

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: P1589906

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589906
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-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

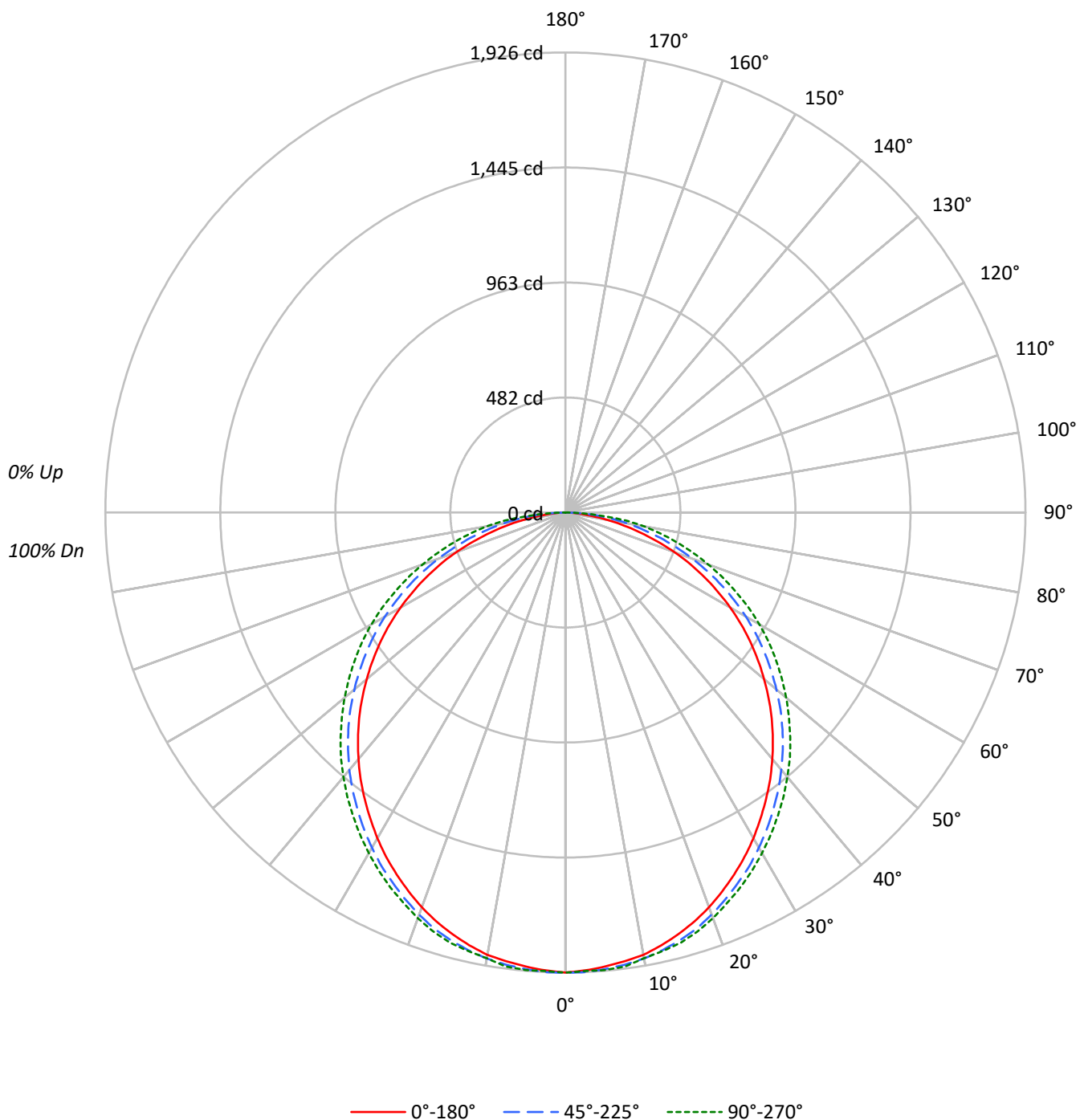
Lumens per Lamp: N/A
Luminaire Lumens: 5603.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	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°	2950	2950	2950
5°	2934	2950	2956
10°	2924	2949	2947
15°	2897	2939	2957
20°	2866	2919	2945
25°	2825	2891	2927
30°	2784	2865	2912
35°	2738	2837	2898
40°	2694	2812	2890
45°	2645	2783	2882
50°	2588	2749	2875
55°	2523	2713	2871
60°	2444	2673	2872
65°	2332	2617	2857
70°	2181	2537	2850
75°	1933	2439	2860
80°	1574	2318	2945
85°	1018	2139	2541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2984 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.3	3.3
10°-20°	522.0	9.3
20°-30°	787.0	14.0
30°-40°	947.0	16.9
40°-50°	987.8	17.6
50°-60°	905.4	16.2
60°-70°	711.0	12.7
70°-80°	432.7	7.7
80°-90°	128.0	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°	1491.2	26.6
0°-40°	2438.2	43.5
0°-60°	4331.4	77.3
0°-90°	5603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1908	1920	1919	1916	1922	181
15°	1827	1845	1854	1856	1865	515
25°	1672	1695	1710	1721	1732	770
35°	1464	1487	1518	1539	1550	916
45°	1221	1246	1285	1315	1331	942
55°	945	969	1016	1057	1075	844
65°	644	668	722	770	788	637
75°	327	357	412	462	483	346
85°	58	82	122	136	145	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1926.1	1926.1	1926.1	1926.1	1926.1
2.5°	1918.9	1928.5	1926.1	1917.7	1921.3
5°	1908.0	1920.1	1918.9	1916.5	1922.5
7.5°	1894.8	1908.0	1909.2	1909.2	1916.5
10°	1880.3	1893.6	1896.0	1892.4	1894.8
12.5°	1856.2	1871.9	1876.7	1876.7	1880.3
15°	1827.3	1845.4	1853.8	1856.2	1864.6
17.5°	1795.9	1815.2	1826.1	1832.1	1839.3
20°	1758.6	1779.1	1791.1	1798.4	1806.8
22.5°	1716.4	1739.3	1752.5	1759.8	1769.4
25°	1671.8	1694.7	1710.4	1721.2	1732.1
