FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2403-1, XT2403-2
FCC ID	:	IHDT56AQ5
STANDARD	:	FCC Part 15 Subpart C §15.209
CLASSIFICATION	:	(DCD) Part 15 Low Power Transmitter Below 1705 kHz
TEST DATE(S)	:	Jan. 02, 2024 ~ Jan. 16, 2024

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR3D1818E	01	Initial issue of report	Jan. 26, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	2.1049	20dB Bandwidth	Reporting Only	-
3.1	2.1049	99% Occupied Bandwidth	Reporting Only	-
3.2	15.209	Radiated Emission	Pass	Under limit 13.45 dB at 909.790 MHz
3.3	15.207	AC Conducted Emission	Pass	Under limit 13.50 dB at 0.187 MHz
3.4	15.203	Antenna Requirements	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2403-1, XT2403-2
FCC ID	IHDT56AQ5
IMEI Code	Conducted: 354958440021450 Conduction: 354958440030899 Radiation: 354958440022375
HW Version	DVT2
SW Version	U2UM34.9
WPT Frequency Range	110 kHz ~ 148 kHz
WPT Type of Modulation	ASK
WPT Antenna Type	Coil Antenna
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two models: XT2403-1 is pSIM+pSIM sample, XT2403-2 is pSIM + eSIM sample, no other difference, full test with the model XT2403-2.

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Test Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-KS 03CH02-KS TH01-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-KS	AUDIX	E3	6.2009-8-24al
2.	CO01-KS	AUDIX	E3	6.2009-8-24

1.7 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.209, §15.207
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

1.8 Specification of Accessory

Accessories Information				
AC Adapter 1(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1251
AC Adapter 1(EU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1252
AC Adapter 1(UK)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1253
AC Adapter 1(AU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1255
AC Adapter 1(AR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1256
AC Adapter 1(BR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1257
AC Adapter 2(US)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1251
AC Adapter 2(EU)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1252
AC Adapter 2(UK)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1253
AC Adapter 2(AU)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1255
AC Adapter 2(AR)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1256
AC Adapter 2(BR)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1257
AC Adapter 2(CHILE)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1259
AC Adapter 2(IN)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1254
AC Adapter 3(IN)	**Brand Name**	Motorola(Acbel)	**Model Name**	MC-684N
Battery	**Brand Name**	Motorola (ATL)	**Model Name**	QM45
USB Cable 1	**Brand Name**	Saibao	**Model Name**	SC18D71644
USB Cable 2	**Brand Name**	Luxshare	**Model Name**	SC18E08104
Wireless Earphone	**Brand Name**	Motorola	**Model Name**	XT2441-1
Wireless Charging dock	**Marketing Name**	Turbo Power 50W Wireless Charging Stand	**Model Name**	MW-02

2 Test Configuration of Equipment Under Test

2.1 Test Mode

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 1000 MHz).

b. AC power line Conducted Emission was tested under maximum output power.

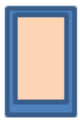
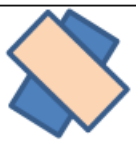
Test Items	Function Type
Occupied Bandwidth	Mode 1: Wireless Charging(Reverse charging)+ WPT 121KHz Mode 2: Wireless Charging(Reverse charging) + WPT 146KHz
Radiated Emission	Mode 1: Wireless Charging(Reverse charging) + WPT 121KHz Mode 2: Wireless Charging(Reverse charging) + WPT 146KHz
AC Conducted Emission	Mode 1 : Wireless Charging(Reverse charging) + Adapter 1 + USB Cable 1

Remark:

1. The worst case of radiated emission is mode 2, only this mode is shown in the report;

2. The tests were performed with Adapter 1 and USB Cable 1;

3. The three WPT charging positions are pretested and shown as below, only the worst position are recorded in the report:

Parallel	Perpendicular	Tilt
		

2.2 Connection Diagram of Test System

This example is connection diagram of EUT test configurations.

For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Mobile Phone (WPT Client)	Motolora	XT2403-2	IHDT56AQ5	N/A	N/A

3 Test Result

3.1 20dB and 99% Occupied Bandwidth Measurement

3.1.1 Limit of 20dB and 99% Occupied Bandwidth

Reporting only, 99% OBW shall not located within 15.205 restricted bands.

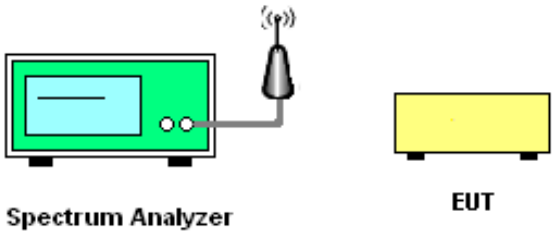
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The 20dB bandwidth is measured with a spectrum analyzer connected via a receiver antenna placed near the EUT while wirelessly charging a charging board.
2. Use the following spectrum analyzer settings for 99 % Bandwidth measurement.
3. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 20dB and 99% Bandwidth

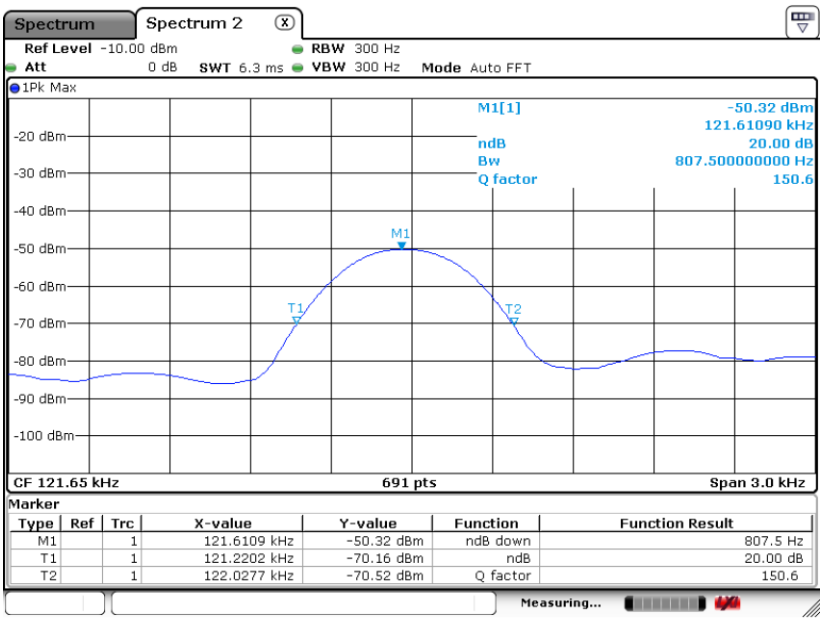
Test Engineer :	Joe	Temperature :	22~24℃
		Relative Humidity :	53~55%

