



# FCC PART 15B TEST REPORT

No. 23T04Z81077-07

for

**Wingtech Group (Hong Kong) Limited**

**5G Mobile Phone**

**Model name: TMRV07P5G**

**FCC ID: 2APXW-TMRV07P5G**

with

**Hardware Version: V1.0**

**Software Version: TMRV07P5G\_0.04.07**

**Issued Date: 2024-04-18**

**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>
23T04Z81077-07	Rev.0	1 <sup>st</sup> edition	2024-03-14
23T04Z81077-07	Rev.1	2 <sup>nd</sup> edition Add test results of wireless charging	2024-04-18

Note: the latest revision of the test report supersedes all previous version.



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## 1. Test Laboratory

### 1.1. Testing Location

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°C

Relative Humidity: 20-75%

### 1.3. Project data

Testing Start Date: 2024-03-02

Testing End Date: 2024-03-13

### 1.4. Signature




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Wang Xue  
(Prepared this test report)



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Zhang Ying  
(Reviewed this test report)



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Zhang Xia  
(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

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### **2.2. Manufacturer Information**

Company Name: Wingtech Group (Hong Kong) Limited  
Address: Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK  
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Tel. +86-21-53529900  
Fax: /

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

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

Description	5G Mobile Phone
Model Name	TMRV07P5G
FCC ID:	2APXW-TMRV07P5G

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL, Telecommunication Technology Labs, CAICT.

#### **3.2. Internal Identification of EUT used during the test**

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	860316070022164/ 860316070022172	V1.0	TMRV07P5G_0.04.07

\*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	Model	Manufacture
AE1	Battery1	TM002	SCUD (FUJIAN) Electronics Co., Ltd.
AE2	Charger1	/	Provided by laboratory
AE3	USB Cable1	HX-WT-60	Huizhou Washin Electronics Co., LTD
AE4	Wireless charger	/	Provided by laboratory

\*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	Charger1+MP3+F Camera +GSM 850 idle
Set.2	EUT1 + AE1 +AE2+AE3	Charger1+R Camera + WCDMA B5 idle
Set.3	EUT1 + AE1 + AE3	USB + LTE B5 idle
Set.4	EUT1 + AE1 + Cable + EUT2	OTG + NR n71 idle
Set.5	EUT1 + AE1 + AE4	Wireless charging

Note:

Equipment Under Test (EUT) is a model of GSM/UMTS/LTE Mobile phone.

It supports

GSM Band 850/900/1800/1900

UMTS Band FDD Band I(W2100)/FDD Band II(W1900) /FDD Band IV(W1700)/FDD V(W850) /FDD VIII(W900)

LTE Band FDD Bands 1/2/3/4/5/7/8/12/13/17/20/25/26/28/66/71,TDD Bands 38/39/40/41

NR Band n1/n3/n7/n25/n28/n38/n41/n66/n71/n77/n78

It has MP3, Camera, USB memory, Bluetooth V5.2, Wi-Fi (802.11a/b/g/n/ac/ax, 802.11n supports 20MHz and 40MHz bandwidth, 802.11ac supports 20MHz, 40MHz and 80MHz bandwidth, 802.11ax supports 20MHz, 40MHz ,80MHz and 160MHz bandwidth) and GPNSS function.

The device contains receivers which tune and operate between 30MHz-960MHz in the following mode: GSM 850, WCDMA850, LTE Band 5/12/13/17/26/71, NR Band n71. All licensed

band receivers that tune in the range of 30MHz-960MHz are investigated. Only the worst-case emissions are reported.

## **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 - Unintentional Radiators	2019
ANSI C63.4	American National Standard for Methods of Measurement of Radio- Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014

Note: The test methods have no deviation with standards.

## 5. LABORATORY ENVIRONMENT

**Semi-anechoic chamber SAC-1** 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 M $\Omega$
Ground system resistance	< 4 $\Omega$
Normalised site attenuation (NSA)	< $\pm 4$ dB, 3m 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 6000 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 M $\Omega$
Ground system resistance	< 4 $\Omega$



## 6. SUMMARY OF TEST RESULTS

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

Items	Test Name	Clause in FCC rules	Section in this report	Verdict	Test Location
1	Radiated Emission	15.109(a)	B.1	P	CTTL(huayuan North Road)
2	Conducted Emission	15.107(a)	B.2	P	CTTL(huayuan North Road)

## 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESW44	103023	R&S	2024-07-08	1 Year
2	LISN	ENV216	101200	R&S	2024-07-04	1 Year
3	Test Receiver	ESCI 7	100344	R&S	2024-03-20	1 Year
4	EMI Antenna	VULB 9163	01223	SCHWARZBECK	2024-08-18	1 Year
5	EMI Antenna	3115	6914	ETS-Lindgren	2024-06-07	1 Year
6	Universal Communication Tester	CMW500	167943	R&S	2024-05-23	1 Year
7	Universal Communication Tester	E7515B	MY60102215	Keysight	2024-07-09	1 Year

Test software information		
Test Item	Software	Version
Radiated Emission	EMC32	V11.50.00
Conducted Emission	EMC32	V8.53.0

## **ANNEX A: MEASUREMENT RESULTS**

### **A.1 Radiated Emission**

#### **Reference**

FCC: CFR Part 15.109(a).

#### **A.1.1 Method of measurement**

The field strength of radiated emissions from the unintentional radiator (USB/OTG mode of MS and charging mode of MS) at distances 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 3/10 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, OTG 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 the other device for charging in OTG mode and is connected to a charger in the case of charging mode.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in section 3.4, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

The model of the PC is M4000E-17, and the serial number of the PC is M706GWXD. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

Note: I/O information: Printer – USB, Mouse – PS/2, Keyboard – USB.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in section 3.4, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

#### **A.1.3 Measurement Limit**

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 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/3MHz	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:

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

Where

$G_A$ : Antenna factor of receive antenna

$G_{PL}$ : Path Loss

$P_{\text{Mea}}$ : Measurement result on receiver.

Measurement uncertainty (worst case):  $U = 4.84 \text{ dB}$ ,  $k=2$ .

