

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: P977019

Luminaire Tested: 24SR-LD2-C-39-UNV-L850-CD1-ST-U

Issue Date: 03/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P977019  
Test Lab: INNOVATION CENTER(P3)  
Issue Date: 03/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24SR-LD2-C-39-UNV-L850-CD1-ST-U  
Description: METALUX SKYRIDGE 2x4 3900LM PACKAGE 80CRI 5000K TROFFER with Straw SKYTRIM  
Light Source: 5000K CCT, 80+ CRI LEDS  
Ballast/Driver: -

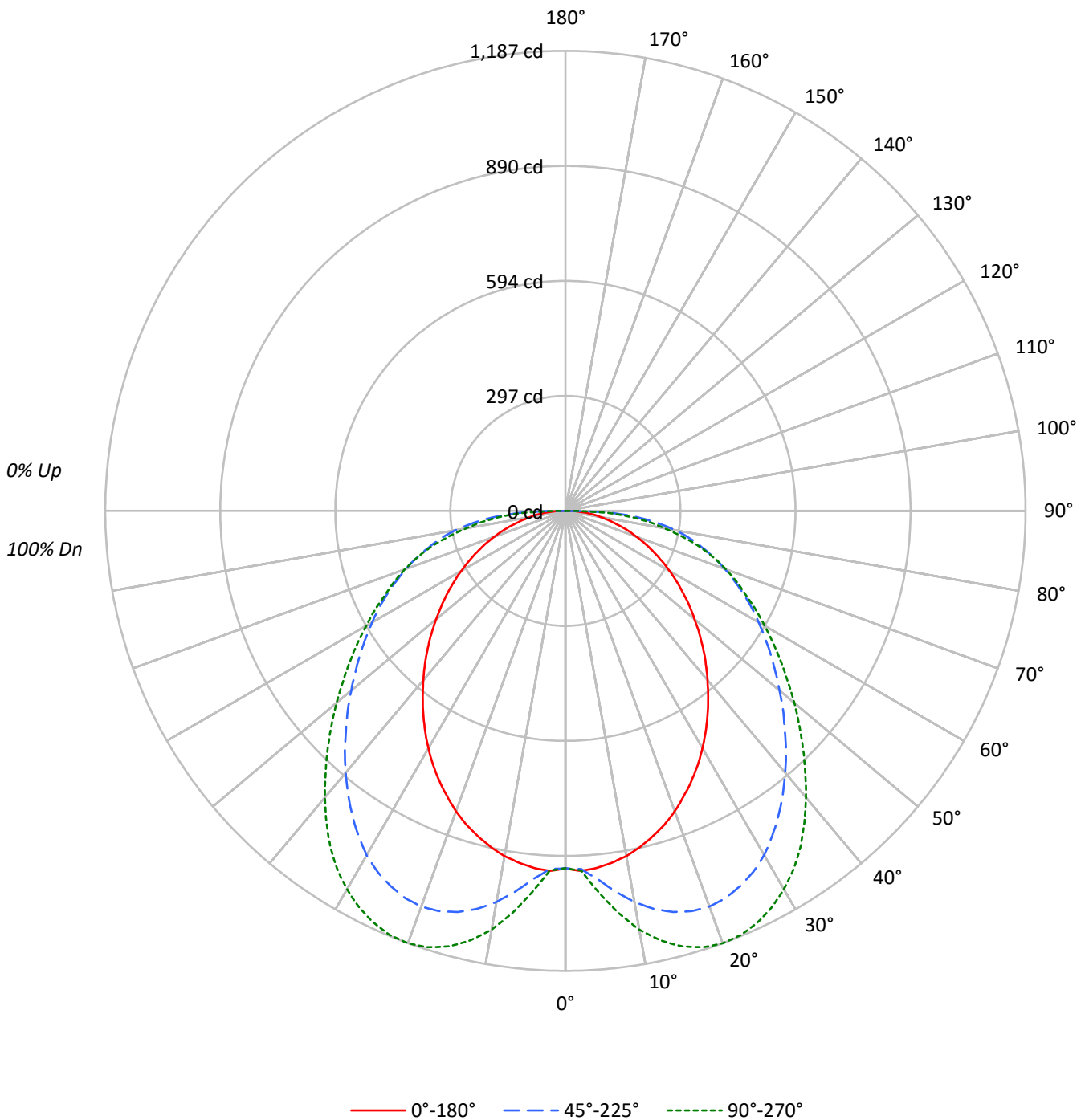
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3501.0 lumens  
Efficiency: N/A  
Efficacy: 126.4 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 (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: P977019  
CATALOG NUMBER: 24SR-LD2-C-39-UNV-L850-CD1-ST-U

