TEST REPORT

No. I14Z49012-EMC01

for

TCL Communication Ltd

HSUPA/HSDPA/UMTS Tri band/GSM Quad bands mobile phone

Model Name: 4013K, 4013J

FCC ID: 2ACCJH006

with

Hardware Version: PIO

Software Version: v5B4

Issued Date: 2014-12-22

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

FCC 2.948 Listed: No. 525429

CTTL, Telecommunication Technology Labs, Academy of Telecommunication Research, MIIT

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

Tel: +86(0)10-62304633-2512, Fax: +86(0)10-62304633-2504

Email: cttl_terminals@catr.cn, website: www.chinattl.com

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I14Z49012-EMC01	Rev.0	1st edition	2014-12-22

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℃

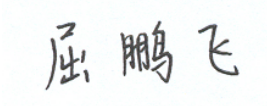
Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2014-12-09

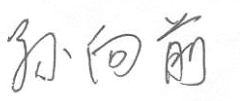
Testing End Date: 2014-12-10

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 Tri band/GSM Quad bands mobile phone
Model Name	4013K,4013J
FCC ID	2ACCJH006
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	014266000004334	PIO	v5B4

*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-2129
AE2	Battery	/	14TCT-BA-1926
AE3	Battery	/	14TCT-BA-1927
AE4	Battery	/	14TCT-BA-0125
AE5	Battery	/	14TCT-BA-1431
AE6	Battery	/	14TCT-BA-0094
AE7	USB cable	/	14TCT-DC-0616
AE8	USB cable	/	1447019DC007
AE9	USB cable	/	14TCT-DC-0717
AE10	USB cable	/	/
AE11	USB cable	/	/
AE12	USB cable	/	/
AE13	Travel charger	/	14TCT-CH-2030
AE14	Travel charger	/	14TCT-CH-2115
AE15	Travel charger	/	14TCT-CH-1051
AE16	Travel charger	/	14TCT-CH-2206
AE17	Travel charger	/	14TCT-CH-2177

AE1

Model	CAB31P0000CB
Manufacturer	Oceansun
Capacitance	1300mAh
Nominal voltage	3.7V

AE2, AE3

Model	CAB1300015C2
Manufacturer	SCUD
Capacitance	1300mAh
Nominal voltage	3.7V

AE4, AE5, AE6

Model	CAB31P0000C1
Manufacturer	BYD
Capacitance	1300mAh
Nominal voltage	3.7V

AE7

Model	CDA3122002C1
Manufacturer	Juwei
Length of cable	92cm

AE8

Model	CDA3122002C2
Manufacturer	Shenghua
Length of cable	91cm

AE9

Model	CDA3122002C8
Manufacturer	PUAN
Length of cable	92cm

AE10

Model	CDA3122005C1
Manufacturer	Juwei
Length of cable	/

AE11

Model	CDA3122005C2
Manufacturer	Shenghua
Length of cable	/

AE12

Model	CDA3122005C8
Manufacturer	PUAN
Length of cable	/

AE13

Model	CBA3002AG0C3
Manufacturer	YINGJU
Length of cable	122cm

AE14

Model	CBA3002AG0C2
Manufacturer	Tenpao
Length of cable	118cm

AE15

Model	CBA3002AG0C1
Manufacturer	BYD
Length of cable	119cm

AE16

Model	CBA3008AG0C2
Manufacturer	Tenpao
Length of cable	/

AE17

Model	CBA3008AG0C3
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/AE4 + AE13	Charger
Set.2	EUT1+ AE1/AE2/AE4 + AE14	Charger
Set.3	EUT1+ AE1/AE2/AE4 + AE15	Charger
Set.4	EUT1+ AE1/AE2/AE4 + AE7/AE8/AE9+AE16	Charger
Set.5	EUT1+ AE1/AE2/AE4 + AE7/AE8/AE9+AE17	Charger
Set.6	EUT1+ AE1/AE2/AE4 + AE7/AE8/AE9	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	2015-07-03	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
17879.938	49.2	-18.5	45.6	22.100	H
17896.938	49.1	-18.5	45.6	22.000	V
17887.375	49.1	-18.5	45.6	22.000	V
17882.063	49.0	-18.5	45.6	21.900	H
17866.125	49.0	-18.5	45.6	21.900	V
17885.250	48.9	-18.5	45.6	21.800	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17955.375	61.6	-17.7	45.6	33.700	H
17957.500	60.8	-17.7	45.6	32.900	V
17868.250	60.6	-18.5	45.6	33.500	V
17924.563	60.6	-17.7	45.6	32.700	H
17979.813	60.3	-17.7	45.6	32.400	V
17928.813	60.2	-17.7	45.6	32.300	H

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
17883.125	49.1	-18.5	45.6	22.000	H
17875.688	49.1	-18.5	45.6	22.000	V
17894.813	49.0	-18.5	45.6	21.900	H
17890.563	49.0	-18.5	45.6	21.900	H
17891.625	49.0	-18.5	45.6	21.900	V
17893.750	49.0	-18.5	45.6	21.900	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17890.563	61.3	-18.5	45.6	34.200	H
17945.813	60.9	-17.7	45.6	33.000	V
17930.938	60.8	-17.7	45.6	32.900	H
17903.313	60.7	-18.5	45.6	33.600	H
17879.938	60.5	-18.5	45.6	33.400	V
17981.938	60.5	-17.7	45.6	32.600	H

