

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: P1589832

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589832
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-52HE-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 5000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

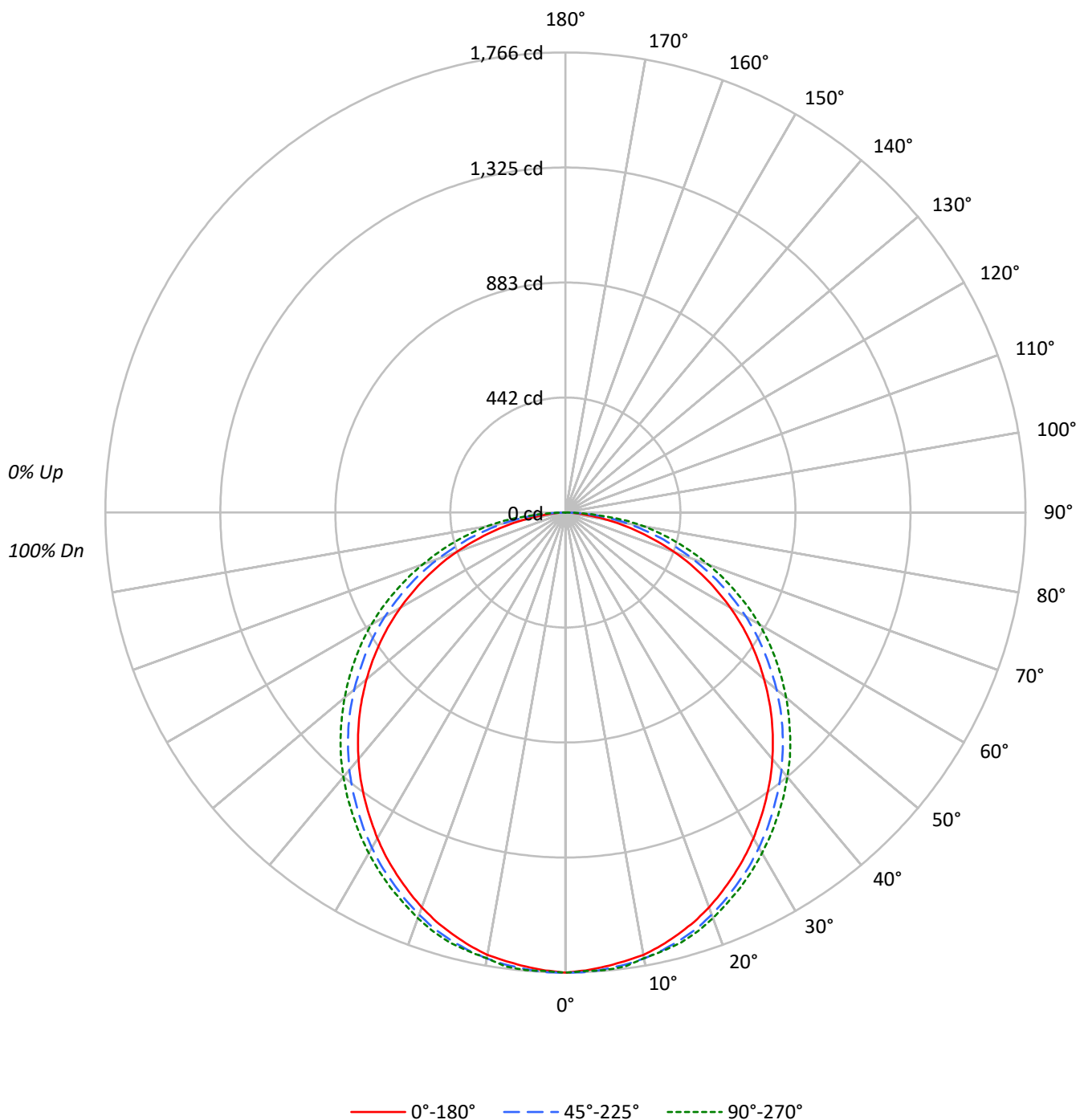
Lumens per Lamp: N/A
Luminaire Lumens: 5138.0 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2705	2705	2705
5°	2690	2705	2711
10°	2682	2704	2702
15°	2657	2695	2711
20°	2628	2677	2700
25°	2591	2651	2684
30°	2553	2627	2670
35°	2511	2602	2658
40°	2471	2579	2650
45°	2425	2552	2643
50°	2373	2521	2636
55°	2314	2488	2633
60°	2241	2451	2634
65°	2139	2400	2620
70°	2000	2326	2613
75°	1772	2237	2623
80°	1443	2126	2701
85°	933	1961	2330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2736 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	3.3
10°-20°	478.7	9.3
20°-30°	721.7	14.0
30°-40°	868.4	16.9
40°-50°	905.8	17.6
50°-60°	830.2	16.2
60°-70°	651.9	12.7
70°-80°	396.8	7.7
80°-90°	117.4	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°	1367.5	26.6
0°-40°	2235.8	43.5
0°-60°	3971.9	77.3
0°-90°	5138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5138.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1750	1761	1760	1757	1763	166
15°	1676	1692	1700	1702	1710	473
25°	1533	1554	1568	1578	1588	706
35°	1343	1364	1392	1412	1421	840
45°	1120	1143	1178	1206	1220	863
55°	867	889	932	969	986	774
65°	590	612	662	706	723	584
75°	300	327	378	423	443	318
85°	53	75	112	125	133	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1766.3	1766.3	1766.3	1766.3	1766.3
2.5°	1759.6	1768.5	1766.3	1758.5	1761.8
5°	1749.7	1760.7	1759.6	1757.4	1763.0
7.5°	1737.5	1749.7	1750.8	1750.8	1757.4
10°	1724.3	1736.4	1738.6	1735.3	1737.5
12.5°	1702.2	1716.5	1720.9	1720.9	1724.3
15°	1675.6	1692.2	1699.9	1702.2	1709.9
