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: P641443

Luminaire Tested: GWS-SA5F-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:	P641443
	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-SA5F-830-U-SL3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19393.1 lumens
Efficiency:	N/A
Efficacy:	62.5 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

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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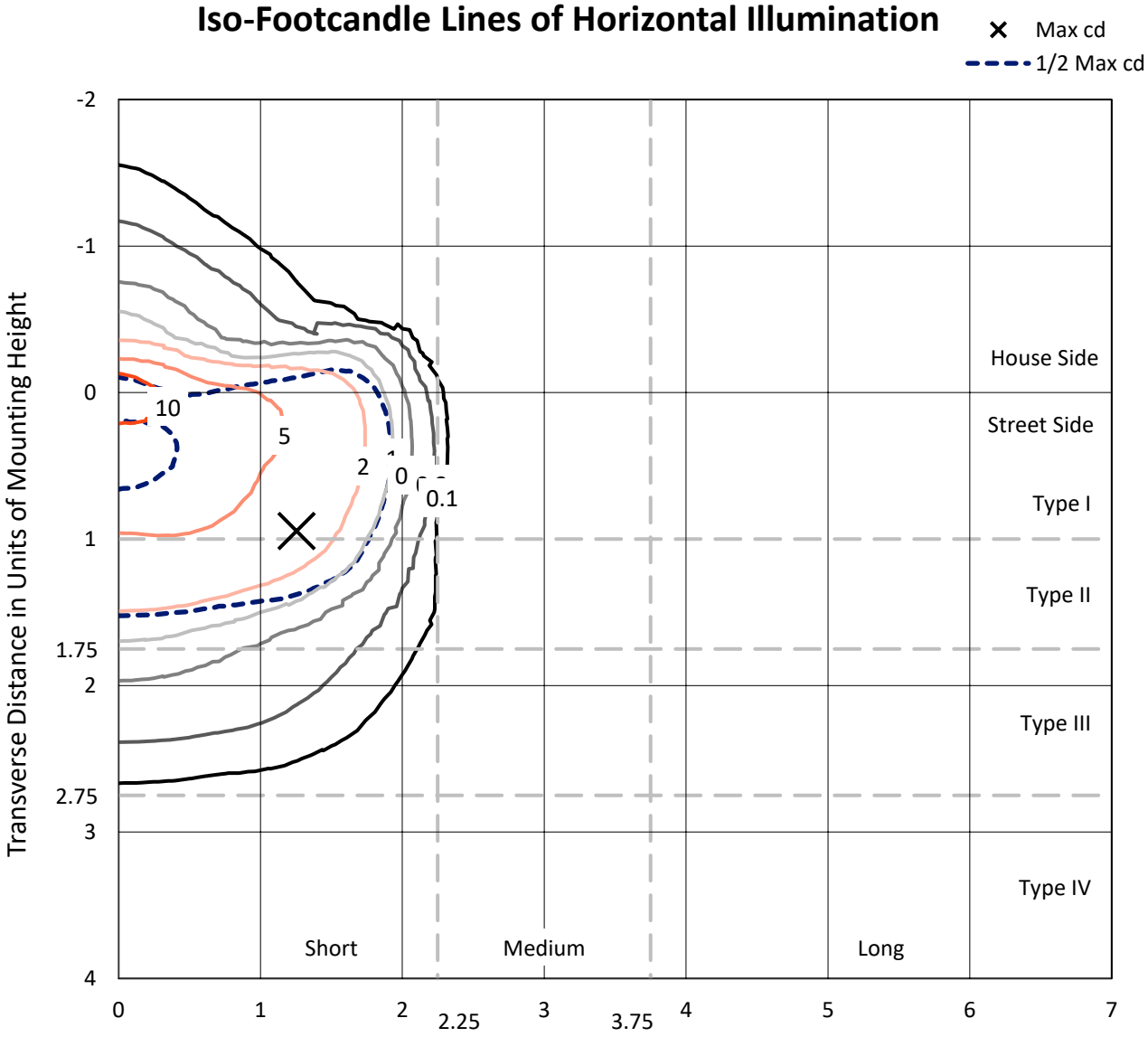
Scaled Data Report

REPORT NUMBER: P641443
CATALOG NUMBER: GWS-SA5F-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 13.6 fc
Type II - Short - N/A

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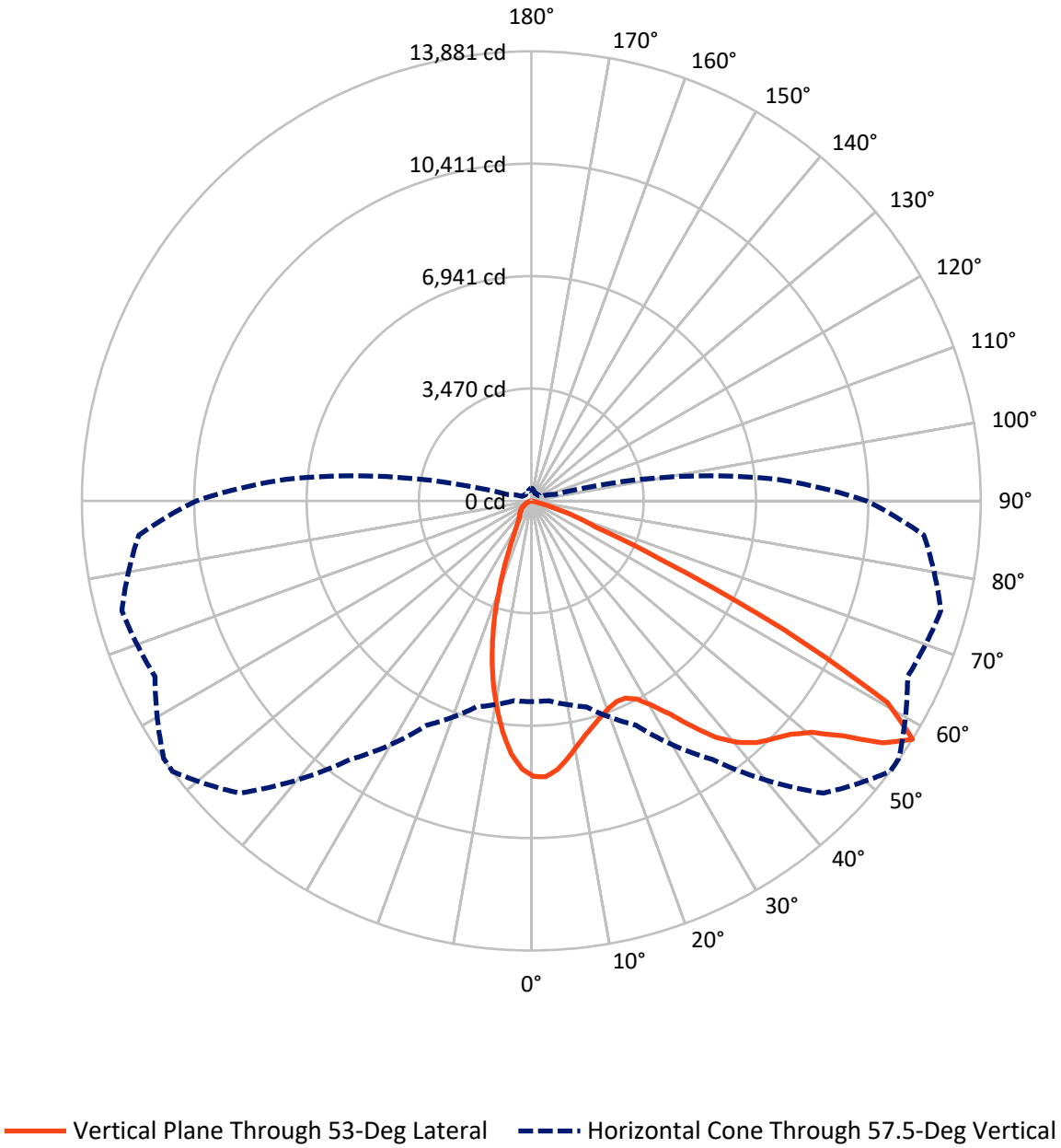
Luminous Intensity Polar Plot