### Measurement results for Set.1:

#### Charing Mode/Average detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17668.500	41.90	-29.90	45.25	26.55	54.00	12.10	H
17695.360	41.20	-29.98	45.25	25.93	54.00	12.80	V
17631.780	41.20	-29.40	45.25	25.35	54.00	12.80	V
17648.440	41.10	-29.60	45.25	25.45	54.00	12.90	V
17719.500	41.10	-29.73	45.25	25.59	54.00	12.90	V
17740.240	41.10	-29.61	45.95	24.76	54.00	12.90	V

#### Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17770.160	51.30	-29.63	45.95	34.97	74.00	22.70	V
17648.440	51.30	-29.60	45.25	35.65	74.00	22.70	H
17587.580	51.30	-29.70	45.25	35.75	74.00	22.70	V
17993.880	51.20	-29.06	46.66	33.60	74.00	22.80	V
17756.560	51.10	-29.61	45.95	34.76	74.00	22.90	H
17701.140	51.10	-29.73	45.25	35.59	74.00	22.90	V

**Measurement results for Set.2:**
**Charing Mode/Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17711.340	41.10	-29.73	45.25	25.59	54.00	12.90	V
17761.320	41.00	-29.63	45.95	24.67	54.00	13.00	V
17771.520	40.80	-29.63	45.95	24.47	54.00	13.20	H
17671.220	40.80	-29.90	45.25	25.45	54.00	13.20	H
17652.520	40.80	-29.60	45.25	25.15	54.00	13.20	V
17623.280	40.80	-29.40	45.25	24.95	54.00	13.20	V

**Charging Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17662.040	51.10	-29.90	45.25	35.75	74.00	22.90	V
17753.840	51.00	-29.61	45.95	34.66	74.00	23.00	H
17997.280	51.00	-29.06	46.66	33.40	74.00	23.00	V
17990.140	51.00	-29.06	46.66	33.40	74.00	23.00	V
17740.240	51.00	-29.61	45.95	34.66	74.00	23.00	V
17730.380	51.00	-29.67	45.25	35.42	74.00	23.00	H

**Measurement results for Set.3:**
**USB Mode/Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17760.640	41.60	-29.63	45.95	25.27	54.00	12.40	V
17752.140	41.50	-29.61	45.95	25.16	54.00	12.50	H
17678.360	41.50	-29.90	45.25	26.15	54.00	12.50	V
17685.160	41.40	-29.98	45.25	26.13	54.00	12.60	V
17743.300	41.40	-29.61	45.95	25.06	54.00	12.60	H
17783.420	41.40	-29.89	45.95	25.33	54.00	12.60	H

**USB Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17987.080	51.70	-29.06	46.66	34.10	74.00	22.30	H
17718.140	51.50	-29.73	45.25	35.99	74.00	22.50	H
17736.500	51.50	-29.67	45.25	35.92	74.00	22.50	H
17639.600	51.40	-29.40	45.25	35.55	74.00	22.60	H
17860.600	51.40	-29.39	45.95	34.84	74.00	22.60	V
17755.880	51.30	-29.61	45.95	34.96	74.00	22.70	H

**Measurement results for Set.4:**
**OTG Mode/Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17721.880	42.00	-29.67	45.25	26.42	54.00	12.00	V
17759.280	41.90	-29.61	45.95	25.56	54.00	12.10	H
17707.940	41.60	-29.73	45.25	26.09	54.00	12.40	H
17749.420	41.50	-29.61	45.95	25.16	54.00	12.50	V
17689.580	41.40	-29.98	45.25	26.13	54.00	12.60	V
17993.200	41.40	-29.06	46.66	23.80	54.00	12.60	H

**OTG Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17641.300	52.50	-29.60	45.25	36.85	74.00	21.50	H
17785.120	52.00	-29.89	45.95	35.93	74.00	22.00	H
17973.820	51.90	-29.06	46.66	34.30	74.00	22.10	H
17686.520	51.70	-29.98	45.25	36.43	74.00	22.30	V
17738.540	51.70	-29.67	45.95	35.41	74.00	22.30	V
17759.620	51.50	-29.61	45.95	35.16	74.00	22.50	V

**Measurement results for Set.4:**

**Wireless Charging Mode/Average detector**

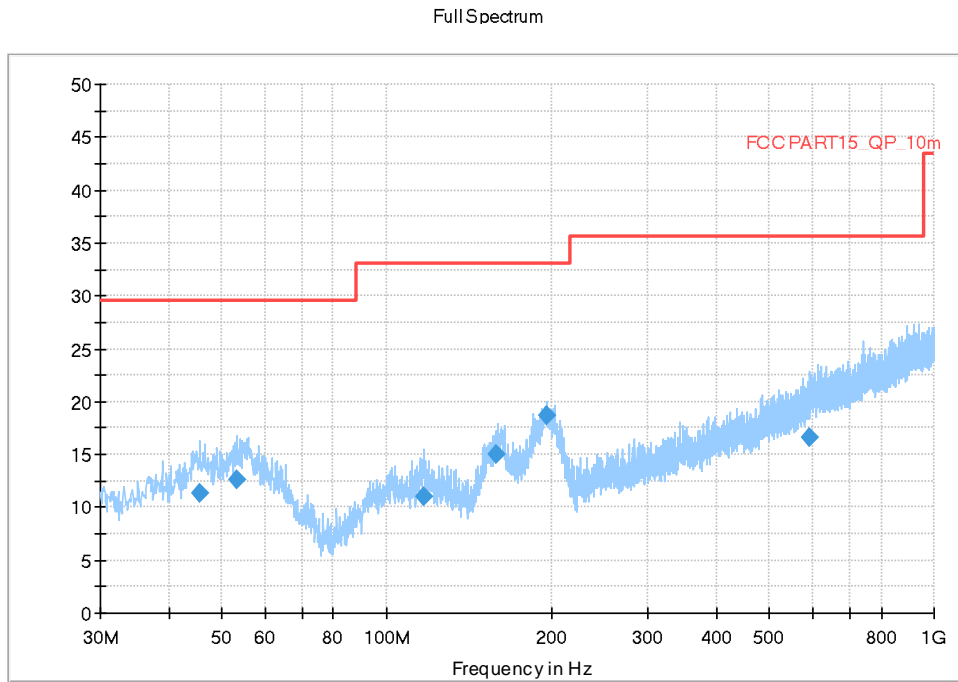
Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17971.100	49.00	-29.10	46.70	31.40	54.00	5.00	V
17995.580	48.70	-29.10	46.70	31.10	54.00	5.30	H
17980.620	48.60	-29.10	46.70	31.00	54.00	5.40	H
17991.160	48.60	-29.10	46.70	31.00	54.00	5.40	H
17763.020	48.60	-29.60	46.00	32.27	54.00	5.40	V
17981.980	48.50	-29.10	46.70	30.90	54.00	5.50	H

