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: P638992

Luminaire Tested: GWS-SA4F-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:	P638992
	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-SA4F-830-U-T3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23069.2 lumens
Efficiency:	N/A
Efficacy:	102.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

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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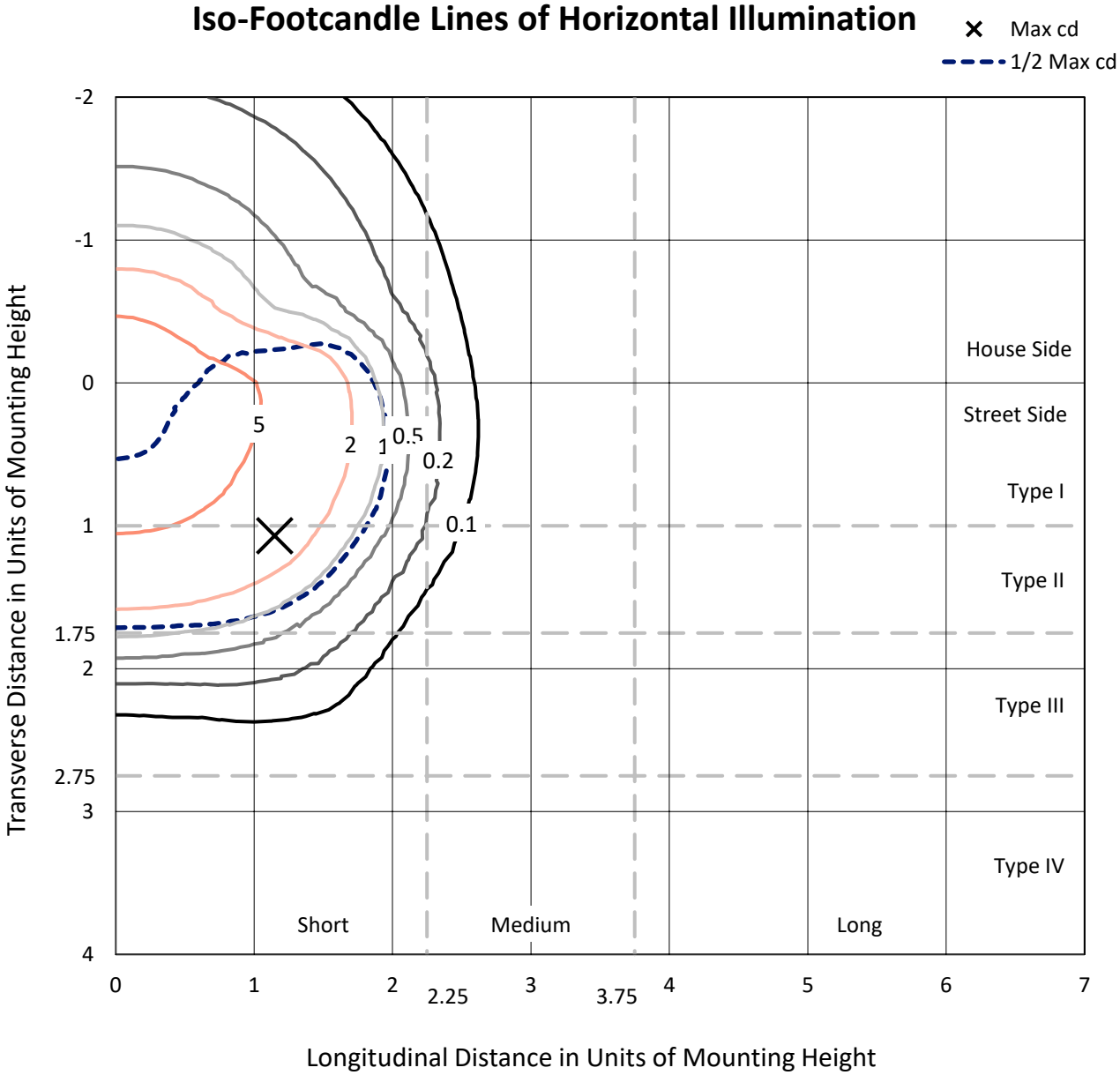
REPORT NUMBER: P638992
CATALOG NUMBER: GWS-SA4F-830-U-T3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
Type II - Short - N/A

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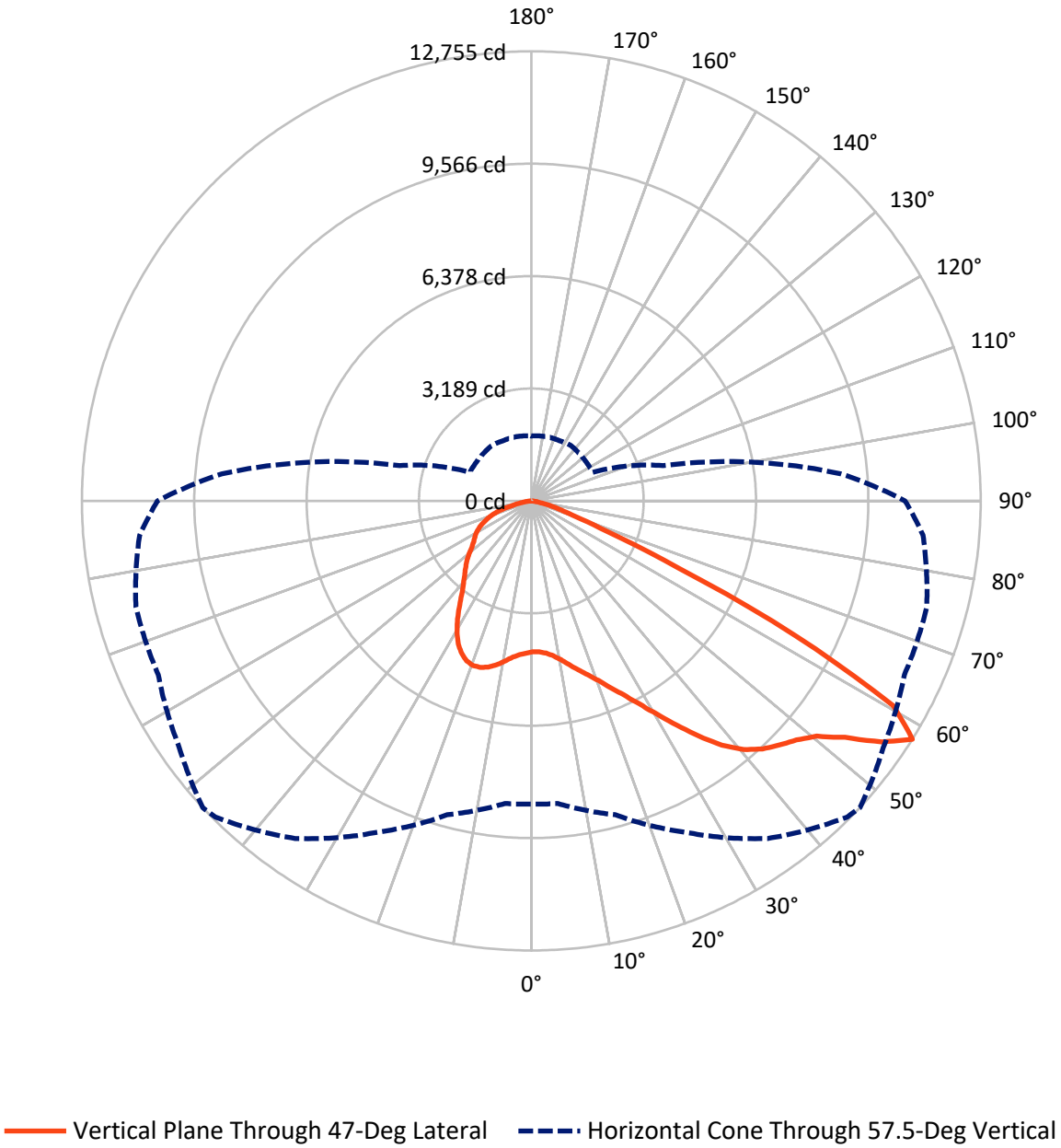
Luminous Intensity Polar Plot