Mode	20dB Bandwidth(KHz)	Occupied Bandwidth (kHz)
Mode 1	0.81	0.73
Mode 2	0.80	0.71

Remark: Because the measured signal is CW adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW

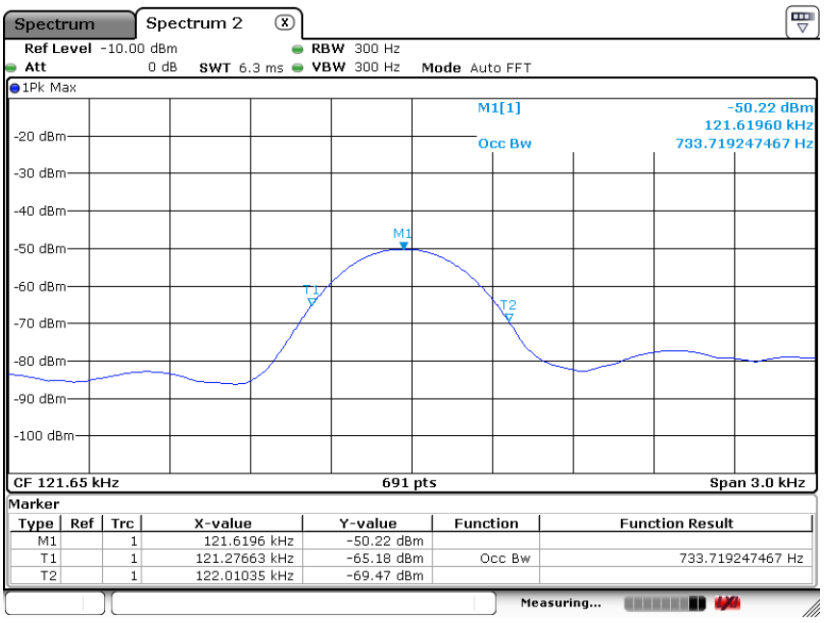
Mode 1:

20 dB Bandwidth Plot



Date: 2.JAN.2024 15:00:50

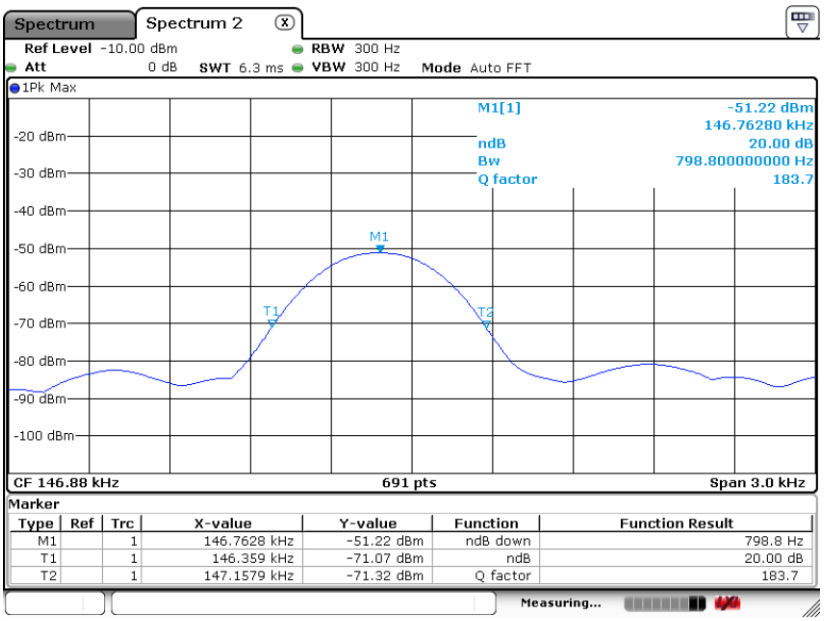
99% Occupied Bandwidth Plot



Date: 2.JAN.2024 15:02:00

Mode 2:

20 dB Bandwidth Plot



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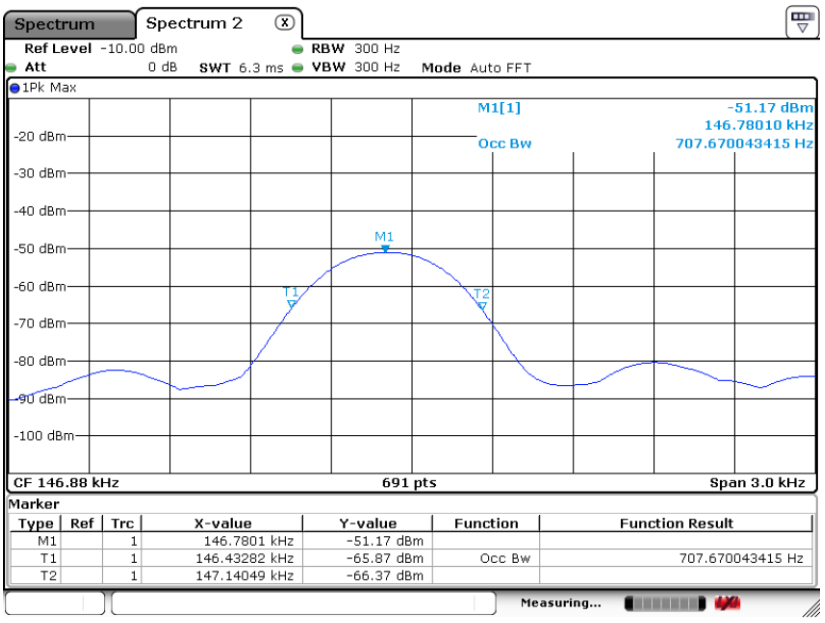
99% Occupied Bandwidth Plot



