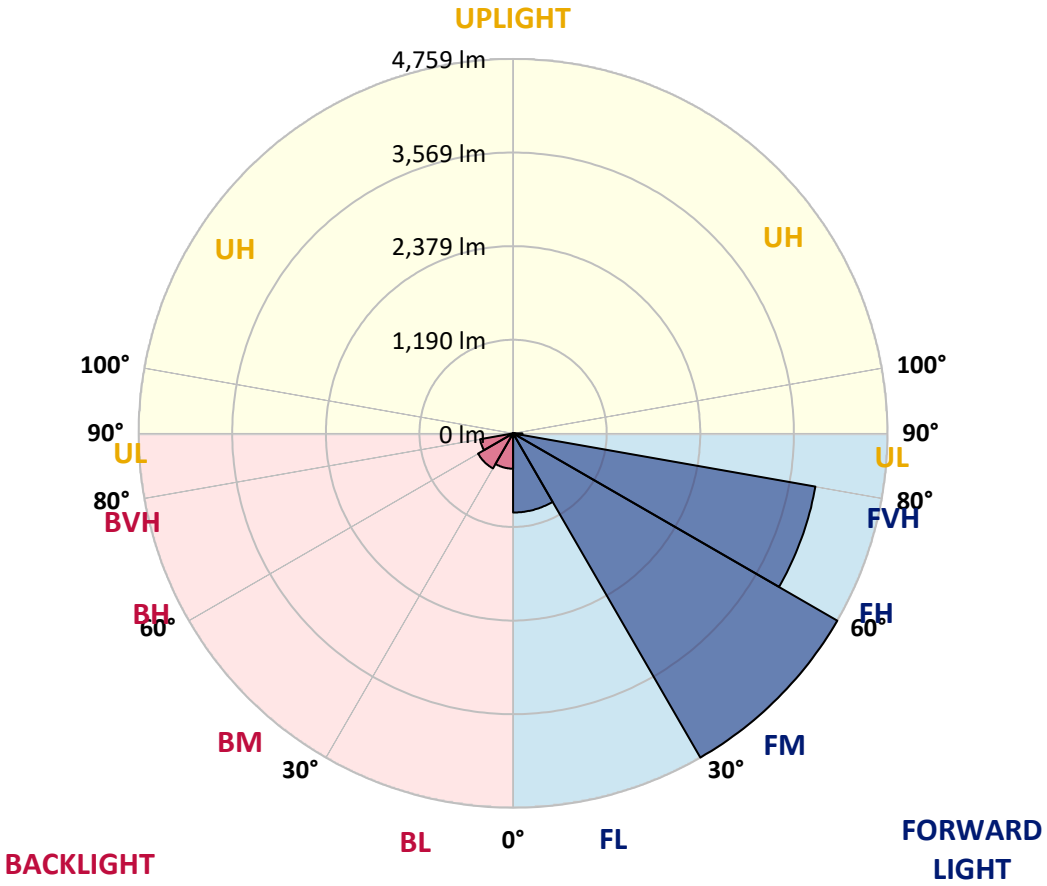
REPORT NUMBER: P639461
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1006.2	9.0			
FM	(30°-60°)	4758.5	42.6			
FH	(60°-80°)	3901.8	34.9			G2/5000
FVH	(80°-90°)	118.5	1.1			G2/225
BL	(0°-30°)	448.8	4.0	B1/500		
BM	(30°-60°)	514.3	4.6	B1/1000		
BH	(60°-80°)	426.5	3.8	B1/500		G1/500
BVH	(80°-90°)	6.7	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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REPORT NUMBER: P639461
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8
2.5°	2617.8	2625.9	2614.8	2642.1	2647.1	2677.4	2694.6	2706.8	2705.8	2720.9	2720.9
5°	2464.1	2472.2	2466.1	2495.4	2518.7	2566.2	2605.7	2651.2	2653.2	2699.7	2716.9
7.5°	2333.7	2334.7	2334.7	2371.1	2401.4	2460.0	2518.7	2588.5	2596.6	2668.3	2713.8
10°	2226.5	2229.5	2230.5	2272.0	2305.3	2376.1	2450.9	2534.9	2544.0	2641.0	2711.8
12.5°	2152.7	2153.7	2157.7	2201.2	2237.6	2311.4	2387.2	2483.3	2495.4	2609.7	2702.7
15°	2117.3	2115.3	2117.3	2153.7	2190.1	2260.9	2338.7	2441.8	2455.0	2583.4	2703.7
17.5°	2115.3	2112.2	2110.2	2137.5	2160.8	2223.4	2302.3	2414.5	2428.7	2571.3	2714.9
20°	2144.6	2142.6	2132.4	2144.6	2149.6	2201.2	2279.1	2393.3	2407.5	2569.2	2739.1
22.5°	2221.4	2216.4	2201.2	2190.1	2162.8	2193.1	2262.9	2378.1	2394.3	2574.3	2770.5
25°	2335.7	2333.7	2314.4	2287.1	2217.4	2205.2	2263.9	2378.1	2393.3	2580.4	2803.8
27.5°	2507.6	2495.4	2471.2	2423.6	2323.5	2252.8	2284.1	2384.2	2399.4	2588.5	2831.1
30°	2682.5	2681.5	2673.4	2624.9	2476.2	2343.8	2326.6	2400.4	2414.5	2595.5	2856.4
32.5°	2863.5	2866.5	2886.7	2849.3	2686.5	2479.3	2403.4	2433.8	2443.9	2609.7	2878.7
35°	3035.4	3041.4	3095.0	3108.2	2942.4	2684.5	2528.8	2500.5	2501.5	2641.0	2908.0
37.5°	3200.2	3220.4	3306.4	3370.1	3260.9	2933.3	2709.8	2613.7	2605.7	2703.7	2952.5
40°	3387.2	3425.7	3533.9	3642.0	3607.7	3261.9	2956.5	2787.7	2770.5	2819.0	3032.3
42.5°	3594.5	3636.0	3779.6	3931.2	3947.4	3659.2	3264.9	3041.4	3012.1	3013.1	3182.0
45°	3817.0	3872.6	4039.4	4257.8	4355.9	4102.1	3645.1	3384.2	3354.9	3311.4	3422.6
47.5°	4109.2	4157.7	4318.5	4570.3	4758.3	4577.3	4143.6	3825.1	3771.5	3707.8	3796.7
50°	4361.0	4403.4	4541.9	4857.4	5248.7	5190.1	4708.8	4376.1	4324.6	4216.4	4290.2
52.5°	4416.6	4449.9	4577.3	4932.2	5623.8	5963.6	5401.4	5042.4	5006.0	4805.8	4834.2
55°	4166.8	4217.4	4331.6	4726.0	5721.9	6719.9	6300.3	5793.7	5717.9	5398.4	5448.9
57.5°	3535.9	3625.9	3733.0	4245.7	5456.0	7122.3	7556.1	6589.5	6520.7	5968.6	5969.6
60°	2591.5	2664.3	2736.1	3205.2	4825.1	7095.0	8695.6	7483.3	7357.9	6434.8	6417.6
62.5°	1884.7	1922.1	1921.1	2088.0	3313.4	6627.9	9294.2	8830.1	8537.9	6933.2	6835.2
65°	1482.3	1481.3	1524.8	1579.4	1850.3	5116.3	9368.0	10796.7	10481.2	7601.6	7397.3
67.5°	1153.7	1175.9	1219.4	1380.2	1390.3	2677.4	8718.9	12013.1	12007.0	8621.8	8055.6
70°	889.8	920.1	981.8	1216.4	1284.1	1498.5	6523.7	11627.9	11725.9	9077.8	7589.4
72.5°	571.3	569.3	660.3	982.8	1233.6	1248.7	3607.7	9236.6	9347.8	8222.4	6136.5
75°	319.5	321.5	373.1	601.6	1149.6	1174.9	1786.6	6586.4	6674.4	6410.5	4714.8
77.5°	125.4	129.4	174.9	316.5	758.3	1049.5	1061.7	4491.4	4504.5	3972.7	2891.8
