

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: P1586463

Luminaire Tested: 22CZSP-49HE-L930

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-49HE-L930
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

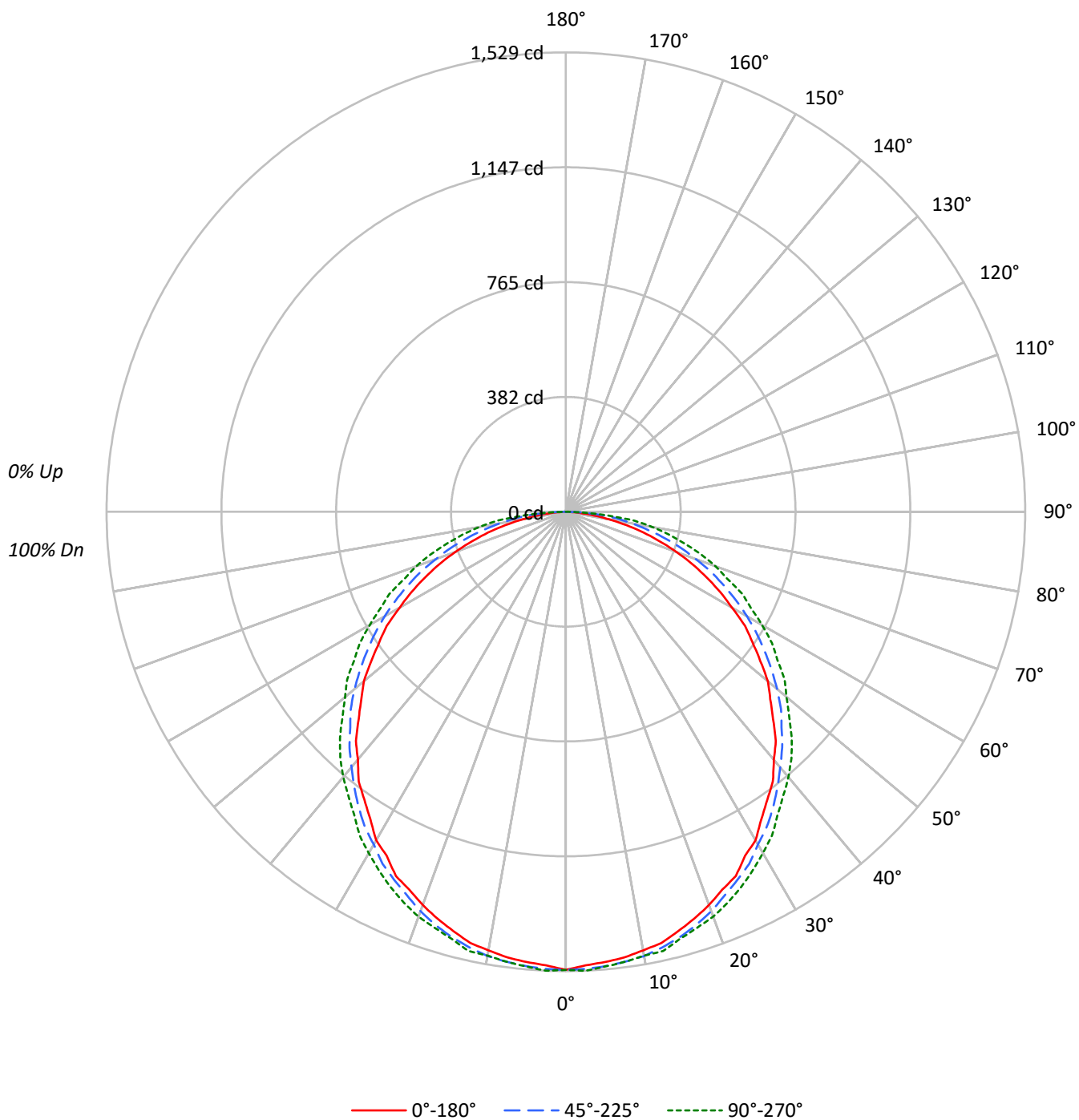
Lumens per Lamp: N/A
Luminaire Lumens: 4491.0 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4774	4774	4774
5°	4728	4771	4775
10°	4713	4774	4769
15°	4685	4751	4769
20°	4642	4715	4779
25°	4622	4670	4765
30°	4565	4624	4743
35°	4469	4594	4700
40°	4402	4537	4711
45°	4319	4495	4708
50°	4276	4470	4671
55°	4139	4409	4694
60°	4000	4361	4723
65°	3827	4295	4804
70°	3597	4213	4854
75°	3241	4138	4952
80°	2651	4063	5276
85°	1728	4045	4936

