

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: P1586436

Luminaire Tested: 22CZSP-47-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586436
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-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

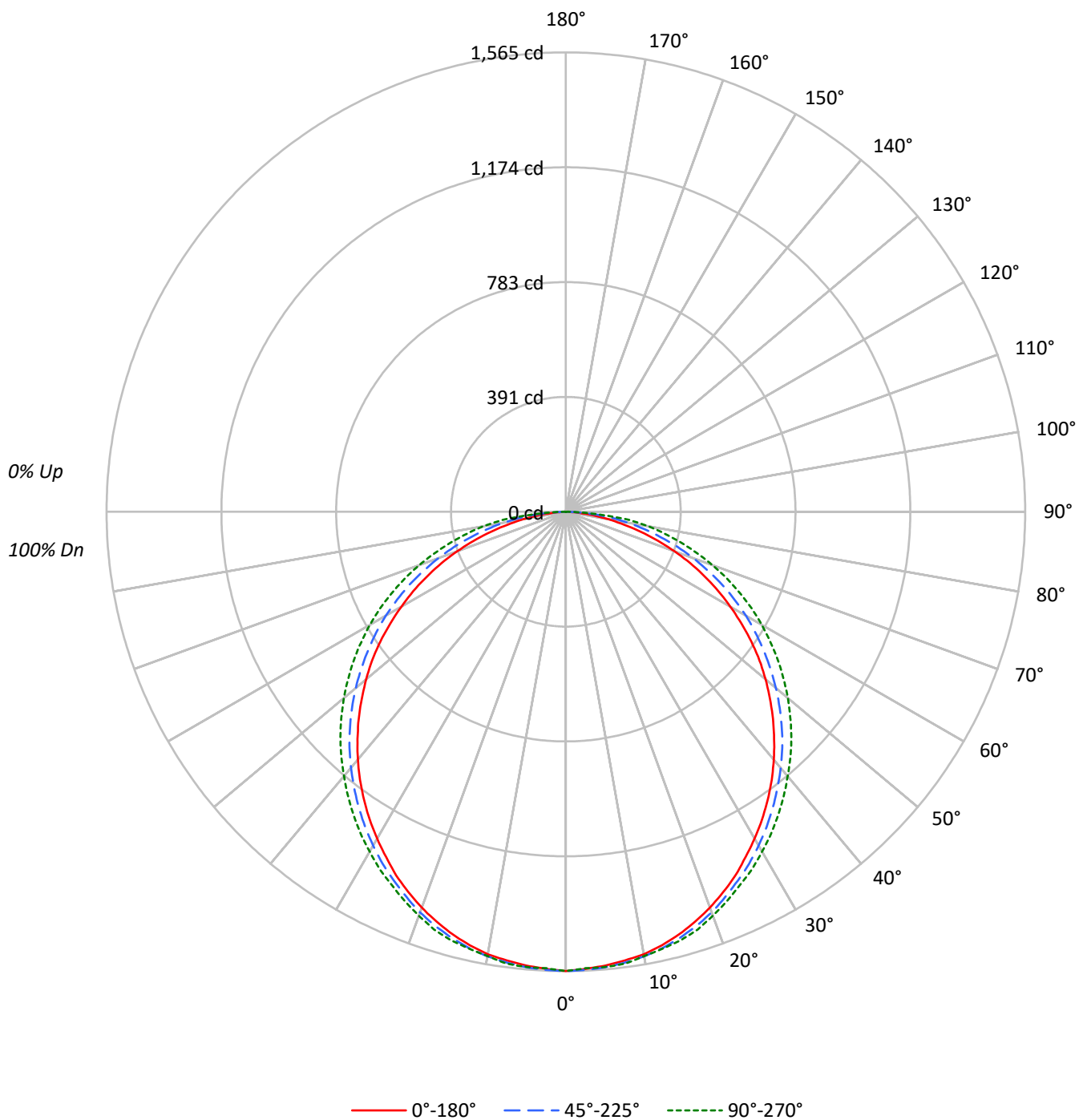
Lumens per Lamp: N/A
Luminaire Lumens: 4568.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	4900	4900	4900
5°	4877	4896	4893
10°	4867	4889	4886
15°	4832	4871	4900
20°	4783	4840	4880
25°	4724	4789	4848
30°	4650	4748	4835
35°	4583	4701	4820
40°	4507	4655	4806
45°	4421	4607	4811
50°	4326	4551	4810
55°	4213	4487	4816
60°	4055	4438	4827
65°	3869	4352	4842
70°	3606	4231	4863
75°	3213	4063	4912
80°	2656	3868	5152
85°	1728	3492	4502

