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: P638471

Luminaire Tested: GWS-SA4E-830-U-SL2-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:	P638471
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-SL2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II 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:	19271.2 lumens
Efficiency:	N/A
Efficacy:	95.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - 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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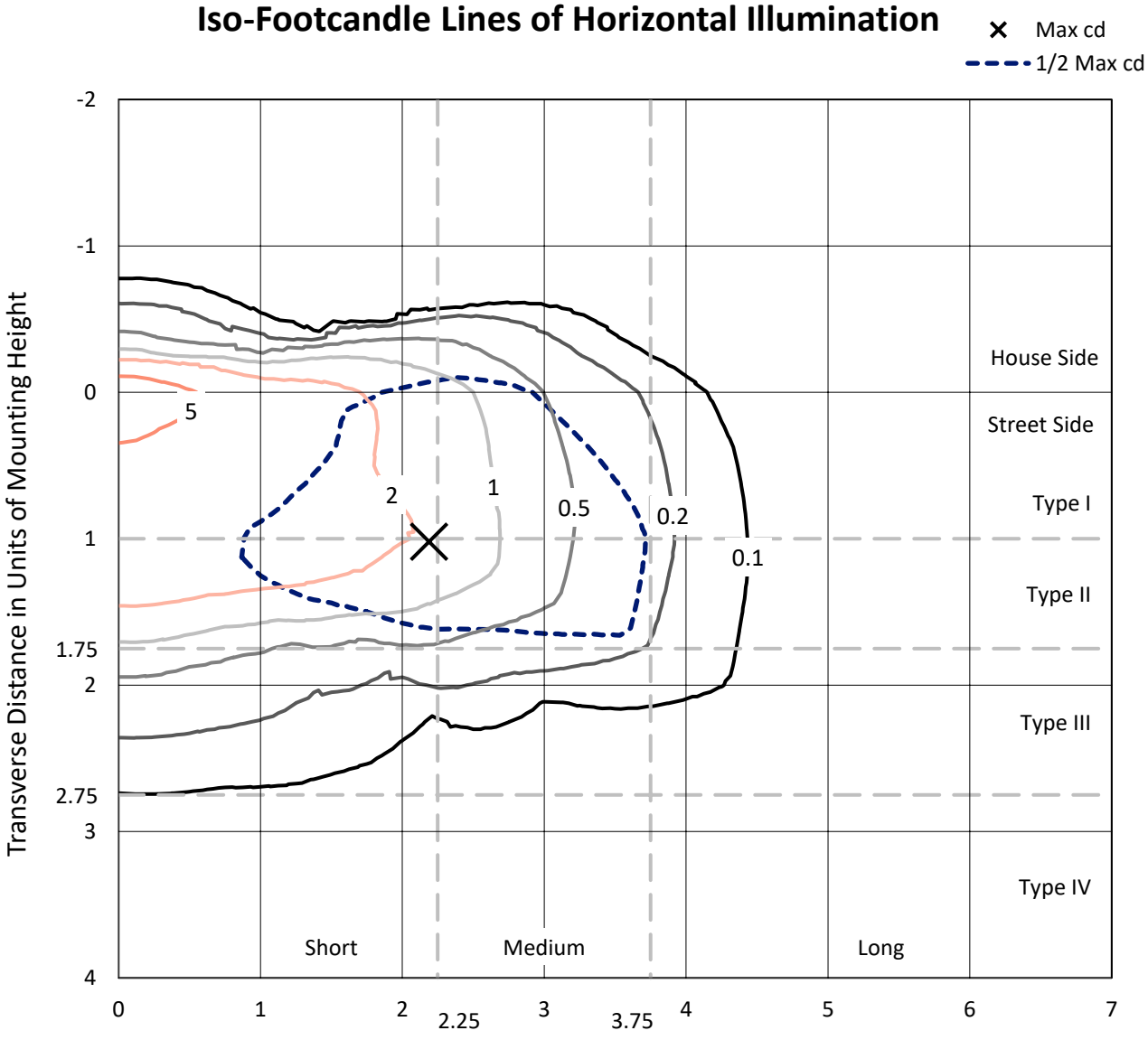
Scaled Data Report

REPORT NUMBER: P638471
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Short - N/A

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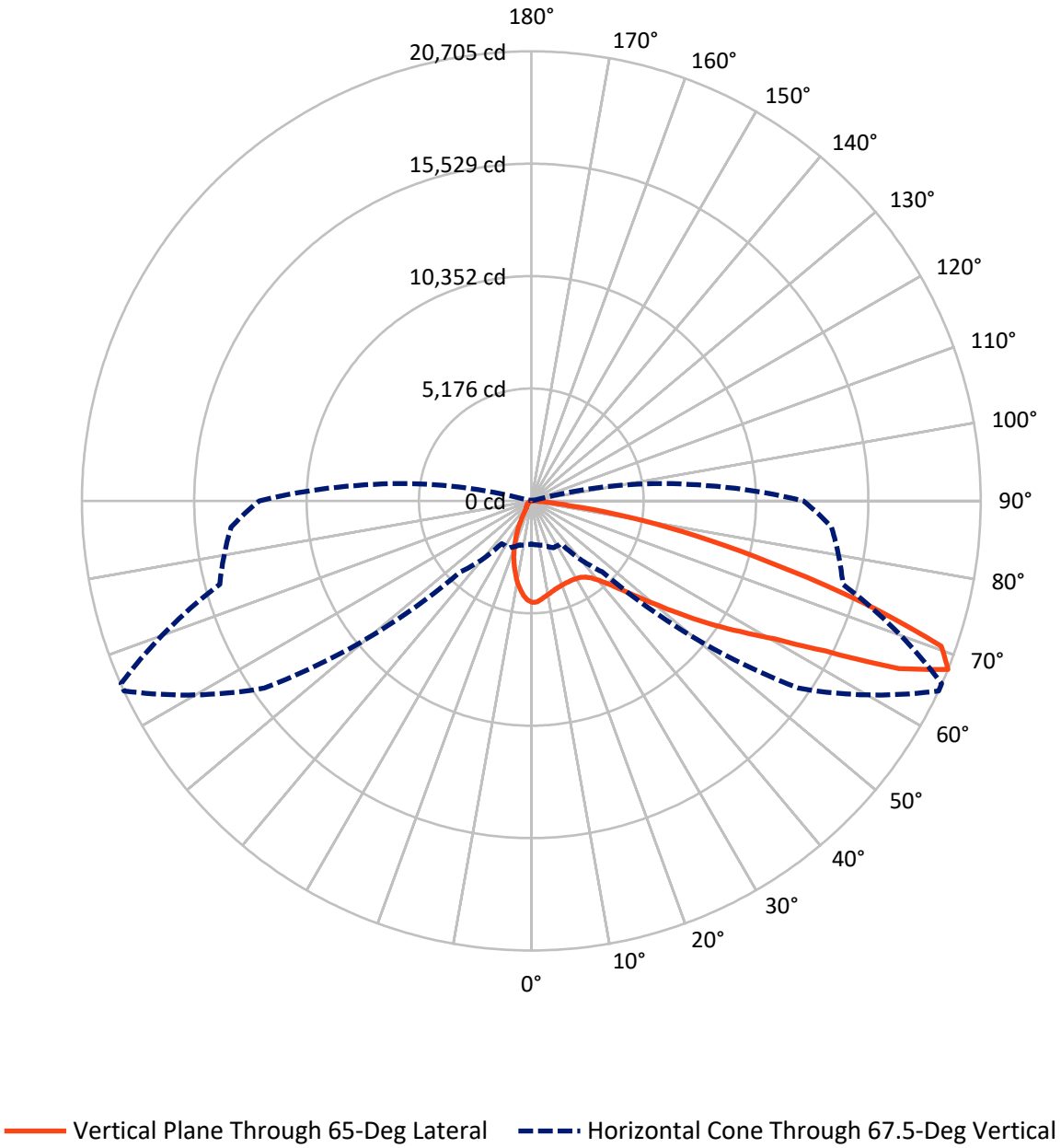
Luminous Intensity Polar Plot



