TEST REPORT

No. I14Z48856-EMC01

for

TCL Communication Ltd.

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

Model Name: 4008A

FCC ID: 2ACCJH013

with

Hardware Version: PIO

Software Version: v4B2A

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
I14Z48856-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

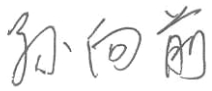
Testing Start Date: 2014-12-04

Testing End Date: 2014-12-19

1.4. Signature

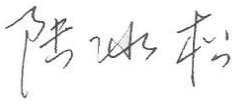
Qu Pengfei

(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 Dual band/GSM Quad band mobile phone
Model Name	4008A
FCC ID	2ACCJH013
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	014282000100147	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-2191
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
5267.188	30.4	-34.5	34.6	30.300	V
5257.813	30.4	-34.5	34.6	30.300	V
5266.563	30.4	-34.5	34.6	30.300	V
5264.375	30.4	-34.5	34.6	30.300	V
5259.375	30.3	-34.5	34.6	30.200	V
5258.750	30.3	-34.5	34.6	30.200	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5518.125	42.2	-34.0	35.1	41.100	V
5791.250	42.2	-33.8	35.1	40.900	V
5762.500	41.9	-33.8	35.1	40.600	V
5297.500	41.8	-34.4	34.6	41.600	V
5267.188	41.8	-34.5	34.6	41.700	V
5838.750	41.7	-33.8	35.1	40.400	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
5265.313	30.5	-34.5	34.6	30.400	V
5261.250	30.5	-34.5	34.6	30.400	V
5267.188	30.5	-34.5	34.6	30.400	V
5260.938	30.4	-34.5	34.6	30.300	V
5253.750	30.4	-34.5	34.6	30.300	V
5258.750	30.4	-34.5	34.6	30.300	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5859.063	42.5	-33.8	35.1	41.200	V
5660.625	42.2	-34.2	35.1	41.300	V
5779.688	42.2	-33.8	35.1	40.900	V
5658.438	42.0	-34.2	35.1	41.100	V
5231.875	41.9	-34.5	34.6	41.800	V
5772.188	41.9	-33.8	35.1	40.600	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
5265.625	30.7	-34.5	34.6	30.600	V
5266.875	30.5	-34.5	34.6	30.400	V
5258.750	30.4	-34.5	34.6	30.300	V
5261.875	30.4	-34.5	34.6	30.300	V
5260.000	30.3	-34.5	34.6	30.200	V
5256.250	30.3	-34.5	34.6	30.200	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5856.875	42.6	-33.8	35.1	41.300	V
5675.313	42.1	-34.2	35.1	41.200	V
5765.000	41.9	-33.8	35.1	40.600	V
5673.125	41.9	-34.2	35.1	41.000	V
5266.875	41.9	-34.5	34.6	41.800	V
5268.750	41.8	-34.4	34.6	41.600	H

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
5268.438	30.6	-34.4	34.6	30.400	V
5262.813	30.3	-34.5	34.6	30.200	V
5271.875	30.3	-34.4	34.6	30.100	V
5265.625	30.2	-34.5	34.6	30.100	V
5282.813	30.2	-34.4	34.6	30.000	V
5267.813	30.2	-34.5	34.6	30.100	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5301.250	42.4	-34.4	34.6	42.200	V
5269.063	42.1	-34.4	34.6	41.900	V
5820.313	42.0	-33.8	35.1	40.700	V
5293.750	42.0	-34.4	34.6	41.800	V
5265.000	41.9	-34.5	34.6	41.800	V
5509.688	41.9	-34.0	35.1	40.800	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
5265.625	30.5	-34.5	34.6	30.400	V
5266.563	30.5	-34.5	34.6	30.400	V
5263.438	30.4	-34.5	34.6	30.300	V
5260.625	30.3	-34.5	34.6	30.200	V
5261.875	30.3	-34.5	34.6	30.200	V
5268.125	30.3	-34.5	34.6	30.200	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5013.750	42.4	-34.6	34.6	42.400	V
5015.313	42.2	-34.6	34.6	42.200	V
5689.688	42.2	-34.2	35.1	41.300	V
5265.625	42.2	-34.5	34.6	42.100	V
5817.188	42.2	-33.8	35.1	40.900	V
5790.313	42.0	-33.8	35.1	40.700	H

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
5263.438	30.4	-34.5	34.6	30.300	V
5266.563	30.4	-34.5	34.6	30.300	V
5264.063	30.4	-34.5	34.6	30.300	V
5260.938	30.3	-34.5	34.6	30.200	V
5259.375	30.3	-34.5	34.6	30.200	V
5267.188	30.2	-34.5	34.6	30.100	H

Charging Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
5266.563	42.5	-34.5	34.6	42.400	V
5226.875	42.4	-34.5	34.6	42.300	V
5219.063	42.3	-34.5	34.6	42.200	V
5014.063	42.3	-34.6	34.6	42.300	V
5262.188	42.3	-34.5	34.6	42.200	V
4992.813	42.3	-34.6	33.1	43.800	H

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
1051.250	34.9	-41.7	24.1	52.500	V
1220.625	33.7	-41.2	24.1	50.800	V
1228.438	33.7	-41.2	24.1	50.800	V
1085.313	33.7	-41.6	24.1	51.200	H
1093.438	33.6	-41.6	24.1	51.100	V
1229.688	33.6	-41.2	24.1	50.700	H

USB Mode/Peak detector

Frequency(MHz)	Result(dBμV/m)	G_{PL} (dB)	G_A (dB/m)	P_{Mea}(dBμV)	Polarity
1195.000	55.1	-41.2	24.1	72.200	V
1024.375	51.5	-41.8	24.1	69.200	V
1541.563	51.4	-40.1	25.3	66.200	H
1201.563	50.8	-41.3	24.1	68.000	V
2398.750	50.3	-38.8	27.7	61.400	V
1324.063	50.1	-40.8	24.1	66.800	H

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 USB cables.

