

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: P1588673

Luminaire Tested: 24CZSP-A-52-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-52-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

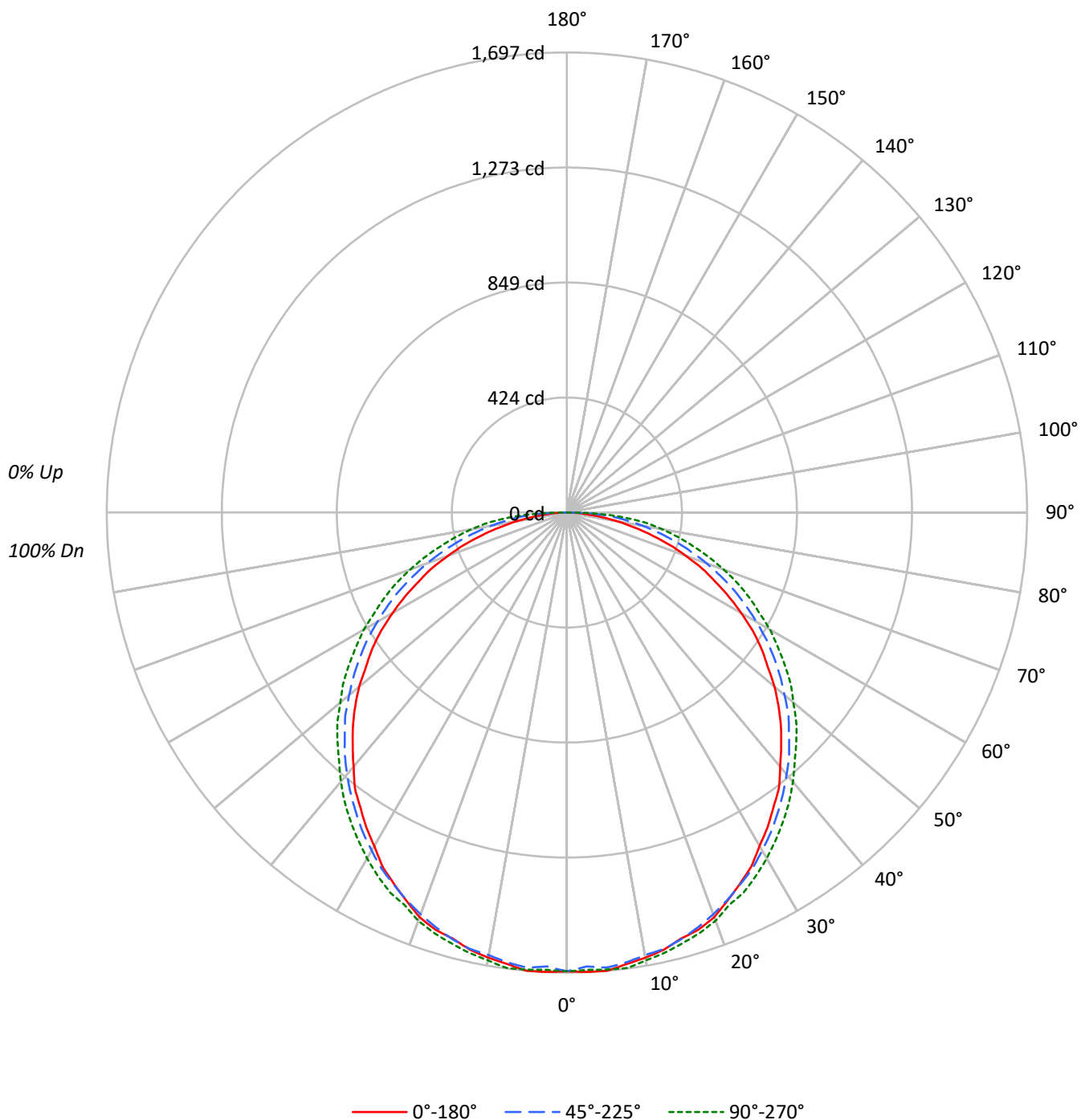
Lumens per Lamp: N/A
Luminaire Lumens: 5166.0 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2592	2592	2592
5°	2610	2591	2602
10°	2594	2578	2609
15°	2580	2584	2609
20°	2589	2571	2611
25°	2553	2557	2611
30°	2512	2547	2606
35°	2482	2533	2600
40°	2446	2521	2592
45°	2417	2508	2591
50°	2382	2497	2597
55°	2339	2488	2620
60°	2274	2471	2649
65°	2184	2471	2690
70°	2083	2454	2754
75°	1918	2460	2855
80°	1680	2510	3143
85°	1283	2891	3761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	3.1
10°-20°	461.9	8.9
20°-30°	701.7	13.6
30°-40°	850.0	16.5
40°-50°	894.3	17.3
50°-60°	831.5	16.1
60°-70°	669.5	13.0
70°-80°	433.7	8.4
80°-90°	162.6	3.1
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°	1324.3	25.6
0°-40°	2174.4	42.1
0°-60°	3900.1	75.5
0°-90°	5166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5166.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1692	1692	1692	1692	1692	
5°	1697	1695	1685	1695	1692	161
15°	1627	1633	1629	1649	1646	461
25°	1511	1509	1513	1539	1545	696
35°	1328	1337	1355	1378	1391	832
45°	1116	1131	1158	1183	1196	860
55°	876	898	932	969	981	781
65°	602	630	682	722	742	599
75°	324	356	416	464	482	344
85°	73	108	164	205	214	90
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1692.5	1692.5	1692.5	1692.5	1692.5
2.5°	1696.2	1696.2	1676.4	1697.4	1688.8
5°	1697.4	1695.0	1685.1	1695.0	1692.5
7.5°	1680.1	1682.6	1673.9	1686.3	1695.0
10°	1667.8	1670.2	1657.9	1677.7	1677.7
12.5°	1651.7	1654.1	1649.2	1667.8	1664.0
15°	1626.9	1633.1	1629.4	1649.2	1645.5
17.5°	1613.3	1608.4	1604.7	1619.5	1626.9
20°	1588.6	1577.4	1577.4	1597.2	1602.2
22.5°	1549.0	1545.3	1546.5	1571.3	1566.3
25°	1510.6	1509.4	1513.1	1539.1	1545.3
27.5°	1472.3	1469.8	1480.9	1505.7	1510.6
30°	1420.3	1425.3	1440.1	1467.3	1473.5
32.5°	1377.0	1385.7	1399.3	1425.3	1432.7
35°	1327.5	1337.4	1354.7	1378.2	1390.6
