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: P638970

Luminaire Tested: GWS-SA4F-830-U-SL3-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:	P638970
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-34)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4F-830-U-SL3-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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:	21891.1 lumens
Efficiency:	N/A
Efficacy:	97.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B2 - U0 - G4

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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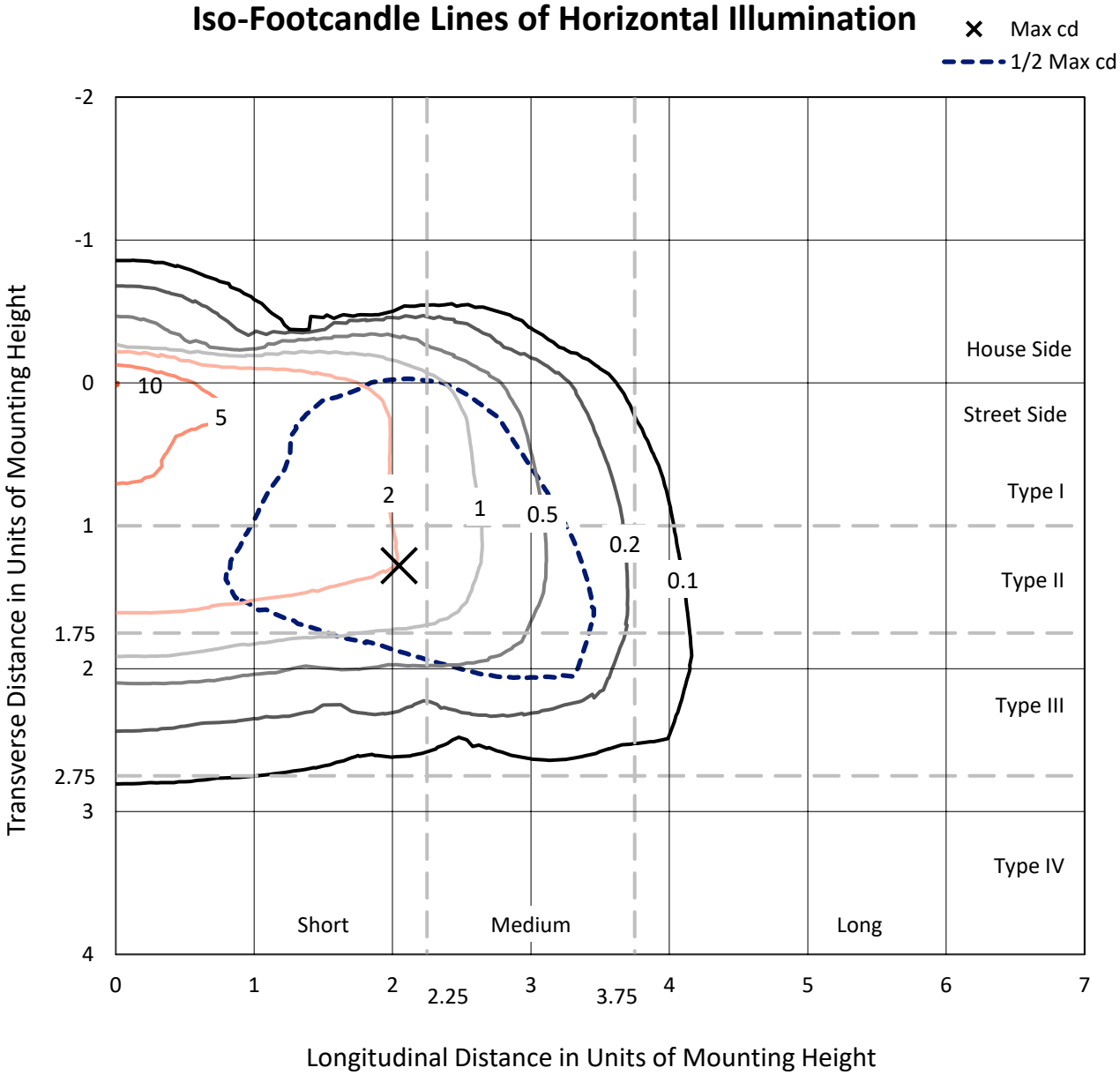
Scaled Data Report

REPORT NUMBER: P638970
CATALOG NUMBER: GWS-SA4F-830-U-SL3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
Type III - Short - N/A

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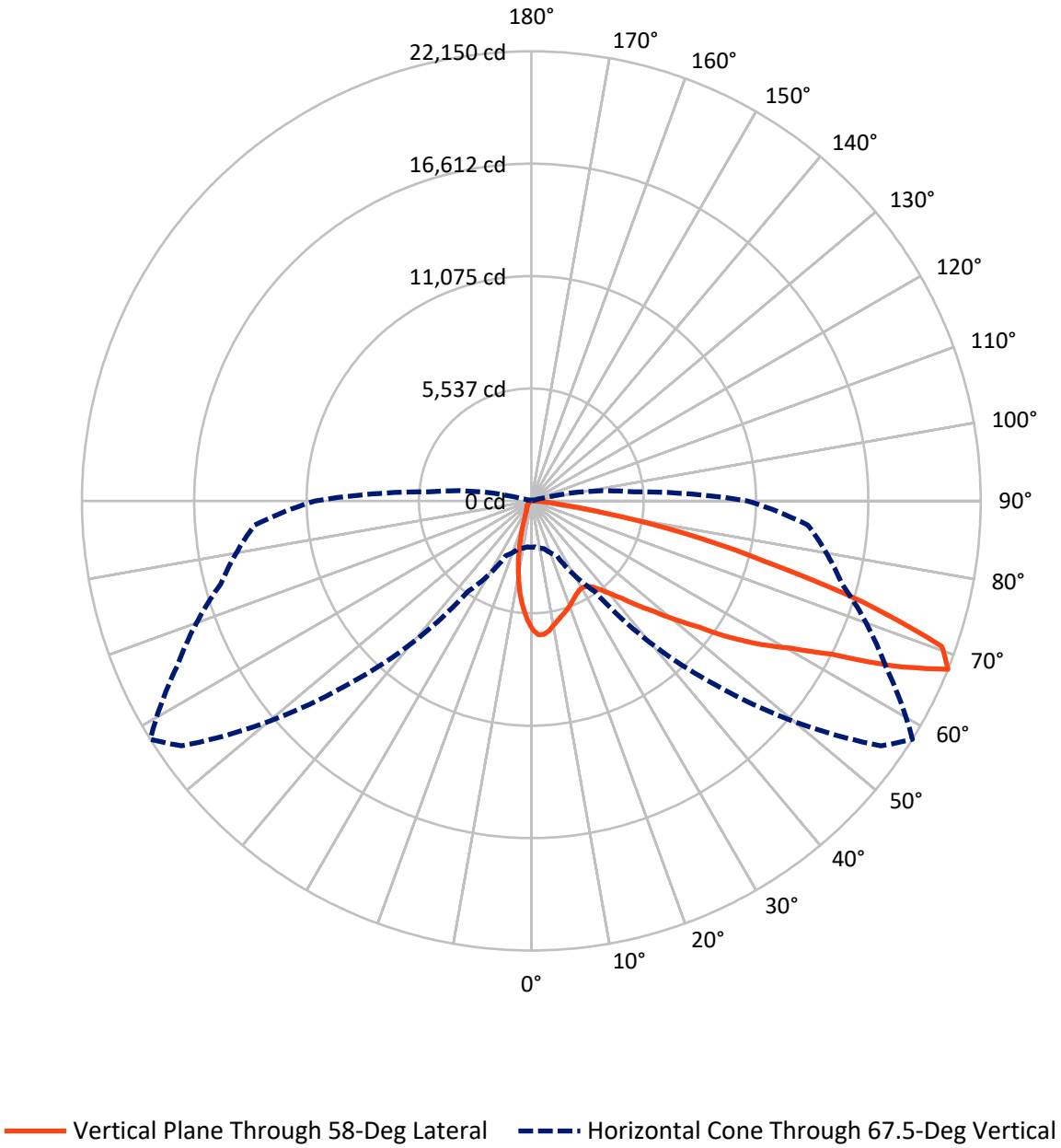
Luminous Intensity Polar Plot



