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: P1357185

Luminaire Tested: 4ASL4-20HE-2-R63-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:	P1357185
	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:	4ASL4-20HE-2-R63-UNV
Description:	4FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND R63 LEDS 2 ROW
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2121.0 lumens
Efficiency:	N/A
Efficacy:	40.0 lumens/watt
Spacing Criteria (0/90/45):	1.21 / 1.3 / 1.4
Luminous Opening:	Rectangular w/ Sides (W: 0.33' x L: 3.98' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	53
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

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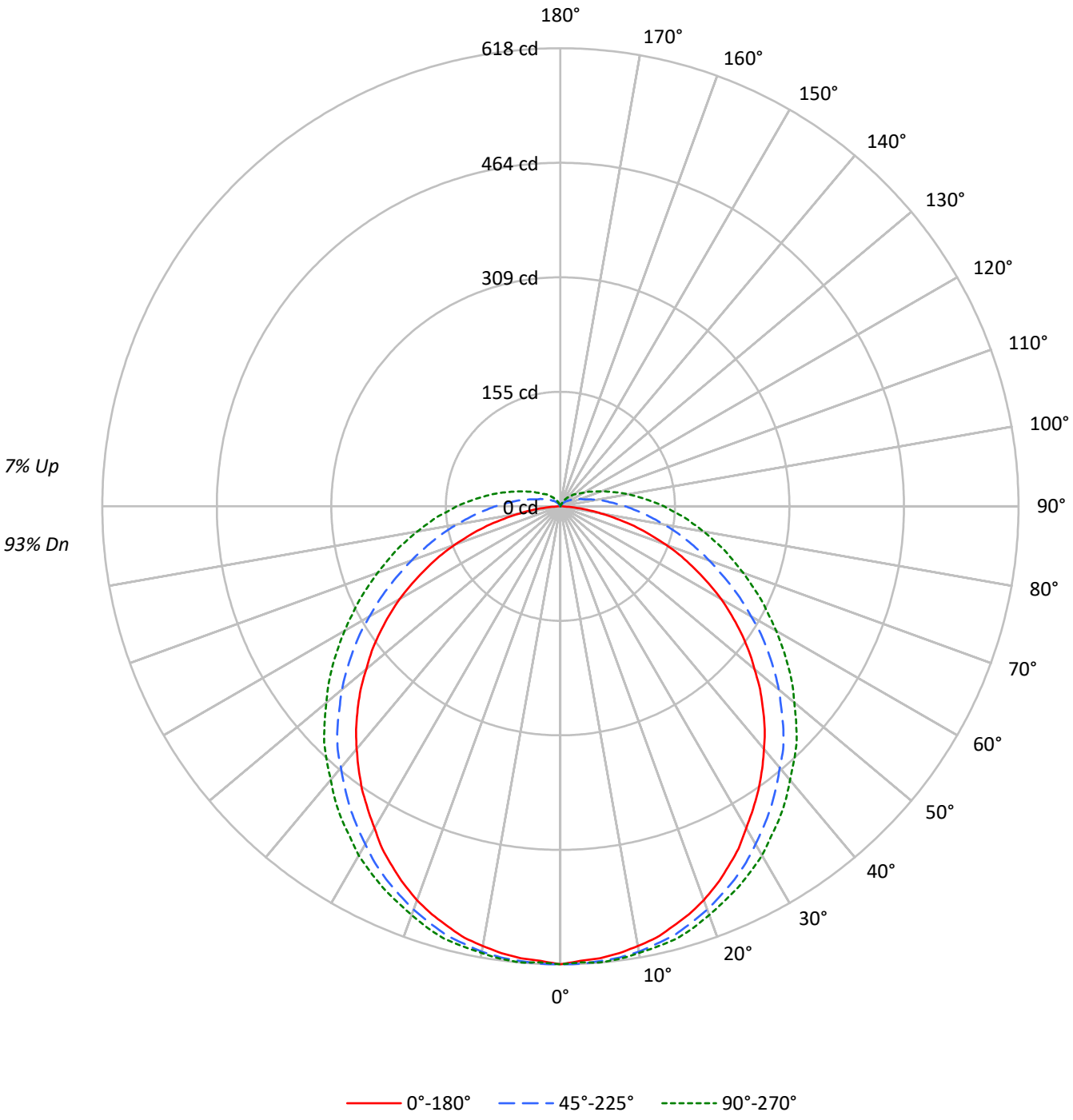
Luminous Intensity Polar Plot



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TEST NUMBER: P1357185
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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°	5014	5014	5014
5°	4974	4914	4899
10°	4940	4824	4780
15°	4895	4724	4684
20°	4837	4599	4549
25°	4743	4476	4434
30°	4628	4334	4319
35°	4536	4203	4185
40°	4430	4062	4044
45°	4324	3940	3941
50°	4186	3778	3789
55°	4055	3605	3668
60°	3891	3411	3539
65°	3638	3229	3440
70°	3354	3058	3349
75°	2942	2927	3319
80°	2291	2810	3307
85°	1390	2808	3403

