





# TEST REPORT No. I20Z60640-EMC01

for

**BLU Products, Inc.** 

**Smart Phone** 

**Model Name: B130DL** 

FCC ID: YHLBLUB130DL

with

Hardware Version: V1.0

Software Version: BLU\_B130DL\_V10.0.02.05.02.02

Issued Date: 2020-6-28

#### Note:

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#### **Test Laboratory:**

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# **REPORT HISTORY**

Report Number	Revision	Description	Issue Date	
I20Z60640-EMC01	Rev.0	1 <sup>st</sup> edition	2020-06-28	

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 17025:2005 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

CTTL (BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development

Area, Beijing, P. R. China 100176

1.3. Testing Environment

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

1.4. Project data

Testing Start Date: 2020-06-01
Testing End Date: 2020-06-24

1.5. Signature

Li Yar

(Prepared this test report)

张颖

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: BLU Products, Inc.

Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172, USA.

City: /
Postal Code: /

Country: USA

Telephone: 305.715.7171 Fax: 305.436.8819

### 2.2. Manufacturer Information

Company Name: BLU Products, Inc.

Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172, USA.

City: /
Postal Code: /
Country: USA

Telephone: 305.715.7171 Fax: 305.436.8819





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

### 3.1. About EUT

Description Smart Phone Model Name B130DL

FCC ID YHLBLUB130DL

Extreme vol. Limits 3.65VDC to 4.2VDC (nominal: 3.9VDC)

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
EUT3	355140110009672	V1.0	BLU_B130DL_V10.0.02.05.02.02

<sup>\*</sup>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	/	/
AE2	Charger	/	/
AE3	USB Cable	/	/
AE4	Headset	/	/
AE1			
Model		C746042300F	
Manufact	urer	Ningbo Veken	Battery Co., Ltd.
Capacita	nce	/	
Nominal	voltage	/	
AE2			
Model		US-CR-1000	
Manufact	urer	Shenzhen Ba	ijunda Electronic Co Ltd
Length of	cable	/	
AE3			
Model		JCT024-F022	
Manufact	urer	Shenglan Tec	hnology Co., LTD
Length of	cable	/	
AE4			
Model		/	
Manufact	urer	/	
Length of	cable	/	
Note: The l	JSB cables are shield	ded.	





### 3.4. General Description

The device contains receivers which tune and operate between 30MHz-960MHz in the following bands: GSM850, WCDMA BAND 5, LTE BAND 5, LTE BAND 12, LTE BAND 13, LTE BAND 26, and LTE BAND 71.

### 3.5. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT3+ AE1 + AE2+ AE3	Charger+Camera
		License RX mode
Set.2	EUT3+ AE1 + AE2 + AE3+ AE4	Charger+MP4
Set.3	EUT3+ AE1 + AE3+ AE4	USB mode +FM





# 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	2019
ANSI C63.4	American National Standard for	2014
	Methods of Measurement of Radio-	
	Noise Emissions from Low-Voltage	
	Electrical and Electronic Equipment	
	in the Range of 9 kHz to 40 GHz	

Note: The test methods have no deviation with standards.





# 5. LABORATORY ENVIRONMENT

**Semi-anechoic chamber SAC-1** (23 meters×17 meters×10 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	< 4Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m/10m distance,
	from 30 to 1000 MHz
Site voltage standing-wave ratio (S <sub>VSWR</sub> )	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

**Semi-anechoic chamber SAC-2** (10 meters × 6.7 meters × 6.1 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding offeetiveness	0.014MHz - 1MHz, >60dB;
Shielding effectiveness	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:

	9	5
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           F         BR	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	Р	CTTL(BDA)
2	Conducted Emission	15.107(a)	A.2	Р	CTTL(BDA)