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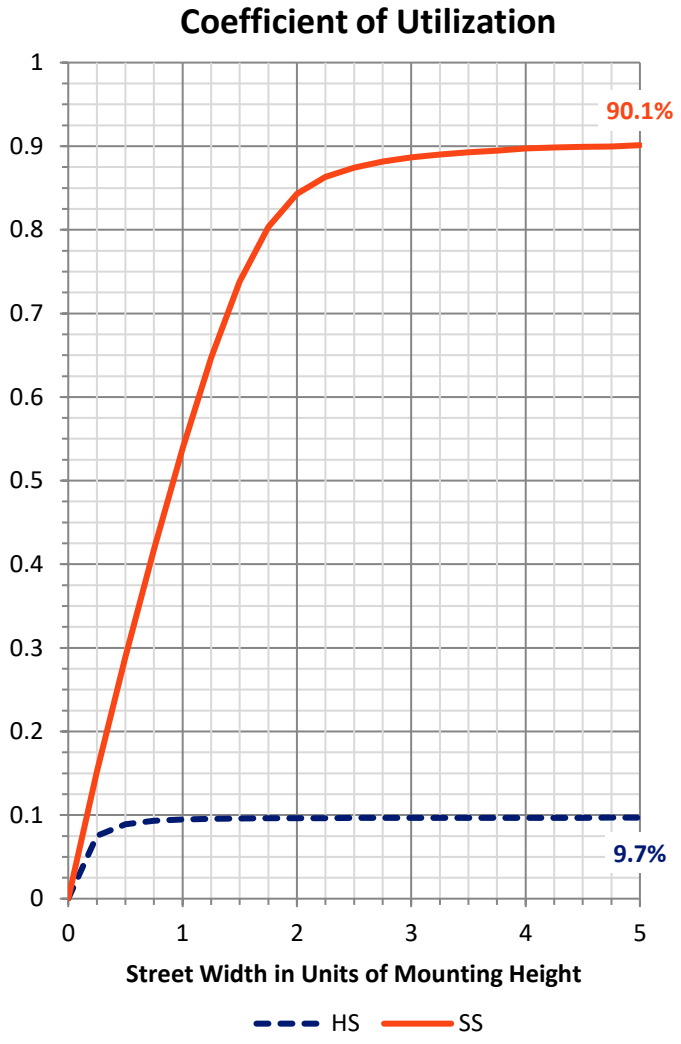
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2138.6	0.0	2138.6
	% Fixture	9.8	0.0	9.8
Street Side	Lumens	19752.5	0.0	19752.5
	% Fixture	90.2	0.0	90.2
Total	Lumens	21891.1	0.0	21891.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	513.1	2.3
10°-20°	1068.1	4.9
20°-30°	1440.4	6.6
30°-40°	2024.1	9.2
40°-50°	3126.0	14.3
50°-60°	4998.9	22.8
60°-70°	5919.0	27.0
70°-80°	2618.4	12.0
80°-90°	183.1	0.8
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°	21891.1	100.0
0°-180°	21891.1	100.0



