TEST REPORT

OF

FCC Part 18

FCC ID: A3L-EP-PG900IBU

Equipment Under Test	: S Charger Pad
Model Name	: EP-PG900IBU
Applicant	: Samsung Electronics Co., Ltd.
Manufacturer	: Samsung Electronics Co., Ltd.
Date of Test(s)	: 2014.01.23 ~ 2014.02.13
Date of Issue	: 2014.02.14

In the configuration tested, the EUT complied with the standards specified above.

Tested By: **Date:** **2014.02.14**

Logan Lee

Approved By: **Date:** **2014.02.14**

Feel Jeong

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)
- Wireless Div. 3FL, 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 435-040
- 35, Giheungdanji-ro 121beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Korea 446-901

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1.2. Details of applicant

Applicant : Samsung Electronics Co., Ltd.
Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea
Contact Person : Lee, Woo Ram
Phone No. : +82 31 301 5379

1.3. Description of EUT

Kind of Product	S Charger Pad
Model Name	EP-PG900IBU
Power Supply	DC 5 V (Used adapter: AC 100 V-240 V)
Frequency Range	110 ㎑ ~ 205 ㎑
Operating Conditions	-20 ℃ ~ 50 ℃
Maximum Field strength	22.08 dBμV/m at 10 m, -7.46 dBμV/m at 300 m
Antenna Type	Inductive loop coil antenna

1.4. Declarations by the manufacturer

- Operation temperature: -20 ℃ ~ 50 ℃

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1.5. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal Date	Cal Interval	Cal Due.
Spectrum Analyzer	R&S	FSV30	101004	Jul. 20, 2013	Annual	Jul. 20, 2014
Loop Antenna	Schwarzbeck Mess-Elektronik	FMZB 1519	1519-039	Jul. 29, 2013	Biennial	Jul. 29, 2015
Mobile Test Unit	R&S	CMU200	109496	Feb. 05, 2014	Annual	Feb. 05, 2015
Test Receiver	R&S	ESU26	100194	Sep. 13, 2013	Annual	Sep. 13, 2014
2-Line V-Network	R&S	ENV216	101180	May 15, 2013	Annual	May 15, 2014
Turn Table	INNCO SYSTEMS	DT-3000S-3T	N/A	N/A	N/A	N.C.R.
Open Area Test Site	WILL TECHNOLOGY CO., LTD	L × W (22 m × 20 m)	N/A	N/A	N/A	N.C.R.

1.6. Worst case of test configurations

In order to check all kinds of possible configurations, EUT was evaluated with appropriate client and under each charging condition as below table.

EUT configuration	Charging current (㎃)	Mobile phone	Description
Charging Mode[1)] with resistive load	25		Maximum resistive load
	250		Medium resistive load
	666		Minimum resistive load
Charging Mode[2)] with client device (FCC ID : A3LGTI9500)		GT-I9500	Less than 1 % of battery
		GT-I9500	Less than 50 % of battery
		GT-I9500	100 % full charging of battery

1) Test Jig was used during the test to satisfy each current status by using resistive loads.
Output current = 25 ㎃ / 250 ㎃ / 666 ㎃

2) WPC device with client device was investigated each battery status.

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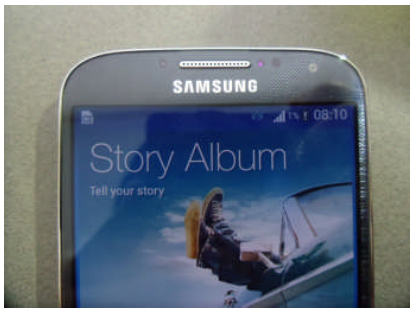
Battery status during charging condition :

- Less than 1 % of battery
- Less than 50 % of battery
- 100 % of battery

Galaxy S4 (GT-I9500)

		
Plot#1 – less than 1 % of battery	Plot#2 – less than 50 % of battery	Plot#3 – 100 % of battery

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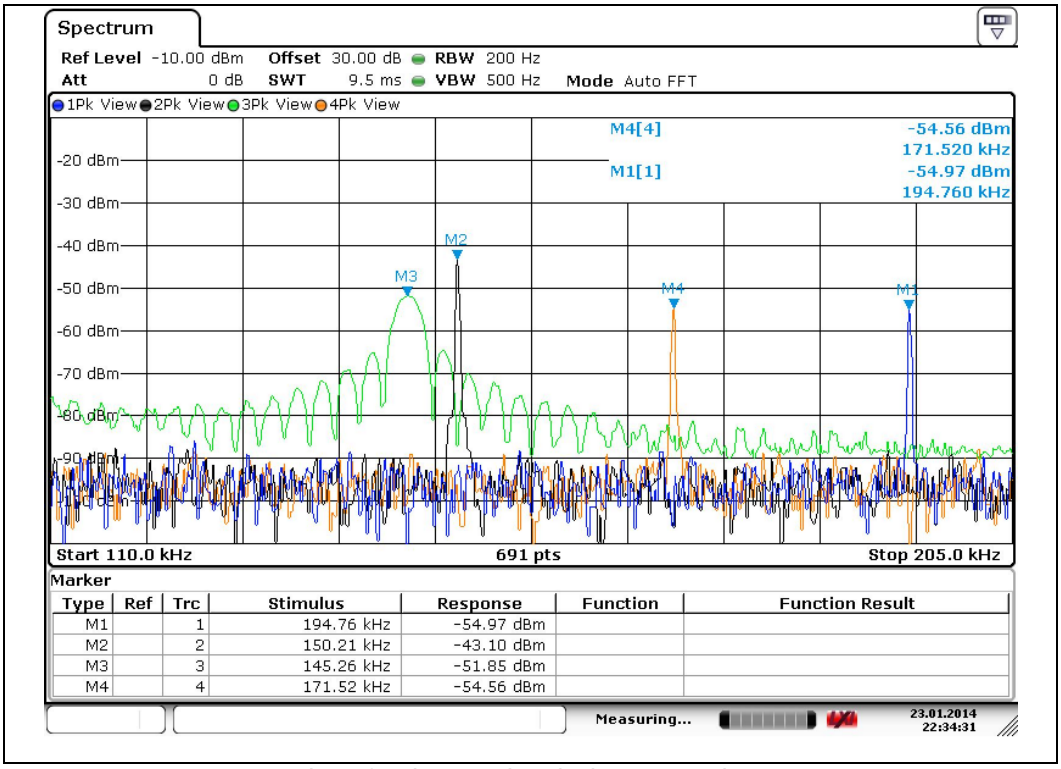
Operating configurations :

Galaxy S4 (GT-I9500)

- While the client device was in airplane mode (Trace#1 “M1”)
- While the client device was connected to an active data connection (Trace#2 “M2”)
  The device was tested under all modes and bands like 2G and 3G.
  In the result, **GSM850 / GPRS / 1 TX** was found in **Middle channel**.
- While the wireless charger is charging without the client device. (Trace#3 “M3”)
- While the wireless charger is charging with the client device turned off. (Trace#4 “M4”)



Plot – fundamental emission comparison

- The level of Trace#2 was more than Trace#1, 3 and 4 so Trace#2 was selected.
- Trace#2 as **GSM850 / GPRS / 1 TX** which was found in **Middle channel** should be tested with the client device as a worst case.

