

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: P977055

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

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P977055
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-ST-U
Description: METALUX SKYRIDGE 2x4 6400LM PACKAGE 90CRI 5000K TROFFER with Straw SKYTRIM
Light Source: 5000K CCT, 90+ CRI LEDS
Ballast/Driver: -

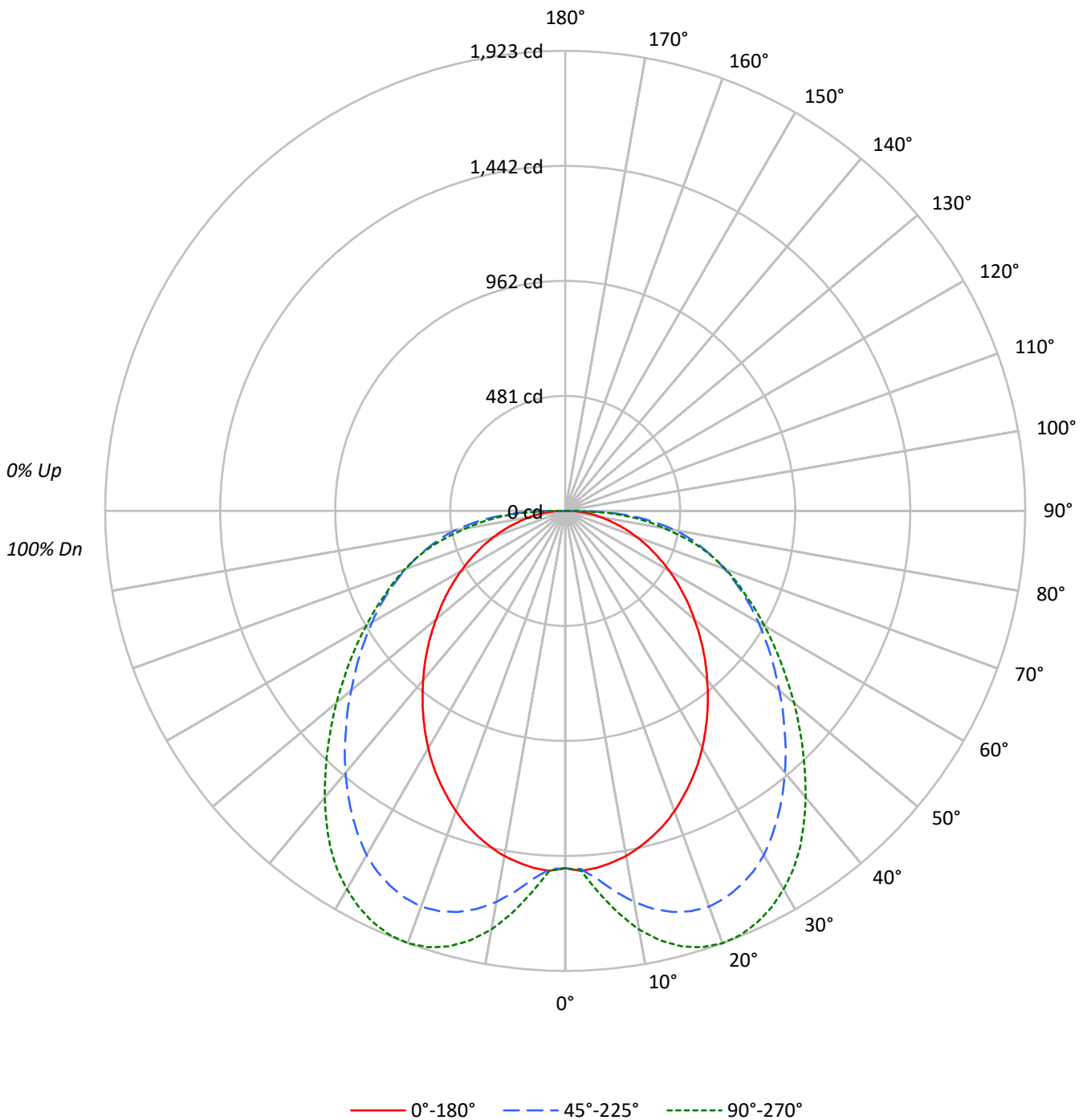
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5671.0 lumens
Efficiency: N/A
Efficacy: 119.1 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): 47.6
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: P977055
CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P977055

CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-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	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°	2010	2010	2010
5°	2024	2086	2162
10°	2001	2267	2428
15°	1962	2418	2625
20°	1913	2520	2753
25°	1849	2568	2818
30°	1780	2581	2836
35°	1702	2551	2813
40°	1622	2509	2747
45°	1549	2466	2672
50°	1474	2445	2614
55°	1413	2458	2580
60°	1355	2509	2587
65°	1298	2615	2649
70°	1244	2789	2807
75°	1187	3076	3029
80°	1179	3631	3278
85°	1292	4675	4086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 87.5°
 Luminance: 6194 cd/sqm



TEST NUMBER: P977055
 CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-ST-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	2.6
10°-20°	476.6	8.4
20°-30°	762.2	13.4
30°-40°	922.7	16.3
40°-50°	942.3	16.6
50°-60°	868.3	15.3
60°-70°	738.6	13.0
70°-80°	552.2	9.7
80°-90°	258.0	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°	1388.9	24.5
0°-40°	2311.6	40.8
0°-60°	4122.2	72.7
0°-90°	5671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1498	1490	1544	1584	1600	142
15°	1408	1535	1736	1844	1885	397
25°	1246	1481	1730	1853	1898	573
35°	1036	1309	1553	1671	1713	648
45°	814	1083	1296	1380	1404	628
55°	602	875	1048	1088	1100	539
65°	408	693	821	827	832	404
75°	228	501	592	583	583	244
85°	84	264	303	268	265	88
90°	0	0	0	0	0	



TEST NUMBER: P977055
 CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-ST-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9
2.5°	1506.0	1502.9	1498.4	1492.3	1490.8	1490.8	1489.2	1489.2	1492.3	1498.4	1507.4
5°	1498.4	1495.3	1490.8	1486.1	1487.8	1492.3	1501.5	1512.1	1527.3	1544.1	1562.3
7.5°	1483.3	1481.6	1478.6	1478.6	1490.8	1512.1	1533.4	1554.7	1579.1	1604.9	1632.3
10°	1464.8	1463.4	1461.8	1474.1	1501.5	1533.4	1563.7	1592.6	1626.2	1659.5	1691.5
12.5°	1439.0	1439.0	1443.5	1471.0	1509.1	1548.6	1586.7	1624.7	1664.2	1703.8	1738.8
15°	1408.5	1408.5	1423.9	1463.4	1512.1	1557.8	1603.4	1646.0	1691.5	1735.7	1772.1
17.5°	1375.2	1373.7	1402.6	1451.1	1506.0	1559.2	1611.0	1658.1	1705.2	1753.9	1792.0
20°	1335.7	1338.7	1376.6	1432.9	1493.9	1553.1	1607.9	1658.1	1708.3	1760.1	1796.5
