



LONESTAR ELECTROSTATIC SOLUTIONS

5213 PINWOOD DR. MCKINNEY TEXAS 75071

Phone: 1-770-856-3119

Email: LonestarESD@outlook.com

Website: LonestarESD.com

SUMMARY

Testing of material samples were performed to ANSI/ESD STM11.11 and 11.12 to determine Surface and Volume resistance of the material. A qty of 6 samples were conditioned to the requirements of the test methods. Each was then tested per the referenced test methods with data recorded and shown below. Results showed a range on Surface Resistance of $10^3 - 10^5$ Ohms. Range for Volume Resistance is $10^4 - 10^5$ Ohms.

MATERIAL:

Corstat Sealed
Sample Thickness: 0.125"

TEST CONDITIONS:

Qty 6 specimens @ 12.4% RH, 23°C, 60 hours conditioning.
Qty 6 specimens @ 50.3% RH, 23°C, 54 hours conditioning.
Test Voltage (@ Upper Resistance): 100 Volts
Electrification Period (@ Upper Resistance): 8-10 seconds

TEST DATA

TEST METHOD/S:

- ANSI/ESD STM11.11-2022
- ANSI/ESD STM11.12-2021

STANDARDS:

- PROSTAT PRS-80 I
RESISTANCE METER (CAL
DATE 1-2023)
- PROSTAT PRF-91 I
CONCENTRIC RING (CAL
DATE 2-2023)
- ALL STANDARDS ON 1
YEAR CAL CYCLE.

TABLE 1: SURFACE RESISTANCE DATA

Test Method	Surface Resistance (Ohms) @ 12.4% RH, 23°C, 60 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
ANSI/ESD STM 11.11	2.37 x 10^5	5.14 x 10^4	7.27 x 10^4	1.19 x 10^5	8.21 x 10^5	6.18 x 10^5	5.14 x 10^4	8.21 x 10^5	3.20 x 10^5

Test Method	Surface Resistance (Ohms) @ 50.3% RH, 23°C, 54 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
ANSI/ESD STM 11.11	7.19 x 10^4	4.42 x 10^4	6.96 x 10^3	8.37 x 10^4	2.53 x 10^4	5.91 x 10^4	6.96 x 10^3	8.37 x 10^4	4.85 x 10^4

TABLE 2: VOLUME RESISTANCE DATA

Test Method	Volume Resistance (Ohms) @ 12.4% RH, 23°C, 60 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	ANSI/ESD STM 11.12	7.45 x 10 ⁵	2.08 x 10 ⁵	8.13 x 10 ⁵	3.22 x 10 ⁵	5.71 x 10 ⁴	9.04 x 10 ⁵	7.31 x 10 ⁴	6.44 x 10 ⁵

Test Method	Volume Resistance (Ohms) @ 50.3% RH, 23°C, 54 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	ANSI/ESD STM 11.12	4.29 x 10 ⁴	8.81 x 10 ⁴	8.06 x 10 ⁴	2.27 x 10 ⁵	4.11 x 10 ⁴	3.02 x 10 ⁴	3.02 x 10 ⁴	2.27 x 10 ⁵