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: P641467

Luminaire Tested: GWS-SA5F-830-U-T3-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:	P641467
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-25)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-T3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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:	28299.3 lumens
Efficiency:	N/A
Efficacy:	91.2 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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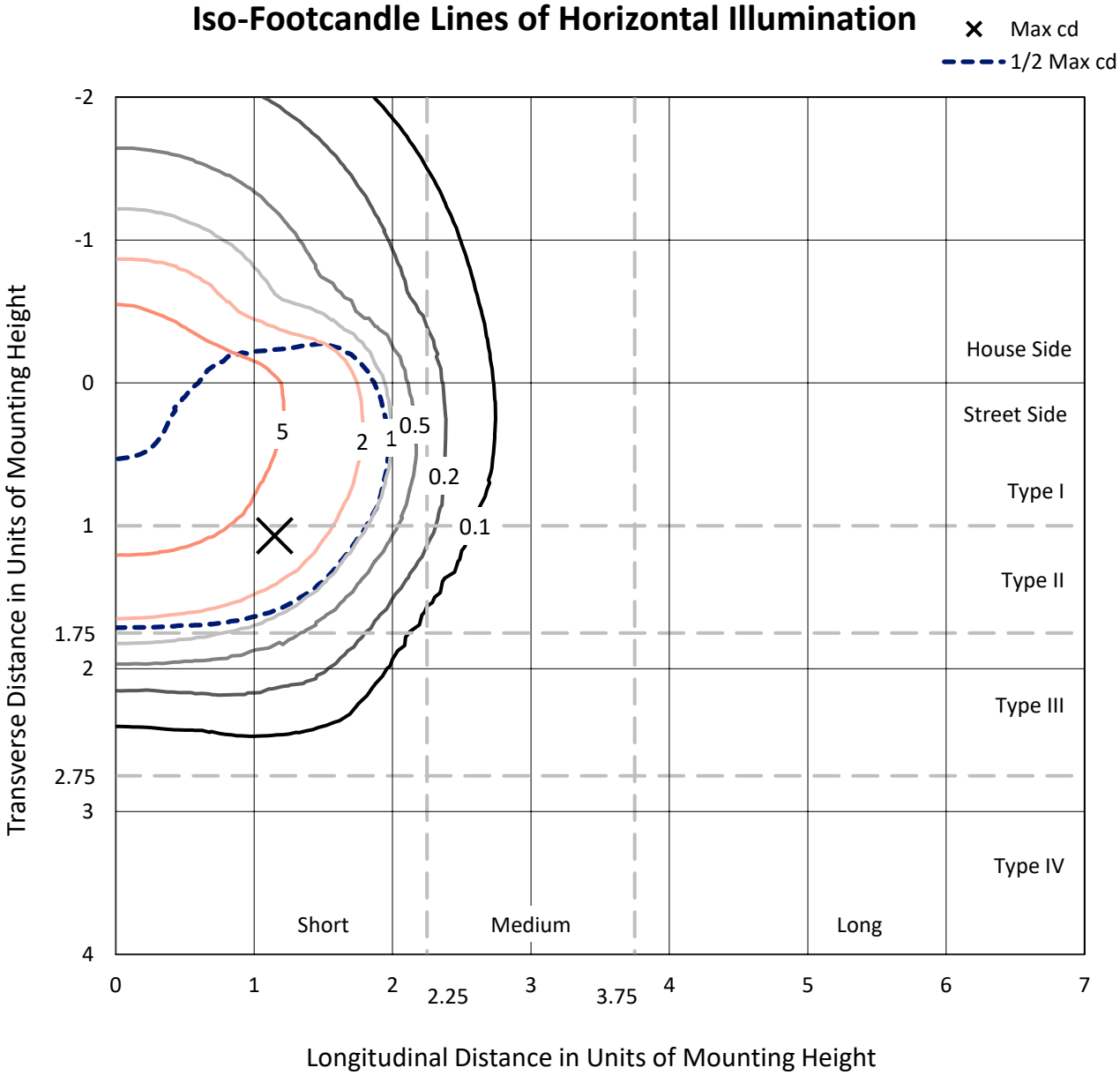
Scaled Data Report

REPORT NUMBER: P641467
CATALOG NUMBER: GWS-SA5F-830-U-T3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
Type II - Short - N/A

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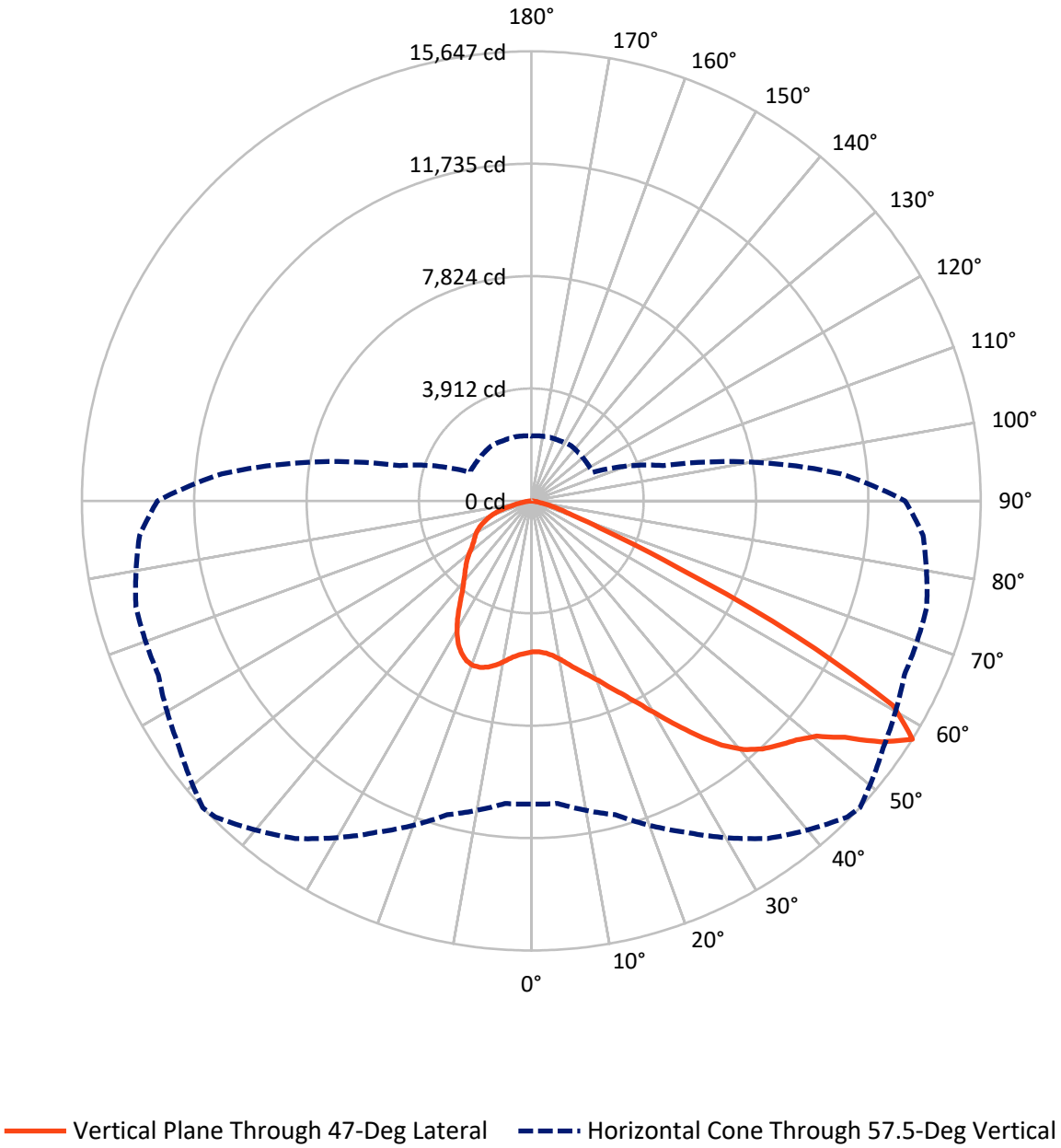
Luminous Intensity Polar Plot



