SCTE · ISBE

STANDARDS

Interface Practices Subcommittee

SCTE STANDARD

SCTE 13 2018

Dielectric Air Leakage Test Method For Trunk, Feeder and Distribution Coaxial Cable

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1.0 SCOPE

This document is identical to SCTE 13 2011 except for informative components which may have been updated such as the title page, NOTICE text, headers and footers. No normative changes have been made to this document.

1.1. The purpose of this test is to detect voids in the dielectric and the bond between the dielectric and the center conductor.

2.0 NOTES AND PRECAUTION

2.1. Check the calibration label on each piece of test equipment to insure that the test equipment used is within calibration period limits.

3.0 EQUIPMENT

3.1. Safety Glasses

3.2. Cable Cutters

3.3. Tubing Cutters

3.4. Band Saw

3.5. Water Container and Distilled Water

3.6. Air Transmission Regulator (Capable of Maintaining 5 PSI)

3.7. Adapter Capable of Connecting Cable to Airline (Including: Air Valve Stem, Rubber Boot, Hose Clamp). Reference Figure 1 or Equivalent.

4.0 DIAGRAM

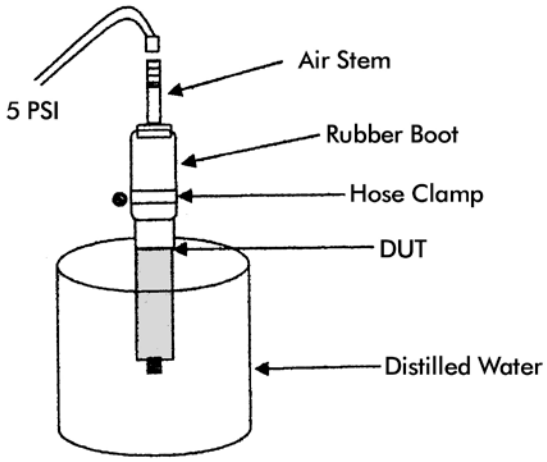

Figure 1

5.0 TEST METHOD

5.1. Cut a 14” ± 0.25” (35.6 cm ± 6.4 mm) specimen of product to be tested with cable cutters. Remove the jacket where applicable. Using a knife or tubing cutters, score the outer aluminum shield five inches from one end of the specimen. Peel away the outer sheath using diagonal cutters. Remove 0.5” ± 0.125” (1.27 cm ± 3.2 mm) of the outer aluminum shield and dielectric material on the opposite end, exposing the center conductor. With a band saw, square the dielectric end to reveal a specimen length of 12” ± 0.25” (30.5 cm ± 6.4 mm).

5.2. Insert the exposed dielectric into the corresponding adapter. Do not over tighten the hose clamp. Assure that no leaks are present between the adapter and the specimen or any other connection.

5.3. Submerge approximately 2” ± 0.25” (5 cm ± 6.4 mm) of the exposed cable end into the water container. Note: Remove all trapped air from the submerged specimen.

5.4. Using 5 PSI ± 0.25 PSI (34.5 kpa ± 1.7 kpa), submit the specimen to air for 15 seconds.

6.0 INSPECTION

No bubble is to release from the end of the specimen and rise to the water surface during the 15-second test.

7.0 REPORTING

Note if any air bubbles were present.