

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: P1586704

Luminaire Tested: 22CZSP-A-49HE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586704
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-A-49HE-L935-S
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

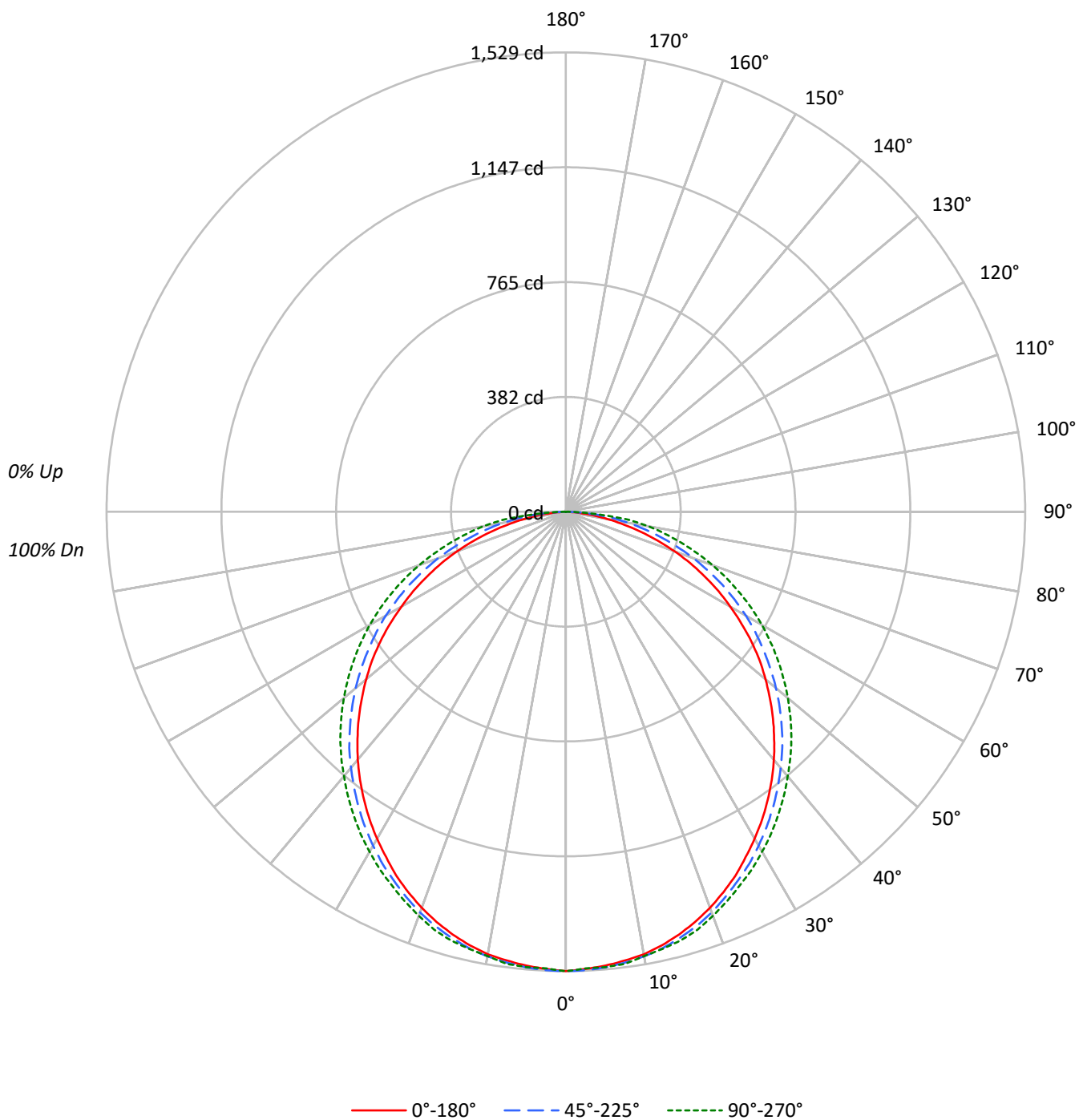
Lumens per Lamp: N/A
Luminaire Lumens: 4464.0 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	4788	4788	4788
5°	4766	4785	4782
10°	4756	4778	4775
15°	4722	4760	4788
20°	4674	4730	4769
25°	4616	4681	4738
30°	4544	4640	4725
35°	4478	4594	4710
40°	4404	4548	4697
45°	4320	4502	4702
50°	4228	4447	4700
55°	4117	4385	4706
60°	3963	4337	4718
65°	3781	4253	4732
70°	3525	4135	4753
75°	3141	3970	4799
80°	2597	3780	5035
85°	1689	3413	4398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5194 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.2
10°-20°	414.1	9.3
20°-30°	624.5	14.0
30°-40°	752.2	16.8
40°-50°	785.5	17.6
50°-60°	721.4	16.2
60°-70°	568.2	12.7
70°-80°	348.6	7.8
80°-90°	104.9	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°	1183.2	26.5
0°-40°	1935.3	43.4
0°-60°	3442.3	77.1
0°-90°	4464.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4464.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1516	1518	1522	1527	1521	144
15°	1457	1460	1468	1477	1477	411
25°	1336	1339	1355	1371	1371	615
35°	1172	1177	1202	1226	1232	733
45°	976	986	1017	1052	1062	752
55°	754	768	803	848	862	673
65°	510	528	574	622	639	505
75°	260	280	328	380	397	275
85°	47	65	95	120	122	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1529.0	1529.0	1529.0	1529.0	1529.0
2.5°	1523.2	1526.1	1527.1	1528.1	1521.2
5°	1516.3	1518.3	1522.2	1527.1	1521.2
7.5°	1506.5	1508.5	1513.4	1520.2	1517.3
10°	1495.7	1496.7	1502.6	1507.5	1501.6
12.5°	1478.1	1481.0	1487.9	1491.8	1489.9
15°	1456.6	1459.5	1468.3	1477.1	1477.1
17.5°	1431.1	1435.0	1445.8	1457.5	1458.5
20°	1402.7	1405.6	1419.3	1431.1	1431.1
22.5°	1370.4	1374.3	1388.0	1400.7	1402.7
25°	1336.1	1339.0	1354.7	1371.3	1371.3
27.5°	1295.9	1301.8	1321.4	1338.0	1341.9
30°	1256.7	1261.6	1283.2	1303.7	1306.7
