



TEST REPORT

No. I21Z61621-WMD02

for

TCL Communication Ltd.

GSM/UMTS/LTE Mobile phone

Model Name: A509DL

FCC ID: 2ACCJH131

with

Hardware Version: PIO

Software Version: vL73

Issued Date: 2021-09-30

Note:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z61621-WMD02	Rev.0	1 st edition	2021-09-02
I21Z61621-WMD02	Rev.1	2 nd edition Delete the data of initial model.	2021-09-14
I21Z61621-WMD02	Rev.2	3 rd edition Update the results in A.1.	2021-09-29
I21Z61621-WMD02	Rev.3	4 th edition Update the table in Chapter 6.	2021-09-30

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

Location 2: CTTL(Shouxiang)

Address: Shouxiang Building, No.51 Xueyan Road, Haidian
District, Beijing 100191, P.R. China

1.3. Testing Environment

Normal Temperature: 15-35°C
Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2020-11-24
Testing End Date: 2021-09-29

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: TCL Communication Ltd.
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2.2. Manufacturer Information

Company Name: TCL Communication Ltd
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3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	GSM/UMTS/LTE Mobile phone
Model Name	A509DL
FCC ID	2ACCJH131
Antenna	Embedded
Output power	22.69dBm maximum EIRP measured for WCDMA Band IV
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
UT13a	015858000011852	PIO	vL73	2021-08-18

*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
AE2	Battery
AE1	
Model	CAB2880000C7
Manufacturer	VEKEN
Capacitance	3000mAh
AE2	
Model	CAB2880001C1
Manufacturer	BYD
Capacitance	3000mAh

*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 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-20 Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
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. Laboratory Environment

Fully-anechoic chamber FAC-3 (9 meters×6.5 meters×4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

6. Summary Of Test Result

WCDMA Band II

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	24.232	P
2	Emission Limit	24.238	P

WCDMA Band V

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	22.913	P
2	Emission Limit	22.917	P

WCDMA Band IV

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	27.53	P

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.

Explanation of worst-case configuration

The worst-case scenario for all measurements is based on the conducted output power measurement investigation results. The test results shown in the following sections represent the worst case emission.

The Equipment Under Test (EUT) is a Class 2 Permissive Change to A509DL (FCC ID: 2ACCJH131), Output Power and Emission Limit are tested.

For detail differences between two models please refer the Declaration of Changes document.

7. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Universal Radio Communication Tester	CMU200	108646	R&S	2021-12-17	1 year
Spectrum Analyzer	FSU	200030	R&S	2022-06-02	1 year
Climate chamber	SH-242	93008556	ESPEC	2023-12-23	3 years
Wireless Communication Test Set	E5515E	MY53211012	Agilent	2022-08-01	1 year
Test Receiver	E4440A	MY48250642	Agilent	2022-03-04	1 year
Universal Radio Communication Tester	CMW500	143008	R&S	2021-12-01	1 year
EMI Antenna	VULB9163	9163-235	Schwarzbeck	2022-04-07	1 year
Signal Generator	N5183A	MY49060052	Agilent	2022-07-11	1 year
EMI Antenna	3117	00058889	ETS-Lindgren	2021-09-22	1 year
EMI Antenna	3117	00119021	ETS-Lindgren	2022-01-14	1 year

Note: The test dates were before the calibration due dates of equipment used (the EMI Antenna which series number is 3117).

Annex A: Measurement Results

A.1 Output Power

A.1.1 Summary

During the process of testing, the EUT was controlled via communication tester to ensure max power transmission and proper modulation.

In all cases, output power is within the specified limits.

A.1.2 Conducted

A.1.2.1 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation.

