

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: P1589911

Luminaire Tested: 24CZSP-SB-60VHE-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589911
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-60VHE-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

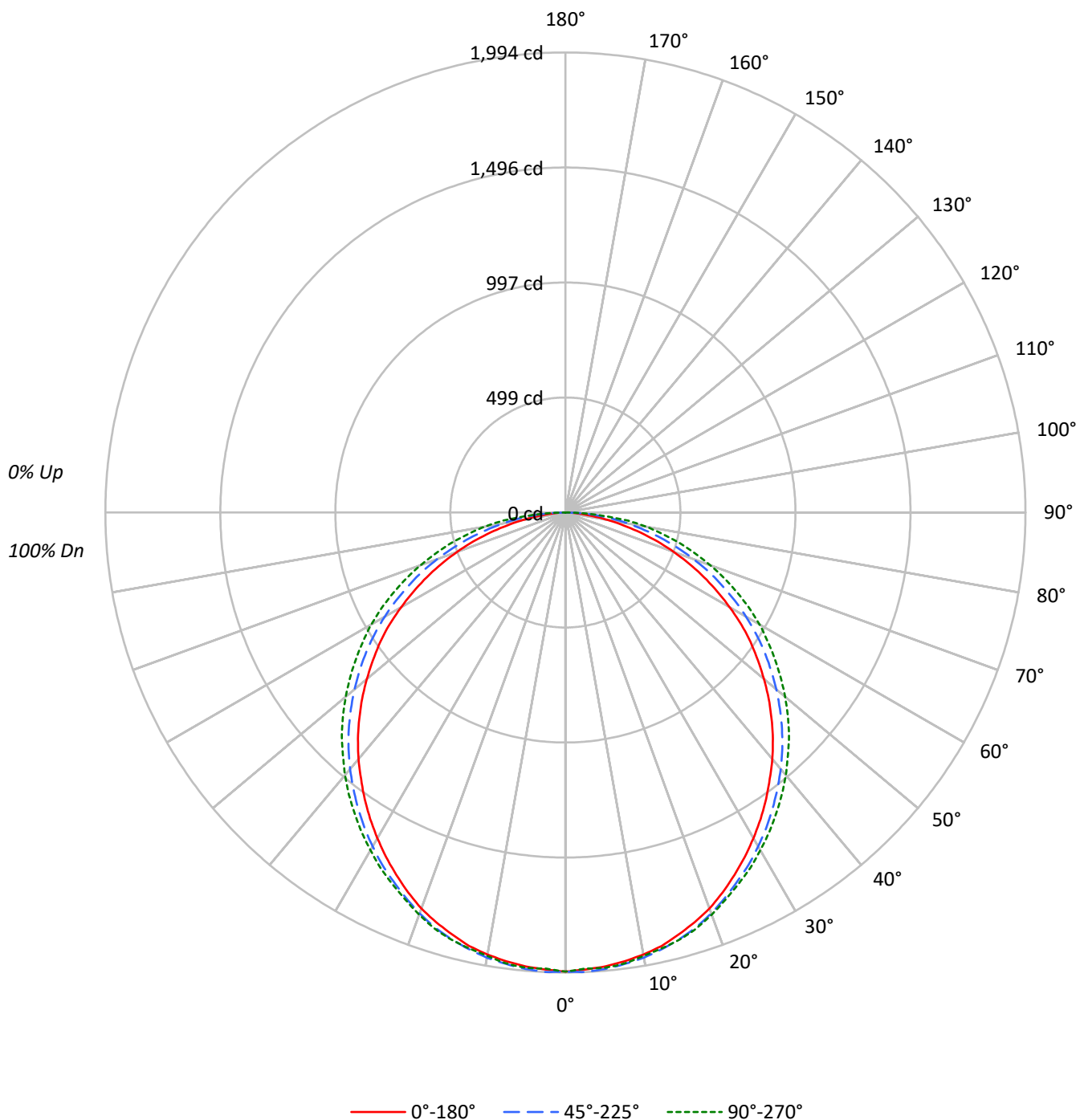
Lumens per Lamp: N/A
Luminaire Lumens: 5807.0 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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	93	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	63	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3048	3048	3048
5°	3037	3054	3046
10°	3026	3047	3035
15°	3003	3034	3038
20°	2977	3013	3023
25°	2929	2981	3001
30°	2882	2956	2989
35°	2836	2928	2978
40°	2789	2902	2971
45°	2737	2875	2968
50°	2677	2844	2961
55°	2616	2813	2960
60°	2519	2771	2978
65°	2401	2717	2980
70°	2240	2642	2989
75°	1993	2546	3040
80°	1637	2439	3155
85°	1081	2290	2850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3230 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	3.2
10°-20°	538.8	9.3
20°-30°	812.1	14.0
30°-40°	977.9	16.8
40°-50°	1021.7	17.6
50°-60°	938.6	16.2
60°-70°	739.2	12.7
70°-80°	453.2	7.8
80°-90°	137.4	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°	1539.1	26.5
0°-40°	2517.0	43.3
0°-60°	4477.3	77.1
0°-90°	5807.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5807.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1975	1979	1986	1984	1981	188
15°	1894	1901	1914	1921	1916	534
25°	1733	1744	1764	1782	1776	799
35°	1517	1536	1566	1594	1593	949
45°	1264	1290	1327	1364	1370	975
55°	980	1008	1053	1099	1109	874
65°	662	697	750	800	822	655
75°	337	376	430	482	514	358
85°	62	91	130	145	162	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1989.8	1989.8	1989.8	1989.8	1989.8
2.5°	1982.5	1987.4	1993.5	1983.7	1978.8
5°	1975.1	1978.8	1986.1	1983.7	1981.2
7.5°	1961.6	1964.0	1973.8	1973.8	1971.4
10°	1945.6	1950.5	1959.1	1957.9	1951.7
12.5°	1924.7	1928.4	1938.2	1938.2	1934.5
15°	1894.0	1901.3	1913.6	1921.0	1916.1
17.5°	1862.0	1869.4	1885.4	1892.7	1890.3
20°	1826.4	1832.5	1848.5	1859.5	1854.6
