Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1704731

Luminaire Tested: GSS-SB4A-AMB-U-5WQ

Issue Date: 10/28/2026

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2024
Report Number:	P1704731
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	10/28/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GSS-SB4A-AMB-U-5WQ
Description:	GALLEON SITE SLIM HIGH DENSITY LED ARRAYS 4SQUARE 130W 1590K FIXTURE w/ T5 WIDE DISTRIBUTION
Light Source:	(104) 1590K CCT, 0 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8149.9 lumens
Efficiency:	N/A
Efficacy:	62.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	130.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

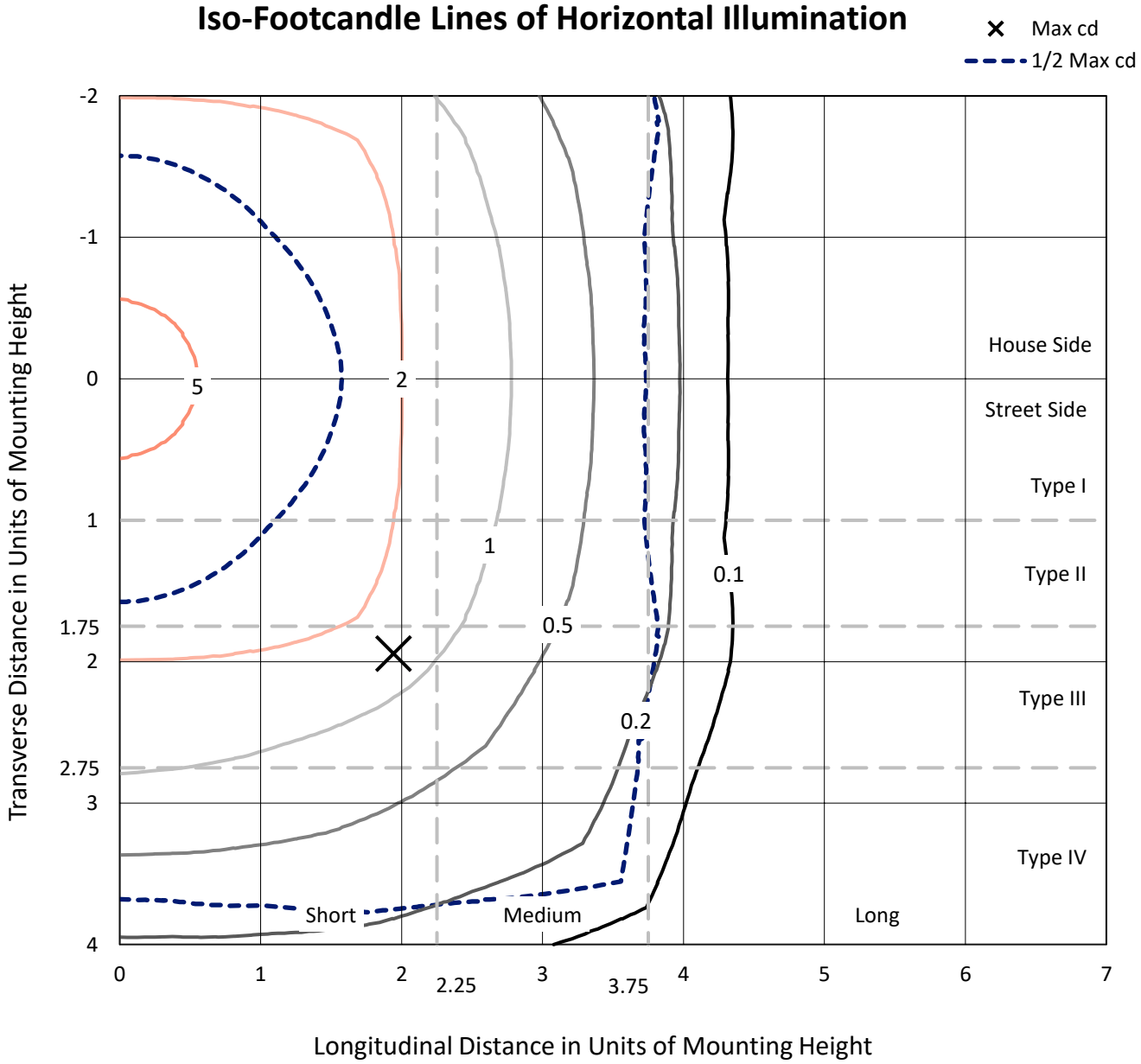


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Scaled Data Report

REPORT NUMBER: P1704731
CATALOG NUMBER: GSS-SB4A-AMB-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination