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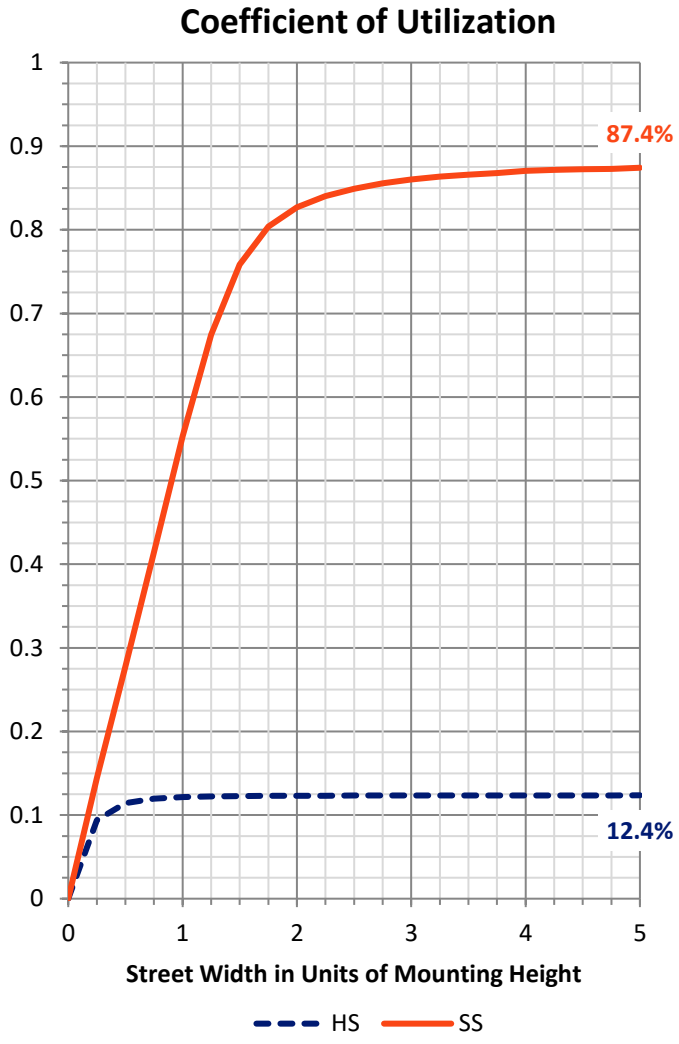
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2406.4	0.0	2406.4
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	16864.8	0.0	16864.8
	% Fixture	87.5	0.0	87.5
Total	Lumens	19271.2	0.0	19271.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.2	2.0
10°-20°	872.6	4.5
20°-30°	1246.9	6.5
30°-40°	1814.1	9.4
40°-50°	2841.2	14.7
50°-60°	4432.4	23.0
60°-70°	4868.8	25.3
70°-80°	2591.1	13.4
80°-90°	215.7	1.1
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°	19271.2	100.0
0°-180°	19271.2	100.0



