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: P638972

Luminaire Tested: GWS-SA4F-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:	P638972
	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-SA4F-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:	21296.3 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):	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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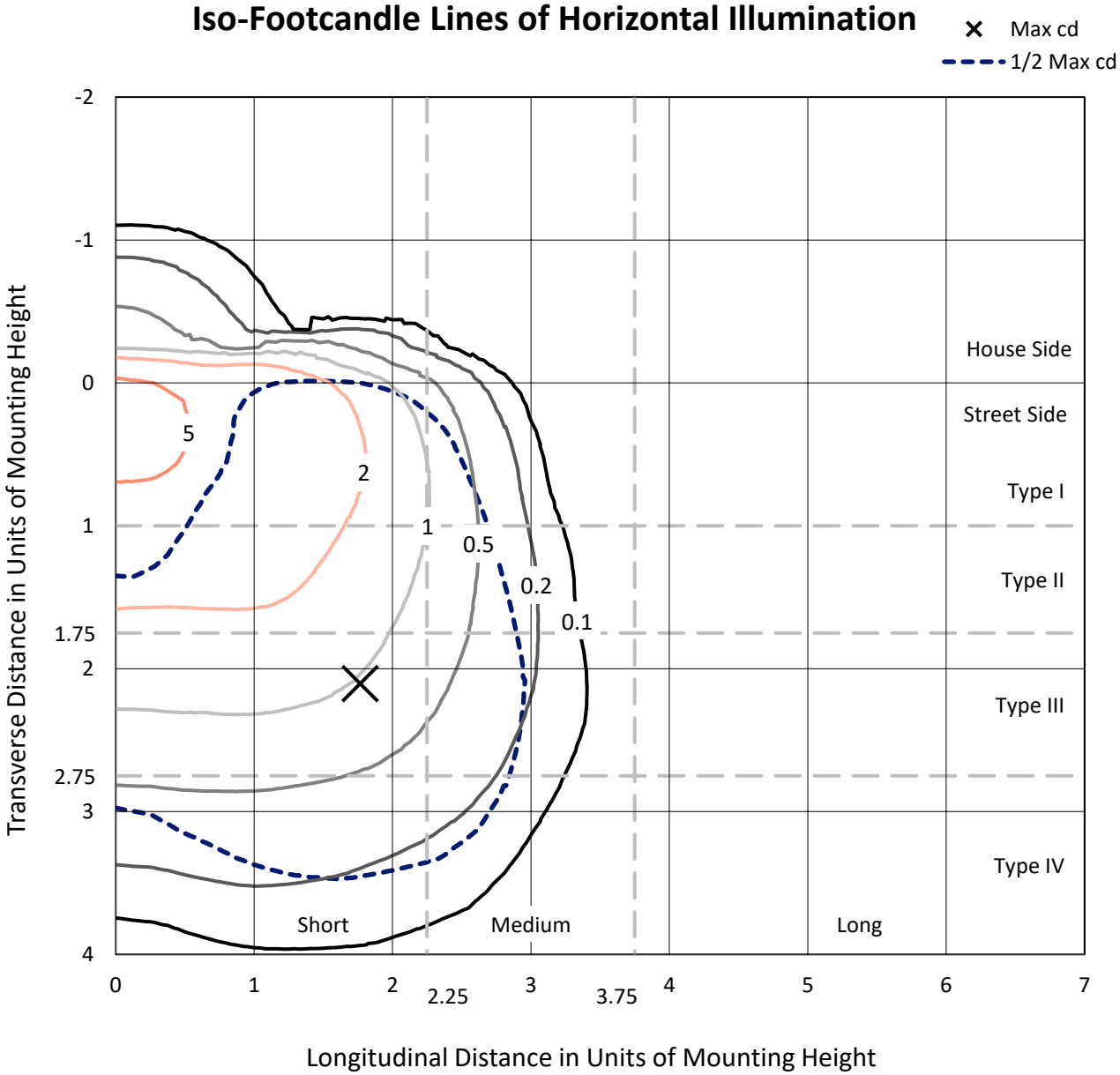
Scaled Data Report

REPORT NUMBER: P638972
CATALOG NUMBER: GWS-SA4F-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type IV - Short - N/A

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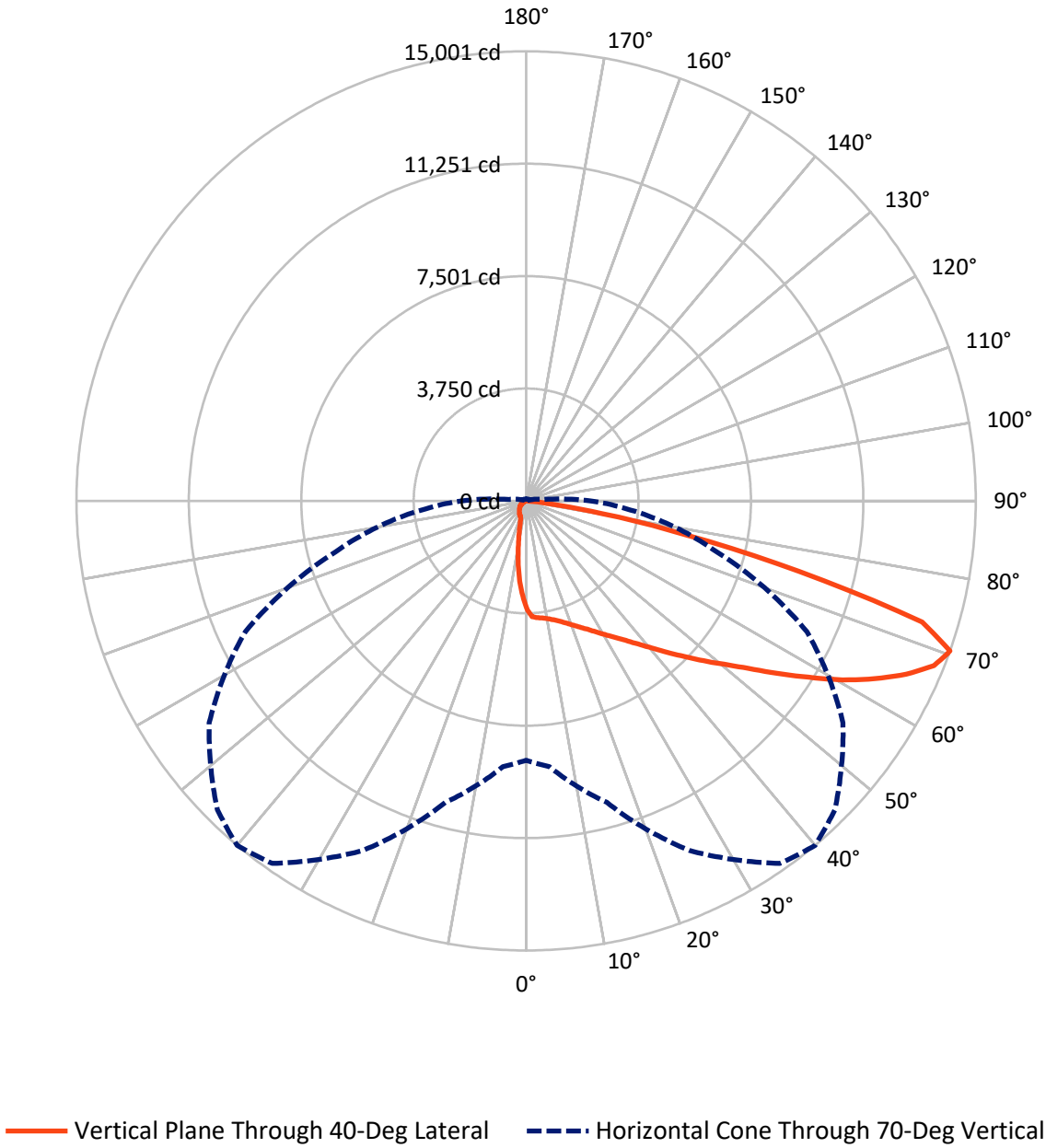
Luminous Intensity Polar Plot



