

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: P1589801

Luminaire Tested: 24CZSP-SB-49HE-L850

Issue Date: 9/3/2026

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-2019
Report Number: P1589801
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-49HE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

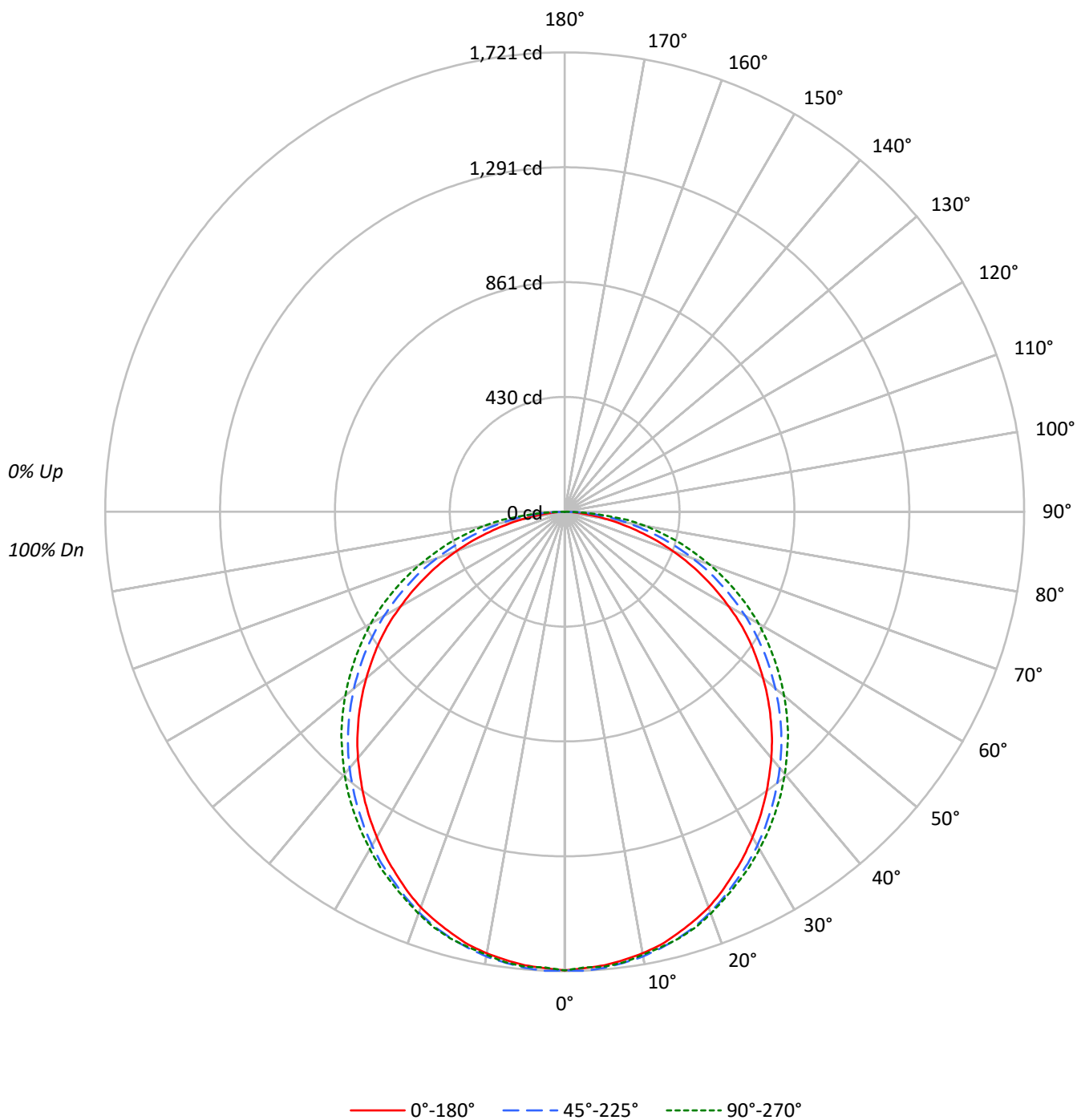
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5014.0 lumens
Efficiency: N/A
Efficacy: 150.6 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): 33.3
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

TEST NUMBER: P1589801
CATALOG NUMBER: 24CZSP-SB-49HE-L850

Luminous Intensity Polar Plot



TEST NUMBER: P1589801

CATALOG NUMBER: 24CZSP-SB-49HE-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	3.2
10°-20°	465.2	9.3
20°-30°	701.2	14.0
30°-40°	844.4	16.8
40°-50°	882.2	17.6
50°-60°	810.4	16.2
60°-70°	638.2	12.7
70°-80°	391.3	7.8
80°-90°	118.6	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°	1328.9	26.5
0°-40°	2173.3	43.3
0°-60°	3865.9	77.1
0°-90°	5014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5014.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1718	1718	1718	1718	1718	
5°	1705	1708	1715	1713	1711	162
15°	1635	1642	1652	1659	1654	461
25°	1496	1506	1523	1539	1533	690
35°	1310	1326	1352	1376	1375	819
45°	1091	1114	1146	1178	1183	841
55°	846	870	910	949	957	755
65°	572	602	647	691	710	566
75°	291	325	371	416	444	309
85°	53	78	112	125	140	68
90°	0	0	0	0	0	

