



# FCC PART18 TEST REPORT

**Report No.:** 20240217G02358X-E

**Product Name:** Microwave Oven

**Trade Name:** Midea

**Model No. :** EC9P02##-S, EC9P02\*\*\*-S, TC9P02##-S, TC9P02\*\*\*-S,  
TC9P02##-S00K, TC9P02\*\*\*-S00K

**FCC ID :** VG8XC9P02YY

**Applicant:** Guangdong Midea Kitchen Appliances Manufacturing Co., Ltd.

**Received Date:** 2024.02.04

**Test Data:** 2024.02.18-2024.02.21

**Issued by:** CCIC Southern Testing Co., Ltd.

**Lab Location:** Electronic Testing Building, No.43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China

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### Test Report

**Product Name**..... Microwave Oven

**Model No.** ..... EC9P02##-S, EC9P02\*\*\*-S, TC9P02##-S, TC9P02\*\*\*-S,  
TC9P02##-S00K, TC9P02\*\*\*-S00K

**Trade name**..... Midea

**Applicant**..... Guangdong Midea Kitchen Appliances Manufacturing Co., Ltd.

**Applicant Address**..... No.6, Yong An Road, Beijiao, Shunde, Foshan, China

**Manufacturer** ..... Guangdong Midea Kitchen Appliances Manufacturing Co., Ltd.

**Manufacturer Address** ..... No.6, Yong An Road, Beijiao, Shunde, Foshan, China

**Test Standards** ..... 47 CFR Part 18  
47 CFR Part 15 Subpart B

**Test Result**..... PASS

**Tested by** ..... Sun Jiaohui  
Jiaohui Sun Test Engineer 2024.02.22

**Reviewed by** ..... Chris You  
Chris You Senior Engineer 2024.02.22

**Approved by** ..... Yang Fan  
Yang Fan, Manager 2024.02.22



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Change History		
Issue	Date	Reason for change
1.0	2024.02.22	First edition



# 1. GENERAL INFORMATION

## 1.1 GENERAL DESCRIPTION OF EUT

EUT Name ..... : Microwave Oven  
 Trade Name..... : Midea  
 Model..... : EC9P02##-S, EC9P02\*\*\*-S, TC9P02##-S, TC9P02\*\*\*-S, TC9P02##-S00K, TC9P02\*\*\*-S00K model designations as follows:  
 E: Film type keypad;  
 T: Touch type keypad;  
 C: Microwave+Grill+Convection function;  
 9: Indicates the microwave output power is 900W;  
 P02: Indicates the design No.  
 ## or \*\*\*: "#", "\*" may be 0~9, A~Z or blank, indicates different appearance;  
 -S: Indicates stainless steel cavity;  
 00K: Indicates the design No..  
 Model of TC9P022KC-S00K was selected for final testing.

Power Supply ..... : 120V AC/60Hz  
 Rated input Power(microwave): 1400W  
 Rated output Power(microwave): 900W  
 Convection Power ..... : **1500W**  
 Grill Power..... : 1100W  
 Frequency..... : 2450MHz(ClassB/Group 2)  
 Magnetron Model..... : 2M519J  
 Magnetron Manufacturer ... : WITOL  
 Description of Support Units :  
 -Load for power output measurement: 1000 milliliters of water in the beaker located in the center of the oven.  
 -Load for frequency measurement: 1000 milliliters of water in the beaker located in the center of the oven.  
 -Load for measurement of radiation on second and third harmonic: Two loads, one of 700 and the other of 300 milliliters, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.  
 -Load for all other measurements: 700 milliliters of water, with the beaker located in the center of the oven.

*Note 1:* The EUT have the following typical setups during the test:

Setup1: Microwave heating mode(According to FCC PART 18);

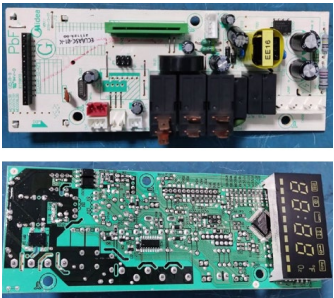
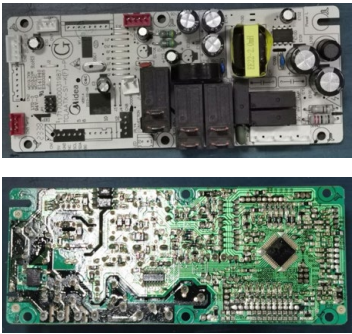
Setup2: Grill mode(According to FCC PART 15B,digital device)

Setup3: Convection mode(According to FCC PART 15B,digital device)

*Note 2:* For a more detailed description, please refer to Specification or User’s Manual supplied by the applicant and/or manufacturer.

*Note 3:* This is an updating report based the original report #: “SET2022-00849” which was re-tested on February 18<sup>th</sup>, 2024 to February 21<sup>st</sup>, 2024. Differences between them are as follow:

1. Difference in appearance & construction & PCB:

No.:	Original	New	Difference(s)
1			<p>1. Mother board: Modified the peripheral circuit (non-RF circuit) and some individual components and PCB layout. The magnetron is exactly same as before</p> <p>2. 120V/400W back heating pipe, 1500W hot air power.</p>

2. Others are the same as before.



## 1.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 18:

No.	Identity	Document Title
1	47 CFR Part 18	Radio Frequency Devices
2	47 CFR Part 15 Subpart B	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

Emission			
Standard	Item	Class / Severity	Result
47 CFR PART 18	Conducted Emission (150 kHz to 30 MHz)	18.307(b)	PASS
	Radiated Emission (30 MHz to 1 GHz)	18.305(b)	PASS
47 CFR PART 15	Conducted Emission (150 kHz to 30 MHz)	15.107	PASS
	Radiated Emission (30 MHz to 1 GHz)	15.109	PASS



### 1.3 Facilities and Accreditations

#### 1.3.1 Facilities

**CNAS-Lab Code: L1659**

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

**FCC-Registration No.: CN1283**

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until June 30,2025.

**ISED Registration: 11185A-1**

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until June 30,2025.

**A2LA Code: 5721.01**

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

#### 1.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15°C- 35°C
Relative Humidity (%):	25% -75%
Atmospheric Pressure (kPa):	86kPa-106kPa

#### 1.3.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Uncertainty of Conducted Emission:	Uc = 3.2 dB (k=2)
Uncertainty of Radiated Emission:(30MHz~1GHz)	Uc = 5.8 dB (k=2)
Uncertainty of Radiated Emission:(1~18GHz)	Uc = 5.1 dB (k=2)





## 2. EQUIPMENTS LIST

### A. Equipment List:

Description	Manufacturer	Model	Serial No.	Calibration Date	Calibration Due. Date
Test Receiver	Rohde & Schwarz	ESIB26	A0304218	2023.10.20	2024.10.19
LISN	ROHDE&SCHWARZ	NSLK 8127	A210803670	2023.06.08	2024.06.07
Shield Room	Xinju Electronics	L9000*W4500* H3100	A181003230	2021.09.05	2024.09.04
EMI Test Receiver	ROHDE&SCHWARZ	ESIB7	A0501375	2023.03.16	2024.03.15
Broadband Ant.	ETC	MCTD2786	A150402240	2021.03.05	2024.03.04
3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2021.03.26	2024.03.25
EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2021.06.08	2024.06.07
EMI Horn Ant.	ETC	1209	A150402241	2023.05.16	2024.05.23
Spectrum Analyzer	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
Portable Spectrometer	ROHDE&SCHWARZ	FSH8	A140401672	2024.02.13	2025.02.12
Prode	ROHDE&SCHWARZ	TSEMF-B1	A140401671	2024.02.14	2025.02.13



### 3. EMC EMISSION TEST

#### 3.1 Test Procedure

Test Requirement: 47 CFR PART 18

Test Method: FCC/OST MP-5:1986

Power Supply: AC 120V/ 60Hz

Frequency Range: 2400-2500MHz

Detector: Peak

Limit: ISM equipment may be operated at any frequency above 9KHz and the frequency band 2400-2500MHz is allocated for use by ISM equipment

ISM frequency	Tolerance
6.78 MHz	±15.0 kHz
13.56 MHz	±7.0 kHz
27.12 MHz	±163.0 kHz
40.68 MHz	±20.0 kHz
915 MHz	±13.0 MHz
2,450 MHz	±50.0 MHz
5,800 MHz	±75.0 MHz
24,125 MHz	±125.0 MHz
61.25 GHz	±250.0 MHz
122.50 GHz	±500.0 MHz
245.00 GHz	±1.0 GHz

#### 3.1.1 Frequency For Normal Voltage

The operating frequency was measured using a spectrum analyzer. Starting with the EUT at room temperature, a 1000mL water load was placed in the center of the oven and the oven was operated at maximum output power. The fundamental operating frequency was monitored until the water load was reduced to 20 percent of the original load.

#### 3.1.2 Frequency For Line Voltage

The EUT was operated / warmed by at least 10 minutes of use with a 1000mL water load at room temperature at the beginning of the test. Then the operating frequency was monitored as the input voltage was varied between 80 and 125 percent of the nominal rating.



### 3.1.3 Measurement data

Operating Mode	Frequency(MHz)
Normal Voltage	2433.2-2470.4
Line Voltage	2435.3-2471.8

## 3.2 RADIATION HAZARD TEST

### 3.2.1 Test Setup

The EUT was set-up according to the FCC MP-5 and FCC Part 18 for radiation Hazard measurement. The measurement was using a microwave leakage meter to measure the radiation leakage in the as-received condition with the oven door closed A 700mL water load in a breaker was located in the center of the oven and the microwave oven was set to maximum power. While the oven operating, the microwave meter will check the leakage and then record the maximum leakage.

### 3.2.2 Limit

A maximum of 1.0mW/cm<sup>2</sup> is allowed in according with the applicable FCC standards

### 3.2.3 Test results

Test location	Test result (mW/cm <sup>2</sup> )	Limit(mW/cm <sup>2</sup> )	Verdict
Left side	0.25	1.0	Pass
Right side	0.18	1.0	Pass
Front	0.34	1.0	Pass
Rear	0.27	1.0	Pass

There was no microwave leakage exceeding a power level of 0.34 m W/cm<sup>2</sup> Observed at any point 5cm or more from the external surface of the oven



### 3.3 RF OUTPUT POWER MEASUREMENT

#### 3.3.1 Test Standard

Test Requirement	47 CFR PART 18
Test Method	FCC/OST MP-5:1986
Power Supply	AC120/60Hz

#### 3.3.2 EUT Operating mode

Test the EUT in microwave mode with full power.

