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: P636025

Luminaire Tested: GWS-SA3E-830-U-T3R-W-GRSBK

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:	P636025
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-T3R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10956.9 lumens
Efficiency:	N/A
Efficacy:	68.8 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

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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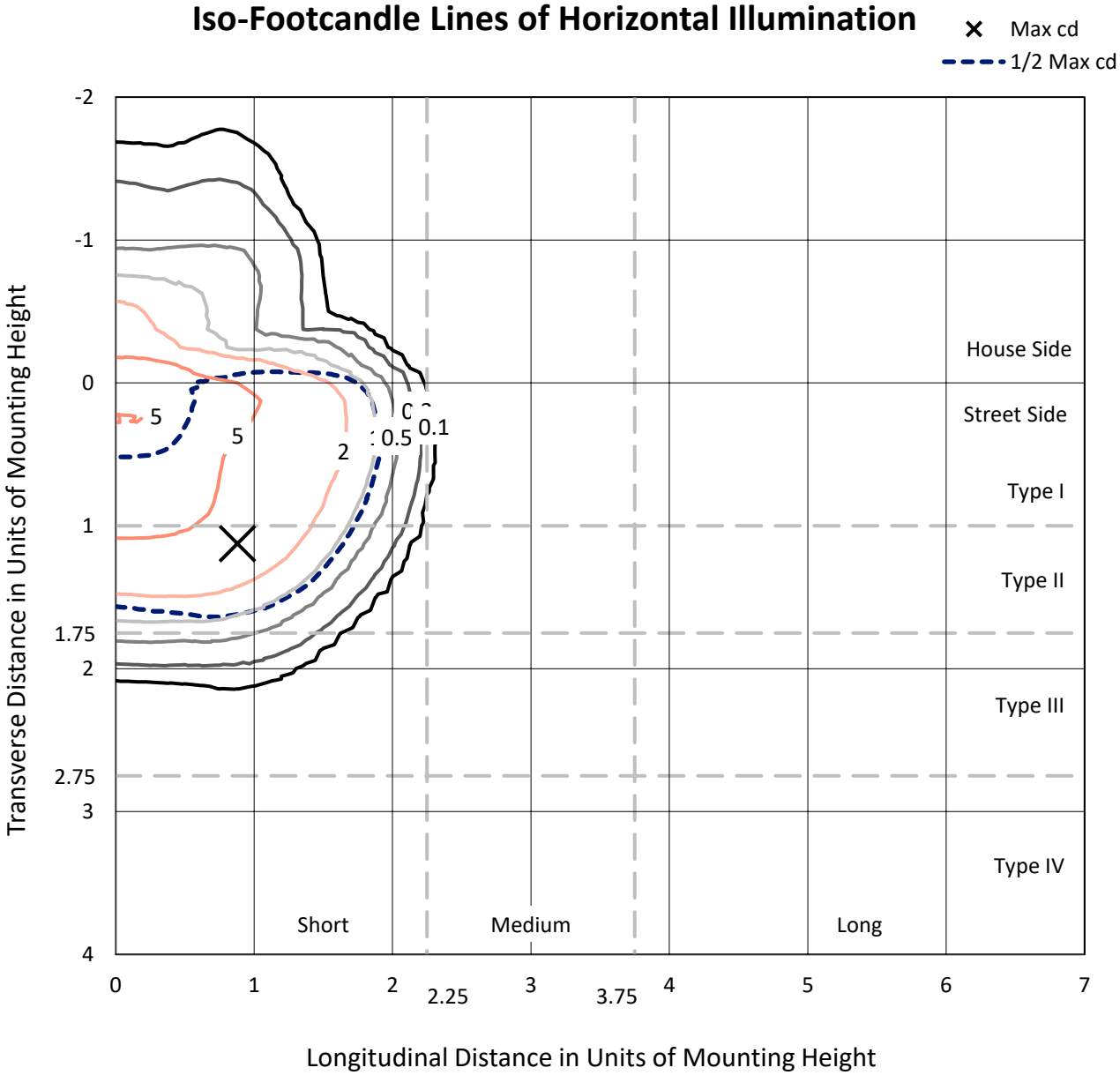
Scaled Data Report

REPORT NUMBER: P636025
CATALOG NUMBER: GWS-SA3E-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
Type II - Short - N/A

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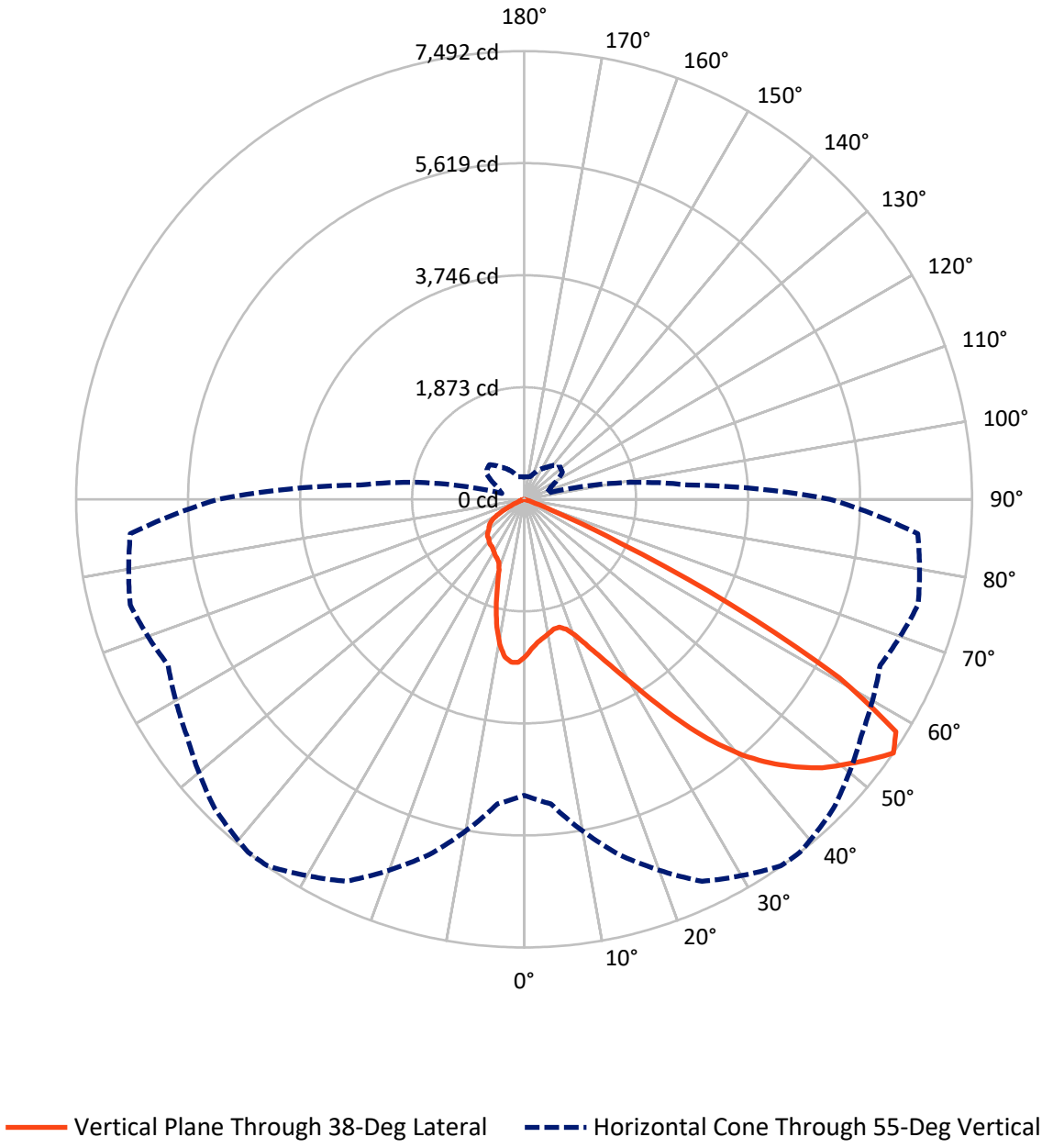
Luminous Intensity Polar Plot