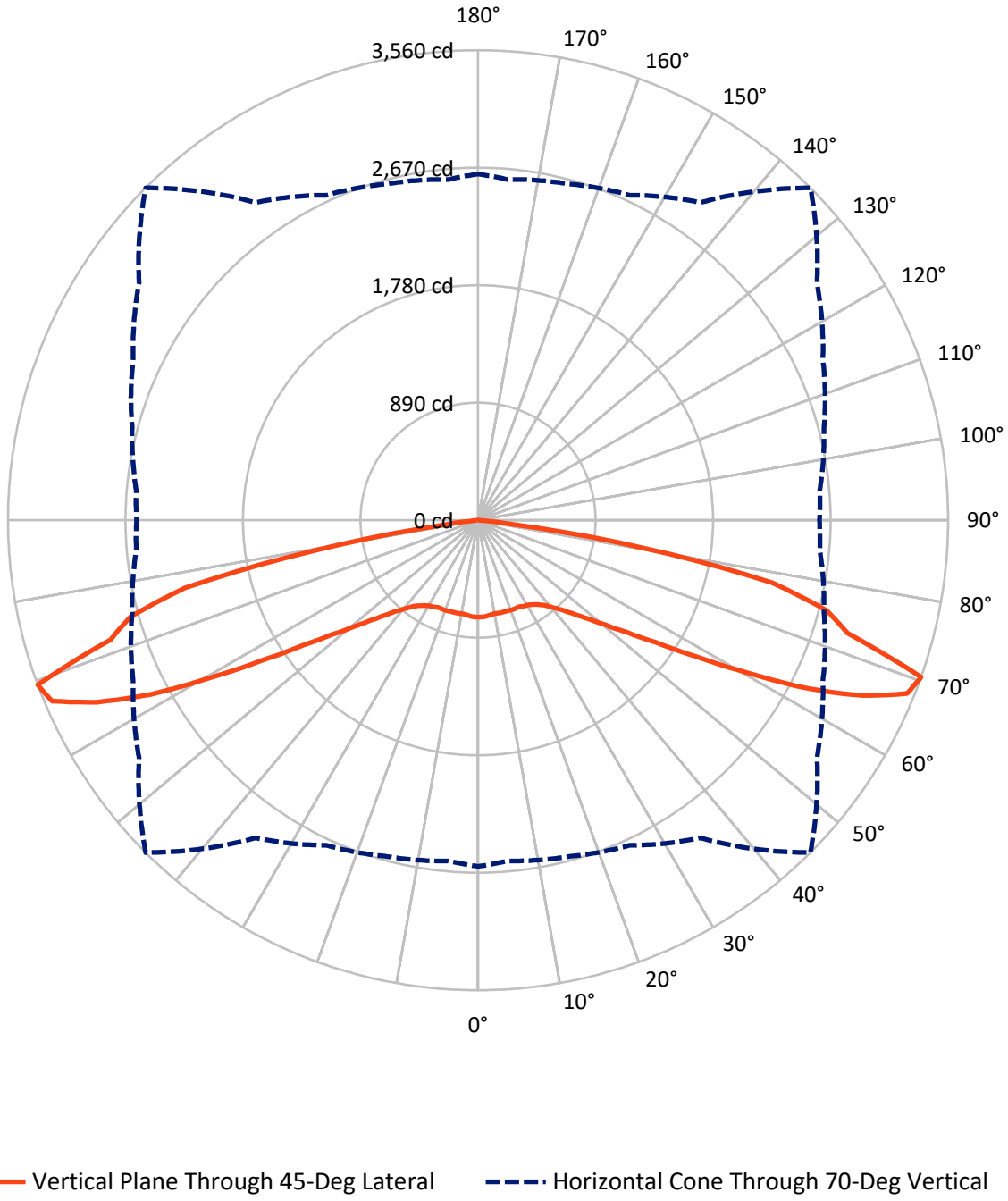
Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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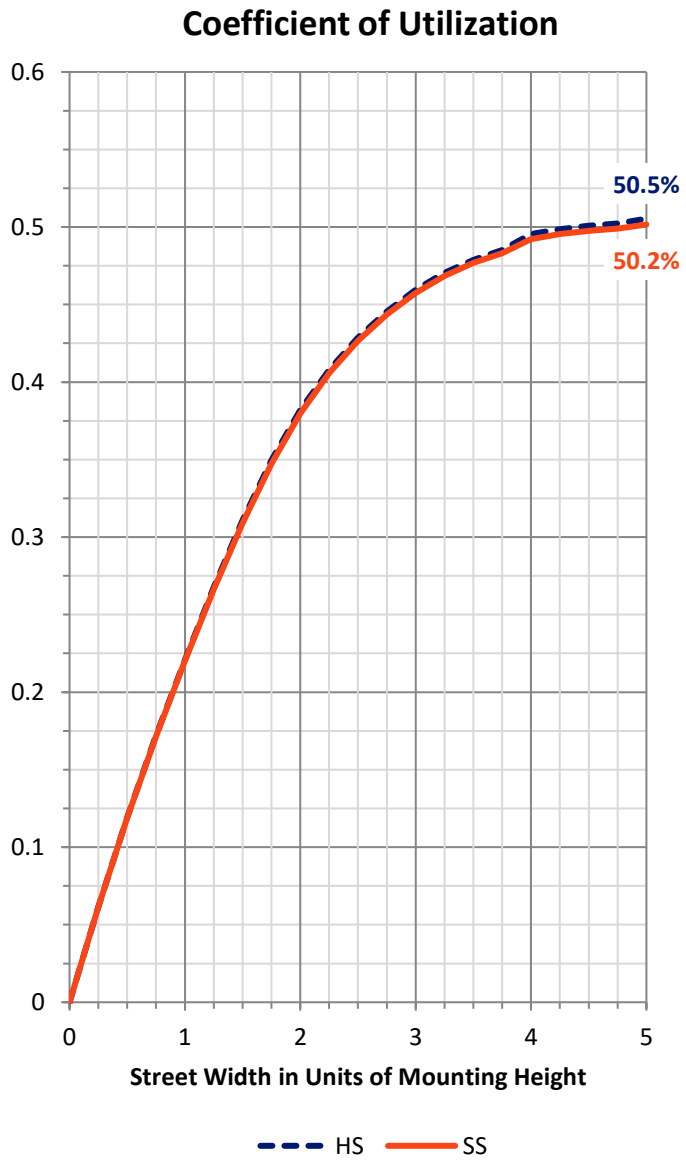
REPORT NUMBER: P1704731
CATALOG NUMBER: GSS-SB4A-AMB-U-5WQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4074.9	0.0	4074.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4074.9	0.0	4074.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	8149.9	0.0	8149.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	0.8
10°-20°	205.2	2.5
20°-30°	339.0	4.2
30°-40°	503.5	6.2
40°-50°	809.5	9.9
50°-60°	1468.2	18.0
60°-70°	2579.3	31.6
70°-80°	2066.8	25.4
80°-90°	109.0	1.3
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°	8149.9	100.0
0°-180°	8149.9	100.0



