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Interface Practices Subcommittee

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Hard Line Pin Connector Return Loss

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1. Introduction

1.1. Executive Summary

This test procedure applies as a method to measure the return loss of Hard Line Pin connectors.

1.2. Scope

This document describes a procedure to measure the Return Loss characteristics of a single Hard Line Pin Connector interfaced between hard line cable and a precision airline. It implements the time domain-gating features of the network analyzers, which removes the interfaces, and far end termination from the DUT (device under test) measurement.

1.3. Benefits

This test procedure provides a common method that can be used by both manufacturers and end users to test whether Hard Line Pin connector models meet return loss specifications. Without such a common test procedure, the testing used to prove Hard Line Pin connector return loss performance can vary and lead to uncertainty as to whether the connector return loss specifications are being met.

1.4. Intended Audience

The intended audience for this test procedure are manufacturers, evaluation laboratories, and end user technician and engineers with the proper equipment to perform this testing.

1.5. Areas for Further Investigation or to be Added in Future Versions

At this time, there are no areas for further investigation for this test procedure.

2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References

- ANSI/SCTE 15 2019 Specification for Trunk, Feeder and Distribution Coaxial Cable

2.2. Standards from Other Organizations

- No normative references are applicable.

2.3. Published Materials

- No normative references are applicable.

3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

3.1. SCTE References

- ANSI/SCTE 15 2019 Specification for Trunk, Feeder and Distribution Coaxial Cable

3.2. Standards from Other Organizations

- No informative references are applicable.

3.3. Published Materials

- No informative references are applicable.

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5. Abbreviations and Definitions

5.1. Abbreviations

ANSI	American National Standards Institute
dB	decibel
Div	division
DUT	device under test
GHz	gigahertz