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: P977011

Luminaire Tested: 24SR-LD2-C-39-UNV-L840-CD1-ST-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:	P977011
Test Lab:	INNOVATION CENTER(P3)
Issue Date:	03/18/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	24SR-LD2-C-39-UNV-L840-CD1-ST-U
Description:	METALUX SKYRIDGE 2x4 3900LM PACKAGE 80CRI 4000K TROFFER with Straw SKYTRIM
Light Source:	4000K CCT, 80+ CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3537.0 lumens
Efficiency:	N/A
Efficacy:	127.7 lumens/watt
Spacing Criteria (0/90/45):	1.15 / 1.62 / 1.56
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	27.7
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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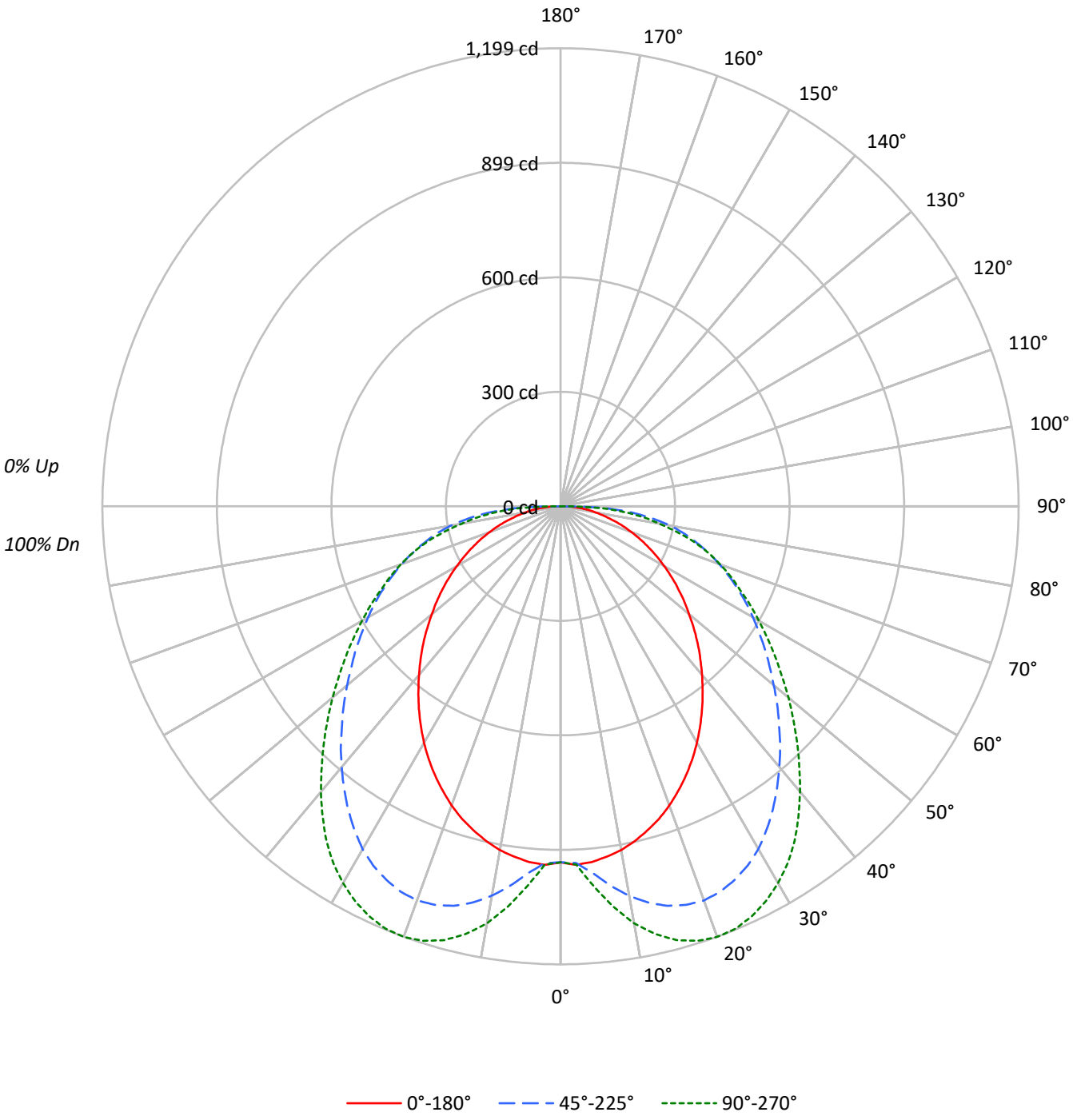
Scaled Data Report

TEST NUMBER: P977011
CATALOG NUMBER: 24SR-LD2-C-39-UNV-L840-CD1-ST-U

Luminous Intensity Polar Plot



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TEST NUMBER: P977011
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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	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80
2	97	88	80	74	94	86	79	73	82	76	71	79	74	69	76	71	68	66
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40
6	68	54	44	38	66	53	44	38	51	43	37	49	42	37	48	41	37	34
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1254	1254	1254
5°	1262	1301	1348
10°	1248	1414	1514
15°	1224	1508	1637
20°	1193	1572	1717
25°	1154	1601	1758
30°	1110	1610	1769
35°	1061	1591	1755
40°	1012	1565	1713
45°	966	1538	1666
50°	920	1525	1630
55°	881	1533	1609
60°	845	1565	1614
65°	809	1631	1652
70°	776	1740	1751
75°	740	1918	1889
80°	735	2265	2044
85°	806	2916	2549

