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: P638987

Luminaire Tested: GWS-SA4F-830-U-T2R-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:	P638987
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-T2R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18118.6 lumens
Efficiency:	N/A
Efficacy:	80.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

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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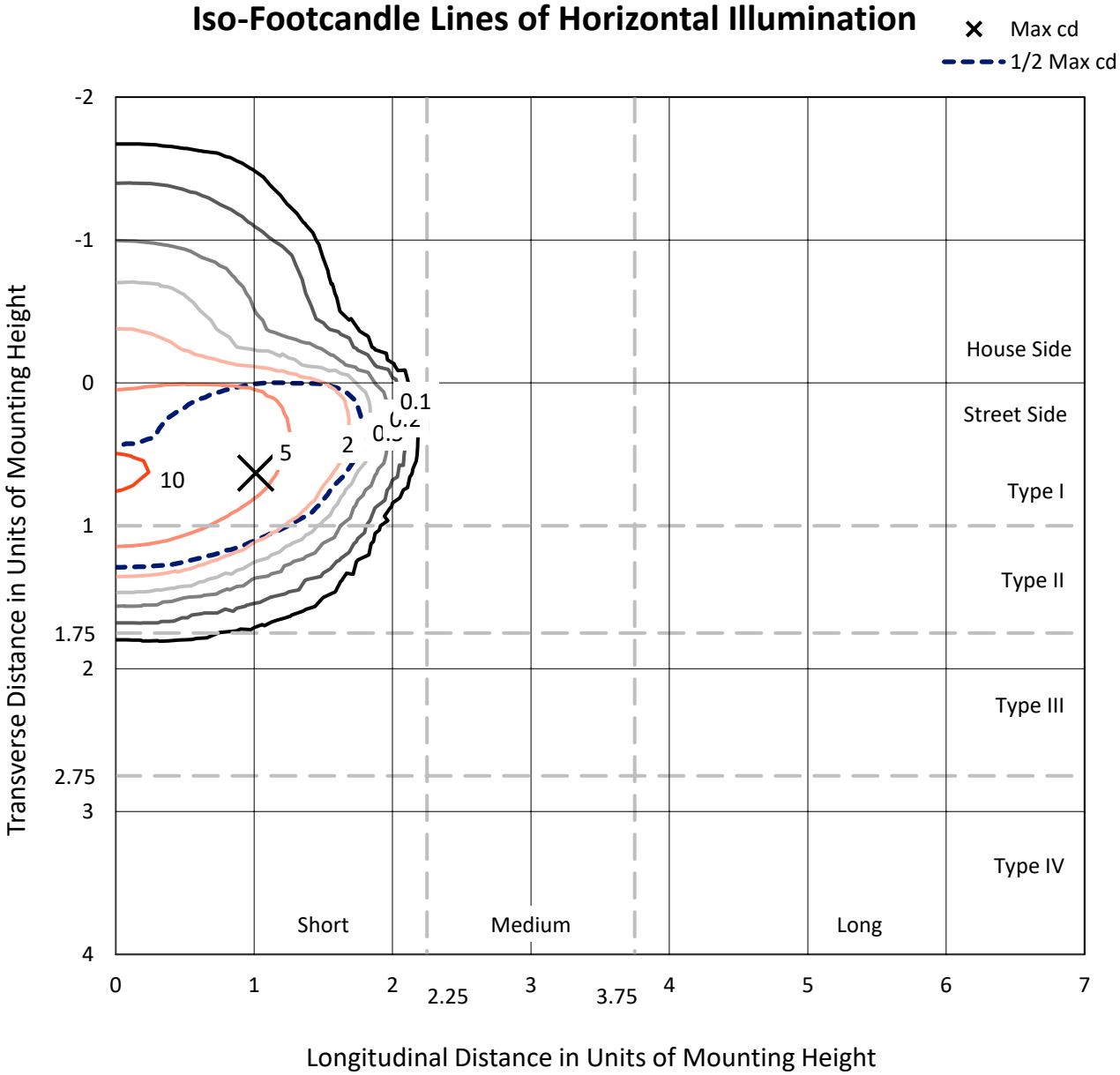
Scaled Data Report

REPORT NUMBER: P638987
CATALOG NUMBER: GWS-SA4F-830-U-T2R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
Type II - Short - N/A

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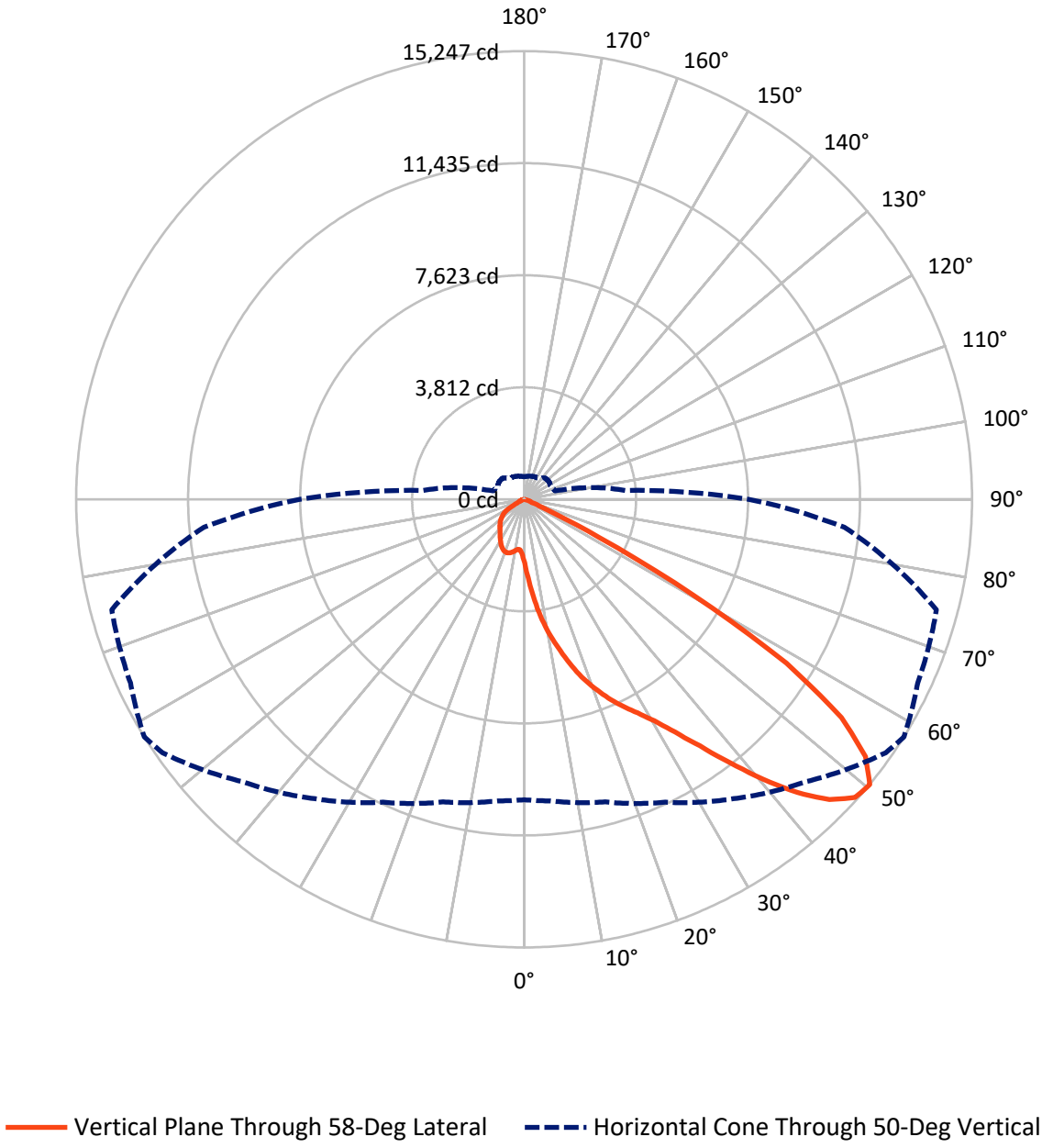
Luminous Intensity Polar Plot