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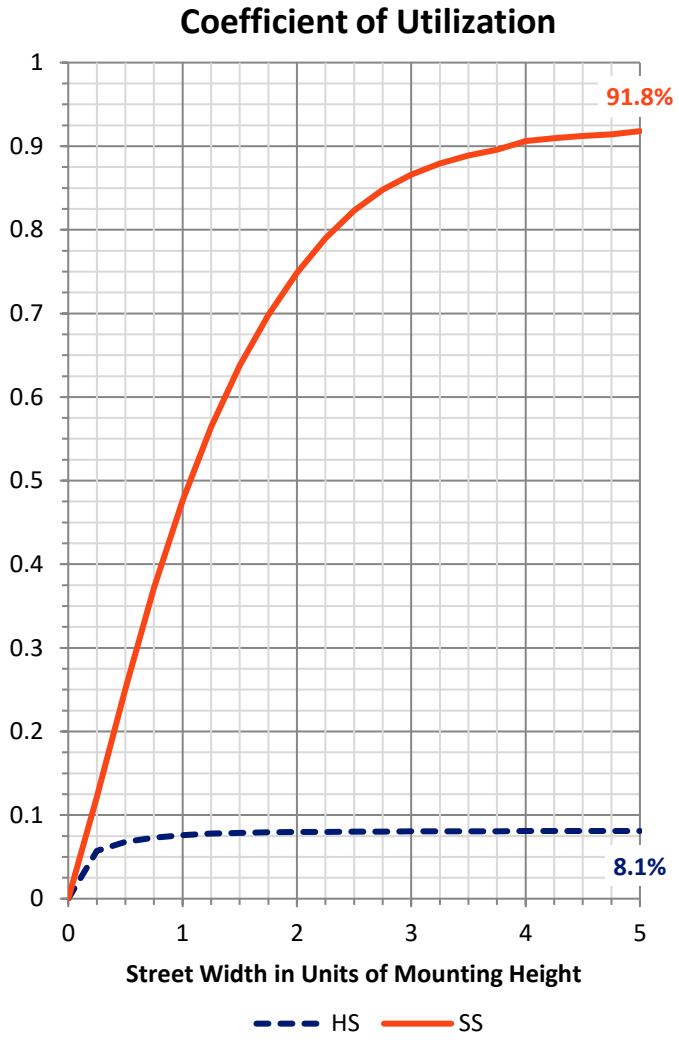
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1741.5	0.0	1741.5
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	19554.8	0.0	19554.8
	% Fixture	91.8	0.0	91.8
Total	Lumens	21296.3	0.0	21296.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.4	1.4
10°-20°	774.6	3.6
20°-30°	1296.5	6.1
30°-40°	2036.3	9.6
40°-50°	3221.0	15.1
50°-60°	4698.6	22.1
60°-70°	5824.6	27.4
70°-80°	2946.9	13.8
80°-90°	192.4	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°	21296.3	100.0
0°-180°	21296.3	100.0



