TEST REPORT

No. I15Z40216-EMC01

for

TCL Communication Ltd.

HSUPA/HSDPA/UMTS Triple band/GSM Quad band mobile phone

Model Name: 4009A

FCC ID: 2ACCJH017

with

Hardware Version: PIO

Software Version: v4B2A

Issued Date: 2015-02-09

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, website: www.chinattl.com

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I15Z40216-EMC01	Rev.0	1st edition	2015-02-09

CONTENTS

1. Test Laboratory

1.1. Testing Location

Location 1: CTTL(huayuan North Road)

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

1.2. Testing Environment

Normal Temperature: 15-35℃

Relative Humidity: 20-75%

1.3. Project data

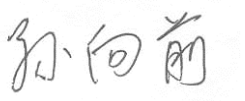
Testing Start Date: 2015-02-05

Testing End Date: 2015-02-09

1.4. Signature

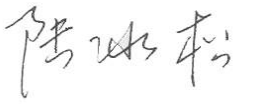
Qu Pengfei

(Prepared this test report)



Sun Xiangqian

(Reviewed this test report)



Lu Bingsong

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.
City:	Shanghai
Postal Code:	201203
Country:	China
Contact Person:	Gong Zhizhou
Contact Email	zhizhou.gong@tcl.com
Telephone:	0086-21-61460890
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.
City:	Shanghai
Postal Code:	201203
Country:	China
Telephone:	0086-21-61460890
Fax:	0086-21-61460602

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

3.1. About EUT

Description	HSUPA/HSDPA/UMTS Triple band/GSM Quad band mobile phone
Model Name	4009A
FCC ID	2ACCJH017
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 Telecommunication Metrology Center of MIIT of People's Republic of China.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	014351000100066	PIO	v4B2A

*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	/	14TCT-BA-1508
AE2	Battery	/	/
AE3	Battery	/	/
AE4	Battery	/	/
AE5	Battery	/	/
AE6	Battery	/	14TCT-BA-0111
AE7	Battery	/	14TCT-BA-1592
AE8	Battery	/	14TCT-BA-1432
AE9	Battery	/	14TCT-BA-1425
AE10	Battery	/	14TCT-BA-1507
AE11	Travel charger	/	14TCT-CH-2117
AE12	Travel charger	/	14TCT-CH-1460
AE13	Travel charger	/	14TCT-CH-1230
AE14	Travel charger	/	14TCT-CH-2217
AE15	Travel charger	/	14TCT-CH-2209
AE16	Travel charger	/	14TCT-CH-2280
AE17	USB cable	/	14TCT-DC-0611
AE18	USB cable	/	14TCT-DC-0599
AE19	USB cable	/	14TCT-DC-0746
AE20	USB cable	/	/
AE21	USB cable	/	/
AE22	USB cable	/	/

AE1, AE6, AE7, AE8, AE9, AE10

Model	CAB31P0000C1
Manufacturer	BYD
Capacitance	1300mAh
Nominal voltage	3.7V

AE2

Model	CAB31P0000CB
Manufacturer	OCEANSUN
Capacitance	1300mAh
Nominal voltage	V

AE3

Model	CAB1150001CB
Manufacturer	OCEANSUN
Capacitance	1150mAh
Nominal voltage	V

AE4

Model	CAB1150000C1
Manufacturer	BYD
Capacitance	1150mAh
Nominal voltage	V

AE5

Model	CAB1300015C2
Manufacturer	SCUD
Capacitance	1300mAh
Nominal voltage	V

AE11

Model	CBA3002AG0C1
Manufacturer	BYD
Length of cable	117cm

AE12

Model	CBA3002AG0C2
Manufacturer	Tenpao
Length of cable	117cm

AE13

Model	CBA3002AG0C3
Manufacturer	Yingju
Length of cable	122cm

AE14

Model	CBA3008AG0C1
Manufacturer	BYD
Length of cable	/

AE15

Model	CBA3008AG0C2
Manufacturer	Tenpao
Length of cable	/

AE16

Model	CBA3008AG0C3
Manufacturer	Yingju
Length of cable	/

AE17

Model	CDA3122002C1
Manufacturer	JUWEI
Length of cable	101cm

AE18

Model	CDA3122002C2
Manufacturer	Shenghua
Length of cable	101cm

AE19

Model	CDA3122002C7
Manufacturer	Yingju
Length of cable	99.5cm

AE20

Model	CDA3122005C1
Manufacturer	Juwei
Length of cable	/

AE21

Model	CDA3122005C2
Manufacturer	Shenghua
Length of cable	/

AE22

Model	CDA3122005C7
Manufacturer	Yingju
Length of cable	/

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

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE11	Charger
Set.2	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE12	Charger
Set.3	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE13	Charger
Set.4	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE14 +AE17/AE18/AE19	Charger
Set.5	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE15 +AE17/AE18/AE19	Charger
Set.6	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE16 +AE17/AE18/AE19	Charger
Set.7	EUT1+ AE1/AE2/AE3/AE4/AE5 + AE17/AE18/AE19	USB

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	10-1-13 Edition
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low - Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2009

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
Location Column	1/2/3/4	The test is performed in test location 1, 2, 3 or 4 which are described in section 1.1 of this report

Clause	List	Clause in FCC rules	Verdict	Location
1	Radiated Emission	15.109(a)	P	1
2	Conducted Emission	15.107(a)	P	1

7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESCI	100344	R&S	2015-03-03	1 year
2	Test Receiver	ESCI 7	100948	R&S	2015-07-16	1 year
3	Universal Radio Communication Tester	CMU200	109914	R&S	2015-04-13	1 year
4	Test Receiver	FSV	101047	R&S	2015-06-27	1 year
5	LISN	ESH2-Z5	829991/012	R&S	2015-04-14	1 year
6	EMI Antenna	VULB 9163	9163-234	Schwarzbeck	2016-09-16	3 years
7	EMI Antenna	3115	9906-5827	ETS-Lindgren	2016-11-19	3 years
8	PC	OPTIPLEX 380	2X1YV2X	DELL	N/A	N/A
9	Monitor	E178FPc	CN-OWR979-64180 -7AJ-D2MS	DELL	N/A	N/A
10	Printer	P1606dn	VNC3L52122	HP	N/A	N/A
11	Keyboard	L100	CN0RH659658907 ATOI40	DELL	N/A	N/A
12	Mouse	M-UAE119	LZ935220ZRC	Lenovo	N/A	N/A

ANNEX A: MEASUREMENT RESULTS

A.1 Radiated Emission (§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 10 meters(for 30MHz-1GHz) and 3 meters (for above 1GHz) is tested. Tested in accordance with the procedures of ANSI C63.4 - 2009, 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 USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode and is connected to a charger in the case of charging mode. The model of the PC is DELL OPTIPLEX 380, and the serial number of the PC is 2X1YV2X. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

A.1.3 Measurement Limit

Frequency range (MHz)	Field strength limit (μV/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:

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

Where

G_A: Antenna factor of receive antenna

G_{PL}: Path Loss

P_{Mea}: Measurement result on receiver.

Measurement uncertainty (worst case): U = 4.3 dB, k=2.

