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Telecommunications
Engineers***

ENGINEERING COMMITTEE
Interface Practices Subcommittee

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

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1. Scope

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.
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.
 - Temperature cycling creates a pumping action with pressure varying above and below barometric pressure.
 - Temperature cycling will accelerate relaxation of the materials.
 - Internal condensation *may* break the surface tension on a connector with a marginal seal.
 - 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.
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.
4. These methods can be used to determine the liquid tightness of integral or external seals, encapsulants or other environmental protection devices.
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.

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 01 2006, Specification for "F" Port, Female, Outdoor
- ANSI/SCTE 15 2006, Specification for Trunk, Feeder and Distribution Coaxial Cable
- ANSI/SCTE 74 2011, Specification for Braided 75 Ohm Flexible RF Coaxial Drop Cable
- ANSI/SCTE 91 2015, Specification for 5/8-24 RF & AC Equipment Port, Female