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REPORT NUMBER: P638471
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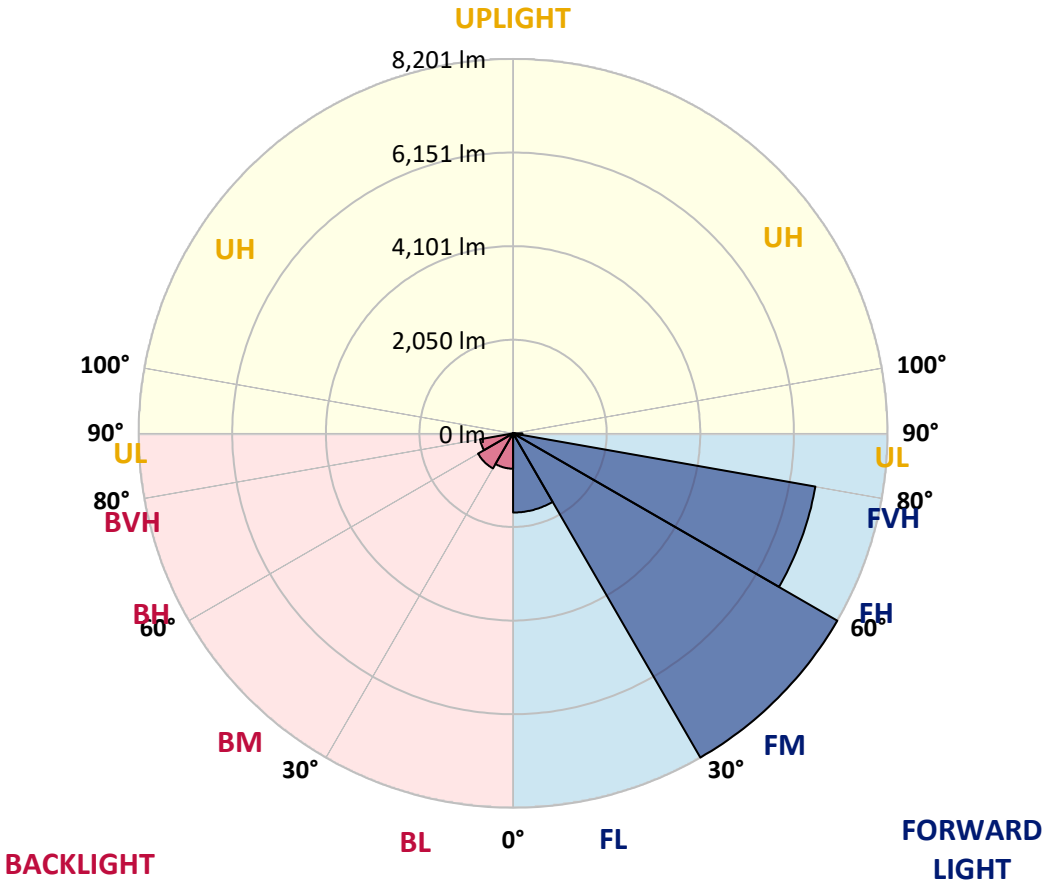
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1734.3	9.0			
FM	(30°-60°)	8201.4	42.6			
FH	(60°-80°)	6724.9	34.9			G3/7500
FVH	(80°-90°)	204.2	1.1			G2/225
BL	(0°-30°)	773.5	4.0	B2/1000		
BM	(30°-60°)	886.4	4.6	B1/1000		
BH	(60°-80°)	735.0	3.8	B2/1000		G2/1000
BVH	(80°-90°)	11.5	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-G3
Type II Short



