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: P634015

Luminaire Tested: GWS-SA2F-830-U-SL2-W-GRSWH

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:	P634015
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-29)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2F-830-U-SL2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10976.1 lumens
Efficiency:	N/A
Efficacy:	88.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	124.5
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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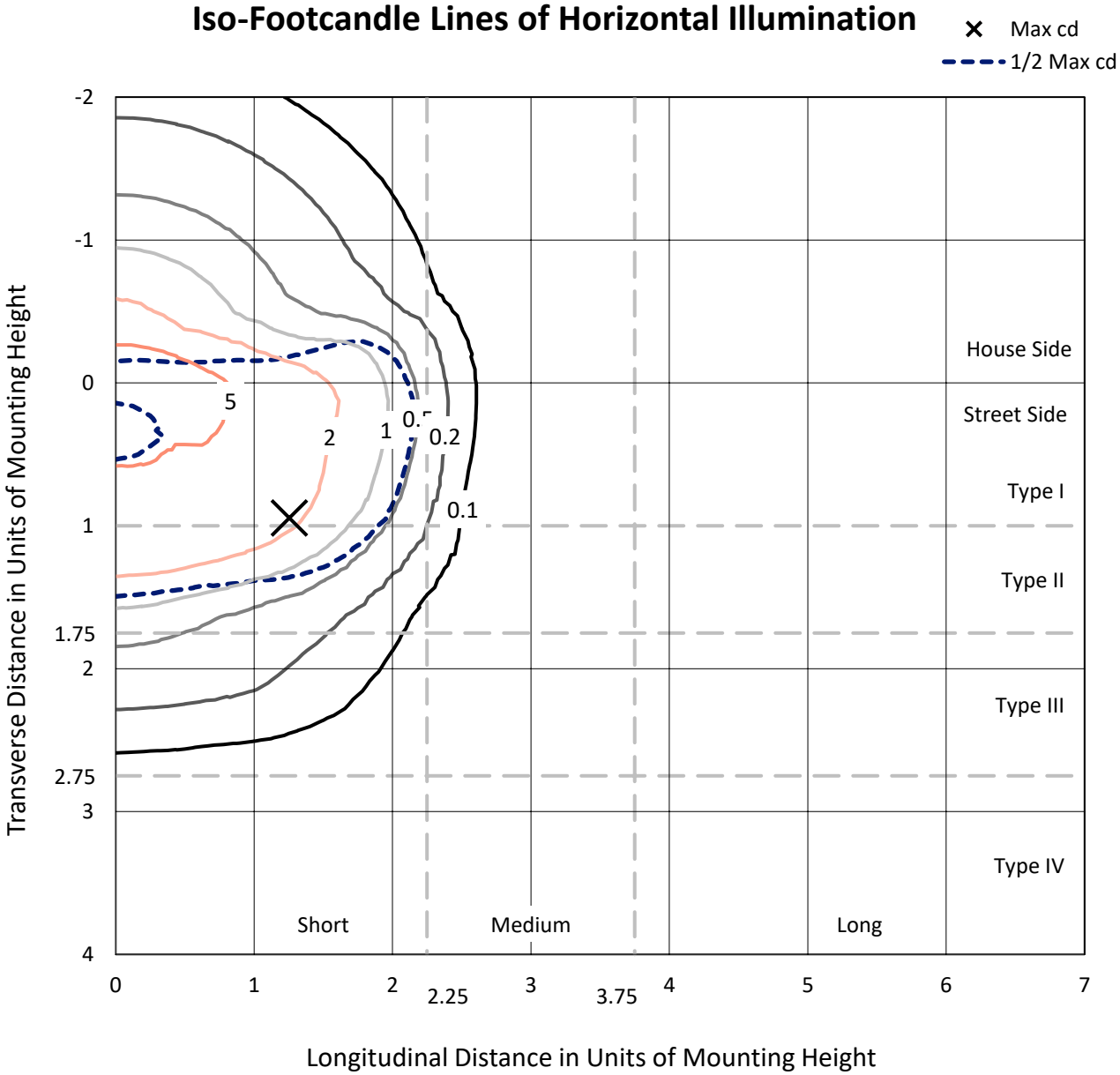
REPORT NUMBER: P634015
CATALOG NUMBER: GWS-SA2F-830-U-SL2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 8.8 fc
Type II - Short - N/A

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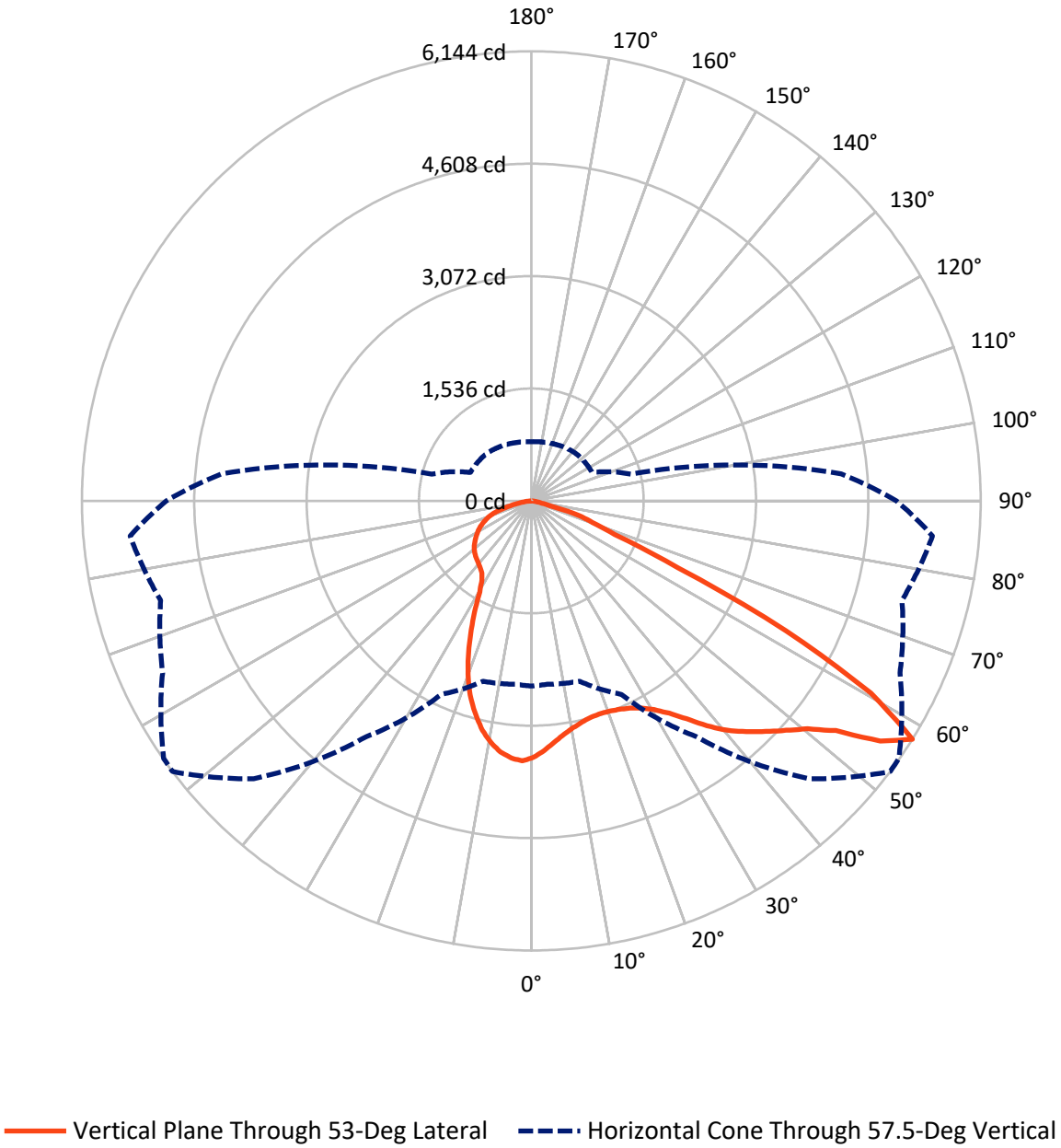
Luminous Intensity Polar Plot