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
Vertical Angle: 87.5°
Luminance: 3865 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	2.6
10°-20°	297.3	8.4
20°-30°	475.4	13.4
30°-40°	575.5	16.3
40°-50°	587.7	16.6
50°-60°	541.6	15.3
60°-70°	460.6	13.0
70°-80°	344.4	9.7
80°-90°	160.9	4.5
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°	866.3	24.5
0°-40°	1441.8	40.8
0°-60°	2571.0	72.7
0°-90°	3537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	935	929	963	988	998	88
15°	878	957	1083	1150	1176	247
25°	777	924	1079	1156	1184	357
35°	646	816	969	1042	1068	404
45°	508	676	808	860	876	392
55°	376	546	654	679	686	336
65°	254	432	512	516	519	252
75°	142	312	369	363	363	152
85°	52	165	189	167	165	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	931.8	931.8	931.8	931.8	931.8	931.8	931.8	931.8	931.8	931.8	931.8
2.5°	939.3	937.4	934.6	930.7	929.8	929.8	928.8	928.8	930.7	934.6	940.2
5°	934.6	932.6	929.8	926.9	927.9	930.7	936.5	943.1	952.6	963.0	974.4
7.5°	925.1	924.1	922.2	922.2	929.8	943.1	956.4	969.7	984.9	1001.0	1018.1
10°	913.6	912.7	911.7	919.4	936.5	956.4	975.3	993.3	1014.2	1035.1	1055.0
12.5°	897.5	897.5	900.3	917.4	941.2	965.8	989.6	1013.3	1038.0	1062.6	1084.5
15°	878.5	878.5	888.1	912.7	943.1	971.6	1000.1	1026.6	1055.0	1082.6	1105.3
17.5°	857.7	856.8	874.8	905.1	939.3	972.5	1004.8	1034.2	1063.5	1093.9	1117.7
20°	*833.0*	*835.0*	*858.6*	*893.7*	*931.8*	*968.7*	*1002.9*	*1034.2*	*1065.4*	*1097.7*	*1120.5*
22.5°	805.5	809.3	838.7	877.6	920.3	958.3	994.3	1027.5	1059.8	1092.0	1114.9
25°	777.0	781.8	817.9	858.6	904.2	943.1	979.1	1014.2	1046.5	1078.7	1101.6
27.5°	746.7	753.4	794.1	836.9	882.3	923.2	959.2	995.2	1027.5	1060.7	1081.7
30°	714.4	723.0	766.6	810.2	857.7	897.5	933.5	970.6	1003.8	1036.1	1056.0
32.5°	680.3	690.7	735.2	782.7	829.2	868.2	904.2	942.1	973.4	1003.8	1023.7
35°	646.1	658.5	704.0	751.5	796.9	835.9	871.0	908.9	940.2	968.7	987.7
37.5°	611.0	626.2	671.8	718.3	762.8	801.8	837.8	872.9	904.2	930.7	949.8
40°	575.9	593.0	638.6	684.0	728.6	765.6	800.7	835.9	867.1	890.9	908.9
42.5°	541.8	558.8	605.4	650.8	691.7	729.6	764.7	798.8	827.3	851.1	867.1
45°	507.6	525.6	571.2	615.7	656.6	694.5	729.6	760.9	788.5	808.4	824.5
47.5°	473.5	492.4	538.0	582.5	621.5	658.5	694.5	723.0	749.5	769.5	782.7
50°	439.3	460.2	504.8	550.3	588.3	625.3	659.4	685.9	710.6	728.6	741.0
52.5°	408.0	427.9	473.5	518.9	557.0	593.9	626.2	651.9	673.6	689.8	702.0
55°	375.7	397.5	445.0	488.7	527.5	564.5	593.9	617.6	637.6	653.6	663.2
57.5°	344.4	369.0	415.5	459.2	499.0	534.1	562.6	585.3	603.5	616.7	625.3
60°	314.0	339.7	388.0	431.7	471.6	505.7	533.2	554.0	570.3	581.6	589.2
62.5°	283.7	313.1	360.6	406.1	444.0	477.2	502.8	521.9	537.1	547.4	552.1
65°	254.2	284.6	333.9	378.6	416.5	447.8	472.5	489.6	503.7	512.3	514.2
67.5°	225.8	258.1	307.3	352.0	388.9	418.4	442.2	458.3	470.5	476.3	478.2
70°	197.3	230.6	280.8	325.5	360.6	388.9	410.8	426.0	436.4	442.2	442.2
72.5°	170.7	204.0	254.2	297.9	330.2	358.7	378.6	392.8	402.2	406.1	405.2
75°	142.4	176.5	225.8	267.5	298.9	325.5	345.4	359.6	366.2	369.0	368.1
77.5°	117.6	149.9	197.3	236.2	269.4	291.3	311.2	324.5	331.1	333.0	332.1
80°	94.9	125.3	167.0	204.0	232.4	256.1	274.1	288.5	294.1	292.3	283.7
82.5°	73.0	100.6	137.5	169.8	196.4	218.2	237.2	245.7	246.7	242.0	234.3
85°	52.2	73.0	104.3	131.9	156.5	172.6	184.0	190.6	192.6	188.9	180.3
87.5°	29.4	42.6	61.7	81.6	100.6	112.0	118.6	122.5	125.3	121.4	115.7
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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TEST NUMBER: P977011