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Scaled Data Report

REPORT NUMBER: P638471
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9
2.5°	4511.8	4525.7	4506.6	4553.6	4562.3	4614.6	4644.2	4665.2	4663.4	4689.6	4689.6
5°	4246.9	4260.9	4250.4	4300.9	4341.0	4422.9	4490.9	4569.3	4572.8	4653.0	4682.6
7.5°	4022.1	4023.9	4023.9	4086.6	4138.9	4239.9	4341.0	4461.3	4475.2	4598.9	4677.4
10°	3837.4	3842.6	3844.4	3915.8	3973.3	4095.3	4224.3	4368.9	4384.6	4551.9	4673.9
12.5°	3710.2	3711.9	3718.9	3793.8	3856.6	3983.8	4114.5	4280.0	4300.9	4497.9	4658.2
15°	3649.2	3645.7	3649.2	3711.9	3774.6	3896.6	4030.8	4208.6	4231.2	4452.6	4659.9
17.5°	3645.7	3640.5	3637.0	3684.0	3724.1	3832.2	3968.1	4161.5	4185.9	4431.6	4679.1
20°	3696.2	3692.7	3675.3	3696.2	3704.9	3793.8	3928.0	4124.9	4149.3	4428.2	4720.9
22.5°	3828.7	3820.0	3793.8	3774.6	3727.6	3779.9	3900.1	4098.8	4126.7	4436.9	4774.9
25°	4025.6	4022.1	3989.0	3941.9	3821.7	3800.8	3901.9	4098.8	4124.9	4447.3	4832.5
27.5°	4321.9	4300.9	4259.1	4177.2	4004.7	3882.7	3936.7	4109.2	4135.4	4461.3	4879.5
30°	4623.3	4621.6	4607.7	4524.0	4267.8	4039.5	4009.9	4137.1	4161.5	4473.5	4923.1
32.5°	4935.3	4940.5	4975.4	4910.9	4630.3	4273.1	4142.4	4194.6	4212.1	4497.9	4961.4
35°	5231.5	5242.0	5334.3	5357.0	5071.2	4626.8	4358.4	4309.7	4311.4	4551.9	5012.0
37.5°	5515.6	5550.4	5698.6	5808.4	5620.1	5055.5	4670.4	4504.8	4490.9	4659.9	5088.6
40°	5838.0	5904.2	6090.7	6277.1	6217.9	5621.9	5095.6	4804.6	4774.9	4858.6	5226.3
42.5°	6195.2	6266.7	6514.1	6775.5	6803.4	6306.8	5627.1	5242.0	5191.4	5193.2	5484.2
45°	6578.6	6674.5	6962.0	7338.4	7507.5	7070.1	6282.4	5832.8	5782.2	5707.3	5899.0
47.5°	7082.3	7165.9	7443.0	7876.9	8201.1	7889.1	7141.5	6592.6	6500.2	6390.4	6543.8
50°	7516.2	7589.4	7828.1	8371.8	9046.3	8945.2	8115.7	7542.3	7453.5	7267.0	7394.2
52.5°	7612.0	7669.5	7889.1	8500.8	9692.8	10278.3	9309.4	8690.8	8628.0	8283.0	8331.8
55°	7181.6	7268.7	7465.6	8145.3	9861.8	11581.9	10858.7	9985.6	9854.9	9304.2	9391.3
57.5°	6094.2	6249.3	6434.0	7317.5	9403.5	12275.5	13023.1	11357.1	11238.6	10287.1	10288.8
60°	4466.5	4592.0	4715.7	5524.3	8316.1	12228.4	14987.1	12897.6	12681.5	11090.4	11060.8
62.5°	3248.4	3312.8	3311.1	3598.6	5710.8	11423.3	16018.7	15218.8	14715.2	11949.6	11780.5
65°	2554.8	2553.0	2628.0	2722.1	3189.1	8818.0	16145.9	18608.4	18064.6	13101.5	12749.5
67.5°	1988.4	2026.7	2101.7	2378.8	2396.2	4614.6	15027.1	20704.8	20694.3	14859.8	13883.9
70°	1533.6	1585.8	1692.1	2096.4	2213.2	2582.7	11243.8	20040.8	20209.9	15645.8	13080.6
72.5°	984.6	981.1	1138.0	1693.9	2126.1	2152.2	6217.9	15919.4	16111.1	14171.5	10576.3
75°	550.7	554.2	643.0	1036.9	1981.4	2025.0	3079.3	11351.8	11503.4	11048.6	8126.1
77.5°	216.1	223.1	301.5	545.5	1307.0	1808.9	1829.8	7741.0	7763.6	6847.0	4984.1
80°	87.1	92.4	153.4	338.1	796.4	1218.1	1307.0	4560.6	4468.2	2650.6	1449.9
82.5°	26.1	27.9	61.0	191.7	416.5	866.1	881.8	1749.7	1652.1	569.9	369.4
85°	1.7	1.7	13.9	59.3	148.1	217.8	587.3	569.9	505.4	142.9	163.8
87.5°	0.0	0.0	1.7	1.7	3.5	7.0	62.7	104.6	106.3	26.1	73.2
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: P638471
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9	4673.9
2.5°	4689.6	4626.8	4621.6	4572.8	4524.0	4463.0	4391.6	4339.3	4302.7	4238.2	4226.0
5°	4682.6	4598.9	4520.5	4381.1	4226.0	4058.7	3912.3	3776.4	3691.0	3633.5	3609.1
7.5°	4668.6	4562.3	4381.1	4118.0	3858.3	3565.5	3337.2	3128.1	2985.2	2901.6	2865.0
10°	4658.2	4515.3	4220.8	3821.7	3419.1	3014.8	2668.0	2357.8	2185.3	2049.4	2026.7
12.5°	4637.3	4447.3	4015.1	3474.9	2955.6	2418.8	1976.2	1596.3	1333.2	1214.6	1172.8
15°	4616.4	4375.9	3809.5	3108.9	2450.2	1788.0	1251.2	885.3	704.0	648.3	644.8
17.5°	4612.9	4311.4	3586.4	2762.2	1920.4	1171.1	712.8	573.3	535.0	521.1	521.1
20°	4623.3	4257.4	3366.9	2363.1	1399.4	712.8	531.5	496.7	474.0	461.8	461.8
22.5°	4633.8	4201.6	3156.0	1960.5	928.8	521.1	468.8	439.2	413.0	399.1	392.1
25°	4640.8	4140.6	2922.5	1556.2	606.5	453.1	411.3	372.9	341.6	324.1	324.1
27.5°	4639.0	4067.4	2687.2	1160.6	470.5	402.6	352.0	311.9	280.6	261.4	263.1
30°	4625.1	3987.3	2443.2	810.3	411.3	352.0	301.5	259.7	228.3	212.6	210.9
32.5°	4614.6	3901.9	2160.9	569.9	369.4	308.5	256.2	216.1	190.0	177.8	176.0
35°	4602.4	3818.2	1892.6	433.9	332.9	266.6	216.1	183.0	162.1	151.6	151.6
37.5°	4605.9	3731.1	1601.5	372.9	296.3	231.8	184.7	156.8	139.4	129.0	127.2
40°	4659.9	3678.8	1315.7	338.1	263.1	200.4	160.3	135.9	118.5	108.0	106.3
42.5°	4794.1	3680.5	1042.1	311.9	233.5	170.8	139.4	116.8	101.1	88.9	87.1
45°	5062.5	3753.7	799.9	284.1	202.2	148.1	120.2	99.3	83.6	73.2	71.4
47.5°	5501.6	3971.6	606.5	259.7	176.0	129.0	102.8	83.6	69.7	61.0	59.3
50°	6200.5	4365.4	477.5	230.0	148.1	111.5	87.1	69.7	57.5	48.8	47.1
52.5°	7040.4	4956.2	409.5	203.9	127.2	97.6	74.9	57.5	47.1	40.1	38.3
55°	8005.9	5662.0	378.2	177.8	108.0	83.6	61.0	47.1	38.3	33.1	29.6
57.5°	8891.2	6298.1	376.4	151.6	92.4	71.4	50.5	40.1	33.1	26.1	24.4
60°	9753.8	6829.6	353.8	125.5	80.2	59.3	43.6	33.1	27.9	22.7	20.9
62.5°	10536.3	7261.8	296.3	101.1	68.0	48.8	36.6	29.6	24.4	19.2	19.2
65°	11519.1	7812.4	226.5	81.9	55.8	40.1	31.4	26.1	22.7	17.4	17.4
67.5°	*12535.1*	*8103.5*	*162.1*	*68.0*	*45.3*	*34.9*	*27.9*	*24.4*	*19.2*	*15.7*	*15.7*
70°	11353.6	6847.0	116.8	55.8	38.3	29.6	24.4	22.7	19.2	15.7	13.9
72.5°	8866.8	4937.0	87.1	43.6	33.1	27.9	22.7	20.9	17.4	13.9	13.9
75°	6575.1	2878.9	66.2	34.9	26.1	22.7	22.7	20.9	17.4	13.9	12.2
77.5°	3574.2	1003.8	50.5	27.9	20.9	17.4	19.2	19.2	15.7	12.2	10.5
80°	946.3	275.3	34.9	20.9	17.4	13.9	13.9	17.4	13.9	10.5	10.5
82.5°	275.3	80.2	24.4	17.4	13.9	12.2	12.2	12.2	10.5	8.7	7.0
85°	134.2	29.6	17.4	13.9	12.2	10.5	8.7	8.7	7.0	5.2	5.2
87.5°	59.3	12.2	13.9	12.2	12.2	8.7	7.0	5.2	5.2	3.5	1.7
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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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

