

# 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

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# **REPORT HISTORY**

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



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# 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. <u>Testing Environment</u>

Normal Temperature: 15-35□ Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2015-12-30 Testing End Date: 2016-01-05

1.4. Signature

张 颖

**Zhang Ying** 

(Prepared this test report)

此肠色

Qu Pengfei

(Reviewed this test report)

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,

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## 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	<b>HW Version</b>	SW Version
EUT1	1	PIO	vBL43

<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	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	1	15TCT-CH-0170
AE6	Travel Charger	1	15TCT-CH-1001
AE7	Travel Charger	1	15TCT-CH-0135
AE8	Travel Charger	1	14TCT-CH-1918
AE9	USB Cable	1	14TCT-DC-0043
AE10	USB Cable	1	15TCT-DC-0101
AE11	USB Cable	1	15TCT-DC-0186
AE12	USB Cable	1	15TCT-DC-0186
AE13	Travel Charger	1	15TCT-CH-0167
AE14	Travel Charger	1	15TCT-CH-1132
AE16	Travel Charger	1	14TCT-CH-2198
AE17	USB Cable	1	14TCT-DC-0258
AE18	USB Cable	1	15TCT-DC-0186



AE1, AE2, AE3, AE4

Model TLi013A7

Manufacturer Zhongshan Tianmao Battery Co,.Ltd

Capacitance 1300mAh 3.7V Nominal voltage

AE5, AE13

CBA0066AG0C1 Type

BYD Manufacturer Length of cable 124cm

AE6

Type CBA3002AG0C5

Manufacturer Puan Length of cable 118cm

AE7, AE14

Type CBA3068AG0C1

Manufacturer **BYD** / Length of cable

AE8, AE16

CBA3008AG0C2 Type

Manufacturer Tenpao

Length of cable

AE9, AE17

CDA3122002C1 Type

Manufacturer Juwei Length of cable 101cm

AE10, AE18

Type CDA3122002C8

**PUAN** Manufacturer Length of cable 99cm

AE11

CDA3122005C1 Type

JUWEI Manufacturer /

Length of cable

AE12

CDA3122005C8 Type

Manufacturer **PUAN** Length of cable /

<sup>\*</sup>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	2014
	Emissions from Low - Voltage Electrical and	
	Electronic Equipment in the Range of 9 kHz to 40	
	GHz	



# 5. LABORATORY ENVIRONMENT

**Semi-anechoic chamber SAC-1** (23 meters $\times$ 17meters $\times$ 10meters) did not exceed following limits along the EMC testing:

minto diorig the Livio 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 3000 MHz

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

•	S S
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:		
Р		Pass
Verdict Column	NA	Not applicable
	F	Fail
Location Column	1/2/3/4	The test is performed in test location 1, 2, 3 or 4 which
Location Column	1/2/3/4	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	Р	1
2	Conducted Emission	15.107(a)	B.2	Р	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	1	1
8.	Printer	P160dn	VNC3L52122	HP	1	/



# **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	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
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:

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

Where

GA: Antenna factor of receive antenna

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



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

Measurement uncertainty (worst case): U = 5.0 dB, k=2.

#### Measurement results for Set.2:

#### **Charging Mode/Average detector**

Frequency(MHz)	Result(dB <sub>μ</sub> V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17889.500	51.2	-18.5	45.6	24.100	Н
17892.900	51.0	-18.5	45.6	23.900	V
17940.500	50.8	-17.7	45.6	22.900	V
17984.700	984.700 50.6		45.6	22.700	Н
17956.650	17956.650 50.5		45.6	22.600	Н
17690.600	7690.600 50.4		45.6	23.700	Н

## **Charging Mode/Peak detector**

gg							
Frequency(MHz)	Result(dBμV/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	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	Н		
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	Н		



#### Measurement results for Set.3:

## **Charging Mode/Average detector**

Frequency(MHz)	Result(dBμV/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17948.150	50.6	-17.7	45.6	22.700	Н
17908.200	3.200 50.4		45.6	23.300	V
17930.300	50.4	-17.7	45.6	22.500	Н
17932.850	.850 50.4		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	Н

