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: P976990

Luminaire Tested: 24SR-LD2-C-59-UNV-L950-CD1-SO-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:	P976990
Test Lab:	INNOVATION CENTER(P3)
Issue Date:	03/18/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	24SR-LD2-C-59-UNV-L950-CD1-SO-U
Description:	METALUX SKYRIDGE 2x4 5900LM PACKAGE 90CRI 5000K TROFFER with Storaro Orange SKYTR
Light Source:	5000K CCT, 90+ CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4090.0 lumens
Efficiency:	N/A
Efficacy:	93.4 lumens/watt
Spacing Criteria (0/90/45):	1.17 / 1.85 / 1.72
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	43.8
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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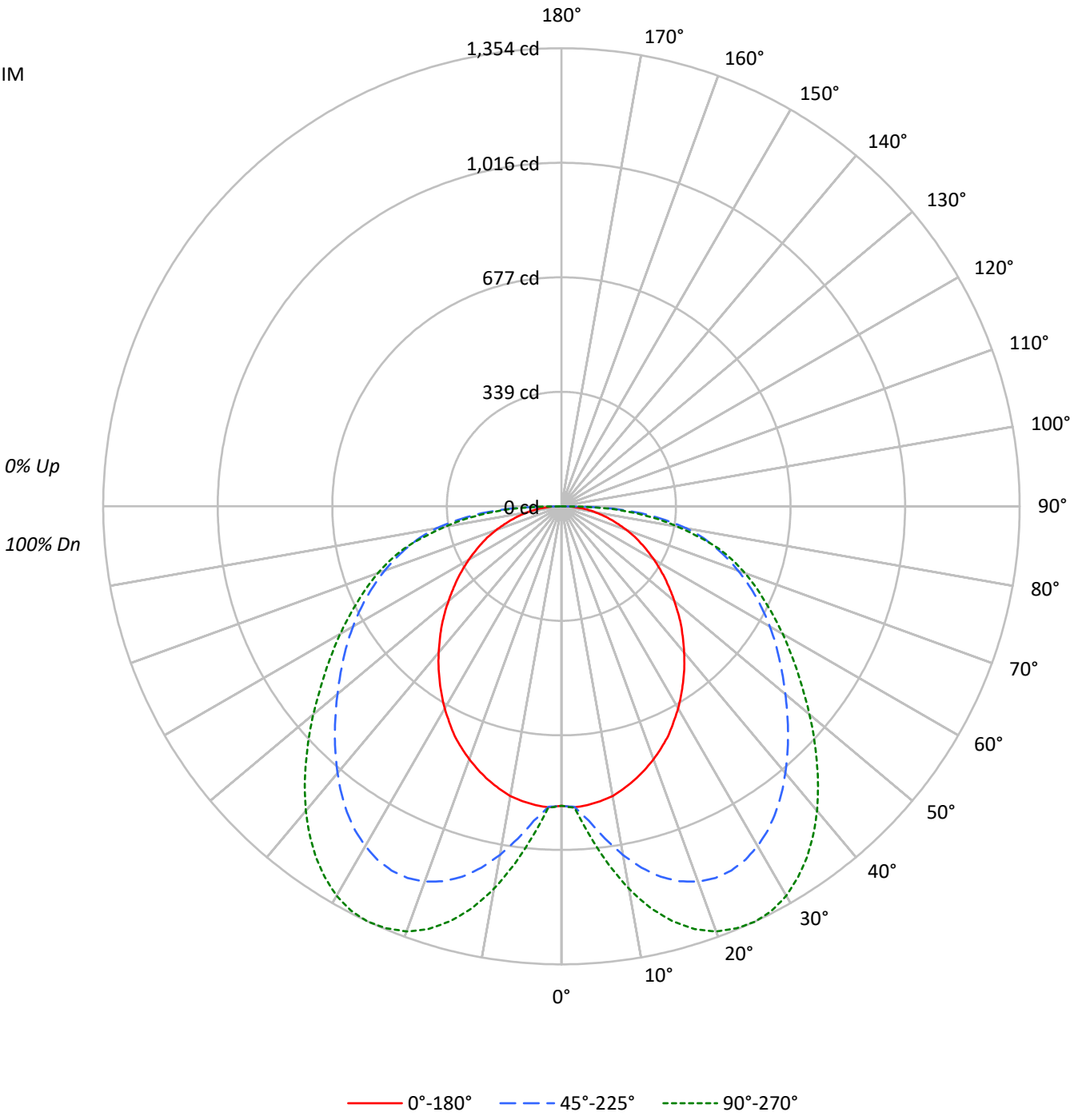
Scaled Data Report

TEST NUMBER: P976990
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L950-CD1-SO-U

Luminous Intensity Polar Plot



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TEST NUMBER: P976990
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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	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1191	1191	1191
5°	1197	1260	1323
10°	1188	1429	1569
15°	1166	1579	1768
20°	1140	1690	1915
25°	1110	1763	2011
30°	1072	1801	2065
35°	1031	1814	2078
40°	991	1808	2064
45°	952	1802	2031
50°	911	1808	2003
55°	879	1844	1997
60°	852	1914	2032
65°	828	2021	2111
70°	807	2186	2269
75°	786	2455	2499
80°	789	2903	2717
85°	872	3645	3294

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
Vertical Angle: 87.5°
Luminance: 4624 cd/sqm

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TEST NUMBER: P976990
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L950-CD1-SO-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	2.2
10°-20°	309.2	7.6
20°-30°	517.8	12.7
30°-40°	648.4	15.9
40°-50°	680.2	16.6
50°-60°	642.7	15.7
60°-70°	562.6	13.8
70°-80°	434.5	10.6
80°-90°	202.7	5.0
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°	918.8	22.5
0°-40°	1567.2	38.3
0°-60°	2890.1	70.7
0°-90°	4090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	886	886	933	968	980	84
15°	837	954	1134	1236	1270	236
25°	748	960	1188	1308	1354	343
35°	628	877	1104	1223	1265	393
45°	500	744	947	1039	1067	386
55°	375	618	786	837	851	335
65°	260	506	635	652	663	258
75°	151	379	472	476	481	160
85°	56	199	236	218	213	60
90°	0	0	0	0	0	

