

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: P1586446

Luminaire Tested: 22CZSP-47-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586446
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-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

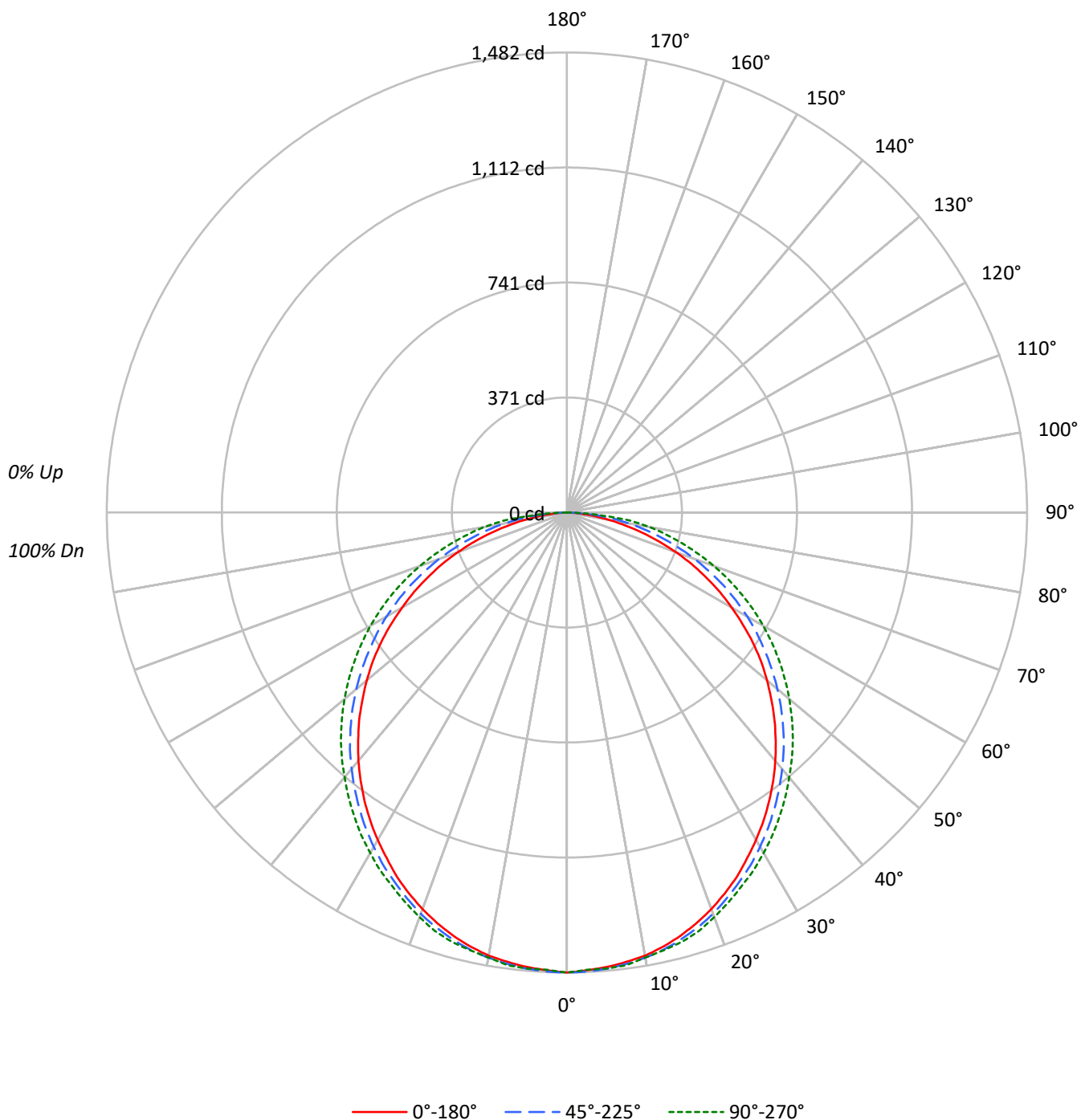
Lumens per Lamp: N/A
Luminaire Lumens: 4327.0 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	4641	4641	4641
5°	4620	4638	4635
10°	4610	4631	4628
15°	4577	4614	4642
20°	4531	4585	4623
25°	4475	4537	4592
30°	4405	4497	4580
35°	4341	4453	4566
40°	4269	4409	4552
45°	4188	4364	4558
50°	4098	4311	4556
55°	3991	4251	4561
60°	3842	4204	4572
65°	3665	4123	4587
70°	3416	4007	4607
75°	3044	3849	4652
80°	2517	3664	4880
85°	1638	3309	4265