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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	931.8	931.8	931.8	931.8	931.8	931.8	931.8	*931.8*
2.5°	934.6	937.4	936.5	938.4	939.3	939.3	936.5	*938.4*
5°	975.3	981.0	984.9	990.5	994.3	994.3	995.2	*998.1*
7.5°	1020.0	1029.4	1038.0	1044.6	1049.4	1051.3	1054.1	*1056.9*
10°	1061.6	1073.1	1082.6	1091.1	1096.7	1100.6	1103.4	*1108.2*
12.5°	1093.9	1107.2	1117.7	1127.1	1134.8	1140.4	1143.2	*1147.0*
15°	1117.7	1132.9	1145.1	1155.6	1162.2	1168.9	1171.7	*1175.5*
17.5°	1131.8	1147.0	1160.3	1170.8	1178.3	1185.0	1188.8	*1192.6*
20°	*1135.7*	*1150.9*	*1165.0*	*1175.5*	*1183.2*	*1191.6*	*1195.4*	*1199.3*
22.5°	1129.9	1145.1	1160.3	1171.7	1180.2	1188.8	1192.6	*1196.5*
25°	1118.6	1134.8	1149.8	1161.3	1168.9	1177.4	1182.1	*1184.1*
27.5°	1100.6	1116.6	1131.8	1142.3	1150.9	1159.4	1164.1	*1165.0*
30°	1075.0	1091.1	1106.3	1116.6	1126.2	1133.8	1138.5	*1138.5*
32.5°	1043.6	1058.8	1075.0	1084.5	1093.0	1100.6	1105.3	*1107.2*
35°	1007.6	1022.8	1038.0	1046.5	1056.0	1061.6	1065.4	*1068.3*
37.5°	968.7	983.8	996.2	1003.8	1014.2	1018.1	1023.7	*1022.8*
40°	926.9	939.3	950.6	957.3	965.8	970.6	976.3	*975.3*
42.5°	883.4	895.6	905.1	912.7	917.4	922.2	926.0	*925.1*
45°	838.7	850.2	858.6	862.4	870.1	871.9	875.7	*875.7*
47.5°	794.1	803.6	811.2	816.8	820.7	822.6	826.4	*826.4*
50°	751.5	760.0	764.7	769.5	773.3	776.1	778.0	*778.9*
52.5°	709.7	716.3	720.2	723.9	727.7	729.6	731.5	*730.5*
55°	669.9	674.6	677.4	680.3	683.1	685.9	685.9	*685.9*
57.5°	630.0	632.8	635.6	637.6	640.4	642.3	642.3	*642.3*
60°	591.1	593.9	594.9	596.8	599.6	600.5	601.5	*599.6*
62.5°	553.2	554.0	555.1	556.0	558.8	560.7	560.7	*559.8*
65°	514.2	514.2	515.2	516.1	518.0	520.0	520.8	*518.9*
67.5°	476.3	476.3	477.2	477.2	480.1	482.0	482.9	*482.9*
70°	439.3	438.4	440.3	441.2	443.1	443.1	445.0	*445.0*
72.5°	402.2	401.3	403.2	403.2	405.2	406.1	406.1	*406.1*
75°	366.2	363.4	364.3	362.4	364.3	364.3	363.4	*363.4*
77.5°	327.3	320.6	318.8	315.0	315.0	315.0	313.1	*313.1*
80°	278.0	271.3	268.5	265.6	265.6	264.7	263.8	*263.8*
82.5°	228.7	222.9	220.1	217.3	219.1	216.3	217.3	*218.2*
85°	175.6	170.7	168.9	166.0	165.1	165.1	166.0	*165.1*
87.5°	113.9	109.0	109.0	106.2	108.2	105.3	102.4	*104.3*
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: P977011
CATALOG NUMBER: 24SR-LD2-C-39-UNV-L840-CD1-ST-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	12.1	13.9	12.5	14.2	14.5	14.0	15.7	14.4	16.1	16.4
	3H	14.0	15.6	14.4	15.9	16.2	16.4	17.9	16.7	18.2	18.6
	4H	14.7	16.2	15.1	16.5	16.9	17.4	18.9	17.8	19.3	19.6
	6H	15.3	16.6	15.7	17.0	17.4	18.4	19.8	18.8	20.1	20.5
	8H	15.5	16.8	15.9	17.2	17.6	18.8	20.1	19.2	20.5	20.9
	12H	15.6	16.9	16.0	17.3	17.7	19.2	20.5	19.6	20.9	21.3
4H	2H	13.4	14.9	13.8	15.3	15.6	14.8	16.2	15.2	16.6	17.0
	3H	15.8	17.0	16.2	17.4	17.8	17.4	18.6	17.8	19.0	19.4
	4H	16.8	17.9	17.2	18.3	18.8	18.6	19.8	19.0	20.2	20.6
	6H	17.6	18.6	18.1	19.1	19.5	19.7	20.8	20.2	21.2	21.6
	8H	17.9	18.9	18.4	19.3	19.8	20.3	21.2	20.7	21.6	22.1
	12H	18.2	19.0	18.6	19.5	20.0	20.7	21.6	21.2	22.1	22.5
8H	4H	17.7	18.6	18.1	19.1	19.5	19.1	20.1	19.6	20.5	21.0
	6H	18.9	19.7	19.4	20.2	20.7	20.5	21.3	21.0	21.8	22.2
	8H	19.5	20.2	20.0	20.7	21.2	21.1	21.8	21.6	22.3	22.8
	12H	19.9	20.6	20.4	21.1	21.6	21.7	22.4	22.2	22.9	23.4
12H	4H	17.9	18.7	18.3	19.2	19.7	19.2	20.1	19.7	20.6	21.0
	6H	19.2	20.0	19.8	20.4	21.0	20.7	21.4	21.2	21.9	22.4
	8H	20.0	20.6	20.5	21.1	21.6	21.4	22.0	21.9	22.5	23.1