# Charging Mode/Peak detector

Frequency(MHz)	Result(dB <sub>μ</sub> V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity	
17994.050	61.0	-17.7	45.6	33.100	V	
17686.350	60.8	-18.9	45.6	34.100	Н	
17450.050	60.8	-19.2	41.5	38.500	Н	
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(dBμV/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17958.350	50.5	-17.7	45.6	22.600	V
17953.250	17953.250 50.5		45.6	22.600	Н
17943.900	17943.900 50.5		45.6	22.600	V
17993.200	993.200 50.4		45.6	22.500	V
17939.650 50.4		-17.7	45.6	22.500	Н
17988.950	17988.950 50.3		45.6	22.400	Н

## **Charging Mode/Peak detector**

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



#### Measurement results for Set.5:

### Charging Mode/Average detector

Frequency(MHz)	Result(dB <sub>μ</sub> V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17960.050	51.2	-17.7	45.6	23.300	V
17926.050	926.050 51.0		45.6	23.100	V
17905.650	50.9	-18.5	45.6	23.800	Н
17970.250	7970.250 50.6		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	Н

#### **Charging Mode/Peak detector**

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

#### Measurement results for Set.6:

#### **USB Mode/Average detector**

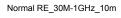
Frequency(MHz)	Result(dB <sub>μ</sub> V/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17949.000	50.7	-17.7	45.6	22.800	V
17964.300	964.300 50.3		45.6	22.400	Н
17988.100	50.3	-17.7	45.6	22.400	V
17880.150	0.150 50.3		45.6	23.200	Н
17903.100	17903.100 50.3		45.6	23.200	V
17828.300	50.2	-18.5	45.6	23.100	V

#### **USB Mode/Peak detector**

Frequency(MHz)	Result(dBμV/m)	G <sub>PL</sub> (dB)	G <sub>A</sub> (dB/m)	P <sub>Mea</sub> (dBµV)	Polarity
17456.850	61.2	-19.2	41.5	38.900	Н
17964.300	964.300 60.9		45.6	33.000	V
17842.750	60.7	-18.5	45.6	33.600	V
17784.950	17784.950 60.7		45.6	33.600	Н
17949.000	17949.000 60.6		45.6	32.700	V
17865.700	865.700 60.6		45.6	33.500	Н

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.





