

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: P1589841

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589841
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-52HE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 5000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

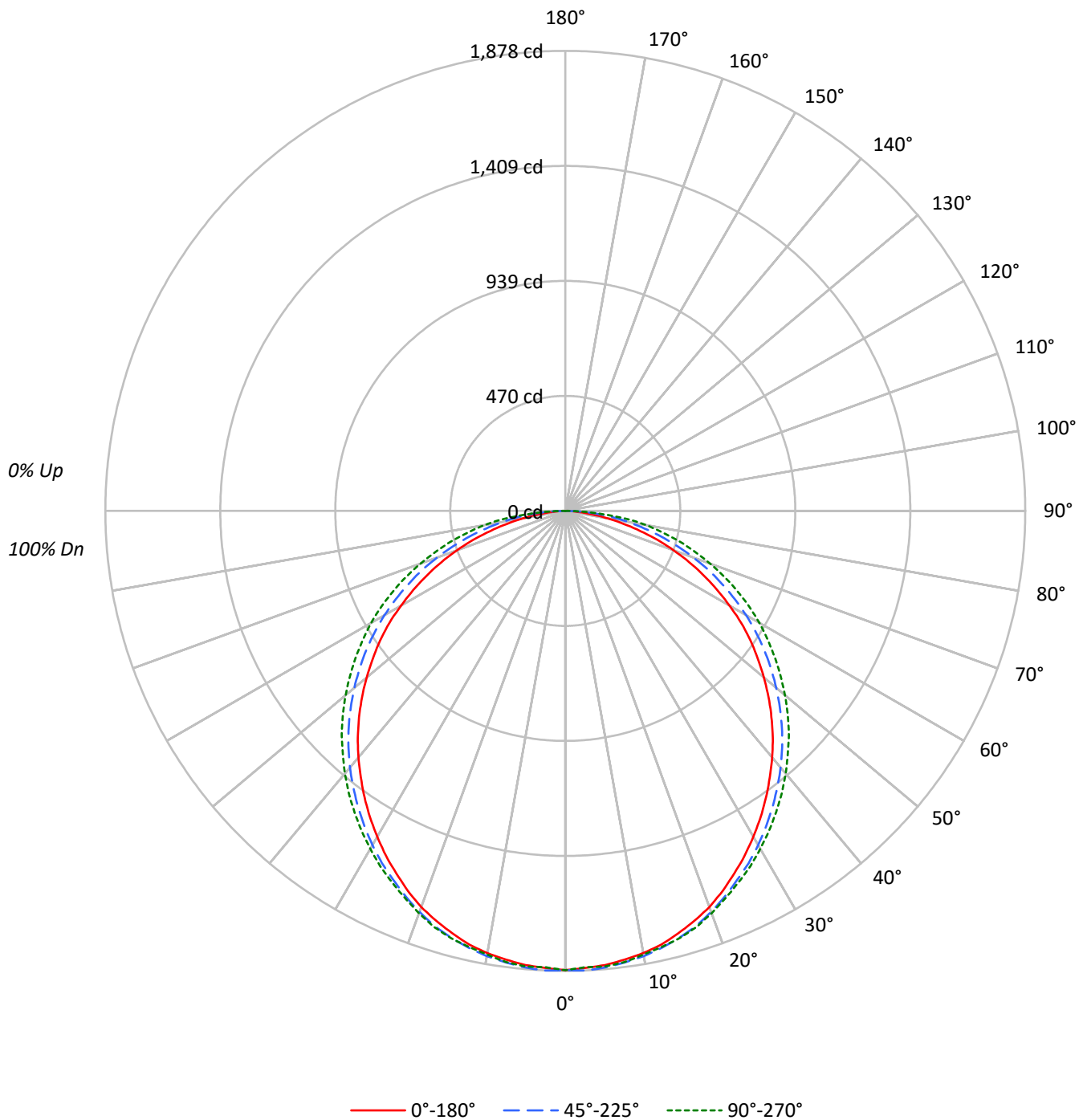
Lumens per Lamp: N/A
Luminaire Lumens: 5471.0 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	2871	2871	2871
5°	2861	2877	2870
10°	2851	2871	2860
15°	2829	2859	2862
20°	2805	2839	2848
25°	2759	2808	2828
30°	2715	2785	2816
35°	2672	2758	2806
40°	2628	2734	2799
45°	2578	2709	2797
50°	2522	2679	2790
55°	2464	2650	2789
60°	2373	2611	2806
65°	2262	2560	2808
70°	2111	2489	2816
75°	1878	2398	2864
80°	1542	2298	2972
85°	1018	2156	2685

