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: P638469

Luminaire Tested: GWS-SA4E-830-U-SL2-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:	P638469
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
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-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR 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:	14274.8 lumens
Efficiency:	N/A
Efficacy:	70.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G1

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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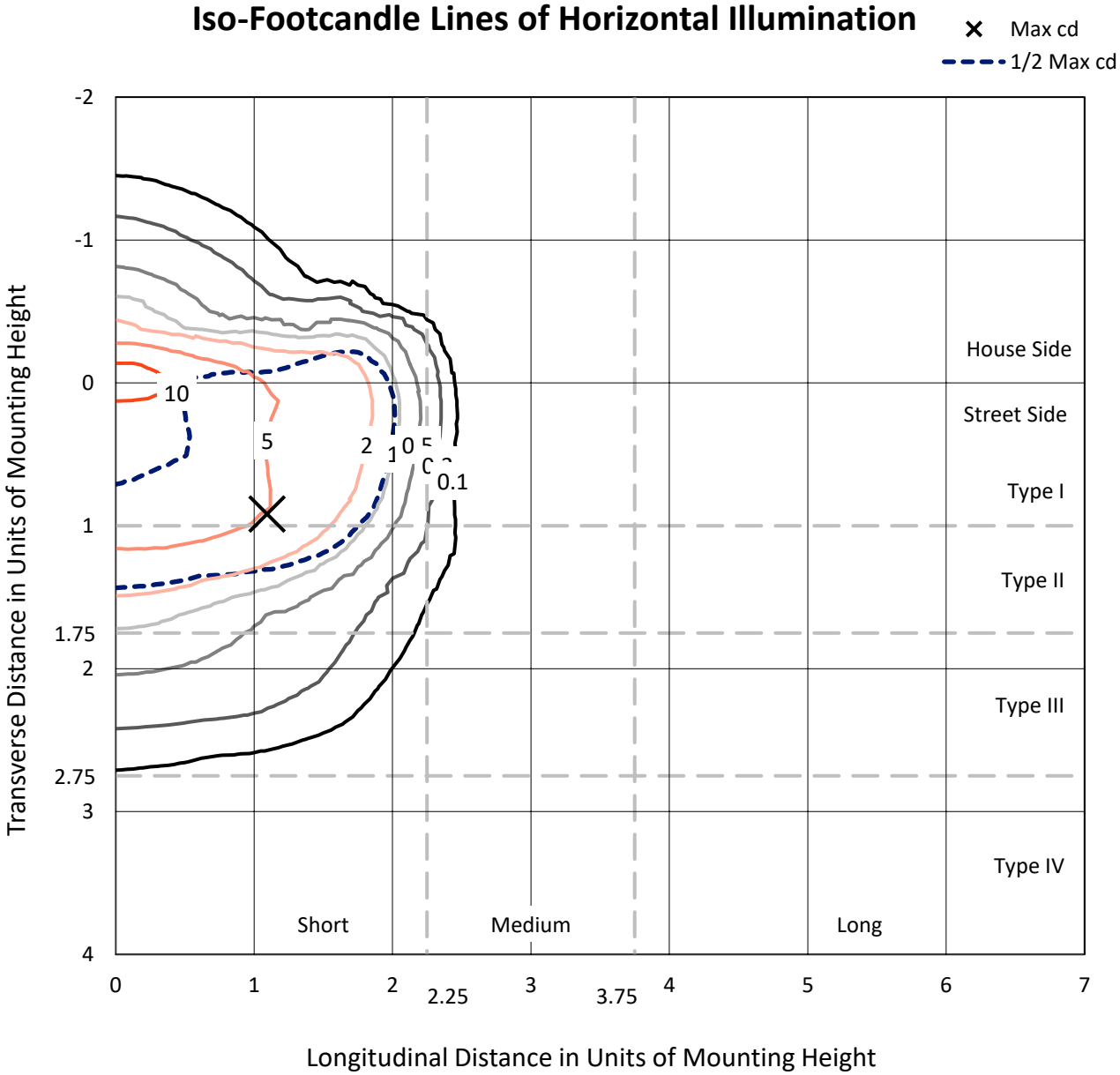
REPORT NUMBER: P638469
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 12.5 fc
Type II - Short - N/A

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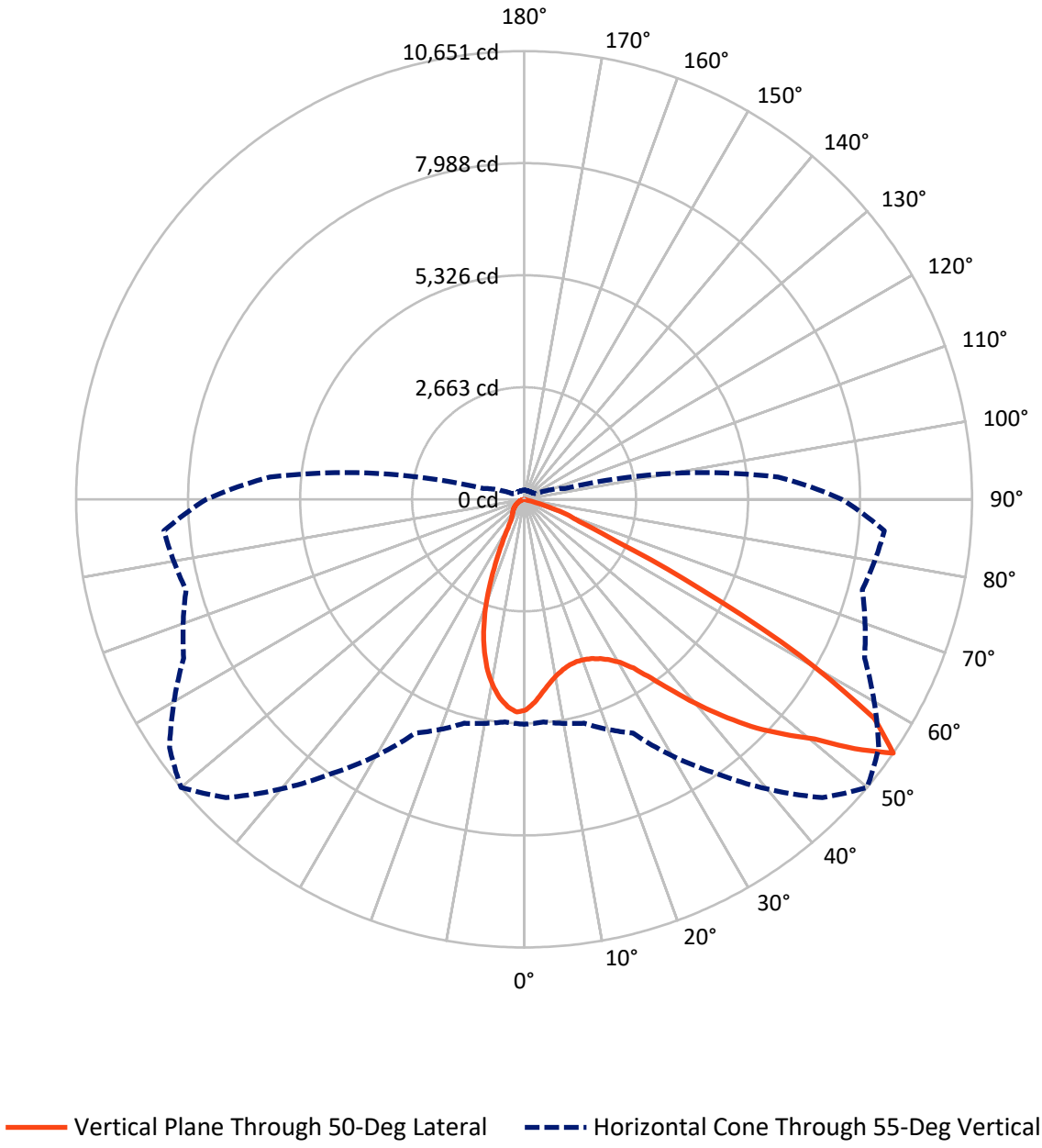
Luminous Intensity Polar Plot



