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: P638963

Luminaire Tested: GWS-SA4F-830-U-RW-W

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:	P638963
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-RW-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	27824.1 lumens
Efficiency:	N/A
Efficacy:	123.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B4 - 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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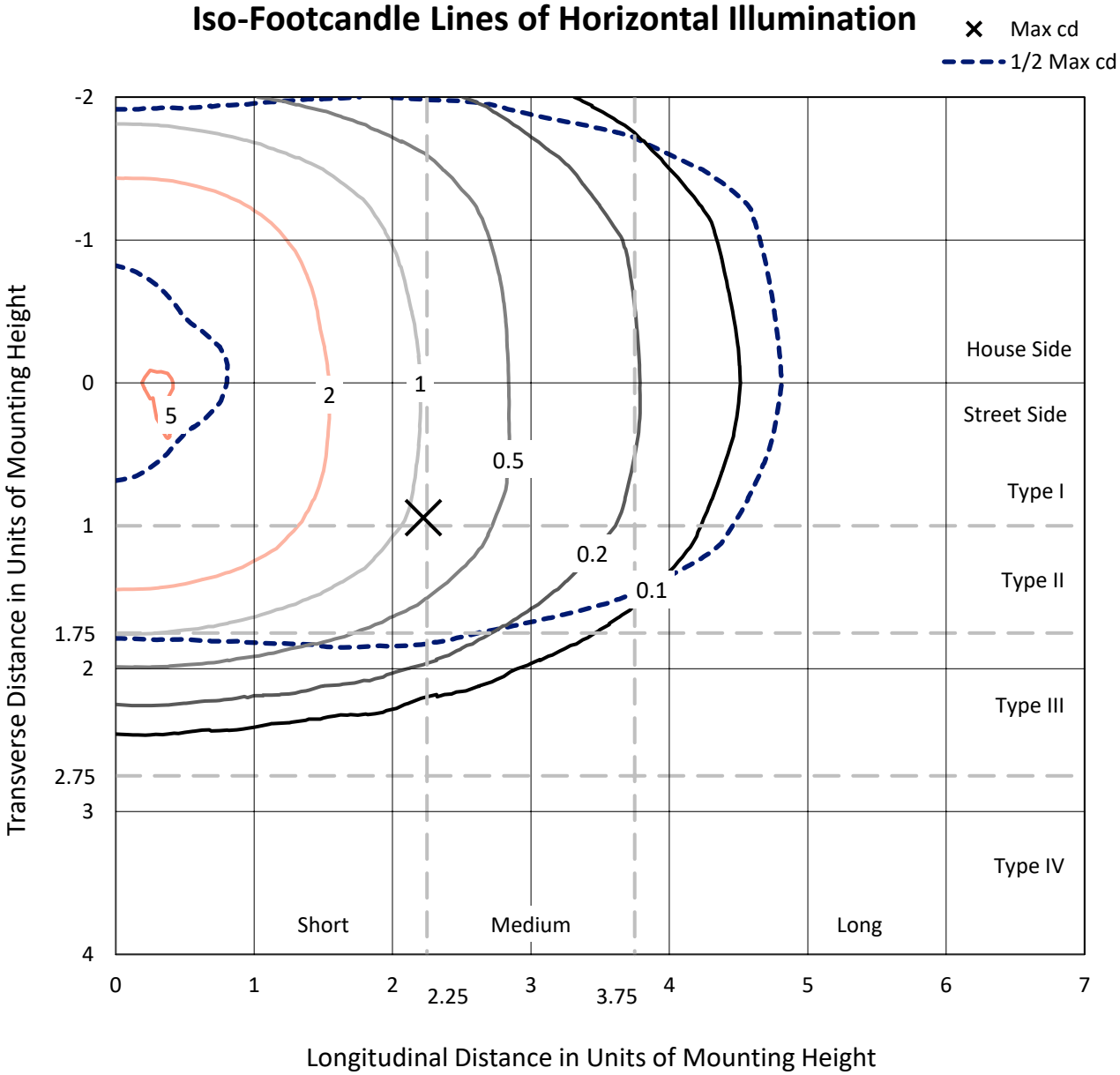
Scaled Data Report

REPORT NUMBER: P638963
CATALOG NUMBER: GWS-SA4F-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type III - Short - N/A

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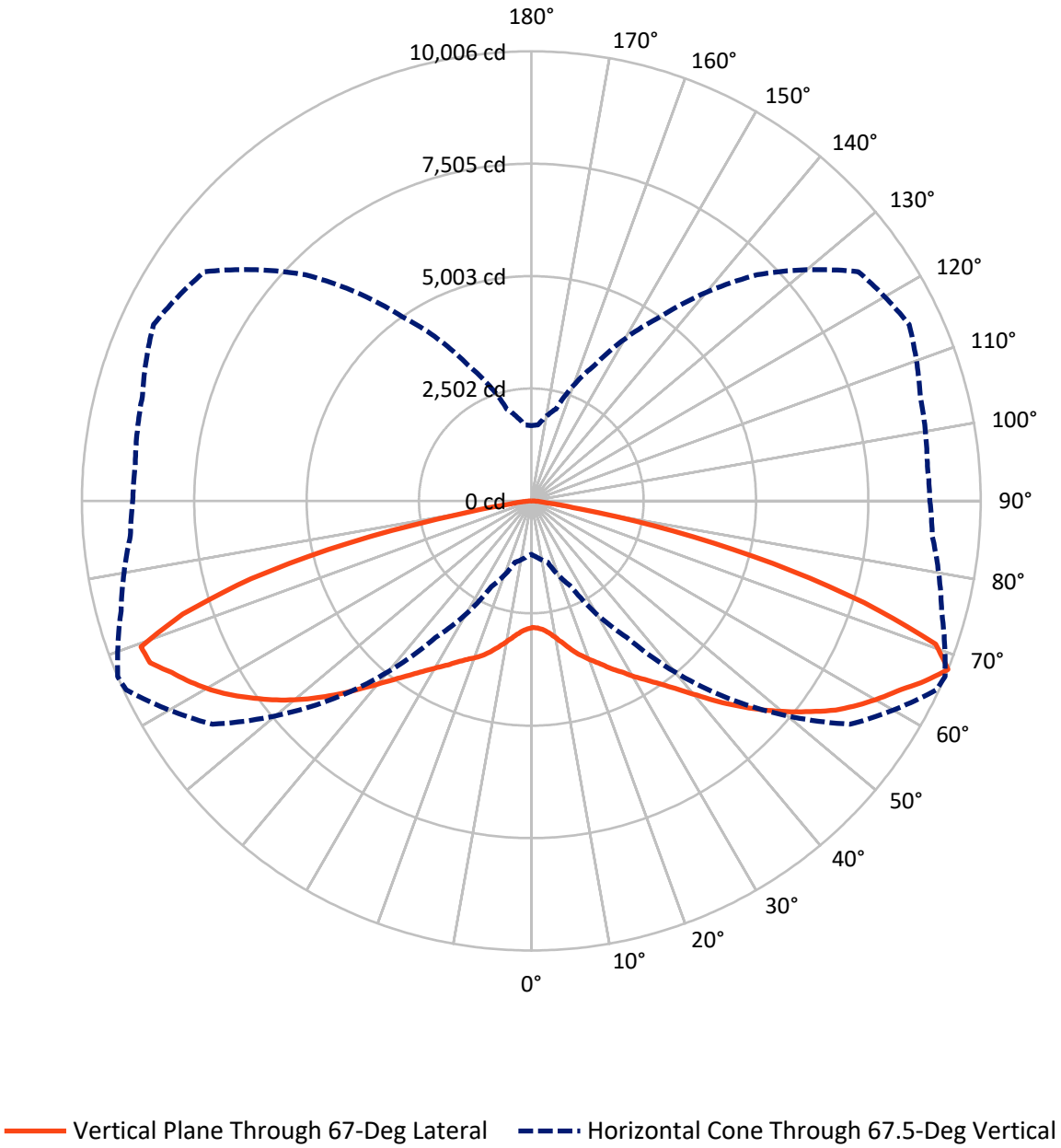
Luminous Intensity Polar Plot



