



# EMC Test Report

**Product Name: Tablet**

**Model Number: CMR-AL09**

**Report No: SYBH(Z-EMC)019122017-2**

**FCC ID: QISCMR-AL09**

**Reliability Laboratory of Huawei Technologies Co., Ltd.**

**(Global Compliance and Testing Center of Huawei Technologies Co., Ltd)**

Administration Building, Headquarters of Chang Lina Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

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## Notice

1. The laboratory has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L0310.
2. The laboratory has passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01
3. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 6369A-1.
4. The laboratory (Reliability Lab of Huawei Technologies Co., Ltd) is also named as “Global Compliance and Testing Center of Huawei Technologies Co., Ltd”, the both names have coexisted since 2009.
5. The laboratory has been recognized by the US Federal Communications Commission (FCC) to perform compliance testing subject to the Commission's Declaration Of Conformity (DOC) and Certification rules. The Designation Number is CN1173, and the Test Firm Registration Number is 294140.”
6. The test report is invalid if not marked with the stamps or the signatures of the persons responsible for performing, revising and approving the test report.
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9. Normally, the test report is only responsible for the samples that have undergone the test.
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**Applicant:** Huawei Technologies Co., Ltd.  
**Address:** Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

**Date of Receipt Test Item:** 2017-12-07  
**Start Date of Test:** 2017-12-08  
**End Date of Test:** 2017-12-15

**Test Result:** Pass

|                                      |                   |                    |                    |
|--------------------------------------|-------------------|--------------------|--------------------|
| <b>Approved By<br/>(Lab Manager)</b> | <u>2017-12-20</u> | <u>Roger Zhang</u> | <u>Roger Zhang</u> |
|                                      | <b>Date</b>       | <b>Name</b>        | <b>Signature</b>   |

|  |                   |                   |                   |
|--|-------------------|-------------------|-------------------|
| <b>Prepared by<br/>(Test Engineer)</b> | <u>2017-12-18</u> | <u>Li hongpin</u> | <u>Li hongpin</u> |
|  | <b>Date</b>       | <b>Name</b>       | <b>Signature</b>  |



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**Modification Record**

| No. | Last Report No. | Modification Description |
|-----|-----------------|--------------------------|
| 1   | NA              | First Report.            |

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## 1 General Information

### 1.1 EUT Description

| EUT Description     |   |
|---------------------|---|
| Product Name        | Tablet  |
| Model Number        | CMR-AL09  |
| Serials Number      | BXY0117A16000023  |
| Input Rated Voltage | DC 3.82V  |
| TX Frequency        | GSM 850: 824MHz to 849MHz<br>DCS 1900: 1850MHz to 1910MHz<br>WCDMA 850: 824MHz to 849MHz<br>WCDMA 1900: 1850MHz to 1910MHz<br>LTE BAND 4: 1710MHz to 1755MHz<br>LTE BAND 5: 824MHz to 849MHz<br>LTE BAND 7: 2500MHz to 2570MHz<br>LTE BAND 12: 699MHz to 716MHz<br>LTE BAND 17: 704MHz to 716MHz<br>LTE BAND 26: 814MHz to 849MHz<br>LTE BAND 38: 2570 MHz to 2620 MHz<br>LTE BAND 41: 2545 MHz to 2655 MHz<br>Bluetooth2.0/3.0+LE 4.2: 2402MHz to 2480MHz<br>WIFI-2.4G b/g/n: 2412MHz to 2462MHz<br>WIFI-5G a/n/ac: 5150 MHz -5250 MHz /5250 MHz -5350 MHz /5470 MHz -5725 MHz/5725 MHz -5850 MHz                    |
| RX Frequency        | GSM 850: 869MHz to 894MHz<br>DCS 1900: 1930MHz to 1990MHz<br>WCDMA 850: 869MHz to 894MHz<br>WCDMA 1900: 1930MHz to 1990MHz<br>LTE BAND 4: 2110MHz to 2155MHz<br>LTE BAND 5: 869MHz to 894MHz<br>LTE BAND 7: 2620MHz to 2690MHz<br>LTE BAND 12: 729MHz to 746MHz<br>LTE BAND 17: 734MHz to 746MHz<br>LTE BAND 26: 859MHz to 894MHz<br>LTE BAND 38: 2570 MHz to 2620 MHz<br>LTE BAND 41: 2545 MHz to 2655 MHz<br>Bluetooth2.0/3.0+LE 4.2: 2402MHz to 2480MHz<br>WIFI-2.4G b/g/n: 2412MHz to 2462MHz<br>WIFI-5G a/n/ac: 5150 MHz -5250 MHz /5250 MHz -5350 MHz /5470 MHz -5725 MHz/5725 MHz -5850 MHz<br>GPS: 1575.42MHz |
| HW Version          | SH1CMRONLM  |
| SW Version          | CMR-AL09 8.0.1.3(SP1C331)   |
| EUT Accessory       |   |
| USB                 | Data Cable USB A Male to Tyle C,Shield<br>Manufacturer:<br>FOXCONN INTERCONNECT TECHNOLOGY LIMITED.<br>HONGLIN TECHNOLOGY CO.,LTD<br>Luxshare Precision Industry Co., Ltd<br>foxlink cheng uei precision industry Co., Ltd  |

|                           |  |
|---------------------------|--|
| Adapter                   | Manufacturer: Huawei Technologies Co.,Ltd.<br>Model: HW-059200UHQ<br>Input voltage: 100-240V 50/60Hz ,0.5A<br>Output voltage: 5V $\overline{\text{---}}$ 2A or 9V $\overline{\text{---}}$ 2A<br>SN: B76595GICY02927;K76547GCR14739 |
| Rechargeable Li-ion       | Manufacturer: Huawei Technologies Co.,Ltd.<br>Battery Model: HB2994I8ECW<br>Rated capacity: 7350 mAh<br>Nominal Voltage: +3.82V<br>Charging Voltage: +4.4V<br>SN:5GHUAYH721;5FAFGIH628;5FAHSCHA11                                  |
| Type C to Audio connector | Manufacturer:<br>Jiangxi Lianchuang Hongsheng Electronic Co.;<br>FOSTER ELECTRIC CO. (HONG KONG) LTD.<br>Merry Electronics Co.,Ltd.<br>Boluo County Quancheng Electronic Co.,Ltd.  |

Remark: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed information.

