

# Global United Technology Services Co., Ltd.

Report No.: GTSE15120225501

# FCC Report (WIFI)

SHENZHEN GIEC ELECTRONICS CO., LTD. Applicant:

**Address of Applicant:** 24/F, Building A Xinian Center, No. 6021 Shennan R,

Shenzhen, Guangdong, China

**Equipment Under Test (EUT)** 

**Product Name: Tablet PC** 

Model No.: TM800W560L

Trade Mark: **GIEC** 

FCC ID: ZVR-TM800W560L

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247:2014

Date of sample receipt: December 17, 2015

**Date of Test:** December 18-25, 2015

December 28, 2015 Date of report issued:

**Test Result:** PASS \*

Authorized Signature:

Robinson Lo **Laboratory Manager** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



# 2 Version

| Version No. | Date              | Description |
|-------------|-------------------|-------------|
| 00          | December 28, 2015 | Original    |
|             |                   |             |
|             |                   |             |
|             |                   |             |
|             |                   |             |

| Prepared By: | Edward.Pan          | Date: | December 28, 2015 |
|--------------|---------------------|-------|-------------------|
|              | Project Engineer    |       |                   |
| Check By:    | hank. yan  Reviewer | Date: | December 28, 2015 |



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# 4 Test Summary

| Test Item                        | Section in CFR 47 | Result |
|----------------------------------|-------------------|--------|
| Antenna requirement              | 15.203/15.247 (c) | Pass   |
| AC Power Line Conducted Emission | 15.207            | Pass   |
| Conducted Peak Output Power      | 15.247 (b)(3)     | Pass   |
| Channel Bandwidth                | 15.247 (a)(2)     | Pass   |
| Power Spectral Density           | 15.247 (e)        | Pass   |
| Band Edge                        | 15.247(d)         | Pass   |
| Spurious Emission                | 15.205/15.209     | Pass   |

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

Remark: Test according to ANSI C63.10 2013 and ANSI C63.4: 2014

# 4.1 Measurement Uncertainty

| Test Item                                                                                             | Frequency Range | Measurement Uncertainty | Notes |  |  |  |
|-------------------------------------------------------------------------------------------------------|-----------------|-------------------------|-------|--|--|--|
| Radiated Emission                                                                                     | 9kHz ~ 30MHz    | ± 4.34dB                | (1)   |  |  |  |
| Radiated Emission                                                                                     | 30MHz ~ 1000MHz | ± 4.24dB                | (1)   |  |  |  |
| Radiated Emission                                                                                     | 1GHz ~ 26.5GHz  | ± 4.68dB                | (1)   |  |  |  |
| AC Power Line Conducted Emission                                                                      | 0.15MHz ~ 30MHz | ± 3.45dB                | (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 Client Information

| Applicant:               | SHENZHEN GIEC ELECTRONICS CO., LTD.                                                                               |  |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|--|
| Address of Applicant:    | 24/F, Building A Xinian Center, No. 6021 Shennan R, Shenzhen, Guangdong, China                                    |  |
| Manufacturer:            | SHENZHEN GIEC ELECTRONICS CO., LTD.                                                                               |  |
| Address of Manufacturer: | 24/F, Building A Xinian Center, No. 6021 Shennan R, Shenzhen, Guangdong, China                                    |  |
| Factory:                 | SHENZHEN GIEC DIGITAL CO., LTD                                                                                    |  |
| Address of Factory:      | No.1 Building, Factory, No.7 District, Dayang Development Areas, FuYong Street, Baoan, Shenzhen, Guangdong, China |  |

# 5.2 General Description of EUT

| Product Name:          | Tablet PC                                         |  |
|------------------------|---------------------------------------------------|--|
| Model No.:             | TM800W560L                                        |  |
| Operation Frequency:   | 802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz    |  |
|                        | 802.11n(HT40): 2422MHz~2452MHz                    |  |
| Channel numbers:       | 802.11b/802.11g /802.11n(HT20): 11                |  |
|                        | 802.11n(HT40): 7                                  |  |
| Channel separation:    | 5MHz                                              |  |
| Modulation technology: | 802.11b: Direct Sequence Spread Spectrum (DSSS)   |  |
|                        | 802.11g/802.11n(H20)/802.11n(H40):                |  |
|                        | Orthogonal Frequency Division Multiplexing (OFDM) |  |
| Antenna Type:          | Integral antenna                                  |  |
| Antenna gain:          | 2.0dBi(declare by Applicant)                      |  |
| Power supply:          | Adapter:                                          |  |
|                        | Model:A88-502000                                  |  |
|                        | Input:AC100-240V~50/60Hz, 0.35A                   |  |
|                        | Output:DC 5V 2000mA                               |  |
|                        | Or                                                |  |
|                        | DC 3.8V 3400mAh Li-ion Battery                    |  |

Xixiang Road, Baoan District, Shenzhen, Guangdong, China Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



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

#### 5.3 Test mode

| Transmitting mode | Keep the EUT in continuously transmitting mode |
|-------------------|------------------------------------------------|
|-------------------|------------------------------------------------|

Remark: During the test, the dutycycle >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.

We have verified the construction and functi, on 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:

Per-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        |

# 5.4 Description of Support Units

N/A:



# 5.5 Test Facility

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

• FCC —Registration No.: 600491

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, June 28, 2013.

• Industry Canada (IC) —Registration No.: 9079A-2

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 with Registration No.: 9079A-2, June 26, 2013.

