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: P638477

Luminaire Tested: GWS-SA4E-830-U-SL4-W-HSS

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:	P638477
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-SL4-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19154.5 lumens
Efficiency:	N/A
Efficacy:	94.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G4

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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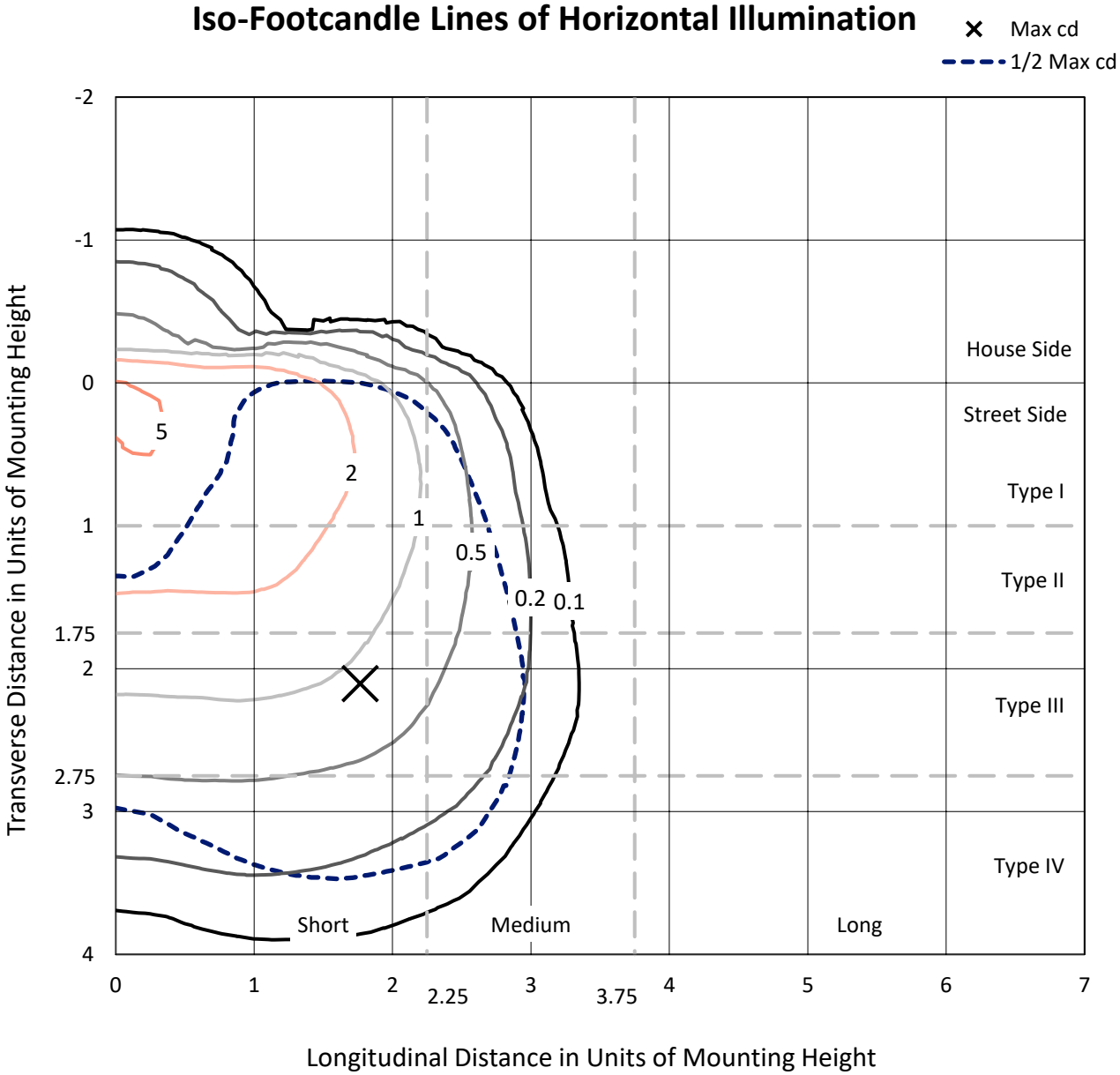
Scaled Data Report

REPORT NUMBER: P638477
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type IV - Short - N/A

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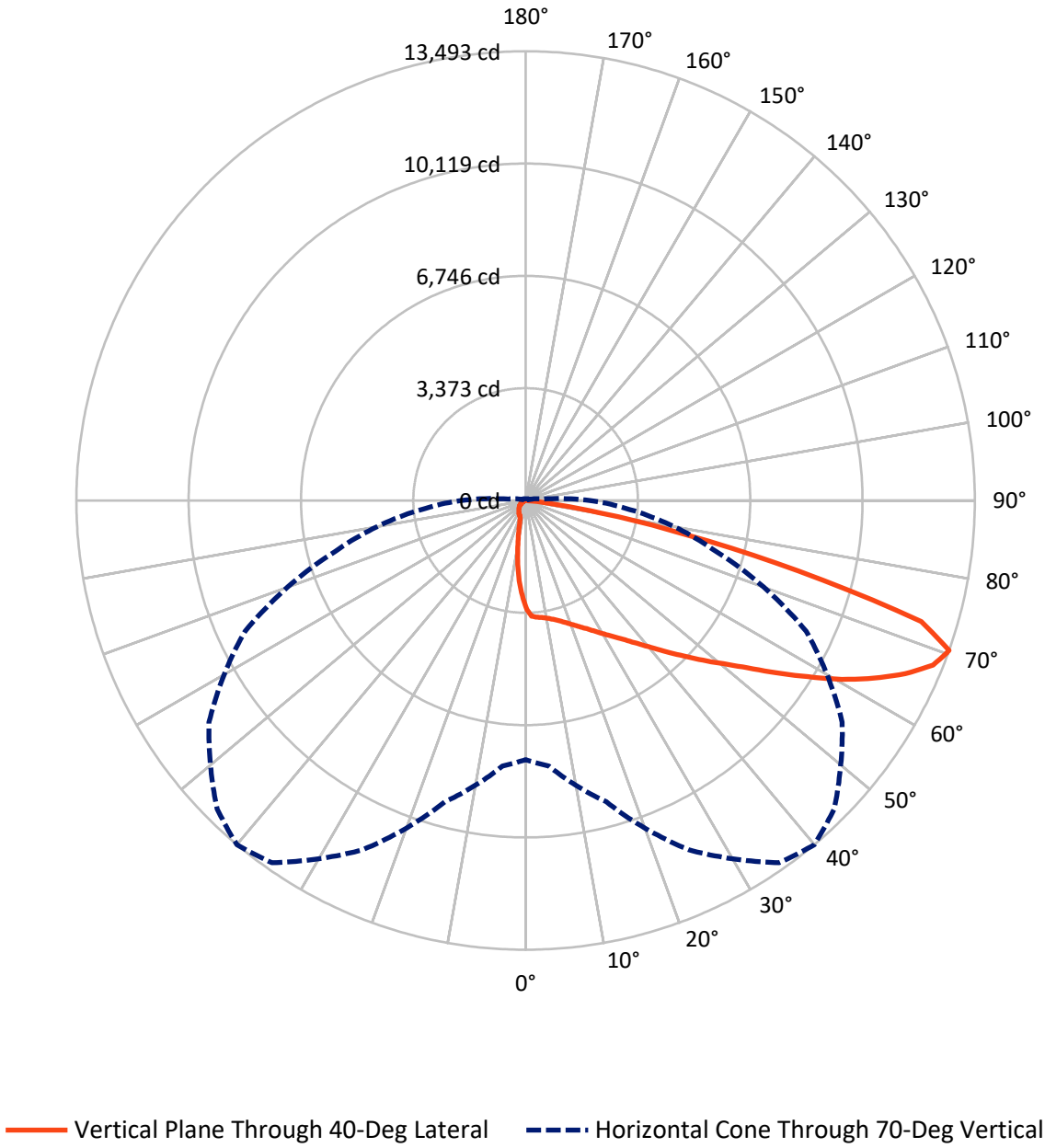
REPORT NUMBER: P638477
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

