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: P976888

Luminaire Tested: 24SR-LD2-C-45-UNV-L840-CD1-PL-U

Issue Date: 03/18/2025

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:	P976888
Test Lab:	INNOVATION CENTER(P3)
Issue Date:	03/18/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	24SR-LD2-C-45-UNV-L840-CD1-PL-U
Description:	METALUX SKYRIDGE 2x4 4500LM PACKAGE 80CRI 4000K TROFFER with Pearl SKYTRIM
Light Source:	4000K CCT, 80+ CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4239.0 lumens
Efficiency:	N/A
Efficacy:	132.9 lumens/watt
Spacing Criteria (0/90/45):	1.29 / 1.98 / 1.87
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	31.9
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:	28.75 FT

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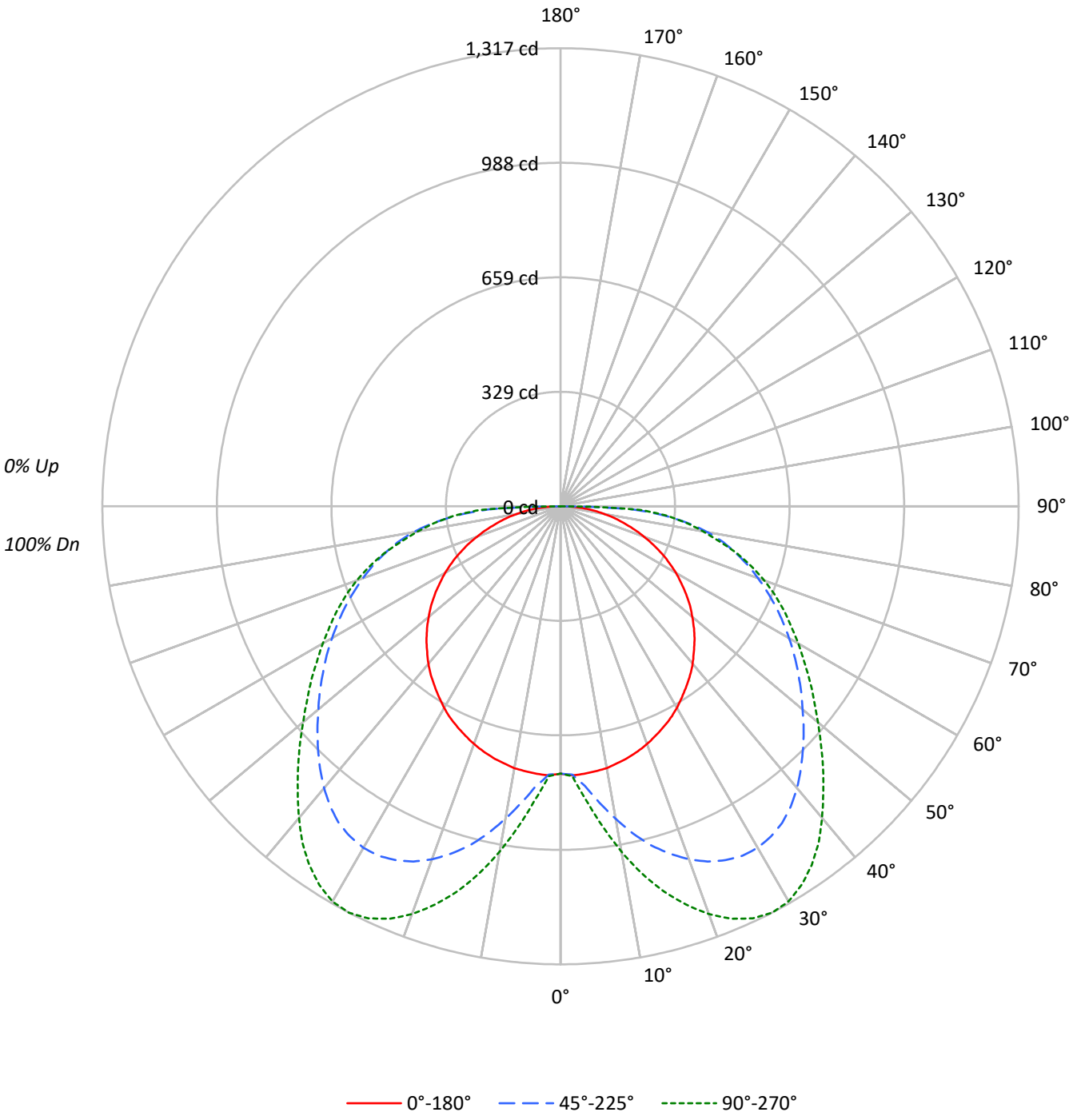
TEST NUMBER: P976888
CATALOG NUMBER: 24SR-LD2-C-45-UNV-L840-CD1-PL-U

Luminous Intensity Polar Plot



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TEST NUMBER: P976888
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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1034	1034	1034
5°	1043	1090	1146
10°	1044	1246	1378
15°	1043	1406	1596
20°	1041	1546	1787
25°	1040	1666	1940
30°	1040	1761	2038
35°	1037	1825	2068
40°	1038	1858	2054
45°	1037	1876	2031
50°	1036	1902	2021
55°	1034	1955	2053
60°	1030	2042	2123
65°	1023	2173	2255
70°	1004	2377	2452
75°	989	2716	2734
80°	998	3330	3225
85°	1088	4613	4698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
Vertical Angle: 87.5°
Luminance: 7008 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	1.9
10°-20°	277.7	6.5
20°-30°	492.1	11.6
30°-40°	647.6	15.3
40°-50°	702.3	16.6
50°-60°	683.6	16.1
60°-70°	614.2	14.5
70°-80°	486.5	11.5
80°-90°	255.0	6.0
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°	849.7	20.0
0°-40°	1497.3	35.3
0°-60°	2883.2	68.0
0°-90°	4239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4239.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	772	772	807	838	848	73
15°	749	846	1009	1111	1146	211
25°	700	892	1122	1258	1307	323
35°	631	869	1111	1224	1259	395
45°	545	788	986	1051	1068	420
55°	441	685	834	863	875	394
65°	321	575	683	696	708	317
75°	190	432	522	523	526	202
85°	70	229	299	299	304	75
90°	0	0	0	0	0	