# 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATI ON INTERVAL
1	Test Receiver	ESU26	100376	R&S	2020-10-30	1 year
2	Test Receiver	Test Receiver	100766	ESCI	2021-03-11	1 year
3	Universal Radio Communication Tester	CMW500	127406	R&S	2021-02-18	1 year
4	Universal Radio Communication Tester	CMU200	111792	R&S	2021-01-05	1 year
5	LISN	ENV216	825562/028	R&S	2020-09-05	1 year
6	BiLog Antenna	VULB9163	9163-482	Schwarzbeck	2020-09-16	1 year
7	EMI Antenna	3117	00139065	ETS-Lindgren	2020-11-10	1 year
8	Signal Generator	SMF100A	101295	R&S	2020-11-06	1 year
9	Printer	P1606dn	VNC3L52122	HP	N/A	N/A
10	Keyboard	KU-1601	2048361	Lenovo	N/A	N/A
11	Mouse	EMS-537A	8021S3MC	Lenovo	N/A	N/A

Test Item	Test Software and Version	Software Vendor		
Radiated Continuous Emission	EMC32 V9.01.00	R&S		
Conducted Emission	EMC32 V8.52.0	R&S		





### 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.

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 the Section 3.4, are investigated. Only the worst case emissions are reported.

The FM radio mode radiated testing was performed with the Low/Mid/High channel. Only the worst cases are reported.

The model of the PC is Lenovo M4000e-17, and the serial number of the PC is M706RMW2. 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.1.3 Measurement Limit

Frequency range	Field strength limit (µV/m)							
(MHz)	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	
I	30-1000	120kHz (IF Bandwidth)	5	Peak/Quasi-peak	
I	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:

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

Where

G<sub>A</sub>: Antenna factor of receive antenna

G<sub>PL</sub>: Path Loss

P<sub>Mea</sub>: Measurement result on receiver.

Measurement uncertainty (worst case): 30MHz-1GHz: 5.40dB, 1GHz-18GHz: 4.32dB, *k*=2.

#### Measurement results for Set.1:

### Charger+Camera /Average detector

Frequency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading		(dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBμV/m)	(ub)	(H/V)
17701.000	40.01	-22.2	41.2	20.95	54.0	14.0	
17702.500	39.96	-22.2	41.2	20.90	54.0	14.0	Н
17777.000	39.94	-22.4	41.3	21.04	54.0	14.1	Н
17695.000	39.93	-22.2	41.2	20.86	54.0	14.1	Н
17687.000	39.93	-22.1	41.2	20.84	54.0	14.1	V
17692.500	39.92	-22.2	41.2	20.85	54.0	14.1	Н

#### Charger+Camera/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)		
17728.500	52.5	-22.2	41.2	33.48	74.0	21.5	V		
17789.000	52.3	-22.4	41.3	33.39	74.0	21.7	V		
16993.500	52.2	-23.0	41.7	33.55	74.0	21.8	V		
17897.000	52.2	-22.6	41.3	33.53	74.0	21.8	V		
17820.000	52.2	-22.5	41.3	33.35	74.0	21.8	V		
16925.500	51.7	-23.0	41.7	33.03	74.0	22.3	Н		





### **Measurement results for Set.2**:

### Charger+MP4 /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)
17701.500	40.04	-22.2	41.2	20.98	54.0	14.0	V
17691.000	40.03	-22.2	41.2	20.95	54.0	14.0	Н
17695.000	40.02	-22.2	41.2	20.95	54.0	14.0	Н
17785.000	39.93	-22.4	41.3	21.05	54.0	14.1	Н
17699.000	39.91	-22.2	41.2	20.84	54.0	14.1	V
17700.500	39.91	-22.2	41.2	20.85	54.0	14.1	Н

### Charger+MP4 /Peak detector

	9-									
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)			
17799.500	52.64	-22.4	41.3	33.79	74.0	21.4	Н			
16953.500	52.56	-23.0	41.7	33.90	74.0	21.4	V			
16961.000	52.37	-23.0	41.7	33.70	74.0	21.6	Н			
17783.500	52.04	-22.4	41.3	33.16	74.0	22.0	Н			
17754.500	52.03	-22.3	41.3	33.08	74.0	22.0	V			
16897.000	52.00	-23.0	41.6	33.37	74.0	22.0	Н			