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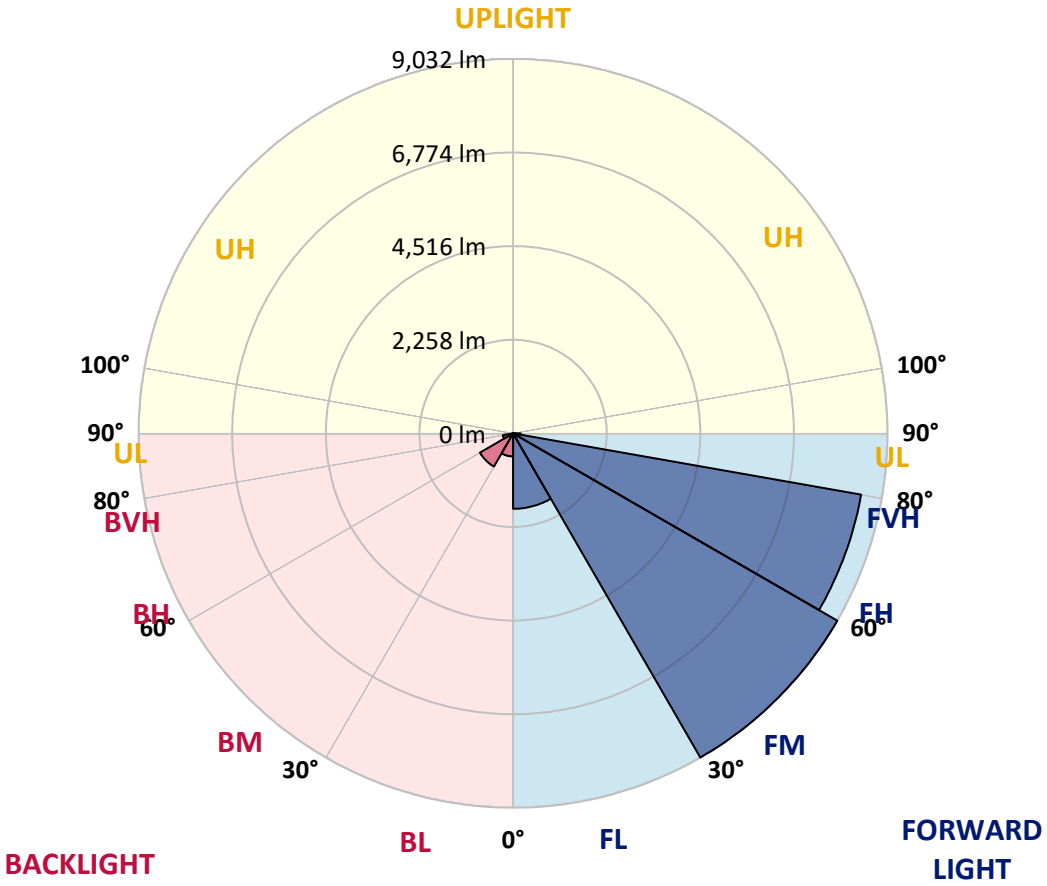
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1820.5	8.5			
FM	(30°-60°)	9031.5	42.4			
FH	(60°-80°)	8523.2	40.0			G4/12000
FVH	(80°-90°)	179.7	0.8			G2/225
BL	(0°-30°)	556.1	2.6	B2/1000		
BM	(30°-60°)	924.4	4.3	B1/1000		
BH	(60°-80°)	248.3	1.2	B1/500		G1/500
BVH	(80°-90°)	12.7	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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REPORT NUMBER: P638972
CATALOG NUMBER: GWS-SA4F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7
2.5°	3885.0	3898.6	3896.6	3902.4	3888.9	3867.6	3863.7	3834.6	3782.3	3716.4	3642.8
5°	3964.4	3979.9	3968.3	3962.5	3937.3	3914.1	3908.3	3877.2	3817.2	3728.0	3600.2
7.5°	4032.3	4036.1	4028.4	4014.8	3978.0	3947.0	3925.7	3883.1	3811.4	3722.2	3575.0
10°	4043.9	4041.9	4045.8	4047.8	4024.5	3997.4	3979.9	3921.8	3830.7	3735.8	3576.9
12.5°	4030.3	4030.3	4055.5	4084.6	4084.6	4071.0	4053.6	4001.3	3894.7	3782.3	3615.7
15°	4047.8	4053.6	4102.0	4156.3	4173.7	4160.1	4152.4	4098.1	3987.7	3863.7	3685.4
17.5°	4109.8	4115.6	4193.1	4274.5	4295.8	4280.3	4264.8	4210.5	4092.3	3956.7	3764.9
20°	4200.8	4216.3	4315.2	4419.8	4439.2	4419.8	4388.8	4313.2	4195.0	4057.4	3840.4
22.5°	4367.5	4377.2	4483.7	4594.2	4603.9	4572.9	4526.4	4421.7	4297.7	4164.0	3925.7
25°	4588.4	4601.9	4708.5	4815.1	4789.9	4743.4	4679.4	4561.2	4419.8	4290.0	4034.2
27.5°	4851.9	4867.4	4972.0	5065.0	4999.2	4944.9	4873.2	4725.9	4582.6	4464.4	4173.7
30°	5136.7	5150.3	5243.3	5326.6	5239.4	5175.5	5090.2	4939.1	4793.8	4704.6	4371.3
32.5°	5411.9	5409.9	5499.1	5566.9	5477.8	5427.4	5349.9	5196.8	5080.5	5041.8	4665.9
35°	5667.6	5667.6	5741.3	5809.1	5745.1	5718.0	5646.3	5524.3	5458.4	5504.9	5059.2
37.5°	5925.3	5911.8	5981.5	6057.1	6051.3	6053.2	6012.5	5954.4	5958.3	6123.0	5599.8
40°	6138.5	6132.7	6214.1	6312.9	6390.4	6452.4	6427.2	6448.5	6570.6	6878.7	6291.6
42.5°	6309.0	6322.6	6427.2	6584.2	6779.9	6905.8	6923.2	7010.4	7324.3	7801.0	7072.4
45°	6504.7	6506.6	6652.0	6892.2	7204.2	7403.8	7473.5	7698.3	8144.0	8758.2	7928.9
47.5°	6745.0	6721.7	6884.5	7221.6	7673.1	7967.6	8091.6	8372.6	9062.4	9692.2	8626.4
50°	7010.4	6967.8	7151.9	7611.1	8198.2	8566.4	8818.3	9229.1	9973.1	10459.5	9145.7
52.5°	7318.5	7277.8	7487.1	8058.7	8828.0	9275.6	9599.1	10013.8	10754.0	11044.6	9455.8
55°	7709.9	7669.2	7890.1	8595.4	9572.0	10153.3	10492.4	10841.2	11480.6	11476.7	9680.5
57.5°	8144.0	8087.8	8393.9	9273.6	10500.2	11104.7	11449.6	11620.1	12032.8	11811.9	9831.7
60°	8641.9	8591.6	9015.9	10081.6	11571.7	12131.7	12348.7	12278.9	12486.2	12009.6	9779.3
62.5°	9091.5	9068.2	9595.3	10938.1	12592.8	13065.6	13125.7	12821.5	12819.5	12013.5	9426.7
65°	9558.5	9603.0	10385.8	11924.3	13619.8	13937.6	13834.9	13360.1	12953.2	11538.7	8384.2
67.5°	9732.8	9862.7	10907.1	12815.7	14429.7	14677.7	14497.5	13629.5	12397.1	9942.1	6384.6
70°	8655.5	8899.7	10414.9	12866.0	14764.9	15001.3	14569.2	12904.8	10335.5	6586.1	3497.5
72.5°	6582.2	6867.0	8678.8	10535.0	13278.8	13817.4	13079.2	10513.7	6661.7	2885.2	1174.2
75°	3683.5	3991.6	6464.0	7932.8	8915.2	9407.3	9136.0	6745.0	2951.0	753.7	350.7
