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: METALUX

Report Number: P1527773

Luminaire Tested: 24CGTX-45-B2750-W2A-4500K

Issue Date: 8/26/2026

Report Generated By 670265710 / DESKTOP-98SHLC4

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

Scaled Data Report

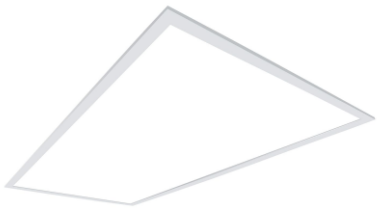
Test Information

Test Method:	LM-79-2019
Report Number:	P1527773
	TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2510-581-13)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	8/26/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	24CGTX-45-B2750-W2A-4500K
Description:	2X4 4500 LUMEN CGTX TROFFER WITH BIO UP LEDS AT 4500K CCT WITH FROSTED SMOOTH L
Light Source:	4500K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4450.0 lumens
Efficiency:	N/A
Efficacy:	113.2 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 1.27 / 1.39
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	39.3
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:	24 FT

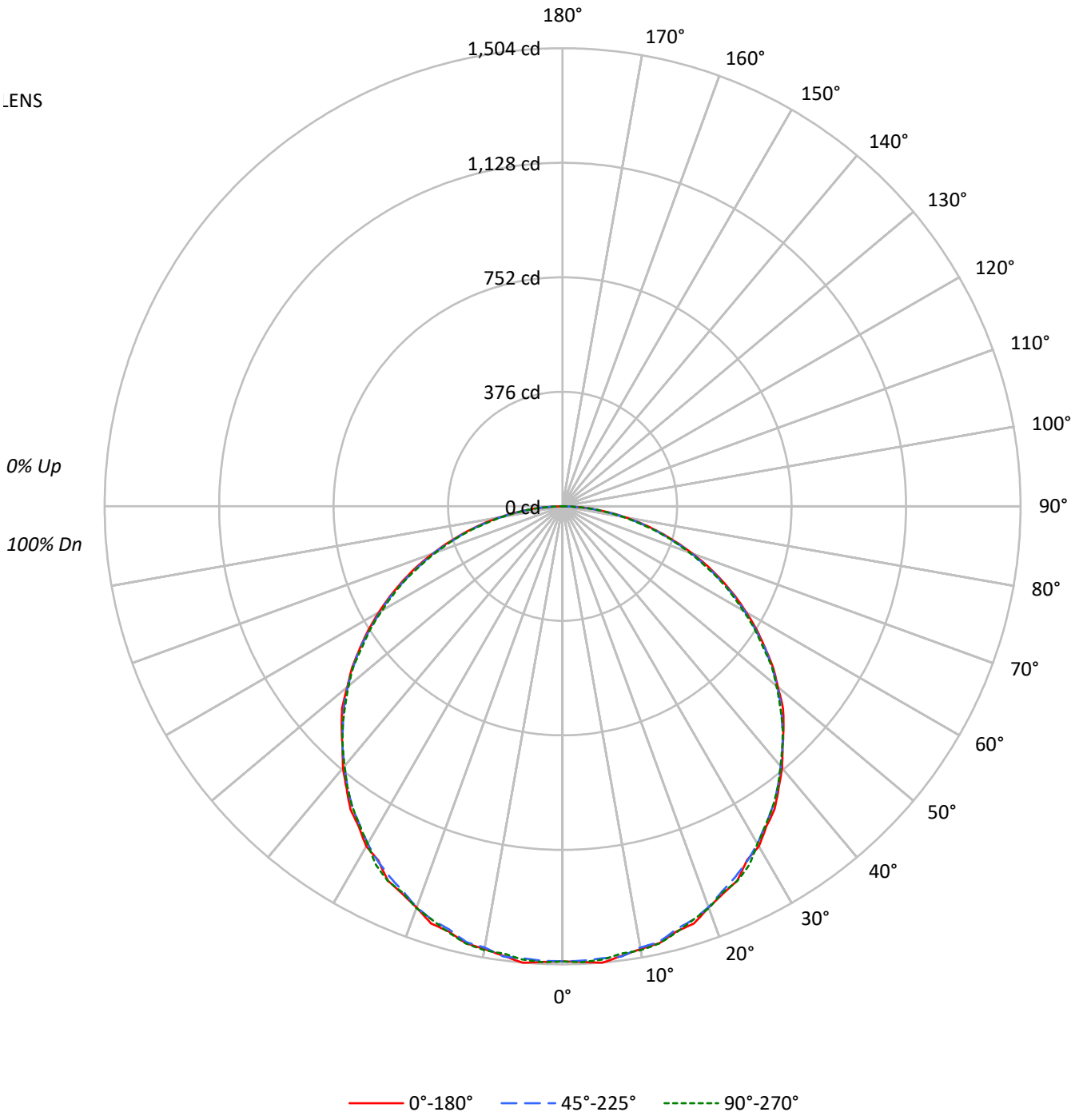


Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1527773
CATALOG NUMBER: 24CGTX-45-B2750-W2A-4500K

Luminous Intensity Polar Plot



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

Scaled Data Report

TEST NUMBER: P1527773
CATALOG NUMBER: 24CGTX-45-B2750-W2A-4500K

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	79	70	63	87	77	69	63	74	67	62	71	65	61	69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2010	2010	2010
5°	2032	2013	2018
10°	2017	2010	2022
15°	2013	2003	2017
20°	2007	2006	2010
25°	2014	1993	2015
30°	2003	1987	1989
35°	1994	1977	1977
40°	1970	1956	1956
45°	1953	1941	1945
50°	1932	1927	1919
55°	1905	1901	1882
60°	1875	1859	1843
65°	1841	1816	1806
70°	1786	1769	1742
75°	1718	1691	1675
80°	1642	1595	1564
85°	1504	1442	1442

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 47.5°
Luminance: 1956 cd/sqm