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
17877.813	49.1	-18.5	45.6	22.000	H
17872.500	48.9	-18.5	45.6	21.800	H
17883.125	48.9	-18.5	45.6	21.800	V
17892.688	48.9	-18.5	45.6	21.800	H
17875.688	48.9	-18.5	45.6	21.800	V
17878.875	48.9	-18.5	45.6	21.800	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17874.625	61.5	-18.5	45.6	34.400	H
17894.813	60.9	-18.5	45.6	33.800	H
17878.875	60.7	-18.5	45.6	33.600	V
17886.313	60.6	-18.5	45.6	33.500	H
17861.875	60.5	-18.5	45.6	33.400	V
17956.438	60.5	-17.7	45.6	32.600	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
17901.188	49.0	-18.5	45.6	21.900	H
17868.250	49.0	-18.5	45.6	21.900	V
17896.938	49.0	-18.5	45.6	21.900	H
17861.875	48.9	-18.5	45.6	21.800	H
17889.500	48.9	-18.5	45.6	21.800	V
17884.188	48.9	-18.5	45.6	21.800	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17877.813	60.6	-18.5	45.6	33.500	H
17872.500	60.4	-18.5	45.6	33.300	V
17920.313	60.3	-17.7	45.6	32.400	H
17885.250	60.2	-18.5	45.6	33.100	H
17952.188	59.9	-17.7	45.6	32.000	V
17904.375	59.9	-18.5	45.6	32.800	V

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
17878.875	49.1	-18.5	45.6	22.000	V
17903.313	49.0	-18.5	45.6	21.900	H
17892.688	49.0	-18.5	45.6	21.900	V
17871.438	48.9	-18.5	45.6	21.800	H
17875.688	48.9	-18.5	45.6	21.800	H
17899.063	48.9	-18.5	45.6	21.800	V

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17888.438	62.0	-18.5	45.6	34.900	V
17990.438	61.0	-17.7	45.6	33.100	H
17867.188	60.9	-18.5	45.6	33.800	V
17894.813	60.6	-18.5	45.6	33.500	H
17876.750	60.1	-18.5	45.6	33.000	H
17900.125	60.1	-18.5	45.6	33.000	V

Measurement results for Set.6:

USB Mode/Average detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17894.813	49.1	-18.5	45.6	22.000	V
17873.563	49.1	-18.5	45.6	22.000	H
17892.688	49.1	-18.5	45.6	22.000	V
17904.375	49.1	-18.5	45.6	22.000	V
17878.875	49.0	-18.5	45.6	21.900	V
17891.625	49.0	-18.5	45.6	21.900	H

USB Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
17955.375	60.1	-17.7	45.6	32.200	V
17992.563	60.1	-17.7	45.6	32.200	H
17866.125	59.9	-18.5	45.6	32.800	V
17984.063	59.8	-17.7	45.6	31.900	H
17884.188	59.6	-18.5	45.6	32.500	V
17892.688	59.6	-18.5	45.6	32.500	H

