



# TEST REPORT

No. I15Z43271-EMC01

for

**TCL Communication Ltd**

**HSUPA/HSDPA/UMTS Tri-band/GSM Quad-band mobile phone**

**Model Name: 4017F**

**FCC ID: 2ACCJH041**

**with**

**Hardware Version: PIO**

**Software Version: vBL43**

**Issued Date: 2016-01-12**

**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:**

**FCC 2.948 Listed: No.525429**

CTTL, Telecommunication Technology Labs, Academy of Telecommunication Research, MIIT  
No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: [ctl\\_terminals@catr.cn](mailto:ctl_terminals@catr.cn), website: [www.chinattl.com](http://www.chinattl.com)



## **REPORT HISTORY**

Report Number	Revision	Description	Issue Date
I15Z43271-EMC01	Rev.0	1st edition	2016-01-12

## **CONTENTS**

1. TEST LABORATORY.....	4
1.1. TESTING LOCATION .....	4
1.2. TESTING ENVIRONMENT .....	4
1.3. PROJECT DATA.....	4
1.4. SIGNATURE .....	4
2. CLIENT INFORMATION.....	5
2.1. APPLICANT INFORMATION.....	5
2.2. MANUFACTURER INFORMATION.....	5
3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE) .....	6
3.1. ABOUT EUT .....	6
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST .....	6
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST.....	6
3.4. EUT SET-UPS .....	8
4. REFERENCE DOCUMENTS .....	8
4.1. REFERENCE DOCUMENTS FOR TESTING.....	8
5. LABORATORY ENVIRONMENT .....	9
6. SUMMARY OF TEST RESULTS.....	10
7. TEST EQUIPMENTS UTILIZED.....	11
ANNEX A: MEASUREMENT RESULTS .....	12



## **1. Test Laboratory**

### **1.1. Testing Location**

#### **Location 1: CTTL(huayuan North Road)**

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

### **1.2. Testing Environment**

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

### **1.3. Project data**

Testing Start Date: 2015-12-30

Testing End Date: 2016-01-05

### **1.4. Signature**

A handwritten signature in black ink that reads "张颖".

Zhang Ying

(Prepared this test report)

A handwritten signature in black ink that reads "屈鹏飞".

Qu Pengfei

(Reviewed this test report)

A handwritten signature in black ink that reads "刘宝典".

Liu Baodian

(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: TCL Communication Ltd.  
Address /Post: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park,  
Pudong Area Shanghai, P.R. China. 201203  
City: Shanghai  
Postal Code: 201203  
Country: China  
Contact Person: Gong Zhizhou  
Contact Email: zhizhou.gong@tcl.com  
Telephone: 0086-21-51798260  
Fax: 0086-21-61460602

### **2.2. Manufacturer Information**

Company Name: TCL Communication Ltd.  
Address /Post: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park,  
Pudong Area Shanghai, P.R. China. 201203  
City: Shanghai  
Postal Code: 201203  
Country: China  
Telephone: 0086-21-51798260  
Fax: 0086-21-61460602

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

#### **3.1. About EUT**

Description	HSUPA/HSDPA/UMTS Tri-band/GSM Quad-band mobile phone
Model Name	4017F
FCC ID	2ACCJH041
Extreme vol. Limits	3.5VDC to 4.2VDC (nominal: 3.8VDC)

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

#### **3.2. Internal Identification of EUT used during the test**

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	/	PIO	vBL43

\*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	SN	Remarks
AE1	battery	BP759T9803T000H3	15TCT-BA-0721
AE2	battery	BP759T9803T000D2	15TCT-BA-0719
AE3	battery	BP759T9803T000H5	15TCT-BA-0722
AE4	battery	BP759T9803T000H0	15TCT-BA-0717
AE5	Travel Charger	/	15TCT-CH-0170
AE6	Travel Charger	/	15TCT-CH-1001
AE7	Travel Charger	/	15TCT-CH-0135
AE8	Travel Charger	/	14TCT-CH-1918
AE9	USB Cable	/	14TCT-DC-0043
AE10	USB Cable	/	15TCT-DC-0101
AE11	USB Cable	/	15TCT-DC-0186
AE12	USB Cable	/	15TCT-DC-0186
AE13	Travel Charger	/	15TCT-CH-0167
AE14	Travel Charger	/	15TCT-CH-1132
AE16	Travel Charger	/	14TCT-CH-2198
AE17	USB Cable	/	14TCT-DC-0258
AE18	USB Cable	/	15TCT-DC-0186



AE1, AE2, AE3, AE4

Model TLi013A7  
Manufacturer Zhongshan Tianmao Battery Co.,Ltd  
Capacitance 1300mAh  
Nominal voltage 3.7V

AE5, AE13

Type CBA0066AG0C1  
Manufacturer BYD  
Length of cable 124cm

AE6

Type CBA3002AG0C5  
Manufacturer Puan  
Length of cable 118cm

AE7, AE14

Type CBA3068AG0C1  
Manufacturer BYD  
Length of cable /

AE8, AE16

Type CBA3008AG0C2  
Manufacturer Tenpao  
Length of cable /

AE9, AE17

Type CDA3122002C1  
Manufacturer Juwei  
Length of cable 101cm

AE10, AE18

Type CDA3122002C8  
Manufacturer PUAN  
Length of cable 99cm

AE11

Type CDA3122005C1  
Manufacturer JUWEI  
Length of cable /

AE12

Type CDA3122005C8  
Manufacturer PUAN  
Length of cable /

\*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.2	EUT2 + AE4 + AE5	Charger
Set.3	EUT2 + AE4 + AE6	Charger
Set.4	EUT2 + AE4 + AE7 + AE9	Charger
Set.5	EUT2 + AE4 + AE8 + AE10	Charger
Set.6	EUT2 + AE4 + AE9	USB

Note:

HSUPA/HSDPA/UMTS Tri-band/GSM Quad-band mobile phone 4017F manufactured by TCL Communication Ltd is a variant model based on 4017A for conformance test. According to the declaration of changes, the results are inherited from the initial model. The report number of initial model is I15Z43226-EMC01.