Luminous Intensity Polar Plot



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REPORT NUMBER: P638477
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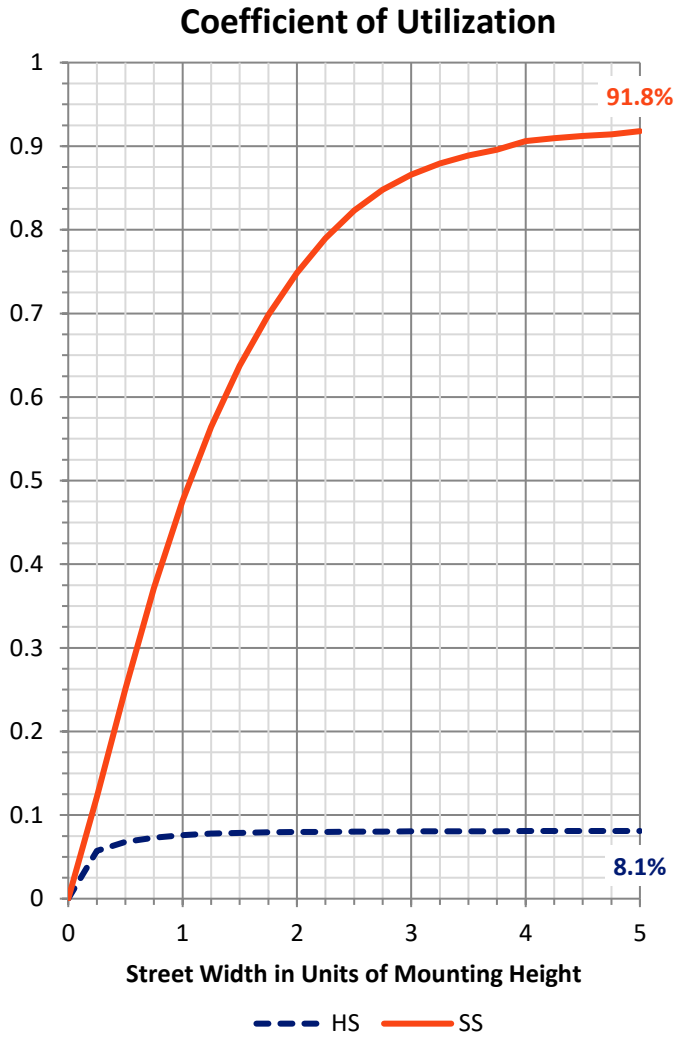
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1566.3	0.0	1566.3
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	17588.2	0.0	17588.2
	% Fixture	91.8	0.0	91.8
Total	Lumens	19154.5	0.0	19154.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.7	1.4
10°-20°	696.7	3.6
20°-30°	1166.1	6.1
30°-40°	1831.5	9.6
40°-50°	2897.0	15.1
50°-60°	4226.0	22.1
60°-70°	5238.8	27.4
70°-80°	2650.5	13.8
80°-90°	173.0	0.9
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°	19154.5	100.0
0°-180°	19154.5	100.0



