

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: P977030

Luminaire Tested: 24SR-LD2-C-59-UNV-L930-CD1-ST-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P977030
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24SR-LD2-C-59-UNV-L930-CD1-ST-U
Description: METALUX SKYRIDGE 2x4 5900LM PACKAGE 90CRI 3000K TROFFER with Straw SKYTRIM
Light Source: 3000K CCT, 90+ CRI LEDS
Ballast/Driver: -

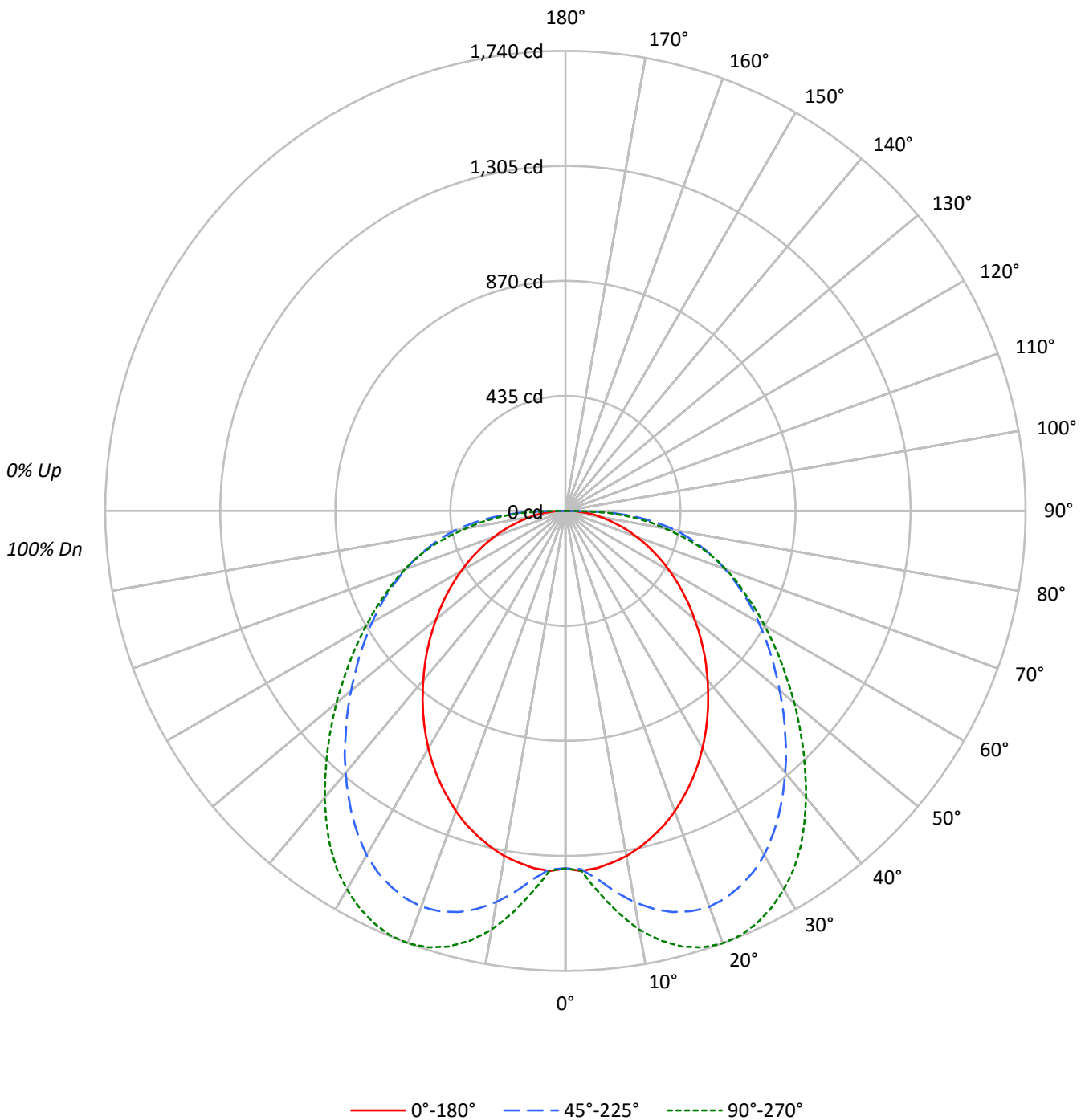
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5133.0 lumens
Efficiency: N/A
Efficacy: 117.2 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): 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: P977030
CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P977030

CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-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°	1819	1819	1819
5°	1832	1888	1956
10°	1812	2052	2197
15°	1776	2188	2376
20°	1731	2281	2492
25°	1674	2324	2551
30°	1611	2336	2567
35°	1540	2309	2546
40°	1468	2271	2486
45°	1402	2232	2418
50°	1334	2213	2366
55°	1279	2225	2335
60°	1226	2271	2342
65°	1174	2367	2398
70°	1126	2524	2541
75°	1074	2784	2742
80°	1067	3287	2966
85°	1170	4231	3699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 87.5°
 Luminance: 5608 cd/sqm



TEST NUMBER: P977030
 CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-CD1-ST-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	2.6
10°-20°	431.4	8.4
20°-30°	689.9	13.4
30°-40°	835.1	16.3
40°-50°	852.9	16.6
50°-60°	785.9	15.3
60°-70°	668.5	13.0
70°-80°	499.8	9.7
80°-90°	233.5	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°	1257.2	24.5
0°-40°	2092.3	40.8
0°-60°	3731.1	72.7
0°-90°	5133.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5133.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1356	1349	1398	1433	1448	128
15°	1275	1389	1571	1669	1706	359
25°	1128	1340	1566	1677	1718	519
35°	938	1185	1406	1513	1550	586
45°	737	980	1173	1249	1271	568
55°	545	792	949	985	996	488
65°	369	627	744	748	753	366
75°	207	453	536	527	527	221
85°	76	239	274	243	240	80
90°	0	0	0	0	0	



