TEST REPORT

No. 23T04Z70647-12

for

Samsung Electronics Co., Ltd.

Notebook PC

MODEL NAME:

NP750XGK,NP750XGQ,NP754XGK,NP751XGK,NP751XGQ,

NP754XGQ

FCC ID: ZCANP750XGL

with

Hardware Version: REV1.0

Software Version: Windows 11

Issued Date: 2024-01-08

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
23T04Z70647-12	Rev.0	1st edition	2024-01-08

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

CONTENTS

1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

CTTL (Huayuan North Road)

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

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project data

Testing Start Date: 2023-12-15

Testing End Date: 2024-01-04

1.5. Signature

Zhang Ying

(Prepared this test report)

An Hui

(Reviewed this test report)

Zhang Xia

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Samsung Electronics Co., Ltd.
Address /Post:	19 Chapin Rd.,Building D Pine Brook, NJ 07058
Contact	Jenni Chun
Email:	j1.chun@samsung.com
Telephone:	+1-201-937-4203

2.2. Manufacturer Information

Company Name:	Samsung Electronics Co., Ltd.
Address /Post:	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea
Contact	Minji Son
Email:	minji28.son@samsung.com
Telephone:	+82-10-3130-2080

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

3.1. About EUT

Description	Notebook PC
Model name	NP750XGK,NP750XGQ,NP754XGK,NP751XGK,NP751XGQ,NP754XGQ
FCC ID	ZCANP750XGL

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	Date of receipt
UT31a	HQ8899YW90003ZJ	REV1.0	Windows 11	2023-12-15
UT41a	HQ8899YW90006WJ	REV1.0	Windows 11	2023-12-15
UT51a	HQ8899YWB0000PJ	REV1.0	Windows 11	2023-12-15

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

3.3. Internal Identification of AE used during the test

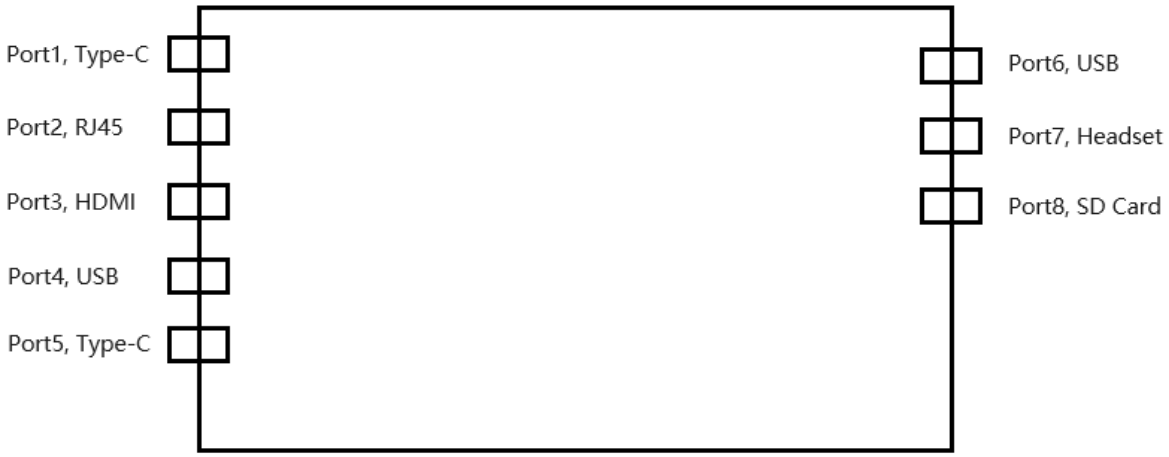
AE ID*	Description	Model	Manufacturer	Note
AE3	Travel adapter	EP-TA845	SOLUM CO.,LTD.	45W US
AE3-2	Travel adapter	EP-TA845	DONGYANG	45W US
AE6	Battery	AA-PBSN4AT	SAMSUNG SDI CO., LTD. (SDI)	/
AE7	Headset	/	/	/
AE8	HDMI Cable	/	/	/
AE9	Type-C to DP Cable	/	/	/
AE10/AE11	Display	/	/	/
AE12/AE13	USB Disk	/	/	/
AE14	SD card	/	/	/

Note: The USB cables are shielded.

3.4. General Description

Equipment under Test (EUT) is a model of Notebook PC with integrated antenna.
It consists of normal options: lithium battery and charger.
Samples undergoing test were selected by the client.
The differences in the model names are only for different marketing purposes.
Manual and specifications of the EUT were provided to fulfil the test.
For more EUT information please refers to the manufacturer's specifications or user's manual.

