

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: P1589829

Luminaire Tested: 24CZSP-SB-52-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589829
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

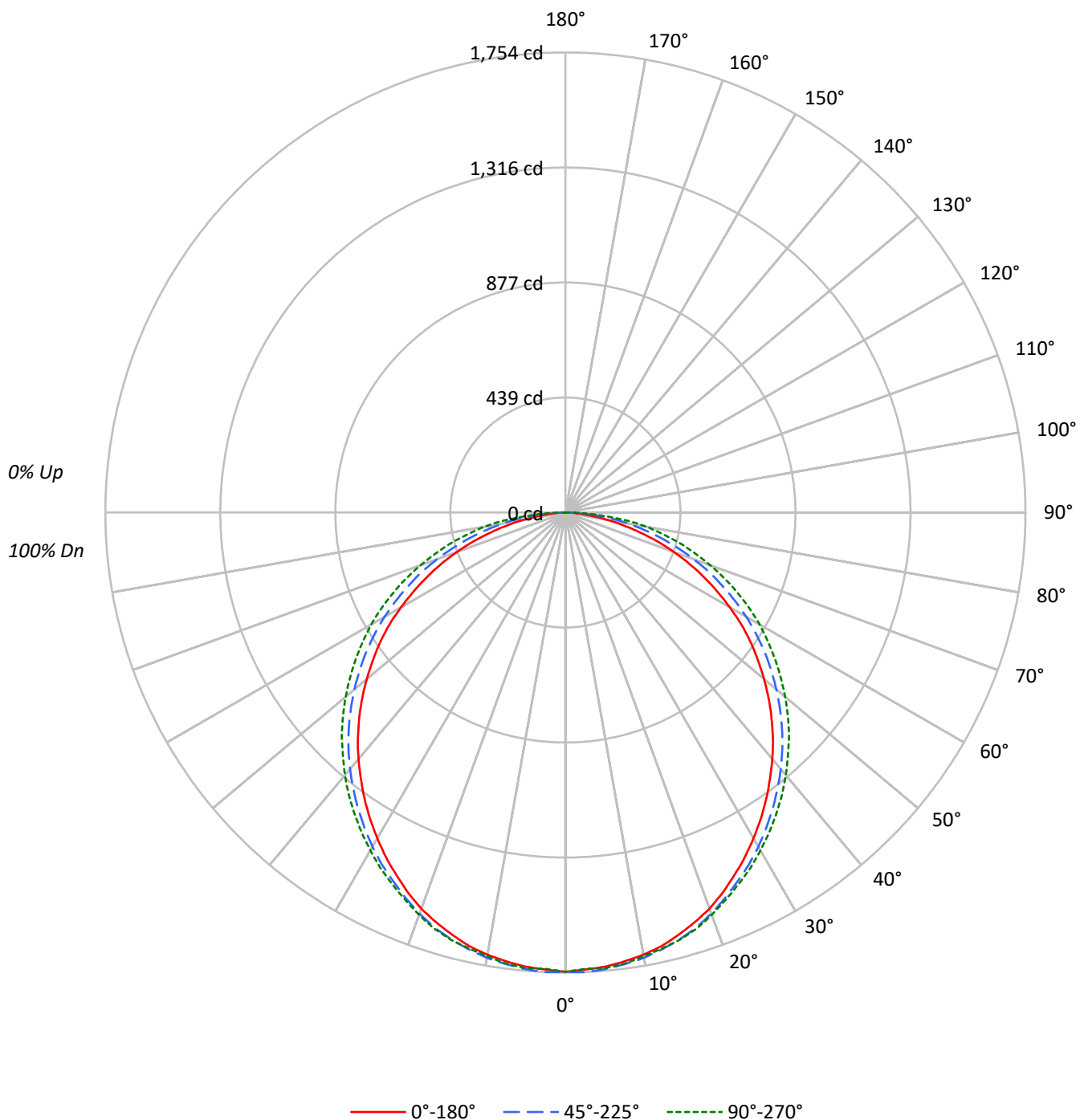
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5110.0 lumens
Efficiency: N/A
Efficacy: 139.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): 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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68		
3	89	79	70	63	87	77	69	63	74	67	62	71	65	61	69	64	60	57		
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	26	37	30	25	37	30	25	36	30	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2682	2682	2682
5°	2672	2687	2680
10°	2663	2681	2671
15°	2643	2670	2674
20°	2619	2651	2660
25°	2577	2623	2641
30°	2536	2601	2630
35°	2495	2576	2621
40°	2454	2554	2614
45°	2408	2530	2612
50°	2355	2502	2605
55°	2302	2475	2605
60°	2216	2438	2621
65°	2113	2391	2622
70°	1971	2325	2630
75°	1753	2240	2675
80°	1440	2146	2776
85°	951	2014	2509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2843 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	3.2
10°-20°	474.1	9.3
20°-30°	714.6	14.0
30°-40°	860.5	16.8
40°-50°	899.0	17.6
50°-60°	826.0	16.2
60°-70°	650.4	12.7
70°-80°	398.8	7.8
80°-90°	120.9	2.4
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°	1354.3	26.5
0°-40°	2214.9	43.3
0°-60°	3939.9	77.1
0°-90°	5110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5110.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1751	1751	1751	1751	1751	
5°	1738	1741	1748	1746	1743	165
15°	1667	1673	1684	1690	1686	470
25°	1525	1535	1552	1568	1563	703
35°	1335	1352	1378	1403	1402	835
45°	1112	1136	1168	1200	1206	858
55°	862	887	927	967	976	769
65°	583	613	660	704	724	576
75°	296	331	378	424	452	315
85°	54	80	115	128	143	70
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1751.0	1751.0	1751.0	1751.0	1751.0
2.5°	1744.5	1748.8	1754.2	1745.6	1741.3
5°	1738.0	1741.3	1747.7	1745.6	1743.4
7.5°	1726.1	1728.3	1736.9	1736.9	1734.8
10°	1712.1	1716.4	1724.0	1722.9	1717.5
12.5°	1693.7	1696.9	1705.6	1705.6	1702.3
15°	1666.6	1673.1	1683.9	1690.4	1686.1
17.5°	1638.5	1645.0	1659.1	1665.6	1663.4
