

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: P1589817

Luminaire Tested: 24CZSP-SB-52-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589817
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

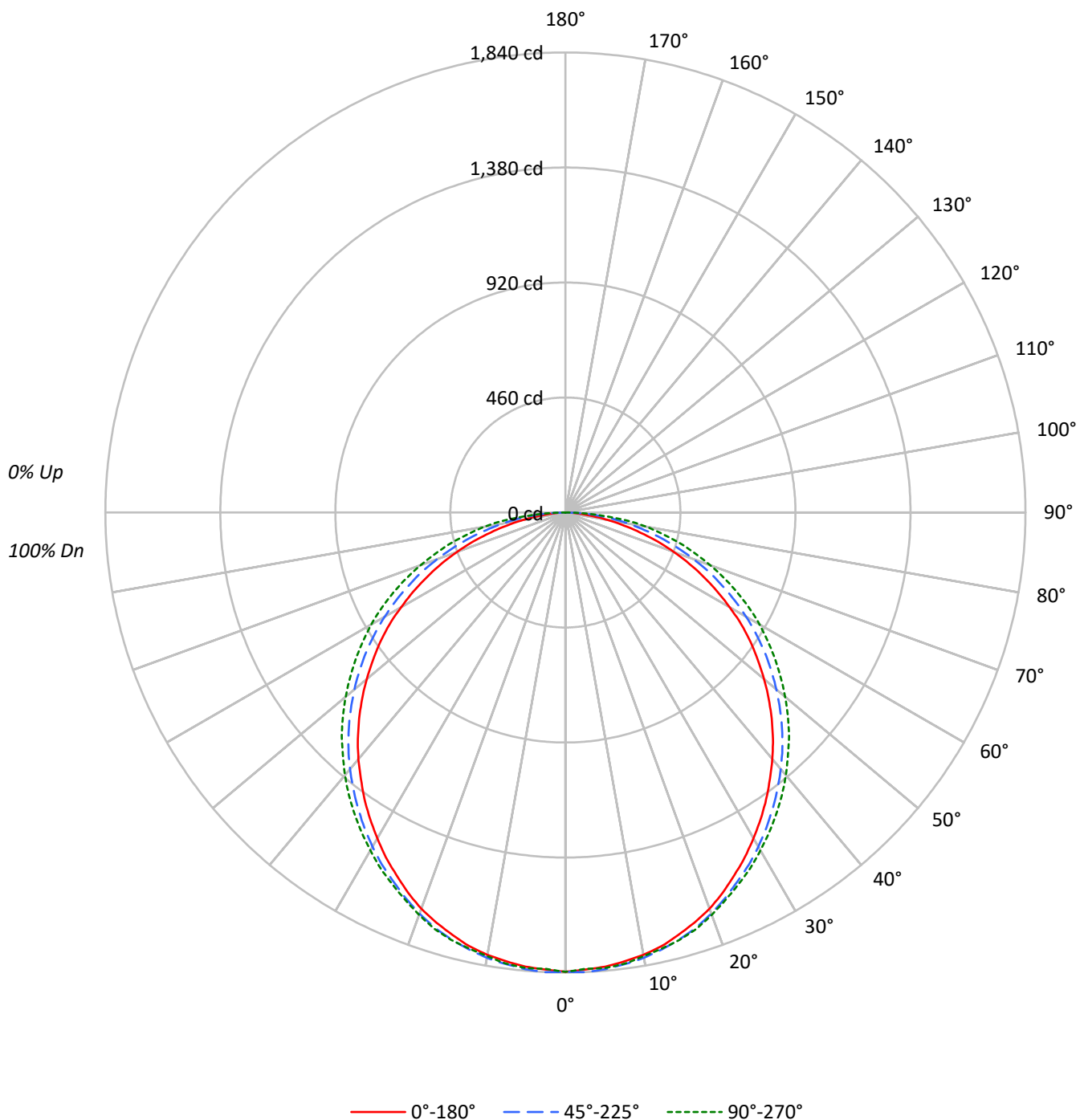
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5361.0 lumens
Efficiency: N/A
Efficacy: 146.1 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2814	2814	2814
5°	2803	2819	2812
10°	2794	2813	2802
15°	2773	2801	2805
20°	2748	2781	2791
25°	2704	2752	2771
30°	2661	2729	2759
35°	2618	2703	2749
40°	2575	2679	2743
45°	2526	2654	2740
50°	2471	2625	2733
55°	2415	2597	2733
60°	2325	2558	2749
65°	2217	2508	2751
70°	2068	2439	2759
75°	1840	2350	2807
80°	1511	2252	2912
85°	996	2114	2633