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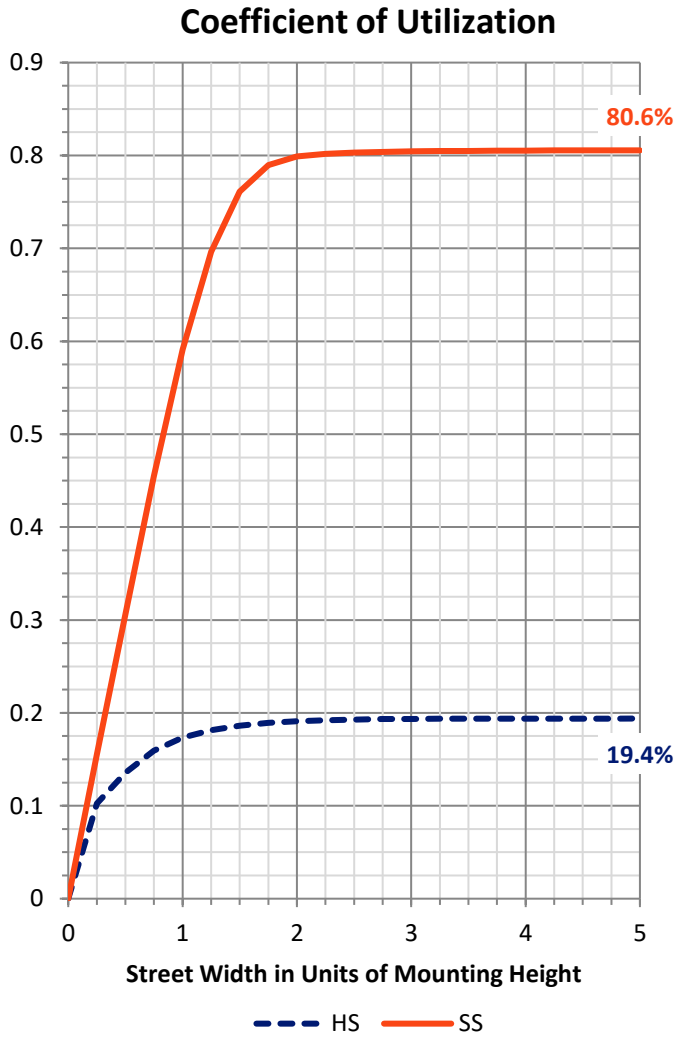
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2134.8	0.0	2134.8
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	8822.2	0.0	8822.2
	% Fixture	80.5	0.0	80.5
Total	Lumens	10956.9	0.0	10956.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.0	2.2
10°-20°	654.1	6.0
20°-30°	1122.4	10.2
30°-40°	1861.6	17.0
40°-50°	2736.6	25.0
50°-60°	3197.8	29.2
60°-70°	1083.9	9.9
70°-80°	55.4	0.5
80°-90°	2.2	0.0
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°	10956.9	100.0
0°-180°	10956.9	100.0



