FCC PART 15B
TEST REPORT

No. 25T04Z100488-010

for

TCL Communication Ltd.

GSM Mobile phone

Model Name: T319E

FCC ID: 2ACCJB238

with

Hardware Version: 1896_MB_V1.0

Software Version: T319E_ALAV_2SIM_V07_20250408_UNLOCK

Issued Date: 2025-04-25

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.

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
25T04Z100488-010	Rev.0	1st edition	2025-04-25

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

CONTENTS

1. Test Laboratory

1.1. Introduction &Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

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°C

Relative Humidity: 20-75%

1.4. Project data

Testing Start Date: 2025-04-07

Testing End Date: 2022-04-20

1.5. Signature

Zhang Ying

(Prepared this test report)

An Hui

(Reviewed this test report)

Zhang Xia

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Contact Person:	Ting Wang
Contact Email:	ting.wang.hz@tcl.com
Telephone:	+86 752 2639091
Fax:	0086-755-36612000-81722

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Contact Person:	Ting Wang
Contact Email:	ting.wang.hz@tcl.com
Telephone:	+86 752 2639091
Fax:	0086-755-36612000-81722

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

3.1. About EUT

Description	GSM Mobile phone
Model Name	T319E
FCC ID:	2ACCJB238

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

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT28a	353104320020079/ 353104320024071	1896_MB_V1.0	T319E_ALAV_2SIM_V07_20250408_UNLOCK

*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	Model	Manufacturer
AE1-1	Battery	TLi010F5	ShenzhenAerospaceElectronic Co.,Ltd.
AE1-2	Battery	TLi010CB	ShenzhenAerospaceElectronic Co.,Ltd.
AE2-1	Charger	XT-252E-5055	Shenzhen Baijunda Electronic Co.,Ltd.
AE2-2	Charger	XT-252A-5055	Shenzhen Baijunda Electronic Co.,Ltd.
AE2-3	Charger	XT-536B-5055A	Shenzhen Baijunda Electronic Co.,Ltd.
AE4	Headset	JWEP1227-C02R	HUIZHOU JUWEI ELECTRONICS CO.,LTD.

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

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.4	UT28a + AE1-1 + AE2-2 + AE4	Charger + Headset
Set.5	UT28a + AE1-1 + PC + AE4	PC+ Headset
Set.6	UT28a + AE4	Headset FM

Note:

Equipment Under Test (EUT) is a model of GSM Mobile phone.

It supports

GSM Band	GSM 850/900/1800/1900 MHz
UMTS Band	/
LTE Band	/
NR Band	/

It has USB memory function.

The device contains receivers which tune and operate between 30MHz-960MHz in the following mode: GSM 850MHz. All licensed band receivers that tune in the range of 30MHz-960MHz are investigated. Only the worst-case emissions are reported.

4. Reference Documents

4.1. Reference Documents for testing

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

Reference	Title	Version
FCC Part 15, Subpart B	Radio frequency devices - Unintentional Radiators	2023
ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014

Note: The test methods have no deviation with standards.

5. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	NA	Not applicable
	F	Fail

Items	Test Name	Clause in FCC rules	Section in this report	Verdict	Test Location
1	Radiated Emission	15.109(a)	B.1	P	**CTTL(huayuan North Road)**
2	Conducted Emission	15.107(a)	B.2	P	**CTTL(huayuan North Road)**

6. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESW44	103023	R&S	2025-06-06	1 year
	EMI Antenna	VULB 9163	01222	SCHWARZBECK	2025-09-11	1 year
	EMI Antenna	3115	00167250	ETS-Lindgren	2026-04-11	2 years
3	Test Receiver	ESCI 3	100344	R&S	2026-04-01	2 years
4	LISN	ENV216	101200	R&S	2025-05-16	1 year
7	Universal Communication Tester	CMW500	116588	R&S	2026-01-25	1 year

Test Item	Test Software and Version	Software Vendor
Conducted Emission	EMC32 V11.50.00	R&S
Radiated Emission	EMC32 V8.53.00	R&S

7. Measurement Uncertainty

Where relevant, the following measurement uncertainty(worse case) levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Location 1: CTTL(BDA)

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	4.72dB(*k*=2)
	1GHz-18GHz	4.84dB(*k*=2)
Conducted Emission	150kHz-30MHz	AC Power Line: 3.08dB(*k*=2)

ANNEX A: EUT photograph

Please refer to External photos and Internal photos documents for EUT photograph.