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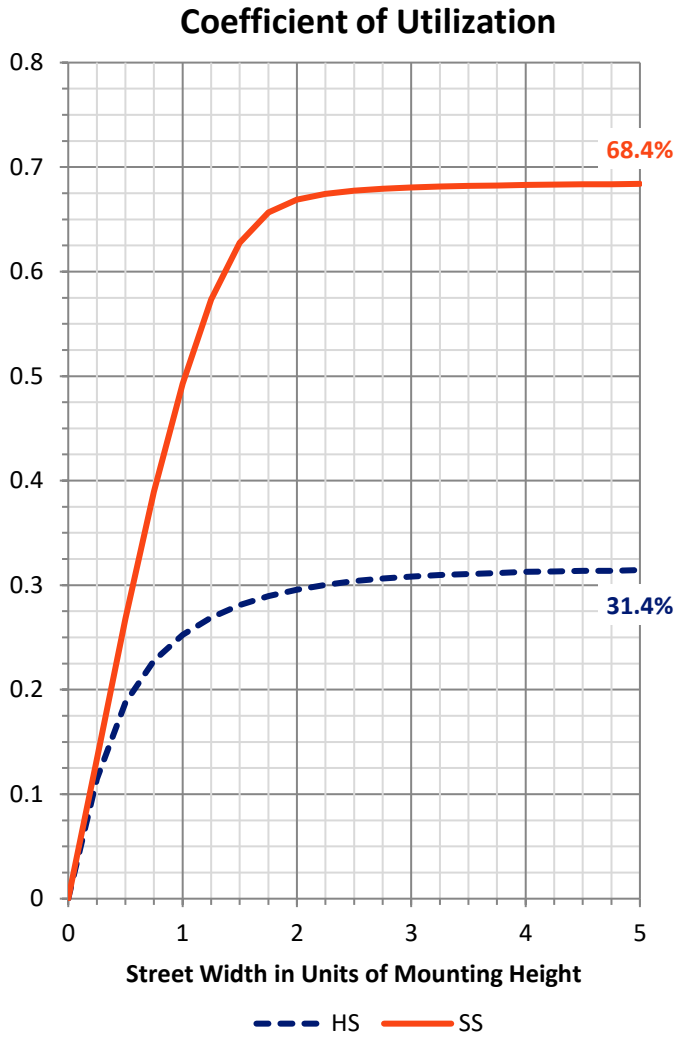
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8956.7	0.0	8956.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	19342.6	0.0	19342.6
	% Fixture	68.4	0.0	68.4
Total	Lumens	28299.3	0.0	28299.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	517.6	1.8
10°-20°	1702.5	6.0
20°-30°	3065.6	10.8
30°-40°	4630.2	16.4
40°-50°	6235.1	22.0
50°-60°	7492.3	26.5
60°-70°	3648.9	12.9
70°-80°	898.9	3.2
80°-90°	108.0	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°	28299.3	100.0
0°-180°	28299.3	100.0