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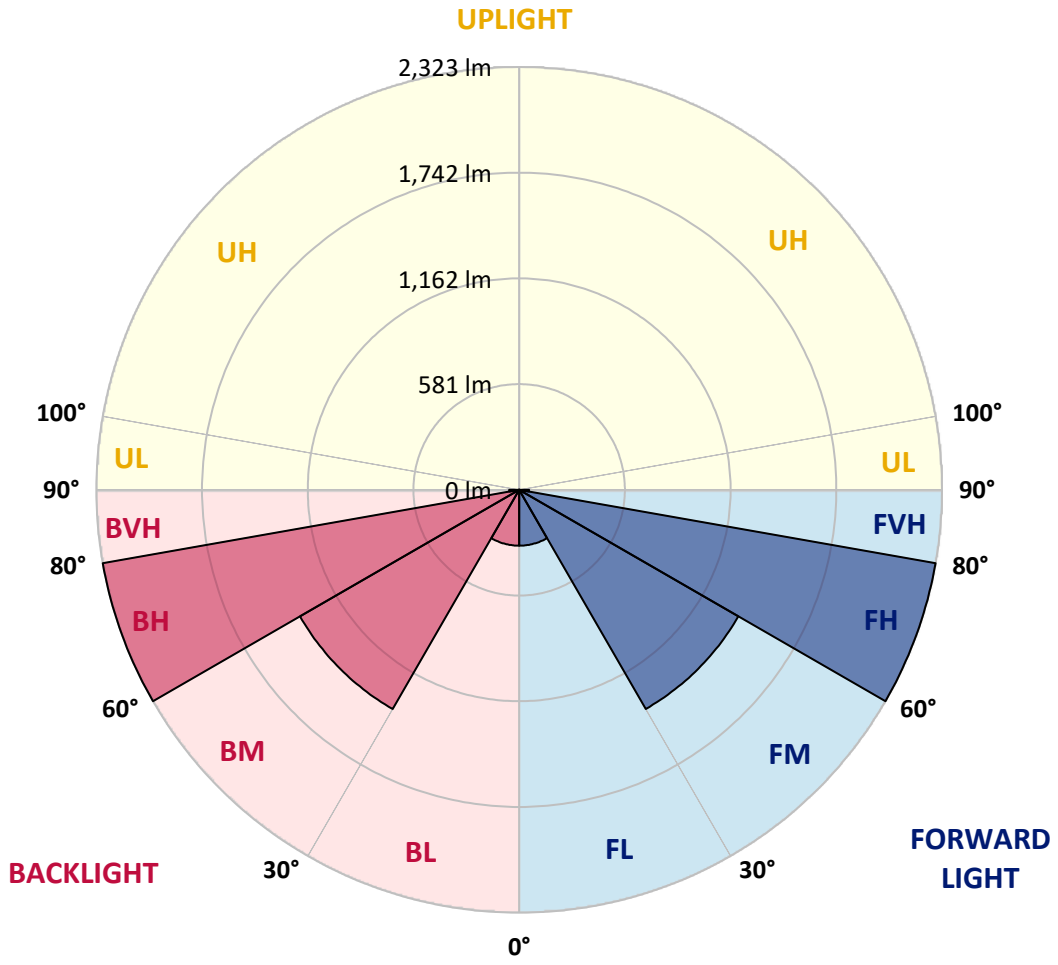
Scaled Data Report

REPORT NUMBER: P1704731
CATALOG NUMBER: GSS-SB4A-AMB-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	306.7	3.8			
FM	(30°-60°)	1390.6	17.1			
FH	(60°-80°)	2323.1	28.5			G2/5000
FVH	(80°-90°)	54.5	0.7			G1/100
BL	(0°-30°)	306.7	3.8	B1/500		
BM	(30°-60°)	1390.6	17.1	B2/2500		
BH	(60°-80°)	2323.1	28.5	B3/2500		G2/5000
BVH	(80°-90°)	54.5	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	733.3	733.3	733.3	733.3	733.3	*733.3*	733.3	733.3	733.3	733.3	733.3
2.5°	737.3	737.3	729.4	729.4	729.4	*733.3*	729.4	729.4	729.4	733.3	733.3
5°	737.3	729.4	729.4	729.4	725.5	*729.4*	729.4	725.5	729.4	725.5	729.4
7.5°	733.3	725.5	721.5	721.5	721.5	*721.5*	721.5	717.6	725.5	717.6	721.5
10°	733.3	729.4	721.5	721.5	721.5	*717.6*	717.6	717.6	721.5	721.5	721.5
12.5°	737.3	729.4	725.5	725.5	721.5	*721.5*	721.5	717.6	721.5	725.5	717.6
15°	737.3	733.3	729.4	725.5	721.5	*721.5*	717.6	721.5	721.5	725.5	725.5
17.5°	737.3	733.3	725.5	725.5	721.5	*721.5*	721.5	721.5	721.5	725.5	725.5
20°	737.3	733.3	729.4	725.5	721.5	*725.5*	725.5	725.5	721.5	725.5	725.5
22.5°	737.3	733.3	725.5	721.5	725.5	*725.5*	725.5	721.5	725.5	729.4	729.4
25°	741.2	737.3	725.5	725.5	729.4	*725.5*	729.4	725.5	725.5	729.4	733.3
27.5°	749.1	745.2	733.3	733.3	733.3	*737.3*	733.3	733.3	737.3	737.3	741.2
30°	757.0	749.1	749.1	749.1	745.2	*745.2*	745.2	745.2	745.2	753.1	757.0
32.5°	768.8	764.9	768.8	764.9	760.9	*760.9*	760.9	764.9	768.8	768.8	772.8
35°	800.4	800.4	796.4	788.5	784.6	*784.6*	784.6	792.5	796.4	800.4	796.4
37.5°	839.8	839.8	831.9	824.0	816.1	*816.1*	816.1	828.0	835.9	835.9	839.8
40°	887.1	883.2	883.2	867.4	863.5	*867.4*	867.4	875.3	887.1	891.1	895.0
42.5°	962.0	958.1	946.3	934.4	926.5	*926.5*	930.5	938.4	954.1	962.0	962.0
45°	1044.8	1044.8	1029.0	1013.3	997.5	*1009.3*	1013.3	1021.2	1040.9	1056.6	1048.8
47.5°	1159.2	1151.3	1131.6	1115.8	1100.0	*1111.8*	1111.8	1131.6	1155.2	1163.1	1167.0
50°	1257.7	1257.7	1245.9	1234.1	1234.1	*1242.0*	1249.8	1253.8	1265.6	1269.6	1269.6
52.5°	1395.7	1391.8	1391.8	1387.8	1395.7	*1411.5*	1403.6	1407.6	1411.5	1403.6	1403.6
55°	1569.2	1553.4	1565.3	1581.0	1600.7	*1632.3*	1632.3	1612.6	1596.8	1577.1	1573.1
57.5°	1758.5	1754.5	1782.1	1825.5	1876.7	*1947.7*	1896.4	1845.2	1805.8	1766.3	1762.4
60°	1983.2	1999.0	2022.6	2101.5	2231.6	*2345.9*	2239.5	2117.2	2026.6	1983.2	1975.3
62.5°	2196.1	2200.0	2286.8	2401.1	2618.0	*2811.2*	2637.7	2436.6	2294.7	2204.0	2192.2
65°	2231.6	2243.4	2389.3	2633.7	2941.3	*3201.5*	2984.6	2700.8	2456.3	2330.1	2322.3
67.5°	2432.7	2428.7	2456.3	2633.7	3102.9	*3505.1*	3213.3	2763.8	2578.5	2511.5	2515.5
70°	*2621.9*	*2590.4*	*2637.7*	*2716.5*	*2937.3*	*3560.3*	*3134.5*	*2882.1*	*2712.6*	*2598.3*	*2586.4*
72.5°	2436.6	2432.7	2539.1	2724.4	2961.0	*2925.5*	3099.0	2744.1	2519.4	2401.1	2389.3
75°	1719.0	1746.6	1975.3	2349.9	2527.3	*2728.4*	2440.5	2353.8	1975.3	1786.1	1790.0
77.5°	524.4	544.1	863.5	1380.0	1766.3	*2278.9*	1770.3	1490.3	843.7	642.7	599.3
80°	114.3	126.2	228.7	354.8	721.5	*1265.6*	690.0	272.0	201.1	134.1	126.2
82.5°	67.0	67.0	78.9	98.6	177.4	*268.1*	134.1	94.6	86.7	67.0	63.1
85°	35.5	35.5	39.4	47.3	47.3	*51.3*	43.4	47.3	43.4	35.5	31.5
87.5°	15.8	15.8	19.7	19.7	15.8	*15.8*	15.8	15.8	19.7	19.7	19.7
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: SP3-2509-541-1

