

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: P1586449

Luminaire Tested: 22CZSP-47-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-772-10)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-47-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

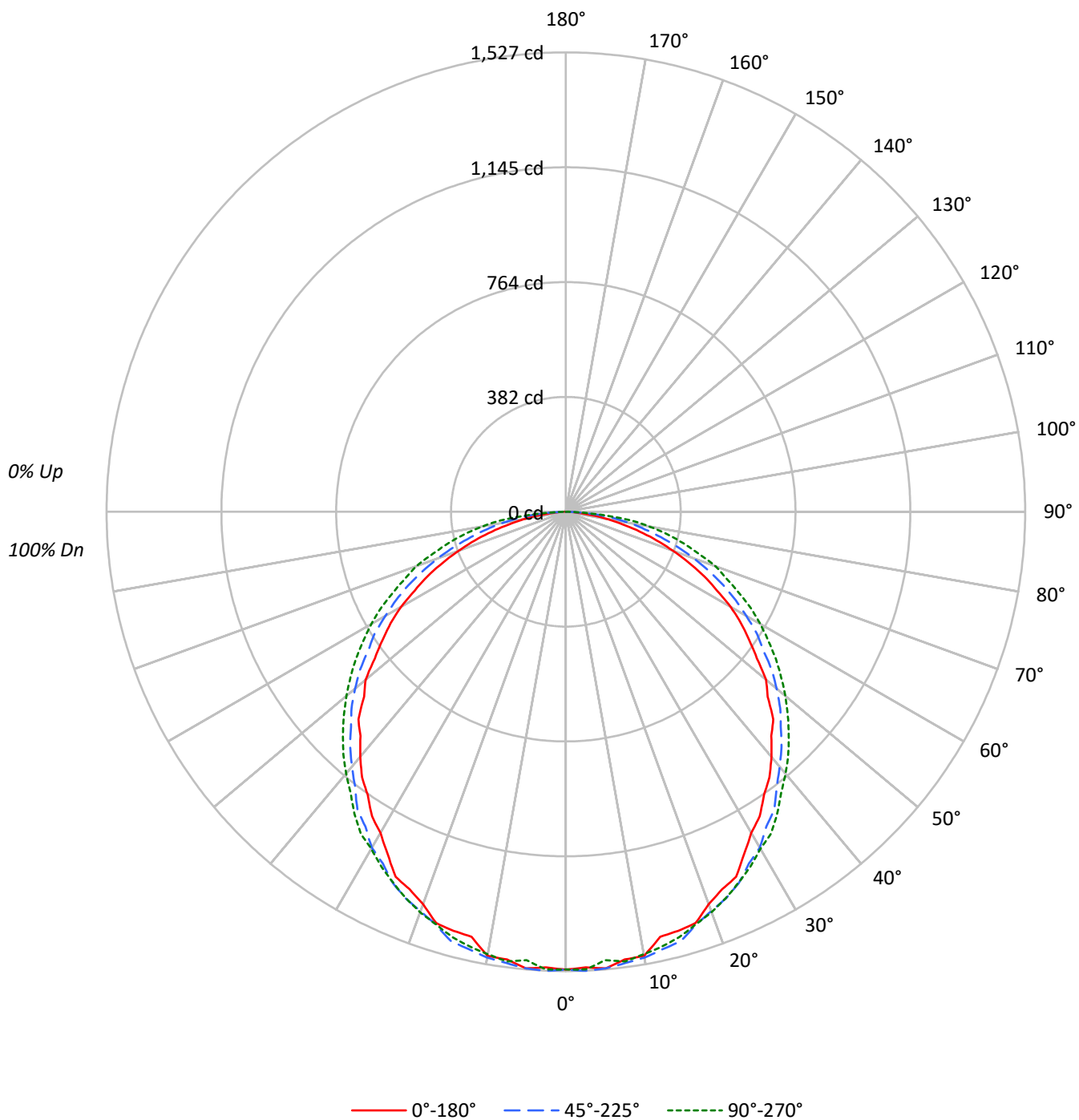
Lumens per Lamp: N/A
Luminaire Lumens: 4443.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	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	31	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°	4765	4765	4765
5°	4789	4789	4703
10°	4766	4784	4748
15°	4675	4789	4743
20°	4626	4708	4721
25°	4626	4704	4698
30°	4457	4663	4677
35°	4390	4618	4684
40°	4346	4520	4644
45°	4318	4473	4641
50°	4233	4454	4639
55°	4061	4371	4650
60°	3964	4338	4676
65°	3763	4275	4689
70°	3470	4138	4850
75°	3084	3955	4895
80°	2562	3879	5074
85°	1566	3471	4290

