



FCC PART 15B TEST REPORT

No. 23Z04T80206-19

for

OnePlus Technology (Shenzhen) Co., Ltd.

Mobile Phone

Model Name: CPH2611

FCC ID: 2ABZ2-AA560

with

Hardware Version: 11

Software Version: OxygenOS V14.0

Issued Date: 2023-11-20

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:

CTTL-Telecommunication Technology Labs, CAICT

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

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
23Z04T80206-19	Rev.0	1 st edition	2023-11-20

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: 2023-10-15

Testing End Date: 2023-11-18

1.4. Signature



Wang Xue
(Prepared this test report)



Zhang Ying
(Reviewed this test report)



Zhang Xia
(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name: OnePlus Technology (Shenzhen) Co., Ltd.
Address /Post: 18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe
Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.
City: Shenzhen
Postal Code: /
Country: China
Telephone: (86)75561882366

2.2. Manufacturer Information

Company Name: OnePlus Technology (Shenzhen) Co., Ltd.
Address /Post: 18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe
Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.
City: Shenzhen
Postal Code: /
Country: China
Telephone: (86)75561882366

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

3.1. About EUT

Description	Mobile Phone
Model Name	CPH2611
FCC ID:	2ABZ2-AA560

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	869135060027210/ 869135060027202	11	OxygenOS V14.0

*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	Battery	BLPA33	Sunwoda
AE2	Charger1	VCBAJAUH	Huntkey
AE3	Charger2	VCBAOBUH	Aohai
AE4	USB Cable	DL129	DUWEI

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

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT1 + AE1 + AE2 +AE4	Charger1+Rear Camera + GSM 850 idle
Set.2	EUT1 + AE1 + AE2 +AE4	Charger1+MP4 + WCDMA 850 idle
Set.3	EUT1 + AE1 + AE2 +AE4	Charger1+Front Camera + LTE B17 idle
Set.4	EUT1 + AE1 + AE2	USB + NR n71 idle
Set.5	EUT1 + AE1 + AE3 +AE4	Charger2

Note:

Equipment Under Test (EUT) is a model of Mobile Phone.

It supports

GSM Band	GSM 850/900/1800/1900
UMTS Band	WCDMA B1/2/4/5/8
LTE Band	FDD_LTE: B1,2,3,4,5,7,8,12,13,17,18,19,20,25,26,28,30,66,71 TDD_LTE: 38/39/40/41/48
NR Band	n1,n2,n3,n5,n7,n8,n20,n25,n28,n38,n40,n41,n66,n71,n77,n78

It has MP3, Camera, USB memory, Bluetooth 5.3, Wi-Fi 2.4G (802.11b/g/n/ac/ax, 802.11n/ac/ax supports 20MHz and 40MHz bandwidth), Wi-Fi 5G(802.11a/n/ac/ax, 802.11n supports 20MHz and 40MHz bandwidth, 802.11n/ac/ax supports 20MHz , 40MHz and 80MHz bandwidth), Wi-Fi 6E and Wi-Fi 7 , NFC , GNSS functions.

The device contains receivers which tune and operate between 30MHz-960MHz in the following mode: GSM850, WCDMA850, LTE Band 5/12/13/17/26/71, NR band n5/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.

Reference	Title	Version
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 Ω
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ± 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 Ω
Ground system resistance	< 4 Ω

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	CALIBRATI ON INTERVAL
1	Test Receiver	ESW44	103144	R&S	2023-11-25	1 Year
2	LISN	ENV216	101200	R&S	2024-06-05	1 year
3	Test Receiver	ESCI 7	100344	R&S	2024-02-21	1 Year
4	EMI Antenna	VULB 9163	01222	SCHWARZBECK	2024-03-28	1 year
5	EMI Antenna	3115	6914	ETS-Lindgren	2024-04-25	1 year
6	Universal Communication Tester	CMW500	163975	R&S	2024-01-03	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 (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/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_{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 μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17988.100	44.60	-29.06	46.66	27.00	54.00	9.40	V
17996.940	44.60	-29.06	46.66	27.00	54.00	9.40	H
17987.760	44.50	-29.06	46.66	26.90	54.00	9.50	H
17944.580	44.40	-28.94	46.66	26.68	54.00	9.60	V
17971.440	44.30	-29.06	46.66	26.70	54.00	9.70	V
17955.120	44.30	-28.94	46.66	26.58	54.00	9.70	H

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17993.880	54.80	-29.06	46.66	37.20	74.00	19.20	V
17941.860	54.80	-28.94	46.66	37.08	74.00	19.20	V
17980.960	54.60	-29.06	46.66	37.00	74.00	19.40	H
17895.620	54.50	-29.53	45.95	38.08	74.00	19.50	V
17919.760	54.40	-29.33	46.66	37.07	74.00	19.60	H
17977.560	54.40	-29.06	46.66	36.80	74.00	19.60	V

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

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17998.640	44.70	-29.06	46.66	27.10	54.00	9.30	H
17983.000	44.60	-29.06	46.66	27.00	54.00	9.40	H
18000.000	44.50	-29.24	47.00	26.74	54.00	9.50	H
17993.200	44.50	-29.06	46.66	26.90	54.00	9.50	H
17995.580	44.40	-29.06	46.66	26.80	54.00	9.60	H
17981.640	44.20	-29.06	46.66	26.60	54.00	9.80	H

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17923.840	55.00	-29.40	46.66	37.74	74.00	19.00	H
17987.420	54.70	-29.06	46.66	37.10	74.00	19.30	V
17961.240	54.50	-29.06	46.66	36.90	74.00	19.50	V
17991.840	54.40	-29.06	46.66	36.80	74.00	19.60	V
17970.080	54.40	-29.06	46.66	36.80	74.00	19.60	V
17987.080	54.30	-29.06	46.66	36.70	74.00	19.70	H

Measurement results for Set.3:
Charing Mode/Average detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17988.440	44.50	-29.06	46.66	26.90	54.00	9.50	H
17939.480	44.20	-29.40	46.66	26.94	54.00	9.80	V
17988.780	44.10	-29.06	46.66	26.50	54.00	9.90	H
17943.560	44.00	-28.94	46.66	26.28	54.00	10.00	V
17968.720	43.90	-29.06	46.66	26.30	54.00	10.10	H
17978.580	43.80	-29.06	46.66	26.20	54.00	10.20	H

