

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: P1588367

Luminaire Tested: 24CZSP-52HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-52HE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

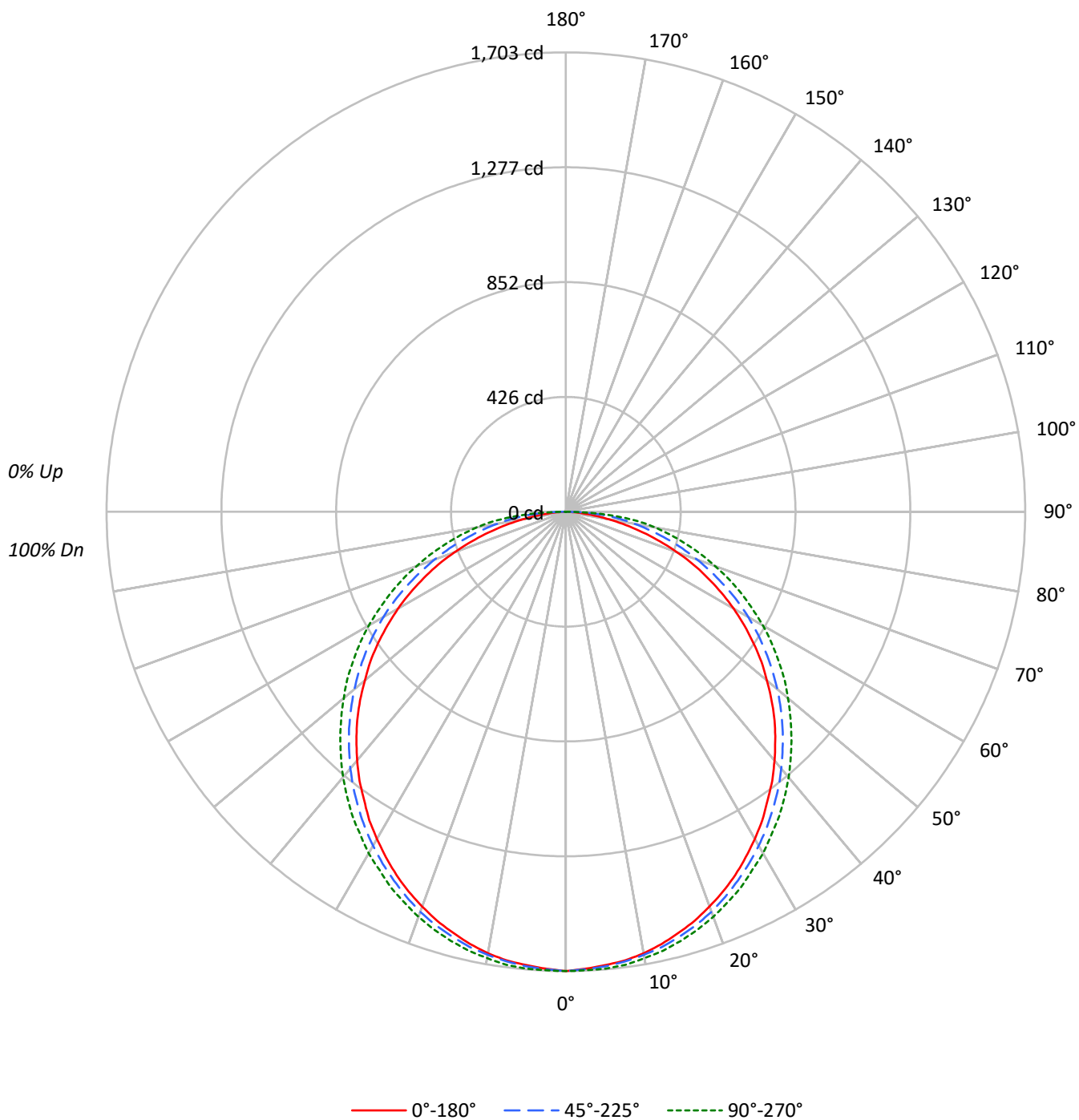
Lumens per Lamp: N/A
Luminaire Lumens: 5051.0 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2608	2608	2608
5°	2594	2601	2614
10°	2585	2594	2613
15°	2562	2585	2611
20°	2538	2573	2604
25°	2511	2549	2596
30°	2477	2529	2586
35°	2439	2507	2577
40°	2406	2485	2569
45°	2371	2462	2562
50°	2318	2438	2561
55°	2270	2415	2568
60°	2201	2394	2587
65°	2107	2356	2604
70°	1972	2316	2635
75°	1754	2283	2722
80°	1443	2293	2959
85°	982	2555	3267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.1	3.2
10°-20°	461.4	9.1
20°-30°	697.7	13.8
30°-40°	841.9	16.7
40°-50°	880.3	17.4
50°-60°	812.2	16.1
60°-70°	645.8	12.8
70°-80°	407.6	8.1
80°-90°	142.9	2.8
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°	1320.2	26.1
0°-40°	2162.1	42.8
0°-60°	3854.6	76.3
0°-90°	5051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1703	1703	1703	1703	1703	
5°	1687	1700	1692	1696	1700	160
15°	1616	1634	1630	1643	1647	456
25°	1486	1508	1508	1528	1536	684
35°	1304	1332	1341	1367	1378	817
45°	1095	1118	1136	1170	1183	843
55°	850	875	904	948	962	759
65°	582	608	650	705	718	575
75°	296	330	386	443	460	314
85°	56	92	145	180	186	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1702.7	1702.7	1702.7	1702.7	1702.7
2.5°	1695.7	1706.9	1697.1	1702.7	1701.3
5°	1687.3	1699.9	1691.5	1695.7	1699.9
7.5°	1677.5	1691.5	1681.7	1688.7	1694.3
10°	1662.2	1676.1	1667.8	1676.1	1680.3
12.5°	1641.2	1658.0	1652.4	1662.2	1666.4
15°	1616.0	1634.2	1630.0	1642.6	1646.8
17.5°	1589.5	1609.0	1606.2	1620.2	1624.4
20°	1557.3	1579.7	1578.3	1592.3	1597.9
22.5°	1523.8	1546.1	1544.7	1560.1	1567.1
25°	1486.0	1508.4	1508.4	1528.0	1536.4
27.5°	1444.1	1469.3	1470.6	1490.2	1497.2
30°	1400.8	1425.9	1430.1	1451.1	1462.3
32.5°	1356.0	1379.8	1386.8	1410.5	1418.9
35°	1304.3	1332.3	1340.6	1367.2	1378.4