20°	1607.1	1612.6	1626.6	1636.4	1632.0
22.5°	1568.2	1574.7	1590.9	1601.7	1597.4
25°	1525.0	1534.7	1552.0	1568.2	1562.8
27.5°	1481.7	1492.5	1514.1	1530.4	1528.2
30°	1434.1	1448.2	1470.9	1491.4	1487.1
32.5°	1385.4	1401.7	1425.5	1447.1	1446.0
35°	1334.6	1351.9	1377.9	1402.7	1401.7
37.5°	1280.5	1301.1	1328.1	1355.2	1356.2
40°	1227.5	1247.0	1277.3	1306.5	1307.6
42.5°	1171.3	1191.8	1224.3	1254.6	1255.7
45°	1111.8	1135.6	1168.0	1200.5	1205.9
47.5°	1051.2	1076.1	1109.6	1144.3	1150.7
50°	988.5	1014.5	1050.2	1086.9	1093.4
52.5°	924.7	951.7	988.5	1025.3	1035.0
55°	862.0	886.9	926.9	966.9	975.5
57.5°	796.0	818.7	862.0	904.2	915.0
60°	723.5	751.7	796.0	838.2	855.5
62.5°	653.2	683.5	728.9	771.1	790.6
65°	582.9	613.2	659.7	704.1	723.5
67.5°	511.6	542.9	592.7	634.9	656.5
70°	440.2	471.5	519.1	564.6	587.3
72.5°	368.8	402.3	448.8	495.3	518.1
75°	296.3	330.9	378.5	424.0	452.1
77.5°	228.2	261.7	309.3	355.8	379.6
80°	163.3	196.8	243.3	289.8	314.7
82.5°	103.8	135.2	180.6	219.6	242.3
85°	54.1	80.0	114.6	127.6	142.8
87.5°	16.2	31.4	44.3	49.8	61.6
90°	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	14.9	16.6	15.3	16.9	17.2	15.7	17.3	16.1	17.7	18.0
	3H	16.7	18.2	17.1	18.5	18.9	17.8	19.3	18.2	19.6	20.0
	4H	17.3	18.8	17.7	19.1	19.5	18.7	20.1	19.1	20.4	20.8
	6H	17.7	19.1	18.2	19.4	19.8	19.4	20.8	19.8	21.1	21.5
	8H	17.8	19.1	18.3	19.5	19.9	19.7	21.0	20.2	21.4	21.8
	12H	17.9	19.1	18.3	19.5	19.9	20.0	21.2	20.4	21.6	22.0
4H	2H	15.7	17.1	16.1	17.5	17.9	16.3	17.7	16.7	18.1	18.4
	3H	17.7	18.9	18.1	19.3	19.7	18.6	19.8	19.0	20.2	20.6
	4H	18.5	19.5	18.9	20.0	20.4	19.7	20.7	20.1	21.2	21.6
	6H	19.0	19.9	19.4	20.4	20.8	20.6	21.5	21.0	22.0	22.4
	8H	19.1	20.0	19.6	20.5	20.9	21.0	21.9	21.4	22.3	22.8
	12H	19.2	20.0	19.7	20.5	21.0	21.2	22.0	21.7	22.5	23.0
8H	4H	18.9	19.8	19.4	20.2	20.7	20.0	20.8	20.4	21.3	21.8
	6H	19.6	20.3	20.1	20.8	21.3	21.0	21.8	21.5	22.3	22.7
	8H	19.8	20.5	20.3	21.0	21.5	21.5	22.2	22.0	22.7	23.2
	12H	20.0	20.5	20.5	21.0	21.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.0	19.8	19.5	20.3	20.7	20.0	20.8	20.5	21.3	21.7
	6H	19.7	20.4	20.2	20.9	21.4	21.1	21.8	21.6	22.2	22.8
	8H	20.0	20.6	20.5	21.1	21.6	21.6	22.2	22.1	22.7	23.3

(END OF REPORT)