

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: P1589902

Luminaire Tested: 24CZSP-SB-60VHE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589902
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-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

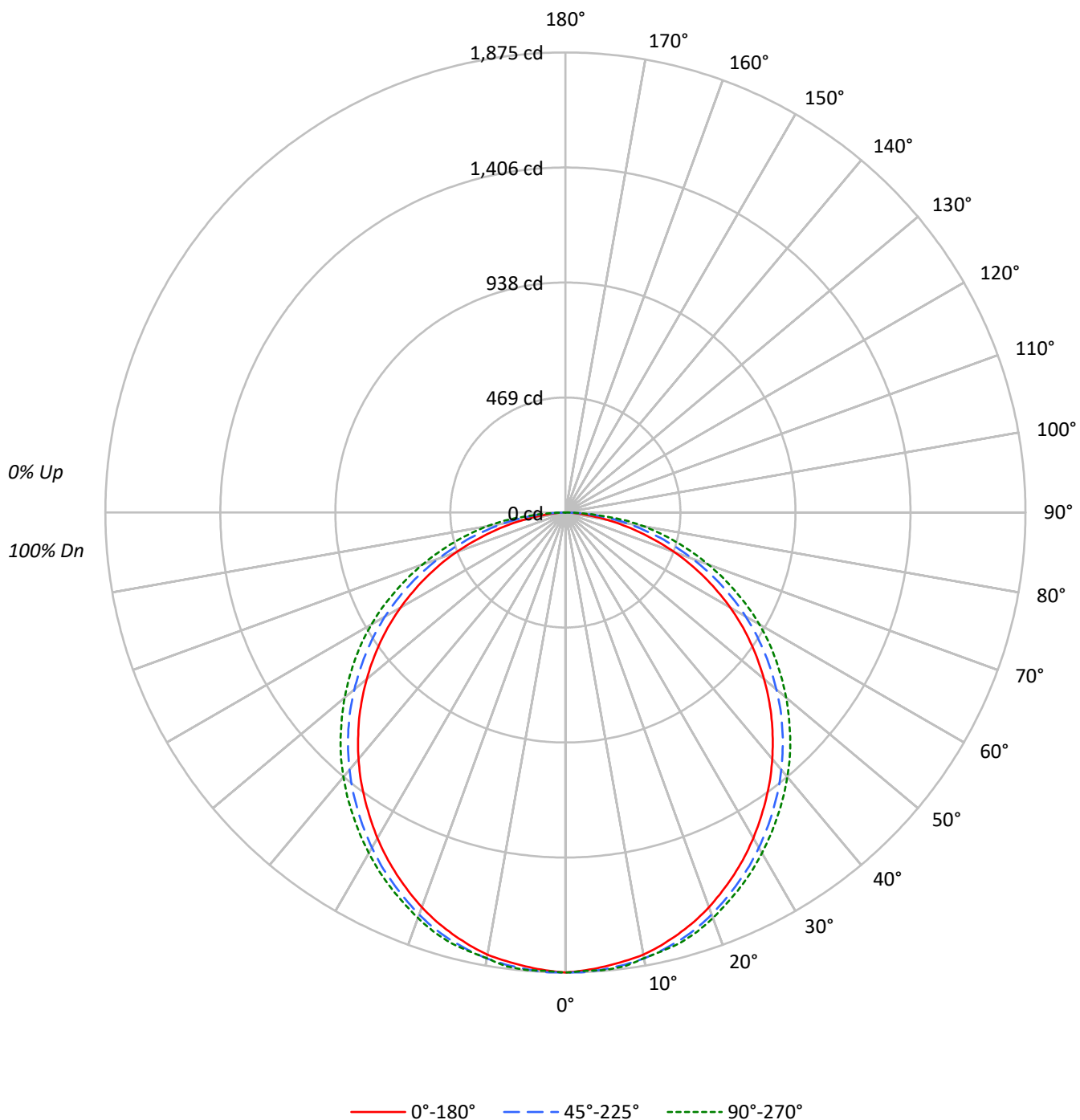
Lumens per Lamp: N/A
Luminaire Lumens: 5454.0 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	2872	2872	2872
5°	2856	2872	2877
10°	2847	2870	2869
15°	2820	2861	2878
20°	2790	2842	2867
25°	2750	2814	2849
30°	2710	2789	2834
35°	2665	2762	2821
40°	2623	2738	2813
45°	2574	2709	2806
50°	2519	2675	2799
55°	2456	2641	2795
60°	2379	2602	2796
65°	2271	2547	2781
70°	2123	2469	2774
75°	1882	2375	2784
80°	1531	2256	2867
85°	989	2082	2474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2905 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	3.3
10°-20°	508.1	9.3
20°-30°	766.1	14.0
30°-40°	921.8	16.9
40°-50°	961.5	17.6
50°-60°	881.3	16.2
60°-70°	692.0	12.7
70°-80°	421.2	7.7
80°-90°	124.6	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°	1451.6	26.6
0°-40°	2373.4	43.5
0°-60°	4216.2	77.3
0°-90°	5454.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5454.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1875	1875	1875	1875	1875	
5°	1857	1869	1868	1866	1871	176
15°	1779	1796	1804	1807	1815	502
25°	1627	1650	1665	1675	1686	750
35°	1426	1448	1477	1498	1509	892
45°	1188	1213	1251	1280	1295	917
55°	920	943	989	1029	1047	822
65°	626	650	703	750	767	620
75°	318	347	401	449	470	337
85°	56	80	118	133	141	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.9	1874.9	1874.9	1874.9	1874.9
2.5°	1867.9	1877.2	1874.9	1866.7	1870.2
5°	1857.3	1869.0	1867.9	1865.5	1871.4
7.5°	1844.4	1857.3	1858.5	1858.5	1865.5
10°	1830.3	1843.2	1845.6	1842.0	1844.4
12.5°	1806.8	1822.1	1826.8	1826.8	1830.3
15°	1778.7	1796.3	1804.5	1806.8	1815.1
17.5°	1748.2	1767.0	1777.5	1783.4	1790.4
20°	1711.8	1731.8	1743.5	1750.5	1758.7
22.5°	1670.7	1693.0	1705.9	1713.0	1722.4