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

Scaled Data Report

TEST NUMBER: P1527773
CATALOG NUMBER: 24CGTX-45-B2750-W2A-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	3.2
10°-20°	407.9	9.2
20°-30°	620.8	14.0
30°-40°	753.4	16.9
40°-50°	788.4	17.7
50°-60°	722.5	16.2
60°-70°	564.9	12.7
70°-80°	343.9	7.7
80°-90°	106.3	2.4
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°-30°	1170.5	26.3
0°-40°	1923.9	43.2
0°-60°	3434.8	77.2
0°-90°	4450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1504	1490	1490	1488	1494	142
15°	1445	1440	1438	1443	1448	409
25°	1357	1350	1342	1346	1358	622
35°	1214	1202	1204	1200	1204	757
45°	1026	1021	1020	1024	1022	792
55°	812	809	810	802	802	727
65°	578	575	570	567	567	572
75°	330	330	325	321	322	350
85°	97	96	93	91	93	109
90°	0	0	0	0	0	

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

Scaled Data Report

TEST NUMBER: P1527773
CATALOG NUMBER: 24CGTX-45-B2750-W2A-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*1494.1*	1494.1	1494.1	1494.1	1494.1
2.5°	*1497.1*	1501.1	1493.1	1491.1	1498.1
5°	*1504.2*	*1490.1*	*1490.1*	*1488.1*	*1494.1*
7.5°	*1488.1*	1485.1	1491.1	1483.1	1481.1
10°	*1476.0*	1466.0	1471.0	1466.0	1480.1
12.5°	*1469.0*	1471.0	1465.0	1465.0	1470.0
15°	*1444.9*	1439.9	1437.9	1442.9	1447.9
17.5°	*1435.9*	1422.8	1423.8	1428.9	1423.8
20°	*1401.7*	1401.7	1400.7	1398.7	1403.7
22.5°	*1376.6*	1373.6	1368.6	1373.6	1372.6
25°	*1356.6*	1349.5	1342.5	1346.5	1357.6
27.5°	*1310.4*	1317.4	1313.4	1310.4	1327.4
30°	*1289.3*	1286.3	1279.2	1282.3	1280.2
32.5°	*1246.1*	1246.1	1240.1	1247.1	1241.1
35°	*1214.0*	1201.9	1203.9	1199.9	1203.9
37.5°	*1165.8*	1164.8	1160.8	1162.8	1160.8
40°	*1121.6*	1115.6	1113.6	1114.6	1113.6
42.5°	*1069.4*	1071.4	1069.4	1070.4	1068.4
45°	*1026.2*	1021.2	1020.2	1024.2	1022.2
47.5°	*982.0*	973.0	973.0	970.0	968.0
50°	*922.8*	923.8	920.8	915.8	916.8
52.5°	*871.6*	867.6	866.5	862.5	866.5
55°	*812.3*	809.3	810.3	802.3	802.3
57.5°	*756.1*	754.1	749.1	745.1	747.1
60°	*696.9*	697.9	690.8	689.8	684.8
62.5°	*638.6*	635.6	632.6	627.6	626.6
65°	*578.4*	575.4	570.3	567.3	567.3
67.5°	*518.1*	511.1	508.1	505.1	502.1
70°	*453.9*	450.8	449.8	445.8	442.8
72.5°	*392.6*	389.6	383.6	382.6	383.6
75°	*330.4*	330.4	325.3	321.3	322.3
77.5°	*271.1*	269.1	266.1	260.1	257.1
80°	*211.9*	208.9	205.8	201.8	201.8
82.5°	*152.6*	149.6	148.6	145.6	146.6
85°	*97.4*	96.4	93.4	91.4	93.4
87.5°	*46.2*	45.2	45.2	45.2	45.2
90°	*0.0*	0.0	0.0	0.0	0.0

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

TEST NUMBER: P1527773
CATALOG NUMBER: 24CGTX-45-B2750-W2A-4500K

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	14.44	16.11	14.81	16.42	16.73	14.36	16.02	14.72	16.34	16.65
	3H	16.38	17.89	16.76	18.21	18.57	16.27	17.78	16.65	18.11	18.47
	4H	17.15	18.57	17.54	18.92	19.29	17.02	18.45	17.42	18.80	19.17
	6H	17.75	19.08	18.16	19.44	19.83	17.60	18.92	18.01	19.28	19.67
	8H	17.96	19.23	18.39	19.62	20.01	17.80	19.06	18.22	19.45	19.85
	12H	18.12	19.33	18.55	19.71	20.14	17.95	19.16	18.38	19.54	19.97
4H	2H	15.10	16.52	15.50	16.87	17.25	15.04	16.46	15.43	16.81	17.18
	3H	17.27	18.47	17.68	18.86	19.26	17.18	18.38	17.59	18.77	19.17
	4H	18.18	19.26	18.61	19.68	20.11	18.07	19.15	18.50	19.56	20.00
	6H	18.92	19.88	19.38	20.32	20.77	18.78	19.73	19.23	20.17	20.62
	8H	19.19	20.08	19.65	20.52	20.99	19.03	19.93	19.49	20.37	20.83
	12H	19.40	20.20	19.88	20.68	21.14	19.23	20.04	19.71	20.51	20.98
8H	4H	18.53	19.42	18.99	19.86	20.33	18.43	19.32	18.89	19.76	20.23
	6H	19.41	20.16	19.91	20.64	21.12	19.28	20.02	19.77	20.51	20.98
	8H	19.76	20.43	20.27	20.94	21.42	19.62	20.29	20.13	20.79	21.28
	12H	20.06	20.65	20.57	21.14	21.70	19.90	20.49	20.41	20.98	21.54
12H	4H	18.57	19.38	19.05	19.85	20.32	18.48	19.28	18.96	19.76	20.23
	6H	19.49	20.16	19.99	20.66	21.15	19.36	20.03	19.86	20.53	21.02
	8H	19.90	20.50	20.41	20.98	21.54	19.76	20.36	20.27	20.84	21.40