Interface connection



Mode	Port1	Port2	Port3	Port 4	Port5	Port6	Port7	Port8
Mode A	AC mains 230V/50Hz	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	Display(Type-C to DP Cable)	USB Disk	Headset	SD Card
Mode B	Display(Type-C to DP Cable)	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	AC mains 230V/50Hz	USB Disk	Headset	SD Card
Mode C	AC mains 230V/50Hz	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	Display(Type-C to DP Cable)	USB Disk	Headset	SD Card
Mode E	Display(Type-C to DP Cable)	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	AC mains 230V/50Hz	USB Disk	Headset	SD Card
Mode F	AC mains 230V/50Hz	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	Display(Type-C to DP Cable)	USB Disk	Headset	SD Card
Mode G	Display(Type-C to DP Cable)	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	AC mains 230V/50Hz	USB Disk	Headset	SD Card
Mode I	AC mains 230V/50Hz	PC(RJ45 cable)	Display(HDMI Cable)	USB Disk	Display(Type-C to DP Cable)	USB Disk	Headset	SD Card

3.5. Key component list

No.	Item	Vendor	Vendor model	Specification
1	MB	HUAQIN	TITAN4	/
2	CPU	Intel	i7 RPL-R (Intel CORE 7 150U)	1.8G/10C
		Intel	i5 RPL-R（Intel CORE 5 120U）	1.4G/10C
		Intel	i3 RPL-R（Intel CORE 3 100U）	1.2G/6C
3	Memory	Samsung	K4UCE3Q4AB-MGCL	LPDDR4x 32GB
		Samsung	K4UBE3D4AB-MGCL	LPDDR4x 16GB
		Samsung	K4U6E3S4AB-MGCL	LPDDR4x 8GB
4	SSD	SSSTC	CL4-8D256	256G GEN4 DRAMLESS
		SEC	MZVL41T0HBLB-00B	1TB GEN4 DRAMLESS
5	WLAN	Intel	AX201D2W	802.11 ac ax 2x2
6	Adapter	SOLUM	EP-TA845	I/P: 100-240V~, 50-60Hz,1.2A DC-output: DC (PDO) 5V/3A or 9V/3A or 15V/3A or 20V/2.25A DC (PPS) 3.3-20V/2.25A
		DONGYANG	EP-TA845	
7	LCD	KD	KD156N20-30NI-A005	15.6" FHD IPS
		INX	2081156QP8045002-52E	15.6" FHD IPS
		CSOT	2061156OP8045001-52E	15.6" FHD IPS
8	Camera	LianYi	LSN094PF	/
		Shine Optics	DK123C	/
		LianYi	LSN118PF	/
9	Battery	Samsung	AA-PBSN4AT	Rated Voltage:15.4V, Rated capacity: 54Wh

3.6. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.33	UT31a+AE3+AE6+AE7+AE8+AE9+AE10+AE11+AE12+AE13+AE14	UT31a+ADAPTER AE3
Set.34	UT41a+AE3+AE6+AE7+AE8+AE9+AE10+AE11+AE12+AE13+AE14	UT41a+ADAPTER AE3
Set.35	UT51a+AE3+AE6+AE7+AE8+AE9+AE10+AE11+AE12+AE13+AE14	UT51a+ADAPTER AE3
Set.33	UT31a+AE3-2+AE6+AE7+AE8+AE9+AE10+AE11+AE12+AE13+AE14	UT31a+ADAPTER AE3-2

Note:

1. All of the above set-ups and test modes were tested, and only the worst results are shown in this report.
2. The EUT exercise program was tested using the Burn-in test program for windows.

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

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

Reference	Title	Version
FCC 47 CFR Part 15, Subpart B	Radio frequency devices - Unintentional Radiators	2023
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 did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ˚C, Max. = 35 ˚C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
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 MΩ
Ground system resistance	< 4 Ω

6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	NA	Not applicable
	F	Fail
	BR	Re-use test data from basic model report.

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

7. Test Equipments Utilized

Test Equipment

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	LISN	ENV216	101200	Rohde & Schwarz	2024-06-04	1 year
2	Test Receiver	ESCI 3	100344	Rohde & Schwarz	2024-02-20	1 year
3	Test Receiver	ESW44	103023	Rohde & Schwarz	2024-06-08	1 year
4	Test Receiver	ESW44	103015	Rohde & Schwarz	2024-01-11	1 year
5	EMI Antenna	VULB9163	01222	Schwarzbeck	2024-01-28	1 year
6	EMI Antenna	3115	6914	ETS-Lindgren	2024-05-07	1 year

Test Software

Test Item	Test Software and Version	Software Vendor
Conducted emission	EMC32 V8.53.0	R&S
Radiated emission	EMC32 V11.50.00	R&S

8. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Location 1: CTTL(huayuan North Road)

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	4.72dB(*k*=2)
	1GHz-18GHz	4.84dB(k=2)
	18GHz-40GHz	5.12dB(k=2)
Conducted Emission	150kHz-30MHz	3.08dB(k=2)

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 at distances of 10 meters(for 30MHz-1GHz) and 3 meters (for above 1GHz) is tested. Tested in accordance with the procedures of ANSI C63.4 – 2014, section 8.3.

The EUT was placed on a non-conductive table and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions. 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.

For the test setup photographs please see the test setup photos document.

A.1.2 EUT Operating Mode

The EUT exercise program was tested using the Burn-in test program for windows.

The system was configured for testing in a typical mode that a customer would normal use.

Cables were attached to each of the available I/O ports. Where applicable, peripherals were attached to the I/O cables. All the external I/O ports were exercised.

LABTM software is used to let the EUT to continuously copy data to external (Hard Disk & SD card) storage media, read and erase the data after copy action was finished. During the test, the a pattern of “H” characters was written to display on the LCD panel; the camera was in video mode; the music was repetitively played through the headset; the WIFI and BT function was on and worked in receiver mode.

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.

Limit (10m) = limit (3m) + 20(log (3/10))

A.1.4 Test Condition

Voltage（V）	Frequency（Hz）
120	60

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:

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

Where

G_A: Antenna factor of receive antenna

G_{PL}: Path Loss

P_{Mea}: Measurement result on receiver.

