

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: P1589812

Luminaire Tested: 24CZSP-SB-52-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589812
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-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

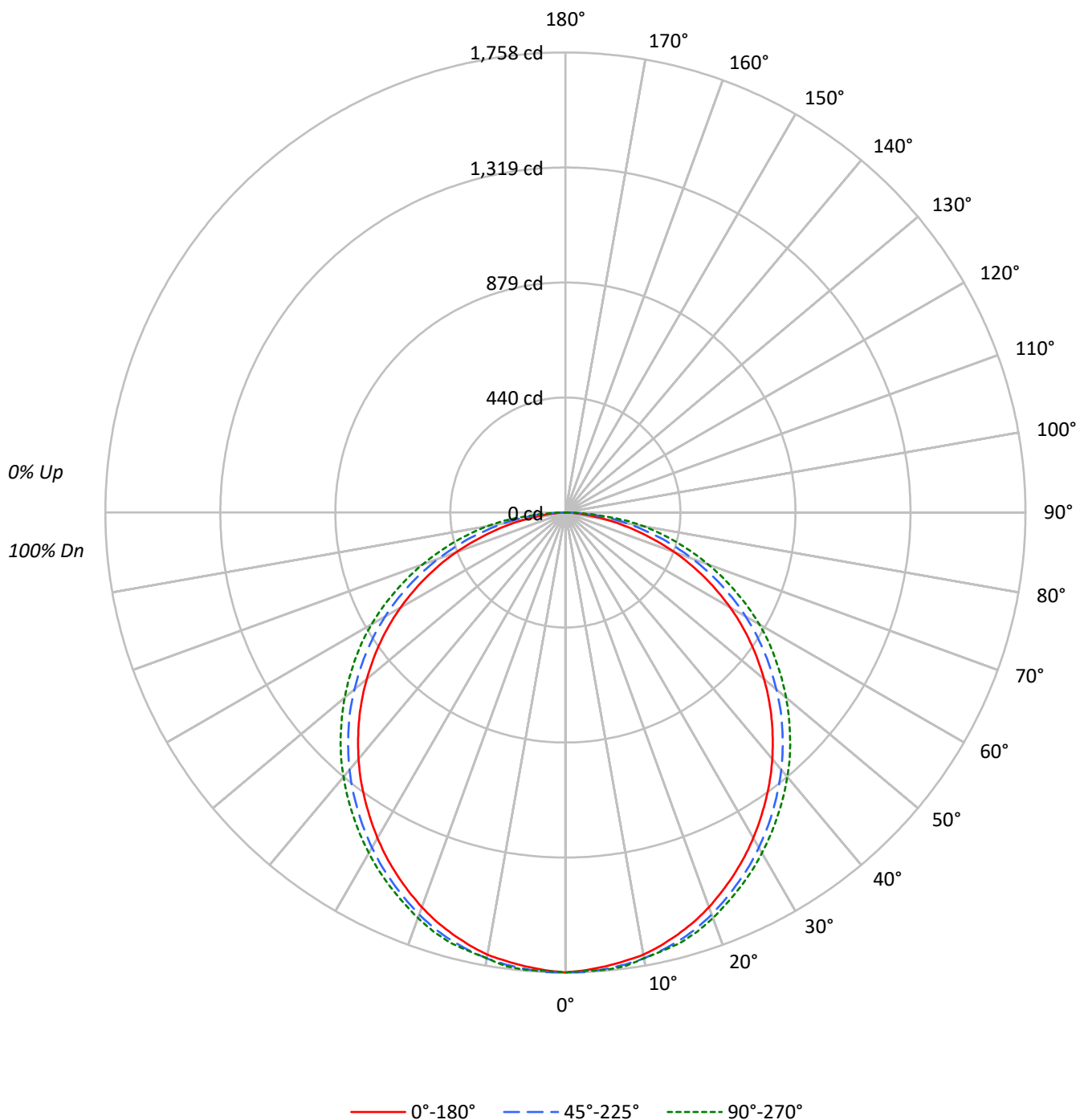
Lumens per Lamp: N/A
Luminaire Lumens: 5113.0 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2692	2692	2692
5°	2677	2692	2697
10°	2669	2691	2689
15°	2644	2682	2698
20°	2616	2664	2687
25°	2578	2638	2671
30°	2541	2614	2657
35°	2499	2589	2645
40°	2459	2566	2637
45°	2413	2540	2630
50°	2361	2508	2623
55°	2303	2476	2620
60°	2230	2439	2621
65°	2129	2388	2607
70°	1990	2315	2601
75°	1764	2226	2610
80°	1436	2115	2688
85°	928	1952	2320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2724 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	3.3
10°-20°	476.3	9.3
20°-30°	718.2	14.0
30°-40°	864.1	16.9
40°-50°	901.4	17.6
50°-60°	826.2	16.2
60°-70°	648.8	12.7
70°-80°	394.9	7.7
80°-90°	116.8	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°	1360.8	26.6
0°-40°	2225.0	43.5
0°-60°	3952.5	77.3
0°-90°	5113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1741	1752	1751	1749	1754	165
15°	1668	1684	1692	1694	1702	470
25°	1526	1546	1561	1571	1581	703
35°	1336	1357	1385	1405	1414	836
45°	1114	1137	1172	1200	1214	859
55°	862	884	927	965	981	771
65°	587	609	659	703	719	581
75°	298	326	376	421	441	316
85°	53	75	111	124	132	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1757.7	1757.7	1757.7	1757.7	1757.7
2.5°	1751.1	1759.9	1757.7	1750.0	1753.3
5°	1741.2	1752.2	1751.1	1748.9	1754.4
7.5°	1729.1	1741.2	1742.3	1742.3	1748.9
10°	1715.9	1728.0	1730.2	1726.9	1729.1
12.5°	1693.9	1708.2	1712.6	1712.6	1715.9
15°	1667.5	1684.0	1691.7	1693.9	1701.6
17.5°	1638.9	1656.5	1666.4	1671.9	1678.5
20°	1604.8	1623.5	1634.5	1641.1	1648.8
22.5°	1566.3	1587.2	1599.3	1605.9	1614.7
