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: P641471

Luminaire Tested: GWS-SA5F-830-U-T3R-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:	P641471
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-T3R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	29069.4 lumens
Efficiency:	N/A
Efficacy:	93.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	310.3
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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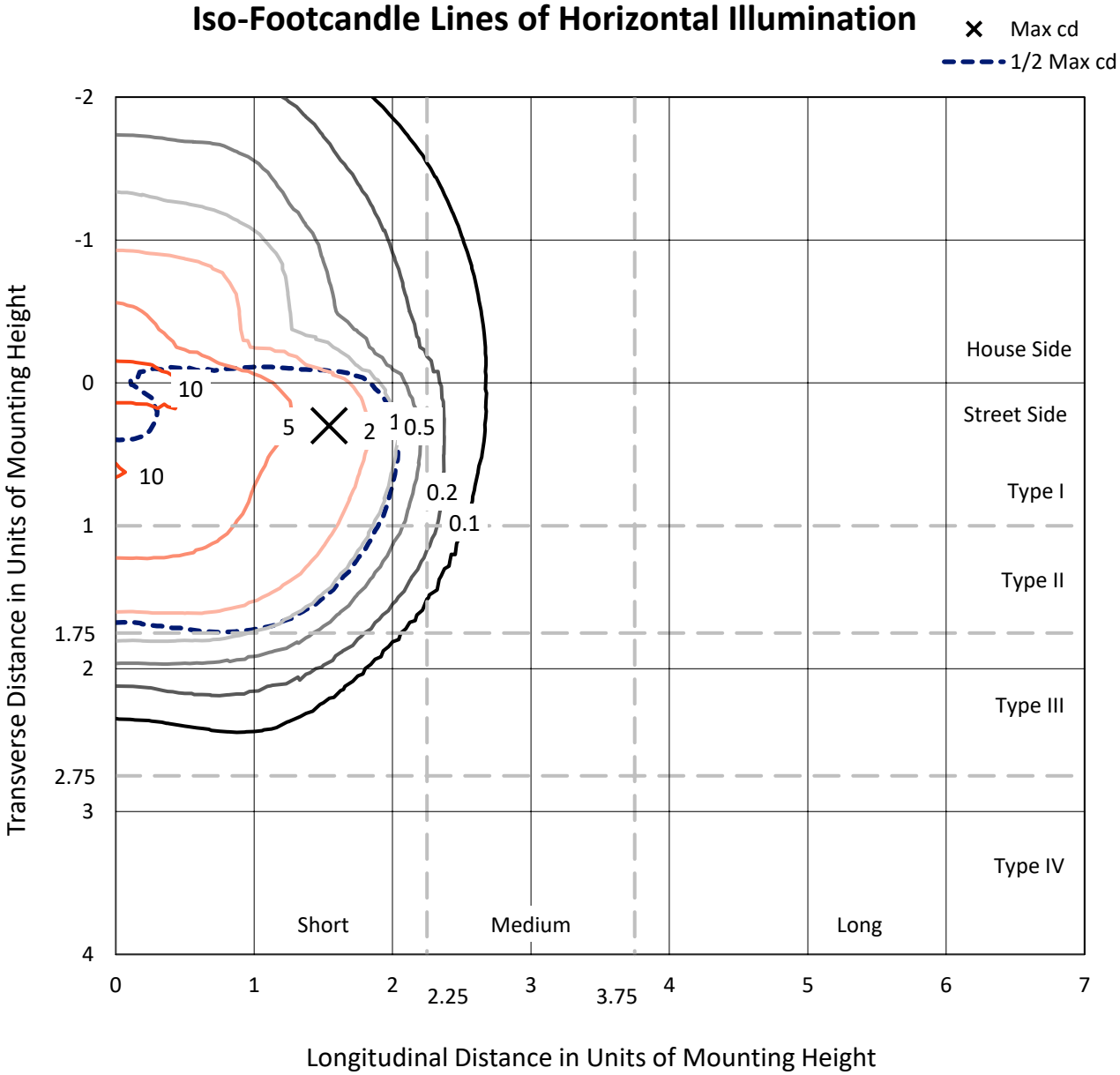
REPORT NUMBER: P641471
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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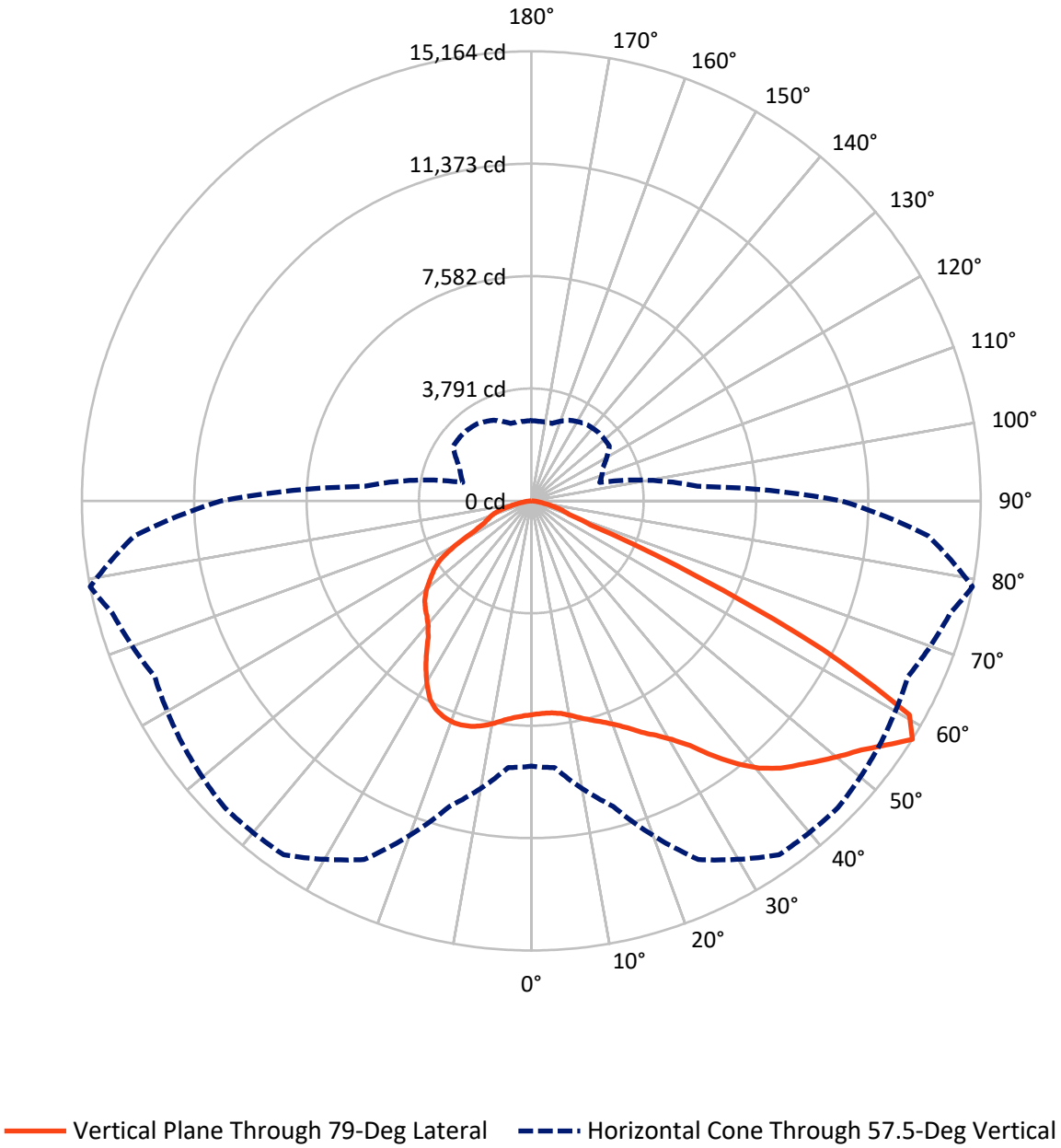
Luminous Intensity Polar Plot



