

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: P1589811

Luminaire Tested: 24CZSP-SB-49HE-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589811
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-49HE-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

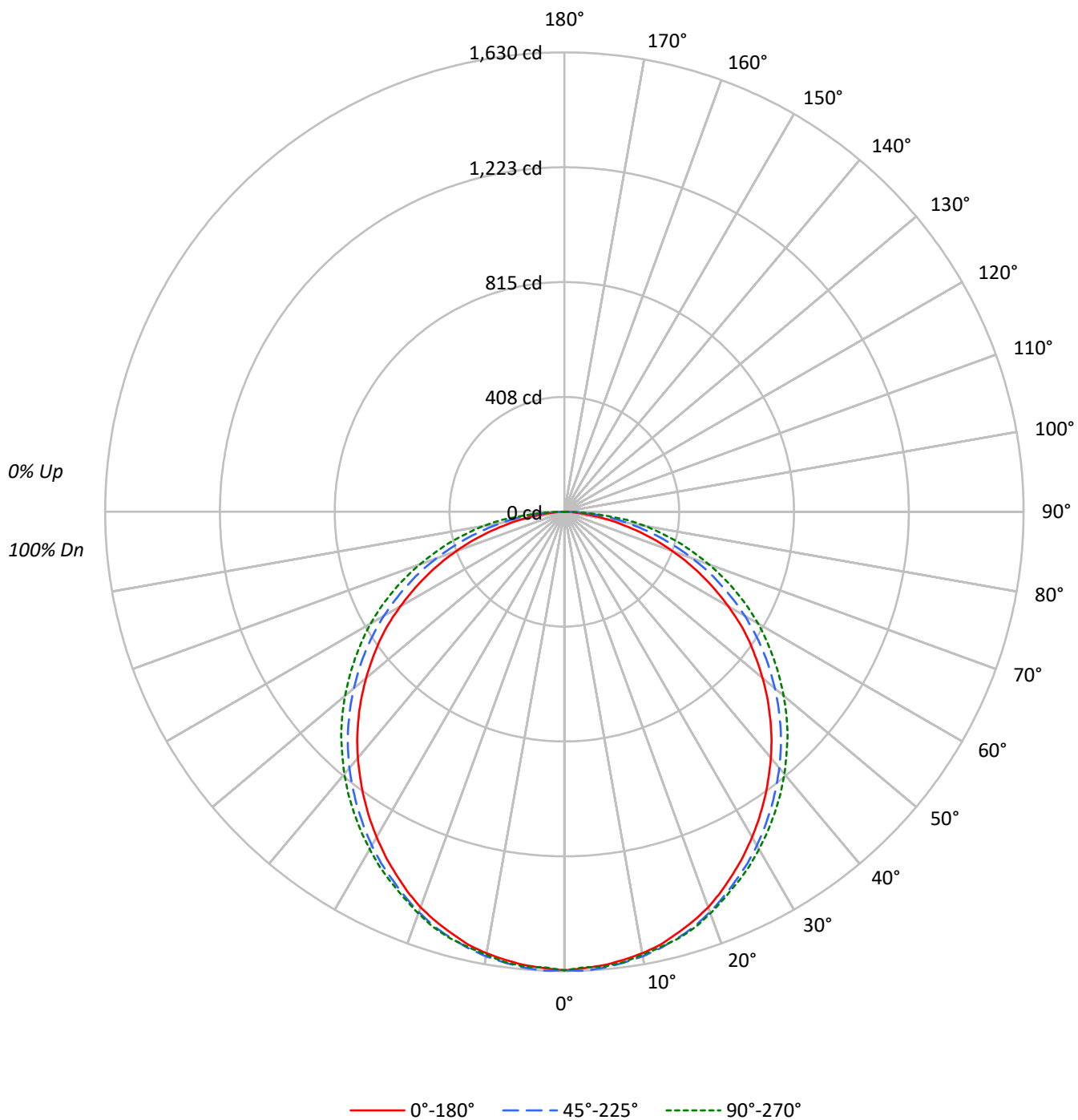
Lumens per Lamp: N/A
Luminaire Lumens: 4748.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	2492	2492	2492
5°	2483	2497	2491
10°	2474	2491	2482
15°	2456	2481	2484
20°	2434	2463	2472
25°	2395	2437	2454
30°	2357	2417	2444
35°	2319	2394	2435
40°	2281	2373	2429
45°	2238	2351	2427
50°	2189	2325	2421
55°	2139	2300	2420
60°	2059	2266	2435
65°	1963	2222	2437
70°	1832	2160	2444
75°	1629	2081	2486
80°	1338	1994	2579
85°	882	1872	2330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2641 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.9	3.2
10°-20°	440.5	9.3
20°-30°	664.0	14.0
30°-40°	799.6	16.8
40°-50°	835.4	17.6
50°-60°	767.5	16.2
60°-70°	604.4	12.7
70°-80°	370.5	7.8
80°-90°	112.3	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°	1258.4	26.5
0°-40°	2058.0	43.3
0°-60°	3660.8	77.1
0°-90°	4748.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4748.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1627	1627	1627	1627	1627	
5°	1615	1618	1624	1622	1620	153
15°	1549	1555	1565	1571	1567	437
25°	1417	1426	1442	1457	1452	653
35°	1240	1256	1280	1303	1302	776
45°	1033	1055	1085	1116	1120	797
55°	801	824	861	898	906	715
65°	542	570	613	654	672	535
75°	275	308	352	394	420	293
85°	50	74	106	119	133	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1626.9	1626.9	1626.9	1626.9	1626.9
2.5°	1620.9	1624.9	1630.0	1621.9	1617.9
5°	1614.9	1617.9	1623.9	1621.9	1619.9
7.5°	1603.8	1605.8	1613.9	1613.9	1611.9
10°	1590.8	1594.8	1601.8	1600.8	1595.8
12.5°	1573.7	1576.7	1584.7	1584.7	1581.7
15°	1548.6	1554.6	1564.6	1570.7	1566.7
17.5°	1522.4	1528.5	1541.5	1547.6	1545.6
20°	1493.3	1498.3	1511.4	1520.4	1516.4
22.5°	1457.1	1463.1	1478.2	1488.3	1484.3
25°	1416.9	1426.0	1442.0	1457.1	1452.1