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REPORT NUMBER: P636025
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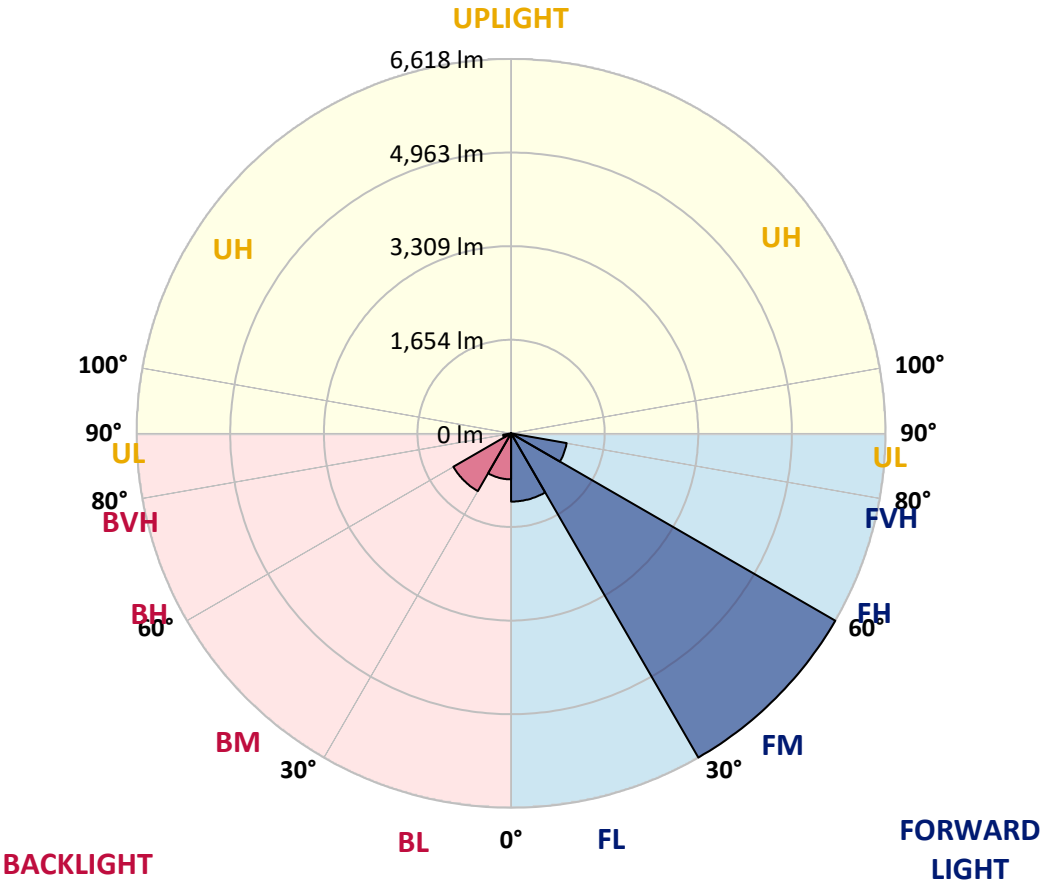
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1206.1	11.0			
FM	(30°-60°)	6617.7	60.4			
FH	(60°-80°)	997.3	9.1			G1/1800
FVH	(80°-90°)	1.2	0.0			G0/10
BL	(0°-30°)	813.3	7.4	B2/1000		
BM	(30°-60°)	1178.3	10.8	B2/2500		
BH	(60°-80°)	142.1	1.3	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P636025
CATALOG NUMBER: GWS-SA3E-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5
2.5°	2447.2	2442.2	2452.2	2472.3	2491.0	2497.3	2516.1	2542.4	2558.7	2597.5	2628.8
5°	2337.0	2334.5	2344.5	2362.0	2387.1	2395.9	2424.7	2468.5	2512.3	2580.0	2646.3
7.5°	2236.8	2235.5	2250.6	2289.4	2325.7	2337.0	2372.1	2425.9	2484.8	2588.7	2686.4
10°	2105.3	2106.5	2135.4	2190.5	2256.8	2279.4	2335.7	2413.4	2489.8	2623.8	2759.1
12.5°	2062.7	2065.2	2080.2	2122.8	2195.5	2224.3	2303.2	2420.9	2518.6	2673.9	2853.0
15°	2166.7	2166.7	2154.1	2159.1	2191.7	2218.0	2300.7	2445.9	2567.4	2734.0	2945.7
17.5°	2368.3	2360.8	2329.5	2286.9	2275.6	2284.4	2350.8	2499.8	2636.3	2804.1	3050.9
20°	2641.3	2643.8	2582.5	2493.5	2422.2	2420.9	2461.0	2595.0	2735.3	2888.0	3164.8
22.5°	2972.0	2961.9	2880.5	2759.1	2635.1	2625.0	2641.3	2740.3	2878.0	3020.8	3305.1
25°	3355.2	3350.2	3235.0	3072.2	2908.1	2884.3	2884.3	2982.0	3082.2	3209.9	3472.9
27.5°	3756.0	3756.0	3644.5	3456.6	3238.7	3196.1	3189.9	3305.1	3371.5	3396.5	3614.4
30°	4168.0	4163.0	4052.8	3859.9	3627.0	3583.1	3565.6	3650.8	3698.4	3623.2	3791.0
32.5°	4586.3	4595.1	4483.6	4304.5	4096.6	4067.8	4014.0	4014.0	4052.8	3947.6	4069.1
35°	5035.9	5033.4	4945.8	4824.3	4646.4	4613.9	4524.9	4385.9	4444.8	4398.5	4453.6
37.5°	5432.9	5451.7	5409.1	5319.0	5174.9	5142.4	4995.8	4744.1	4789.2	4861.8	4910.7
40°	5836.2	5851.2	5893.8	5865.0	5683.4	5623.3	5362.8	4949.5	4999.6	5248.8	5389.1
42.5°	6232.0	6239.5	6325.9	6373.5	6130.5	6025.3	5640.8	5074.8	5127.4	5551.9	5797.4
45°	6483.7	6500.0	6642.8	6788.0	6525.0	6381.0	5882.6	5235.1	5257.6	5762.3	6099.2
47.5°	6473.7	6511.3	6779.3	7043.5	6864.4	6709.1	6173.1	5491.8	5454.2	5960.2	6298.4
50°	6272.1	6317.1	6701.6	7121.2	7108.7	6964.6	6496.2	5863.8	5746.0	6135.5	6323.4
52.5°	5853.7	5984.0	6565.1	7131.2	7305.3	7232.6	6895.7	6364.7	6140.5	6387.3	6363.5
55°	4949.5	5109.8	6150.6	7046.0	7483.1	7491.9	7315.3	6887.0	6568.9	6820.6	6610.2
57.5°	3757.2	3885.0	4734.1	6272.1	7188.8	7332.8	7478.1	7162.5	6833.1	7116.2	6667.8
60°	2264.4	2412.1	2964.4	4602.6	5806.2	6051.6	6621.5	6560.1	6163.1	6284.6	5468.0
62.5°	918.0	995.7	1368.9	2536.1	3654.5	3883.7	4429.8	4522.4	4424.8	4300.8	3316.4
65°	335.6	367.0	548.6	1048.3	1680.7	1764.6	2052.7	2216.8	2352.0	2002.6	1233.6
67.5°	207.9	227.9	356.9	538.5	611.2	568.6	578.6	690.1	658.8	407.0	220.4
70°	154.0	170.3	279.3	373.2	246.7	190.4	129.0	137.8	124.0	109.0	107.7
72.5°	106.5	121.5	209.2	220.4	95.2	67.6	47.6	66.4	75.1	73.9	76.4
75°	70.1	81.4	131.5	86.4	23.8	18.8	16.3	35.1	45.1	45.1	46.3
77.5°	41.3	47.6	46.3	17.5	5.0	5.0	3.8	6.3	10.0	11.3	13.8
80°	5.0	3.8	2.5	2.5	2.5	2.5	2.5	2.5	3.8	3.8	3.8
82.5°	1.3	1.3	1.3	2.5	2.5	2.5	2.5	2.5	2.5	3.8	3.8
85°	0.0	0.0	1.3	1.3	2.5	2.5	2.5	2.5	2.5	3.8	3.8
87.5°	0.0	0.0	1.3	1.3	2.5	2.5	2.5	2.5	2.5	3.8	3.8
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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Scaled Data Report

