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: P638997

Luminaire Tested: GWS-SA4F-830-U-T3R-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:	P638997
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	21158.7 lumens
Efficiency:	N/A
Efficacy:	93.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - U0 - G4

Input Watts (W):	225.3
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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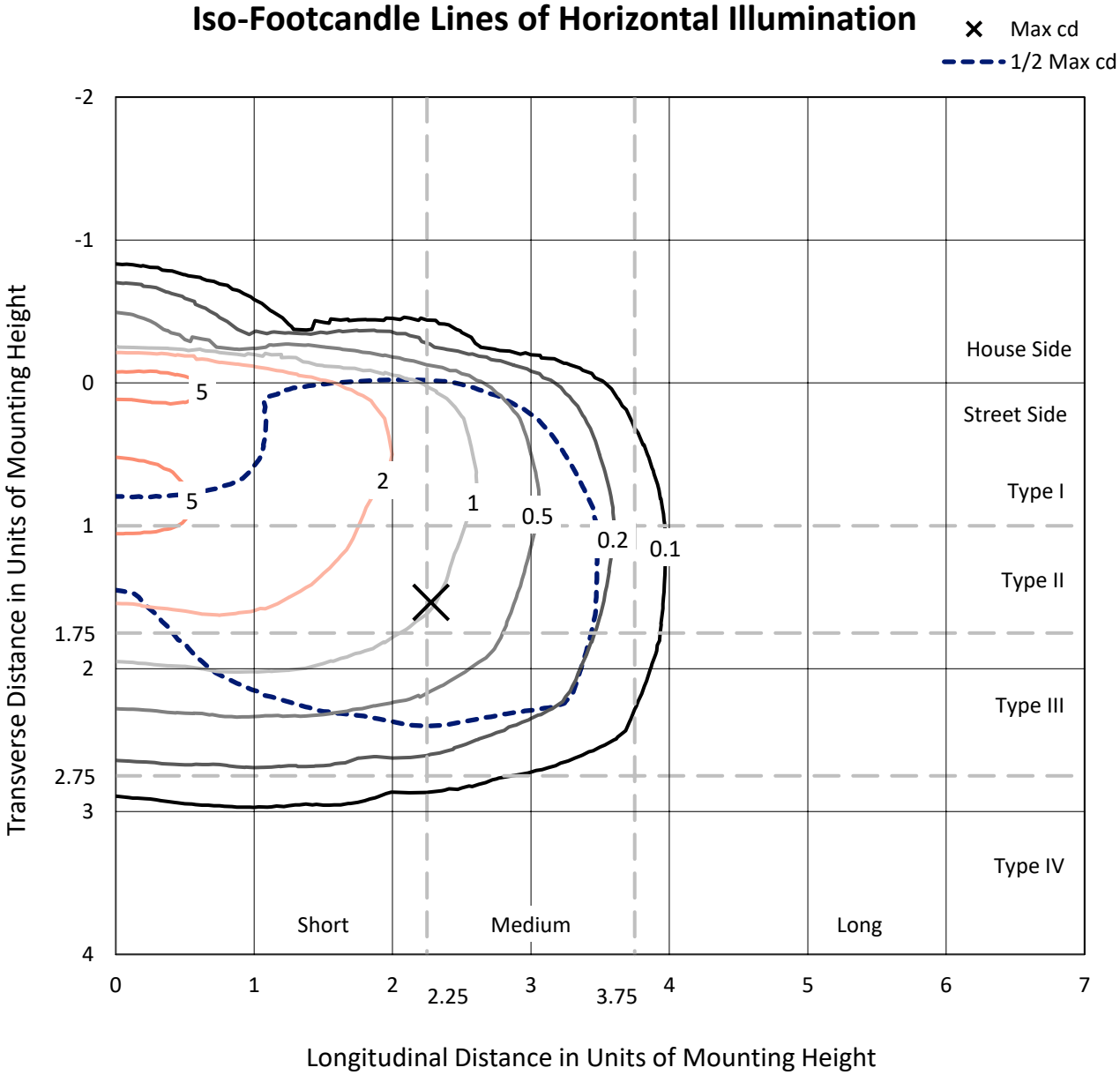
Scaled Data Report

REPORT NUMBER: P638997
CATALOG NUMBER: GWS-SA4F-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type III - Medium - N/A

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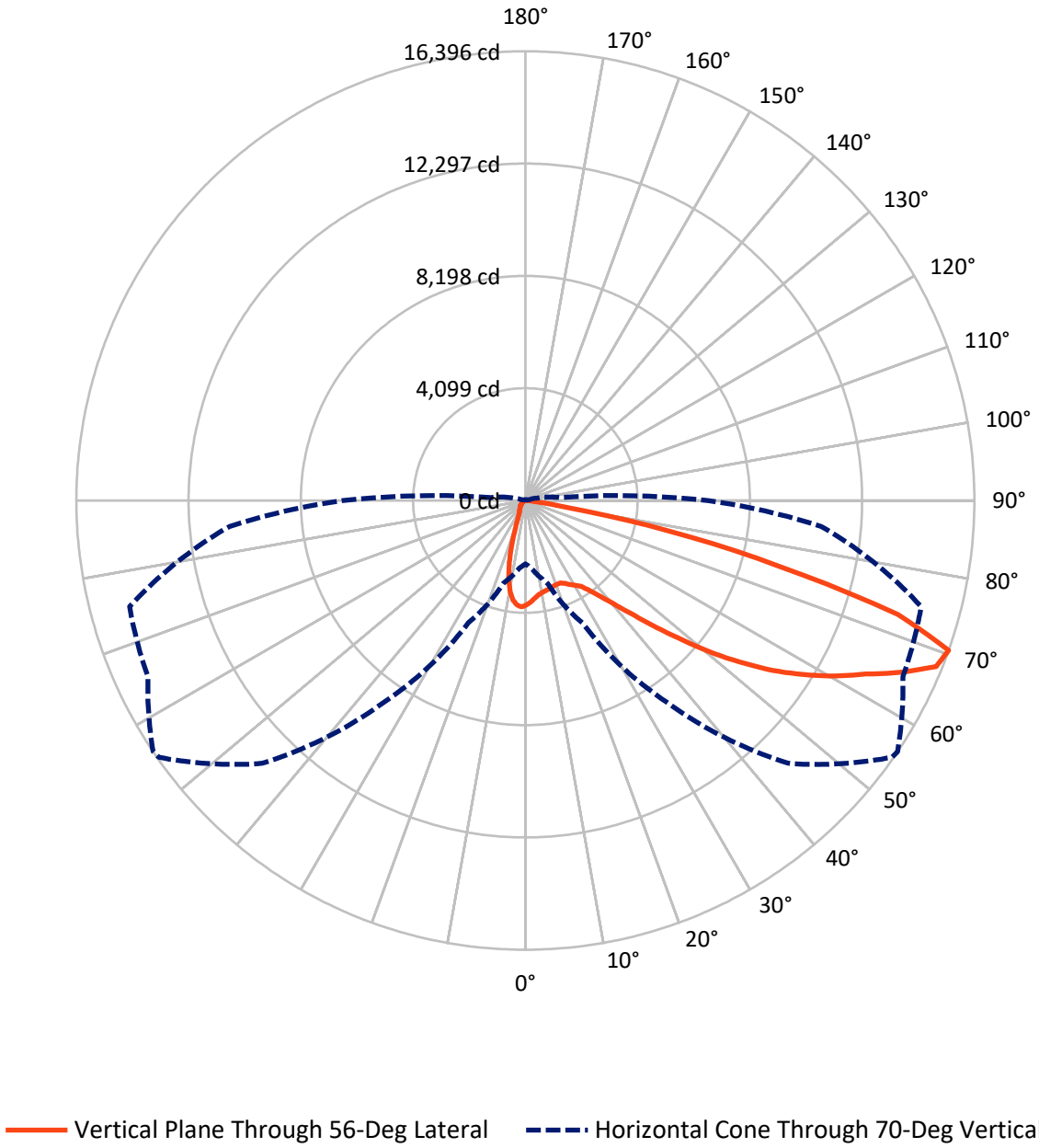
Luminous Intensity Polar Plot



