

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1588350

Luminaire Tested: 24CZSP-52-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-52-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

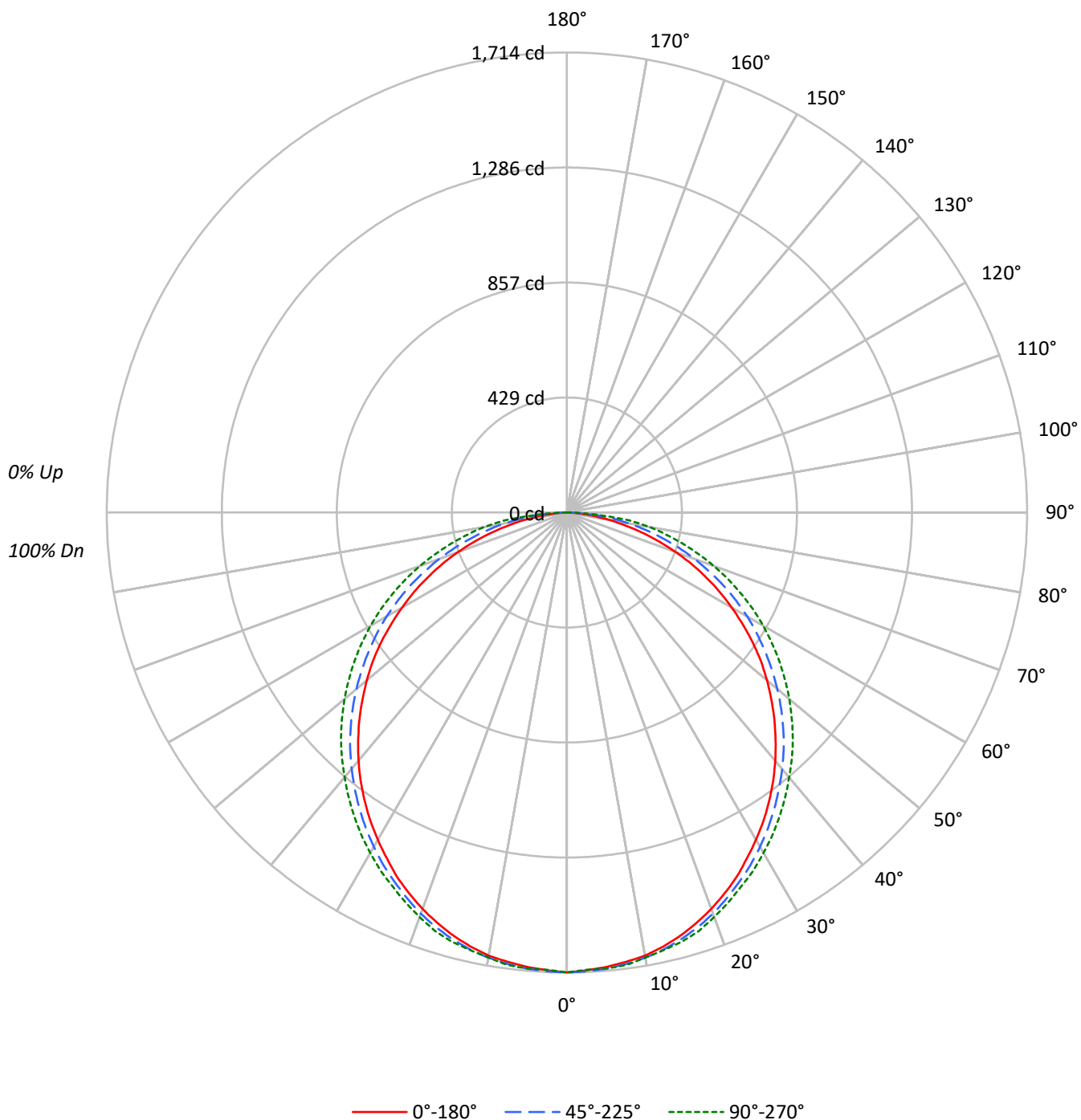
Lumens per Lamp: N/A
Luminaire Lumens: 5003.0 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: 24 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	69
3	89	79	70	64	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°	2625	2625	2625
5°	2613	2623	2621
10°	2607	2619	2617
15°	2588	2609	2625
20°	2562	2593	2614
25°	2531	2566	2597
30°	2491	2543	2590
35°	2455	2519	2582
40°	2414	2493	2575
45°	2368	2468	2578
50°	2317	2438	2577
55°	2257	2404	2580
60°	2172	2377	2586
65°	2073	2331	2594
70°	1932	2266	2605
75°	1721	2177	2631
80°	1424	2072	2760
85°	926	1872	2411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2847 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.1	3.2
10°-20°	464.1	9.3
20°-30°	699.9	14.0
30°-40°	843.0	16.8
40°-50°	880.4	17.6
50°-60°	808.5	16.2
60°-70°	636.8	12.7
70°-80°	390.7	7.8
80°-90°	117.6	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°	1326.0	26.5
0°-40°	2169.0	43.4
0°-60°	3857.9	77.1
0°-90°	5003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1699	1702	1706	1712	1705	161
15°	1632	1636	1646	1656	1656	460
25°	1497	1501	1518	1537	1537	689
35°	1313	1320	1347	1374	1381	821
45°	1093	1106	1140	1179	1190	843
55°	845	861	900	951	966	755
65°	572	592	643	697	716	566
75°	291	314	368	426	445	308
85°	53	72	106	135	137	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.7	1713.7	1713.7	1713.7	1713.7
2.5°	1707.1	1710.4	1711.5	1712.6	1704.9
5°	1699.4	1701.6	1706.0	1711.5	1704.9
7.5°	1688.4	1690.6	1696.1	1703.8	1700.5
10°	1676.3	1677.4	1684.0	1689.5	1682.9
12.5°	1656.6	1659.9	1667.6	1671.9	1669.7
15°	1632.4	1635.7	1645.6	1655.5	1655.5
17.5°	1603.9	1608.3	1620.3	1633.5	1634.6
20°	1572.0	1575.3	1590.7	1603.9	1603.9
22.5°	1535.8	1540.2	1555.6	1569.8	1572.0
25°	1497.4	1500.7	1518.3	1536.9	1536.9
27.5°	1452.4	1459.0	1480.9	1499.6	1504.0
30°	1408.5	1414.0	1438.1	1461.2	1464.5
32.5°	1362.4	1369.0	1394.2	1419.5	1424.9