77.5°	1245.9	1348.6	3007.2	4908.1	5884.7	5442.9	4607.7	3350.2	1085.1	286.8	186.0
80°	738.2	777.0	1120.0	2443.4	3096.4	2567.4	2026.8	1238.2	552.2	153.1	129.8
82.5°	220.9	261.6	618.1	906.8	1213.0	755.7	639.4	707.2	286.8	83.3	108.5
85°	0.0	0.0	131.8	281.0	317.8	124.0	124.0	401.1	52.3	34.9	79.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	9.7	5.8	7.8	17.4
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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REPORT NUMBER: P638972
CATALOG NUMBER: GWS-SA4F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7	3613.7
2.5°	3590.5	3522.7	3443.2	3367.6	3296.0	3202.9	3158.4	3104.1	3057.6	3032.4	3046.0
5°	3518.8	3412.2	3249.4	3084.7	2918.1	2761.2	2619.7	2524.8	2439.5	2394.9	2404.6
7.5°	3456.8	3313.4	3059.6	2790.2	2522.8	2253.5	2034.5	1864.0	1732.3	1678.0	1668.3
10°	3429.6	3249.4	2891.0	2503.5	2092.7	1730.3	1420.3	1232.3	1098.7	1032.8	1044.4
12.5°	3443.2	3216.5	2747.6	2222.5	1689.6	1267.2	970.8	794.4	699.5	660.7	651.1
15°	3482.0	3208.8	2619.7	1935.7	1304.0	885.5	670.4	598.7	579.4	575.5	575.5
17.5°	3526.5	3210.7	2487.9	1645.1	990.1	656.9	573.5	560.0	554.2	550.3	552.2
20°	3571.1	3210.7	2336.8	1350.5	744.1	567.7	546.4	536.7	530.9	529.0	529.0
22.5°	3625.4	3210.7	2168.2	1077.3	596.8	538.7	521.2	515.4	509.6	507.7	505.7
25°	3691.2	3212.6	1982.2	842.9	542.5	513.5	499.9	494.1	488.3	484.4	484.4
27.5°	3786.2	3228.1	1776.8	656.9	511.5	490.2	478.6	472.8	467.0	461.2	461.2
30°	3923.8	3266.9	1546.2	542.5	482.5	465.0	453.4	449.5	443.7	437.9	436.0
32.5°	4129.1	3334.7	1307.9	486.4	455.3	437.9	424.3	420.5	414.7	408.8	406.9
35°	4415.9	3458.7	1075.4	451.5	420.5	403.0	395.3	393.3	385.6	379.8	379.8
37.5°	4836.4	3660.2	852.6	416.6	391.4	377.8	368.2	364.3	356.5	350.7	348.8
40°	5349.9	3921.8	662.7	389.5	364.3	350.7	341.0	335.2	325.5	317.8	313.9
42.5°	6004.8	4241.5	523.2	360.4	339.1	325.5	317.8	306.1	292.6	281.0	279.0
45°	6686.8	4570.9	432.1	333.3	315.8	304.2	294.5	279.0	259.6	246.1	242.2
47.5°	7210.0	4776.3	377.8	304.2	290.6	281.0	269.3	250.0	226.7	211.2	207.3
50°	7584.0	4807.3	337.2	277.1	269.3	259.6	242.2	219.0	193.8	178.3	174.4
52.5°	7768.1	4667.8	304.2	251.9	246.1	236.4	215.1	189.9	162.8	147.3	143.4
55°	7851.4	4404.3	273.2	230.6	222.8	211.2	188.0	160.8	133.7	120.1	116.3
57.5°	7818.4	4014.8	246.1	209.3	199.6	186.0	160.8	131.8	110.4	96.9	94.9
60°	7574.3	3468.4	219.0	188.0	176.3	160.8	135.6	108.5	89.1	79.4	77.5
62.5°	7047.3	2790.2	191.8	162.8	155.0	139.5	116.3	89.1	73.6	67.8	65.9
65°	5968.0	1972.5	164.7	137.6	133.7	118.2	96.9	73.6	63.9	60.1	58.1
67.5°	4290.0	1199.4	139.5	118.2	114.3	100.8	81.4	63.9	58.1	56.2	56.2
70°	*2156.6*	*567.7*	*110.4*	*96.9*	*96.9*	*83.3*	*69.8*	*58.1*	*56.2*	*54.3*	*54.3*
72.5°	732.4	242.2	83.3	75.6	79.4	71.7	60.1	54.3	54.3	54.3	54.3
75°	250.0	127.9	58.1	54.3	58.1	58.1	52.3	52.3	54.3	54.3	54.3
77.5°	162.8	85.3	40.7	36.8	44.6	44.6	44.6	48.4	52.3	52.3	52.3
80°	133.7	46.5	27.1	25.2	32.9	32.9	36.8	44.6	48.4	48.4	48.4
82.5°	114.3	29.1	15.5	17.4	23.3	25.2	31.0	36.8	42.6	44.6	44.6
85°	77.5	15.5	11.6	13.6	15.5	19.4	25.2	31.0	34.9	38.8	38.8
87.5°	21.3	5.8	7.8	9.7	9.7	13.6	19.4	23.3	27.1	29.1	29.1
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

