

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: P1589790

Luminaire Tested: 24CZSP-SB-47-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589790
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

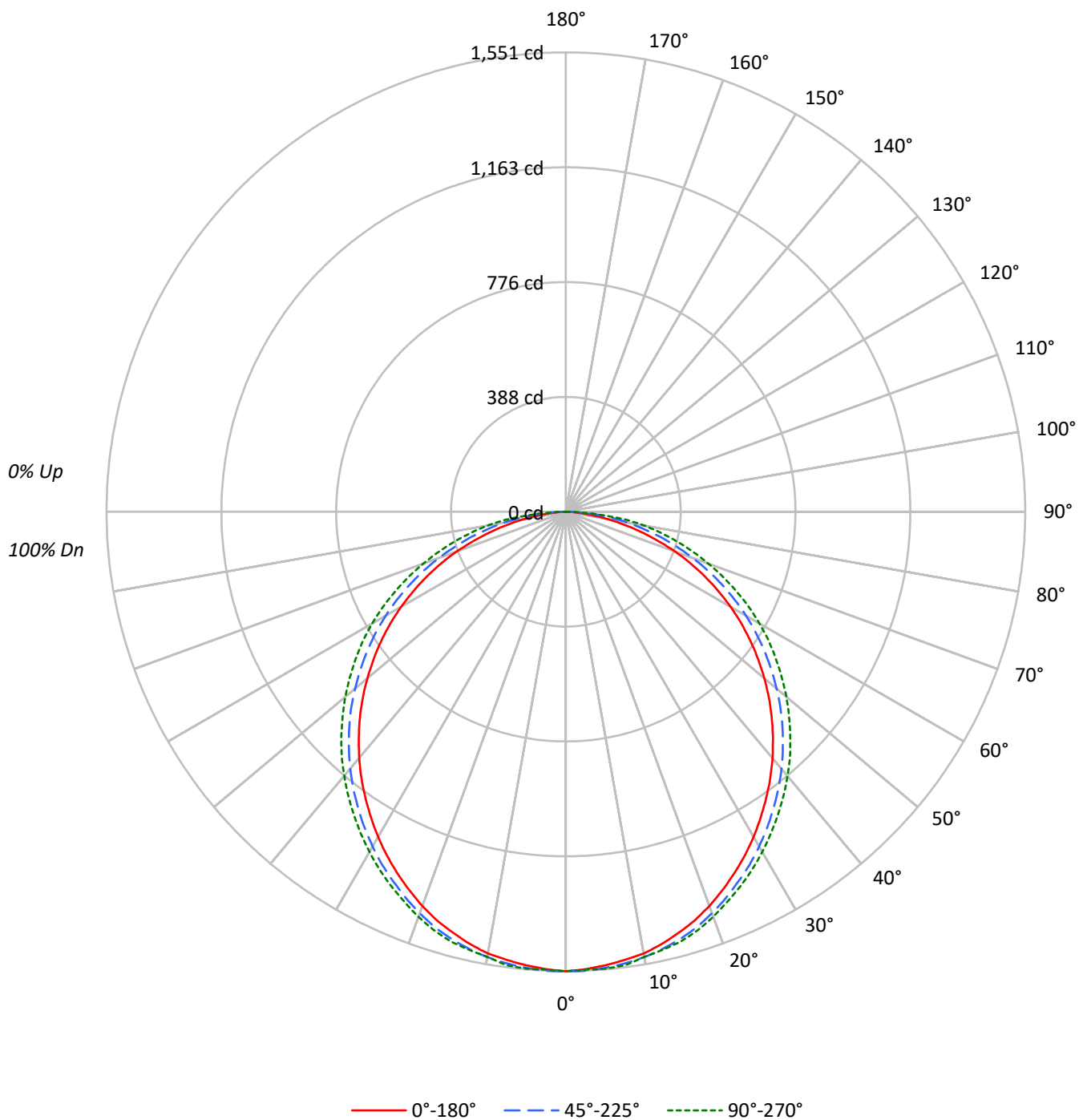
Lumens per Lamp: N/A
Luminaire Lumens: 4513.0 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2376	2376	2376
5°	2363	2376	2381
10°	2355	2375	2374
15°	2334	2368	2381
20°	2309	2351	2372
25°	2276	2328	2358
30°	2242	2308	2345
35°	2206	2285	2334
40°	2170	2265	2327
45°	2130	2242	2322
50°	2084	2214	2316
55°	2032	2185	2312
60°	1969	2153	2314
65°	1879	2107	2301
70°	1756	2043	2296
75°	1557	1965	2304
80°	1267	1866	2372
85°	819	1724	2047

