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: P636508

Luminaire Tested: GWS-SA3F-830-U-T2-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:	P636508
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-T2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11537.4 lumens
Efficiency:	N/A
Efficacy:	63.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	183.2
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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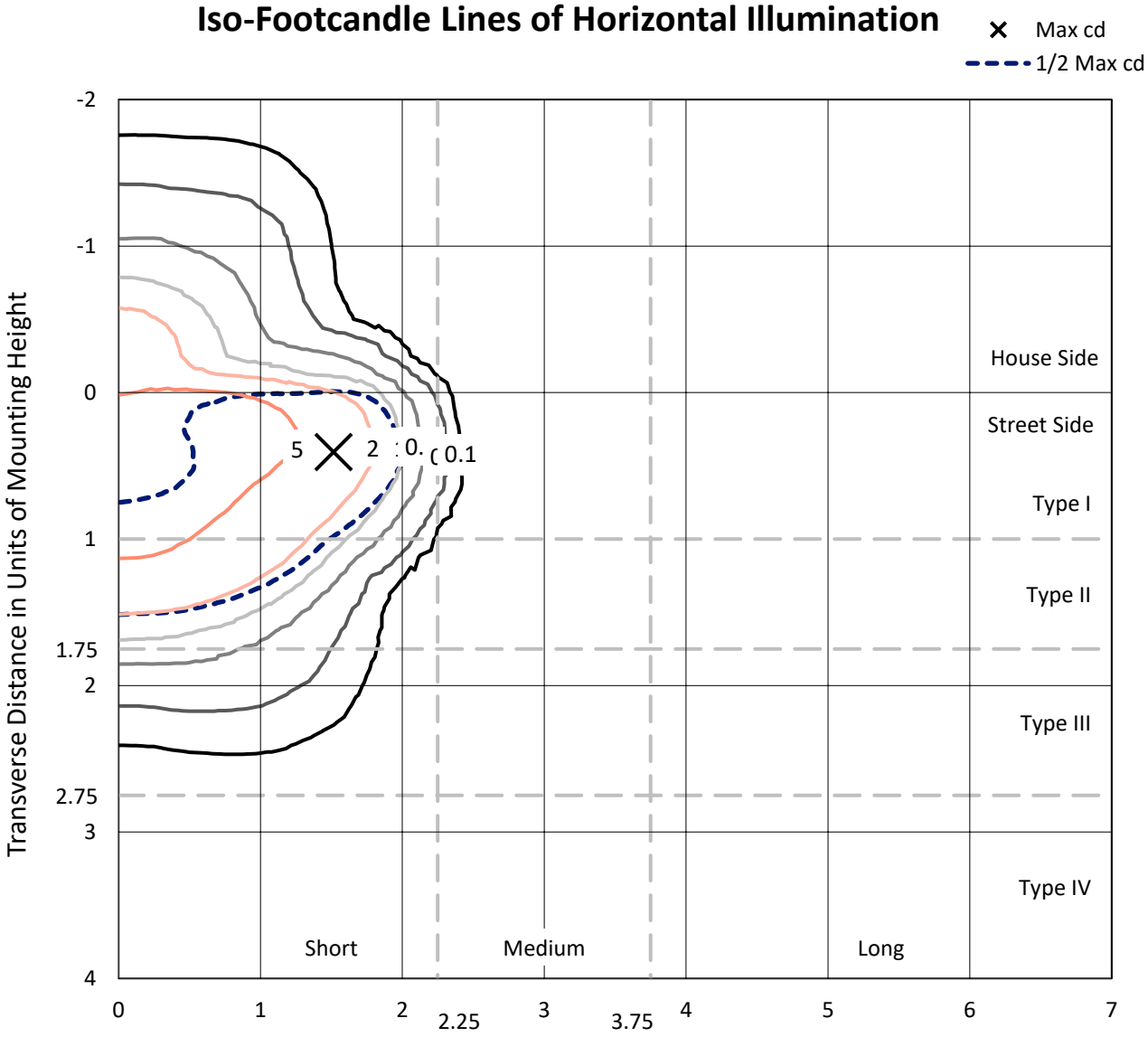
Scaled Data Report

REPORT NUMBER: P636508
CATALOG NUMBER: GWS-SA3F-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 9 fc
Type II - Short - N/A

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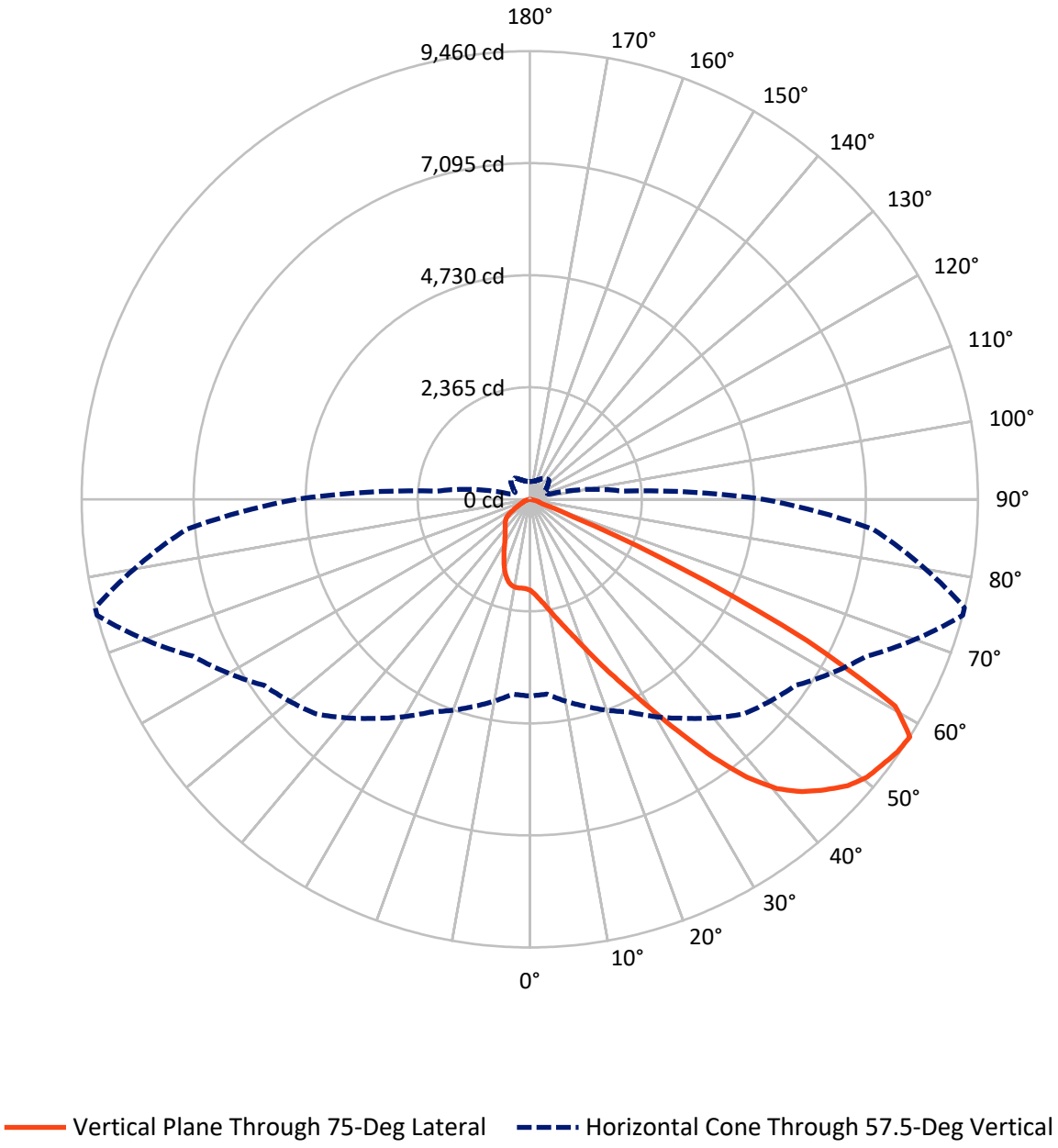
Luminous Intensity Polar Plot