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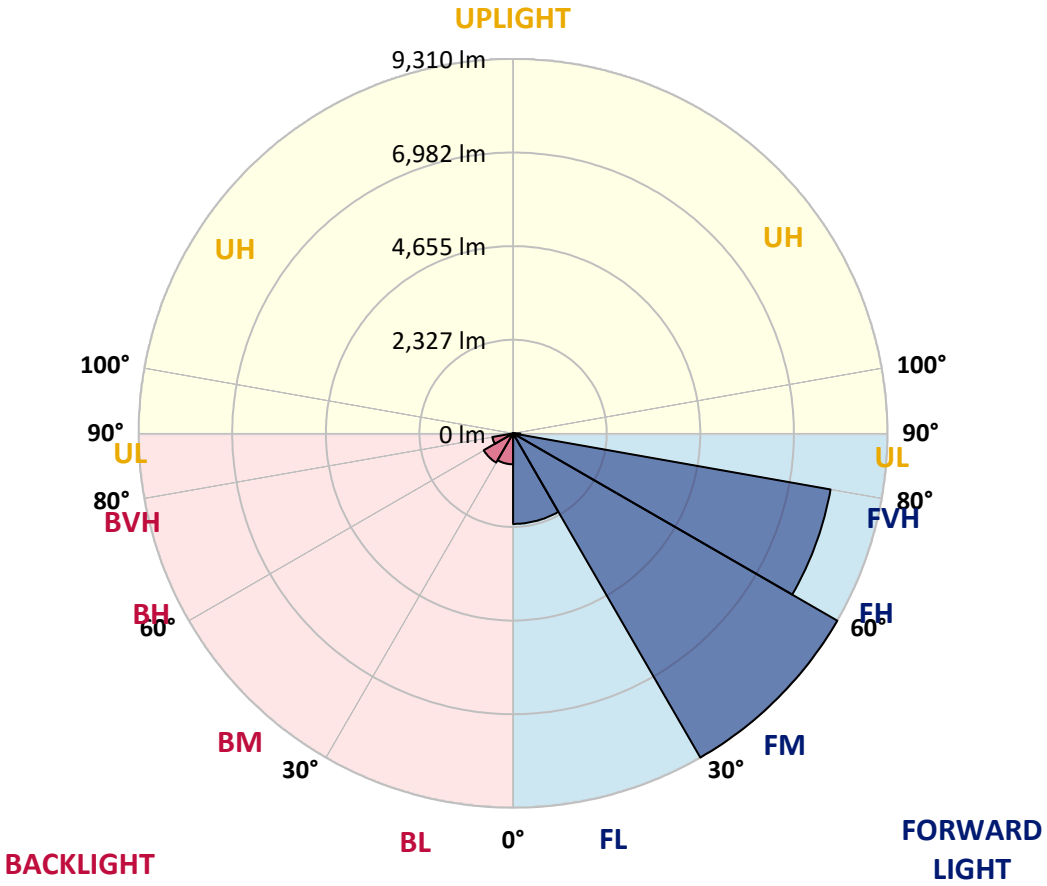
REPORT NUMBER: P638970
CATALOG NUMBER: GWS-SA4F-830-U-SL3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2252.0	10.3			
FM	(30°-60°)	9309.8	42.5			
FH	(60°-80°)	8015.4	36.6			G4/12000
FVH	(80°-90°)	175.3	0.8			G2/225
BL	(0°-30°)	769.6	3.5	B2/1000		
BM	(30°-60°)	839.1	3.8	B1/1000		
BH	(60°-80°)	522.1	2.4	B2/1000		G2/1000
BVH	(80°-90°)	7.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type III Short



