

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: P1589822

Luminaire Tested: 24CZSP-SB-52-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589822
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-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

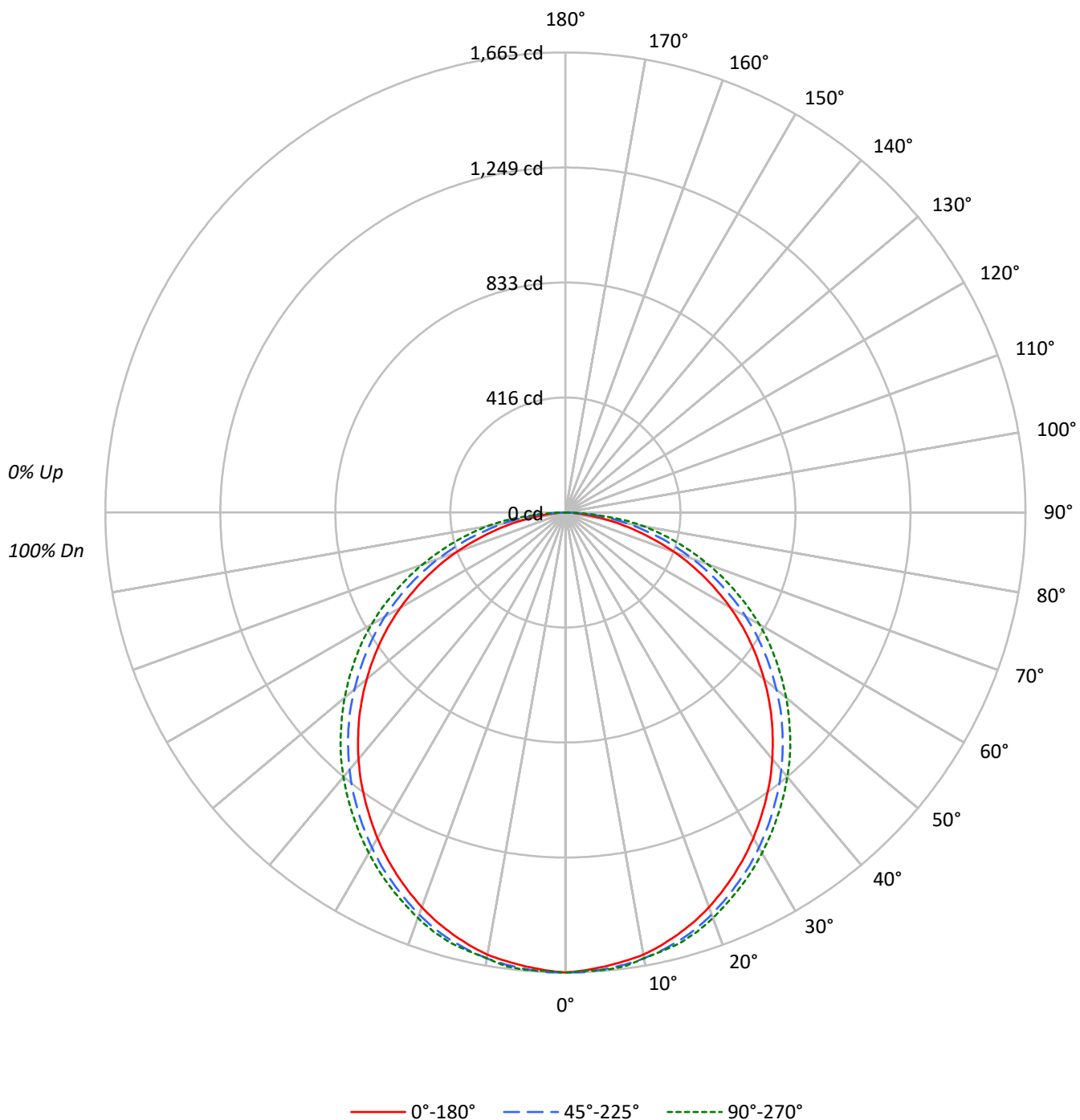
Lumens per Lamp: N/A
Luminaire Lumens: 4843.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2550	2550	2550
5°	2536	2550	2555
10°	2528	2549	2547
15°	2504	2541	2556
20°	2477	2523	2545
25°	2442	2498	2530
30°	2406	2476	2517
35°	2367	2453	2505
40°	2329	2431	2498
45°	2286	2406	2491
50°	2237	2376	2485
55°	2181	2345	2482
60°	2113	2311	2483
65°	2016	2262	2469
70°	1885	2193	2463
75°	1671	2108	2472
80°	1360	2003	2546
85°	879	1849	2197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2579 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	3.3
10°-20°	451.2	9.3
20°-30°	680.2	14.0
30°-40°	818.5	16.9
40°-50°	853.8	17.6
50°-60°	782.6	16.2
60°-70°	614.5	12.7
70°-80°	374.0	7.7
80°-90°	110.6	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°	1289.0	26.6
0°-40°	2107.5	43.5
0°-60°	3743.8	77.3
0°-90°	4843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4843.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1665	1665	1665	1665	1665	
5°	1649	1660	1659	1656	1662	157
15°	1579	1595	1602	1604	1612	446
25°	1445	1465	1478	1488	1497	666
35°	1266	1286	1312	1330	1340	792
45°	1055	1077	1111	1137	1150	814
55°	817	838	878	914	929	730
65°	556	577	624	666	681	550
75°	282	308	356	399	418	299
85°	50	71	105	118	125	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1664.9	1664.9	1664.9	1664.9	1664.9
2.5°	1658.6	1666.9	1664.9	1657.6	1660.7
5°	1649.2	1659.6	1658.6	1656.5	1661.7
7.5°	1637.8	1649.2	1650.3	1650.3	1656.5
10°	1625.3	1636.7	1638.8	1635.7	1637.8
12.5°	1604.4	1618.0	1622.1	1622.1	1625.3
15°	1579.4	1595.1	1602.3	1604.4	1611.7
17.5°	1552.3	1569.0	1578.4	1583.6	1589.8
20°	1520.0	1537.8	1548.2	1554.4	1561.7
22.5°	1483.6	1503.4	1514.8	1521.1	1529.4
25°	1445.0	1464.8	1478.4	1487.7	1497.1
