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: FAIL-SAFE

Report Number: P1357336

Luminaire Tested: 6ASL4-20HE-2-A59-UNV

Issue Date: 2/17/2026

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:	P1357336
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-7)
Test Lab:	INNOVATION CENTER
Issue Date:	2/17/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	FAIL-SAFE
Catalog Number:	6ASL4-20HE-2-A59-UNV
Description:	6FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 2 ROW
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2482.0 lumens
Efficiency:	N/A
Efficacy:	33.4 lumens/watt
Spacing Criteria (0/90/45):	1.21 / 1.3 / 1.4
Luminous Opening:	Rectangular w/ Sides (W: 0.33' x L: 5.98' x H: 0.1')
CIE Type:	Direct

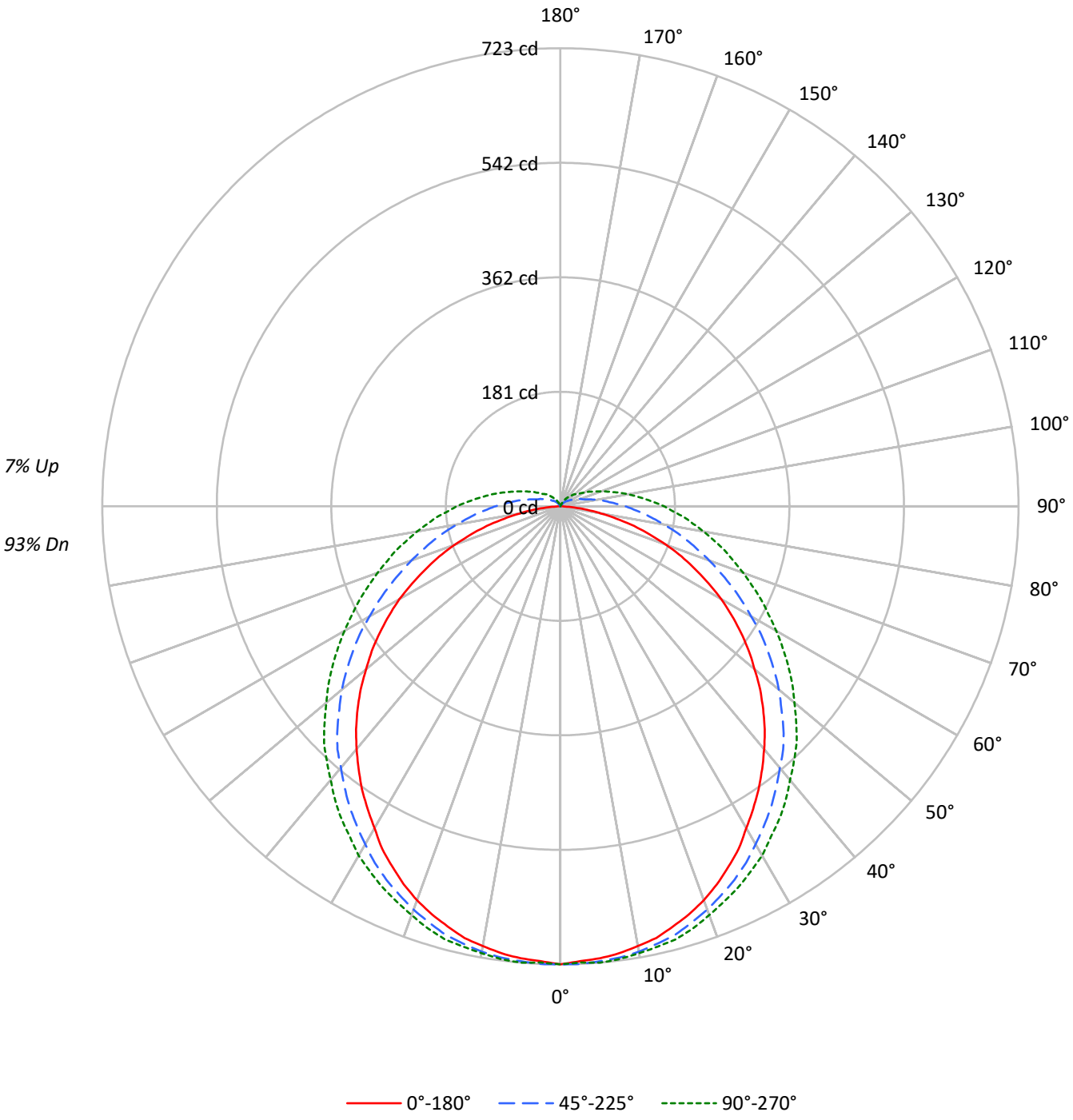
Input Watts (W):	74.4
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

Luminous Intensity Polar Plot



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

Scaled Data Report

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	65	70	66	63	60
3	86	75	66	59	83	73	65	58	69	62	56	65	59	55	62	57	53	50
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	49	45	42
5	72	59	50	43	70	57	49	42	54	47	41	52	45	40	49	43	39	36
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	44	39	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28	37	31	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	29	24	22
10	50	37	29	24	49	36	28	23	35	28	23	33	27	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3905	3905	3905
5°	3877	3829	3815
10°	3853	3760	3723
15°	3821	3685	3648
20°	3779	3589	3543
25°	3709	3494	3453
30°	3622	3386	3363
35°	3554	3285	3259
40°	3476	3177	3149
45°	3396	3084	3070
50°	3293	2960	2951
55°	3195	2826	2857
60°	3075	2676	2756
65°	2885	2537	2679
70°	2672	2407	2607
75°	2361	2308	2584
80°	1865	2222	2576
85°	1173	2229	2650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3396 cd/sqm