### **Measurement results for Set.3**:

### **USB mode +FM /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)
17697.000	39.90	-22.2	41.2	20.83	54.0	14.1	V
17701.500	39.88	-22.2	41.2	20.82	54.0	14.1	V
17694.000	39.83	-22.2	41.2	20.76	54.0	14.2	V
17691.500	39.83	-22.2	41.2	20.75	54.0	14.2	Н
17699.500	39.82	-22.2	41.2	20.76	54.0	14.2	V
17701.000	39.82	-22.2	41.2	20.76	54.0	14.2	V

### USB mode +FM /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)
17760.500	52.6	-22.3	41.3	33.67	74.0	21.4	٧
17579.500	52.6	-22.4	41.2	33.73	74.0	21.4	V
17020.500	52.4	-23.0	41.7	33.77	74.0	21.6	Н
17641.500	52.4	-22.0	41.2	33.23	74.0	21.6	V
17060.000	52.4	-23.0	41.6	33.75	74.0	21.6	V
17771.500	52.2	-22.3	41.3	33.34	74.0	21.8	V





### Charger+Camera, Set.1

#### 15B RE 30MHz-1GHz

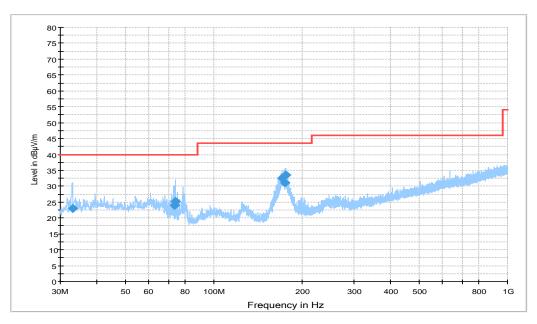


Figure A.1 Radiated Emission from 30MHz to 1GHz

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	(dBµV/m)
33.007000	23.0	100.0	V	163.0	-1.5	17.0	40.0
73.262000	24.1	100.0	V	225.0	-4.8	15.9	40.0
74.038000	25.1	100.0	V	260.0	-5.0	14.9	40.0
171.23200	32.6	100.0	V	3.0	-3.7	10.9	43.5
174.33600	31.0	100.0	V	3.0	-3.6	12.5	43.5
175.79100	33.4	100.0	V	3.0	-3.5	10.1	43.5