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

Charging Mode, Set.1

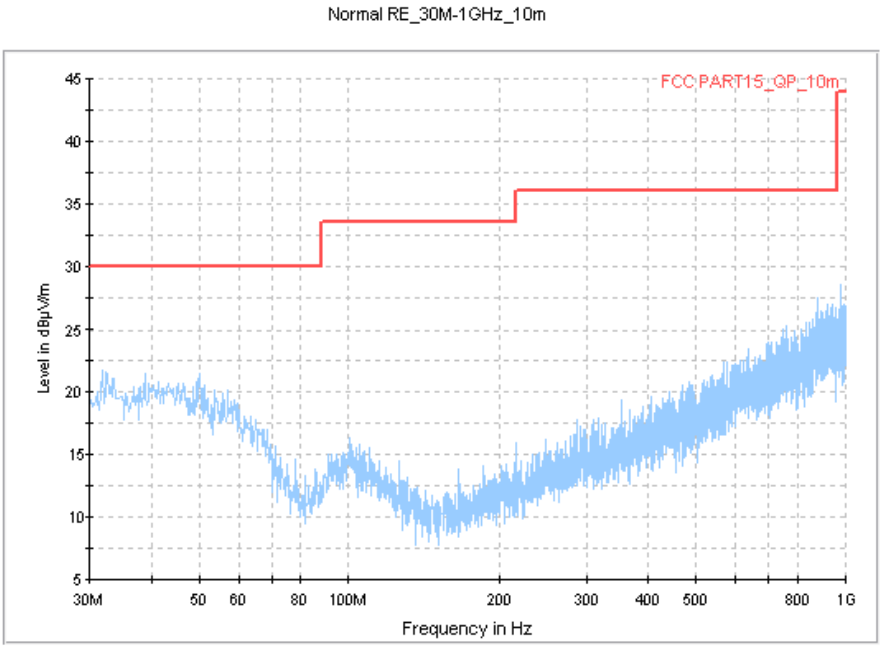


Fig.1 Radiated Emission from 30MHz to 1GHz

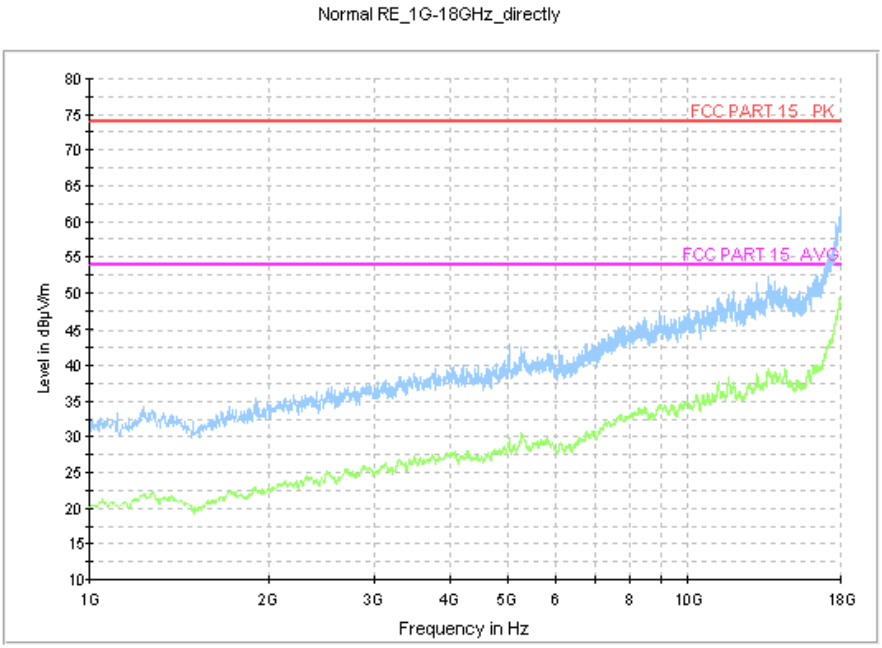


Fig.2 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.2

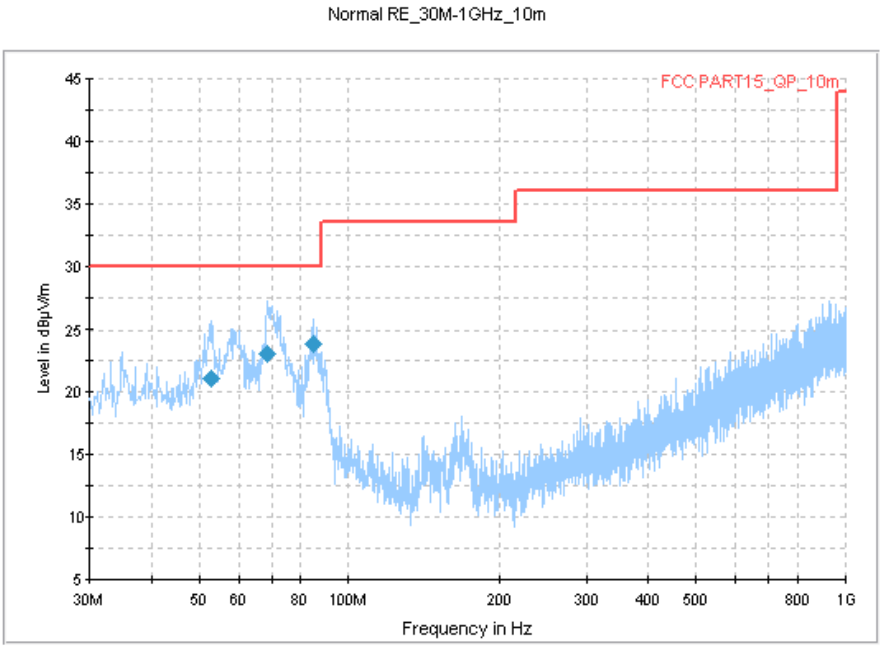


Fig.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
52.736250	21.1	30.0	8.9	-21.0	V
68.618750	23.0	30.0	7.0	-14.0	V
85.227500	23.9	30.0	6.1	-28.0	V