Measurement results for Set.1:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9871.750	35.8	-24.9	38.0	22.700	V
9381.250	35.7	-26.3	38.4	23.600	H
9856.000	35.6	-24.8	38.0	22.400	V
9990.438	35.6	-24.2	38.0	21.800	V
9150.063	35.6	-26.1	38.4	23.300	V
9997.188	35.6	-24.2	38.0	21.800	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9354.250	47.7	-26.3	38.4	35.600	H
9110.125	47.4	-26.1	38.4	35.100	V
9870.063	47.2	-24.9	38.0	34.100	V
9956.688	47.2	-24.9	38.0	34.100	H
9374.500	47.1	-26.3	38.4	35.000	V
9836.313	46.9	-24.8	38.0	33.700	V

Measurement results for Set.2:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9382.938	35.4	-25.6	38.4	22.600	H
9853.188	35.4	-24.8	38.0	22.200	V
9853.750	35.3	-24.8	38.0	22.100	V
9852.625	35.3	-24.8	38.0	22.100	H
9831.813	35.3	-24.8	38.0	22.100	V
9379.000	35.3	-26.3	38.4	23.200	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9804.250	47.7	-24.8	38.0	34.500	V
9962.313	47.5	-24.2	38.0	33.700	H
9802.000	47.2	-24.8	38.0	34.000	V
9380.125	46.7	-26.3	38.4	34.600	H
9893.125	46.7	-24.9	38.0	33.600	H
9809.875	46.6	-24.8	38.0	33.400	V

Measurement results for Set.3:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9876.813	35.4	-24.9	38.0	22.300	H
9974.125	35.2	-24.2	38.0	21.400	H
9841.375	35.2	-24.8	38.0	22.000	V
10000.000	35.1	-24.2	38.5	20.800	V
9997.188	35.1	-24.2	38.0	21.300	H
9858.250	35.1	-24.8	38.0	21.900	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9370.000	46.9	-26.3	38.4	34.800	H
9792.438	46.8	-24.8	38.0	33.600	V
9403.188	46.6	-25.6	38.4	33.800	V
9659.125	46.5	-25.4	38.0	33.900	H
9987.625	46.4	-24.2	38.0	32.600	H
9388.563	46.3	-25.6	38.4	33.500	V

Measurement results for Set.4:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9845.313	35.3	-24.8	38.0	22.100	H
9376.750	35.2	-26.3	38.4	23.100	V
9988.750	35.1	-24.2	38.0	21.300	V
9877.188	35.1	-24.9	38.0	22.000	H
9861.250	35.1	-24.9	38.0	22.000	V
9858.063	35.1	-24.8	38.0	21.900	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9101.563	46.9	-26.7	38.4	35.200	H
9994.063	46.8	-24.2	38.0	33.000	H
9857.000	46.8	-24.8	38.0	33.600	V
9846.375	46.6	-24.8	38.0	33.400	H
8279.188	46.5	-27.5	37.7	36.300	V
9127.063	46.4	-26.1	38.4	34.100	H

Measurement results for Set.5:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9973.000	35.4	-24.2	38.0	21.600	V
9857.125	35.4	-24.8	38.0	22.200	V
9844.750	35.4	-24.8	38.0	22.200	V
9848.688	35.2	-24.8	38.0	22.000	H
9985.938	35.2	-24.2	38.0	21.400	H
9804.250	35.2	-24.8	38.0	22.000	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9965.125	46.9	-24.2	38.0	33.100	V
8941.938	46.8	-26.7	38.0	35.500	V
9799.750	46.8	-24.8	38.0	33.600	H
9929.125	46.7	-24.9	38.0	33.600	H
9446.500	46.7	-25.6	38.4	33.900	V
9144.438	46.6	-26.1	38.4	34.300	V

Measurement results for Set.6:

Charging Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9856.563	35.5	-24.8	38.0	22.300	H
9853.750	35.2	-24.8	38.0	22.000	V
9848.125	35.2	-24.8	38.0	22.000	V
9874.000	35.1	-24.9	38.0	22.000	H
9384.063	35.1	-25.6	38.4	22.300	V
9814.938	35.1	-24.8	38.0	21.900	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9848.125	47.5	-24.8	38.0	34.300	V
9849.250	47.2	-24.8	38.0	34.000	V
9412.188	47.2	-25.6	38.4	34.400	H
9382.375	47.2	-25.6	38.4	34.400	H
9332.875	47.1	-26.3	38.4	35.000	H
9103.375	46.8	-26.7	38.4	35.100	V

Measurement results for Set.7:

USB Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
9998.313	35.8	-24.2	38.0	22.000	V
8935.750	35.5	-26.7	38.0	24.200	H
9991.563	35.5	-24.2	38.0	21.700	V
9866.688	35.4	-24.9	38.0	22.300	H
9870.625	35.4	-24.9	38.0	22.300	H
9853.750	35.4	-24.8	38.0	22.200	V

USB Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
1453.375	51.7	-40.2	24.1	67.800	H
1457.875	51.4	-40.2	24.1	67.500	V
1467.438	51.3	-40.0	24.1	67.200	V
1452.813	51.3	-40.2	24.1	67.400	H
1453.938	51.3	-40.2	24.1	67.400	V
1451.688	51.3	-40.2	24.1	67.400	V

Note: The measurement results of Set.1, Set.2, Set.3, Set.4, Set.5, Set.6 and Set.7 showed here are worst cases of the combinations of different batteries and different USB cables.