Charging Mode, Set.1

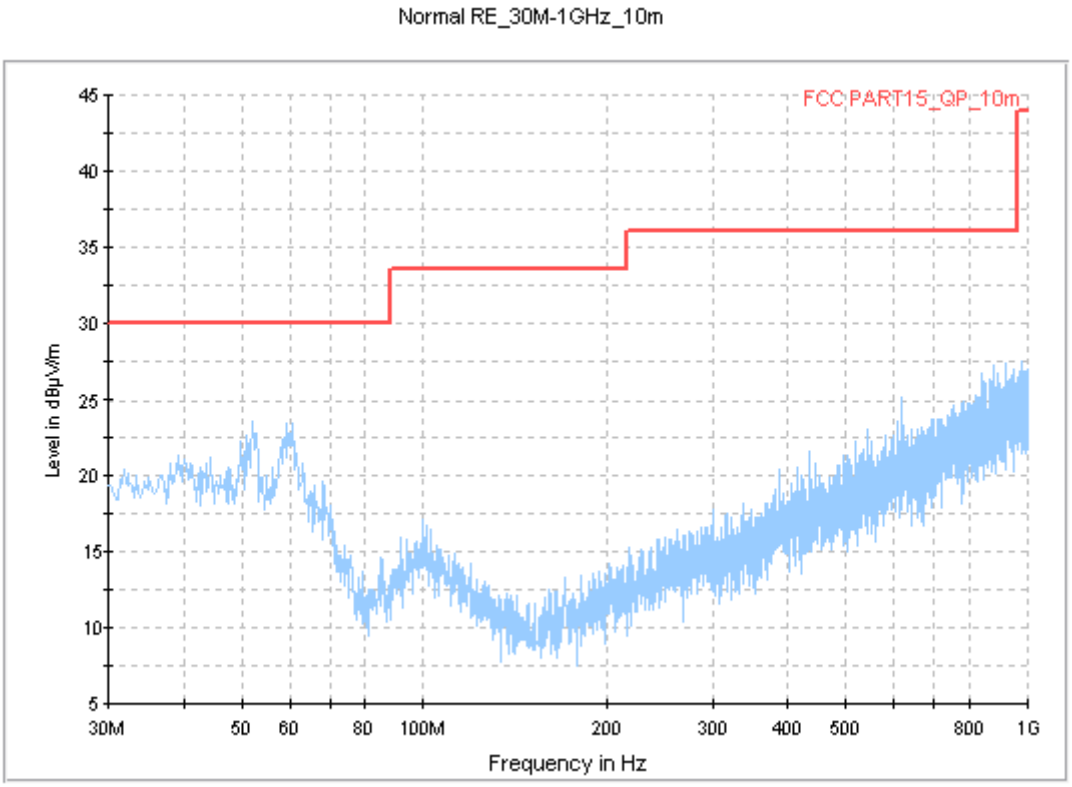


Fig.1 Radiated Emission from 30MHz to 1GHz

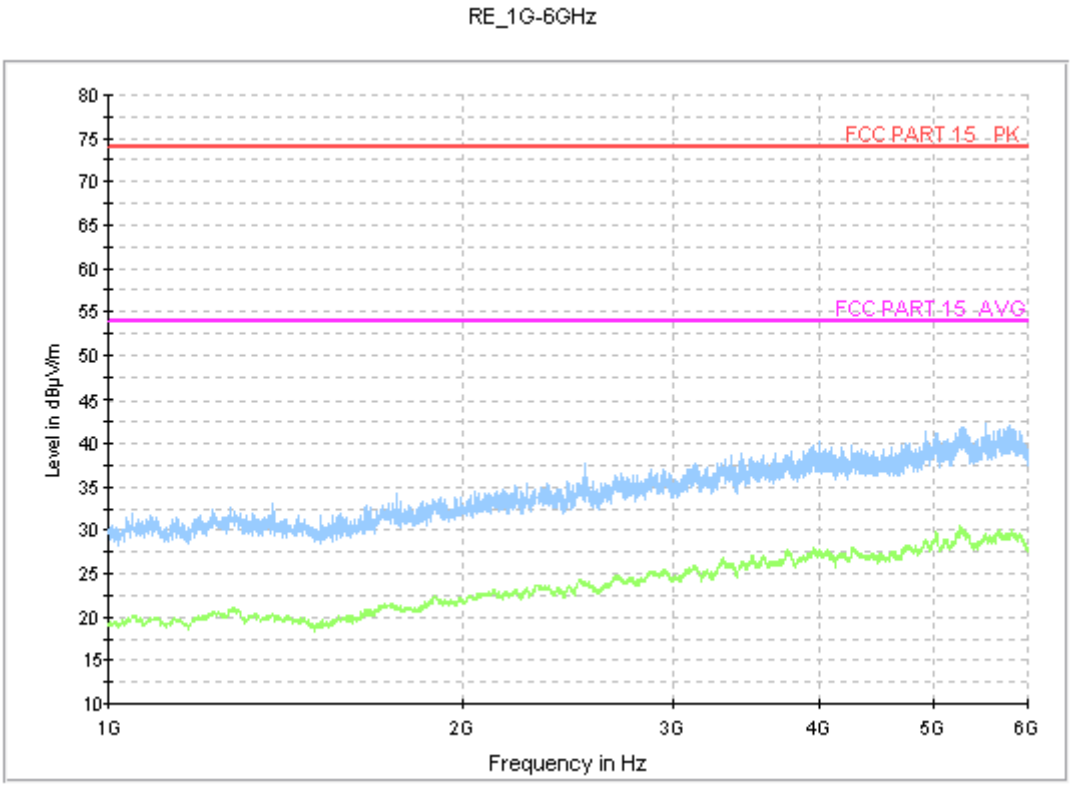


Fig.2 Radiated Emission from 1GHz to 6GHz

Charging Mode, Set.2

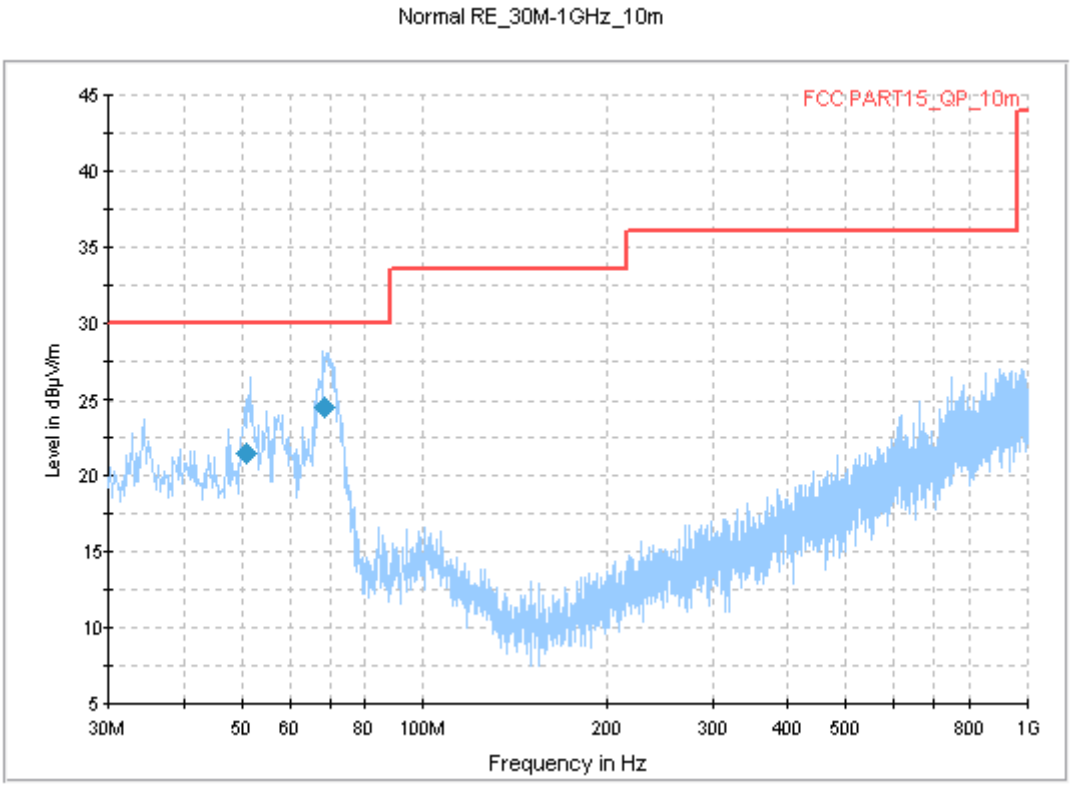


Fig.3 Radiated Emission from 30MHz to 1GHz

Final Result

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Azimuth Deg	Polarization H/V
50.982500	21.6	30.0	8.4	0.0	V
68.612500	24.6	30.0	5.4	68.0	V

