



# TEST REPORT

## No. I17Z60687-EMC01

for

**TCL Communication Ltd.**

**LTE / UMTS / GSM mobile phone**

**Model Name: 5085O**

**FCC ID: 2ACCJH077**

with

**Hardware Version: PIO1**

**Software Version: 7JACUD**

**Issued Date: 2017-05-22**

**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: [cttl\\_terminals@catr.cn](mailto:cttl_terminals@catr.cn), website: [www.chinattl.com](http://www.chinattl.com)



## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I17Z60687-EMC01	Rev.0	1 <sup>st</sup> edition	2017-05-22

## **CONTENTS**

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

## **1. Test Laboratory**

### **1.1. Testing Location**

**Location BDA: CTTL(kangding Road)**

Address: No. A18, Kangding Road, Yizhuang, Beijing,  
P. R. China 100176

### **1.2. Testing Environment**

Normal Temperature: 15-35℃

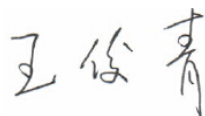
Relative Humidity: 20-75%

### **1.3. Project data**

Testing Start Date: 2017-04-19

Testing End Date: 2017-04-27

### **1.4. Signature**



---

**Wang Junqing**

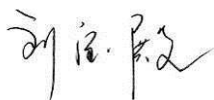
**(Prepared this test report)**



---

**Zhang Ying**

**(Reviewed this test report)**



---

**Liu Baodian**

**Deputy Director of the laboratory**

**(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: P. R. China  
Contact Person: Gong Zhizhou  
Contact Email: zhizhou.gong@tcl.com  
Telephone: 0086-21-31363544  
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: P. R. China  
Contact Person: Gong Zhizhou  
Contact Email: zhizhou.gong@tcl.com  
Telephone: 0086-21-31363544  
Fax: 0086-21-61460602

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

#### 3.1. About EUT

Description	LTE / UMTS / GSM mobile phone
Model Name	5085O
FCC ID	2ACCJH077
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	\	PIO1	7JACUD

\*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	/	/
AE3	Charger	/	/
AE11	USB Cable	/	/
AE12	USB Cable	/	/
AE13	Back cover2	/	/
AE14	Back cover3	/	/
AE15	Back cover4	/	/
AE16	USB Cable	/	/

##### AE1

Model	TLp027AJ
SN	CAC2710010CJ
Manufacturer	COSLIGHT
Capacitance	2710 mAh
Nominal voltage	/

##### AE3

Model	CBA0058AGAD2
Manufacturer	TENPAO
Length of cable	/

##### AE11

Model	CDA0000078CF
Manufacturer	LUXSHARE
Length of cable	98cm

##### AE12

Model	CDA0000104CF
Manufacturer	LUXSHARE
Length of cable	98cm

**AE13**

Model SAA29Q00A10C/SAA29Q00C10C  
Manufacturer TCL

**AE14**

Model SAA29R00A10C  
Manufacturer TCL

**AE15**

Model SAA29P00A10C  
Manufacturer TCL

**AE16**

Model CDA0000103CF  
Manufacturer LUXSHARE  
Length of cable /

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

Note: The USB cables are shielded.

### 3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.17	EUT1+ AE1+ AE3+ AE11/AE12	Charger
Set.18	EUT1+ AE1+ AE11/AE12	USB
Set.19	EUT1+ AE1+ AE3+ AE11/AE12	Back Cover2(AE13)
Set.20	EUT1+ AE1+ AE3+ AE11/AE12	Back Cover3(AE14)
Set.21	EUT1+ AE1+ AE3+ AE11/AE12	Back Cover4(AE15)

The LTE / UMTS / GSM mobile phone 5085O manufactured by TCL Communication Ltd. is a variant model based on 5085C for conformance test. According to the declaration of changes, the results are inherited from the initial model. The report number of initial model is I17Z60308-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	2015 Edition
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. 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	< 4 Ω
Normalised site attenuation (NSA)	< ±4 dB, 10 m distance
Site voltage standing-wave ratio ( $S_{VSWR}$ )	Between 0 and 6 dB, from 1GHz to 6GHz
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

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

## 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATI ON INTERVAL
1	Test Receiver	ESU26	100376	R&S	2017-11-30	1 year
2	Test Receiver	ESCI 7	100948	R&S	2017-07-05	1 year
3	Universal Radio Communication Tester	CMW500	127406	R&S	2018-02-19	1 year
4	Universal Radio Communication Tester	CMW500	155415	R&S	2018-02-15	1 year
5	LISN	ESH2-Z5	829991/012	R&S	2018-04-10	1 year
6	EMI Antenna	VULB 9163	9163-514	Schwarzbeck	2017-11-24	3 years
7	EMI Antenna	3117	00139065	ETS-Lindgren	2017-09-21	3 years
8	PC	OPTIPLEX 380	2X1YV2X	DELL	N/A	N/A
9	Printer	P1606dn	VNC3L52122	HP	N/A	N/A
10	Keyboard	L100	CN0RH6596589 07ATOI40	DELL	N/A	N/A
11	Mouse	M-UAE119	LZ935220ZRC	Lenovo	N/A	N/A

Test Item	Test Software and Version	Software Vendor	Test operator
Radiated Continuous Emission	EMC32 V9.01	R&S	Yang Fei
Conducted Emission	EMC32 V8.52.0	R&S	Zhang Guowei

## **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 (for 30MHz-1GHz) and 3 meters (for above 1GHz) 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.

#### **A.1.2 EUT Operating Mode:**

The MS is operating in the charging mode. During the test MS is connected to a charger in the case of charging mode.

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

#### **A.1.3 Measurement Limit**

Frequency range (MHz)	Field strength limit ( $\mu\text{V/m}$ )		
	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

$P_{\text{Mea}}$ : Measurement result on receiver.

Measurement uncertainty (worst case): 30MHz-1GHz: 4.86dB, 1GHz-18GHz: 5.26dB,  $k=2$ .

### Measurement results for Set.17:

#### Charging Mode/Average detector

Frequency(MHz)	Result(dB $\mu$ V/m)	$G_{\text{PL}}$ (dB)	$G_A$ (dB/m)	$P_{\text{Mea}}$ (dB $\mu$ V)	Polarity
17808.750	41.5	-23.0	41.0	23.519	V
17804.250	41.4	-23.1	41.0	23.495	V
17812.500	41.3	-23.0	40.9	23.408	V
17791.500	41.3	-23.3	41.0	23.582	H
17801.250	41.3	-23.1	41.0	23.418	H
17803.500	41.2	-23.1	41.0	23.341	V

#### Charging Mode/Peak detector

Frequency(MHz)	Result(dB $\mu$ V/m)	$G_{\text{PL}}$ (dB)	$G_A$ (dB/m)	$P_{\text{Mea}}$ (dB $\mu$ V)	Polarity
17809.500	52.9	-23.0	41.0	34.994	H
17811.000	52.5	-23.0	41.0	34.560	H
17831.250	52.4	-23.3	40.9	34.790	V
17801.250	52.4	-23.1	41.0	34.550	H
17814.000	52.2	-23.1	40.9	34.279	H
17788.500	52.1	-23.3	41.0	34.425	H

Sample calculation: Peak detector, 17805.000MHz

$$\text{Result} = P_{\text{Mea}} (34.425\text{dB}\mu\text{V}) + G_A (41.0\text{dB/m}) + G_{\text{PL}}(-23.3 \text{ dB}) = 52.1\text{dB}\mu\text{V/m}$$

