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: P1357230

Luminaire Tested: 4ASL4-30VHE-3-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:	P1357230
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-12)
Test Lab:	INNOVATION CENTER
Issue Date:	2/17/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	FAIL-SAFE
Catalog Number:	4ASL4-30VHE-3-R63-UNV
Description:	4FT 3000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND R63 LEDS 3 ROW
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3110.0 lumens
Efficiency:	N/A
Efficacy:	39.9 lumens/watt
Spacing Criteria (0/90/45):	1.21 / 1.3 / 1.39
Luminous Opening:	Rectangular w/ Sides (W: 0.33' x L: 3.98' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	77.9
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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Scaled Data Report

TEST NUMBER: P1357230
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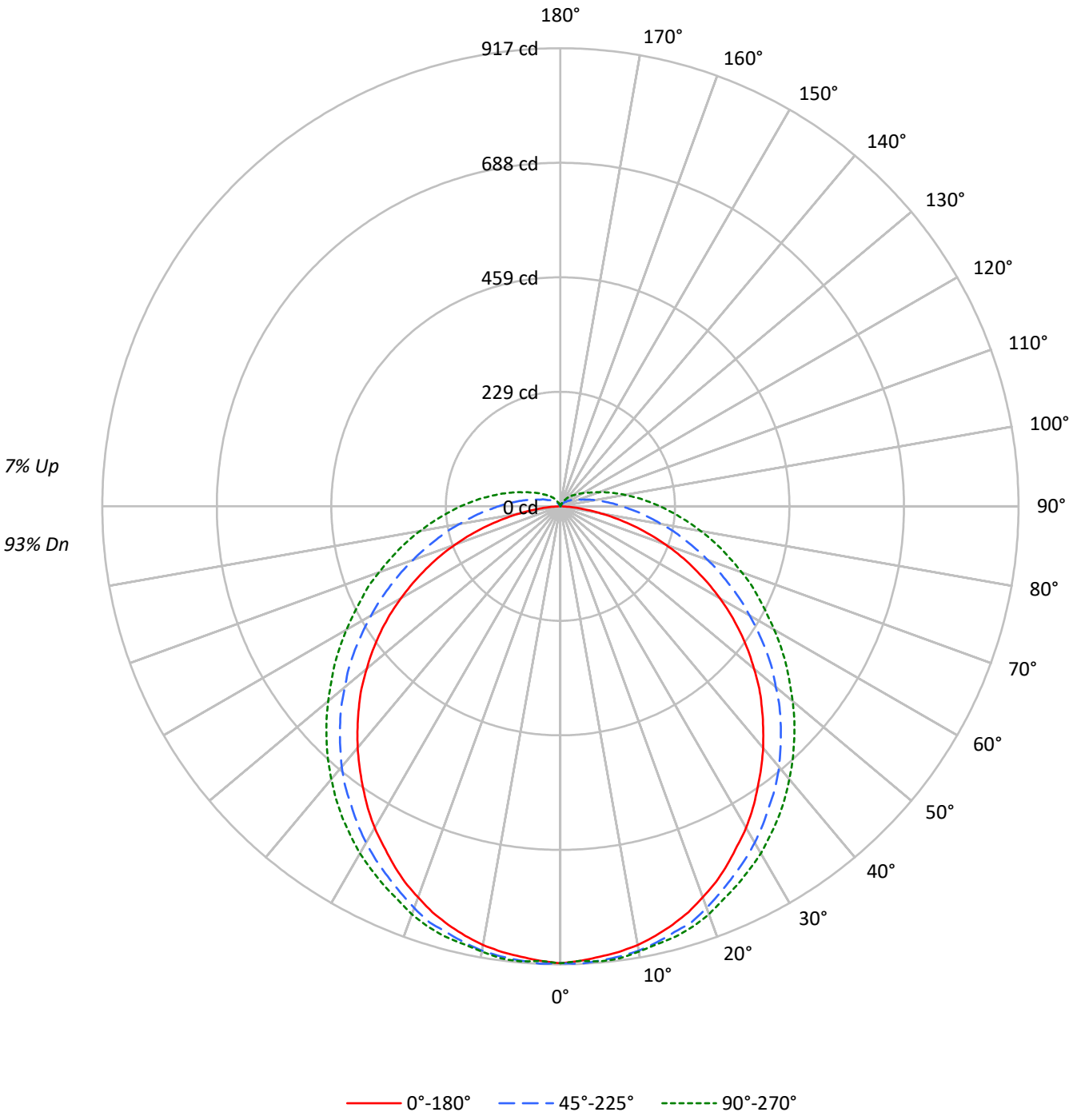
Luminous Intensity Polar Plot



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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	96	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	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	35	29	41	34	28	39	32	28	37	32	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7423	7423	7423
5°	7357	7283	7253
10°	7316	7142	7070
15°	7235	6966	6914
20°	7125	6797	6739
25°	6998	6586	6539
30°	6863	6403	6371
35°	6697	6195	6183
40°	6544	6005	5985
45°	6380	5775	5787
50°	6193	5529	5580
55°	5991	5292	5395
60°	5728	5018	5206
65°	5395	4752	5051
70°	4967	4491	4928
75°	4345	4250	4844
80°	3406	4071	4808
85°	2043	4026	4880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6380 cd/sqm