## 1.2 Test Site Information

|                     |   |
|---------------------|---|
| Test Site 1:        | RELIABILITY LABORATORY OF HUAWEI TECHNOLOGIES CO., LTD.   |
| Test Site Location: | Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C |
| Test Site 2:        | RELIABILITY LABORATORY OF HUAWEI TECHNOLOGIES CO., LTD.   |
| Test Site Location: | No.2 New City Avenue Songshan Lake Sci. &Tech. Industry Park, Dongguan, Guangdong, China                                    |

## 1.3 Applied Standards

### APPLIED STANDARD

47 CFR FCC Part 15:2016, Subpart B

## 2 Summary of Results

| Summary of Results   |                   |   |        |                |
|--|-------------------|---|--------|----------------|
| Test Items   | Test Mode         | Performance Class & Required Performance Criteria | Result | Site           |
| <u>Radiated Emissions</u><br>Enclosure Port  | Mode2~<br>Mode4   | CLASS B   | Pass   | Site1<br>Site2 |
| <u>Conducted Emissions</u><br><input type="checkbox"/> DC Power Port<br><input checked="" type="checkbox"/> AC Power Port<br><input type="checkbox"/> Telecommunication Ports                      | Mode1~<br>Mode2&4 | CLASS B   | Pass   | Site1          |
| Note:<br>1, Measurement taken is within the uncertainty of test system.<br>2, <input checked="" type="checkbox"/> The item has been tested; <input type="checkbox"/> The item has not been tested. |                   |   |        |                |

During the measurement, the environmental conditions complied with the range listed as below.

| Item                 | Required       |
|----------------------|----------------|
| Ambient temperature  | 15°C ~ 35°C    |
| Relative humidity    | 25% ~ 75%      |
| Atmospheric pressure | 86kPa ~ 106kPa |



### 3 System Configuration during EMC Test

#### 3.1 Test Mode

The EUT was configured, installed, arranged and operated in a manner consistent with typical application. The following mode(s) were applied during the compliance test.

| Test Mode |                                  |
|-----------|----------------------------------|
| Mode 1:   | Charging +WIFI+BT+GPS On+Traffic |
| Mode 2:   | Charging+Camera On+idle          |
| Mode 3:   | Video Playing+Earphone+idle      |
| Mode 4:   | Data Transmitting                |

Remark:

- 1) If there is one kind of accessories with different models, each one should be applied throughout the compliance test respectively, however, only the worst case will be recorded in this report.
- 2) If EUT has more than one typical operation, only the worst test mode will be recorded in this report.

Traffic Mode:

When the EUT state is switched on and with Radio Resource Control (RRC) connection established.

Idle Mode:

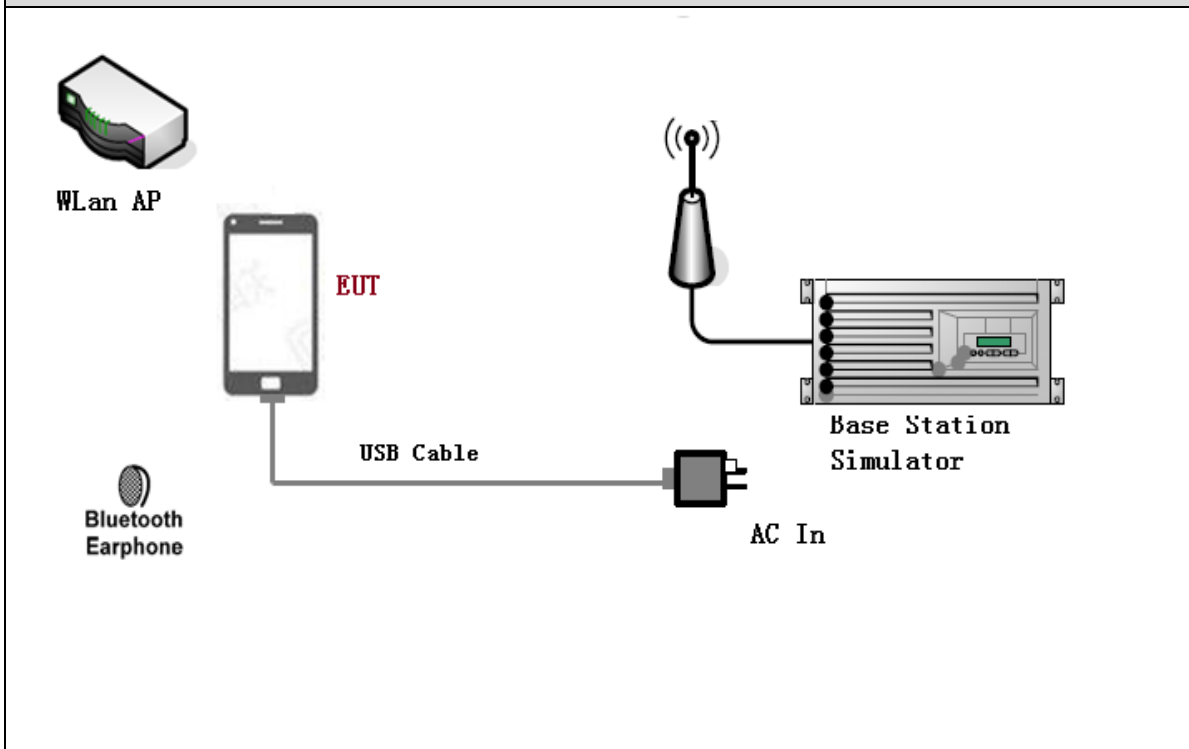
When the EUT state is switched on but without Radio Resource Control (RRC) connection.

Worst Case:

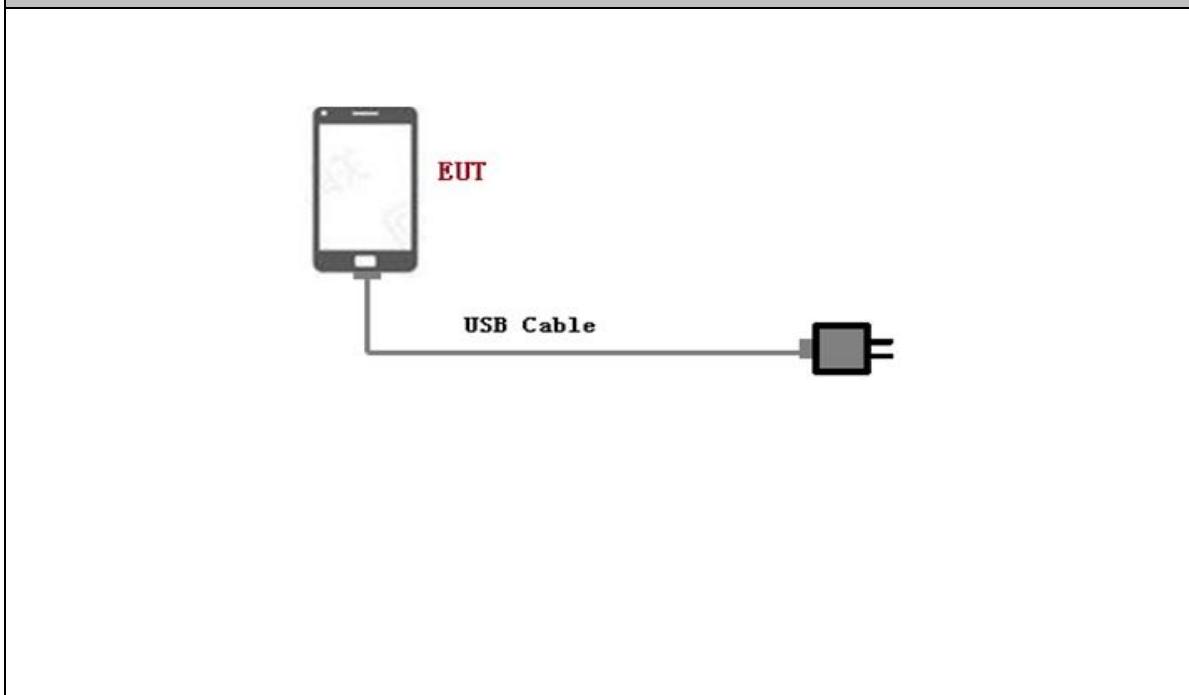
- 1) Radiated Emission: Mode 4
- 2) Conducted Emission: Mode 1

### 3.2 Test System Configuration

Connection Diagram (Mode 1)



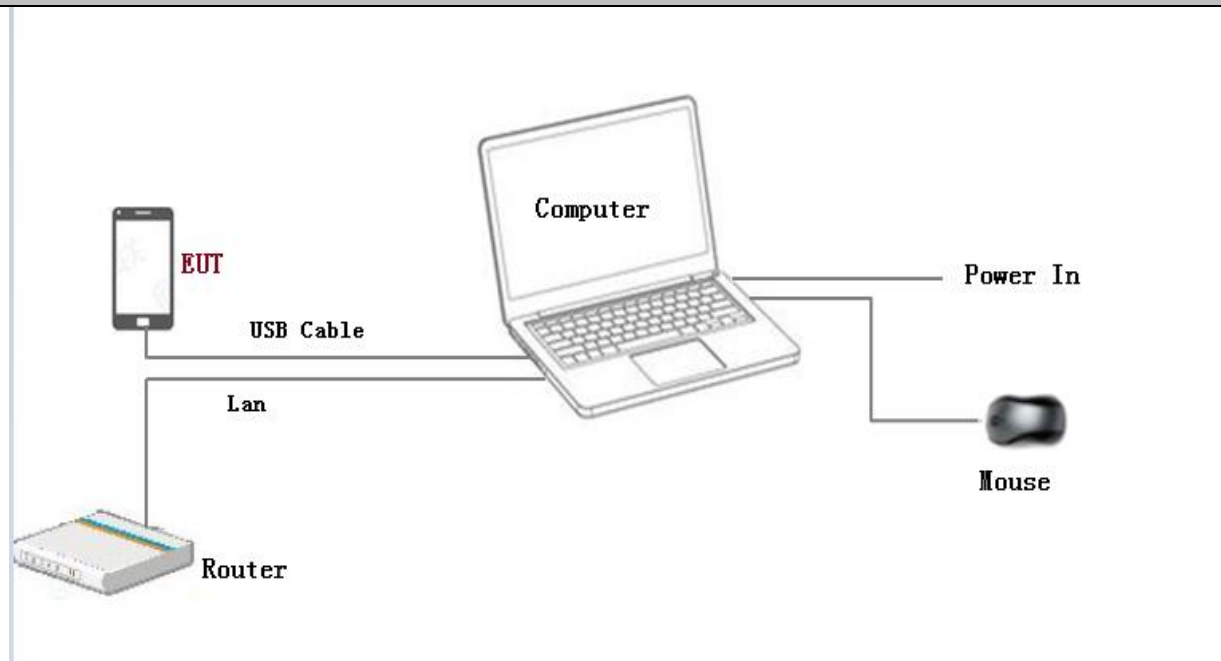
Connection Diagram (Mode 2)



Connection Diagram (Mode 3)



Connection Diagram (Mode 4)



### 3.3 Cables Used during Test

| Cable | Quantity | Length | Type of Cable |
|-------|----------|--------|---------------|
| USB   | 1        | <3m    | Shielded      |

### 3.4 Associated Equipment Used during Test

| name                       | Model           | Manufacturer | S/N         | Calibrated Deadline |
|----------------------------|-----------------|--------------|-------------|---------------------|
| Radio Communication Tester | CMU200          | R&S          | 3608082535  | 2018-03-01          |
| Radio Communication Tester | MT8820C         | Anritsu      | A110518805  | 2018-05-15          |
| Notebook                   | S3              | ThinkPad     | A140714638  | /                   |
| Mouse                      | M-U0025-O       | Lenovo       | HS423HB22TB | /                   |
| Earphone                   | MEMD1532B528A00 | Huawei       | 22040300    | /                   |

## 4 Electromagnetic Interference (EMI)

### 4.1 Radiated Disturbance 30MHz to 18GHz

#### 4.1.1 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANCI C63.4: 2014. The test distance was 3m. The set-up and test methods were according to ANCI C63.4: 2014.

A preliminary scan and a final scan of the emissions were made from 30 MHz to 18 GHz by using test script of software; The emissions were measured using Quasi-Peak Detector (30MHz~1GHz) and AV/PK detector (above 1GHz). The maximal emission value was acquired by adjusting the antenna height, polarisation and turntable azimuth in accordance with the software setup. Normally, the height range of antenna was 1m to 4m. The azimuth range of turntable was 0° to 360°. The receiving antenna has two polarizations V and H.

Measurement bandwidth (RBW) for 30MHz to 1000 MHz: 120 kHz;

Measurement bandwidth (RBW) for 1000MHz to 40000 MHz: 1MHz;

EUT was configured in idle mode and the test performed at worst emission state.