### 5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrrial Zone, Xixiang Road,

Baoan District, Shenzhen, Guangdong, China

Tel: 0755-27798480 Fax: 0755-27798960



# 6 Test Instruments list

| Rad                 | Radiated Emission:                              |                                |                             |                  |                        |                            |  |  |
|---------------------|-------------------------------------------------|--------------------------------|-----------------------------|------------------|------------------------|----------------------------|--|--|
| Item Test Equipment |                                                 | Manufacturer                   | Model No.                   | Inventory<br>No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |  |
| 1                   | 3m Semi- Anechoic<br>Chamber                    | ZhongYu Electron               | 9.2(L)*6.2(W)* 6.4(H)       | GTS250           | Mar. 27 2015           | Mar. 26 2016               |  |  |
| 2                   | Control Room                                    | ZhongYu Electron               | 6.2(L)*2.5(W)* 2.4(H)       | GTS251           | N/A                    | N/A                        |  |  |
| 3                   | Spectrum Analyzer                               | Agilent                        | E4440A                      | GTS533           | Dec. 3 2015            | Dec. 2 2016                |  |  |
| 4                   | EMI Test Receiver                               | Rohde & Schwarz                | ESU26                       | GTS203           | June 30 2015           | June 29 2016               |  |  |
| 5                   | 5 BiConiLog Antenna SCHWARZBECK MESS-ELEKTRONIK |                                | VULB9163                    | GTS214           | June 30 2015           | June 29 2016               |  |  |
| 6                   | Double -ridged waveguide<br>horn                | SCHWARZBECK<br>MESS-ELEKTRONIK | 9120D-829                   | GTS208           | June 26 2015           | June 25 2016               |  |  |
| 7                   | Horn Antenna                                    | ETS-LINDGREN                   | 3160                        | GTS217           | Mar. 27 2015           | Mar. 26 2016               |  |  |
| 8                   | EMI Test Software                               | AUDIX                          | E3                          | N/A              | N/A                    | N/A                        |  |  |
| 9                   | Coaxial Cable                                   | GTS                            | N/A                         | GTS213           | Mar. 28 2015           | Mar. 27 2016               |  |  |
| 10                  | Coaxial Cable                                   | GTS                            | N/A                         | GTS211           | Mar. 28 2015           | Mar. 27 2016               |  |  |
| 11                  | Coaxial cable                                   | GTS                            | N/A                         | GTS210           | Mar. 28 2015           | Mar. 27 2016               |  |  |
| 12                  | Coaxial Cable                                   | GTS                            | N/A                         | GTS212           | Mar. 28 2015           | Mar. 27 2016               |  |  |
| 13                  | Amplifier(100kHz-3GHz)                          | HP                             | 8347A                       | GTS204           | June 30 2015           | June 29 2016               |  |  |
| 14                  | Amplifier(2GHz-20GHz)                           | HP                             | 8349B                       | GTS206           | June 30 2015           | June 29 2016               |  |  |
| 15                  | Amplifier (18-26GHz)                            | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | GTS218           | June 26 2015           | June 25 2016               |  |  |
| 16                  | Band filter                                     | Amindeon                       | 82346                       | GTS219           | Mar. 28 2015           | Mar. 27 2016               |  |  |
| 17                  | Power Meter                                     | Anritsu                        | ML2495A                     | GTS540           | June 30 2015           | June 29 2016               |  |  |
| 18                  | Power Sensor                                    | Anritsu                        | MA2411B                     | GTS541           | June 30 2015           | June 29 2016               |  |  |

| Con  | ducted Emission:         |                                |                      |                  |                        |                            |
|------|--------------------------|--------------------------------|----------------------|------------------|------------------------|----------------------------|
| Item | Test Equipment           | Manufacturer                   | Model No.            | Inventory<br>No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |
| 1    | Shielding Room           | ZhongYu Electron               | 7.0(L)x3.0(W)x3.0(H) | GTS264           | Sep. 07 2015           | Sep. 06 2016               |
| 2    | <b>EMI Test Receiver</b> | Rohde & Schwarz                | ESCS30               | GTS223           | June 30 2015           | June 29 2016               |
| 3    | 10dB Pulse Limita        | Rohde & Schwarz                | N/A                  | GTS224           | June 30 2015           | June 29 2016               |
| 4    | Coaxial Switch           | ANRITSU CORP                   | MP59B                | GTS225           | June 30 2015           | June 29 2016               |
| 5    | LISN                     | SCHWARZBECK<br>MESS-ELEKTRONIK | NSLK 8127            | GTS226           | June 30 2015           | June 29 2016               |
| 6    | Coaxial Cable            | GTS                            | N/A                  | GTS227           | June 30 2015           | June 29 2016               |
| 7    | EMI Test Software        | AUDIX                          | E3                   | N/A              | N/A                    | N/A                        |

| Gen  | General used equipment: |              |           |                  |                        |                            |  |  |
|------|-------------------------|--------------|-----------|------------------|------------------------|----------------------------|--|--|
| Item | Test Equipment          | Manufacturer | Model No. | Inventory<br>No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |  |
| 1    | Barometer               | ChangChun    | DYM3      | GTS257           | July 07 2015           | July 06 2016               |  |  |



# 7 Test results and Measurement Data

# 7.1 Antenna requirement

**Standard requirement:** FCC Part15 C Section 15.203 /247(c)

#### 15.203 requirement:

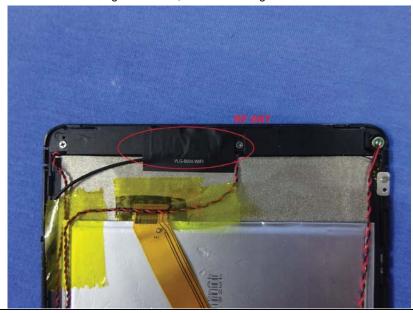
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 15.247(c) (1)(i) requirement:

(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.

### E.U.T Antenna:

The antenna is Integral antenna, the best case gain of the antenna is 2dBi





# 7.2 Conducted Emissions

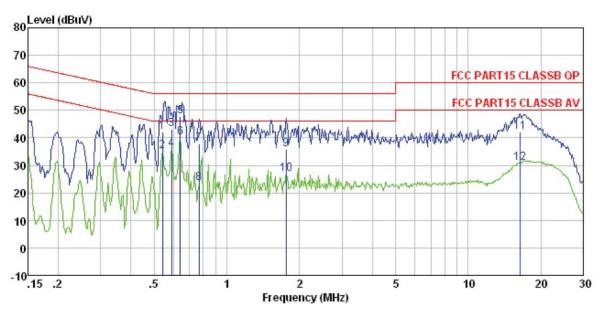
| Toot Doguiromonts     | FCC Part15 C Section 15.207                                                                                                                                                                                                                                   | ,                        |                |  |  |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--|--|
| Test Requirement:     |                                                                                                                                                                                                                                                               |                          |                |  |  |
| Test Method:          | ANSI C63.10:2013                                                                                                                                                                                                                                              |                          |                |  |  |
| Test Frequency Range: | 150KHz to 30MHz                                                                                                                                                                                                                                               |                          |                |  |  |
| Class / Severity:     | Class B                                                                                                                                                                                                                                                       |                          |                |  |  |
| Receiver setup:       | RBW=9KHz, VBW=30KHz, Sv                                                                                                                                                                                                                                       | weep time=auto           |                |  |  |
| Limit:                | Frequency range (MHz)                                                                                                                                                                                                                                         | Limit (d                 | lBuV)          |  |  |
|                       | ,                                                                                                                                                                                                                                                             | Quasi-peak               | Average        |  |  |
|                       | 0.15-0.5                                                                                                                                                                                                                                                      | 66 to 56*                | 56 to 46*      |  |  |
|                       | 0.5-5                                                                                                                                                                                                                                                         | 56                       | 46             |  |  |
|                       | 5-30                                                                                                                                                                                                                                                          | 60                       | 50             |  |  |
| <del></del>           | * Decreases with the logarithn                                                                                                                                                                                                                                | · · · ·                  |                |  |  |
| Test setup:           | Reference Plane                                                                                                                                                                                                                                               |                          | -              |  |  |
|                       | AUX Equipment  Test table/Insulation plane  Remark E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m                                                                                                              | Filter — AC pow          | ver            |  |  |
| Test procedure:       | The E.U.T and simulators a<br>line impedance stabilization<br>50ohm/50uH coupling impe                                                                                                                                                                        | n network (L.I.S.N.). Th | nis provides a |  |  |
|                       | 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).                                    |                          |                |  |  |
|                       | 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. |                          |                |  |  |
| Test Instruments:     | Refer to section 6.0 for details                                                                                                                                                                                                                              |                          |                |  |  |
| Test mode:            | Refer to section 5.3 for details                                                                                                                                                                                                                              |                          |                |  |  |
| Test results:         | Pass                                                                                                                                                                                                                                                          |                          |                |  |  |