Date: 2.JAN.2024 15:10:16

3.2 Radiated Emission Measurement

3.2.1 Limit of Radiated Emission

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Receiver Parameter	Setting
Frequency Range: 9kHz~150kHz	RBW 200Hz for QP
Frequency Range: 150kHz~30MHz	RBW 9kHz for QP
Frequency Range: 30MHz~1000MHz	RBW 120kHz for Peak

Note: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For radiated emissions from 9kHz to 1GHz test distance is 3m

For 9kHz ~ 30MHz

1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
3. specific line (dBμV/m) = 20 log Emission level (μV/m)
4. Limit line = specific limits (dBμV/m) + distance extrapolation factor.

3.2.2 Measuring Instruments

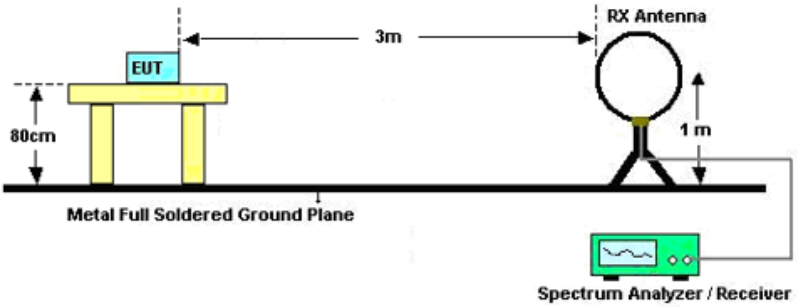
See list of measuring equipment of this test report.

3.2.3 Measuring Instrument Setting

Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

3.2.4 Test Setup of Radiated Emission

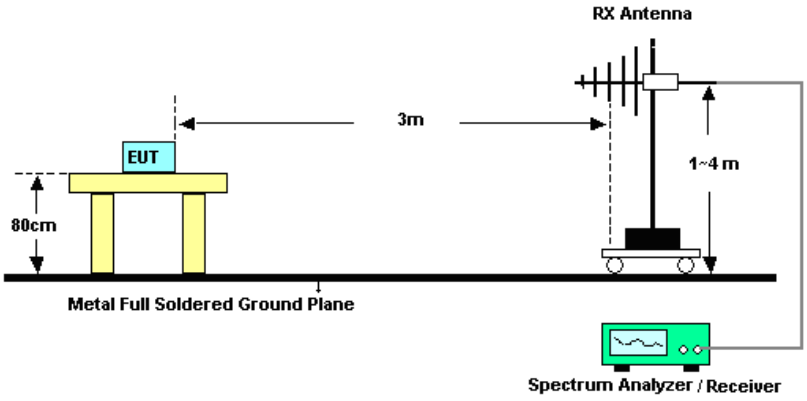
For radiated emissions below 30MHz



Note:

1. There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.
2. Tested for radiated below 30 MHz using a loop antenna in accordance with C63.10, the antenna was positioned in three antenna orientations: horizontal, vertical, and ground-parallel three polarization's, the worst case is horizontal & vertical polarization, test data of two mode was reported.

