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: P638960

Luminaire Tested: GWS-SA4F-830-U-AFL-W

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:	P638960
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-45)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-AFL-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	27523.8 lumens
Efficiency:	N/A
Efficacy:	122.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	225.3
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: P638960
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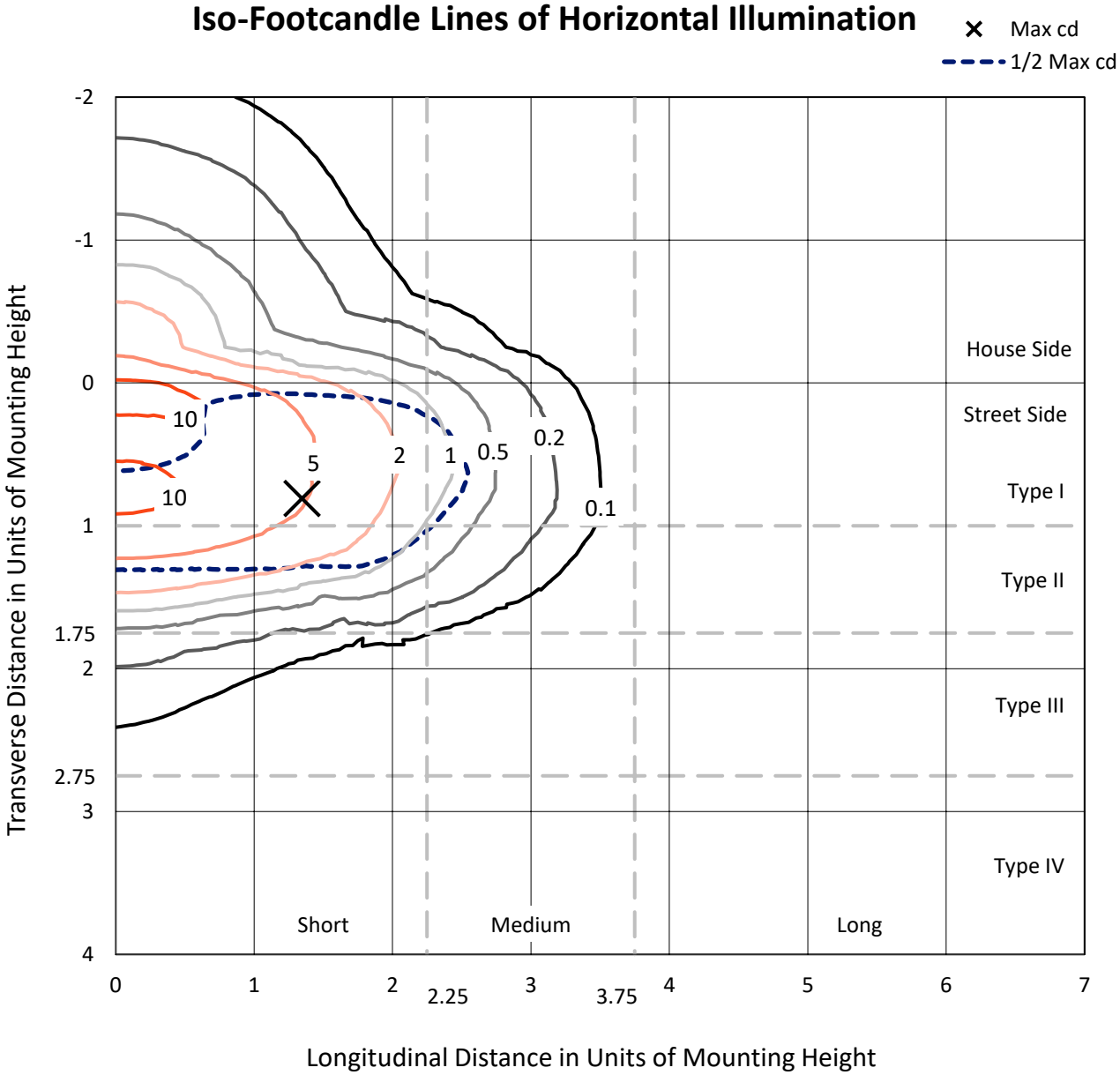
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc
Type II - Short - N/A

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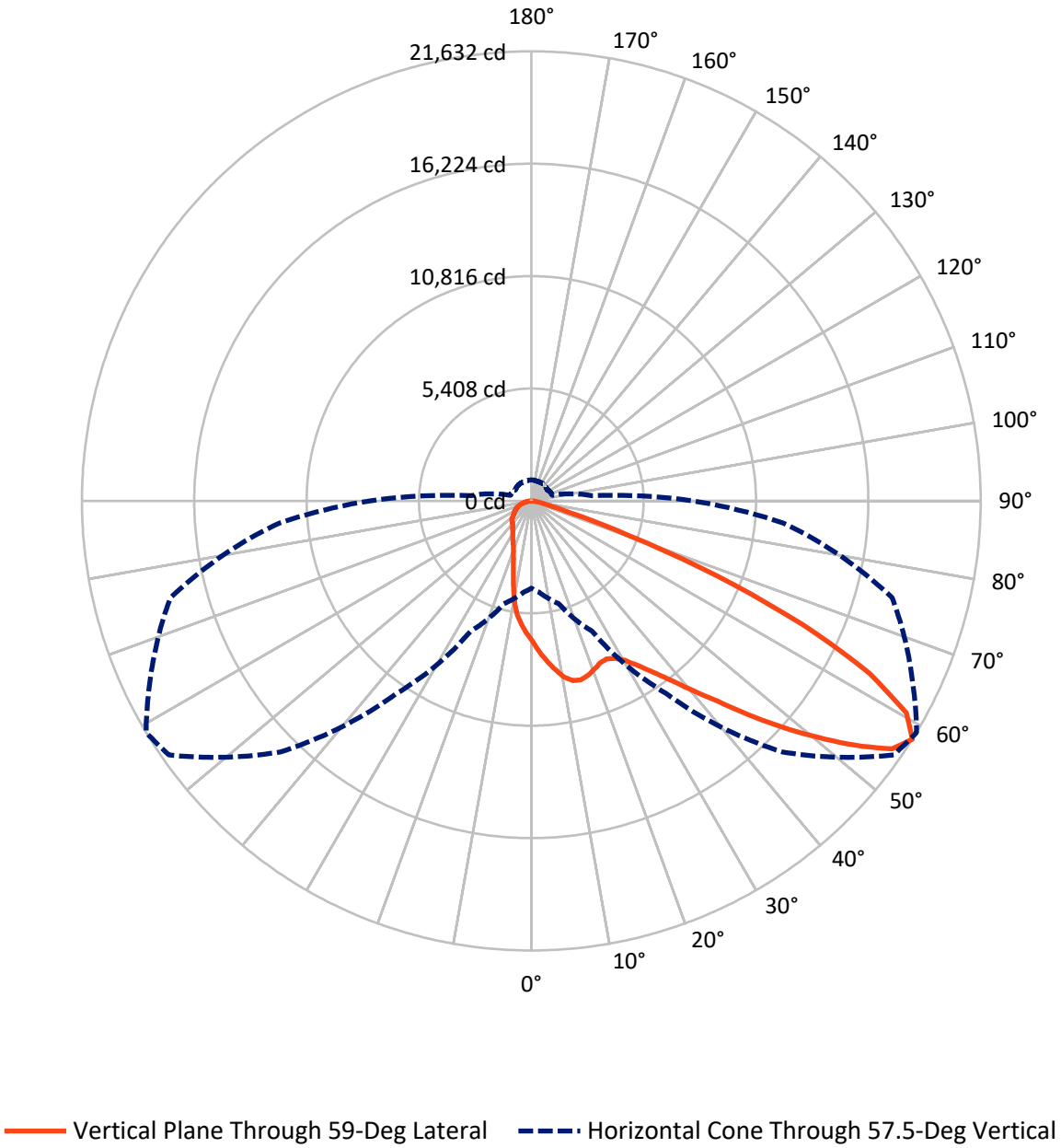
Luminous Intensity Polar Plot



