



# TEST REPORT

## No. I21Z70497-EMC01

for

**Samsung Electronics Co., Ltd.**

**Tablet with Bluetooth, WLAN**

**Model Name: SM-X200**

**FCC ID: ZCASM200**

with

**Hardware Version: REV1.0**

**Software Version: X200.001**

**Issued Date: 2021-11-15**

**Note:**

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**Test Laboratory:**

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I21Z70497-EMC01	Rev.0	1 <sup>st</sup> edition	2021-11-15

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

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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 (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

### **1.2. Testing Location**

#### **CTTL (BDA)**

Address: No. 18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, 100176, P.R. China

### **1.3. Testing Environment**

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

### **1.4. Project data**

Testing Start Date: 2021-11-03  
Testing End Date: 2021-11-15

### **1.5. Signature**



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Li Yan

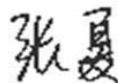
(Prepared this test report)



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Zhang Ying

(Reviewed this test report)



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Zhang Xia

Deputy Director of the laboratory  
(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Samsung Electronics Co., Ltd.  
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Email: j1.chun@samsung.com  
Telephone: +1-201-937-4203

### **2.2. Manufacturer Information**

Company Name: Samsung Electronics. Co., Ltd.  
Address: Samsung R5, Maetan dong 129, Samsung ro  
Youngtong gu, Suwon city 443 742, Korea  
City: /  
Postal Code: /  
Country: /  
Contact: 조성훈(Sunghoon Cho)  
Email: ggobi.cho@samsung.com  
Telephone: +82-10-2722-4159

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

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

Description	Tablet with Bluetooth, WLAN
Model Name	SM-X200
FCC ID	ZCASM200

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**

<b>EUT ID*</b>	<b>IME/SNI</b>	<b>HW Version</b>	<b>SW Version</b>	<b>Date of receipt</b>
UT09a	2170497UT09a	REV1.0	X200.001	2021.11.03

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

#### **3.3. Internal Identification of AE used during the test**

<b>AE ID*</b>	<b>Description</b>	<b>SN</b>	<b>Remarks</b>
AE1	Adapter1	/	/
AE2	Adapter2	/	/
AE3	Adapter3	/	/
AE4	Adapter4	/	/
AE5	Adapter5	/	/
AE6	Adapter6	/	/
AE7	Adapter7	/	/
AE8	Adapter8	/	/
AE9	Adapter9	/	/
AE10	Adapter10	/	/
AE11	Adapter11	/	/
AE12	USB Cable	/	/
AE13	Headset1	/	/
AE14	Headset2	/	/
AE15	Battery1	/	/
AE16	Battery2	/	/
AE17	Battery3	/	/

AE1

Model	EP-TA50EWE
Manufacturer	HAEM Co.,Ltd
Length of cable	/

AE2

Model	EP-TA50UWE
Manufacturer	HAEM Co.,Ltd



Length of cable	/
AE3	
Model	EP-TA50EWE
Manufacturer	RFTECH Co., Ltd.
Length of cable	/
AE4	
Model	EP-TA200EWE
Manufacturer	RFTECH Co., Ltd.
Length of cable	/
AE5	
Model	EP-TA50EWE
Manufacturer	Salcomp (Shenzhen) Co., Ltd.
Length of cable	/
AE6	
Model	EP-TA50UWE
Manufacturer	Salcomp (Shenzhen) Co., Ltd.
Length of cable	/
AE7	
Model	EP-TA50UWE
Manufacturer	DONGYANG E&P Inc.
Length of cable	/
AE8	
Model	EP-TA50BW
Manufacturer	Salcomp (Shenzhen) Co., Ltd.
Length of cable	/
AE9	
Model	EP-TA50JWE
Manufacturer	RFTech
Length of cable	/
AE10	
Model	EP-TA200JWE
Manufacturer	RFTech
Length of cable	/
AE11	
Model	EP-TA50JWE
Manufacturer	HAEM
Length of cable	/
AE12	
Model	EP-DR140AWE(GH39-01999A)
Manufacturer	Samsung Electronics Co., Ltd.
Length of cable	/
AE13	
Model	CH59-15054A
Manufacturer	DONGGUAN YOUNGBO ELECTRONICS CO.,LTD

Length of cable	/
AE14	
Model	CH59-15054A
Manufacturer	CRESYN HANOI Co., Ltd
Length of cable	/
AE15	
Type	Secondary Li-ion Battery
SN	HQ-6300NA
Manufacturer	Ningde Amperex Technology Limited
AE16	
Type	Secondary Li-ion Battery
SN	HQ-6300SD
Manufacturer	SCUD (Fujian) Electronics CO.,LTD
AE17	
Type	Secondary Li-ion Battery
SN	HQ-6300SA
Manufacturer	SCUD (Fujian) Electronics CO.,LTD

Note: The USB cables are shielded.

### 3.4. General Description

Equipment under Test (EUT) is a model of Tablet with Bluetooth, WLAN with integrated an tenna.

Samples undergoing test were selected by the client.

The detail information about EUT please refers to manual and specifications provide by manufacturer.