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1.7. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 18		
Section in FCC Part 18	**Test Item**	**Result**
18.305	Radiated Emissions	Complied
18.307	AC Conducted Power Line Emissions	Complied

1.8. Test Report Revision

Revision	Report number	Description
0	F690501/RF-RTL007371	Initial
1	F690501/RF-RTL007371-1	Added the limit to the result table in page 11-12.
2	F690501/RF-RTL007371-2	Re-test field strength at 10 m.

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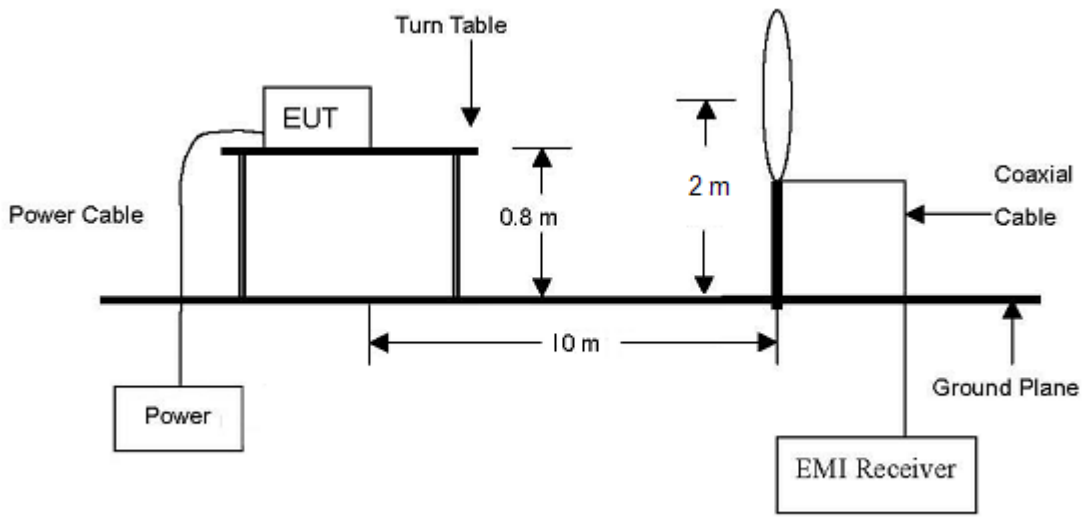
2. Field Strength of Fundamental & Spurious emissions

2.1. Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 9 ㎑ to 30 ㎒.



2.2. Limit

2.2.1. Radiated emission limits

According to §18.305 (b), The field strength levels of emissions which lie outside the bands specified in §18.301, unless otherwise indicated, shall not exceed the following :

Equipment	Operating frequency	RF power generated by equipment(watts)	Field strength limit(㎶/m)	Distance (meter)
Any type unless otherwise specified(miscellaneous)	Any ISM frequency	Below 500 500 or more	25 25 x SQRT (power/500)	300 [1]300
	Any non-ISM frequency	**Below 500** 500 or more	**15** 15 x SQRT (power/500)	**300** [1]300
Industrial heaters and RF stabilized arc welders	On or below 5,725 ㎒ Above 5,725 ㎒	Any Any	10 ([2])	1600 ([2])
Medical diathermy	Any ISM frequency Any non-ISM frequency	Any Any	25 15	300 300
Ultrasonic	Below 490 ㎑	Below 500 500 or more	2,400/F(㎑) 2,400/F(㎑) x SQRT(power/500)	300 [3]300
	490 to 1,600 ㎑ Above 1,600 ㎑	Any Any	24,000/F(㎑) 15	30 30
Induction cooking ranges	Below 90 ㎑ On or above 90 ㎑	Any Any	1,500 300	[4]30 [4]30

[1]Field strength may not exceed 10 ㎶/m at 1 600 meters. Consumer equipment operating below 1 000 ㎒ is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

[2]Reduced to the greatest extent possible.

[3]Field strength may not exceed 10 ㎶/m at 1 600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.

[4]Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.

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2.3. Test Procedures

Radiated emissions from the EUT were measured according to the dictates of MP-5.

2.3.1. Test Procedures for emission from 9 ㎑ to 30 ㎒

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. Then antenna is a loop antenna is fixed at 2 meter above the ground to determine the maximum value of the field strength. Both parallel and perpendicular of the antenna are set to make the measurement.

c. For each suspected emission, the EUT was arranged to its worst case and then the table was turned from 0 degrees to 360 degrees to find the maximum reading.

d. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

e. The test data of the worst-case condition was recorded.

Below 150 ㎑, Set the spectrum analyzer : RBW = 200 ㎐, VBW ≥ RBW, Span = enough to catch the trace, Sweep time = auto, Detector function = Quasi-peak, Trace mode = Max hold.

150 ㎑ to 30 ㎒, Set the spectrum analyzer : RBW = 9 ㎑, VBW ≥ RBW, Span = enough to catch the trace, Sweep time = auto, Detector function = Quasi-peak, Trace mode = Max hold.

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2.4. Test Result

Ambient temperature : (24 ± 1) ℃
Relative humidity : 47 % R.H.

The following table shows the highest levels of radiated emissions on both polarizations of horizontal and vertical.

2.4.1. Field Strength of Fundamental

2.4.1.1. Test mode : Charging mode with resistive load

A. Charging mode with resistive load (Charging current 25 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.142	21.30	Q.P.	H	20.01	0.48	41.79	12.25	23.52	11.27

B. Charging mode with resistive load (Charging current 250 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.167	16.40	Q.P.	H	19.99	0.48	36.87	7.33	23.52	16.19

C. Charging mode with resistive load (Charging current 666 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.146	18.24	Q.P.	H	20.00	0.48	38.72	9.18	23.52	14.34

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2.4.1.2. Test mode : Charging mode with client device_Galaxy S4(GT-I9500)

A. Charging mode with client device (less than 1 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.186	11.50	Q.P.	H	20.01	0.49	32.00	2.46	23.52	21.06

B. Charging mode with client device (less than 50 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.189	10.30	Q.P.	H	20.01	0.49	30.80	1.26	23.52	22.26

C. Charging mode with client device (100 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
0.185	8.80	Q.P.	H	20.01	0.49	29.30	-0.24	23.52	23.76

Note;

1. Result at 300 m [dBμV/m]= Actual at 10 m [dBμV/m] + 20 log(10/300)

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2.4.2. Spurious Emissions

2.4.2.1. Test mode : Charging mode with resistive load

A. Charging mode with resistive load (Charging current 25 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.04	Not detected	-	-	-	-	-	-	-	-
0.05	-3.26	Q.P.	H	20.12	0.41	17.27	-12.27	23.52	35.79
0.43	1.30	Q.P.	H	20.08	0.50	21.88	-7.66	23.52	31.18
Above 0.44	Not detected	-	-	-	-	-	-	-	-