#### 4.1.2 Test setup

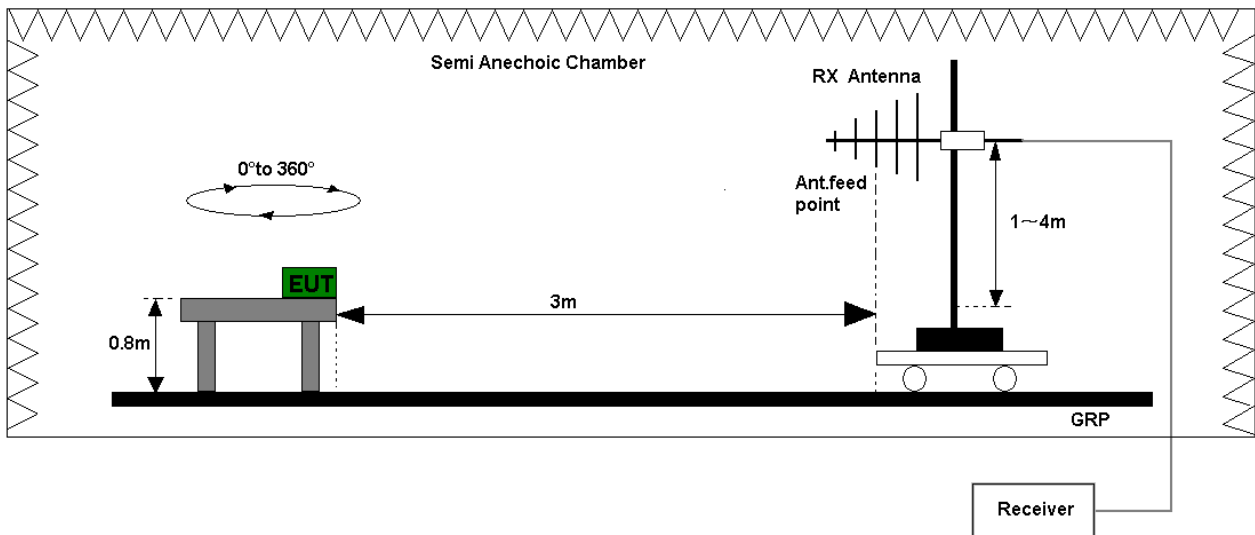


Figure 1. Test set-up of radiated disturbance(30MHz-1GHz)

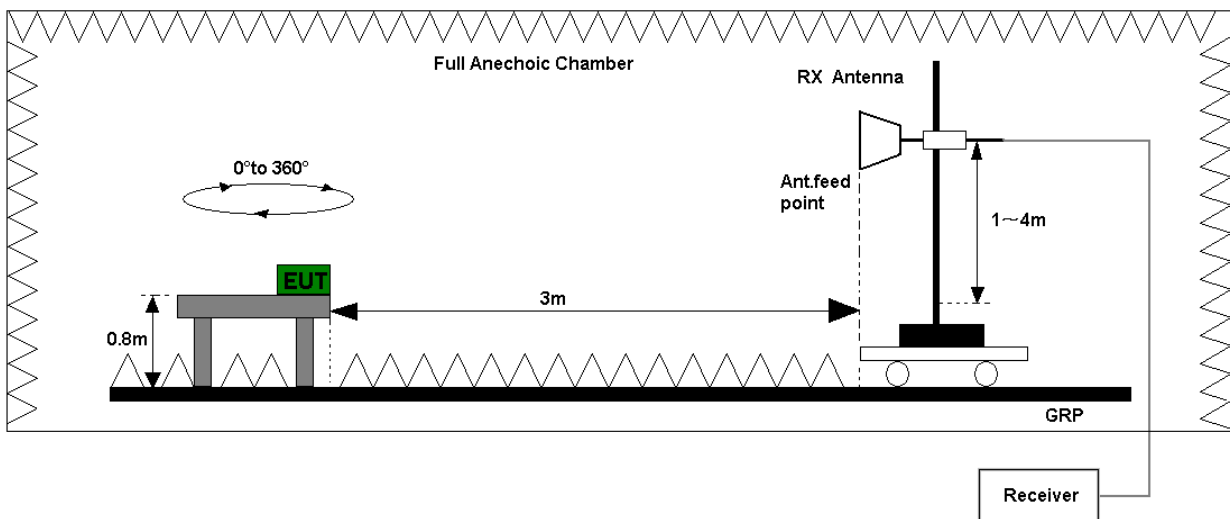


Figure 2. Test set-up of radiated disturbance(above 1GHz)

### 4.1.3 Test Results

The EUT has met the requirements for Radiated Emission of enclosure port.  
Refer to the section 7.1.1 of this report for test data.

| Test Limits (Class B)       |                  |      |                    |    |
|-----------------------------|------------------|------|--------------------|----|
| Frequency of Emission (MHz) | Radiated Limit   |      |                    |    |
|                             | Unit( $\mu$ V/m) |      | Unit(dB $\mu$ V/m) |    |
| 30-88                       | 100              |      | 40                 |    |
| 88-216                      | 150              |      | 43.5               |    |
| 216-960                     | 200              |      | 46                 |    |
| Above 960                   | 500              |      | 54                 |    |
| Above 1000                  | AV               | PK   | AV                 | PK |
|                             | 500              | 5000 | 54                 | 74 |

## 4.2 Conducted Disturbance 0.15 MHz to 30MHz

### 4.2.1 Test Procedure

The Table-top EUT was placed upon a non-metallic table 0.8 m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm away from LISN. The set-up and test methods were according to ANCI C63.4: 2014 Conducted Disturbance at AC Port measurements were undertaken on the L and N Lines. The emissions were measured using a Quasi-Peak Detector and Average Detector.

EUT was communicated with the simulator through Air interface, the simulator controls the EUT to transmitter the maximum power which defined in specification of product. The EUT operated on the typical channel.

Measurement bandwidth (RBW) for 150 kHz to 30 MHz: 9 kHz;

The EUT was set in the shielded chamber and operated under nominal conditions.