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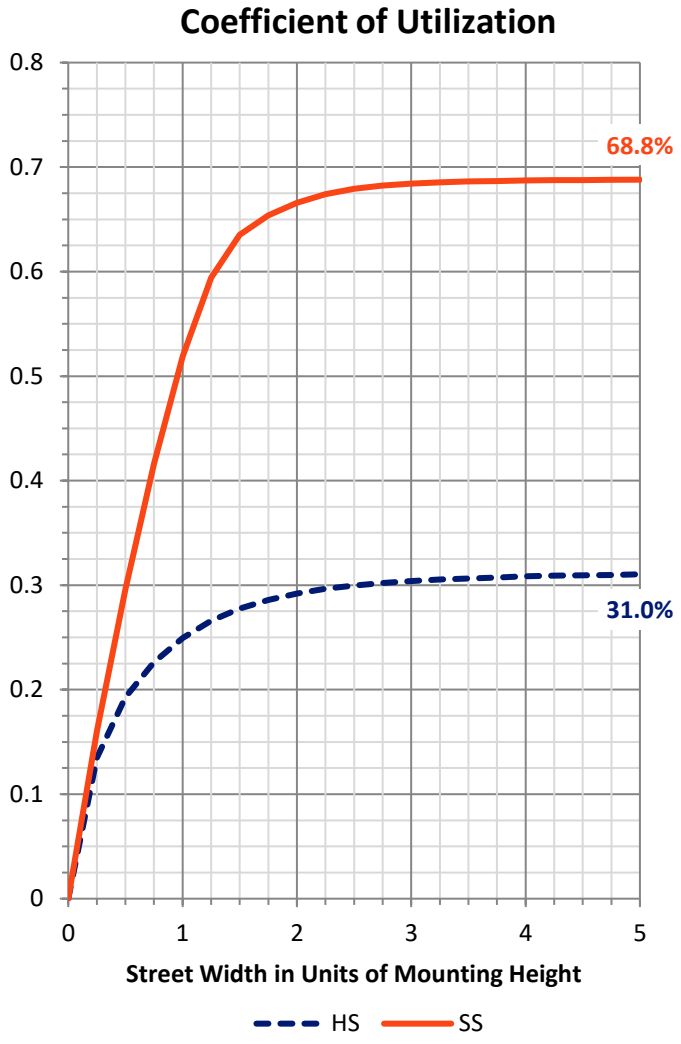
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3431.8	0.0	3431.8
	% Fixture	31.3	0.0	31.3
Street Side	Lumens	7544.3	0.0	7544.3
	% Fixture	68.7	0.0	68.7
Total	Lumens	10976.1	0.0	10976.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.0	2.9
10°-20°	831.5	7.6
20°-30°	1225.2	11.2
30°-40°	1714.9	15.6
40°-50°	2254.4	20.5
50°-60°	2643.2	24.1
60°-70°	1557.2	14.2
70°-80°	387.4	3.5
80°-90°	45.4	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°	10976.1	100.0
0°-180°	10976.1	100.0