B. Charging mode with resistive load (Charging current 250 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.05	Not detected	-	-	-	-	-	-	-	-
0.06	-3.40	Q.P.	H	20.06	0.41	17.07	-12.47	23.52	35.99
0.59	-3.80	Q.P.	H	20.19	0.50	16.89	-12.65	23.52	36.17
Above 0.60	Not detected	-	-	-	-	-	-	-	-

C. Charging mode with resistive load (Charging current 666 ㎃ status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.03	Not detected	-	-	-	-	-	-	-	-
0.04	-3.21	Q.P.	H	20.19	0.41	17.39	-12.15	23.52	35.67
0.44	1.50	Q.P.	H	20.08	0.50	22.08	-7.46	23.52	30.98
Above 0.45	Not detected	-	-	-	-	-	-	-	-

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2.4.2.2. Test mode : Charging mode with client device_Galaxy S4(GT-I9500)

A. Charging mode with client device (less than 1 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (MHz)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.06	Not detected	-	-	-	-	-	-	-	-
0.07	-3.41	Q.P.	H	20.08	0.41	17.08	-12.46	23.52	35.98
0.58	-1.40	Q.P.	H	20.19	0.50	19.29	-10.25	23.52	33.77
Above 0.59	Not detected	-	-	-	-	-	-	-	-

B. Charging mode with client device (less than 50 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (MHz)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.06	Not detected	-	-	-	-	-	-	-	-
0.07	-3.56	Q.P.	H	20.08	0.41	16.93	-12.61	23.52	36.13
0.64	0.70	Q.P.	H	20.22	0.50	21.42	-8.12	23.52	31.64
Above 0.65	Not detected	-	-	-	-	-	-	-	-

C. Charging mode with client device (100 % battery status)

Radiated Emissions			Ant	Correction Factors		Total		FCC Limit	
Frequency (MHz)	Reading (dBμV)	Detect Mode	Pol.	Ant. (dB/m)	Cable (dB)	Actual (dBμV/m) at 10 m	Result (dBμV/m) at 300 m[1]	Limit (dBμV/m) at 300 m	Margin (dB)
Below 0.07	Not detected	-	-	-	-	-	-	-	-
0.08	-3.46	Q.P.	H	20.07	0.41	17.02	-12.52	23.52	36.04
0.56	-1.50	Q.P.	H	20.18	0.50	19.18	-10.36	23.52	33.88
Above 0.57	Not detected	-	-	-	-	-	-	-	-

Note;

1. Result at 300 m [dBμV/m]= Actual at 10 m [dBμV/m] + 20 log(10/300)

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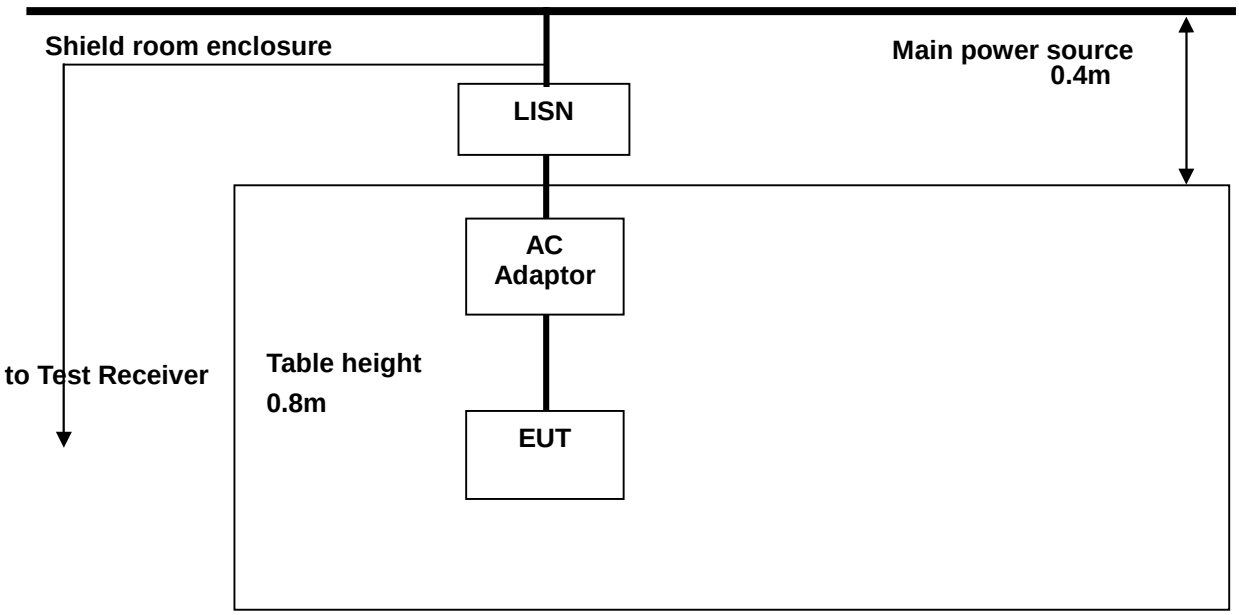
3. AC Conducted power line Emissions

3.1. Test Setup



3.2. Limit

According to §18.307 for an intentional radiator 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 ㎑ to 30 ㎒, shall not exceed the limits in the following table, as measured using a 50 uH/50 ohm line impedance stabilization network(LISN).
Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequency ranges.

(b) All other part 18 consumer devices :

Frequency of Emission (㎒)	Conducted limit (㏈㎶)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

* Decreases with the logarithm of the frequency.

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3.3. Test Procedures

AC conducted emissions from the EUT were measured according to the dictates of MP-5.

1. The test procedure is performed in a 6.5 m × 3.6 m× 3.6 m (L × W × H) shielded room. The EUT along with its peripherals were placed on a 1.0 m(W)× 1.5 m(L) and 0.8 m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
2. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.
3. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
4. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

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3.4. Test Results

The following table shows the highest levels of conducted emissions on both phase of Hot and Neutral line.

Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

Frequency range : 0.15 ㎒ – 30 ㎒
Measured Bandwidth : 9 ㎑

A. Charging mode with resistive load (Charging current 25 ㎃ status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(㎒)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.57	34.19	27.48	N	56.00	46.00	21.81	18.52
1.41	35.18	29.98	N	56.00	46.00	20.82	16.02
1.69	35.47	30.92	N	56.00	46.00	20.53	15.08
1.98	36.05	31.81	N	56.00	46.00	19.95	14.19
2.26	35.81	30.63	N	56.00	46.00	20.19	15.37
7.63	29.50	22.90	N	60.00	50.00	30.50	27.10
0.56	35.13	21.79	L1	56.00	46.00	20.87	24.21
1.41	34.11	26.65	L1	56.00	46.00	21.89	19.35
1.69	34.20	27.80	L1	56.00	46.00	21.80	18.20
2.26	33.82	27.46	L1	56.00	46.00	22.18	18.54
3.39	33.37	25.52	L1	56.00	46.00	22.63	20.48
7.07	30.69	20.41	L1	60.00	50.00	29.31	29.59

