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: P637472

Luminaire Tested: GWS-SA4C-830-U-AFL-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:	P637472
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-AFL-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11613.8 lumens
Efficiency:	N/A
Efficacy:	90.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G0

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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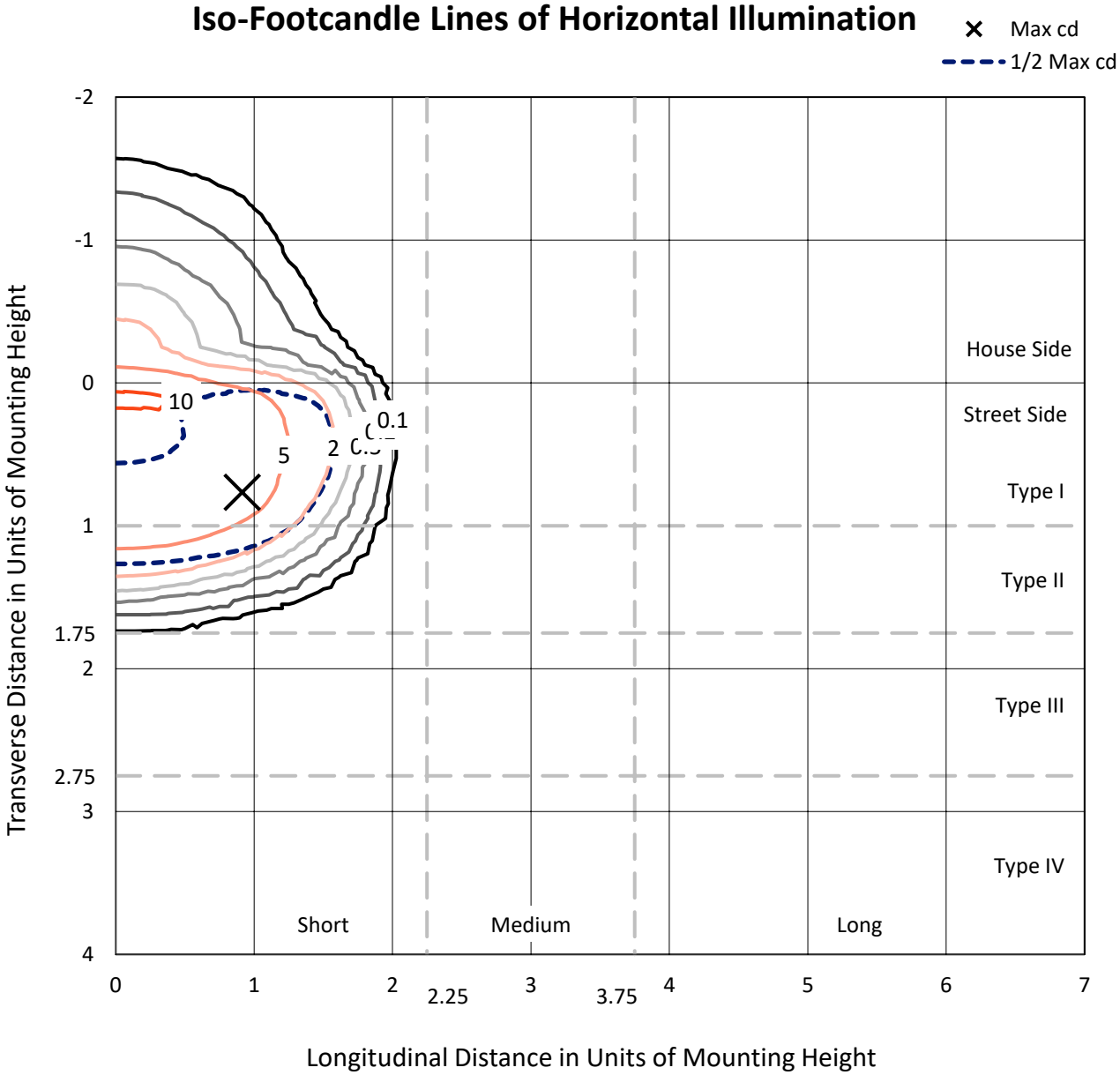
Scaled Data Report

REPORT NUMBER: P637472
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 11.3 fc
Type II - Short - N/A

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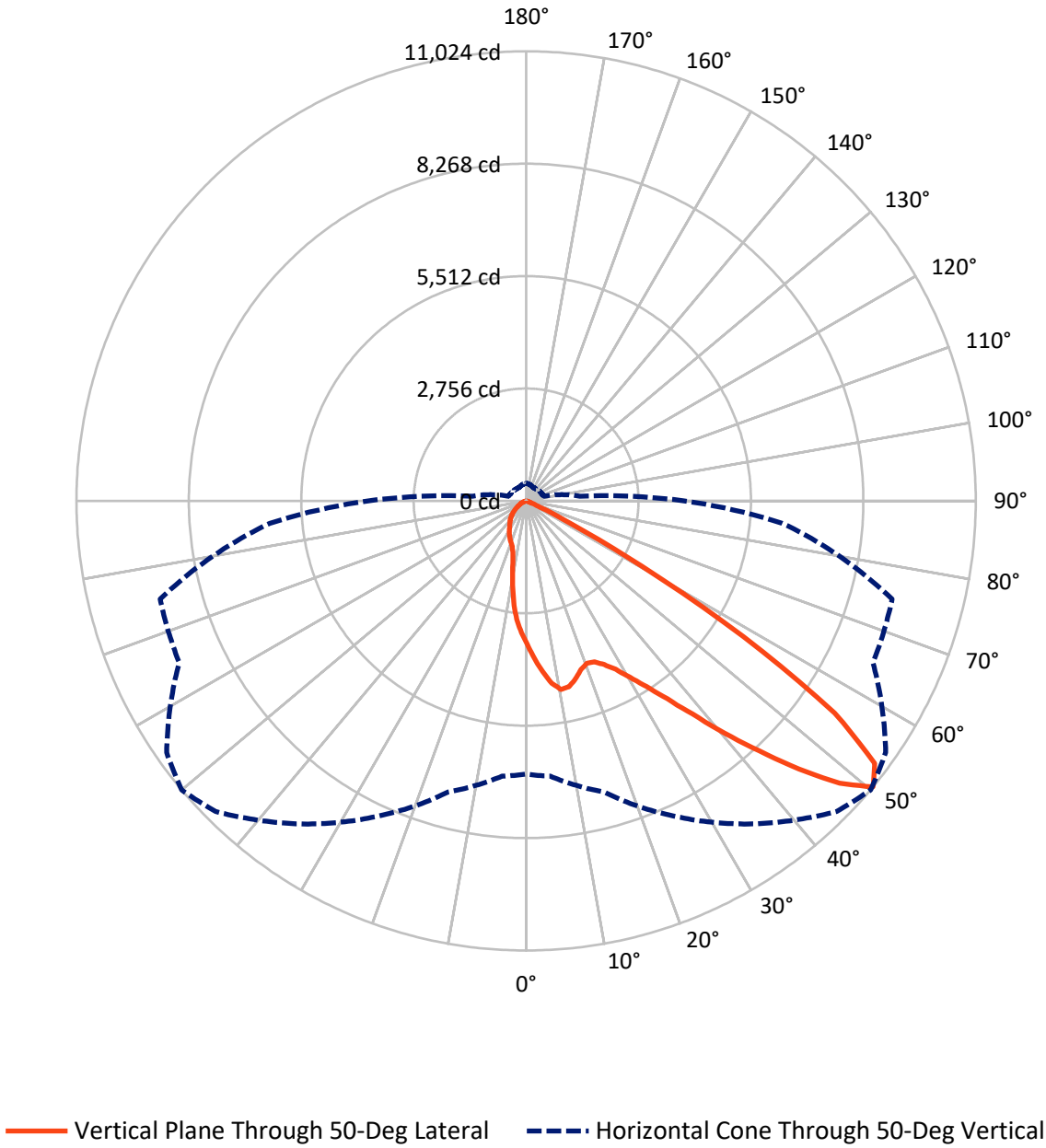
Luminous Intensity Polar Plot



