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-RW

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-RW
Description:	GALLEON SITE SLIM HIGH DENSITY LED ARRAYS 4SQUARE 130W 1590K FIXTURE w/ RECTANGULAR WIDE DISTRIBUTION
Light Source:	(104) 1590K CCT, 0 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8494.6 lumens
Efficiency:	N/A
Efficacy:	65.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

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

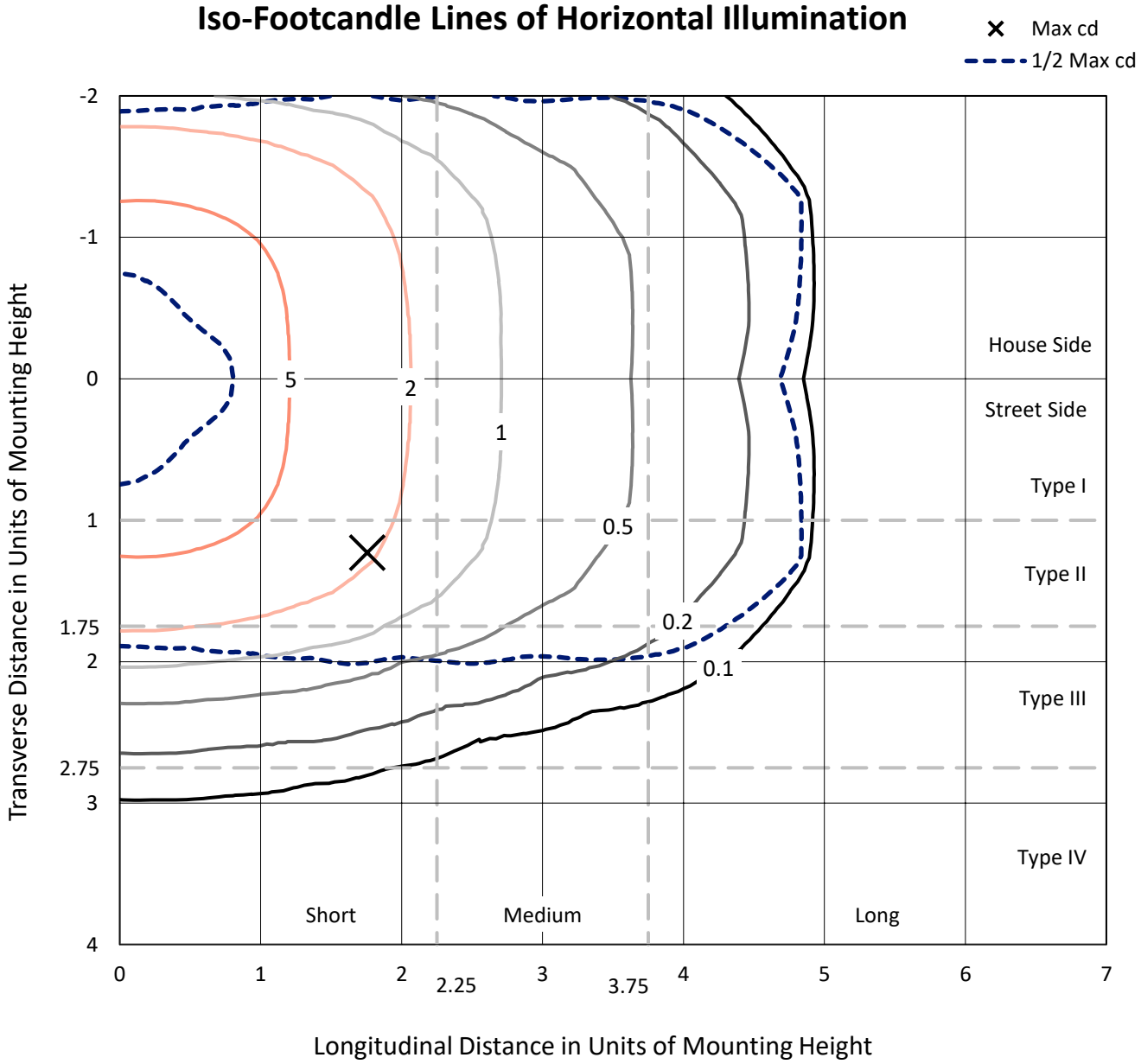


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Scaled Data Report

REPORT NUMBER: P1704731
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Iso-Footcandle Lines of Horizontal Illumination