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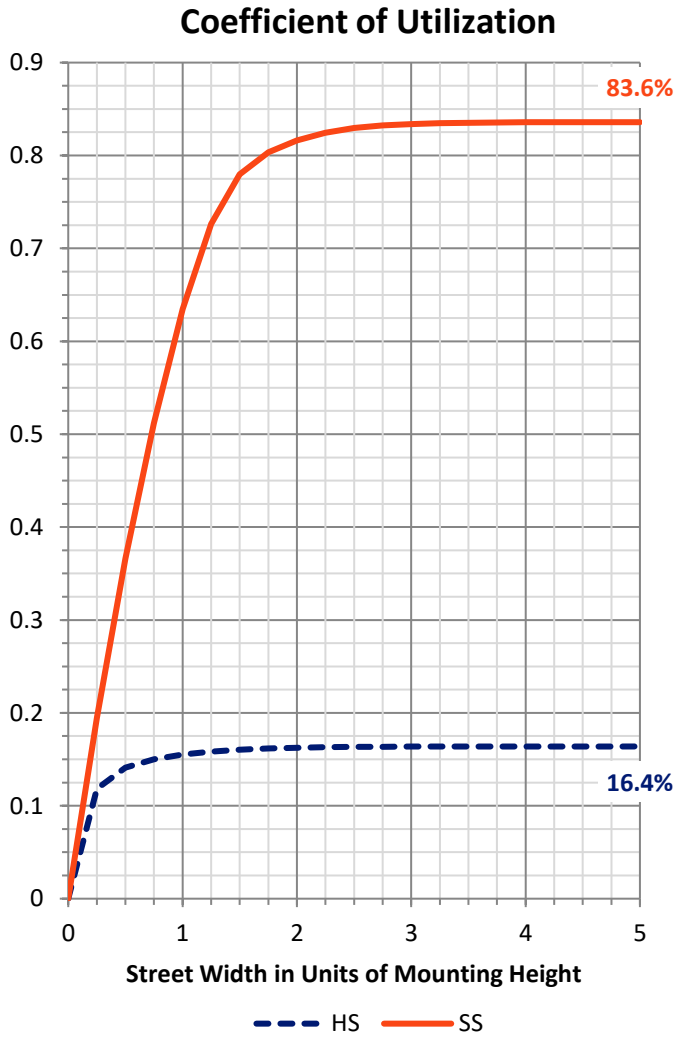
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3203.5	0.0	3203.5
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	16189.6	0.0	16189.6
	% Fixture	83.5	0.0	83.5
Total	Lumens	19393.1	0.0	19393.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	727.8	3.8
10°-20°	1597.9	8.2
20°-30°	2081.6	10.7
30°-40°	3019.4	15.6
40°-50°	4356.8	22.5
50°-60°	5269.1	27.2
60°-70°	2147.5	11.1
70°-80°	193.0	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°	19393.1	100.0
0°-180°	19393.1	100.0