ANNEX B: MEASUREMENT RESULTS

B.1 Radiated Emission

Reference

FCC: CFR Part 15.109(a).

B.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (USB/OTG mode of MS and charging mode of MS) at distances of 3 meters is tested. Tested in accordance with the procedures of ANSI C63.4 – 2014, section 8.3.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3/10 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

B.1.2 EUT Operating Mode

The MS is operating in the USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in section 3.4, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

Note: I/O information: Printer – USB, Mouse – PS/2, Keyboard – USB.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

B.1.3 Measurement Limit

Frequency range (MHz)	Field strength limit (μV/m)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

Note: the above limit is for 3 meters test distance. 10 meters' limit is got by converting.

B.1.4 Test Condition

Frequency range (MHz)	RBW/VBW	Sweep Time (s)	Detector
30-1000	120kHz (IF Bandwidth)	5	Peak/Quasi-peak
Above 1000	1MHz/3MHz	15	Peak, Average

B.1.5 Measurement Results

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”. It includes the antenna factor of receive antenna and the path loss.

The measurement results are obtained as described below:

Result = $P_{Mea} + A_{Rpl} = P_{Mea} + G_A + G_{PL}$

Where

G_A: Antenna factor of receive antenna

G_{PL}: Path Loss

P_{Mea}: Measurement result on receiver.