### 3.5. EUT set-ups

<b>EUT set-up No.</b>	<b>Combination of EUT and AE</b>	<b>Remarks</b>
Set.1	UT09a + AE1 + AE12	Charger1+ R Camera
Set.2	UT09a + AE2 + AE12+ AE13	Charger2+ MP4+ Headset1
Set.3	UT09a + AE3 + AE12+ AE14	Charger3+ F camera+Headset2
Set.4	UT09a + AE4 + AE12+ AE13	Charger4+MP3+ Headset1
Set.5	UT09a + AE5 + AE12+ AE14	Charger5+MP4+ Headset2
Set.6	UT09a + AE6	Charger6
Set.7	UT09a + AE7	Charger7
Set.8	UT09a + AE8	Charger8
Set.9	UT09a + AE9+ AE13	Charger9+R Camera +Headset1
Set.10	UT09a + AE10+ AE14	Charger10+ MP4+ Headset2
Set.11	UT09a + AE11	Charger11+ F camera
Set.12	UT09a + AE12 + AE13	USB SD TO PC + Headset1
Set.13	UT09a + AE12 + AE14	USB PC TO SD + Headset2

Note: All the set-ups above were tested but only the worst test data of worst set-up showed in this report.



## **4. Reference Documents**

### **4.1. Reference Documents for testing**

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

<b>Reference</b>	<b>Title</b>	<b>Version</b>
FCC Part 15, Subpart B	Radio frequency devices - Unintentional Radiators	2019
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-2** (10 meters×6.7meters×6.1meters) 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, 3m 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 6000 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
	BR	Re-use test data from basic model report.

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

## 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESU26	100376	R&S	2022-09-15	1 year
2	Test Receiver	ESCI	100766	R&S	2022-03-09	1 year
3	LISN	ENV216	101459	R&S	2022-03-09	1 year
4	BiLog Antenna	VULB9163	9163-514	Schwarzbeck	2022-03-22	1 year
5	EMI Antenna	3117	00119024	ETS-Lindgren	2022-04-11	1 year
6	Universal Radio Communication Tester	CMW500	167943	R&S	2022-04-05	1 year
7	Printer	P1606dn	VNC3L52122	HP	N/A	N/A
8	Keyboard	KU-1601	2048361	Lenovo	N/A	N/A
9	Mouse	EMS-537A	8021S3MC	Lenovo	N/A	N/A
10	PC	M4000e-17	M706RMW2	Lenovo	N/A	N/A

## **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 (USB mode of MS and 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 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 USB mode, charging mode, MP4, MP3, CAMERA and SD mode.

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.

#### **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/3MHz	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: 5.40dB, 1GHz-18GHz: 4.32dB,  $k=2$ .

Note: all the set-up lists in section 3.5 were tested and only the worst test data of worst set-up showed in this section.

#### Measurement results for Set.2:

##### Adapter2+ MP4+ Headset1 /Average detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17586.500	42.93	-16.9	40.6	19.18	54.0	11.1	V
17601.500	42.89	-16.6	40.6	18.85	54.0	11.1	V
17595.500	42.85	-16.7	40.6	18.88	54.0	11.2	V
17593.500	42.83	-16.7	40.6	18.91	54.0	11.2	V
17598.500	42.80	-16.6	40.6	18.76	54.0	11.2	H
17601.000	42.80	-16.6	40.6	18.74	54.0	11.2	V

##### Adapter2+ MP4+ Headset1 /Peak detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17594.000	55.1	-16.7	40.6	31.21	74.0	18.9	V
17018.500	54.8	-18.1	41.2	31.68	74.0	19.2	V
17580.500	54.7	-17.0	40.6	31.14	74.0	19.3	V
16983.500	54.7	-18.0	41.2	31.49	74.0	19.3	V
17020.500	54.6	-18.1	41.2	31.55	74.0	19.4	H
17596.500	54.5	-16.6	40.6	30.51	74.0	19.5	V

**Measurement results for Set.3:**
**Adapter3+ Headset2+ Front camera /Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17595.000	42.94	-16.7	40.6	18.98	54.0	11.1	H
17594.000	42.91	-16.7	40.6	18.97	54.0	11.1	V
17593.000	42.87	-16.7	40.6	18.97	54.0	11.1	V
17592.000	42.85	-16.7	40.6	18.96	54.0	11.2	V
17596.000	42.82	-16.6	40.6	18.84	54.0	11.2	V
17591.000	42.82	-16.8	40.6	18.96	54.0	11.2	H

**Adapter3+ Headset2+ Front camera /Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17491.500	55.5	-17.6	40.7	32.32	74.0	18.5	H
17371.000	54.9	-17.4	40.8	31.55	74.0	19.1	H
17425.500	54.8	-17.6	40.8	31.62	74.0	19.2	V
17588.500	54.7	-16.8	40.6	30.89	74.0	19.3	H
17596.500	54.7	-16.6	40.6	30.68	74.0	19.3	H
17513.500	54.6	-17.6	40.7	31.51	74.0	19.4	V

**Measurement results for Set.12:**
**USB (SD) mode+ Headset1 /Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17594.500	42.35	-16.7	40.6	18.41	54.0	11.6	V
17600.500	42.27	-16.5	40.6	18.20	54.0	11.7	V
17591.000	42.23	-16.8	40.6	18.37	54.0	11.8	H
17598.000	42.20	-16.6	40.6	18.17	54.0	11.8	V
17601.000	42.19	-16.6	40.6	18.14	54.0	11.8	V
17593.500	42.18	-16.7	40.6	18.26	54.0	11.8	V