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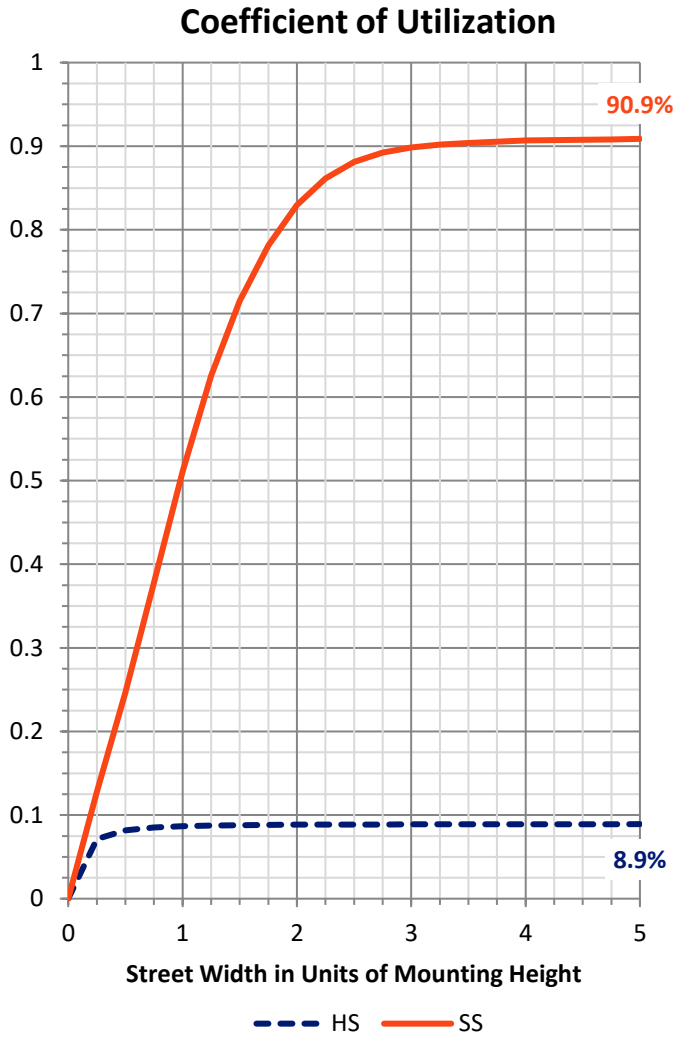
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1900.5	0.0	1900.5
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	19258.2	0.0	19258.2
	% Fixture	91.0	0.0	91.0
Total	Lumens	21158.7	0.0	21158.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.6	1.5
10°-20°	736.7	3.5
20°-30°	1167.0	5.5
30°-40°	2012.4	9.5
40°-50°	3398.3	16.1
50°-60°	4993.2	23.6
60°-70°	5919.8	28.0
70°-80°	2524.4	11.9
80°-90°	79.3	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°	21158.7	100.0
0°-180°	21158.7	100.0