27.5°	1404.4	1423.1	1441.9	1453.4	1461.7
30°	1360.6	1380.4	1400.2	1414.8	1423.1
32.5°	1313.8	1334.6	1357.5	1373.1	1382.5
35°	1265.8	1285.6	1311.7	1330.4	1339.8
37.5°	1216.9	1237.7	1264.8	1284.6	1296.0
40°	1164.8	1186.7	1215.8	1237.7	1249.2
42.5°	1110.6	1131.4	1163.7	1188.7	1202.3
45°	1055.4	1077.3	1110.6	1136.6	1150.2
47.5°	998.1	1018.9	1055.4	1085.6	1097.1
50°	938.7	958.5	997.0	1029.3	1042.9
52.5°	878.3	899.1	937.7	972.0	986.6
55°	816.8	837.6	878.3	913.7	929.3
57.5°	754.3	775.1	816.8	853.3	872.0
60°	689.7	710.5	754.3	791.8	810.5
62.5°	623.0	644.9	689.7	728.2	748.0
65°	556.3	577.2	624.1	665.7	681.4
67.5°	489.7	510.5	556.3	598.0	616.8
70°	420.9	444.9	489.7	533.4	550.1
72.5°	349.0	376.1	420.9	466.7	483.4
75°	282.3	308.4	356.3	399.0	417.8
77.5°	216.7	244.8	289.6	333.4	352.1
80°	154.2	181.3	227.1	268.8	288.6
82.5°	97.9	121.9	167.7	205.2	219.8
85°	50.0	70.8	105.2	117.7	125.0
87.5°	14.6	25.0	37.5	46.9	52.1
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	14.8	16.4	15.1	16.7	17.0	15.5	17.1	15.9	17.5	17.8
	3H	16.5	18.0	16.9	18.4	18.7	17.6	19.1	17.9	19.4	19.8
	4H	17.1	18.6	17.5	18.9	19.3	18.4	19.9	18.8	20.2	20.6
	6H	17.5	18.9	18.0	19.2	19.6	19.2	20.5	19.6	20.9	21.2
	8H	17.7	18.9	18.1	19.3	19.7	19.5	20.7	19.9	21.1	21.5
	12H	17.7	18.9	18.1	19.3	19.7	19.7	20.9	20.1	21.3	21.7
4H	2H	15.5	16.9	15.9	17.3	17.7	16.1	17.5	16.5	17.9	18.2
	3H	17.5	18.7	17.9	19.1	19.5	18.4	19.6	18.8	20.0	20.4
	4H	18.3	19.3	18.7	19.8	20.2	19.4	20.5	19.9	20.9	21.4
	6H	18.8	19.7	19.2	20.2	20.6	20.3	21.3	20.8	21.7	22.2
	8H	18.9	19.8	19.4	20.3	20.7	20.7	21.6	21.2	22.0	22.5
	12H	19.0	19.8	19.5	20.3	20.7	20.9	21.8	21.4	22.2	22.7
8H	4H	18.7	19.6	19.2	20.0	20.5	19.7	20.6	20.2	21.1	21.5
	6H	19.4	20.1	19.9	20.6	21.1	20.8	21.5	21.3	22.0	22.5
	8H	19.6	20.2	20.1	20.7	21.2	21.2	21.9	21.8	22.4	22.9
	12H	19.7	20.3	20.2	20.8	21.3	21.6	22.2	22.1	22.7	23.2
12H	4H	18.8	19.6	19.3	20.1	20.5	19.7	20.5	20.2	21.0	21.5
	6H	19.5	20.2	20.0	20.6	21.2	20.8	21.5	21.4	22.0	22.5
	8H	19.8	20.4	20.3	20.8	21.4	21.4	22.0	21.9	22.4	23.0

(END OF REPORT)