



***Society of Cable  
Telecommunications  
Engineers***

---

**ENGINEERING COMMITTEE  
Interface Practices Subcommittee**

---

**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 47 2007**

**Test Method for Coaxial Cable Attenuation**

## NOTICE

The Society of Cable Telecommunications Engineers (SCTE) Standards are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability and ultimately the long term reliability of broadband communications facilities. These documents shall not in any way preclude any member or nonmember of SCTE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE members, whether used domestically or internationally.

SCTE assumes no obligations or liability whatsoever to any party who may adopt the Standards. Such adopting party assumes all risks associated with adoption of these Standards or Recommended Practices, and accepts full responsibility for any damage and/or claims arising from the adoption of such Standards or Recommended Practices.

Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this standard have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE web site at <http://www.scte.org>.

All Rights Reserved

© Society of Cable Telecommunications Engineers, Inc. 2007

140 Philips Road

Exton, PA 19341

## TABLE OF CONTENTS

1.0	SCOPE .....	1
2.0	EQUIPMENT.....	1
3.0	BLOCK DIAGRAM.....	2
4.0	TEST SAMPLES .....	2
5.0	TEST METHOD.....	3
6.0	INSPECTION/REPORT FORM.....	4

## **1.0 SCOPE**

- 1.1. Measurement technique for determining attenuation of coaxial cable at various selected frequencies.

## **2.0 EQUIPMENT**

- 2.1. Network Analyzer: Agilent 8753 or equivalent 75-ohm network analyzer. Minimum loss matching pads may be used if necessary.
- 2.2. Network analyzer calibration kit, appropriate for the connector type being used. Standard Agilent calibration kits (85039B F-Type and 85036B N-Type) are specified to 3 GHz.
- 2.3. Environmental chamber or room capable of maintaining 68°F (20°C) and large enough to accommodate cable sample to be tested.
- 2.4. Thermometer consisting of a digital multimeter and thermal probe or any device capable of accurately measuring the temperature inside the environmental chamber.
- 2.5. Cable preparation and connector installation tools as required.
- 2.6. Drop Cable Test
  - Proper “F” connector for size drop cable or the appropriate size laboratory connector.
- 2.7. Hardline Cable Test

Push-on type test connectors cable to “N” for the proper size of Hardline cable or the appropriate size field connector.