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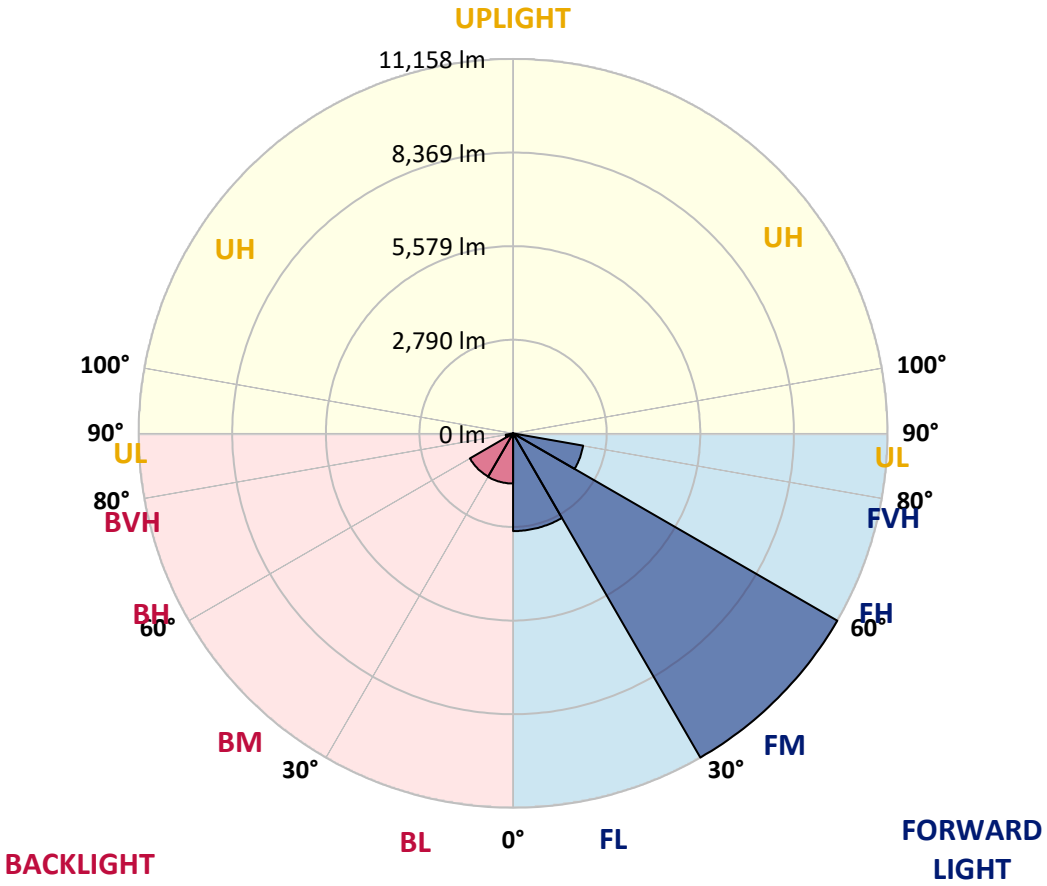
REPORT NUMBER: P641443
CATALOG NUMBER: GWS-SA5F-830-U-SL3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2912.2	15.0			
FM	(30°-60°)	11158.4	57.5			
FH	(60°-80°)	2119.0	10.9			G2/5000
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	1495.1	7.7	B3/2500		
BM	(30°-60°)	1486.9	7.7	B2/2500		
BH	(60°-80°)	221.4	1.1	B1/500		G1/500
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: B3-U0-G2
Type II Short



