



***Society of Cable  
Telecommunications  
Engineers***

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**ENGINEERING COMMITTEE  
Network Operations Subcommittee**

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**SCTE Technical Report**

**SCTE 209 2015**

**Technical Report  
UHF Leakage, Ingress, Direct Pickup**

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140 Philips Road  
Exton, PA 19341

## SCTE 209 2015

### 1. Scope

Until recently, cable system signal leakage monitoring and repair activities were necessarily focused on preventing interference to aeronautical navigation and communication systems in the 108 megahertz (MHz) to 137 MHz and 225 MHz to 400 MHz very high frequency (VHF) and ultra high frequency (UHF) bands.<sup>1</sup> Although Section 76.605(a)(12) of the Federal Communications Commission (FCC) Rules contains leakage limits for frequencies above 400 MHz, cable signals in the UHF spectrum were generally unobserved because (1) there were no explicit FCC requirements to monitor leakage on those frequencies, and (2) there were few if any complaints of interference.

Consequently, cable signal leakage monitoring devices were designed and manufactured to cover the VHF spectrum, particularly in and near the 108 MHz to 137 MHz aeronautical frequencies, but not the UHF spectrum.

Even though frequencies above 806 MHz have been used for land mobile and cell phone communications for many years, cable signal leakage had never been recognized as a problem at those frequencies because there were few cable systems operating in that part of the spectrum.

Today circumstances have changed. Frequencies in the 700 MHz range that had been used for over-the-air television (TV) broadcasting have been reallocated for land mobile communications. Some of those frequencies are licensed to cellular phone companies. These new licensees have the technical ability to detect interference to their radio services, and to determine that the interference is coming from cable signal leakage.

Moreover, in recent years cable engineers have determined that the leakage characteristics of cable plant vary substantially by frequency, and that monitoring for VHF leaks does not detect UHF leaks.

This document provides guidance and recommendations to cable operators on monitoring and measurement practices and procedures for mitigating cable signal leakage, ingress, and direct pickup in the UHF band.

### 2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of the standard. At the time of Subcommittee approval, the editions indicated were valid. All standards are subject to revision; and while parties to any agreement based on this standard 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 *may not* be compatible with the referenced version.

- None are applicable

### 3. Informative References

The following documents *may* provide valuable information to the reader but are not required when complying with this standard.

- None are applicable

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<sup>1</sup> The VHF spectrum encompasses 30 MHz to 300 MHz, and the UHF spectrum encompasses 300 MHz to 3000 MHz.