

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: P976918

Luminaire Tested: 24SR-LD2-C-59-UNV-L940-CD1-PL-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P976918
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24SR-LD2-C-59-UNV-L940-CD1-PL-U
Description: METALUX SKYRIDGE 2x4 5900LM PACKAGE 90CRI 4000K TROFFER with Pearl SKYTRIM
Light Source: 4000K CCT, 90+ CRI LEDS
Ballast/Driver: -

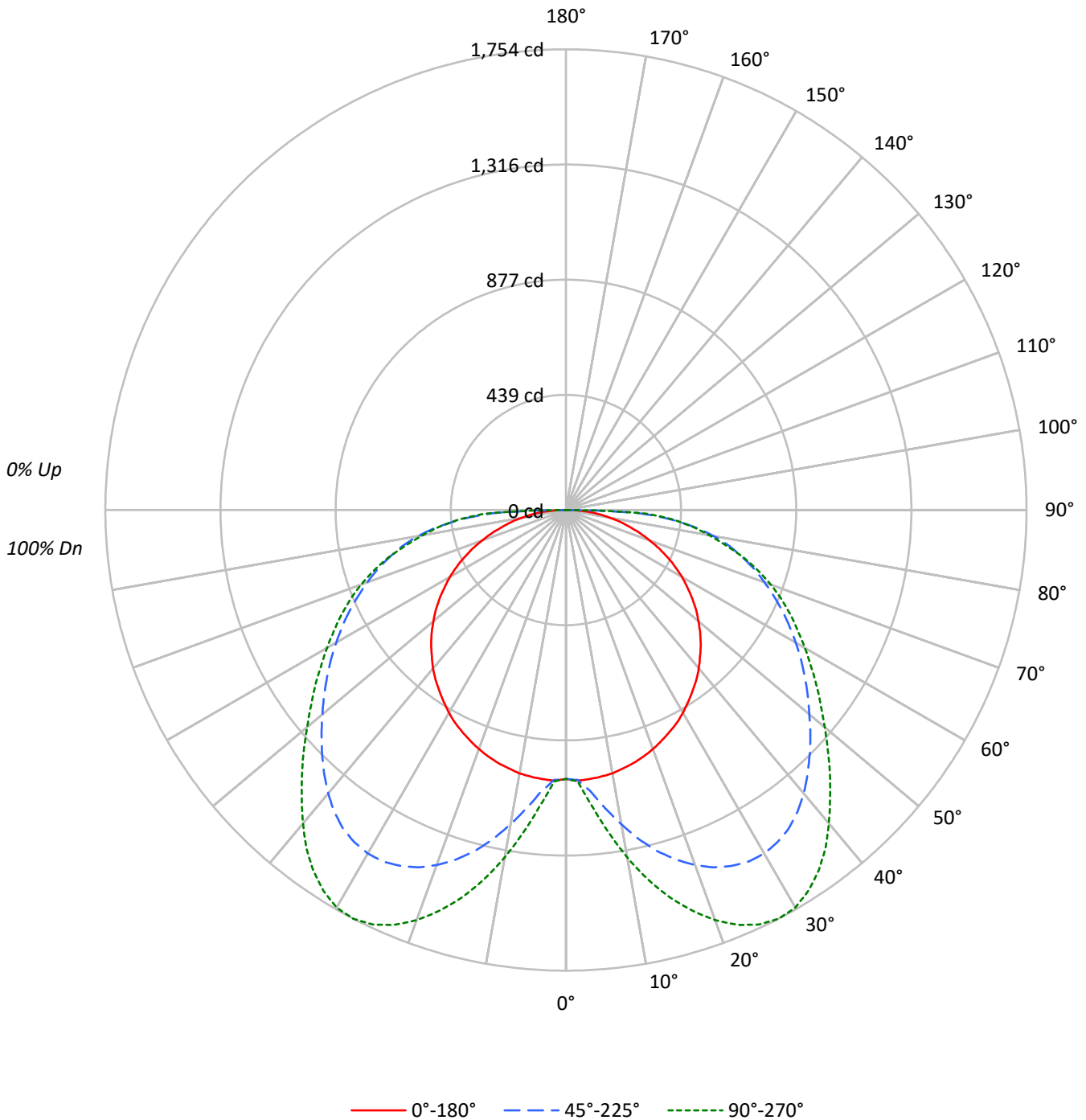
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5646.0 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
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 (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: P976918
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-U