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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

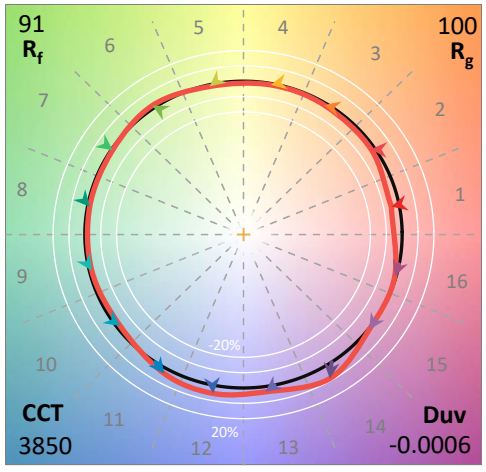
Test Information

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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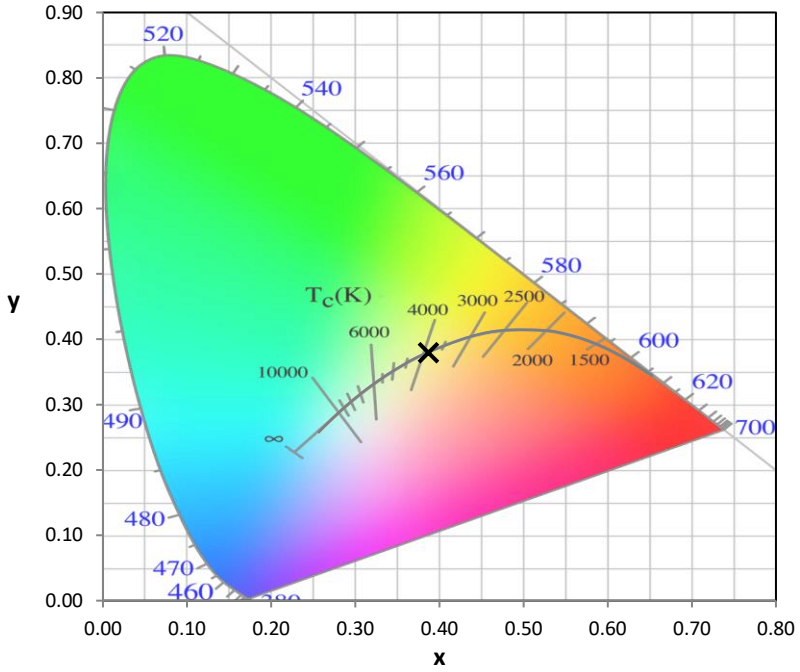
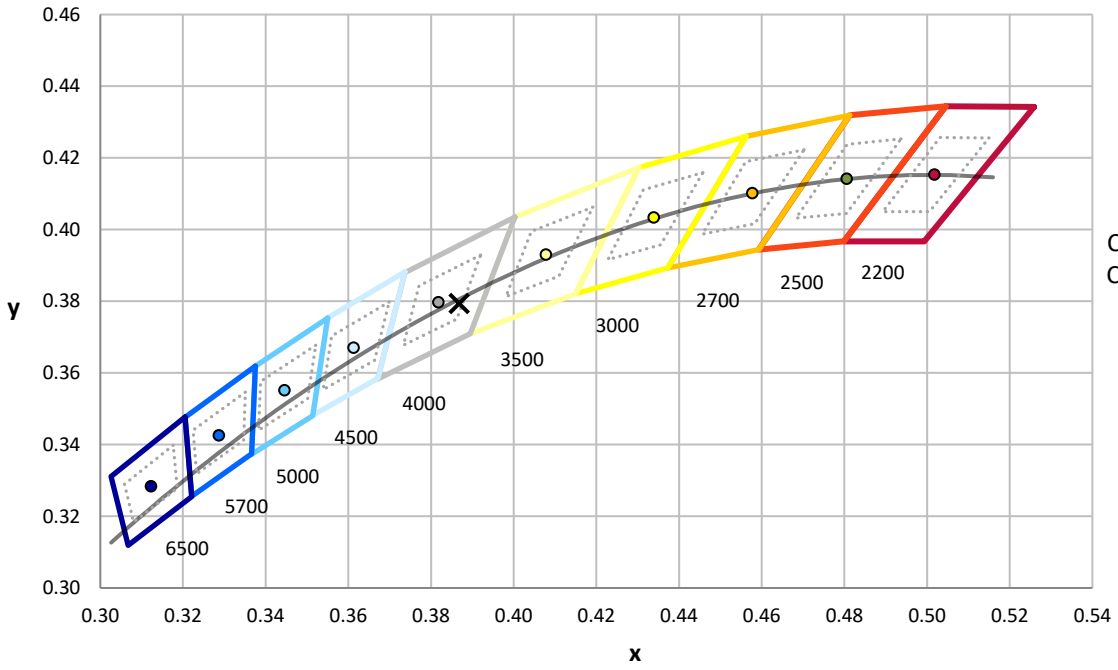
CIE 1931 Chromaticity Diagram



