

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: P1587728

Luminaire Tested: 22CZSP-SB-47-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587728
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: 22CZSP-SB-47-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

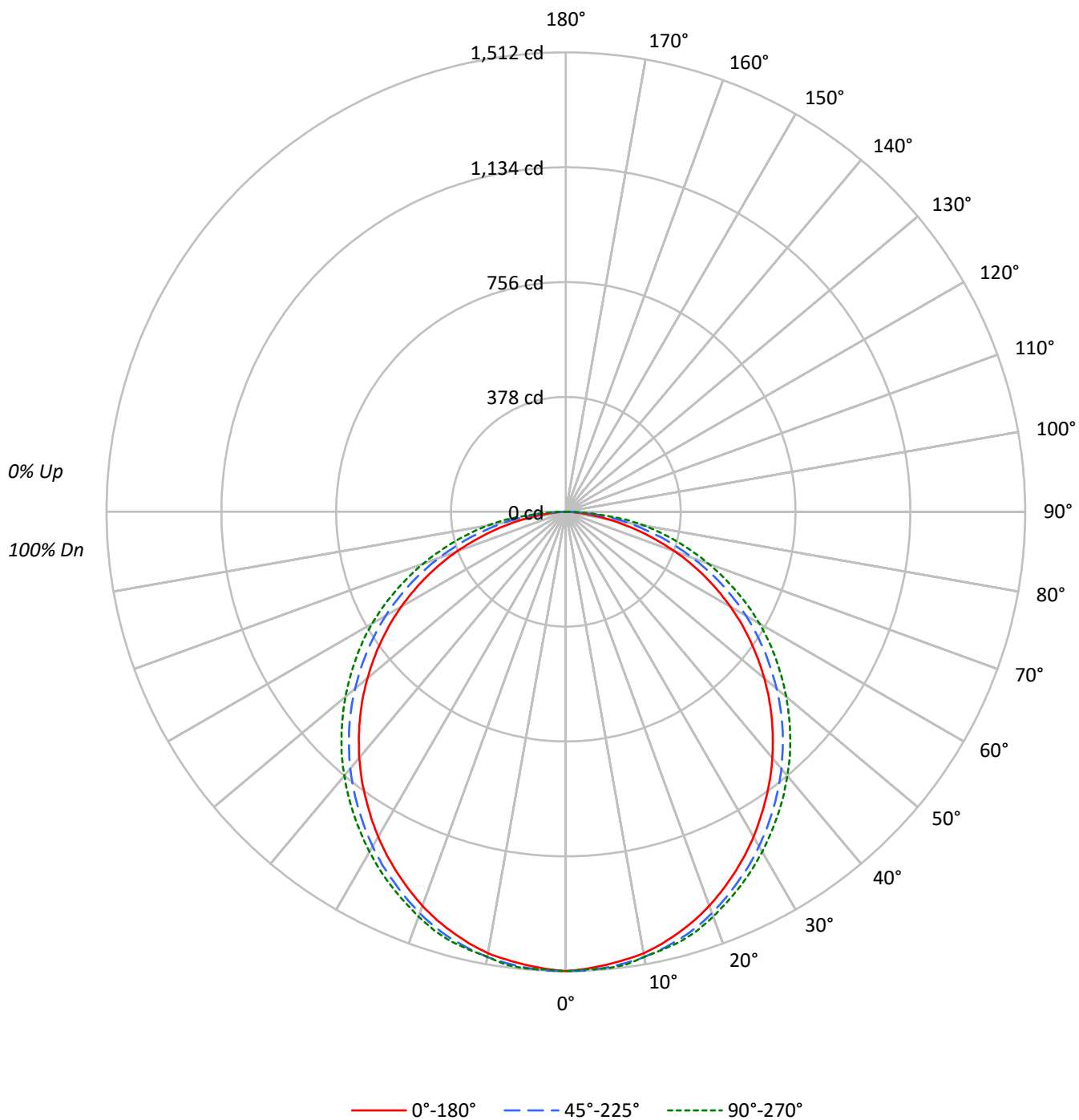
Lumens per Lamp: N/A
Luminaire Lumens: 4398.0 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
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	94	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	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4734	4734	4734
5°	4708	4734	4743
10°	4693	4732	4729
15°	4650	4717	4745
20°	4600	4685	4726
25°	4534	4638	4697
30°	4468	4598	4673
35°	4394	4553	4651
40°	4324	4513	4637
45°	4244	4466	4625
50°	4152	4411	4614
55°	4049	4354	4607
60°	3922	4290	4610
65°	3743	4199	4585
70°	3499	4071	4573
75°	3102	3915	4590
80°	2525	3720	4726
85°	1631	3435	4078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4788 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	3.3
10°-20°	409.7	9.3
20°-30°	617.7	14.0
30°-40°	743.3	16.9
40°-50°	775.3	17.6
50°-60°	710.7	16.2
60°-70°	558.1	12.7
70°-80°	339.6	7.7
80°-90°	100.5	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°	1170.5	26.6
0°-40°	1913.8	43.5
0°-60°	3399.8	77.3
0°-90°	4398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4398.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1498	1507	1506	1504	1509	142
15°	1434	1448	1455	1457	1464	405
25°	1312	1330	1342	1351	1360	605
35°	1150	1168	1191	1208	1217	719
45°	958	978	1009	1032	1044	739
55°	742	761	798	830	844	663
65°	505	524	567	605	619	500
75°	256	280	324	362	379	272
85°	45	64	96	107	114	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1511.9	1511.9	1511.9	1511.9	1511.9
2.5°	1506.2	1513.8	1511.9	1505.3	1508.1
5°	1497.7	1507.1	1506.2	1504.3	1509.0
7.5°	1487.3	1497.7	1498.6	1498.6	1504.3
10°	1475.9	1486.3	1488.2	1485.4	1487.3
12.5°	1457.0	1469.3	1473.1	1473.1	1475.9
15°	1434.3	1448.5	1455.1	1457.0	1463.6
17.5°	1409.7	1424.8	1433.4	1438.1	1443.8
20°	1380.4	1396.5	1405.9	1411.6	1418.2
22.5°	1347.3	1365.2	1375.6	1381.3	1388.9
25°	1312.3	1330.2	1342.5	1351.0	1359.6
