

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: P1589813

Luminaire Tested: 24CZSP-SB-52-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589813
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

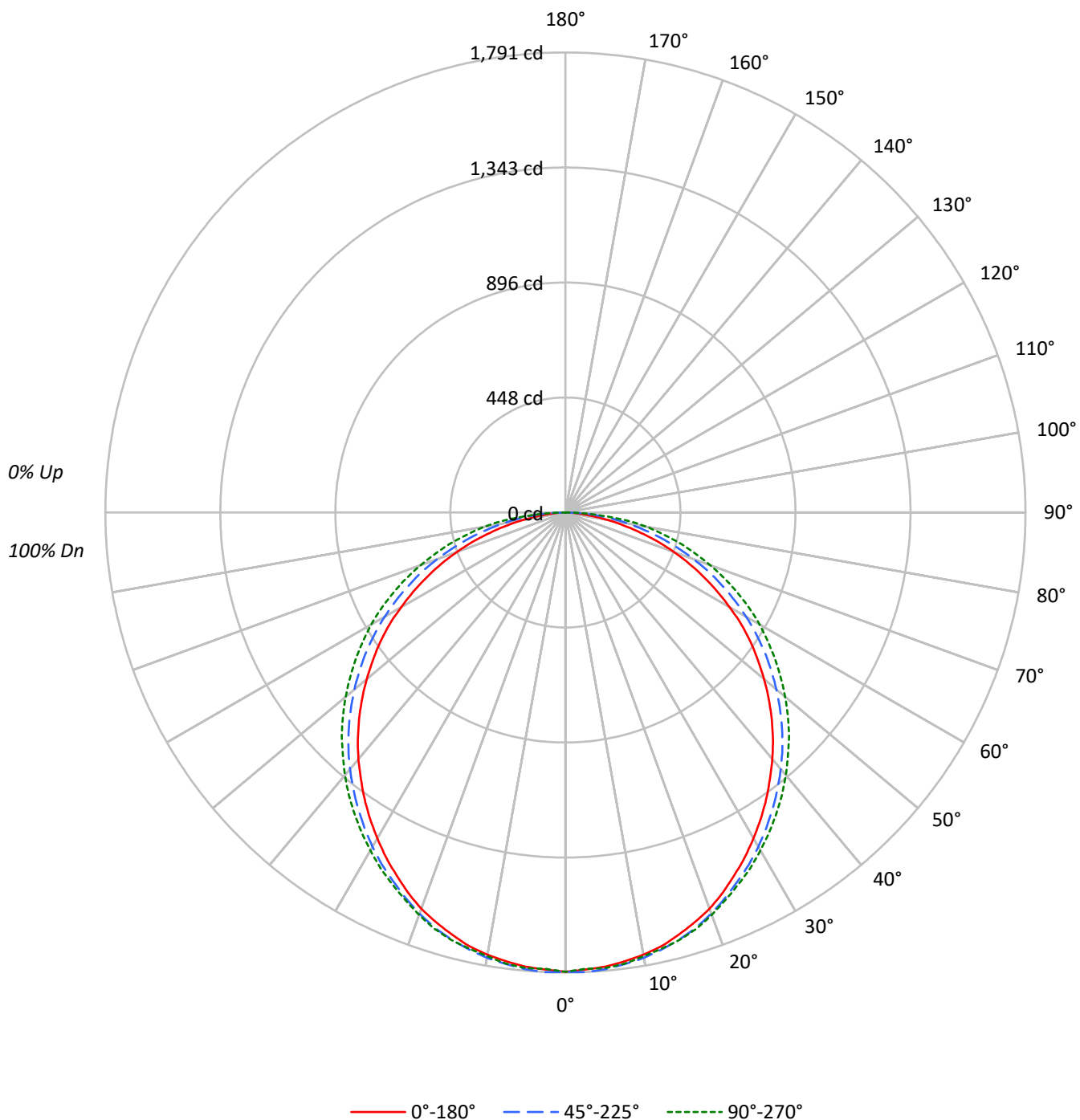
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5218.0 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 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	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	68
3	89	79	70	63	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°	2739	2739	2739
5°	2729	2744	2737
10°	2719	2738	2728
15°	2699	2727	2730
20°	2675	2707	2716
25°	2632	2678	2697
30°	2590	2656	2686
35°	2548	2631	2676
40°	2506	2608	2670
45°	2459	2583	2667
50°	2405	2555	2660
55°	2350	2527	2660
60°	2263	2490	2676
65°	2157	2442	2678
70°	2013	2374	2686
75°	1791	2287	2732
80°	1471	2192	2835
85°	970	2058	2562