Set.33, Mode A, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4

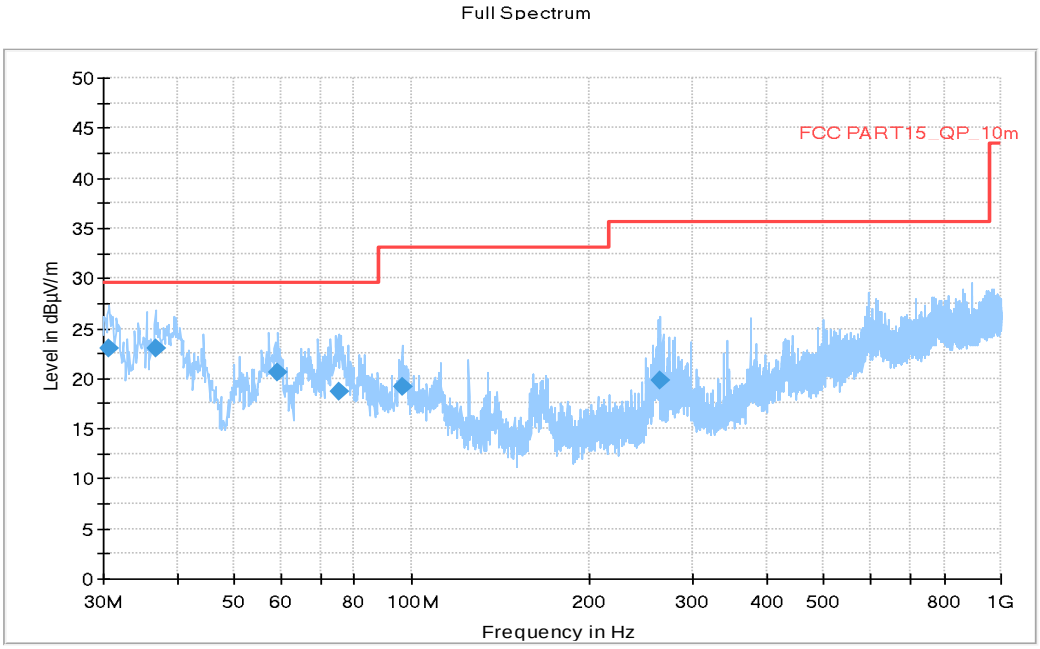


Figure A.1 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)
30.679000	**22.95**	**29.54**	**6.59**	**120.000**	**311.0**	**V**	**45.0**
36.790000	**22.93**	**29.54**	**6.61**	**120.000**	**100.0**	**V**	**135.0**
59.391000	**20.53**	**29.54**	**9.01**	**120.000**	**275.0**	**V**	**-6.0**
75.590000	**18.62**	**29.54**	**10.92**	**120.000**	**108.0**	**V**	**122.0**
96.251000	**19.11**	**33.06**	**13.95**	**120.000**	**275.0**	**V**	**264.0**
263.576000	**19.76**	**35.56**	**15.80**	**120.000**	**125.0**	**V**	**103.0**

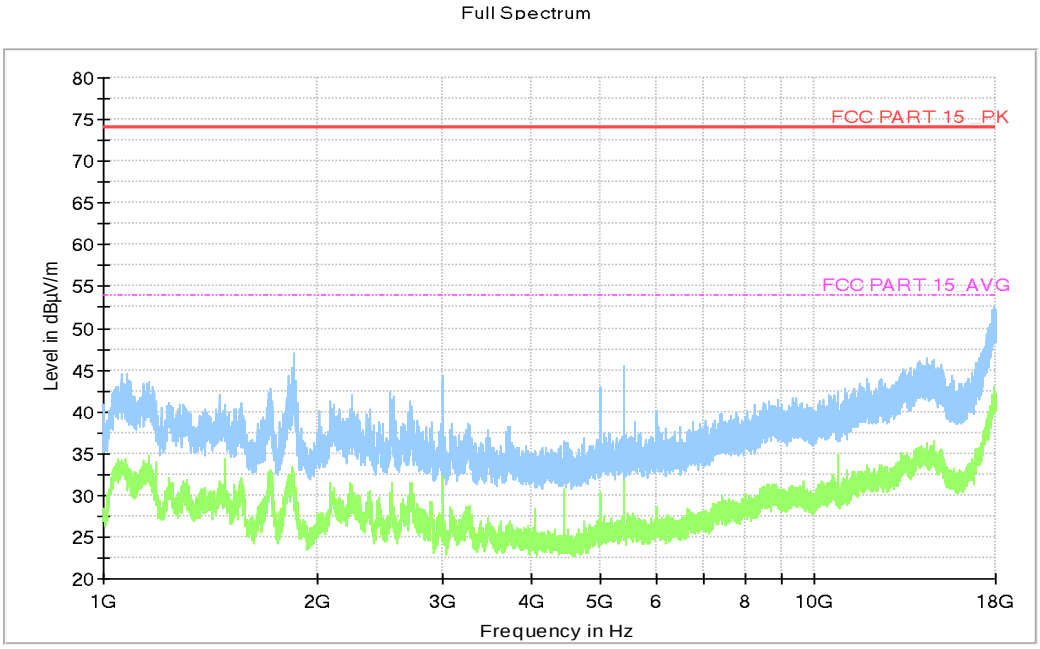


Figure A.2 Radiated Emission from 1GHz to 18GHz

Average detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1484.840	34.3	-39.9	24.8	49.4	54.0	19.7	H
2999.200	33.4	-39.5	30.0	43.0	54.0	20.6	V
4454.740	30.7	-39.1	32.4	37.4	54.0	23.3	V
4995.000	30.3	-38.8	33.3	35.8	54.0	23.7	V
5400.620	42.1	-38.4	34.0	46.5	54.0	11.9	H
5997.320	28.7	-38.4	34.4	32.7	54.0	25.3	H