**Measurement results for Set.18:**
**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
17804.250	41.4	-23.1	41.0	23.520	V
17801.250	41.3	-23.1	41.0	23.500	H
17815.500	41.3	-23.1	40.9	23.433	V
17808.000	41.3	-23.0	41.0	23.364	V
17793.750	41.3	-23.2	41.0	23.567	H
17805.000	41.2	-23.1	41.0	23.352	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
17810.250	53.5	-23.0	41.0	35.530	V
17791.500	53.0	-23.3	41.0	35.335	H
17823.000	52.7	-23.2	40.9	34.890	H
17799.000	52.5	-23.2	41.0	34.728	H
17797.500	52.4	-23.2	41.0	34.675	V
17811.000	52.3	-23.0	41.0	34.398	V

Sample calculation: Peak detector, 17811.000MHz

Result =P<sub>Mea</sub> (34.398dB $\mu$ V)+ G<sub>A</sub> (41.0dB/m)+ G<sub>PL</sub>(-23.0 dB) =52.3dB $\mu$ V/m

**Measurement results for Set.19:**
**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
17800.500	41.3	-23.1	41.0	23.484	V
17807.250	41.3	-23.0	41.0	23.342	V
17806.500	41.2	-23.0	41.0	23.334	H
17799.750	41.2	-23.2	41.0	23.404	H
17805.000	41.2	-23.1	41.0	23.313	V
17802.000	41.2	-23.1	41.0	23.346	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
17811.750	53.6	-23.0	41.0	35.663	H
17818.500	52.8	-23.1	40.9	35.007	H
17809.500	52.8	-23.0	41.0	34.872	V
17778.750	52.4	-23.5	41.0	34.962	H
17815.500	52.4	-23.1	40.9	34.520	V
17802.750	52.2	-23.1	41.0	34.300	V

Sample calculation: Peak detector, 17802.750MHz

Result =P<sub>Mea</sub> (34.300dB $\mu$ V)+ G<sub>A</sub> (41.0dB/m)+ G<sub>PL</sub>(-23.1 dB) =52.2dB $\mu$ V/m

**Measurement results for Set.20:**
**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
17806.500	41.4	-23.0	41.0	23.467	V
17803.500	41.3	-23.1	41.0	23.472	V
17799.750	41.3	-23.2	41.0	23.470	V
17792.250	41.2	-23.3	41.0	23.551	H
17815.500	41.2	-23.1	40.9	23.361	H
17800.500	41.2	-23.1	41.0	23.378	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
17820.750	53.0	-23.1	40.9	35.183	V
17827.500	52.7	-23.2	40.9	35.001	H
17800.500	52.7	-23.1	41.0	34.869	V
17808.000	52.6	-23.0	41.0	34.625	H
17869.500	52.5	-23.8	40.9	35.446	H
17814.000	52.5	-23.1	40.9	34.613	V

Sample calculation: Peak detector, 17814.000MHz

Result =P<sub>Mea</sub> (34.613dB $\mu$ V)+ G<sub>A</sub> (40.9dB/m)+ G<sub>PL</sub>(-23.1 dB) =52.5dB $\mu$ V/m

**Measurement results for Set.21:**
**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
17802.000	41.4	-23.1	41.0	23.540	H
17798.250	41.3	-23.2	41.0	23.554	H
17807.250	41.2	-23.0	41.0	23.293	V
17803.500	41.2	-23.1	41.0	23.333	V
17810.250	41.2	-23.0	41.0	23.240	V
17808.750	41.2	-23.0	41.0	23.232	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
17808.750	53.1	-23.0	41.0	35.168	H
17784.750	52.7	-23.4	41.0	35.099	H
17805.750	52.6	-23.1	41.0	34.688	V
17796.000	52.1	-23.2	41.0	34.394	H
17802.000	52.1	-23.1	41.0	34.274	V
17786.250	52.1	-23.4	41.0	34.493	H

Sample calculation: Peak detector, 17786.250MHz

Result =P<sub>Mea</sub> (34.493dB $\mu$ V)+ G<sub>A</sub> (41.0dB/m)+ G<sub>PL</sub>(-23.4 dB) =52.1dB $\mu$ V/m