### 4.2.2 Test Setup

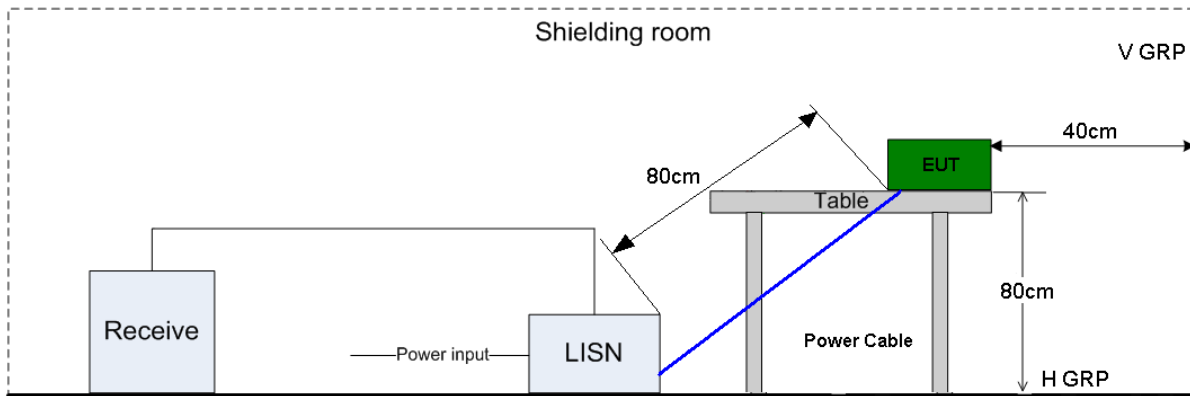


Figure 3. Test Set-up of conducted disturbance

### 4.2.3 Test Results

The EUT has met requirements for Conducted disturbance of power lines.

Refer to the section 7.2.1 of this report for test data.

| Test Limit of AC Power Port |                 |                 |
|-----------------------------|-----------------|-----------------|
| Frequency range             | 150kHz ~ 30MHz  |                 |
| Frequency                   | Voltage limits  |                 |
|                             | QP (dB $\mu$ V) | AV (dB $\mu$ V) |
| 0.15MHz~0.5MHz              | 66-56           | 56-46           |
| 0.5MHz-5MHz                 | 56              | 46              |
| 5MHz~30MHz                  | 60              | 50              |

## 5 Main Test Instruments

| Main Test Equipments |                            |              |            |              |                     |              |
|----------------------|----------------------------|--------------|------------|--------------|---------------------|--------------|
| Test item            | Test Instrument            | Model        | S/N        | Manufacturer | Calibrated Deadline | Cal interval |
| RE                   | EMI Test receiver          | ESU26        | 100150     | R&S          | Jun. 20, 2018       | 12           |
|                      | Spectrum Analyzer          | E4447A       | MY52090002 | Agilent      | Oct. 22, 2018       | 12           |
|                      | Broadband Antenna          | VULB 9163    | 9163-491   | SCHWARZ BECK | Mar. 28, 2019       | 24           |
|                      | Horn Antenna               | HF906        | 100683     | R&S          | Mar. 28, 2019       | 24           |
|                      | Horn antenna (18 to 40GHz) | SAS-574      | 426        | A.H.Systems  | Air.09,2018         | 24           |
| CE                   | EMI Test receiver          | ESU26        | 100150     | R&S          | May. 15, 2018       | 12           |
|                      | Artificial Mains Network   | ENV4200      | 100134     | R&S          | May. 15, 2018       | 12           |
|                      | Artificial Mains Network   | ENV216       | 100382     | R&S          | May. 15, 2018       | 12           |
| Software Information |                            |              |            |              |                     |              |
| Test Item            | Software Name              | Manufacturer |            | Version      |                     |              |
| RE                   | EMC32                      | R&S          |            | V9.25.0      |                     |              |
| RE                   | ES-K1                      | R&S          |            | V1.7.1       |                     |              |
| CE                   | EMC32                      | R&S          |            | V9.25.0      |                     |              |

## 6 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

| System Measurement Uncertainty |                                  |               |
|--------------------------------|----------------------------------|---------------|
| Items                          | Extended Uncertainty             |               |
| RE(30MHz-1GHz)                 | Field strength (dB $\mu$ V/m)    | U=4.1dB; k=2  |
| RE(1GHz-18GHz)                 | Field strength (dB $\mu$ V/m)    | U=5.0dB; k=2  |
| RE(18 GHz-26.5GHz)             | Field strength (dB $\mu$ V/m)    | U=5.9 dB; k=2 |
| RE (26.5 GHz- 40GHz)           | Field strength (dB $\mu$ V/m)    | U=5.8 dB; k=2 |
| CE                             | Disturbance Voltage (dB $\mu$ V) | U=2.5dB; k=2  |