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TEST NUMBER: P976990
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L950-CD1-SO-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	885.0	885.0	885.0	885.0	885.0	885.0	885.0	885.0	885.0	885.0	885.0
2.5°	890.7	889.3	887.8	885.0	883.6	883.6	883.6	883.6	885.0	889.3	892.0
5°	886.5	886.5	883.6	882.1	883.6	887.8	894.9	906.3	917.5	933.1	945.8
7.5°	879.4	877.9	876.6	877.9	890.7	909.1	927.4	948.7	968.5	991.1	1009.4
10°	869.6	868.0	869.6	880.8	906.3	935.9	962.8	989.6	1016.4	1046.1	1071.6
12.5°	854.0	854.0	859.5	885.0	920.3	957.1	992.4	1026.3	1060.4	1094.2	1123.9
15°	837.0	838.4	852.4	889.3	933.1	975.5	1016.4	1056.2	1095.7	1133.8	1166.3
17.5°	817.2	819.9	844.1	889.3	938.8	988.3	1034.9	1078.6	1121.0	1162.1	1196.0
20°	795.9	798.8	834.2	886.5	941.7	995.3	1044.8	1092.9	1138.2	1180.6	1215.8
22.5°	772.0	776.1	821.4	877.9	938.8	996.6	1047.6	1097.1	1143.7	1189.0	1224.3
25°	*747.8*	*753.5*	*805.8*	*866.7*	*930.2*	*989.6*	*1043.4*	*1092.9*	*1142.3*	*1187.6*	*1222.8*
27.5°	718.1	728.0	787.4	849.6	917.5	976.8	1030.7	1083.0	1132.5	1177.7	1212.9
30°	690.0	702.7	764.9	829.8	899.2	958.6	1012.2	1064.5	1114.0	1159.3	1194.7
32.5°	658.8	674.4	739.4	807.3	875.1	933.1	988.3	1040.6	1090.0	1135.3	1169.2
35°	627.8	646.0	712.6	781.9	848.2	906.3	959.9	1012.2	1060.4	1104.1	1136.6
37.5°	596.6	616.4	682.9	753.5	817.2	873.7	927.4	978.4	1027.8	1068.7	1101.3
40°	564.0	586.7	653.1	721.0	784.7	839.7	893.5	943.0	989.6	1029.2	1060.4
42.5°	531.5	557.0	623.4	690.0	750.7	804.5	858.1	906.3	950.0	988.3	1017.9
45°	500.5	526.0	590.9	657.4	716.8	770.4	822.8	869.6	911.8	947.2	975.5
47.5°	468.0	496.3	561.2	626.2	682.9	736.6	787.4	831.3	872.2	904.7	931.8
50°	435.4	466.5	530.2	593.7	651.7	704.1	753.5	795.9	834.2	863.8	889.3
52.5°	404.2	436.8	501.8	564.0	620.7	673.0	721.0	762.1	797.5	824.3	846.9
55°	374.6	408.6	473.7	534.4	592.4	643.2	688.5	728.0	760.5	786.0	805.8
57.5°	344.9	381.8	446.7	508.9	564.0	615.0	658.8	695.5	725.2	749.3	766.3
60°	316.7	354.8	421.4	482.0	537.2	586.7	629.1	663.0	691.3	711.1	723.8
62.5°	287.1	328.0	394.4	456.6	511.7	558.5	599.4	632.0	655.9	673.0	684.3
65°	260.0	301.1	369.1	431.3	483.6	528.7	566.9	598.1	620.7	634.8	641.8
67.5°	233.2	275.6	343.6	404.2	455.2	499.0	534.4	564.0	583.8	595.2	600.8
70°	205.1	250.2	316.7	376.1	425.6	466.5	501.8	527.3	545.8	555.7	558.5
72.5°	176.7	223.3	289.9	347.7	394.4	434.1	466.5	490.6	507.5	514.6	516.1
75°	151.2	195.2	260.0	315.2	360.5	397.2	429.7	452.4	465.1	472.2	473.7
77.5°	125.7	168.2	230.4	282.7	322.3	357.6	388.8	410.0	422.7	428.4	428.4
80°	101.8	141.3	197.8	244.6	282.7	315.2	343.6	364.7	376.1	374.6	369.1
82.5°	79.1	115.9	164.0	205.1	238.9	268.6	297.0	309.7	313.9	309.7	305.3
85°	56.5	86.2	124.4	158.3	187.9	210.6	229.0	238.9	240.3	236.1	231.9
87.5°	32.5	48.1	70.8	96.1	111.7	125.7	141.3	147.0	147.0	149.9	141.3
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: P976990
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L950-CD1-SO-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	885.0	885.0	885.0	885.0	885.0	885.0	885.0	*885.0*
2.5°	890.7	892.0	892.0	894.9	896.4	896.4	894.9	*892.0*
5°	950.0	958.6	964.1	972.7	976.8	981.2	982.6	*979.7*
7.5°	1019.3	1032.0	1043.4	1056.2	1061.7	1066.1	1071.6	*1067.4*
10°	1085.8	1102.8	1116.9	1130.9	1139.5	1145.2	1149.4	*1148.1*
12.5°	1142.3	1162.1	1177.7	1191.8	1203.0	1211.6	1215.8	*1215.8*
15°	1186.1	1208.7	1228.5	1244.1	1255.3	1263.9	1269.6	*1269.6*
17.5°	1220.2	1242.6	1263.9	1279.5	1290.7	1302.1	1307.7	*1310.5*
20°	1239.9	1263.9	1285.0	1302.1	1314.9	1327.4	1333.1	*1337.3*
22.5°	1249.8	1273.8	1296.4	1314.9	1329.0	1340.2	1347.2	*1350.1*
25°	*1249.8*	*1275.1*	*1299.3*	*1317.6*	*1331.8*	*1344.6*	*1351.6*	*1354.5*
27.5°	1241.3	1268.1	1292.2	1309.2	1324.8	1337.3	1344.6	*1347.2*
30°	1224.3	1251.2	1275.1	1292.2	1307.7	1319.1	1326.1	*1329.0*
32.5°	1197.5	1225.7	1248.3	1265.2	1280.8	1292.2	1299.3	*1300.6*
35°	1166.3	1193.1	1214.4	1231.4	1247.0	1256.9	1262.6	*1265.2*
37.5°	1128.3	1153.6	1174.9	1190.5	1204.6	1215.8	1221.5	*1222.8*
40°	1087.2	1111.1	1129.6	1143.7	1157.9	1167.8	1173.4	*1174.9*
42.5°	1043.4	1066.1	1083.0	1095.7	1108.3	1116.9	1121.0	*1122.6*
45°	998.2	1017.9	1033.5	1044.8	1056.2	1063.2	1067.4	*1067.4*
47.5°	952.9	971.3	983.9	992.4	1002.3	1009.4	1013.7	*1012.2*
50°	907.6	923.2	933.1	941.7	950.0	954.2	958.6	*957.1*
52.5°	862.3	876.6	882.1	889.3	896.4	900.6	904.7	*901.9*
55°	818.6	828.5	834.2	839.7	845.4	849.6	852.4	*851.1*
57.5°	776.1	783.2	787.4	793.1	797.5	800.1	803.0	*801.6*
60°	730.9	736.6	739.4	745.1	749.3	752.2	755.0	*755.0*
62.5°	688.5	692.8	694.2	699.9	702.7	705.4	709.8	*708.2*
65°	643.2	647.6	650.4	654.6	657.4	660.3	664.5	*663.0*
67.5°	600.8	605.1	606.5	610.8	615.0	619.2	620.7	*620.7*
70°	558.5	561.2	562.7	568.4	569.7	573.9	576.8	*576.8*
72.5°	516.1	517.4	520.3	524.5	527.3	530.2	533.0	*531.5*
75°	470.8	473.7	475.0	477.9	477.9	480.7	480.7	*480.7*
77.5°	424.2	419.8	418.5	417.0	415.7	415.7	415.7	*414.1*
80°	360.5	356.3	354.8	352.1	352.1	352.1	352.1	*350.6*
82.5°	298.3	292.6	289.9	288.4	287.1	287.1	287.1	*285.5*
85°	226.2	220.5	219.1	217.6	217.6	216.3	215.0	*213.4*
87.5°	140.0	135.6	134.3	131.5	133.0	130.1	130.1	*130.1*
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: P976990
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L950-CD1-SO-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	12.4	14.2	12.8	14.5	14.8	15.0	16.7	15.4	17.1	17.4
	3H	14.3	15.9	14.7	16.2	16.6	17.5	19.0	17.8	19.4	19.7
	4H	15.0	16.5	15.4	16.9	17.2	18.6	20.1	19.0	20.5	20.8
	6H	15.6	17.0	16.0	17.3	17.7	19.6	21.0	20.0	21.4	21.8
	8H	15.8	17.1	16.2	17.5	17.9	20.1	21.4	20.5	21.8	22.2
	12H	15.9	17.2	16.4	17.6	18.0	20.5	21.8	20.9	22.2	22.6
4H	2H	14.0	15.5	14.3	15.8	16.2	15.7	17.2	16.1	17.6	18.0
	3H	16.3	17.6	16.7	18.0	18.4	18.5	19.7	18.9	20.1	20.5
	4H	17.4	18.5	17.8	19.0	19.4	19.8	21.0	20.2	21.4	21.8
	6H	18.2	19.3	18.7	19.7	20.1	21.0	22.0	21.5	22.5	22.9
	8H	18.5	19.5	19.0	19.9	20.4	21.5	22.5	22.0	23.0	23.4
	12H	18.8	19.6	19.2	20.1	20.6	22.0	22.9	22.5	23.4	23.8
8H	4H	18.4	19.4	18.9	19.9	20.3	20.3	21.3	20.8	21.7	22.2
	6H	19.7	20.5	20.2	21.0	21.5	21.7	22.6	22.2	23.0	23.5
	8H	20.3	21.0	20.8	21.5	22.0	22.4	23.1	22.9	23.6	24.1
	12H	20.7	21.4	21.2	21.9	22.4	23.0	23.7	23.5	24.2	24.7
12H	4H	18.6	19.5	19.1	20.0	20.5	20.4	21.3	20.9	21.8	22.2
	6H	20.1	20.8	20.6	21.3	21.8	21.9	22.7	22.4	23.1	23.7
	8H	20.8	21.5	21.3	21.9	22.5	22.7	23.3	23.2	23.8	24.4

