

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: P1588354

Luminaire Tested: 24CZSP-52HE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588354
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-52HE-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 5000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

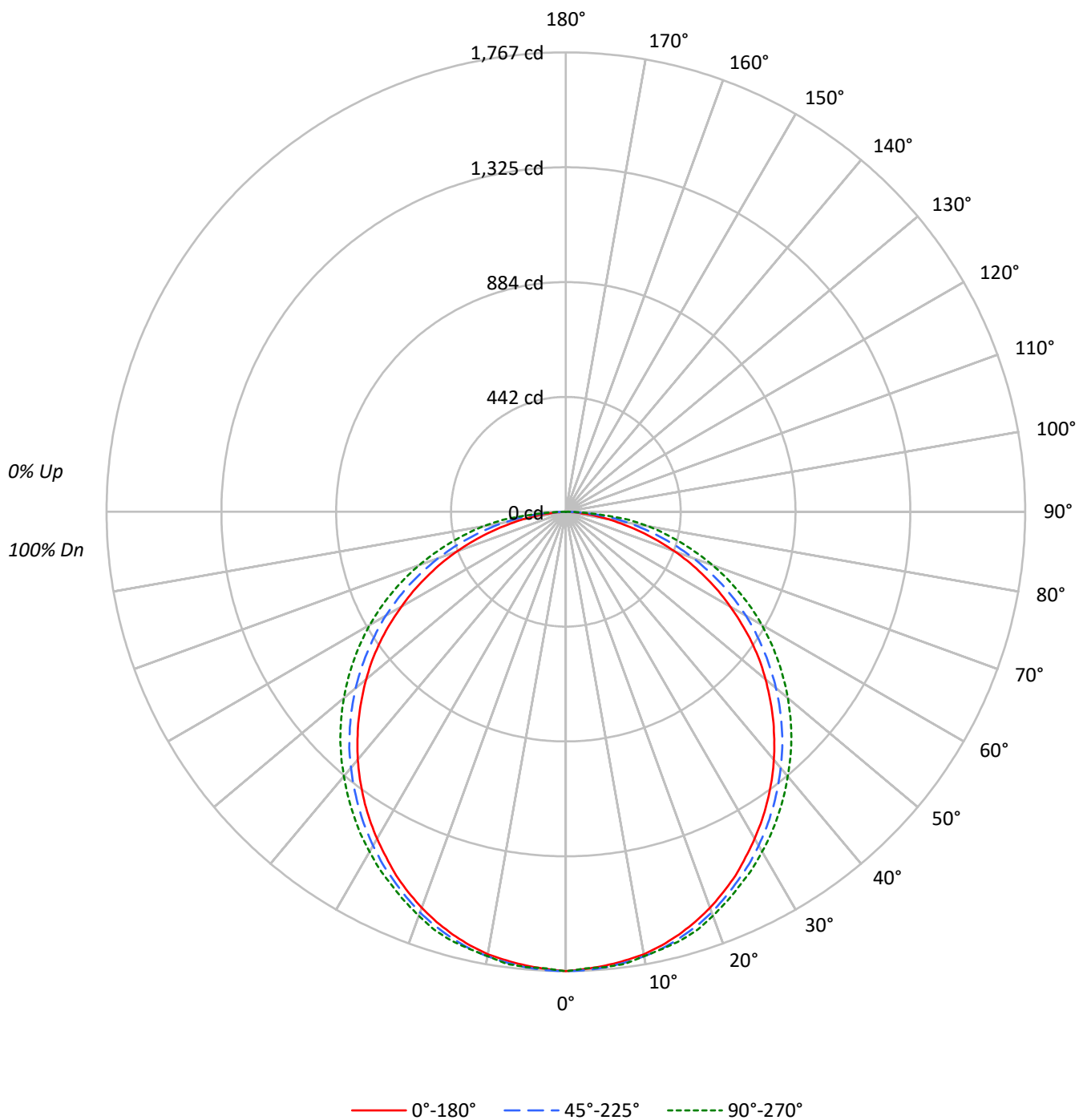
Lumens per Lamp: N/A
Luminaire Lumens: 5159.0 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2707	2707	2707
5°	2694	2705	2703
10°	2688	2701	2699
15°	2669	2691	2707
20°	2642	2674	2696
25°	2609	2646	2678
30°	2569	2623	2671
35°	2531	2597	2663
40°	2490	2571	2655
45°	2442	2545	2658
50°	2390	2514	2657
55°	2328	2479	2660
60°	2240	2452	2667
65°	2138	2404	2675
70°	1992	2337	2687
75°	1775	2244	2713
80°	1468	2137	2845
85°	954	1930	2487