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

Scaled Data Report

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	2.8
10°-20°	197.1	7.9
20°-30°	298.6	12.0
30°-40°	361.2	14.6
40°-50°	380.8	15.3
50°-60°	355.4	14.3
60°-70°	293.4	11.8
70°-80°	212.9	8.6
80°-90°	134.5	5.4
90°-100°	80.3	3.2
100°-110°	46.0	1.9
110°-120°	26.1	1.1
120°-130°	14.9	0.6
130°-140°	8.1	0.3
140°-150°	3.5	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	564.3	22.7
0°-40°	925.5	37.3
0°-60°	1661.6	66.9
0°-90°	2302.4	92.8
90°-120°	152.4	6.1
90°-150°	178.9	7.2
90°-180°	180.0	7.3
0°-180°	2482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	716	723	721	721	723	68
15°	687	696	700	702	707	194
25°	628	637	650	659	664	289
35°	546	559	580	596	602	341
45°	452	471	498	518	528	349
55°	348	368	400	427	439	311
65°	234	259	298	334	350	233
75°	120	152	207	250	268	127
85°	23	70	132	177	196	28
90°	0	43	102	146	164	1
95°	0	27	77	118	134	0
105°	0	9	43	75	86	0
115°	0	4	25	46	55	0
125°	0	2	16	30	34	0
135°	0	0	9	18	23	0
145°	0	0	4	11	14	0
155°	0	0	0	2	4	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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

Scaled Data Report

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.0	723.0	723.0	723.0	723.0
2.5°	718.4	725.3	723.0	720.7	720.7
5°	716.2	723.0	720.7	720.7	723.0
7.5°	711.6	718.4	718.4	718.4	720.7
10°	704.8	713.9	713.9	713.9	716.2
12.5°	698.0	704.8	707.1	709.3	711.6
15°	686.6	695.7	700.2	702.5	707.1
17.5°	675.2	682.1	688.9	695.7	698.0
20°	661.6	670.7	677.5	684.3	686.6
22.5°	645.7	654.8	663.9	670.7	675.2
25°	627.5	636.6	650.2	659.3	663.9
27.5°	609.3	618.4	634.3	645.7	650.2
30°	586.6	600.2	616.1	629.8	636.6
32.5°	566.1	579.7	597.9	613.9	618.4
35°	545.6	559.3	579.7	595.7	602.5
37.5°	522.9	538.8	559.3	577.5	584.3
40°	500.2	516.1	538.8	559.3	563.8
42.5°	477.4	493.4	520.6	538.8	545.6
45°	452.4	470.6	497.9	518.4	527.5
47.5°	427.4	445.6	472.9	495.6	504.7
50°	400.1	420.6	450.2	472.9	482.0
52.5°	375.1	395.6	425.1	450.2	461.5
55°	347.8	368.3	400.1	427.4	438.8
57.5°	320.6	341.0	375.1	404.7	416.1
60°	293.3	313.7	347.8	382.0	393.3
62.5°	263.7	286.5	322.8	356.9	370.6
65°	234.2	259.2	297.8	334.2	350.1
67.5°	206.9	231.9	272.8	313.7	327.4
70°	177.3	204.6	250.1	291.0	306.9
72.5°	147.8	177.3	227.4	270.5	286.5
75°	120.5	152.3	206.9	250.1	268.3
77.5°	90.9	129.6	186.4	231.9	247.8
80°	65.9	106.9	166.0	213.7	229.6
82.5°	43.2	86.4	147.8	195.5	211.4
85°	22.7	70.5	131.9	177.3	195.5
87.5°	6.8	54.6	115.9	161.4	177.3
90°	0.0	43.2	102.3	145.5	163.7
92.5°	0.0	34.1	88.7	131.9	147.8
95°	0.0	27.3	77.3	118.2	134.1
97.5°	0.0	22.7	68.2	106.9	120.5
100°	0.0	18.2	59.1	95.5	109.1
102.5°	0.0	13.6	50.0	84.1	97.8
105°	0.0	9.1	43.2	75.0	86.4
107.5°	0.0	6.8	36.4	65.9	77.3
110°	0.0	6.8	34.1	56.8	68.2

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	*4.5*	29.6	52.3	61.4
115°	0.0	*4.5*	25.0	45.5	54.6
117.5°	0.0	*4.5*	22.7	40.9	50.0
120°	0.0	*4.5*	20.5	36.4	43.2
122.5°	0.0	*2.3*	18.2	31.8	38.6
125°	0.0	*2.3*	15.9	29.6	34.1
127.5°	0.0	*2.3*	13.6	27.3	31.8
130°	0.0	*2.3*	13.6	25.0	29.6
132.5°	0.0	*0.0*	11.4	22.7	27.3
135°	0.0	*0.0*	9.1	18.2	22.7
137.5°	0.0	*0.0*	9.1	15.9	20.5
140°	0.0	*0.0*	6.8	15.9	18.2
142.5°	0.0	*0.0*	4.5	13.6	15.9
145°	0.0	*0.0*	4.5	11.4	13.6
147.5°	0.0	*0.0*	2.3	9.1	11.4
150°	0.0	*0.0*	2.3	6.8	9.1
152.5°	0.0	*0.0*	0.0	4.5	6.8
155°	0.0	*0.0*	0.0	2.3	4.5
157.5°	0.0	*0.0*	0.0	0.0	2.3
160°	0.0	*0.0*	0.0	0.0	0.0
162.5°	0.0	*0.0*	0.0	0.0	0.0
165°	0.0	*0.0*	0.0	0.0	0.0
167.5°	0.0	*0.0*	0.0	0.0	0.0
170°	0.0	*0.0*	0.0	0.0	0.0
172.5°	0.0	*0.0*	0.0	0.0	0.0
175°	0.0	*0.0*	0.0	0.0	0.0
177.5°	0.0	*0.0*	0.0	0.0	0.0
180°	0.0	*0.0*	0.0	0.0	0.0

