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: P637483

Luminaire Tested: GWS-SA4C-830-U-SL3-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:	P637483
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-SL3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR 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:	9019.3 lumens
Efficiency:	N/A
Efficacy:	70.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

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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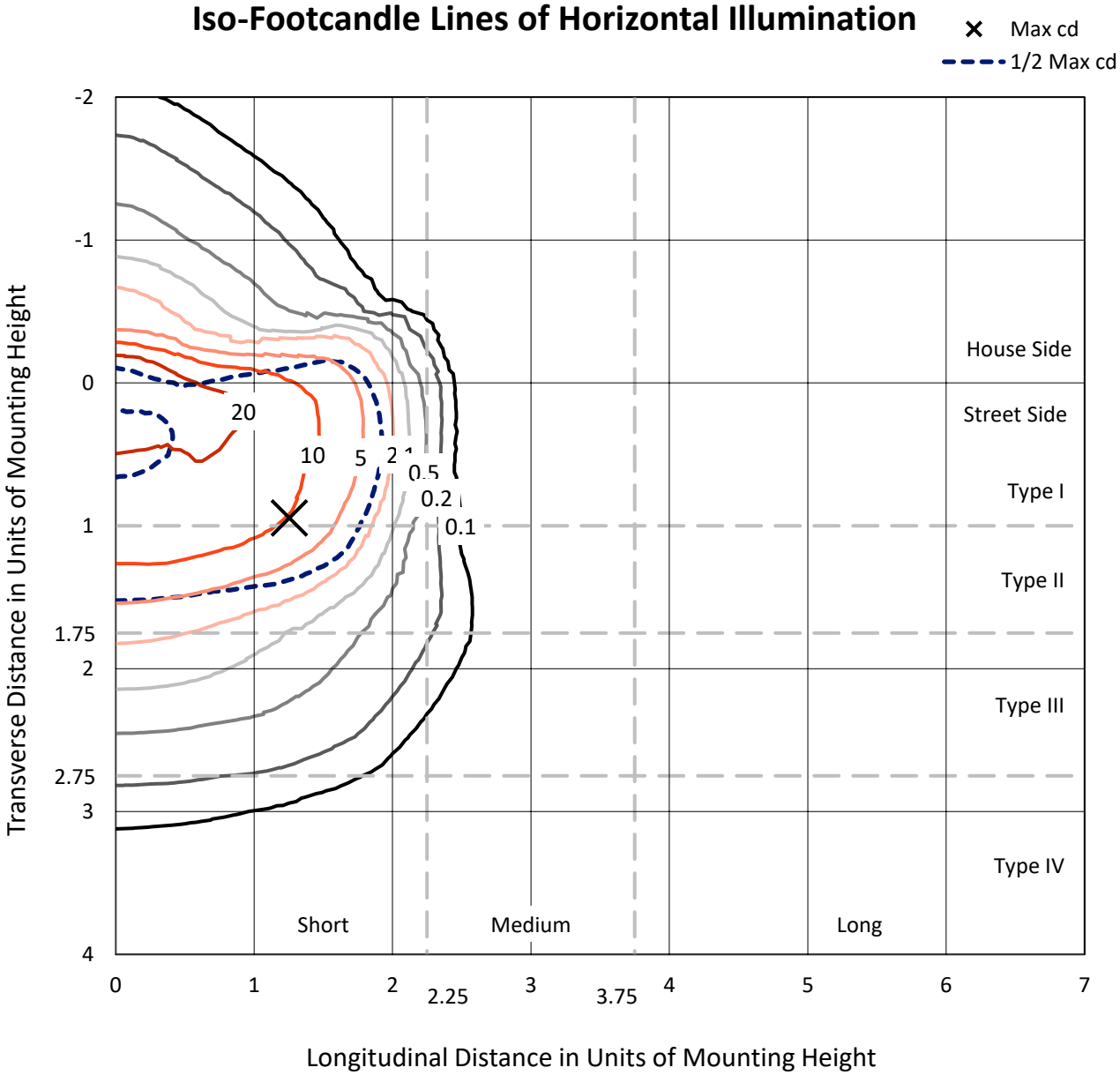
REPORT NUMBER: P637483
CATALOG NUMBER: GWS-SA4C-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 39.6 fc
Type II - Short - N/A

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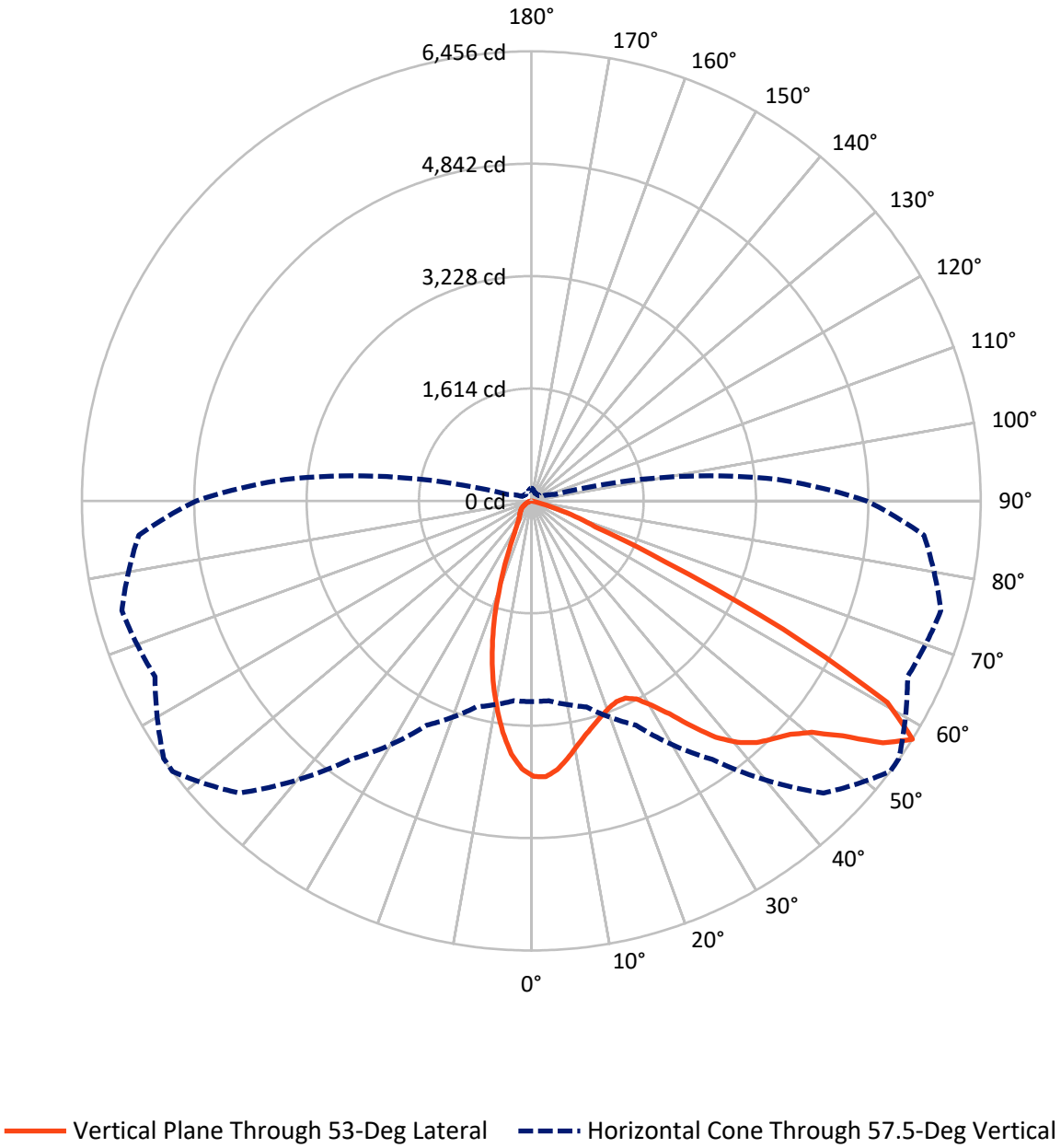
Luminous Intensity Polar Plot