15B RE - 1GHz-3GHz

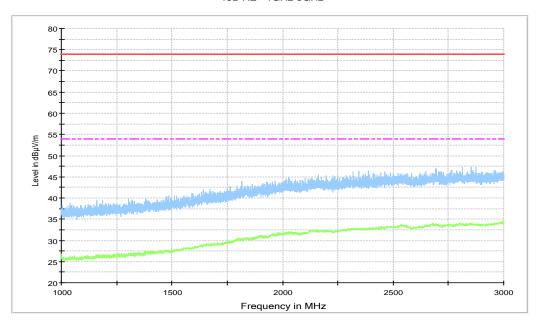


Figure A.2 Radiated Emission from 1GHz to 3GHz

RE - 3GHz-18GHz

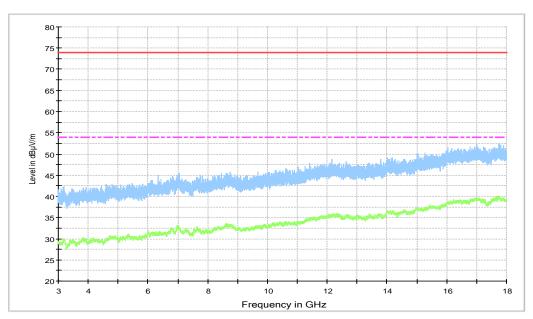


Figure A.3 Radiated Emission from 3GHz to 18GHz





# Charger+MP4, Set.2

#### 15B RE 30MHz-1GHz

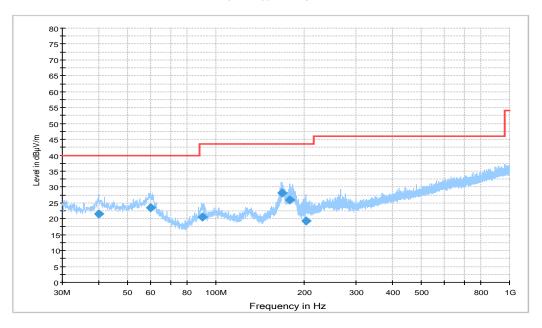


Figure A.4 Radiated Emission from 30MHz to 1GHz

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	(dBµV/m)
39.797000	21.6	100.0	V	112.0	-0.3	18.4	40.0
60.070000	23.5	100.0	V	266.0	-0.4	16.5	40.0
89.946000	20.4	110.0	V	235.0	-3.3	23.1	43.5
168.22500	28.2	100.0	V	-4.0	-3.8	15.3	43.5
178.89500	25.9	100.0	V	-28.0	-3.4	17.6	43.5
203.33900	19.4	100.0	V	11.0	-1.6	24.1	43.5



15B RE - 1GHz-3GHz

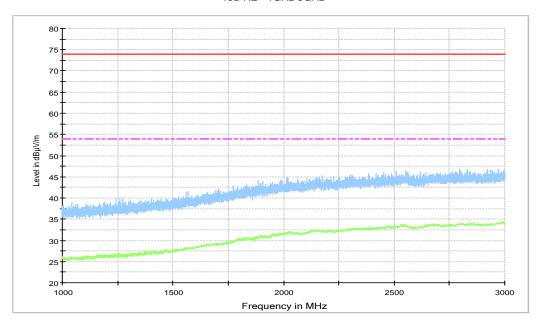


Figure A.5 Radiated Emission from 1GHz to 3GHz



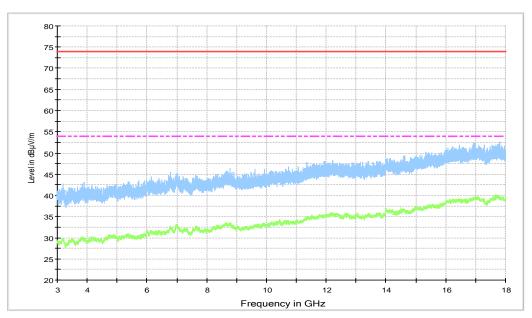


Figure A.6 Radiated Emission from 3GHz to 18GHz





### USB mode +FM, Set.3



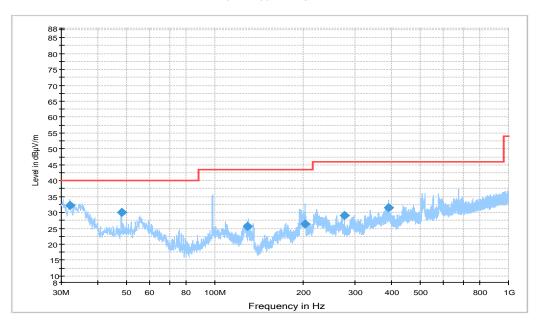


Figure A.7 Radiated Emission from 30MHz to 1GHz

Note: the spike  $(98\mbox{MHz})$  is coming from FM singal source .