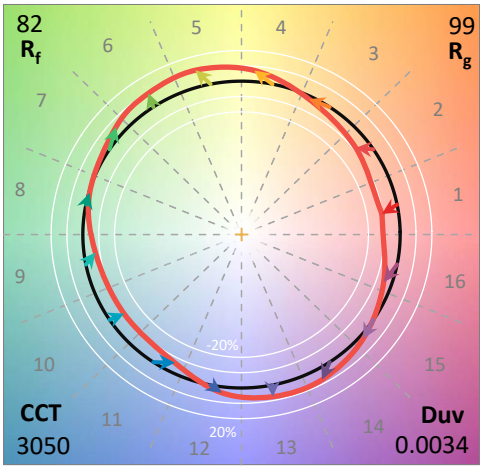
Test Information

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

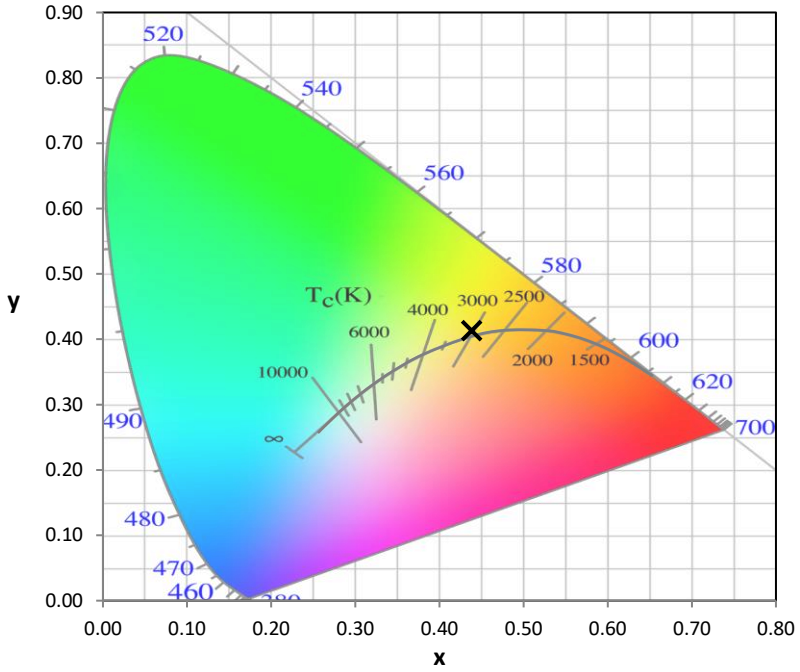
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

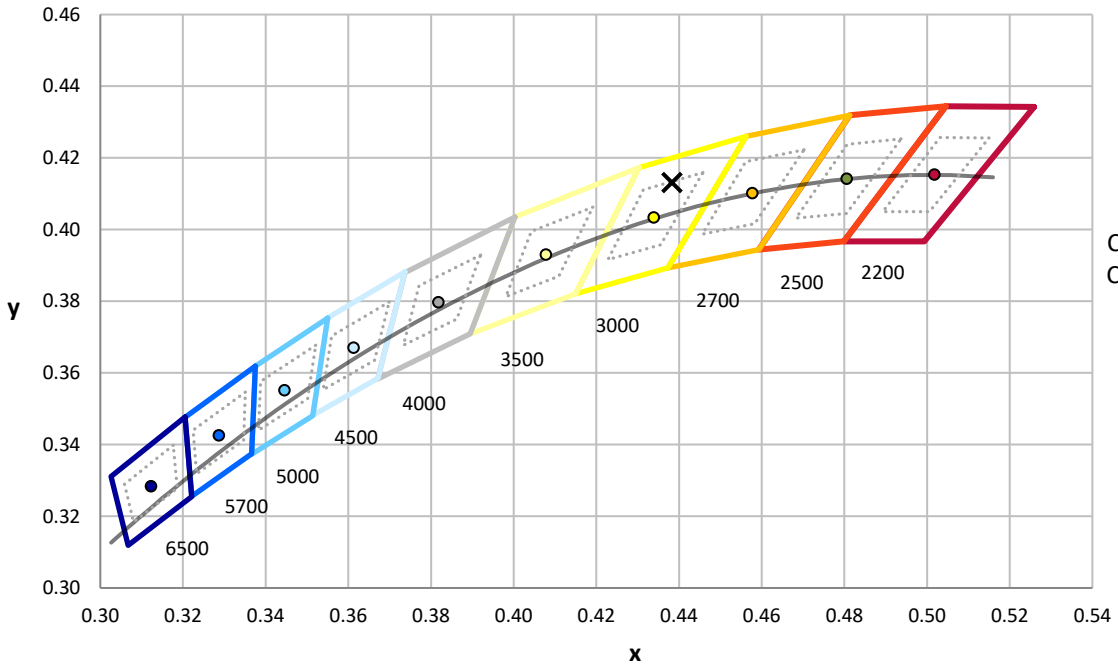
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