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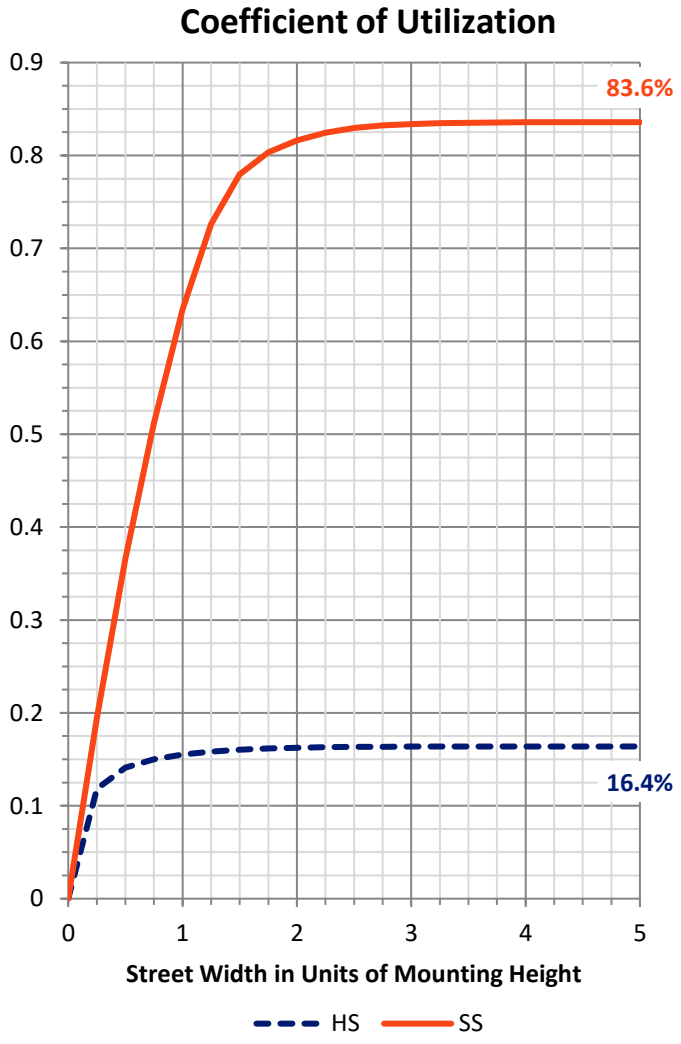
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1489.9	0.0	1489.9
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	7529.4	0.0	7529.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	9019.3	0.0	9019.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.5	3.8
10°-20°	743.1	8.2
20°-30°	968.1	10.7
30°-40°	1404.3	15.6
40°-50°	2026.2	22.5
50°-60°	2450.6	27.2
60°-70°	998.8	11.1
70°-80°	89.7	1.0
80°-90°	0.0	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°	9019.3	100.0
0°-180°	9019.3	100.0