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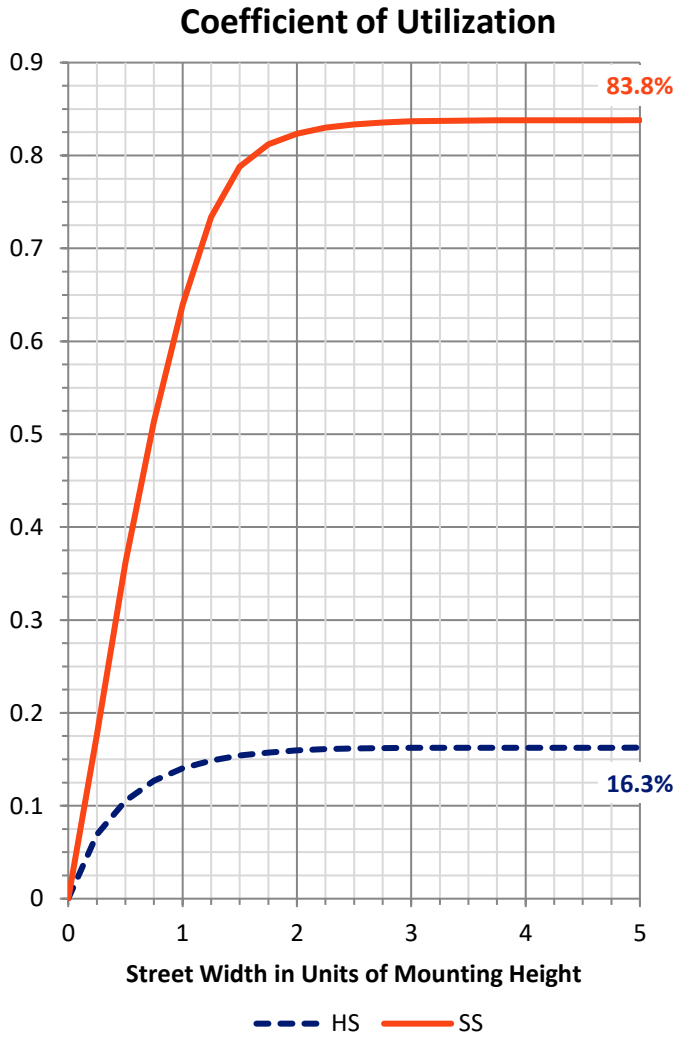
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1884.6	0.0	1884.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	9652.8	0.0	9652.8
	% Fixture	83.7	0.0	83.7
Total	Lumens	11537.4	0.0	11537.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	1.7
10°-20°	636.1	5.5
20°-30°	1164.8	10.1
30°-40°	1932.5	16.8
40°-50°	2951.4	25.6
50°-60°	3316.5	28.7
60°-70°	1223.3	10.6
70°-80°	116.9	1.0
80°-90°	0.1	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°	11537.4	100.0
0°-180°	11537.4	100.0



