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

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

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: P1704728

Luminaire Tested: GSS-SB1A-AMB-U-5MQ

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:	P1704728
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	10/28/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GSS-SB1A-AMB-U-5MQ
Description:	GALLEON SITE SLIM HIGH DENSITY LED ARRAYS 1SQUARE 36W 1590K FIXTURE w/ T5 MEDIUM DISTRIBUTION
Light Source:	(26) 1590K CCT, 0 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2144.2 lumens
Efficiency:	N/A
Efficacy:	59.7 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type V - Medium
BUG Rating:	B2 - U0 - G0

Input Watts (W):	35.9
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

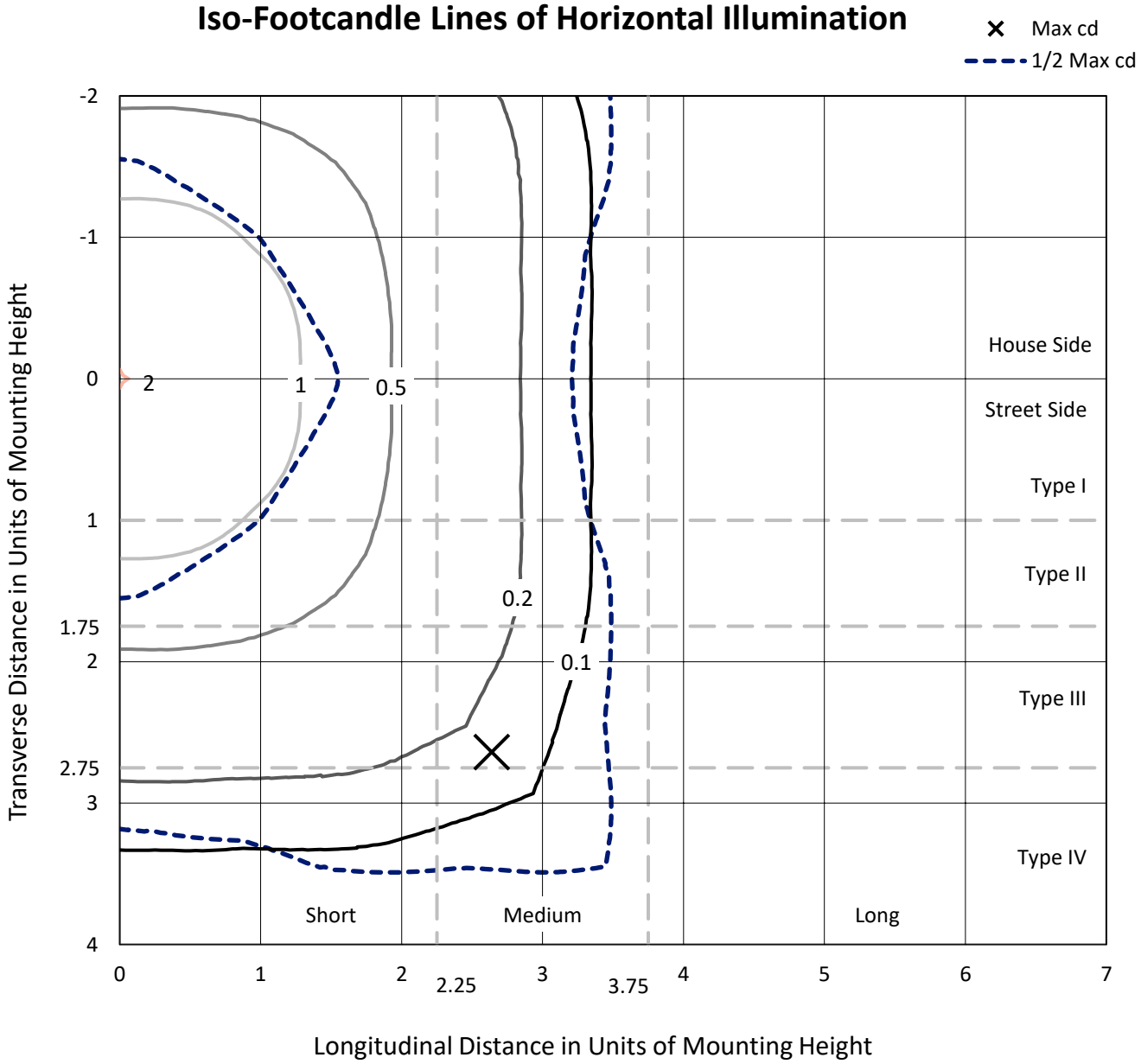


Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1704728
CATALOG NUMBER: GSS-SB1A-AMB-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination