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17997.280	55.00	-29.06	46.66	37.40	74.00	19.00	V
17961.240	54.70	-29.06	46.66	37.10	74.00	19.30	H
17968.040	54.60	-29.06	46.66	37.00	74.00	19.40	H
17997.960	54.50	-29.06	46.66	36.90	74.00	19.50	H
17980.620	54.50	-29.06	46.66	36.90	74.00	19.50	H
17979.260	54.50	-29.06	46.66	36.90	74.00	19.50	H

Measurement results for Set.4:
USB Mode/Average detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17991.160	45.40	-29.06	46.66	27.80	54.00	8.60	V
17990.820	45.40	-29.06	46.66	27.80	54.00	8.60	V
17996.940	45.40	-29.06	46.66	27.80	54.00	8.60	H
17973.820	45.20	-29.06	46.66	27.60	54.00	8.80	H
17985.720	45.10	-29.06	46.66	27.50	54.00	8.90	V
17990.140	45.00	-29.06	46.66	27.40	54.00	9.00	H

USB Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17956.140	55.80	-28.94	46.66	38.08	74.00	18.20	H
17992.860	55.80	-29.06	46.66	38.20	74.00	18.20	V
17998.640	55.80	-29.06	46.66	38.20	74.00	18.20	H
17987.760	55.70	-29.06	46.66	38.10	74.00	18.30	V
17988.780	55.50	-29.06	46.66	37.90	74.00	18.50	H
17925.200	55.50	-29.40	46.66	38.24	74.00	18.50	V

Measurement results for Set.5:
Charing Mode/Average detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17988.100	45.90	-29.06	46.66	28.30	54.00	8.10	H
17998.980	45.90	-29.06	46.66	28.30	54.00	8.10	V
17995.240	45.90	-29.06	46.66	28.30	54.00	8.10	V
17968.040	45.90	-29.06	46.66	28.30	54.00	8.10	H
17998.640	45.80	-29.06	46.66	28.20	54.00	8.20	V
17995.920	45.80	-29.06	46.66	28.20	54.00	8.20	V

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
17962.600	56.70	-29.06	46.66	39.10	74.00	17.30	H
17996.940	56.50	-29.06	46.66	38.90	74.00	17.50	V
17962.940	56.10	-29.06	46.66	38.50	74.00	17.90	V
17967.360	56.00	-29.06	46.66	38.40	74.00	18.00	V
17921.120	55.90	-29.40	46.66	38.64	74.00	18.10	V
17989.800	55.80	-29.06	46.66	38.20	74.00	18.20	H

Measurement results for Set.1:

Full Spectrum

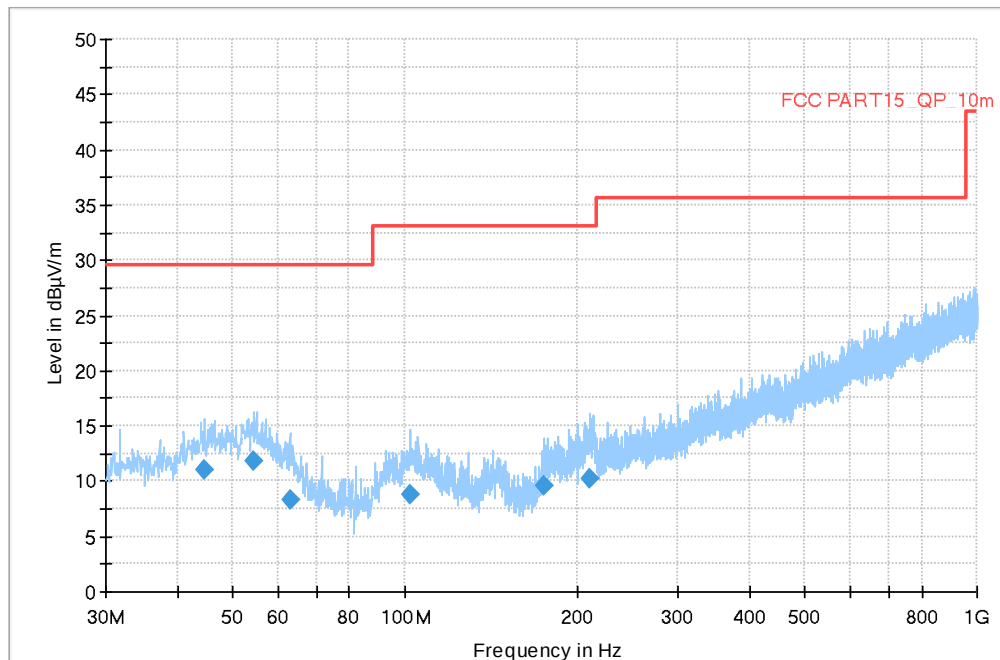


Fig A.1 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
44.647000	10.97	29.54	18.57	120.000	107.0	V	315.0
54.541000	11.85	29.54	17.69	120.000	100.0	V	226.0
62.980000	8.32	29.54	21.22	120.000	275.0	H	45.0
102.265000	8.78	33.06	24.28	120.000	182.0	H	8.0
175.306000	9.59	33.06	23.47	120.000	125.0	V	135.0
210.129000	10.26	33.06	22.80	120.000	107.0	V	225.0

