

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: P1589786

Luminaire Tested: 24CZSP-SB-47-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589786
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-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

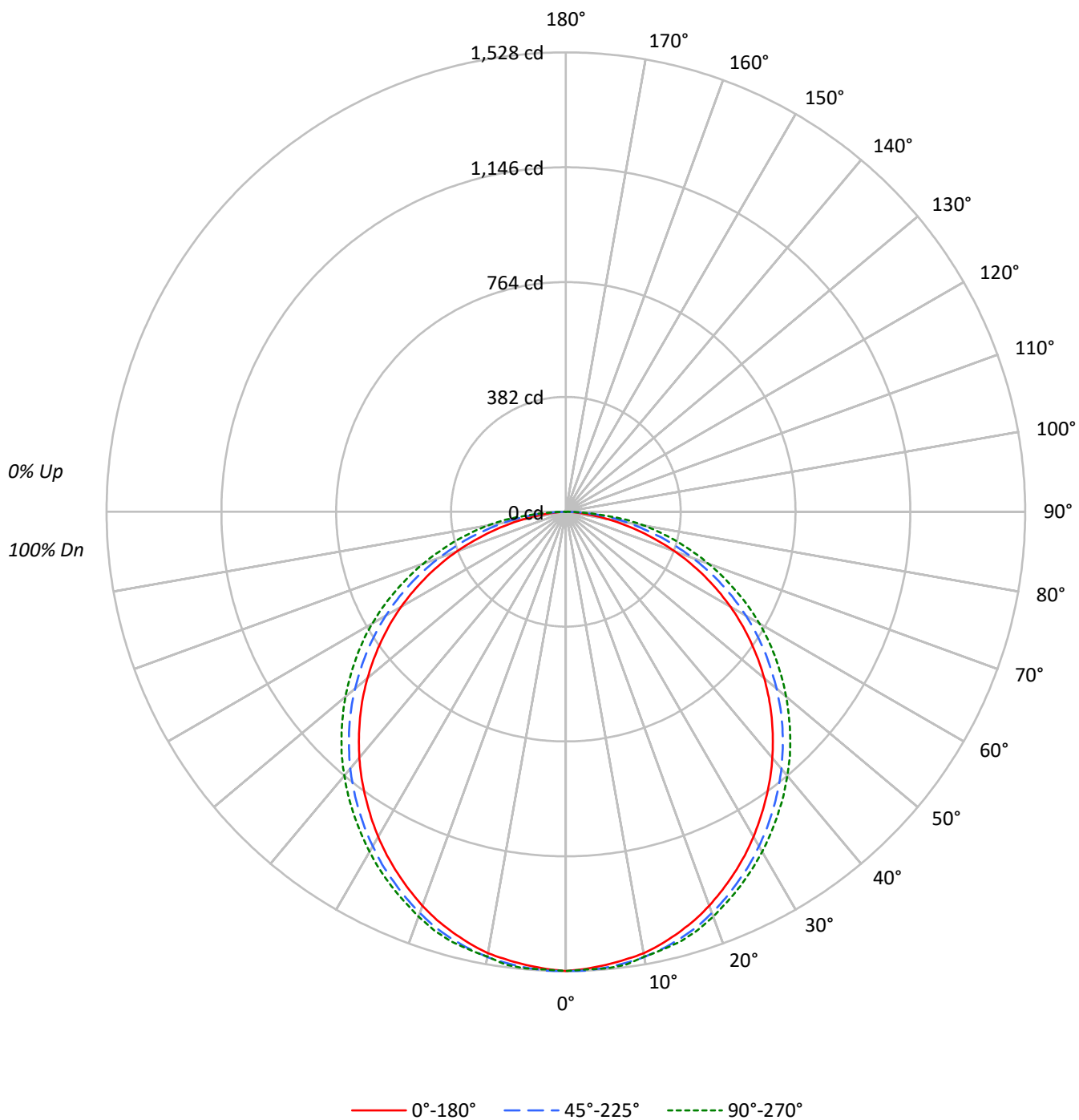
Lumens per Lamp: N/A
Luminaire Lumens: 4444.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	85	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	71	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	60	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	51	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	44	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	39	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	35	35	33
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	31	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	28	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2340	2340	2340
5°	2327	2340	2344
10°	2320	2339	2337
15°	2298	2331	2345
20°	2273	2315	2336
25°	2241	2293	2322
30°	2208	2272	2310
35°	2172	2250	2299
40°	2137	2231	2292
45°	2098	2207	2286
50°	2053	2180	2280
55°	2001	2152	2277
60°	1939	2120	2278
65°	1850	2075	2266
70°	1729	2012	2261
75°	1533	1935	2269
80°	1248	1838	2336
85°	807	1698	2016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2367 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.3
10°-20°	414.0	9.3
20°-30°	624.2	14.0
30°-40°	751.1	16.9
40°-50°	783.4	17.6
50°-60°	718.1	16.2
60°-70°	563.9	12.7
70°-80°	343.2	7.7
80°-90°	101.5	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°	1182.8	26.6
0°-40°	1933.8	43.5
0°-60°	3435.4	77.3
0°-90°	4444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4444.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1513	1523	1522	1520	1525	144
15°	1449	1464	1470	1472	1479	409
25°	1326	1344	1357	1365	1374	611
35°	1162	1180	1204	1221	1229	727
45°	968	988	1019	1043	1055	747
55°	750	769	806	838	853	670
65°	510	530	573	611	625	505
75°	259	283	327	366	383	275
85°	46	65	97	108	115	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527.7	1527.7	1527.7	1527.7	1527.7
2.5°	1522.0	1529.6	1527.7	1521.0	1523.9
5°	1513.4	1522.9	1522.0	1520.0	1524.8
7.5°	1502.8	1513.4	1514.3	1514.3	1520.0
10°	1491.4	1501.9	1503.8	1500.9	1502.8
12.5°	1472.2	1484.7	1488.5	1488.5	1491.4
15°	1449.3	1463.6	1470.3	1472.2	1478.9
17.5°	1424.4	1439.7	1448.3	1453.1	1458.9