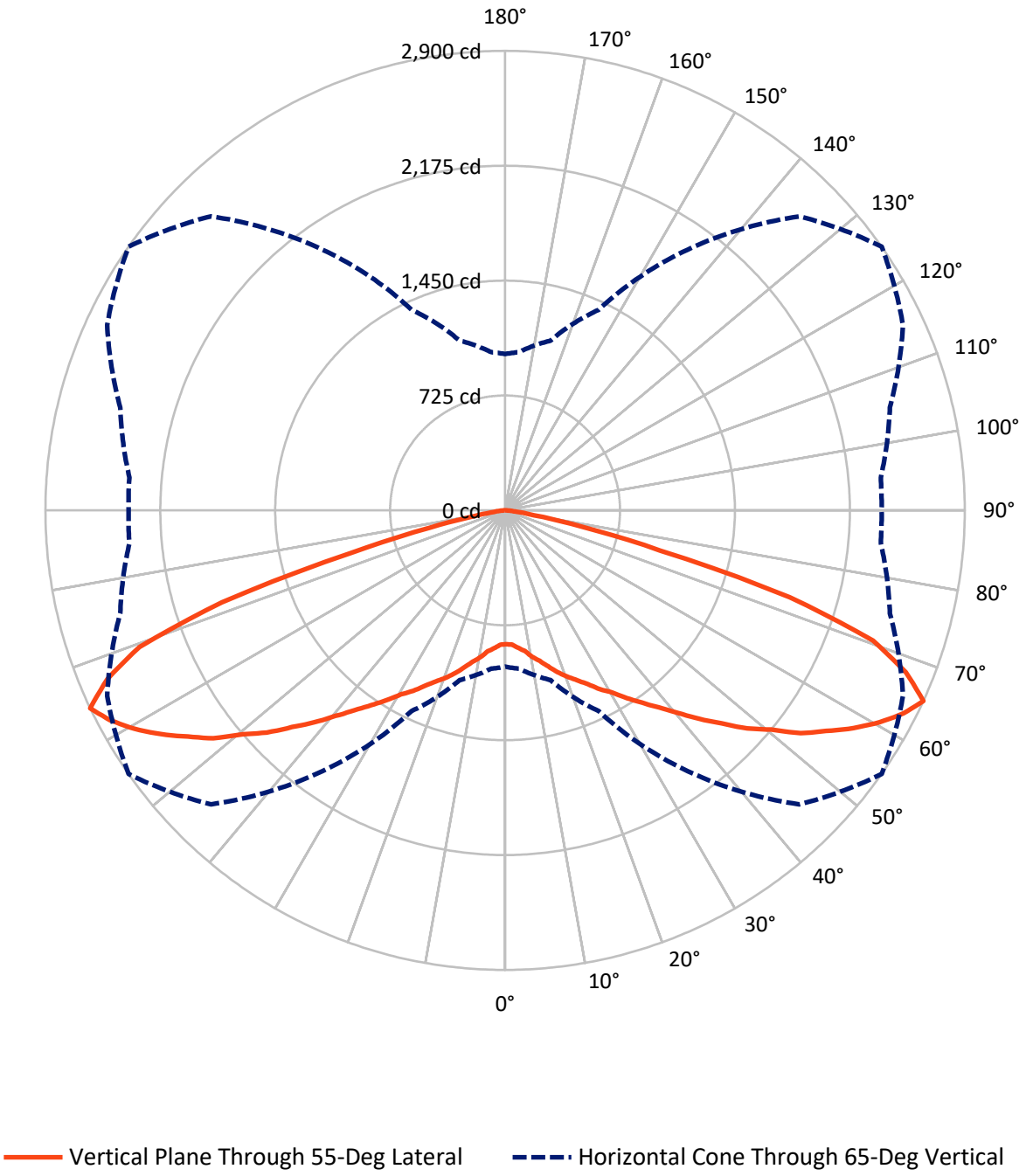
Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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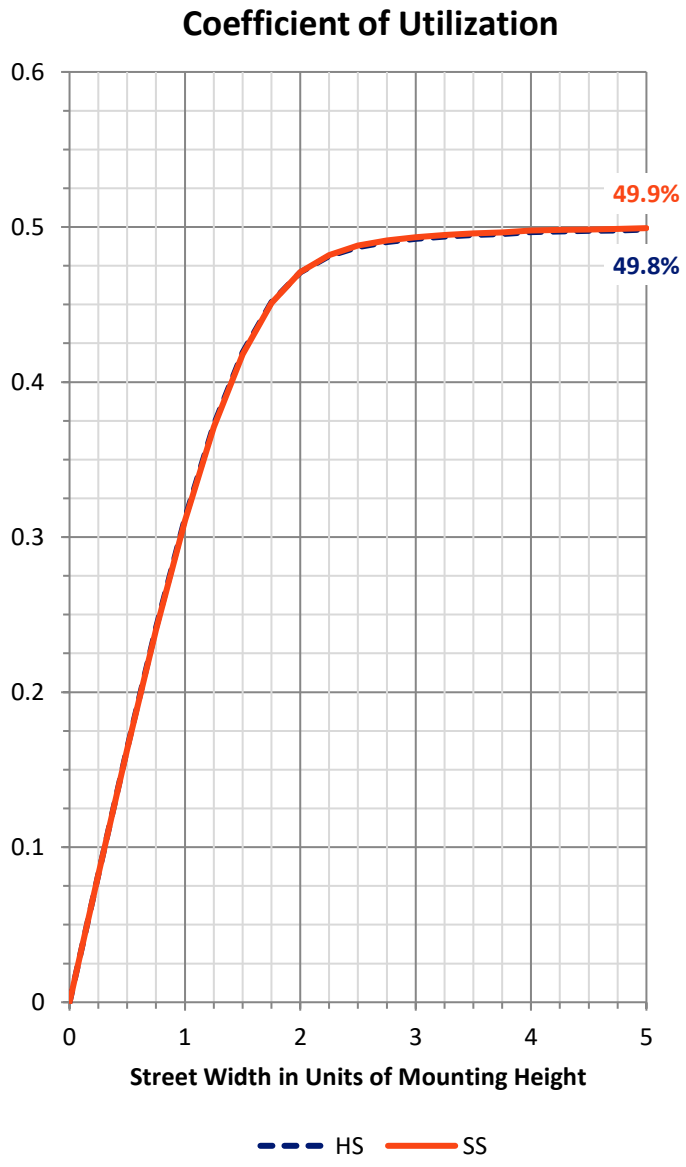
REPORT NUMBER: P1704731
CATALOG NUMBER: GSS-SB4A-AMB-U-RW

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4247.3	0.0	4247.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4247.3	0.0	4247.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	8494.6	0.0	8494.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	1.0
10°-20°	281.5	3.3
20°-30°	536.5	6.3
30°-40°	903.2	10.6
40°-50°	1454.0	17.1
50°-60°	2058.7	24.2
60°-70°	2019.5	23.8
70°-80°	1086.9	12.8
80°-90°	70.1	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°	8494.6	100.0
0°-180°	8494.6	100.0