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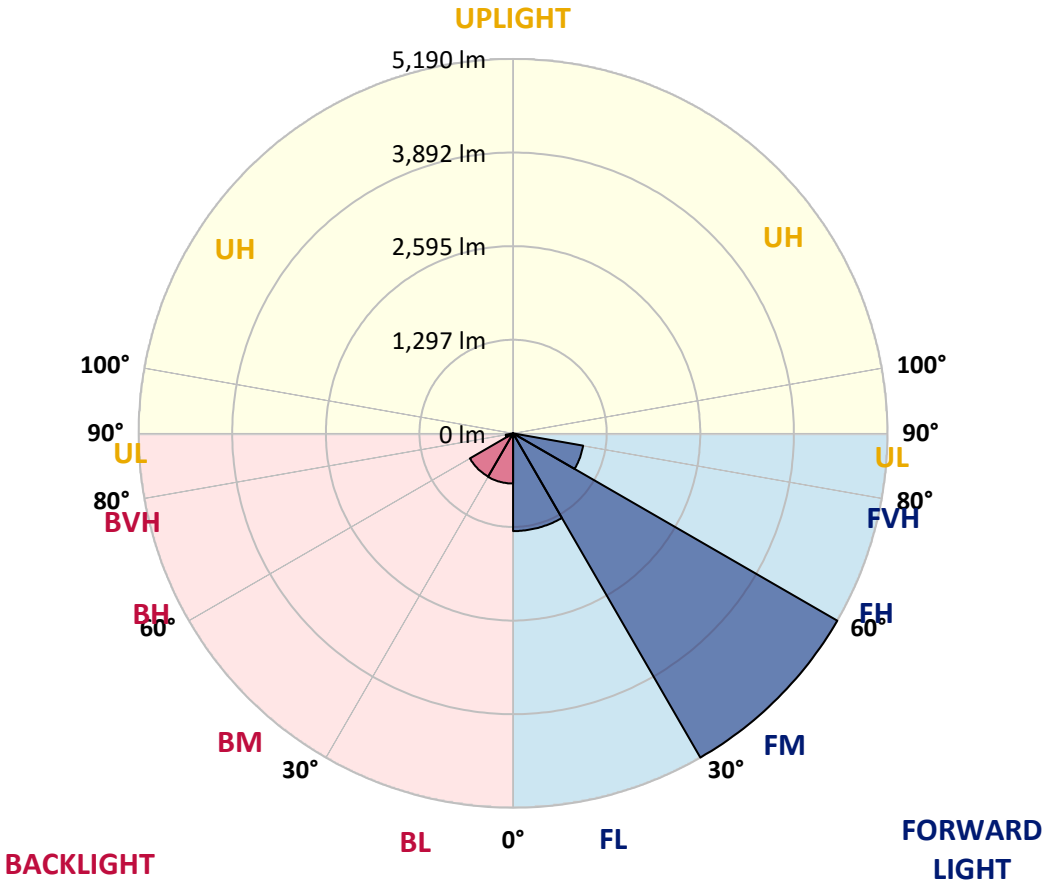
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1354.4	15.0			
FM	(30°-60°)	5189.5	57.5			
FH	(60°-80°)	985.5	10.9			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	695.3	7.7	B2/1000		
BM	(30°-60°)	691.5	7.7	B1/1000		
BH	(60°-80°)	103.0	1.1	B0/110		G0/110
BVH	(80°-90°)	0.0	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: P637483
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3901.1	3910.0	3925.4	3945.3	3958.6	3965.2	3965.2	3984.0	3971.9	3961.9	3950.9
5°	3734.2	3743.0	3764.0	3796.1	3828.1	3851.4	3877.9	3897.8	3905.5	3905.5	3886.7
7.5°	3498.7	3510.9	3524.2	3568.4	3638.0	3690.0	3735.3	3764.0	3806.0	3819.3	3792.8
10°	3245.6	3257.7	3287.6	3348.4	3428.0	3505.4	3582.7	3619.2	3691.1	3728.7	3698.8
12.5°	3031.1	3036.7	3076.4	3149.4	3251.1	3357.2	3451.2	3488.8	3590.5	3646.9	3611.5
15°	2854.3	2857.6	2897.4	2978.1	3095.2	3225.7	3344.0	3382.7	3507.6	3592.7	3539.6
17.5°	2720.5	2721.6	2755.9	2843.2	2965.9	3110.7	3251.1	3298.6	3460.0	3562.8	3483.2
20°	2653.1	2649.7	2674.1	2750.3	2866.4	3011.2	3177.0	3235.6	3433.5	3558.4	3440.1
22.5°	2654.2	2646.4	2656.4	2710.5	2808.9	2944.9	3130.6	3196.9	3435.7	3577.2	3403.7
25°	2717.2	2706.1	2708.3	2737.1	2806.7	2930.5	3137.2	3208.0	3479.9	3640.2	3390.4
27.5°	2823.3	2811.1	2811.1	2825.5	2863.1	2975.9	3220.2	3300.9	3598.2	3762.9	3418.0
30°	2960.4	2948.2	2943.8	2958.2	2989.1	3093.0	3404.8	3488.8	3800.5	3964.1	3506.5
32.5°	3117.3	3103.0	3110.7	3130.6	3160.5	3304.2	3642.4	3754.1	4053.7	4235.0	3665.6
35°	3283.2	3271.0	3306.4	3349.5	3395.9	3597.1	3970.7	4068.0	4364.3	4572.1	3908.8
37.5°	3441.2	3435.7	3509.8	3600.4	3696.6	3948.6	4304.6	4379.8	4630.7	4939.1	4206.2
40°	3599.3	3598.2	3725.3	3884.5	4038.2	4299.1	4557.7	4619.6	4793.2	5224.3	4491.4
42.5°	3776.2	3776.2	3952.0	4164.2	4368.7	4595.3	4743.5	4771.1	4866.2	5389.0	4705.9
45°	3945.3	3955.3	4158.7	4405.2	4647.3	4826.4	4871.7	4873.9	4896.0	5486.3	4883.8
47.5°	4079.1	4087.9	4331.1	4615.2	4876.1	5002.1	5008.8	4998.8	4974.5	5579.2	5020.9
50°	4187.4	4200.7	4454.9	4755.6	5033.1	5171.3	5222.1	5212.2	5150.3	5678.7	5117.1
52.5°	4240.5	4259.3	4498.0	4825.3	5207.7	5460.9	5602.4	5625.6	5413.4	5733.9	5208.8
55°	3816.0	3843.6	4063.6	4511.3	5305.0	5908.6	6130.8	6126.4	5698.6	5898.6	5432.1
57.5°	2881.9	2879.7	3062.1	3551.8	4531.2	5934.0	6455.8	6446.9	5965.0	6089.9	5661.0
60°	1962.2	1948.9	1997.5	2234.1	3168.2	4834.1	5875.4	5994.8	5775.9	5625.6	4806.5
62.5°	1615.1	1602.9	1587.4	1522.2	1819.6	3011.2	4059.2	4240.5	4211.7	3910.0	3014.5
65°	1322.1	1332.1	1375.2	1347.5	1265.7	1544.3	2107.0	2214.2	2024.1	1703.5	1053.5
67.5°	975.0	979.4	1035.8	1181.7	1137.5	1028.1	991.6	1009.3	591.4	271.9	175.8
70°	575.9	579.3	631.2	826.9	923.0	789.3	669.9	659.9	234.4	73.0	79.6
72.5°	326.1	319.5	329.4	393.5	503.0	419.0	344.9	313.9	70.7	40.9	40.9
75°	154.8	150.3	129.3	121.6	110.5	70.7	44.2	37.6	17.7	16.6	16.6
77.5°	1.1	3.3	2.2	3.3	3.3	2.2	1.1	1.1	3.3	3.3	4.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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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Scaled Data Report