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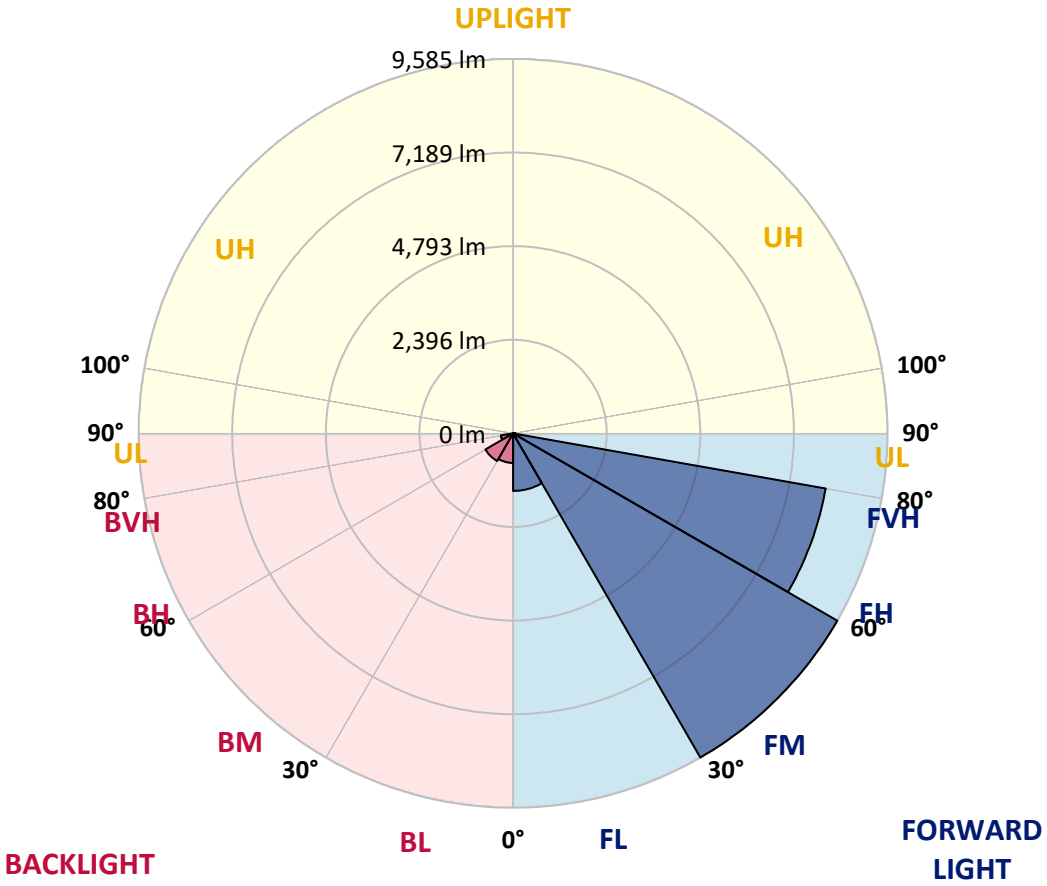
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1474.4	7.0			
FM	(30°-60°)	9585.5	45.3			
FH	(60°-80°)	8127.2	38.4			G4/12000
FVH	(80°-90°)	71.2	0.3			G1/100
BL	(0°-30°)	756.9	3.6	B2/1000		
BM	(30°-60°)	818.6	3.9	B1/1000		
BH	(60°-80°)	317.0	1.5	B1/500		G1/500
BVH	(80°-90°)	8.1	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-G4
Type III Medium