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#### Measurement data

Line:



Condition : FCC PART15 CLASSB QP LISN-2013 LINE

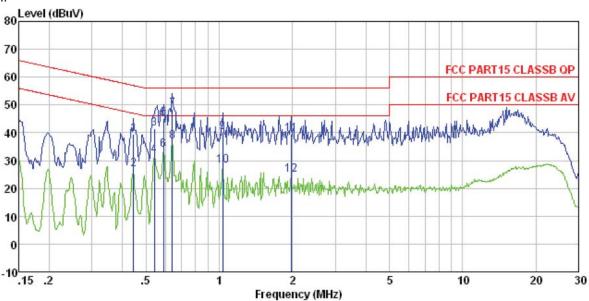
Job No. : 2255RF Test mode : Wifi mode Test Engineer: Arslan

|                            | Freq   | Read<br>Level | Level | LISN<br>Factor | Cable<br>Loss | Limit<br>Line | Over<br>Limit | Remark  |
|----------------------------|--------|---------------|-------|----------------|---------------|---------------|---------------|---------|
|                            | MHz    | dBuV          | dBuV  | dB             | dB            | dBuV          | dB            |         |
| 1                          | 0.541  | 41.76         | 42.00 | 0.13           | 0.11          | 56.00         | -14.00        | QP      |
| 2                          | 0.541  | 35.05         | 35.29 | 0.13           | 0.11          | 46.00         | -10.71        | Average |
| 3                          | 0.592  | 43.03         | 43.28 | 0.13           | 0.12          | 56.00         | -12.72        | QP      |
| 2<br>3<br>4<br>5<br>6<br>7 | 0.592  | 35.53         | 35.78 | 0.13           | 0.12          | 46.00         | -10.22        | Average |
| 5                          | 0.641  | 47.45         | 47.71 | 0.13           | 0.13          | 56.00         | -8.29         | QP      |
| 6                          | 0.641  | 39.76         | 40.02 | 0.13           | 0.13          | 46.00         | -5.98         | Average |
|                            | 0.767  | 37.43         | 37.70 | 0.14           | 0.13          | 56.00         | -18.30        | QP      |
| 8<br>9                     | 0.767  | 23.12         | 23.39 | 0.14           | 0.13          | 46.00         | -22.61        | Average |
| 9                          | 1.762  | 35.61         | 35.87 | 0.12           | 0.14          | 56.00         | -20.13        | QP      |
| 10                         | 1.762  | 26.74         | 27.00 | 0.12           | 0.14          | 46.00         | -19.00        | Average |
| 11                         | 16.398 | 41.64         | 42.25 | 0.39           | 0.22          | 60.00         | -17.75        | QP      |
| 12                         | 16.398 | 30.38         | 30.99 | 0.39           | 0.22          | 50.00         | -19.01        | Average |

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#### Neutral:



Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 2255RF Test mode : Wifi mode Test Engineer: Arslan

|             | Freq  | Read<br>Level | Level | LISN<br>Factor | Cable<br>Loss | Limit<br>Line | Over<br>Limit | Remark   |
|-------------|-------|---------------|-------|----------------|---------------|---------------|---------------|----------|
|             | MHz   | dBuV          | dBuV  | dB             | dB            | dBuV          | dB            |          |
| 1           | 0.444 | 39.18         | 39.35 | 0.06           | 0.11          |               | -17.63        | 2 (27.2) |
| 2           | 0.444 | 26.53         | 26.70 | 0.06           | 0.11          |               |               | Average  |
|             | 0.541 | 41.17         | 41.35 | 0.07           | 0.11          |               | -14.65        |          |
| 4           | 0.541 | 31.78         | 31.96 | 0.07           | 0.11          | 46.00         | -14.04        | Average  |
| 5           | 0.592 | 44.92         | 45.11 | 0.07           | 0.12          | 56.00         | -10.89        | QP       |
| 4<br>5<br>6 | 0.592 | 33.62         | 33.81 | 0.07           | 0.12          | 46.00         | -12.19        | Average  |
| 7           | 0.641 | 48.41         | 48.61 | 0.07           | 0.13          | 56.00         | -7.39         | QP       |
| 8           | 0.641 | 36.68         | 36.88 | 0.07           | 0.13          | 46.00         | -9.12         | Average  |
| 9           | 1.032 | 39.80         | 40.00 | 0.07           | 0.13          | 56.00         | -16.00        | QP       |
| 10          | 1.032 | 27.83         | 28.03 | 0.07           | 0.13          | 46.00         | -17.97        | Average  |
| 11          | 1.970 | 39.41         | 39.64 | 0.09           | 0.14          |               | -16.36        |          |
| 12          | 1.970 | 24.70         | 24.93 | 0.09           | 0.14          |               |               | Average  |

#### 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 Conducted Peak Output Power

| Test Requirement: | FCC Part15 C Section 15.247 (b)(3)                              |  |  |
|-------------------|-----------------------------------------------------------------|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03        |  |  |
| Limit:            | 30dBm                                                           |  |  |
| Test setup:       | Power Meter  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 6.0 for details                                |  |  |
| Test mode:        | Refer to section 5.3 for details                                |  |  |
| Test results:     | Pass                                                            |  |  |

# **Measurement Data**

| Test CH |         | Peak Outp | Limit(dBm)    | Result        |             |        |
|---------|---------|-----------|---------------|---------------|-------------|--------|
|         | 802.11b | 802.11g   | 802.11n(HT20) | 802.11n(HT40) | Limit(abin) | Nesuit |
| Lowest  | 7.45    | 7.43      | 7.34          | 7.22          |             |        |
| Middle  | 7.38    | 7.41      | 7.30          | 7.35          | 30.00       | Pass   |
| Highest | 7.27    | 7.22      | 7.37          | 7.40          |             |        |



# 7.4 Channel Bandwidth

| Test Requirement: | FCC Part15 C Section 15.247 (a)(2)                                    |  |  |
|-------------------|-----------------------------------------------------------------------|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03              |  |  |
| Limit:            | >500KHz                                                               |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 6.0 for details                                      |  |  |
| Test mode:        | Refer to section 5.3 for details                                      |  |  |
| Test results:     | Pass                                                                  |  |  |