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

Scaled Data Report

TEST NUMBER: P1357336
CATALOG NUMBER: 6ASL4-20HE-2-A59-UNV

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.05	15.59	14.53	16.05	16.54	16.14	17.68	16.62	18.14	18.63
	3H	15.56	16.96	16.04	17.43	17.96	18.61	20.01	19.09	20.48	21.01
	4H	16.04	17.36	16.54	17.85	18.40	19.83	21.16	20.33	21.64	22.19
	6H	16.31	17.55	16.83	18.05	18.61	21.12	22.35	21.64	22.85	23.41
	8H	16.36	17.55	16.90	18.07	18.64	21.79	22.98	22.32	23.50	24.07
	12H	16.38	17.52	16.92	18.03	18.63	22.54	23.68	23.08	24.20	24.80
4H	2H	14.94	16.27	15.45	16.75	17.30	16.57	17.90	17.08	18.39	18.93
	3H	16.68	17.81	17.20	18.34	18.91	19.27	20.40	19.78	20.93	21.49
	4H	17.29	18.33	17.83	18.87	19.47	20.66	21.70	21.20	22.24	22.84
	6H	17.69	18.61	18.25	19.17	19.79	22.15	23.06	22.71	23.63	24.24
	8H	17.79	18.65	18.35	19.22	19.84	22.93	23.79	23.49	24.36	24.98
	12H	17.84	18.62	18.42	19.21	19.84	23.81	24.59	24.39	25.19	25.82
8H	4H	17.99	18.85	18.56	19.42	20.05	20.88	21.74	21.44	22.31	22.93
	6H	18.58	19.31	19.18	19.92	20.55	22.54	23.27	23.14	23.88	24.51
	8H	18.77	19.43	19.38	20.05	20.69	23.47	24.13	24.07	24.75	25.39
	12H	18.89	19.48	19.50	20.08	20.79	24.53	25.12	25.14	25.73	26.44
12H	4H	18.20	18.98	18.78	19.57	20.20	20.89	21.67	21.47	22.27	22.90
	6H	18.89	19.55	19.50	20.17	20.81	22.58	23.24	23.19	23.86	24.50
	8H	19.18	19.76	19.79	20.37	21.08	23.57	24.16	24.18	24.77	25.48

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

Fail-Safe

Report Number: SP1-2511-597-9

Test Date: 01/22/2026

Luminaire Tested: 4ASL-2-A590-UNV-OPL-1_600mA

Data in this report applies to families of products including 4ASL

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.05

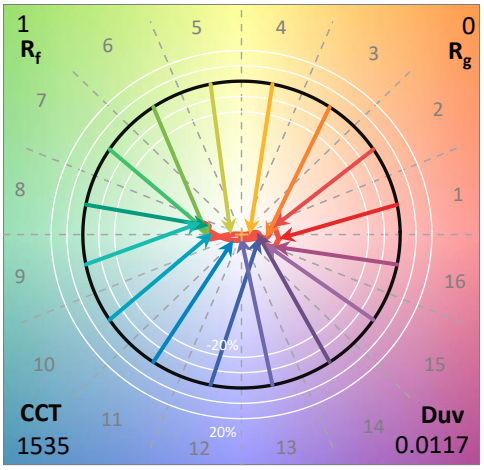
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2511-597-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	01/29/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Fail-Safe
Catalog Number:	**4ASL-2-A590-UNV-OPL-1_600mA**
Description:	2foot 4ASL LED LUMINAIRE WITH OPL LENS AND AMBER 590 LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K):	1535
CIE u':	0.3534
CIE v':	0.5468
Duv:	0.0117
CIE x:	0.5921
CIE y:	0.4072
CIE z:	0.0007
Peak Wavelength (nm):	598
Dominant Wavelength (nm):	592
Purity:	99.97894
Rf:	1.3
Rg:	0.1

CRI (Ra):	-20.0				
R1:	-32.1	R9:	-380.5
R2:	53.1	R10:	29.9
R3:	18.5	R11:	-92.0
R4:	-65.7	R12:	-8.5
R5:	-38.6	R13:	-13.5
R6:	42.8	R14:	47.1
R7:	-6.2	R15:	-65.4
R8:	-132.3		



