



TEST REPORT

No.B17N00107-EMC

for

Huawei Technologies Co.,Ltd.

LTE CPE

Model Name: B612s-51d

FCC ID: QISB612S-51D

with

Hardware Version: WL1B612SW

Software Version: 11.187.01.01.00

Issued Date: 2017-03-20

Test Laboratory:

FCC 2.948 Listed: No.342690

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:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
B17N00107-EMC	Rev.0	1st edition	2017-03-20



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1. Test Laboratory

1.1. Testing Location

Address: TCL International E city No. 1001 Zhongshanyuan Road, Nanshan District, Shenzhen, Guangdong, China
Postal Code: 518048
Telephone: +86(755)33322000
Fax: +86(755)33322001

1.2. Testing Environment

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

1.3. Project data

Testing Start Date: 2017-02-10
Testing End Date: 2017-03-16

1.4. Signature



Liang Yong

(Prepared this test report)



Zhang Yunzhan

(Reviewed this test report)



Cao Junfei

Director of the laboratory
(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Huawei Technologies Co.,Ltd.
Address: Administration Building, Headquarters of Huawei Technologies Co.,
Ltd., Bantian, Longgang District Shenzhen China

2.2. Manufacturer Information

Company Name: Huawei Technologies Co.,Ltd.
Address: Administration Building, Headquarters of Huawei Technologies Co.,
Ltd., Bantian, Longgang District Shenzhen China

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

3.1. About EUT

Description	LTE CPE
Model Name	B612s-51d
FCC ID	QISB612S-51D

The Equipment Under Test (EUT) are a model of LTE CPE with integrated antenna.

The EUT supports GPRS service and EGPRS service.

Remark: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed information.

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI
EUT1	864596030003281

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

3.3. Internal Identification of AE

AE ID*	Description	SN
AE1	antenna	/
AE2	Travel charger	/
AE3	net cable	/
AE1		
Model	3dBi antenna	
AE2-1		
Model	HW-120100U01	
Manufacturer	Shenzhen Honor Electronic Co.,Ltd	
SN	A75001H1400066	
AE2-2		
Model	HW-120100U01	
Manufacturer	DONGGUAN SHILONG FUHUA ELECTRONIC CO.,LTD	
SN	U88902H1F00140	
AE3		
Model	/	
Manufacturer	/	

*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+AE2-1	Charging mode
Set.2	EUT1+ AE1+AE2-2	Charging mode
Set.3	EUT1+ AE1+AE2-1+AE3	USB mode
Set.4	EUT1+ AE1+AE2-2+AE3	USB mode

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	10-1-2015 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	2014

5. LABORATORY ENVIRONMENT

Semi-anechoic chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-18000MHz,>90dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3 m distance, from 30 to 1000 MHz

Shield room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-10000MHz,>90dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω

Fully-anechoic chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-18000MHz,>90dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz



6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:	
P	Pass
NA	Not applicable
F	Fail

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Radiated Emission	15.109(a)	A.1	P
2	Conducted Emission	15.107(a)	A.2	P



7. Test Facilities Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CALDUE DATE	CAL PERIOD
1.	Test Receiver	ESCI	100701	R&S	2017.08.09	1 year
2.	Test Receiver	ESR7	101675	R&S	2017.07.21	1 year
3.	Spectrum Analyzer	FSP 40	100378	R&S	2017.12.15	1 year
4.	BiLog Antenna	VULB9163	9163 330	Schwarzbeck	2017.04.22	3 years
5.	LISN	ESH2-Z5	100196	R&S	2018.01.05	1 year
6.	Horn Antenna	3117	00066585	ETS-Lindgren	2019.03.05	3 years
7.	Universal Radio Communication Tester	E5515C	GB44051324	Agilent	2017.05.18	1 year
8.	PC	2OET-A00DC D	PF-OIYDAK	Lenovo	/	/
9.	Printer	P1008	VNF6C12491	HP	/	/
10.	Mouse	MO28UOL	44B39412	Lenovo	/	/
11.	Chamber	FACT5-2.0	4166	ETS-Lindgren	2018.05.13	3 years

ANNEX A: MEASUREMENT RESULTS

A.1 Radiated Emission (§15.109(a))

Reference

FCC: CFR Part 15.109(a)

A.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (USB mode of MS and charging mode of MS) at a distance 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:

Charging mode: The MS is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released. The MS is connected to a charger.

USB mode: The model of the PC is Lenovo 2OET-A00DCD, and the serial number of the PC is PF-OIYDAK. The CMD.exe is used to let the PC keep on ping MS's IP address, pinging MS's IP address was until test finished .

A.1.3 Measurement Limit

Limit from CFR Part 15.109(a)

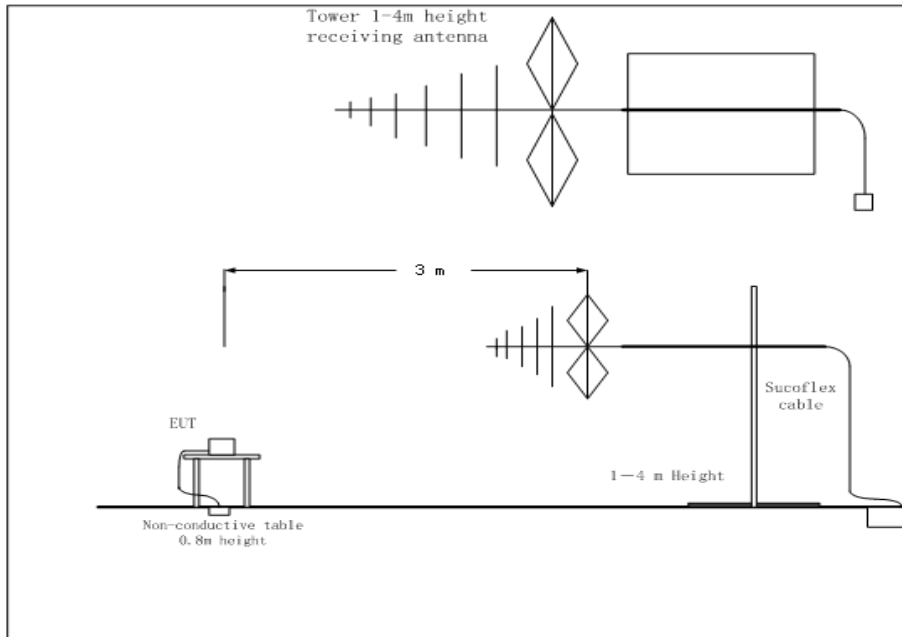
Frequency range (MHz)	Field strength limit ($\mu\text{V}/\text{m}$)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

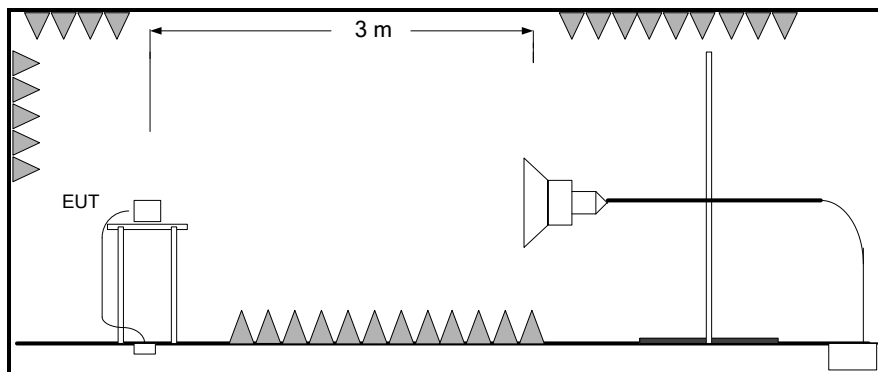
A.1.4 Test Condition

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

**A.1.5 Test set-up:
30MHz-1GHz**



1GHz-18GHz



A.1.6 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:

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

Where

G_A : Antenna factor of receive antenna

G_{PL} : Path Loss

P_{Mea} : Measurement result on receiver.