REPORT NUMBER: P637483
CATALOG NUMBER: GWS-SA4C-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3931.0	3897.8	3890.1	3887.8	3856.9	3823.7	3789.5	3776.2	3756.3	3744.1	3754.1
5°	3856.9	3809.4	3767.3	3728.7	3660.1	3585.0	3519.7	3477.7	3437.9	3411.4	3418.0
7.5°	3751.9	3690.0	3593.8	3495.4	3369.4	3256.6	3130.6	3053.2	2981.4	2941.6	2960.4
10°	3640.2	3558.4	3404.8	3237.8	3040.0	2863.1	2682.9	2535.9	2450.8	2370.1	2378.9
12.5°	3530.8	3422.5	3192.5	2939.4	2689.5	2428.7	2156.7	1953.3	1814.0	1713.4	1698.0
15°	3429.1	3289.8	2985.8	2652.0	2311.5	1964.4	1617.3	1326.5	1165.1	1065.6	1059.0
17.5°	3338.4	3166.0	2771.3	2351.3	1924.6	1480.2	1081.1	863.4	770.5	727.4	723.0
20°	3251.1	3041.1	2552.5	2046.2	1502.3	1039.1	746.2	645.6	615.7	598.0	600.3
22.5°	3167.1	2905.1	2322.5	1707.9	1126.4	729.6	578.1	539.5	536.1	538.4	539.5
25°	3096.3	2780.2	2086.0	1381.8	803.7	556.0	483.1	472.0	482.0	496.3	498.6
27.5°	3059.9	2678.5	1854.9	1053.5	581.5	452.1	419.0	423.4	441.1	456.5	458.8
30°	3069.8	2602.2	1616.2	763.9	447.7	381.4	370.3	379.2	396.9	411.2	413.4
32.5°	3140.6	2563.5	1371.9	556.0	368.1	332.7	328.3	334.9	350.4	361.5	362.6
35°	3281.0	2572.4	1139.7	425.6	316.2	296.3	295.2	299.6	307.3	315.1	316.2
37.5°	3487.7	2644.2	910.9	353.7	286.3	271.9	267.5	267.5	273.0	276.4	278.6
40°	3709.9	2752.6	729.6	312.8	265.3	249.8	241.0	237.7	242.1	246.5	247.6
42.5°	3893.4	2860.9	592.5	284.1	248.7	227.7	216.7	214.5	220.0	227.7	229.9
45°	4033.8	2944.9	494.1	260.9	229.9	206.7	194.6	194.6	204.5	217.8	220.0
47.5°	4162.0	3012.3	421.2	239.9	212.2	187.9	175.8	178.0	194.6	212.2	215.6
50°	4249.3	3066.5	367.0	221.1	197.9	172.4	161.4	165.8	185.7	206.7	210.0
52.5°	4343.3	3132.8	331.6	204.5	184.6	160.3	150.3	153.7	175.8	199.0	203.4
55°	4603.1	3355.0	330.5	182.4	161.4	143.7	139.3	140.4	162.5	189.0	194.6
57.5°	*4815.3*	*3550.7*	*352.6*	*153.7*	*134.9*	*126.0*	*123.8*	*124.9*	*144.8*	*174.7*	*181.3*
60°	3984.0	2759.2	291.8	127.1	112.8	110.5	107.2	109.4	128.2	154.8	160.3
62.5°	2357.9	1577.5	139.3	97.3	96.2	94.0	90.6	95.1	112.8	136.0	139.3
65°	805.9	467.6	88.4	79.6	81.8	78.5	75.2	79.6	95.1	108.3	109.4
67.5°	154.8	123.8	70.7	66.3	67.4	60.8	59.7	64.1	73.0	75.2	74.1
70°	80.7	71.9	54.2	54.2	52.0	43.1	43.1	47.5	47.5	44.2	43.1
72.5°	42.0	39.8	35.4	39.8	33.2	26.5	26.5	28.7	26.5	22.1	22.1
75°	16.6	16.6	15.5	19.9	14.4	12.2	11.1	13.3	9.9	7.7	7.7
77.5°	4.4	4.4	4.4	5.5	3.3	3.3	2.2	2.2	1.1	0.0	0.0
80°	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

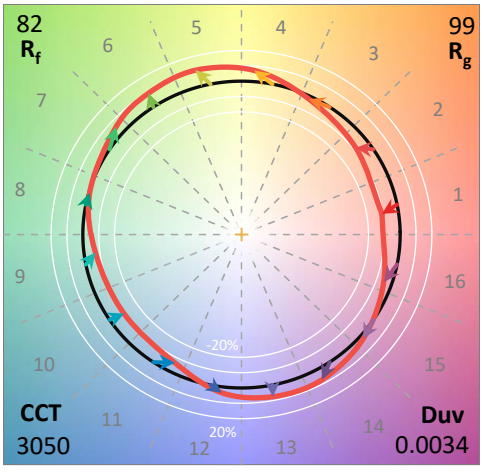
Test Information

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

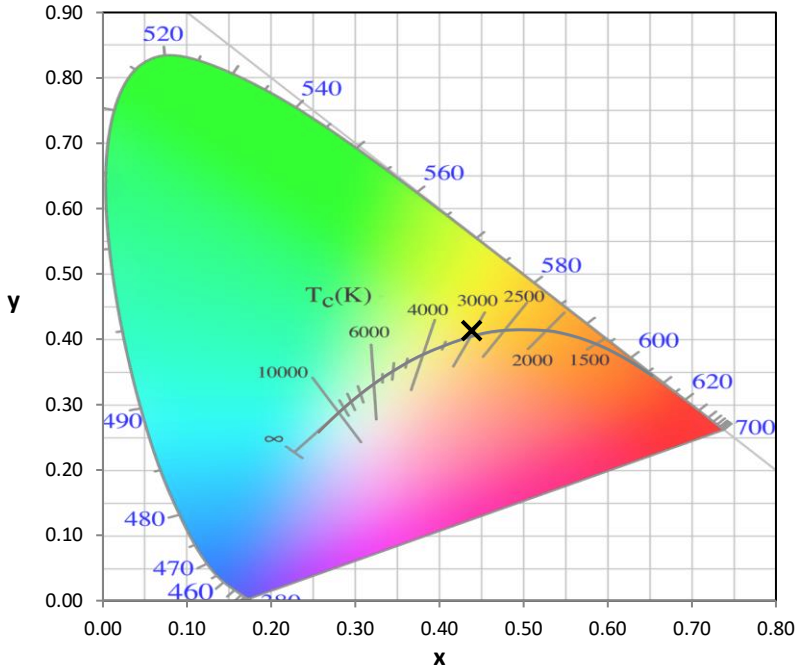
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