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2936 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	3.2
10°-20°	478.5	9.3
20°-30°	721.7	14.0
30°-40°	869.3	16.8
40°-50°	907.8	17.6
50°-60°	833.8	16.2
60°-70°	656.7	12.7
70°-80°	402.9	7.8
80°-90°	121.2	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°	1367.4	26.5
0°-40°	2236.7	43.4
0°-60°	3978.2	77.1
0°-90°	5159.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5159.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1767	1767	1767	1767	1767	
5°	1752	1755	1759	1765	1758	167
15°	1683	1687	1697	1707	1707	475
25°	1544	1548	1566	1585	1585	711
35°	1354	1361	1389	1417	1424	847
45°	1128	1140	1175	1216	1227	869
55°	872	888	928	980	996	778
65°	590	610	663	719	738	583
75°	300	324	379	439	458	318
85°	54	75	110	139	142	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1760.3	1763.7	1764.8	1766.0	1758.0
5°	1752.4	1754.6	1759.2	1764.8	1758.0
7.5°	1741.1	1743.3	1749.0	1756.9	1753.5
10°	1728.6	1729.7	1736.5	1742.2	1735.4
12.5°	1708.2	1711.6	1719.6	1724.1	1721.8
15°	1683.3	1686.7	1696.9	1707.1	1707.1
17.5°	1653.9	1658.4	1670.9	1684.5	1685.6
20°	1621.1	1624.5	1640.3	1653.9	1653.9
22.5°	1583.7	1588.2	1604.1	1618.8	1621.1
25°	1544.1	1547.5	1565.6	1584.8	1584.8
27.5°	1497.7	1504.5	1527.1	1546.3	1550.9
30°	1452.4	1458.1	1483.0	1506.7	1510.1
32.5°	1404.8	1411.6	1437.7	1463.7	1469.4
35°	1353.9	1360.7	1389.0	1417.3	1424.1
37.5°	1300.7	1308.6	1338.1	1370.9	1377.7
40°	1245.2	1254.3	1286.0	1321.1	1327.9
42.5°	1186.4	1198.8	1232.8	1269.0	1279.2
45°	1127.5	1140.0	1175.0	1215.8	1227.1
47.5°	1065.2	1080.0	1116.2	1159.2	1171.6
50°	1003.0	1017.7	1055.0	1101.5	1115.0
52.5°	939.6	954.3	992.8	1041.5	1056.2
55°	871.7	887.5	928.3	980.3	996.2
57.5°	801.5	821.9	864.9	918.1	933.9
60°	731.3	751.7	800.3	852.4	870.5
62.5°	662.2	681.5	731.3	786.8	806.0
65°	589.8	610.2	663.4	718.8	738.1
67.5°	518.5	538.8	592.1	649.8	670.2
70°	444.9	467.5	521.9	579.6	600.0
72.5°	371.3	395.1	450.5	509.4	528.7
75°	300.0	323.8	379.2	439.2	458.5
77.5°	229.8	255.8	310.2	371.3	389.4
80°	166.4	191.3	242.3	302.3	322.6
82.5°	106.4	127.9	178.9	235.5	250.2
85°	54.3	74.7	109.8	139.2	141.5
87.5°	17.0	23.8	36.2	54.3	55.5
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	14.94	16.60	15.30	16.91	17.23	15.77	17.43	16.13	17.74	18.06
	3H	16.69	18.20	17.07	18.53	18.89	17.88	19.39	18.26	19.72	20.08
	4H	17.31	18.73	17.71	19.08	19.46	18.77	20.20	19.17	20.54	20.92
	6H	17.72	19.04	18.13	19.41	19.80	19.55	20.87	19.96	21.24	21.63
	8H	17.83	19.09	18.25	19.48	19.88	19.87	21.14	20.30	21.53	21.92
	12H	17.88	19.09	18.31	19.47	19.90	20.09	21.30	20.51	21.68	22.11
4H	2H	15.71	17.13	16.11	17.48	17.85	16.36	17.78	16.75	18.13	18.50
	3H	17.69	18.88	18.10	19.28	19.68	18.71	19.91	19.12	20.31	20.70
	4H	18.42	19.51	18.85	19.92	20.36	19.76	20.85	20.19	21.26	21.70
	6H	18.95	19.90	19.40	20.34	20.80	20.72	21.67	21.17	22.11	22.56
	8H	19.10	19.99	19.56	20.43	20.90	21.11	22.00	21.57	22.45	22.91
	12H	19.18	19.99	19.66	20.46	20.93	21.39	22.19	21.87	22.67	23.14
8H	4H	18.88	19.77	19.34	20.22	20.68	20.05	20.94	20.51	21.39	21.85
	6H	19.54	20.29	20.04	20.77	21.25	21.16	21.91	21.66	22.39	22.87
	8H	19.75	20.42	20.26	20.93	21.41	21.68	22.34	22.18	22.85	23.33
	12H	19.89	20.49	20.40	20.97	21.53	22.06	22.65	22.57	23.14	23.70
12H	4H	18.97	19.78	19.45	20.25	20.72	20.08	20.88	20.56	21.35	21.82
	6H	19.68	20.35	20.18	20.85	21.33	21.21	21.88	21.72	22.39	22.87
	8H	19.95	20.55	20.46	21.03	21.59	21.79	22.38	22.29	22.87	23.43