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4324 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	2.8
10°-20°	168.4	7.9
20°-30°	255.2	12.0
30°-40°	308.7	14.6
40°-50°	325.4	15.3
50°-60°	303.7	14.3
60°-70°	250.7	11.8
70°-80°	181.9	8.6
80°-90°	114.9	5.4
90°-100°	68.6	3.2
100°-110°	39.3	1.9
110°-120°	22.3	1.1
120°-130°	12.7	0.6
130°-140°	6.9	0.3
140°-150°	3.0	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	482.2	22.7
0°-40°	790.9	37.3
0°-60°	1420.0	66.9
0°-90°	1967.5	92.8
90°-120°	130.3	6.1
90°-150°	152.9	7.2
90°-180°	153.0	7.2
0°-180°	2121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	612	618	616	616	618	58
15°	587	594	598	600	604	166
25°	536	544	556	563	567	247
35°	466	478	495	509	515	291
45°	387	402	426	443	451	298
55°	297	315	342	365	375	266
65°	200	222	254	286	299	199
75°	103	130	177	214	229	108
85°	19	60	113	152	167	24
90°	0	37	87	124	140	1
95°	0	23	66	101	115	0
105°	0	8	37	64	74	0
115°	0	4	21	39	47	0
125°	0	2	14	25	29	0
135°	0	0	8	16	19	0
145°	0	0	4	10	12	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	

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TEST NUMBER: P1357185
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.8	*617.8*	617.8	617.8	617.8
2.5°	*613.9*	*619.8*	*617.8*	*615.9*	*615.9*
5°	612.0	*617.8*	615.9	615.9	617.8
7.5°	608.1	*613.9*	613.9	613.9	615.9
10°	602.3	*610.1*	610.1	610.1	612.0
12.5°	596.5	*602.3*	604.2	606.2	608.1
15°	586.7	*594.5*	598.4	600.3	604.2
17.5°	577.0	*582.9*	588.7	594.5	596.5
20°	565.4	*573.1*	579.0	584.8	586.7
22.5°	551.8	*559.5*	567.3	573.1	577.0
25°	536.2	*544.0*	555.7	563.4	567.3
27.5°	520.7	*528.5*	542.1	551.8	555.7
30°	501.3	*512.9*	526.5	538.2	544.0
32.5°	483.8	*495.4*	511.0	524.6	528.5
35°	466.3	*477.9*	495.4	509.0	514.9
37.5°	446.9	*460.5*	477.9	493.5	499.3
40°	427.4	*441.0*	460.5	477.9	481.8
42.5°	408.0	*421.6*	444.9	460.5	466.3
45°	386.6	*402.2*	425.5	443.0	450.7
47.5°	365.3	*380.8*	404.1	423.5	431.3
50°	341.9	*359.4*	384.7	404.1	411.9
52.5°	320.6	*338.1*	363.3	384.7	394.4
55°	297.3	*314.7*	341.9	365.3	375.0
57.5°	273.9	*291.4*	320.6	345.8	355.5
60°	250.6	*268.1*	297.3	326.4	336.1
62.5°	225.4	*244.8*	275.9	305.0	316.7
65°	200.1	*221.5*	254.5	285.6	299.2
67.5°	176.8	*198.2*	233.1	268.1	279.8
70°	151.5	*174.9*	213.7	248.7	262.3
72.5°	126.3	*151.5*	194.3	231.2	244.8
75°	103.0	*130.2*	176.8	213.7	229.3
77.5°	77.7	*110.7*	159.3	198.2	211.8
80°	56.3	*91.3*	141.8	182.6	196.2
82.5°	36.9	*73.8*	126.3	167.1	180.7
85°	19.4	*60.2*	112.7	151.5	167.1
87.5°	5.8	*46.6*	99.1	137.9	151.5
90°	0.0	*36.9*	87.4	124.3	139.9
92.5°	0.0	*29.1*	75.8	112.7	126.3
95°	0.0	*23.3*	66.1	101.0	114.6
97.5°	0.0	*19.4*	58.3	91.3	103.0
100°	0.0	*15.5*	50.5	81.6	93.3
102.5°	0.0	*11.7*	42.7	71.9	83.5
105°	0.0	*7.8*	36.9	64.1	73.8
107.5°	0.0	*5.8*	31.1	56.3	66.1
110°	0.0	*5.8*	29.1	48.6	58.3

TEST NUMBER: P1357185
CATALOG NUMBER: 4ASL4-20HE-2-R63-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	*3.9*	25.3	44.7	52.5
115°	0.0	*3.9*	21.4	38.9	46.6
117.5°	0.0	*3.9*	19.4	35.0	42.7
120°	0.0	*3.9*	17.5	31.1	36.9
122.5°	0.0	*1.9*	15.5	27.2	33.0
125°	0.0	*1.9*	13.6	25.3	29.1
127.5°	0.0	*1.9*	11.7	23.3	27.2
130°	0.0	*1.9*	11.7	21.4	25.3
132.5°	0.0	*0.0*	9.7	19.4	23.3
135°	0.0	*0.0*	7.8	15.5	19.4
137.5°	0.0	*0.0*	7.8	13.6	17.5
140°	0.0	*0.0*	5.8	13.6	15.5
142.5°	0.0	*0.0*	3.9	11.7	13.6
145°	0.0	*0.0*	3.9	9.7	11.7
147.5°	0.0	*0.0*	1.9	7.8	9.7
150°	0.0	*0.0*	1.9	5.8	7.8
152.5°	0.0	*0.0*	0.0	3.9	5.8
155°	0.0	*0.0*	0.0	1.9	3.9
157.5°	0.0	*0.0*	0.0	0.0	1.9
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