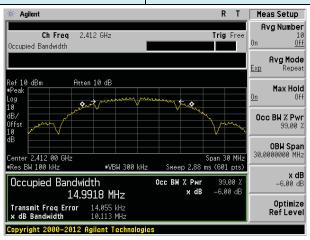
### **Measurement Data**

| Test CH |         | Channel Ban | Limit/K∐z)    | Result        |            |        |
|---------|---------|-------------|---------------|---------------|------------|--------|
|         | 802.11b | 802.11g     | 802.11n(HT20) | 802.11n(HT40) | Limit(KHz) | Result |
| Lowest  | 10.113  | 16.618      | 17.848        | 36.516        |            |        |
| Middle  | 10.111  | 16.612      | 17.838        | 36.521        | >500       | Pass   |
| Highest | 10.112  | 16.608      | 17.834        | 36.515        |            |        |

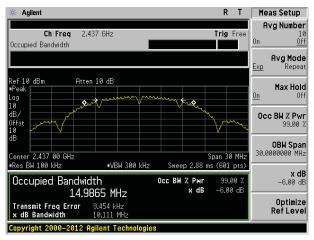
# Test plot as follows:



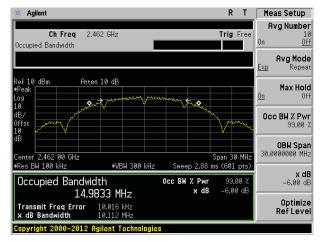
Test mode: 802.11b



#### Lowest channel



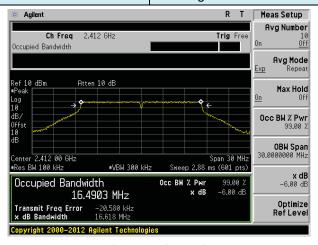
#### Middle channel



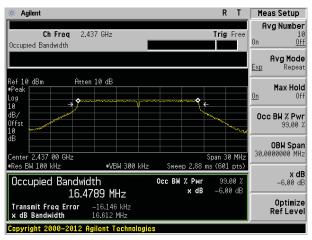
Highest channel



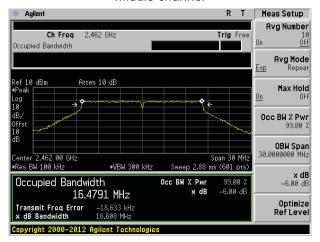
Test mode: 802.11g



#### Lowest channel



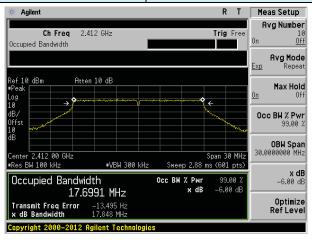
### Middle channel



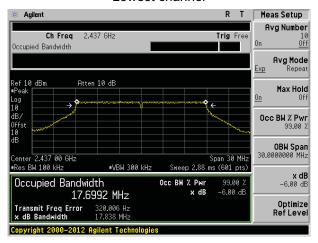
Highest channel



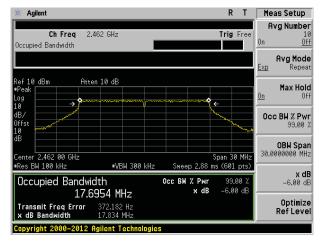
Test mode: 802.11n(HT20)



#### Lowest channel



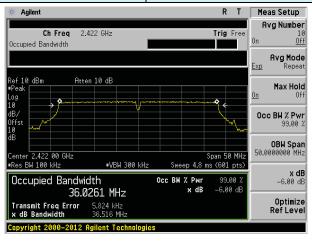
#### Middle channel



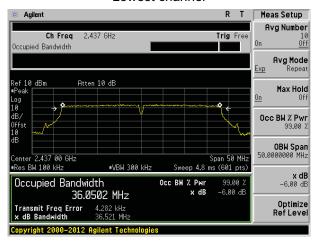
Highest channel



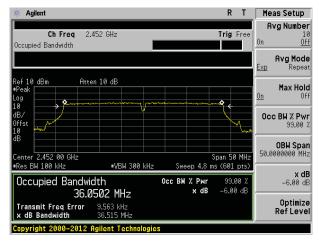
Test mode: 802.11n(HT40)



#### Lowest channel



#### Middle channel



Highest channel



# 7.5 Power Spectral Density

| Test Requirement: | FCC Part15 C Section 15.247 (e)                                       |  |  |
|-------------------|-----------------------------------------------------------------------|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03              |  |  |
| Limit:            | 8dBm                                                                  |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 6.0 for details                                      |  |  |
| Test mode:        | Refer to section 5.3 for details                                      |  |  |
| Test results:     | Pass                                                                  |  |  |

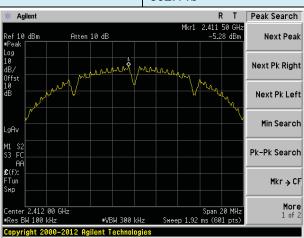
### **Measurement Data**

| Test CH |         | Power Spectra | Limit(dBm/3kHz) | Result        |                   |        |
|---------|---------|---------------|-----------------|---------------|-------------------|--------|
| rest CH | 802.11b | 802.11g       | 802.11n(HT20)   | 802.11n(HT40) | Limit(dBin/3Ki12) | Result |
| Lowest  | -5.28   | -10.76        | -11.00          | -13.93        |                   |        |
| Middle  | -5.24   | -10.67        | -10.42          | -14.12        | 8.00              | Pass   |
| Highest | -5.44   | -10.73        | -10.62          | -14.21        |                   |        |

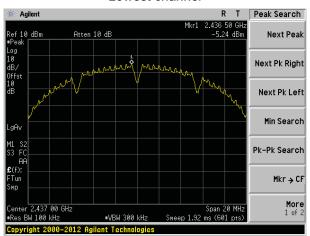


# Test plot as follows:

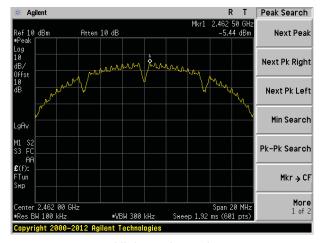
Test mode: 802.11b



#### Lowest channel



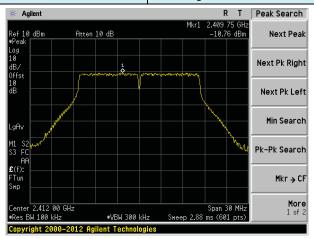
### Middle channel



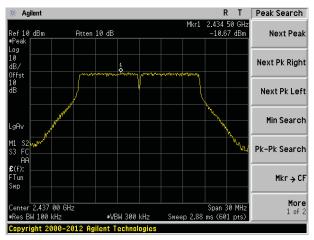
Highest channel



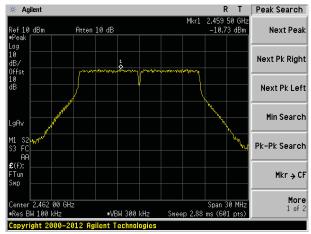
Test mode: 802.11g



#### Lowest channel



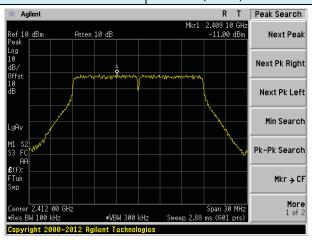
# Middle channel



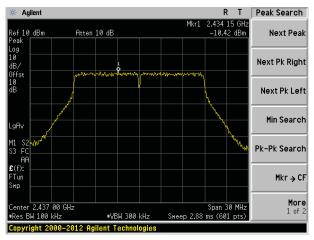
Highest channel



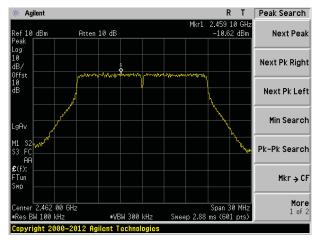
Test mode: 802.11n(HT20)