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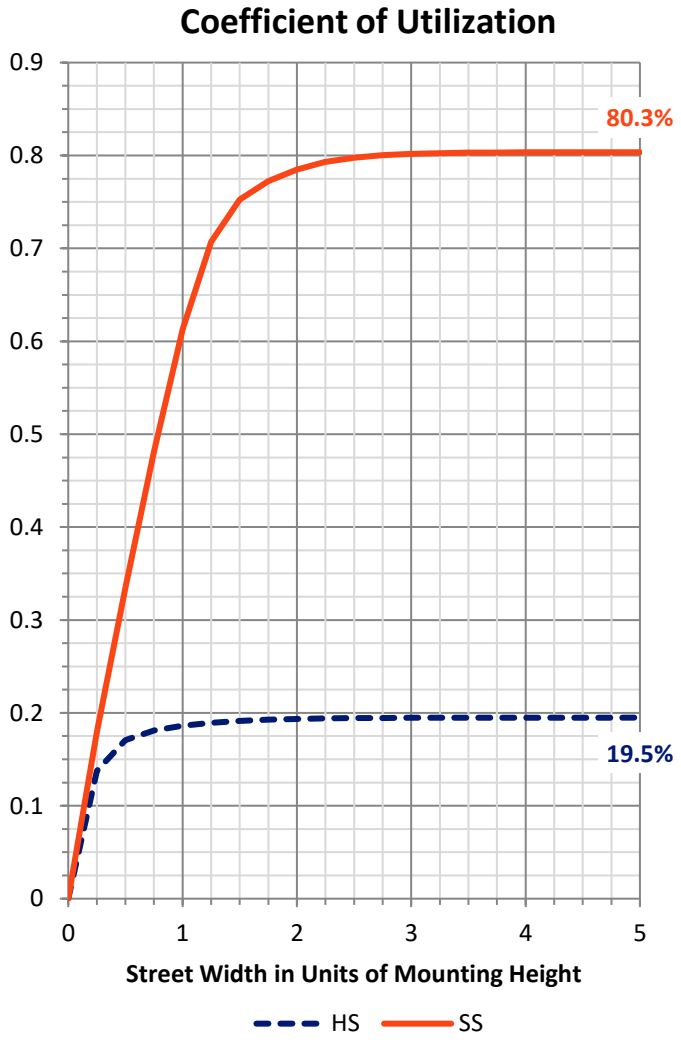
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2812.8	0.0	2812.8
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	11462.0	0.0	11462.0
	% Fixture	80.3	0.0	80.3
Total	Lumens	14274.8	0.0	14274.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	439.8	3.1
10°-20°	1082.4	7.6
20°-30°	1526.7	10.7
30°-40°	2259.3	15.8
40°-50°	3259.4	22.8
50°-60°	3844.7	26.9
60°-70°	1715.0	12.0
70°-80°	147.4	1.0
80°-90°	0.1	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°	14274.8	100.0
0°-180°	14274.8	100.0



