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: P638501

Luminaire Tested: GWS-SA4E-830-U-T3R-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:	P638501
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-T3R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY 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:	21313.7 lumens
Efficiency:	N/A
Efficacy:	105.2 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):	202.6
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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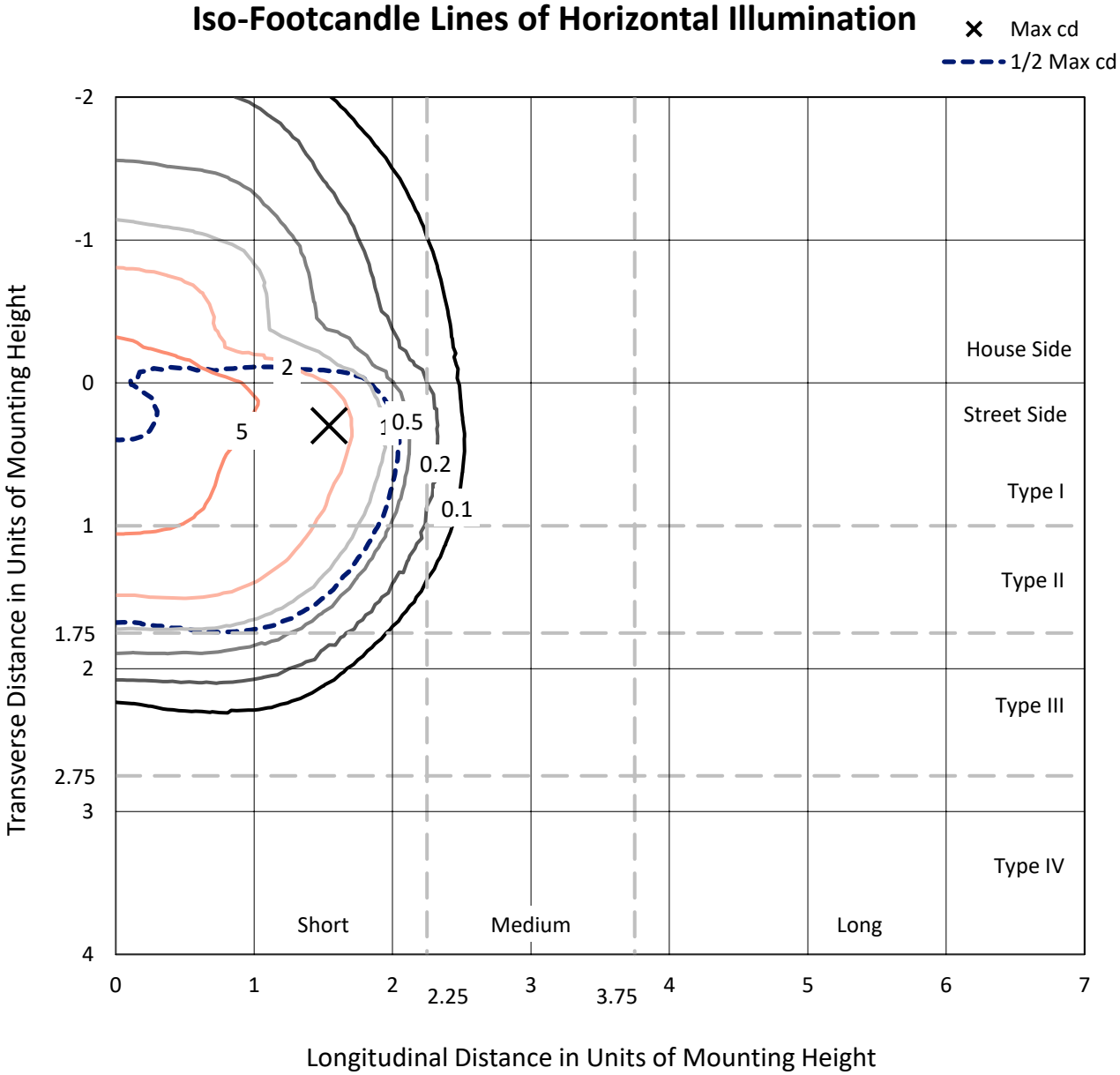
Scaled Data Report

REPORT NUMBER: P638501
CATALOG NUMBER: GWS-SA4E-830-U-T3R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
Type II - Short - N/A

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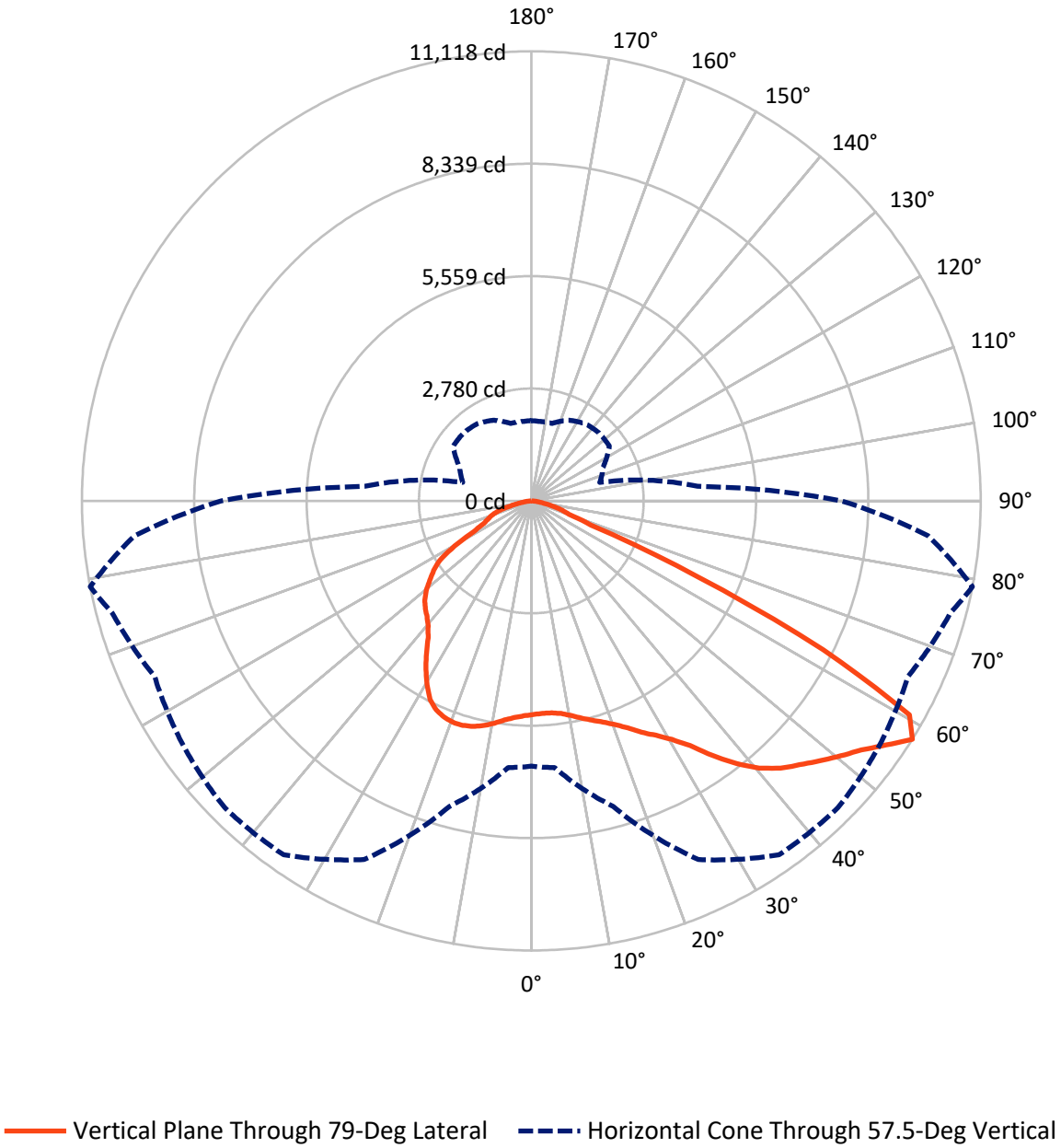
Luminous Intensity Polar Plot