#### Lowest channel



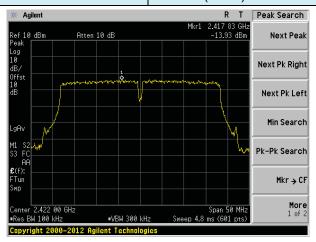
#### Middle channel



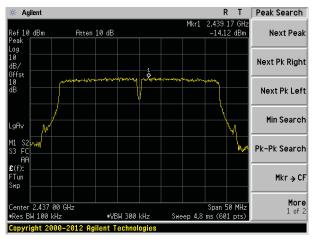
Highest channel



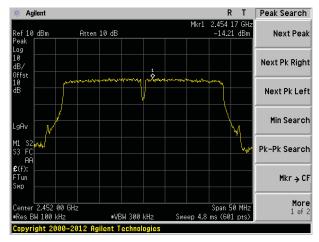
Test mode: 802.11n(HT40)



#### Lowest channel



#### Middle channel



Highest channel



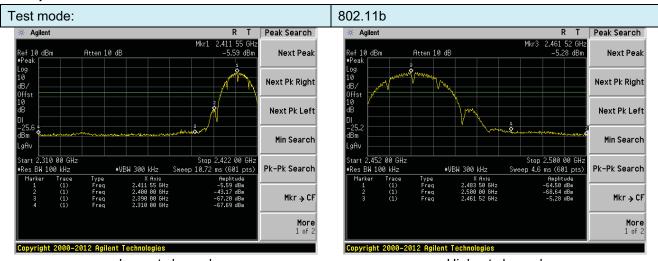
# 7.6 Band edges

# 7.6.1 Conducted Emission Method

| Test Requirement: | FCC Part15 C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                         |  |  |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                   | · /                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03                                                                                                                                                                                                                                                                                                                                |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |
| Test setup:       | ·                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                        |  |  |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                        |  |  |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                    |  |  |

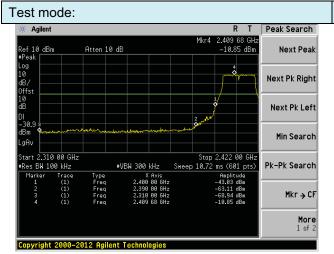


#### Test plot as follows:

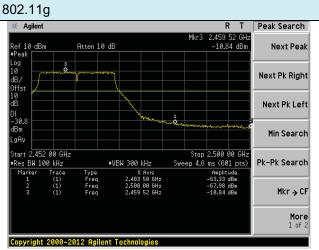


Lowest channel

Highest channel

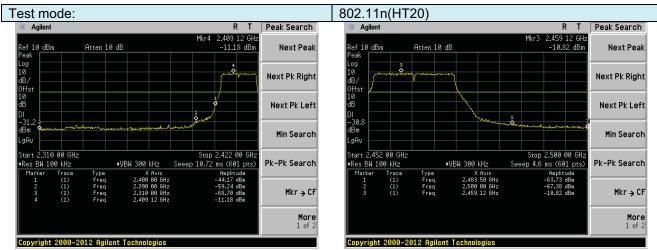


Lowest channel



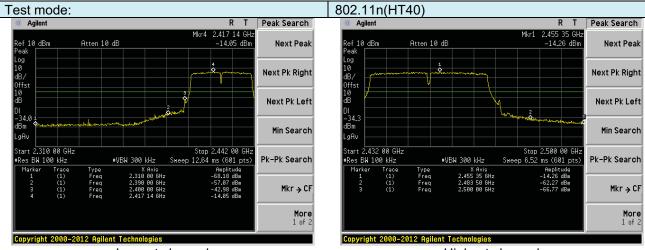
Highest channel





Lowest channel

Highest channel



Lowest channel

Highest channel



#### 7.6.2 Radiated Emission Method

| Test site:  Measurement Distance: 3m  Receiver setup:    Frequency   Detector   RBW   VBW   Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7.6.2 Radiated Emission Me | etnoa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |                                       |     |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------|-----|--|--|--|
| Test Frequency Range:    All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.   Test site:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Test Requirement:          | FCC Part15 C Section 15.209 and 15.205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |                                       |     |  |  |  |
| Test site:  Measurement Distance: 3m  Receiver setup:    Frequency   Detector   RBW   VBW   Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Test Method:               | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                                       |     |  |  |  |
| Test site:    Receiver setup:   Frequency   Detector   RBW   VBW   Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Test Frequency Range:      | All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |                                       |     |  |  |  |
| Above 1GHz  Peak  IMHz  AMHz  AMHz  AMHz  Average  Frequency  Limit (dBuV/m @3m)  Value  Above 1GHz  Above 1GHz  Test setup:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Refer to section 5.3 for details                                                                   | Test site:                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                                       |     |  |  |  |
| Above 1GHz  Peak  IMHz  AMHz  AMHz  AMHz  Average  Frequency  Limit (dBuV/m @3m)  Value  Above 1GHz  Above 1GHz  Test setup:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Refer to section 5.3 for details                                                                   | Receiver setup:            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                                       |     |  |  |  |
| Limit:  Frequency  Limit (dBuV/m @3m)  Value  Above 1GHz  Frequency  Above 1GHz  Test setup:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report. | •                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        | 1MHz                                  |     |  |  |  |
| Test Procedure:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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 to make the measurement.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasippeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Test Instruments:  Refer to section 5.3 for details                            |                            | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |                                       |     |  |  |  |
| Test setup:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Refer to section 6.0 for details  Refer to section 5.3 for details              | Limit:                     | Freque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |                                       | ·   |  |  |  |
| Test setup:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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 tuned from 0 degrees to 360 degrees to find the maximum reading.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Refer to section 6.0 for details  Test mode:  Refer to section 5.3 for details   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        | · · · · · · · · · · · · · · · · · · · |     |  |  |  |
| Test Procedure:  1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  4. For each suspected emission, the EUT was arranged to its worst case and then tota table was turned from 0 degrees to 360 degrees to find the maximum reading.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Test Instruments:  Refer to section 5.3 for details                                                                                           |                            | Above 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | GHZ    |                                       |     |  |  |  |
| the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.  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.  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.  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.  5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  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, quasipeak or average method as specified and then reported in a data sheet.  7. The radiation measurements are performed in X, Y, Z axis positioning And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.  Test Instruments:  Refer to section 5.0 for details  Refer to section 5.3 for details                                                                              | rest setup.                | Turn Table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | m in m | Horn Anter<br>Spectrum<br>Analyzer    | nna |  |  |  |
| Test Instruments: Refer to section 6.0 for details Test mode: Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Test Procedure:            | <ol> <li>the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>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>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>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>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>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, quasipeak or average method as specified and then reported in a data sheet.</li> <li>The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test</li> </ol> |        |                                       |     |  |  |  |
| Test mode: Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Test Instruments:          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        | o rope                                |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                                       |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Test results:              | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                       |     |  |  |  |



