

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: P1588678

Luminaire Tested: 24CZSP-A-52-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588678
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-52-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

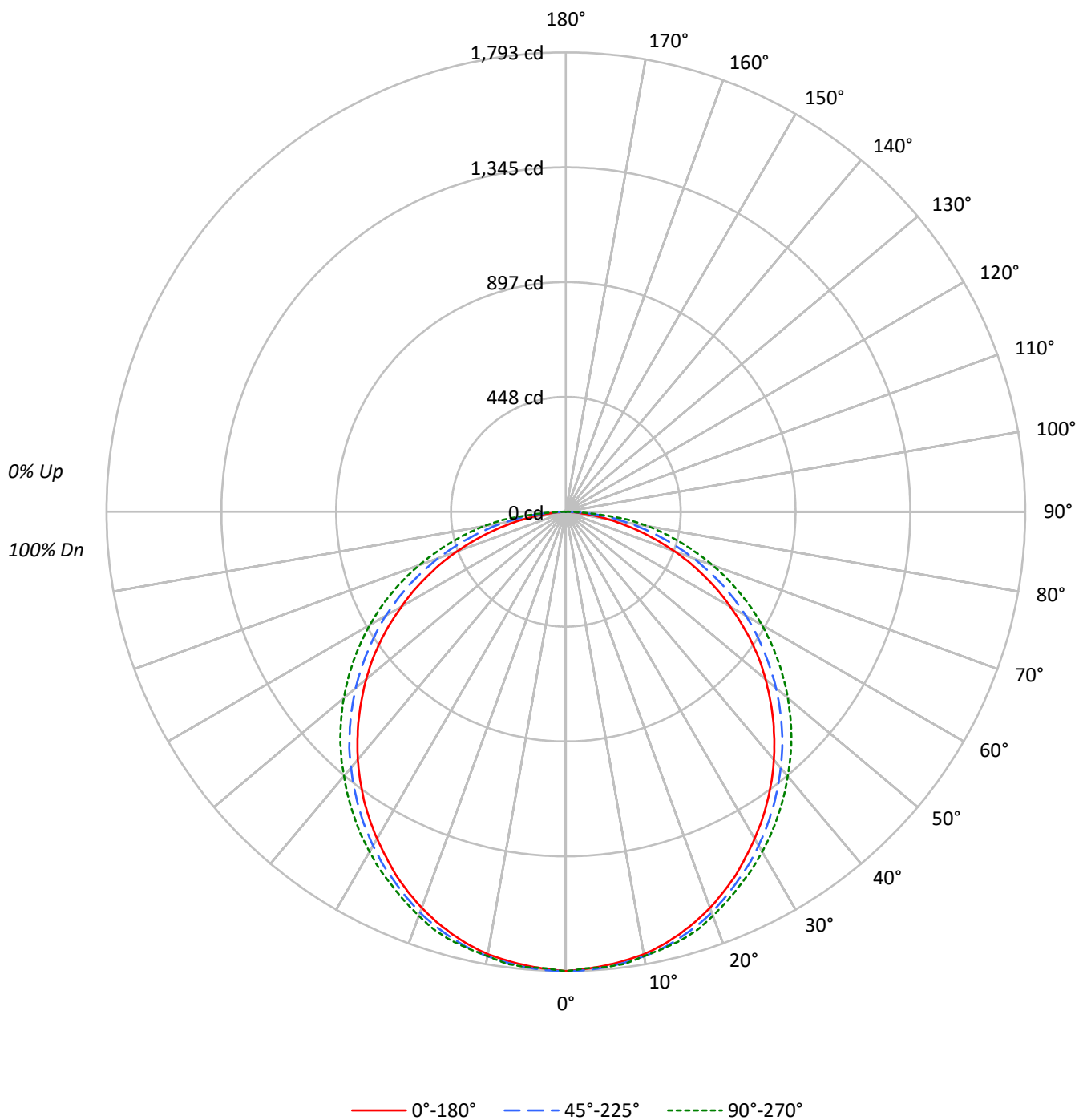
Lumens per Lamp: N/A
Luminaire Lumens: 5235.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2746	2746	2746
5°	2734	2745	2743
10°	2728	2741	2739
15°	2708	2730	2747
20°	2681	2713	2735
25°	2648	2685	2718
30°	2607	2661	2710
35°	2569	2635	2702
40°	2526	2609	2694
45°	2478	2583	2697
50°	2425	2551	2696
55°	2362	2515	2699
60°	2273	2488	2706
65°	2169	2439	2714
70°	2021	2372	2726
75°	1801	2277	2753
80°	1490	2168	2888
85°	968	1958	2524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2979 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.6	3.2
10°-20°	485.6	9.3
20°-30°	732.3	14.0
30°-40°	882.1	16.8
40°-50°	921.2	17.6
50°-60°	846.0	16.2
60°-70°	666.4	12.7
70°-80°	408.8	7.8
80°-90°	123.0	2.3
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°	1387.5	26.5
0°-40°	2269.6	43.4
0°-60°	4036.8	77.1
0°-90°	5235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1793	1793	1793	1793	1793	
5°	1778	1780	1785	1791	1784	169
15°	1708	1712	1722	1732	1732	482
25°	1567	1570	1589	1608	1608	721
35°	1374	1381	1410	1438	1445	859
45°	1144	1157	1192	1234	1245	882
55°	884	901	942	995	1011	790
65°	598	619	673	729	749	592
75°	304	328	385	446	465	323
85°	55	76	111	141	144	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1793.1	1793.1	1793.1	1793.1	1793.1
2.5°	1786.2	1789.7	1790.8	1792.0	1783.9
5°	1778.2	1780.5	1785.1	1790.8	1783.9
7.5°	1766.7	1769.0	1774.7	1782.8	1779.3
10°	1754.1	1755.2	1762.1	1767.9	1761.0
12.5°	1733.4	1736.8	1744.9	1749.5	1747.2
15°	1708.1	1711.6	1721.9	1732.2	1732.2
17.5°	1678.3	1682.9	1695.5	1709.3	1710.4
20°	1644.9	1648.4	1664.5	1678.3	1678.3
22.5°	1607.0	1611.6	1627.7	1642.6	1644.9
25°	1566.8	1570.3	1588.7	1608.2	1608.2
27.5°	1519.7	1526.6	1549.6	1569.1	1573.7
30°	1473.8	1479.5	1504.8	1528.9	1532.4
32.5°	1425.5	1432.4	1458.9	1485.3	1491.0