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Scaled Data Report

REPORT NUMBER: P638997
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1
2.5°	3551.6	3545.8	3549.7	3578.7	3633.0	3658.2	3700.8	3708.6	3743.4	3788.0	3805.4
5°	3321.0	3301.7	3311.4	3352.0	3414.0	3483.8	3563.2	3584.6	3671.7	3770.6	3844.2
7.5°	3109.8	3088.5	3111.8	3175.7	3262.9	3338.5	3456.7	3470.2	3609.7	3784.1	3917.8
10°	2778.5	2784.3	2830.8	2943.2	3076.9	3233.8	3392.7	3412.1	3584.6	3828.7	4036.0
12.5°	2524.7	2511.1	2561.5	2689.4	2877.3	3106.0	3344.3	3369.5	3586.5	3896.5	4187.1
15°	2406.5	2402.6	2423.9	2516.9	2699.1	2968.4	3299.7	3332.7	3611.7	3958.5	4330.5
17.5°	2410.4	2404.6	2402.6	2456.9	2592.5	2865.7	3251.3	3293.9	3633.0	4026.3	4481.7
20°	2578.9	2551.8	2503.4	2478.2	2559.6	2799.8	3218.3	3266.8	3664.0	4098.0	4642.5
22.5°	2931.6	2941.3	2811.5	2675.8	2637.1	2807.6	3214.5	3270.7	3731.8	4210.4	4840.1
25°	3636.9	3621.4	3381.1	3076.9	2865.7	2896.7	3282.3	3350.1	3865.5	4371.2	5026.1
27.5°	4520.4	4534.0	4204.6	3720.2	3278.4	3080.8	3406.3	3474.1	4020.5	4472.0	5150.1
30°	5483.4	5469.8	5117.2	4580.5	3863.6	3386.9	3530.3	3590.4	4098.0	4526.2	5278.0
32.5°	6394.1	6363.1	6014.3	5452.4	4609.5	3869.4	3700.8	3735.7	4200.7	4644.4	5450.5
35°	7171.0	7169.1	6864.9	6266.2	5376.8	4473.9	3993.4	4022.4	4392.5	4832.4	5704.3
37.5°	7973.2	7946.1	7605.1	7058.7	6165.4	5136.6	4441.0	4429.3	4694.8	5109.4	6016.2
40°	8632.0	8614.6	8353.0	7827.9	6985.0	5869.0	4983.5	4948.6	5053.3	5493.1	6450.3
42.5°	9120.3	9122.2	9040.8	8721.1	7853.1	6715.7	5665.5	5611.3	5609.3	6072.4	7023.8
45°	9490.3	9515.5	9637.6	9589.2	8878.1	7701.9	6539.4	6483.2	6388.3	6824.2	7680.6
47.5°	9662.8	9695.7	10063.9	10257.6	9775.2	8680.4	7579.9	7461.7	7275.7	7824.0	8415.0
50°	9645.4	9703.5	10216.9	10806.0	10589.0	9672.5	8713.4	8657.2	8353.0	8881.9	9141.6
52.5°	9250.1	9374.1	10226.6	11139.2	11214.8	10587.0	9885.6	9781.0	9633.7	9986.4	9823.6
55°	8176.7	8327.8	9817.8	11245.8	11703.1	11385.3	11032.7	10947.4	10703.3	11028.8	10418.5
57.5°	7593.4	7723.3	8957.5	11193.5	12117.7	12123.5	12053.8	11984.0	11782.5	12059.6	11116.0
60°	7242.7	7372.6	8498.3	11001.7	12493.6	12902.5	13012.9	13005.1	12714.5	13231.8	11933.7
62.5°	6729.3	6907.5	8019.7	10503.7	12761.0	13669.7	14003.0	13950.7	13627.1	14452.5	12743.6
65°	5692.7	5847.7	7039.3	9682.2	12604.1	14305.3	15076.4	15103.6	14729.6	15601.5	13383.0
67.5°	3991.4	4105.8	5289.6	7957.7	11538.4	14514.5	16175.1	16173.1	15535.6	16190.6	13100.1
70°	2313.5	2470.4	3125.3	4919.6	8976.9	13563.2	16339.7	16395.9	15208.2	14960.2	10840.8
72.5°	895.2	1025.0	1771.0	2613.8	4681.2	10389.4	14055.3	14220.0	12728.1	11540.3	7545.0
75°	267.4	298.4	833.2	1391.2	1879.5	5018.4	9515.5	9562.0	8730.8	7198.2	3867.4
77.5°	199.6	220.9	364.3	703.3	658.8	1521.0	4923.4	5376.8	4634.7	2571.2	1065.7
80°	135.6	160.8	259.6	343.0	244.1	405.0	1383.4	1519.1	1414.4	577.4	267.4
82.5°	60.1	77.5	184.1	172.4	89.1	116.3	426.3	453.4	292.6	174.4	93.0
85°	5.8	7.8	69.8	75.6	32.9	27.1	89.1	89.1	63.9	60.1	38.8
87.5°	0.0	0.0	1.9	3.9	3.9	5.8	7.8	9.7	11.6	15.5	19.4
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: P638997
CATALOG NUMBER: GWS-SA4F-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1	3815.1
2.5°	3850.0	3826.8	3855.8	3879.1	3884.9	3842.3	3817.1	3780.2	3772.5	3774.4	3764.7
5°	3902.3	3890.7	3912.0	3886.8	3820.9	3696.9	3590.4	3472.2	3408.2	3371.4	3367.5
7.5°	3999.2	3993.4	3970.1	3855.8	3650.4	3375.3	3109.8	2850.2	2689.4	2631.3	2621.6
10°	4142.6	4131.0	4036.0	3764.7	3326.9	2797.9	2352.2	1980.2	1753.5	1687.6	1606.3
12.5°	4307.3	4284.0	4076.7	3569.1	2838.6	2106.2	1550.1	1133.5	937.8	879.7	879.7
15°	4466.2	4415.8	4053.5	3245.5	2237.9	1369.9	866.1	654.9	594.8	579.3	579.3
17.5°	4628.9	4532.0	3962.4	2803.7	1546.2	809.9	577.4	536.7	529.0	530.9	532.8
20°	4782.0	4630.9	3801.6	2272.8	986.2	565.8	517.3	507.7	503.8	507.7	505.7
22.5°	4948.6	4721.9	3557.4	1693.5	641.3	509.6	492.1	484.4	480.5	486.3	486.3
25°	5113.3	4787.8	3233.8	1139.3	509.6	474.7	465.0	457.3	453.4	455.3	455.3
27.5°	5198.6	4762.6	2809.5	726.6	457.3	439.8	430.1	420.5	414.6	412.7	414.6
30°	5256.7	4685.1	2290.2	517.3	414.6	393.3	383.6	375.9	360.4	350.7	354.6
32.5°	5347.8	4607.6	1726.4	434.0	379.8	346.8	331.3	312.0	290.6	281.0	281.0
35°	5456.3	4501.0	1211.0	391.4	343.0	308.1	279.0	246.1	220.9	213.1	213.1
37.5°	5599.7	4400.3	806.0	362.3	312.0	275.1	234.4	195.7	168.6	164.7	162.8
40°	5814.7	4315.0	567.7	341.0	284.8	240.3	191.8	151.1	131.8	125.9	125.9
42.5°	6093.7	4227.8	449.5	319.7	261.6	207.3	153.1	120.1	104.6	100.8	98.8
45°	6438.6	4125.1	391.4	300.3	238.3	172.4	122.1	100.8	89.1	85.3	85.3
47.5°	6812.6	3985.6	364.3	275.1	211.2	139.5	102.7	87.2	81.4	79.4	77.5
50°	7180.7	3797.7	341.0	251.9	180.2	114.3	89.1	79.4	75.6	73.6	73.6
52.5°	7502.4	3578.7	312.0	224.8	147.3	98.8	79.4	73.6	69.8	65.9	63.9
55°	7777.5	3340.4	275.1	193.8	120.1	87.2	73.6	67.8	63.9	60.1	58.1
57.5°	8132.1	3204.8	220.9	156.9	98.8	77.5	67.8	62.0	58.1	52.3	52.3
60°	8525.4	3106.0	164.7	124.0	85.3	71.7	62.0	56.2	52.3	46.5	46.5
62.5°	8841.3	2958.7	129.8	100.8	73.6	63.9	56.2	50.4	46.5	40.7	40.7
65°	8961.4	2654.5	106.6	79.4	60.1	56.2	50.4	46.5	40.7	34.9	34.9
67.5°	8418.9	2046.1	89.1	63.9	50.4	48.4	44.6	42.6	34.9	31.0	29.1
70°	*6667.3*	*1247.8*	*73.6*	*52.3*	*42.6*	*40.7*	*40.7*	*36.8*	*31.0*	*29.1*	*27.1*
72.5°	4568.9	643.3	60.1	42.6	36.8	36.8	34.9	32.9	29.1	27.1	27.1
75°	2373.6	215.1	46.5	32.9	29.1	31.0	31.0	29.1	27.1	27.1	25.2
77.5°	680.1	96.9	34.9	25.2	23.3	23.3	25.2	25.2	25.2	23.3	23.3
80°	176.3	56.2	25.2	19.4	19.4	19.4	19.4	21.3	23.3	21.3	21.3
82.5°	71.7	31.0	17.4	15.5	15.5	15.5	15.5	17.4	19.4	19.4	19.4
85°	44.6	15.5	13.6	13.6	13.6	11.6	11.6	13.6	13.6	15.5	15.5
87.5°	27.1	11.6	11.6	11.6	11.6	9.7	9.7	9.7	9.7	9.7	9.7
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