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TEST NUMBER: P1357230
CATALOG NUMBER: 4ASL4-30VHE-3-R63-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	2.8
10°-20°	249.0	8.0
20°-30°	376.5	12.1
30°-40°	455.9	14.7
40°-50°	478.8	15.4
50°-60°	446.7	14.4
60°-70°	369.2	11.9
70°-80°	265.8	8.5
80°-90°	165.2	5.3
90°-100°	96.8	3.1
100°-110°	55.4	1.8
110°-120°	31.3	1.0
120°-130°	18.0	0.6
130°-140°	9.7	0.3
140°-150°	4.1	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	712.3	22.9
0°-40°	1168.2	37.6
0°-60°	2093.8	67.3
0°-90°	2894.1	93.1
90°-120°	183.4	5.9
90°-150°	215.2	6.9
90°-180°	216.0	6.9
0°-180°	3110.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	915	915	915	915	915	
5°	905	913	913	913	915	86
15°	867	879	882	888	892	244
25°	791	804	818	829	837	364
35°	688	707	730	751	761	431
45°	570	591	624	650	662	440
55°	439	464	502	538	552	393
65°	297	325	375	422	439	294
75°	152	190	257	312	335	161
85°	28	86	162	219	240	35
90°	0	51	124	177	200	1
95°	0	32	93	143	164	0
105°	0	11	51	89	105	0
115°	0	6	30	55	65	0
125°	0	4	19	36	42	0
135°	0	0	11	23	28	0
145°	0	0	6	13	15	0
155°	0	0	0	4	6	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: P1357230
CATALOG NUMBER: 4ASL4-30VHE-3-R63-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	914.7	914.7	914.7	914.7	914.7
2.5°	910.9	916.6	916.6	910.9	910.9
5°	905.2	912.8	912.8	912.8	914.7
7.5°	899.5	909.0	909.0	909.0	912.8
10°	891.9	901.4	903.3	903.3	905.2
12.5°	880.5	891.9	893.8	895.7	897.6
15°	867.2	878.6	882.4	888.1	891.9
17.5°	851.9	865.2	872.9	878.6	882.4
20°	832.9	846.2	855.7	863.3	869.1
22.5°	813.9	825.3	836.7	846.2	851.9
25°	791.1	804.4	817.7	829.1	836.7
27.5°	766.4	781.6	798.7	812.0	819.6
30°	743.5	758.8	777.8	794.9	802.5
32.5°	716.9	734.0	755.0	772.1	781.6
35°	688.4	707.4	730.2	751.2	760.7
37.5°	659.9	678.9	707.4	728.3	737.8
40°	631.3	650.4	680.8	703.6	713.1
42.5°	600.9	619.9	652.3	677.0	688.4
45°	570.5	591.4	623.7	650.4	661.8
47.5°	540.1	561.0	595.2	623.7	635.2
50°	505.8	528.7	562.9	595.2	606.6
52.5°	473.5	496.3	534.4	566.7	578.1
55°	439.3	464.0	502.0	538.2	551.5
57.5°	405.1	429.8	469.7	507.7	523.0
60°	368.9	395.5	437.4	477.3	494.4
62.5°	332.8	361.3	407.0	448.8	465.9
65°	296.7	325.2	374.6	422.2	439.3
67.5°	260.5	291.0	344.2	393.6	414.6
70°	224.4	256.7	313.8	365.1	386.0
72.5°	188.3	222.5	285.2	338.5	359.4
75°	152.1	190.2	256.7	311.9	334.7
77.5°	116.0	159.7	232.0	287.1	310.0
80°	83.7	133.1	205.4	262.4	285.2
82.5°	53.2	106.5	182.6	239.6	262.4
85°	28.5	85.6	161.6	218.7	239.6
87.5°	9.5	66.6	140.7	197.8	218.7
90°	0.0	51.3	123.6	176.9	199.7
92.5°	0.0	39.9	108.4	159.7	180.7
95°	0.0	32.3	93.2	142.6	163.5
97.5°	0.0	26.6	81.8	127.4	146.4
100°	0.0	20.9	70.4	114.1	131.2
102.5°	0.0	17.1	60.9	100.8	117.9
105°	0.0	11.4	51.3	89.4	104.6
107.5°	0.0	9.5	43.7	79.9	93.2
110°	0.0	7.6	39.9	68.5	81.8

