

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: P1589787

Luminaire Tested: 24CZSP-SB-47-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

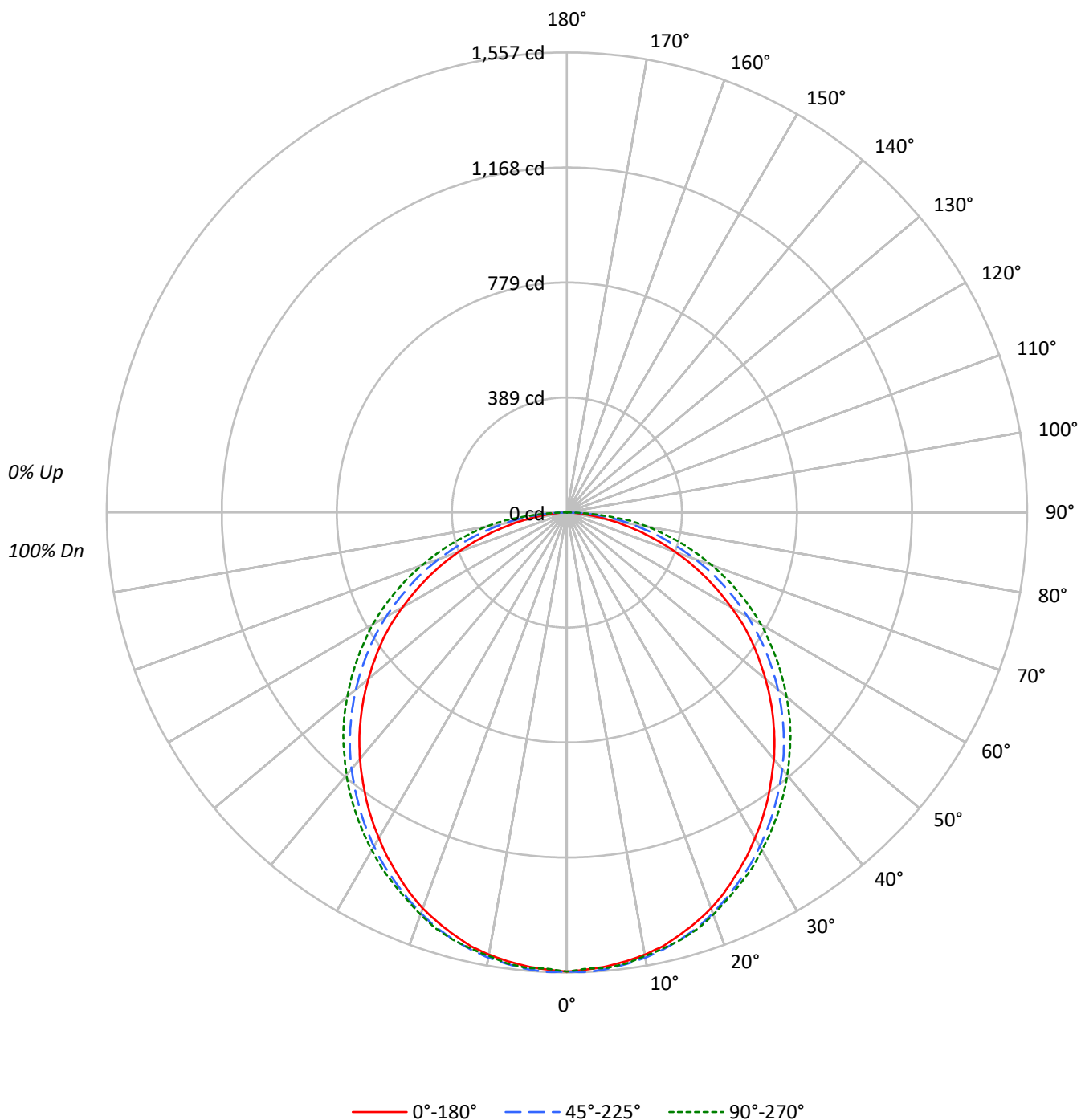
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4535.0 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 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	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	68
3	89	79	70	63	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°	2380	2380	2380
5°	2371	2385	2379
10°	2363	2380	2371
15°	2345	2370	2373
20°	2325	2353	2361
25°	2287	2328	2344
30°	2251	2309	2334
35°	2215	2286	2326
40°	2178	2267	2320
45°	2137	2245	2318
50°	2090	2221	2312
55°	2043	2197	2312
60°	1967	2164	2326
65°	1875	2122	2327
70°	1750	2063	2334
75°	1556	1988	2374
80°	1278	1905	2464
85°	844	1787	2227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2523 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	3.2
10°-20°	420.8	9.3
20°-30°	634.2	14.0
30°-40°	763.7	16.8
40°-50°	797.9	17.6
50°-60°	733.0	16.2
60°-70°	577.2	12.7
70°-80°	353.9	7.8
80°-90°	107.3	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°	1201.9	26.5
0°-40°	1965.7	43.3
0°-60°	3496.6	77.1
0°-90°	4535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1542	1545	1551	1549	1547	146
15°	1479	1485	1494	1500	1496	417
25°	1353	1362	1377	1392	1387	624
35°	1184	1200	1223	1245	1244	741
45°	987	1008	1037	1065	1070	761
55°	765	787	823	858	866	682
65°	517	544	586	625	642	511
75°	263	294	336	376	401	280
85°	48	71	102	113	127	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1554.0	1554.0	1554.0	1554.0	1554.0
2.5°	1548.2	1552.0	1556.8	1549.2	1545.3
5°	1542.4	1545.3	1551.1	1549.2	1547.2
7.5°	1531.9	1533.8	1541.5	1541.5	1539.6
10°	1519.4	1523.2	1530.0	1529.0	1524.2
12.5°	1503.1	1506.0	1513.7	1513.7	1510.8
15°	1479.1	1484.9	1494.5	1500.2	1496.4
17.5°	1454.1	1459.9	1472.4	1478.1	1476.2
20°	1426.3	1431.1	1443.6	1452.2	1448.4
22.5°	1391.8	1397.5	1411.9	1421.5	1417.7
25°	1353.4	1362.0	1377.4	1391.8	1387.0
27.5°	1315.0	1324.6	1343.8	1358.2	1356.2
30°	1272.7	1285.2	1305.4	1323.6	1319.8
