

# TEST REPORT

**Applicant:** Lightcomm Technology Co., Ltd.

**Address of Applicant:** UNIT 1306 13/F ARION COMMERCIAL CENTRE, 2-12  
QUEEN'S ROAD WEST, SHEUNG WAN HK

**Manufacturer/ Factory:** Huizhou Hengdu Electronics Co., Ltd.

**Address of  
Manufacturer/ Factory:** No.8 Huitai Road, Huinan High-tech Industrial Park, Huiao  
Avenue, Huizhou, Guangdong, China

**Equipment Under Test (EUT)**

Product Name: 10.1" QUAD CORE TABLET PDVD COMBO

Model No.: SLTDVD1024-COMBO, SLTDVD1024\_COMBO\_DISP14,  
SLTDVD1024, SLTDVD1024\_18DISP, SLTDVD1023,  
206886, MDT9001, MDT9002, MDT9003, MDT1001,  
MDT1002, MDT1005, MDT100X, DL9002, DL9003, DL1001,  
DL1002

**FCC ID:** XMF-MDT1005MK

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247

**Date of sample receipt:** August 02, 2021

**Date of Test:** August 02-09, 2021

**Date of report issued:** August 09, 2021

**Test Result :** PASS \*

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

Authorized Signature:

**Robinson Luo**

**Laboratory Manager**

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

## 2 Version

| Version No. | Date            | Description |
|-------------|-----------------|-------------|
| 00          | August 09, 2021 | Original    |
|             |                 |             |
|             |                 |             |
|             |                 |             |

Prepared By:



Project Engineer

Date:

August 09, 2021

Check By:



Reviewer

Date:

August 09, 2021

## 3 Contents

|  | Page |
|--|------|
| 1 COVER PAGE .....                               | 1    |
| 2 VERSION .....                                  | 2    |
| 3 CONTENTS .....                                 | 3    |
| 4 TEST SUMMARY .....                             | 4    |
| 5 GENERAL INFORMATION .....                      | 5    |
| 5.1 GENERAL DESCRIPTION OF EUT .....             | 5    |
| 5.2 TEST MODE .....                              | 7    |
| 5.3 DESCRIPTION OF SUPPORT UNITS .....           | 7    |
| 5.4 DEVIATION FROM STANDARDS .....               | 7    |
| 5.5 ABNORMALITIES FROM STANDARD CONDITIONS ..... | 7    |
| 5.6 TEST FACILITY .....                          | 7    |
| 5.7 TEST LOCATION .....                          | 7    |
| 5.8 ADDITIONAL INSTRUCTIONS .....                | 7    |
| 6 TEST INSTRUMENTS LIST .....                    | 8    |
| 7 TEST RESULTS AND MEASUREMENT DATA .....        | 10   |
| 7.1 ANTENNA REQUIREMENT .....                    | 10   |
| 7.2 CONDUCTED EMISSIONS .....                    | 11   |
| 7.3 SPURIOUS EMISSION .....                      | 14   |
| 7.3.1 Radiated Emission Method .....             | 14   |
| 8 TEST SETUP PHOTO .....                         | 19   |
| 9 EUT CONSTRUCTIONAL DETAILS .....               | 19   |



## 4 Test Summary

| Test Item                        | Section                    | Result |
|----------------------------------|----------------------------|--------|
| Antenna requirement              | FCC part 15.203/15.247 (c) | Pass   |
| AC Power Line Conducted Emission | FCC part 15.207            | Pass   |
| Conducted Peak Output Power      | FCC part 15.247 (b)(3)     | N/A    |
| Channel Bandwidth & 99% OCB      | FCC part 15.247 (a)(2)     | N/A    |
| Power Spectral Density           | FCC part 15.247 (e)        | N/A    |
| Band Edge                        | FCC part 15.247(d)         | N/A    |
| Spurious Emission                | FCC part 15.205/15.209     | Pass   |

*Remark: Test according to ANSI C63.10:2013 and RSS-Gen*

*Pass: The EUT complies with the essential requirements in the standard.*

### Measurement Uncertainty

| Test Item                        | Frequency Range | Measurement Uncertainty | Notes |
|----------------------------------|-----------------|-------------------------|-------|
| Radiated Emission                | 30MHz-200MHz    | 3.8039dB                | (1)   |
| Radiated Emission                | 200MHz-1GHz     | 3.9679dB                | (1)   |
| Radiated Emission                | 1GHz-18GHz      | 4.29dB                  | (1)   |
| Radiated Emission                | 18GHz-40GHz     | 3.30dB                  | (1)   |
| AC Power Line Conducted Emission | 0.15MHz ~ 30MHz | 3.44dB                  | (1)   |