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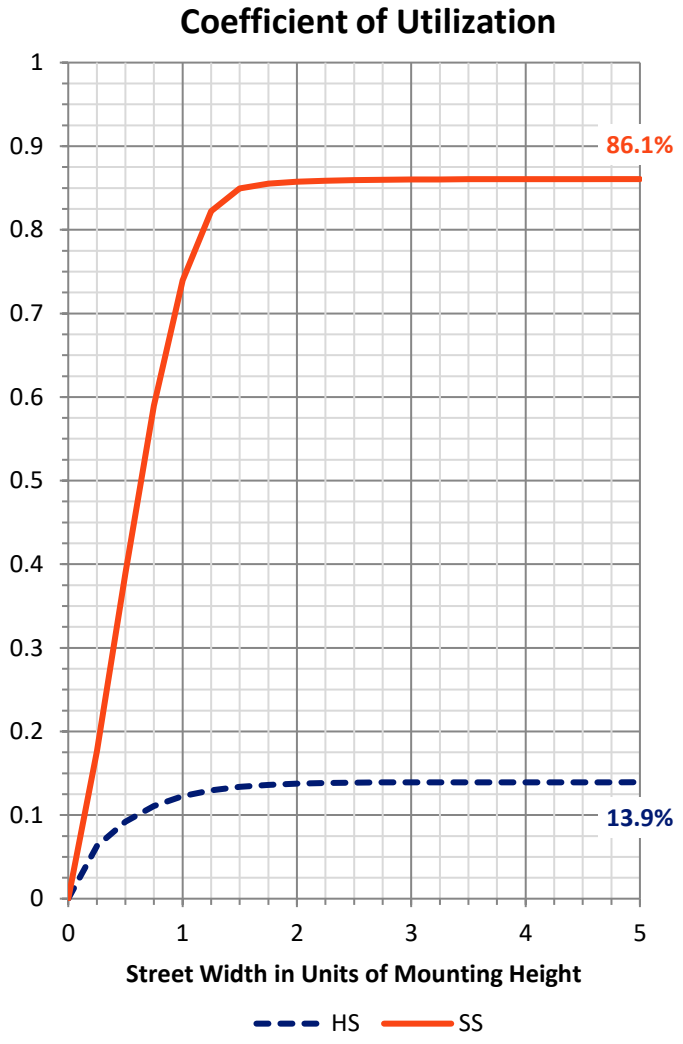
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2537.8	0.0	2537.8
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	15580.8	0.0	15580.8
	% Fixture	86.0	0.0	86.0
Total	Lumens	18118.6	0.0	18118.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.1	1.5
10°-20°	1061.4	5.9
20°-30°	2147.8	11.9
30°-40°	3799.6	21.0
40°-50°	5539.1	30.6
50°-60°	4439.7	24.5
60°-70°	799.9	4.4
70°-80°	63.0	0.3
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°	18118.6	100.0
0°-180°	18118.6	100.0