Lowest

# Measurement data:

Test mode:

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

Test channel:

802.11b

| Peak value         |                         |                             |                       |                          |                   |                        |                       |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2390.00            | 51.86                   | 27.59                       | 5.38                  | 34.01                    | 50.82             | 74.00                  | -23.18                | Horizontal   |
| 2400.00            | 60.95                   | 27.58                       | 5.39                  | 34.01                    | 59.91             | 74.00                  | -14.09                | Horizontal   |
| 2390.00            | 53.56                   | 27.59                       | 5.38                  | 34.01                    | 52.52             | 74.00                  | -21.48                | Vertical     |
| 2400.00            | 62.80                   | 27.58                       | 5.39                  | 34.01                    | 61.76             | 74.00                  | -12.24                | Vertical     |
| Average va         | lue:                    | -                           | <del>-</del>          | -                        | -                 | -                      | •                     | -            |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2390.00            | 38.56                   | 27.59                       | 5.38                  | 34.01                    | 37.52             | 54.00                  | -16.48                | Horizontal   |
| 2400.00            | 46.88                   | 27.58                       | 5.39                  | 34.01                    | 45.84             | 54.00                  | -8.16                 | Horizontal   |
| 2390.00            | 40.40                   | 27.59                       | 5.38                  | 34.01                    | 39.36             | 54.00                  | -14.64                | Vertical     |
| 2400.00            | 48.02                   | 27.58                       | 5.39                  | 34.01                    | 46.98             | 54.00                  | -7.02                 | Vertical     |
| •                  |                         | •                           | -                     | -                        | •                 | -                      | -                     | -            |
| Test mode:         |                         | 802.1                       | 1b                    | Test channel:            |                   | ŀ                      | Highest               |              |
| Peak value         |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2483.50            | 52.61                   | 27.53                       | 5.47                  | 33.92                    | 51.69             | 74.00                  | -22.31                | Horizontal   |
| 2500.00            | 48.37                   | 27.55                       | 5.49                  | 29.93                    | 51.48             | 74.00                  | -22.52                | Horizontal   |
| 2483.50            | 54.91                   | 27.53                       | 5.47                  | 33.92                    | 53.99             | 74.00                  | -20.01                | Vertical     |
| 2500.00            | 50.92                   | 27.55                       | 5.49                  | 29.93                    | 54.03             | 74.00                  | -19.97                | Vertical     |
| Average va         | lue:                    |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<br>Level           | Antenna<br>Factor           | Cable<br>Loss         | Preamp<br>Factor         | Level             | Limit Line             | Over<br>Limit         | Polarization |

# 2500.00 Remark:

(MHz)

2483.50

2500.00

2483.50

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

(dB)

5.47

5.49

5.47

5.49

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

(dB)

33.92

29.93

33.92

29.93

(dBuV/m)

38.04

38.13

40.01

40.02

(dBuV/m)

54.00

54.00

54.00

54.00

(dBuV)

38.96

35.02

40.93

36.91

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

(dB/m)

27.53

27.55

27.53

27.55

(dB)

-15.96

-15.87

-13.99

-13.98

Horizontal

Horizontal

Vertical

Vertical



802.11g

Test mode:

Report No.: GTSE15120225501

Lowest

|                    |                         |                             | . 9                   |                          |                   |                        |                       |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       | _            |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2390.00            | 50.43                   | 27.59                       | 5.38                  | 34.01                    | 49.39             | 74.00                  | -24.61                | Horizontal   |
| 2400.00            | 59.03                   | 27.58                       | 5.39                  | 34.01                    | 57.99             | 74.00                  | -16.01                | Horizontal   |
| 2390.00            | 52.03                   | 27.59                       | 5.38                  | 34.01                    | 50.99             | 74.00                  | -23.01                | Vertical     |
| 2400.00            | 60.50                   | 27.58                       | 5.39                  | 34.01                    | 59.46             | 74.00                  | -14.54                | Vertical     |
| Average va         | lue:                    |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2390.00            | 37.54                   | 27.59                       | 5.38                  | 34.01                    | 36.50             | 54.00                  | -17.50                | Horizontal   |
| 2400.00            | 45.70                   | 27.58                       | 5.39                  | 34.01                    | 44.66             | 54.00                  | -9.34                 | Horizontal   |
| 2390.00            | 39.26                   | 27.59                       | 5.38                  | 34.01                    | 38.22             | 54.00                  | -15.78                | Vertical     |
| 2400.00            | 46.74                   | 27.58                       | 5.39                  | 34.01                    | 45.70             | 54.00                  | -8.30                 | Vertical     |
|                    |                         |                             |                       |                          |                   |                        |                       |              |
| Test mode:         | est mode: 802.11g       |                             | Tes                   | st channel:              | Highest           |                        |                       |              |
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2483.50            | 50.56                   | 27.53                       | 5.47                  | 33.92                    | 49.64             | 74.00                  | -24.36                | Horizontal   |
| 2500.00            | 46.78                   | 27.55                       | 5.49                  | 29.93                    | 49.89             | 74.00                  | -24.11                | Horizontal   |
| 2483.50            | 52.57                   | 27.53                       | 5.47                  | 33.92                    | 51.65             | 74.00                  | -22.35                | Vertical     |
| 2500.00            | 49.06                   | 27.55                       | 5.49                  | 29.93                    | 52.17             | 74.00                  | -21.83                | Vertical     |
| Average va         | lue:                    | 1                           |                       | 1                        | T                 |                        |                       | 1            |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Polarization |
| 2483.50            | 37.72                   | 27.53                       | 5.47                  | 33.92                    | 36.80             | 54.00                  | -17.20                | Horizontal   |
|                    | 34.06                   | 27.55                       | 5.49                  | 29.93                    | 37.17             | 54.00                  | -16.83                | Horizontal   |
| 2500.00            | 04.00                   |                             |                       |                          |                   |                        |                       |              |
| 2500.00<br>2483.50 | 39.56                   | 27.53                       | 5.47                  | 33.92                    | 38.64             | 54.00                  | -15.36                | Vertical     |

