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: P1357239

Luminaire Tested: 4ASL4-35VHE-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:	P1357239
	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:	4ASL4-35VHE-3-R63-UNV
Description:	4FT 3500 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:	3624.0 lumens
Efficiency:	N/A
Efficacy:	38.8 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):	93.5
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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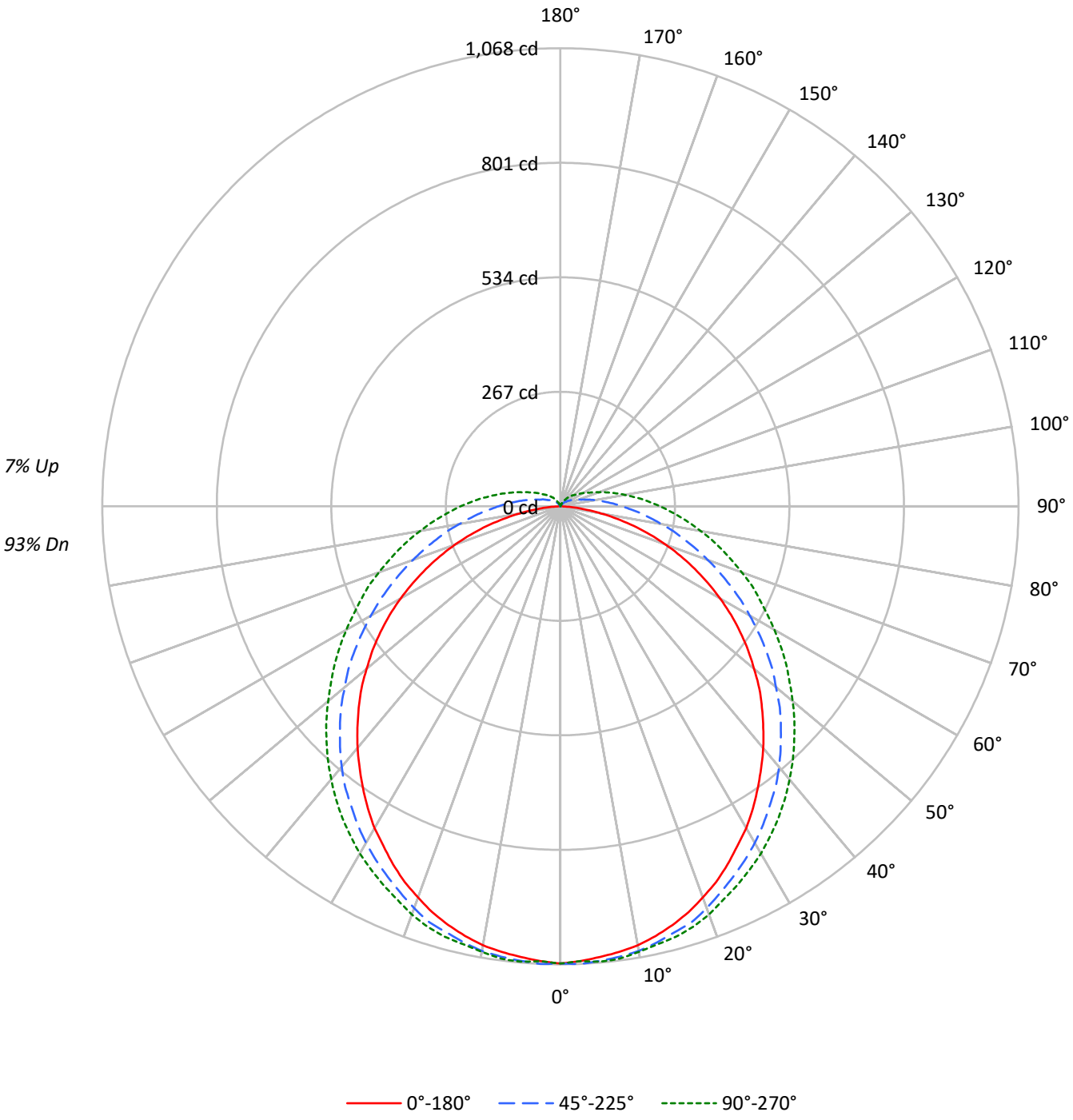
Luminous Intensity Polar Plot



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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°	8650	8650	8650
5°	8573	8487	8452
10°	8525	8322	8238
15°	8431	8118	8057
20°	8303	7921	7853
25°	8154	7675	7620
30°	7998	7461	7423
35°	7804	7219	7205
40°	7626	6998	6975
45°	7435	6730	6743
50°	7216	6442	6503
55°	6982	6168	6286
60°	6675	5847	6067
65°	6285	5538	5885
70°	5788	5232	5742
75°	5064	4954	5645
80°	3968	4742	5603
85°	2379	4694	5686