22.5°	1782.1	1789.5	1807.9	1820.2	1815.3
25°	1733.0	1744.0	1763.7	1782.1	1776.0
27.5°	1683.8	1696.1	1720.7	1739.1	1736.6
30°	1629.7	1645.7	1671.5	1694.9	1689.9
32.5°	1574.4	1592.8	1619.9	1644.5	1643.2
35°	1516.6	1536.3	1565.8	1594.1	1592.8
37.5°	1455.2	1478.5	1509.3	1540.0	1541.2
40°	1395.0	1417.1	1451.5	1484.7	1485.9
42.5°	1331.1	1354.4	1391.3	1425.7	1426.9
45°	1263.5	1290.5	1327.4	1364.2	1370.4
47.5°	1194.6	1222.9	1261.0	1300.3	1307.7
50°	1123.3	1152.8	1193.4	1235.2	1242.6
52.5°	1050.8	1081.6	1123.3	1165.1	1176.2
55°	979.6	1007.8	1053.3	1098.8	1108.6
57.5°	904.6	930.4	979.6	1027.5	1039.8
60°	822.2	854.2	904.6	952.5	972.2
62.5°	742.3	776.8	828.4	876.3	898.4
65°	662.5	696.9	749.7	800.1	822.2
67.5°	581.3	617.0	673.5	721.5	746.0
70°	500.2	535.9	589.9	641.6	667.4
72.5°	419.1	457.2	510.1	562.9	588.7
75°	336.8	376.1	430.2	481.8	513.7
77.5°	259.3	297.4	351.5	404.4	431.4
80°	185.6	223.7	276.5	329.4	357.7
82.5°	118.0	153.6	205.3	249.5	275.3
85°	61.5	90.9	130.3	145.0	162.2
87.5°	18.4	35.6	50.4	56.5	70.1
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	15.4	17.0	15.8	17.4	17.7	16.1	17.8	16.5	18.1	18.4
	3H	17.1	18.7	17.5	19.0	19.3	18.2	19.7	18.6	20.1	20.4
	4H	17.8	19.2	18.2	19.5	19.9	19.1	20.5	19.5	20.9	21.3
	6H	18.2	19.5	18.6	19.9	20.3	19.9	21.2	20.3	21.6	22.0
	8H	18.3	19.6	18.7	19.9	20.3	20.2	21.5	20.6	21.8	22.2
	12H	18.3	19.6	18.8	19.9	20.4	20.4	21.6	20.8	22.0	22.4
4H	2H	16.2	17.6	16.6	17.9	18.3	16.7	18.2	17.1	18.5	18.9
	3H	18.1	19.3	18.6	19.7	20.1	19.1	20.3	19.5	20.7	21.1
	4H	18.9	20.0	19.3	20.4	20.8	20.1	21.2	20.5	21.6	22.0
	6H	19.4	20.4	19.9	20.8	21.3	21.0	22.0	21.5	22.4	22.9
	8H	19.6	20.5	20.0	20.9	21.4	21.4	22.3	21.9	22.7	23.2
	12H	19.7	20.5	20.2	21.0	21.4	21.7	22.5	22.2	23.0	23.4
8H	4H	19.4	20.2	19.8	20.7	21.2	20.4	21.3	20.9	21.7	22.2
	6H	20.0	20.8	20.5	21.3	21.7	21.5	22.2	22.0	22.7	23.2
	8H	20.3	20.9	20.8	21.4	21.9	22.0	22.6	22.5	23.1	23.6
	12H	20.4	21.0	20.9	21.5	22.0	22.3	22.9	22.8	23.4	24.0
12H	4H	19.4	20.2	19.9	20.7	21.2	20.4	21.2	20.9	21.7	22.2
	6H	20.2	20.8	20.7	21.3	21.8	21.5	22.2	22.1	22.7	23.2
	8H	20.5	21.0	21.0	21.5	22.1	22.1	22.7	22.6	23.2	23.7

(END OF REPORT)