#### 3.3.3 Test Data

Mass of Water(g)	Mass of the container(g)	ambient temperature (°C)	Initial temperature(°C)	Final temperature(°C)	Heating Time(S)	Output Power(Watt)
1000	280	19.4	11.2	30.6	120	702.5

Formula:

$$P = \frac{4.2 \times m_w(T_2 - T_1) + 0.9 \times m_c(T_2 - T_0)}{t}$$

P is the microwave power output, in watts

Mw is the mass of the water, in grams

Mc is the mass of the container, in grams

T0 is the ambient temperature, in degrees Celsius

T1 is Initial temperature of the water, in degrees Celsius

T2 is final temperature of the water, in degrees Celsius

T is heating time, in seconds, excluding the magnetron filament heating-up time

## 4. CONDUCTED EMISSION

### 4.1.1 Conducted Emission Limit

Frequency range (MHz)	Conducted Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

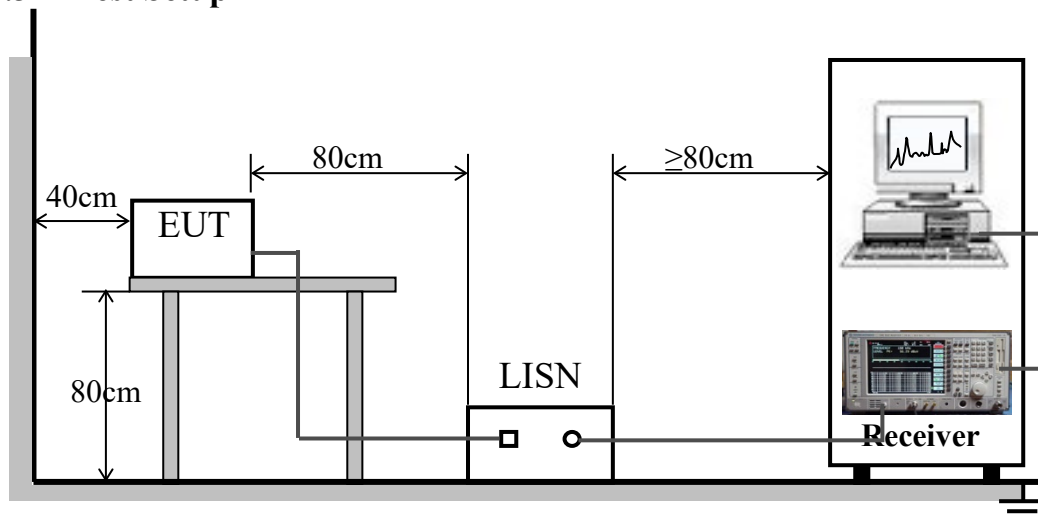
**Note:**

- a) The limit decreases linearly with the logarithm of the frequency in the range 0.05 MHz to 0.5 MHz.
- b) The lower limit is applicable at the transition frequency.

### 4.1.2 Test Procedure

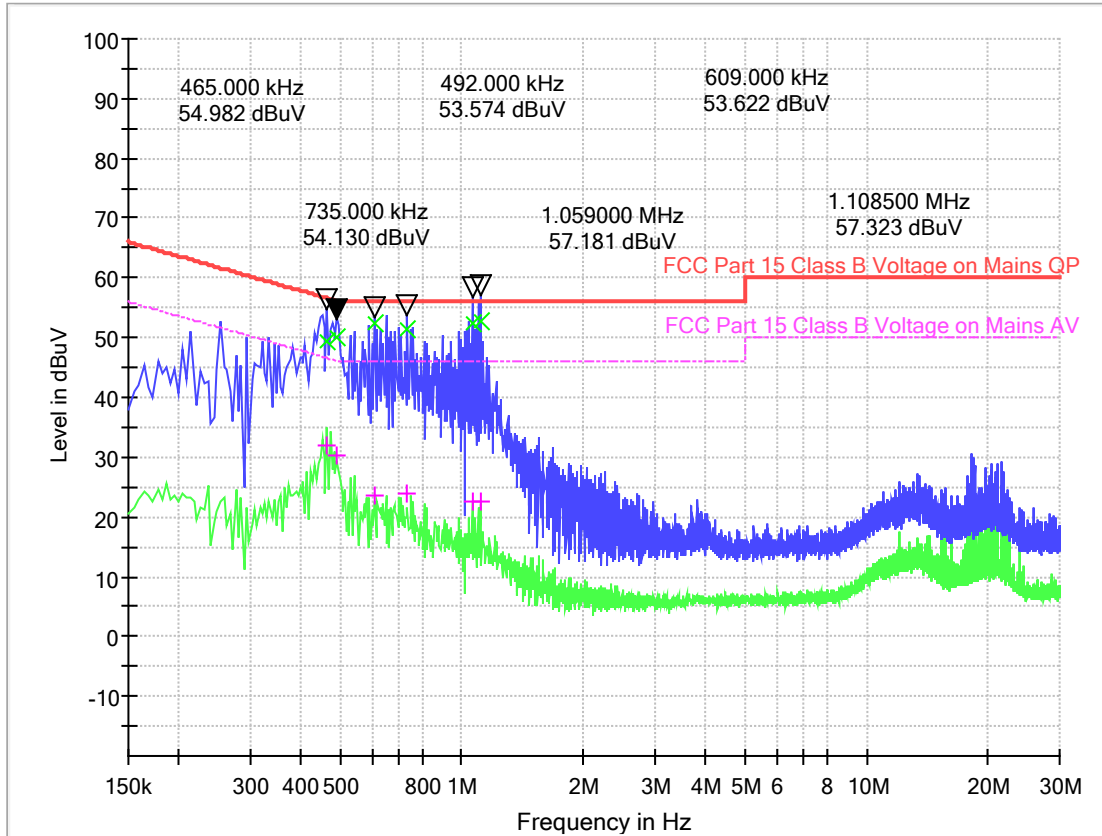
The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides 50 $\Omega$ /50 $\mu$ H of coupling impedance for the measuring instrument. The Common Antenna is used for the call between the EUT and the System Simulator (SS). A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

### 4.1.3 Test Setup



**A. Test Result:**

Mains terminal disturbance voltage, Setup1,L phase

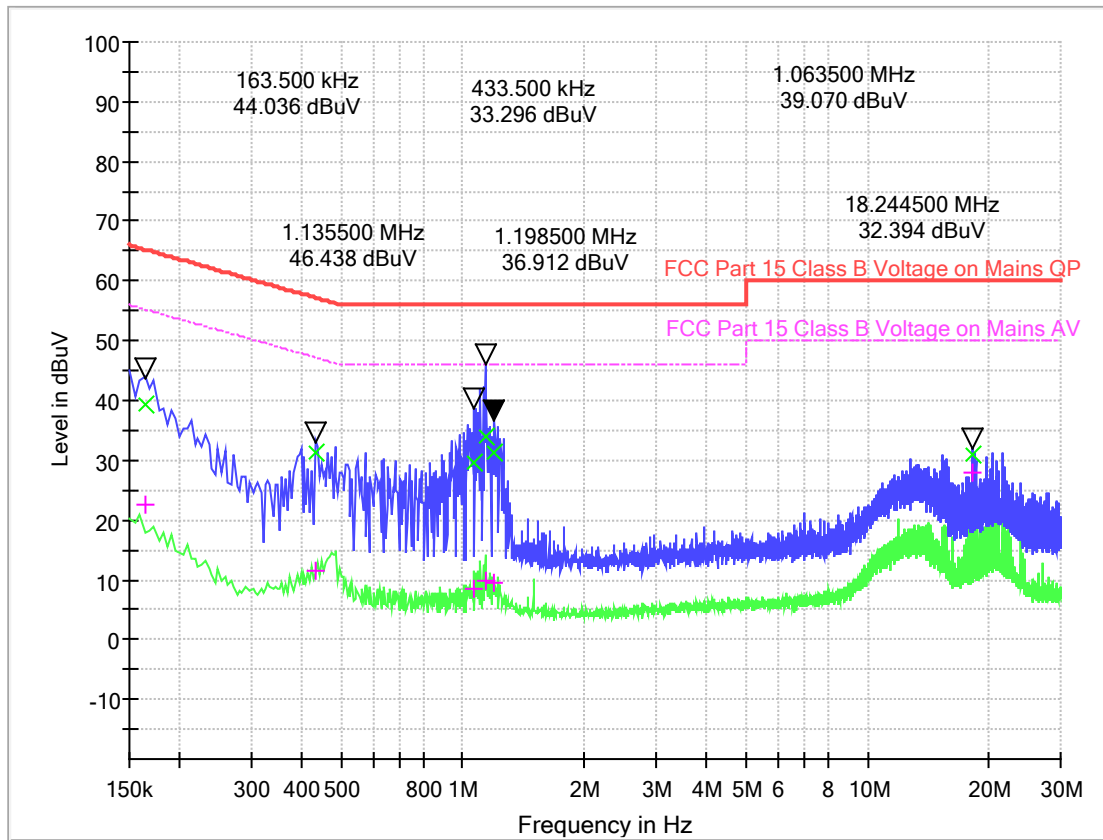


(Plot A: L Phase)

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.465000	49.42	32.12	0.1	10.1	7.18	56.6	14.48	46.6
0.492000	49.99	30.13	0.1	10.1	6.14	56.1	16.00	46.1
0.609000	52.34	23.50	0.1	10.1	3.66	56.0	22.50	46.0
0.735000	51.24	23.98	0.1	10.1	4.76	56.0	22.02	46.0
1.059000	52.55	22.68	0.2	10.2	3.45	56.0	23.32	46.0
1.108500	52.62	22.56	0.2	10.2	3.38	56.0	23.44	46.0



Mains terminal disturbance voltage, Setup 1, N phase

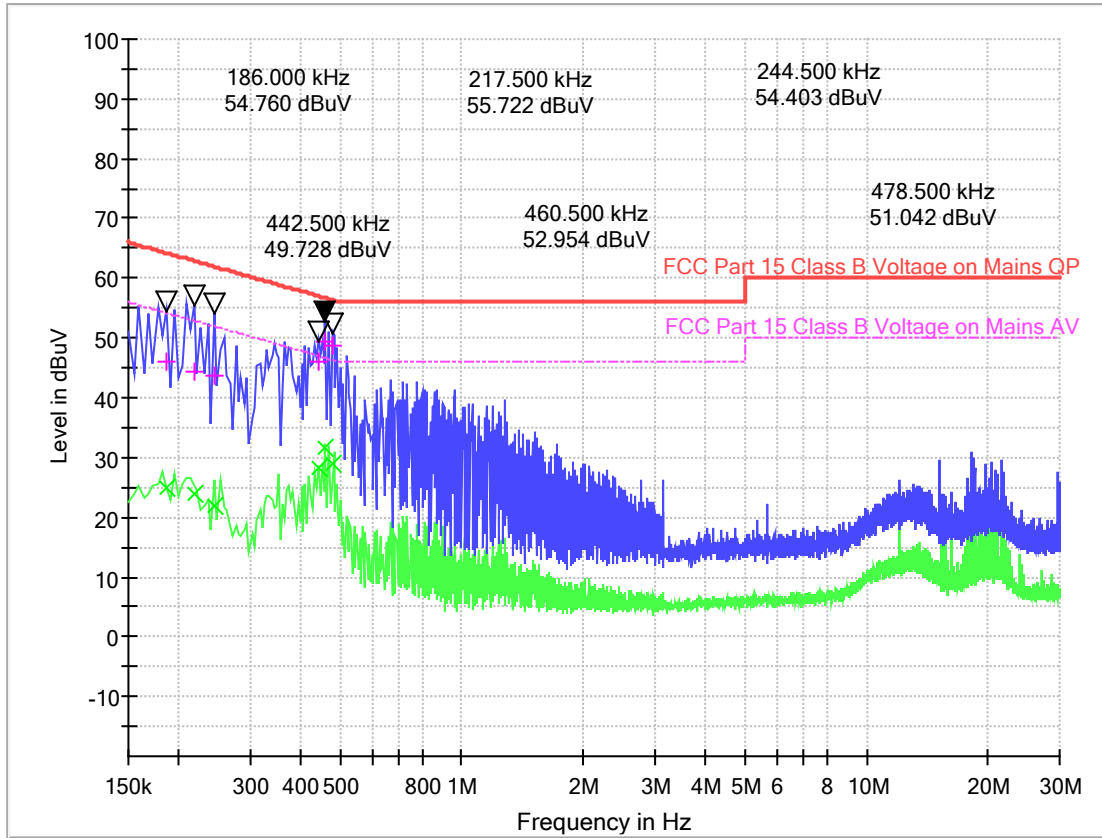


(Plot B: N Phase)

