ACCREDITED TESTING LABORATORY PROGRAM
ROLES AND RESPONSIBILITIES

I. INTRODUCTION

The FCC equipment authorization program as detailed in Part 2 Subpart J has two approval procedures: certification and Supplier’s Declaration of Conformity (SDoC). The approval procedure required to be used is specified in the applicable FCC rule part(s) that apply to the radio frequency functions of a device or an end-product. In general, except when otherwise stated in a rule, intentional radiators (transmitters) are required to be approved using the certification procedure, and unintentional radiators (e.g. digital circuitry) are approved using the SDoC procedure.

Certification constitutes the most rigorous equipment authorization procedure, and requires that compliance testing be performed at an FCC-recognized accredited testing laboratory. The accreditation is to be performed by an FCC-recognized accreditation body, or an accreditation body recognized under the terms of a government-to-government Mutual Recognition Agreement (MRA). All certified equipment is listed in a Commission database that contains the application for certification, test report, and other supporting information. When using the SDoC procedure, testing is not required to be performed by an FCC-recognized accredited testing laboratory.

II. KEY PLAYERS

a) Accreditation Body. An Accreditation Body (AB) is an authoritative body that performs accreditation. Accreditation is a third-party attestation related to a conformity assessment body

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1 See 47 C.F.R. Part 2 Subpart J.

2 On July 13, 2017, the FCC adopted Report and Order FCC 17-93 that merged the Declaration of Conformity (DoC) and verification procedures into the new Supplier’s Declaration of Conformity (SDoC) procedure. The former DoC and Verification procedures are allowed to be used until no later than November 2, 2018.

3 See 47 C.F.R. § 2.907.

4 See 47 CFR § 2.950. As of July 13, 2017, the FCC rules will no longer provide for the recognition of testing laboratories as “2.948 listed” for testing of equipment subject to certification. All testing performed on or after July 13, 2017 on applications for certification will be required to be based on testing performed by an FCC-recognized accredited testing laboratory.


6 Although not directly involved in laboratory accreditation activities, each device processed by a testing laboratory for FCC Certification or SDoC also involves the Responsible Party, defined in § 2.909.

(continued....)
conveying formal demonstration of its competence to carry out specific conformity assessment tasks.\(^7\)

b) **Designating Authority.** A Designating Authority (DA) is a body responsible for determining that the testing laboratory is competent and capable of performing testing within the scope of the designation.\(^8\)

c) **Testing laboratory.** The testing laboratory is responsible to make a determination of the applicable test procedures and to properly test to those requirements.

### III. ACCREDITED TESTING LABORATORY RECOGNITION PROCEDURE

The following procedure is used for a testing laboratory to be recognized by the FCC as an accredited testing laboratory, and thus be deemed competent to test products subject to the certification approval procedure.\(^9\)

a) **Step 1 – Laboratory Accreditation**

1) Seek accreditation from one of the accreditation bodies listed on the FCC accredited test firm webpage.

2) Obtain ISO/IEC 17025 accreditation with a scope covering the applicable FCC requirements and test methods.\(^10\)

3) The accreditation body (AB) will use the “Accredited Testing Laboratory FCC Technical Assessment Checklist” to assist in the assessment of the testing laboratory.\(^11\)

b) **Step 2 – Designation**

1) After completion of the accreditation process, a request for recognition is submitted to the FCC. The party submitting the request is known as the designating authority (DA).

2) For accredited testing laboratories in the U.S. or in non-MRA countries, the DA is the FCC-recognized AB.

3) For accrediting bodies in MRA countries, the DA is defined in the MRA. In MRA countries, the DA reviews the accreditation information and makes a determination as to whether the testing laboratory meets the requirements for designation. Once the DA determines that the requirements have been met, it designates the testing laboratory to the FCC by providing the information listed in III) d), for review and recognition by the FCC.

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\(^7\) See ISO/IEC 17000:2004, 2.6 and 5.6.; the authority of an accreditation body is typically derived from a government body.

\(^8\) See ISO/IEC 17000:2004, 7.3.

\(^9\) The use of an FCC-recognized accredited testing laboratory is not required for products subject to the verification or Supplier’s Declaration of Conformity (SDoC) approval procedures. However, the testing laboratory is required to maintain a record of their measurement facilities as required in § 2.948.

\(^10\) It is noted that a new edition of the ISO/IEC conformity assessment standards has been issued. The Commission will accept either ISO/IEC 17025:2005 or ISO/IEC 17025:2017 at this time and is reviewing options to update the applicable FCC rules to specify the 2017 edition.