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	(dBµV/m)
32.037000	32.3	100.0	V	32.0	-1.6	7.7	40.0
48.042000	30.0	100.0	V	33.0	0.0	10.0	40.0
129.61900	25.7	119.0	Н	45.0	-4.2	17.8	43.5
202.56300	26.2	100.0	Н	25.0	-1.6	17.3	43.5
276.96200	29.1	100.0	Н	-23.0	0.1	16.9	46.0
389.48200	31.5	100.0	V	-4.0	3.9	14.5	46.0



15B RE - 1GHz-3GHz

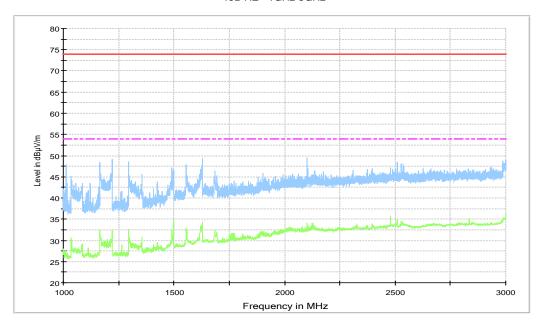
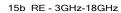


Figure A.8 Radiated Emission from 1GHz to 3GHz



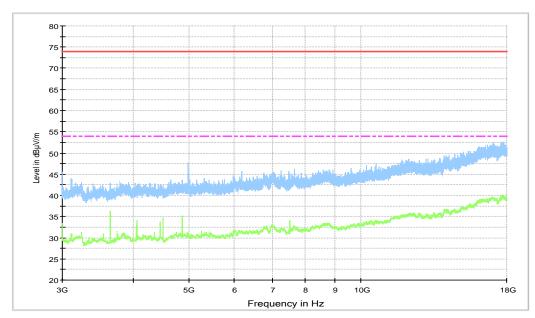


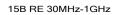
Figure A.9 Radiated Emission from 3GHz to 18GHz





# License RX band mode, Set.1

## GSM850MHz MID CHANNEL (881.6MHz)



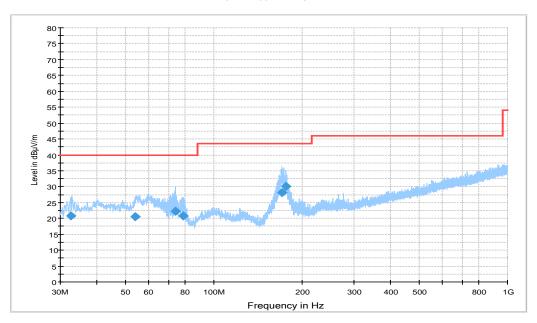


Figure A.10 Radiated Emission from 30MHz to 1GHz

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	(dBµV/m)
32.522000	20.9	100.0	V	122.0	-1.5	19.1	40.0
53.959000	20.5	100.0	V	80.0	-0.2	19.5	40.0
73.844000	22.2	100.0	V	242.0	-4.9	17.8	40.0
78.694000	20.8	100.0	V	235.0	-6.1	19.2	40.0
171.23200	28.1	100.0	V	7.0	-3.7	15.4	43.5
175.88800	30.2	100.0	V	4.0	-3.5	13.3	43.5