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TEST NUMBER: P976888
CATALOG NUMBER: 24SR-LD2-C-45-UNV-L840-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	768.7	768.7	768.7	768.7	768.7	768.7	768.7	768.7	768.7	768.7	768.7
2.5°	774.3	773.3	772.2	771.0	769.9	768.7	768.7	768.7	769.9	772.2	775.5
5°	772.2	771.0	769.9	769.9	771.0	773.3	780.0	787.9	795.7	806.8	819.2
7.5°	768.7	767.7	767.7	769.9	778.8	792.2	807.9	824.8	841.5	859.4	876.3
10°	764.4	763.2	764.4	774.3	794.5	816.9	840.4	863.9	886.4	912.1	935.6
12.5°	756.5	756.5	762.1	782.1	811.4	841.5	871.7	903.1	932.1	963.5	990.4
15°	748.7	748.7	760.9	791.2	828.1	863.9	902.0	938.9	973.5	1009.4	1040.7
17.5°	738.6	738.6	759.9	798.0	840.4	884.1	927.8	969.2	1008.3	1047.5	1081.1
20°	727.3	729.6	757.6	803.5	851.6	900.8	947.8	993.7	1037.4	1079.9	1116.7
22.5°	713.9	718.4	754.3	805.8	860.6	912.1	963.5	1012.7	1058.6	1105.6	1142.5
25°	700.5	707.3	749.8	805.8	863.9	919.9	973.5	1025.0	1074.3	1122.5	1162.7
27.5°	*685.9*	*695.0*	*743.0*	*802.3*	*865.0*	*922.0*	*978.1*	*1031.8*	*1083.3*	*1132.4*	*1173.8*
30°	669.2	680.3	733.1	795.7	860.6	918.7	977.0	1032.9	1084.4	1133.6	1173.8
32.5°	650.2	664.7	720.7	785.6	851.6	910.9	969.2	1025.0	1077.6	1125.8	1163.9
35°	631.1	649.0	707.3	773.3	839.2	898.5	956.8	1013.9	1065.4	1111.2	1144.8
37.5°	612.1	631.1	690.4	756.5	822.5	881.8	941.2	996.0	1045.2	1087.7	1118.0
40°	590.9	612.1	671.5	738.6	803.5	862.9	921.0	973.5	1018.4	1057.6	1085.4
42.5°	567.4	590.9	651.3	718.4	782.1	840.4	896.3	945.5	988.1	1022.8	1046.3
45°	545.0	569.7	630.1	697.2	759.9	816.9	870.7	916.5	954.6	985.9	1006.1
47.5°	520.4	546.0	608.8	673.7	735.2	791.2	842.7	884.1	921.0	947.8	965.7
50°	494.7	522.5	585.3	650.2	710.6	765.4	814.7	852.8	886.4	908.6	925.5
52.5°	468.9	498.0	560.6	625.5	685.9	738.6	785.6	822.5	851.6	871.7	886.4
55°	440.9	473.3	536.1	601.0	659.1	711.7	756.5	790.1	816.9	833.6	847.2
57.5°	411.9	446.5	511.4	576.3	634.6	684.9	727.3	758.7	782.1	796.8	806.8
60°	382.8	419.7	484.6	549.5	606.6	656.9	697.2	726.3	747.5	758.7	766.5
62.5°	352.5	391.7	457.6	522.5	580.8	627.8	665.9	692.7	711.7	720.7	728.5
65°	321.2	362.6	429.8	494.7	552.8	596.5	633.4	658.1	674.8	682.6	687.1
67.5°	288.7	332.3	400.6	465.5	521.5	563.9	598.7	623.3	636.7	643.5	646.8
70°	255.1	301.0	369.2	434.1	487.9	528.3	561.8	584.1	597.5	604.3	605.4
72.5°	223.8	268.6	337.9	400.6	452.1	491.2	522.5	546.0	559.6	565.1	565.1
75°	190.2	235.1	303.3	363.7	412.9	451.0	482.3	504.8	517.0	522.5	522.5
77.5°	161.1	202.5	266.4	324.5	370.4	407.3	437.6	461.1	474.5	480.1	480.1
80°	128.8	169.0	228.3	282.0	324.5	358.1	389.4	414.1	427.5	429.8	426.3
82.5°	99.5	136.6	186.9	235.1	274.2	305.5	336.9	357.0	367.0	369.2	368.2
85°	70.5	100.7	143.2	182.4	214.9	243.9	266.4	285.4	295.5	298.8	301.0
87.5°	41.4	58.1	85.1	115.2	139.9	158.9	172.3	189.1	199.2	205.9	212.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	768.7	768.7	768.7	768.7	768.7	768.7	768.7	*768.7*
2.5°	774.3	775.5	776.6	776.6	776.6	777.8	776.6	*776.6*
5°	823.6	830.3	835.9	839.2	842.7	848.3	847.2	*848.3*
7.5°	885.1	896.3	908.6	915.4	919.9	926.6	928.8	*928.8*
10°	949.0	964.7	979.1	989.2	996.0	1006.1	1007.1	*1008.3*
12.5°	1009.4	1028.4	1045.2	1056.4	1066.5	1075.3	1079.9	*1081.1*
15°	1060.9	1084.4	1103.3	1118.0	1128.0	1138.1	1143.7	*1146.0*
17.5°	1106.8	1131.4	1152.6	1169.5	1181.6	1191.7	1198.5	*1200.8*
20°	1142.5	1169.5	1192.9	1210.9	1225.3	1236.6	1245.5	*1247.8*
22.5°	1171.7	1199.6	1224.3	1244.4	1258.9	1272.3	1280.1	*1283.6*
25°	1192.9	1223.1	1248.8	1267.9	1283.6	1295.8	1303.6	*1307.1*
27.5°	*1205.3*	*1235.4*	*1260.1*	*1279.1*	*1294.7*	*1305.9*	*1313.7*	*1317.2*
30°	1205.3	1234.4	1258.9	1276.8	1291.4	1302.6	1308.1	*1311.6*
32.5°	1192.9	1221.0	1243.2	1258.9	1272.3	1283.6	1288.0	*1290.2*
35°	1172.8	1197.5	1217.5	1230.9	1242.2	1252.3	1256.6	*1258.9*
37.5°	1143.7	1166.0	1181.6	1194.0	1203.0	1213.1	1216.4	*1218.7*
40°	1106.8	1128.0	1139.2	1150.3	1158.2	1167.2	1169.5	*1169.5*
42.5°	1066.5	1084.4	1095.5	1103.3	1108.9	1114.6	1118.0	*1118.0*
45°	1024.0	1039.6	1047.5	1054.1	1059.7	1064.2	1067.5	*1067.5*
47.5°	981.4	993.7	1000.5	1004.9	1009.4	1013.9	1016.2	*1016.2*
50°	938.9	947.8	953.4	956.8	961.3	964.7	966.9	*965.7*
52.5°	896.3	903.1	907.6	910.9	913.2	916.5	917.7	*918.7*
55°	853.8	858.3	861.7	863.9	868.4	871.7	872.8	*875.1*
57.5°	812.4	814.7	819.2	820.2	824.8	828.1	829.3	*830.3*
60°	769.9	772.2	775.5	777.8	783.3	785.6	786.7	*788.9*
62.5°	728.5	729.6	734.1	738.6	743.0	745.3	746.5	*747.5*
65°	687.1	690.4	693.8	697.2	701.6	705.0	706.1	*708.4*
67.5°	646.8	649.0	653.5	656.9	660.2	663.6	665.9	*666.9*
70°	605.4	607.6	611.1	613.2	616.7	620.0	623.3	*623.3*
72.5°	565.1	565.1	567.4	569.7	573.0	575.2	576.3	*576.3*
75°	521.5	520.4	522.5	523.7	523.7	523.7	524.8	*526.0*
77.5°	474.5	470.0	467.7	467.7	468.9	466.7	467.7	*468.9*
80°	420.7	416.2	415.2	415.2	416.2	415.2	416.2	*416.2*
82.5°	363.7	363.7	360.4	361.4	362.6	360.4	362.6	*364.9*
85°	297.7	298.8	297.7	301.0	301.0	301.0	302.1	*304.3*
87.5°	213.7	220.5	218.2	222.7	221.5	222.7	223.8	*227.2*
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*