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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: SP1-2506-457-8

Test Date: 07/02/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L950-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L950-CD1-U

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

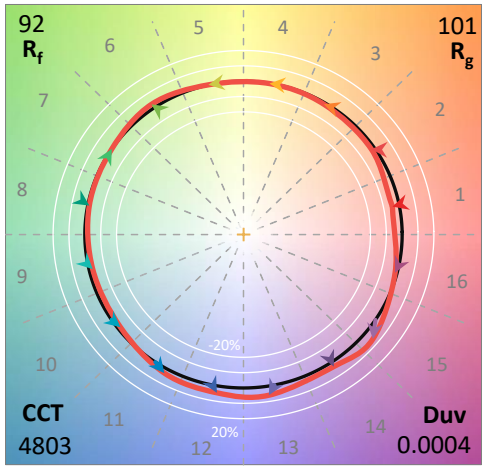
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2506-457-8
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-L950-CD1-U**
Description:	2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K):	4803
CIE u':	0.2133
CIE v':	0.4881
Duv:	0.0004
CIE x:	0.3510
CIE y:	0.3570
CIE z:	0.2921
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	574
Purity:	12.41797
Rf:	91.5
Rg:	100.9

CRI (Ra):	94.6				
R1:	95.9	R9:	74.3		
R2:	96.0	R10:	88.6		
R3:	94.0	R11:	95.2		
R4:	95.8	R12:	71.3		
R5:	94.6	R13:	96.0		
R6:	92.9	R14:	96.1		
R7:	96.3	R15:	94.1		
R8:	91.2				



