

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: P1588676

Luminaire Tested: 24CZSP-A-52-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588676
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-A-52-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

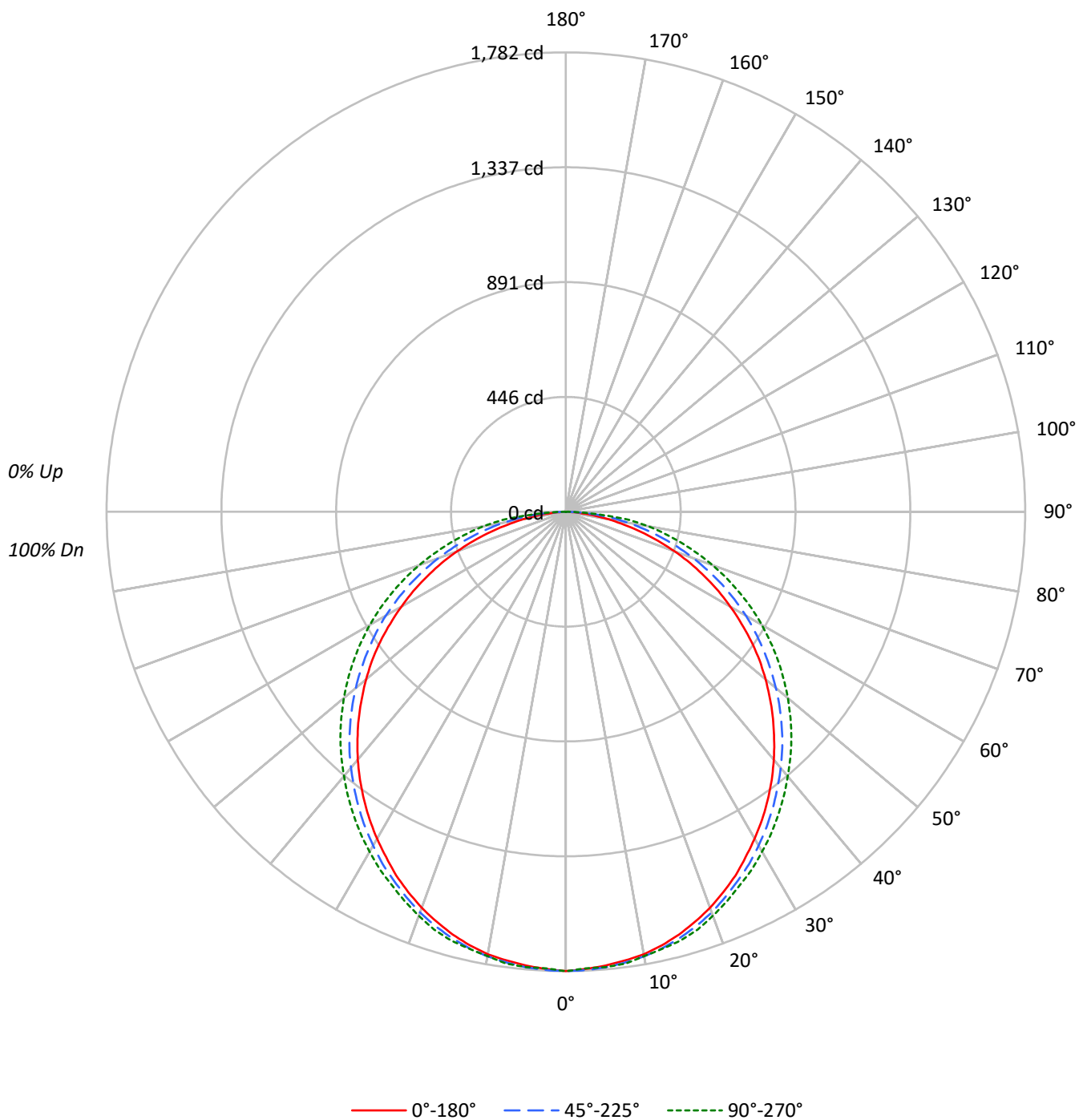
Lumens per Lamp: N/A
Luminaire Lumens: 5202.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2729	2729	2729
5°	2717	2727	2725
10°	2711	2723	2722
15°	2691	2713	2729
20°	2664	2696	2718
25°	2631	2668	2701
30°	2590	2645	2693
35°	2553	2619	2685
40°	2510	2593	2677
45°	2463	2566	2680
50°	2410	2535	2679
55°	2347	2499	2682
60°	2259	2472	2689
65°	2155	2424	2697
70°	2009	2356	2709
75°	1790	2263	2736
80°	1480	2155	2869
85°	963	1945	2508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2961 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	3.2
10°-20°	482.5	9.3
20°-30°	727.7	14.0
30°-40°	876.5	16.8
40°-50°	915.4	17.6
50°-60°	840.7	16.2
60°-70°	662.1	12.7
70°-80°	406.2	7.8
80°-90°	122.2	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°	1378.8	26.5
0°-40°	2255.3	43.4
0°-60°	4011.4	77.1
0°-90°	5202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1767	1769	1774	1780	1773	168
15°	1697	1701	1711	1721	1721	479
25°	1557	1560	1579	1598	1598	717
35°	1365	1372	1401	1429	1436	854
45°	1137	1150	1185	1226	1237	877
55°	879	895	936	988	1004	785
65°	595	615	669	725	744	588
75°	302	326	382	443	462	321
85°	55	75	111	140	143	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1781.8	1781.8	1781.8	1781.8	1781.8
2.5°	1775.0	1778.4	1779.5	1780.7	1772.7
5°	1767.0	1769.3	1773.8	1779.5	1772.7
7.5°	1755.6	1757.9	1763.6	1771.6	1768.1
10°	1743.0	1744.2	1751.0	1756.7	1749.9
12.5°	1722.5	1725.9	1733.9	1738.4	1736.2
15°	1697.4	1700.8	1711.1	1721.3	1721.3
17.5°	1667.7	1672.2	1684.8	1698.5	1699.6
20°	1634.6	1638.0	1654.0	1667.7	1667.7
22.5°	1596.9	1601.5	1617.5	1632.3	1634.6
25°	1557.0	1560.4	1578.6	1598.0	1598.0
27.5°	1510.2	1517.0	1539.8	1559.2	1563.8
30°	1464.5	1470.2	1495.3	1519.3	1522.7
32.5°	1416.6	1423.4	1449.7	1475.9	1481.6