Peak detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1851.360	47.0	-39.8	26.4	60.4	74.0	27.0	H
2534.420	42.4	-39.7	28.4	53.7	74.0	31.6	H
2997.160	43.8	-39.5	30.0	53.4	74.0	30.2	H
4993.300	43.0	-38.8	33.3	48.5	74.0	31.0	V
5400.960	45.0	-38.4	34.0	49.4	74.0	29.0	V
5991.540	40.2	-38.4	34.4	44.2	74.0	33.8	V

Set.34, Mode B, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4

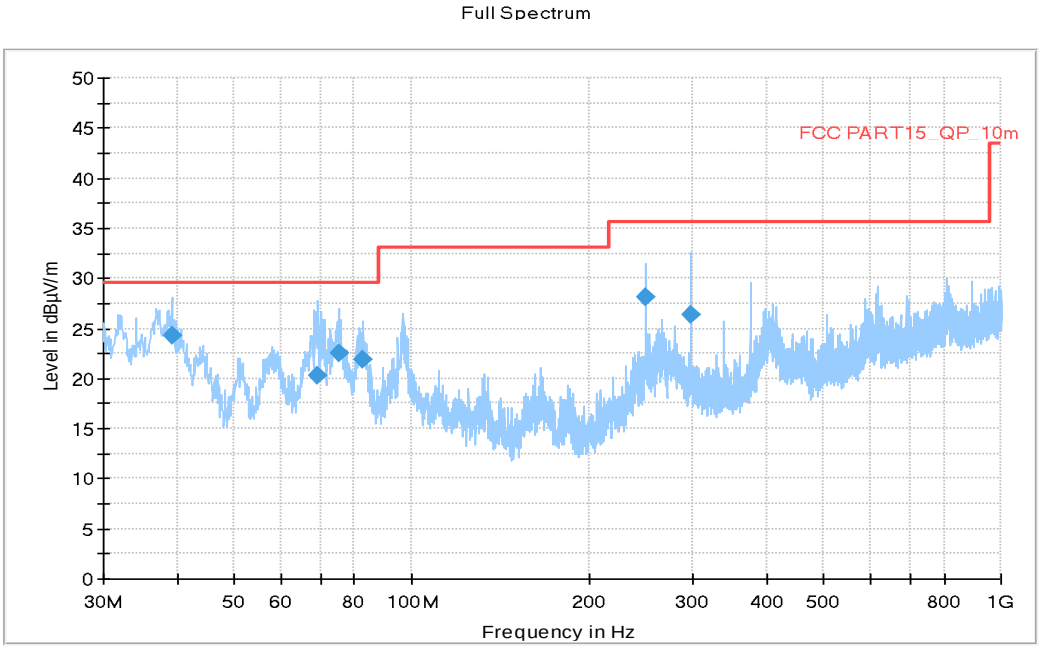


Figure A.1 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)
39.215000	24.22	29.54	5.32	120.000	183.0	V	303.0
69.382000	20.31	29.54	9.23	120.000	183.0	V	155.0
75.105000	22.50	29.54	7.04	120.000	275.0	V	-44.0
82.768000	21.84	29.54	7.70	120.000	175.0	V	155.0
249.996000	28.08	35.56	7.48	120.000	108.0	V	173.0
296.944000	26.41	35.56	9.15	120.000	100.0	V	264.0