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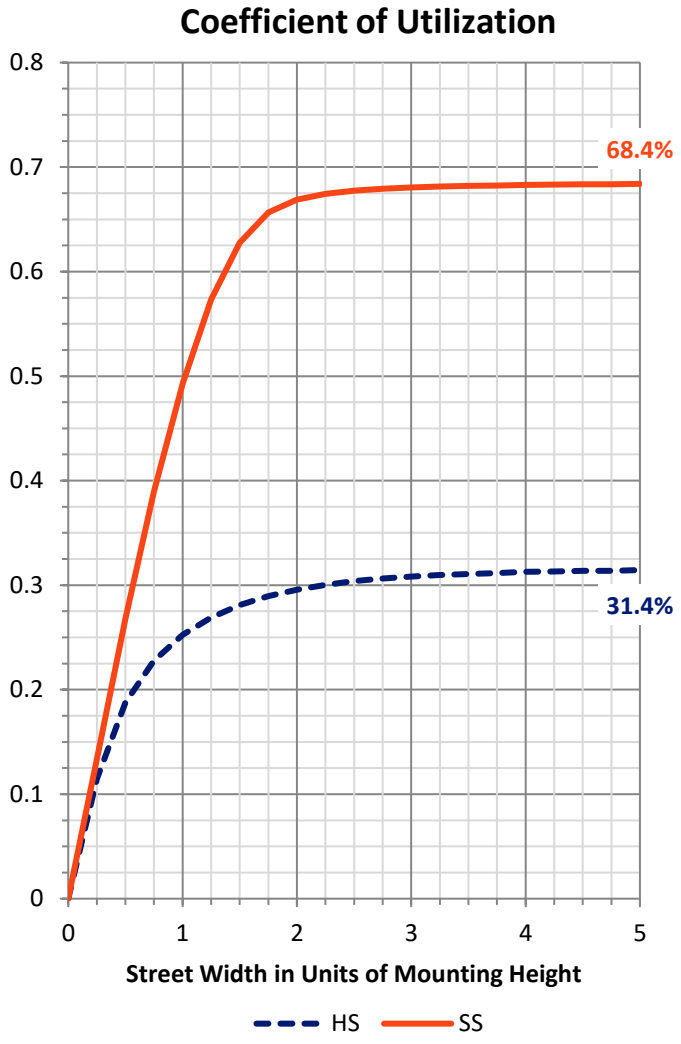
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7301.4	0.0	7301.4
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	15767.9	0.0	15767.9
	% Fixture	68.4	0.0	68.4
Total	Lumens	23069.2	0.0	23069.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.0	1.8
10°-20°	1387.9	6.0
20°-30°	2499.0	10.8
30°-40°	3774.5	16.4
40°-50°	5082.8	22.0
50°-60°	6107.7	26.5
60°-70°	2974.5	12.9
70°-80°	732.8	3.2
80°-90°	88.1	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°	23069.2	100.0
0°-180°	23069.2	100.0