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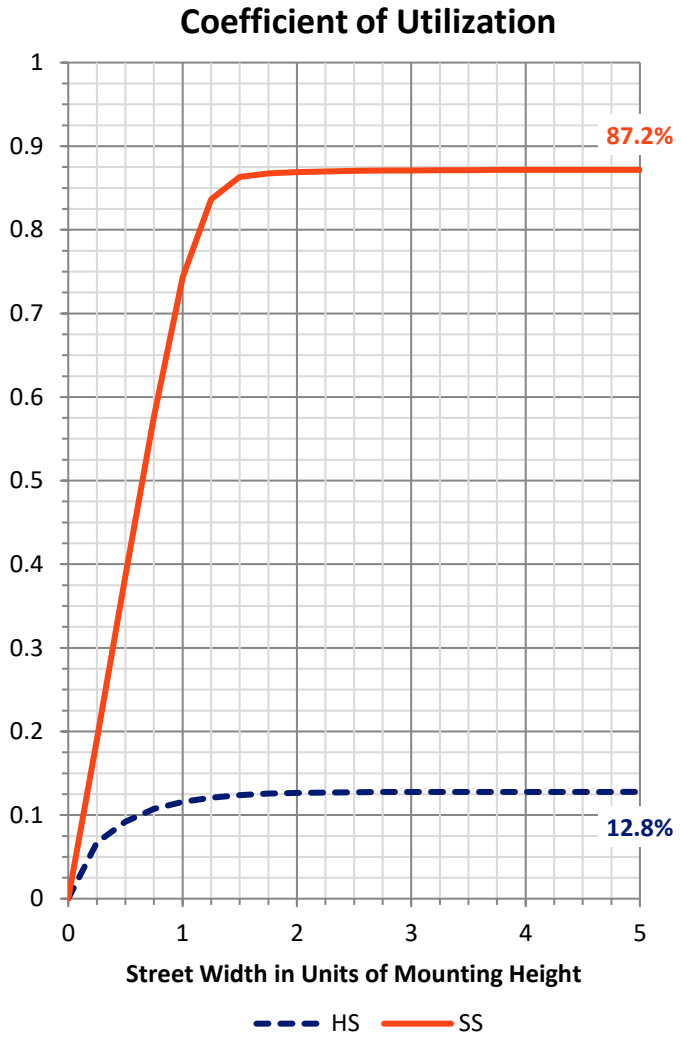
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.2	0.0	1492.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	10121.6	0.0	10121.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	11613.8	0.0	11613.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.4	2.8
10°-20°	842.1	7.3
20°-30°	1389.8	12.0
30°-40°	2293.5	19.7
40°-50°	3628.8	31.2
50°-60°	2747.4	23.7
60°-70°	343.9	3.0
70°-80°	38.9	0.3
80°-90°	3.0	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°	11613.8	100.0
0°-180°	11613.8	100.0