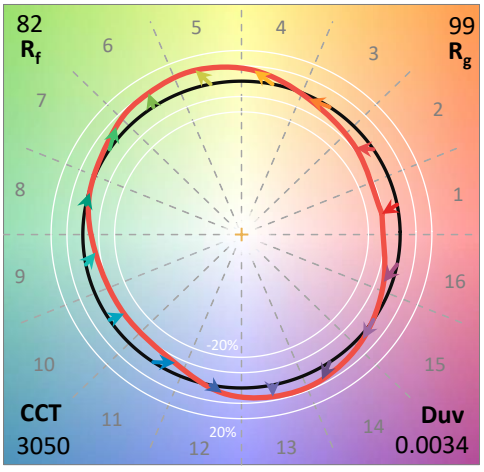
Test Information

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

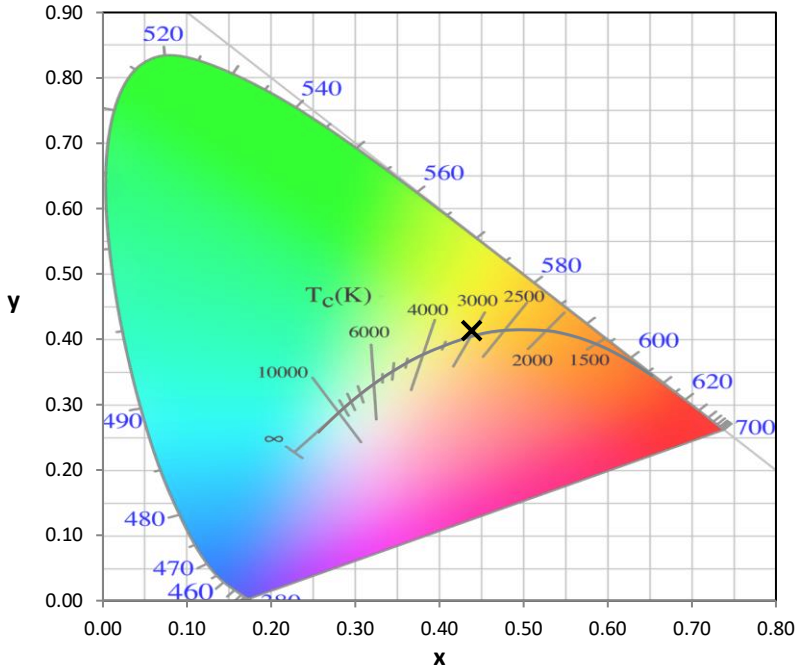
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

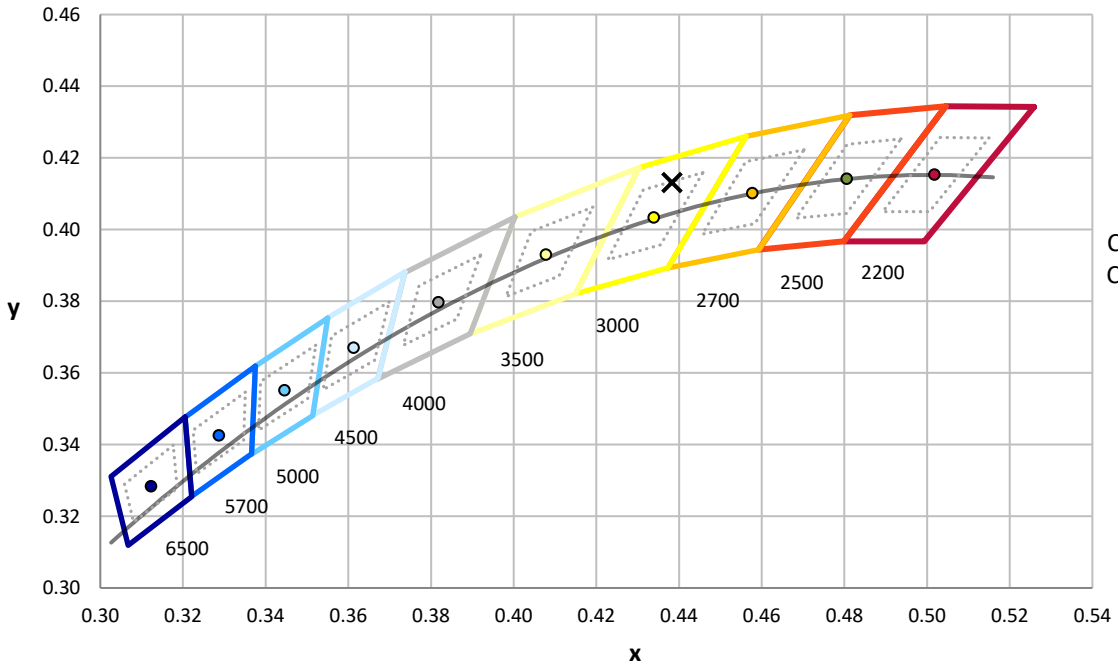
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