27.5°	1275.4	1292.4	1309.4	1319.8	1327.4
30°	1235.6	1253.6	1271.6	1284.8	1292.4
32.5°	1193.0	1212.0	1232.8	1247.0	1255.5
35°	1149.5	1167.5	1191.1	1208.2	1216.7
37.5°	1105.1	1124.0	1148.6	1166.6	1177.0
40°	1057.7	1077.6	1104.1	1124.0	1134.4
42.5°	1008.6	1027.5	1056.8	1079.5	1091.8
45°	958.4	978.3	1008.6	1032.2	1044.5
47.5°	906.4	925.3	958.4	985.8	996.3
50°	852.4	870.4	905.4	934.8	947.1
52.5°	797.6	816.5	851.5	882.7	896.0
55°	741.7	760.7	797.6	829.7	843.9
57.5°	685.0	703.9	741.7	774.9	791.9
60°	626.3	645.2	685.0	719.0	736.1
62.5°	565.8	585.6	626.3	661.3	679.3
65°	505.2	524.1	566.7	604.6	618.8
67.5°	444.7	463.6	505.2	543.1	560.1
70°	382.2	404.0	444.7	484.4	499.5
72.5°	316.9	341.5	382.2	423.9	439.0
75°	256.4	280.0	323.6	362.4	379.4
77.5°	196.8	222.3	263.0	302.8	319.8
80°	140.0	164.6	206.3	244.1	262.1
82.5°	88.9	110.7	152.3	186.4	199.6
85°	45.4	64.3	95.6	106.9	113.5
87.5°	13.2	22.7	34.1	42.6	47.3
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	16.90	18.56	17.27	18.88	19.19	17.64	19.30	18.00	19.61	19.93
	3H	18.67	20.17	19.05	20.50	20.86	19.72	21.22	20.09	21.55	21.91
	4H	19.29	20.71	19.69	21.06	21.43	20.58	22.00	20.98	22.35	22.72
	6H	19.70	21.02	20.11	21.38	21.77	21.33	22.64	21.74	23.01	23.40
	8H	19.80	21.06	20.22	21.45	21.85	21.62	22.88	22.04	23.27	23.67
	12H	19.85	21.06	20.28	21.44	21.87	21.81	23.02	22.24	23.40	23.83
4H	2H	17.67	19.09	18.07	19.44	19.81	18.24	19.66	18.64	20.01	20.38
	3H	19.66	20.86	20.07	21.25	21.65	20.55	21.75	20.96	22.15	22.55
	4H	20.40	21.49	20.83	21.90	22.33	21.57	22.66	22.00	23.07	23.50
	6H	20.93	21.88	21.38	22.32	22.78	22.48	23.43	22.93	23.87	24.32
	8H	21.07	21.96	21.53	22.40	22.87	22.85	23.73	23.30	24.18	24.64
	12H	21.15	21.96	21.63	22.43	22.90	23.10	23.90	23.58	24.37	24.84
8H	4H	20.85	21.74	21.31	22.18	22.64	21.87	22.76	22.33	23.20	23.67
	6H	21.51	22.25	22.00	22.74	23.21	22.93	23.67	23.42	24.16	24.63
	8H	21.72	22.39	22.23	22.89	23.38	23.40	24.07	23.91	24.57	25.06
	12H	21.86	22.45	22.36	22.94	23.50	23.75	24.34	24.26	24.83	25.39
12H	4H	20.93	21.73	21.41	22.20	22.67	21.90	22.70	22.38	23.17	23.64
	6H	21.64	22.30	22.14	22.81	23.29	22.98	23.65	23.49	24.15	24.64
	8H	21.91	22.50	22.42	22.99	23.55	23.52	24.11	24.02	24.60	25.15