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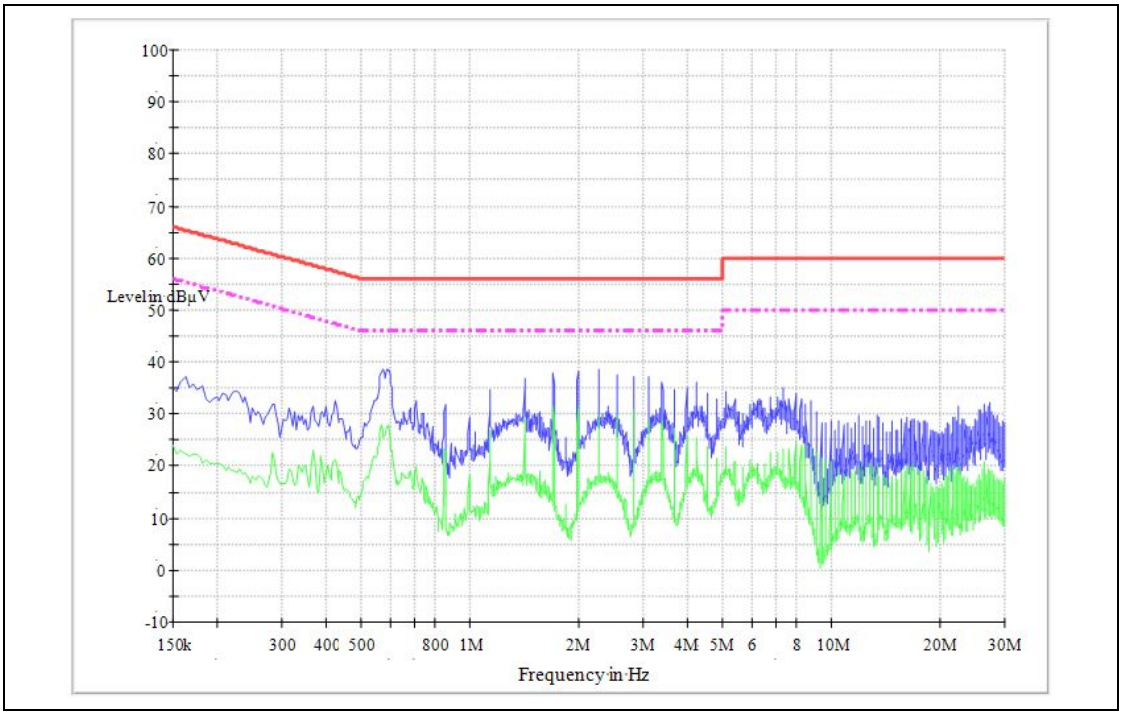
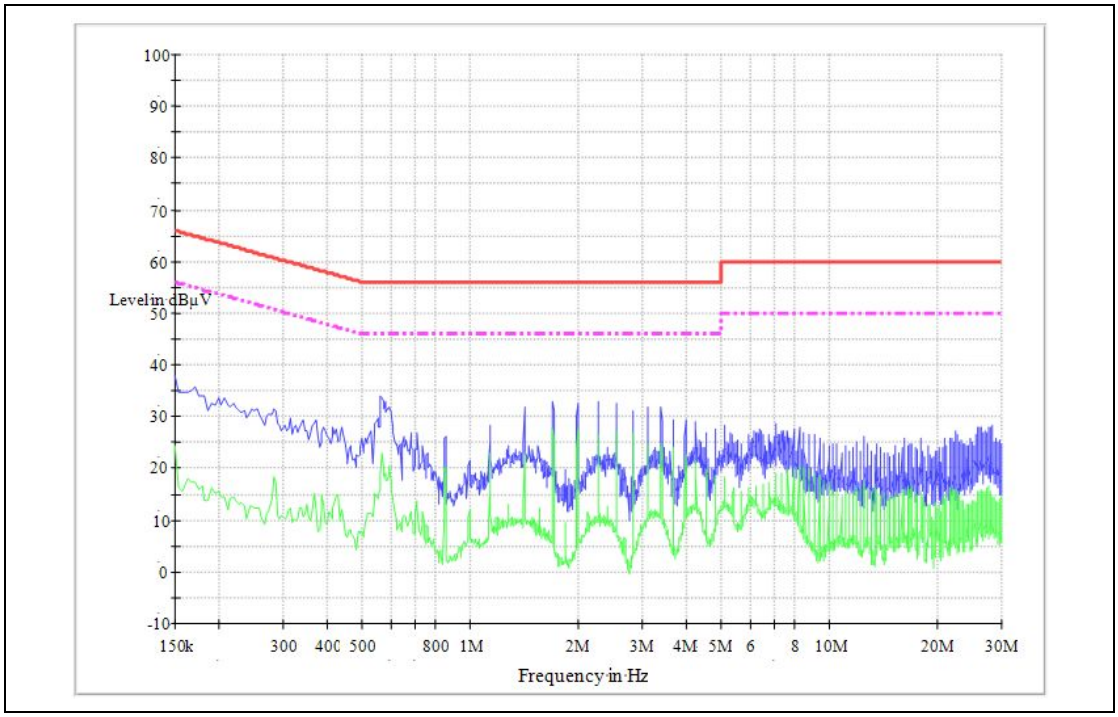
Test mode: (Neutral)



Test mode: (Hot)



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B. Charging mode with resistive load (Charging current 250 ㎃ status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(㎒)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.59	32.99	26.24	N	56.00	46.00	23.01	19.76
0.88	32.12	26.88	N	56.00	46.00	23.88	19.12
1.47	35.21	30.58	N	56.00	46.00	20.79	15.42
2.06	37.08	32.30	N	56.00	46.00	18.92	13.70
2.65	37.86	33.25	N	56.00	46.00	18.14	12.75
3.82	37.63	32.94	N	56.00	46.00	18.37	13.06
0.60	32.97	19.77	L1	56.00	46.00	23.03	26.23
1.47	32.30	22.95	L1	56.00	46.00	23.70	23.05
2.64	27.59	15.44	L1	56.00	46.00	28.41	30.56
3.22	26.45	13.01	L1	56.00	46.00	29.55	32.99
3.81	26.57	14.64	L1	56.00	46.00	29.43	31.36
7.35	33.28	24.29	L1	60.00	50.00	26.72	25.71

