

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: P1588342

Luminaire Tested: 24CZSP-52-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588342
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-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

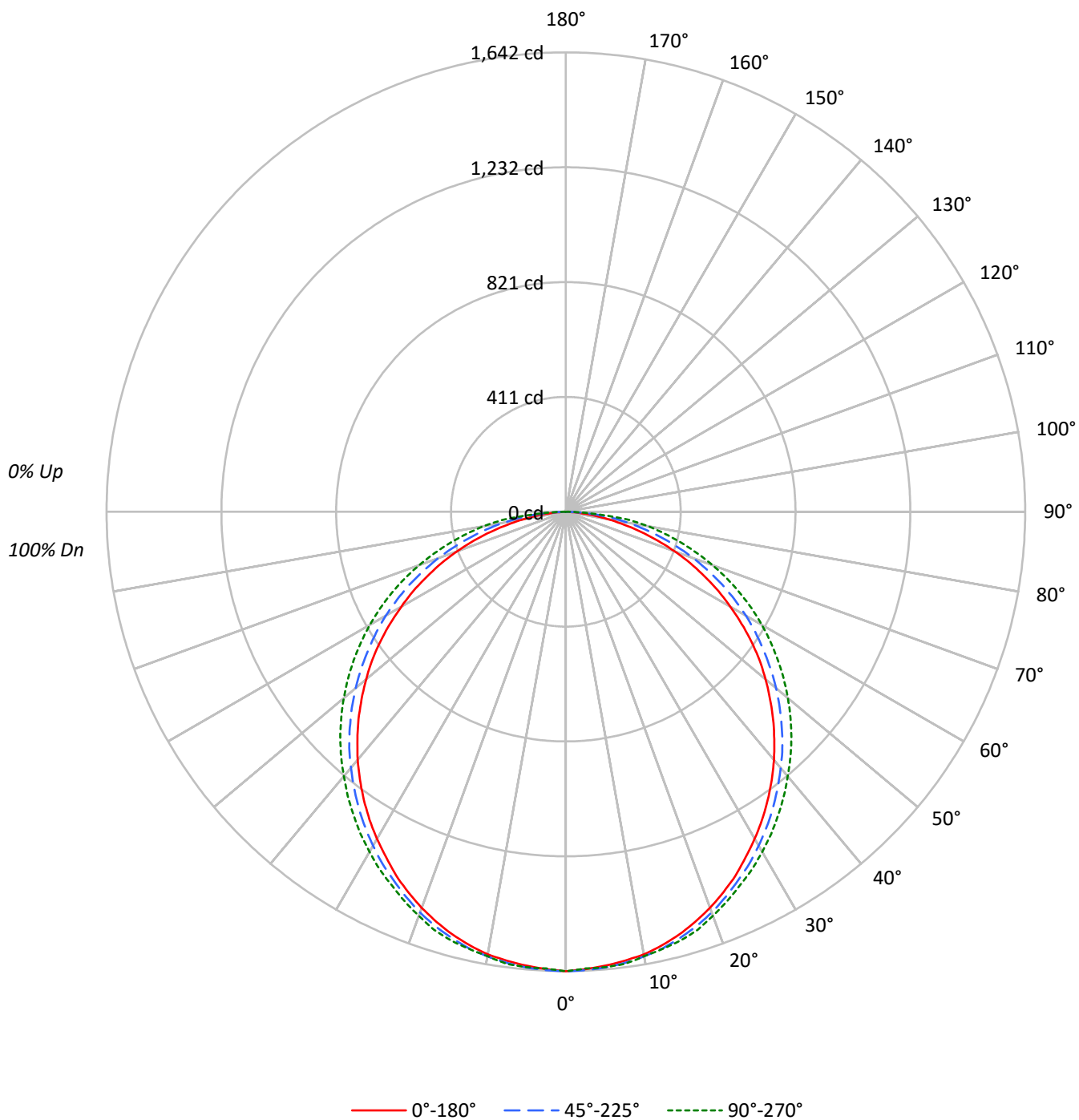
Lumens per Lamp: N/A
Luminaire Lumens: 4795.0 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2516	2516	2516
5°	2504	2514	2512
10°	2499	2510	2509
15°	2481	2501	2516
20°	2456	2485	2506
25°	2425	2459	2489
30°	2387	2438	2482
35°	2353	2414	2475
40°	2314	2390	2468
45°	2270	2366	2470
50°	2221	2337	2470
55°	2163	2304	2472
60°	2082	2279	2478
65°	1987	2235	2486
70°	1852	2172	2497
75°	1650	2086	2522
80°	1364	1986	2645
85°	887	1794	2311