These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

A.1.2.2 Measurement Result

WCDMA Band II

QPSK

	CH	Frequency (MHz)	output power (dBm)
WCDMA (Band II)	9262	1852.4	23.14
	9400	1880.0	23.23
	9538	1907.6	23.37

16QAM

	CH	Frequency (MHz)	output power (dBm)
WCDMA (Band II)	9262	1852.4	22.22
	9400	1880.0	21.74
	9538	1907.6	21.68

WCDMA Band V

QPSK

	CH	Frequency (MHz)	output power (dBm)
WCDMA (Band V)	4132	826.4	23.92
	4183	836.6	23.96
	4233	846.6	23.82

16QAM

	CH	Frequency (MHz)	output power (dBm)
WCDMA (Band V)	4132	826.4	22.14
	4183	836.6	22.36
	4233	846.6	22.46

WCDMA Band IV**QPSK**

WCDMA (Band IV)	CH	Frequency (MHz)	output power (dBm)
	1312	1712.4	23.81
	1412	1732.4	24.06
	1513	1752.6	23.90

16QAM

WCDMA (Band IV)	CH	Frequency (MHz)	output power (dBm)
	1312	1712.4	22.48
	1412	1732.4	23.16
	1513	1752.6	23.05

A.1.3 Radiated

A.1.3.1 Description

This is the test for the maximum radiated power from the EUT.

Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts".

Part 24.232(c) specifies "Mobile and portable stations are limited to 2 watts EIRP".

Part 27.50(d) specifies "Fixed, mobile, and portable (handheld) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands are limited to 1 watt EIRP".

A.1.3.2 Method of Measurement

ANSI C63.26 chapter 5.2.5.5: when working in decibels (i.e., logarithmic scale), the ERP and EIRP represent the sum of the transmit antenna gain (in dBd or dBi, respectively) and the conducted RF output power (expressed in dB relative to watts or milliwatts).

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

$$\text{ERP or EIRP} = P_{\text{Mea}} + G_T$$

Where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Mea} , e.g., dBm or dBW)

P_{Mea} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

WCDMA Band II

QPSK

WCDMA Band II	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -1.3$)
	9262	1852.4	23.14	21.84
	9400	1880.0	23.23	21.93
	9538	1907.6	23.37	22.07

16QAM

WCDMA Band II	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -1.3$)
	9262	1852.4	22.22	20.92
	9400	1880.0	21.74	20.44
	9538	1907.6	21.68	20.38

WCDMA Band V
QPSK

WCDMA Band V	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -4.6$)
	4132	826.4	23.92	17.17
4183	836.6	23.96	17.21	
4233	846.6	23.82	17.07	

16QAM

WCDMA Band V	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -4.6$)
	4132	826.4	22.14	15.39
4183	836.6	22.36	15.61	
4233	846.6	22.46	15.71	

WCDMA Band IV
QPSK

WCDMA Band IV	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -1.4$)
	1712.4	22.58	23.81	22.51
1732.4	22.66	24.06	22.76	
1752.6	22.78	23.90	22.60	

16QAM

WCDMA Band IV	CH	Frequency (MHz)	Output power Conducted (dBm)	Output power Radiated(dBm) ($G_T - L_C = -1.4$)
	1712.4	22.58	22.48	21.18
1732.4	22.66	23.16	21.86	
1752.6	22.78	23.05	21.75	

A.2 Emission Limit

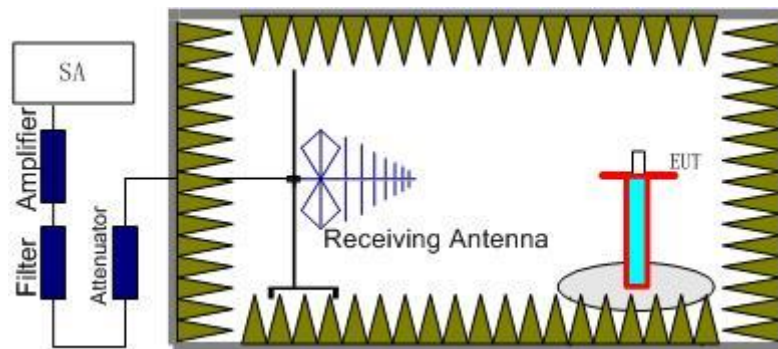
A.2.1 Measurement Method

The measurements procedures in TIA-603E-2016 are used.