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Scaled Data Report

REPORT NUMBER: P638970
CATALOG NUMBER: GWS-SA4F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4
2.5°	6641.9	6653.5	6669.0	6688.4	6684.5	6667.1	6645.7	6597.3	6566.3	6469.4	6351.2
5°	6428.7	6426.8	6465.5	6502.4	6568.2	6603.1	6651.6	6607.0	6591.5	6475.2	6283.4
7.5°	6012.2	6033.5	6078.0	6136.2	6231.1	6333.8	6450.0	6436.5	6483.0	6405.5	6167.2
10°	5603.3	5591.7	5661.5	5748.7	5894.0	6025.7	6194.3	6192.4	6314.4	6306.7	6035.4
12.5°	5244.9	5243.0	5297.2	5396.0	5566.5	5750.6	5979.2	5985.0	6136.2	6198.2	5923.0
15°	4942.6	4946.5	4998.8	5101.5	5277.8	5502.6	5768.0	5816.5	5987.0	6112.9	5812.6
17.5°	4727.6	4729.5	4760.5	4849.6	5022.1	5262.3	5582.0	5647.9	5866.9	6049.0	5723.5
20°	4628.8	4621.0	4626.8	4671.4	4805.1	5024.0	5392.2	5477.4	5756.4	6004.4	5642.1
22.5°	4642.3	4630.7	4603.6	4597.8	4657.8	4824.5	5190.7	5295.3	5636.3	5977.3	5568.5
25°	4762.5	4737.3	4698.5	4640.4	4617.1	4700.5	5014.3	5122.8	5523.9	5979.2	5512.3
27.5°	4946.5	4919.4	4871.0	4793.5	4702.4	4667.5	4894.2	4996.9	5444.5	6023.8	5485.2
30°	5181.0	5159.7	5113.2	5020.1	4898.1	4754.7	4869.0	4954.3	5405.7	6114.9	5496.8
32.5°	5458.0	5442.5	5403.8	5318.5	5179.0	4960.1	4954.3	5020.1	5436.7	6246.6	5541.3
35°	5725.4	5731.2	5733.2	5686.7	5537.5	5272.0	5188.7	5212.0	5564.6	6444.2	5642.1
37.5°	6014.1	6000.5	6070.3	6103.2	5959.9	5677.0	5551.0	5553.0	5808.7	6736.8	5832.0
40°	6233.0	6236.9	6388.0	6523.7	6463.6	6190.4	6010.2	6008.3	6184.6	7137.9	6138.1
42.5°	6438.4	6463.6	6686.4	6918.9	7002.2	6760.1	6630.2	6581.8	6711.6	7680.4	6597.3
45°	6657.4	6694.2	7006.1	7337.4	7556.4	7413.0	7310.3	7329.7	7345.2	8312.0	7215.4
47.5°	6913.1	6936.4	7321.9	7788.9	8197.7	8160.9	8166.7	8143.5	8135.7	9108.3	8033.0
50°	7223.1	7277.4	7721.1	8279.1	8837.1	9081.2	9162.6	9172.3	9046.3	9976.4	8879.7
52.5°	7881.9	7947.8	8327.5	8815.8	9534.6	10048.0	10379.4	10313.5	10119.7	10817.2	9807.8
55°	8658.8	8709.2	9075.4	9581.1	10387.1	11107.9	11894.5	11867.4	11392.7	11702.7	10571.2
57.5°	8732.5	8788.7	9356.3	10131.4	11481.8	12417.7	13245.0	13332.2	12636.6	12330.5	11253.2
60°	7905.1	8019.4	8794.5	9836.9	11900.3	14178.9	14725.3	14742.7	13549.2	12967.9	12086.3
62.5°	6335.7	6390.0	7170.8	8531.0	11255.1	15205.8	16986.4	16618.2	14721.4	13954.1	13405.8
65°	3320.9	3541.8	4221.9	5727.3	9127.7	14847.3	19706.7	19605.9	16829.4	15366.6	14432.7
67.5°	2278.5	2276.6	2437.4	2985.7	5442.5	12783.8	21041.6	22149.9	19266.8	15851.0	13688.7
70°	1734.1	1739.9	1883.3	2239.8	2819.1	8509.6	19576.8	21471.7	19720.2	14392.0	11071.1
72.5°	1150.9	1162.5	1400.8	1809.7	2251.4	4171.5	15213.5	17180.1	16593.0	11559.3	7792.8
75°	687.8	697.5	868.0	1315.6	2001.5	2334.7	9666.4	11877.1	11421.8	7967.1	4177.3
77.5°	282.9	290.6	445.6	819.6	1464.8	1813.5	5345.7	7771.4	6841.4	3167.9	1141.2
80°	118.2	122.1	215.1	573.5	1056.0	1137.3	2476.2	3652.3	2803.6	682.0	348.8
82.5°	42.6	44.6	79.4	315.8	656.8	856.4	1249.7	1443.5	790.5	222.8	187.9
85°	1.9	1.9	19.4	106.6	249.9	242.2	714.9	691.7	261.6	93.0	112.4
87.5°	0.0	0.0	1.9	1.9	3.9	9.7	67.8	120.1	56.2	23.3	48.4
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: P638970
CATALOG NUMBER: GWS-SA4F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4	6314.4
2.5°	6273.7	6171.0	6058.7	5954.0	5787.4	5688.6	5566.5	5512.3	5434.8	5415.4	5427.0
5°	6145.9	5969.5	5700.2	5456.1	5140.3	4886.5	4630.7	4522.2	4382.7	4289.7	4250.9
7.5°	5965.7	5735.1	5314.7	4871.0	4437.0	3973.9	3621.2	3388.7	3177.6	3061.3	3038.1
10°	5783.5	5483.2	4880.6	4245.1	3572.8	3018.7	2542.0	2189.4	1902.7	1772.8	1672.1
12.5°	5595.6	5221.7	4438.9	3609.6	2828.8	2073.2	1484.2	1141.2	935.8	854.5	868.0
15°	5423.2	4969.8	4001.0	2974.1	1991.8	1251.6	819.6	691.7	643.3	627.8	625.8
17.5°	5258.5	4731.5	3565.1	2356.0	1313.6	767.3	627.8	596.8	583.2	575.4	575.4
20°	5109.3	4502.8	3138.8	1774.8	848.6	608.4	567.7	552.2	540.6	534.8	534.8
22.5°	4969.8	4281.9	2722.2	1255.5	625.8	546.4	521.2	505.7	492.1	484.4	484.4
25°	4843.8	4082.4	2325.0	864.1	538.6	499.9	472.8	455.3	432.1	418.5	418.5
27.5°	4752.8	3904.1	1943.3	629.7	486.3	449.5	418.5	395.3	370.1	354.6	350.7
30°	4698.5	3753.0	1557.8	517.3	437.9	401.1	366.2	337.1	308.1	292.6	290.6
32.5°	4667.5	3613.5	1205.1	451.4	397.2	354.6	315.8	284.8	255.8	238.3	236.4
35°	4679.1	3505.0	902.9	406.9	358.4	313.9	271.3	240.3	215.1	199.6	195.7
37.5°	4779.9	3456.6	678.1	372.0	325.5	279.0	234.4	205.4	182.1	170.5	168.6
40°	4975.6	3466.2	532.8	344.9	298.4	244.1	201.5	174.4	156.9	147.3	145.3
42.5°	5279.8	3547.6	439.8	321.6	269.3	213.1	174.4	153.1	135.6	125.9	124.0
45°	5733.2	3716.2	383.6	294.5	238.3	184.1	151.1	131.8	116.3	104.6	102.7
47.5°	6390.0	4008.8	346.8	269.3	211.2	158.9	129.8	110.4	96.9	87.2	85.3
50°	7089.4	4359.4	315.8	244.1	187.9	137.6	110.4	91.1	79.4	69.8	67.8
52.5°	7835.4	4737.3	292.6	220.9	166.6	118.2	93.0	75.6	63.9	54.3	52.3
55°	8552.3	5117.0	265.4	205.4	141.4	100.8	77.5	62.0	50.4	42.6	42.6
57.5°	9249.8	5465.8	236.4	180.2	116.3	85.3	63.9	50.4	40.7	34.9	32.9
60°	10082.9	5948.2	203.4	153.1	96.9	71.7	52.3	40.7	32.9	27.1	27.1
62.5°	11321.0	6450.0	174.4	127.9	81.4	60.1	42.6	32.9	27.1	23.3	21.3
65°	11726.0	6178.8	147.3	104.6	65.9	48.4	34.9	29.1	23.3	21.3	19.4
67.5°	*10644.8*	*5064.7*	*122.1*	*85.3*	*54.3*	*40.7*	*31.0*	*25.2*	*21.3*	*19.4*	*17.4*
70°	8306.2	3594.1	94.9	63.9	44.6	32.9	27.1	23.3	19.4	17.4	17.4
72.5°	5649.8	2125.5	75.6	48.4	36.8	29.1	23.3	21.3	19.4	17.4	15.5
75°	2782.3	755.6	58.1	36.8	29.1	25.2	21.3	19.4	17.4	15.5	15.5
77.5°	749.8	209.3	44.6	29.1	23.3	19.4	19.4	19.4	17.4	13.6	13.6
80°	253.8	87.2	32.9	21.3	19.4	15.5	13.6	17.4	15.5	13.6	11.6
82.5°	139.5	42.6	23.3	17.4	13.6	11.6	11.6	11.6	11.6	9.7	9.7
85°	89.1	23.3	15.5	13.6	13.6	9.7	7.8	7.8	5.8	5.8	5.8
87.5°	40.7	13.6	13.6	11.6	11.6	9.7	5.8	3.9	1.9	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