**Wireless Charging Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17964.300	60.20	-29.10	46.70	42.60	74.00	13.80	H
17967.020	59.50	-29.10	46.70	41.90	74.00	14.50	H
17782.060	59.50	-29.90	46.00	43.43	74.00	14.50	H
17890.520	59.30	-29.50	46.00	42.88	74.00	14.70	H
17759.280	59.30	-29.60	46.00	42.96	74.00	14.70	V
17983.000	59.00	-29.10	46.70	41.40	74.00	15.00	H



**Measurement results for Set.1:**

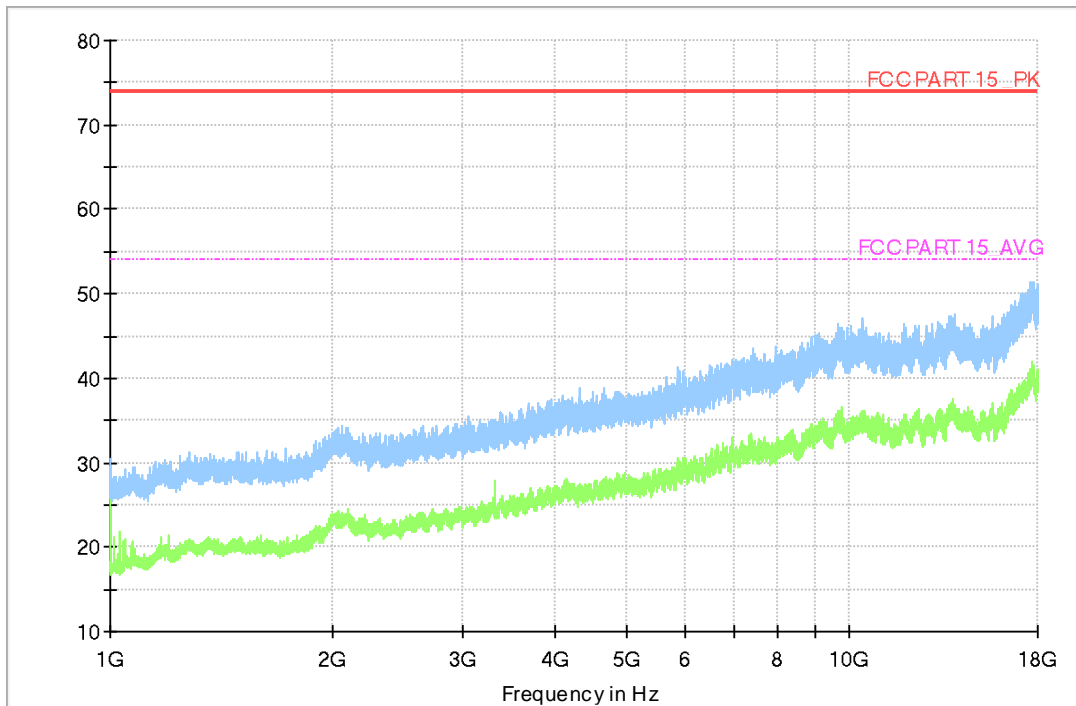


**Fig A.1 Radiated Emission from 30MHz to 1GHz**

**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
45.617000	11.40	29.54	18.14	120.000	179.0	V	47.0
53.280000	12.57	29.54	16.97	120.000	100.0	V	225.0
117.106000	10.96	33.06	22.10	120.000	123.0	V	-26.0
158.525000	15.07	33.06	17.99	120.000	100.0	V	-25.0
196.258000	18.62	33.06	14.44	120.000	100.0	V	47.0
590.369000	16.57	35.56	18.99	120.000	125.0	V	121.0

Full Spectrum



**Fig A.2 Radiated Emission from 1GHz to 18GHz**

Measurement results for Set.2:

Full Spectrum

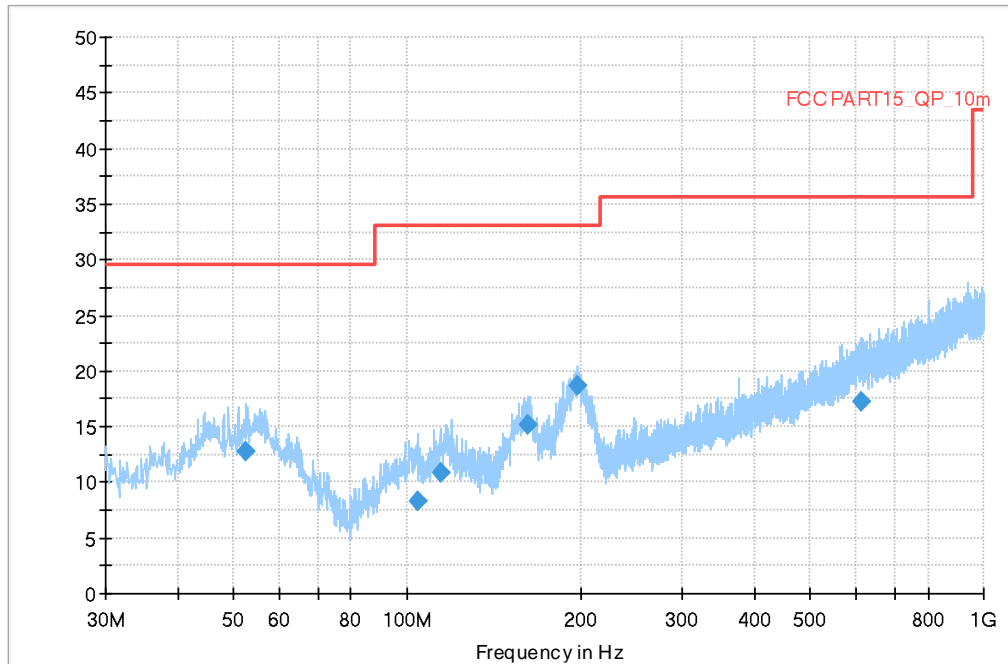
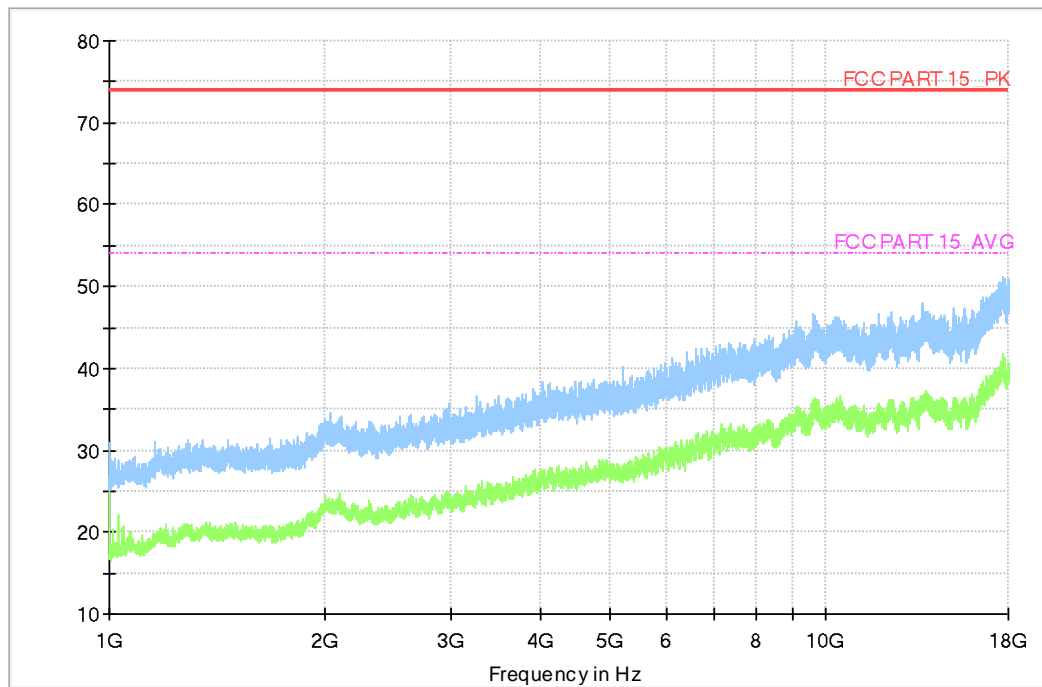


Fig A.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	PoI	Azimuth (deg)
52.504000	12.75	29.54	16.79	120.000	101.0	V	245.0
104.399000	8.23	33.06	24.83	120.000	176.0	H	193.0
114.099000	10.86	33.06	22.20	120.000	112.0	V	13.0
162.502000	15.10	33.06	17.96	120.000	101.0	V	-25.0
196.937000	18.63	33.06	14.43	120.000	101.0	V	45.0
613.843000	17.29	35.56	18.27	120.000	309.0	H	103.0

Full Spectrum



**Fig A.4 Radiated Emission from 1GHz to 18GHz**

Measurement results for Set.3:

Full Spectrum

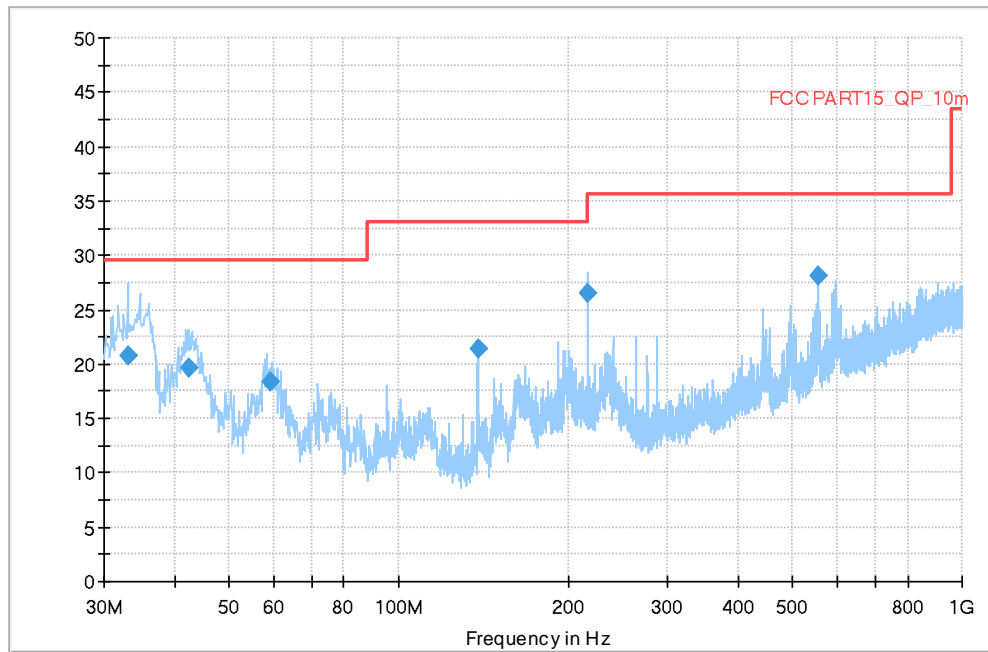
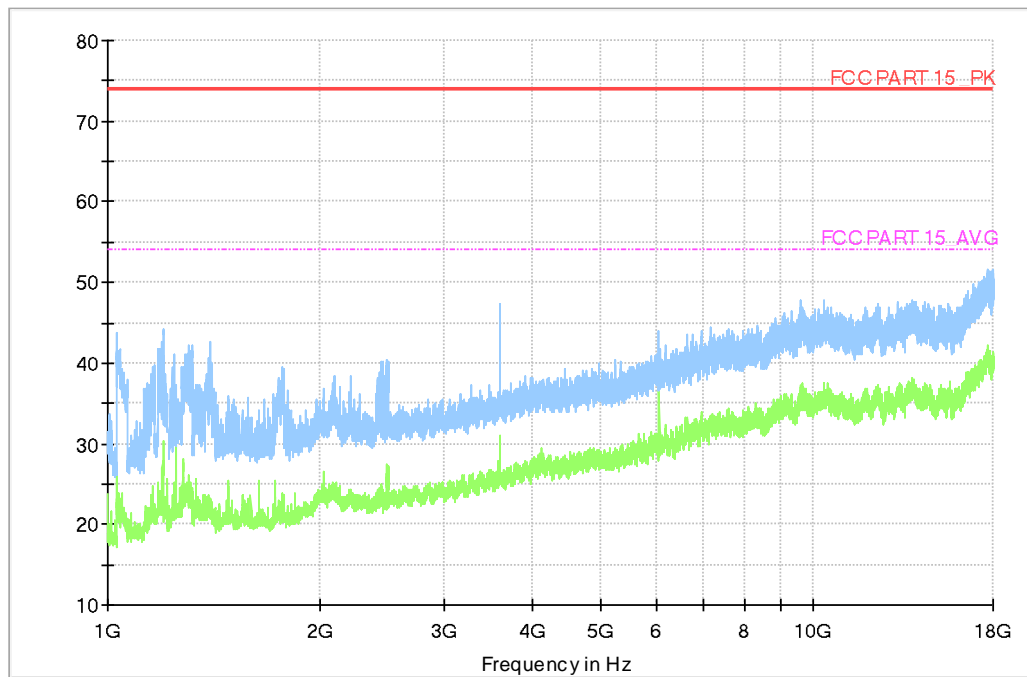