Note: the result contains vertical part and Horizontal part

RE Measurement uncertainty: 30M-1GHz: 5.12dB (k=2);
1GHz-18GHz: 4.48 dB (k=2)

Set.1 Charging mode / Peak detector

Frequency(MHz)	Result(dBuV/m)	Limit (dB μ V/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dB μ V)
14552.500000	54.67	74.00	19.33	V	11.9	42.77
14659.500000	54.95	74.00	19.05	V	11.9	43.05
15648.500000	55.70	74.00	18.30	V	12.6	43.1
16231.500000	55.42	74.00	18.58	V	13.1	42.32
16792.500000	55.65	74.00	18.35	V	13.9	41.75
17413.500000	55.24	74.00	18.76	V	14.0	41.24

Set.1 Charging mode / Average detector

Frequency(MHz)	Result(dBuV/m)	Limit (dB μ V/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dB μ V)
14529.000000	42.89	54.00	11.11	V	11.8	31.09
15036.500000	43.37	54.00	10.63	V	12.1	31.27
15787.000000	44.58	54.00	9.42	V	12.8	31.78
16273.500000	44.13	54.00	9.87	V	13.2	30.93
16798.500000	44.79	54.00	9.21	V	13.9	30.89
17354.000000	44.14	54.00	9.86	V	14.0	30.14

Set.2 Charging mode / Peak detector

Frequency(MHz)	Result(dBuV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dBμV)
14058.000000	54.40	74.00	19.60	V	11.0	43.4
14586.500000	55.30	74.00	18.70	V	11.9	43.4
15750.500000	56.04	74.00	17.96	V	12.8	43.24
16265.000000	55.97	74.00	18.03	V	13.2	42.77
16765.000000	56.02	74.00	17.98	V	13.9	42.12
17274.000000	55.64	74.00	18.36	V	13.9	41.74

Set.2 Charging mode / Average detector

Frequency(MHz)	Result(dBuV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dBμV)
14526.000000	43.00	54.00	11.00	V	11.8	31.2
15049.000000	43.33	54.00	10.67	V	12.1	31.23
15766.500000	44.70	54.00	9.30	V	12.8	31.9
16334.500000	44.17	54.00	9.83	V	13.4	30.77
16826.000000	44.87	54.00	9.13	V	13.9	30.97
17428.500000	44.19	54.00	9.81	V	14.0	30.19

Set.3 USB mode / Peak detector

Frequency(MHz)	Result(dBuV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dBμV)
14455.500000	54.54	74.00	19.46	V	11.7	42.84
15109.500000	55.96	74.00	18.04	V	12.1	43.86
15768.500000	56.01	74.00	17.99	V	12.8	43.21
16179.500000	56.03	74.00	17.97	V	13.1	42.93
16535.000000	56.26	74.00	17.74	V	13.7	42.56
17428.000000	55.78	74.00	18.22	V	14.0	41.78

Set.3 USB mode / Average detector

Frequency(MHz)	Result(dBuV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dBμV)
14534.500000	43.10	54.00	10.90	V	11.9	31.2
15112.000000	43.50	54.00	10.50	V	12.1	31.4
15776.500000	44.60	54.00	9.40	V	12.8	31.8
16211.000000	44.14	54.00	9.86	V	13.1	31.04
16792.500000	44.58	54.00	9.42	V	13.9	30.68
17441.500000	44.09	54.00	9.91	V	14.0	30.09

Set.4 USB mode / Peak detector

Frequency(MHz)	Result(dBuV/m)	Limit (dB μ V/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dB μ V)
14225.500000	54.66	74.00	19.34	V	11.3	43.36
15023.500000	55.16	74.00	18.84	V	12.0	43.16
15683.500000	56.44	74.00	17.56	V	12.6	43.84
16219.000000	55.53	74.00	18.47	V	13.1	42.43
16844.500000	56.08	74.00	17.92	V	13.9	42.18
17313.000000	55.28	74.00	18.72	V	13.9	41.38

Set.4 USB mode / Average detector

Frequency(MHz)	Result(dBuV/m)	Limit (dB μ V/m)	Margin(dB)	Polarity	ARpl (dB)	PMea (dB μ V)
14522.000000	42.99	54.00	11.01	V	11.8	31.19
15060.000000	43.56	54.00	10.44	V	12.1	31.46
15781.000000	44.51	54.00	9.49	V	12.8	31.71
16224.500000	44.03	54.00	9.97	V	13.1	30.93
16745.500000	44.78	54.00	9.22	V	13.9	30.88
17357.000000	44.12	54.00	9.88	V	14.0	30.12

Note: The measurement result of Set.1, Set.2, Set.3, and Set.4 showed here are worst cases of combinations of different batteries and USB cables.