Test Date: 09/16/2025

Luminaire Tested: GALN-SA1A-AMB-U-T3BC

Data in this report applies to families of products including GALN-SA1A*

Report Generated By FNC07603 / LDUCLS01DT01661
Version: v7.05

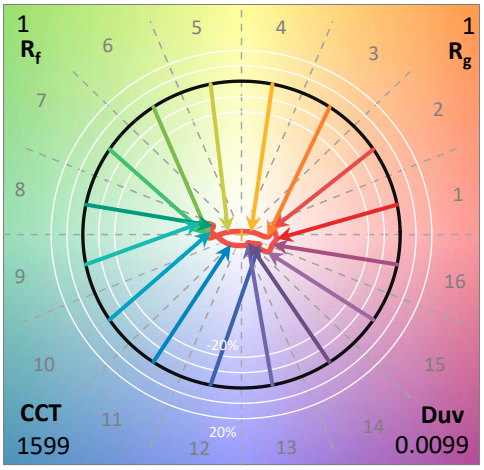
Test Information

Test Method:	LM-79-2019
Report Number:	SP3-2509-541-1
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP3 - 3M SPHERE
Measurement Geometry:	4π
Issue Date:	10/02/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGraw-Edison
Catalog Number:	**GALN-SA1A-AMB-U-T3BC**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) AMBER, 615MA LIGHTSQUARES TYPE III ROADWAY OPTICS WITH ANGLED BACKLIGHT CONTROL HEATSINK

Spectral Parameters

CCT (K):	1599
CIE u':	0.3452
CIE v':	0.5480
Duv:	0.0099
CIE x:	0.5859
CIE y:	0.4133
CIE z:	0.0008
Peak Wavelength (nm):	596
Dominant Wavelength (nm):	591
Purity:	99.94224
Rf:	1.2
Rg:	0.9

CRI (Ra):	-22.7				
R1:	-36.4	R9:	-395.3		
R2:	50.8	R10:	26.0		
R3:	18.3	R11:	-97.2		
R4:	-69.1	R12:	-14.1		
R5:	-41.9	R13:	-17.6		
R6:	38.5	R14:	46.4		
R7:	-6.7	R15:	-69.4		
R8:	-135.4				



Test Conditions

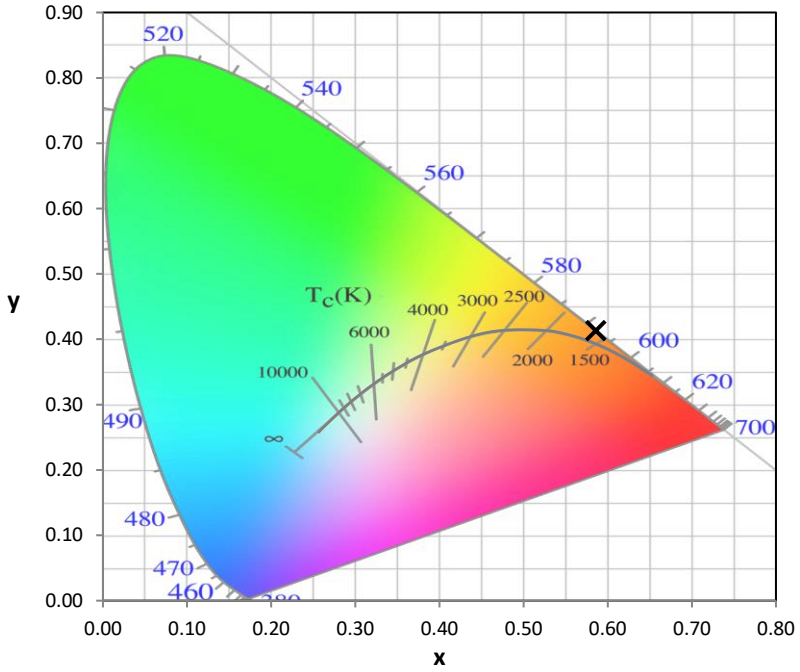
Stabilization Time:	64M
Operation Time:	2H 4M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP3-2509-541-1

