

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: P1589904

Luminaire Tested: 24CZSP-SB-60VHE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589904
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

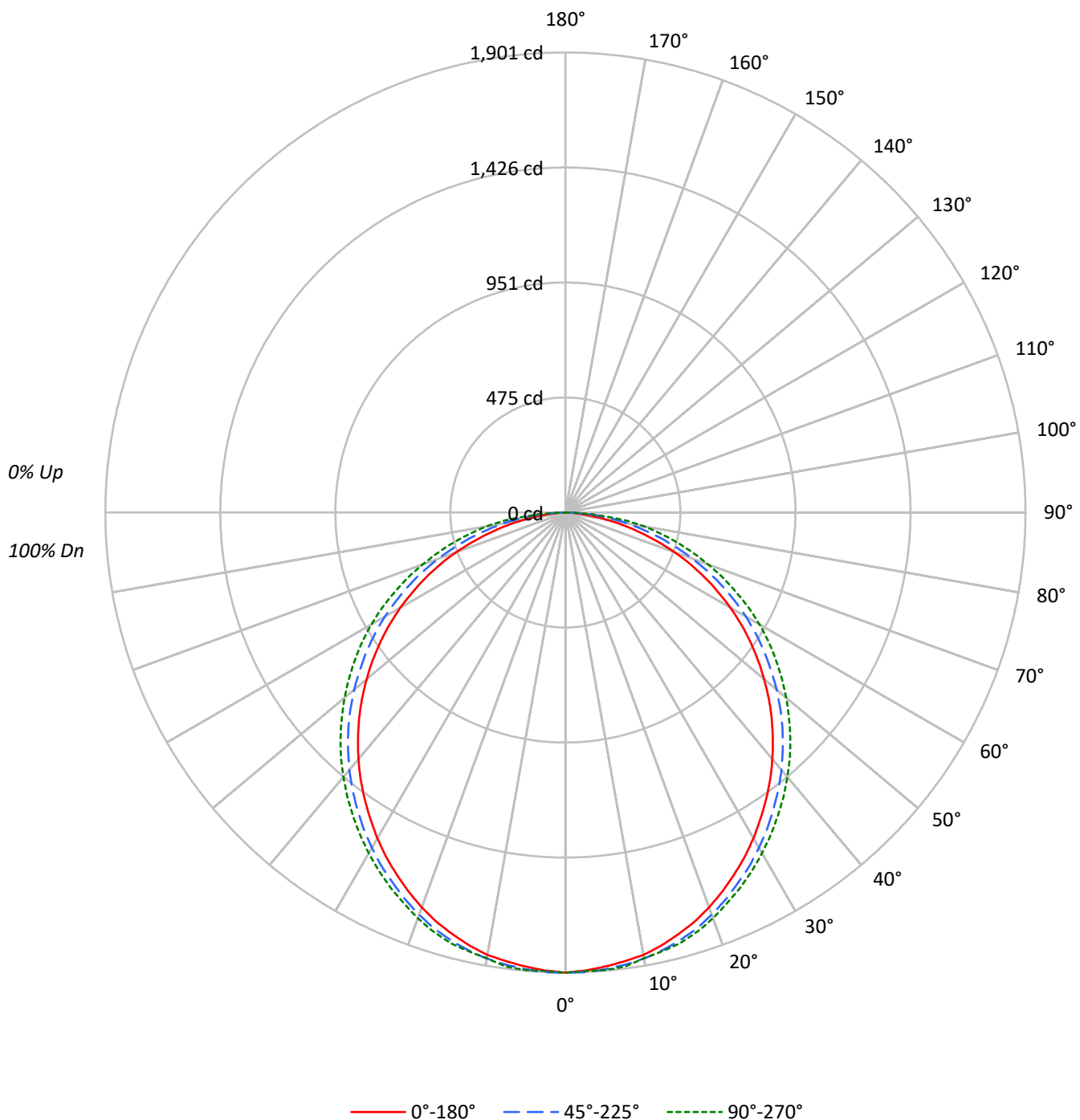
Lumens per Lamp: N/A
Luminaire Lumens: 5531.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2912	2912	2912
5°	2896	2912	2918
10°	2887	2911	2909
15°	2860	2902	2919
20°	2830	2882	2907
25°	2789	2853	2889
30°	2748	2828	2874
35°	2703	2801	2861
40°	2660	2776	2852
45°	2611	2747	2845
50°	2554	2713	2838
55°	2491	2678	2834
60°	2413	2639	2836
65°	2303	2583	2820
70°	2153	2504	2813
75°	1908	2408	2823
80°	1553	2288	2907
85°	1003	2112	2509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2946 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.9	3.3
10°-20°	515.3	9.3
20°-30°	776.9	14.0
30°-40°	934.8	16.9
40°-50°	975.1	17.6
50°-60°	893.7	16.2
60°-70°	701.8	12.7
70°-80°	427.1	7.7
80°-90°	126.4	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°	1472.1	26.6
0°-40°	2406.9	43.5
0°-60°	4275.7	77.3
0°-90°	5531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1901	1901	1901	1901	1901	
5°	1884	1895	1894	1892	1898	179
15°	1804	1822	1830	1832	1841	509
25°	1650	1673	1688	1699	1710	761
35°	1446	1468	1498	1519	1530	905
45°	1205	1230	1268	1298	1314	929
55°	933	957	1003	1044	1061	834
65°	635	659	713	760	778	628
75°	322	352	407	456	477	342
85°	57	81	120	134	143	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1901.4	1901.4	1901.4	1901.4	1901.4
2.5°	1894.2	1903.7	1901.4	1893.0	1896.6
5°	1883.5	1895.4	1894.2	1891.8	1897.8
7.5°	1870.4	1883.5	1884.7	1884.7	1891.8
10°	1856.2	1869.2	1871.6	1868.1	1870.4
12.5°	1832.4	1847.8	1852.6	1852.6	1856.2
15°	1803.8	1821.6	1830.0	1832.4	1840.7
17.5°	1772.9	1791.9	1802.6	1808.6	1815.7
20°	1736.0	1756.2	1768.1	1775.2	1783.6
22.5°	1694.3	1716.9	1730.0	1737.2	1746.7
25°	1650.3	1672.9	1688.4	1699.1	1709.8
27.5°	1603.9	1625.3	1646.7	1659.8	1669.3