Charging Mode, Set.17

15B RE 30MHz-1GHz

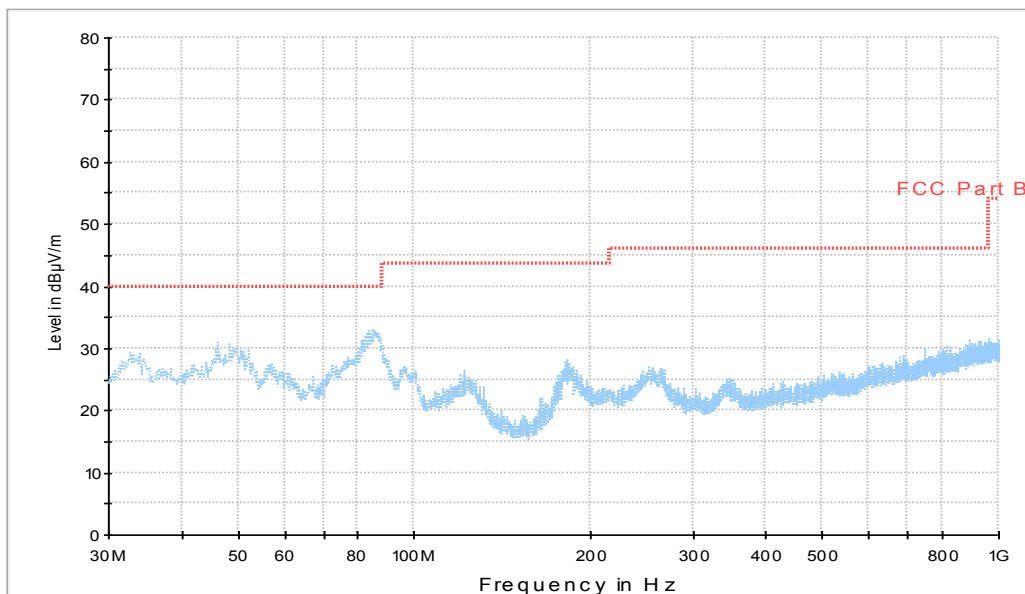


Figure A.1 Radiated Emission from 30MHz to 1GHz

15B RE - 1GHz-3GHz

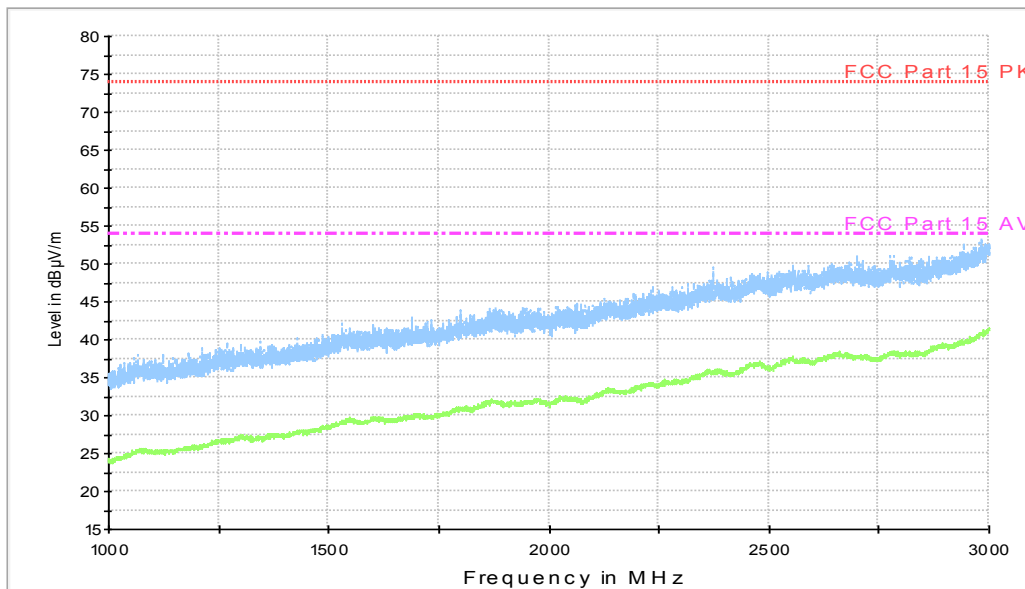
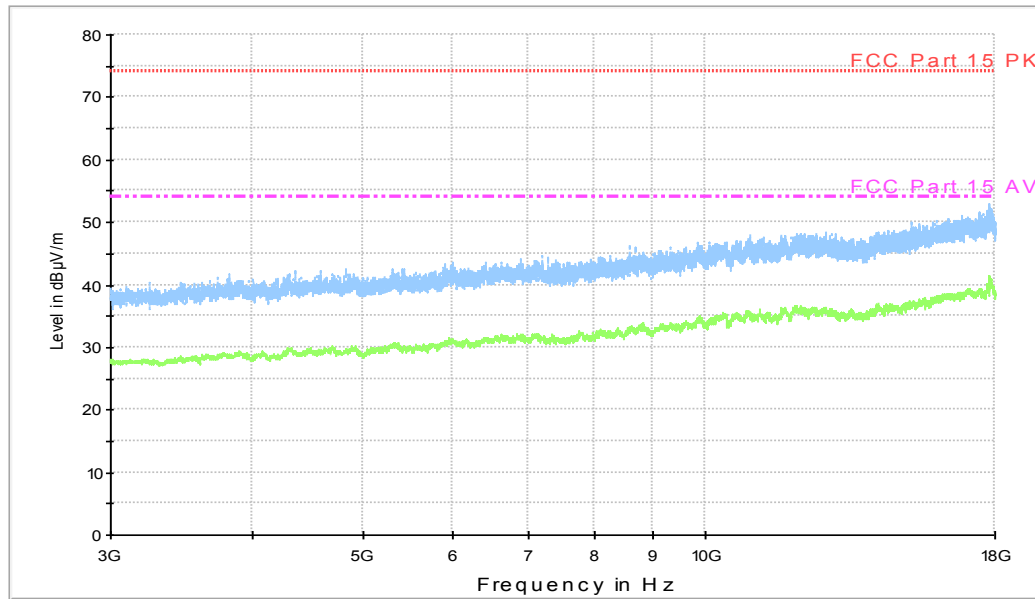