Charging mode: Set 1

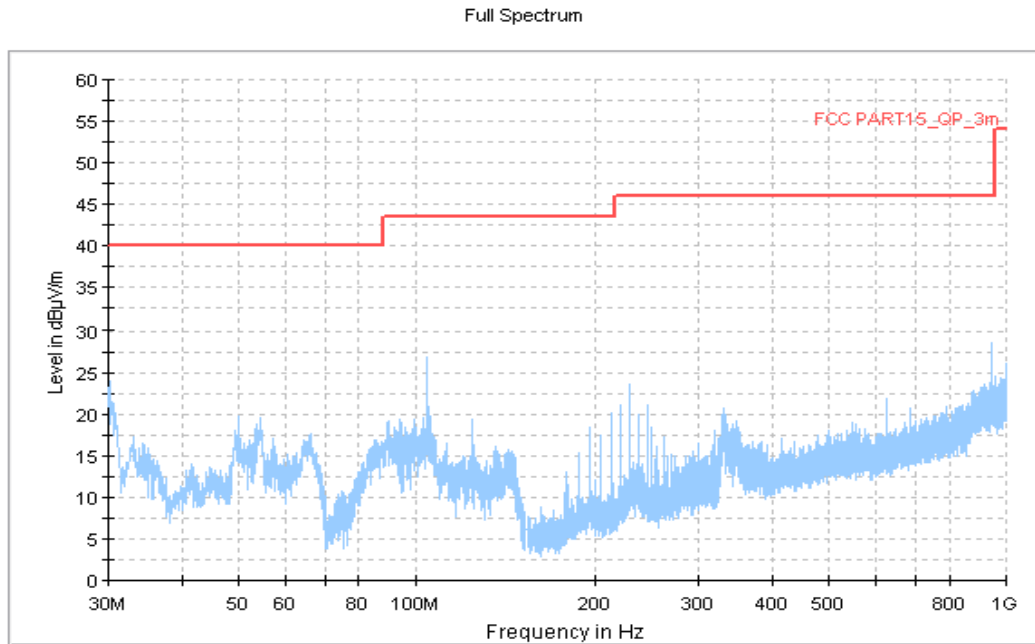


Figure A.1 Radiated Emission from 30MHz to 1GHz

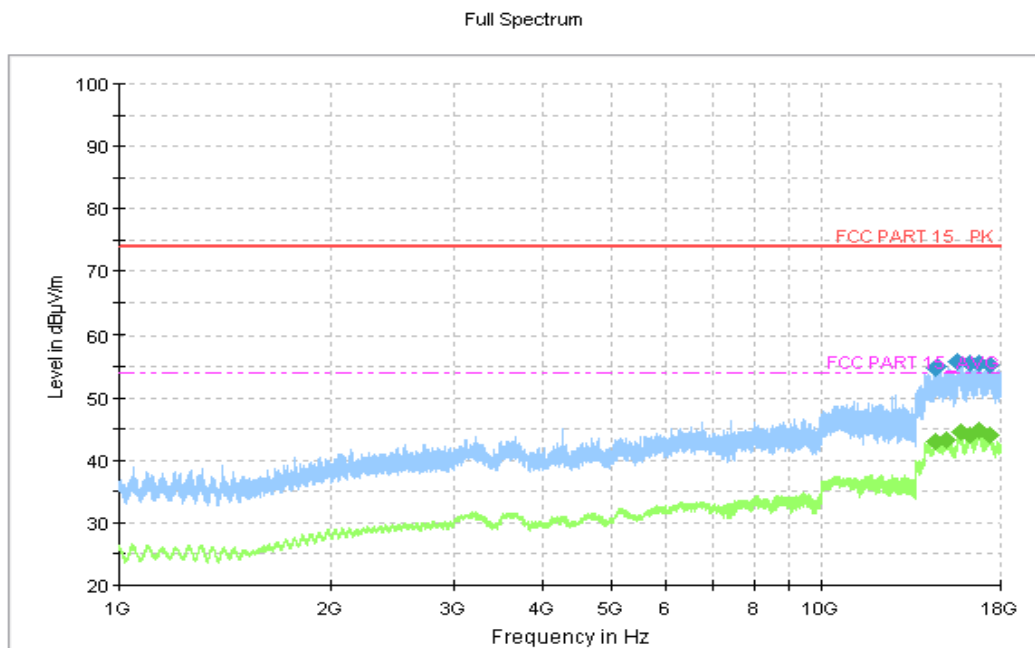


Figure A.2 Radiated Emission from 1GHz to 18GHz

Charging mode: Set 2

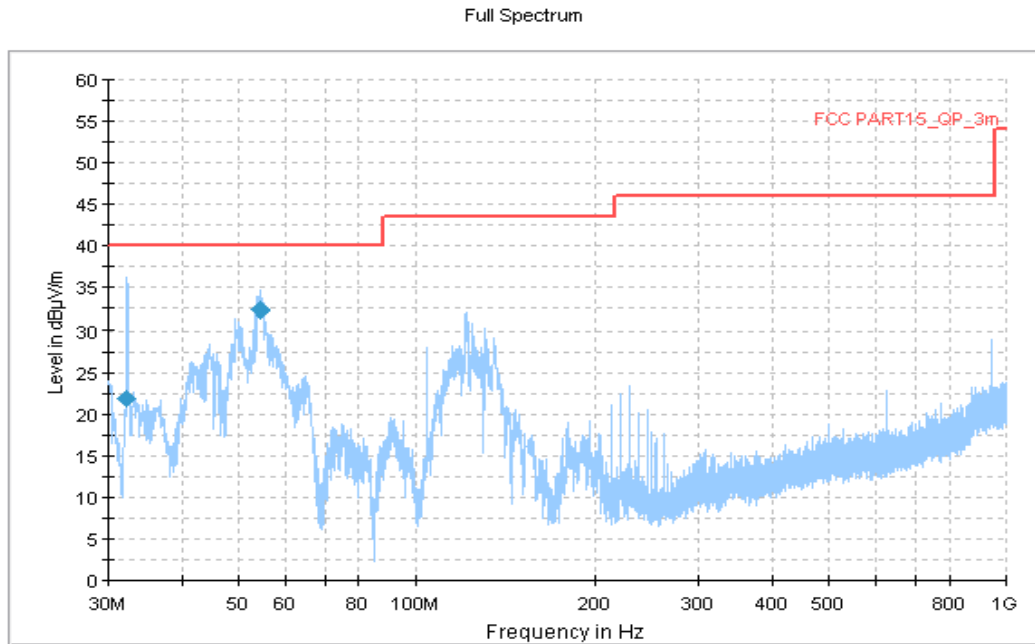


Figure A.3 Radiated Emission from 30MHz to 1GHz

Final_Result

Frequency(MHz)	QuasiPeak(dBµV/m)	Limit(dBµV/m)	Margin(dB)	Pol	Corr.(dB)
32.303000	21.84	40.00	18.16	V	-37.1
54.402000	32.32	40.00	7.68	V	-33.3