TEST NUMBER: P1357230
CATALOG NUMBER: 4ASL4-30VHE-3-R63-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	*5.7*	36.1	60.9	74.2
115°	0.0	*5.7*	30.4	55.1	64.7
117.5°	0.0	*5.7*	26.6	49.4	59.0
120°	0.0	*3.8*	24.7	43.7	53.2
122.5°	0.0	*3.8*	20.9	39.9	47.5
125°	0.0	*3.8*	19.0	36.1	41.8
127.5°	0.0	*1.9*	17.1	32.3	38.0
130°	0.0	*1.9*	15.2	28.5	34.2
132.5°	0.0	*1.9*	13.3	26.6	32.3
135°	0.0	*0.0*	11.4	22.8	28.5
137.5°	0.0	*0.0*	9.5	20.9	24.7
140°	0.0	*0.0*	7.6	17.1	22.8
142.5°	0.0	*0.0*	5.7	15.2	19.0
145°	0.0	*0.0*	5.7	13.3	15.2
147.5°	0.0	*0.0*	3.8	9.5	13.3
150°	0.0	*0.0*	1.9	7.6	9.5
152.5°	0.0	*0.0*	0.0	5.7	7.6
155°	0.0	*0.0*	0.0	3.8	5.7
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	16.30	17.84	16.77	18.29	18.78	18.32	19.86	18.79	20.32	20.80
	3H	17.79	19.20	18.28	19.66	20.19	20.79	22.19	21.27	22.66	23.18
	4H	18.28	19.61	18.78	20.09	20.63	21.98	23.32	22.49	23.80	24.34
	6H	18.55	19.79	19.07	20.29	20.84	23.24	24.48	23.75	24.97	25.53
	8H	18.60	19.79	19.13	20.31	20.87	23.88	25.07	24.41	25.59	26.15
	12H	18.62	19.76	19.15	20.27	20.86	24.59	25.73	25.13	26.25	26.84
4H	2H	17.17	18.51	17.68	18.99	19.53	18.76	20.09	19.26	20.57	21.11
	3H	18.91	20.04	19.42	20.57	21.13	21.45	22.58	21.96	23.11	23.67
	4H	19.51	20.55	20.05	21.09	21.68	22.82	23.85	23.35	24.39	24.98
	6H	19.91	20.83	20.47	21.39	22.00	24.26	25.18	24.81	25.74	26.35
	8H	20.01	20.87	20.57	21.43	22.05	25.01	25.88	25.57	26.44	27.06
	12H	20.05	20.83	20.63	21.42	22.05	25.85	26.63	26.43	27.22	27.85
8H	4H	20.19	21.06	20.76	21.62	22.24	23.03	23.89	23.59	24.46	25.08
	6H	20.77	21.51	21.37	22.11	22.73	24.65	25.38	25.24	25.98	26.61
	8H	20.96	21.62	21.56	22.23	22.87	25.54	26.20	26.14	26.81	27.45
	12H	21.07	21.66	21.68	22.26	22.97	26.56	27.15	27.17	27.75	28.46
12H	4H	20.39	21.17	20.97	21.76	22.39	23.04	23.82	23.62	24.41	25.04
	6H	21.07	21.73	21.67	22.34	22.98	24.68	25.34	25.29	25.96	26.60
	8H	21.35	21.94	21.95	22.54	23.24	25.65	26.24	26.25	26.84	27.54

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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

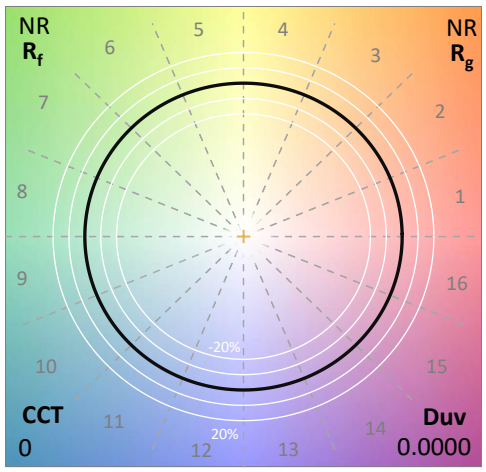
Test Information

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

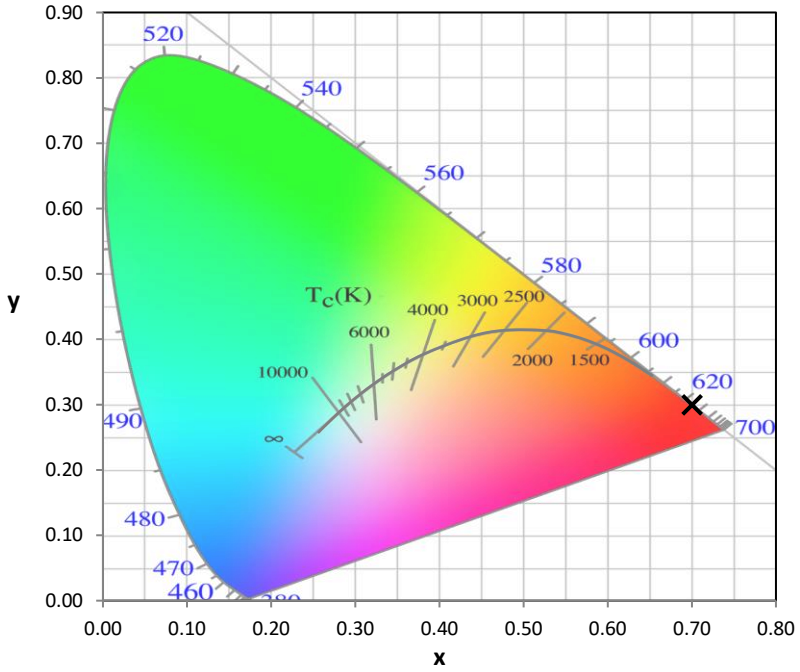
Stabilization Time:	69M
Operation Time:	2H 9M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2511-597-7