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REPORT NUMBER: P641467
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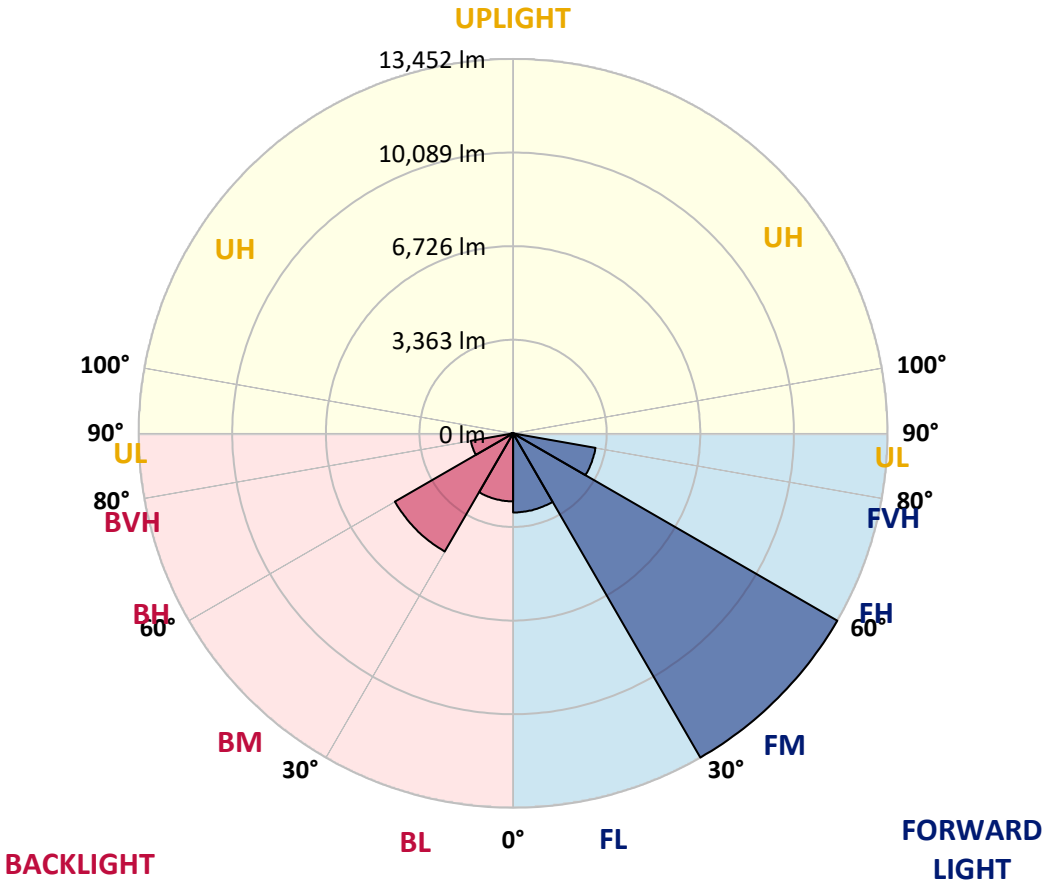
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2842.5	10.0			
FM	(30°-60°)	13452.2	47.5			
FH	(60°-80°)	3007.4	10.6			G2/5000
FVH	(80°-90°)	40.6	0.1			G1/100
BL	(0°-30°)	2443.2	8.6	B3/2500		
BM	(30°-60°)	4905.5	17.3	B3/5000		
BH	(60°-80°)	1540.5	5.4	B3/2500		G3/2500
BVH	(80°-90°)	67.4	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: P641467
CATALOG NUMBER: GWS-SA5F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	*5248.1*	5248.1	5248.1	5248.1	5248.1
2.5°	5238.6	5236.3	5236.3	5250.5	5250.5	5255.3	*5262.4*	5269.5	5271.9	5260.0	5233.9
5°	5295.7	5295.7	5295.7	5307.6	5307.6	5312.3	*5321.8*	5324.2	5321.8	5302.8	5276.7
7.5°	5386.0	5386.0	5388.4	5402.6	5414.5	5421.7	*5438.3*	5435.9	5428.8	5397.9	5364.6
10°	5533.4	5540.5	5547.6	5564.3	5588.0	5604.7	*5616.6*	5616.6	5607.1	5559.5	5516.7
12.5°	5742.5	5752.0	5759.2	5773.4	5792.5	5821.0	*5847.1*	5847.1	5835.2	5775.8	5711.6
15°	5987.4	5996.9	5994.5	5999.2	6034.9	6075.3	*6096.7*	6111.0	6115.7	6032.5	5932.7
17.5°	6267.8	6277.3	6267.8	6253.6	6258.3	6322.5	*6360.5*	6412.8	6443.7	6332.0	6172.8
20°	6522.2	6512.6	6512.6	6522.2	6536.4	6614.9	*6671.9*	6757.5	6795.5	6660.0	6412.8
22.5°	6790.7	6812.1	6802.6	6802.6	6859.7	6990.4	*7059.3*	7171.0	7211.4	7035.6	6702.8
25°	7137.8	7156.8	7152.0	7156.8	7223.3	7408.7	*7477.7*	7684.4	7724.9	7472.9	7023.7
27.5°	7518.1	7549.0	7563.2	7558.5	7665.4	7907.9	*7993.4*	8281.0	8354.7	7962.5	7365.9
30°	8012.5	8045.7	8057.6	8052.9	8178.8	8509.2	*8606.7*	8934.7	9039.3	8542.5	7800.9
32.5°	8585.3	8618.6	8654.2	8668.5	8830.1	9167.6	*9307.9*	9647.7	9797.5	9212.8	8326.2
35°	9153.4	9181.9	9250.8	9362.5	9583.6	9928.2	*10051.8*	10387.0	10531.9	9909.2	8960.8
37.5°	9780.9	9799.9	9859.3	10013.8	10332.3	10660.3	*10783.9*	11104.8	11121.4	10581.9	9678.6
40°	10467.8	10467.8	10455.9	10608.0	10940.8	11271.2	*11378.1*	11563.5	11466.1	11100.0	10377.4
42.5°	11050.1	11040.6	11050.1	11192.7	11439.9	11708.5	*11801.2*	11765.5	11641.9	11497.0	11009.7
45°	11575.4	11582.5	11668.1	11777.4	11905.8	12065.0	*12119.7*	11917.7	11806.0	11815.5	11516.0
47.5°	11931.9	11939.1	12138.7	12321.7	12400.2	12450.1	*12426.3*	12145.8	12088.8	12195.8	11905.8
50°	11979.5	12017.5	12362.1	12737.7	12932.6	12939.7	*12873.2*	12530.9	12514.3	12635.5	12114.9
52.5°	11989.0	12027.0	12457.2	13134.6	13640.9	13747.9	*13671.8*	13315.3	13141.8	13020.5	12371.6
55°	11953.3	11996.1	12471.5	13400.8	14370.6	14798.4	*14805.6*	14301.7	13747.9	13667.0	13103.7
57.5°	*10553.3*	*10570.0*	*11306.8*	*12723.4*	*14342.1*	*15554.3*	*15647.0*	*14962.4*	*14330.2*	*14254.1*	*13690.8*
60°	7351.7	7418.2	8219.2	10089.8	12048.4	14185.2	*14484.7*	14285.0	13862.0	13308.1	11746.5
62.5°	3681.8	3738.8	4542.2	6310.6	8309.6	9997.1	*10318.0*	10529.6	10629.4	10035.2	7998.2
65°	1585.4	1628.2	2127.3	3296.7	4703.8	5519.1	*5630.8*	5885.1	6507.9	5806.7	4309.3
67.5°	1060.1	1088.6	1342.9	2010.8	2771.4	2823.7	*2807.1*	2861.8	2997.2	2474.3	1946.7
70°	812.9	836.7	1007.8	1473.7	1991.8	1704.2	*1613.9*	1464.2	1590.1	1621.0	1578.2
72.5°	589.5	608.5	736.8	1005.4	1247.9	1088.6	*1074.3*	1150.4	1321.5	1369.1	1342.9
75°	380.3	389.8	468.2	551.4	644.1	698.8	*727.3*	865.2	1038.7	1074.3	1043.4
77.5°	254.3	261.5	306.6	354.2	366.0	368.4	*377.9*	439.7	558.6	625.1	618.0