25°	1525.6	1546.5	1560.8	1570.7	1580.6
27.5°	1482.7	1502.5	1522.3	1534.4	1543.2
30°	1436.5	1457.4	1478.3	1493.7	1502.5
32.5°	1387.0	1409.0	1433.2	1449.7	1459.6
35°	1336.4	1357.3	1384.8	1404.6	1414.5
37.5°	1284.7	1306.7	1335.3	1356.2	1368.3
40°	1229.7	1252.8	1283.6	1306.7	1318.8
42.5°	1172.5	1194.5	1228.6	1255.0	1269.3
45°	1114.2	1137.3	1172.5	1200.0	1214.3
47.5°	1053.7	1075.7	1114.2	1146.1	1158.2
50°	991.0	1011.9	1052.6	1086.7	1101.0
52.5°	927.2	949.2	989.9	1026.2	1041.6
55°	862.3	884.3	927.2	964.6	981.1
57.5°	796.3	818.3	862.3	900.8	920.6
60°	728.1	750.1	796.3	835.9	855.7
62.5°	657.8	680.9	728.1	768.8	789.7
65°	587.4	609.4	658.9	702.8	719.3
67.5°	517.0	539.0	587.4	631.4	651.2
70°	444.4	469.7	517.0	563.2	580.8
72.5°	368.5	397.1	444.4	492.8	510.4
75°	298.1	325.6	376.2	421.3	441.1
77.5°	228.8	258.5	305.8	352.0	371.8
80°	162.8	191.4	239.8	283.8	304.7
82.5°	103.4	128.7	177.1	216.7	232.1
85°	52.8	74.8	111.1	124.3	132.0
87.5°	15.4	26.4	39.6	49.5	55.0
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	19.9
	4H	17.3	18.7	17.7	19.1	19.5	18.6	20.0	19.0	20.4	20.8
	6H	17.7	19.1	18.1	19.4	19.8	19.4	20.7	19.8	21.0	21.4
	8H	17.8	19.1	18.3	19.5	19.9	19.7	20.9	20.1	21.3	21.7
	12H	17.9	19.1	18.3	19.5	19.9	19.9	21.1	20.3	21.4	21.9
4H	2H	15.7	17.1	16.1	17.5	17.9	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	20.0	21.1	21.5
	6H	19.0	19.9	19.4	20.4	20.8	20.5	21.5	21.0	21.9	22.4
	8H	19.1	20.0	19.6	20.4	20.9	20.9	21.8	21.3	22.2	22.7
	12H	19.2	20.0	19.7	20.5	20.9	21.1	21.9	21.6	22.4	22.9
8H	4H	18.9	19.8	19.3	20.2	20.7	19.9	20.8	20.4	21.2	21.7
	6H	19.6	20.3	20.0	20.8	21.3	21.0	21.7	21.5	22.2	22.7
	8H	19.8	20.4	20.3	20.9	21.4	21.4	22.1	21.9	22.6	23.1
	12H	19.9	20.5	20.4	21.0	21.5	21.8	22.4	22.3	22.9	23.4
12H	4H	19.0	19.8	19.4	20.2	20.7	19.9	20.7	20.4	21.2	21.7
	6H	19.7	20.4	20.2	20.8	21.4	21.0	21.7	21.5	22.2	22.7
	8H	20.0	20.5	20.5	21.0	21.6	21.6	22.1	22.1	22.6	23.2

(END OF REPORT)