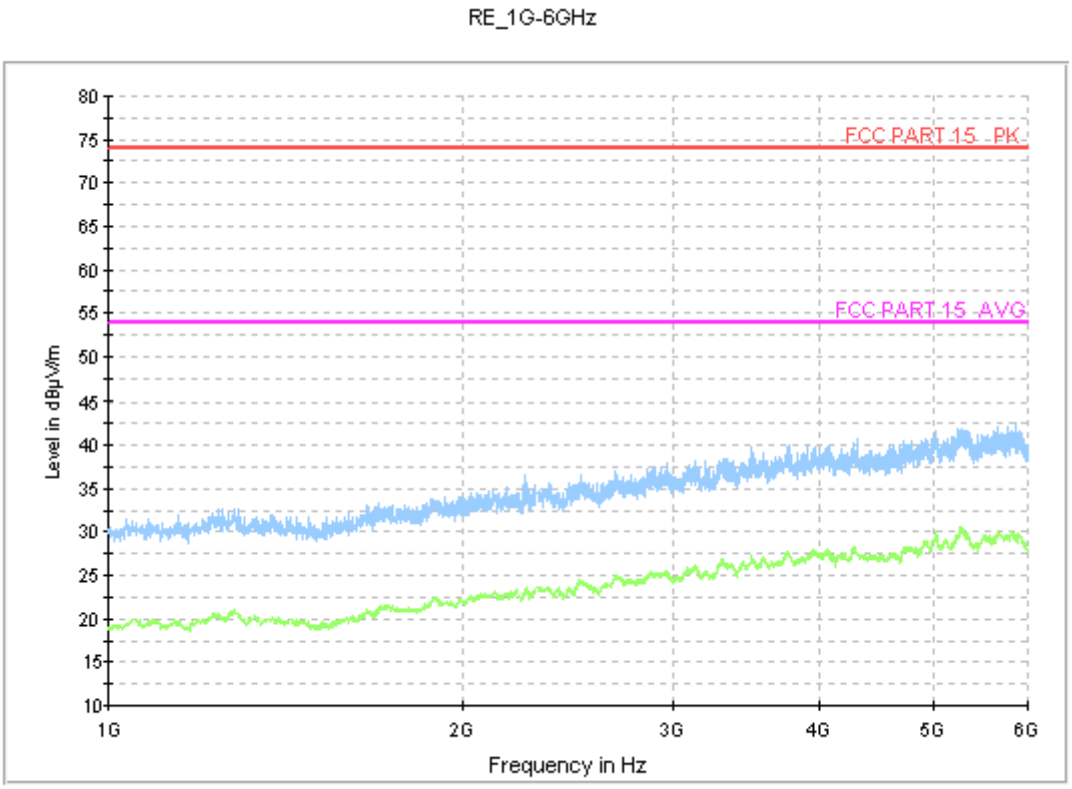


Fig.4 Radiated Emission from 1GHz to 6GHz

Charging Mode, Set.3

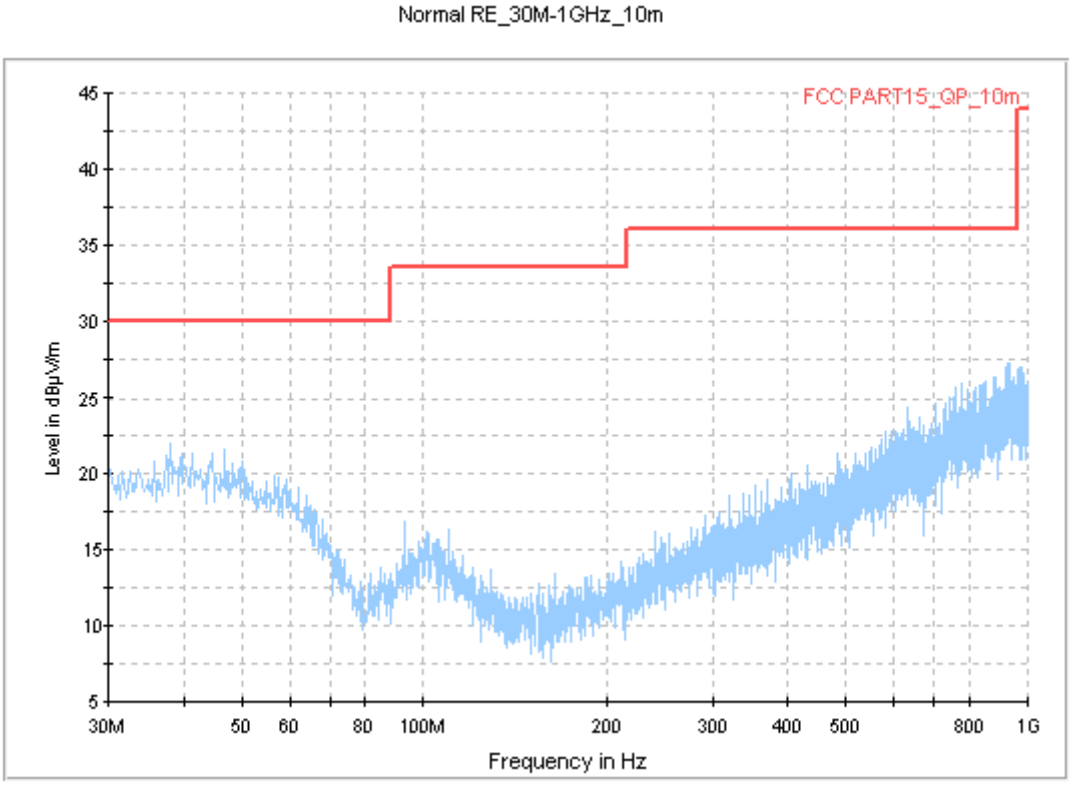


Fig.5 Radiated Emission from 30MHz to 1GHz

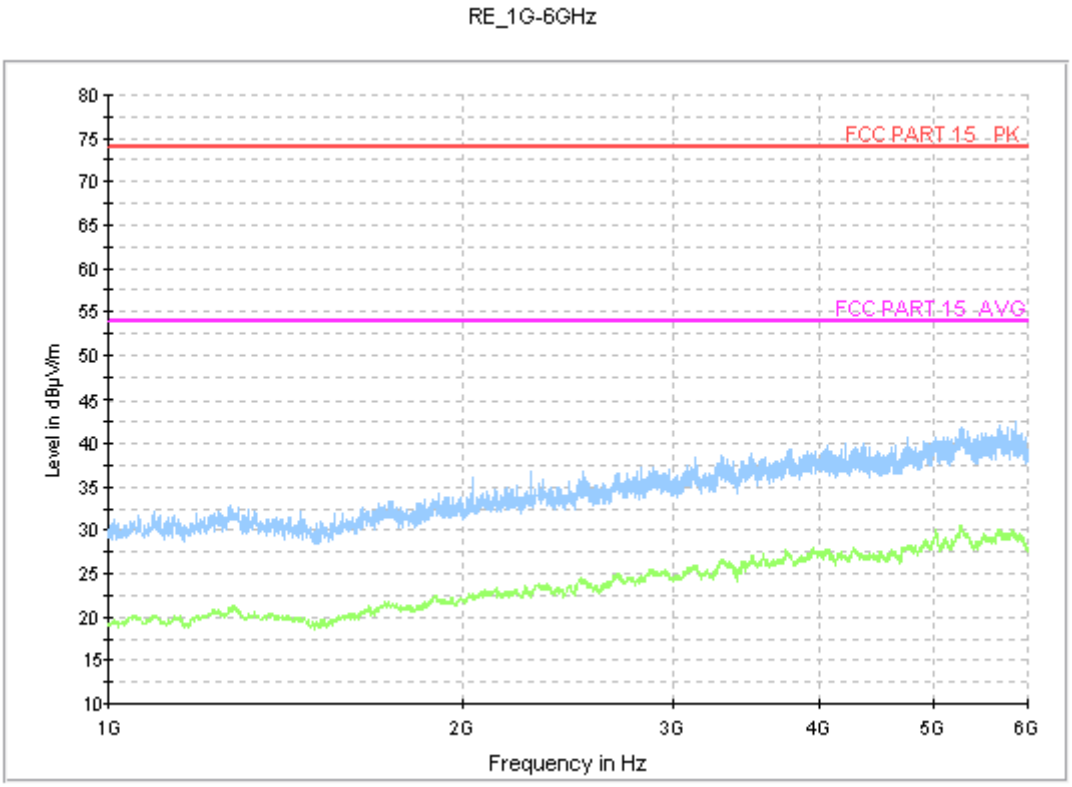


Fig.6 Radiated Emission from 1GHz to 6GHz

Charging Mode, Set.4

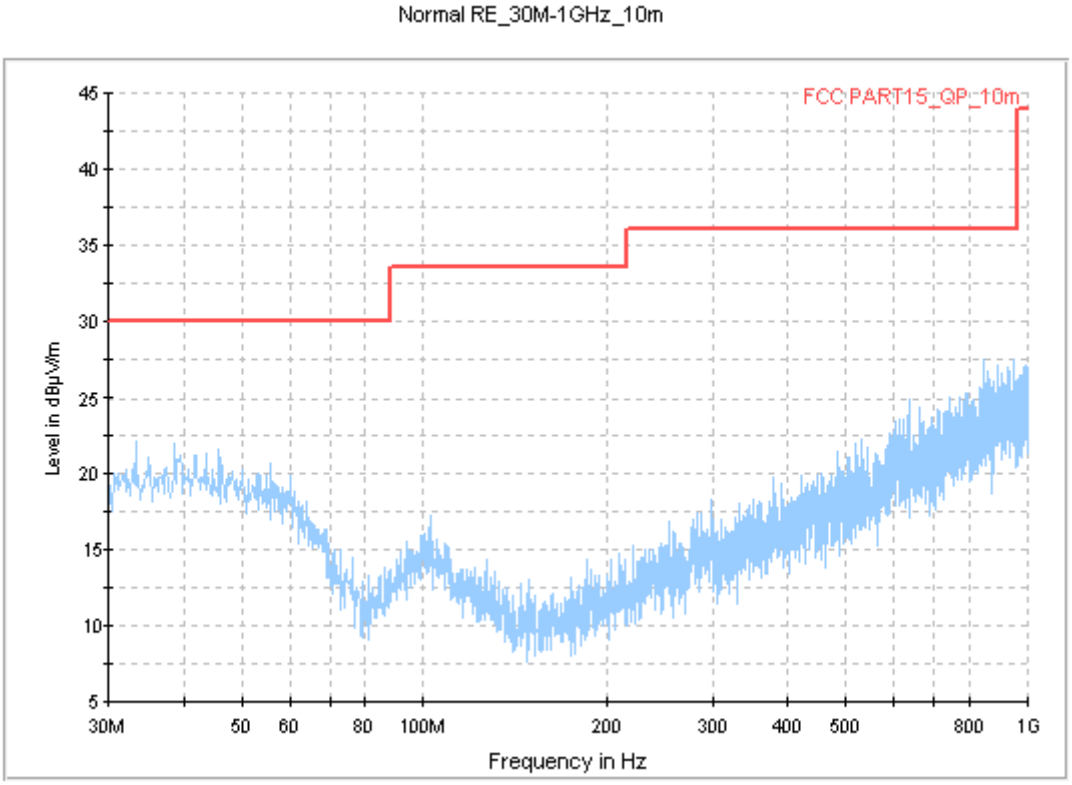


Fig.7 Radiated Emission from 30MHz to 1GHz

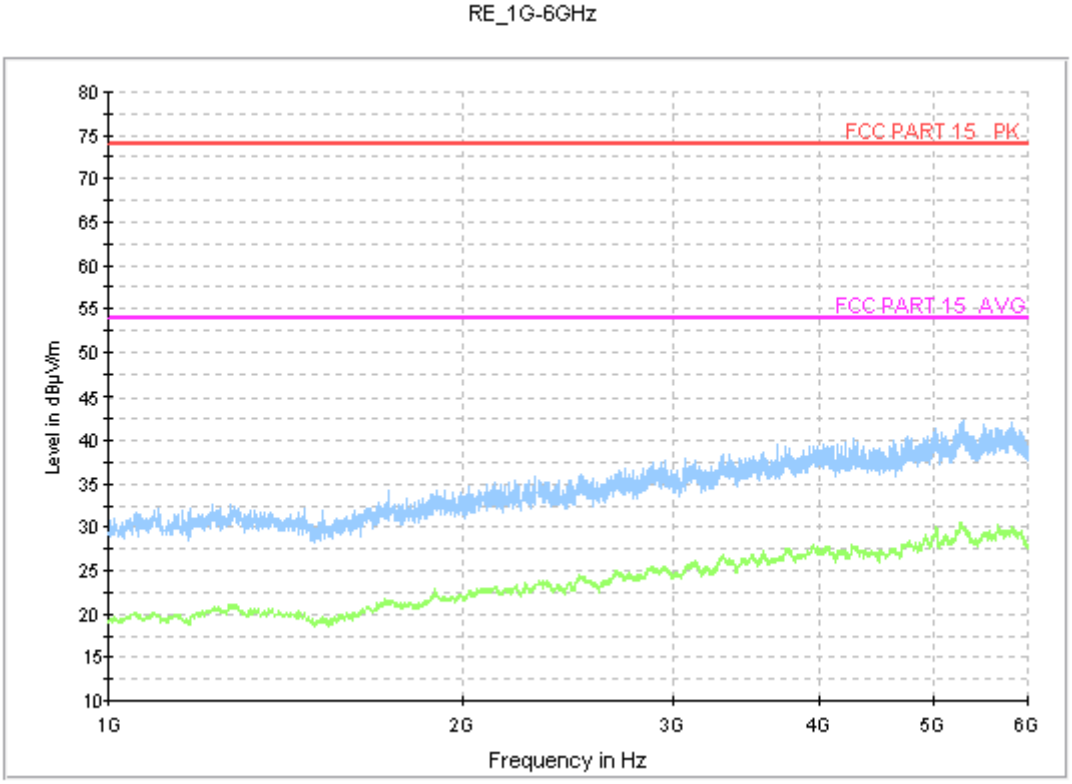