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 7435 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.1	2.8
10°-20°	290.2	8.0
20°-30°	438.8	12.1
30°-40°	531.3	14.7
40°-50°	558.0	15.4
50°-60°	520.6	14.4
60°-70°	430.2	11.9
70°-80°	309.8	8.5
80°-90°	192.5	5.3
90°-100°	112.8	3.1
100°-110°	64.5	1.8
110°-120°	36.4	1.0
120°-130°	21.0	0.6
130°-140°	11.3	0.3
140°-150°	4.7	0.1
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	830.0	22.9
0°-40°	1361.3	37.6
0°-60°	2439.9	67.3
0°-90°	3372.4	93.1
90°-120°	213.7	5.9
90°-150°	250.7	6.9
90°-180°	252.0	7.0
0°-180°	3624.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1055	1064	1064	1064	1066	100
15°	1010	1024	1028	1035	1039	285
25°	922	937	953	966	975	425
35°	802	824	851	875	886	502
45°	665	689	727	758	771	513
55°	512	541	585	627	643	457
65°	346	379	436	492	512	342
75°	177	222	299	363	390	188
85°	33	100	188	255	279	41
90°	0	60	144	206	233	2
95°	0	38	109	166	191	0
105°	0	13	60	104	122	0
115°	0	7	36	64	75	0
125°	0	4	22	42	49	0
135°	0	0	13	27	33	0
145°	0	0	7	16	18	0
155°	0	0	0	4	7	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1065.9	*1065.9*	1065.9	1065.9	1065.9
2.5°	*1061.4*	*1068.1*	*1068.1*	*1061.4*	*1061.4*
5°	1054.8	*1063.7*	1063.7	1063.7	1065.9
7.5°	1048.1	*1059.2*	1059.2	1059.2	1063.7
10°	1039.3	*1050.4*	1052.6	1052.6	1054.8
12.5°	1026.0	*1039.3*	1041.5	1043.7	1045.9
15°	1010.5	*1023.8*	1028.2	1034.8	1039.3
17.5°	992.7	*1008.3*	1017.1	1023.8	1028.2
20°	970.6	*986.1*	997.2	1006.0	1012.7
22.5°	948.4	*961.7*	975.0	986.1	992.7
25°	921.8	*937.3*	952.9	966.1	975.0
27.5°	893.0	*910.8*	930.7	946.2	955.1
30°	866.4	*884.2*	906.3	926.3	935.1
32.5°	835.4	*855.4*	879.7	899.7	910.8
35°	802.2	*824.3*	850.9	875.3	886.4
37.5°	768.9	*791.1*	824.3	848.7	859.8
40°	735.7	*757.9*	793.3	819.9	831.0
42.5°	700.2	*722.4*	760.1	788.9	802.2
45°	664.8	*689.2*	726.8	757.9	771.1
47.5°	629.3	*653.7*	693.6	726.8	740.1
50°	589.4	*616.0*	655.9	693.6	706.9
52.5°	551.8	*578.4*	622.7	660.4	673.6
55°	511.9	*540.7*	585.0	627.1	642.6
57.5°	472.0	*500.8*	547.3	591.7	609.4
60°	429.9	*460.9*	509.7	556.2	576.1
62.5°	387.8	*421.0*	474.2	523.0	542.9
65°	345.7	*378.9*	436.5	491.9	511.9
67.5°	303.6	*339.0*	401.1	458.7	483.1
70°	261.5	*299.2*	365.6	425.5	449.8
72.5°	219.4	*259.3*	332.4	394.4	418.8
75°	177.3	*221.6*	299.2	363.4	390.0
77.5°	135.2	*186.1*	270.3	334.6	361.2
80°	97.5	*155.1*	239.3	305.8	332.4
82.5°	62.0	*124.1*	212.7	279.2	305.8
85°	33.2	*99.7*	188.4	254.8	279.2
87.5°	11.1	*77.6*	164.0	230.5	254.8
90°	0.0	*59.8*	144.0	206.1	232.7
92.5°	0.0	*46.5*	126.3	186.1	210.5
95°	0.0	*37.7*	108.6	166.2	190.6
97.5°	0.0	*31.0*	95.3	148.5	170.6
100°	0.0	*24.4*	82.0	133.0	152.9
102.5°	0.0	*19.9*	70.9	117.4	137.4
105°	0.0	*13.3*	59.8	104.1	121.9
107.5°	0.0	*11.1*	51.0	93.1	108.6
110°	0.0	*8.9*	46.5	79.8	95.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	*6.6*	42.1	70.9	86.4
115°	0.0	*6.6*	35.5	64.3	75.3
117.5°	0.0	*6.6*	31.0	57.6	68.7
120°	0.0	*4.4*	28.8	51.0	62.0
122.5°	0.0	*4.4*	24.4	46.5	55.4
125°	0.0	*4.4*	22.2	42.1	48.8
127.5°	0.0	*2.2*	19.9	37.7	44.3
130°	0.0	*2.2*	17.7	33.2	39.9
132.5°	0.0	*2.2*	15.5	31.0	37.7
135°	0.0	*0.0*	13.3	26.6	33.2
137.5°	0.0	*0.0*	11.1	24.4	28.8
140°	0.0	*0.0*	8.9	19.9	26.6
142.5°	0.0	*0.0*	6.6	17.7	22.2
145°	0.0	*0.0*	6.6	15.5	17.7
147.5°	0.0	*0.0*	4.4	11.1	15.5
150°	0.0	*0.0*	2.2	8.9	11.1
152.5°	0.0	*0.0*	0.0	6.6	8.9
155°	0.0	*0.0*	0.0	4.4	6.6
157.5°	0.0	*0.0*	0.0	0.0	2.2
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	16.83	18.37	17.30	18.82	19.31	18.86	20.40	19.32	20.85	21.33
	3H	18.33	19.73	18.81	20.19	20.72	21.32	22.72	21.80	23.19	23.71
	4H	18.81	20.14	19.31	20.62	21.16	22.52	23.85	23.02	24.33	24.87
	6H	19.08	20.32	19.60	20.82	21.37	23.77	25.01	24.28	25.50	26.06
	8H	19.13	20.32	19.66	20.84	21.40	24.42	25.60	24.94	26.12	26.68
	12H	19.15	20.29	19.68	20.80	21.39	25.12	26.26	25.66	26.78	27.37
4H	2H	17.71	19.04	18.21	19.52	20.06	19.29	20.62	19.79	21.10	21.64
	3H	19.44	20.58	19.96	21.10	21.66	21.98	23.11	22.49	23.64	24.20
	4H	20.04	21.08	20.58	21.62	22.21	23.35	24.39	23.88	24.92	25.51
	6H	20.44	21.36	21.00	21.92	22.53	24.79	25.71	25.35	26.27	26.88
	8H	20.54	21.40	21.10	21.96	22.58	25.54	26.41	26.10	26.97	27.59
	12H	20.58	21.37	21.16	21.96	22.58	26.38	27.16	26.96	27.75	28.38
8H	4H	20.73	21.59	21.29	22.15	22.77	23.56	24.43	24.12	24.99	25.61
	6H	21.30	22.04	21.90	22.64	23.27	25.18	25.91	25.77	26.51	27.14
	8H	21.49	22.15	22.09	22.76	23.40	26.07	26.73	26.68	27.35	27.98
	12H	21.60	22.19	22.21	22.79	23.50	27.09	27.68	27.70	28.28	28.99
12H	4H	20.92	21.70	21.50	22.29	22.92	23.57	24.36	24.15	24.95	25.57
	6H	21.60	22.26	22.20	22.87	23.51	25.21	25.88	25.82	26.49	27.13
	8H	21.88	22.47	22.48	23.07	23.78	26.18	26.77	26.78	27.37	28.07