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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	14.91	16.45	15.39	16.91	17.40	16.97	18.51	17.45	18.97	19.46
	3H	16.42	17.82	16.90	18.29	18.82	19.42	20.82	19.91	21.29	21.83
	4H	16.90	18.22	17.40	18.71	19.26	20.63	21.96	21.14	22.45	22.99
	6H	17.17	18.41	17.69	18.91	19.47	21.90	23.14	22.42	23.64	24.20
	8H	17.22	18.41	17.76	18.93	19.50	22.56	23.75	23.10	24.27	24.84
	12H	17.24	18.38	17.78	18.89	19.49	23.29	24.43	23.83	24.95	25.54
4H	2H	15.79	17.12	16.30	17.61	18.15	17.40	18.73	17.91	19.22	19.76
	3H	17.54	18.67	18.05	19.20	19.77	20.08	21.22	20.60	21.75	22.31
	4H	18.14	19.18	18.68	19.72	20.32	21.47	22.51	22.01	23.05	23.65
	6H	18.55	19.46	19.10	20.03	20.64	22.94	23.85	23.50	24.42	25.03
	8H	18.64	19.50	19.21	20.07	20.70	23.70	24.57	24.27	25.13	25.76
	12H	18.69	19.47	19.28	20.07	20.70	24.56	25.34	25.15	25.94	26.57
8H	4H	18.84	19.70	19.40	20.27	20.89	21.69	22.55	22.25	23.12	23.74
	6H	19.43	20.16	20.02	20.77	21.40	23.33	24.06	23.93	24.67	25.30
	8H	19.61	20.27	20.22	20.89	21.54	24.24	24.90	24.85	25.52	26.17
	12H	19.73	20.32	20.34	20.93	21.64	25.29	25.87	25.90	26.48	27.19
12H	4H	19.04	19.82	19.63	20.42	21.05	21.70	22.48	22.28	23.08	23.71
	6H	19.73	20.39	20.34	21.01	21.65	23.37	24.03	23.98	24.65	25.30
	8H	20.02	20.61	20.63	21.21	21.92	24.35	24.94	24.96	25.55	26.26

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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-7

Test Date: 01/21/2026

Luminaire Tested: 4ASL-2-R630-UNV-OPL-1_600mA

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.05

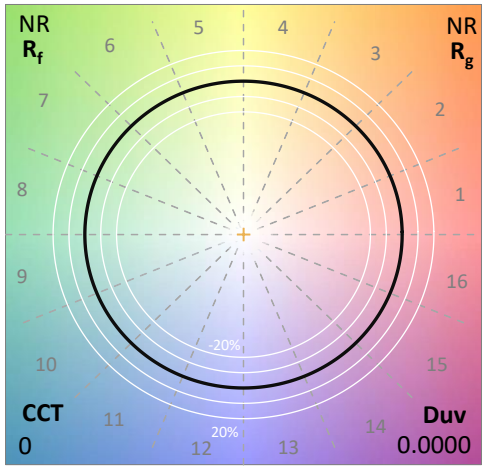
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2511-597-7
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-R630-UNV-OPL-1_600mA**
Description:	2foot 4ASL LED LUMINAIRE WITH OPL LENS AND RED 630NM LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K):	0	CRI (Ra):	0.0		
CIE u':	0.5395	R1:	0.0	R9:	0.0
CIE v':	0.5190	R2:	0.0	R10:	0.0
Duv:	0.0000	R3:	0.0	R11:	0.0
CIE x:	0.7004	R4:	0.0	R12:	0.0
CIE y:	0.2995	R5:	0.0	R13:	0.0
CIE z:	0.0001	R6:	0.0	R14:	0.0
Peak Wavelength (nm):	638	R7:	0.0	R15:	0.0
Dominant Wavelength (nm):	624	R8:	0.0		
Purity:	99.9862				

Rf:	NR
Rg:	NR



Test Conditions

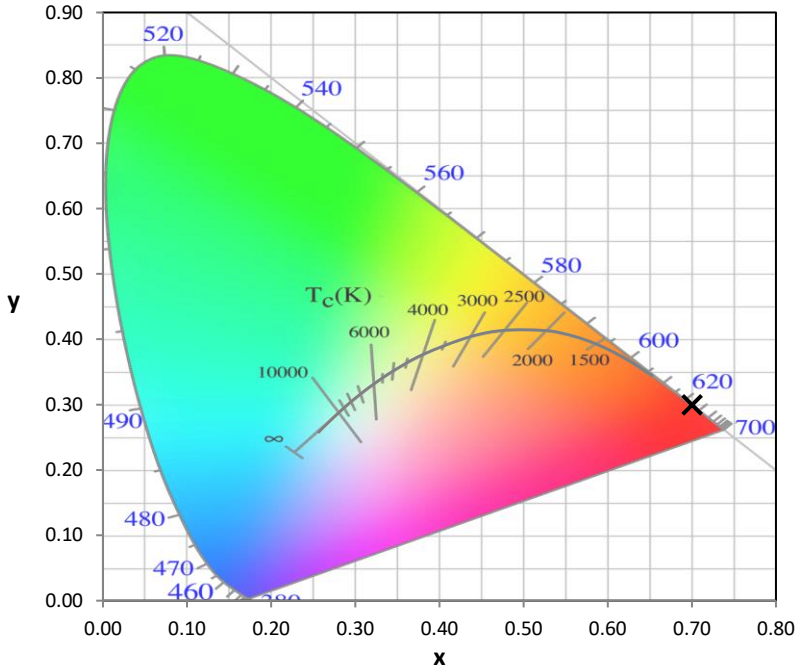
Stabilization Time:	69M
Operation Time:	2H 9M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2511-597-7