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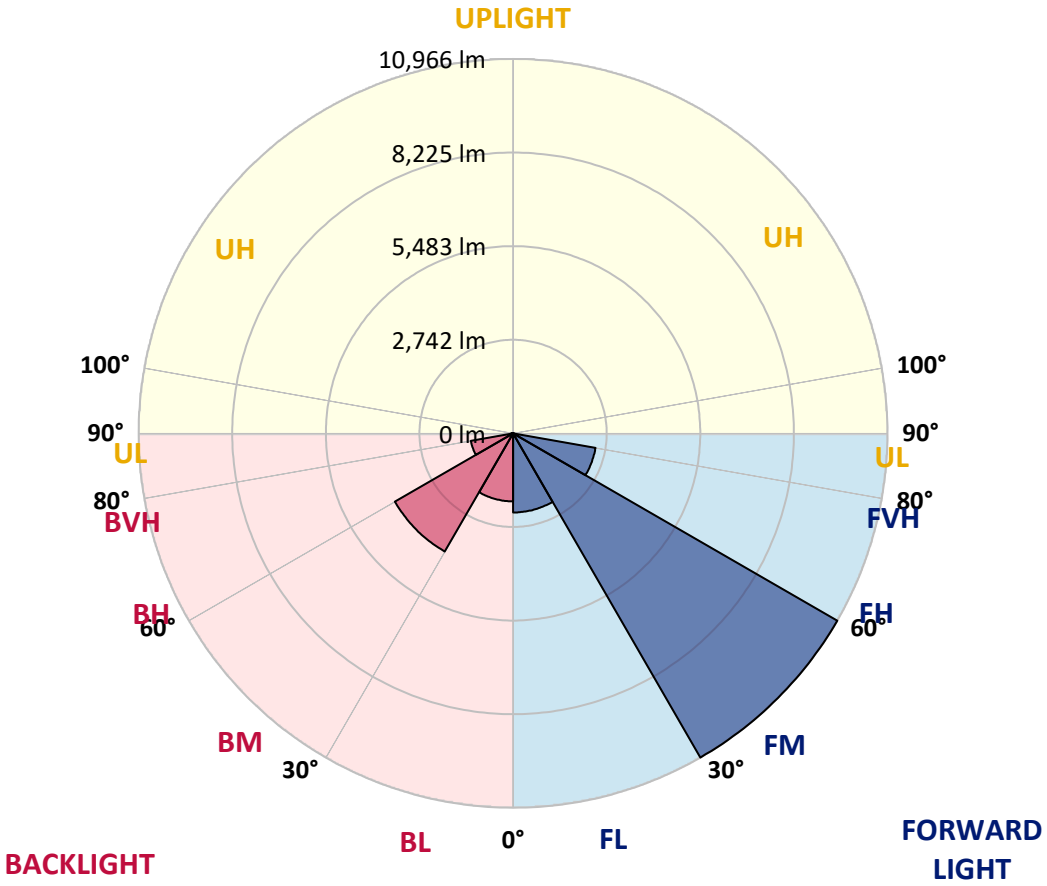
REPORT NUMBER: P638992
CATALOG NUMBER: GWS-SA4F-830-U-T3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2317.2	10.0			
FM	(30°-60°)	10966.0	47.5			
FH	(60°-80°)	2451.6	10.6			G2/5000
FVH	(80°-90°)	33.1	0.1			G1/100
BL	(0°-30°)	1991.7	8.6	B3/2500		
BM	(30°-60°)	3998.9	17.3	B3/5000		
BH	(60°-80°)	1255.8	5.4	B3/2500		G3/2500
BVH	(80°-90°)	55.0	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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REPORT NUMBER: P638992
CATALOG NUMBER: GWS-SA4F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	*4278.2*	4278.2	4278.2	4278.2	4278.2
2.5°	4270.5	4268.5	4268.5	4280.2	4280.2	4284.0	*4289.8*	4295.7	4297.6	4287.9	4266.6
5°	4317.0	4317.0	4317.0	4326.7	4326.7	4330.5	*4338.3*	4340.2	4338.3	4322.8	4301.5
7.5°	4390.6	4390.6	4392.5	4404.2	4413.8	4419.7	*4433.2*	4431.3	4425.5	4400.3	4373.2
10°	4510.7	4516.5	4522.4	4535.9	4555.3	4568.9	*4578.5*	4578.5	4570.8	4532.0	4497.2
12.5°	4681.2	4689.0	4694.8	4706.4	4721.9	4745.2	*4766.5*	4766.5	4756.8	4708.4	4656.0
15°	4880.8	4888.6	4886.6	4890.5	4919.6	4952.5	*4969.9*	4981.6	4985.4	4917.6	4836.2
17.5°	5109.4	5117.2	5109.4	5097.8	5101.7	5154.0	*5185.0*	5227.6	5252.8	5161.8	5031.9
20°	5316.8	5309.0	5309.0	5316.8	5328.4	5392.3	*5438.8*	5508.6	5539.6	5429.1	5227.6
22.5°	5535.7	5553.2	5545.4	5545.4	5591.9	5698.5	*5754.7*	5845.7	5878.7	5735.3	5464.0
25°	5818.6	5834.1	5830.2	5834.1	5888.4	6039.5	*6095.7*	6264.3	6297.2	6091.8	5725.6
27.5°	6128.6	6153.8	6165.4	6161.6	6248.8	6446.4	*6516.1*	6750.6	6810.7	6491.0	6004.6
30°	6531.6	6558.8	6568.5	6564.6	6667.3	6936.6	*7016.0*	7283.4	7368.7	6963.7	6359.2
32.5°	6998.6	7025.7	7054.8	7066.4	7198.2	7473.3	*7587.6*	7864.7	7986.8	7510.1	6787.4
35°	7461.7	7484.9	7541.1	7632.2	7812.4	8093.3	*8194.1*	8467.3	8585.5	8077.8	7304.7
37.5°	7973.2	7988.7	8037.2	8163.1	8422.7	8690.1	*8790.9*	9052.5	9066.0	8626.2	7889.9
40°	8533.2	8533.2	8523.5	8647.5	8918.8	9188.1	*9275.3*	9426.4	9347.0	9048.6	8459.6
42.5°	9007.9	9000.1	9007.9	9124.1	9325.7	9544.6	*9620.2*	9591.1	9490.4	9372.2	8975.0
45°	9436.1	9441.9	9511.7	9600.8	9705.4	9835.2	*9879.8*	9715.1	9624.0	9631.8	9387.7
47.5°	9726.7	9732.6	9895.3	10044.5	10108.4	10149.1	*10129.8*	9901.1	9854.6	9941.8	9705.4
50°	9765.5	9796.5	10077.4	10383.6	10542.5	10548.3	*10494.0*	10215.0	10201.5	10300.3	9875.9
52.5°	9773.2	9804.2	10155.0	10707.2	11119.9	11207.1	*11145.1*	10854.4	10713.0	10614.2	10085.2
55°	9744.2	9779.1	10166.6	10924.2	11714.7	12063.5	*12069.3*	11658.5	11207.1	11141.2	10682.0
57.5°	*8602.9*	*8616.5*	*9217.2*	*10372.0*	*11691.5*	*12679.6*	*12755.2*	*12197.2*	*11681.8*	*11619.8*	*11160.6*
60°	5993.0	6047.2	6700.2	8225.1	9821.7	11563.6	*11807.7*	11645.0	11300.1	10848.6	9575.6
62.5°	3001.3	3047.8	3702.7	5144.3	6773.8	8149.5	*8411.1*	8583.6	8664.9	8180.5	6520.0
65°	1292.4	1327.3	1734.2	2687.4	3834.5	4499.1	*4590.2*	4797.5	5305.1	4733.6	3512.9
67.5°	864.2	887.4	1094.7	1639.2	2259.2	2301.9	*2288.3*	2332.9	2443.3	2017.0	1586.9
70°	662.7	682.0	821.5	1201.3	1623.7	1389.3	*1315.6*	1193.6	1296.3	1321.4	1286.6
72.5°	480.5	496.0	600.7	819.6	1017.2	887.4	*875.8*	937.8	1077.3	1116.1	1094.7
75°	310.0	317.8	381.7	449.5	525.1	569.7	*592.9*	705.3	846.7	875.8	850.6
77.5°	207.3	213.1	250.0	288.7	298.4	300.3	*308.1*	358.5	455.3	509.6	503.8