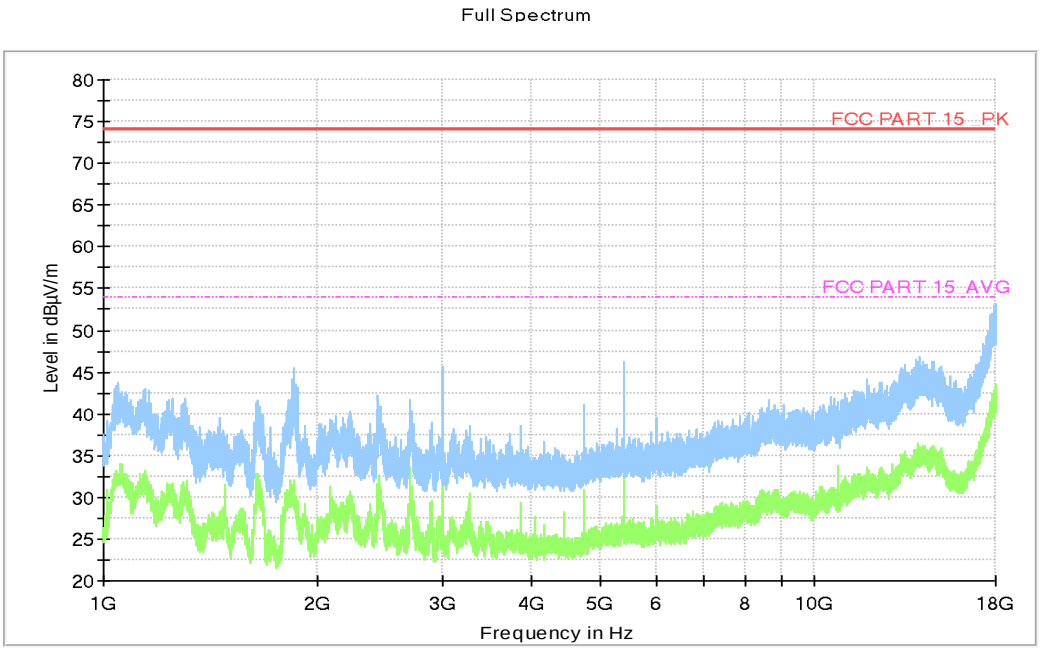


Figure A.2 Radiated Emission from 1GHz to 18GHz

Average detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1642.260	32.8	-39.9	25.5	47.2	54.0	21.2	H
2442.620	32.6	-39.7	28.1	44.2	54.0	21.4	H
2700.000	33.5	-39.6	28.9	44.2	54.0	20.5	V
2995.120	33.9	-39.5	30.0	43.5	54.0	20.1	H
4751.900	30.4	-39.2	32.9	36.7	54.0	23.6	V
5399.940	39.3	-38.5	34.0	43.7	54.0	14.7	V

Peak detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1848.980	45.4	-39.8	26.4	58.8	74.0	28.6	H
2435.140	42.2	-39.7	28.1	53.7	74.0	31.8	V
2994.100	45.3	-39.5	30.0	54.9	74.0	28.7	V
4751.900	41.0	-39.2	32.9	47.3	74.0	33.0	V
5400.280	46.4	-38.4	34.0	50.8	74.0	27.6	V
5992.560	39.5	-38.4	34.4	43.5	74.0	34.5	V

Set.35, Mode A, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4

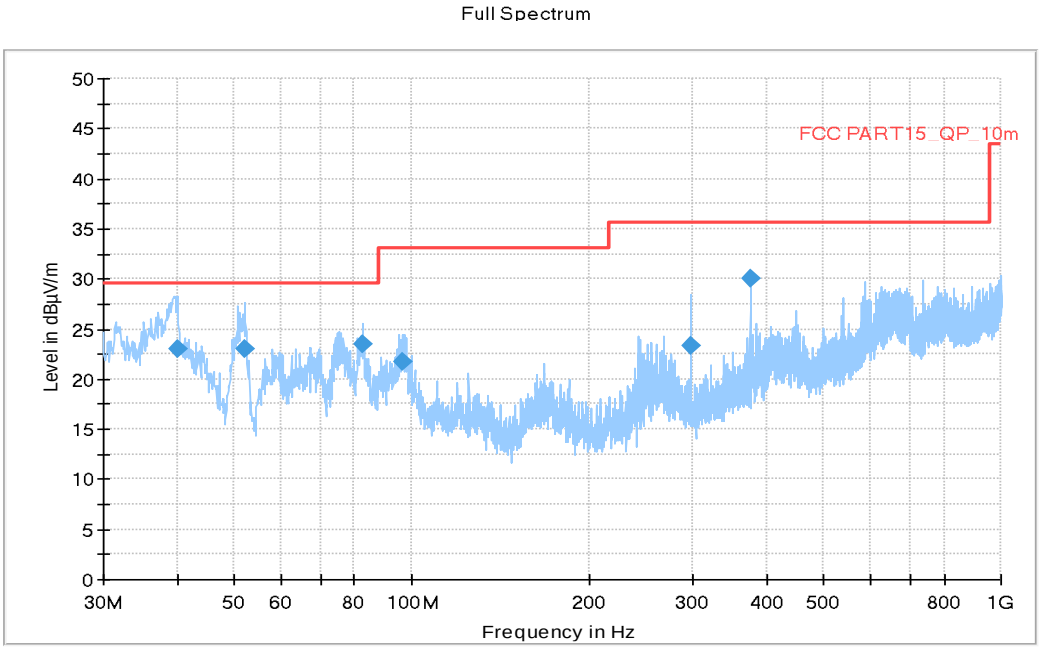


Figure A.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)
39.991000	**23.00**	**29.54**	**6.54**	**120.000**	**175.0**	**V**	**136.0**
52.213000	**23.08**	**29.54**	**6.46**	**120.000**	**100.0**	**V**	**302.0**
82.574000	**23.55**	**29.54**	**5.99**	**120.000**	**125.0**	**V**	**301.0**
96.639000	**21.71**	**33.06**	**11.35**	**120.000**	**212.0**	**V**	**45.0**
296.944000	**23.36**	**35.56**	**12.20**	**120.000**	**275.0**	**H**	**155.0**
375.029000	**29.95**	**35.56**	**5.61**	**120.000**	**100.0**	**V**	**-45.0**