Luminous Intensity Polar Plot





TEST NUMBER: P976918

CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-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	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78	78	78	78
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62	62	62	62
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51	51	51	51
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42	42	42	42
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36	36	36	36
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31	31	31	31
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27	27	27	27
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23	23	23	23
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21	21	21	21
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19	19	19	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1378	1378	1378
5°	1389	1451	1526
10°	1391	1660	1835
15°	1389	1873	2126
20°	1387	2059	2380
25°	1385	2219	2585
30°	1385	2346	2714
35°	1381	2431	2754
40°	1382	2474	2736
45°	1381	2499	2705
50°	1379	2533	2692
55°	1378	2605	2734
60°	1372	2719	2828
65°	1362	2895	3004
70°	1337	3166	3266
75°	1317	3618	3642
80°	1329	4435	4296
85°	1450	6143	6257

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 9337 cd/sqm



TEST NUMBER: P976918
 CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	1.9
10°-20°	369.8	6.5
20°-30°	655.5	11.6
30°-40°	862.6	15.3
40°-50°	935.4	16.6
50°-60°	910.5	16.1
60°-70°	818.1	14.5
70°-80°	648.1	11.5
80°-90°	339.6	6.0
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°	1131.7	20.0
0°-40°	1994.3	35.3
0°-60°	3840.2	68.0
0°-90°	5646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1028	1028	1075	1116	1130	98
15°	997	1127	1344	1479	1526	281
25°	933	1188	1495	1676	1741	430
35°	841	1157	1480	1630	1677	527
45°	726	1050	1313	1400	1422	560
55°	587	913	1110	1149	1166	525
65°	428	765	909	926	944	422
75°	253	575	696	697	701	270
85°	94	306	398	399	405	100
90°	0	0	0	0	0	



TEST NUMBER: P976918
 CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9
2.5°	1031.3	1029.9	1028.5	1026.9	1025.5	1023.9	1023.9	1023.9	1025.5	1028.5	1032.9
5°	1028.5	1026.9	1025.5	1025.5	1026.9	1029.9	1038.9	1049.4	1059.8	1074.6	1091.1
7.5°	1023.9	1022.5	1022.5	1025.5	1037.3	1055.2	1076.0	1098.5	1120.8	1144.6	1167.1
10°	1018.1	1016.5	1018.1	1031.3	1058.2	1088.1	1119.4	1150.7	1180.5	1214.8	1246.1