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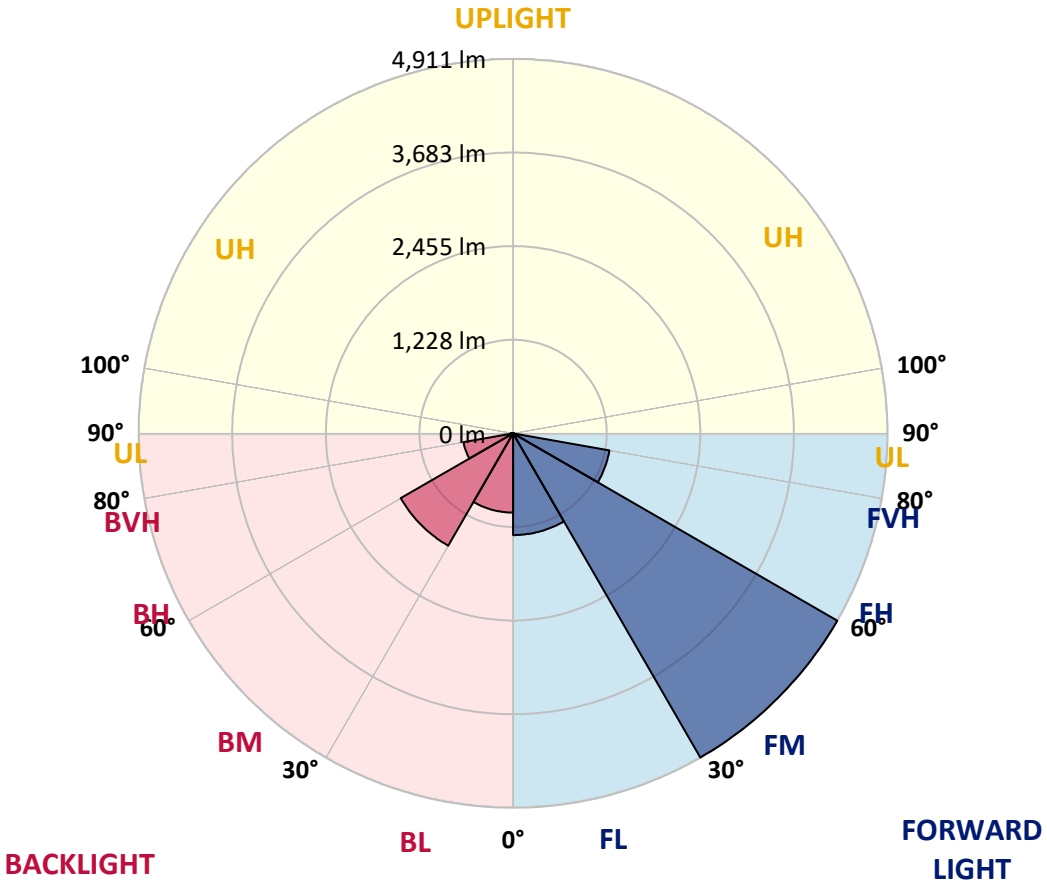
REPORT NUMBER: P634015
CATALOG NUMBER: GWS-SA2F-830-U-SL2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1334.5	12.2			
FM	(30°-60°)	4910.8	44.7			
FH	(60°-80°)	1283.8	11.7			G1/1800
FVH	(80°-90°)	15.2	0.1			G1/100
BL	(0°-30°)	1039.2	9.5	B3/2500		
BM	(30°-60°)	1701.7	15.5	B2/2500		
BH	(60°-80°)	660.7	6.0	B2/1000		G2/1000
BVH	(80°-90°)	30.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P634015
CATALOG NUMBER: GWS-SA2F-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0
2.5°	3303.6	3312.8	3314.7	3343.3	3345.1	3386.7	3414.4	3408.9	3437.5	3472.6	3500.3
5°	3145.6	3146.5	3155.8	3189.9	3208.4	3262.9	3309.1	3309.1	3364.5	3436.6	3498.5
7.5°	3015.3	3014.4	3022.7	3060.6	3091.1	3156.7	3219.5	3226.9	3304.5	3409.8	3510.5
10°	2894.3	2900.8	2910.0	2956.2	2995.0	3076.3	3151.1	3163.2	3261.1	3391.3	3527.1
12.5°	2816.7	2817.6	2831.5	2883.2	2933.1	3020.0	3098.5	3113.3	3226.0	3373.8	3539.1
15°	2766.8	2767.8	2782.5	2839.8	2898.0	2985.8	3066.2	3082.8	3205.6	3371.0	3562.2
17.5°	2744.7	2743.7	2757.6	2814.9	2878.6	2970.1	3056.0	3076.3	3214.9	3392.3	3602.9
20°	2744.7	2745.6	2753.0	2804.7	2869.4	2966.4	3066.2	3091.1	3250.9	3440.3	3665.7
22.5°	2783.5	2787.2	2790.9	2826.0	2876.8	2971.9	3092.9	3126.2	3328.5	3520.7	3747.9
25°	2859.2	2860.1	2863.8	2892.5	2915.6	2987.6	3137.3	3187.2	3449.5	3638.0	3851.4
27.5°	2960.8	2973.8	2977.5	2995.9	2995.9	3026.4	3206.6	3278.6	3613.1	3807.1	3983.5
30°	3103.1	3107.7	3114.2	3134.5	3112.3	3099.4	3308.2	3400.6	3802.4	4011.2	4142.4
32.5°	3227.8	3238.0	3273.1	3306.3	3266.6	3226.0	3457.9	3566.9	3984.4	4223.7	4311.5
35°	3334.1	3359.0	3426.4	3500.3	3472.6	3432.0	3656.5	3770.1	4134.1	4376.1	4461.1
37.5°	3462.5	3481.9	3574.3	3694.3	3719.3	3699.9	3898.5	3979.8	4233.9	4414.9	4542.4
40°	3592.7	3622.3	3741.5	3907.7	4002.9	4016.8	4122.1	4176.6	4268.0	4339.2	4526.7
42.5°	3725.8	3776.6	3940.1	4134.1	4303.1	4334.6	4310.5	4333.6	4257.0	4234.8	4453.7
45°	3888.3	3948.4	4133.2	4380.7	4603.4	4652.3	4495.3	4474.1	4255.1	4195.1	4408.5
47.5°	4080.5	4140.6	4317.0	4605.2	4889.8	4925.8	4684.7	4645.9	4319.8	4256.0	4469.4
50°	4250.5	4292.1	4450.0	4772.4	5156.8	5178.0	4893.5	4846.3	4480.5	4425.1	4659.7
52.5°	4077.7	4073.1	4239.4	4636.6	5295.3	5551.2	5215.0	5169.7	4790.9	4705.9	4954.4
55°	3459.7	3407.0	3555.8	3946.6	4908.2	5882.9	5791.4	5700.9	5204.8	4988.6	5230.7
57.5°	2529.4	2514.6	2550.7	2917.4	3931.8	5369.2	6144.3	6136.0	5562.3	5247.3	5506.0
60°	1977.9	1955.7	1859.6	1869.8	2680.0	4194.1	5332.3	5577.1	5784.0	5402.5	5698.1
62.5°	1756.2	1739.5	1689.7	1552.0	1596.4	2812.1	3908.7	4133.2	5054.2	4771.5	4894.4
65°	1454.1	1449.5	1491.0	1485.5	1337.7	1552.9	2206.1	2432.4	3177.9	3217.7	3177.9
67.5°	1056.8	1048.5	1153.8	1361.7	1287.8	1172.3	1229.6	1308.1	1629.6	1463.3	1317.4
70°	687.3	675.3	736.3	983.9	1152.9	1021.7	885.9	873.0	896.1	557.1	602.3
72.5°	461.0	447.1	446.2	541.4	696.6	688.2	686.4	679.9	606.9	439.7	487.8
75°	256.8	245.7	243.0	233.7	249.4	254.0	270.7	279.9	303.0	333.5	369.5
77.5°	43.4	42.5	53.6	68.4	94.2	121.0	149.7	158.0	194.9	231.0	254.0
80°	24.0	24.9	32.3	39.7	52.7	72.1	92.4	97.9	120.1	139.5	158.0
