



# TEST REPORT

No.I16N00975-EMC01

for

**OnePlus Technology(Shenzhen) Co., Ltd.**

**Mobile Phone**

**Model Name: ONEPLUS A3000**

**FCC ID: 2ABZ2-A3000**

with

**Hardware Version: 28**

**Software Version: oxygen 3.5.1**

**Issued Date: 2016-10-31**

**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**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I16N00975-EMC01	Rev.0	1st edition	2016-10-31



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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)33322000

### 1.2. Testing Environment

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

### 1.3. Project data

Testing Start Date: 2016-08-31  
Testing End Date: 2016-10-29

### 1.4. Signature



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Liang Yong  
(Prepared this test report)



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Zhang Yunzhuan  
(Reviewed this test report)



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Gao Junfei  
Director of the laboratory  
(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: OnePlus Technology(Shenzhen) Co., Ltd.

Address: 18/F, Tower C, Tai Ran Building, No.8 Tai Ran Road, Shenzhen, China

### **2.2. Manufacturer Information**

Company Name: OnePlus Technology(Shenzhen) Co., Ltd.

Address: 18/F, Tower C, Tai Ran Building, No.8 Tai Ran Road, Shenzhen, China



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

#### **3.1. About EUT**

Description	Mobile Phone
Model Name	ONEPLUS A3000
FCC ID	2ABZ2-A3000

The Equipment Under Test (EUT) are a model of Mobile Phone with integrated antenna.

The EUT supports GPRS service and EGPRS service. It has MP3, camera, USB memory, FM radio, GPS receiver, Bluetooth and WLAN functions.

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
EUT	860046039212719

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

#### **3.3. Internal Identification of AE**

AE ID*	Description	SN
AE1	Battery	/
AE2	Travel charger	/
AE3	USB cable	/
AE1		
Model	BLP633	
Manufacturer	DESAY	
Capacitance	3400mAh	
Nominal Voltage	3.85V	
AE2-1		
Model	HK0504	
Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD	
SN	HC1608500001	
AE2-2		
Model	DC0504A5	
Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD	
SN	H11619000004	
AE2-3		
Model	DC0504B5GB	
Manufacturer	LITEON TECHNOLOGY CORPORATION	
SN	LCYYWWWSSSSSS	



AE3

Model /  
Manufacturer /  
Length of cable 102cm

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

### 3.4. EUT set-ups

<b>EUT set-up No.</b>	<b>Combination of EUT and AE</b>	<b>Remarks</b>
Set.1	EUT+ AE1 + AE2-1+ AE3	Charging mode
Set.2	EUT+ AE1 + AE2-2+ AE3	Charging mode
Set.3	EUT+ AE1 + AE2-3+ AE3	Charging mode
Set.4	EUT+ AE1+ AE3	USB mode

#### 4. Reference Documents

##### 4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

<b>Reference</b>	<b>Title</b>	<b>Version</b>
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	ESCI	100702	R&S	2017.06.26	1 year
3.	Spectrum Analyzer	FSP 40	100378	R&S	2016.12.18	1 year
4.	BiLog Antenna	VULB9163	9163 329	Schwarzbeck	2017.01.20	3 years
5.	LISN	ESH2-Z5	100196	R&S	2017.01.12	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	M4099t	SA08850737	Lenovo	/	/
9.	Monitor	L1710d	0M04340B10 01010	Lenovo	/	/
10.	Printer	P1008	VNF6C12491	HP	/	/
11.	Keyboard	KB-0225	0723779	Lenovo	/	/
12.	Mouse	MO28UOL	44B39412	Lenovo	/	/

## **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:**

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 Lenovo Thinkcentre M4099t, and the serial number of the PC is SA08850737. 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**

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 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

$G_{\text{PL}}$ : Path Loss

$P_{\text{Mea}}$ : 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)	Polarity	$P_{\text{Mea}}$ (dB $\mu$ V)	$A_{\text{Rpl}}$ (dB)	Margin(dB)	Limit (dB $\mu$ V/m)
14135.500000	55.7	H	44.5	11.2	18.3	74.0
15134.500000	56.5	V	44.4	12.1	17.5	74.0
15712.500000	58.4	H	45.7	12.7	15.6	74.0
16313.500000	58.3	V	45.0	13.3	15.7	74.0
16836.000000	59.6	V	45.7	13.9	14.4	74.0
17265.500000	58.9	H	45.0	13.9	15.1	74.0

#### Set.1 Charging mode / Average detector

Frequency(MHz)	Result(dBuV/m)	Polarity	$P_{\text{Mea}}$ (dB $\mu$ V)	$A_{\text{Rpl}}$ (dB)	Margin(dB)	Limit (dB $\mu$ V/m)
14545.000000	44.2	H	32.3	11.9	9.8	54.0
15165.000000	45.1	V	33.0	12.1	8.9	54.0
15679.500000	46.7	V	34.1	12.6	7.3	54.0
16224.500000	47.0	V	33.9	13.1	7.0	54.0
16790.000000	47.5	H	33.6	13.9	6.5	54.0
17402.500000	47.3	H	33.3	14.0	6.7	54.0

#### Set.2 Charging mode / Peak detector

Frequency(MHz)	Result(dBuV/m)	Polarity	$P_{\text{Mea}}$ (dB $\mu$ V)	$A_{\text{Rpl}}$ (dB)	Margin(dB)	Limit (dB $\mu$ V/m)
14122.000000	56.2	H	45.0	11.2	17.8	74.0
15144.000000	57.0	V	44.9	12.1	17.0	74.0
15761.000000	59.4	V	46.6	12.8	14.6	74.0
16151.000000	58.6	V	45.5	13.1	15.4	74.0
16764.000000	59.6	V	45.7	13.9	14.4	74.0
17363.500000	59.2	V	45.2	14.0	14.8	74.0

**Set.2 Charging mode / Average detector**

Frequency(MHz)	Result(dBuV/m)	Polarity	P <sub>Mea</sub> (dBμV)	A <sub>Rpl</sub> (dB)	Margin(dB)	Limit (dBμV/m)
14546.000000	44.0	V	32.1	11.9	10.0	54.0
15174.500000	45.2	V	33.1	12.1	8.8	54.0
15780.500000	46.5	H	33.7	12.8	7.5	54.0
16227.000000	47.2	V	34.1	13.1	6.8	54.0
16759.500000	47.6	H	33.7	13.9	6.4	54.0
17353.500000	47.3	V	33.3	14.0	6.7	54.0

