

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: P1586440

Luminaire Tested: 22CZSP-47-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586440
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-47-L850-S
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

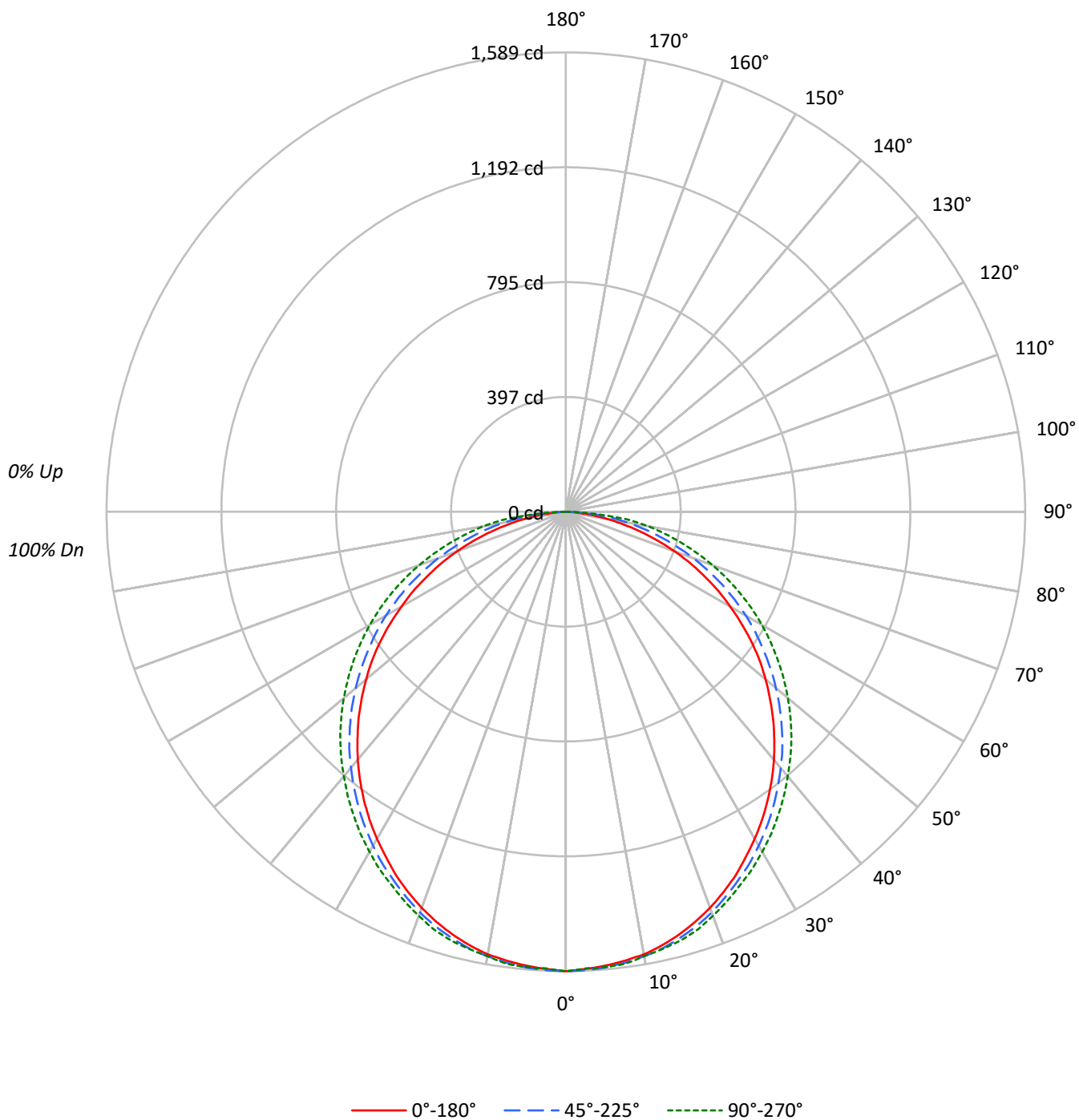
Lumens per Lamp: N/A
Luminaire Lumens: 4640.0 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586440

CATALOG NUMBER: 22CZSP-47-L850-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586440

CATALOG NUMBER: 22CZSP-47-L850-S

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	69
3	89	79	70	64	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°	4977	4977	4977
5°	4954	4973	4970
10°	4943	4966	4963
15°	4908	4948	4977
20°	4858	4916	4957
25°	4798	4865	4925
30°	4723	4823	4911
35°	4655	4776	4896
40°	4578	4728	4882
45°	4491	4680	4888
50°	4395	4623	4886
55°	4280	4558	4892
60°	4119	4508	4904
65°	3931	4420	4918
70°	3663	4298	4940
75°	3264	4127	4988
80°	2699	3929	5233
85°	1757	3550	4574