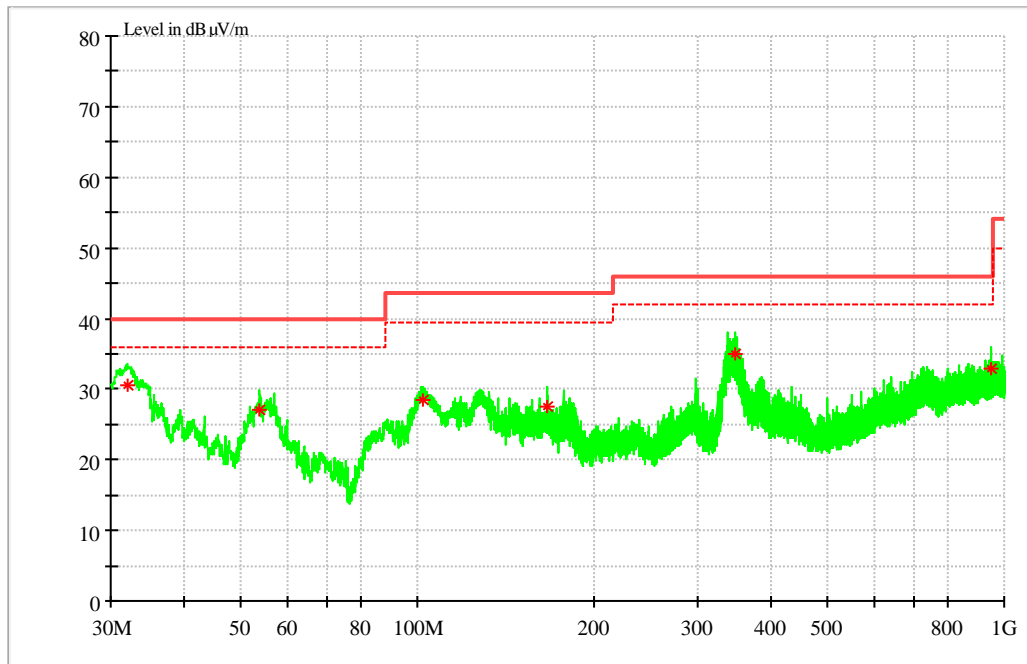
## 7 Test Data and Graph

Only the worst test results were shown

### 7.1 Radiated Disturbance

#### 7.1.1 30MHz~1GHz

Test Mode 4: Data Transmitting



#### MEASUREMENT RESULT: QP Detector

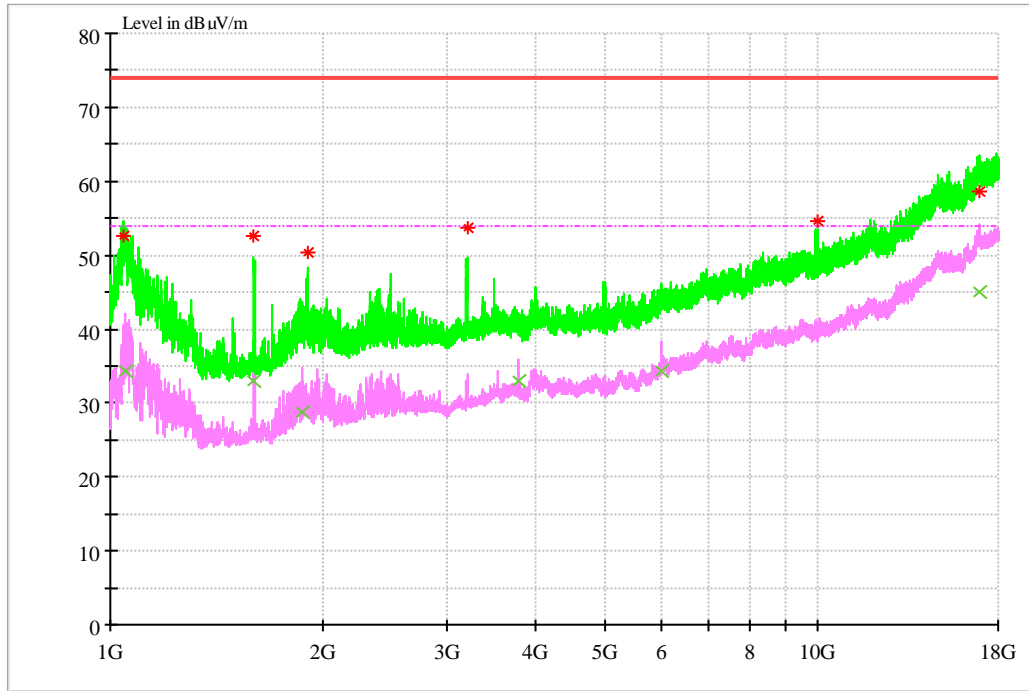
| Frequency<br>MHz | Level<br>dBµV/m | Transd<br>dB | Limit<br>dBµV/m | Margin<br>dB | Height<br>cm | Azimuth<br>deg | Polarisation |
|------------------|-----------------|--------------|-----------------|--------------|--------------|----------------|--------------|
| 31.988500        | 30.64           | 14.6         | 40.00           | 9.36         | 100.0        | 59.0           | V            |
| 53.862000        | 26.94           | 11.4         | 40.00           | 13.06        | 100.0        | 120.0          | V            |
| 102.459000       | 28.39           | 11.9         | 43.50           | 15.11        | 100.0        | 227.0          | V            |
| 166.624500       | 27.41           | 11.8         | 43.50           | 16.09        | 100.0        | 136.0          | H            |
| 346.802000       | 34.98           | 17.0         | 46.00           | 11.02        | 100.0        | 126.0          | V            |
| 951.839500       | 32.95           | 26.7         | 46.00           | 13.05        | 100.0        | 6.0            | V            |

Note:

Level = Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)  
The reading level is calculated by software which is not shown in the sheet.

### 7.1.2 1GHz~18GHz

Test Mode 4: Data Transmitting



**MEASUREMENT RESULT: PK Detector**

| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 1041.933333   | 52.69              | -15.7     | 74.00              | 21.31     | 100.0     | 160.0       | V            |
| 1594.433333   | 52.62              | -12.0     | 74.00              | 27.38     | 100.0     | 143.0       | V            |
| 1896.466667   | 50.34              | -10.0     | 74.00              | 23.66     | 100.0     | 125.0       | V            |
| 3194.700000   | 53.77              | -4.5      | 74.00              | 20.23     | 100.0     | 246.0       | V            |
| 9990.733333   | 54.58              | 7.3       | 74.00              | 19.42     | 100.0     | 212.0       | V            |
| 16902.366667  | 58.52              | 20.9      | 74.00              | 15.48     | 100.0     | 0.0         | H            |