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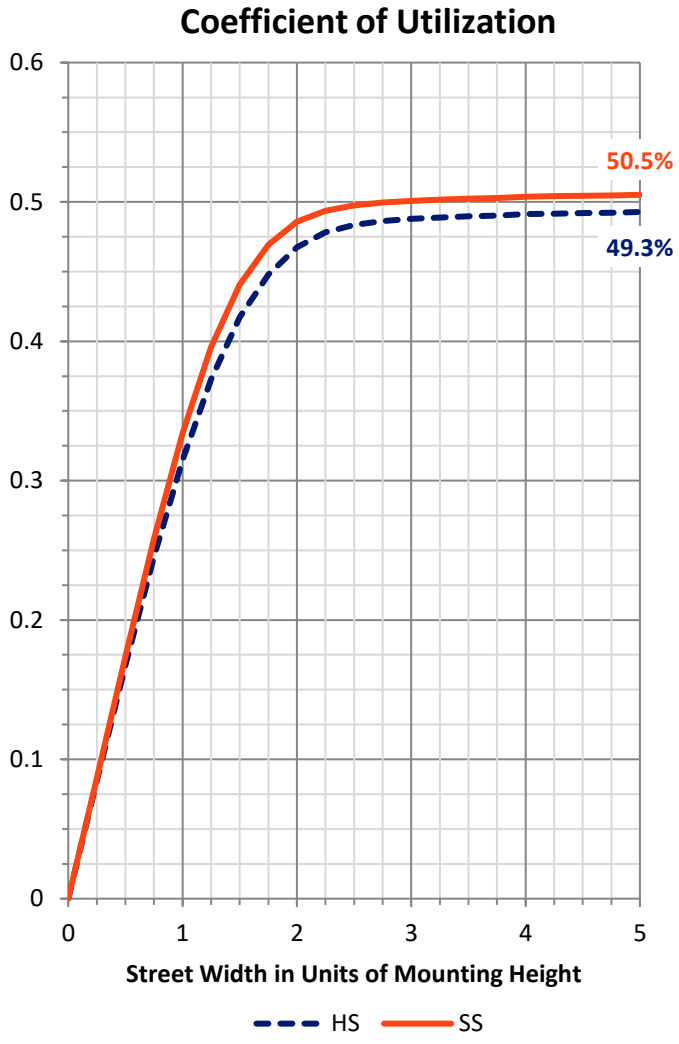
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13758.5	0.0	13758.5
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	14065.6	0.0	14065.6
	% Fixture	50.6	0.0	50.6
Total	Lumens	27824.1	0.0	27824.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.4	1.0
10°-20°	933.8	3.4
20°-30°	1832.2	6.6
30°-40°	3121.4	11.2
40°-50°	5012.4	18.0
50°-60°	6810.8	24.5
60°-70°	6515.0	23.4
70°-80°	3097.5	11.1
80°-90°	224.5	0.8
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°	27824.1	100.0
0°-180°	27824.1	100.0



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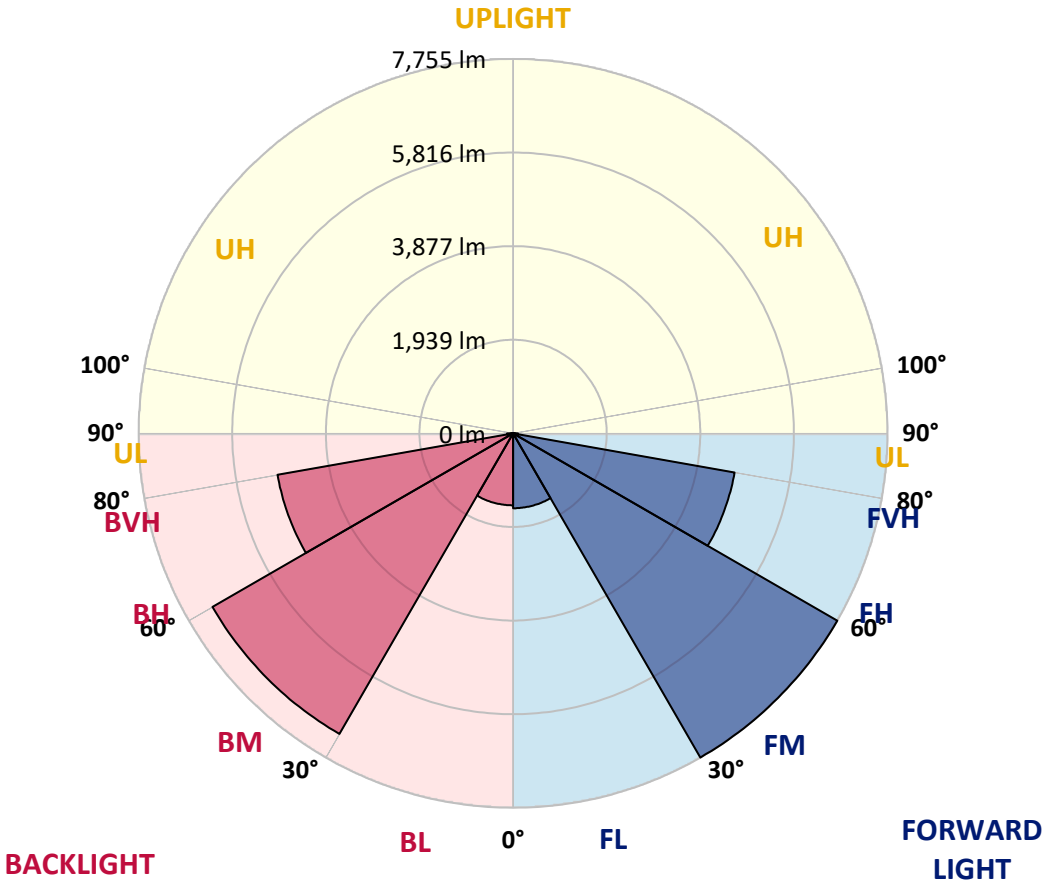
REPORT NUMBER: P638963
CATALOG NUMBER: GWS-SA4F-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1551.4	5.6			
FM	(30°-60°)	7754.8	27.9			
FH	(60°-80°)	4658.5	16.7			G2/5000
FVH	(80°-90°)	100.9	0.4			G2/225
BL	(0°-30°)	1491.0	5.4	B3/2500		
BM	(30°-60°)	7189.9	25.8	B4/8500		
BH	(60°-80°)	4954.0	17.8	B4/5000		G4/5000
BVH	(80°-90°)	123.6	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
Type III Short



