

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: P1589820

Luminaire Tested: 24CZSP-SB-52-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589820
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-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

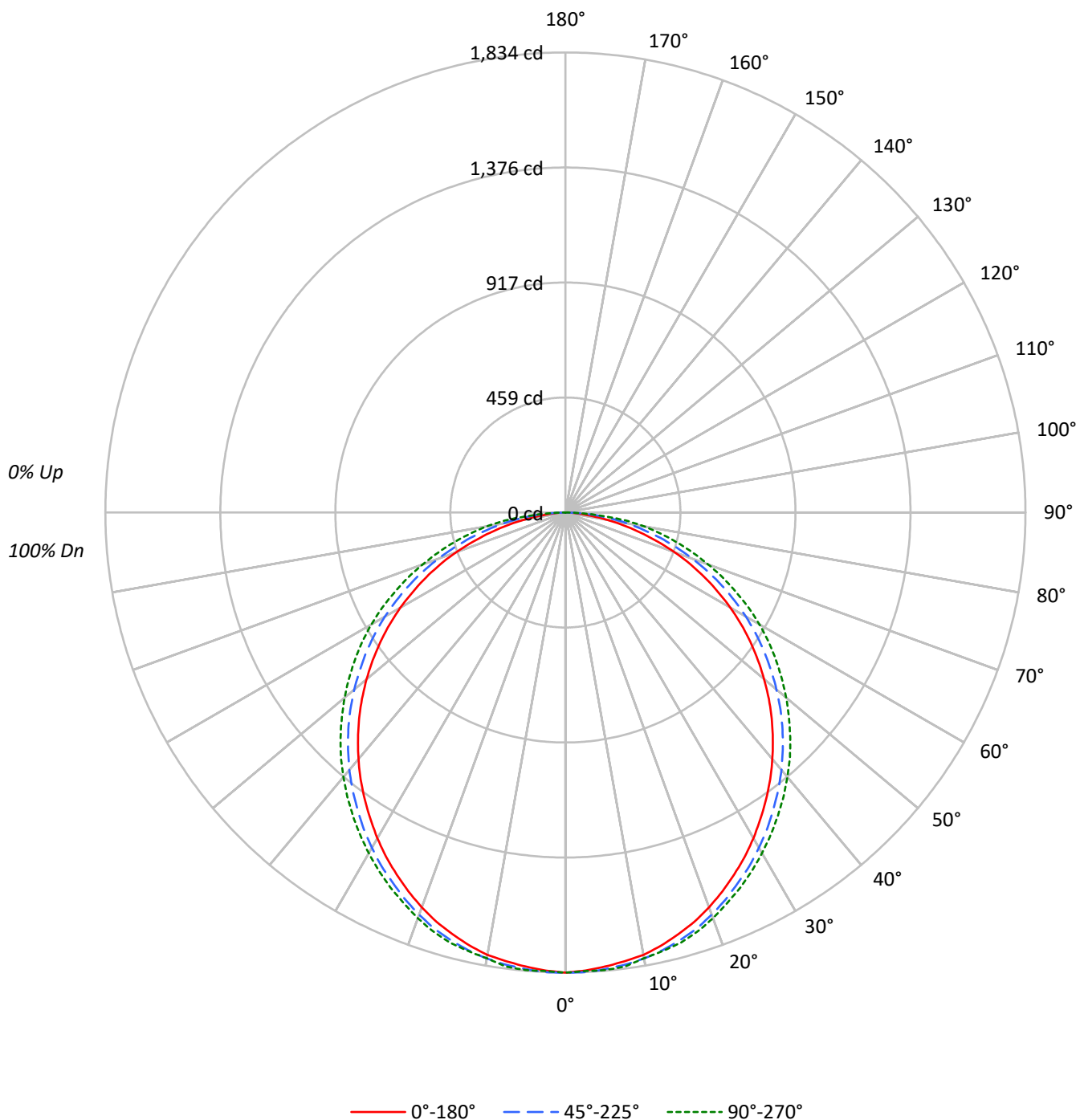
Lumens per Lamp: N/A
Luminaire Lumens: 5336.0 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2809	2809	2809
5°	2794	2810	2815
10°	2785	2808	2806
15°	2759	2799	2816
20°	2730	2780	2805
25°	2691	2753	2788
30°	2651	2729	2773
35°	2608	2702	2760
40°	2566	2678	2752
45°	2519	2651	2745
50°	2465	2617	2738
55°	2403	2584	2734
60°	2328	2546	2736
65°	2222	2492	2721
70°	2077	2416	2714
75°	1841	2323	2724
80°	1499	2207	2805
85°	968	2037	2420