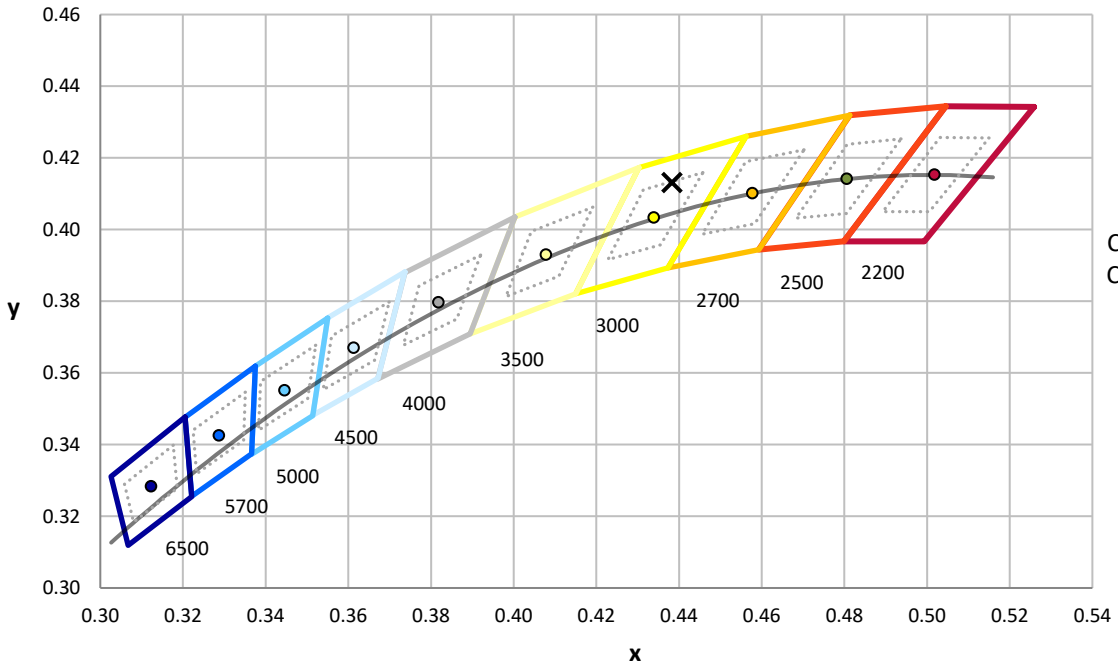
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

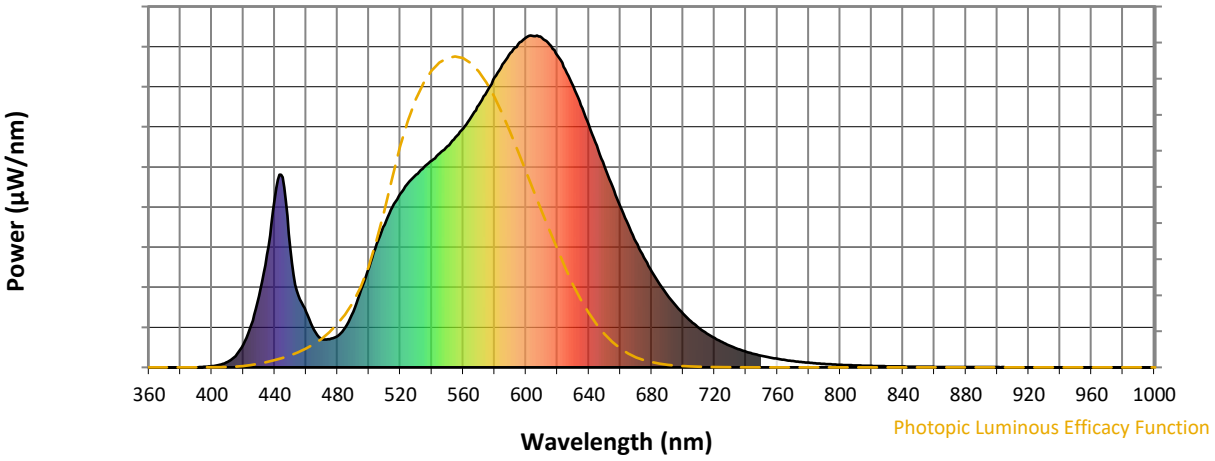


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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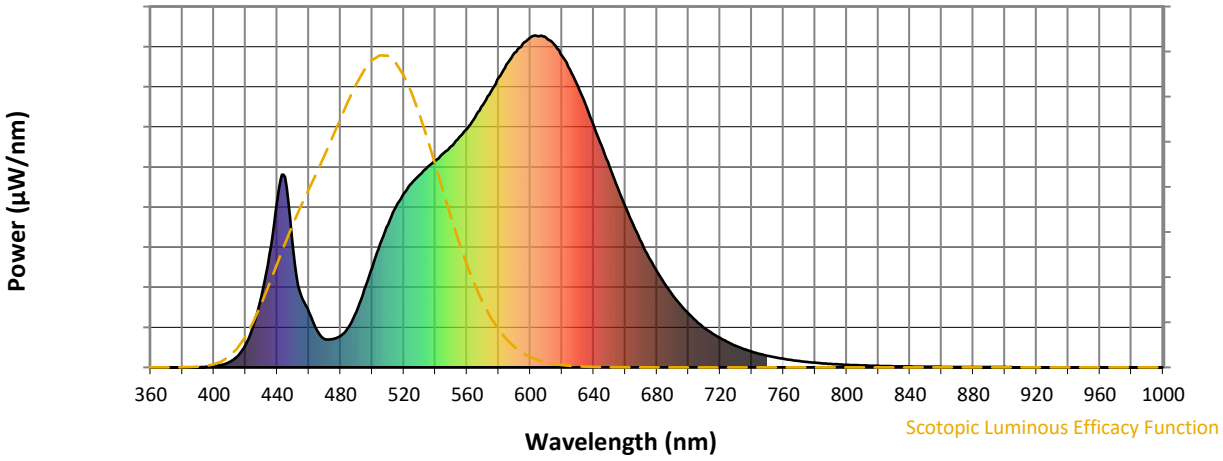
Scotopic Flux vs. Wavelength