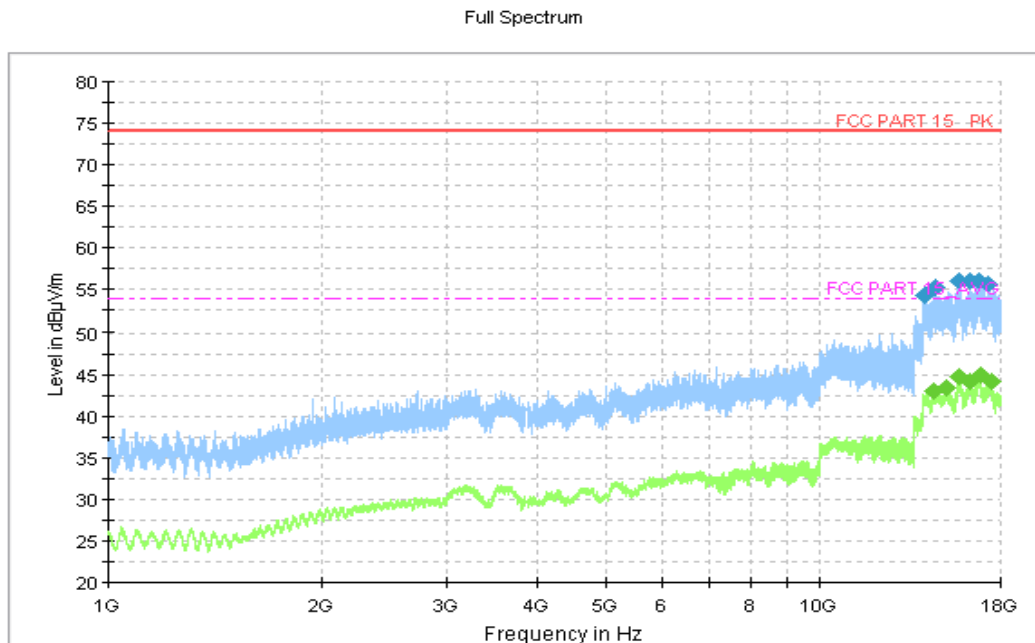


Figure A.4 Radiated Emission from 1GHz to 18GHz

USB mode: Set 3

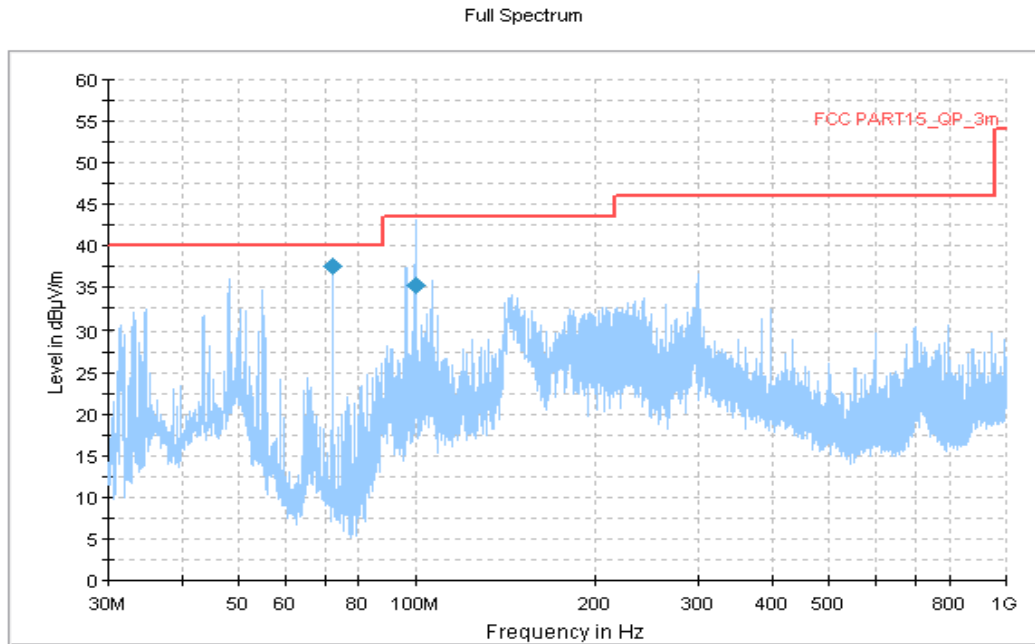


Figure A.5 Radiated Emission from 30MHz to 1GHz

Final_Result

Frequency(MHz)	QuasiPeak(dBµV/m)	Limit(dBµV/m)	Margin(dB)	Pol	Corr.(dB)
72.189000	37.63	40.00	2.37	V	-37.1
100.266000	35.21	43.52	8.31	V	-33.0

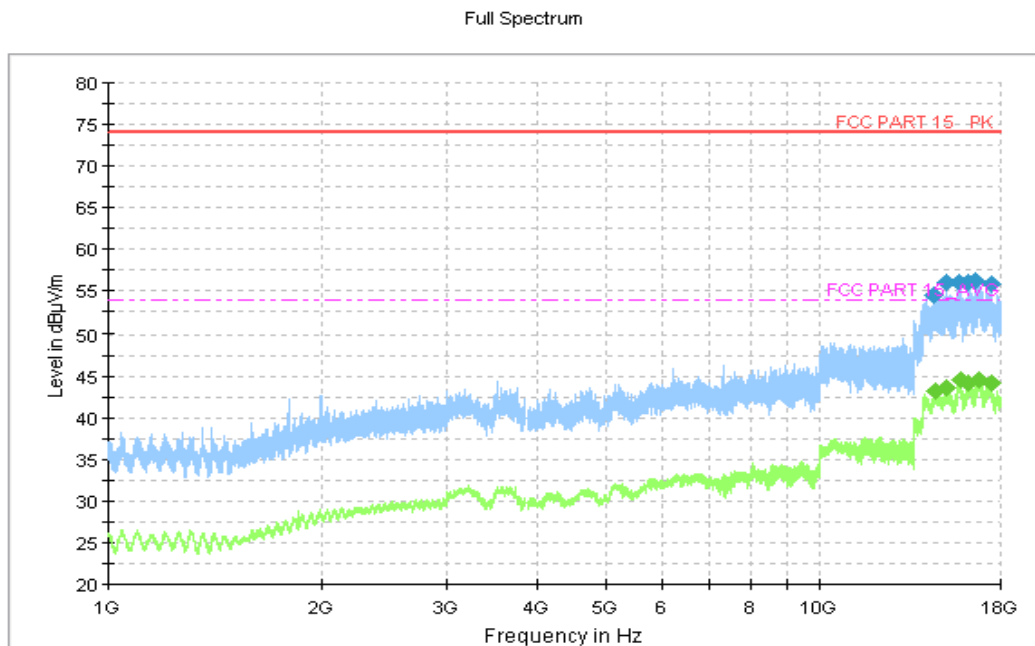


Figure A.6 Radiated Emission from 1GHz to 18GHz

USB mode: Set 4

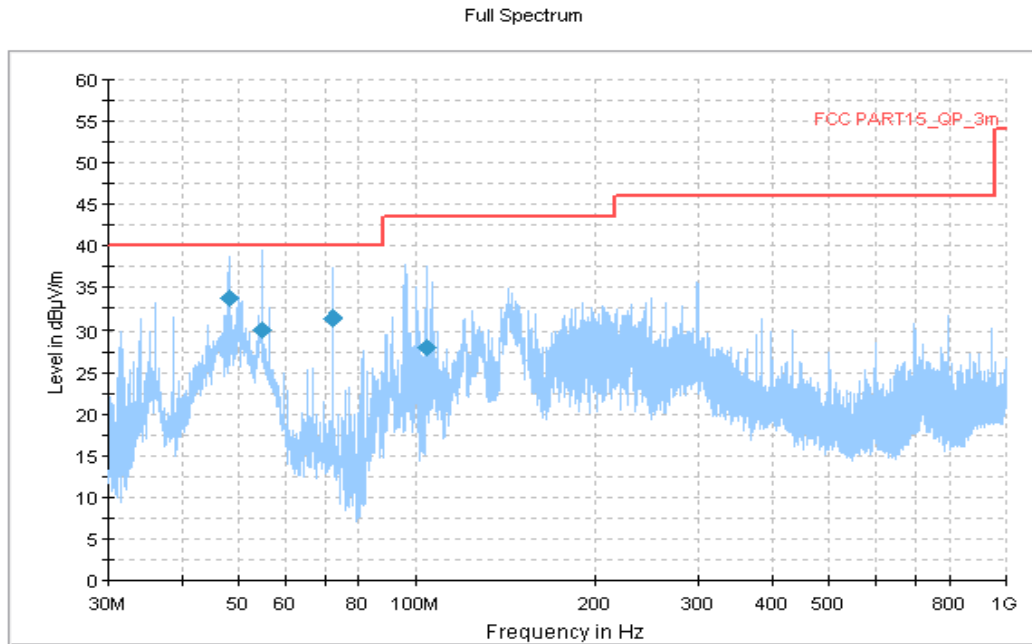


Figure A.7 Radiated Emission from 30MHz to 1GHz

Final_Result

Frequency(MHz)	QuasiPeak(dBµV/m)	Limit(dBµV/m)	Margin(dB)	Pol	Corr.(dB)
48.081000	33.74	40.00	6.26	V	-32.9
54.745000	30.05	40.00	9.95	V	-33.4
72.140000	31.41	40.00	8.59	V	-37.1
104.235000	27.94	43.52	15.58	V	-32.7