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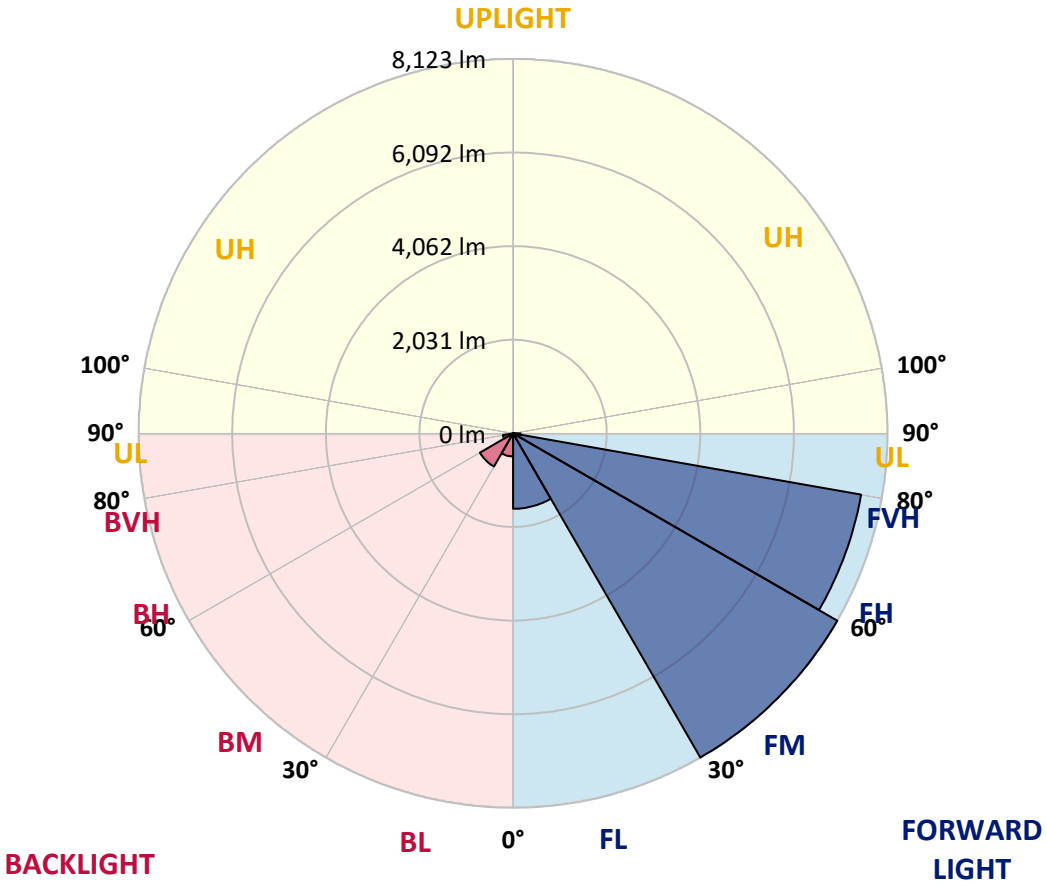
REPORT NUMBER: P638477
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1637.4	8.5			
FM	(30°-60°)	8123.2	42.4			
FH	(60°-80°)	7666.0	40.0			G4/12000
FVH	(80°-90°)	161.6	0.8			G2/225
BL	(0°-30°)	500.2	2.6	B2/1000		
BM	(30°-60°)	831.4	4.3	B1/1000		
BH	(60°-80°)	223.3	1.2	B1/500		G1/500
BVH	(80°-90°)	11.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type IV Short