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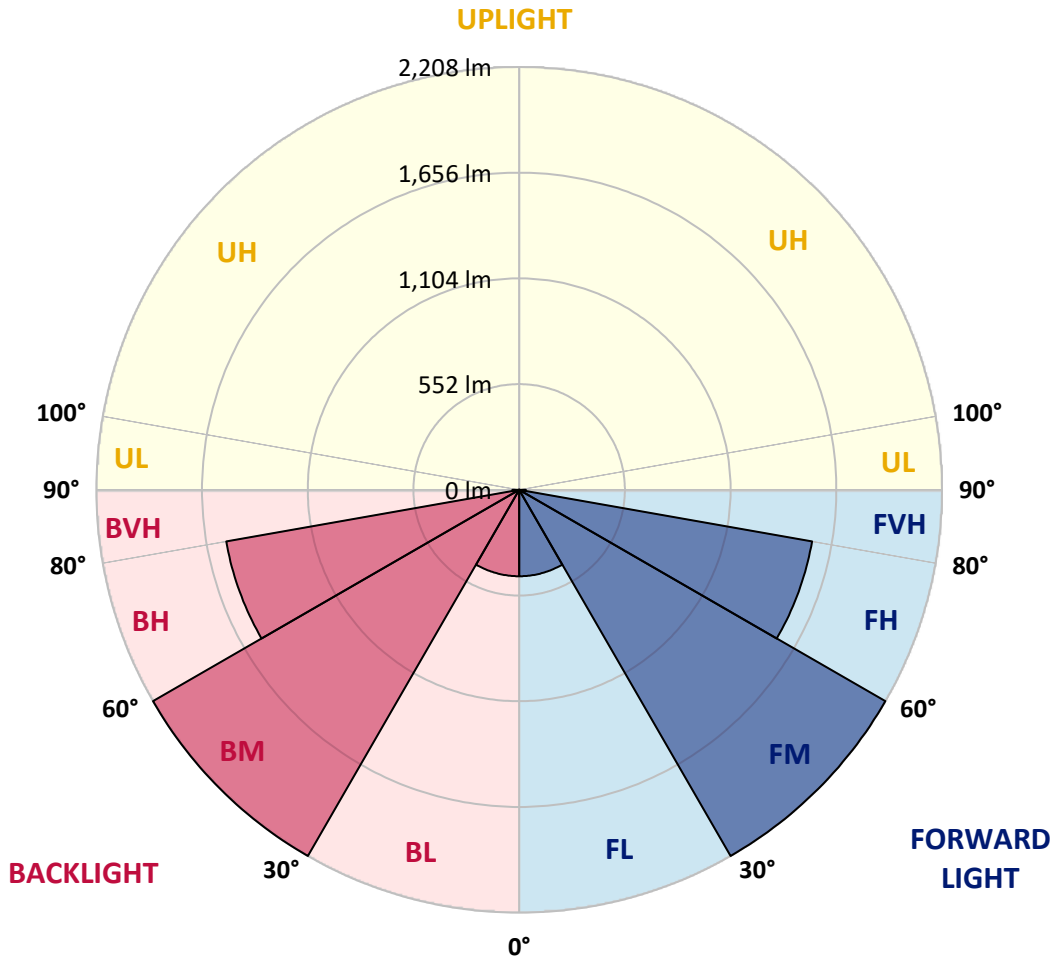
Scaled Data Report

REPORT NUMBER: P1704731
CATALOG NUMBER: GSS-SB4A-AMB-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	451.1	5.3			
FM	(30°-60°)	2208.0	26.0			
FH	(60°-80°)	1553.2	18.3			G1/1800
FVH	(80°-90°)	35.0	0.4			G1/100
BL	(0°-30°)	451.1	5.3	B1/500		
BM	(30°-60°)	2208.0	26.0	B2/2500		
BH	(60°-80°)	1553.2	18.3	B3/2500		G3/2500
BVH	(80°-90°)	35.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	844.5	844.5	844.5	844.5	844.5	844.5	*844.5*	844.5	844.5	844.5	844.5
2.5°	848.4	848.4	844.5	844.5	848.4	848.4	*848.4*	848.4	852.4	852.4	848.4
5°	844.5	848.4	844.5	852.4	856.3	864.2	*872.1*	876.0	880.0	883.9	880.0
7.5°	856.3	852.4	856.3	864.2	872.1	887.9	*895.8*	911.5	923.4	927.3	923.4
10°	868.1	868.1	876.0	891.8	907.6	923.4	*939.2*	951.0	962.8	966.8	966.8
12.5°	883.9	883.9	895.8	919.4	943.1	962.8	*974.7*	986.5	1002.3	1002.3	1006.2
15°	883.9	887.9	903.7	943.1	978.6	1006.2	*1022.0*	1029.9	1041.8	1037.8	1045.7
17.5°	903.7	903.7	931.3	974.7	1014.1	1053.6	*1073.3*	1073.3	1073.3	1073.3	1085.2
20°	931.3	935.2	958.9	1014.1	1069.4	1101.0	*1120.7*	1112.8	1101.0	1097.0	1108.8
22.5°	974.7	974.7	1010.2	1061.5	1116.7	1156.2	*1164.1*	1148.3	1132.5	1116.7	1120.7
25°	1037.8	1033.9	1069.4	1124.6	1175.9	1215.4	*1215.4*	1187.8	1164.1	1144.4	1148.3
27.5°	1093.1	1101.0	1136.5	1191.7	1243.0	1278.5	*1278.5*	1239.1	1199.6	1172.0	1175.9
30°	1175.9	1175.9	1215.4	1274.6	1318.0	1341.7	*1333.8*	1290.4	1239.1	1207.5	1211.4
32.5°	1247.0	1254.9	1302.2	1357.4	1396.9	1424.5	*1412.7*	1349.6	1294.3	1258.8	1258.8
35°	1357.4	1365.3	1396.9	1448.2	1487.7	1511.3	*1491.6*	1428.5	1349.6	1318.0	1318.0
37.5°	1475.8	1475.8	1515.3	1558.7	1598.2	1606.1	*1578.4*	1503.5	1420.6	1385.1	1393.0
40°	1594.2	1613.9	1649.5	1688.9	1716.5	1724.4	*1681.0*	1598.2	1503.5	1475.8	1475.8
42.5°	1728.4	1740.2	1783.6	1823.1	1854.7	1854.7	*1799.4*	1704.7	1610.0	1578.4	1574.5
45°	1858.6	1858.6	1906.0	1957.3	1988.8	1988.8	*1917.8*	1815.2	1712.6	1673.1	1677.1
47.5°	1957.3	1969.1	2024.3	2091.4	2138.8	2123.0	*2055.9*	1929.6	1827.0	1787.6	1799.4
50°	2036.2	2055.9	2130.9	2209.8	2276.9	2269.0	*2174.3*	2063.8	1945.4	1906.0	1921.7
52.5°	2083.5	2115.1	2186.1	2280.8	2379.5	2411.1	*2336.1*	2190.1	2087.5	2036.2	2040.1
55°	2130.9	2126.9	2217.7	2332.1	2474.2	2529.4	*2458.4*	2332.1	2209.8	2158.5	2154.6
57.5°	2055.9	2071.7	2174.3	2328.2	2509.7	2639.9	*2592.6*	2466.3	2340.0	2288.7	2276.9
60°	1815.2	1838.9	2016.4	2241.4	2482.1	2707.0	*2714.9*	2600.5	2466.3	2411.1	2395.3
62.5°	1369.3	1389.0	1539.0	1929.6	2371.6	2714.9	*2821.4*	2742.5	2596.5	2490.0	2478.1
65°	*986.5*	*1002.3*	*1108.8*	*1396.9*	*2008.6*	*2624.1*	*2900.4*	*2770.1*	*2513.6*	*2379.5*	*2375.5*
67.5°	627.4	643.2	741.9	974.7	1420.6	2371.6	*2726.7*	2647.8	2482.1	2391.3	2399.2
70°	382.8	394.6	438.0	576.1	951.0	1487.7	*2462.3*	2762.3	2561.0	2415.0	2399.2
72.5°	252.5	256.5	288.1	359.1	513.0	883.9	*1878.3*	2675.4	2687.3	2529.4	2521.5
75°	185.5	185.5	201.2	224.9	272.3	426.2	*1010.2*	2411.1	2880.6	2746.5	2691.2
77.5°	114.4	114.4	150.0	157.8	157.8	236.8	*485.4*	1393.0	2115.1	1909.9	1696.8
80°	90.8	86.8	94.7	110.5	110.5	126.3	*185.5*	311.7	706.3	406.4	272.3
82.5°	59.2	59.2	55.2	71.0	71.0	71.0	*71.0*	126.3	193.4	90.8	82.9
85°	23.7	23.7	27.6	31.6	31.6	31.6	*35.5*	55.2	67.1	39.5	35.5
87.5°	7.9	7.9	7.9	7.9	7.9	11.8	*15.8*	15.8	19.7	23.7	23.7
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