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2983 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	3.2
10°-20°	497.4	9.3
20°-30°	749.7	14.0
30°-40°	902.8	16.8
40°-50°	943.2	17.6
50°-60°	866.5	16.2
60°-70°	682.4	12.7
70°-80°	418.4	7.8
80°-90°	126.9	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°	1420.8	26.5
0°-40°	2323.7	43.3
0°-60°	4133.4	77.1
0°-90°	5361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5361.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1837	1837	1837	1837	1837	
5°	1823	1827	1834	1831	1829	173
15°	1748	1755	1767	1774	1769	493
25°	1600	1610	1628	1645	1640	738
35°	1400	1418	1446	1472	1470	876
45°	1166	1191	1225	1260	1265	900
55°	904	930	972	1014	1024	807
65°	612	643	692	739	759	605
75°	311	347	397	445	474	330
85°	57	84	120	134	150	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1837.0	1837.0	1837.0	1837.0	1837.0
2.5°	1830.2	1834.7	1840.4	1831.3	1826.8
5°	1823.4	1826.8	1833.6	1831.3	1829.1
7.5°	1810.9	1813.2	1822.2	1822.2	1820.0
10°	1796.2	1800.7	1808.6	1807.5	1801.8
12.5°	1776.9	1780.3	1789.3	1789.3	1785.9
15°	1748.5	1755.3	1766.7	1773.5	1768.9
17.5°	1719.0	1725.8	1740.6	1747.4	1745.1
20°	1686.1	1691.8	1706.5	1716.7	1712.2
22.5°	1645.2	1652.1	1669.1	1680.4	1675.9
25°	1599.9	1610.1	1628.2	1645.2	1639.6
27.5°	1554.5	1565.8	1588.5	1605.5	1603.3
30°	1504.5	1519.3	1543.1	1564.7	1560.1
32.5°	1453.5	1470.5	1495.5	1518.2	1517.0
35°	1400.2	1418.3	1445.5	1471.6	1470.5
37.5°	1343.4	1365.0	1393.4	1421.7	1422.9
40°	1287.8	1308.3	1340.0	1370.7	1371.8
42.5°	1228.8	1250.4	1284.4	1316.2	1317.3
45°	1166.4	1191.4	1225.4	1259.5	1265.1
47.5°	1102.9	1129.0	1164.2	1200.5	1207.3
50°	1037.1	1064.3	1101.7	1140.3	1147.1
52.5°	970.1	998.5	1037.1	1075.6	1085.9
55°	904.3	930.4	972.4	1014.4	1023.5
57.5°	835.1	858.9	904.3	948.6	959.9
60°	759.1	788.6	835.1	879.4	897.5
62.5°	685.3	717.1	764.8	809.0	829.4
65°	611.6	643.3	692.1	738.7	759.1
67.5°	536.7	569.6	621.8	666.0	688.7
70°	461.8	494.7	544.6	592.3	616.1
72.5°	386.9	422.1	470.9	519.7	543.5
75°	310.9	347.2	397.1	444.8	474.3
77.5°	239.4	274.6	324.5	373.3	398.3
80°	171.3	206.5	255.3	304.1	330.2
82.5°	108.9	141.8	189.5	230.3	254.2
85°	56.7	84.0	120.3	133.9	149.8
87.5°	17.0	32.9	46.5	52.2	64.7
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	15.1	16.8	15.5	17.1	17.4	15.9	17.5	16.2	17.8	18.1
	3H	16.9	18.4	17.2	18.7	19.1	17.9	19.5	18.3	19.8	20.1
	4H	17.5	18.9	17.9	19.3	19.6	18.8	20.3	19.2	20.6	21.0
	6H	17.9	19.2	18.3	19.6	20.0	19.6	20.9	20.0	21.3	21.7
	8H	18.0	19.3	18.4	19.7	20.1	19.9	21.2	20.3	21.6	22.0
	12H	18.1	19.3	18.5	19.7	20.1	20.1	21.3	20.6	21.7	22.1
4H	2H	15.9	17.3	16.3	17.6	18.0	16.5	17.9	16.9	18.2	18.6
	3H	17.9	19.1	18.3	19.5	19.9	18.8	20.0	19.2	20.4	20.8
	4H	18.6	19.7	19.1	20.1	20.6	19.8	20.9	20.3	21.3	21.8
	6H	19.2	20.1	19.6	20.6	21.0	20.8	21.7	21.2	22.1	22.6
	8H	19.3	20.2	19.8	20.6	21.1	21.1	22.0	21.6	22.5	22.9
	12H	19.4	20.2	19.9	20.7	21.1	21.4	22.2	21.9	22.7	23.2
8H	4H	19.1	20.0	19.5	20.4	20.9	20.1	21.0	20.6	21.5	21.9
	6H	19.8	20.5	20.2	21.0	21.5	21.2	21.9	21.7	22.4	22.9
	8H	20.0	20.6	20.5	21.1	21.6	21.7	22.4	22.2	22.9	23.4
	12H	20.1	20.7	20.6	21.2	21.8	22.1	22.7	22.6	23.1	23.7
12H	4H	19.2	20.0	19.6	20.4	20.9	20.1	21.0	20.6	21.4	21.9
	6H	19.9	20.6	20.4	21.0	21.6	21.3	21.9	21.8	22.4	22.9
	8H	20.2	20.8	20.7	21.3	21.8	21.8	22.4	22.3	22.9	23.5

(END OF REPORT)