80°	50.6	53.6	89.0	196.2	462.1	706.8	758.3	2646.1	2592.5	1537.9	841.2
82.5°	15.2	16.2	35.4	111.2	241.7	502.5	511.6	1015.2	958.5	330.6	214.4
85°	1.0	1.0	8.1	34.4	85.9	126.4	340.7	330.6	293.2	82.9	95.0
87.5°	0.0	0.0	1.0	1.0	2.0	4.0	36.4	60.7	61.7	15.2	42.5
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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REPORT NUMBER: P639461
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8	2711.8
2.5°	2720.9	2684.5	2681.5	2653.2	2624.9	2589.5	2548.0	2517.7	2496.4	2459.0	2452.0
5°	2716.9	2668.3	2622.8	2541.9	2452.0	2354.9	2270.0	2191.1	2141.5	2108.2	2094.0
7.5°	2708.8	2647.1	2541.9	2389.3	2238.6	2068.7	1936.3	1815.0	1732.0	1683.5	1662.3
10°	2702.7	2619.8	2448.9	2217.4	1983.8	1749.2	1548.0	1368.0	1267.9	1189.1	1175.9
12.5°	2690.6	2580.4	2329.6	2016.2	1714.9	1403.4	1146.6	926.2	773.5	704.7	680.5
15°	2678.5	2538.9	2210.3	1803.8	1421.6	1037.4	726.0	513.6	408.5	376.1	374.1
17.5°	2676.4	2501.5	2080.9	1602.6	1114.3	679.5	413.5	332.7	310.4	302.3	302.3
20°	2682.5	2470.2	1953.5	1371.1	811.9	413.5	308.4	288.2	275.0	267.9	267.9
22.5°	2688.6	2437.8	1831.1	1137.5	538.9	302.3	272.0	254.8	239.6	231.5	227.5
25°	2692.6	2402.4	1695.6	902.9	351.9	262.9	238.6	216.4	198.2	188.1	188.1
27.5°	2691.6	2359.9	1559.1	673.4	273.0	233.6	204.2	181.0	162.8	151.7	152.7
30°	2683.5	2313.4	1417.6	470.2	238.6	204.2	174.9	150.7	132.5	123.4	122.3
32.5°	2677.4	2263.9	1253.8	330.6	214.4	179.0	148.6	125.4	110.2	103.1	102.1
35°	2670.4	2215.4	1098.1	251.8	193.1	154.7	125.4	106.2	94.0	88.0	88.0
37.5°	2672.4	2164.8	929.2	216.4	171.9	134.5	107.2	91.0	80.9	74.8	73.8
40°	2703.7	2134.5	763.4	196.2	152.7	116.3	93.0	78.9	68.8	62.7	61.7
42.5°	2781.6	2135.5	604.6	181.0	135.5	99.1	80.9	67.7	58.6	51.6	50.6
45°	2937.3	2177.9	464.1	164.8	117.3	85.9	69.8	57.6	48.5	42.5	41.5
47.5°	3192.1	2304.3	351.9	150.7	102.1	74.8	59.7	48.5	40.4	35.4	34.4
50°	3597.6	2532.8	277.0	133.5	85.9	64.7	50.6	40.4	33.4	28.3	27.3
52.5°	4084.9	2875.6	237.6	118.3	73.8	56.6	43.5	33.4	27.3	23.3	22.2
55°	4645.1	3285.1	219.4	103.1	62.7	48.5	35.4	27.3	22.2	19.2	17.2
57.5°	5158.7	3654.2	218.4	88.0	53.6	41.5	29.3	23.3	19.2	15.2	14.2
60°	5659.2	3962.6	205.3	72.8	46.5	34.4	25.3	19.2	16.2	13.1	12.1
62.5°	6113.2	4213.3	171.9	58.6	39.4	28.3	21.2	17.2	14.2	11.1	11.1
65°	6683.5	4532.8	131.4	47.5	32.4	23.3	18.2	15.2	13.1	10.1	10.1
67.5°	*7273.0*	*4701.7*	*94.0*	*39.4*	*26.3*	*20.2*	*16.2*	*14.2*	*11.1*	*9.1*	*9.1*
70°	6587.4	3972.7	67.7	32.4	22.2	17.2	14.2	13.1	11.1	9.1	8.1
72.5°	5144.6	2864.5	50.6	25.3	19.2	16.2	13.1	12.1	10.1	8.1	8.1
75°	3814.9	1670.4	38.4	20.2	15.2	13.1	13.1	12.1	10.1	8.1	7.1
77.5°	2073.8	582.4	29.3	16.2	12.1	10.1	11.1	11.1	9.1	7.1	6.1
80°	549.0	159.8	20.2	12.1	10.1	8.1	8.1	10.1	8.1	6.1	6.1
82.5°	159.8	46.5	14.2	10.1	8.1	7.1	7.1	7.1	6.1	5.1	4.0
85°	77.9	17.2	10.1	8.1	7.1	6.1	5.1	5.1	4.0	3.0	3.0
87.5°	34.4	7.1	8.1	7.1	7.1	5.1	4.0	3.0	3.0	2.0	1.0
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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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