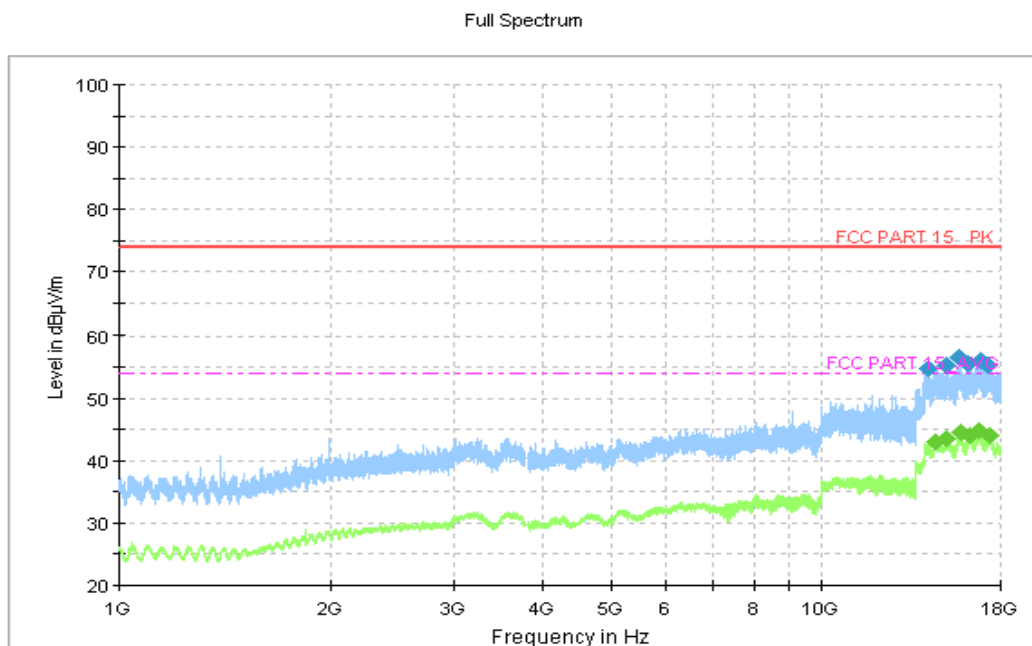


Figure A.8 Radiated Emission from 1GHz to 18GHz

A.2 Conducted Emission (§15.107(a))

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:

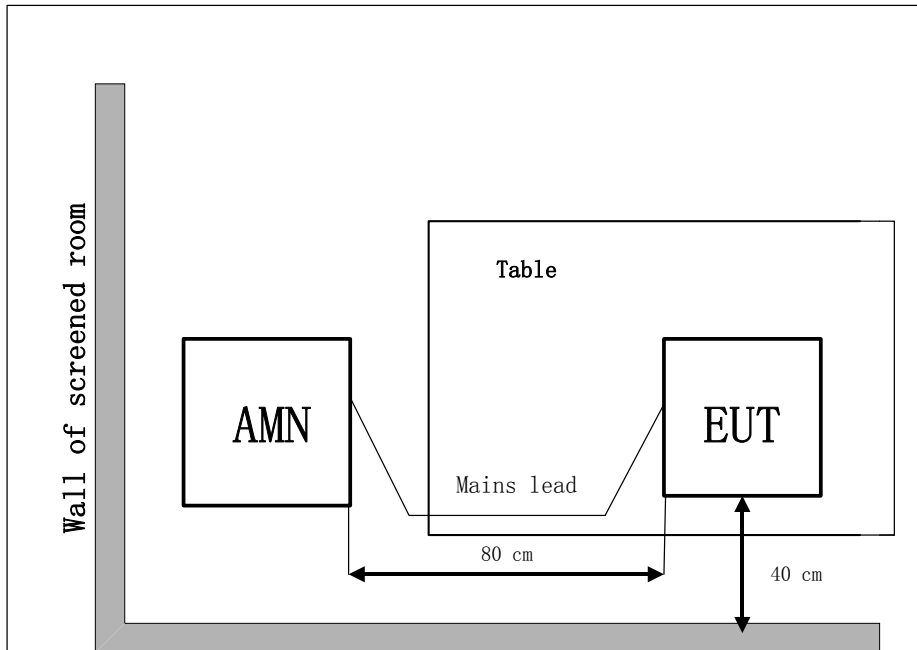
Charging mode: The MS is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released. The MS is connected to a charger.

USB mode: The model of the PC is Lenovo 2OET-A00DCD, and the serial number of the PC is PF-OIYDAK. The CMD.exe is used to let the PC keep on ping MS's IP address, pinging MS's IP address was until test finished .

A.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	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 set-up:



A.2.5 Test Condition in charging mode

Voltage (V)	Frequency (Hz)
120	60
240	60

RBW	Sweep Time(s)
9kHz	1

CE Measurement uncertainty: 3.06 dB (k=2)

A.2.6 Measurement Results
Charging mode:Set.1
Voltage:120V

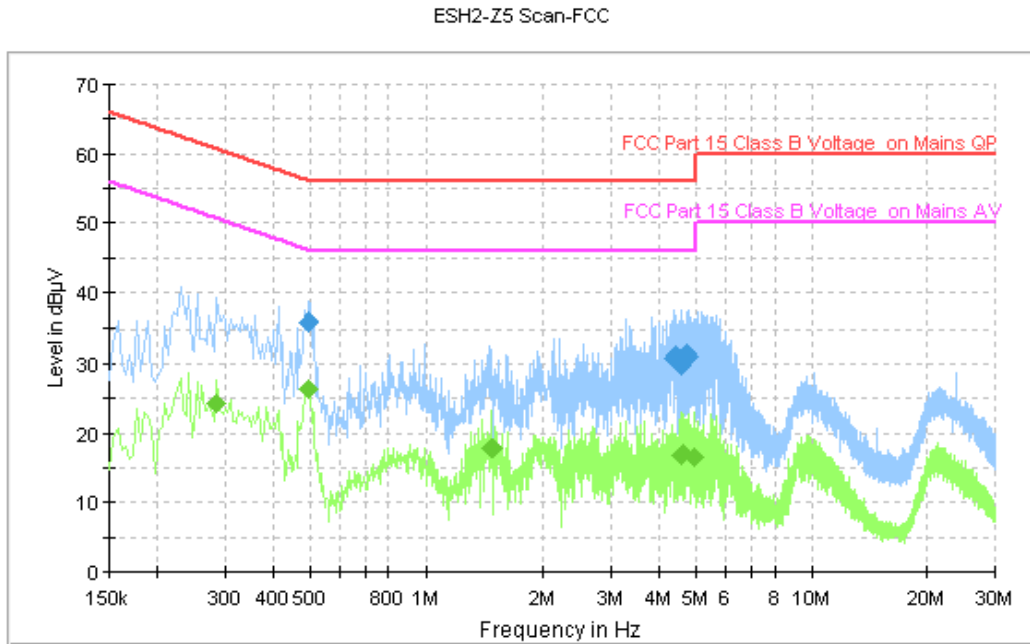


Figure A.9 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.498000	36.0	GND	N	9.7	20.0	56.0
4.398000	30.7	GND	N	9.6	25.3	56.0
4.434000	31.4	GND	N	9.6	24.6	56.0
4.570000	29.8	GND	N	9.6	26.2	56.0
4.734000	31.5	GND	N	9.6	24.5	56.0
4.786000	30.9	GND	N	9.6	25.1	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.286000	24.4	GND	N	9.6	26.2	50.6
0.498000	26.5	GND	N	9.7	19.6	46.0
1.486000	17.8	GND	N	9.6	28.2	46.0
4.578000	16.7	GND	N	9.6	29.3	46.0
4.638000	17.1	GND	N	9.6	28.9	46.0
4.926000	16.5	GND	N	9.6	29.5	46.0

