

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: P1589826

Luminaire Tested: 24CZSP-SB-52-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

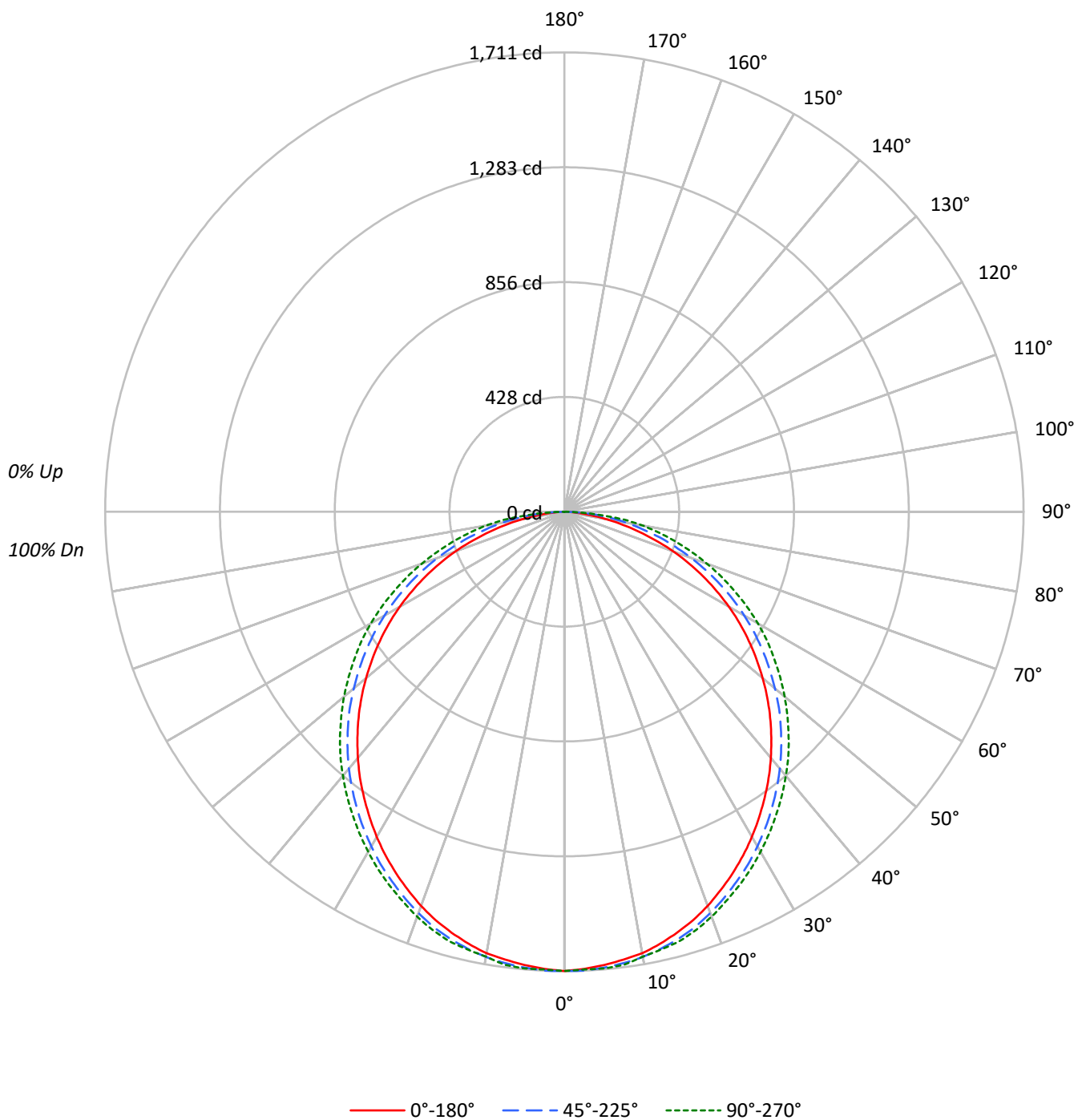
Lumens per Lamp: N/A
Luminaire Lumens: 4976.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	94	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	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2620	2620	2620
5°	2605	2620	2625
10°	2597	2619	2617
15°	2573	2610	2626
20°	2546	2593	2615
25°	2509	2567	2599
30°	2472	2544	2586
35°	2432	2520	2574
40°	2393	2498	2566
45°	2349	2472	2560
50°	2298	2441	2553
55°	2241	2410	2550
60°	2171	2374	2551
65°	2072	2324	2537
70°	1937	2253	2531
75°	1717	2166	2540
80°	1397	2059	2615
85°	903	1900	2258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2651 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	3.3
10°-20°	463.6	9.3
20°-30°	698.9	14.0
30°-40°	841.0	16.9
40°-50°	877.2	17.6
50°-60°	804.1	16.2
60°-70°	631.4	12.7
70°-80°	384.3	7.7
80°-90°	113.7	2.3
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°	1324.4	26.6
0°-40°	2165.4	43.5
0°-60°	3846.6	77.3
0°-90°	4976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1711	1711	1711	1711	1711	
5°	1694	1705	1704	1702	1707	161
15°	1623	1639	1646	1648	1656	458
25°	1485	1505	1519	1529	1538	684
35°	1301	1321	1348	1367	1377	814
45°	1084	1107	1141	1168	1182	836
55°	839	861	902	939	955	750
65°	572	593	641	684	700	565
75°	290	317	366	410	429	308
85°	51	73	108	121	128	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1710.6	1710.6	1710.6	1710.6	1710.6
2.5°	1704.2	1712.7	1710.6	1703.1	1706.3
5°	1694.5	1705.2	1704.2	1702.0	1707.4
7.5°	1682.7	1694.5	1695.6	1695.6	1702.0
10°	1669.9	1681.7	1683.8	1680.6	1682.7
12.5°	1648.5	1662.4	1666.7	1666.7	1669.9
15°	1622.8	1638.9	1646.3	1648.5	1656.0
17.5°	1595.0	1612.1	1621.7	1627.1	1633.5
20°	1561.8	1580.0	1590.7	1597.1	1604.6
22.5°	1524.3	1544.7	1556.4	1562.9	1571.4
25°	1484.7	1505.1	1519.0	1528.6	1538.2
27.5°	1443.0	1462.2	1481.5	1493.3	1501.8