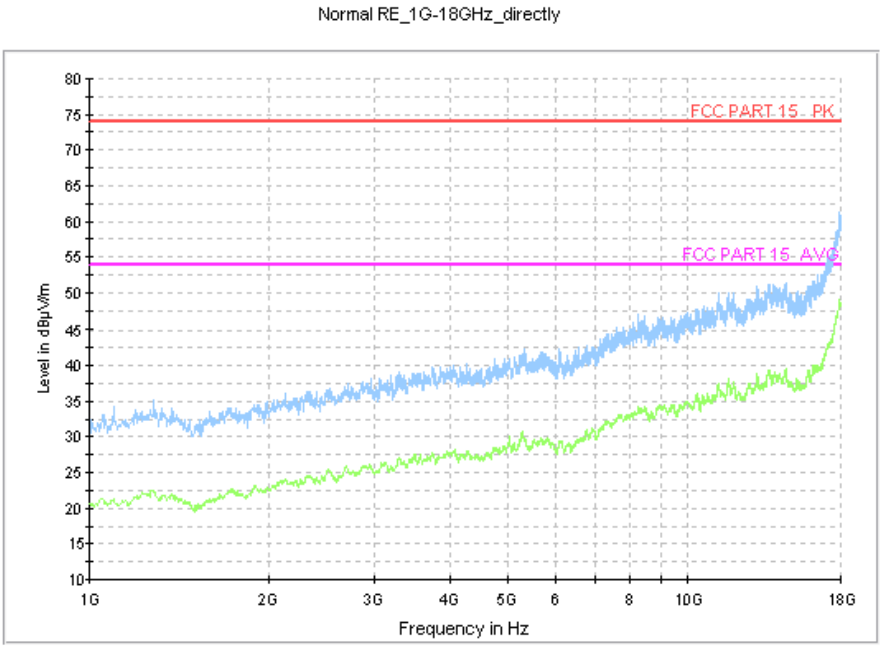


Fig.4 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.3

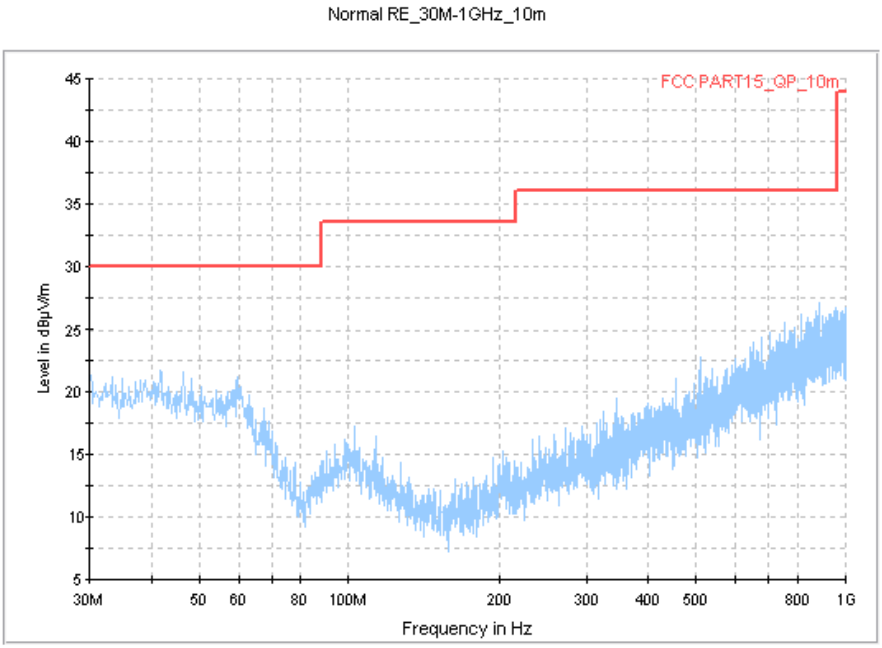


Fig.5 Radiated Emission from 30MHz to 1GHz

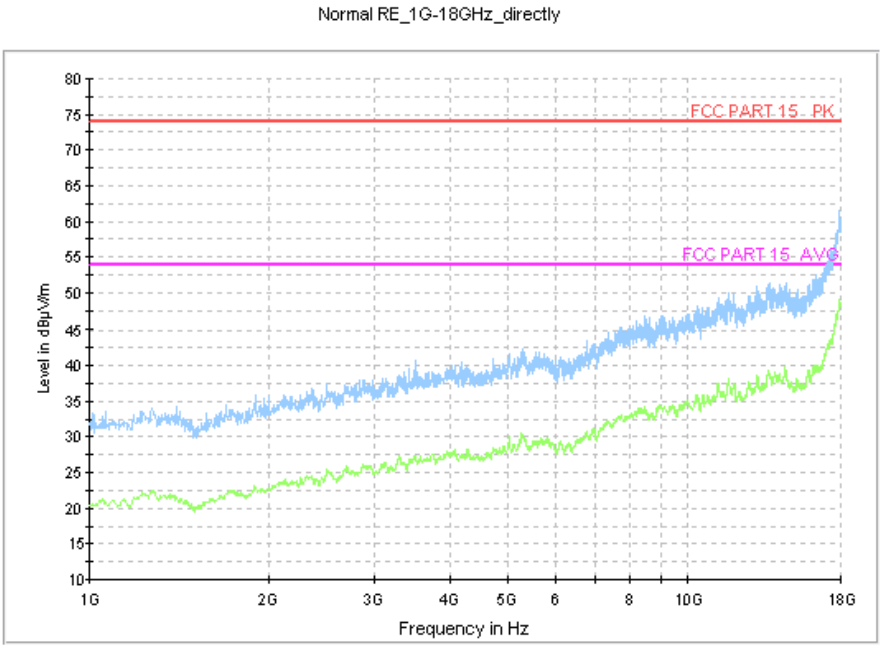


Fig.6 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.4

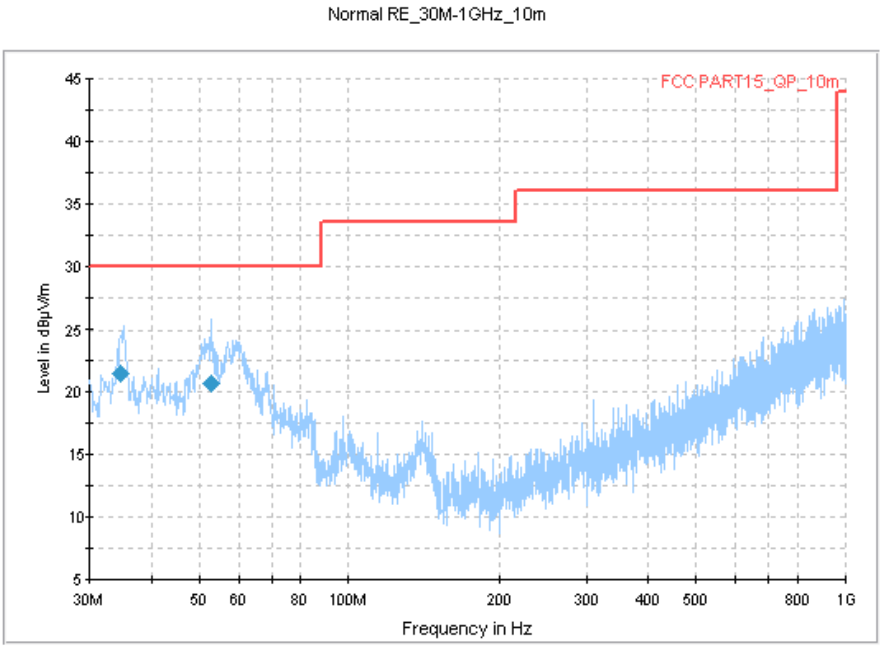


Fig.7 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
34.795000	21.5	30.0	8.5	30.0	V
52.856250	20.7	30.0	9.3	-28.0	V