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3044 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.3	3.2
10°-20°	507.6	9.3
20°-30°	765.1	14.0
30°-40°	921.3	16.8
40°-50°	962.6	17.6
50°-60°	884.3	16.2
60°-70°	696.4	12.7
70°-80°	426.9	7.8
80°-90°	129.5	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°	1450.0	26.5
0°-40°	2371.3	43.3
0°-60°	4218.2	77.1
0°-90°	5471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1875	1875	1875	1875	1875	
5°	1861	1864	1871	1869	1867	177
15°	1784	1791	1803	1810	1805	504
25°	1633	1643	1662	1679	1673	753
35°	1429	1447	1475	1502	1501	894
45°	1190	1216	1251	1285	1291	918
55°	923	950	992	1035	1044	823
65°	624	656	706	754	775	617
75°	317	354	405	454	484	337
85°	58	86	123	137	153	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.7	1874.7	1874.7	1874.7	1874.7
2.5°	1867.7	1872.4	1878.2	1868.9	1864.3
5°	1860.8	1864.3	1871.2	1868.9	1866.6
7.5°	1848.1	1850.4	1859.6	1859.6	1857.3
10°	1833.0	1837.6	1845.7	1844.6	1838.8
12.5°	1813.3	1816.8	1826.1	1826.1	1822.6
15°	1784.4	1791.3	1802.9	1809.8	1805.2
17.5°	1754.3	1761.2	1776.3	1783.2	1780.9
20°	1720.7	1726.5	1741.5	1752.0	1747.3
22.5°	1679.0	1685.9	1703.3	1714.9	1710.3
25°	1632.7	1643.1	1661.6	1679.0	1673.2
27.5°	1586.4	1597.9	1621.1	1638.5	1636.2
30°	1535.4	1550.5	1574.8	1596.8	1592.2
32.5°	1483.3	1500.7	1526.2	1549.3	1548.2
35°	1428.9	1447.4	1475.2	1501.8	1500.7
37.5°	1371.0	1393.0	1421.9	1450.9	1452.0
40°	1314.3	1335.1	1367.5	1398.8	1399.9
42.5°	1254.0	1276.0	1310.8	1343.2	1344.4
45°	1190.4	1215.8	1250.6	1285.3	1291.1
47.5°	1125.5	1152.1	1188.0	1225.1	1232.0
50°	1058.4	1086.1	1124.4	1163.7	1170.7
52.5°	990.0	1019.0	1058.4	1097.7	1108.1
55°	922.9	949.5	992.3	1035.2	1044.5
57.5°	852.2	876.6	922.9	968.0	979.6
60°	774.7	804.8	852.2	897.4	915.9
62.5°	699.4	731.8	780.4	825.6	846.4
65°	624.1	656.5	706.3	753.8	774.7
67.5°	547.7	581.3	634.5	679.7	702.9
70°	471.3	504.9	555.8	604.4	628.8
72.5°	394.9	430.8	480.5	530.3	554.6
75°	317.3	354.3	405.3	453.9	484.0
77.5°	244.3	280.2	331.2	381.0	406.4
80°	174.8	210.7	260.5	310.3	337.0
82.5°	111.2	144.7	193.4	235.1	259.4
85°	57.9	85.7	122.7	136.6	152.8
87.5°	17.4	33.6	47.5	53.3	66.0
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	15.2	16.8	15.5	17.2	17.5	15.9	17.6	16.3	17.9	18.2
	3H	16.9	18.4	17.3	18.8	19.1	18.0	19.5	18.4	19.9	20.2
	4H	17.6	19.0	18.0	19.3	19.7	18.9	20.3	19.3	20.7	21.0
	6H	18.0	19.3	18.4	19.7	20.1	19.7	21.0	20.1	21.4	21.7
	8H	18.1	19.3	18.5	19.7	20.1	20.0	21.2	20.4	21.6	22.0
	12H	18.1	19.3	18.6	19.7	20.2	20.2	21.4	20.6	21.8	22.2
4H	2H	15.9	17.4	16.3	17.7	18.1	16.5	18.0	16.9	18.3	18.7
	3H	17.9	19.1	18.4	19.5	19.9	18.9	20.1	19.3	20.5	20.9
	4H	18.7	19.8	19.1	20.2	20.6	19.9	21.0	20.3	21.4	21.8
	6H	19.2	20.2	19.7	20.6	21.1	20.8	21.8	21.3	22.2	22.7
	8H	19.4	20.3	19.8	20.7	21.2	21.2	22.1	21.7	22.5	23.0
	12H	19.5	20.3	19.9	20.7	21.2	21.5	22.3	22.0	22.8	23.2
8H	4H	19.1	20.0	19.6	20.5	20.9	20.2	21.1	20.6	21.5	22.0
	6H	19.8	20.6	20.3	21.1	21.5	21.3	22.0	21.8	22.5	23.0
	8H	20.0	20.7	20.6	21.2	21.7	21.8	22.4	22.3	22.9	23.4
	12H	20.2	20.8	20.7	21.3	21.8	22.1	22.7	22.6	23.2	23.8
12H	4H	19.2	20.0	19.7	20.5	21.0	20.2	21.0	20.7	21.5	22.0
	6H	20.0	20.6	20.5	21.1	21.6	21.3	22.0	21.9	22.5	23.0
	8H	20.2	20.8	20.7	21.3	21.9	21.9	22.5	22.4	23.0	23.5

(END OF REPORT)