

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: P1589749

Luminaire Tested: 24CZSP-SB-42-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589749
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-42-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

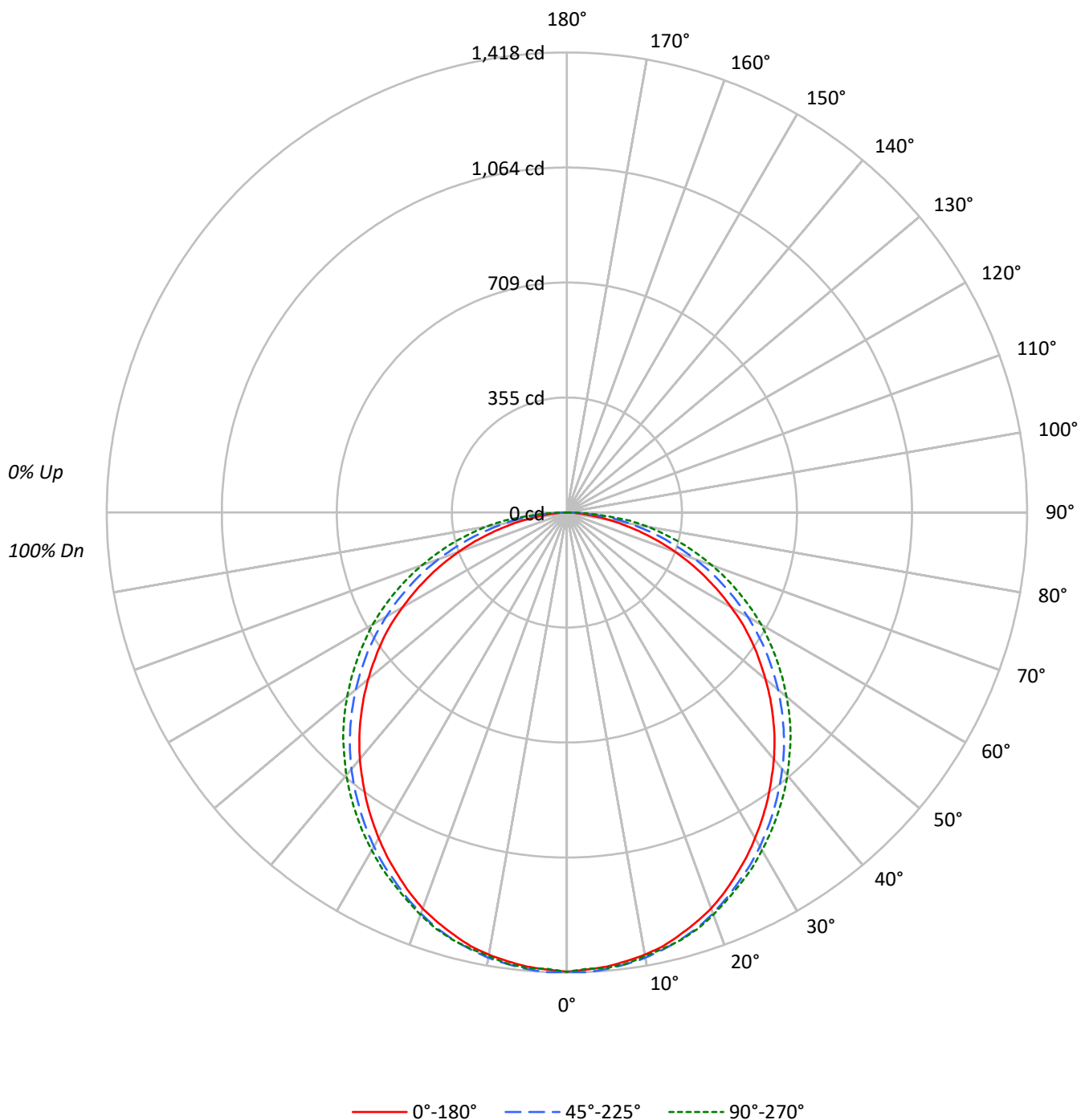
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4131.0 lumens
Efficiency: N/A
Efficacy: 143.9 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): 28.7
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°	2168	2168	2168
5°	2160	2172	2167
10°	2153	2168	2159
15°	2136	2159	2161
20°	2118	2143	2151
25°	2083	2120	2135
30°	2050	2103	2126
35°	2017	2083	2119
40°	1984	2065	2114
45°	1947	2045	2112
50°	1904	2023	2106
55°	1861	2001	2106
60°	1792	1971	2119
65°	1708	1933	2120
70°	1593	1879	2126
75°	1418	1811	2163
80°	1164	1735	2244
85°	768	1629	2028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	3.2
10°-20°	383.3	9.3
20°-30°	577.7	14.0
30°-40°	695.7	16.8
40°-50°	726.8	17.6
50°-60°	667.7	16.2
60°-70°	525.8	12.7
70°-80°	322.4	7.8
80°-90°	97.7	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°	1094.9	26.5
0°-40°	1790.5	43.3
0°-60°	3185.1	77.1
0°-90°	4131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1405	1408	1413	1411	1409	133
15°	1347	1353	1361	1367	1363	380
25°	1233	1241	1255	1268	1263	568
35°	1079	1093	1114	1134	1133	675
45°	899	918	944	970	975	693
55°	697	717	749	782	789	622
65°	471	496	533	569	585	466
75°	240	268	306	343	366	255
85°	44	65	93	103	115	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.5	1415.5	1415.5	1415.5	1415.5
2.5°	1410.3	1413.8	1418.2	1411.2	1407.7
5°	1405.0	1407.7	1412.9	1411.2	1409.4
7.5°	1395.4	1397.2	1404.2	1404.2	1402.4
10°	1384.1	1387.6	1393.7	1392.8	1388.4
12.5°	1369.2	1371.8	1378.8	1378.8	1376.2
15°	1347.3	1352.6	1361.3	1366.6	1363.1
17.5°	1324.6	1329.8	1341.2	1346.5	1344.7
20°	1299.2	1303.6	1315.0	1322.9	1319.4
22.5°	1267.8	1273.0	1286.1	1294.9	1291.4
25°	1232.8	1240.7	1254.7	1267.8	1263.4
27.5°	1197.8	1206.6	1224.1	1237.2	1235.4
30°	1159.4	1170.7	1189.1	1205.7	1202.2
