

ESD TR14.0-02-13

ESD Association Technical Report

ESD TR14.0-02-13

Revision and re-designation of ANSI/ESD SP14.1-2004

***For the Protection of Electrostatic
Discharge Susceptible Items***

***System Level Electrostatic Discharge
(ESD) Simulator Verification***



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Published by:

Electrostatic Discharge Association
7900 Turin Road, Bldg. 3
Rome, NY 13440

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Printed in the United States of America

(This foreword is not part of ESD Association Technical Report ESD TR14.0-02-13)

FOREWORD

When this document was originally written in 2004, there was a lack of information available to address new findings in regards to ESD simulator repeatability issues and problems with the method of making accurate measurements of the discharge current. Current measuring targets made to the IEC specification [ref 2.2] at the time, were shown to have large response variation and insufficient bandwidth to be used to characterize ESD current waveforms.

As originally written, this document attempted to fill these gaps by specifying better measurement system verification procedures, specified better measurement components and also specified a better performing current waveform target. Different and additional simulator current and field specifications were also noted, but were outside the scope of the document.

Since its release, other documents have evolved, such as the IEC 61000-4-2 which has addressed many of the items the Working Group was attempting to address. Because of this, this Technical Report should be used as a reference document.

This document is intended to provide guidance to system designers, manufacturers, and calibration laboratories for verification and specification of the systems and fixtures used to measure ESD simulator discharge currents.

Although the results may not be reproducible, this document was created as a means to help minimize test data correlation problems of system equipment under test, due to variations in measurement system characteristics.

This technical report was originally designated ANSI/ESD SP14.1-2004 and approved on February 22, 2004. ESD TR14.0-02-13 is a revision and re-designation of ANSI/ESD SP14.1-2004.

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TABLE OF CONTENTS

1.0 PURPOSE, SCOPE, AND APPLICATION	1
1.1 PURPOSE	1
1.2 SCOPE	1
1.3 APPLICATION	1
2.0 REFERENCES	1
3.0 DEFINITIONS	1
4.0 PERSONNEL SAFETY	1
5.0 MEASUREMENT SYSTEM VERIFICATION	2
5.1 GENERAL	2
5.2 MEASUREMENT SYSTEM.....	2
5.2.1 Oscilloscope/Digitizer.....	2
5.2.2 ESD Target	2
5.2.3 ESD Target Adapter.....	2
5.2.4 Attenuators.....	2
5.2.5 Cables/Connectors.....	3
5.2.6 Pulse Generator	3
5.3 SYSTEM CHARACTERISTICS.....	3
5.3.1 Pulse Generator and Oscilloscope	3
5.3.2 Reference Waveform	3
5.3.3 System Response Waveform	4
5.3.4 Performance Requirements	5
6.0 BIBLIOGRAPHY	6

FIGURES

FIGURE 1: Schematic for Capturing Reference Waveform	4
FIGURE 2: Schematic for Capturing System Response to Reference Waveform.....	4
FIGURE 3: Waveforms Obtained by the Setups of Figures 1 and 2	5
FIGURE 4: Comparison of Current Waveforms	5
FIGURE 5: Current Sensor Construction: Example of the Central Brass Part	7
FIGURE 6: Current Sensor Construction: Printed Circuit Board Example.....	8
FIGURE 7: Current Sensor Construction: Example of Component Drawings	9
FIGURE 8: Current Sensor Construction: Example of Stainless Steel Cover	10
FIGURE 9: Current Sensor Construction: Example of Final Assembly	11
FIGURE 10: Typical Constant Impedance Tapered Transmission Line Adapter.....	12

ANNEXES

ANNEX A (Informative): Current Sensor Construction.....	7
ANNEX B (Informative): Target Adapter	12
ANNEX C (Informative): ESD TR14.0-02-13 Revision History	13