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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

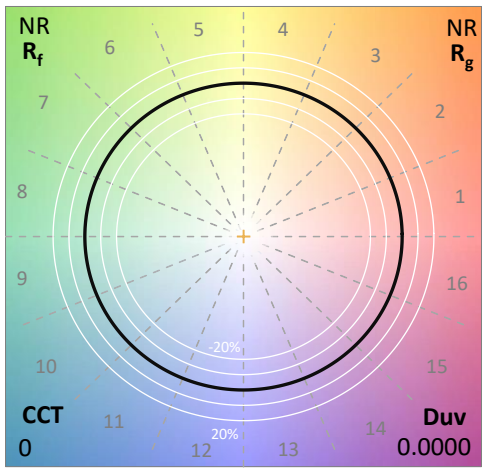
Test Information

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

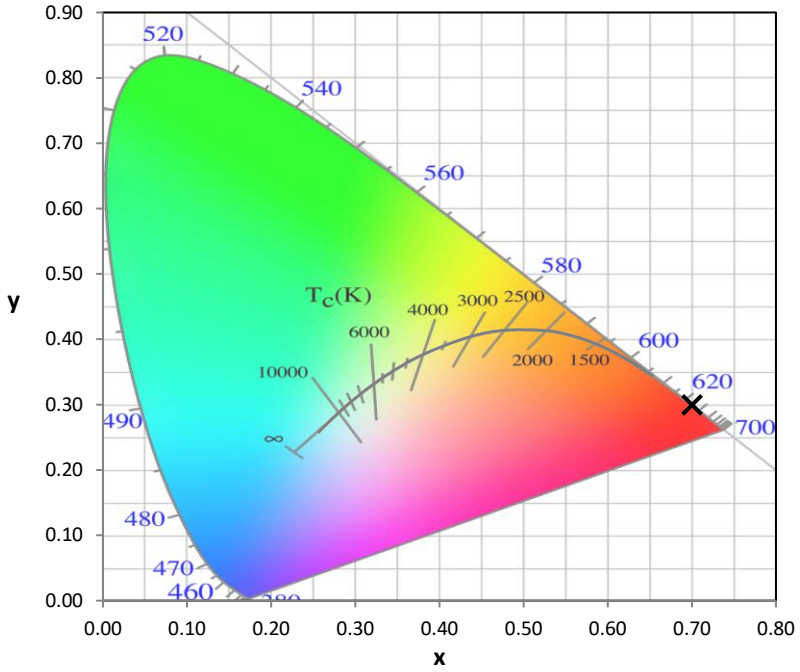
Stabilization Time:	69M
Operation Time:	2H 9M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2511-597-7