Figure A.2 Radiated Emission from 1GHz to 3GHz

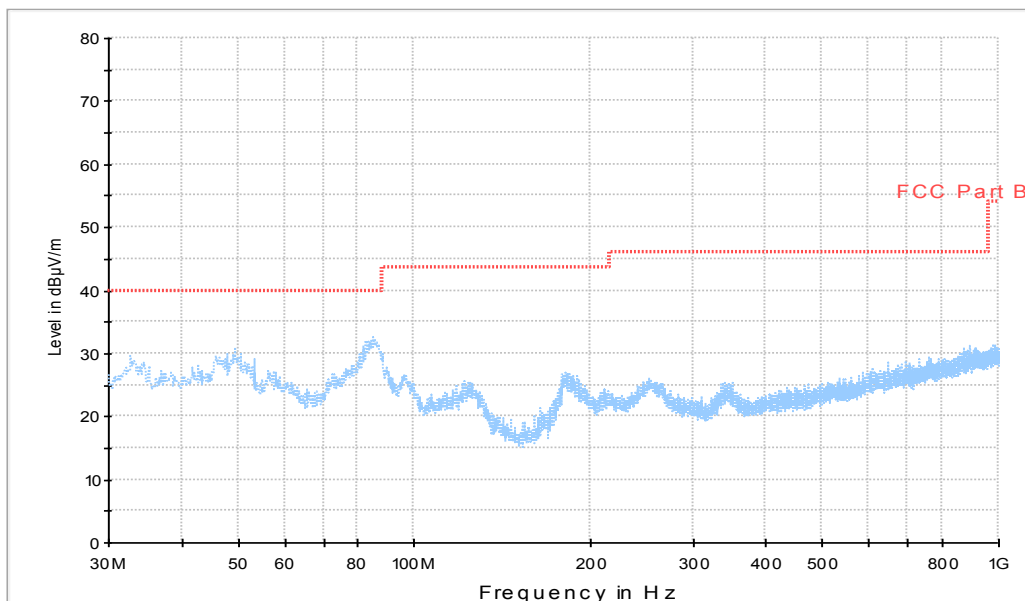
15b RE - 3GHz-18GHz



**Figure A.3 Radiated Emission from 3GHz to 18GHz**

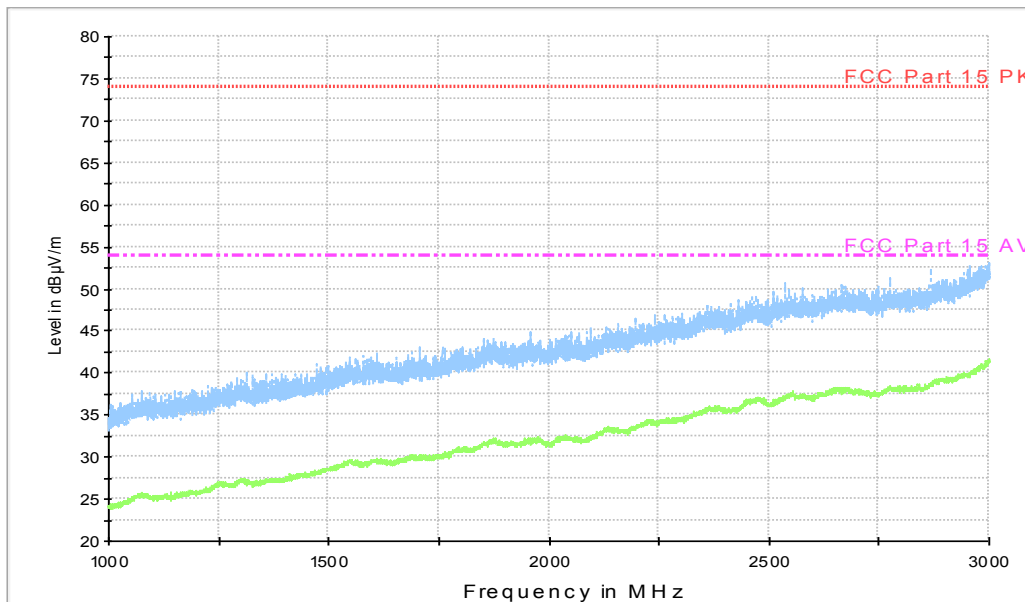
**Charging Mode, Set.18**

15B RE 30MHz-1GHz



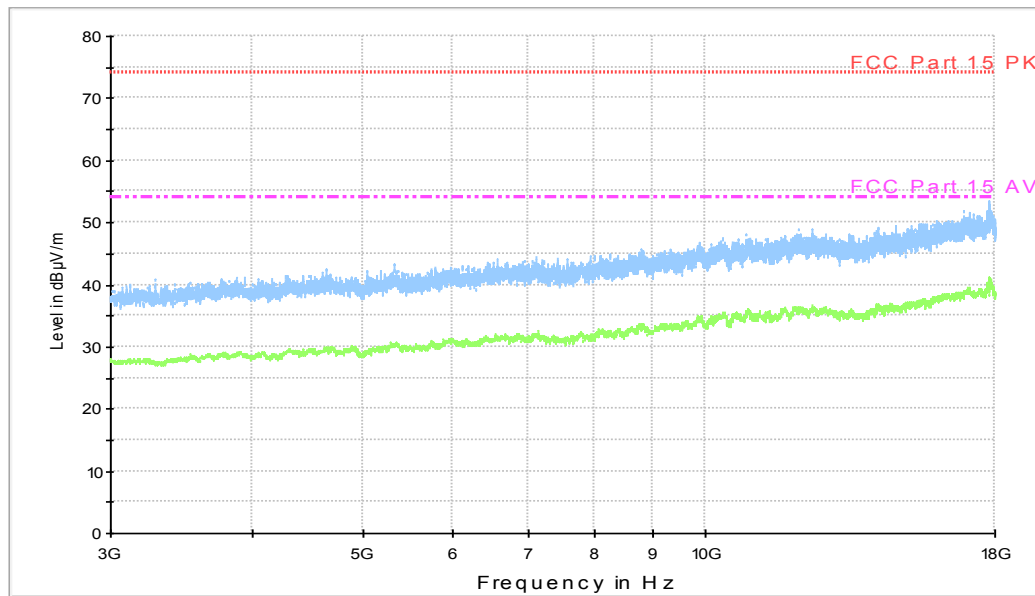
**Figure A.4 Radiated Emission from 30MHz to 1GHz**