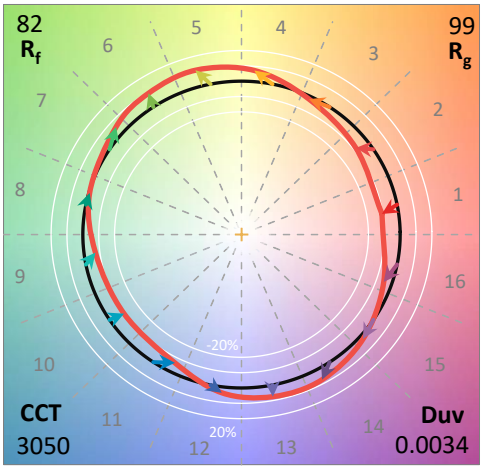
Test Information

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

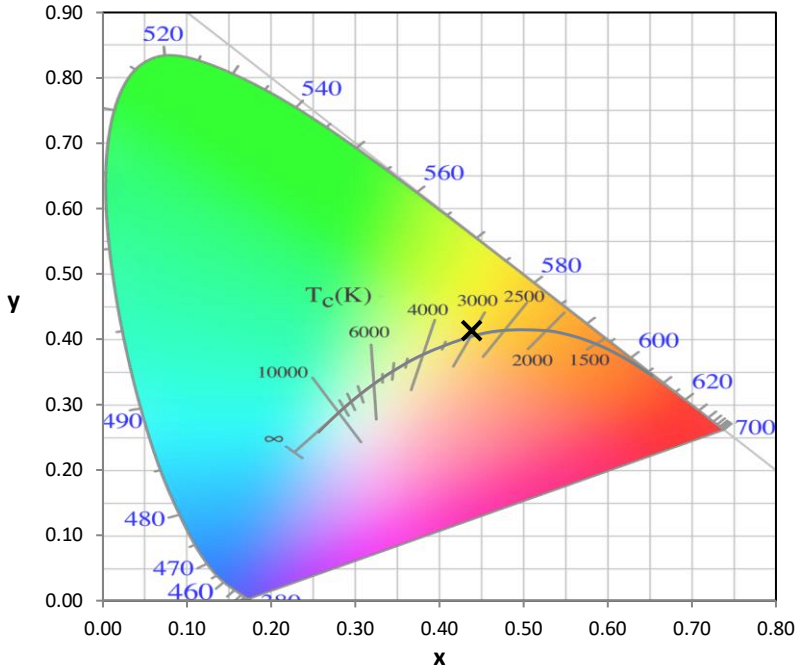
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

