

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: P1589848

Luminaire Tested: 24CZSP-SB-52HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589848
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-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

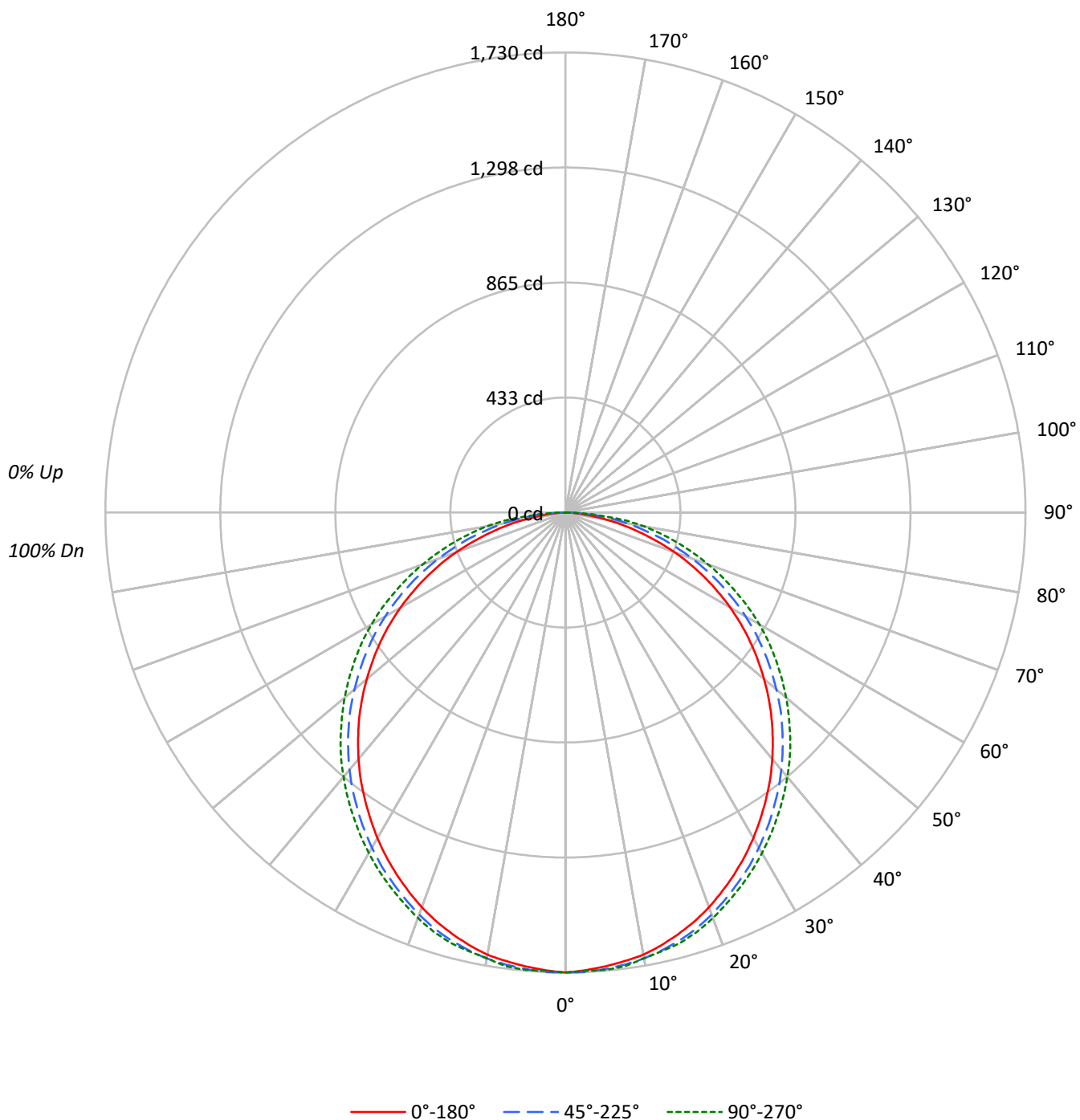
Lumens per Lamp: N/A
Luminaire Lumens: 5032.0 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	2649	2649	2649
5°	2635	2650	2655
10°	2626	2648	2647
15°	2602	2640	2655
20°	2574	2622	2645
25°	2537	2596	2629
30°	2500	2573	2615
35°	2459	2548	2603
40°	2420	2526	2595
45°	2375	2499	2589
50°	2324	2468	2582
55°	2266	2437	2578
60°	2195	2401	2580
65°	2095	2350	2566
70°	1958	2278	2560
75°	1736	2191	2569
80°	1413	2082	2645
85°	914	1921	2283