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5314 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	3.2
10°-20°	423.7	9.3
20°-30°	639.0	14.0
30°-40°	769.7	16.8
40°-50°	803.8	17.6
50°-60°	738.2	16.2
60°-70°	581.4	12.7
70°-80°	356.7	7.8
80°-90°	107.3	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°	1210.7	26.5
0°-40°	1980.4	43.4
0°-60°	3522.5	77.1
0°-90°	4568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1552	1554	1558	1563	1557	147
15°	1490	1494	1502	1512	1512	420
25°	1367	1370	1386	1403	1403	629
35°	1199	1205	1230	1255	1261	750
45°	998	1009	1040	1076	1086	770
55°	772	786	822	868	882	689
65°	522	540	587	636	654	517
75°	266	287	336	389	406	282
85°	48	66	97	123	125	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.7	1564.7	1564.7	1564.7	1564.7
2.5°	1558.6	1561.7	1562.7	1563.7	1556.6
5°	1551.6	1553.6	1557.6	1562.7	1556.6
7.5°	1541.6	1543.6	1548.6	1555.6	1552.6
10°	1530.6	1531.6	1537.6	1542.6	1536.6
12.5°	1512.5	1515.5	1522.6	1526.6	1524.6
15°	1490.5	1493.5	1502.5	1511.5	1511.5
17.5°	1464.4	1468.4	1479.5	1491.5	1492.5
20°	1435.4	1438.4	1452.4	1464.4	1464.4
22.5°	1402.3	1406.3	1420.3	1433.4	1435.4
25°	1367.2	1370.2	1386.2	1403.3	1403.3
27.5°	1326.1	1332.1	1352.2	1369.2	1373.2
30°	1286.0	1291.0	1313.1	1334.1	1337.1
32.5°	1243.9	1249.9	1273.0	1296.0	1301.0
35°	1198.8	1204.8	1229.9	1254.9	1261.0
37.5°	1151.7	1158.7	1184.8	1213.8	1219.9
40°	1102.6	1110.6	1138.7	1169.7	1175.8
42.5°	1050.5	1061.5	1091.6	1123.6	1132.7
45°	998.3	1009.4	1040.4	1076.5	1086.5
47.5°	943.2	956.2	988.3	1026.4	1037.4
50°	888.1	901.1	934.2	975.3	987.3
52.5°	831.9	845.0	879.1	922.2	935.2
55°	771.8	785.8	821.9	868.0	882.1
57.5°	709.7	727.7	765.8	812.9	826.9
60°	647.5	665.6	708.7	754.8	770.8
62.5°	586.4	603.4	647.5	696.6	713.7
65°	522.2	540.3	587.4	636.5	653.5
67.5°	459.1	477.1	524.2	575.3	593.4
70°	393.9	414.0	462.1	513.2	531.2
72.5°	328.8	349.8	398.9	451.1	468.1
75°	265.6	286.7	335.8	388.9	406.0
77.5°	203.5	226.5	274.6	328.8	344.8
80°	147.3	169.4	214.5	267.6	285.7
82.5°	94.2	113.3	158.4	208.5	221.5
85°	48.1	66.2	97.2	123.3	125.3
87.5°	15.0	21.0	32.1	48.1	49.1
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	17.00	18.66	17.36	18.98	19.29	17.83	19.49	18.19	19.81	20.12
	3H	18.75	20.26	19.13	20.59	20.95	19.95	21.45	20.32	21.78	22.14
	4H	19.37	20.80	19.77	21.14	21.52	20.83	22.26	21.23	22.60	22.98
	6H	19.78	21.11	20.19	21.47	21.86	21.62	22.94	22.03	23.30	23.69
	8H	19.89	21.15	20.32	21.54	21.94	21.94	23.20	22.36	23.59	23.99
	12H	19.94	21.15	20.37	21.54	21.96	22.15	23.36	22.58	23.74	24.17
4H	2H	17.77	19.19	18.17	19.54	19.92	18.42	19.84	18.81	20.19	20.56
	3H	19.75	20.95	20.16	21.34	21.74	20.77	21.97	21.18	22.37	22.77
	4H	20.49	21.57	20.92	21.98	22.42	21.82	22.91	22.25	23.32	23.76
	6H	21.01	21.97	21.47	22.41	22.86	22.78	23.73	23.23	24.17	24.62
	8H	21.16	22.05	21.62	22.49	22.96	23.17	24.07	23.63	24.51	24.97
	12H	21.24	22.05	21.72	22.52	22.99	23.45	24.25	23.93	24.73	25.20
8H	4H	20.94	21.84	21.40	22.28	22.74	22.11	23.01	22.57	23.45	23.91
	6H	21.61	22.35	22.10	22.84	23.31	23.23	23.97	23.72	24.46	24.93
	8H	21.82	22.48	22.32	22.99	23.47	23.74	24.41	24.24	24.91	25.40
	12H	21.96	22.55	22.46	23.04	23.60	24.12	24.71	24.63	25.20	25.76
12H	4H	21.03	21.84	21.51	22.31	22.78	22.14	22.94	22.62	23.42	23.88
	6H	21.74	22.41	22.24	22.91	23.40	23.27	23.94	23.78	24.45	24.93
	8H	22.02	22.61	22.52	23.10	23.66	23.85	24.44	24.36	24.93	25.49