Fig A.5 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
33.104000	20.70	29.54	8.84	120.000	276.0	V	136.0
42.319000	19.71	29.54	9.83	120.000	176.0	V	155.0
59.197000	18.43	29.54	11.11	120.000	100.0	V	193.0
138.155000	21.47	33.06	11.59	120.000	325.0	H	-25.0
215.949000	26.51	33.06	6.55	120.000	287.0	H	315.0
557.292000	28.05	35.56	7.51	120.000	225.0	V	-39.0

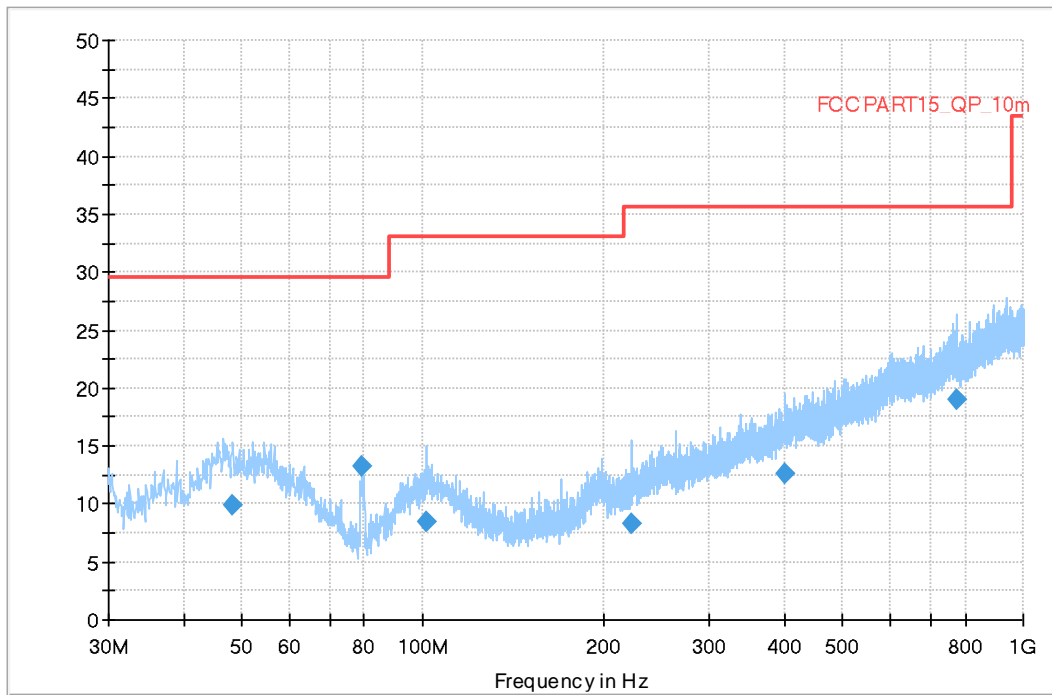
Full Spectrum



**Fig A.6 Radiated Emission from 1GHz to 18GHz**

**Measurement results for Set.4:**

Full Spectrum

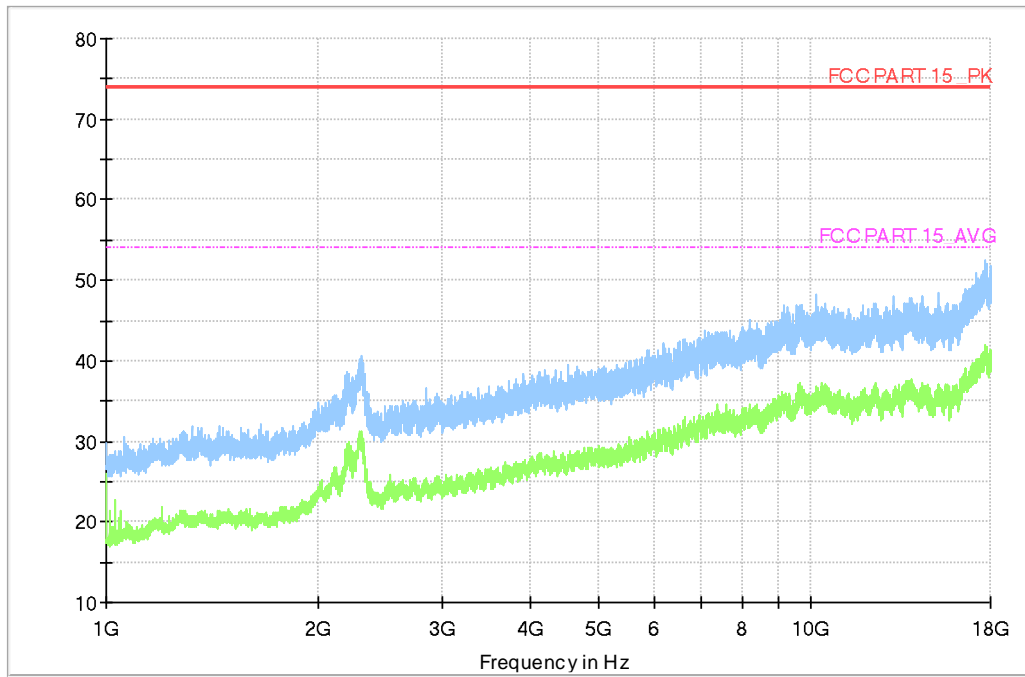


**Fig A.7 Radiated Emission from 30MHz to 1GHz**

**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	PoI	Azimuth (deg)
48.333000	9.93	29.54	19.61	120.000	325.0	V	227.0
79.373000	13.27	29.54	16.27	120.000	175.0	V	64.0
101.198000	8.48	33.06	24.58	120.000	100.0	H	263.0
223.321000	8.24	35.56	27.32	120.000	275.0	V	47.0
400.540000	12.59	35.56	22.97	120.000	308.0	H	315.0
775.057000	18.94	35.56	16.62	120.000	275.0	V	47.0