Charging mode:Set.2
Voltage:120V

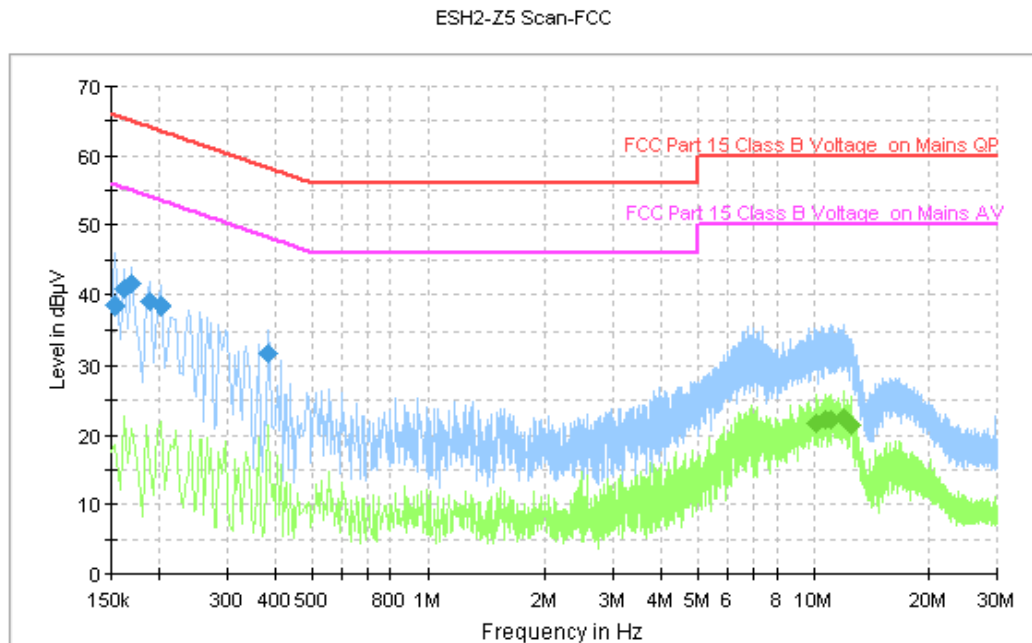


Figure A.10 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.154000	38.5	GND	N	9.6	27.3	65.8
0.162000	40.7	GND	N	9.6	24.7	65.4
0.170000	41.6	GND	N	9.6	23.3	65.0
0.190000	38.9	GND	N	9.6	25.1	64.0
0.202000	38.4	GND	N	9.6	25.1	63.5
0.386000	31.7	GND	N	9.6	26.5	58.1

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
10.146000	21.6	GND	N	9.8	28.4	50.0
10.682000	22.2	GND	N	9.9	27.8	50.0
11.050000	22.3	GND	N	9.9	27.7	50.0
11.942000	22.4	GND	N	9.9	27.6	50.0
11.982000	22.4	GND	N	9.9	27.6	50.0
12.478000	21.5	GND	N	9.9	28.5	50.0

USB mode:Set.3
Voltage:120V

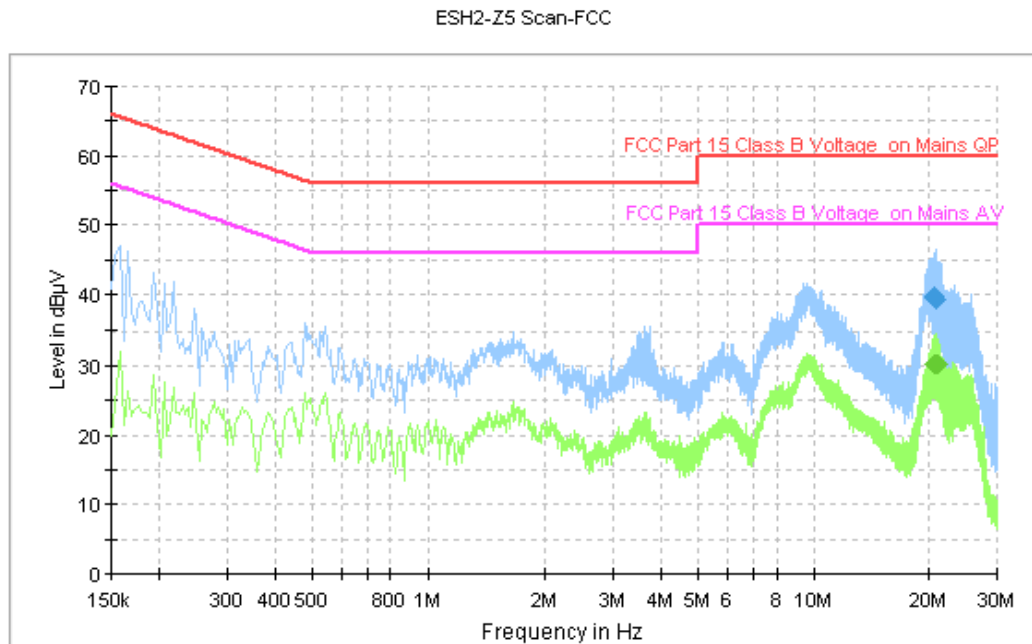


Figure A.11 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.502000	39.6	GND	N	10.0	20.4	60.0
20.538000	39.6	GND	N	10.0	20.4	60.0
20.578000	39.8	GND	N	10.0	20.2	60.0
20.638000	39.7	GND	N	10.0	20.3	60.0
20.722000	39.3	GND	N	10.0	20.7	60.0
20.842000	39.2	GND	N	10.0	20.8	60.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.562000	30.2	GND	N	10.0	19.8	50.0
20.758000	30.3	GND	N	10.0	19.7	50.0
20.790000	30.3	GND	N	10.0	19.7	50.0
20.858000	30.3	GND	N	10.0	19.7	50.0
20.942000	30.2	GND	N	10.0	19.8	50.0
20.958000	30.3	GND	N	10.0	19.7	50.0

