

American National Standard for Electromagnetic Compatibility— Radiated Emission Measurements in Electromagnetic Interference (EMI) Control—Calibration and Qualification of Antennas (9 kHz to 40 GHz)

C63®

Accredited Standards Committee C63®—Electromagnetic Compatibility

Accredited by the
American National Standards Institute

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

ANSI C63.5-2017/Cor 1-2019
(Corrigendum to
ANSI C63.5-2017)

American National Standard for Electromagnetic Compatibility— Radiated Emission Measurements in Electromagnetic Interference (EMI) Control—Calibration and Qualification of Antennas (9 kHz to 40 GHz)

Corrigendum 1

Accredited Standards Committee C63®—Electromagnetic Compatibility

Accredited by the
American National Standards Institute

Secretariat
Institute of Electrical and Electronics Engineers, Inc.

Approved 3 January 2019
American National Standards Institute

C63®

Abstract: Methods for determining antenna factors of antennas used for radiated emission measurements in electromagnetic interference (EMI) control from 9 kHz to 40 GHz are provided. Antennas included are linearly polarized antennas such as loops, rods (monopoles), tuned dipoles, biconical dipoles, log-periodic dipole arrays, biconical and log-periodic dipole array hybrids, broadband horns, etc., that are used in measurements prescribed by ANSI C63.4 and ANSI C63.10. The antenna calibration methods include standard site method (i.e., three-antenna method), reference antenna method, equivalent capacitance substitution method, standard transmit loop method, standard antenna method, and standard field method. The selection of attenuation in 5.1.1 e) is addressed in this corrigendum, such that a maximum VSWR of 2:1 is achieved.

Keywords: ANSI C63.5, antenna factors, equivalent capacitance substitution, linearly polarized antennas, near-free space, reference antenna method, standard antenna method, standard site method, standard transmit loop method

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

Copyright © 2019 by The Institute of Electrical and Electronics Engineers, Inc.
All rights reserved. Published 13 March 2019. Printed in the United States of America.

IEEE is a registered trademark in the U.S. Patent & Trademark Office, owned by The Institute of Electrical and Electronics Engineers, Incorporated.

PDF: ISBN 978-1-5044-5616-6 STD23588

IEEE prohibits discrimination, harassment and bullying. For more information, visit <http://www.ieee.org/web/aboutus/whatis/policies/p9-26.html>.
No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

American National Standard

An American National Standard implies a consensus of those substantially concerned with its scope and provisions. An American National Standard is intended as a guide to aid the manufacturer, the consumer, and the general public. The existence of an American National Standard does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standard. American National Standards are subject to periodic review and users are cautioned to obtain the latest editions.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of publication. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Authorization to photocopy portions of any individual standard for internal or personal use is granted by the Institute of Electrical and Electronics Engineers, Inc., provided that the appropriate fee is paid to Copyright Clearance Center. To arrange for payment of licensing fee, please contact Copyright Clearance Center, Customer Service, 222 Rosewood Drive, Danvers, MA 01923 USA; (978) 750-8400. Permission to photocopy portions of any individual standard for educational classroom use can also be obtained through the Copyright Clearance Center.

Errata

Users are encouraged to check the IEEE Errata URL (<http://standards.ieee.org/findstds/errata/index.html>), and the one for ASC C63[®] (http://www.c63.org/explanations_interpretations_request.htm), for errata periodically.

Interpretations (ASC C63[®] standards)

Current interpretations are essential to the understanding of all ASC C63[®] standards. To assist in the meanings of requirements, informative interpretations are available at the following URL: (http://www.c63.org/standards_development.htm). Users are cautioned that, although interpretations do not and can not change the requirements of a standard, they serve to clarify the meanings of requirements. All interpretations are informative rather than normative, until such time as the standard is revised (consistent with ASC C63[®] ANSI-accredited operating procedures) to incorporate the interpretation as a normative requirement.

Patents

NOTE—The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights.

By publication of this standard, no position is taken with respect to the validity of any such claim(s) or of any patent rights in connection therewith. If a patent holder has filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, then details may be obtained from the standards developer (<http://www.c63.org/documents/misc/patents>).