32.5°	1215.6	1221.5	1244.0	1266.5	1271.4
35°	1171.5	1177.4	1201.9	1226.4	1232.2
37.5°	1125.5	1132.3	1157.8	1186.2	1192.1
40°	1077.5	1085.3	1112.7	1143.1	1149.0
42.5°	1026.5	1037.3	1066.7	1098.0	1106.9
45°	975.6	986.4	1016.7	1052.0	1061.8
47.5°	921.7	934.5	965.8	1003.0	1013.8
50°	867.9	880.6	912.9	953.1	964.8
52.5°	813.0	825.7	859.0	901.2	913.9
55°	754.2	767.9	803.2	848.3	862.0
57.5°	693.5	711.1	748.4	794.4	808.1
60°	632.8	650.4	692.5	737.6	753.3
62.5°	573.0	589.7	632.8	680.8	697.4
65°	510.3	528.0	574.0	622.0	638.7
67.5°	448.6	466.3	512.3	562.2	579.9
70°	385.0	404.5	451.6	501.5	519.1
72.5°	321.3	341.9	389.9	440.8	457.4
75°	259.6	280.1	328.1	380.1	396.7
77.5°	198.8	221.4	268.4	321.3	337.0
80°	144.0	165.5	209.6	261.5	279.2
82.5°	92.1	110.7	154.8	203.7	216.5
85°	47.0	64.6	95.0	120.5	122.4
87.5°	14.7	20.6	31.3	47.0	48.0
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	16.92	18.58	17.28	18.90	19.21	17.75	19.41	18.11	19.73	20.04
	3H	18.67	20.18	19.05	20.51	20.87	19.87	21.37	20.24	21.70	22.06
	4H	19.29	20.72	19.69	21.06	21.44	20.75	22.18	21.15	22.52	22.90
	6H	19.70	21.02	20.11	21.39	21.78	21.54	22.86	21.95	23.22	23.61
	8H	19.81	21.07	20.24	21.46	21.86	21.86	23.12	22.28	23.51	23.91
	12H	19.86	21.07	20.29	21.46	21.88	22.07	23.28	22.50	23.66	24.09
4H	2H	17.69	19.11	18.09	19.46	19.84	18.34	19.76	18.73	20.11	20.48
	3H	19.67	20.87	20.08	21.26	21.66	20.69	21.89	21.10	22.29	22.69
	4H	20.40	21.49	20.84	21.90	22.34	21.74	22.83	22.17	23.24	23.68
	6H	20.93	21.89	21.39	22.33	22.78	22.70	23.65	23.15	24.09	24.54
	8H	21.08	21.97	21.54	22.41	22.88	23.09	23.99	23.55	24.43	24.89
	12H	21.16	21.97	21.64	22.44	22.91	23.37	24.17	23.85	24.65	25.12
8H	4H	20.86	21.76	21.32	22.20	22.66	22.03	22.93	22.49	23.37	23.83
	6H	21.52	22.27	22.02	22.76	23.23	23.15	23.89	23.64	24.38	24.85
	8H	21.74	22.40	22.24	22.91	23.39	23.66	24.33	24.16	24.83	25.32
	12H	21.88	22.47	22.38	22.96	23.52	24.04	24.63	24.55	25.12	25.68
12H	4H	20.95	21.76	21.43	22.23	22.70	22.06	22.86	22.54	23.34	23.80
	6H	21.66	22.33	22.16	22.83	23.32	23.19	23.86	23.70	24.37	24.85
	8H	21.94	22.53	22.44	23.02	23.58	23.77	24.36	24.28	24.85	25.41