**USB (SD) mode+ Headset1 /Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17597.000	54.9	-16.6	40.6	30.90	74.0	19.1	V
17637.500	54.8	-17.4	40.6	31.56	74.0	19.2	V
17576.500	54.7	-17.1	40.6	31.21	74.0	19.3	H
17568.000	54.4	-17.4	40.6	31.15	74.0	19.6	H
16382.500	54.4	-18.1	41.1	31.42	74.0	19.6	V
17481.000	54.3	-17.7	40.7	31.24	74.0	19.7	V



### Adapter2+ MP4+ Headset1, Set.2

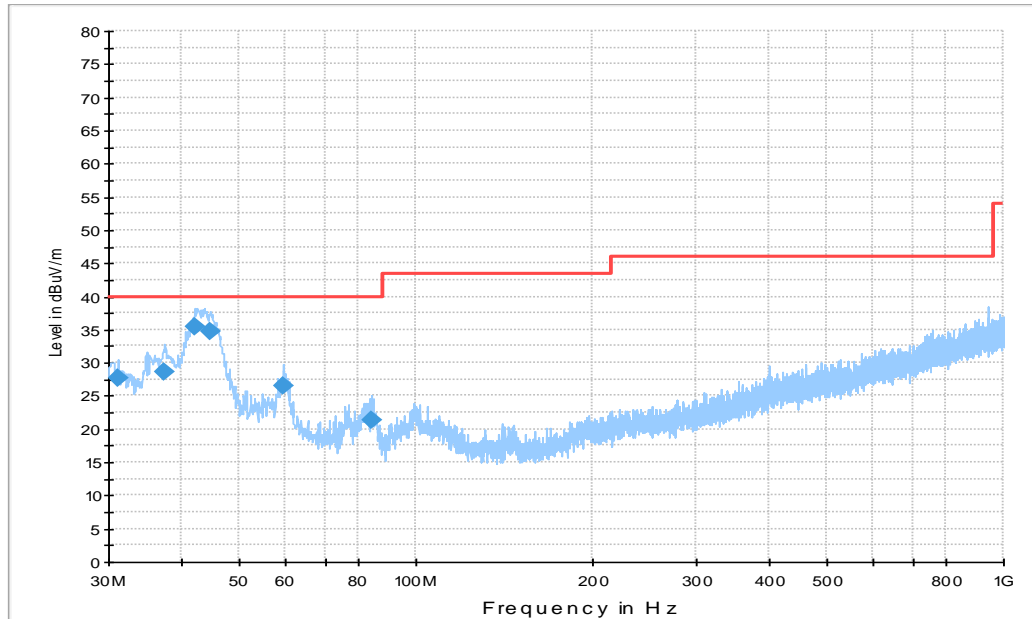
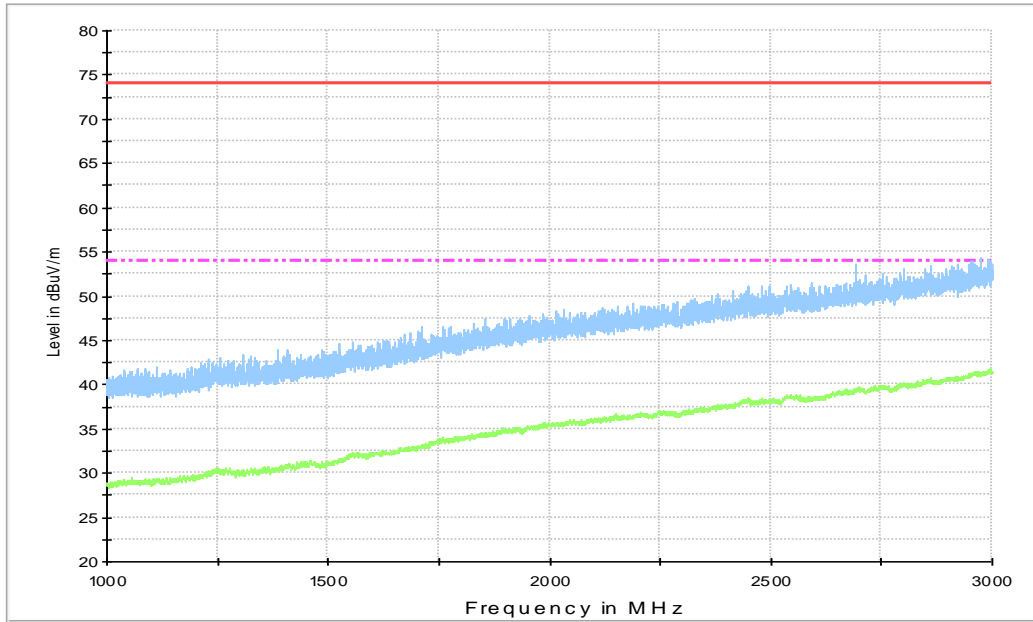