12.5°	1007.7	1007.7	1015.1	1041.8	1080.7	1120.8	1161.1	1202.8	1241.5	1283.2	1319.1
15°	997.2	997.2	1013.5	1053.8	1102.9	1150.7	1201.4	1250.5	1296.7	1344.4	1386.1
17.5°	983.8	983.8	1012.1	1062.8	1119.4	1177.5	1235.7	1290.9	1343.0	1395.2	1439.9
20°	968.7	971.8	1009.1	1070.2	1134.2	1199.8	1262.4	1323.6	1381.7	1438.3	1487.4
22.5°	950.9	956.9	1004.6	1073.2	1146.2	1214.8	1283.2	1348.8	1410.0	1472.6	1521.7
25°	933.0	942.1	998.6	1073.2	1150.7	1225.3	1296.7	1365.3	1430.9	1495.0	1548.6
27.5°	913.6	925.6	989.6	1068.6	1152.1	1228.1	1302.7	1374.3	1442.9	1508.3	1563.4
30°	891.3	906.2	976.4	1059.8	1146.2	1223.7	1301.3	1375.7	1444.3	1509.9	1563.4
32.5°	866.1	885.3	959.9	1046.4	1134.2	1213.2	1290.9	1365.3	1435.3	1499.4	1550.2
35°	840.6	864.4	942.1	1029.9	1117.8	1196.8	1274.4	1350.4	1419.0	1480.0	1524.7
37.5°	815.3	840.6	919.6	1007.7	1095.5	1174.5	1253.6	1326.6	1392.1	1448.7	1489.0
40°	787.0	815.3	894.3	983.8	1070.2	1149.3	1226.7	1296.7	1356.4	1408.6	1445.7
42.5°	755.7	787.0	867.5	956.9	1041.8	1119.4	1193.8	1259.4	1316.1	1362.3	1393.5
45°	725.9	758.8	839.2	928.6	1012.1	1088.1	1159.7	1220.7	1271.4	1313.1	1340.0
47.5°	693.2	727.3	810.9	897.3	979.2	1053.8	1122.4	1177.5	1226.7	1262.4	1286.2
50°	658.9	696.0	779.6	866.1	946.5	1019.5	1085.1	1135.8	1180.5	1210.2	1232.7
52.5°	624.6	663.3	746.7	833.2	913.6	983.8	1046.4	1095.5	1134.2	1161.1	1180.5
55°	587.3	630.4	714.0	800.5	877.9	947.9	1007.7	1052.4	1088.1	1110.3	1128.4
57.5°	548.6	594.7	681.1	767.6	845.2	912.2	968.7	1010.5	1041.8	1061.2	1074.6
60°	509.8	559.0	645.4	731.9	807.9	874.9	928.6	967.3	995.6	1010.5	1020.9
62.5°	469.5	521.7	609.5	696.0	773.6	836.2	886.9	922.6	947.9	959.9	970.3
65°	427.8	483.0	572.4	658.9	736.3	794.5	843.6	876.5	898.7	909.2	915.2
67.5°	384.5	442.7	533.5	620.0	694.6	751.1	797.5	830.2	848.0	857.0	861.4
70°	339.8	400.9	491.8	578.2	649.8	703.6	748.3	778.0	795.9	804.9	806.3
72.5°	298.0	357.8	450.1	533.5	602.1	654.3	696.0	727.3	745.3	752.7	752.7
75°	253.3	313.1	403.9	484.4	550.0	600.7	642.4	672.3	688.6	696.0	696.0
77.5°	214.6	269.8	354.8	432.2	493.4	542.5	582.9	614.1	632.0	639.4	639.4
80°	171.5	225.0	304.1	375.7	432.2	477.0	518.7	551.6	569.4	572.4	567.8
82.5°	132.6	181.9	248.9	313.1	365.2	407.0	448.7	475.5	488.8	491.8	490.4
85°	93.9	134.2	190.7	242.9	286.2	324.9	354.8	380.1	393.5	397.9	400.9
87.5°	55.2	77.4	113.3	153.4	186.3	211.6	229.5	251.9	265.4	274.2	283.2
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: P976918

CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9	1023.9
2.5°	1031.3	1032.9	1034.3	1034.3	1034.3	1035.9	1034.3	1034.3
5°	1096.9	1105.9	1113.4	1117.8	1122.4	1129.8	1128.4	1129.8
7.5°	1178.9	1193.8	1210.2	1219.3	1225.3	1234.1	1237.1	1237.1
10°	1264.0	1284.8	1304.1	1317.5	1326.6	1340.0	1341.4	1343.0
12.5°	1344.4	1369.7	1392.1	1407.0	1420.4	1432.3	1438.3	1439.9
15°	1413.0	1444.3	1469.6	1489.0	1502.5	1515.9	1523.3	1526.3
17.5°	1474.2	1506.9	1535.2	1557.6	1573.9	1587.3	1596.3	1599.3
20°	1521.7	1557.6	1588.9	1612.8	1632.0	1647.1	1658.9	1661.9
22.5°	1560.6	1597.7	1630.6	1657.5	1676.8	1694.6	1705.0	1709.6
25°	1588.9	1629.0	1663.3	1688.8	1709.6	1725.9	1736.3	1740.9
27.5°	1605.3	1645.5	1678.4	1703.6	1724.5	1739.3	1749.8	1754.4
30°	1605.3	1644.1	1676.8	1700.6	1720.1	1734.9	1742.3	1747.0
32.5°	1588.9	1626.2	1655.9	1676.8	1694.6	1709.6	1715.5	1718.5
35°	1562.0	1594.9	1621.6	1639.4	1654.5	1667.9	1673.7	1676.8
37.5°	1523.3	1553.0	1573.9	1590.3	1602.3	1615.8	1620.2	1623.2
40°	1474.2	1502.5	1517.3	1532.1	1542.6	1554.6	1557.6	1557.6
42.5°	1420.4	1444.3	1459.1	1469.6	1477.0	1484.6	1489.0	1489.0
45°	1363.9	1384.7	1395.2	1404.0	1411.4	1417.4	1421.8	1421.8
47.5°	1307.1	1323.6	1332.6	1338.4	1344.4	1350.4	1353.4	1353.4
50°	1250.5	1262.4	1269.8	1274.4	1280.4	1284.8	1287.8	1286.2
52.5°	1193.8	1202.8	1208.8	1213.2	1216.2	1220.7	1222.3	1223.7
55°	1137.2	1143.2	1147.7	1150.7	1156.7	1161.1	1162.5	1165.5
57.5°	1082.1	1085.1	1091.1	1092.5	1098.5	1102.9	1104.5	1105.9
60°	1025.5	1028.5	1032.9	1035.9	1043.4	1046.4	1047.8	1050.8
62.5°	970.3	971.8	977.8	983.8	989.6	992.6	994.2	995.6
65°	915.2	919.6	924.0	928.6	934.4	939.1	940.5	943.5
67.5°	861.4	864.4	870.5	874.9	879.3	883.9	886.9	888.3
70°	806.3	809.3	813.9	816.7	821.3	825.7	830.2	830.2
72.5°	752.7	752.7	755.7	758.8	763.2	766.2	767.6	767.6
75°	694.6	693.2	696.0	697.6	697.6	697.6	699.0	700.6
77.5°	632.0	626.0	623.0	623.0	624.6	621.6	623.0	624.6
80°	560.4	554.4	553.0	553.0	554.4	553.0	554.4	554.4
82.5°	484.4	484.4	480.0	481.4	483.0	480.0	483.0	486.0
85°	396.5	397.9	396.5	400.9	400.9	400.9	402.3	405.3
87.5°	284.6	293.6	290.6	296.6	295.0	296.6	298.0	302.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P976918
 CATALOG NUMBER: 24SR-LD2-C-59-UNV-L940-CD1-PL-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	14.1	15.8	14.4	16.2	16.5	16.1	17.8	16.4	18.2	18.5
	3H	16.0	17.7	16.4	18.0	18.4	18.7	20.3	19.0	20.6	21.0
	4H	16.8	18.4	17.2	18.7	19.1	19.9	21.4	20.3	21.8	22.1
	6H	17.4	18.8	17.8	19.2	19.6	21.1	22.5	21.5	22.9	23.2
	8H	17.6	19.0	18.0	19.4	19.8	21.6	23.0	22.0	23.4	23.8
	12H	17.8	19.1	18.2	19.5	19.9	22.2	23.5	22.6	23.9	24.4
4H	2H	15.5	17.0	15.9	17.4	17.7	16.9	18.4	17.3	18.8	19.1
	3H	18.0	19.3	18.4	19.7	20.1	19.7	21.0	20.1	21.4	21.8
	4H	19.0	20.3	19.5	20.7	21.1	21.1	22.3	21.5	22.7	23.2
	6H	19.9	21.0	20.4	21.5	21.9	22.5	23.6	22.9	24.0	24.4
	8H	20.3	21.3	20.7	21.7	22.2	23.1	24.2	23.6	24.6	25.1
	12H	20.5	21.4	21.0	21.9	22.4	23.8	24.8	24.3	25.2	25.7
8H	4H	20.1	21.1	20.5	21.5	22.0	21.7	22.7	22.1	23.1	23.6
	6H	21.4	22.3	21.9	22.8	23.2	23.3	24.1	23.8	24.6	25.1
	8H	22.0	22.8	22.5	23.3	23.7	24.1	24.9	24.6	25.4	25.9
	12H	22.4	23.1	22.9	23.6	24.2	25.0	25.7	25.5	26.2	26.7
12H	4H	20.3	21.2	20.8	21.7	22.2	21.8	22.7	22.3	23.2	23.7
	6H	21.8	22.6	22.3	23.0	23.6	23.5	24.3	24.0	24.7	25.3
	8H	22.5	23.2	23.0	23.7	24.3	24.4	25.1	24.9	25.6	26.1