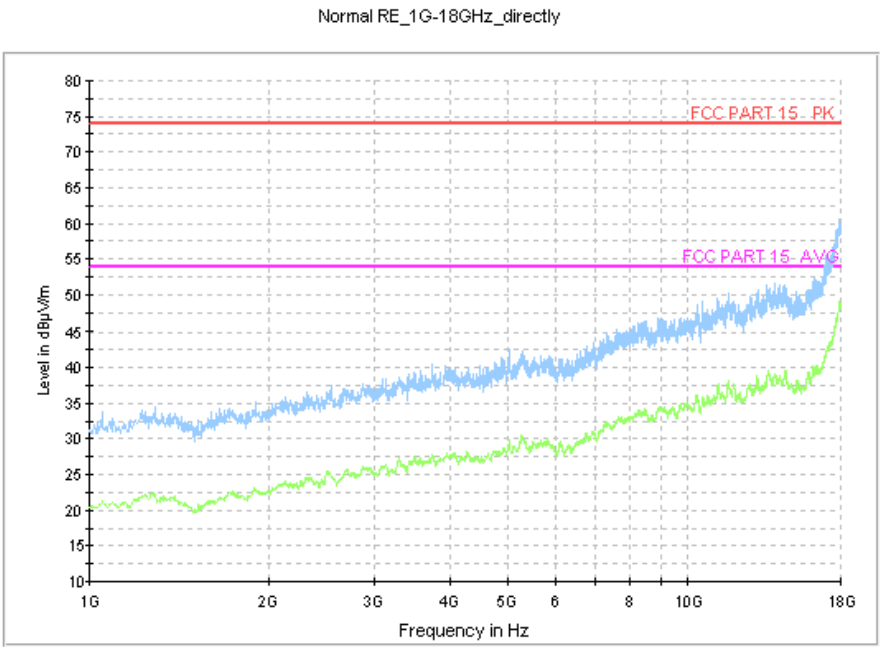


Fig.8 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.5

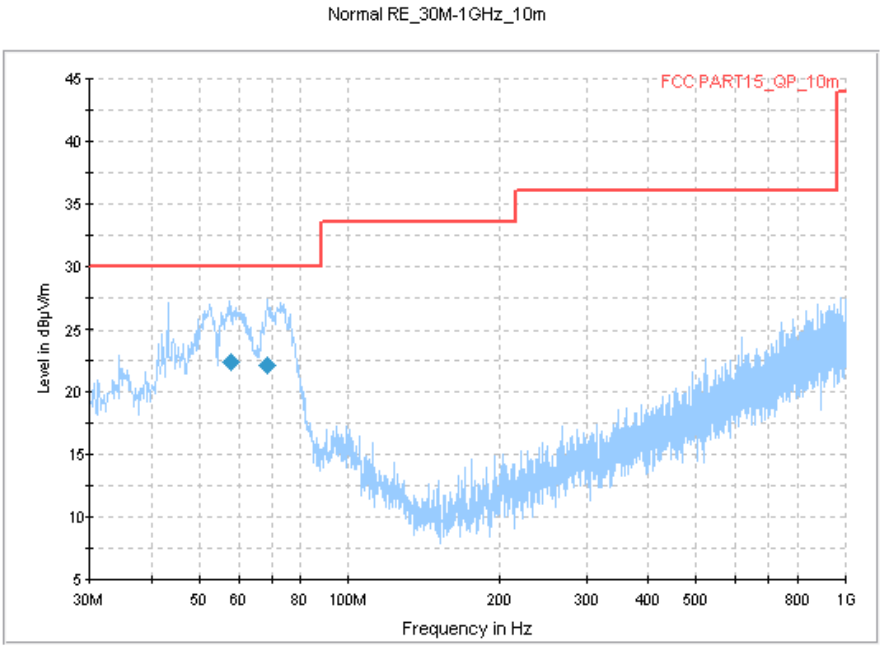


Fig.9 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
58.123750	22.4	30.0	7.6	-26.0	V
68.800000	22.2	30.0	7.8	16.0	V