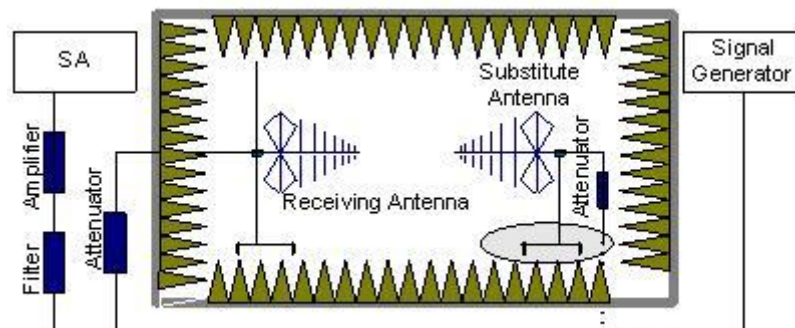
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment. The resolution bandwidth is set as outlined in Part 24.238, Part 22.917, Part 27.53. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of WCDMA Band II, WCDMA Band V and WCDMA Band IV.

The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5-meter-high non-conductive stand at a 3-meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the

substitution antenna and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss (P_{pl}) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (G_a) should be recorded after test.

A amplifier should be connected in for the test.

The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dBi}$.

A.2.2 Measurement Limit

Part 22.917 , Part 24.238 and Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of WCDMA Band II (1852.4 MHz, 1880.0MHz and 1907.6MHz),WCDMA Band V(826.4MHz, 836.6MHz and 846.6MHz) and WCDMA Band IV(1712.4MHz, 1732.4MHz and 1752.6MHz). It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the WCDMA Band II, WCDMA Band V and WCDMA Band IV into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

A.2.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
WCDMA Band V	Low	30MHz-10GHz	Pass
	Middle	30MHz-10GHz	Pass
	High	30MHz-10GHz	Pass
WCDMA Band II	Low	30MHz-20GHz	Pass
	Middle	30MHz-20GHz	Pass
	High	30MHz-20GHz	Pass
WCDMA Band IV	Low	30MHz-20GHz	Pass
	Middle	30MHz-20GHz	Pass
	High	30MHz-20GHz	Pass

A.2.5 Sweep Table

Working Frequency	Subrange (GHz)	RBW	VBW	Sweep time (s)
WCDMA Band V	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~10	1 MHz	3 MHz	3
WCDMA Band II	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~11	1 MHz	3 MHz	3
	11~14	1 MHz	3 MHz	3
	14~18	1 MHz	3 MHz	3
WCDMA Band IV	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~11	1 MHz	3 MHz	3
	11~14	1 MHz	3 MHz	3
	14~18	1 MHz	3 MHz	3
	18~20	1 MHz	3 MHz	2

WCDMA BAND II Mode Channel 9262/1852.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3704.02	-53.87	6.42	8.49	-51.80	-13.00	38.80	V
5556.02	-51.85	7.19	10.59	-48.45	-13.00	35.45	V
7413.01	-49.36	8.15	12.10	-45.41	-13.00	32.41	H
9269.01	-46.04	9.08	13.26	-41.86	-13.00	28.86	H
11132.01	-51.20	9.70	13.17	-47.73	-13.00	34.73	V
12947.01	-49.31	10.49	13.47	-46.33	-13.00	33.33	V

WCDMA BAND II Mode Channel 9400/1880MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3759.02	-54.64	6.26	8.56	-52.34	-13.00	39.34	H
5649.02	-51.39	7.27	10.57	-48.09	-13.00	35.09	H
7523.01	-51.25	8.30	12.22	-47.33	-13.00	34.33	H
9413.01	-50.80	9.10	13.35	-46.55	-13.00	33.55	H
11278.01	-50.51	9.86	13.14	-47.23	-13.00	34.23	V
13157.01	-48.05	10.69	13.72	-45.02	-13.00	32.02	V

WCDMA BAND II Mode Channel 9538/1907.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3814.02	-53.66	6.09	8.64	-51.11	-13.00	38.11	H
5724.02	-51.48	7.30	10.56	-48.22	-13.00	35.22	H
7636.01	-51.90	8.14	12.31	-47.73	-13.00	34.73	H
9545.01	-51.11	9.38	13.35	-47.14	-13.00	34.14	H
11465.01	-50.70	9.90	13.11	-47.49	-13.00	34.49	V
13390.01	-47.28	10.57	14.05	-43.80	-13.00	30.80	H