Test Conditions

Stabilization Time:	43M
Operation Time:	1H 43M
Sphere Temperature (°C):	24.9

REPORT NUMBER: SP1-2506-457-8

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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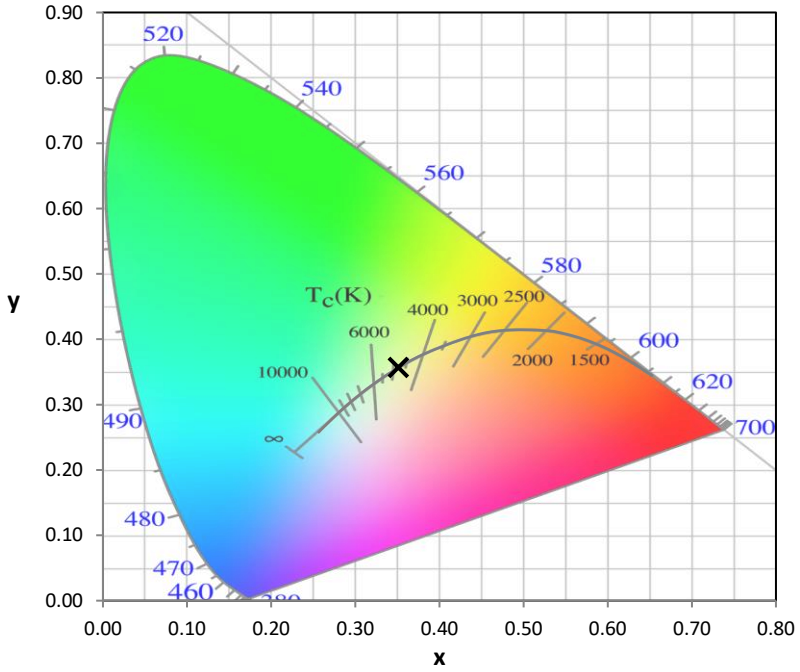
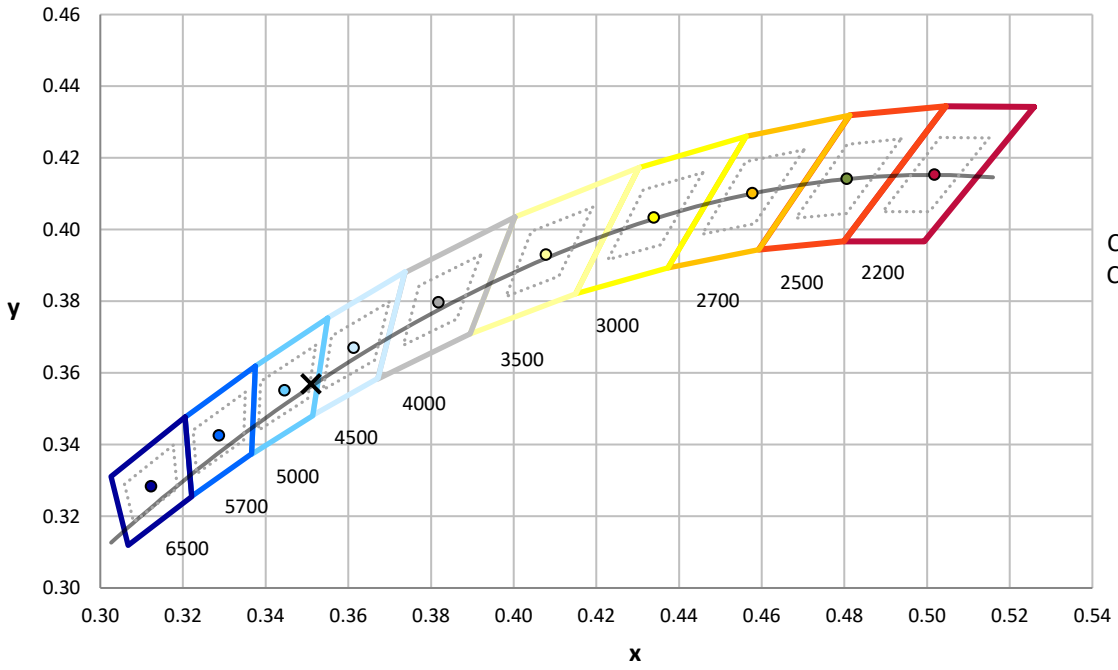
CIE 1931 Chromaticity Diagram



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



CCT = 4803K
CIE x = 0.3510
CIE y = 0.3570
Duv = 0.0004

Point lies inside the ANSI 5000K 7-step quadrangle

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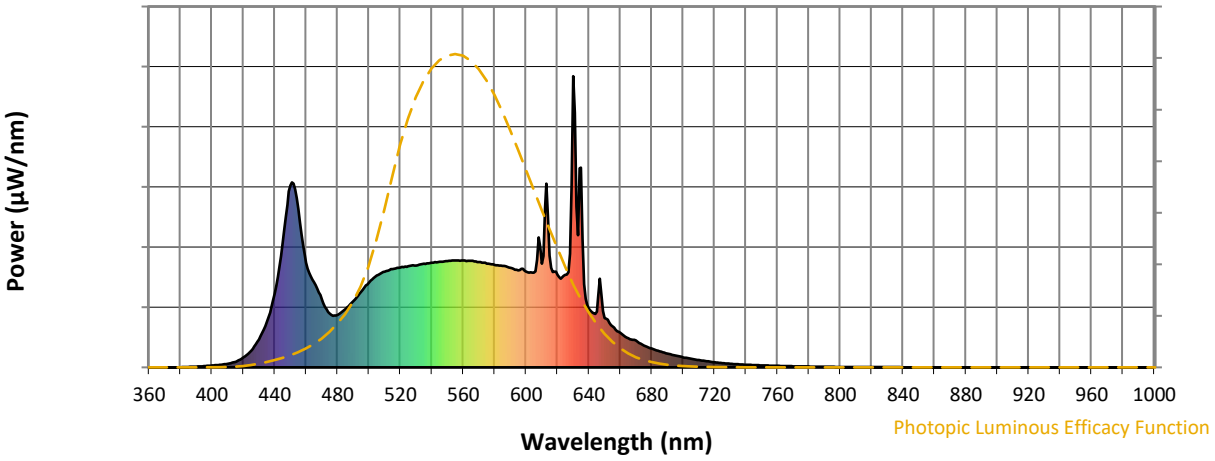
Photopic Flux vs. Wavelength



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	227	NR	620	318	NR	750	7	NR	880	0	NR
365	0	NR	495	259	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	292	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	315	NR	635	686	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	202	NR	770	4	NR	900	0	NR
385	1	NR	515	338	NR	645	192	NR	775	3	NR	905	0	NR
390	3	NR	520	343	NR	650	169	NR	780	3	NR	910	0	NR
395	5	NR	525	347	NR	655	141	NR	785	2	NR	915	0	NR
400	6	NR	530	350	NR	660	119	NR	790	2	NR	920	0	NR
405	9	NR	535	356	NR	665	100	NR	795	2	NR	925	0	NR
410	12	NR	540	359	NR	670	92	NR	800	2	NR	930	0	NR
415	19	NR	545	363	NR	675	75	NR	805	1	NR	935	0	NR
420	34	NR	550	365	NR	680	64	NR	810	1	NR	940	0	NR
425	57	NR	555	368	NR	685	55	NR	815	1	NR	945	0	NR
430	96	NR	560	367	NR	690	47	NR	820	1	NR	950	0	NR
435	157	NR	565	366	NR	695	41	NR	825	1	NR	955	0	NR
440	252	NR	570	361	NR	700	34	NR	830	1	NR	960	0	NR
445	427	NR	575	356	NR	705	30	NR	835	1	NR	965	0	NR
450	625	NR	580	352	NR	710	25	NR	840	1	NR	970	0	NR
455	544	NR	585	348	NR	715	21	NR	845	0	NR	975	0	NR
460	360	NR	590	342	NR	720	18	NR	850	0	NR	980	0	NR
465	292	NR	595	333	NR	725	15	NR	855	0	NR	985	0	NR
470	232	NR	600	329	NR	730	12	NR	860	0	NR	990	0	NR
475	184	NR	605	325	NR	735	11	NR	865	0	NR	995	0	NR
480	180	NR	610	357	NR	740	9	NR	870	0	NR	1000	0	NR
485	201	NR	615	384	NR	745	8	NR	875	0	NR			

