TEST REPORT

No. I22Z61212-WMD01

for

Reliance Communications LLC

Orbic Speed 5G

Model Name: R500L5S6

FCC ID: 2ABGH-R500L5S6

with

Hardware Version: V1.2

Software Version: ORB500L5S6_V1.0.6_BVT-NA

Issued Date: 2022-06-30

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S.Government.

Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22Z61212-WMD01	Rev.0	1st edition	2022-06-30

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0 and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191

1.3. Testing Environment

Normal Temperature: 15-35℃

Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2021-10-13

Testing End Date: 2021-10-13

1.5. Signature

Dong Yuan

(Prepared this test report)

Zhou Yu

(Reviewed this test report)

Zhao Hui Lin

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Reliance Communications LLC
Address /Post:	91 Colin Drive, Unit 1, HOLBROOK, New York 11741, United States
Contact:	Saqib Ghouri
Email:	Saqib.Ghouri@reliance.us
Telephone:	+1 631-240-8400

2.2. Manufacturer Information

Company Name:	Unimaxcomm
Address /Post:	Room 602, Floor 6th, Building B, Software Park T3,Hi-Tech Park South, Nanshan District, Shenzhen, P.R. China
Contact:	Vicky Yang
Email:	ymei<ymei@unimaxcomm.com>
Telephone:	186 8920 9065

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Orbic Speed 5G
Model Name	R500L5S6
FCC ID	2ABGH-R500L5S6
Antenna	Embedded
Extreme vol. Limits	3.5VDC to 4.4VDC (nominal: 3.85VDC)
Extreme temp. Tolerance	-10°C to +55°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL.

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
/	/	/	/	/

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery

AE1

Model	BTE-4401
Manufacturer	HUIZHOU DXDRAGON INC
Capacitance	4400mAh

*AE ID: is used to identify the test sample in the lab internally.

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the client or manufacturer, which are the bases of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 96	CITIZENS BROADBAND RADIO SERVICE	10-1-20 Edition
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01

5. Summary Of Test Result

LTE Band 48

Items	Test Name	Clause in FCC rules	Verdict
1	End User Device Additional Requirements (CBSD Protocol)	96.47	BR

Terms used in Verdict column

P	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable.The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the standard.

The Equipment Under Test (EUT) model R500L5S6 (FCC ID: 2ABGH-R500L5S6) is a variant product of R500L5 (FCC ID: 2ABGH-R500L5), according to the declaration of changes provided by the applicant and FCC KDB publication 484596 D01, all the test results are derived from test report No.I21Z61893-WMD01.
For detail differences between two models please refer the Declaration of Changes document.

6. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Spectrum Analyzer	FSU	200030	R&S	2022-06-02	1 year

Annex A: Measurement Results

A.1 End User Device Additional Requirement (CBSD Protocol)

A. 1.1 Measurement Limit

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During testing, the EUT is connected to a certified CBSD (Baicells pBS2120 FCC ID: 2AG32PBS212096) as a companion device to show compliance with Part 96.47.

End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

A.1.2 Measurement Method

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer.

1. Run#1:

a. Setup frequency with 3615MHz – 3635MHz.

b. Check EUT Tx frequency.

c. Disable AP service and check EUT stop transmission within 10s.

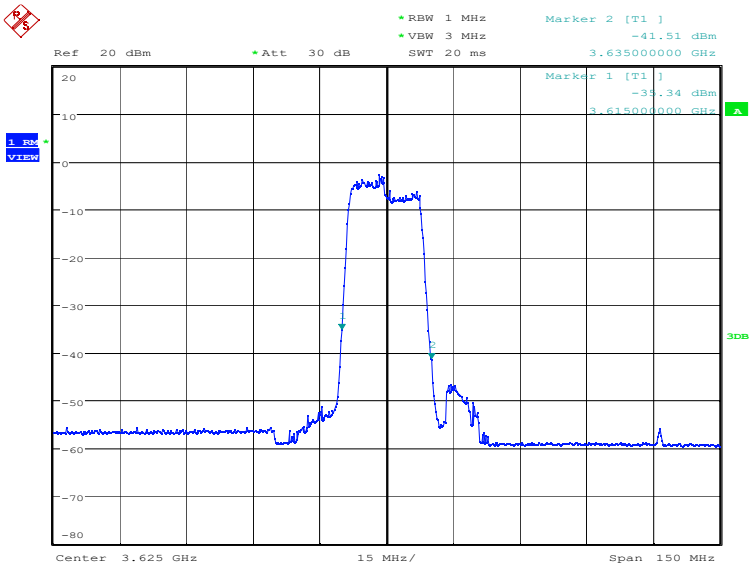
2. Run#2:

a. Setup frequency with 3660MHz – 3680MHz.