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Scaled Data Report

REPORT NUMBER: P638963
CATALOG NUMBER: GWS-SA4F-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	*2817.3*	2817.3	2817.3
2.5°	2759.2	2763.1	2768.9	2780.5	2792.2	2809.6	2827.0	2825.1	*2832.8*	2838.7	2844.5
5°	2743.7	2747.6	2757.3	2772.8	2790.2	2819.3	2856.1	2871.6	*2883.2*	2904.5	2923.9
7.5°	2776.7	2784.4	2798.0	2819.3	2846.4	2883.2	2933.6	2960.7	*2978.2*	3016.9	3049.9
10°	2821.2	2830.9	2858.0	2898.7	2939.4	2995.6	3059.6	3100.2	*3111.9*	3162.2	3224.3
12.5°	2863.8	2875.5	2920.0	2993.7	3067.3	3142.9	3218.4	3268.8	*3272.7*	3340.5	3410.3
15°	2931.7	2941.4	3001.4	3096.4	3208.8	3313.4	3406.4	3441.3	*3456.8*	3505.2	3592.4
17.5°	3080.9	3092.5	3170.0	3272.7	3390.9	3501.3	3594.3	3623.4	*3623.4*	3664.1	3735.8
20°	3241.7	3253.3	3356.0	3487.8	3631.2	3743.5	3815.2	3788.1	*3778.4*	3790.0	3840.4
22.5°	3421.9	3443.2	3542.0	3695.1	3871.4	4009.0	4045.8	3964.4	*3937.3*	3910.2	3921.8
25°	3652.5	3677.7	3774.5	3937.3	4109.8	4255.1	4276.4	4150.4	*4134.9*	4040.0	4005.1
27.5°	3917.9	3937.3	4057.4	4218.3	4379.1	4501.2	4524.4	4369.4	*4317.1*	4185.3	4103.9
30°	4260.9	4278.3	4383.0	4541.9	4681.4	4766.6	4795.7	4582.5	*4541.9*	4340.3	4214.4
32.5°	4634.9	4642.6	4749.2	4902.3	5026.3	5107.6	5067.0	4818.9	*4758.9*	4532.2	4359.7
35°	5063.1	5063.1	5200.7	5324.7	5423.5	5446.7	5369.2	5086.3	*5016.6*	4770.5	4555.4
37.5°	5483.6	5495.2	5623.1	5770.3	5857.5	5853.6	5712.2	5402.2	*5322.7*	5055.3	4817.0
40°	5938.9	5964.1	6092.0	6256.7	6340.0	6328.4	6111.4	5766.5	*5685.1*	5369.2	5136.7
42.5°	6357.4	6398.1	6547.3	6715.9	6807.0	6799.2	6572.5	6185.0	*6105.5*	5749.0	5516.5
45°	6690.7	6733.3	6919.4	7153.8	7299.1	7285.6	7056.9	6619.0	*6522.1*	6148.2	5892.4
47.5°	6983.3	7027.9	7235.2	7483.2	7713.8	7737.0	7527.8	7056.9	*6954.2*	6576.4	6287.7
50°	7208.1	7229.4	7461.9	7733.2	8000.6	8130.4	7948.2	7496.8	*7372.8*	6998.8	6673.3
52.5°	7190.6	7219.7	7506.5	7874.6	8233.1	8446.2	8320.3	7911.4	*7791.3*	7384.4	7066.6
55°	6836.0	6865.1	7206.1	7742.9	8362.9	8676.8	8663.2	8306.7	*8219.5*	7777.7	7475.5
57.5°	6318.7	6382.6	6721.7	7301.1	8192.4	8860.9	8915.1	8667.1	*8576.0*	8163.3	7880.4
60°	5392.5	5477.7	5869.1	6621.0	7646.0	8798.9	9184.5	8971.3	*8915.1*	8521.8	8246.6
62.5°	3917.9	3979.9	4501.2	5487.4	6836.0	8357.1	9411.2	9285.2	*9242.6*	8843.4	8578.0
65°	2346.5	2487.9	2906.5	3881.1	5514.6	7523.9	9287.2	9696.0	*9651.4*	9174.8	8860.9
67.5°	*1187.8*	*1251.7*	*1416.4*	*2104.3*	*3708.7*	*6225.7*	*8665.2*	*9951.8*	*10006.0*	*9457.7*	*8961.6*
70°	736.3	753.7	800.3	1038.6	1852.4	4090.4	7086.0	9285.2	*9550.7*	9413.1	8700.1
72.5°	591.0	594.9	602.6	647.2	889.4	1912.5	4479.9	7272.0	*7750.6*	8791.1	8326.1
75°	490.2	492.2	494.1	507.7	554.2	780.9	2179.9	4997.2	*5557.2*	7471.6	7719.6
77.5°	393.3	383.7	391.4	397.2	408.8	436.0	751.8	2666.2	*3233.9*	4904.2	5969.9
80°	255.8	251.9	267.4	273.2	284.8	302.3	401.1	904.9	*1098.6*	1784.6	1898.9
82.5°	137.6	129.8	162.8	156.9	162.8	176.3	236.4	331.3	*372.0*	538.7	455.3
85°	42.6	42.6	44.6	52.3	63.9	62.0	102.7	162.8	*180.2*	230.6	170.5
87.5°	7.8	7.8	7.8	7.8	7.8	9.7	21.3	32.9	*44.6*	79.4	60.1