22.5°	1291.4	1297.6	1344.7	1407.1	1475.5	1536.5	1594.2	1647.5	1699.3	1750.8	1787.5
25°	1245.8	1253.6	1311.3	1376.6	1449.7	1512.1	1569.9	1626.2	1678.0	1729.6	1766.2
27.5°	1197.3	1207.9	1273.2	1341.8	1414.7	1480.2	1537.9	1595.7	1647.5	1700.7	1734.3
30°	1145.5	1159.2	1229.2	1299.0	1375.2	1439.0	1496.8	1556.1	1609.4	1661.2	1693.1
32.5°	1090.8	1107.4	1178.8	1255.0	1329.5	1392.0	1449.7	1510.5	1560.7	1609.4	1641.3
35°	1035.9	1055.8	1128.7	1204.8	1277.7	1340.2	1396.5	1457.3	1507.4	1553.1	1583.6
37.5°	979.6	1004.0	1077.1	1151.6	1223.1	1285.5	1343.2	1399.5	1449.7	1492.3	1522.8
40°	923.3	950.8	1023.9	1096.7	1168.2	1227.6	1283.9	1340.2	1390.3	1428.4	1457.3
42.5°	868.7	895.9	970.6	1043.5	1109.0	1169.8	1226.1	1280.8	1326.4	1364.5	1390.3
45°	813.8	842.7	915.8	987.2	1052.7	1113.5	1169.8	1220.0	1264.2	1296.1	1321.9
47.5°	759.1	789.4	862.5	934.0	996.4	1055.8	1113.5	1159.2	1201.8	1233.7	1255.0
50°	704.3	737.8	809.3	882.4	943.2	1002.6	1057.2	1099.8	1139.3	1168.2	1188.0
52.5°	654.1	686.0	759.1	832.0	893.0	952.2	1004.0	1045.1	1079.9	1105.9	1125.6
55°	602.3	637.3	713.5	783.5	845.7	905.1	952.2	990.3	1022.2	1048.0	1063.4
57.5°	552.2	591.7	666.2	736.2	800.1	856.4	902.0	938.5	967.6	988.8	1002.6
60°	503.4	544.6	622.2	692.2	756.1	810.7	854.9	888.3	914.3	932.5	944.6
62.5°	454.9	502.0	578.2	651.0	711.8	765.1	806.2	836.7	861.1	877.7	885.2
65°	407.6	456.3	535.4	607.0	667.8	718.0	757.5	784.9	807.7	821.4	824.4
67.5°	362.0	413.8	492.8	564.4	623.6	670.9	709.0	734.8	754.4	763.6	766.7
70°	316.3	369.7	450.2	521.9	578.2	623.6	658.6	683.0	699.8	709.0	709.0
72.5°	273.7	327.2	407.6	477.6	529.4	575.1	607.0	629.7	644.9	651.0	649.6
75°	228.3	282.9	362.0	428.9	479.3	521.9	553.8	576.5	587.2	591.7	590.2
77.5°	188.6	240.4	316.3	378.7	432.0	467.0	498.9	520.2	530.9	533.9	532.5
80°	152.1	200.8	267.8	327.2	372.6	410.7	439.6	462.5	471.5	468.6	454.9
82.5°	117.1	161.3	220.5	272.3	314.9	349.9	380.4	393.9	395.5	388.0	375.7
85°	83.7	117.1	167.3	211.5	251.0	276.8	295.0	305.7	308.7	302.8	289.1
87.5°	47.1	68.4	98.9	130.8	161.3	179.5	190.2	196.3	200.8	194.7	185.5
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: P977055