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.163500	39.27	22.56	0.1	10.1	26.01	65.3	32.72	55.3
0.433500	31.29	11.43	0.1	10.1	25.90	57.2	35.76	47.2
1.063500	29.71	8.50	0.2	10.2	26.29	56.0	37.50	46.0
1.135500	33.81	9.95	0.2	10.2	22.19	56.0	36.05	46.0
1.198500	31.37	9.66	0.2	10.2	24.63	56.0	36.34	46.0
18.244500	31.07	27.94	0.5	10.5	28.93	60.0	22.06	50.0



Mains terminal disturbance voltage, Setup2,L phase



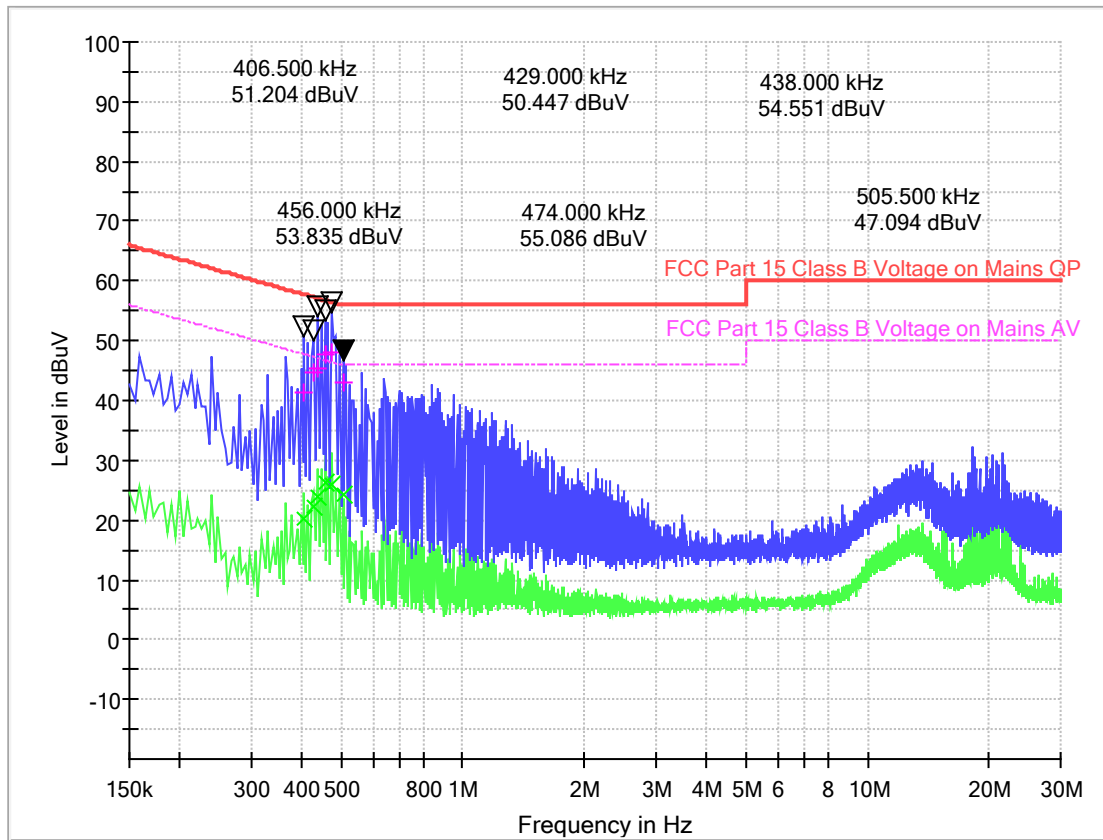
(Plot C: L Phase)

Frequency (MHz)	Quasi Peak	Average (dB $\mu$ V)	Cable Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.186000	46.12	24.78	0.1	10.1	18.09	64.2	29.43	54.2
0.217500	44.26	23.91	0.1	10.1	18.65	62.9	29.00	52.9
0.244500	43.84	21.90	0.1	10.1	18.10	61.9	30.04	51.9
0.442500	46.07	28.39	0.1	10.1	10.94	57.0	18.62	47.0
0.460500	49.44	31.71	0.1	10.1	7.24	56.7	14.97	46.7
0.478500	48.56	29.08	0.1	10.1	7.81	56.4	17.29	46.4





Mains terminal disturbance voltage, Setup 2, N phase

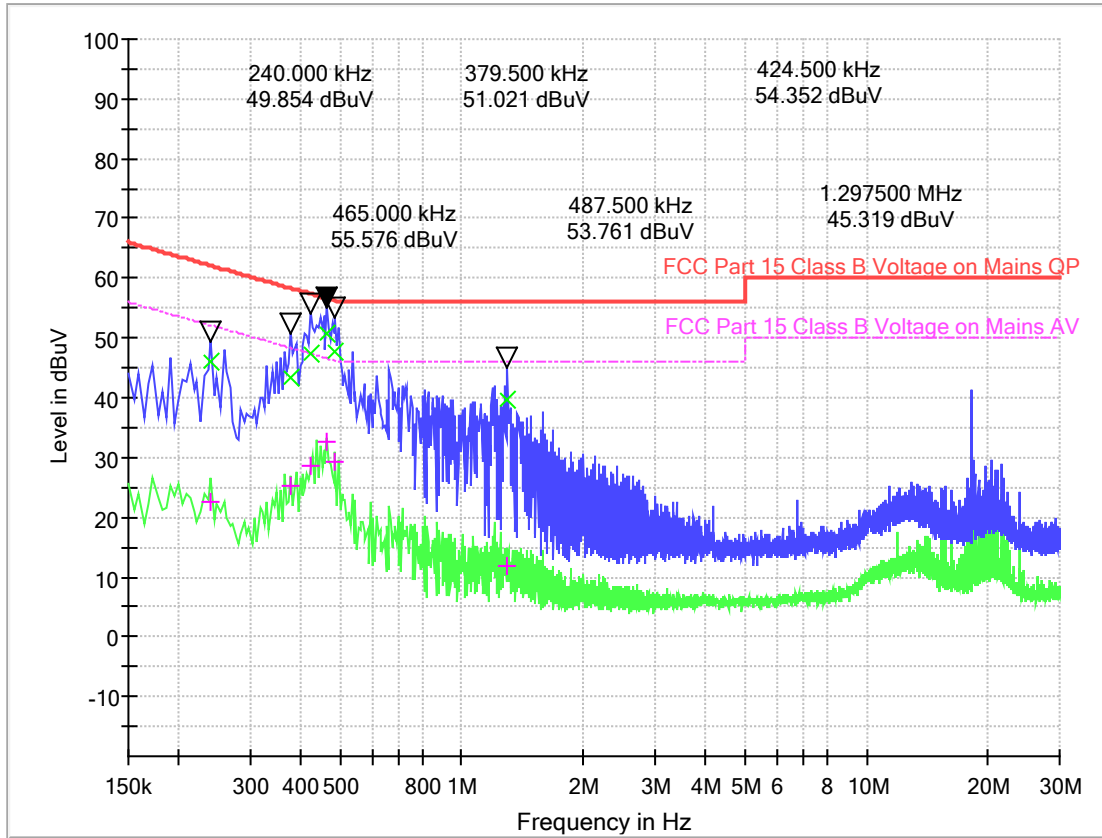


(Plot D: N Phase)

Frequency (MHz)	Quasi Peak	Average (dB $\mu$ V)	Cable Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.406500	41.45	20.14	0.1	10.1	16.27	57.7	27.58	47.7
0.429000	44.53	22.36	0.1	10.1	12.74	57.3	24.91	47.3
0.438000	45.26	23.81	0.1	10.1	11.84	57.1	23.29	47.1
0.456000	47.65	26.12	0.1	10.1	9.12	56.8	20.65	46.8
0.474000	47.95	25.96	0.1	10.1	8.49	56.4	20.48	46.4
0.505500	43.18	24.23	0.1	10.1	12.82	56.0	21.77	46.0



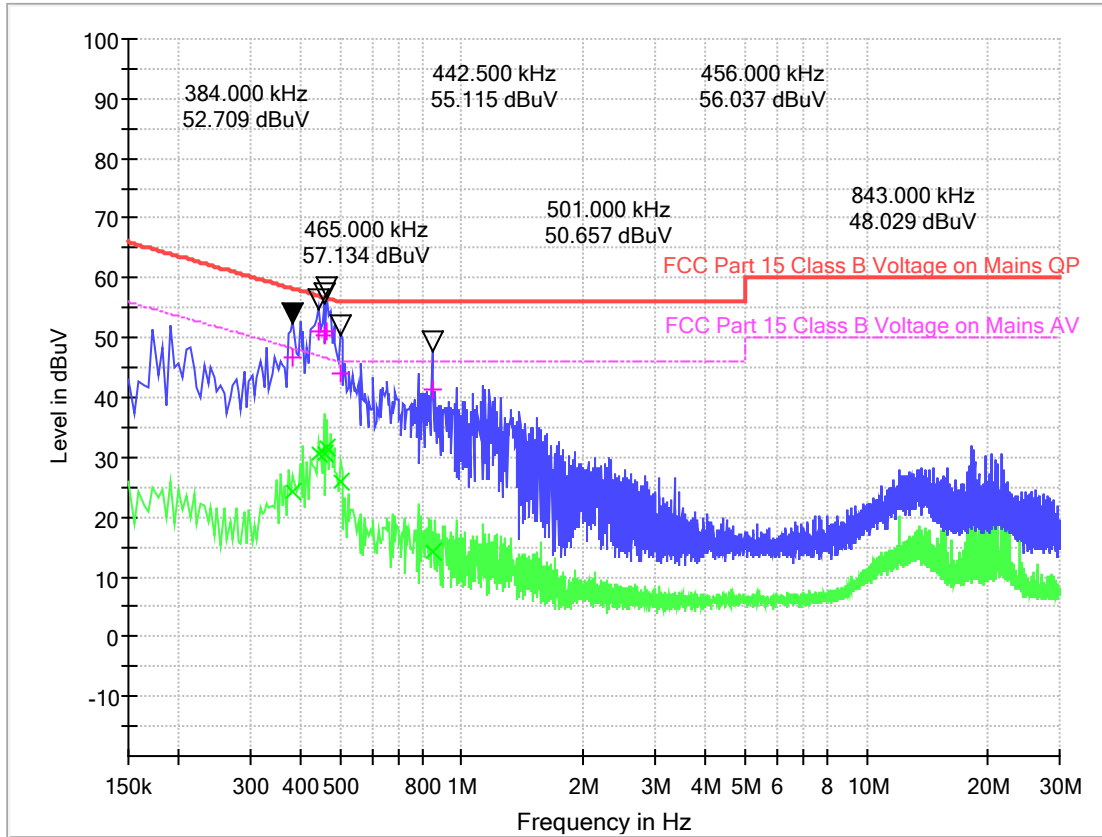
Mains terminal disturbance voltage, Setup3,L phase