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5398 cd/sqm

TEST NUMBER: P1586440

CATALOG NUMBER: 22CZSP-47-L850-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	3.2
10°-20°	430.4	9.3
20°-30°	649.1	14.0
30°-40°	781.8	16.8
40°-50°	816.5	17.6
50°-60°	749.9	16.2
60°-70°	590.6	12.7
70°-80°	362.3	7.8
80°-90°	109.1	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°	1229.8	26.5
0°-40°	2011.6	43.4
0°-60°	3578.0	77.1
0°-90°	4640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4640.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1589	1589	1589	1589	1589	
5°	1576	1578	1582	1587	1581	150
15°	1514	1517	1526	1535	1535	427
25°	1389	1392	1408	1425	1425	639
35°	1218	1224	1249	1275	1281	762
45°	1014	1025	1057	1094	1104	782
55°	784	798	835	882	896	700
65°	530	549	597	646	664	525
75°	270	291	341	395	412	286
85°	49	67	99	125	127	64
90°	0	0	0	0	0	

TEST NUMBER: P1586440

CATALOG NUMBER: 22CZSP-47-L850-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1589.3	1589.3	1589.3	1589.3	1589.3
2.5°	1583.2	1586.3	1587.3	1588.3	1581.2
5°	1576.1	1578.1	1582.2	1587.3	1581.2
7.5°	1565.9	1567.9	1573.0	1580.2	1577.1
10°	1554.7	1555.7	1561.8	1566.9	1560.8
12.5°	1536.4	1539.4	1546.6	1550.6	1548.6
15°	1514.0	1517.0	1526.2	1535.4	1535.4
17.5°	1487.5	1491.6	1502.8	1515.0	1516.0
20°	1458.0	1461.0	1475.3	1487.5	1487.5
22.5°	1424.4	1428.5	1442.7	1455.9	1458.0
25°	1388.7	1391.8	1408.1	1425.4	1425.4
27.5°	1347.0	1353.1	1373.5	1390.8	1394.9
30°	1306.3	1311.4	1333.8	1355.2	1358.2
32.5°	1263.5	1269.6	1293.0	1316.5	1321.6
35°	1217.7	1223.8	1249.3	1274.7	1280.8
37.5°	1169.8	1177.0	1203.4	1233.0	1239.1
40°	1120.0	1128.1	1156.6	1188.2	1194.3
42.5°	1067.0	1078.2	1108.8	1141.3	1150.5
45°	1014.1	1025.3	1056.8	1093.5	1103.7
47.5°	958.1	971.3	1003.9	1042.6	1053.8
50°	902.1	915.3	948.9	990.7	1002.9
52.5°	845.1	858.3	892.9	936.7	949.9
55°	784.0	798.2	834.9	881.7	896.0
57.5°	720.8	739.2	777.9	825.7	840.0
60°	657.7	676.0	719.8	766.7	783.0
62.5°	595.6	612.9	657.7	707.6	724.9
65°	530.5	548.8	596.6	646.5	663.8
67.5°	466.3	484.6	532.5	584.4	602.7
70°	400.1	420.5	469.4	521.3	539.6
72.5°	334.0	355.3	405.2	458.2	475.5
75°	269.8	291.2	341.1	395.0	412.3
77.5°	206.7	230.1	279.0	334.0	350.2
80°	149.7	172.1	217.9	271.8	290.2
82.5°	95.7	115.1	160.9	211.8	225.0
85°	48.9	67.2	98.8	125.2	127.3
87.5°	15.3	21.4	32.6	48.9	49.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586440

CATALOG NUMBER: 22CZSP-47-L850-S

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	17.05	18.72	17.42	19.03	19.34	17.88	19.55	18.25	19.86	20.17
	3H	18.81	20.32	19.19	20.64	21.00	20.00	21.51	20.38	21.83	22.19
	4H	19.43	20.85	19.83	21.20	21.57	20.89	22.31	21.29	22.66	23.03
	6H	19.84	21.16	20.25	21.52	21.91	21.67	22.99	22.08	23.35	23.74
	8H	19.95	21.21	20.37	21.60	22.00	21.99	23.25	22.41	23.64	24.04
	12H	20.00	21.21	20.43	21.59	22.02	22.20	23.41	22.63	23.79	24.22
4H	2H	17.83	19.25	18.22	19.59	19.97	18.47	19.89	18.87	20.24	20.62
	3H	19.80	21.00	20.21	21.40	21.80	20.83	22.02	21.24	22.42	22.82
	4H	20.54	21.63	20.97	22.04	22.47	21.88	22.96	22.31	23.38	23.81
	6H	21.07	22.02	21.52	22.46	22.91	22.83	23.78	23.28	24.22	24.68
	8H	21.21	22.11	21.67	22.55	23.01	23.23	24.12	23.69	24.56	25.03
	12H	21.30	22.10	21.78	22.58	23.04	23.51	24.31	23.98	24.78	25.25
8H	4H	21.00	21.89	21.46	22.33	22.80	22.17	23.06	22.63	23.50	23.97
	6H	21.66	22.40	22.15	22.89	23.36	23.28	24.02	23.77	24.51	24.98
	8H	21.87	22.54	22.38	23.04	23.53	23.79	24.46	24.30	24.96	25.45
	12H	22.01	22.60	22.51	23.09	23.65	24.18	24.77	24.68	25.26	25.82
12H	4H	21.09	21.89	21.57	22.37	22.83	22.19	23.00	22.67	23.47	23.94
	6H	21.79	22.46	22.30	22.97	23.45	23.33	24.00	23.83	24.50	24.99
	8H	22.07	22.66	22.58	23.15	23.71	23.91	24.50	24.41	24.99	25.55