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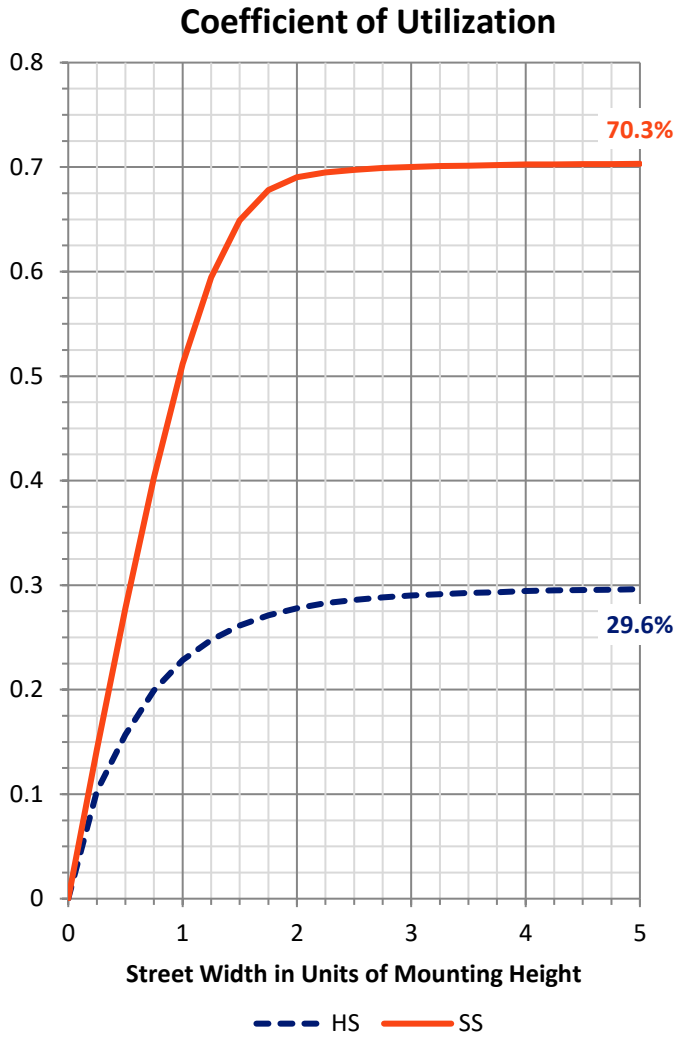
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8641.0	0.0	8641.0
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	20428.4	0.0	20428.4
	% Fixture	70.3	0.0	70.3
Total	Lumens	29069.4	0.0	29069.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.2	2.3
10°-20°	1854.0	6.4
20°-30°	3142.7	10.8
30°-40°	4810.3	16.5
40°-50°	6414.0	22.1
50°-60°	7407.7	25.5
60°-70°	3849.3	13.2
70°-80°	818.3	2.8
80°-90°	106.0	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°	29069.4	100.0
0°-180°	29069.4	100.0



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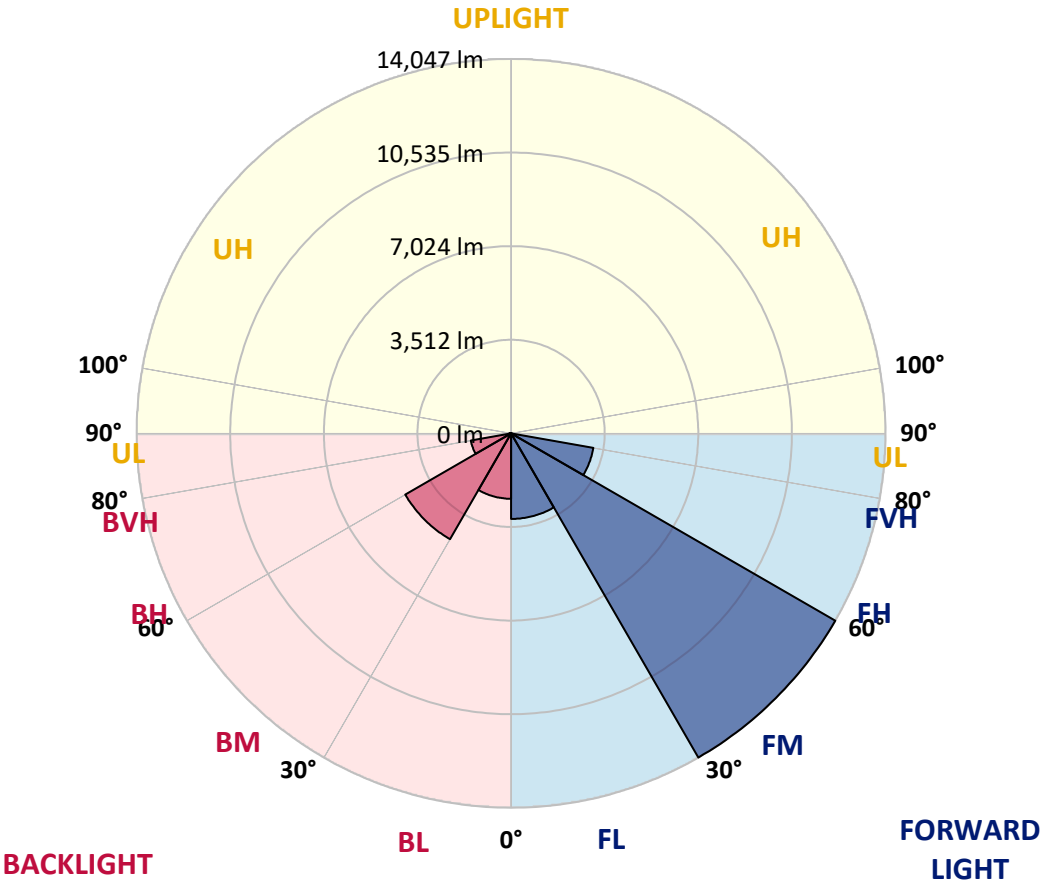
REPORT NUMBER: P641471
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3209.9	11.0			
FM	(30°-60°)	14047.2	48.3			
FH	(60°-80°)	3134.4	10.8			G2/5000
FVH	(80°-90°)	36.9	0.1			G1/100
BL	(0°-30°)	2453.9	8.4	B3/2500		
BM	(30°-60°)	4584.8	15.8	B3/5000		
BH	(60°-80°)	1533.2	5.3	B3/2500		G3/2500
BVH	(80°-90°)	69.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type II Short