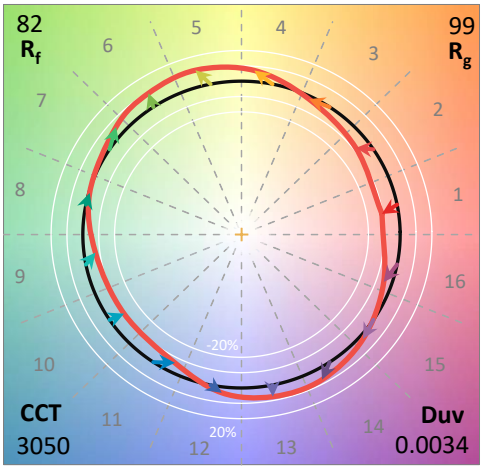
Test Information

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

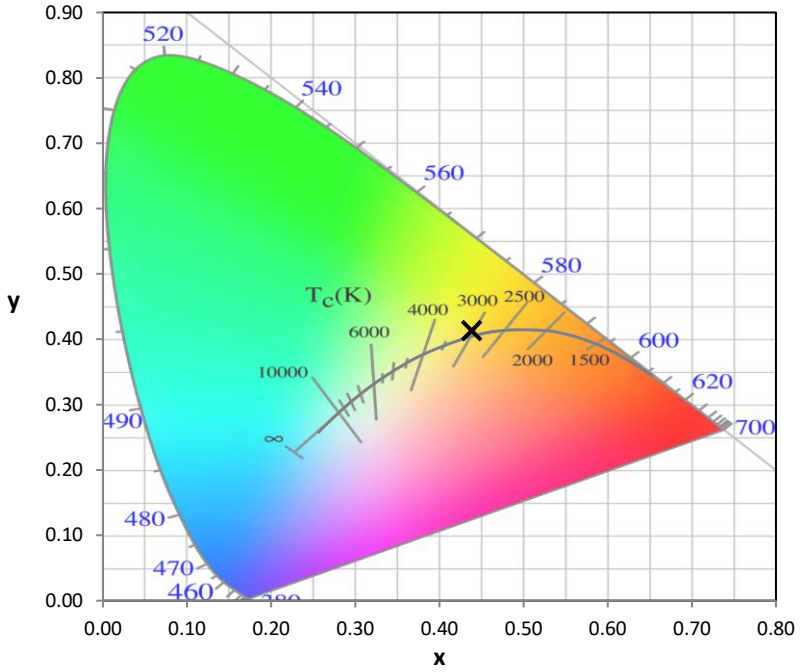
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

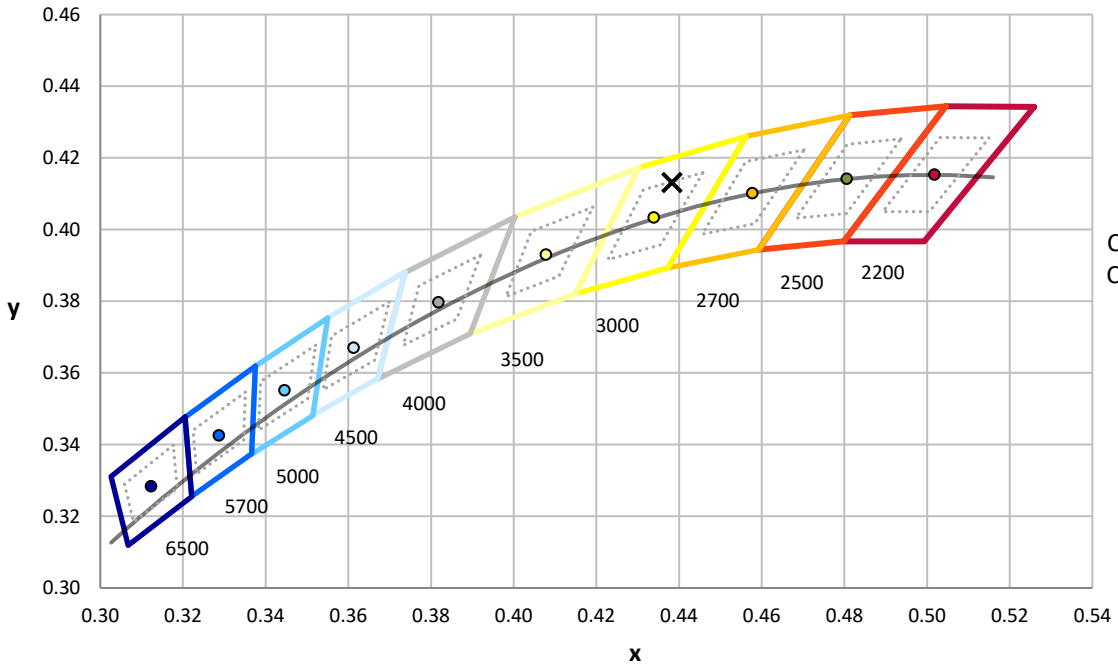
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

