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## EMC TEST REPORT

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|                       |  |
|-----------------------|--|
| <b>Report Number</b>  | BWTR-2207-FCC15B                                       |
| <b>FCC ID</b>         | SRQ-ZTEA32-2   |
| <b>Applicant</b>      | ZTE Corporation  |
| <b>Product Name</b>   | LTE/WCDMA/GSM(GPRS)<br>Multi-Mode Digital Mobile Phone |
| <b>Marketing Name</b> | N/A  |
| <b>Brand Name</b>     | ZTE  |
| <b>Model Name</b>     | ZTE Blade A32  |
| <b>Serial Number</b>  | 860855060008287  |
| <b>Test Standard</b>  | FCC 47 CFR Part 15 Subpart B                           |
| <b>Tested Date</b>    | Feb. 24, 2022  |

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## Revision History

| Revision | Description             | Issued Date |
|----------|-------------------------|-------------|
| A        | Initial issue of report | 2022/02/25  |
|          |                         |             |

## 1 Summary of Test Result

| Report Section | FCC Section | Description        | Result |
|----------------|-------------|--------------------|--------|
| 3.1            | 15.107      | Conducted Emission | Pass   |
| 3.2            | 15.109      | Radiated Emission  | Pass   |

We, Beijing Boomwave Test Service Co. Ltd., would like to declare that the tested sample has been evaluated and in compliance with the requirements of applicable standards.

Prepared by: 高爽 2022.02.25 14:04:40 +08'00'

Reviewed by: 陈锐 2022.02.25 14:11:15 +08'00'

Approved by: 赵翔 2022.02.25 14:29:09 +08'00'

**Rationale:**

The test results in this report apply exclusively to the tested model / sample.

The electrical copy of test report is invalid without the signatures. The hard copy is invalid without seal.

The test report shall not be modified, republished or copied without the written authorization of the laboratory.

## 2 General Information

### 2.1 Applicant

ZTE CORPORATION

ZTE Plaza, No. 55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

### 2.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, No. 55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

### 2.3 Product Feature of Equipment Under Test

|                             |  |
|-----------------------------|--|
| <b>Product Name</b>         | LTE/WCDMA/GSM(GPRS) Multi-Mode Digital Mobile Phone  |
| <b>Marketing Name</b>       | N/A  |
| <b>Model Name</b>           | ZTE Blade A32  |
| <b>Sample Status</b>        | Production   |
| <b>Power Supply Rating</b>  | DC 3.85V   |
| <b>Supported Function</b>   | GSM850/PCS1900<br>WCDMA Band II/IV/V<br>LTE Band 2/4/5/7/12/17/28/38/66<br>2.4GHz Bluetooth<br>2.4GHz WiFi<br>Wired Charging |
| <b>Antenna Type</b>         | Fixed Internal   |
| <b>Cable</b>                | 0.7m USB cable   |
| <b>Hardware Version</b>     | 19765_1_10M11  |
| <b>Software Version</b>     | W1.0.0_A32   |
| <b>Sample Received Date</b> | 2022/01/20   |

### 2.4 Ancillary Equipment

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following ancillary equipment were used to form a representative test configuration during the tests.

|                      |                                      |
|----------------------|--------------------------------------|
| <b>Accessory</b>     | Power Adapter 1                      |
| <b>Manufacturer</b>  | Shenzhen Ruijing Industrial Co., Ltd |
| <b>Model Name</b>    | STC-A51D-Z                           |
| <b>Input Power</b>   | AC100-240V-50/60Hz 250mA             |
| <b>Output Power</b>  | DC5V, 1000mA                         |
| <b>Serial Number</b> | ---                                  |

|                      |                           |
|----------------------|---------------------------|
| <b>Accessory</b>     | Power Adapter 2           |
| <b>Manufacturer</b>  | Puan Electronics Co., Ltd |
| <b>Model Name</b>    | STC-A51D-Z                |
| <b>Input Power</b>   | AC100-240V-50/60Hz 250mA  |
| <b>Output Power</b>  | DC5V, 1000mA              |
| <b>Serial Number</b> | ---                       |

Note: This power adapter model was selected for test as the worst case.

|                        |                                       |
|------------------------|---------------------------------------|
| <b>Accessory</b>       | Li-Lon Battery                        |
| <b>Manufacturer</b>    | Guangdong Fenghua New Energy Co., Ltd |
| <b>Model Name</b>      | LI3930T44P4h486074                    |
| <b>Capacity</b>        | 3000mAh                               |
| <b>Nominal Voltage</b> | 3.85V                                 |
| <b>Serial Number</b>   | ---                                   |

|                      |                                  |
|----------------------|----------------------------------|
| <b>Accessory</b>     | Headset 1                        |
| <b>Manufacturer</b>  | ShenZhen FDC Electronic Co., Ltd |
| <b>Model Name</b>    | DEM-8A                           |
| <b>Serial Number</b> | ---                              |

|                      |                            |
|----------------------|----------------------------|
| <b>Accessory</b>     | Headset 2                  |
| <b>Manufacturer</b>  | JUWEI ELECTRONICS CO., LTD |
| <b>Model Name</b>    | JWEP1091-Z01               |
| <b>Serial Number</b> | ---                        |

Note: This headset model was selected for test as the worst case.

|                      |   |
|----------------------|---|
| <b>Accessory</b>     | USB Cable 1                                 |
| <b>Manufacturer</b>  | Dongguan Guojun Plastic Electronic Co., Ltd |
| <b>Model Name</b>    | V815W-USBMicro USB_L=0.7m black_low level   |
| <b>Serial Number</b> | ---   |

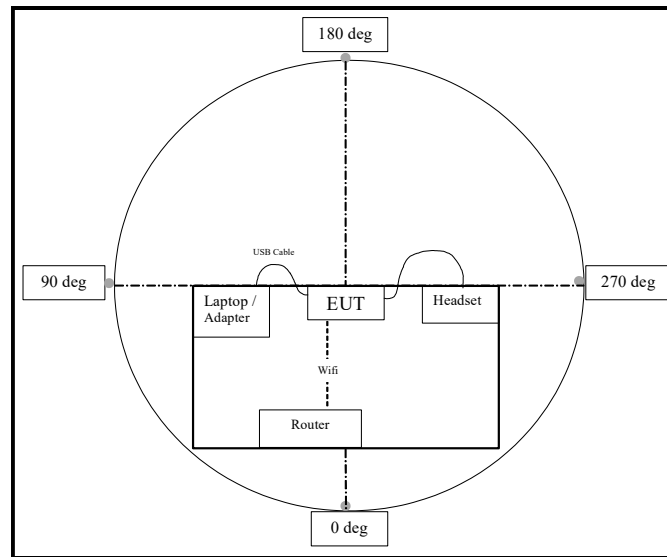
Note: This USB cable model was selected for test as the worst case.