35°	1365.2	1372.0	1400.6	1429.1	1436.0
37.5°	1311.5	1319.5	1349.2	1382.3	1389.2
40°	1255.6	1264.7	1296.7	1332.1	1338.9
42.5°	1196.3	1208.8	1243.1	1279.6	1289.9
45°	1136.9	1149.5	1184.8	1225.9	1237.3
47.5°	1074.1	1089.0	1125.5	1168.9	1181.4
50°	1011.3	1026.2	1063.8	1110.6	1124.3
52.5°	947.4	962.3	1001.1	1050.1	1065.0
55°	878.9	894.9	936.0	988.5	1004.5
57.5°	808.2	828.7	872.1	925.7	941.7
60°	737.4	757.9	807.0	859.5	877.8
62.5°	667.8	687.2	737.4	793.3	812.7
65°	594.7	615.2	668.9	724.8	744.2
67.5°	522.8	543.3	597.0	655.2	675.7
70°	448.6	471.4	526.2	584.4	605.0
72.5°	374.4	398.4	454.3	513.7	533.1
75°	302.5	326.5	382.4	442.9	462.3
77.5°	231.7	258.0	312.8	374.4	392.7
80°	167.8	192.9	244.3	304.8	325.3
82.5°	107.3	129.0	180.4	237.4	252.3
85°	54.8	75.3	110.7	140.4	142.7
87.5°	17.1	24.0	36.5	54.8	55.9
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	14.97	16.63	15.33	16.94	17.26	15.80	17.46	16.16	17.77	18.09
	3H	16.72	18.23	17.10	18.56	18.91	17.91	19.42	18.29	19.75	20.11
	4H	17.34	18.76	17.74	19.11	19.48	18.80	20.22	19.20	20.57	20.95
	6H	17.75	19.07	18.16	19.44	19.83	19.58	20.90	19.99	21.27	21.66
	8H	17.86	19.12	18.28	19.51	19.91	19.90	21.17	20.33	21.55	21.95
	12H	17.91	19.12	18.34	19.50	19.93	20.11	21.32	20.54	21.71	22.13
4H	2H	15.74	17.16	16.14	17.51	17.88	16.38	17.81	16.78	18.15	18.53
	3H	17.72	18.91	18.12	19.31	19.71	18.74	19.94	19.15	20.33	20.73
	4H	18.45	19.54	18.88	19.95	20.39	19.79	20.88	20.22	21.29	21.72
	6H	18.98	19.93	19.43	20.37	20.83	20.74	21.70	21.20	22.14	22.59
	8H	19.13	20.02	19.59	20.46	20.92	21.14	22.03	21.60	22.47	22.94
	12H	19.21	20.01	19.69	20.49	20.96	21.42	22.22	21.90	22.70	23.16
8H	4H	18.91	19.80	19.37	20.24	20.71	20.08	20.97	20.54	21.41	21.88
	6H	19.57	20.32	20.06	20.80	21.28	21.19	21.94	21.68	22.42	22.90
	8H	19.78	20.45	20.29	20.96	21.44	21.70	22.37	22.21	22.88	23.36
	12H	19.92	20.51	20.43	21.00	21.56	22.09	22.68	22.59	23.17	23.73
12H	4H	19.00	19.80	19.48	20.28	20.75	20.10	20.91	20.58	21.38	21.85
	6H	19.70	20.37	20.21	20.88	21.36	21.24	21.91	21.75	22.41	22.90
	8H	19.98	20.57	20.49	21.06	21.62	21.82	22.41	22.32	22.90	23.46