

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: P1589847

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52HE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

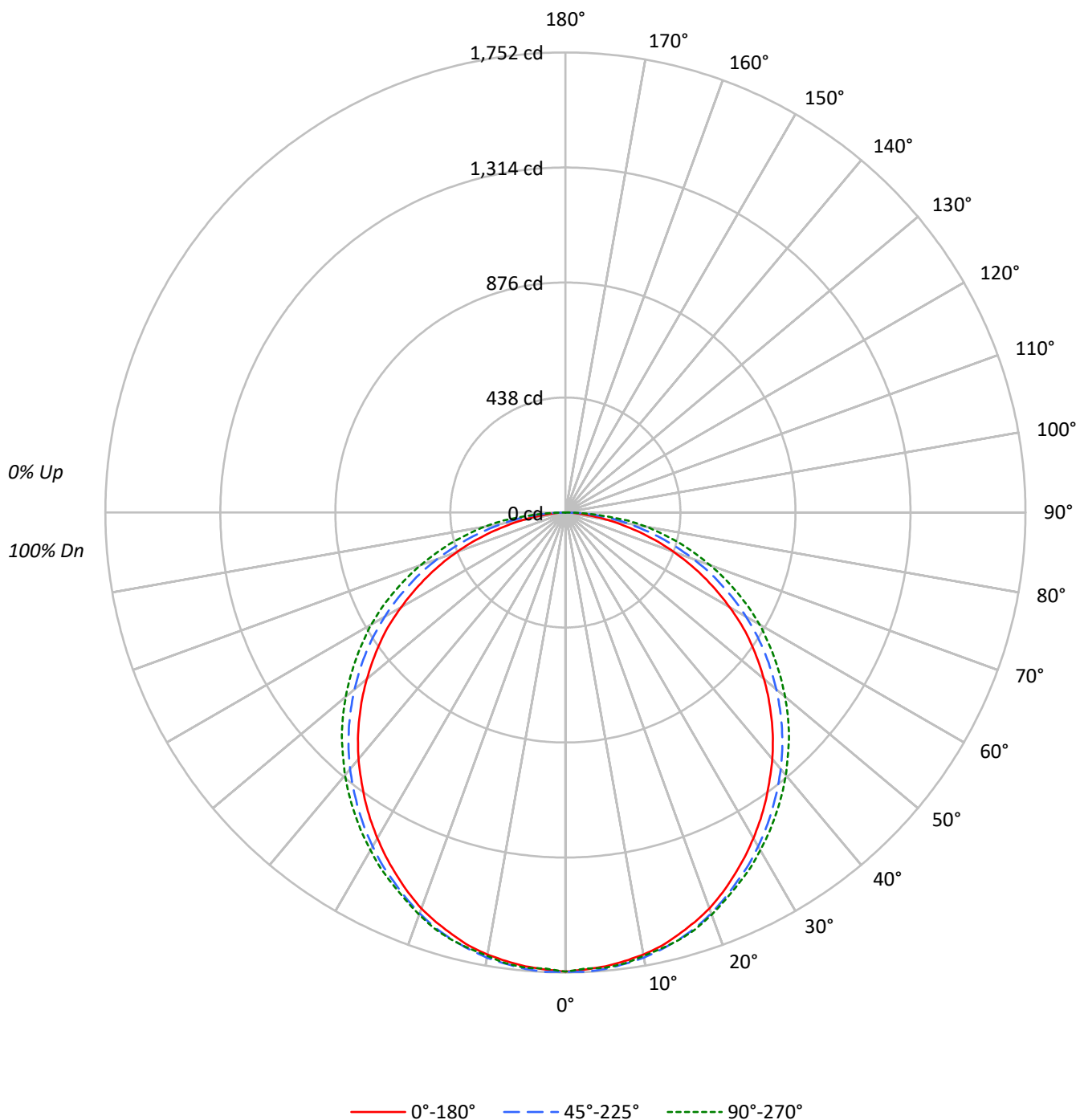
Lumens per Lamp: N/A
Luminaire Lumens: 5102.0 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	93	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	68
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2678	2678	2678
5°	2668	2683	2676
10°	2659	2677	2667
15°	2639	2666	2669
20°	2615	2647	2656
25°	2573	2619	2637
30°	2532	2597	2626
35°	2491	2572	2617
40°	2450	2550	2610
45°	2405	2526	2608
50°	2352	2498	2601
55°	2298	2471	2601
60°	2213	2435	2616
65°	2109	2387	2618
70°	1968	2321	2626
75°	1751	2236	2671
80°	1439	2143	2771
85°	949	2012	2504