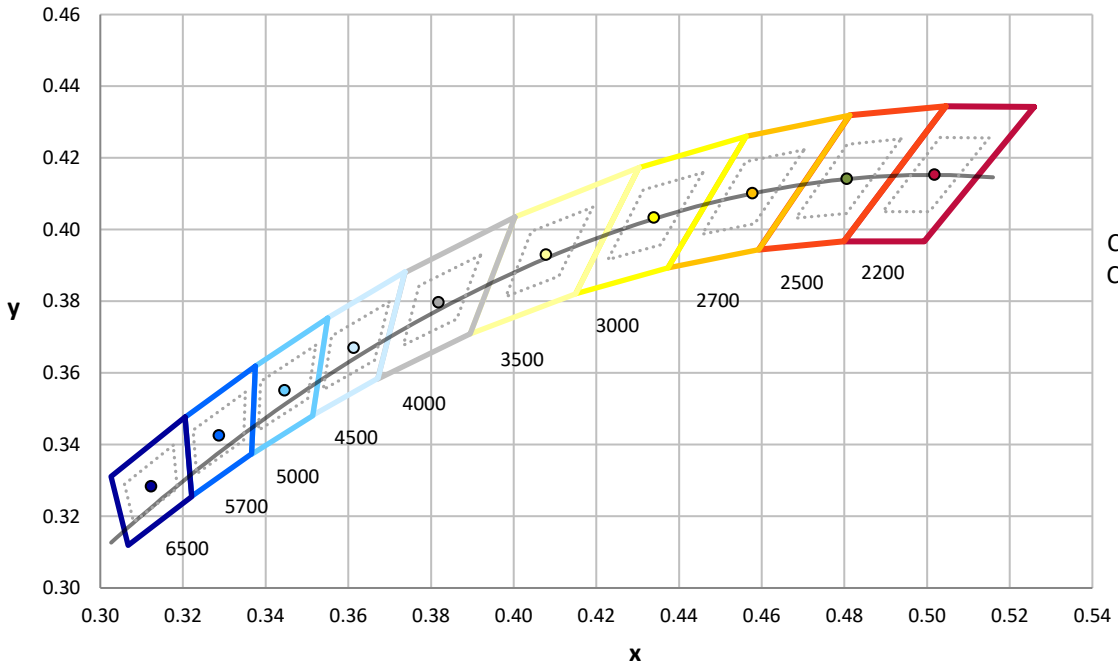
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2511-597-7