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2728 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.3	3.2
10°-20°	444.8	9.3
20°-30°	670.8	14.0
30°-40°	807.9	16.8
40°-50°	843.8	17.6
50°-60°	774.9	16.2
60°-70°	610.3	12.7
70°-80°	374.4	7.8
80°-90°	112.7	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°	1270.9	26.5
0°-40°	2078.8	43.4
0°-60°	3697.5	77.1
0°-90°	4795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4795.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1642	1642	1642	1642	1642	
5°	1629	1631	1635	1640	1634	155
15°	1565	1568	1577	1587	1587	441
25°	1435	1438	1455	1473	1473	661
35°	1258	1265	1291	1317	1324	787
45°	1048	1060	1092	1130	1140	808
55°	810	825	863	911	926	723
65°	548	567	617	668	686	542
75°	279	301	352	408	426	296
85°	50	69	102	129	132	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1642.4	1642.4	1642.4	1642.4	1642.4
2.5°	1636.1	1639.3	1640.3	1641.4	1634.0
5°	1628.7	1630.8	1635.1	1640.3	1634.0
7.5°	1618.2	1620.3	1625.6	1632.9	1629.8
10°	1606.6	1607.7	1614.0	1619.3	1613.0
12.5°	1587.7	1590.9	1598.2	1602.4	1600.3
15°	1564.6	1567.7	1577.2	1586.7	1586.7
17.5°	1537.2	1541.4	1553.0	1565.6	1566.7
20°	1506.7	1509.8	1524.6	1537.2	1537.2
22.5°	1472.0	1476.2	1490.9	1504.6	1506.7
25°	1435.1	1438.3	1455.1	1473.0	1473.0
27.5°	1392.0	1398.3	1419.4	1437.2	1441.5
30°	1349.9	1355.2	1378.3	1400.4	1403.6
32.5°	1305.7	1312.0	1336.2	1360.4	1365.7
35°	1258.4	1264.7	1291.0	1317.3	1323.6
37.5°	1208.9	1216.3	1243.6	1274.2	1280.5
40°	1157.4	1165.8	1195.2	1227.9	1234.2
42.5°	1102.7	1114.2	1145.8	1179.5	1188.9
45°	1047.9	1059.5	1092.1	1130.0	1140.5
47.5°	990.1	1003.8	1037.4	1077.4	1089.0
50°	932.2	945.9	980.6	1023.7	1036.4
52.5°	873.3	887.0	922.7	968.0	981.7
55°	810.2	824.9	862.8	911.2	925.9
57.5°	744.9	763.9	803.8	853.3	868.0
60°	679.7	698.6	743.9	792.3	809.1
62.5°	615.5	633.4	679.7	731.2	749.1
65°	548.2	567.1	616.6	668.1	686.0
67.5°	481.9	500.8	550.3	603.9	622.9
70°	413.5	434.5	485.0	538.7	557.6
72.5°	345.1	367.2	418.8	473.5	491.4
75°	278.8	300.9	352.5	408.2	426.1
77.5°	213.6	237.8	288.3	345.1	361.9
80°	154.7	177.8	225.2	280.9	299.9
82.5°	98.9	118.9	166.2	218.8	232.5
85°	50.5	69.4	102.1	129.4	131.5
87.5°	15.8	22.1	33.7	50.5	51.6
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	14.68	16.35	15.05	16.66	16.97	15.51	17.18	15.88	17.49	17.80
	3H	16.44	17.95	16.82	18.27	18.63	17.63	19.14	18.01	19.46	19.82
	4H	17.06	18.48	17.45	18.83	19.20	18.52	19.94	18.92	20.29	20.66
	6H	17.47	18.79	17.88	19.15	19.54	19.30	20.62	19.71	20.98	21.37
	8H	17.58	18.84	18.00	19.23	19.63	19.62	20.88	20.04	21.27	21.67
	12H	17.63	18.84	18.06	19.22	19.65	19.83	21.04	20.26	21.42	21.85
4H	2H	15.46	16.88	15.85	17.22	17.60	16.10	17.52	16.50	17.87	18.25
	3H	17.43	18.63	17.84	19.03	19.43	18.46	19.65	18.87	20.05	20.45
	4H	18.17	19.26	18.60	19.67	20.10	19.51	20.59	19.94	21.01	21.44
	6H	18.70	19.65	19.15	20.09	20.54	20.46	21.41	20.91	21.85	22.31
	8H	18.84	19.74	19.30	20.18	20.64	20.86	21.75	21.32	22.19	22.66
	12H	18.93	19.73	19.41	20.21	20.67	21.13	21.94	21.61	22.41	22.88
8H	4H	18.63	19.52	19.09	19.96	20.43	19.80	20.69	20.26	21.13	21.60
	6H	19.29	20.03	19.78	20.52	20.99	20.91	21.65	21.40	22.14	22.61
	8H	19.50	20.17	20.01	20.67	21.16	21.42	22.09	21.93	22.59	23.08
	12H	19.64	20.23	20.14	20.72	21.28	21.81	22.40	22.31	22.89	23.45
12H	4H	18.72	19.52	19.20	20.00	20.46	19.82	20.63	20.30	21.10	21.57
	6H	19.42	20.09	19.93	20.60	21.08	20.96	21.63	21.46	22.13	22.62
	8H	19.70	20.29	20.20	20.78	21.34	21.53	22.13	22.04	22.62	23.17