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5251 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	3.2
10°-20°	412.3	9.3
20°-30°	621.9	14.0
30°-40°	747.0	16.8
40°-50°	779.8	17.6
50°-60°	718.0	16.2
60°-70°	567.0	12.8
70°-80°	349.2	7.9
80°-90°	103.5	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°	1178.6	26.5
0°-40°	1925.6	43.3
0°-60°	3423.4	77.1
0°-90°	4443.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4443.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1522	1522	1522	1522	1522	
5°	1524	1508	1524	1526	1496	144
15°	1442	1462	1477	1471	1463	408
25°	1339	1348	1362	1356	1360	610
35°	1148	1169	1208	1214	1225	722
45°	975	983	1010	1032	1048	746
55°	744	764	801	837	852	668
65°	508	526	577	619	633	500
75°	255	280	327	379	405	270
85°	44	62	97	115	119	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1521.7	1521.7	1521.7	1521.7	1521.7
2.5°	1516.0	1532.1	1527.4	1530.3	1522.7
5°	1523.6	1508.5	1523.6	1525.5	1496.1
7.5°	1500.9	1502.8	1513.2	1516.0	1507.5
10°	1499.0	1504.7	1504.7	1495.2	1493.3
12.5°	1446.9	1475.3	1489.5	1496.1	1480.0
15°	1442.1	1462.0	1477.2	1470.6	1463.0
17.5°	1433.6	1427.9	1438.3	1445.9	1437.4
20°	1388.1	1397.6	1412.8	1414.7	1416.6
22.5°	1357.8	1360.6	1391.0	1393.8	1390.0
25°	1338.9	1348.3	1361.6	1355.9	1359.7
27.5°	1282.9	1305.7	1318.0	1329.4	1329.4
30°	1232.7	1259.3	1289.6	1293.4	1293.4
32.5°	1199.6	1217.6	1240.3	1247.9	1268.7
35°	1148.4	1169.2	1208.1	1213.8	1225.2
37.5°	1112.4	1133.2	1151.2	1171.1	1175.9
40°	1063.1	1084.9	1105.8	1128.5	1136.1
42.5°	1011.0	1033.8	1061.2	1084.9	1094.4
45°	975.0	982.6	1010.1	1031.9	1048.0
47.5°	909.6	931.4	966.5	994.0	1000.6
50°	868.9	877.4	914.4	951.3	952.3
52.5°	800.7	826.2	862.2	897.3	902.0
55°	743.8	763.7	800.7	836.7	851.8
57.5°	690.7	705.9	753.3	789.3	797.8
60°	632.9	649.1	692.6	734.3	746.7
62.5°	565.7	588.4	635.8	675.6	692.6
65°	507.9	525.9	577.0	618.7	632.9
67.5°	442.5	467.1	515.5	561.9	577.0
70°	379.0	403.6	452.0	500.3	529.7
72.5°	316.5	342.1	390.4	446.3	462.4
75°	254.9	279.5	326.9	379.0	404.6
77.5°	194.2	220.8	269.1	321.2	345.8
80°	142.1	163.0	215.1	260.6	281.4
82.5°	88.1	109.9	158.2	200.9	218.9
85°	43.6	62.5	96.6	114.7	119.4
87.5°	13.3	19.9	30.3	39.8	45.5
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	16.89	18.55	17.26	18.87	19.18	17.71	19.38	18.08	19.69	20.00
	3H	18.64	20.15	19.02	20.48	20.84	19.86	21.37	20.24	21.70	22.05
	4H	19.26	20.68	19.66	21.03	21.40	20.77	22.20	21.17	22.54	22.92
	6H	19.66	20.98	20.07	21.35	21.74	21.58	22.90	21.99	23.26	23.65
	8H	19.76	21.03	20.19	21.42	21.81	21.90	23.16	22.32	23.55	23.95
	12H	19.81	21.02	20.24	21.40	21.83	22.10	23.31	22.53	23.70	24.12
4H	2H	17.68	19.10	18.08	19.45	19.83	18.32	19.74	18.72	20.09	20.46
	3H	19.66	20.85	20.06	21.25	21.65	20.70	21.90	21.11	22.29	22.69
	4H	20.39	21.47	20.82	21.89	22.32	21.77	22.85	22.20	23.27	23.70
	6H	20.91	21.86	21.36	22.30	22.75	22.73	23.69	23.19	24.13	24.58
	8H	21.05	21.94	21.51	22.38	22.85	23.13	24.02	23.59	24.46	24.93
	12H	21.12	21.93	21.60	22.40	22.87	23.40	24.20	23.88	24.68	25.14
8H	4H	20.85	21.75	21.31	22.19	22.65	22.06	22.95	22.51	23.39	23.85
	6H	21.51	22.25	22.00	22.74	23.21	23.18	23.93	23.67	24.41	24.89
	8H	21.71	22.38	22.22	22.89	23.37	23.69	24.36	24.20	24.86	25.35
	12H	21.84	22.43	22.35	22.92	23.48	24.06	24.65	24.56	25.14	25.70
12H	4H	20.94	21.75	21.42	22.22	22.69	22.08	22.88	22.56	23.36	23.83
	6H	21.65	22.32	22.15	22.82	23.31	23.23	23.90	23.74	24.40	24.89
	8H	21.92	22.51	22.43	23.00	23.56	23.80	24.40	24.31	24.88	25.44