TEST NUMBER: P977030

CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-CD1-ST-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2
2.5°	1363.1	1360.3	1356.3	1350.7	1349.4	1349.4	1347.9	1347.9	1350.7	1356.3	1364.4
5°	1356.3	1353.5	1349.4	1345.1	1346.6	1350.7	1359.0	1368.7	1382.4	1397.6	1414.1
7.5°	1342.5	1341.1	1338.3	1338.3	1349.4	1368.7	1387.9	1407.2	1429.3	1452.6	1477.5
10°	1325.9	1324.6	1323.1	1334.2	1359.0	1387.9	1415.4	1441.5	1471.9	1502.1	1531.0
12.5°	1302.5	1302.5	1306.6	1331.4	1365.9	1401.7	1436.1	1470.6	1506.4	1542.1	1573.8
15°	1274.9	1274.9	1288.8	1324.6	1368.7	1410.0	1451.3	1489.9	1531.0	1571.0	1604.0
17.5°	1244.7	1243.4	1269.5	1313.5	1363.1	1411.3	1458.2	1500.8	1543.4	1587.5	1622.0
20°	1208.9	1211.7	1246.0	1297.0	1352.2	1405.7	1455.4	1500.8	1546.2	1593.1	1626.1
22.5°	1168.9	1174.5	1217.1	1273.6	1335.5	1390.7	1443.0	1491.2	1538.0	1584.7	1617.9
25°	1127.6	1134.6	1186.9	1246.0	1312.2	1368.7	1420.9	1471.9	1518.8	1565.5	1598.6
27.5°	1083.7	1093.3	1152.4	1214.5	1280.5	1339.8	1392.0	1444.3	1491.2	1539.3	1569.7
30°	1036.8	1049.2	1112.6	1175.8	1244.7	1302.5	1354.8	1408.5	1456.7	1503.6	1532.5
32.5°	987.3	1002.3	1067.0	1135.9	1203.4	1259.9	1312.2	1367.2	1412.6	1456.7	1485.6
35°	937.7	955.6	1021.6	1090.5	1156.5	1213.0	1264.0	1319.0	1364.4	1405.7	1433.3
37.5°	886.7	908.7	974.9	1042.4	1107.0	1163.5	1215.8	1266.8	1312.2	1350.7	1378.3
40°	835.7	860.6	926.7	992.7	1057.4	1111.1	1162.1	1213.0	1258.4	1292.9	1319.0
42.5°	786.3	810.9	878.5	944.5	1003.8	1058.8	1109.8	1159.3	1200.6	1235.1	1258.4
45°	736.6	762.7	828.9	893.5	952.8	1007.9	1058.8	1104.2	1144.3	1173.2	1196.5
47.5°	687.1	714.5	780.7	845.4	901.9	955.6	1007.9	1049.2	1087.8	1116.7	1135.9
50°	637.5	667.8	732.5	798.7	853.7	907.4	956.9	995.5	1031.2	1057.4	1075.3
52.5°	592.1	621.0	687.1	753.1	808.3	861.9	908.7	946.0	977.5	1001.0	1018.8
55°	545.2	576.9	645.8	709.2	765.5	819.2	861.9	896.3	925.2	948.6	962.5
57.5°	499.8	535.5	603.0	666.4	724.2	775.1	816.5	849.4	875.8	895.0	907.4
60°	455.7	492.9	563.1	626.5	684.3	733.8	773.8	804.0	827.6	844.1	855.0
62.5°	411.8	454.4	523.3	589.3	644.3	692.5	729.7	757.3	779.4	794.4	801.3
65°	368.9	413.0	484.6	549.4	604.5	649.9	685.6	710.5	731.0	743.5	746.2
67.5°	327.6	374.5	446.0	510.9	564.4	607.3	641.7	665.1	682.9	691.2	694.0
70°	286.3	334.7	407.5	472.3	523.3	564.4	596.1	618.2	633.4	641.7	641.7
72.5°	247.8	296.1	368.9	432.3	479.2	520.5	549.4	570.0	583.7	589.3	588.0
75°	206.6	256.1	327.6	388.2	433.8	472.3	501.3	521.8	531.5	535.5	534.2
77.5°	170.7	217.6	286.3	342.8	391.0	422.7	451.6	470.9	480.5	483.3	482.0
80°	137.7	181.8	242.4	296.1	337.3	371.7	397.9	418.6	426.8	424.2	411.8
82.5°	106.0	146.0	199.6	246.5	285.0	316.7	344.3	356.5	358.0	351.2	340.0
85°	75.8	106.0	151.4	191.4	227.2	250.5	267.0	276.7	279.4	274.1	261.7
87.5°	42.6	61.9	89.5	118.4	146.0	162.5	172.2	177.7	181.8	176.2	167.9
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: P977030

CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-CD1-ST-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2	1352.2
2.5°	1356.3	1360.3	1359.0	1361.8	1363.1	1363.1	1359.0	1361.8
5°	1415.4	1423.7	1429.3	1437.4	1443.0	1443.0	1444.3	1448.5
7.5°	1480.2	1493.9	1506.4	1516.0	1522.9	1525.6	1529.7	1533.8
10°	1540.6	1557.3	1571.0	1583.4	1591.6	1597.2	1601.2	1608.3
12.5°	1587.5	1606.8	1622.0	1635.7	1646.8	1655.0	1659.1	1664.6
15°	1622.0	1644.0	1661.8	1677.0	1686.7	1696.3	1700.4	1705.9
17.5°	1642.6	1664.6	1683.9	1699.1	1710.0	1719.6	1725.2	1730.8
20°	1648.1	1670.2	1690.7	1705.9	1717.1	1729.3	1734.8	1740.4
22.5°	1639.8	1661.8	1683.9	1700.4	1712.8	1725.2	1730.8	1736.3
25°	1623.3	1646.8	1668.7	1685.4	1696.3	1708.7	1715.6	1718.4
27.5°	1597.2	1620.5	1642.6	1657.8	1670.2	1682.6	1689.4	1690.7
30°	1560.1	1583.4	1605.5	1620.5	1634.4	1645.3	1652.2	1652.2
32.5°	1514.5	1536.6	1560.1	1573.8	1586.2	1597.2	1604.0	1606.8
35°	1462.3	1484.3	1506.4	1518.8	1532.5	1540.6	1546.2	1550.3
37.5°	1405.7	1427.8	1445.8	1456.7	1471.9	1477.5	1485.6	1484.3
40°	1345.1	1363.1	1379.6	1389.2	1401.7	1408.5	1416.9	1415.4
42.5°	1282.0	1299.7	1313.5	1324.6	1331.4	1338.3	1343.8	1342.5
45°	1217.1	1233.8	1246.0	1251.6	1262.7	1265.3	1270.8	1270.8
47.5°	1152.4	1166.1	1177.3	1185.4	1191.0	1193.7	1199.3	1199.3
50°	1090.5	1102.9	1109.8	1116.7	1122.2	1126.3	1129.1	1130.4
52.5°	1029.9	1039.6	1045.1	1050.5	1056.1	1058.8	1061.6	1060.1
55°	972.1	979.0	983.1	987.3	991.4	995.5	995.5	995.5
57.5°	914.3	918.4	922.5	925.2	929.3	932.1	932.1	932.1
60°	857.8	861.9	863.3	866.1	870.2	871.5	873.0	870.2
62.5°	802.7	804.0	805.5	806.8	810.9	813.7	813.7	812.4
65°	746.2	746.2	747.7	749.0	751.8	754.6	755.9	753.1
67.5°	691.2	691.2	692.5	692.5	696.8	699.5	700.8	700.8
70°	637.5	636.2	638.9	640.2	643.0	643.0	645.8	645.8
72.5°	583.7	582.4	585.2	585.2	588.0	589.3	589.3	589.3
75°	531.5	527.4	528.7	525.9	528.7	528.7	527.4	527.4
77.5°	474.9	465.3	462.7	457.2	457.2	457.2	454.4	454.4
80°	403.4	393.8	389.7	385.4	385.4	384.1	382.8	382.8
82.5°	331.9	323.5	319.5	315.4	318.0	313.9	315.4	316.7
85°	254.8	247.8	245.2	240.9	239.6	239.6	240.9	239.6
87.5°	165.3	158.3	158.3	154.2	157.0	152.9	148.6	151.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P977030
 CATALOG NUMBER: 24SR-LD2-C-59-UNV-L930-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	13.4	15.1	13.8	15.5	15.8	15.3	17.0	15.7	17.3	17.7
	3H	15.3	16.9	15.7	17.2	17.5	17.6	19.2	18.0	19.5	19.9
	4H	16.0	17.5	16.4	17.8	18.2	18.7	20.2	19.1	20.6	20.9
	6H	16.6	17.9	17.0	18.3	18.7	19.7	21.1	20.1	21.4	21.8
	8H	16.8	18.1	17.2	18.5	18.9	20.1	21.4	20.5	21.8	22.2
	12H	16.9	18.2	17.3	18.6	19.0	20.5	21.8	20.9	22.1	22.6
4H	2H	14.7	16.2	15.1	16.5	16.9	16.1	17.5	16.5	17.9	18.3
	3H	17.1	18.3	17.5	18.7	19.1	18.7	19.9	19.1	20.3	20.7
	4H	18.1	19.2	18.5	19.6	20.1	19.9	21.1	20.3	21.5	21.9
	6H	18.9	19.9	19.4	20.4	20.8	21.0	22.1	21.5	22.5	22.9
	8H	19.2	20.2	19.7	20.6	21.1	21.5	22.5	22.0	22.9	23.4
	12H	19.5	20.3	19.9	20.8	21.3	22.0	22.9	22.5	23.4	23.8
8H	4H	19.0	19.9	19.4	20.4	20.8	20.4	21.4	20.9	21.8	22.3
	6H	20.2	21.0	20.7	21.5	22.0	21.8	22.6	22.3	23.1	23.5
	8H	20.8	21.5	21.3	22.0	22.5	22.4	23.1	22.9	23.6	24.1
	12H	21.2	21.9	21.7	22.4	22.9	23.0	23.7	23.5	24.2	24.7
12H	4H	19.2	20.0	19.6	20.5	21.0	20.5	21.4	21.0	21.9	22.3
	6H	20.5	21.3	21.1	21.7	22.3	22.0	22.7	22.5	23.2	23.7
	8H	21.2	21.9	21.8	22.4	22.9	22.7	23.3	23.2	23.8	24.4

