

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: P977044

Luminaire Tested: 24SR-LD2-C-48-UNV-L940-CD1-ST-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P977044
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24SR-LD2-C-48-UNV-L940-CD1-ST-U
Description: METALUX SKYRIDGE 2x4 4800LM PACKAGE 90CRI 4000K TROFFER with Straw SKYTRIM
Light Source: 4000K CCT, 90+ CRI LEDS
Ballast/Driver: -

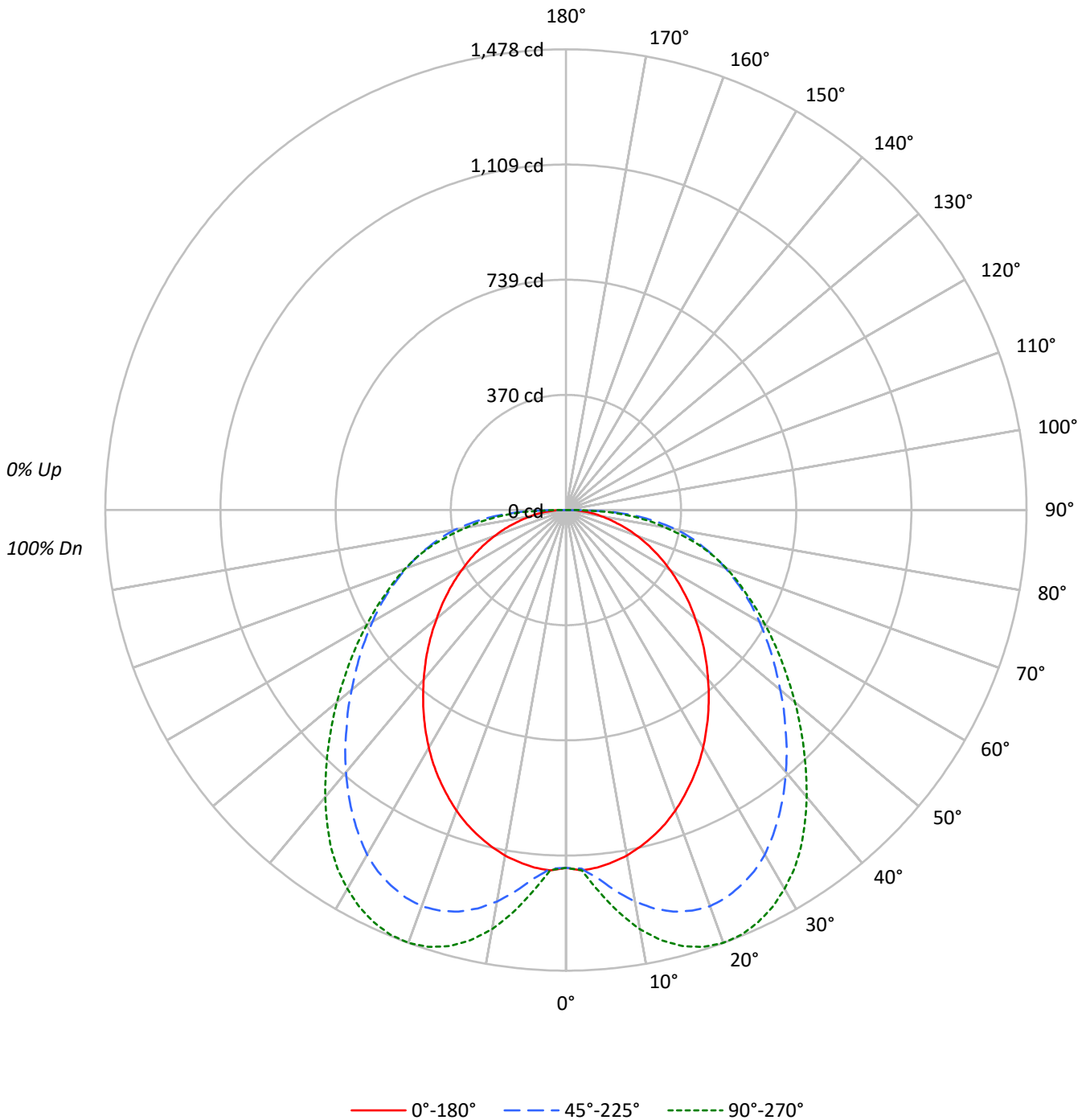
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4358.0 lumens
Efficiency: N/A
Efficacy: 125.2 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): 34.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P977044
CATALOG NUMBER: 24SR-LD2-C-48-UNV-L940-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P977044

