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S T A N D A R D S

Interface Practices Subcommittee

SCTE STANDARD

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**Test Method for Reverse Path (Upstream)
bit error rate**

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1. Introduction

1.1. Executive Summary

This procedure defines a method of measurement for bit error rate (BER) in the return path of active Cable Telecommunications equipment. It is intended for measurement of 75-ohm. See the Cable Telecommunications Testing Guidelines document, ANSI/SCTE 96 2013, for a discussion of proper testing techniques.

1.2. Scope

Since the introduction of Cablelabs DOCSIS 3.1 specifications, QAM channels have been sharing the upstream spectrum with OFDMA channels. Through Proactive Network Maintenance (PNM), DOCSIS 3.1 specifications leverage CMTS and cable modem features and capabilities to enable measurement and reporting of network conditions and their effects. These measurements include FEC statistics (BER) as measured by the CMTS on upstream OFDMA channels. Accordingly, the scope of this test was not broadened to cover OFDMA channels. Instead, the reader is referred to the DOCSIS 3.1 specifications.

For bit error rate measurements in the forward path see ANSI/SCTE 121 2011.

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 96 2013: Cable Telecommunications Testing Guidelines

2.2. Standards from Other Organizations

- DOCSIS 3.1, Physical Layer Specification, CM-SP-PHYv3.1-I13-171220, December 20, 2017, Cable Television Laboratories, Inc.

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 121 2011: Test Method for Downstream Bit Error Rate