

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: P1589840

Luminaire Tested: 24CZSP-SB-52HE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589840
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-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 5000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

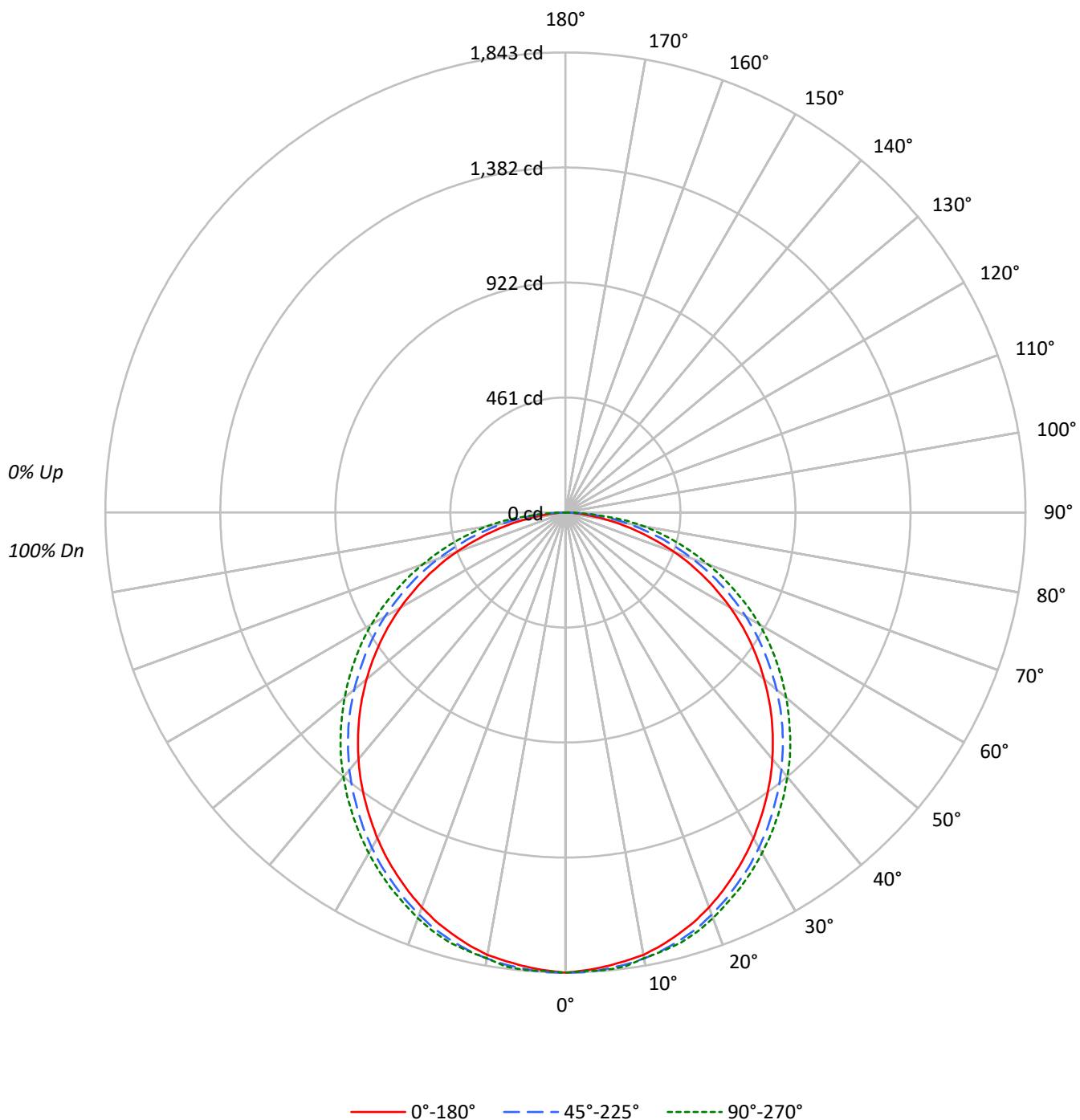
Lumens per Lamp: N/A
Luminaire Lumens: 5362.0 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
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	94	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	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2823	2823	2823
5°	2807	2823	2829
10°	2799	2822	2820
15°	2773	2813	2829
20°	2743	2794	2818
25°	2704	2766	2801
30°	2664	2742	2787
35°	2620	2715	2774
40°	2578	2691	2765
45°	2531	2663	2758
50°	2476	2630	2751
55°	2415	2597	2747
60°	2339	2558	2749
65°	2232	2504	2734
70°	2087	2428	2727
75°	1850	2335	2737
80°	1506	2218	2818
85°	974	2047	2432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2856 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	3.3
10°-20°	499.5	9.3
20°-30°	753.1	14.0
30°-40°	906.2	16.9
40°-50°	945.3	17.6
50°-60°	866.4	16.2
60°-70°	680.4	12.7
70°-80°	414.1	7.7
80°-90°	122.5	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°	1427.1	26.6
0°-40°	2333.3	43.5
0°-60°	4145.0	77.3
0°-90°	5362.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5362.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1843	1843	1843	1843	1843	
5°	1826	1838	1836	1834	1840	173
15°	1749	1766	1774	1776	1784	493
25°	1600	1622	1637	1647	1658	737
35°	1402	1423	1452	1473	1483	877
45°	1168	1193	1230	1258	1273	901
55°	904	927	972	1012	1029	808
65°	616	639	691	737	754	609
75°	313	341	394	442	462	331
85°	55	78	116	130	138	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1843.3	1843.3	1843.3	1843.3	1843.3
2.5°	1836.3	1845.6	1843.3	1835.2	1838.7
5°	1826.0	1837.5	1836.3	1834.0	1839.8
7.5°	1813.3	1826.0	1827.1	1827.1	1834.0
10°	1799.4	1812.1	1814.4	1811.0	1813.3
12.5°	1776.4	1791.4	1796.0	1796.0	1799.4
15°	1748.7	1766.0	1774.1	1776.4	1784.4
17.5°	1718.7	1737.1	1747.5	1753.3	1760.2