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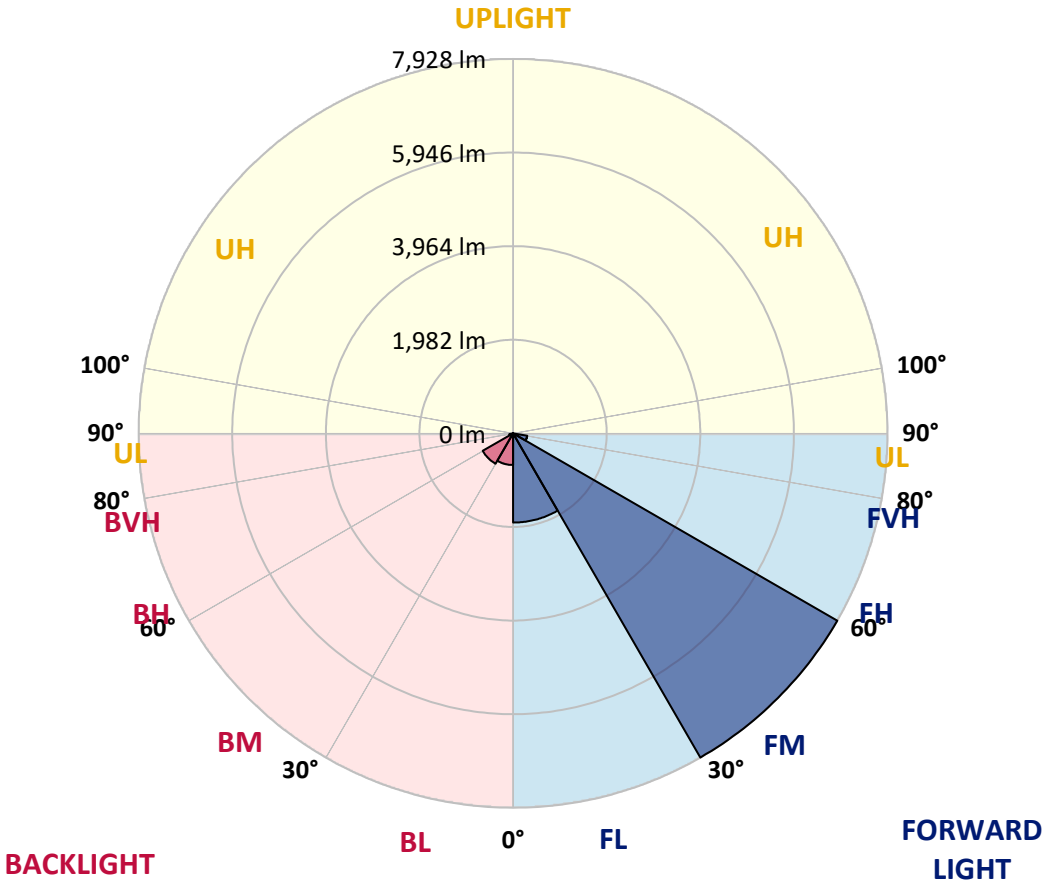
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1888.6	16.3			
FM	(30°-60°)	7927.6	68.3			
FH	(60°-80°)	304.0	2.6			G0/660
FVH	(80°-90°)	1.4	0.0			G0/10
BL	(0°-30°)	669.8	5.8	B2/1000		
BM	(30°-60°)	742.1	6.4	B1/1000		
BH	(60°-80°)	78.7	0.7	B0/110		G0/110
BVH	(80°-90°)	1.6	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-G0
Type II Short