## **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	10-1-14 Edition
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low - Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014

## **5. LABORATORY ENVIRONMENT**

**Semi-anechoic chamber SAC-1** (23 meters×17meters×10meters) 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	< 4Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m/10m distance, from 30 to 1000 MHz
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 3000 MHz

**Shielded room** did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz, >60dB; 1MHz – 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω

## 6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:				
Verdict Column	P	Pass		
	NA	Not applicable		
	F	Fail		
Location Column	1/2/3/4	The test is performed in test location 1, 2, 3 or 4 which are described in section 1.1 of this report		

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



## **7. Test Equipments Utilized**

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CAL. DUE DATE	CAL. INTERVAL
1.	EMI Antenna	VULB9163	9163-301	Schwarzbeck	2017-12-16	3 Years
2.	Test Receiver	ESU26	100235	R&S	2016-03-02	1 Year
3.	EMI Antenna	3115	6914	ETS-Lindgren	2016-12-15	3 Years
4.	Test Receiver for Conducted Emission	ESCI 7	100948	R&S	2016-07-07	1 Year
5.	LISN	ENV216	101200	R&S	2016-07-07	1 Year
6.	Universal Radio Communication Tester	CMU200	109914	R&S	2016-03-26	1 Year
7.	PC	OPTIPLEX 380	2X1YV2X	Dell	/	/
8.	Printer	P160dn	VNC3L52122	HP	/	/

## ANNEX A: MEASUREMENT RESULTS

### A.1 Radiated Emission

#### Reference

FCC: CFR Part 15.109(a).

#### A.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (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 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.

#### A.1.2 EUT Operating Mode:

The MS is operating in the charging mode.

For the charging mode, the EUT is keeping on playing MP3 file.

#### A.1.3 Measurement Limit

Frequency range (MHz)	Field strength limit ( $\mu$ V/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.

#### A.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/1MHz	15	Peak, Average

#### A.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:

$$\text{Result} = P_{\text{Mea}} + A_{\text{RPL}} = P_{\text{Mea}} + G_A + G_{\text{PL}}$$

Where

$G_A$ : Antenna factor of receive antenna

$G_{\text{PL}}$ : Path Loss

$P_{Mea}$ : Measurement result on receiver.  
Measurement uncertainty (worst case):  $U = 5.0 \text{ dB}$ ,  $k=2$ .

**Measurement results for Set.2:****Charging Mode/Average detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17889.500	51.2	-18.5	45.6	24.100	H
17892.900	51.0	-18.5	45.6	23.900	V
17940.500	50.8	-17.7	45.6	22.900	V
17984.700	50.6	-17.7	45.6	22.700	H
17956.650	50.5	-17.7	45.6	22.600	H
17690.600	50.4	-18.9	45.6	23.700	H

**Charging Mode/Peak detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17971.100	61.1	-17.7	45.6	33.200	V
17906.500	60.9	-18.5	45.6	33.800	V
17977.900	60.9	-17.7	45.6	33.000	H
17995.750	60.9	-17.7	45.6	33.000	V
17690.600	60.8	-18.9	45.6	34.100	V
17781.550	60.5	-18.5	45.6	33.400	H

**Measurement results for Set.3:****Charging Mode/Average detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17948.150	50.6	-17.7	45.6	22.700	H
17908.200	50.4	-18.5	45.6	23.300	V
17930.300	50.4	-17.7	45.6	22.500	H
17932.850	50.4	-17.7	45.6	22.500	V
17859.750	50.3	-18.5	45.6	23.200	V
17867.400	50.3	-18.5	45.6	23.200	H

**Charging Mode/Peak detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17994.050	61.0	-17.7	45.6	33.100	V
17686.350	60.8	-18.9	45.6	34.100	H
17450.050	60.8	-19.2	41.5	38.500	H
17988.950	60.5	-17.7	45.6	32.600	V
17829.150	60.3	-18.5	45.6	33.200	V
17982.150	60.3	-17.7	45.6	32.400	V

**Measurement results for Set.4:****Charging Mode/Average detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17958.350	50.5	-17.7	45.6	22.600	V
17953.250	50.5	-17.7	45.6	22.600	H
17943.900	50.5	-17.7	45.6	22.600	V
17993.200	50.4	-17.7	45.6	22.500	V
17939.650	50.4	-17.7	45.6	22.500	H
17988.950	50.3	-17.7	45.6	22.400	H

**Charging Mode/Peak detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17973.650	60.7	-17.7	45.6	32.800	H
17937.100	60.7	-17.7	45.6	32.800	V
17910.750	60.7	-18.5	45.6	33.600	V
17888.650	60.7	-18.5	45.6	33.600	H
17965.150	60.5	-17.7	45.6	32.600	V
17762.000	60.5	-18.5	45.6	33.400	H

**Measurement results for Set.5:****Charging Mode/Average detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17960.050	51.2	-17.7	45.6	23.300	V
17926.050	51.0	-17.7	45.6	23.100	V
17905.650	50.9	-18.5	45.6	23.800	H
17970.250	50.6	-17.7	45.6	22.700	V
17933.700	50.5	-17.7	45.6	22.600	V
17832.550	50.5	-18.5	45.6	23.400	H

**Charging Mode/Peak detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17904.800	62.4	-18.5	45.6	35.300	V
17967.700	61.9	-17.7	45.6	34.000	H
17958.350	61.8	-17.7	45.6	33.900	H
17992.350	61.5	-17.7	45.6	33.600	V
17898.850	61.4	-18.5	45.6	34.300	V
17800.250	61.1	-18.5	45.6	34.000	H