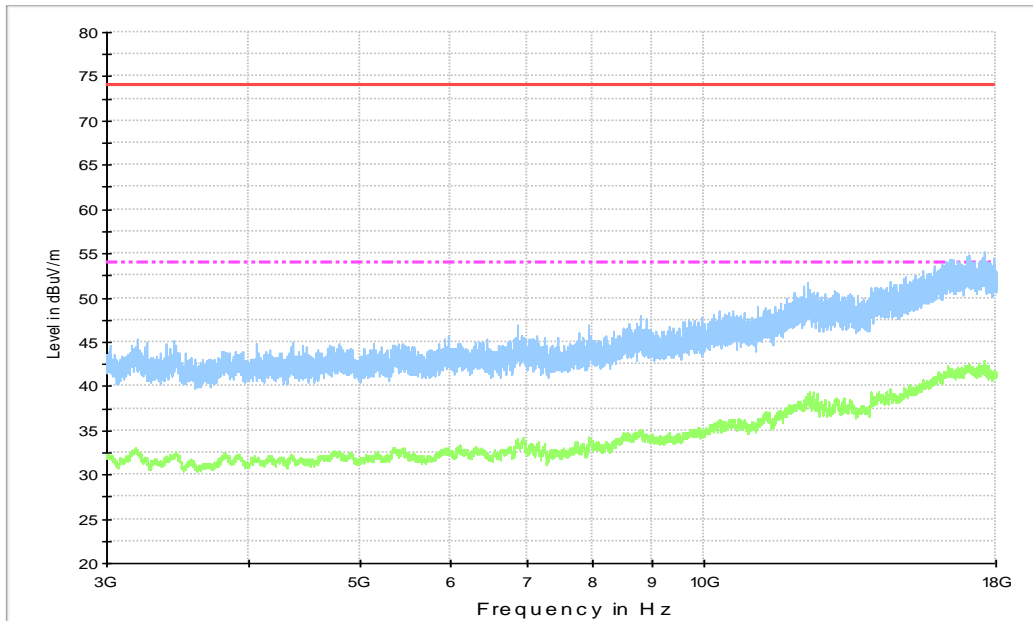
Figure A.1 Radiated Emission from 30MHz to 1GHz

### Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
31.164000	27.7	100.0	V	255.0	-1.1	12.3	40.0
37.372000	28.6	100.0	V	300.0	-0.2	11.4	40.0
42.125000	35.4	100.0	V	105.0	0.2	4.6	40.0
44.841000	34.8	113.0	V	90.0	0.1	5.2	40.0
59.391000	26.6	112.0	V	0.0	-0.4	13.4	40.0
84.320000	21.4	113.0	V	315.0	-4.6	18.6	40.0



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



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

### Adapter3+ Headset2+ Front camera, Set.3

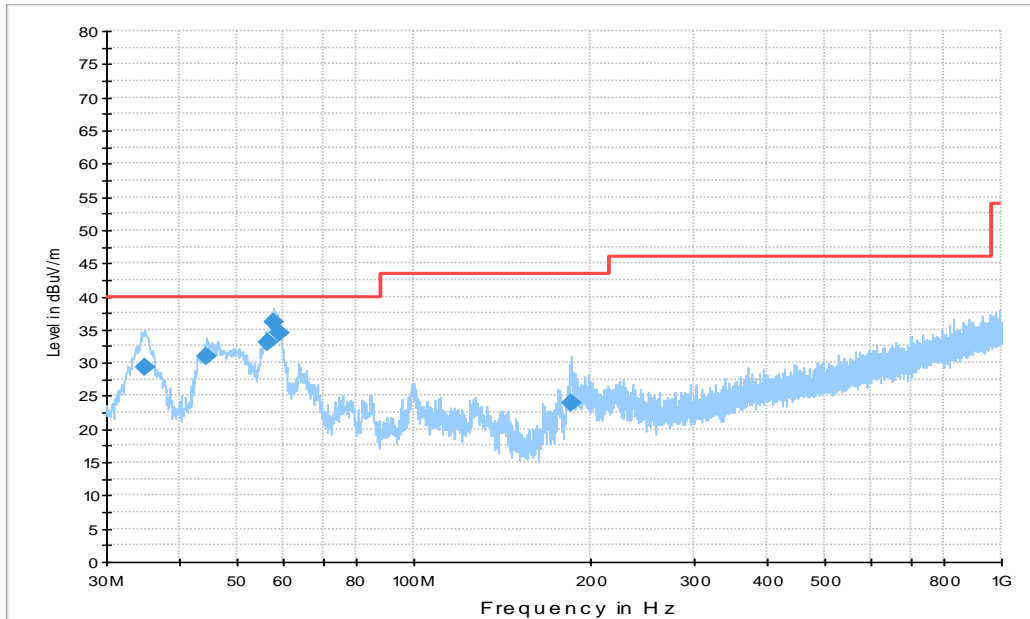
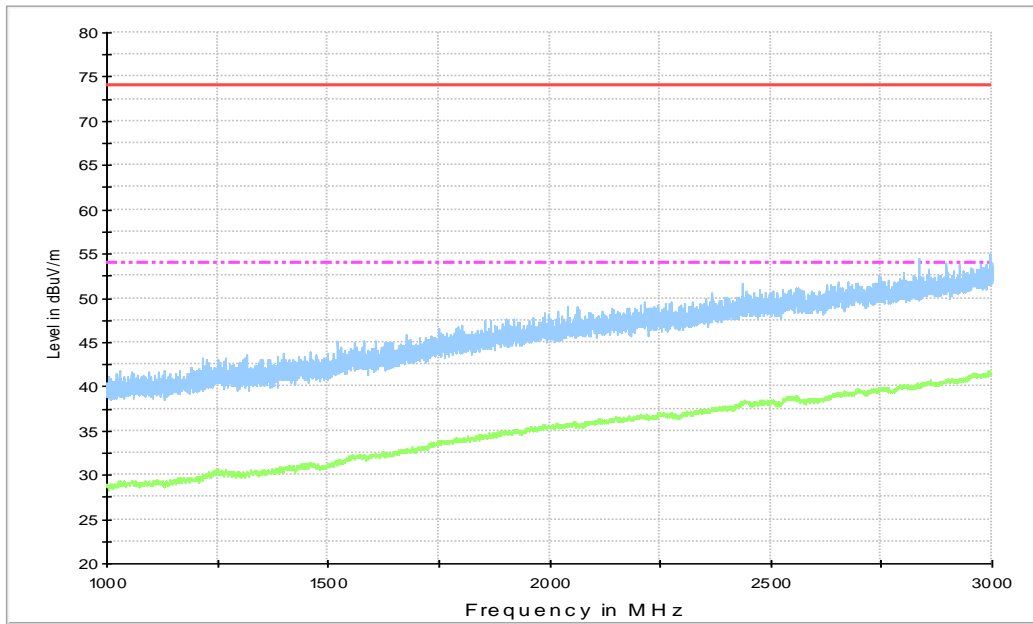