(Plot E: L Phase)

Frequency (MHz)	Quasi Peak	Average (dB $\mu$ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.240000	45.96	22.71	0.1	10.1	16.14	62.1	29.39	52.1
0.379500	43.24	25.17	0.1	10.1	15.05	58.3	23.12	48.3
0.424500	47.33	28.45	0.1	10.1	10.03	57.4	18.91	47.4
0.465000	50.75	32.49	0.1	10.1	5.85	56.6	14.11	46.6
0.487500	47.67	29.33	0.1	10.1	8.54	56.2	16.88	46.2
1.297500	39.56	11.96	0.2	10.2	16.44	56.0	34.04	46.0

Mains terminal disturbance voltage, Setup 3, N phase



(Plot F: N Phase)

Frequency (MHz)	QuasiPea k	CAverage (dB $\mu$ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB $\mu$ V)
0.384000	46.59	24.22	0.1	10.1	11.60	58.2	23.97	48.2
0.442500	51.07	30.76	0.1	10.1	5.94	57.0	16.25	47.0
0.456000	50.35	30.77	0.1	10.1	6.42	56.8	16.00	46.8
0.465000	50.95	31.53	0.1	10.1	5.65	56.6	15.07	46.6
0.501000	44.09	25.77	0.1	10.1	11.91	56.0	20.23	46.0
0.843000	41.29	14.35	0.1	10.1	14.71	56.0	31.65	46.0

**Test Result: PASS**

## 5. RADIATED EMISSION

### 5.1.1 Radiated Emission Limits

- (a) ISM equipment operation on a frequency specified in §18.301 is permitted unlimited radiated energy in the band specified for that frequency.
- (b) The field strength levels of emissions which lie outside the bands specified in §18.301, unless otherwise indicated, shall not exceed the following:

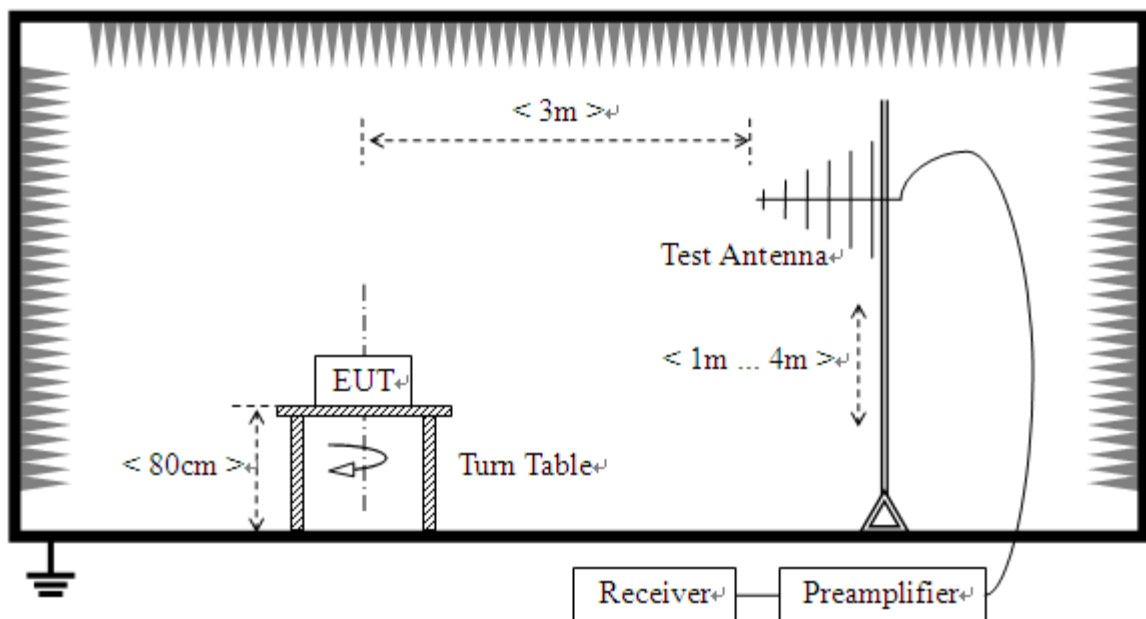
RF Power generated by equipment(watts)	Field strength limit(uV/m) @300m
Below 500	25
500or more	$25 * \text{SQRT}(\text{power}/500)$

Power =702.5W

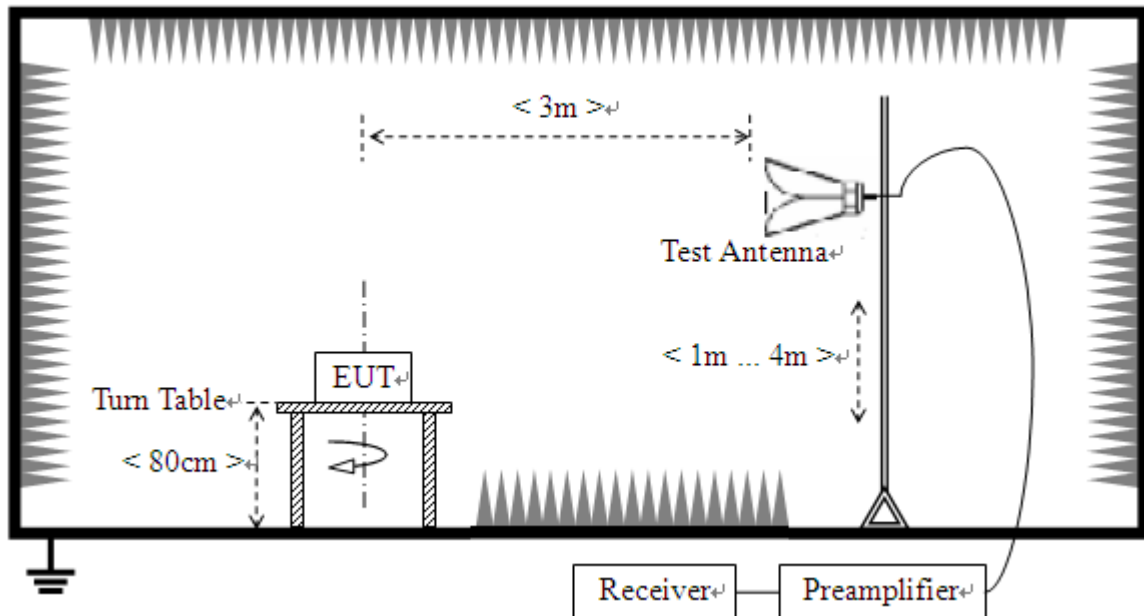
Limit= $20\lg(25 * \text{SQRT}(\text{power}/500)) + 20\lg(300/3)$  @ 3m distance.