Charging Mode, Set.1

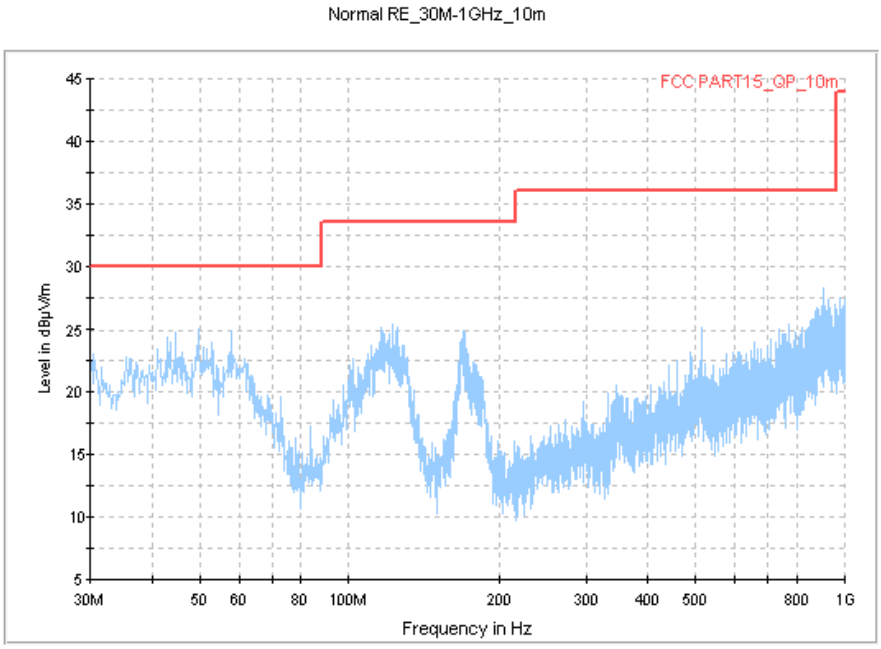


Fig.1 Radiated Emission from 30MHz to 1GHz

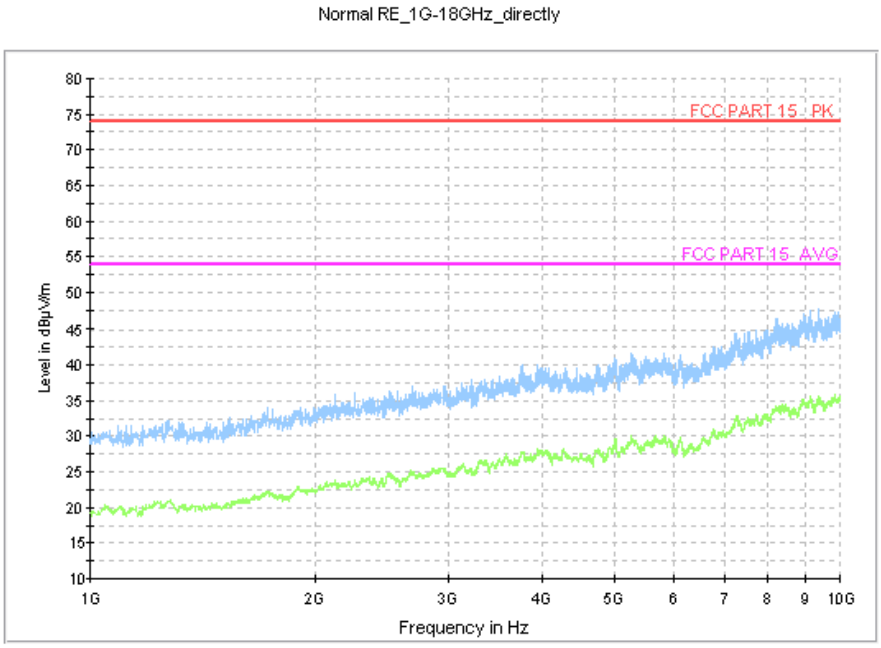


Fig.2 Radiated Emission from 1GHz to 10GHz

Charging Mode, Set.2

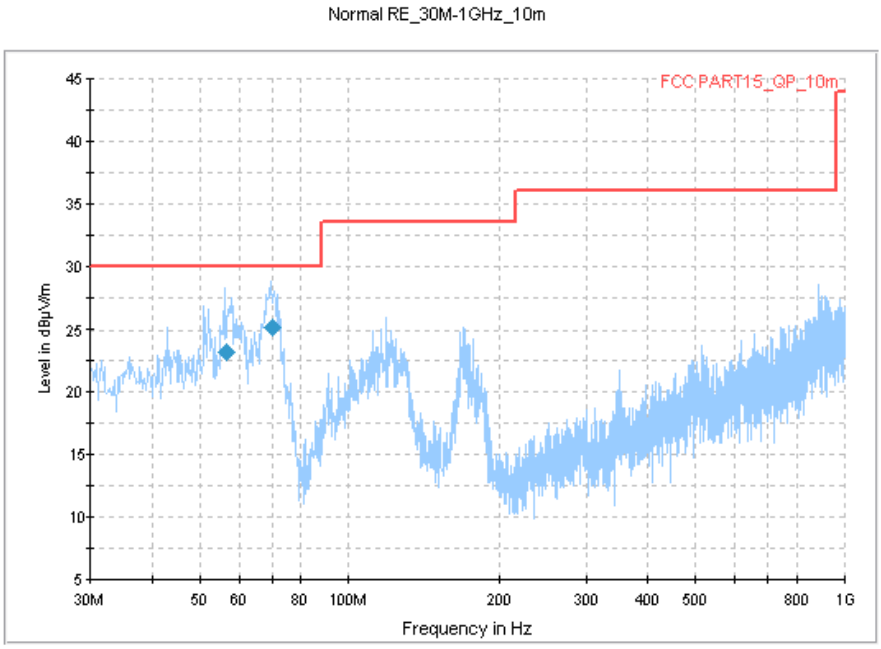


Fig.3 Radiated Emission from 30MHz to 1GHz

Final Result

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
56.790000	23.2	30.0	6.8	-27.0	V
70.007500	25.2	30.0	4.8	-6.0	V