15B RE - 1GHz-3GHz

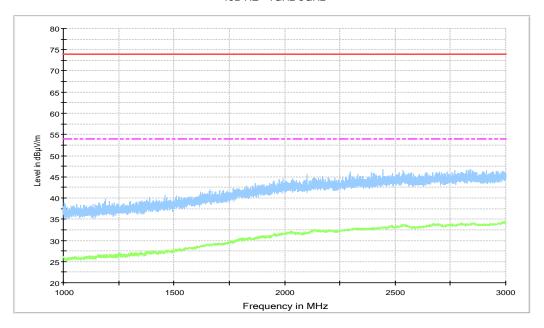


Figure A.11 Radiated Emission from 1GHz to 3GHz



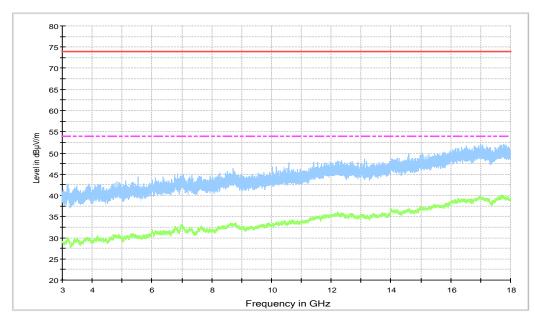


Figure A.12 Radiated Emission from 3GHz to 18GHz





## WCDMA Band 5 MID CHANNEL (881.6MHz)

15B RE 30MHz-1GHz

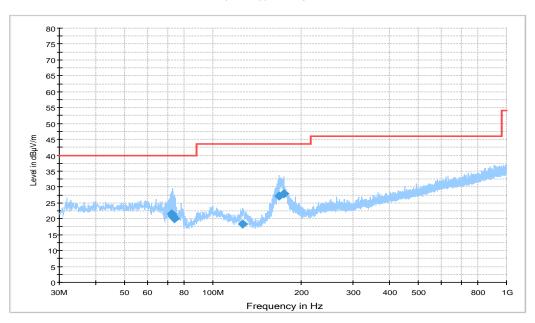


Figure A.13 Radiated Emission from 30MHz to 1GHz

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	(dBµV/m)
72.583000	21.5	110.0	V	219.0	-4.6	18.5	40.0
73.165000	20.9	100.0	V	315.0	-4.8	19.1	40.0
73.747000	20.0	100.0	V	242.0	-4.9	20.0	40.0
126.51500	18.3	100.0	V	0.0	-4.0	25.2	43.5
168.22500	27.2	110.0	V	7.0	-3.8	16.3	43.5
174.33600	27.8	110.0	V	9.0	-3.6	15.7	43.5



15B RE - 1GHz-3GHz

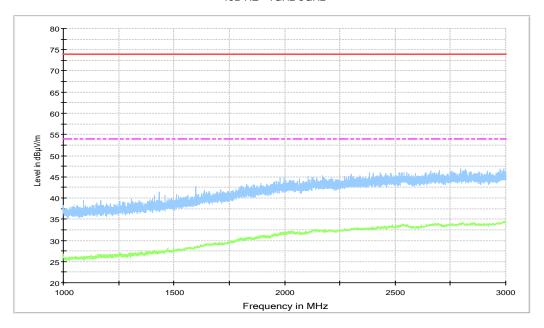


Figure A.14 Radiated Emission from 1GHz to 3GHz



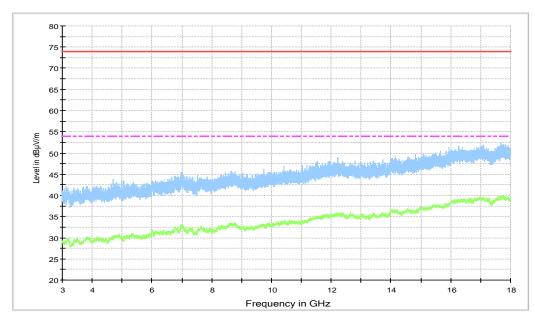
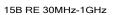


Figure A.15 Radiated Emission from 3GHz to 18GHz





## LTE Band 12 MID CHANNEL (737.5MHz)



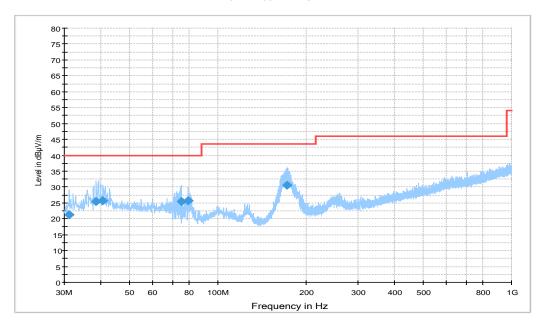


Figure A.16 Radiated Emission from 30MHz to 1GHz

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBµV/m)	(cm)		(deg)	(dB)	(dB)	$(dB\mu V/m)$
31.261000	21.2	100.0	V	23.0	-1.8	18.8	40.0
38.536000	25.5	100.0	V	65.0	-0.5	14.5	40.0
40.670000	25.6	110.0	V	126.0	-0.2	14.4	40.0
75.008000	25.3	100.0	V	225.0	-5.2	14.7	40.0
79.179000	25.7	100.0	V	242.0	-6.2	14.3	40.0
171.32900	30.6	100.0	V	11.0	-3.7	12.9	43.5