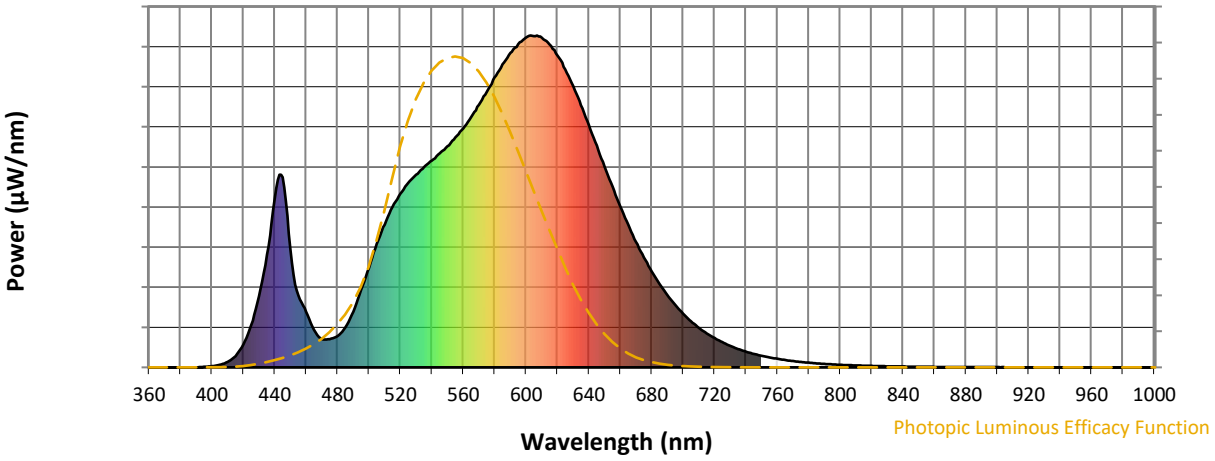


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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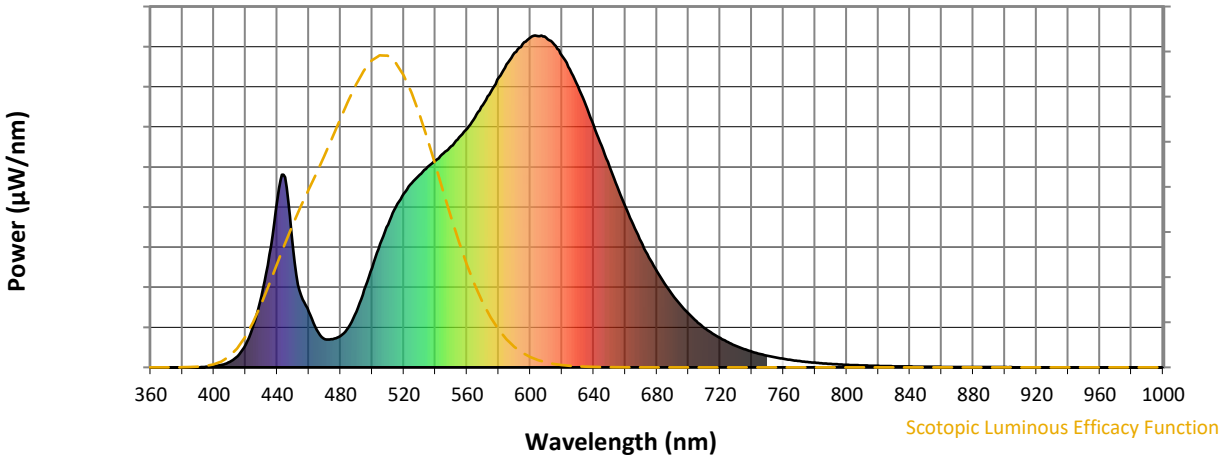
Scotopic Flux vs. Wavelength



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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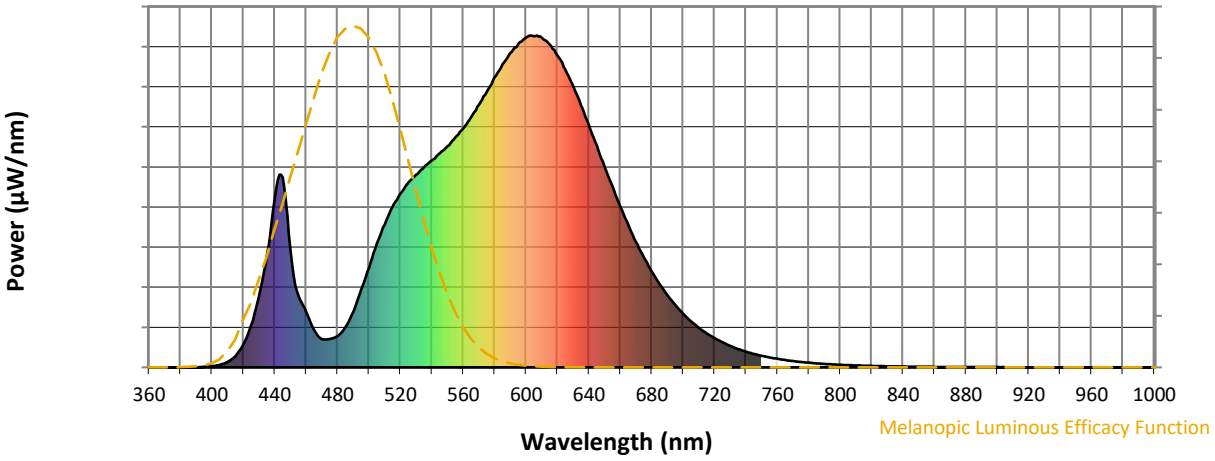
Melanopic Flux vs. Wavelength



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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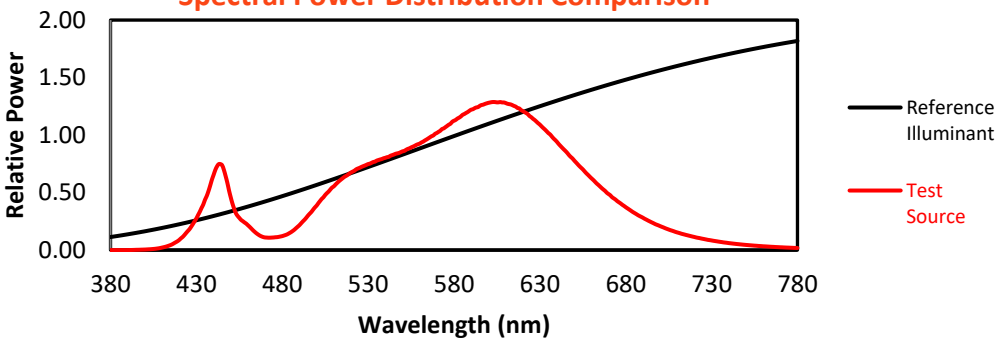
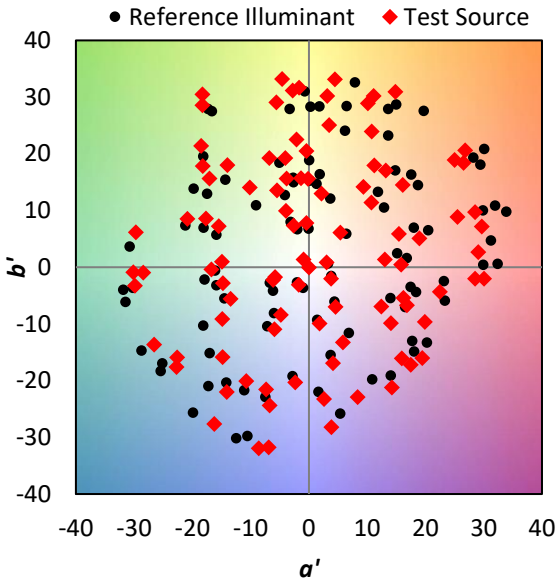
Summary

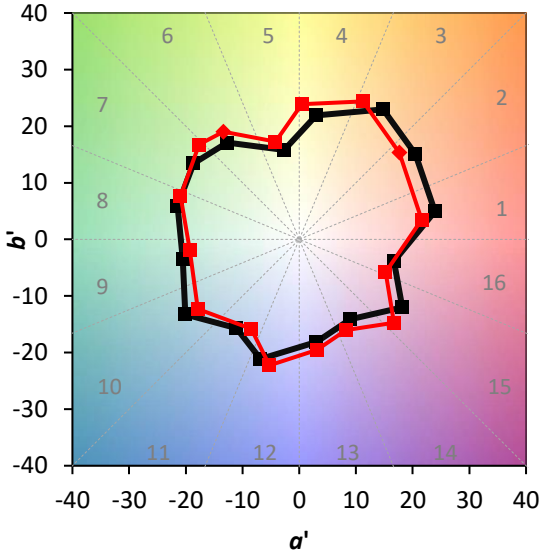
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