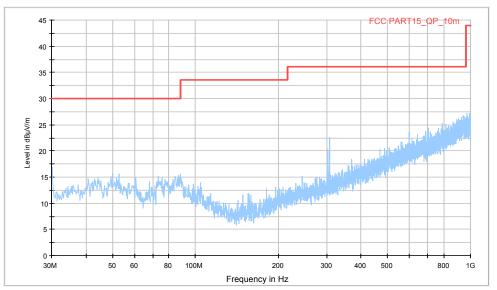


Figure A.1 Radiated Emission from 30MHz to 1GHz



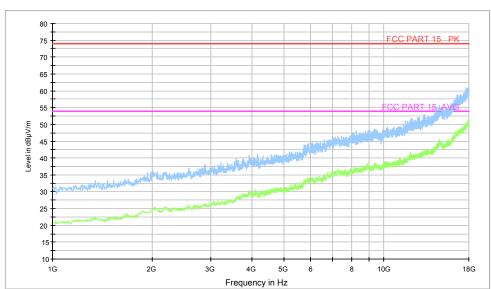


Figure A.2 Radiated Emission from 1GHz to 18GHz



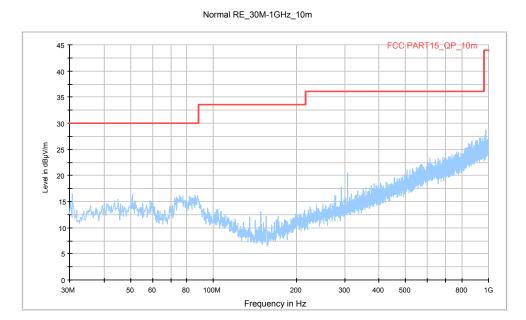


Figure A.3 Radiated Emission from 30MHz to 1GHz

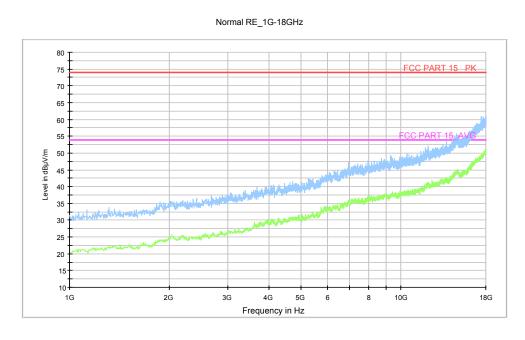


Figure A.4 Radiated Emission from 1GHz to 18GHz



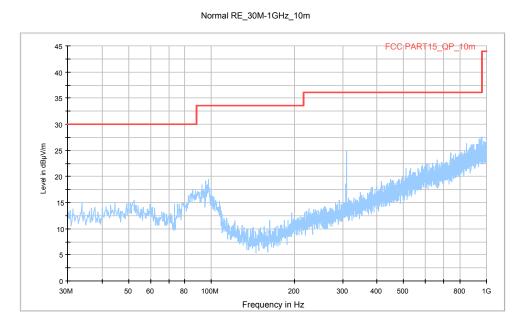


Figure A.5 Radiated Emission from 30MHz to 1GHz

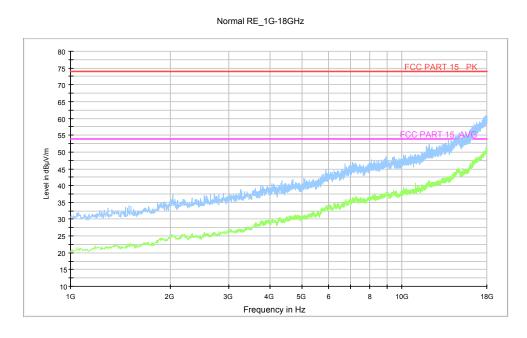


Figure A.6 Radiated Emission from 1GHz to 18GHz



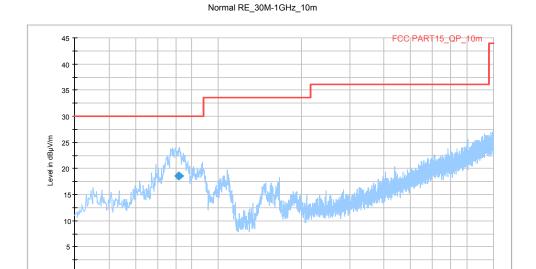


Figure A.7 Radiated Emission from 30MHz to 1GHz

Frequency in Hz

#### Final Result 1

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



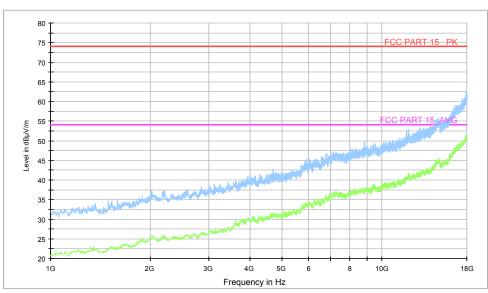


Figure A.8 Radiated Emission from 1GHz to 18GHz



#### **USB Mode, Set.6**

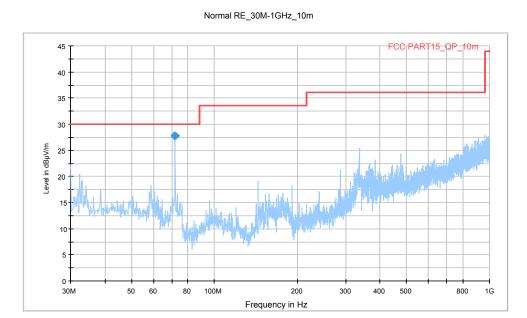


Figure A.9 Radiated Emission from 30MHz to 1GHz

# Final Result 1

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



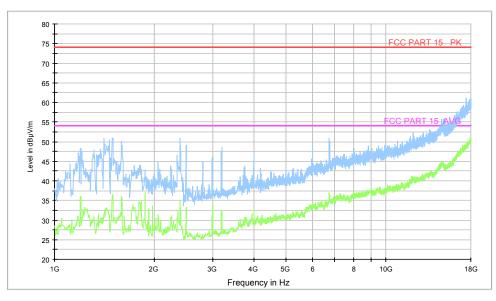


Figure A.10 Radiated Emission from 1GHz to 18GHz



### 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 (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

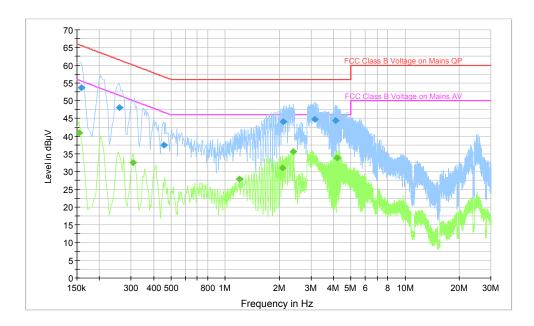
RBW/IF bandwidth	Sweep Time(s)
9kHz	1



#### A.2.5 Measurement Results

Measurement uncertainty: *U*= 2.7 dB, *k*=2.

