

ESDBEST ESD Mat Resistance Test Report

Purpose

This report provides a standard template and example results for electrical resistance testing of ESDBEST two-layer rubber ESD mats. Testing should be performed under a controlled environment using a calibrated resistance meter such as ACL 800 or equivalent.

Applicable Standards

ANSI/ESD S20.20 • ANSI/ESD STM4.1 • IEC 61340-5-1

Recommended Test Equipment

- ACL 800 Surface Resistance Meter
- 5 lb electrodes
- Ground cord
- Thermo-hygrometer
- ESD bench mat sample

Environmental Conditions

Parameter	Recommended
Temperature	23 ± 2 °C
Relative Humidity	12-50% RH (record actual)
Conditioning Time	≥48 hours if required

Sample Test Record

Test Item	Measured Value	Pass Criteria	Result
Surface Resistance (RTT)	$1.8 \times 10^8 \Omega$	10^6 – $10^9 \Omega$	PASS
Resistance to Ground (RTG)	$6.2 \times 10^7 \Omega$	Per EPA requirement	PASS
Visual Inspection	No defects	No damage	PASS

Testing Procedure

1. Condition the sample and record temperature and humidity.
2. Place electrodes according to ANSI/ESD STM4.1.
3. Measure RTT and RTG using a calibrated meter.
4. Repeat measurements at multiple locations.
5. Record all values and compare against acceptance criteria.
6. Retest after cleaning if abnormal readings are observed.

Inspector Sign-off

Inspector: _____ Date: _____

ESDBEST | <https://esdbest.com> | sales2@esdbest.com | +86 13714272599