

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: P1589780

Luminaire Tested: 24CZSP-SB-47-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

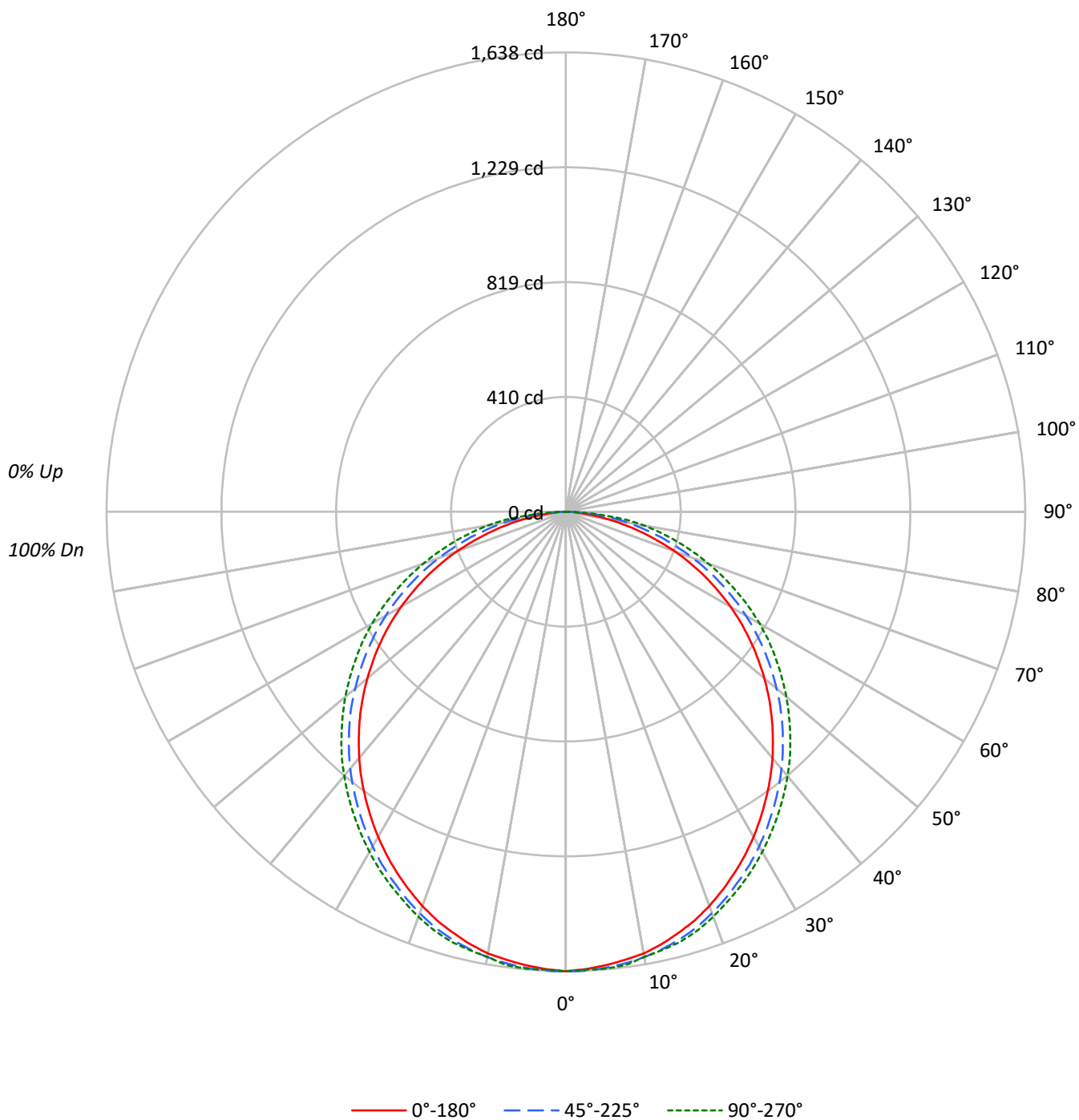
Lumens per Lamp: N/A
Luminaire Lumens: 4766.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2509	2509	2509
5°	2495	2509	2514
10°	2487	2508	2507
15°	2465	2500	2515
20°	2438	2483	2505
25°	2403	2459	2490
30°	2368	2437	2477
35°	2329	2413	2465
40°	2292	2392	2458
45°	2250	2367	2452
50°	2201	2338	2445
55°	2146	2308	2442
60°	2079	2274	2444
65°	1984	2226	2430
70°	1855	2158	2424
75°	1644	2075	2433
80°	1338	1971	2505
85°	865	1821	2162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2538 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	3.3
10°-20°	444.0	9.3
20°-30°	669.4	14.0
30°-40°	805.5	16.9
40°-50°	840.2	17.6
50°-60°	770.1	16.2
60°-70°	604.7	12.7
70°-80°	368.1	7.7
80°-90°	108.9	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°	1268.5	26.6
0°-40°	2074.0	43.5
0°-60°	3684.3	77.3
0°-90°	4766.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4766.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1638	1638	1638	1638	1638	
5°	1623	1633	1632	1630	1635	154
15°	1554	1570	1577	1579	1586	438
25°	1422	1442	1455	1464	1473	655
35°	1246	1265	1291	1309	1318	780
45°	1039	1060	1093	1119	1132	801
55°	804	824	864	899	914	718
65°	548	568	614	655	670	542
75°	278	304	351	393	411	295
85°	49	70	104	116	123	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1638.4	1638.4	1638.4	1638.4	1638.4
2.5°	1632.2	1640.4	1638.4	1631.2	1634.3
5°	1623.0	1633.3	1632.2	1630.2	1635.3
7.5°	1611.7	1623.0	1624.0	1624.0	1630.2
10°	1599.4	1610.7	1612.8	1609.7	1611.7
12.5°	1578.9	1592.2	1596.3	1596.3	1599.4
15°	1554.3	1569.7	1576.9	1578.9	1586.1
17.5°	1527.7	1544.1	1553.3	1558.4	1564.6
20°	1495.9	1513.3	1523.6	1529.7	1536.9
22.5°	1460.0	1479.5	1490.7	1496.9	1505.1
25°	1422.1	1441.5	1454.9	1464.1	1473.3
27.5°	1382.1	1400.5	1419.0	1430.3	1438.5
30°	1339.0	1358.5	1378.0	1392.3	1400.5
32.5°	1292.9	1313.4	1335.9	1351.3	1360.5
35°	1245.7	1265.2	1290.8	1309.3	1318.5