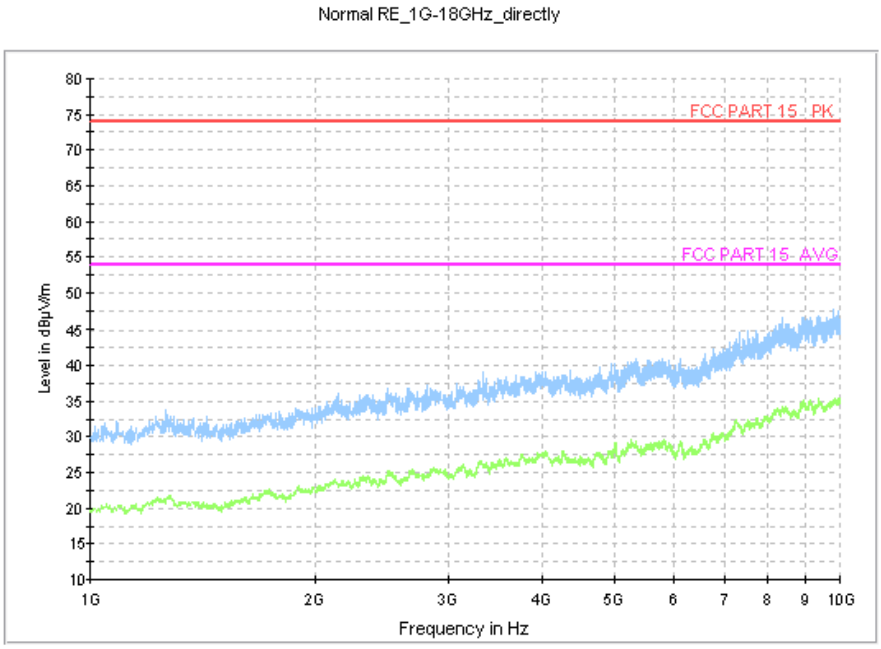


Fig.4 Radiated Emission from 1GHz to 10GHz

Charging Mode, Set.3

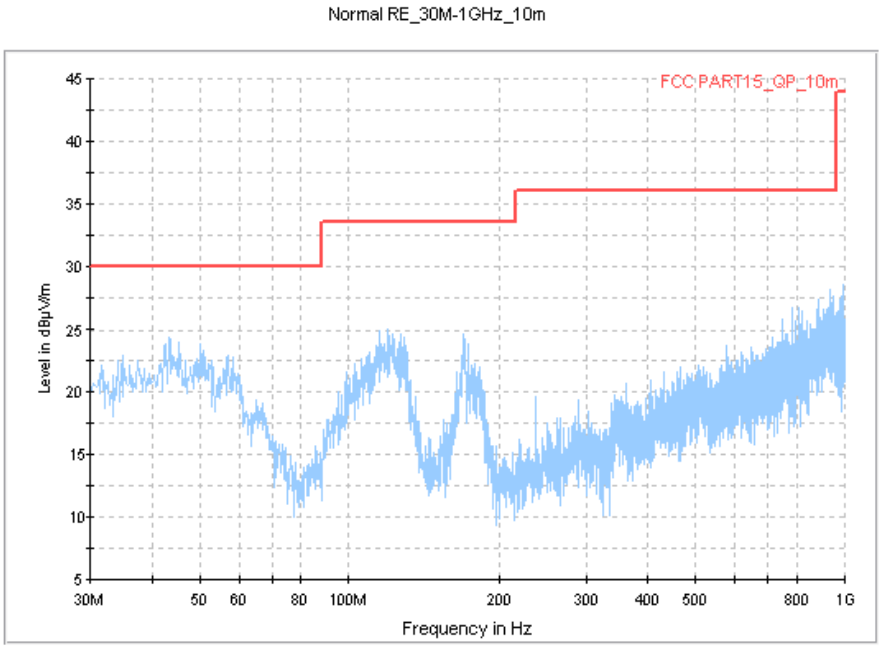


Fig.5 Radiated Emission from 30MHz to 1GHz

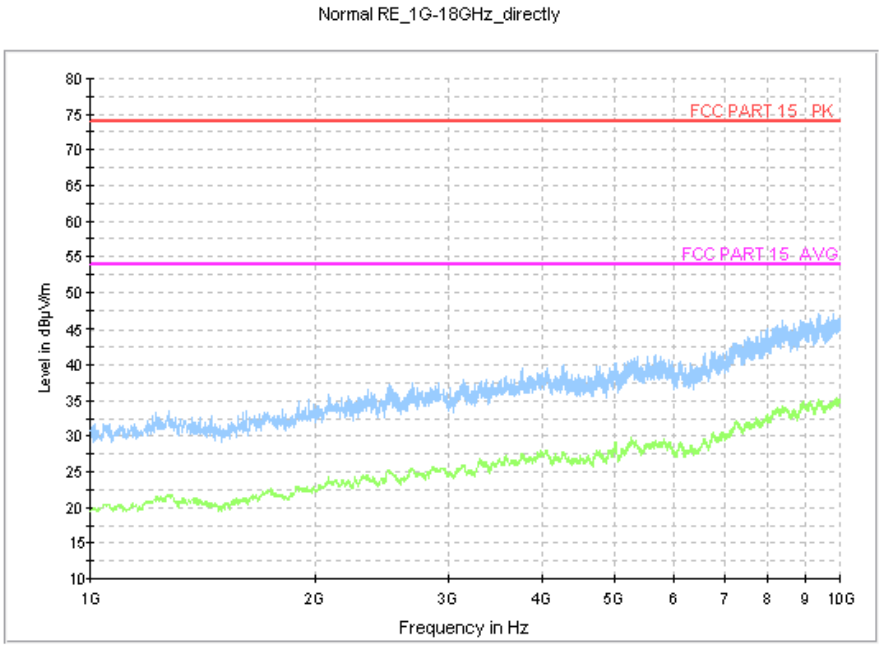


Fig.6 Radiated Emission from 1GHz to 10GHz

Charging Mode, Set.4

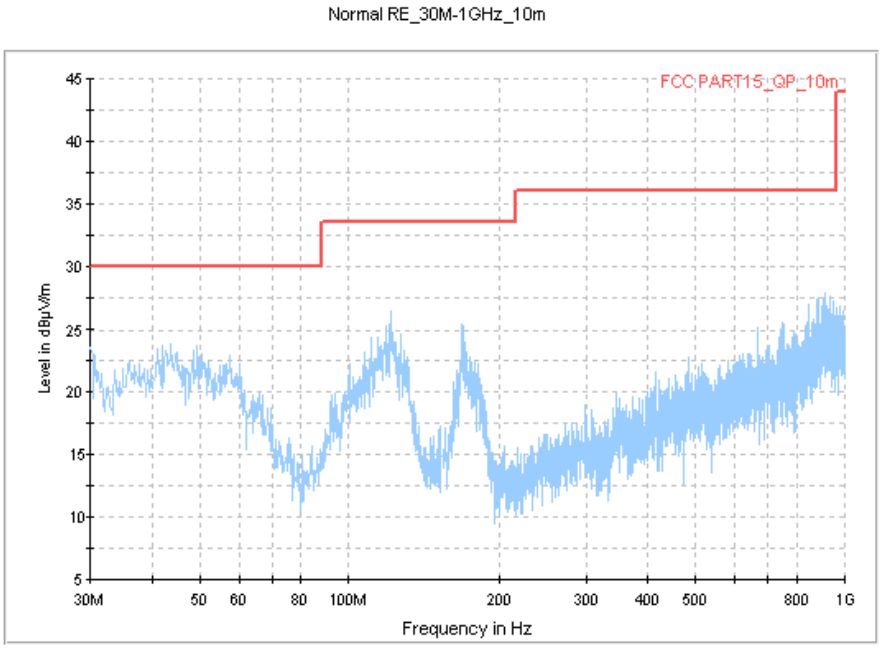


Fig.7 Radiated Emission from 30MHz to 1GHz

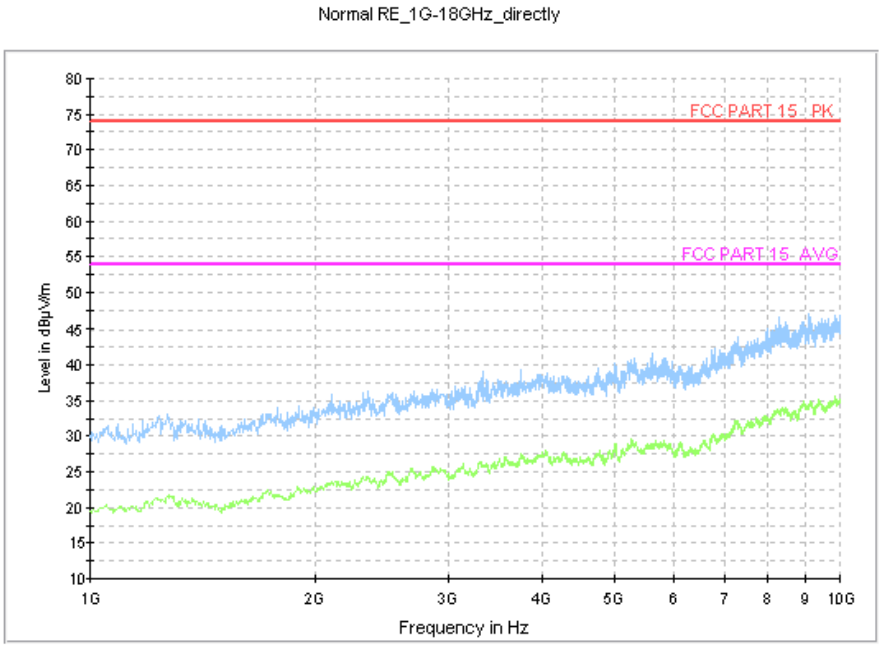


Fig.8 Radiated Emission from 1GHz to 10GHz

Charging Mode, Set.5

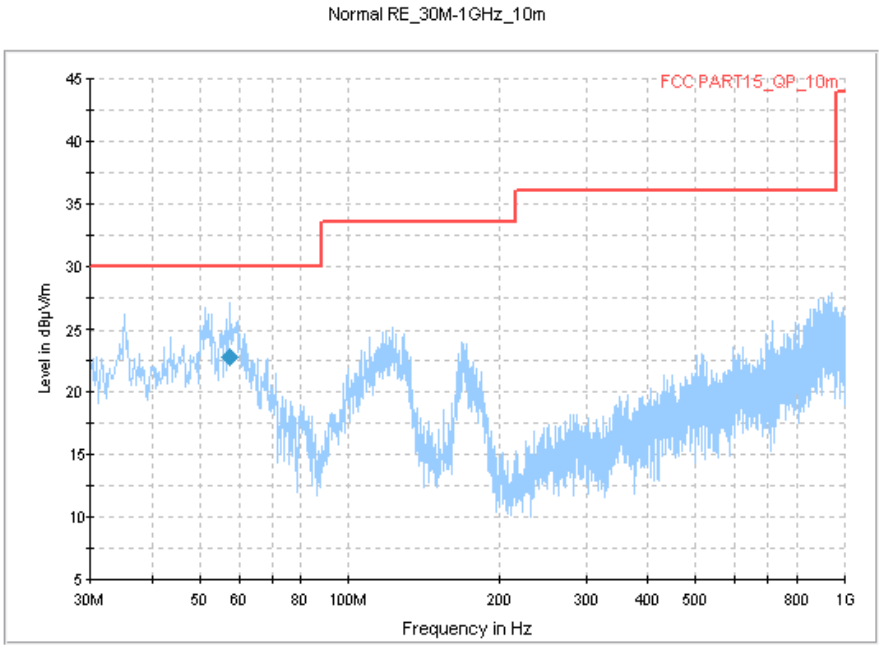


Fig.9 Radiated Emission from 30MHz to 1GHz

Final Result

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
57.585000	22.8	30.0	7.2	166.0	V

