

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: P976735

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

Issue Date: 03/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P976735  
Test Lab: INNOVATION CENTER(P3)  
Issue Date: 03/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24SR-LD2-C-64-UNV-L950-CD1-BR-U  
Description: METALUX SKYRIDGE 2x4 6400LM PACKAGE 90CRI 5000K TROFFER with Belladonna Rose SKYT  
Light Source: 5000K CCT, 90+ CRI LEDS  
Ballast/Driver: -

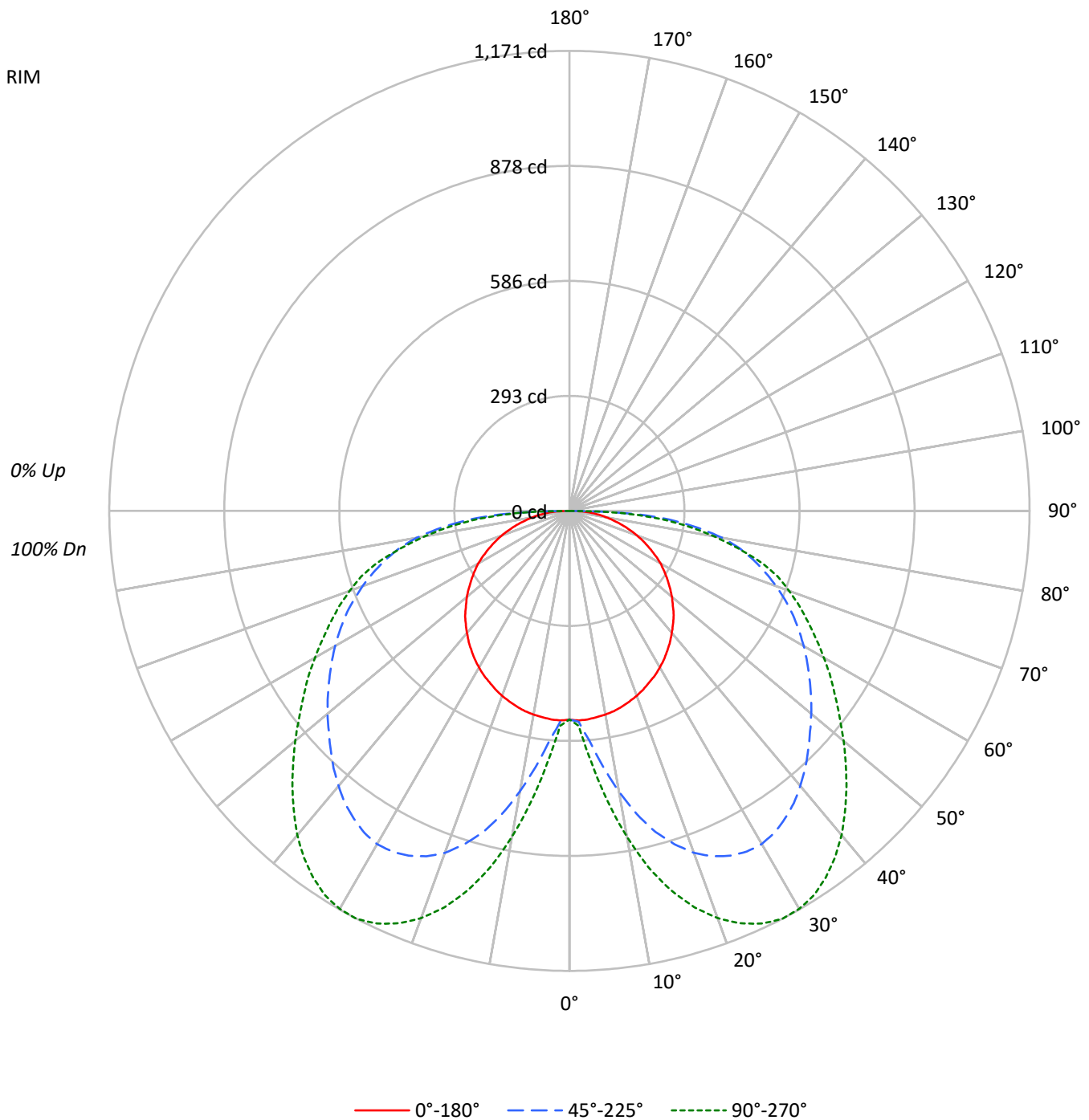
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3684.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 2.29 / 2.08  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 47.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P976735  
CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-BR-U