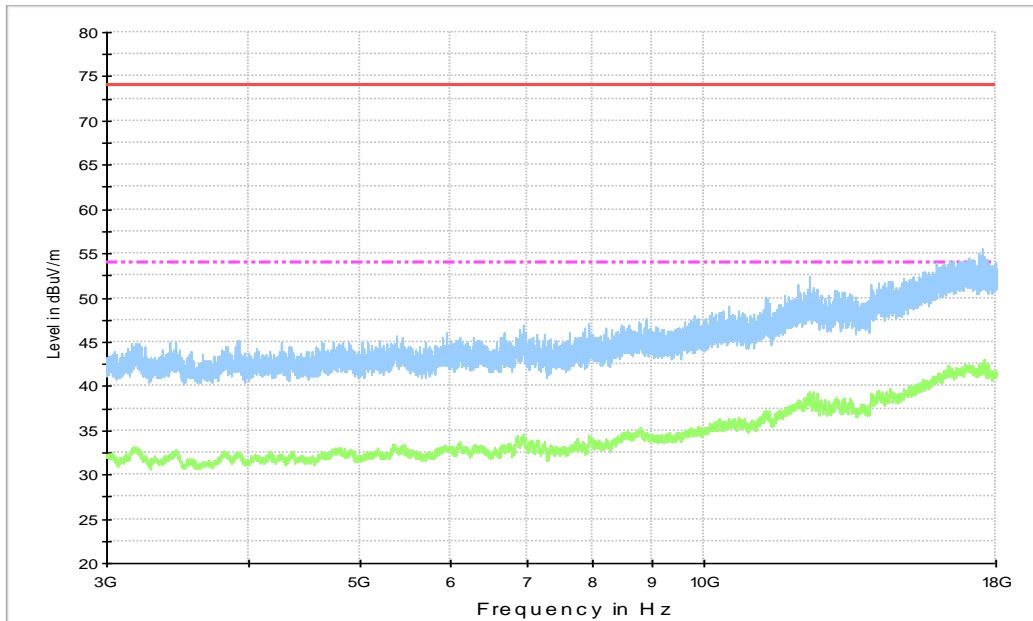
Figure A.4 Radiated Emission from 30MHz to 1GHz

### Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
34.850000	29.3	100.0	V	165.0	-0.6	10.7	40.0
44.453000	30.9	113.0	V	75.0	0.1	9.1	40.0
56.384000	33.0	100.0	V	225.0	-0.3	7.0	40.0
57.839000	36.2	100.0	V	225.0	-0.3	3.8	40.0
59.197000	34.4	100.0	V	225.0	-0.4	5.6	40.0
185.39400	24.0	112.0	V	0.0	-2.2	19.5	43.5