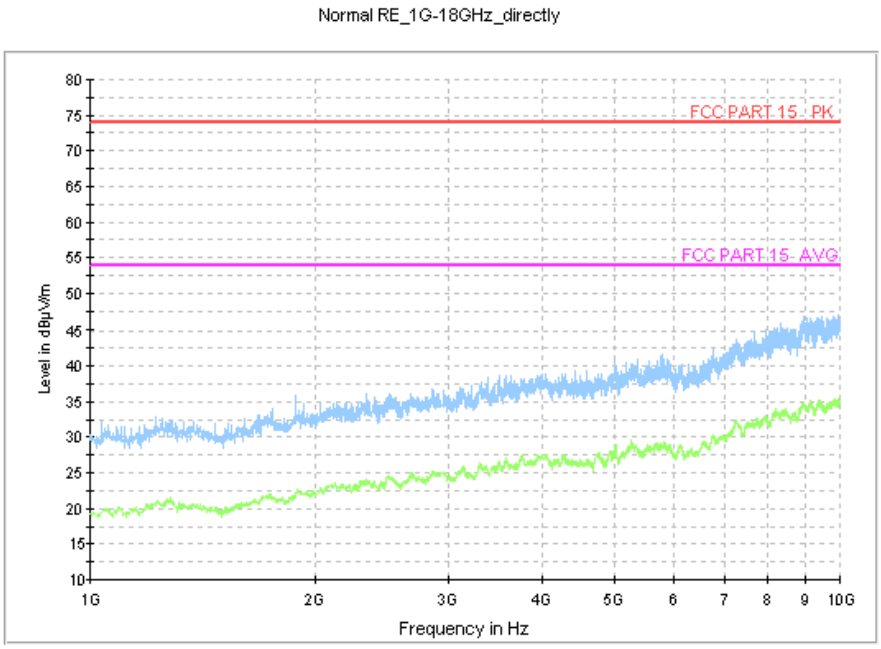


Fig.10 Radiated Emission from 1GHz to 10GHz

Charging Mode, Set.6

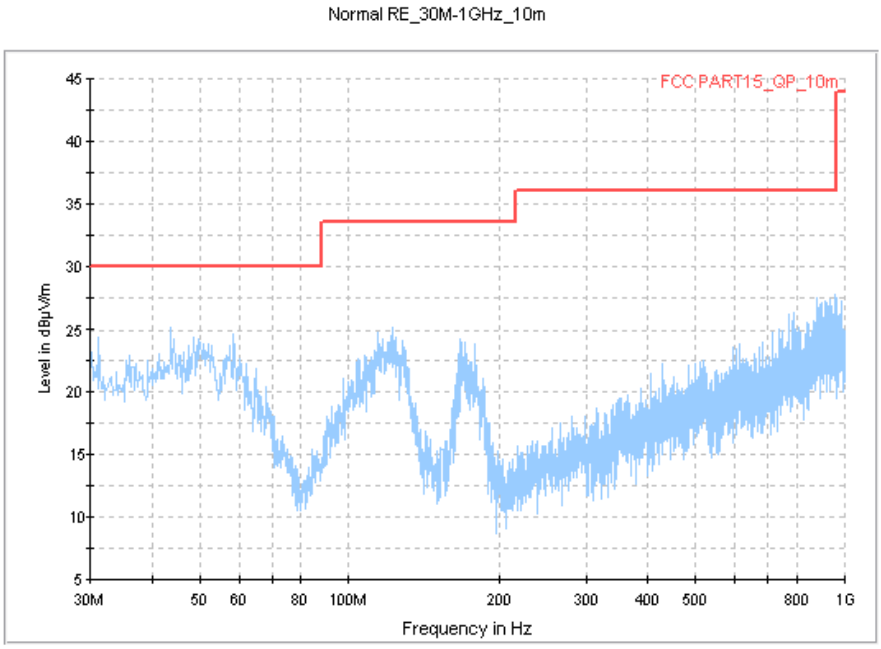


Fig.11 Radiated Emission from 30MHz to 1GHz

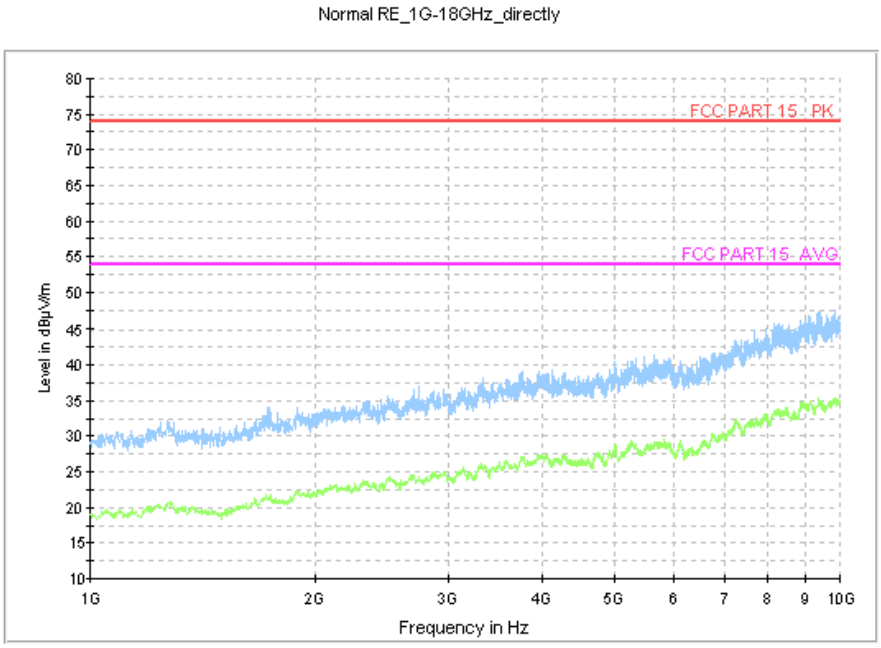


Fig.12 Radiated Emission from 1GHz to 10GHz

USB Mode, Set.7

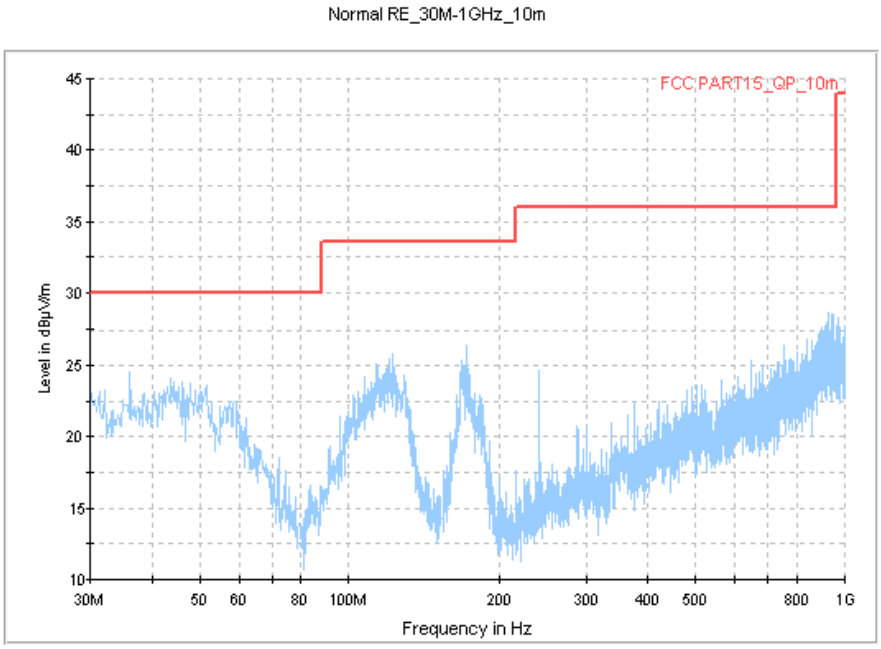


Fig.13 Radiated Emission from 30MHz to 1GHz

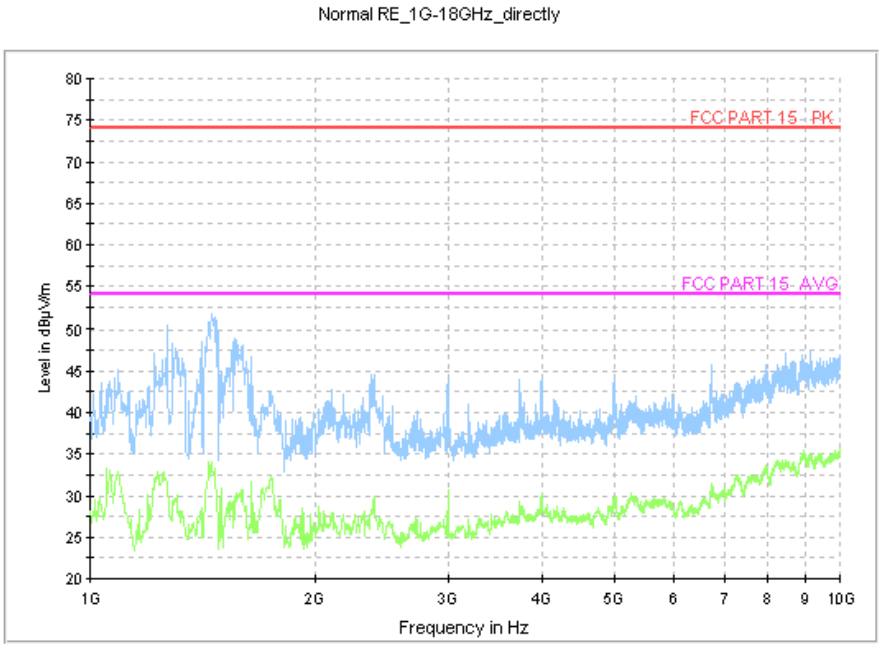


Fig.14 Radiated Emission from 1GHz to 10GHz

A.2 Conducted Emission (§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 - 2009, section 7.2.

A.2.2 EUT Operating Mode

The MS is operating in the USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode and is connected to a charger in the case of charging mode. The model of the PC is DELL OPTIPLEX 380, and the serial number of the PC is 2X1YV2X. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