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Scaled Data Report

REPORT NUMBER: P638477
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3250.3	3250.3	3250.3	3250.3	3250.3	*3250.3*	3250.3	3250.3	3250.3	3250.3	3250.3
2.5°	3494.3	3506.5	3504.7	3510.0	3497.8	*3478.6*	3475.1	3449.0	3401.9	3342.7	3276.4
5°	3565.7	3579.7	3569.2	3564.0	3541.3	*3520.4*	3515.2	3487.3	3433.3	3353.1	3238.1
7.5°	3626.7	3630.2	3623.2	3611.0	3577.9	*3550.0*	3530.9	3492.5	3428.1	3347.9	3215.4
10°	3637.2	3635.4	3638.9	3640.7	3619.8	*3595.4*	3579.7	3527.4	3445.5	3360.1	3217.2
12.5°	3625.0	3625.0	3647.6	3673.8	3673.8	*3661.6*	3645.9	3598.8	3503.0	3401.9	3252.0
15°	3640.7	3645.9	3689.5	3738.3	3754.0	*3741.8*	3734.8	3686.0	3586.6	3475.1	3314.8
17.5°	3696.4	3701.7	3771.4	3844.6	3863.7	*3849.8*	3835.9	3787.1	3680.8	3558.8	3386.2
20°	3778.4	3792.3	3881.2	3975.3	3992.7	*3975.3*	3947.4	3879.4	3773.1	3649.4	3454.2
22.5°	3928.2	3936.9	4032.8	4132.1	4140.9	*4113.0*	4071.1	3977.0	3865.5	3745.2	3530.9
25°	4126.9	4139.1	4235.0	4330.8	4308.2	*4266.3*	4208.8	4102.5	3975.3	3858.5	3628.5
27.5°	4363.9	4377.9	4472.0	4555.6	4496.4	*4447.6*	4383.1	4250.6	4121.7	4015.4	3754.0
30°	4620.1	4632.3	4716.0	4790.9	4712.5	*4655.0*	4578.3	4442.4	4311.6	4231.5	3931.7
32.5°	4867.6	4865.8	4946.0	5007.0	4926.8	*4881.5*	4811.8	4674.1	4569.6	4534.7	4196.6
35°	5097.6	5097.6	5163.9	5224.9	5167.3	*5143.0*	5078.5	4968.7	4909.4	4951.2	4550.4
37.5°	5329.4	5317.2	5380.0	5447.9	5442.7	*5444.5*	5407.9	5355.6	5359.1	5507.2	5036.6
40°	5521.1	5515.9	5589.1	5678.0	5747.7	*5803.5*	5780.8	5800.0	5909.8	6186.9	5658.8
42.5°	5674.5	5686.7	5780.8	5922.0	6098.0	*6211.3*	6227.0	6305.4	6587.7	7016.4	6361.2
45°	5850.5	5852.3	5983.0	6199.1	6479.7	*6659.2*	6721.9	6924.1	7324.9	7877.4	7131.5
47.5°	6066.6	6045.7	6192.1	6495.3	6901.4	*7166.3*	7277.9	7530.6	8151.0	8717.4	7758.9
50°	6305.4	6267.0	6432.6	6845.6	7373.7	*7704.8*	7931.4	8300.9	8970.1	9407.5	8225.9
52.5°	6582.5	6545.9	6734.1	7248.2	7940.1	*8342.7*	8633.7	9006.7	9672.4	9933.9	8504.8
55°	6934.5	6897.9	7096.6	7731.0	8609.3	*9132.2*	9437.2	9750.9	10326.0	10322.5	8706.9
57.5°	7324.9	7274.4	7549.7	8341.0	9444.1	*9987.9*	10298.1	10451.5	10822.7	10624.0	8842.9
60°	7772.8	7727.5	8109.2	9067.7	10407.9	*10911.6*	11106.8	11044.0	11230.5	10801.8	8795.8
62.5°	8177.1	8156.2	8630.3	9838.0	11326.3	*11751.6*	11805.6	11532.0	11530.2	10805.3	8478.6
65°	8597.1	8637.2	9341.3	10725.1	12250.0	*12535.8*	12443.5	12016.5	11650.5	10378.3	7541.0
67.5°	8754.0	8870.8	9810.1	11526.8	12978.5	*13201.6*	13039.5	12258.7	11150.3	8942.2	5742.5
70°	*7785.0*	*8004.6*	*9367.5*	*11572.1*	*13280.0*	*13492.6*	*13104.0*	*11606.9*	*9296.0*	*5923.7*	*3145.7*
72.5°	5920.2	6176.4	7805.9	9475.5	11943.3	*12427.8*	11763.8	9456.3	5991.7	2595.0	1056.1
75°	3313.0	3590.1	5813.9	7135.0	8018.5	*8461.2*	8217.2	6066.6	2654.3	677.9	315.4
77.5°	1120.6	1213.0	2704.8	4414.5	5292.8	*4895.5*	4144.3	3013.3	976.0	257.9	167.3
80°	664.0	698.9	1007.3	2197.6	2785.0	*2309.2*	1823.0	1113.6	496.7	137.7	116.8
82.5°	198.7	235.3	555.9	815.6	1091.0	*679.7*	575.1	636.1	257.9	74.9	97.6
85°	0.0	0.0	118.5	252.7	285.8	*111.5*	111.5	360.8	47.1	31.4	71.5
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	1.7	8.7	5.2	7.0	15.7
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: P638477
CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3
2.5°	3229.4	3168.4	3096.9	3029.0	2964.5	2880.8	2840.7	2791.9	2750.1	2727.5	2739.7
5°	3164.9	3069.0	2922.6	2774.5	2624.6	2483.5	2356.2	2270.8	2194.2	2154.1	2162.8
7.5°	3109.1	2980.2	2751.9	2509.6	2269.1	2026.9	1829.9	1676.6	1558.0	1509.2	1500.5
10°	3084.7	2922.6	2600.2	2251.7	1882.2	1556.3	1277.5	1108.4	988.2	928.9	939.4
12.5°	3096.9	2893.0	2471.3	1999.0	1519.7	1139.8	873.1	714.5	629.1	594.3	585.6
15°	3131.8	2886.0	2356.2	1741.0	1172.9	796.5	603.0	538.5	521.1	517.6	517.6
17.5°	3171.9	2887.8	2237.7	1479.6	890.6	590.8	515.9	503.7	498.4	495.0	496.7
20°	3211.9	2887.8	2101.8	1214.7	669.2	510.6	491.5	482.8	477.5	475.8	475.8
22.5°	3260.7	2887.8	1950.2	969.0	536.8	484.5	468.8	463.6	458.4	456.6	454.9
25°	3320.0	2889.5	1782.9	758.1	488.0	461.8	449.6	444.4	439.2	435.7	435.7
27.5°	3405.4	2903.5	1598.1	590.8	460.1	440.9	430.5	425.2	420.0	414.8	414.8
30°	3529.1	2938.3	1390.7	488.0	434.0	418.3	407.8	404.3	399.1	393.9	392.1
32.5°	3713.9	2999.3	1176.4	437.4	409.6	393.9	381.7	378.2	373.0	367.7	366.0
35°	3971.8	3110.9	967.2	406.1	378.2	362.5	355.5	353.8	346.8	341.6	341.6
37.5°	4350.0	3292.1	766.8	374.7	352.0	339.8	331.1	327.6	320.7	315.4	313.7
40°	4811.8	3527.4	596.0	350.3	327.6	315.4	306.7	301.5	292.8	285.8	282.3
42.5°	5400.9	3815.0	470.6	324.2	305.0	292.8	285.8	275.4	263.2	252.7	251.0
45°	6014.3	4111.2	388.6	299.8	284.1	273.6	264.9	251.0	233.5	221.3	217.8
47.5°	6484.9	4296.0	339.8	273.6	261.4	252.7	242.2	224.8	203.9	190.0	186.5
50°	6821.3	4323.8	303.2	249.2	242.2	233.5	217.8	196.9	174.3	160.3	156.9
52.5°	6986.8	4198.4	273.6	226.6	221.3	212.6	193.4	170.8	146.4	132.5	129.0
55°	7061.8	3961.3	245.7	207.4	200.4	190.0	169.0	144.7	120.3	108.1	104.6
57.5°	7032.1	3611.0	221.3	188.2	179.5	167.3	144.7	118.5	99.3	87.1	85.4
60°	6812.5	3119.6	196.9	169.0	158.6	144.7	122.0	97.6	80.2	71.5	69.7
62.5°	6338.5	2509.6	172.5	146.4	139.4	125.5	104.6	80.2	66.2	61.0	59.3
65°	5367.8	1774.2	148.1	123.7	120.3	106.3	87.1	66.2	57.5	54.0	52.3
67.5°	3858.5	1078.8	125.5	106.3	102.8	90.6	73.2	57.5	52.3	50.5	50.5
70°	*1939.7*	*510.6*	*99.3*	*87.1*	*87.1*	*74.9*	*62.7*	*52.3*	*50.5*	*48.8*	*48.8*
72.5°	658.8	217.8	74.9	68.0	71.5	64.5	54.0	48.8	48.8	48.8	48.8
75°	224.8	115.0	52.3	48.8	52.3	52.3	47.1	47.1	48.8	48.8	48.8
77.5°	146.4	76.7	36.6	33.1	40.1	40.1	40.1	43.6	47.1	47.1	47.1
80°	120.3	41.8	24.4	22.7	29.6	29.6	33.1	40.1	43.6	43.6	43.6
82.5°	102.8	26.1	13.9	15.7	20.9	22.7	27.9	33.1	38.3	40.1	40.1
85°	69.7	13.9	10.5	12.2	13.9	17.4	22.7	27.9	31.4	34.9	34.9
87.5°	19.2	5.2	7.0	8.7	8.7	12.2	17.4	20.9	24.4	26.1	26.1
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

