



Certificate of Acceptance

To participate
in the IECEE CB Scheme – IEC System of Conformity Assessment Schemes for Electrotechnical
Equipment and Components (IECEE)

CTC Laboratories, Inc.
1-2/F., Building 1 and 2, Jiaquan Building
Guanlan High-Tech Park
Shenzhen 518110, Guangdong
China

has been assessed and determined to fully comply with the requirements of ISO/IEC 17025: 2005-05,
The Basic Rules, IEC CA 01:2016-07 & IECEE 01-S:2017-02 and Rules of Procedure IECEE 02: 2018-06, and the relevant
IECEE CB-Scheme Operational Documents.

CTC Laboratories, Inc.

is therefore entitled to operate as a CB Testing Laboratory (CBTL) under the responsibility of **TÜV Rheinland Japan Ltd.** as
National Certification Body (NCB) and to carry out testing within the IECEE CB Scheme for the Scope
(Product Category(ies) and Standard(s)) as listed in the relevant part of the IECEE Web Site at www.iecee.org, and
is subject to all other terms as set forth in the IECEE Basic Rules and Rules of Procedure

The IECEE membership status of this CBTL can be verified on the aforementioned site.



A handwritten signature in blue ink, reading 'Kerry McManama'. The signature is written in a cursive style and is positioned above a horizontal dotted line.

Date of Issue: 2019-01-02
TL645

Kerry McManama
IECEE Executive Secretary



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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ELECTRICAL

Valid To: November 30, 2021

Certificate Number: 4340.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on unintentional and intentional radiators:

Test(s)

Test Method(s)¹

Emissions

Radiated and Conducted
(up to 40 GHz)

CFR 47, FCC Part 15, Subpart B (using ANSI C63.4:2014);
CRF 47, FCC Part 18 (using FCC OST/MP-5:1986);
CISPR 22; EN 55022; CISPR 32; EN 55032;
ICES-003; ICES-005;
AS/NZS CISPR 22; AS/NZS CISPR 32;
VCCI V-3; VCCI V-32-1;
CISPR 11; EN 55011;
CISPR 13; EN 55013;
CISPR 14-1; EN 55014-1;
CISPR 15; EN 55015

Harmonic Current Emissions and
Flicker

IEC 61000-3-2; EN 61000-3-2;
AS/NZS 61000.3.2;
IEC 61000-3-3; EN 61000-3-3;
AS/NZS 61000.3.3

Immunity

Electrostatic Discharge (ESD)

IEC 61000-4-2; EN 61000-4-2; AS/NZS 61000.4.2

Radiated Immunity
(up to 6 GHz, 10 V/m)

IEC 61000-4-3; EN 61000-4-3; AS/NZS 61000.4.3

Electrical Fast Transient (EFT)

IEC 61000-4-4; EN 61000-4-4; AS/NZS 61000.4.4

Surge Immunity

IEC 61000-4-5; EN 61000-4-5; AS/NZS 61000.4.5

Conducted Immunity

IEC 61000-4-6; EN 61000-4-6; AS/NZS 61000.4.6

Test(s)

Test Method(s)¹

Immunity (cont'd)

Magnetic Fields Immunity

IEC 61000-4-8; EN 61000-4-8; AS/NZS 61000.4.8

Voltage Dip & Interrupt

IEC 61000-4-11; EN 61000-4-11; AS/NZS 61000.4.11

Generic and Product Specific Standards

EN 61000-6-1; EN 61000-6-2;
EN 61000-6-3; EN 61000-6-4;
IEC 61000-6-1; IEC 61000-6-2;
IEC 61000-6-3; IEC 61000-6-4;
AS/NZS 61000.6.1; AS/NZS 61000.6.2;
AS/NZS 61000.6.3; AS/NZS 61000.6.4;
EN 55024; CISPR 24; AS/NZS CISPR 24; CISPR 35;
AS/NZS CISPR 35; EN 55035;
EN 300 386; EN 55014-2; EN 61547;
BETS-7;
EN 301 489-01; EN 301 489-03; EN 301 489-05;
EN 301 489-07; EN 301 489-09; EN 301 489-17;
EN 301 489-19; EN 301 489-24; EN 301 489-34;
EN 301 489-52