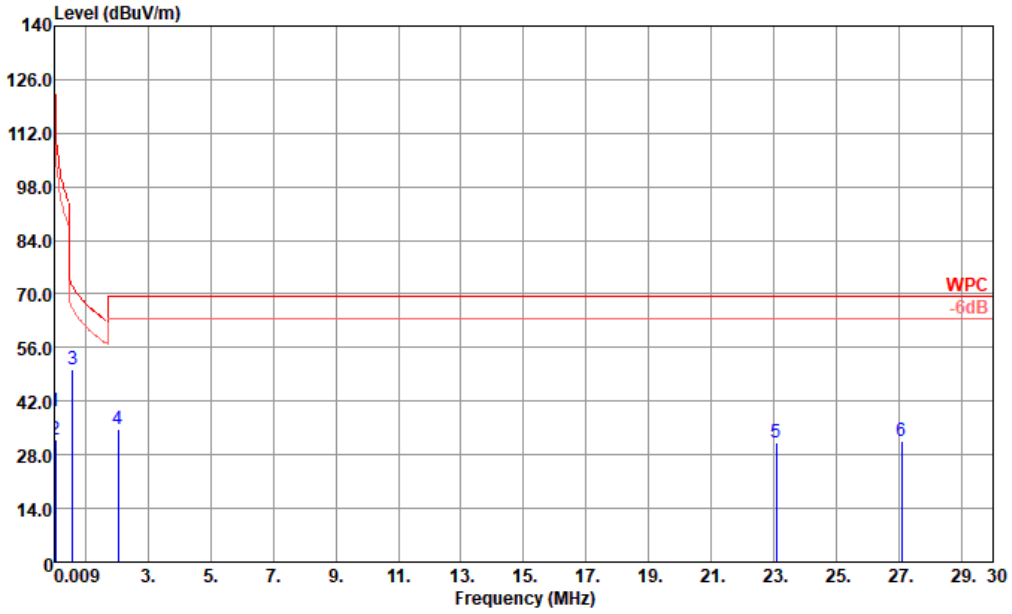
For radiated emissions above 30MHz



3.2.5 Test Result of Radiated Emission (9kHz ~ 30MHz)

<Mode 1>

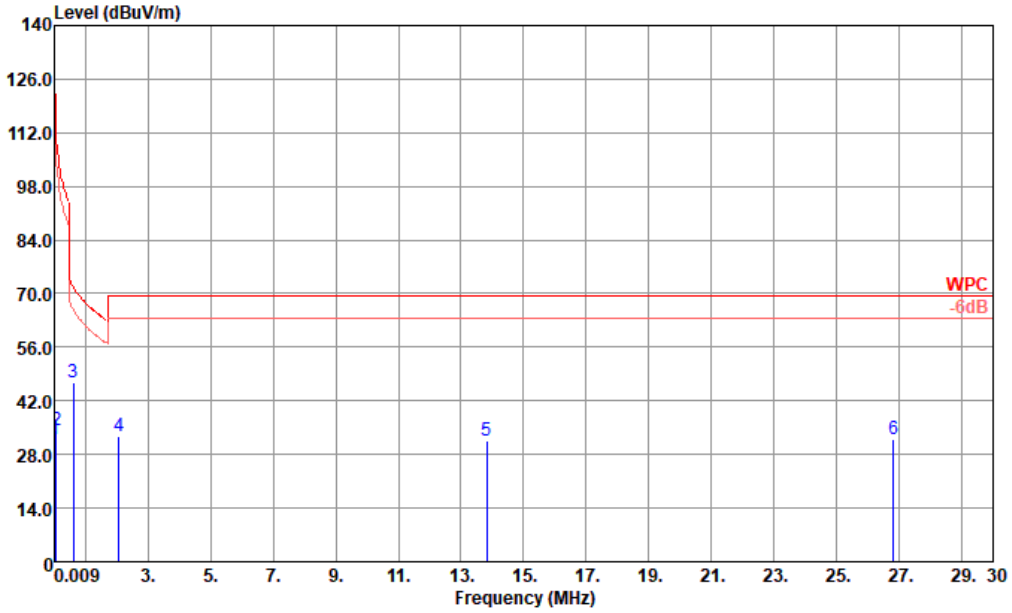
Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Horizontal	Relative Humidity :	41~42%



Site : 03CH02-KS
Condition : WPC 3m HFH2 101125 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 a	0.030	39.58	-78.51	118.09	17.76	21.80	0.02	---	---	Average
2	0.050	32.10	-81.51	113.61	10.28	21.80	0.02	---	---	Average
3 q	0.601	50.40	-21.60	72.00	28.37	22.00	0.03	---	---	QP
4	2.042	34.56	-34.98	69.54	12.49	22.00	0.07	---	---	QP
5	23.079	31.35	-38.19	69.54	9.15	21.60	0.60	---	---	QP
6	27.090	31.39	-38.15	69.54	9.25	21.45	0.69	---	---	QP

Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Vertical	Relative Humidity :	41~42%

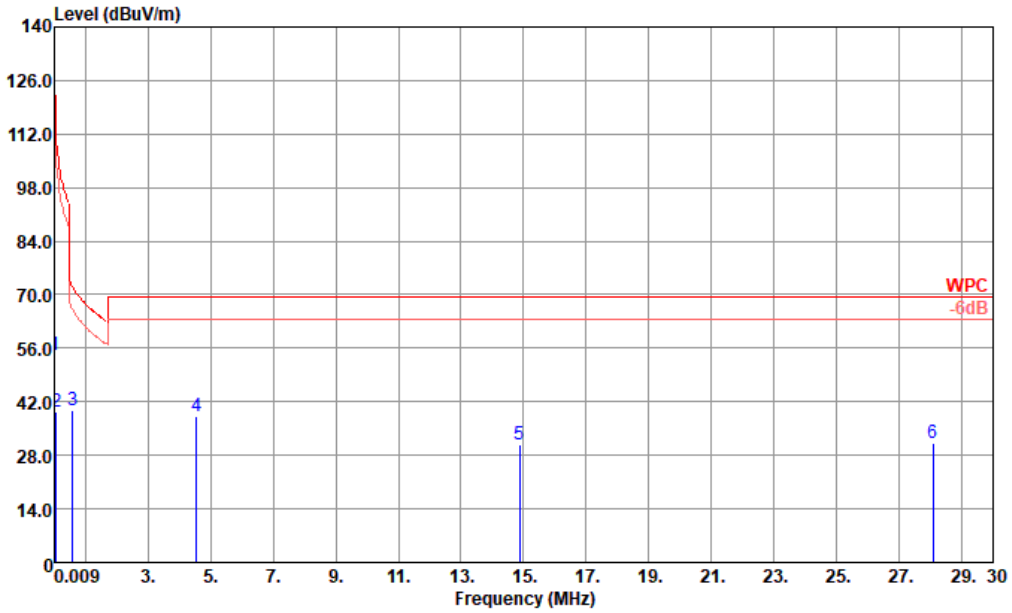


Site : 03CH02-KS
Condition : WPC 3m HFH2 101125 VERTICAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	0.030	31.83	-86.22	118.05	10.01	21.80	0.02	---	---	Average
2 a	0.068	34.35	-76.64	110.99	12.43	21.90	0.02	---	---	Average
3 q	0.605	46.81	-25.14	71.95	24.78	22.00	0.03	---	---	QP
4	2.060	32.77	-36.77	69.54	10.70	22.00	0.07	---	---	QP
5	13.814	31.39	-38.15	69.54	9.10	21.91	0.38	---	---	QP
6	26.815	32.02	-37.52	69.54	11.79	19.54	0.69	---	---	QP