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 5 General Information

### 5.1 General Description of EUT

|  |   |
|--|---|
| Product Name:  | 10.1" QUAD CORE TABLET PDVD COMBO   |
| Model No.:   | SLTDVD1024-COMBO, SLTDVD1024_COMBO_DISP14, SLTDVD1024, SLTDVD1024_18DISP, SLTDVD1023, 206886, MDT9001, MDT9002, MDT9003, MDT1001, MDT1002, MDT1005, MDT100X, DL9002, DL9003, DL1001, DL1002 |
| Test Model No.:  | SLTDVD1024-COMBO  |
| Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The only difference is model name for commercial purpose. |   |
| Serial No.:  | A2008338340000001   |
| Hardware version:  | MDT1005-MK-MAIN-MT8167-4BITX4-VER2.1  |
| Software version:  | Android Q   |
| Operation Frequency:   | 802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz<br>802.11n(HT40): 2422MHz~2452MHz  |
| Test sample(s) ID:   | GTS202108000003-1   |
| Sample(s) Status   | Engineer sample   |
| Channel numbers:   | 802.11b/802.11g /802.11n(HT20): 11<br>802.11n(HT40):7   |
| Channel separation:  | 5MHz  |
| Modulation technology:   | 802.11b: Direct Sequence Spread Spectrum (DSSS)<br>802.11g/802.11n(HT20)/802.11n(HT40):<br>Orthogonal Frequency Division Multiplexing (OFDM)  |
| Antenna Type:  | PCB Antenna   |
| Antenna gain:  | 2.92dBi(declare by applicant)   |
| Power supply:  | AC ADAPTER<br>Model:TEKA-UCA20US<br>Input: AC 100-240V, 50/60Hz, 0.35A MAX<br>Output: DC 5.0V, 2.0A<br>Battery: 3.7V, 16.28Wh, 4400mAh<br>Car charger<br>Input: 12V DC<br>Output: 5V, 2A    |

| Operation Frequency each of channel |           |         |           |         |           |         |           |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel                             | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 1                                   | 2412MHz   | 4       | 2427MHz   | 7       | 2442MHz   | 10      | 2457MHz   |
| 2                                   | 2417MHz   | 5       | 2432MHz   | 8       | 2447MHz   | 11      | 2462MHz   |
| 3                                   | 2422MHz   | 6       | 2437MHz   | 9       | 2452MHz   |         |           |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Test channel    | Frequency (MHz)               |               |
|-----------------|-------------------------------|---------------|
|                 | 802.11b/802.11g/802.11n(HT20) | 802.11n(HT40) |
| Lowest channel  | 2412MHz                       | 2422MHz       |
| Middle channel  | 2437MHz                       | 2437MHz       |
| Highest channel | 2462MHz                       | 2452MHz       |



## 5.2 Test mode

|  |  |
|--|--|
| Transmitting mode  | Keep the EUT in continuously transmitting mode |
| <i>Remark: During the test, the dutycycle &gt;98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data. New battery is used during all test.</i> |  |

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

|           |         |         |               |               |
|-----------|---------|---------|---------------|---------------|
| Mode      | 802.11b | 802.11g | 802.11n(HT20) | 802.11n(HT40) |
| Data rate | 1Mbps   | 6Mbps   | 6.5Mbps       | 13Mbps        |

## 5.3 Description of Support Units

None

## 5.4 Deviation from Standards

None.

## 5.5 Abnormalities from Standard Conditions

None.

## 5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC—Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen 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 files.

- **IC —Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-

anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

## 5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

## 5.8 Additional Instructions

|                   |   |
|-------------------|---|
| Test Software     | Special test command provided by manufacturer |
| Power level setup | Default                                       |