15B RE - 1GHz-3GHz



**Figure A.5 Radiated Emission from 1GHz to 3GHz**

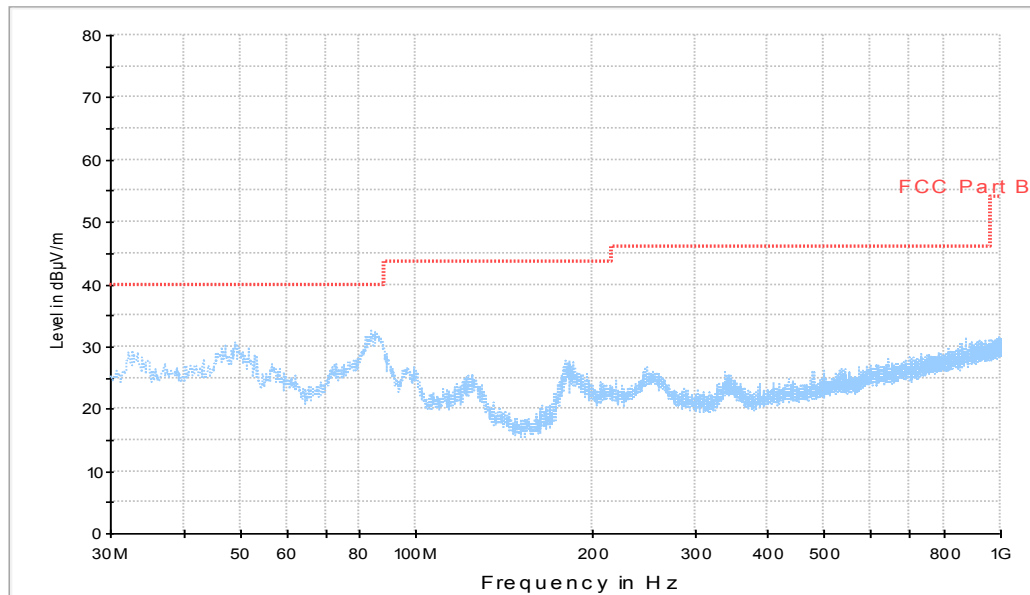
15b RE - 3GHz-18GHz



**Figure A.6 Radiated Emission from 3GHz to 18GHz**

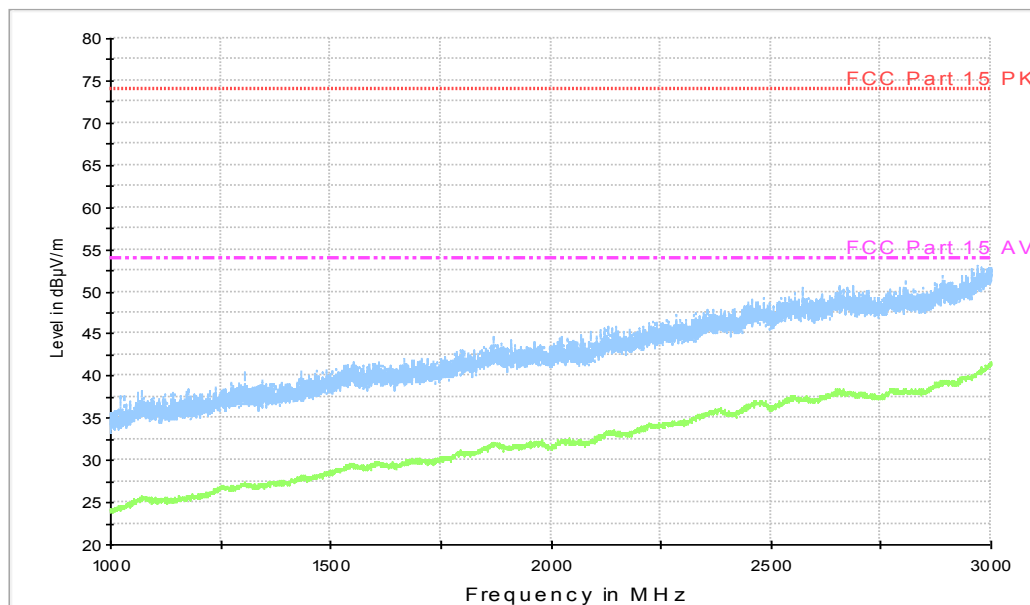
**Charging Mode, Set.19**

15B RE 30MHz-1GHz



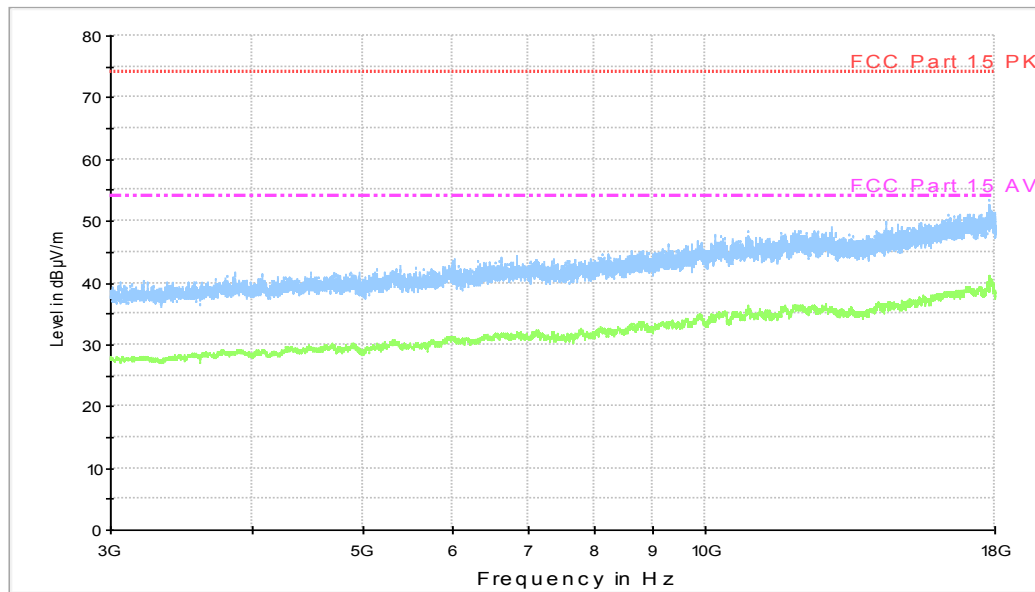
**Figure A.7 Radiated Emission from 30MHz to 1GHz**

15B RE - 1GHz-3GHz



**Figure A.8 Radiated Emission from 1GHz to 3GHz**

15b RE - 3GHz-18GHz



**Figure A.9 Radiated Emission from 3GHz to 18GHz**

Charging Mode, Set.20

15B RE 30MHz-1GHz

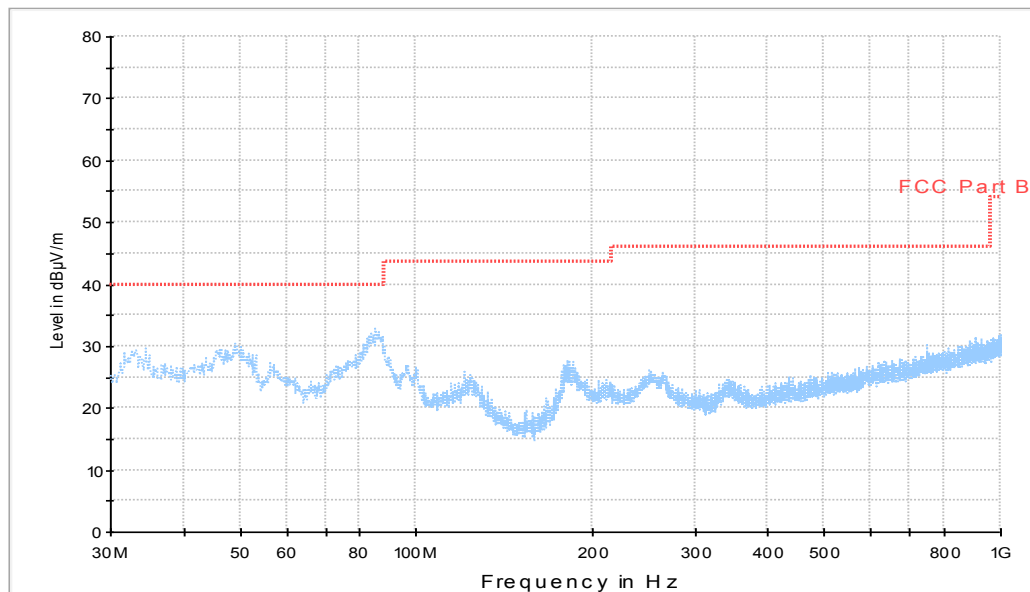


Figure A.10 Radiated Emission from 30MHz to 1GHz

15B RE - 1GHz-3GHz

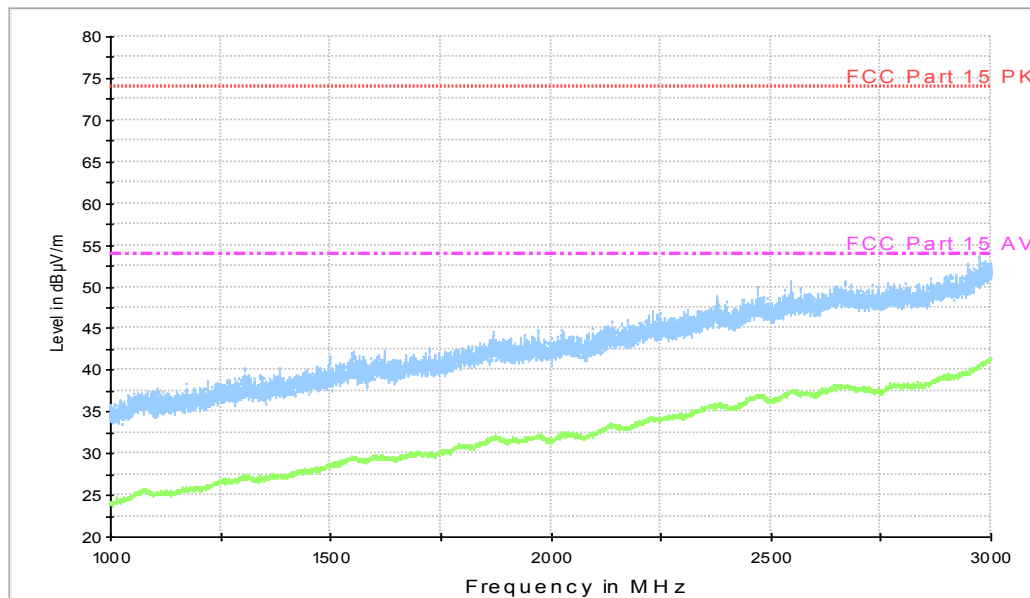
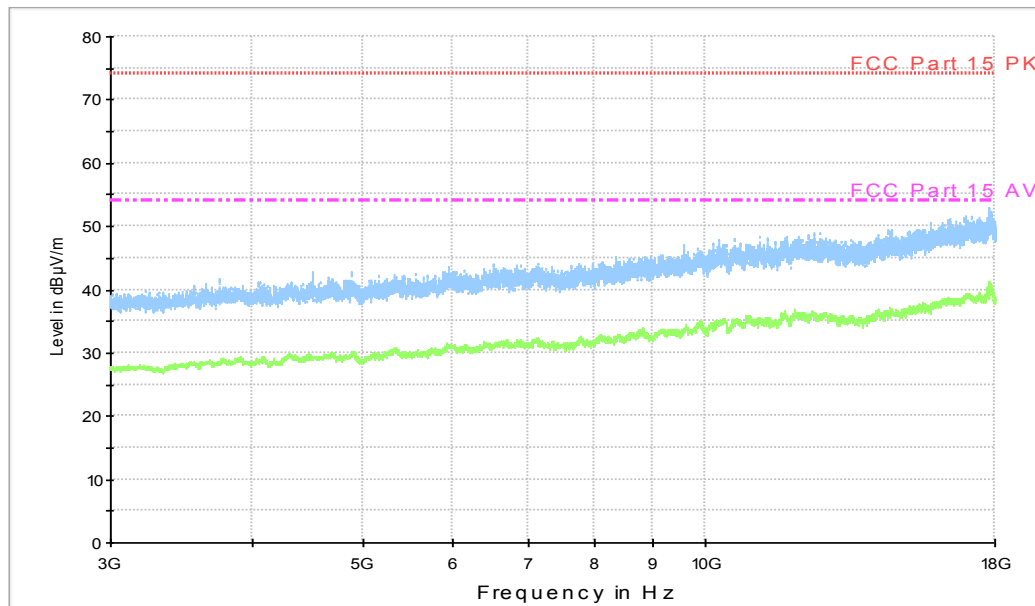