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	3.3
10°-20°	497.1	9.3
20°-30°	749.5	14.0
30°-40°	901.8	16.9
40°-50°	940.7	17.6
50°-60°	862.2	16.2
60°-70°	677.1	12.7
70°-80°	412.1	7.7
80°-90°	121.9	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°	1420.2	26.6
0°-40°	2322.0	43.5
0°-60°	4124.9	77.3
0°-90°	5336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5336.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1817	1829	1827	1825	1831	173
15°	1740	1757	1766	1768	1776	491
25°	1592	1614	1629	1639	1650	734
35°	1395	1416	1445	1466	1476	873
45°	1163	1187	1224	1252	1267	897
55°	900	923	968	1007	1024	804
65°	613	636	688	734	751	606
75°	311	340	393	440	460	330
85°	55	78	116	130	138	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.3	1834.3	1834.3	1834.3	1834.3
2.5°	1827.4	1836.6	1834.3	1826.3	1829.7
5°	1817.1	1828.6	1827.4	1825.1	1830.9
7.5°	1804.5	1817.1	1818.3	1818.3	1825.1
10°	1790.7	1803.3	1805.6	1802.2	1804.5
12.5°	1767.8	1782.7	1787.3	1787.3	1790.7
15°	1740.2	1757.4	1765.5	1767.8	1775.8
17.5°	1710.4	1728.7	1739.1	1744.8	1751.7
20°	1674.8	1694.3	1705.8	1712.7	1720.7
22.5°	1634.6	1656.4	1669.0	1675.9	1685.1
25°	1592.1	1613.9	1628.9	1639.2	1649.5
27.5°	1547.4	1568.0	1588.7	1601.3	1610.5
30°	1499.1	1521.0	1542.8	1558.8	1568.0
32.5°	1447.5	1470.5	1495.7	1512.9	1523.3
35°	1394.7	1416.5	1445.2	1465.9	1476.2
37.5°	1340.7	1363.7	1393.5	1415.4	1428.0
40°	1283.3	1307.4	1339.6	1363.7	1376.3
42.5°	1223.7	1246.6	1282.2	1309.7	1324.7
45°	1162.8	1186.9	1223.7	1252.4	1267.3
47.5°	1099.7	1122.6	1162.8	1196.1	1208.7
50°	1034.3	1056.1	1098.5	1134.1	1149.0
52.5°	967.7	990.6	1033.1	1071.0	1087.1
55°	899.9	922.9	967.7	1006.7	1023.9
57.5°	831.1	854.0	899.9	940.1	960.8
60°	759.9	782.9	831.1	872.4	893.1
62.5°	686.4	710.5	759.9	802.4	824.2
65°	613.0	635.9	687.6	733.5	750.7
67.5°	539.5	562.5	613.0	658.9	679.6
70°	463.7	490.2	539.5	587.7	606.1
72.5°	384.5	414.4	463.7	514.3	532.6
75°	311.1	339.8	392.6	439.6	460.3
77.5°	238.8	269.8	319.1	367.3	388.0
80°	169.9	199.7	250.2	296.2	318.0
82.5°	107.9	134.3	184.8	226.1	242.2
85°	55.1	78.1	115.9	129.7	137.7
87.5°	16.1	27.5	41.3	51.7	57.4
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	15.5	17.1	17.4	15.8	17.5	16.2	17.8	18.1
	3H	16.9	18.4	17.2	18.7	19.0	17.9	19.4	18.3	19.7	20.1
	4H	17.5	18.9	17.9	19.2	19.6	18.8	20.2	19.2	20.5	20.9
	6H	17.9	19.2	18.3	19.6	20.0	19.5	20.8	19.9	21.2	21.6
	8H	18.0	19.2	18.4	19.6	20.0	19.8	21.1	20.2	21.5	21.9
	12H	18.0	19.2	18.5	19.6	20.1	20.0	21.2	20.4	21.6	22.0
4H	2H	15.9	17.3	16.3	17.6	18.0	16.4	17.8	16.8	18.2	18.6
	3H	17.8	19.0	18.3	19.4	19.8	18.7	19.9	19.2	20.3	20.7
	4H	18.6	19.7	19.0	20.1	20.5	19.8	20.8	20.2	21.3	21.7
	6H	19.1	20.1	19.6	20.5	21.0	20.7	21.6	21.1	22.1	22.5
	8H	19.3	20.2	19.7	20.6	21.1	21.0	21.9	21.5	22.4	22.8
	12H	19.3	20.1	19.8	20.6	21.1	21.3	22.1	21.8	22.6	23.0
8H	4H	19.0	19.9	19.5	20.4	20.8	20.1	20.9	20.5	21.4	21.9
	6H	19.7	20.4	20.2	20.9	21.4	21.1	21.9	21.6	22.3	22.8
	8H	19.9	20.6	20.4	21.1	21.6	21.6	22.3	22.1	22.8	23.2
	12H	20.0	20.6	20.6	21.1	21.7	21.9	22.5	22.4	23.0	23.6
12H	4H	19.1	19.9	19.6	20.4	20.9	20.1	20.9	20.6	21.4	21.8
	6H	19.8	20.5	20.4	21.0	21.5	21.2	21.8	21.7	22.3	22.8
	8H	20.1	20.7	20.6	21.2	21.7	21.7	22.3	22.2	22.8	23.3

(END OF REPORT)