CIE 1931 Chromaticity Diagram



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

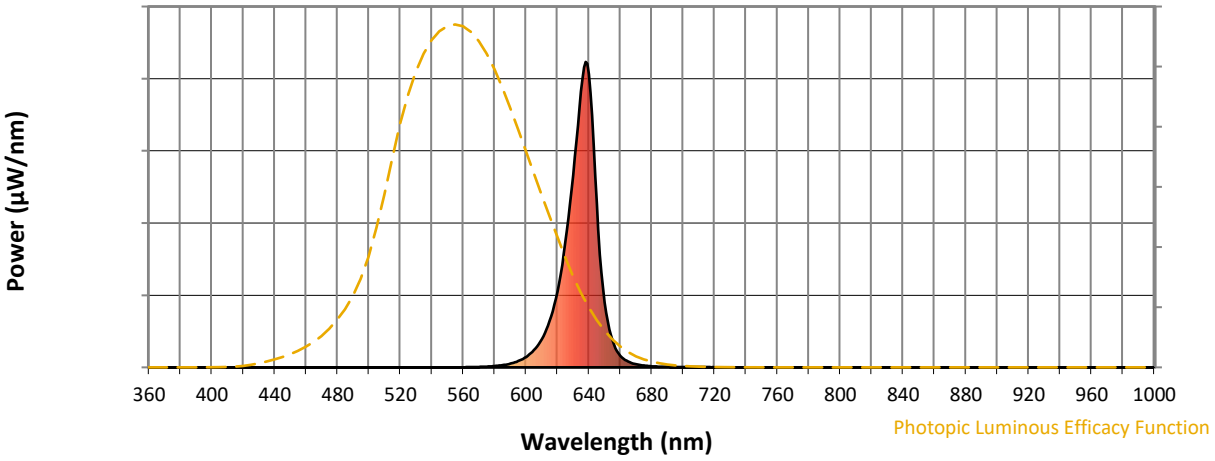


CCT = 0K
CIE x = 0.7004
CIE y = 0.2995
Duv = 0.0000

Point lies outside the range

REPORT NUMBER: SP1-2511-597-7

Photopic Flux vs. Wavelength

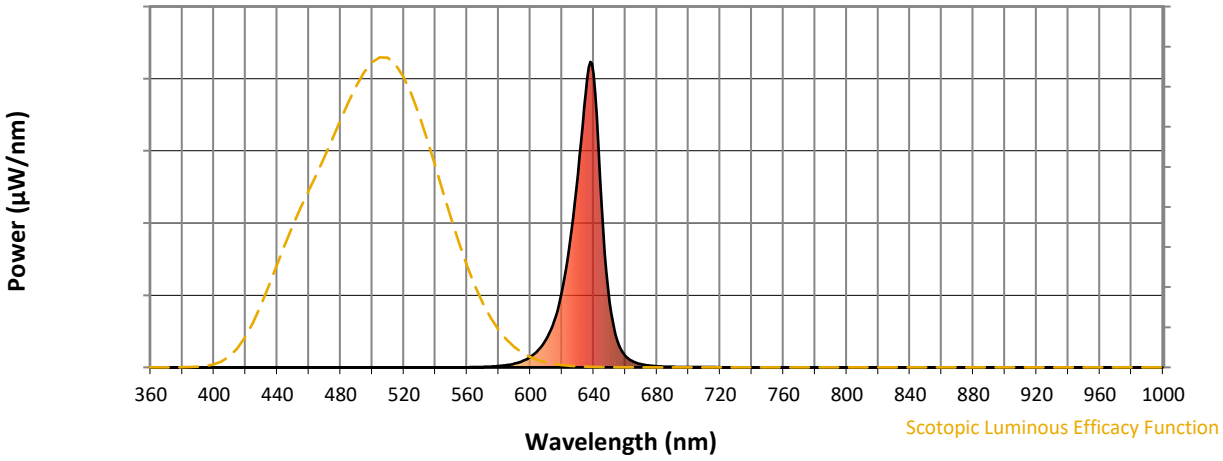


Photopic Lumens: NR

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	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-7

Scotopic Flux vs. Wavelength

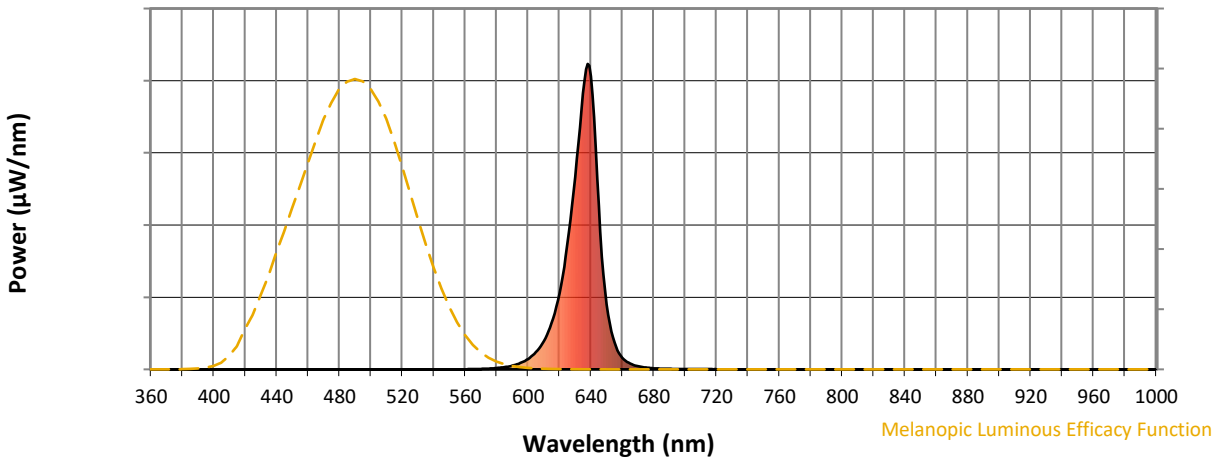


Scotopic Lumens: NR **S/P: 0.05**

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	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 0.02**

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	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