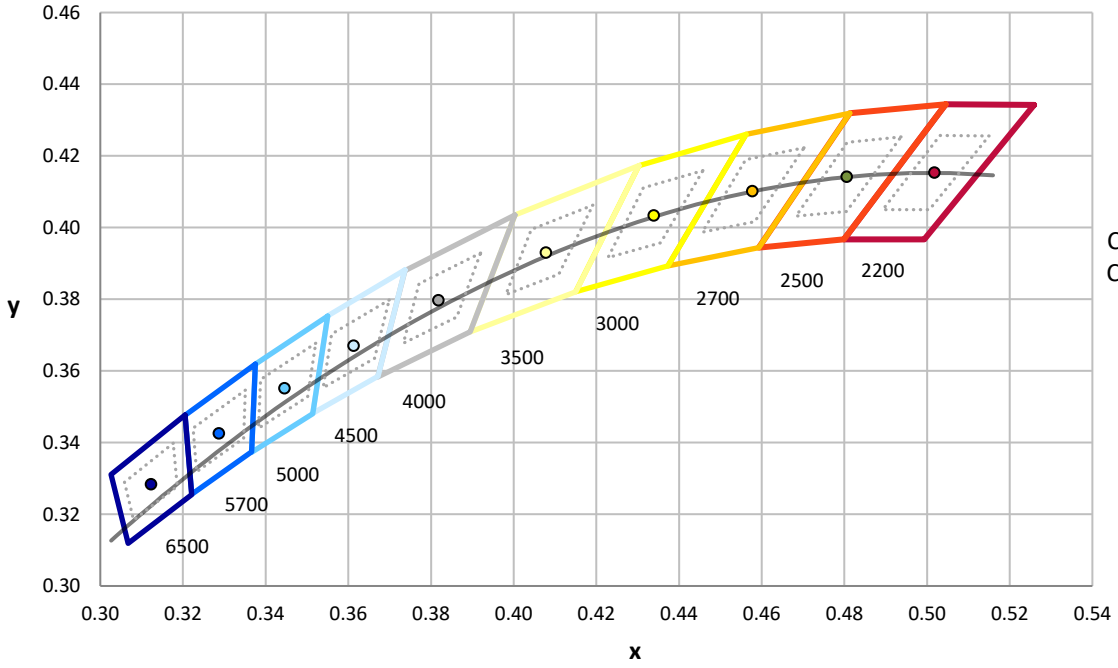
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