|                      |   |
|----------------------|---|
| <b>Accessory</b>     | USB Cable 2                               |
| <b>Manufacturer</b>  | Shenzhen Kaibai Electronic Co., Ltd       |
| <b>Model Name</b>    | V815W-USBMicro USB_L=0.7m black_low level |
| <b>Serial Number</b> | ---                                       |

|                      |                 |
|----------------------|-----------------|
| <b>Support Unit</b>  | Wireless Router |
| <b>Manufacturer</b>  | LINKSYS         |
| <b>Model Name</b>    | WRT3200ACM      |
| <b>Serial Number</b> | 19810609704032  |

|                      |               |
|----------------------|---------------|
| <b>Support Unit</b>  | Laptop        |
| <b>Manufacturer</b>  | Dell          |
| <b>Model Name</b>    | Inspiron 5493 |
| <b>Serial Number</b> | NG4DK A00     |

## 2.5 Configuration and Peripherals



## 2.6 Applicable Standards

| Standard                     | Version | Title   |
|------------------------------|---------|---|
| FCC 47 CFR Part 15 Subpart B | 2019    | Requirements for Un-intentional Radiators   |
| ANSI C63.4                   | 2014    | American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz |

## 2.7 Test Facilities

Company Name: Beijing Boomwave Test Service Co. Ltd

Address: EMC Building, No.1 Wang Jing East Road, Chao Yang District Beijing, P.R. China 100102

FCC Test Firm Registration Number: 613197

ISED Canada Registration No.: 24289 (CAB Identifier: CN0010)

VCCI Registration No.: R-20062, G-20063, C-20050, T-20049

| Test Site                                 | Description                 | Dimension             | Ground Plane Size |
|---|-----------------------------|-----------------------|-------------------|
| <input checked="" type="checkbox"/> SAC10 | 10m semi-anechoic chamber   | 19.5m × 12.9m × 8.6m  | 4m × 4m           |
| <input type="checkbox"/> SAC3             | 3m semi-anechoic chamber    | 9.6m × 6.4m × 6.0m    | 9.6m × 6.4m       |
| <input checked="" type="checkbox"/> SR#1  | Shielding Room for EMS test | 8.1m × 4.05m × 2.755m | 8.1m × 4.05m      |
| <input type="checkbox"/> SR#2             | Shielding Room for RF test  | 8.1m × 4.05m × 2.755m | ---               |

## 2.8 EUT Operation Mode

| Mode No. | Mode   | Description                                 |
|----------|--|---|
| Mode 1   | GSM850/PCS1900 + BT + 2.4GHz WiFi + GPS + Playing MP4 (SD card)<br>+ Headset + USB Cable + Power Adapter | Multimedia Playing<br>(EUT + Power Adapter) |
| Mode 2   | WCDMA + BT + 2.4GHz WiFi + GPS + Playing MP4 (SD card)<br>+ Headset + USB Cable + Power Adapter          |   |
| Mode 3   | LTE + BT + 2.4GHz WiFi + GPS + Playing MP4 (SD card)<br>+ Headset + USB Cable + Power Adapter            |   |
| Mode 4   | GSM850/PCS1900 + BT + 2.4GHz WiFi + GPS + Camera<br>+ Headset + USB Cable connected with Laptop          | Data Transferring<br>(EUT + Laptop)         |
| Mode 5   | WCDMA + BT + 2.4GHz WiFi + GPS + Camera<br>+ Headset + USB Cable connected with Laptop                   |   |
| Mode 6   | LTE + BT + 2.4GHz WiFi + GPS + Camera<br>+ Headset + USB Cable connected with Laptop                     |   |

Note: Pre-Scan has been conducted to determine the worst-case mode: Mode 2 and Mode 5.



### 3 Test Result

#### 3.1 Conducted Emission

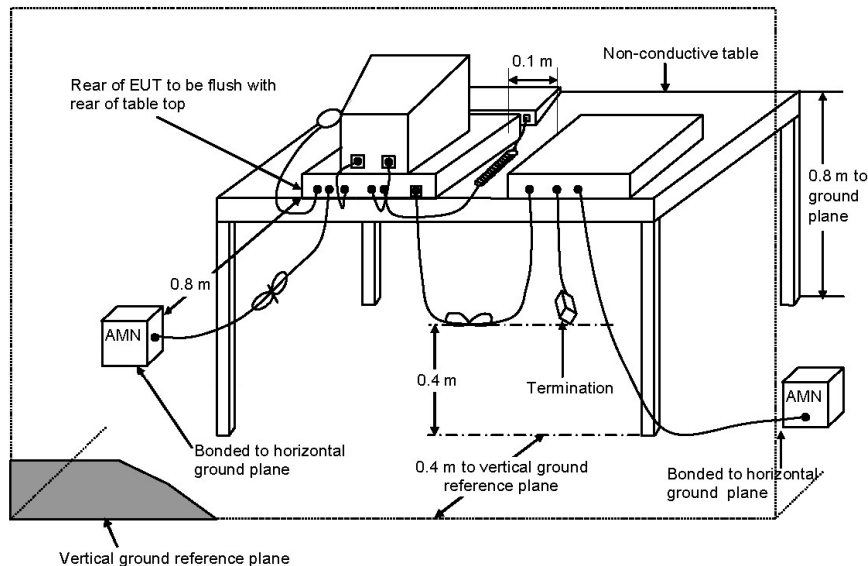
##### 3.1.1. Limits

FCC 47 CFR Part 15 Subpart B - §15.107 (a)

| Frequency Range (MHz) | Detector Type / Bandwidth | Class B limits (dBµV) |
|-----------------------|---------------------------|-----------------------|
| 0.15 to 0.5           | Quasi Peak / 9 kHz        | 66 to 56              |
| 0.5 to 5              |                           | 56                    |
| 5 to 30               |                           | 60                    |
| 0.15 to 0.5           | Average / 9 kHz           | 56 to 46              |
| 0.5 to 5              |                           | 46                    |
| 5 to 30               |                           | 50                    |