80°	133.1	133.1	149.7	149.7	171.1	204.4	*213.9*	254.3	309.0	342.3	344.6
82.5°	52.3	54.7	64.2	71.3	85.6	104.6	*111.7*	133.1	161.6	185.4	206.8
85°	21.4	23.8	26.1	30.9	38.0	47.5	*49.9*	57.0	76.1	95.1	107.0
87.5°	0.0	0.0	2.4	2.4	4.8	7.1	*7.1*	9.5	11.9	21.4	28.5
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: P641467
CATALOG NUMBER: GWS-SA5F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1	5248.1
2.5°	5264.8	5233.9	5264.8	5274.3	5300.4	5309.9	5293.3	5290.9	5290.9	5267.2	5260.0
5°	5300.4	5271.9	5302.8	5317.1	5355.1	5378.9	5383.6	5402.6	5414.5	5405.0	5402.6
7.5°	5388.4	5352.7	5386.0	5407.4	5457.3	5495.3	5512.0	5554.8	5585.7	5580.9	5578.5
10°	5542.9	5495.3	5533.4	5569.0	5623.7	5668.9	5671.2	5695.0	5725.9	5716.4	5711.6
12.5°	5721.1	5676.0	5718.8	5754.4	5818.6	5837.6	5806.7	5797.2	5802.0	5790.1	5780.6
15°	5939.8	5875.6	5913.7	5954.1	5989.7	5968.3	5901.8	5875.6	5873.3	5856.6	5847.1
17.5°	6158.5	6077.7	6106.2	6127.6	6111.0	6044.4	5961.2	5916.0	5894.7	5861.4	5851.9
20°	6374.8	6272.6	6267.8	6251.2	6175.1	6053.9	5942.2	5851.9	5797.2	5752.0	5735.4
22.5°	6622.0	6479.4	6408.1	6332.0	6165.6	5968.3	5799.6	5671.2	5583.3	5526.2	5507.2
25°	6888.2	6686.2	6538.8	6386.7	6070.5	5785.3	5550.0	5374.1	5269.5	5207.7	5186.3
27.5°	7152.0	6873.9	6652.9	6393.8	5880.4	5521.5	5205.4	4967.7	4863.1	4813.2	4796.5
30°	7508.6	7123.5	6788.4	6301.1	5630.8	5155.4	4760.9	4520.8	4451.9	4416.2	4402.0
32.5°	7919.8	7439.6	6969.0	6106.2	5312.3	4727.6	4311.7	4145.3	4097.7	4028.8	4026.4
35°	8461.7	7891.2	7140.1	5818.6	4910.6	4268.9	3967.0	3848.2	3762.6	3653.3	3643.8
37.5°	9093.9	8454.6	7232.8	5452.6	4442.4	3890.9	3710.3	3577.2	3439.3	3294.4	3275.3
40°	9747.6	9112.9	7240.0	5020.0	3983.6	3641.4	3489.3	3315.7	3144.6	2983.0	2961.6
42.5°	10434.5	9726.2	7114.0	4520.8	3608.1	3425.1	3270.6	3051.9	2859.4	2750.0	2738.2
45°	11047.7	10220.6	6828.8	3995.5	3330.0	3244.4	3047.2	2811.8	2709.6	2631.2	2614.6
47.5°	11530.2	10548.6	6443.7	3524.9	3104.2	3059.0	2802.3	2681.1	2602.7	2531.4	2514.7
50°	11767.9	10622.3	5942.2	3142.2	2895.0	2840.4	2664.5	2571.8	2519.5	2462.4	2448.2
52.5°	12062.7	10705.5	5509.6	2821.4	2690.6	2616.9	2550.4	2476.7	2438.7	2403.0	2391.1
55°	12740.1	11019.2	5281.4	2564.7	2495.7	2462.4	2452.9	2391.1	2379.3	2355.5	2334.1
57.5°	*13015.8*	*10817.2*	*4741.9*	*2355.5*	*2341.2*	*2346.0*	*2369.7*	*2312.7*	*2300.8*	*2272.3*	*2258.0*
60°	10467.8	8176.5	3211.2	2174.8	2212.9	2243.8	2267.5	2210.5	2193.9	2189.1	2170.1
62.5°	6707.5	5029.5	2241.4	2006.1	2063.1	2101.2	2115.4	2060.8	2048.9	2086.9	2089.3
65°	3491.6	2740.5	1818.3	1825.4	1873.0	1930.0	1958.5	1939.5	1934.8	1975.2	1977.6
67.5°	1782.7	1675.7	1585.4	1611.5	1649.6	1723.2	1789.8	1873.0	1901.5	1906.3	1908.6
70°	1518.8	1471.3	1426.1	1442.8	1483.2	1523.6	1587.8	1628.2	1580.6	1568.7	1564.0
72.5°	1293.0	1257.4	1236.0	1255.0	1276.4	1269.3	1250.2	1269.3	1276.4	1278.8	1281.1
75°	1005.4	979.3	962.6	965.0	965.0	938.9	903.2	881.8	858.1	839.0	839.0
77.5°	615.6	620.4	637.0	634.6	632.2	622.7	587.1	568.1	511.0	494.4	494.4
80°	351.8	358.9	375.5	380.3	380.3	368.4	332.8	311.4	285.2	273.3	271.0
82.5°	213.9	223.4	232.9	237.7	240.1	225.8	194.9	178.3	164.0	152.1	152.1
85°	111.7	116.5	126.0	128.4	121.2	107.0	90.3	83.2	68.9	66.6	66.6
87.5°	30.9	33.3	38.0	30.9	28.5	21.4	11.9	9.5	4.8	2.4	2.4
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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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