82.5°	12.9	12.9	16.6	21.2	28.6	37.9	49.9	54.5	69.3	81.3	94.2
85°	4.6	4.6	6.5	8.3	12.0	15.7	19.4	22.2	30.5	41.6	47.1
87.5°	0.0	0.0	0.0	0.0	0.9	1.8	3.7	3.7	4.6	8.3	12.0
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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REPORT NUMBER: P634015
CATALOG NUMBER: GWS-SA2F-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0	3505.0
2.5°	3523.4	3498.5	3532.7	3548.4	3553.9	3557.6	3533.6	3517.0	3511.4	3493.9	3483.7
5°	3536.4	3519.7	3552.1	3552.1	3529.0	3505.0	3456.0	3421.8	3397.8	3369.2	3364.5
7.5°	3558.5	3546.5	3564.1	3528.1	3469.9	3405.2	3320.2	3253.7	3200.1	3165.0	3165.9
10°	3588.1	3573.3	3559.5	3479.1	3372.9	3253.7	3123.4	3026.4	2937.7	2897.1	2874.9
12.5°	3607.5	3586.3	3528.1	3395.0	3238.9	3079.1	2895.2	2751.1	2622.7	2564.5	2559.9
15°	3631.5	3592.7	3476.3	3286.0	3068.9	2850.9	2614.4	2413.9	2240.3	2149.7	2145.1
17.5°	3662.9	3599.2	3414.4	3161.3	2889.7	2568.2	2270.7	2018.5	1833.8	1763.6	1775.6
20°	3707.3	3606.6	3344.2	3022.7	2667.1	2246.7	1876.3	1644.4	1573.3	1568.6	1559.4
22.5°	3757.2	3611.2	3266.6	2867.5	2397.3	1904.0	1550.2	1451.3	1450.4	1473.5	1479.0
25°	3813.5	3614.9	3178.9	2686.5	2105.4	1562.2	1370.9	1341.4	1364.5	1407.9	1413.4
27.5°	3885.6	3622.3	3072.6	2487.8	1795.0	1349.7	1272.1	1264.7	1292.4	1333.1	1331.2
30°	3991.8	3649.1	2959.9	2259.7	1476.3	1249.0	1212.0	1213.0	1224.1	1243.5	1246.2
32.5°	4099.9	3690.7	2850.0	2002.8	1293.3	1191.7	1175.1	1173.2	1173.2	1181.6	1183.4
35°	4202.4	3737.8	2730.8	1734.9	1204.7	1158.5	1147.4	1141.8	1139.1	1137.2	1134.4
37.5°	4259.7	3760.9	2614.4	1470.7	1157.5	1136.3	1125.2	1117.8	1107.7	1100.3	1098.4
40°	4234.8	3734.1	2479.5	1273.0	1128.9	1115.0	1102.1	1092.0	1078.1	1071.6	1067.9
42.5°	4151.6	3650.9	2332.6	1179.7	1105.8	1092.0	1076.2	1059.6	1050.4	1044.8	1043.9
45°	4063.9	3550.2	2155.3	1125.2	1083.6	1067.0	1048.5	1030.1	1019.9	1017.1	1016.2
47.5°	4061.1	3500.3	1966.8	1081.8	1056.8	1040.2	1017.1	998.6	987.6	983.9	980.2
50°	4183.0	3551.2	1754.3	1043.9	1029.1	1011.6	985.7	965.4	951.5	946.9	946.0
52.5°	4436.2	3742.4	1564.0	1006.0	992.2	971.9	950.6	930.3	913.7	905.3	904.4
55°	4709.6	3985.4	1445.8	967.2	948.8	931.2	911.8	889.6	871.2	858.2	856.4
57.5°	*4992.3*	*4250.5*	*1409.7*	*918.3*	*904.4*	*892.4*	*869.3*	*845.3*	*824.0*	*812.0*	*809.3*
60°	5225.1	4478.7	1477.2	866.5	859.2	843.4	822.2	799.1	784.3	775.1	773.2
62.5°	4374.3	3646.3	1192.6	810.2	810.2	793.6	769.5	752.9	742.7	736.3	734.4
65°	2776.1	2257.8	813.9	753.8	752.9	730.7	710.4	699.3	694.7	684.5	682.7
67.5°	1209.3	1031.9	695.6	696.6	692.9	668.8	648.5	640.2	631.0	619.9	619.0
70°	627.3	639.3	622.7	632.8	626.3	597.7	578.3	565.4	546.0	534.9	535.8
72.5°	506.3	519.2	537.7	553.4	539.5	516.4	485.9	470.2	445.3	433.3	434.2
75°	386.2	400.0	417.6	434.2	423.1	394.5	375.1	359.4	330.7	316.9	319.6
77.5°	266.1	273.5	294.7	293.8	290.1	281.8	253.1	234.6	205.1	188.5	190.3
80°	165.4	170.0	180.1	184.8	182.9	171.8	148.7	134.9	117.3	107.2	108.1
82.5°	99.8	102.5	111.8	112.7	111.8	103.5	85.9	75.8	64.7	59.1	59.1
85°	50.8	52.7	58.2	58.2	52.7	44.3	39.7	35.1	28.6	25.9	25.9
87.5°	13.9	13.9	17.6	14.8	12.0	11.1	5.5	4.6	1.8	0.9	0.9
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