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Scaled Data Report

TEST NUMBER: P976888
CATALOG NUMBER: 24SR-LD2-C-45-UNV-L840-CD1-PL-U

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	13.1	14.8	13.4	15.2	15.5	15.1	16.8	15.4	17.2	17.5
	3H	15.0	16.7	15.4	17.0	17.4	17.7	19.3	18.0	19.6	20.0
	4H	15.8	17.4	16.2	17.7	18.1	18.9	20.4	19.3	20.8	21.1
	6H	16.4	17.8	16.8	18.2	18.6	20.1	21.5	20.5	21.9	22.3
	8H	16.6	18.0	17.0	18.4	18.8	20.6	22.0	21.0	22.4	22.8
	12H	16.8	18.1	17.2	18.5	18.9	21.2	22.5	21.6	22.9	23.4
4H	2H	14.5	16.0	14.9	16.4	16.7	15.9	17.4	16.3	17.8	18.1
	3H	17.0	18.3	17.4	18.7	19.1	18.7	20.0	19.1	20.4	20.8
	4H	18.1	19.3	18.5	19.7	20.1	20.1	21.3	20.5	21.7	22.2
	6H	18.9	20.0	19.4	20.5	20.9	21.5	22.6	21.9	23.0	23.4
	8H	19.3	20.3	19.7	20.7	21.2	22.2	23.2	22.6	23.6	24.1
	12H	19.5	20.4	20.0	20.9	21.4	22.8	23.8	23.3	24.2	24.7
8H	4H	19.1	20.1	19.5	20.5	21.0	20.7	21.7	21.1	22.1	22.6
	6H	20.4	21.3	20.9	21.8	22.2	22.3	23.1	22.8	23.6	24.1
	8H	21.0	21.8	21.5	22.3	22.7	23.1	23.9	23.6	24.4	24.9
	12H	21.4	22.1	21.9	22.6	23.2	24.0	24.7	24.5	25.2	25.7
12H	4H	19.3	20.2	19.8	20.7	21.2	20.8	21.7	21.3	22.2	22.7
	6H	20.8	21.6	21.3	22.0	22.6	22.5	23.3	23.0	23.7	24.3
	8H	21.5	22.2	22.0	22.7	23.3	23.4	24.1	23.9	24.6	25.2

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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: SP1-2506-457-7

Test Date: 07/02/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L940-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L940-CD1-U

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

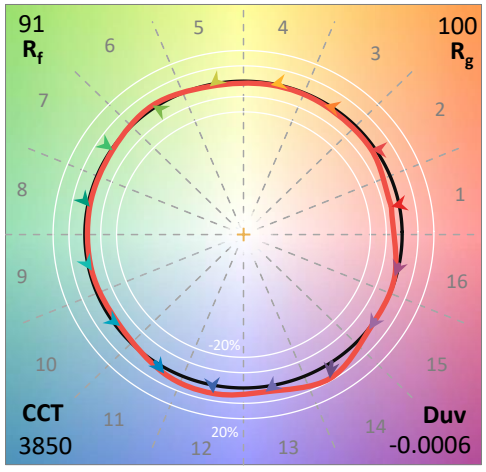
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-457-7
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	07/02/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Metalux
Catalog Number:	**24SR-LD2-64-C-UNV-L940-CD1-U**
Description:	2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K):	3850
CIE u':	0.2283
CIE v':	0.5037
Duv:	-0.0006
CIE x:	0.3868
CIE y:	0.3794
CIE z:	0.2338
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	579
Purity:	29.94798
Rf:	91.3
Rg:	99.8

CRI (Ra):	94.0
R1:	95.3
R2:	96.3
R3:	95.7
R4:	95.2
R5:	94.4
R6:	94.3
R7:	94.1
R8:	86.7
R9:	65.3
R10:	89.6
R11:	95.5
R12:	76.1
R13:	95.5
R14:	96.8
R15:	92.3



Test Conditions

Stabilization Time:	38M
Operation Time:	1H 38M
Sphere Temperature (°C):	24.4

REPORT NUMBER: SP1-2506-457-7

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
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