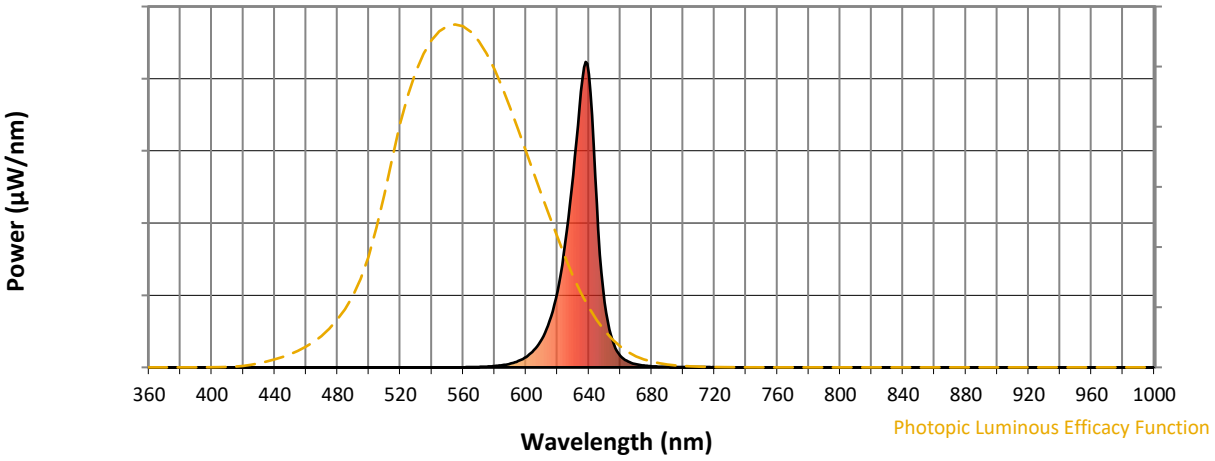


CCT = 0K
CIE x = 0.7004
CIE y = 0.2995
Duv = 0.0000

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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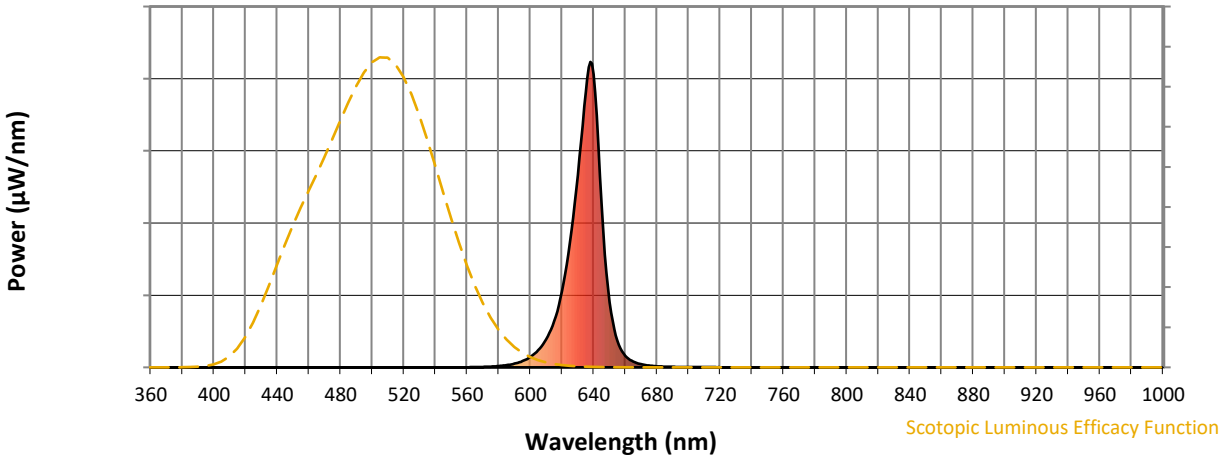
Scotopic Flux vs. Wavelength



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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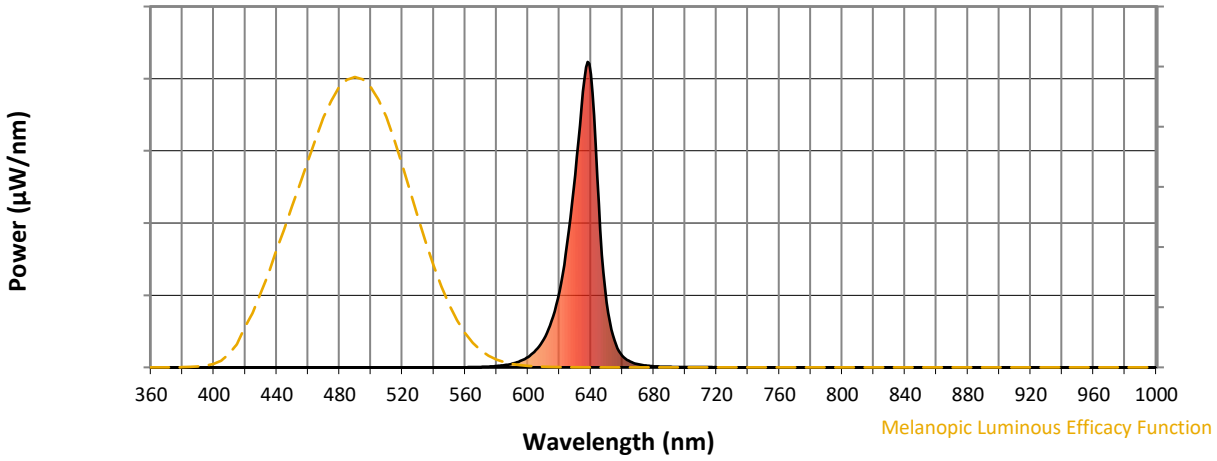
Melanopic Flux vs. Wavelength



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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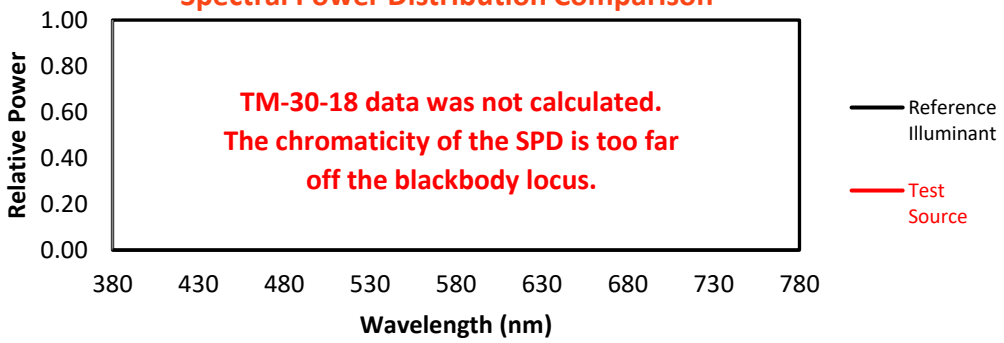
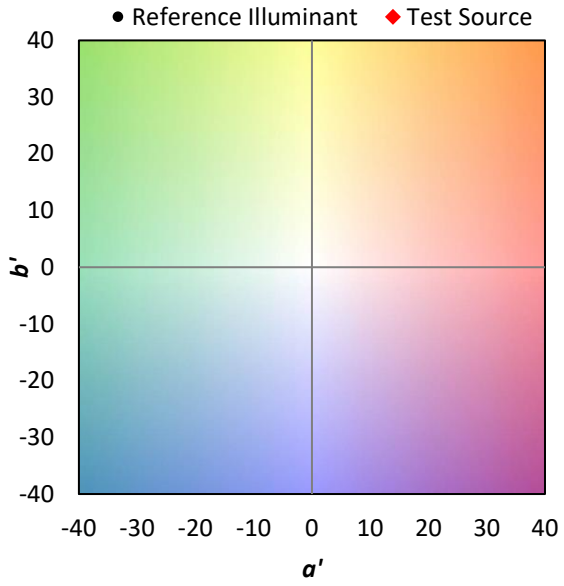
Summary