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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REPORT NUMBER: P638963
CATALOG NUMBER: GWS-SA4F-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3	2817.3
2.5°	2856.1	2838.7	2848.3	2854.2	2852.2	2848.3	2829.0	2825.1	2815.4	2799.9	2796.0
5°	2941.4	2922.0	2923.9	2918.1	2898.7	2873.5	2830.9	2809.6	2792.2	2772.8	2770.8
7.5°	3075.1	3053.7	3047.9	3020.8	2966.5	2908.4	2840.6	2801.8	2772.8	2747.6	2743.7
10°	3245.6	3224.3	3204.9	3140.9	3051.8	2974.3	2885.2	2829.0	2786.3	2755.3	2749.5
12.5°	3435.5	3418.0	3369.6	3276.6	3170.0	3078.9	2987.9	2918.1	2856.1	2809.6	2803.8
15°	3646.7	3607.9	3534.3	3414.1	3313.4	3239.8	3129.3	3034.4	2935.5	2873.5	2860.0
17.5°	3793.9	3761.0	3673.8	3557.5	3478.1	3414.1	3284.3	3148.7	3015.0	2923.9	2904.5
20°	3898.6	3863.7	3764.9	3679.6	3654.4	3600.2	3449.0	3292.1	3137.1	3024.7	2999.5
22.5°	3974.1	3937.3	3836.5	3793.9	3828.8	3819.1	3671.8	3493.6	3309.5	3175.8	3144.8
25°	4045.8	4010.9	3921.8	3937.3	4030.3	4059.4	3900.5	3693.2	3483.9	3326.9	3290.1
27.5°	4113.6	4069.1	4028.4	4113.6	4245.4	4299.6	4131.1	3896.6	3669.9	3509.1	3480.0
30°	4218.3	4166.0	4160.1	4284.1	4493.4	4539.9	4353.9	4119.4	3894.7	3731.9	3695.1
32.5°	4350.0	4301.6	4305.5	4491.5	4733.7	4772.4	4613.5	4394.6	4169.8	4007.1	3956.7
35°	4528.3	4468.2	4501.2	4729.8	4974.0	5045.6	4917.8	4735.6	4516.7	4350.0	4293.8
37.5°	4774.4	4687.2	4755.0	4995.3	5241.3	5347.9	5249.1	5113.5	4896.4	4727.9	4675.6
40°	5088.3	5016.6	5043.7	5309.2	5563.0	5690.9	5628.9	5495.2	5280.1	5103.8	5043.7
42.5°	5460.3	5388.6	5378.9	5661.8	5915.6	6109.4	6049.3	5927.3	5704.4	5502.9	5444.8
45°	5824.6	5758.7	5772.3	6061.0	6345.8	6557.0	6496.9	6353.6	6111.4	5878.8	5832.3
47.5°	6204.4	6150.1	6161.7	6467.9	6781.8	6993.0	6917.4	6743.0	6460.1	6212.1	6155.9
50°	6593.8	6531.8	6549.3	6870.9	7210.0	7409.6	7293.3	7035.6	6723.7	6481.4	6433.0
52.5°	6981.4	6907.7	6952.3	7256.5	7607.2	7766.1	7551.0	7239.1	6936.8	6696.5	6642.3
55°	7427.0	7349.5	7301.1	7626.6	7973.4	8039.3	7744.8	7380.5	7022.0	6748.8	6715.9
57.5°	7833.9	7768.0	7677.0	8002.5	8258.3	8209.8	7894.0	7341.8	6814.7	6464.0	6417.5
60°	8198.2	8142.0	8062.6	8339.7	8455.9	8347.4	7773.9	6882.5	6303.2	5937.0	5915.6
62.5°	8533.4	8473.3	8399.7	8636.1	8620.6	8368.7	7227.4	6177.2	5402.2	5008.8	4974.0
65°	8798.9	8744.6	8723.3	8909.3	8884.1	7952.1	6376.8	5022.4	3947.0	3503.3	3489.7
67.5°	*8874.4*	*8853.1*	*8967.5*	*9283.3*	*8889.9*	*7115.1*	*5001.1*	*3330.8*	*2119.8*	*1699.3*	*1674.1*
70°	8591.5	8589.6	8917.1	9368.5	8083.9	5435.1	2951.0	1501.7	1065.7	945.6	930.1
72.5°	8223.4	8217.6	8477.2	8081.9	5995.1	2974.3	1242.0	804.1	666.6	633.6	633.6
75°	7618.8	7603.3	7799.0	6148.2	3371.5	1120.0	658.8	552.2	523.2	517.4	517.4
77.5°	6210.2	6080.4	5772.3	3799.7	1176.2	550.3	436.0	434.0	416.6	414.7	414.7
80°	2042.3	2042.3	2373.6	1449.4	519.3	339.1	308.1	323.6	306.1	294.5	292.6
82.5°	333.3	459.2	653.0	414.7	281.0	211.2	189.9	201.5	211.2	168.6	168.6
85°	131.8	172.5	251.9	193.8	129.8	85.3	91.1	100.8	89.1	77.5	75.6
87.5°	50.4	62.0	89.1	46.5	27.1	15.5	9.7	9.7	7.8	7.8	7.8
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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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