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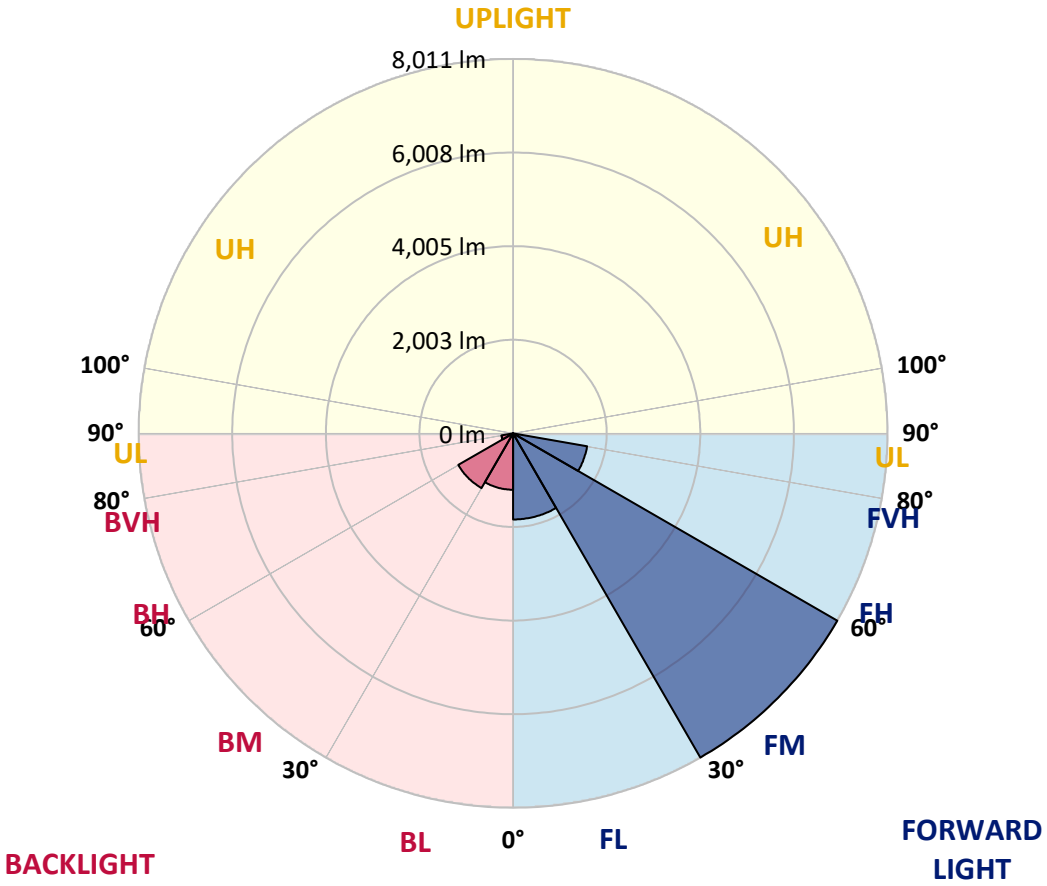
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1842.9	12.9			
FM	(30°-60°)	8010.5	56.1			
FH	(60°-80°)	1608.5	11.3			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	1206.0	8.4	B3/2500		
BM	(30°-60°)	1352.8	9.5	B2/2500		
BH	(60°-80°)	254.0	1.8	B1/500		G1/500
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
Type II Short