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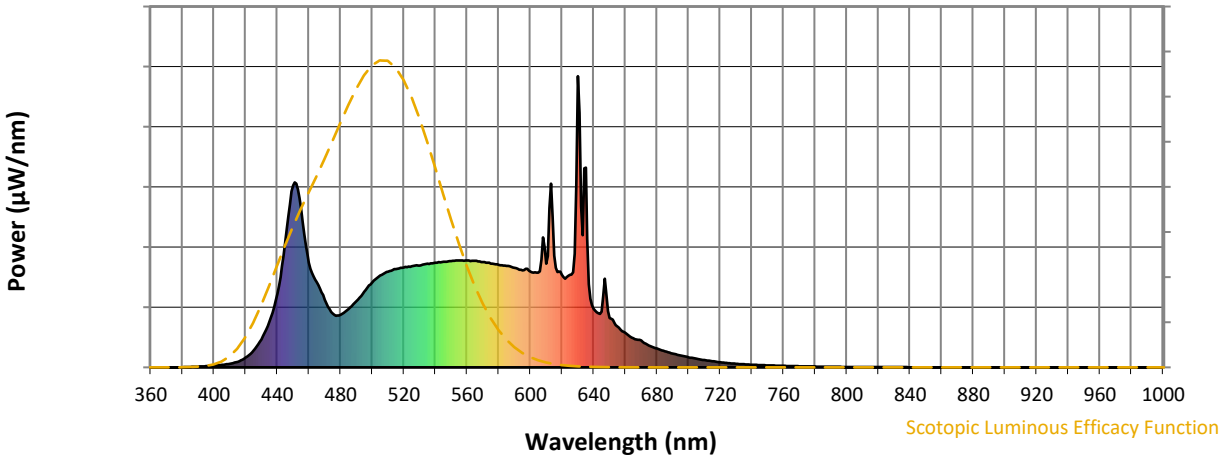
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 2.02**

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	227	NR	620	318	NR	750	7	NR	880	0	NR
365	0	NR	495	259	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	292	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	315	NR	635	686	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	202	NR	770	4	NR	900	0	NR
385	1	NR	515	338	NR	645	192	NR	775	3	NR	905	0	NR
390	3	NR	520	343	NR	650	169	NR	780	3	NR	910	0	NR
395	5	NR	525	347	NR	655	141	NR	785	2	NR	915	0	NR
400	6	NR	530	350	NR	660	119	NR	790	2	NR	920	0	NR
405	9	NR	535	356	NR	665	100	NR	795	2	NR	925	0	NR
410	12	NR	540	359	NR	670	92	NR	800	2	NR	930	0	NR
415	19	NR	545	363	NR	675	75	NR	805	1	NR	935	0	NR
420	34	NR	550	365	NR	680	64	NR	810	1	NR	940	0	NR
425	57	NR	555	368	NR	685	55	NR	815	1	NR	945	0	NR
430	96	NR	560	367	NR	690	47	NR	820	1	NR	950	0	NR
435	157	NR	565	366	NR	695	41	NR	825	1	NR	955	0	NR
440	252	NR	570	361	NR	700	34	NR	830	1	NR	960	0	NR
445	427	NR	575	356	NR	705	30	NR	835	1	NR	965	0	NR
450	625	NR	580	352	NR	710	25	NR	840	1	NR	970	0	NR
455	544	NR	585	348	NR	715	21	NR	845	0	NR	975	0	NR
460	360	NR	590	342	NR	720	18	NR	850	0	NR	980	0	NR
465	292	NR	595	333	NR	725	15	NR	855	0	NR	985	0	NR
470	232	NR	600	329	NR	730	12	NR	860	0	NR	990	0	NR
475	184	NR	605	325	NR	735	11	NR	865	0	NR	995	0	NR
480	180	NR	610	357	NR	740	9	NR	870	0	NR	1000	0	NR
485	201	NR	615	384	NR	745	8	NR	875	0	NR			

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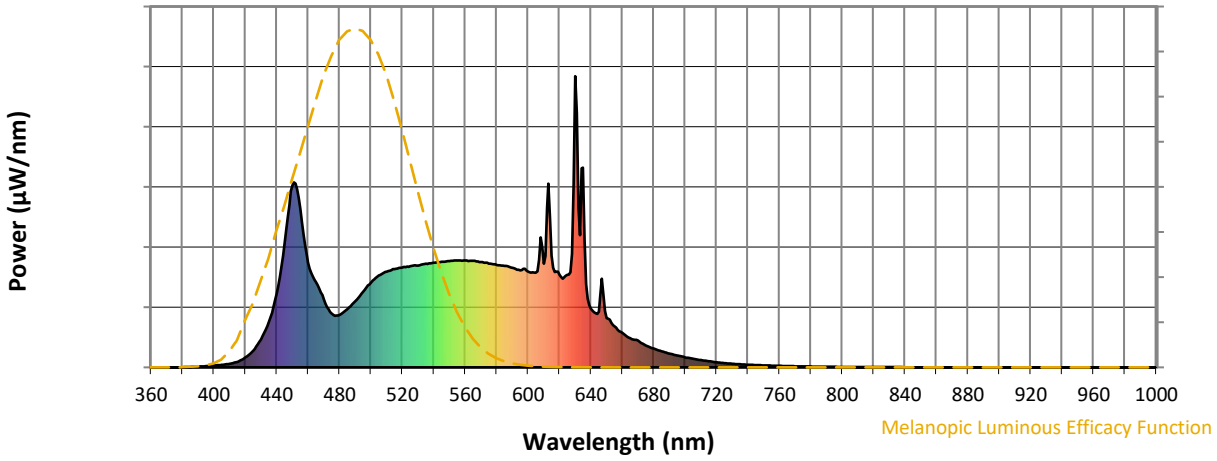
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 4.33**