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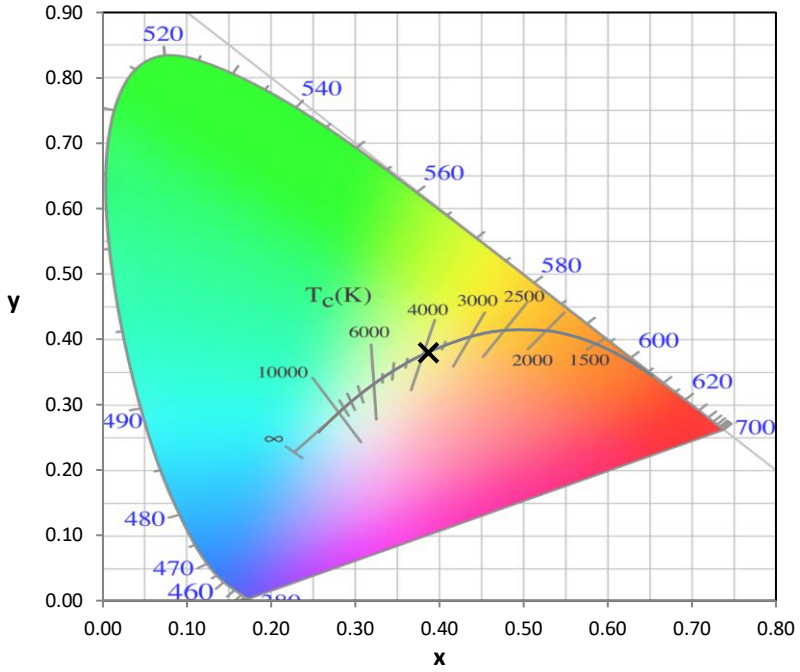
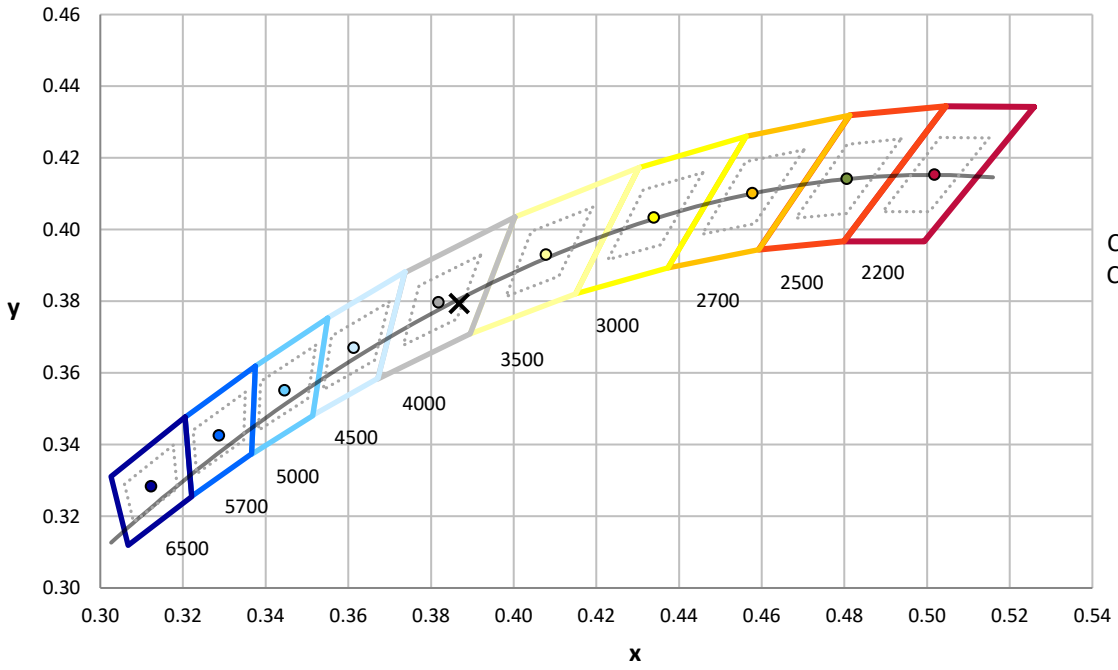
CIE 1931 Chromaticity Diagram



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



CCT = 3850K
CIE x = 0.3868
CIE y = 0.3794
Duv = -0.0006

Point lies inside the ANSI 4000K 4-step quadrangle

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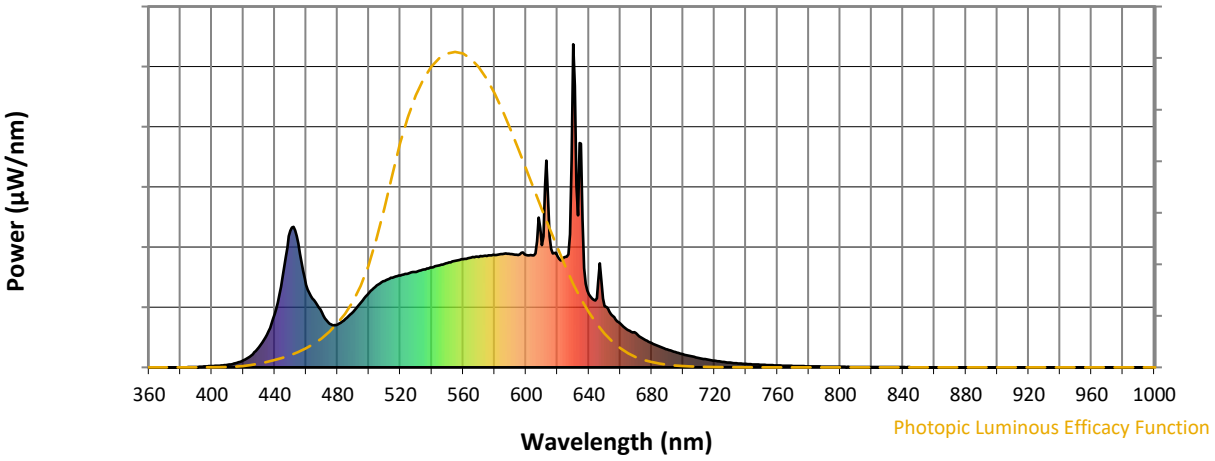
Photopic Flux vs. Wavelength



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	173	NR	620	343	NR	750	8	NR	880	0	NR
365	0	NR	495	201	NR	625	342	NR	755	7	NR	885	0	NR
370	0	NR	500	231	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	253	NR	635	692	NR	765	5	NR	895	0	NR
380	0	NR	510	268	NR	640	226	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	214	NR	775	4	NR	905	0	NR
390	1	NR	520	284	NR	650	190	NR	780	3	NR	910	0	NR
395	3	NR	525	290	NR	655	160	NR	785	3	NR	915	0	NR
400	4	NR	530	296	NR	660	136	NR	790	2	NR	920	0	NR
405	5	NR	535	303	NR	665	115	NR	795	2	NR	925	0	NR
410	8	NR	540	310	NR	670	106	NR	800	2	NR	930	0	NR
415	13	NR	545	316	NR	675	87	NR	805	2	NR	935	0	NR
420	22	NR	550	323	NR	680	75	NR	810	1	NR	940	0	NR
425	37	NR	555	330	NR	685	64	NR	815	1	NR	945	0	NR
430	62	NR	560	335	NR	690	55	NR	820	1	NR	950	0	NR
435	102	NR	565	340	NR	695	47	NR	825	1	NR	955	0	NR
440	164	NR	570	342	NR	700	40	NR	830	1	NR	960	0	NR
445	281	NR	575	345	NR	705	34	NR	835	1	NR	965	0	NR
450	423	NR	580	348	NR	710	29	NR	840	1	NR	970	0	NR
455	384	NR	585	350	NR	715	25	NR	845	1	NR	975	0	NR
460	256	NR	590	351	NR	720	21	NR	850	0	NR	980	0	NR
465	208	NR	595	348	NR	725	17	NR	855	0	NR	985	0	NR
470	169	NR	600	348	NR	730	14	NR	860	0	NR	990	0	NR
475	135	NR	605	347	NR	735	12	NR	865	0	NR	995	0	NR
480	133	NR	610	379	NR	740	11	NR	870	0	NR	1000	0	NR
485	149	NR	615	406	NR	745	9	NR	875	0	NR			