<Mode 2>

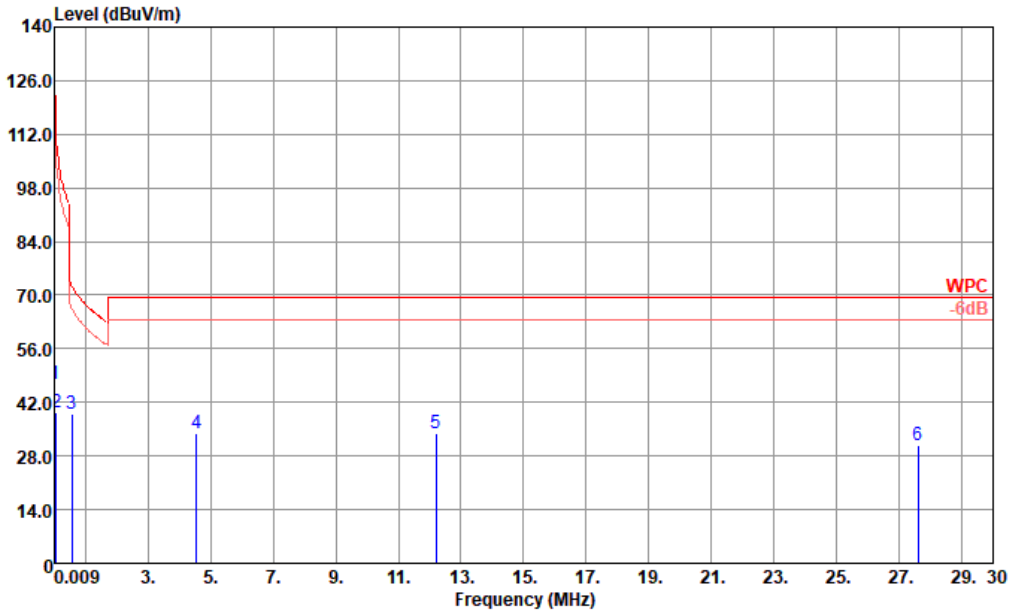
Test Engineer :	Feng	**Temperature :**	21~22°C
Polarization :	Horizontal	**Relative Humidity :**	41~42%



Site : 03CH02-KS
Condition : WPC 3m HFH2 101125 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 a	0.030	54.18	-63.91	118.09	32.36	21.80	0.02	---	---	Average
2	0.065	39.36	-72.02	111.38	17.44	21.90	0.02	---	---	Average
3	0.594	39.83	-32.28	72.11	17.80	22.00	0.03	---	---	QP
4 q	4.562	38.05	-31.49	69.54	15.78	22.13	0.14	---	---	QP
5	14.868	30.88	-38.66	69.54	8.62	21.86	0.40	---	---	QP
6	28.080	31.21	-38.33	69.54	9.11	21.39	0.71	---	---	QP

Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Vertical	Relative Humidity :	41~42%



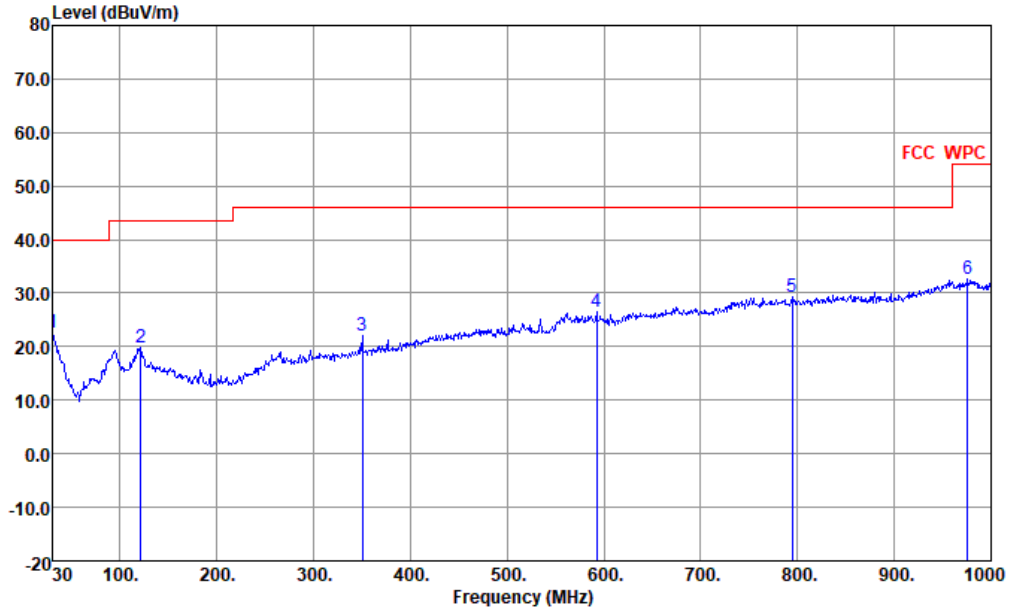
Site : 03CH02-KS
Condition : WPC 3m HFH2 101125 VERTICAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 a	0.030	46.95	-71.14	118.09	25.13	21.80	0.02	---	---	Average
2	0.068	39.50	-71.49	110.99	17.58	21.90	0.02	---	---	Average
3 q	0.581	38.99	-33.31	72.30	16.96	22.00	0.03	---	---	QP
4	4.562	33.85	-35.69	69.54	11.58	22.13	0.14	---	---	QP
5	12.199	33.95	-35.59	69.54	11.62	21.99	0.34	---	---	QP
6	27.605	30.95	-38.59	69.54	8.83	21.42	0.70	---	---	QP

