

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: P1584368

Luminaire Tested: 14CZSP-52-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-52-L945-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

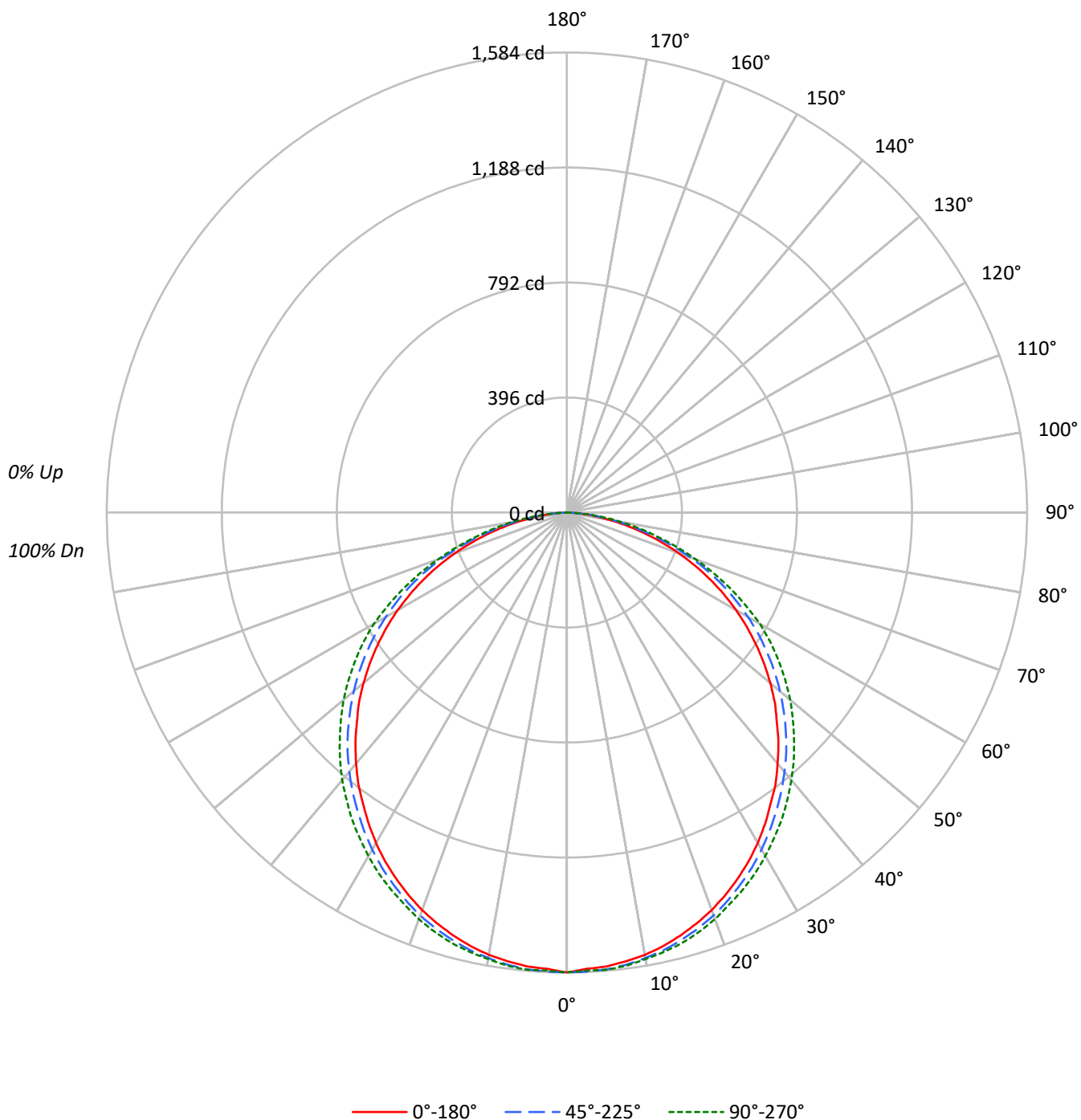
Lumens per Lamp: N/A
Luminaire Lumens: 4578.0 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.9
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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69	65	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5336	5336	5336
5°	5306	5340	5345
10°	5291	5330	5342
15°	5261	5315	5352
20°	5224	5294	5343
25°	5171	5254	5326
30°	5113	5212	5315
35°	5031	5167	5305
40°	4965	5125	5291
45°	4871	5080	5269
50°	4790	5019	5260
55°	4675	4948	5226
60°	4532	4850	5172
65°	4330	4717	4959
70°	4036	4454	4654
75°	3606	4018	4246
80°	2955	3386	3714
85°	1979	2474	2760