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REPORT NUMBER: P638469
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	*5008.4*	5008.4	5008.4	5008.4	5008.4
2.5°	4652.9	4656.4	4658.1	4705.2	4722.6	4792.3	*4828.9*	4848.1	4898.6	4957.9	5006.7
5°	4341.0	4335.7	4344.4	4403.7	4442.0	4544.8	*4600.6*	4639.0	4750.5	4889.9	5006.7
7.5°	4069.1	4079.6	4090.0	4154.5	4212.0	4323.5	*4403.7*	4461.2	4616.3	4823.7	5020.6
10°	3877.4	3877.4	3893.1	3966.3	4034.2	4171.9	*4252.1*	4325.3	4510.0	4764.4	5036.3
12.5°	3736.3	3738.0	3757.2	3840.8	3919.2	4062.1	*4145.8*	4217.2	4421.1	4705.2	5039.8
15°	3670.0	3664.8	3680.5	3769.4	3856.5	3990.7	*4077.8*	4147.5	4358.4	4672.1	5057.2
17.5°	3652.6	3649.1	3661.3	3748.5	3837.3	3968.0	*4053.4*	4123.1	4349.7	4682.5	5109.5
20°	3703.1	3696.2	3690.9	3765.9	3849.5	3978.5	*4067.4*	4145.8	4391.5	4740.0	5189.6
22.5°	3823.4	3823.4	3811.2	3847.8	3903.5	4020.3	*4112.7*	4215.5	4501.3	4855.0	5308.1
25°	4044.7	4027.3	4004.6	4020.3	4013.3	4086.5	*4196.3*	4339.2	4708.7	5045.0	5452.8
27.5°	4297.4	4313.1	4274.7	4276.5	4215.5	4189.3	*4316.6*	4532.6	5017.1	5313.4	5667.1
30°	4640.7	4628.5	4630.2	4625.0	4483.9	4360.1	*4497.8*	4785.3	5405.7	5722.9	5945.9
32.5°	4909.1	4926.5	4984.0	5017.1	4832.4	4633.7	*4780.1*	5128.6	5848.4	6189.9	6287.5
35°	5193.1	5224.5	5341.2	5449.3	5294.2	5065.9	*5222.7*	5583.5	6264.8	6651.7	6679.6
37.5°	5492.9	5555.6	5695.0	5884.9	5860.6	5658.4	*5801.3*	6118.5	6592.5	6930.5	7003.7
40°	5836.2	5897.1	6125.4	6399.0	6456.5	6411.2	*6458.3*	6643.0	6808.6	6942.7	7143.1
42.5°	6212.6	6296.2	6585.5	6951.5	7167.5	7207.6	*7097.8*	7078.7	6902.7	6803.3	7113.5
45°	6656.9	6754.5	7082.2	7556.2	7899.5	7953.5	*7763.5*	7517.8	6961.9	6700.5	7024.6
47.5°	7155.3	7247.7	7573.6	8143.4	8654.0	8674.9	*8343.8*	7948.3	7137.9	6819.0	7092.6
50°	7322.6	7380.1	7662.5	8331.6	9272.7	9433.0	*8953.8*	8432.7	7491.7	7167.5	7423.7
52.5°	6747.6	6770.2	7015.9	7692.1	9147.2	10177.1	*9844.3*	9155.9	8120.8	7699.1	7934.3
55°	*5346.5*	*5309.9*	*5508.5*	*6128.9*	*7950.0*	*10025.5*	*10651.1*	*10292.1*	*8931.1*	*8322.9*	*8598.3*
57.5°	3739.7	3696.2	3650.9	4070.8	5932.0	8498.9	*9814.6*	10450.7	9703.1	8941.6	9314.5
60°	3074.0	3032.2	2812.6	2619.2	3586.4	6102.8	*7538.7*	8735.9	9640.4	8910.2	9291.8
62.5°	2655.8	2631.4	2542.5	2279.4	2110.4	3483.6	*4720.9*	5867.5	7397.6	6996.8	7017.7
65°	2086.0	2079.0	2140.0	2167.9	1866.4	1927.4	*2408.4*	3049.6	3999.4	3771.1	3575.9
67.5°	1425.5	1409.8	1524.8	1875.1	1794.9	1521.3	*1409.8*	1422.0	1730.5	1057.8	840.0
70°	906.2	869.6	871.3	1162.4	1460.3	1200.7	*1087.4*	956.7	860.9	156.8	177.8
72.5°	580.3	557.6	479.2	524.5	676.2	585.5	*590.8*	508.9	339.8	83.6	97.6
75°	244.0	224.8	172.5	137.7	135.9	85.4	*74.9*	69.7	47.1	47.1	50.5
77.5°	1.7	0.0	0.0	1.7	3.5	1.7	*1.7*	3.5	7.0	10.5	12.2
80°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	1.7
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: P638469
CATALOG NUMBER: GWS-SA4E-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4	5008.4
2.5°	5036.3	4994.5	5041.5	5058.9	5057.2	5058.9	5008.4	4973.5	4971.8	4928.2	4907.3
5°	5055.4	5022.3	5057.2	5034.5	4980.5	4912.5	4821.9	4743.5	4708.7	4658.1	4633.7
7.5°	5092.0	5057.2	5052.0	4961.3	4827.2	4684.3	4523.9	4381.0	4304.4	4212.0	4217.2
10°	5118.2	5078.1	5010.1	4825.4	4602.4	4374.1	4135.3	3922.7	3788.5	3664.8	3643.9
12.5°	5128.6	5069.4	4910.8	4632.0	4318.3	4020.3	3670.0	3366.8	3157.7	2995.6	2973.0
15°	5147.8	5052.0	4783.6	4398.5	3968.0	3546.3	3100.2	2685.4	2408.4	2221.9	2237.6
17.5°	5177.4	5032.8	4640.7	4137.1	3591.6	2995.6	2392.7	1916.9	1662.5	1554.4	1556.2
20°	5219.3	5010.1	4483.9	3849.5	3140.3	2373.5	1672.9	1314.0	1242.5	1239.0	1233.8
22.5°	5275.0	4987.5	4316.6	3534.1	2605.3	1662.5	1113.6	1002.0	1031.7	1089.2	1099.6
25°	5341.2	4959.6	4130.1	3178.6	2021.5	1090.9	834.7	817.3	888.8	965.4	982.9
27.5°	5444.1	4945.7	3917.5	2774.3	1418.5	782.5	683.1	693.6	758.1	822.5	838.2
30°	5618.3	4971.8	3685.7	2321.2	911.4	623.9	592.5	608.2	643.0	676.2	690.1
32.5°	5855.3	5048.5	3460.9	1826.3	650.0	542.0	535.0	543.7	557.6	576.8	582.0
35°	6132.4	5180.9	3229.1	1307.0	536.7	494.9	487.9	487.9	494.9	498.4	500.1
37.5°	6360.7	5320.3	3011.3	869.6	481.0	458.3	447.9	442.6	440.9	444.4	446.1
40°	6460.0	5377.8	2774.3	632.6	440.9	425.2	409.5	393.8	393.8	406.0	407.8
42.5°	6390.3	5313.4	2500.7	522.8	413.0	390.4	366.0	352.0	359.0	371.2	374.7
45°	6242.2	5154.8	2199.2	461.8	385.1	355.5	327.6	318.9	325.9	341.6	345.0
47.5°	6217.8	5050.2	1838.5	421.7	355.5	325.9	296.3	287.5	296.3	308.5	311.9
50°	6460.0	5140.8	1437.7	386.9	327.6	294.5	270.1	261.4	266.6	273.6	277.1
52.5°	6902.7	5477.2	1160.6	353.8	294.5	263.1	247.5	237.0	237.0	244.0	245.7
55°	*7556.2*	*6064.4*	*1002.0*	*315.4*	*256.2*	*238.7*	*224.8*	*214.3*	*214.3*	*217.8*	*219.6*
57.5°	8309.0	6775.4	1038.6	264.9	224.8	216.1	203.9	195.2	198.7	198.7	198.7
60°	8204.4	6723.2	1111.8	223.1	198.7	195.2	184.7	181.2	189.9	183.0	179.5
62.5°	6043.5	4644.2	582.0	183.0	170.8	167.3	160.3	167.3	179.5	160.3	153.4
65°	2934.6	2248.0	233.5	149.9	144.6	141.2	137.7	148.1	155.1	125.5	118.5
67.5°	690.1	561.1	151.6	127.2	120.2	113.3	116.8	118.5	113.3	85.4	81.9
70°	179.5	176.0	118.5	106.3	95.8	88.9	88.9	87.1	74.9	54.0	50.5
72.5°	97.6	95.8	85.4	80.2	66.2	59.3	61.0	54.0	41.8	31.4	29.6
75°	48.8	52.3	48.8	45.3	36.6	33.1	33.1	29.6	20.9	12.2	12.2
77.5°	10.5	12.2	12.2	10.5	8.7	7.0	7.0	8.7	3.5	0.0	0.0
80°	1.7	1.7	1.7	1.7	1.7	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

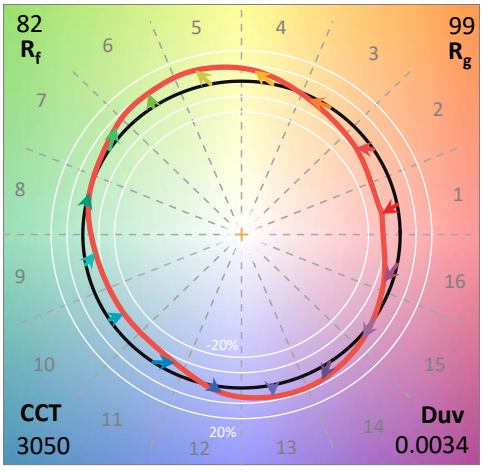
Test Information

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

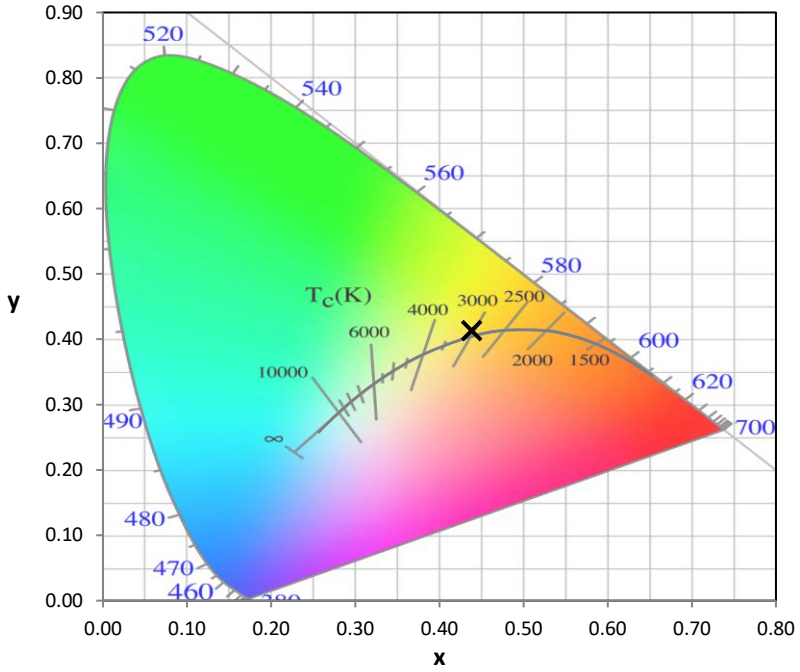
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