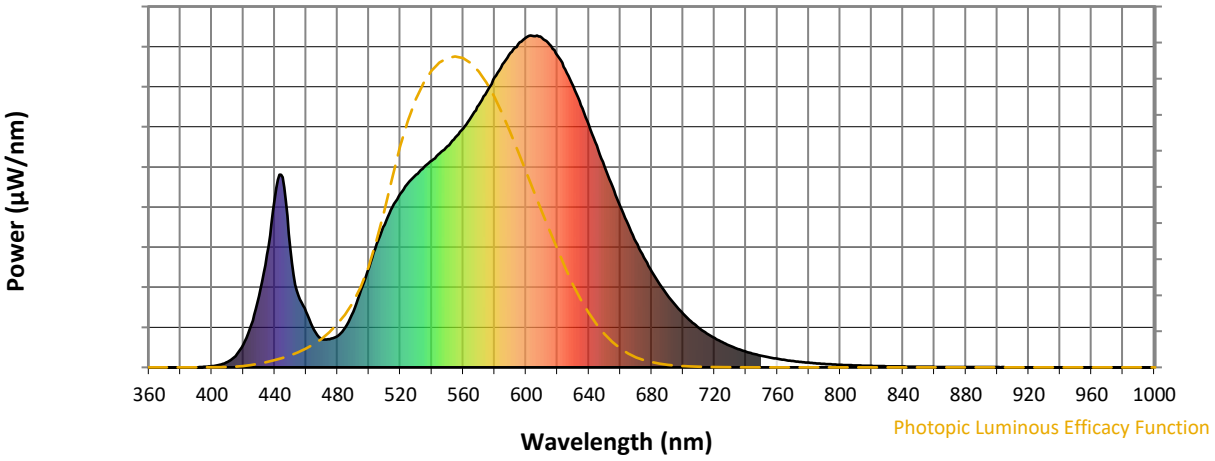


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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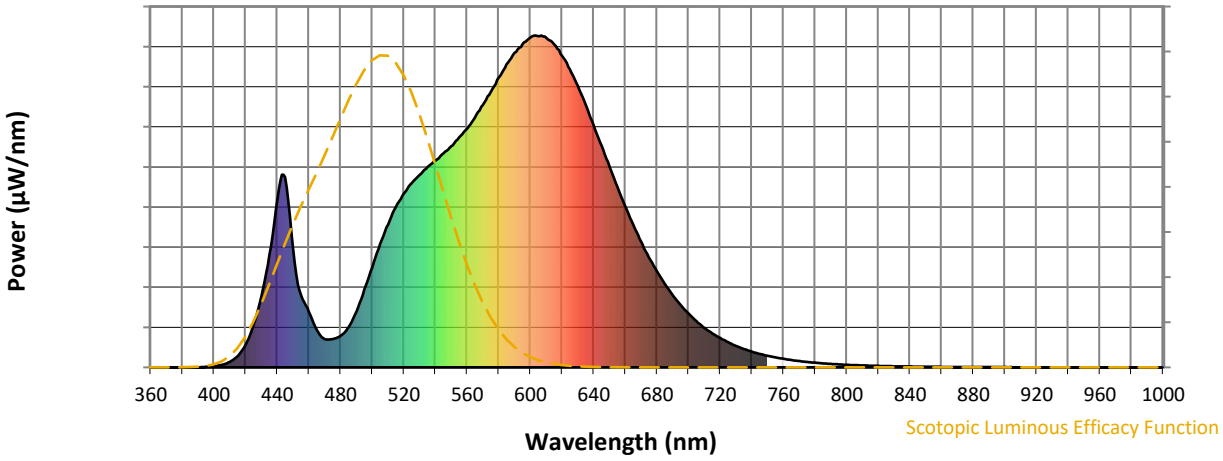
Scotopic Flux vs. Wavelength



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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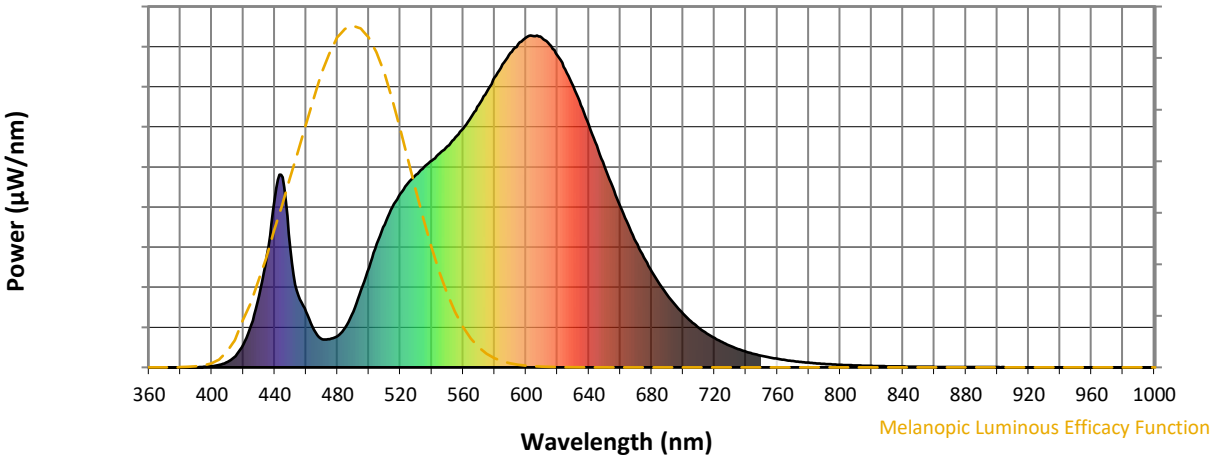
Melanopic Flux vs. Wavelength



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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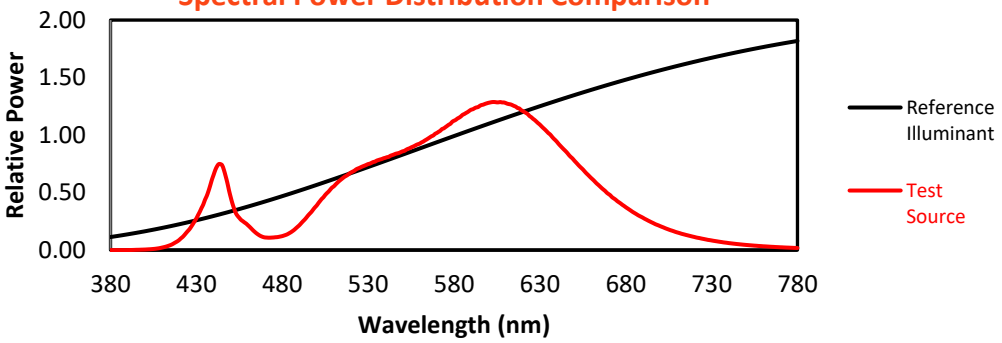
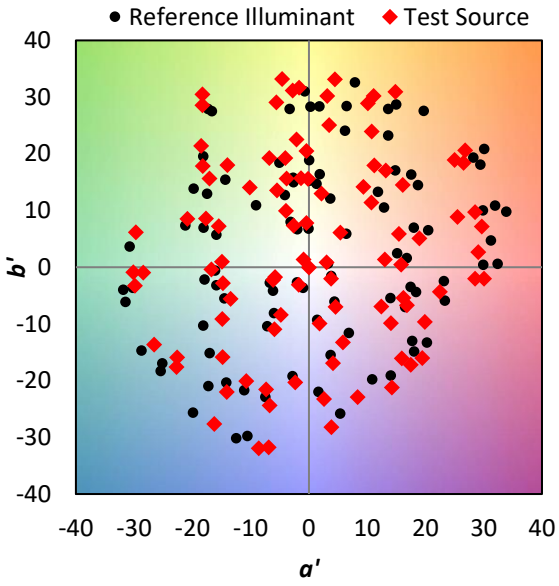
Summary

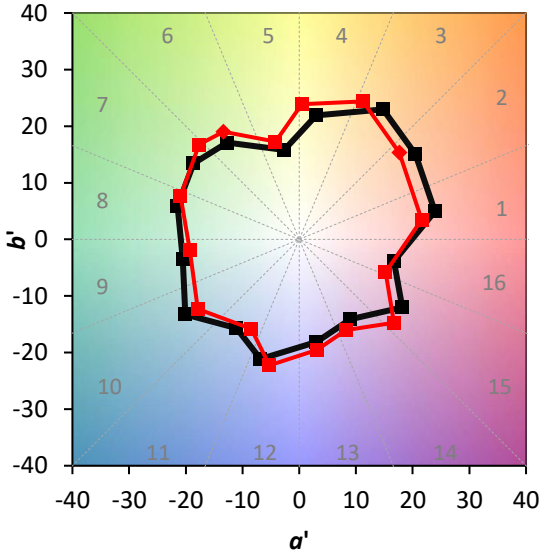
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