**Set.3 Charging mode / Peak detector**

Frequency(MHz)	Result(dBuV/m)	Polarity	P <sub>Mea</sub> (dBμV)	A <sub>Rpl</sub> (dB)	Margin(dB)	Limit (dBμV/m)
14496.500000	55.8	V	44.0	11.8	18.2	74.0
15127.000000	56.9	V	44.8	12.1	17.1	74.0
15707.000000	58.4	V	45.7	12.7	15.6	74.0
16183.000000	59.1	V	46.0	13.1	14.9	74.0
16830.500000	59.0	H	45.1	13.9	15.0	74.0
17286.000000	59.4	H	45.5	13.9	14.6	74.0

**Set.3 Charging mode / Average detector**

Frequency(MHz)	Result(dBuV/m)	Polarity	P <sub>Mea</sub> (dBμV)	A <sub>Rpl</sub> (dB)	Margin(dB)	Limit (dBμV/m)
14547.000000	44.1	V	32.2	11.9	9.9	54.0
15178.500000	45.2	V	33.0	12.2	8.8	54.0
15682.500000	46.6	H	34.0	12.6	7.4	54.0
16208.500000	47.1	V	34.0	13.1	6.9	54.0
16772.500000	47.6	V	33.7	13.9	6.4	54.0
17284.500000	47.2	V	33.3	13.9	6.8	54.0

**Set.4USB mode / Peak detector**

Frequency(MHz)	Result(dBuV/m)	Polarity	P <sub>Mea</sub> (dBμV)	A <sub>Rpl</sub> (dB)	Margin(dB)	Limit (dBμV/m)
13965.500000	56.7	V	45.9	10.8	17.3	74.0
15057.500000	56.4	H	44.3	12.1	17.6	74.0
15699.000000	57.9	V	45.2	12.7	16.1	74.0
16212.000000	58.7	V	45.6	13.1	15.3	74.0
16886.000000	59.4	H	45.4	14.0	14.6	74.0
17315.000000	59.1	H	45.2	13.9	14.9	74.0

**Set.4 USB mode / Average detector**

Frequency(MHz)	Result(dBuV/m)	Polarity	P <sub>Mea</sub> (dBμV)	A <sub>Rpl</sub> (dB)	Margin(dB)	Limit (dBμV/m)
14545.000000	44.2	H	32.3	11.9	9.8	54.0
15172.500000	44.9	H	32.8	12.1	9.1	54.0
15674.000000	46.7	H	34.1	12.6	7.3	54.0
16201.500000	47.1	V	34.0	13.1	6.9	54.0
16733.000000	47.8	H	34.0	13.8	6.2	54.0
17305.500000	47.2	V	33.3	13.9	6.8	54.0