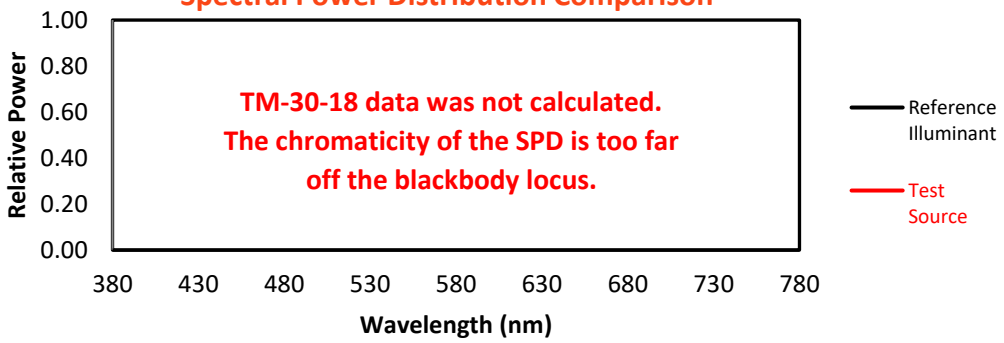
REPORT NUMBER: SP1-2511-597-7

TM-30-18

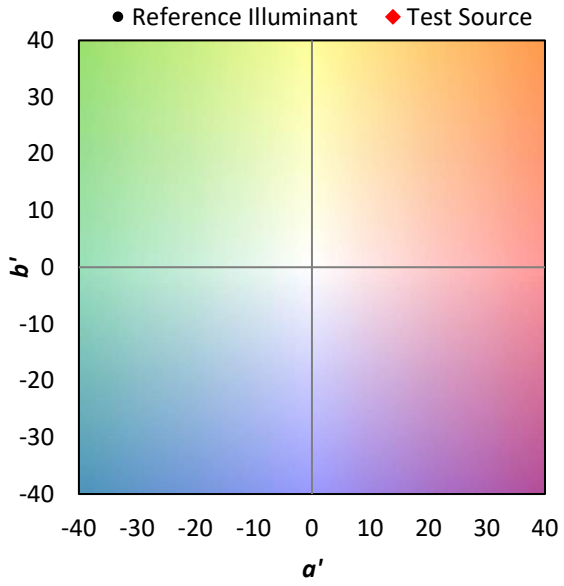
Summary

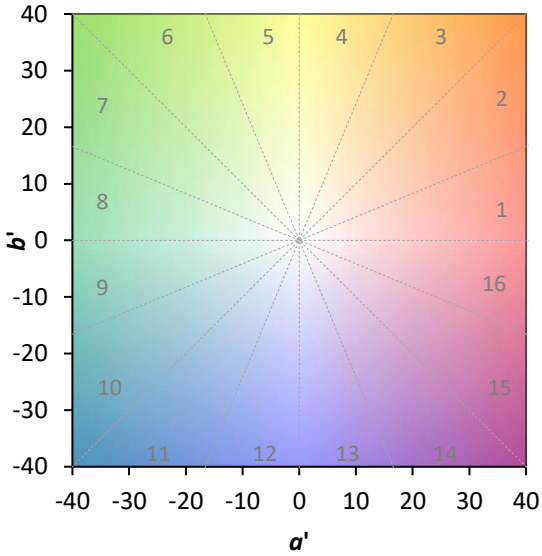
R_f = 0
R_g = 0
CIE R_a = 0.0
R_9 = 0.0

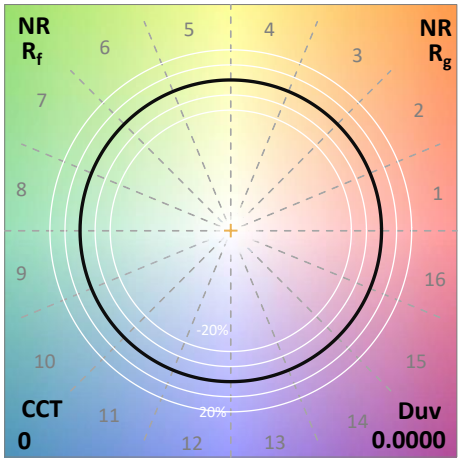
Spectral Power Distribution Comparison

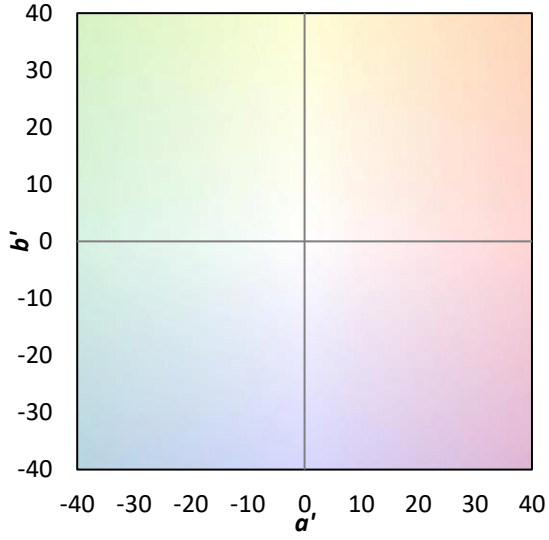


Color Vector Graphics







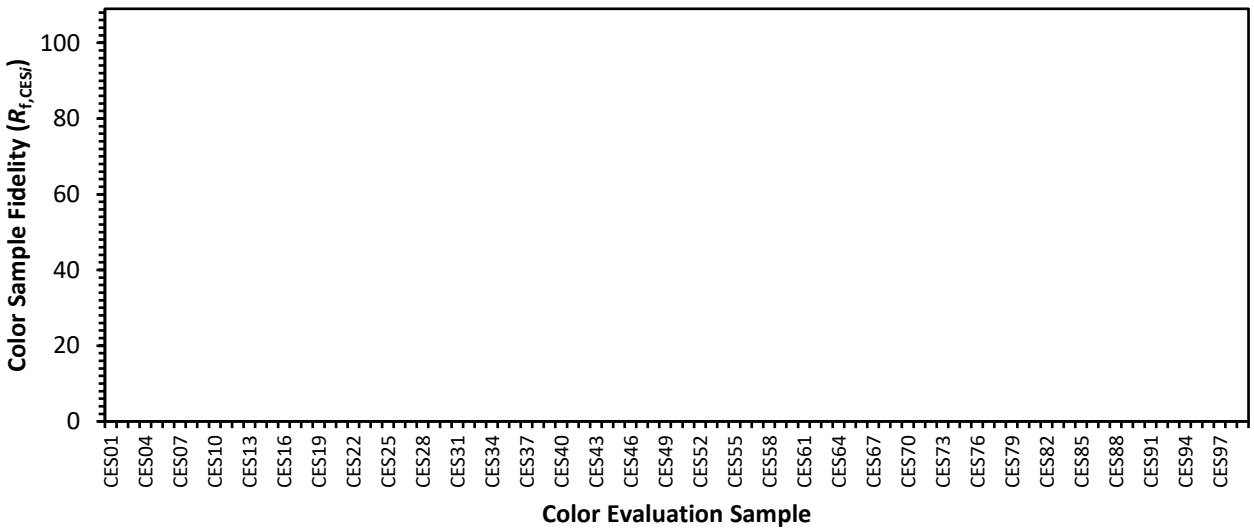


REPORT NUMBER: SP1-2511-597-7

TM-30-18

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

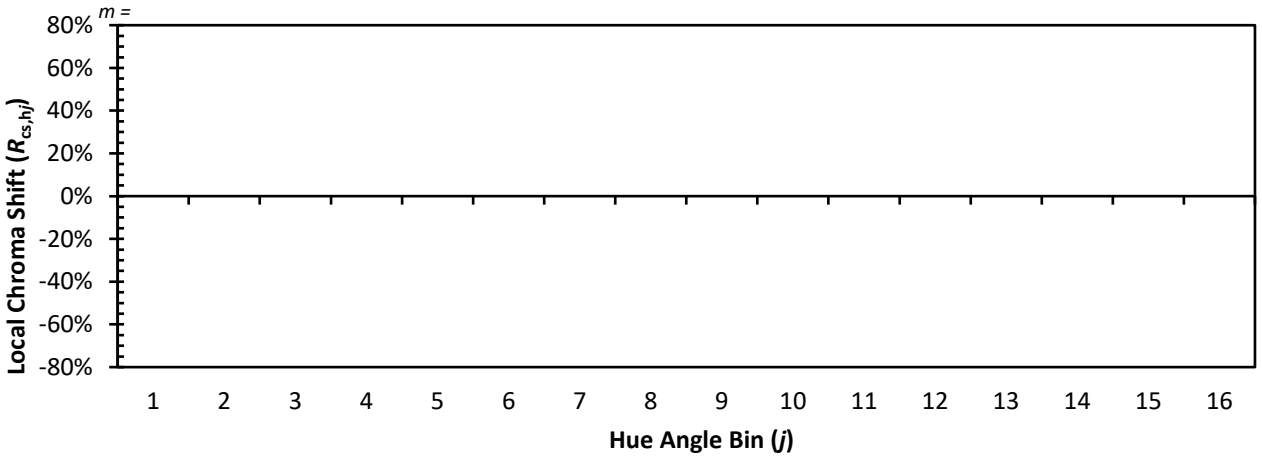
CES01 = 0	CES26 = 0	CES51 = 0	CES76 = 0
CES02 = 0	CES27 = 0	CES52 = 0	CES77 = 0
CES03 = 0	CES28 = 0	CES53 = 0	CES78 = 0
CES04 = 0	CES29 = 0	CES54 = 0	CES79 = 0
CES05 = 0	CES30 = 0	CES55 = 0	CES80 = 0
