

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: P1589896

Luminaire Tested: 24CZSP-SB-60VHE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589896
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-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 6000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

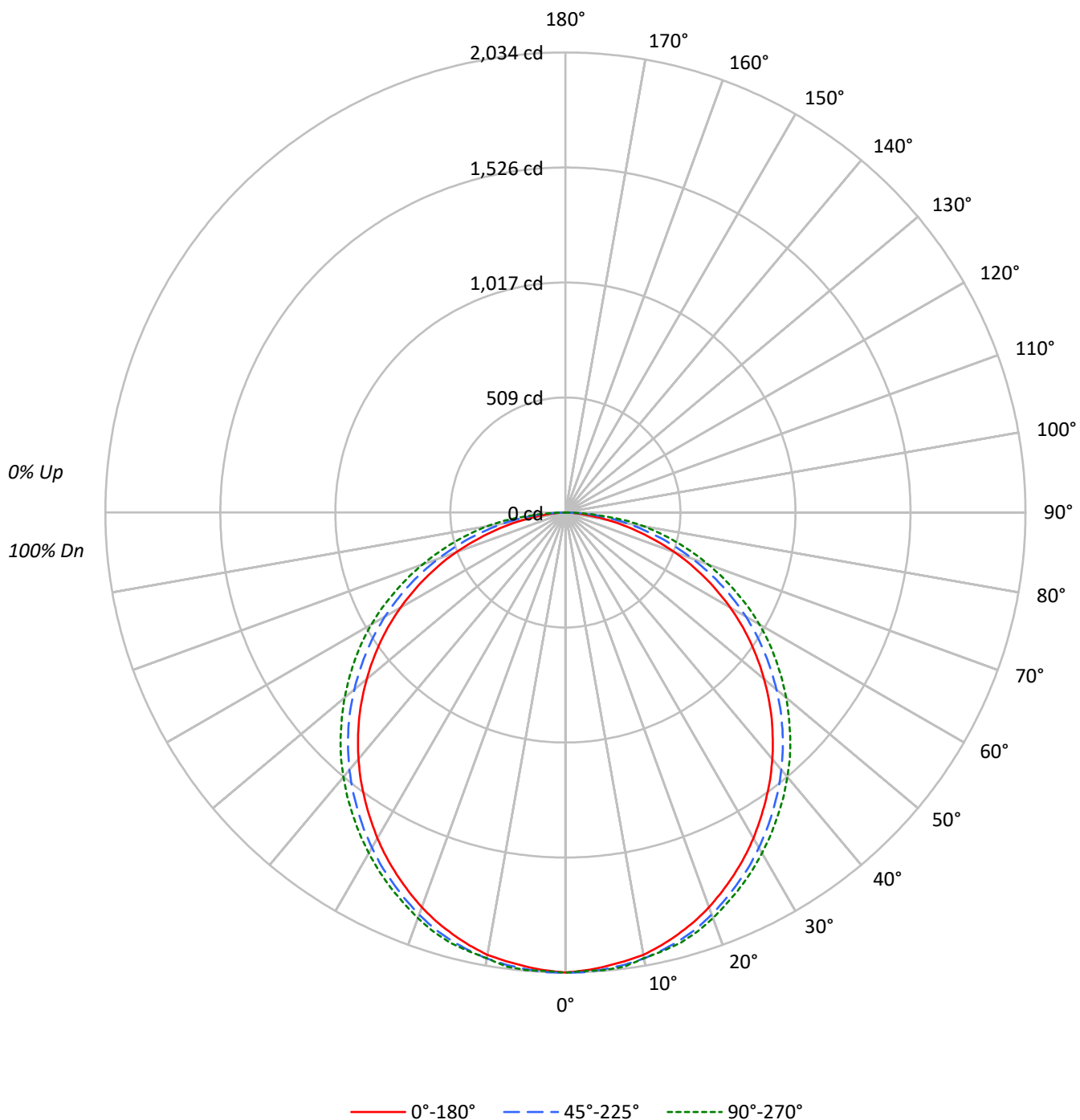
Lumens per Lamp: N/A
Luminaire Lumens: 5917.0 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3115	3115	3115
5°	3098	3116	3121
10°	3088	3114	3112
15°	3060	3104	3122
20°	3027	3083	3110
25°	2984	3052	3091
30°	2940	3025	3075
35°	2892	2996	3061
40°	2845	2970	3051
45°	2793	2939	3044
50°	2733	2902	3036
55°	2665	2865	3032
60°	2581	2823	3034
65°	2463	2763	3017
70°	2303	2679	3010
75°	2042	2576	3020
80°	1662	2448	3110
85°	1074	2260	2683