WCDMA BAND V Mode Channel 4132/826.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1650.01	-57.54	3.57	5.23	2.15	-58.03	-13.00	45.03	H
2468.00	-54.02	4.59	6.00	2.15	-54.76	-13.00	41.76	H
3308.02	-53.37	5.29	7.74	2.15	-53.07	-13.00	40.07	V
4134.02	-54.76	6.06	9.03	2.15	-53.94	-13.00	40.94	H
4928.01	-54.68	6.73	9.83	2.15	-53.73	-13.00	40.73	V
5771.01	-53.47	7.23	10.55	2.15	-52.30	-13.00	39.30	V

WCDMA BAND V Mode Channel 4183/836.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1672.01	-59.93	3.58	5.19	2.15	-60.47	-13.00	47.47	H
2506.00	-52.03	4.63	6.11	2.15	-52.70	-13.00	39.70	H
3349.02	-54.29	5.32	7.84	2.15	-53.92	-13.00	40.92	H
4199.02	-54.24	6.20	9.10	2.15	-53.49	-13.00	40.49	V
5016.01	-54.24	6.58	9.92	2.15	-53.05	-13.00	40.05	V
5847.01	-53.10	7.23	10.53	2.15	-51.95	-13.00	38.95	V

WCDMA BAND V Mode Channel 4233/846.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1692.01	-57.65	3.59	5.15	2.15	-58.24	-13.00	45.24	V
2537.00	-48.56	4.66	6.17	2.15	-49.20	-13.00	36.20	H
3391.02	-54.33	5.35	7.94	2.15	-53.89	-13.00	40.89	V
4237.02	-53.90	6.25	9.14	2.15	-53.16	-13.00	40.16	V
5098.01	-53.53	6.77	10.04	2.15	-52.41	-13.00	39.41	V
5934.01	-52.96	7.47	10.51	2.15	-52.07	-13.00	39.07	V

WCDMA BAND IV Mode Channel 1312/1712.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3423.02	-60.36	5.38	8.02	-57.72	-13.00	44.72	H
5143.02	-56.80	6.87	10.10	-53.57	-13.00	40.57	H
6855.01	-62.96	7.82	11.43	-59.35	-13.00	46.35	H
8572.01	-64.46	8.54	13.01	-59.99	-13.00	46.99	H
10258.01	-62.32	9.50	13.00	-58.82	-13.00	45.82	V
11968.01	-60.24	10.20	13.01	-57.43	-13.00	44.43	V

WCDMA BAND IV Mode Channel 1412/1732.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3463.02	-61.85	5.45	8.11	-59.19	-13.00	46.19	H
5205.02	-57.38	6.97	10.19	-54.16	-13.00	41.16	V
6977.01	-64.74	8.12	11.57	-61.29	-13.00	48.29	V
8690.01	-64.86	8.37	13.04	-60.19	-13.00	47.19	V
10450.01	-62.26	9.73	13.08	-58.91	-13.00	45.91	V
12181.01	-59.90	10.11	13.07	-56.94	-13.00	43.94	V

WCDMA BAND IV Mode Channel 1513/1752.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3504.02	-59.68	5.53	8.21	-57.00	-13.00	44.00	H
5258.02	-57.31	7.00	10.26	-54.05	-13.00	41.05	V
7016.01	-60.81	8.28	11.62	-57.47	-13.00	44.47	H
8763.01	-63.33	8.55	13.05	-58.83	-13.00	45.83	H
10504.01	-62.08	9.64	13.10	-58.62	-13.00	45.62	V
12254.01	-60.21	10.02	13.10	-57.13	-13.00	44.13	V

Note1: The measurement results showed here are worst cases.

Note2: The maximum value of expanded measurement uncertainty for this test item is $U = 5.16$ dB, $k = 2$.

Annex B: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p>  	
<hr/> Certificate of Accreditation to ISO/IEC 17025:2017 <hr/>	
NVLAP LAB CODE: 600118-0	
Telecommunication Technology Labs, CAICT Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
Electromagnetic Compatibility & Telecommunications	
<i>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).</i>	
2020-09-29 through 2021-09-30 <i>Effective Dates</i>	  For the National Voluntary Laboratory Accreditation Program

END OF REPORT