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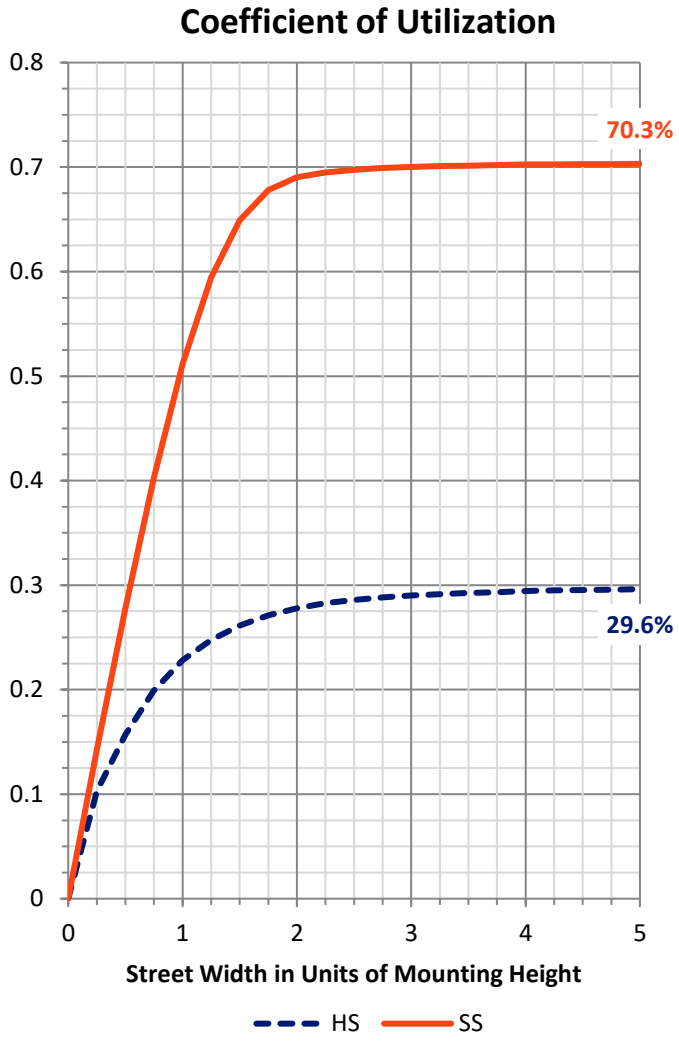
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6335.6	0.0	6335.6
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	14978.1	0.0	14978.1
	% Fixture	70.3	0.0	70.3
Total	Lumens	21313.7	0.0	21313.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.2	2.3
10°-20°	1359.4	6.4
20°-30°	2304.2	10.8
30°-40°	3526.9	16.5
40°-50°	4702.8	22.1
50°-60°	5431.3	25.5
60°-70°	2822.3	13.2
70°-80°	599.9	2.8
80°-90°	77.7	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°	21313.7	100.0
0°-180°	21313.7	100.0