Full Spectrum

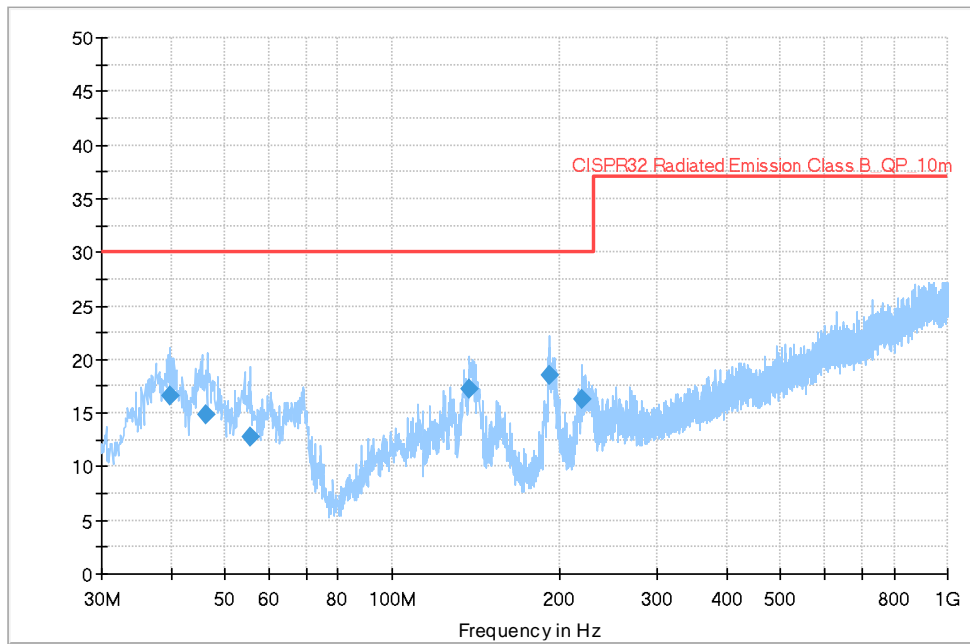


**Fig A.8 Radiated Emission from 1GHz to 18GHz**



**Measurement results for Set.5:**

Full Spectrum

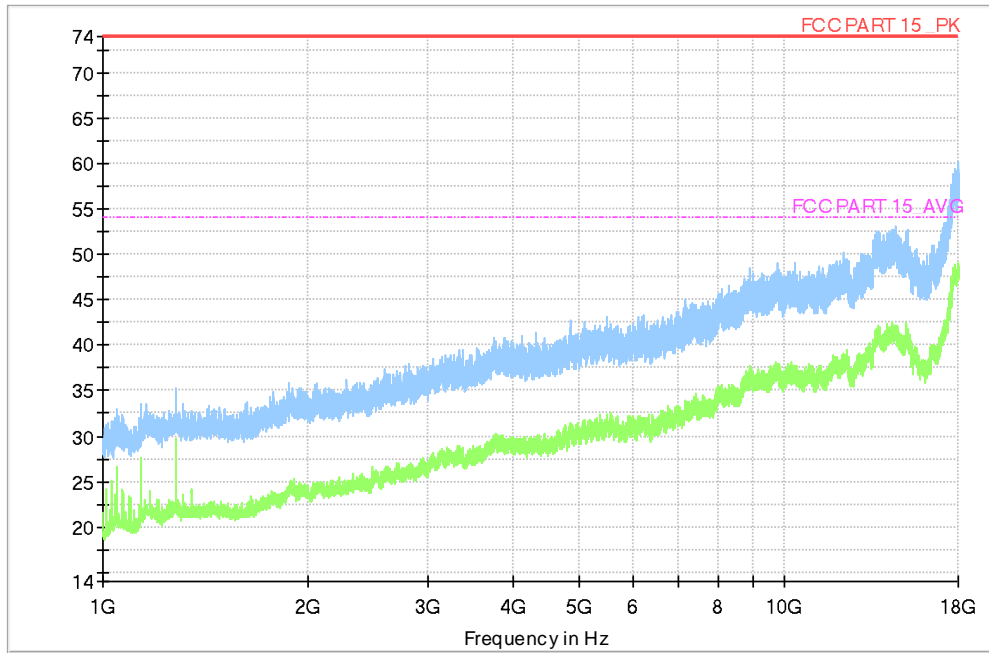


**Fig A.9 Radiated Emission from 30MHz to 1GHz**

**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
39.884434	16.69	30.00	13.31	120.000	275.0	V	315.0
46.374379	14.81	30.00	15.19	120.000	100.0	V	225.0
55.458820	12.83	30.00	17.17	120.000	325.0	V	264.0
137.304258	17.21	30.00	12.79	120.000	175.0	V	155.0
192.104950	18.49	30.00	11.51	120.000	100.0	V	245.0
220.134490	16.35	30.00	13.65	120.000	101.0	V	245.0

Full Spectrum



**Fig A.10 Radiated Emission from 1GHz to 18GHz**

## A.2 Conducted Emission

### 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 DELL M4000E-17, and the serial number of the PC is M706GWXD. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

Note: I/O information: Printer – USB, Mouse – PS/2, Keyboard – USB.

### 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

RBW/IF bandwidth	Sweep Time(s)
9kHz	1

### A.2.5 Measurement Results

Measurement uncertainty:  $U= 3.08$  dB,  $k=2$ .

