

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

#### BUREAU VERITAS CONSUMER PRODUCTS SERVICES, LTD.1

15 Musick Irvine, CA 92618 Mr. Leslie Bai Phone: 408 526 1188

#### ELECTRICAL

Valid to: July 31, 2021 Certificate Number: 3699.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory, as well as the satellite location listed below, to perform the following tests on <u>Bluetooth and Wireless devices</u>:

| <b>Test Technology:</b> | Test Method(s):  |
|-------------------------|--|
| Mobile Communications   | 3GPP TS 31.121; 3GPP TS 31.122;  |
|                         | 3GPP TS 31.124; 3GPP TS 34.108;  |
| (up to 18 GHz -         | 3GPP TS 34.109; 3GPP TS 34.121-1;  |
| Radiated emissions)     | 3GPP TS 34.121-2; 3GPP TS 34.123-1;  |
|                         | 3GPP TS 34.123-2; 3GPP TS 34.123-3;  |
|                         | 3GPP TS 34.124 (sec 8.2 only); 3GPP TS 34.171;   |
|                         | 3GPP TS 34.229-1; 3GPP TS 34.229-2;  |
|                         | 3GPP TS 34.229-3; 3GPP TS 51.010-1;  |
|                         | 3GPP TS 36.123 (sec 8.2 only); 3GPP TS 36.508;   |
|                         | 3GPP TS 36.509; 3GPP TS 36.521-1;  |
|                         | 3GPP TS 36.521-2; 3GPP TS 36.521-3;  |
|                         | 3GPP TS 36.523-1; 3GPP TS 36.523-2;  |
|                         | 3GPP TS 36.523-3; 3GPP TS 37.571-1;  |
|                         | 3GPP TS 37.571-2; 3GPP TR 37.901;  |
|                         | 3GPP TS 38.523-1;  |
|                         | 3GPP TS 51.010-2; 3GPP TS 51.010-4;  |
|                         | 3GPP TS 51.010-5;  |
|                         | ANSI C63.27;   |
|                         | EN 301 419-1; EN 301 419-2; EN 301 419-3;  |
|                         | EN 301 419-7; EN 301 420; EN 301 511;  |
|                         | EN 301 908-1; EN 301 908-2; EN 301 908-13;   |
|                         | ETSI TS 102 230; GCF-CC;   |
|                         | PTCRB Bearer-Agnostic TTY Test Specification;  |
|                         | PTCRB PPMD; PTCRB NAPRD.03;  |
|                         | PTCRB PVG.03;  |
|                         | Sprint LTE Test Plans;<br>MetroPCS LTE Test Plans;   |
|                         | Verizon Wireless Test Specifications:  |
|                         | LTE 3GPP Band 13 RF and RRM Conformance Test Plan  |
|                         | LTE 3GPP Band 13 KP and KKM Conformance Test Plan  LTE 3GPP Band 13 Supplementary RF Conformance Test Plan |
|                         | LTE 3GPP Band 13 Signaling Conformance Test Plan   |
|                         | LTE Supplementary Signaling Conformance Test Plan  |
|                         | LTE Data Retry Test Plan   |
|                         | LTE Device – UICC (USIM, ISIM) Interaction Test Plan   |
|                         | 212 Device Gree (Conv., 1914) Interaction Test Fain  |

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#### **Test Technology:**

#### **Test Method(s):**

Mobile Communications *(cont)* 

Verizon Wireless Test Specifications (cont):

LTE SMS Test Plan

LTE 3GPP Band 13 Data Throughput Test Plan

LTE AT commands for Test Automation Test Plan

LTE 3GPP Band 13 Supplementary RRM Conformance Test Plan

LTE IMS Registration and Retry Test Plan

LTE 3GPP Band 4 Supplementary RF Conformance Test Plan

LTE Device-UICC (USIM, ISIM) Interaction for Band 4 Test Plan

LTE 3GPP Band 4 Data Throughput Test Plan

LTE Interband Test Plan

LTE 3GPP Band 2 Supplementary RF Conformance Test Plan

LTE 3GPP Band 5 Supplementary RF Conformance Test Plan

LTE Test Plan RichCommServices

IMS VoIP Test Plan

E911 for LTE Only or LTE Multi-Mode VoLTE Capable Devices

hVoLTE Devices Test Plan

LTE Multi-Band Supplementary Signaling Conformance Test Plan

LTE PCO Test Plan

eMBMS Lab Conformance Test Plan

LTE-CDMA InterRAT Performance Test Plan

LTE Multi-Band Data Throughput Test Plan

LTE 3GPP Band 4 and Band 66 Supplementary RF Conformance

SIB8 1XRTT CHANNEL BROADCAST Test Plan

Voice over Wifi Test Plan

USCC LTE Data Throughput Test Plan

Field Trial<sup>2</sup>

GSMA TS.11; GSMA TS.35; GSMA TS.40;