15B RE - 1GHz-3GHz

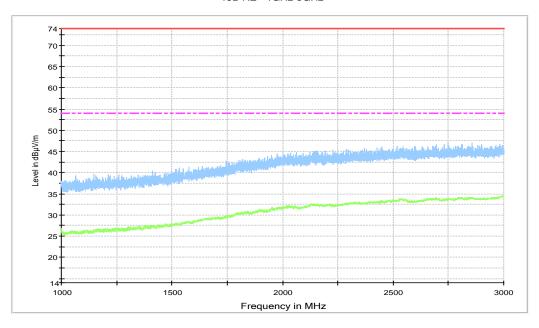


Figure A.17 Radiated Emission from 1GHz to 3GHz



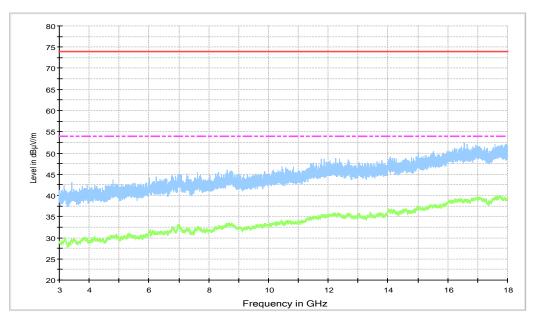


Figure A.18 Radiated Emission from 3GHz to 18GHz





### **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 and charging mode.

The model of the PC is Lenovo M4000e-17, and the serial number of the PC is M706RMW2. 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 (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					

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

Voltage (V)	Frequency (Hz)
120	60

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

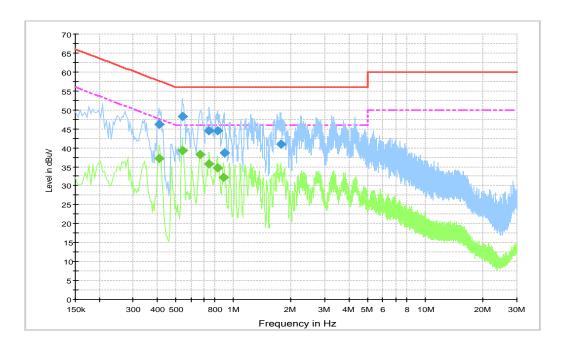




### A.2.5 Measurement Results

Measurement uncertainty: U= 3.10 dB, k=2.

### Charger+ Camera, Set.1



**Figure A.19 Conducted Emission** 

## **Final Result 1**

Frequency	QuasiPeak	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.411000	46.1	10000.0	9.000	L1	20.0	11.5	57.6
0.541500	48.2	10000.0	9.000	L1	20.0	7.8	56.0
0.748500	44.4	10000.0	9.000	L1	19.9	11.6	56.0
0.825000	44.5	10000.0	9.000	L1	19.9	11.5	56.0
0.897000	38.7	10000.0	9.000	L1	19.9	17.3	56.0
1.770000	41.0	10000.0	9.000	L1	19.8	15.0	56.0

Frequency	Average	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.411000	37.2	10000.0	9.000	L1	20.0	10.4	47.6
0.541500	39.3	10000.0	9.000	L1	20.0	6.7	46.0
0.672000	38.3	10000.0	9.000	L1	19.9	7.7	46.0
0.748500	35.7	10000.0	9.000	L1	19.9	10.3	46.0
0.825000	34.6	10000.0	9.000	L1	19.9	11.4	46.0
0.888000	32.2	10000.0	9.000	L1	19.8	13.8	46.0