Test Conditions

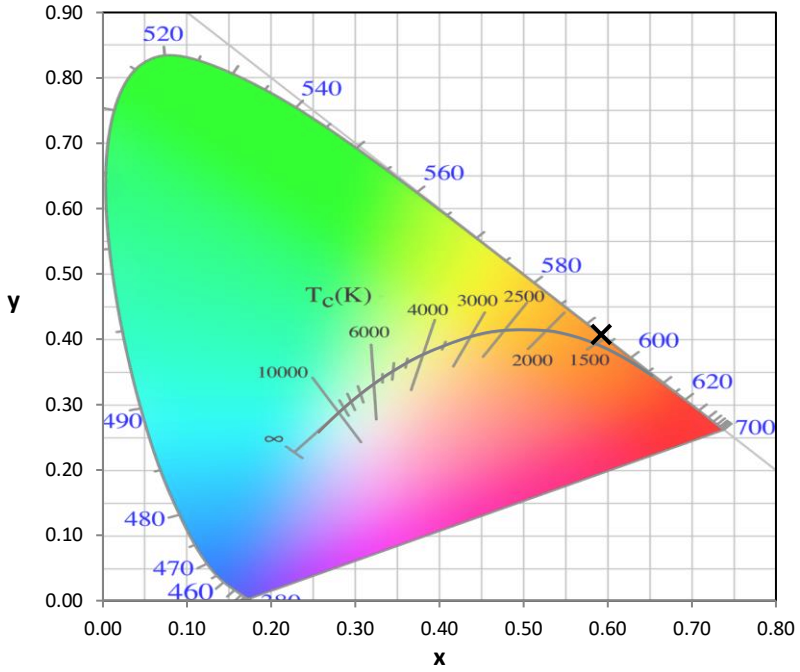
Stabilization Time:	77M
Operation Time:	2H 17M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2511-597-9

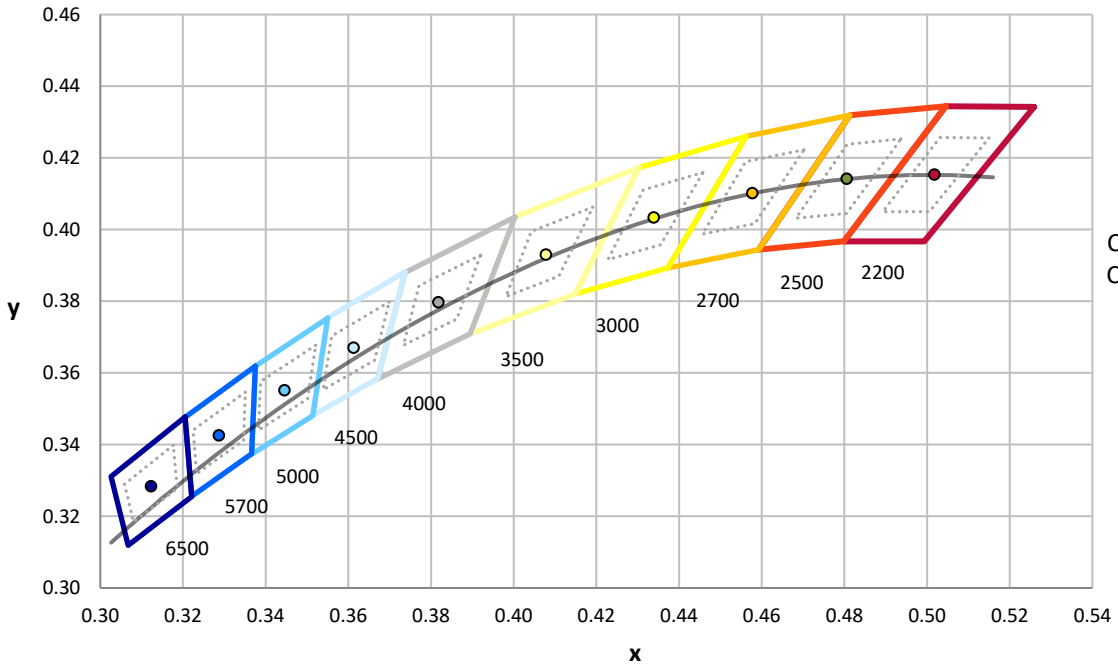
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	10/21/2025	10/21/2026
Sphere Thermometer	ONSET IN0085	10/21/2025	10/21/2026
Room Thermometer	ONSET IN0046	10/21/2025	10/21/2026