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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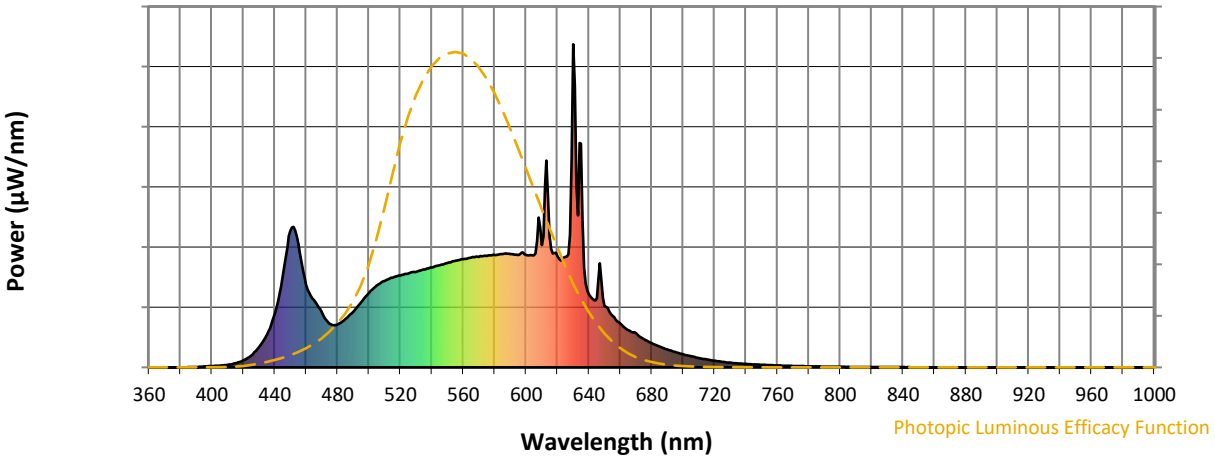
Photopic Flux vs. Wavelength



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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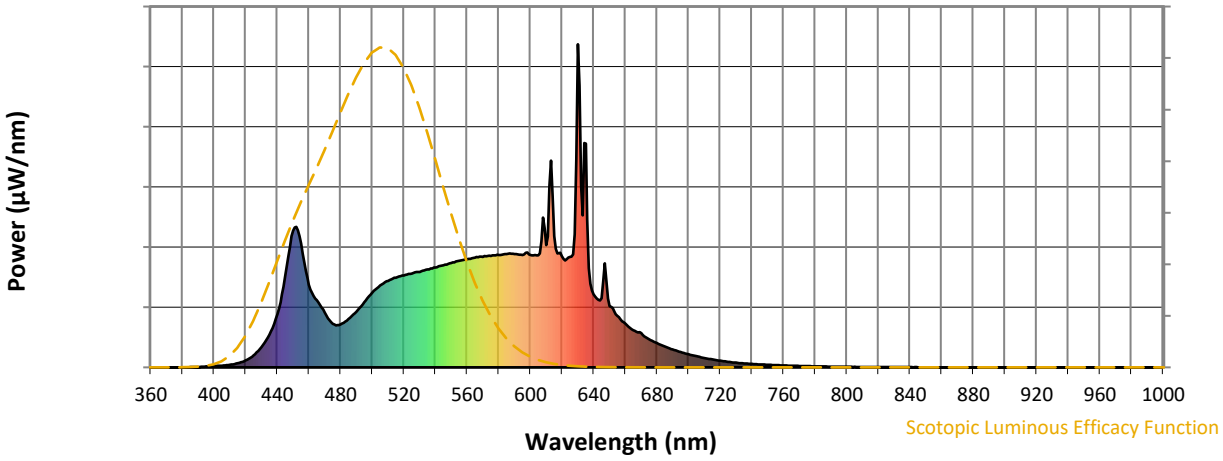
Scotopic Flux vs. Wavelength



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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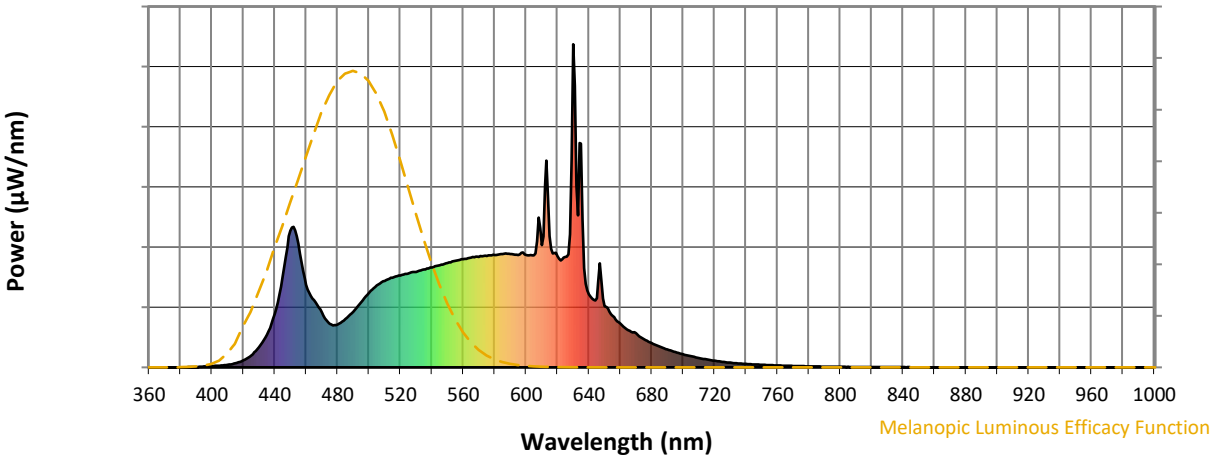
Melanopic Flux vs. Wavelength