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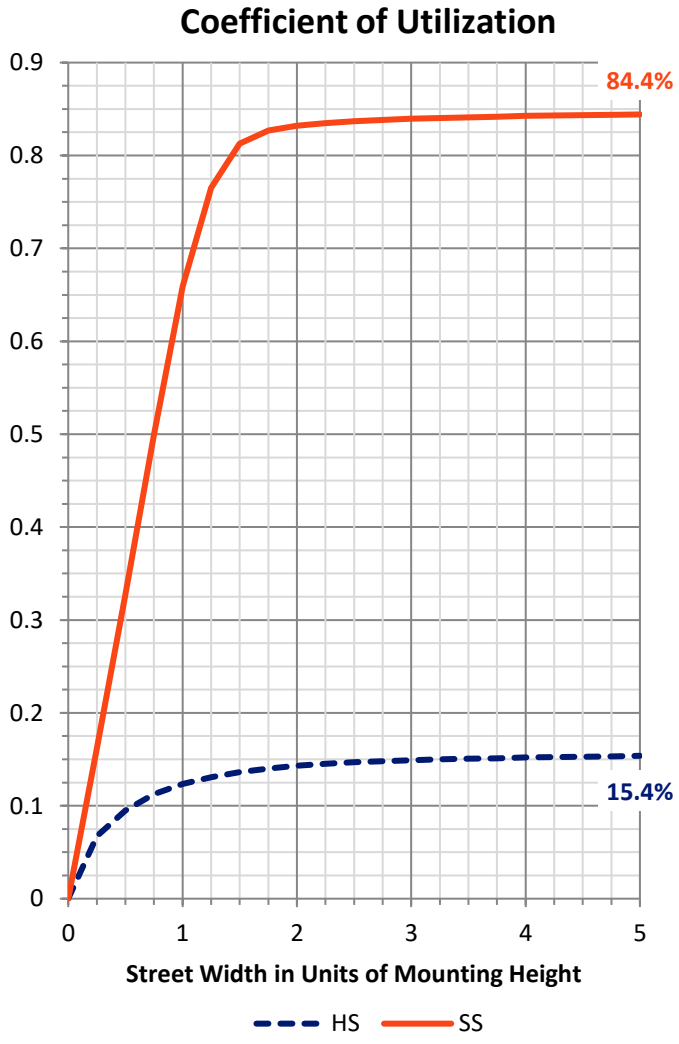
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4271.6	0.0	4271.6
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	23252.2	0.0	23252.2
	% Fixture	84.5	0.0	84.5
Total	Lumens	27523.8	0.0	27523.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	627.4	2.3
10°-20°	1589.7	5.8
20°-30°	2577.0	9.4
30°-40°	4145.4	15.1
40°-50°	6437.4	23.4
50°-60°	6933.9	25.2
60°-70°	4024.2	14.6
70°-80°	1050.5	3.8
80°-90°	138.4	0.5
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°	27523.8	100.0
0°-180°	27523.8	100.0



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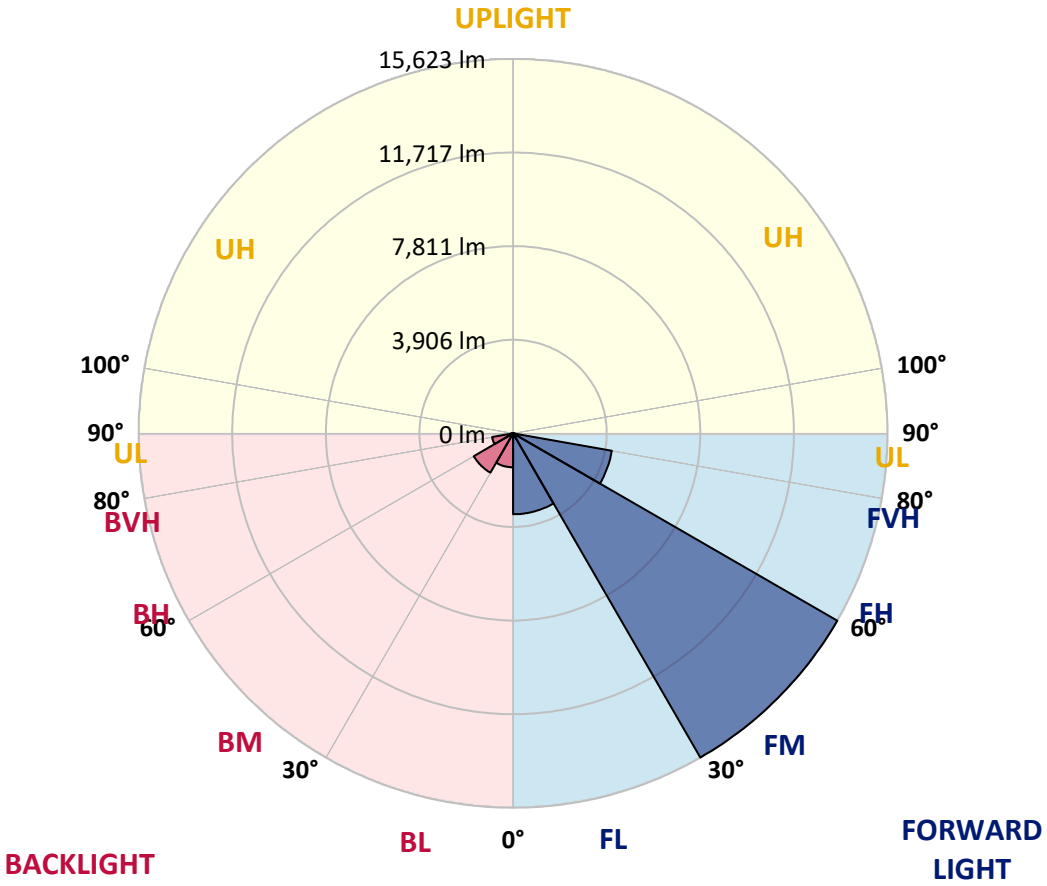
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3376.9	12.3			
FM	(30°-60°)	15622.8	56.8			
FH	(60°-80°)	4186.3	15.2			G2/5000
FVH	(80°-90°)	66.3	0.2			G1/100
BL	(0°-30°)	1417.1	5.1	B3/2500		
BM	(30°-60°)	1893.8	6.9	B2/2500		
BH	(60°-80°)	888.5	3.2	B2/1000		G2/1000
BVH	(80°-90°)	72.1	0.3			G1/100
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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Scaled Data Report