### 5.1.2 Test Setup

For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



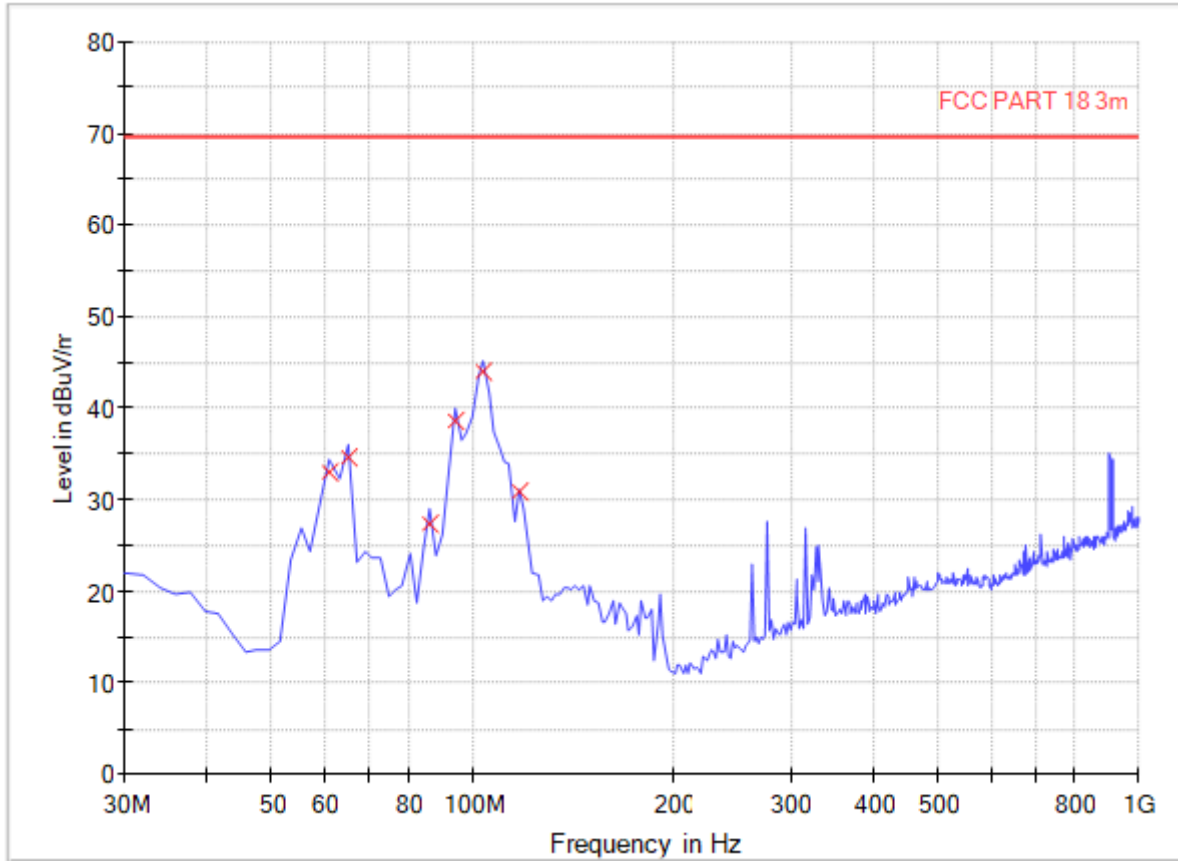
### 5.1.3 Test Procedure

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

**Note:** Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

**Test Result:**

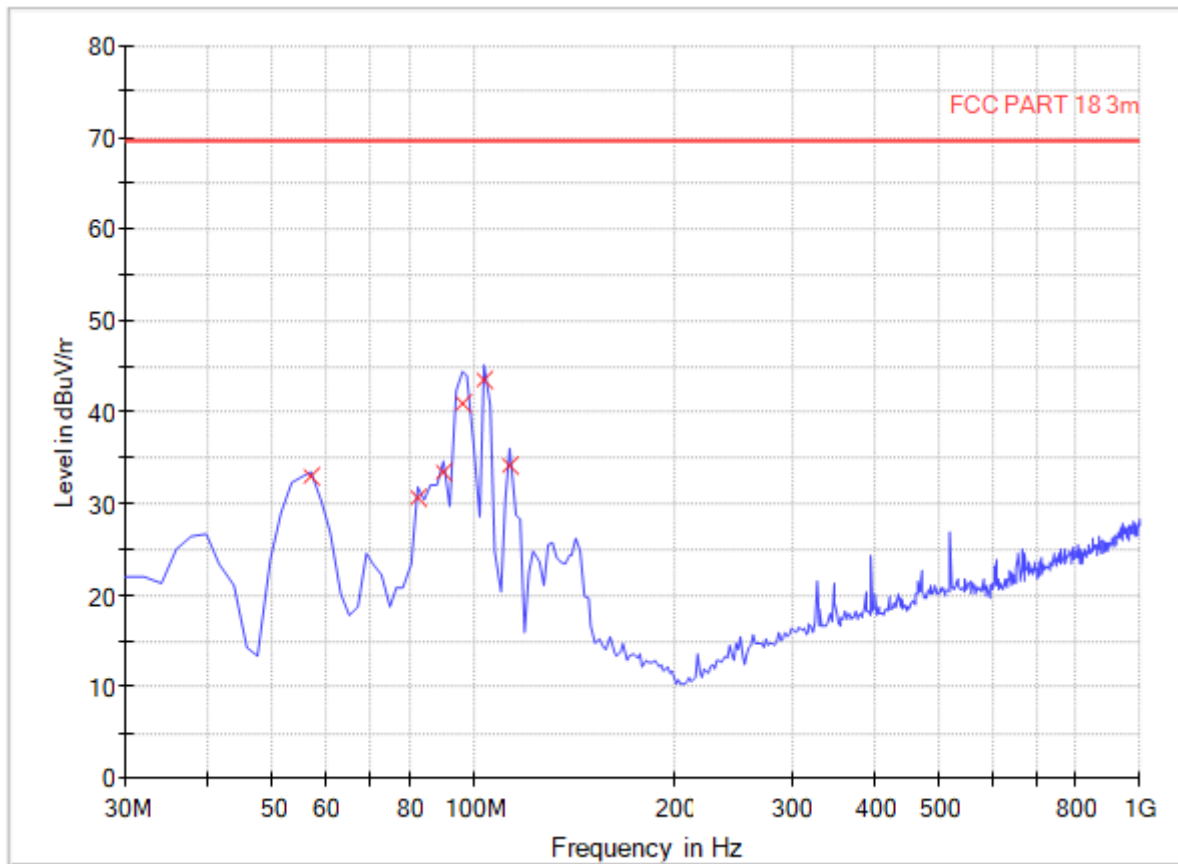
Radiation disturbances, antenna polarization: Setup1, Horizontal



(Plot A: Test Antenna Horizontal 30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Verdict
61.12	33.09	120.000	100.0	69.40	36.31	Horizontal	Pass
65.00	34.56	120.000	100.0	69.40	34.84	Horizontal	Pass
86.36	27.28	120.000	100.0	69.40	42.12	Horizontal	Pass
94.16	38.53	120.000	100.0	69.40	30.87	Horizontal	Pass
103.88	43.95	120.000	100.0	69.40	25.45	Horizontal	Pass
117.48	30.87	120.000	100.0	69.40	38.53	Horizontal	Pass

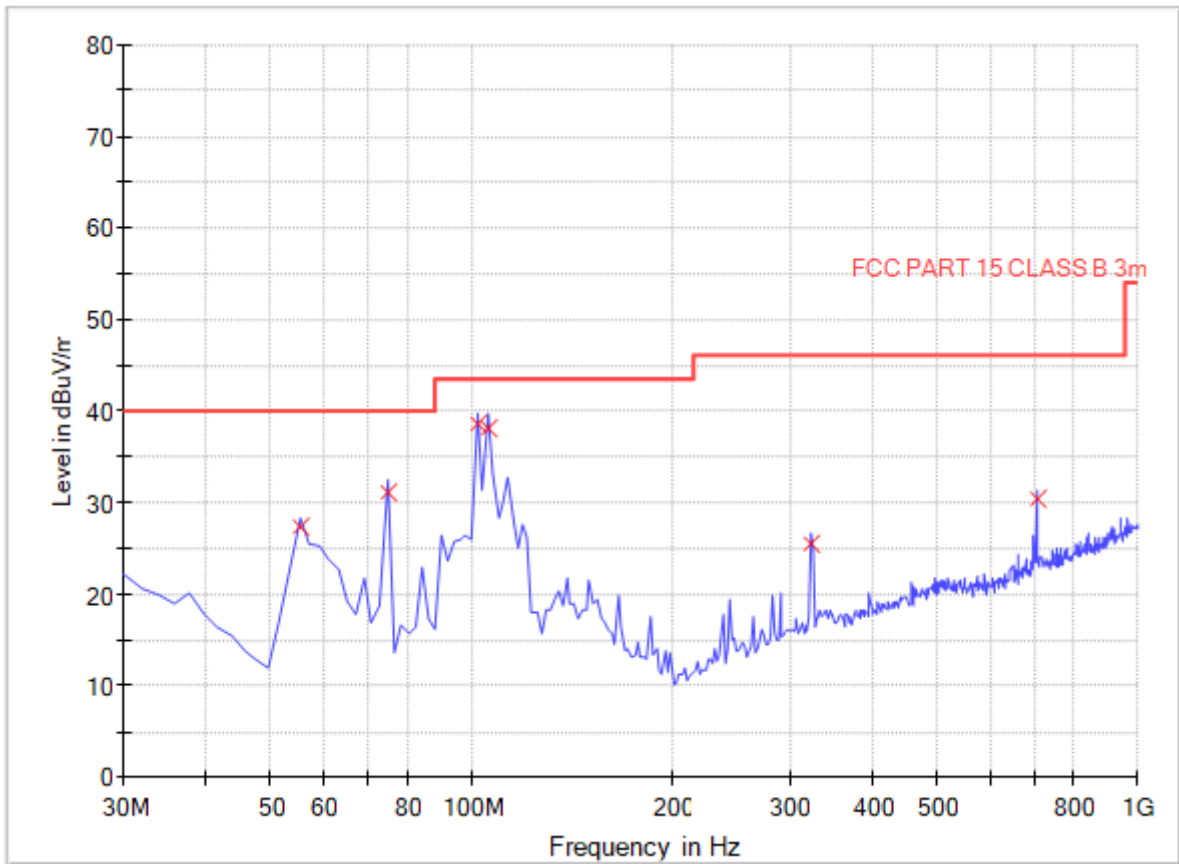
Radiation disturbances, antenna polarization: Setup1, Vertical



(Plot B: Test Antenna Vertical 30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Horizontal
57.20	32.90	120.000	100.0	69.40	36.50	Vertical	Pass
82.48	30.66	120.000	100.0	69.40	38.74	Vertical	Pass
90.28	33.37	120.000	100.0	69.40	36.03	Vertical	Pass
96.08	40.96	120.000	100.0	69.40	28.44	Vertical	Pass
103.88	43.60	120.000	100.0	69.40	25.80	Vertical	Pass
113.60	34.25	120.000	100.0	69.40	35.15	Vertical	Pass

Radiation disturbances, antenna polarization: Setup2, Horizontal

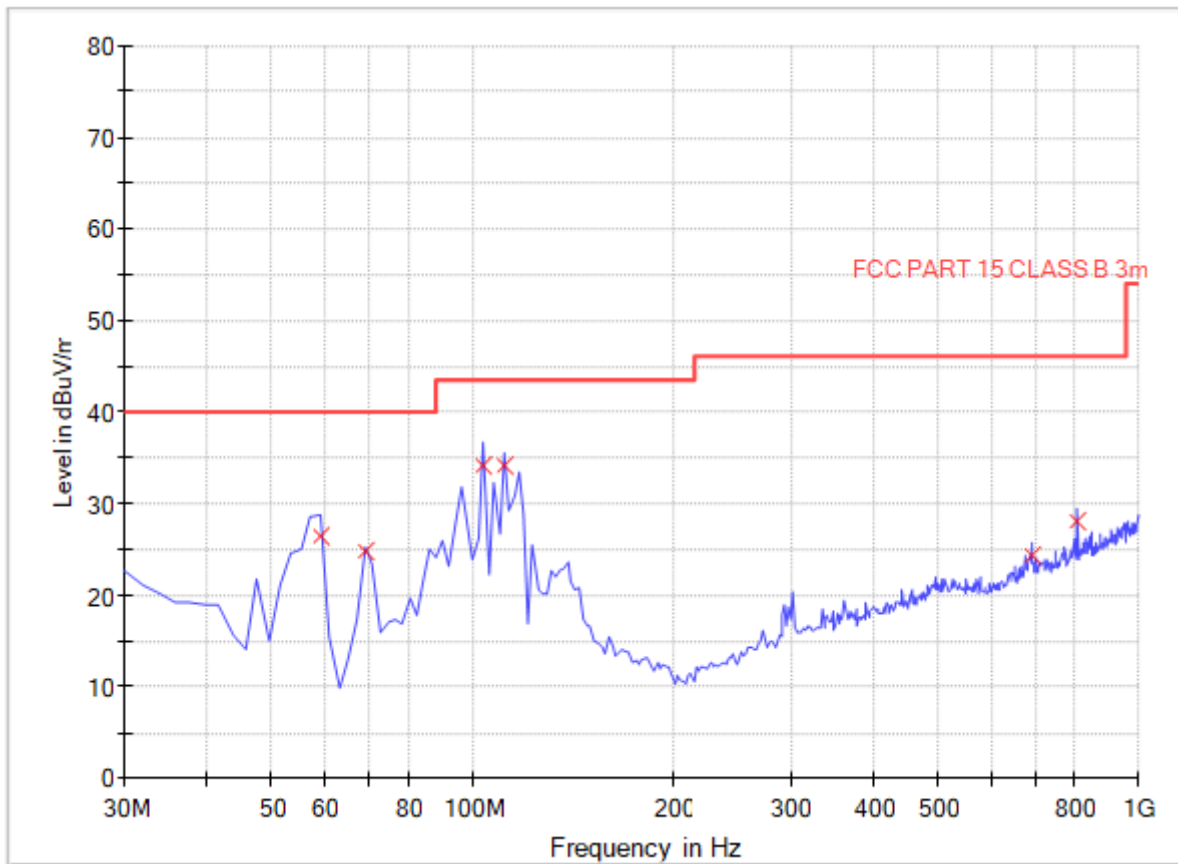


(Plot C: Test Antenna Horizontal30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Verdict
55.28	27.43	120.000	100.0	40.00	12.57	Horizontal	Pass
74.72	31.22	120.000	100.0	40.00	8.78	Horizontal	Pass
101.92	38.65	120.000	100.0	43.50	4.85	Horizontal	Pass
105.80	38.24	120.000	100.0	43.50	5.26	Horizontal	Pass
323.52	25.47	120.000	100.0	46.00	20.53	Horizontal	Pass
704.52	30.45	120.000	100.0	46.00	15.55	Horizontal	Pass