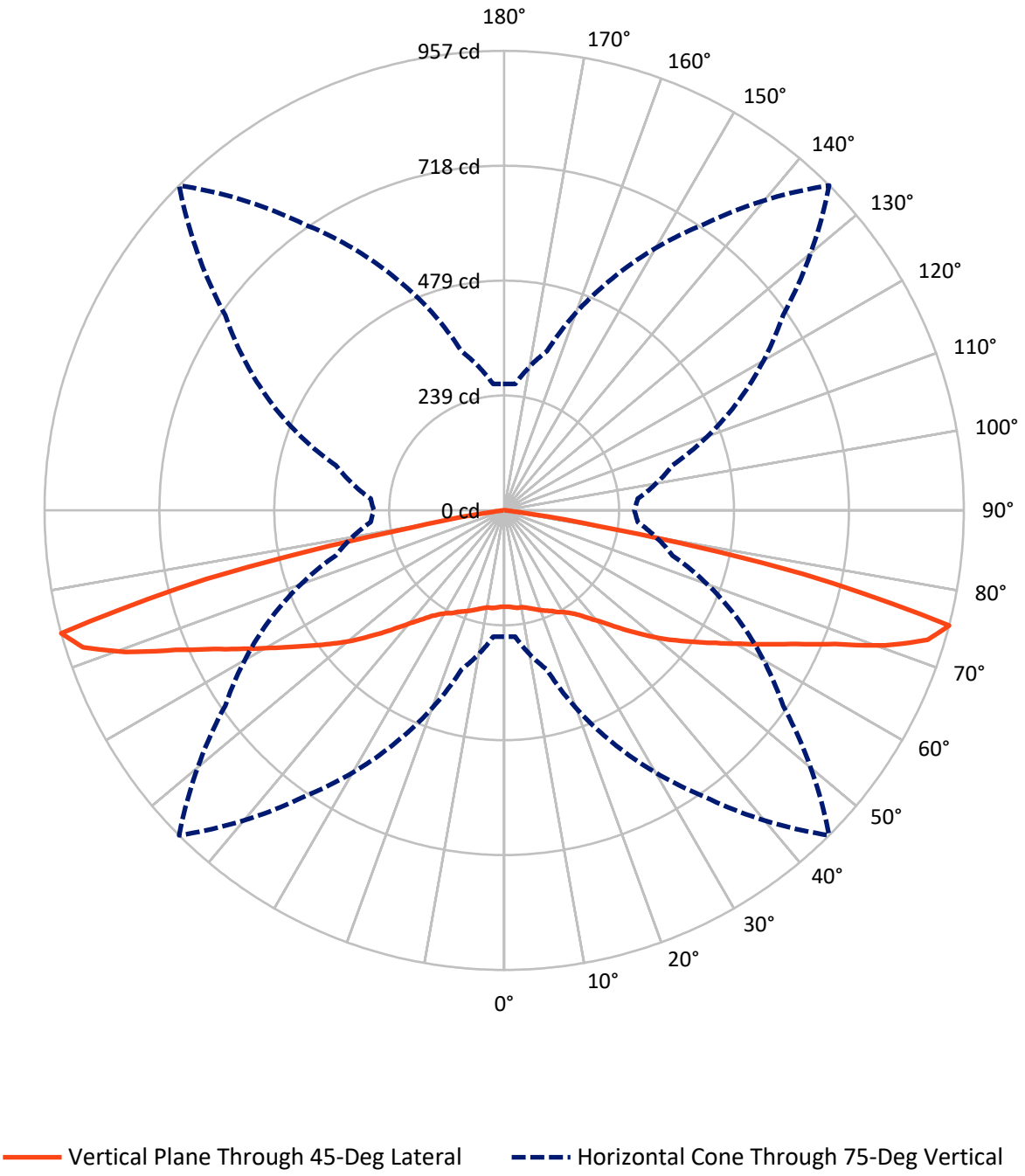
Based on 10 foot mounting height. Maximum calculated value = 2 fc
Type V - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P1704728
CATALOG NUMBER: GSS-SB1A-AMB-U-5MQ

Luminous Intensity Polar Plot



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

Scaled Data Report

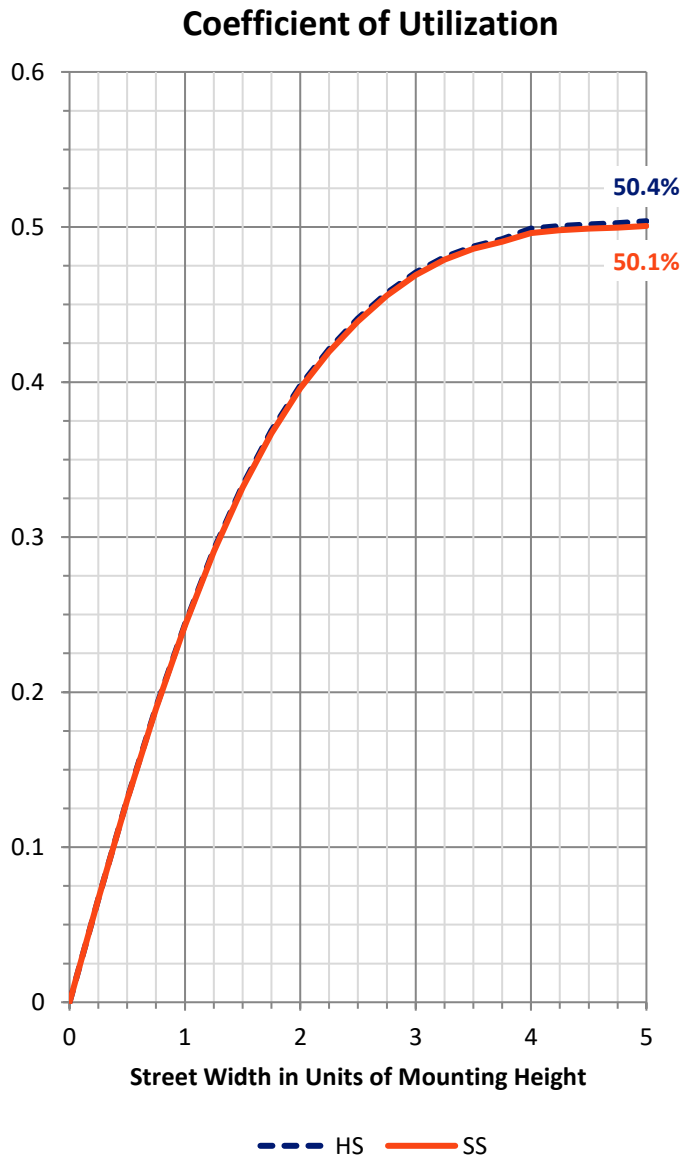
REPORT NUMBER: P1704728
CATALOG NUMBER: GSS-SB1A-AMB-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1072.1	0.0	1072.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1072.1	0.0	1072.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	2144.2	0.0	2144.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.4	0.9
10°-20°	60.2	2.8
20°-30°	106.7	5.0
30°-40°	169.7	7.9
40°-50°	278.3	13.0
50°-60°	430.2	20.1
60°-70°	589.0	27.5
70°-80°	474.9	22.1
80°-90°	15.8	0.7
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°	2144.2	100.0
0°-180°	2144.2	100.0



