Doc: LITD 06 (23348) IS / IEC 62153-4-5: 2021 August 2023

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY (Not to be reproduced without the permission of BIS or used as a STANDARD)

> मसौदा भारतीय मानक धात्विक संचार केबल परीक्षण विधियाँ -भाग 4 विद्युत चुम्बकीय संगतता (ईएमसी) – अनुभाग 5 स्क्रीनिंग या कपलिंग क्षीणन – अब्सोर्बिंग क्लैंप पद्धति (पहला पुनरीक्षण)

Draft Indian Standard Metallic communication cable test methods – Part 4 Electromagnetic compatibility (EMC) Sec 5 Screening or coupling attenuation – Absorbing clamp method

(First Revision)

ICS 33.100.10; 33.120.10

Wires, Cables, Waveguides & Accessories Sectional Committee, LITD 06 Last Date for Comments: 01st November 2023

NATIONAL FOREWORD

(Formal clauses will be added later)

This draft Indian Standard (Part 4/Sec 5) (*First Revision*) which is identical with IEC 62153-4-5: 2021. 'Metallic communication cable test methods –Part 4-5: Electromagnetic compatibility (EMC) – Screening or coupling attenuation – Absorbing clamp method' issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendations of the Dependability of Electronic, Electrical Components, Equipment and Systems Sectional Committee and approval of the Electronics and Information Technology Division Council.

This Standard was first published in 2021 and was identical with IEC 62153-4-5:2006. The first revision of this standard has been undertaken to align it with the latest version of IEC 62153-4-5: 2021.

The text of IEC Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard', and
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted draft standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Corresponding Indian Standard	Degree of Equivalence
IEC 60050-726 International Electrotechnical Vocabulary (IEV) – Part 726: Transmission lines and waveguides	IS 1885 (Part 56): 1981 Electrotechnical vocabulary: Part 56 microwave components and accessories	Technically Equivalent
CISPR 16-1-3:2004 Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-3: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Disturbance power	IS 10052 (Part 1/Sec 3) : 2018 Radio Disturbance and Immunity Measuring Apparatus and Methods — Specification Part 1 Radio Disturbance and Immunity Measuring Apparatus Section 3 Ancillary equipment — Disturbance power	Identical with CISPR 16-1-3 : 2016

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:-

International Standard	Title
IEC TS 62153-4-1	Metallic communication cable test methods – Part 4-1: Electromagnetic compatibility (EMC) – Introduction to electromagnetic screening measurements
ITU-T G.117:1996	Transmission aspects of unbalance about earth
ITU-T O.9:1999	Measuring arrangements to assess the degree of unbalance about earth

Scope of IEC 62153-4-5: 2021 is as follows:

The absorbing clamp method is suitable to determine the screening- or the coupling attenuation of metallic communication cables in the frequency range of 30 MHz to 1 000 MH (2 400 MHz), depending on the performance of the clamp. It is an alternative method to the triaxial method of IEC 62153-4-4 or IEC 62153-4-9. Due to the undefined outer circuit of this absorbing clamp method, the test results obtained at different places and laboratories could vary by at least \pm 6 dB.

NOTE- The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details please refer IEC 62153-4-5: 2021 or kindly contact.

Head Electronics & IT Department Bureau of Indian Standards 9, B.S. Zafar Marg, New Delhi-110002 Email: litd@bis.gov.in /Telefax: 011-23237093