

Federal Communications Commission Office of Engineering and Technology Laboratory Division

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Draft Laboratory Division Publications Report

Title: Antenna Calibration Procedure

Short Title: Antenna Calibration Procedure

Reason: Update for new 2017 version of ANSI C63.5 standard

Publication: 822428

Keyword/Subject: Antenna Calibration Procedure, ANSI C63.5

Question:

What procedure should be used to calibrate antennas used to make radiated emission measurements and normalized site attenuation (NSA) measurements?

Answer:

ANSI C63.4-2014, ANSI C63.10-2013, and ANSI C63.26-2015 provide guidance on the types of measurement antennas for use in making radiated emission and NSA measurements. These standards reference the latest edition of ANSI C63.5 for antenna calibration. ANSI C63.5-2017 was recently released and is to be used for calibrating measurement antennas. The use of the ANSI C63-series documents for basic FCC compliance testing purposes is described in KDB Publications 300643 and 971168.

For FCC compliance measurements, a transition period will be allowed such that measurement antennas used for radiated emission measurements may be calibrated in accordance with either ANSI C63.5-2006 or ANSI C63.5-2017 during the transition period. After July 1, 2018, measurement antennas are required to be calibrated in accordance with ANSI C63.5-2017.

Tables 1, 2, and 3 of ANSI C63.4-2014, provide summaries of the types of antennas that may be used when making exploratory measurements, final compliance measurements, and site validation measurements, respectively.