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

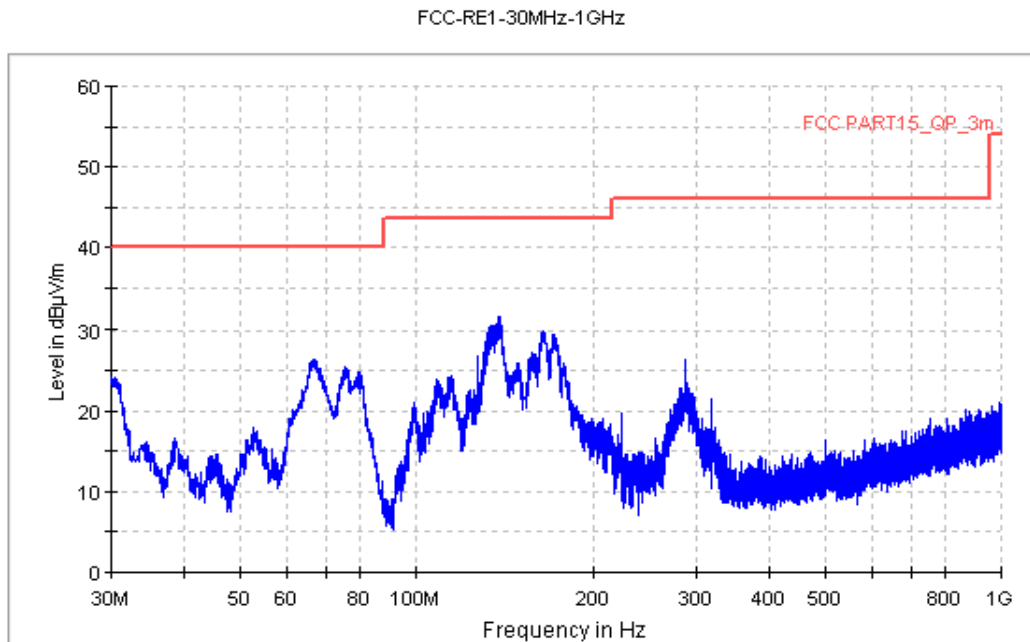


Figure A.1 Radiated Emission from 30MHz to 1GHz

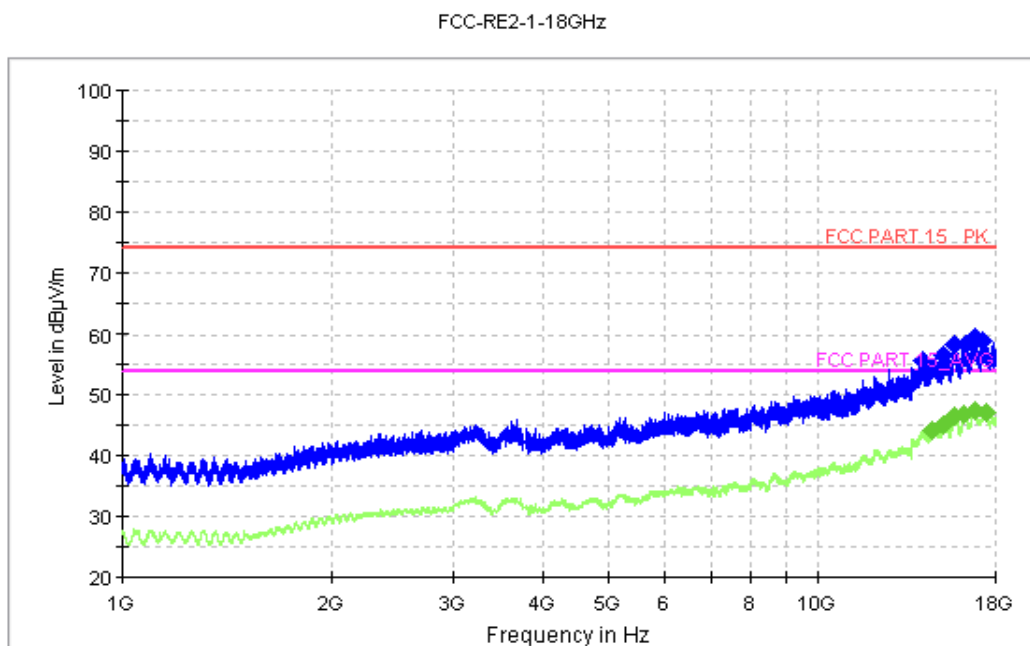


Figure A.2 Radiated Emission from 1GHz to 18GHz



Charging mode: Set 2

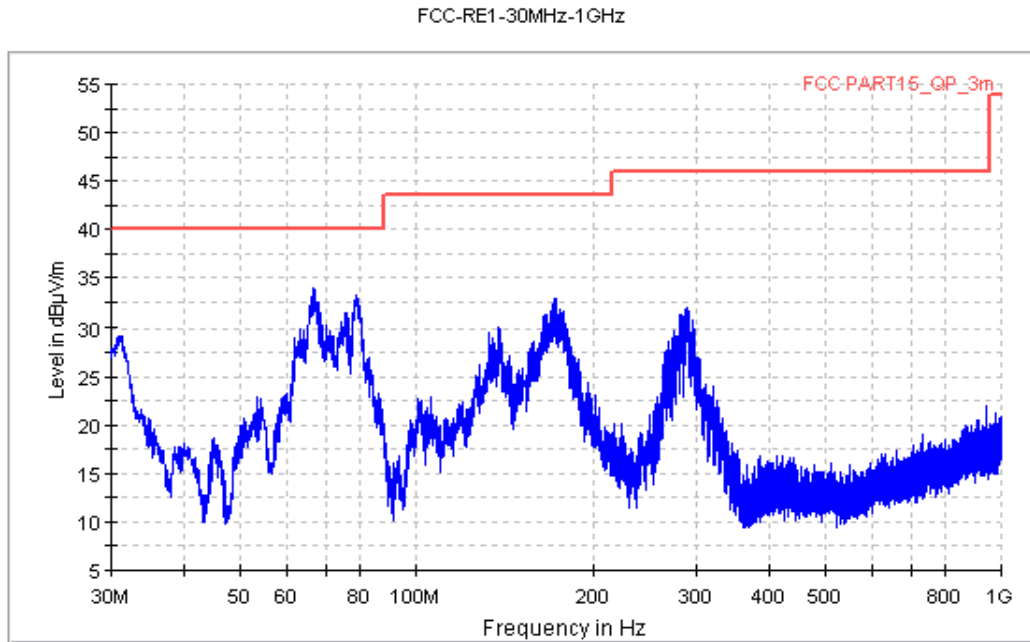


Figure A.3 Radiated Emission from 30MHz to 1GHz

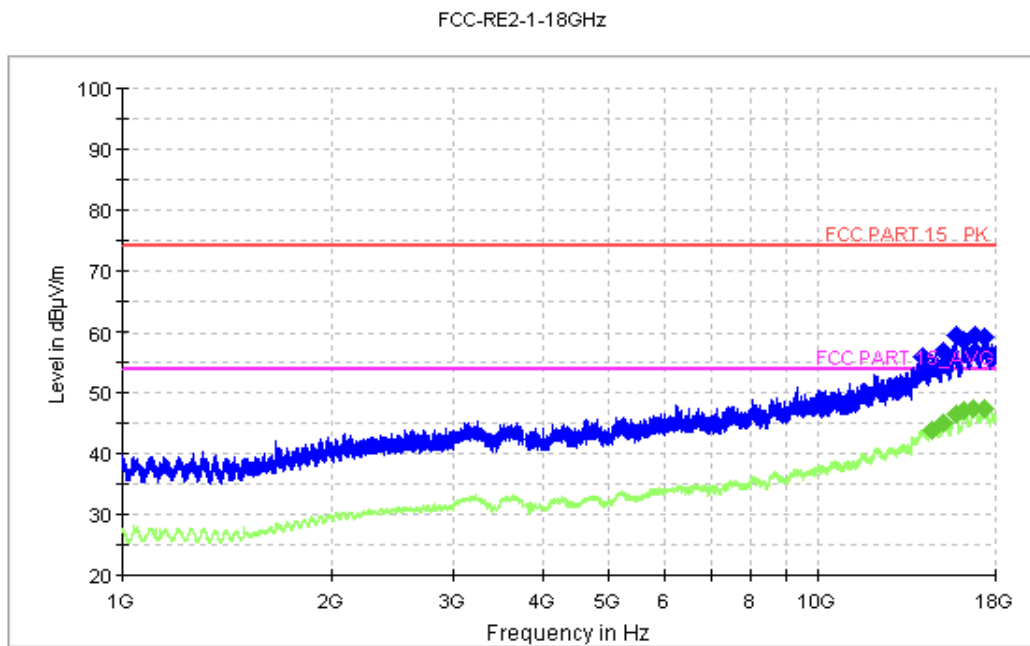


Figure A.4 Radiated Emission from 1GHz to 18GHz

Charging mode: Set 3

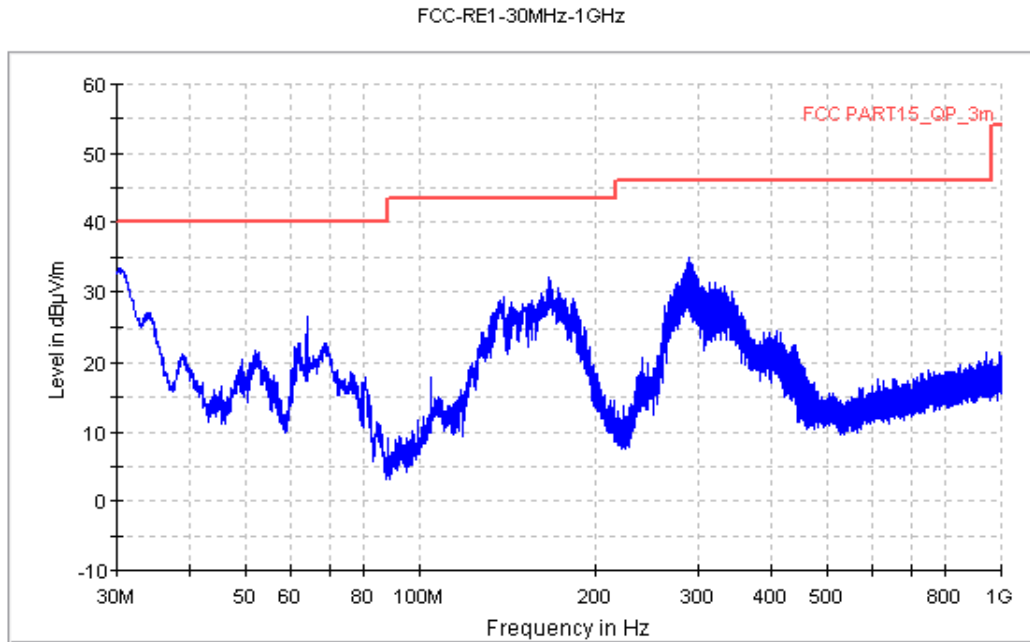


Figure A.5 Radiated Emission from 30MHz to 1GHz

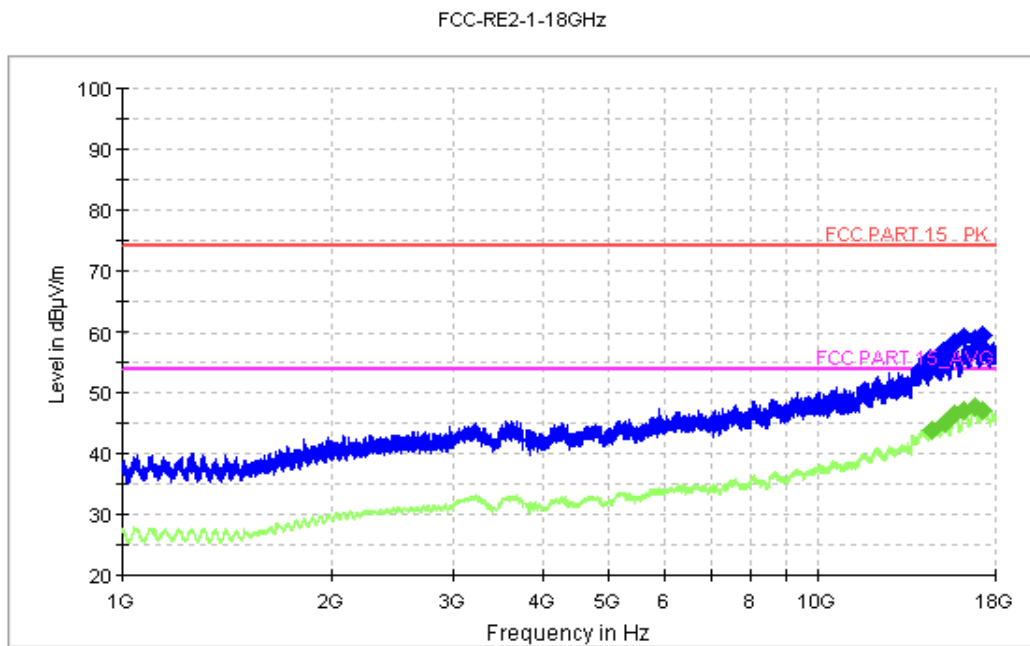


Figure A.6 Radiated Emission from 1GHz to 18GHz