REPORT NUMBER: P638960
CATALOG NUMBER: GWS-SA4F-830-U-AFL-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5
2.5°	7663.4	7599.4	7644.0	7564.5	7531.6	7444.4	7332.0	7256.5	7140.2	6989.1	6857.3
5°	8424.8	8380.3	8390.0	8304.7	8229.1	8083.8	7853.2	7725.4	7527.7	7223.5	6940.6
7.5°	8401.6	8453.9	8483.0	8556.6	8577.9	8564.4	8357.0	8178.8	7961.8	7504.5	7078.2
10°	7531.6	7630.4	7719.5	7971.4	8277.6	8665.1	8713.6	8607.0	8388.0	7862.9	7242.9
12.5°	6584.1	6659.7	6739.1	7041.4	7510.3	8285.3	8810.4	8876.3	8789.1	8217.5	7428.9
15°	6119.1	6153.9	6229.5	6429.1	6803.0	7663.4	8641.9	8930.6	9087.5	8593.4	7638.2
17.5°	6099.7	6115.2	6152.0	6258.6	6518.2	7182.8	8337.7	8822.1	9322.0	8990.6	7882.3
20°	6500.8	6460.1	6436.8	6434.9	6562.8	7022.0	8043.1	8647.7	9432.4	9397.5	8143.9
22.5°	7056.9	7070.4	7020.1	6896.1	6880.6	7136.3	7895.9	8471.4	9465.4	9757.9	8386.1
25°	7845.5	7913.3	7764.1	7527.7	7411.5	7467.7	7986.9	8417.1	9461.5	10058.3	8537.2
27.5°	8765.9	8818.2	8667.1	8357.0	8116.8	7981.1	8258.2	8577.9	9494.4	10317.9	8628.3
30°	9814.1	9831.6	9624.2	9298.7	8948.0	8657.4	8709.7	8909.3	9663.0	10658.9	8734.9
32.5°	11094.9	11168.5	10854.6	10339.2	9849.0	9477.0	9316.2	9444.0	10027.3	11062.0	8899.6
35°	12720.6	12745.8	12346.6	11608.4	10914.7	10399.3	10062.2	10130.0	10581.4	11625.8	9147.6
37.5°	14253.3	14278.5	13854.1	13168.2	12176.1	11470.8	10982.5	10951.5	11290.6	12422.2	9552.6
40°	15226.0	15297.6	15107.8	14677.6	13730.1	12778.7	12116.0	12009.5	12220.7	13396.8	10116.4
42.5°	15749.1	15780.1	15776.2	15832.4	15268.6	14323.0	13394.9	13181.7	13323.2	14449.0	10686.1
45°	15753.0	15830.5	16037.8	16578.4	16603.6	16014.6	15010.9	14677.6	14547.8	15508.9	11280.9
47.5°	15047.7	15131.0	15700.7	16764.4	17549.2	17682.9	16946.6	16278.1	15731.7	16421.5	11769.2
50°	12912.4	13121.7	14206.8	16088.2	17735.2	19019.9	18793.1	17886.3	16783.8	17126.8	12075.4
52.5°	11058.1	11050.3	11718.8	14177.7	16958.2	19608.9	20579.6	19541.1	17824.3	17574.4	12152.9
55°	8097.4	8142.0	8825.9	10843.0	14884.9	19039.2	21562.0	21064.1	19017.9	17812.7	12121.9
57.5°	4198.9	4419.8	5121.2	6919.3	11310.0	17078.3	21300.5	21631.8	20230.9	17981.3	12162.6
60°	2121.7	2079.1	2331.0	3303.7	6553.1	13338.7	19688.3	20744.3	20449.8	18113.0	12187.7
62.5°	1416.4	1404.8	1335.0	1530.7	2677.8	7899.7	16783.8	18264.2	18928.8	17803.0	11866.1
65°	1226.5	1203.3	1075.4	1067.6	1300.2	3276.5	12302.1	14357.9	15644.5	16425.4	11096.9
67.5°	1104.5	1069.6	939.8	875.8	933.9	1439.7	6932.9	9630.1	11552.2	13890.9	9411.1
70°	986.3	968.8	839.0	746.0	740.2	877.7	2553.8	4970.0	7068.5	9477.0	6880.6
72.5°	883.6	852.6	742.1	653.0	608.4	622.0	1108.3	1914.4	3658.3	5911.7	4115.5
75°	765.4	742.1	645.2	556.1	501.8	455.3	676.2	885.5	1668.3	2809.6	1943.5
77.5°	591.0	575.5	509.6	441.8	410.8	339.1	410.8	558.0	771.2	1183.9	1011.4
80°	343.0	352.7	379.8	344.9	302.3	242.2	267.4	321.6	463.1	641.4	573.5
82.5°	172.4	184.1	246.1	199.6	180.2	141.4	158.9	189.9	242.2	354.6	224.8
85°	13.6	13.6	44.6	50.4	62.0	50.4	63.9	77.5	110.4	141.4	75.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.8	9.7	17.4	32.9	21.3