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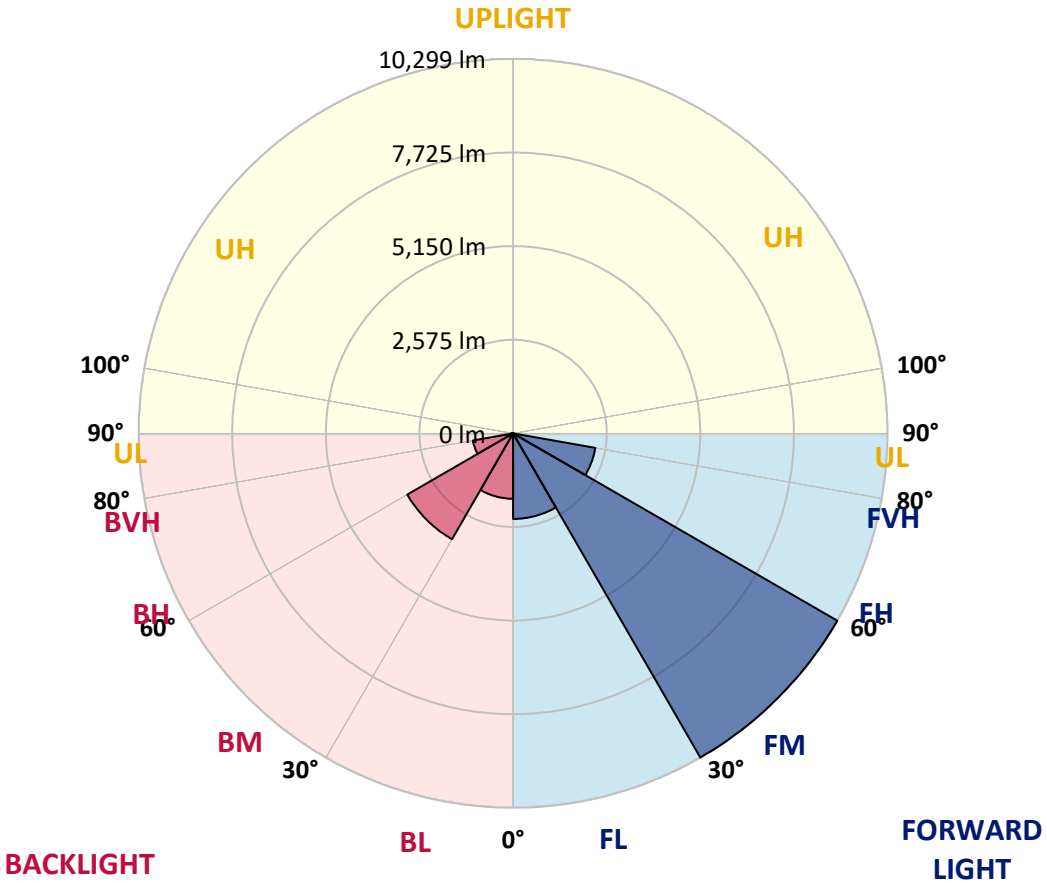
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2353.5	11.0			
FM	(30°-60°)	10299.4	48.3			
FH	(60°-80°)	2298.1	10.8			G2/5000
FVH	(80°-90°)	27.1	0.1			G1/100
BL	(0°-30°)	1799.2	8.4	B3/2500		
BM	(30°-60°)	3361.6	15.8	B3/5000		
BH	(60°-80°)	1124.1	5.3	B3/2500		G3/2500
BVH	(80°-90°)	50.6	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: P638501
CATALOG NUMBER: GWS-SA4E-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	*5282.0*	5282.0
2.5°	5041.5	5031.1	5034.6	5048.5	5100.8	5139.1	5179.2	5215.8	5250.7	*5261.1*	5269.8
5°	4862.0	4842.9	4848.1	4870.8	4931.8	4996.2	5067.7	5154.8	5238.5	*5266.3*	5302.9
7.5°	4734.8	4731.3	4740.1	4774.9	4839.4	4900.4	4992.7	5116.5	5261.1	*5308.2*	5372.6
10°	4565.8	4558.8	4593.7	4665.1	4771.4	4869.0	4978.8	5125.2	5327.3	*5397.0*	5496.4
12.5°	4431.6	4428.1	4464.7	4564.0	4700.0	4855.1	5006.7	5170.5	5416.2	*5512.1*	5634.0
15°	4510.0	4494.3	4496.1	4565.8	4687.8	4870.8	5076.4	5252.4	5505.1	*5627.1*	5783.9
17.5°	4738.3	4710.4	4689.5	4701.7	4771.4	4961.4	5182.7	5362.2	5607.9	*5750.8*	5942.5
20°	5053.7	5038.1	4980.5	4942.2	4957.9	5125.2	5350.0	5517.3	5742.1	*5902.4*	6108.1
22.5°	5477.2	5438.9	5360.4	5299.5	5252.4	5383.1	5590.5	5735.1	5928.6	*6095.9*	6310.2
25°	6001.7	5946.0	5822.3	5726.4	5625.3	5759.5	5944.2	6054.0	6184.7	*6339.8*	6543.7
27.5°	6536.7	6489.7	6352.0	6223.1	6097.6	6181.2	6400.8	6463.6	6449.6	*6562.9*	6737.2
30°	7106.6	7047.4	6916.7	6777.2	6615.2	6669.2	6866.1	6897.5	6749.4	*6843.5*	6962.0
32.5°	7707.8	7650.3	7537.0	7375.0	7192.0	7212.9	7266.9	7296.6	7155.4	*7209.4*	7300.0
35°	8319.5	8265.5	8150.5	7990.1	7855.9	7728.7	7592.8	7711.3	7629.4	*7734.0*	7727.0
37.5°	8878.9	8824.9	8753.4	8629.7	8399.7	8148.7	7835.0	7981.4	8108.6	*8241.1*	8218.4
40°	9257.1	9220.5	9237.9	9218.7	8922.5	8425.8	7953.5	8113.9	8460.7	*8687.2*	8675.0
42.5°	9582.9	9546.3	9647.4	9720.6	9372.1	8682.0	8011.0	8164.4	8685.5	*9039.2*	9021.8
45°	9727.6	9717.1	9884.4	10116.2	9783.3	8953.8	8159.2	8269.0	8856.2	*9309.3*	9243.1
47.5°	9555.1	9591.6	9921.0	10313.1	10124.9	9276.2	8462.4	8490.3	9079.3	*9602.1*	9415.6
50°	9211.7	9291.9	9736.3	10318.3	10374.1	9640.4	8882.4	8812.7	9379.0	*9914.0*	9506.3
52.5°	8711.6	8795.2	9520.2	10278.3	10517.0	10062.2	9441.8	9342.4	9757.2	*10226.0*	9521.9
55°	7563.2	7676.5	9025.3	10187.6	10656.4	10445.6	10072.6	9870.5	10245.1	*10654.7*	9677.0
57.5°	*6561.1*	*6620.4*	*7819.4*	*9785.1*	*10684.3*	*10727.9*	*10522.2*	*10281.7*	*10729.6*	*11118.2*	*9851.3*
60°	4815.0	4828.9	5907.6	8096.4	9828.6	10564.1	10485.6	10128.4	10499.6	*10747.0*	9053.2
62.5°	2720.3	2722.0	3582.9	5404.0	7341.9	8610.5	8659.3	8343.9	8032.0	*8105.2*	6301.5
65°	1021.2	1117.1	1636.4	2655.8	4232.9	5083.4	5285.5	5358.7	4839.4	*4517.0*	3379.0
67.5°	683.1	705.8	955.0	1366.3	1883.8	2174.9	2432.8	2439.7	1784.5	*1591.1*	1331.4
70°	521.1	543.7	751.1	977.6	955.0	881.8	953.2	927.1	958.5	*984.6*	1012.5
72.5°	388.6	411.3	582.1	690.1	573.3	564.6	639.6	711.0	777.2	*805.1*	848.7
75°	257.9	275.3	392.1	369.4	317.2	374.7	467.0	538.5	576.8	*609.9*	643.0
77.5°	163.8	176.0	209.1	169.0	176.0	219.6	271.9	336.3	372.9	*406.0*	423.5
80°	74.9	73.2	71.4	80.2	99.3	129.0	163.8	202.1	230.0	*244.0*	254.4
