

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: P1589784

Luminaire Tested: 24CZSP-SB-47-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589784
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

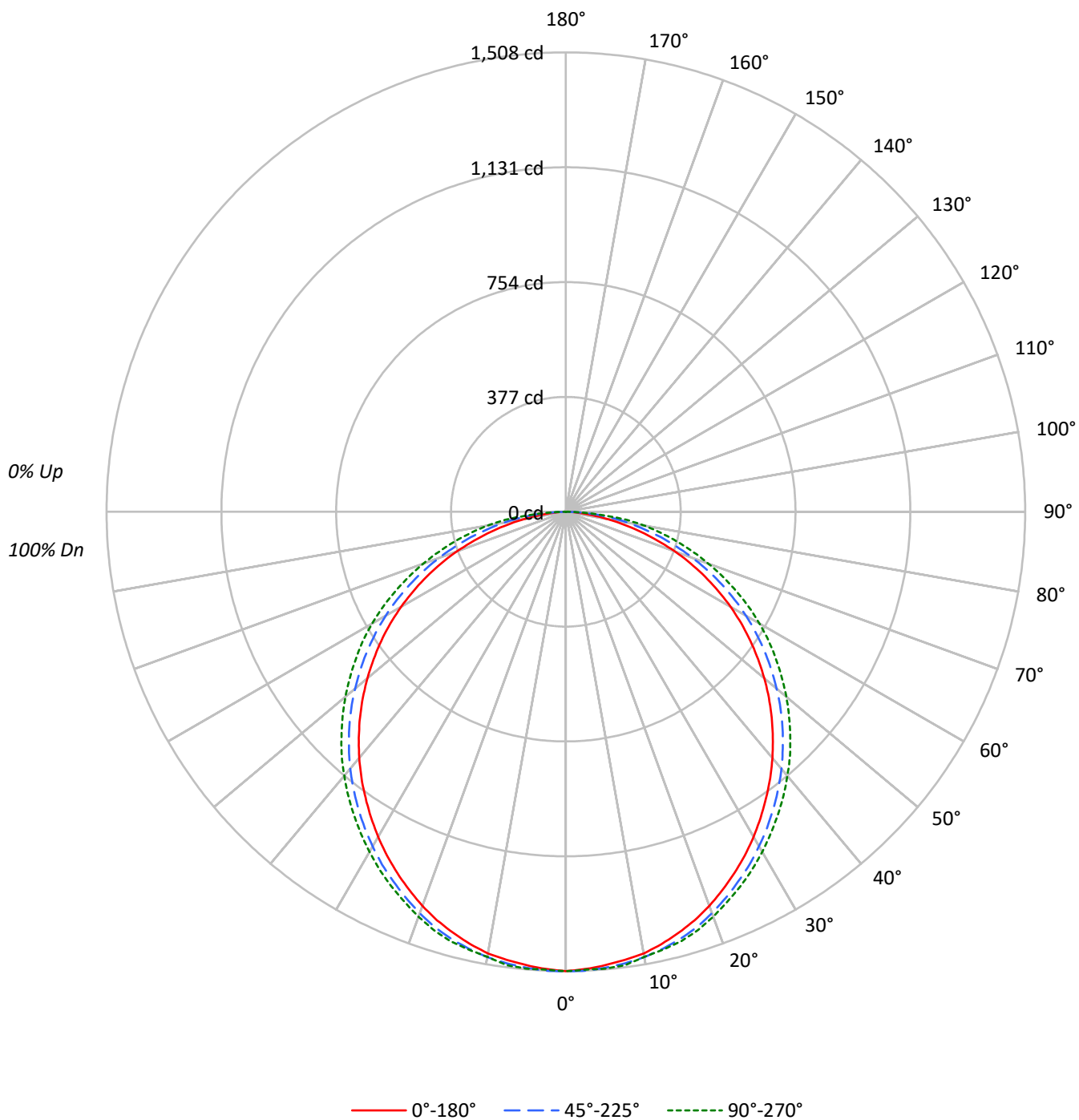
Lumens per Lamp: N/A
Luminaire Lumens: 4387.0 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2310	2310	2310
5°	2297	2310	2314
10°	2290	2309	2307
15°	2269	2302	2315
20°	2244	2286	2306
25°	2212	2263	2292
30°	2180	2243	2280
35°	2144	2222	2269
40°	2110	2202	2262
45°	2071	2179	2257
50°	2026	2152	2251
55°	1976	2124	2248
60°	1914	2093	2249
65°	1827	2049	2237
70°	1708	1987	2231
75°	1514	1910	2239
80°	1232	1814	2306
85°	796	1675	1989