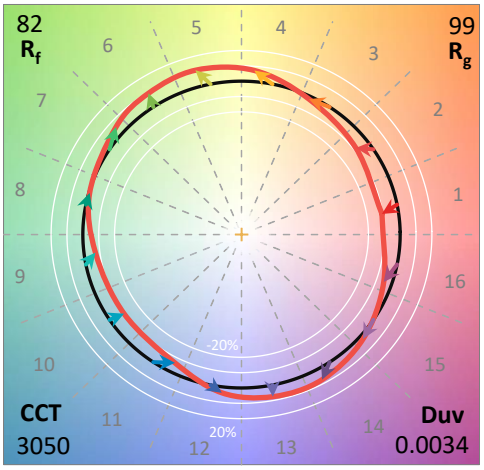
Test Information

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

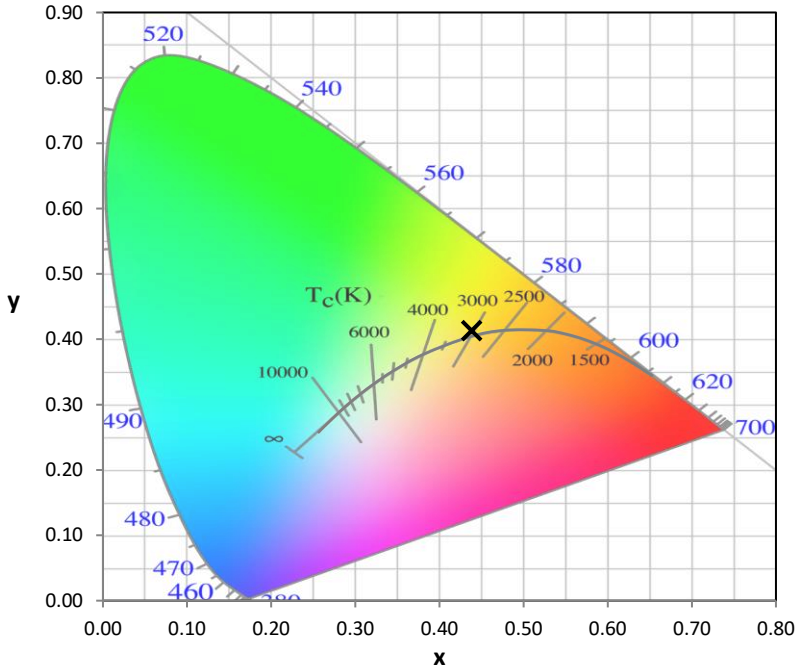
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

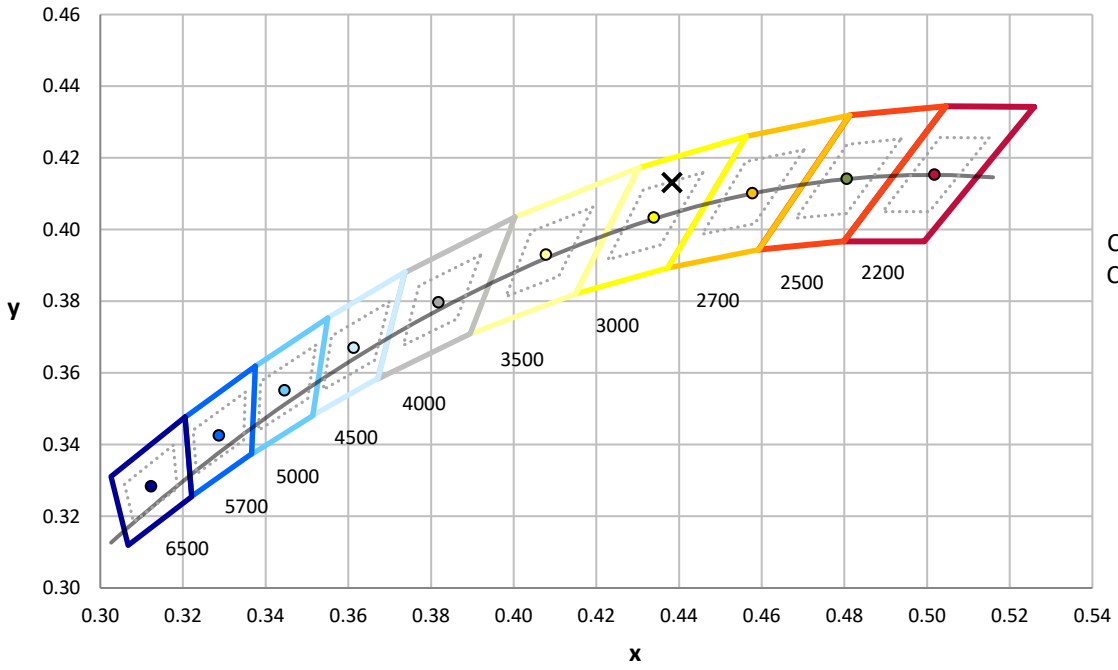
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