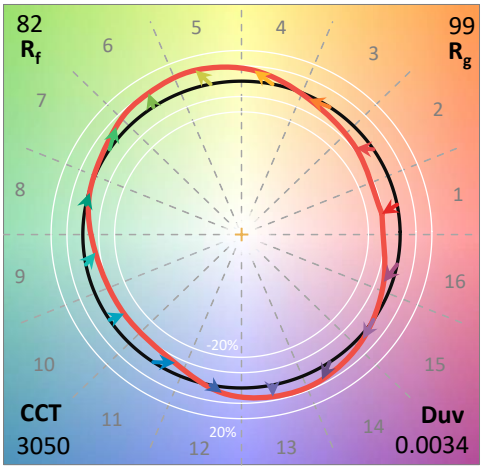
Test Information

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

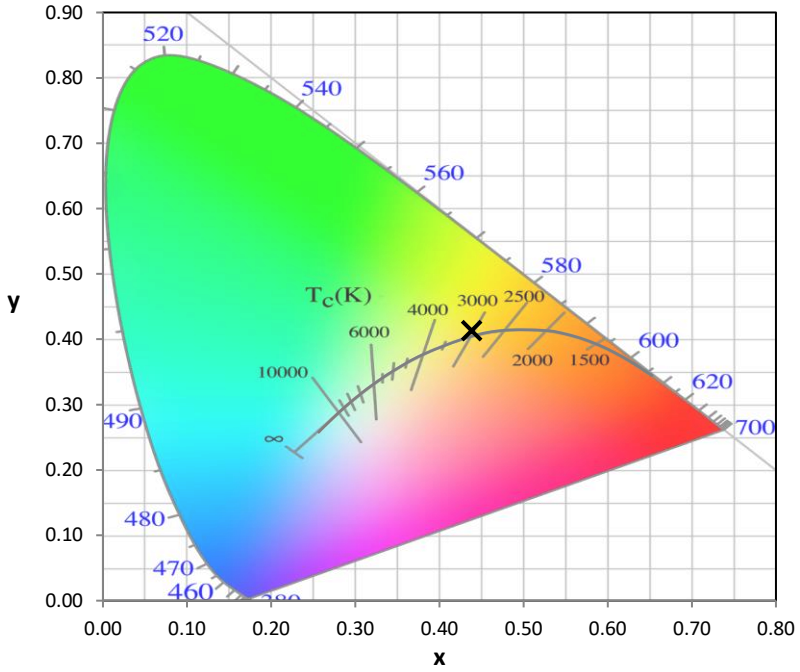
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

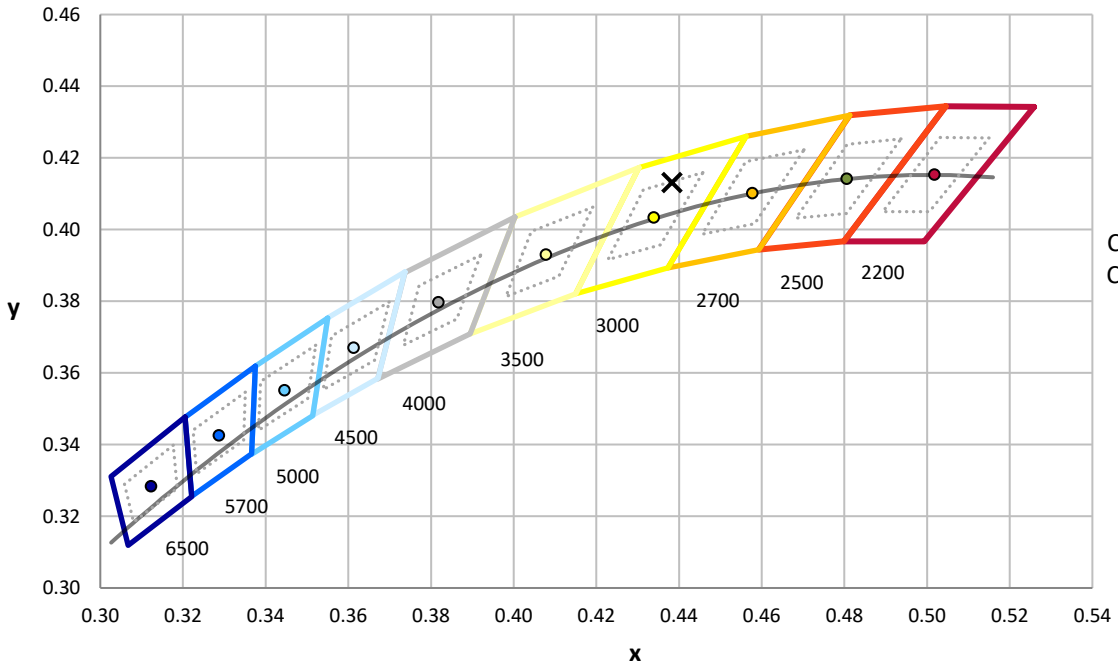
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

