

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: P1589907

Luminaire Tested: 24CZSP-SB-60VHE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589907
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-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 6000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

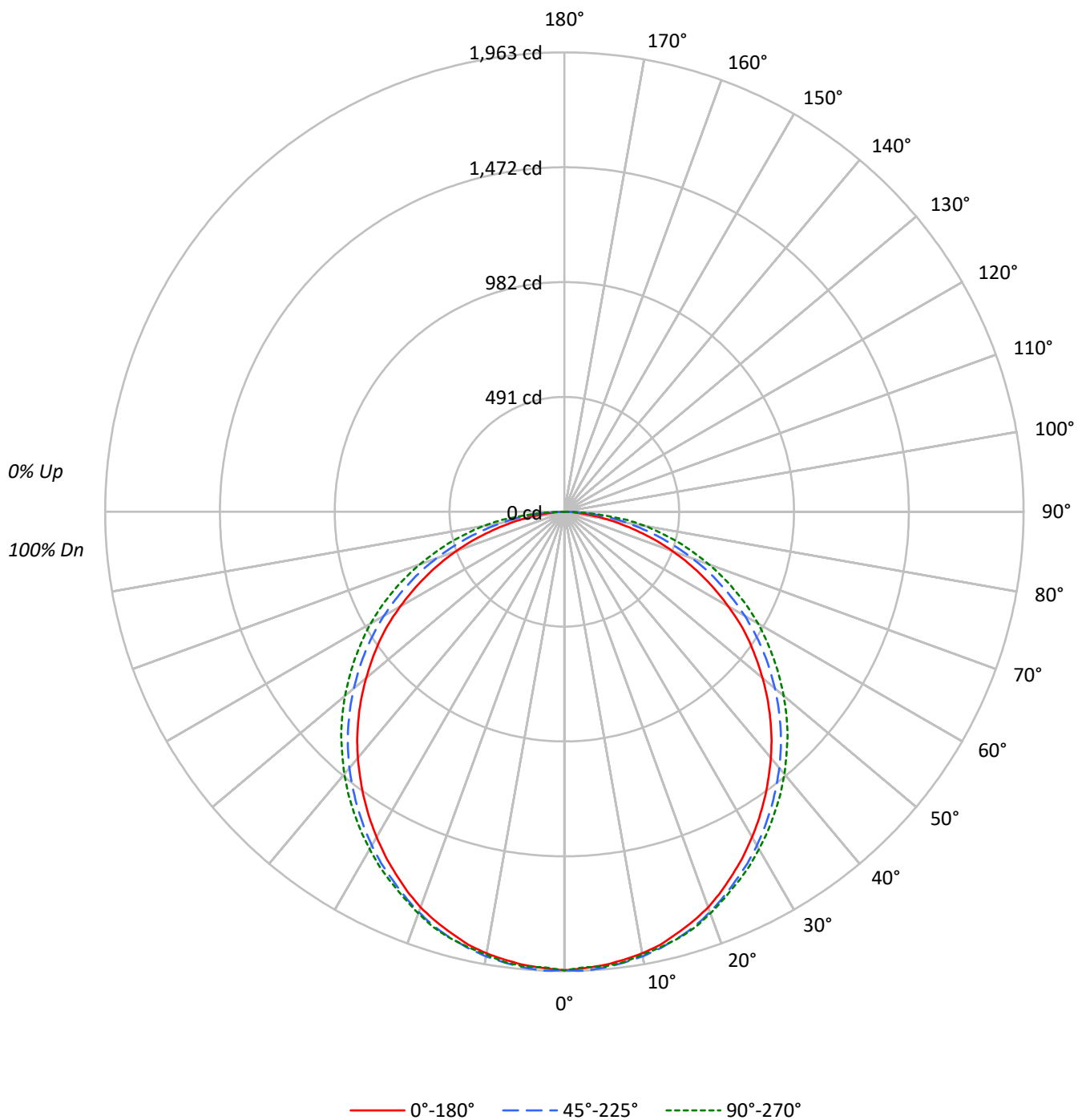
Lumens per Lamp: N/A
Luminaire Lumens: 5718.0 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	3001	3001	3001
5°	2990	3007	2999
10°	2980	3000	2989
15°	2957	2988	2992
20°	2931	2967	2977
25°	2884	2935	2955
30°	2838	2911	2943
35°	2792	2883	2933
40°	2746	2858	2925
45°	2695	2831	2923
50°	2636	2800	2915
55°	2576	2769	2915
60°	2480	2728	2932
65°	2364	2675	2934
70°	2206	2601	2943
75°	1962	2507	2994
80°	1611	2402	3107
85°	1063	2255	2806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3181 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.3	3.2
10°-20°	530.5	9.3
20°-30°	799.6	14.0
30°-40°	962.9	16.8
40°-50°	1006.0	17.6
50°-60°	924.2	16.2
60°-70°	727.8	12.7
70°-80°	446.2	7.8
80°-90°	135.3	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°	1515.5	26.5
0°-40°	2478.4	43.3
0°-60°	4408.7	77.1
0°-90°	5718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1959	1959	1959	1959	1959	
5°	1945	1948	1956	1953	1951	185
15°	1865	1872	1884	1892	1887	526
25°	1706	1717	1737	1755	1749	787
35°	1493	1513	1542	1570	1568	934
45°	1244	1271	1307	1343	1349	960
55°	964	992	1037	1082	1092	861
65°	652	686	738	788	810	645
75°	332	370	424	474	506	352
85°	60	90	128	143	160	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1959.3	1959.3	1959.3	1959.3	1959.3
2.5°	1952.1	1956.9	1963.0	1953.3	1948.4
5°	1944.8	1948.4	1955.7	1953.3	1950.9
7.5°	1931.5	1933.9	1943.6	1943.6	1941.2
10°	1915.8	1920.6	1929.1	1927.9	1921.8
12.5°	1895.2	1898.8	1908.5	1908.5	1904.9
15°	1864.9	1872.2	1884.3	1891.6	1886.7
17.5°	1833.5	1840.7	1856.5	1863.7	1861.3
20°	1798.4	1804.4	1820.2	1831.0	1826.2
22.5°	1754.8	1762.1	1780.2	1792.3	1787.5
25°	1706.4	1717.3	1736.7	1754.8	1748.8