**Measurement results for Set.6:****USB Mode/Average detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17949.000	50.7	-17.7	45.6	22.800	V
17964.300	50.3	-17.7	45.6	22.400	H
17988.100	50.3	-17.7	45.6	22.400	V
17880.150	50.3	-18.5	45.6	23.200	H
17903.100	50.3	-18.5	45.6	23.200	V
17828.300	50.2	-18.5	45.6	23.100	V

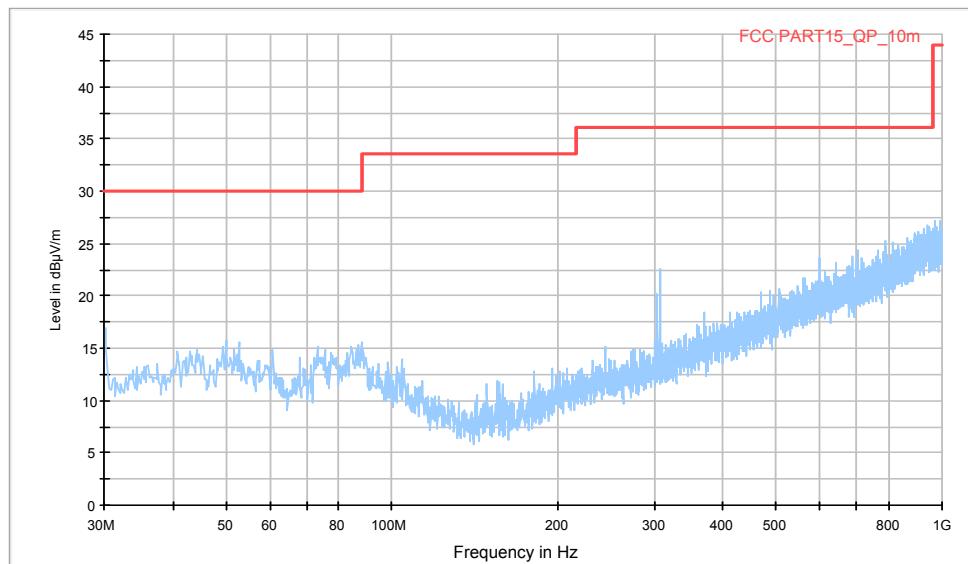
**USB Mode/Peak detector**

Frequency(MHz)	Result(dB $\mu$ V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dB $\mu$ V)	Polarity
17456.850	61.2	-19.2	41.5	38.900	H
17964.300	60.9	-17.7	45.6	33.000	V
17842.750	60.7	-18.5	45.6	33.600	V
17784.950	60.7	-18.5	45.6	33.600	H
17949.000	60.6	-17.7	45.6	32.700	V
17865.700	60.6	-18.5	45.6	33.500	H

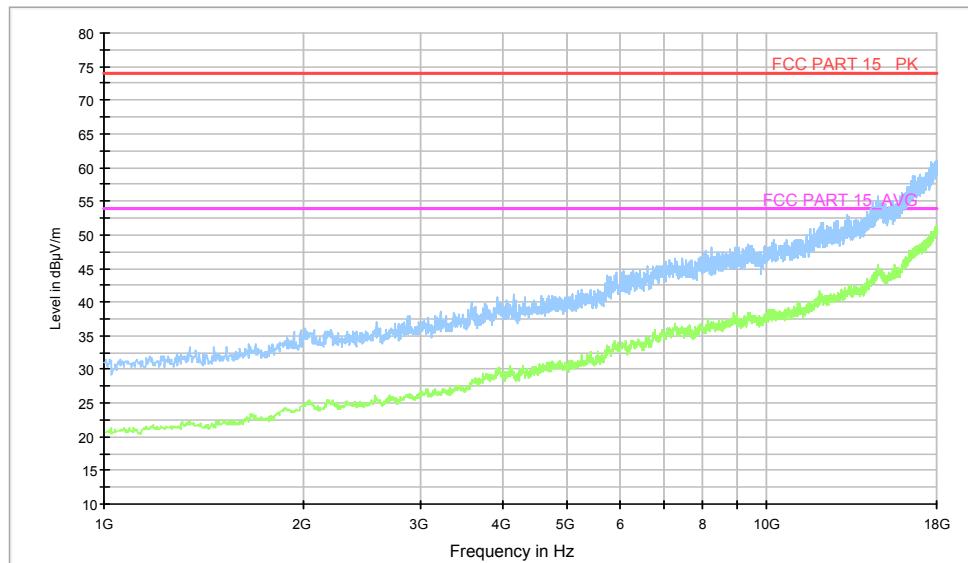
Note: The measurement results of Set.2, Set.3, Set.4, Set.5 and Set.6 showed here are worst cases of the combinations of different batteries and USB cables.

**Charging Mode, Set.2**

Normal RE\_30M-1GHz\_10m

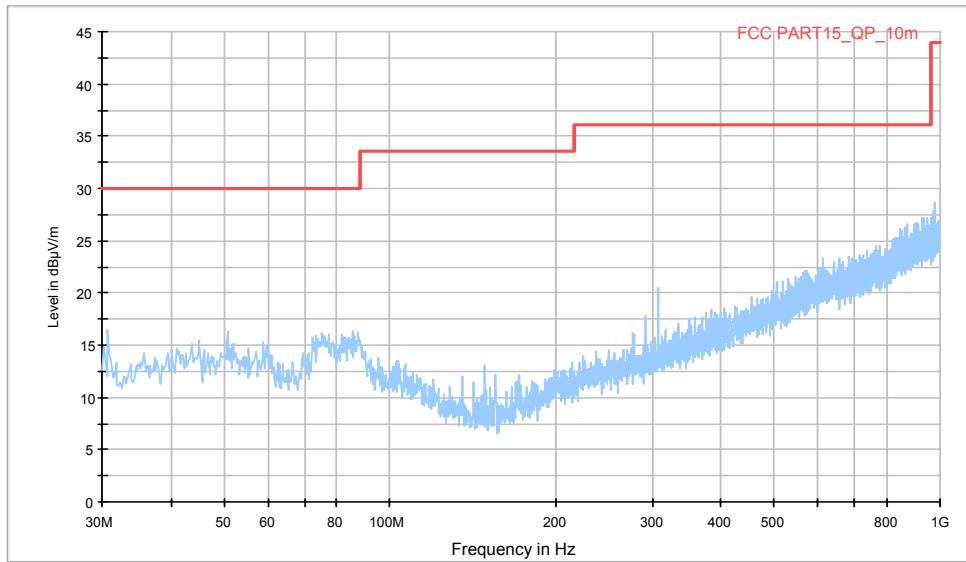
**Figure A.1 Radiated Emission from 30MHz to 1GHz**