Measurement results for Set.4, Charging + GSM850MHz idle

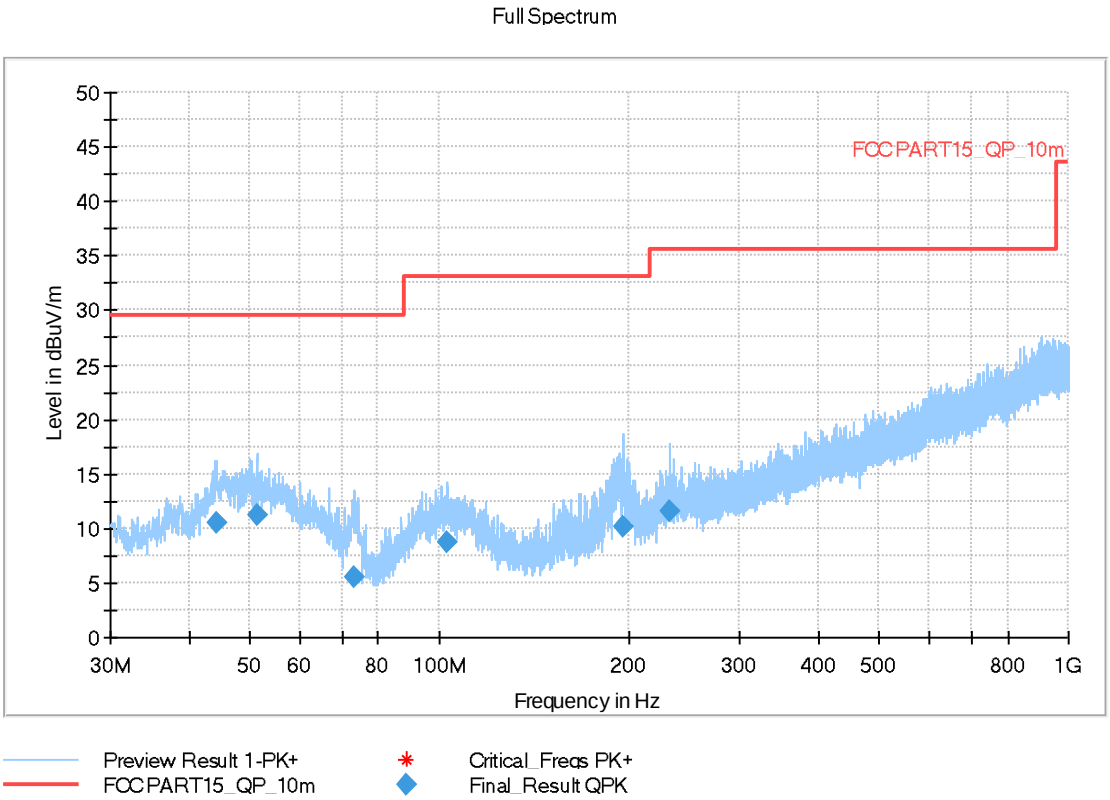

Figure A.1 Radiated Emission from 30MHz to 1GHz

QP detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
44.356000	10.57	29.54	18.97	225.0	V	300.0
51.243000	11.15	29.54	18.39	125.0	V	90.0
73.456000	5.55	29.54	23.99	225.0	V	249.0
103.041000	8.67	33.06	24.39	220.0	V	128.0
195.821500	10.17	33.06	22.89	117.0	V	151.0
232.196500	11.49	35.56	24.07	100.0	V	144.0