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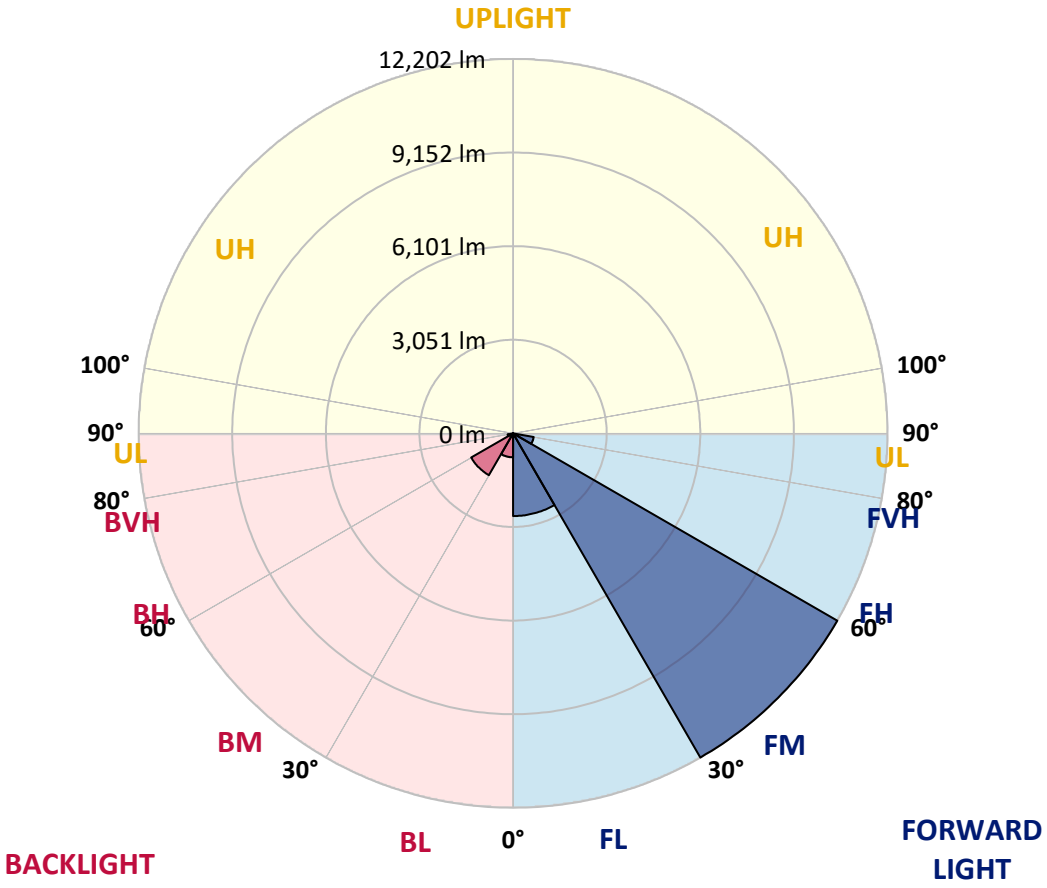
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2696.0	14.9			
FM	(30°-60°)	12202.3	67.3			
FH	(60°-80°)	682.5	3.8			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	781.3	4.3	B2/1000		
BM	(30°-60°)	1576.1	8.7	B2/2500		
BH	(60°-80°)	180.4	1.0	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: P638987
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2
2.5°	3202.8	3152.4	3123.3	3100.1	2997.4	2834.6	2728.1	2671.9	2578.9	2421.9	2286.3
5°	4179.3	4142.5	4074.7	4028.2	3896.4	3665.8	3427.5	3332.6	3121.4	2766.8	2449.1
7.5°	4826.4	4799.3	4774.1	4712.1	4588.1	4378.8	4115.3	4016.5	3691.0	3187.3	2666.1
10°	5324.4	5303.1	5274.0	5272.1	5175.2	4987.2	4729.5	4626.9	4274.2	3644.5	2921.8
12.5°	5762.3	5744.8	5739.0	5793.3	5731.3	5591.7	5312.7	5184.9	4810.9	4111.5	3204.7
15°	6062.6	6058.7	6083.9	6190.5	6225.3	6161.4	5926.9	5789.4	5359.2	4580.4	3516.6
17.5°	6200.1	6211.8	6260.2	6444.3	6599.3	6653.5	6473.3	6357.1	5903.7	5055.0	3849.9
20°	6434.6	6430.7	6459.8	6634.1	6824.0	7017.8	6963.5	6864.7	6454.0	5556.9	4220.0
22.5°	7095.3	7039.1	6977.1	7004.2	7072.0	7298.7	7399.5	7349.1	7021.7	6072.3	4601.7
25°	8110.6	8052.4	7852.9	7659.1	7531.2	7633.9	7771.5	7796.7	7585.5	6601.2	5000.8
27.5°	9187.8	9135.5	8910.8	8620.1	8253.9	8075.7	8178.4	8228.7	8139.6	7230.9	5425.1
30°	10197.3	10127.5	9881.5	9521.1	9096.8	8823.6	8707.3	8742.2	8794.5	7976.9	5923.1
32.5°	11073.1	11020.7	10726.2	10346.5	9937.7	9652.8	9381.6	9439.7	9567.6	8889.4	6560.5
35°	11815.1	11788.0	11476.1	11098.2	10666.2	10520.9	10288.4	10300.0	10427.9	9991.9	7337.5
37.5°	12460.3	12413.8	12131.0	11780.3	11437.3	11414.1	11350.1	11355.9	11421.8	11276.5	8230.7
40°	12867.2	12824.6	12623.1	12406.1	12162.0	12165.8	12497.2	12522.3	12446.8	12537.8	9174.3
42.5°	13020.3	12989.3	12880.8	12882.7	12857.5	12971.9	13593.8	13640.3	13369.0	13527.9	9980.3
45°	12754.8	12741.3	12749.0	13028.0	13330.3	13682.9	14490.9	14572.3	14188.6	14184.8	10610.0
47.5°	11898.5	11871.3	12098.0	12572.7	13272.2	13958.1	15033.4	15159.3	14762.1	14560.6	11005.2
50°	10220.5	10298.0	10656.5	11369.5	12433.2	13580.2	15027.6	15246.5	14783.5	14527.7	10939.4
52.5°	7403.4	7387.9	8172.6	9153.0	10447.2	12371.2	14229.3	14549.0	14266.1	14204.1	10792.1
55°	4028.2	4169.6	4698.5	5996.7	7612.6	10083.0	12406.1	13103.6	13431.0	14085.9	11057.6
57.5°	1480.3	1542.3	1873.6	2792.0	4030.1	6269.9	9476.5	10528.6	11540.0	13756.6	11013.0
60°	596.8	608.4	740.1	1026.9	1693.4	3191.1	5684.8	6618.6	7571.9	10530.5	8451.6
62.5°	434.0	449.5	501.8	600.6	856.4	1395.0	2451.0	2850.1	3115.6	5215.9	4163.8
65°	350.7	362.3	404.9	449.5	565.8	749.8	790.5	761.5	757.6	1348.5	955.2
67.5°	290.6	302.3	333.3	364.3	406.9	373.9	271.3	284.8	232.5	230.6	187.9
70°	213.1	226.7	257.7	290.6	244.1	100.8	156.9	232.5	176.3	147.3	143.4
72.5°	160.8	170.5	199.6	189.9	71.7	38.8	104.6	168.6	135.6	108.5	106.6
75°	120.1	125.9	100.8	31.0	7.8	9.7	38.8	69.8	75.6	62.0	62.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.9	5.8	7.8	9.7	11.6
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: P638987
CATALOG NUMBER: GWS-SA4F-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2	2164.2
2.5°	2208.8	2127.4	2011.2	1914.3	1840.7	1769.0	1714.7	1660.5	1658.5	1631.4	1625.6
5°	2301.8	2154.5	1941.4	1788.4	1695.4	1639.2	1600.4	1581.0	1571.3	1561.7	1557.8
7.5°	2435.5	2224.3	1929.8	1767.0	1689.5	1652.7	1625.6	1614.0	1608.2	1600.4	1598.5
10°	2600.2	2325.1	1972.4	1807.7	1739.9	1705.0	1676.0	1658.5	1648.8	1635.3	1631.4
12.5°	2797.8	2449.1	2040.2	1875.5	1803.9	1757.4	1718.6	1693.4	1679.8	1662.4	1658.5
15°	3010.9	2582.7	2115.8	1937.5	1852.3	1792.2	1743.8	1705.0	1679.8	1658.5	1652.7
17.5°	3231.8	2718.4	2183.6	1980.2	1875.5	1803.9	1734.1	1681.8	1650.8	1623.7	1615.9
20°	3479.8	2857.9	2228.2	1987.9	1867.8	1772.9	1691.5	1625.6	1594.6	1557.8	1550.0
22.5°	3739.5	2987.7	2247.6	1970.5	1825.2	1714.7	1627.5	1559.7	1515.2	1476.4	1464.8
25°	3991.3	3103.9	2237.9	1922.0	1761.2	1633.3	1544.2	1474.5	1426.0	1387.3	1377.6
27.5°	4258.7	3200.8	2203.0	1850.4	1674.0	1544.2	1459.0	1398.9	1354.3	1311.7	1302.0
30°	4559.0	3289.9	2146.8	1763.2	1571.3	1453.2	1387.3	1346.6	1298.2	1253.6	1240.0
32.5°	4921.4	3369.4	2065.4	1658.5	1480.3	1373.7	1336.9	1305.9	1249.7	1203.2	1193.5
35°	5336.0	3435.3	1962.7	1550.0	1391.2	1323.3	1315.6	1274.9	1201.3	1147.0	1135.4
37.5°	5816.5	3499.2	1840.7	1443.5	1325.3	1300.1	1302.0	1232.3	1143.2	1077.3	1069.5
40°	6333.8	3563.1	1705.0	1350.5	1265.2	1286.5	1269.1	1170.3	1025.0	961.0	953.3
42.5°	6872.5	3632.9	1567.5	1263.3	1214.8	1234.2	1209.0	1046.3	941.6	908.7	904.8
45°	7358.8	3716.2	1418.3	1176.1	1164.5	1158.7	1116.0	947.5	902.9	879.6	877.7
47.5°	7709.5	3702.6	1259.4	1092.8	1110.2	1090.8	961.0	901.0	864.1	833.1	825.4
50°	*7645.5*	*3466.3*	*1094.7*	*999.8*	*1040.5*	*1023.0*	*864.1*	*846.7*	*813.8*	*780.8*	*769.2*
52.5°	7482.8	3144.6	951.3	901.0	964.9	924.2	798.3	780.8	751.8	709.1	695.6
55°	7570.0	2842.4	839.0	821.5	887.4	765.3	724.6	697.5	666.5	620.0	614.2
57.5°	7289.0	2319.2	674.3	685.9	784.7	653.0	635.5	592.9	540.6	509.6	505.7
60°	5045.4	1245.8	422.4	435.9	567.7	548.3	569.6	530.9	466.9	437.9	432.1
62.5°	2317.3	499.9	230.6	220.9	298.4	372.0	488.3	484.4	404.9	358.4	354.6
65°	561.9	228.6	164.7	155.0	168.6	222.8	317.8	381.7	327.4	273.2	267.4
67.5°	182.1	186.0	151.1	141.4	149.2	166.6	189.9	211.2	209.3	191.8	187.9
70°	145.3	168.6	139.5	127.9	127.9	133.7	127.9	102.7	89.1	96.9	100.8
72.5°	108.5	127.9	110.4	98.8	94.9	93.0	79.4	58.1	40.7	36.8	34.9
75°	63.9	71.7	67.8	58.1	54.3	48.4	38.8	25.2	13.6	9.7	5.8
77.5°	11.6	13.6	15.5	11.6	9.7	7.8	5.8	1.9	0.0	0.0	0.0
80°	0.0	1.9	1.9	1.9	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