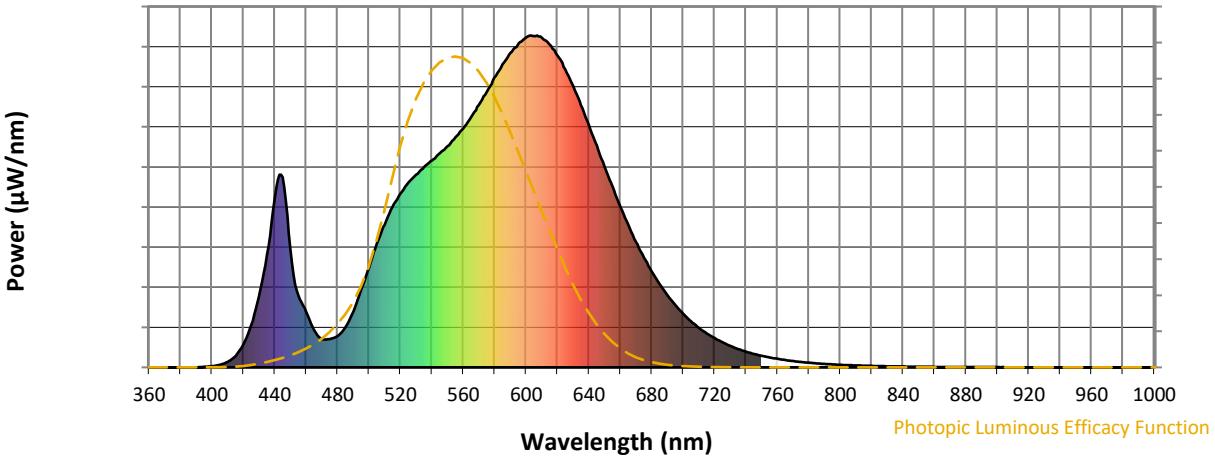


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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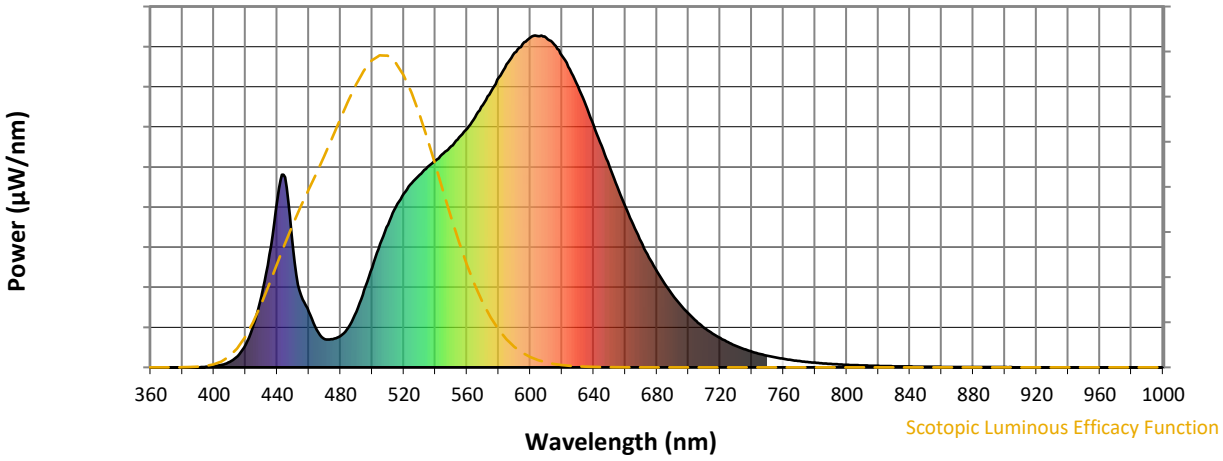
Scotopic Flux vs. Wavelength



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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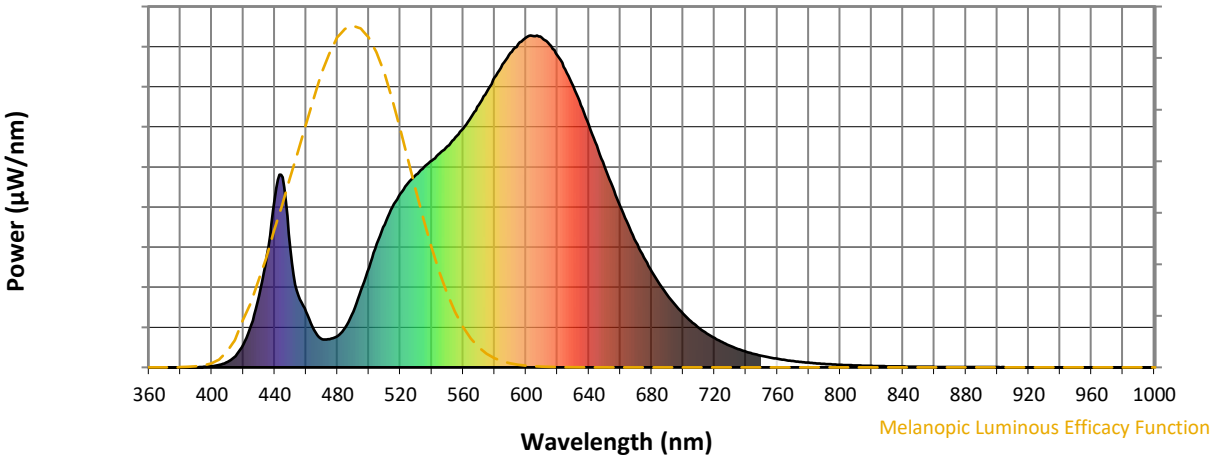
Melanopic Flux vs. Wavelength



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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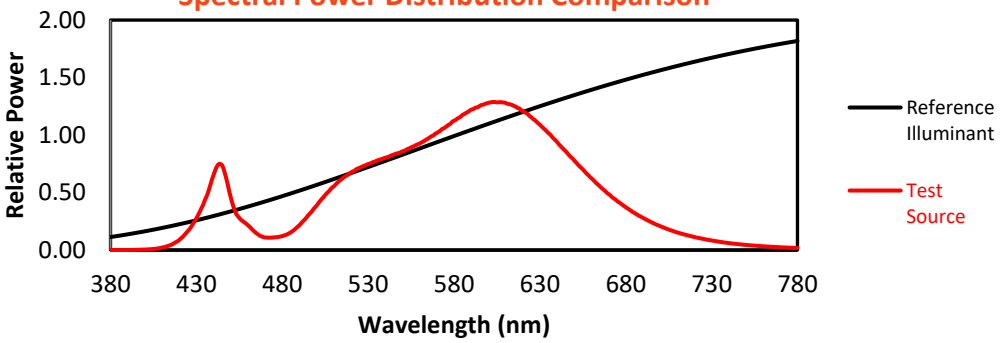
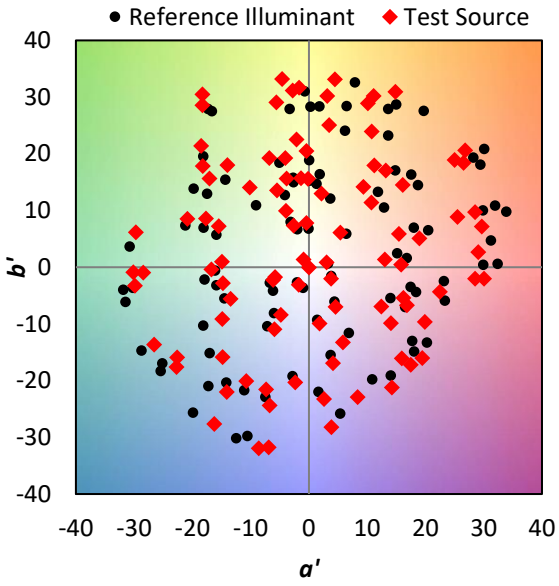
Summary

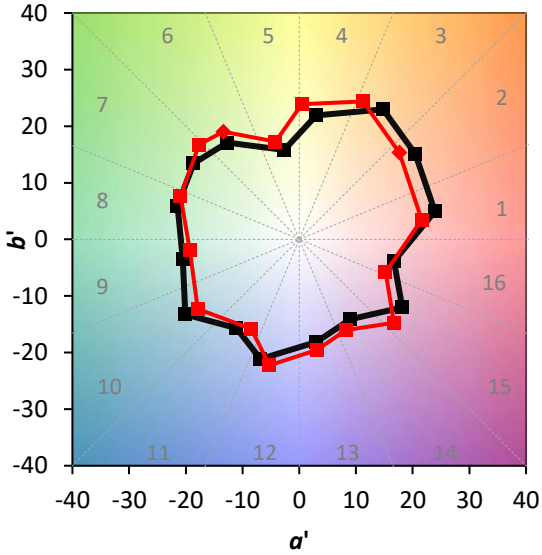
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