### Luminous Intensity Polar Plot





TEST NUMBER: P976735

CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-BR-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	106	100	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	85	83	80	78
2	95	85	77	70	92	83	75	69	79	73	67	76	70	66	73	68	64	73	68	64	62
3	85	73	64	56	83	71	63	56	68	61	55	65	59	54	63	57	53	63	57	53	50
4	77	64	54	46	75	62	53	46	60	52	45	57	50	45	55	49	44	55	49	44	41
5	71	56	46	39	68	55	46	39	53	45	38	51	44	38	49	42	37	49	42	37	35
6	65	50	40	33	63	49	40	33	47	39	33	46	38	33	44	37	32	44	37	32	30
7	60	45	36	29	58	44	35	29	43	35	29	41	34	28	40	33	28	40	33	28	26
8	56	41	32	25	54	40	31	25	39	31	25	38	30	25	36	30	25	36	30	25	23
9	52	37	29	23	50	37	28	22	36	28	22	34	27	22	33	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	24	20	31	24	20	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	714	714	714
5°	719	793	869
10°	719	990	1151
15°	719	1178	1393
20°	717	1326	1580
25°	714	1438	1721
30°	715	1521	1817
35°	713	1571	1869
40°	712	1605	1892
45°	714	1635	1897
50°	713	1682	1906
55°	713	1750	1938
60°	721	1853	2012
65°	718	1999	2134
70°	721	2203	2340
75°	724	2524	2620
80°	751	3060	2896
85°	865	3946	3572