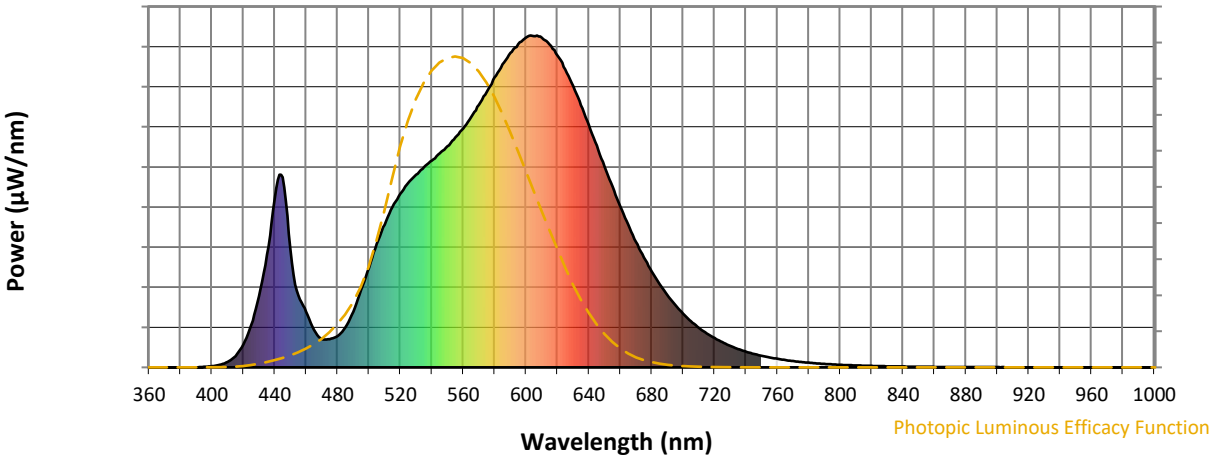


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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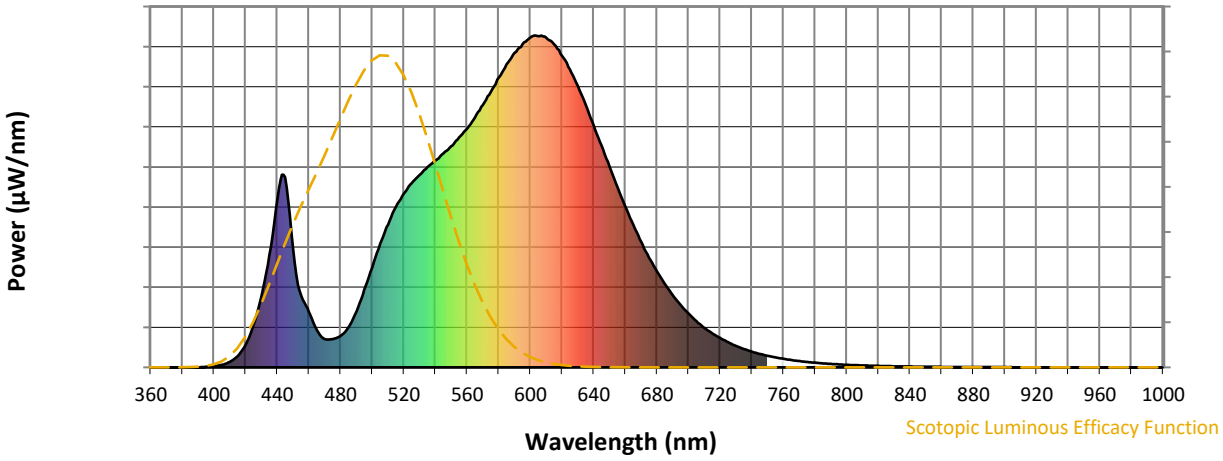
Scotopic Flux vs. Wavelength



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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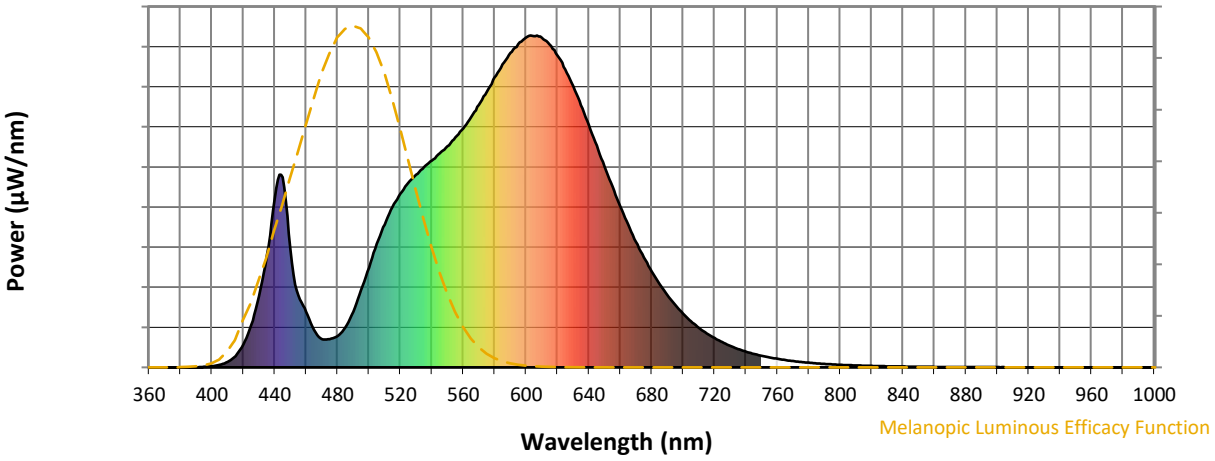
Melanopic Flux vs. Wavelength



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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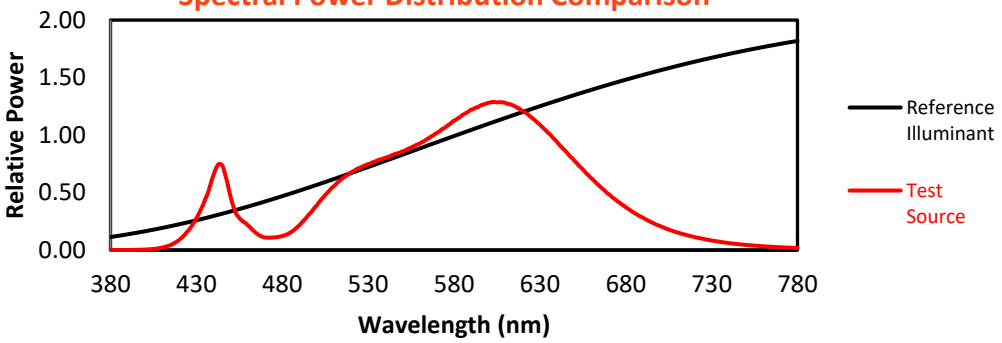
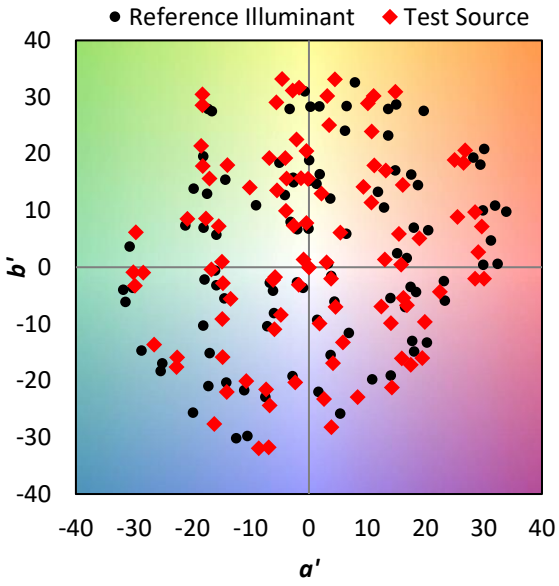
Summary

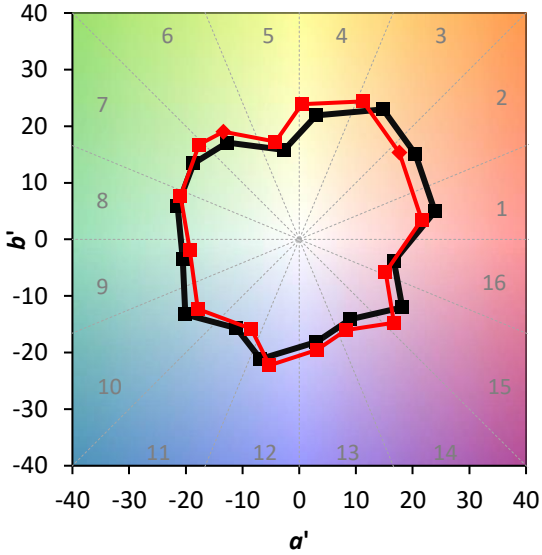
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