80°	108.5	108.5	122.1	122.1	139.5	166.6	*174.4*	207.3	251.9	279.0	281.0
82.5°	42.6	44.6	52.3	58.1	69.8	85.3	*91.1*	108.5	131.8	151.1	168.6
85°	17.4	19.4	21.3	25.2	31.0	38.8	*40.7*	46.5	62.0	77.5	87.2
87.5°	0.0	0.0	1.9	1.9	3.9	5.8	*5.8*	7.8	9.7	17.4	23.3
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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REPORT NUMBER: P638992
CATALOG NUMBER: GWS-SA4F-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2	4278.2
2.5°	4291.8	4266.6	4291.8	4299.5	4320.8	4328.6	4315.0	4313.1	4313.1	4293.7	4287.9
5°	4320.8	4297.6	4322.8	4334.4	4365.4	4384.8	4388.7	4404.2	4413.8	4406.1	4404.2
7.5°	4392.5	4363.5	4390.6	4408.0	4448.7	4479.7	4493.3	4528.2	4553.4	4549.5	4547.5
10°	4518.5	4479.7	4510.7	4539.8	4584.4	4621.2	4623.1	4642.5	4667.7	4659.9	4656.0
12.5°	4663.8	4627.0	4661.9	4690.9	4743.2	4758.7	4733.6	4725.8	4729.7	4720.0	4712.2
15°	4842.1	4789.7	4820.7	4853.7	4882.7	4865.3	4811.1	4789.7	4787.8	4774.2	4766.5
17.5°	5020.3	4954.4	4977.7	4995.1	4981.6	4927.3	4859.5	4822.7	4805.2	4778.1	4770.4
20°	5196.6	5113.3	5109.4	5095.9	5033.9	4935.1	4844.0	4770.4	4725.8	4689.0	4675.4
22.5°	5398.1	5281.9	5223.8	5161.8	5026.1	4865.3	4727.7	4623.1	4551.4	4504.9	4489.4
25°	5615.2	5450.5	5330.3	5206.3	4948.6	4716.1	4524.3	4380.9	4295.7	4245.3	4227.8
27.5°	5830.2	5603.5	5423.3	5212.1	4793.6	4501.0	4243.3	4049.6	3964.3	3923.6	3910.1
30°	6120.9	5807.0	5533.8	5136.6	4590.2	4202.7	3881.0	3685.3	3629.1	3600.1	3588.4
32.5°	6456.1	6064.7	5681.0	4977.7	4330.5	3853.9	3514.8	3379.2	3340.4	3284.2	3282.3
35°	6897.8	6432.8	5820.5	4743.2	4003.1	3479.9	3233.9	3137.0	3067.2	2978.1	2970.3
37.5°	7413.3	6892.0	5896.1	4444.8	3621.4	3171.8	3024.6	2916.1	2803.7	2685.5	2670.0
40°	7946.1	7428.8	5901.9	4092.2	3247.4	2968.4	2844.4	2702.9	2563.4	2431.7	2414.2
42.5°	8506.1	7928.7	5799.2	3685.3	2941.3	2792.1	2666.1	2487.9	2330.9	2241.8	2232.1
45°	9006.0	8331.7	5566.7	3257.1	2714.6	2644.8	2484.0	2292.2	2208.9	2144.9	2131.4
47.5°	9399.3	8599.1	5252.8	2873.5	2530.5	2493.7	2284.4	2185.6	2121.7	2063.5	2050.0
50°	9593.0	8659.1	4844.0	2561.5	2360.0	2315.4	2172.0	2096.5	2053.9	2007.4	1995.7
52.5°	9833.3	8726.9	4491.4	2299.9	2193.4	2133.3	2079.0	2019.0	1988.0	1958.9	1949.2
55°	10385.5	8982.7	4305.3	2090.7	2034.5	2007.4	1999.6	1949.2	1939.5	1920.2	1902.7
57.5°	*10610.3*	*8818.0*	*3865.5*	*1920.2*	*1908.5*	*1912.4*	*1931.8*	*1885.3*	*1875.6*	*1852.3*	*1840.7*
60°	8533.2	6665.3	2617.7	1772.9	1803.9	1829.1	1848.5	1802.0	1788.4	1784.5	1769.0
62.5°	5467.9	4100.0	1827.2	1635.3	1681.8	1712.8	1724.5	1679.9	1670.2	1701.2	1703.1
65°	2846.3	2234.1	1482.3	1488.1	1526.8	1573.3	1596.6	1581.1	1577.2	1610.1	1612.1
67.5°	1453.2	1366.0	1292.4	1313.7	1344.7	1404.8	1459.0	1526.8	1550.1	1554.0	1555.9
70°	1238.1	1199.4	1162.6	1176.1	1209.1	1242.0	1294.3	1327.3	1288.5	1278.8	1274.9
72.5°	1054.1	1025.0	1007.6	1023.1	1040.5	1034.7	1019.2	1034.7	1040.5	1042.4	1044.4
75°	819.6	798.3	784.7	786.7	786.7	765.4	736.3	718.8	699.5	684.0	684.0
77.5°	501.8	505.7	519.3	517.3	515.4	507.7	478.6	463.1	416.6	403.0	403.0
80°	286.8	292.6	306.1	310.0	310.0	300.3	271.3	253.8	232.5	222.8	220.9
82.5°	174.4	182.1	189.9	193.8	195.7	184.1	158.9	145.3	133.7	124.0	124.0
85°	91.1	94.9	102.7	104.6	98.8	87.2	73.6	67.8	56.2	54.3	54.3
87.5°	25.2	27.1	31.0	25.2	23.3	17.4	9.7	7.8	3.9	1.9	1.9
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