Full Spectrum

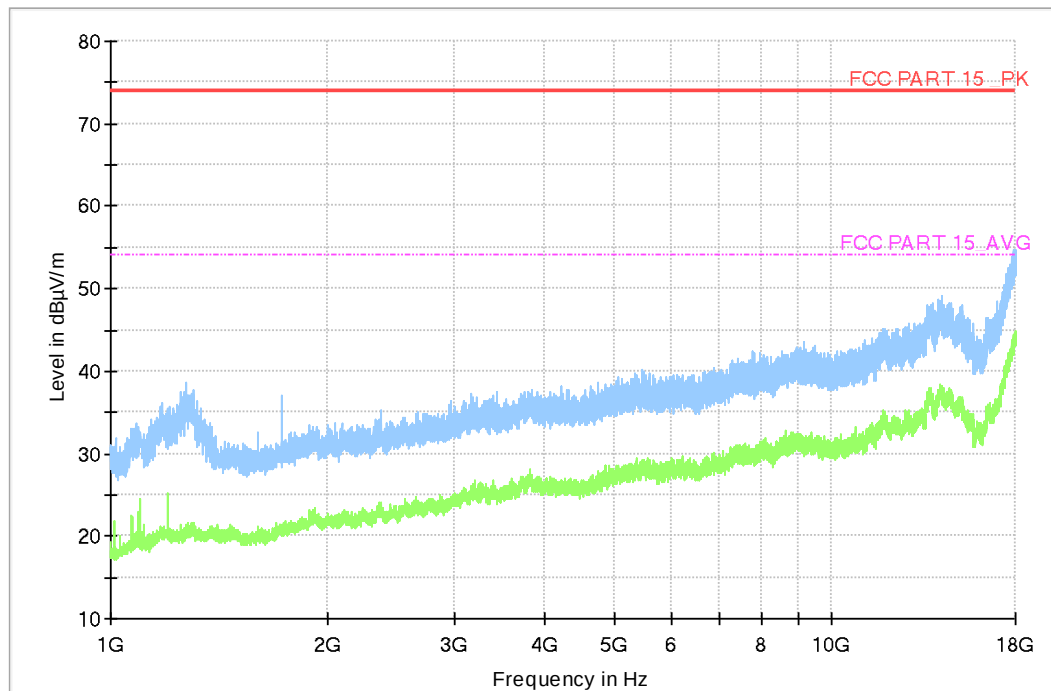


Fig A.2 Radiated Emission from 1GHz to 18GHz

Measurement results for Set.2:

Full Spectrum

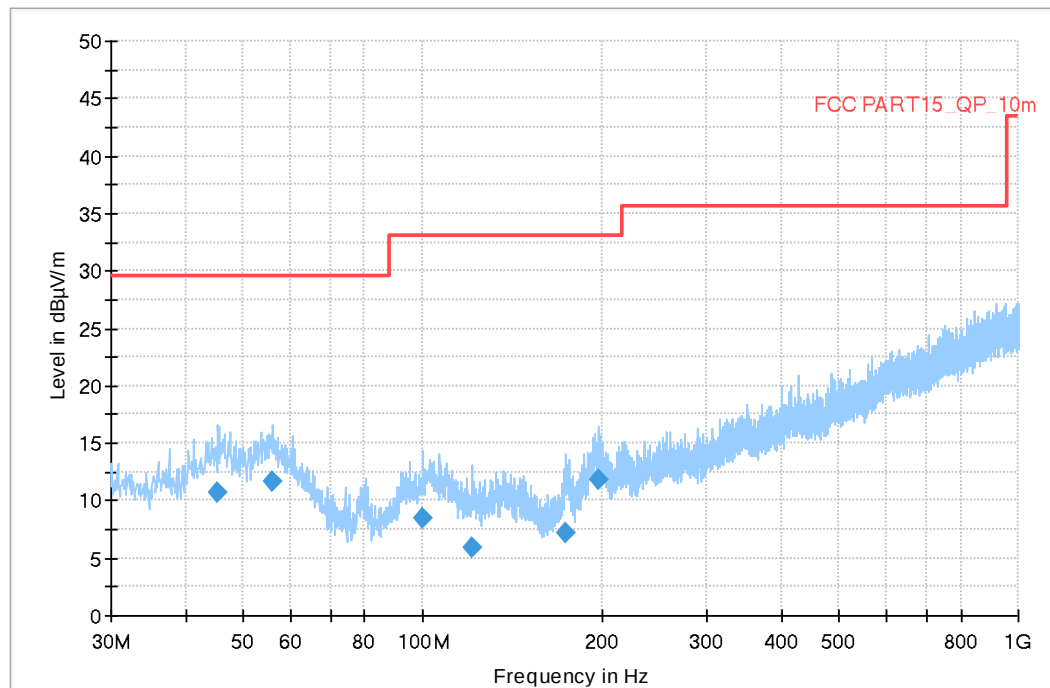


Fig A.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
45.326000	10.72	29.54	18.82	120.000	176.0	V	162.0
56.093000	11.64	29.54	17.90	120.000	118.0	V	292.0
99.937000	8.39	33.06	24.67	120.000	107.0	H	315.0
120.792000	5.98	33.06	27.08	120.000	276.0	H	-18.0
174.045000	7.11	33.06	25.95	120.000	125.0	V	135.0
197.325000	11.88	33.06	21.18	120.000	118.0	V	45.0

Full Spectrum

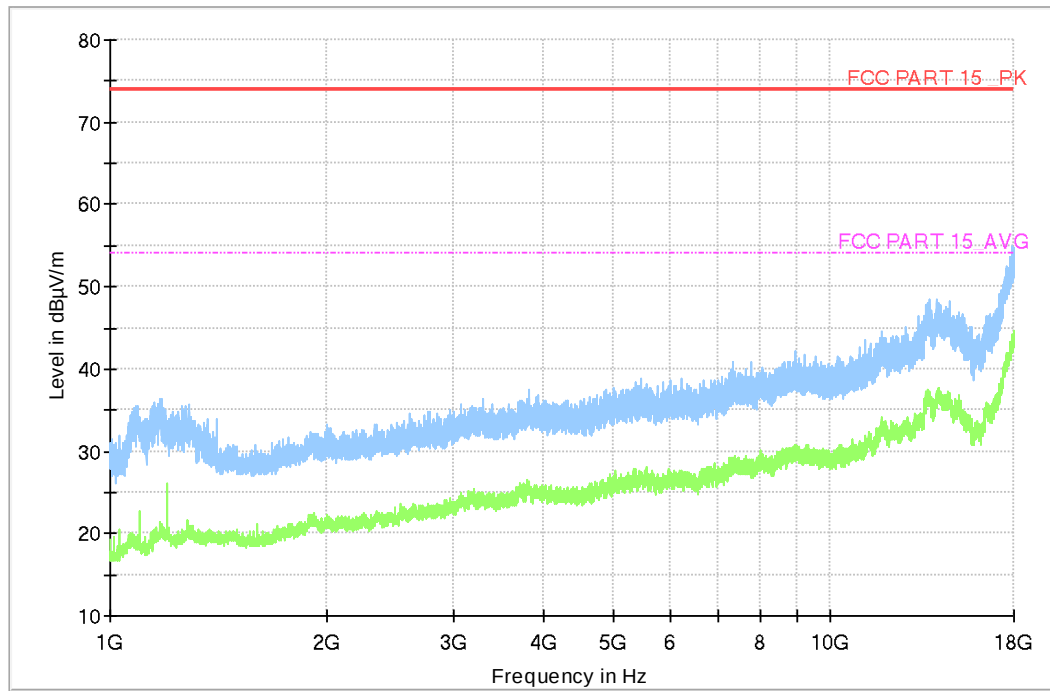


Fig A.4 Radiated Emission from 1GHz to 18GHz

Measurement results for Set.3:

Full Spectrum

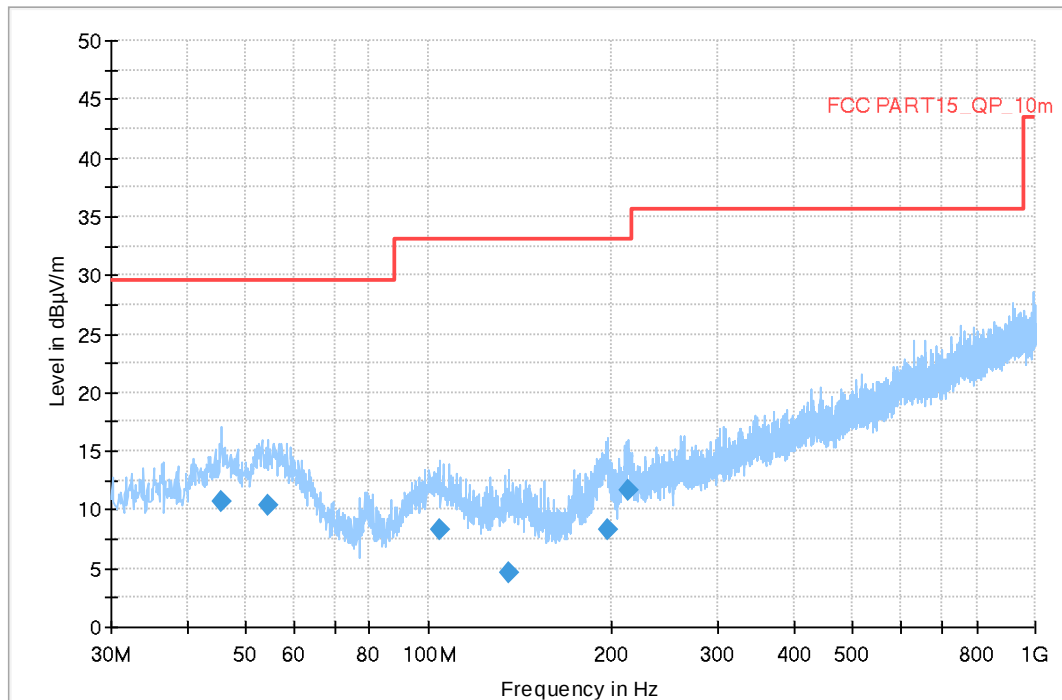


Fig A.5 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
45.520000	10.62	29.54	18.92	120.000	325.0	V	-5.0
54.444000	10.34	29.54	19.20	120.000	176.0	V	86.0
104.399000	8.35	33.06	24.71	120.000	182.0	V	35.0
135.827000	4.70	33.06	28.36	120.000	101.0	V	45.0
197.810000	8.36	33.06	24.70	120.000	118.0	V	-31.0
213.621000	11.59	33.06	21.47	120.000	108.0	V	225.0

Full Spectrum

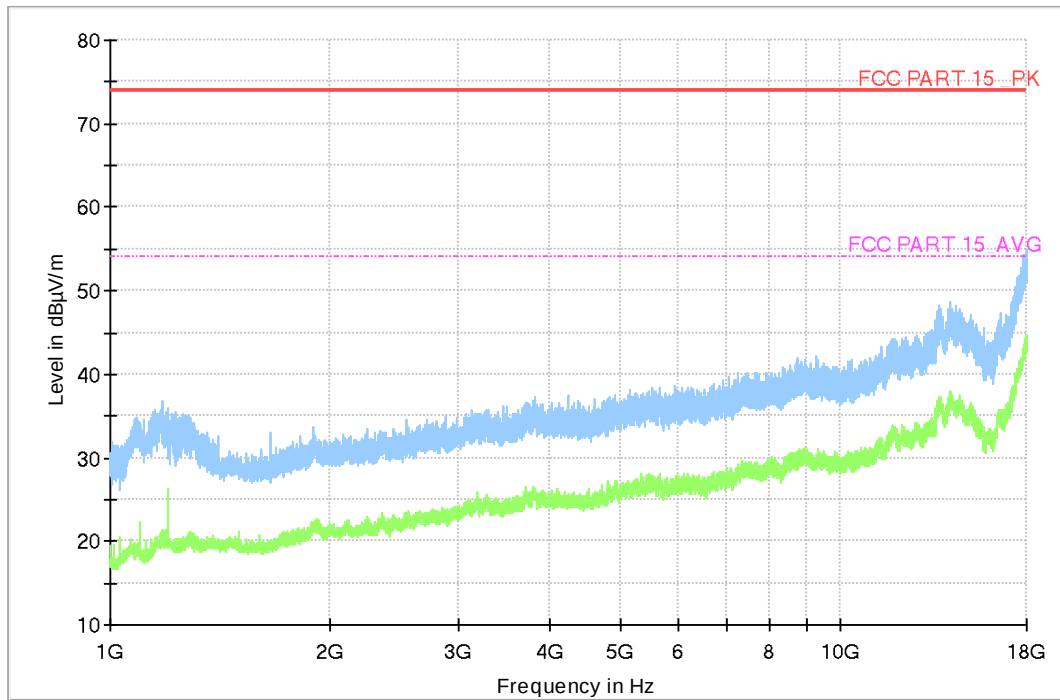


Fig A.6 Radiated Emission from 1GHz to 18GHz

Measurement results for Set.4:

Full Spectrum

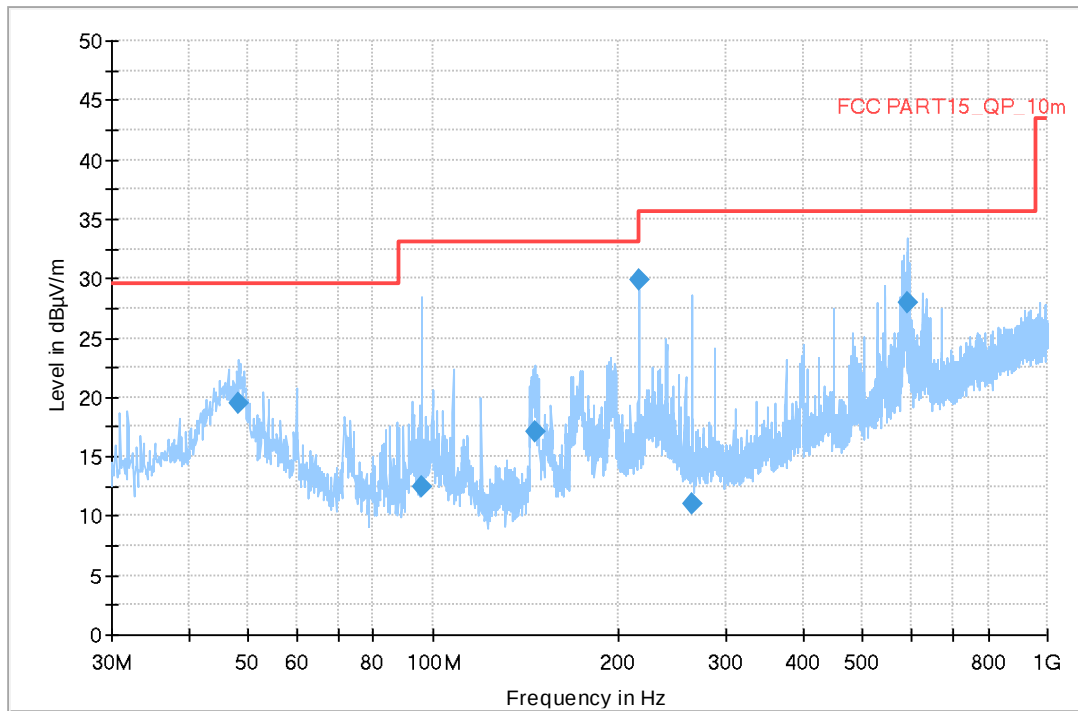


Fig A.7 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
48.236000	19.57	29.54	9.97	120.000	108.0	V	225.0
95.863000	12.49	33.06	20.57	120.000	107.0	V	279.0
146.400000	17.05	33.06	16.01	120.000	176.0	V	-18.0
215.949000	29.93	33.06	3.13	120.000	101.0	V	98.0
263.479000	10.96	35.56	24.60	120.000	311.0	H	135.0
592.115000	27.99	35.56	7.57	120.000	225.0	V	-13.0

Full Spectrum

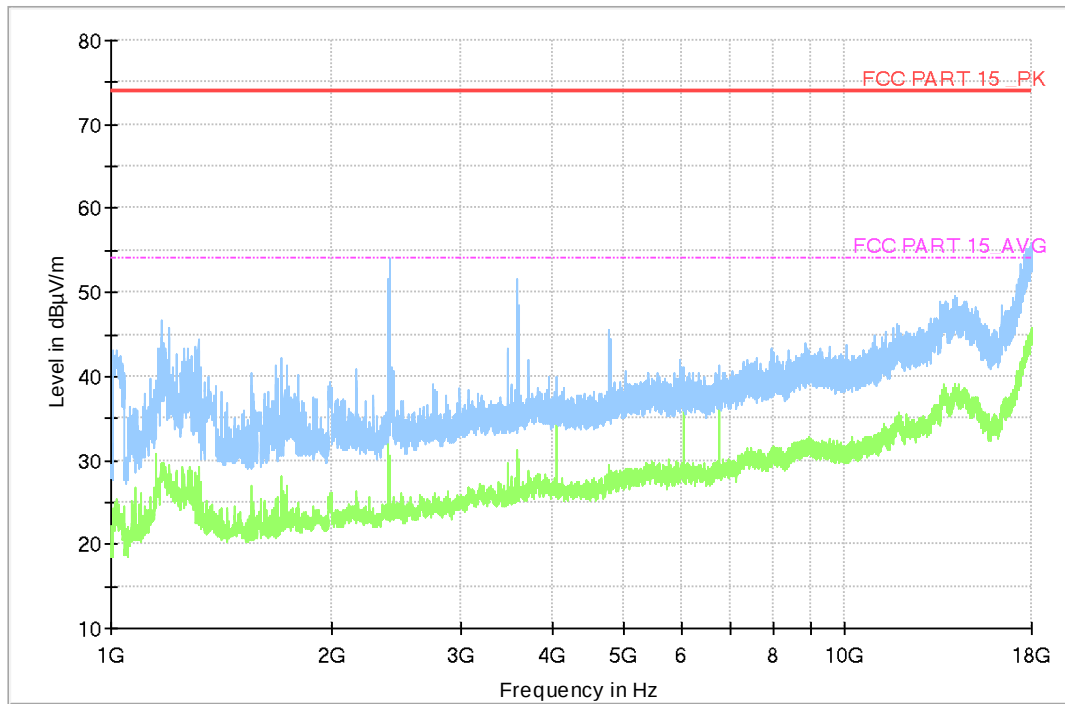


Fig A.8 Radiated Emission from 1GHz to 18GHz

Measurement results for Set.5:

Full Spectrum

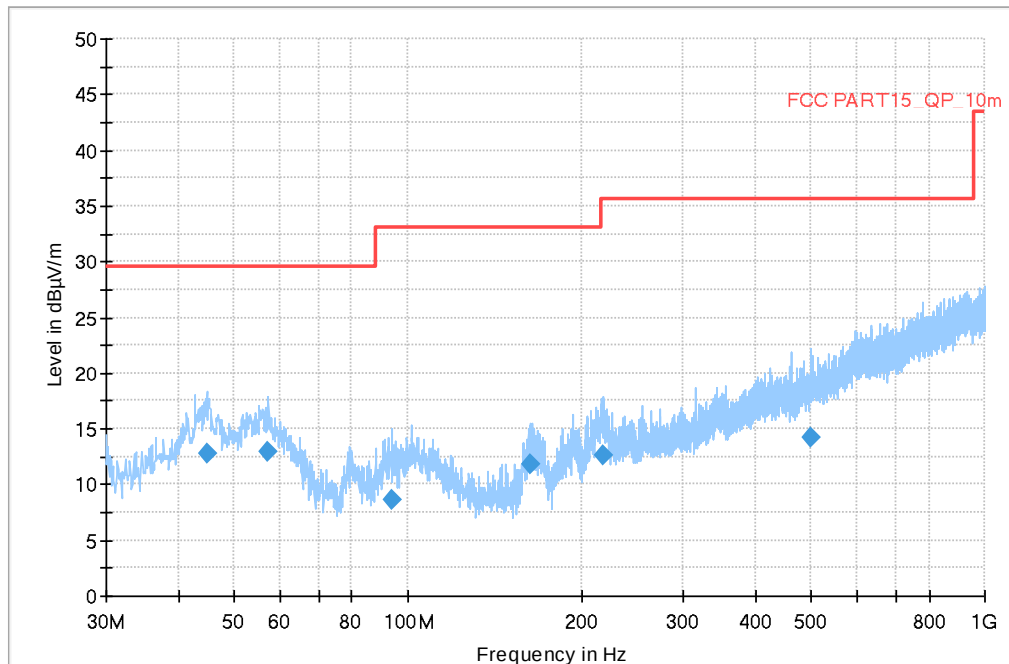


Fig A.9 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
44.841000	12.73	29.54	16.81	120.000	125.0	V	136.0
57.160000	12.99	29.54	16.55	120.000	225.0	V	46.0
93.923000	8.66	33.06	24.40	120.000	225.0	V	-44.0
163.181000	11.80	33.06	21.26	120.000	325.0	H	-31.0
217.404000	12.58	35.56	22.98	120.000	257.0	H	0.0
500.062000	14.25	35.56	21.31	120.000	101.0	H	126.0

Full Spectrum

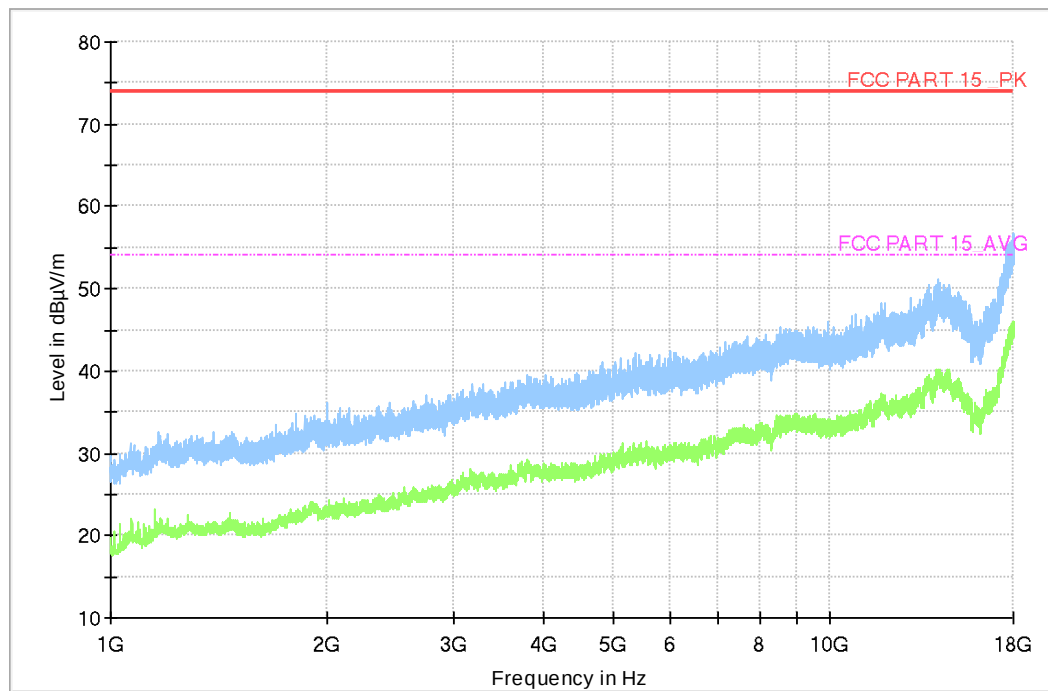


Fig A.10 Radiated Emission from 1GHz to 18GHz

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 (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: $U = 3.08 \text{ dB}$, $k=2$.

Charging Mode, Set.1:

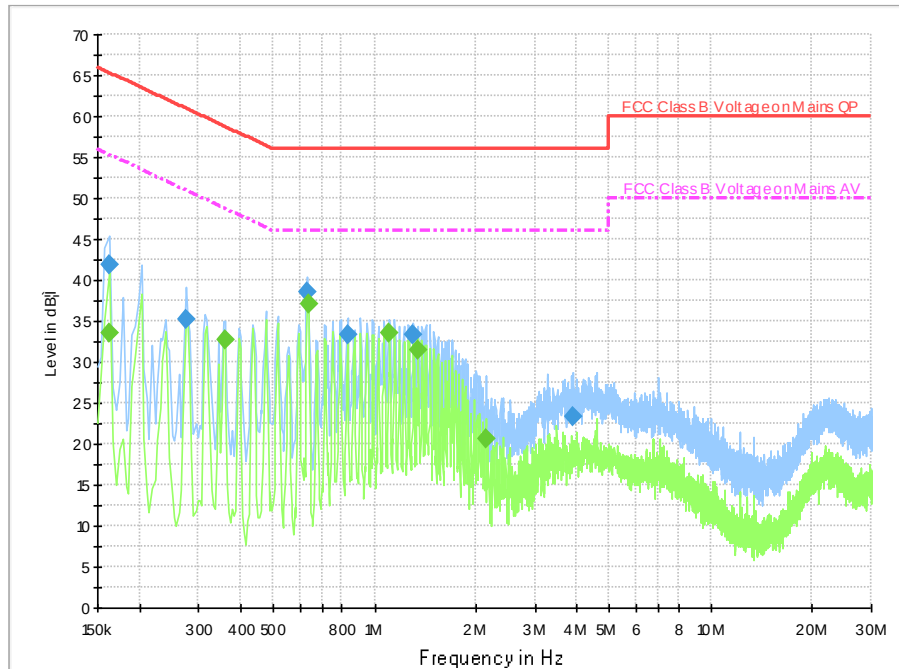


Fig A.11 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.162000	41.9	2000.0	9.000	On	L1	19.8	23.4	65.4	
0.274000	35.2	2000.0	9.000	On	L1	19.7	25.8	61.0	
0.630000	38.5	2000.0	9.000	On	N	19.6	17.5	56.0	
0.830000	33.3	2000.0	9.000	On	N	19.7	22.7	56.0	
1.306000	33.4	2000.0	9.000	On	L1	19.6	22.6	56.0	
3.874000	23.4	2000.0	9.000	On	L1	19.6	32.6	56.0	

