

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: P1586693

Luminaire Tested: 22CZSP-A-49HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586693
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-A-49HE-L830
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

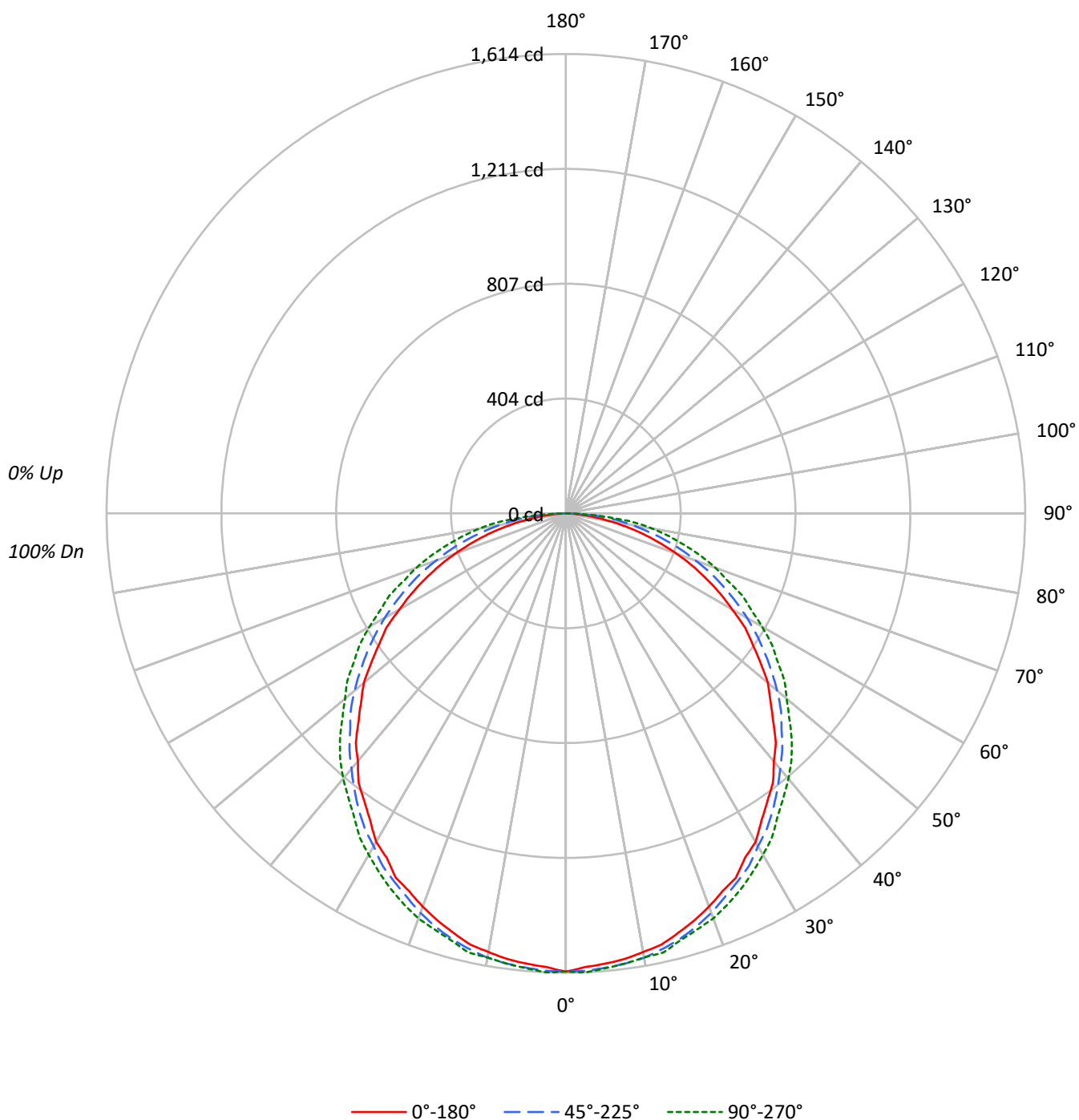
Lumens per Lamp: N/A
Luminaire Lumens: 4742.0 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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			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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5041	5041	5041
5°	4992	5038	5042
10°	4976	5041	5036
15°	4946	5017	5036
20°	4901	4978	5046
25°	4881	4931	5031
30°	4819	4882	5008
35°	4718	4851	4962
40°	4648	4790	4974
45°	4560	4747	4971
50°	4515	4720	4932
55°	4371	4656	4957
60°	4224	4606	4987
65°	4041	4535	5072
70°	3798	4449	5126
75°	3421	4370	5229
80°	2799	4290	5570
85°	1825	4272	5210

