

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: P1589827

Luminaire Tested: 24CZSP-SB-52-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589827
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-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

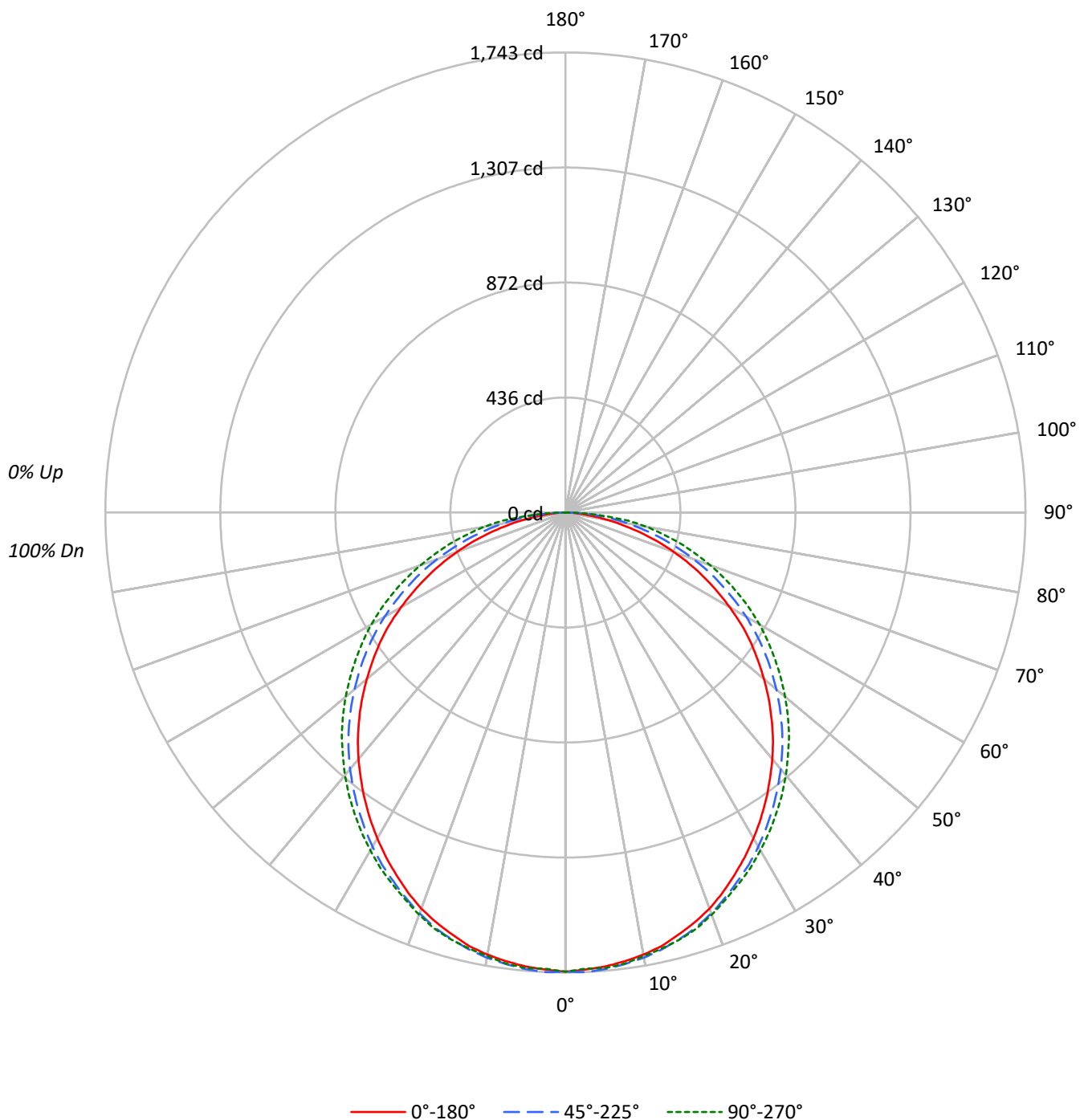
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5077.0 lumens
Efficiency: N/A
Efficacy: 138.3 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			0
RW	70	50	30	10	70	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
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°	2665	2665	2665
5°	2655	2670	2663
10°	2645	2664	2654
15°	2626	2653	2656
20°	2603	2634	2643
25°	2560	2606	2624
30°	2520	2585	2613
35°	2479	2560	2604
40°	2438	2537	2597
45°	2393	2514	2595
50°	2340	2486	2589
55°	2287	2459	2588
60°	2202	2423	2604
65°	2099	2376	2605
70°	1958	2310	2613
75°	1742	2226	2658
80°	1432	2133	2758
85°	944	2002	2492

