

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: P1588344

Luminaire Tested: 24CZSP-52-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588344
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

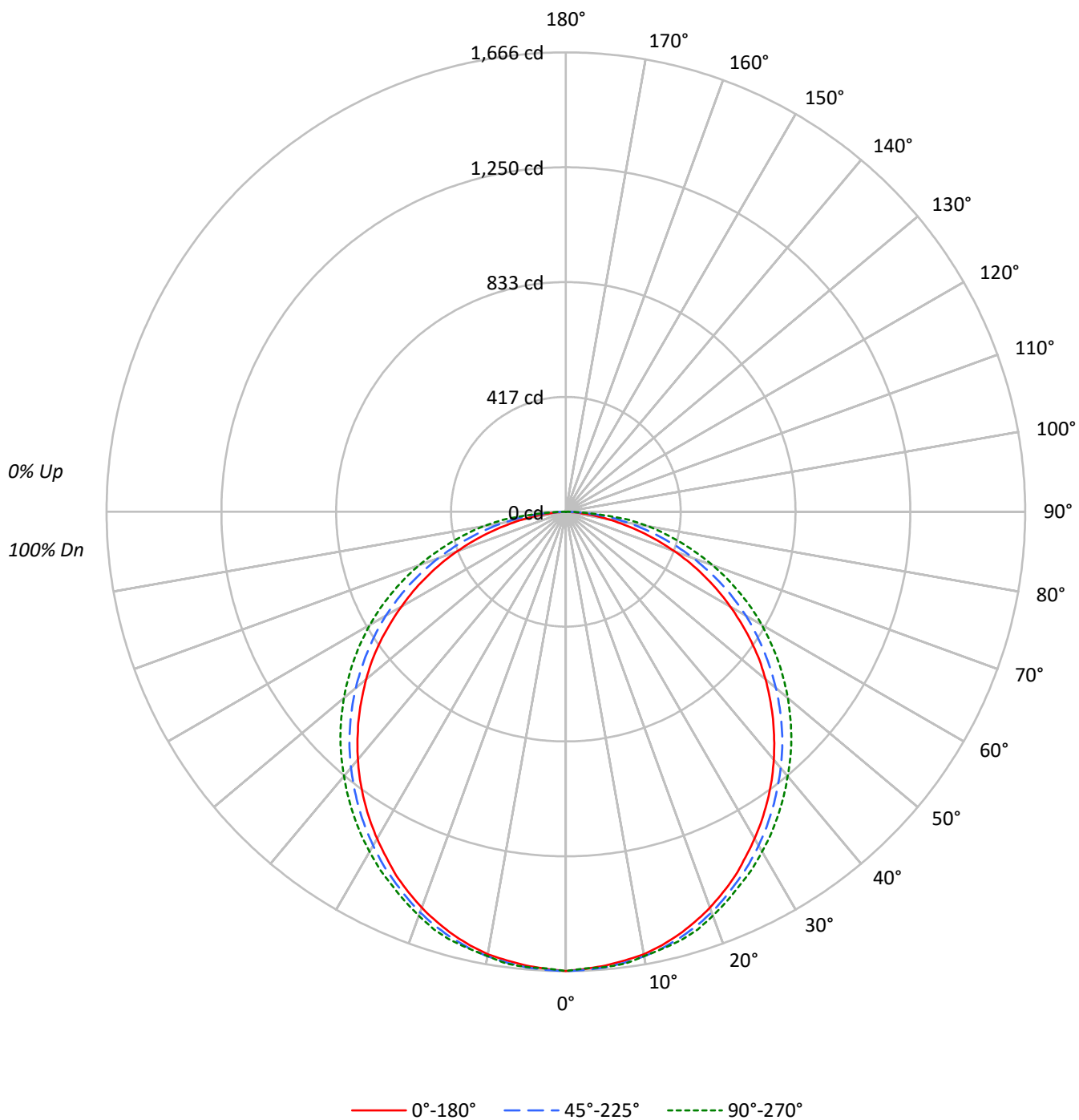
Lumens per Lamp: N/A
Luminaire Lumens: 4863.0 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2551	2551	2551
5°	2540	2549	2548
10°	2534	2546	2544
15°	2516	2536	2552
20°	2491	2520	2541
25°	2460	2494	2525
30°	2421	2472	2518
35°	2386	2448	2510
40°	2347	2424	2503
45°	2302	2399	2505
50°	2253	2370	2505
55°	2194	2337	2507
60°	2111	2311	2514
65°	2015	2266	2521
70°	1878	2203	2533
75°	1674	2116	2558
80°	1384	2015	2682
85°	900	1819	2344