OMA-ETS-XMTHML MP CON

(Conformance for HXTML Mobile Profile);

OMA-ETS-MMS-INT (Interoperability for MMS);

OMA-ETS-WCSS;

Verizon Wireless Test Specifications:

VoLTE Field Test Plan

LTE OTADM Test Plan

Field Testing - Band 13 Test Plan

Class 3 APN Management - Open Development 4G Device Test

Cases

Application Enabler

OMA-ETS (in accordance with NAPRD.03 and GCF-CC);

IMTC Enabler Test Specifications (in accordance with NAPRD.03 and GCF-CC);

GSM Association Enabler Test Specifications (in accordance with

NAPRD.03 and GCF-CC);

JAVA Test Specifications

OTA (Over The Air)

CTIA OTA Performance (for Mobile Stations);

CTIA Converged Devices (for RF Performance Evaluation of Wi-Fi

Mobile Converged Devices);

3GPP TS 34.114 (for OTA Antenna Performance);

Verizon Wireless Test Specifications:

LTE Over the Air Radiated Performance Test Plan

Over-The-Air Radiated Performance for CDMA and LTE Multi-

Mode Devices Test Plan

US Cellular Test Specifications:

LTE over the Air Radiated Test Plan

USCC M2M OTA Test Plan

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**Test Technology: Test Method(s):** 

Bluetooth Radio and Protocol Conformance Testing:

RF:1;

RF-PHY1 (including 20 dBm LE, Core Specification Addendum 5);

RF-PHY2;

BR/EDR Protocols:1 (*only BB*); LE Protocols:1 (excluding HCI);

Traditional Profile:1;

GATT-Based Profile & Service:1

InternetOfThings (IoT)

Cybersecurity CTIA Cybersecurity Certification Test Plan for IoT Devices

V2X Conformance test specifications for Wireless Access in Vehicular

Environments (WAVE) – Security Services;

Conformance test specifications for Wireless Access in Vehicular

Environments (WAVE) – Networking Services;

Conformance test specifications for Wireless Access in Vehicular

Environments (WAVE) – 802.11-TSS&TP;

Conformance test specifications for Wireless Access in Vehicular Environments (WAVE) – Multi-channel Operation -TSS&TP; Conformance test specifications for SAE J2945/1 - On-board System

Requirements for V2V Safety Communications

LoRa End Device Certification EU;

LoRa End-Device Certification Requirements for US and Canada

Thread V1.1 Certification Test Plan

ZigBee IEEE 802.15.4 Test Specification;

ZigBee PRO Compliant Platform Test Specification; ZigBee PRO Green Power Feature Test Specification; ZigBee Base Device Behavior Test Specification;

ZigBee Cluster Library Basic Cluster (0x0000) Test Specification;

ZigBee Cluster Library Fan Control Cluster (0x0202) Test

Specification;

ZigBee Cluster Library Groups Cluster (0x0004) Test Specification; ZigBee Cluster Library IAS WD Cluster (0x0502) Library Test

Specification;

ZigBee Cluster Library OnOff Cluster (0x0005) Test Specification; ZigBee Cluster Library Scenes Cluster (0x0005) Test Specification; Zigbee RF Performance (TRP/TIS) Specification & Test plan

<sup>&</sup>lt;sup>1</sup> Accreditation is granted to this laboratory at the location listed above as well as the satellite laboratory location listed below

<sup>&</sup>lt;sup>2</sup> This laboratory meets A2LA R104 – General Requirements: Accreditation of Field Testing and Field Calibration Laboratories for these tests

#### BUREAU VERITAS CONSUMER PRODUCTS SERVICES, LTD

Center Minami SEKI BLD #202 4-5-17 Chigasaki Higashi, Tsuzuki-ku, Yokohama, Japan, 224-0033

<u>Test Technology:</u> <u>Test Method(s):</u>

Bluetooth Radio Conformance Testing:

RF:1;

RF-PHY1 (including 20 dBm LE, Core Specification Addendum 5);

RF-PHY2



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# **Accredited Laboratory**

A2LA has accredited

## BUREAU VERITAS CONSUMER PRODUCTS SERVICES, INC.

Irvine, CA

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).

SEAL TOTAL AZLA

Presented this 18th day of November 2019

Vice President, Accreditation Services For the Accreditation Council Certificate Number 3699.01 Valid to July 31, 2021