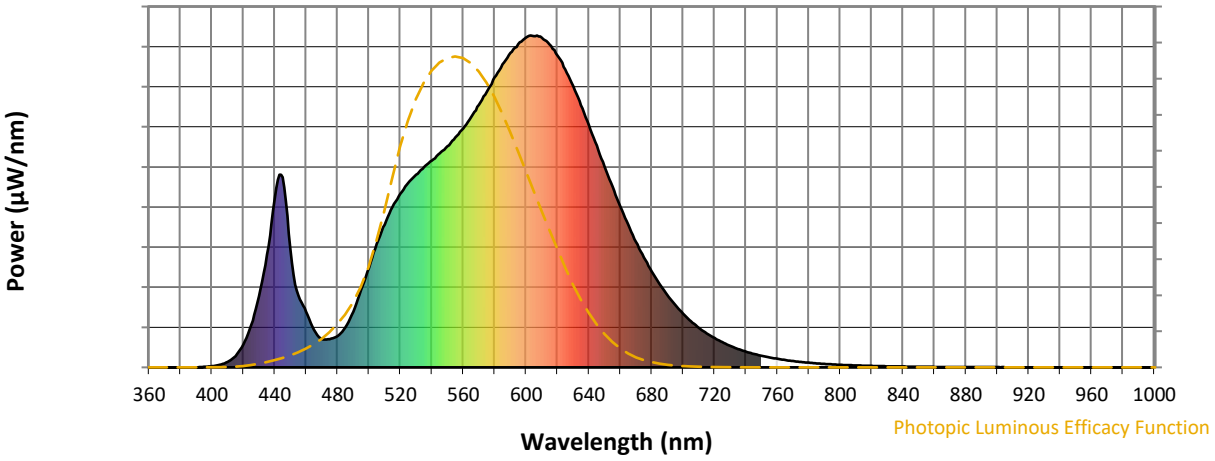


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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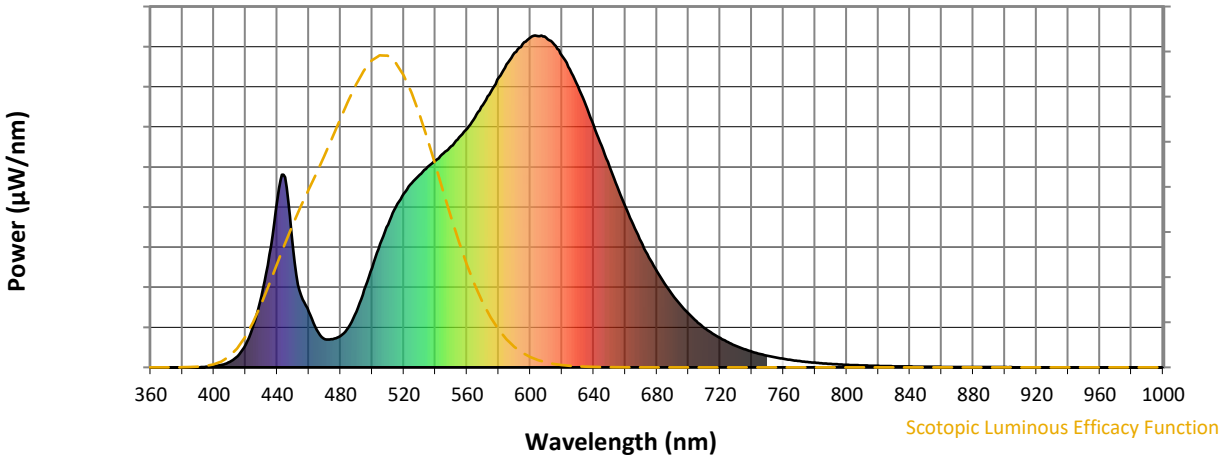
Scotopic Flux vs. Wavelength



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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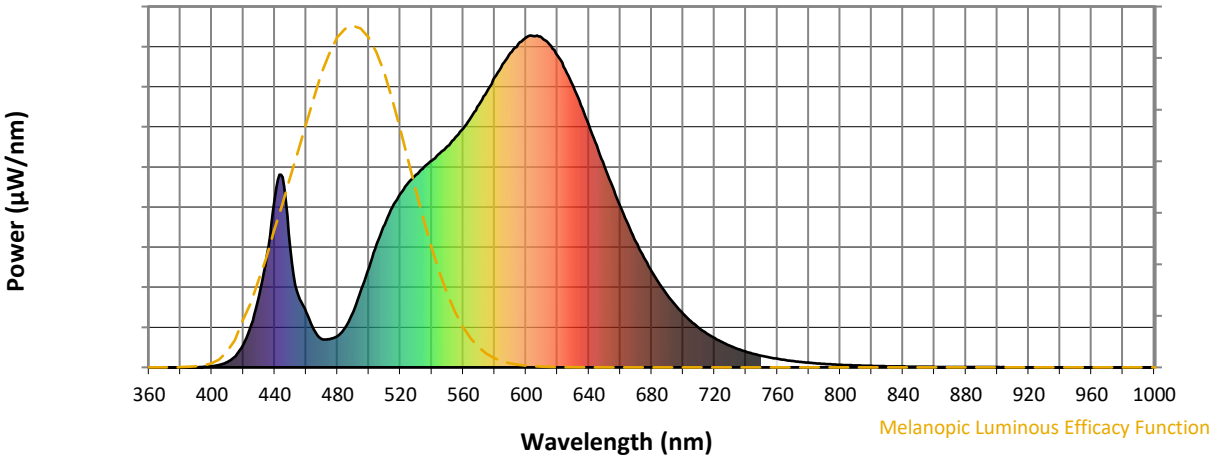
Melanopic Flux vs. Wavelength



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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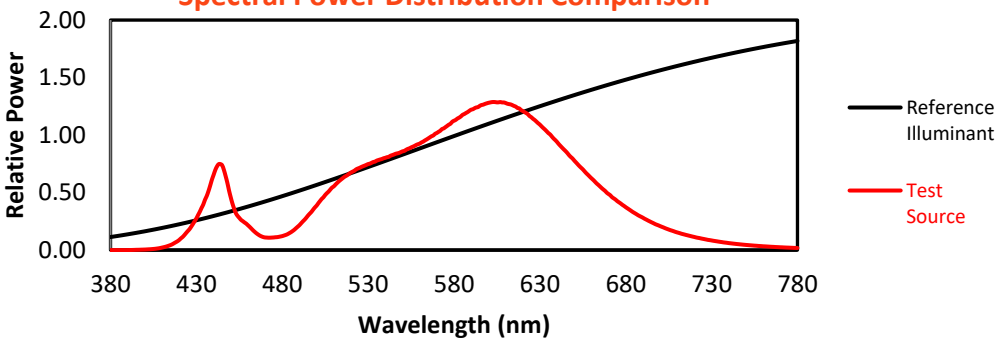
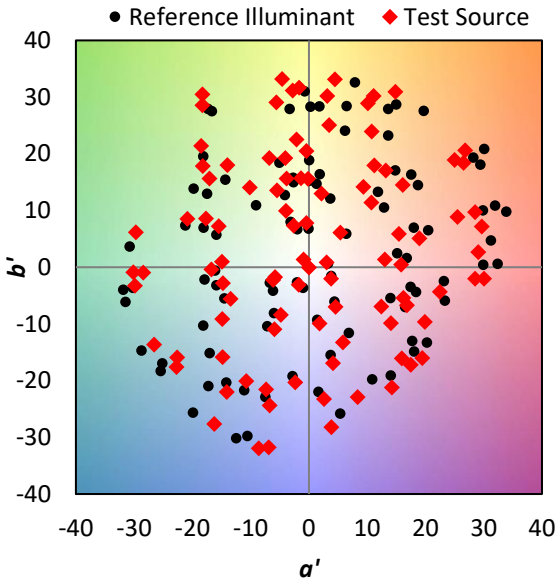
Summary

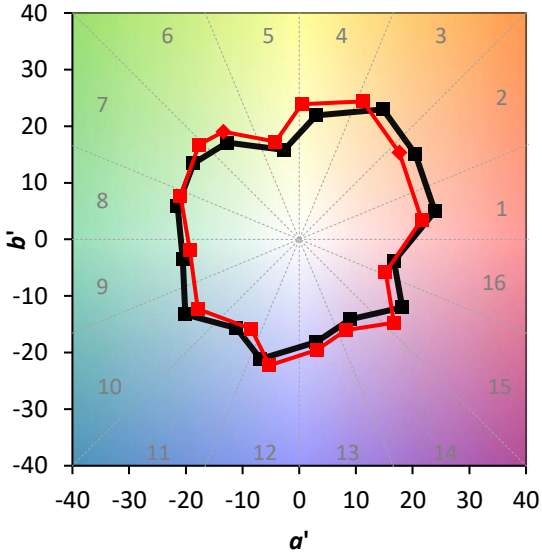
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