REPORT NUMBER: P636025
CATALOG NUMBER: GWS-SA3E-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5
2.5°	2652.6	2643.8	2680.1	2706.5	2727.7	2737.8	2724.0	2722.7	2722.7	2695.2	2687.7
5°	2683.9	2687.7	2739.0	2761.6	2765.3	2752.8	2721.5	2700.2	2687.7	2658.9	2642.6
7.5°	2744.0	2756.5	2805.4	2801.6	2767.8	2710.2	2627.5	2563.7	2522.3	2477.3	2449.7
10°	2830.4	2854.2	2884.3	2831.7	2724.0	2577.5	2407.1	2285.6	2213.0	2161.7	2130.3
12.5°	2935.6	2959.4	2949.4	2825.4	2601.2	2339.5	2120.3	1945.0	1861.1	1814.7	1782.2
15°	3042.1	3057.1	2992.0	2750.3	2384.6	2032.7	1788.4	1614.4	1511.7	1474.1	1446.5
17.5°	3151.1	3147.3	2999.5	2602.5	2095.3	1687.0	1446.5	1327.6	1298.7	1292.5	1290.0
20°	3265.0	3231.2	2969.5	2390.8	1747.1	1345.1	1208.6	1216.1	1268.7	1293.7	1298.7
22.5°	3395.3	3310.1	2894.3	2104.0	1391.4	1120.9	1134.7	1208.6	1280.0	1313.8	1318.8
25°	3534.3	3382.7	2769.1	1735.8	1097.1	1030.7	1112.1	1197.3	1273.7	1315.0	1320.0
27.5°	3625.7	3400.3	2563.7	1365.1	941.8	995.7	1082.1	1163.5	1242.4	1287.5	1293.7
30°	3724.7	3392.8	2284.4	1052.0	889.2	965.6	1040.7	1114.6	1187.3	1237.4	1242.4
32.5°	3869.9	3387.8	1943.7	854.1	867.9	941.8	996.9	1058.3	1108.4	1137.2	1133.4
35°	4060.3	3381.5	1546.7	770.2	855.4	923.0	966.9	995.7	940.6	923.0	926.8
37.5°	4304.5	3396.5	1212.3	735.2	851.6	918.0	955.6	872.9	787.8	755.2	750.2
40°	4575.0	3435.4	924.3	721.4	864.2	930.5	913.0	776.5	671.3	607.4	593.6
42.5°	4846.8	3477.9	731.4	716.4	885.5	965.6	842.9	706.4	548.6	512.2	507.2
45°	5048.5	3470.4	632.5	707.6	904.2	985.6	824.1	606.2	489.7	473.4	474.7
47.5°	5149.9	3387.8	578.6	687.6	911.8	965.6	777.7	564.8	449.6	467.1	482.2
50°	5096.0	3173.6	528.5	648.7	895.5	939.3	703.9	533.5	429.6	502.2	536.0
52.5°	5030.9	2910.6	473.4	588.6	856.6	903.0	675.0	524.8	417.1	484.7	509.7
55°	*5117.3*	*2744.0*	*383.2*	*496.0*	*780.2*	*817.8*	*652.5*	*523.5*	*388.2*	*377.0*	*373.2*
57.5°	4995.8	2412.1	274.3	356.9	598.7	647.5	636.2	514.7	344.4	343.2	348.2
60°	3861.2	1471.6	187.9	226.7	367.0	413.3	577.4	492.2	296.8	273.0	274.3
62.5°	2194.2	626.2	129.0	140.3	187.9	222.9	440.8	447.1	274.3	260.5	274.3
65°	764.0	224.2	100.2	93.9	103.9	119.0	253.0	345.7	249.2	225.4	227.9
67.5°	157.8	111.5	88.9	77.6	77.6	77.6	129.0	215.4	205.4	179.1	181.6
70°	100.2	95.2	77.6	66.4	63.9	58.9	73.9	119.0	141.5	130.3	131.5
72.5°	73.9	72.6	61.4	53.9	47.6	42.6	46.3	58.9	72.6	75.1	76.4
75°	45.1	46.3	40.1	33.8	30.1	26.3	27.6	27.6	27.6	25.0	27.6
77.5°	13.8	15.0	12.5	10.0	8.8	8.8	8.8	7.5	6.3	3.8	3.8
80°	3.8	3.8	3.8	3.8	3.8	2.5	2.5	1.3	1.3	0.0	0.0
82.5°	3.8	3.8	3.8	3.8	2.5	2.5	1.3	1.3	0.0	0.0	0.0
85°	3.8	3.8	3.8	3.8	2.5	2.5	1.3	1.3	0.0	0.0	0.0
87.5°	3.8	3.8	3.8	3.8	2.5	2.5	1.3	1.3	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	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