REPORT NUMBER: SP1-2511-597-9

CIE 1931 Chromaticity Diagram



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

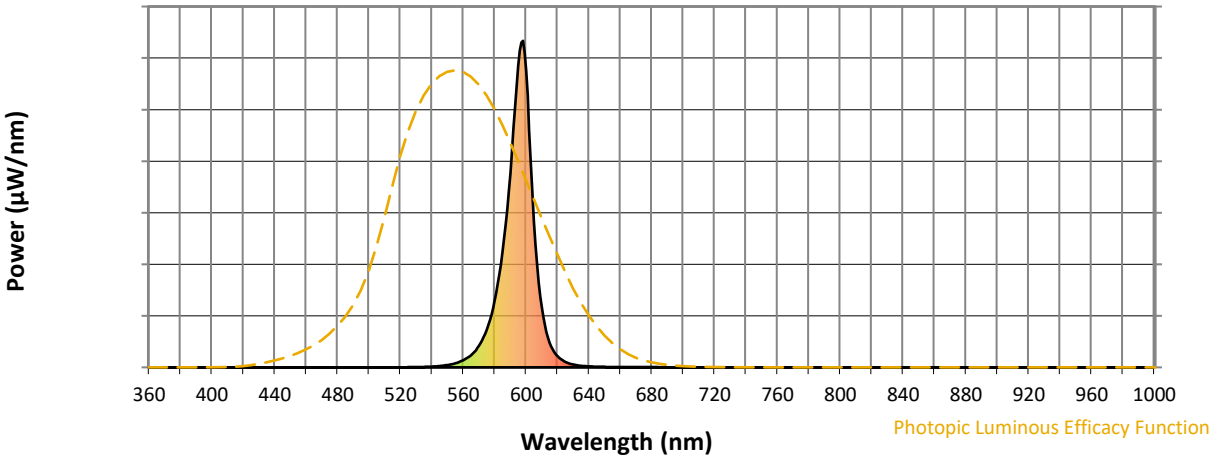


CCT = 1535K
CIE x = 0.5921
CIE y = 0.4072
Duv = 0.0117

Point lies outside the range

REPORT NUMBER: SP1-2511-597-9

Photopic Flux vs. Wavelength

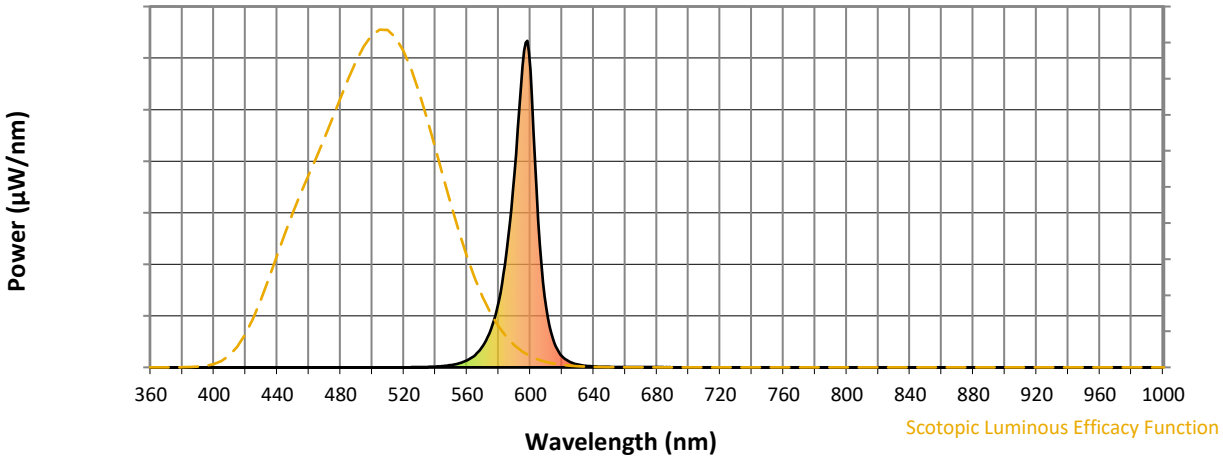


Photopic Lumens: NR

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	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	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	0	NR	650	2	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	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	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	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-9

Scotopic Flux vs. Wavelength

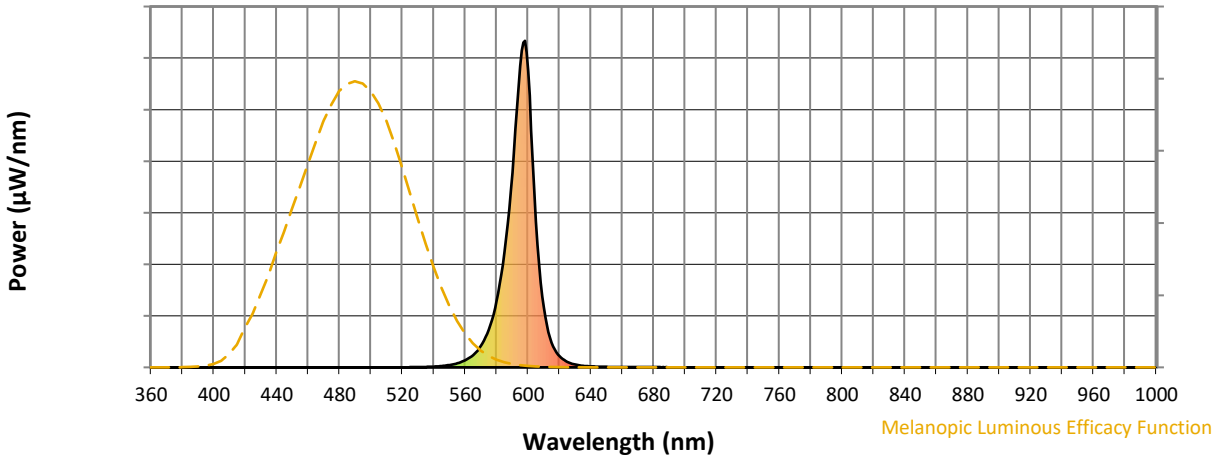


Scotopic Lumens: NR **S/P: 0.22**

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	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	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	0	NR	650	2	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	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	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	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 0.12**

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	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	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	0	NR	650	2	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	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	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	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