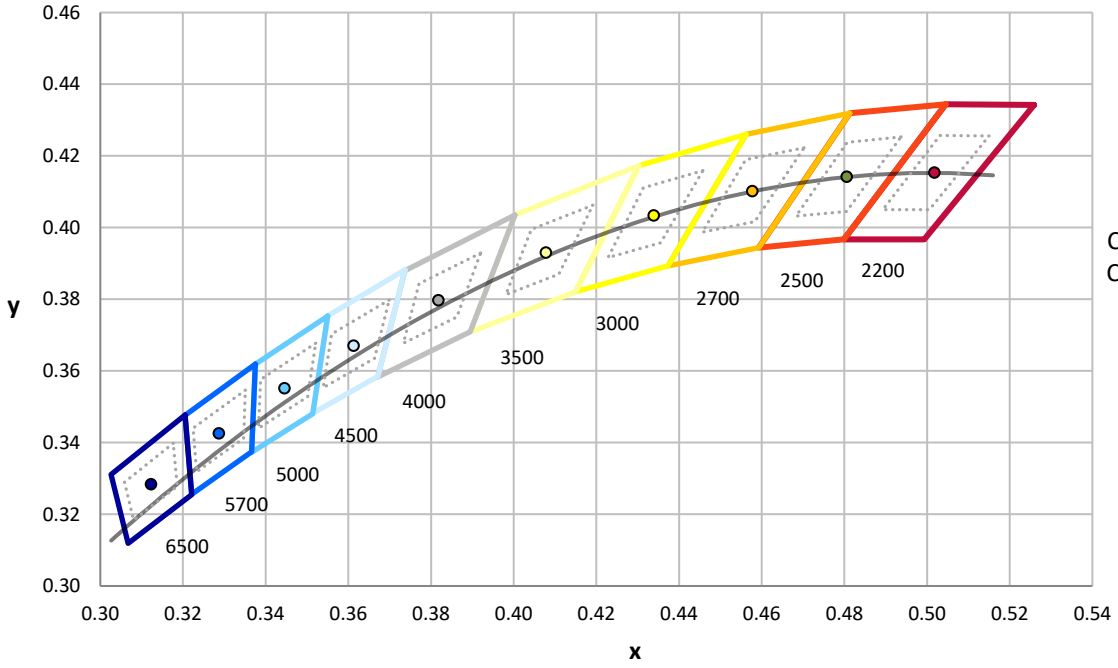
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