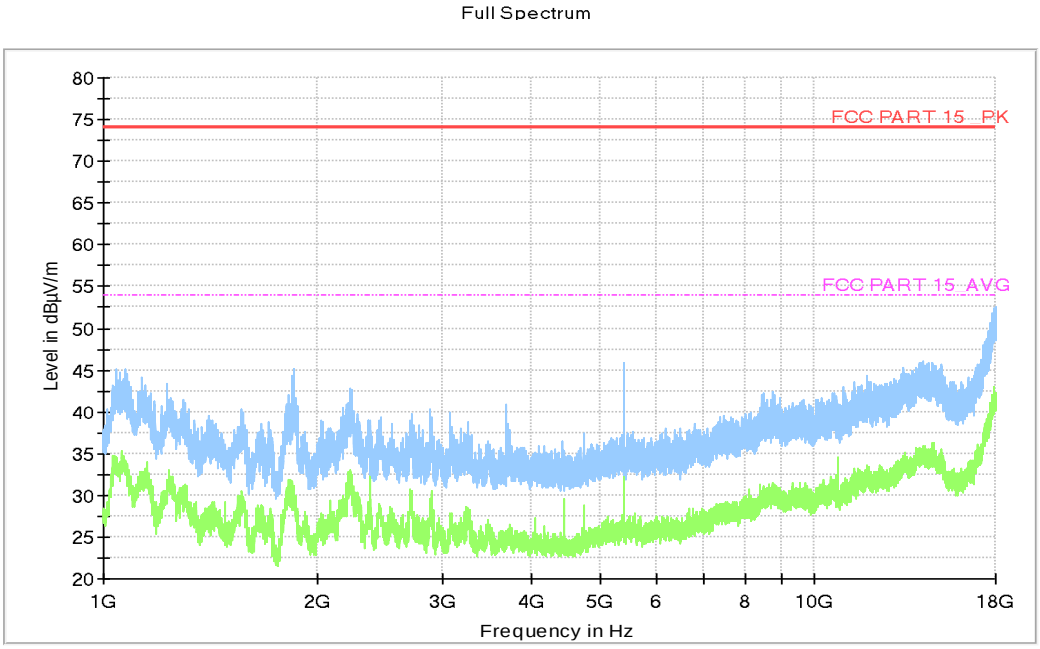


Figure A.4 Radiated Emission from 1GHz to 18GHz

Average detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1061.880	35.3	-39.8	23.6	51.5	54.0	18.7	H
2220.600	33.0	-39.8	27.7	45.1	54.0	21.0	H
2375.980	33.5	-39.7	28.0	45.2	54.0	20.5	V
2714.620	30.5	-39.6	29.0	41.1	54.0	23.5	H
4455.080	29.7	-39.1	32.4	36.4	54.0	24.3	H
5400.960	42.1	-38.4	34.0	46.5	54.0	11.9	H

Peak detector result

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
1071.740	45.2	-39.8	23.6	61.4	74.0	28.8	V
1850.340	45.1	-39.8	26.4	58.5	74.0	28.9	H
2219.920	42.7	-39.7	27.7	54.8	74.0	31.3	V
2880.540	40.4	-39.6	29.6	50.4	74.0	33.6	H
3683.620	40.9	-39.5	31.5	48.8	74.0	33.1	H
5400.620	45.8	-38.4	34.0	50.2	74.0	28.2	H

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.

For the test setup photographs please see the test setup photos document.

A.2.2 EUT Operating Mode

The EUT exercise program was tested using the Burn-in test program for windows.

The system was configured for testing in a typical mode that a customer would normal use.

Cables were attached to each of the available I/O ports. Where applicable, peripherals were attached to the I/O cables. All the external I/O ports were exercised.

LABTM software is used to let the EUT to continuously copy data to external (Hard Disk & SD card) storage media, read and erase the data after copy action was finished. During the test, the a pattern of “H” characters was written to display on the LCD panel; the camera was in video mode; the music was repetitively played through the headset; the WIFI and BT function was on and worked in receiver mode.