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	227	NR	620	318	NR	750	7	NR	880	0	NR
365	0	NR	495	259	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	292	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	315	NR	635	686	NR	765	4	NR	895	0	NR
380	0	NR	510	329	NR	640	202	NR	770	4	NR	900	0	NR
385	1	NR	515	338	NR	645	192	NR	775	3	NR	905	0	NR
390	3	NR	520	343	NR	650	169	NR	780	3	NR	910	0	NR
395	5	NR	525	347	NR	655	141	NR	785	2	NR	915	0	NR
400	6	NR	530	350	NR	660	119	NR	790	2	NR	920	0	NR
405	9	NR	535	356	NR	665	100	NR	795	2	NR	925	0	NR
410	12	NR	540	359	NR	670	92	NR	800	2	NR	930	0	NR
415	19	NR	545	363	NR	675	75	NR	805	1	NR	935	0	NR
420	34	NR	550	365	NR	680	64	NR	810	1	NR	940	0	NR
425	57	NR	555	368	NR	685	55	NR	815	1	NR	945	0	NR
430	96	NR	560	367	NR	690	47	NR	820	1	NR	950	0	NR
435	157	NR	565	366	NR	695	41	NR	825	1	NR	955	0	NR
440	252	NR	570	361	NR	700	34	NR	830	1	NR	960	0	NR
445	427	NR	575	356	NR	705	30	NR	835	1	NR	965	0	NR
450	625	NR	580	352	NR	710	25	NR	840	1	NR	970	0	NR
455	544	NR	585	348	NR	715	21	NR	845	0	NR	975	0	NR
460	360	NR	590	342	NR	720	18	NR	850	0	NR	980	0	NR
465	292	NR	595	333	NR	725	15	NR	855	0	NR	985	0	NR
470	232	NR	600	329	NR	730	12	NR	860	0	NR	990	0	NR
475	184	NR	605	325	NR	735	11	NR	865	0	NR	995	0	NR
480	180	NR	610	357	NR	740	9	NR	870	0	NR	1000	0	NR
485	201	NR	615	384	NR	745	8	NR	875	0	NR			

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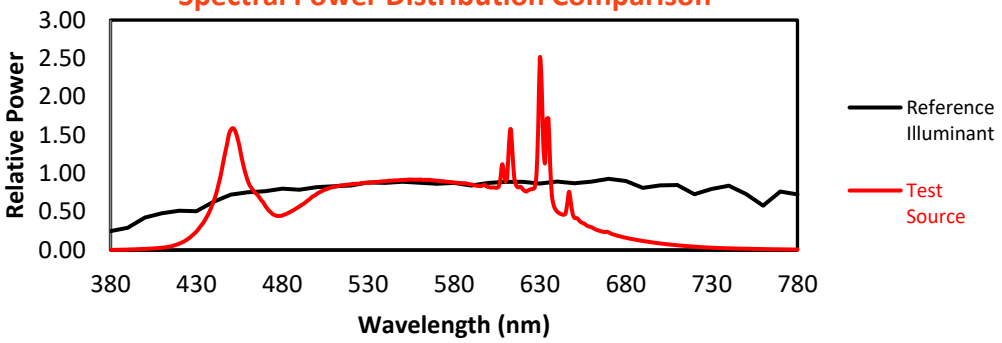
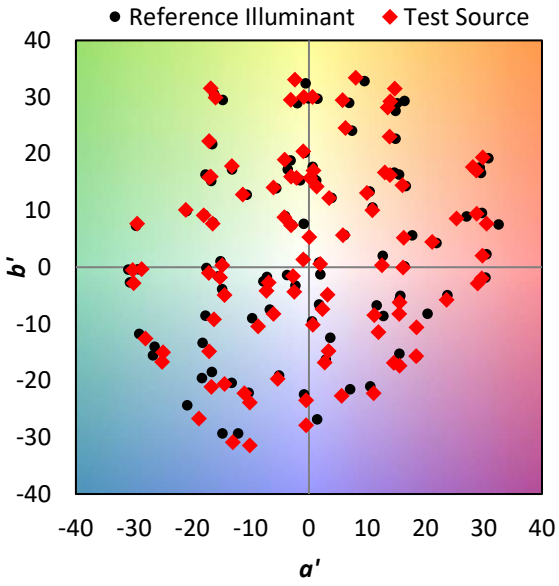
Summary

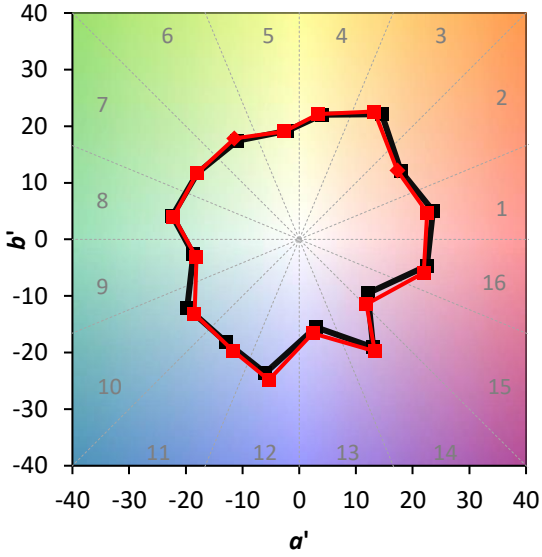
R_f = 91.5
R_g = 100.9
CIE R_a = 94.6
R_9 = 74.3