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*= 2.9 dB, *k*=2.

Charging Mode, Set.1

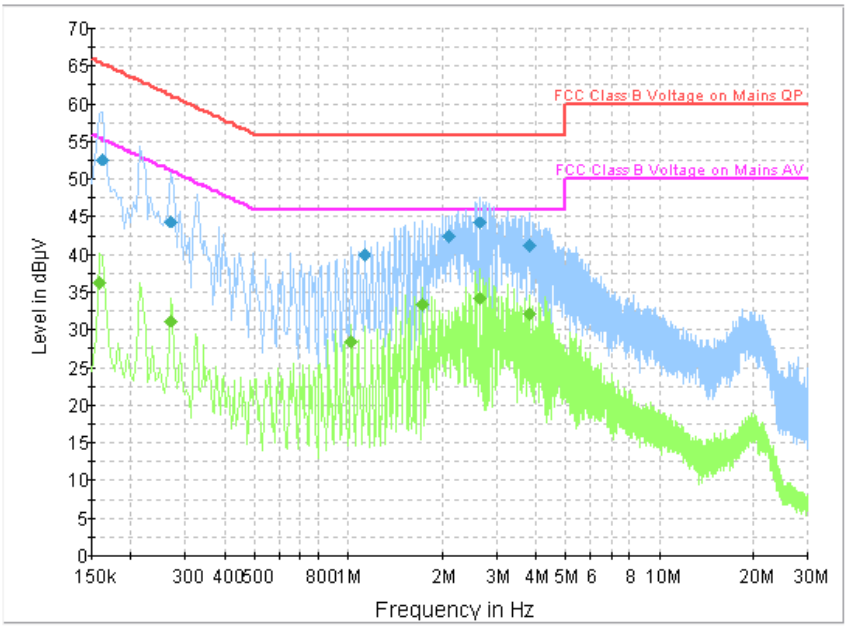


Fig.15 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	52.6	GND	N	19.7	12.6	65.3
0.267000	44.5	GND	N	19.7	16.7	61.2
1.126500	39.9	GND	L1	19.6	16.1	56.0
2.107500	42.4	GND	L1	19.6	13.6	56.0
2.647500	44.2	GND	L1	19.7	11.8	56.0
3.831000	41.3	GND	L1	19.7	14.7	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.159000	36.4	GND	L1	19.7	19.1	55.5
0.267000	31.3	GND	L1	19.7	19.9	51.2
1.018500	28.3	GND	L1	19.7	17.7	46.0
1.738500	33.3	GND	L1	19.7	12.7	46.0
2.647500	34.2	GND	L1	19.7	11.8	46.0
3.831000	32.2	GND	L1	19.7	13.8	46.0