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: P638960
CATALOG NUMBER: GWS-SA4F-830-U-AFL-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5	6756.5
2.5°	6768.2	6669.3	6551.2	6454.3	6305.1	6225.6	6124.9	6000.9	5950.5	5927.2	5913.7
5°	6781.7	6607.3	6355.5	6122.9	5865.2	5661.8	5435.1	5198.7	5063.0	5030.1	5006.9
7.5°	6832.1	6588.0	6186.9	5803.2	5324.6	4880.9	4448.8	4020.6	3801.6	3718.3	3710.6
10°	6901.9	6580.2	6016.4	5378.9	4570.9	3869.5	3363.7	3028.5	2887.1	2840.6	2825.1
12.5°	6989.1	6574.4	5791.6	4789.8	3700.9	3038.2	2749.5	2695.3	2714.6	2710.8	2710.8
15°	7099.5	6582.2	5520.3	4123.3	2993.7	2637.1	2642.9	2706.9	2766.9	2776.6	2776.6
17.5°	7219.6	6574.4	5127.0	3454.8	2569.3	2542.2	2631.3	2720.4	2774.7	2782.4	2782.4
20°	7349.5	6537.6	4631.0	2825.1	2383.3	2482.1	2579.0	2648.8	2681.7	2689.4	2689.4
22.5°	7427.0	6433.0	4092.3	2391.0	2265.1	2387.2	2451.1	2522.8	2526.7	2464.7	2462.7
25°	7415.3	6237.3	3478.1	2112.0	2139.2	2245.7	2327.1	2276.7	2214.7	2179.8	2174.0
27.5°	7341.7	5942.7	2852.2	1900.8	1990.0	2110.1	2084.9	2042.3	2026.8	1988.0	1984.1
30°	7248.7	5580.4	2290.3	1736.1	1834.9	1945.4	1906.6	1902.8	1887.3	1844.6	1844.6
32.5°	7159.6	5206.4	1865.9	1614.1	1736.1	1743.9	1798.1	1802.0	1794.3	1720.6	1712.9
35°	7134.4	4832.5	1579.2	1517.2	1639.2	1635.4	1712.9	1710.9	1577.2	1474.5	1472.6
37.5°	7209.9	4452.7	1408.7	1437.7	1505.5	1555.9	1617.9	1505.5	1461.0	1399.0	1395.1
40°	7370.8	4102.0	1321.5	1391.2	1420.3	1493.9	1397.0	1404.8	1393.2	1346.7	1340.8
42.5°	7583.9	3803.6	1273.0	1375.7	1371.8	1391.2	1284.7	1315.7	1333.1	1298.2	1292.4
45°	7789.3	3543.9	1247.8	1317.6	1337.0	1224.6	1203.3	1232.3	1259.5	1245.9	1240.1
47.5°	7940.4	3319.2	1234.3	1238.2	1292.4	1168.4	1133.5	1147.1	1180.0	1185.8	1183.9
50°	7986.9	3127.3	1218.8	1172.3	1160.6	1112.2	1085.1	1081.2	1120.0	1147.1	1151.0
52.5°	7897.8	2956.8	1178.1	1114.1	1058.0	1065.7	1056.0	1036.6	1075.4	1112.2	1116.1
55°	7766.1	2860.0	1114.1	1058.0	992.1	1023.1	1026.9	1009.5	1034.7	1059.9	1059.9
57.5°	*7775.7*	*2916.1*	*1052.1*	*1005.6*	*933.9*	*974.6*	*995.9*	*988.2*	*988.2*	*1007.6*	*1009.5*
60°	7839.7	2997.5	1011.4	939.8	875.8	918.4	966.9	959.1	941.7	966.9	966.9
62.5°	7655.6	2889.0	984.3	875.8	813.8	864.2	922.3	918.4	899.1	939.8	943.6
65°	7113.1	2598.4	953.3	796.4	751.8	809.9	860.3	873.9	856.4	910.7	920.4
67.5°	5962.1	2185.7	893.3	720.8	689.8	744.1	792.5	811.9	798.3	862.2	870.0
70°	4444.9	1769.1	798.3	637.5	614.2	662.7	707.2	715.0	716.9	792.5	800.2
72.5°	2834.8	1375.7	672.4	544.5	527.0	563.9	596.8	627.8	641.4	713.1	711.1
75°	1581.1	1023.1	540.6	461.2	430.2	459.2	498.0	534.8	573.5	678.2	689.8
77.5°	910.7	718.9	428.2	370.1	333.3	364.3	397.2	449.5	565.8	656.9	645.2
80°	513.5	467.0	323.6	271.3	248.0	271.3	296.5	395.3	445.7	484.4	490.2
82.5°	240.3	261.6	220.9	166.6	166.6	182.1	205.4	306.1	337.1	275.1	240.3
85°	87.2	118.2	108.5	85.3	75.6	73.6	127.9	174.4	108.5	96.9	83.3
87.5°	23.3	32.9	31.0	21.3	11.6	9.7	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