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

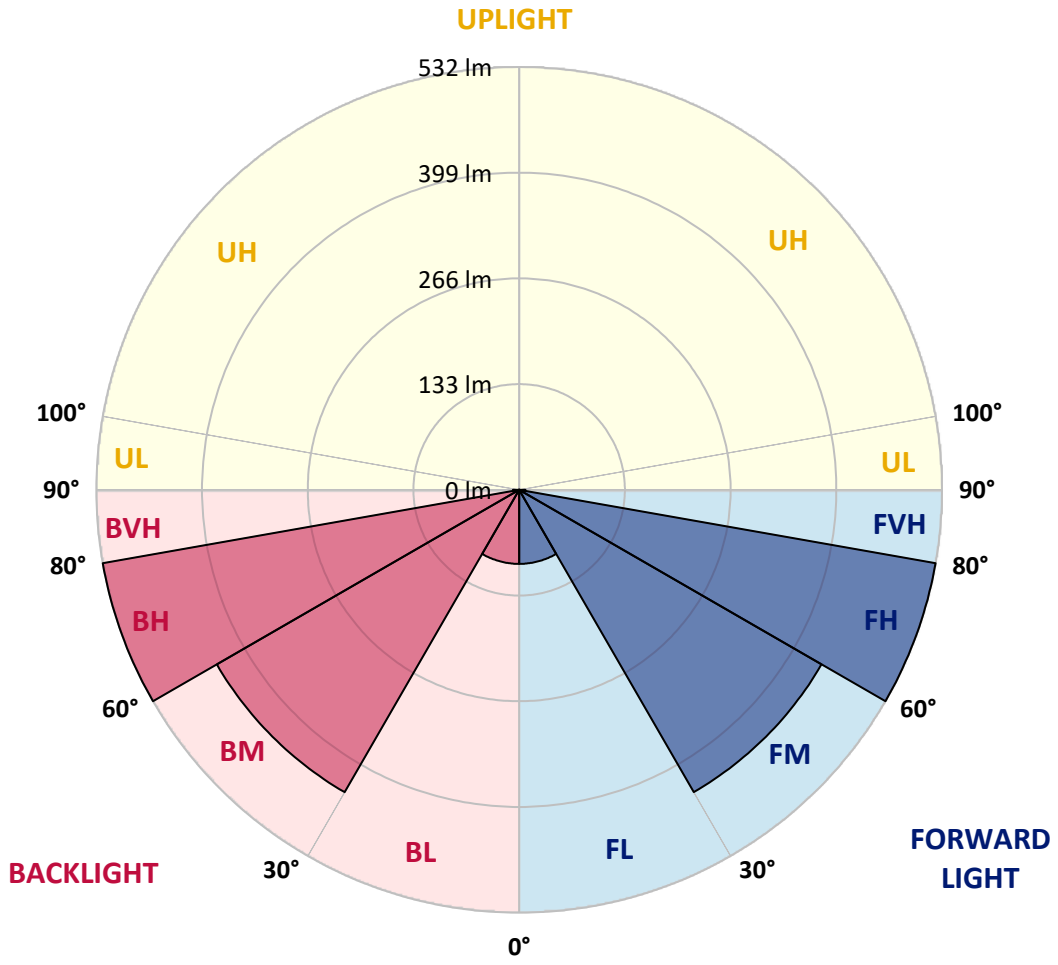
Scaled Data Report

REPORT NUMBER: P1704728
CATALOG NUMBER: GSS-SB1A-AMB-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	93.2	4.3			
FM	(30°-60°)	439.1	20.5			
FH	(60°-80°)	531.9	24.8			G0/660
FVH	(80°-90°)	7.9	0.4			G0/10
BL	(0°-30°)	93.2	4.3	B0/110		
BM	(30°-60°)	439.1	20.5	B1/1000		
BH	(60°-80°)	531.9	24.8	B2/1000		G0/660
BVH	(80°-90°)	7.9	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G0
Type V Medium



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

Scaled Data Report

REPORT NUMBER: P1704728
CATALOG NUMBER: GSS-SB1A-AMB-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	201.0	201.0	201.0	201.0	201.0	201.0	201.0	201.0	201.0	201.0	201.0
2.5°	202.0	201.0	201.0	200.0	200.0	201.0	201.0	201.0	202.0	201.0	201.0
5°	203.0	203.0	202.0	202.0	202.0	203.0	203.0	202.0	203.0	202.0	202.0
7.5°	204.0	204.0	203.0	204.0	204.0	205.0	204.0	204.0	205.0	204.0	204.0
10°	206.1	206.1	205.0	205.0	206.1	205.0	206.1	205.0	206.1	206.1	206.1
12.5°	209.1	208.1	207.1	208.1	208.1	208.1	208.1	207.1	208.1	207.1	208.1
15°	210.1	211.1	210.1	211.1	211.1	212.1	210.1	210.1	210.1	211.1	210.1
17.5°	214.1	214.1	214.1	215.1	216.1	217.1	216.1	215.1	214.1	214.1	214.1
20°	218.1	218.1	219.1	218.1	220.1	222.1	220.1	219.1	219.1	218.1	217.1
22.5°	223.1	222.1	223.1	224.1	226.1	227.1	226.1	225.1	222.1	222.1	221.1
25°	227.1	226.1	227.1	230.1	231.1	232.1	232.1	230.1	228.1	226.1	225.1
27.5°	230.1	231.1	233.1	236.1	238.1	240.1	239.1	236.1	233.1	230.1	230.1
30°	238.1	238.1	240.1	244.1	246.1	246.1	246.1	244.1	241.1	238.1	237.1
32.5°	248.1	249.1	251.1	254.1	255.1	255.1	256.1	254.1	252.1	249.1	248.1
35°	260.1	262.1	265.1	268.1	269.1	267.1	269.1	269.1	267.1	263.1	263.1
37.5°	279.1	279.1	282.1	284.1	284.1	284.1	284.1	285.1	284.1	280.1	279.1
40°	299.1	300.1	304.1	306.1	303.1	303.1	306.1	307.1	307.1	302.1	302.1
42.5°	323.1	323.1	328.1	331.1	329.1	327.1	331.1	333.1	332.1	328.1	327.1
45°	349.1	350.1	353.1	357.1	356.1	355.1	358.1	360.1	358.1	355.1	355.1
47.5°	378.1	377.1	381.1	389.1	388.1	385.1	390.1	390.1	388.1	383.1	381.1
50°	404.1	406.1	412.1	421.1	420.1	418.1	424.1	424.1	417.1	410.1	410.1
52.5°	430.1	433.1	442.1	454.1	454.1	450.1	456.1	458.1	448.1	436.1	435.1
55°	457.1	459.1	473.1	483.1	487.1	484.1	494.1	488.1	477.1	463.1	457.1
57.5°	481.1	482.1	497.1	515.1	523.1	521.1	530.1	521.1	503.1	484.1	481.1
60°	505.1	507.1	524.1	547.1	561.1	564.1	568.1	551.1	530.1	510.1	508.1
62.5°	502.1	508.1	543.1	583.1	603.1	614.1	611.1	587.1	549.1	515.1	512.1
65°	479.1	484.1	517.1	592.1	649.2	670.2	660.2	602.1	539.1	509.1	504.1
67.5°	530.1	533.1	558.1	581.1	675.2	743.2	694.2	609.1	582.1	554.1	550.1
70°	564.1	575.1	606.1	669.2	737.2	842.2	775.2	697.2	618.2	569.1	560.1
72.5°	491.1	503.1	571.1	695.2	875.2	922.2	907.2	715.2	583.1	508.1	500.1
75°	263.1	264.1	343.1	533.1	728.2	957.2	709.2	538.1	363.1	279.1	271.1
77.5°	36.0	39.0	87.0	188.0	352.1	637.2	348.1	186.0	89.0	56.0	51.0
80°	19.0	20.0	31.0	35.0	59.0	197.0	68.0	30.0	31.0	22.0	22.0
82.5°	10.0	11.0	15.0	19.0	24.0	25.0	20.0	18.0	17.0	11.0	11.0
85°	6.0	7.0	8.0	10.0	10.0	10.0	10.0	10.0	9.0	6.0	6.0
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