32.5°	1229.5	1243.9	1265.1	1284.3	1283.3
35°	1184.4	1199.8	1222.8	1244.9	1243.9
37.5°	1136.4	1154.7	1178.7	1202.7	1203.6
40°	1089.4	1106.7	1133.6	1159.5	1160.4
42.5°	1039.5	1057.7	1086.5	1113.4	1114.4
45°	986.7	1007.8	1036.6	1065.4	1070.2
47.5°	933.0	955.0	984.8	1015.5	1021.3
50°	877.3	900.3	932.0	964.6	970.4
52.5°	820.7	844.6	877.3	909.9	918.6
55°	765.0	787.1	822.6	858.1	865.8
57.5°	706.4	726.6	765.0	802.4	812.0
60°	642.1	667.1	706.4	743.9	759.2
62.5°	579.7	606.6	646.9	684.4	701.6
65°	517.3	544.2	585.5	624.8	642.1
67.5°	454.0	481.8	526.0	563.4	582.6
70°	390.7	418.5	460.7	501.0	521.2
72.5°	327.3	357.1	398.3	439.6	459.8
75°	263.0	293.7	335.9	376.3	401.2
77.5°	202.5	232.3	274.5	315.8	336.9
80°	144.9	174.7	216.0	257.2	279.3
82.5°	92.1	120.0	160.3	194.8	215.0
85°	48.0	71.0	101.7	113.3	126.7
87.5°	14.4	27.8	39.4	44.2	54.7
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	14.53	16.19	14.89	16.50	16.82	15.27	16.93	15.64	17.25	17.56
	3H	16.29	17.80	16.67	18.12	18.48	17.37	18.88	17.74	19.20	19.56
	4H	16.91	18.34	17.31	18.68	19.06	18.25	19.67	18.65	20.02	20.40
	6H	17.33	18.65	17.74	19.01	19.40	19.02	20.34	19.43	20.70	21.09
	8H	17.43	18.69	17.86	19.08	19.48	19.33	20.59	19.75	20.98	21.38
	12H	17.48	18.69	17.91	19.08	19.50	19.54	20.75	19.97	21.14	21.56
4H	2H	15.30	16.72	15.69	17.07	17.44	15.88	17.30	16.27	17.65	18.02
	3H	17.29	18.49	17.70	18.88	19.28	18.20	19.40	18.61	19.80	20.20
	4H	18.04	19.13	18.47	19.54	19.98	19.24	20.33	19.67	20.74	21.17
	6H	18.58	19.53	19.03	19.97	20.43	20.17	21.12	20.62	21.56	22.02
	8H	18.73	19.62	19.19	20.06	20.53	20.55	21.45	21.01	21.89	22.35
	12H	18.81	19.62	19.29	20.09	20.56	20.83	21.63	21.31	22.11	22.58
8H	4H	18.50	19.39	18.95	19.83	20.29	19.54	20.43	20.00	20.87	21.34
	6H	19.17	19.92	19.67	20.40	20.88	20.62	21.37	21.11	21.85	22.33
	8H	19.39	20.06	19.90	20.57	21.05	21.11	21.78	21.62	22.28	22.77
	12H	19.54	20.13	20.05	20.62	21.18	21.49	22.08	21.99	22.57	23.13
12H	4H	18.58	19.38	19.06	19.86	20.33	19.57	20.37	20.05	20.84	21.31
	6H	19.30	19.97	19.81	20.48	20.96	20.68	21.35	21.18	21.85	22.33
	8H	19.59	20.18	20.10	20.67	21.23	21.23	21.82	21.73	22.31	22.87