**MEASUREMENT RESULT: AV Detector**

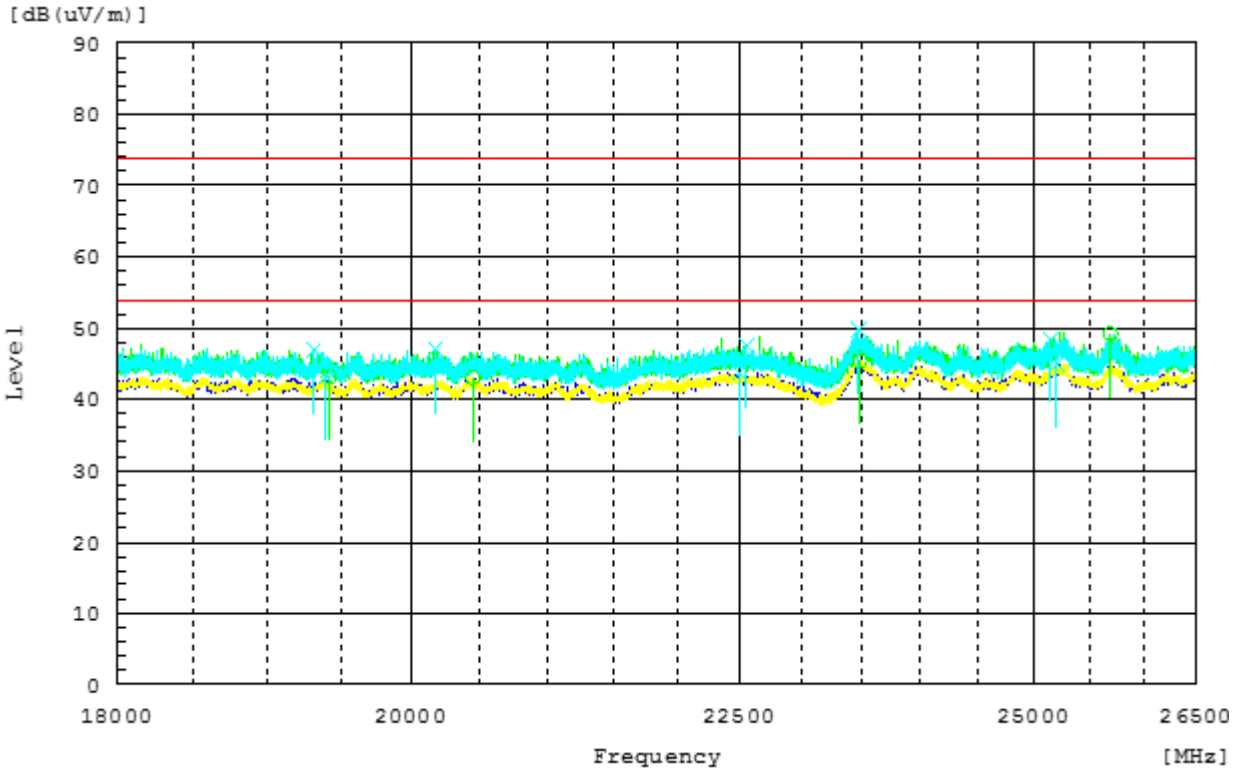
| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 1047.033333   | 34.23              | -15.5     | 54.00              | 19.77     | 100.0     | 160.0       | V            |
| 1597.266667   | 33.02              | -12.0     | 54.00              | 20.98     | 100.0     | 143.0       | V            |
| 1870.966667   | 28.82              | -10.0     | 54.00              | 25.18     | 100.0     | 125.0       | V            |
| 3766.466667   | 32.90              | -3.3      | 54.00              | 21.10     | 100.0     | 315.0       | V            |
| 6000.266667   | 34.28              | 1.2       | 54.00              | 19.72     | 100.0     | 107.0       | V            |
| 16893.866667  | 45.08              | 21.0      | 54.00              | 8.92      | 100.0     | 263.0       | V            |

Note:

Level = Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)  
The reading level is calculated by software which is not shown in the sheet.

### 7.1.3 18GHz~26.5GHz

Test Mode 4: Data Transmitting



#### MEASUREMENT RESULT: PK Detector

| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 19313.250     | 46.9               | -15.7     | 74.0               | 27.1      | 100       | 59          | V            |
| 20171.750     | 47.1               | -16.6     | 74.0               | 26.9      | 100       | 332         | V            |
| 22550.050     | 47.7               | -13.5     | 74.0               | 26.3      | 100       | 0           | V            |
| 23474.000     | 49.8               | -12.3     | 74.0               | 24.2      | 100       | 185         | V            |
| 25145.950     | 48.6               | -11.9     | 74.0               | 25.4      | 100       | 224         | V            |
| 25697.600     | 49.2               | -11.7     | 74.0               | 24.8      | 100       | 178         | H            |

#### MEASUREMENT RESULT: AV Detector

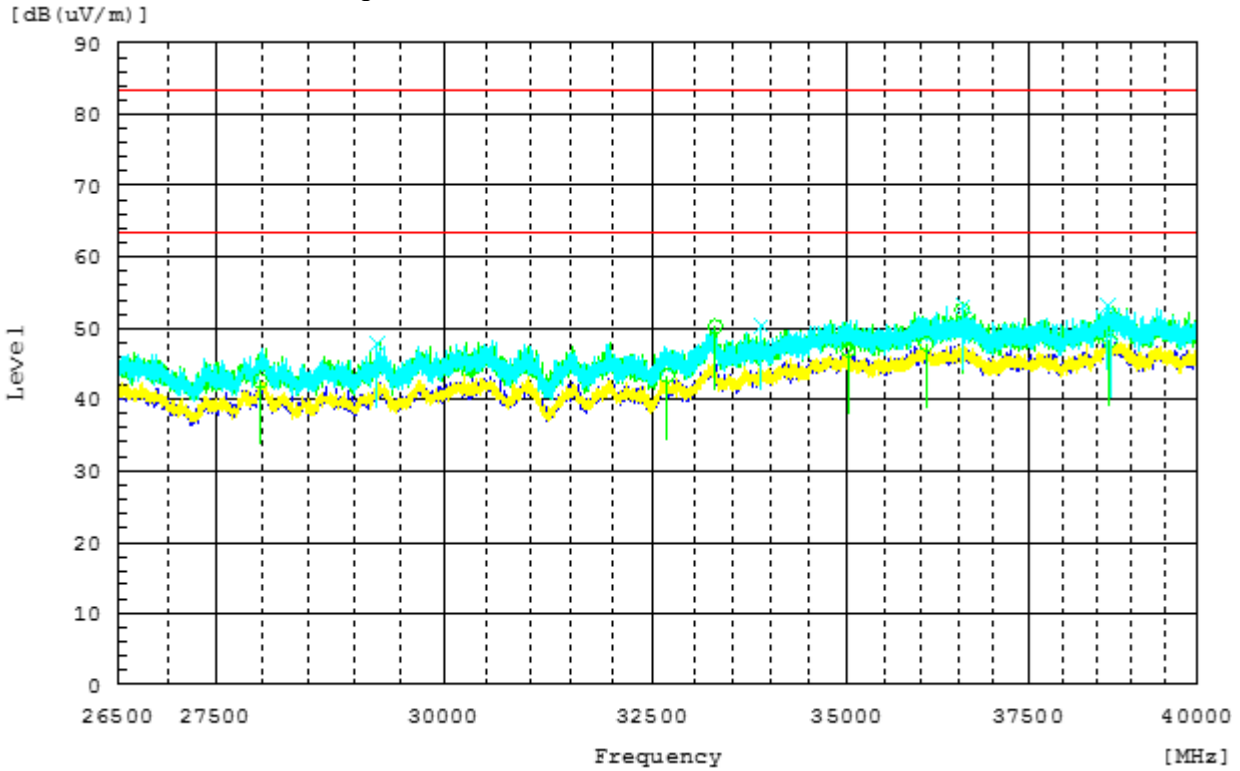
| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 19394.850     | 43.4               | -15.9     | 54.0               | 10.6      | 100       | 152         | V            |
| 19420.350     | 43.2               | -16.0     | 54.0               | 10.8      | 100       | 91          | H            |
| 20443.750     | 43.0               | -16.2     | 54.0               | 11.0      | 100       | 298         | H            |
| 22495.650     | 43.8               | -13.5     | 54.0               | 10.2      | 100       | 358         | V            |
| 23485.900     | 45.4               | -12.2     | 54.0               | 8.6       | 100       | 12          | H            |
| 25196.950     | 45.1               | -11.8     | 54.0               | 8.9       | 100       | 43          | V            |

Note:

Level = Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)  
The reading level is calculated by software which is not shown in the sheet.