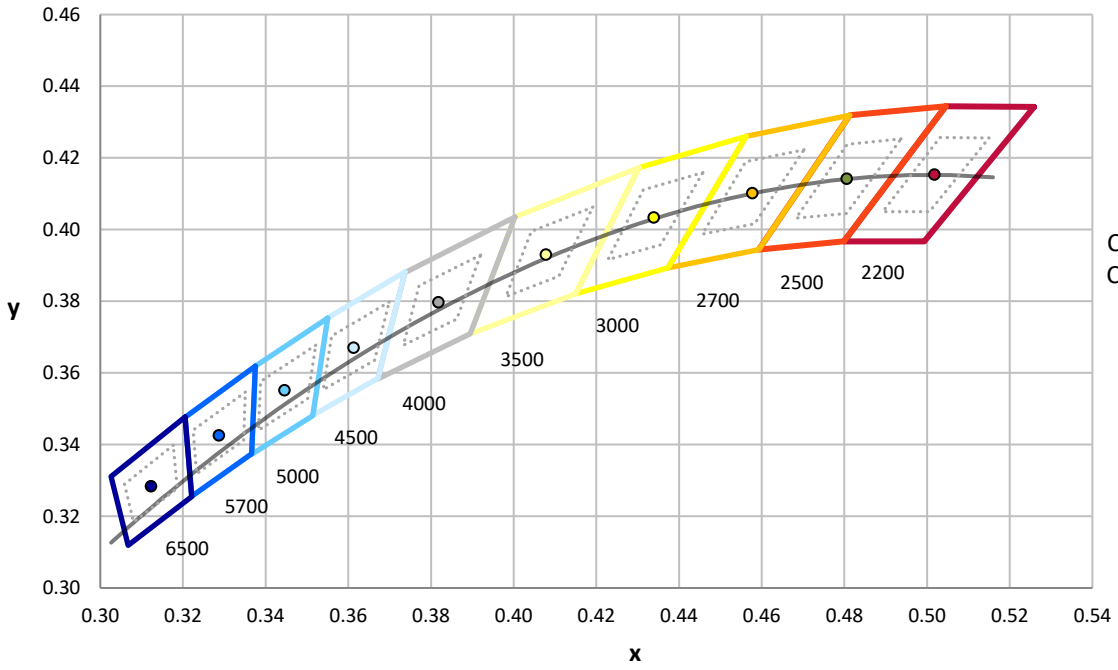
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	3M SPHERE IN02505	7/1/2025	1/1/2026
Power Meter	XITRON INXT2011006	1/20/2025	1/20/2026
AC Power Source	CHROMA 61604 IN6064A	10/22/2024	10/22/2025
DC Power Source	EYSIGHT N5770A IN0534	10/22/2024	10/22/2025
Sphere Thermometer	TANDD IN4036E	10/22/2024	10/22/2025

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

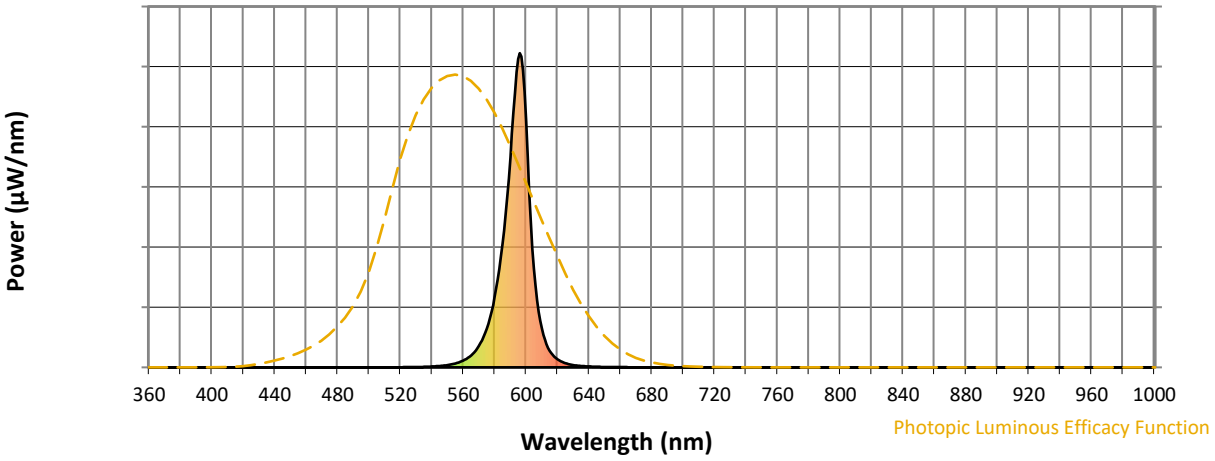


CCT = 1599K
CIE x = 0.5859
CIE y = 0.4133
Duv = 0.0099

Point lies outside the range

REPORT NUMBER: SP3-2509-541-1

Photopic Flux vs. Wavelength

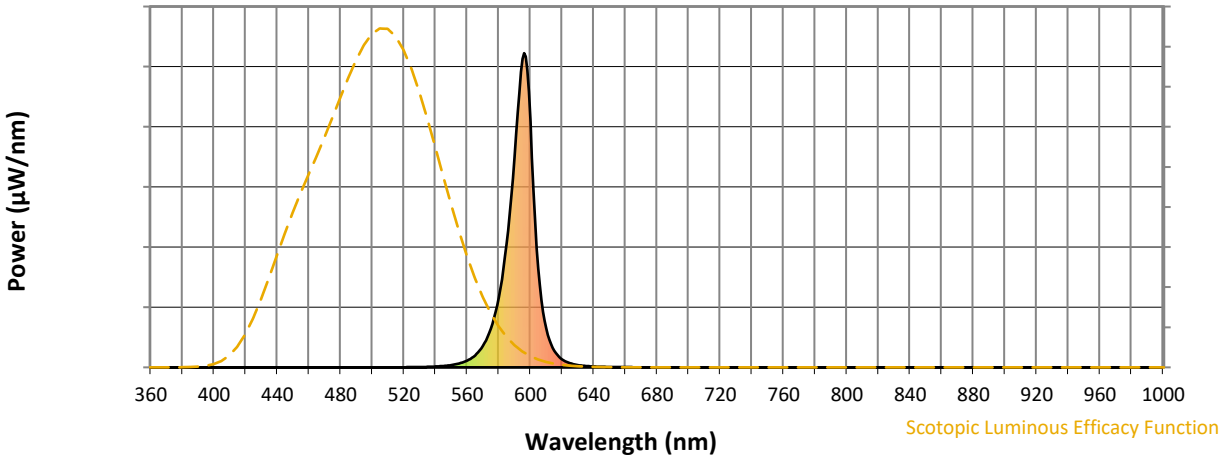


Photopic Lumens: NR

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	0	NR	620	26	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	8	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	1	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	2	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	3	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	68	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	123	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	223	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	392	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	669	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	982	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	783	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	315	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	124	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	53	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP3-2509-541-1