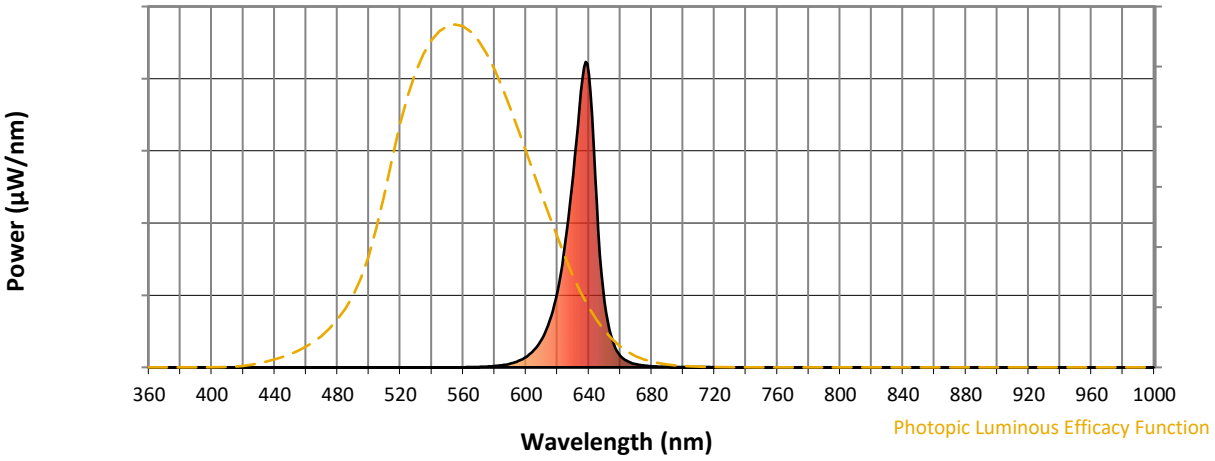


CCT = 0K
CIE x = 0.7004
CIE y = 0.2995
Duv = 0.0000

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			

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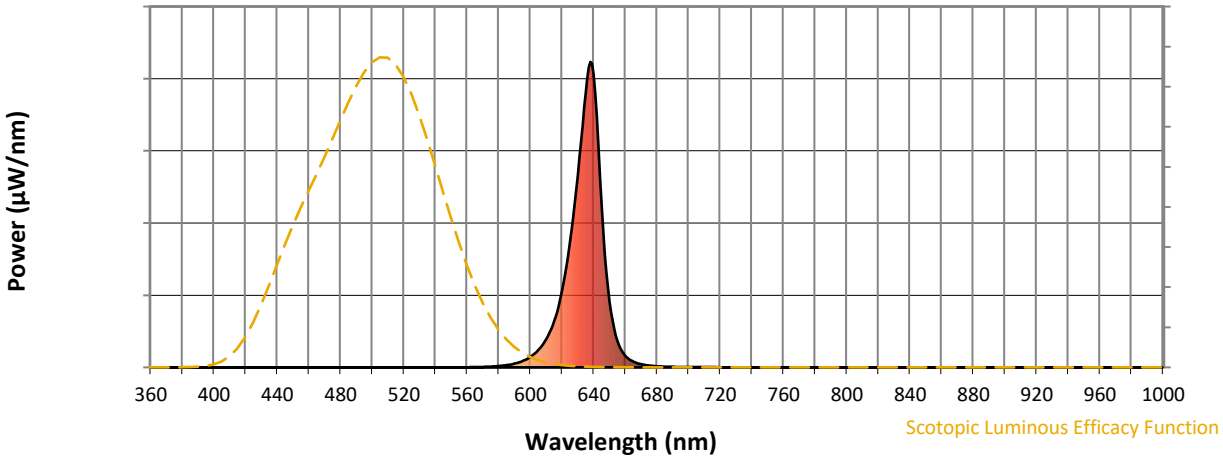
Scotopic Flux vs. Wavelength



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			

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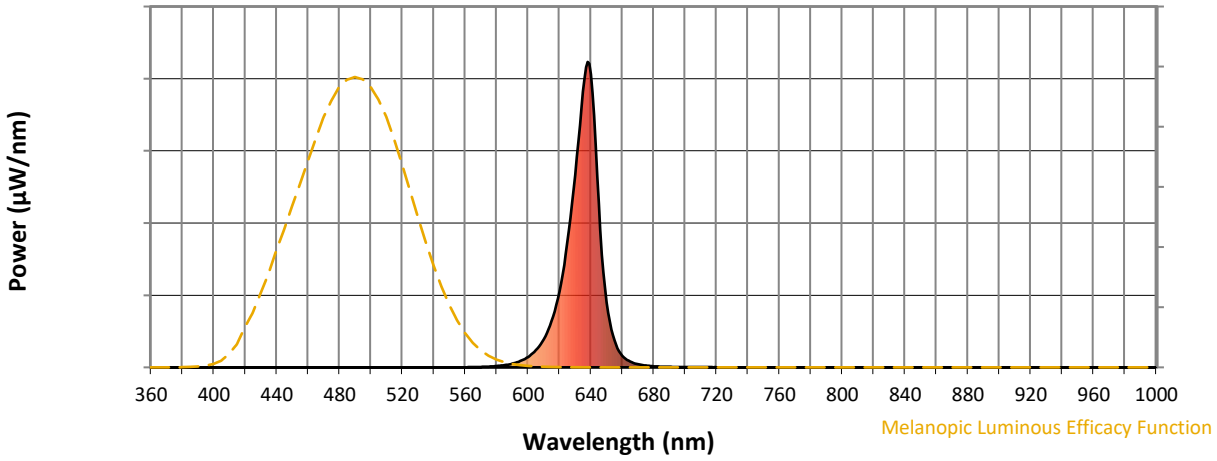
Melanopic Flux vs. Wavelength



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			

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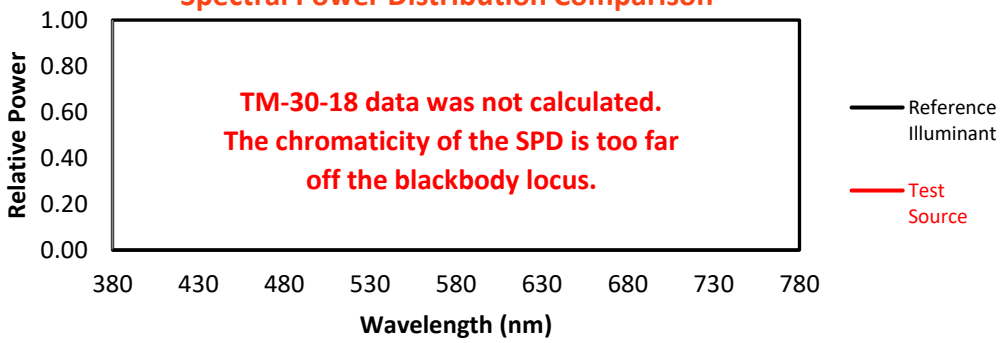
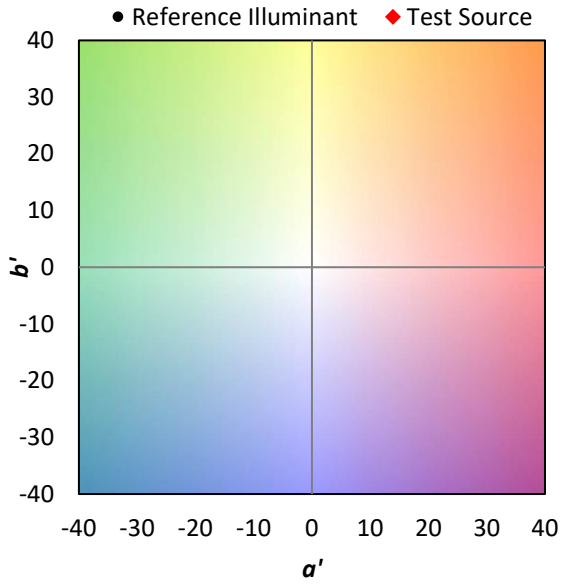
Summary