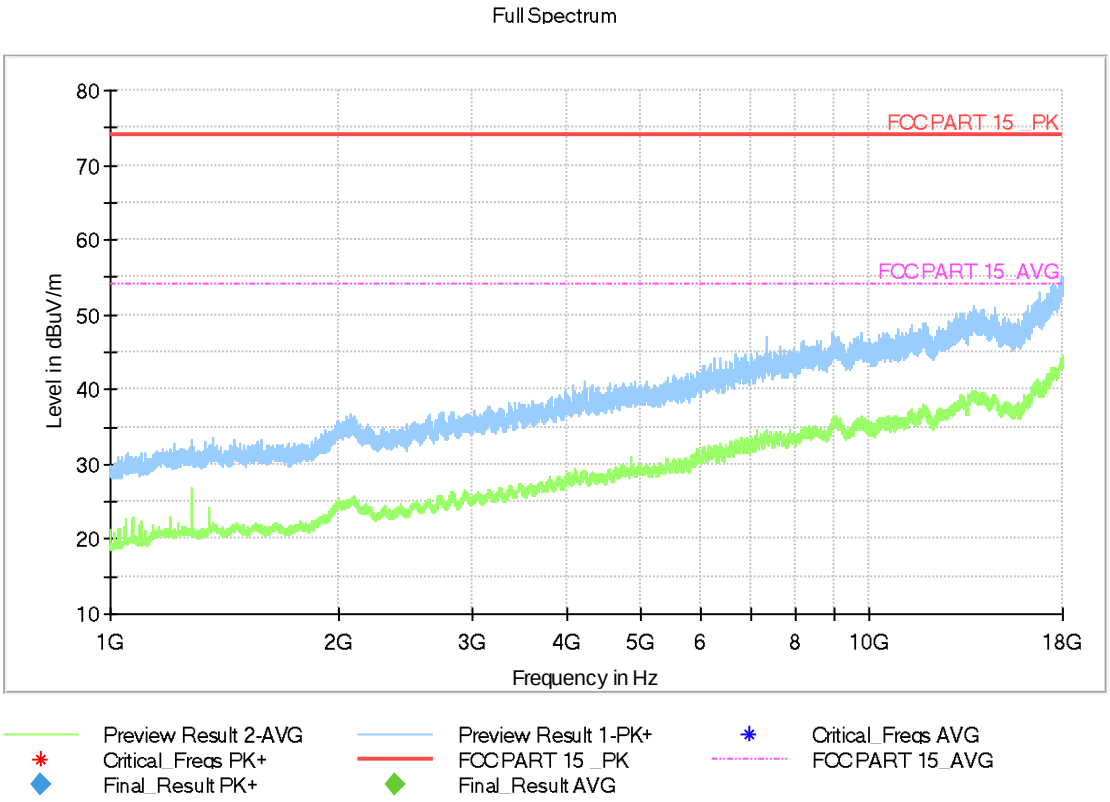

Figure A.2 Radiated Emission from 1GHz to 18GHz

Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17955.100	44.20	-26.80	42.30	28.70	54.00	9.80	V
17923.200	44.01	-26.80	42.30	28.51	54.00	9.99	V
17928.600	43.87	-26.80	42.30	28.37	54.00	10.13	H
17941.200	43.86	-26.80	42.30	28.36	54.00	10.14	H
17945.300	43.86	-26.80	42.30	28.36	54.00	10.14	H
17944.200	43.85	-26.80	42.30	28.35	54.00	10.15	H

Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17999.300	55.17	-26.80	42.30	39.67	74.00	18.83	V
17956.100	55.00	-26.80	42.30	39.50	74.00	19.00	V
17957.800	54.95	-26.80	42.30	39.45	74.00	19.05	H
17937.100	54.81	-26.80	42.30	39.31	74.00	19.19	V
17875.600	54.79	-26.80	42.30	39.29	74.00	19.21	V
17967.000	54.75	-26.80	42.30	39.25	74.00	19.25	H

Measurement results for Set.5, USB to PC transfer:

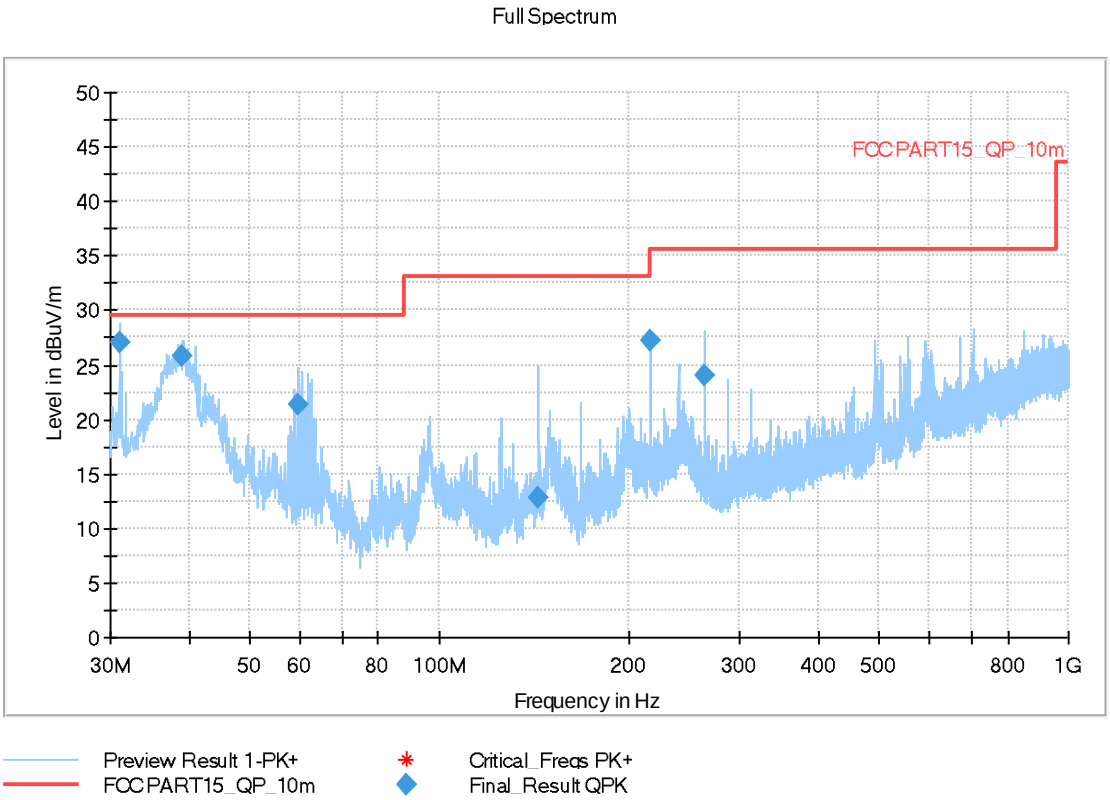

Figure A.3 Radiated Emission from 30MHz to 1GHz

QP detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
31.115500	27.02	29.54	2.52	100.0	V	221.0
39.118000	25.82	29.54	3.72	205.0	V	166.0
59.585000	21.28	29.54	8.26	315.0	H	90.0
143.975000	12.83	33.06	20.23	275.0	V	129.0
215.997500	27.27	33.06	5.79	192.0	V	135.0
263.964000	24.07	35.56	11.49	325.0	H	98.0