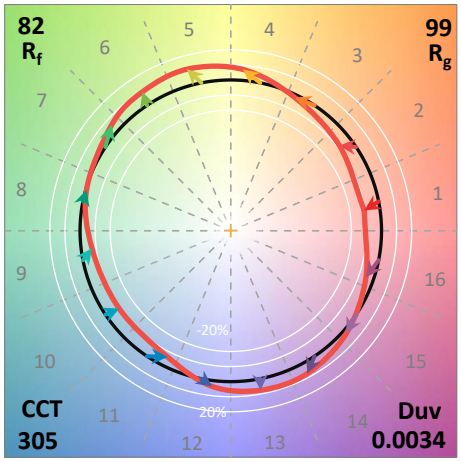
Spectral Power Distribution Comparison

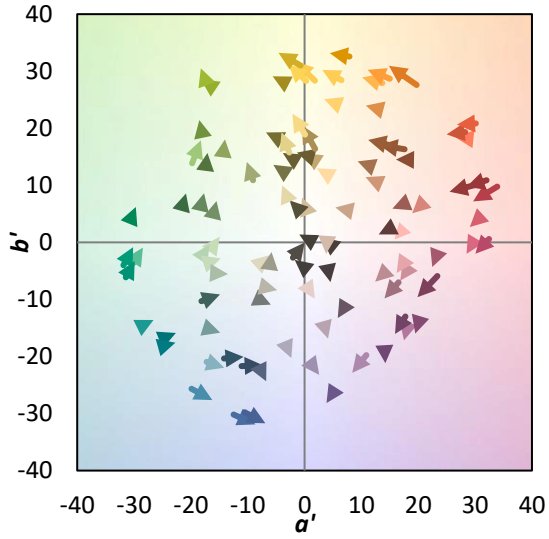


Color Vector Graphics









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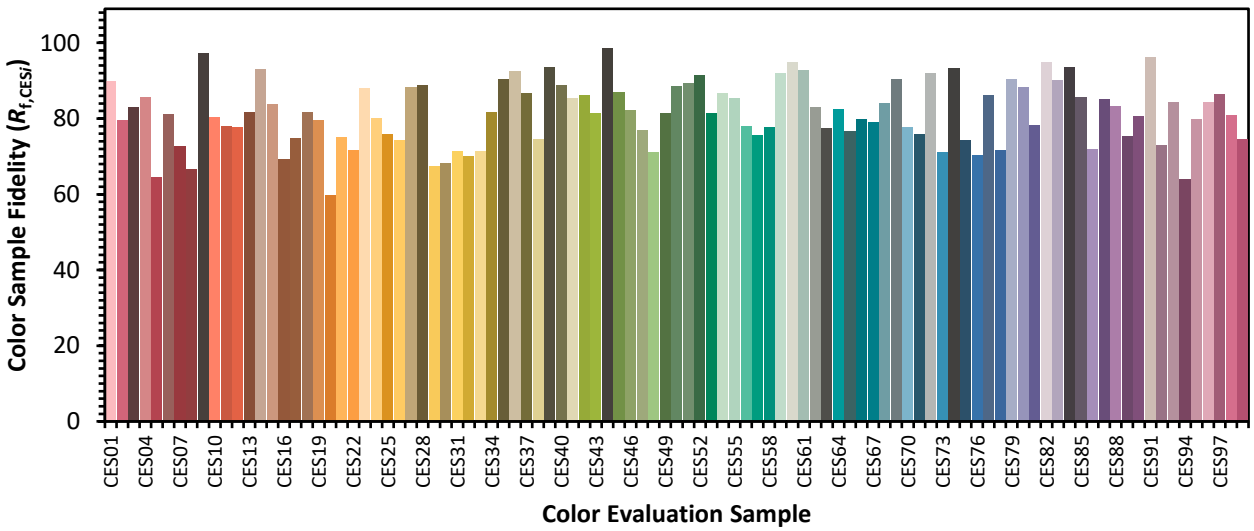
Individual Sample Fidelity Index ($R_{f,i}$)