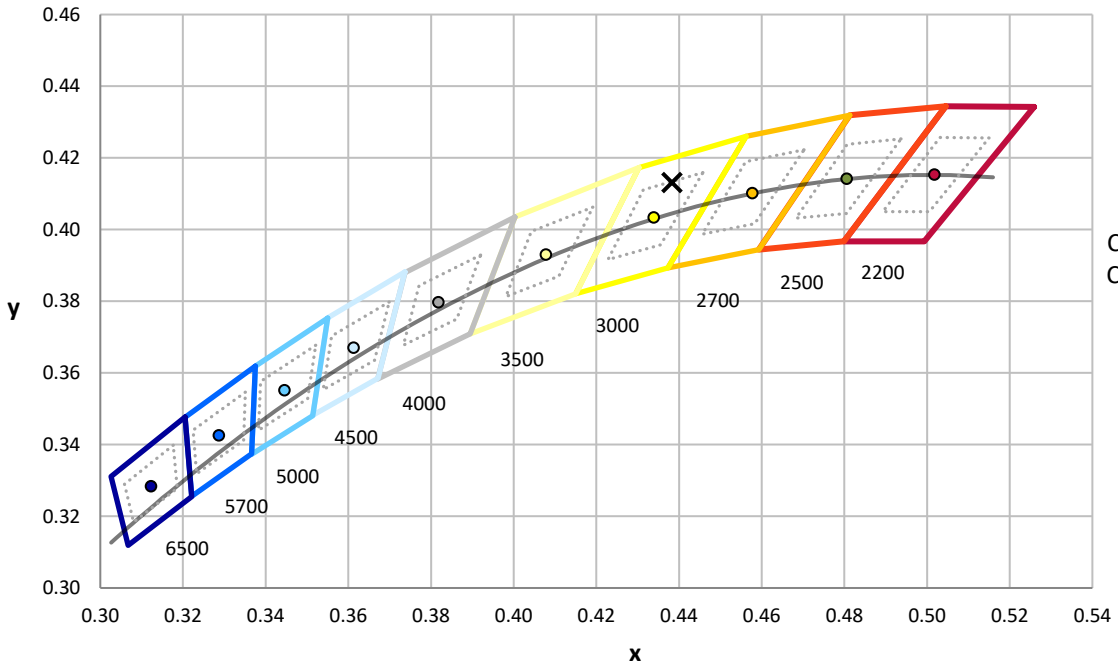
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