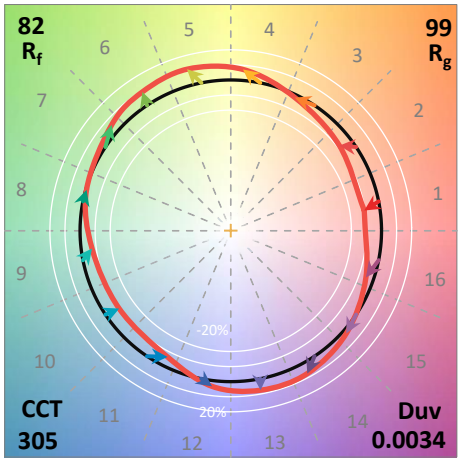
Spectral Power Distribution Comparison

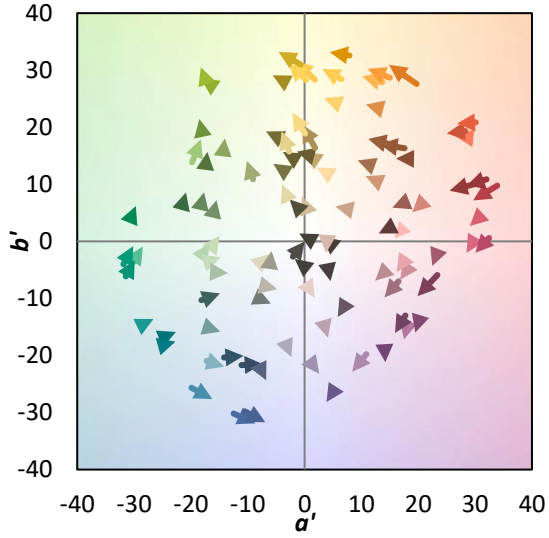


Color Vector Graphics









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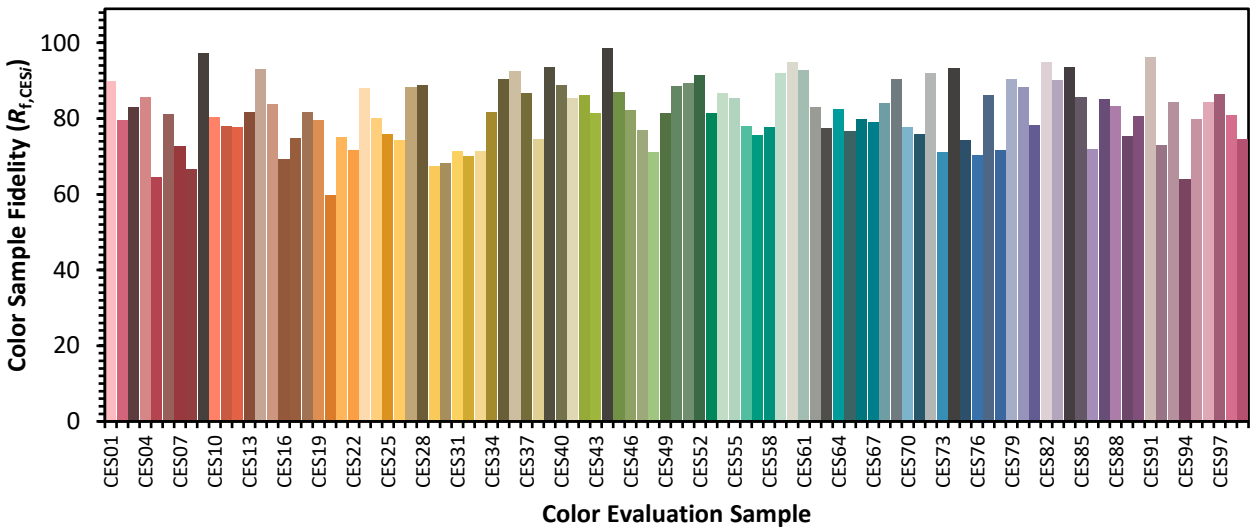
Individual Sample Fidelity Index ($R_{f,i}$)