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

Metalux

Report Number: SP1-2505-441-7-R2

Test Date: 06/12/2025

Luminaire Tested: 24CGTX-55-B2750-W2A-4500K

Data in this report applies to families of products including 24CGTX

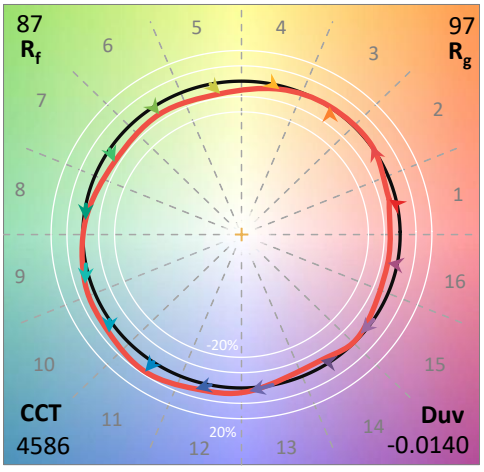
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2505-441-7-R2
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	07/28/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Metalux
Catalog Number:	**24CGTX-55-B2750-W2A-4500K**
Description:	*THIS IS A REVISION OF REPORT SP1-2504-441-7-R2 TO UPDATE THE CATALOG INFORMATION* 2X4 5500 LUMEN CGTX AT 3.0V

Spectral Parameters

CCT (K):	4586	CRI (Ra):	86.0		
CIE u':	0.2254	R1:	90.9	R9:	88.3
CIE v':	0.4753	R2:	86.0	R10:	73.4
Duv:	-0.0140	R3:	84.1	R11:	89.8
CIE x:	0.3529	R4:	88.1	R12:	69.1
CIE y:	0.3308	R5:	89.1	R13:	88.9
CIE z:	0.3163	R6:	80.3	R14:	92.7
Peak Wavelength (nm):	630	R7:	83.3	R15:	91.4
Dominant Wavelength (nm):	637	R8:	86.7		
Purity:	5.105834				
Rf:	86.9				
Rg:	96.7				



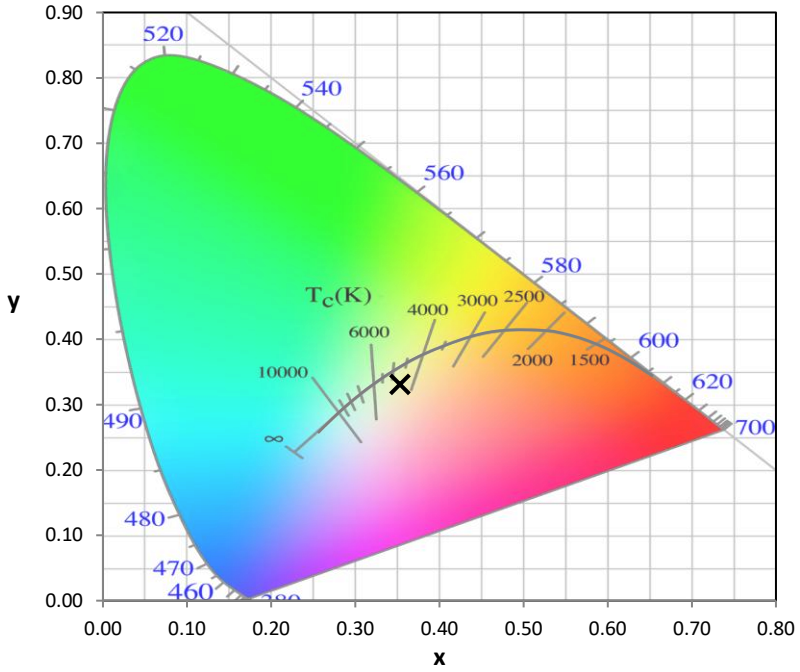
Test Conditions

Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	25.0

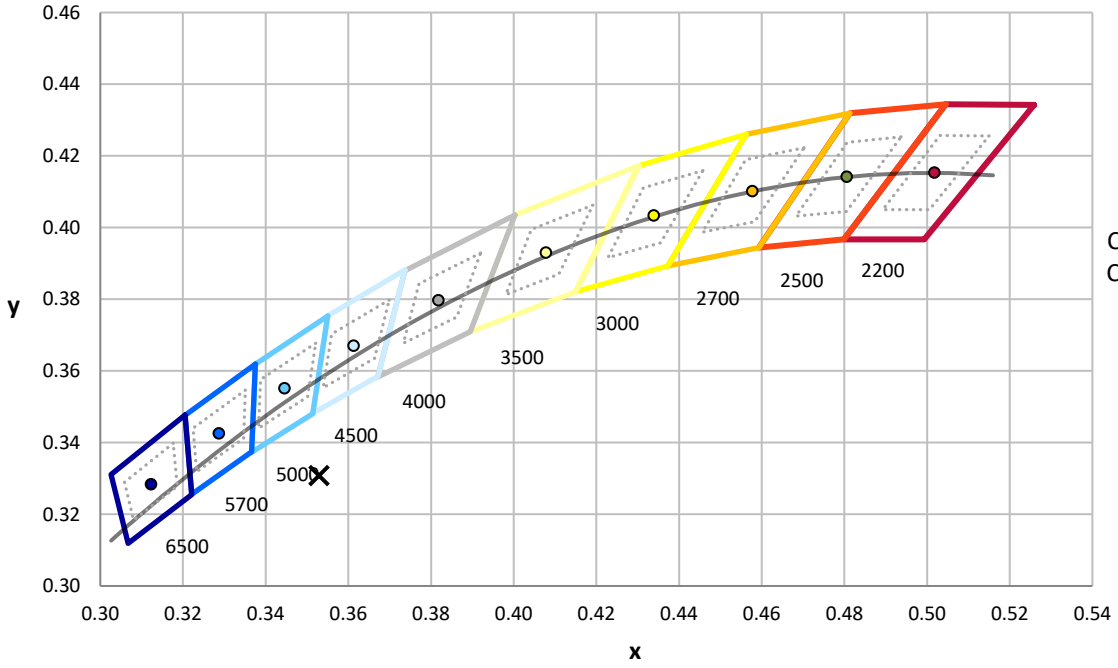
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2024	6/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2505-441-7-R2