82.5°	29.6	33.1	36.6	43.6	54.0	69.7	92.4	118.5	141.2	*144.6*	153.4
85°	12.2	13.9	15.7	19.2	24.4	31.4	38.3	54.0	68.0	*73.2*	78.4
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	5.2	8.7	15.7	*17.4*	19.2
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: P638501
CATALOG NUMBER: GWS-SA4E-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0
2.5°	5316.9	5294.2	5332.6	5358.7	5383.1	5357.0	5348.2	5325.6	5322.1	5322.1	5334.3
5°	5365.7	5350.0	5390.1	5405.8	5404.0	5346.5	5311.7	5266.3	5243.7	5243.7	5247.2
7.5°	5452.8	5444.1	5466.8	5442.4	5386.6	5269.8	5154.8	5059.0	4994.5	4961.4	4971.8
10°	5597.5	5587.0	5567.8	5477.2	5316.9	5074.7	4839.4	4665.1	4560.6	4501.3	4504.8
12.5°	5738.6	5721.2	5653.2	5452.8	5123.4	4738.3	4429.9	4234.7	4119.7	4050.0	4034.3
15°	5893.7	5848.4	5702.0	5327.3	4808.0	4327.0	4004.7	3793.8	3670.1	3628.2	3626.5
17.5°	6041.8	5961.7	5696.8	5104.3	4429.9	3896.6	3572.5	3441.8	3420.9	3440.0	3445.3
20°	6191.7	6062.7	5639.3	4795.8	3980.3	3467.9	3300.6	3354.6	3433.1	3485.3	3497.5
22.5°	6346.8	6146.4	5508.6	4398.5	3506.2	3178.6	3248.3	3366.8	3464.4	3534.1	3541.1
25°	6521.1	6224.8	5313.4	3912.3	3126.3	3098.5	3236.1	3361.6	3466.2	3546.3	3560.3
27.5°	6620.4	6226.6	5039.8	3412.1	2952.1	3067.1	3206.5	3325.0	3429.6	3516.7	3532.4
30°	6718.0	6179.5	4605.9	3006.1	2901.5	3030.5	3156.0	3265.8	3365.1	3450.5	3469.7
32.5°	6855.7	6135.9	4105.7	2772.6	2871.9	2995.6	3098.5	3196.1	3272.7	3311.1	3321.5
35°	7026.4	6080.2	3574.2	2671.5	2852.7	2967.8	3058.4	3110.7	3011.3	2990.4	3013.1
37.5°	7265.2	6027.9	3044.4	2627.9	2840.5	2957.3	3037.5	2903.3	2781.3	2732.5	2749.9
40°	7523.1	5998.3	2685.5	2593.1	2845.8	2967.8	2950.3	2751.7	2575.7	2472.8	2469.4
42.5°	7742.7	5953.0	2455.4	2570.4	2859.7	3007.8	2831.8	2617.5	2356.1	2295.1	2296.8
45°	7890.8	5837.9	2333.4	2546.0	2871.9	3016.6	2776.1	2432.8	2246.3	2208.0	2206.2
47.5°	7951.8	5628.8	2255.0	2507.7	2870.2	2945.1	2662.8	2356.1	2169.6	2159.2	2166.1
50°	7911.7	5285.5	2174.9	2432.8	2828.4	2870.2	2532.1	2288.1	2117.3	2174.9	2216.7
52.5°	7763.6	4841.1	2079.0	2329.9	2753.4	2784.8	2465.9	2246.3	2079.0	2155.7	2188.8
55°	7725.2	4480.4	1957.0	2195.8	2641.9	2633.2	2396.2	2225.4	2052.9	2023.2	2028.5
57.5°	*7674.7*	*4128.4*	*1754.9*	*1955.3*	*2359.6*	*2373.5*	*2329.9*	*2201.0*	*1984.9*	*1976.2*	*1984.9*
60°	6667.4	3164.7	1564.9	1686.9	1937.8	2012.8	2255.0	2155.7	1875.1	1838.5	1836.8
62.5°	4354.9	1916.9	1392.4	1470.8	1578.9	1666.0	2056.3	2025.0	1754.9	1732.2	1747.9
65°	2342.1	1366.3	1266.9	1314.0	1373.2	1439.4	1704.3	1803.7	1585.8	1505.7	1507.4
67.5°	1197.2	1162.4	1172.8	1205.9	1251.2	1284.3	1375.0	1462.1	1352.3	1284.3	1282.6
70°	1024.7	1052.6	1068.3	1087.4	1117.1	1111.8	1120.5	1136.2	1127.5	1094.4	1092.7
72.5°	873.1	916.6	920.1	923.6	934.1	909.7	894.0	867.8	869.6	874.8	876.6
75°	664.0	705.8	716.2	711.0	721.5	690.1	669.2	643.0	611.7	606.4	609.9
77.5°	432.2	465.3	481.0	477.5	482.7	458.3	447.9	420.0	383.4	369.4	369.4
80°	261.4	280.6	292.8	296.3	301.5	284.1	266.6	242.2	226.5	210.9	210.9
82.5°	158.6	170.8	179.5	179.5	184.7	165.6	151.6	134.2	127.2	113.3	113.3
85°	80.2	88.9	92.4	90.6	87.1	71.4	66.2	57.5	54.0	47.1	47.1
87.5°	19.2	24.4	24.4	17.4	17.4	8.7	5.2	1.7	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