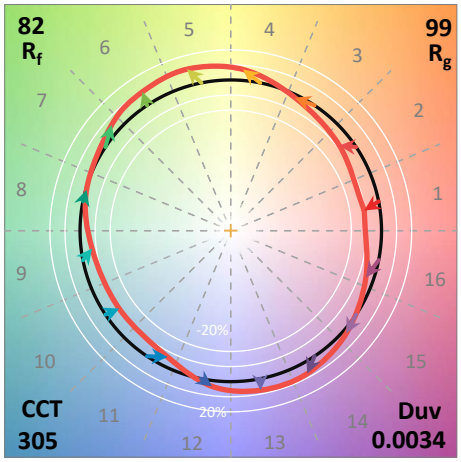
Spectral Power Distribution Comparison

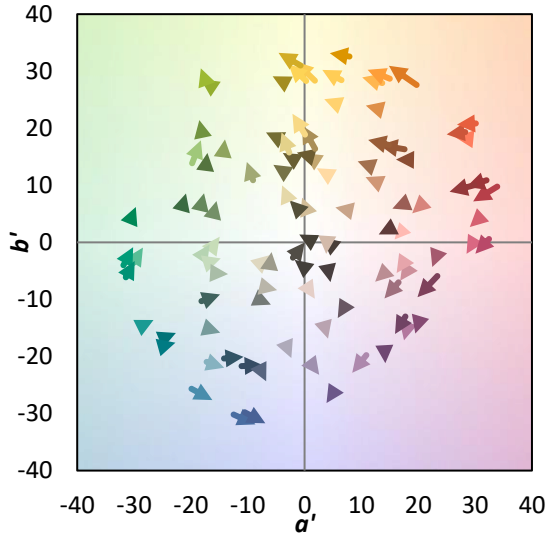


Color Vector Graphics









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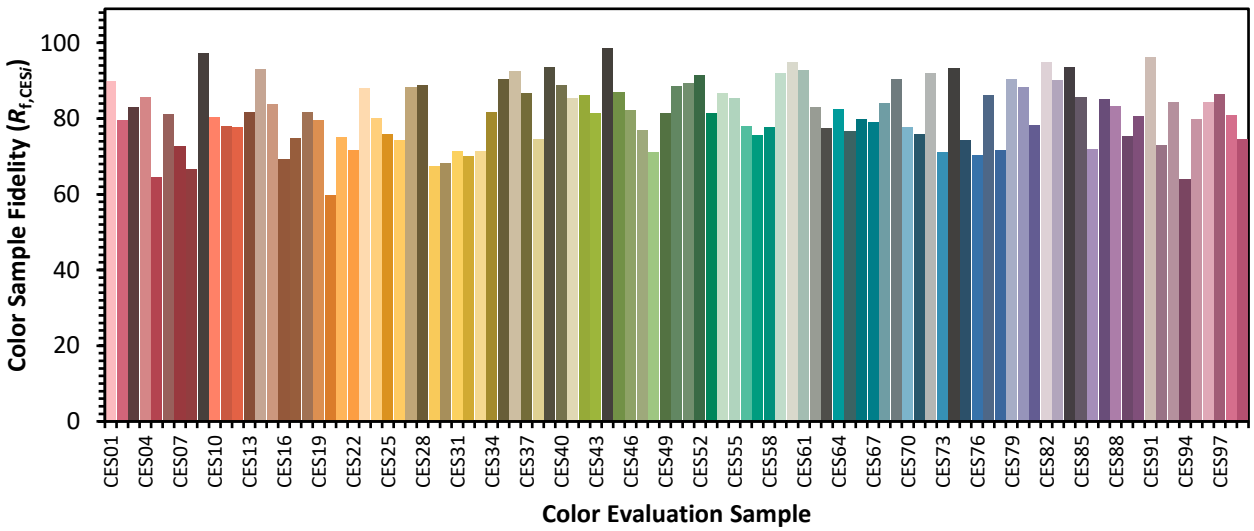
Individual Sample Fidelity Index ($R_{f,i}$)