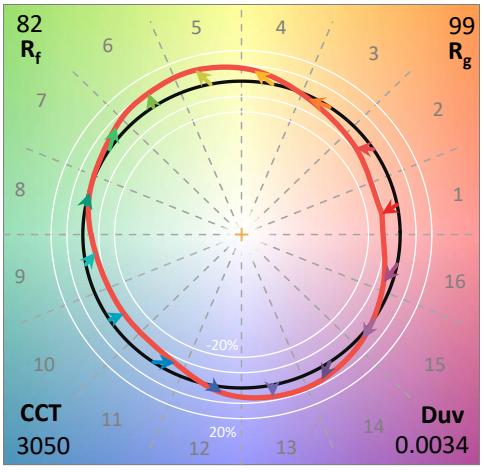
Test Information

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

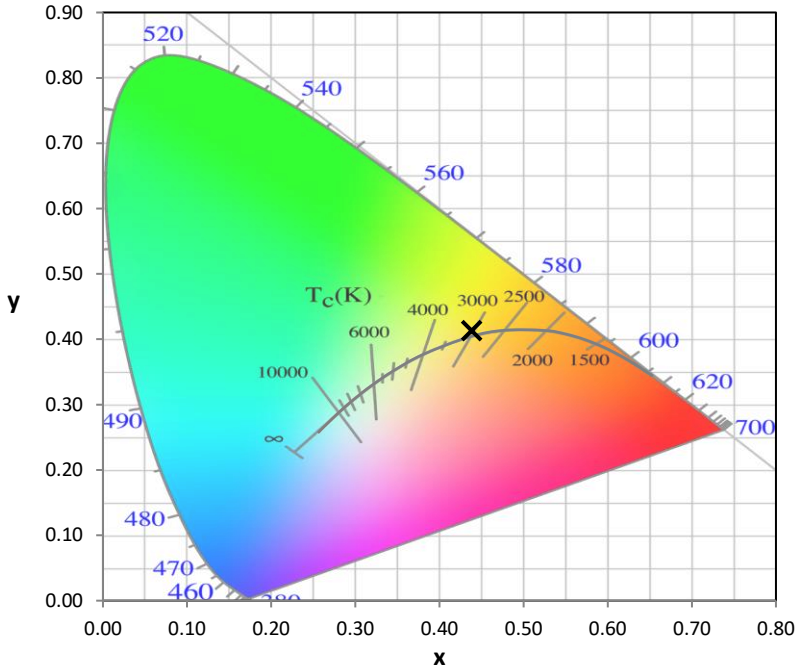
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

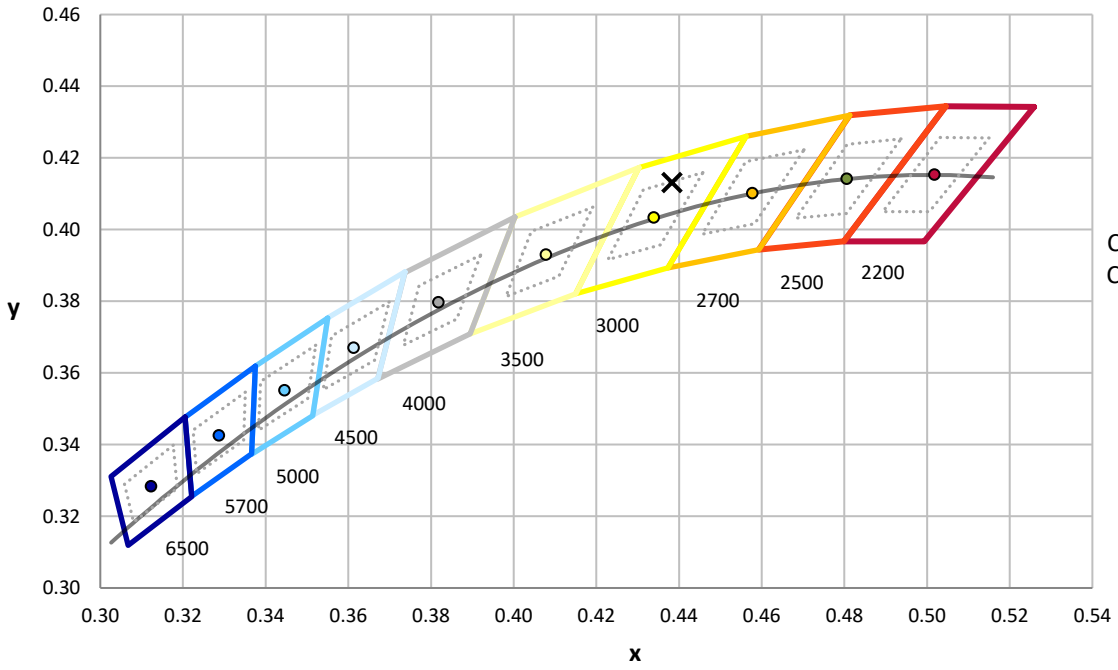
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