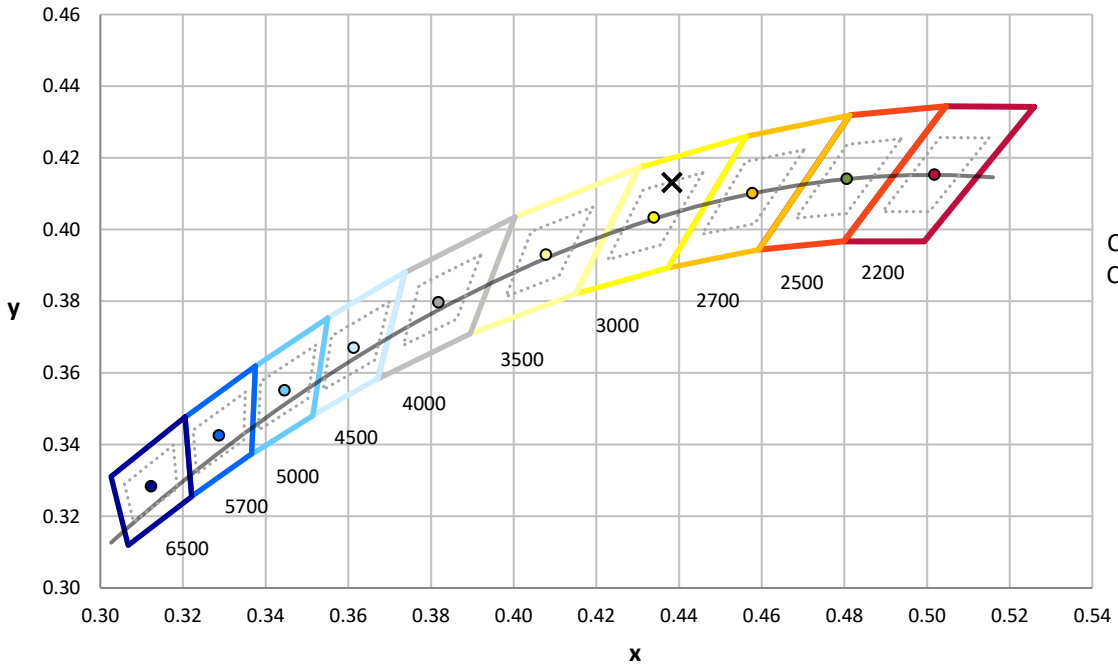
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

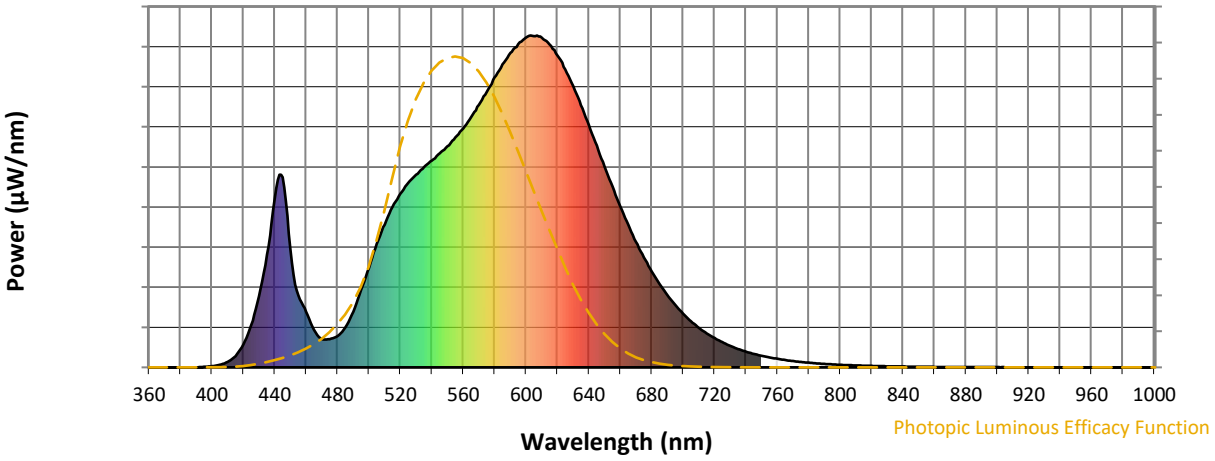


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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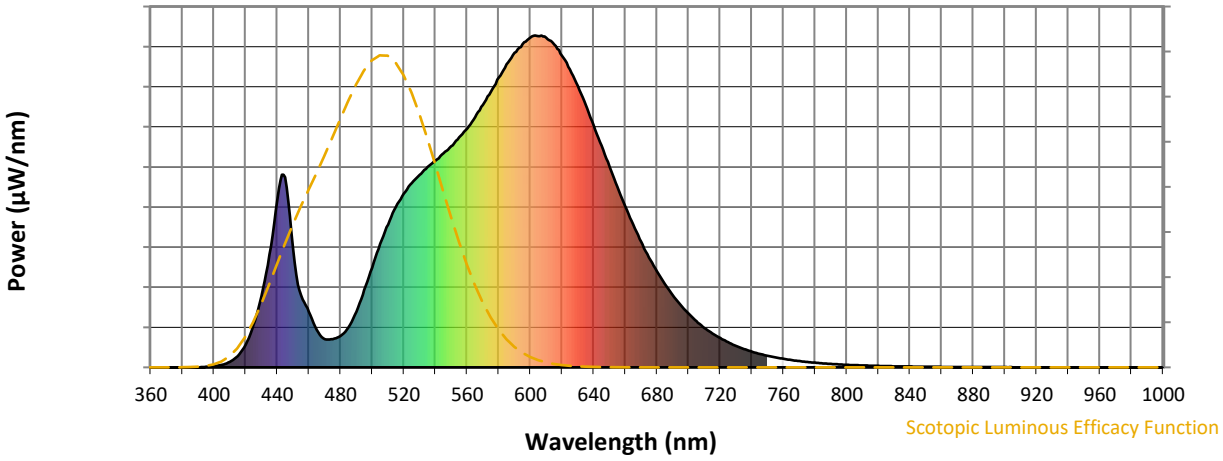
Scotopic Flux vs. Wavelength