CIE 1931 Chromaticity Diagram



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

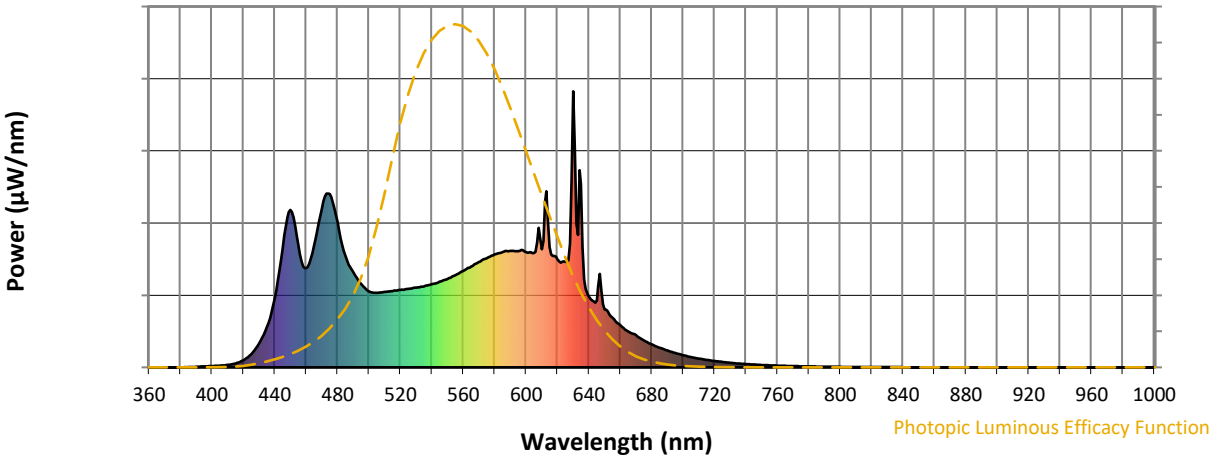


CCT = 4586K
CIE x = 0.3529
CIE y = 0.3308
Duv = -0.0140

Point lies outside the range

REPORT NUMBER: SP1-2505-441-7-R2

Photopic Flux vs. Wavelength

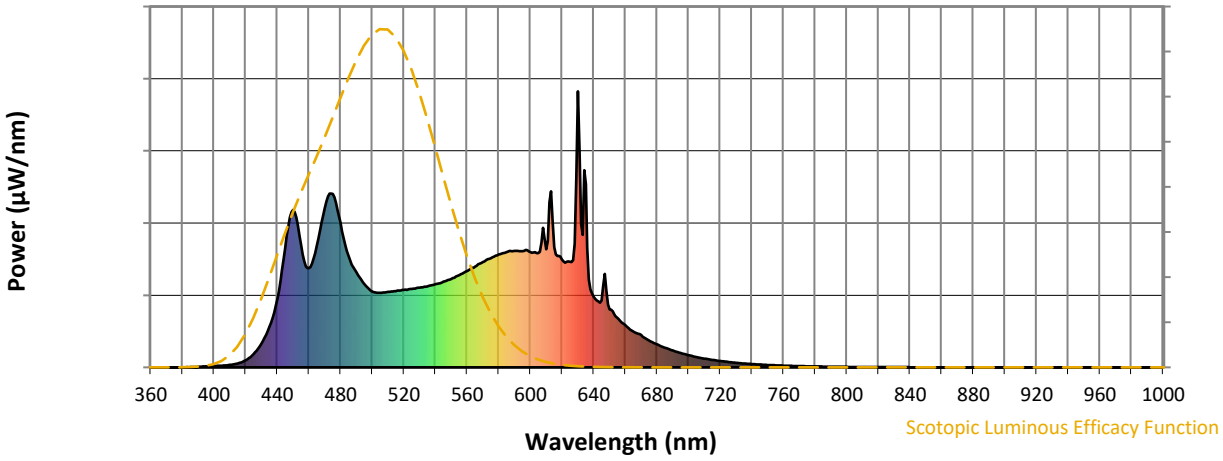


Photopic Lumens: NR

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	344	NR	620	391	NR	750	9	NR	880	0	NR
365	0	NR	495	302	NR	625	383	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	270	NR	635	663	NR	765	5	NR	895	0	NR
380	0	NR	510	274	NR	640	257	NR	770	5	NR	900	0	NR
385	1	NR	515	276	NR	645	242	NR	775	4	NR	905	0	NR
390	2	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	3	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	5	NR	530	289	NR	660	153	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	130	NR	795	2	NR	925	0	NR
410	9	NR	540	302	NR	670	117	NR	800	2	NR	930	0	NR
415	14	NR	545	310	NR	675	97	NR	805	2	NR	935	0	NR
420	26	NR	550	321	NR	680	83	NR	810	1	NR	940	0	NR
425	48	NR	555	334	NR	685	71	NR	815	1	NR	945	0	NR
430	86	NR	560	349	NR	690	61	NR	820	1	NR	950	0	NR
435	148	NR	565	365	NR	695	52	NR	825	1	NR	955	0	NR
440	248	NR	570	382	NR	700	44	NR	830	1	NR	960	0	NR
445	431	NR	575	396	NR	705	38	NR	835	1	NR	965	0	NR
450	571	NR	580	409	NR	710	32	NR	840	1	NR	970	0	NR
455	443	NR	585	418	NR	715	27	NR	845	1	NR	975	0	NR
460	359	NR	590	422	NR	720	23	NR	850	1	NR	980	0	NR
465	441	NR	595	421	NR	725	20	NR	855	0	NR	985	0	NR
470	578	NR	600	418	NR	730	17	NR	860	0	NR	990	0	NR
475	628	NR	605	414	NR	735	14	NR	865	0	NR	995	0	NR
480	525	NR	610	428	NR	740	12	NR	870	0	NR	1000	0	NR
485	405	NR	615	435	NR	745	10	NR	875	0	NR			

