

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: P1589837

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589837
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

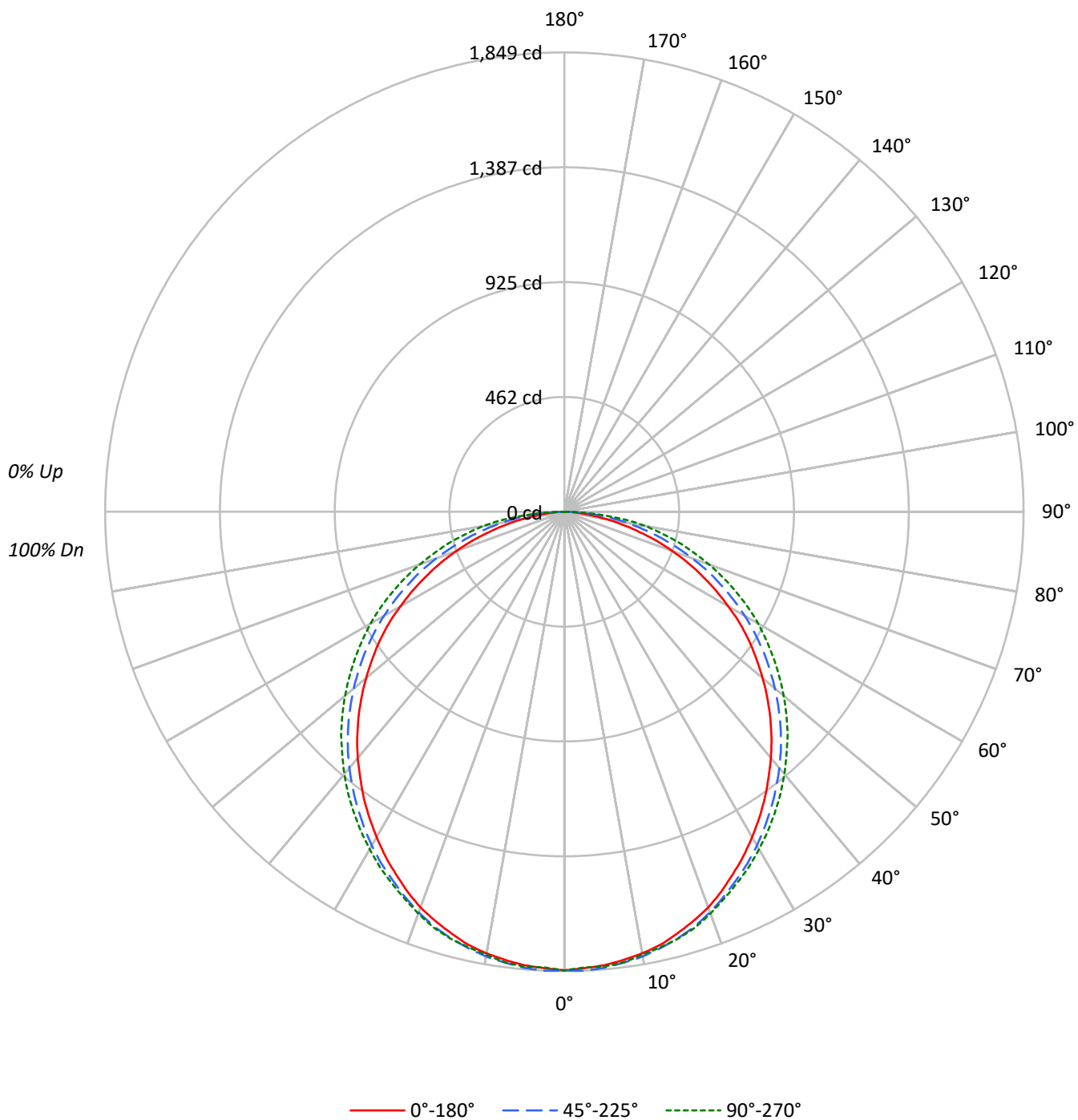
Lumens per Lamp: N/A
Luminaire Lumens: 5387.0 lumens
Efficiency: N/A
Efficacy: 146.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2827	2827	2827
5°	2817	2833	2826
10°	2807	2827	2816
15°	2786	2815	2819
20°	2762	2795	2804
25°	2717	2765	2784
30°	2674	2742	2773
35°	2631	2716	2763
40°	2587	2692	2756
45°	2539	2667	2754
50°	2483	2638	2747
55°	2427	2609	2746
60°	2337	2571	2763
65°	2227	2521	2764
70°	2078	2451	2772
75°	1849	2362	2820
80°	1519	2262	2927
85°	1002	2125	2645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.6	3.2
10°-20°	499.8	9.3
20°-30°	753.3	14.0
30°-40°	907.2	16.8
40°-50°	947.8	17.6
50°-60°	870.7	16.2
60°-70°	685.7	12.7
70°-80°	420.4	7.8
80°-90°	127.5	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°	1427.7	26.5
0°-40°	2334.9	43.3
0°-60°	4153.5	77.1
0°-90°	5387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5387.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1832	1836	1842	1840	1838	174
15°	1757	1764	1775	1782	1778	496
25°	1608	1618	1636	1653	1648	741
35°	1407	1425	1453	1479	1478	880
45°	1172	1197	1231	1266	1271	904
55°	909	935	977	1019	1028	811
65°	614	646	696	742	763	608
75°	312	349	399	447	477	332
85°	57	84	121	134	150	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.9	1845.9	1845.9	1845.9	1845.9
2.5°	1839.1	1843.6	1849.3	1840.2	1835.6
5°	1832.2	1835.6	1842.5	1840.2	1837.9
7.5°	1819.7	1822.0	1831.1	1831.1	1828.8
10°	1804.9	1809.4	1817.4	1816.3	1810.6
12.5°	1785.5	1788.9	1798.0	1798.0	1794.6
15°	1757.0	1763.8	1775.2	1782.1	1777.5
17.5°	1727.3	1734.2	1749.0	1755.8	1753.6
20°	1694.3	1700.0	1714.8	1725.1	1720.5
22.5°	1653.2	1660.1	1677.2	1688.6	1684.0
25°	1607.6	1617.9	1636.1	1653.2	1647.5