\(^11\) See KDB Publication 853844.
c) **Step 3 – FCC Recognition**

1) The FCC will review the information submitted regarding the testing laboratory.
2) The FCC will make a determination on whether to recognize the testing laboratory.
3) The FCC will notify the DA of the decision on request for recognition.
4) A list of recognized accredited testing laboratories is provided on the FCC web page.

d) **Supporting Information**

The following information is required to be provided in the request for recognition as an accredited testing laboratory:

1) Name, location, mailing, and contact information.
2) Designation number and [FCC Registration Number (FRN)].
3) ISO/IEC 17025 Certificate of Accreditation. In cases where the AB does not issue a certificate, equivalent information must be provided.
4) A list of the FCC rule sections the accreditation applies to.
5) The scope of accreditation including the FCC related test methods and supporting FCC guidance for the accredited test laboratory (see Table A1 in Appendix A).
6) The expiration date of the accreditation. The FCC rules require that a testing laboratory must be re-evaluated by the AB at least every two years.
7) A completed “Accredited Testing Laboratory FCC Technical Assessment Checklist.” For the designation of a newly accredited testing laboratory, a completed checklist, completed by the AB, shall be provided. For a renewal of a recognized accredited testing laboratory, a statement indicating continued compliance with a previously submitted checklist is acceptable.
8) A statement that the test laboratory complies with all provisions of this document, *i.e.*, Accredited Testing Laboratory Program Roles and Responsibilities.

e) **Additional requirements and information**

1) For a renewal of the recognition of an accredited testing laboratory, the FCC database expiration date shall be updated by the DA.
2) The FCC-required information may only be submitted by the DA, and should not be submitted directly to the FCC from the testing laboratory. The DA shall submit the information by completing fields on the designation web page and uploading any required attachments.
3) Information provided in support of the designation of an accredited testing laboratory is publicly available on the FCC webpage.
4) Information regarding MRAs and the designation procedures can be found on the [OET MRA webpage](#).
IV. TESTING LABORATORY PROCEDURES AND SCOPE OF ACCREDITATION

A testing laboratory performing tests in support of the FCC’s approval procedures shall be accredited to ISO/IEC 17025 with a scope of accreditation covering the regulations and measurement procedures listed in Table A1 (see Appendix A). The accredited testing laboratory shall have the applicable testing methods included in their scope of accreditation from the list in Table A1.

Testing laboratories desiring ISO/IEC 17025 accreditation as an EMC/radio-parameter testing laboratory, should contact one of the FCC-recognized accreditation bodies listed on the FCC-recognized test firm AB webpage. A testing laboratory located in the U.S. must obtain accreditation from an AB located in the U.S. A testing laboratory in an MRA partner country may use any AB allowed under the terms of the MRA with the country in which they are located to obtain accreditation. A testing laboratory located in a country without a telecommunications MRA with the U.S., may use an AB that the FCC has recognized for performing accreditation assessment within that specific country.

Table A1 provides a list of the scopes of accreditation and associated test methods for testing performed in support of the FCC approval procedures. The testing laboratory is assessed to show that it is competent to perform testing using the applicable test methods for the scope of accreditation. The testing laboratory shall have a working knowledge of any applicable KDB publications at the time of the assessment. If the testing laboratory is being assessed and found competent for a scope in Table A1 that has a KDB publication identified in the Test Method(s) column of Table A1, then the KDB publication should be identified by version number in the scope of accreditation information provided to the FCC. If the testing laboratory is being assessed and is found competent for a scope that has a KDB publication identified in the Supporting FCC Guidance column of Table A1, then it is not necessary to include the KDB publication on the scope of accreditation.

A testing laboratory is not required to be assessed and recognized for all of the scopes identified in Table A1. For the scopes identified in Table A1, the FCC will allow the scope to be limited by the upper frequency range, but will not otherwise recognize partial FCC scopes. The assessed maximum frequency for each scope is the highest measurement frequency that the testing laboratory is capable of performing measurements. The AB shall specify the maximum frequency range capability of the testing laboratory for each scope of accreditation. The FCC will allow deviations from the test methods as permitted in FCC rules and procedures. In the scope of accreditation, the AB should identify any test method limitations in the testing laboratory’s capability to perform all of the tests indicated in the test method for a given scope (e.g., ANSI C63.10-2013 requires the use of the site validation requirements in CISPR 16-1-4:2010-04, however, the FCC rules allow for a transition period of July 13, 2018.)