25°	1627.3	1649.6	1664.9	1675.4	1686.0
27.5°	1581.6	1602.7	1623.8	1636.7	1646.1
30°	1532.3	1554.6	1576.9	1593.3	1602.7
32.5°	1479.5	1503.0	1528.8	1546.4	1556.9
35°	1425.5	1447.8	1477.2	1498.3	1508.8
37.5°	1370.4	1393.9	1424.4	1446.7	1459.6
40°	1311.7	1336.4	1369.2	1393.9	1406.8
42.5°	1250.7	1274.2	1310.6	1338.7	1354.0
45°	1188.5	1213.2	1250.7	1280.0	1295.3
47.5°	1124.0	1147.5	1188.5	1222.6	1235.5
50°	1057.1	1079.4	1122.8	1159.2	1174.5
52.5°	989.1	1012.5	1055.9	1094.7	1111.1
55°	919.8	943.3	989.1	1029.0	1046.6
57.5°	849.5	872.9	919.8	960.9	982.0
60°	776.7	800.2	849.5	891.7	912.8
62.5°	701.6	726.3	776.7	820.1	842.4
65°	626.5	650.0	702.8	749.7	767.3
67.5°	551.4	574.9	626.5	673.5	694.6
70°	474.0	501.0	551.4	600.7	619.5
72.5°	393.0	423.6	474.0	525.6	544.4
75°	318.0	347.3	401.3	449.4	470.5
77.5°	244.0	275.7	326.2	375.4	396.6
80°	173.6	204.2	255.8	302.7	325.0
82.5°	110.3	137.3	188.9	231.1	247.6
85°	56.3	79.8	118.5	132.6	140.8
87.5°	16.4	28.2	42.2	52.8	58.7
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	15.2	16.8	15.5	17.1	17.5	15.9	17.6	16.3	17.9	18.2
	3H	16.9	18.4	17.3	18.8	19.1	18.0	19.5	18.4	19.8	20.2
	4H	17.6	19.0	18.0	19.3	19.7	18.8	20.3	19.2	20.6	21.0
	6H	18.0	19.3	18.4	19.6	20.0	19.6	20.9	20.0	21.3	21.7
	8H	18.1	19.3	18.5	19.7	20.1	19.9	21.1	20.3	21.5	21.9
	12H	18.1	19.3	18.5	19.7	20.1	20.1	21.3	20.5	21.7	22.1
4H	2H	15.9	17.4	16.3	17.7	18.1	16.5	17.9	16.9	18.3	18.6
	3H	17.9	19.1	18.3	19.5	19.9	18.8	20.0	19.2	20.4	20.8
	4H	18.7	19.8	19.1	20.2	20.6	19.8	20.9	20.3	21.3	21.8
	6H	19.2	20.1	19.6	20.6	21.0	20.7	21.7	21.2	22.1	22.6
	8H	19.3	20.2	19.8	20.7	21.1	21.1	22.0	21.6	22.4	22.9
	12H	19.4	20.2	19.9	20.7	21.2	21.4	22.2	21.8	22.6	23.1
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	21.9	21.7	22.4	22.9
	8H	20.0	20.7	20.5	21.2	21.6	21.7	22.3	22.2	22.8	23.3
	12H	20.1	20.7	20.6	21.2	21.8	22.0	22.6	22.5	23.1	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	21.9	21.8	22.4	22.9
	8H	20.2	20.8	20.7	21.3	21.8	21.8	22.4	22.3	22.9	23.4

(END OF REPORT)