Charging Mode, Set.1:

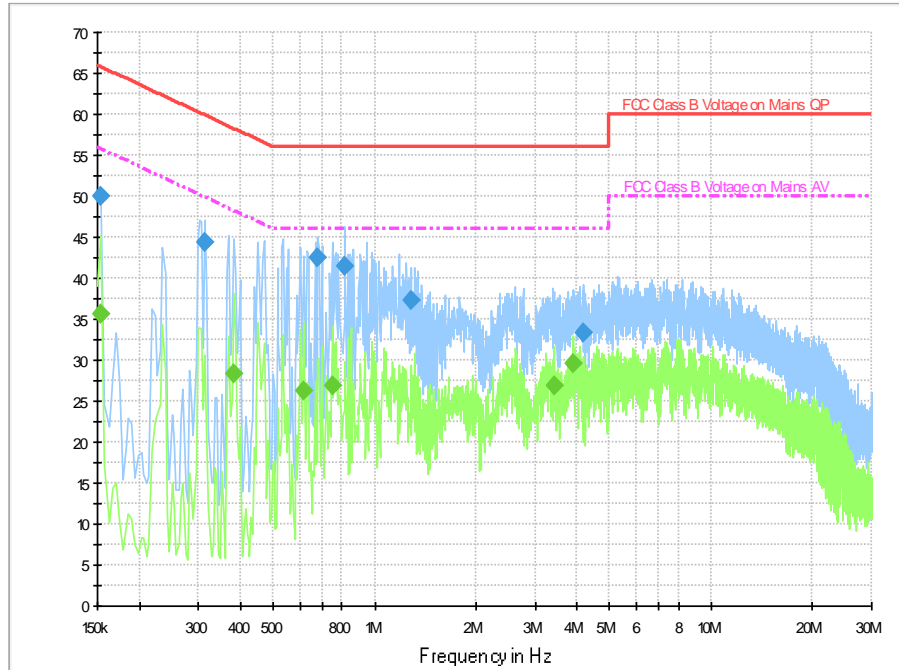


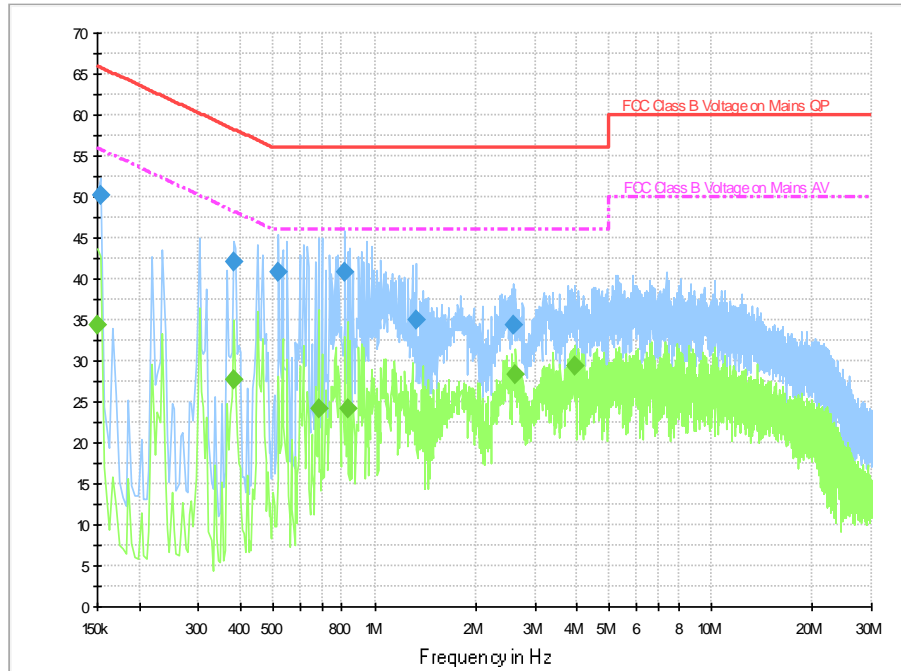
Fig A.11 Conducted Emission from 150kHz to 30MHz

#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.154000	50.0	2000.0	9.000	On	N	19.9	15.8	65.8	
0.314000	44.4	2000.0	9.000	On	L1	19.7	15.5	59.9	
0.678000	42.5	2000.0	9.000	On	L1	19.7	13.5	56.0	
0.814000	41.4	2000.0	9.000	On	L1	19.7	14.6	56.0	
1.282000	37.4	2000.0	9.000	On	N	19.6	18.6	56.0	
4.182000	33.4	2000.0	9.000	On	L1	19.6	22.6	56.0	

#### Final Result 2

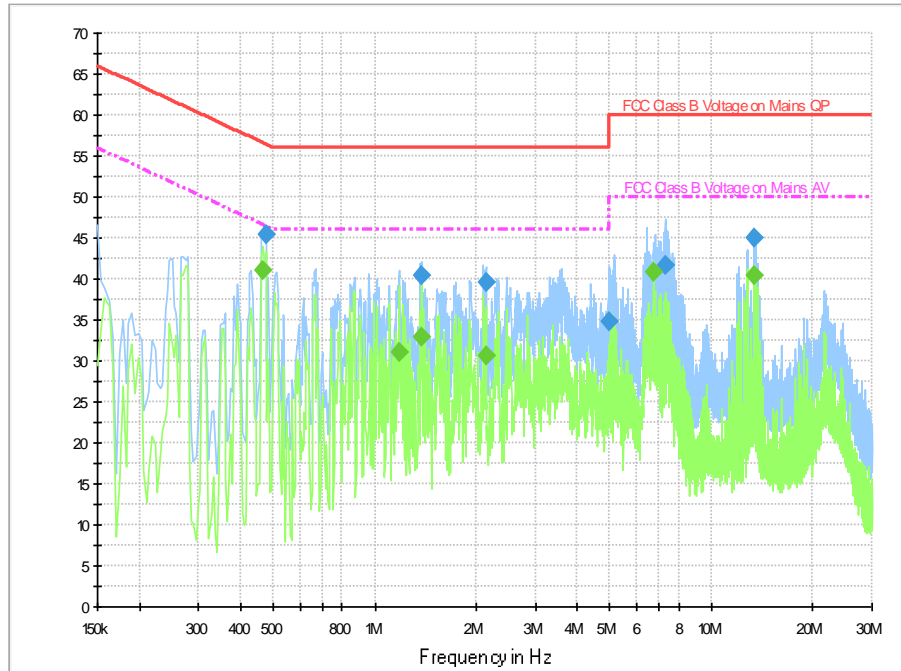
Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.154000	35.6	2000.0	9.000	On	N	19.9	20.2	55.8	
0.382000	28.4	2000.0	9.000	On	L1	19.7	19.8	48.2	
0.614000	26.2	2000.0	9.000	On	L1	19.7	19.8	46.0	
0.750000	26.9	2000.0	9.000	On	N	19.7	19.1	46.0	
3.406000	26.8	2000.0	9.000	On	N	19.6	19.2	46.0	
3.898000	29.6	2000.0	9.000	On	N	19.6	16.4	46.0	