The FCC allows an accredited testing laboratory to meet the full scope requirements using multiple testing locations of the same organization at different locations in accordance with the AB’s procedures. At a minimum, all of the facilities are required to be located in the same country.

After July 12, 2017, when an FCC-recognized accredited testing laboratory uses external resources to perform testing, it is required that such testing be performed by testing laboratories that have also been recognized by the Commission as accredited with the appropriate scope of accreditation.

12 See the FCC equipment authorization webpage for links to the referenced measurement procedures: http://www.fcc.gov/oet/ea/eameasurements.html.

13 See KDB Publication 974614 D02 for accreditation body recognition procedures.

(continued....)
V. TECHNICAL ASSESSMENT EVALUATION

The FCC has developed the “Accredited Testing Laboratory FCC Technical Assessment Checklist” to be used by the AB to aid in the assessment of testing laboratories. For the designation of a newly accredited testing laboratory, a completed checklist shall be provided to the Commission by the AB or the DA. For a renewal of the designation of an accredited testing laboratory, a statement indicating continued compliance with a previously submitted checklist is acceptable.

The checklist identifies specific items to be evaluated during the technical assessment of a testing laboratory, to determine the capability and competence of that laboratory to perform testing needed to show compliance with FCC regulatory requirements under the 47 CFR rules. The checklist is intended to serve as a guide, and it provides a minimum list of items to be included in the technical evaluation of the testing laboratory as part of the complete ISO/IEC 17025 assessment. The checklist is not intended to replace good engineering judgment of the technical assessor(s) or a thorough evaluation of the facility. As such, other related items not shown on the checklist may be evaluated by the assessor(s). The AB shall attest that all responses on this checklist are complete and accurate.

VI. RADIATED EMISSIONS TEST FACILITY

a) Antenna Calibration. Testing laboratories performing radiated emission measurements and NSA measurements, as required by the FCC rules, are required to use antennas calibrated in accordance with ANSI C63.5-2017.

b) Site Validation Requirements. When using radiated emission test procedures that require the use of a validated test site (e.g., ANSI C63.4-2014 and ANSI C63.10-2013) the test site used shall meet the following site validation requirements:

1) Test facilities used to make radiated emission measurements from 30 MHz to 1 GHz are required to meet the site validation requirements in ANSI C63.4-2014.

2) For radiated emission measurements in 1 GHz to 40 GHz the test facility is required to comply with the site validation requirements in CISPR 16-1-4:2010-04.

3) Validation of the acceptability criterion shall be confirmed no less than once every three years.

c) Description of radiated emission test facility. A description of the measurement facilities used by the testing laboratory are required to be maintained, in accordance with Section 2.948(b).

d) Compliance Testing Experimental Radio Licenses. A testing laboratory located in the United States or a territory of the United States that performs testing at an open-area test site is required to have a valid compliance testing experimental radio license, per Subpart G of Part 5 of the rules.

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14 See KDB Publication 853844.

15 See KDB Publication 822428. See also 4.5 of ANSI C63.4-2014 and 4.3 of ANSI C63.10-2013 for guidance on the types of measurement antennas for use in making radiated emission measurements. See also Tables 1, 2, and 3 of ANSI C63.4-2014 for a summary of the types of antennas that may be used when making exploratory measurements, final compliance measurements, and site validation measurements, respectively. Antennas used for radiated emission measurements shall be calibrated in accordance with ANSI C63.5-2017.

16 See KDB Publication 414788.

17 On April 14, 2017, the FCC released public notice DA 17-362, and has been accepting Compliance Testing License applications since then. See https://apps.fcc.gov/edocs_public/attachmatch/DA-17-362A1.pdf
VII. TEST REPORTS

Test reports for devices subject to testing at an FCC-recognized accredited testing laboratory shall be generated by the testing laboratory that tested the device. Testing is required to be performed by FCC-recognized accredited testing laboratories. It is not acceptable for a device that is required to be tested at an FCC-recognized test laboratory to be tested at a non-recognized test laboratory and have an FCC-recognized test laboratory simply review the test report, without performing all the testing at the recognized test facility but indicating that testing was performed at the FCC-recognized test laboratory.

For each test performed, the test report shall specify the location that each test was performed, and the person(s) that performed each test.

VIII. TRANSITION PERIOD FOR NEW MEASUREMENT METHODS

The FCC rules provide for a transition period when new test methods are adopted, to allow time for an accredited testing laboratory to update their ISO/IEC 17025 scope of accreditation.