27.5°	1562.0	1573.4	1596.2	1613.3	1611.0
30°	1511.8	1526.7	1550.6	1572.3	1567.7
32.5°	1460.5	1477.6	1502.7	1525.5	1524.4
35°	1407.0	1425.2	1452.6	1478.8	1477.6
37.5°	1349.9	1371.6	1400.1	1428.6	1429.8
40°	1294.1	1314.6	1346.5	1377.3	1378.4
42.5°	1234.8	1256.4	1290.7	1322.6	1323.7
45°	1172.1	1197.2	1231.4	1265.6	1271.3
47.5°	1108.2	1134.5	1169.8	1206.3	1213.1
50°	1042.1	1069.5	1107.1	1145.9	1152.7
52.5°	974.8	1003.3	1042.1	1080.9	1091.1
55°	908.7	934.9	977.1	1019.3	1028.4
57.5°	839.2	863.1	908.7	953.2	964.6
60°	762.8	792.4	839.2	883.6	901.9
62.5°	688.7	720.6	768.5	812.9	833.5
65°	614.5	646.5	695.5	742.2	762.8
67.5°	539.3	572.4	624.8	669.3	692.1
70°	464.0	497.1	547.3	595.2	619.1
72.5°	388.8	424.1	473.2	522.2	546.1
75°	312.4	348.9	399.1	446.9	476.6
77.5°	240.6	275.9	326.1	375.1	400.2
80°	172.2	207.5	256.5	305.6	331.8
82.5°	109.5	142.5	190.4	231.5	255.4
85°	57.0	84.4	120.9	134.5	150.5
87.5°	17.1	33.1	46.7	52.4	65.0
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	15.1	16.8	15.5	17.1	17.4	15.9	17.5	16.2	17.8	18.2
	3H	16.9	18.4	17.3	18.7	19.1	18.0	19.5	18.3	19.8	20.2
	4H	17.5	18.9	17.9	19.3	19.7	18.9	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	18.5	19.7	20.1	19.9	21.2	20.4	21.6	22.0
	12H	18.1	19.3	18.5	19.7	20.1	20.1	21.4	20.6	21.7	22.2
4H	2H	15.9	17.3	16.3	17.7	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	22.2	22.6
	8H	19.3	20.2	19.8	20.7	21.1	21.2	22.0	21.6	22.5	22.9
	12H	19.4	20.2	19.9	20.7	21.2	21.4	22.2	21.9	22.7	23.2
8H	4H	19.1	20.0	19.6	20.4	20.9	20.1	21.0	20.6	21.5	21.9
	6H	19.8	20.5	20.3	21.0	21.5	21.2	22.0	21.7	22.5	22.9
	8H	20.0	20.7	20.5	21.2	21.7	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	23.2	23.7
12H	4H	19.2	20.0	19.7	20.5	20.9	20.2	21.0	20.6	21.4	21.9
	6H	19.9	20.6	20.4	21.0	21.6	21.3	22.0	21.8	22.4	23.0
	8H	20.2	20.8	20.7	21.3	21.8	21.8	22.4	22.3	22.9	23.5

(END OF REPORT)