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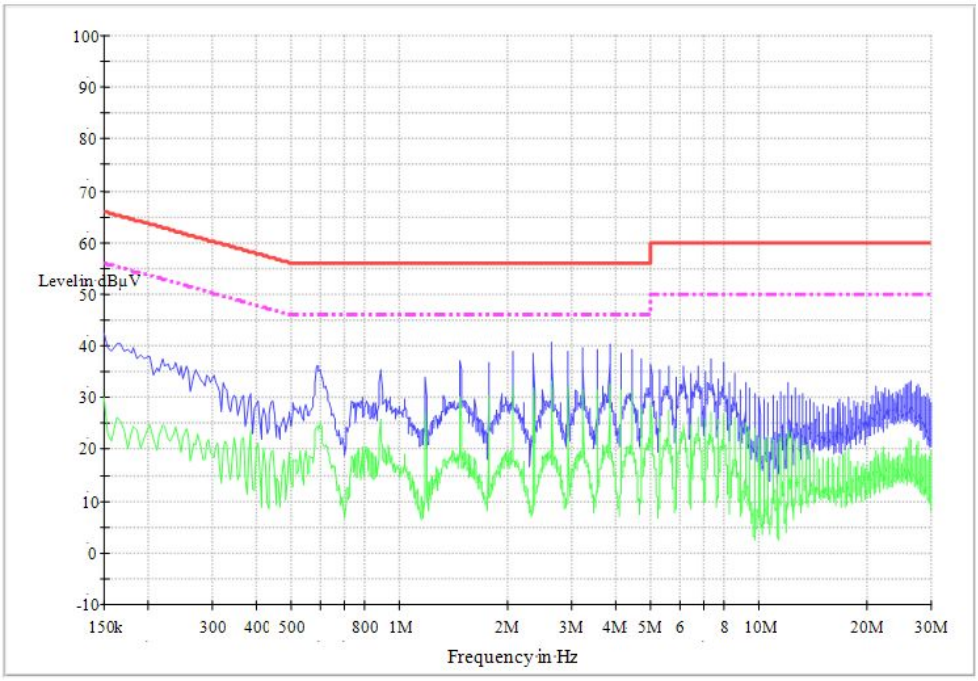
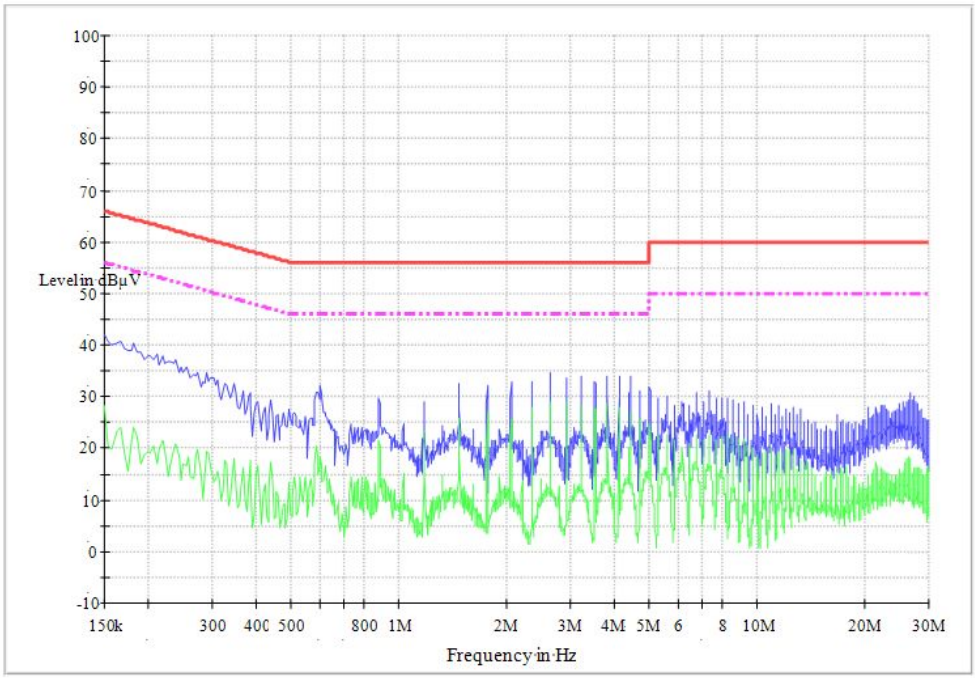
Test mode: (Neutral)



Test mode: (Hot)



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C. Charging mode with resistive load (Charging current 666 ㎃ status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(㎒)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.58	30.83	25.66	N	56.00	46.00	25.17	20.34
1.06	27.40	21.14	N	56.00	46.00	28.60	24.86
1.41	29.41	23.40	N	56.00	46.00	26.59	22.60
2.12	27.93	21.43	N	56.00	46.00	28.07	24.57
3.18	27.12	19.12	N	56.00	46.00	28.88	26.88
6.71	31.74	23.53	N	60.00	50.00	28.26	26.47
0.17	39.14	26.98	L1	64.96	54.96	25.82	27.98
0.57	29.12	22.44	L1	56.00	46.00	26.88	23.56
1.42	29.24	25.37	L1	56.00	46.00	26.76	20.63
1.77	30.64	26.16	L1	56.00	46.00	25.36	19.84
2.48	29.62	25.93	L1	56.00	46.00	26.38	20.07
8.51	31.50	27.88	L1	60.00	50.00	28.50	22.12