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 4809 cd/sqm



TEST NUMBER: P976735  
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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	1.6
10°-20°	227.8	6.2
20°-30°	416.4	11.3
30°-40°	553.8	15.0
40°-50°	609.7	16.6
50°-60°	604.3	16.4
60°-70°	553.2	15.0
70°-80°	445.4	12.1
80°-90°	213.7	5.8
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°	703.8	19.1
0°-40°	1257.6	34.1
0°-60°	2471.6	67.1
0°-90°	3684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3684.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	533	537	587	627	643	51
15°	516	649	846	959	1000	146
25°	481	721	968	1108	1159	222
35°	434	709	956	1091	1138	272
45°	375	639	860	963	997	289
55°	304	564	746	808	826	272
65°	226	487	628	655	670	223
75°	139	380	486	499	504	147
85°	56	207	256	235	231	58
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°	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0
2.5°	534.1	534.1	532.7	532.7	532.7	532.7	532.7	532.7	534.1	537.1	538.8
5°	532.7	532.7	532.7	532.7	534.1	540.2	547.7	559.9	571.9	587.2	600.6
7.5°	529.6	529.6	529.6	534.1	547.7	568.9	588.6	611.2	634.0	656.6	674.9
10°	526.5	526.5	529.6	546.3	573.6	605.3	635.4	665.8	694.5	724.8	750.4
12.5°	522.1	522.1	531.0	561.4	600.6	640.1	679.4	715.6	752.1	789.9	818.6
15°	516.0	516.0	535.7	576.4	624.9	673.3	718.7	762.6	805.0	845.9	877.6
17.5°	508.4	511.5	540.2	591.7	646.0	702.2	752.1	801.9	847.3	889.7	927.5
20°	500.9	505.4	544.7	603.7	664.3	726.2	780.8	832.3	880.7	926.1	965.4
22.5°	491.7	497.8	547.7	612.8	678.0	742.9	800.5	854.9	906.3	951.7	992.6
25°	481.2	490.3	549.3	617.3	688.6	753.5	812.5	868.5	921.4	968.4	1009.3
27.5°	472.0	484.2	547.7	620.4	693.0	759.6	820.0	876.0	930.6	977.6	1019.9
30°	460.0	475.1	544.7	619.0	691.4	759.6	818.6	876.0	930.6	979.0	1019.9
32.5°	448.0	466.1	537.1	612.8	686.9	752.1	812.5	870.1	923.0	971.5	1010.8
35°	434.3	455.5	528.2	603.7	676.3	741.5	800.5	856.5	910.8	956.2	995.7
37.5°	420.7	443.3	516.0	591.7	662.7	726.2	783.8	839.8	891.3	938.1	974.5
40°	405.4	431.3	504.0	578.0	646.0	708.1	765.7	820.0	870.1	913.9	948.7
42.5°	390.4	417.7	490.3	563.0	629.5	688.6	746.0	797.5	845.9	888.2	920.0
45°	375.3	402.6	473.6	546.3	609.8	668.8	723.4	774.7	820.0	859.5	889.7
47.5°	357.0	387.3	458.6	528.2	590.1	649.1	702.2	750.4	795.8	830.6	859.5
50°	340.5	372.3	441.9	509.9	570.5	629.5	680.8	727.8	770.2	803.6	829.2
52.5°	322.4	355.6	425.2	493.4	553.8	609.8	661.3	705.0	742.9	774.7	798.9
55°	304.1	338.9	410.1	475.1	535.7	591.7	640.1	682.5	718.7	746.0	768.8
57.5°	286.0	322.4	393.4	460.0	519.0	573.6	620.4	658.2	693.0	717.3	736.8
60°	267.9	305.7	375.3	441.9	502.3	553.8	599.2	635.4	665.8	688.6	705.0
62.5°	246.7	287.6	358.6	423.8	482.8	532.7	576.4	609.8	638.5	658.2	671.9
65°	225.5	269.3	340.5	405.4	463.0	511.5	552.4	584.1	609.8	627.9	637.1
67.5°	204.4	251.2	322.4	387.3	441.9	487.3	526.5	556.9	579.5	594.7	602.3
70°	183.2	230.0	301.0	364.7	417.7	460.0	497.8	526.5	546.3	559.9	565.8
72.5°	160.4	208.8	278.4	340.5	390.4	432.7	467.5	494.8	512.9	523.5	528.2
75°	139.2	186.0	254.2	313.2	360.1	399.5	432.7	460.0	478.1	485.6	490.3
77.5°	116.4	163.4	228.6	282.9	326.9	363.1	394.9	420.7	437.4	444.9	449.4
80°	96.9	139.2	198.2	248.1	289.0	323.8	352.5	379.8	393.4	394.9	390.4
82.5°	75.7	115.0	166.5	210.3	245.1	278.4	305.7	323.8	329.9	329.9	325.3
85°	56.0	86.3	130.1	164.9	195.2	219.4	236.1	251.2	254.2	255.6	249.7
87.5°	31.8	48.4	77.1	99.9	118.1	134.7	146.7	154.3	154.3	155.9	152.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P976735

CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-BR-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0
2.5°	538.8	541.6	541.6	544.7	546.3	546.3	547.7	547.7
5°	606.7	619.0	623.4	631.0	635.4	641.5	644.6	643.2
7.5°	688.6	706.7	715.6	726.2	738.4	741.5	746.0	746.0
10°	770.2	791.3	805.0	817.2	830.6	836.7	842.8	842.8
12.5°	844.3	865.4	883.8	898.8	912.5	921.4	927.5	929.1
15°	904.9	932.2	950.3	967.0	982.1	991.0	998.8	1000.2
17.5°	954.8	980.4	1004.7	1023.0	1036.4	1050.0	1054.7	1057.8
20°	994.1	1021.3	1047.2	1065.3	1080.4	1094.0	1100.1	1103.2
22.5°	1023.0	1051.7	1077.3	1097.1	1112.1	1125.8	1133.3	1136.3
25°	1041.1	1071.2	1098.5	1118.2	1134.9	1148.6	1156.1	1159.1
27.5°	1053.1	1083.4	1109.1	1128.8	1145.5	1159.1	1166.7	1171.1
30°	1053.1	1083.4	1109.1	1128.8	1145.5	1159.1	1166.7	1169.7
32.5°	1044.1	1074.3	1100.1	1118.2	1134.9	1148.6	1156.1	1159.1
35°	1027.4	1057.8	1082.0	1100.1	1116.8	1128.8	1136.3	1138.0
37.5°	1004.7	1033.6	1056.1	1074.3	1089.5	1101.5	1109.1	1110.7
40°	979.0	1006.3	1027.4	1044.1	1057.8	1068.4	1075.9	1077.3
42.5°	948.7	974.5	992.6	1009.3	1021.3	1031.9	1039.5	1038.0
45°	916.9	941.2	956.2	969.8	983.5	991.0	997.1	997.1
47.5°	885.2	904.9	918.6	930.6	941.2	948.7	953.4	953.4
50°	852.0	868.5	880.7	891.3	900.2	906.3	910.8	910.8
52.5°	818.6	833.7	842.8	852.0	859.5	864.0	868.5	867.1
55°	785.2	797.5	803.6	812.5	818.6	824.7	827.8	826.2
57.5°	752.1	759.6	765.7	773.2	779.3	785.2	786.9	788.3
60°	715.6	723.4	727.8	735.4	741.5	746.0	749.0	747.6
62.5°	680.8	685.5	690.0	696.1	700.6	706.7	708.1	708.1
65°	643.2	647.7	652.1	658.2	662.7	668.8	671.9	670.2
67.5°	606.7	611.2	615.9	620.4	626.5	632.6	634.0	634.0
70°	568.9	573.6	576.4	582.5	587.2	593.1	594.7	594.7
72.5°	532.7	535.7	538.8	544.7	547.7	552.4	555.2	555.2
75°	491.7	494.8	497.8	500.9	502.3	504.0	505.4	504.0
77.5°	446.4	443.3	440.2	440.2	437.4	438.8	440.2	438.8
80°	384.3	381.2	378.4	376.7	373.7	373.7	375.3	373.7
82.5°	319.3	313.2	310.2	308.8	305.7	305.7	305.7	305.7
85°	240.6	237.5	236.1	233.0	230.0	228.6	230.0	231.4
87.5°	149.8	146.7	143.7	140.6	139.2	137.8	140.6	136.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P976735  
 CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-BR-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	15.1	16.9	15.5	17.2	17.6
	3H	14.1	15.7	14.5	16.1	16.4	17.8	19.4	18.1	19.7	20.1
	4H	14.9	16.4	15.3	16.8	17.1	19.0	20.6	19.4	20.9	21.3
	6H	15.5	16.9	15.9	17.3	17.7	20.1	21.6	20.5	22.0	22.3
	8H	15.7	17.1	16.1	17.5	17.9	20.6	22.0	21.0	22.4	22.8
	12H	15.9	17.2	16.3	17.6	18.0	21.0	22.4	21.5	22.8	23.2
4H	2H	13.9	15.4	14.3	15.8	16.1	15.9	17.4	16.3	17.8	18.2
	3H	16.4	17.7	16.8	18.1	18.5	18.8	20.1	19.2	20.5	20.9
	4H	17.5	18.7	17.9	19.1	19.5	20.2	21.5	20.7	21.9	22.3
	6H	18.4	19.4	18.8	19.9	20.3	21.5	22.6	22.0	23.1	23.5
	8H	18.7	19.7	19.1	20.2	20.6	22.1	23.1	22.5	23.6	24.0
	12H	18.9	19.9	19.4	20.4	20.8	22.6	23.5	23.1	24.0	24.5
8H	4H	18.6	19.7	19.1	20.1	20.6	20.8	21.8	21.2	22.2	22.7
	6H	20.0	20.9	20.5	21.4	21.8	22.3	23.2	22.8	23.6	24.1
	8H	20.6	21.4	21.1	21.9	22.3	23.0	23.8	23.5	24.3	24.8
	12H	21.1	21.8	21.6	22.2	22.8	23.7	24.4	24.2	24.9	25.4
12H	4H	18.9	19.8	19.4	20.3	20.8	20.9	21.8	21.4	22.3	22.8
	6H	20.4	21.2	20.9	21.7	22.2	22.5	23.3	23.0	23.7	24.3
	8H	21.2	21.9	21.7	22.4	22.9	23.3	24.0	23.8	24.5	25.0