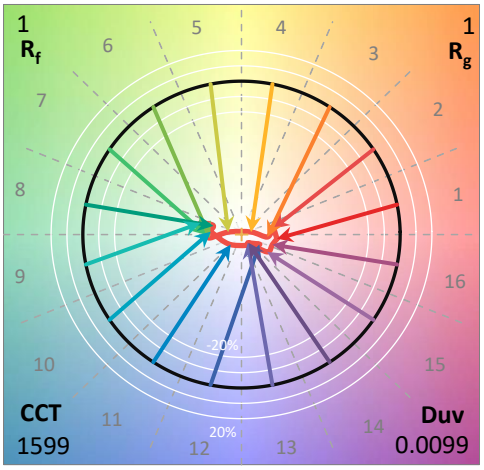
Test Information

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

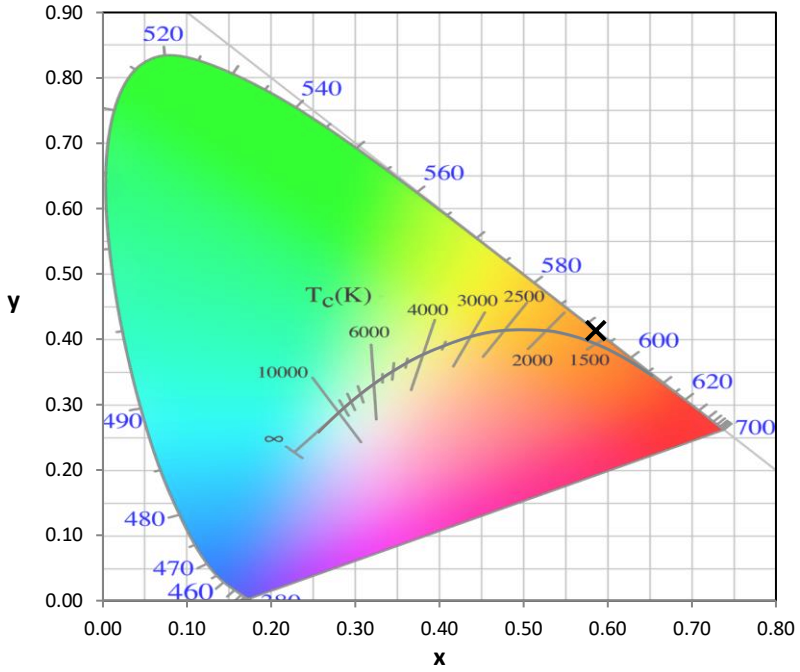
Stabilization Time:	64M
Operation Time:	2H 4M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP3-2509-541-1