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2336 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.7	3.3
10°-20°	408.7	9.3
20°-30°	616.2	14.0
30°-40°	741.4	16.9
40°-50°	773.4	17.6
50°-60°	708.9	16.2
60°-70°	556.7	12.7
70°-80°	338.8	7.7
80°-90°	100.2	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°	1167.6	26.6
0°-40°	1909.1	43.5
0°-60°	3391.3	77.3
0°-90°	4387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4387.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1494	1503	1502	1500	1505	142
15°	1431	1445	1452	1453	1460	404
25°	1309	1327	1339	1348	1356	603
35°	1147	1165	1188	1205	1214	718
45°	956	976	1006	1030	1042	737
55°	740	759	796	828	842	661
65°	504	523	565	603	617	499
75°	256	279	323	362	378	271
85°	45	64	95	107	113	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.1	1508.1	1508.1	1508.1	1508.1
2.5°	1502.4	1510.0	1508.1	1501.5	1504.3
5°	1493.9	1503.4	1502.4	1500.5	1505.3
7.5°	1483.6	1493.9	1494.9	1494.9	1500.5
10°	1472.2	1482.6	1484.5	1481.7	1483.6
12.5°	1453.4	1465.6	1469.4	1469.4	1472.2
15°	1430.7	1444.9	1451.5	1453.4	1460.0
17.5°	1406.2	1421.3	1429.8	1434.5	1440.1
20°	1376.9	1393.0	1402.4	1408.1	1414.7
22.5°	1343.9	1361.8	1372.2	1377.9	1385.4
25°	1309.0	1326.9	1339.2	1347.7	1356.2
27.5°	1272.2	1289.2	1306.1	1316.5	1324.1
30°	1232.5	1250.5	1268.4	1281.6	1289.2
32.5°	1190.1	1208.9	1229.7	1243.9	1252.3
35°	1146.6	1164.6	1188.2	1205.2	1213.7
37.5°	1102.3	1121.2	1145.7	1163.6	1174.0
40°	1055.1	1074.9	1101.3	1121.2	1131.5
42.5°	1006.0	1024.9	1054.2	1076.8	1089.1
45°	956.0	975.8	1006.0	1029.6	1041.9
47.5°	904.1	923.0	956.0	983.4	993.8
50°	850.3	868.2	903.2	932.4	944.7
52.5°	795.6	814.4	849.4	880.5	893.7
55°	739.9	758.8	795.6	827.7	841.8
57.5°	683.3	702.1	739.9	772.9	789.9
60°	624.8	643.6	683.3	717.2	734.2
62.5°	564.4	584.2	624.8	659.7	677.6
65°	504.0	522.8	565.3	603.1	617.2
67.5°	443.6	462.4	504.0	541.7	558.7
70°	381.3	403.0	443.6	483.2	498.3
72.5°	316.2	340.7	381.3	422.8	437.9
75°	255.8	279.3	322.8	361.5	378.4
77.5°	196.3	221.8	262.4	302.0	319.0
80°	139.7	164.2	205.7	243.5	261.4
82.5°	88.7	110.4	151.9	185.9	199.1
85°	45.3	64.2	95.3	106.6	113.2
87.5°	13.2	22.6	34.0	42.5	47.2
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	14.41	16.07	14.77	16.38	16.70	15.14	16.80	15.51	17.12	17.43
	3H	16.18	17.68	16.55	18.01	18.37	17.22	18.73	17.60	19.05	19.41
	4H	16.80	18.22	17.19	18.56	18.94	18.09	19.51	18.49	19.85	20.23
	6H	17.20	18.52	17.62	18.89	19.28	18.83	20.15	19.24	20.51	20.90
	8H	17.31	18.57	17.73	18.96	19.35	19.13	20.39	19.55	20.78	21.17
	12H	17.36	18.56	17.79	18.95	19.37	19.32	20.53	19.75	20.91	21.34
4H	2H	15.18	16.60	15.57	16.94	17.32	15.75	17.17	16.15	17.51	17.89
	3H	17.17	18.36	17.58	18.76	19.16	18.06	19.26	18.47	19.65	20.05
	4H	17.91	18.99	18.34	19.41	19.84	19.08	20.16	19.51	20.58	21.01
	6H	18.44	19.39	18.89	19.83	20.28	19.99	20.93	20.44	21.37	21.83
	8H	18.58	19.47	19.04	19.91	20.38	20.35	21.24	20.81	21.68	22.15
	12H	18.66	19.46	19.14	19.94	20.40	20.61	21.41	21.08	21.88	22.35
8H	4H	18.36	19.25	18.81	19.69	20.15	19.38	20.27	19.84	20.71	21.17
	6H	19.02	19.76	19.51	20.25	20.72	20.43	21.18	20.93	21.66	22.14
	8H	19.23	19.89	19.74	20.40	20.88	20.91	21.57	21.41	22.08	22.56
	12H	19.36	19.95	19.87	20.44	21.00	21.26	21.85	21.76	22.34	22.90
12H	4H	18.44	19.24	18.92	19.71	20.18	19.40	20.20	19.88	20.68	21.15
	6H	19.14	19.81	19.65	20.31	20.80	20.49	21.15	20.99	21.66	22.14
	8H	19.42	20.01	19.93	20.50	21.06	21.02	21.61	21.53	22.10	22.66