Normal RE\_1G-18GHz

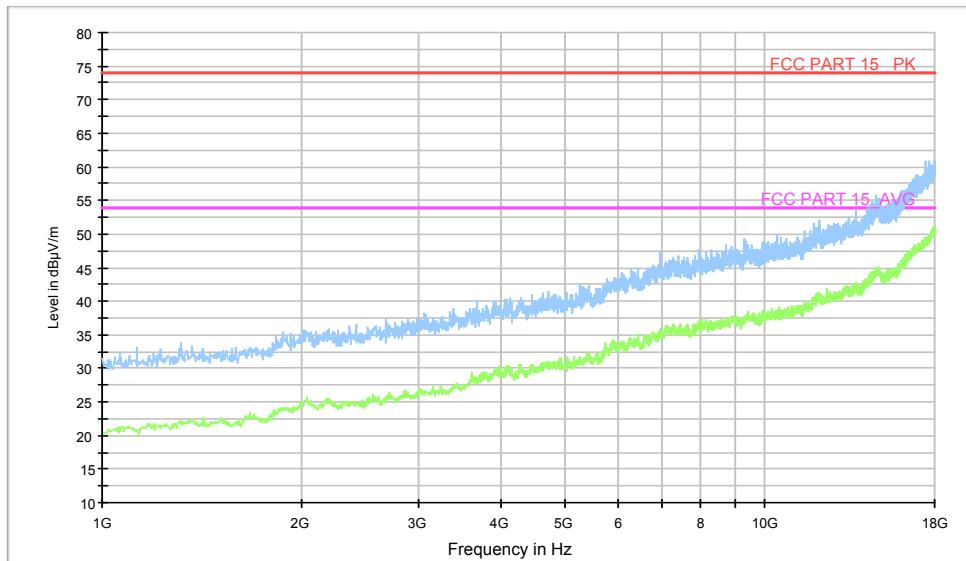
**Figure A.2 Radiated Emission from 1GHz to 18GHz**

**Charging Mode, Set.3**

Normal RE\_30M-1GHz\_10m

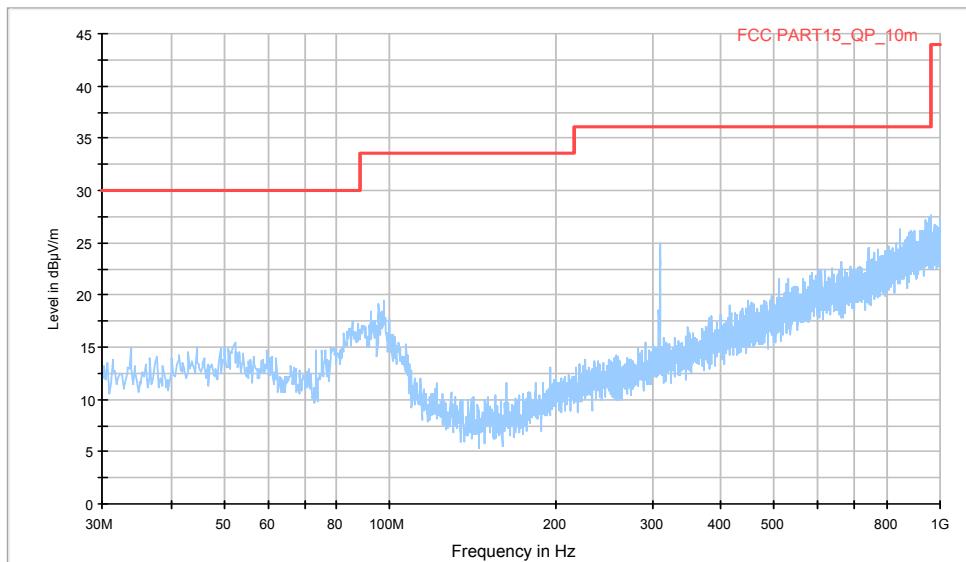
**Figure A.3 Radiated Emission from 30MHz to 1GHz**

Normal RE\_1G-18GHz

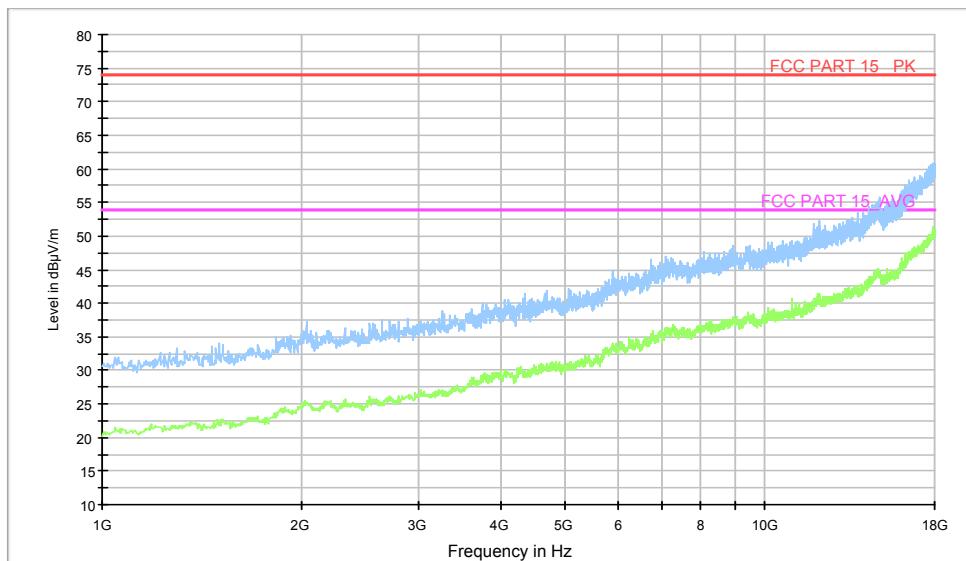
**Figure A.4 Radiated Emission from 1GHz to 18GHz**

