

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: P1589910

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589910
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-60VHE-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

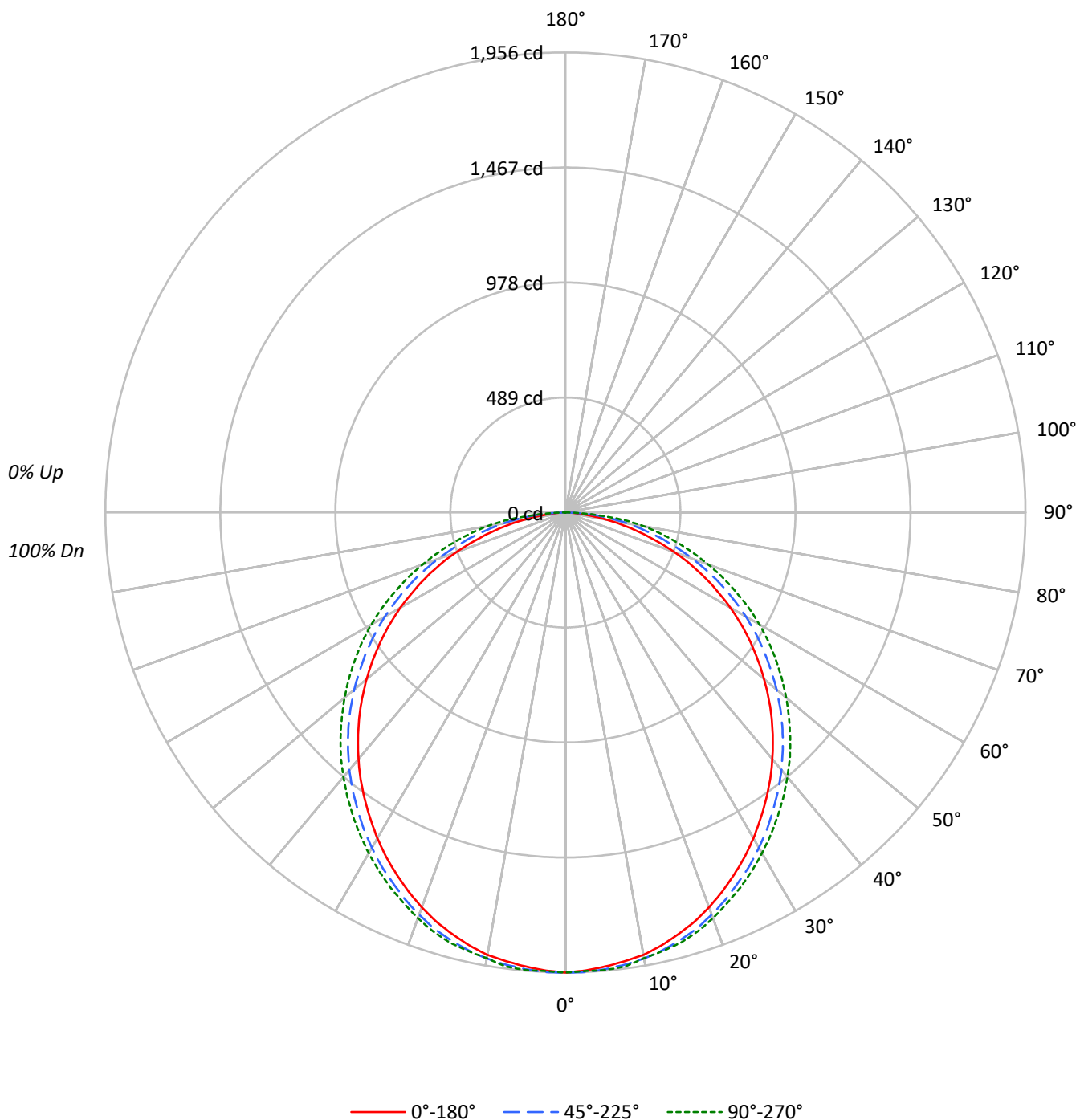
Lumens per Lamp: N/A
Luminaire Lumens: 5691.0 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1589910

CATALOG NUMBER: 24CZSP-SB-60VHE-L950-S

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°	2996	2996	2996
5°	2980	2997	3002
10°	2970	2995	2993
15°	2943	2986	3003
20°	2911	2965	2991
25°	2870	2936	2973
30°	2828	2910	2958
35°	2781	2882	2944
40°	2737	2857	2935
45°	2686	2827	2928
50°	2628	2792	2920
55°	2563	2756	2916
60°	2483	2715	2918
65°	2369	2658	2902
70°	2215	2577	2895
75°	1964	2478	2905
80°	1598	2354	2991
85°	1033	2174	2582

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3031 cd/sqm

TEST NUMBER: P1589910

CATALOG NUMBER: 24CZSP-SB-60VHE-L950-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	3.3
10°-20°	530.2	9.3
20°-30°	799.3	14.0
30°-40°	961.8	16.9
40°-50°	1003.3	17.6
50°-60°	919.6	16.2
60°-70°	722.1	12.7
70°-80°	439.5	7.7
80°-90°	130.0	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°	1514.7	26.6
0°-40°	2476.5	43.5
0°-60°	4399.4	77.3
0°-90°	5691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5691.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1956	1956	1956	1956	1956	
5°	1938	1950	1949	1947	1953	184
15°	1856	1874	1883	1885	1894	524
25°	1698	1721	1737	1748	1759	783
35°	1488	1511	1541	1563	1574	931
45°	1240	1266	1305	1336	1352	956
55°	960	984	1032	1074	1092	858
65°	654	678	733	782	801	647
75°	332	362	419	469	491	352
85°	59	83	124	138	147	77
90°	0	0	0	0	0	