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9	1493.9
2.5°	1498.4	1502.9	1501.5	1504.6	1506.0	1506.0	1501.5	1504.6
5°	1563.7	1572.9	1579.1	1588.1	1594.2	1594.2	1595.7	1600.4
7.5°	1635.4	1650.5	1664.2	1674.9	1682.5	1685.5	1690.0	1694.5
10°	1702.1	1720.5	1735.7	1749.4	1758.4	1764.6	1769.1	1776.8
12.5°	1753.9	1775.2	1792.0	1807.1	1819.4	1828.4	1832.9	1839.1
15°	1792.0	1816.4	1836.0	1852.8	1863.4	1874.1	1878.6	1884.7
17.5°	1814.7	1839.1	1860.4	1877.2	1889.2	1899.9	1906.0	1912.2
20°	1820.9	1845.2	1867.9	1884.7	1897.0	1910.5	1916.7	1922.8
22.5°	1811.6	1836.0	1860.4	1878.6	1892.3	1906.0	1912.2	1918.3
25°	1793.4	1819.4	1843.6	1862.0	1874.1	1887.8	1895.4	1898.5
27.5°	1764.6	1790.4	1814.7	1831.5	1845.2	1858.9	1866.5	1867.9
30°	1723.6	1749.4	1773.8	1790.4	1805.7	1817.8	1825.4	1825.4
32.5°	1673.3	1697.6	1723.6	1738.8	1752.5	1764.6	1772.1	1775.2
35°	1615.5	1639.9	1664.2	1678.0	1693.1	1702.1	1708.3	1712.8
37.5°	1553.1	1577.4	1597.3	1609.4	1626.2	1632.3	1641.3	1639.9
40°	1486.1	1506.0	1524.2	1534.9	1548.6	1556.1	1565.4	1563.7
42.5°	1416.3	1436.0	1451.1	1463.4	1471.0	1478.6	1484.7	1483.3
45°	1344.7	1363.1	1376.6	1382.7	1395.0	1397.9	1404.0	1404.0
47.5°	1273.2	1288.4	1300.6	1309.7	1315.8	1318.9	1325.0	1325.0
50°	1204.8	1218.5	1226.1	1233.7	1239.8	1244.3	1247.4	1248.8
52.5°	1137.9	1148.5	1154.7	1160.6	1166.8	1169.8	1172.9	1171.3
55°	1074.0	1081.6	1086.1	1090.8	1095.3	1099.8	1099.8	1099.8
57.5°	1010.1	1014.6	1019.1	1022.2	1026.7	1029.8	1029.8	1029.8
60°	947.7	952.2	953.8	956.9	961.4	962.8	964.5	961.4
62.5°	886.9	888.3	890.0	891.4	895.9	899.0	899.0	897.5
65°	824.4	824.4	826.1	827.5	830.6	833.7	835.1	832.0
67.5°	763.6	763.6	765.1	765.1	769.8	772.9	774.3	774.3
70°	704.3	702.8	705.9	707.3	710.4	710.4	713.5	713.5
72.5°	644.9	643.5	646.5	646.5	649.6	651.0	651.0	651.0
75°	587.2	582.7	584.1	581.0	584.1	584.1	582.7	582.7
77.5°	524.7	514.1	511.2	505.1	505.1	505.1	502.0	502.0
80°	445.7	435.0	430.5	425.8	425.8	424.4	423.0	423.0
82.5°	366.7	357.5	353.0	348.4	351.3	346.8	348.4	349.9
85°	281.5	273.7	270.9	266.1	264.7	264.7	266.1	264.7
87.5°	182.6	174.8	174.8	170.3	173.4	168.9	164.2	167.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P977055
 CATALOG NUMBER: 24SR-LD2-C-64-UNV-L950-CD1-ST-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	13.8	15.5	14.2	15.8	16.1	15.7	17.4	16.0	17.7	18.0
	3H	15.6	17.2	16.0	17.5	17.9	18.0	19.6	18.4	19.9	20.2
	4H	16.4	17.8	16.8	18.2	18.6	19.1	20.6	19.5	20.9	21.3
	6H	16.9	18.3	17.3	18.6	19.0	20.0	21.4	20.4	21.8	22.2
	8H	17.1	18.4	17.5	18.8	19.2	20.5	21.8	20.9	22.2	22.6
	12H	17.3	18.5	17.7	18.9	19.3	20.8	22.1	21.3	22.5	22.9
4H	2H	15.1	16.5	15.5	16.9	17.3	16.4	17.9	16.8	18.2	18.6
	3H	17.4	18.7	17.8	19.1	19.5	19.0	20.3	19.4	20.6	21.0
	4H	18.4	19.6	18.9	20.0	20.4	20.3	21.4	20.7	21.8	22.2
	6H	19.3	20.3	19.7	20.7	21.2	21.4	22.4	21.8	22.8	23.3
	8H	19.6	20.5	20.0	21.0	21.4	21.9	22.8	22.3	23.3	23.7
	12H	19.8	20.7	20.3	21.1	21.6	22.4	23.2	22.8	23.7	24.2
8H	4H	19.3	20.3	19.8	20.7	21.2	20.8	21.7	21.2	22.2	22.6
	6H	20.6	21.4	21.1	21.9	22.3	22.1	22.9	22.6	23.4	23.9
	8H	21.1	21.8	21.6	22.3	22.8	22.8	23.5	23.3	24.0	24.5
	12H	21.6	22.2	22.1	22.7	23.3	23.4	24.0	23.9	24.5	25.1
12H	4H	19.5	20.4	20.0	20.8	21.3	20.9	21.7	21.4	22.2	22.7
	6H	20.9	21.6	21.4	22.1	22.6	22.3	23.0	22.8	23.5	24.0
	8H	21.6	22.2	22.1	22.7	23.3	23.0	23.7	23.5	24.2	24.7

