

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: P1588710

Luminaire Tested: 24CZSP-A-52HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588710
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: 24CZSP-A-52HE-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 5000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

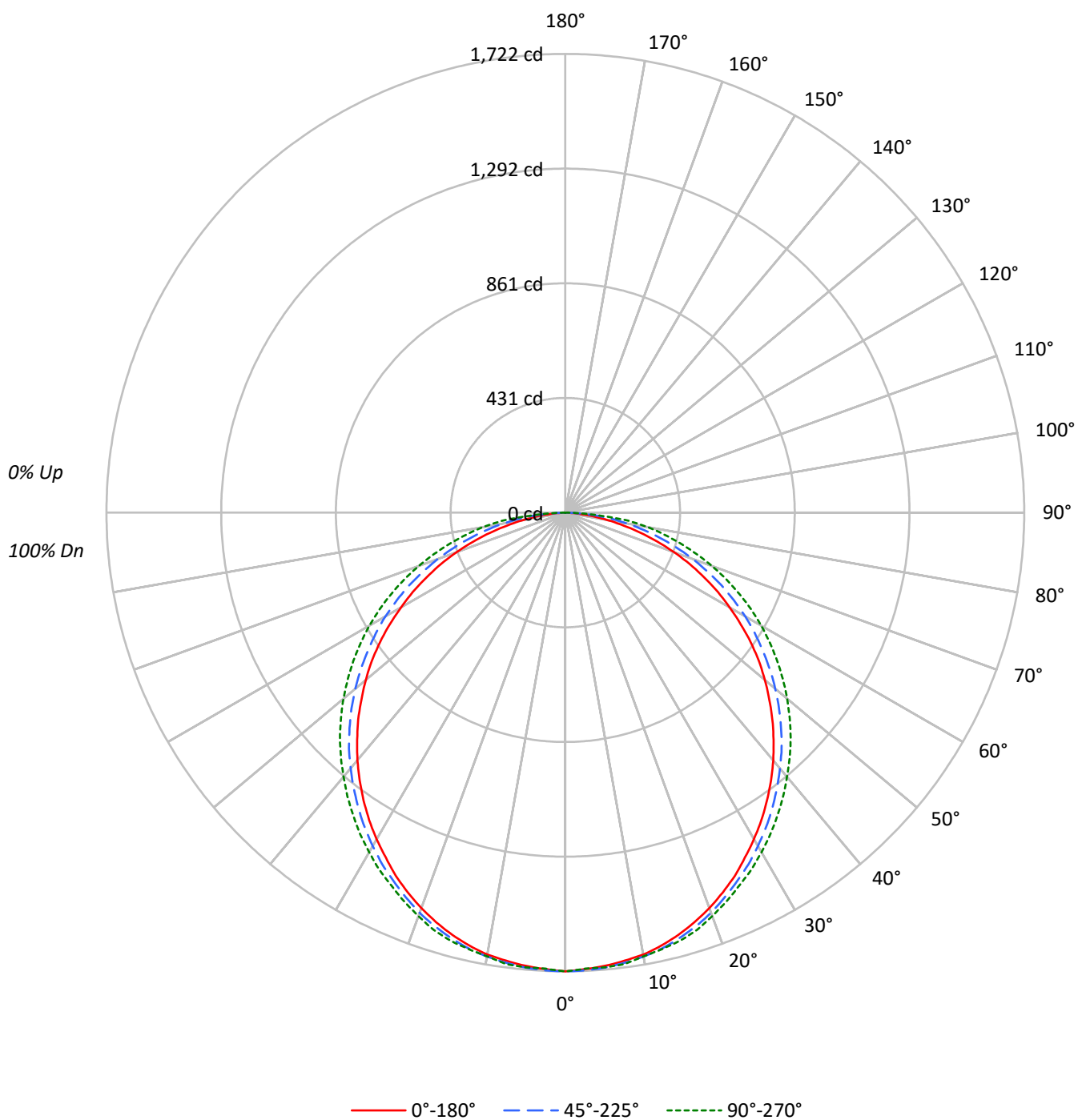
Lumens per Lamp: N/A
Luminaire Lumens: 5028.0 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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°	2638	2638	2638
5°	2626	2636	2634
10°	2620	2632	2630
15°	2601	2622	2638
20°	2575	2606	2627
25°	2543	2579	2610
30°	2503	2556	2603
35°	2467	2531	2595
40°	2426	2506	2588
45°	2380	2481	2591
50°	2329	2450	2589
55°	2268	2416	2593
60°	2183	2389	2599
65°	2083	2343	2607
70°	1942	2278	2618
75°	1730	2187	2644
80°	1431	2082	2773
85°	931	1880	2423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2861 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.9	3.2
10°-20°	466.4	9.3
20°-30°	703.4	14.0
30°-40°	847.2	16.8
40°-50°	884.8	17.6
50°-60°	812.6	16.2
60°-70°	640.0	12.7
70°-80°	392.6	7.8
80°-90°	118.2	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°	1332.6	26.5
0°-40°	2179.9	43.4
0°-60°	3877.2	77.1
0°-90°	5028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1708	1710	1714	1720	1713	162
15°	1641	1644	1654	1664	1664	463
25°	1505	1508	1526	1545	1545	693
35°	1320	1326	1354	1381	1388	825
45°	1099	1111	1145	1185	1196	847
55°	850	865	905	955	971	758
65°	575	595	646	701	719	569
75°	292	316	370	428	447	310
85°	53	73	107	136	138	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.2	1722.2	1722.2	1722.2	1722.2
2.5°	1715.6	1718.9	1720.0	1721.1	1713.4
5°	1707.9	1710.1	1714.5	1720.0	1713.4
7.5°	1696.8	1699.1	1704.6	1712.3	1709.0
10°	1684.7	1685.8	1692.4	1698.0	1691.3
12.5°	1664.9	1668.2	1675.9	1680.3	1678.1
15°	1640.6	1643.9	1653.8	1663.8	1663.8
17.5°	1611.9	1616.3	1628.4	1641.7	1642.8
20°	1579.9	1583.2	1598.7	1611.9	1611.9
22.5°	1543.5	1547.9	1563.4	1577.7	1579.9
25°	1504.9	1508.2	1525.8	1544.6	1544.6
27.5°	1459.6	1466.3	1488.3	1507.1	1511.5
30°	1415.5	1421.0	1445.3	1468.5	1471.8