CES06 = 0	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 0	CES32 = 0	CES57 = 0	CES82 = 0
CES08 = 0	CES33 = 0	CES58 = 0	CES83 = 0
CES09 = 0	CES34 = 0	CES59 = 0	CES84 = 0
CES10 = 0	CES35 = 0	CES60 = 0	CES85 = 0
CES11 = 0	CES36 = 0	CES61 = 0	CES86 = 0
CES12 = 0	CES37 = 0	CES62 = 0	CES87 = 0
CES13 = 0	CES38 = 0	CES63 = 0	CES88 = 0
CES14 = 0	CES39 = 0	CES64 = 0	CES89 = 0
CES15 = 0	CES40 = 0	CES65 = 0	CES90 = 0
CES16 = 0	CES41 = 0	CES66 = 0	CES91 = 0
CES17 = 0	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 0	CES43 = 0	CES68 = 0	CES93 = 0
CES19 = 0	CES44 = 0	CES69 = 0	CES94 = 0
CES20 = 0	CES45 = 0	CES70 = 0	CES95 = 0
CES21 = 0	CES46 = 0	CES71 = 0	CES96 = 0
CES22 = 0	CES47 = 0	CES72 = 0	CES97 = 0
CES23 = 0	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 0	CES49 = 0	CES74 = 0	CES99 = 0
CES25 = 0	CES50 = 0	CES75 = 0	