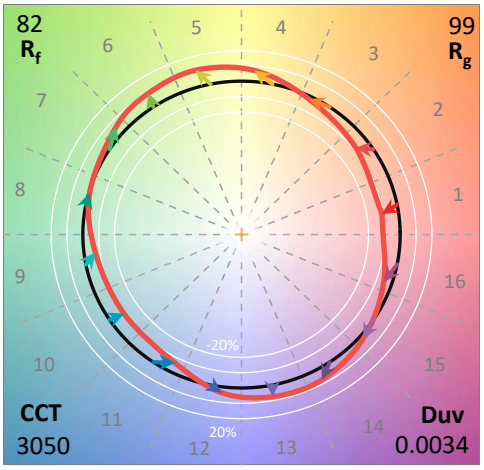
Test Information

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

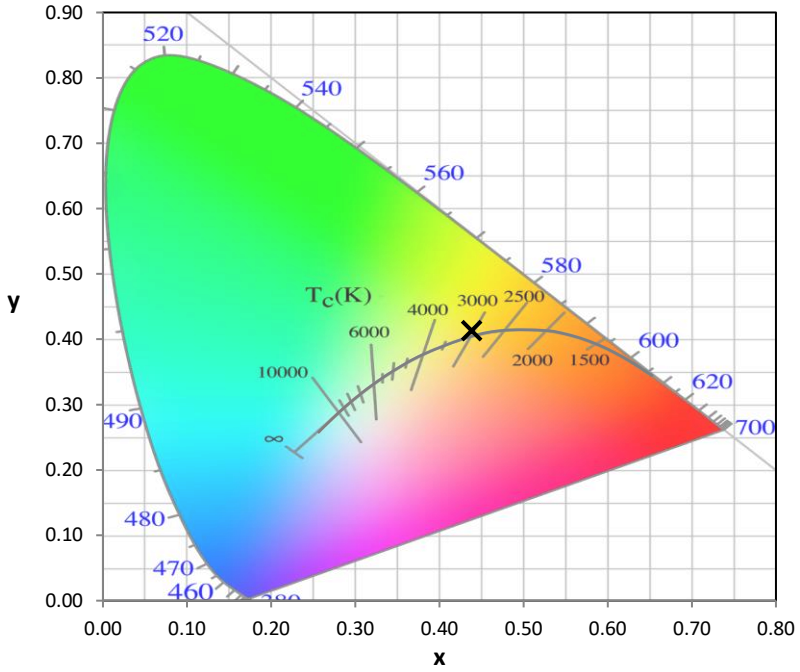
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

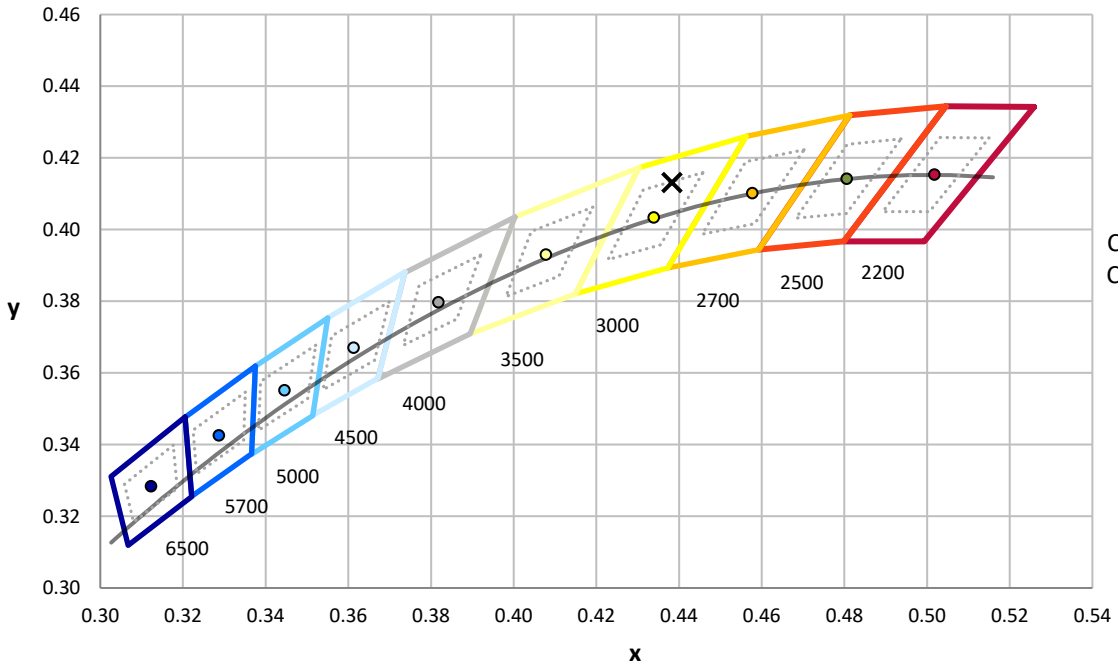
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