CATALOG NUMBER: 24SR-LD2-C-48-UNV-L940-CD1-ST-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1545	1545	1545
5°	1555	1603	1661
10°	1538	1742	1866
15°	1508	1858	2018
20°	1470	1937	2116
25°	1421	1973	2166
30°	1368	1983	2179
35°	1308	1960	2162
40°	1246	1928	2111
45°	1190	1895	2053
50°	1133	1879	2009
55°	1086	1889	1983
60°	1041	1928	1988
65°	997	2010	2036
70°	956	2143	2157
75°	912	2364	2328
80°	906	2790	2518
85°	993	3592	3140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 87.5°
 Luminance: 4760 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	2.6
10°-20°	366.3	8.4
20°-30°	585.7	13.4
30°-40°	709.1	16.3
40°-50°	724.1	16.6
50°-60°	667.3	15.3
60°-70°	567.6	13.0
70°-80°	424.4	9.7
80°-90°	198.2	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°	1067.4	24.5
0°-40°	1776.4	40.8
0°-60°	3167.8	72.7
0°-90°	4358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4358.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1152	1145	1187	1217	1230	109
15°	1082	1180	1334	1417	1448	305
25°	957	1138	1329	1424	1459	440
35°	796	1006	1194	1284	1316	498
45°	625	832	996	1060	1079	483
55°	463	673	805	836	845	414
65°	313	532	631	635	639	311
75°	175	385	455	448	448	187
85°	64	203	233	206	203	68
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°	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0
2.5°	1157.3	1154.9	1151.5	1146.8	1145.7	1145.7	1144.4	1144.4	1146.8	1151.5	1158.4
5°	1151.5	1149.1	1145.7	1142.0	1143.3	1146.8	1153.8	1162.0	1173.7	1186.6	1200.6
7.5°	1139.8	1138.6	1136.2	1136.2	1145.7	1162.0	1178.4	1194.8	1213.5	1233.3	1254.4
10°	1125.7	1124.6	1123.3	1132.8	1153.8	1178.4	1201.7	1223.9	1249.7	1275.3	1299.8
12.5°	1105.9	1105.9	1109.3	1130.4	1159.7	1190.0	1219.3	1248.6	1278.9	1309.3	1336.2
15°	1082.4	1082.4	1094.2	1124.6	1162.0	1197.1	1232.2	1264.9	1299.8	1333.8	1361.8
17.5°	1056.8	1055.7	1077.9	1115.1	1157.3	1198.2	1238.0	1274.2	1310.4	1347.8	1377.1
20°	1026.4	1028.8	1057.9	1101.1	1148.0	1193.5	1235.7	1274.2	1312.7	1352.6	1380.6
22.5°	992.4	997.1	1033.3	1081.3	1133.9	1180.8	1225.1	1266.0	1305.8	1345.5	1373.6
25°	957.3	963.3	1007.7	1057.9	1114.0	1162.0	1206.4	1249.7	1289.5	1329.1	1357.3
27.5°	920.1	928.2	978.4	1031.1	1087.1	1137.5	1181.9	1226.2	1266.0	1306.9	1332.7
30°	880.3	890.8	944.6	998.2	1056.8	1105.9	1150.2	1195.9	1236.8	1276.6	1301.1
32.5°	838.2	851.0	905.9	964.4	1021.7	1069.7	1114.0	1160.8	1199.3	1236.8	1261.3
35°	796.1	811.3	867.4	925.9	981.9	1029.9	1073.1	1119.9	1158.4	1193.5	1216.9
37.5°	752.8	771.5	827.7	885.0	939.9	987.9	1032.2	1075.5	1114.0	1146.8	1170.2
40°	709.6	730.6	786.8	842.8	897.7	943.3	986.6	1029.9	1068.4	1097.7	1119.9
42.5°	667.5	688.5	745.9	801.9	852.2	899.0	942.2	984.2	1019.3	1048.6	1068.4
45°	625.4	647.6	703.7	758.6	809.0	855.7	899.0	937.5	971.5	996.0	1015.9
47.5°	583.4	606.7	662.8	717.7	765.7	811.3	855.7	890.8	923.5	948.1	964.4
50°	541.2	567.0	621.9	678.1	724.8	770.4	812.4	845.2	875.5	897.7	913.0
52.5°	502.7	527.2	583.4	639.4	686.3	731.7	771.5	803.2	829.9	849.9	865.0
55°	462.9	489.8	548.3	602.1	649.9	695.5	731.7	761.0	785.5	805.4	817.2