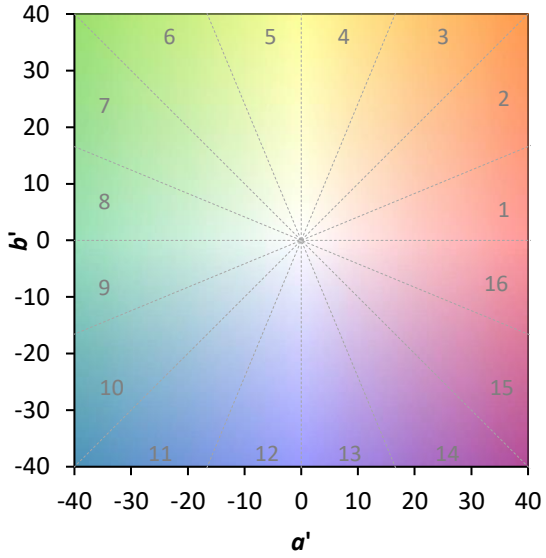
R_f = 0
R_g = 0
CIE R_a = 0.0
R_9 = 0.0

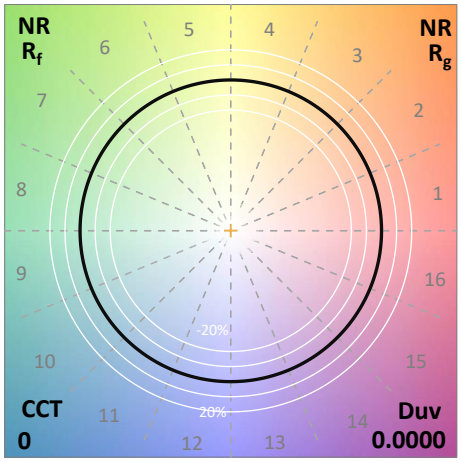
Spectral Power Distribution Comparison

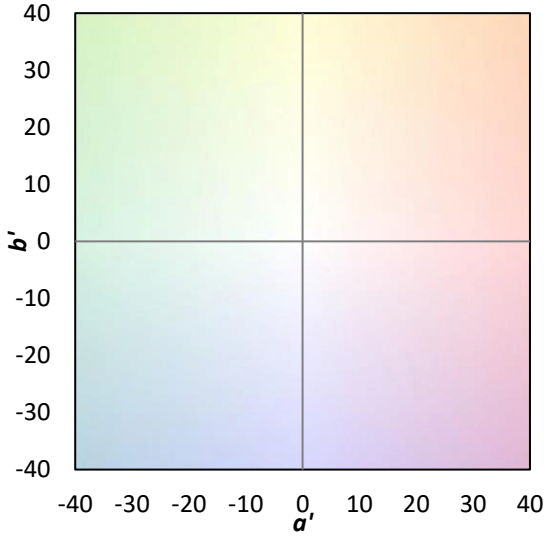


Color Vector Graphics









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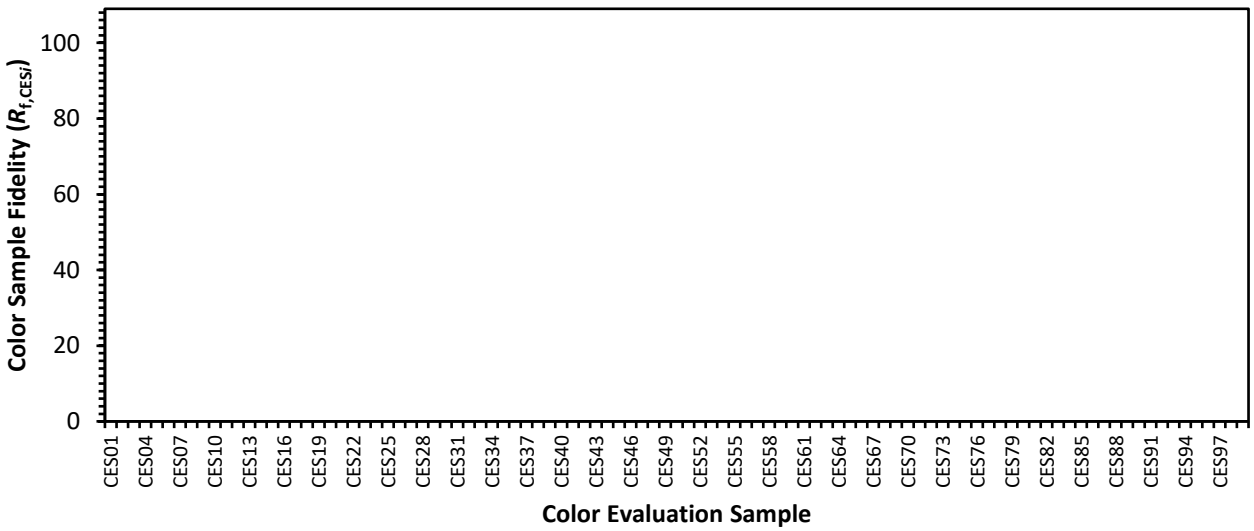
