

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: P1589849

Luminaire Tested: 24CZSP-SB-52HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589849
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-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

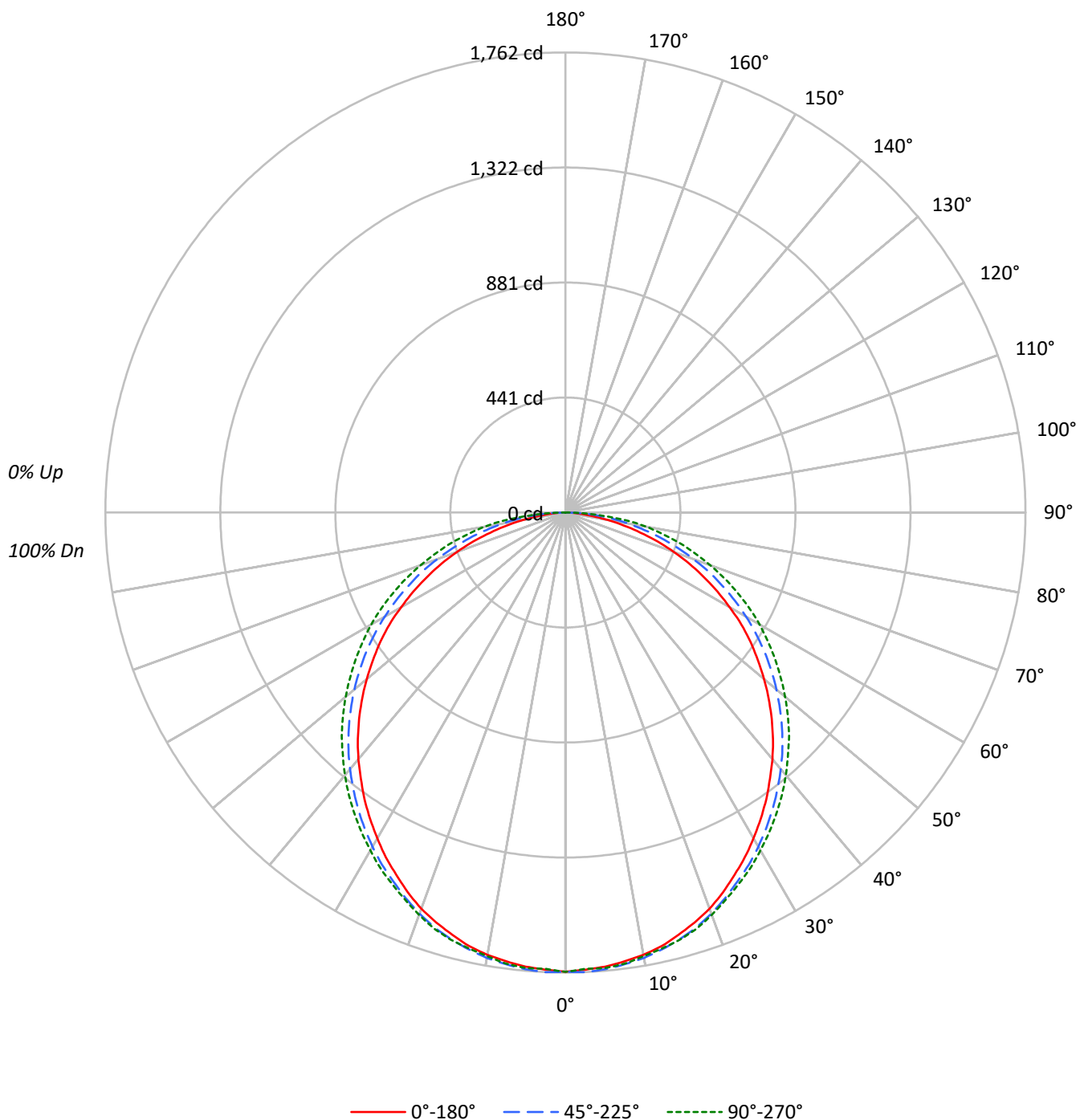
Lumens per Lamp: N/A
Luminaire Lumens: 5134.0 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2694	2694	2694
5°	2685	2700	2693
10°	2675	2694	2684
15°	2655	2683	2686
20°	2632	2664	2673
25°	2589	2635	2653
30°	2548	2614	2642
35°	2507	2588	2633
40°	2466	2566	2627
45°	2419	2542	2624
50°	2367	2514	2618
55°	2312	2487	2617
60°	2227	2450	2633
65°	2123	2402	2634
70°	1980	2336	2642
75°	1762	2251	2688
80°	1447	2157	2789
85°	954	2024	2520