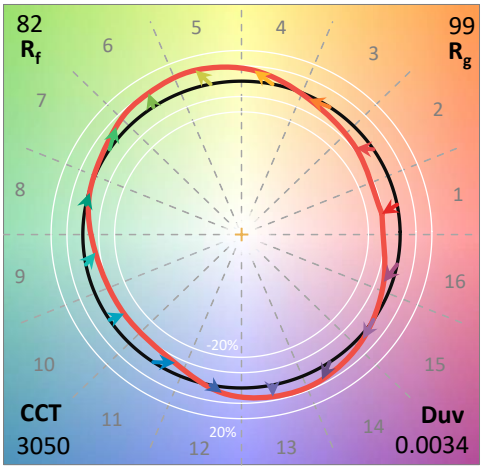
Test Information

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

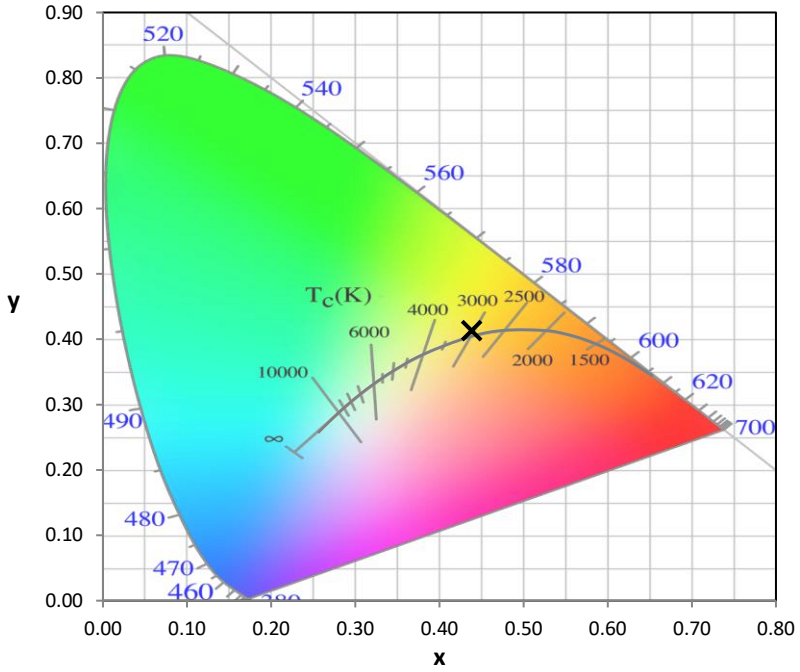
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

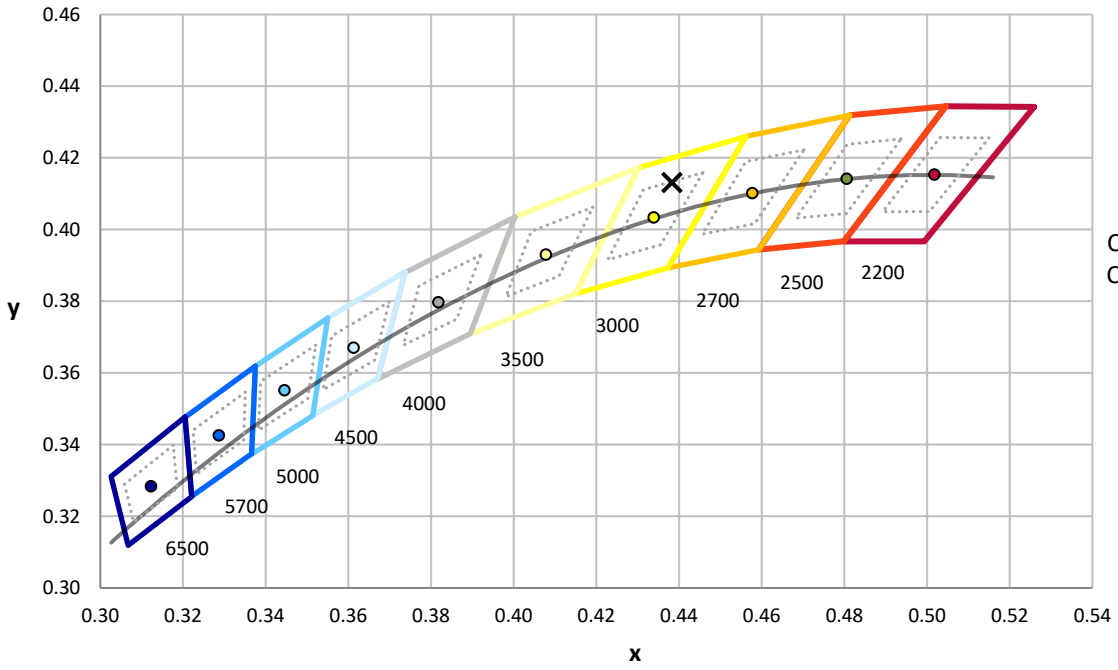
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