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Scaled Data Report

REPORT NUMBER: P637472
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5
2.5°	4009.3	4041.4	4032.5	3990.5	3945.2	3913.2	3863.4	3847.9	3735.2	3656.7	3573.8
5°	4493.5	4503.4	4492.4	4441.5	4361.9	4285.7	4203.9	4156.3	3967.3	3797.1	3623.5
7.5°	4609.6	4597.4	4618.4	4643.8	4632.8	4599.6	4513.4	4461.4	4235.9	3958.5	3695.4
10°	4247.0	4219.3	4297.8	4429.4	4567.6	4723.4	4701.3	4705.7	4497.9	4161.9	3789.3
12.5°	3766.1	3755.1	3813.7	3966.2	4237.0	4590.8	4675.9	4818.5	4737.8	4381.8	3896.6
15°	3555.0	3560.5	3595.9	3692.1	3886.6	4326.6	4531.1	4788.6	4952.2	4595.2	4014.8
17.5°	3587.1	3607.0	3605.8	3637.9	3756.2	4108.8	4347.6	4694.7	5118.0	4840.6	4150.8
20°	3804.8	3824.7	3794.9	3770.6	3810.3	4053.5	4251.4	4599.6	5229.7	5088.2	4294.5
22.5°	4130.9	4154.1	4083.4	4013.7	3988.3	4144.2	4287.9	4560.9	5314.8	5314.8	4422.7
25°	4525.5	4557.6	4448.2	4324.4	4253.6	4335.4	4443.7	4648.2	5402.1	5518.2	4510.1
27.5°	4966.6	4967.7	4873.8	4734.5	4601.8	4611.8	4677.0	4845.0	5498.3	5737.1	4578.6
30°	5462.9	5466.3	5341.3	5174.4	5007.5	4962.2	5017.5	5144.6	5698.4	6012.3	4673.7
32.5°	6104.1	6119.5	5940.5	5695.1	5478.4	5393.3	5425.4	5559.1	6016.7	6357.2	4816.3
35°	6970.7	6987.3	6723.1	6399.2	6054.3	5926.1	5958.2	6093.0	6477.7	6846.9	5044.0
37.5°	7826.3	7848.4	7580.9	7279.1	6806.0	6593.8	6626.9	6755.2	7169.7	7523.4	5408.8
40°	8417.7	8447.5	8364.6	8161.2	7722.4	7443.8	7483.6	7530.1	7931.3	8332.6	5881.9
42.5°	8729.4	8771.4	8806.8	8910.7	8679.7	8446.4	8379.0	8382.3	8706.2	9157.2	6373.8
45°	8748.2	8789.1	8970.4	9371.7	9547.4	9498.8	9376.1	9293.2	9297.6	9706.6	6681.1
47.5°	8140.2	8216.5	8555.9	9341.8	10002.9	10406.3	10344.4	10147.7	9546.3	9743.1	6647.9
50°	6699.9	6775.1	7391.9	8522.7	9671.2	10768.9	11024.3	10760.1	9383.8	9288.8	6306.4
52.5°	4866.0	4873.8	5273.9	6594.9	8327.1	10100.1	10701.5	10676.0	9136.2	8738.3	5839.9
55°	2311.4	2283.8	2733.7	3721.9	5759.2	8169.0	9182.6	9470.0	8784.7	8340.3	5478.4
57.5°	673.2	686.5	886.5	1452.5	2880.7	5220.9	6288.7	6823.7	7210.6	6856.9	4249.2
60°	301.8	302.9	337.2	442.2	959.5	2428.6	3251.0	3913.2	4311.1	3995.0	2108.0
62.5°	218.9	220.0	233.2	249.8	326.1	822.4	1219.3	1625.0	1654.8	1083.3	533.9
65°	182.4	182.4	184.6	184.6	195.7	294.0	370.3	477.5	402.4	298.5	208.9
67.5°	147.0	148.1	150.3	150.3	147.0	147.0	159.2	174.7	186.8	231.0	192.3
70°	115.0	113.9	113.9	115.0	111.6	95.1	102.8	117.2	128.2	180.2	166.9
72.5°	89.5	90.6	89.5	85.1	77.4	56.4	60.8	76.3	81.8	112.8	112.8
75°	67.4	68.5	64.1	48.6	32.1	17.7	23.2	37.6	47.5	55.3	40.9
77.5°	8.8	8.8	6.6	6.6	5.5	6.6	6.6	8.8	13.3	13.3	9.9
80°	1.1	1.1	1.1	2.2	3.3	4.4	4.4	4.4	4.4	5.5	5.5
82.5°	1.1	1.1	1.1	1.1	3.3	3.3	4.4	4.4	4.4	4.4	4.4
85°	0.0	0.0	0.0	1.1	2.2	3.3	3.3	4.4	4.4	4.4	4.4
87.5°	0.0	0.0	0.0	1.1	2.2	3.3	3.3	3.3	4.4	4.4	4.4
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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CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5	3518.5
2.5°	3524.0	3459.9	3382.6	3329.5	3254.3	3204.6	3133.8	3086.3	3045.4	3013.3	3031.0
5°	3525.2	3423.5	3265.4	3130.5	2983.5	2848.6	2703.8	2590.0	2487.2	2440.7	2466.2
7.5°	3547.3	3401.3	3159.3	2919.4	2637.5	2358.9	2098.1	1885.8	1780.8	1731.1	1746.5
10°	3590.4	3391.4	3041.0	2643.0	2185.4	1805.1	1552.0	1408.3	1349.7	1318.8	1324.3
12.5°	3630.2	3384.8	2887.3	2279.4	1724.4	1400.6	1269.0	1249.1	1261.3	1262.4	1261.3
15°	3684.3	3372.6	2697.2	1905.7	1379.6	1210.4	1213.7	1242.5	1271.2	1280.1	1277.9
17.5°	3741.8	3353.8	2451.8	1547.6	1170.6	1155.2	1193.8	1232.5	1261.3	1265.7	1266.8
20°	3801.5	3315.1	2172.1	1263.5	1073.4	1113.1	1156.3	1185.0	1206.0	1212.6	1214.8
22.5°	3829.1	3233.3	1849.4	1060.1	1008.1	1061.2	1093.3	1130.8	1137.5	1113.1	1117.6
25°	3814.8	3095.1	1534.3	923.0	942.9	996.0	1043.5	1024.7	997.1	979.4	984.9
27.5°	3769.4	2911.6	1225.9	822.4	873.3	940.7	946.2	925.2	920.8	906.4	910.9
30°	3720.8	2700.5	986.0	741.7	802.5	873.3	856.7	864.4	865.5	849.0	854.5
32.5°	3691.0	2479.4	784.8	687.6	757.2	770.5	803.6	819.1	820.2	781.5	788.2
35°	3700.9	2261.7	664.4	643.3	715.2	711.9	758.3	767.2	703.0	650.0	655.5
37.5°	3781.6	2060.5	595.8	609.1	642.2	667.7	703.0	644.5	630.1	605.8	609.1
40°	3931.9	1889.1	554.9	588.1	592.5	633.4	579.2	587.0	588.1	572.6	575.9
42.5°	4107.7	1746.5	530.6	575.9	564.9	571.5	517.3	532.8	549.4	542.8	543.9
45°	4196.1	1607.3	509.6	533.9	537.2	474.2	462.1	478.6	499.6	503.0	504.1
47.5°	4117.7	1474.6	487.5	473.1	495.2	432.2	417.8	423.4	447.7	461.0	463.2
50°	*3877.8*	*1322.1*	*454.3*	*419.0*	*406.8*	*388.0*	*374.7*	*375.8*	*403.5*	*426.7*	*431.1*
52.5°	3540.6	1162.9	400.2	354.8	327.2	341.6	344.9	338.3	363.7	386.9	391.3
55°	3213.4	963.9	317.3	288.5	263.1	294.0	302.9	294.0	301.8	317.3	318.4
57.5°	2262.8	545.0	243.2	238.8	217.8	252.0	266.4	253.1	239.9	249.8	252.0
60°	1049.0	285.2	186.8	186.8	181.3	216.7	241.0	222.2	196.8	201.2	204.5
62.5°	328.3	180.2	137.1	129.3	148.1	184.6	204.5	185.7	155.9	155.9	160.3
65°	185.7	154.8	108.3	99.5	120.5	148.1	160.3	140.4	113.9	111.6	111.6
67.5°	172.4	147.0	96.2	80.7	85.1	95.1	99.5	86.2	78.5	77.4	78.5
70°	142.6	122.7	77.4	55.3	52.0	50.8	53.1	49.7	47.5	48.6	52.0
72.5°	88.4	74.1	48.6	33.2	28.7	27.6	27.6	27.6	26.5	26.5	26.5
75°	32.1	27.6	22.1	16.6	14.4	13.3	13.3	14.4	13.3	12.2	11.1
77.5°	9.9	8.8	8.8	8.8	7.7	6.6	5.5	5.5	4.4	3.3	3.3
80°	5.5	5.5	5.5	5.5	4.4	4.4	3.3	2.2	1.1	1.1	0.0
82.5°	5.5	5.5	5.5	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0
85°	4.4	4.4	4.4	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0
87.5°	4.4	4.4	4.4	4.4	4.4	4.4	3.3	2.2	1.1	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