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



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 [^] /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			

REPORT NUMBER: SP1-2506-457-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 2.02

λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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

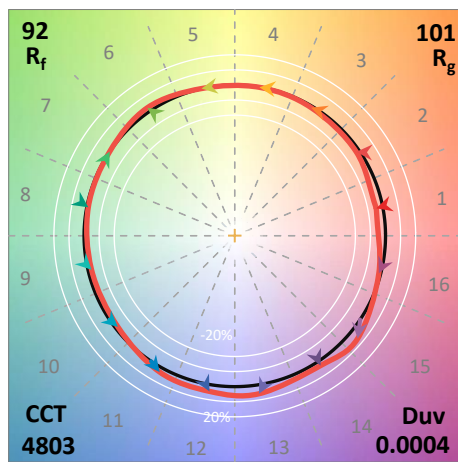
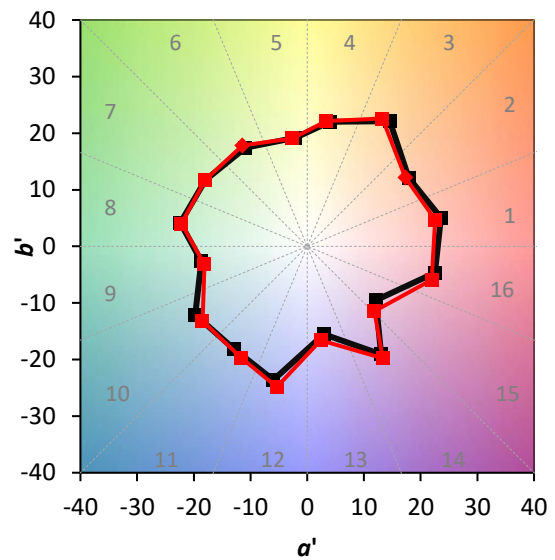
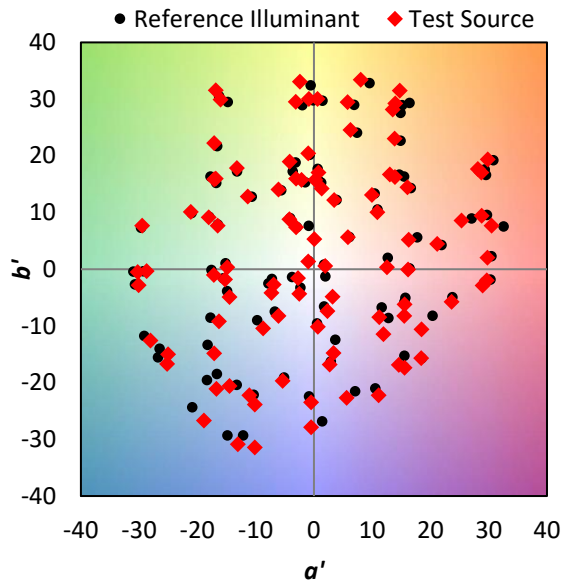
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	227	NR	620	318	NR	750	7	NR	880	0	NR
365	0	NR	495	259	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	292	NR	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			

Summary

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

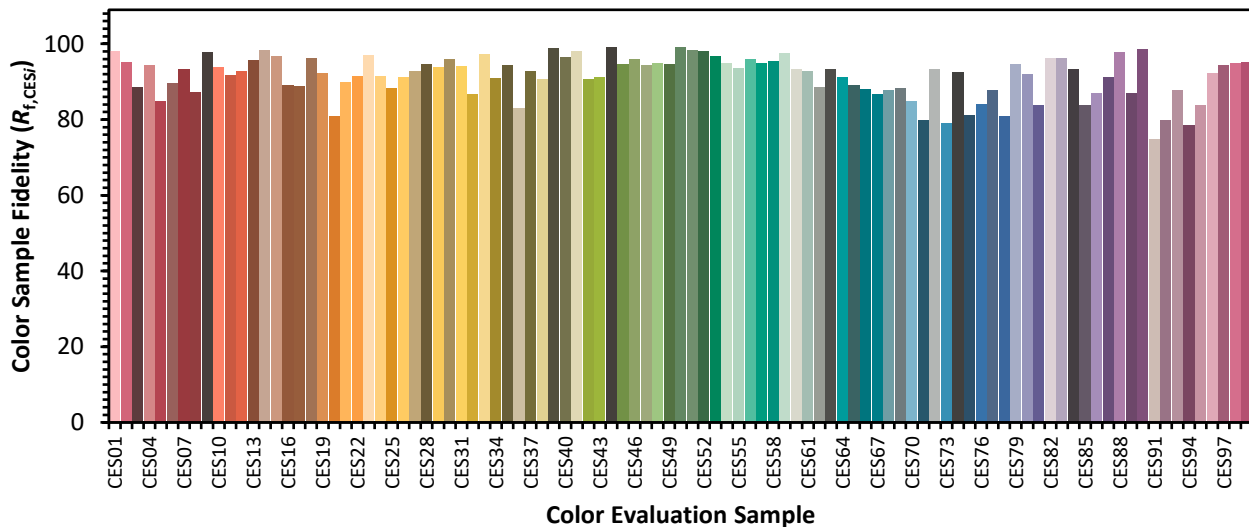


Color Vector Graphics



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)