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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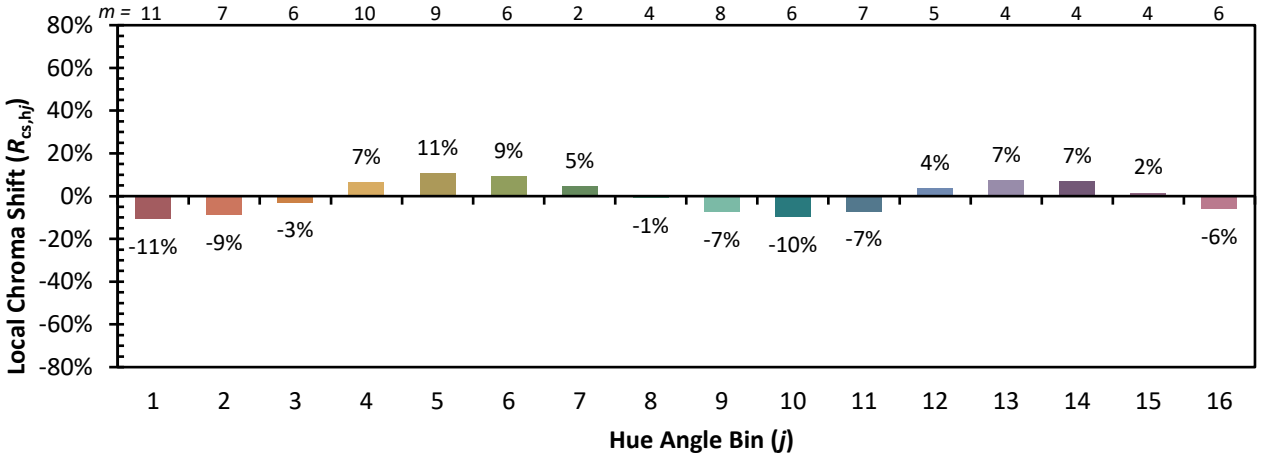
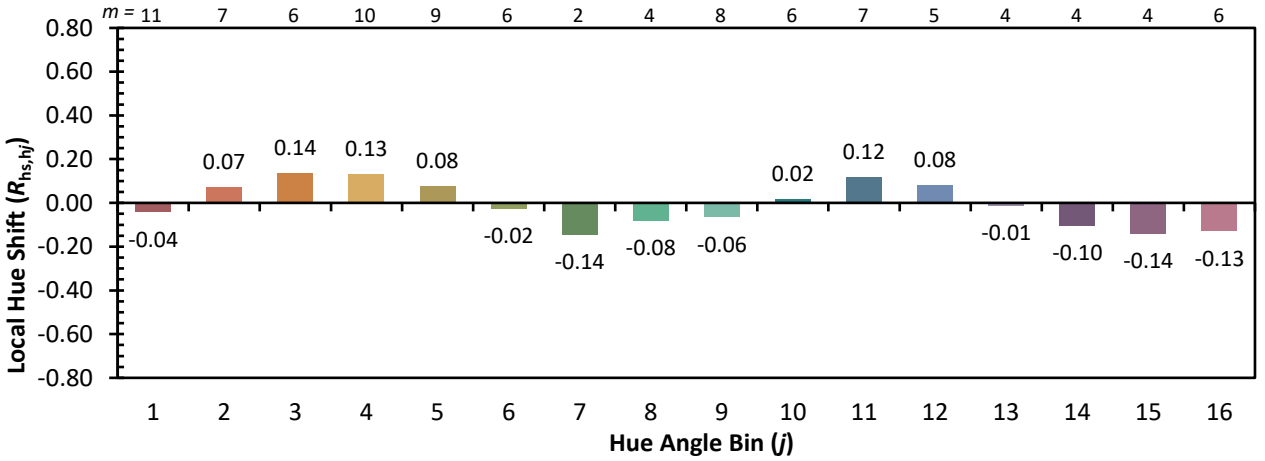
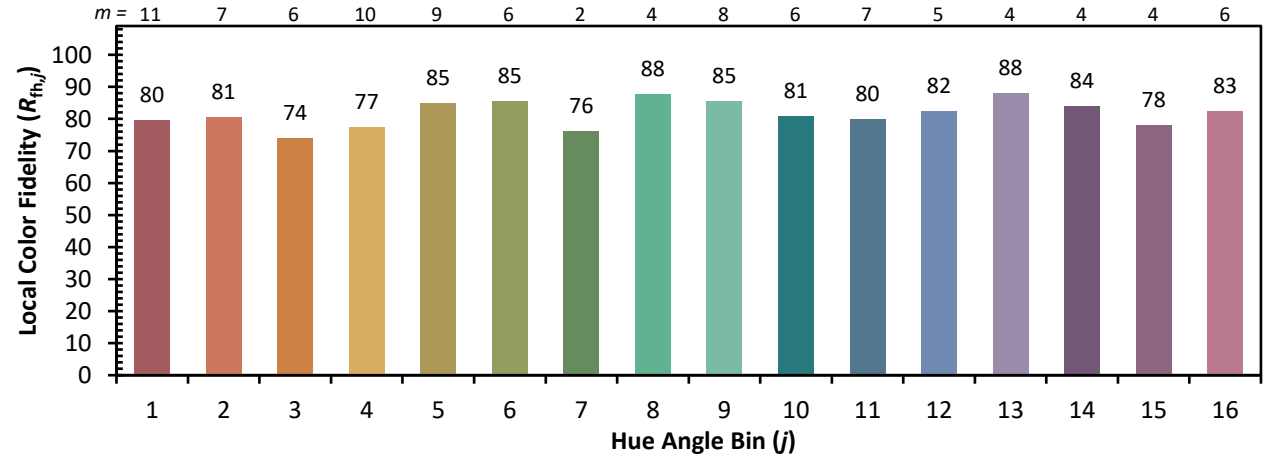
Color Rendition by Hue-Angle Bin







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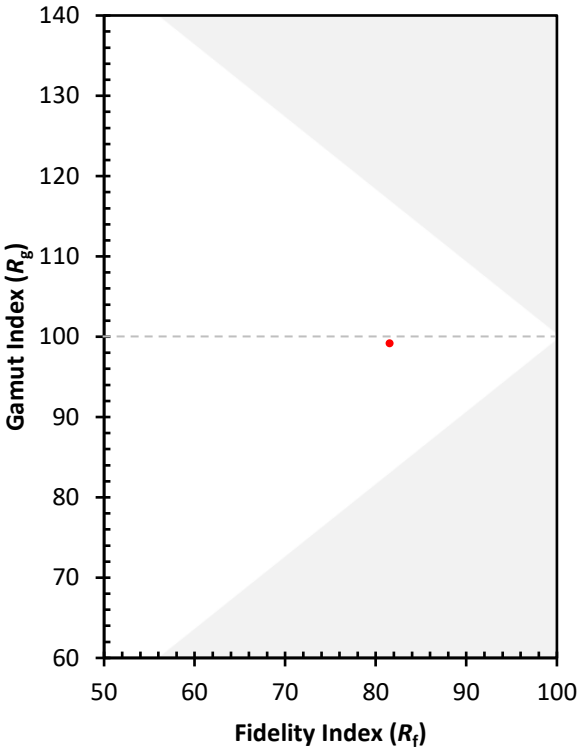
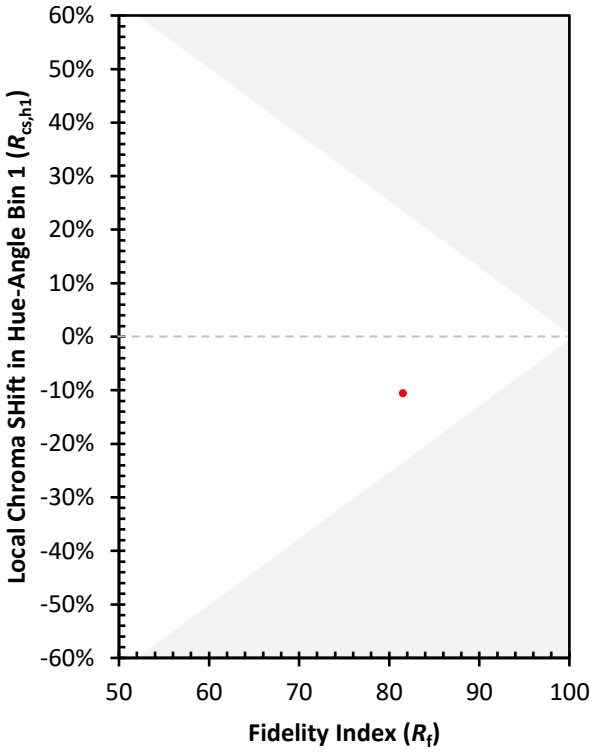
Measure Comparisons





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