Individual Sample Fidelity Index ($R_{f,i}$)

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	



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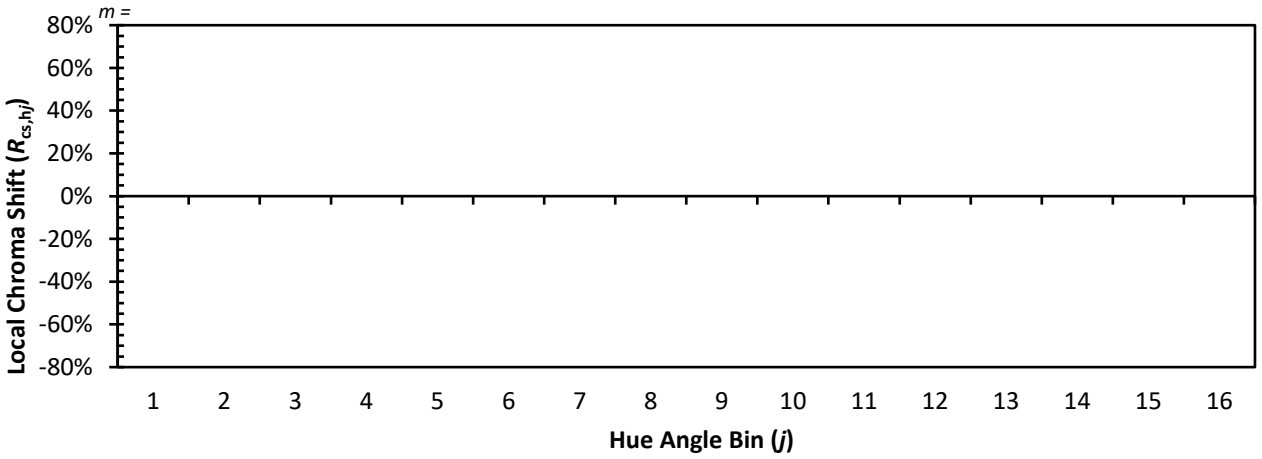
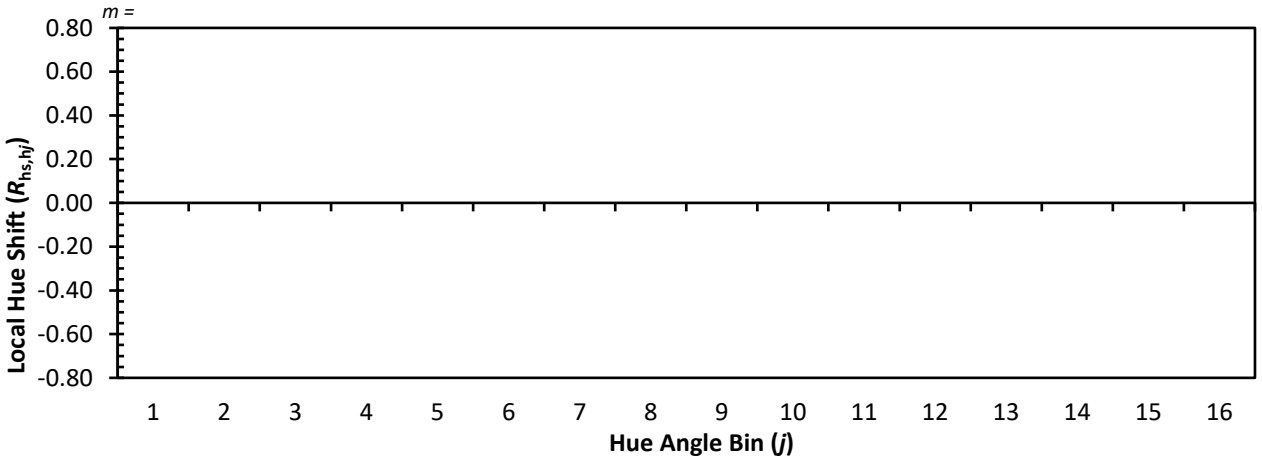
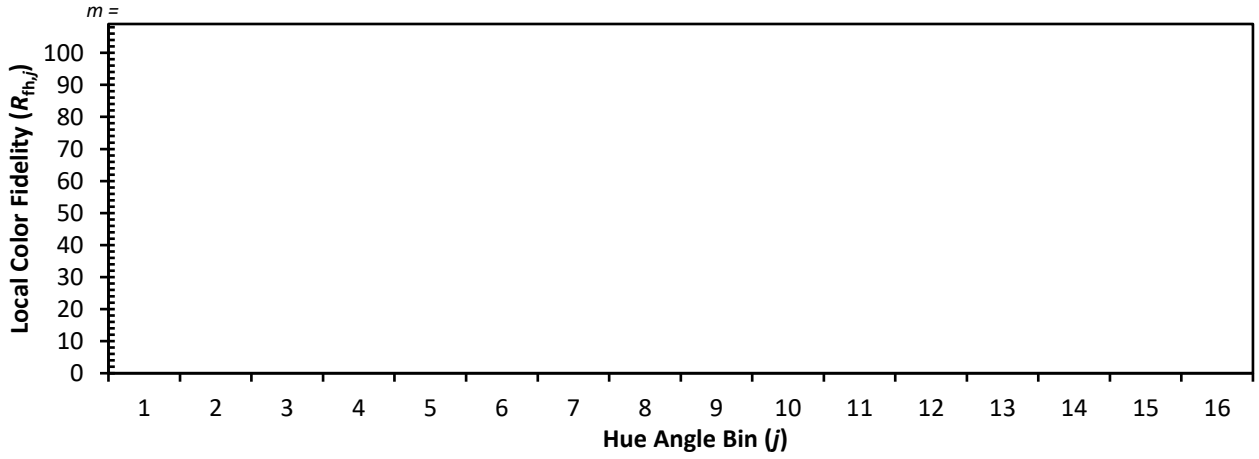
Color Rendition by Hue-Angle Bin