### Luminous Intensity Polar Plot





TEST NUMBER: P977019

CATALOG NUMBER: 24SR-LD2-C-39-UNV-L850-CD1-ST-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	100	100	100	100
1	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80	80	80	80
2	97	88	80	74	94	86	79	73	82	76	71	79	74	69	76	71	68	66	66	66	66
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54	54	54	54
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46	46	46	46
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40	40	40	40
6	68	54	44	38	66	53	44	38	51	43	37	49	42	37	48	41	37	34	34	34	34
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30	30	30	30
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27	27	27	27
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24	24	24	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22	22	22	22

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

	0°	45°	90°
0°	1241	1241	1241
5°	1249	1287	1334
10°	1235	1400	1499
15°	1211	1493	1621
20°	1181	1556	1700
25°	1142	1585	1740
30°	1099	1593	1751
35°	1050	1575	1737
40°	1001	1549	1696
45°	956	1523	1649
50°	910	1510	1614
55°	872	1518	1593
60°	836	1549	1597
65°	801	1614	1635
70°	768	1722	1733
75°	732	1899	1870
80°	728	2242	2023
85°	798	2885	2523

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 40°  
 Vertical Angle: 87.5°  
 Luminance: 3825 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.7	2.6
10°-20°	294.3	8.4
20°-30°	470.5	13.4
30°-40°	569.6	16.3
40°-50°	581.7	16.6
50°-60°	536.0	15.3
60°-70°	456.0	13.0
70°-80°	340.9	9.7
80°-90°	159.3	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°	857.5	24.5
0°-40°	1427.1	40.8
0°-60°	2544.9	72.7
0°-90°	3501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3501.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	925	920	953	978	988	88
15°	870	948	1072	1139	1164	245
25°	769	914	1068	1144	1172	354
35°	640	808	959	1032	1057	400
45°	502	669	800	852	867	388
55°	372	540	647	672	679	333
65°	252	428	507	510	514	250
75°	141	309	365	360	360	151
85°	52	163	187	166	163	54
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°	922.3	922.3	922.3	922.3	922.3	922.3	922.3	922.3	922.3	922.3	922.3
2.5°	929.7	927.8	925.0	921.3	920.4	920.4	919.4	919.4	921.3	925.0	930.6
5°	925.0	923.2	920.4	917.5	918.5	921.3	926.9	933.5	942.9	953.2	964.5
7.5°	915.7	914.7	912.8	912.8	920.4	933.5	946.7	959.8	974.8	990.8	1007.7
10°	904.3	903.4	902.4	910.0	926.9	946.7	965.4	983.2	1003.9	1024.5	1044.2
12.5°	888.4	888.4	891.2	908.1	931.6	956.0	979.5	1003.0	1027.4	1051.8	1073.4
15°	869.6	869.6	879.0	903.4	933.5	961.7	989.9	1016.2	1044.2	1071.5	1094.0
17.5°	849.0	848.1	865.9	895.9	929.7	962.6	994.6	1023.6	1052.7	1082.8	1106.3
20°	824.6	826.5	849.8	884.6	922.3	958.8	992.7	1023.6	1054.6	1086.6	1109.1
22.5°	797.3	801.1	830.1	868.7	910.9	948.6	984.2	1017.1	1049.0	1080.9	1103.5
25°	769.1	773.9	809.5	849.8	895.0	933.5	969.2	1003.9	1035.9	1067.7	1090.4
27.5°	739.1	745.7	786.0	828.4	873.4	913.8	949.4	985.1	1017.1	1049.9	1070.6
30°	707.2	715.6	758.8	801.9	849.0	888.4	924.0	960.7	993.6	1025.5	1045.2
32.5°	673.4	683.6	727.8	774.8	820.8	859.3	895.0	932.5	963.5	993.6	1013.3
35°	639.5	651.8	696.8	743.8	788.8	827.3	862.1	899.6	930.6	958.8	977.6
37.5°	604.8	619.8	664.9	710.9	755.1	793.6	829.2	864.0	895.0	921.3	940.1
40°	570.0	587.0	632.1	677.1	721.2	757.8	792.6	827.3	858.3	881.8	899.6
42.5°	536.3	553.1	599.2	644.2	684.7	722.2	756.9	790.7	818.9	842.4	858.3
45°	502.4	520.2	565.3	609.5	649.9	687.4	722.2	753.2	780.5	800.2	816.1
47.5°	468.7	487.4	532.5	576.6	615.1	651.8	687.4	715.6	741.9	761.6	774.8
50°	434.8	455.5	499.6	544.7	582.3	618.9	652.7	679.0	703.4	721.2	733.4
52.5°	403.8	423.5	468.7	513.6	551.3	587.8	619.8	645.2	666.7	682.8	694.9
55°	371.8	393.5	440.5	483.7	522.1	558.8	587.8	611.3	631.1	647.0	656.5
57.5°	340.9	365.3	411.3	454.5	493.9	528.7	556.9	579.4	597.3	610.5	618.9
60°	310.8	336.2	384.1	427.3	466.8	500.5	527.8	548.4	564.5	575.7	583.2
62.5°	280.8	309.9	356.9	401.9	439.5	472.3	497.7	516.6	531.6	541.8	546.5