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		

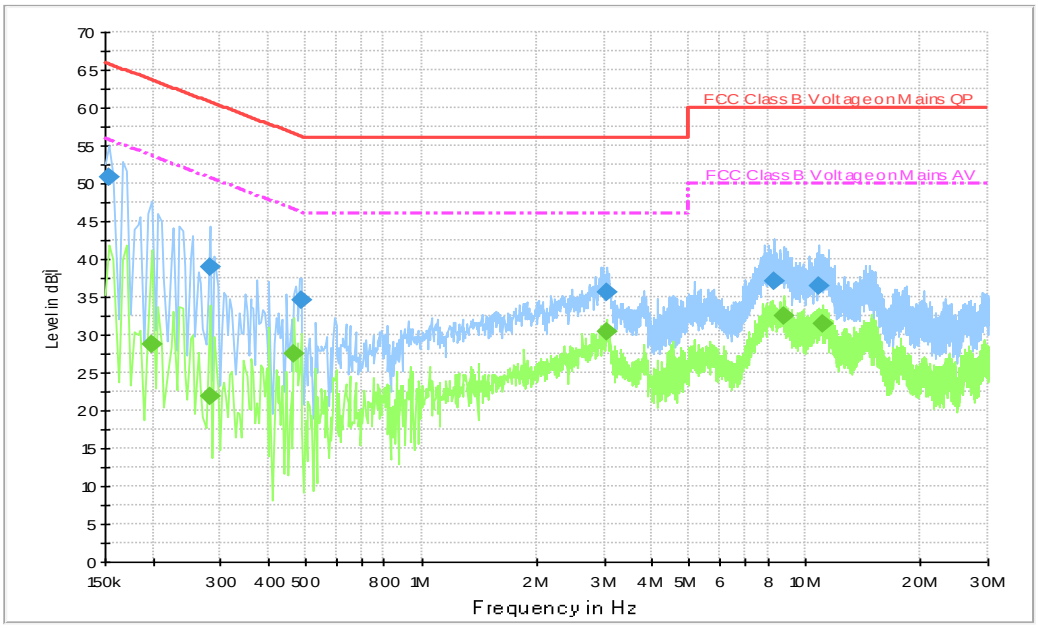
A.2.4 Test Condition in charging mode

Voltage（V）	Frequency（Hz）
120	60

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

A.2.5 Measurement Results

Set.33, Mode A, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4



Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Figure A.11 Conducted Emission

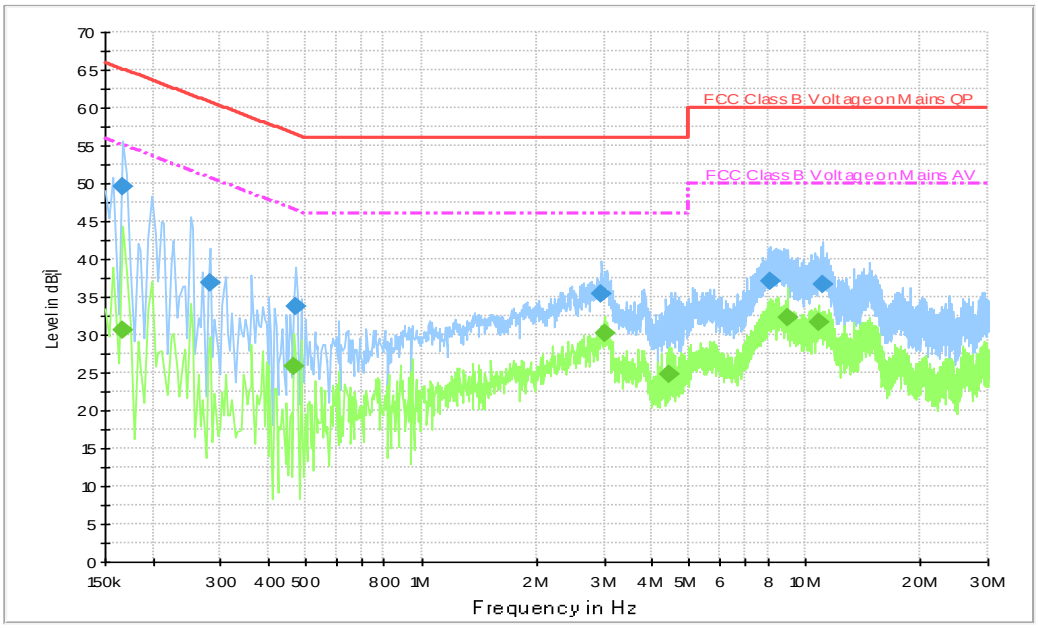
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154000	50.9	N	19.9	14.9	65.8
0.282000	39.0	L1	19.7	21.8	60.8
0.486000	34.6	N	19.7	21.6	56.2
3.030000	35.6	L1	19.6	20.4	56.0
8.274000	37.0	L1	19.6	23.0	60.0
10.858000	36.5	L1	19.7	23.5	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.198000	28.7	L1	19.7	25.0	53.7
0.282000	21.9	L1	19.7	28.9	50.8
0.466000	27.5	N	19.7	19.1	46.6
3.030000	30.5	L1	19.6	15.5	46.0
8.762000	32.4	L1	19.7	17.6	50.0
11.170000	31.4	L1	19.7	18.6	50.0

Set.34, Mode B, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4



Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Figure A.11 Conducted Emission

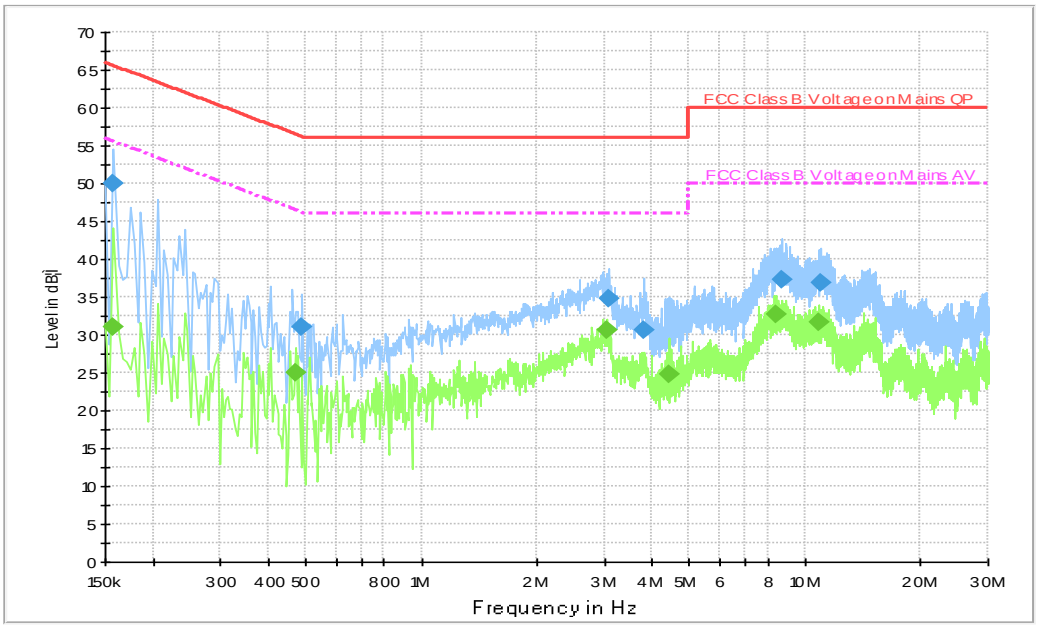
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	49.5	N	19.7	15.6	65.2
0.282000	36.9	L1	19.7	23.9	60.8
0.470000	33.8	N	19.7	22.7	56.5
2.958000	35.3	L1	19.6	20.7	56.0
8.082000	37.0	L1	19.6	23.0	60.0
11.130000	36.7	L1	19.7	23.3	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	30.7	N	19.7	24.5	55.2
0.466000	25.9	N	19.7	20.7	46.6
2.994000	30.3	L1	19.6	15.7	46.0
4.430000	24.8	N	19.6	21.2	46.0
8.978000	32.2	L1	19.7	17.8	50.0
10.818000	31.6	L1	19.7	18.4	50.0

