

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: P1584349

Luminaire Tested: 14CZSP-49HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2602-698-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-49HE-L945
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

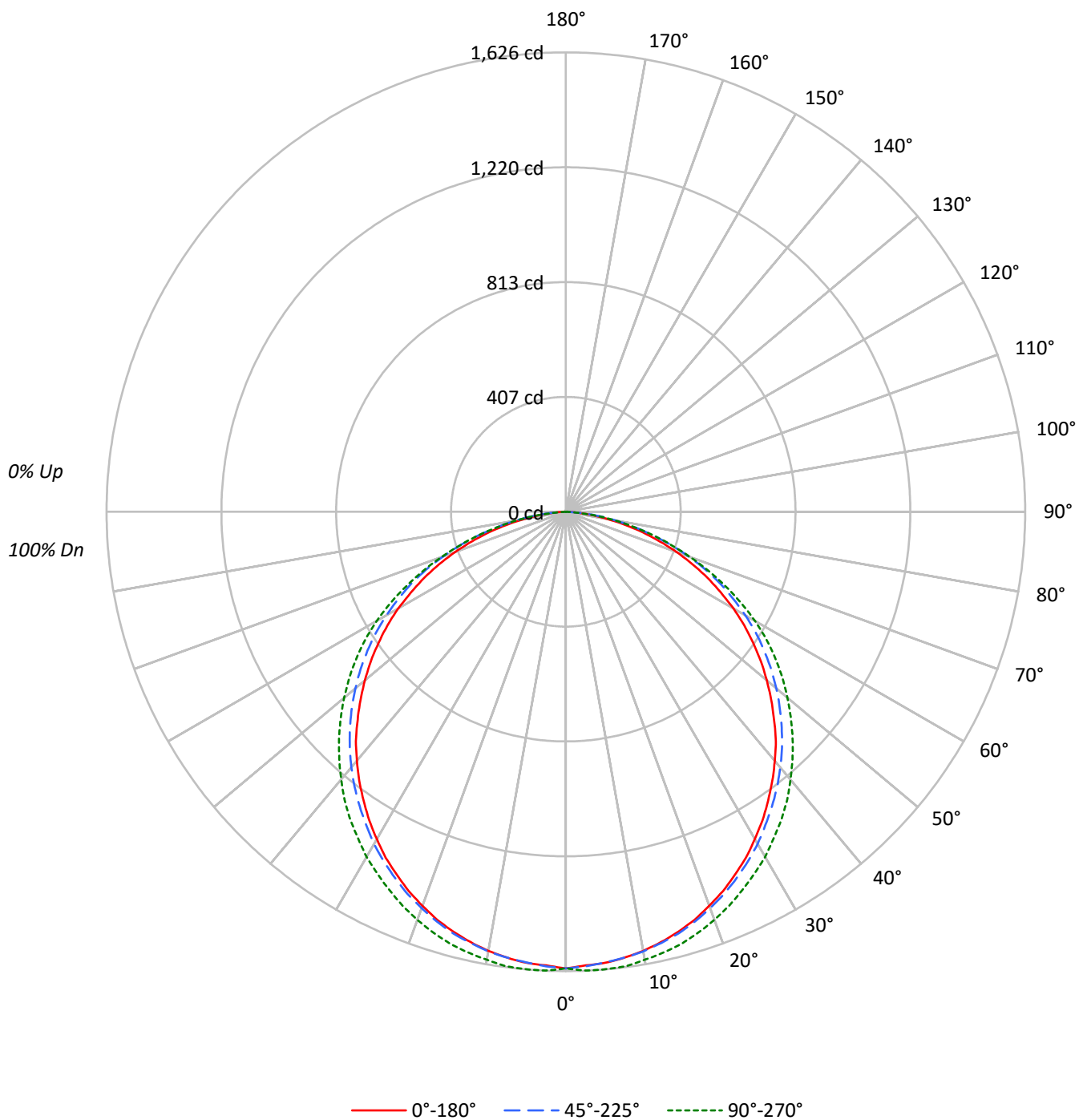
Lumens per Lamp: N/A
Luminaire Lumens: 4656.0 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
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	109	104	100	96	106	102	98	94	97	94	91		94	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	73	61	53	47	59	52	46		57	51	46		55
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	44	37	32		43	36	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5447	5447	5447
5°	5421	5416	5498
10°	5400	5406	5510
15°	5368	5389	5522
20°	5321	5354	5512
25°	5268	5319	5495
30°	5206	5282	5490
35°	5134	5234	5472
40°	5061	5195	5443
45°	4968	5149	5411
50°	4867	5098	5370
55°	4757	5034	5320
60°	4616	4944	5211
65°	4405	4817	4975
70°	4108	4544	4619
75°	3666	4102	4141
80°	2982	3456	3427
85°	1941	2412	1883