32.5°	1369.2	1375.8	1401.2	1426.5	1432.1
35°	1319.5	1326.1	1353.7	1381.3	1387.9
37.5°	1267.7	1275.4	1304.1	1336.1	1342.7
40°	1213.6	1222.4	1253.3	1287.5	1294.2
42.5°	1156.2	1168.4	1201.5	1236.8	1246.7
45°	1098.9	1111.0	1145.2	1184.9	1196.0
47.5°	1038.2	1052.5	1087.8	1129.8	1141.9
50°	977.5	991.9	1028.3	1073.5	1086.7
52.5°	915.7	930.1	967.6	1015.0	1029.4
55°	849.5	865.0	904.7	955.4	970.9
57.5°	781.1	801.0	842.9	894.8	910.2
60°	712.7	732.6	780.0	830.8	848.4
62.5°	645.4	664.2	712.7	766.8	785.5
65°	574.8	594.7	646.5	700.6	719.3
67.5°	505.3	525.2	577.0	633.3	653.1
70°	433.6	455.7	508.6	564.9	584.7
72.5°	361.9	385.0	439.1	496.5	515.2
75°	292.4	315.5	369.6	428.1	446.8
77.5°	224.0	249.3	302.3	361.9	379.5
80°	162.2	186.5	236.1	294.6	314.4
82.5°	103.7	124.7	174.3	229.5	243.8
85°	53.0	72.8	107.0	135.7	137.9
87.5°	16.5	23.2	35.3	53.0	54.1
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	14.85	16.51	15.21	16.82	17.14	15.68	17.34	16.04	17.65	17.97
	3H	16.60	18.11	16.98	18.44	18.80	17.79	19.30	18.17	19.63	19.99
	4H	17.22	18.64	17.62	18.99	19.37	18.68	20.11	19.08	20.45	20.83
	6H	17.63	18.95	18.04	19.32	19.71	19.46	20.79	19.88	21.15	21.54
	8H	17.74	19.00	18.16	19.39	19.79	19.78	21.05	20.21	21.44	21.83
	12H	17.79	19.00	18.22	19.38	19.81	20.00	21.21	20.42	21.59	22.02
4H	2H	15.62	17.04	16.02	17.39	17.76	16.27	17.69	16.66	18.04	18.41
	3H	17.60	18.80	18.01	19.19	19.59	18.62	19.82	19.03	20.22	20.62
	4H	18.33	19.42	18.76	19.83	20.27	19.67	20.76	20.10	21.17	21.61
	6H	18.86	19.81	19.32	20.25	20.71	20.63	21.58	21.08	22.02	22.47
	8H	19.01	19.90	19.47	20.34	20.81	21.02	21.91	21.48	22.36	22.82
	12H	19.09	19.90	19.57	20.37	20.84	21.30	22.10	21.78	22.58	23.05
8H	4H	18.79	19.68	19.25	20.13	20.59	19.96	20.85	20.42	21.30	21.76
	6H	19.45	20.20	19.95	20.68	21.16	21.07	21.82	21.57	22.30	22.78
	8H	19.67	20.33	20.17	20.84	21.32	21.59	22.25	22.09	22.76	23.24
	12H	19.80	20.40	20.31	20.89	21.44	21.97	22.56	22.48	23.05	23.61
12H	4H	18.88	19.69	19.36	20.16	20.63	19.99	20.79	20.47	21.26	21.73
	6H	19.59	20.26	20.09	20.76	21.25	21.12	21.79	21.63	22.30	22.78
	8H	19.86	20.46	20.37	20.95	21.50	21.70	22.29	22.20	22.78	23.34