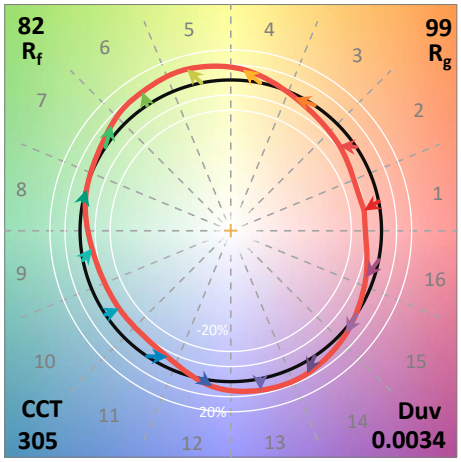
Spectral Power Distribution Comparison

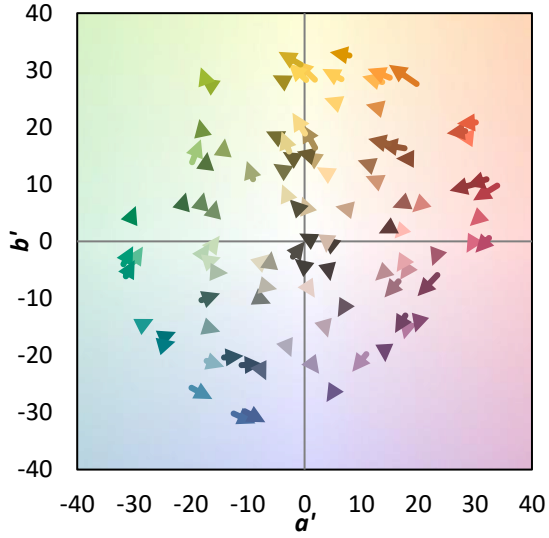


Color Vector Graphics









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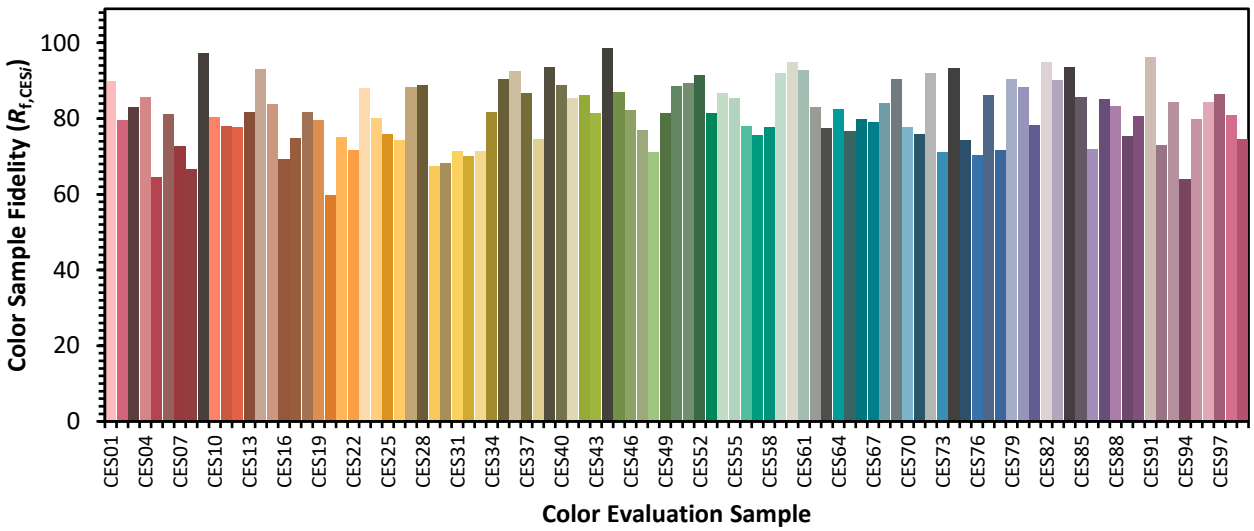
Individual Sample Fidelity Index ($R_{f,i}$)