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5846 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.2	3.2
10°-20°	435.8	9.2
20°-30°	658.6	13.9
30°-40°	794.3	16.8
40°-50°	830.4	17.5
50°-60°	765.7	16.1
60°-70°	606.7	12.8
70°-80°	379.4	8.0
80°-90°	119.0	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°	1246.5	26.3
0°-40°	2040.8	43.0
0°-60°	3636.9	76.7
0°-90°	4742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1610	1610	1610	1610	1610	
5°	1588	1595	1603	1608	1604	151
15°	1526	1533	1548	1558	1553	431
25°	1413	1408	1427	1448	1456	648
35°	1234	1249	1269	1291	1298	774
45°	1030	1044	1072	1099	1123	797
55°	801	820	853	899	908	718
65°	545	569	612	660	685	540
75°	283	306	361	412	432	298
85°	51	72	119	139	145	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1610.0	1610.0	1610.0	1610.0	1610.0
2.5°	1595.4	1602.7	1608.5	1607.1	1614.3
5°	1588.2	1595.4	1602.7	1608.5	1604.2
7.5°	1579.5	1586.7	1595.4	1604.2	1595.4
10°	1565.0	1569.3	1585.3	1586.7	1583.8
12.5°	1551.9	1556.3	1567.9	1578.0	1580.9
15°	1525.8	1533.1	1547.6	1557.7	1553.4
17.5°	1499.7	1509.9	1522.9	1533.1	1533.1
20°	1470.7	1478.0	1493.9	1501.2	1514.2
22.5°	1437.4	1446.1	1459.1	1479.4	1486.7
25°	1412.7	1408.3	1427.2	1447.5	1456.2
27.5°	1363.4	1369.2	1395.3	1414.1	1421.4
30°	1332.9	1335.8	1350.3	1376.4	1385.1
32.5°	1279.3	1288.0	1314.1	1332.9	1348.9
35°	1234.3	1248.8	1269.1	1290.9	1298.1
37.5°	1195.1	1198.0	1221.2	1250.3	1256.1
40°	1137.1	1154.5	1171.9	1208.2	1216.9
42.5°	1092.2	1100.9	1125.5	1160.3	1173.4
45°	1029.8	1044.3	1071.9	1099.4	1122.6
47.5°	974.7	989.2	1025.4	1060.2	1064.6
50°	926.8	932.6	968.9	1008.0	1012.4
52.5°	861.5	876.0	910.9	954.4	968.9
55°	800.6	819.5	852.8	899.3	908.0
57.5°	747.0	755.7	794.8	841.2	858.6
60°	674.4	699.1	735.4	780.3	796.3
62.5°	612.1	635.3	674.4	716.5	733.9
65°	545.4	568.6	612.1	659.9	684.6
67.5°	481.5	500.4	552.6	601.9	613.5
70°	414.8	436.6	485.9	536.7	559.9
72.5°	345.2	369.9	425.0	472.8	497.5
75°	282.8	306.0	361.2	411.9	432.2
77.5°	217.6	243.7	297.3	348.1	371.3
80°	155.2	181.3	237.9	288.6	308.9
82.5°	100.1	127.6	181.3	226.3	243.7
85°	50.8	72.5	118.9	139.2	145.0
87.5°	16.0	26.1	40.6	46.4	46.4
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	17.15	18.81	17.51	19.13	19.44	17.93	19.60	18.30	19.92	20.23
	3H	18.93	20.44	19.30	20.77	21.13	20.08	21.59	20.45	21.92	22.28
	4H	19.56	20.99	19.96	21.34	21.71	21.00	22.43	21.40	22.78	23.15
	6H	19.99	21.32	20.40	21.68	22.07	21.83	23.15	22.24	23.52	23.91
	8H	20.10	21.37	20.53	21.76	22.16	22.17	23.44	22.60	23.83	24.23
	12H	20.16	21.37	20.59	21.76	22.18	22.42	23.63	22.85	24.01	24.44
4H	2H	17.92	19.35	18.32	19.69	20.07	18.53	19.96	18.93	20.31	20.68
	3H	19.93	21.13	20.34	21.53	21.93	20.92	22.12	21.33	22.52	22.92
	4H	20.69	21.78	21.12	22.19	22.63	22.00	23.10	22.43	23.51	23.94
	6H	21.24	22.19	21.69	22.63	23.09	23.00	23.96	23.45	24.40	24.85
	8H	21.39	22.29	21.85	22.73	23.19	23.43	24.33	23.89	24.77	25.23
	12H	21.48	22.29	21.96	22.76	23.23	23.74	24.55	24.22	25.03	25.49
8H	4H	21.17	22.07	21.63	22.51	22.97	22.31	23.21	22.77	23.65	24.11
	6H	21.86	22.61	22.35	23.09	23.57	23.48	24.23	23.97	24.71	25.19
	8H	22.09	22.76	22.59	23.26	23.75	24.02	24.69	24.53	25.20	25.68
	12H	22.23	22.83	22.74	23.32	23.88	24.45	25.05	24.96	25.54	26.09
12H	4H	21.27	22.07	21.74	22.55	23.02	22.34	23.15	22.82	23.62	24.09
	6H	22.01	22.68	22.51	23.19	23.67	23.53	24.21	24.04	24.71	25.20
	8H	22.31	22.91	22.82	23.40	23.95	24.15	24.75	24.65	25.24	25.79