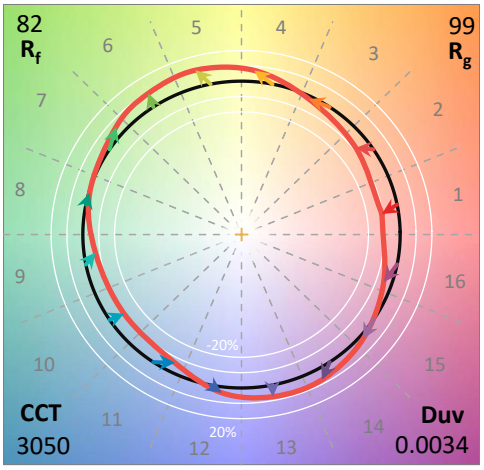
Test Information

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

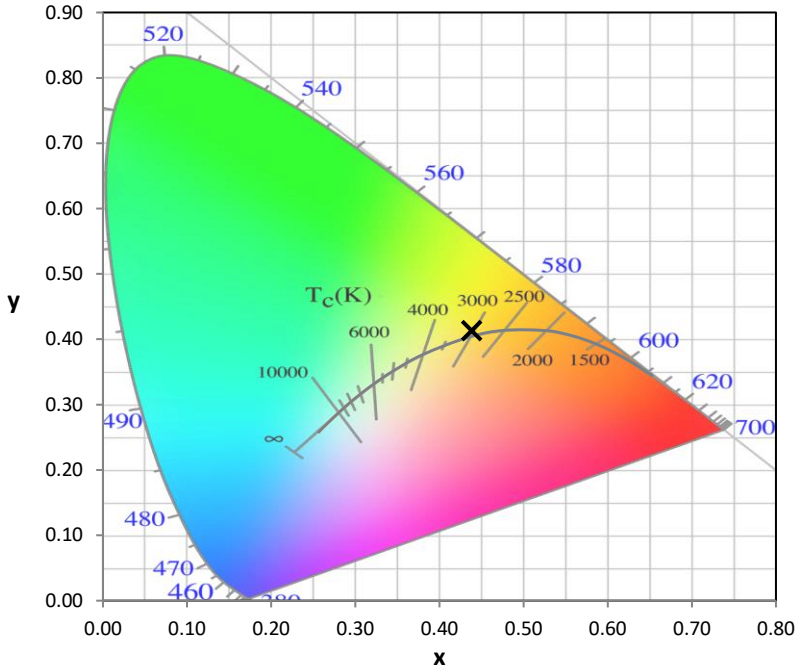
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

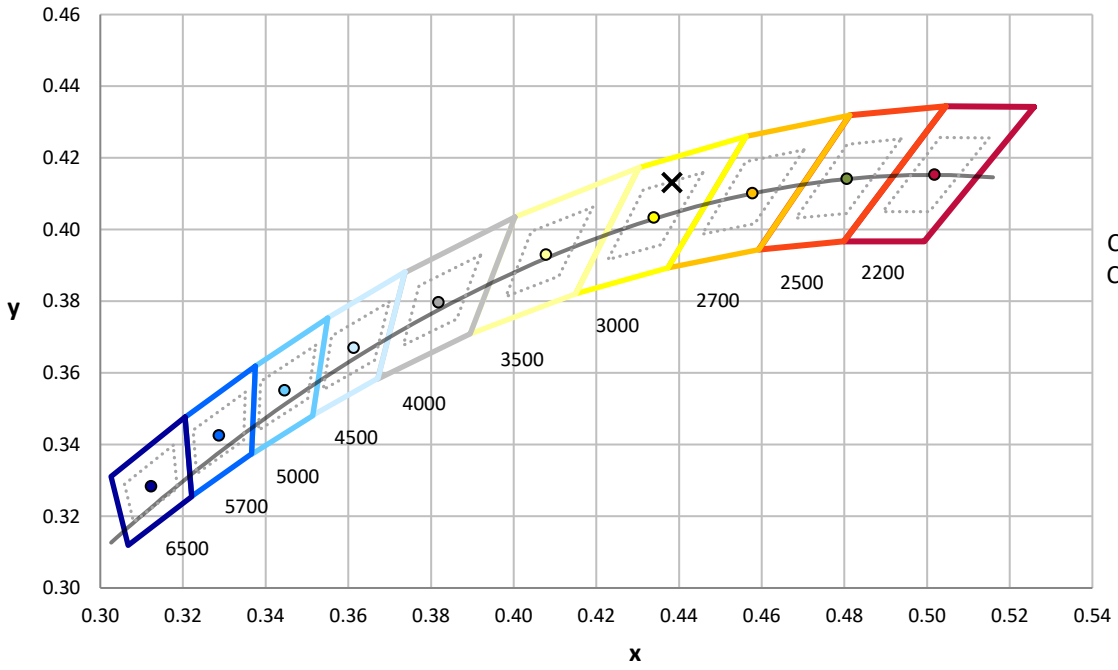
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