## 6 Test Instruments list

| Radiated Emission: |                                     |                                |                             |               |                     |                         |
|--------------------|-------------------------------------|--------------------------------|-----------------------------|---------------|---------------------|-------------------------|
| Item               | Test Equipment                      | Manufacturer                   | Model No.                   | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                  | 3m Semi- Anechoic Chamber           | ZhongYu Electron               | 9.2(L)*6.2(W)* 6.4(H)       | GTS250        | July. 02 2020       | July. 01 2025           |
| 2                  | Control Room                        | ZhongYu Electron               | 6.2(L)*2.5(W)* 2.4(H)       | GTS251        | N/A                 | N/A                     |
| 3                  | EMI Test Receiver                   | Rohde & Schwarz                | ESU26                       | GTS203        | June. 24 2021       | June. 23 2022           |
| 4                  | BiConiLog Antenna                   | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163                    | GTS214        | June. 24 2021       | June. 23 2022           |
| 5                  | Double -ridged waveguide horn       | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120 D                 | GTS208        | June. 24 2021       | June. 23 2022           |
| 6                  | Horn Antenna                        | ETS-LINDGREN                   | 3160                        | GTS217        | June. 24 2021       | June. 23 2022           |
| 7                  | EMI Test Software                   | AUDIX                          | E3                          | N/A           | N/A                 | N/A                     |
| 8                  | Coaxial Cable                       | GTS                            | N/A                         | GTS213        | June. 24 2021       | June. 23 2022           |
| 9                  | Coaxial Cable                       | GTS                            | N/A                         | GTS211        | June. 24 2021       | June. 23 2022           |
| 10                 | Coaxial cable                       | GTS                            | N/A                         | GTS210        | June. 24 2021       | June. 23 2022           |
| 11                 | Coaxial Cable                       | GTS                            | N/A                         | GTS212        | June. 24 2021       | June. 23 2022           |
| 12                 | Amplifier(100kHz-3GHz)              | HP                             | 8347A                       | GTS204        | June. 24 2021       | June. 23 2022           |
| 13                 | Amplifier(2GHz-20GHz)               | HP                             | 84722A                      | GTS206        | June. 24 2021       | June. 23 2022           |
| 14                 | Amplifier (18-26GHz)                | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | GTS218        | June. 24 2021       | June. 23 2022           |
| 15                 | Band filter                         | Amindeon                       | 82346                       | GTS219        | June. 24 2021       | June. 23 2022           |
| 16                 | Power Meter                         | Anritsu                        | ML2495A                     | GTS540        | June. 24 2021       | June. 23 2022           |
| 17                 | Power Sensor                        | Anritsu                        | MA2411B                     | GTS541        | June. 24 2021       | June. 23 2022           |
| 18                 | Wideband Radio Communication Tester | Rohde & Schwarz                | CMW500                      | GTS575        | June. 24 2021       | June. 23 2022           |
| 19                 | Splitter                            | Agilent                        | 11636B                      | GTS237        | June. 24 2021       | June. 23 2022           |
| 20                 | Loop Antenna                        | ZHINAN                         | ZN30900A                    | GTS534        | June. 24 2021       | June. 23 2022           |
| 21                 | Breitband hornantenne               | SCHWARZBECK                    | BBHA 9170                   | GTS579        | Oct. 18 2020        | Oct. 17 2021            |
| 22                 | Amplifier                           | TDK                            | PA-02-02                    | GTS574        | Oct. 18 2020        | Oct. 17 2021            |
| 23                 | Amplifier                           | TDK                            | PA-02-03                    | GTS576        | Oct. 18 2020        | Oct. 17 2021            |
| 24                 | PSA Series Spectrum Analyzer        | Rohde & Schwarz                | FSP                         | GTS578        | June. 24 2021       | June. 23 2022           |



| Conducted Emission |                           |                         |                      |               |                     |                         |
|--------------------|---------------------------|-------------------------|----------------------|---------------|---------------------|-------------------------|
| Item               | Test Equipment            | Manufacturer            | Model No.            | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                  | Shielding Room            | ZhongYu Electron        | 7.3(L)x3.1(W)x2.9(H) | GTS252        | May.15 2019         | May.14 2022             |
| 2                  | EMI Test Receiver         | R&S                     | ESCI 7               | GTS552        | June. 24 2021       | June. 23 2022           |
| 3                  | Coaxial Switch            | ANRITSU CORP            | MP59B                | GTS225        | June. 24 2021       | June. 23 2022           |
| 4                  | ENV216 2-L-V-NETZNACHB.DE | ROHDE&SCHWARZ           | ENV216               | GTS226        | June. 24 2021       | June. 23 2022           |
| 5                  | Coaxial Cable             | GTS                     | N/A                  | GTS227        | N/A                 | N/A                     |
| 6                  | EMI Test Software         | AUDIX                   | E3                   | N/A           | N/A                 | N/A                     |
| 7                  | Thermo meter              | KTJ                     | TA328                | GTS233        | June. 24 2021       | June. 23 2022           |
| 8                  | Absorbing clamp           | Elektronik-Feinmechanik | MDS21                | GTS229        | June. 24 2021       | June. 23 2022           |
| 9                  | ISN                       | SCHWARZBECK             | NTFM 8158            | GTS565        | June. 24 2021       | June. 23 2022           |
| 10                 | High voltage probe        | SCHWARZBECK             | TK9420               | GTS537        | July. 09 2021       | July. 08 2022           |

| RF Conducted Test: |  |              |                  |            |                     |                         |
|--------------------|--|--------------|------------------|------------|---------------------|-------------------------|
| Item               | Test Equipment                                 | Manufacturer | Model No.        | Serial No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                  | MXA Signal Analyzer                            | Agilent      | N9020A           | GTS566     | June. 24 2021       | June. 23 2022           |
| 2                  | EMI Test Receiver                              | R&S          | ESCI 7           | GTS552     | June. 24 2021       | June. 23 2022           |
| 3                  | Spectrum Analyzer                              | Agilent      | E4440A           | GTS533     | June. 24 2021       | June. 23 2022           |
| 4                  | MXG vector Signal Generator                    | Agilent      | N5182A           | GTS567     | June. 24 2021       | June. 23 2022           |
| 5                  | ESG Analog Signal Generator                    | Agilent      | E4428C           | GTS568     | June. 24 2021       | June. 23 2022           |
| 6                  | USB RF Power Sensor                            | DARE         | RPR3006W         | GTS569     | June. 24 2021       | June. 23 2022           |
| 7                  | RF Switch Box                                  | Shongyi      | RFSW3003328      | GTS571     | June. 24 2021       | June. 23 2022           |
| 8                  | Programmable Constant Temp & Humi Test Chamber | WEWON        | WHTH-150L-40-880 | GTS572     | June. 24 2021       | June. 23 2022           |