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2903 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	3.2
10°-20°	484.1	9.3
20°-30°	729.7	14.0
30°-40°	878.7	16.8
40°-50°	918.0	17.6
50°-60°	843.4	16.2
60°-70°	664.2	12.7
70°-80°	407.2	7.8
80°-90°	123.5	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°	1382.9	26.5
0°-40°	2261.7	43.3
0°-60°	4023.2	77.1
0°-90°	5218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1788	1788	1788	1788	1788	
5°	1775	1778	1785	1782	1780	169
15°	1702	1708	1720	1726	1722	480
25°	1557	1567	1585	1601	1596	718
35°	1363	1380	1407	1432	1431	852
45°	1135	1160	1193	1226	1231	876
55°	880	906	946	987	996	785
65°	595	626	674	719	739	588
75°	303	338	386	433	462	322
85°	55	82	117	130	146	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1788.0	1788.0	1788.0	1788.0	1788.0
2.5°	1781.4	1785.8	1791.3	1782.5	1778.1
5°	1774.7	1778.1	1784.7	1782.5	1780.3
7.5°	1762.6	1764.8	1773.6	1773.6	1771.4
10°	1748.2	1752.7	1760.4	1759.3	1753.8
12.5°	1729.5	1732.8	1741.6	1741.6	1738.3
15°	1701.9	1708.5	1719.5	1726.2	1721.7
17.5°	1673.1	1679.8	1694.1	1700.8	1698.5
20°	1641.1	1646.6	1661.0	1670.9	1666.5
22.5°	1601.4	1608.0	1624.6	1635.6	1631.2
25°	1557.2	1567.1	1584.8	1601.4	1595.8
27.5°	1513.0	1524.1	1546.1	1562.7	1560.5
30°	1464.4	1478.8	1502.0	1522.9	1518.5
32.5°	1414.7	1431.3	1455.6	1477.7	1476.6
35°	1362.8	1380.5	1407.0	1432.4	1431.3
37.5°	1307.6	1328.6	1356.2	1383.8	1384.9
40°	1253.5	1273.4	1304.3	1334.1	1335.2
42.5°	1196.0	1217.0	1250.2	1281.1	1282.2
45°	1135.3	1159.6	1192.7	1225.9	1231.4
47.5°	1073.5	1098.9	1133.1	1168.4	1175.1
50°	1009.4	1035.9	1072.4	1109.9	1116.5
52.5°	944.2	971.9	1009.4	1047.0	1056.9
55°	880.2	905.6	946.5	987.3	996.2
57.5°	812.8	836.0	880.2	923.3	934.3
60°	738.8	767.5	812.8	855.9	873.6
62.5°	667.0	698.0	744.4	787.4	807.3
65°	595.3	626.2	673.7	719.0	738.8
67.5°	522.4	554.4	605.2	648.3	670.4
70°	449.5	481.5	530.1	576.5	599.7
72.5°	376.6	410.8	458.3	505.8	529.0
75°	302.6	337.9	386.5	432.9	461.6
77.5°	233.0	267.3	315.9	363.3	387.6
80°	166.8	201.0	248.5	296.0	321.4
82.5°	106.0	138.0	184.4	224.2	247.4
85°	55.2	81.7	117.1	130.3	145.8
87.5°	16.6	32.0	45.3	50.8	62.9
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	16.7	15.4	17.0	17.3	15.8	17.4	16.1	17.7	18.1
	3H	16.8	18.3	17.2	18.6	19.0	17.9	19.4	18.2	19.7	20.0
	4H	17.4	18.8	17.8	19.2	19.5	18.7	20.2	19.1	20.5	20.9
	6H	17.8	19.1	18.2	19.5	19.9	19.5	20.8	19.9	21.2	21.6
	8H	17.9	19.2	18.3	19.6	20.0	19.8	21.1	20.2	21.5	21.9
	12H	18.0	19.2	18.4	19.6	20.0	20.0	21.2	20.5	21.6	22.1
4H	2H	15.8	17.2	16.2	17.6	17.9	16.4	17.8	16.8	18.1	18.5
	3H	17.8	19.0	18.2	19.4	19.8	18.7	19.9	19.1	20.3	20.7
	4H	18.5	19.6	19.0	20.0	20.5	19.7	20.8	20.2	21.2	21.7
	6H	19.1	20.0	19.5	20.5	20.9	20.7	21.6	21.1	22.0	22.5
	8H	19.2	20.1	19.7	20.5	21.0	21.0	21.9	21.5	22.4	22.8
	12H	19.3	20.1	19.8	20.6	21.0	21.3	22.1	21.8	22.6	23.1
8H	4H	19.0	19.9	19.4	20.3	20.8	20.0	20.9	20.5	21.4	21.8
	6H	19.7	20.4	20.2	20.9	21.4	21.1	21.9	21.6	22.3	22.8
	8H	19.9	20.5	20.4	21.1	21.5	21.6	22.3	22.1	22.8	23.3
	12H	20.0	20.6	20.5	21.1	21.7	22.0	22.6	22.5	23.1	23.6
12H	4H	19.1	19.9	19.5	20.3	20.8	20.1	20.9	20.5	21.3	21.8
	6H	19.8	20.5	20.3	20.9	21.5	21.2	21.9	21.7	22.3	22.8
	8H	20.1	20.7	20.6	21.2	21.7	21.7	22.3	22.2	22.8	23.4

(END OF REPORT)