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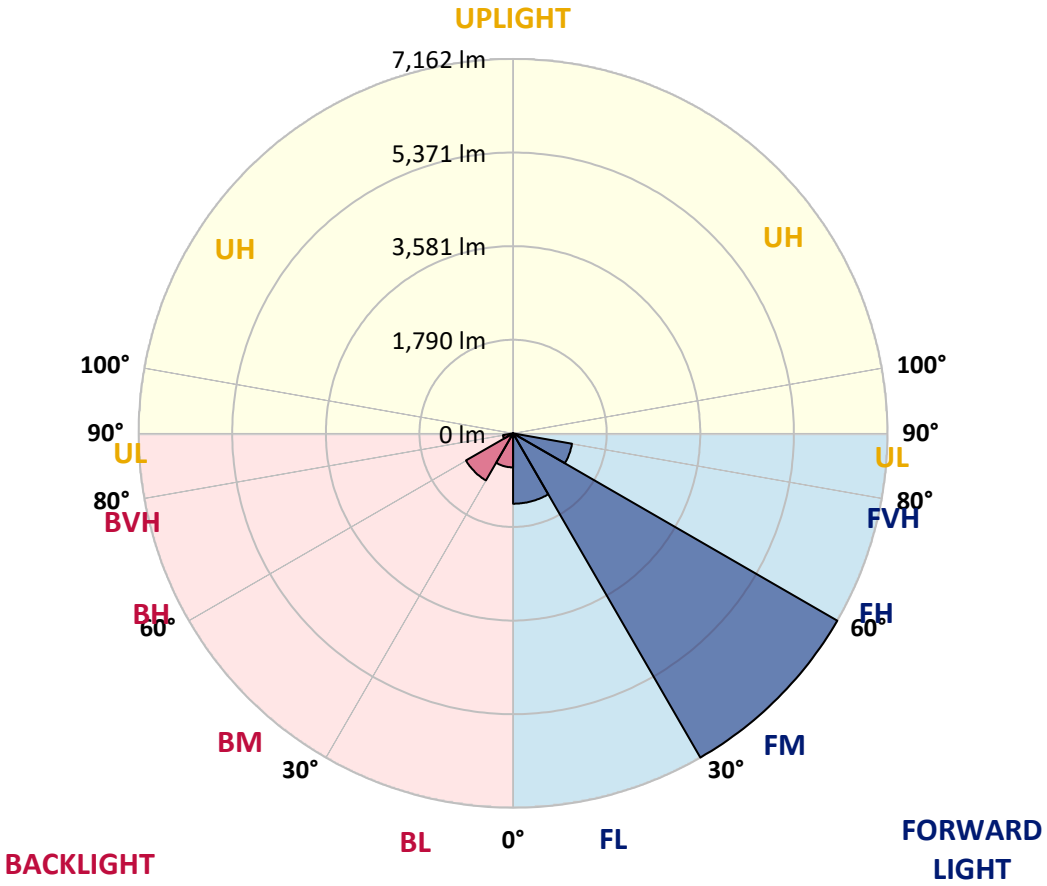
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1346.4	11.7			
FM	(30°-60°)	7161.9	62.1			
FH	(60°-80°)	1144.5	9.9			G1/1800
FVH	(80°-90°)	0.1	0.0			G0/10
BL	(0°-30°)	650.3	5.6	B2/1000		
BM	(30°-60°)	1038.5	9.0	B2/2500		
BH	(60°-80°)	195.7	1.7	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: B2-U0-G1
Type II Short