| General used equipment: |                                 |              |           |               |                     |                         |
|-------------------------|---------------------------------|--------------|-----------|---------------|---------------------|-------------------------|
| Item                    | Test Equipment                  | Manufacturer | Model No. | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                       | Humidity/ Temperature Indicator | KTJ          | TA328     | GTS243        | June. 24 2021       | June. 23 2022           |
| 2                       | Barometer                       | ChangChun    | DYM3      | GTS255        | June. 24 2021       | June. 23 2022           |

## 7 Test results and Measurement Data

### 7.1 Antenna requirement

|  |                                     |
|--|-------------------------------------|
| <b>Standard requirement:</b>   | FCC Part15 C Section 15.203 /247(c) |
| <b>15.203 requirement:</b><br>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. |                                     |
| <b>15.247(c) (1)(i) requirement:</b><br>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.  |                                     |
| <b>EUT Antenna:</b>  |                                     |
| <i>The antenna is PCB antenna, the best case gain of the antennas are 2.92dBi, reference to the appendix II for details</i>  |                                     |

## 7.2 Conducted Emissions

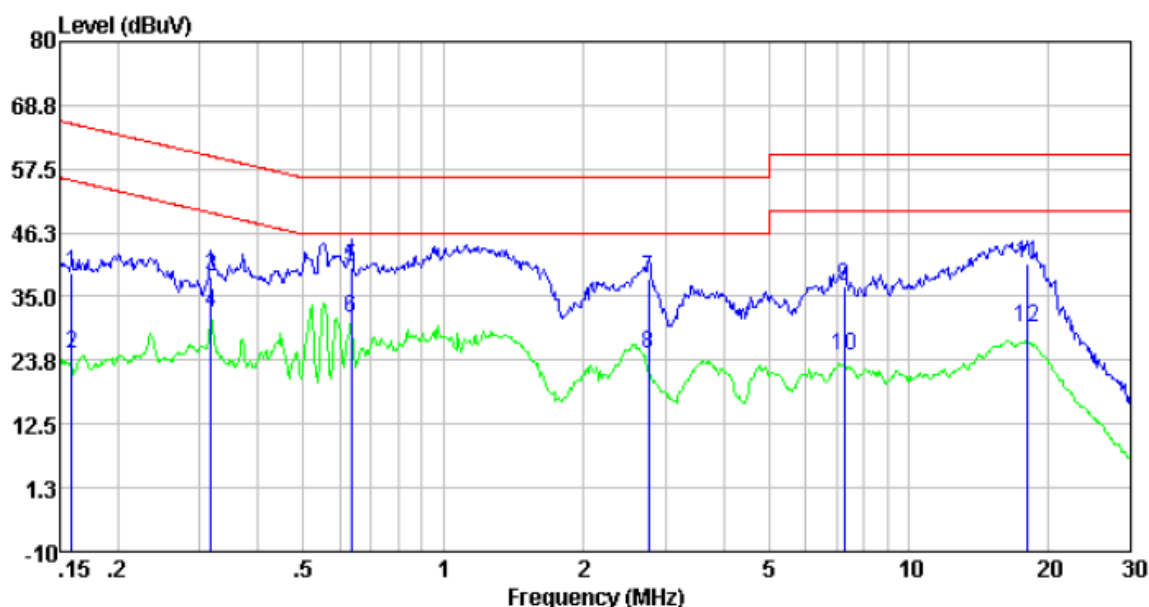
|  |   |              |         |           |         |          |
|--|---|--------------|---------|-----------|---------|----------|
| Test Requirement:                                | FCC Part15 C Section 15.207   |              |         |           |         |          |
| Test Method:                                     | ANSI C63.10:2013  |              |         |           |         |          |
| Test Frequency Range:                            | 150KHz to 30MHz   |              |         |           |         |          |
| Receiver setup:                                  | RBW=9KHz, VBW=30KHz, Sweep time=auto  |              |         |           |         |          |
| Limit:   | Frequency range (MHz)   | Limit (dBuV) |         |           |         |          |
|  |   | Quasi-peak   |         | Average   |         |          |
|  | 0.15-0.5  | 66 to 56*    |         | 56 to 46* |         |          |
|  | 0.5-5   | 56           |         | 46        |         |          |
|  | 5-30  | 60           |         | 50        |         |          |
| * Decreases with the logarithm of the frequency. |   |              |         |           |         |          |
| Test setup:                                      | <div><div><div>Reference Plane</div><div><div>LISN</div><div>AUX Equipment</div><div>E.U.T</div><div>Test table/Insulation plane</div></div><div><div>40cm</div><div>80cm</div></div><div><div>LISN</div><div>Filter</div><div>EMI Receiver</div></div><div>AC power</div></div><div><p>Remark:<br/>E.U.T: Equipment Under Test<br/>LISN: Line Impedance Stabilization Network<br/>Test table height=0.8m</p></div></div>   |              |         |           |         |          |
| Test procedure:                                  | <div>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</div> <div>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</div> <div>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</div> |              |         |           |         |          |
| Test Instruments:                                | Refer to section 6.0 for details  |              |         |           |         |          |
| Test mode:                                       | Refer to section 5.2 for details  |              |         |           |         |          |
| Test environment:                                | Temp.:  | 25 °C        | Humid.: | 52%       | Press.: | 1012mbar |
| Test voltage:                                    | AC 120V, 60Hz   |              |         |           |         |          |
| Test results:                                    | Pass  |              |         |           |         |          |

