

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: P1589818

Luminaire Tested: 24CZSP-SB-52-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589818
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-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

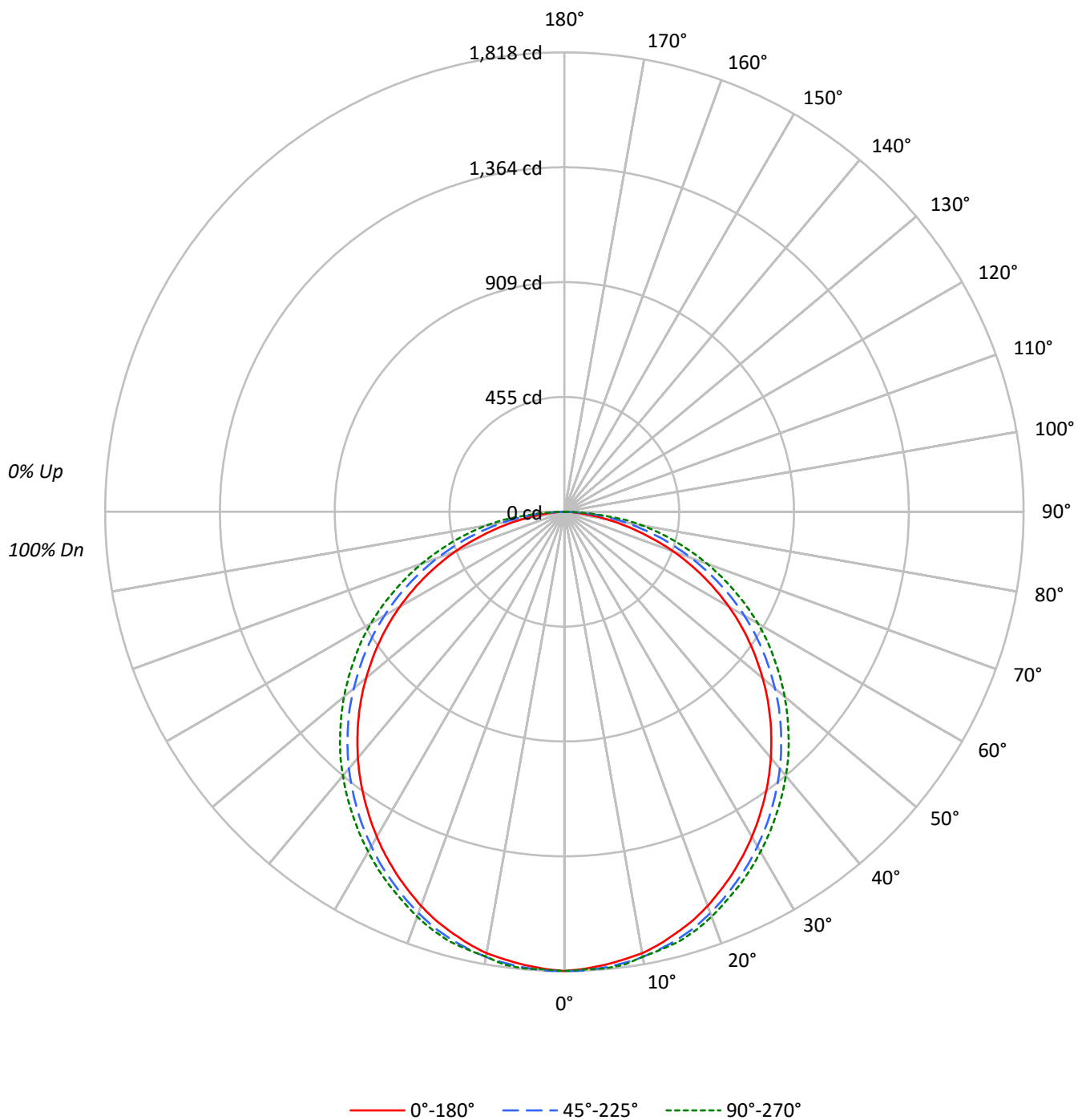
Lumens per Lamp: N/A
Luminaire Lumens: 5287.0 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2784	2784	2784
5°	2768	2784	2789
10°	2759	2783	2781
15°	2734	2774	2790
20°	2705	2755	2779
25°	2666	2727	2762
30°	2627	2703	2748
35°	2584	2677	2735
40°	2542	2654	2727
45°	2496	2626	2720
50°	2442	2593	2713
55°	2381	2560	2709
60°	2306	2522	2711
65°	2201	2469	2696
70°	2058	2394	2689
75°	1824	2302	2699
80°	1484	2187	2778
85°	960	2019	2399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	3.3
10°-20°	492.5	9.3
20°-30°	742.6	14.0
30°-40°	893.5	16.9
40°-50°	932.0	17.6
50°-60°	854.3	16.2
60°-70°	670.9	12.7
70°-80°	408.3	7.7
80°-90°	120.8	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°	1407.1	26.6
0°-40°	2300.7	43.5
0°-60°	4087.0	77.3
0°-90°	5287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5287.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1800	1812	1811	1808	1814	171
15°	1724	1741	1749	1752	1760	486
25°	1578	1599	1614	1624	1634	727
35°	1382	1404	1432	1452	1463	865
45°	1152	1176	1212	1241	1256	888
55°	892	914	959	998	1014	797
65°	607	630	681	727	744	601
75°	308	337	389	436	456	327
85°	55	77	115	128	136	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1817.5	1817.5	1817.5	1817.5	1817.5
2.5°	1810.7	1819.8	1817.5	1809.5	1812.9
5°	1800.4	1811.8	1810.7	1808.4	1814.1
7.5°	1787.9	1800.4	1801.6	1801.6	1808.4
10°	1774.3	1786.8	1789.1	1785.6	1787.9
12.5°	1751.5	1766.3	1770.9	1770.9	1774.3
15°	1724.2	1741.3	1749.2	1751.5	1759.5
17.5°	1694.7	1712.9	1723.1	1728.8	1735.6
20°	1659.4	1678.7	1690.1	1696.9	1704.9
22.5°	1619.6	1641.2	1653.7	1660.5	1669.6
25°	1577.5	1599.1	1613.9	1624.1	1634.4
27.5°	1533.1	1553.6	1574.1	1586.6	1595.7