### 7.1.4 26.5GHz~40GHz

Test Mode 4: Data Transmitting



MEASUREMENT RESULT: PK Detector

| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 29248.600     | 47.9               | -7.9      | 84.0               | 36.1      | 100       | 13          | V            |
| 33274.300     | 50.3               | -0.9      | 84.0               | 33.7      | 100       | 80          | H            |
| 33853.450     | 50.4               | -0.2      | 84.0               | 33.6      | 100       | 218         | V            |
| 36568.300     | 52.6               | 3.2       | 84.0               | 31.4      | 100       | 74          | H            |
| 36581.800     | 53.1               | 3.1       | 84.0               | 30.9      | 100       | 266         | V            |
| 38652.700     | 53.3               | 1.1       | 84.0               | 30.7      | 100       | 341         | V            |

MEASUREMENT RESULT: AV Detector

| Frequency MHz | Level dB $\mu$ V/m | Transd dB | Limit dB $\mu$ V/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---------------|--------------------|-----------|--------------------|-----------|-----------|-------------|--------------|
| 27983.650     | 42.6               | -10.5     | 64.0               | 21.4      | 100       | 87          | H            |
| 32677.600     | 43.3               | -3.0      | 64.0               | 20.7      | 100       | 0           | H            |
| 35010.400     | 47.0               | 1.7       | 64.0               | 17.0      | 100       | 0           | H            |
| 36071.500     | 47.8               | 3.4       | 64.0               | 16.2      | 100       | 7           | H            |
| 38677.000     | 48.2               | 1.3       | 64.0               | 15.8      | 100       | 353         | H            |
| 38699.950     | 49.1               | 1.5       | 64.0               | 14.9      | 100       | 357         | V            |

Note:

Level = Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

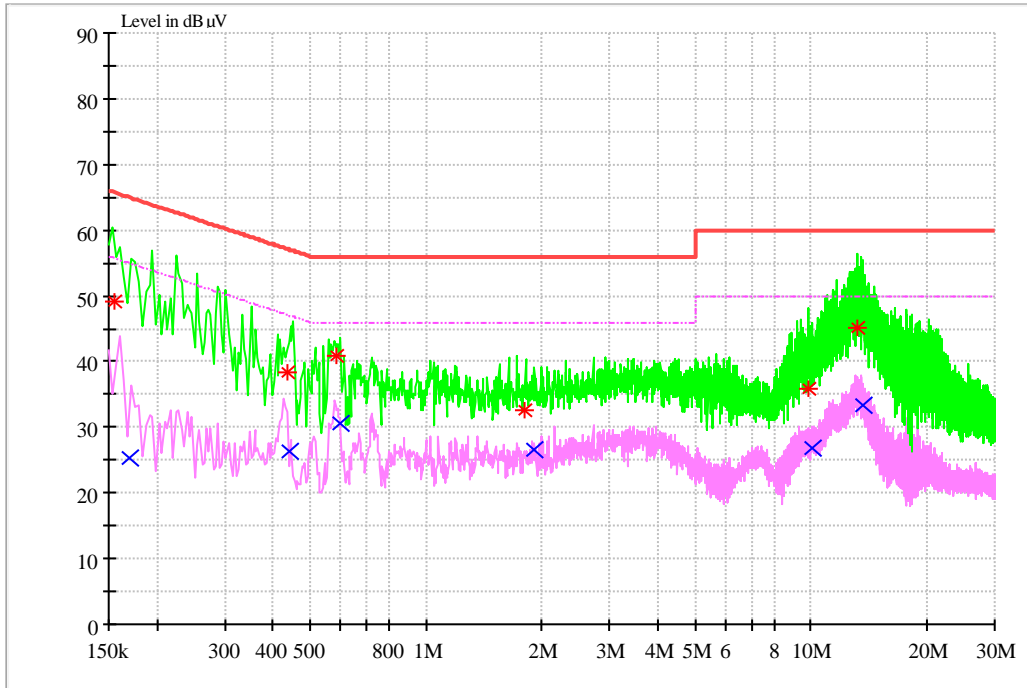
The reading level is calculated by software which is not shown in the sheet.

Limit:(PK)=74+20log(D1/D2)=74+20log(3/1)=84; Limit:(AV)=54+20log(D1/D2)=54+20log(3/1)=64

## 7.2 Conducted Disturbance

### 7.2.1 AC Port Test Data

Test Mode 1: Charging +WIFI+BT+GPS On+Traffic



#### MEASUREMENT RESULT: QP Detector

| Frequency MHz | Level dBµV | Line | Transd dB | Margin dB | Limit dBµV | PE  |
|---------------|------------|------|-----------|-----------|------------|-----|
| 0.155605      | 49.24      | L1   | 9.7       | 16.46     | 65.70      | FLO |
| 0.439062      | 38.40      | N    | 9.7       | 18.68     | 57.08      | FLO |
| 0.586493      | 40.86      | L1   | 9.7       | 15.14     | 56.00      | FLO |
| 1.807712      | 32.64      | L1   | 9.7       | 23.36     | 56.00      | FLO |
| 9.872843      | 35.74      | N    | 10.0      | 24.26     | 60.00      | FLO |
| 13.252716     | 45.01      | N    | 10.1      | 14.99     | 60.00      | FLO |

#### MEASUREMENT RESULT: AV Detector

| Frequency MHz | Level dBµV | Line | Transd dB | Margin dB | Limit dBµV | PE  |
|---------------|------------|------|-----------|-----------|------------|-----|
| 0.169555      | 25.38      | N    | 9.7       | 29.60     | 54.98      | FLO |
| 0.442501      | 26.45      | L1   | 9.7       | 20.57     | 47.02      | FLO |
| 0.595362      | 30.61      | L1   | 9.7       | 15.39     | 46.00      | FLO |
| 1.907976      | 26.55      | L1   | 9.7       | 19.45     | 46.00      | FLO |
| 10.091942     | 26.77      | L1   | 10.0      | 23.23     | 50.00      | FLO |
| 13.577810     | 33.42      | N    | 10.1      | 16.58     | 50.00      | FLO |

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