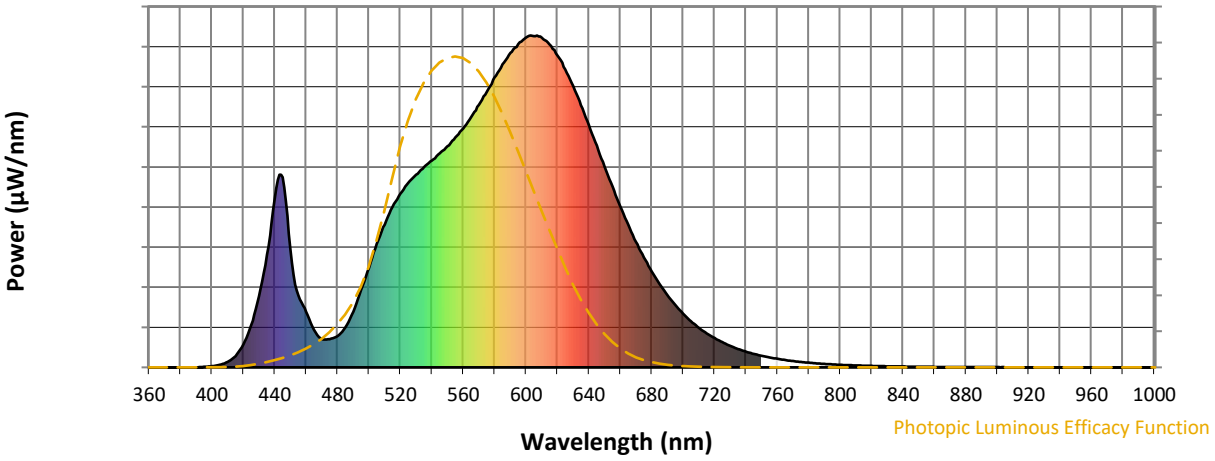


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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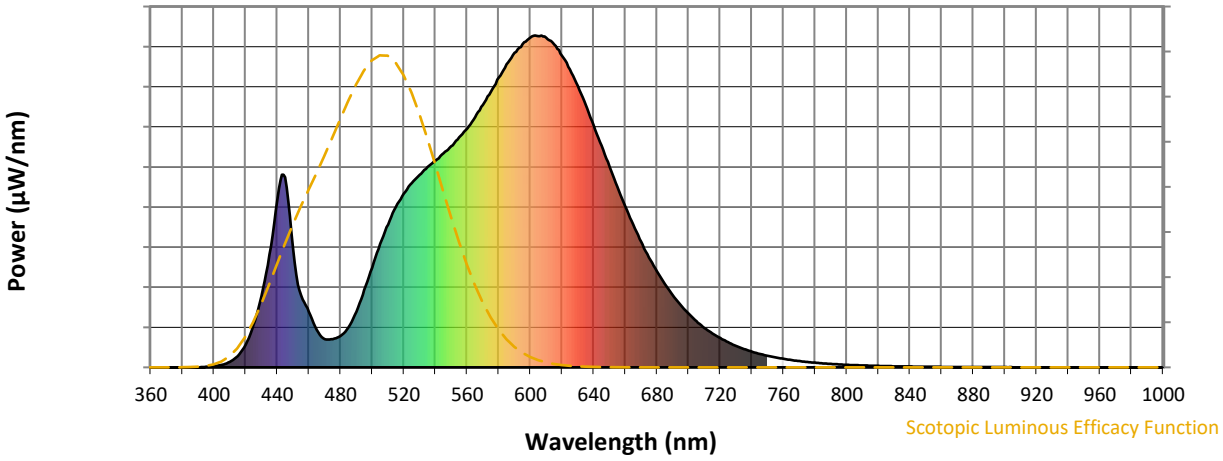
Scotopic Flux vs. Wavelength



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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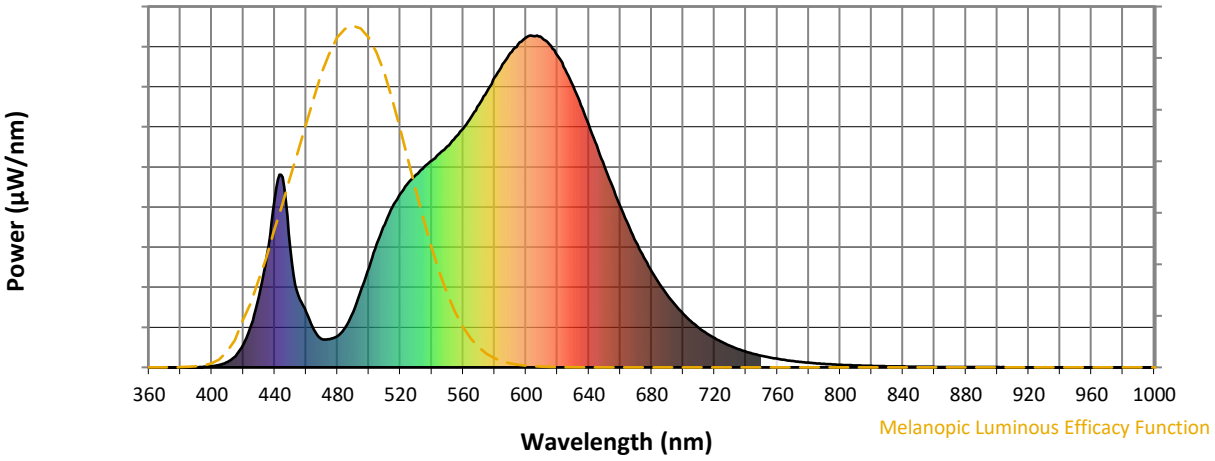
Melanopic Flux vs. Wavelength



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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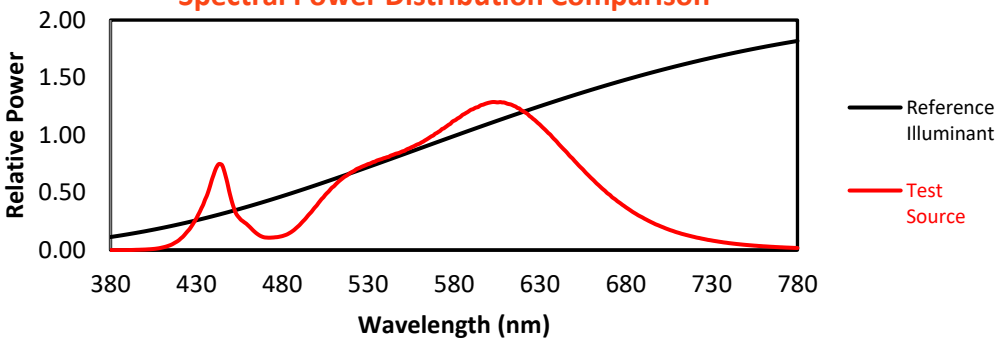
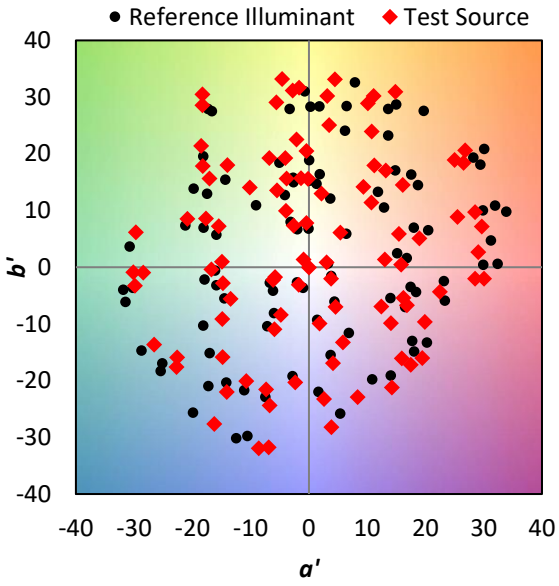
Summary

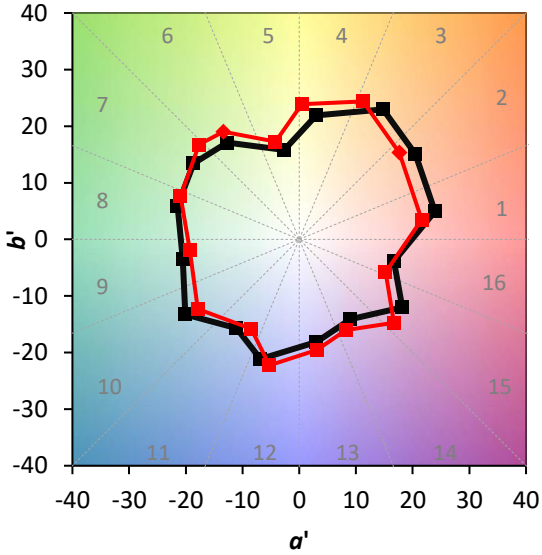
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