USB mode: Set 4

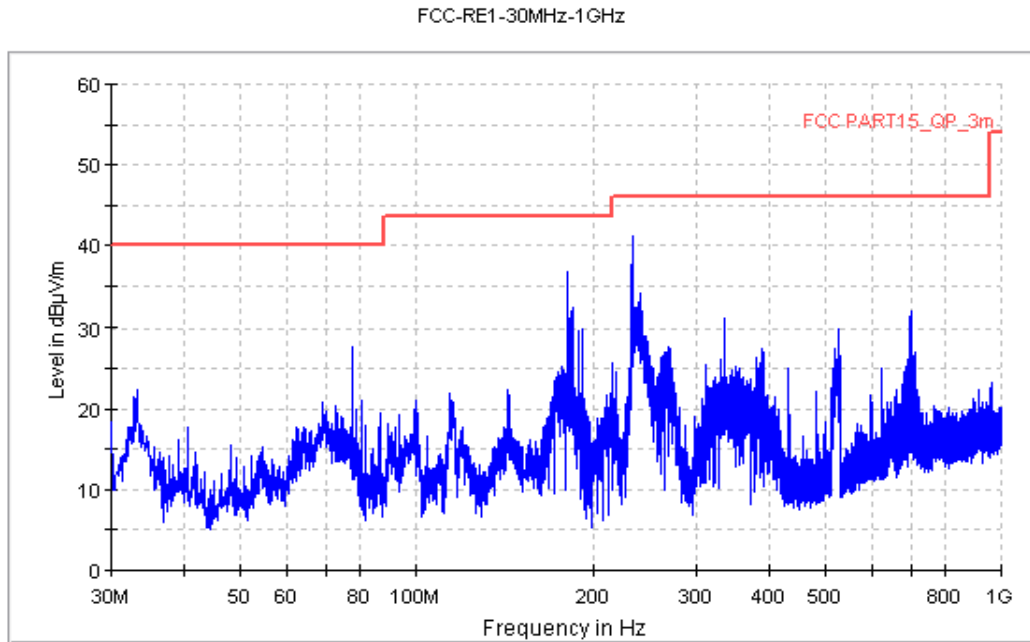


Figure A.7 Radiated Emission from 30MHz to 1GHz

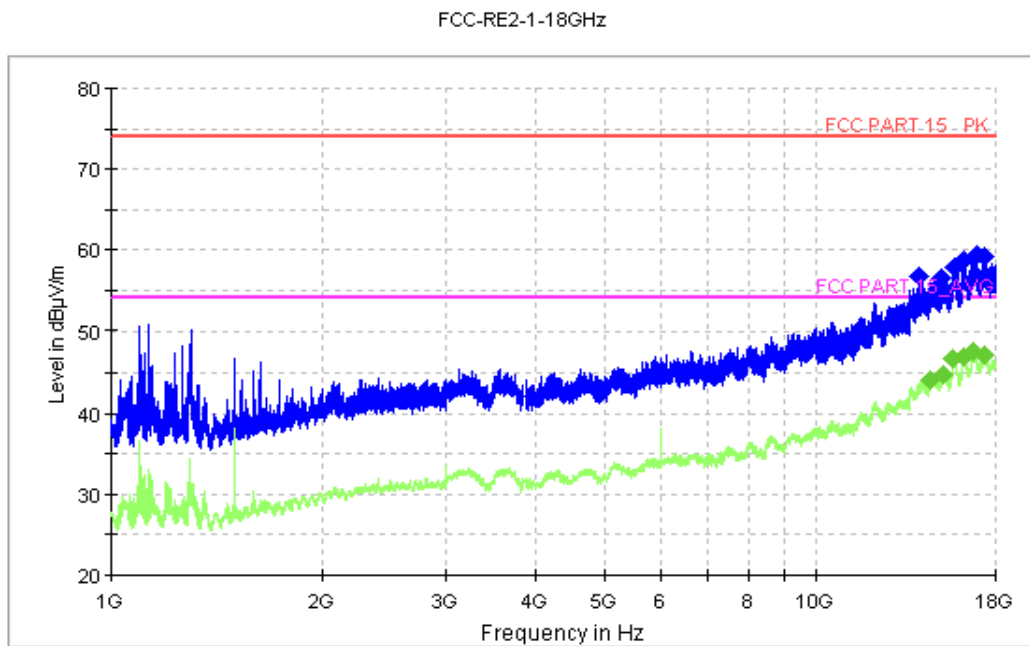


Figure A.8 Radiated Emission from 1GHz to 18GHz

## 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:

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 Lenovo Thinkcentre M4099t, and the serial number of the PC is SA08850737. 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 (dB $\mu$ 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

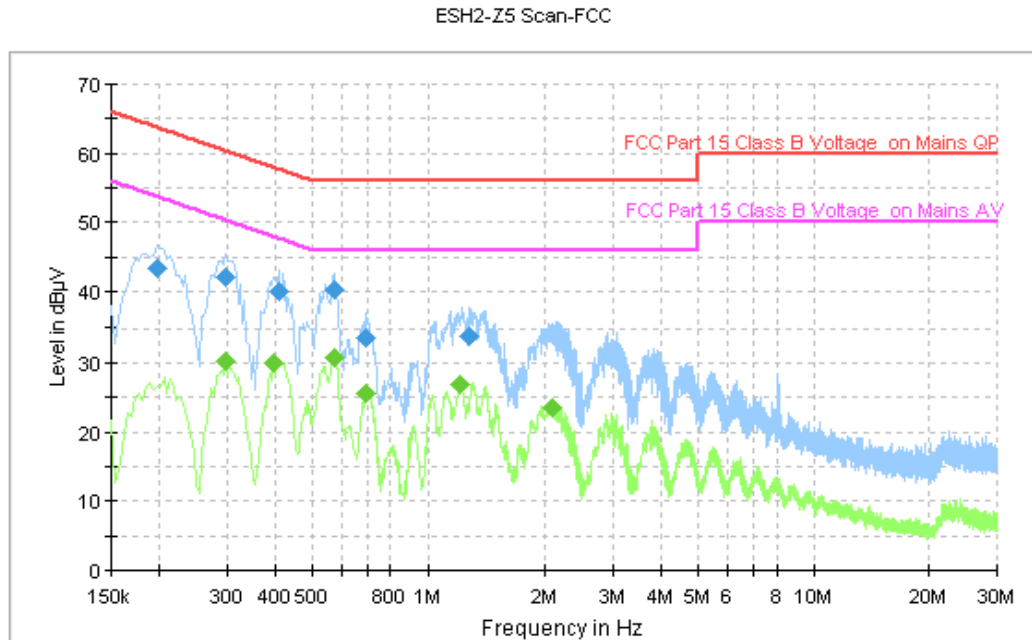
### A.2.4 Test Condition in charging mode

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

RBW	Sweep Time(s)
9kHz	1

**CE Measurement uncertainty:** 3.06 dB (k=2)

**A.2.5 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)
0.198000	43.3	GND	L1	9.8	20.4	63.7
0.298000	42.1	GND	L1	9.8	18.2	60.3
0.410000	40.1	GND	L1	9.8	17.5	57.6
0.570000	40.2	GND	L1	9.8	15.8	56.0
0.690000	33.6	GND	L1	9.8	22.4	56.0
1.282000	33.9	GND	L1	9.8	22.1	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.298000	30.3	GND	L1	9.8	20.0	50.3
0.398000	30.0	GND	L1	9.8	17.9	47.9
0.574000	30.6	GND	L1	9.8	15.4	46.0
0.690000	25.5	GND	L1	9.8	20.5	46.0
1.210000	26.9	GND	L1	9.8	19.1	46.0
2.078000	23.5	GND	L1	9.8	22.5	46.0