37.5°	1197.5	1218.0	1244.7	1264.2	1275.4
40°	1146.3	1167.8	1196.5	1218.0	1229.3
42.5°	1092.9	1113.4	1145.2	1169.8	1183.2
45°	1038.6	1060.1	1092.9	1118.6	1131.9
47.5°	982.2	1002.7	1038.6	1068.3	1079.6
50°	923.8	943.3	981.2	1013.0	1026.3
52.5°	864.3	884.8	922.7	956.6	970.9
55°	803.8	824.3	864.3	899.2	914.5
57.5°	742.3	762.8	803.8	839.7	858.2
60°	678.7	699.2	742.3	779.2	797.7
62.5°	613.1	634.6	678.7	716.7	736.1
65°	547.5	568.0	614.1	655.1	670.5
67.5°	481.9	502.4	547.5	588.5	607.0
70°	414.2	437.8	481.9	524.9	541.3
72.5°	343.5	370.1	414.2	459.3	475.7
75°	277.8	303.5	350.6	392.7	411.1
77.5°	213.3	240.9	285.0	328.1	346.5
80°	151.7	178.4	223.5	264.5	284.0
82.5°	96.4	120.0	165.1	202.0	216.3
85°	49.2	69.7	103.6	115.9	123.0
87.5°	14.4	24.6	36.9	46.1	51.3
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	14.70	16.36	15.06	16.67	16.98	15.43	17.09	15.80	17.41	17.72
	3H	16.46	17.97	16.84	18.30	18.66	17.51	19.02	17.89	19.34	19.70
	4H	17.08	18.50	17.48	18.85	19.23	18.38	19.80	18.77	20.14	20.52
	6H	17.49	18.81	17.90	19.17	19.56	19.12	20.44	19.53	20.80	21.19
	8H	17.60	18.86	18.02	19.24	19.64	19.42	20.68	19.84	21.06	21.46
	12H	17.64	18.85	18.07	19.23	19.66	19.61	20.82	20.04	21.20	21.63
4H	2H	15.46	16.88	15.86	17.23	17.61	16.04	17.46	16.43	17.80	18.18
	3H	17.46	18.65	17.86	19.05	19.45	18.35	19.54	18.76	19.94	20.34
	4H	18.20	19.28	18.63	19.69	20.13	19.37	20.45	19.80	20.86	21.30
	6H	18.73	19.68	19.18	20.12	20.57	20.27	21.22	20.73	21.66	22.12
	8H	18.87	19.76	19.33	20.20	20.66	20.64	21.53	21.10	21.97	22.43
	12H	18.95	19.75	19.43	20.22	20.69	20.89	21.69	21.37	22.17	22.64
8H	4H	18.64	19.53	19.10	19.97	20.44	19.66	20.55	20.12	21.00	21.46
	6H	19.31	20.05	19.80	20.54	21.01	20.72	21.46	21.21	21.95	22.42
	8H	19.52	20.18	20.02	20.69	21.17	21.19	21.86	21.70	22.37	22.85
	12H	19.65	20.24	20.16	20.73	21.29	21.55	22.14	22.05	22.63	23.18
12H	4H	18.72	19.53	19.20	20.00	20.47	19.69	20.49	20.17	20.97	21.43
	6H	19.43	20.10	19.94	20.60	21.09	20.77	21.44	21.28	21.95	22.43
	8H	19.71	20.30	20.21	20.79	21.35	21.31	21.90	21.82	22.39	22.95