TEST NUMBER: P1589910

CATALOG NUMBER: 24CZSP-SB-60VHE-L950-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1956.4	1956.4	1956.4	1956.4	1956.4
2.5°	1949.0	1958.8	1956.4	1947.8	1951.5
5°	1938.0	1950.2	1949.0	1946.6	1952.7
7.5°	1924.5	1938.0	1939.2	1939.2	1946.6
10°	1909.8	1923.3	1925.8	1922.1	1924.5
12.5°	1885.4	1901.3	1906.2	1906.2	1909.8
15°	1856.0	1874.3	1882.9	1885.4	1893.9
17.5°	1824.1	1843.7	1854.8	1860.9	1868.2
20°	1786.2	1807.0	1819.3	1826.6	1835.2
22.5°	1743.3	1766.6	1780.1	1787.4	1797.2
25°	1698.0	1721.3	1737.2	1748.2	1759.3
27.5°	1650.3	1672.3	1694.4	1707.8	1717.6
30°	1598.9	1622.1	1645.4	1662.5	1672.3
32.5°	1543.8	1568.3	1595.2	1613.6	1624.6
35°	1487.5	1510.7	1541.3	1563.4	1574.4
37.5°	1429.9	1454.4	1486.3	1509.5	1523.0
40°	1368.7	1394.4	1428.7	1454.4	1467.9
42.5°	1305.1	1329.5	1367.5	1396.9	1412.8
45°	1240.2	1265.9	1305.1	1335.7	1351.6
47.5°	1172.8	1197.3	1240.2	1275.7	1289.1
50°	1103.1	1126.3	1171.6	1209.6	1225.5
52.5°	1032.1	1056.5	1101.8	1142.2	1159.4
55°	959.8	984.3	1032.1	1073.7	1092.0
57.5°	886.4	910.9	959.8	1002.7	1024.7
60°	810.5	834.9	886.4	930.4	952.5
62.5°	732.1	757.8	810.5	855.8	879.0
65°	653.8	678.2	733.3	782.3	800.7
67.5°	575.4	599.9	653.8	702.7	724.8
70°	494.6	522.8	575.4	626.8	646.4
72.5°	410.1	442.0	494.6	548.5	568.1
75°	331.8	362.4	418.7	468.9	490.9
77.5°	254.6	287.7	340.3	391.8	413.8
80°	181.2	213.0	266.9	315.9	339.1
82.5°	115.1	143.2	197.1	241.2	258.3
85°	58.8	83.2	123.7	138.3	146.9
87.5°	17.1	29.4	44.1	55.1	61.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589910

CATALOG NUMBER: 24CZSP-SB-60VHE-L950-S

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	15.3	17.0	15.7	17.3	17.6	16.0	17.7	16.4	18.0	18.3
	3H	17.1	18.6	17.5	18.9	19.3	18.1	19.6	18.5	20.0	20.3
	4H	17.7	19.1	18.1	19.5	19.8	19.0	20.4	19.4	20.8	21.1
	6H	18.1	19.4	18.5	19.8	20.2	19.7	21.1	20.1	21.4	21.8
	8H	18.2	19.5	18.6	19.9	20.3	20.0	21.3	20.5	21.7	22.1
	12H	18.3	19.5	18.7	19.8	20.3	20.2	21.4	20.7	21.8	22.2
4H	2H	16.1	17.5	16.5	17.8	18.2	16.7	18.1	17.0	18.4	18.8
	3H	18.1	19.3	18.5	19.7	20.1	19.0	20.2	19.4	20.6	21.0
	4H	18.8	19.9	19.2	20.3	20.7	20.0	21.1	20.4	21.5	21.9
	6H	19.3	20.3	19.8	20.7	21.2	20.9	21.8	21.3	22.3	22.7
	8H	19.5	20.4	19.9	20.8	21.3	21.3	22.1	21.7	22.6	23.1
	12H	19.6	20.4	20.0	20.8	21.3	21.5	22.3	22.0	22.8	23.3
8H	4H	19.3	20.1	19.7	20.6	21.1	20.3	21.2	20.7	21.6	22.1
	6H	19.9	20.7	20.4	21.2	21.6	21.3	22.1	21.8	22.6	23.0
	8H	20.1	20.8	20.6	21.3	21.8	21.8	22.5	22.3	23.0	23.5
	12H	20.3	20.9	20.8	21.3	21.9	22.2	22.8	22.7	23.2	23.8
12H	4H	19.3	20.1	19.8	20.6	21.1	20.3	21.1	20.8	21.6	22.1
	6H	20.1	20.7	20.6	21.2	21.7	21.4	22.1	21.9	22.5	23.1
	8H	20.3	20.9	20.8	21.4	22.0	21.9	22.5	22.4	23.0	23.6

(END OF REPORT)