27.5°	1624.8	1646.5	1668.2	1681.4	1691.1
30°	1574.2	1597.1	1620.0	1636.8	1646.5
32.5°	1519.9	1544.0	1570.5	1588.6	1599.5
35°	1464.5	1487.4	1517.5	1539.2	1550.1
37.5°	1407.8	1431.9	1463.3	1486.2	1499.4
40°	1347.6	1372.9	1406.6	1431.9	1445.2
42.5°	1284.9	1309.0	1346.4	1375.3	1391.0
45°	1221.0	1246.3	1284.9	1315.0	1330.7
47.5°	1154.7	1178.8	1221.0	1256.0	1269.2
50°	1086.0	1108.9	1153.5	1190.9	1206.5
52.5°	1016.1	1040.2	1084.8	1124.6	1141.4
55°	945.0	969.1	1016.1	1057.1	1075.2
57.5°	872.7	896.8	945.0	987.2	1008.9
60°	797.9	822.0	872.7	916.1	937.7
62.5°	720.8	746.1	797.9	842.5	865.4
65°	643.6	667.8	722.0	770.2	788.3
67.5°	566.5	590.6	643.6	691.9	713.6
70°	487.0	514.7	566.5	617.1	636.4
72.5°	403.8	435.1	487.0	540.0	559.3
75°	326.6	356.8	412.2	461.6	483.3
77.5°	250.7	283.3	335.1	385.7	407.4
80°	178.4	209.7	262.8	311.0	333.9
82.5°	113.3	141.0	194.1	237.5	254.3
85°	57.9	82.0	121.7	136.2	144.6
87.5°	16.9	28.9	43.4	54.2	60.3
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	16.9	15.6	17.2	17.5	16.0	17.7	16.4	18.0	18.3
	3H	17.0	18.5	17.4	18.9	19.2	18.1	19.6	18.4	19.9	20.3
	4H	17.6	19.1	18.0	19.4	19.8	18.9	20.4	19.3	20.7	21.1
	6H	18.1	19.4	18.5	19.7	20.1	19.7	21.0	20.1	21.4	21.8
	8H	18.2	19.4	18.6	19.8	20.2	20.0	21.2	20.4	21.6	22.0
	12H	18.2	19.4	18.6	19.8	20.2	20.2	21.4	20.6	21.8	22.2
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	19.9	21.0	20.4	21.4	21.9
	6H	19.3	20.2	19.7	20.7	21.1	20.8	21.8	21.3	22.2	22.7
	8H	19.4	20.3	19.9	20.8	21.2	21.2	22.1	21.7	22.5	23.0
	12H	19.5	20.3	20.0	20.8	21.3	21.5	22.3	21.9	22.7	23.2
8H	4H	19.2	20.1	19.7	20.5	21.0	20.2	21.1	20.7	21.6	22.0
	6H	19.9	20.6	20.4	21.1	21.6	21.3	22.0	21.8	22.5	23.0
	8H	20.1	20.7	20.6	21.2	21.7	21.8	22.4	22.3	22.9	23.4
	12H	20.2	20.8	20.7	21.3	21.9	22.1	22.7	22.6	23.2	23.7
12H	4H	19.3	20.1	19.8	20.6	21.0	20.3	21.1	20.7	21.5	22.0
	6H	20.0	20.7	20.5	21.1	21.7	21.3	22.0	21.9	22.5	23.0
	8H	20.3	20.9	20.8	21.3	21.9	21.9	22.5	22.4	23.0	23.5

(END OF REPORT)