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REPORT NUMBER: P636508
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	*1924.3*	1924.3	1924.3
2.5°	2149.8	2172.1	2165.2	2151.2	2142.9	2113.6	2095.5	2042.6	*2005.0*	2000.9	1966.0
5°	2421.4	2417.2	2411.6	2394.9	2381.0	2335.0	2280.7	2191.6	*2112.2*	2102.5	2028.7
7.5°	2570.3	2573.1	2575.9	2573.1	2563.4	2528.6	2468.7	2364.3	*2243.1*	2234.8	2117.8
10°	2631.6	2637.2	2651.1	2677.6	2701.2	2698.4	2663.6	2556.4	*2407.4*	2393.5	2236.2
12.5°	2660.8	2667.8	2690.1	2740.2	2804.3	2854.4	2860.0	2763.9	*2599.6*	2577.3	2376.8
15°	2701.2	2708.2	2736.0	2801.5	2894.8	2993.6	3057.7	2996.4	*2812.6*	2788.9	2531.4
17.5°	2719.3	2729.1	2769.5	2855.8	2976.9	3128.7	3273.5	3267.9	*3064.6*	3046.5	2711.0
20°	2754.1	2761.1	2797.3	2890.6	3036.8	3255.4	3499.1	3586.8	*3372.4*	3345.9	2928.2
22.5°	2864.1	2866.9	2883.6	2942.1	3078.6	3347.3	3728.8	3958.6	*3735.8*	3701.0	3171.9
25°	3043.8	3042.4	3049.3	3059.1	3159.3	3440.6	3950.2	4377.7	*4152.1*	4114.5	3447.5
27.5°	3272.1	3272.1	3288.8	3261.0	3301.3	3556.2	4168.8	4859.4	*4636.6*	4583.7	3749.7
30°	3540.8	3539.4	3578.4	3533.9	3546.4	3738.6	4404.1	5384.4	*5221.4*	5156.0	4097.8
32.5°	3905.6	3897.3	3941.8	3880.6	3838.8	4014.2	4690.9	5933.0	*5921.8*	5821.6	4535.0
35°	4366.5	4352.6	4366.5	4306.7	4231.5	4399.9	5066.9	6480.2	*6698.8*	6592.9	5055.8
37.5°	4824.6	4869.2	4884.5	4781.5	4720.2	4888.7	5519.4	6970.3	*7440.9*	7330.9	5597.4
40°	5364.9	5350.9	5403.9	5288.3	5249.3	5435.9	5962.2	7335.1	*8028.5*	7924.1	6079.2
42.5°	5763.1	5788.1	5853.6	5789.5	5758.9	5934.3	6334.0	7548.1	*8436.5*	8333.4	6423.1
45°	6240.7	6258.8	6283.8	6230.9	6198.9	6371.6	6602.7	7641.4	*8747.0*	8635.6	6654.2
47.5°	6757.3	6771.2	6771.2	6662.6	6559.5	6630.5	6782.3	7694.3	*9032.4*	8925.2	6825.5
50°	7127.6	7134.6	7195.9	7119.3	6895.1	6785.1	6864.5	7745.8	*9221.8*	9121.5	6881.2
52.5°	6799.0	6790.7	6992.6	7151.3	7211.2	6992.6	7006.5	7821.0	*9313.7*	9227.3	6925.7
55°	5725.5	5711.6	5995.6	6381.3	6909.0	7188.9	7177.8	7865.6	*9415.3*	9362.4	7087.2
57.5°	*4150.7*	*4127.0*	*4522.5*	*4951.3*	*5643.3*	*6402.2*	*6847.8*	*7840.5*	*9459.9*	*9455.7*	*7275.2*
60°	2495.2	2475.7	2848.8	3300.0	3834.6	4597.7	5337.0	7023.2	*8863.9*	8872.3	6786.5
62.5°	1535.8	1553.9	1890.9	2120.6	2319.7	2549.5	2976.9	4724.4	*6566.5*	6620.8	4768.9
65°	1033.2	1047.1	1359.0	1648.6	1648.6	1347.8	1157.1	2258.5	*3503.2*	3411.3	2255.7
67.5°	693.4	708.7	955.2	1293.5	1342.3	939.9	469.2	673.9	*976.1*	946.8	558.3
70°	408.0	424.7	636.3	886.9	977.5	654.4	313.3	285.4	*277.1*	268.7	217.2
72.5°	182.4	189.4	324.4	451.1	412.1	275.7	221.4	228.4	*215.8*	211.6	176.8
75°	55.7	58.5	83.5	97.5	98.9	98.9	133.7	179.6	*169.9*	171.3	136.5
77.5°	13.9	13.9	22.3	20.9	11.1	9.7	25.1	40.4	*41.8*	37.6	27.8
80°	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	*1.4*	1.4	1.4
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: P636508
CATALOG NUMBER: GWS-SA3F-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3	1924.3
2.5°	1950.7	1914.5	1890.9	1857.4	1833.8	1808.7	1786.4	1768.3	1758.6	1755.8	1757.2
5°	1995.3	1938.2	1882.5	1818.5	1773.9	1732.1	1698.7	1672.3	1659.7	1655.5	1655.5
7.5°	2063.5	1984.2	1885.3	1785.0	1709.9	1644.4	1605.4	1576.2	1565.0	1562.3	1553.9
10°	2152.6	2044.0	1881.1	1725.2	1619.3	1551.1	1523.3	1514.9	1519.1	1520.5	1519.1
12.5°	2259.8	2106.7	1854.7	1637.4	1523.3	1481.5	1484.3	1506.6	1531.6	1544.2	1546.9
15°	2374.0	2163.8	1794.8	1533.0	1441.1	1439.7	1480.1	1531.6	1580.4	1601.2	1606.8
17.5°	2502.1	2209.7	1702.9	1421.6	1370.1	1410.5	1482.9	1562.3	1627.7	1662.5	1669.5
20°	2642.7	2247.3	1585.9	1317.2	1307.5	1379.9	1480.1	1577.6	1658.3	1697.3	1704.3
22.5°	2788.9	2273.8	1450.9	1221.1	1250.4	1345.0	1453.7	1548.3	1624.9	1669.5	1675.0
25°	2956.0	2276.6	1313.0	1140.4	1197.5	1297.7	1389.6	1467.6	1531.6	1570.6	1574.8
27.5°	3102.2	2243.1	1190.5	1074.9	1148.7	1239.2	1300.5	1343.7	1388.2	1410.5	1411.9
30°	3270.7	2184.7	1074.9	1022.0	1098.6	1166.8	1197.5	1207.2	1211.4	1215.6	1210.0
32.5°	3471.2	2113.6	988.6	970.5	1041.5	1087.5	1095.8	1076.3	1052.6	1019.2	1010.9
35°	3717.7	2049.6	917.6	920.4	978.8	1006.7	999.7	958.0	912.0	871.6	864.7
37.5°	3985.0	1995.3	863.3	871.6	910.6	930.1	909.2	863.3	842.4	807.6	809.0
40°	4221.7	1950.7	814.5	822.9	841.0	859.1	825.7	795.1	834.0	831.3	834.0
42.5°	4390.2	1913.1	772.8	768.6	781.1	793.7	768.6	753.3	818.7	800.6	810.4
45°	4489.1	1878.3	738.0	712.9	732.4	754.7	738.0	718.5	740.7	657.2	650.2
47.5°	4555.9	1858.8	707.3	658.6	693.4	732.4	697.6	650.2	618.2	545.8	540.2
50°	4562.8	1849.1	671.1	602.9	647.5	689.2	648.9	583.4	537.5	505.4	501.3
52.5°	4599.1	1868.6	621.0	531.9	580.6	647.5	619.6	554.2	491.5	463.7	458.1
55°	4760.6	1950.7	537.5	434.4	505.4	615.4	595.9	494.3	434.4	417.7	413.5
57.5°	*4927.7*	*1967.4*	*423.3*	*343.9*	*440.0*	*569.5*	*544.4*	*455.3*	*396.8*	*377.3*	*373.2*
60°	4505.8	1620.7	317.5	284.0	388.5	526.3	504.0	431.6	363.4	339.7	335.6
62.5°	2960.2	875.8	252.0	240.9	327.2	445.6	459.5	389.9	324.4	299.4	298.0
65°	1364.5	406.6	193.5	190.8	256.2	355.1	395.4	341.1	274.3	252.0	252.0
67.5°	371.8	201.9	151.8	140.6	174.0	238.1	288.2	254.8	194.9	168.5	167.1
70°	185.2	162.9	136.5	121.1	125.3	147.6	169.9	142.0	98.9	80.8	79.4
72.5°	151.8	133.7	115.6	103.0	94.7	90.5	87.7	71.0	45.9	34.8	33.4
75°	112.8	96.1	82.2	66.8	57.1	52.9	47.3	34.8	19.5	11.1	9.7
77.5°	25.1	23.7	22.3	16.7	15.3	12.5	9.7	7.0	2.8	0.0	0.0
80°	1.4	1.4	1.4	1.4	1.4	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