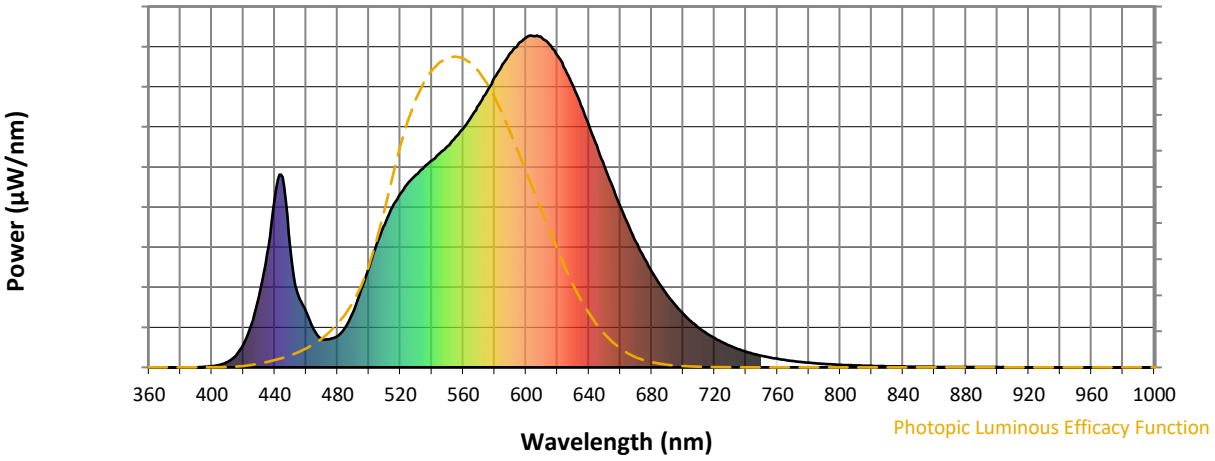


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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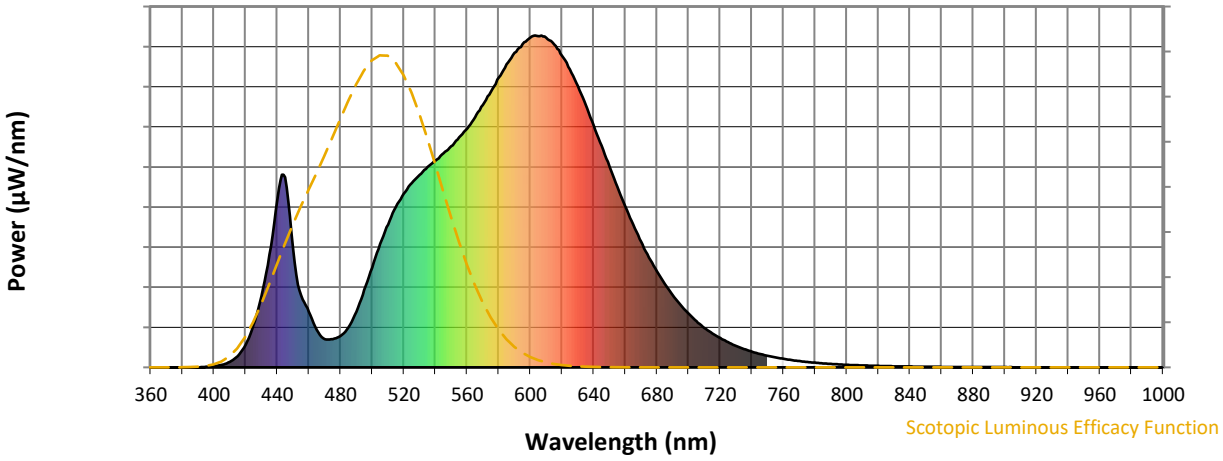
Scotopic Flux vs. Wavelength



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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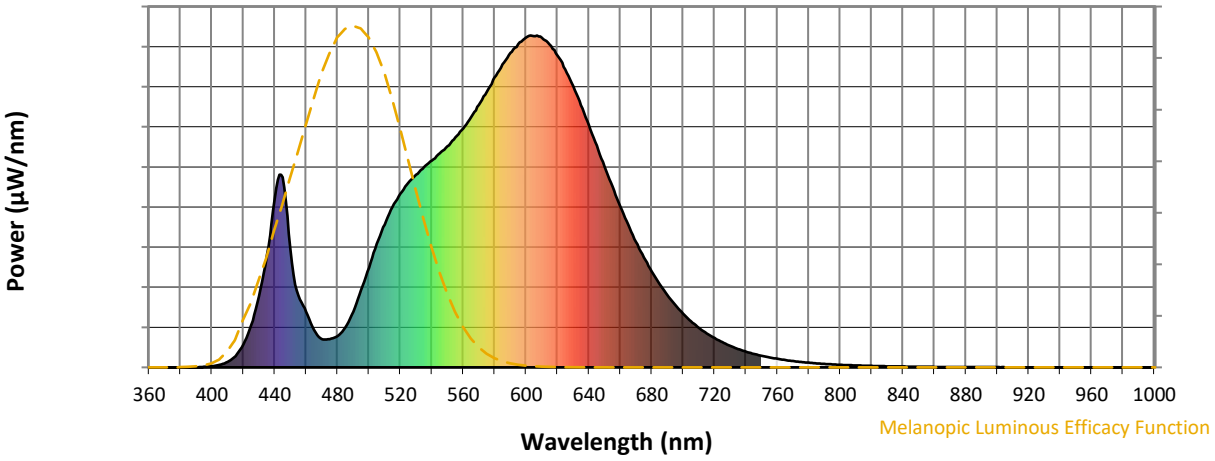
Melanopic Flux vs. Wavelength