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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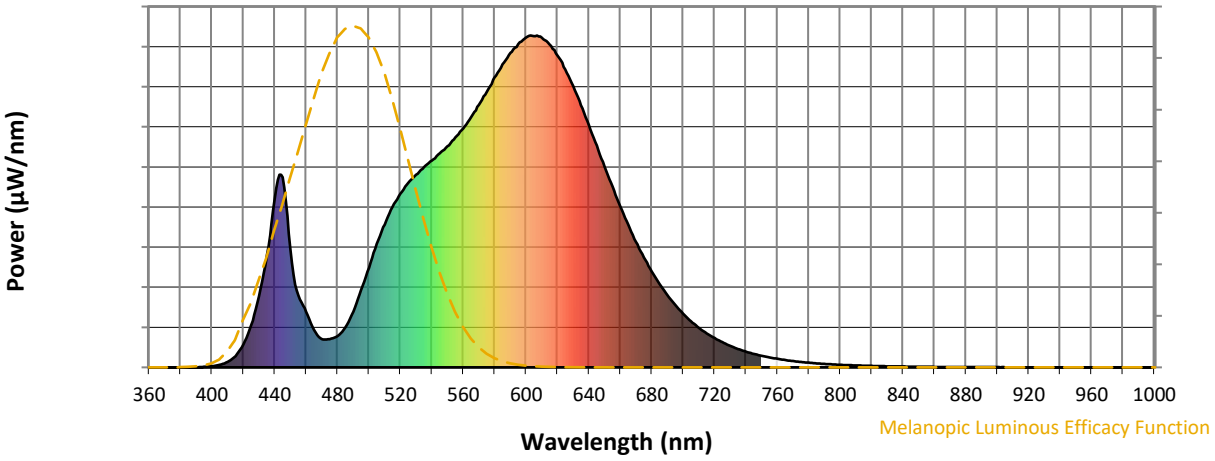
Melanopic Flux vs. Wavelength



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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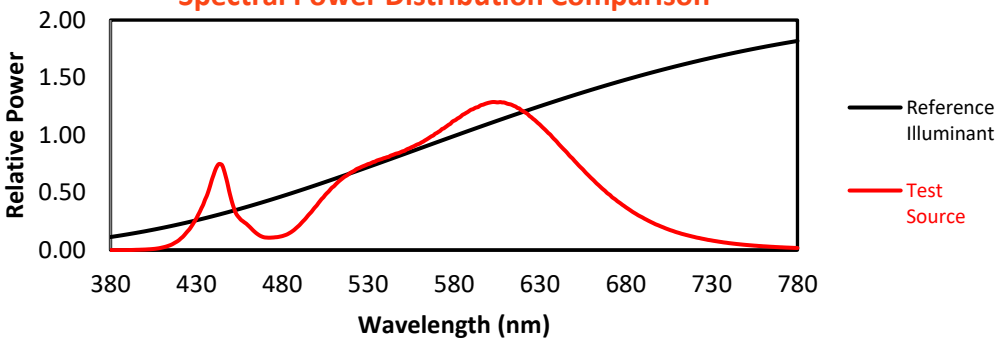
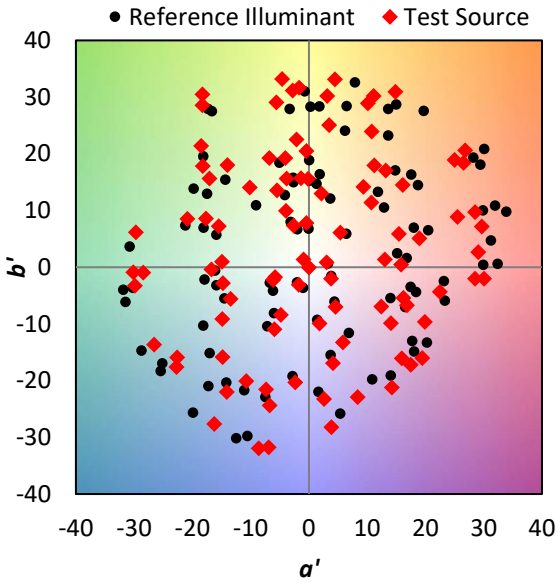
Summary

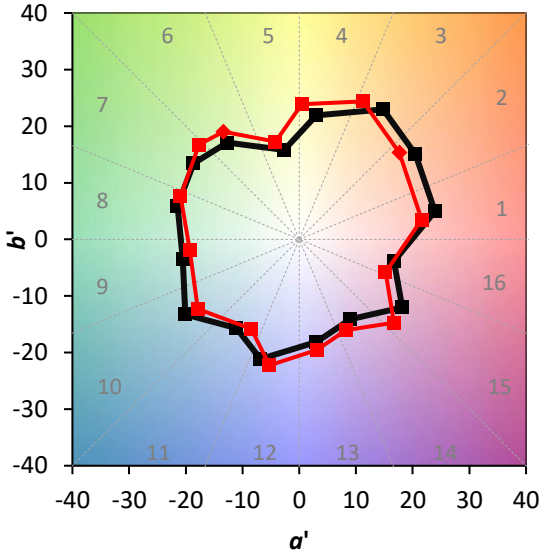
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