35°	1313.0	1319.6	1347.0	1374.4	1381.0
37.5°	1261.4	1269.1	1297.6	1329.4	1336.0
40°	1207.6	1216.4	1247.1	1281.1	1287.7
42.5°	1150.5	1162.6	1195.5	1230.6	1240.5
45°	1093.4	1105.5	1139.5	1179.0	1190.0
47.5°	1033.0	1047.3	1082.4	1124.1	1136.2
50°	972.6	986.9	1023.1	1068.2	1081.3
52.5°	911.2	925.4	962.8	1010.0	1024.2
55°	845.3	860.7	900.2	950.7	966.1
57.5°	777.2	797.0	838.7	890.3	905.7
60°	709.2	728.9	776.1	826.6	844.2
62.5°	642.2	660.9	709.2	763.0	781.6
65°	572.0	591.7	643.3	697.1	715.8
67.5°	502.8	522.6	574.1	630.1	649.9
70°	431.4	453.4	506.1	562.1	581.8
72.5°	360.1	383.1	436.9	494.0	512.7
75°	290.9	314.0	367.8	425.9	444.6
77.5°	222.9	248.1	300.8	360.1	377.6
80°	161.4	185.5	234.9	293.1	312.9
82.5°	103.2	124.1	173.5	228.3	242.6
85°	52.7	72.5	106.5	135.0	137.2
87.5°	16.5	23.1	35.1	52.7	53.8
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	14.83	16.49	15.20	16.81	17.12	15.66	17.32	16.03	17.64	17.95
	3H	16.59	18.09	16.96	18.42	18.78	17.78	19.28	18.15	19.61	19.97
	4H	17.20	18.63	17.60	18.97	19.35	18.67	20.09	19.06	20.44	20.81
	6H	17.62	18.94	18.03	19.30	19.69	19.45	20.77	19.86	21.13	21.52
	8H	17.72	18.99	18.15	19.37	19.77	19.77	21.03	20.19	21.42	21.82
	12H	17.78	18.99	18.20	19.37	19.80	19.98	21.19	20.41	21.57	22.00
4H	2H	15.60	17.02	16.00	17.37	17.75	16.25	17.67	16.65	18.02	18.39
	3H	17.58	18.78	17.99	19.17	19.57	18.60	19.80	19.01	20.20	20.60
	4H	18.32	19.40	18.75	19.82	20.25	19.66	20.74	20.09	21.15	21.59
	6H	18.85	19.80	19.30	20.24	20.69	20.61	21.56	21.06	22.00	22.45
	8H	18.99	19.88	19.45	20.32	20.79	21.01	21.90	21.46	22.34	22.80
	12H	19.08	19.88	19.55	20.35	20.82	21.28	22.09	21.76	22.56	23.03
8H	4H	18.78	19.67	19.23	20.11	20.57	19.94	20.84	20.40	21.28	21.74
	6H	19.44	20.18	19.93	20.67	21.14	21.06	21.80	21.55	22.29	22.76
	8H	19.65	20.32	20.15	20.82	21.31	21.57	22.24	22.08	22.74	23.23
	12H	19.79	20.38	20.29	20.87	21.43	21.95	22.55	22.46	23.04	23.59
12H	4H	18.87	19.67	19.34	20.14	20.61	19.97	20.77	20.45	21.25	21.72
	6H	19.57	20.24	20.08	20.74	21.23	21.10	21.77	21.61	22.28	22.76
	8H	19.85	20.44	20.35	20.93	21.49	21.68	22.27	22.19	22.76	23.32