**Charging Mode, Set.4**

Normal RE\_30M-1GHz\_10m

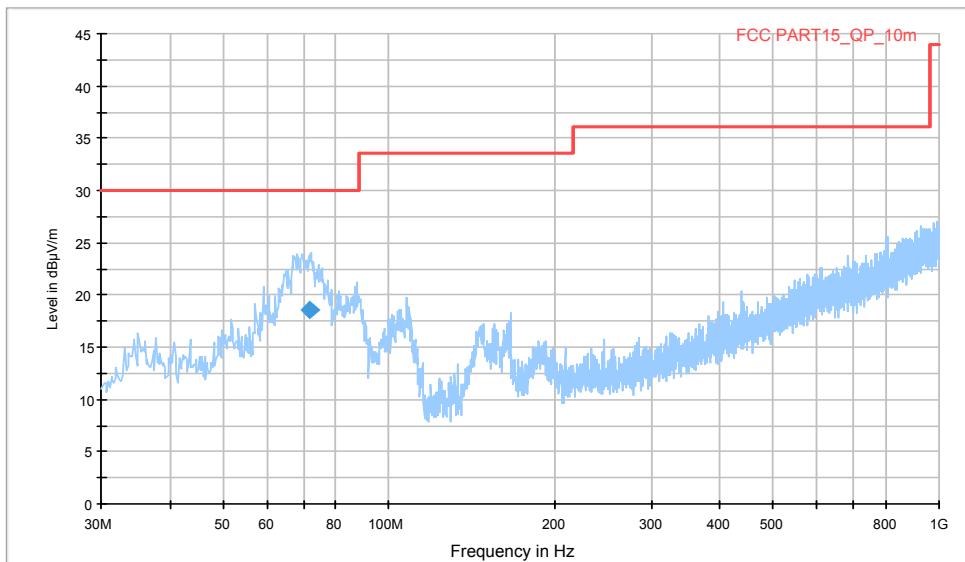
**Figure A.5 Radiated Emission from 30MHz to 1GHz**