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

Charging Mode, Set.2

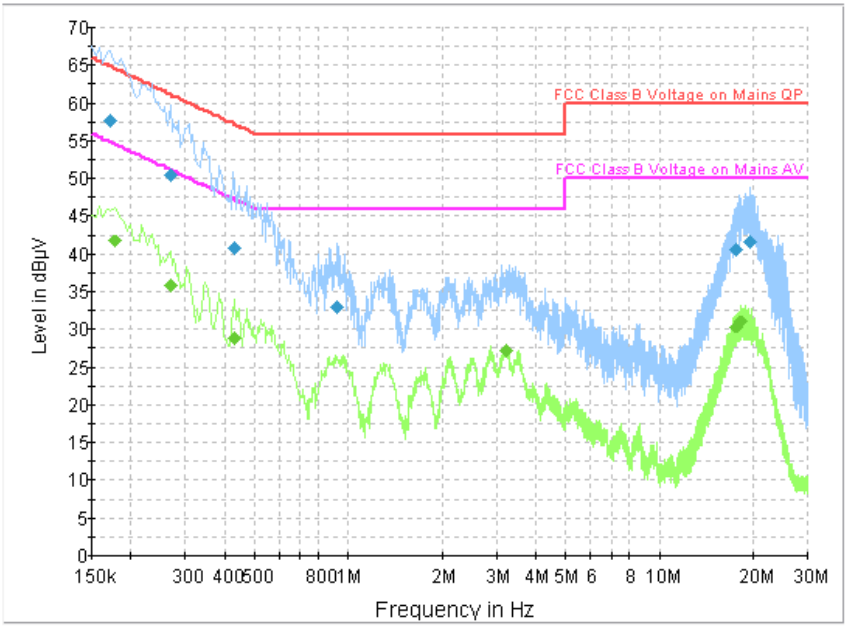


Fig.16 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.172500	57.8	GND	L1	19.7	7.1	64.8
0.267000	50.5	GND	L1	19.7	10.7	61.2
0.433500	40.7	GND	L1	19.8	16.5	57.2
0.919500	33.1	GND	N	19.7	22.9	56.0
17.637000	40.7	GND	L1	20.1	19.3	60.0
19.383000	41.5	GND	N	20.1	18.5	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	41.7	GND	L1	19.7	12.9	54.6
0.267000	35.8	GND	L1	19.7	15.4	51.2
0.433500	28.9	GND	L1	19.8	18.3	47.2
3.214500	27.2	GND	L1	19.7	18.8	46.0
17.574000	30.4	GND	L1	20.1	19.6	50.0
18.267000	31.0	GND	L1	20.1	19.0	50.0

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

Charging Mode, Set.3

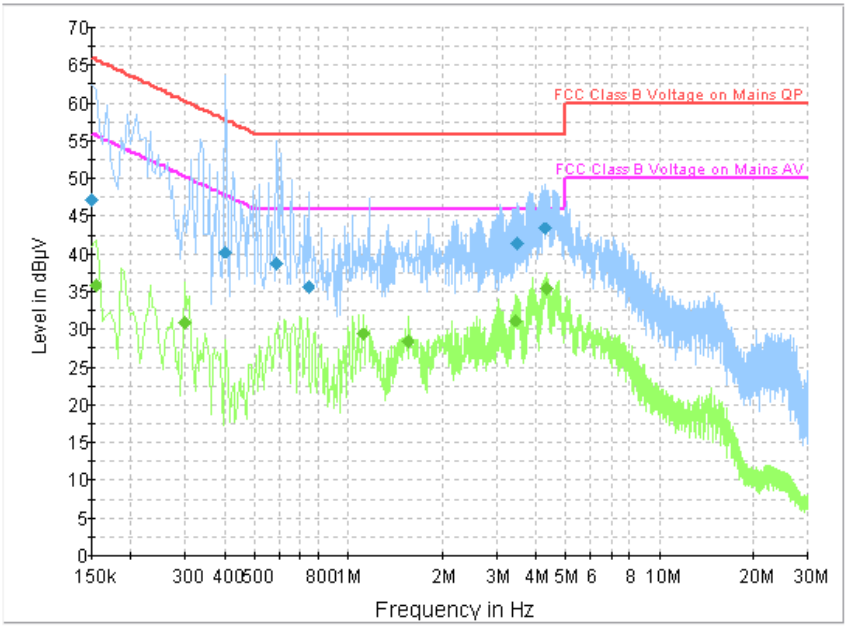


Fig.17 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	47.3	GND	L1	20.1	18.7	66.0
0.402000	40.2	GND	L1	19.8	17.6	57.8
0.586500	38.8	GND	L1	19.8	17.2	56.0
0.744000	35.6	GND	L1	19.8	20.4	56.0
3.484500	41.4	GND	L1	19.6	14.6	56.0
4.312500	43.5	GND	L1	19.6	12.5	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154500	35.8	GND	L1	19.9	19.9	55.8
0.298500	30.8	GND	L1	19.8	19.4	50.3
1.113000	29.3	GND	L1	19.7	16.7	46.0
1.558500	28.4	GND	L1	19.7	17.6	46.0
3.453000	31.2	GND	L1	19.6	14.8	46.0
4.353000	35.4	GND	L1	19.7	10.6	46.0

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

Charging Mode, Set.4

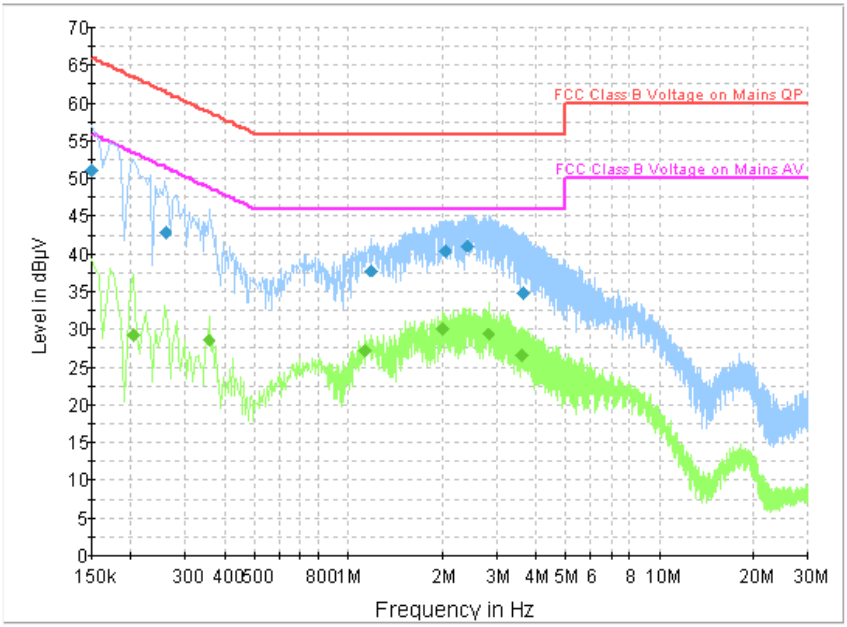


Fig.18 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	51.1	GND	L1	20.1	14.9	66.0
0.258000	42.9	GND	L1	19.8	18.6	61.5
1.189500	37.7	GND	L1	19.7	18.3	56.0
2.040000	40.5	GND	L1	19.6	15.5	56.0
2.409000	41.1	GND	L1	19.6	14.9	56.0
3.655500	34.9	GND	N	19.7	21.1	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.204000	29.2	GND	L1	19.8	24.3	53.4
0.357000	28.6	GND	L1	19.8	20.2	48.8
1.140000	27.2	GND	L1	19.6	18.8	46.0
1.999500	30.1	GND	L1	19.6	15.9	46.0
2.823000	29.3	GND	L1	19.6	16.7	46.0
3.633000	26.5	GND	L1	19.7	19.5	46.0