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5269 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.3
10°-20°	430.0	9.4
20°-30°	651.0	14.2
30°-40°	786.2	17.2
40°-50°	821.6	17.9
50°-60°	752.9	16.4
60°-70°	581.2	12.7
70°-80°	326.9	7.1
80°-90°	78.2	1.7
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°	1231.0	26.9
0°-40°	2017.2	44.1
0°-60°	3591.7	78.5
0°-90°	4578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4578.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1569	1580	1579	1580	1580	149
15°	1508	1520	1524	1530	1534	426
25°	1391	1403	1413	1420	1433	641
35°	1223	1238	1256	1273	1290	766
45°	1022	1042	1066	1088	1106	790
55°	796	817	842	869	890	711
65°	543	567	592	615	622	537
75°	277	303	309	321	326	294
85°	51	59	64	70	71	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.5	1583.5	1583.5	1583.5	1583.5
2.5°	1572.8	1584.9	1582.2	1586.2	1578.8
5°	1568.7	1580.2	1578.8	1580.2	1580.2
7.5°	1558.6	1570.7	1570.1	1572.1	1573.4
10°	1546.5	1557.9	1557.9	1559.9	1561.3
12.5°	1529.6	1541.8	1543.1	1546.5	1549.2
15°	1508.1	1520.2	1523.6	1529.6	1534.3
17.5°	1483.8	1496.6	1502.0	1508.1	1514.1
20°	1456.9	1468.3	1476.4	1481.1	1489.9
22.5°	1425.2	1438.0	1446.7	1451.5	1460.9
25°	1390.8	1402.9	1413.1	1420.5	1432.6
27.5°	1354.4	1366.6	1378.7	1387.4	1401.6
30°	1314.0	1326.8	1339.6	1353.1	1365.9
32.5°	1270.2	1285.0	1299.2	1314.0	1328.1
35°	1223.0	1238.5	1256.0	1272.9	1289.7
37.5°	1179.2	1193.4	1211.6	1229.8	1246.6
40°	1128.7	1144.2	1165.1	1185.3	1202.8
42.5°	1077.5	1094.3	1117.2	1136.8	1155.6
45°	1022.2	1042.4	1066.0	1087.6	1105.8
47.5°	971.0	988.5	1012.1	1035.7	1054.6
50°	913.7	933.3	957.5	982.5	1003.4
52.5°	855.8	876.0	900.9	925.9	947.4
55°	795.8	816.7	842.3	868.6	889.5
57.5°	734.5	756.7	783.0	809.3	830.2
60°	672.5	694.7	719.7	748.6	767.5
62.5°	607.8	632.7	656.3	683.3	694.7
65°	543.1	566.7	591.6	615.2	622.0
67.5°	477.1	501.3	523.6	539.1	547.8
70°	409.7	436.0	452.1	467.0	472.4
72.5°	343.0	369.3	378.7	392.9	398.2
75°	277.0	302.6	308.6	321.4	326.1
77.5°	212.9	236.5	238.5	253.4	257.4
80°	152.3	171.2	174.5	188.7	191.4
82.5°	97.7	111.2	115.9	128.0	132.1
85°	51.2	58.6	64.0	70.1	71.4
87.5°	16.8	20.9	17.5	18.2	16.8
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	17.53	19.18	17.89	19.49	19.81	18.07	19.72	18.43	20.03	20.35
	3H	19.31	20.80	19.68	21.13	21.48	19.93	21.42	20.30	21.75	22.11
	4H	19.93	21.34	20.33	21.69	22.06	20.60	22.00	20.99	22.35	22.73
	6H	20.34	21.65	20.75	22.01	22.40	21.07	22.38	21.48	22.74	23.13
	8H	20.44	21.69	20.87	22.08	22.48	21.22	22.46	21.64	22.85	23.25
	12H	20.49	21.69	20.92	22.07	22.50	21.30	22.50	21.73	22.88	23.31
4H	2H	18.25	19.66	18.65	20.01	20.38	18.68	20.08	19.07	20.43	20.81
	3H	20.25	21.43	20.66	21.83	22.23	20.75	21.93	21.16	22.33	22.73
	4H	21.01	22.07	21.44	22.49	22.92	21.54	22.61	21.98	23.03	23.46
	6H	21.53	22.47	21.99	22.91	23.36	22.15	23.08	22.60	23.52	23.98
	8H	21.67	22.55	22.13	22.99	23.45	22.34	23.21	22.80	23.65	24.12
	12H	21.75	22.54	22.23	23.01	23.48	22.46	23.24	22.94	23.72	24.19
8H	4H	21.34	22.22	21.80	22.66	23.12	21.82	22.69	22.28	23.14	23.60
	6H	21.98	22.71	22.48	23.20	23.67	22.53	23.26	23.03	23.75	24.22
	8H	22.18	22.83	22.69	23.34	23.83	22.79	23.44	23.30	23.95	24.43
	12H	22.31	22.89	22.82	23.38	23.94	22.97	23.55	23.48	24.04	24.60
12H	4H	21.38	22.17	21.86	22.64	23.11	21.84	22.63	22.32	23.10	23.57
	6H	22.04	22.69	22.55	23.20	23.68	22.57	23.22	23.08	23.73	24.21
	8H	22.29	22.87	22.80	23.36	23.92	22.88	23.45	23.38	23.94	24.50