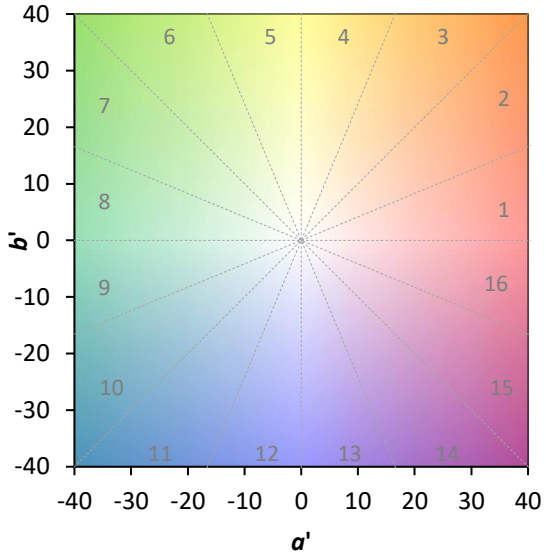
R_f = 0
R_g = 0
CIE R_a = 0.0
R_9 = 0.0

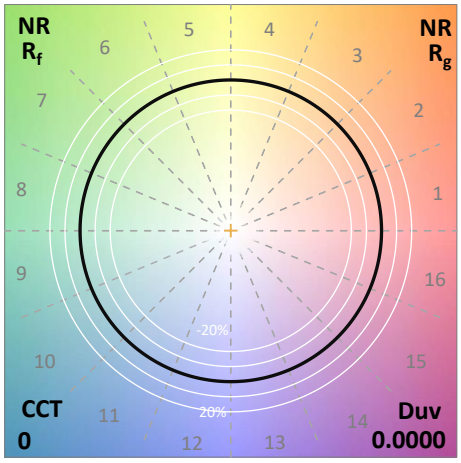
Spectral Power Distribution Comparison

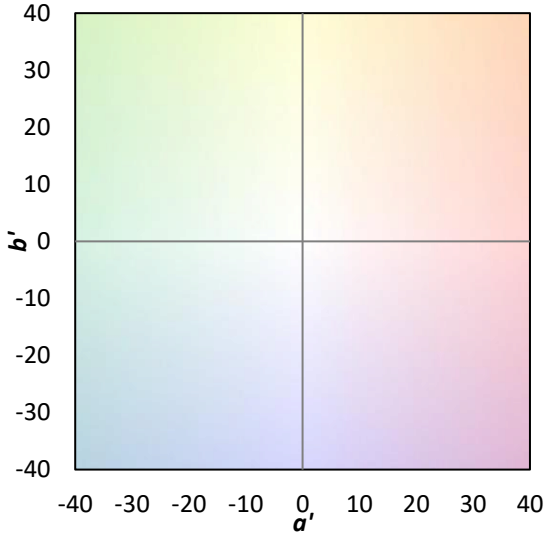


Color Vector Graphics









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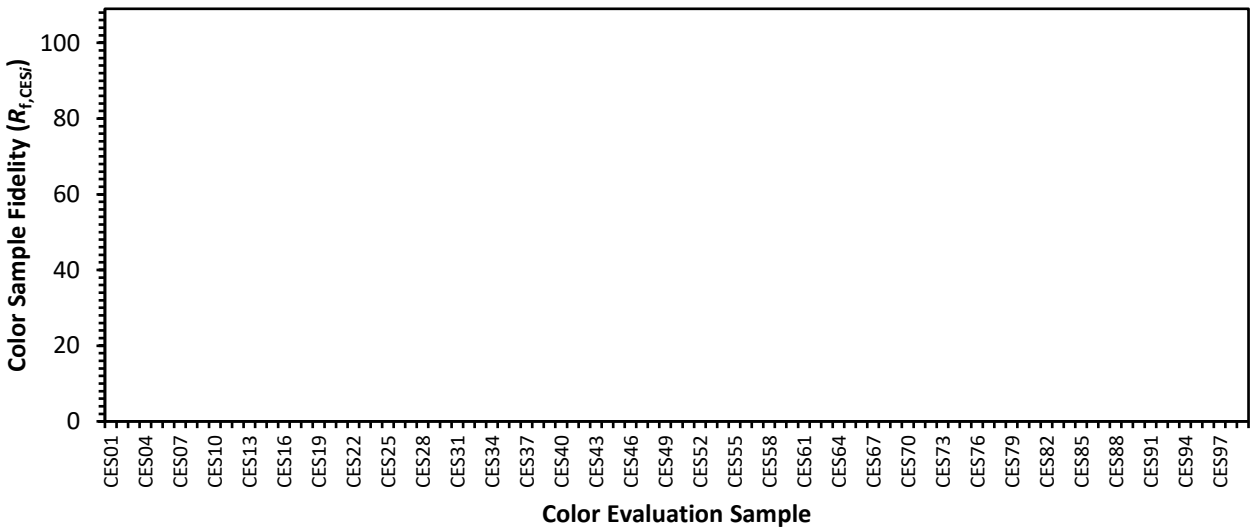
Individual Sample Fidelity Index ($R_{f,i}$)