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-457-5

Test Date: 07/02/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L930-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L930-CD1-U

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-457-5
 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-L930-CD1-U**
 Description: 2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K): 2935
 CIE u': 0.2530
 CIE v': 0.5224
 Duv: -0.0002
 CIE x: 0.4413
 CIE y: 0.4049
 CIE z: 0.1538
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 583
 Purity: 53.99297
 Rf: 91.8
 Rg: 99.6

CRI (Ra):	93.5		
R1:	94.7	R9:	55.1
R2:	97.2	R10:	92.3
R3:	98.6	R11:	97.0
R4:	95.2	R12:	86.4
R5:	94.7	R13:	95.3
R6:	96.8	R14:	98.2
R7:	90.9	R15:	89.3
R8:	80.4		



Test Conditions

Stabilization Time: 40M
 Operation Time: 1H 40M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-457-5

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: SP1-2506-457-5

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-457-5

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	108	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	129	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	151	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	168	NR	635	695	NR	765	5	NR	895	0	NR
380	0	NR	510	179	NR	640	225	NR	770	4	NR	900	0	NR
385	0	NR	515	187	NR	645	214	NR	775	4	NR	905	0	NR
390	0	NR	520	194	NR	650	190	NR	780	3	NR	910	0	NR
395	1	NR	525	199	NR	655	160	NR	785	3	NR	915	0	NR
400	2	NR	530	205	NR	660	136	NR	790	2	NR	920	0	NR
405	2	NR	535	213	NR	665	115	NR	795	2	NR	925	0	NR
410	4	NR	540	219	NR	670	106	NR	800	2	NR	930	0	NR
415	7	NR	545	228	NR	675	87	NR	805	1	NR	935	0	NR
420	12	NR	550	236	NR	680	74	NR	810	1	NR	940	0	NR
425	20	NR	555	247	NR	685	64	NR	815	1	NR	945	0	NR
430	32	NR	560	257	NR	690	55	NR	820	1	NR	950	0	NR
435	50	NR	565	267	NR	695	47	NR	825	1	NR	955	0	NR
440	79	NR	570	277	NR	700	40	NR	830	1	NR	960	0	NR
445	133	NR	575	287	NR	705	34	NR	835	1	NR	965	0	NR
450	194	NR	580	297	NR	710	29	NR	840	1	NR	970	0	NR
455	168	NR	585	308	NR	715	24	NR	845	0	NR	975	0	NR
460	117	NR	590	315	NR	720	20	NR	850	0	NR	980	0	NR
465	101	NR	595	320	NR	725	17	NR	855	0	NR	985	0	NR
470	85	NR	600	327	NR	730	14	NR	860	0	NR	990	0	NR
475	73	NR	605	331	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	91	NR	615	398	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-457-5