Charging mode:Set.1  
Voltage:240V

ESH2-Z5 Scan-FCC

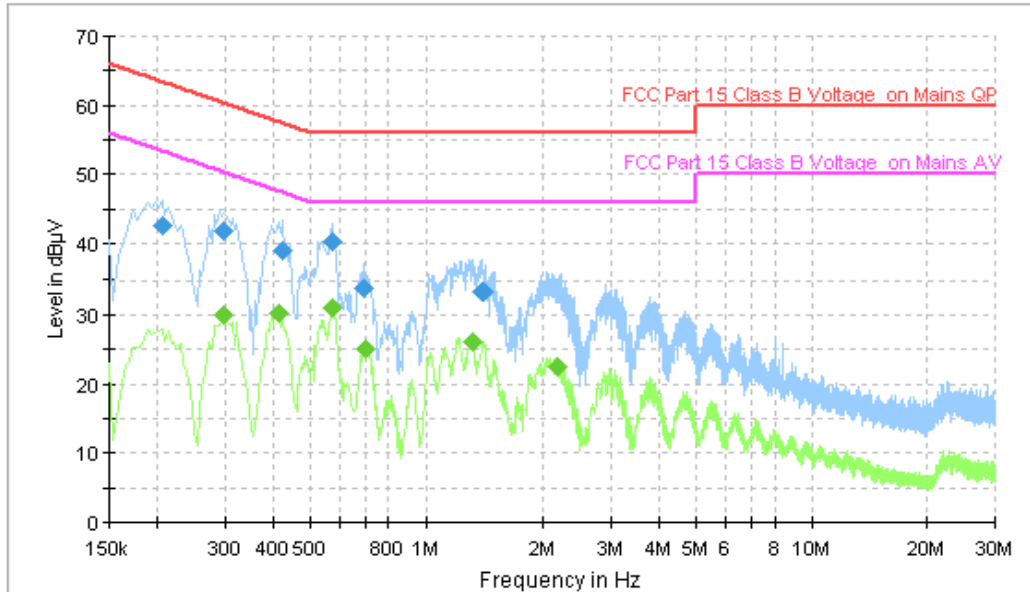


Figure A.10 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.206000	42.7	GND	L1	9.8	20.7	63.4
0.298000	41.9	GND	L1	9.8	18.4	60.3
0.422000	38.9	GND	L1	9.8	18.5	57.4
0.570000	40.4	GND	L1	9.8	15.6	56.0
0.690000	33.9	GND	L1	9.8	22.1	56.0
1.402000	33.3	GND	L1	9.8	22.7	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.298000	30.1	GND	L1	9.8	20.2	50.3
0.414000	30.2	GND	L1	9.8	17.4	47.6
0.574000	30.9	GND	L1	9.8	15.1	46.0
0.698000	25.0	GND	L1	9.8	21.0	46.0
1.322000	26.2	GND	L1	9.8	19.8	46.0
2.178000	22.6	GND	L1	9.8	23.4	46.0

Charging mode: Set.2  
Voltage: 120V

ESH2-Z5 Scan-FCC

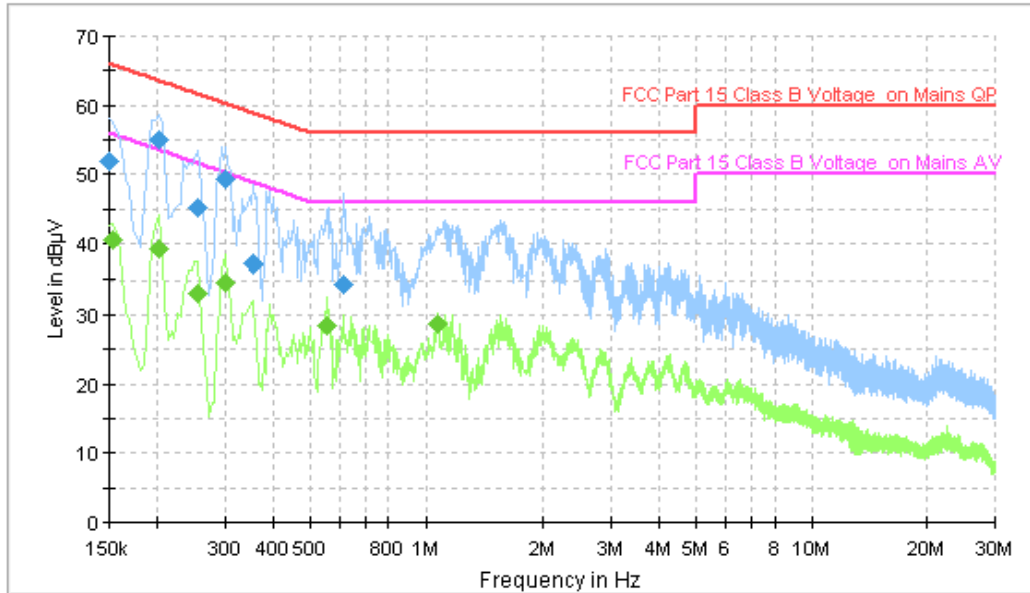


Figure A.11 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.150000	51.8	GND	L1	9.7	14.2	66.0
0.202000	54.9	GND	L1	9.8	8.6	63.5
0.254000	45.1	GND	L1	9.8	16.5	61.6
0.302000	49.2	GND	L1	9.8	11.0	60.2
0.354000	37.1	GND	L1	9.8	21.8	58.9
0.610000	34.4	GND	L1	9.8	21.6	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.154000	40.5	GND	L1	9.7	15.3	55.8
0.202000	39.4	GND	L1	9.8	14.2	53.5
0.254000	32.9	GND	L1	9.8	18.7	51.6
0.302000	34.6	GND	L1	9.8	15.6	50.2
0.554000	28.4	GND	L1	9.8	17.6	46.0
1.070000	28.7	GND	L1	9.8	17.3	46.0

Charging mode:Set.2  
Voltage:240V

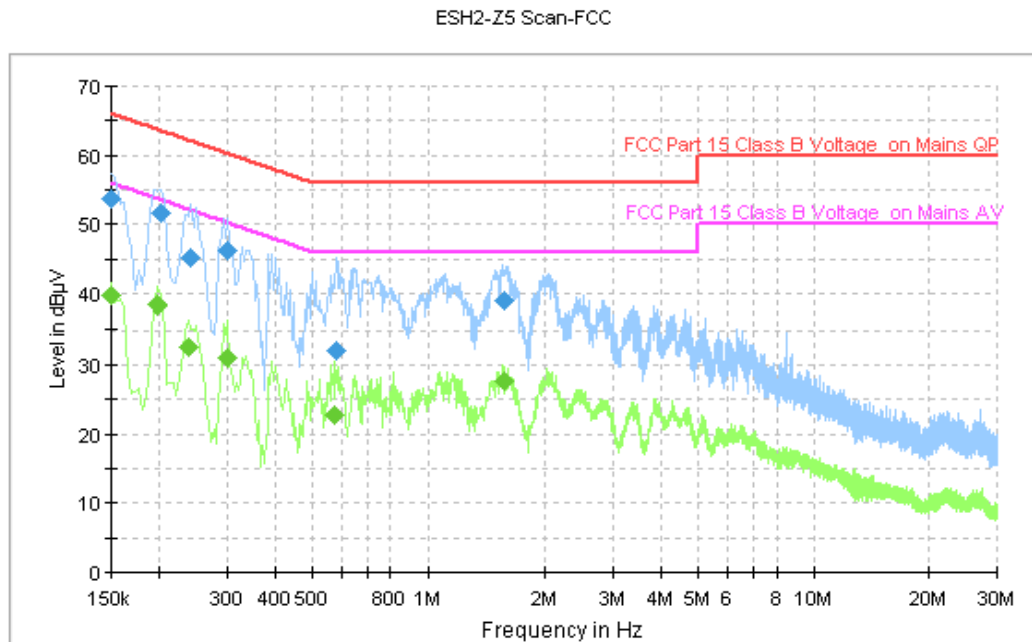


Figure A.12 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.150000	53.8	GND	N	9.6	12.2	66.0
0.202000	51.6	GND	L1	9.8	12.0	63.5
0.242000	45.3	GND	N	9.6	16.8	62.0
0.302000	46.2	GND	L1	9.8	14.0	60.2
0.578000	31.9	GND	N	9.6	24.1	56.0
1.570000	38.9	GND	L1	9.8	17.1	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.150000	39.8	GND	N	9.6	16.2	56.0
0.198000	38.6	GND	L1	9.8	15.1	53.7
0.238000	32.5	GND	L1	9.8	19.7	52.2
0.302000	30.9	GND	L1	9.8	19.2	50.2
0.570000	22.7	GND	L1	9.8	23.3	46.0
1.562000	27.6	GND	L1	9.8	18.4	46.0