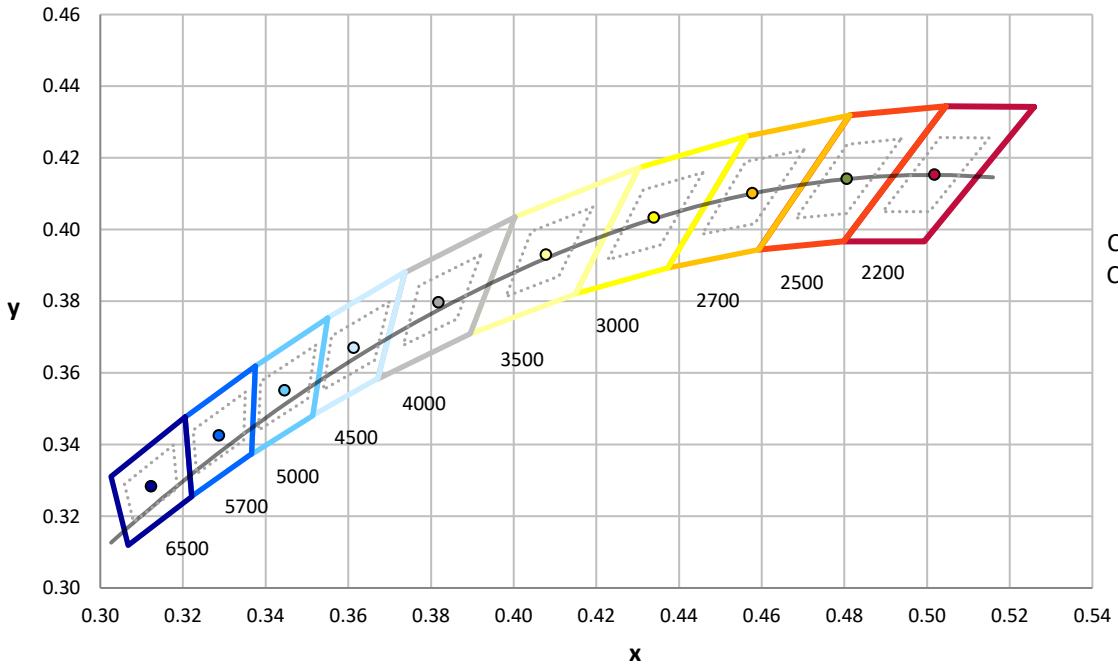
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	3M SPHERE IN02505	7/1/2025	1/1/2026
Power Meter	XITRON INXT2011006	1/20/2025	1/20/2026
AC Power Source	CHROMA 61604 IN6064A	10/22/2024	10/22/2025
DC Power Source	EYSIGHT N5770A IN0534	10/22/2024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