Note: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

##### 3.1.2. Typical Test Setup Layout

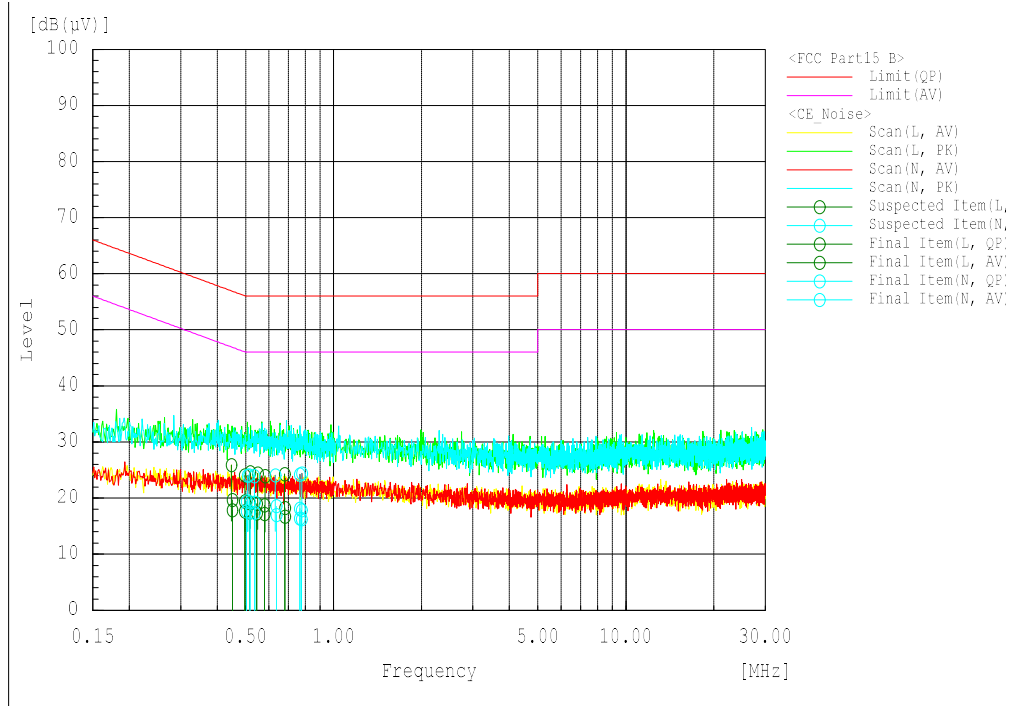


##### 3.1.3. Test Procedures

- 1) The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meter 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 connected to the other LISN.
- 4) The frequency range from 150 kHz to 30 MHz was searched.
- 5) Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 6) 6 frequency points closest to the limit of each line shall be performed the final measurement by Quasi Peak detector.

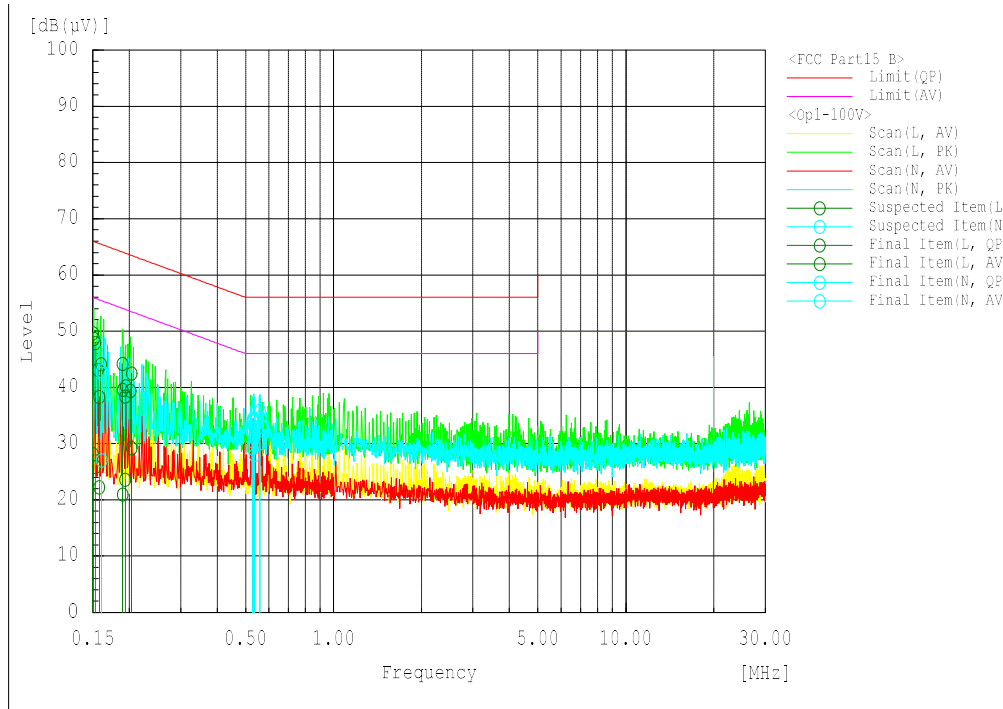
### 3.1.4. Test Result

|                       |                 |                       |               |
|-----------------------|-----------------|-----------------------|---------------|
| <b>Test Mode</b>      | Noise           | <b>Test Date</b>      | 2022.02.24    |
| <b>Test Frequency</b> | 0.15MHz ~ 30MHz | <b>Test Engineer</b>  | Chen Rui      |
| <b>Serial Number</b>  | ---             | <b>Temp, Humidity</b> | 23.3°C, 54.5% |



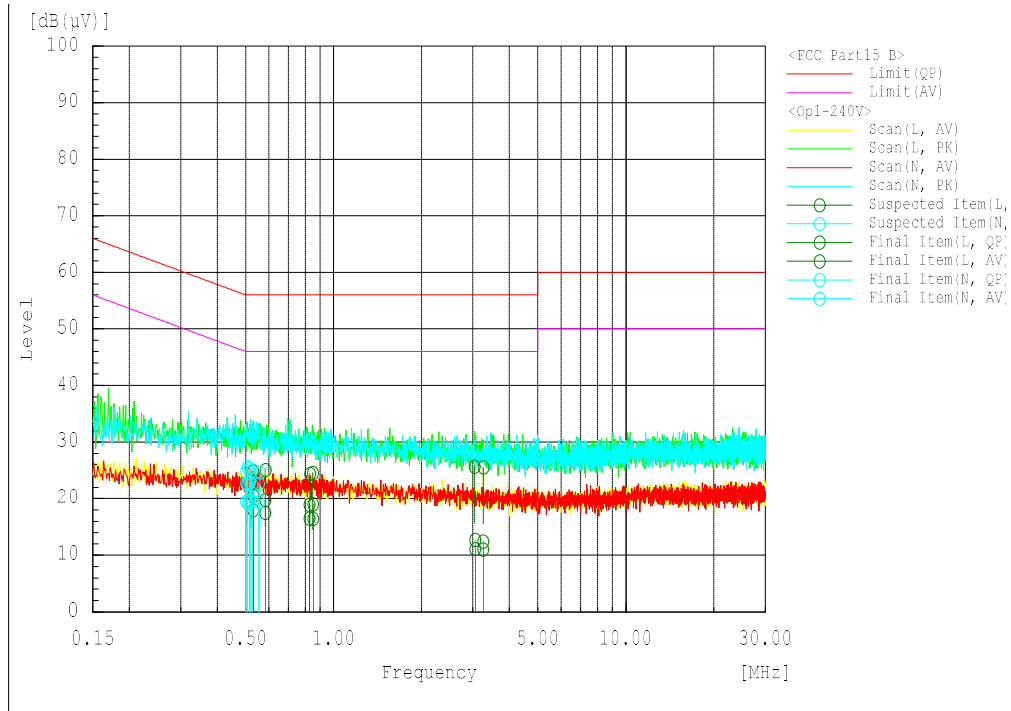
| Frequency MHz | Line | Reading dB(µV) |      | Factor dB | Level dB(µV) |      | Limit dB(µV) |      | Margin dB |      | Pass/Fail |
|---------------|------|----------------|------|-----------|--------------|------|--------------|------|-----------|------|-----------|
|               |      | QP             | AV   |           | QP           | AV   | QP           | AV   | QP        | AV   |           |
| 0.504         | N    | -0.5           | -2.3 | 19.9      | 19.4         | 17.6 | 56.0         | 46.0 | 36.6      | 28.4 | Pass      |
| 0.517         | N    | -0.6           | -2.4 | 19.9      | 19.3         | 17.5 | 56.0         | 46.0 | 36.7      | 28.5 | Pass      |
| 0.536         | N    | -0.7           | -2.5 | 19.9      | 19.2         | 17.4 | 56.0         | 46.0 | 36.8      | 28.6 | Pass      |
| 0.636         | N    | -1.3           | -2.9 | 19.9      | 18.6         | 17.0 | 56.0         | 46.0 | 37.4      | 29.0 | Pass      |
| 0.767         | N    | -1.7           | -3.5 | 19.8      | 18.1         | 16.3 | 56.0         | 46.0 | 37.9      | 29.7 | Pass      |
| 0.777         | N    | -2.0           | -3.6 | 19.8      | 17.8         | 16.2 | 56.0         | 46.0 | 38.2      | 29.8 | Pass      |
| 0.45          | L    | -0.2           | -2.1 | 19.9      | 19.7         | 17.8 | 56.9         | 46.9 | 37.2      | 29.1 | Pass      |
| 0.496         | L    | -0.5           | -2.3 | 19.9      | 19.4         | 17.6 | 56.1         | 46.1 | 36.7      | 28.5 | Pass      |
| 0.516         | L    | -0.8           | -2.5 | 19.9      | 19.1         | 17.4 | 56.0         | 46.0 | 36.9      | 28.6 | Pass      |
| 0.546         | L    | -0.9           | -2.6 | 19.9      | 19.0         | 17.3 | 56.0         | 46.0 | 37.0      | 28.7 | Pass      |
| 0.58          | L    | -1.1           | -2.7 | 19.9      | 18.8         | 17.2 | 56.0         | 46.0 | 37.2      | 28.8 | Pass      |
| 0.682         | L    | -1.6           | -3.2 | 19.9      | 18.3         | 16.7 | 56.0         | 46.0 | 37.7      | 29.3 | Pass      |