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	3.2
10°-20°	401.4	9.3
20°-30°	605.3	14.0
30°-40°	729.1	16.8
40°-50°	761.4	17.6
50°-60°	699.3	16.2
60°-70°	550.8	12.7
70°-80°	337.9	7.8
80°-90°	101.7	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°	1146.8	26.5
0°-40°	1875.9	43.4
0°-60°	3336.6	77.1
0°-90°	4327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1470	1472	1476	1480	1474	140
15°	1412	1415	1423	1432	1432	398
25°	1295	1298	1313	1329	1329	596
35°	1136	1141	1165	1189	1194	710
45°	946	956	986	1020	1029	729
55°	731	744	779	822	836	653
65°	495	512	556	603	619	489
75°	252	272	318	368	384	267
85°	46	63	92	117	119	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1482.1	1482.1	1482.1	1482.1	1482.1
2.5°	1476.4	1479.3	1480.2	1481.2	1474.5
5°	1469.8	1471.7	1475.5	1480.2	1474.5
7.5°	1460.3	1462.2	1466.9	1473.6	1470.7
10°	1449.8	1450.8	1456.5	1461.2	1455.5
12.5°	1432.7	1435.6	1442.2	1446.0	1444.1
15°	1411.9	1414.7	1423.2	1431.8	1431.8
17.5°	1387.2	1391.0	1401.4	1412.8	1413.8
20°	1359.6	1362.5	1375.8	1387.2	1387.2
22.5°	1328.3	1332.1	1345.4	1357.7	1359.6
25°	1295.1	1297.9	1313.1	1329.2	1329.2
27.5°	1256.1	1261.8	1280.8	1297.0	1300.8
30°	1218.2	1222.9	1243.8	1263.7	1266.6
32.5°	1178.3	1184.0	1205.8	1227.7	1232.4
35°	1135.6	1141.3	1165.0	1188.7	1194.4
37.5°	1090.9	1097.6	1122.3	1149.8	1155.5
40°	1044.4	1052.0	1078.6	1108.0	1113.7
42.5°	995.0	1005.5	1034.0	1064.3	1072.9
45°	945.7	956.1	985.5	1019.7	1029.2
47.5°	893.4	905.8	936.2	972.3	982.7
50°	841.2	853.6	884.9	923.8	935.2
52.5°	788.1	800.4	832.7	873.5	885.8
55°	731.1	744.4	778.6	822.2	835.5
57.5°	672.2	689.3	725.4	770.0	783.3
60°	613.4	630.4	671.3	714.9	730.1
62.5°	555.4	571.6	613.4	659.9	676.0
65°	494.7	511.8	556.4	602.9	619.1
67.5°	434.9	451.9	496.6	545.0	562.1
70°	373.1	392.1	437.7	486.1	503.2
72.5°	311.4	331.4	377.9	427.3	443.4
75°	251.6	271.5	318.1	368.4	384.5
77.5°	192.7	214.6	260.2	311.4	326.6
80°	139.6	160.5	203.2	253.5	270.6
82.5°	89.2	107.3	150.0	197.5	209.8
85°	45.6	62.7	92.1	116.8	118.7
87.5°	14.2	19.9	30.4	45.6	46.5
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	16.81	18.47	17.18	18.79	19.10	17.64	19.30	18.01	19.62	19.93
	3H	18.57	20.07	18.94	20.40	20.76	19.76	21.26	20.13	21.59	21.95
	4H	19.18	20.61	19.58	20.95	21.33	20.65	22.07	21.04	22.42	22.79
	6H	19.60	20.92	20.01	21.28	21.67	21.43	22.75	21.84	23.11	23.50
	8H	19.70	20.97	20.13	21.35	21.75	21.75	23.01	22.17	23.40	23.80
	12H	19.76	20.97	20.18	21.35	21.78	21.96	23.17	22.39	23.55	23.98
4H	2H	17.58	19.01	17.98	19.35	19.73	18.23	19.65	18.63	20.00	20.37
	3H	19.56	20.76	19.97	21.15	21.55	20.58	21.78	20.99	22.18	22.58
	4H	20.30	21.38	20.73	21.80	22.23	21.64	22.72	22.07	23.13	23.57
	6H	20.83	21.78	21.28	22.22	22.67	22.59	23.54	23.04	23.98	24.43
	8H	20.97	21.86	21.43	22.30	22.77	22.99	23.88	23.44	24.32	24.78
	12H	21.06	21.86	21.53	22.33	22.80	23.26	24.07	23.74	24.54	25.01
8H	4H	20.76	21.65	21.21	22.09	22.55	21.93	22.82	22.38	23.26	23.72
	6H	21.42	22.16	21.91	22.65	23.12	23.04	23.78	23.53	24.27	24.74
	8H	21.63	22.30	22.14	22.80	23.29	23.55	24.22	24.06	24.72	25.21
	12H	21.77	22.36	22.27	22.85	23.41	23.93	24.53	24.44	25.02	25.57
12H	4H	20.85	21.65	21.32	22.12	22.59	21.95	22.75	22.43	23.23	23.70
	6H	21.55	22.22	22.06	22.72	23.21	23.08	23.75	23.59	24.26	24.74
	8H	21.83	22.42	22.33	22.91	23.47	23.66	24.25	24.17	24.74	25.30