27.5°	1376.7	1386.8	1406.9	1421.9	1419.9
30°	1332.5	1345.6	1366.7	1385.8	1381.8
32.5°	1287.3	1302.4	1324.5	1344.6	1343.6
35°	1240.1	1256.1	1280.3	1303.4	1302.4
37.5°	1189.8	1208.9	1234.0	1259.2	1260.2
40°	1140.6	1158.7	1186.8	1213.9	1214.9
42.5°	1088.3	1107.4	1137.6	1165.7	1166.7
45°	1033.0	1055.2	1085.3	1115.5	1120.5
47.5°	976.8	999.9	1031.0	1063.2	1069.2
50°	918.5	942.6	975.8	1009.9	1016.0
52.5°	859.2	884.3	918.5	952.7	961.7
55°	800.9	824.0	861.2	898.4	906.4
57.5°	739.6	760.7	800.9	840.1	850.2
60°	672.3	698.4	739.6	778.8	794.9
62.5°	607.0	635.1	677.3	716.5	734.6
65°	541.6	569.8	613.0	654.2	672.3
67.5°	475.3	504.5	550.7	589.9	610.0
70°	409.0	438.1	482.4	524.6	545.7
72.5°	342.7	373.8	417.0	460.2	481.4
75°	275.3	307.5	351.7	393.9	420.1
77.5°	212.0	243.2	287.4	330.6	352.7
80°	151.7	182.9	226.1	269.3	292.4
82.5°	96.5	125.6	167.8	204.0	225.1
85°	50.2	74.4	106.5	118.6	132.6
87.5°	15.1	29.1	41.2	46.2	57.3
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	14.7	16.3	15.1	16.7	17.0	15.4	17.1	15.8	17.4	17.7
	3H	16.4	18.0	16.8	18.3	18.6	17.5	19.0	17.9	19.4	19.7
	4H	17.1	18.5	17.5	18.8	19.2	18.4	19.8	18.8	20.2	20.6
	6H	17.5	18.8	17.9	19.2	19.6	19.2	20.5	19.6	20.9	21.3
	8H	17.6	18.9	18.0	19.2	19.6	19.5	20.8	19.9	21.1	21.5
	12H	17.6	18.9	18.1	19.2	19.7	19.7	20.9	20.1	21.3	21.7
4H	2H	15.5	16.9	15.9	17.2	17.6	16.0	17.5	16.4	17.8	18.2
	3H	17.4	18.6	17.9	19.0	19.4	18.4	19.6	18.8	20.0	20.4
	4H	18.2	19.3	18.6	19.7	20.1	19.4	20.5	19.8	20.9	21.3
	6H	18.7	19.7	19.2	20.1	20.6	20.3	21.3	20.8	21.7	22.2
	8H	18.9	19.8	19.3	20.2	20.7	20.7	21.6	21.2	22.0	22.5
	12H	19.0	19.8	19.5	20.3	20.7	21.0	21.8	21.5	22.3	22.7
8H	4H	18.7	19.5	19.1	20.0	20.5	19.7	20.6	20.2	21.0	21.5
	6H	19.3	20.1	19.8	20.6	21.0	20.8	21.5	21.3	22.0	22.5
	8H	19.6	20.2	20.1	20.7	21.2	21.3	21.9	21.8	22.4	22.9
	12H	19.7	20.3	20.2	20.8	21.3	21.6	22.2	22.2	22.7	23.3
12H	4H	18.7	19.5	19.2	20.0	20.5	19.7	20.5	20.2	21.0	21.5
	6H	19.5	20.1	20.0	20.6	21.1	20.8	21.5	21.4	22.0	22.5
	8H	19.8	20.3	20.3	20.8	21.4	21.4	22.0	21.9	22.5	23.0

(END OF REPORT)