

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: P1589836

Luminaire Tested: 24CZSP-SB-52HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589836
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-52HE-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

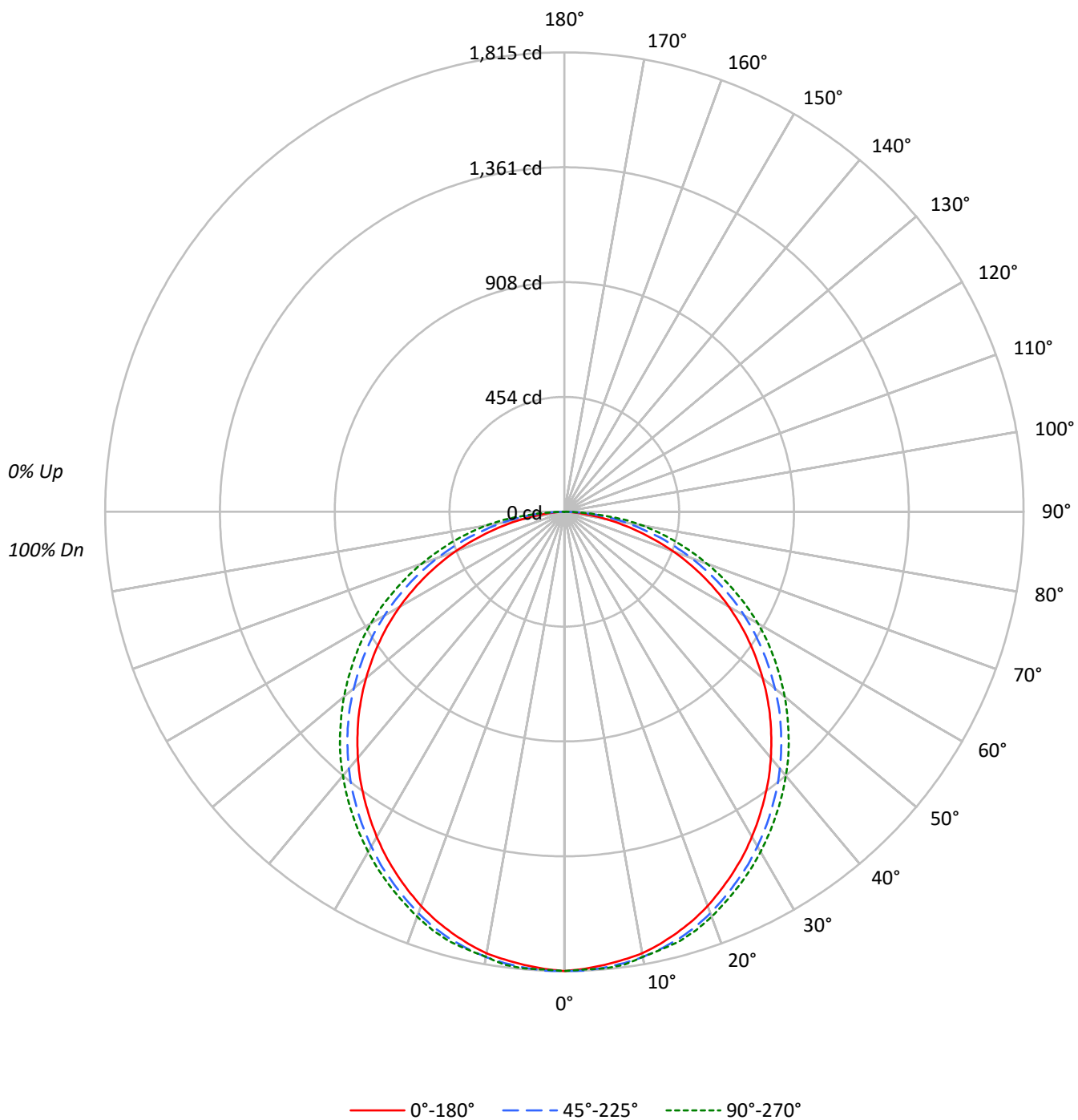
Lumens per Lamp: N/A
Luminaire Lumens: 5279.0 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2779	2779	2779
5°	2764	2780	2785
10°	2755	2778	2776
15°	2730	2770	2786
20°	2701	2750	2775
25°	2662	2723	2758
30°	2623	2699	2744
35°	2580	2673	2731
40°	2538	2650	2722
45°	2492	2622	2716
50°	2438	2590	2709
55°	2377	2556	2705
60°	2303	2519	2706
65°	2198	2465	2692
70°	2055	2390	2685
75°	1821	2298	2695
80°	1483	2184	2775
85°	958	2016	2395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2812 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	3.3
10°-20°	491.8	9.3
20°-30°	741.5	14.0
30°-40°	892.2	16.9
40°-50°	930.6	17.6
50°-60°	853.0	16.2
60°-70°	669.8	12.7
70°-80°	407.7	7.7
80°-90°	120.6	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°	1405.0	26.6
0°-40°	2297.2	43.5
0°-60°	4080.9	77.3
0°-90°	5279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1815	1815	1815	1815	1815	
5°	1798	1809	1808	1806	1811	171
15°	1722	1739	1747	1749	1757	486
25°	1575	1597	1612	1622	1632	726
35°	1380	1401	1430	1450	1460	863
45°	1150	1174	1211	1239	1254	887
55°	890	913	957	996	1013	796
65°	606	629	680	726	743	600
75°	308	336	388	435	455	326
85°	54	77	115	128	136	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1814.7	1814.7	1814.7	1814.7	1814.7
2.5°	1807.9	1817.0	1814.7	1806.8	1810.2
5°	1797.7	1809.1	1807.9	1805.7	1811.3
7.5°	1785.2	1797.7	1798.8	1798.8	1805.7
10°	1771.6	1784.1	1786.3	1782.9	1785.2
12.5°	1748.9	1763.6	1768.2	1768.2	1771.6
15°	1721.6	1738.7	1746.6	1748.9	1756.8
17.5°	1692.1	1710.3	1720.5	1726.2	1733.0
20°	1656.9	1676.2	1687.5	1694.4	1702.3
22.5°	1617.1	1638.7	1651.2	1658.0	1667.1
25°	1575.1	1596.7	1611.5	1621.7	1631.9
27.5°	1530.8	1551.3	1571.7	1584.2	1593.3