30°	1485.4	1507.0	1528.6	1544.5	1553.6
32.5°	1434.2	1456.9	1482.0	1499.0	1509.3
35°	1381.9	1403.5	1431.9	1452.4	1462.6
37.5°	1328.4	1351.2	1380.7	1402.4	1414.9
40°	1271.6	1295.4	1327.3	1351.2	1363.7
42.5°	1212.4	1235.2	1270.4	1297.7	1312.5
45°	1152.1	1176.0	1212.4	1240.9	1255.6
47.5°	1089.6	1112.3	1152.1	1185.1	1197.6
50°	1024.8	1046.4	1088.4	1123.7	1138.5
52.5°	958.8	981.5	1023.6	1061.1	1077.1
55°	891.7	914.4	958.8	997.5	1014.5
57.5°	823.4	846.2	891.7	931.5	952.0
60°	752.9	775.7	823.4	864.4	884.9
62.5°	680.1	704.0	752.9	795.0	816.6
65°	607.3	630.1	681.3	726.8	743.8
67.5°	534.6	557.3	607.3	652.8	673.3
70°	459.5	485.6	534.6	582.3	600.5
72.5°	381.0	410.6	459.5	509.5	527.7
75°	308.2	336.7	389.0	435.6	456.1
77.5°	236.6	267.3	316.2	364.0	384.4
80°	168.3	197.9	247.9	293.4	315.0
82.5°	106.9	133.1	183.1	224.1	240.0
85°	54.6	77.3	114.9	128.5	136.5
87.5°	15.9	27.3	40.9	51.2	56.9
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	15.1	16.7	15.4	17.0	17.3	15.8	17.5	16.2	17.8	18.1
	3H	16.8	18.3	17.2	18.7	19.0	17.9	19.4	18.2	19.7	20.1
	4H	17.4	18.9	17.8	19.2	19.6	18.7	20.2	19.1	20.5	20.9
	6H	17.9	19.2	18.3	19.5	19.9	19.5	20.8	19.9	21.2	21.6
	8H	18.0	19.2	18.4	19.6	20.0	19.8	21.0	20.2	21.4	21.8
	12H	18.0	19.2	18.4	19.6	20.0	20.0	21.2	20.4	21.6	22.0
4H	2H	15.8	17.2	16.2	17.6	18.0	16.4	17.8	16.8	18.2	18.5
	3H	17.8	19.0	18.2	19.4	19.8	18.7	19.9	19.1	20.3	20.7
	4H	18.6	19.6	19.0	20.1	20.5	19.7	20.8	20.2	21.2	21.7
	6H	19.1	20.0	19.5	20.5	20.9	20.6	21.6	21.1	22.0	22.5
	8H	19.2	20.1	19.7	20.6	21.0	21.0	21.9	21.5	22.3	22.8
	12H	19.3	20.1	19.8	20.6	21.1	21.3	22.1	21.7	22.5	23.0
8H	4H	19.0	19.9	19.5	20.3	20.8	20.0	20.9	20.5	21.4	21.8
	6H	19.7	20.4	20.2	20.9	21.4	21.1	21.8	21.6	22.3	22.8
	8H	19.9	20.5	20.4	21.0	21.5	21.6	22.2	22.1	22.7	23.2
	12H	20.0	20.6	20.5	21.1	21.7	21.9	22.5	22.4	23.0	23.5
12H	4H	19.1	19.9	19.6	20.4	20.8	20.1	20.9	20.5	21.3	21.8
	6H	19.8	20.5	20.3	20.9	21.5	21.1	21.8	21.7	22.3	22.8
	8H	20.1	20.7	20.6	21.1	21.7	21.7	22.3	22.2	22.8	23.3

(END OF REPORT)