USB mode:Set.4
Voltage:120V

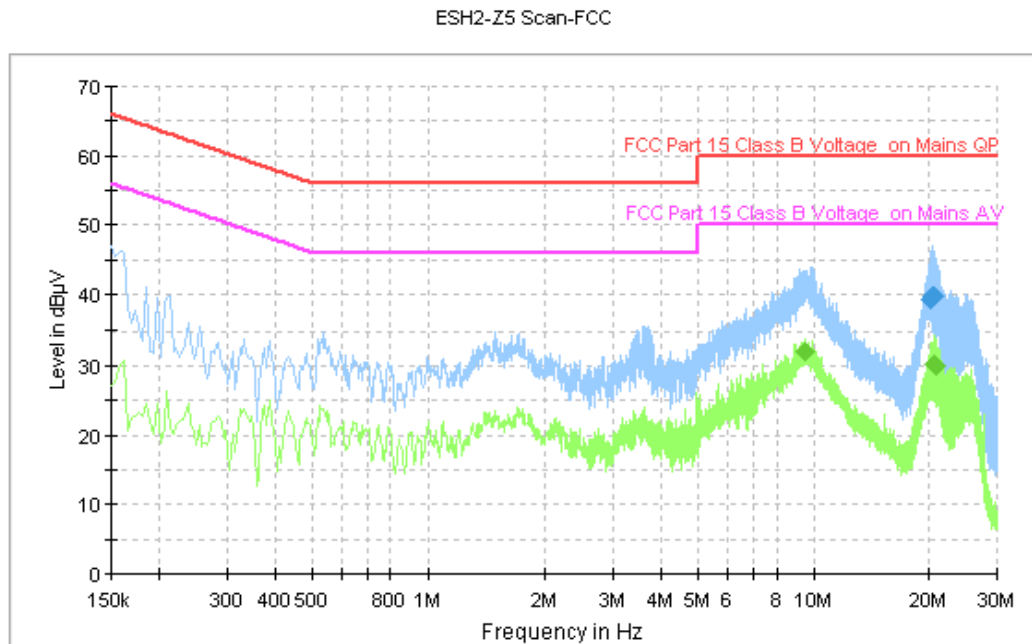


Figure A.12 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.218000	39.4	GND	N	10.0	20.6	60.0
20.334000	39.9	GND	N	10.0	20.1	60.0
20.386000	39.9	GND	N	10.0	20.1	60.0
20.450000	39.9	GND	N	10.0	20.1	60.0
20.486000	39.7	GND	N	10.0	20.3	60.0
20.586000	39.7	GND	N	10.0	20.3	60.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
9.462000	32.1	GND	N	9.9	17.9	50.0
20.494000	30.3	GND	N	10.0	19.7	50.0
20.502000	30.3	GND	N	10.0	19.7	50.0
20.578000	30.3	GND	N	10.0	19.7	50.0
20.622000	30.2	GND	N	10.0	19.8	50.0
20.722000	30.1	GND	N	10.0	19.9	50.0

Charging mode:Set.1
Voltage:240V

ESH2-Z5 Scan-FCC

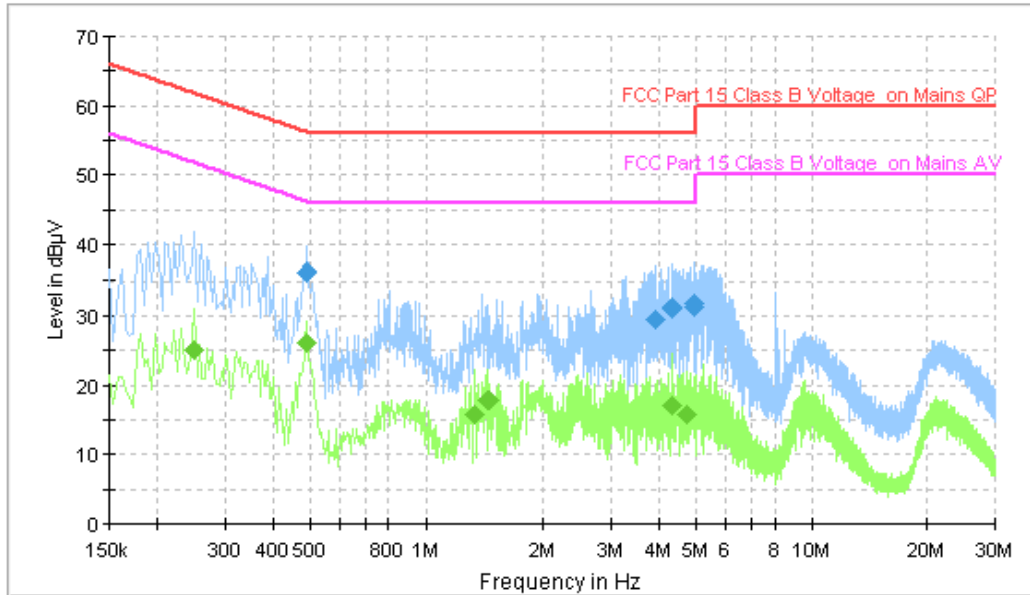


Figure A.13 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.490000	36.1	GND	N	9.7	20.1	56.2
3.926000	29.5	GND	N	9.6	26.5	56.0
4.330000	31.1	GND	N	9.6	24.9	56.0
4.350000	31.4	GND	N	9.6	24.6	56.0
4.946000	31.1	GND	N	9.6	24.9	56.0
4.962000	31.7	GND	N	9.6	24.3	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.250000	25.0	GND	N	9.6	26.8	51.8
0.490000	26.1	GND	N	9.7	20.1	46.2
1.338000	15.9	GND	N	9.6	30.1	46.0
1.454000	17.7	GND	N	9.5	28.3	46.0
4.330000	17.0	GND	N	9.6	29.0	46.0
4.710000	15.8	GND	N	9.6	30.2	46.0