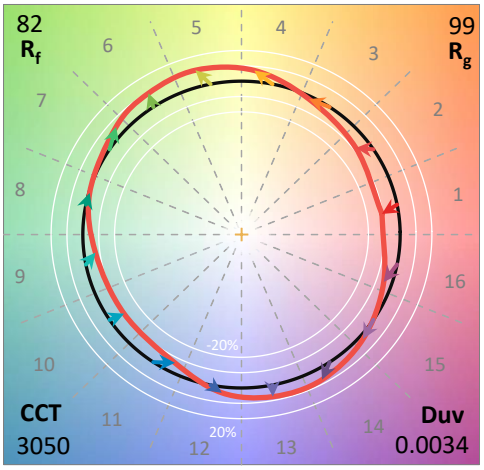
Test Information

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

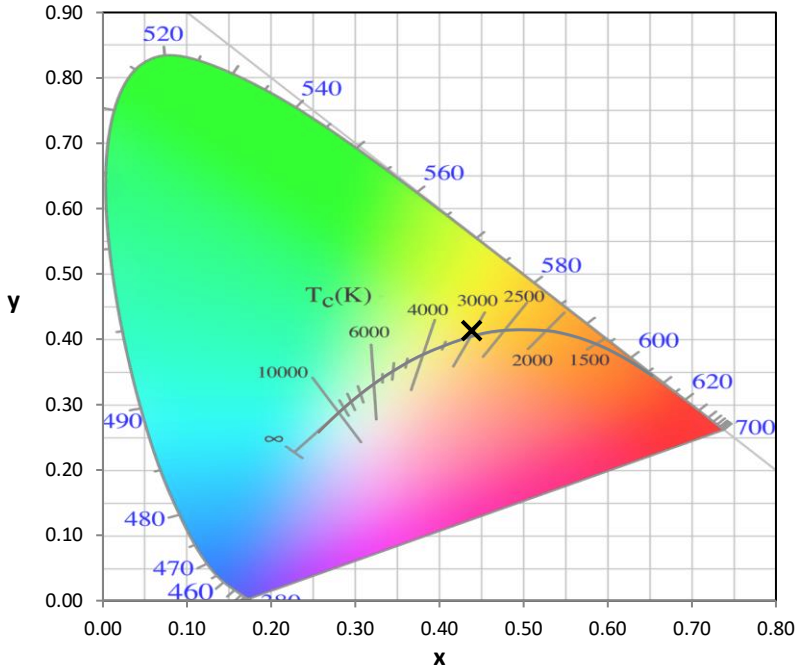
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