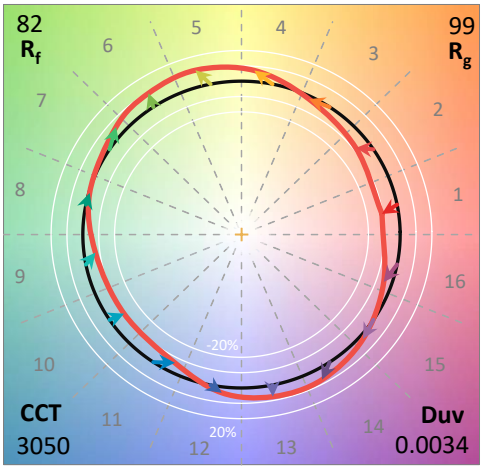
Test Information

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

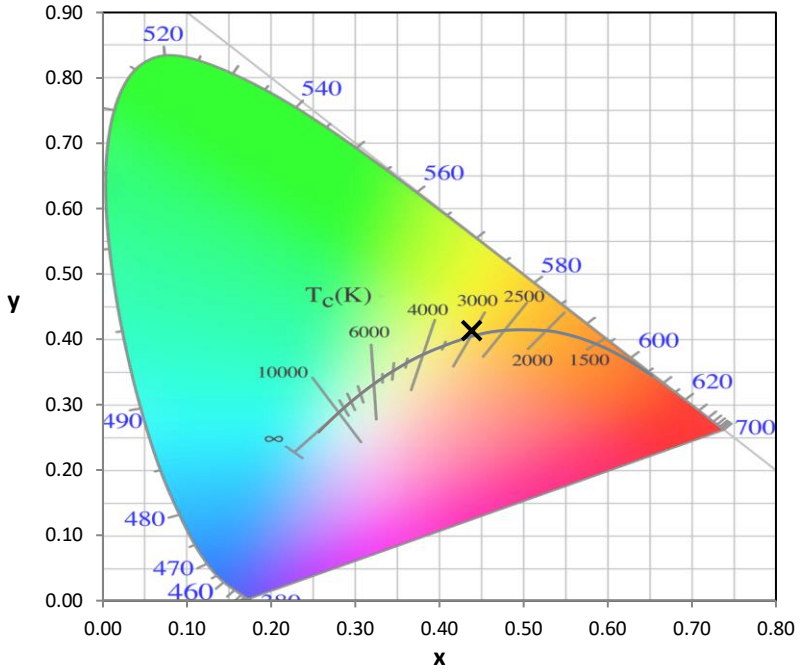
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

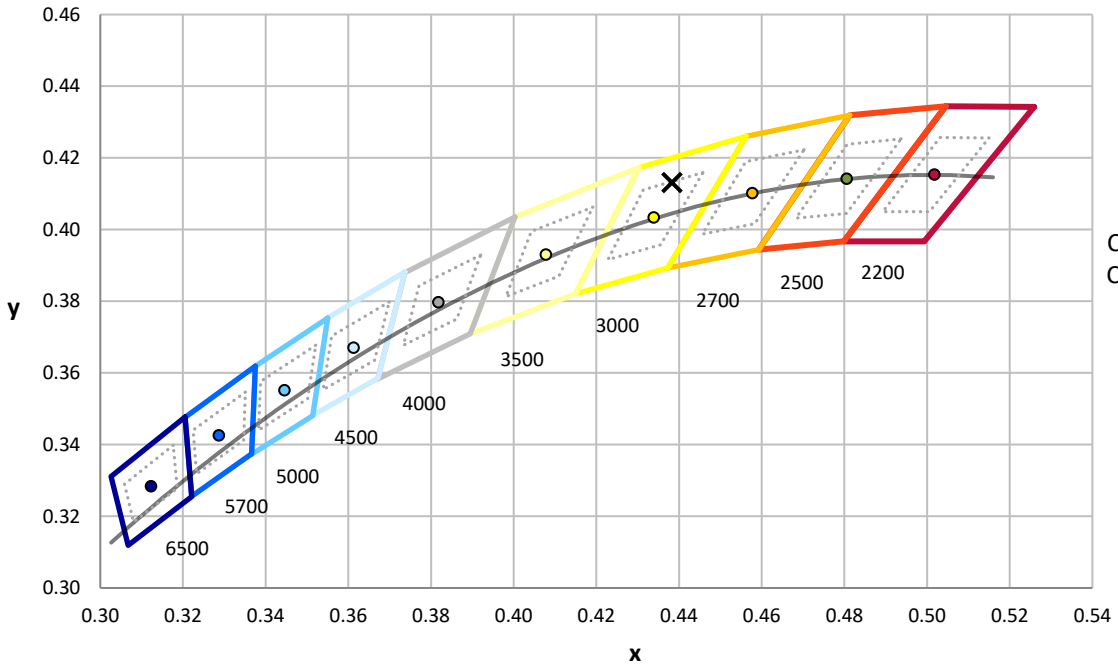
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