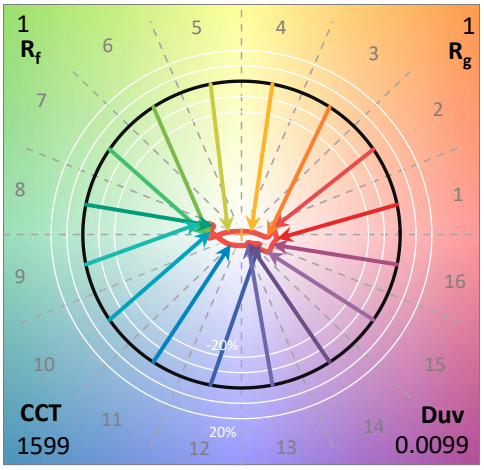
Test Information

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

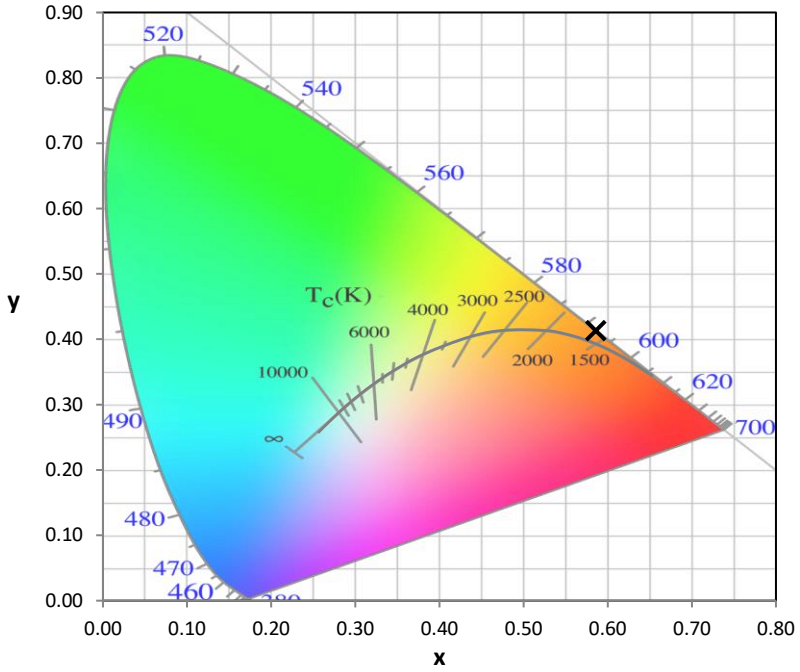
Stabilization Time:	64M
Operation Time:	2H 4M
Sphere Temperature (°C):	25.0

REPORT NUMBER: SP3-2509-541-1

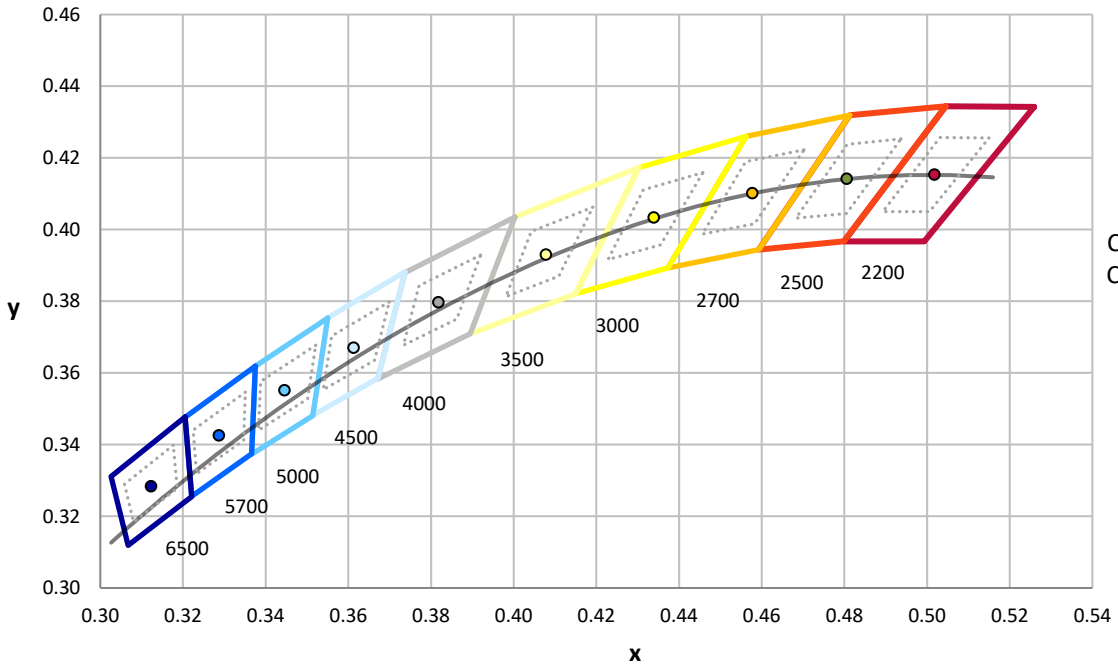
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	3M SPHERE IN02505	7/1/2025	1/1/2026
Power Meter	XITRON INXT2011006	1/20/2025	1/20/2026
AC Power Source	CHROMA 61604 IN6064A	10/22/2024	10/22/2025
DC Power Source	EYSIGHT N5770A IN0534	10/22/2024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