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

**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**

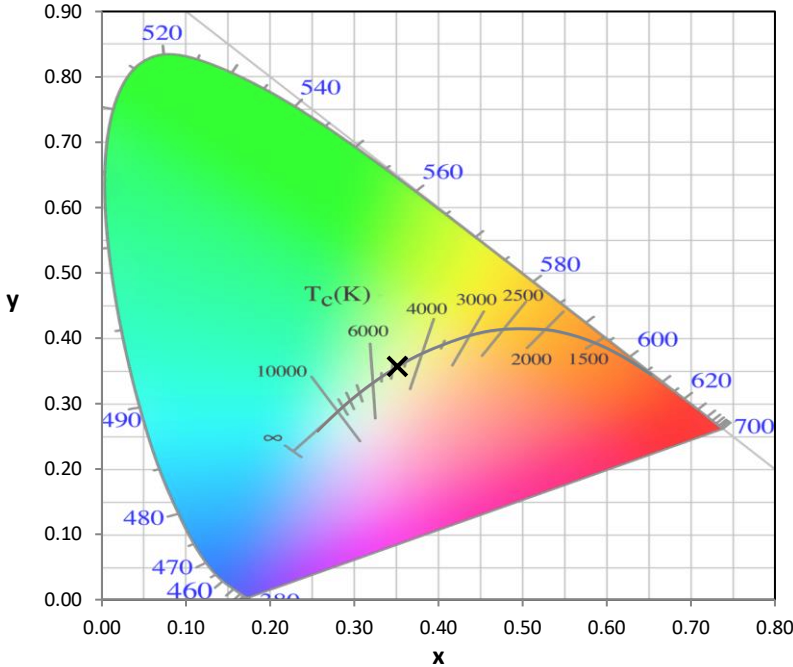
Stabilization Time: 43M  
 Operation Time: 1H 43M  
 Sphere Temperature (°C): 24.9

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

REPORT NUMBER: SP1-2506-457-8

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

REPORT NUMBER: SP1-2506-457-8

**Photopic Flux vs. Wavelength**

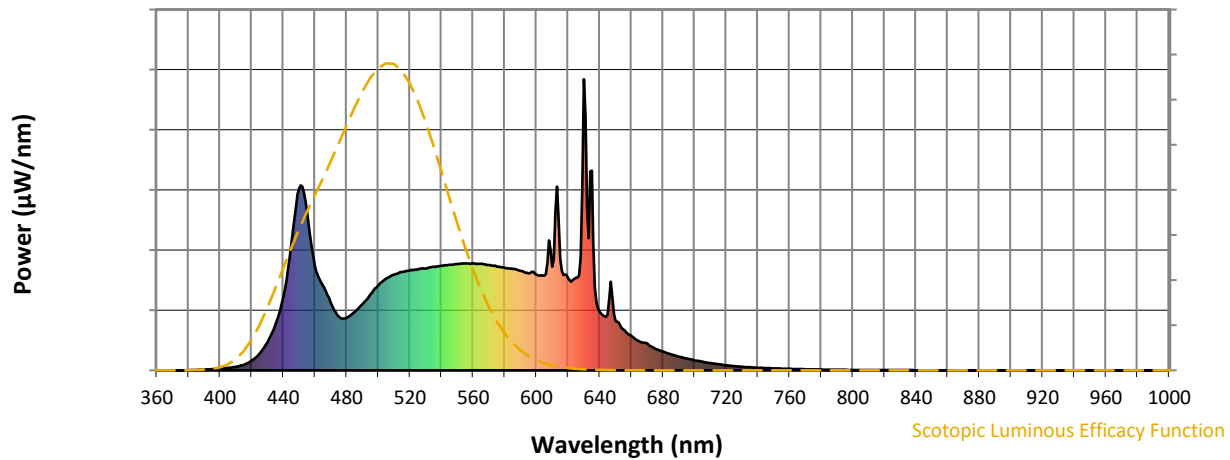


**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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			

REPORT NUMBER: SP1-2506-457-8

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 2.02**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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			