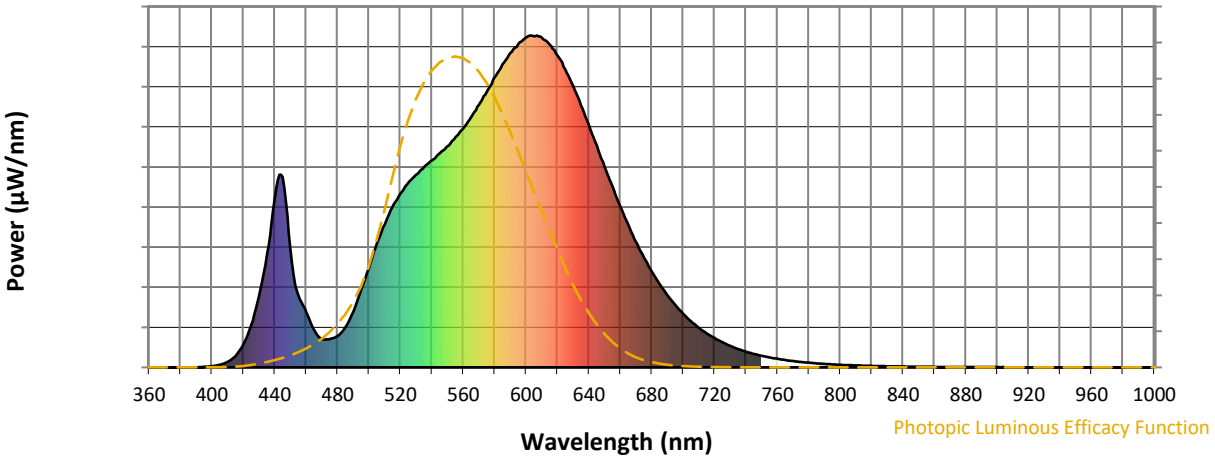


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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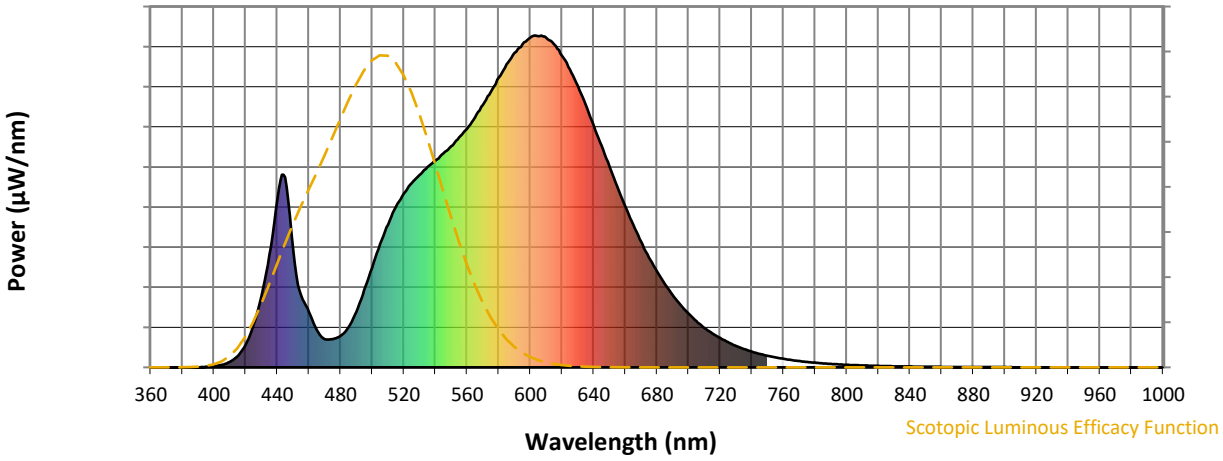
Scotopic Flux vs. Wavelength



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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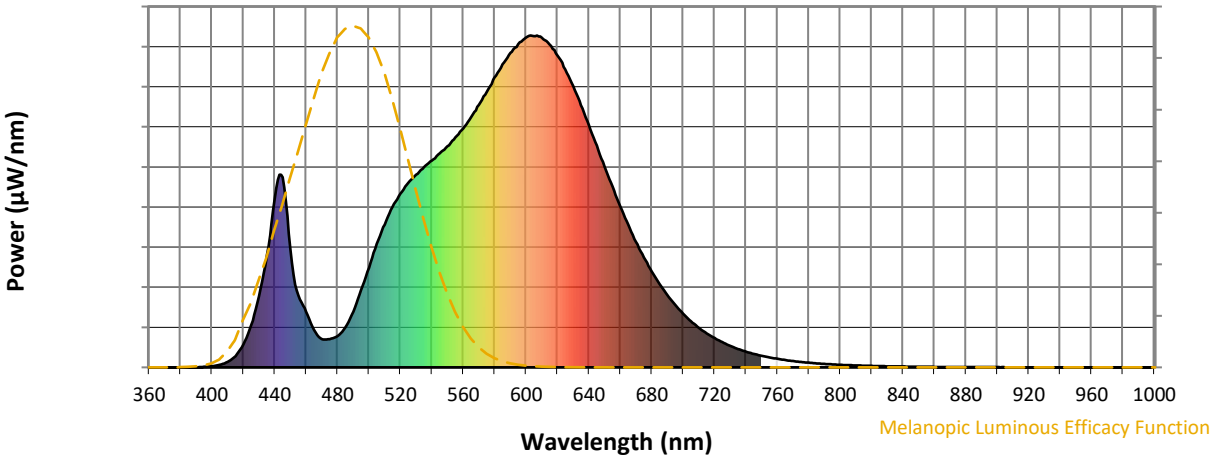
Melanopic Flux vs. Wavelength



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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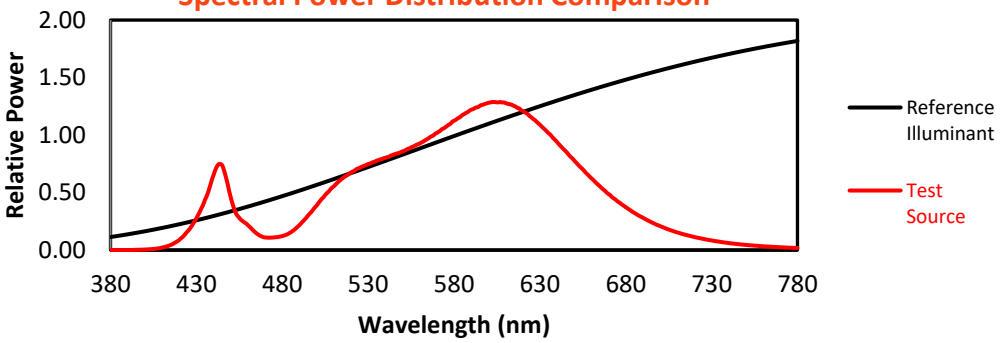
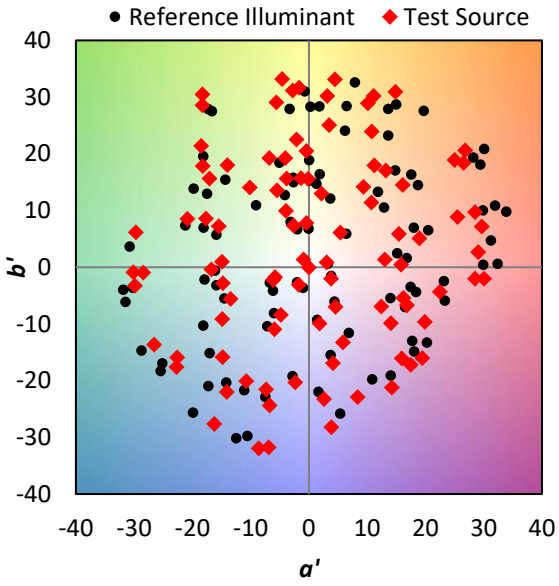
Summary

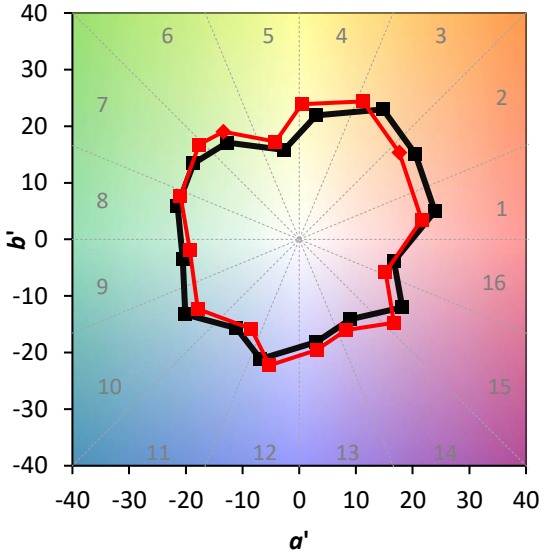
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