3.2.6 Test Result of Radiated Emission (30MHz ~ 1000MHz)

<Mode 1>

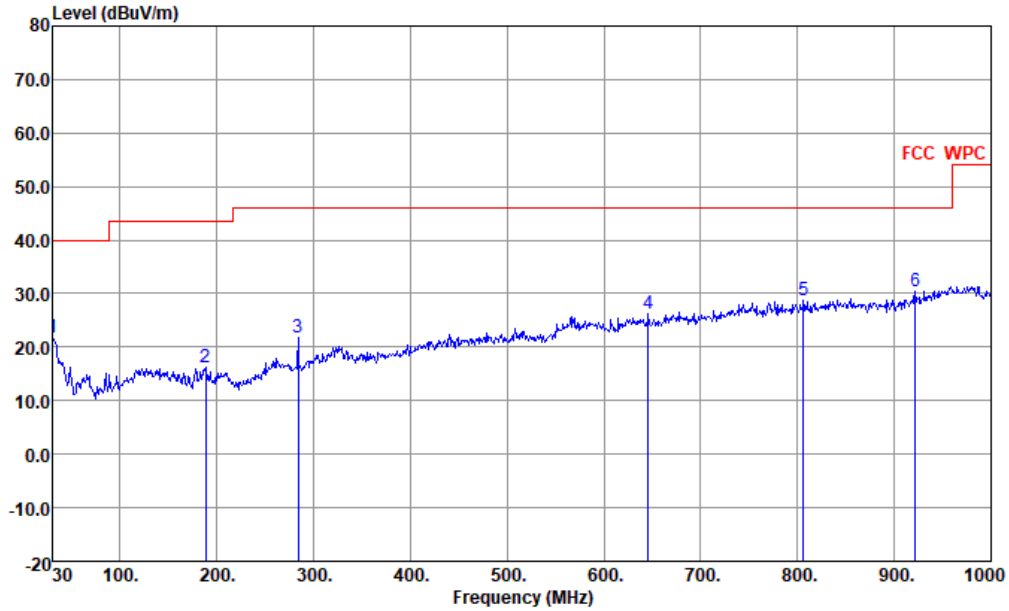
Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Horizontal	Relative Humidity :	41~42%



Site : 03CH02-KS
Condition : FCC WPC 3m 59913 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.000	22.75	-17.25	40.00	30.26	24.68	0.76	32.95	---	---	Peak
2	121.180	19.92	-23.58	43.50	33.57	17.47	1.64	32.76	---	---	Peak
3	350.100	21.92	-24.08	46.00	31.95	20.22	2.76	33.01	---	---	Peak
4	592.600	26.60	-19.40	46.00	30.94	25.65	3.57	33.56	---	---	Peak
5 p	794.360	29.19	-16.81	46.00	30.37	27.91	4.20	33.29	---	---	Peak
6	975.750	32.52	-21.48	54.00	28.54	30.94	4.64	31.60	---	---	Peak

Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Vertical	Relative Humidity :	41~42%

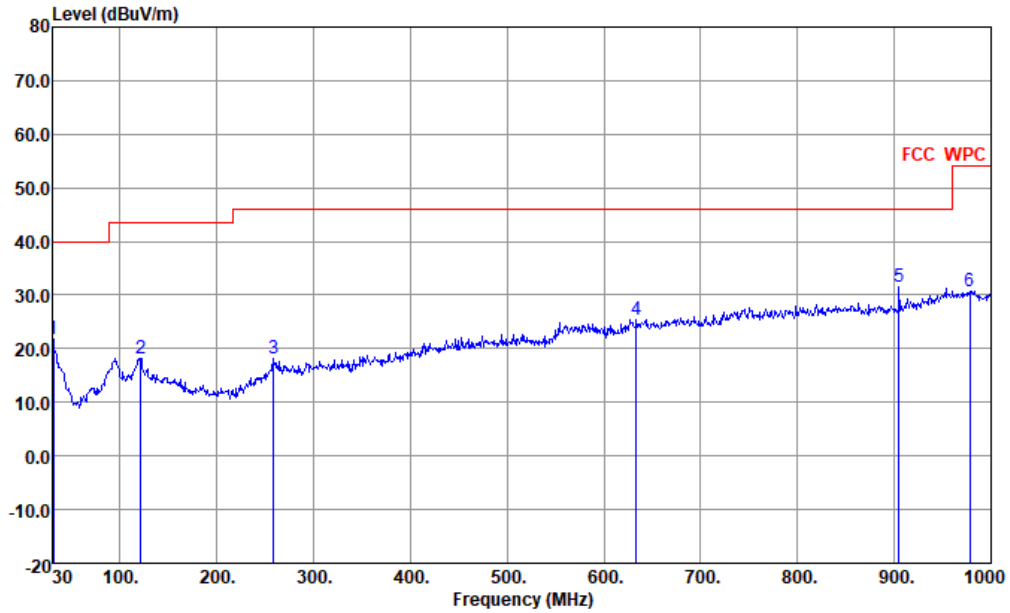


Site : 03CH02-KS
Condition : FCC WPC 3m 59913 VERTICAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.000	21.86	-18.14	40.00	29.37	24.68	0.76	32.95	---	---	Peak
2	188.110	16.27	-27.23	43.50	32.45	14.63	2.01	32.82	---	---	Peak
3	284.140	21.68	-24.32	46.00	33.40	18.76	2.41	32.89	---	---	Peak
4	645.950	26.19	-19.81	46.00	29.73	26.27	3.72	33.53	---	---	Peak
5	806.000	28.78	-17.22	46.00	29.85	27.93	4.23	33.23	---	---	Peak
6 p	921.430	30.45	-15.55	46.00	28.77	29.48	4.53	32.33	---	---	Peak

<Mode 2>

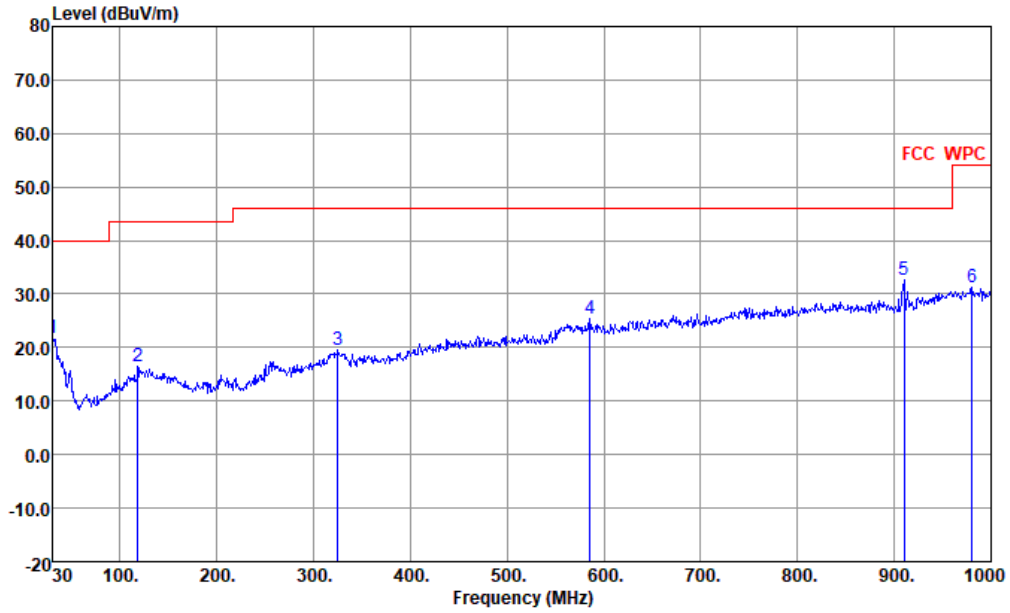
Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Horizontal	Relative Humidity :	41~42%