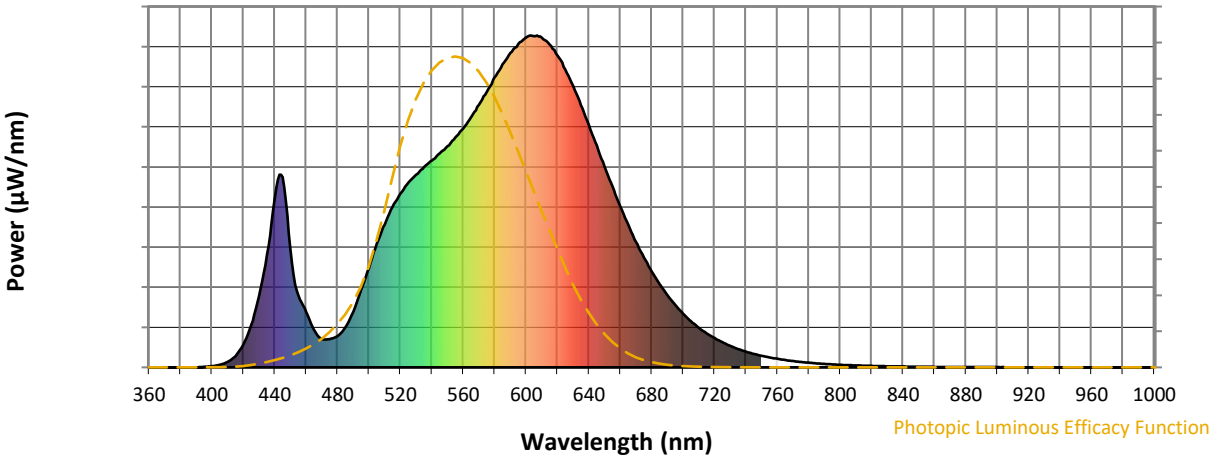


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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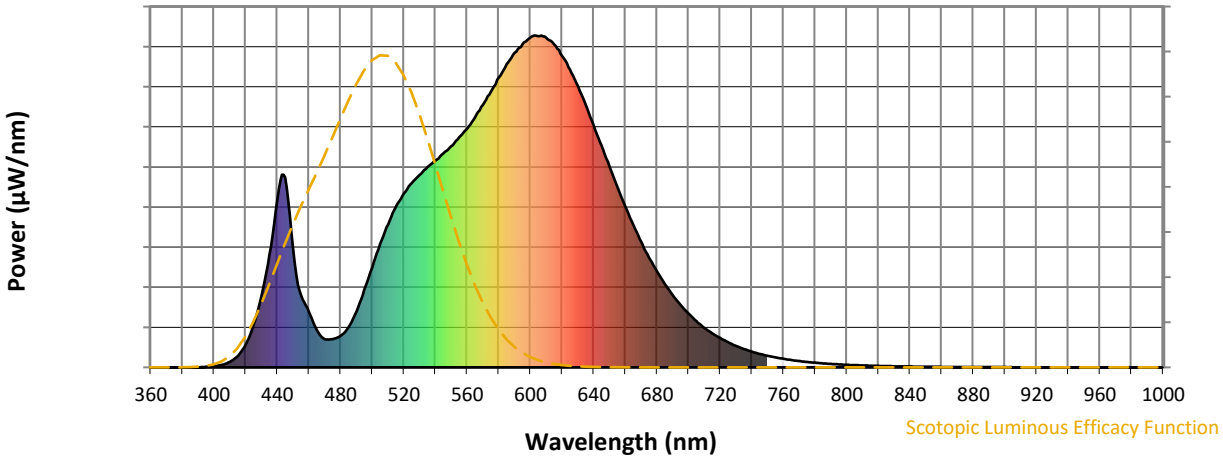
Scotopic Flux vs. Wavelength



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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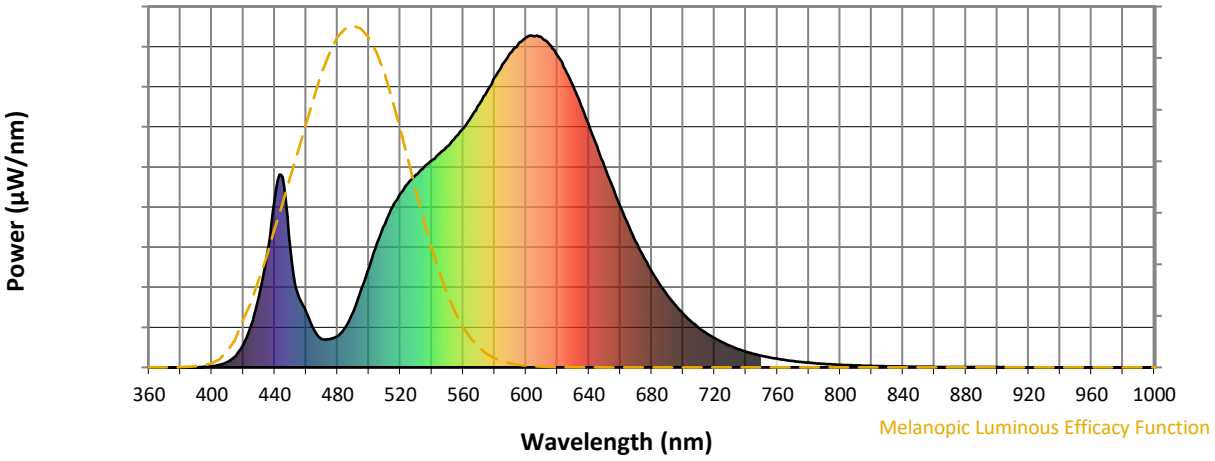
Melanopic Flux vs. Wavelength



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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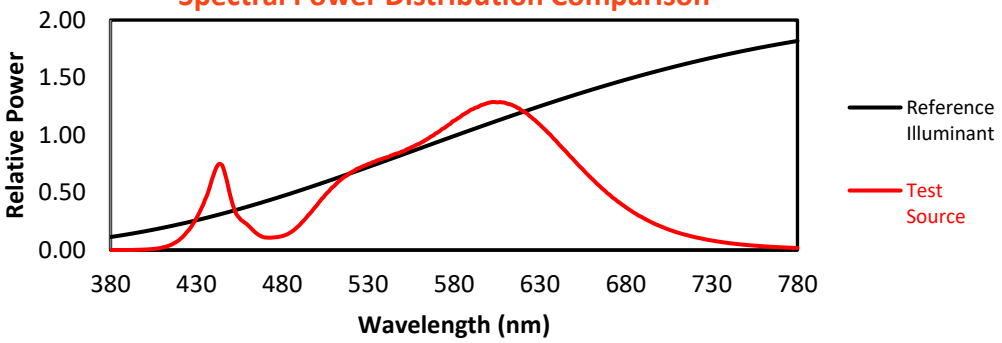
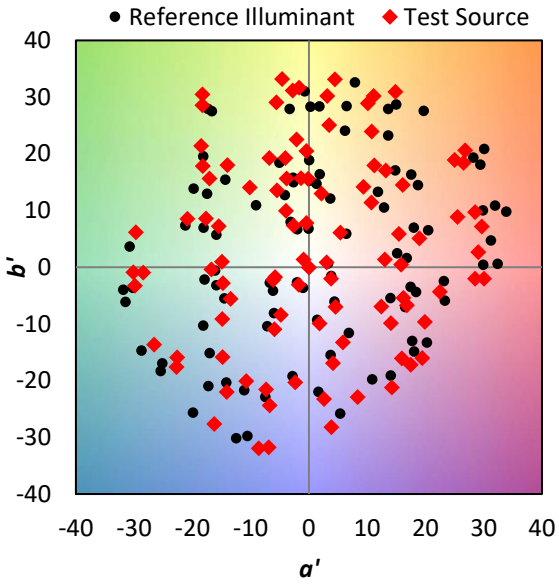
Summary

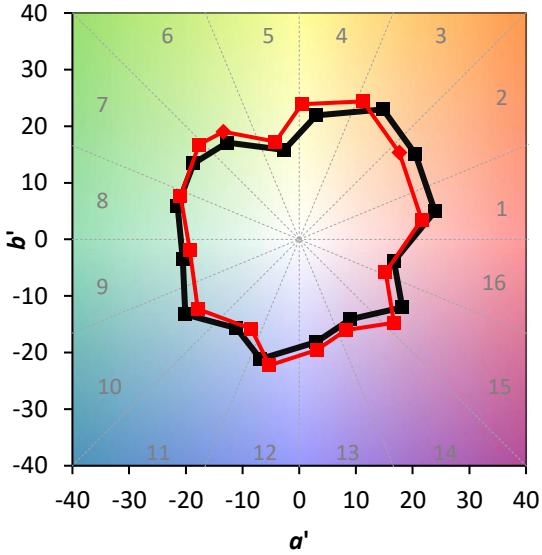
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