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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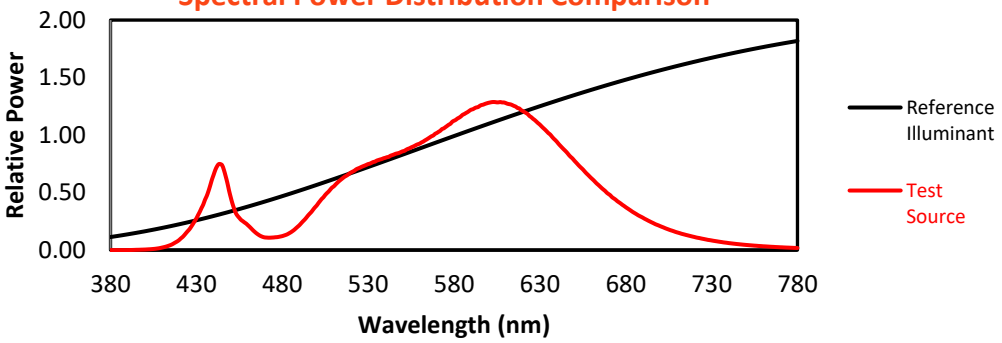
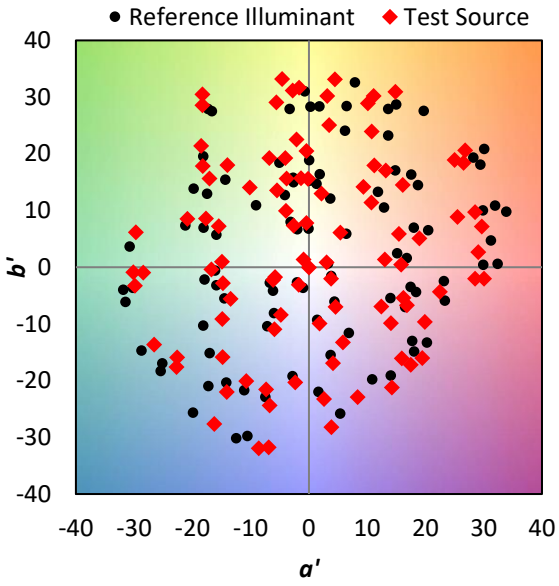
Summary

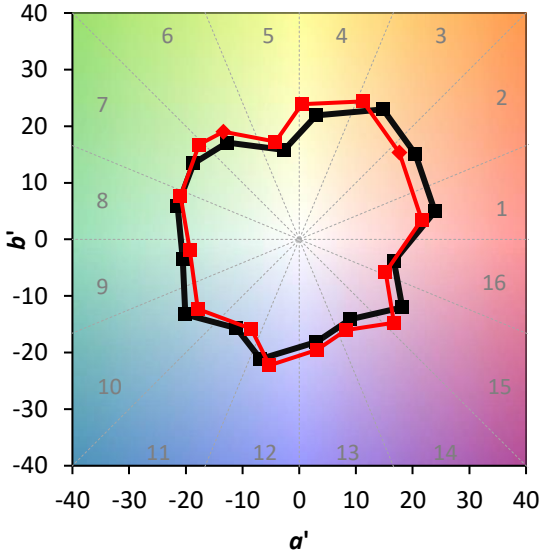
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