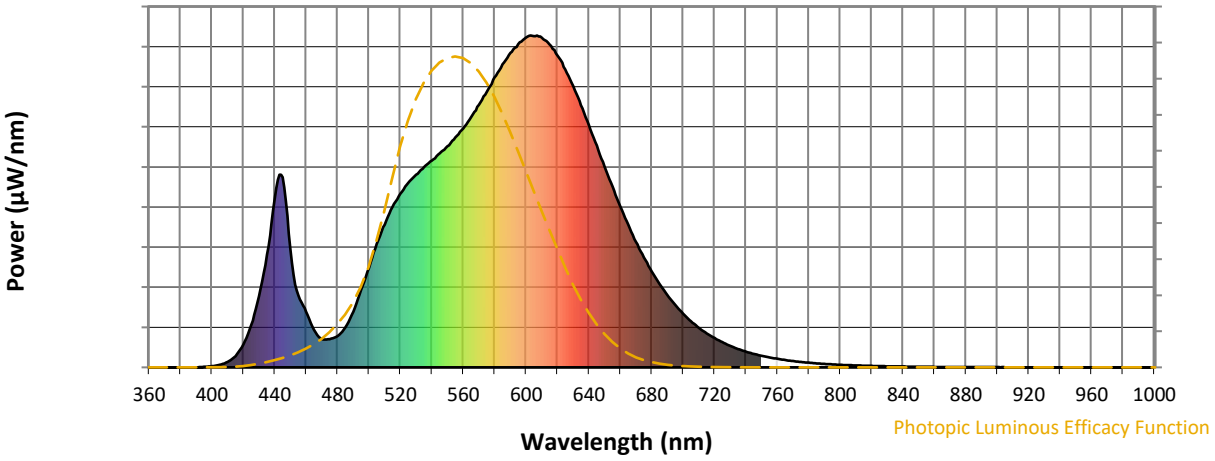


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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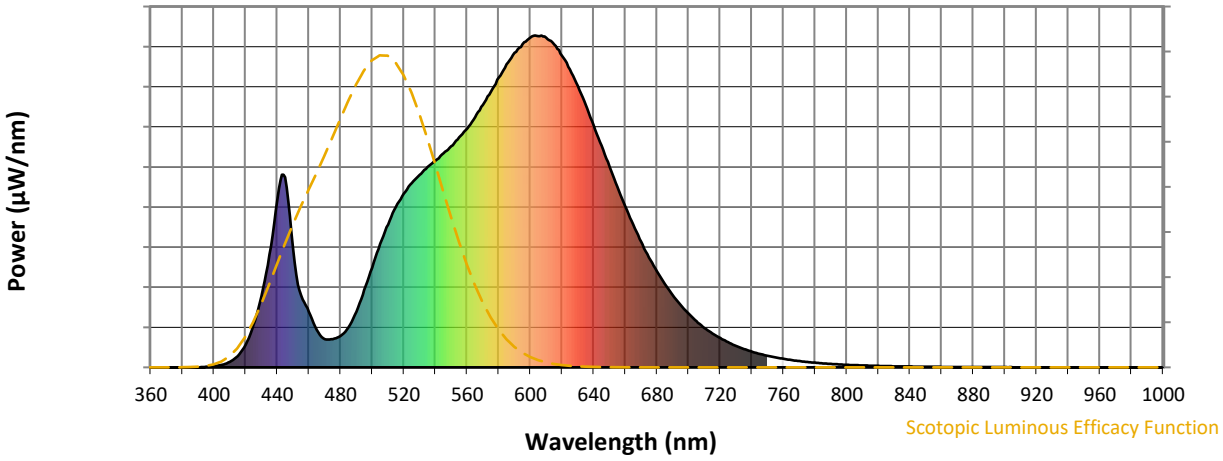
Scotopic Flux vs. Wavelength



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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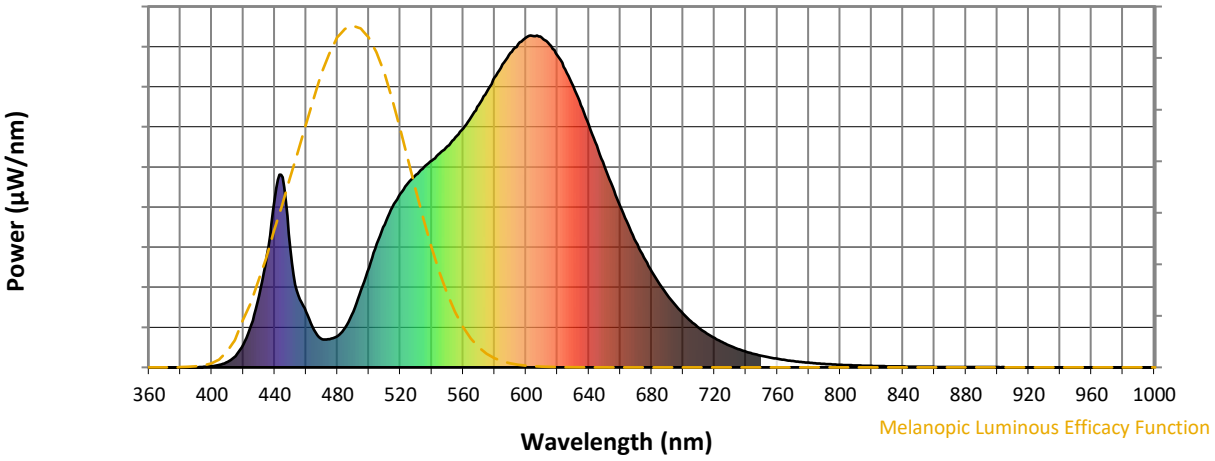
Melanopic Flux vs. Wavelength



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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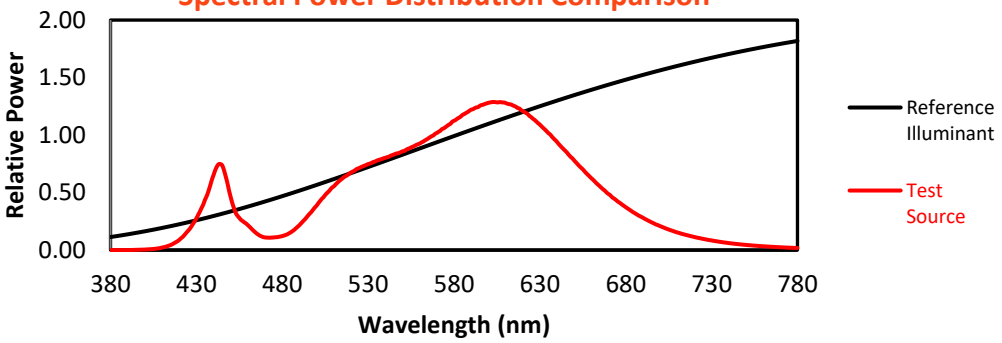
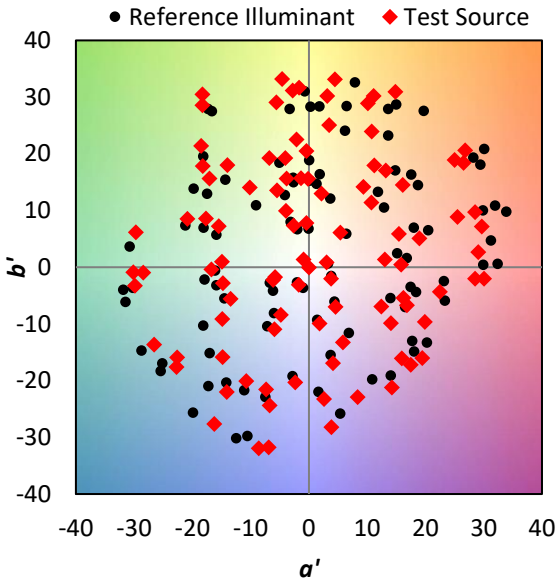
Summary

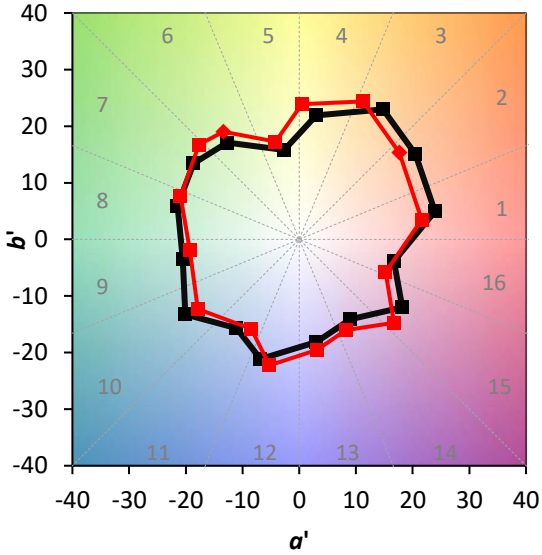
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