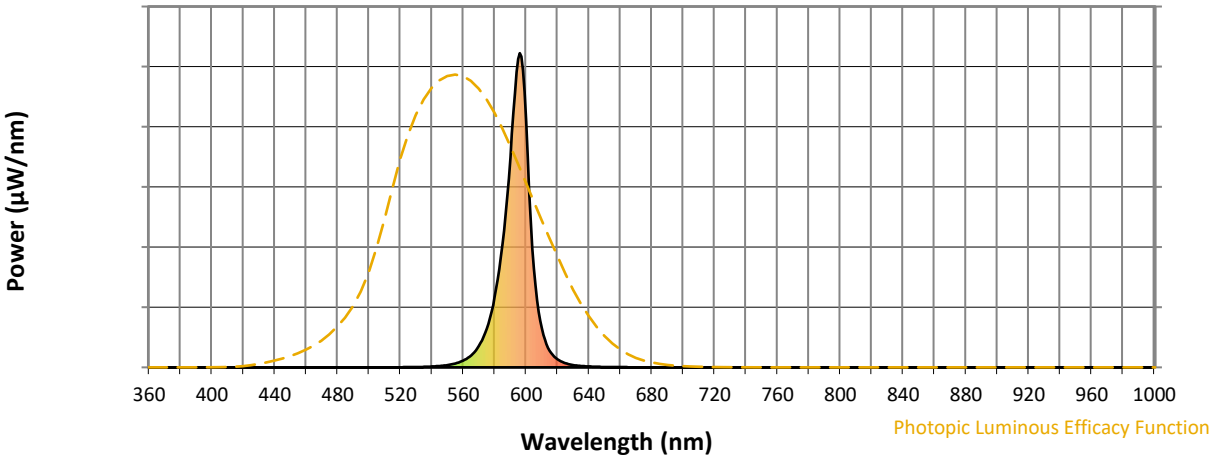


CCT = 1599K
CIE x = 0.5859
CIE y = 0.4133
Duv = 0.0099

Point lies outside the range

REPORT NUMBER: SP3-2509-541-1

Photopic Flux vs. Wavelength

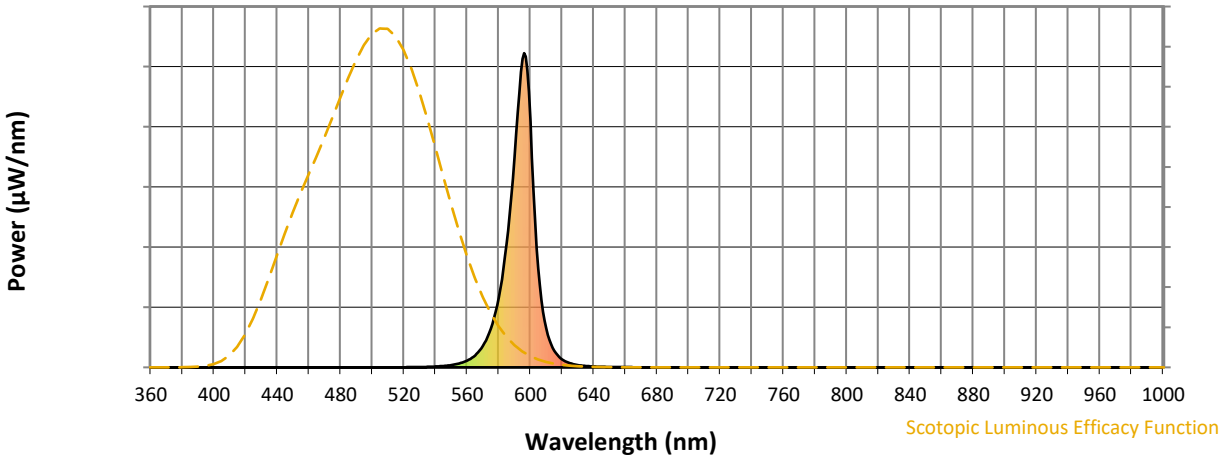


Photopic Lumens: NR

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

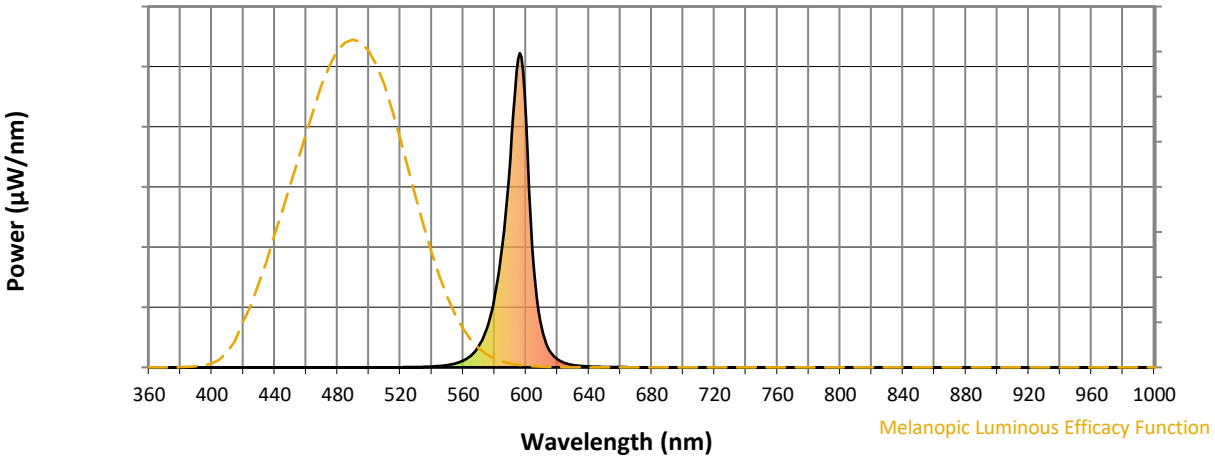


Scotopic Lumens: NR **S/P: 0.23**

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			

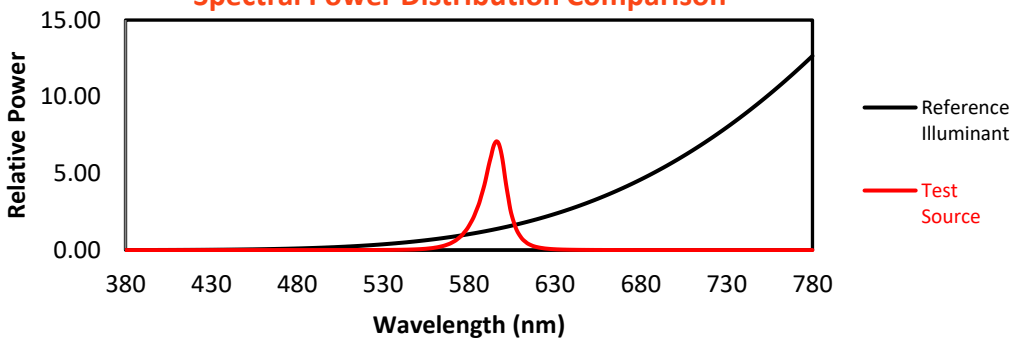
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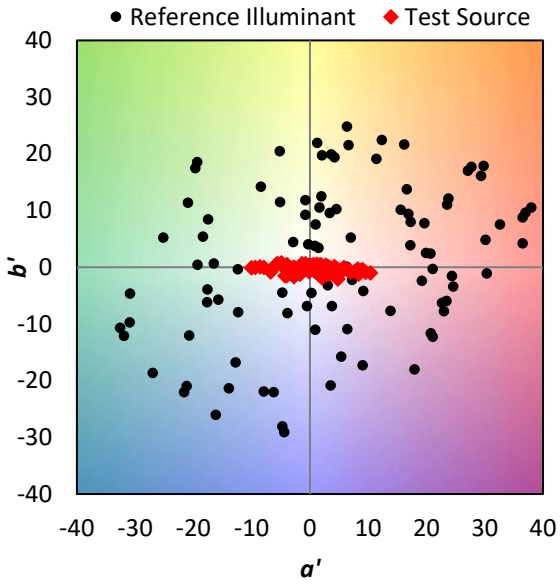
Summary

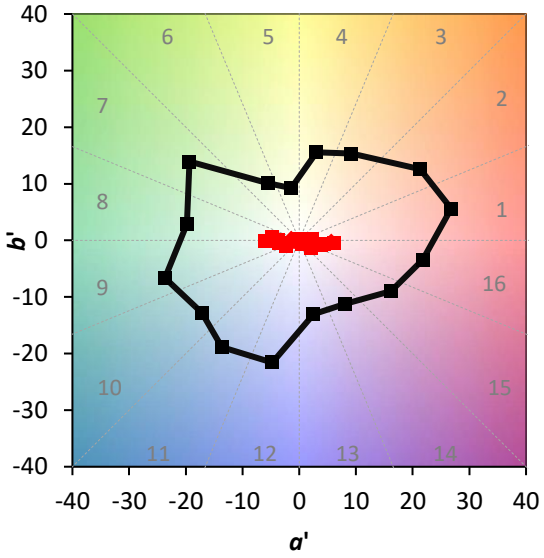
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R_g = 0.9
CIE R_a = -22.7
R_9 = -395.3