35°	1373.9	1380.7	1409.5	1438.2	1445.1
37.5°	1319.9	1327.9	1357.8	1391.1	1398.0
40°	1263.6	1272.8	1304.9	1340.5	1347.4
42.5°	1203.8	1216.5	1250.9	1287.7	1298.0
45°	1144.1	1156.7	1192.4	1233.7	1245.2
47.5°	1080.9	1095.9	1132.6	1176.3	1188.9
50°	1017.8	1032.7	1070.6	1117.7	1131.5
52.5°	953.4	968.4	1007.4	1056.8	1071.7
55°	884.5	900.6	941.9	994.8	1010.9
57.5°	813.3	834.0	877.6	931.6	947.7
60°	742.1	762.7	812.1	865.0	883.4
62.5°	672.0	691.5	742.1	798.3	817.9
65°	598.5	619.2	673.1	729.4	749.0
67.5°	526.1	546.8	600.8	659.4	680.0
70°	451.4	474.4	529.6	588.1	608.8
72.5°	376.8	400.9	457.2	516.9	536.4
75°	304.4	328.5	384.8	445.7	465.2
77.5°	233.2	259.6	314.7	376.8	395.2
80°	168.9	194.1	245.8	306.7	327.4
82.5°	108.0	129.8	181.5	238.9	253.9
85°	55.1	75.8	111.4	141.3	143.6
87.5°	17.2	24.1	36.8	55.1	56.3
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	14.99	16.65	15.35	16.96	17.28	15.82	17.48	16.18	17.79	18.11
	3H	16.74	18.25	17.12	18.58	18.94	17.93	19.44	18.31	19.77	20.13
	4H	17.36	18.78	17.76	19.13	19.51	18.82	20.25	19.22	20.59	20.97
	6H	17.77	19.09	18.18	19.46	19.85	19.61	20.93	20.02	21.29	21.68
	8H	17.88	19.14	18.30	19.53	19.93	19.93	21.19	20.35	21.58	21.97
	12H	17.93	19.14	18.36	19.52	19.95	20.14	21.35	20.57	21.73	22.16
4H	2H	15.76	17.18	16.16	17.53	17.90	16.41	17.83	16.80	18.18	18.55
	3H	17.74	18.94	18.15	19.33	19.73	18.76	19.96	19.17	20.36	20.76
	4H	18.47	19.56	18.90	19.97	20.41	19.81	20.90	20.24	21.31	21.75
	6H	19.00	19.95	19.46	20.39	20.85	20.77	21.72	21.22	22.16	22.61
	8H	19.15	20.04	19.61	20.48	20.95	21.16	22.06	21.62	22.50	22.96
	12H	19.23	20.04	19.71	20.51	20.98	21.44	22.24	21.92	22.72	23.19
8H	4H	18.93	19.82	19.39	20.27	20.73	20.10	20.99	20.56	21.44	21.90
	6H	19.59	20.34	20.09	20.82	21.30	21.21	21.96	21.71	22.45	22.92
	8H	19.81	20.47	20.31	20.98	21.46	21.73	22.39	22.23	22.90	23.38
	12H	19.94	20.54	20.45	21.03	21.58	22.11	22.70	22.62	23.19	23.75
12H	4H	19.02	19.83	19.50	20.30	20.77	20.13	20.93	20.61	21.40	21.87
	6H	19.73	20.40	20.23	20.90	21.39	21.26	21.93	21.77	22.44	22.92
	8H	20.00	20.60	20.51	21.09	21.64	21.84	22.43	22.34	22.92	23.48