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

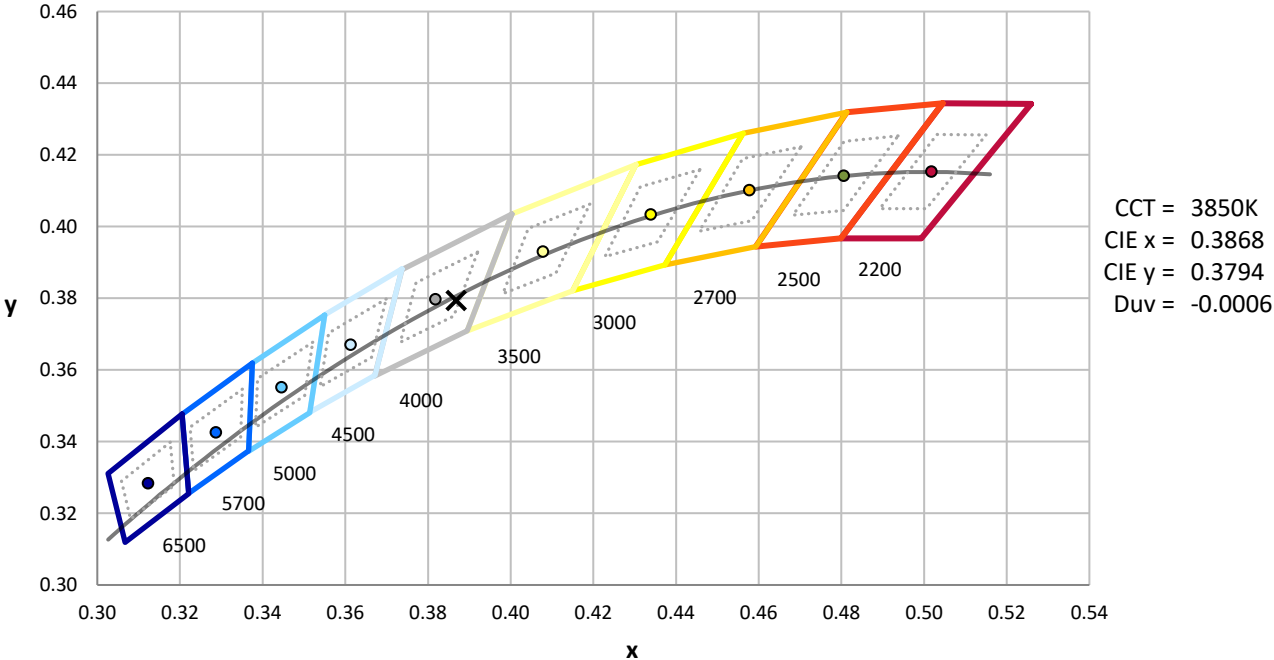
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-457-7

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



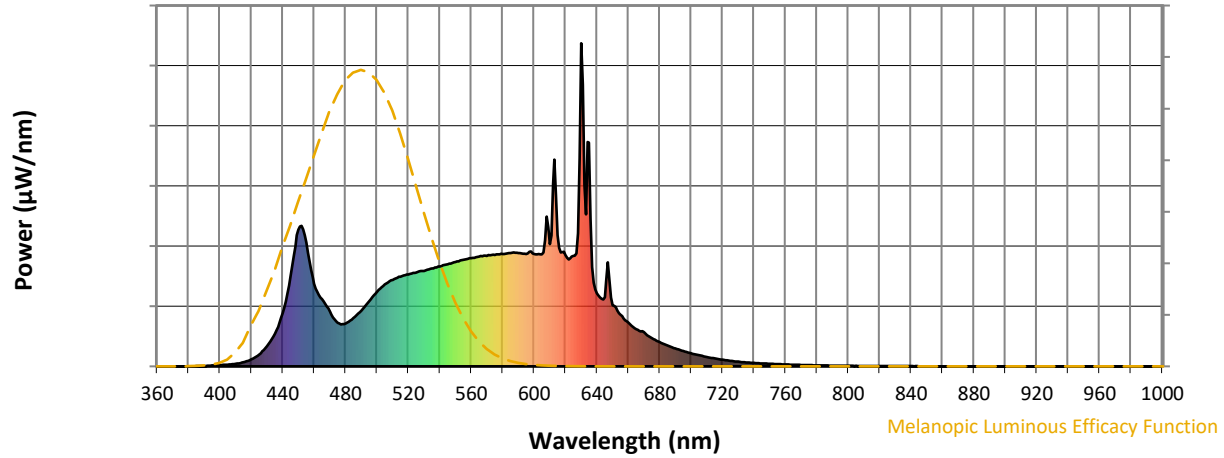
Scotopic Lumens: NR

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)