Scotopic Flux vs. Wavelength

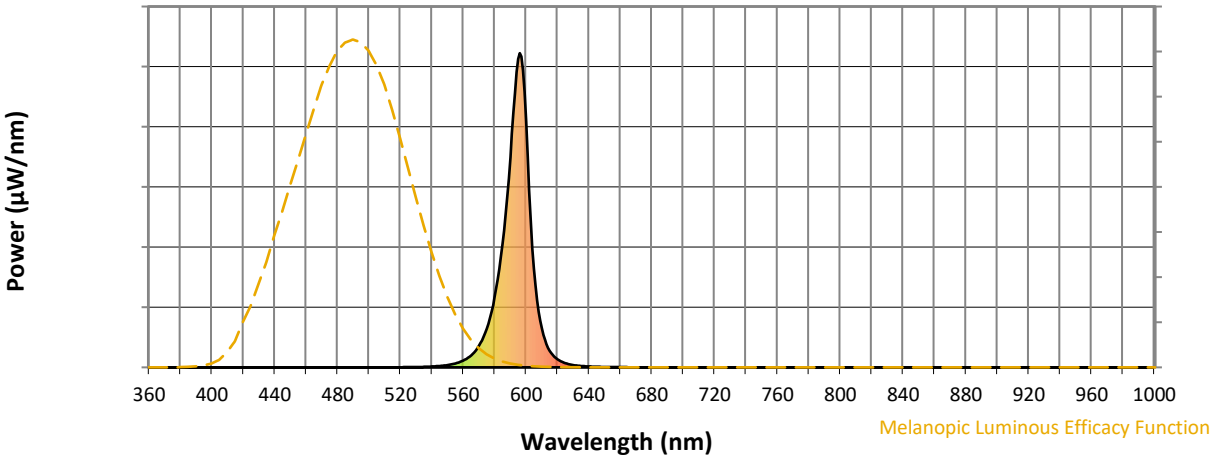


Scotopic Lumens: NR **S/P: 0.23**

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	0	NR	620	26	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	8	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	1	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	2	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	3	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	68	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	123	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	223	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	392	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	669	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	982	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	783	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	315	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	124	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	53	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP3-2509-541-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 0.13**

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	0	NR	620	26	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	8	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	1	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	2	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	3	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	68	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	123	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	223	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	392	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	669	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	982	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	783	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	315	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	124	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	53	NR	745	0	NR	875	0	NR			

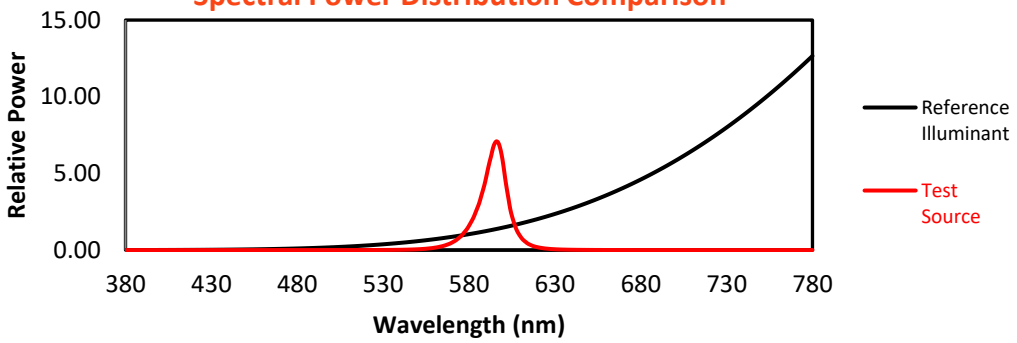
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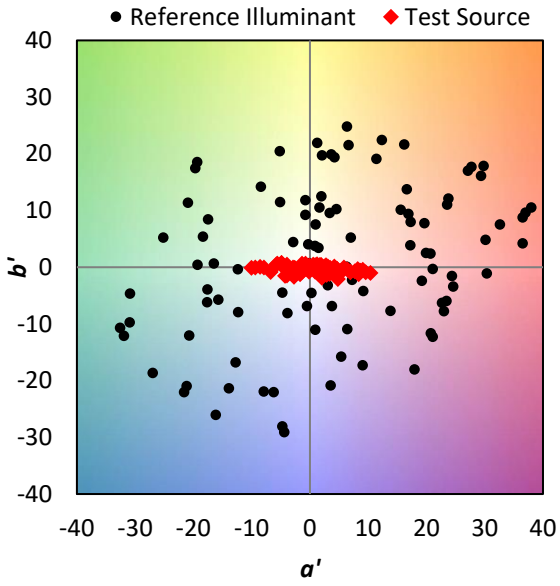
Summary

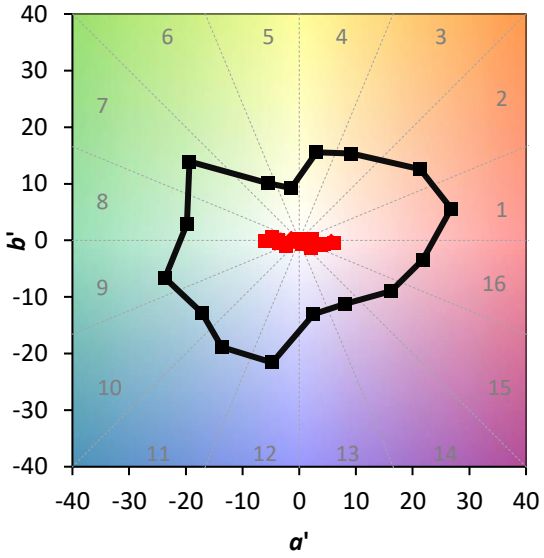
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R_g = 0.9
CIE R_a = -22.7
R_9 = -395.3