Set.35, Mode A, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4



Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Figure A.11 Conducted Emission

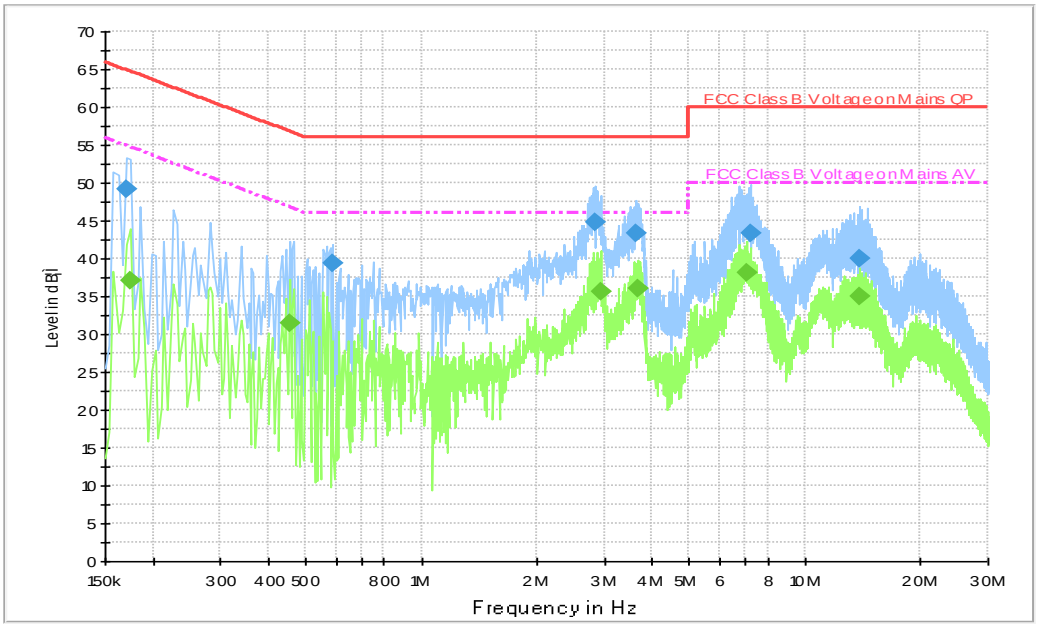
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	50.0	N	19.7	15.6	65.6
0.490000	31.1	N	19.7	25.1	56.2
3.082000	34.7	L1	19.6	21.3	56.0
3.790000	30.6	L1	19.6	25.4	56.0
8.710000	37.3	L1	19.7	22.7	60.0
10.994000	36.8	L1	19.7	23.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	31.1	N	19.7	24.5	55.6
0.470000	25.0	N	19.7	21.5	46.5
3.034000	30.7	L1	19.6	15.3	46.0
4.434000	24.7	N	19.6	21.3	46.0
8.410000	32.6	L1	19.7	17.4	50.0
10.902000	31.7	L1	19.7	18.3	50.0

Set.43, Mode A, Charging + ping + USB transfer + HDMI display + DP display + SD Card transfer + Camera + MP4



Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Figure A.11 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.170000	49.2	N	19.7	15.7	65.0
0.586000	39.3	N	19.6	16.7	56.0
2.834000	44.8	N	19.6	11.2	56.0
3.630000	43.3	N	19.6	12.7	56.0
7.186000	43.3	N	19.6	16.7	60.0
13.826000	40.0	N	19.7	20.0	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	37.1	N	19.7	17.6	54.8
0.454000	31.5	N	19.7	15.3	46.8
2.930000	35.7	N	19.6	10.3	46.0
3.678000	36.1	N	19.6	9.9	46.0
7.042000	38.1	N	19.6	11.9	50.0
13.962000	34.9	N	19.7	15.1	50.0

ANNEX B: Persons involved in this testing

Test Item	Tester
Radiated Emission	Ding Zai & Zhang Tianli & Li Pengfei & Yan Hanchen
Conducted Emission	Li Pengfei

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