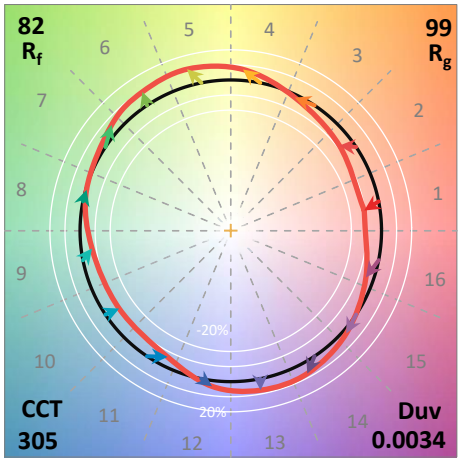
Spectral Power Distribution Comparison

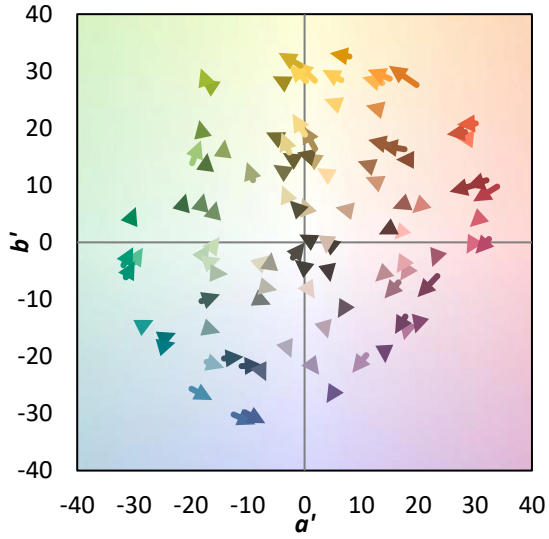


Color Vector Graphics









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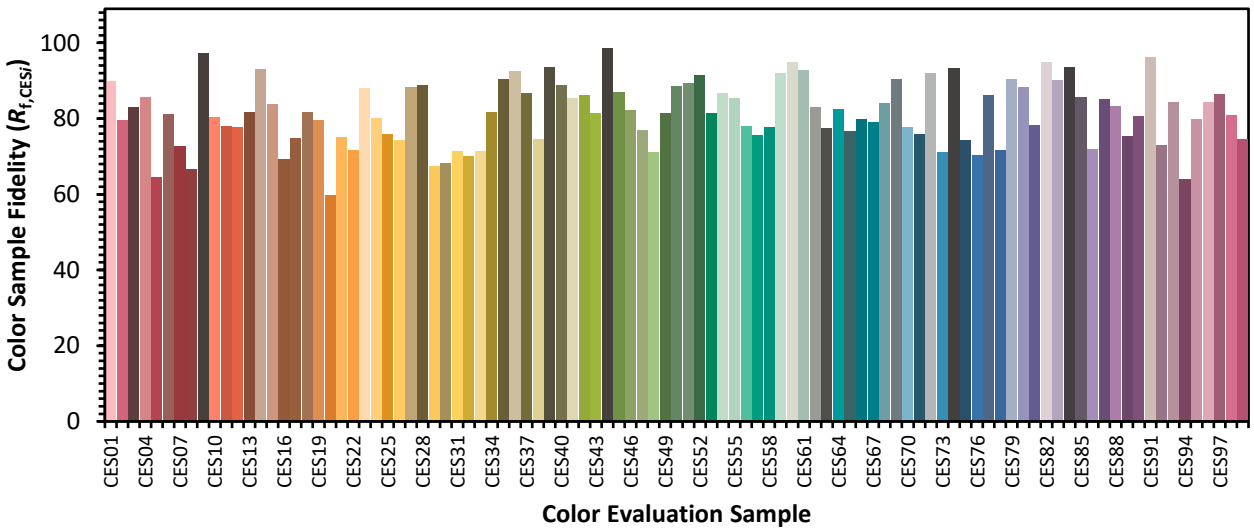
Individual Sample Fidelity Index ($R_{f,i}$)