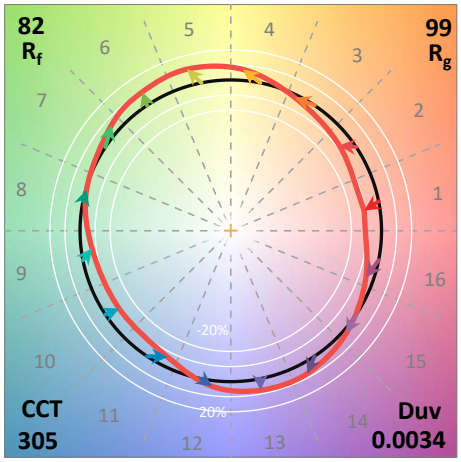
Spectral Power Distribution Comparison

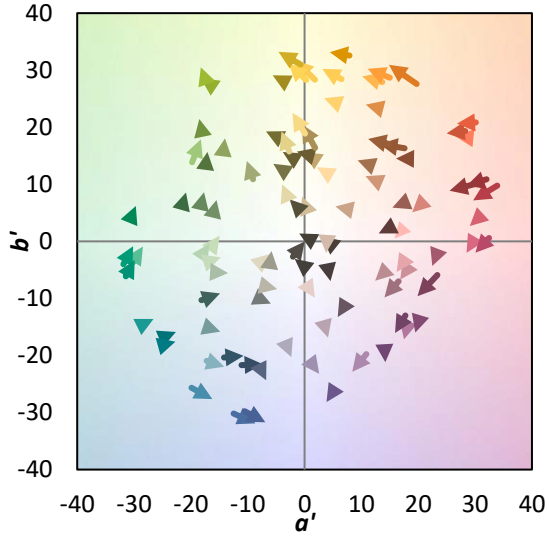


Color Vector Graphics









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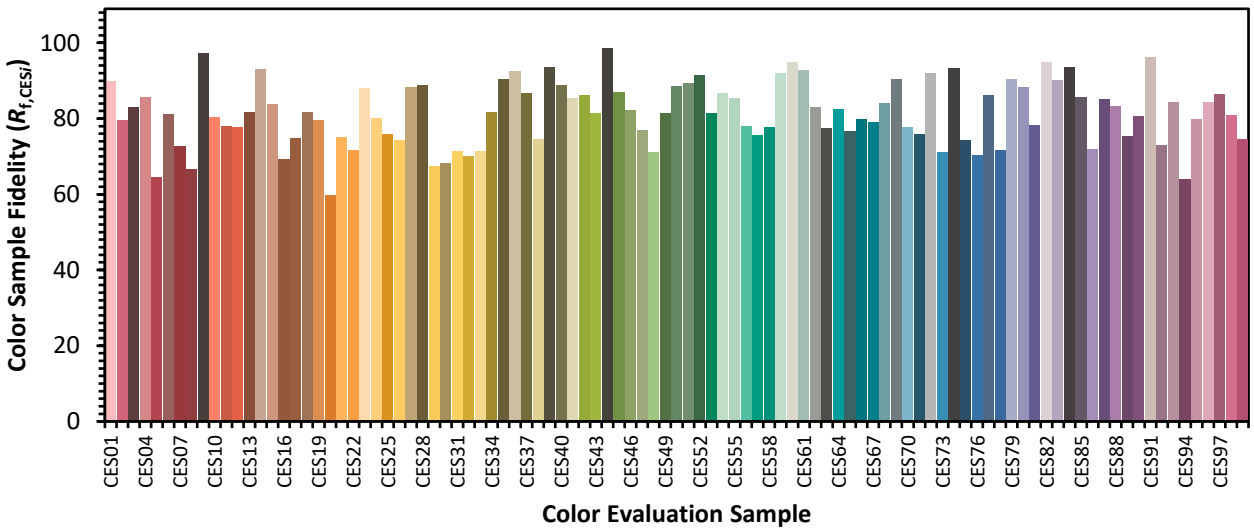
Individual Sample Fidelity Index ($R_{f,i}$)