REPORT NUMBER: SP1-2505-441-7-R2

Scotopic Flux vs. Wavelength

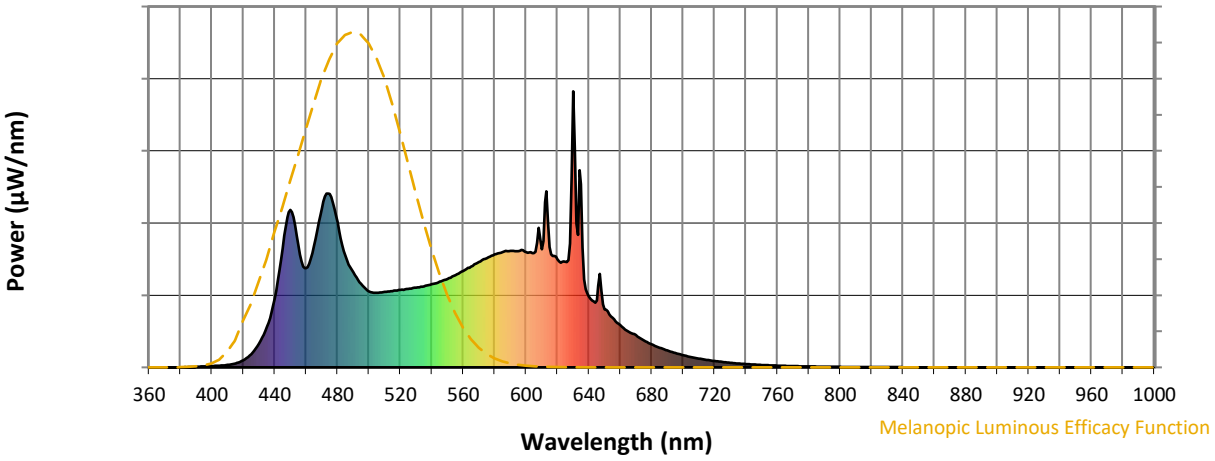


Scotopic Lumens: NR **S/P: 2.19**

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	344	NR	620	391	NR	750	9	NR	880	0	NR
365	0	NR	495	302	NR	625	383	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	270	NR	635	663	NR	765	5	NR	895	0	NR
380	0	NR	510	274	NR	640	257	NR	770	5	NR	900	0	NR
385	1	NR	515	276	NR	645	242	NR	775	4	NR	905	0	NR
390	2	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	3	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	5	NR	530	289	NR	660	153	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	130	NR	795	2	NR	925	0	NR
410	9	NR	540	302	NR	670	117	NR	800	2	NR	930	0	NR
415	14	NR	545	310	NR	675	97	NR	805	2	NR	935	0	NR
420	26	NR	550	321	NR	680	83	NR	810	1	NR	940	0	NR
425	48	NR	555	334	NR	685	71	NR	815	1	NR	945	0	NR
430	86	NR	560	349	NR	690	61	NR	820	1	NR	950	0	NR
435	148	NR	565	365	NR	695	52	NR	825	1	NR	955	0	NR
440	248	NR	570	382	NR	700	44	NR	830	1	NR	960	0	NR
445	431	NR	575	396	NR	705	38	NR	835	1	NR	965	0	NR
450	571	NR	580	409	NR	710	32	NR	840	1	NR	970	0	NR
455	443	NR	585	418	NR	715	27	NR	845	1	NR	975	0	NR
460	359	NR	590	422	NR	720	23	NR	850	1	NR	980	0	NR
465	441	NR	595	421	NR	725	20	NR	855	0	NR	985	0	NR
470	578	NR	600	418	NR	730	17	NR	860	0	NR	990	0	NR
475	628	NR	605	414	NR	735	14	NR	865	0	NR	995	0	NR
480	525	NR	610	428	NR	740	12	NR	870	0	NR	1000	0	NR
485	405	NR	615	435	NR	745	10	NR	875	0	NR			

REPORT NUMBER: SP1-2505-441-7-R2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 5.06**

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	344	NR	620	391	NR	750	9	NR	880	0	NR
365	0	NR	495	302	NR	625	383	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	270	NR	635	663	NR	765	5	NR	895	0	NR
380	0	NR	510	274	NR	640	257	NR	770	5	NR	900	0	NR
385	1	NR	515	276	NR	645	242	NR	775	4	NR	905	0	NR
390	2	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	3	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	5	NR	530	289	NR	660	153	NR	790	2	NR	920	0	NR
405	6	NR	535	294	NR	665	130	NR	795	2	NR	925	0	NR
410	9	NR	540	302	NR	670	117	NR	800	2	NR	930	0	NR
415	14	NR	545	310	NR	675	97	NR	805	2	NR	935	0	NR
420	26	NR	550	321	NR	680	83	NR	810	1	NR	940	0	NR
425	48	NR	555	334	NR	685	71	NR	815	1	NR	945	0	NR
430	86	NR	560	349	NR	690	61	NR	820	1	NR	950	0	NR
435	148	NR	565	365	NR	695	52	NR	825	1	NR	955	0	NR
440	248	NR	570	382	NR	700	44	NR	830	1	NR	960	0	NR
445	431	NR	575	396	NR	705	38	NR	835	1	NR	965	0	NR
450	571	NR	580	409	NR	710	32	NR	840	1	NR	970	0	NR
455	443	NR	585	418	NR	715	27	NR	845	1	NR	975	0	NR
460	359	NR	590	422	NR	720	23	NR	850	1	NR	980	0	NR
465	441	NR	595	421	NR	725	20	NR	855	0	NR	985	0	NR
470	578	NR	600	418	NR	730	17	NR	860	0	NR	990	0	NR
475	628	NR	605	414	NR	735	14	NR	865	0	NR	995	0	NR
480	525	NR	610	428	NR	740	12	NR	870	0	NR	1000	0	NR
485	405	NR	615	435	NR	745	10	NR	875	0	NR			

