

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: P1588300

Luminaire Tested: 24CZSP-47-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588300
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-47-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

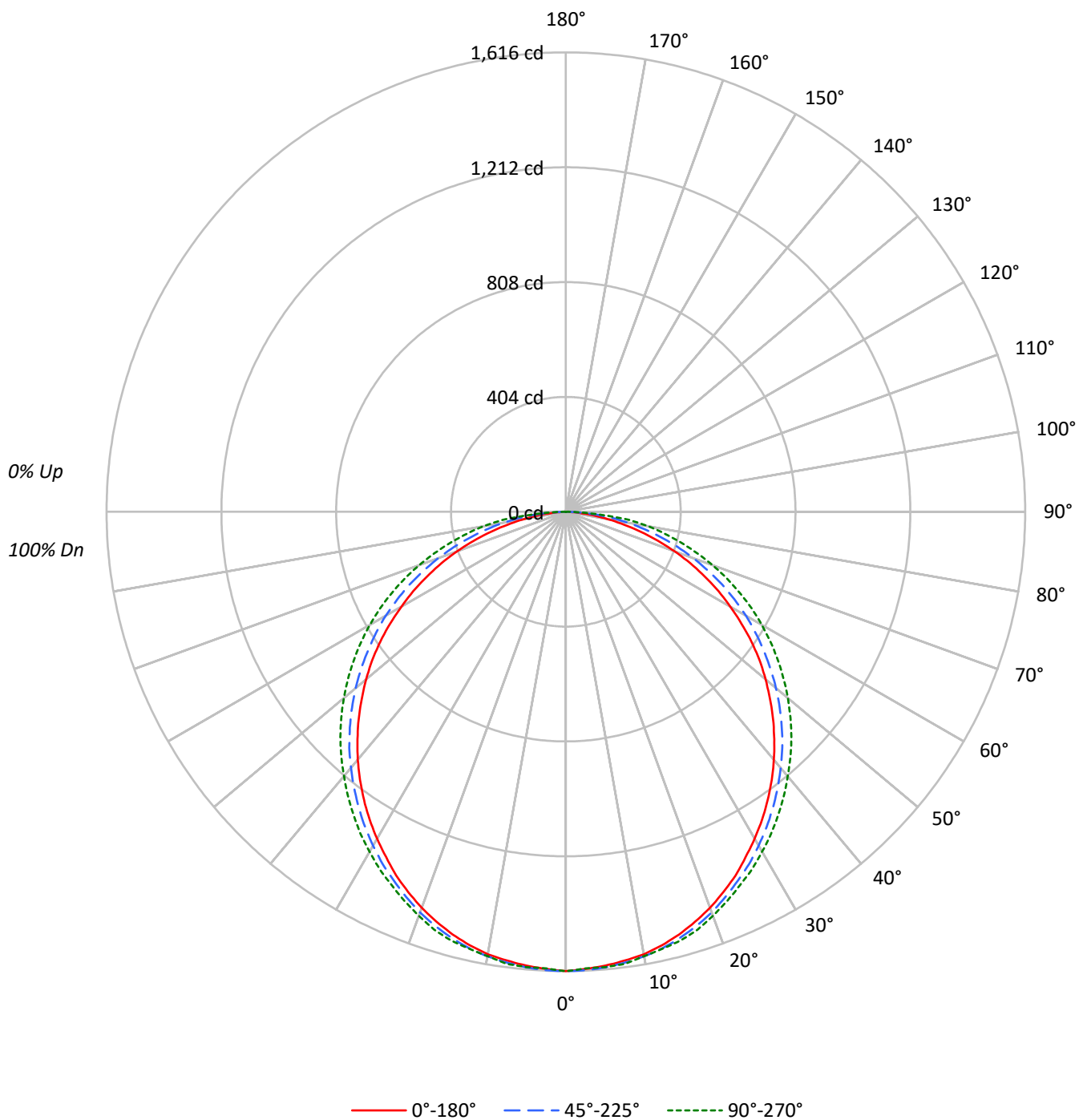
Lumens per Lamp: N/A
Luminaire Lumens: 4718.0 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2475	2475	2475
5°	2464	2473	2472
10°	2459	2470	2468
15°	2441	2461	2476
20°	2416	2445	2465
25°	2386	2420	2449
30°	2349	2399	2442
35°	2315	2375	2435
40°	2277	2351	2428
45°	2233	2328	2431
50°	2185	2299	2430
55°	2129	2267	2433
60°	2049	2242	2439
65°	1955	2199	2446
70°	1822	2137	2457
75°	1623	2052	2481
80°	1342	1954	2602
85°	873	1764	2274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2685 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.8	3.2
10°-20°	437.6	9.3
20°-30°	660.0	14.0
30°-40°	795.0	16.8
40°-50°	830.2	17.6
50°-60°	762.5	16.2
60°-70°	600.5	12.7
70°-80°	368.4	7.8
80°-90°	110.9	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°	1250.5	26.5
0°-40°	2045.5	43.4
0°-60°	3638.2	77.1
0°-90°	4718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1616	1616	1616	1616	1616	
5°	1603	1605	1609	1614	1608	152
15°	1539	1542	1552	1561	1561	434
25°	1412	1415	1432	1449	1449	650
35°	1238	1244	1270	1296	1302	774
45°	1031	1042	1075	1112	1122	795
55°	797	812	849	896	911	712
65°	539	558	607	657	675	534
75°	274	296	347	402	419	291
85°	50	68	100	127	129	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.0	1616.0	1616.0	1616.0	1616.0
2.5°	1609.8	1612.9	1614.0	1615.0	1607.8
5°	1602.6	1604.7	1608.8	1614.0	1607.8
7.5°	1592.2	1594.3	1599.5	1606.7	1603.6
10°	1580.8	1581.9	1588.1	1593.3	1587.1
12.5°	1562.2	1565.3	1572.6	1576.7	1574.6
15°	1539.4	1542.5	1551.9	1561.2	1561.2
17.5°	1512.5	1516.7	1528.0	1540.5	1541.5
20°	1482.5	1485.6	1500.1	1512.5	1512.5
22.5°	1448.3	1452.5	1467.0	1480.4	1482.5
25°	1412.1	1415.2	1431.8	1449.4	1449.4
27.5°	1369.6	1375.9	1396.6	1414.2	1418.3
30°	1328.2	1333.4	1356.2	1377.9	1381.0
32.5°	1284.8	1291.0	1314.8	1338.6	1343.8