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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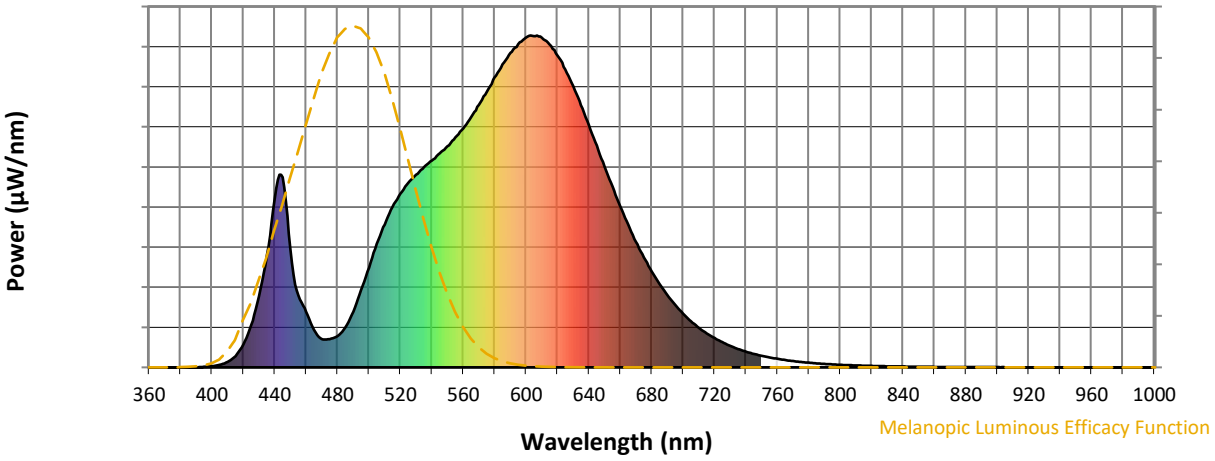
Melanopic Flux vs. Wavelength



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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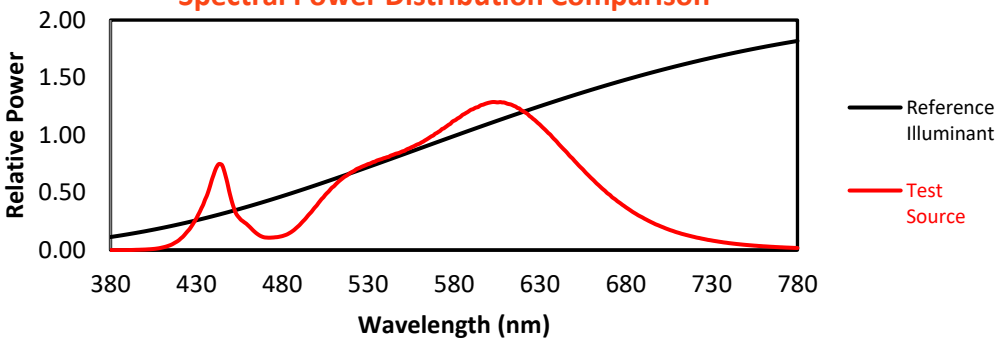
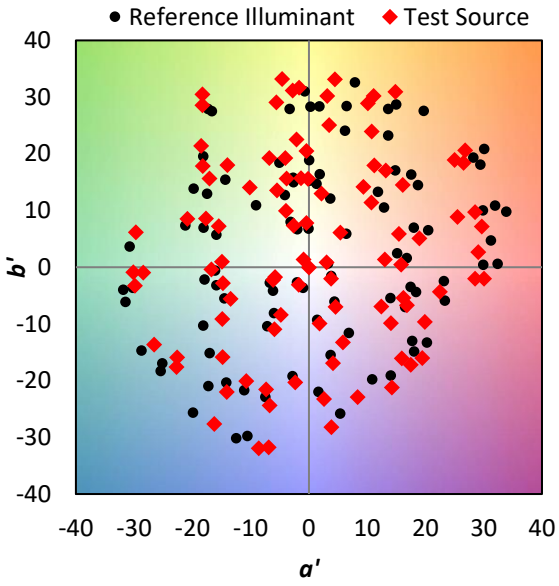
Summary

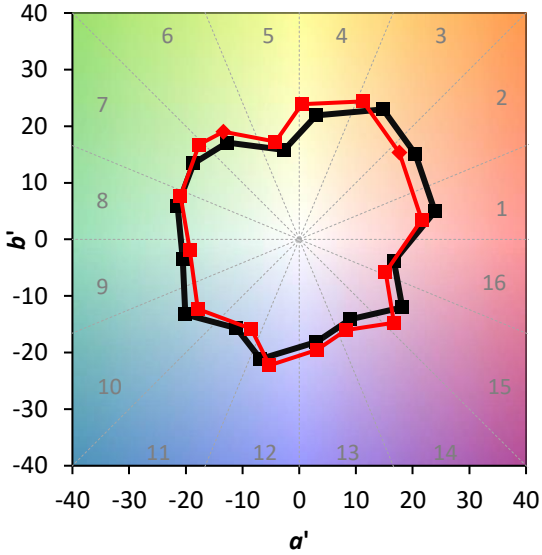
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