Test channel:

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test mode:

Report No.: GTSE15120225501

Lowest

| Read<br>Level<br>(dBuV) | Antenna<br>Factor                                                                                                                    | Cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Preamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| Level                   |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | •                                                                                                                                                                                                                                                                                                                                                                                  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| ` '                     | (dB/m)                                                                                                                               | Loss<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Factor<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (dBuV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Limit Line<br>(dBuV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Limit<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Polarization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 50.59                   | 27.59                                                                                                                                | 5.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 49.55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 59.25                   | 27.58                                                                                                                                | 5.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 58.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 52.20                   | 27.59                                                                                                                                | 5.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 51.16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 60.76                   | 27.58                                                                                                                                | 5.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 59.72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| ue:                     |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                    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| Read<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 Line<br>(dBuV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Over<br>Limit<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Polarization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 37.66                   | 27.59                                                                                                                                | 5.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 36.62                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 45.84                   | 27.58                                                                                                                                | 5.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 44.80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Horizontal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 39.39                   | 27.59                                                                                                                                | 5.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 38.35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 46.88                   | 27.58                                                                                                                                | 5.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 45.84                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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|                         |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                    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|                         | 802.1                                                                                                                                | 1n(HT20)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Tes                                                                                                                                                                                                                                                                                                                                                                                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|                         |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                    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| Read<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 Line<br>(dBuV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Over<br>Limit<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Polarization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 50.79                   | 27.53                                                                                                                                | 5.47                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 49.87                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Horizontal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 46.96                   | 27.55                                                                                                                                | 5.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 29.93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50.07                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 52.83                   | 27.53                                                                                                                                | 5.47                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 51.91                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 49.27                   | 27.55                                                                                                                                | 5.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 29.93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 52.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| ue:                     |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Т                                                                                                                                                                                                                                                                                                                                                                                  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| Read<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 Line<br>(dBuV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Over<br>Limit<br>(dB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Polarization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 37.86                   | 27.53                                                                                                                                | 5.47                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 36.94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 34.16                   | 27.55                                                                                                                                | 5.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 29.93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 37.27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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|                         | 07.50                                                                                                                                | 5 A7                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 38.79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Vertical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 39.71                   | 27.53                                                                                                                                | 5.47                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 30.79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 34.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -13.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Vertical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                         | 52.20 60.76  ue:  Read Level (dBuV) 37.66 45.84 39.39 46.88  Read Level (dBuV) 50.79 46.96 52.83 49.27  ue:  Read Level (dBuV) 37.86 | 52.20       27.59         60.76       27.58         ue:         Read Level (dBuV)       Antenna Factor (dB/m)         37.66       27.59         45.84       27.58         39.39       27.59         46.88       27.58         802.1         Read Level (dBuV)       Antenna Factor (dB/m)         50.79       27.53         46.96       27.55         52.83       27.55         ue:       Read Level (dBuV)         (dBuV)       Antenna Factor (dB/m)         37.86       27.53 | 52.20         27.59         5.38           60.76         27.58         5.39           ue:           Read Level (dBuV)         Antenna Loss (dB/m) (dB)           37.66         27.59         5.38           45.84         27.58         5.39           39.39         27.59         5.38           46.88         27.58         5.39           802.11n(HT20)         802.11n(HT20)           Read Level (dBuV)         Cable Loss (dB/m)         Cable Loss (dB/m)           52.83         27.53         5.47           49.27         27.55         5.49           ue:         Read Level (dB/m)         Cable Loss (dB/m)           (dBuV)         (dB/m)         (dB)           37.86         27.53         5.47 | 52.20         27.59         5.38         34.01           60.76         27.58         5.39         34.01           ue:           Read Level (dBuV)         Antenna Factor (dB/m)         Cable Factor (dB)         Preamp Factor (dB)           (dBuV)         (dB/m)         (dB)         34.01           45.84         27.58         5.39         34.01           39.39         27.59         5.38         34.01           46.88         27.58         5.39         34.01           802.11n(HT20)         Test           Read Level (dB/w)         Antenna Cable Factor (dB)         Preamp Factor (dB)           (dB)         50.79         27.53         5.47         33.92           49.27         27.55         5.49         29.93           52.83         27.53         5.47         33.92           49.27         27.55         5.49         29.93           ue:           Read Level (dBuV)         Antenna Factor (dB/m)         Cable Cabl | 52.20         27.59         5.38         34.01         51.16           60.76         27.58         5.39         34.01         59.72           ue:           Read Level (dBuV)         Antenna Factor (dB/m)         Cable Loss (dB)         Preamp Factor (dBuV/m)         Level (dBuV/m)           37.66         27.59         5.38         34.01         36.62           45.84         27.58         5.39         34.01         44.80           39.39         27.59         5.38         34.01         38.35           46.88         27.58         5.39         34.01         45.84           Read Level (dBwV) (dB/m) (dB/m) (dB)         Cable Loss (dB)         Preamp Factor (dBwV/m)         Level (dBwV/m)           50.79         27.53         5.47         33.92         49.87           46.96         27.55         5.49         29.93         50.07           52.83         27.53         5.47         33.92         51.91           49.27         27.55         5.49         29.93         52.38           ue:           Read Level (dBwV)         Antenna Factor (dB/m)         Cable Loss (dB)         Preamp Factor (dB)         Level (dBwV/m)           137.86< | 52.20         27.59         5.38         34.01         51.16         74.00           60.76         27.58         5.39         34.01         59.72         74.00           ue:           Read Level (dBuV)         Antenna Factor (dB)         Cable Loss Factor (dB)         Level (dBuV/m)         Limit Line (dBuV/m)           37.66         27.59         5.38         34.01         36.62         54.00           45.84         27.58         5.39         34.01         44.80         54.00           39.39         27.59         5.38         34.01         38.35         54.00           46.88         27.58         5.39         34.01         45.84         54.00           Boz.11n(HT20)         Test channel:         In the channel:           Factor (dBuV)         Cable (dBuV/m)         Level (dBuV/m)         Limit Line (dBuV/m)           50.79         27.53         5.47         33.92         49.87         74.00           52.83         27.53         5.47         33.92         51.91         74.00           49.27         27.55         5.49         29.93         52.38         74.00           Testor (dBuV) | 52.20         27.59         5.38         34.01         51.16         74.00         -22.84           60.76         27.58         5.39         34.01         59.72         74.00         -14.28           ue:           Read Level (dBuV)         Antenna Factor (dB/m)         Cable Loss (dB)         Preamp Factor (dBuV/m)         Level (dBuV/m)         Limit Line (dBuV/m)         Over Limit (dB)           37.66         27.59         5.38         34.01         36.62         54.00         -17.38           45.84         27.58         5.39         34.01         44.80         54.00         -9.20           39.39         27.59         5.38         34.01         38.35         54.00         -15.65           46.88         27.58         5.39         34.01         45.84         54.00         -8.16           Bo2.11n(HT20)         Test channel:         Highest           Highest           Read Level (dBuV)         Level (dBuV/m)         Cuble (dBuV/m)         Cuble Limit Line (dBuV/m)         Over Limit (dB)           50.79         27.53         5.47         33.92         49.87         74.00         -24.13           46.96         27.55         5.49         < |

Test channel:

802.11n(HT20)

Global United Technology Services Co., Ltd.