|                       |                  |                       |               |
|-----------------------|------------------|-----------------------|---------------|
| <b>Test Mode</b>      | Mode 2 - AC 100V | <b>Test Date</b>      | 2022.02.24    |
| <b>Test Frequency</b> | 0.15MHz ~ 30MHz  | <b>Test Engineer</b>  | Chen Rui      |
| <b>Serial Number</b>  | 860855060008287  | <b>Temp, Humidity</b> | 23.3°C, 54.5% |



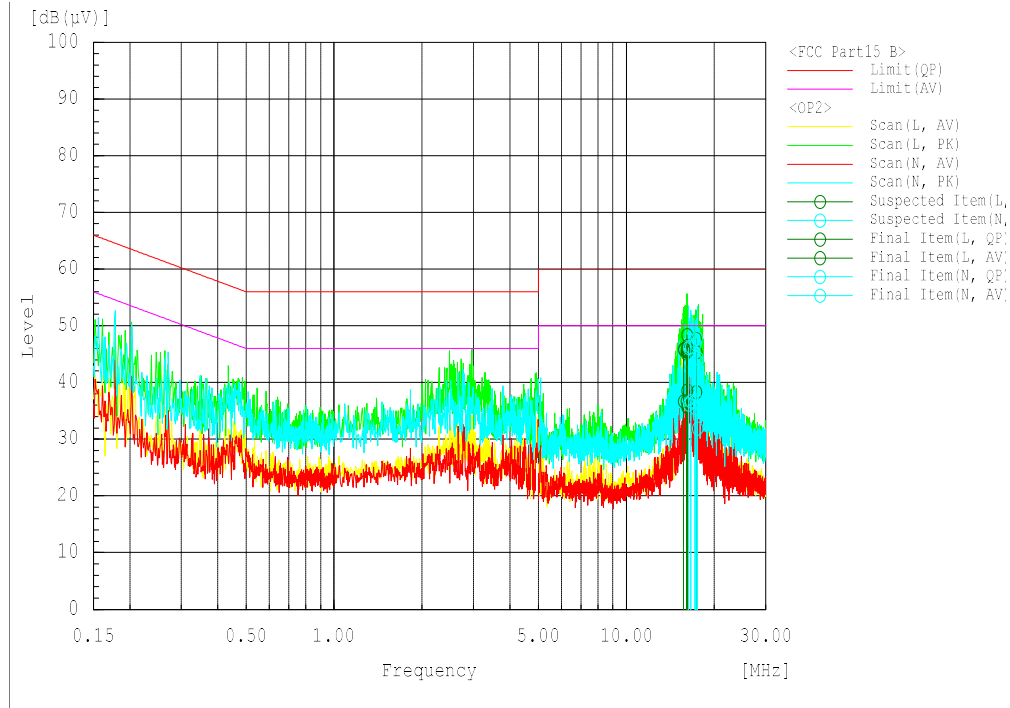
| Frequency MHz | Line | Reading dB(μV) |      | Factor dB | Level dB(μV) |      | Limit dB(μV) |      | Margin dB |      | Pass/Fail |
|---------------|------|----------------|------|-----------|--------------|------|--------------|------|-----------|------|-----------|
|               |      | QP             | AV   |           | QP           | AV   | QP           | AV   | QP        | AV   |           |
| 0.15          | L    | 29.7           | 8.1  | 20.0      | 49.7         | 28.1 | 66.0         | 56.0 | 16.3      | 27.9 | Pass      |
| 0.153         | L    | 27.9           | 5.9  | 20.0      | 47.9         | 25.9 | 65.9         | 55.9 | 18.0      | 30.0 | Pass      |
| 0.158         | L    | 18.3           | 2.2  | 20.0      | 38.3         | 22.2 | 65.6         | 55.6 | 27.3      | 33.4 | Pass      |
| 0.19          | L    | 19.6           | 1.0  | 20.0      | 39.6         | 21.0 | 64.0         | 54.0 | 24.4      | 33.0 | Pass      |
| 0.193         | L    | 18.4           | 3.6  | 20.0      | 38.4         | 23.6 | 63.9         | 53.9 | 25.5      | 30.3 | Pass      |
| 0.203         | L    | 22.6           | 9.3  | 19.9      | 42.5         | 29.2 | 63.5         | 53.5 | 21.0      | 24.3 | Pass      |
| 0.161         | N    | 22.9           | 7.1  | 20.0      | 42.9         | 27.1 | 65.4         | 55.4 | 22.5      | 28.3 | Pass      |
| 0.529         | N    | 14.1           | 10.5 | 19.9      | 34.0         | 30.4 | 56.0         | 46.0 | 22.0      | 15.6 | Pass      |
| 0.528         | N    | 14.1           | 9.3  | 19.9      | 34.0         | 29.2 | 56.0         | 46.0 | 22.0      | 16.8 | Pass      |
| 0.536         | N    | 12.9           | 8.1  | 19.9      | 32.8         | 28.0 | 56.0         | 46.0 | 23.2      | 18.0 | Pass      |
| 0.533         | N    | 13.2           | 11.2 | 19.9      | 33.1         | 31.1 | 56.0         | 46.0 | 22.9      | 14.9 | Pass      |
| 0.56          | N    | 14.7           | 10.2 | 19.9      | 34.6         | 30.1 | 56.0         | 46.0 | 21.4      | 15.9 | Pass      |