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	3.2
10°-20°	451.1	9.3
20°-30°	680.3	14.0
30°-40°	819.4	16.8
40°-50°	855.7	17.6
50°-60°	785.9	16.2
60°-70°	619.0	12.7
70°-80°	379.8	7.8
80°-90°	114.3	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°	1288.9	26.5
0°-40°	2108.3	43.4
0°-60°	3749.9	77.1
0°-90°	4863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1652	1654	1658	1664	1657	157
15°	1587	1590	1600	1609	1609	447
25°	1456	1459	1476	1494	1494	670
35°	1276	1283	1309	1336	1342	798
45°	1063	1074	1108	1146	1157	819
55°	822	837	875	924	939	733
65°	556	575	625	678	696	550
75°	283	305	358	414	432	300
85°	51	70	104	131	133	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1665.7	1665.7	1665.7	1665.7	1665.7
2.5°	1659.3	1662.5	1663.6	1664.6	1657.2
5°	1651.8	1654.0	1658.2	1663.6	1657.2
7.5°	1641.2	1643.3	1648.6	1656.1	1652.9
10°	1629.4	1630.5	1636.9	1642.2	1635.8
12.5°	1610.2	1613.4	1620.9	1625.2	1623.0
15°	1586.7	1589.9	1599.5	1609.2	1609.2
17.5°	1559.0	1563.3	1575.0	1587.8	1588.9
20°	1528.1	1531.3	1546.2	1559.0	1559.0
22.5°	1492.8	1497.1	1512.0	1525.9	1528.1
25°	1455.5	1458.7	1475.8	1493.9	1493.9
27.5°	1411.7	1418.1	1439.5	1457.6	1461.9
30°	1369.1	1374.4	1397.9	1420.3	1423.5
32.5°	1324.2	1330.6	1355.2	1379.7	1385.1
35°	1276.2	1282.6	1309.3	1336.0	1342.4
37.5°	1226.1	1233.5	1261.3	1292.2	1298.6
40°	1173.8	1182.3	1212.2	1245.3	1251.7
42.5°	1118.3	1130.0	1162.0	1196.2	1205.8
45°	1062.8	1074.5	1107.6	1146.0	1156.7
47.5°	1004.1	1018.0	1052.1	1092.7	1104.4
50°	945.4	959.3	994.5	1038.3	1051.1
52.5°	885.7	899.5	935.8	981.7	995.6
55°	821.6	836.6	875.0	924.1	939.0
57.5°	755.5	774.7	815.2	865.4	880.3
60°	689.3	708.5	754.4	803.5	820.6
62.5°	624.2	642.4	689.3	741.6	759.8
65°	555.9	575.2	625.3	677.6	695.7
67.5°	488.7	507.9	558.1	612.5	631.7
70°	419.4	440.7	491.9	546.3	565.6
72.5°	350.0	372.4	424.7	480.2	498.3
75°	282.8	305.2	357.5	414.0	432.2
77.5°	216.6	241.2	292.4	350.0	367.1
80°	156.9	180.3	228.4	284.9	304.1
82.5°	100.3	120.6	168.6	222.0	235.8
85°	51.2	70.4	103.5	131.3	133.4
87.5°	16.0	22.4	34.1	51.2	52.3
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	14.73	16.39	15.10	16.71	17.02	15.56	17.22	15.93	17.54	17.85
	3H	16.49	18.00	16.86	18.32	18.68	17.68	19.19	18.06	19.51	19.87
	4H	17.11	18.53	17.50	18.88	19.25	18.57	19.99	18.97	20.34	20.71
	6H	17.52	18.84	17.93	19.20	19.59	19.35	20.67	19.76	21.03	21.42
	8H	17.62	18.89	18.05	19.28	19.67	19.67	20.93	20.09	21.32	21.72
	12H	17.68	18.89	18.11	19.27	19.70	19.88	21.09	20.31	21.47	21.90
4H	2H	15.50	16.93	15.90	17.27	17.65	16.15	17.57	16.55	17.92	18.29
	3H	17.48	18.68	17.89	19.08	19.47	18.51	19.70	18.91	20.10	20.50
	4H	18.22	19.30	18.65	19.72	20.15	19.56	20.64	19.99	21.06	21.49
	6H	18.75	19.70	19.20	20.14	20.59	20.51	21.46	20.96	21.90	22.36
	8H	18.89	19.78	19.35	20.23	20.69	20.91	21.80	21.37	22.24	22.70
	12H	18.98	19.78	19.46	20.25	20.72	21.18	21.99	21.66	22.46	22.93
8H	4H	18.68	19.57	19.14	20.01	20.47	19.85	20.74	20.31	21.18	21.64
	6H	19.34	20.08	19.83	20.57	21.04	20.96	21.70	21.45	22.19	22.66
	8H	19.55	20.22	20.06	20.72	21.21	21.47	22.14	21.98	22.64	23.13
	12H	19.69	20.28	20.19	20.77	21.33	21.86	22.45	22.36	22.94	23.50
12H	4H	18.77	19.57	19.25	20.04	20.51	19.87	20.67	20.35	21.15	21.62
	6H	19.47	20.14	19.98	20.64	21.13	21.01	21.68	21.51	22.18	22.66
	8H	19.75	20.34	20.25	20.83	21.39	21.58	22.18	22.09	22.66	23.22