Charging mode: Set.2
Voltage: 240V

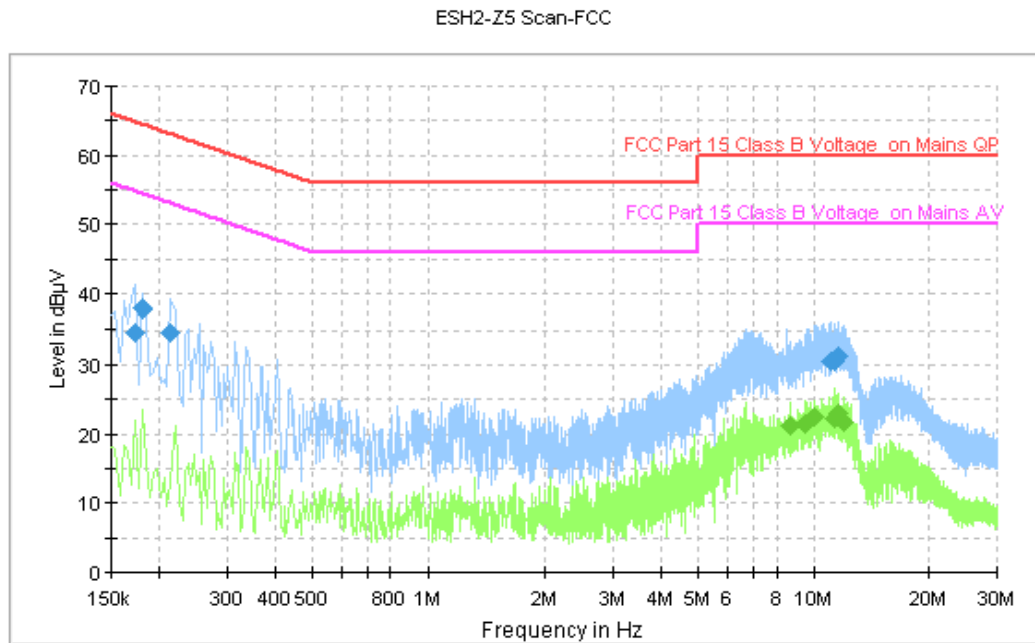


Figure A.14 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.174000	34.6	GND	N	9.6	30.1	64.8
0.182000	38.0	GND	N	9.6	26.4	64.4
0.214000	34.6	GND	N	9.6	28.4	63.0
11.062000	30.5	GND	N	9.9	29.5	60.0
11.322000	30.4	GND	N	9.9	29.6	60.0
11.566000	31.3	GND	N	9.9	28.7	60.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
8.706000	21.1	GND	N	9.8	28.9	50.0
9.542000	21.4	GND	N	9.9	28.6	50.0
10.034000	22.5	GND	N	9.8	27.5	50.0
11.390000	22.3	GND	N	9.9	27.7	50.0
11.566000	22.9	GND	N	9.9	27.1	50.0
11.922000	21.8	GND	N	9.9	28.2	50.0

USB mode:Set.3
Voltage:240V

ESH2-Z5 Scan-FCC

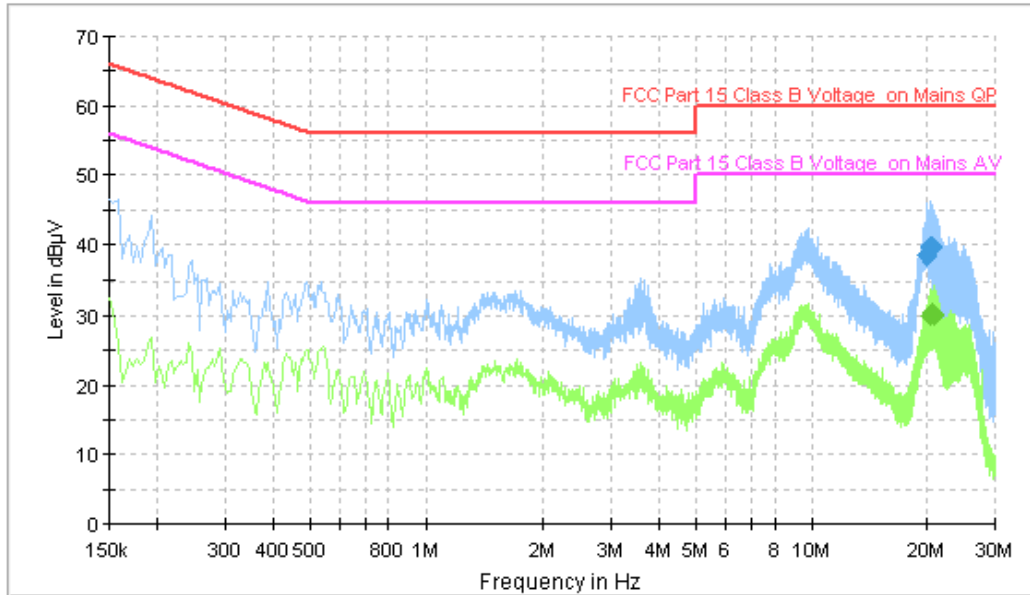


Figure A.15 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.002000	38.5	GND	N	10.0	21.5	60.0
20.326000	39.6	GND	N	10.0	20.4	60.0
20.362000	39.9	GND	N	10.0	20.1	60.0
20.370000	39.7	GND	N	10.0	20.3	60.0
20.662000	39.7	GND	N	10.0	20.3	60.0
20.674000	39.6	GND	N	10.0	20.4	60.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.378000	30.1	GND	N	10.0	19.9	50.0
20.554000	30.4	GND	N	10.0	19.6	50.0
20.674000	30.4	GND	N	10.0	19.6	50.0
20.766000	30.2	GND	N	10.0	19.8	50.0
20.774000	30.2	GND	N	10.0	19.8	50.0
20.866000	30.1	GND	N	10.0	19.9	50.0

USB mode:Set.4
Voltage:240V

ESH2-Z5 Scan-FCC

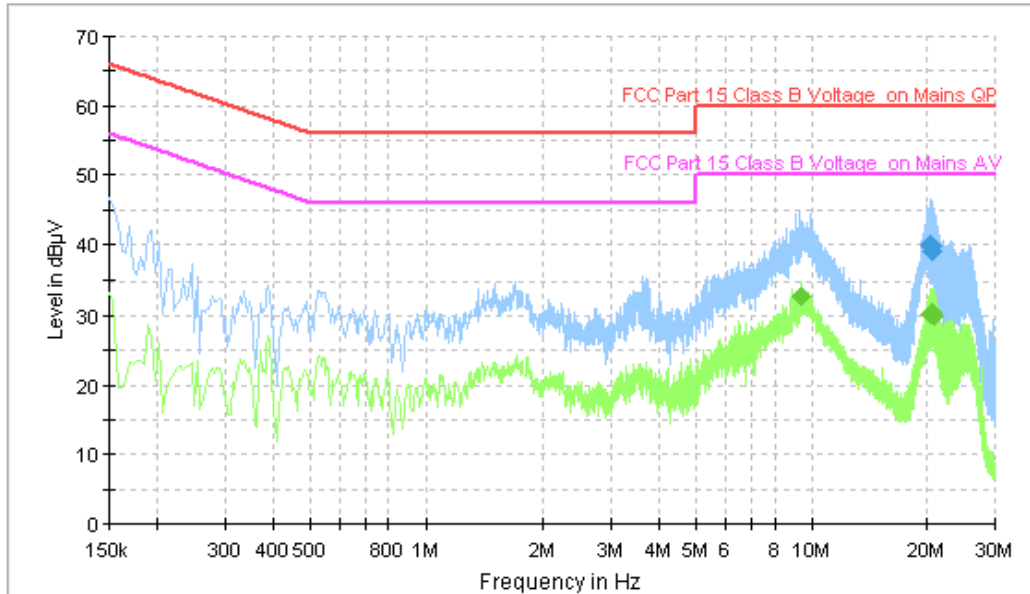


Figure A.16 Conducted Emission

Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
20.350000	39.9	GND	N	10.0	20.1	60.0
20.366000	39.8	GND	N	10.0	20.2	60.0
20.390000	40.0	GND	N	10.0	20.0	60.0
20.398000	39.9	GND	N	10.0	20.1	60.0
20.498000	39.8	GND	N	10.0	20.2	60.0
20.710000	39.1	GND	N	10.0	20.9	60.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
9.434000	32.7	GND	N	9.8	17.3	50.0
20.350000	30.1	GND	N	10.0	19.9	50.0
20.518000	30.4	GND	N	10.0	19.6	50.0
20.662000	30.2	GND	N	10.0	19.8	50.0
20.770000	30.0	GND	N	10.0	20.0	50.0
20.830000	29.9	GND	N	10.0	20.1	50.0

END OF REPORT