



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 10^5 – 10^5 Ohms. Range for Volume Resistance is 10^5 – 10^5 Ohms.

MATERIAL:

24 STY PC
Sample Thickness: 0.125"

TEST CONDITIONS:

Qty 6 specimens @ 12.9% RH, 22.9°C, 60 hours conditioning.
Qty 6 specimens @ 50.5% RH, 23.3°C, 55 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-801
RESISTANCE METER (CAL
DATE 1-2023)
- PROSTAT PRF-911
CONCENTRIC RING (CAL
DATE 2-2023)
- ALL STANDARDS ON 1
YEAR CAL CYCLE.

TABLE 1: SURFACE RESISTANCE DATA

Test Method ANSI/ESD STM 11.11	Surface Resistance (Ohms) @ 12.9% RH, 22.9°C, 60 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	4.4×10^5	3.8×10^5	3.7×10^5	4.1×10^5	2.5×10^5	2.5×10^5	2.5×10^5	4.4×10^5	3.5×10^5

Test Method ANSI/ESD STM 11.11	Surface Resistance (Ohms) @ 50.5% RH, 23.3°C, 55 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	4.1×10^5	2.8×10^5	2.0×10^5	3.2×10^5	2.0×10^5	1.8×10^5	1.8×10^5	4.1×10^5	2.65×10^5

TABLE 2: VOLUME RESISTANCE DATA

Test Method	Volume Resistance (Ohms) @ 12.9% RH, 22.9°C, 60 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	ANSI/ESD STM 11.12	3.2×10^5	4.0×10^5	2.3×10^5	2.2×10^5	2.4×10^5	2.2×10^5	2.2×10^5	4.0×10^5

Test Method	Volume Resistance (Ohms) @ 50.5% RH, 23.3°C, 55 hours conditioning								
	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Min	Max	Mean
	ANSI/ESD STM 11.12	2.8×10^5	3.8×10^5	1.7×10^5	1.4×10^5	1.5×10^5	1.3×10^5	1.3×10^5	3.8×10^5