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REPORT NUMBER: P641443
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	*8506.9*	8506.9	8506.9	8506.9	8506.9
2.5°	8388.1	8407.1	8440.4	8483.2	8511.7	8525.9	*8525.9*	8566.3	8540.2	8518.8	8495.0
5°	8029.2	8048.2	8093.3	8162.3	8231.2	8281.1	*8338.2*	8380.9	8397.6	8397.6	8357.2
7.5°	7522.9	7549.0	7577.6	7672.6	7822.4	7934.1	*8031.5*	8093.3	8183.7	8212.2	8155.1
10°	6978.6	7004.7	7068.9	7199.6	7370.8	7537.1	*7703.5*	7782.0	7936.5	8017.3	7953.1
12.5°	6517.5	6529.3	6614.9	6771.8	6990.5	7218.6	*7420.7*	7501.5	7720.2	7841.4	7765.3
15°	6137.2	6144.3	6229.9	6403.4	6655.3	6935.8	*7190.1*	7273.3	7541.9	7724.9	7610.8
17.5°	5849.5	5851.9	5925.6	6113.4	6377.2	6688.6	*6990.5*	7092.7	7439.7	7660.7	7489.6
20°	5704.6	5697.4	5749.7	5913.7	6163.3	6474.7	*6831.2*	6957.2	7382.6	7651.2	7396.9
22.5°	5706.9	5690.3	5711.7	5828.2	6039.7	6332.1	*6731.4*	6874.0	7387.4	7691.6	7318.5
25°	5842.4	5818.6	5823.4	5885.2	6034.9	6301.2	*6745.6*	6897.8	7482.5	7827.1	7289.9
27.5°	6070.6	6044.5	6044.5	6075.4	6156.2	6398.6	*6923.9*	7097.4	7736.8	8091.0	7349.4
30°	6365.3	6339.2	6329.7	6360.6	6427.1	6650.6	*7320.8*	7501.5	8171.8	8523.6	7539.5
32.5°	6702.9	6672.0	6688.6	6731.4	6795.6	7104.5	*7831.9*	8071.9	8716.1	9105.9	7881.8
35°	7059.4	7033.2	7109.3	7202.0	7301.8	7734.4	*8537.8*	8747.0	9384.0	9830.9	8404.7
37.5°	7399.3	7387.4	7546.7	7741.6	7948.3	8490.3	*9255.6*	9417.3	9956.8	10620.0	9044.1
40°	7739.2	7736.8	8010.1	8352.4	8682.8	9243.8	*9800.0*	9933.1	10306.2	11233.2	9657.3
42.5°	8119.5	8119.5	8497.4	8953.8	9393.5	9880.8	*10199.3*	10258.7	10463.1	11587.4	10118.5
45°	8483.2	8504.5	8941.9	9471.9	9992.5	10377.5	*10475.0*	10479.7	10527.3	11796.5	10501.1
47.5°	8770.8	8789.8	9312.7	9923.6	10484.5	10755.5	*10769.7*	10748.3	10696.0	11996.2	10795.9
50°	9003.7	9032.2	9578.9	10225.4	10822.0	11119.1	*11228.5*	11207.1	11074.0	12210.1	11002.7
52.5°	9117.8	9158.2	9671.6	10375.2	11197.6	11741.9	*12046.1*	12096.0	11639.7	12329.0	11199.9
55°	8205.1	8264.5	8737.5	9700.1	11406.7	12704.5	*13182.3*	13172.8	12252.9	12683.1	11680.1
57.5°	*6196.6*	*6191.8*	*6584.0*	*7637.0*	*9742.9*	*12759.2*	*13881.1*	*13862.1*	*12825.7*	*13094.3*	*12172.1*
60°	4219.0	4190.5	4295.1	4803.7	6812.2	10394.2	*12633.2*	12889.9	12419.3	12096.0	10334.8
62.5°	3472.6	3446.5	3413.2	3273.0	3912.4	6474.7	*8728.0*	9117.8	9056.0	8407.1	6481.8
65°	2842.8	2864.2	2956.9	2897.4	2721.5	3320.5	*4530.4*	4760.9	4352.1	3662.8	2265.2
67.5°	2096.4	2105.9	2227.2	2540.9	2445.8	2210.5	*2132.1*	2170.1	1271.6	584.7	377.9
70°	1238.4	1245.5	1357.2	1777.9	1984.7	1697.1	*1440.4*	1419.0	503.9	156.9	171.1
72.5°	701.2	686.9	708.3	846.2	1081.5	900.8	*741.6*	675.0	152.1	87.9	87.9
75°	332.8	323.3	278.1	261.5	237.7	152.1	*95.1*	80.8	38.0	35.7	35.7
77.5°	2.4	7.1	4.8	7.1	7.1	4.8	*2.4*	2.4	7.1	7.1	9.5
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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REPORT NUMBER: P641443
CATALOG NUMBER: GWS-SA5F-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9	8506.9
2.5°	8452.3	8380.9	8364.3	8359.6	8293.0	8221.7	8148.0	8119.5	8076.7	8050.6	8071.9
5°	8293.0	8190.8	8100.5	8017.3	7869.9	7708.3	7568.0	7477.7	7392.2	7335.1	7349.4
7.5°	8067.2	7934.1	7727.3	7515.8	7244.8	7002.3	6731.4	6565.0	6410.5	6324.9	6365.3
10°	7827.1	7651.2	7320.8	6961.9	6536.5	6156.2	5768.7	5452.6	5269.6	5096.1	5115.1
12.5°	7591.8	7358.9	6864.5	6320.2	5783.0	5222.0	4637.3	4200.0	3900.5	3684.2	3650.9
15°	7373.1	7073.6	6420.0	5702.2	4970.1	4223.7	3477.4	2852.3	2505.3	2291.3	2277.1
17.5°	7178.2	6807.4	5958.9	5055.7	4138.2	3182.7	2324.6	1856.4	1656.7	1564.0	1554.5
20°	6990.5	6538.8	5488.3	4399.6	3230.2	2234.3	1604.4	1388.1	1323.9	1285.9	1290.7
22.5°	6809.8	6246.5	4993.9	3672.3	2422.1	1568.8	1243.1	1159.9	1152.8	1157.5	1159.9
25°	6657.7	5977.9	4485.2	2971.1	1728.0	1195.6	1038.7	1014.9	1036.3	1067.2	1072.0
27.5°	6579.3	5759.2	3988.4	2265.2	1250.2	972.2	900.8	910.4	948.4	981.7	986.4
30°	6600.6	5595.2	3475.0	1642.4	962.6	820.0	796.3	815.3	853.3	884.2	889.0
32.5°	6752.8	5512.0	2949.7	1195.6	791.5	715.4	705.9	720.2	753.5	777.2	779.6
35°	7054.6	5531.0	2450.6	915.1	679.8	637.0	634.6	644.1	660.8	677.4	679.8
37.5°	7499.1	5685.5	1958.6	760.6	615.6	584.7	575.2	575.2	587.1	594.2	599.0
40°	7976.9	5918.5	1568.8	672.7	570.5	537.2	518.2	511.0	520.5	530.0	532.4
42.5°	8371.4	6151.4	1274.0	610.9	534.8	489.6	465.9	461.1	473.0	489.6	494.4
45°	8673.3	6332.1	1062.5	560.9	494.4	444.5	418.3	418.3	439.7	468.2	473.0
47.5°	8949.0	6477.0	905.6	515.8	456.4	404.1	377.9	382.7	418.3	456.4	463.5
50°	9136.8	6593.5	789.1	475.4	425.5	370.8	347.0	356.5	399.3	444.5	451.6
52.5°	9338.8	6736.1	713.1	439.7	396.9	344.7	323.3	330.4	377.9	427.8	437.3
55°	9897.4	7213.9	710.7	392.2	347.0	309.0	299.5	301.9	349.4	406.4	418.3
57.5°	*10353.8*	*7634.6*	*758.2*	*330.4*	*290.0*	*271.0*	*266.2*	*268.6*	*311.4*	*375.5*	*389.8*
60°	8566.3	5932.7	627.5	273.3	242.4	237.7	230.6	235.3	275.7	332.8	344.7
62.5°	5069.9	3391.8	299.5	209.2	206.8	202.0	194.9	204.4	242.4	292.4	299.5
65°	1732.8	1005.4	190.2	171.1	175.9	168.8	161.6	171.1	204.4	232.9	235.3
67.5°	332.8	266.2	152.1	142.6	145.0	130.7	128.4	137.9	156.9	161.6	159.3
70°	173.5	154.5	116.5	116.5	111.7	92.7	92.7	102.2	102.2	95.1	92.7
72.5°	90.3	85.6	76.1	85.6	71.3	57.0	57.0	61.8	57.0	47.5	47.5
75°	35.7	35.7	33.3	42.8	30.9	26.1	23.8	28.5	21.4	16.6	16.6
77.5°	9.5	9.5	9.5	11.9	7.1	7.1	4.8	4.8	2.4	0.0	0.0
80°	0.0	2.4	0.0	2.4	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