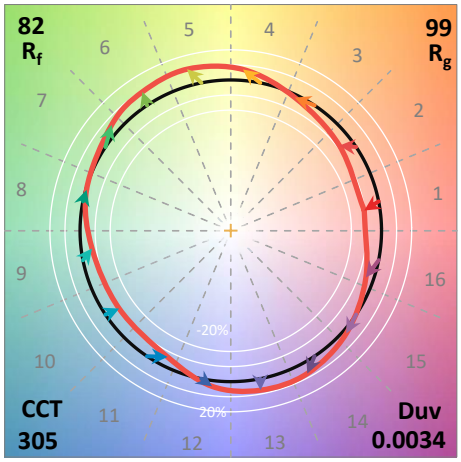
Spectral Power Distribution Comparison

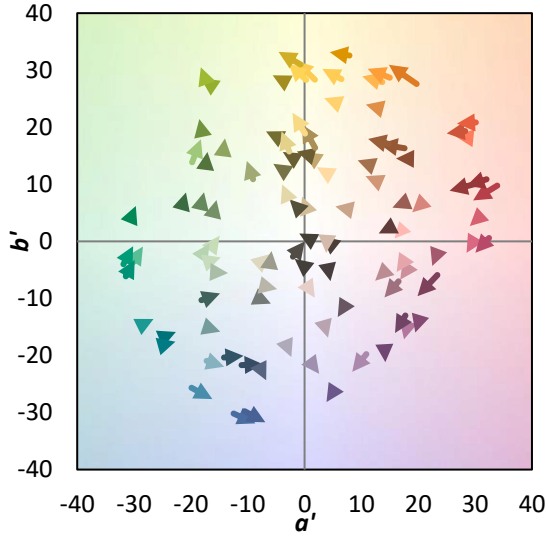


Color Vector Graphics









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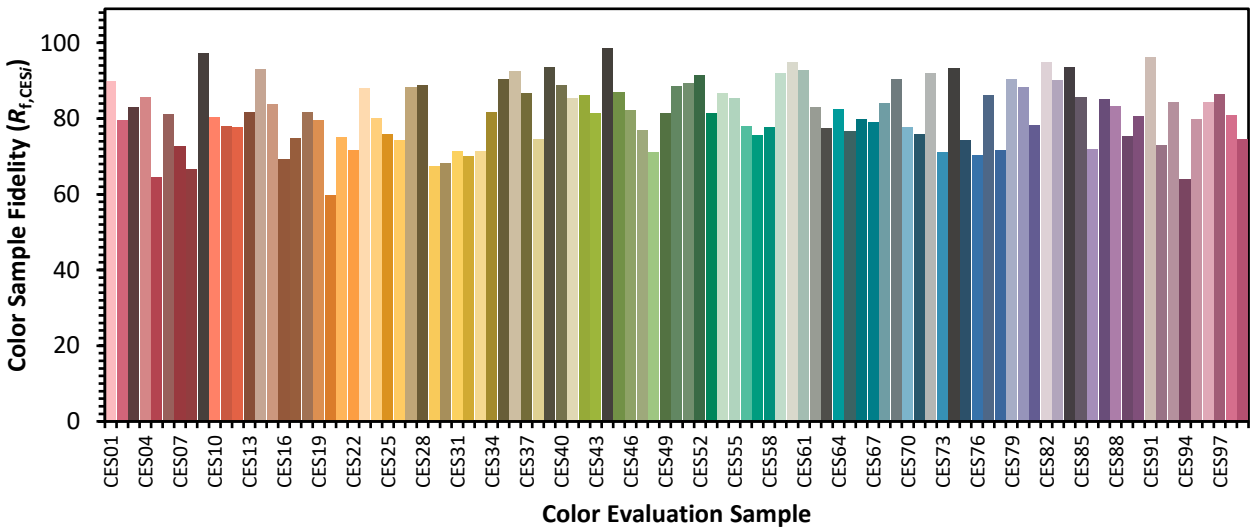
Individual Sample Fidelity Index ($R_{f,i}$)