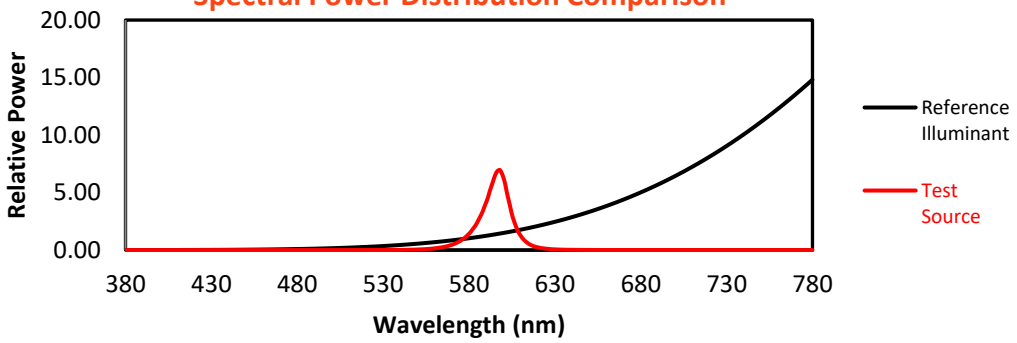
REPORT NUMBER: SP1-2511-597-9

TM-30-18

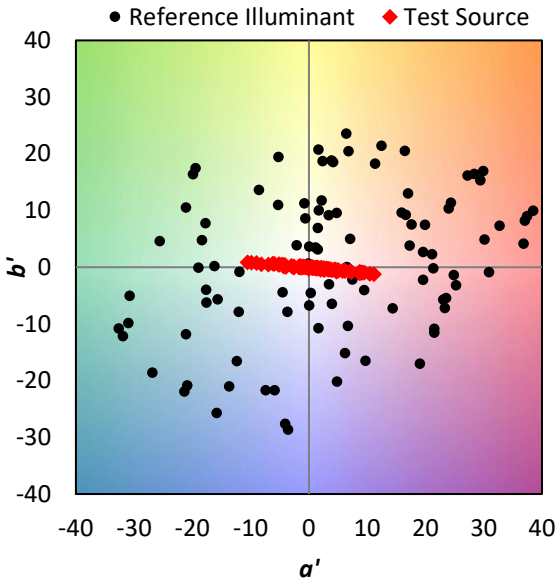
Summary

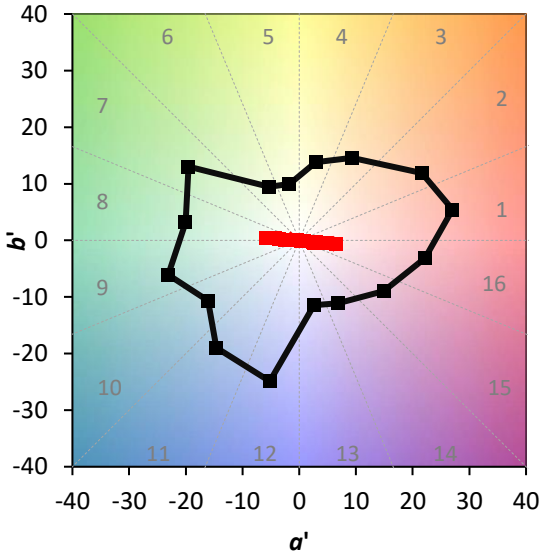
R_f = 1.3
R_g = 0.1
CIE R_a = -20.0
R_9 = -380.5