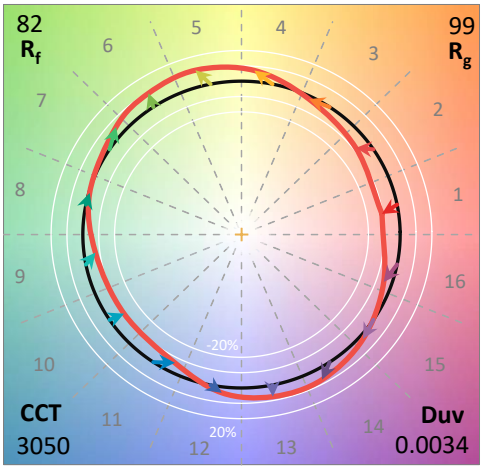
Test Information

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

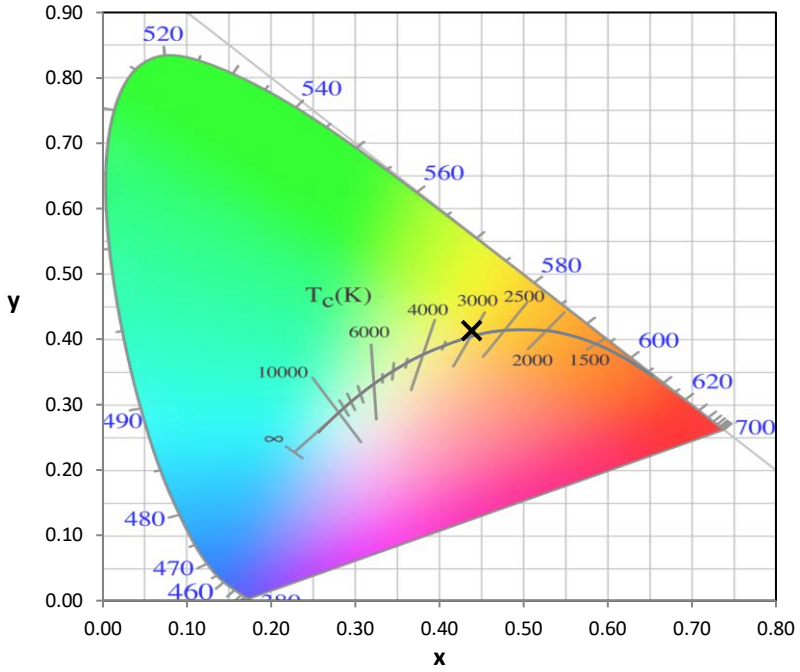
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

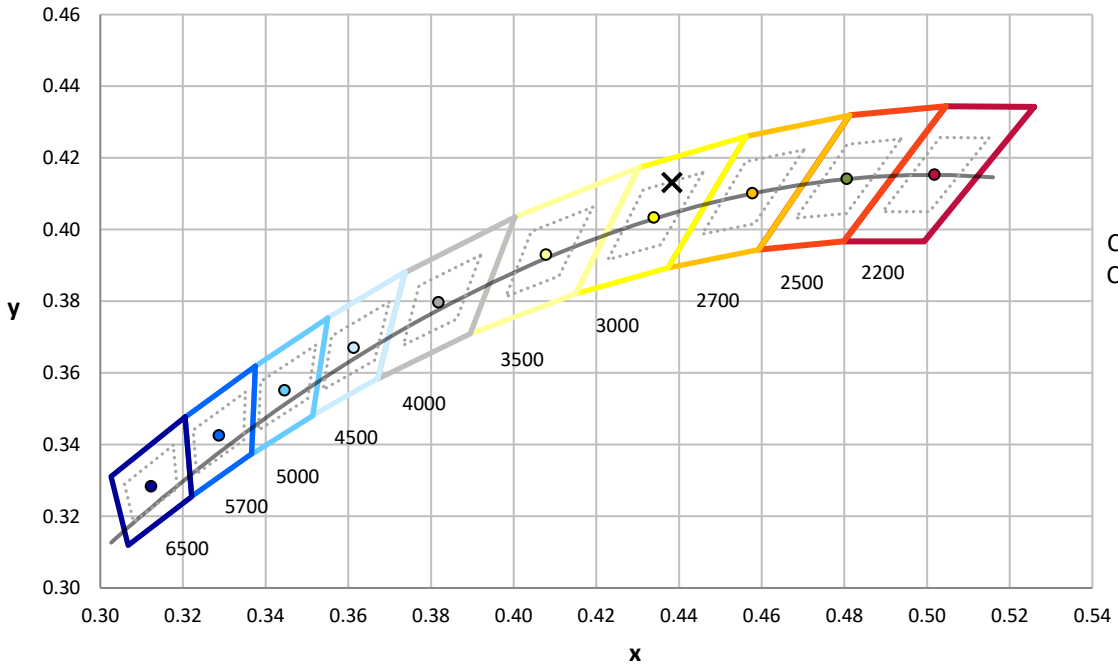
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

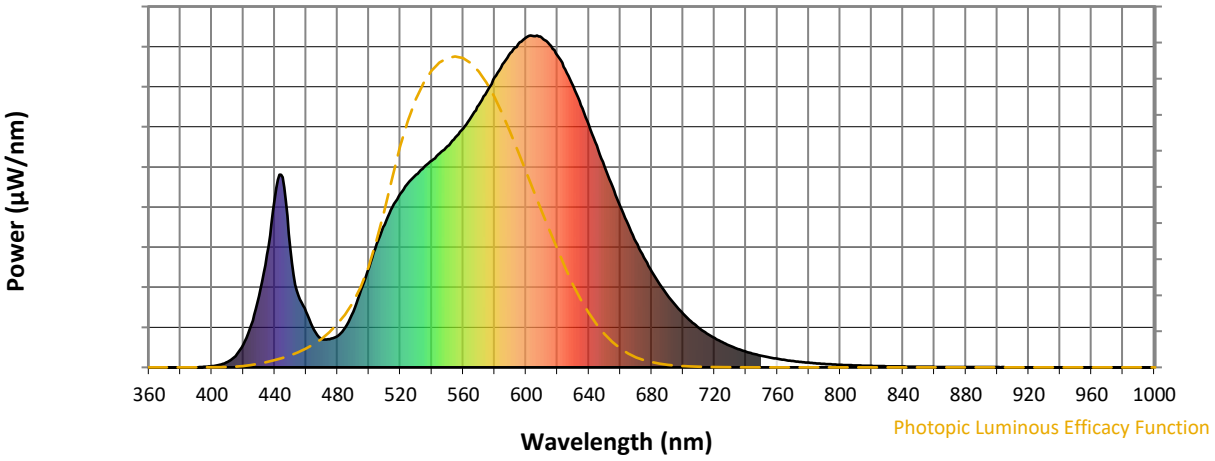


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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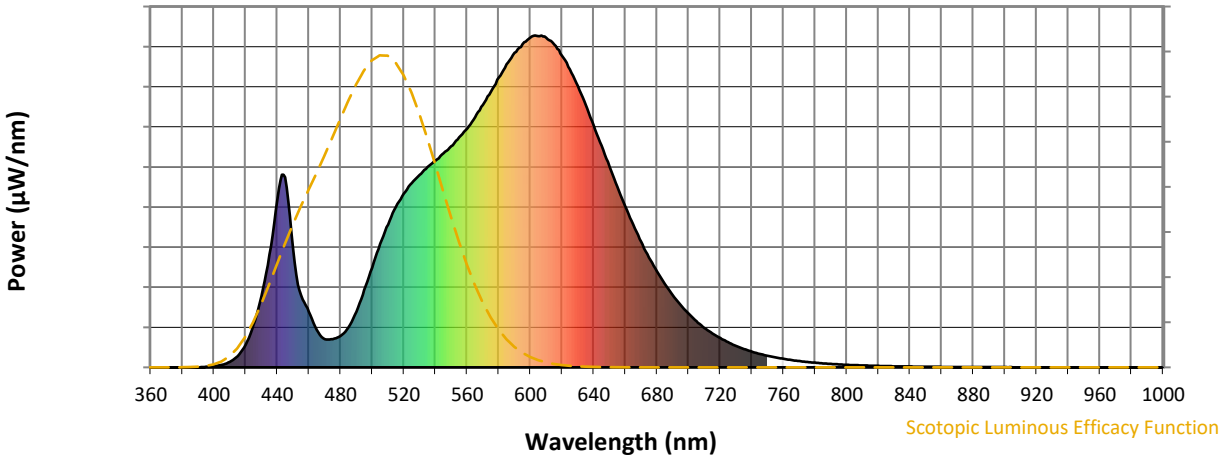
Scotopic Flux vs. Wavelength