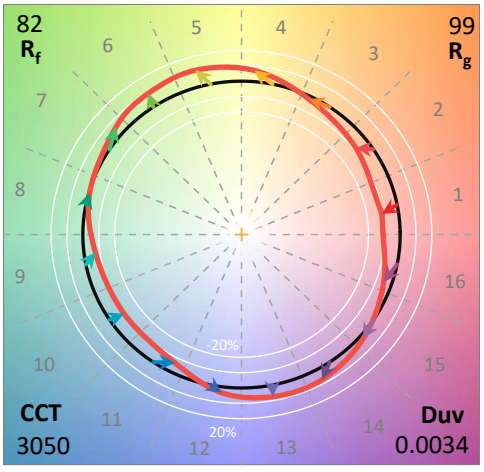
Test Information

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

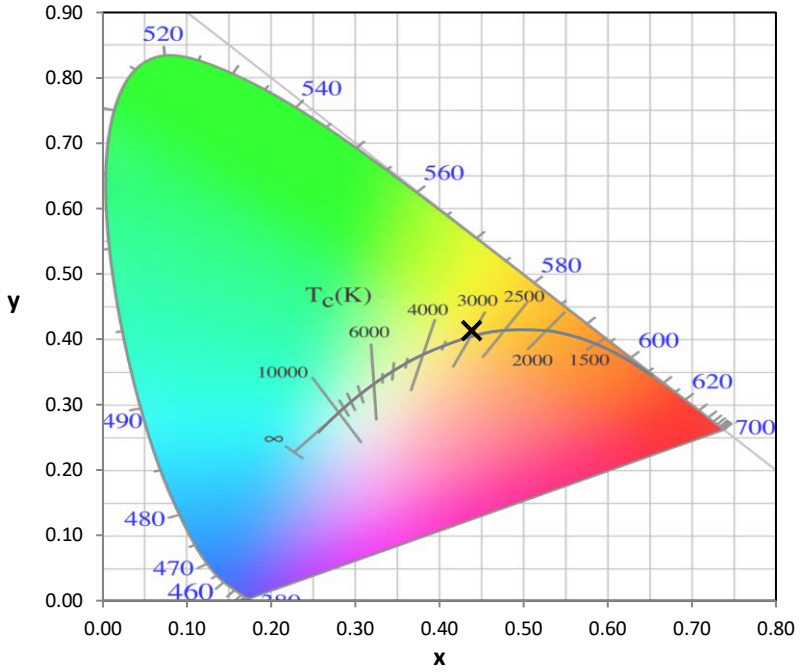
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

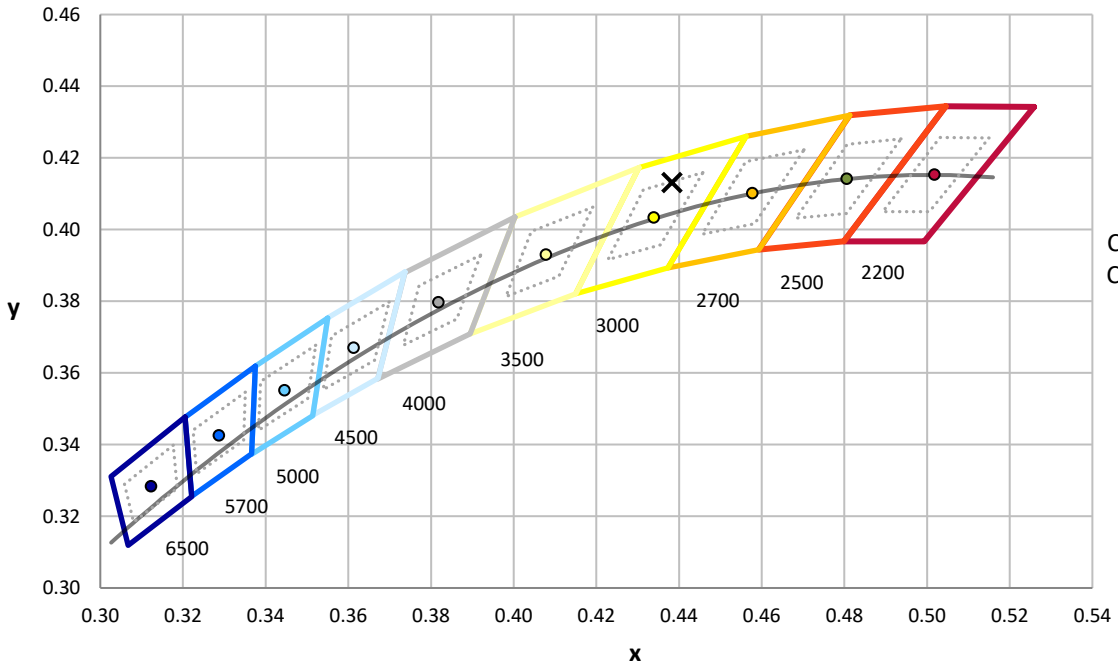
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

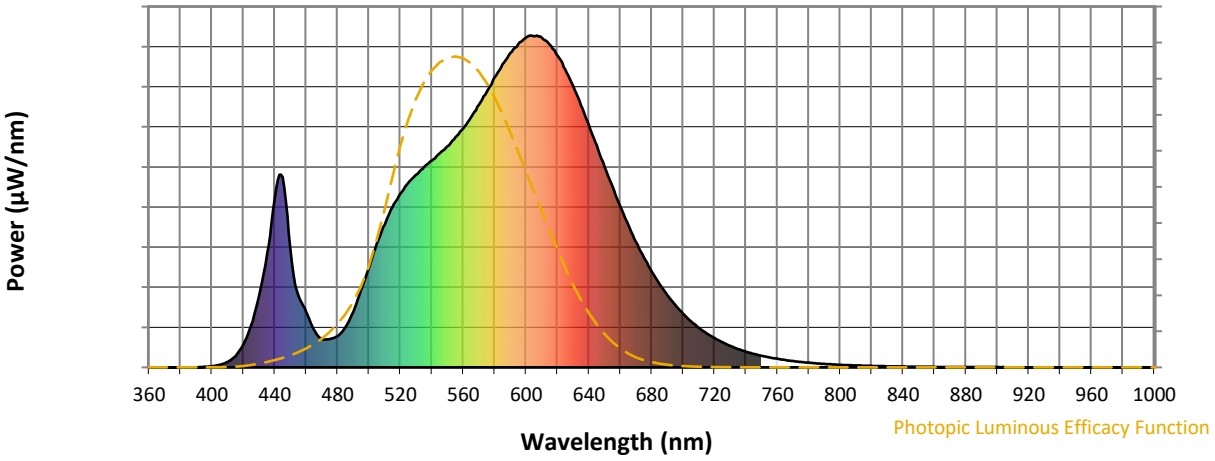


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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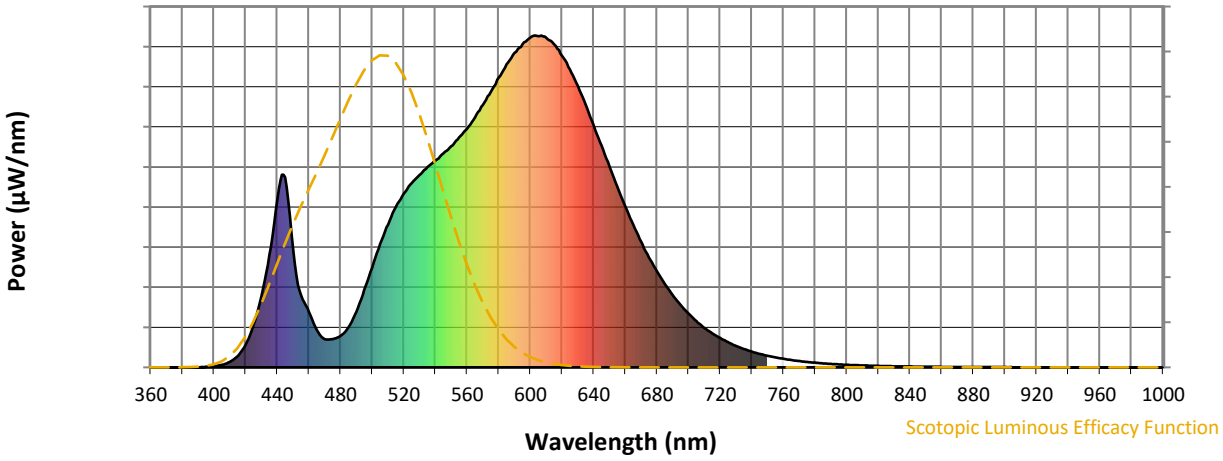
Scotopic Flux vs. Wavelength