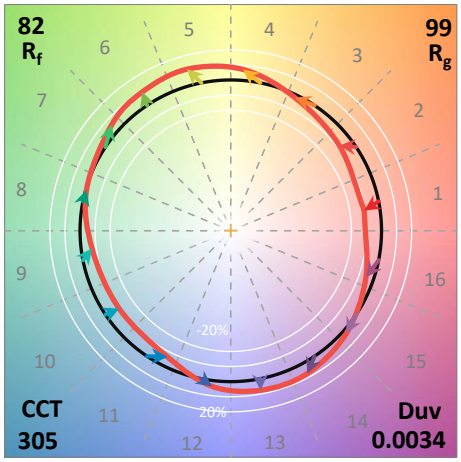
Spectral Power Distribution Comparison

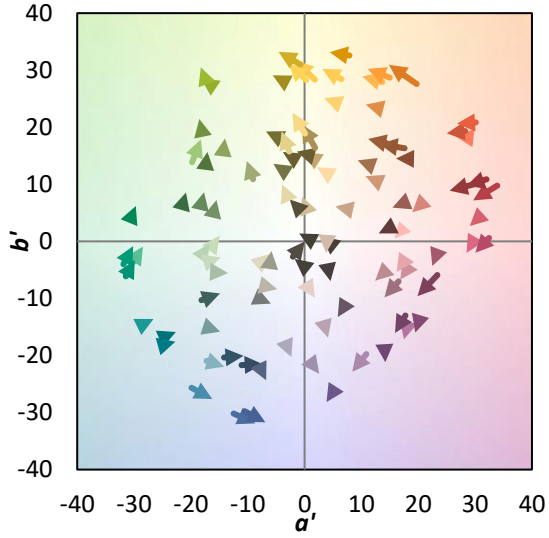


Color Vector Graphics









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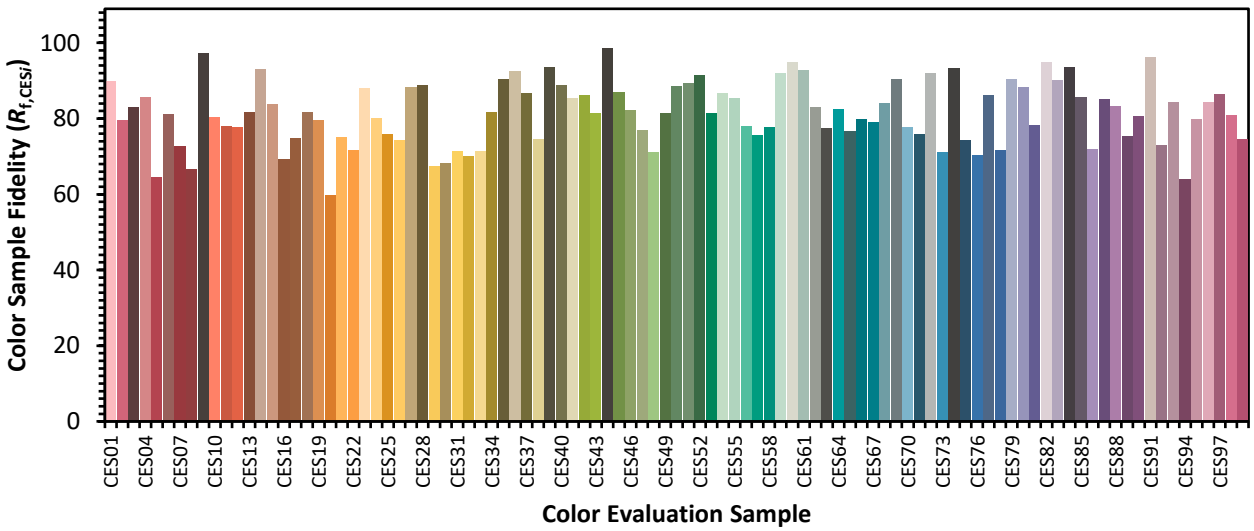
Individual Sample Fidelity Index ($R_{f,i}$)