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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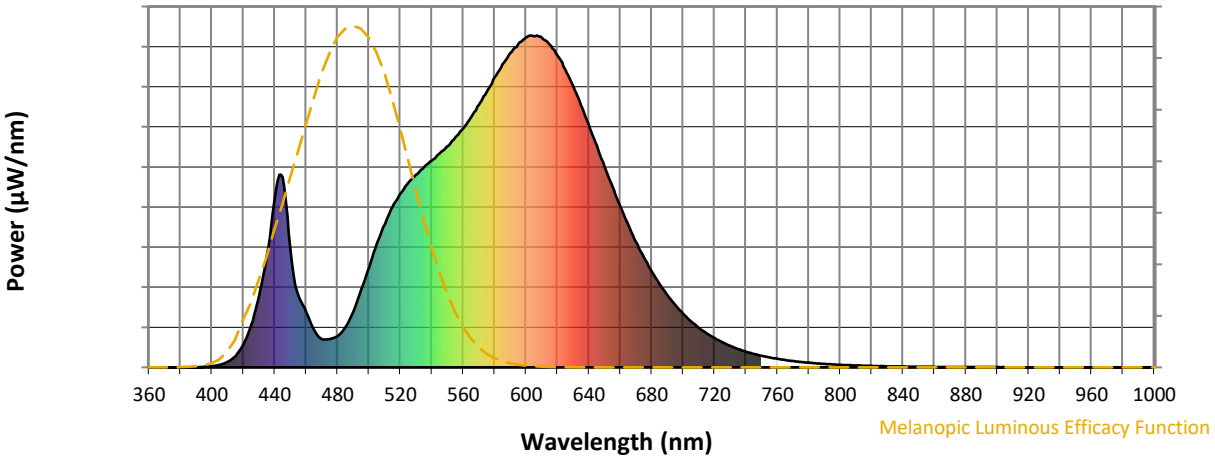
Melanopic Flux vs. Wavelength



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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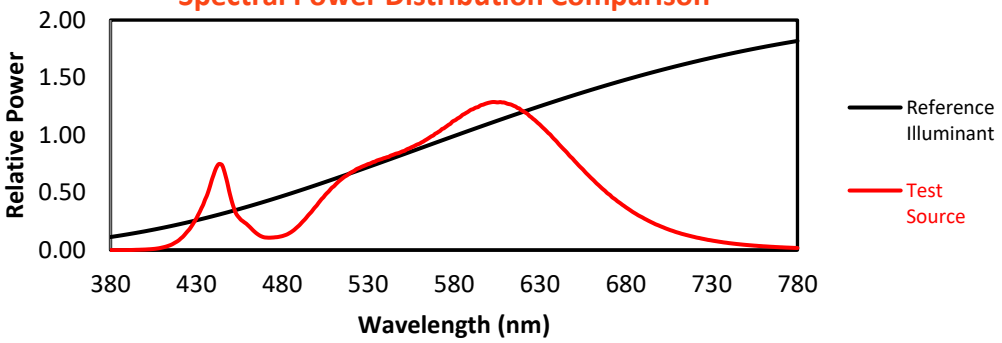
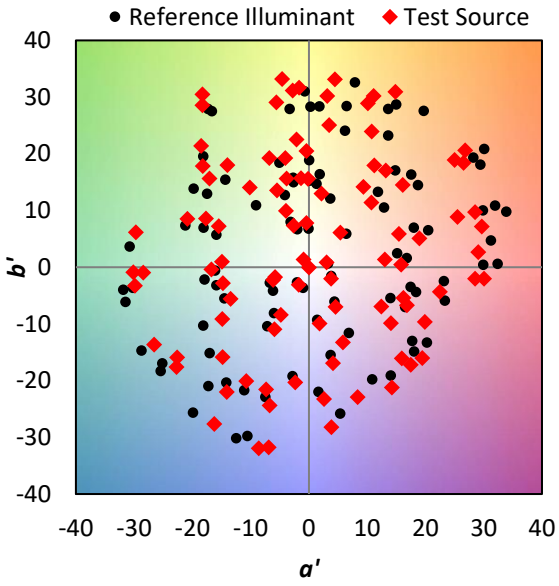
Summary

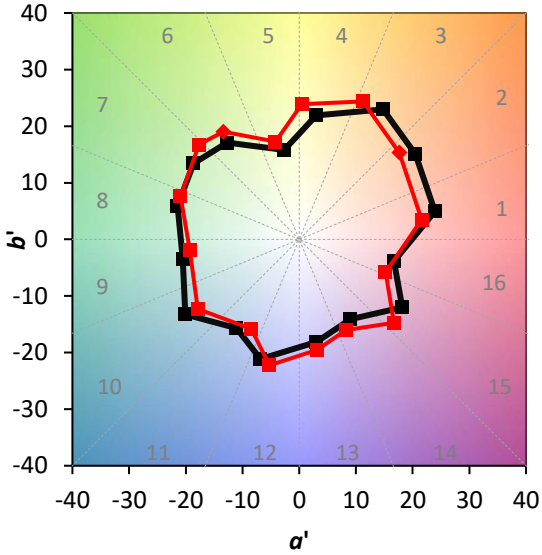
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