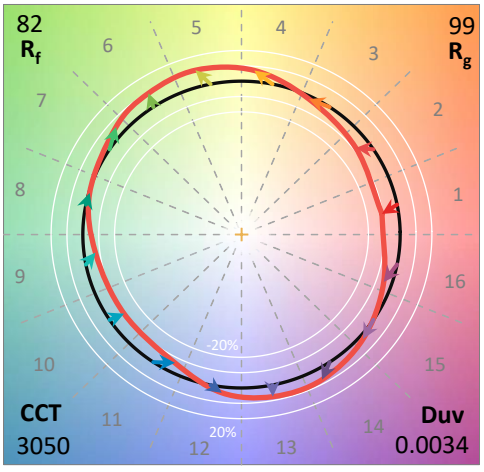
Test Information

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

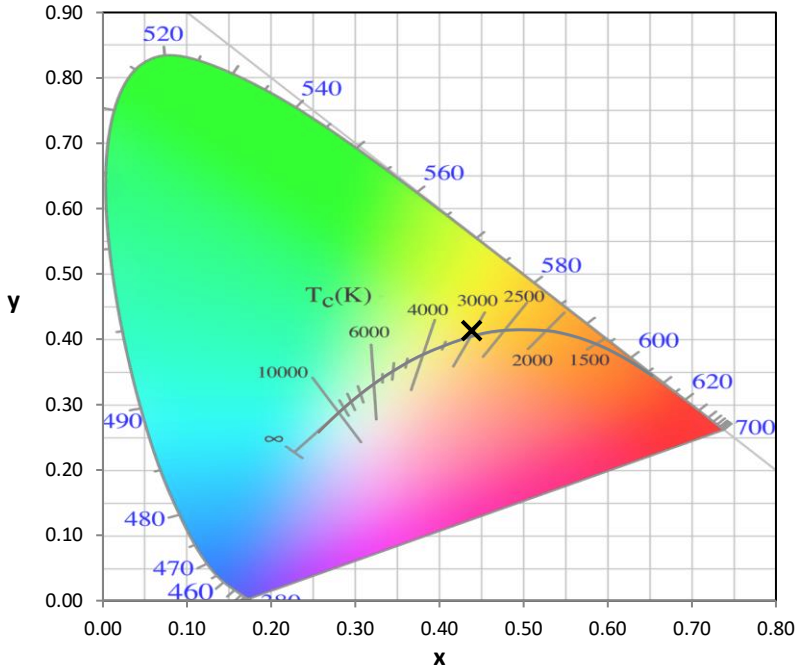
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

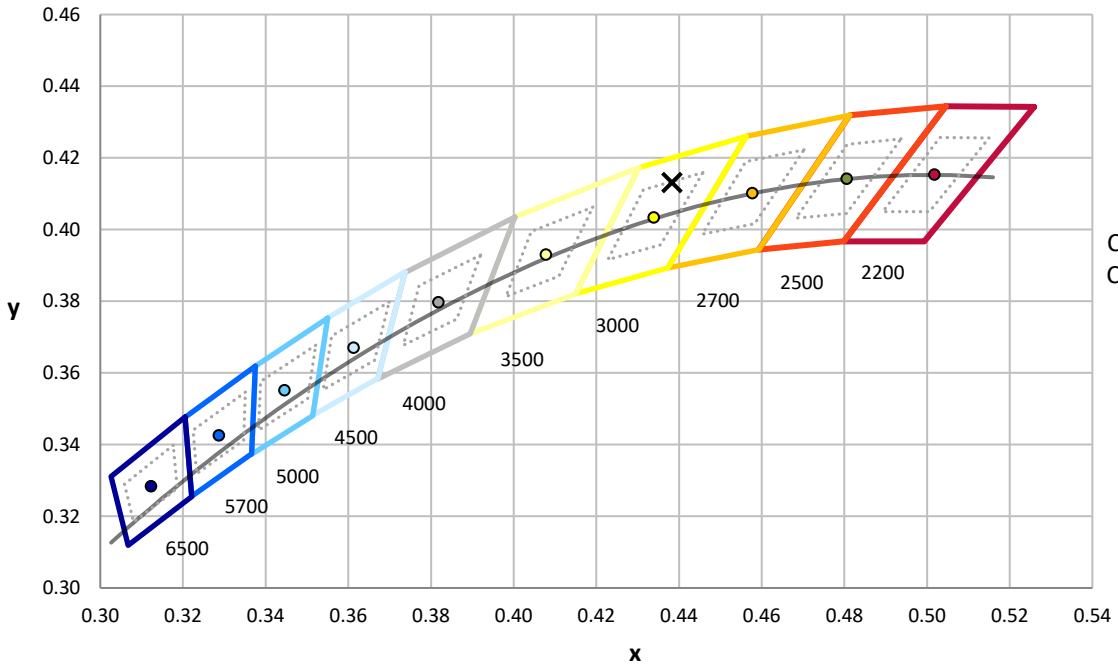
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