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Scaled Data Report

REPORT NUMBER: P641471
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	*7204.1*	7204.1
2.5°	6876.1	6861.8	6866.6	6885.6	6956.9	7009.2	7063.8	7113.8	7161.3	*7175.5*	7187.4
5°	6631.3	6605.1	6612.2	6643.1	6726.3	6814.3	6911.7	7030.6	7144.6	*7182.7*	7232.6
7.5°	6457.8	6453.0	6464.9	6512.4	6600.4	6683.6	6809.5	6978.3	7175.5	*7239.7*	7327.7
10°	6227.2	6217.7	6265.2	6362.7	6507.7	6640.8	6790.5	6990.2	7265.9	*7360.9*	7496.4
12.5°	6044.2	6039.4	6089.4	6224.8	6410.2	6621.8	6828.5	7052.0	7387.1	*7517.8*	7684.2
15°	6151.1	6129.8	6132.1	6227.2	6393.6	6643.1	6923.6	7163.7	7508.3	*7674.7*	7888.6
17.5°	6462.5	6424.5	6396.0	6412.6	6507.7	6766.7	7068.6	7313.4	7648.5	*7843.4*	8104.9
20°	6892.7	6871.3	6792.9	6740.6	6762.0	6990.2	7296.8	7524.9	7831.5	*8050.2*	8330.7
22.5°	7470.3	7418.0	7311.0	7227.8	7163.7	7341.9	7624.8	7822.0	8085.9	*8314.0*	8606.4
25°	8185.7	8109.6	7940.9	7810.2	7672.3	7855.3	8107.3	8257.0	8435.2	*8646.8*	8924.9
27.5°	8915.4	8851.2	8663.4	8487.5	8316.4	8430.5	8730.0	8815.5	8796.5	*8951.0*	9188.7
30°	9692.6	9611.8	9433.5	9243.4	9022.3	9096.0	9364.6	9407.4	9205.3	*9333.7*	9495.3
32.5°	10512.6	10434.1	10279.6	10058.6	9809.0	9837.6	9911.2	9951.6	9759.1	*9832.8*	9956.4
35°	11346.8	11273.1	11116.3	10897.6	10714.6	10541.1	10355.7	10517.3	10405.6	*10548.2*	10538.7
37.5°	12109.8	12036.1	11938.6	11769.9	11456.2	11113.9	10686.1	10885.7	11059.2	*11239.9*	11209.0
40°	12625.5	12575.6	12599.4	12573.3	12169.2	11491.8	10847.7	11066.4	11539.3	*11848.3*	11831.7
42.5°	13070.0	13020.1	13157.9	13257.8	12782.4	11841.2	10926.1	11135.3	11846.0	*12328.4*	12304.7
45°	13267.3	13253.0	13481.2	13797.3	13343.3	12212.0	11128.2	11277.9	12078.9	*12696.8*	12606.5
47.5°	13032.0	13081.9	13531.1	14065.9	13809.2	12651.7	11541.7	11579.8	12383.1	*13096.1*	12841.8
50°	12563.7	12673.1	13279.2	14073.0	14149.1	13148.4	12114.5	12019.5	12791.9	*13521.6*	12965.4
52.5°	11881.6	11995.7	12984.4	14018.3	14344.0	13723.6	12877.5	12742.0	13307.7	*13947.0*	12986.8
55°	10315.3	10469.8	12309.4	13894.8	14534.1	14246.5	13737.9	13462.2	13973.2	*14531.7*	13198.3
57.5°	*8948.6*	*9029.4*	*10664.7*	*13345.7*	*14572.1*	*14631.6*	*14351.1*	*14023.1*	*14633.9*	*15164.0*	*13436.0*
60°	6567.1	6586.1	8057.3	11042.6	13405.1	14408.1	14301.2	13813.9	14320.2	*14657.7*	12347.5
62.5°	3710.2	3712.6	4886.7	7370.4	10013.4	11743.8	11810.3	11380.1	10954.7	*11054.5*	8594.5
65°	1392.8	1523.5	2231.8	3622.2	5773.2	6933.1	7208.8	7308.6	6600.4	*6160.7*	4608.6
67.5°	931.7	962.6	1302.5	1863.4	2569.3	2966.2	3318.0	3327.5	2433.8	*2170.0*	1815.9
70°	710.7	741.6	1024.4	1333.4	1302.5	1202.7	1300.1	1264.5	1307.2	*1342.9*	1380.9
72.5°	530.0	560.9	793.8	941.2	782.0	770.1	872.3	969.7	1060.1	*1098.1*	1157.5
75°	351.8	375.5	534.8	503.9	432.6	511.0	637.0	734.4	786.7	*831.9*	877.0
77.5°	223.4	240.1	285.2	230.5	240.1	299.5	370.8	458.7	508.6	*553.8*	577.6
80°	102.2	99.8	97.4	109.3	135.5	175.9	223.4	275.7	313.7	*332.8*	347.0
82.5°	40.4	45.2	49.9	59.4	73.7	95.1	126.0	161.6	192.5	*197.3*	209.2
85°	16.6	19.0	21.4	26.1	33.3	42.8	52.3	73.7	92.7	*99.8*	107.0
87.5°	0.0	0.0	0.0	0.0	2.4	4.8	7.1	11.9	21.4	*23.8*	26.1
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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Scaled Data Report