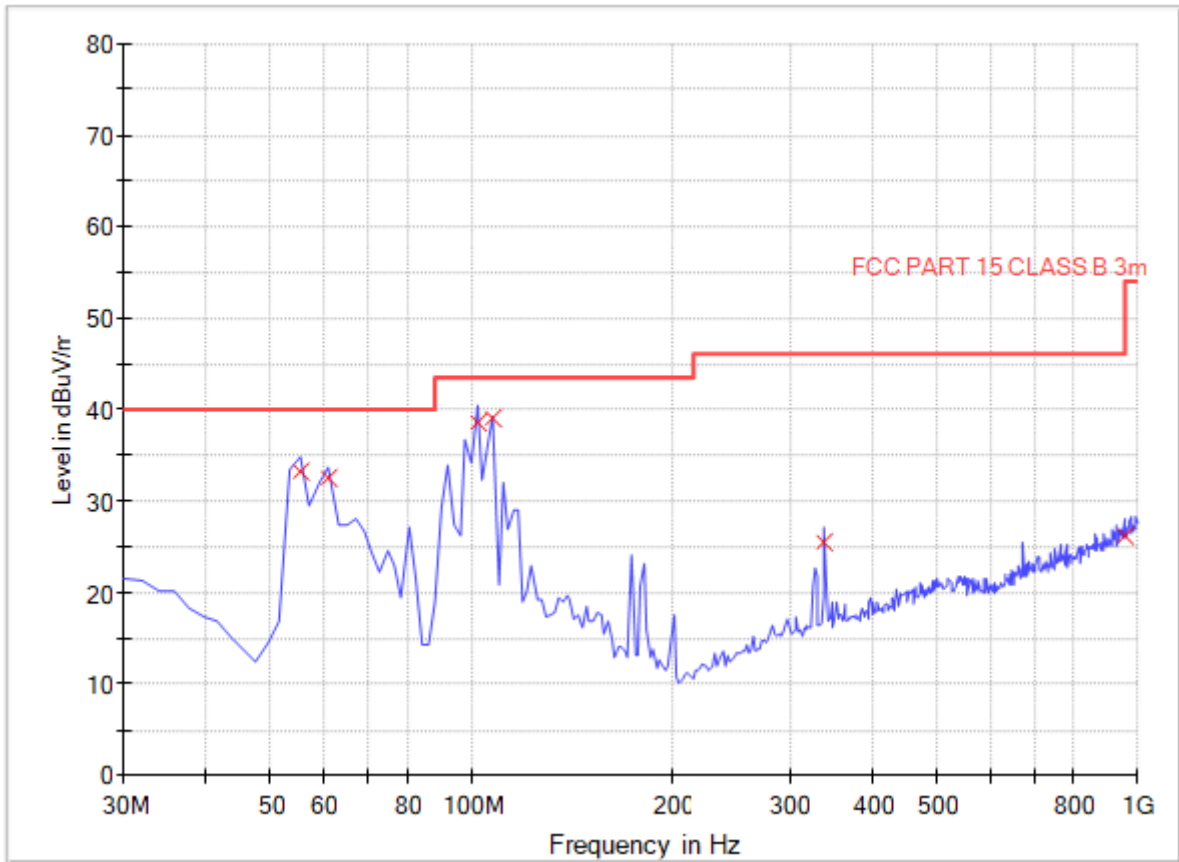
Radiation disturbances, antenna polarization:Setup2, Vertical



(Plot D: Test Antenna Vertical30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Horizontal
59.16	26.49	120.000	100.0	40.00	13.51	Vertical	Pass
68.88	24.78	120.000	100.0	40.00	15.22	Vertical	Pass
103.88	34.16	120.000	100.0	43.50	9.34	Vertical	Pass
111.64	34.17	120.000	100.0	43.50	9.33	Vertical	Pass
690.92	24.37	120.000	100.0	46.00	21.63	Vertical	Pass
809.48	28.08	120.000	100.0	46.00	17.92	Vertical	Pass

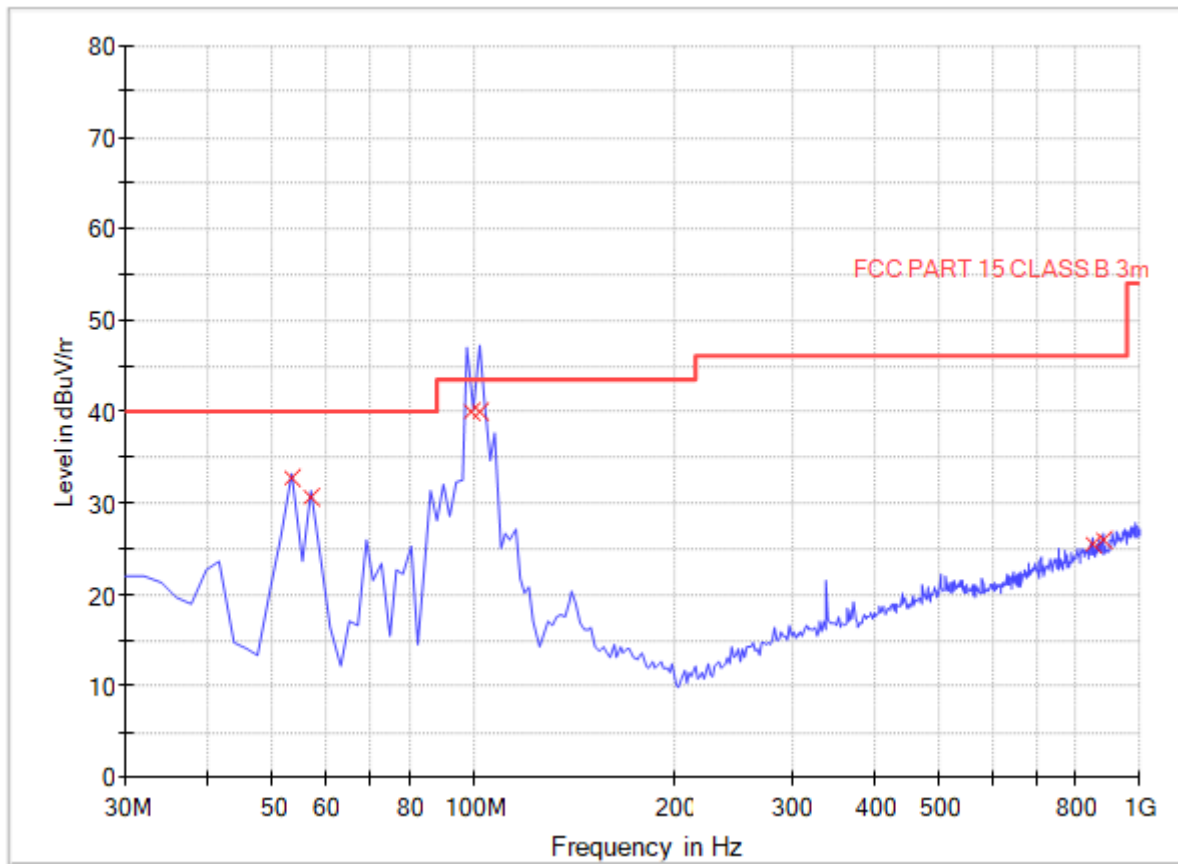
Radiation disturbances, antenna polarization: Setup3, Horizontal



(Plot E: Test Antenna Horizontal30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Verdict
55.28	33.13	120.000	100.0	40.00	6.87	Horizontal	Pass
61.12	32.61	120.000	100.0	40.00	7.39	Horizontal	Pass
101.92	38.57	120.000	100.0	43.50	4.93	Horizontal	Pass
107.76	38.96	120.000	100.0	43.50	4.54	Horizontal	Pass
339.08	25.54	120.000	100.0	46.00	20.46	Horizontal	Pass
953.36	26.31	120.000	100.0	46.00	19.69	Horizontal	Pass

Radiation disturbances, antenna polarization:Setup3, Vertical



(Plot F: Test Antenna Vertical30M - 1G)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna	Horizontal
53.32	32.85	120.000	100.0	40.00	7.15	Vertical	Pass
57.20	30.58	120.000	100.0	40.00	9.42	Vertical	Pass
99.40	39.96	120.000	100.0	43.50	3.54	Vertical	Pass
101.92	40.00	120.000	100.0	43.50	3.50	Vertical	Pass
848.36	25.51	120.000	100.0	46.00	20.49	Vertical	Pass
879.48	25.93	120.000	100.0	46.00	20.07	Vertical	Pass



**Above 1GHz, Setup1**

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1884.22	50.29	-12.40	69.40	19.11	100	304	Horizontal
2	2432.61	53.55	-10.75	69.40	15.85	100	232	Horizontal
3	3435.86	51.28	-7.54	69.40	18.12	100	76	Horizontal
4	4545.39	53.96	-2.58	69.40	15.44	100	15	Horizontal
5	7015.25	58.52	2.05	69.40	10.88	100	263	Horizontal
6	11631.91	58.66	5.43	69.40	10.74	100	345	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1709.93	56.68	-13.09	69.40	12.72	100	84	Vertical
2	2432.61	53.45	-10.75	69.40	15.95	100	322	Vertical
3	3610.15	54.04	-6.71	69.40	15.36	100	33	Vertical
4	4558.14	52.46	-2.40	69.40	16.94	100	66	Vertical
5	6938.73	56.91	2.47	69.40	12.49	100	315	Vertical
6	9850.71	55.44	4.81	69.40	13.96	100	12	Vertical

**Above 1GHz Setup2,3(See Remark 3)**

NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	--	--	--	--	--	--	Vertical
2	--	--	--	--	--	--	Vertical
3	--	--	--	--	--	--	Vertical
4	--	--	--	--	--	--	Vertical
5	--	--	--	--	--	--	Vertical
6	--	--	--	--	--	--	Vertical

NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	--	--	--	--	--	--	Horizontal
2	--	--	--	--	--	--	Horizontal
3	--	--	--	--	--	--	Horizontal
4	--	--	--	--	--	--	Horizontal
5	--	--	--	--	--	--	Horizontal
6	--	--	--	--	--	--	Horizontal