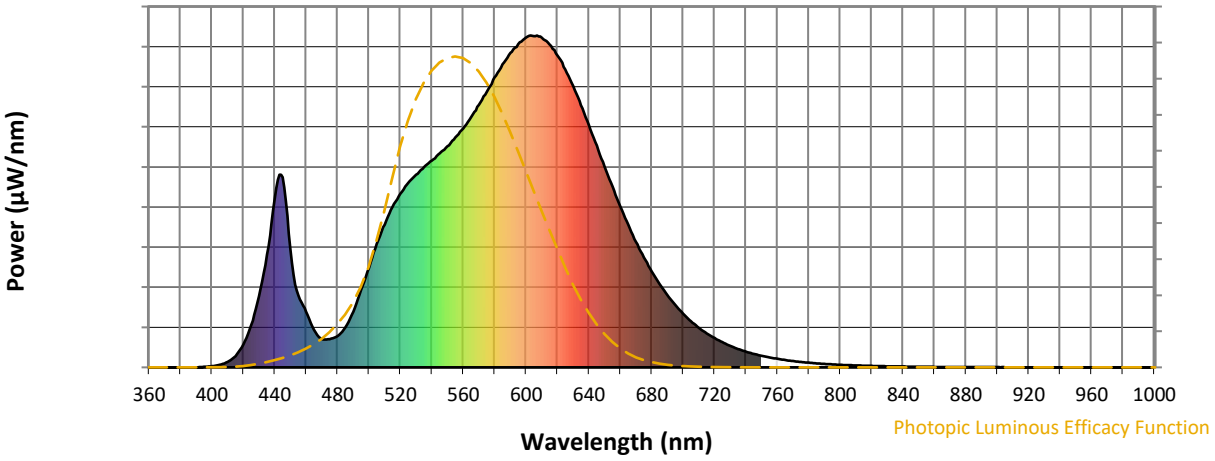


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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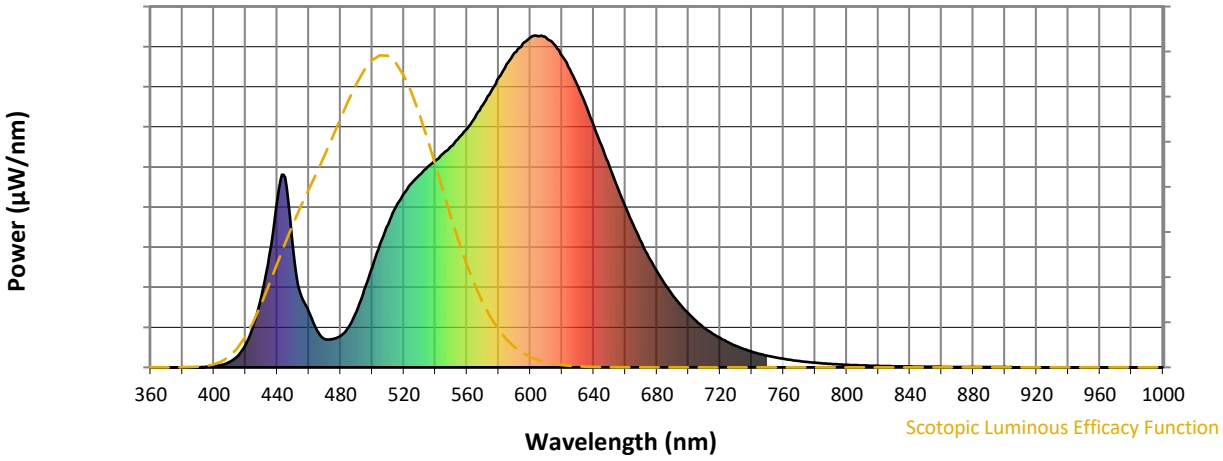
Scotopic Flux vs. Wavelength



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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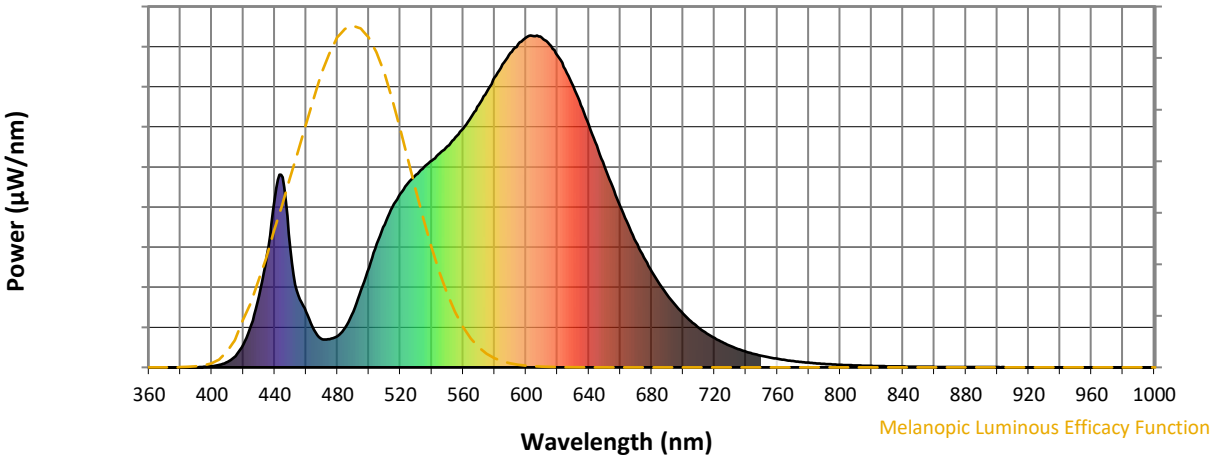
Melanopic Flux vs. Wavelength



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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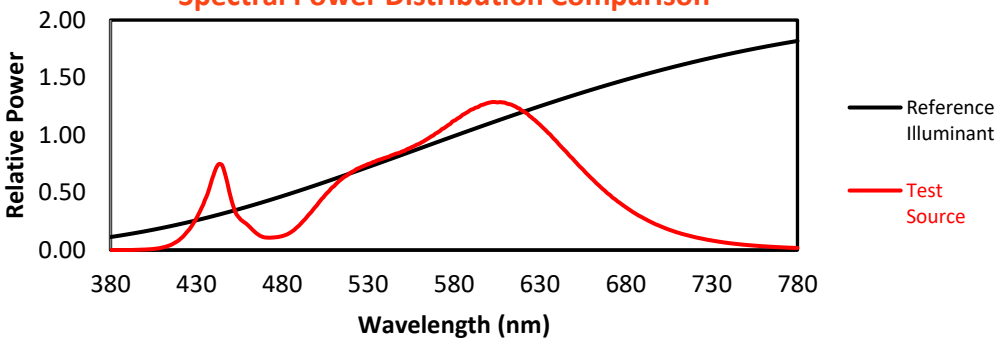
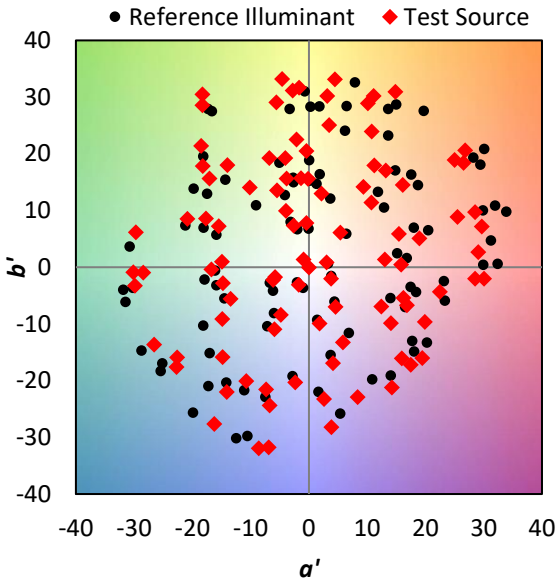
Summary

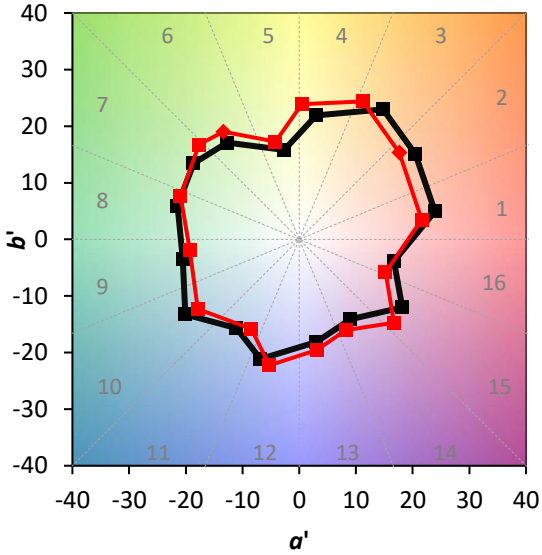
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