Remark: Both high and low voltages have been tested to show only the worst low voltage test data.



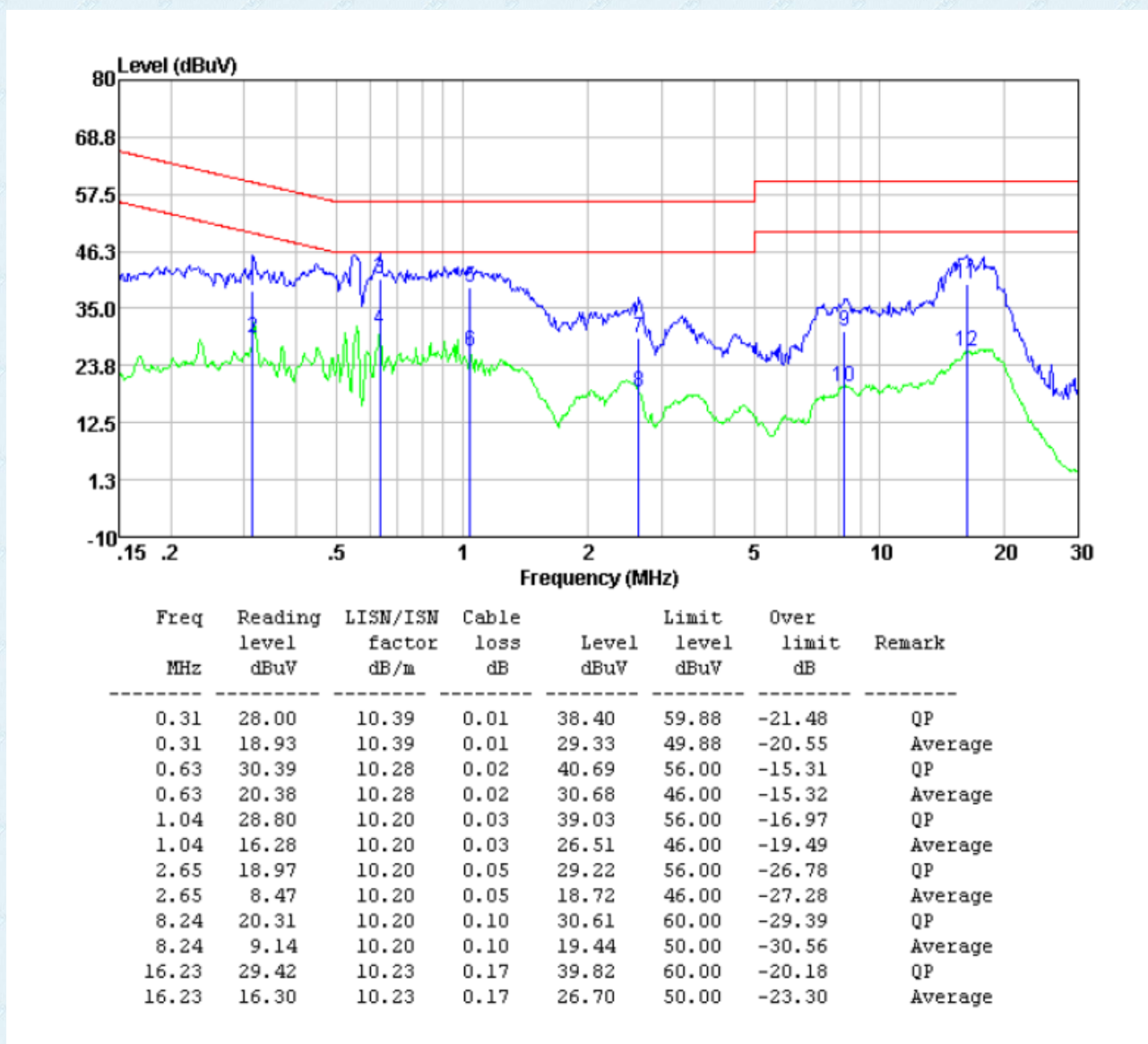
## Measurement data

Line:



| Freq<br>MHz | Reading<br>level<br>dBuV | LISN/ISN<br>factor<br>dB/m | Cable<br>loss<br>dB | Level<br>dBuV | Limit<br>level<br>dBuV | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|----------------------------|---------------------|---------------|------------------------|---------------------|---------|
| 0.16        | 28.66                    | 10.40                      | 0.01                | 39.07         | 65.52                  | -26.45              | QP      |
| 0.16        | 14.54                    | 10.40                      | 0.01                | 24.95         | 55.52                  | -30.57              | Average |
| 0.32        | 28.01                    | 10.39                      | 0.01                | 38.41         | 59.80                  | -21.39              | QP      |
| 0.32        | 21.75                    | 10.39                      | 0.01                | 32.15         | 49.80                  | -17.65              | Average |
| 0.63        | 29.79                    | 10.28                      | 0.02                | 40.09         | 56.00                  | -15.91              | QP      |
| 0.63        | 20.86                    | 10.28                      | 0.02                | 31.16         | 46.00                  | -14.84              | Average |
| 2.76        | 27.94                    | 10.20                      | 0.05                | 38.19         | 56.00                  | -17.81              | QP      |
| 2.76        | 14.62                    | 10.20                      | 0.05                | 24.87         | 46.00                  | -21.13              | Average |
| 7.25        | 26.41                    | 10.20                      | 0.09                | 36.70         | 60.00                  | -23.30              | QP      |
| 7.25        | 14.09                    | 10.20                      | 0.09                | 24.38         | 50.00                  | -25.62              | Average |
| 18.04       | 30.41                    | 10.26                      | 0.18                | 40.85         | 60.00                  | -19.15              | QP      |
| 18.04       | 19.07                    | 10.26                      | 0.18                | 29.51         | 50.00                  | -20.49              | Average |

Neutral:

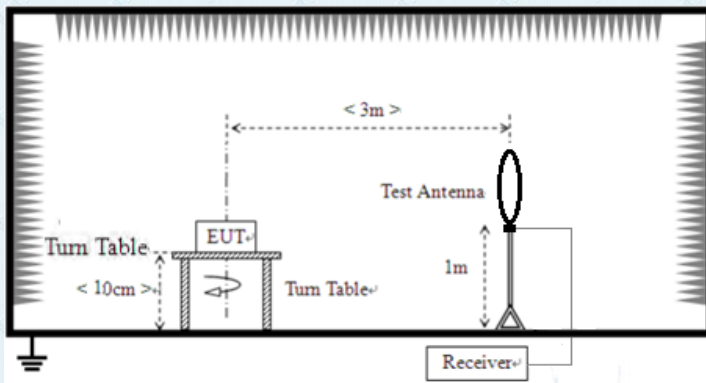


Notes:

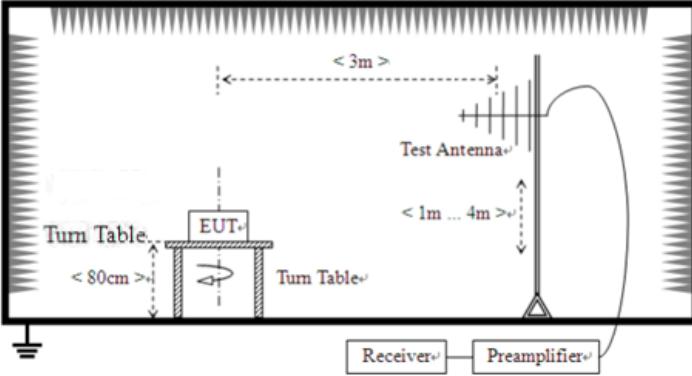
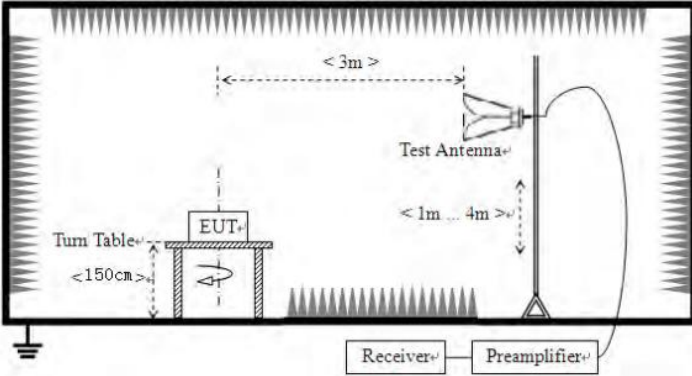
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

