

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: P1586444

Luminaire Tested: 22CZSP-47-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586444
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-L935-S
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

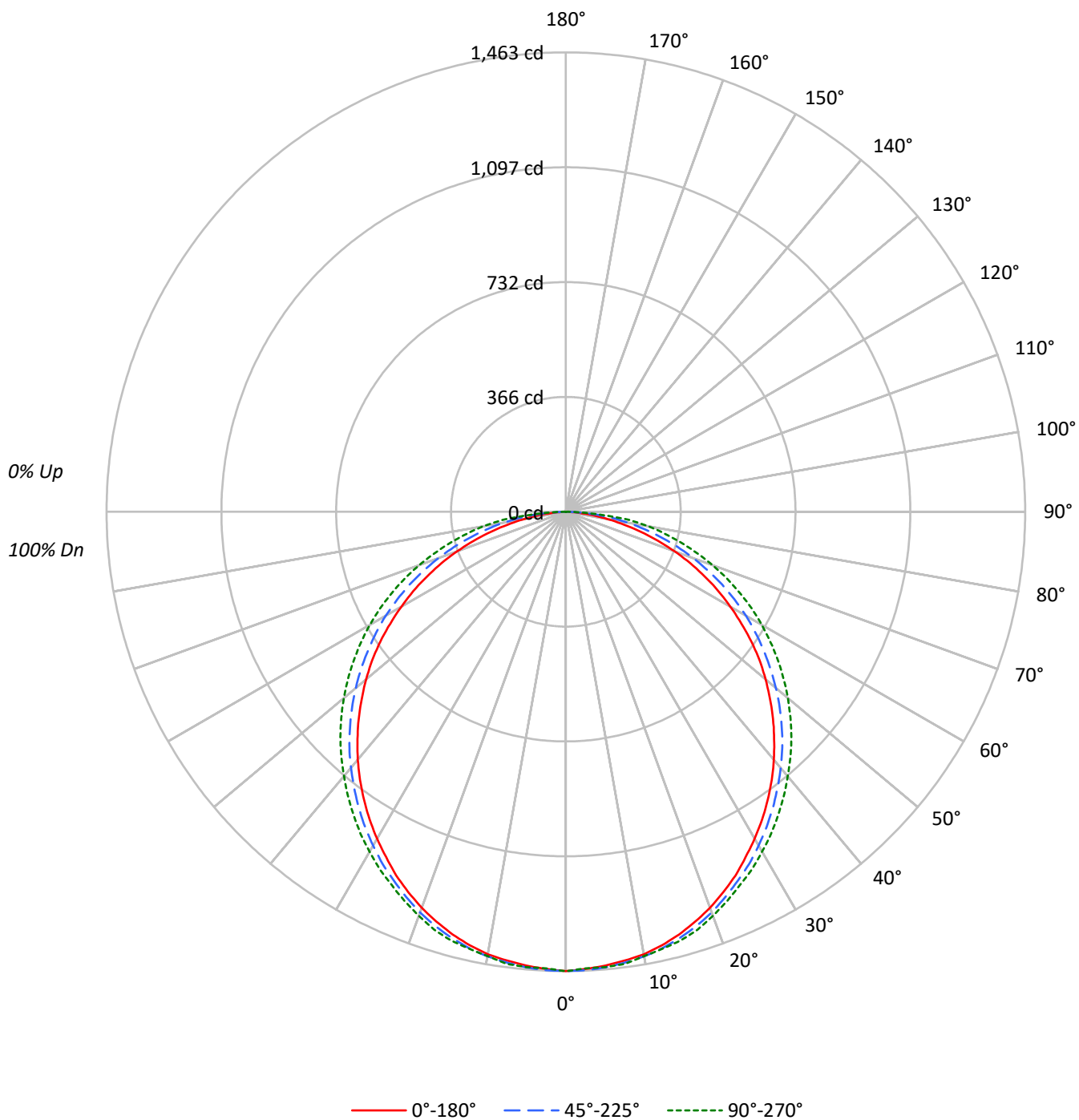
Lumens per Lamp: N/A
Luminaire Lumens: 4271.0 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