REPORT NUMBER: P641471
CATALOG NUMBER: GWS-SA5F-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1	7204.1
2.5°	7251.6	7220.7	7273.0	7308.6	7341.9	7306.3	7294.4	7263.5	7258.7	7258.7	7275.4
5°	7318.2	7296.8	7351.4	7372.8	7370.4	7292.0	7244.5	7182.7	7151.8	7151.8	7156.5
7.5°	7437.0	7425.1	7456.0	7422.7	7346.7	7187.4	7030.6	6899.8	6811.9	6766.7	6781.0
10°	7634.3	7620.0	7593.9	7470.3	7251.6	6921.2	6600.4	6362.7	6220.1	6139.3	6144.0
12.5°	7826.8	7803.0	7710.3	7437.0	6987.8	6462.5	6041.8	5775.6	5618.7	5523.7	5502.3
15°	8038.3	7976.5	7776.9	7265.9	6557.6	5901.6	5461.9	5174.3	5005.5	4948.5	4946.1
17.5°	8240.4	8131.0	7769.7	6961.6	6041.8	5314.5	4872.4	4694.2	4665.7	4691.8	4698.9
20°	8444.8	8268.9	7691.3	6540.9	5428.6	4729.8	4501.7	4575.3	4682.3	4753.6	4770.2
22.5°	8656.3	8383.0	7513.1	5999.0	4782.1	4335.3	4430.3	4592.0	4725.1	4820.1	4829.6
25°	8894.0	8489.9	7246.9	5335.9	4264.0	4225.9	4413.7	4584.8	4727.4	4836.8	4855.8
27.5°	9029.4	8492.3	6873.7	4653.8	4026.3	4183.2	4373.3	4534.9	4677.5	4796.4	4817.8
30°	9162.5	8428.1	6281.9	4100.0	3957.4	4133.2	4304.4	4454.1	4589.6	4706.1	4732.2
32.5°	9350.3	8368.7	5599.7	3781.5	3917.0	4085.7	4225.9	4359.0	4463.6	4515.9	4530.2
35°	9583.2	8292.6	4874.8	3643.6	3890.8	4047.7	4171.3	4242.6	4107.1	4078.6	4109.5
37.5°	9908.9	8221.3	4152.3	3584.2	3874.2	4033.4	4142.8	3959.7	3793.4	3726.8	3750.6
40°	10260.6	8180.9	3662.6	3536.7	3881.3	4047.7	4023.9	3753.0	3512.9	3372.7	3367.9
42.5°	10560.1	8119.1	3348.9	3505.8	3900.3	4102.4	3862.3	3569.9	3213.4	3130.2	3132.6
45°	10762.1	7962.3	3182.5	3472.5	3917.0	4114.2	3786.2	3318.0	3063.7	3011.4	3009.0
47.5°	10845.3	7677.1	3075.6	3420.2	3914.6	4016.8	3631.7	3213.4	2959.1	2944.9	2954.4
50°	10790.7	7208.8	2966.2	3318.0	3857.5	3914.6	3453.5	3120.7	2887.8	2966.2	3023.3
52.5°	10588.6	6602.7	2835.5	3177.8	3755.3	3798.1	3363.2	3063.7	2835.5	2940.1	2985.3
55°	10536.3	6110.7	2669.1	2994.8	3603.2	3591.3	3268.1	3035.2	2799.9	2759.5	2766.6
57.5°	*10467.4*	*5630.6*	*2393.4*	*2666.8*	*3218.2*	*3237.2*	*3177.8*	*3001.9*	*2707.2*	*2695.3*	*2707.2*
60°	9093.6	4316.3	2134.4	2300.7	2643.0	2745.2	3075.6	2940.1	2557.4	2507.5	2505.1
62.5°	5939.6	2614.5	1899.1	2006.0	2153.4	2272.2	2804.6	2761.8	2393.4	2362.5	2383.9
65°	3194.4	1863.4	1727.9	1792.1	1872.9	1963.2	2324.5	2460.0	2162.9	2053.6	2055.9
67.5°	1632.9	1585.3	1599.6	1644.7	1706.5	1751.7	1875.3	1994.1	1844.4	1751.7	1749.3
70°	1397.6	1435.6	1457.0	1483.1	1523.5	1516.4	1528.3	1549.7	1537.8	1492.6	1490.3
72.5°	1190.8	1250.2	1254.9	1259.7	1274.0	1240.7	1219.3	1183.6	1186.0	1193.2	1195.5
75°	905.6	962.6	976.9	969.7	984.0	941.2	912.7	877.0	834.3	827.1	831.9
77.5°	589.4	634.6	656.0	651.2	658.4	625.1	610.8	572.8	522.9	503.9	503.9
80°	356.5	382.7	399.3	404.1	411.2	387.4	363.6	330.4	309.0	287.6	287.6
82.5°	216.3	232.9	244.8	244.8	251.9	225.8	206.8	183.0	173.5	154.5	154.5
85°	109.3	121.2	126.0	123.6	118.8	97.4	90.3	78.4	73.7	64.2	64.2
87.5°	26.1	33.3	33.3	23.8	23.8	11.9	7.1	2.4	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