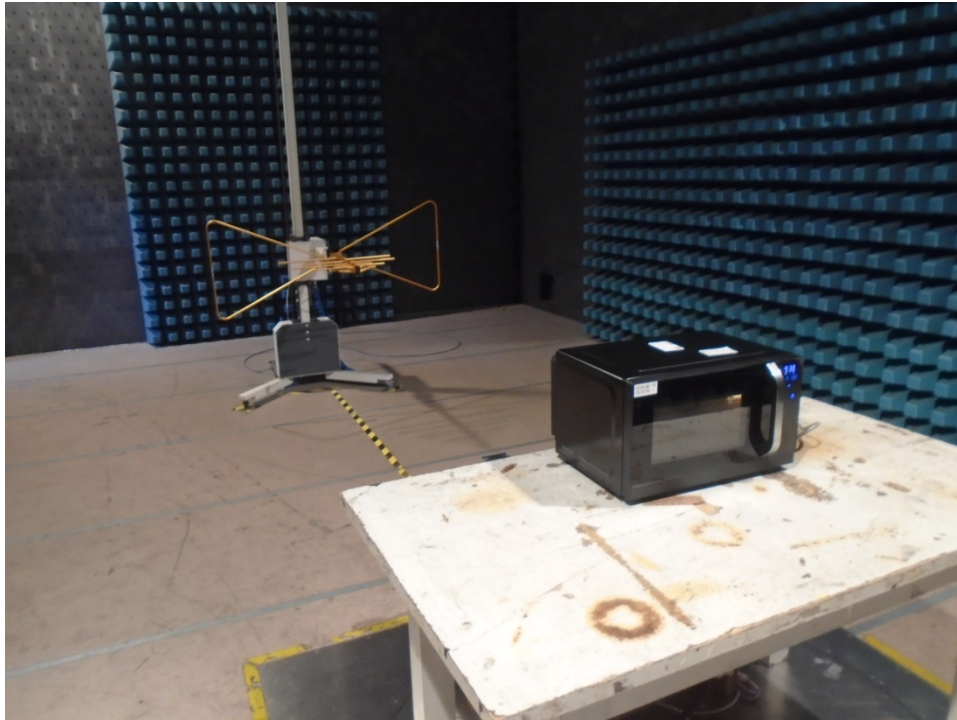


**REMARKS:**

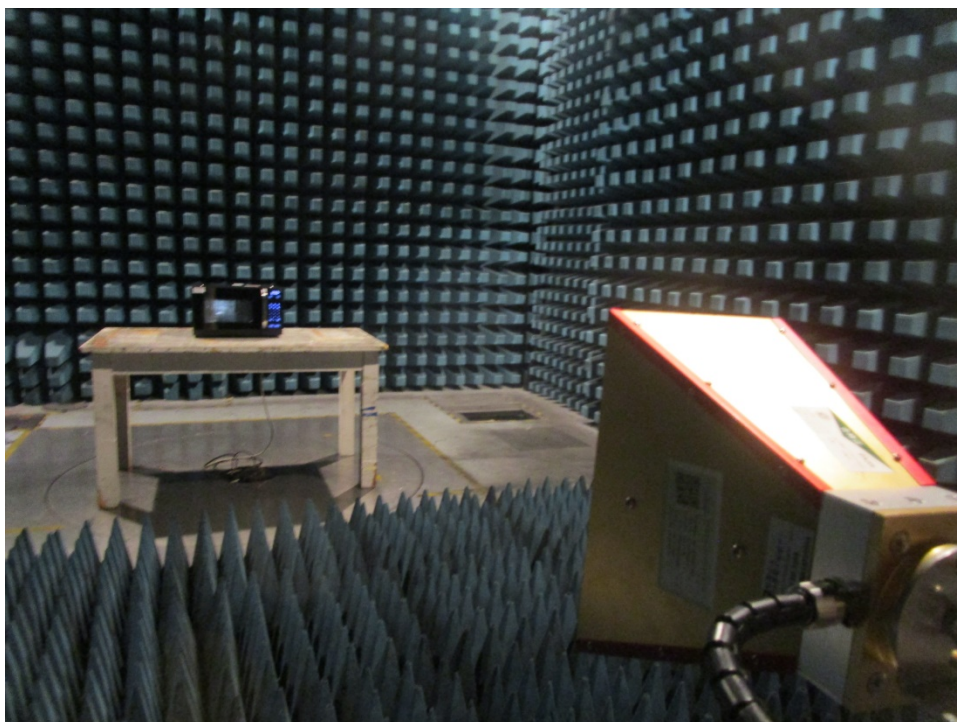
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)  
- Pre-Amplifier Factor(dB)
3. For Set up 2,3 mode, The EUT's internal highest frequency is less than 108MHz, so test frequency range is up to 1000MHz. Other frequency reading was too low against the official limit that not recorded.

## APPENDIX I: PHOTOGRAPHS OF EMC TEST CONFIGURATION

### 1. Radiated Emission Measurement below 1GHz



### 2. Radiated Emission Measurement above 1GHz



### 3. Conducted emission at AC mains input/output port Measurement



### 4. Radiation Hazard Test



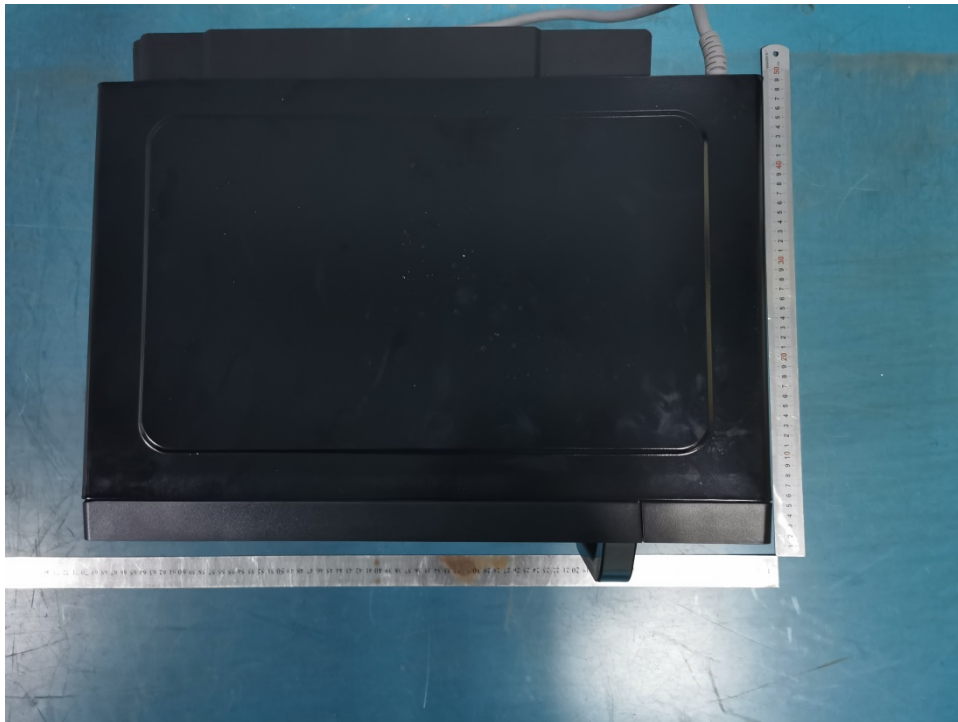


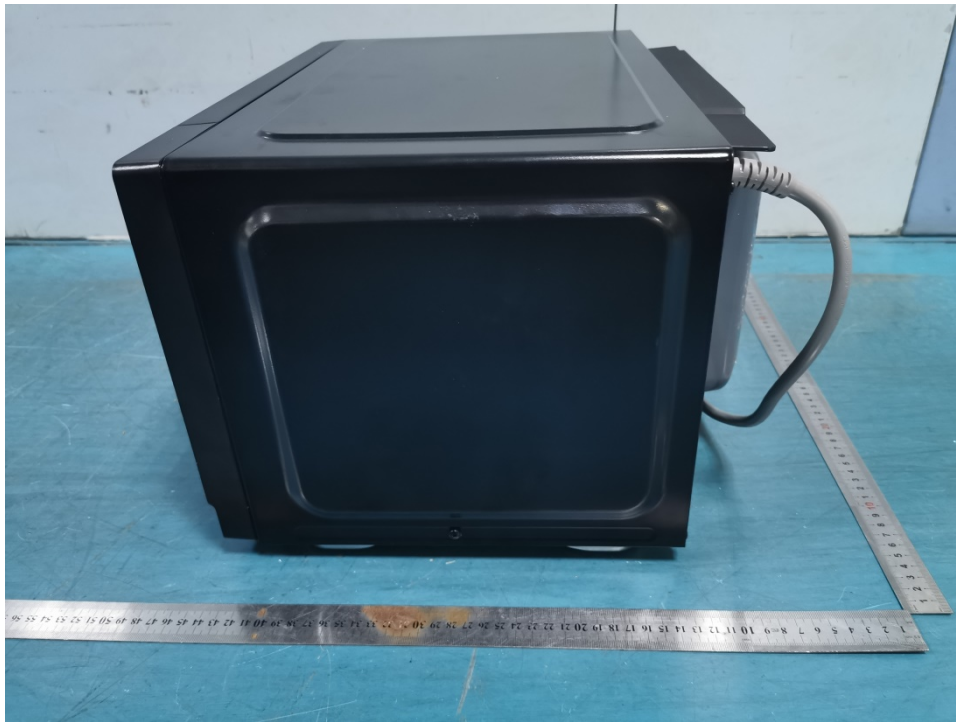
## APPENDIX II: PHOTOGRAPHS OF PRODUCT PHOTO