65°	251.6	281.7	330.5	374.7	412.3	443.2	467.6	484.6	498.6	507.1	509.0
67.5°	223.5	255.4	304.2	348.5	385.0	414.2	437.7	453.6	465.7	471.4	473.3
70°	195.3	228.3	277.9	322.2	356.9	385.0	406.6	421.6	432.0	437.7	437.7
72.5°	169.0	202.0	251.6	294.9	326.8	355.0	374.7	388.8	398.1	401.9	401.0
75°	140.9	174.7	223.5	264.8	295.9	322.2	341.9	355.9	362.5	365.3	364.4
77.5°	116.4	148.4	195.3	233.8	266.7	288.3	308.0	321.2	327.7	329.6	328.7
80°	93.9	124.0	165.3	202.0	230.0	253.5	271.4	285.5	291.1	289.3	280.8
82.5°	72.3	99.6	136.1	168.1	194.4	216.0	234.8	243.2	244.2	239.5	231.9
85°	51.7	72.3	103.3	130.6	155.0	170.9	182.1	188.7	190.6	186.9	178.5
87.5°	29.1	42.2	61.0	80.8	99.6	110.8	117.4	121.2	124.0	120.2	114.5
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°	922.3	922.3	922.3	922.3	922.3	922.3	922.3	922.3
2.5°	925.0	927.8	926.9	928.8	929.7	929.7	926.9	928.8
5°	965.4	971.1	974.8	980.4	984.2	984.2	985.1	988.0
7.5°	1009.6	1019.0	1027.4	1034.0	1038.7	1040.6	1043.3	1046.1
10°	1050.8	1062.2	1071.5	1080.0	1085.6	1089.4	1092.1	1096.9
12.5°	1082.8	1095.9	1106.3	1115.6	1123.2	1128.8	1131.6	1135.4
15°	1106.3	1121.3	1133.5	1143.8	1150.4	1157.0	1159.8	1163.5
17.5°	1120.3	1135.4	1148.5	1158.9	1166.3	1172.9	1176.7	1180.5
20°	1124.1	1139.2	1153.2	1163.5	1171.1	1179.5	1183.3	1187.1
22.5°	1118.4	1133.5	1148.5	1159.8	1168.2	1176.7	1180.5	1184.3
25°	1107.2	1123.2	1138.1	1149.5	1157.0	1165.4	1170.1	1172.0
27.5°	1089.4	1105.3	1120.3	1130.7	1139.2	1147.6	1152.3	1153.2
30°	1064.1	1080.0	1095.0	1105.3	1114.8	1122.2	1126.9	1126.9
32.5°	1033.0	1048.0	1064.1	1073.4	1081.9	1089.4	1094.0	1095.9
35°	997.3	1012.4	1027.4	1035.9	1045.2	1050.8	1054.6	1057.4
37.5°	958.8	973.8	986.1	993.6	1003.9	1007.7	1013.3	1012.4
40°	917.5	929.7	941.0	947.5	956.0	960.7	966.4	965.4
42.5°	874.4	886.5	895.9	903.4	908.1	912.8	916.6	915.7
45°	830.1	841.5	849.8	853.6	861.2	863.0	866.8	866.8
47.5°	786.0	795.4	803.0	808.5	812.3	814.2	818.0	818.0
50°	743.8	752.3	756.9	761.6	765.4	768.2	770.1	771.0
52.5°	702.5	709.0	712.8	716.5	720.3	722.2	724.1	723.1
55°	663.0	667.7	670.5	673.4	676.2	679.0	679.0	679.0
57.5°	623.6	626.4	629.2	631.1	633.8	635.7	635.7	635.7
60°	585.1	587.8	588.9	590.7	593.5	594.4	595.4	593.5
62.5°	547.5	548.4	549.4	550.3	553.1	555.0	555.0	554.1
65°	509.0	509.0	510.0	510.9	512.8	514.7	515.5	513.6
67.5°	471.4	471.4	472.3	472.3	475.2	477.1	478.0	478.0
70°	434.8	433.9	435.8	436.7	438.6	438.6	440.5	440.5
72.5°	398.1	397.2	399.1	399.1	401.0	401.9	401.9	401.9
75°	362.5	359.7	360.6	358.7	360.6	360.6	359.7	359.7
77.5°	323.9	317.4	315.6	311.8	311.8	311.8	309.9	309.9
80°	275.2	268.6	265.8	262.9	262.9	262.0	261.1	261.1
82.5°	226.4	220.7	217.9	215.1	216.9	214.1	215.1	216.0
85°	173.8	169.0	167.2	164.3	163.4	163.4	164.3	163.4
87.5°	112.7	107.9	107.9	105.2	107.1	104.3	101.4	103.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**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	13.8	12.5	14.1	14.4	14.0	15.7	14.4	16.0	16.3
	3H	14.0	15.5	14.3	15.9	16.2	16.3	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	19.2	19.6
	6H	15.2	16.6	15.6	17.0	17.4	18.4	19.7	18.8	20.1	20.5
	8H	15.4	16.7	15.8	17.1	17.5	18.8	20.1	19.2	20.5	20.9
	12H	15.6	16.8	16.0	17.2	17.7	19.2	20.4	19.6	20.8	21.2
4H	2H	13.4	14.9	13.8	15.2	15.6	14.7	16.2	15.1	16.6	16.9
	3H	15.7	17.0	16.1	17.4	17.8	17.3	18.6	17.7	19.0	19.4
	4H	16.7	17.9	17.2	18.3	18.7	18.6	19.7	19.0	20.1	20.6
	6H	17.6	18.6	18.0	19.0	19.5	19.7	20.7	20.2	21.2	21.6
	8H	17.9	18.8	18.4	19.3	19.7	20.2	21.2	20.7	21.6	22.1
	12H	18.1	19.0	18.6	19.5	19.9	20.7	21.6	21.2	22.0	22.5
8H	4H	17.7	18.6	18.1	19.0	19.5	19.1	20.1	19.6	20.5	21.0
	6H	18.9	19.7	19.4	20.2	20.7	20.4	21.2	20.9	21.7	22.2
	8H	19.4	20.2	19.9	20.7	21.2	21.1	21.8	21.6	22.3	22.8
	12H	19.9	20.5	20.4	21.0	21.6	21.7	22.4	22.2	22.8	23.4
12H	4H	17.8	18.7	18.3	19.2	19.6	19.2	20.1	19.7	20.5	21.0
	6H	19.2	19.9	19.7	20.4	20.9	20.6	21.4	21.2	21.8	22.4
	8H	19.9	20.6	20.4	21.1	21.6	21.4	22.0	21.9	22.5	23.0