TEST NUMBER: P1589801

CATALOG NUMBER: 24CZSP-SB-49HE-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1718.1	1718.1	1718.1	1718.1	1718.1
2.5°	1711.7	1716.0	1721.3	1712.8	1708.5
5°	1705.4	1708.5	1714.9	1712.8	1710.7
7.5°	1693.7	1695.8	1704.3	1704.3	1702.2
10°	1679.9	1684.1	1691.6	1690.5	1685.2
12.5°	1661.9	1665.0	1673.5	1673.5	1670.3
15°	1635.3	1641.7	1652.3	1658.7	1654.4
17.5°	1607.7	1614.1	1627.9	1634.3	1632.1
20°	1577.0	1582.3	1596.1	1605.6	1601.4
22.5°	1538.8	1545.1	1561.0	1571.7	1567.4
25°	1496.3	1505.9	1522.8	1538.8	1533.4
27.5°	1453.9	1464.5	1485.7	1501.6	1499.5
30°	1407.2	1421.0	1443.2	1463.4	1459.2
32.5°	1359.4	1375.3	1398.7	1419.9	1418.8
35°	1309.5	1326.5	1352.0	1376.4	1375.3
37.5°	1256.5	1276.6	1303.2	1329.7	1330.8
40°	1204.5	1223.6	1253.3	1281.9	1283.0
42.5°	1149.3	1169.5	1201.3	1231.0	1232.1
45°	1090.9	1114.3	1146.1	1177.9	1183.2
47.5°	1031.5	1055.9	1088.8	1122.8	1129.1
50°	969.9	995.4	1030.4	1066.5	1072.9
52.5°	907.3	933.9	969.9	1006.0	1015.6
55°	845.8	870.2	909.5	948.7	957.2
57.5°	781.0	803.3	845.8	887.2	897.8
60°	709.9	737.5	781.0	822.4	839.4
62.5°	641.0	670.7	715.3	756.6	775.7
65°	572.0	601.7	647.3	690.8	709.9
67.5°	502.0	532.7	581.5	622.9	644.2
70°	431.9	462.7	509.4	554.0	576.2
72.5°	361.9	394.8	440.4	486.0	508.3
75°	290.8	324.7	371.4	416.0	443.6
77.5°	223.9	256.8	303.5	349.1	372.5
80°	160.2	193.1	238.8	284.4	308.8
82.5°	101.9	132.7	177.2	215.4	237.7
85°	53.1	78.5	112.5	125.2	140.1
87.5°	15.9	30.8	43.5	48.8	60.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589801

CATALOG NUMBER: 24CZSP-SB-49HE-L850

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	14.9	16.5	15.2	16.9	17.2	15.6	17.3	16.0	17.6	17.9
	3H	16.6	18.1	17.0	18.5	18.8	17.7	19.2	18.1	19.6	19.9
	4H	17.3	18.7	17.7	19.0	19.4	18.6	20.0	19.0	20.4	20.7
	6H	17.7	19.0	18.1	19.4	19.7	19.4	20.7	19.8	21.1	21.4
	8H	17.8	19.0	18.2	19.4	19.8	19.7	20.9	20.1	21.3	21.7
	12H	17.8	19.0	18.3	19.4	19.9	19.9	21.1	20.3	21.5	21.9
4H	2H	15.6	17.1	16.0	17.4	17.8	16.2	17.6	16.6	18.0	18.4
	3H	17.6	18.8	18.0	19.2	19.6	18.6	19.8	19.0	20.1	20.5
	4H	18.4	19.5	18.8	19.9	20.3	19.6	20.7	20.0	21.1	21.5
	6H	18.9	19.9	19.4	20.3	20.8	20.5	21.5	21.0	21.9	22.4
	8H	19.1	20.0	19.5	20.4	20.9	20.9	21.8	21.4	22.2	22.7
	12H	19.2	20.0	19.6	20.4	20.9	21.2	22.0	21.7	22.5	22.9
8H	4H	18.8	19.7	19.3	20.2	20.6	19.9	20.8	20.3	21.2	21.7
	6H	19.5	20.3	20.0	20.8	21.2	21.0	21.7	21.5	22.2	22.7
	8H	19.7	20.4	20.2	20.9	21.4	21.5	22.1	22.0	22.6	23.1
	12H	19.9	20.5	20.4	21.0	21.5	21.8	22.4	22.3	22.9	23.5
12H	4H	18.9	19.7	19.4	20.2	20.7	19.9	20.7	20.4	21.2	21.7
	6H	19.7	20.3	20.2	20.8	21.3	21.0	21.7	21.6	22.2	22.7
	8H	19.9	20.5	20.4	21.0	21.6	21.6	22.2	22.1	22.7	23.2

(END OF REPORT)