REPORT NUMBER: SP1-2506-457-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.33

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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			

**Summary**

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



**Color Vector Graphics**



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

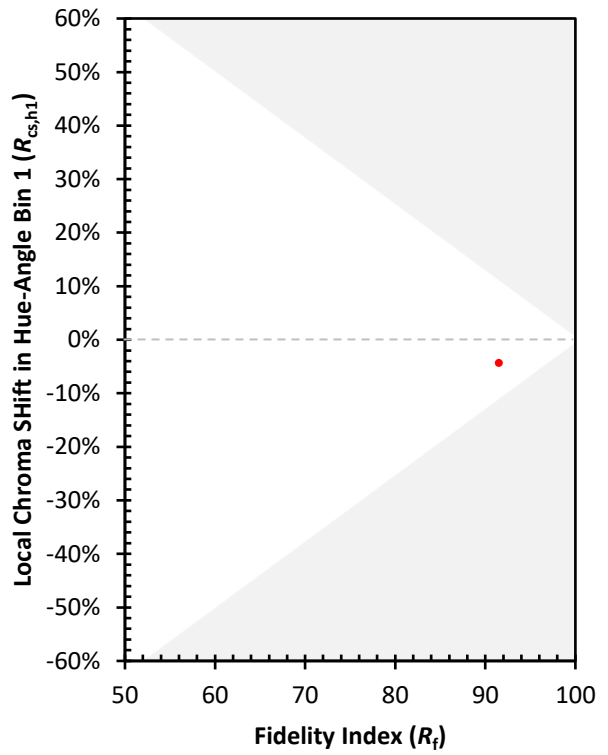
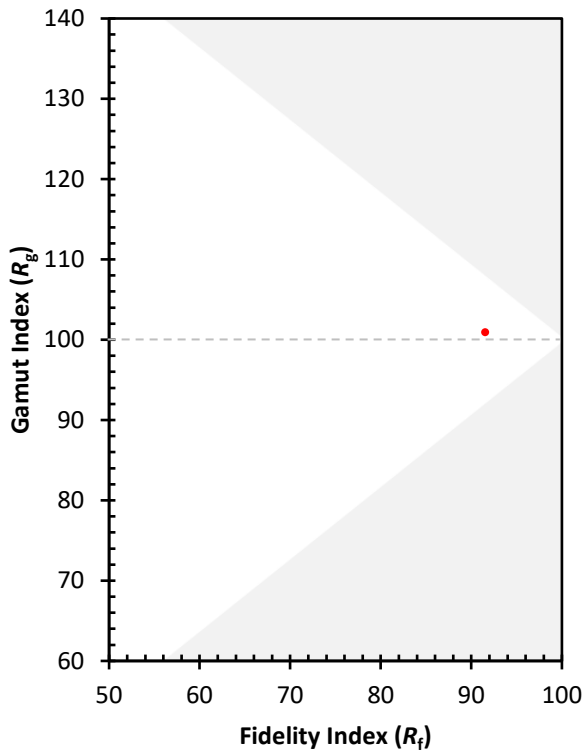
CES01 = 85	CES26 = 91	CES51 = 98	CES76 = 84
CES02 = 61	CES27 = 93	CES52 = 98	CES77 = 88
CES03 = 31	CES28 = 95	CES53 = 97	CES78 = 81
CES04 = 69	CES29 = 94	CES54 = 95	CES79 = 95
CES05 = 48	CES30 = 96	CES55 = 94	CES80 = 92
CES06 = 50	CES31 = 94	CES56 = 96	CES81 = 84
CES07 = 41	CES32 = 87	CES57 = 95	CES82 = 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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)