Normal RE\_1G-18GHz

**Figure A.6 Radiated Emission from 1GHz to 18GHz**

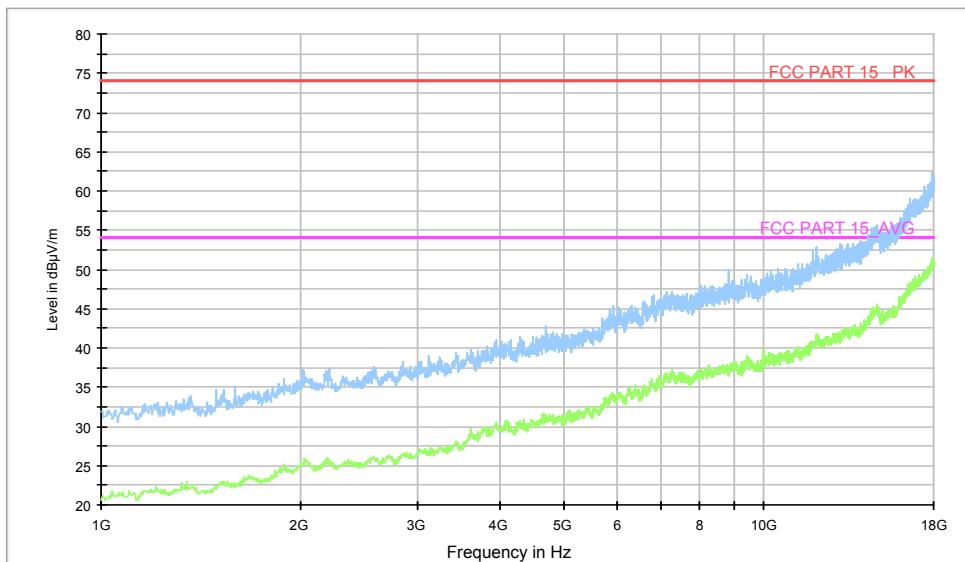
**Charging Mode, Set.5**

Normal RE\_30M-1GHz\_10m


**Figure A.7 Radiated Emission from 30MHz to 1GHz**
**Final Result 1**

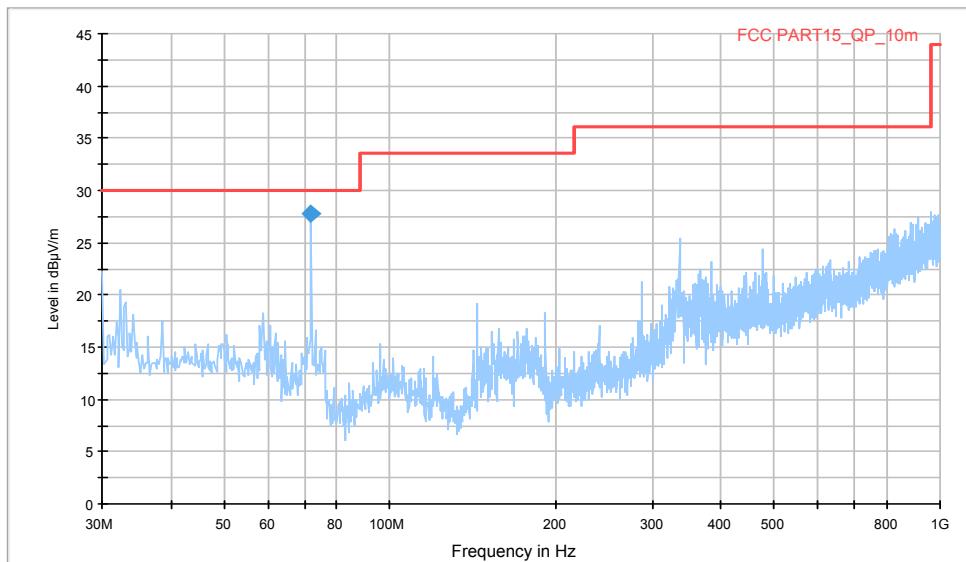
Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V/m)
72.063500	18.6	384.0	V	0.0	-15.8	11.4	30.0

Normal RE\_1G-18GHz


**Figure A.8 Radiated Emission from 1GHz to 18GHz**

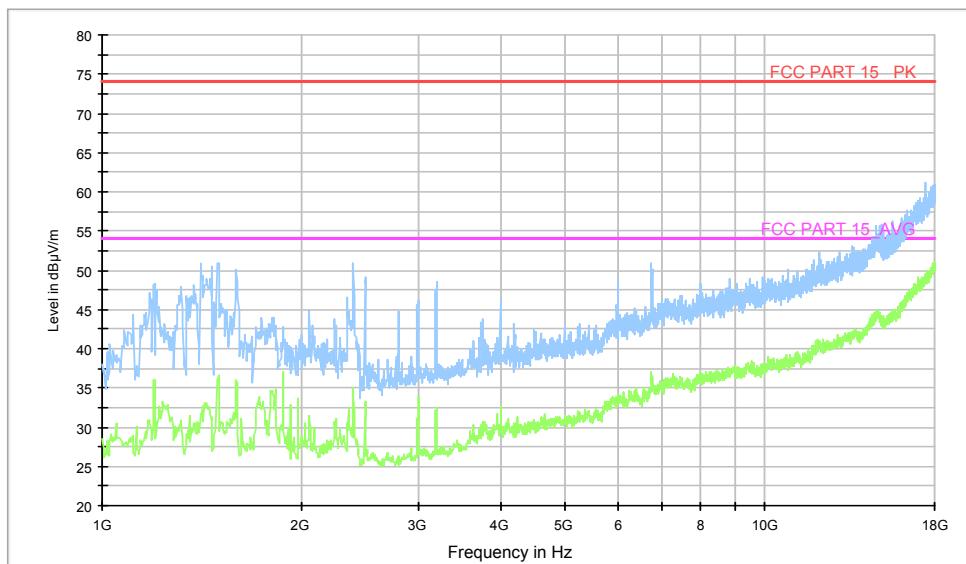
**USB Mode, Set.6**

Normal RE\_30M-1GHz\_10m


**Figure A.9 Radiated Emission from 30MHz to 1GHz**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V/m)
72.001000	27.7	125.0	V	210.0	-15.8	2.3	30.0

Normal RE\_1G-18GHz


**Figure A.10 Radiated Emission from 1GHz to 18GHz**

## A.2 Conducted Emission

### Reference

FCC: CFR Part 15.107(a).

#### A.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.

#### A.2.2 EUT Operating Mode

The MS is operating in the USB mode and charging mode.

For the charging mode, the EUT is keeping on playing MP3 file.

#### A.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	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

#### A.2.4 Test Condition in charging mode

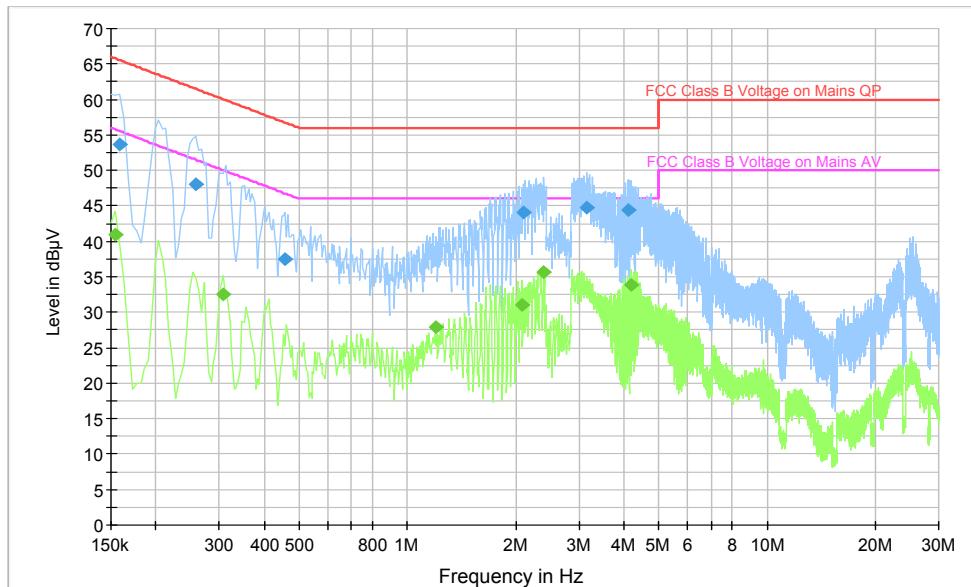
Voltage (V)	Frequency (Hz)
120	60

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

### A.2.5 Measurement Results

Measurement uncertainty:  $U= 2.7 \text{ dB}$ ,  $k=2$ .