|                       |                  |                       |               |
|-----------------------|------------------|-----------------------|---------------|
| <b>Test Mode</b>      | Mode 2 - AC 240V | <b>Test Date</b>      | 2022.02.24    |
| <b>Test Frequency</b> | 0.15MHz ~ 30MHz  | <b>Test Engineer</b>  | Chen Rui      |
| <b>Serial Number</b>  | 860855060008287  | <b>Temp, Humidity</b> | 23.3°C, 54.5% |



| Frequency MHz | Line | Reading dB(μV) |      | Factor dB | Level dB(μV) |      | Limit dB(μV) |      | Margin dB |      | Pass/Fail |
|---------------|------|----------------|------|-----------|--------------|------|--------------|------|-----------|------|-----------|
|               |      | QP             | AV   |           | QP           | AV   | QP           | AV   | QP        | AV   |           |
| 0.501         | N    | 2.8            | -0.4 | 19.9      | 22.7         | 19.5 | 56.0         | 46.0 | 33.3      | 26.5 | Pass      |
| 0.506         | N    | 2.8            | -0.5 | 19.9      | 22.7         | 19.4 | 56.0         | 46.0 | 33.3      | 26.6 | Pass      |
| 0.514         | N    | 3.0            | -0.3 | 19.9      | 22.9         | 19.6 | 56.0         | 46.0 | 33.1      | 26.4 | Pass      |
| 0.518         | N    | 3.0            | -0.2 | 19.9      | 22.9         | 19.7 | 56.0         | 46.0 | 33.1      | 26.3 | Pass      |
| 0.527         | N    | 2.6            | -0.4 | 19.9      | 22.5         | 19.5 | 56.0         | 46.0 | 33.5      | 26.5 | Pass      |
| 0.556         | N    | 2.7            | -0.5 | 19.9      | 22.6         | 19.4 | 56.0         | 46.0 | 33.4      | 26.6 | Pass      |
| 0.531         | L    | 0.6            | -1.9 | 19.9      | 20.5         | 18.0 | 56.0         | 46.0 | 35.5      | 28.0 | Pass      |
| 0.583         | L    | -0.2           | -2.4 | 19.9      | 19.7         | 17.5 | 56.0         | 46.0 | 36.3      | 28.5 | Pass      |
| 0.826         | L    | -0.9           | -3.3 | 19.8      | 18.9         | 16.5 | 56.0         | 46.0 | 37.1      | 29.5 | Pass      |
| 0.852         | L    | -0.8           | -3.4 | 19.8      | 19.0         | 16.4 | 56.0         | 46.0 | 37.0      | 29.6 | Pass      |
| 3.053         | L    | -7.2           | -8.8 | 19.9      | 12.7         | 11.1 | 56.0         | 46.0 | 43.3      | 34.9 | Pass      |
| 3.248         | L    | -7.5           | -8.9 | 19.9      | 12.4         | 11.0 | 56.0         | 46.0 | 43.6      | 35.0 | Pass      |

|                |                 |                |               |
|----------------|-----------------|----------------|---------------|
| Test Mode      | Mode 5          | Test Date      | 2022.02.24    |
| Test Frequency | 0.15MHz ~ 30MHz | Test Engineer  | Chen Rui      |
| Serial Number  | 860855060008287 | Temp, Humidity | 23.3°C, 54.5% |



| Frequency MHz | Line | Reading dB(µV) |      | Factor dB | Level dB(µV) |      | Limit dB(µV) |      | Margin dB |      | Pass/Fail |
|---------------|------|----------------|------|-----------|--------------|------|--------------|------|-----------|------|-----------|
|               |      | QP             | AV   |           | QP           | AV   | QP           | AV   | QP        | AV   |           |
| 15.706        | L    | 25.9           | 16.7 | 20.0      | 45.9         | 36.7 | 60.0         | 50.0 | 14.1      | 13.3 | Pass      |
| 16.053        | L    | 25.5           | 16.7 | 20.0      | 45.5         | 36.7 | 60.0         | 50.0 | 14.5      | 13.3 | Pass      |
| 16.12         | L    | 28.4           | 18.6 | 20.0      | 48.4         | 38.6 | 60.0         | 50.0 | 11.6      | 11.4 | Pass      |
| 16.124        | L    | 25.6           | 15.7 | 20.0      | 45.6         | 35.7 | 60.0         | 50.0 | 14.4      | 14.3 | Pass      |
| 16.181        | L    | 26.1           | 15.8 | 20.0      | 46.1         | 35.8 | 60.0         | 50.0 | 13.9      | 14.2 | Pass      |
| 17.374        | L    | 27.7           | 18.3 | 20.0      | 47.7         | 38.3 | 60.0         | 50.0 | 12.3      | 11.7 | Pass      |
| 16.318        | N    | 26.1           | 16.1 | 20.0      | 46.1         | 36.1 | 60.0         | 50.0 | 13.9      | 13.9 | Pass      |
| 16.605        | N    | 26.3           | 16.7 | 20.0      | 46.3         | 36.7 | 60.0         | 50.0 | 13.7      | 13.3 | Pass      |
| 17.057        | N    | 27.4           | 16.6 | 20.0      | 47.4         | 36.6 | 60.0         | 50.0 | 12.6      | 13.4 | Pass      |
| 17.246        | N    | 26.8           | 15.5 | 20.0      | 46.8         | 35.5 | 60.0         | 50.0 | 13.2      | 14.5 | Pass      |
| 17.433        | N    | 27.7           | 16.8 | 20.0      | 47.7         | 36.8 | 60.0         | 50.0 | 12.3      | 13.2 | Pass      |
| 17.55         | N    | 24.4           | 11.9 | 20.0      | 44.4         | 31.9 | 60.0         | 50.0 | 15.6      | 18.1 | Pass      |

### 3.1.5. Uncertainty

$$U_{lab}=3\text{dB} (U_{Cispr}=3.44\text{dB})$$

The reported uncertainty is an expanded uncertainty calculated using a coverage factor of 2 which gives a level of confidence of approximately 95%.

### 3.2 Radiated Emission

#### 3.2.1. Limit

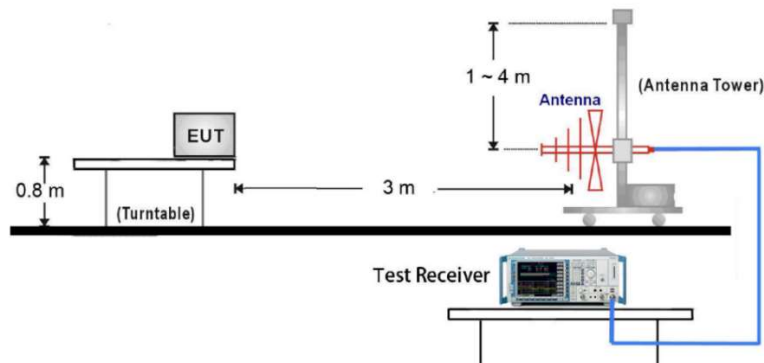
FCC 47 CFR Part 15 Subpart B - §15.109 (a)

| Frequency (MHz) | Field Strength |        | Measurement Distance (meters) |
|-----------------|----------------|--------|-------------------------------|
|                 | uV/m           | dBuV/m |                               |
| 30 - 88         | 100            | 40.0   | 3                             |
| 88 - 216        | 150            | 43.5   | 3                             |
| 216 - 960       | 200            | 46.0   | 3                             |
| Above 960       | 500            | 54.0   | 3                             |

