



***Society of Cable
Telecommunications
Engineers***

**ENGINEERING COMMITTEE
Interface Practices Subcommittee**

AMERICAN NATIONAL STANDARD

ANSI/SCTE 60 2010

**Test Method for Interface Moisture Migration
Double Ended**

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 non-member 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, and accepts full responsibility for any damage and/or claims arising from the adoption of such Standards.

Attention is called to the possibility that implementation of this standard may require the 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. 2010
140 Philips Road
Exton, PA 19341

TABLE OF CONTENTS

1.0	SCOPE	1
2.0	EQUIPMENT	2
3.0	TEST ARRANGEMENT	4
4.0	TEST SAMPLES	5
5.0	TEST METHOD	6
6.0	INSPECTION – DROP.....	7
7.0	REPORTING DATA – DROP	8
8.0	INSPECTION – HARDLINE	8
9.0	REPORTING DATA – HARDLINE.....	9
10.0	NORMATIVE REFERENCES	9

1.0 SCOPE

- 1.1 The purpose of this document is to provide a test method for detecting moisture penetration into the coaxial connector/cable and or the connector/port interface.
- 1.2 Although the artificial environment cannot be directly correlated to field service, the tests involve several environmental mechanisms that may affect a connector's tendency to leak in an outdoor environment.
 - 1.2.1 Temperature cycling creates a pumping action with pressure varying above and below barometric pressure.
 - 1.2.2 Temperature cycling will accelerate relaxation of the materials.
 - 1.2.3 Internal condensation may break the surface tension on a connector with a marginal seal.
 - 1.2.4 Initial leakage will increase the pumping action due to the introduction of a non-ideal gas (water vapor), which will have a larger pressure change than air.
- 1.3 Liquid penetrant examination can be used for investigation of the presence, location, and to an extent, the nature and magnitude of the detected moisture paths.
- 1.4 These methods can be used to determine the liquid tightness of integral or external seals, encapsulants or other environmental protection devices.
- 1.5 An acceptable performance level for a given cable / connector combination per test method is derived from the visual appearance and condition of the interfaces. The ratio is determined and expressed as a percent passed based on the test data.