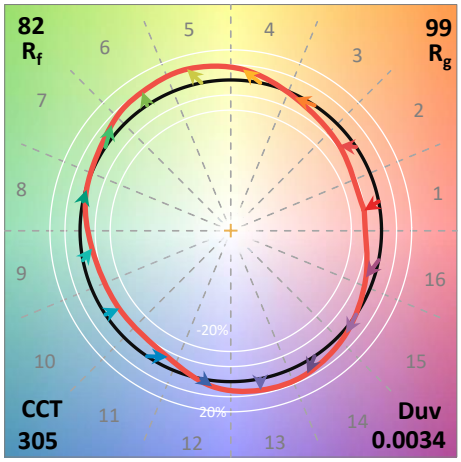
Spectral Power Distribution Comparison

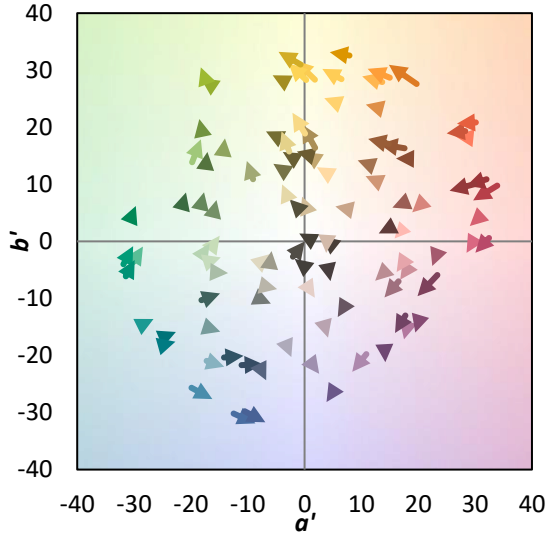


Color Vector Graphics









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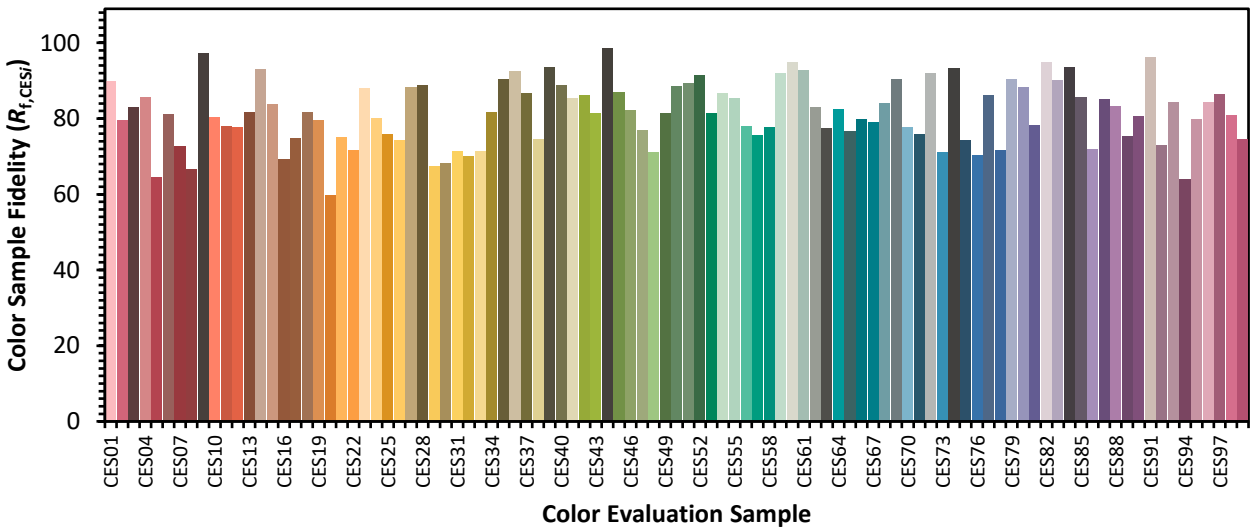
Individual Sample Fidelity Index ($R_{f,i}$)