Fig.8 Radiated Emission from 1GHz to 6GHz

Charging Mode, Set.5

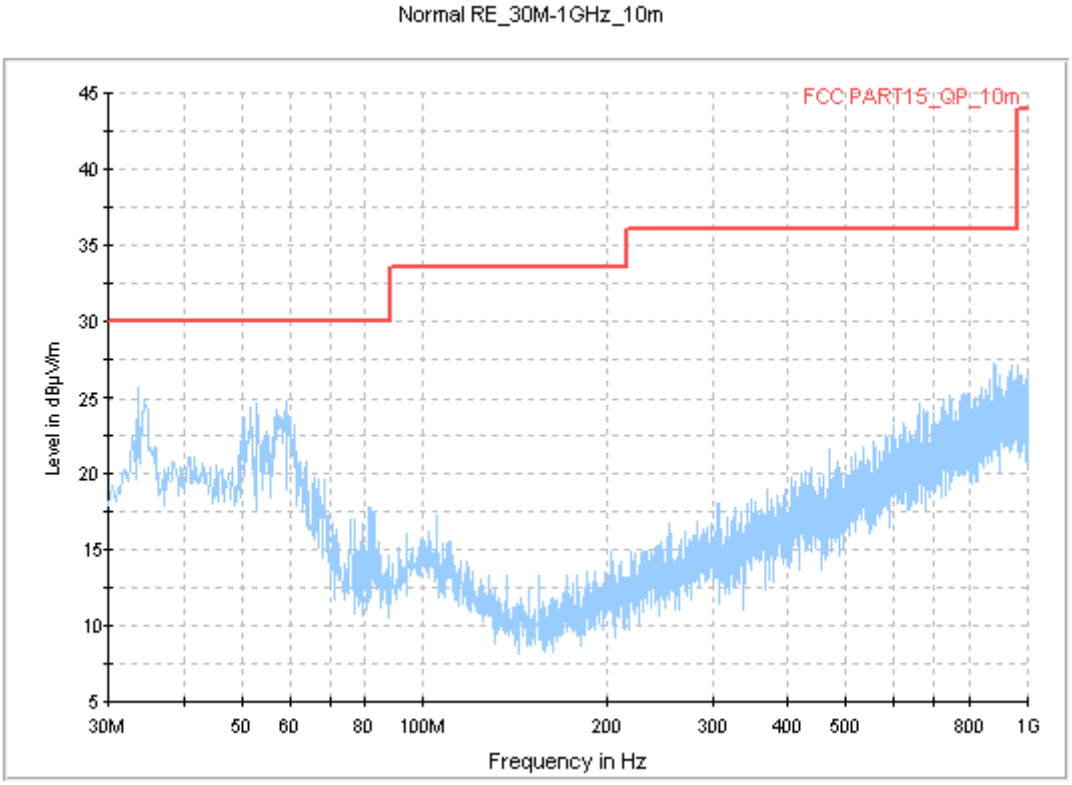


Fig.9 Radiated Emission from 30MHz to 1GHz

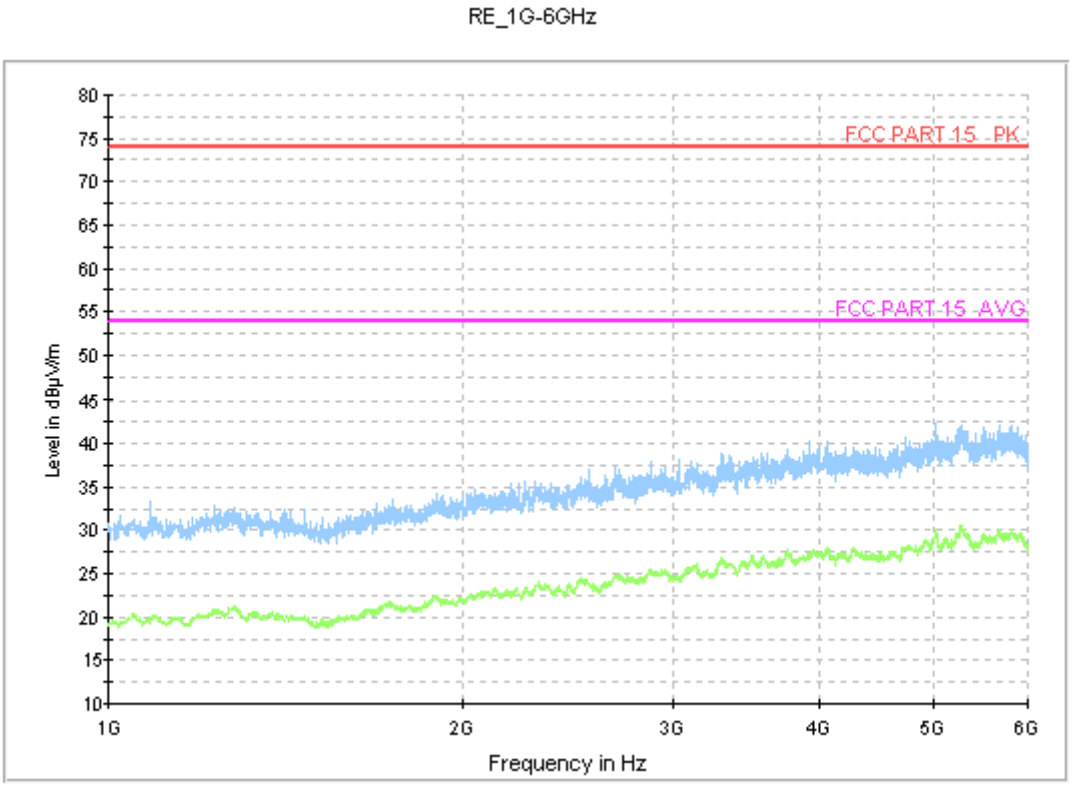


Fig.10 Radiated Emission from 1GHz to 6GHz

Charging Mode, Set.6

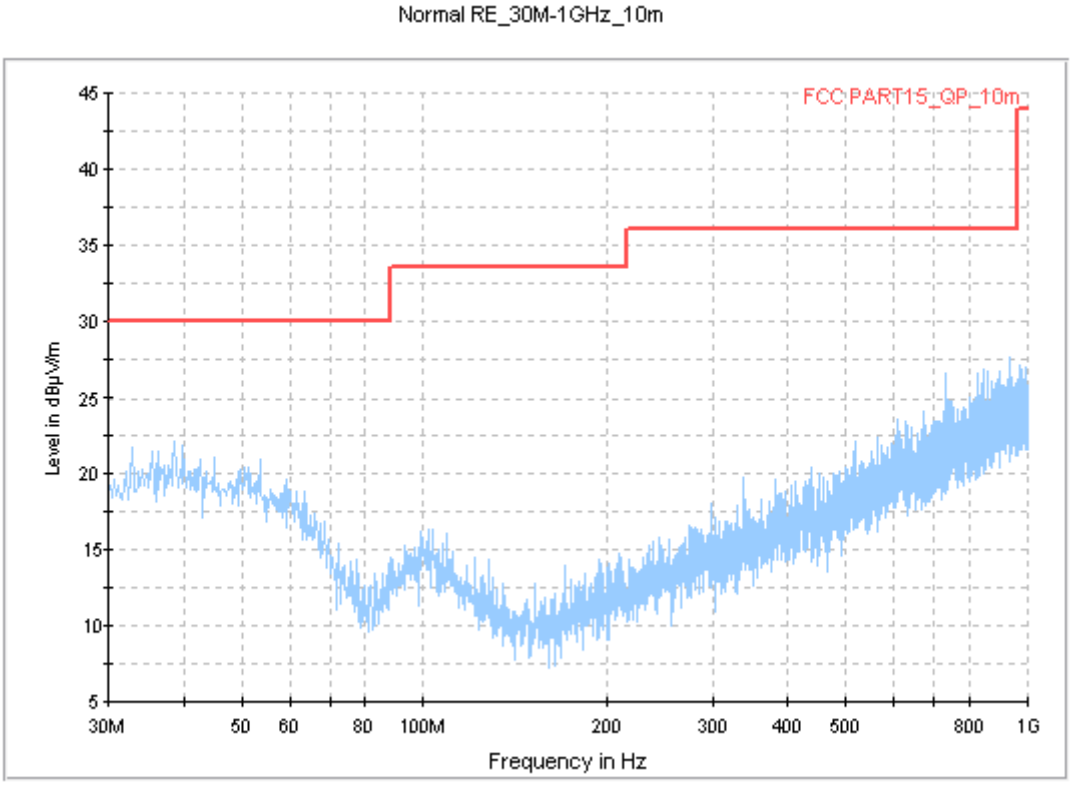


Fig.11 Radiated Emission from 30MHz to 1GHz

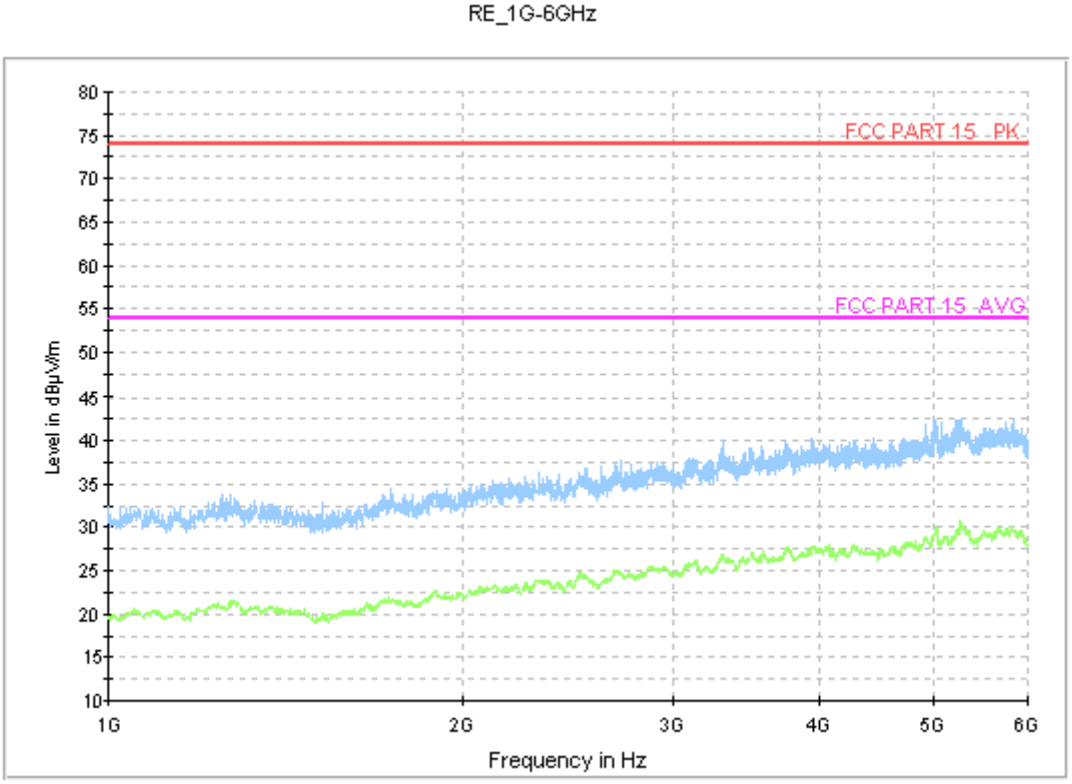


Fig.12 Radiated Emission from 1GHz to 6GHz