35°	1238.2	1244.4	1270.3	1296.1	1302.4
37.5°	1189.5	1196.8	1223.7	1253.7	1259.9
40°	1138.8	1147.1	1176.1	1208.1	1214.4
42.5°	1085.0	1096.3	1127.4	1160.5	1169.8
45°	1031.1	1042.5	1074.6	1111.9	1122.2
47.5°	974.2	987.6	1020.8	1060.1	1071.5
50°	917.2	930.7	964.9	1007.3	1019.7
52.5°	859.3	872.7	907.9	952.4	965.9
55°	797.2	811.6	848.9	896.5	911.0
57.5°	733.0	751.6	790.9	839.6	854.1
60°	668.8	687.4	731.9	779.6	796.1
62.5°	605.6	623.2	668.8	719.5	737.1
65°	539.4	558.0	606.7	657.4	675.0
67.5°	474.1	492.8	541.4	594.2	612.9
70°	406.9	427.6	477.3	530.1	548.7
72.5°	339.6	361.3	412.0	465.9	483.5
75°	274.3	296.1	346.8	401.7	419.3
77.5°	210.2	234.0	283.7	339.6	356.1
80°	152.2	175.0	221.5	276.4	295.0
82.5°	97.3	117.0	163.6	215.3	228.8
85°	49.7	68.3	100.4	127.3	129.4
87.5°	15.5	21.7	33.1	49.7	50.7
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	14.63	16.29	14.99	16.60	16.92	15.46	17.12	15.82	17.43	17.75
	3H	16.38	17.89	16.76	18.22	18.58	17.57	19.08	17.95	19.41	19.77
	4H	17.00	18.42	17.40	18.77	19.15	18.46	19.88	18.86	20.23	20.61
	6H	17.41	18.73	17.82	19.10	19.49	19.24	20.56	19.65	20.93	21.32
	8H	17.52	18.78	17.94	19.17	19.57	19.56	20.83	19.99	21.21	21.61
	12H	17.57	18.78	18.00	19.16	19.59	19.77	20.99	20.20	21.37	21.80
4H	2H	15.40	16.82	15.80	17.17	17.54	16.05	17.47	16.44	17.81	18.19
	3H	17.38	18.57	17.78	18.97	19.37	18.40	19.60	18.81	19.99	20.39
	4H	18.11	19.20	18.54	19.61	20.05	19.45	20.54	19.88	20.95	21.39
	6H	18.64	19.59	19.09	20.03	20.49	20.40	21.36	20.86	21.80	22.25
	8H	18.79	19.68	19.25	20.12	20.59	20.80	21.69	21.26	22.14	22.60
	12H	18.87	19.68	19.35	20.15	20.62	21.08	21.88	21.56	22.36	22.82
8H	4H	18.57	19.46	19.03	19.91	20.37	19.74	20.63	20.20	21.07	21.54
	6H	19.23	19.98	19.73	20.46	20.94	20.85	21.60	21.34	22.08	22.56
	8H	19.44	20.11	19.95	20.62	21.10	21.36	22.03	21.87	22.54	23.02
	12H	19.58	20.17	20.09	20.66	21.22	21.75	22.34	22.26	22.83	23.39
12H	4H	18.66	19.46	19.14	19.94	20.41	19.77	20.57	20.24	21.04	21.51
	6H	19.37	20.03	19.87	20.54	21.02	20.90	21.57	21.41	22.07	22.56
	8H	19.64	20.24	20.15	20.72	21.28	21.48	22.07	21.98	22.56	23.12