27.5°	1658.0	1670.1	1694.3	1712.4	1710.0
30°	1604.7	1620.5	1645.9	1668.9	1664.0
32.5°	1550.3	1568.4	1595.1	1619.3	1618.1
35°	1493.4	1512.8	1541.8	1569.6	1568.4
37.5°	1432.9	1455.9	1486.1	1516.4	1517.6
40°	1373.6	1395.4	1429.3	1461.9	1463.1
42.5°	1310.7	1333.7	1370.0	1403.8	1405.1
45°	1244.1	1270.7	1307.0	1343.3	1349.4
47.5°	1176.3	1204.2	1241.7	1280.4	1287.7
50°	1106.1	1135.2	1175.1	1216.3	1223.5
52.5°	1034.7	1065.0	1106.1	1147.3	1158.2
55°	964.5	992.4	1037.1	1081.9	1091.6
57.5°	890.7	916.1	964.5	1011.7	1023.8
60°	809.6	841.1	890.7	937.9	957.3
62.5°	731.0	764.9	815.7	862.9	884.7
65°	652.3	686.2	738.2	787.8	809.6
67.5°	572.4	607.5	663.2	710.4	734.6
70°	492.6	527.7	580.9	631.7	657.1
72.5°	412.7	450.2	502.2	554.3	579.7
75°	331.6	370.3	423.6	474.4	505.9
77.5°	255.4	292.9	346.1	398.2	424.8
80°	182.7	220.3	272.3	324.3	352.2
82.5°	116.2	151.3	202.1	245.7	271.1
85°	60.5	89.6	128.3	142.8	159.7
87.5°	18.2	35.1	49.6	55.7	69.0
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	15.3	17.0	15.7	17.3	17.6	16.1	17.7	16.4	18.1	18.4
	3H	17.1	18.6	17.5	18.9	19.3	18.2	19.7	18.5	20.0	20.4
	4H	17.7	19.1	18.1	19.5	19.9	19.1	20.5	19.5	20.8	21.2
	6H	18.1	19.5	18.5	19.8	20.2	19.8	21.1	20.2	21.5	21.9
	8H	18.2	19.5	18.7	19.9	20.3	20.1	21.4	20.6	21.8	22.2
	12H	18.3	19.5	18.7	19.9	20.3	20.3	21.6	20.8	21.9	22.4
4H	2H	16.1	17.5	16.5	17.9	18.2	16.7	18.1	17.1	18.5	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	19.3	20.3	20.8	20.0	21.1	20.5	21.5	22.0
	6H	19.4	20.3	19.8	20.8	21.2	21.0	21.9	21.4	22.4	22.8
	8H	19.5	20.4	20.0	20.9	21.3	21.4	22.3	21.8	22.7	23.2
	12H	19.6	20.4	20.1	20.9	21.4	21.6	22.4	22.1	22.9	23.4
8H	4H	19.3	20.2	19.8	20.6	21.1	20.3	21.2	20.8	21.7	22.1
	6H	20.0	20.7	20.5	21.2	21.7	21.4	22.2	21.9	22.7	23.1
	8H	20.2	20.9	20.7	21.4	21.9	21.9	22.6	22.4	23.1	23.6
	12H	20.3	20.9	20.9	21.4	22.0	22.3	22.9	22.8	23.4	23.9
12H	4H	19.4	20.2	19.9	20.7	21.1	20.4	21.2	20.9	21.7	22.1
	6H	20.1	20.8	20.6	21.3	21.8	21.5	22.2	22.0	22.6	23.2
	8H	20.4	21.0	20.9	21.5	22.0	22.0	22.6	22.5	23.1	23.7

(END OF REPORT)