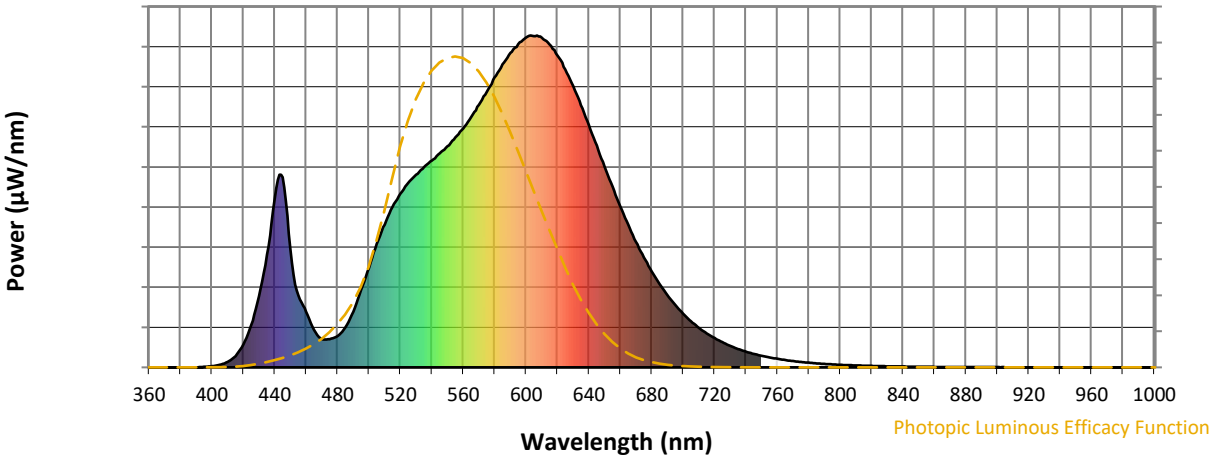


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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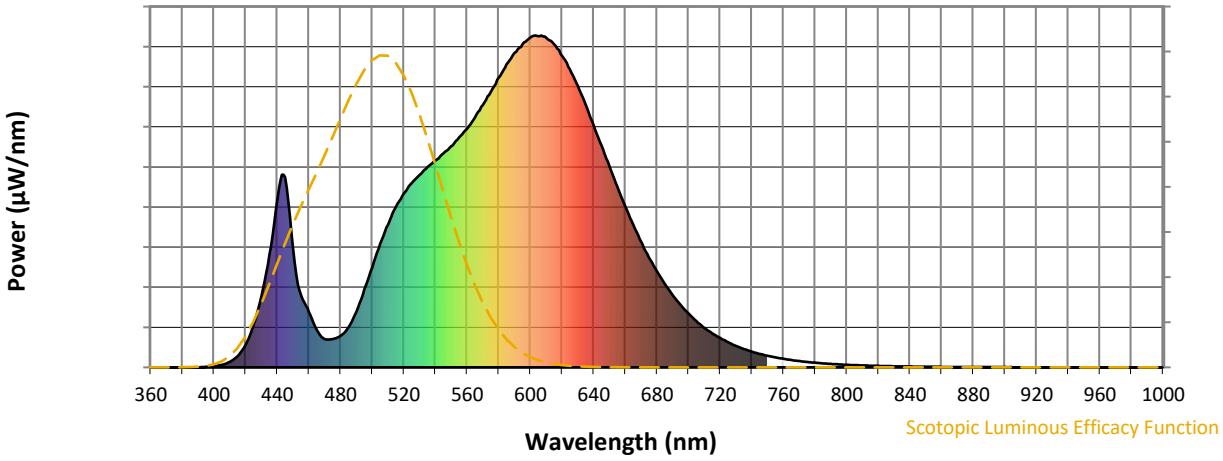
Scotopic Flux vs. Wavelength



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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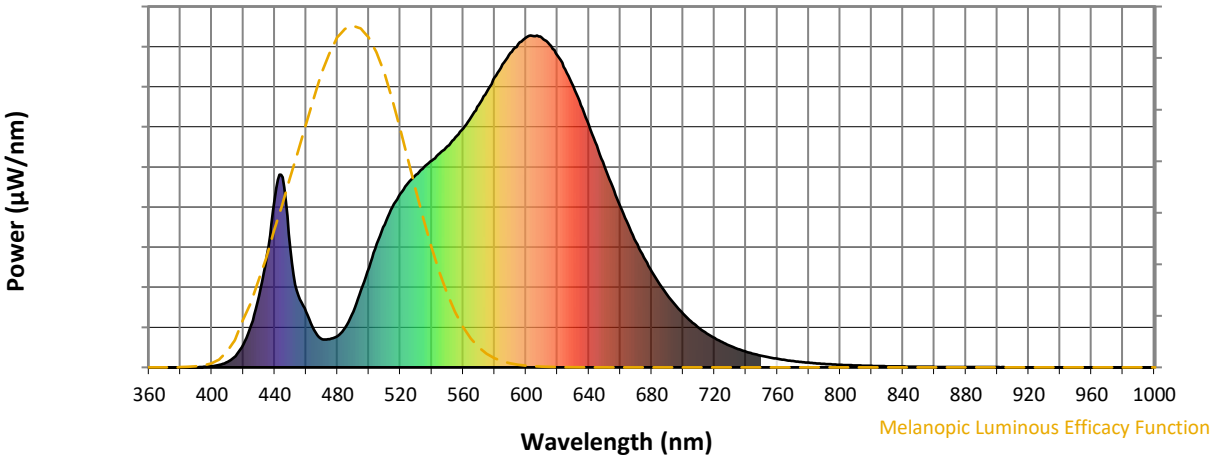
Melanopic Flux vs. Wavelength



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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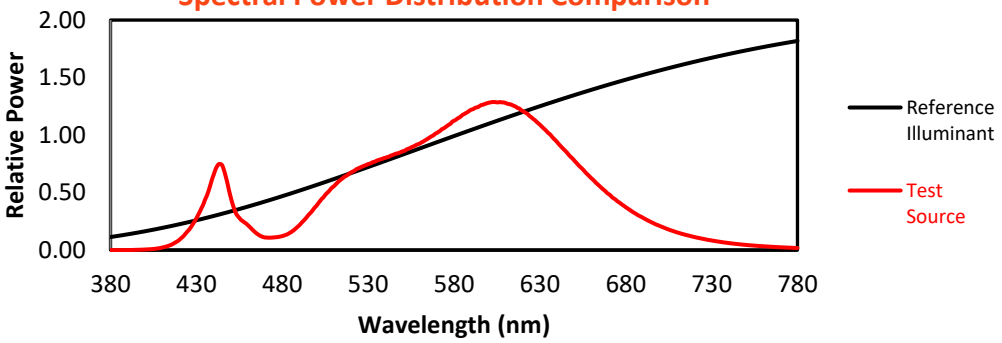
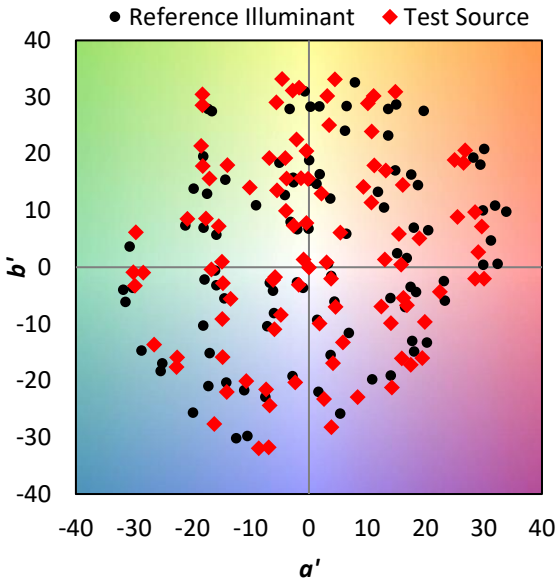
Summary

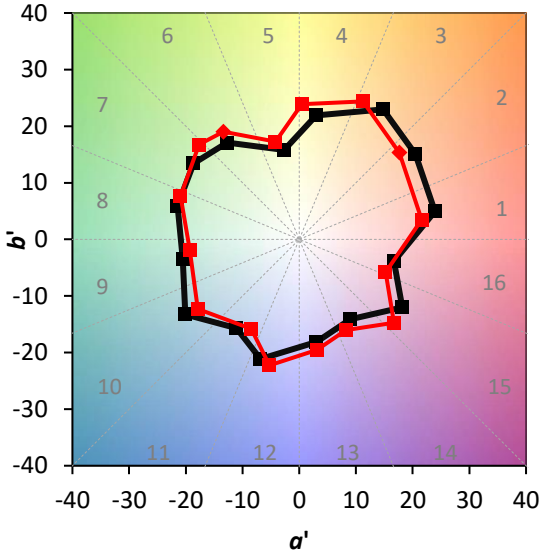
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