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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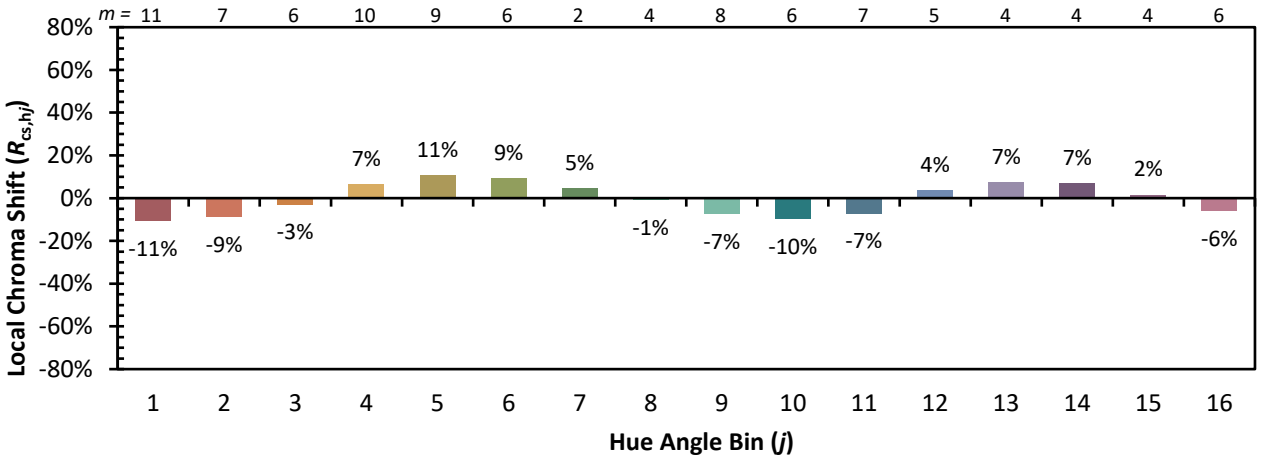
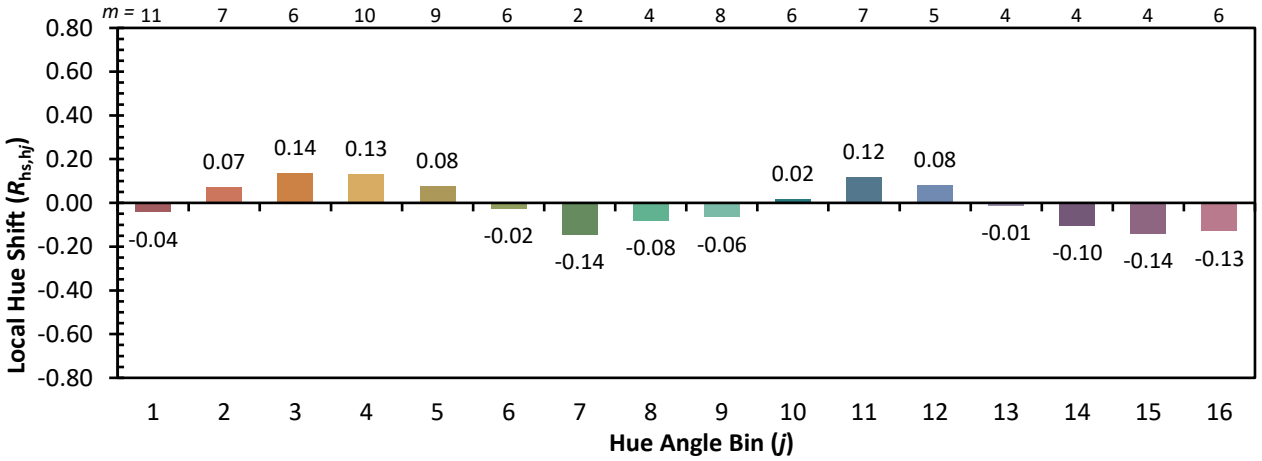
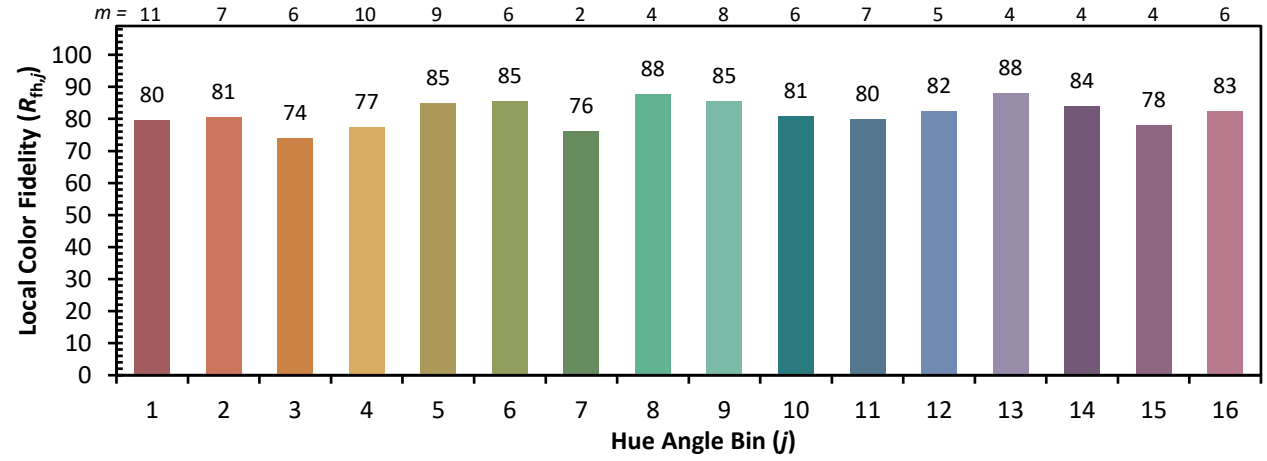
Color Rendition by Hue-Angle Bin







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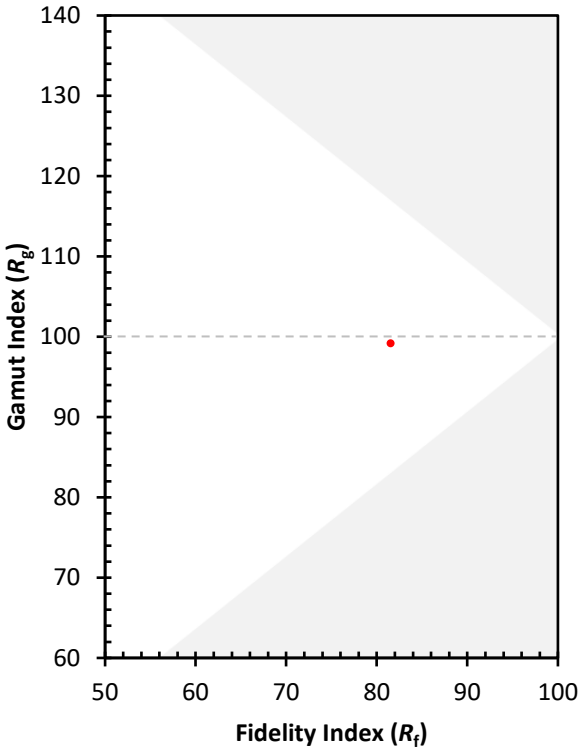
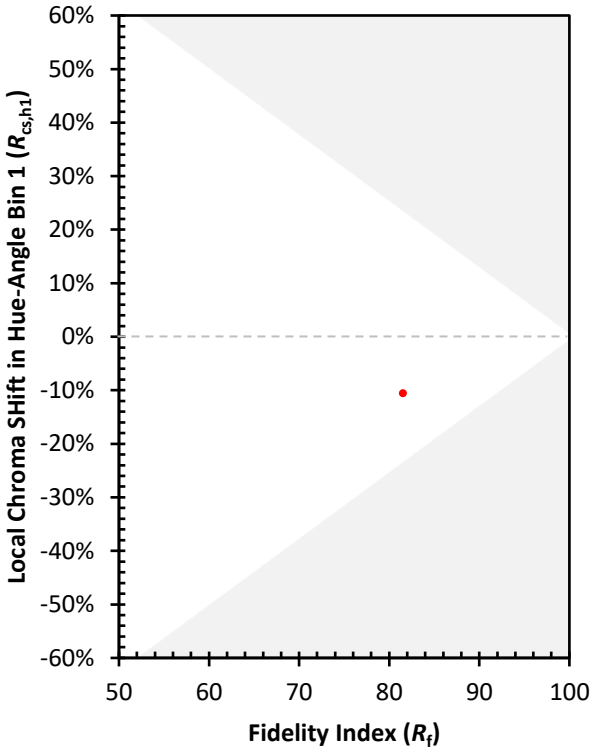
Measure Comparisons





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