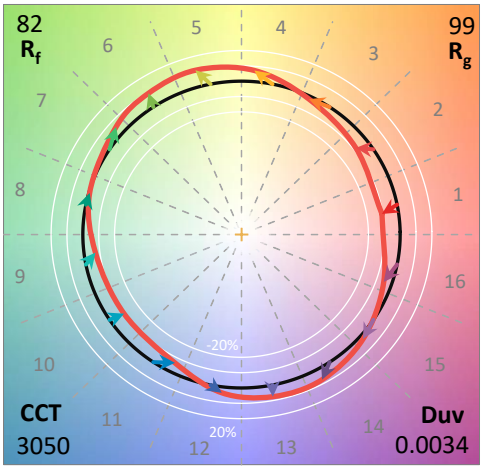
Test Information

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

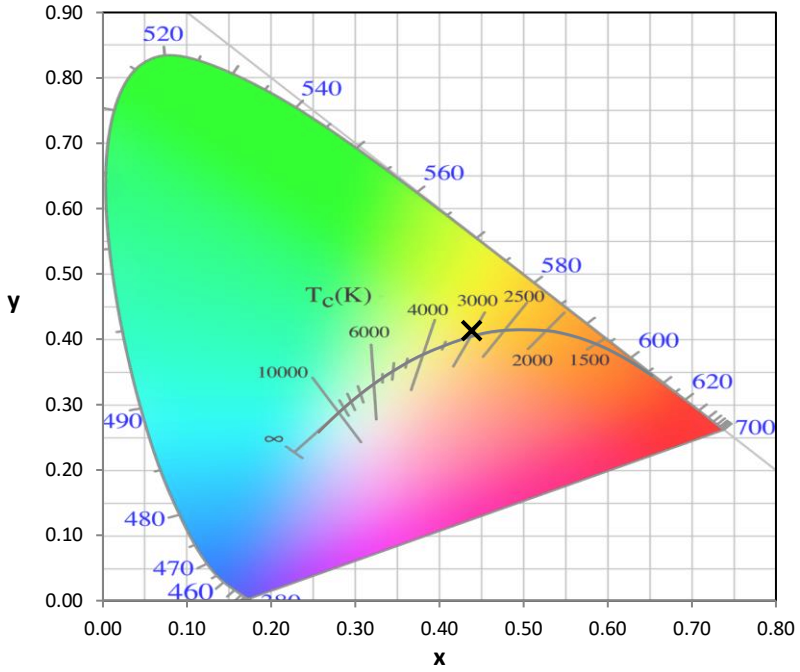
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

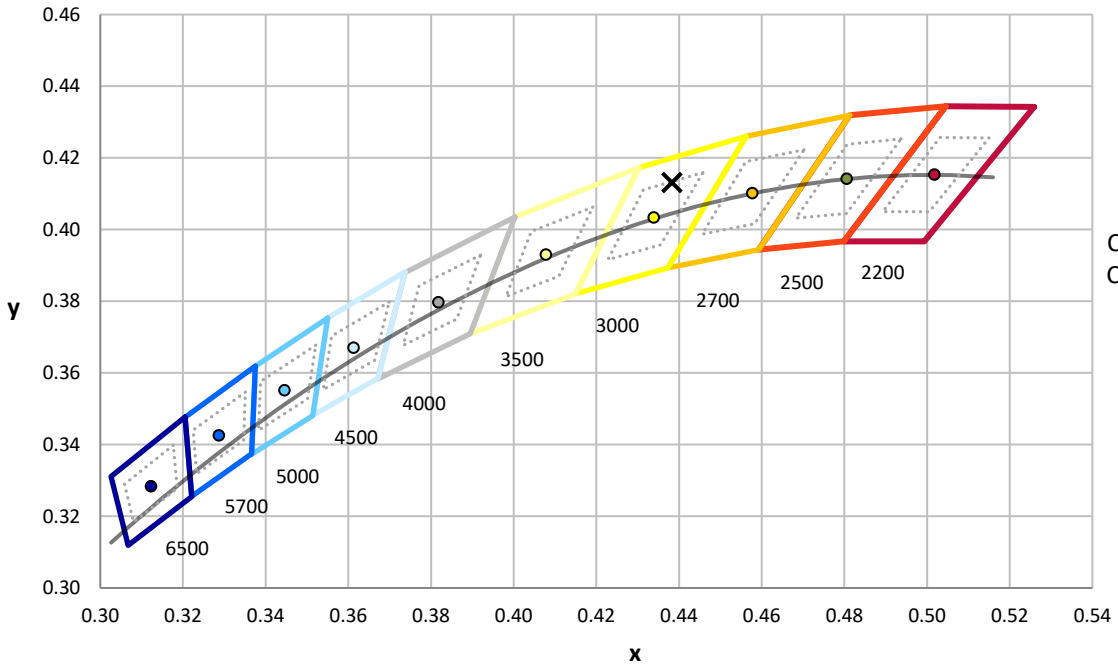
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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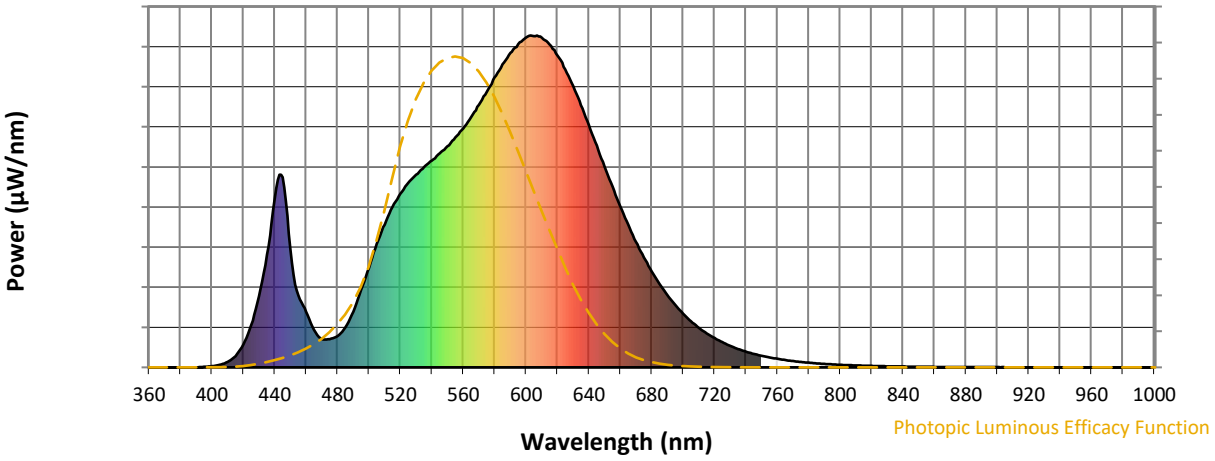
Photopic Flux vs. Wavelength