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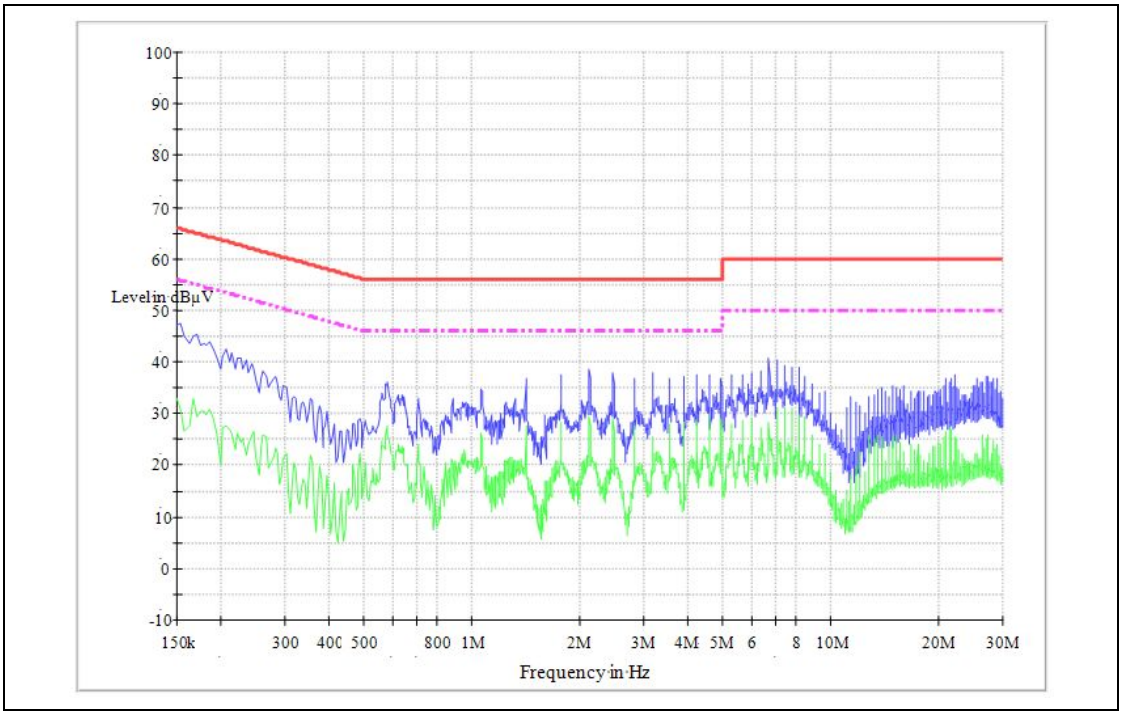
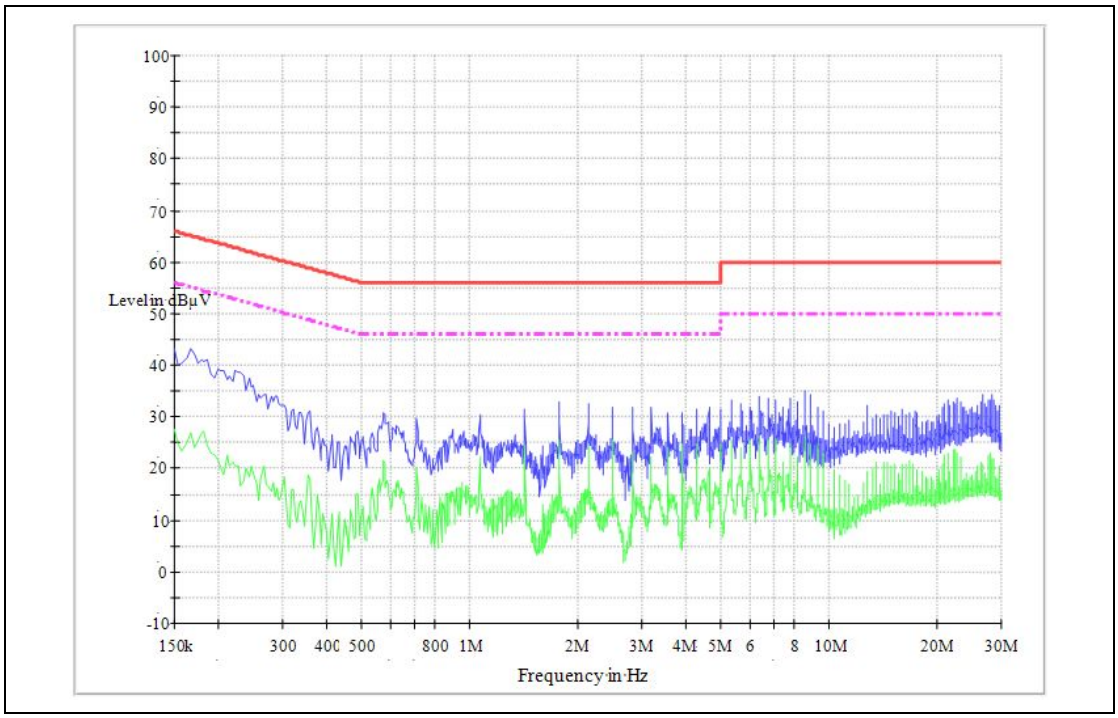
Test mode: (Neutral)



Test mode: (Hot)



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D. Charging mode with client device (less than 1 % battery status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(MHz)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.19	37.71	31.36	N	64.04	54.04	26.33	22.68
0.58	34.55	30.00	N	56.00	46.00	21.45	16.00
1.14	33.73	28.10	N	56.00	46.00	22.27	17.90
1.90	35.50	30.78	N	56.00	46.00	20.50	15.22
2.66	37.72	33.16	N	56.00	46.00	18.28	12.84
4.18	40.26	35.69	N	56.00	46.00	15.74	10.31
0.19	36.73	27.75	L1	64.04	54.04	27.31	26.29
0.57	26.99	19.97	L1	56.00	46.00	29.01	26.03
1.14	28.98	24.78	L1	56.00	46.00	27.02	21.22
2.66	33.26	29.67	L1	56.00	46.00	22.74	16.33
3.41	31.53	27.06	L1	56.00	46.00	24.47	18.94
3.80	36.04	32.67	L1	56.00	46.00	19.96	13.33

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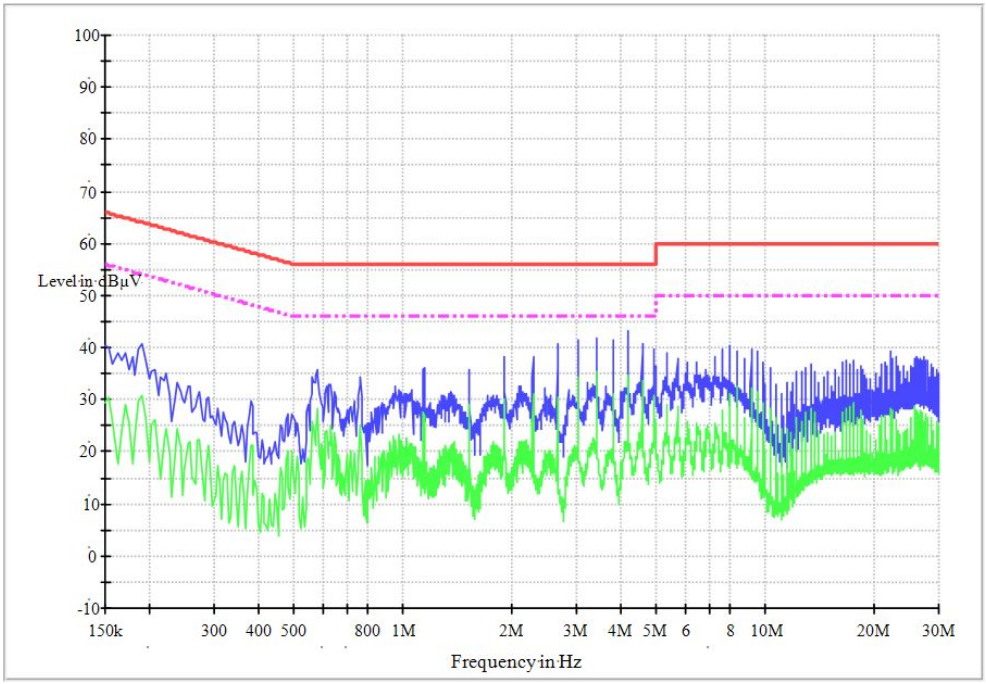
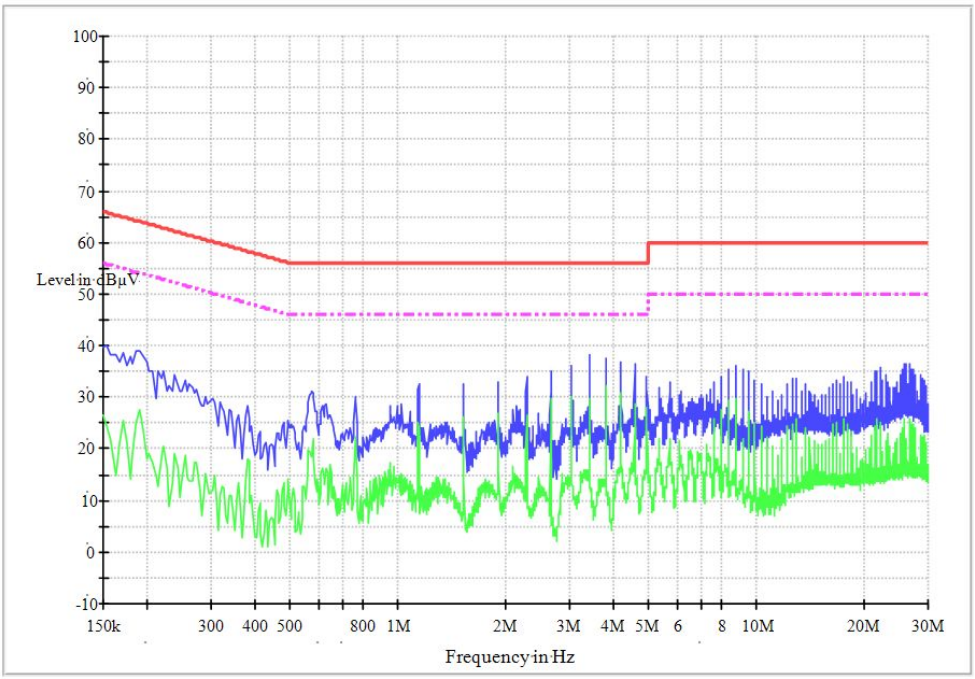
Test mode: (Neutral)