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5537 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.1	3.2
10°-20°	412.7	9.2
20°-30°	623.7	13.9
30°-40°	752.3	16.8
40°-50°	786.4	17.5
50°-60°	725.2	16.1
60°-70°	574.6	12.8
70°-80°	359.3	8.0
80°-90°	112.7	2.5
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°	1180.5	26.3
0°-40°	1932.8	43.0
0°-60°	3444.4	76.7
0°-90°	4491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1504	1511	1518	1523	1519	143
15°	1445	1452	1466	1475	1471	408
25°	1338	1334	1352	1371	1379	614
35°	1169	1183	1202	1222	1229	733
45°	975	989	1015	1041	1063	755
55°	758	776	808	852	860	680
65°	516	538	580	625	648	512
75°	268	290	342	390	409	282
85°	48	69	113	132	137	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1524.7	1524.7	1524.7	1524.7	1524.7
2.5°	1511.0	1517.9	1523.4	1522.0	1528.9
5°	1504.1	1511.0	1517.9	1523.4	1519.2
7.5°	1495.9	1502.8	1511.0	1519.2	1511.0
10°	1482.2	1486.3	1501.4	1502.8	1500.0
12.5°	1469.8	1473.9	1484.9	1494.5	1497.3
15°	1445.1	1451.9	1465.7	1475.3	1471.2
17.5°	1420.3	1430.0	1442.3	1451.9	1451.9
20°	1392.9	1399.7	1414.8	1421.7	1434.1
22.5°	1361.3	1369.5	1381.9	1401.1	1408.0
25°	1337.9	1333.8	1351.7	1370.9	1379.1
27.5°	1291.2	1296.7	1321.4	1339.3	1346.2
30°	1262.4	1265.1	1278.9	1303.6	1311.8
32.5°	1211.5	1219.8	1244.5	1262.4	1277.5
35°	1169.0	1182.7	1201.9	1222.5	1229.4
37.5°	1131.9	1134.6	1156.6	1184.1	1189.6
40°	1076.9	1093.4	1109.9	1144.2	1152.5
42.5°	1034.3	1042.6	1065.9	1098.9	1111.3
45°	975.3	989.0	1015.1	1041.2	1063.2
47.5°	923.1	936.8	971.2	1004.1	1008.2
50°	877.8	883.2	917.6	954.7	958.8
52.5°	815.9	829.7	862.6	903.9	917.6
55°	758.2	776.1	807.7	851.7	859.9
57.5°	707.4	715.7	752.8	796.7	813.2
60°	638.7	662.1	696.4	739.0	754.1
62.5°	579.7	601.7	638.7	678.6	695.1
65°	516.5	538.5	579.7	625.0	648.4
67.5°	456.0	473.9	523.4	570.1	581.0
70°	392.9	413.5	460.2	508.2	530.2
72.5°	326.9	350.3	402.5	447.8	471.2
75°	267.9	289.8	342.0	390.1	409.3
77.5°	206.0	230.8	281.6	329.7	351.7
80°	147.0	171.7	225.3	273.4	292.6
82.5°	94.8	120.9	171.7	214.3	230.8
85°	48.1	68.7	112.6	131.9	137.4
87.5°	15.1	24.7	38.5	44.0	44.0
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	16.96	18.62	17.32	18.94	19.25	17.75	19.41	18.11	19.73	20.04
	3H	18.74	20.25	19.11	20.58	20.94	19.89	21.40	20.27	21.73	22.09
	4H	19.38	20.80	19.77	21.15	21.52	20.81	22.24	21.21	22.59	22.96
	6H	19.80	21.13	20.21	21.49	21.88	21.64	22.96	22.05	23.33	23.72
	8H	19.91	21.18	20.34	21.57	21.97	21.98	23.25	22.41	23.64	24.04
	12H	19.97	21.18	20.40	21.57	21.99	22.23	23.44	22.66	23.83	24.25
4H	2H	17.73	19.16	18.13	19.50	19.88	18.34	19.77	18.74	20.12	20.49
	3H	19.74	20.94	20.15	21.34	21.74	20.73	21.93	21.14	22.33	22.73
	4H	20.50	21.59	20.93	22.00	22.44	21.82	22.91	22.25	23.32	23.75
	6H	21.05	22.01	21.50	22.44	22.90	22.81	23.77	23.27	24.21	24.66
	8H	21.20	22.10	21.66	22.54	23.01	23.24	24.14	23.70	24.58	25.04
	12H	21.29	22.10	21.77	22.57	23.04	23.55	24.36	24.03	24.84	25.31
8H	4H	20.98	21.88	21.44	22.32	22.78	22.12	23.02	22.58	23.46	23.93
	6H	21.67	22.42	22.16	22.91	23.38	23.29	24.04	23.78	24.52	25.00
	8H	21.90	22.57	22.40	23.08	23.56	23.83	24.51	24.34	25.01	25.49
	12H	22.05	22.64	22.55	23.13	23.69	24.26	24.86	24.77	25.35	25.91
12H	4H	21.08	21.89	21.56	22.36	22.83	22.15	22.96	22.63	23.43	23.90
	6H	21.82	22.49	22.32	23.00	23.48	23.34	24.02	23.85	24.52	25.01
	8H	22.12	22.72	22.63	23.21	23.77	23.96	24.56	24.47	25.05	25.61