Telecommunications

Radio

(excluding HAC and

Protocol Conformance Testing)

Unlicensed Radio - FCC

CFR 47, FCC Part 15, Subpart C (using ANSI C63.10:2013);
ANSI C63.4:2014;

U-NII with DFS Intentional Radiators - FCC Part 15,
Subpart E (using FCC KDB 905462 D02 (v02))

Licensed Radio - FCC

FCC Parts 22, 24, 25 (non-microwave), 27, 90, 95, 97, and
101 (non-microwave), (using ANSI/TIA-603-E-2016)

Radio – ISED

RSS-GEN; RSS-119; RSS-132; RSS-133; RSS-139;
RSS-195; RSS-199; RSS-210; RSS-310;
RSS-247 (with DFS); RSS-216; RSS-130;
RSS-135; RSS-215

Test(s)

Test Method(s)¹

Telecommunications (cont'd)

Radio

*(excluding SAR, HAC, and
Protocol Conformance Testing)*

European Union (EU)

EN 300 220-1; EN 300 220-2;
EN 300 220-3-1; EN 300 220-3-2;
EN 300 220-4;
EN 300 330-1; EN 300 330-2;
EN 300 440;
EN 303 372-1; EN 303 372-2;
EN 303 340;
EN 303 345;
EN 303 413;
EN 303 417;
EN 301 357-1; EN 301 357-2;
EN 300 422-1; EN 300 422-2;
EN 302 291-1; EN 302 291-2;
EN 302 208-1; EN 302 208-2;
EN 300 328; EN 301 893; EN 302 502;
EN 301 511; EN 301 908-1; EN 301 908-2;
EN 301 908-13; EN 300 113-1; EN 300 113-2;
EN 300 086-1; EN 300 086-2;
EN 300 296-1; EN 300 296-2

Australia/New Zealand

AS/NZS 4268; AS/NZS 4771;
AS/CA S042.1; AS/ACIF S042.3; AS/CA S042.4

RF Exposure/MPE

(750MHz to 6GHz)

IEEE 1528:2013; IEEE Std C95.1; IEEE Std C95.3;
RSS-102 (RF. Exp.); RSS-102 (SAR);
EN 50360; EN 50364;
EN 50383; EN 50385;
EN 50566; EN 50663;
EN 62209-1; EN 62209-2;
EN 62233; EN 62311;
EN 62369-1; EN 62479;
EN 62493;
IEC 62209-1; IEC 62209-2;
IEC 62233; IEC 62493;
AS/NZS 2772.1; AS/NZS 2772.2

On the following types of products: Industrial, Scientific, Medical (ISM), Information Technology Equipment (ITE), Network Equipment, Medical Electrical Equipment

¹ 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.*



Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1²:

Rule Subpart/Technology	Test Method	Maximum Frequency
Unintentional Radiators Part 15B	ANSI C63.4:2014	40000 MHz
Industrial, Scientific, and Medical Equipment Part 18	FCC MP-5:1986	40000 MHz
Intentional Radiators Part 15C	ANSI C63.10:2013	40000 MHz
U-NII with DFS Intentional Radiators Part 15E	FCC KDB 905462 D02 (v02)	40000 MHz
Commercial Mobile Services (FCC Licensed Radio Service Equipment) Parts 22 (cellular), 24, 25 (non-microwave), and 27	ANSI/TIA-603-E	40000 MHz
General Mobile Radio Services (FCC Licensed Radio Service Equipment) Parts 22 (non-cellular), 90 (non-microwave), 95, 97, and 101 (non-microwave)	ANSI/TIA-603-E	40000 MHz
<u>RF Exposure</u> Devices Subject to SAR Requirements	IEEE Std 1528:2013	6000 MHz

²Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (<https://apps.fcc.gov/oetcf/eas/>) for a listing of FCC approved laboratories.





Accredited Laboratory

A2LA has accredited

CTC LABORATORIES, INC.

Shenzhen, Guangdong, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 13th day of December 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4340.01
Valid to November 30, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.