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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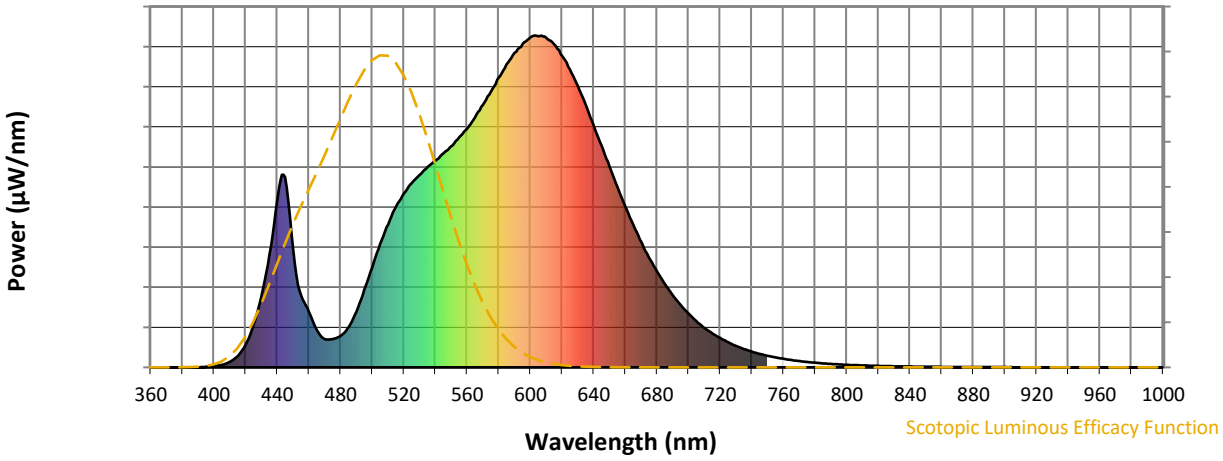
Scotopic Flux vs. Wavelength



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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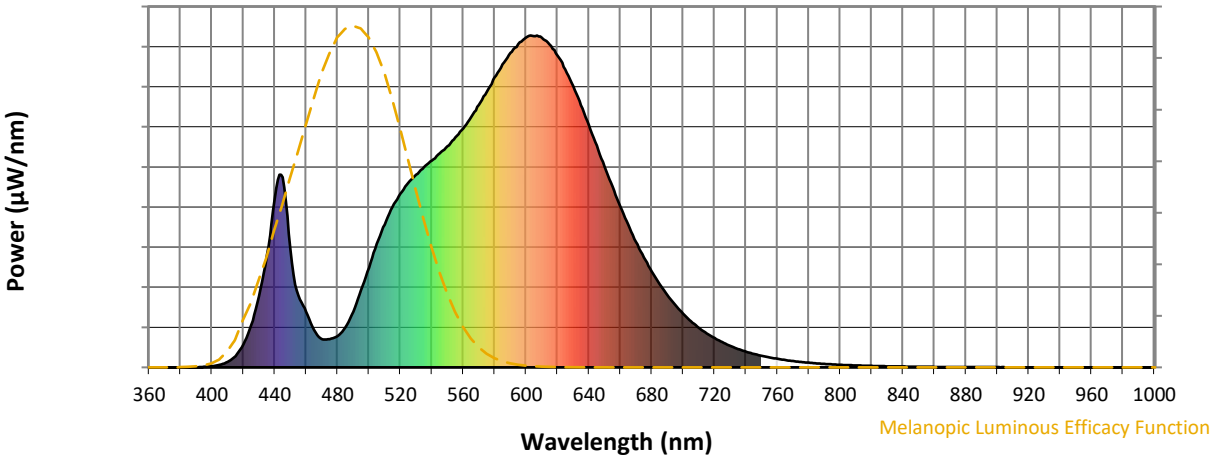
Melanopic Flux vs. Wavelength



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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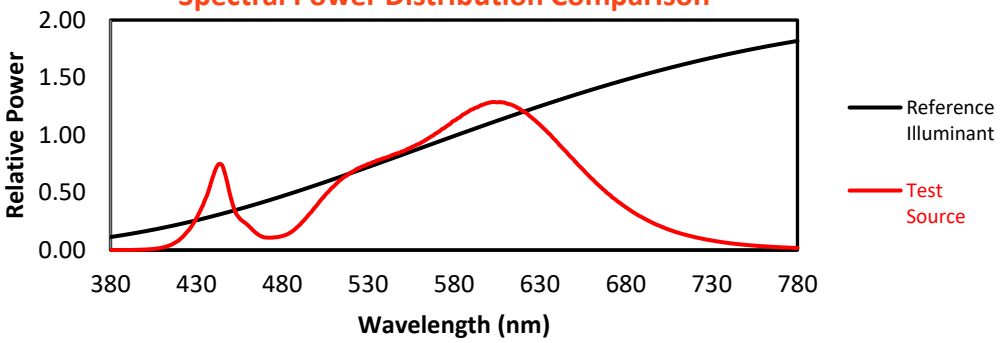
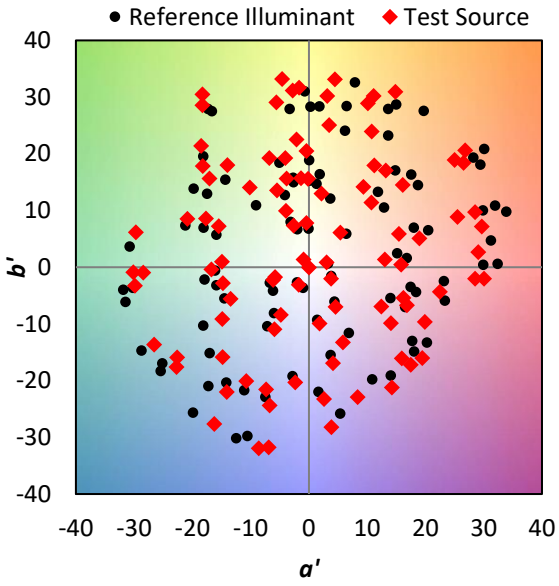
Summary

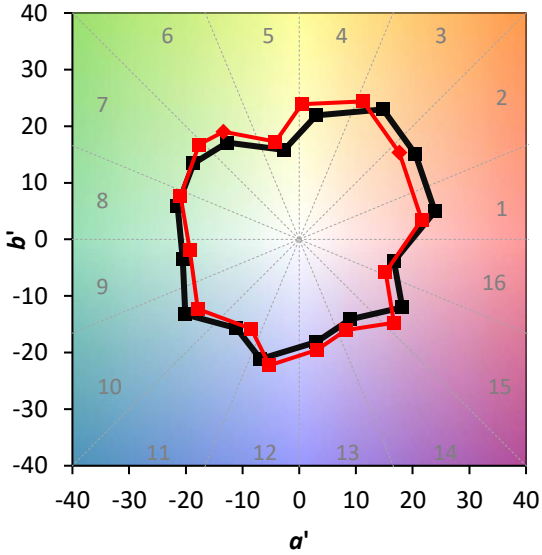
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