57.5°	424.3	454.7	511.9	565.8	614.8	658.1	693.2	721.2	743.5	759.9	770.4
60°	386.9	418.5	478.1	531.9	581.0	623.0	657.0	682.6	702.6	716.6	725.9
62.5°	349.6	385.8	444.3	500.3	547.0	587.9	619.6	643.0	661.7	674.5	680.3
65°	313.2	350.7	411.4	466.5	513.2	551.8	582.1	603.2	620.7	631.2	633.6
67.5°	278.2	318.0	378.7	433.8	479.2	515.6	544.8	564.7	579.8	586.8	589.2
70°	243.1	284.1	346.0	401.0	444.3	479.2	506.1	524.8	537.7	544.8	544.8
72.5°	210.3	251.4	313.2	367.0	406.9	441.9	466.5	483.9	495.6	500.3	499.2
75°	175.4	217.4	278.2	329.6	368.3	401.0	425.6	443.0	451.2	454.7	453.6
77.5°	144.9	184.7	243.1	291.1	332.0	358.9	383.4	399.8	408.0	410.3	409.2
80°	116.9	154.3	205.8	251.4	286.3	315.6	337.8	355.4	362.3	360.1	349.6
82.5°	90.0	124.0	169.4	209.2	242.0	268.9	292.3	302.7	304.0	298.1	288.7
85°	64.3	90.0	128.5	162.5	192.9	212.7	226.7	234.9	237.3	232.7	222.1
87.5°	36.2	52.5	76.0	100.5	124.0	138.0	146.2	150.9	154.3	149.6	142.5
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°	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0
2.5°	1151.5	1154.9	1153.8	1156.2	1157.3	1157.3	1153.8	1156.2
5°	1201.7	1208.8	1213.5	1220.4	1225.1	1225.1	1226.2	1229.8
7.5°	1256.7	1268.4	1278.9	1287.1	1292.9	1295.3	1298.7	1302.2
10°	1308.0	1322.2	1333.8	1344.4	1351.3	1356.0	1359.5	1365.5
12.5°	1347.8	1364.2	1377.1	1388.7	1398.2	1405.1	1408.6	1413.3
15°	1377.1	1395.8	1410.9	1423.8	1432.0	1440.2	1443.6	1448.4
17.5°	1394.6	1413.3	1429.6	1442.5	1451.8	1460.0	1464.7	1469.4
20°	1399.3	1418.0	1435.5	1448.4	1457.8	1468.2	1472.9	1477.6
22.5°	1392.2	1410.9	1429.6	1443.6	1454.2	1464.7	1469.4	1474.2
25°	1378.2	1398.2	1416.7	1430.9	1440.2	1450.7	1456.5	1458.9
27.5°	1356.0	1375.8	1394.6	1407.5	1418.0	1428.5	1434.4	1435.5
30°	1324.5	1344.4	1363.1	1375.8	1387.6	1396.9	1402.7	1402.7
32.5°	1285.8	1304.6	1324.5	1336.2	1346.7	1356.0	1361.8	1364.2
35°	1241.5	1260.2	1278.9	1289.5	1301.1	1308.0	1312.7	1316.2
37.5°	1193.5	1212.2	1227.5	1236.8	1249.7	1254.4	1261.3	1260.2
40°	1142.0	1157.3	1171.3	1179.5	1190.0	1195.9	1202.9	1201.7
42.5°	1088.4	1103.5	1115.1	1124.6	1130.4	1136.2	1140.9	1139.8
45°	1033.3	1047.5	1057.9	1062.6	1072.0	1074.2	1079.0	1079.0
47.5°	978.4	990.1	999.5	1006.4	1011.2	1013.5	1018.2	1018.2
50°	925.9	936.4	942.2	948.1	952.8	956.2	958.6	959.7
52.5°	874.4	882.6	887.3	891.9	896.6	899.0	901.3	900.1
55°	825.3	831.2	834.6	838.2	841.7	845.2	845.2	845.2
57.5°	776.3	779.7	783.2	785.5	789.0	791.4	791.4	791.4
60°	728.3	731.7	733.0	735.4	738.8	739.9	741.2	738.8
62.5°	681.5	682.6	683.9	685.0	688.5	690.8	690.8	689.7
65°	633.6	633.6	634.8	635.9	638.3	640.6	641.7	639.4
67.5°	586.8	586.8	587.9	587.9	591.6	593.9	595.0	595.0
70°	541.2	540.1	542.5	543.6	545.9	545.9	548.3	548.3
72.5°	495.6	494.5	496.8	496.8	499.2	500.3	500.3	500.3
75°	451.2	447.8	448.9	446.5	448.9	448.9	447.8	447.8
77.5°	403.2	395.1	392.8	388.1	388.1	388.1	385.8	385.8
80°	342.5	334.3	330.9	327.2	327.2	326.1	325.0	325.0
82.5°	281.8	274.7	271.2	267.8	270.0	266.5	267.8	268.9
85°	216.3	210.3	208.1	204.5	203.4	203.4	204.5	203.4
87.5°	140.3	134.4	134.4	130.9	133.3	129.8	126.2	128.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P977044