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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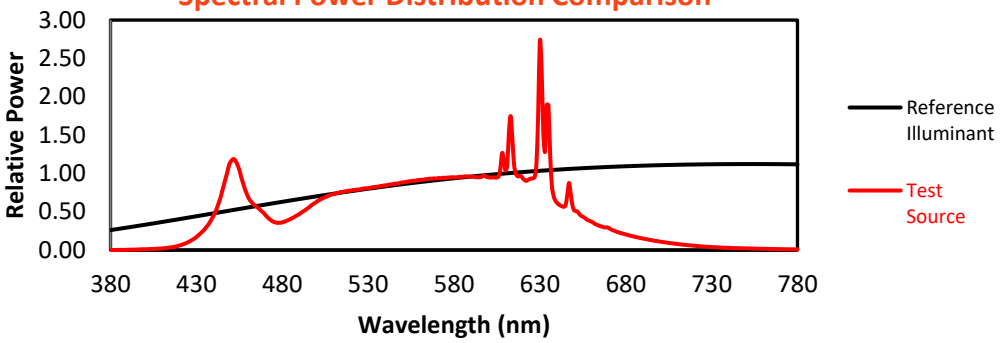
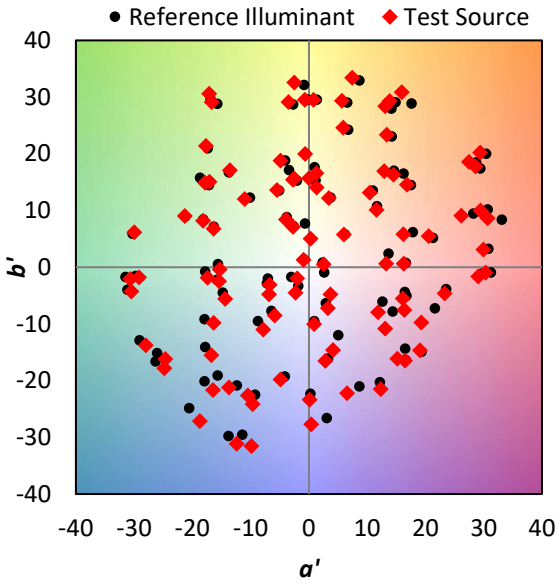
Summary

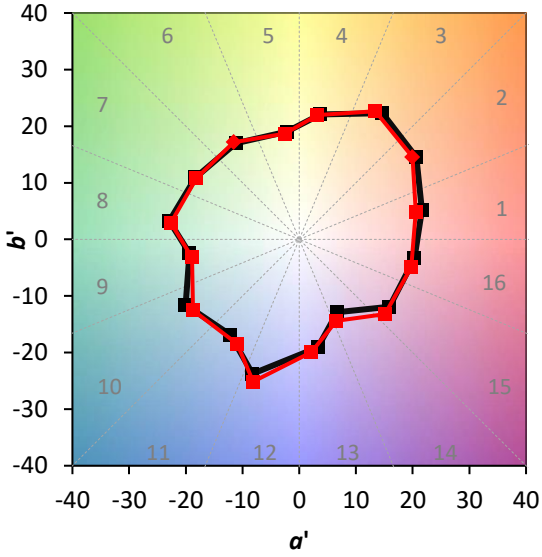
R_f = 91.3
R_g = 99.8
CIE R_a = 94.0
R_9 = 65.3