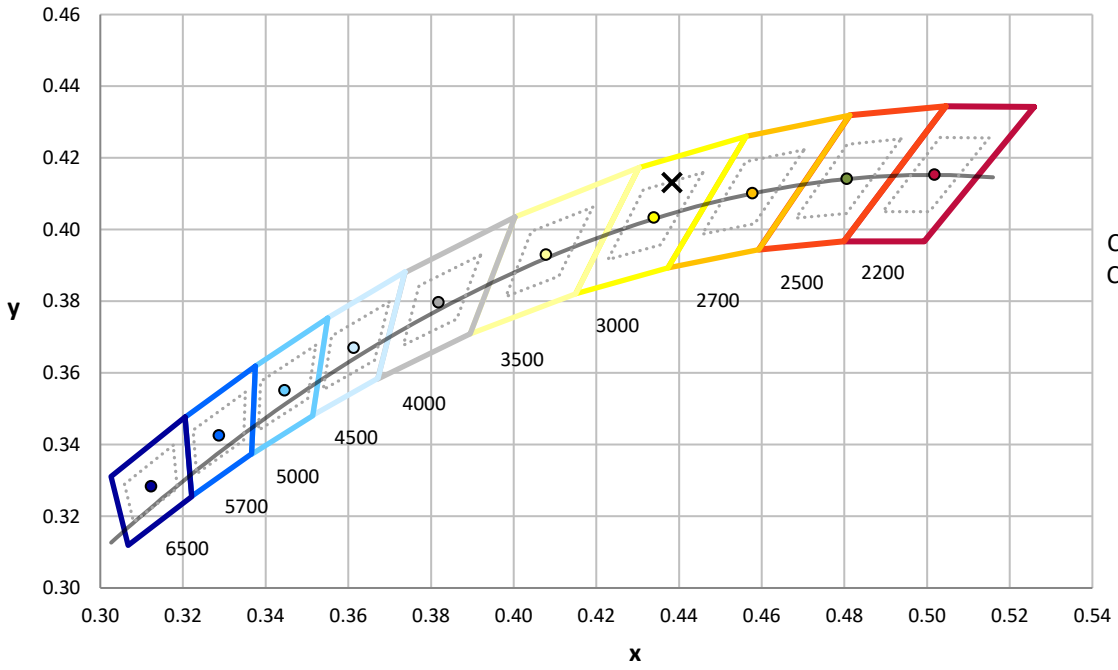
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

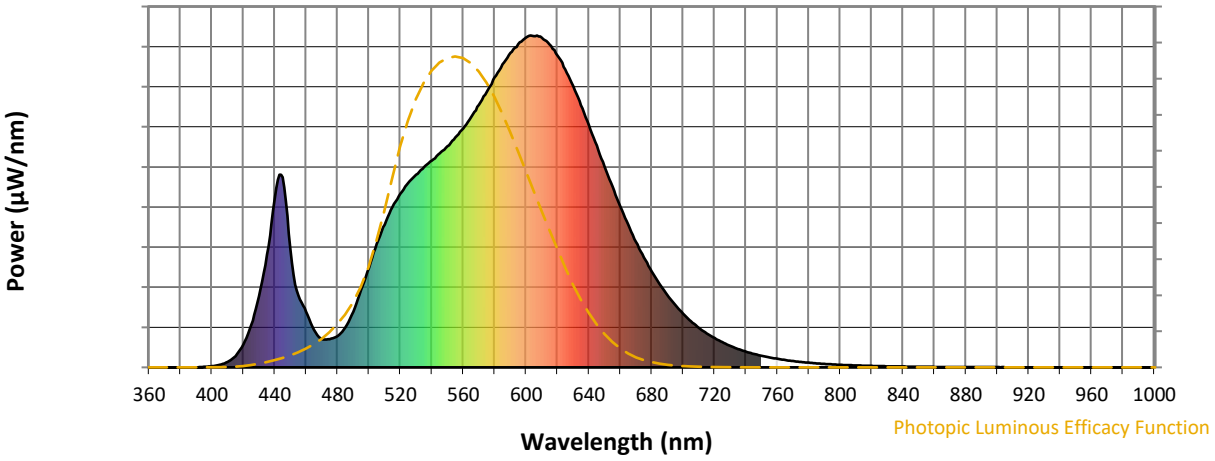


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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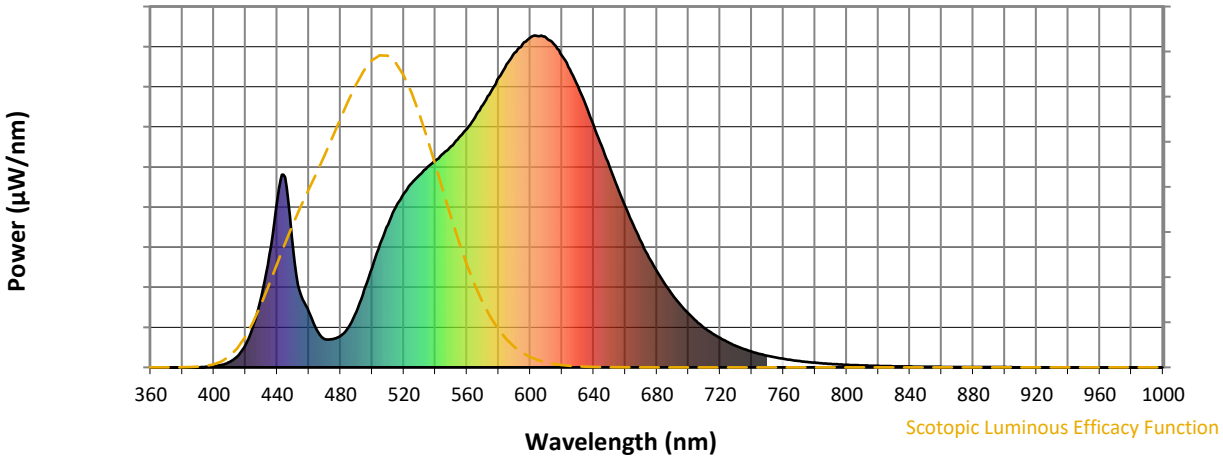
Scotopic Flux vs. Wavelength