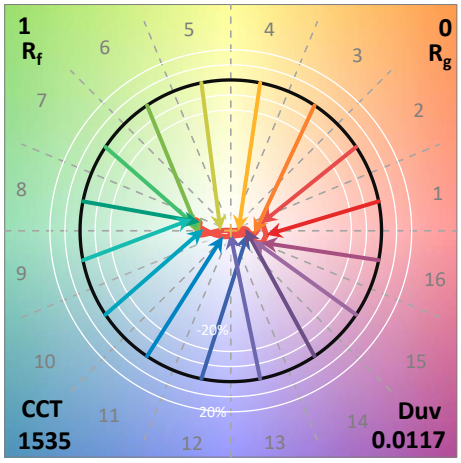
Spectral Power Distribution Comparison

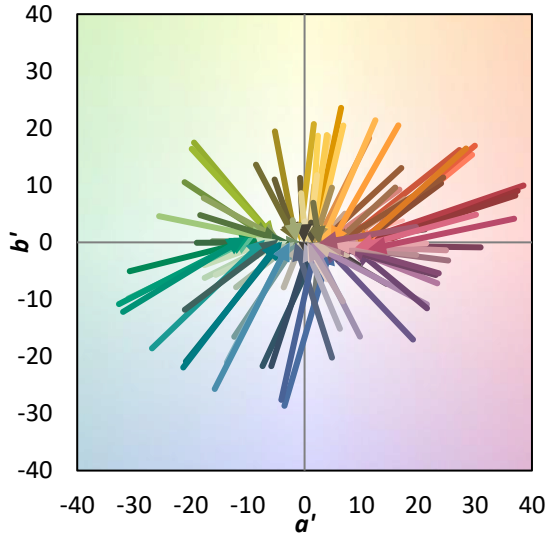


Color Vector Graphics







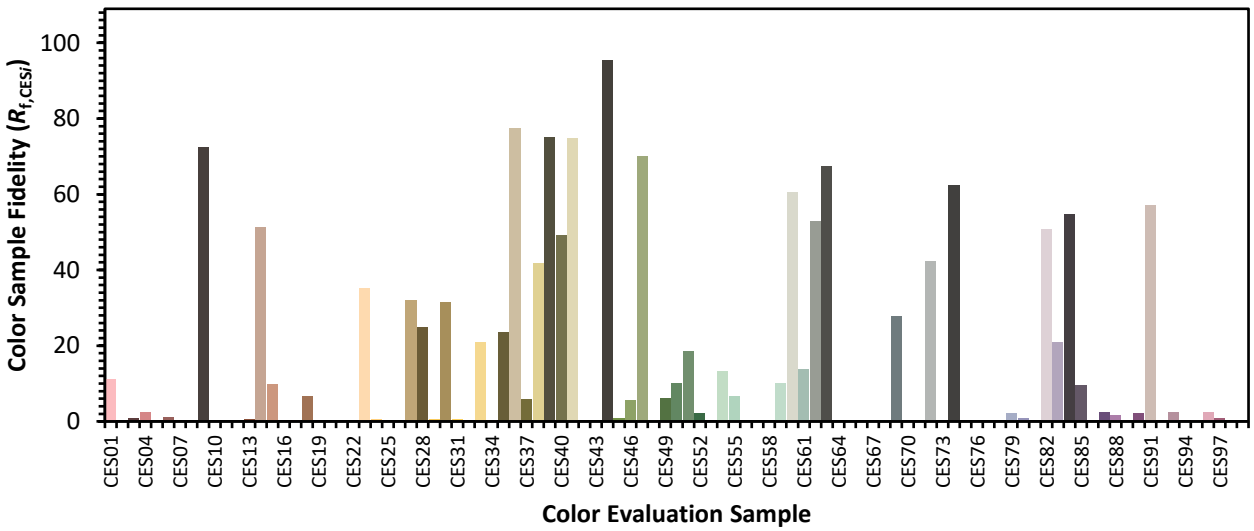


REPORT NUMBER: SP1-2511-597-9

TM-30-18

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

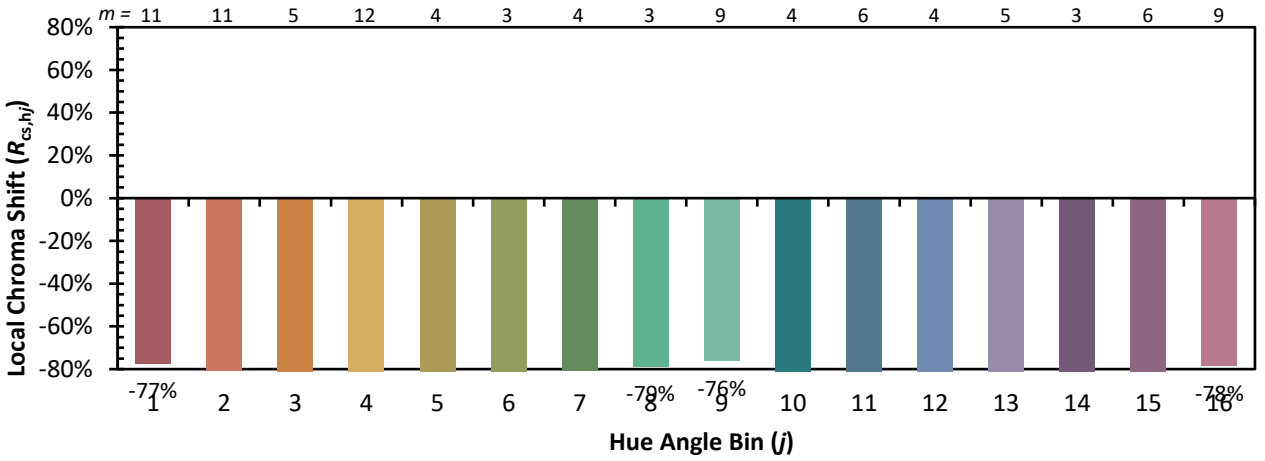
CES01 = 90	CES26 = 0	CES51 = 19	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 25	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 13	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 7	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 51
CES08 = 39	CES33 = 21	CES58 = 0	CES83 = 21
CES09 = 29	CES34 = 0	CES59 = 10	CES84 = 55
CES10 = 87	CES35 = 24	CES60 = 60	CES85 = 10
CES11 = 70	CES36 = 77	CES61 = 14	CES86 = 0
CES12 = 76	CES37 = 6	CES62 = 53	CES87 = 2
CES13 = 47	CES38 = 42	CES63 = 68	CES88 = 2
CES14 = 77	CES39 = 75	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 49	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 75	CES66 = 0	CES91 = 57
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 60	CES43 = 0	CES68 = 0	CES93 = 3
CES19 = 80	CES44 = 95	CES69 = 28	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 6	CES71 = 0	CES96 = 2
CES22 = 87	CES47 = 70	CES72 = 42	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 6	CES74 = 62	CES99 = 0
CES25 = 79	CES50 = 10	CES75 = 0	