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5411 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.1	3.3
10°-20°	438.7	9.4
20°-30°	664.4	14.3
30°-40°	802.6	17.2
40°-50°	838.4	18.0
50°-60°	767.7	16.5
60°-70°	589.9	12.7
70°-80°	328.5	7.1
80°-90°	72.7	1.6
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°	1256.2	27.0
0°-40°	2058.8	44.2
0°-60°	3664.9	78.7
0°-90°	4656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4656.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1616	1616	1616	1616	1616	
5°	1603	1619	1601	1610	1626	152
15°	1539	1554	1545	1560	1583	434
25°	1417	1434	1431	1452	1478	653
35°	1248	1266	1272	1303	1330	781
45°	1043	1065	1081	1113	1135	805
55°	810	836	857	887	906	724
65°	552	581	604	616	624	546
75°	282	310	315	315	318	298
85°	50	59	62	52	49	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.4	1616.4	1616.4	1616.4	1616.4
2.5°	1607.2	1622.5	1610.3	1614.9	1625.5
5°	1602.7	1619.4	1601.2	1610.3	1625.5
7.5°	1592.0	1607.2	1592.0	1602.7	1622.5
10°	1578.3	1595.1	1579.9	1590.5	1610.3
12.5°	1560.1	1573.8	1563.1	1578.3	1598.1
15°	1538.8	1554.0	1544.8	1560.1	1582.9
17.5°	1514.4	1528.1	1520.5	1540.3	1561.6
20°	1484.0	1499.2	1493.1	1512.9	1537.2
22.5°	1453.5	1468.7	1464.2	1484.0	1509.8
25°	1417.0	1433.7	1430.7	1452.0	1477.9
27.5°	1380.5	1397.2	1395.7	1420.0	1444.4
30°	1337.9	1354.6	1357.6	1383.5	1410.9
32.5°	1295.2	1313.5	1315.0	1343.9	1369.8
35°	1248.1	1266.3	1272.4	1302.8	1330.2
37.5°	1200.9	1219.1	1228.3	1257.2	1286.1
40°	1150.6	1170.4	1181.1	1211.5	1237.4
42.5°	1100.4	1120.2	1132.4	1162.8	1187.2
45°	1042.6	1065.4	1080.6	1112.6	1135.4
47.5°	986.3	1010.6	1027.4	1057.8	1080.6
50°	928.4	954.3	972.6	1003.0	1024.3
52.5°	870.6	898.0	916.3	945.2	966.5
55°	809.7	835.6	856.9	887.3	905.6
57.5°	748.8	774.7	797.5	824.9	841.7
60°	684.9	712.3	733.6	761.0	773.2
62.5°	617.9	646.9	668.2	689.5	700.1
65°	552.5	581.4	604.2	616.4	624.0
67.5°	485.5	514.4	535.7	541.8	546.4
70°	417.0	446.0	461.2	464.2	468.8
72.5°	348.5	377.5	389.6	389.6	391.2
75°	281.6	310.5	315.1	315.1	318.1
77.5°	216.1	242.0	245.0	245.0	245.0
80°	153.7	173.5	178.1	178.1	176.6
82.5°	97.4	111.1	118.7	112.6	109.6
85°	50.2	59.4	62.4	51.7	48.7
87.5°	15.2	18.3	15.2	9.1	7.6
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	17.63	19.28	18.00	19.59	19.91	18.14	19.79	18.50	20.10	20.41
	3H	19.40	20.89	19.78	21.22	21.58	19.94	21.43	20.31	21.75	22.11
	4H	20.03	21.43	20.43	21.78	22.15	20.57	21.97	20.97	22.32	22.69
	6H	20.43	21.73	20.84	22.10	22.49	20.99	22.29	21.40	22.65	23.05
	8H	20.53	21.77	20.95	22.16	22.56	21.09	22.34	21.52	22.73	23.12
	12H	20.57	21.77	21.00	22.15	22.58	21.13	22.32	21.56	22.71	23.14
4H	2H	18.35	19.76	18.75	20.11	20.48	18.75	20.15	19.15	20.50	20.88
	3H	20.35	21.52	20.76	21.92	22.32	20.76	21.94	21.17	22.34	22.74
	4H	21.11	22.17	21.54	22.58	23.02	21.51	22.58	21.95	22.99	23.43
	6H	21.63	22.56	22.08	23.00	23.45	22.05	22.98	22.51	23.42	23.88
	8H	21.76	22.63	22.22	23.07	23.54	22.19	23.06	22.65	23.51	23.97
	12H	21.83	22.61	22.31	23.09	23.56	22.26	23.04	22.74	23.52	23.99
8H	4H	21.44	22.31	21.90	22.75	23.21	21.80	22.67	22.26	23.11	23.58
	6H	22.07	22.79	22.56	23.28	23.76	22.44	23.16	22.93	23.65	24.13
	8H	22.26	22.91	22.77	23.42	23.90	22.64	23.28	23.14	23.79	24.27
	12H	22.39	22.96	22.89	23.45	24.01	22.74	23.31	23.25	23.80	24.36
12H	4H	21.47	22.25	21.95	22.73	23.19	21.82	22.61	22.30	23.08	23.55
	6H	22.12	22.77	22.63	23.28	23.76	22.48	23.13	22.99	23.64	24.12
	8H	22.36	22.94	22.87	23.43	23.99	22.72	23.30	23.23	23.79	24.35