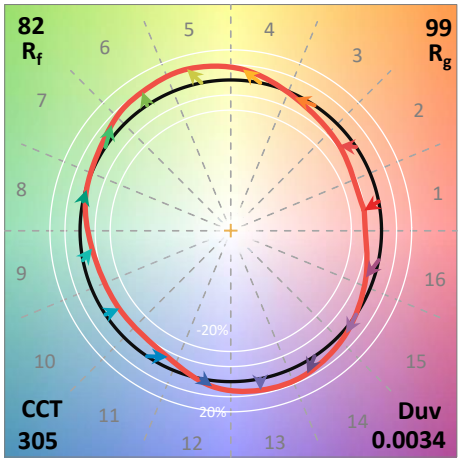
Spectral Power Distribution Comparison

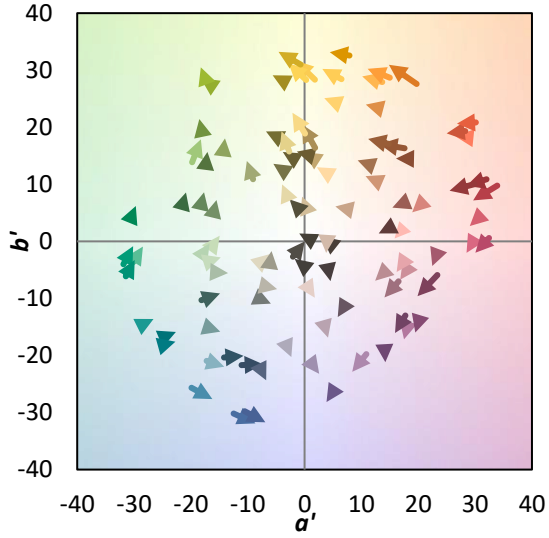


Color Vector Graphics









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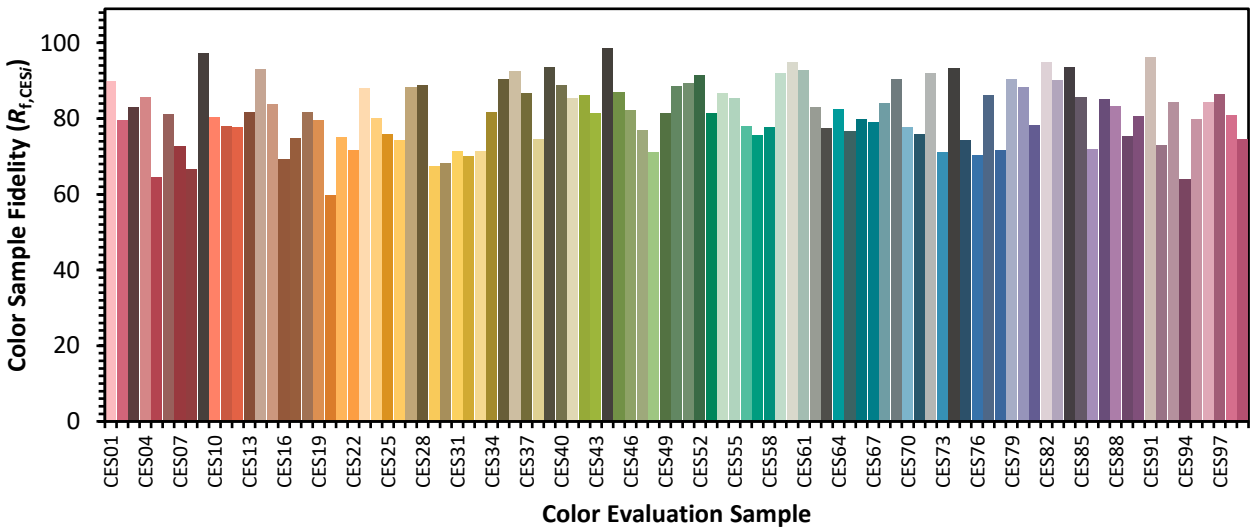
Individual Sample Fidelity Index ($R_{f,i}$)