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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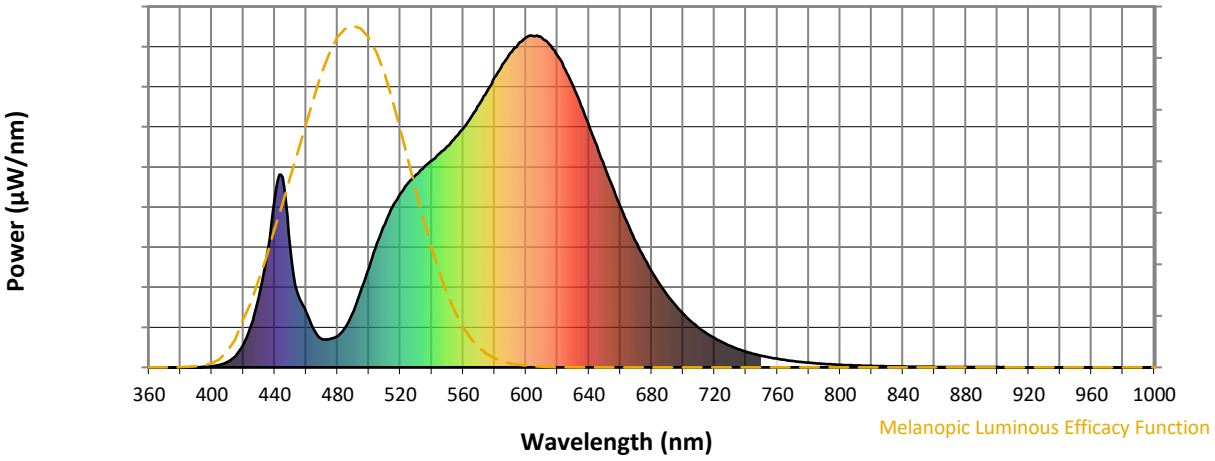
Melanopic Flux vs. Wavelength



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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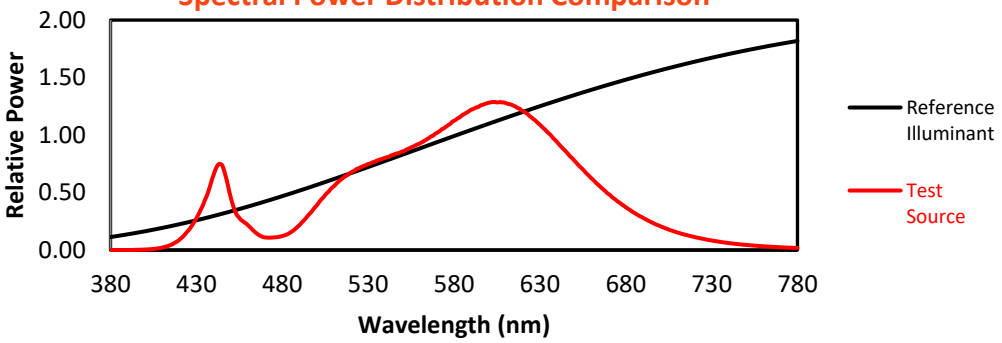
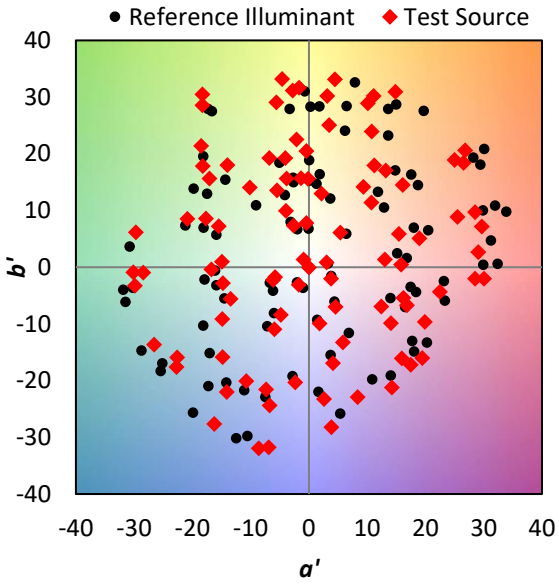
Summary

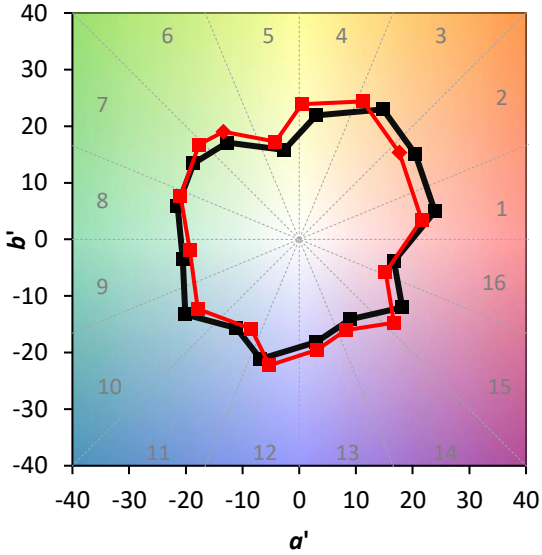
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