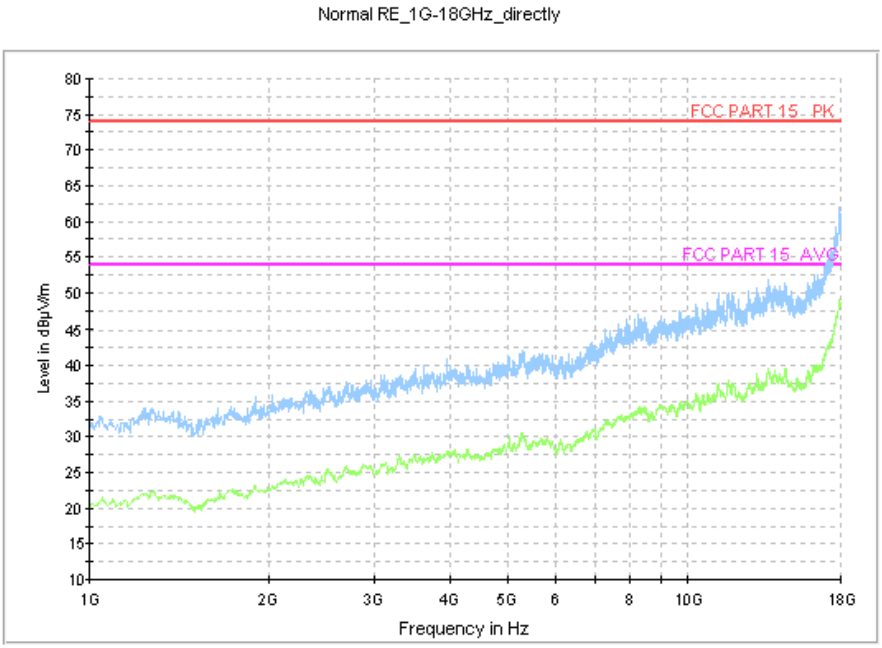


Fig.10 Radiated Emission from 1GHz to 18GHz

USB Mode, Set.6

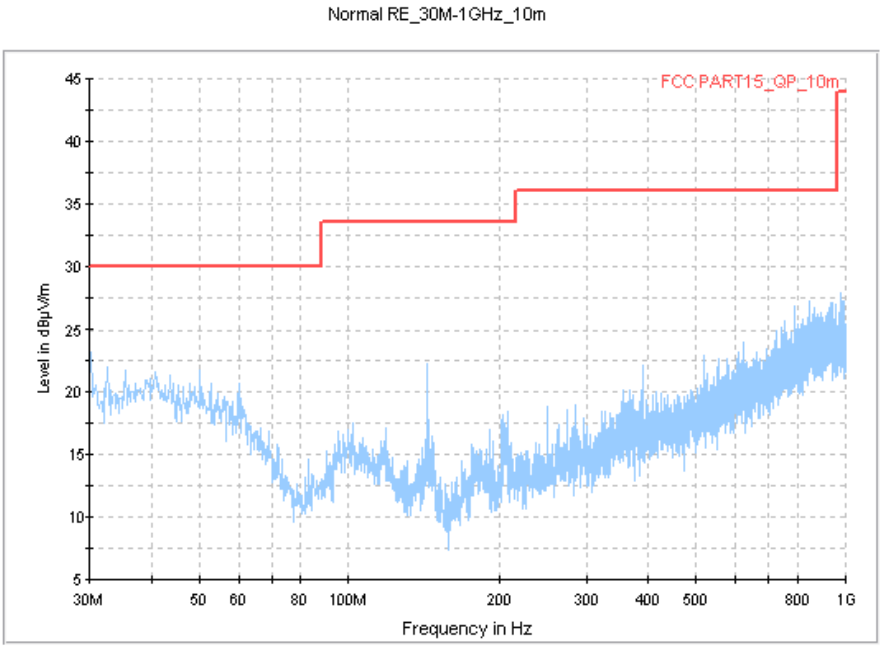


Fig.11 Radiated Emission from 30MHz to 1GHz

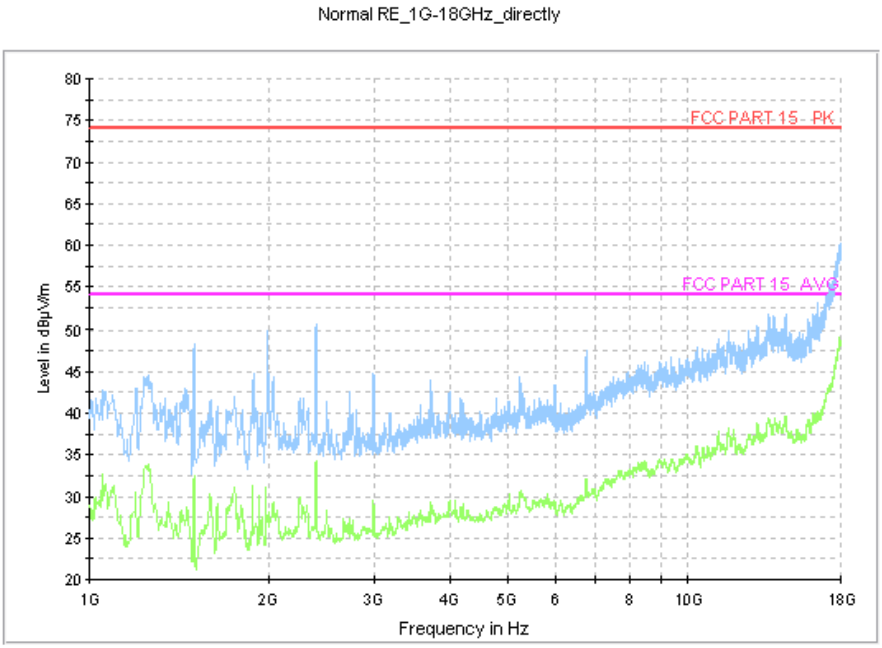


Fig.12 Radiated Emission from 1GHz to 18GHz

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

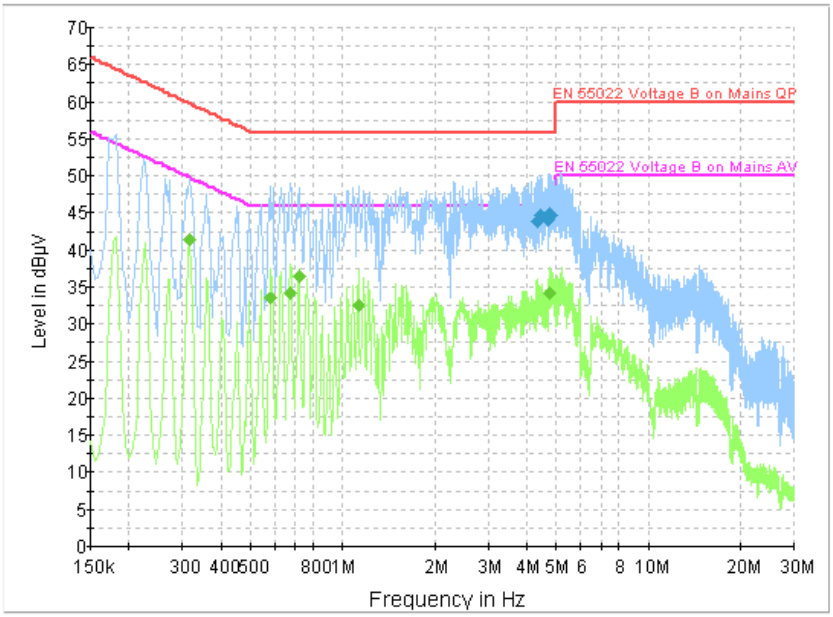


Fig.13 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
4.330500	43.9	GND	L1	19.7	12.1	56.0
4.420500	44.8	GND	L1	19.7	11.2	56.0
4.722000	44.0	GND	L1	19.7	12.0	56.0
4.771500	44.8	GND	L1	19.7	11.2	56.0
4.780500	44.5	GND	L1	19.7	11.5	56.0
4.812000	44.7	GND	L1	19.7	11.3	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.316500	41.5	GND	L1	19.8	8.3	49.8
0.582000	33.5	GND	L1	20.0	12.5	46.0
0.672000	34.1	GND	L1	19.9	11.9	46.0
0.721500	36.5	GND	L1	19.9	9.5	46.0
1.122000	32.6	GND	L1	19.8	13.4	46.0
4.771500	34.2	GND	L1	19.7	11.8	46.0

