

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: P1589814

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

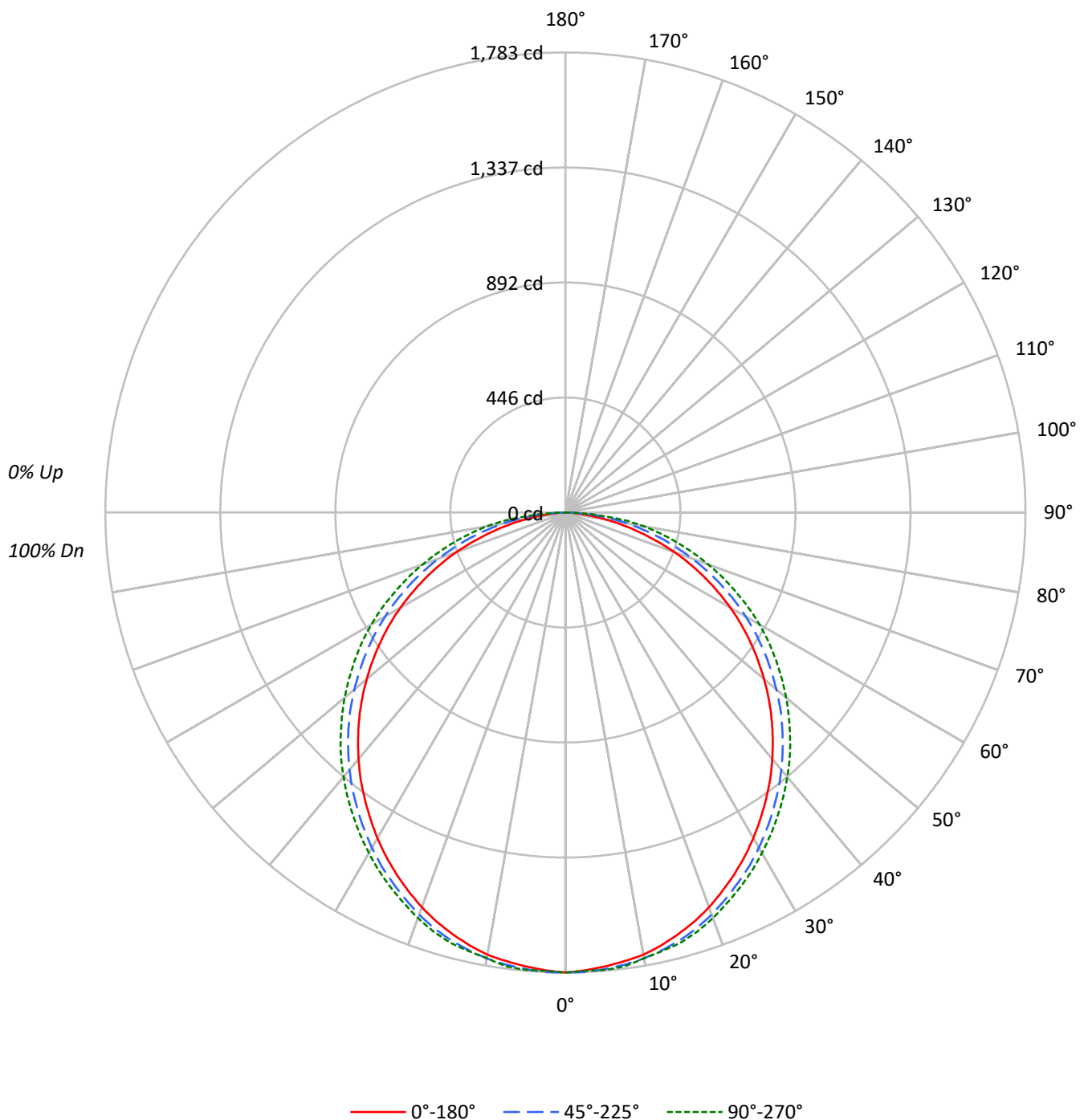
Lumens per Lamp: N/A
Luminaire Lumens: 5186.0 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: 28.75 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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2731	2731	2731
5°	2715	2731	2736
10°	2707	2729	2728
15°	2682	2721	2737
20°	2653	2702	2726
25°	2615	2675	2709
30°	2577	2652	2695
35°	2534	2626	2683
40°	2494	2603	2674
45°	2448	2576	2668
50°	2395	2544	2661
55°	2335	2511	2657
60°	2262	2474	2659
65°	2159	2422	2644
70°	2018	2348	2638
75°	1789	2258	2648
80°	1456	2145	2725
85°	940	1981	2353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2762 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	3.3
10°-20°	483.1	9.3
20°-30°	728.4	14.0
30°-40°	876.5	16.9
40°-50°	914.3	17.6
50°-60°	838.0	16.2
60°-70°	658.0	12.7
70°-80°	400.5	7.7
80°-90°	118.5	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°	1380.2	26.6
0°-40°	2256.7	43.5
0°-60°	4009.0	77.3
0°-90°	5186.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5186.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1783	1783	1783	1783	1783	
5°	1766	1777	1776	1774	1779	168
15°	1691	1708	1716	1718	1726	477
25°	1547	1569	1583	1593	1603	713
35°	1356	1377	1405	1425	1435	848
45°	1130	1154	1189	1217	1232	871
55°	875	897	940	978	995	782
65°	596	618	668	713	730	589
75°	302	330	382	427	447	320
85°	54	76	113	126	134	70
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1782.8	1782.8	1782.8	1782.8	1782.8
2.5°	1776.1	1785.0	1782.8	1775.0	1778.3
5°	1766.0	1777.2	1776.1	1773.8	1779.4
7.5°	1753.8	1766.0	1767.1	1767.1	1773.8
10°	1740.4	1752.6	1754.9	1751.5	1753.8
12.5°	1718.1	1732.6	1737.0	1737.0	1740.4
15°	1691.3	1708.0	1715.8	1718.1	1725.9
17.5°	1662.3	1680.1	1690.2	1695.7	1702.4
20°	1627.7	1646.7	1657.8	1664.5	1672.3
22.5°	1588.6	1609.8	1622.1	1628.8	1637.7
25°	1547.4	1568.6	1583.1	1593.1	1603.2