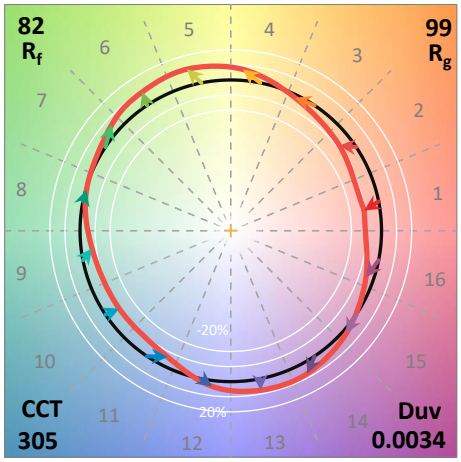
Spectral Power Distribution Comparison

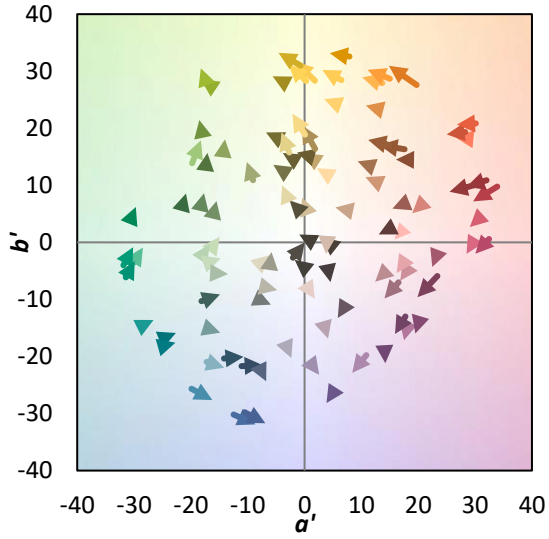


Color Vector Graphics









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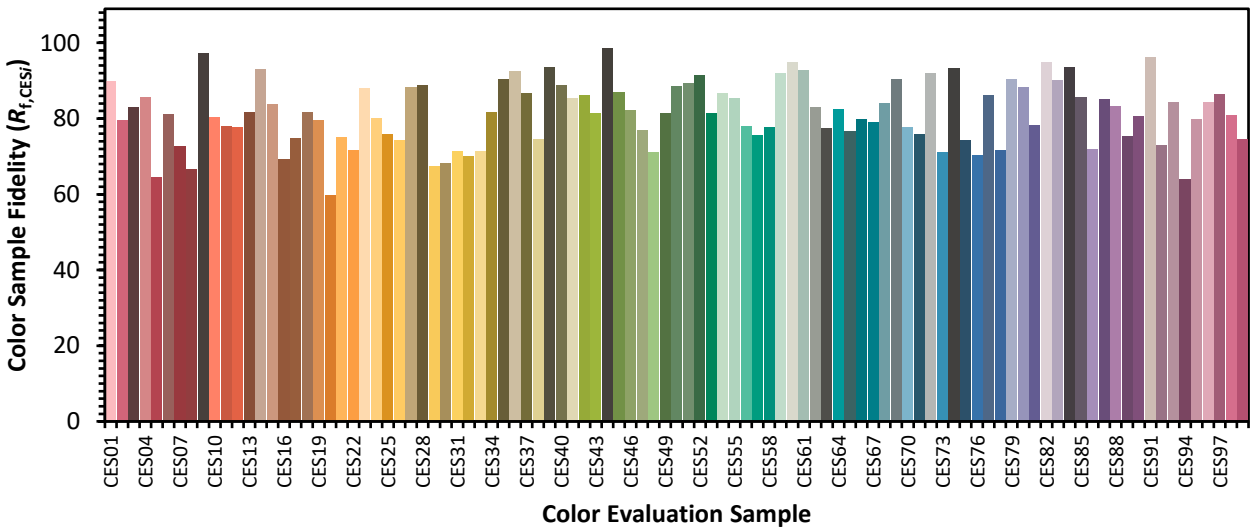
Individual Sample Fidelity Index ($R_{f,i}$)