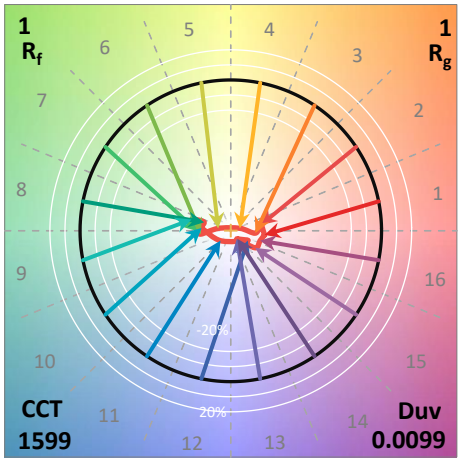
Spectral Power Distribution Comparison

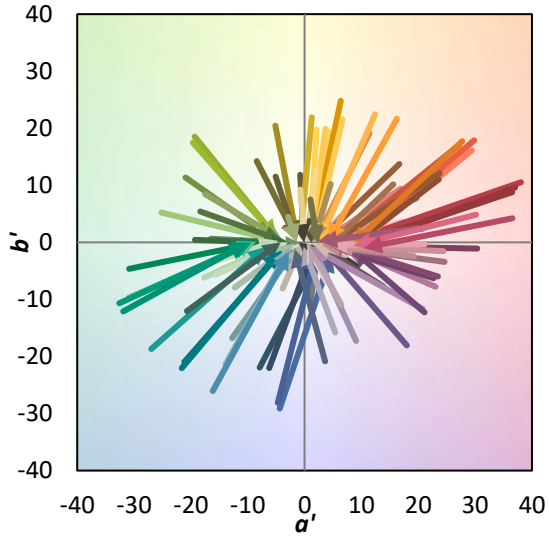


Color Vector Graphics







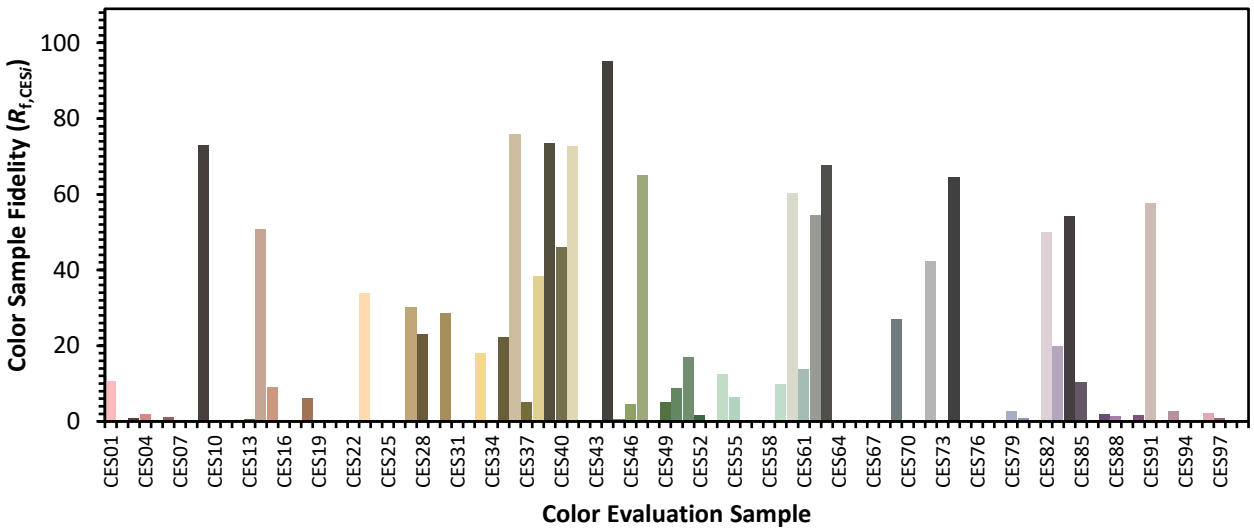


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Individual Sample Fidelity Index ($R_{f,i}$)

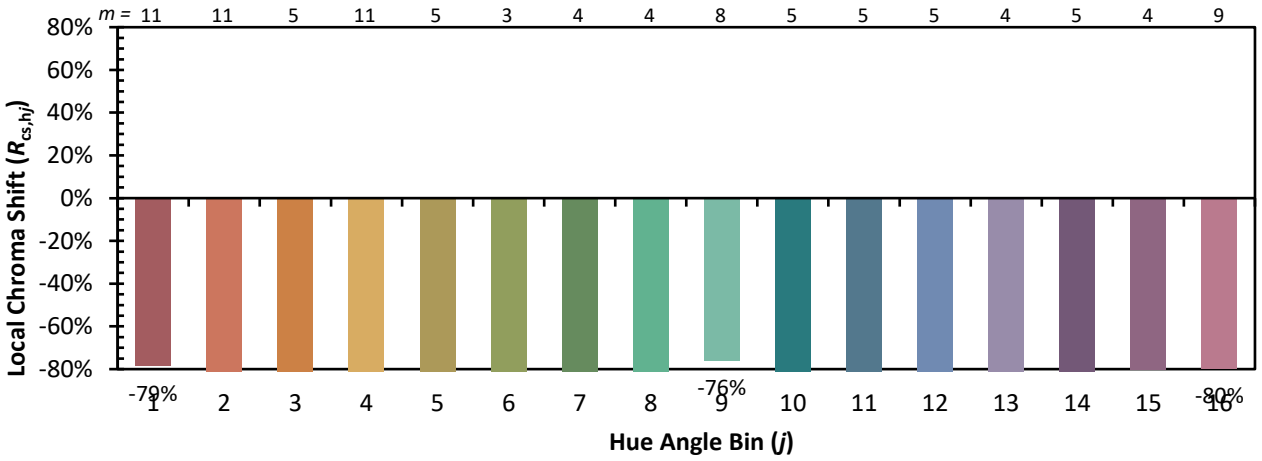
CES01 = 90	CES26 = 0	CES51 = 17	CES76 = 0
CES02 = 69	CES27 = 30	CES52 = 2	CES77 = 0
CES03 = 30	CES28 = 23	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 0	CES54 = 12	CES79 = 3
CES05 = 51	CES30 = 29	CES55 = 6	CES80 = 1
CES06 = 56	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 40	CES32 = 0	CES57 = 0	CES82 = 50
CES08 = 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	