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2403 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	3.3
10°-20°	420.4	9.3
20°-30°	633.9	14.0
30°-40°	762.7	16.9
40°-50°	795.6	17.6
50°-60°	729.2	16.2
60°-70°	572.6	12.7
70°-80°	348.5	7.7
80°-90°	103.1	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°	1201.1	26.6
0°-40°	1963.9	43.5
0°-60°	3488.7	77.3
0°-90°	4513.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4513.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1537	1547	1546	1544	1548	146
15°	1472	1486	1493	1495	1502	415
25°	1347	1365	1378	1386	1395	621
35°	1180	1198	1222	1240	1248	738
45°	984	1004	1035	1059	1072	758
55°	761	781	818	851	866	680
65°	518	538	582	620	635	513
75°	263	287	332	372	389	279
85°	47	66	98	110	116	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.4	1551.4	1551.4	1551.4	1551.4
2.5°	1545.6	1553.4	1551.4	1544.6	1547.5
5°	1536.9	1546.6	1545.6	1543.6	1548.5
7.5°	1526.2	1536.9	1537.8	1537.8	1543.6
10°	1514.5	1525.2	1527.1	1524.2	1526.2
12.5°	1495.1	1507.7	1511.6	1511.6	1514.5
15°	1471.8	1486.4	1493.2	1495.1	1501.9
17.5°	1446.6	1462.1	1470.8	1475.7	1481.5
20°	1416.5	1433.0	1442.7	1448.5	1455.3
22.5°	1382.5	1400.9	1411.6	1417.4	1425.2
25°	1346.6	1365.0	1377.6	1386.4	1395.1
27.5°	1308.7	1326.2	1343.7	1354.3	1362.1
30°	1267.9	1286.4	1304.8	1318.4	1326.2
32.5°	1224.2	1243.7	1265.0	1279.6	1288.3
35°	1179.6	1198.0	1222.3	1239.8	1248.5
37.5°	1133.9	1153.4	1178.6	1197.1	1207.7
40°	1085.4	1105.8	1133.0	1153.4	1164.0
42.5°	1034.9	1054.3	1084.4	1107.7	1120.4
45°	983.5	1003.9	1034.9	1059.2	1071.8
47.5°	930.1	949.5	983.5	1011.6	1022.3
50°	874.7	893.2	929.1	959.2	971.8
52.5°	818.4	837.8	873.8	905.8	919.4
55°	761.1	780.6	818.4	851.4	866.0
57.5°	702.9	722.3	761.1	795.1	812.6
60°	642.7	662.1	702.9	737.8	755.3
62.5°	580.6	601.0	642.7	678.6	697.1
65°	518.4	537.8	581.5	620.4	634.9
67.5°	456.3	475.7	518.4	557.3	574.7
70°	392.2	414.6	456.3	497.1	512.6
72.5°	325.2	350.5	392.2	434.9	450.5
75°	263.1	287.4	332.0	371.8	389.3
77.5°	201.9	228.1	269.9	310.7	328.1
80°	143.7	168.9	211.6	250.5	268.9
82.5°	91.3	113.6	156.3	191.3	204.8
85°	46.6	66.0	98.1	109.7	116.5
87.5°	13.6	23.3	35.0	43.7	48.5
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	14.51	16.17	14.87	16.48	16.79	15.24	16.90	15.61	17.22	17.53
	3H	16.28	17.78	16.65	18.11	18.47	17.32	18.83	17.70	19.15	19.51
	4H	16.89	18.31	17.29	18.66	19.04	18.19	19.61	18.58	19.95	20.33
	6H	17.30	18.62	17.71	18.98	19.37	18.93	20.25	19.34	20.61	21.00
	8H	17.41	18.67	17.83	19.05	19.45	19.23	20.49	19.65	20.87	21.27
	12H	17.45	18.66	17.88	19.04	19.47	19.42	20.63	19.85	21.01	21.44
4H	2H	15.27	16.69	15.67	17.04	17.42	15.85	17.27	16.24	17.61	17.99
	3H	17.27	18.46	17.68	18.86	19.26	18.16	19.35	18.57	19.75	20.15
	4H	18.01	19.09	18.44	19.50	19.94	19.18	20.26	19.61	20.67	21.11
	6H	18.54	19.49	18.99	19.93	20.38	20.08	21.03	20.54	21.47	21.93
	8H	18.68	19.57	19.14	20.01	20.47	20.45	21.34	20.91	21.78	22.24
	12H	18.76	19.56	19.24	20.03	20.50	20.70	21.50	21.18	21.98	22.45
8H	4H	18.45	19.34	18.91	19.79	20.25	19.48	20.36	19.93	20.81	21.27
	6H	19.12	19.86	19.61	20.35	20.82	20.53	21.27	21.02	21.76	22.24
	8H	19.33	19.99	19.83	20.50	20.98	21.00	21.67	21.51	22.18	22.66
	12H	19.46	20.05	19.97	20.54	21.10	21.36	21.95	21.86	22.44	22.99
12H	4H	18.53	19.34	19.01	19.81	20.28	19.50	20.30	19.98	20.78	21.25
	6H	19.24	19.91	19.75	20.41	20.90	20.58	21.25	21.09	21.76	22.24
	8H	19.52	20.11	20.02	20.60	21.16	21.12	21.71	21.63	22.20	22.76