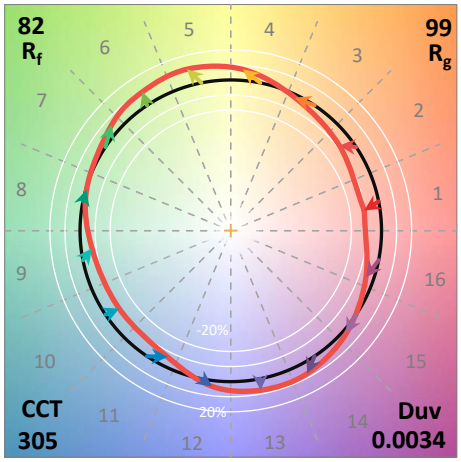
Spectral Power Distribution Comparison

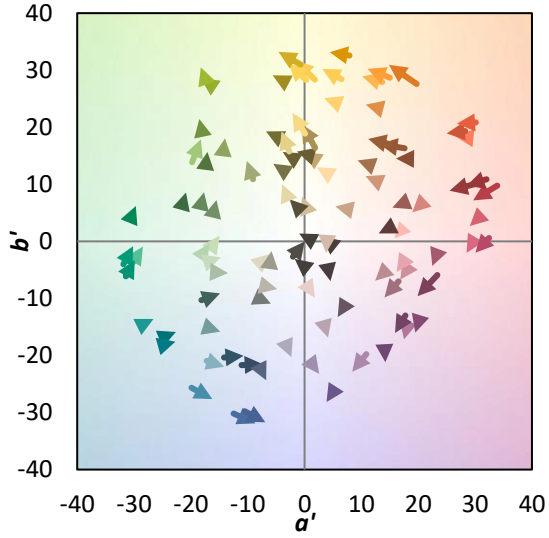


Color Vector Graphics









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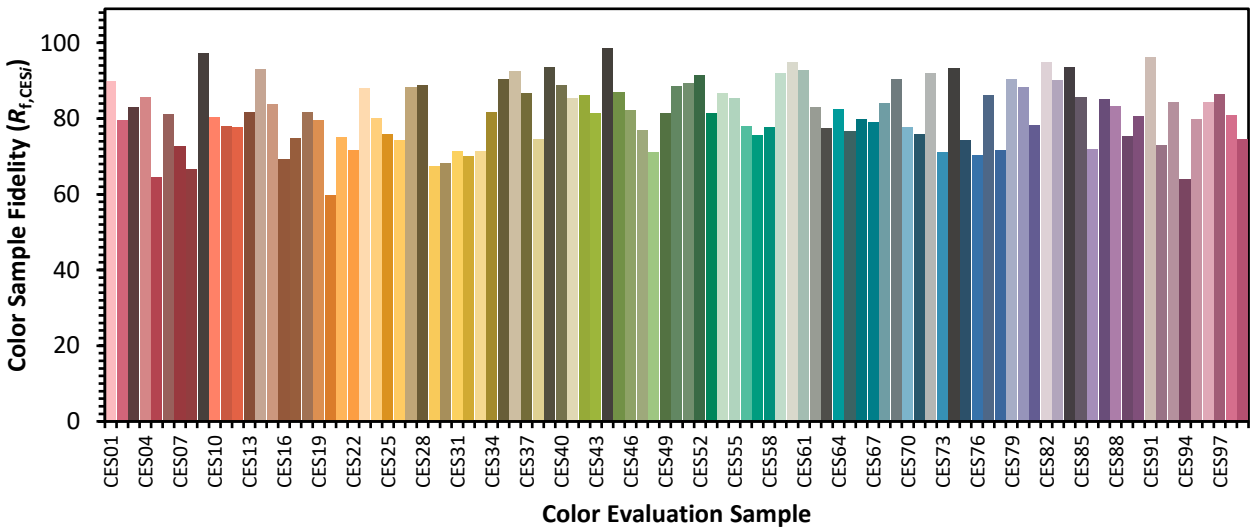
Individual Sample Fidelity Index ($R_{f,i}$)