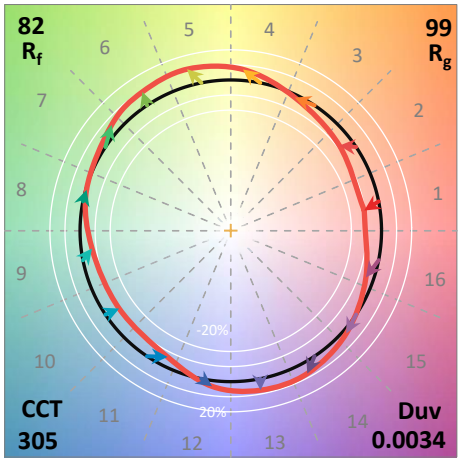
Spectral Power Distribution Comparison

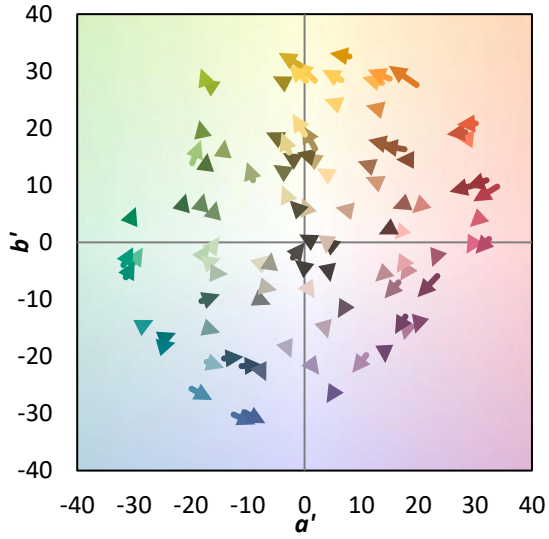


Color Vector Graphics









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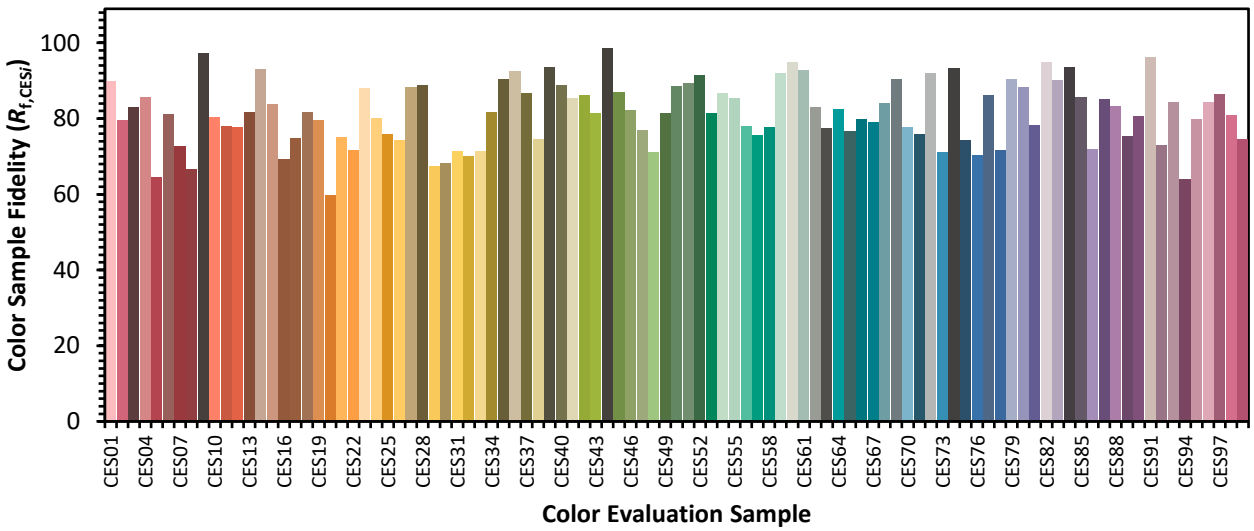
Individual Sample Fidelity Index ($R_{f,i}$)