20°	1394.8	1411.1	1420.6	1426.4	1433.0
22.5°	1361.3	1379.5	1390.0	1395.8	1403.4
25°	1326.0	1344.1	1356.6	1365.2	1373.8
27.5°	1288.7	1305.9	1323.1	1333.6	1341.3
30°	1248.5	1266.7	1284.9	1298.3	1305.9
32.5°	1205.5	1224.6	1245.7	1260.0	1268.6
35°	1161.5	1179.7	1203.6	1220.8	1229.4
37.5°	1116.6	1135.7	1160.6	1178.8	1189.3
40°	1068.8	1088.9	1115.7	1135.7	1146.2
42.5°	1019.1	1038.2	1067.9	1090.8	1103.2
45°	968.4	988.5	1019.1	1043.0	1055.4
47.5°	915.9	935.0	968.4	996.2	1006.7
50°	861.4	879.5	914.9	944.5	957.0
52.5°	805.9	825.0	860.4	892.0	905.3
55°	749.5	768.6	805.9	838.4	852.8
57.5°	692.1	711.3	749.5	783.0	800.2
60°	632.9	652.0	692.1	726.6	743.8
62.5°	571.7	591.8	632.9	668.2	686.4
65°	510.5	529.6	572.6	610.9	625.2
67.5°	449.3	468.4	510.5	548.7	566.0
70°	386.2	408.2	449.3	489.5	504.8
72.5°	320.3	345.1	386.2	428.3	443.6
75°	259.1	283.0	327.0	366.1	383.4
77.5°	198.8	224.7	265.8	305.9	323.1
80°	141.5	166.3	208.4	246.6	264.8
82.5°	89.9	111.9	153.9	188.3	201.7
85°	45.9	65.0	96.6	108.0	114.7
87.5°	13.4	22.9	34.4	43.0	47.8
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	14.45	16.11	14.82	16.43	16.74	15.19	16.85	15.55	17.16	17.48
	3H	16.22	17.73	16.60	18.05	18.41	17.27	18.77	17.64	19.10	19.46
	4H	16.84	18.26	17.24	18.61	18.98	18.13	19.55	18.53	19.90	20.27
	6H	17.25	18.57	17.66	18.93	19.32	18.88	20.20	19.29	20.56	20.95
	8H	17.35	18.61	17.78	19.00	19.40	19.17	20.43	19.60	20.82	21.22
	12H	17.40	18.61	17.83	18.99	19.42	19.37	20.57	19.79	20.96	21.38
4H	2H	15.22	16.64	15.62	16.99	17.36	15.79	17.21	16.19	17.56	17.93
	3H	17.21	18.41	17.62	18.80	19.20	18.11	19.30	18.51	19.70	20.10
	4H	17.96	19.04	18.39	19.45	19.89	19.12	20.21	19.56	20.62	21.06
	6H	18.48	19.43	18.94	19.87	20.33	20.03	20.98	20.48	21.42	21.87
	8H	18.63	19.52	19.08	19.96	20.42	20.40	21.29	20.86	21.73	22.19
	12H	18.71	19.51	19.19	19.98	20.45	20.65	21.45	21.13	21.93	22.39
8H	4H	18.40	19.29	18.86	19.73	20.20	19.42	20.31	19.88	20.75	21.22
	6H	19.06	19.81	19.56	20.29	20.77	20.48	21.22	20.97	21.71	22.18
	8H	19.27	19.94	19.78	20.44	20.93	20.95	21.62	21.46	22.12	22.61
	12H	19.41	20.00	19.92	20.49	21.05	21.30	21.89	21.81	22.38	22.94
12H	4H	18.48	19.28	18.96	19.76	20.23	19.45	20.25	19.93	20.72	21.19
	6H	19.19	19.85	19.69	20.36	20.84	20.53	21.20	21.04	21.70	22.19
	8H	19.46	20.05	19.97	20.54	21.10	21.07	21.66	21.57	22.15	22.71

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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