Site : 03CH02-KS
Condition : FCC WPC 3m 59913 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.970	21.77	-18.23	40.00	29.77	24.20	0.76	32.96	---	---	Peak
2	121.180	18.28	-25.22	43.50	31.93	17.47	1.64	32.76	---	---	Peak
3	258.920	18.09	-27.91	46.00	29.47	19.48	2.17	33.03	---	---	Peak
4	633.340	25.45	-20.55	46.00	28.95	26.33	3.70	33.53	---	---	Peak
5 p	904.940	31.56	-14.44	46.00	30.59	29.04	4.49	32.56	---	---	Peak
6	977.690	30.64	-23.36	54.00	26.69	30.88	4.64	31.57	---	---	Peak

Test Engineer :	Feng	Temperature :	21~22°C
Polarization :	Vertical	Relative Humidity :	41~42%



Site : 03CH02-KS
Condition : FCC WPC 3m 59913 VERTICAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.000	21.73	-18.27	40.00	29.24	24.68	0.76	32.95	---	---	Peak
2	118.270	16.38	-27.12	43.50	30.14	17.39	1.62	32.77	---	---	Peak
3	324.880	19.47	-26.53	46.00	30.26	19.47	2.65	32.91	---	---	Peak
4	585.810	25.44	-20.56	46.00	29.83	25.65	3.52	33.56	---	---	Peak
5 p	909.790	32.55	-13.45	46.00	31.42	29.12	4.50	32.49	---	---	Peak
6	980.600	31.12	-22.88	54.00	27.19	30.81	4.65	31.53	---	---	Peak

3.3 AC Conducted Emission Measurement

3.3.1 Limits of AC Conducted Emission

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 in the following table.

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.

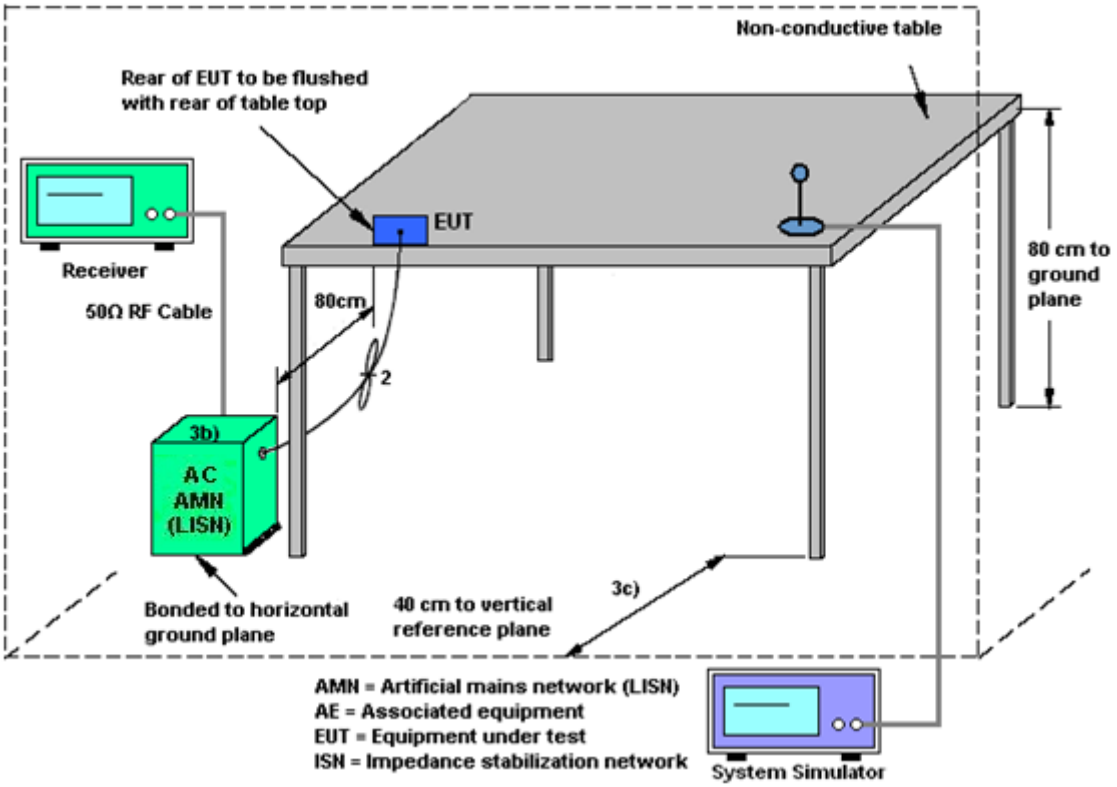
3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedure

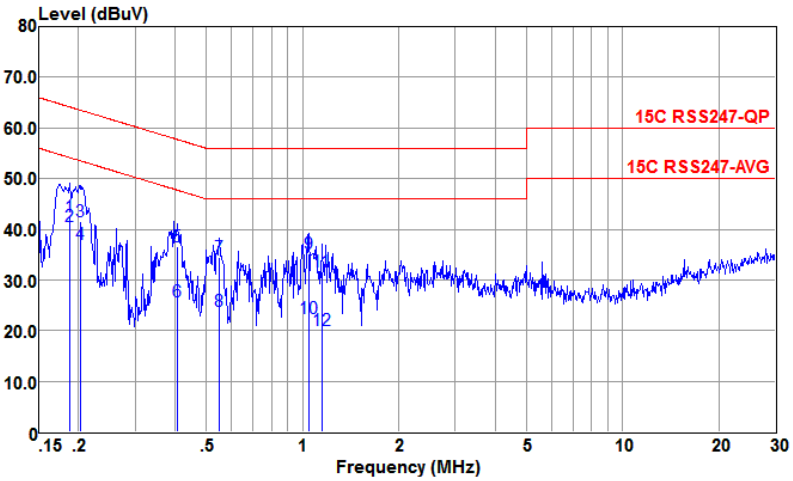
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

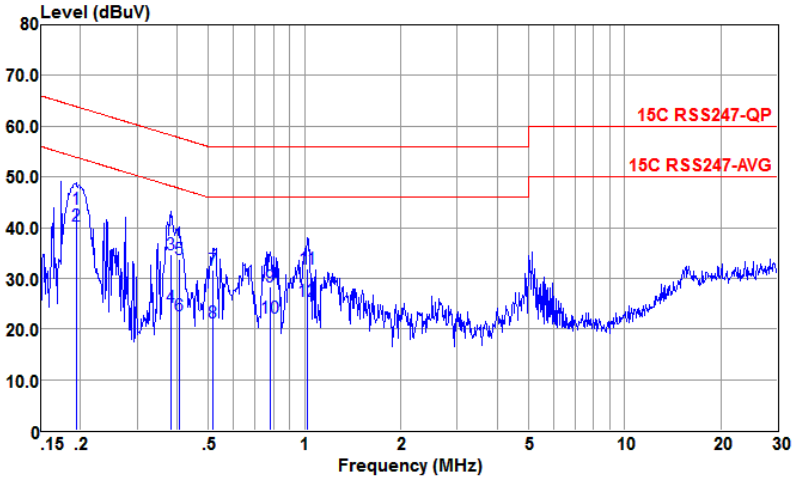
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15C RSS247-QP LISN-060105-L 2023 LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.187	42.55	-21.60	64.15	32.11	0.03	10.41	QP
2	*	0.187	40.65	-13.50	54.15	30.21	0.03	10.41	Average
3		0.202	41.54	-22.00	63.54	31.10	0.03	10.41	QP
4		0.202	37.04	-16.50	53.54	26.60	0.03	10.41	Average
5		0.408	36.47	-21.21	57.68	26.20	0.00	10.27	QP
6		0.408	25.77	-21.91	47.68	15.50	0.00	10.27	Average
7		0.549	34.36	-21.64	56.00	24.20	-0.04	10.20	QP
8		0.549	23.96	-22.04	46.00	13.80	-0.04	10.20	Average
9		1.049	35.19	-20.81	56.00	25.20	-0.10	10.09	QP
10		1.049	22.49	-23.51	46.00	12.50	-0.10	10.09	Average
11		1.147	31.58	-24.42	56.00	21.60	-0.11	10.09	QP
12		1.147	20.18	-25.82	46.00	10.20	-0.11	10.09	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15C RSS247-QP LISN-060105-N 2023 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.193	43.66	-20.23	63.89	33.20	0.05	10.41	QP
2	*	0.193	40.26	-13.63	53.89	29.80	0.05	10.41	Average
3		0.383	34.73	-23.48	58.21	24.49	-0.05	10.29	QP
4		0.383	24.43	-23.78	48.21	14.19	-0.05	10.29	Average
5		0.408	33.82	-23.86	57.68	23.61	-0.06	10.27	QP
6		0.408	22.72	-24.96	47.68	12.51	-0.06	10.27	Average
7		0.518	31.64	-24.36	56.00	21.50	-0.07	10.21	QP
8		0.518	21.34	-24.66	46.00	11.20	-0.07	10.21	Average
9		0.783	28.24	-27.76	56.00	18.21	-0.08	10.11	QP
10		0.783	22.24	-23.76	46.00	12.21	-0.08	10.11	Average
11		1.021	31.79	-24.21	56.00	21.80	-0.10	10.09	QP
12		1.021	25.49	-20.51	46.00	15.50	-0.10	10.09	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

3.4 Antenna Requirements

3.4.1 Standard Applicable

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Jan. 02, 2024 ~Jan. 10, 2024	Oct. 10, 2024	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Oct. 10, 2023	Jan. 10, 2024 ~Jan. 16, 2024	Oct. 09, 2024	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Oct. 10, 2023	Jan. 10, 2024 ~Jan. 16, 2024	Oct. 09, 2024	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 21, 2023	Jan. 10, 2024 ~Jan. 16, 2024	Dec. 20, 2024	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul 06, 2023	Jan. 10, 2024 ~Jan. 16, 2024	Jul 05, 2024	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jan. 10, 2024 ~Jan. 16, 2024	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jan. 10, 2024 ~Jan. 16, 2024	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jan. 10, 2024 ~Jan. 16, 2024	NCR	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 16, 2023	Jan. 11, 2024 ~Jan. 13, 2024	May 15, 2024	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 11, 2023	Jan. 11, 2024 ~Jan. 13, 2024	Oct. 10, 2024	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	May 16, 2023	Jan. 11, 2024 ~Jan. 13, 2024	May 15, 2024	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 11, 2023	Jan. 11, 2024 ~Jan. 13, 2024	Oct. 10, 2024	Conduction (CO01-KS)

NCR: No Calibration Required

5 Measurement Uncertainty

Uncertainty of AC Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.94dB**

Uncertainty of Radiated Emission Measurement (9 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.30dB**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.04dB**

---------- THE END ----------