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.7	3.3
10°-20°	468.8	9.3
20°-30°	706.8	14.0
30°-40°	850.4	16.9
40°-50°	887.1	17.6
50°-60°	813.1	16.2
60°-70°	638.5	12.7
70°-80°	388.6	7.7
80°-90°	115.0	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°	1339.3	26.6
0°-40°	2189.7	43.5
0°-60°	3889.9	77.3
0°-90°	5032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1730	1730	1730	1730	1730	
5°	1714	1724	1723	1721	1727	163
15°	1641	1657	1665	1667	1675	463
25°	1501	1522	1536	1546	1556	692
35°	1315	1336	1363	1382	1392	823
45°	1097	1119	1154	1181	1195	846
55°	849	870	912	949	966	758
65°	578	600	648	692	708	572
75°	293	320	370	415	434	311
85°	52	74	109	122	130	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1729.8	1729.8	1729.8	1729.8	1729.8
2.5°	1723.3	1732.0	1729.8	1722.2	1725.5
5°	1713.6	1724.4	1723.3	1721.2	1726.6
7.5°	1701.7	1713.6	1714.7	1714.7	1721.2
10°	1688.7	1700.6	1702.8	1699.5	1701.7
12.5°	1667.0	1681.1	1685.4	1685.4	1688.7
15°	1641.1	1657.3	1664.9	1667.0	1674.6
17.5°	1612.9	1630.2	1640.0	1645.4	1651.9
20°	1579.4	1597.8	1608.6	1615.1	1622.7
22.5°	1541.5	1562.0	1573.9	1580.4	1589.1
25°	1501.4	1522.0	1536.1	1545.8	1555.5
27.5°	1459.2	1478.7	1498.2	1510.1	1518.7
30°	1413.7	1434.3	1454.9	1470.0	1478.7
32.5°	1365.0	1386.7	1410.5	1426.7	1436.5
35°	1315.2	1335.8	1362.9	1382.3	1392.1
37.5°	1264.4	1286.0	1314.1	1334.7	1346.6
40°	1210.2	1233.0	1263.3	1286.0	1297.9
42.5°	1153.9	1175.6	1209.1	1235.1	1249.2
45°	1096.6	1119.3	1153.9	1181.0	1195.1
47.5°	1037.0	1058.7	1096.6	1128.0	1139.9
50°	975.3	995.9	1035.9	1069.5	1083.6
52.5°	912.5	934.2	974.2	1010.0	1025.1
55°	848.7	870.3	912.5	949.3	965.6
57.5°	783.7	805.4	848.7	886.6	906.0
60°	716.6	738.3	783.7	822.7	842.2
62.5°	647.3	670.1	716.6	756.7	777.2
65°	578.1	599.7	648.4	691.7	708.0
67.5°	508.8	530.4	578.1	621.4	640.8
70°	437.3	462.2	508.8	554.2	571.6
72.5°	362.6	390.8	437.3	485.0	502.3
75°	293.4	320.4	370.2	414.6	434.1
77.5°	225.2	254.4	300.9	346.4	365.9
80°	160.2	188.4	236.0	279.3	299.9
82.5°	101.8	126.7	174.3	213.3	228.4
85°	52.0	73.6	109.3	122.3	129.9
87.5°	15.2	26.0	39.0	48.7	54.1
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	14.9	16.5	15.2	16.9	17.2	15.6	17.3	16.0	17.6	17.9
	3H	16.7	18.2	17.0	18.5	18.8	17.7	19.2	18.1	19.5	19.9
	4H	17.3	18.7	17.7	19.0	19.4	18.6	20.0	19.0	20.3	20.7
	6H	17.7	19.0	18.1	19.4	19.8	19.3	20.6	19.7	21.0	21.4
	8H	17.8	19.0	18.2	19.4	19.8	19.6	20.9	20.0	21.3	21.7
	12H	17.8	19.0	18.3	19.4	19.9	19.8	21.0	20.2	21.4	21.8
4H	2H	15.7	17.1	16.1	17.4	17.8	16.2	17.6	16.6	18.0	18.4
	3H	17.6	18.8	18.1	19.2	19.6	18.5	19.7	18.9	20.1	20.5
	4H	18.4	19.5	18.8	19.9	20.3	19.6	20.6	20.0	21.1	21.5
	6H	18.9	19.9	19.4	20.3	20.8	20.5	21.4	20.9	21.9	22.3
	8H	19.1	19.9	19.5	20.4	20.9	20.8	21.7	21.3	22.2	22.6
	12H	19.1	19.9	19.6	20.4	20.9	21.1	21.9	21.6	22.4	22.8
8H	4H	18.8	19.7	19.3	20.2	20.6	19.9	20.7	20.3	21.2	21.6
	6H	19.5	20.2	20.0	20.7	21.2	20.9	21.7	21.4	22.1	22.6
	8H	19.7	20.4	20.2	20.9	21.4	21.4	22.0	21.9	22.6	23.0
	12H	19.8	20.4	20.3	20.9	21.5	21.7	22.3	22.2	22.8	23.4
12H	4H	18.9	19.7	19.4	20.2	20.7	19.9	20.7	20.4	21.2	21.6
	6H	19.6	20.3	20.2	20.8	21.3	21.0	21.6	21.5	22.1	22.6
	8H	19.9	20.5	20.4	21.0	21.5	21.5	22.1	22.0	22.6	23.1

(END OF REPORT)