

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: P1589903

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589903
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-L930
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

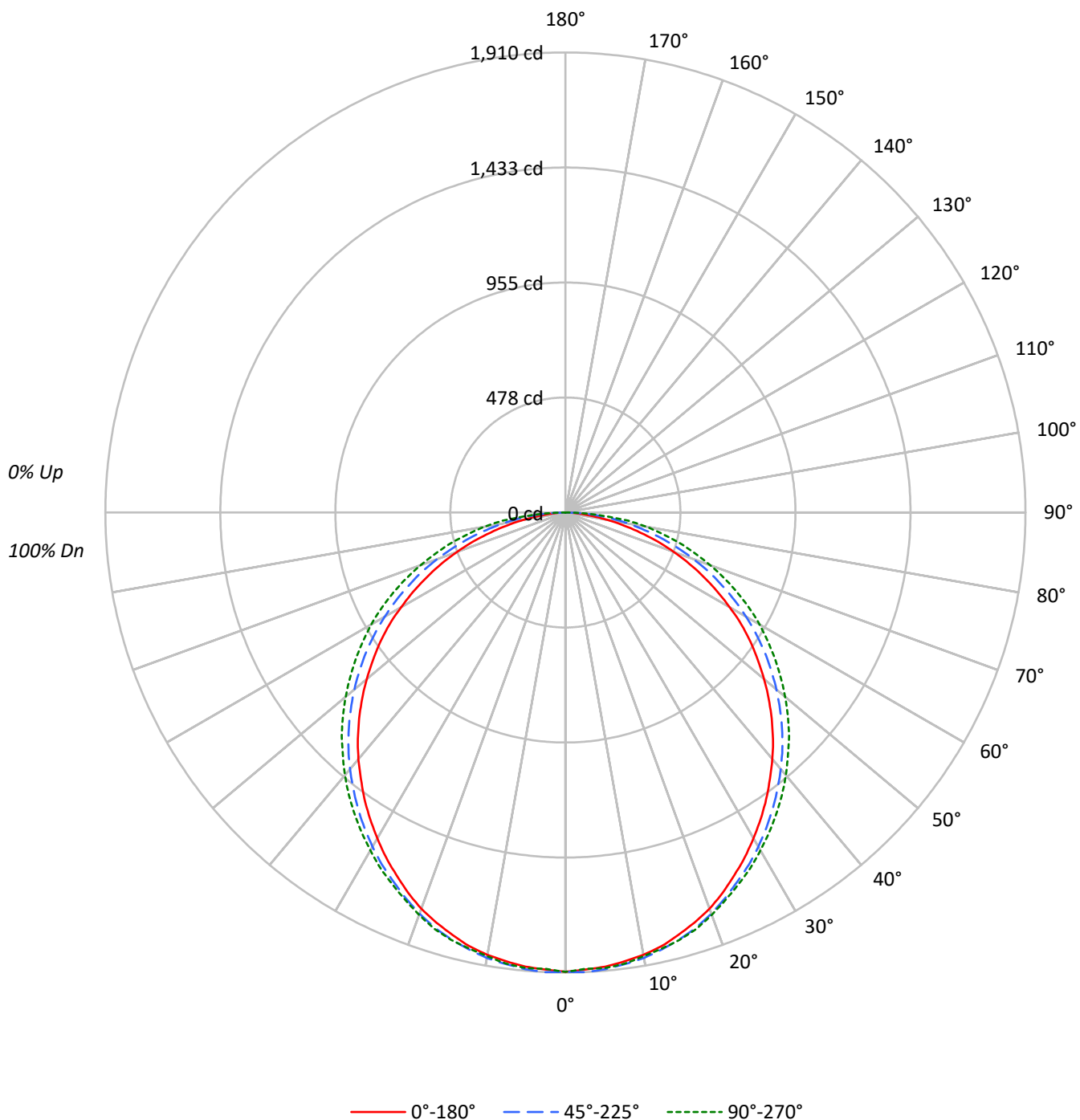
Lumens per Lamp: N/A
Luminaire Lumens: 5565.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
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°	2921	2921	2921
5°	2910	2926	2919
10°	2900	2920	2909
15°	2878	2908	2912
20°	2853	2887	2897
25°	2807	2856	2876
30°	2762	2833	2864
35°	2718	2806	2854
40°	2673	2781	2847
45°	2623	2755	2845
50°	2565	2725	2837
55°	2507	2695	2837
60°	2414	2656	2854
65°	2301	2604	2856
70°	2147	2532	2864
75°	1910	2439	2913
80°	1569	2337	3023
85°	1035	2193	2733