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

Charging Mode, Set.5

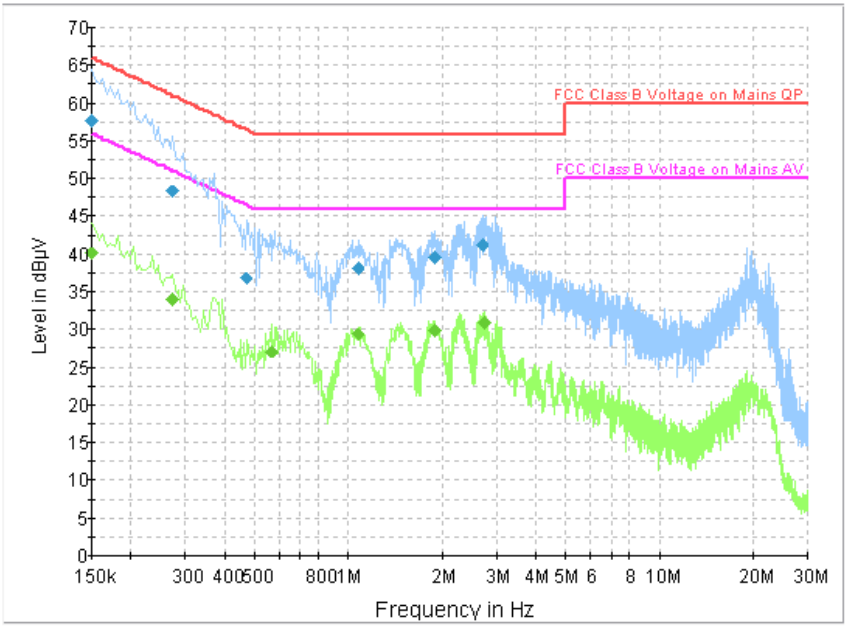


Fig.19 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	57.9	GND	L1	20.1	8.1	66.0
0.271500	48.3	GND	L1	19.8	12.8	61.1
0.469500	36.9	GND	L1	19.8	19.6	56.5
1.077000	38.1	GND	L1	19.7	17.9	56.0
1.900500	39.6	GND	L1	19.6	16.4	56.0
2.701500	41.3	GND	L1	19.6	14.7	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	40.2	GND	L1	20.1	15.8	56.0
0.271500	33.9	GND	L1	19.8	17.1	51.1
0.568500	27.0	GND	L1	19.8	19.0	46.0
1.072500	29.3	GND	L1	19.7	16.7	46.0
1.900500	30.0	GND	L1	19.6	16.0	46.0
2.742000	30.8	GND	L1	19.6	15.2	46.0

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

Charging Mode, Set.6

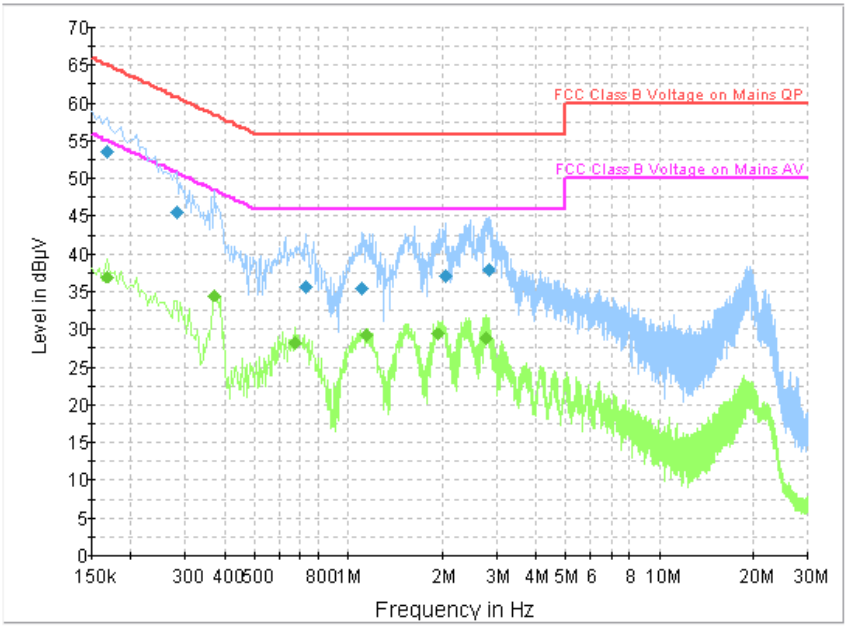


Fig.20 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	53.6	GND	L1	19.7	11.5	65.1
0.280500	45.6	GND	L1	19.7	15.2	60.8
0.730500	35.6	GND	N	19.8	20.4	56.0
1.104000	35.5	GND	N	19.7	20.5	56.0
2.062500	37.1	GND	N	19.6	18.9	56.0
2.827500	38.0	GND	N	19.7	18.0	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	37.0	GND	L1	19.7	18.0	55.1
0.370500	34.4	GND	L1	19.8	14.1	48.5
0.672000	28.3	GND	L1	19.8	17.7	46.0
1.144500	29.2	GND	L1	19.6	16.8	46.0
1.927500	29.4	GND	L1	19.6	16.6	46.0
2.760000	28.8	GND	L1	19.6	17.2	46.0

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

USB Mode, Set.7

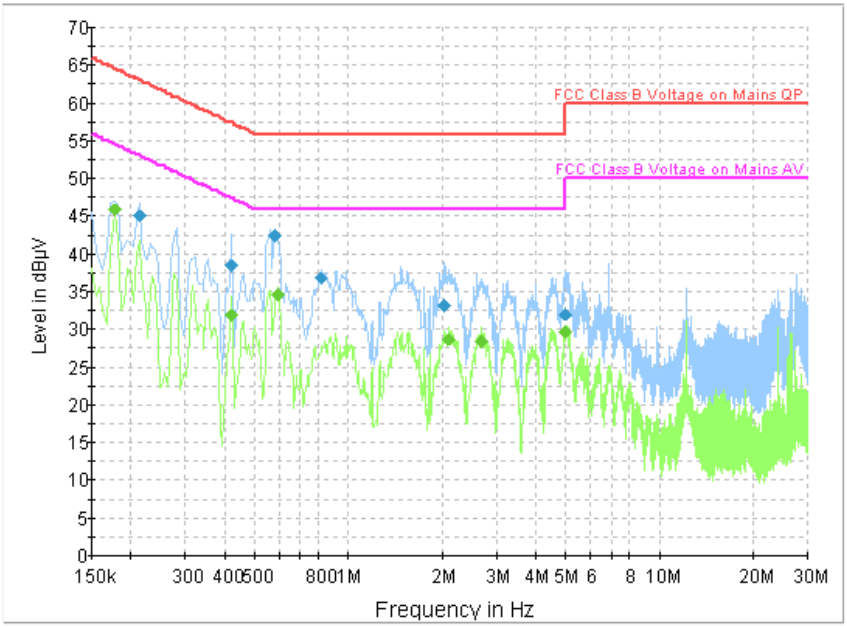


Fig.21 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.213000	45.1	GND	N	19.8	18.0	63.1
0.420000	38.5	GND	L1	19.8	18.9	57.4
0.582000	42.4	GND	L1	19.8	13.6	56.0
0.816000	36.9	GND	N	19.8	19.1	56.0
2.031000	33.2	GND	L1	19.6	22.8	56.0
4.987500	32.1	GND	N	19.6	23.9	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	45.8	GND	N	19.7	8.8	54.6
0.420000	31.9	GND	L1	19.8	15.5	47.4
0.595500	34.7	GND	L1	19.8	11.3	46.0
2.107500	28.7	GND	N	19.6	17.3	46.0
2.670000	28.4	GND	N	19.7	17.6	46.0
4.992000	29.7	GND	N	19.6	16.3	46.0

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

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