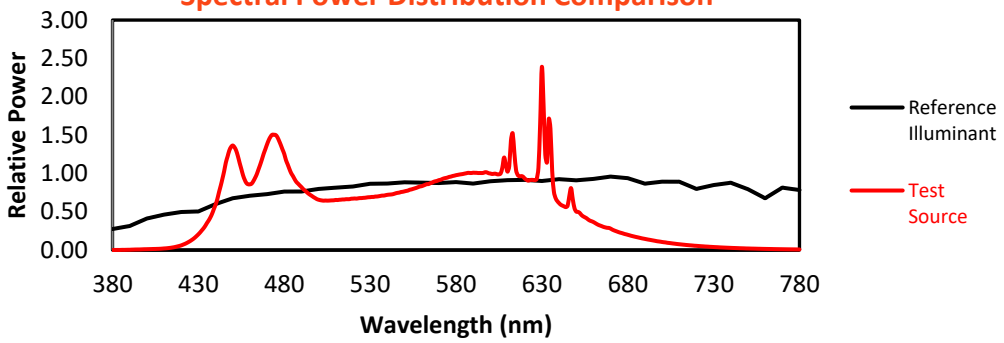
REPORT NUMBER: SP1-2505-441-7-R2

TM-30-18

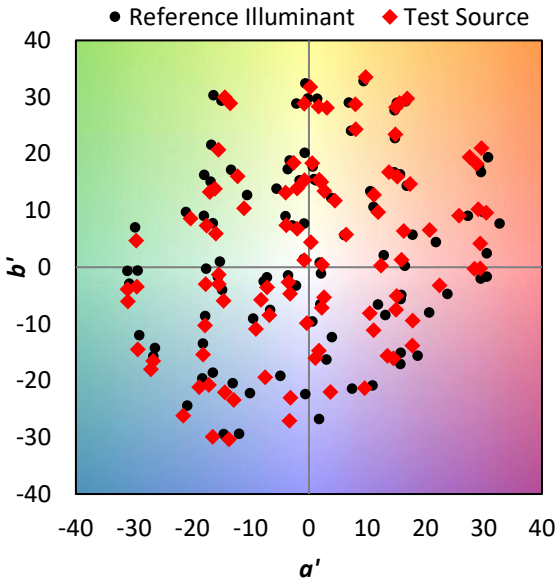
Summary

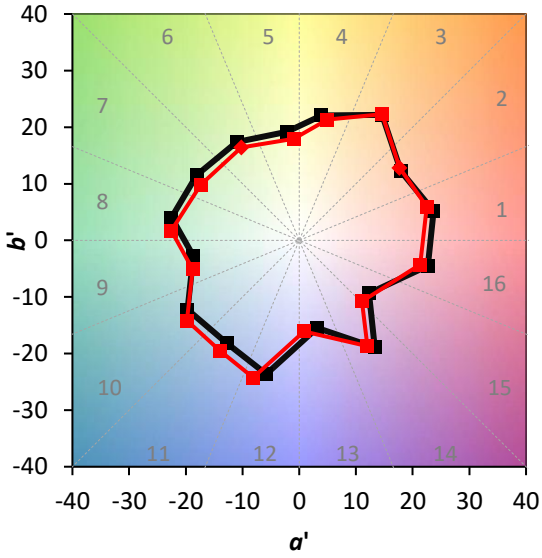
R_f = 86.9
R_g = 96.7
CIE R_a = 86.0
R_9 = 88.3

