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# IEEE Standard for Measurement of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz

IEEE Electromagnetic Compatibility Society

Sponsored by the
Standards Development Committee

IEEE
3 Park Avenue
New York, NY 10016-5997
USA

**IEEE Std 187™-2018**
(Revision of IEEE Std 187-2003)

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**Abstract:** Spurious radiation from sound and television broadcast receivers are possible sources of interference with other radio services. This standard describes the potential sources of spurious radiation from receivers intended for the reception of sound and television broadcast, and the measurement methods for them.

**Keywords:** antenna radiation, conducted emissions, FM sound broadcast receivers, IEEE 187, radiated emissions, spurious emissions, television broadcast receivers

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA



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**Mark Arthurs,** *Vice Chair*

Jeff Howell Jon Kanter Tracy Pruitt

The following members of the individual balloting committee voted on this standard. Balloters may have voted for approval, disapproval, or abstention.

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Suresh Channarasappa
Benjamin Cotts
Alistair Duffy
Randall Groves
Timothy Harrington
Werner Hoelzl
Daniel Hoolihan
Sergiu Iordanescu
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Yeou Song Lee
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Nick S. A. Nikjoo
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David
Lisa Wa
Kimb l Williams

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*Member Emeritus

## Introduction

This introduction is not part of IEEE Std 187-2018, IEEE Standard for Measurement of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz.

This standard is a revision of IEEE Std 187-2003, IEEE Standard for Measurement Methods of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz.

This standard is specifically written to outline the procedures for testing television (National Television System Committee [NTSC] and Advanced Television Systems Committee [ATSC]) broadcast receivers.

## Contents

# IEEE Standard for Measurement of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz

## 1. Overview

### 1.1 Scope

Spurious radiation from sound and television broadcast receivers are possible sources of interference with other radio services.

This standard describes the potential sources of spurious radiation from receivers intended for the reception of sound and television broadcast, and the measurement methods for them.

### 1.2 General

This standard is divided into three types of testing: conducted emissions (Clause 6), radiated emissions (Clause 7), and antenna radiation (Clause 8). This standard also includes three informative annexes entitled "General TV test requirements," "Isolation transformer," and "Bibliography."

## 2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so each referenced document is cited in text and its relationship to this document is explained). For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.

ANSI C63.4, American National Standard for Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.[1]

ANSI C63.23, American National Standard Guide for Electromagnetic Compatibility—Computations and Treatment of Measurement Uncertainty.

BETS-7, Technical Standards and Requirements for Radio Apparatus Capable of Receiving Television Broadcasting.

[1]ANSI publications are available from the American National Standards Institute (http://www.ansi.org/).