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

Charging Mode, Set.2

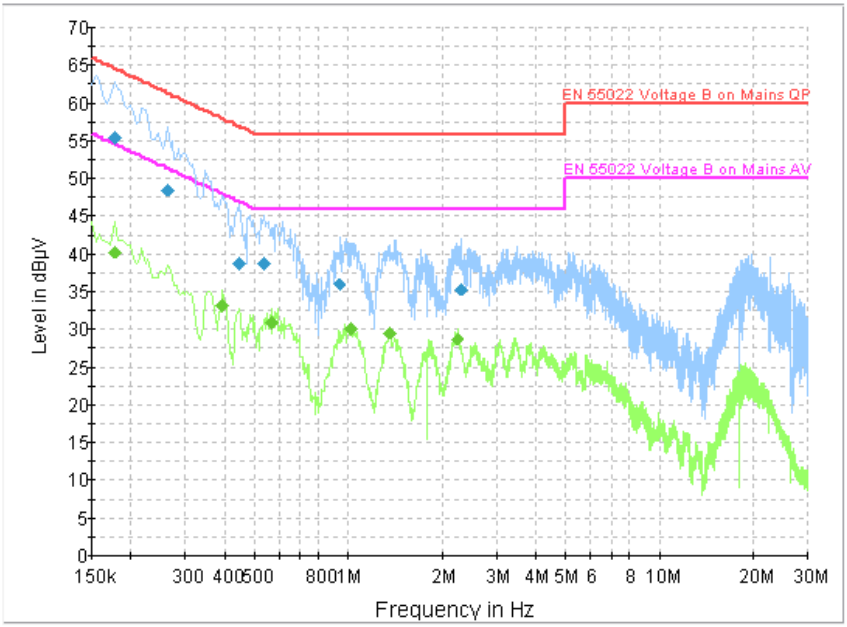


Fig.14 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	55.5	GND	L1	19.9	9.1	64.6
0.262500	48.5	GND	L1	19.8	12.8	61.4
0.442500	38.8	GND	L1	20.0	18.2	57.0
0.532500	38.9	GND	L1	20.0	17.1	56.0
0.937500	35.9	GND	L1	19.8	20.1	56.0
2.301000	35.4	GND	L1	19.7	20.6	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	40.3	GND	L1	19.9	14.3	54.6
0.393000	33.2	GND	L1	19.9	14.8	48.0
0.568500	30.9	GND	L1	20.0	15.1	46.0
1.018500	30.0	GND	L1	19.7	16.0	46.0
1.365000	29.5	GND	L1	19.7	16.5	46.0
2.238000	28.7	GND	L1	19.7	17.3	46.0

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

Charging Mode, Set.3

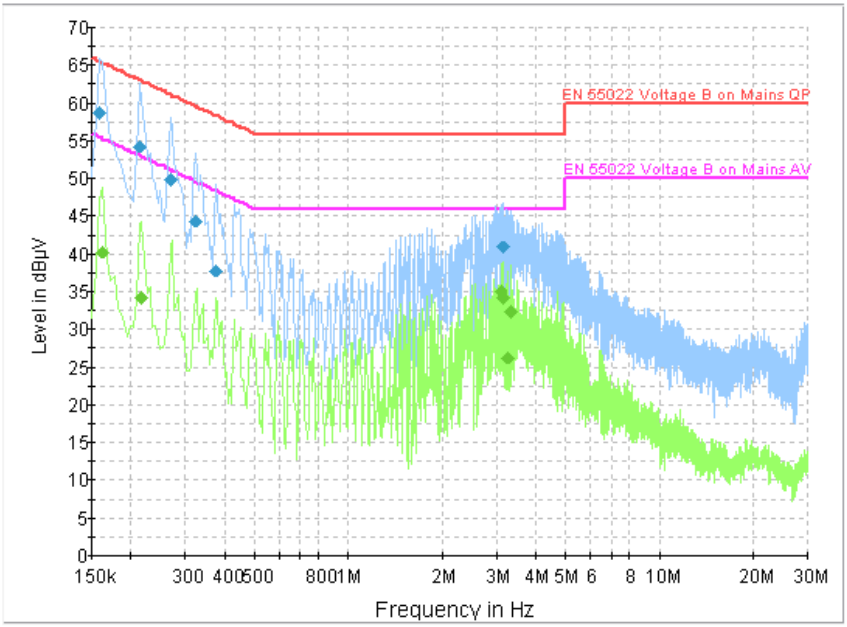


Fig.15 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.159000	58.9	GND	L1	19.9	6.7	65.5
0.213000	54.4	GND	L1	19.9	8.7	63.1
0.267000	49.9	GND	L1	19.8	11.3	61.2
0.321000	44.3	GND	N	19.9	15.3	59.7
0.375000	37.8	GND	N	19.9	20.6	58.4
3.156000	40.9	GND	L1	19.7	15.1	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	40.3	GND	N	19.9	15.0	55.3
0.217500	34.2	GND	N	19.8	18.7	52.9
3.102000	35.0	GND	N	19.7	11.0	46.0
3.156000	34.1	GND	L1	19.7	11.9	46.0
3.264000	26.2	GND	L1	19.6	19.8	46.0
3.318000	32.3	GND	L1	19.6	13.7	46.0

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

Charging Mode, Set.4

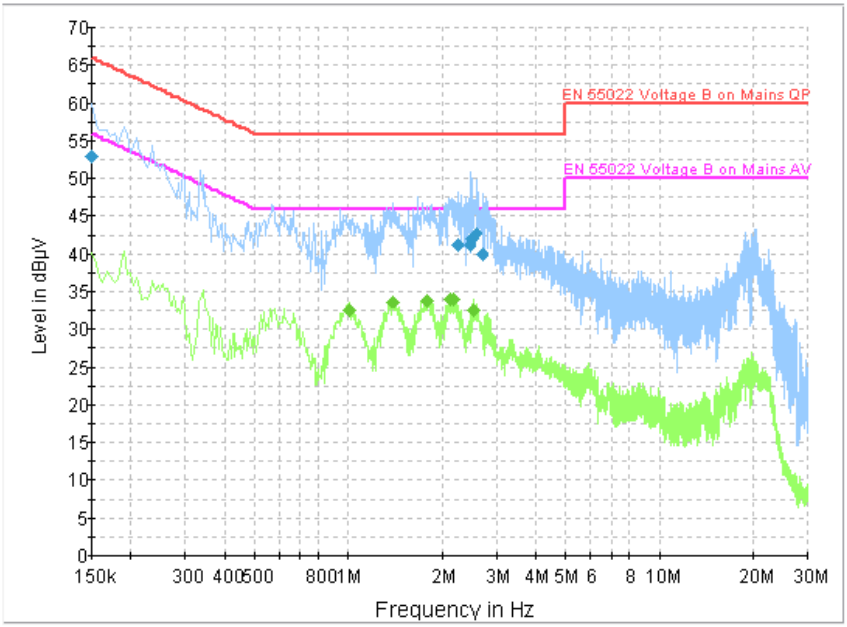


Fig.16 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	52.9	GND	L1	19.7	13.1	66.0
2.256000	41.3	GND	L1	19.7	14.7	56.0
2.449500	41.2	GND	L1	19.7	14.8	56.0
2.503500	42.1	GND	L1	19.7	13.9	56.0
2.584500	42.8	GND	L1	19.7	13.2	56.0
2.706000	39.9	GND	L1	19.7	16.1	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.009500	32.5	GND	L1	19.7	13.5	46.0
1.392000	33.7	GND	L1	19.7	12.3	46.0
1.797000	33.9	GND	L1	19.7	12.1	46.0
2.121000	34.0	GND	L1	19.7	12.0	46.0
2.175000	33.9	GND	L1	19.7	12.1	46.0
2.530500	32.6	GND	L1	19.7	13.4	46.0