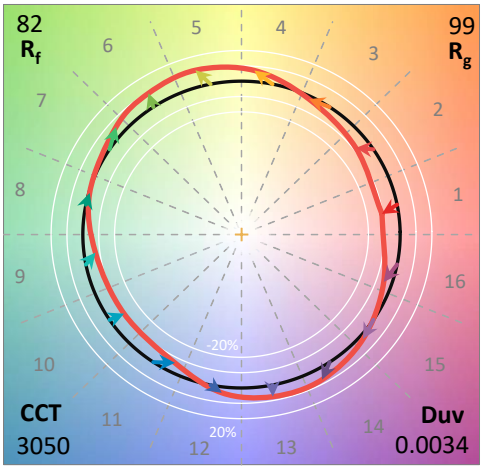
Test Information

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

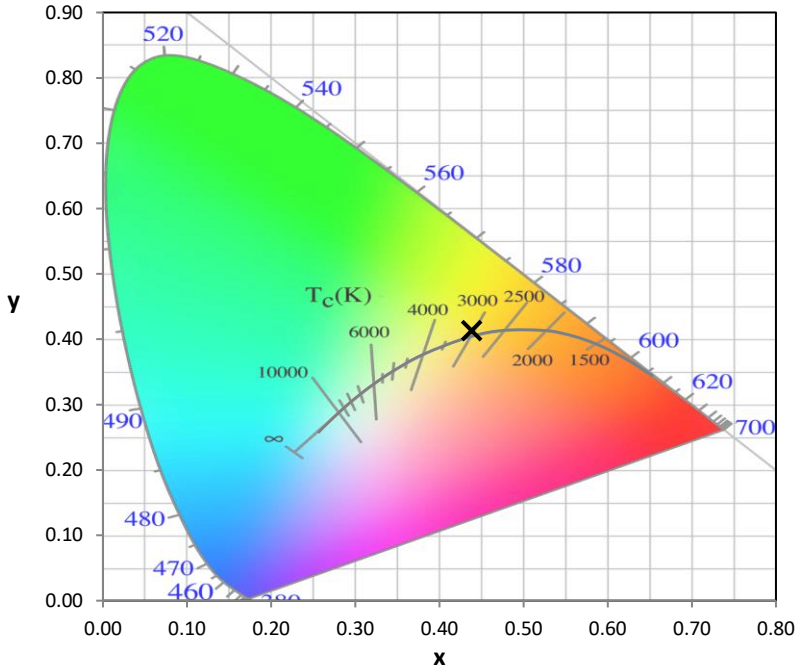
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

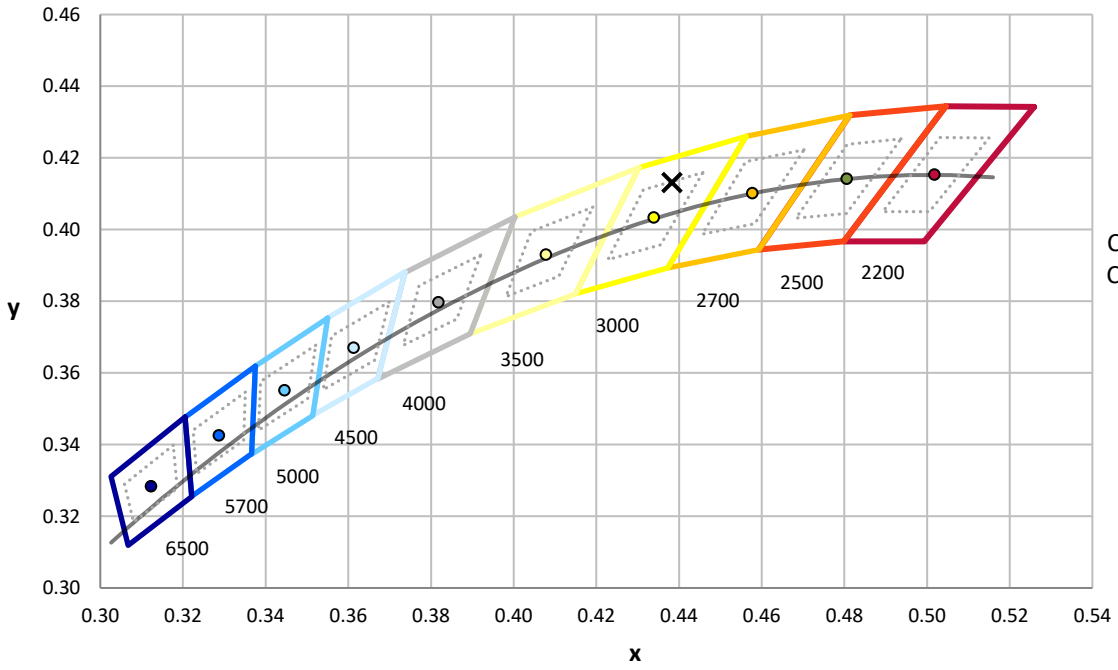
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