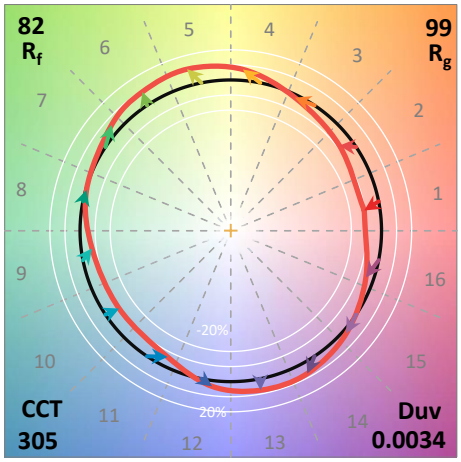
Spectral Power Distribution Comparison

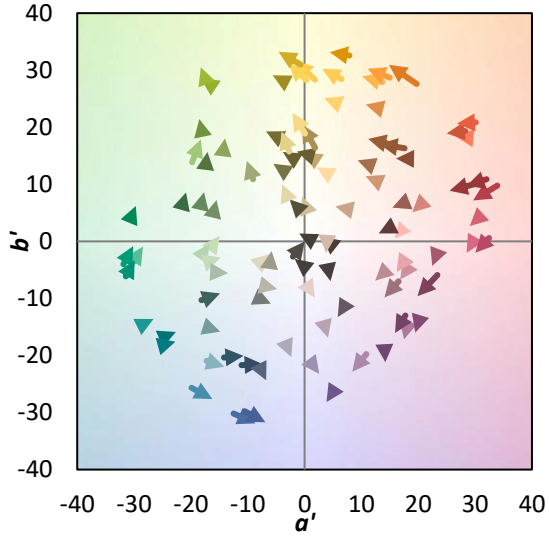


Color Vector Graphics









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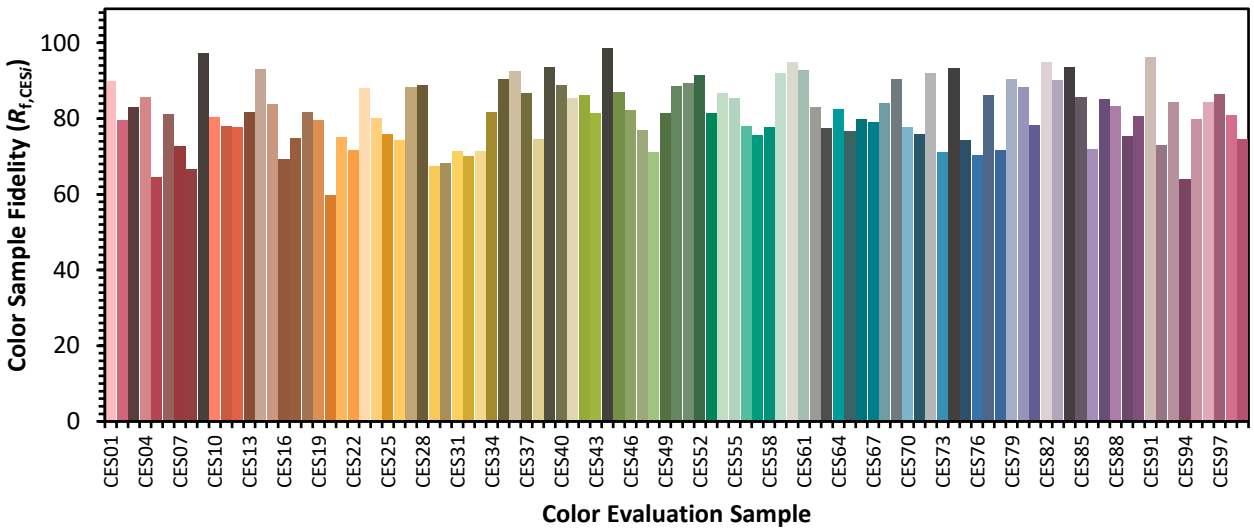
Individual Sample Fidelity Index ($R_{f,i}$)