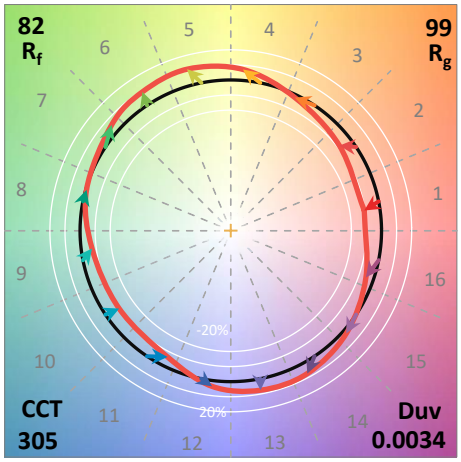
Spectral Power Distribution Comparison

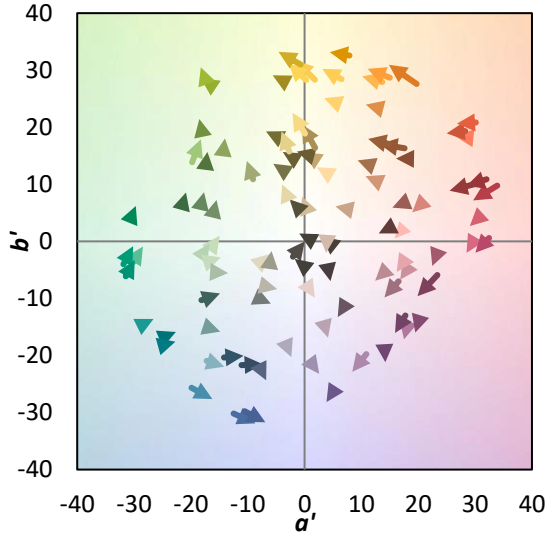


Color Vector Graphics









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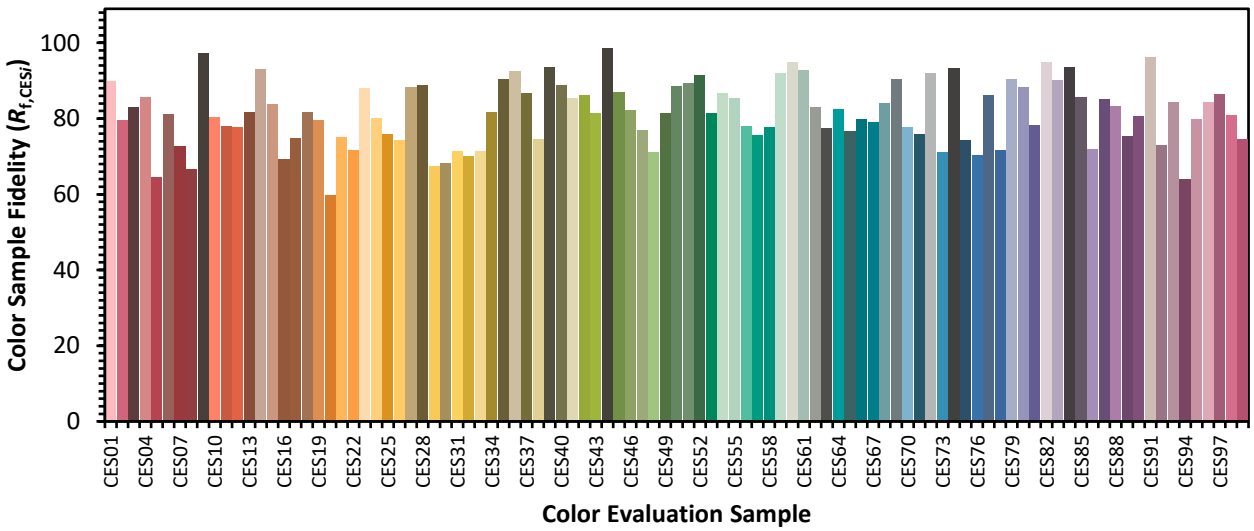
Individual Sample Fidelity Index ($R_{f,i}$)