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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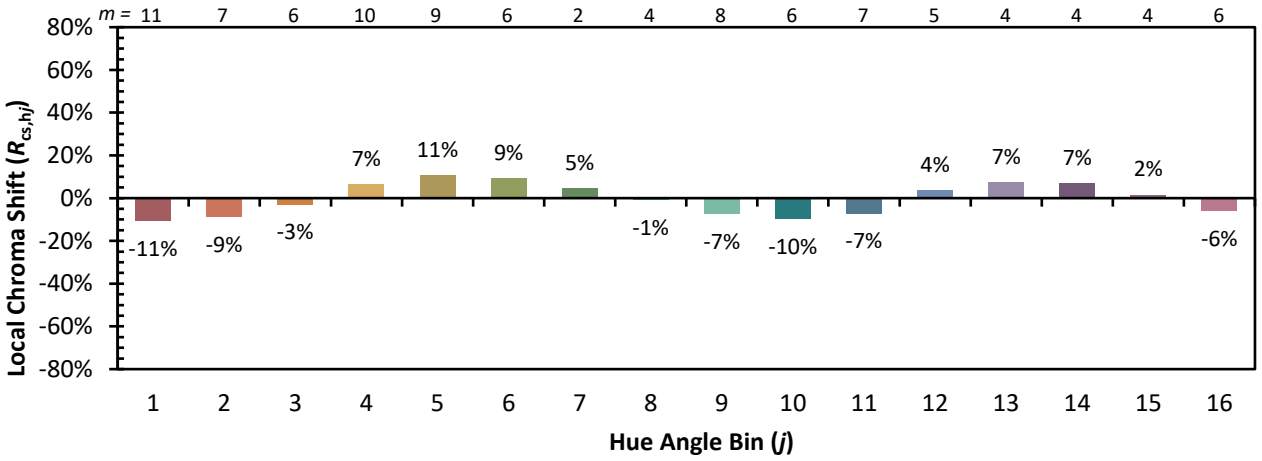
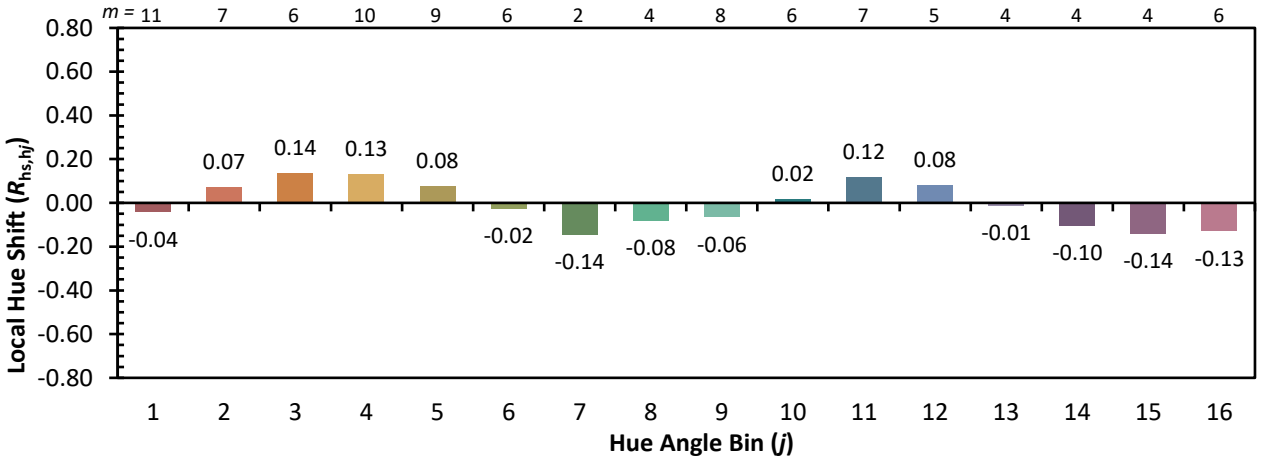
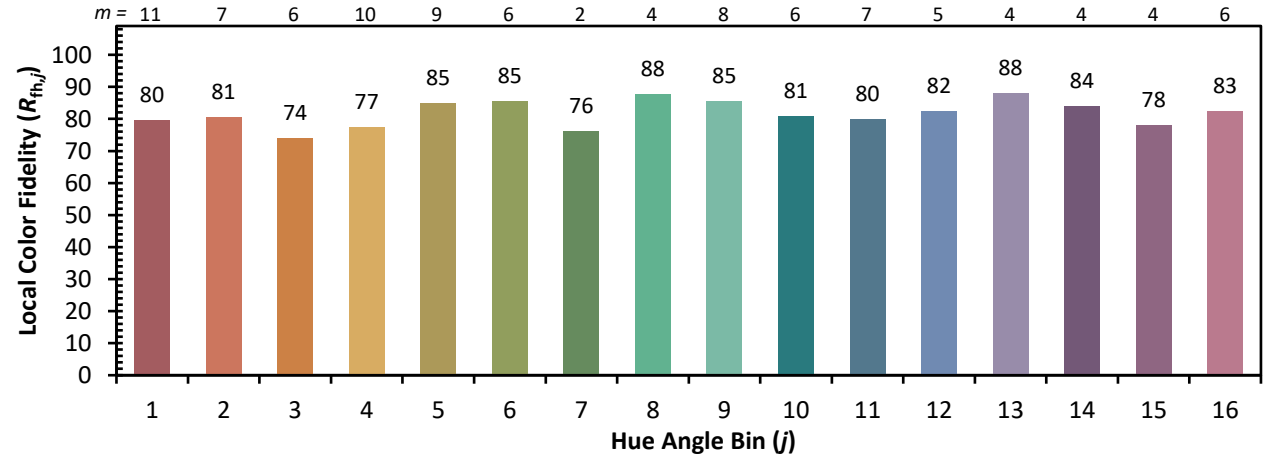
Color Rendition by Hue-Angle Bin







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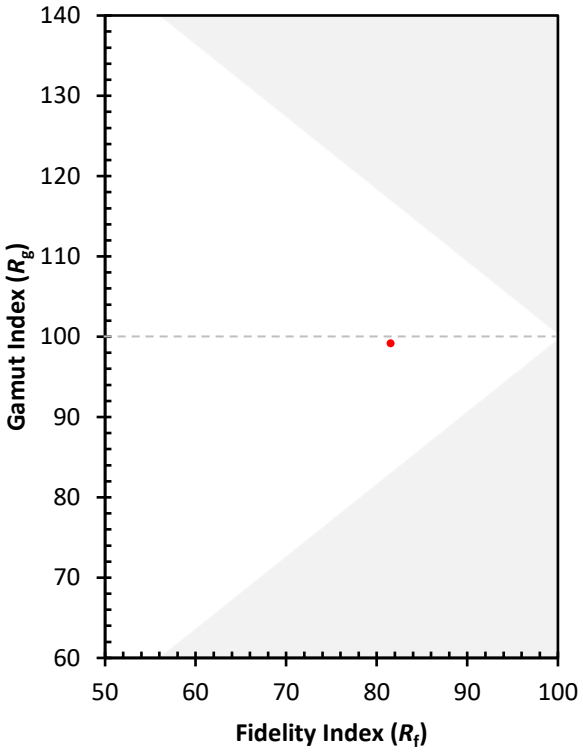
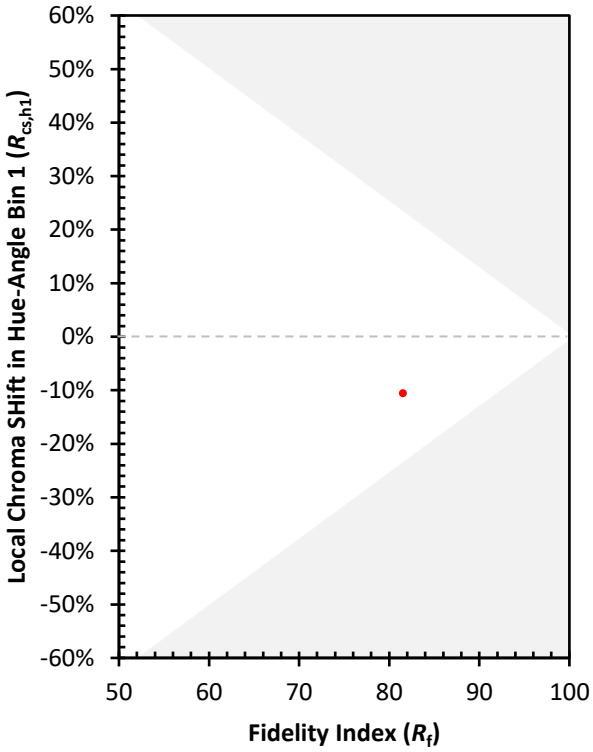
Measure Comparisons





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