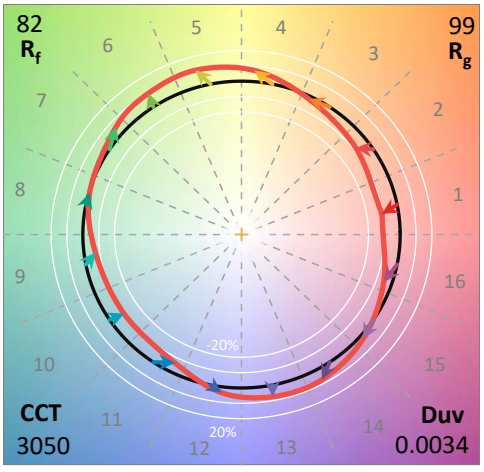
Test Information

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

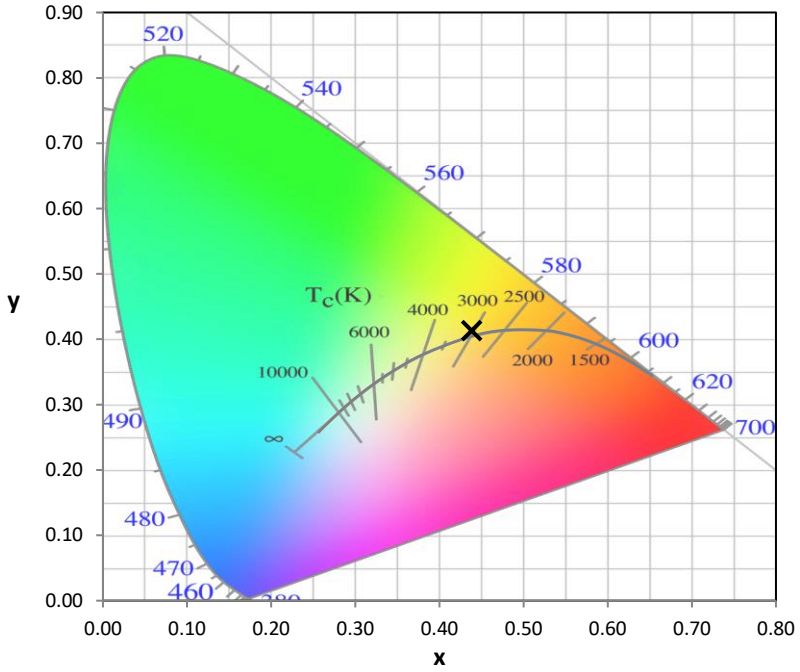
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

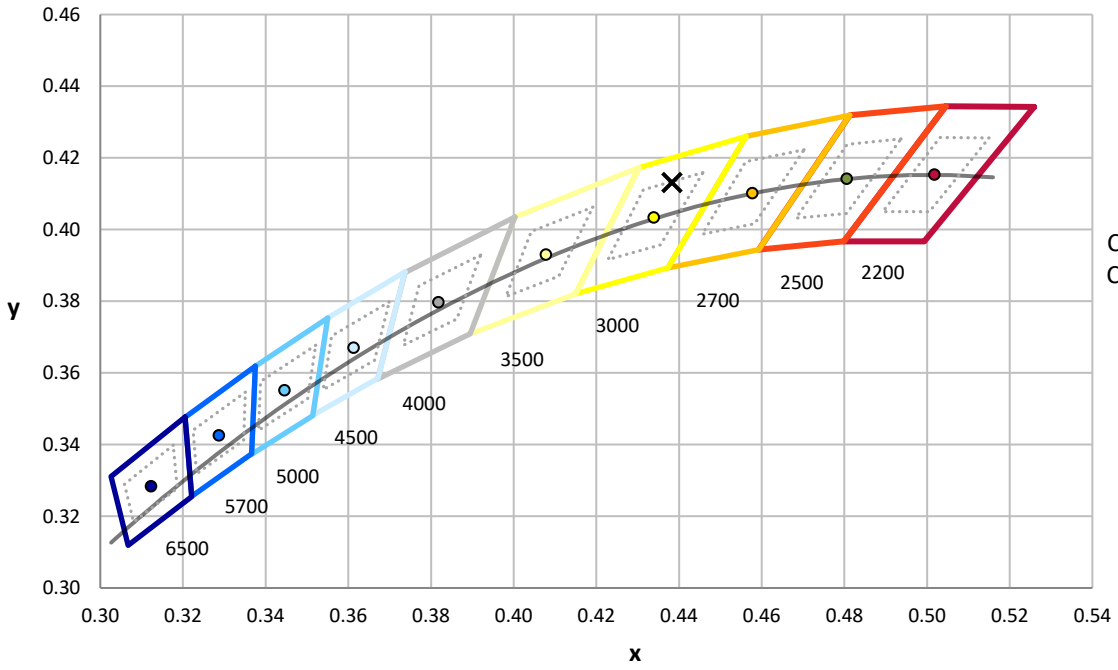
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

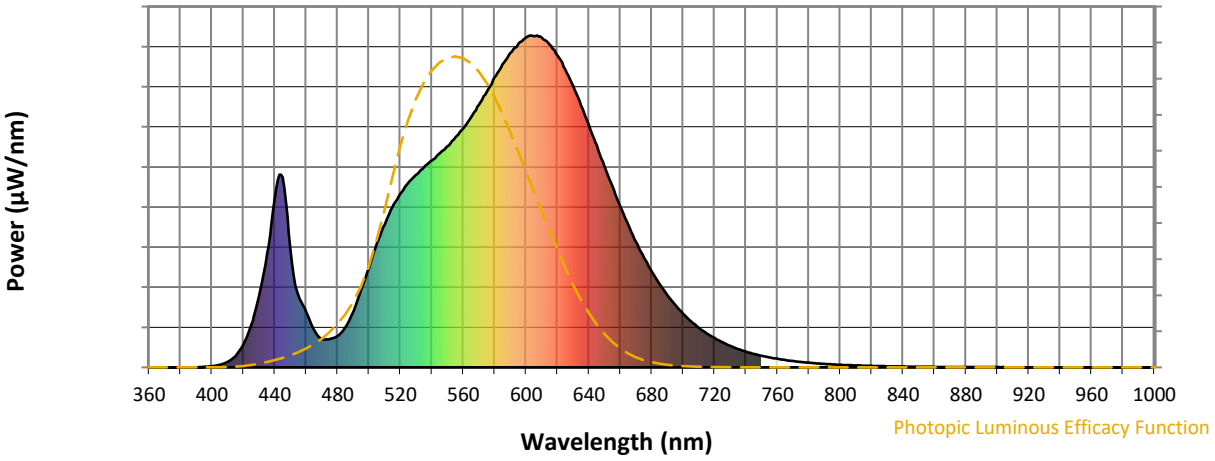


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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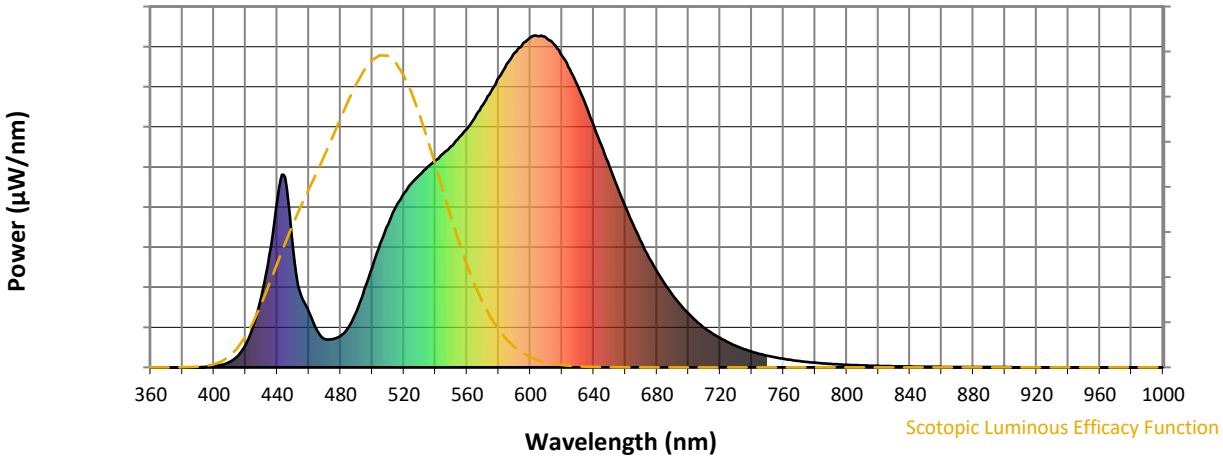
Scotopic Flux vs. Wavelength