Figure A.11 Radiated Emission from 1GHz to 3GHz

15b RE - 3GHz-18GHz



**Figure A.12 Radiated Emission from 3GHz to 18GHz**



## USB Mode, Set.21

15B RE 30MHz-1GHz

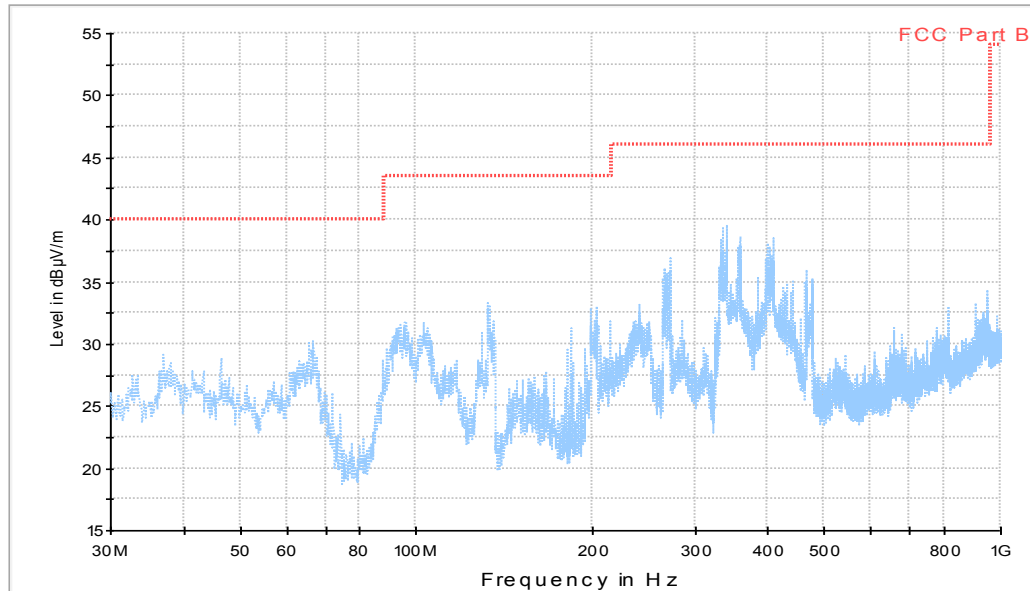


Figure A.13 Radiated Emission from 30MHz to 1GHz

15B RE - 1GHz-3GHz

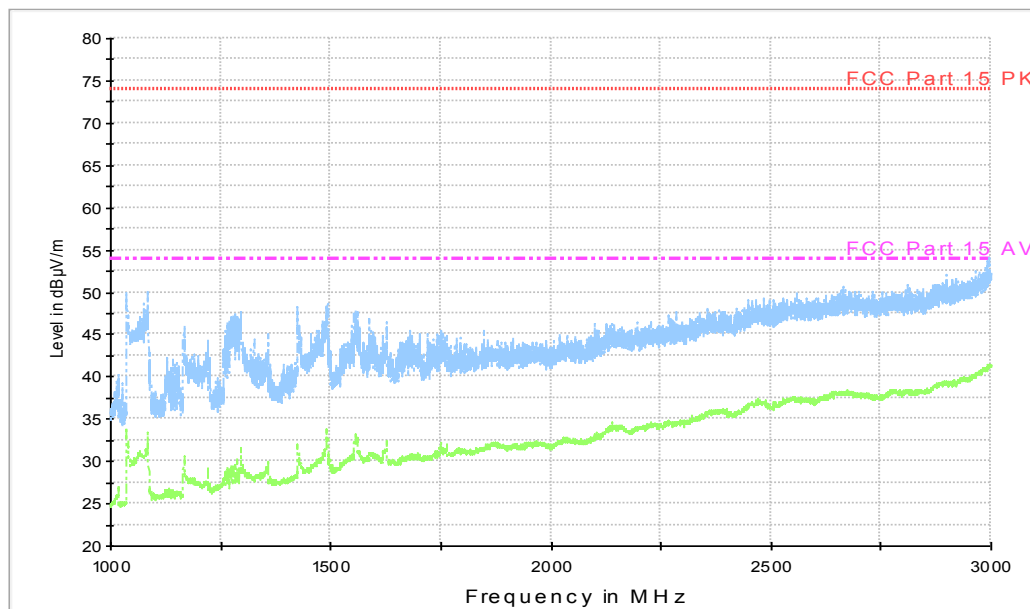
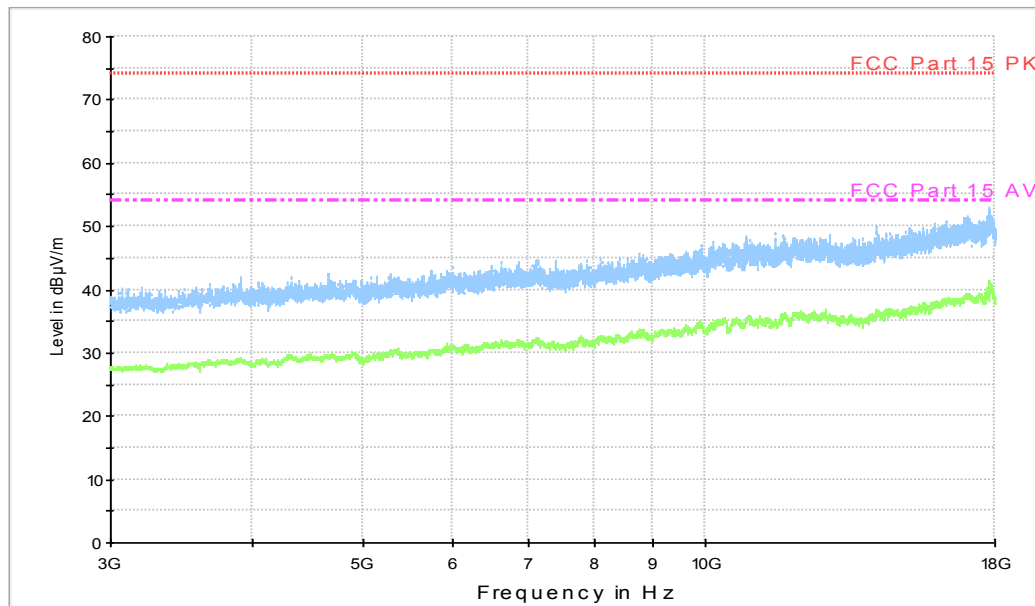


Figure A.14 Radiated Emission from 1GHz to 3GHz

15b RE - 3GHz-18GHz



**Figure A.15 Radiated Emission from 3GHz 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 charging mode. During the test MS is connected to a charger in the case of charging mode.