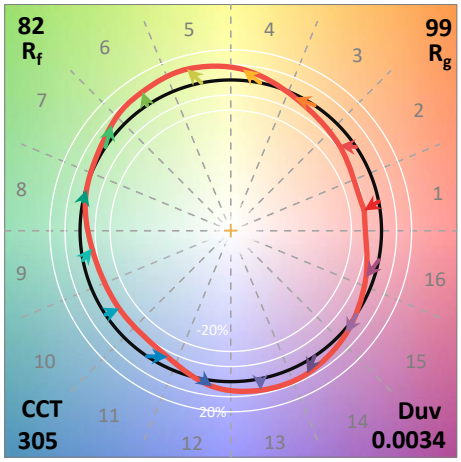
Spectral Power Distribution Comparison

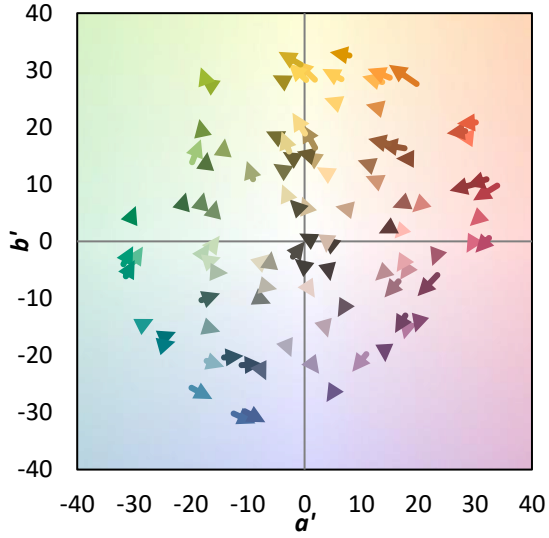


Color Vector Graphics









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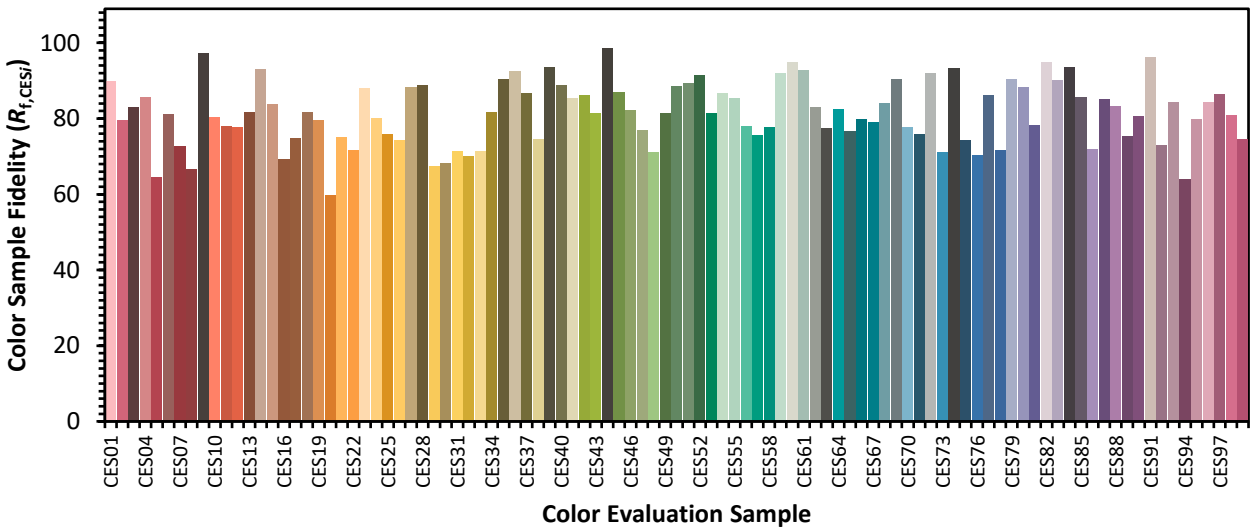
Individual Sample Fidelity Index ($R_{f,i}$)

