

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: P1586687

Luminaire Tested: 22CZSP-A-47-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586687
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-A-47-L940
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

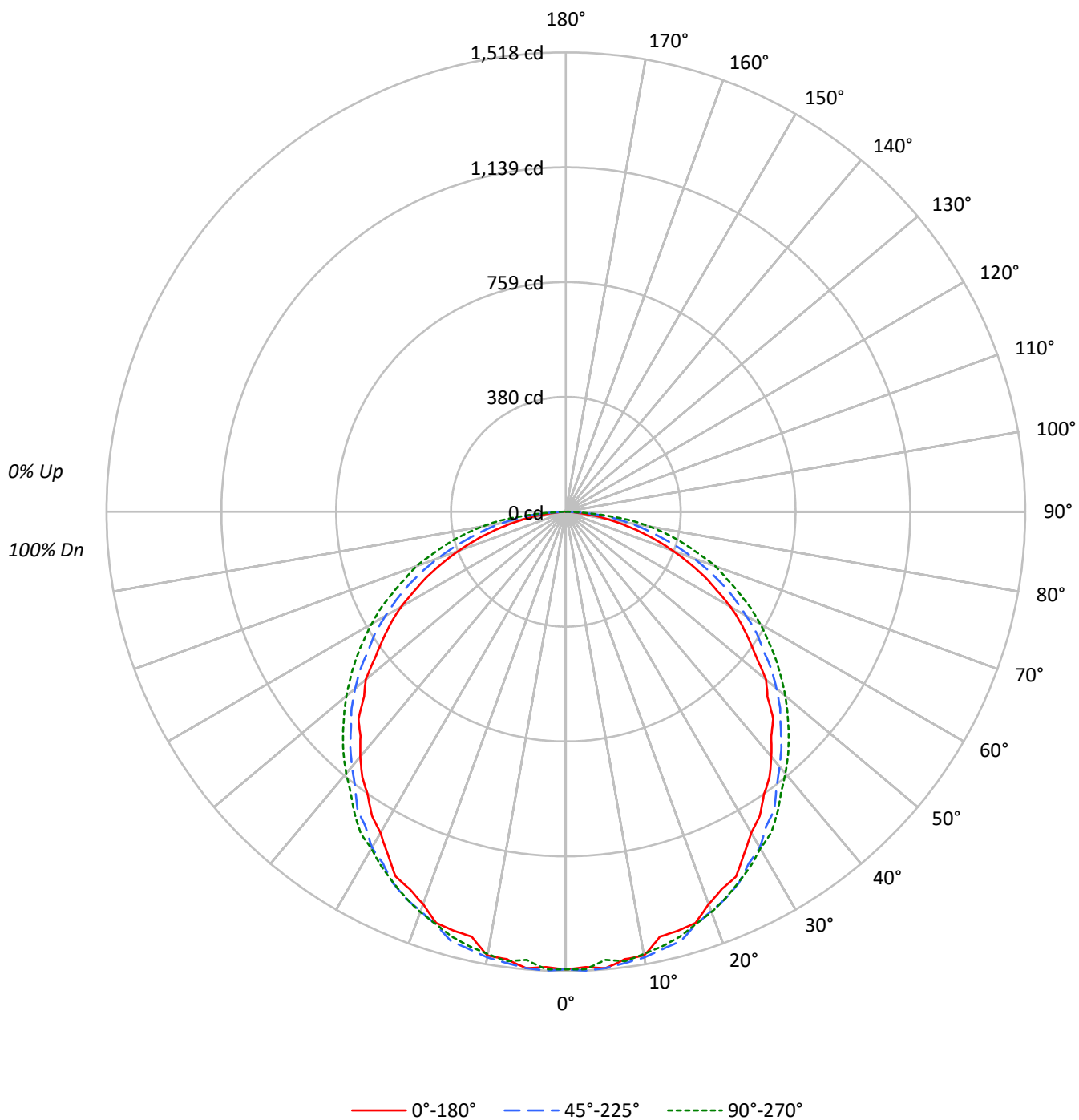
Lumens per Lamp: N/A
Luminaire Lumens: 4415.0 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	4735	4735	4735
5°	4759	4759	4673
10°	4736	4754	4718
15°	4645	4759	4713
20°	4597	4678	4691
25°	4597	4675	4668
30°	4429	4634	4647
35°	4362	4589	4654
40°	4318	4492	4615
45°	4291	4445	4612
50°	4206	4426	4610
55°	4035	4343	4621
60°	3939	4311	4646
65°	3739	4249	4660
70°	3448	4112	4818
75°	3065	3930	4864
80°	2546	3854	5042
85°	1556	3449	4261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5218 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	3.2
10°-20°	409.7	9.3
20°-30°	618.0	14.0
30°-40°	742.3	16.8
40°-50°	774.9	17.6
50°-60°	713.5	16.2
60°-70°	563.4	12.8
70°-80°	346.9	7.9
80°-90°	102.8	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°	1171.2	26.5
0°-40°	1913.5	43.3
0°-60°	3401.8	77.1
0°-90°	4415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1514	1499	1514	1516	1487	143
15°	1433	1453	1468	1461	1454	405
25°	1330	1340	1353	1347	1351	606
35°	1141	1162	1200	1206	1217	717
45°	969	976	1004	1025	1041	741
55°	739	759	796	831	846	664
65°	505	523	573	615	629	497
75°	253	278	325	377	402	269
85°	43	62	96	114	119	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.1	1512.1	1512.1	1512.1	1512.1
2.5°	1506.5	1522.5	1517.8	1520.6	1513.1
5°	1514.0	1499.0	1514.0	1515.9	1486.7
7.5°	1491.4	1493.3	1503.7	1506.5	1498.0
10°	1489.5	1495.2	1495.2	1485.8	1483.9
12.5°	1437.8	1466.0	1480.1	1486.7	1470.7
15°	1433.0	1452.8	1467.9	1461.3	1453.8
17.5°	1424.6	1418.9	1429.3	1436.8	1428.3
20°	1379.4	1388.8	1403.9	1405.7	1407.6
22.5°	1349.2	1352.1	1382.2	1385.0	1381.3
25°	1330.4	1339.8	1353.0	1347.4	1351.1
27.5°	1274.9	1297.5	1309.7	1321.0	1321.0
30°	1225.0	1251.3	1281.5	1285.2	1285.2
32.5°	1192.0	1209.9	1232.5	1240.0	1260.7