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.162000	33.6	2000.0	9.000	On	L1	19.8	21.8	55.4	
0.358000	32.7	2000.0	9.000	On	L1	19.7	16.0	48.8	
0.634000	37.1	2000.0	9.000	On	N	19.6	8.9	46.0	
1.106000	33.5	2000.0	9.000	On	L1	19.6	12.5	46.0	
1.342000	31.4	2000.0	9.000	On	N	19.6	14.6	46.0	
2.138000	20.6	2000.0	9.000	On	N	19.6	25.4	46.0	

Charging Mode, Set.2:

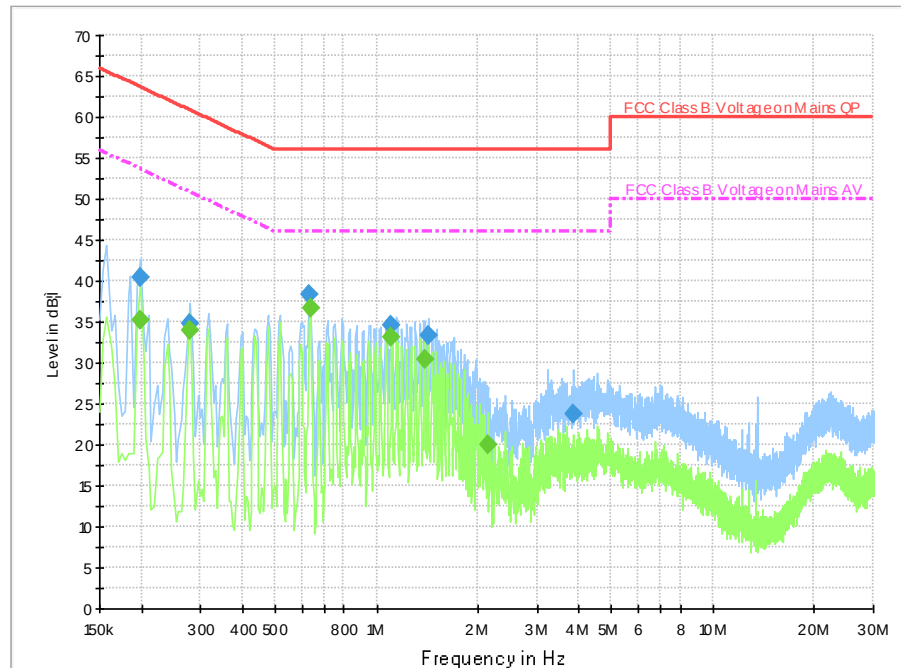


Fig A.12 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.198000	40.4	2000.0	9.000	On	N	19.7	23.3	63.7	
0.278000	34.9	2000.0	9.000	On	L1	19.7	26.0	60.9	
0.630000	38.3	2000.0	9.000	On	L1	19.7	17.7	56.0	
1.106000	34.6	2000.0	9.000	On	L1	19.6	21.4	56.0	
1.426000	33.4	2000.0	9.000	On	L1	19.7	22.6	56.0	
3.842000	23.8	2000.0	9.000	On	N	19.6	32.2	56.0	

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.198000	35.1	2000.0	9.000	On	N	19.7	18.5	53.7	
0.278000	33.9	2000.0	9.000	On	L1	19.7	17.0	50.9	
0.634000	36.6	2000.0	9.000	On	N	19.6	9.4	46.0	
1.106000	33.1	2000.0	9.000	On	L1	19.6	12.9	46.0	
1.386000	30.5	2000.0	9.000	On	L1	19.6	15.5	46.0	
2.138000	20.0	2000.0	9.000	On	N	19.6	26.0	46.0	

Charging Mode, Set.3:

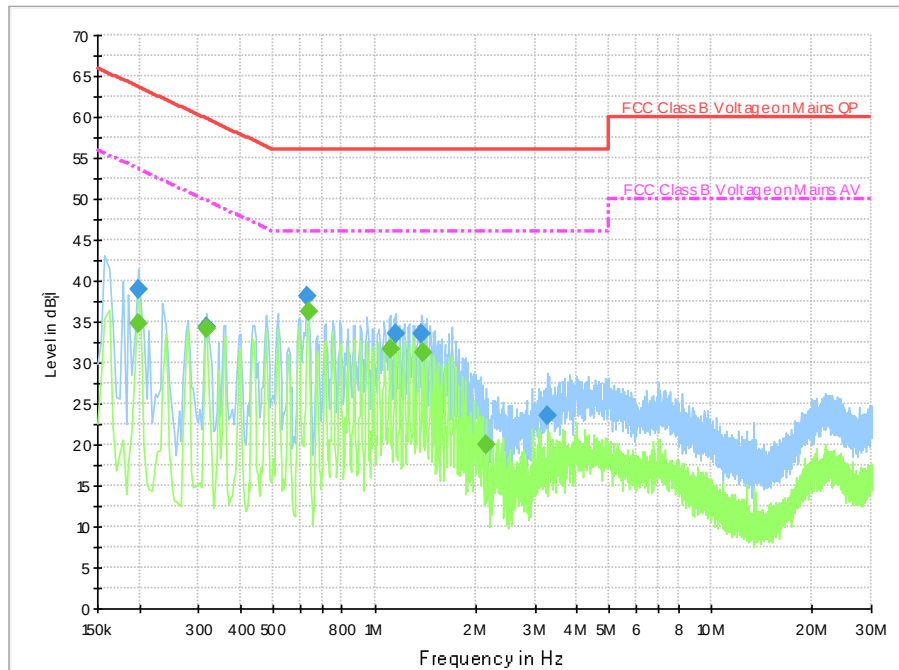


Fig A.13 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.198000	39.0	2000.0	9.000	On	L1	19.7	24.7	63.7	
0.318000	34.4	2000.0	9.000	On	L1	19.7	25.4	59.8	
0.630000	38.1	2000.0	9.000	On	N	19.6	17.9	56.0	
1.150000	33.5	2000.0	9.000	On	L1	19.7	22.5	56.0	
1.382000	33.6	2000.0	9.000	On	L1	19.6	22.4	56.0	
3.282000	23.6	2000.0	9.000	On	N	19.6	32.4	56.0	

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.198000	34.7	2000.0	9.000	On	L1	19.7	19.0	53.7	
0.318000	34.1	2000.0	9.000	On	N	19.7	15.7	49.8	
0.634000	36.2	2000.0	9.000	On	N	19.6	9.8	46.0	
1.110000	31.7	2000.0	9.000	On	L1	19.6	14.3	46.0	
1.386000	31.2	2000.0	9.000	On	L1	19.6	14.8	46.0	
2.138000	20.0	2000.0	9.000	On	L1	19.6	26.0	46.0	