#### Charging Mode, Set.2



**Figure A.11 Conducted Emission**

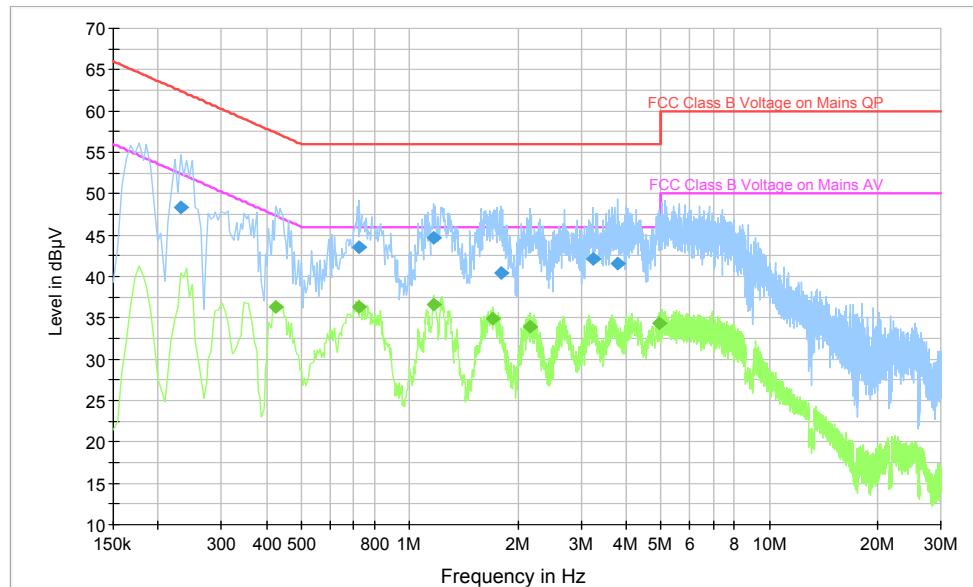
#### Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.159000	53.7	L1	19.9	11.8	65.5
0.258000	48.0	L1	19.8	13.5	61.5
0.456000	37.5	L1	19.9	19.2	56.8
2.098500	44.1	L1	19.6	11.9	56.0
3.151500	44.7	L1	19.3	11.3	56.0
4.101000	44.4	L1	19.6	11.6	56.0

#### Final Result 2

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154500	40.9	L1	20.0	14.8	55.8
0.307500	32.5	N	19.8	17.5	50.0
1.198500	27.9	L1	19.7	18.1	46.0
2.076000	31.0	L1	19.7	15.0	46.0
2.400000	35.7	L1	19.2	10.3	46.0
4.209000	33.9	L1	19.6	12.1	46.0

Note: The measurement results showed here are worst cases of the combinations of different batteries and USB cables.

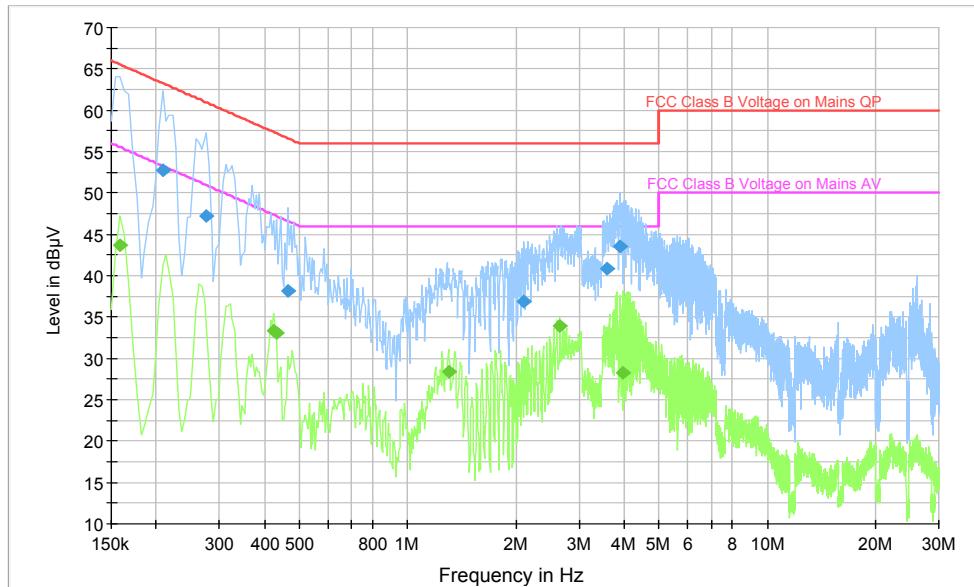
**Charging Mode, Set.3**

**Figure A.12 Conducted Emission**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.231000	48.4	L1	19.8	14.0	62.4
0.726000	43.5	L1	19.8	12.5	56.0
1.167000	44.7	L1	19.7	11.3	56.0
1.792500	40.4	N	19.7	15.6	56.0
3.228000	42.1	L1	19.3	13.9	56.0
3.777000	41.5	L1	19.5	14.5	56.0

**Final Result 2**

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.424500	36.3	N	19.9	11.1	47.4
0.726000	36.3	L1	19.8	9.7	46.0
1.167000	36.5	L1	19.7	9.5	46.0
1.707000	34.9	L1	19.7	11.1	46.0
2.170500	33.9	L1	19.4	12.1	46.0
4.965000	34.3	L1	19.6	11.7	46.0

Note: The measurement results showed here are worst cases of the combinations of different batteries and USB cables.

