

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: P1586467

Luminaire Tested: 22CZSP-49HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586467
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-L940
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

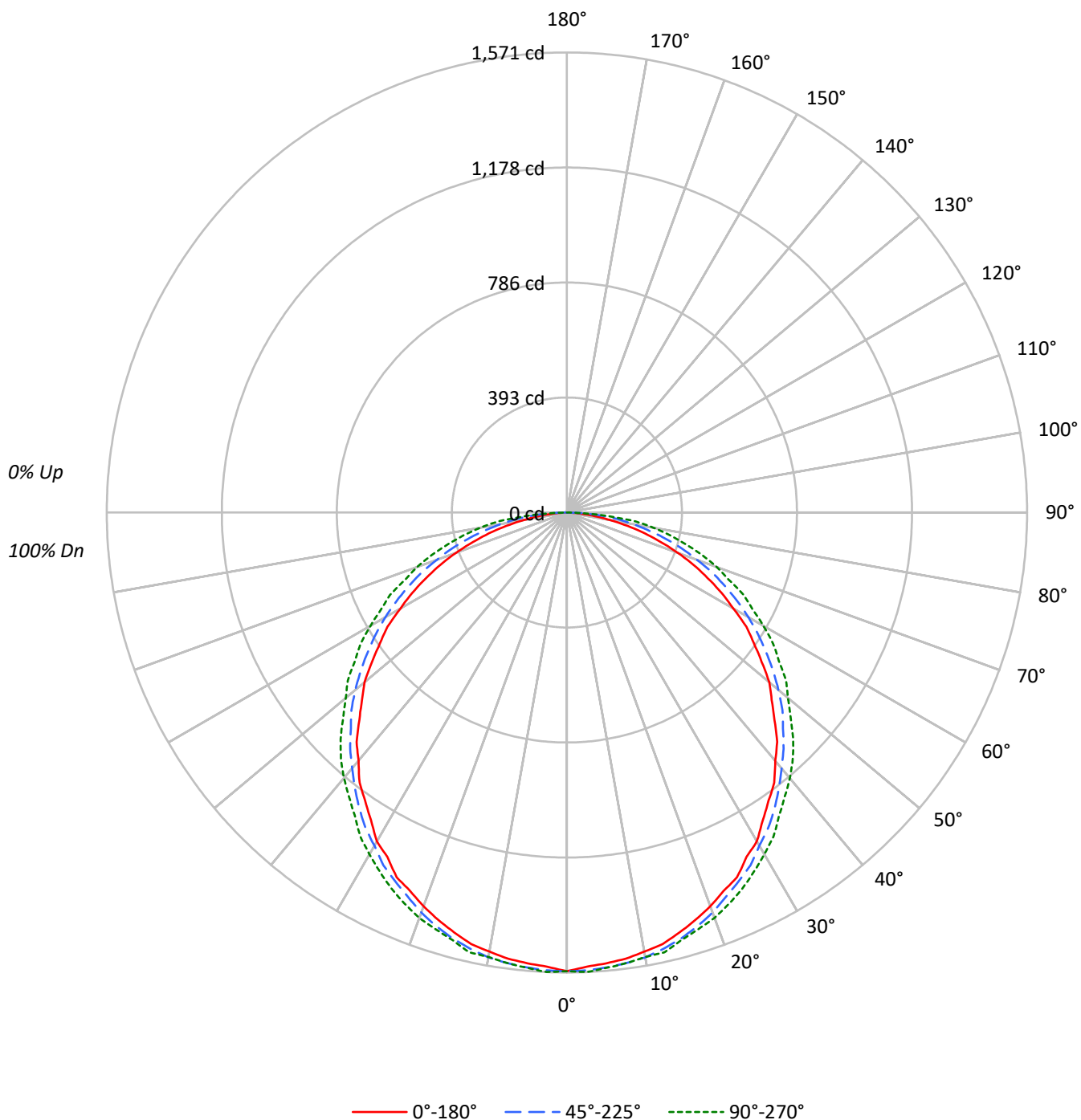
Lumens per Lamp: N/A
Luminaire Lumens: 4614.0 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	4905	4905	4905
5°	4857	4902	4906
10°	4842	4905	4900
15°	4813	4881	4900
20°	4769	4844	4910
25°	4749	4798	4895
30°	4689	4751	4873
35°	4591	4721	4828
40°	4523	4661	4840
45°	4437	4618	4837
50°	4393	4592	4799
55°	4253	4530	4823
60°	4110	4481	4852
65°	3931	4413	4935
70°	3695	4329	4987
75°	3330	4251	5089
80°	2723	4173	5421
85°	1775	4157	5069