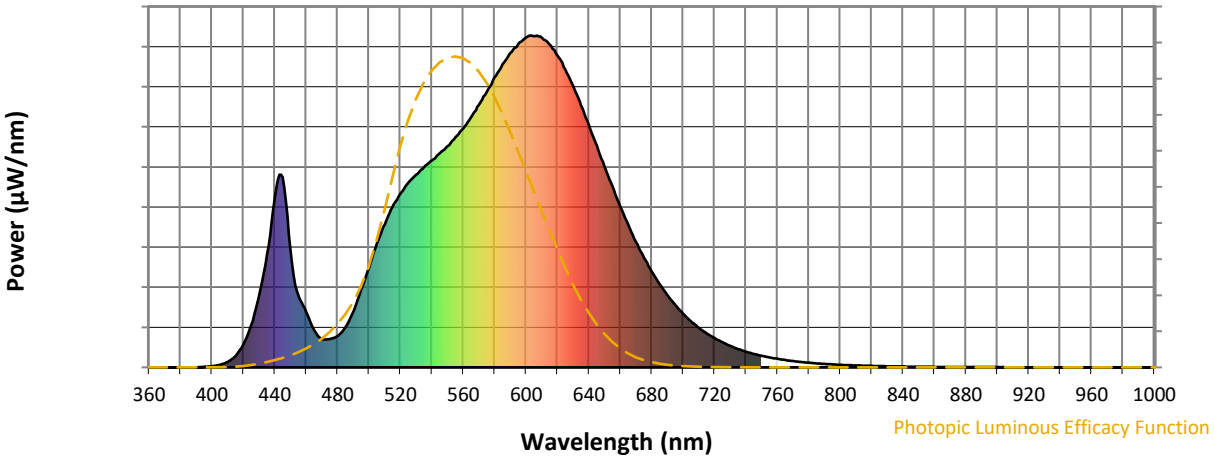


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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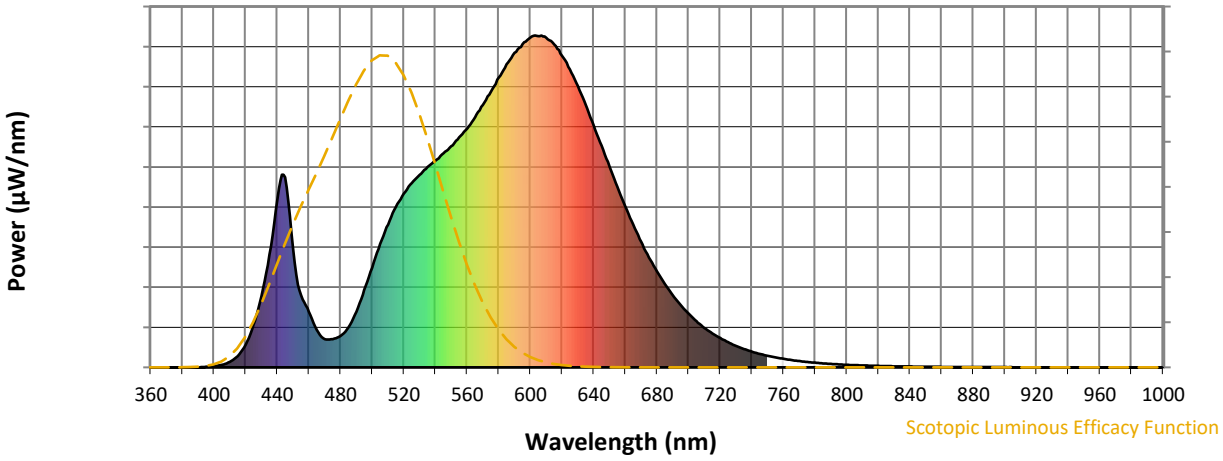
Scotopic Flux vs. Wavelength



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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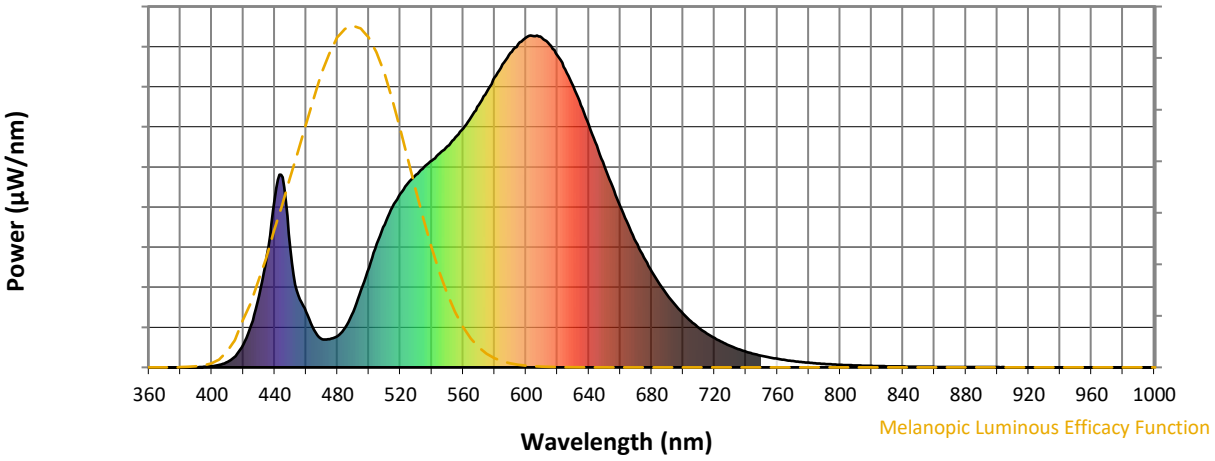
Melanopic Flux vs. Wavelength



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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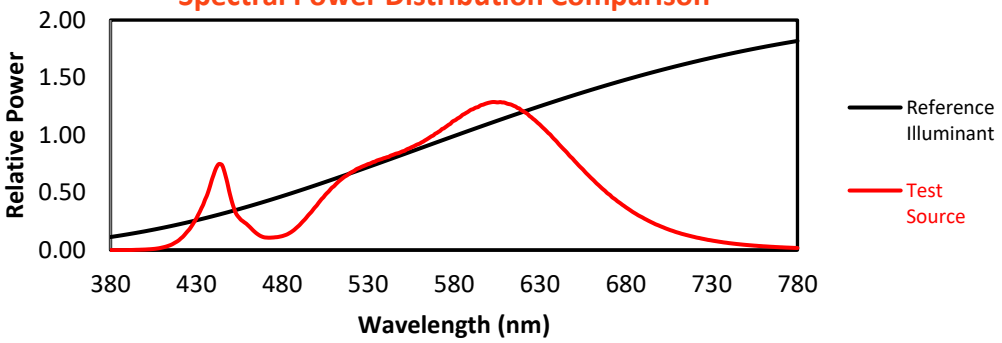
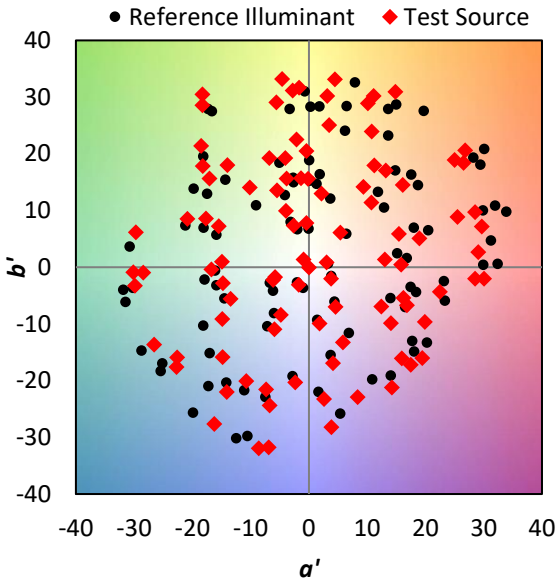
Summary

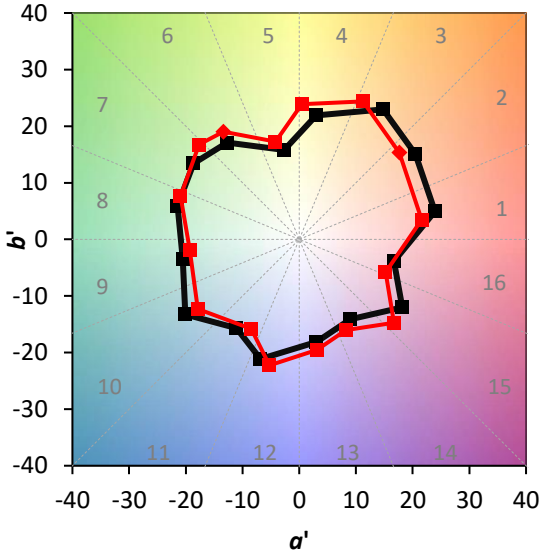
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