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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	12.9	14.6	13.2	14.9	15.2	14.8	16.5	15.1	16.8	17.1
	3H	14.7	16.3	15.1	16.6	17.0	17.1	18.6	17.5	19.0	19.3
	4H	15.4	16.9	15.8	17.3	17.6	18.2	19.6	18.6	20.0	20.4
	6H	16.0	17.4	16.4	17.7	18.1	19.1	20.5	19.5	20.9	21.2
	8H	16.2	17.5	16.6	17.9	18.3	19.5	20.9	20.0	21.2	21.6
	12H	16.3	17.6	16.8	18.0	18.4	19.9	21.2	20.4	21.6	22.0
4H	2H	14.2	15.6	14.6	16.0	16.4	15.5	17.0	15.9	17.3	17.7
	3H	16.5	17.7	16.9	18.1	18.5	18.1	19.3	18.5	19.7	20.1
	4H	17.5	18.7	17.9	19.1	19.5	19.3	20.5	19.8	20.9	21.3
	6H	18.3	19.4	18.8	19.8	20.3	20.5	21.5	20.9	21.9	22.4
	8H	18.7	19.6	19.1	20.0	20.5	21.0	21.9	21.4	22.4	22.8
	12H	18.9	19.8	19.4	20.2	20.7	21.5	22.3	21.9	22.8	23.3
8H	4H	18.4	19.4	18.9	19.8	20.3	19.9	20.8	20.3	21.3	21.7
	6H	19.7	20.5	20.1	20.9	21.4	21.2	22.0	21.7	22.5	23.0
	8H	20.2	20.9	20.7	21.4	21.9	21.8	22.6	22.3	23.1	23.5
	12H	20.7	21.3	21.2	21.8	22.3	22.5	23.1	23.0	23.6	24.2
12H	4H	18.6	19.4	19.1	19.9	20.4	20.0	20.8	20.4	21.3	21.8
	6H	20.0	20.7	20.5	21.2	21.7	21.4	22.1	21.9	22.6	23.1
	8H	20.7	21.3	21.2	21.8	22.4	22.1	22.8	22.6	23.3	23.8

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

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

REPORT NUMBER: SP1-2506-457-7

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			

REPORT NUMBER: SP1-2506-457-7

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			

REPORT NUMBER: SP1-2506-457-7

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			

Summary

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



Color Vector Graphics



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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)