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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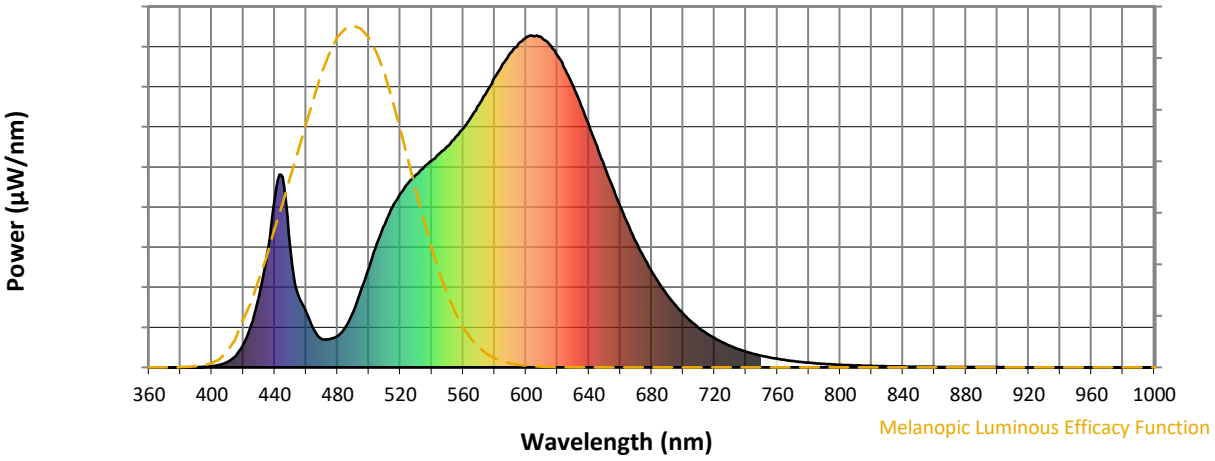
Melanopic Flux vs. Wavelength



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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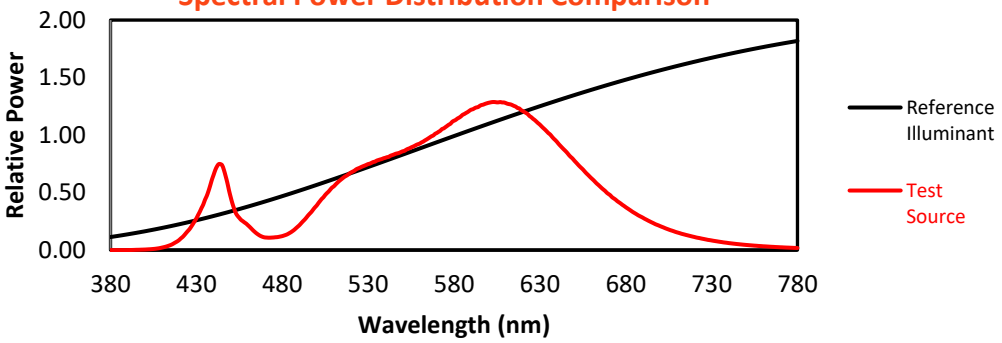
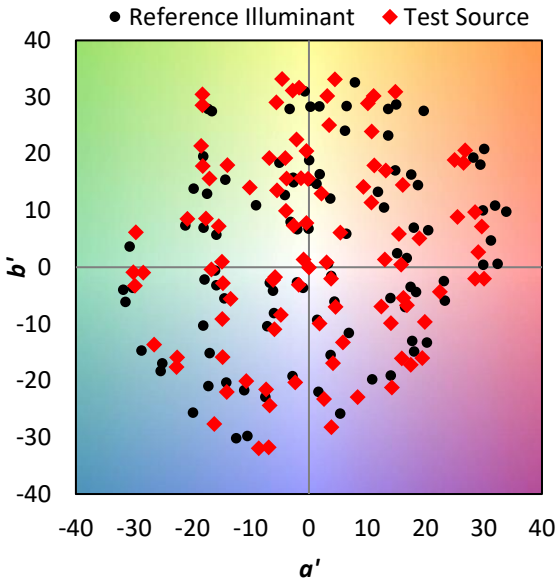
Summary

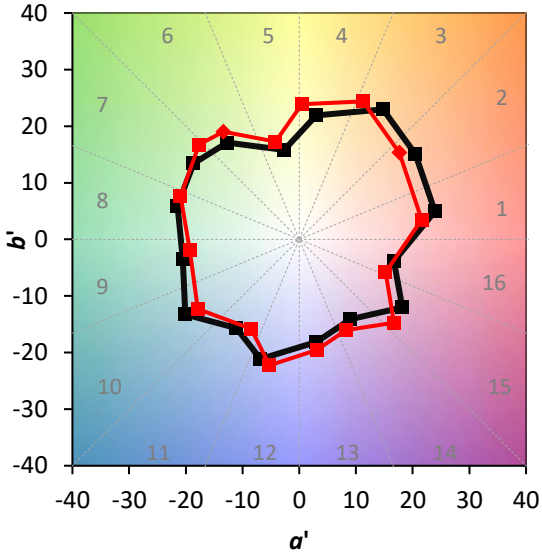
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