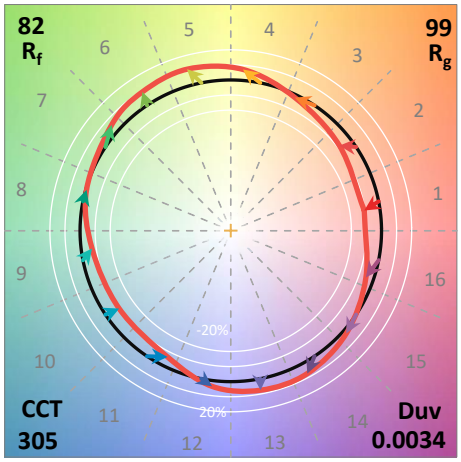
Spectral Power Distribution Comparison

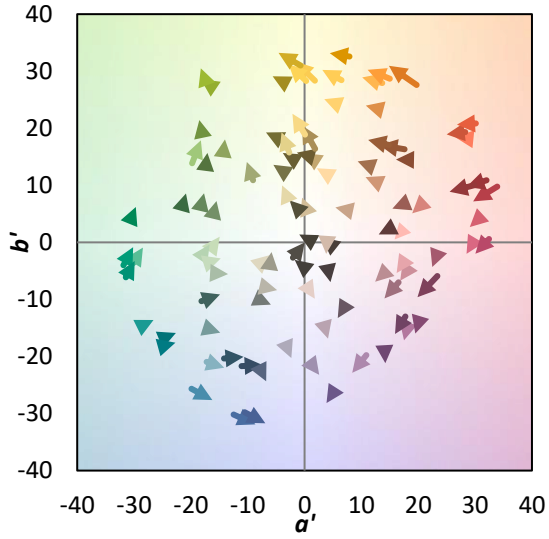


Color Vector Graphics









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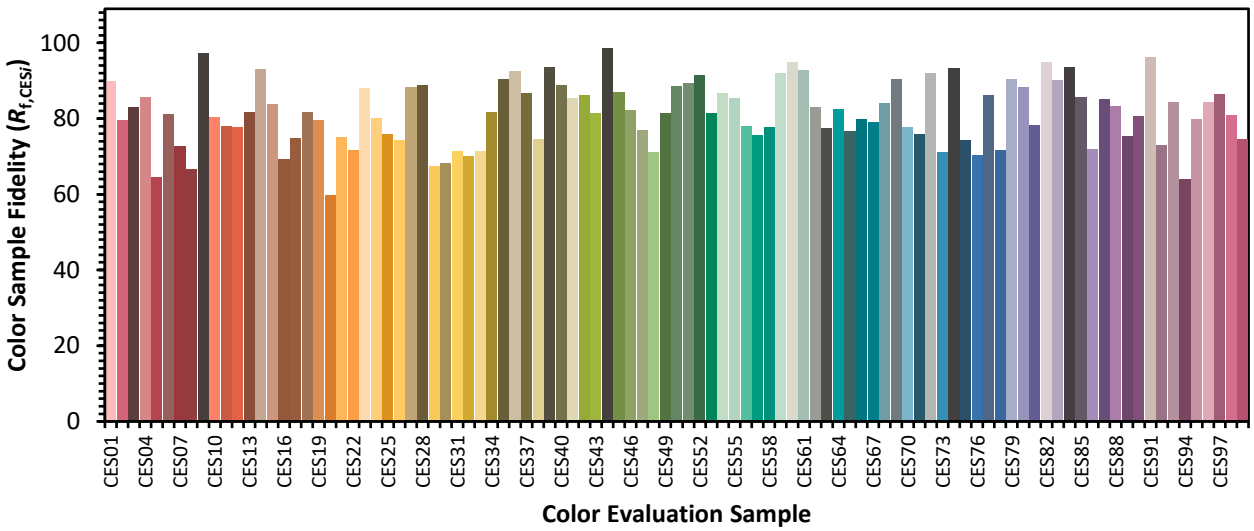
Individual Sample Fidelity Index ($R_{f,i}$)