Test mode: (Hot)



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E. Charging mode with client device (less than 50 % battery status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(MHz)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.15	41.04	32.99	N	66.00	56.00	24.96	23.01
0.24	32.39	27.51	N	62.10	52.10	29.71	24.59
0.60	36.10	30.71	N	56.00	46.00	19.90	15.29
1.19	34.37	29.61	N	56.00	46.00	21.63	16.39
2.08	38.23	32.44	N	56.00	46.00	17.77	13.56
3.57	35.79	30.48	N	56.00	46.00	20.21	15.52
0.19	36.85	25.25	L1	64.04	54.04	27.19	28.79
0.60	31.80	24.15	L1	56.00	46.00	24.20	21.85
1.49	31.71	27.96	L1	56.00	46.00	24.29	18.04
2.09	33.77	28.98	L1	56.00	46.00	22.23	17.02
2.68	32.17	28.29	L1	56.00	46.00	23.83	17.71
3.87	29.40	25.38	L1	56.00	46.00	26.60	20.62

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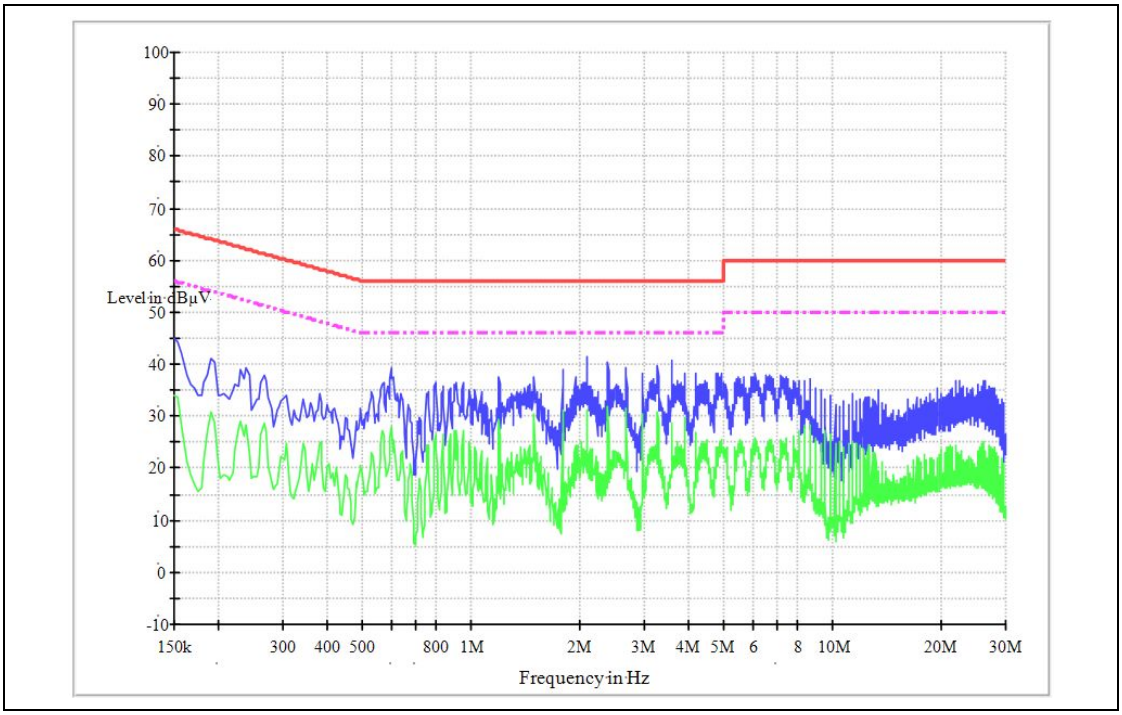
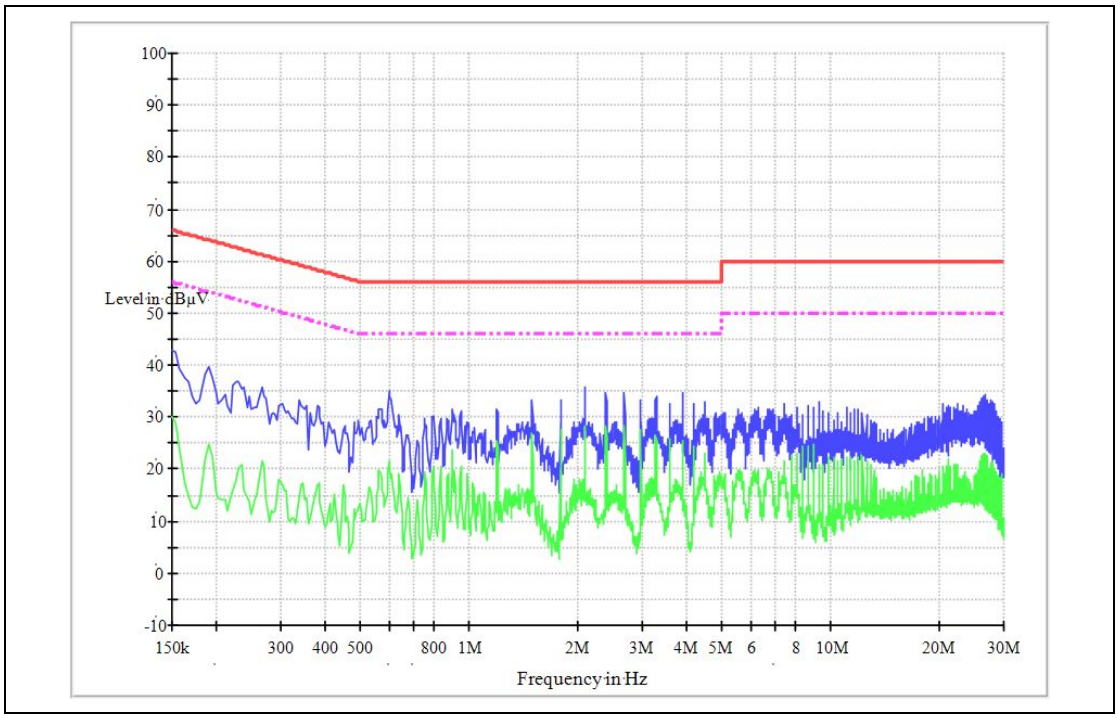
Test mode: (Neutral)