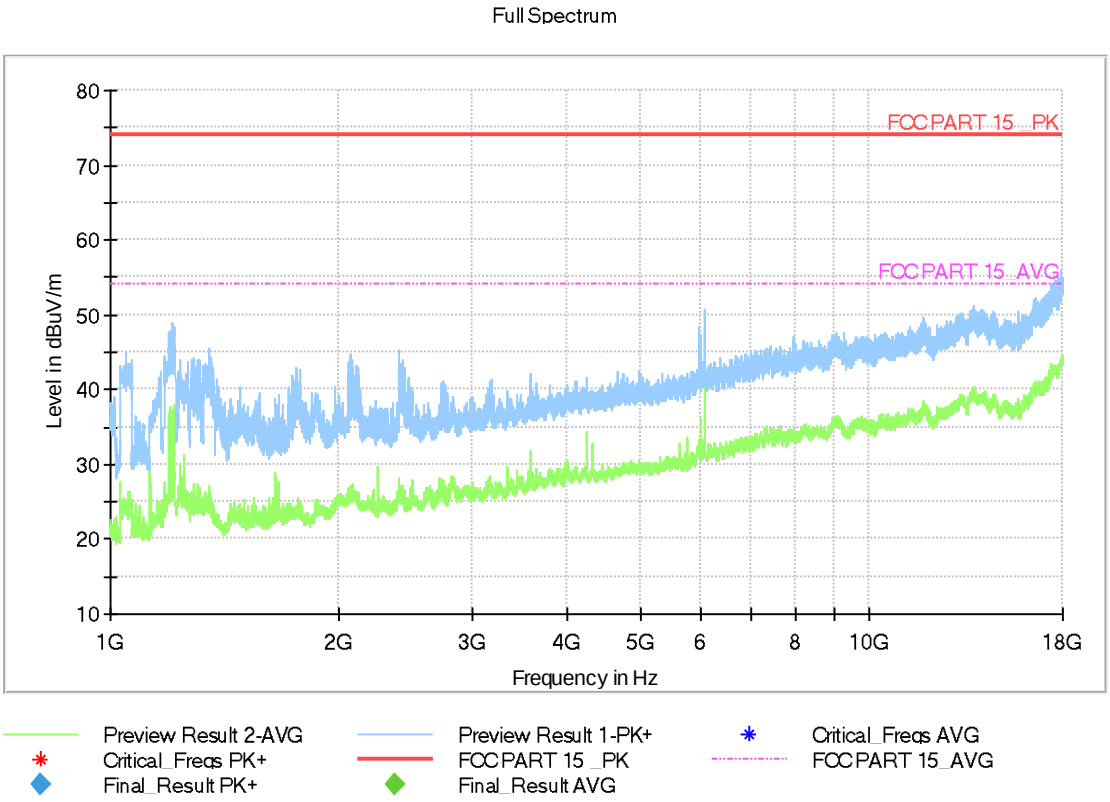

Figure A.4 Radiated Emission from 1GHz to 18GHz

Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
6054.800	48.23	-36.15	35.40	48.98	54.00	5.77	V
6055.100	46.94	-36.15	35.40	47.69	54.00	7.06	V
6054.400	46.58	-36.15	35.40	47.33	54.00	7.42	V
6055.500	44.81	-36.15	35.40	45.56	54.00	9.19	V
17945.300	44.21	-26.80	42.30	28.71	54.00	9.79	V
17960.900	44.13	-26.80	42.30	28.63	54.00	9.87	V

Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17911.600	55.93	-26.80	42.30	40.43	74.00	18.07	V
17896.000	55.65	-26.80	42.30	40.15	74.00	18.35	H
17940.200	54.95	-26.80	42.30	39.45	74.00	19.05	H
17938.100	54.94	-26.80	42.30	39.44	74.00	19.06	H
17942.900	54.90	-26.80	42.30	39.40	74.00	19.10	V
17915.300	54.88	-26.80	42.30	39.38	74.00	19.12	V

Measurement results for Set.6, FM function:

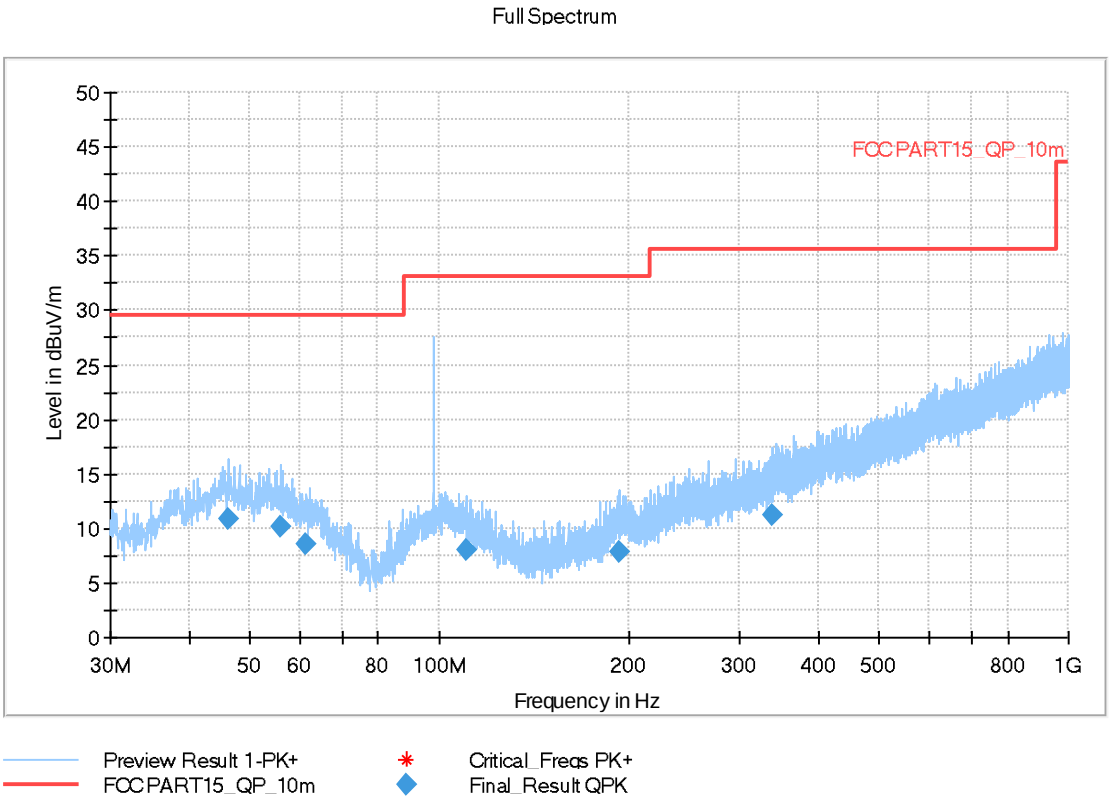

Figure A.5 Radiated Emission from 30MHz to 1GHz

QP detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
46.199000	10.83	29.54	18.71	125.0	H	217.0
55.899000	10.05	29.54	19.49	125.0	V	180.0
61.525000	8.52	29.54	21.02	305.0	H	211.0
110.219000	8.04	33.06	25.02	316.0	V	315.0
192.911500	7.84	33.06	25.22	192.0	V	136.0
338.266000	11.13	35.56	24.43	293.0	H	158.0

B.2 Conducted Emission

Reference

FCC: CFR Part 15.107(a).

B.2.1 Method of measurement

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits. Tested in accordance with the procedures of ANSI C63.4 – 2014, section 7.3.

B.2.2 EUT Operating Mode

The MS is operating in the USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode and is connected to a charger in the case of charging mode. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

Note：I/O information：Printer – USB, Mouse – PS/2, Keyboard – USB.

B.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency		

B.2.4 Test Condition in charging mode

Voltage（V）	Frequency（Hz）
120	60

RBW/IF bandwidth	Sweep Time(s)
9kHz	1

Measurement results:

The measurement results showed as followed are worst cases, and the combinations of different batteries, cables and headsets were considered if applicable.