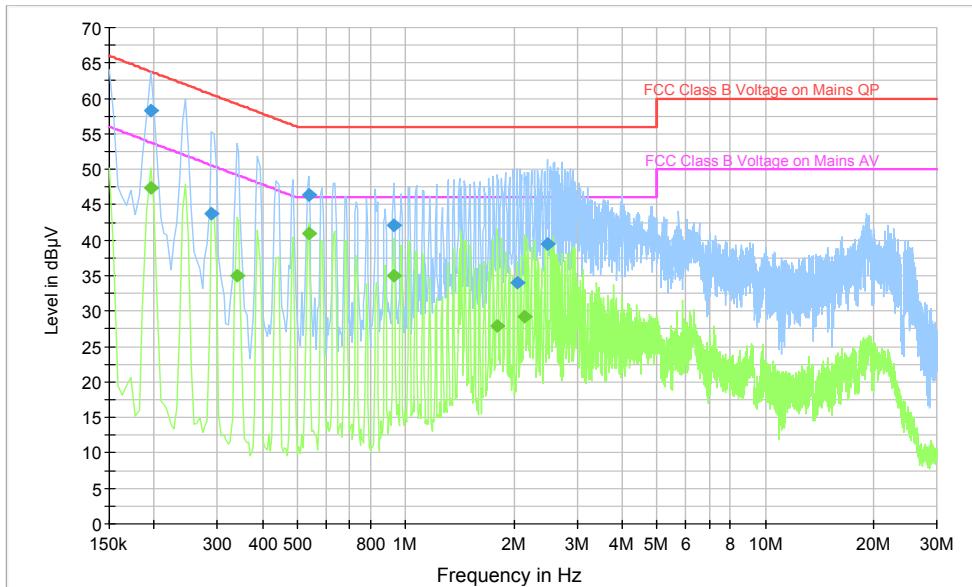
**Charging Mode, Set.4**

**Figure A.13 Conducted Emission**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.208500	52.7	L1	19.8	10.5	63.3
0.276000	47.2	L1	19.8	13.8	60.9
0.465000	38.1	L1	19.9	18.5	56.6
2.107500	36.9	L1	19.6	19.1	56.0
3.579000	40.8	L1	19.5	15.2	56.0
3.894000	43.5	L1	19.5	12.5	56.0

**Final Result 2**

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.159000	43.7	L1	19.9	11.8	55.5
0.424500	33.4	N	19.9	14.0	47.4
0.433500	33.0	N	19.9	14.2	47.2
1.297500	28.4	N	19.7	17.6	46.0
2.652000	33.9	L1	19.4	12.1	46.0
3.952500	28.2	L1	19.5	17.8	46.0

Note: The measurement results showed here are worst cases of the combinations of different batteries and USB cables.

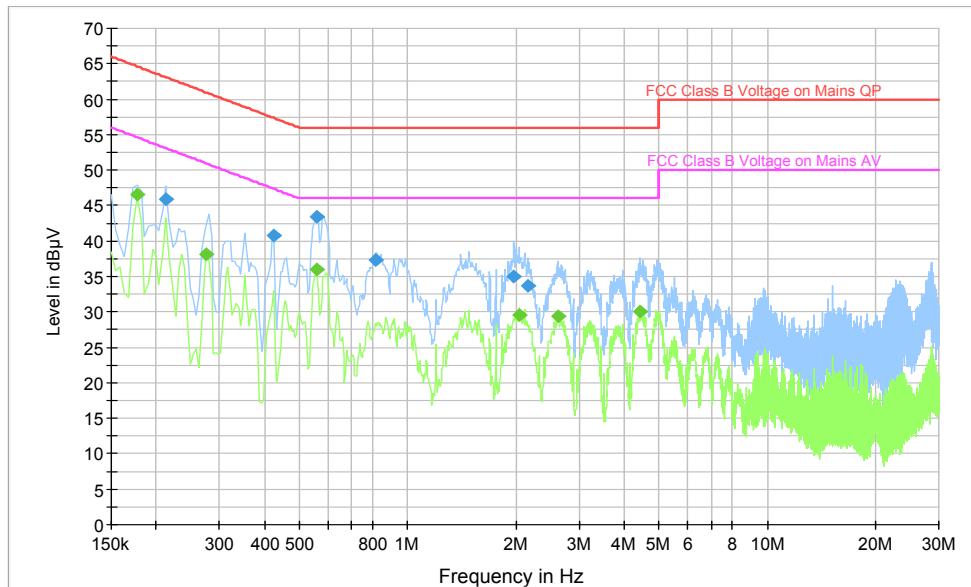
**Charging Mode, Set.5**

**Figure A.14 Conducted Emission**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.195000	58.3	L1	19.8	5.5	63.8
0.289500	43.8	L1	19.8	16.7	60.5
0.537000	46.4	L1	19.9	9.6	56.0
0.928500	42.2	L1	19.8	13.8	56.0
2.044500	34.0	L1	19.7	22.0	56.0
2.476500	39.4	N	19.0	16.6	56.0

**Final Result 2**

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.195000	47.3	L1	19.8	6.5	53.8
0.339000	35.1	N	19.9	14.2	49.2
0.537000	41.0	L1	19.9	5.0	46.0
0.928500	35.0	L1	19.8	11.0	46.0
1.801500	27.9	L1	19.7	18.1	46.0
2.139000	29.2	L1	19.5	16.8	46.0

Note: The measurement results showed here are worst cases of the combinations of different batteries and USB cables.

**USB Mode, Set.6**

**Figure A.15 Conducted Emission**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.213000	45.9	N	19.8	17.2	63.1
0.424500	40.8	L1	19.9	16.6	57.4
0.559500	43.4	L1	19.9	12.6	56.0
0.816000	37.2	N	19.8	18.8	56.0
1.977000	35.1	L1	19.7	20.9	56.0
2.152500	33.6	L1	19.5	22.4	56.0

**Final Result 2**

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	46.5	N	19.8	8.1	54.6
0.276000	38.1	N	19.8	12.8	50.9
0.559500	35.9	N	19.9	10.1	46.0
2.044500	29.5	L1	19.7	16.5	46.0
2.611500	29.3	N	19.2	16.7	46.0
4.443000	30.1	N	19.6	15.9	46.0

Note: The measurement results showed here are worst cases of the combinations of different batteries and USB cables.

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