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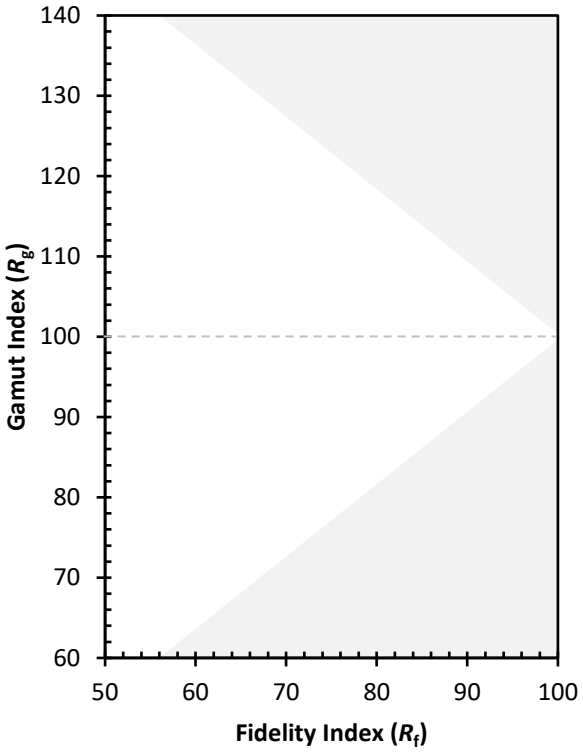
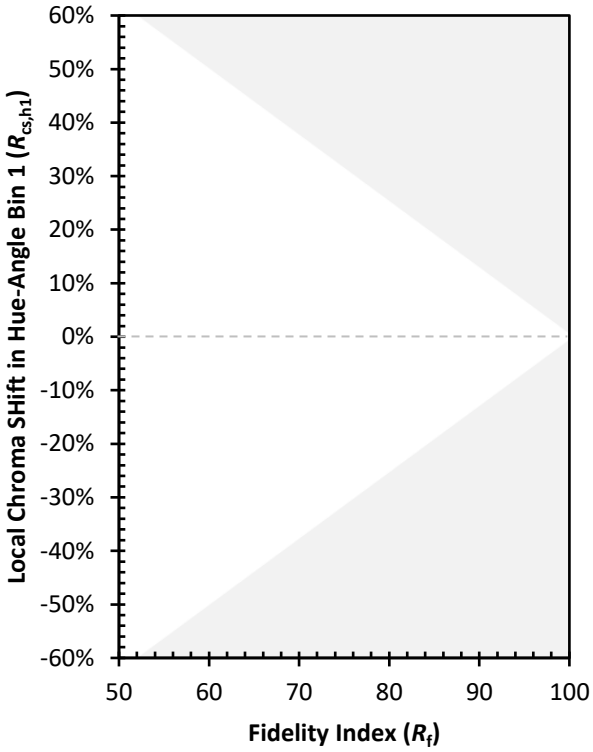
Measure Comparisons





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