B.2.5 Measurement Results

Measurement results for Set.4, Charging + GSM850MHz idle

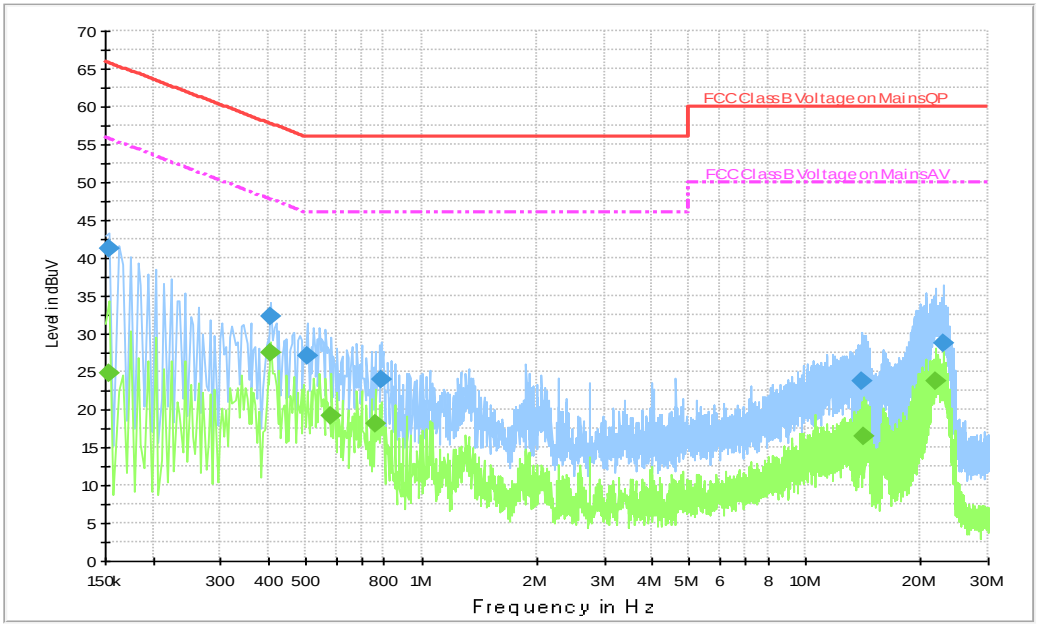

Fig A.6 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	41.3	N	20.0	24.5	65.8
0.406000	32.3	L1	20.0	25.4	57.7
0.502000	27.0	L1	20.0	29.0	56.0
0.786000	24.1	L1	19.9	31.9	56.0
14.026000	23.7	L1	20.0	36.3	60.0
22.934000	28.8	L1	20.1	31.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	24.8	N	20.0	31.0	55.8
0.406000	27.6	L1	20.0	20.2	47.7
0.582000	19.1	L1	20.0	26.9	46.0
0.758000	18.1	L1	19.9	27.9	46.0
14.182000	16.4	L1	20.0	33.6	50.0
21.846000	23.8	L1	20.1	26.2	50.0

Measurement results for Set.5, USB TO PC transfer:

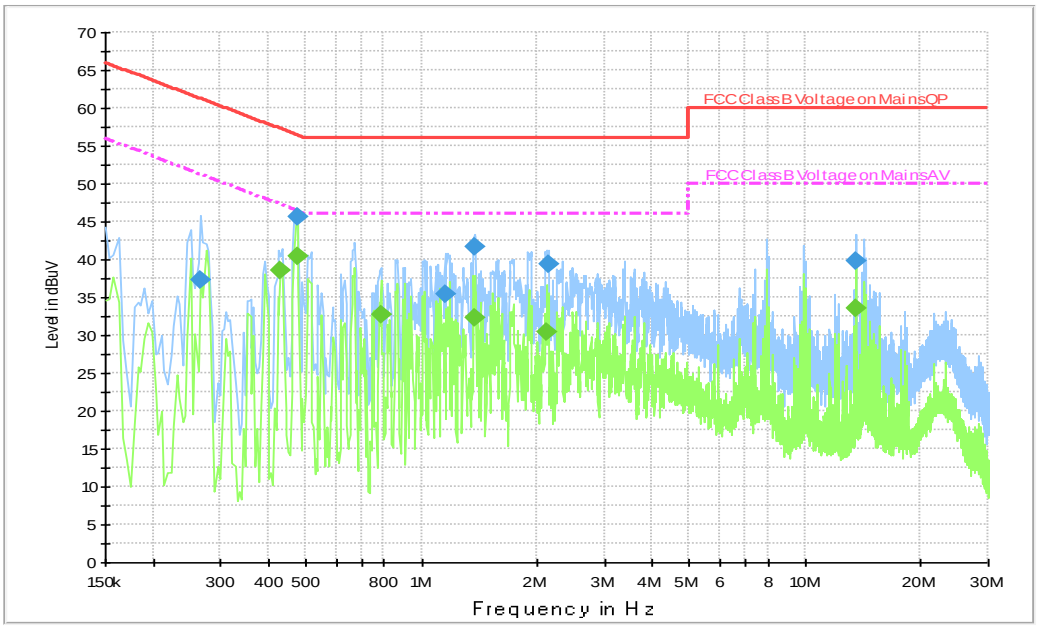

Fig A.7 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.266000	37.3	N	19.8	23.9	61.2
0.474000	45.5	L1	20.0	10.9	56.4
1.150000	35.4	N	19.7	20.6	56.0
1.370000	41.7	L1	19.9	14.3	56.0
2.134000	39.3	N	19.6	16.7	56.0
13.558000	39.8	L1	20.0	20.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.430000	38.5	L1	20.0	8.7	47.3
0.474000	40.3	N	19.9	6.1	46.4
0.786000	32.8	N	19.8	13.2	46.0
1.382000	32.3	L1	19.9	13.7	46.0
2.126000	30.3	N	19.6	15.7	46.0
13.562000	33.5	N	19.8	16.5	50.0

ANNEX C: Test Layout

Please refer to Test setup photos documents for test layout.

ANNEX D: Persons involved in this testing

Test Item	Tester
Conducted emission	Zhang Tianli
Radiated emission	Zhang Tianli

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