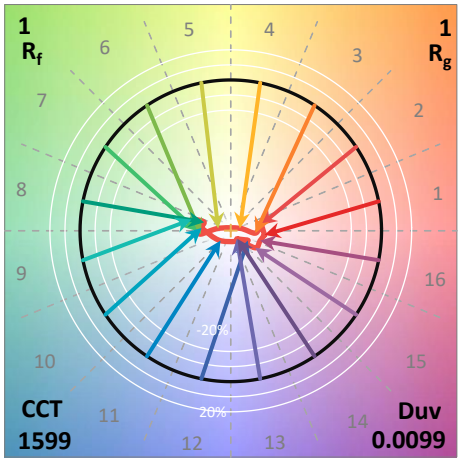
Spectral Power Distribution Comparison

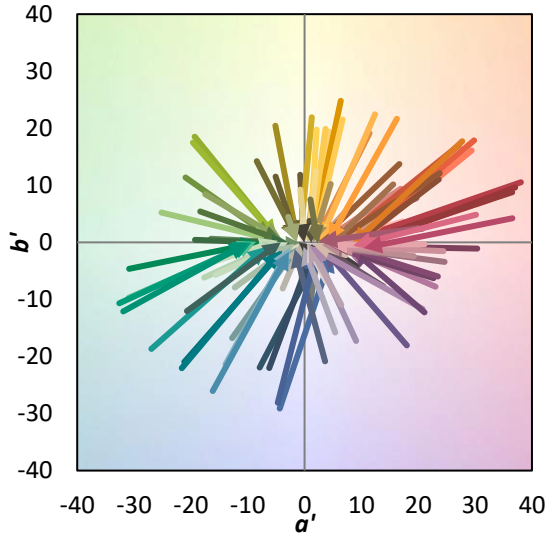


Color Vector Graphics







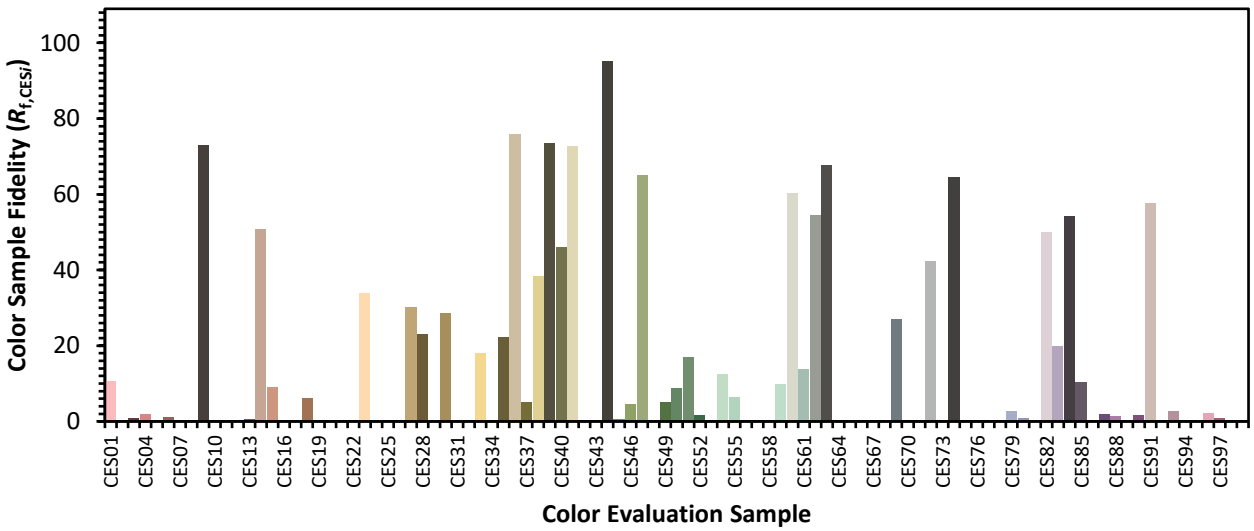


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Individual Sample Fidelity Index ($R_{f,i}$)

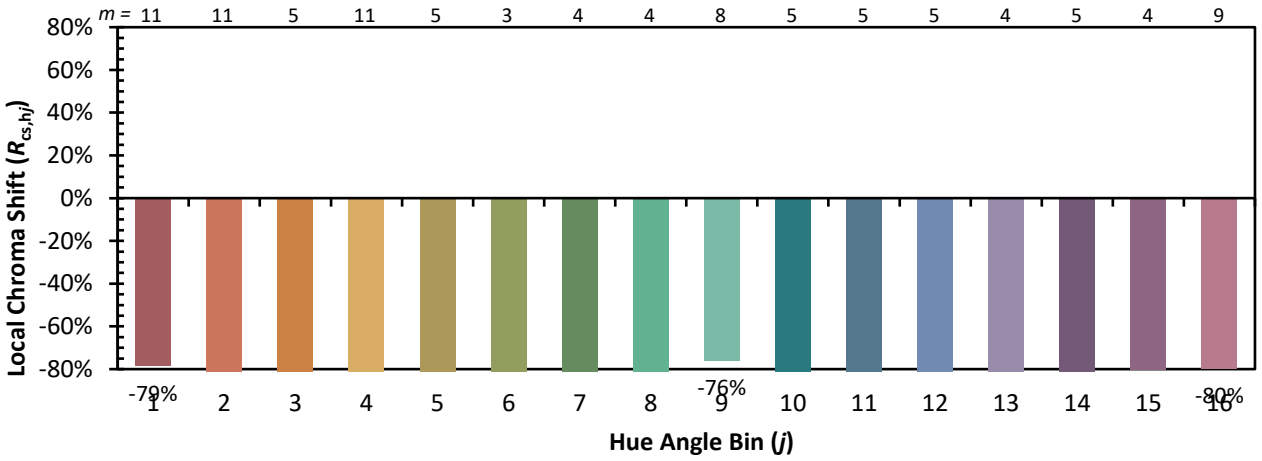
CES01 = 90	CES26 = 0	CES51 = 17	CES76 = 0
CES02 = 69	CES27 = 30	CES52 = 2	CES77 = 0
CES03 = 30	CES28 = 23	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 0	CES54 = 12	CES79 = 3
CES05 = 51	CES30 = 29	CES55 = 6	CES80 = 1
CES06 = 56	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 40	CES32 = 0	CES57 = 0	CES82 = 50
CES08 = 38	CES33 = 18	CES58 = 0	CES83 = 20
CES09 = 29	CES34 = 0	CES59 = 10	CES84 = 54
CES10 = 87	CES35 = 22	CES60 = 60	CES85 = 10
CES11 = 70	CES36 = 76	CES61 = 14	CES86 = 0
CES12 = 75	CES37 = 5	CES62 = 55	CES87 = 2
CES13 = 46	CES38 = 38	CES63 = 68	CES88 = 1
CES14 = 76	CES39 = 73	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 46	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 73	CES66 = 0	CES91 = 58
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 59	CES43 = 0	CES68 = 0	CES93 = 3
CES19 = 80	CES44 = 95	CES69 = 27	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 5	CES71 = 0	CES96 = 2
CES22 = 86	CES47 = 65	CES72 = 42	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 5	CES74 = 65	CES99 = 0
CES25 = 79	CES50 = 9	CES75 = 0	