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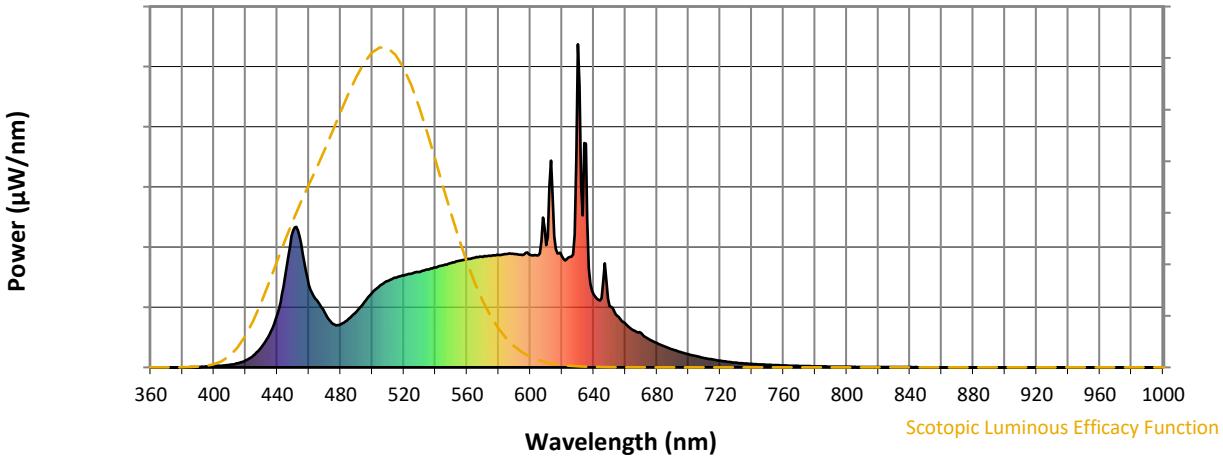
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.74**

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	173	NR	620	343	NR	750	8	NR	880	0	NR
365	0	NR	495	201	NR	625	342	NR	755	7	NR	885	0	NR
370	0	NR	500	231	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	253	NR	635	692	NR	765	5	NR	895	0	NR
380	0	NR	510	268	NR	640	226	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	214	NR	775	4	NR	905	0	NR
390	1	NR	520	284	NR	650	190	NR	780	3	NR	910	0	NR
395	3	NR	525	290	NR	655	160	NR	785	3	NR	915	0	NR
400	4	NR	530	296	NR	660	136	NR	790	2	NR	920	0	NR
405	5	NR	535	303	NR	665	115	NR	795	2	NR	925	0	NR
410	8	NR	540	310	NR	670	106	NR	800	2	NR	930	0	NR
415	13	NR	545	316	NR	675	87	NR	805	2	NR	935	0	NR
420	22	NR	550	323	NR	680	75	NR	810	1	NR	940	0	NR
425	37	NR	555	330	NR	685	64	NR	815	1	NR	945	0	NR
430	62	NR	560	335	NR	690	55	NR	820	1	NR	950	0	NR
435	102	NR	565	340	NR	695	47	NR	825	1	NR	955	0	NR
440	164	NR	570	342	NR	700	40	NR	830	1	NR	960	0	NR
445	281	NR	575	345	NR	705	34	NR	835	1	NR	965	0	NR
450	423	NR	580	348	NR	710	29	NR	840	1	NR	970	0	NR
455	384	NR	585	350	NR	715	25	NR	845	1	NR	975	0	NR
460	256	NR	590	351	NR	720	21	NR	850	0	NR	980	0	NR
465	208	NR	595	348	NR	725	17	NR	855	0	NR	985	0	NR
470	169	NR	600	348	NR	730	14	NR	860	0	NR	990	0	NR
475	135	NR	605	347	NR	735	12	NR	865	0	NR	995	0	NR
480	133	NR	610	379	NR	740	11	NR	870	0	NR	1000	0	NR
485	149	NR	615	406	NR	745	9	NR	875	0	NR			

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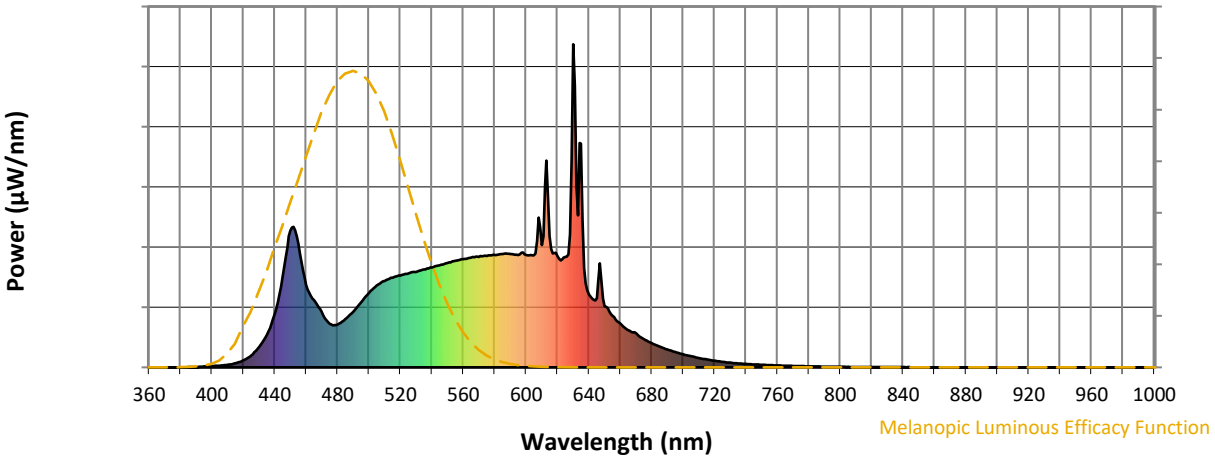
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.6**