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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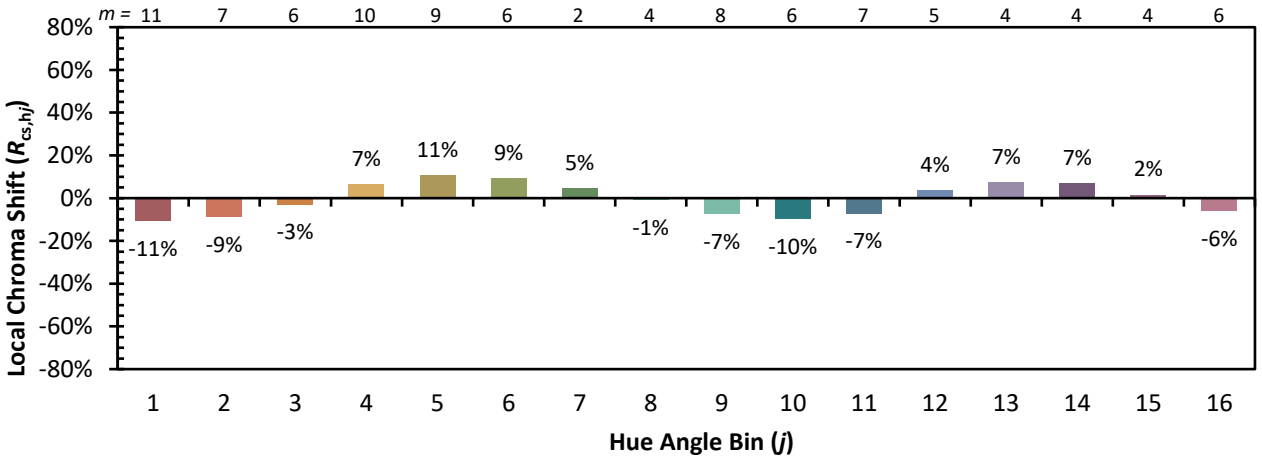
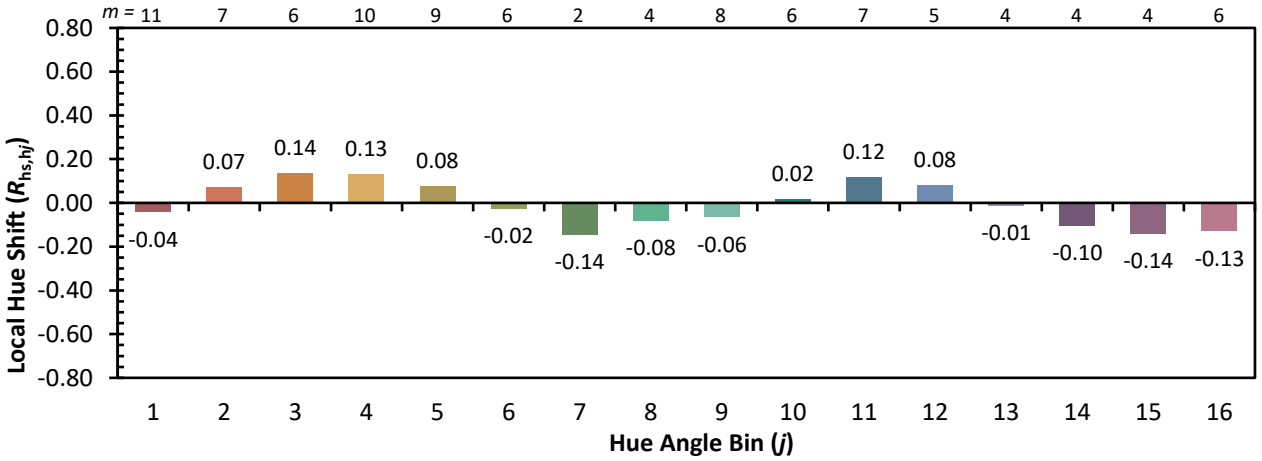
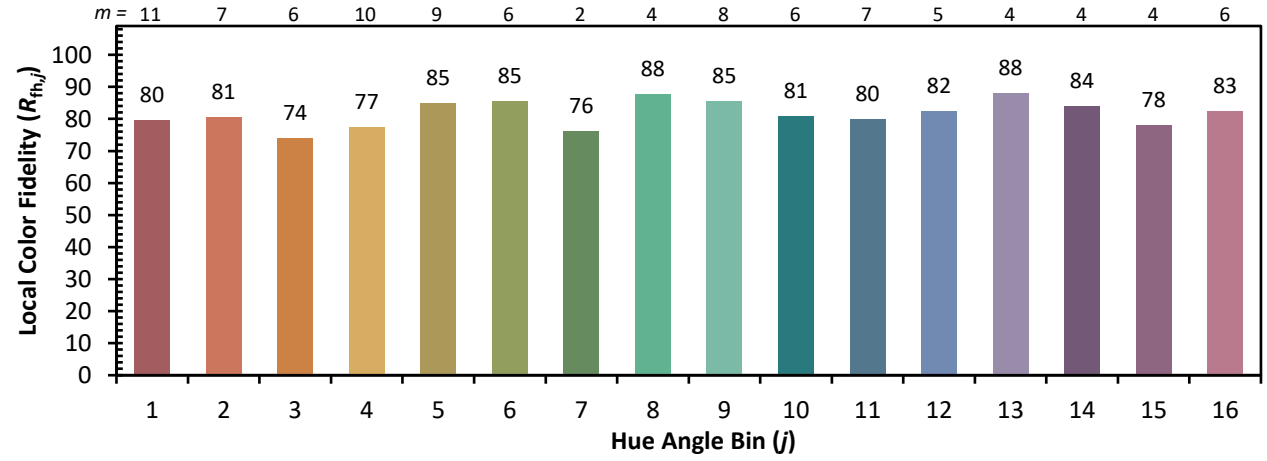
Color Rendition by Hue-Angle Bin







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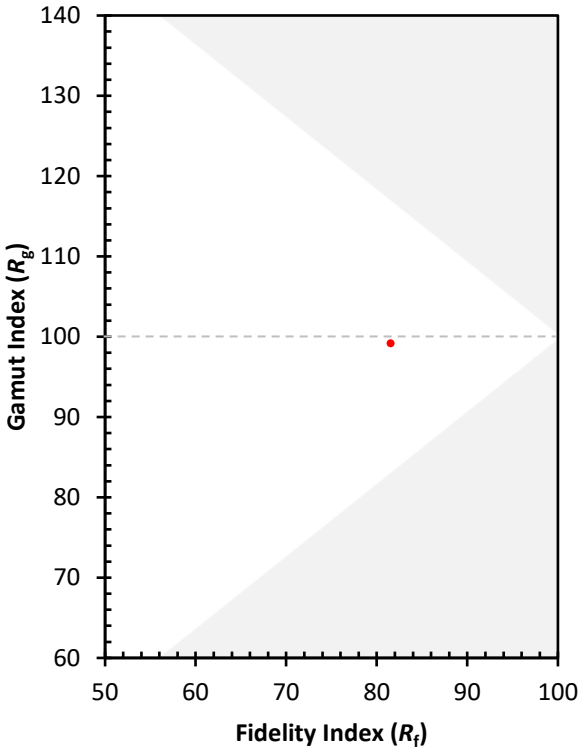
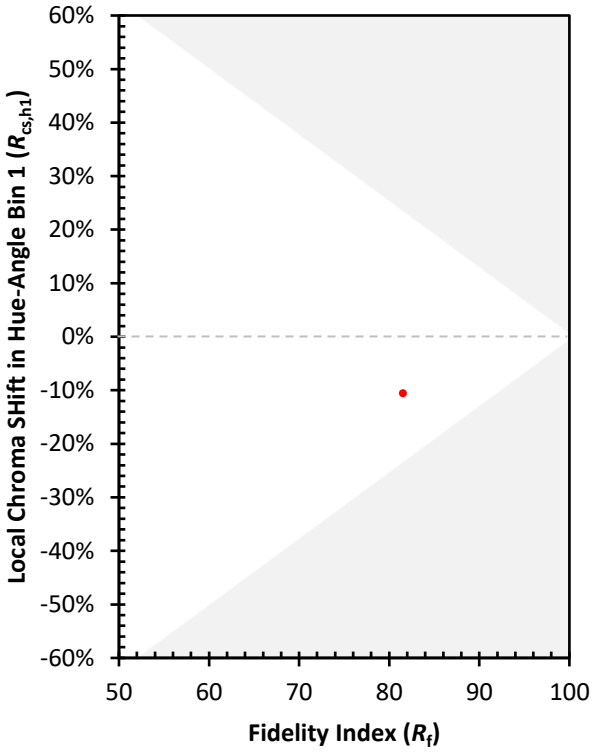
Measure Comparisons





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