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2856 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.4	3.2
10°-20°	476.3	9.3
20°-30°	717.9	14.0
30°-40°	864.6	16.8
40°-50°	903.3	17.6
50°-60°	829.8	16.2
60°-70°	653.5	12.7
70°-80°	400.7	7.8
80°-90°	121.5	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°	1360.7	26.5
0°-40°	2225.3	43.3
0°-60°	3958.4	77.1
0°-90°	5134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1759	1759	1759	1759	1759	
5°	1746	1749	1756	1754	1752	166
15°	1674	1681	1692	1698	1694	473
25°	1532	1542	1559	1576	1570	706
35°	1341	1358	1384	1409	1408	839
45°	1117	1141	1174	1206	1212	862
55°	866	891	931	971	980	773
65°	586	616	663	707	727	579
75°	298	332	380	426	454	316
85°	54	80	115	128	143	70
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1759.2	1759.2	1759.2	1759.2	1759.2
2.5°	1752.7	1757.0	1762.5	1753.8	1749.4
5°	1746.2	1749.4	1756.0	1753.8	1751.6
7.5°	1734.2	1736.4	1745.1	1745.1	1742.9
10°	1720.1	1724.4	1732.1	1731.0	1725.5
12.5°	1701.6	1704.9	1713.6	1713.6	1710.3
15°	1674.5	1681.0	1691.8	1698.4	1694.0
17.5°	1646.2	1652.7	1666.9	1673.4	1671.2
20°	1614.7	1620.1	1634.3	1644.0	1639.7
22.5°	1575.6	1582.1	1598.4	1609.3	1604.9
25°	1532.1	1541.9	1559.3	1575.6	1570.1
27.5°	1488.7	1499.5	1521.2	1537.5	1535.4
30°	1440.8	1455.0	1477.8	1498.4	1494.1
32.5°	1391.9	1408.2	1432.1	1453.9	1452.8
35°	1340.9	1358.3	1384.3	1409.3	1408.2
37.5°	1286.5	1307.2	1334.4	1361.5	1362.6
40°	1233.3	1252.9	1283.3	1312.6	1313.7
42.5°	1176.8	1197.4	1230.0	1260.5	1261.6
45°	1117.0	1140.9	1173.5	1206.1	1211.6
47.5°	1056.2	1081.2	1114.9	1149.6	1156.1
50°	993.2	1019.2	1055.1	1092.0	1098.6
52.5°	929.0	956.2	993.2	1030.1	1039.9
55°	866.0	891.0	931.2	971.4	980.1
57.5°	799.7	822.6	866.0	908.4	919.3
60°	726.9	755.2	799.7	842.1	859.5
62.5°	656.3	686.7	732.4	774.8	794.3
65°	585.7	616.1	662.8	707.4	726.9
67.5°	514.0	545.5	595.5	637.8	659.6
70°	442.2	473.8	521.6	567.2	590.0
72.5°	370.5	404.2	450.9	497.7	520.5
75°	297.7	332.5	380.3	425.9	454.2
77.5°	229.3	263.0	310.8	357.5	381.4
80°	164.1	197.8	244.5	291.2	316.2
82.5°	104.3	135.8	181.5	220.6	243.4
85°	54.3	80.4	115.2	128.2	143.4
87.5°	16.3	31.5	44.6	50.0	61.9
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	15.0	16.6	15.3	16.9	17.2	15.7	17.4	16.1	17.7	18.0
	3H	16.7	18.2	17.1	18.6	18.9	17.8	19.3	18.2	19.6	20.0
	4H	17.3	18.8	17.7	19.1	19.5	18.7	20.1	19.1	20.5	20.8
	6H	17.8	19.1	18.2	19.4	19.8	19.5	20.8	19.9	21.1	21.5
	8H	17.9	19.1	18.3	19.5	19.9	19.8	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	21.6	22.0
4H	2H	15.7	17.2	16.1	17.5	17.9	16.3	17.7	16.7	18.1	18.5
	3H	17.7	18.9	18.1	19.3	19.7	18.6	19.8	19.0	20.2	20.6
	4H	18.5	19.6	18.9	20.0	20.4	19.7	20.8	20.1	21.2	21.6
	6H	19.0	20.0	19.5	20.4	20.9	20.6	21.6	21.1	22.0	22.4
	8H	19.2	20.1	19.6	20.5	21.0	21.0	21.9	21.4	22.3	22.8
	12H	19.2	20.0	19.7	20.5	21.0	21.3	22.1	21.7	22.5	23.0
8H	4H	18.9	19.8	19.4	20.3	20.7	20.0	20.9	20.4	21.3	21.8
	6H	19.6	20.3	20.1	20.8	21.3	21.1	21.8	21.5	22.3	22.8
	8H	19.8	20.5	20.3	21.0	21.5	21.5	22.2	22.0	22.7	23.2
	12H	20.0	20.6	20.5	21.1	21.6	21.9	22.5	22.4	23.0	23.6
12H	4H	19.0	19.8	19.5	20.3	20.8	20.0	20.8	20.5	21.3	21.7
	6H	19.7	20.4	20.3	20.9	21.4	21.1	21.8	21.6	22.3	22.8
	8H	20.0	20.6	20.5	21.1	21.7	21.7	22.3	22.2	22.7	23.3

(END OF REPORT)