27.5°	1503.9	1523.9	1544.0	1556.3	1565.2
30°	1457.0	1478.2	1499.4	1515.0	1523.9
32.5°	1406.8	1429.1	1453.7	1470.4	1480.4
35°	1355.5	1376.7	1404.6	1424.7	1434.7
37.5°	1303.0	1325.4	1354.4	1375.6	1387.8
40°	1247.3	1270.7	1301.9	1325.4	1337.6
42.5°	1189.3	1211.6	1246.2	1272.9	1287.4
45°	1130.1	1153.6	1189.3	1217.1	1231.6
47.5°	1068.8	1091.1	1130.1	1162.5	1174.8
50°	1005.2	1026.4	1067.7	1102.2	1116.7
52.5°	940.5	962.8	1004.1	1040.9	1056.5
55°	874.6	897.0	940.5	978.4	995.1
57.5°	807.7	830.0	874.6	913.7	933.8
60°	738.5	760.9	807.7	847.9	868.0
62.5°	667.1	690.6	738.5	779.8	801.0
65°	595.7	618.1	668.3	712.9	729.6
67.5°	524.3	546.7	595.7	640.4	660.4
70°	450.7	476.4	524.3	571.2	589.0
72.5°	373.7	402.7	450.7	499.8	517.6
75°	302.3	330.2	381.5	427.3	447.4
77.5°	232.0	262.2	310.1	357.0	377.1
80°	165.1	194.1	243.2	287.8	309.0
82.5°	104.9	130.5	179.6	219.8	235.4
85°	53.5	75.9	112.7	126.1	133.9
87.5°	15.6	26.8	40.2	50.2	55.8
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	15.0	16.6	15.4	17.0	17.3	15.7	17.4	16.1	17.7	18.0
	3H	16.8	18.3	17.1	18.6	18.9	17.8	19.3	18.2	19.6	20.0
	4H	17.4	18.8	17.8	19.1	19.5	18.7	20.1	19.1	20.4	20.8
	6H	17.8	19.1	18.2	19.5	19.9	19.4	20.7	19.8	21.1	21.5
	8H	17.9	19.1	18.3	19.5	19.9	19.7	21.0	20.1	21.4	21.8
	12H	17.9	19.1	18.4	19.5	20.0	19.9	21.1	20.3	21.5	21.9
4H	2H	15.8	17.2	16.2	17.5	17.9	16.3	17.7	16.7	18.1	18.5
	3H	17.7	18.9	18.2	19.3	19.7	18.6	19.8	19.1	20.2	20.6
	4H	18.5	19.6	18.9	20.0	20.4	19.7	20.7	20.1	21.2	21.6
	6H	19.0	20.0	19.5	20.4	20.9	20.6	21.5	21.0	22.0	22.4
	8H	19.2	20.1	19.6	20.5	21.0	20.9	21.8	21.4	22.3	22.7
	12H	19.2	20.0	19.7	20.5	21.0	21.2	22.0	21.7	22.5	22.9
8H	4H	18.9	19.8	19.4	20.3	20.7	20.0	20.8	20.4	21.3	21.8
	6H	19.6	20.3	20.1	20.8	21.3	21.0	21.8	21.5	22.2	22.7
	8H	19.8	20.5	20.3	21.0	21.5	21.5	22.2	22.0	22.7	23.1
	12H	19.9	20.5	20.5	21.0	21.6	21.8	22.4	22.3	22.9	23.5
12H	4H	19.0	19.8	19.5	20.3	20.8	20.0	20.8	20.5	21.3	21.7
	6H	19.7	20.4	20.3	20.9	21.4	21.1	21.8	21.6	22.2	22.7
	8H	20.0	20.6	20.5	21.1	21.6	21.6	22.2	22.1	22.7	23.2

(END OF REPORT)