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.4

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	108	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	129	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	151	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	168	NR	635	695	NR	765	5	NR	895	0	NR
380	0	NR	510	179	NR	640	225	NR	770	4	NR	900	0	NR
385	0	NR	515	187	NR	645	214	NR	775	4	NR	905	0	NR
390	0	NR	520	194	NR	650	190	NR	780	3	NR	910	0	NR
395	1	NR	525	199	NR	655	160	NR	785	3	NR	915	0	NR
400	2	NR	530	205	NR	660	136	NR	790	2	NR	920	0	NR
405	2	NR	535	213	NR	665	115	NR	795	2	NR	925	0	NR
410	4	NR	540	219	NR	670	106	NR	800	2	NR	930	0	NR
415	7	NR	545	228	NR	675	87	NR	805	1	NR	935	0	NR
420	12	NR	550	236	NR	680	74	NR	810	1	NR	940	0	NR
425	20	NR	555	247	NR	685	64	NR	815	1	NR	945	0	NR
430	32	NR	560	257	NR	690	55	NR	820	1	NR	950	0	NR
435	50	NR	565	267	NR	695	47	NR	825	1	NR	955	0	NR
440	79	NR	570	277	NR	700	40	NR	830	1	NR	960	0	NR
445	133	NR	575	287	NR	705	34	NR	835	1	NR	965	0	NR
450	194	NR	580	297	NR	710	29	NR	840	1	NR	970	0	NR
455	168	NR	585	308	NR	715	24	NR	845	0	NR	975	0	NR
460	117	NR	590	315	NR	720	20	NR	850	0	NR	980	0	NR
465	101	NR	595	320	NR	725	17	NR	855	0	NR	985	0	NR
470	85	NR	600	327	NR	730	14	NR	860	0	NR	990	0	NR
475	73	NR	605	331	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	91	NR	615	398	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2506-457-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.72

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	108	NR	620	338	NR	750	8	NR	880	0	NR
365	0	NR	495	129	NR	625	339	NR	755	7	NR	885	0	NR
370	0	NR	500	151	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	168	NR	635	695	NR	765	5	NR	895	0	NR
380	0	NR	510	179	NR	640	225	NR	770	4	NR	900	0	NR
385	0	NR	515	187	NR	645	214	NR	775	4	NR	905	0	NR
390	0	NR	520	194	NR	650	190	NR	780	3	NR	910	0	NR
395	1	NR	525	199	NR	655	160	NR	785	3	NR	915	0	NR
400	2	NR	530	205	NR	660	136	NR	790	2	NR	920	0	NR
405	2	NR	535	213	NR	665	115	NR	795	2	NR	925	0	NR
410	4	NR	540	219	NR	670	106	NR	800	2	NR	930	0	NR
415	7	NR	545	228	NR	675	87	NR	805	1	NR	935	0	NR
420	12	NR	550	236	NR	680	74	NR	810	1	NR	940	0	NR
425	20	NR	555	247	NR	685	64	NR	815	1	NR	945	0	NR
430	32	NR	560	257	NR	690	55	NR	820	1	NR	950	0	NR
435	50	NR	565	267	NR	695	47	NR	825	1	NR	955	0	NR
440	79	NR	570	277	NR	700	40	NR	830	1	NR	960	0	NR
445	133	NR	575	287	NR	705	34	NR	835	1	NR	965	0	NR
450	194	NR	580	297	NR	710	29	NR	840	1	NR	970	0	NR
455	168	NR	585	308	NR	715	24	NR	845	0	NR	975	0	NR
460	117	NR	590	315	NR	720	20	NR	850	0	NR	980	0	NR
465	101	NR	595	320	NR	725	17	NR	855	0	NR	985	0	NR
470	85	NR	600	327	NR	730	14	NR	860	0	NR	990	0	NR
475	73	NR	605	331	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	367	NR	740	10	NR	870	0	NR	1000	0	NR
485	91	NR	615	398	NR	745	9	NR	875	0	NR			