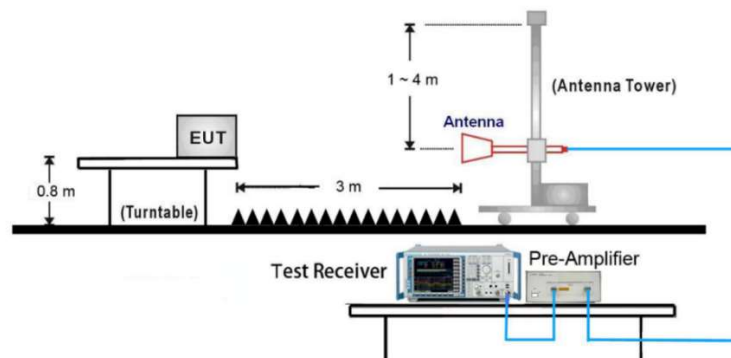
| Frequency (MHz) | Class B Limits dBuV/m |         | Measurement Distance (meters) |
|-----------------|-----------------------|---------|-------------------------------|
|                 | Peak                  | Average |                               |
| Above 1000      | 74                    | 54      | 3                             |

| Highest frequency generated or used in the device or on which the device operates or tunes (MHz) | Upper frequency of measurement range (MHz)                          |
|--|---|
| Below 1.705  | 30  |
| 1.705~108  | 1000  |
| 108~500  | 2000  |
| 500~1000   | 5000  |
| Above 1000   | 5th harmonic of the highest frequency or 40 GHz, whichever is lower |

#### 3.2.2. Typical Test Setup Layout and Connection



30MHz- 1GHz Test Setup



Above 1GHz Test Setup

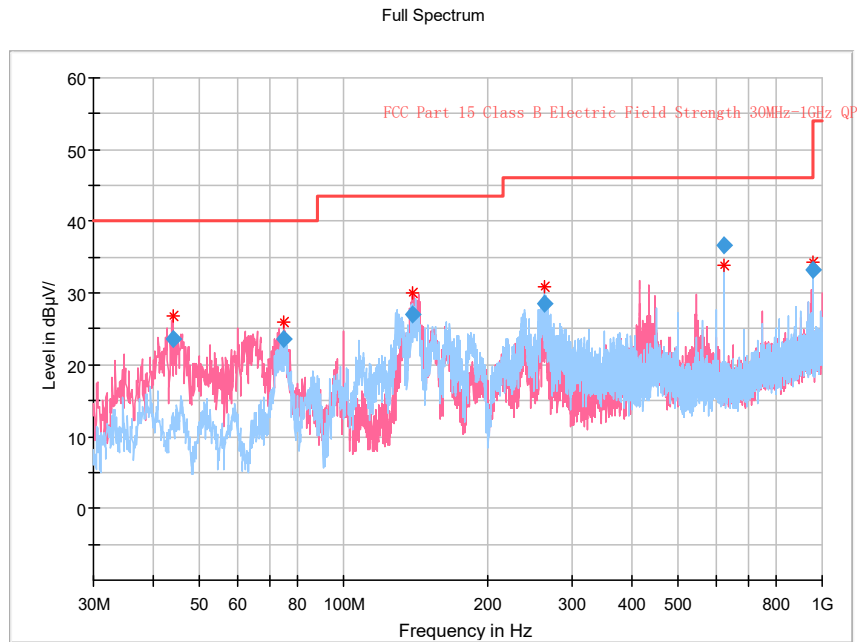
### 3.2.3. Test Procedures

#### 30MHz - 1GHz & Above 1GHz:

- 1) The EUT was placed on a rotatable table top 0.8 meter above ground.
- 2) The EUT was set 3 meters from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
- 3) The table was rotated 360 degrees to determine the position of the highest radiation.
- 4) The elevation of the antenna varies from 1 m to 4 m above the ground to find the maximum field strength. The horizontal polarization and vertical polarization of the antenna are set for measurement.
- 5) For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 to 4 meters) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- 6) Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode; Then the quasi-peak or average scan is carried out at points with relatively high peak value.
- 7) Reading(dBuV/m) = QuasiPeak(dBμV/m) or MaxPeak(dBuV/m) or Average(dBμV/m) - Corr.(dB)

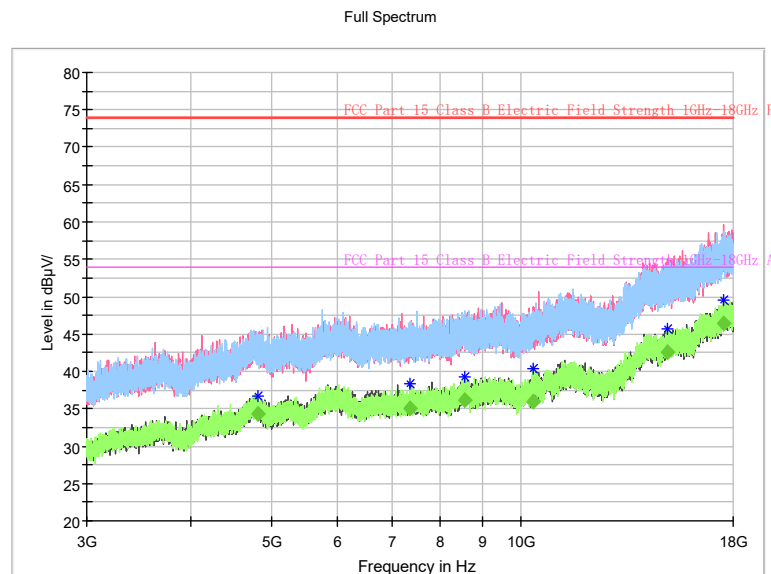
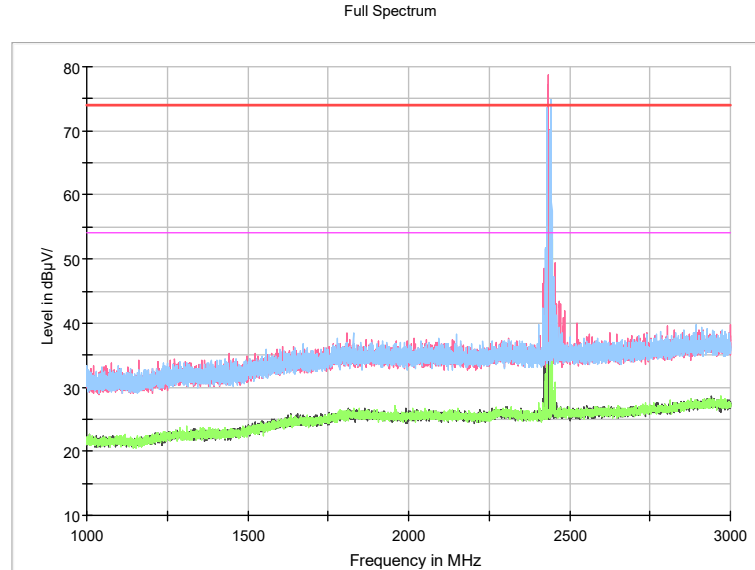
### 3.2.4. Test Result