**Charging Mode, Set.2:**

**Fig A.12 Conducted Emission from 150kHz to 30MHz**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.154000	50.3	2000.0	9.000	On	L1	19.9	15.5	65.8	
0.382000	42.1	2000.0	9.000	On	N	19.7	16.1	58.2	
0.518000	40.7	2000.0	9.000	On	N	19.7	15.3	56.0	
0.814000	40.7	2000.0	9.000	On	L1	19.7	15.3	56.0	
1.330000	35.0	2000.0	9.000	On	N	19.6	21.0	56.0	
2.582000	34.5	2000.0	9.000	On	N	19.6	21.5	56.0	

**Final Result 2**

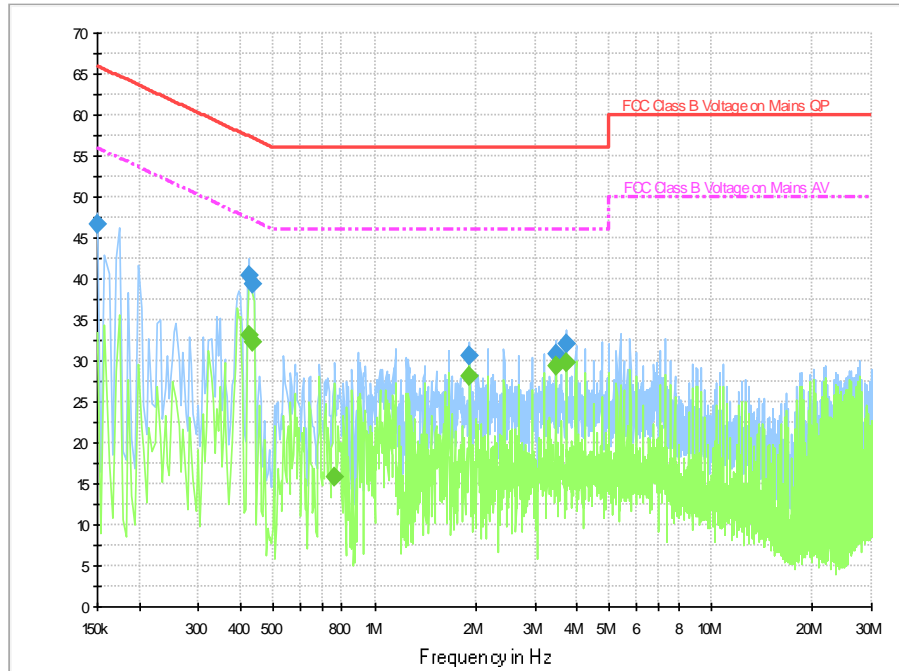
Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.150000	34.4	2000.0	9.000	On	N	20.0	21.6	56.0	
0.382000	27.7	2000.0	9.000	On	L1	19.7	20.5	48.2	
0.682000	24.1	2000.0	9.000	On	L1	19.7	21.9	46.0	
0.830000	24.3	2000.0	9.000	On	N	19.6	21.7	46.0	
2.630000	28.3	2000.0	9.000	On	N	19.6	17.7	46.0	
3.942000	29.3	2000.0	9.000	On	L1	19.6	16.7	46.0	

**USB Mode, Set.3:**

**Fig A.13 Conducted Emission from 150kHz to 30MHz**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.474000	45.5	2000.0	9.000	On	L1	19.7	11.0	56.4	
1.378000	40.5	2000.0	9.000	On	N	19.6	15.5	56.0	
2.134000	39.7	2000.0	9.000	On	L1	19.6	16.3	56.0	
4.974000	34.9	2000.0	9.000	On	L1	19.6	21.1	56.0	
7.318000	41.7	2000.0	9.000	On	N	19.6	18.3	60.0	
13.418000	45.0	2000.0	9.000	On	L1	19.7	15.0	60.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.466000	41.0	2000.0	9.000	On	L1	19.7	5.6	46.6	
1.178000	31.0	2000.0	9.000	On	N	19.6	15.0	46.0	
1.382000	33.0	2000.0	9.000	On	L1	19.6	13.0	46.0	
2.134000	30.5	2000.0	9.000	On	L1	19.6	15.5	46.0	
6.702000	40.8	2000.0	9.000	On	N	19.6	9.2	50.0	
13.418000	40.4	2000.0	9.000	On	N	19.7	9.6	50.0	

**Wireless charging Mode, Set.5:**

**Fig A.14 Conducted Emission from 150kHz to 30MHz**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.150000	46.6	2000.0	9.000	On	N	20.0	19.4	66.0	
0.422000	40.5	2000.0	9.000	On	N	19.7	16.9	57.4	
0.434000	39.3	2000.0	9.000	On	N	19.7	17.9	57.2	
1.918000	30.7	2000.0	9.000	On	N	19.6	25.3	56.0	
3.450000	30.9	2000.0	9.000	On	L1	19.6	25.1	56.0	
3.706000	32.1	2000.0	9.000	On	N	19.6	23.9	56.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.422000	33.1	2000.0	9.000	On	N	19.7	14.3	47.4	
0.434000	32.4	2000.0	9.000	On	L1	19.7	14.8	47.2	
0.762000	15.7	2000.0	9.000	On	N	19.7	30.3	46.0	
1.918000	28.1	2000.0	9.000	On	N	19.6	17.9	46.0	
3.450000	29.3	2000.0	9.000	On	L1	19.6	16.7	46.0	
3.706000	29.9	2000.0	9.000	On	L1	19.6	16.1	46.0	

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