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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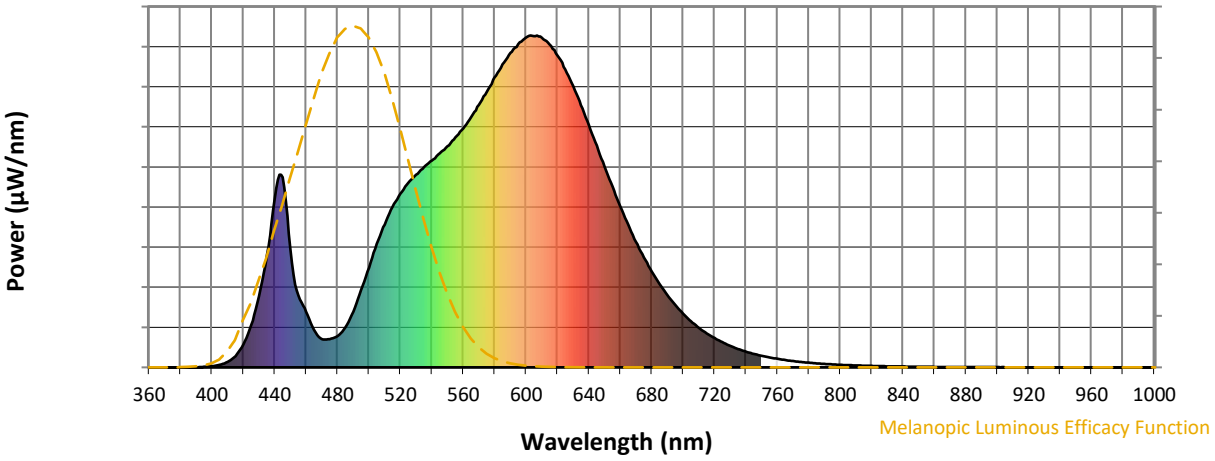
Melanopic Flux vs. Wavelength



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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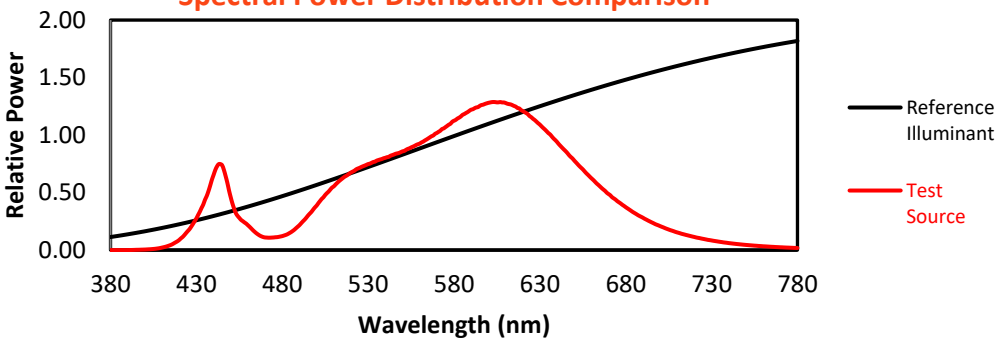
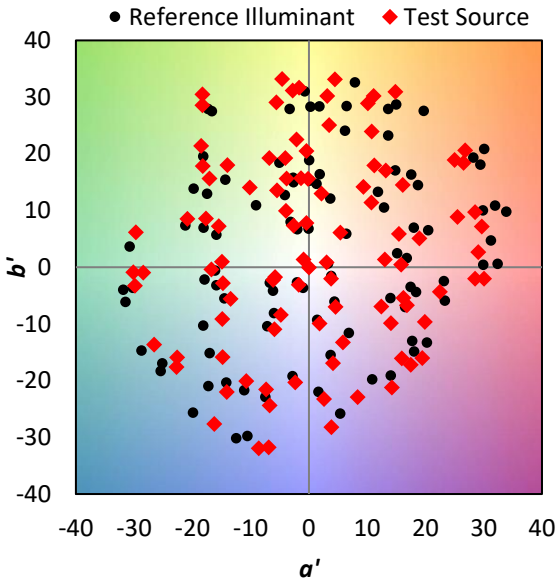
Summary

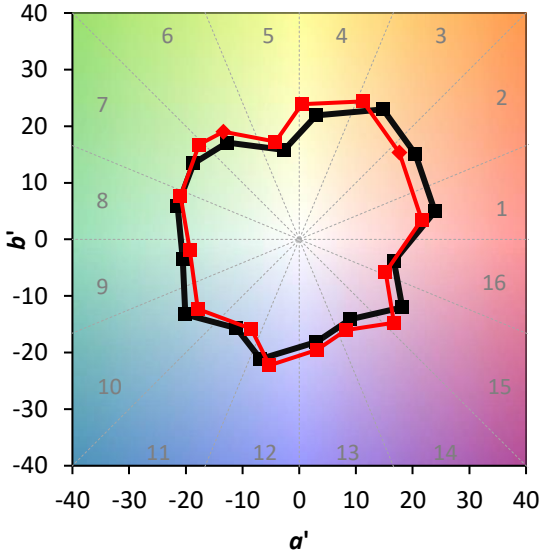
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