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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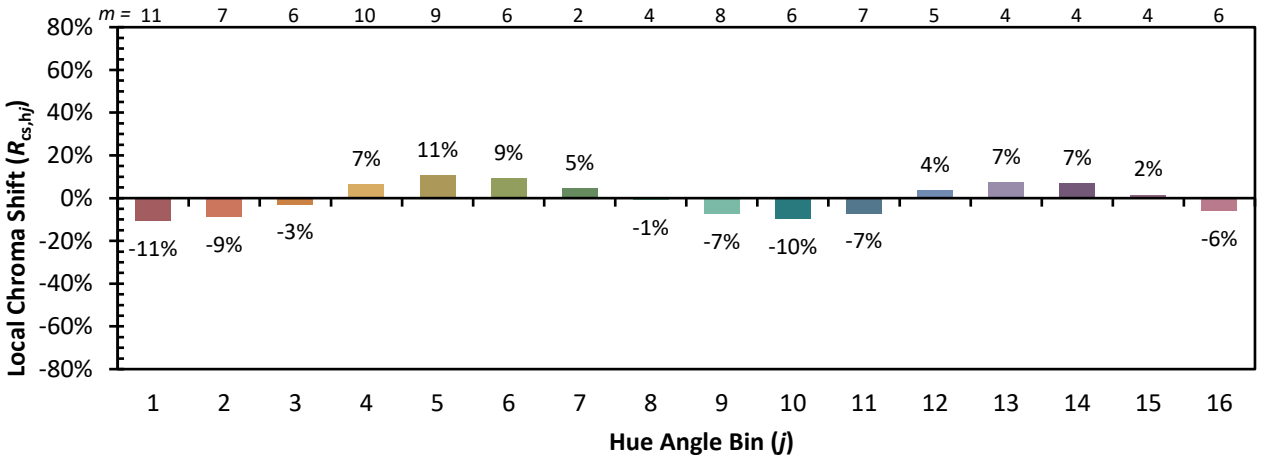
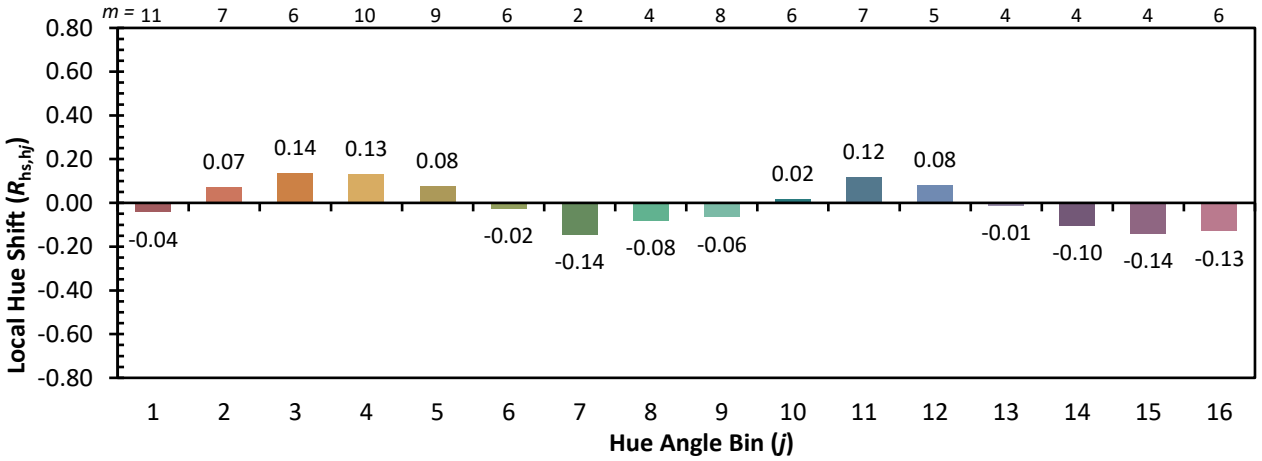
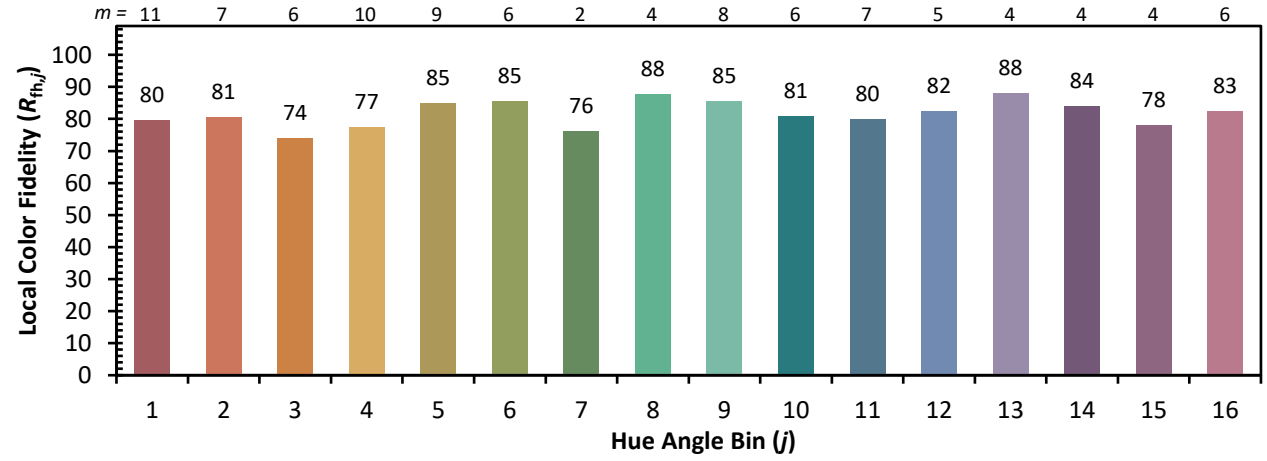
Color Rendition by Hue-Angle Bin







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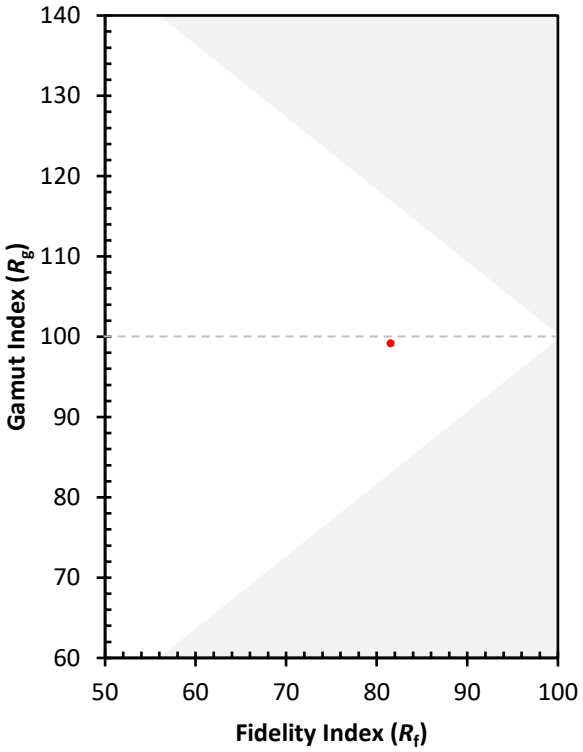
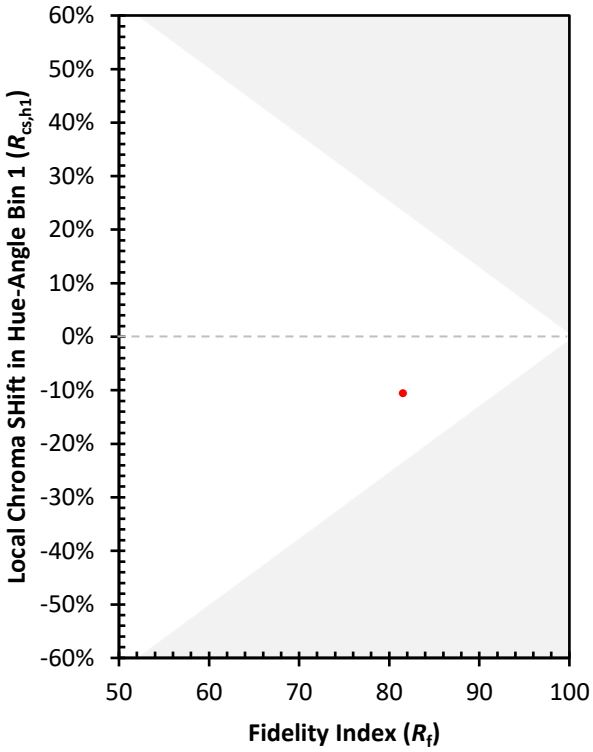
Measure Comparisons





(END OF REPORT)