REPORT NUMBER: SP3-2509-541-1

CIE 1931 Chromaticity Diagram



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

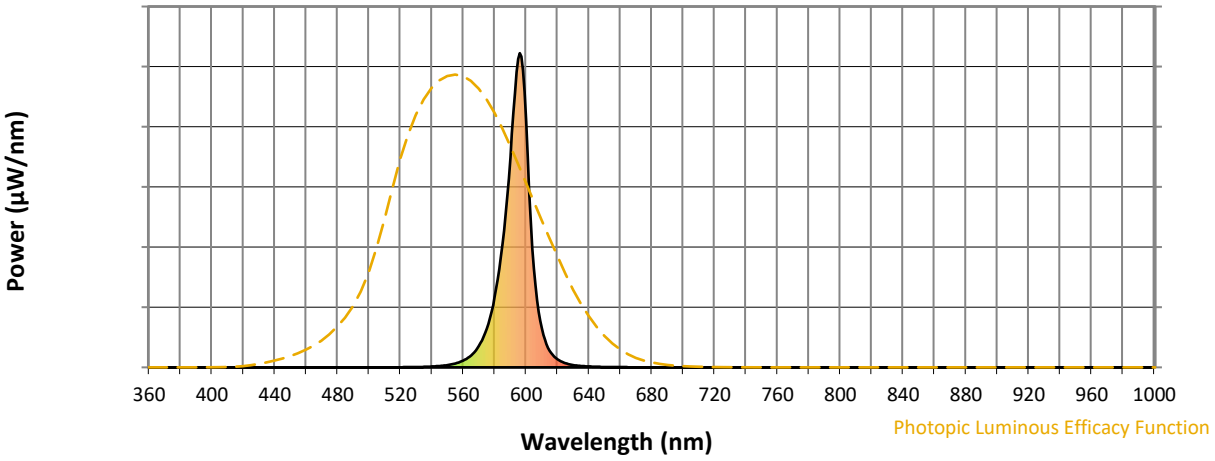


CCT = 1599K
CIE x = 0.5859
CIE y = 0.4133
Duv = 0.0099

Point lies outside the range

REPORT NUMBER: SP3-2509-541-1

Photopic Flux vs. Wavelength

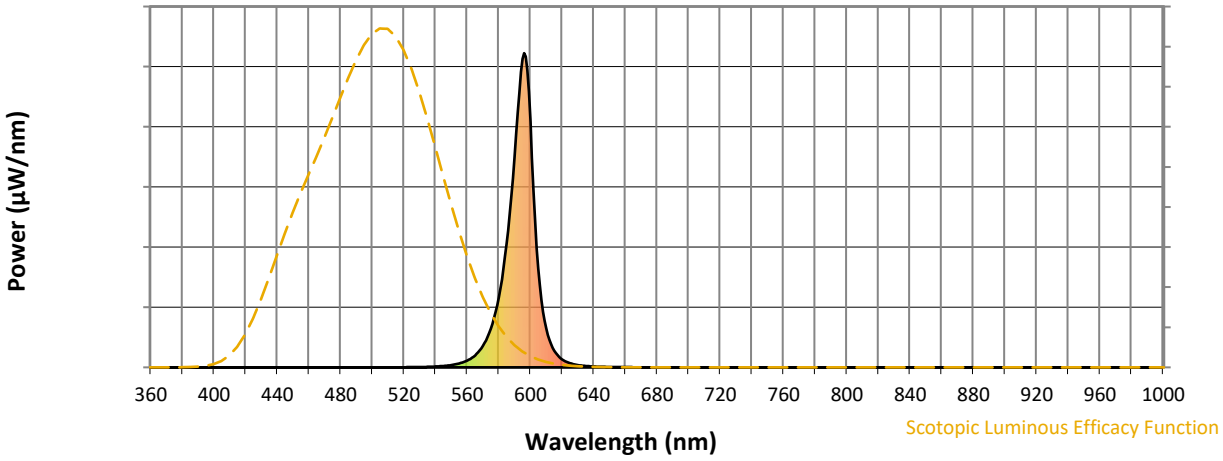


Photopic Lumens: NR