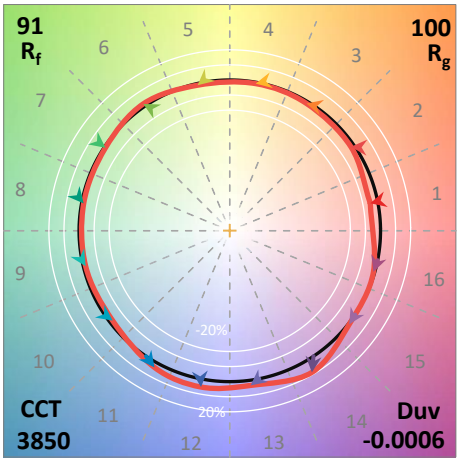
Spectral Power Distribution Comparison

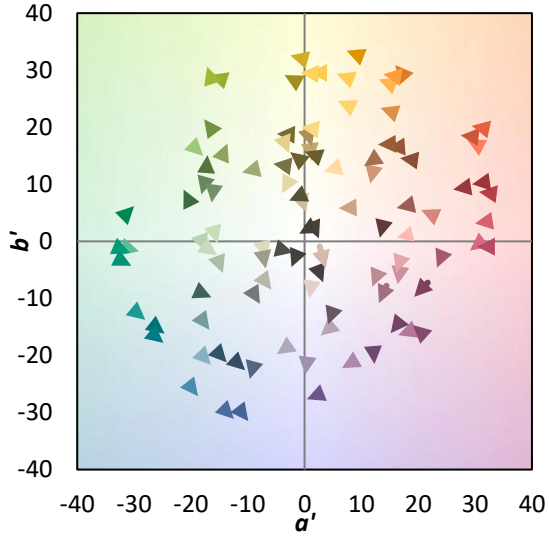


Color Vector Graphics









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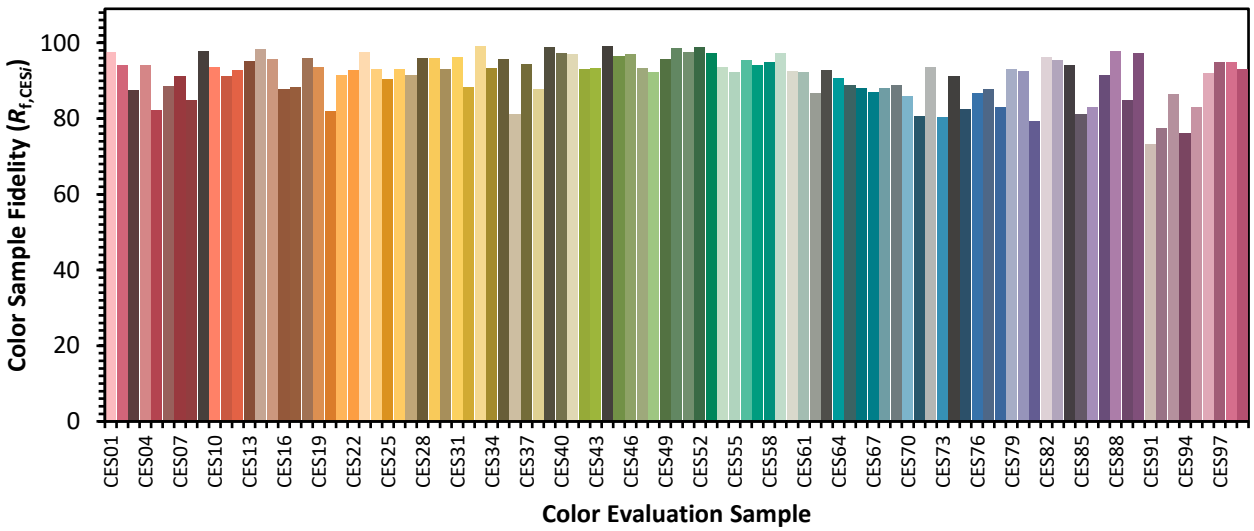
Individual Sample Fidelity Index ($R_{f,i}$)

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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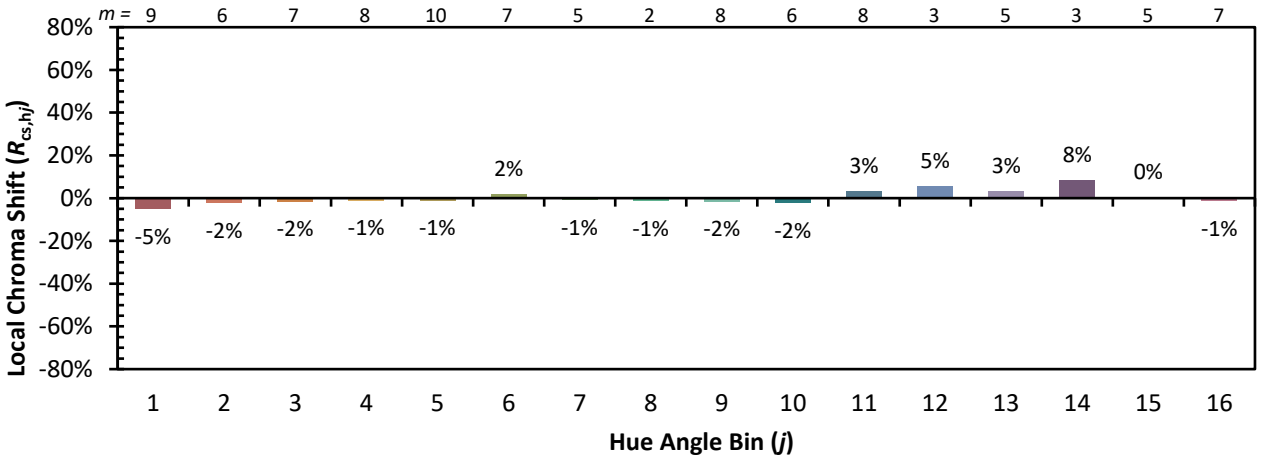
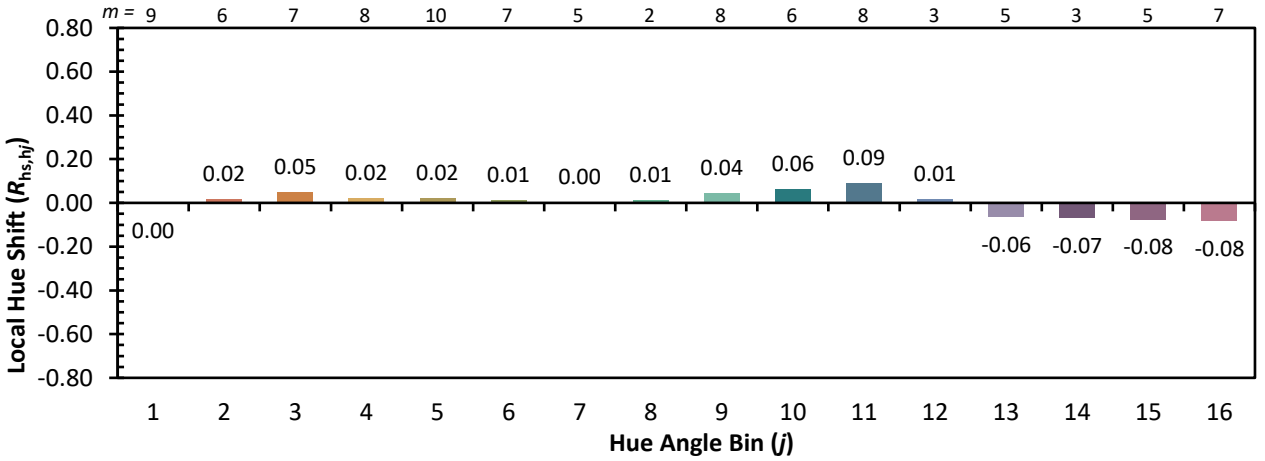
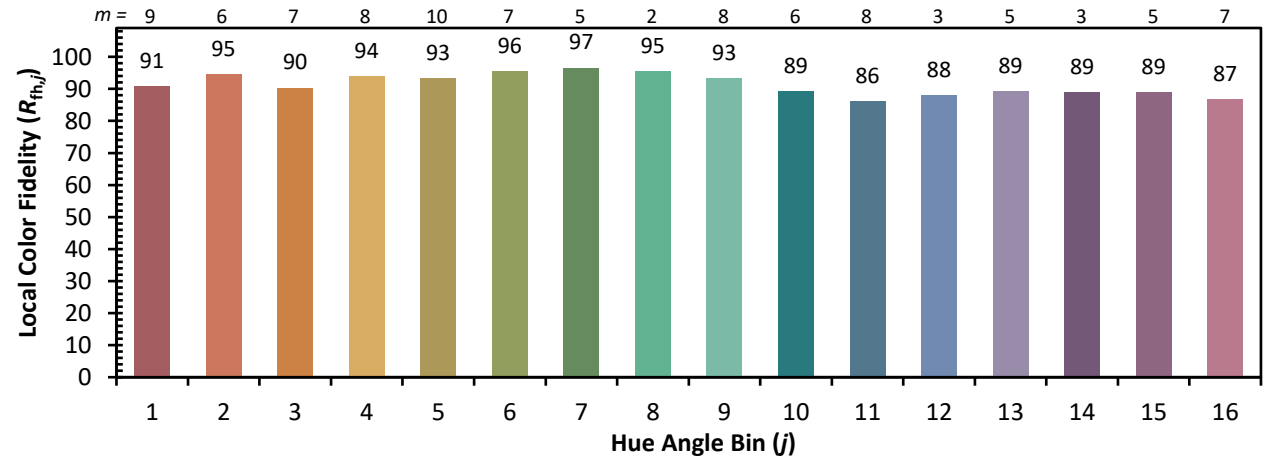
Color Rendition by Hue-Angle Bin