Charging mode:Set.3  
Voltage:120V

ESH2-Z5 Scan-FCC

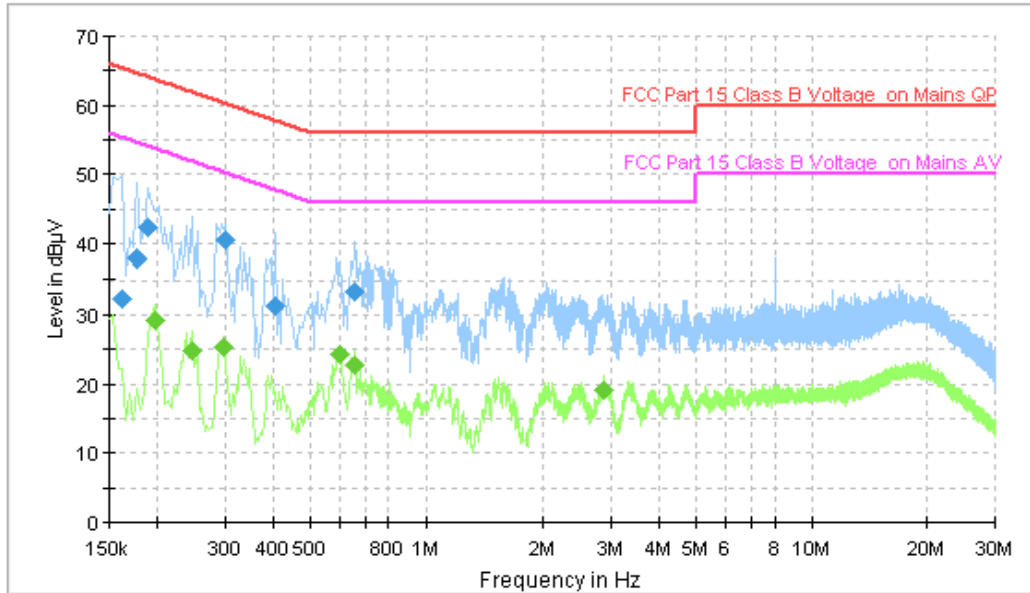


Figure A.13 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.162000	32.3	GND	L1	9.8	33.0	65.4
0.178000	37.9	GND	N	9.6	26.7	64.6
0.190000	42.4	GND	L1	9.8	21.6	64.0
0.302000	40.6	GND	N	9.6	19.6	60.2
0.406000	31.2	GND	N	9.7	26.5	57.7
0.654000	33.3	GND	N	9.6	22.7	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.198000	29.2	GND	L1	9.8	24.5	53.7
0.246000	24.7	GND	L1	9.8	27.2	51.9
0.298000	25.4	GND	L1	9.8	24.9	50.3
0.598000	24.2	GND	L1	9.8	21.8	46.0
0.650000	22.8	GND	L1	9.8	23.2	46.0
2.870000	19.1	GND	L1	9.8	26.9	46.0

Charging mode:Set.3  
Voltage:240V

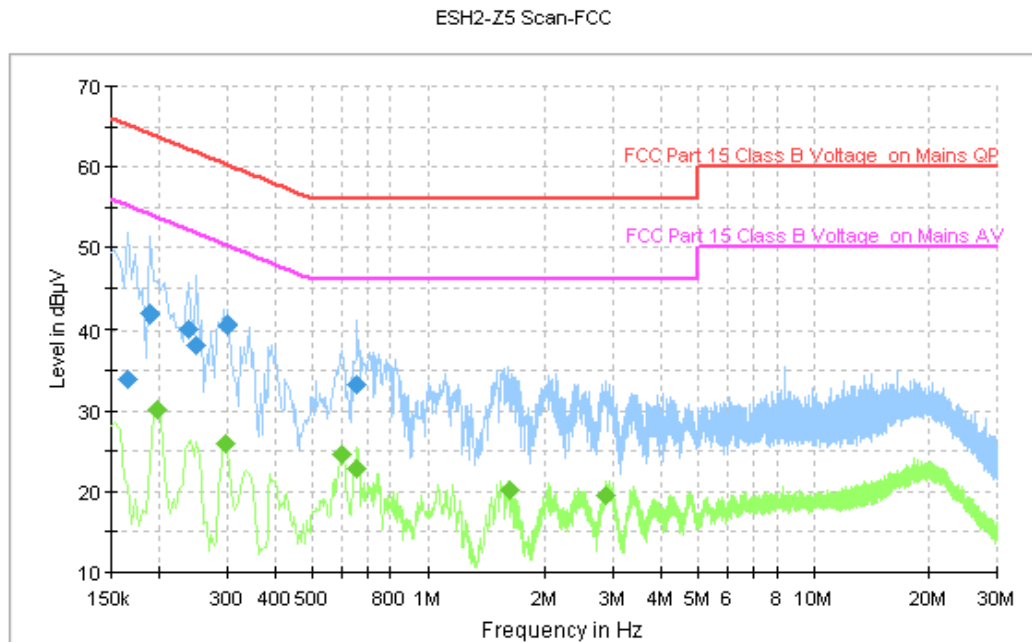


Figure A.14 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.166000	33.9	GND	N	9.6	31.3	65.2
0.190000	41.9	GND	N	9.6	22.1	64.0
0.238000	40.0	GND	N	9.6	22.1	62.2
0.250000	38.1	GND	N	9.6	23.7	61.8
0.302000	40.4	GND	N	9.6	19.7	60.2
0.654000	33.3	GND	N	9.6	22.7	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.198000	30.2	GND	L1	9.8	23.5	53.7
0.298000	26.1	GND	L1	9.8	24.2	50.3
0.598000	24.6	GND	L1	9.8	21.4	46.0
0.650000	22.8	GND	L1	9.8	23.2	46.0
1.614000	20.2	GND	L1	9.8	25.8	46.0
2.878000	19.6	GND	L1	9.8	26.4	46.0