35°	1141.2	1161.9	1200.5	1206.1	1217.4
37.5°	1105.4	1126.1	1144.0	1163.8	1168.5
40°	1056.4	1078.1	1098.8	1121.4	1128.9
42.5°	1004.6	1027.2	1054.5	1078.1	1087.5
45°	968.9	976.4	1003.7	1025.4	1041.4
47.5°	903.9	925.5	960.4	987.7	994.3
50°	863.4	871.9	908.6	945.3	946.3
52.5°	795.6	821.0	856.8	891.7	896.4
55°	739.1	758.9	795.6	831.4	846.5
57.5°	686.4	701.5	748.5	784.3	792.8
60°	629.0	645.0	688.3	729.7	741.9
62.5°	562.1	584.7	631.8	671.3	688.3
65°	504.7	522.6	573.4	614.8	629.0
67.5°	439.7	464.2	512.2	558.3	573.4
70°	376.6	401.1	449.1	497.1	526.3
72.5°	314.5	339.9	387.9	443.5	459.5
75°	253.3	277.8	324.8	376.6	402.0
77.5°	193.0	219.4	267.4	319.2	343.7
80°	141.2	161.9	213.7	258.9	279.6
82.5°	87.6	109.2	157.2	199.6	217.5
85°	43.3	62.1	96.0	113.9	118.6
87.5°	13.2	19.8	30.1	39.5	45.2
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	16.87	18.53	17.23	18.85	19.16	17.69	19.35	18.06	19.67	19.98
	3H	18.62	20.13	19.00	20.46	20.82	19.84	21.35	20.22	21.67	22.03
	4H	19.24	20.66	19.63	21.01	21.38	20.75	22.18	21.15	22.52	22.90
	6H	19.64	20.96	20.05	21.32	21.71	21.55	22.88	21.96	23.24	23.63
	8H	19.74	21.01	20.17	21.39	21.79	21.88	23.14	22.30	23.53	23.93
	12H	19.79	21.00	20.22	21.38	21.81	22.08	23.29	22.51	23.67	24.10
4H	2H	17.66	19.08	18.06	19.43	19.81	18.30	19.72	18.69	20.07	20.44
	3H	19.63	20.83	20.04	21.23	21.63	20.68	21.88	21.09	22.27	22.67
	4H	20.37	21.45	20.80	21.87	22.30	21.74	22.83	22.17	23.24	23.68
	6H	20.89	21.84	21.34	22.28	22.73	22.71	23.66	23.16	24.10	24.56
	8H	21.03	21.92	21.48	22.36	22.82	23.11	24.00	23.57	24.44	24.91
	12H	21.10	21.91	21.58	22.38	22.85	23.38	24.18	23.85	24.65	25.12
8H	4H	20.83	21.72	21.29	22.16	22.63	22.03	22.93	22.49	23.37	23.83
	6H	21.49	22.23	21.98	22.72	23.19	23.16	23.90	23.65	24.39	24.86
	8H	21.69	22.36	22.20	22.86	23.35	23.67	24.33	24.17	24.84	25.32
	12H	21.82	22.41	22.33	22.90	23.46	24.04	24.63	24.54	25.12	25.68
12H	4H	20.92	21.73	21.40	22.20	22.67	22.06	22.86	22.54	23.34	23.80
	6H	21.62	22.29	22.13	22.80	23.28	23.21	23.88	23.71	24.38	24.87
	8H	21.90	22.49	22.40	22.98	23.54	23.78	24.37	24.29	24.86	25.42