USB Mode, Set.4:

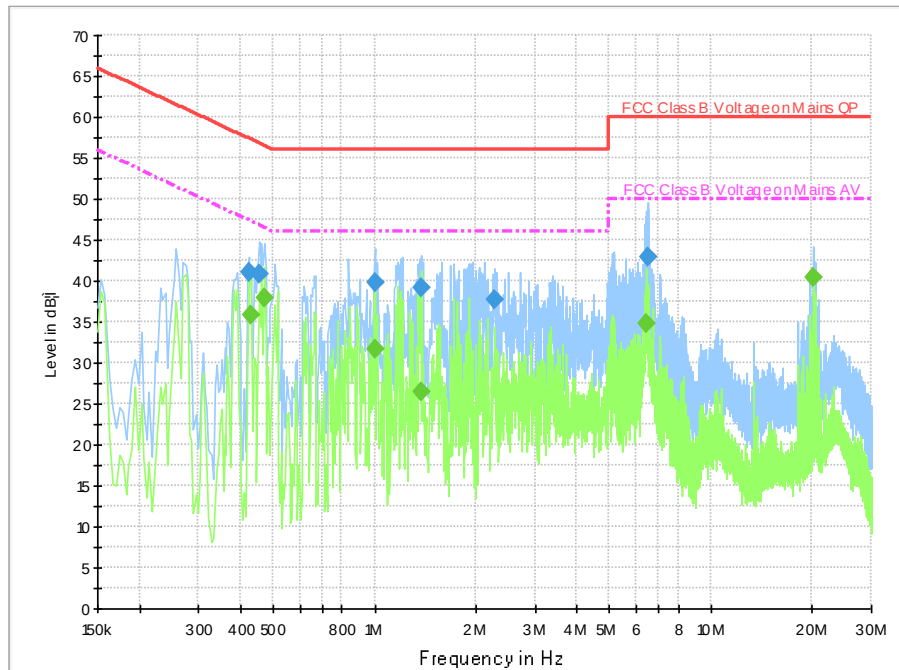


Fig A.14 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.422000	41.1	2000.0	9.000	On	L1	19.7	16.3	57.4	
0.454000	40.8	2000.0	9.000	On	L1	19.7	16.0	56.8	
1.002000	39.8	2000.0	9.000	On	N	19.6	16.2	56.0	
1.382000	39.1	2000.0	9.000	On	L1	19.6	16.9	56.0	
2.266000	37.8	2000.0	9.000	On	N	19.6	18.2	56.0	
6.518000	43.0	2000.0	9.000	On	N	19.6	17.0	60.0	

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.430000	35.9	2000.0	9.000	On	L1	19.7	11.3	47.3	
0.470000	37.9	2000.0	9.000	On	N	19.7	8.6	46.5	
1.002000	31.7	2000.0	9.000	On	N	19.6	14.3	46.0	
1.382000	26.5	2000.0	9.000	On	L1	19.6	19.5	46.0	
6.446000	34.8	2000.0	9.000	On	L1	19.6	15.2	50.0	
20.258000	40.4	2000.0	9.000	On	L1	19.8	9.6	50.0	

Charging Mode, Set.5:

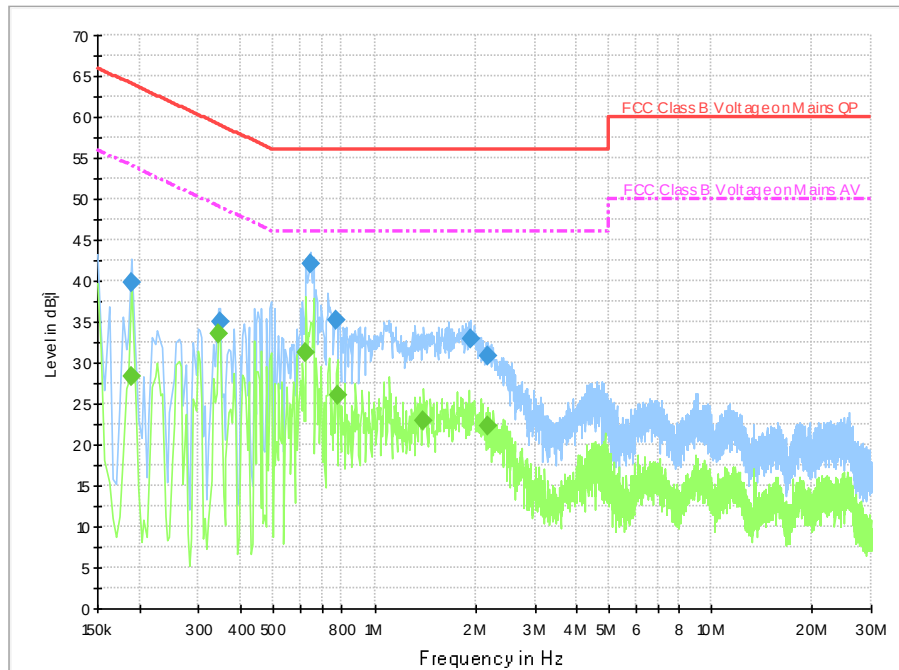


Fig A.15 Conducted Emission from 150kHz to 30MHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.190000	39.7	2000.0	9.000	On	L1	19.7	24.3	64.0	
0.346000	34.9	2000.0	9.000	On	L1	19.7	24.1	59.1	
0.642000	42.0	2000.0	9.000	On	N	19.6	14.0	56.0	
0.766000	35.2	2000.0	9.000	On	N	19.7	20.8	56.0	
1.934000	32.9	2000.0	9.000	On	L1	19.6	23.1	56.0	
2.162000	30.9	2000.0	9.000	On	L1	19.6	25.1	56.0	

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.190000	28.3	2000.0	9.000	On	L1	19.7	25.8	54.0	
0.342000	33.5	2000.0	9.000	On	L1	19.7	15.6	49.2	
0.626000	31.3	2000.0	9.000	On	N	19.6	14.7	46.0	
0.774000	26.1	2000.0	9.000	On	N	19.7	19.9	46.0	
1.398000	22.9	2000.0	9.000	On	N	19.6	23.1	46.0	
2.162000	22.3	2000.0	9.000	On	L1	19.6	23.7	46.0	

END OF REPORT