30°	1398.0	1418.3	1438.7	1453.7	1462.2
32.5°	1349.8	1371.2	1394.8	1410.9	1420.5
35°	1300.6	1320.9	1347.7	1367.0	1376.6
37.5°	1250.3	1271.7	1299.5	1319.9	1331.6
40°	1196.8	1219.2	1249.2	1271.7	1283.5
42.5°	1141.1	1162.5	1195.7	1221.4	1235.3
45°	1084.4	1106.8	1141.1	1167.9	1181.8
47.5°	1025.5	1046.9	1084.4	1115.4	1127.2
50°	964.5	984.8	1024.4	1057.6	1071.5
52.5°	902.4	923.8	963.4	998.7	1013.7
55°	839.2	860.6	902.4	938.8	954.8
57.5°	775.0	796.4	839.2	876.7	896.0
60°	708.6	730.0	775.0	813.5	832.8
62.5°	640.1	662.6	708.6	748.2	768.6
65°	571.6	593.0	641.2	684.0	700.1
67.5°	503.1	524.5	571.6	614.4	633.7
70°	432.5	457.1	503.1	548.1	565.2
72.5°	358.6	386.4	432.5	479.6	496.7
75°	290.1	316.9	366.1	410.0	429.2
77.5°	222.7	251.6	297.6	342.5	361.8
80°	158.4	186.3	233.4	276.2	296.5
82.5°	100.6	125.2	172.3	210.9	225.9
85°	51.4	72.8	108.1	121.0	128.5
87.5°	15.0	25.7	38.5	48.2	53.5
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	14.8	16.5	15.2	16.8	17.1	15.6	17.2	15.9	17.6	17.9
	3H	16.6	18.1	17.0	18.4	18.8	17.7	19.2	18.0	19.5	19.9
	4H	17.2	18.7	17.6	19.0	19.4	18.5	19.9	18.9	20.3	20.7
	6H	17.6	19.0	18.1	19.3	19.7	19.3	20.6	19.7	21.0	21.3
	8H	17.7	19.0	18.2	19.4	19.8	19.6	20.8	20.0	21.2	21.6
	12H	17.8	19.0	18.2	19.4	19.8	19.8	21.0	20.2	21.3	21.8
4H	2H	15.6	17.0	16.0	17.4	17.8	16.2	17.6	16.6	18.0	18.3
	3H	17.6	18.8	18.0	19.2	19.6	18.5	19.7	18.9	20.1	20.5
	4H	18.3	19.4	18.8	19.8	20.3	19.5	20.6	19.9	21.0	21.4
	6H	18.9	19.8	19.3	20.3	20.7	20.4	21.4	20.9	21.8	22.3
	8H	19.0	19.9	19.5	20.3	20.8	20.8	21.7	21.2	22.1	22.6
	12H	19.1	19.9	19.6	20.4	20.8	21.0	21.8	21.5	22.3	22.8
8H	4H	18.8	19.7	19.3	20.1	20.6	19.8	20.7	20.3	21.1	21.6
	6H	19.5	20.2	19.9	20.7	21.2	20.9	21.6	21.4	22.1	22.6
	8H	19.7	20.3	20.2	20.8	21.3	21.3	22.0	21.9	22.5	23.0
	12H	19.8	20.4	20.3	20.9	21.4	21.7	22.3	22.2	22.8	23.3
12H	4H	18.9	19.7	19.4	20.1	20.6	19.8	20.6	20.3	21.1	21.6
	6H	19.6	20.3	20.1	20.7	21.3	20.9	21.6	21.5	22.1	22.6
	8H	19.9	20.4	20.4	20.9	21.5	21.5	22.1	22.0	22.5	23.1

(END OF REPORT)