32.5°	1120.0	1133.1	1152.4	1169.8	1169.0
35°	1078.9	1092.9	1113.9	1134.0	1133.1
37.5°	1035.2	1051.8	1073.7	1095.5	1096.4
40°	992.4	1008.1	1032.6	1056.2	1057.1
42.5°	946.9	963.5	989.7	1014.2	1015.1
45°	898.8	918.0	944.3	970.5	974.9
47.5°	849.8	870.0	897.1	925.0	930.3
50°	799.1	820.1	849.0	878.7	883.9
52.5°	747.5	769.4	799.1	828.9	836.7
55°	696.8	716.9	749.3	781.6	788.6
57.5°	643.5	661.9	696.8	730.9	739.7
60°	584.9	607.7	643.5	677.6	691.6
62.5°	528.1	552.6	589.3	623.4	639.1
65°	471.3	495.7	533.3	569.2	584.9
67.5°	413.6	438.9	479.1	513.2	530.7
70°	355.8	381.2	419.7	456.4	474.8
72.5°	298.1	325.2	362.8	400.4	418.8
75°	239.6	267.5	306.0	342.7	365.5
77.5°	184.5	211.6	250.1	287.7	306.9
80°	132.0	159.1	196.7	234.3	254.4
82.5°	83.9	109.3	146.0	177.5	195.8
85°	43.7	64.7	92.7	103.2	115.4
87.5°	13.1	25.4	35.8	40.2	49.8
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	14.20	15.86	14.57	16.18	16.49	14.95	16.61	15.31	16.92	17.24
	3H	15.96	17.47	16.34	17.80	18.16	17.04	18.55	17.42	18.88	19.24
	4H	16.59	18.01	16.99	18.36	18.73	17.93	19.35	18.33	19.70	20.07
	6H	17.00	18.32	17.41	18.69	19.08	18.70	20.02	19.11	20.38	20.77
	8H	17.11	18.37	17.53	18.76	19.16	19.01	20.27	19.43	20.66	21.06
	12H	17.16	18.37	17.59	18.75	19.18	19.22	20.43	19.65	20.81	21.24
4H	2H	14.97	16.40	15.37	16.74	17.12	15.55	16.97	15.95	17.32	17.70
	3H	16.97	18.16	17.37	18.56	18.96	17.88	19.08	18.29	19.47	19.87
	4H	17.72	18.81	18.15	19.22	19.65	18.91	20.00	19.35	20.41	20.85
	6H	18.26	19.21	18.71	19.65	20.10	19.85	20.80	20.30	21.24	21.69
	8H	18.40	19.30	18.86	19.74	20.20	20.23	21.12	20.69	21.56	22.03
	12H	18.49	19.29	18.97	19.77	20.24	20.50	21.31	20.98	21.78	22.25
8H	4H	18.17	19.06	18.63	19.51	19.97	19.21	20.11	19.67	20.55	21.01
	6H	18.85	19.59	19.34	20.08	20.55	20.30	21.04	20.79	21.53	22.00
	8H	19.07	19.74	19.58	20.24	20.73	20.79	21.46	21.29	21.96	22.44
	12H	19.22	19.81	19.72	20.30	20.86	21.16	21.75	21.67	22.24	22.80
12H	4H	18.26	19.06	18.73	19.53	20.00	19.24	20.05	19.72	20.52	20.99
	6H	18.98	19.65	19.48	20.15	20.64	20.35	21.02	20.86	21.53	22.01
	8H	19.27	19.86	19.77	20.35	20.91	20.91	21.50	21.41	21.99	22.55