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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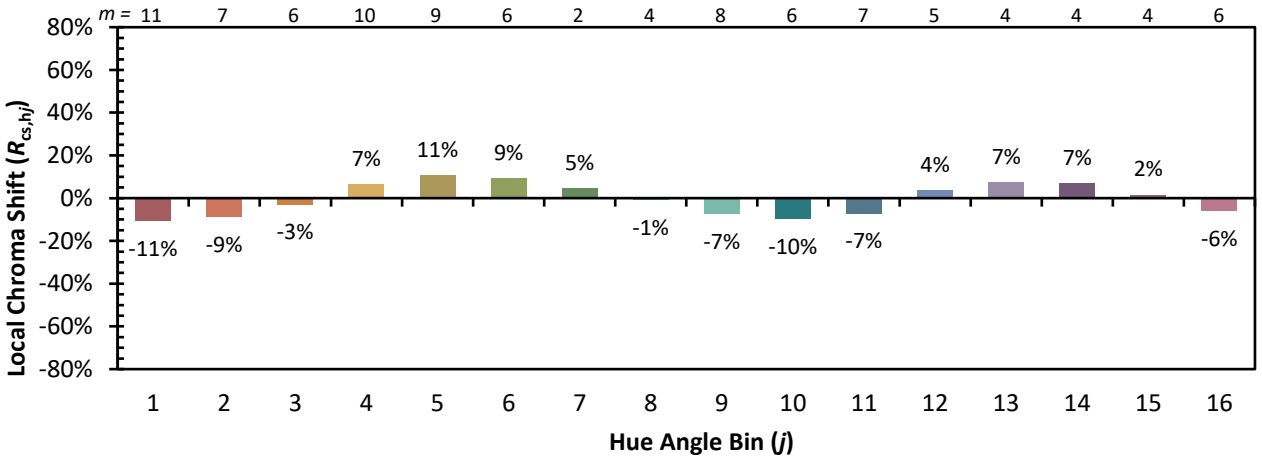
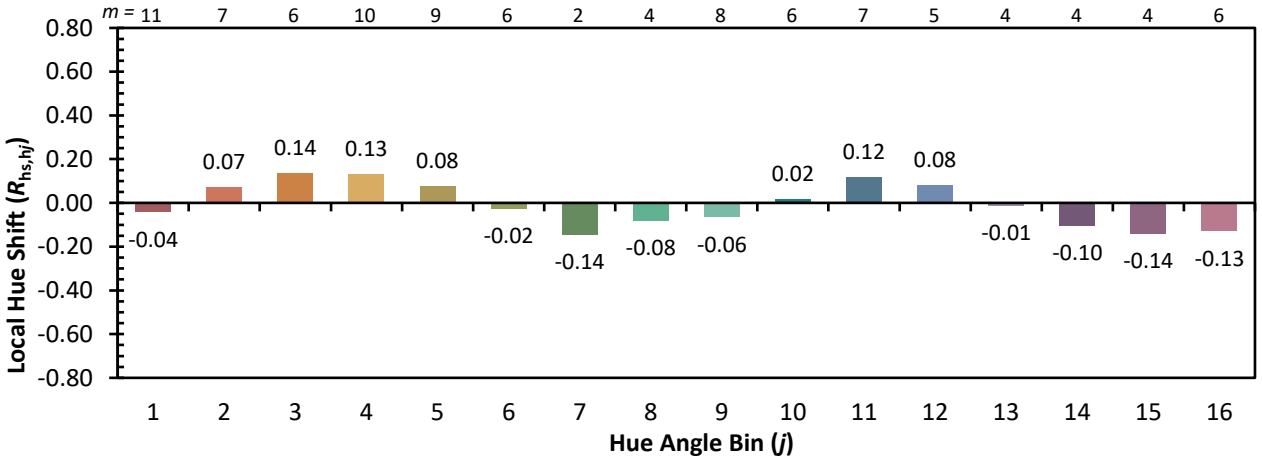
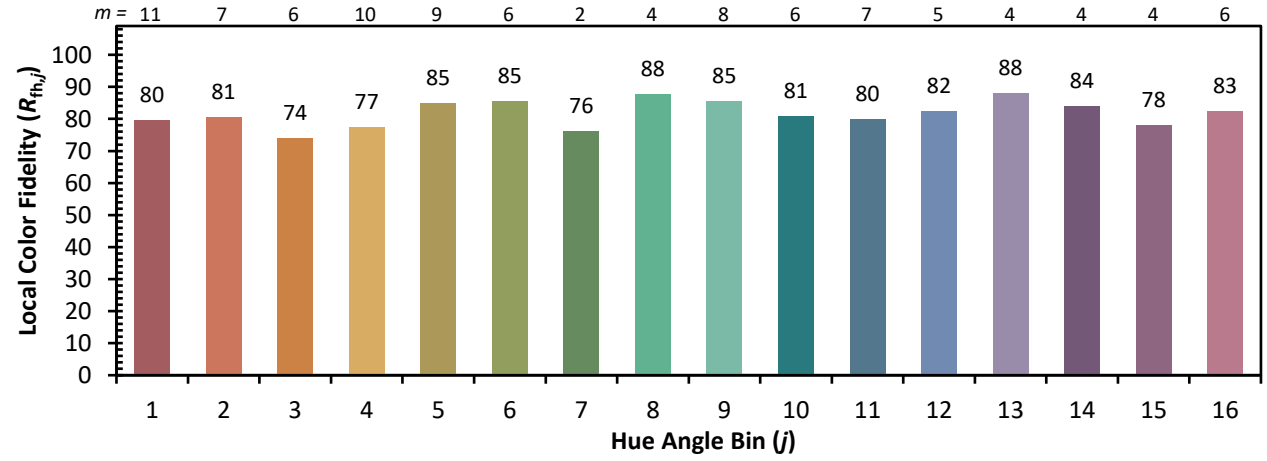
Color Rendition by Hue-Angle Bin







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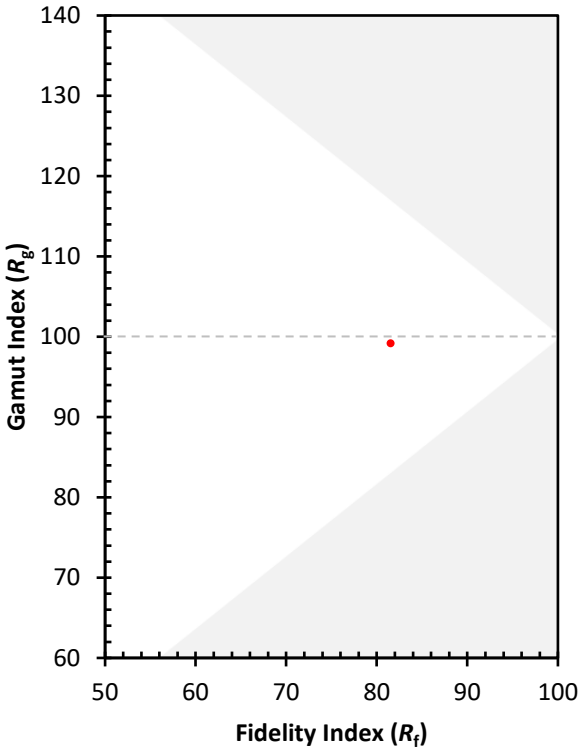
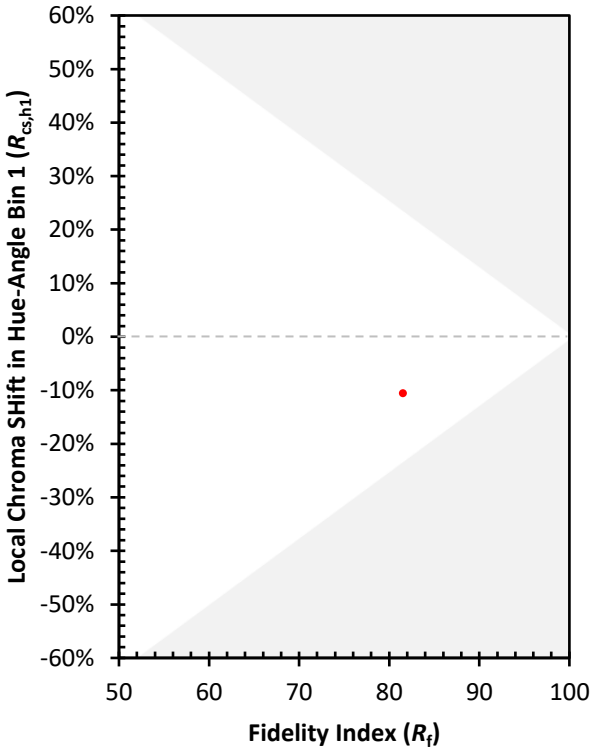
Measure Comparisons





(END OF REPORT)