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	173	NR	620	343	NR	750	8	NR	880	0	NR
365	0	NR	495	201	NR	625	342	NR	755	7	NR	885	0	NR
370	0	NR	500	231	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	253	NR	635	692	NR	765	5	NR	895	0	NR
380	0	NR	510	268	NR	640	226	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	214	NR	775	4	NR	905	0	NR
390	1	NR	520	284	NR	650	190	NR	780	3	NR	910	0	NR
395	3	NR	525	290	NR	655	160	NR	785	3	NR	915	0	NR
400	4	NR	530	296	NR	660	136	NR	790	2	NR	920	0	NR
405	5	NR	535	303	NR	665	115	NR	795	2	NR	925	0	NR
410	8	NR	540	310	NR	670	106	NR	800	2	NR	930	0	NR
415	13	NR	545	316	NR	675	87	NR	805	2	NR	935	0	NR
420	22	NR	550	323	NR	680	75	NR	810	1	NR	940	0	NR
425	37	NR	555	330	NR	685	64	NR	815	1	NR	945	0	NR
430	62	NR	560	335	NR	690	55	NR	820	1	NR	950	0	NR
435	102	NR	565	340	NR	695	47	NR	825	1	NR	955	0	NR
440	164	NR	570	342	NR	700	40	NR	830	1	NR	960	0	NR
445	281	NR	575	345	NR	705	34	NR	835	1	NR	965	0	NR
450	423	NR	580	348	NR	710	29	NR	840	1	NR	970	0	NR
455	384	NR	585	350	NR	715	25	NR	845	1	NR	975	0	NR
460	256	NR	590	351	NR	720	21	NR	850	0	NR	980	0	NR
465	208	NR	595	348	NR	725	17	NR	855	0	NR	985	0	NR
470	169	NR	600	348	NR	730	14	NR	860	0	NR	990	0	NR
475	135	NR	605	347	NR	735	12	NR	865	0	NR	995	0	NR
480	133	NR	610	379	NR	740	11	NR	870	0	NR	1000	0	NR
485	149	NR	615	406	NR	745	9	NR	875	0	NR			

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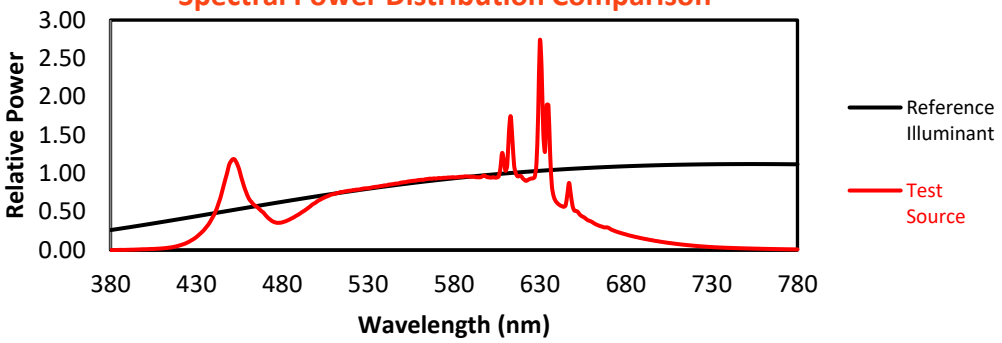
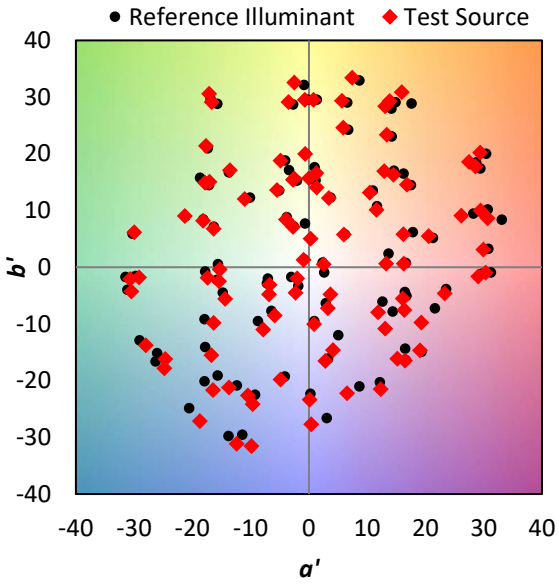
Summary

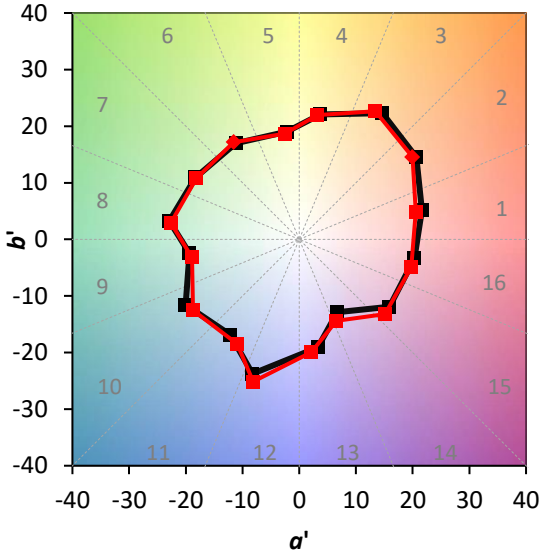
R_f = 91.3
R_g = 99.8
CIE R_a = 94.0
R_9 = 65.3

