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G115 - Guidance on Scopes of Accreditation for Electrical Testing Laboratories

This document has been created by the A2LA Electromagnetic Advisory Committee (EMAC) to provide guidance on formatting A2LA scopes of accreditation specific to the Electrical field of testing to:

- Assist laboratories in meeting regulatory requirements;
- Ensure consistency in the presentation of technical capabilities among accredited laboratories in the Electrical/EMC field; and
- Clarify the true technical capabilities of each laboratory

Pursuant to Part C, Section I (Scopes of Accreditation), in A2LA <u>R101 - General Requirements- Accreditation of</u> <u>ISO-IEC 17025 Laboratories</u>, "The scope of accreditation is the fundamental document attesting to the organization's competence to perform test and/or calibration services as indicated on the scope of accreditation." For general scope formatting guidelines such as preferred layout, preferred methods, method revision status, and parameter-based scopes, please refer to this section of R101.

The following sections outline areas commonly listed on A2LA Electrical scopes of accreditation. Each section provides specific requirements, which are mandated either by relevant specifiers of accreditation or A2LA.

I. <u>Automotive EMC</u>

Ford Motor Company, General Motors, and Chrysler (i.e. the OEM's), have formally agreed to an OEM recognition process for testing laboratories: <u>Automotive EMC Recognition Process</u>. Table 2 of this document lists the base specifications that must be included on the laboratory's ISO/IEC 17025 scope of accreditation (issued by an ILAC signatory AB).

References to individual test locations (i.e. test chambers) are not included on the scope of accreditation under the Automotive EMC Recognition Process.

II. EPA Energy Star

Specific test methods must appear in an accredited laboratory's Scope of accreditation for product categories before the laboratory can be recognized by the U.S. Environmental Protection Agency (EPA) to test products for ENERGY STAR® qualification. All Energy Star product specifications for which the laboratory is seeking recognition must be included on the Scope of Accreditation along with the corresponding test methods.

Available product specifications can be found <u>here</u>. Corresponding test methods can be found <u>here</u>.

III. Military

<u>MIL-STD-461/462</u>: Versions MIL-STD-461A through MIL-STD-461C contain only limits and are not permitted on a scope unless accompanied by MIL-STD-462, which contains test methods. Version MIL-STD-461D (limits) is not permitted on a scope unless accompanied by MIL-STD-462D (methods). Standalone versions of MIL-STD-461E through MIL-STD-461G are acceptable, since they contain test methods and there are no MIL-STD-462 versions that accompany these methods.

IV. Product Safety and Radio

Tests shall first be listed according to product category: Household (60335), Tools (60745), Medical (60601), Office (60950), Laboratory (61010), Photovoltaic (60891), A/V (60065), Laser (60825), Lighting (60838), etc. If the laboratory is not able to perform every test method within the product category, then a specific list of either excluded or included methods (particular requirements) shall be listed. The shorter list (exclusions vs. inclusions) is preferred.

<u>Example:</u>	
Household	IEC 60335 (excluding sections 2-95 and 2-97)
Tools	IEC 60745 (sections 2-11, 2-12, and 2-14 only)

V. FDA ASCA Basic Safety and Essential Performance

For laboratories seeking recognition in the FDA ASCA Basic Safety and Essential Performance program, test standards listed on the Scope of Accreditation must match those included in the FDA's <u>Recognized</u> <u>Consensus Standards</u> listing. The Scope of Accreditation shall include a table indicating the specific standards for which the laboratory is seeking recognition and shall be accompanied by the ASCA Document Number.

VI. <u>Regulatory Requirements</u>

<u>United States (FCC)</u>: Pursuant to <u>KDB 974614 Accredited Testing Laboratory Program Roles and</u> <u>Responsibilities</u>, testing laboratories are required to be accredited to ISO/IEC 17025 for the applicable test methods listed in Tables 1 and 2. KDBs that do not contain a test method and are determined to be guidance only shall not be listed on the Scope of Accreditation.

<u>United States (FCC)</u>: Testing laboratories associated with a Telecommunication Certification Body (TCB) Program shall be accredited to the regulations and measurement procedures as listed in Table 2 of <u>TCB</u> <u>Program Roles and Responsibilities</u>.

<u>APEC TEL MRA Phase I</u>: Testing laboratories are required to be accredited to ISO/IEC 17025 with specific test methods listed on their scope of accreditation. Links for each economy's specific requirements are as follows:

- <u>Australia</u>
- <u>Canada</u>
- Chinese Taipei (BSMI)
- <u>Chinese Taipei (NCC)</u>
- Hong Kong
- <u>Republic of Korea</u>
- <u>Singapore</u>
- <u>Vietnam</u>

<u>US-Japan EMC Arrangement</u>: Based on an exchange of letters between the Government of Japan and United States Trade Representative (USTR), The Voluntary Control Council for Interference by Information Technology Equipment (VCCI), a private-sector Japanese organization, will accept test results for IT equipment from accredited U.S. laboratories that are in compliance with ISO/IEC 17025 and specific VCCI requirements. VCCI Rules are located at: <u>VCCI Council Rules</u>

VII. Footnotes on Scopes of Accreditation:

Dated vs. Undated Test Methods (applicable for all Electrical Scopes): "When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA *R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories."*

<u>Withdrawn/Superseded Methods Listed on Scopes (where applicable):</u> "This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method(s) itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method(s) has been withdrawn."

<u>Accreditation for Field Testing (where applicable)</u>: "This laboratory performs field testing activities for these tests."

Parameter Based Scopes (where applicable): "This laboratory also uses customer supplied specifications and/or methods directly related to the types of tests and within the parameters listed above."

Risk Assessment (applicable for all Product Safety):

"The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities."

DOCUMENT REVISION HISTORY

Date	Description
05/11/21	Updated Hong Kong and Singapore links in section VI
	 Updated footnotes in section VII
03/28/23	Removed Radiated and Conducted Emissions section
	Removed language referencing "non-lighting" tests from
	the EPA Energy Star section. Added reference and
	hyperlink to the EPA's product specification list.
	Added FDA ASCA section.
	Added language to section VI Regulatory Requirements –
	U.S. (FCC) clarifying that KDBs that do not contain test
	methods cannot be listed on the Scope of Accreditation.
	Updated Singapore link under section VI Regulatory
	Requirements - APEC TEL MRA Phase I.
	Added Risk Assessment footnote under section VII.
	> Added language to section III Military clarifying that MIL-
	STD-461A, C, and D are only permitted to be on Scopes
	when accompanied by test methods.