20°	1682.9	1702.5	1714.1	1721.0	1729.1
22.5°	1642.6	1664.5	1677.2	1684.1	1693.3
25°	1599.9	1621.8	1636.8	1647.2	1657.6
27.5°	1554.9	1575.7	1596.4	1609.1	1618.3
30°	1506.5	1528.4	1550.3	1566.4	1575.7
32.5°	1454.5	1477.6	1503.0	1520.3	1530.7
35°	1401.5	1423.4	1452.2	1473.0	1483.4
37.5°	1347.3	1370.3	1400.3	1422.2	1434.9
40°	1289.6	1313.8	1346.1	1370.3	1383.0
42.5°	1229.6	1252.7	1288.4	1316.1	1331.1
45°	1168.5	1192.7	1229.6	1258.5	1273.4
47.5°	1105.0	1128.1	1168.5	1201.9	1214.6
50°	1039.3	1061.2	1103.9	1139.6	1154.6
52.5°	972.4	995.5	1038.1	1076.2	1092.4
55°	904.3	927.4	972.4	1011.6	1028.9
57.5°	835.1	858.2	904.3	944.7	965.5
60°	763.6	786.7	835.1	876.6	897.4
62.5°	689.8	714.0	763.6	806.3	828.2
65°	616.0	639.0	690.9	737.1	754.4
67.5°	542.1	565.2	616.0	662.1	682.9
70°	466.0	492.5	542.1	590.6	609.0
72.5°	386.4	416.4	466.0	516.8	535.2
75°	312.6	341.4	394.5	441.8	462.5
77.5°	239.9	271.1	320.7	369.1	389.9
80°	170.7	200.7	251.5	297.6	319.5
82.5°	108.4	135.0	185.7	227.2	243.4
85°	55.4	78.4	116.5	130.3	138.4
87.5°	16.1	27.7	41.5	51.9	57.7
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	15.8	17.5	16.2	17.8	18.1
	3H	16.9	18.4	17.3	18.7	19.1	17.9	19.4	18.3	19.8	20.1
	4H	17.5	18.9	17.9	19.3	19.6	18.8	20.2	19.2	20.6	20.9
	6H	17.9	19.2	18.3	19.6	20.0	19.5	20.8	19.9	21.2	21.6
	8H	18.0	19.3	18.4	19.7	20.1	19.8	21.1	20.2	21.5	21.9
	12H	18.1	19.3	18.5	19.6	20.1	20.0	21.2	20.4	21.6	22.0
4H	2H	15.9	17.3	16.3	17.6	18.0	16.4	17.9	16.8	18.2	18.6
	3H	17.9	19.1	18.3	19.5	19.9	18.8	20.0	19.2	20.4	20.7
	4H	18.6	19.7	19.0	20.1	20.5	19.8	20.9	20.2	21.3	21.7
	6H	19.1	20.1	19.6	20.5	21.0	20.7	21.6	21.1	22.1	22.5
	8H	19.3	20.2	19.7	20.6	21.1	21.0	21.9	21.5	22.4	22.8
	12H	19.4	20.2	19.8	20.6	21.1	21.3	22.1	21.8	22.6	23.0
8H	4H	19.1	19.9	19.5	20.4	20.8	20.1	21.0	20.5	21.4	21.9
	6H	19.7	20.5	20.2	20.9	21.4	21.1	21.9	21.6	22.4	22.8
	8H	19.9	20.6	20.4	21.1	21.6	21.6	22.3	22.1	22.8	23.3
	12H	20.1	20.7	20.6	21.1	21.7	22.0	22.5	22.5	23.0	23.6
12H	4H	19.1	19.9	19.6	20.4	20.9	20.1	20.9	20.6	21.4	21.8
	6H	19.9	20.5	20.4	21.0	21.5	21.2	21.9	21.7	22.3	22.9
	8H	20.1	20.7	20.6	21.2	21.8	21.7	22.3	22.2	22.8	23.4

(END OF REPORT)