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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	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°	4581	4581	4581
5°	4560	4578	4575
10°	4550	4571	4568
15°	4518	4554	4582
20°	4472	4525	4563
25°	4417	4478	4533
30°	4348	4439	4520
35°	4285	4396	4507
40°	4214	4352	4494
45°	4133	4308	4499
50°	4045	4255	4497
55°	3939	4195	4502
60°	3791	4150	4513
65°	3618	4069	4527
70°	3372	3955	4547
75°	3005	3799	4593
80°	2485	3617	4817
85°	1617	3266	4207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4968 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	3.2
10°-20°	396.2	9.3
20°-30°	597.5	14.0
30°-40°	719.7	16.8
40°-50°	751.6	17.6
50°-60°	690.2	16.2
60°-70°	543.6	12.7
70°-80°	333.5	7.8
80°-90°	100.4	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°	1132.0	26.5
0°-40°	1851.7	43.4
0°-60°	3293.5	77.1
0°-90°	4271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1451	1453	1456	1461	1455	138
15°	1394	1396	1405	1413	1413	393
25°	1278	1281	1296	1312	1312	588
35°	1121	1126	1150	1173	1179	701
45°	933	944	973	1006	1016	720
55°	722	735	768	812	825	644
65°	488	505	549	595	611	483
75°	248	268	314	364	380	263
85°	45	62	91	115	117	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1457.3	1460.1	1461.1	1462.0	1455.4
5°	1450.7	1452.6	1456.4	1461.1	1455.4
7.5°	1441.4	1443.3	1447.9	1454.5	1451.7
10°	1431.1	1432.0	1437.6	1442.3	1436.7
12.5°	1414.2	1417.0	1423.6	1427.3	1425.4
15°	1393.6	1396.4	1404.8	1413.3	1413.3
17.5°	1369.2	1373.0	1383.3	1394.5	1395.5
20°	1342.0	1344.8	1358.0	1369.2	1369.2
22.5°	1311.1	1314.9	1328.0	1340.2	1342.0
25°	1278.3	1281.1	1296.1	1312.0	1312.0
27.5°	1239.9	1245.5	1264.3	1280.2	1283.9
30°	1202.4	1207.1	1227.7	1247.4	1250.2
32.5°	1163.0	1168.7	1190.2	1211.8	1216.5
35°	1120.9	1126.5	1149.9	1173.3	1179.0
37.5°	1076.8	1083.4	1107.7	1134.9	1140.5
40°	1030.9	1038.4	1064.6	1093.7	1099.3
42.5°	982.2	992.5	1020.6	1050.6	1059.0
45°	933.4	943.7	972.8	1006.5	1015.9
47.5°	881.9	894.1	924.1	959.7	970.0
50°	830.3	842.5	873.4	911.9	923.1
52.5°	777.9	790.0	821.9	862.2	874.4
55°	721.6	734.7	768.5	811.6	824.7
57.5°	663.5	680.4	716.0	760.0	773.2
60°	605.4	622.3	662.6	705.7	720.7
62.5°	548.2	564.2	605.4	651.3	667.3
65°	488.3	505.1	549.2	595.1	611.0
67.5°	429.2	446.1	490.1	537.9	554.8
70°	368.3	387.1	432.0	479.8	496.7
72.5°	307.4	327.1	373.0	421.7	437.7
75°	248.4	268.0	314.0	363.6	379.6
77.5°	190.2	211.8	256.8	307.4	322.4
80°	137.8	158.4	200.6	250.2	267.1
82.5°	88.1	105.9	148.1	194.9	207.1
85°	45.0	61.9	90.9	115.3	117.1
87.5°	14.1	19.7	30.0	45.0	45.9
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	16.77	18.43	17.13	18.74	19.06	17.60	19.26	17.96	19.57	19.89
	3H	18.52	20.03	18.90	20.35	20.71	19.71	21.22	20.09	21.55	21.91
	4H	19.14	20.56	19.54	20.91	21.28	20.60	22.02	21.00	22.37	22.75
	6H	19.55	20.87	19.96	21.23	21.63	21.38	22.70	21.79	23.07	23.46
	8H	19.66	20.92	20.08	21.31	21.71	21.70	22.96	22.13	23.35	23.75
	12H	19.71	20.92	20.14	21.30	21.73	21.91	23.12	22.34	23.51	23.93
4H	2H	17.54	18.96	17.94	19.31	19.68	18.18	19.61	18.58	19.95	20.33
	3H	19.51	20.71	19.92	21.11	21.51	20.54	21.74	20.95	22.13	22.53
	4H	20.25	21.34	20.68	21.75	22.19	21.59	22.68	22.02	23.09	23.52
	6H	20.78	21.73	21.23	22.17	22.63	22.54	23.50	23.00	23.93	24.39
	8H	20.93	21.82	21.39	22.26	22.72	22.94	23.83	23.40	24.27	24.74
	12H	21.01	21.81	21.49	22.29	22.76	23.22	24.02	23.70	24.49	24.96
8H	4H	20.71	21.60	21.17	22.04	22.51	21.88	22.77	22.34	23.21	23.68
	6H	21.37	22.12	21.86	22.60	23.08	22.99	23.74	23.48	24.22	24.70
	8H	21.58	22.25	22.09	22.76	23.24	23.50	24.17	24.01	24.68	25.16
	12H	21.72	22.31	22.23	22.80	23.36	23.89	24.48	24.39	24.97	25.53
12H	4H	20.80	21.60	21.28	22.08	22.55	21.90	22.71	22.38	23.18	23.65
	6H	21.50	22.17	22.01	22.68	23.16	23.04	23.71	23.55	24.21	24.70
	8H	21.78	22.37	22.29	22.86	23.42	23.62	24.21	24.12	24.70	25.26