37.5°	1284.2	1290.4	1309.0	1331.2	1346.1
40°	1223.6	1239.7	1260.7	1292.9	1296.6
42.5°	1169.2	1185.2	1212.5	1247.1	1243.4
45°	1116.0	1130.8	1158.0	1182.8	1196.4
47.5°	1059.0	1072.7	1108.5	1138.2	1148.1
50°	999.7	1017.0	1047.9	1078.8	1090.0
52.5°	932.9	951.4	991.0	1024.4	1040.5
55°	875.9	898.2	931.6	968.7	981.1
57.5°	812.8	831.4	872.2	909.3	921.7
60°	742.3	764.6	806.7	846.2	864.8
62.5°	674.3	699.0	743.6	784.4	799.2
65°	602.5	629.7	681.7	722.5	742.3
67.5°	540.7	562.9	613.7	659.4	680.5
70°	465.2	494.9	548.1	598.8	614.9
72.5°	398.4	424.4	480.0	530.8	550.6
75°	324.1	356.3	415.7	464.0	482.5
77.5°	256.1	289.5	348.9	399.6	420.7
80°	190.5	222.7	284.6	336.5	356.3
82.5°	128.7	160.8	222.7	273.4	295.7
85°	73.0	107.6	164.5	205.4	214.0
87.5°	32.2	61.9	92.8	111.3	118.8
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	14.99	16.67	15.36	16.99	17.30	15.67	17.35	16.03	17.66	17.98
	3H	16.85	18.38	17.22	18.70	19.06	17.89	19.41	18.26	19.74	20.10
	4H	17.53	18.98	17.93	19.33	19.70	18.85	20.29	19.25	20.64	21.01
	6H	18.03	19.37	18.44	19.73	20.12	19.74	21.08	20.15	21.45	21.84
	8H	18.17	19.46	18.60	19.85	20.24	20.15	21.43	20.57	21.82	22.22
	12H	18.26	19.50	18.69	19.88	20.30	20.50	21.74	20.93	22.12	22.55
4H	2H	15.79	17.23	16.18	17.58	17.95	16.31	17.75	16.70	18.10	18.47
	3H	17.87	19.10	18.28	19.49	19.89	18.77	19.99	19.18	20.38	20.78
	4H	18.69	19.80	19.12	20.22	20.65	19.90	21.01	20.33	21.42	21.85
	6H	19.32	20.30	19.77	20.73	21.19	20.97	21.94	21.42	22.38	22.83
	8H	19.52	20.43	19.97	20.87	21.34	21.46	22.37	21.91	22.81	23.28
	12H	19.65	20.48	20.13	20.95	21.42	21.91	22.73	22.39	23.21	23.68
8H	4H	19.20	20.12	19.66	20.56	21.02	20.24	21.15	20.70	21.59	22.06
	6H	19.99	20.76	20.48	21.24	21.71	21.49	22.26	21.98	22.74	23.21
	8H	20.27	20.96	20.78	21.47	21.95	22.11	22.80	22.62	23.30	23.79
	12H	20.49	21.10	20.99	21.59	22.15	22.72	23.33	23.23	23.82	24.38
12H	4H	19.31	20.14	19.79	20.61	21.08	20.28	21.10	20.75	21.58	22.04
	6H	20.15	20.85	20.66	21.35	21.83	21.56	22.25	22.07	22.76	23.24
	8H	20.52	21.14	21.03	21.63	22.18	22.27	22.88	22.77	23.37	23.93