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

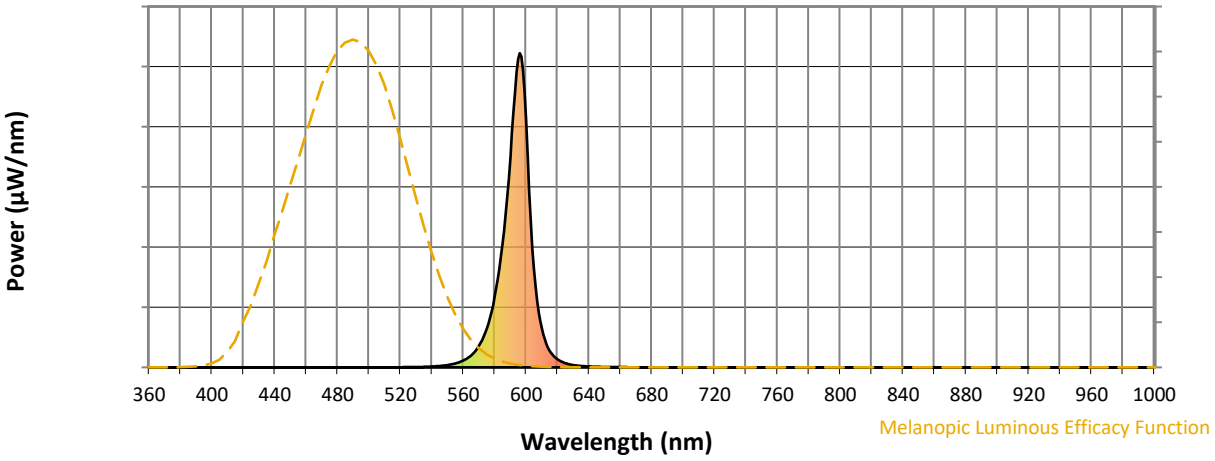


Scotopic Lumens: NR **S/P: 0.23**

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			

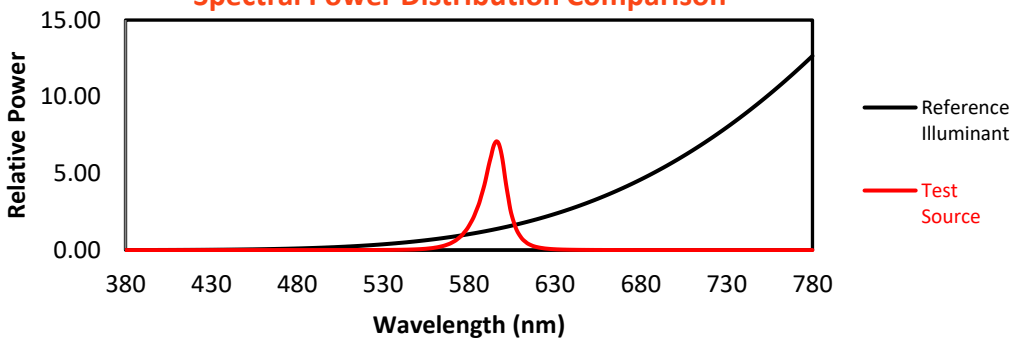
REPORT NUMBER: SP3-2509-541-1

TM-30-18

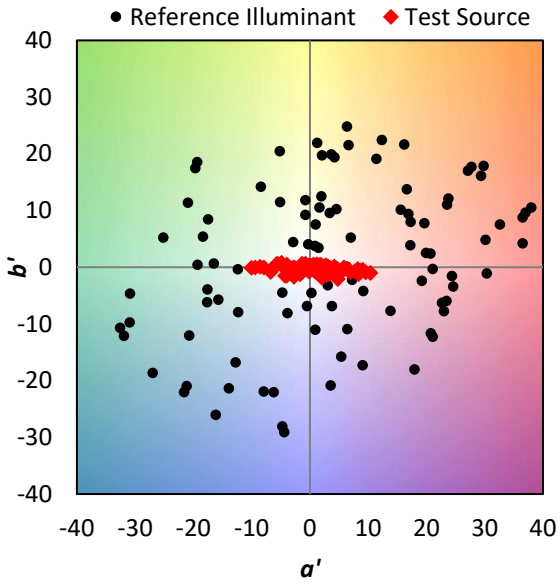
Summary

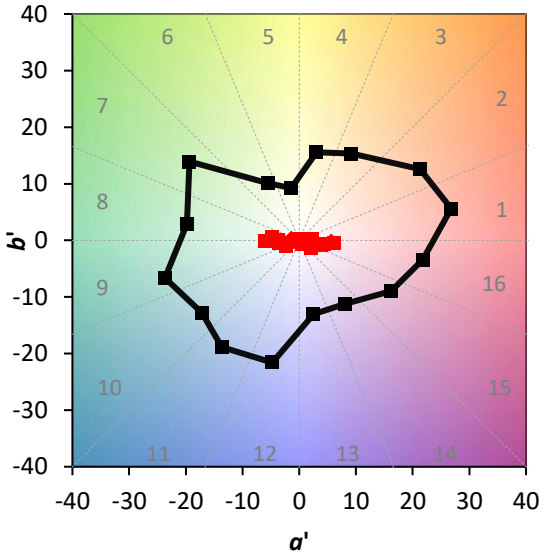
R_f = 1.2
R_g = 0.9
CIE R_a = -22.7
R_9 = -395.3