USB Mode, Set.7

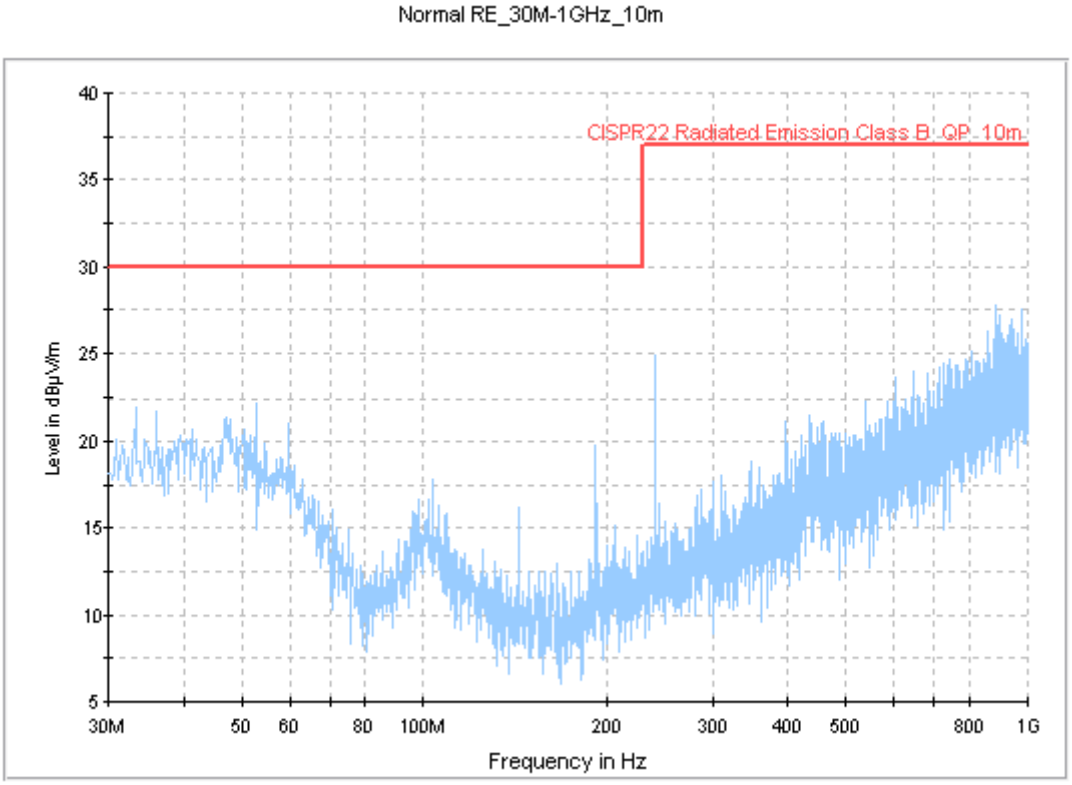


Fig.13 Radiated Emission from 30MHz to 1GHz

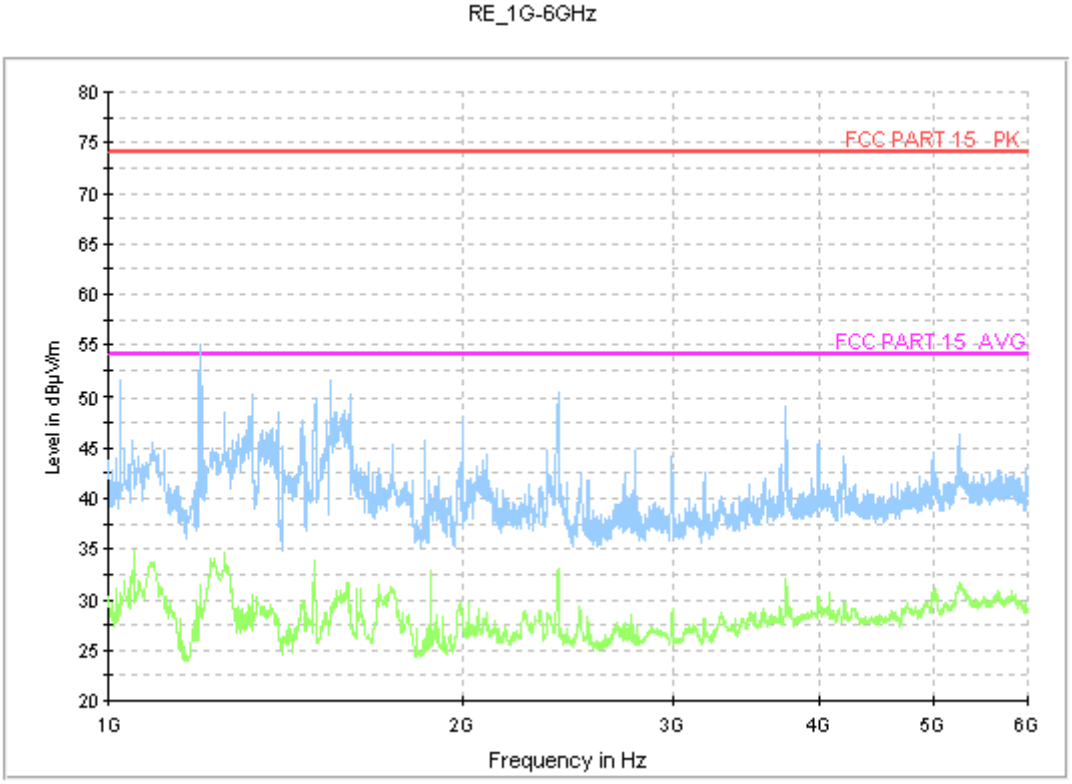


Fig.14 Radiated Emission from 1GHz to 6GHz

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

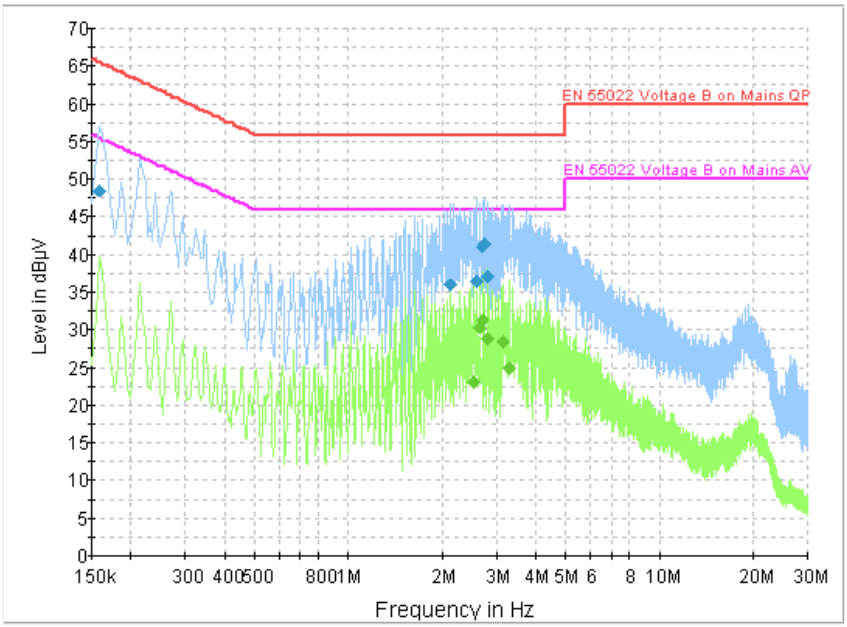


Fig.1 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.159000	48.6	GND	L1	19.8	16.9	65.5
2.130000	36.0	GND	L1	19.7	20.0	56.0
2.589000	36.5	GND	L1	19.7	19.5	56.0
2.692500	41.2	GND	L1	19.7	14.8	56.0
2.742000	41.5	GND	L1	19.7	14.5	56.0
2.805000	37.2	GND	L1	19.7	18.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.530500	23.2	GND	L1	19.7	22.8	46.0
2.638500	30.4	GND	L1	19.7	15.6	46.0
2.692500	31.4	GND	L1	19.7	14.6	46.0
2.805000	28.9	GND	L1	19.7	17.1	46.0
3.142500	28.5	GND	L1	19.7	17.5	46.0
3.304500	24.9	GND	L1	19.6	21.1	46.0