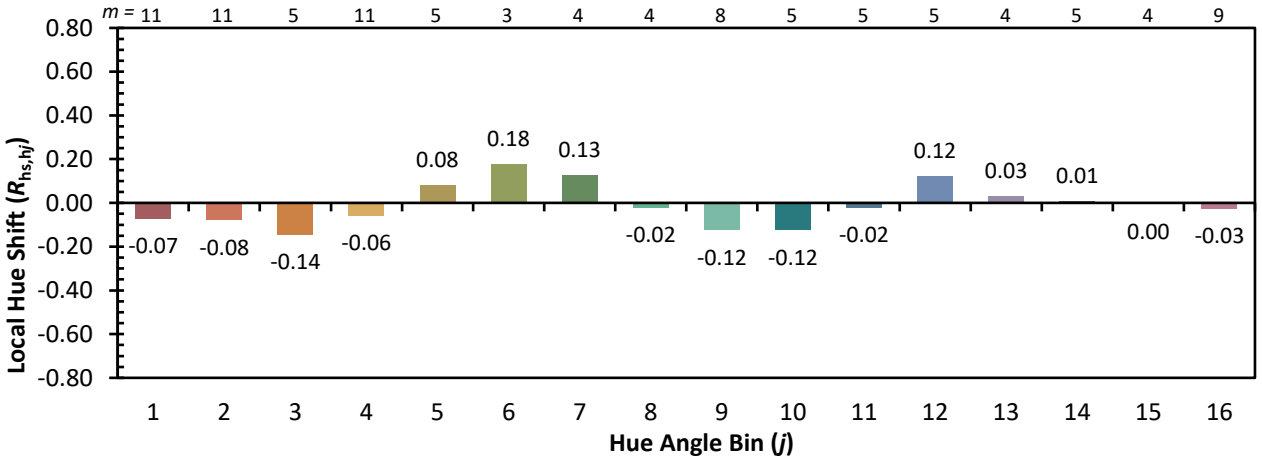


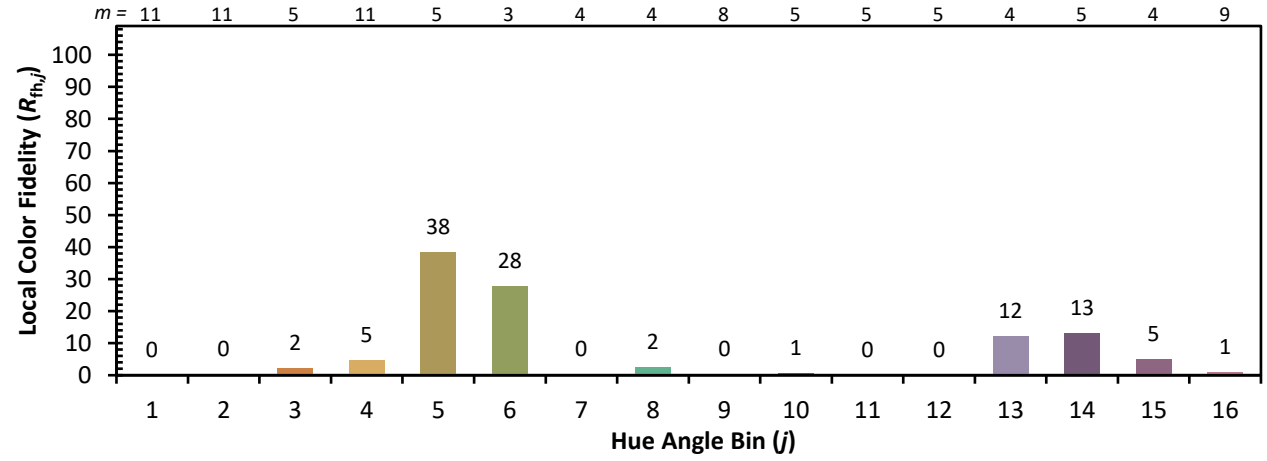
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Color Rendition by Hue-Angle Bin



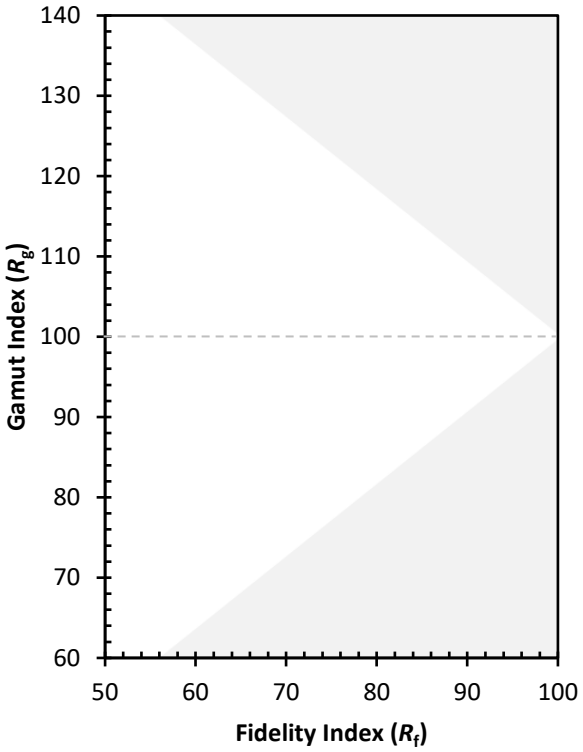


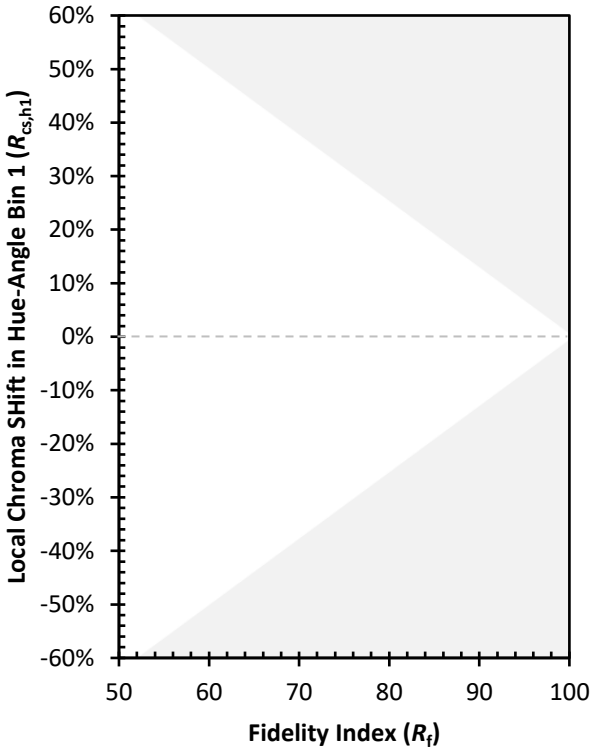


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Measure Comparisons





(END OF REPORT)