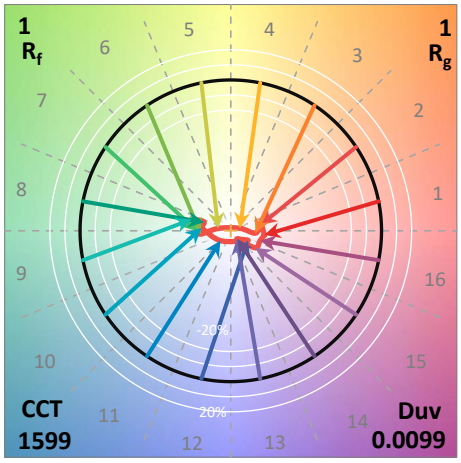
Spectral Power Distribution Comparison

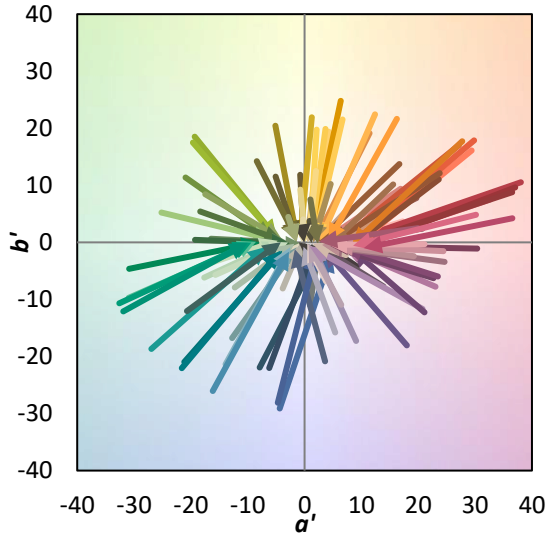


Color Vector Graphics







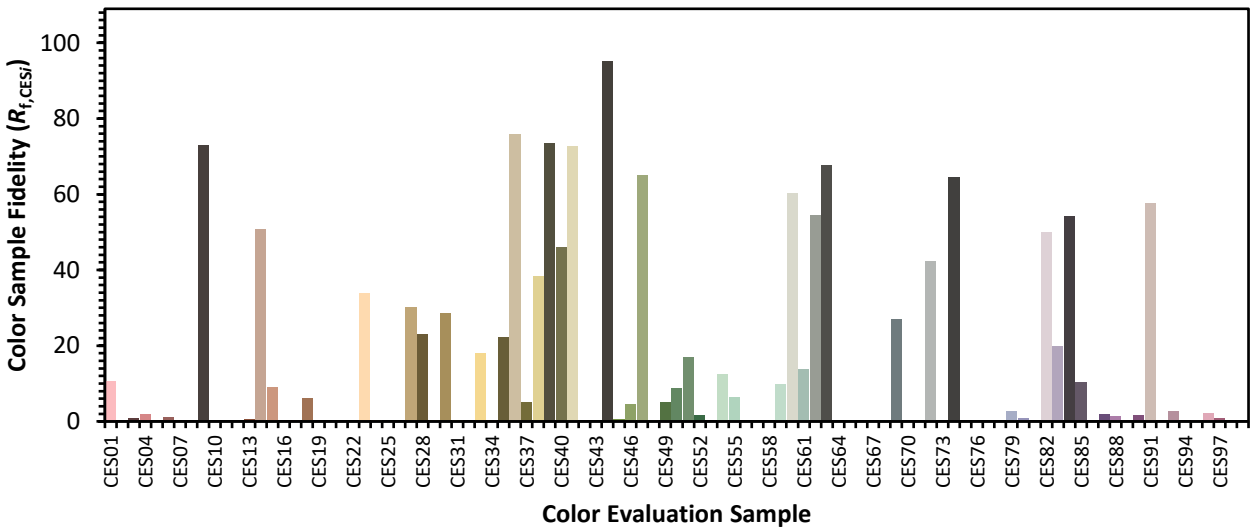


REPORT NUMBER: SP3-2509-541-1

TM-30-18

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

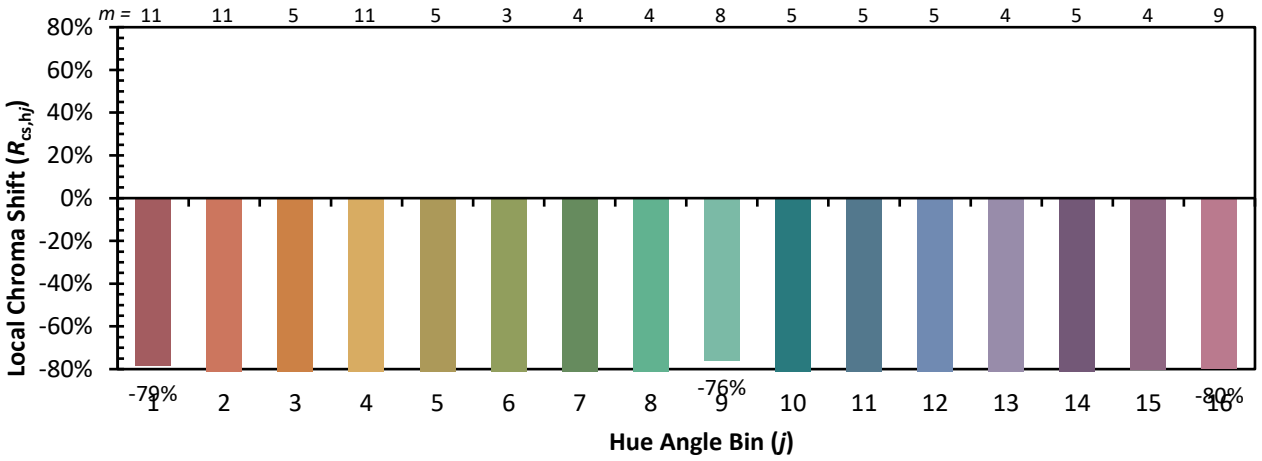
CES01 = 90	CES26 = 0	CES51 = 17	CES76 = 0
CES02 = 69	CES27 = 30	CES52 = 2	CES77 = 0
CES03 = 30	CES28 = 23	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 0	CES54 = 12	CES79 = 3
CES05 = 51	CES30 = 29	CES55 = 6	CES80 = 1
CES06 = 56	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 40	CES32 = 0	CES57 = 0	CES82 = 50
CES08 =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