## 7.3 Spurious Emission

### 7.3.1 Radiated Emission Method

|  |   |              |         |                      |            |
|--|---|--------------|---------|----------------------|------------|
| Test Requirement:                        | FCC Part15 C Section 15.209   |              |         |                      |            |
| Test Method:                             | ANSI C63.10:2013  |              |         |                      |            |
| Test Frequency Range:                    | 30MHz to1GHz  |              |         |                      |            |
| Test site:                               | Measurement Distance: 3m  |              |         |                      |            |
| Receiver setup:                          | Frequency   | Detector     | RBW     | VBW                  | Value      |
|  | 9KHz-150KHz   | Quasi-peak   | 200Hz   | 600Hz                | Quasi-peak |
|  | 150KHz-30MHz  | Quasi-peak   | 9KHz    | 30KHz                | Quasi-peak |
|  | 30MHz-1GHz  | Quasi-peak   | 120KHz  | 300KHz               | Quasi-peak |
|  | Above 1GHz  | Peak         | 1MHz    | 3MHz                 | Peak       |
|  |   | Peak         | 1MHz    | 10Hz                 | Average    |
| Limit:                                   | Frequency   | Limit (uV/m) | Value   | Measurement Distance |            |
|  | 0.009MHz-0.490MHz   | 2400/F(KHz)  | QP      | 300m                 |            |
|  | 0.490MHz-1.705MHz   | 24000/F(KHz) | QP      | 300m                 |            |
|  | 1.705MHz-30MHz  | 30           | QP      | 30m                  |            |
|  | 30MHz-88MHz   | 100          | QP      | 3m                   |            |
|  | 88MHz-216MHz  | 150          | QP      |                      |            |
|  | 216MHz-960MHz   | 200          | QP      |                      |            |
|  | 960MHz-1GHz   | 500          | QP      |                      |            |
|  | Above 1GHz  | 500          | Average |                      |            |
|  |   | 5000         | Peak    |                      |            |
| Test setup:                              | For radiated emissions from 9kHz to 30MHz   |              |         |                      |            |
|  | <div></div> |              |         |                      |            |
| For radiated emissions from 30MHz to1GHz |   |              |         |                      |            |



|                          |  |
|--------------------------|--|
|                          |  <p>For radiated emissions above 1GHz</p>   |
| <p>Test Procedure:</p>   | <ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol> |
| <p>Test Instruments:</p> | <p>Refer to section 6.0 for details</p>  |

|                   |                                  |       |         |     |         |          |
|-------------------|----------------------------------|-------|---------|-----|---------|----------|
| Test mode:        | Refer to section 5.2 for details |       |         |     |         |          |
| Test voltage:     | AC120V 60Hz                      |       |         |     |         |          |
| Test environment: | Temp.:                           | 25 °C | Humid.: | 52% | Press.: | 1012mbar |
| Test voltage:     | AC 120V, 60Hz                    |       |         |     |         |          |
| Test results:     | Pass                             |       |         |     |         |          |

## Remarks:

1. Only the worst case Main Antenna test data.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

## Measurement data:

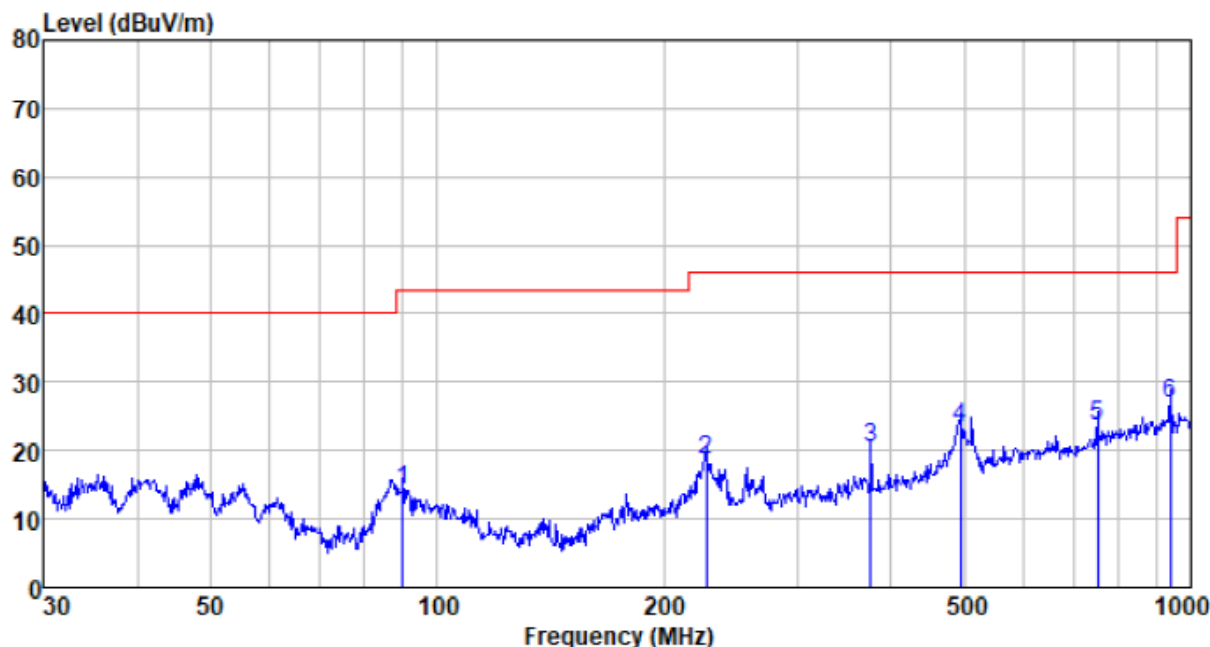
### ■ 9kHz~30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