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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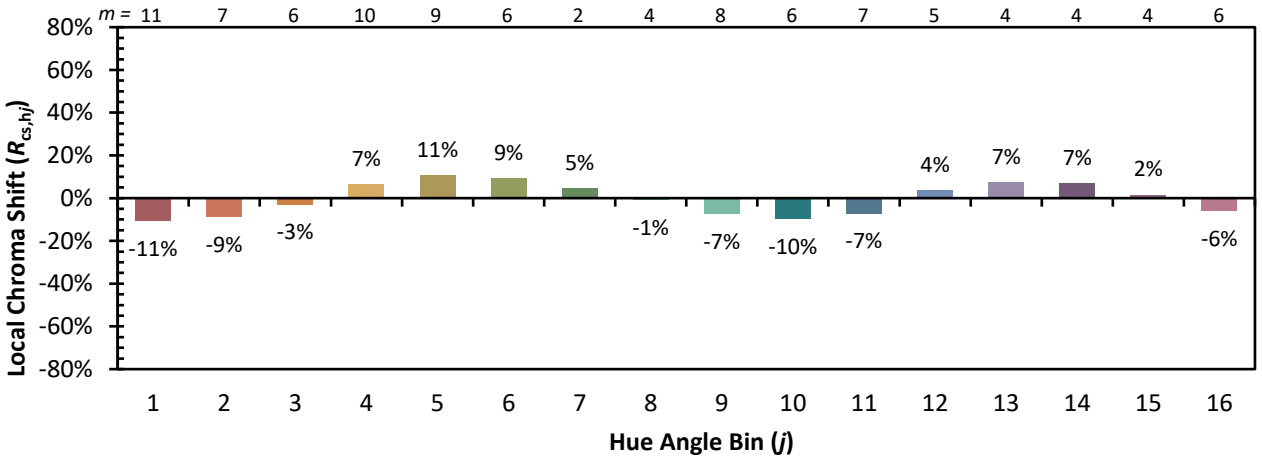
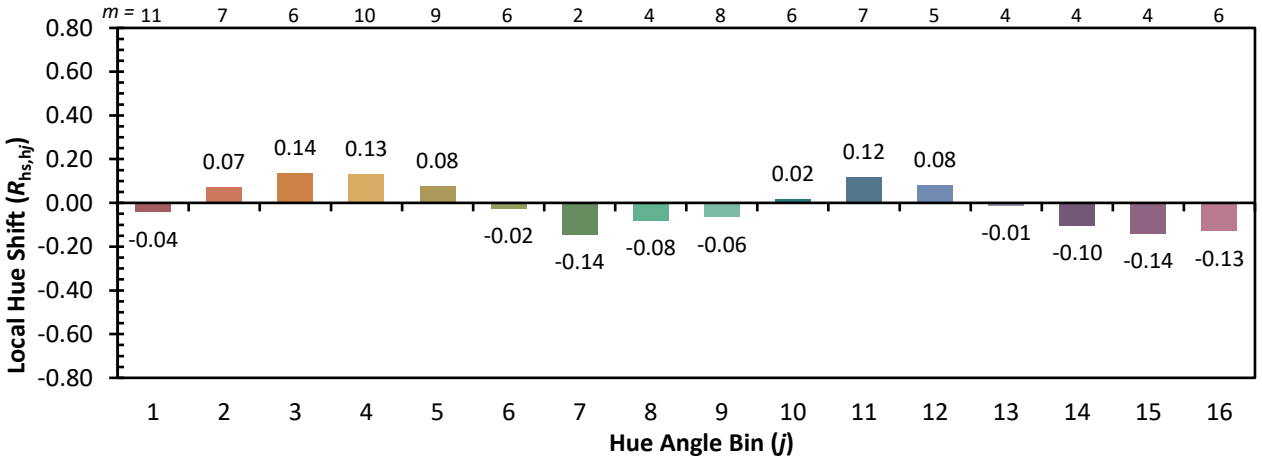
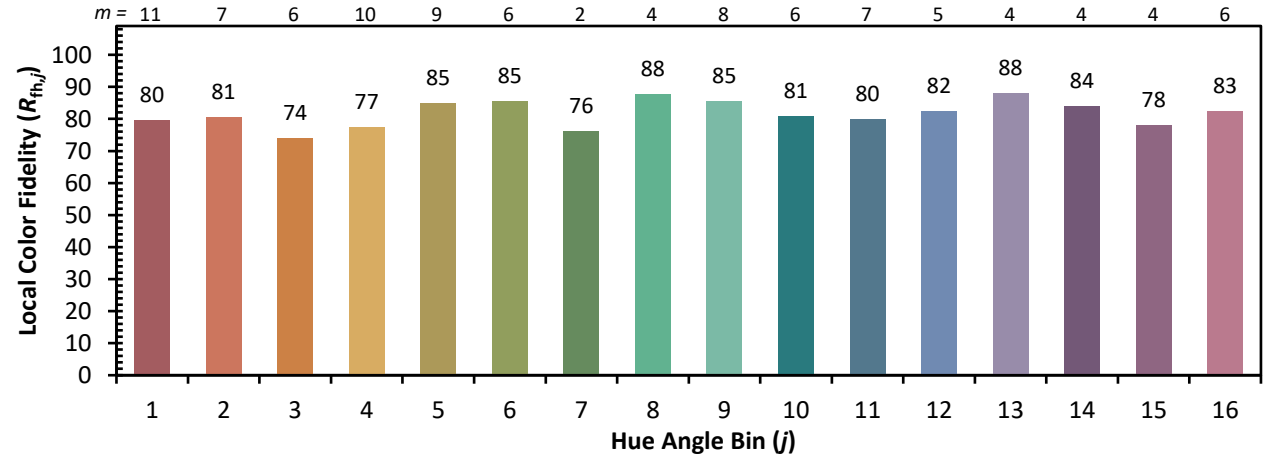
Color Rendition by Hue-Angle Bin







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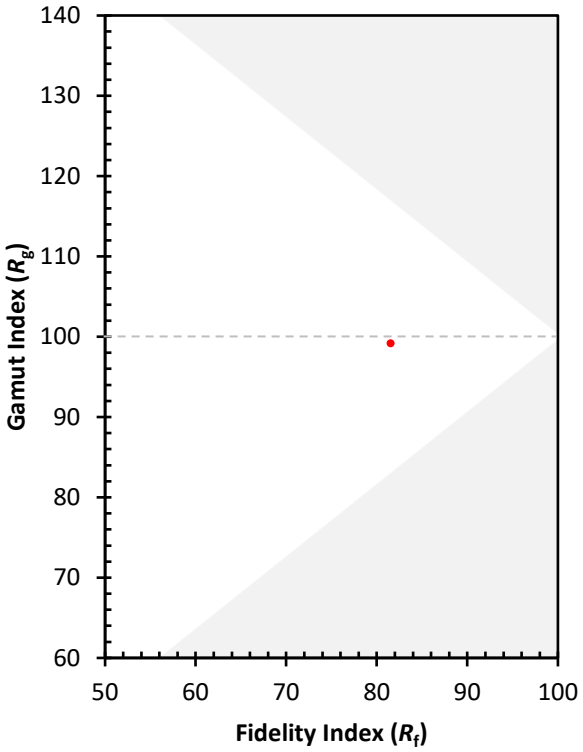
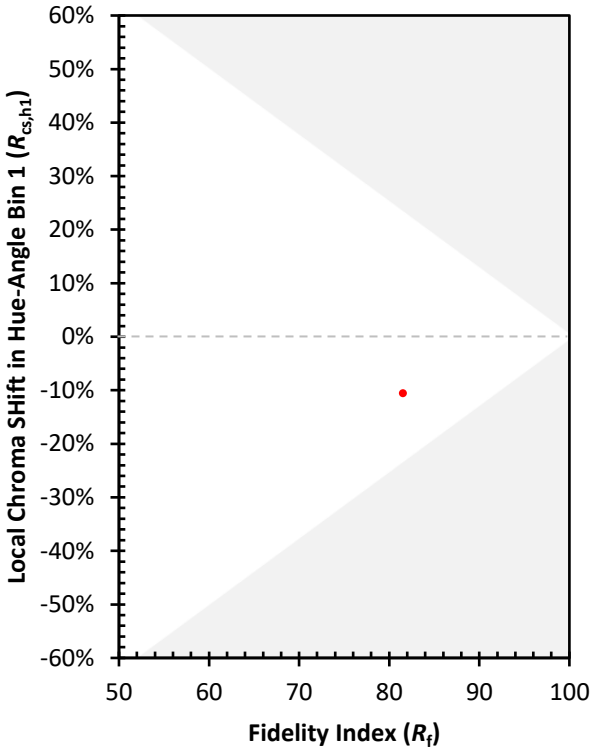
Measure Comparisons





(END OF REPORT)