

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: P1586462

Luminaire Tested: 22CZSP-49HE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586462
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-49HE-L930-S
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

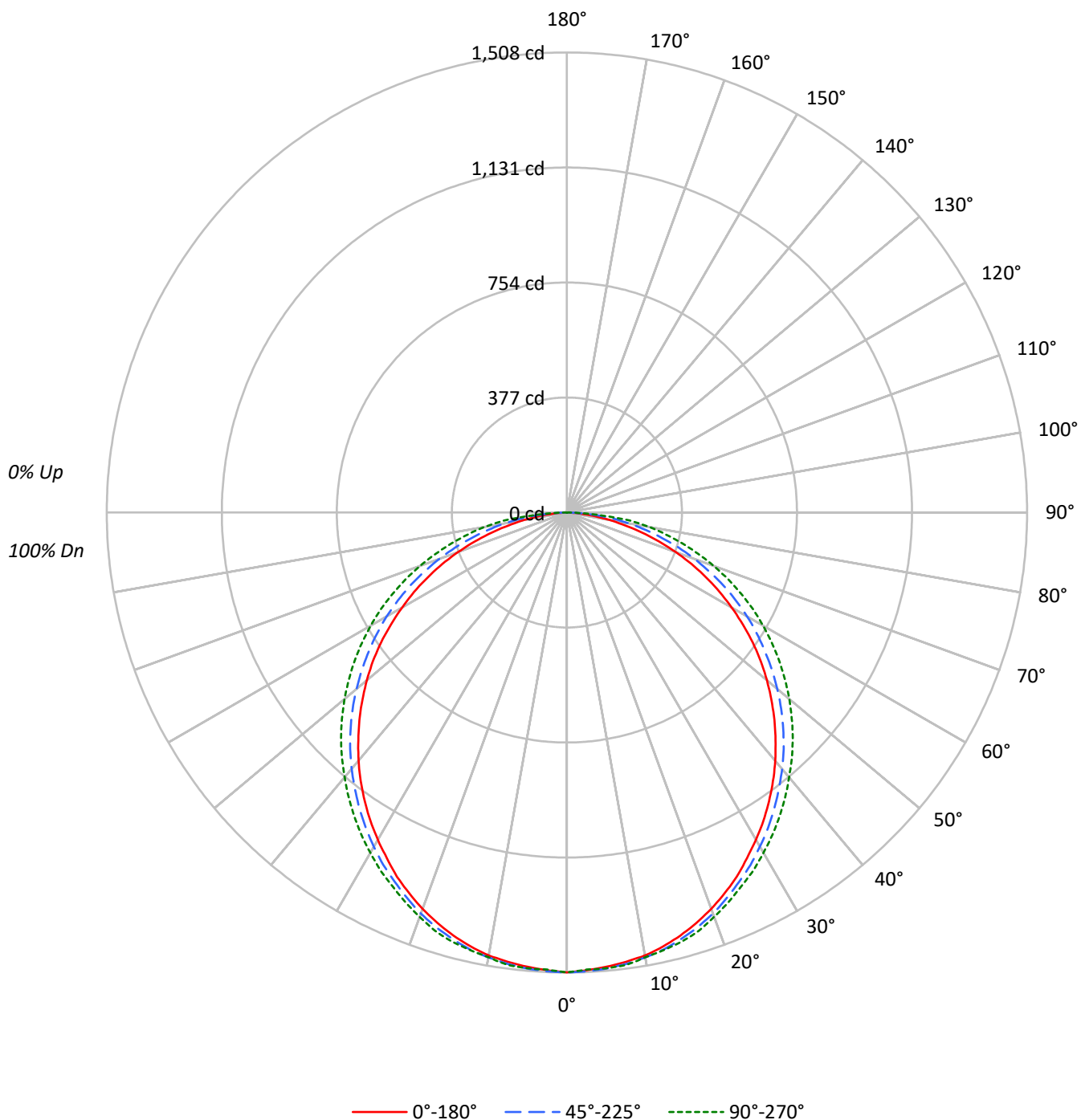
Lumens per Lamp: N/A
Luminaire Lumens: 4401.0 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4720	4720	4720
5°	4699	4717	4714
10°	4689	4710	4707
15°	4655	4693	4721
20°	4608	4663	4702
25°	4551	4615	4671
30°	4480	4574	4658
35°	4415	4529	4644
40°	4342	4484	4630
45°	4259	4439	4636
50°	4168	4384	4634
55°	4060	4323	4639
60°	3907	4276	4651
65°	3728	4193	4665
70°	3474	4076	4686
75°	3096	3914	4732
80°	2561	3727	4963
85°	1667	3366	4337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5119 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	3.2
10°-20°	408.2	9.3
20°-30°	615.7	14.0
30°-40°	741.6	16.8
40°-50°	774.5	17.6
50°-60°	711.2	16.2
60°-70°	560.2	12.7
70°-80°	343.7	7.8
80°-90°	103.4	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°	1166.5	26.5
0°-40°	1908.0	43.4
0°-60°	3393.7	77.1
0°-90°	4401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4401.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1495	1497	1501	1506	1500	142
15°	1436	1439	1448	1456	1456	405
25°	1317	1320	1336	1352	1352	606
35°	1155	1161	1185	1209	1215	722
45°	962	972	1002	1037	1047	742
55°	744	757	792	836	850	664
65°	503	520	566	613	630	498
75°	256	276	324	375	391	271
85°	46	64	94	119	121	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.5	1507.5	1507.5	1507.5	1507.5
2.5°	1501.7	1504.6	1505.5	1506.5	1499.7
5°	1494.9	1496.8	1500.7	1505.5	1499.7
7.5°	1485.2	1487.2	1492.0	1498.8	1495.9
10°	1474.6	1475.6	1481.4	1486.2	1480.4
12.5°	1457.2	1460.1	1466.9	1470.8	1468.8
15°	1436.0	1438.9	1447.6	1456.3	1456.3
17.5°	1410.9	1414.8	1425.4	1437.0	1437.9
20°	1382.9	1385.8	1399.3	1410.9	1410.9
22.5°	1351.0	1354.9	1368.4	1381.0	1382.9
25°	1317.2	1320.1	1335.6	1352.0	1352.0
27.5°	1277.6	1283.4	1302.7	1319.1	1323.0
30°	1239.0	1243.8	1265.1	1285.3	1288.2