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3152 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	3.3
10°-20°	551.2	9.3
20°-30°	831.1	14.0
30°-40°	1000.0	16.9
40°-50°	1043.1	17.6
50°-60°	956.1	16.2
60°-70°	750.8	12.7
70°-80°	456.9	7.7
80°-90°	135.2	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°	1574.8	26.6
0°-40°	2574.8	43.5
0°-60°	4574.1	77.3
0°-90°	5917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5917.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2034	2034	2034	2034	2034	
5°	2015	2028	2026	2024	2030	191
15°	1930	1949	1958	1960	1969	544
25°	1766	1790	1806	1818	1829	814
35°	1546	1571	1603	1626	1637	968
45°	1289	1316	1357	1389	1405	994
55°	998	1023	1073	1116	1135	892
65°	680	705	762	813	832	672
75°	345	377	435	488	510	366
85°	61	87	129	144	153	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2034.1	2034.1	2034.1	2034.1	2034.1
2.5°	2026.4	2036.6	2034.1	2025.1	2029.0
5°	2015.0	2027.7	2026.4	2023.9	2030.2
7.5°	2001.0	2015.0	2016.2	2016.2	2023.9
10°	1985.7	1999.7	2002.2	1998.4	2001.0
12.5°	1960.2	1976.8	1981.9	1981.9	1985.7
15°	1929.7	1948.8	1957.7	1960.2	1969.1
17.5°	1896.6	1917.0	1928.4	1934.8	1942.4
20°	1857.1	1878.8	1891.5	1899.1	1908.0
22.5°	1812.6	1836.8	1850.8	1858.4	1868.6
25°	1765.5	1789.7	1806.2	1817.7	1829.1
27.5°	1715.8	1738.8	1761.7	1775.7	1785.8
30°	1662.4	1686.6	1710.7	1728.6	1738.8
32.5°	1605.1	1630.6	1658.6	1677.7	1689.1
35°	1546.5	1570.7	1602.6	1625.5	1636.9
37.5°	1486.7	1512.2	1545.3	1569.5	1583.5
40°	1423.1	1449.8	1485.4	1512.2	1526.2
42.5°	1356.9	1382.3	1421.8	1452.4	1468.9
45°	1289.4	1316.2	1356.9	1388.7	1405.3
47.5°	1219.4	1244.9	1289.4	1326.3	1340.3
50°	1146.9	1171.0	1218.1	1257.6	1274.2
52.5°	1073.0	1098.5	1145.6	1187.6	1205.4
55°	997.9	1023.4	1073.0	1116.3	1135.4
57.5°	921.6	947.0	997.9	1042.5	1065.4
60°	842.6	868.1	921.6	967.4	990.3
62.5°	761.2	787.9	842.6	889.7	913.9
65°	679.7	705.2	762.5	813.4	832.5
67.5°	598.3	623.7	679.7	730.6	753.5
70°	514.2	543.5	598.3	651.7	672.1
72.5°	426.4	459.5	514.2	570.2	590.6
75°	345.0	376.8	435.3	487.5	510.4
77.5°	264.8	299.1	353.9	407.3	430.2
80°	188.4	221.5	277.5	328.4	352.6
82.5°	119.7	148.9	204.9	250.8	268.6
85°	61.1	86.6	128.6	143.8	152.7
87.5°	17.8	30.5	45.8	57.3	63.6
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	15.4	17.1	15.8	17.4	17.7	16.2	17.8	16.5	18.2	18.5
	3H	17.2	18.7	17.6	19.0	19.4	18.3	19.8	18.6	20.1	20.5
	4H	17.8	19.3	18.2	19.6	20.0	19.1	20.5	19.5	20.9	21.3
	6H	18.2	19.6	18.7	19.9	20.3	19.9	21.2	20.3	21.6	21.9
	8H	18.3	19.6	18.8	20.0	20.4	20.2	21.4	20.6	21.8	22.2
	12H	18.4	19.6	18.8	20.0	20.4	20.4	21.6	20.8	21.9	22.4
4H	2H	16.2	17.6	16.6	18.0	18.4	16.8	18.2	17.2	18.6	18.9
	3H	18.2	19.4	18.6	19.8	20.2	19.1	20.3	19.5	20.7	21.1
	4H	18.9	20.0	19.4	20.4	20.9	20.1	21.2	20.5	21.6	22.0
	6H	19.5	20.4	19.9	20.9	21.3	21.0	22.0	21.5	22.4	22.9
	8H	19.6	20.5	20.1	21.0	21.4	21.4	22.3	21.9	22.7	23.2
	12H	19.7	20.5	20.2	21.0	21.4	21.6	22.4	22.1	22.9	23.4
8H	4H	19.4	20.3	19.9	20.7	21.2	20.4	21.3	20.9	21.7	22.2
	6H	20.1	20.8	20.6	21.3	21.8	21.5	22.2	22.0	22.7	23.2
	8H	20.3	20.9	20.8	21.4	21.9	21.9	22.6	22.5	23.1	23.6
	12H	20.4	21.0	20.9	21.5	22.0	22.3	22.9	22.8	23.4	23.9
12H	4H	19.5	20.3	20.0	20.8	21.2	20.4	21.2	20.9	21.7	22.2
	6H	20.2	20.9	20.7	21.3	21.9	21.5	22.2	22.1	22.7	23.2
	8H	20.5	21.0	21.0	21.5	22.1	22.1	22.7	22.6	23.1	23.7

(END OF REPORT)