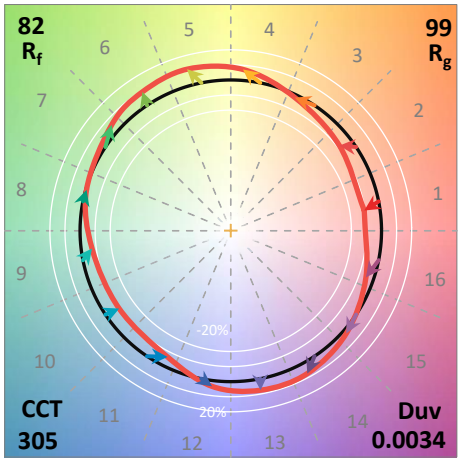
Spectral Power Distribution Comparison

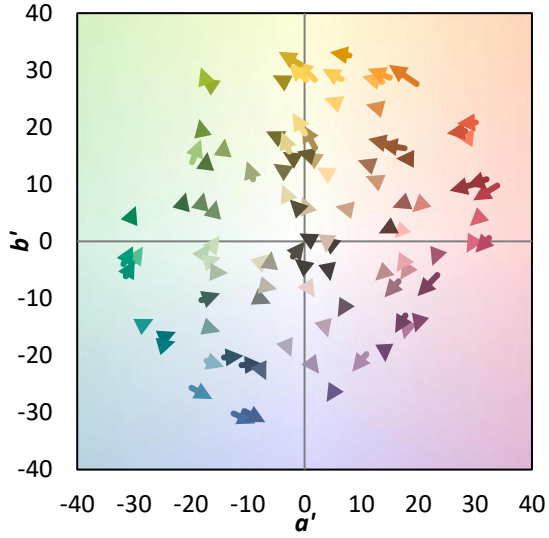


Color Vector Graphics









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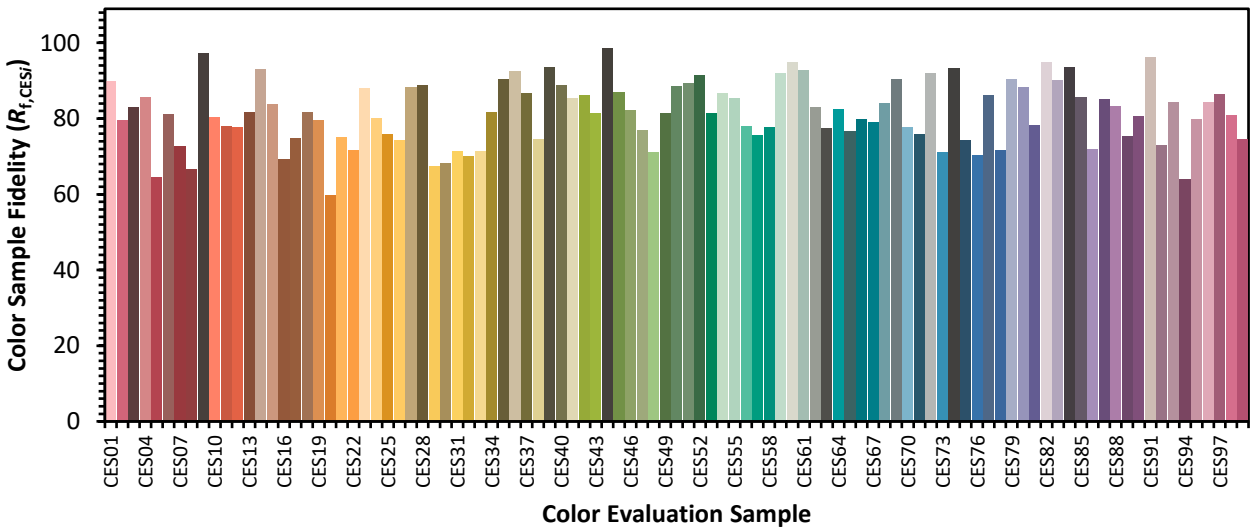
Individual Sample Fidelity Index ($R_{f,i}$)