## **Charging Mode, Set.2**



**Figure A.11 Conducted Emission** 

#### **Final Result 1**

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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	CAverage	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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



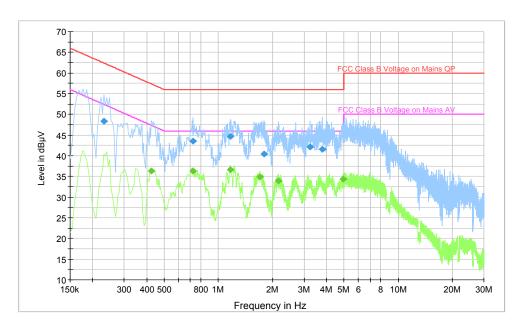


Figure A.12 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	$(dB\mu V)$		(dB)	(dB)	(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	CAverage	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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



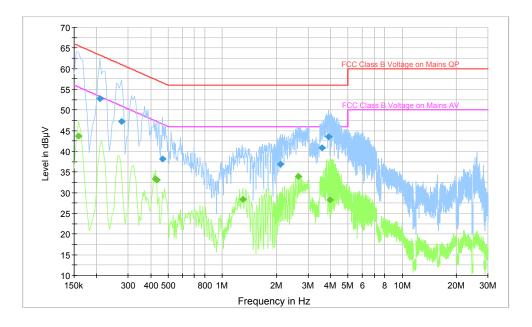


Figure A.13 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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	CAverage	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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



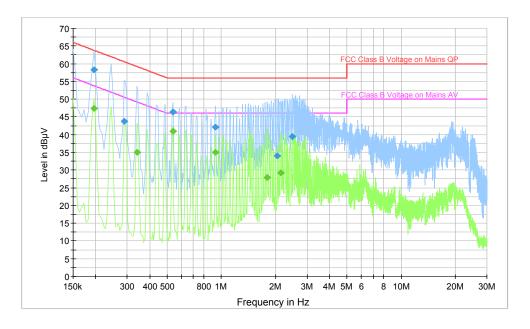


Figure A.14 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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	CAverage	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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



# **USB Mode, Set.6**

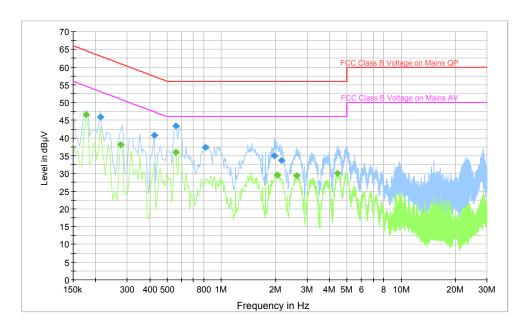


Figure A.15 Conducted Emission

#### Final Result 1

Time Hooding 1								
Frequency	QuasiPeak	Line	Corr.	Margin	Limit			
(MHz)	(dBµV)		(dB)	(dB)	(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	CAverage	Line	Corr.	Margin	Limit
(MHz)	(dBµV)		(dB)	(dB)	(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\*\*\*