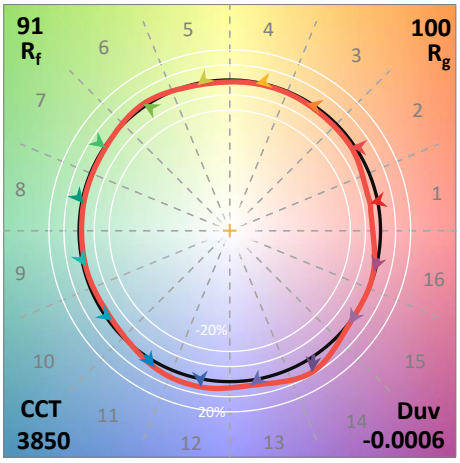
Spectral Power Distribution Comparison

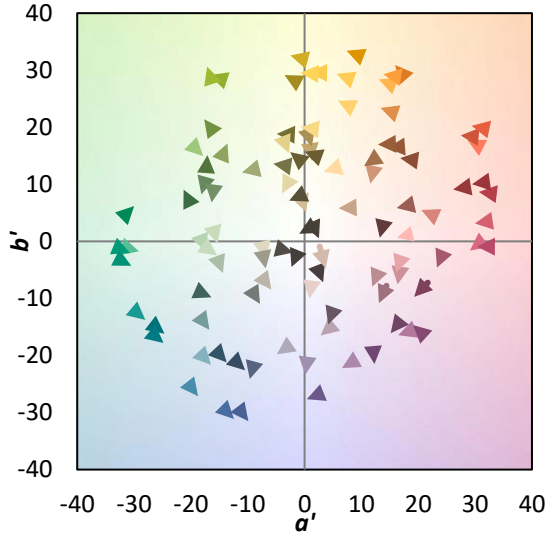


Color Vector Graphics









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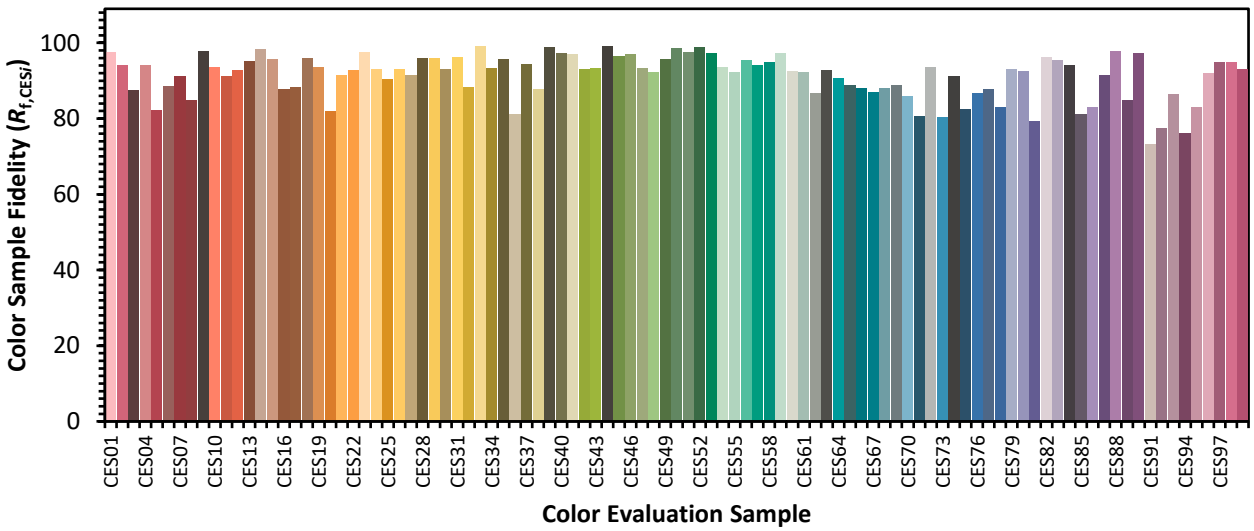
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 93	CES51 = 98	CES76 = 87
CES02 = 62	CES27 = 91	CES52 = 99	CES77 = 88
CES03 = 31	CES28 = 96	CES53 = 97	CES78 = 83
CES04 = 69	CES29 = 96	CES54 = 94	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 92
CES06 = 50	CES31 = 96	CES56 = 95	CES81 = 79
CES07 = 42	CES32 = 88	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 95	CES83 = 95
CES09 = 29	CES34 = 93	CES59 = 97	CES84 = 94
CES10 = 74	CES35 = 96	CES60 = 93	CES85 = 81
CES11 = 57	CES36 = 81	CES61 = 92	CES86 = 83
CES12 = 63	CES37 = 94	CES62 = 87	CES87 = 92
CES13 = 43	CES38 = 88	CES63 = 93	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 85
CES15 = 71	CES40 = 97	CES65 = 89	CES90 = 97
CES16 = 47	CES41 = 97	CES66 = 88	CES91 = 73
CES17 = 49	CES42 = 93	CES67 = 87	CES92 = 77
CES18 = 56	CES43 = 93	CES68 = 88	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 89	CES94 = 76
CES20 = 66	CES45 = 96	CES70 = 86	CES95 = 83
CES21 = 85	CES46 = 97	CES71 = 81	CES96 = 92
CES22 = 78	CES47 = 93	CES72 = 94	CES97 = 95
CES23 = 91	CES48 = 92	CES73 = 80	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 91	CES99 = 93
CES25 = 71	CES50 = 98	CES75 = 83	