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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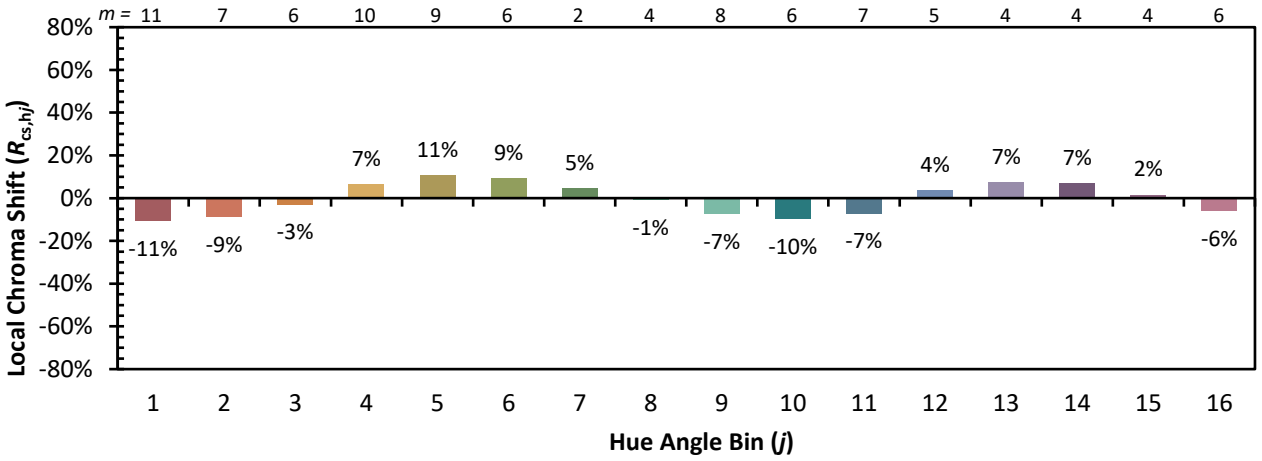
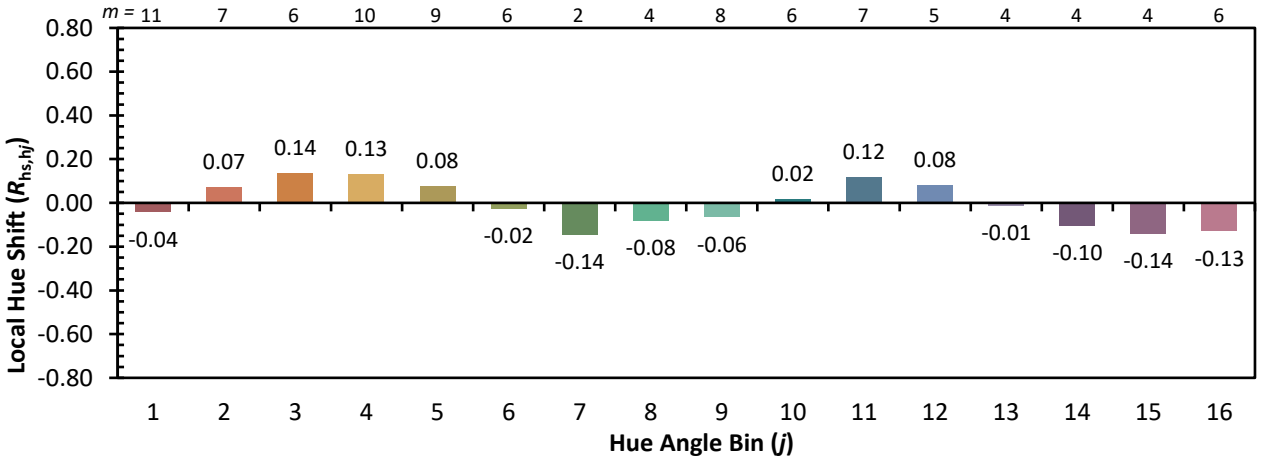
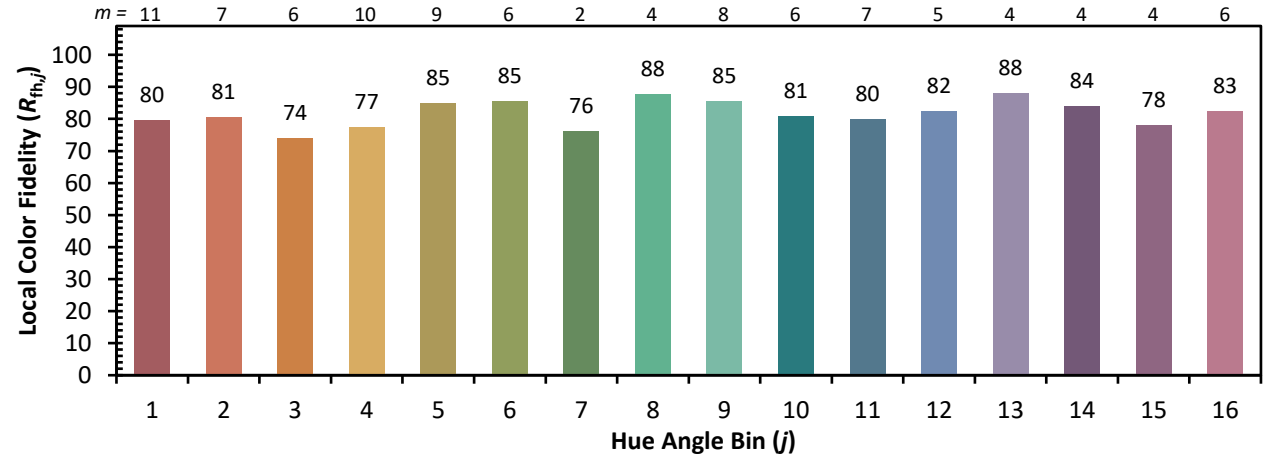
Color Rendition by Hue-Angle Bin







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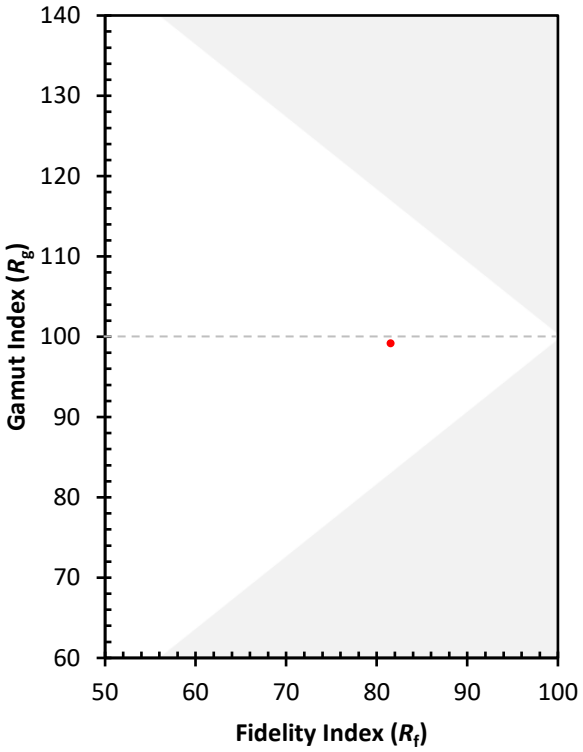
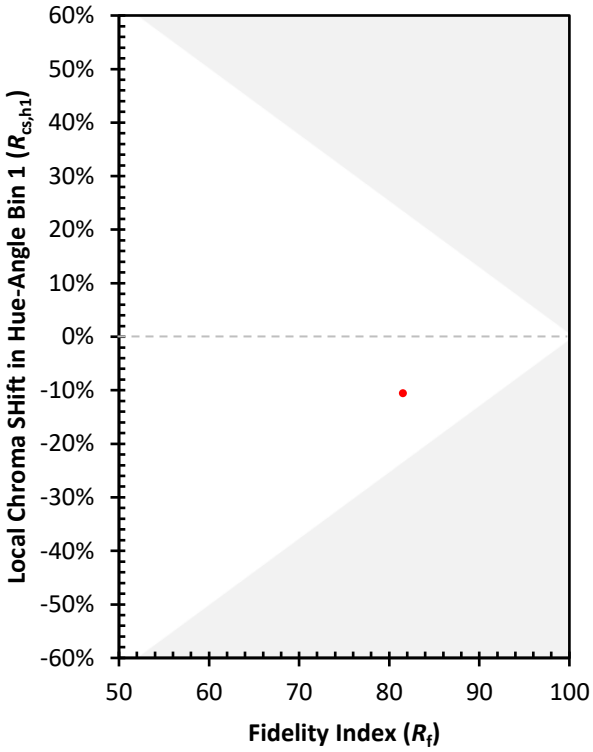
Measure Comparisons





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