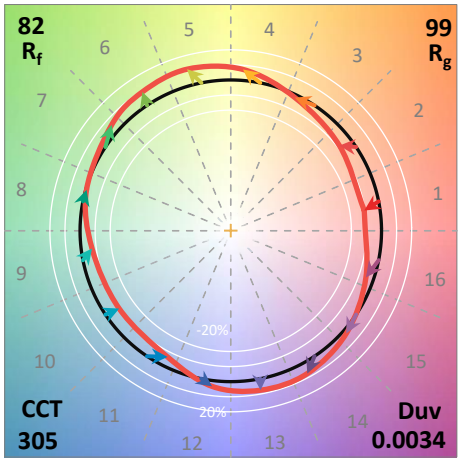
Spectral Power Distribution Comparison

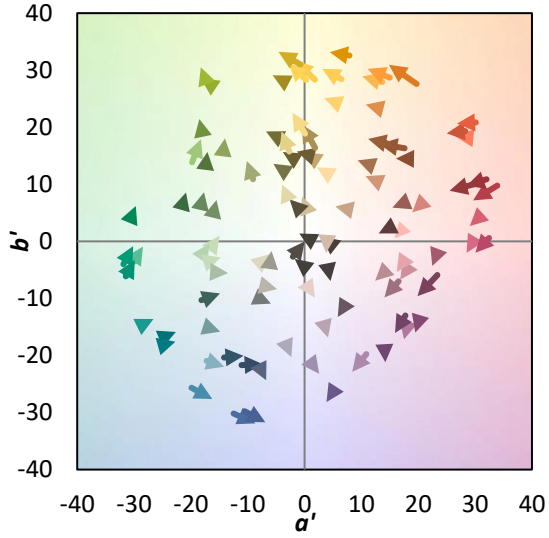


Color Vector Graphics









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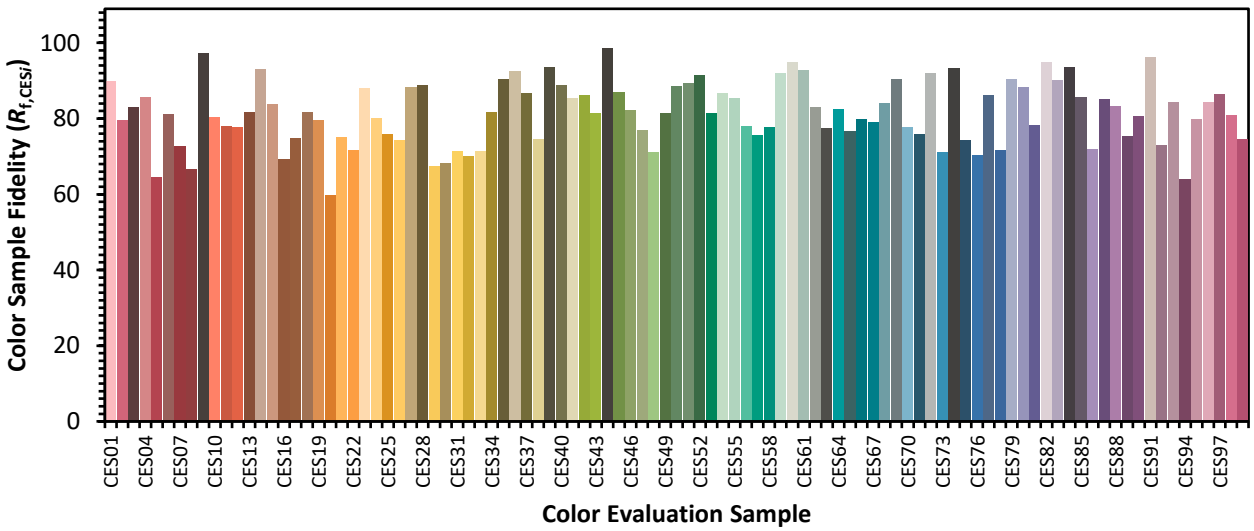
Individual Sample Fidelity Index ($R_{f,i}$)

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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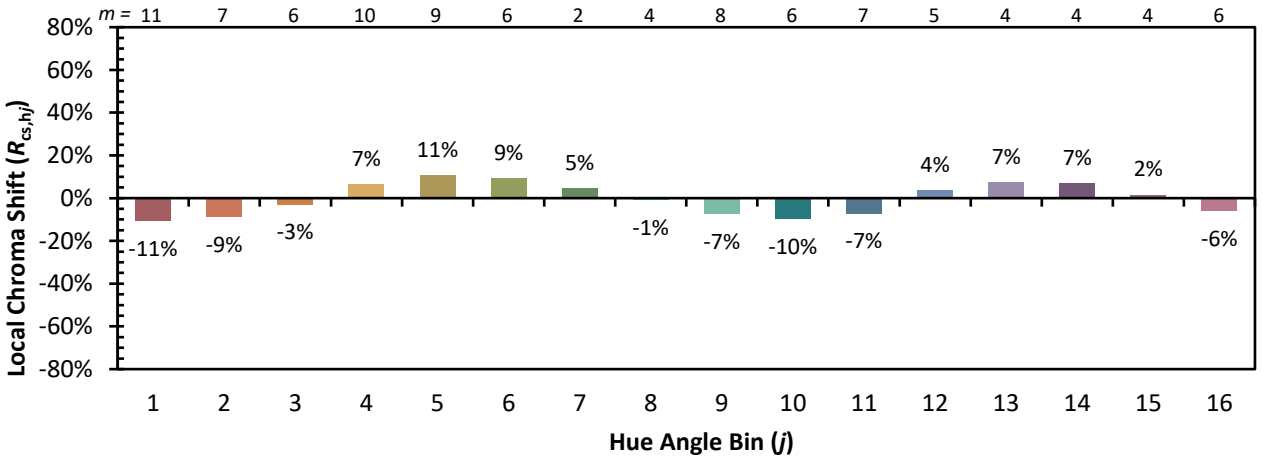
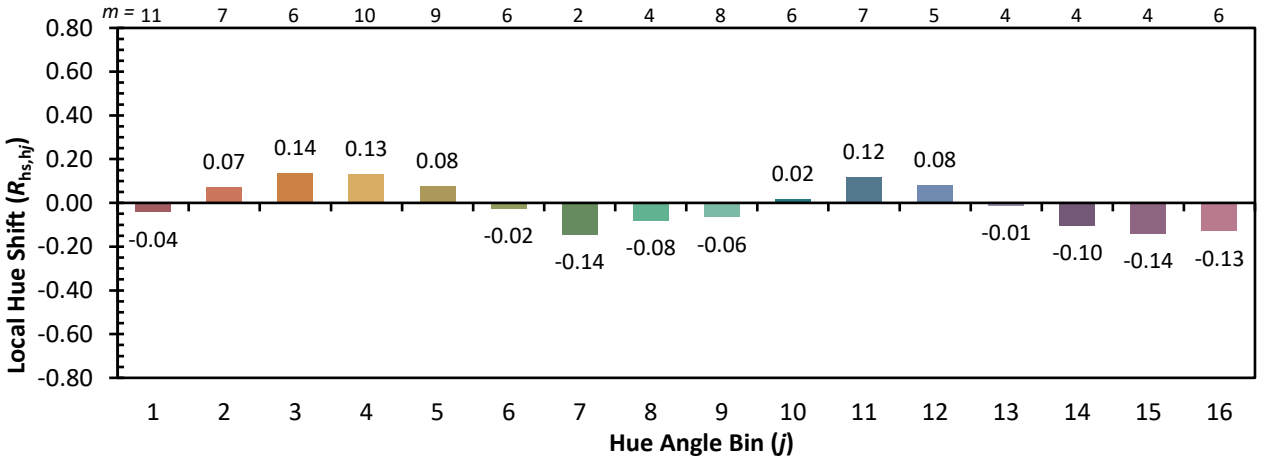
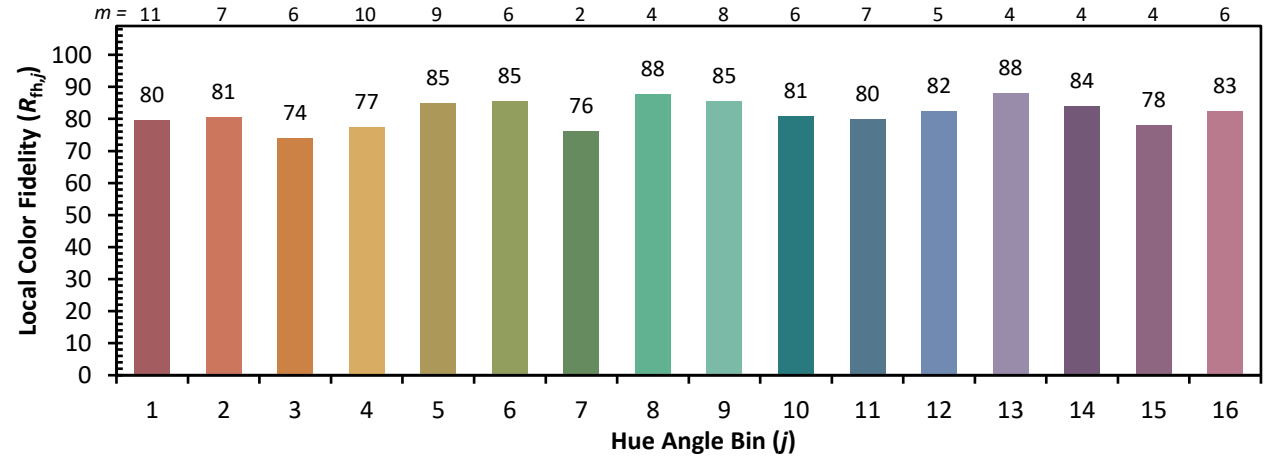
Color Rendition by Hue-Angle Bin







