

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: P1589824

Luminaire Tested: 24CZSP-SB-52-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589824
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

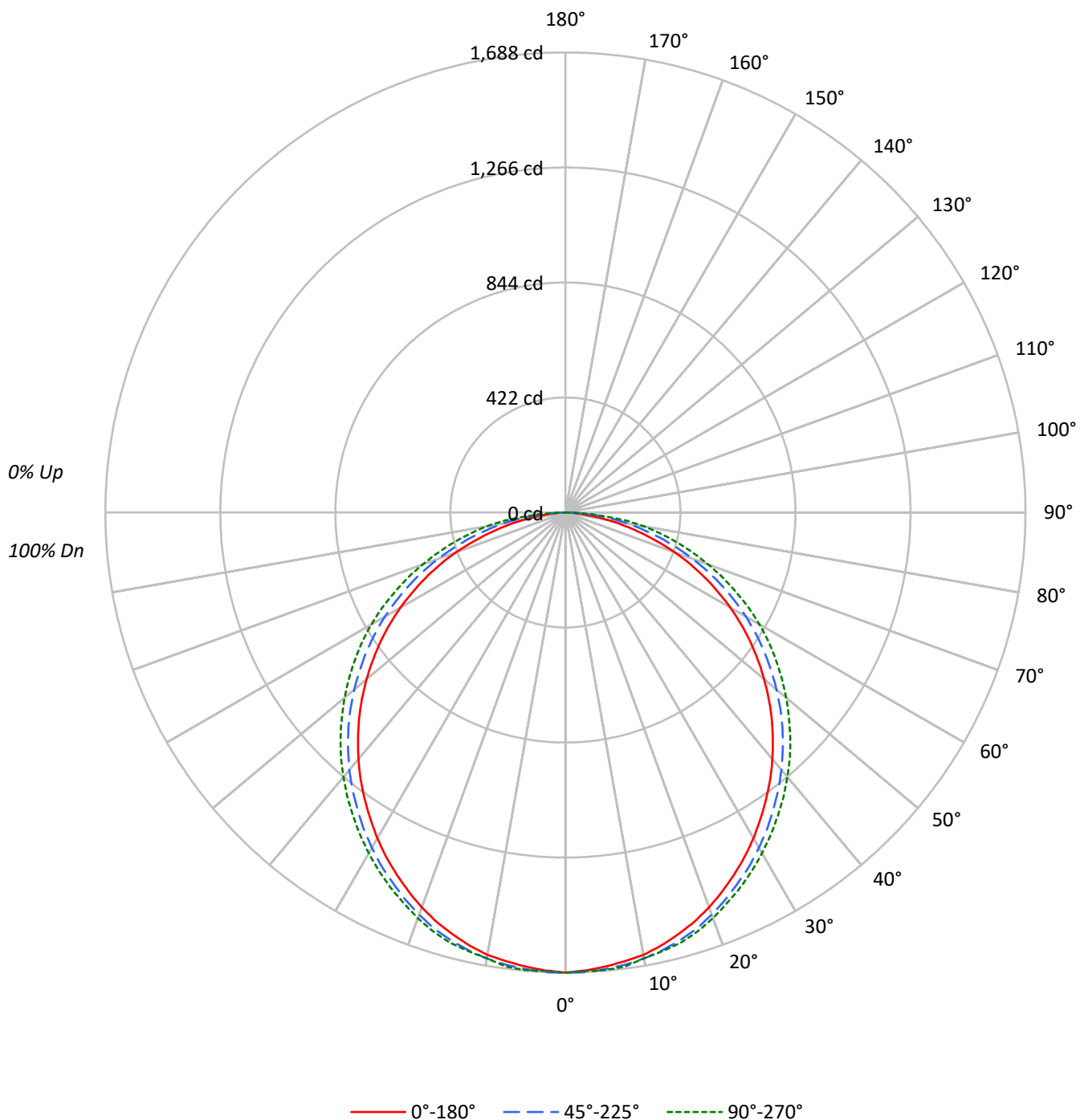
Lumens per Lamp: N/A
Luminaire Lumens: 4911.0 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2586	2586	2586
5°	2571	2586	2591
10°	2563	2585	2583
15°	2540	2576	2592
20°	2512	2559	2581
25°	2476	2533	2566
30°	2440	2511	2552
35°	2400	2487	2540
40°	2361	2465	2533
45°	2318	2439	2526
50°	2268	2409	2520
55°	2212	2378	2516
60°	2142	2343	2518
65°	2045	2293	2504
70°	1911	2223	2498
75°	1694	2138	2507
80°	1379	2031	2581
85°	891	1875	2228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2616 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	3.3
10°-20°	457.5	9.3
20°-30°	689.8	14.0
30°-40°	830.0	16.9
40°-50°	865.8	17.6
50°-60°	793.6	16.2
60°-70°	623.2	12.7
70°-80°	379.3	7.7
80°-90°	112.2	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°	1307.1	26.6
0°-40°	2137.0	43.5
0°-60°	3796.4	77.3
0°-90°	4911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4911.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1672	1683	1682	1680	1685	159
15°	1602	1617	1625	1627	1634	452
25°	1465	1485	1499	1509	1518	675
35°	1284	1304	1330	1349	1359	803
45°	1070	1092	1126	1153	1166	825
55°	828	849	891	926	942	740
65°	564	585	633	675	691	558
75°	286	313	361	405	424	304
85°	51	72	107	119	127	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1688.2	1688.2	1688.2	1688.2	1688.2
2.5°	1681.9	1690.3	1688.2	1680.8	1684.0
5°	1672.4	1682.9	1681.9	1679.8	1685.1
7.5°	1660.8	1672.4	1673.4	1673.4	1679.8
10°	1648.1	1659.7	1661.8	1658.7	1660.8
12.5°	1627.0	1640.7	1644.9	1644.9	1648.1
15°	1601.6	1617.4	1624.8	1627.0	1634.4
17.5°	1574.1	1591.0	1600.5	1605.8	1612.2
20°	1541.4	1559.3	1569.9	1576.2	1583.6
22.5°	1504.4	1524.5	1536.1	1542.4	1550.9
25°	1465.3	1485.4	1499.1	1508.6	1518.1
27.5°	1424.1	1443.1	1462.1	1473.8	1482.2