### 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

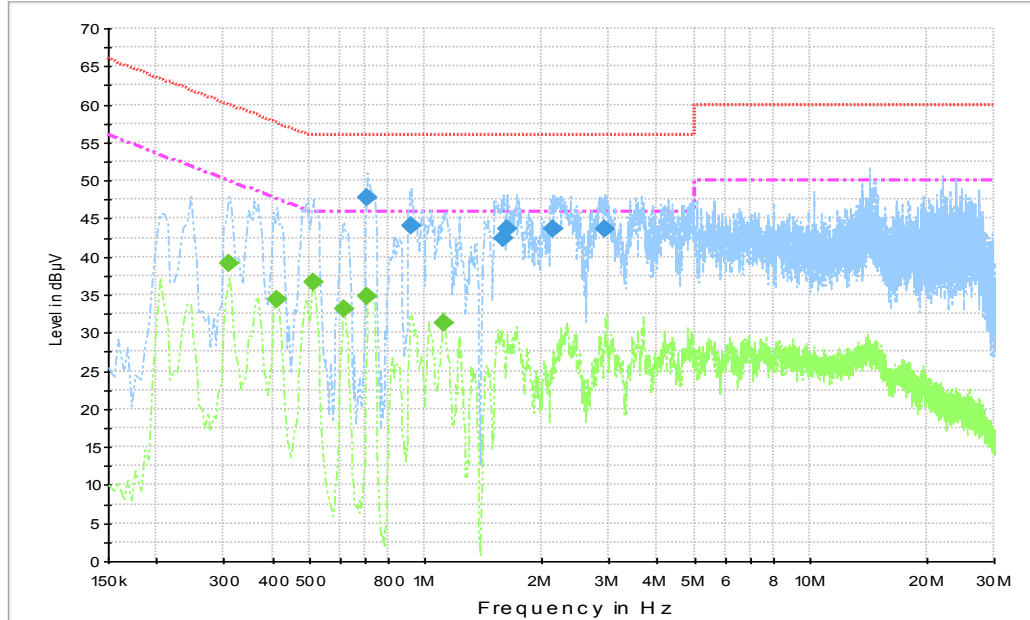
Voltage (V)	Frequency (Hz)
120	60

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

### A.2.5 Measurement Results

Measurement uncertainty:  $U= 3.38\text{dB}$ ,  $k=2$ .

#### Charging Mode, Set.17



**Figure A.16 Conducted Emission**

#### Final Result 1

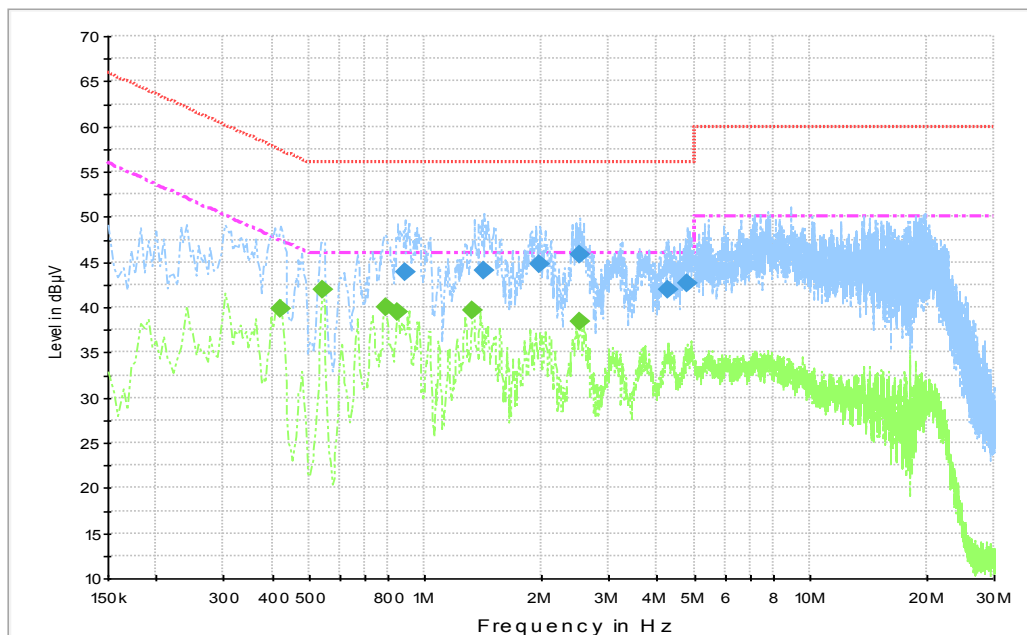
Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.879000	44.7	L1	10.2	11.3	56.0
1.450500	46.1	L1	10.2	9.9	56.0
1.936500	45.1	L1	10.3	10.9	56.0
2.512500	45.1	L1	10.3	10.9	56.0
4.290000	41.7	L1	10.4	14.3	56.0
4.758000	42.8	L1	10.4	13.2	56.0

#### Final Result 2

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.420000	40.4	L1	10.2	7.0	47.4
0.541500	42.1	L1	10.2	3.9	46.0
0.663000	38.1	L1	10.2	7.9	46.0
0.784500	40.9	L1	10.2	5.1	46.0
1.329000	39.7	L1	10.2	6.3	46.0
2.539500	38.2	L1	10.3	7.8	46.0

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

### Charging Mode, Set.18



**Figure A.17 Conducted Emission**

#### Final Result 1

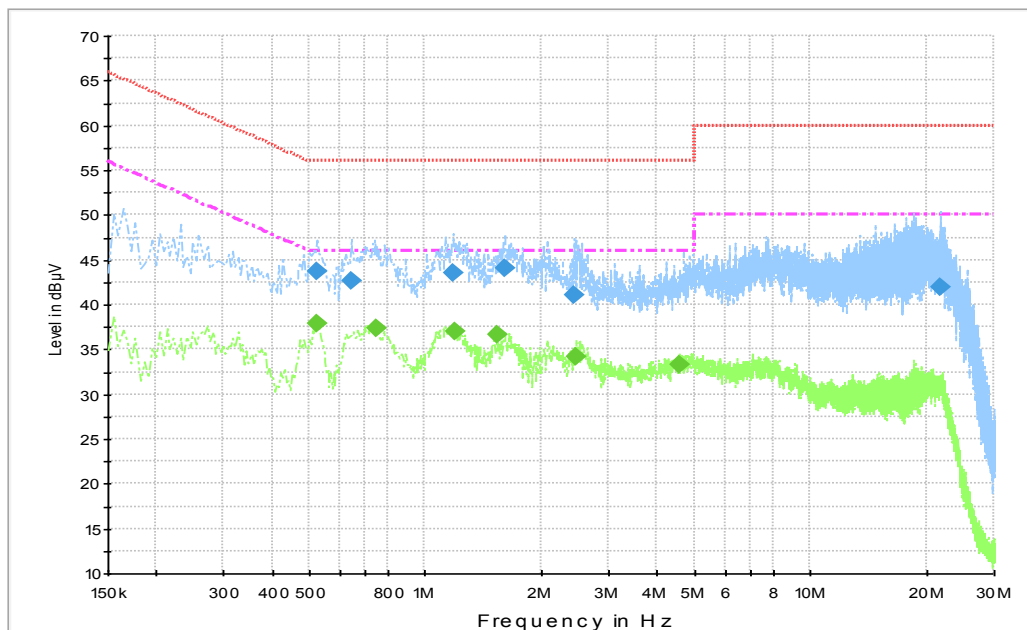
Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.883500	43.8	L1	10.2	12.2	56.0
1.428000	44.1	L1	10.2	11.9	56.0
1.990500	44.8	L1	10.3	11.2	56.0
2.521500	45.8	L1	10.3	10.2	56.0
4.281000	41.9	L1	10.4	14.1	56.0
4.807500	42.6	L1	10.4	13.4	56.0