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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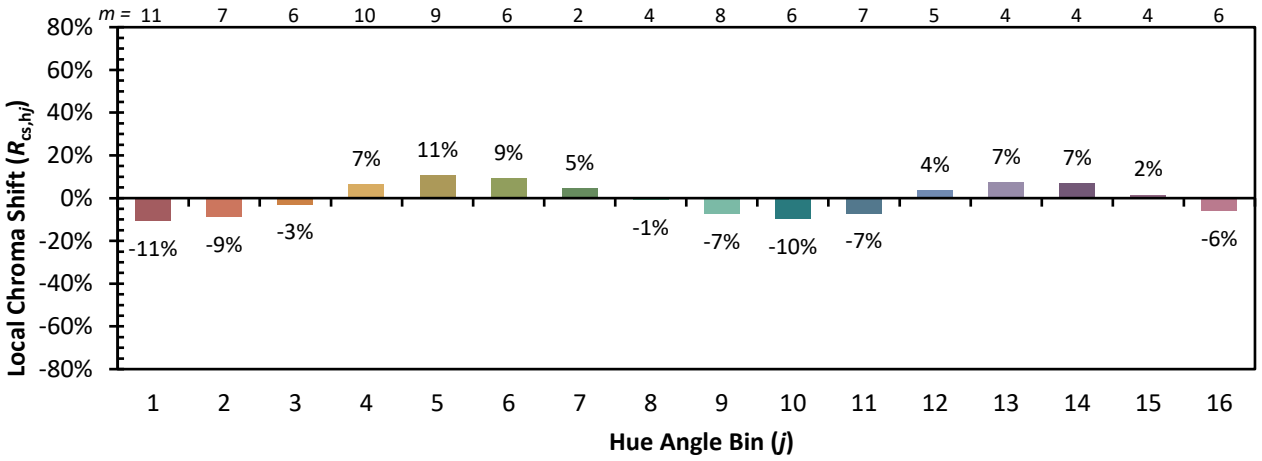
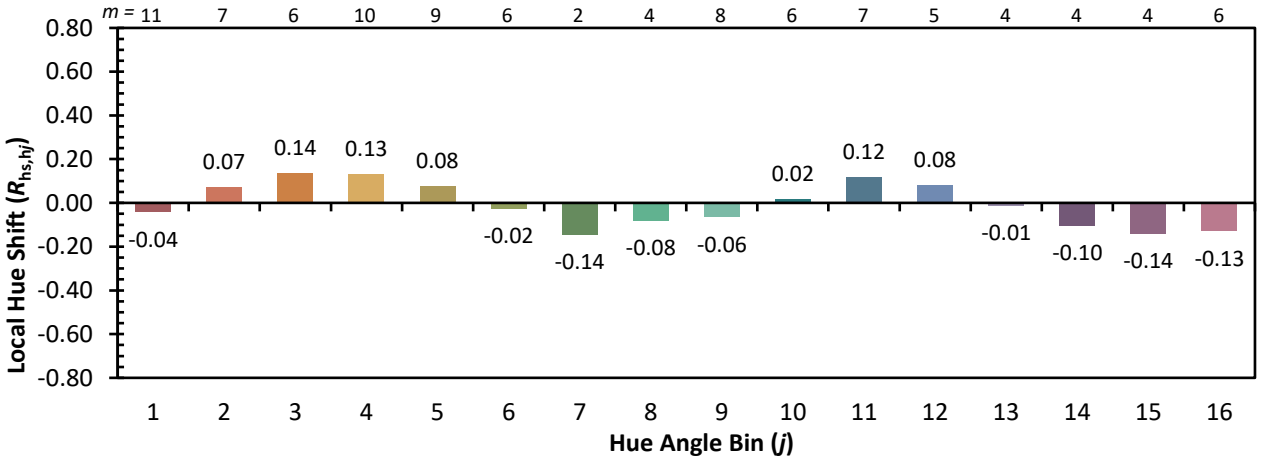
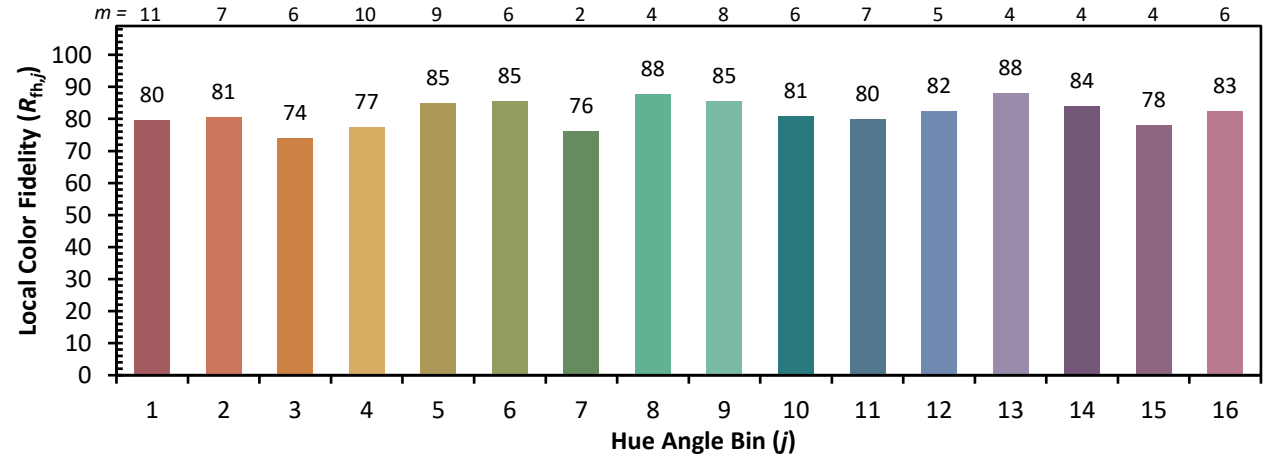
Color Rendition by Hue-Angle Bin







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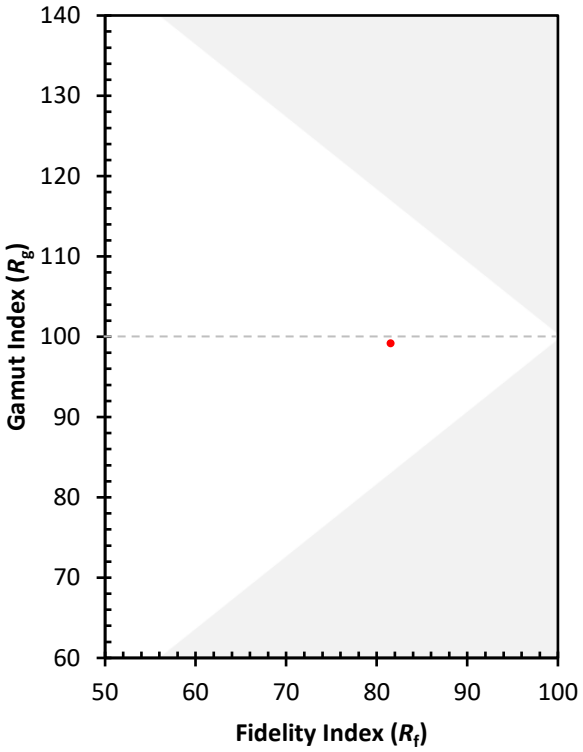
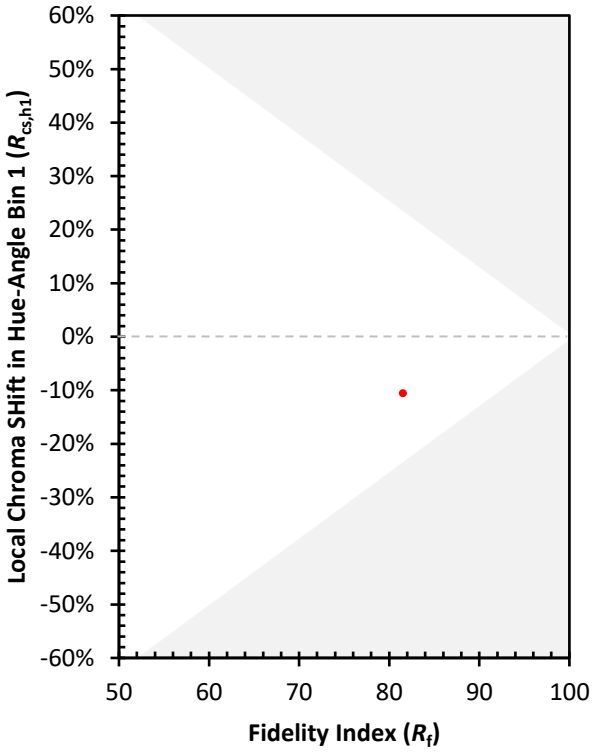
Measure Comparisons





(END OF REPORT)