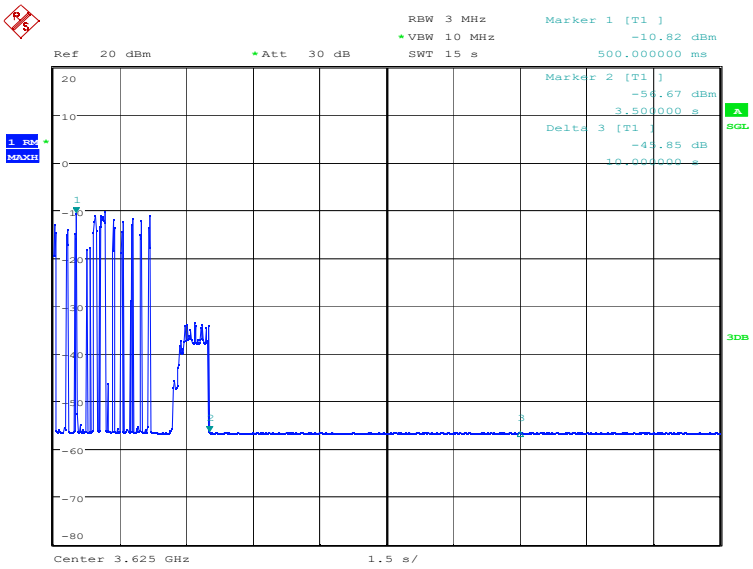
b. Check EUT Tx frequency.

c. Disable AP service and check EUT stop transmission within 10s.

RUN#1：



Date: 13.OCT.2021 14:03:06

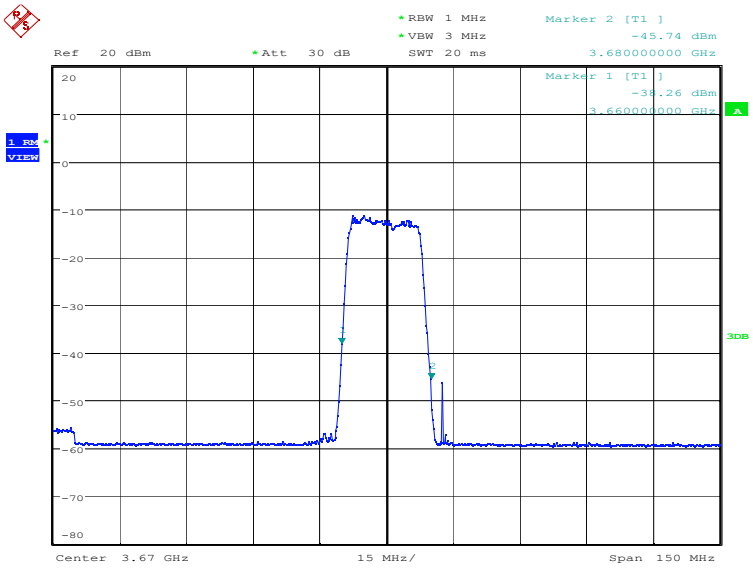


Date: 13.OCT.2021 14:18:19

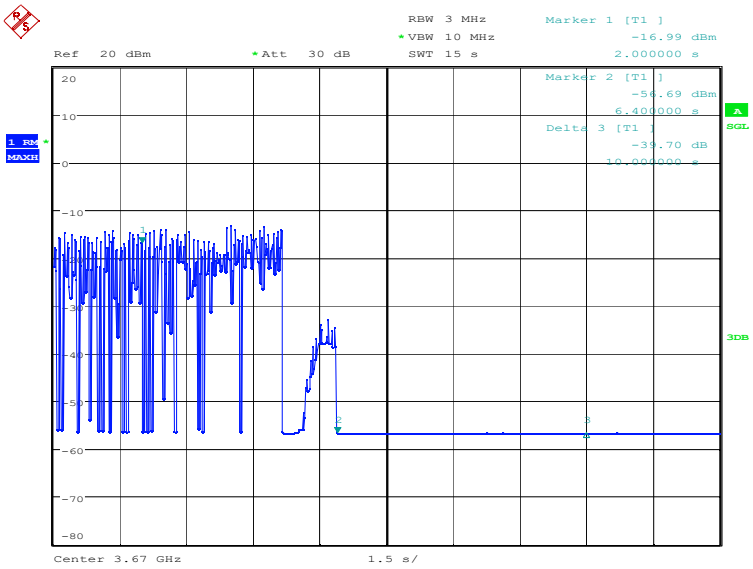
Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.
Marker 2: EUT discontinues operation.
Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT.

RUN#2：



Date: 13.OCT.2021 11:10:20



Date: 13.OCT.2021 11:41:36

Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.
Marker 2: EUT discontinues operation.
Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT

Annex B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ilac-MRA

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT
Beijing
China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-09-29 through 2022-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

*****END OF REPORT*****