

SCTE • ISBE[®]

S T A N D A R D S

Interface Practices Subcommittee

SCTE STANDARD

SCTE 249 2018

Test Method Common Mode Disturbance

NOTICE

The Society of Cable Telecommunications Engineers (SCTE) / International Society of Broadband Experts (ISBE) Standards and Operational Practices (hereafter called “documents”) are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability, best practices 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•ISBE 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•ISBE members.

SCTE•ISBE assumes no obligations or liability whatsoever to any party who may adopt the documents. Such adopting party assumes all risks associated with adoption of these documents, and accepts full responsibility for any damage and/or claims arising from the adoption of such documents.

Attention is called to the possibility that implementation of this document may require the use of subject matter covered by patent rights. By publication of this document, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE•ISBE 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 document 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•ISBE web site at <http://www.scte.org>.

All Rights Reserved

© Society of Cable Telecommunications Engineers, Inc. 2018
140 Philips Road
Exton, PA 19341

Table of Contents

Title	Page Number
NOTICE.....	2
Table of Contents	3
1. Introduction.....	4
1.1. Executive Summary	4
1.2. Scope	4
1.3. Benefits	4
1.4. Intended Audience	4
1.5. Areas for Further Investigation or to be Added in Future Versions.....	4
2. Normative References	5
2.1. SCTE References	5
2.2. Standards from Other Organizations	5
2.3. Published Materials	5
3. Informative References	5
3.1. SCTE References	5
3.2. Standards from Other Organizations	5
3.3. Published Materials	5
4. Compliance Notation	6
5. Abbreviations and Definitions.....	6
5.1. Abbreviations.....	6
5.2. Definitions.....	6
6. Test Method	7
6.1. Key Performance Metrics.....	7
6.2. Required Equipment	7
6.3. Calibration and Equipment Preparation	7
6.3.1. Power Supply Test Fixture.....	7
6.4. Detailed Procedure	8
6.4.1. EUT Setup.....	8
6.4.2. Test Equipment Setup	9
6.4.3. Noise Floor Verification.....	9
6.4.4. Common Mode Disturbance Measurement	9
6.5. Recording of Results	9

List of Figures

Title	Page Number
Figure 1 - Power Supply Test Fixture	7
Figure 2 - Setup for Standalone Power Supplies tested with the Power Supply Test Fixture	8
Figure 3 - Setup for Devices with Integrated Power Supplies	9
Figure 4 - Sample Common Mode Disturbance Measurement	10

List of Tables

Title	Page Number
--------------	--------------------

NO TABLE OF FIGURES ENTRIES FOUND.