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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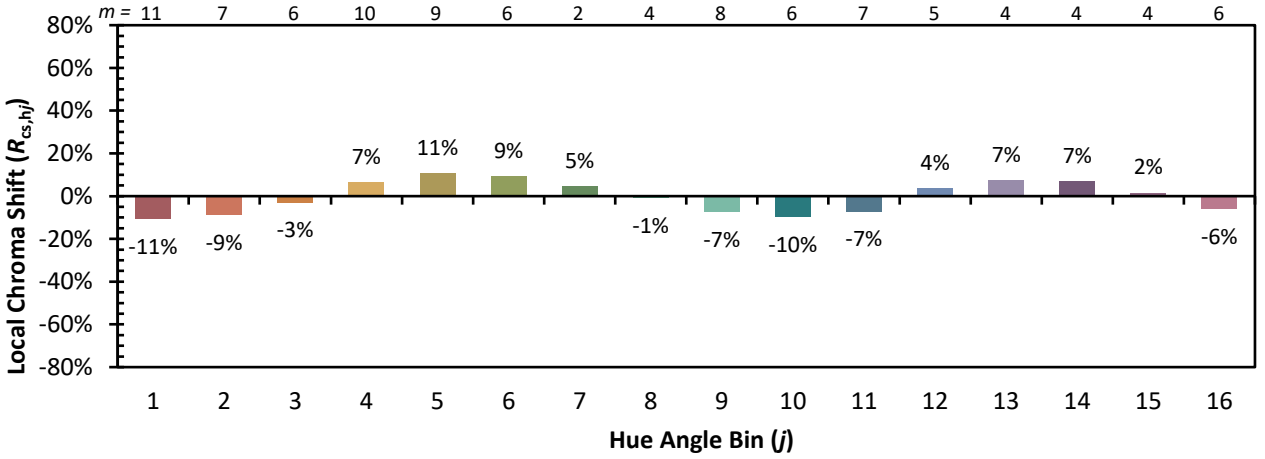
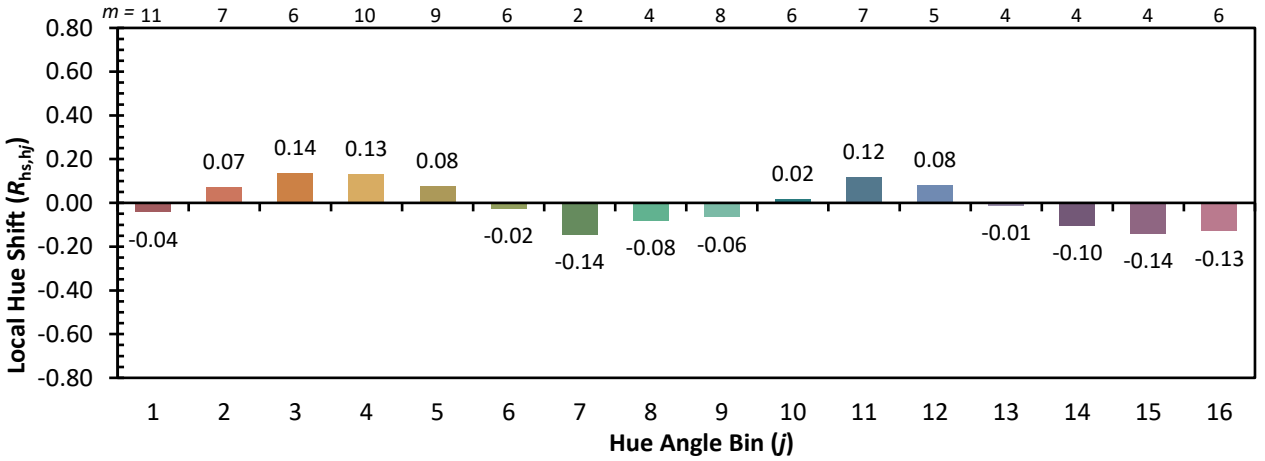
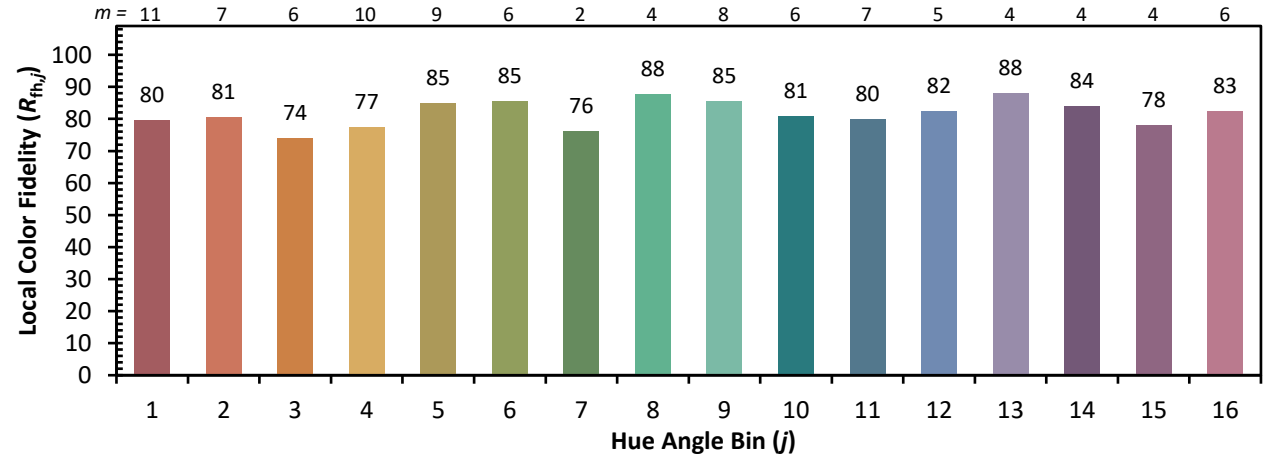
Color Rendition by Hue-Angle Bin







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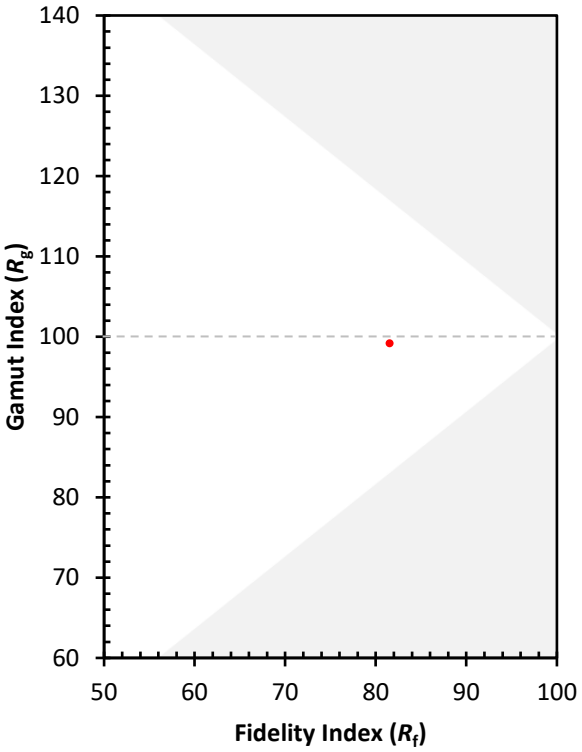
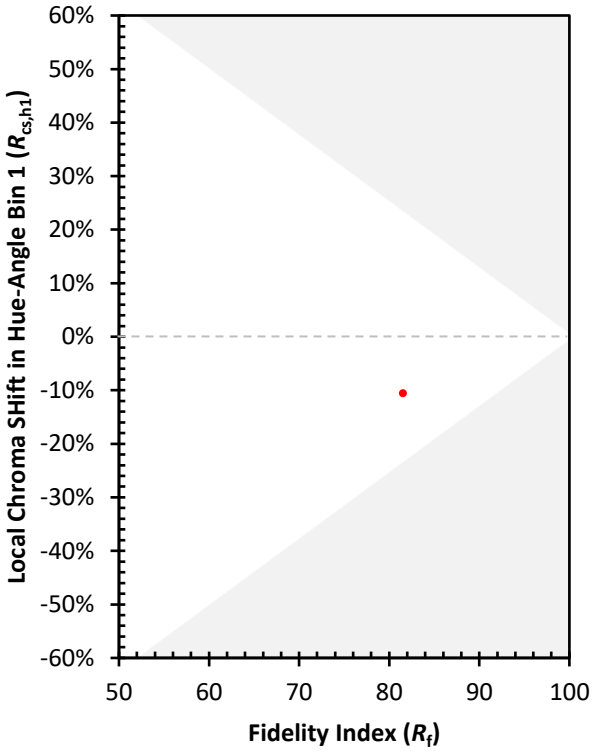
Measure Comparisons





(END OF REPORT)