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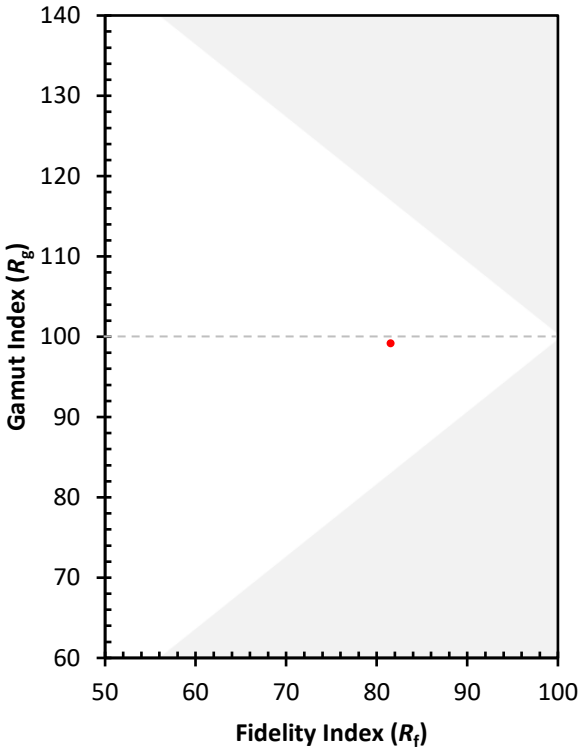
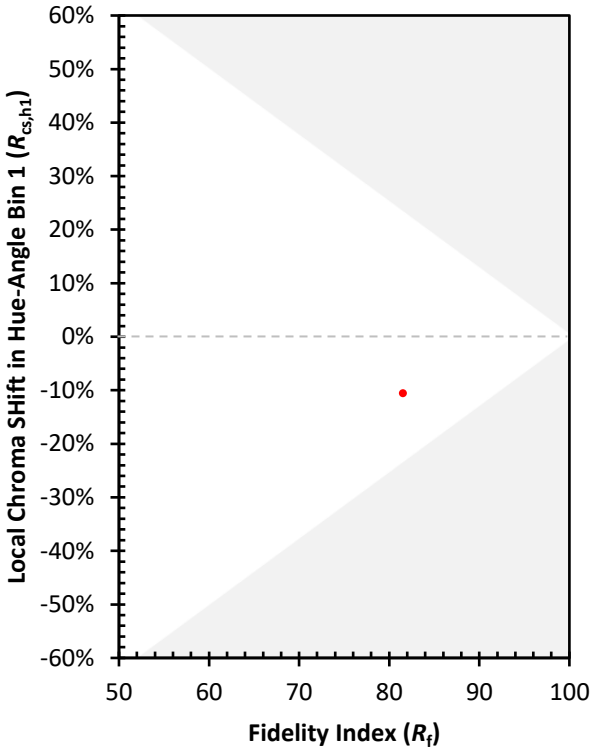
Measure Comparisons





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