### External Photo



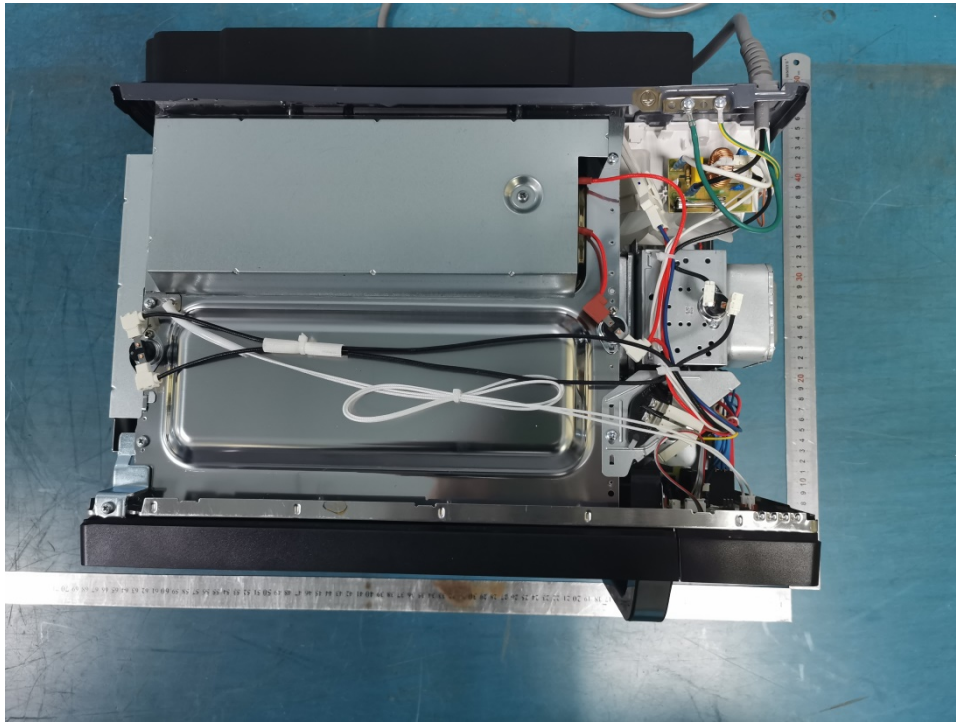


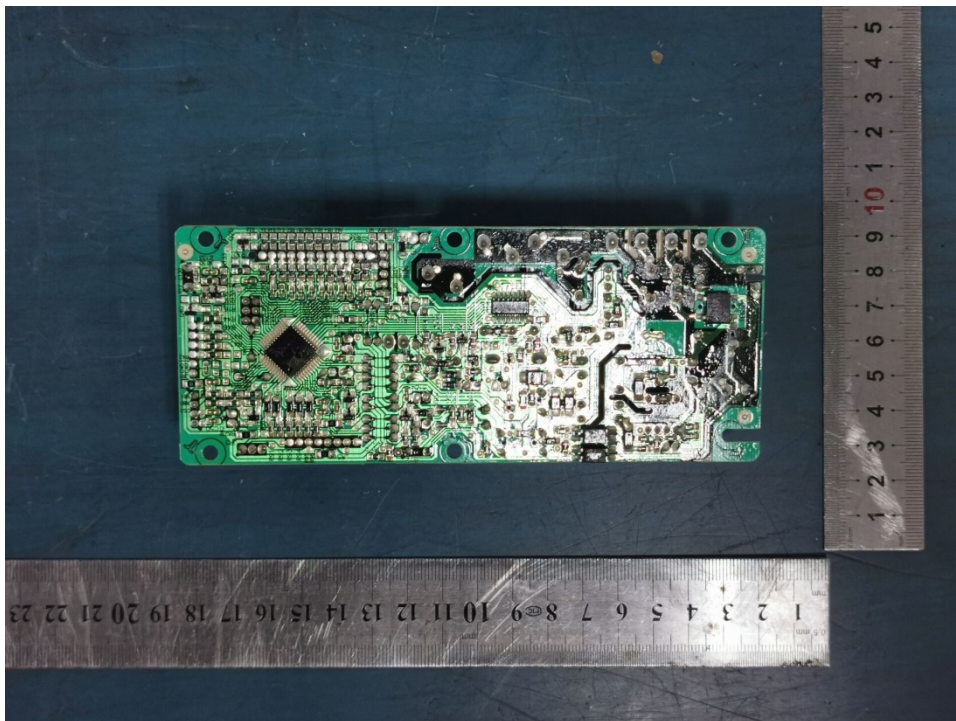
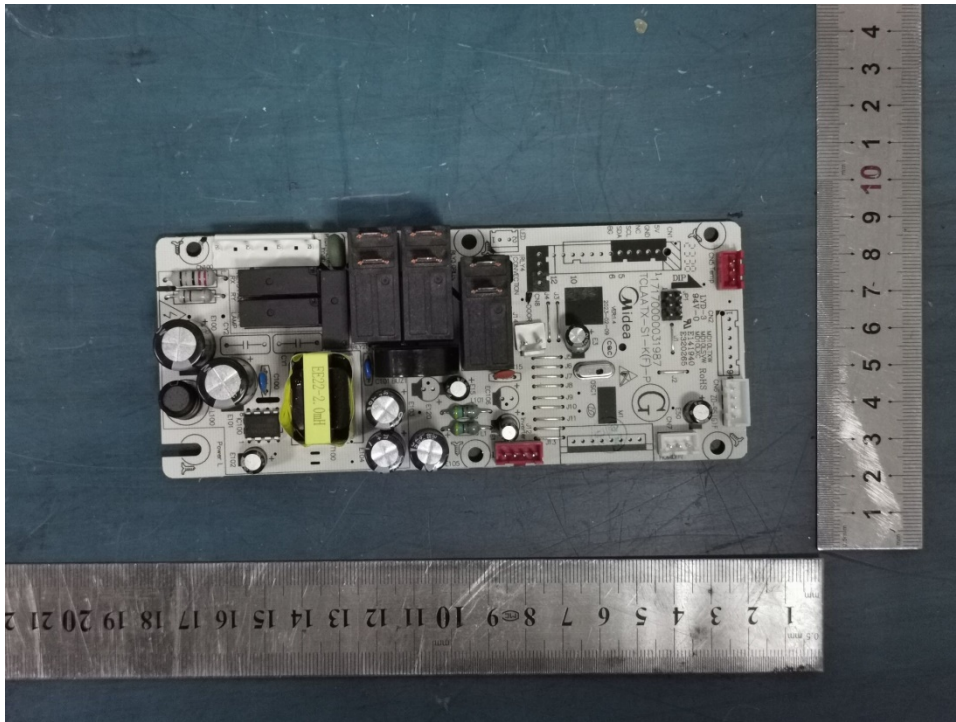


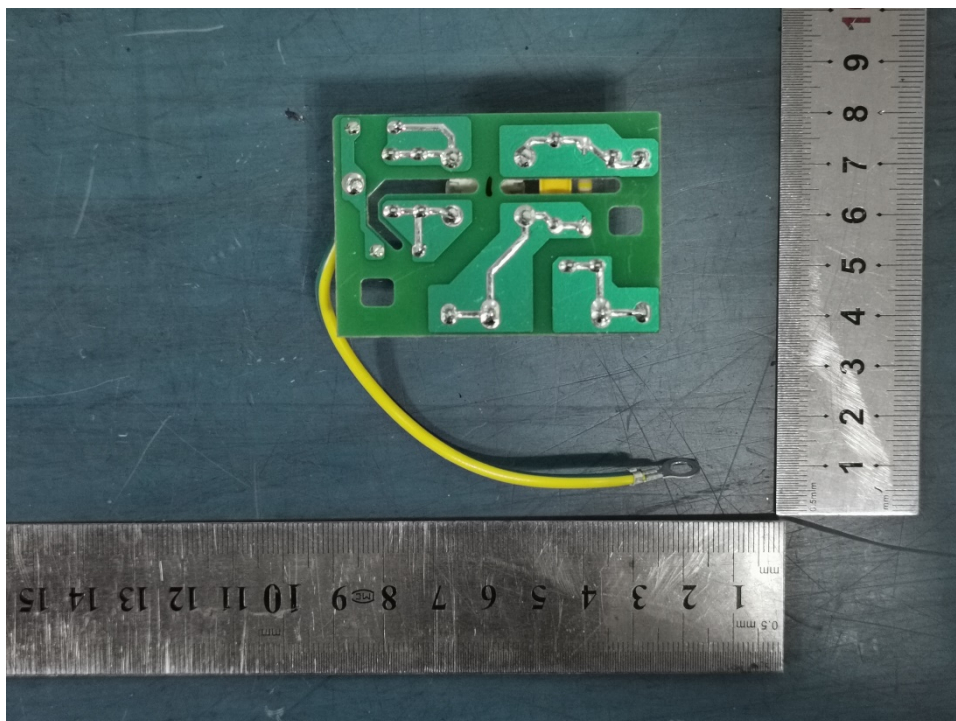
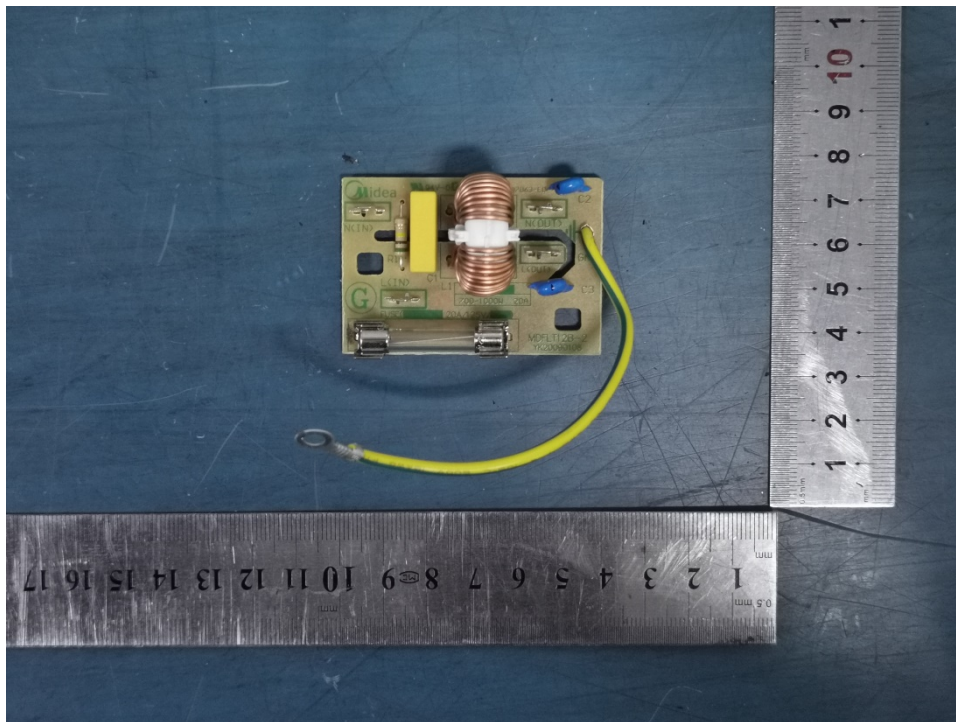


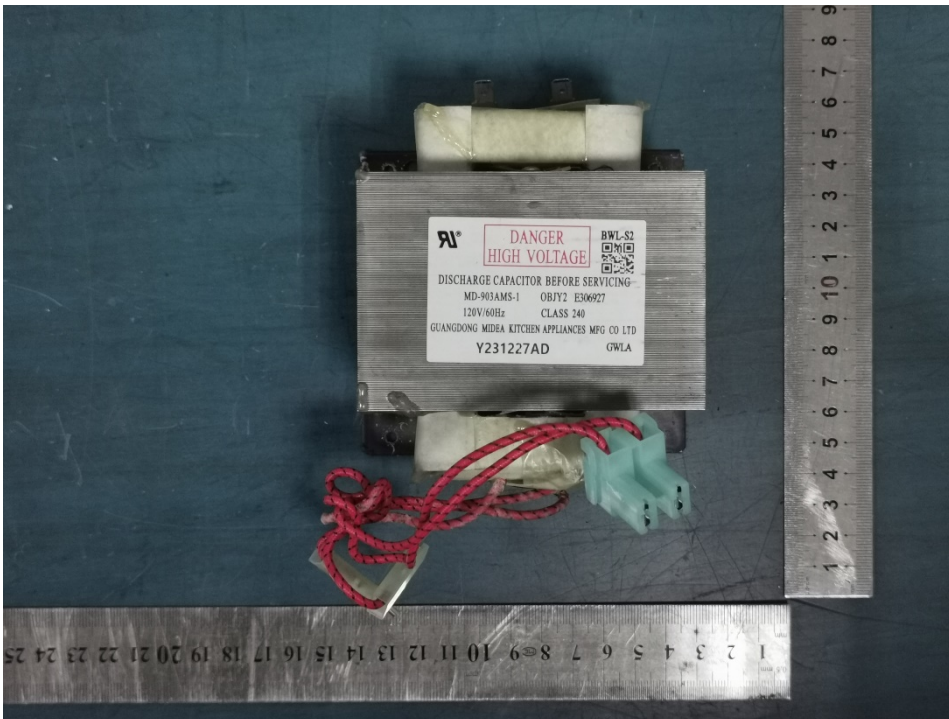


### Internal Photo









\*\*\* End of Report \*\*\*