|                       |                   |                       |               |
|-----------------------|-------------------|-----------------------|---------------|
| <b>Test Mode</b>      | Mode 2            | <b>Test Date</b>      | 2022.02.24    |
| <b>Test Frequency</b> | 30 MHz ~ 1000 MHz | <b>Test Engineer</b>  | Gao Shuang    |
| <b>Serial Number</b>  | 860855060008287   | <b>Temp, Humidity</b> | 23.1°C, 54.3% |



| Frequency (MHz) | Reading (dBuV/m) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|------------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 43.968000       | 43.94            | 23.64              | 40.00          | 16.36       | 1000.0          | 120.000         | 99.7        | V   | 155.0         | -20.3      |
| 74.911000       | 48.83            | 23.63              | 40.00          | 16.37       | 1000.0          | 120.000         | 99.7        | V   | 203.0         | -25.2      |
| 139.222000      | 51.10            | 27.10              | 43.50          | 16.40       | 1000.0          | 120.000         | 100.2       | V   | 156.0         | -24.0      |
| 263.479000      | 46.67            | 28.57              | 46.00          | 17.43       | 1000.0          | 120.000         | 100.7       | H   | 25.0          | -18.1      |
| 624.998000      | 44.39            | 36.59              | 46.00          | 9.41        | 1000.0          | 120.000         | 124.7       | H   | 177.0         | -7.8       |
| 959.842000      | 35.69            | 33.19              | 46.00          | 12.81       | 1000.0          | 120.000         | 124.7       | H   | 25.0          | -2.5       |

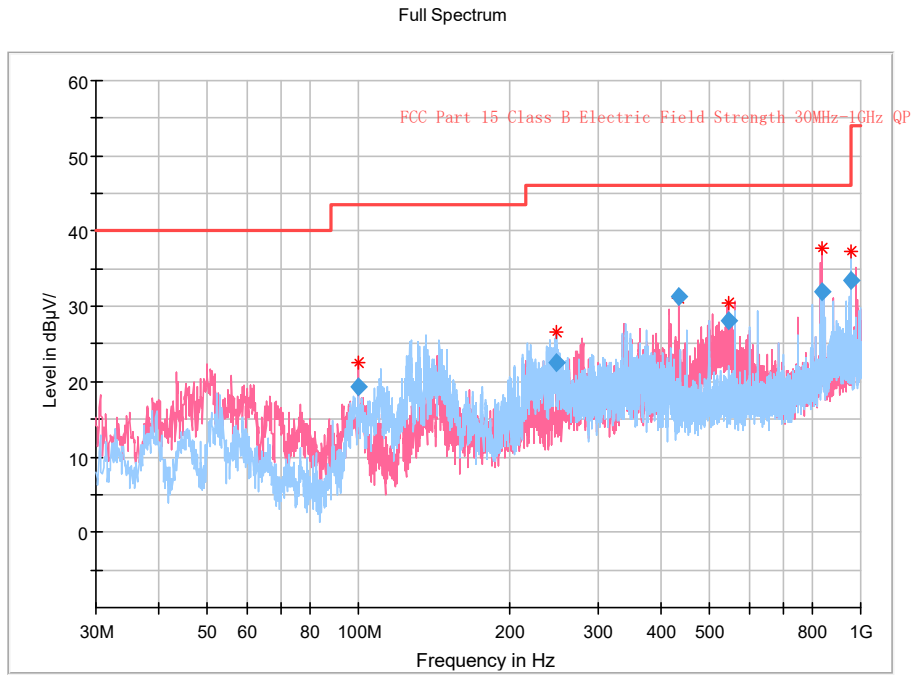
|                |                      |                |               |
|----------------|----------------------|----------------|---------------|
| Test Mode      | Mode 2               | Test Date      | 2022.02.24    |
| Test Frequency | 1000 MHz ~ 18000 MHz | Test Engineer  | Gao Shuang    |
| Serial Number  | 860855060008287      | Temp, Humidity | 23.1°C, 54.3% |



| Frequency (MHz) | Reading MaxPeak (dBuV/m) | Reading Average (dBuV/m) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------------|--------------------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 4816.500000     | ---                      | 55.40                    | ---              | 34.30            | 54.00          | 19.70       | 1000.0          | 1000.000        | 182.0       | H   | 200.0         | -21.1      |
| 7345.500000     | ---                      | 56.26                    | ---              | 35.06            | 54.00          | 18.94       | 1000.0          | 1000.000        | 112.7       | V   | 20.0          | -21.2      |
| 8567.500000     | ---                      | 56.21                    | ---              | 36.21            | 54.00          | 17.79       | 1000.0          | 1000.000        | 99.9        | H   | 166.0         | -20.0      |
| 10337.500000    | ---                      | 55.02                    | ---              | 36.02            | 54.00          | 17.98       | 1000.0          | 1000.000        | 100.6       | H   | 354.0         | -19.0      |
| 15017.500000    | ---                      | 55.87                    | ---              | 42.57            | 54.00          | 11.43       | 1000.0          | 1000.000        | 199.9       | H   | 205.0         | -13.3      |
| 17546.500000    | ---                      | 57.65                    | ---              | 46.35            | 54.00          | 7.65        | 1000.0          | 1000.000        | 124.9       | H   | 20.0          | -11.3      |

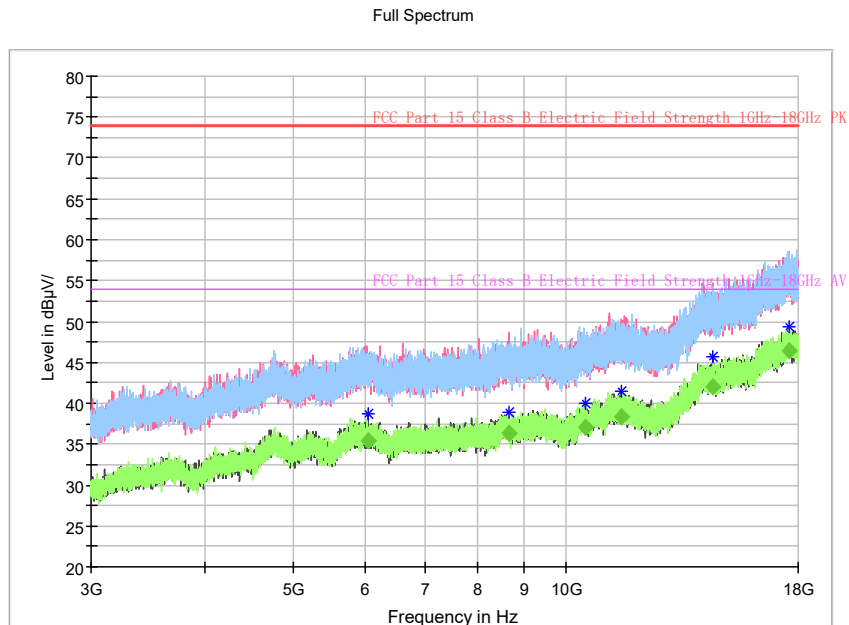
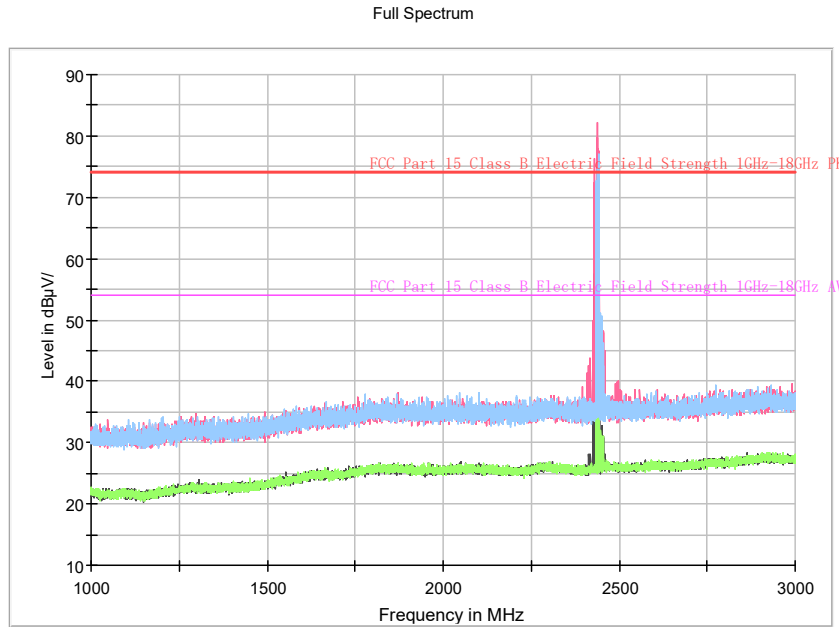