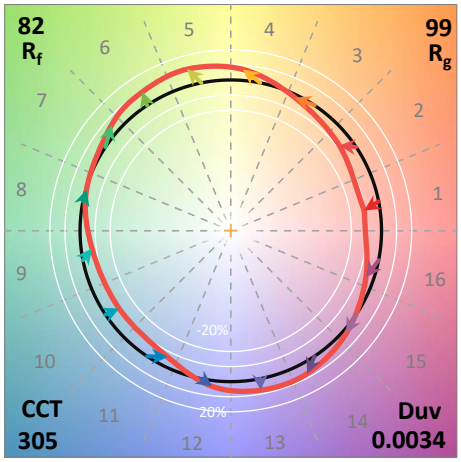
Spectral Power Distribution Comparison

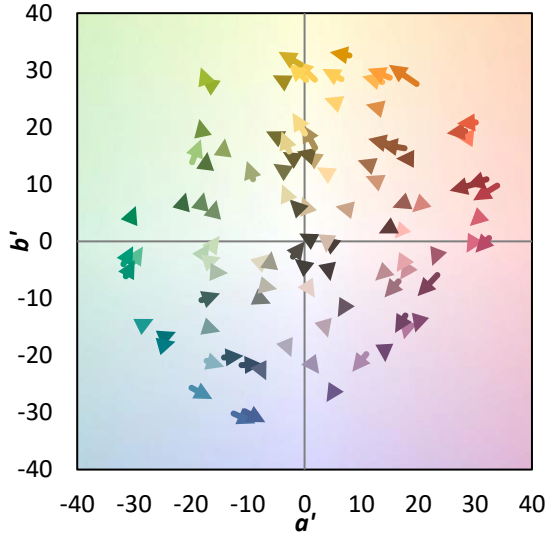


Color Vector Graphics









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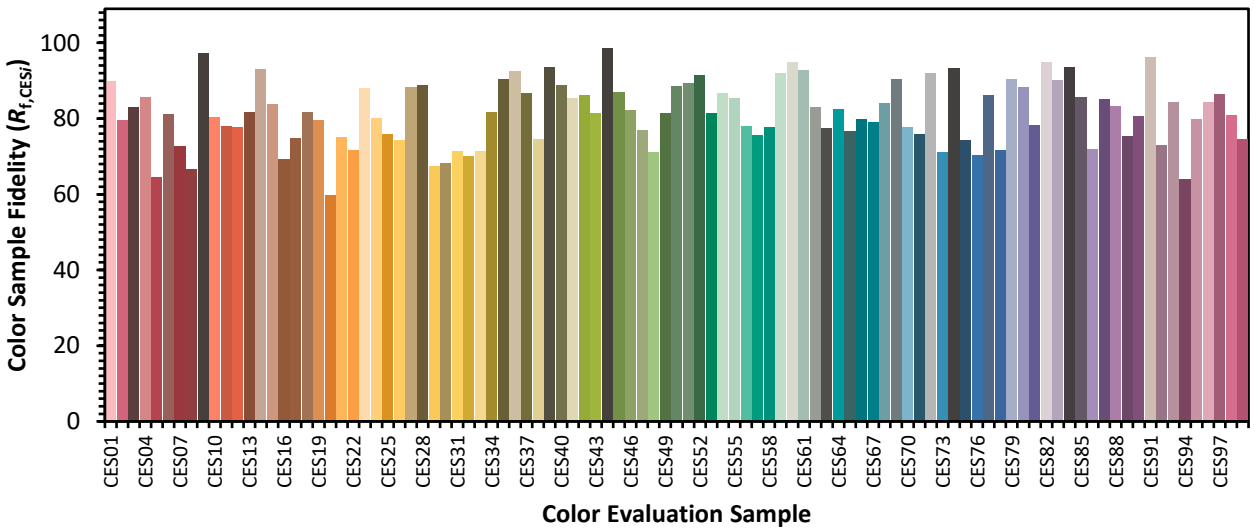
Individual Sample Fidelity Index ($R_{f,i}$)