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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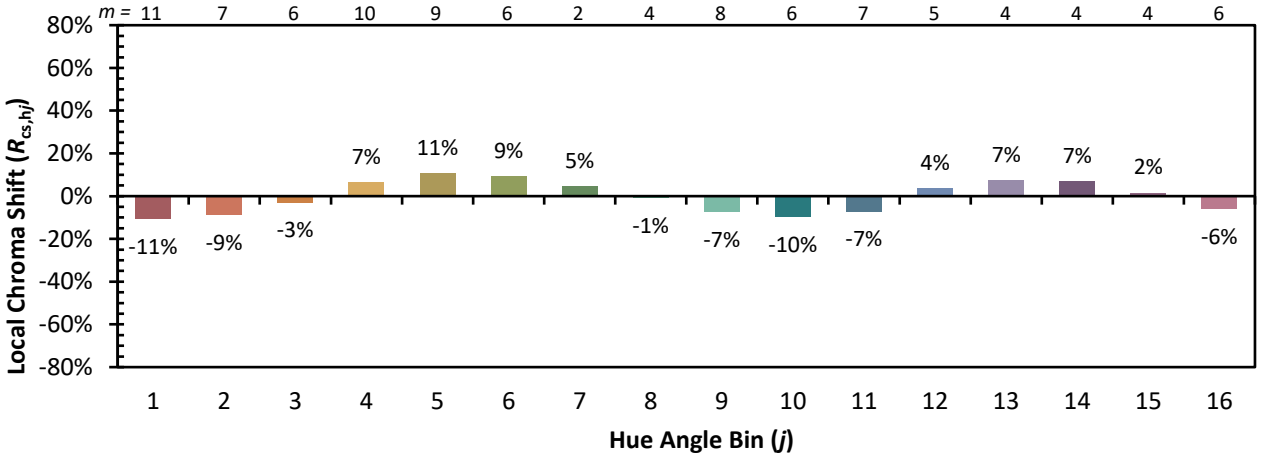
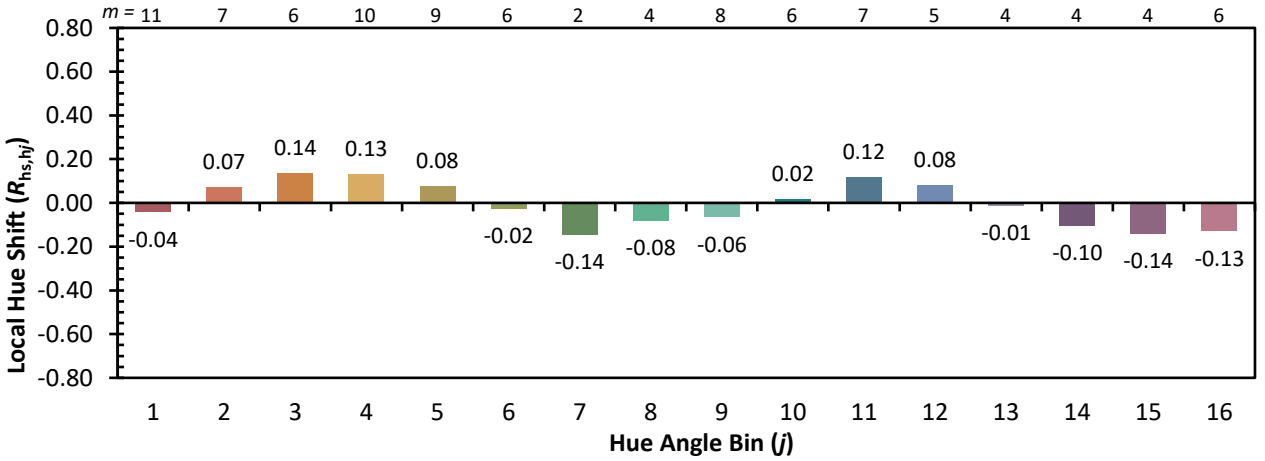
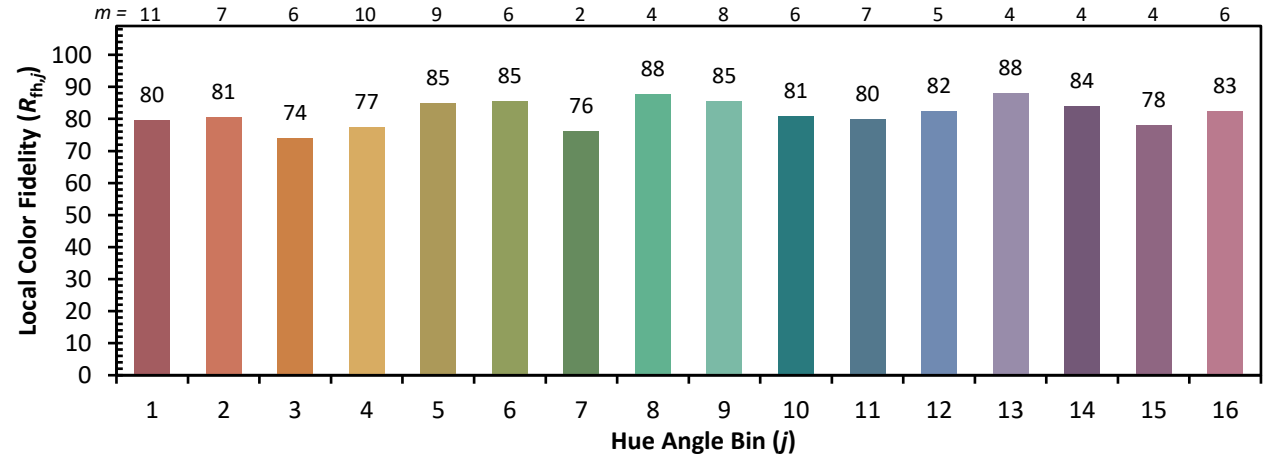
Color Rendition by Hue-Angle Bin







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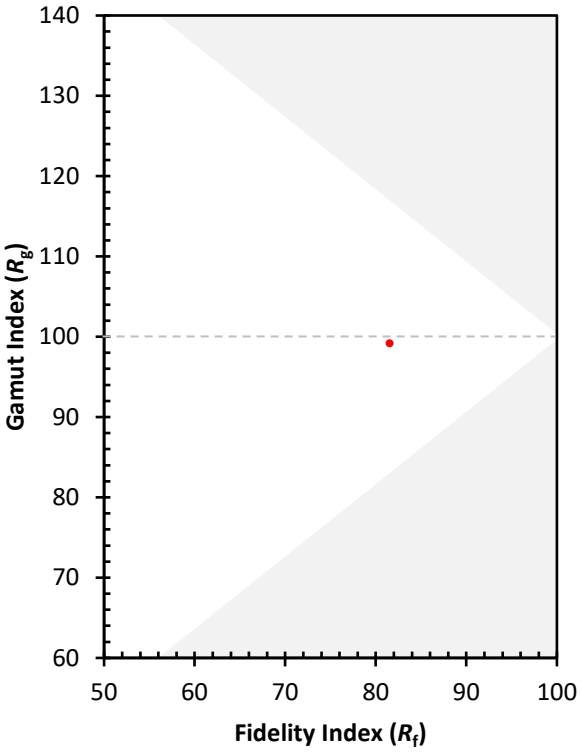
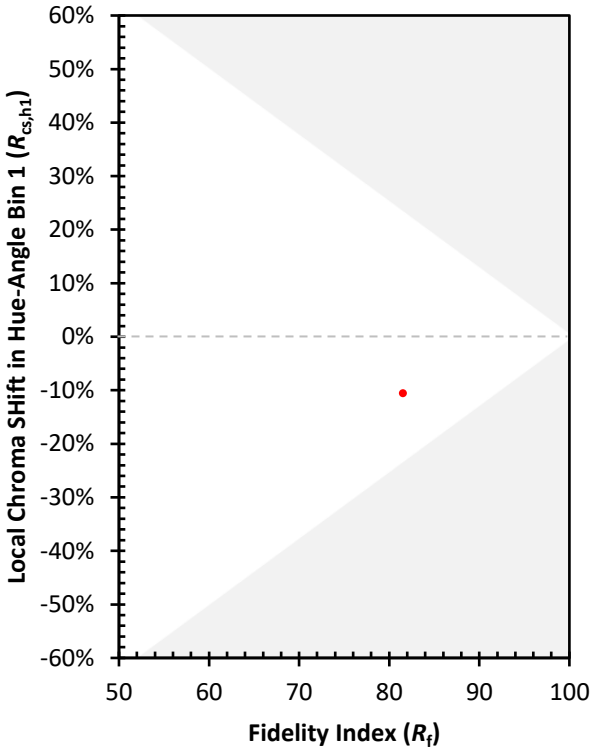
Measure Comparisons





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