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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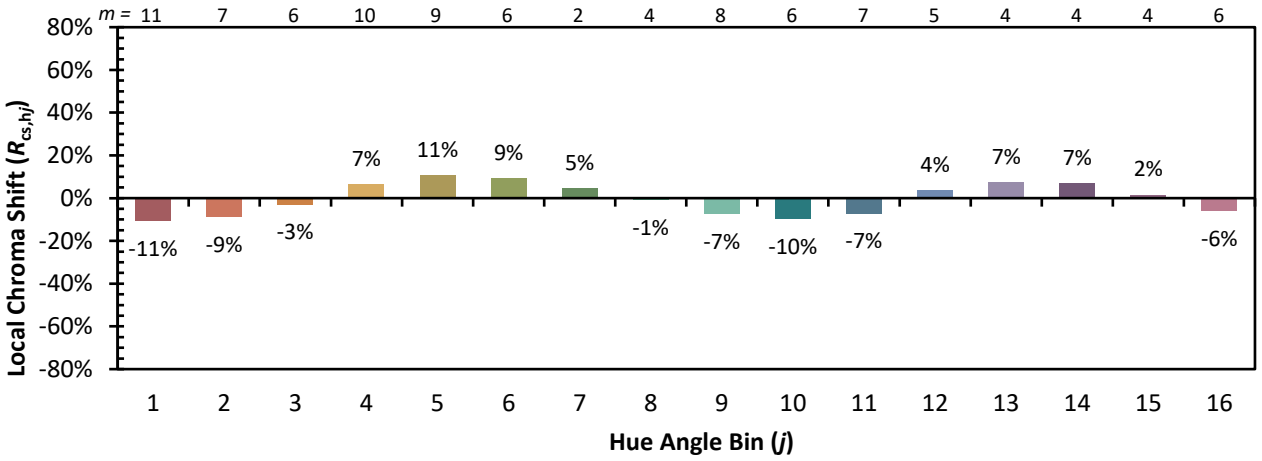
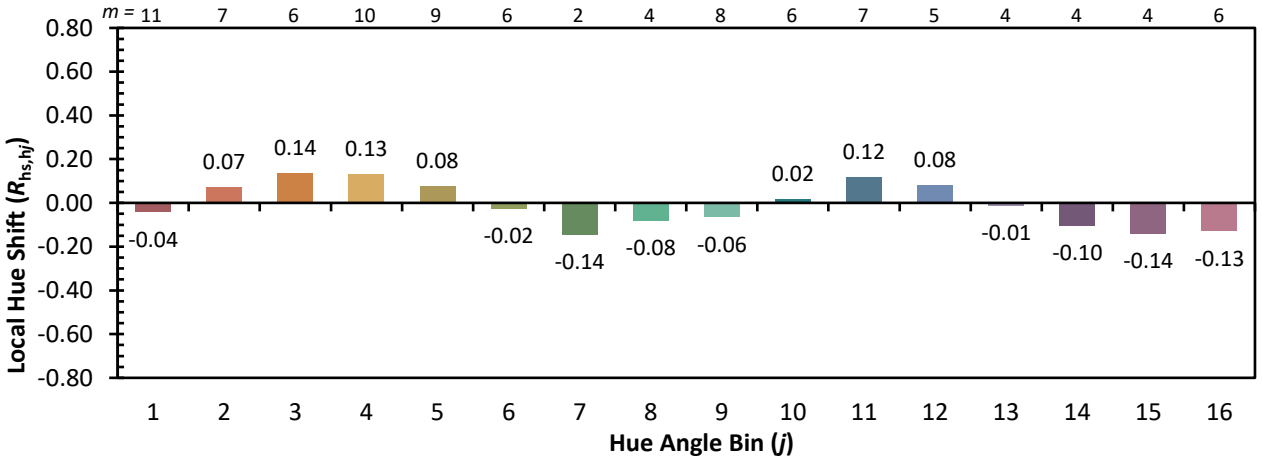
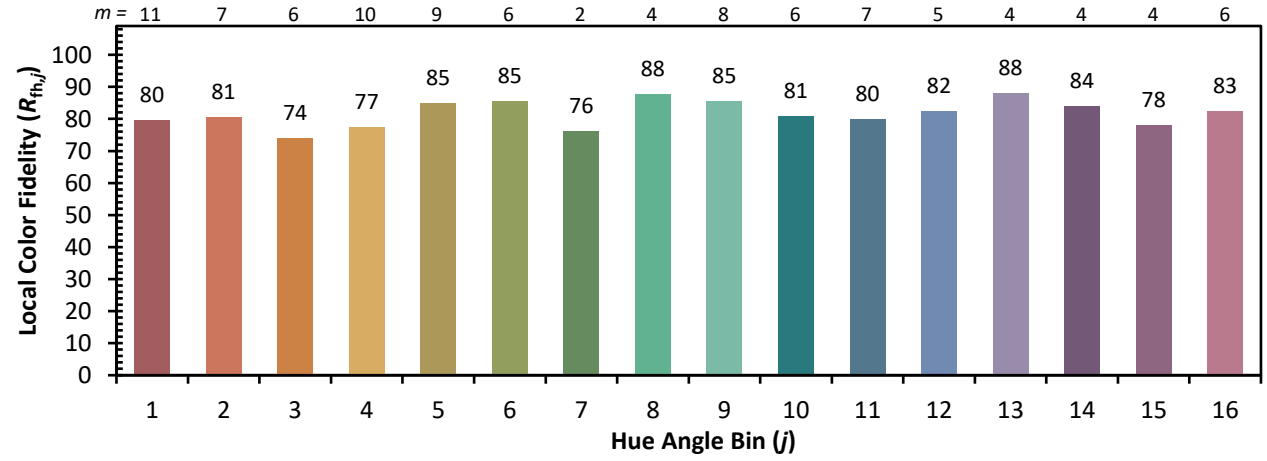
Color Rendition by Hue-Angle Bin







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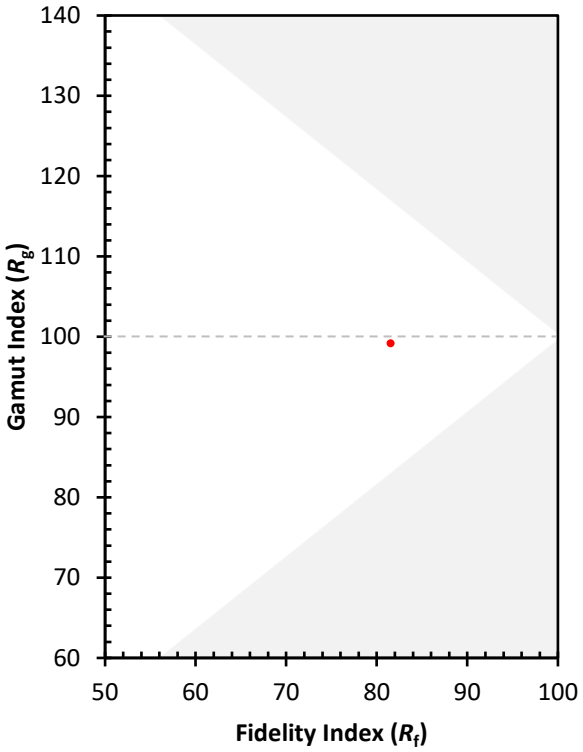
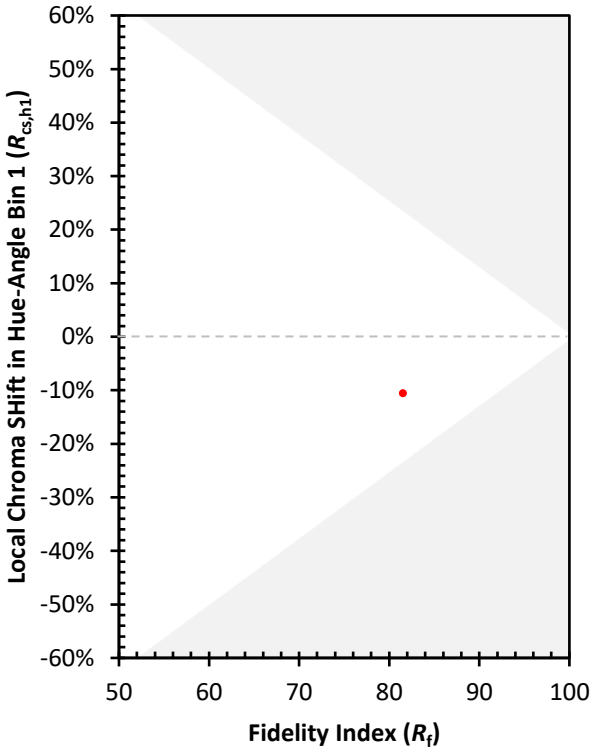
Measure Comparisons





(END OF REPORT)