30°	1483.1	1504.7	1526.3	1542.2	1551.3
32.5°	1432.0	1454.7	1479.7	1496.8	1507.0
35°	1379.8	1401.4	1429.8	1450.2	1460.4
37.5°	1326.4	1349.1	1378.7	1400.2	1412.7
40°	1269.6	1293.5	1325.3	1349.1	1361.6
42.5°	1210.6	1233.3	1268.5	1295.8	1310.5
45°	1150.4	1174.2	1210.6	1239.0	1253.7
47.5°	1087.9	1110.6	1150.4	1183.3	1195.8
50°	1023.2	1044.8	1086.8	1122.0	1136.8
52.5°	957.3	980.0	1022.1	1059.5	1075.4
55°	890.3	913.0	957.3	995.9	1013.0
57.5°	822.2	844.9	890.3	930.1	950.5
60°	751.8	774.5	822.2	863.1	883.5
62.5°	679.1	703.0	751.8	793.8	815.4
65°	606.4	629.1	680.2	725.7	742.7
67.5°	533.7	556.5	606.4	651.9	672.3
70°	458.8	484.9	533.7	581.4	599.6
72.5°	380.4	410.0	458.8	508.8	526.9
75°	307.8	336.1	388.4	434.9	455.4
77.5°	236.2	266.9	315.7	363.4	383.8
80°	168.1	197.6	247.6	293.0	314.6
82.5°	106.7	132.9	182.8	223.7	239.6
85°	54.5	77.2	114.7	128.3	136.3
87.5°	15.9	27.3	40.9	51.1	56.8
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	15.1	16.7	15.4	17.0	17.3	15.8	17.4	16.2	17.8	18.1
	3H	16.8	18.3	17.2	18.7	19.0	17.9	19.4	18.2	19.7	20.1
	4H	17.4	18.9	17.8	19.2	19.6	18.7	20.2	19.1	20.5	20.9
	6H	17.8	19.2	18.3	19.5	19.9	19.5	20.8	19.9	21.2	21.5
	8H	18.0	19.2	18.4	19.6	20.0	19.8	21.0	20.2	21.4	21.8
	12H	18.0	19.2	18.4	19.6	20.0	20.0	21.2	20.4	21.6	22.0
4H	2H	15.8	17.2	16.2	17.6	18.0	16.4	17.8	16.8	18.2	18.5
	3H	17.8	19.0	18.2	19.4	19.8	18.7	19.9	19.1	20.3	20.7
	4H	18.6	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	20.6	21.6	21.1	22.0	22.5
	8H	19.2	20.1	19.7	20.6	21.0	21.0	21.9	21.5	22.3	22.8
	12H	19.3	20.1	19.8	20.6	21.0	21.2	22.0	21.7	22.5	23.0
8H	4H	19.0	19.9	19.5	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	21.8	21.6	22.3	22.8
	8H	19.9	20.5	20.4	21.0	21.5	21.5	22.2	22.1	22.7	23.2
	12H	20.0	20.6	20.5	21.1	21.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.1	19.9	19.6	20.4	20.8	20.0	20.8	20.5	21.3	21.8
	6H	19.8	20.5	20.3	20.9	21.5	21.1	21.8	21.7	22.3	22.8
	8H	20.1	20.7	20.6	21.1	21.7	21.7	22.3	22.2	22.7	23.3

(END OF REPORT)