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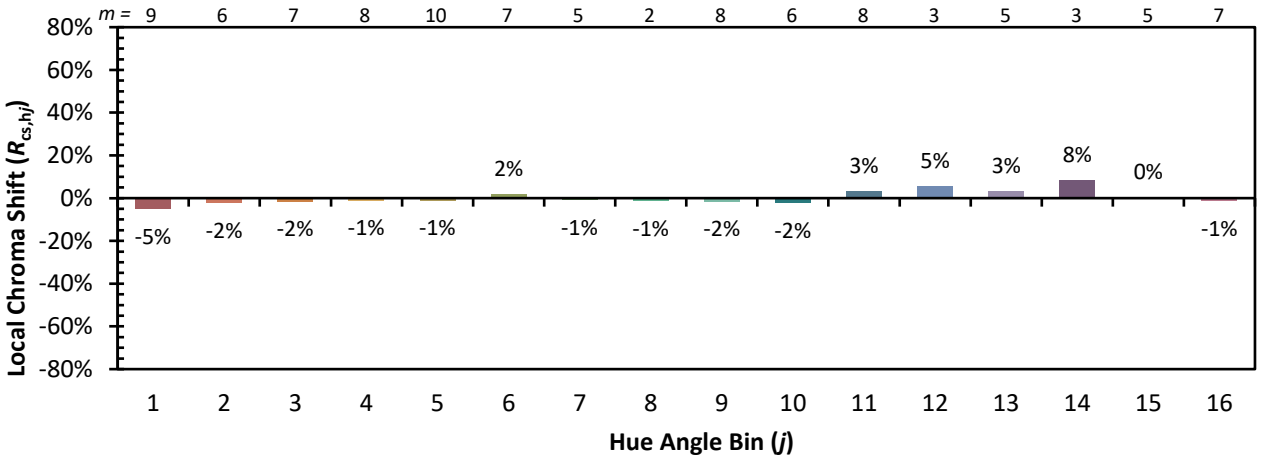
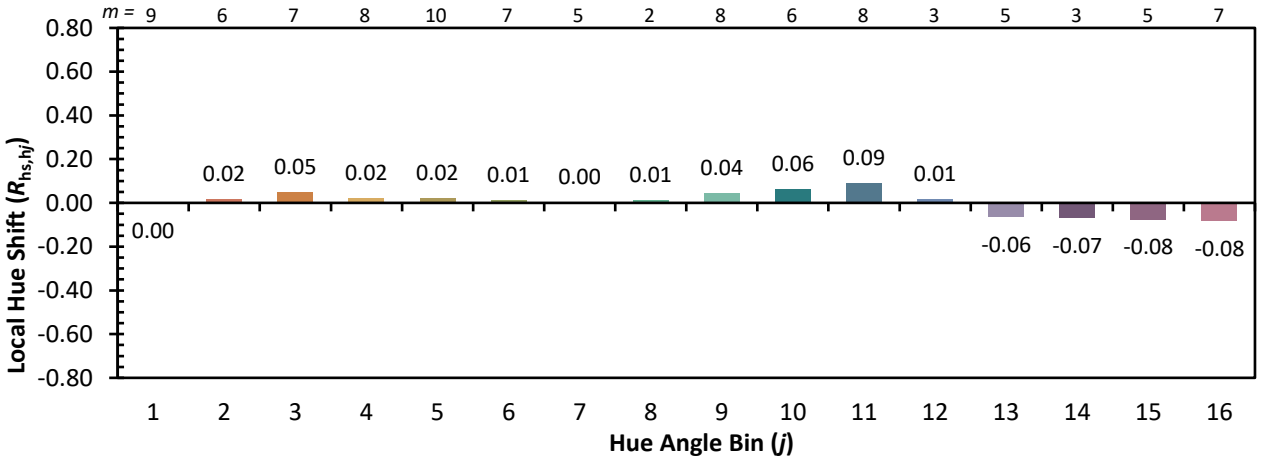
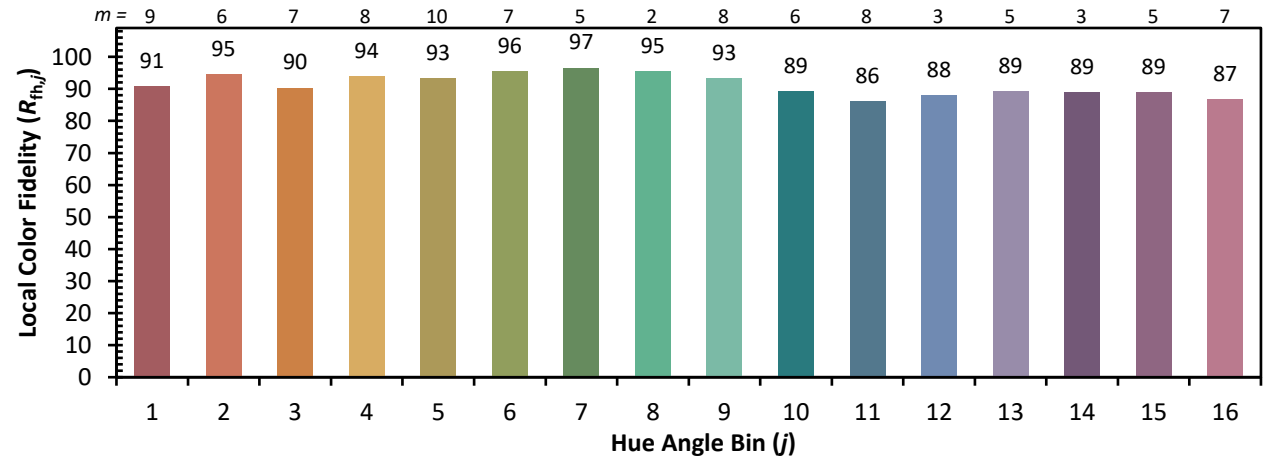
Color Rendition by Hue-Angle Bin







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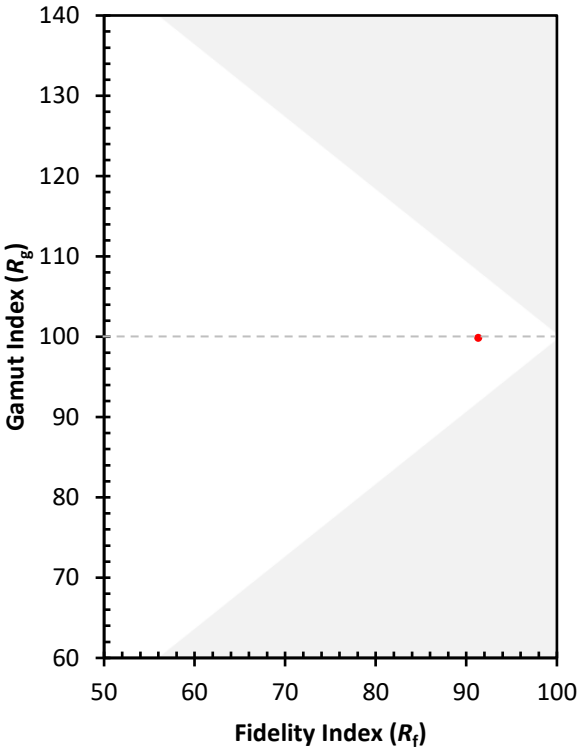
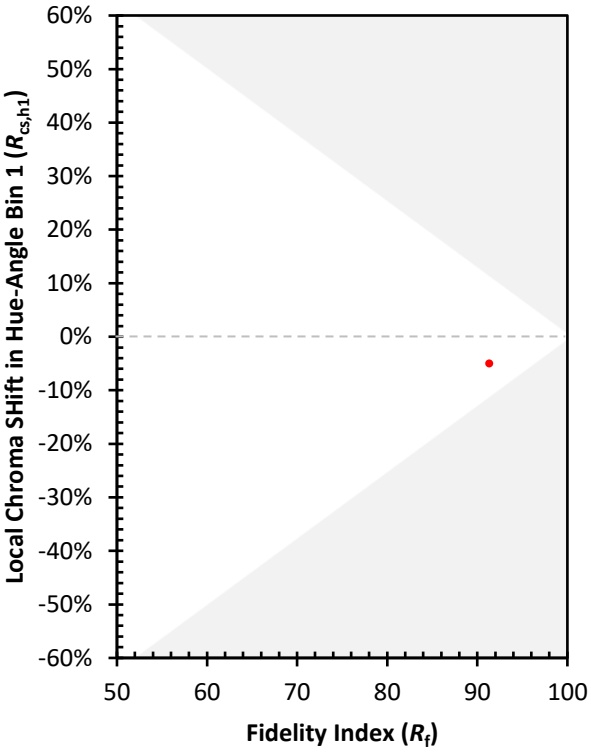
Measure Comparisons





(END OF REPORT)