When the FCC updates the FCC scopes or FCC-recognized test methods shown in Table A1, accredited testing laboratories can use the new test method during a transition period; however, the testing laboratory is required to be assessed by an AB and have their scope of accreditation updated within two years of the date that the new method is referenced in this KDB publication (Table A1), unless otherwise noted.

IX. LIST OF ACCREDITED TESTING LABORATORIES

To view a listing of accredited laboratories, choose “Accredited” at the Test Firm Type pull-down arrow at https://apps.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm. The information in this database is maintained by the applicable AB or DA. Any corrections to this information will need to be made by a testing laboratory’s AB; change requests should not be submitted directly to the FCC from the accredited testing laboratory.

X. KDB PUBLICATIONS SUMMARY LIST

Several key KDB publications are listed as follows. This list is not comprehensive; unless otherwise specified, other information and attachments within each KDB publication may apply for Table A1 scope purposes. For each KDB publication, the latest version number in effect as of the date of an equipment authorization applies.

KDB Publication 300643, Part 15 Intentional and Unintentional Radiator measurement procedures.

KDB Publication 414788 D01, Test Sites for Radiated Emission Measurements.

KDB Publication 447498 D01, RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices.

KDB Publication 789033 D02, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E.

KDB Publication 822248, Antenna Calibration Procedure.

KDB Publication 853844 D01, Accredited Testing Laboratory FCC Technical Assessment Checklist.
KDB Publication 865644 D01, SAR Measurement Requirements for 100 MHz TO 6 GHz.

KDB Publication 905462, U-NII DFS Test Procedures.

KDB Publication 935210 D02 through D05, Signal Boosters.


KDB Publication 974614 D02, OET Procedures for the Recognition of Laboratory Accreditation Bodies.

XI. REFERENCES


[B3] DA 09-2478, Office of Engineering and Technology Clarifies Use of Recently Published ASC C63® Measurement Standards for Compliance Testing of Intentional and Unintentional Radiators under Part 15.


# APPENDIX A

## TESTING LABORATORY SCOPES OF ACCREDITATION

<table>
<thead>
<tr>
<th>FCC Accredited Laboratory Scope</th>
<th>Test Method(s)</th>
<th>Supporting FCC Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unintentional Radiators (FCC Part 15, Subpart B)</strong></td>
<td>• ANSI C63.4-2014</td>
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<tr>
<td><strong>Industrial, Scientific, and Medical Equipment (FCC Part 18)</strong></td>
<td>• ANSI C63.4-2014</td>
<td>• [FCC MP-5 (February 1986)]</td>
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<tr>
<td>• Consumer ISM equipment</td>
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<tr>
<td><strong>Intentional Radiators (FCC Part 15 Subpart C)</strong></td>
<td>• ANSI C63.10-2013</td>
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<tr>
<td><strong>UPCS (FCC Part 15, Subpart D)</strong></td>
<td>• ANSI C63.17-2013</td>
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<tr>
<td>• Unlicensed Personal Communication Systems devices</td>
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<tr>
<td><strong>U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E)</strong></td>
<td>• ANSI C63.10-2013</td>
<td>• [KDB Publication 789033]</td>
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<tr>
<td>• Unlicensed National Information Infrastructure Devices (U-NII without DFS)</td>
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<tr>
<td><strong>U-NII with DFS Intentional Radiators (FCC Part 15 Subpart E)</strong></td>
<td>• ANSI C63.10-2013</td>
<td>• [KDB Publication 905462 D02 U-NII DFS Compliance Procedures New Rules v02 (April 8, 2016)]</td>
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<tr>
<td>• Unlicensed National Information Infrastructure U-NII) Devices with Dynamic Frequency Selection (DFS)</td>
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<tr>
<td><strong>UWB Intentional Radiators (FCC Part 15, Subpart F)</strong></td>
<td>• ANSI C63.10-2013</td>
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<tr>
<td>• Ultra-wideband Operation</td>
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<tr>
<td><strong>BPL Intentional Radiators (FCC Part 15, Subpart G)</strong></td>
<td>• ANSI C63.10-2013</td>
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<td>• Access Broadband Over Power Line (Access BPL)</td>
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<tr>
<td><strong>White Space Device Intentional Radiators (FCC Part 15, Subpart H)</strong></td>
<td>• ANSI C63.10-2013</td>
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<tr>
<td>• White Space Devices</td>
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<tr>
<td><strong>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</strong></td>
<td>• ANSI/TIA-603-E-2016; [1] or</td>
<td>• [KDB Publication 971168]</td>
</tr>
<tr>
<td>• Part 22 (cellular)</td>
<td>• ANSI/TIA-102.CAAA-E-2016; [1] or</td>
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<tr>
<td>• Part 24</td>
<td>• ANSI C63.26-2015</td>
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<tr>
<td>• Part 25 (below 3 GHz)</td>
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<td>• Part 27</td>
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<tr>
<td><strong>General Mobile Radio Services (FCC Licensed Radio Service Equipment)</strong></td>
<td><strong>Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)</strong></td>
<td><strong>Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment)</strong></td>
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| • Part 22 (non-cellular)  
• Part 90 (below 3 GHz)  
• Part 95 (below 3 GHz)[3]  
• Part 97 (below 3 GHz)  
• Part 101 (below 3 GHz) | • Part 96 | • Part 80  
• Part 87 | • Part 25  
• Part 30  
• Part 74  
• Part 90 (above 3 GHz)  
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• Part 101 | • Devices subject to SAR requirements | • HAC for Commercial mobile services | • Wideband Consumer signal boosters  
• Provider-specific signal boosters  
• Industrial signal boosters | • ANSI C63.26-2015 |
| • ANSI/TIA-603-E-2016; [1] or  
• ANSI/TIA-102.CAAA-E-2016; [1] or  
• ANSI C63.26-2015 | • ANSI/TIA-603-E-2016; [1] or  
• ANSI/TIA-102.CAAA-E-2016; [1] or  
• ANSI C63.26-2015 | • ANSI/TIA-603-E-2016; [1] or  
• ANSI/TIA-102.CAAA-E-2016; [1] or  
• ANSI C63.26-2015 | • ANSI/TIA-603-E-2016; [1] or  
• ANSI/TIA-102.CAAA-E-2016; [1] or  
• KDB Publication 940660 |
| | | | | • KDB Publication 653005 | | | |