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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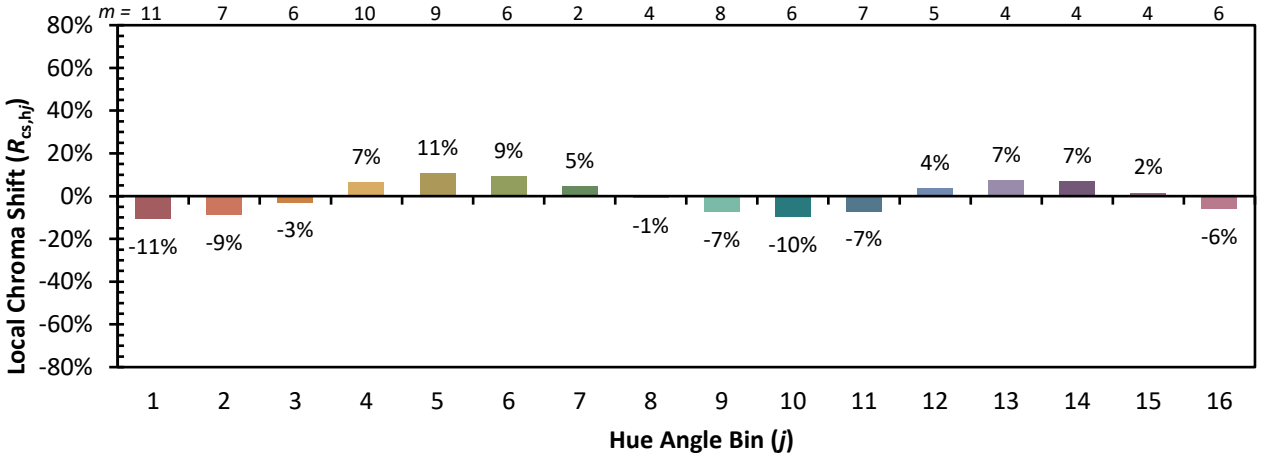
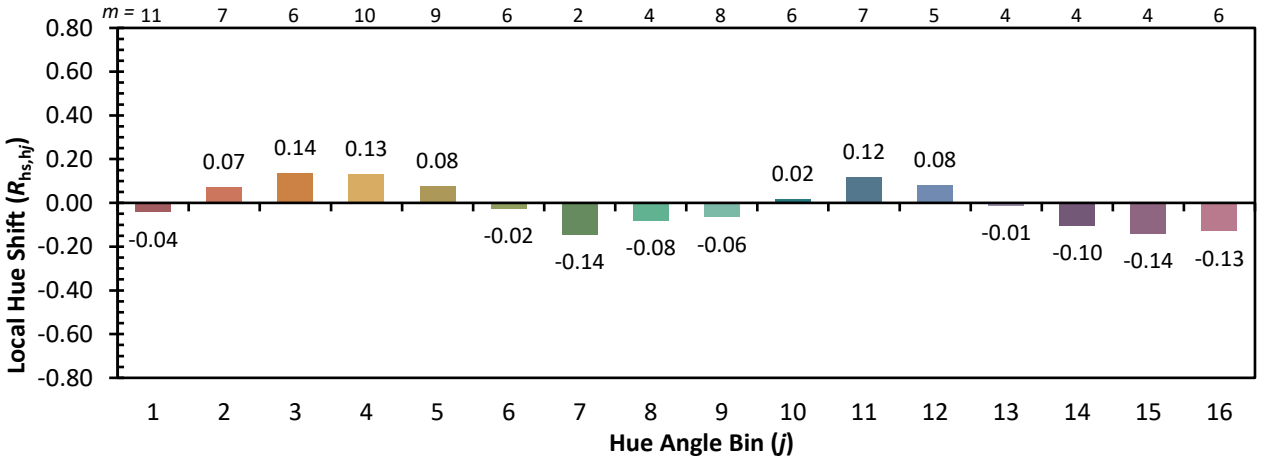
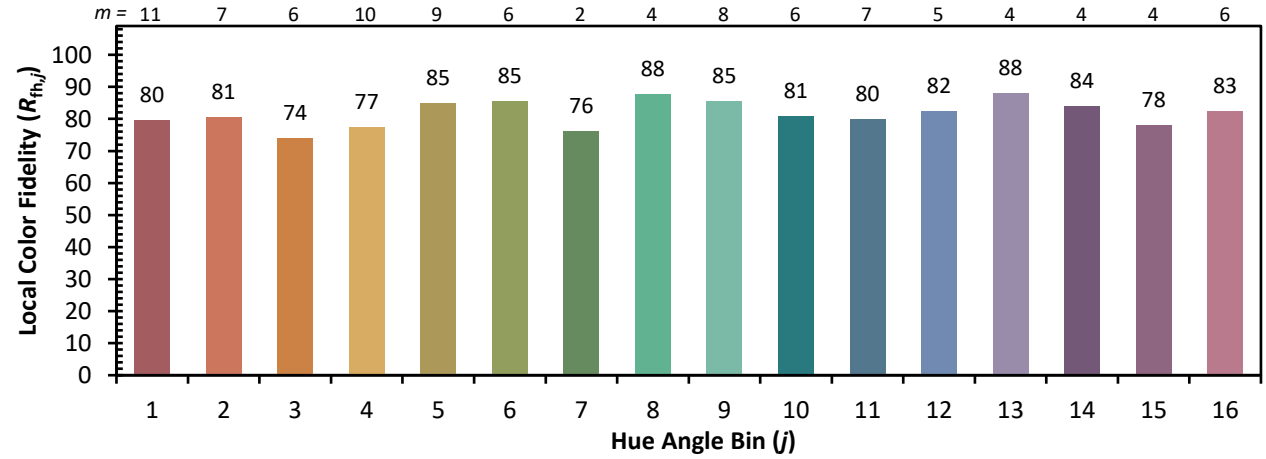
Color Rendition by Hue-Angle Bin







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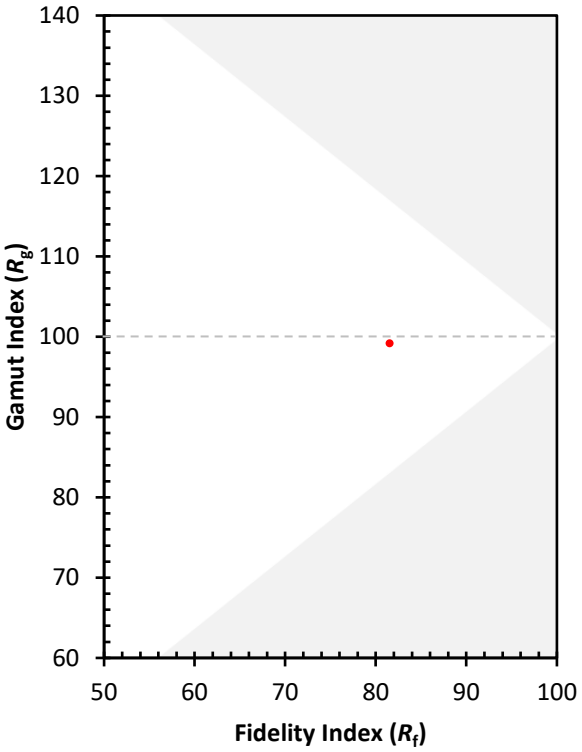
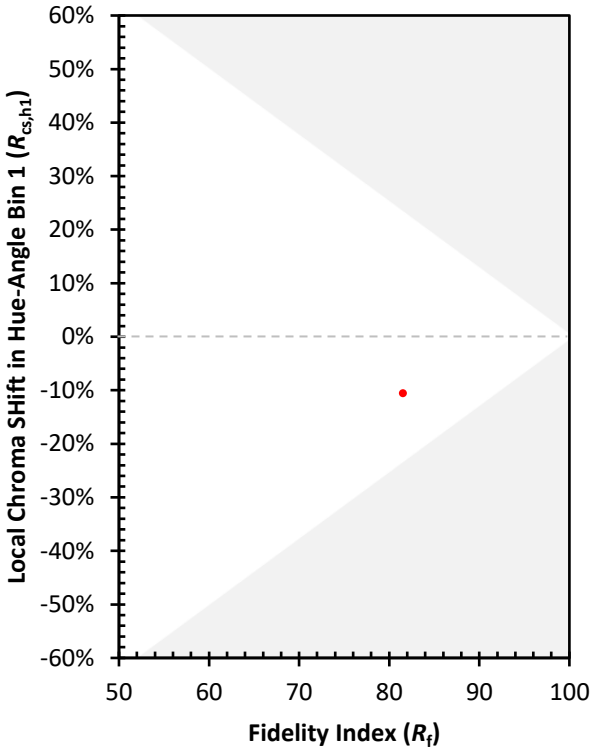
Measure Comparisons





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