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.4	3.2
10°-20°	516.3	9.3
20°-30°	778.2	14.0
30°-40°	937.2	16.8
40°-50°	979.1	17.6
50°-60°	899.5	16.2
60°-70°	708.4	12.7
70°-80°	434.3	7.8
80°-90°	131.7	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°	1474.9	26.5
0°-40°	2412.1	43.3
0°-60°	4290.7	77.1
0°-90°	5565.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5565.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1893	1896	1903	1901	1899	180
15°	1815	1822	1834	1841	1836	512
25°	1661	1671	1690	1708	1702	766
35°	1453	1472	1501	1528	1526	909
45°	1211	1237	1272	1307	1313	934
55°	939	966	1009	1053	1062	837
65°	635	668	718	767	788	628
75°	323	360	412	462	492	343
85°	59	87	125	139	156	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1906.9	1906.9	1906.9	1906.9	1906.9
2.5°	1899.8	1904.5	1910.4	1901.0	1896.3
5°	1892.8	1896.3	1903.4	1901.0	1898.7
7.5°	1879.8	1882.2	1891.6	1891.6	1889.2
10°	1864.5	1869.2	1877.5	1876.3	1870.4
12.5°	1844.5	1848.0	1857.4	1857.4	1853.9
15°	1815.0	1822.1	1833.9	1840.9	1836.2
17.5°	1784.4	1791.5	1806.8	1813.9	1811.5
20°	1750.3	1756.1	1771.5	1782.1	1777.3
22.5°	1707.8	1714.9	1732.6	1744.4	1739.7
25°	1660.7	1671.3	1690.2	1707.8	1702.0
27.5°	1613.6	1625.4	1649.0	1666.6	1664.3
30°	1561.8	1577.1	1601.8	1624.2	1619.5
32.5°	1508.8	1526.5	1552.4	1575.9	1574.8
35°	1453.4	1472.3	1500.6	1527.6	1526.5
37.5°	1394.5	1416.9	1446.4	1475.8	1477.0
40°	1336.8	1358.0	1391.0	1422.8	1424.0
42.5°	1275.6	1298.0	1333.3	1366.3	1367.5
45°	1210.8	1236.7	1272.1	1307.4	1313.3
47.5°	1144.8	1171.9	1208.5	1246.1	1253.2
50°	1076.5	1104.8	1143.7	1183.7	1190.8
52.5°	1007.0	1036.5	1076.5	1116.6	1127.2
55°	938.7	965.8	1009.4	1053.0	1062.4
57.5°	866.9	891.6	938.7	984.7	996.4
60°	788.0	818.6	866.9	912.8	931.7
62.5°	711.4	744.4	793.9	839.8	861.0
65°	634.8	667.8	718.5	766.8	788.0
67.5°	557.1	591.3	645.4	691.4	714.9
70°	479.4	513.5	565.4	614.8	639.6
72.5°	401.6	438.2	488.8	539.4	564.2
75°	322.7	360.4	412.2	461.7	492.3
77.5°	248.5	285.0	336.9	387.5	413.4
80°	177.9	214.4	265.0	315.7	342.7
82.5°	113.1	147.2	196.7	239.1	263.8
85°	58.9	87.2	124.8	139.0	155.5
87.5°	17.7	34.2	48.3	54.2	67.1
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	15.2	16.9	15.6	17.2	17.5	16.0	17.6	16.3	18.0	18.3
	3H	17.0	18.5	17.4	18.8	19.2	18.1	19.6	18.5	19.9	20.3
	4H	17.6	19.0	18.0	19.4	19.8	19.0	20.4	19.4	20.7	21.1
	6H	18.0	19.4	18.4	19.7	20.1	19.7	21.1	20.1	21.4	21.8
	8H	18.1	19.4	18.6	19.8	20.2	20.0	21.3	20.5	21.7	22.1
	12H	18.2	19.4	18.6	19.8	20.2	20.3	21.5	20.7	21.8	22.3
4H	2H	16.0	17.4	16.4	17.8	18.2	16.6	18.0	17.0	18.4	18.7
	3H	18.0	19.2	18.4	19.6	20.0	18.9	20.1	19.3	20.5	20.9
	4H	18.8	19.8	19.2	20.3	20.7	20.0	21.0	20.4	21.4	21.9
	6H	19.3	20.2	19.7	20.7	21.1	20.9	21.8	21.3	22.3	22.7
	8H	19.4	20.3	19.9	20.8	21.2	21.3	22.2	21.7	22.6	23.1
	12H	19.5	20.3	20.0	20.8	21.3	21.5	22.3	22.0	22.8	23.3
8H	4H	19.2	20.1	19.7	20.5	21.0	20.3	21.1	20.7	21.6	22.0
	6H	19.9	20.6	20.4	21.1	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	20.8	20.8	21.3	21.9	22.2	22.8	22.7	23.3	23.8
12H	4H	19.3	20.1	19.8	20.6	21.0	20.3	21.1	20.8	21.6	22.0
	6H	20.0	20.7	20.5	21.2	21.7	21.4	22.1	21.9	22.5	23.1
	8H	20.3	20.9	20.8	21.4	21.9	21.9	22.5	22.4	23.0	23.6

(END OF REPORT)