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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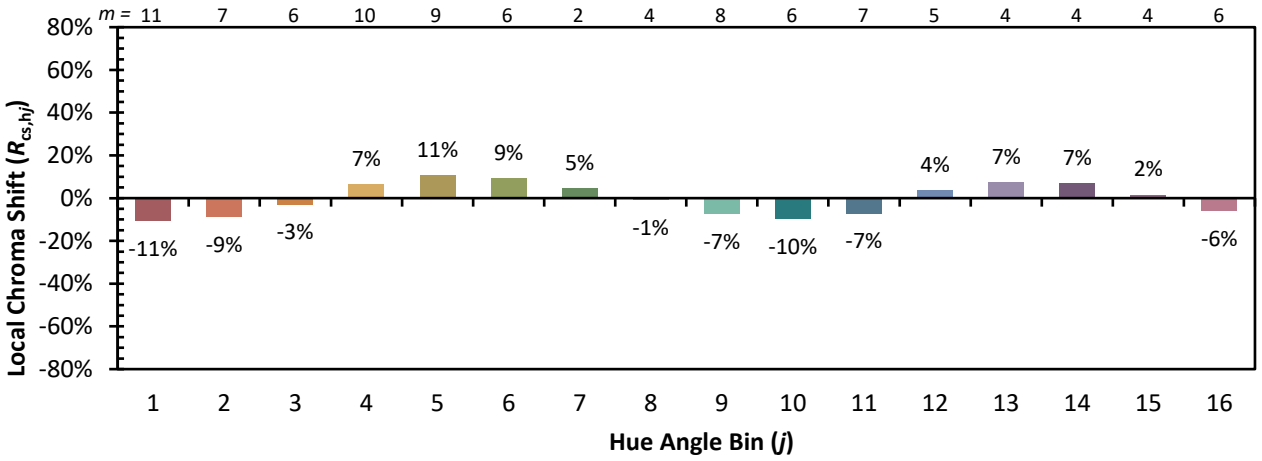
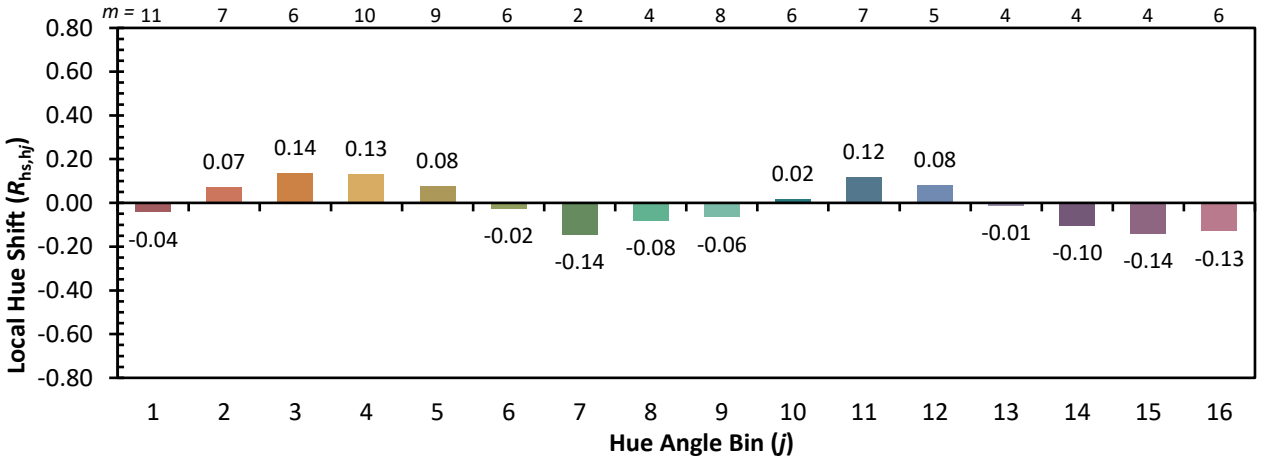
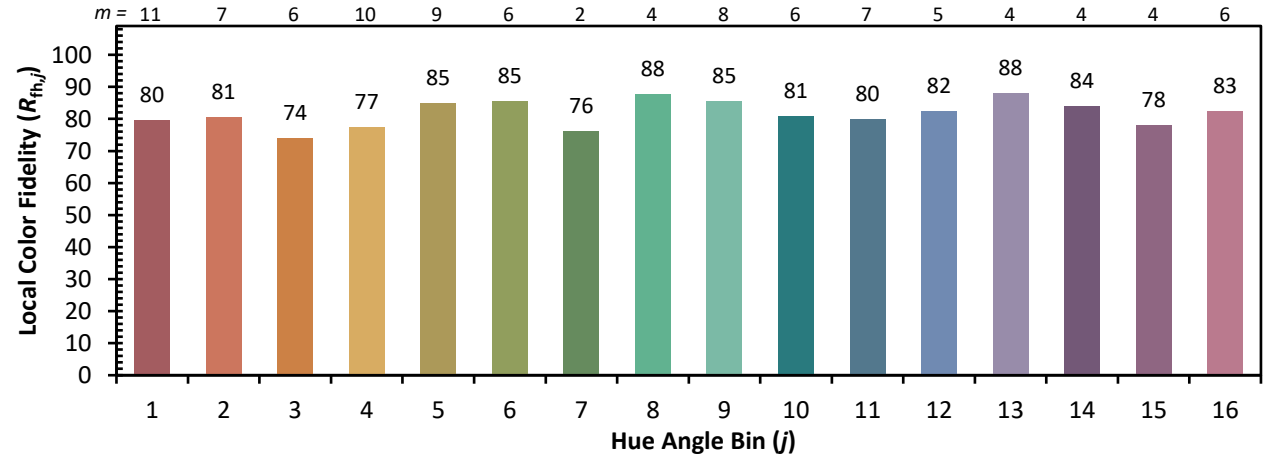
Color Rendition by Hue-Angle Bin







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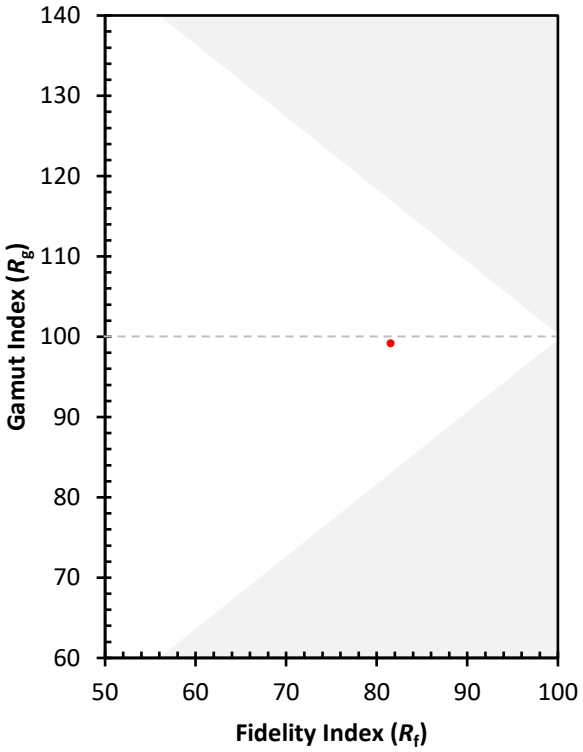
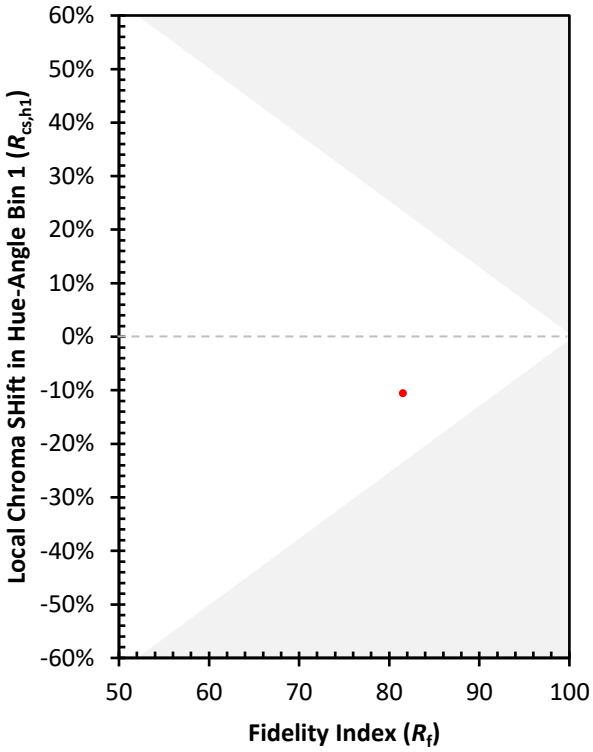
Measure Comparisons





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