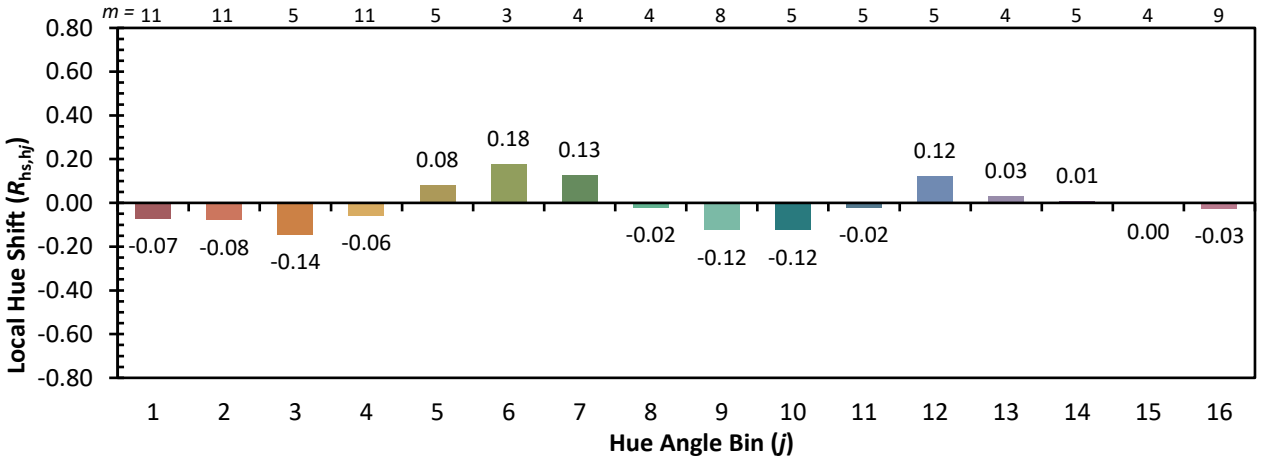


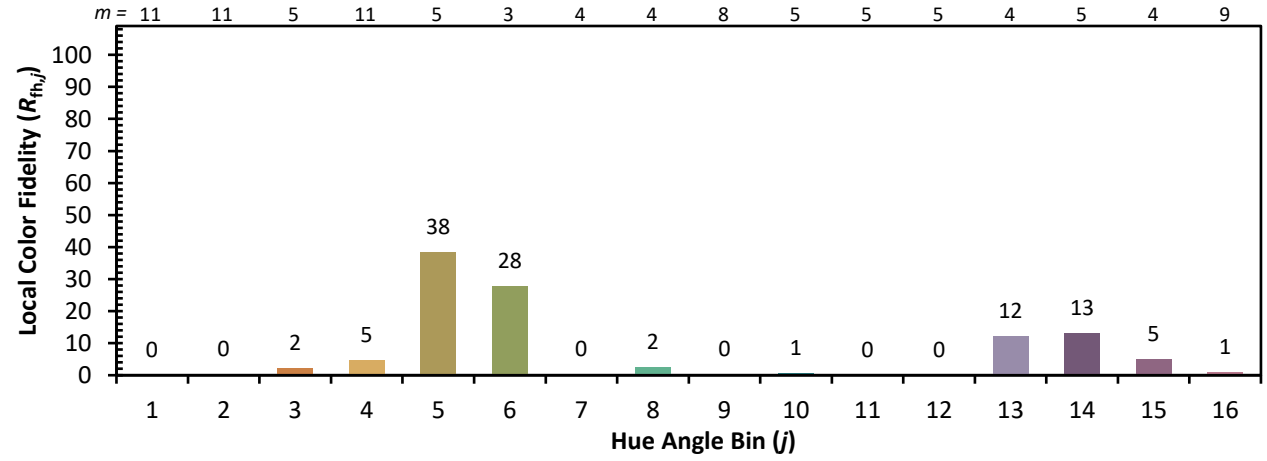
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Color Rendition by Hue-Angle Bin



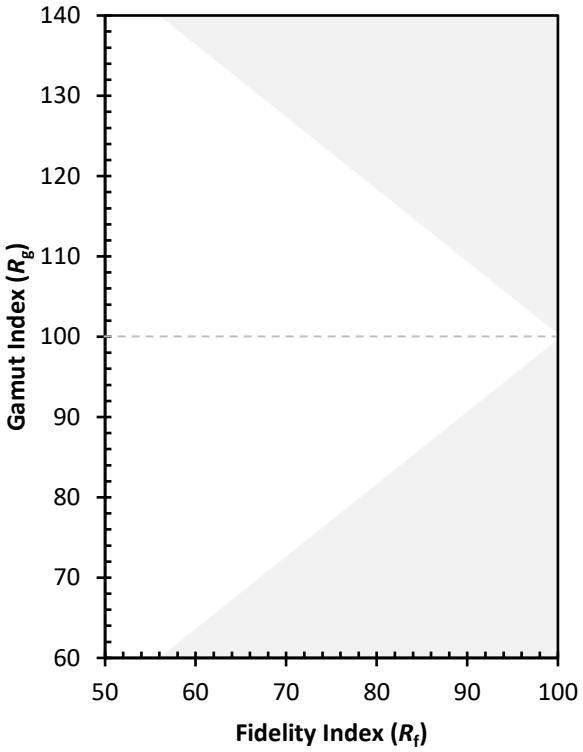


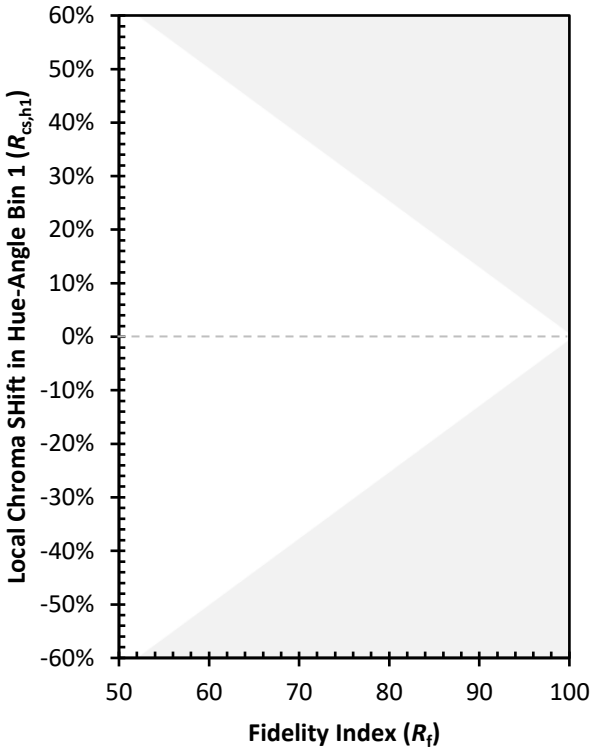


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Measure Comparisons





(END OF REPORT)