Summary

$R_f = 91.8$
 $R_g = 99.6$
 $CIE R_a = 93.5$
 $R_9 = 55.1$

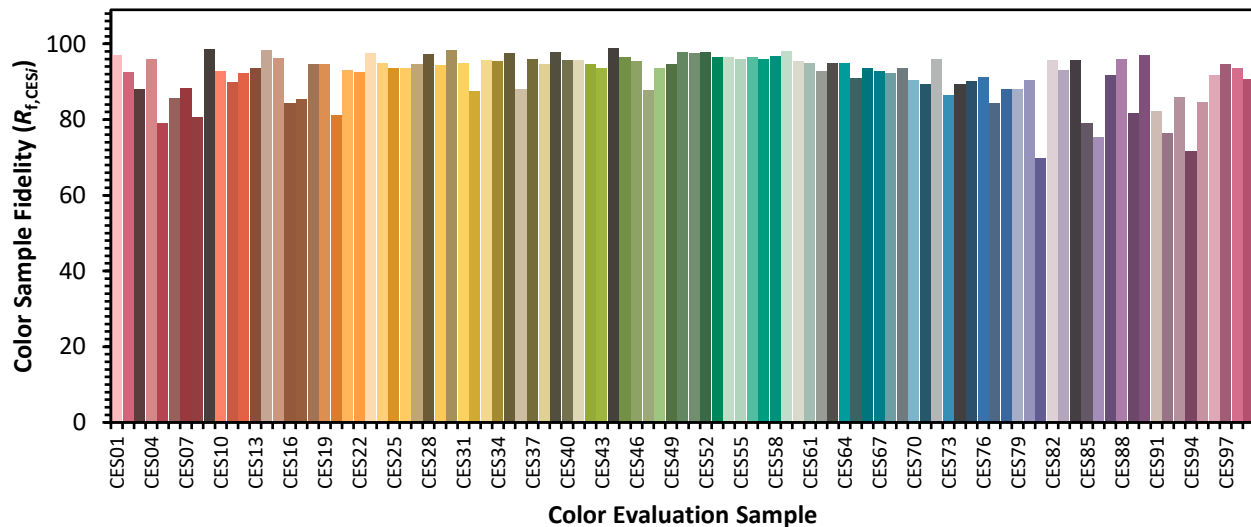


Color Vector Graphics



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

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 91
CES02 = 63	CES27 = 95	CES52 = 98	CES77 = 84
CES03 = 32	CES28 = 97	CES53 = 97	CES78 = 88
CES04 = 70	CES29 = 94	CES54 = 96	CES79 = 88
CES05 = 51	CES30 = 98	CES55 = 96	CES80 = 90
CES06 = 51	CES31 = 95	CES56 = 97	CES81 = 70
CES07 = 44	CES32 = 87	CES57 = 96	CES82 = 96
CES08 = 42	CES33 = 96	CES58 = 97	CES83 = 93
CES09 = 29	CES34 = 95	CES59 = 98	CES84 = 96
CES10 = 76	CES35 = 97	CES60 = 95	CES85 = 79
CES11 = 59	CES36 = 88	CES61 = 95	CES86 = 75
CES12 = 65	CES37 = 96	CES62 = 93	CES87 = 92
CES13 = 44	CES38 = 95	CES63 = 95	CES88 = 96
CES14 = 74	CES39 = 98	CES64 = 95	CES89 = 82
CES15 = 72	CES40 = 96	CES65 = 91	CES90 = 97
CES16 = 48	CES41 = 96	CES66 = 94	CES91 = 82
CES17 = 50	CES42 = 95	CES67 = 93	CES92 = 77
CES18 = 57	CES43 = 94	CES68 = 92	CES93 = 86
CES19 = 72	CES44 = 99	CES69 = 93	CES94 = 72
CES20 = 67	CES45 = 97	CES70 = 91	CES95 = 85
CES21 = 86	CES46 = 95	CES71 = 89	CES96 = 92
CES22 = 79	CES47 = 88	CES72 = 96	CES97 = 95
CES23 = 92	CES48 = 94	CES73 = 86	CES98 = 94
CES24 = 91	CES49 = 95	CES74 = 89	CES99 = 91
CES25 = 72	CES50 = 98	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)