|                |                   |                |               |
|----------------|-------------------|----------------|---------------|
| Test Mode      | Mode 5            | Test Date      | 2022.02.24    |
| Test Frequency | 30 MHz ~ 1000 MHz | Test Engineer  | Gao Shuang    |
| Serial Number  | 860855060008287   | Temp, Humidity | 23.1°C, 54.3% |



| Frequency (MHz) | Reading (dBuV/m) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|------------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 99.937000       | 40.43            | 19.43              | 43.50          | 24.07       | 1000.0          | 120.000         | 100.8       | V   | 335.0         | -21.0      |
| 247.086000      | 40.80            | 22.60              | 46.00          | 23.40       | 1000.0          | 120.000         | 106.5       | H   | 335.0         | -18.2      |
| 433.326000      | 43.92            | 31.22              | 46.00          | 14.78       | 1000.0          | 120.000         | 102.3       | V   | 9.0           | -12.7      |
| 543.906000      | 38.49            | 28.19              | 46.00          | 17.81       | 1000.0          | 120.000         | 102.2       | V   | 358.0         | -10.3      |
| 835.294000      | 36.53            | 32.03              | 46.00          | 13.97       | 1000.0          | 120.000         | 193.1       | V   | 155.0         | -4.5       |
| 959.842000      | 35.92            | 33.42              | 46.00          | 12.58       | 1000.0          | 120.000         | 224.7       | H   | 205.0         | -2.5       |

|                       |                      |                       |               |
|-----------------------|----------------------|-----------------------|---------------|
| <b>Test Mode</b>      | Mode 5               | <b>Test Date</b>      | 2022.02.24    |
| <b>Test Frequency</b> | 1000 MHz ~ 18000 MHz | <b>Test Engineer</b>  | Gao Shuang    |
| <b>Serial Number</b>  | 860855060008287      | <b>Temp, Humidity</b> | 23.1°C, 54.3% |



| Frequency (MHz) | Reading MaxPeak (dBuV/m) | Reading Average (dBuV/m) | MaxPeak (dBuV/m) | Average (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------------|--------------------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 6051.500000     | ---                      | 58.93                    | ---              | 35.46            | 54.00          | 18.54       | 1000.0          | 1000.000        | 120.3       | V   | 205.0         | -20.4      |
| 8639.000000     | ---                      | 51.99                    | ---              | 36.25            | 54.00          | 17.75       | 1000.0          | 1000.000        | 124.9       | H   | 344.0         | -20.1      |
| 10500.000000    | ---                      | 52.54                    | ---              | 37.12            | 54.00          | 16.88       | 1000.0          | 1000.000        | 119.5       | V   | 205.0         | -18.8      |
| 11489.000000    | ---                      | 57.46                    | ---              | 38.42            | 54.00          | 15.58       | 1000.0          | 1000.000        | 125.0       | V   | 205.0         | -16.5      |
| 14520.500000    | ---                      | 53.05                    | ---              | 41.97            | 54.00          | 12.03       | 1000.0          | 1000.000        | 125.0       | V   | 25.0          | -13.4      |
| 17599.500000    | ---                      | 56.38                    | ---              | 46.35            | 54.00          | 7.65        | 1000.0          | 1000.000        | 205.6       | H   | 176.0         | -11.2      |

### 3.2.5. Uncertainty

| Radiated Test |                      |          |           |     |
|---------------|----------------------|----------|-----------|-----|
| Frequency     | Antenna Polarization | Distance | $U_{lab}$ | $k$ |
| 30MHz-200MHz  | Horizontal           | 3m       | 4.58 dB   | 2   |
|               | Vertical             | 3m       | 4.73 dB   | 2   |
| 200MHz-1GHz   | Horizontal           | 3m       | 4.90 dB   | 2   |
|               | Vertical             | 3m       | 4.93 dB   | 2   |
| 1GHz-6GHz     | ---                  | 3m       | 4.66 dB   | 2   |
| 6GHz-18GHz    | ---                  | 3m       | 5.14dB    | 2   |

Determining compliance with the limits shall be based on the results of the compliance measurements, taking into account the considerations on measurement instrumentation uncertainty.

Because  $U_{lab}$  is equal to  $U_{CISPR}$  (as specified in CISPR16-4-2), then:

- compliance is deemed to occur if no measured disturbance exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance exceeds the disturbance limit.

#### 4 Test Instruments

| Test Item          | Description                            | Model Name | S / N               | Manufacture            | Next Cal Date |
|--------------------|--|------------|---------------------|------------------------|---------------|
| Radiated Emission  | EMI TEST RECERVER                      | ESR26      | 101320              | R&S                    | 2023/01/11    |
|                    | Pre-amplifier                          | PE15A1009  | V00140120181115E825 | Pasternack Enterprises | 2023/01/11    |
|                    | Hybrid antenna                         | VULB9163   | 01266               | SCHAFFNER              | 2022/07/03    |
|                    | Pre-amplifier                          | TAP-011858 | AP19L806047         | TONSCEND               | 2022/04/01    |
|                    | Horn Antenna                           | HF907      | 100096              | R&S                    | 2022/04/01    |
| Conducted Emission | EMI TEST RECERVER                      | ESR26      | 101320              | R&S                    | 2023/01/11    |
|                    | 16 A 2-Line V-Network                  | ENV216     | 102328              | R&S                    | 2023/01/11    |
|                    | Pulse Limiter                          | ESH3-Z2    | 102457              | R&S                    | 2023/01/11    |
| Other              | Wireless comprehensive test instrument | CMW500     | 115895              | R&S                    | 2023/01/11    |

--- End of Test Report ---