

Testing Equipment to Electrostatic Discharge. Case Study-Communication Cables

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Abstract—The paper deals with the analysis of the characteristics of electrostatic discharges (ESD) processes and the impact of ESD to the performances of equipment, especially to the communication cables. ESD current models are analyzed, and, in conformity with basic standards in this field the measuring methods of the discharges are applied. The comparative results for unshielded and shielded cables are done. The experimental determinations show that the cable shielding offers an improvement to their functionality, but it does not totally eliminate the probability to damage on the electrostatic discharge actions. New mitigation techniques should be developed.