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

Charging Mode, Set.5

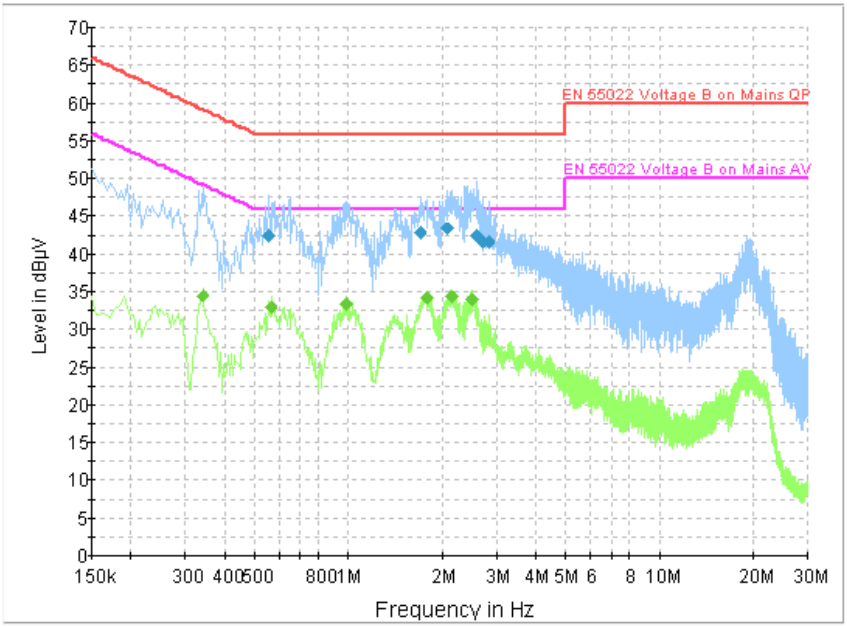


Fig.17 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.555000	42.4	GND	L1	20.0	13.6	56.0
1.698000	42.9	GND	L1	19.7	13.1	56.0
2.085000	43.5	GND	L1	19.7	12.5	56.0
2.589000	42.5	GND	L1	19.7	13.5	56.0
2.683500	41.6	GND	L1	19.7	14.4	56.0
2.814000	41.6	GND	L1	19.7	14.4	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.339000	34.5	GND	L1	19.8	14.8	49.2
0.564000	32.9	GND	L1	20.0	13.1	46.0
0.987000	33.3	GND	L1	19.8	12.7	46.0
1.797000	34.1	GND	L1	19.7	11.9	46.0
2.170500	34.3	GND	L1	19.7	11.7	46.0
2.508000	34.0	GND	L1	19.7	12.0	46.0

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

USB Mode, Set.6

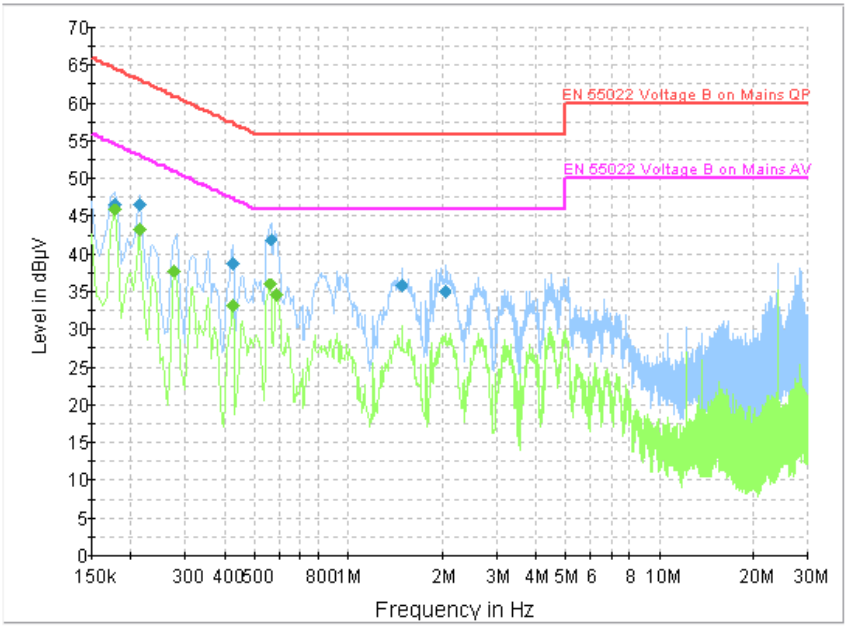


Fig.18 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	46.5	GND	L1	19.9	18.1	64.6
0.213000	46.6	GND	L1	19.9	16.5	63.1
0.424500	38.7	GND	L1	20.0	18.6	57.4
0.564000	41.9	GND	L1	20.0	14.1	56.0
1.486500	35.8	GND	L1	19.7	20.2	56.0
2.053500	35.1	GND	L1	19.7	20.9	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
19.9	8.7	GND	L1	19.9	8.7	54.6
19.9	9.8	GND	L1	19.9	9.8	53.1
19.9	13.2	GND	N	19.9	13.2	50.9
20.0	14.1	GND	L1	20.0	14.1	47.4
20.0	10.0	GND	N	20.0	10.0	46.0
20.0	11.3	GND	L1	20.0	11.3	46.0

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

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