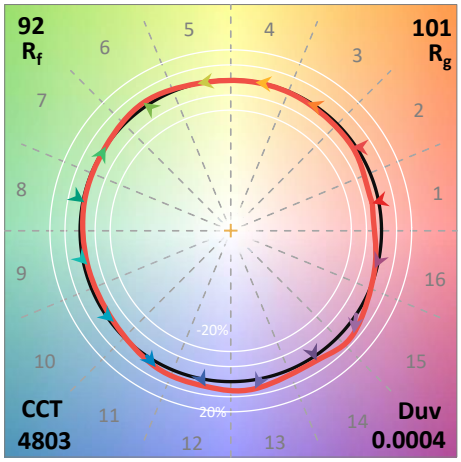
Spectral Power Distribution Comparison

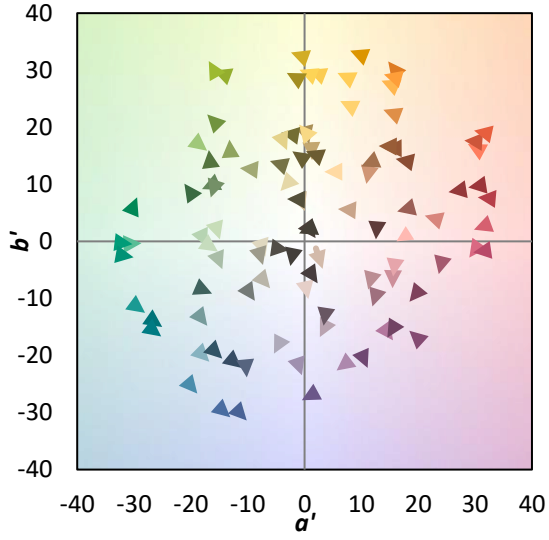


Color Vector Graphics









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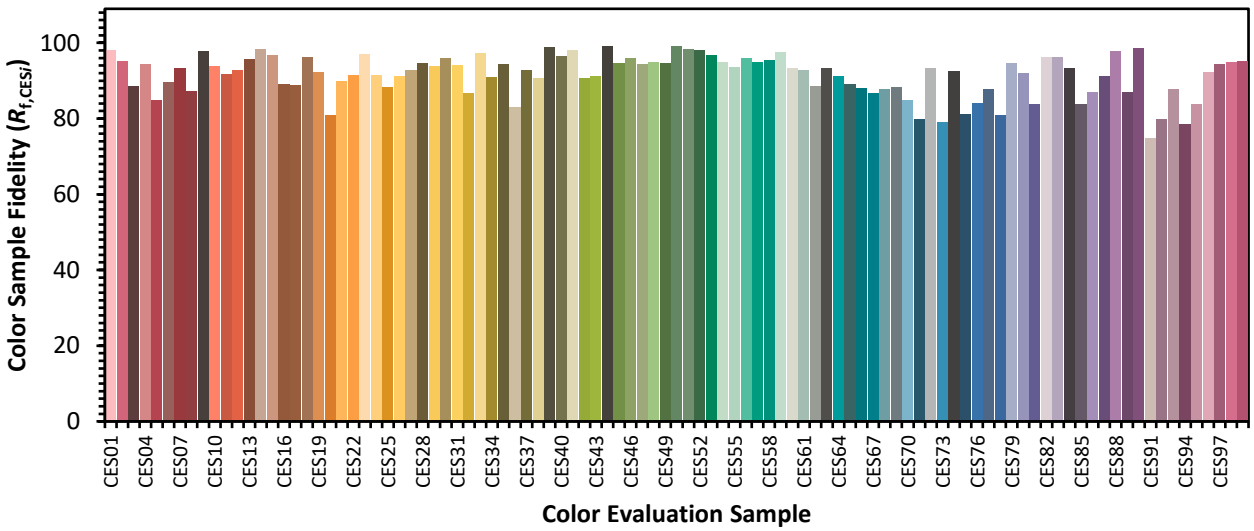
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 84
CES02 = 61	CES27 = 93	CES52 = 98	CES77 = 88
CES03 = 31	CES28 = 95	CES53 = 97	CES78 = 81
CES04 = 69	CES29 = 94	CES54 = 95	CES79 = 95
CES05 = 48	CES30 = 96	CES55 = 94	CES80 = 92
CES06 = 50	CES31 = 94	CES56 = 96	CES81 = 84
CES07 = 41	CES32 = 87	CES57 = 95	CES82 = 96
CES08 = 40	CES33 = 97	CES58 = 95	CES83 = 96
CES09 = 29	CES34 = 91	CES59 = 98	CES84 = 93
CES10 = 73	CES35 = 94	CES60 = 93	CES85 = 84
CES11 = 56	CES36 = 83	CES61 = 93	CES86 = 87
CES12 = 62	CES37 = 93	CES62 = 89	CES87 = 91
CES13 = 43	CES38 = 91	CES63 = 93	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 89	CES90 = 99
CES16 = 47	CES41 = 98	CES66 = 88	CES91 = 75
CES17 = 48	CES42 = 91	CES67 = 87	CES92 = 80
CES18 = 56	CES43 = 91	CES68 = 88	CES93 = 88
CES19 = 70	CES44 = 99	CES69 = 88	CES94 = 79
CES20 = 65	CES45 = 95	CES70 = 85	CES95 = 84
CES21 = 85	CES46 = 96	CES71 = 80	CES96 = 92
CES22 = 77	CES47 = 94	CES72 = 93	CES97 = 94
CES23 = 91	CES48 = 95	CES73 = 79	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 93	CES99 = 95
CES25 = 70	CES50 = 99	CES75 = 81	