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

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**Photopic Flux vs. Wavelength**

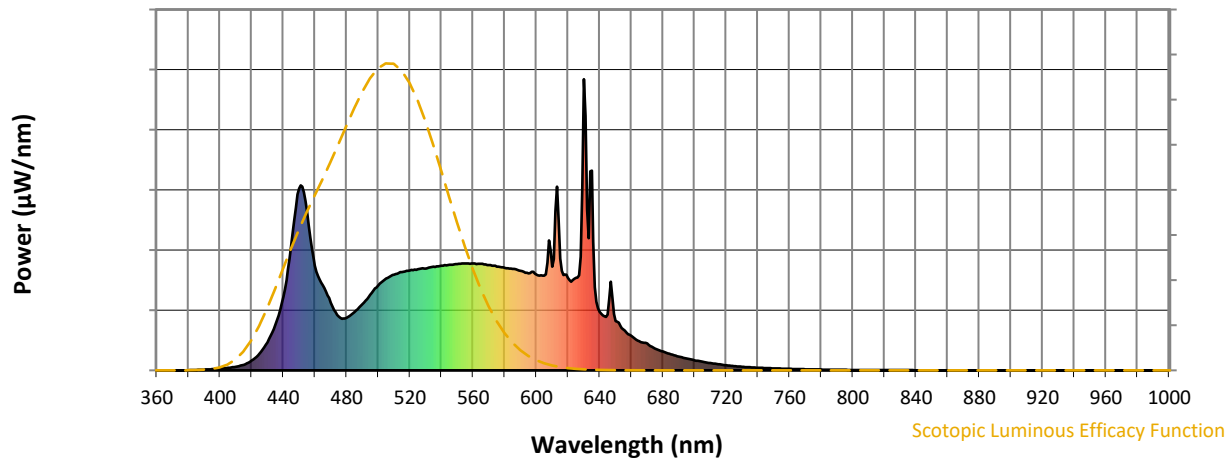


**Photopic Lumens: NR**

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**

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

**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)