30°	1553.9	1576.5	1599.1	1615.8	1625.3
32.5°	1500.4	1524.2	1550.4	1568.2	1578.9
35°	1445.7	1468.3	1498.0	1519.4	1530.1
37.5°	1389.7	1413.5	1444.5	1467.1	1480.2
40°	1330.2	1355.2	1388.5	1413.5	1426.6
42.5°	1268.4	1292.2	1329.1	1357.6	1373.1
45°	1205.3	1230.3	1268.4	1298.1	1313.6
47.5°	1139.9	1163.7	1205.3	1239.8	1252.9
50°	1072.0	1094.7	1138.7	1175.6	1191.0
52.5°	1003.0	1026.8	1070.9	1110.1	1126.8
55°	932.8	956.6	1003.0	1043.5	1061.3
57.5°	861.4	885.2	932.8	974.5	995.9
60°	787.7	811.5	861.4	904.3	925.7
62.5°	711.5	736.5	787.7	831.7	854.3
65°	635.4	659.2	712.7	760.3	778.2
67.5°	559.2	583.0	635.4	683.0	704.4
70°	480.7	508.1	559.2	609.2	628.2
72.5°	398.6	429.5	480.7	533.0	552.1
75°	322.4	352.2	406.9	455.7	477.1
77.5°	247.5	279.6	330.8	380.7	402.2
80°	176.1	207.0	259.4	307.0	329.6
82.5°	111.8	139.2	191.6	234.4	251.1
85°	57.1	80.9	120.2	134.5	142.8
87.5°	16.7	28.6	42.8	53.5	59.5
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	15.9	17.6	16.3	17.9	18.2
	3H	17.0	18.5	17.4	18.8	19.2	18.0	19.5	18.4	19.9	20.2
	4H	17.6	19.0	18.0	19.4	19.7	18.9	20.3	19.3	20.7	21.0
	6H	18.0	19.3	18.4	19.7	20.1	19.6	21.0	20.0	21.3	21.7
	8H	18.1	19.4	18.5	19.8	20.2	19.9	21.2	20.4	21.6	22.0
	12H	18.2	19.4	18.6	19.8	20.2	20.1	21.3	20.6	21.7	22.1
4H	2H	16.0	17.4	16.4	17.7	18.1	16.6	18.0	17.0	18.3	18.7
	3H	18.0	19.2	18.4	19.6	20.0	18.9	20.1	19.3	20.5	20.9
	4H	18.7	19.8	19.1	20.2	20.6	19.9	21.0	20.3	21.4	21.8
	6H	19.2	20.2	19.7	20.6	21.1	20.8	21.7	21.2	22.2	22.6
	8H	19.4	20.3	19.8	20.7	21.2	21.2	22.0	21.6	22.5	23.0
	12H	19.5	20.3	19.9	20.7	21.2	21.4	22.2	21.9	22.7	23.2
8H	4H	19.2	20.1	19.6	20.5	21.0	20.2	21.1	20.6	21.5	22.0
	6H	19.8	20.6	20.3	21.1	21.5	21.2	22.0	21.7	22.5	22.9
	8H	20.0	20.7	20.5	21.2	21.7	21.7	22.4	22.2	22.9	23.4
	12H	20.2	20.8	20.7	21.2	21.8	22.1	22.7	22.6	23.1	23.7
12H	4H	19.2	20.0	19.7	20.5	21.0	20.2	21.0	20.7	21.5	22.0
	6H	20.0	20.6	20.5	21.1	21.6	21.3	22.0	21.8	22.4	23.0
	8H	20.2	20.8	20.7	21.3	21.9	21.8	22.4	22.3	22.9	23.5

(END OF REPORT)