30°	1379.7	1399.8	1419.9	1434.7	1443.1
32.5°	1332.2	1353.3	1376.6	1392.4	1401.9
35°	1283.6	1303.7	1330.1	1349.1	1358.6
37.5°	1234.0	1255.1	1282.5	1302.6	1314.2
40°	1181.1	1203.3	1232.9	1255.1	1266.7
42.5°	1126.2	1147.3	1180.1	1205.4	1219.2
45°	1070.2	1092.4	1126.2	1152.6	1166.3
47.5°	1012.1	1033.2	1070.2	1100.8	1112.5
50°	951.9	971.9	1011.0	1043.8	1057.5
52.5°	890.6	911.7	950.8	985.7	1000.5
55°	828.3	849.4	890.6	926.5	942.4
57.5°	764.9	786.0	828.3	865.2	884.3
60°	699.4	720.5	764.9	802.9	821.9
62.5°	631.8	654.0	699.4	738.5	758.5
65°	564.2	585.3	632.8	675.1	690.9
67.5°	496.5	517.7	564.2	606.4	625.4
70°	426.8	451.1	496.5	540.9	557.8
72.5°	353.9	381.4	426.8	473.3	490.2
75°	286.3	312.7	361.3	404.6	423.6
77.5°	219.7	248.3	293.7	338.1	357.1
80°	156.4	183.8	230.3	272.6	292.6
82.5°	99.3	123.6	170.1	208.1	222.9
85°	50.7	71.8	106.7	119.4	126.8
87.5°	14.8	25.4	38.0	47.5	52.8
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	15.5	17.2	15.9	17.5	17.8
	3H	16.6	18.1	16.9	18.4	18.8	17.6	19.1	18.0	19.4	19.8
	4H	17.2	18.6	17.6	19.0	19.3	18.5	19.9	18.9	20.2	20.6
	6H	17.6	18.9	18.0	19.3	19.7	19.2	20.5	19.6	20.9	21.3
	8H	17.7	19.0	18.1	19.3	19.7	19.5	20.8	19.9	21.2	21.6
	12H	17.7	19.0	18.2	19.3	19.8	19.7	20.9	20.1	21.3	21.7
4H	2H	15.6	17.0	16.0	17.3	17.7	16.1	17.6	16.5	17.9	18.3
	3H	17.6	18.8	18.0	19.2	19.6	18.5	19.6	18.9	20.0	20.4
	4H	18.3	19.4	18.7	19.8	20.2	19.5	20.6	19.9	21.0	21.4
	6H	18.8	19.8	19.3	20.2	20.7	20.4	21.3	20.8	21.8	22.2
	8H	19.0	19.9	19.4	20.3	20.8	20.7	21.6	21.2	22.1	22.5
	12H	19.1	19.9	19.5	20.3	20.8	21.0	21.8	21.5	22.3	22.7
8H	4H	18.7	19.6	19.2	20.1	20.5	19.8	20.7	20.2	21.1	21.6
	6H	19.4	20.2	19.9	20.6	21.1	20.8	21.6	21.3	22.1	22.5
	8H	19.6	20.3	20.1	20.8	21.3	21.3	22.0	21.8	22.5	23.0
	12H	19.8	20.3	20.3	20.8	21.4	21.7	22.2	22.2	22.7	23.3
12H	4H	18.8	19.6	19.3	20.1	20.6	19.8	20.6	20.3	21.1	21.5
	6H	19.5	20.2	20.1	20.7	21.2	20.9	21.6	21.4	22.0	22.6
	8H	19.8	20.4	20.3	20.9	21.4	21.4	22.0	21.9	22.5	23.1

(END OF REPORT)