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5688 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	3.2
10°-20°	424.0	9.2
20°-30°	640.8	13.9
30°-40°	772.9	16.8
40°-50°	807.9	17.5
50°-60°	745.1	16.1
60°-70°	590.4	12.8
70°-80°	369.1	8.0
80°-90°	115.8	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°	1212.9	26.3
0°-40°	1985.7	43.0
0°-60°	3538.7	76.7
0°-90°	4614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1545	1552	1559	1565	1561	147
15°	1485	1492	1506	1516	1512	419
25°	1375	1370	1389	1408	1417	630
35°	1201	1215	1235	1256	1263	753
45°	1002	1016	1043	1070	1092	776
55°	779	797	830	875	883	698
65°	531	553	596	642	666	526
75°	275	298	351	401	421	290
85°	49	71	116	136	141	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.5	1566.5	1566.5	1566.5	1566.5
2.5°	1552.4	1559.4	1565.1	1563.7	1570.7
5°	1545.3	1552.4	1559.4	1565.1	1560.9
7.5°	1536.9	1543.9	1552.4	1560.9	1552.4
10°	1522.7	1527.0	1542.5	1543.9	1541.1
12.5°	1510.0	1514.3	1525.6	1535.4	1538.3
15°	1484.6	1491.7	1505.8	1515.7	1511.5
17.5°	1459.2	1469.1	1481.8	1491.7	1491.7
20°	1431.0	1438.1	1453.6	1460.7	1473.4
22.5°	1398.6	1407.0	1419.7	1439.5	1446.5
25°	1374.6	1370.3	1388.7	1408.4	1416.9
27.5°	1326.6	1332.2	1357.6	1376.0	1383.0
30°	1296.9	1299.8	1313.9	1339.3	1347.8
32.5°	1244.7	1253.2	1278.6	1296.9	1312.5
35°	1201.0	1215.1	1234.9	1256.0	1263.1
37.5°	1162.9	1165.7	1188.3	1216.5	1222.1
40°	1106.4	1123.4	1140.3	1175.6	1184.0
42.5°	1062.7	1071.1	1095.1	1129.0	1141.7
45°	1002.0	1016.1	1042.9	1069.7	1092.3
47.5°	948.4	962.5	997.8	1031.6	1035.9
50°	901.8	907.4	942.7	980.8	985.1
52.5°	838.3	852.4	886.3	928.6	942.7
55°	779.0	797.4	829.8	875.0	883.4
57.5°	726.8	735.3	773.4	818.5	835.5
60°	656.2	680.2	715.5	759.3	774.8
62.5°	595.6	618.1	656.2	697.2	714.1
65°	530.6	553.2	595.6	642.1	666.1
67.5°	468.5	486.9	537.7	585.7	597.0
70°	403.6	424.8	472.8	522.2	544.7
72.5°	335.9	359.9	413.5	460.1	484.1
75°	275.2	297.8	351.4	400.8	420.6
77.5°	211.7	237.1	289.3	338.7	361.3
80°	151.0	176.4	231.4	280.8	300.6
82.5°	97.4	124.2	176.4	220.2	237.1
85°	49.4	70.6	115.7	135.5	141.1
87.5°	15.5	25.4	39.5	45.2	45.2
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	17.05	18.72	17.42	19.03	19.35	17.84	19.51	18.20	19.82	20.14
	3H	18.83	20.34	19.21	20.67	21.03	19.98	21.50	20.36	21.82	22.18
	4H	19.47	20.90	19.87	21.24	21.62	20.91	22.33	21.30	22.68	23.06
	6H	19.90	21.22	20.31	21.59	21.98	21.73	23.06	22.14	23.42	23.81
	8H	20.01	21.28	20.43	21.66	22.06	22.08	23.35	22.50	23.74	24.13
	12H	20.06	21.28	20.49	21.66	22.09	22.32	23.54	22.75	23.92	24.35
4H	2H	17.82	19.25	18.22	19.60	19.97	18.44	19.86	18.83	20.21	20.59
	3H	19.83	21.04	20.24	21.43	21.83	20.82	22.03	21.23	22.42	22.82
	4H	20.59	21.69	21.02	22.10	22.53	21.91	23.00	22.34	23.41	23.85
	6H	21.14	22.10	21.59	22.54	22.99	22.91	23.87	23.36	24.30	24.76
	8H	21.30	22.19	21.75	22.64	23.10	23.33	24.23	23.79	24.67	25.14
	12H	21.38	22.19	21.86	22.67	23.14	23.65	24.46	24.13	24.93	25.40
8H	4H	21.07	21.97	21.53	22.41	22.88	22.22	23.11	22.68	23.56	24.02
	6H	21.76	22.51	22.26	23.00	23.47	23.38	24.13	23.87	24.62	25.09
	8H	21.99	22.67	22.50	23.17	23.65	23.93	24.60	24.43	25.10	25.59
	12H	22.14	22.74	22.64	23.23	23.78	24.36	24.95	24.86	25.44	26.00
12H	4H	21.17	21.98	21.65	22.45	22.92	22.25	23.05	22.72	23.53	24.00
	6H	21.91	22.59	22.42	23.09	23.58	23.44	24.11	23.94	24.62	25.10
	8H	22.22	22.81	22.72	23.30	23.86	24.05	24.65	24.56	25.14	25.70