#### Final Result 2

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.420000	39.8	L1	10.2	7.7	47.4
0.541500	42.0	L1	10.2	4.0	46.0
0.789000	40.0	L1	10.2	6.0	46.0
0.843000	39.5	L1	10.2	6.5	46.0
1.324500	39.6	L1	10.2	6.4	46.0
2.521500	38.4	L1	10.3	7.6	46.0

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

### Charging Mode, Set.19



**Figure A.18 Conducted Emission**

#### Final Result 1

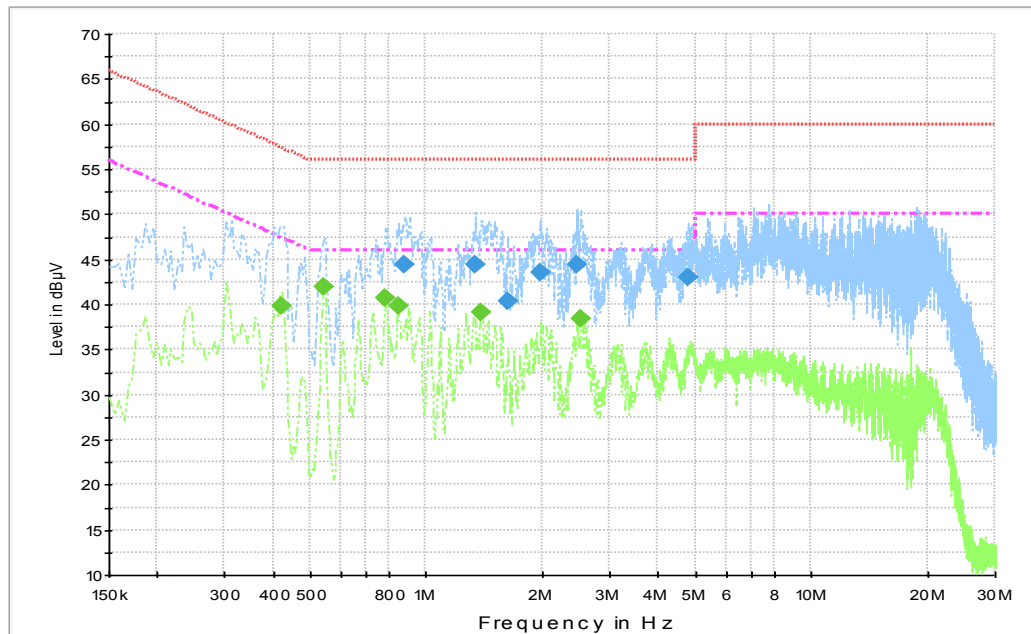
Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.523500	43.6	L1	10.2	12.4	56.0
0.640500	42.7	L1	10.2	13.3	56.0
1.180500	43.5	L1	10.2	12.5	56.0
1.603500	44.1	L1	10.2	11.9	56.0
2.440500	41.1	L1	10.3	14.9	56.0
21.705000	41.9	N	11.0	18.1	60.0

#### Final Result 2

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.523500	37.9	L1	10.2	8.1	46.0
0.748500	37.4	L1	10.2	8.6	46.0
1.189500	37.1	L1	10.2	8.9	46.0
1.545000	36.7	L1	10.2	9.3	46.0
2.458500	34.2	L1	10.3	11.8	46.0
4.551000	33.2	L1	10.4	12.8	46.0

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

### Charging Mode, Set.20



**Figure A.19 Conducted Emission**

#### Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.879000	44.4	L1	10.2	11.6	56.0
1.342500	44.3	L1	10.2	11.7	56.0
1.621500	40.4	N	10.3	15.6	56.0
1.972500	43.6	L1	10.3	12.4	56.0
2.472000	44.3	L1	10.3	11.7	56.0
4.807500	43.0	L1	10.4	13.0	56.0

#### Final Result 2

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.420000	39.8	L1	10.2	7.6	47.4
0.541500	42.0	L1	10.2	4.0	46.0
0.784500	40.8	L1	10.2	5.2	46.0
0.847500	39.7	L1	10.2	6.3	46.0
1.392000	39.1	L1	10.2	6.9	46.0
2.521500	38.5	L1	10.3	7.5	46.0

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

USB Mode, Set.21

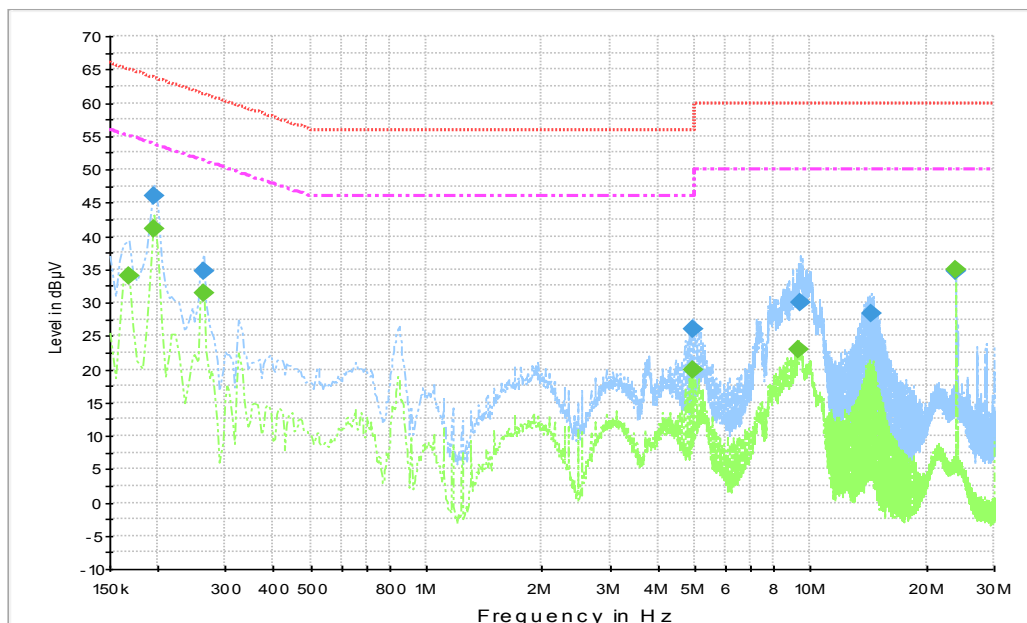


Figure A.20 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.195000	45.9	L1	10.2	17.9	63.8
0.262500	34.6	L1	10.2	26.7	61.4
4.951500	25.9	L1	10.4	30.1	56.0
9.348000	30.0	L1	10.6	30.0	60.0
14.329500	28.5	N	10.8	31.5	60.0
23.968500	34.8	L1	11.3	25.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.168000	33.9	L1	10.2	21.2	55.1
0.195000	41.0	L1	10.2	12.8	53.8
0.262500	31.5	L1	10.2	19.9	51.4
4.951500	20.0	L1	10.4	26.0	46.0
9.316500	22.9	N	10.6	27.1	50.0
23.968500	34.9	L1	11.3	15.1	50.0

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

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