# Charger+MP4, Set.2

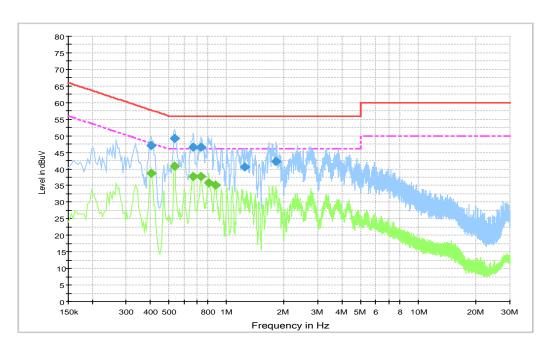


Figure A.20 Conducted Emission

# **Final Result 1**

Frequency	QuasiPeak	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.406500	47.2	10000.0	9.000	L1	20.0	10.6	57.7
0.537000	49.3	10000.0	9.000	L1	20.0	6.7	56.0
0.672000	46.6	10000.0	9.000	L1	19.9	9.4	56.0
0.739500	46.5	10000.0	9.000	L1	19.9	9.5	56.0
1.248000	40.7	10000.0	9.000	L1	19.8	15.3	56.0
1.815000	42.3	10000.0	9.000	L1	19.8	13.7	56.0

Frequency	Average	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.406500	38.7	10000.0	9.000	L1	20.0	9.0	47.7
0.537000	40.8	10000.0	9.000	L1	20.0	5.2	46.0
0.672000	37.6	10000.0	9.000	L1	19.9	8.4	46.0
0.739500	37.8	10000.0	9.000	L1	19.9	8.2	46.0
0.811500	35.7	10000.0	9.000	L1	19.9	10.3	46.0
0.874500	35.0	10000.0	9.000	L1	19.8	11.0	46.0





## USB mode +FM, Set.3

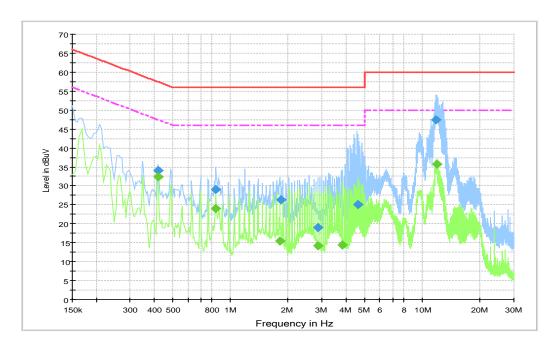


Figure A.21 Conducted Emission

# **Final Result 1**

Frequency	QuasiPeak	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.420000	34.1	10000.0	9.000	L1	20.0	23.4	57.4
0.838500	29.0	10000.0	9.000	N	19.9	27.0	56.0
1.824000	26.4	10000.0	9.000	N	19.8	29.6	56.0
2.859000	18.9	10000.0	9.000	N	19.8	37.1	56.0
4.609500	25.1	10000.0	9.000	N	19.8	30.9	56.0
11.764500	47.3	10000.0	9.000	L1	19.9	12.7	60.0

Frequency	Average	Meas. Time	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	(ms)	(kHz)		(dB)	(dB)	(dBµV)
0.420000	32.5	10000.0	9.000	L1	20.0	15.0	47.4
0.838500	24.0	10000.0	9.000	N	19.9	22.0	46.0
1.815000	15.4	10000.0	9.000	L1	19.8	30.6	46.0
2.859000	14.2	10000.0	9.000	N	19.8	31.8	46.0
3.835500	14.5	10000.0	9.000	N	19.8	31.5	46.0
11.850000	35.7	10000.0	9.000	L1	19.9	14.3	50.0





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

Test Item	Tester
Radiated Emission	Zhao Wenhui,Li Zongliang
Conducted Emission	Guo Qian

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