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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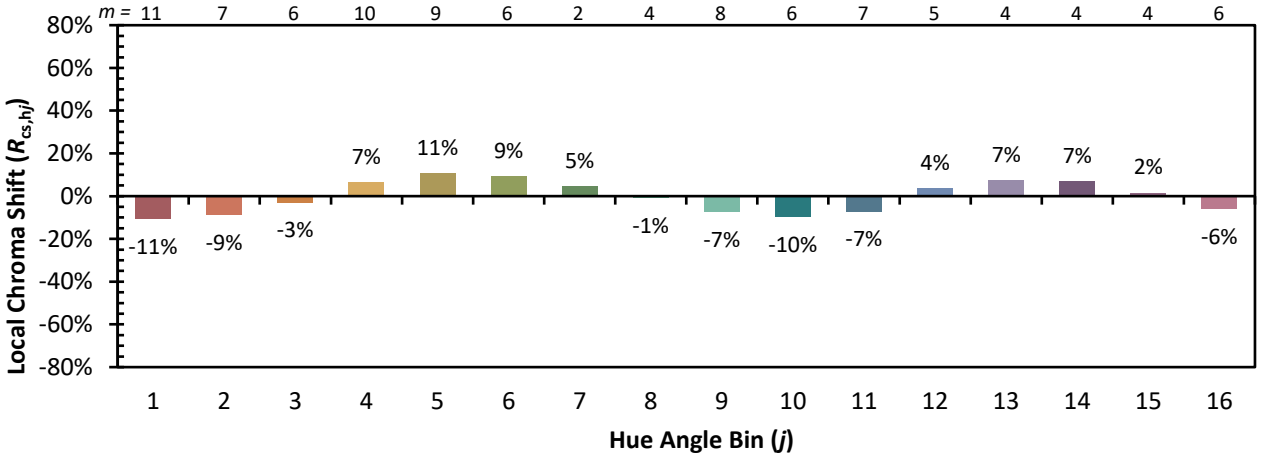
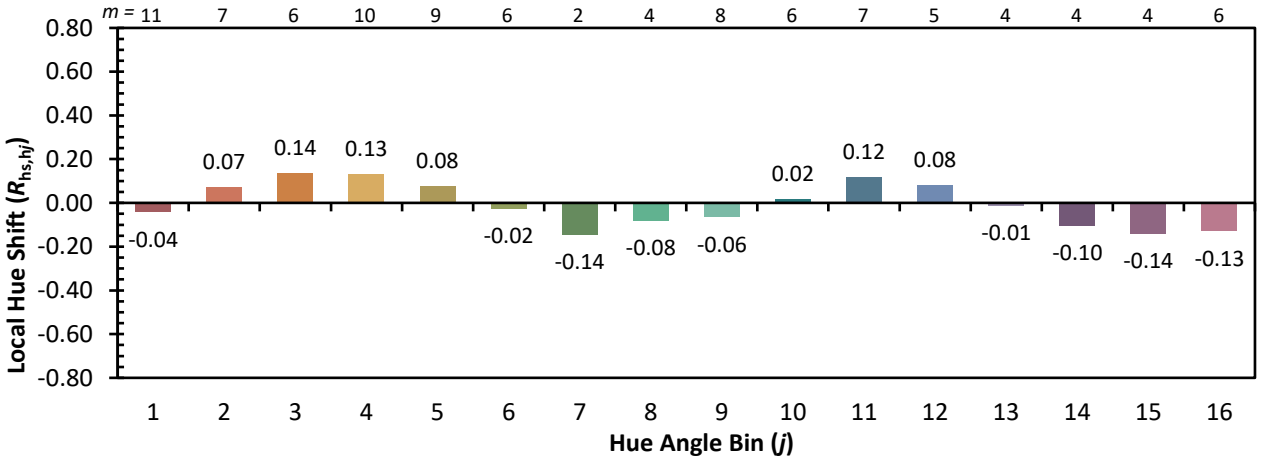
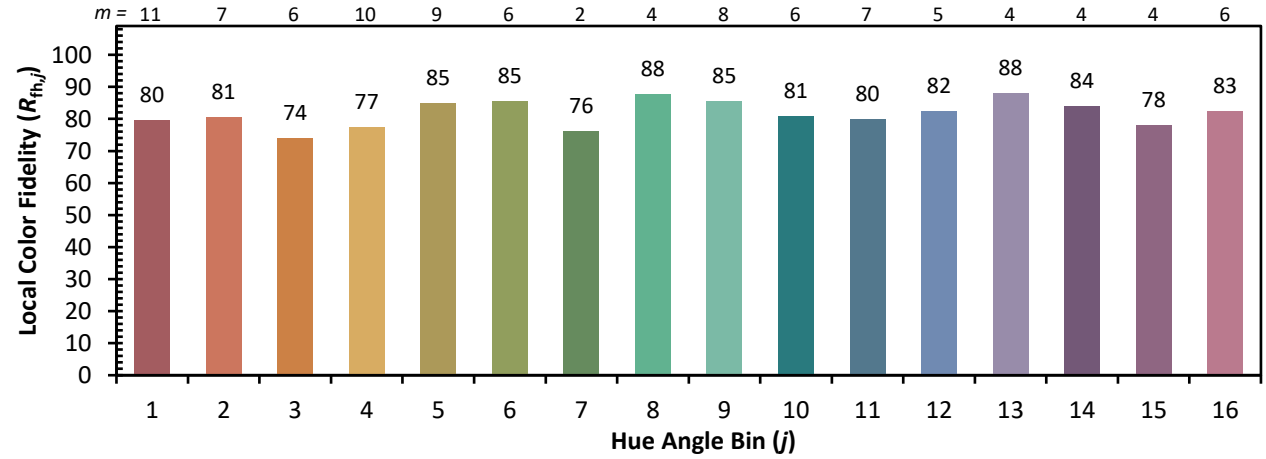
Color Rendition by Hue-Angle Bin







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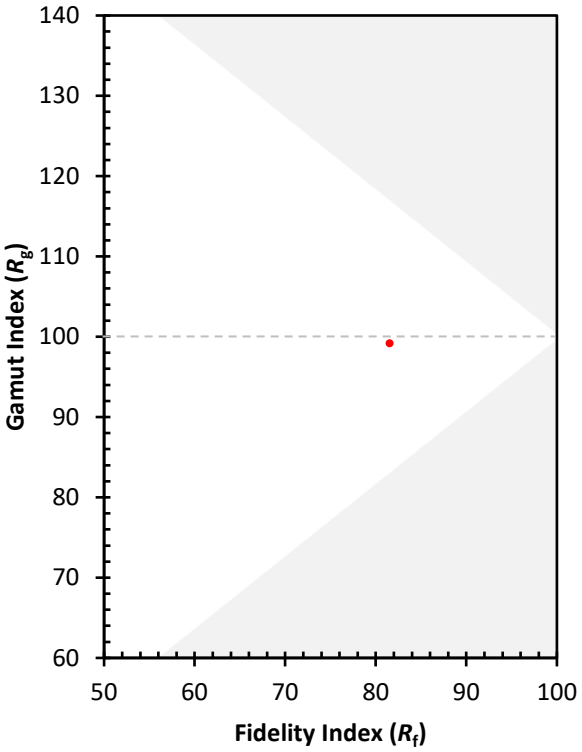
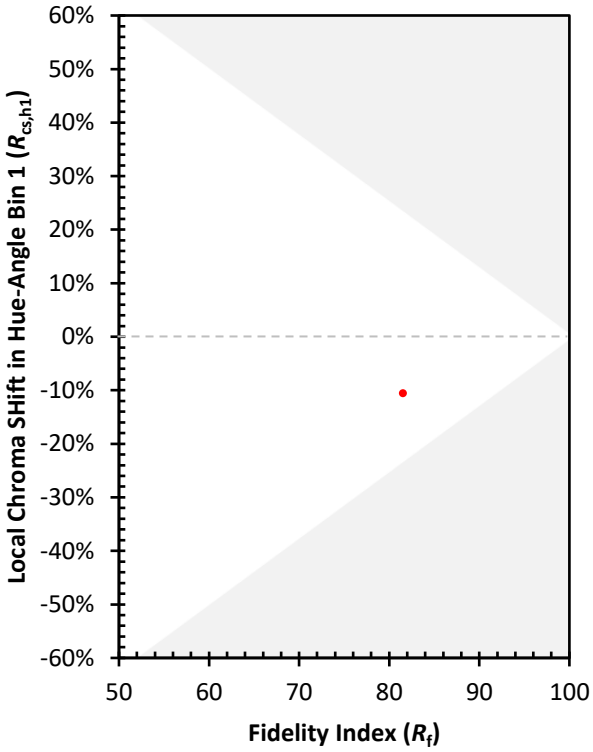
Measure Comparisons





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