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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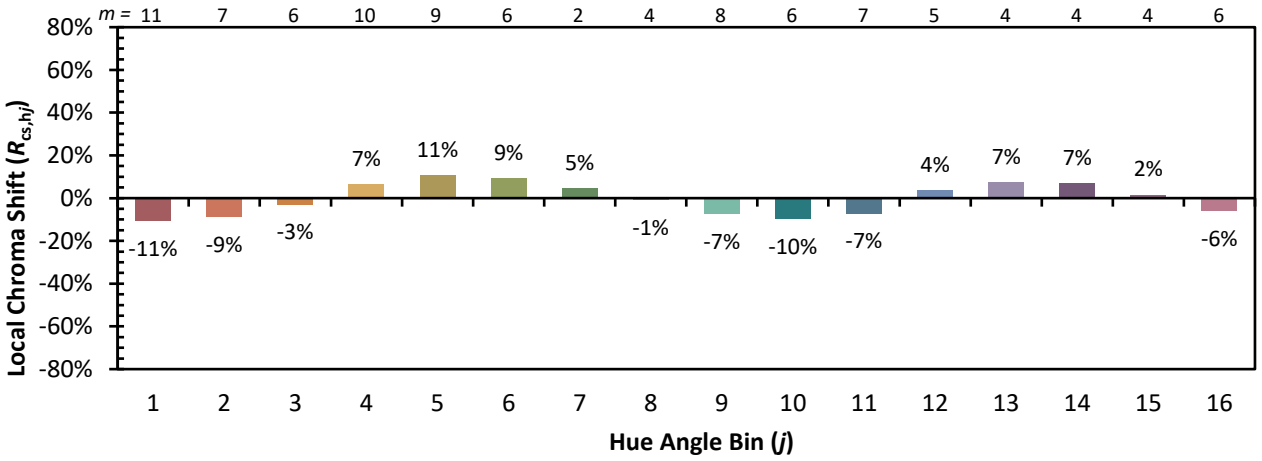
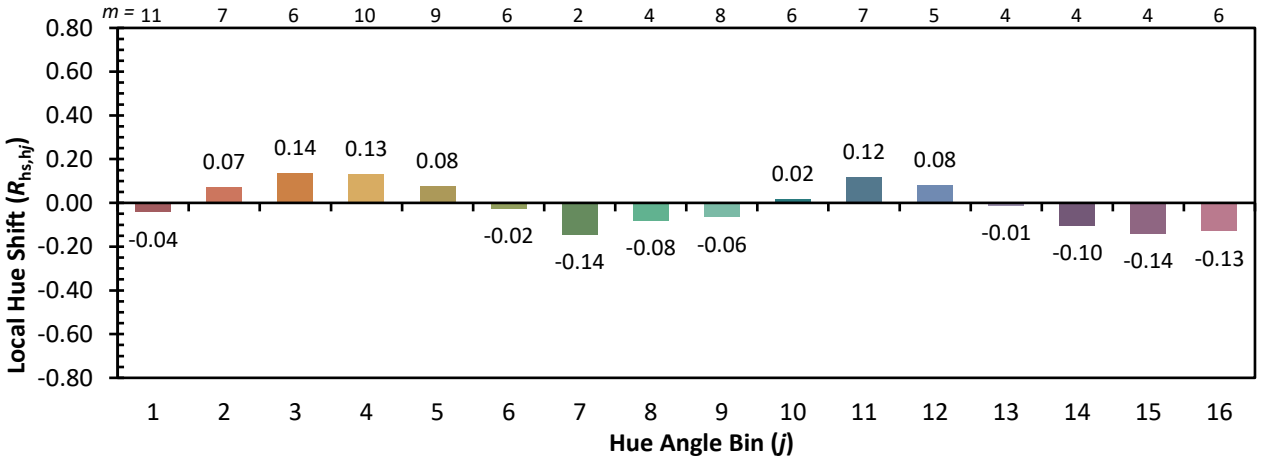
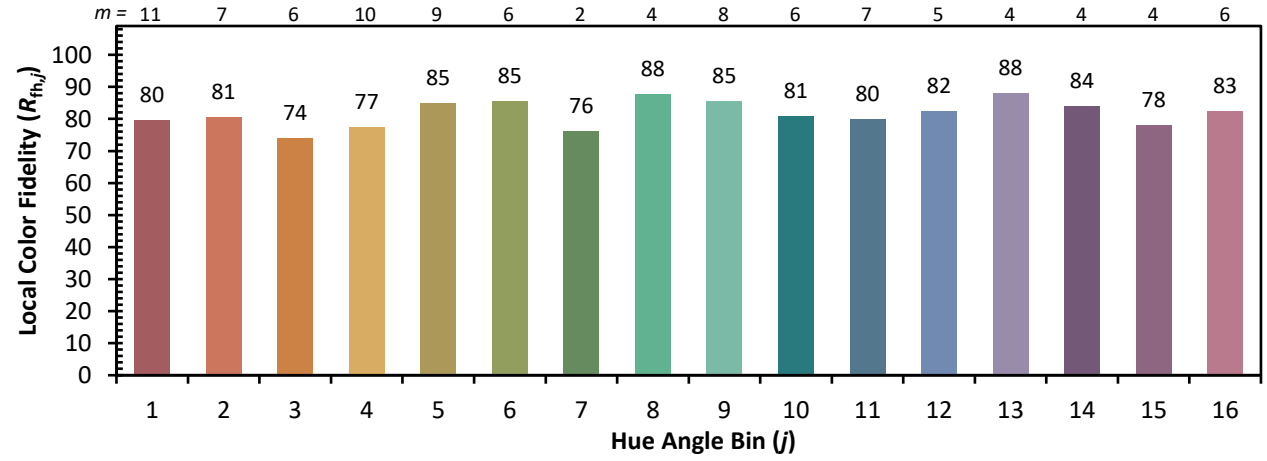
Color Rendition by Hue-Angle Bin







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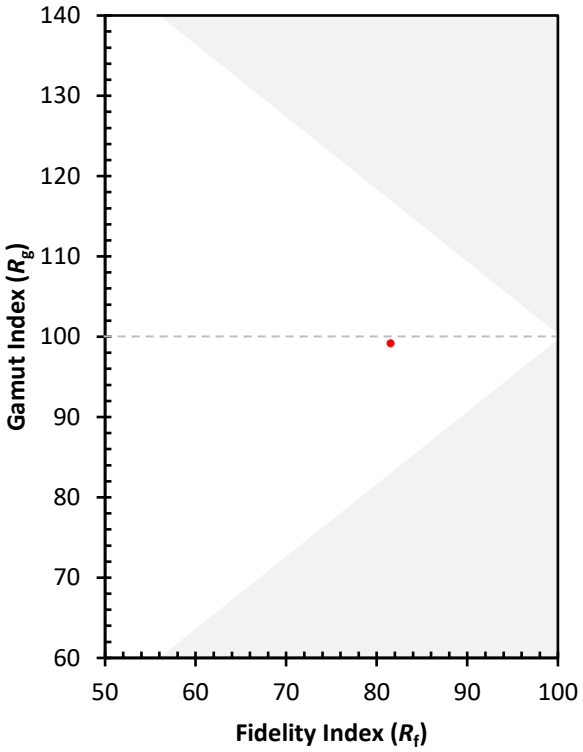
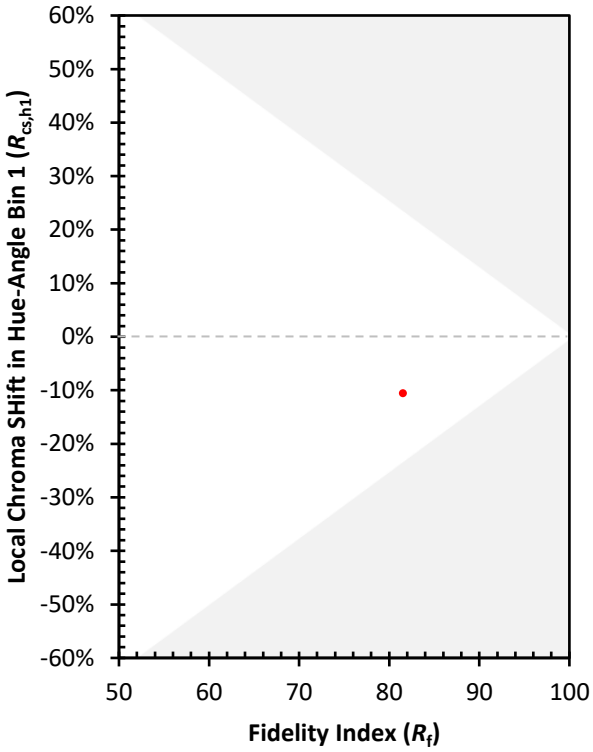
Measure Comparisons





(END OF REPORT)