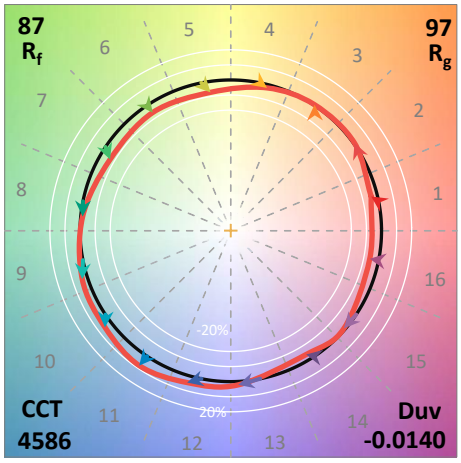
Spectral Power Distribution Comparison

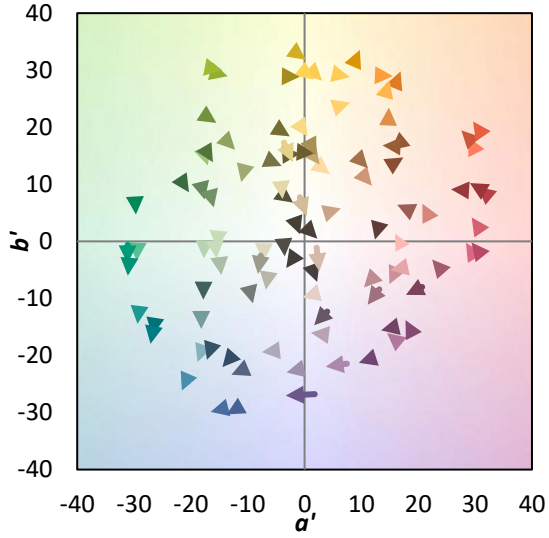


Color Vector Graphics







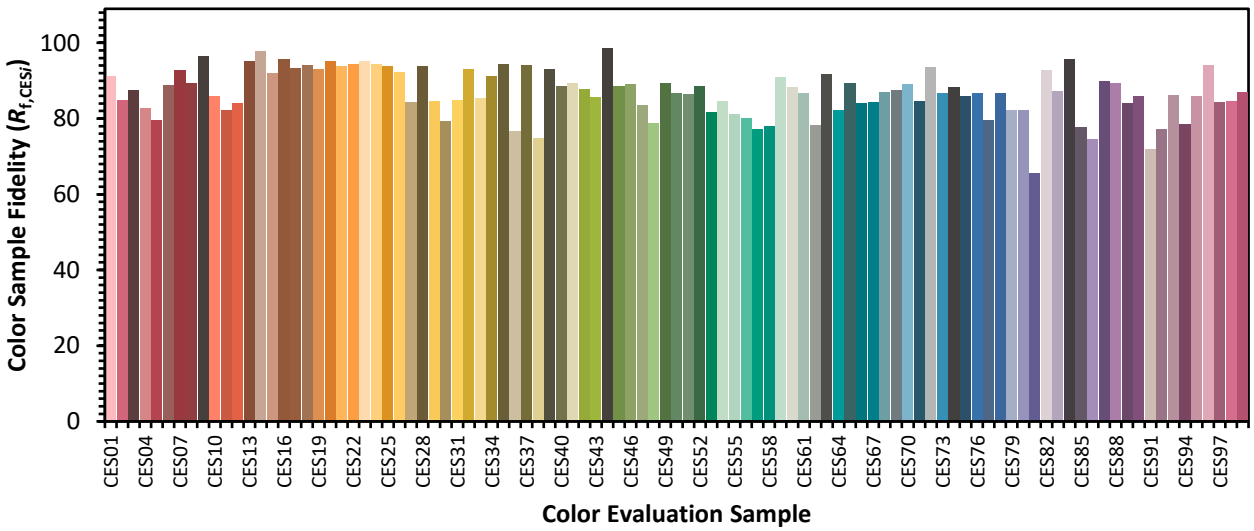


REPORT NUMBER: SP1-2505-441-7-R2

TM-30-18

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

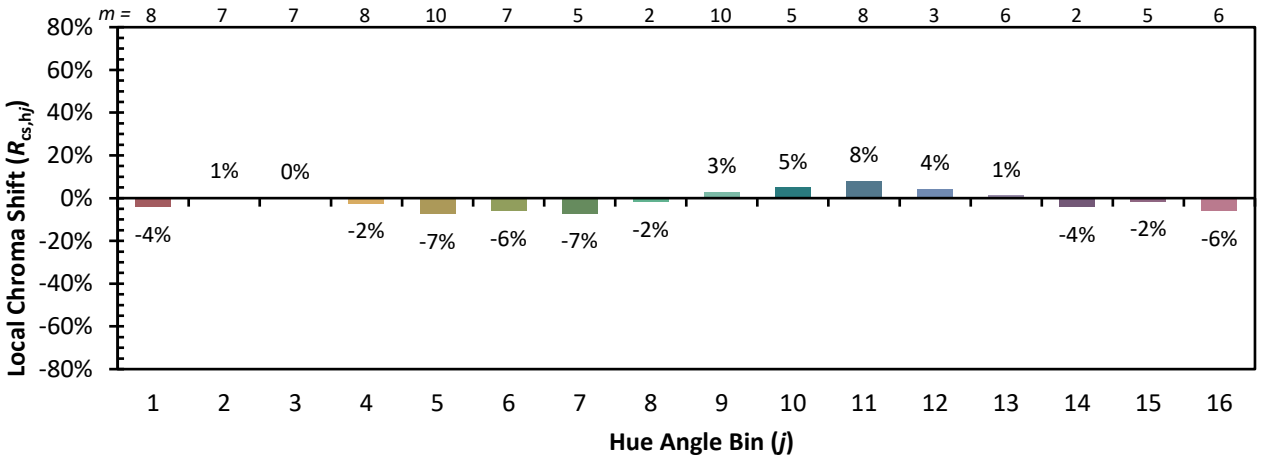
CES01 = 86	CES26 = 92	CES51 = 87	CES76 = 87
CES02 = 62	CES27 = 84	CES52 = 89	CES77 = 80
CES03 = 31	CES28 = 94	CES53 = 82	CES78 = 87
CES04 = 69	CES29 = 85	CES54 = 85	CES79 = 82
CES05 = 49	CES30 = 79	CES55 = 81	CES80 = 82
CES06 = 50	CES31 = 85	CES56 = 80	CES81 = 65
CES07 = 42	CES32 = 93	CES57 = 77	CES82 = 93
CES08 = 41	CES33 = 85	CES58 = 78	CES83 = 87
CES09 = 29	CES34 = 91	CES59 = 91	CES84 = 96
CES10 = 75	CES35 = 94	CES60 = 88	CES85 = 78
CES11 = 57	CES36 = 77	CES61 = 87	CES86 = 75
CES12 = 63	CES37 = 94	CES62 = 78	CES87 = 90
CES13 = 43	CES38 = 75	CES63 = 92	CES88 = 89
CES14 = 74	CES39 = 93	CES64 = 82	CES89 = 84
CES15 = 71	CES40 = 89	CES65 = 89	CES90 = 86
CES16 = 47	CES41 = 89	CES66 = 84	CES91 = 72
CES17 = 49	CES42 = 88	CES67 = 84	CES92 = 77
CES18 = 56	CES43 = 86	CES68 = 87	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 87	CES94 = 79
CES20 = 66	CES45 = 88	CES70 = 89	CES95 = 86
CES21 = 85	CES46 = 89	CES71 = 85	CES96 = 94
CES22 = 78	CES47 = 84	CES72 = 94	CES97 = 84
CES23 = 91	CES48 = 79	CES73 = 87	CES98 = 85
CES24 = 90	CES49 = 89	CES74 = 88	CES99 = 87
CES25 = 70	CES50 = 87	CES75 = 86	