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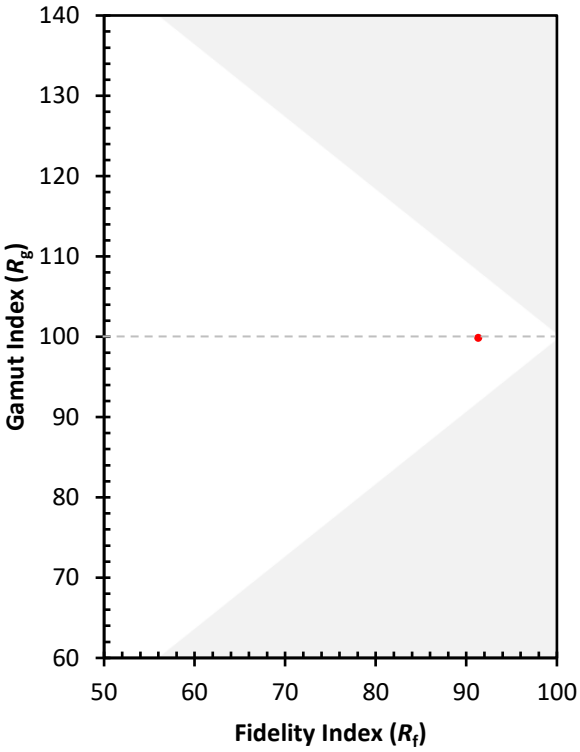
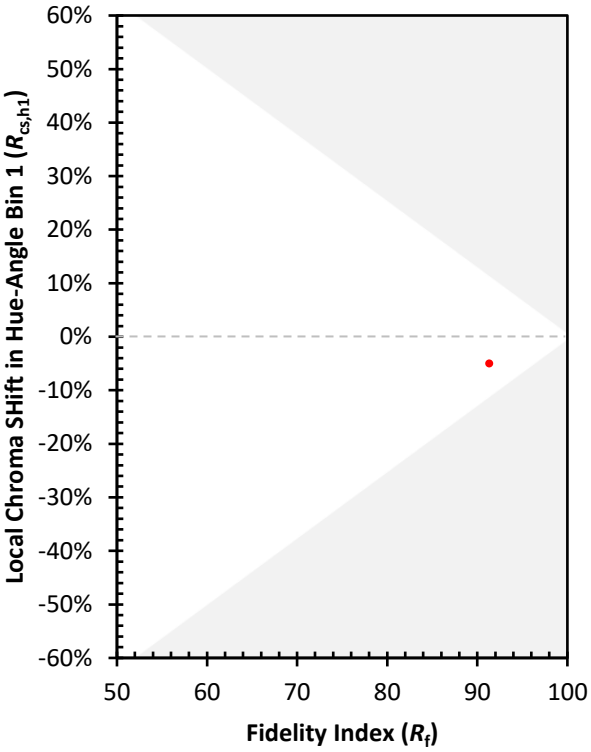
Measure Comparisons





(END OF REPORT)