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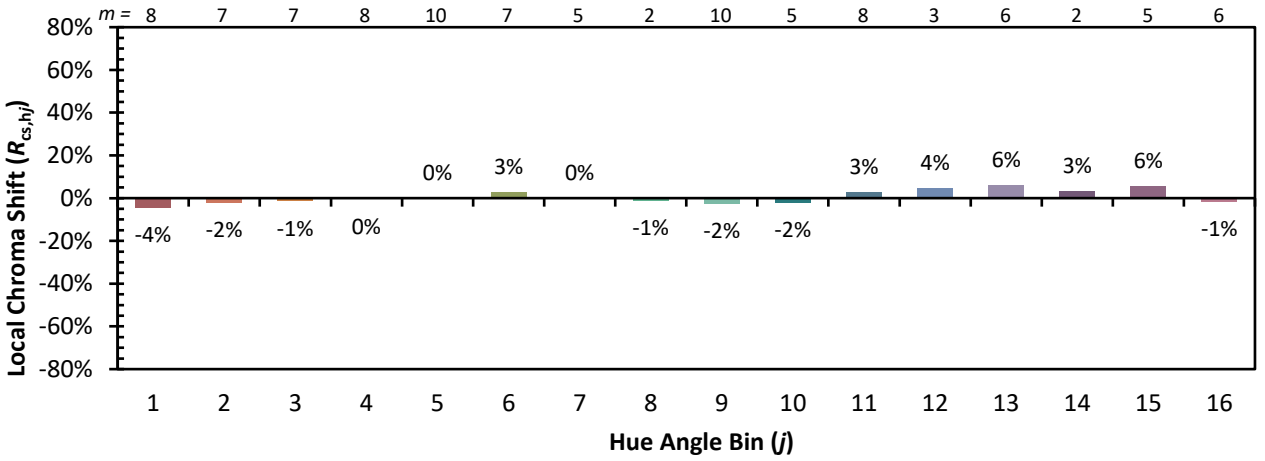
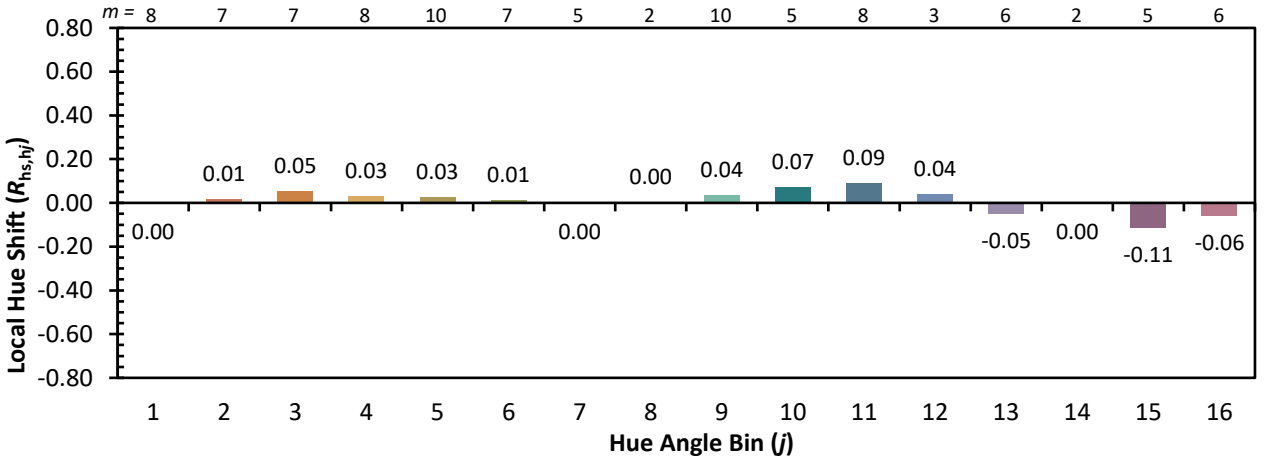
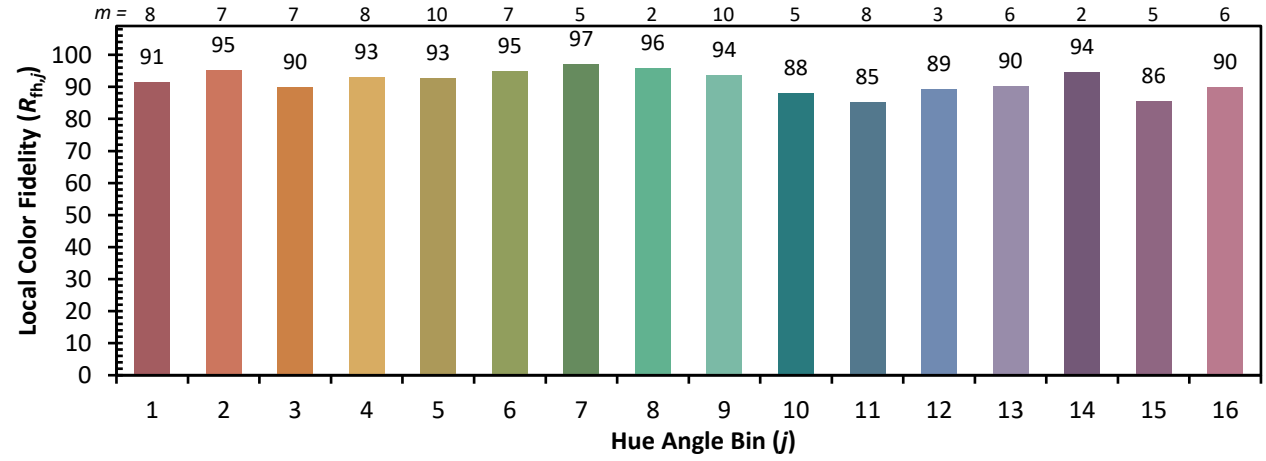
Color Rendition by Hue-Angle Bin







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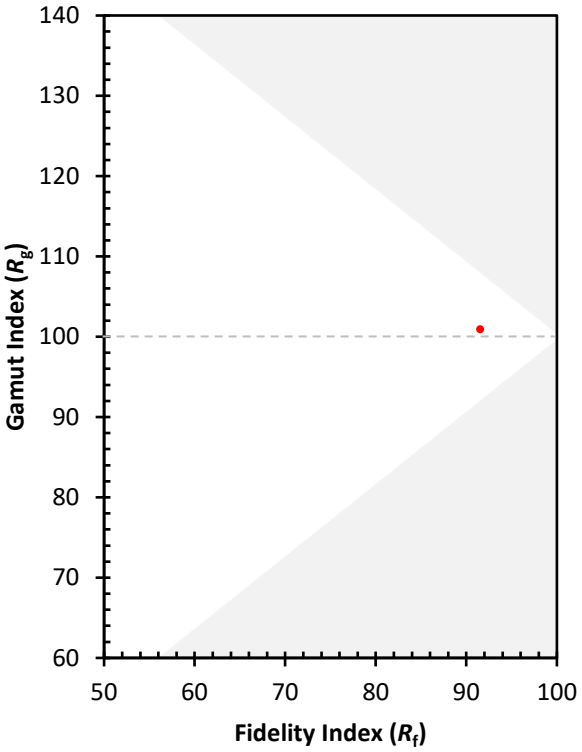
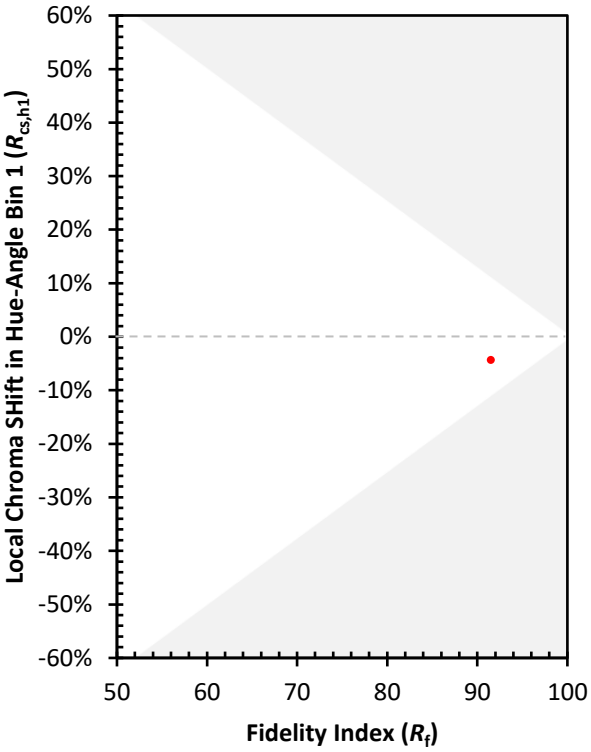
Measure Comparisons





(END OF REPORT)