37.5°	1256.8	1281.9	1293.1	1321.1	1332.3
40°	1203.6	1230.2	1242.8	1273.5	1284.7
42.5°	1149.1	1175.7	1189.7	1223.2	1234.4
45°	1094.6	1118.4	1136.5	1170.1	1182.7
47.5°	1034.5	1061.0	1080.6	1117.0	1129.5
50°	973.0	1000.9	1023.3	1062.4	1075.0
52.5°	914.3	939.4	964.6	1007.9	1021.9
55°	850.0	875.1	904.5	947.8	961.8
57.5°	784.3	809.4	843.0	889.1	904.5
60°	718.5	743.7	781.5	829.0	844.4
62.5°	650.0	675.2	717.2	766.1	780.1
65°	581.5	608.1	650.0	704.6	718.5
67.5°	511.7	538.2	582.9	640.3	655.6
70°	440.4	469.7	517.2	574.6	588.5
72.5°	366.3	399.8	452.9	508.9	525.6
75°	296.4	329.9	385.8	443.2	459.9
77.5°	227.9	265.6	321.5	381.6	399.8
80°	163.6	201.3	260.0	318.7	335.5
82.5°	104.8	144.0	202.7	258.6	272.6
85°	55.9	92.3	145.4	180.3	185.9
87.5°	18.2	47.5	65.7	86.7	88.1
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	14.89	16.56	15.25	16.87	17.19	15.61	17.28	15.97	17.59	17.91
	3H	16.67	18.19	17.05	18.52	18.88	17.77	19.29	18.15	19.62	19.98
	4H	17.30	18.74	17.70	19.08	19.46	18.71	20.14	19.11	20.49	20.86
	6H	17.73	19.06	18.14	19.42	19.81	19.57	20.90	19.98	21.26	21.65
	8H	17.84	19.11	18.26	19.50	19.90	19.95	21.22	20.37	21.61	22.00
	12H	17.90	19.12	18.33	19.50	19.93	20.26	21.48	20.68	21.86	22.29
4H	2H	15.65	17.08	16.05	17.43	17.81	16.21	17.64	16.61	17.99	18.37
	3H	17.67	18.88	18.08	19.28	19.68	18.62	19.83	19.03	20.23	20.63
	4H	18.44	19.53	18.87	19.95	20.38	19.73	20.83	20.16	21.24	21.67
	6H	18.99	19.95	19.44	20.39	20.85	20.77	21.73	21.22	22.17	22.62
	8H	19.15	20.05	19.61	20.49	20.96	21.23	22.14	21.69	22.58	23.04
	12H	19.25	20.06	19.73	20.54	21.00	21.63	22.44	22.11	22.92	23.39
8H	4H	18.92	19.83	19.38	20.27	20.73	20.04	20.95	20.50	21.39	21.85
	6H	19.63	20.39	20.12	20.88	21.35	21.26	22.02	21.75	22.50	22.98
	8H	19.87	20.55	20.38	21.06	21.54	21.86	22.54	22.37	23.04	23.53
	12H	20.05	20.65	20.55	21.14	21.70	22.40	23.00	22.91	23.49	24.05
12H	4H	19.03	19.84	19.51	20.32	20.79	20.08	20.89	20.55	21.36	21.83
	6H	19.79	20.48	20.30	20.98	21.46	21.33	22.01	21.83	22.51	23.00
	8H	20.12	20.72	20.62	21.21	21.77	22.00	22.60	22.51	23.09	23.65