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

Charging Mode, Set.2

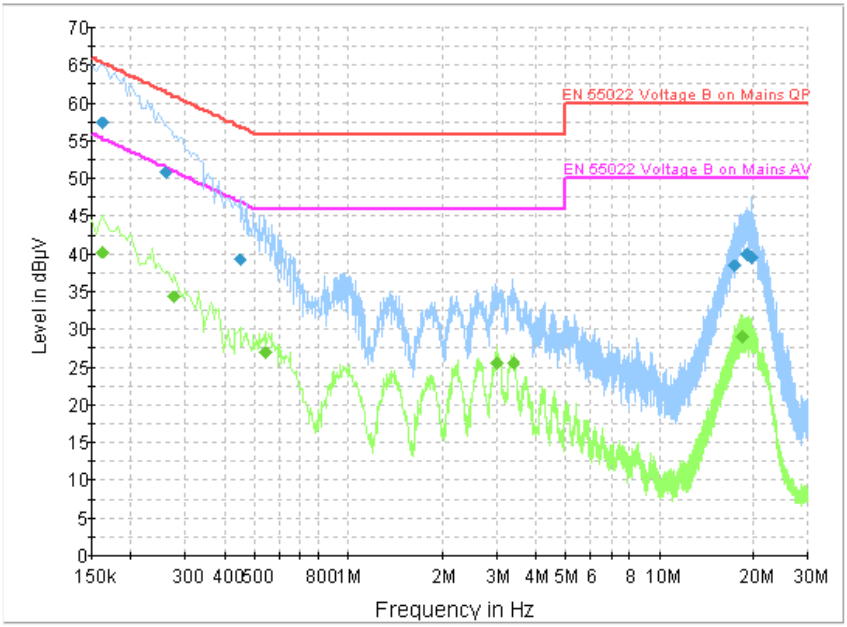


Fig.2 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	57.5	GND	L1	19.9	7.8	65.3
0.258000	50.9	GND	L1	19.8	10.6	61.5
0.447000	39.2	GND	L1	20.0	17.7	56.9
17.434500	38.5	GND	L1	19.9	21.5	60.0
19.149000	39.9	GND	N	19.9	20.1	60.0
19.756500	39.7	GND	N	19.9	20.3	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	40.3	GND	L1	19.9	15.0	55.3
0.276000	34.3	GND	L1	19.9	16.7	50.9
0.541500	27.0	GND	L1	20.0	19.0	46.0
3.007500	25.5	GND	L1	19.7	20.5	46.0
3.385500	25.6	GND	L1	19.7	20.4	46.0
18.415500	29.1	GND	L1	19.9	20.9	50.0

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

Charging Mode, Set.3

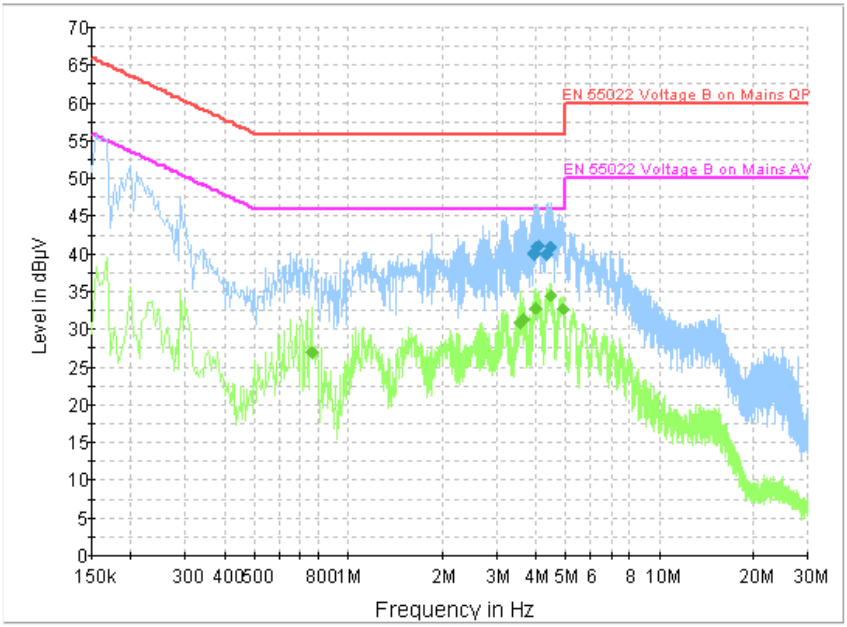


Fig.3 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
3.957000	39.9	GND	L1	19.7	16.1	56.0
3.975000	40.3	GND	L1	19.7	15.7	56.0
4.047000	41.0	GND	L1	19.6	15.0	56.0
4.087500	41.0	GND	L1	19.6	15.0	56.0
4.353000	40.0	GND	L1	19.7	16.0	56.0
4.474500	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)
0.762000	26.8	GND	L1	19.9	19.2	46.0
3.579000	30.9	GND	L1	19.7	15.1	46.0
3.660000	31.3	GND	L1	19.7	14.7	46.0
3.997500	32.9	GND	L1	19.7	13.1	46.0
4.488000	34.6	GND	L1	19.7	11.4	46.0
4.915500	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.4

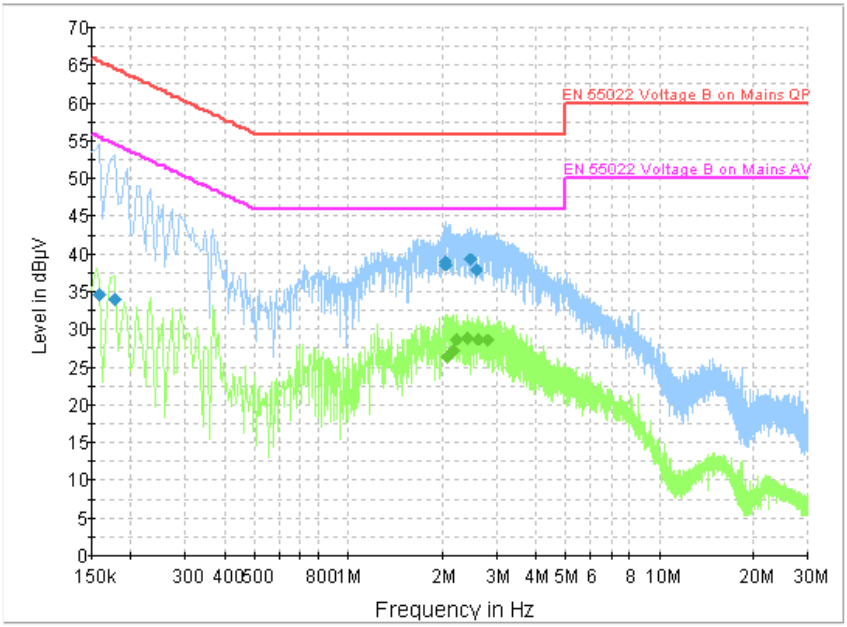


Fig.4 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.159000	34.7	GND	L1	19.8	30.8	65.5
0.177000	34.0	GND	L1	19.9	30.7	64.6
2.049000	39.0	GND	L1	19.7	17.0	56.0
2.067000	38.7	GND	L1	19.7	17.3	56.0
2.476500	39.3	GND	L1	19.7	16.7	56.0
2.580000	38.0	GND	L1	19.7	18.0	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.076000	26.4	GND	L1	19.7	19.6	46.0
2.188500	27.3	GND	L1	19.7	18.7	46.0
2.229000	28.8	GND	L1	19.7	17.2	46.0
2.404500	28.9	GND	L1	19.7	17.1	46.0
2.629500	28.8	GND	L1	19.7	17.2	46.0
2.791500	28.6	GND	L1	19.7	17.4	46.0