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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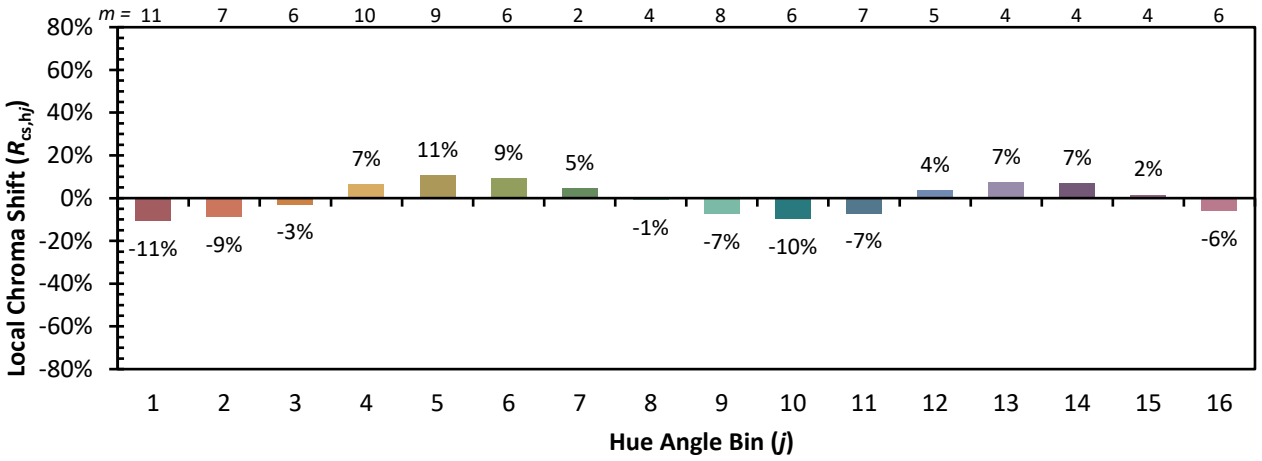
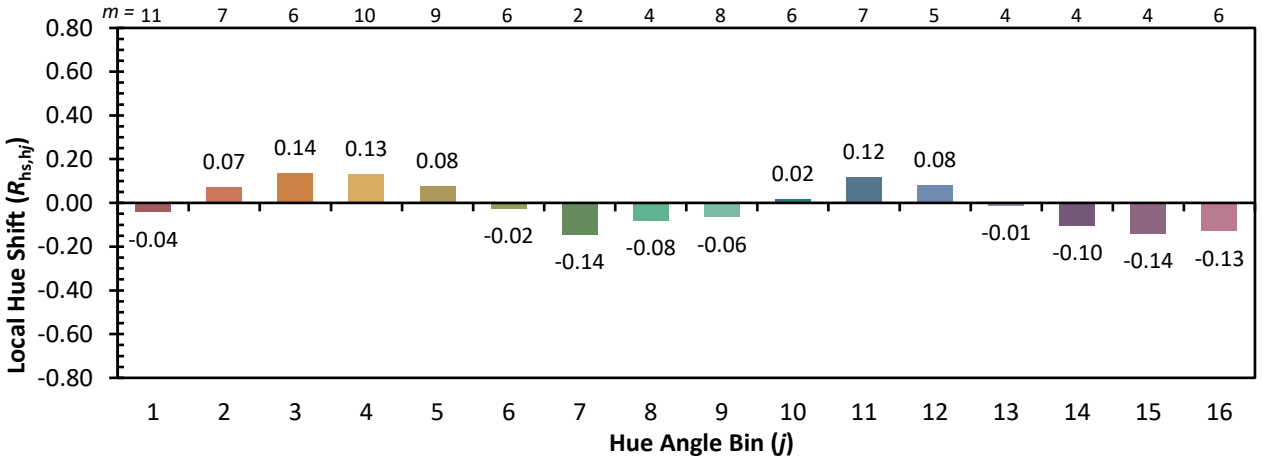
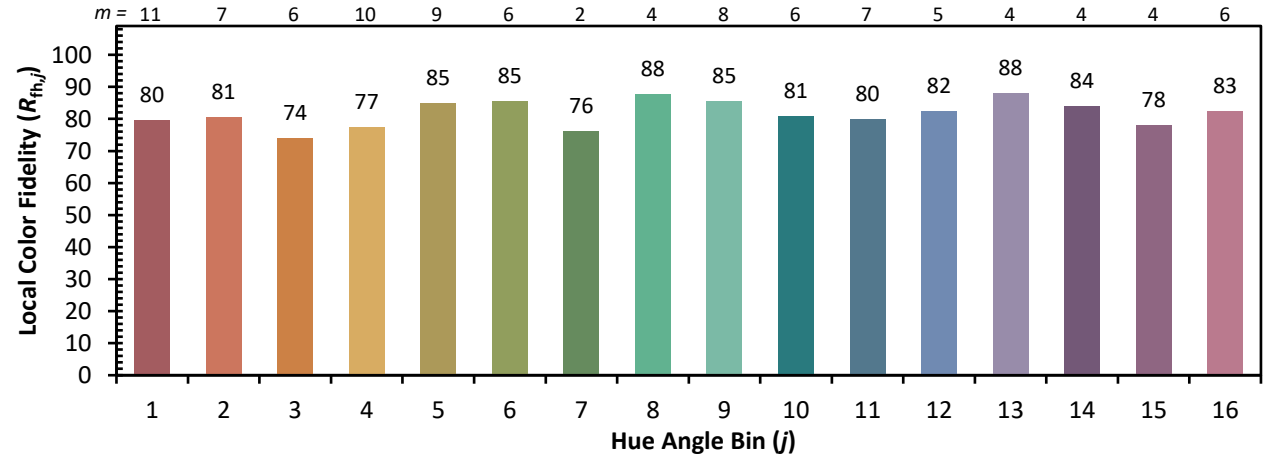
Color Rendition by Hue-Angle Bin







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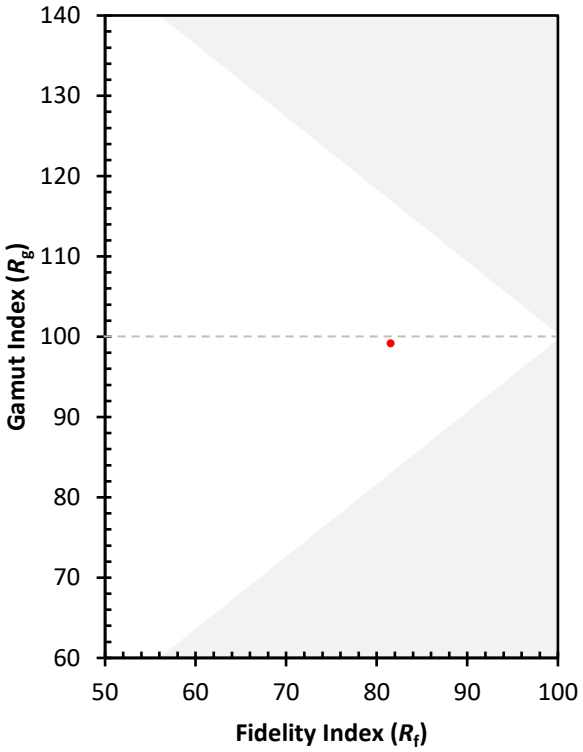
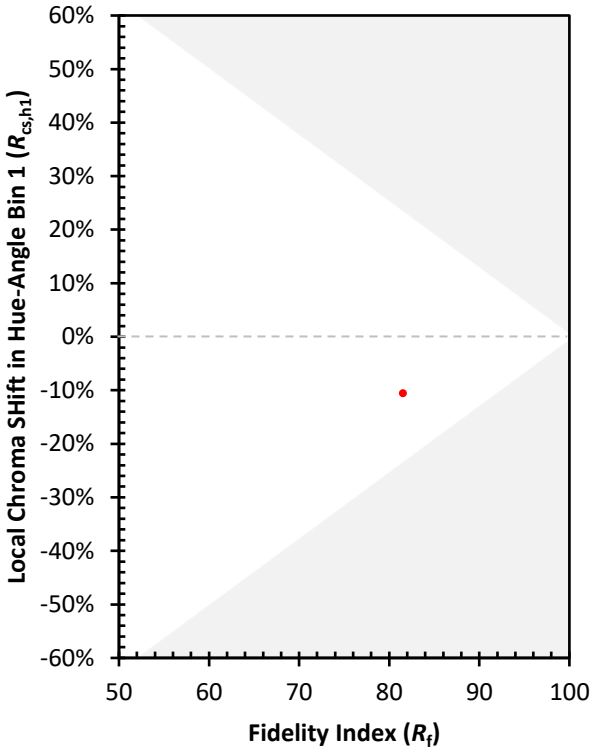
Measure Comparisons





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