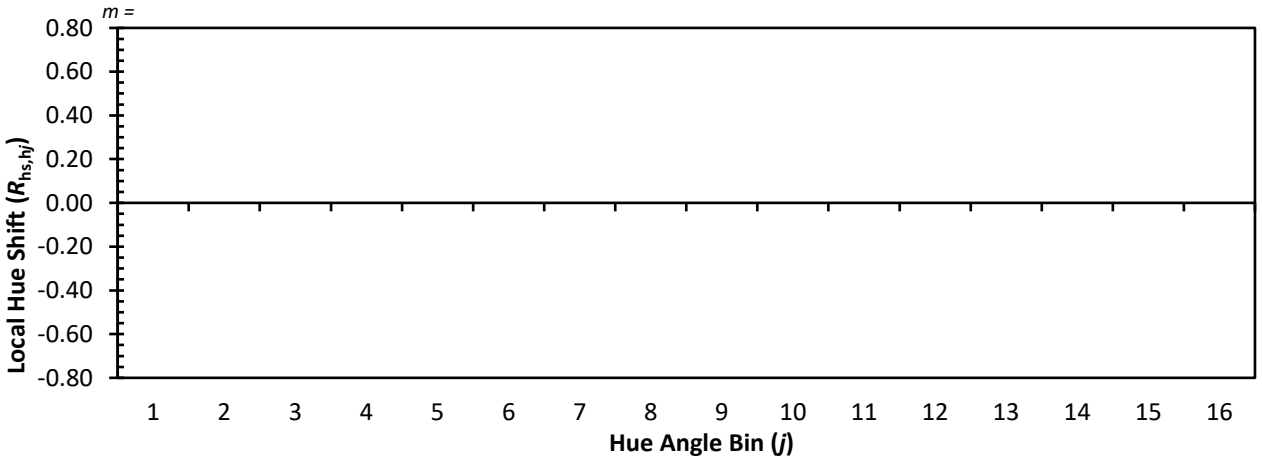


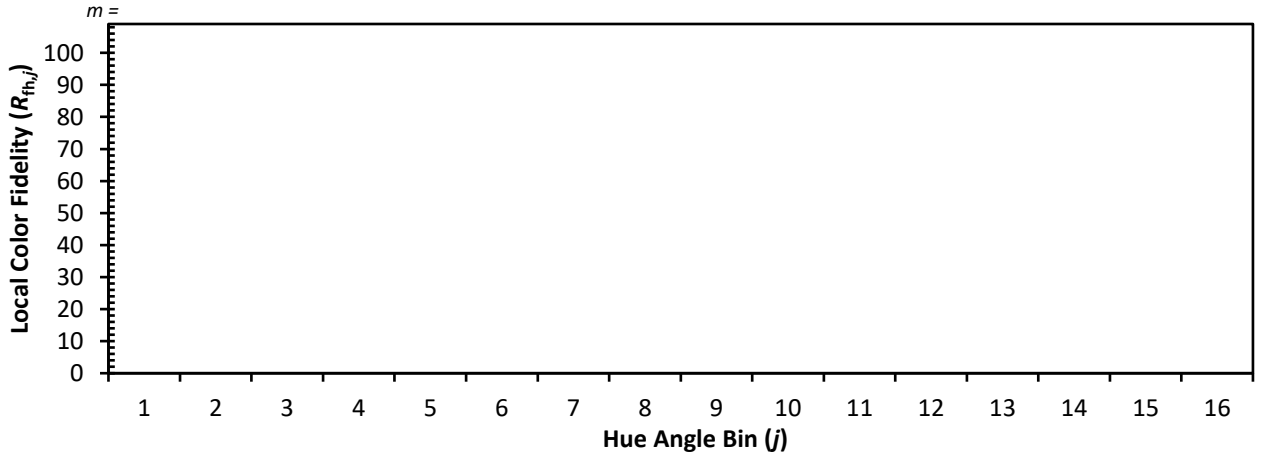
REPORT NUMBER: SP1-2511-597-7

TM-30-18

Color Rendition by Hue-Angle Bin



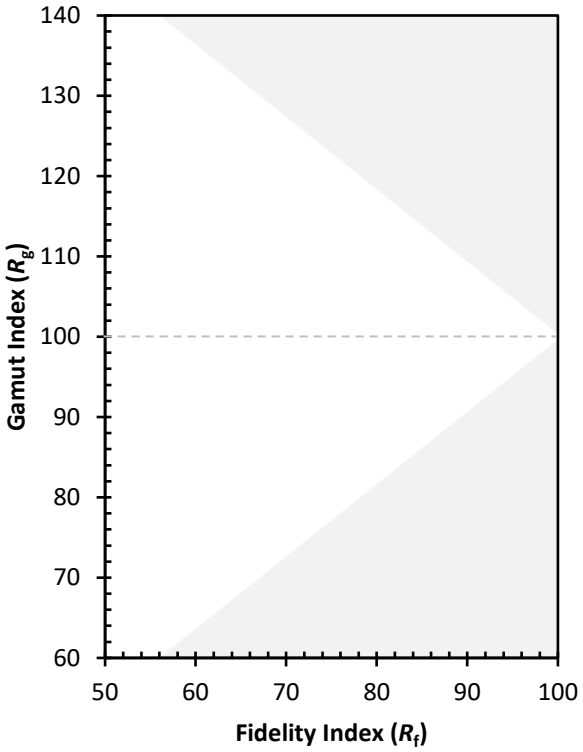


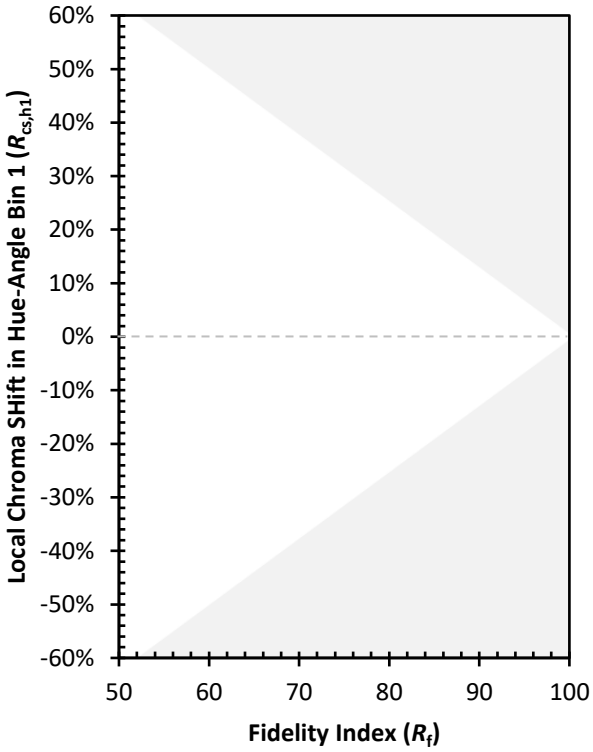


REPORT NUMBER: SP1-2511-597-7

TM-30-18

Measure Comparisons





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