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

Charging Mode, Set.5

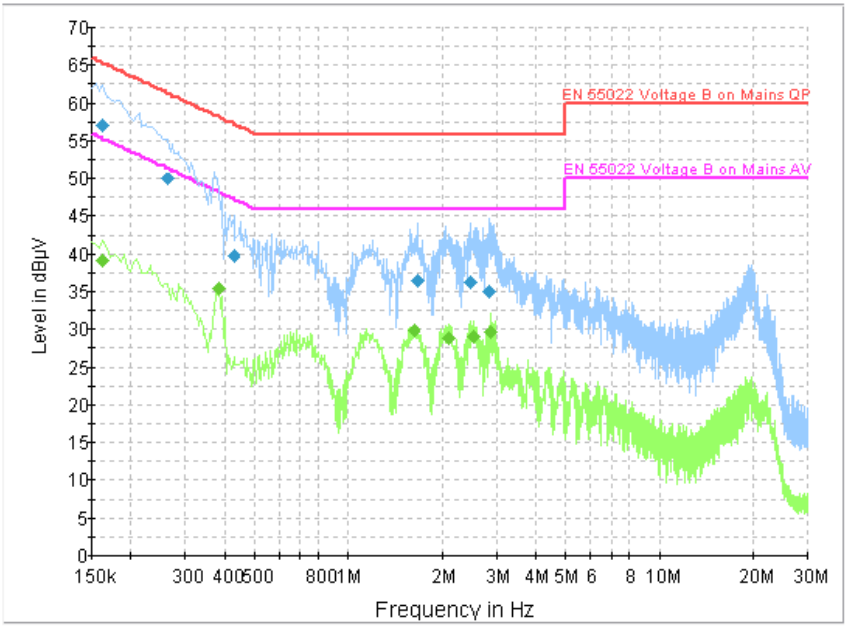


Fig.5 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	57.2	GND	L1	19.9	8.1	65.3
0.262500	50.1	GND	N	19.8	11.3	61.4
0.429000	39.8	GND	N	20.0	17.5	57.3
1.666500	36.6	GND	N	19.7	19.4	56.0
2.485500	36.3	GND	N	19.7	19.7	56.0
2.845500	35.1	GND	N	19.7	20.9	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	39.1	GND	N	19.9	16.2	55.3
0.384000	35.4	GND	L1	19.9	12.8	48.2
1.626000	29.9	GND	L1	19.7	16.1	46.0
2.107500	28.9	GND	L1	19.7	17.1	46.0
2.517000	29.0	GND	L1	19.7	17.0	46.0
2.881500	29.8	GND	L1	19.7	16.2	46.0

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

Charging Mode, Set.6

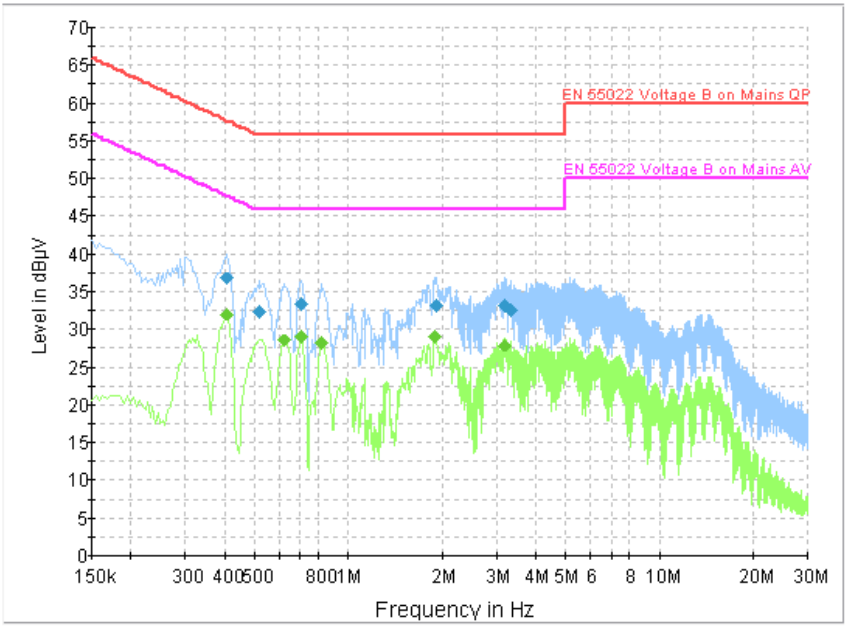


Fig.1 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.406500	36.7	GND	L1	19.9	21.0	57.7
0.519000	32.3	GND	L1	20.0	23.7	56.0
0.703500	33.3	GND	L1	19.9	22.7	56.0
1.914000	33.2	GND	L1	19.7	22.8	56.0
3.174000	33.2	GND	L1	19.7	22.8	56.0
3.327000	32.6	GND	L1	19.7	23.4	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.406500	32.0	GND	L1	19.9	15.8	47.7
0.622500	28.6	GND	L1	19.9	17.4	46.0
0.703500	29.0	GND	L1	19.9	17.0	46.0
0.820500	28.2	GND	L1	19.9	17.8	46.0
1.905000	29.1	GND	L1	19.7	16.9	46.0
3.174000	28.0	GND	L1	19.7	18.0	46.0

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

USB Mode, Set.7

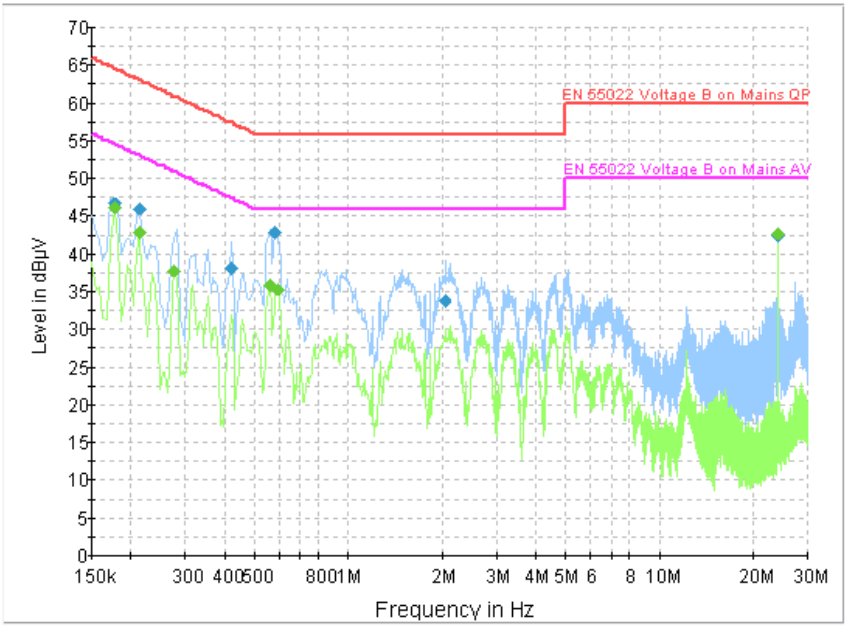


Fig.2 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	46.8	GND	N	19.9	17.9	64.6
0.213000	46.1	GND	N	19.9	17.0	63.1
0.420000	38.2	GND	L1	20.0	19.3	57.4
0.582000	42.9	GND	L1	20.0	13.1	56.0
2.040000	33.9	GND	L1	19.7	22.1	56.0
23.986500	42.4	GND	L1	19.8	17.6	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.177000	46.2	GND	N	19.9	8.4	54.6
0.213000	42.8	GND	N	19.9	10.2	53.1
0.276000	37.8	GND	N	19.9	13.2	50.9
0.559500	35.8	GND	L1	20.0	10.2	46.0
0.595500	35.3	GND	N	20.0	10.7	46.0
23.986500	42.7	GND	N	19.9	7.3	50.0

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

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