17.5°	1646.9	1664.6	1674.5	1680.1	1686.7
20°	1612.6	1631.4	1642.5	1649.1	1656.8
22.5°	1573.9	1594.9	1607.1	1613.7	1622.6
25°	1533.0	1554.0	1568.4	1578.4	1588.3
27.5°	1489.9	1509.8	1529.7	1541.9	1550.7
30°	1443.5	1464.5	1485.5	1501.0	1509.8
32.5°	1393.8	1415.9	1440.2	1456.8	1466.7
35°	1342.9	1363.9	1391.6	1411.5	1421.4
37.5°	1291.0	1313.1	1341.8	1362.8	1375.0
40°	1235.7	1258.9	1289.9	1313.1	1325.3
42.5°	1178.2	1200.4	1234.6	1261.1	1275.5
45°	1119.7	1142.9	1178.2	1205.9	1220.2
47.5°	1058.9	1081.0	1119.7	1151.7	1163.9
50°	995.9	1016.9	1057.8	1092.0	1106.4
52.5°	931.8	953.9	994.8	1031.2	1046.7
55°	866.6	888.7	931.8	969.3	985.9
57.5°	800.2	822.3	866.6	905.2	925.1
60°	731.7	753.8	800.2	840.0	859.9
62.5°	661.0	684.2	731.7	772.6	793.6
65°	590.2	612.3	662.1	706.3	722.9
67.5°	519.5	541.6	590.2	634.4	654.3
70°	446.5	472.0	519.5	565.9	583.6
72.5°	370.3	399.0	446.5	495.2	512.9
75°	299.5	327.2	378.0	423.3	443.2
77.5°	229.9	259.7	307.3	353.7	373.6
80°	163.6	192.3	241.0	285.2	306.2
82.5°	103.9	129.3	178.0	217.7	233.2
85°	53.1	75.2	111.6	124.9	132.6
87.5°	15.5	26.5	39.8	49.7	55.3
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	18.1	19.6	20.0
	4H	17.3	18.8	17.7	19.1	19.5	18.6	20.1	19.0	20.4	20.8
	6H	17.8	19.1	18.2	19.4	19.8	19.4	20.7	19.8	21.1	21.5
	8H	17.9	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	21.5	21.9
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	20.5	21.5	21.0	21.9	22.4
	8H	19.1	20.0	19.6	20.5	20.9	20.9	21.8	21.4	22.2	22.7
	12H	19.2	20.0	19.7	20.5	21.0	21.2	22.0	21.6	22.4	22.9
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	21.7	21.5	22.2	22.7
	8H	19.8	20.4	20.3	20.9	21.4	21.5	22.1	22.0	22.6	23.1
	12H	19.9	20.5	20.4	21.0	21.6	21.8	22.4	22.3	22.9	23.4
12H	4H	19.0	19.8	19.5	20.3	20.7	20.0	20.8	20.4	21.2	21.7
	6H	19.7	20.4	20.2	20.8	21.4	21.0	21.7	21.6	22.2	22.7
	8H	20.0	20.6	20.5	21.0	21.6	21.6	22.2	22.1	22.7	23.2

(END OF REPORT)