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



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

USB (SD) mode+ Headset1+RX LTE B17, Set.12

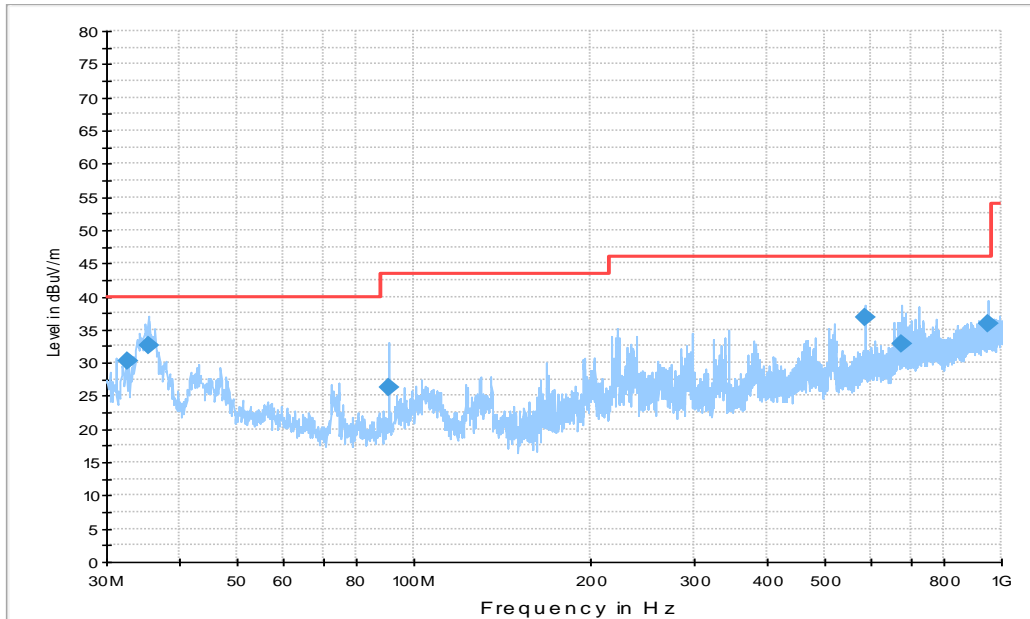
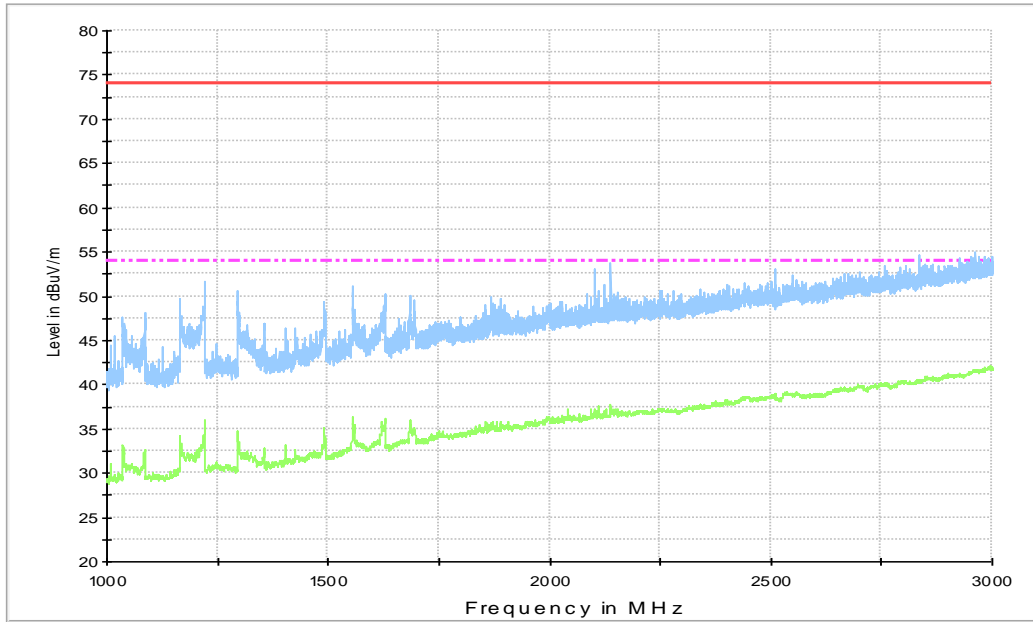


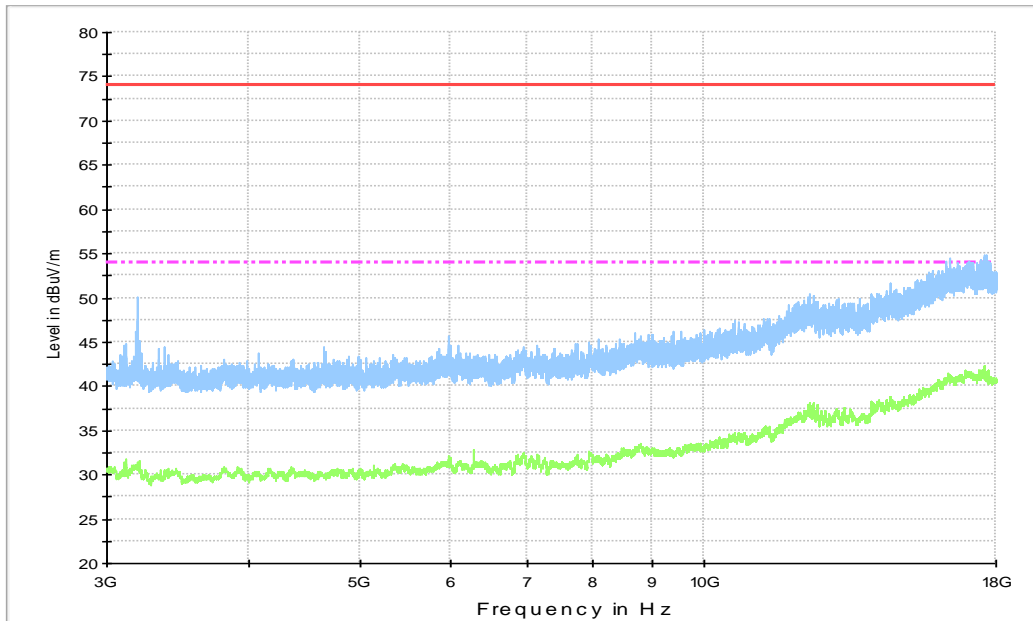
Figure A.7 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
32.619000	30.2	100.0	V	285.0	-0.9	9.8	40.0
35.335000	32.6	113.0	V	239.0	-0.5	7.4	40.0
90.625000	26.4	125.0	H	285.0	-2.7	17.1	43.5
585.03400	36.8	100.0	H	45.0	7.9	9.2	46.0
676.40800	33.0	100.0	V	15.0	8.9	13.0	46.0
949.36600	35.9	113.0	H	75.0	12.5	10.1	46.0



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



**Figure A.9 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 USB mode, charging mode, MP4, CAMERA and SD 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.