32.5°	1198.4	1204.2	1226.4	1248.7	1253.5
35°	1155.0	1160.8	1184.9	1209.1	1214.9
37.5°	1109.6	1116.4	1141.5	1169.5	1175.3
40°	1062.3	1070.0	1097.0	1127.0	1132.8
42.5°	1012.1	1022.7	1051.6	1082.6	1091.2
45°	961.8	972.5	1002.4	1037.2	1046.8
47.5°	908.7	921.3	952.2	988.9	999.5
50°	855.6	868.2	900.0	939.6	951.2
52.5°	801.5	814.1	846.9	888.4	901.0
55°	743.6	757.1	791.9	836.3	849.8
57.5°	683.7	701.1	737.8	783.2	796.7
60°	623.8	641.2	682.8	727.2	742.6
62.5°	564.9	581.4	623.8	671.2	687.6
65°	503.1	520.5	565.9	613.2	629.6
67.5°	442.3	459.7	505.1	554.3	571.7
70°	379.5	398.8	445.2	494.4	511.8
72.5°	316.8	337.0	384.3	434.6	451.0
75°	255.9	276.2	323.5	374.7	391.1
77.5°	196.0	218.2	264.6	316.8	332.2
80°	142.0	163.2	206.7	257.8	275.2
82.5°	90.8	109.1	152.6	200.9	213.4
85°	46.4	63.7	93.7	118.8	120.7
87.5°	14.5	20.3	30.9	46.4	47.3
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	16.87	18.53	17.23	18.85	19.16	17.70	19.36	18.06	19.68	19.99
	3H	18.63	20.13	19.00	20.46	20.82	19.82	21.32	20.19	21.65	22.01
	4H	19.24	20.67	19.64	21.01	21.39	20.71	22.13	21.10	22.47	22.85
	6H	19.65	20.98	20.07	21.34	21.73	21.49	22.81	21.90	23.17	23.56
	8H	19.76	21.03	20.19	21.41	21.81	21.81	23.07	22.23	23.46	23.86
	12H	19.81	21.02	20.24	21.41	21.83	22.02	23.23	22.45	23.61	24.04
4H	2H	17.64	19.06	18.04	19.41	19.79	18.29	19.71	18.69	20.06	20.43
	3H	19.62	20.82	20.03	21.21	21.61	20.64	21.84	21.05	22.24	22.64
	4H	20.36	21.44	20.79	21.85	22.29	21.69	22.78	22.13	23.19	23.63
	6H	20.88	21.84	21.34	22.28	22.73	22.65	23.60	23.10	24.04	24.49
	8H	21.03	21.92	21.49	22.36	22.83	23.04	23.94	23.50	24.38	24.84
	12H	21.11	21.92	21.59	22.39	22.86	23.32	24.13	23.80	24.60	25.07
8H	4H	20.81	21.71	21.27	22.15	22.61	21.98	22.88	22.44	23.32	23.78
	6H	21.48	22.22	21.97	22.71	23.18	23.10	23.84	23.59	24.33	24.80
	8H	21.69	22.36	22.19	22.86	23.34	23.61	24.28	24.11	24.78	25.27
	12H	21.83	22.42	22.33	22.91	23.47	23.99	24.59	24.50	25.07	25.63
12H	4H	20.90	21.71	21.38	22.18	22.65	22.01	22.81	22.49	23.29	23.75
	6H	21.61	22.28	22.11	22.78	23.27	23.14	23.81	23.65	24.32	24.80
	8H	21.89	22.48	22.39	22.97	23.53	23.72	24.31	24.23	24.80	25.36