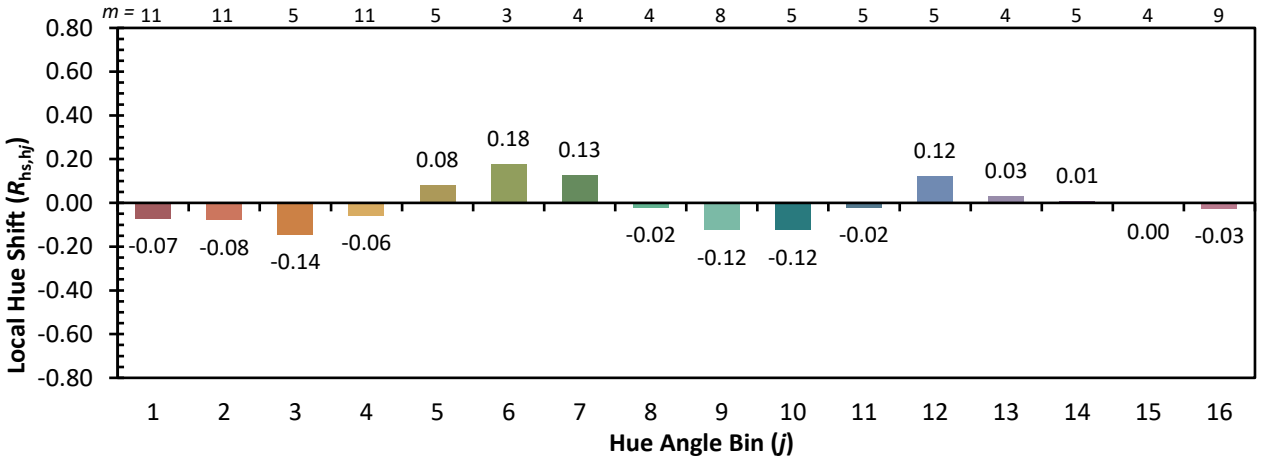


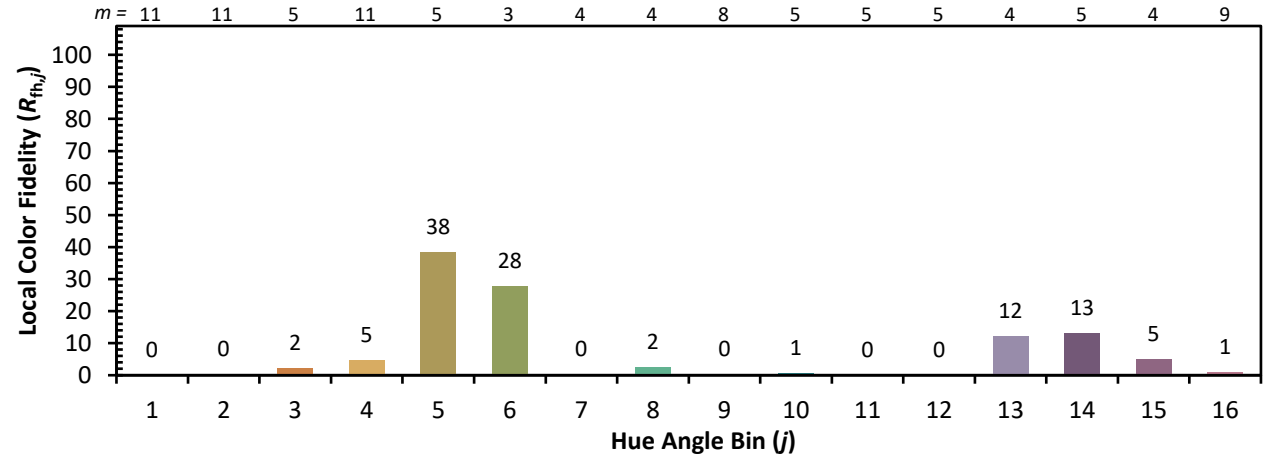
REPORT NUMBER: SP3-2509-541-1

TM-30-18

Color Rendition by Hue-Angle Bin



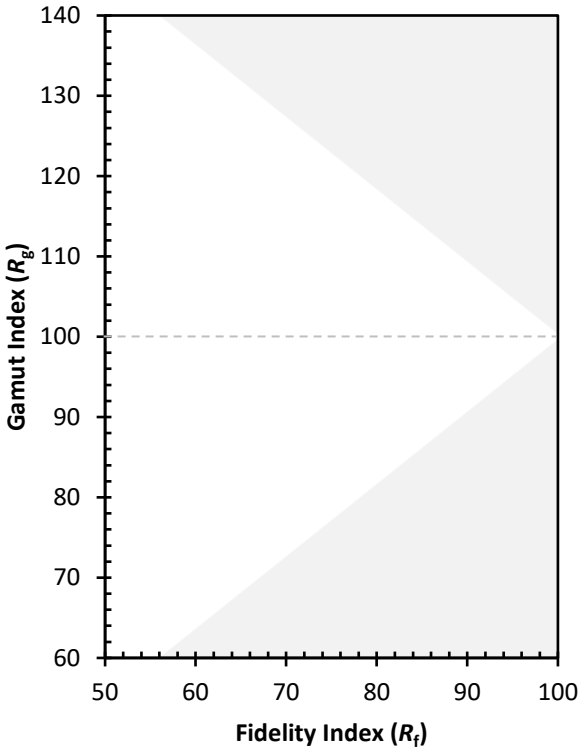


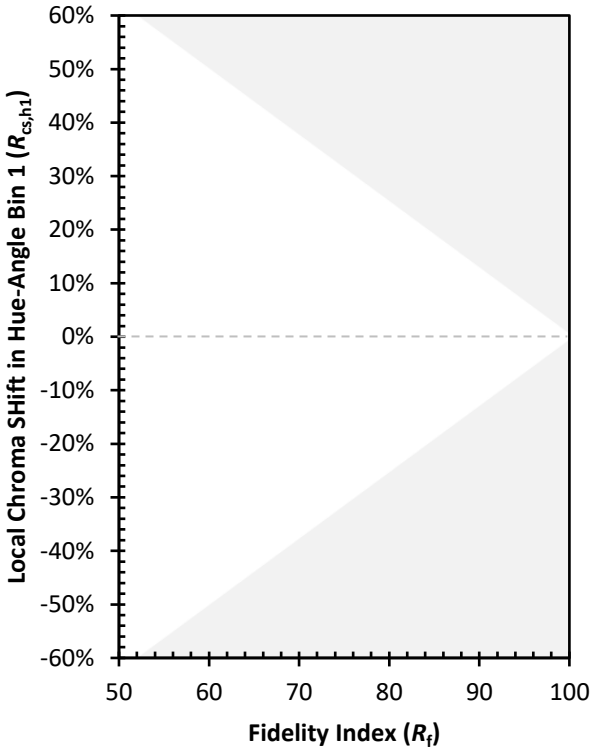


REPORT NUMBER: SP3-2509-541-1

TM-30-18

Measure Comparisons





(END OF REPORT)