### 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

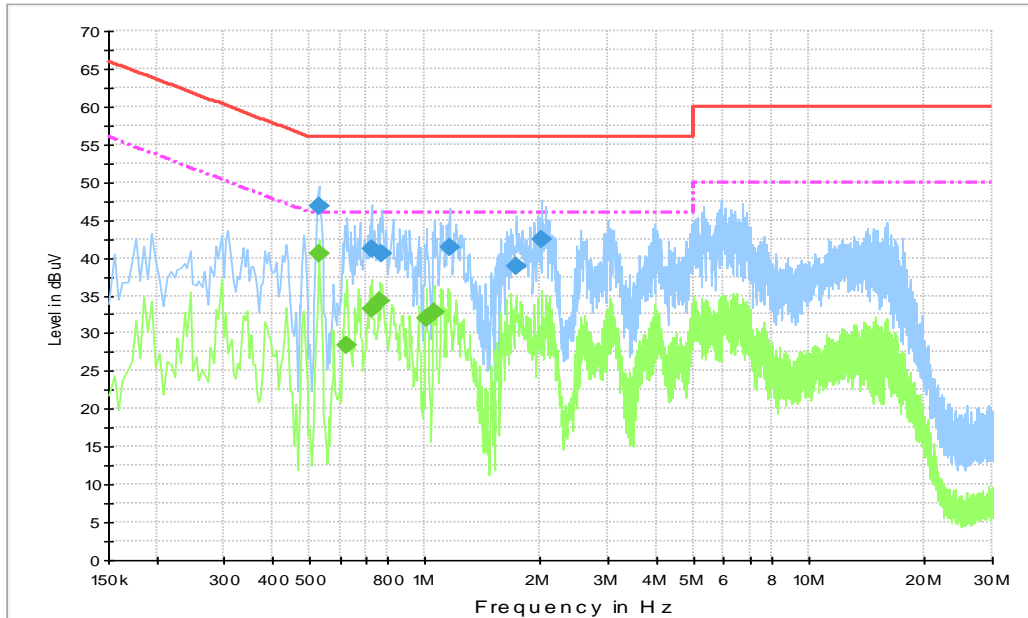
RBW/IF bandwidth	Sweep Time(s)
9kHz	1

### A.2.5 Measurement Results

Measurement uncertainty:  $U= 3.10 \text{ dB}$ ,  $k=2$ .

Note: all the set-up lists in section 3.5 were tested and only the worst test data of worst set-up showed in this section.

#### Set.3



**Figure A.10 Conducted Emission**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

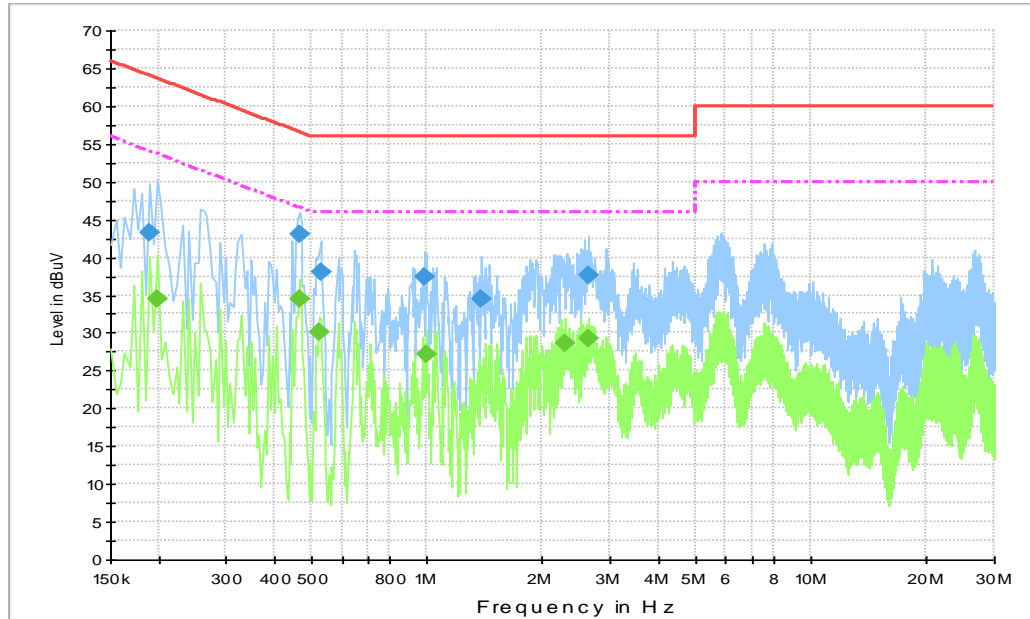
#### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.528000	46.8	5000.0	9.000	On	L1	19.8	9.2	56.0
0.726000	41.2	5000.0	9.000	On	L1	19.8	14.8	56.0
0.775500	40.5	5000.0	9.000	On	N	19.8	15.5	56.0
1.158000	41.5	5000.0	9.000	On	L1	19.7	14.5	56.0
1.734000	38.9	5000.0	9.000	On	N	19.7	17.1	56.0
2.008500	42.5	5000.0	9.000	On	L1	19.7	13.5	56.0

#### Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.528000	40.5	5000.0	9.000	On	L1	19.8	5.5	46.0
0.627000	28.4	5000.0	9.000	On	N	19.8	17.6	46.0
0.726000	33.2	5000.0	9.000	On	L1	19.8	12.8	46.0
0.766500	34.3	5000.0	9.000	On	L1	19.8	11.7	46.0
1.009500	31.9	5000.0	9.000	On	L1	19.7	14.1	46.0
1.059000	32.8	5000.0	9.000	On	L1	19.7	13.2	46.0



**Set.10**

**Figure A.11 Conducted Emission**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

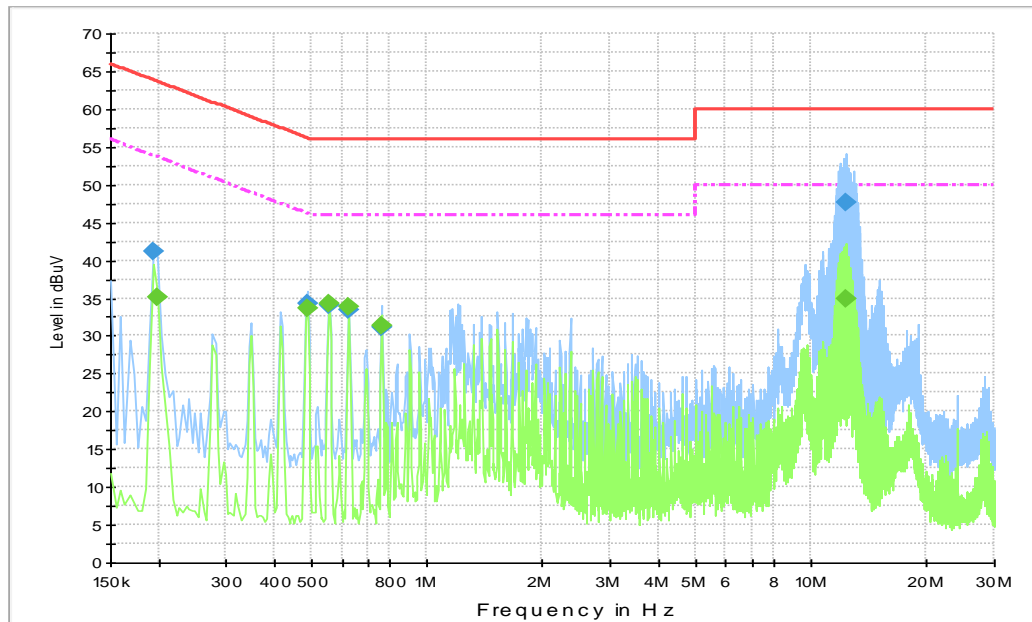
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190500	43.2	5000.0	9.000	On	L1	20.0	20.8	64.0
0.465000	43.0	5000.0	9.000	On	L1	19.9	13.6	56.6
0.528000	38.1	5000.0	9.000	On	L1	19.8	17.9	56.0
0.987000	37.4	5000.0	9.000	On	L1	19.7	18.6	56.0
1.383000	34.6	5000.0	9.000	On	L1	19.7	21.4	56.0
2.634000	37.7	5000.0	9.000	On	L1	19.6	18.3	56.0

**Final Result 2**

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.199500	34.6	5000.0	9.000	On	L1	19.9	19.1	53.6
0.465000	34.5	5000.0	9.000	On	L1	19.9	12.1	46.6
0.523500	30.2	5000.0	9.000	On	L1	19.9	15.8	46.0
0.996000	27.1	5000.0	9.000	On	L1	19.7	18.9	46.0
2.292000	28.6	5000.0	9.000	On	L1	19.6	17.4	46.0
2.634000	29.2	5000.0	9.000	On	L1	19.6	16.8	46.0

### USB (SD) mode, Set.12



**Figure A.12 Conducted Emission**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

#### Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.195000	41.2	5000.0	9.000	On	L1	19.9	22.7	63.8
0.487500	34.3	5000.0	9.000	On	L1	19.9	21.9	56.2
0.555000	34.0	5000.0	9.000	On	L1	19.9	22.0	56.0
0.627000	33.5	5000.0	9.000	On	L1	19.8	22.5	56.0
0.762000	31.2	5000.0	9.000	On	N	19.8	24.8	56.0
12.277500	47.7	5000.0	9.000	On	N	19.8	12.3	60.0

#### Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.199500	35.0	5000.0	9.000	On	N	19.9	18.6	53.6
0.487500	33.6	5000.0	9.000	On	L1	19.9	12.6	46.2
0.555000	34.2	5000.0	9.000	On	N	19.9	11.8	46.0
0.627000	33.8	5000.0	9.000	On	N	19.8	12.2	46.0
0.762000	31.3	5000.0	9.000	On	L1	19.8	14.7	46.0
12.286500	34.8	5000.0	9.000	On	L1	19.8	15.2	50.0



**ANNEX B: Persons involved in this testing**

Test Item	Tester
Radiated Emission	Li Zongliang
Conducted Emission	Guo Qian

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