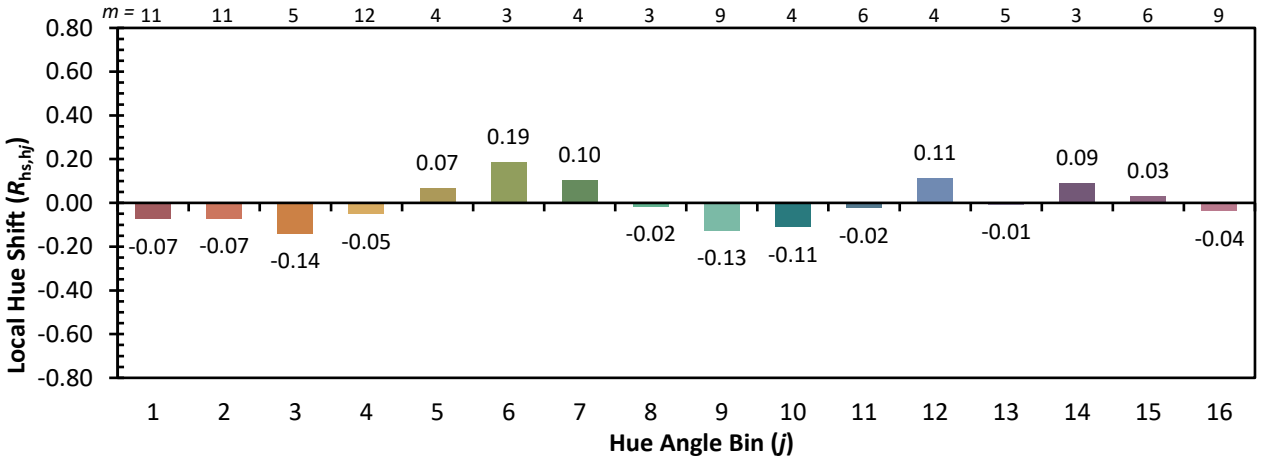


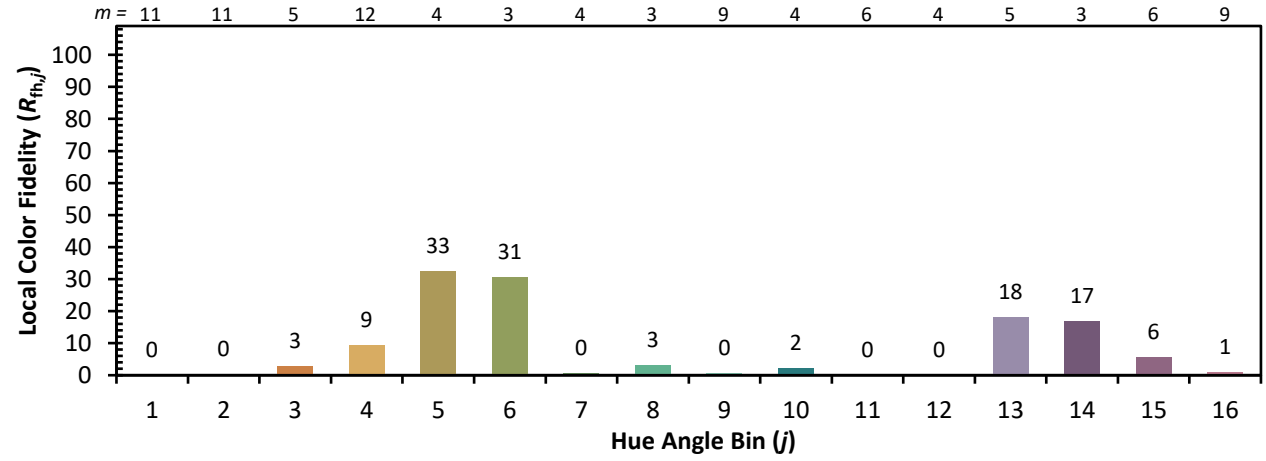
REPORT NUMBER: SP1-2511-597-9

TM-30-18

Color Rendition by Hue-Angle Bin



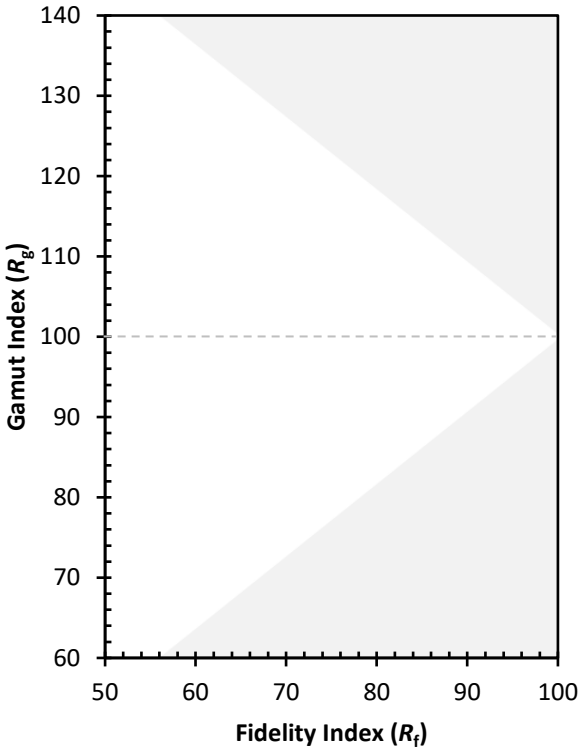


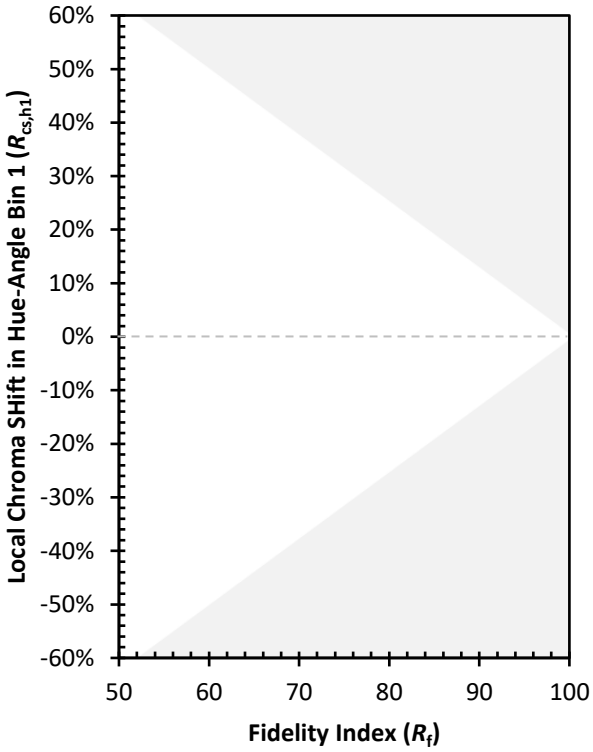


REPORT NUMBER: SP1-2511-597-9

TM-30-18

Measure Comparisons





(END OF REPORT)