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.6	3.2
10°-20°	471.0	9.3
20°-30°	710.0	14.0
30°-40°	855.0	16.8
40°-50°	893.2	17.6
50°-60°	820.6	16.2
60°-70°	646.2	12.7
70°-80°	396.2	7.8
80°-90°	120.1	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°	1345.6	26.5
0°-40°	2200.6	43.3
0°-60°	3914.4	77.1
0°-90°	5077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1727	1730	1736	1734	1732	164
15°	1656	1662	1673	1680	1675	467
25°	1515	1525	1542	1558	1553	698
35°	1326	1343	1369	1394	1393	829
45°	1105	1128	1160	1193	1198	852
55°	856	881	921	961	969	764
65°	579	609	656	700	719	573
75°	294	329	376	421	449	313
85°	54	80	114	127	142	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.7	1739.7	1739.7	1739.7	1739.7
2.5°	1733.2	1737.5	1742.9	1734.3	1730.0
5°	1726.8	1730.0	1736.5	1734.3	1732.2
7.5°	1715.0	1717.1	1725.7	1725.7	1723.6
10°	1701.0	1705.3	1712.8	1711.7	1706.4
12.5°	1682.7	1686.0	1694.6	1694.6	1691.3
15°	1655.9	1662.3	1673.1	1679.5	1675.2
17.5°	1627.9	1634.4	1648.3	1654.8	1652.6
20°	1596.8	1602.1	1616.1	1625.8	1621.5
22.5°	1558.1	1564.5	1580.7	1591.4	1587.1
25°	1515.1	1524.8	1542.0	1558.1	1552.7
27.5°	1472.1	1482.9	1504.4	1520.5	1518.3
30°	1424.8	1438.8	1461.4	1481.8	1477.5
32.5°	1376.5	1392.6	1416.2	1437.7	1436.7
35°	1326.0	1343.2	1369.0	1393.7	1392.6
37.5°	1272.3	1292.7	1319.5	1346.4	1347.5
40°	1219.6	1238.9	1269.0	1298.0	1299.1
42.5°	1163.7	1184.1	1216.4	1246.5	1247.5
45°	1104.6	1128.3	1160.5	1192.7	1198.1
47.5°	1044.5	1069.2	1102.5	1136.9	1143.3
50°	982.1	1007.9	1043.4	1079.9	1086.4
52.5°	918.7	945.6	982.1	1018.7	1028.3
55°	856.4	881.1	920.9	960.6	969.2
57.5°	790.9	813.4	856.4	898.3	909.1
60°	718.9	746.8	790.9	832.8	850.0
62.5°	649.0	679.1	724.2	766.1	785.5
65°	579.2	609.3	655.5	699.5	718.9
67.5°	508.3	539.4	588.8	630.8	652.2
70°	437.3	468.5	515.8	560.9	583.5
72.5°	366.4	399.7	445.9	492.1	514.7
75°	294.4	328.8	376.1	421.2	449.2
77.5°	226.7	260.0	307.3	353.5	377.2
80°	162.3	195.6	241.8	288.0	312.7
82.5°	103.2	134.3	179.4	218.1	240.7
85°	53.7	79.5	113.9	126.8	141.8
87.5°	16.1	31.2	44.1	49.4	61.2
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	16.0	17.6	18.0
	3H	16.7	18.2	17.1	18.5	18.9	17.8	19.3	18.1	19.6	20.0
	4H	17.3	18.7	17.7	19.1	19.4	18.6	20.1	19.0	20.4	20.8
	6H	17.7	19.0	18.1	19.4	19.8	19.4	20.7	19.8	21.1	21.5
	8H	17.8	19.1	18.2	19.5	19.9	19.7	21.0	20.1	21.4	21.8
	12H	17.9	19.1	18.3	19.5	19.9	19.9	21.1	20.4	21.5	22.0
4H	2H	15.7	17.1	16.1	17.5	17.8	16.3	17.7	16.7	18.0	18.4
	3H	17.7	18.9	18.1	19.3	19.7	18.6	19.8	19.0	20.2	20.6
	4H	18.4	19.5	18.9	19.9	20.4	19.6	20.7	20.1	21.1	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	20.9	21.8	21.4	22.3	22.7
	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	19.3	20.2	20.7	19.9	20.8	20.4	21.3	21.7
	6H	19.6	20.3	20.1	20.8	21.3	21.0	21.8	21.5	22.2	22.7
	8H	19.8	20.5	20.3	21.0	21.4	21.5	22.2	22.0	22.7	23.2
	12H	19.9	20.5	20.4	21.0	21.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.0	19.8	19.5	20.2	20.7	20.0	20.8	20.4	21.2	21.7
	6H	19.7	20.4	20.2	20.8	21.4	21.1	21.8	21.6	22.2	22.7
	8H	20.0	20.6	20.5	21.1	21.6	21.6	22.2	22.1	22.7	23.3

(END OF REPORT)