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2839 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.4	3.2
10°-20°	473.4	9.3
20°-30°	713.5	14.0
30°-40°	859.2	16.8
40°-50°	897.6	17.6
50°-60°	824.7	16.2
60°-70°	649.4	12.7
70°-80°	398.1	7.8
80°-90°	120.7	2.4
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°	1352.2	26.5
0°-40°	2211.4	43.3
0°-60°	3933.7	77.1
0°-90°	5102.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5102.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1748	1748	1748	1748	1748	
5°	1735	1738	1745	1743	1741	165
15°	1664	1670	1681	1688	1684	470
25°	1523	1532	1550	1566	1560	702
35°	1332	1350	1376	1400	1400	833
45°	1110	1134	1166	1199	1204	856
55°	861	886	925	965	974	768
65°	582	612	659	703	722	575
75°	296	330	378	423	451	314
85°	54	80	114	127	142	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1748.3	1748.3	1748.3	1748.3	1748.3
2.5°	1741.8	1746.1	1751.5	1742.9	1738.5
5°	1735.3	1738.5	1745.0	1742.9	1740.7
7.5°	1723.4	1725.6	1734.2	1734.2	1732.1
10°	1709.4	1713.7	1721.3	1720.2	1714.8
12.5°	1691.0	1694.3	1702.9	1702.9	1699.7
15°	1664.0	1670.5	1681.3	1687.8	1683.5
17.5°	1635.9	1642.4	1656.5	1662.9	1660.8
20°	1604.6	1610.0	1624.1	1633.8	1629.5
22.5°	1565.8	1572.2	1588.4	1599.2	1594.9
25°	1522.6	1532.3	1549.6	1565.8	1560.4
27.5°	1479.4	1490.2	1511.8	1528.0	1525.8
30°	1431.9	1445.9	1468.6	1489.1	1484.8
32.5°	1383.3	1399.5	1423.2	1444.8	1443.7
35°	1332.5	1349.8	1375.7	1400.5	1399.5
37.5°	1278.5	1299.0	1326.0	1353.0	1354.1
40°	1225.6	1245.0	1275.3	1304.4	1305.5
42.5°	1169.5	1190.0	1222.4	1252.6	1253.7
45°	1110.1	1133.8	1166.2	1198.6	1204.0
47.5°	1049.6	1074.4	1107.9	1142.5	1148.9
50°	987.0	1012.9	1048.5	1085.2	1091.7
52.5°	923.3	950.3	987.0	1023.7	1033.4
55°	860.6	885.5	925.4	965.4	974.0
57.5°	794.8	817.4	860.6	902.7	913.5
60°	722.4	750.5	794.8	836.9	854.1
62.5°	652.2	682.5	727.8	769.9	789.4
65°	582.0	612.3	658.7	703.0	722.4
67.5°	510.8	542.1	591.7	633.9	655.5
70°	439.5	470.8	518.3	563.7	586.3
72.5°	368.2	401.7	448.1	494.6	517.2
75°	295.9	330.4	377.9	423.3	451.4
77.5°	227.8	261.3	308.8	355.3	379.0
80°	163.1	196.5	243.0	289.4	314.2
82.5°	103.7	135.0	180.3	219.2	241.9
85°	54.0	79.9	114.5	127.4	142.5
87.5°	16.2	31.3	44.3	49.7	61.6
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	17.7	18.0
	3H	16.7	18.2	17.1	18.5	18.9	17.8	19.3	18.2	19.6	20.0
	4H	17.3	18.7	17.7	19.1	19.5	18.7	20.1	19.1	20.4	20.8
	6H	17.7	19.1	18.1	19.4	19.8	19.4	20.7	19.8	21.1	21.5
	8H	17.8	19.1	18.3	19.5	19.9	19.7	21.0	20.2	21.4	21.8
	12H	17.9	19.1	18.3	19.5	19.9	20.0	21.2	20.4	21.5	22.0
4H	2H	15.7	17.1	16.1	17.5	17.9	16.3	17.7	16.7	18.1	18.4
	3H	17.7	18.9	18.1	19.3	19.7	18.6	19.8	19.0	20.2	20.6
	4H	18.5	19.5	18.9	20.0	20.4	19.6	20.7	20.1	21.1	21.6
	6H	19.0	19.9	19.4	20.4	20.8	20.6	21.5	21.0	22.0	22.4
	8H	19.1	20.0	19.6	20.5	20.9	21.0	21.9	21.4	22.3	22.8
	12H	19.2	20.0	19.7	20.5	21.0	21.2	22.0	21.7	22.5	23.0
8H	4H	18.9	19.8	19.4	20.2	20.7	19.9	20.8	20.4	21.3	21.7
	6H	19.6	20.3	20.1	20.8	21.3	21.0	21.8	21.5	22.3	22.7
	8H	19.8	20.5	20.3	21.0	21.5	21.5	22.2	22.0	22.7	23.2
	12H	20.0	20.5	20.5	21.0	21.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.0	19.8	19.5	20.3	20.7	20.0	20.8	20.5	21.3	21.7
	6H	19.7	20.4	20.2	20.9	21.4	21.1	21.8	21.6	22.2	22.8
	8H	20.0	20.6	20.5	21.1	21.6	21.6	22.2	22.1	22.7	23.3

(END OF REPORT)