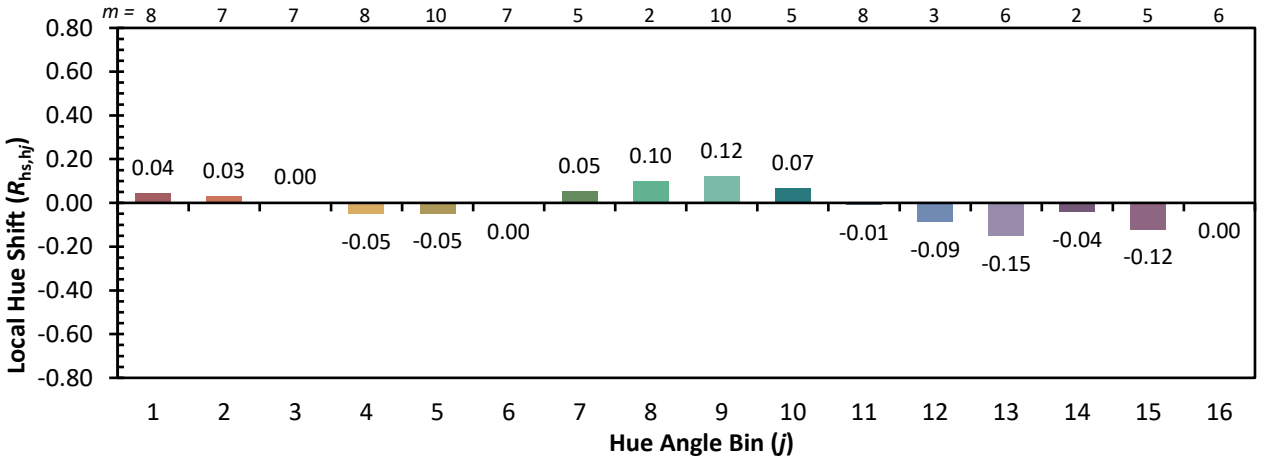


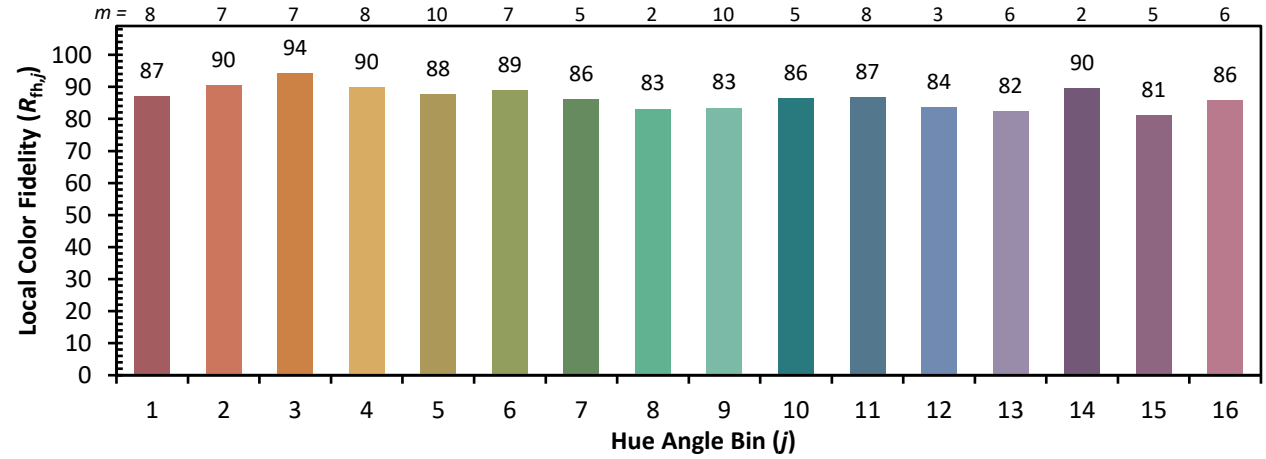
REPORT NUMBER: SP1-2505-441-7-R2

TM-30-18

Color Rendition by Hue-Angle Bin



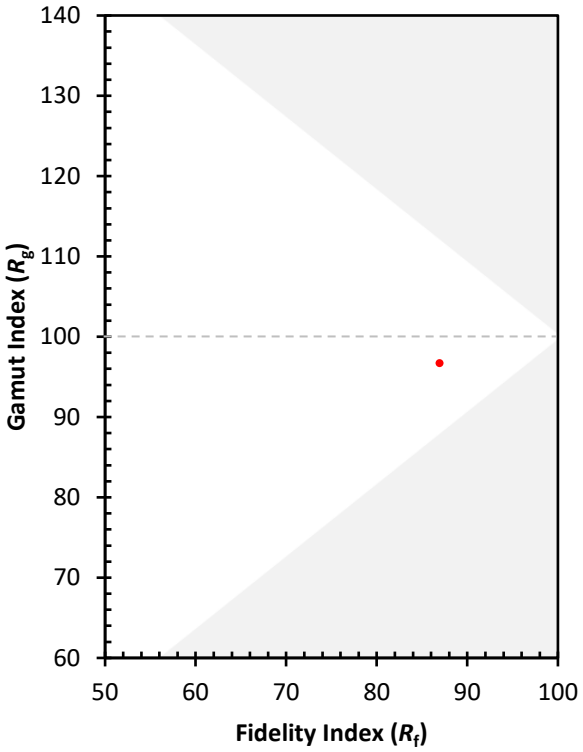


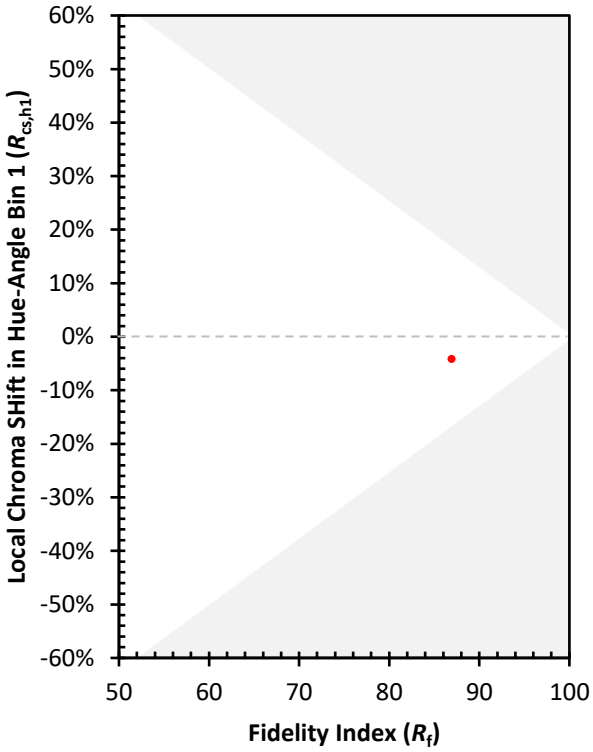


REPORT NUMBER: SP1-2505-441-7-R2

TM-30-18

Measure Comparisons





(END OF REPORT)