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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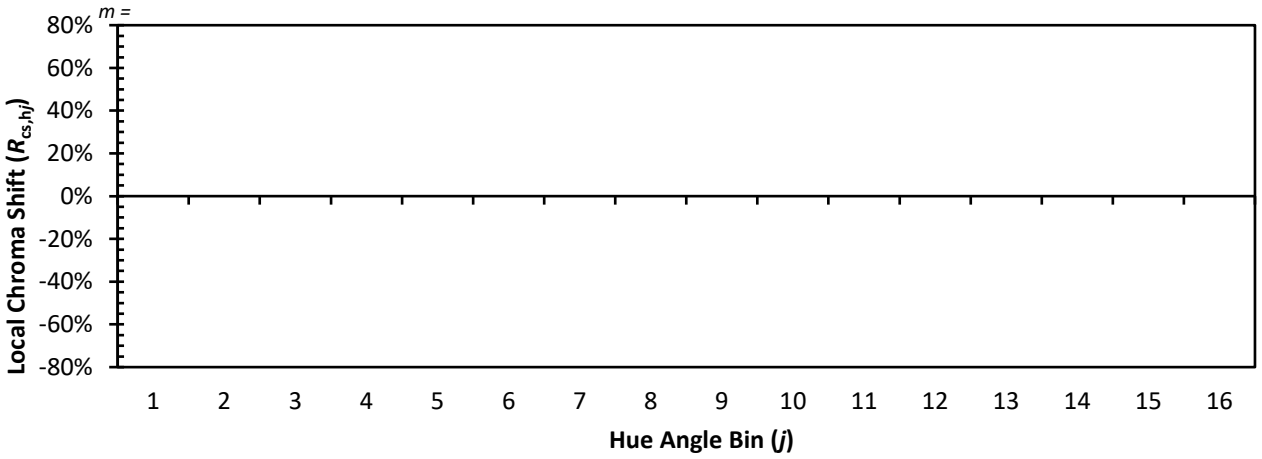
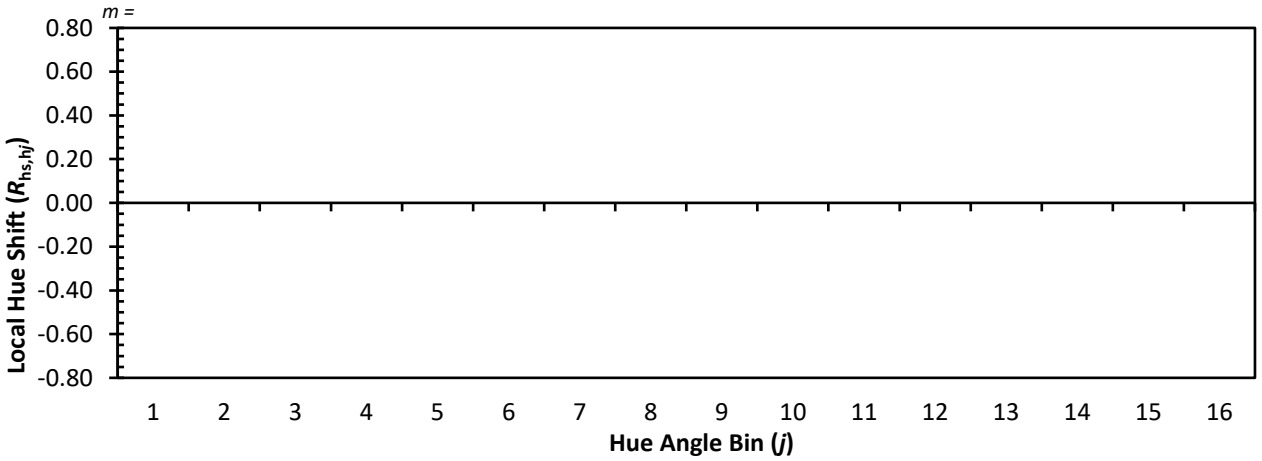
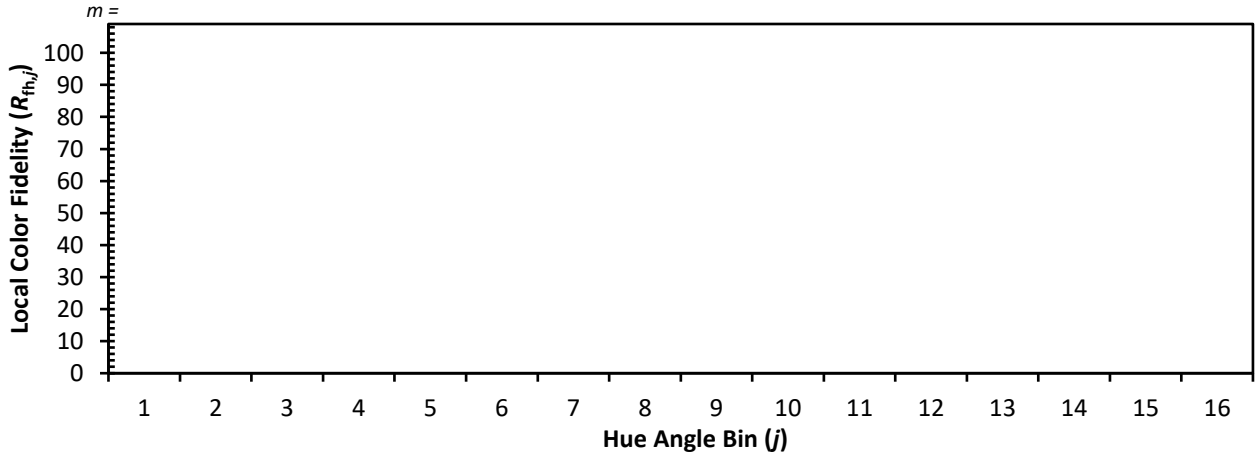
Color Rendition by Hue-Angle Bin