Test mode: (Hot)



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F. Charging mode with client device (100 % battery status)

FREQ.	LEVEL(dBμV)		LINE	LIMIT(dBμV)		MARGIN(dB)	
(MHz)	Q-Peak	Average		Q-Peak	Average	Q-Peak	Average
0.21	36.89	30.71	N	63.21	53.21	26.32	22.50
0.60	34.37	29.39	N	56.00	46.00	21.63	16.61
1.56	31.76	31.25	N	56.00	46.00	24.24	14.75
2.05	38.68	34.93	N	56.00	46.00	17.32	11.07
3.28	37.16	20.47	N	56.00	46.00	18.84	25.53
6.00	35.95	33.01	N	60.00	50.00	24.05	16.99
0.19	35.90	26.65	L1	64.04	54.04	28.14	27.39
0.61	30.20	21.80	L1	56.00	46.00	25.80	24.20
1.50	21.49	13.16	L1	56.00	46.00	34.51	32.84
1.88	20.98	14.18	L1	56.00	46.00	35.02	31.82
3.01	17.83	12.37	L1	56.00	46.00	38.17	33.63
3.76	21.58	15.56	L1	56.00	46.00	34.42	30.44

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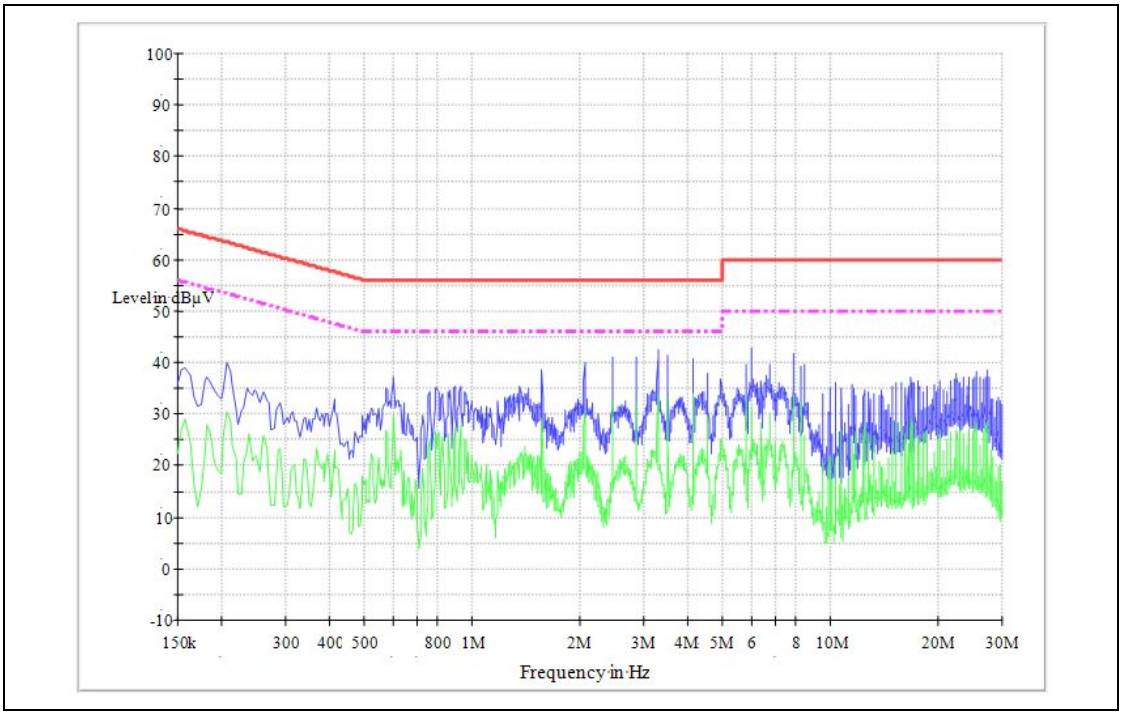
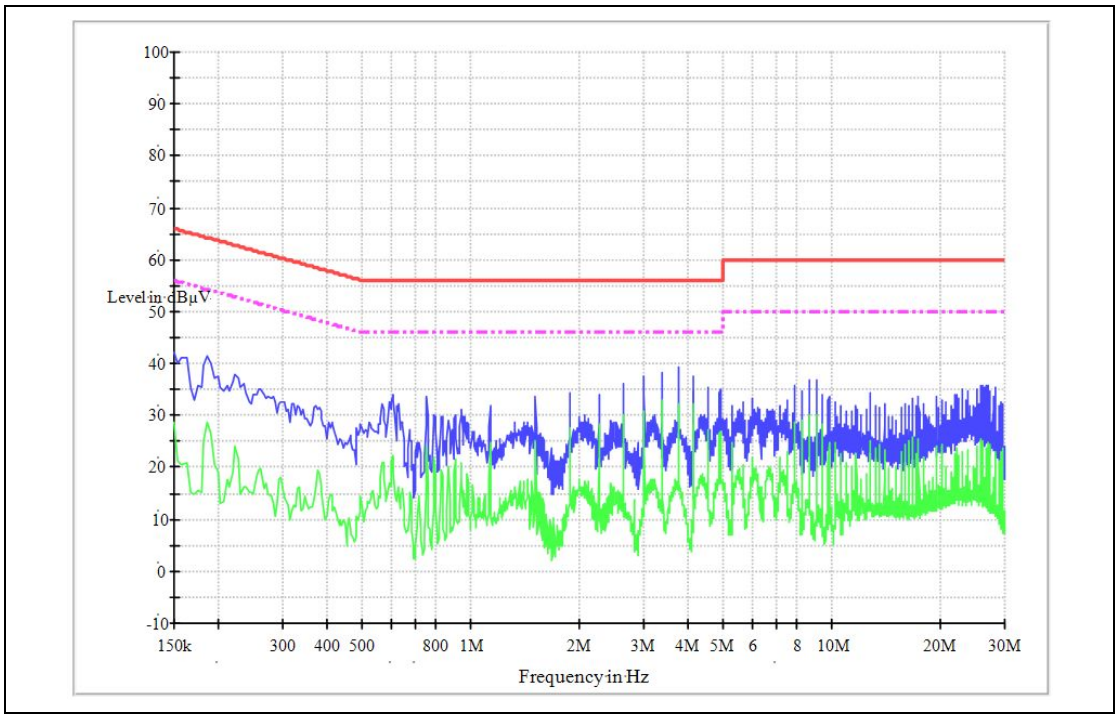
Test mode: (Neutral)



Test mode: (Hot)



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