## ■ Below 1GHz

Pre-scan all test modes, found worst case at 802.11g 2462MHz, and so only show the test result of 802.11g 2462MHz

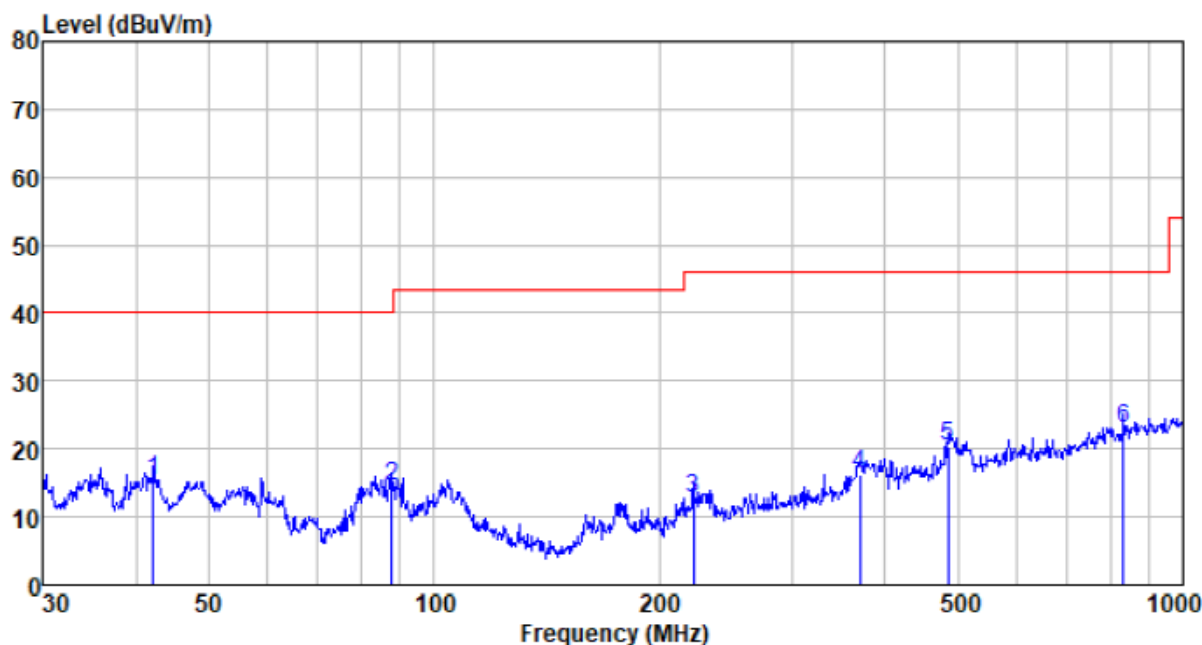
### Horizontal:



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamplifier<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------------|-----------------|--------------------------|---------------------|--------|
| 89.905      | 39.00                    | 10.57                     | 1.11                | 36.64                        | 14.04           | 43.50                    | -29.46              | QP     |
| 227.691     | 42.63                    | 11.42                     | 2.01                | 37.36                        | 18.70           | 46.00                    | -27.30              | QP     |
| 375.939     | 40.05                    | 14.94                     | 2.75                | 37.50                        | 20.24           | 46.00                    | -25.76              | QP     |
| 494.199     | 40.50                    | 17.18                     | 3.28                | 37.51                        | 23.45           | 46.00                    | -22.55              | QP     |
| 752.743     | 36.49                    | 20.59                     | 4.28                | 37.62                        | 23.74           | 46.00                    | -22.26              | QP     |
| 938.833     | 37.01                    | 22.46                     | 4.99                | 37.56                        | 26.90           | 46.00                    | -19.10              | QP     |



Vertical:



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 42.154      | 38.28                    | 12.22                     | 0.69                | 35.79                  | 15.40           | 40.00                    | -24.60              | QP     |
| 87.725      | 40.09                    | 9.94                      | 1.09                | 36.62                  | 14.50           | 40.00                    | -25.50              | QP     |
| 222.170     | 36.84                    | 11.24                     | 1.97                | 37.35                  | 12.70           | 46.00                    | -33.30              | QP     |
| 370.702     | 36.28                    | 14.86                     | 2.72                | 37.49                  | 16.37           | 46.00                    | -29.63              | QP     |
| 485.609     | 37.68                    | 17.06                     | 3.24                | 37.51                  | 20.47           | 46.00                    | -25.53              | QP     |
| 833.317     | 34.35                    | 21.71                     | 4.58                | 37.61                  | 23.03           | 46.00                    | -22.97              | QP     |

## 8 Test Setup Photo

Reference to the **appendix I** for details.

## 9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----