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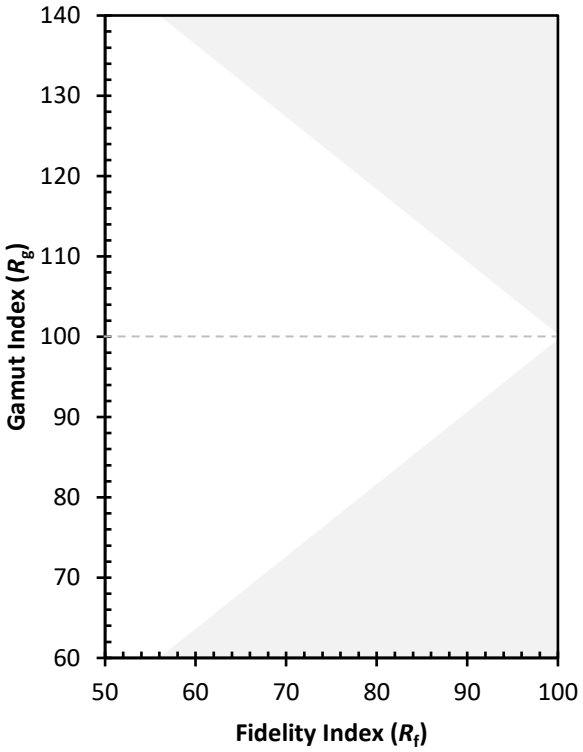
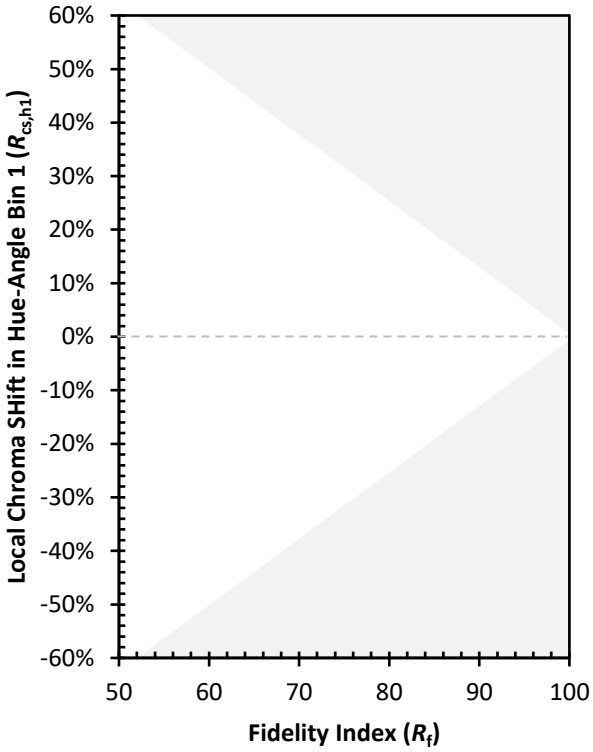
Measure Comparisons





(END OF REPORT)