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18 Microwave frequencies as used in this FCC scope refer to frequencies of 3 GHz and above.
Table A1 Notes:

[1] ANSI/TIA-603-D-2010 or ANSI/TIA-102.CAAA-D-2013 may continue to be used until March 2, 2020 which is two years from the date of the publication of this KDB.


[3] Table updates for the scope General Mobile Radio Service to add text “above 3 GHz” and for the Microwave and Millimeter Wave Bands Radio Services for Parts 90, 95 and 97 above 3 GHz in version v05r01 are considered clarifications to the scope and therefore the two year transition period ends on March 2, 2020 and is not extended two year from the release date of v05r01.

Change Notice

03/02/2018: 974614 D01 Accredited Test Lab Roles and Resp v05 replaces 974614 D01 Accredited Test Lab Roles and Resp v04. Changes to the document include the following:

• Updated Scope table A1 and reference section to incorporate the following test procedures
  o ANSI C63.26-2015
  o TIA 603 E, 2016
  o TIA 102-CAAA-E, 2016
  o ANSI C63.5-2017
• Updated Scope table A1 to add Part 30, 95M, and 95L to Microwave and Millimeter Wave Band Radio Service.
• Updated to remove references to 2.948 listed laboratory program.
• Updated to add references to SDoC procedures under FCC 17-93.
• Updated Compliance Testing License guidance.
• Updated to remove references to older ANSI C63.4 and ANSI C63.10 standards.
• Updated table to modify microwave frequencies breakpoint from the Part 101.3 definition (890 MHz) to the Part 2.101 definition convention (3 GHz).
• Updated scope for signal boosters for version of KDB, to add the required test method ANSI C63.26-2015, move KDB 935210 to the supporting guidance column and to clarify that signal boosters are also in Part 90 of the FCC rules.
• Added KDB 940660 to right column for Part 96 CBRS in table A1.
• Updated to allow the use of either the 2005 or 2017 version of ISO/IEC 17025.

04/02/2019: 974614 D01 Accredited Test Lab Roles and Resp v05 replaces 974614 D01 Accredited Test Lab Roles and Resp v04. Changes to the document include the following:

• Updated Appendix A table to clarify that Part 90 and Part 97 operation above 3 GHz is included in this scope.
• Updated site validation requirements for 1 GHz to 40 GHz as the July 2018 transition to CISPR 16-1-4:2010-04 has passed.
• Removed note allowing use of ANSI C63.19-2007 as transition date has passed.