USB mode:Set.4  
Voltage:120V

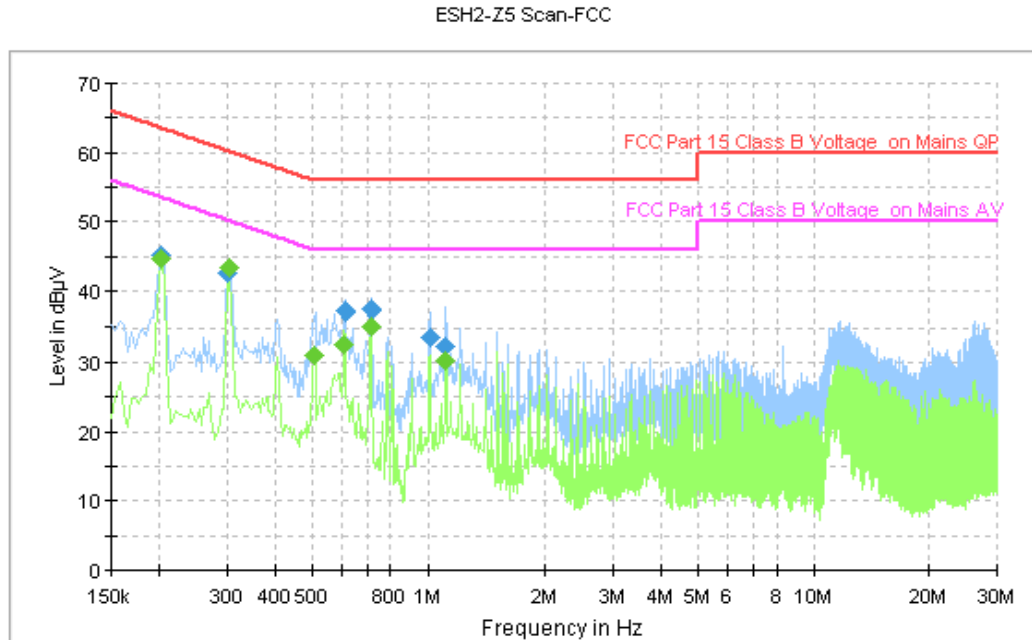


Figure A.15 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.202000	45.1	GND	N	9.6	18.4	63.5
0.302000	42.7	GND	N	9.6	17.4	60.2
0.610000	37.1	GND	N	9.6	18.9	56.0
0.710000	37.4	GND	N	9.5	18.6	56.0
1.014000	33.6	GND	N	9.5	22.4	56.0
1.114000	32.3	GND	N	9.6	23.7	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.202000	44.6	GND	N	9.6	9.0	53.5
0.306000	43.3	GND	N	9.6	6.8	50.1
0.506000	31.1	GND	N	9.7	14.9	46.0
0.606000	32.6	GND	N	9.6	13.4	46.0
0.710000	35.1	GND	N	9.5	10.9	46.0
1.114000	30.2	GND	N	9.6	15.8	46.0

USB mode:Set.4  
Voltage:240V

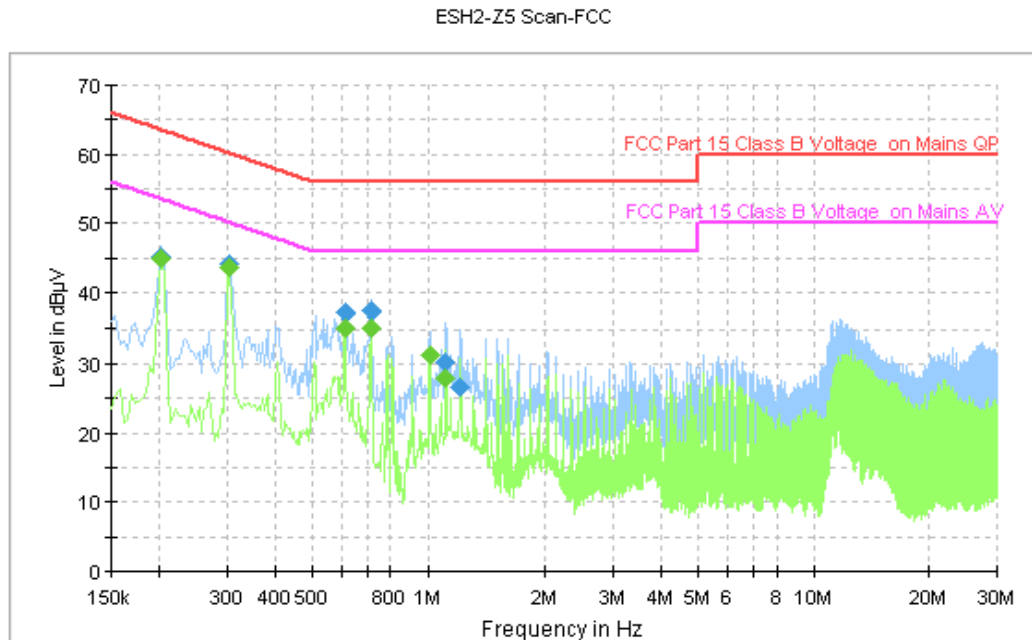


Figure A.16 Conducted Emission

**Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.202000	45.3	GND	N	9.6	18.3	63.5
0.306000	44.2	GND	N	9.6	15.9	60.1
0.610000	37.1	GND	N	9.6	18.9	56.0
0.710000	37.3	GND	N	9.5	18.7	56.0
1.114000	30.3	GND	N	9.6	25.7	56.0
1.214000	26.6	GND	N	9.5	29.4	56.0

**Final Measurement Detector 2**

Frequency (MHz)	Average (dB µV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB µV)
0.202000	44.9	GND	N	9.6	8.6	53.5
0.306000	43.8	GND	N	9.6	6.3	50.1
0.610000	35.1	GND	N	9.6	10.9	46.0
0.710000	35.1	GND	N	9.5	10.9	46.0
1.014000	31.3	GND	L1	9.8	14.7	46.0
1.114000	28.0	GND	N	9.6	18.0	46.0

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