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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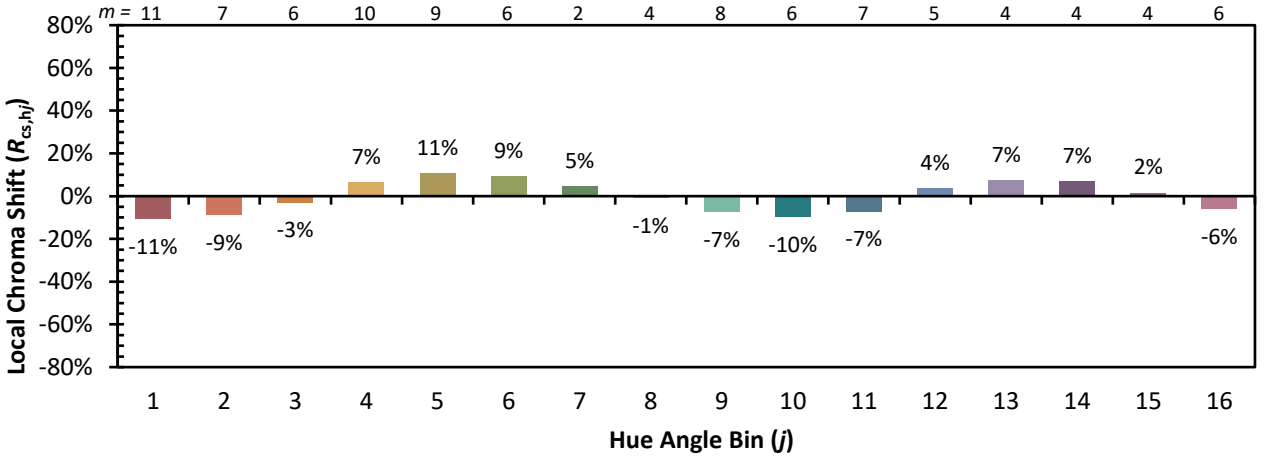
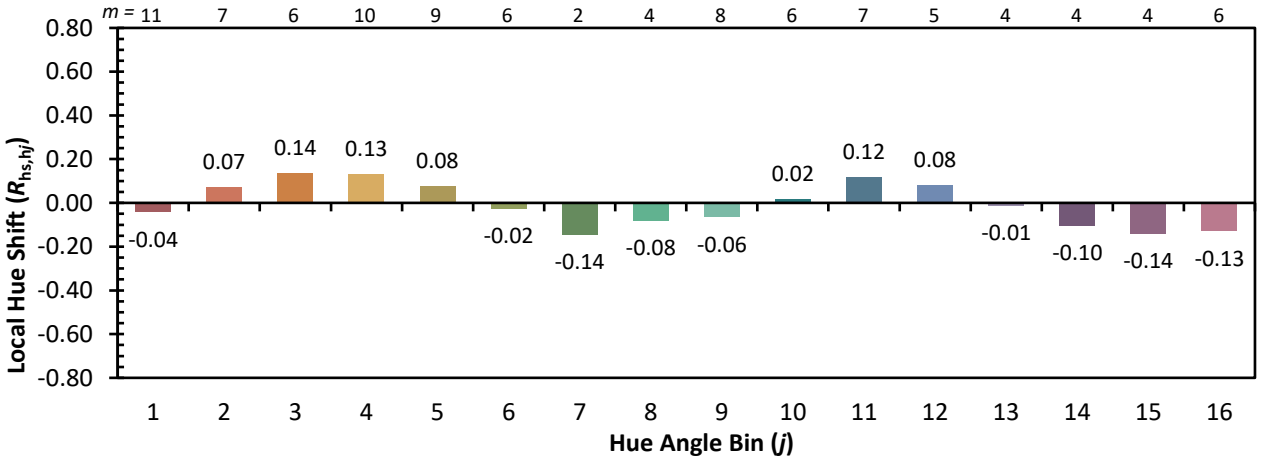
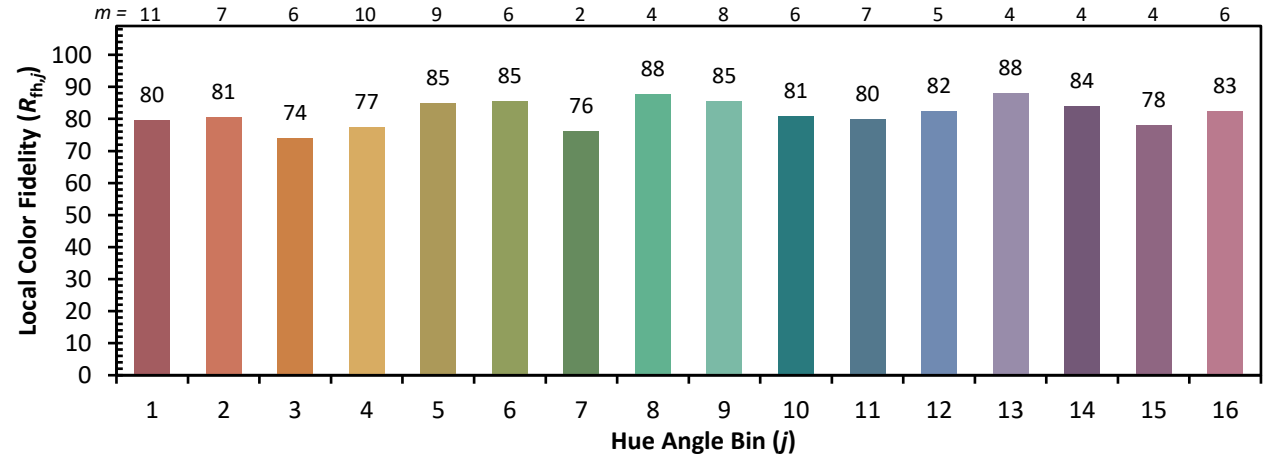
Color Rendition by Hue-Angle Bin







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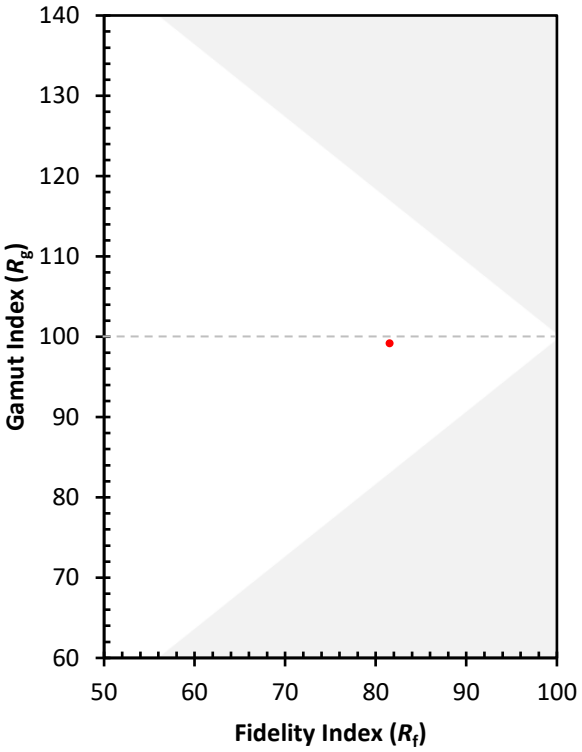
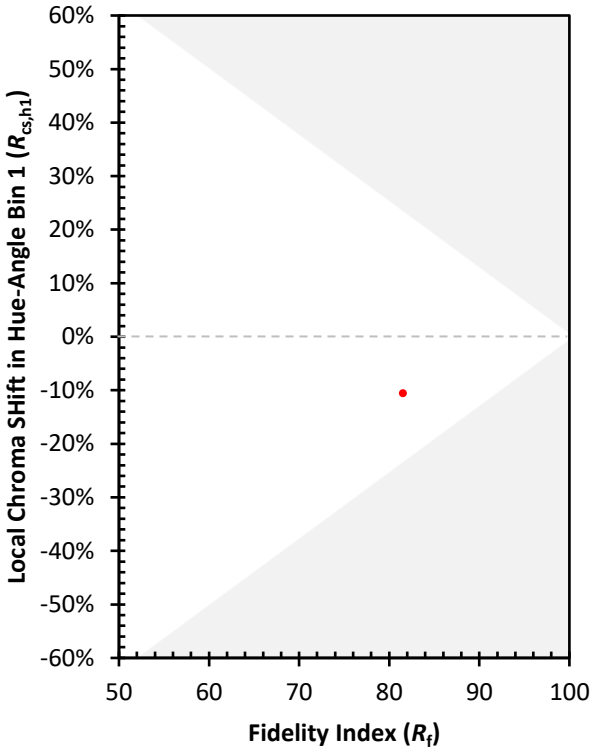
Measure Comparisons





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