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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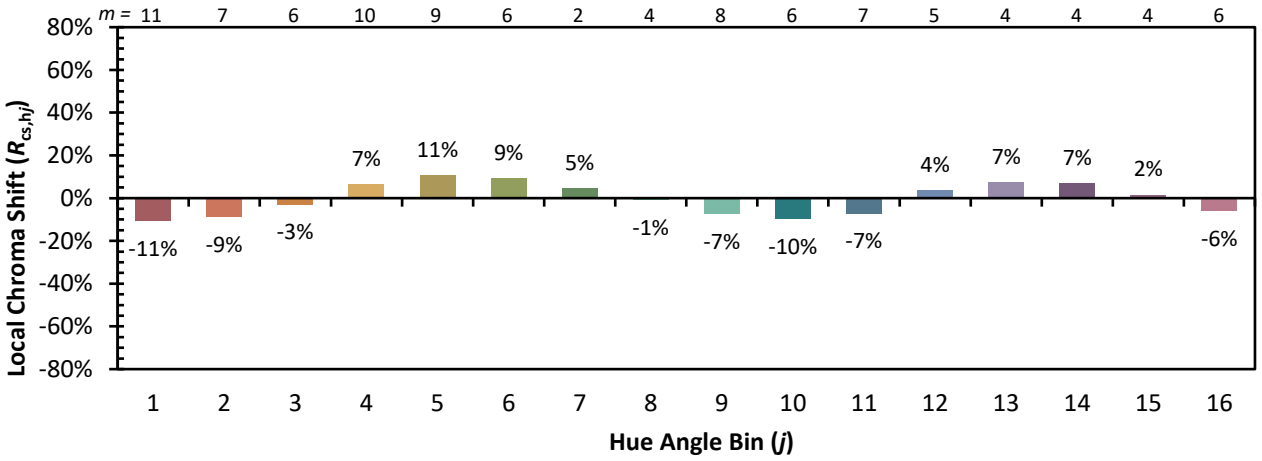
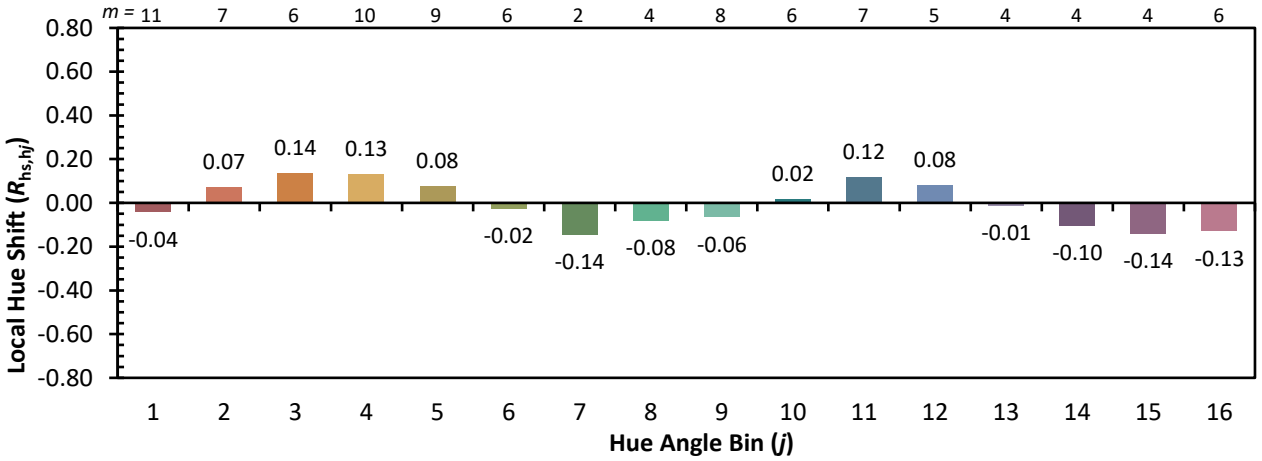
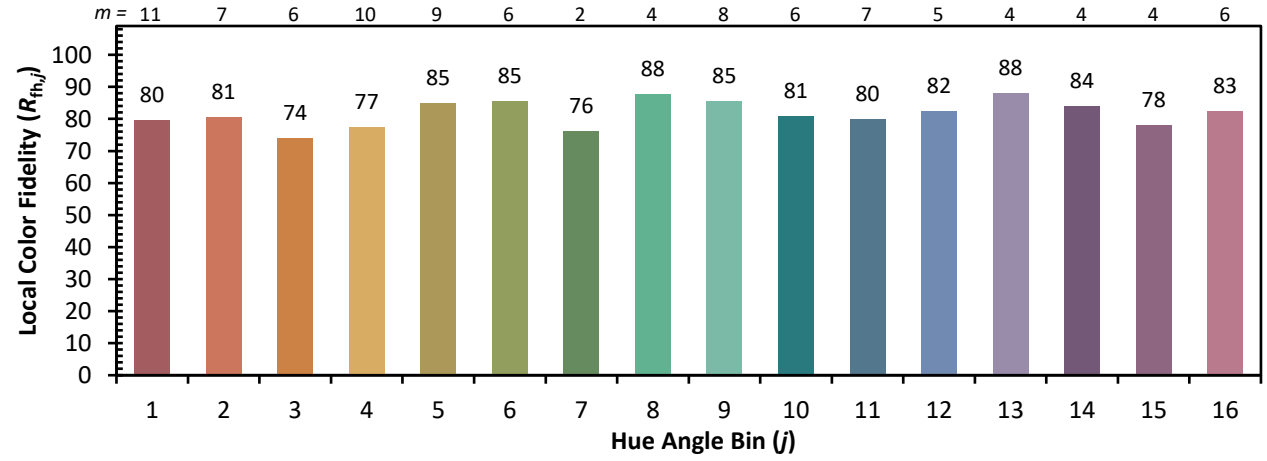
Color Rendition by Hue-Angle Bin







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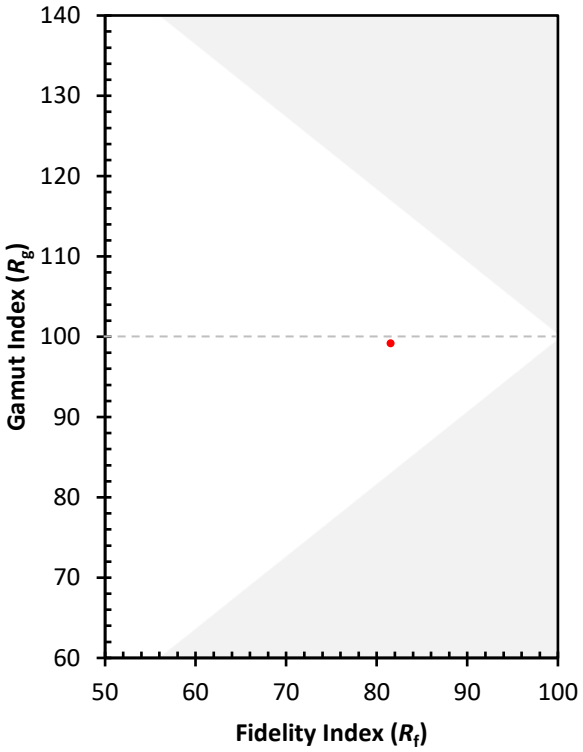
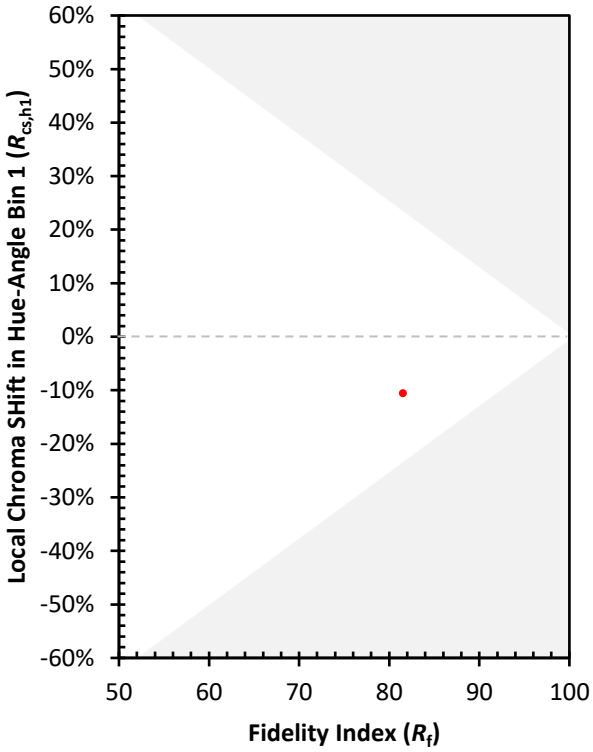
Measure Comparisons





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