 $No.\ 301\text{-}309,\ 3/F.,\ Jinyuan\ Business\ Building,\ No.2,\ Laodong\ Industrial\ Zone,$ 

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Xixiang Road, Baoan District, Shenzhen, Guangdong, China



Report No.: GTSE15120225501

| Test mode:         |                                       | 802.1                       | 1n(HT40)              | Test channel:            |          |                   | Lowest                 |          |              |
|--------------------|---------------------------------------|-----------------------------|-----------------------|--------------------------|----------|-------------------|------------------------|----------|--------------|
| Peak value:        |                                       |                             |                       |                          |          |                   |                        |          |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV)               | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prear<br>Facto<br>(dB    | or<br>Or | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | I I imit | Polarization |
| 2390.00            | 49.68                                 | 27.59                       | 5.38                  | 34.0                     | 1        | 48.64             | 74.00                  | -25.36   | Horizontal   |
| 2400.00            | 58.03                                 | 27.58                       | 5.39                  | 34.0                     | 1        | 56.99             | 74.00                  | -17.01   | Horizontal   |
| 2390.00            | 51.22                                 | 27.59                       | 5.38                  | 34.0                     | 1        | 50.18             | 74.00                  | -23.82   | Vertical     |
| 2400.00            | 59.29                                 | 27.58                       | 5.39                  | 34.0                     | 1        | 58.25             | 74.00                  | -15.75   | Vertical     |
| Average va         | lue:                                  |                             |                       |                          |          |                   |                        |          |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV)               | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prear<br>Facto<br>(dB    | or<br>Or | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | I I imit | Polarization |
| 2390.00            | 37.01                                 | 27.59                       | 5.38                  | 34.0                     | 1        | 35.97             | 54.00                  | -18.03   | Horizontal   |
| 2400.00            | 45.09                                 | 27.58                       | 5.39                  | 34.01                    |          | 44.05             | 54.00                  | -9.95    | Horizontal   |
| 2390.00            | 38.67                                 | 27.59                       | 5.38                  | 34.01                    |          | 37.63             | 54.00                  | -16.37   | Vertical     |
| 2400.00            | 46.06                                 | 27.58                       | 5.39                  | 34.01                    |          | 45.02             | 54.00                  | -8.98    | Vertical     |
|                    |                                       |                             |                       | ,                        |          |                   |                        |          |              |
| Test mode:         | est mode: 802.11n(HT40) Test channel: |                             |                       | Highest                  |          |                   |                        |          |              |
| Peak value         |                                       |                             |                       |                          |          |                   |                        |          |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV)               | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prear<br>Facto<br>(dB    | or<br>Or | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | I I imit | Polarization |
| 2483.50            | 49.49                                 | 27.53                       | 5.47                  | 33.9                     | 2        | 48.57             | 74.00                  | -25.43   | Horizontal   |
| 2500.00            | 45.95                                 | 27.55                       | 5.49                  | 29.9                     | 3        | 49.06             | 74.00                  | -24.94   | Horizontal   |
| 2483.50            | 51.34                                 | 27.53                       | 5.47                  | 33.9                     | 2        | 50.42             | 74.00                  | -23.58   | Vertical     |
| 2500.00            | 48.08                                 | 27.55                       | 5.49                  | 29.93                    |          | 51.19             | 74.00                  | -22.81   | Vertical     |
| Average va         | lue:                                  | ,                           |                       | T                        |          | 1                 |                        | 1        |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | ı ımıt   | Polarization |
| 2483.50            | 37.07                                 | 27.53                       | 5.47                  | 33.92                    |          | 36.15             | 54.00                  | -17.85   | Horizontal   |
| 2500.00            | 33.55                                 | 27.55                       | 5.49                  | 29.9                     | 3        | 36.66             | 54.00                  | -17.34   | Horizontal   |
| 2483.50            | 38.84                                 | 27.53                       | 5.47                  | 33.9                     | 2        | 37.92             | 54.00                  | -16.08   | Vertical     |
| 2500.00            | 35.35                                 | 27.55                       | 5.49                  | 29.9                     | 3        | 38.46             | 54.00                  | -15.54   | Vertical     |
| Remark:            |                                       |                             |                       |                          |          |                   |                        |          |              |

Global United Technology Services Co., Ltd.

No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrrial Zone,

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Xixiang Road, Baoan District, Shenzhen, Guangdong, China



# 7.7 Spurious Emission

# 7.7.1 Conducted Emission Method

| Test Requirement: | FCC Part15 C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
|                   |                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |  |  |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |

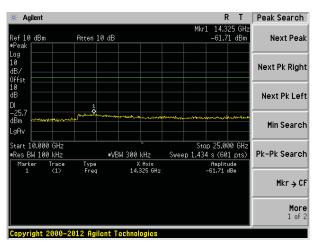


#### Test plot as follows:

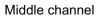
Test mode: 802.11b

# Lowest channel Peak Search 2.406 GH -5.71 dBm Atten 10 dB Next Peak 10 dBm Next Pk Right Next Pk Left Min Search Start 30 MHz ■Res BW 100 kHz Stop 10.000 GH: Sweep 952.8 ms (601 pts) #VBW 300 kHz Pk-Pk Search Mkr → CF More 1 of 2

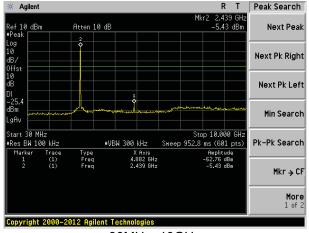
30MHz~10GHz



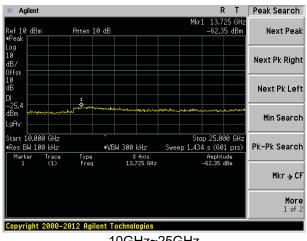
10GHz~25GHz



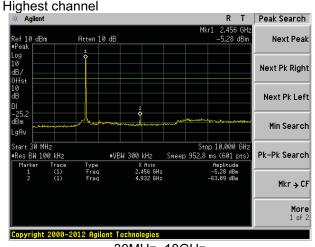
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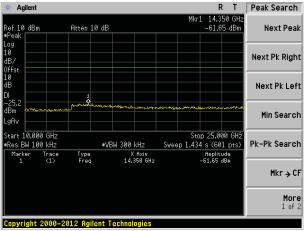
30MHz~10GHz



10GHz~25GHz



30MHz~10GHz



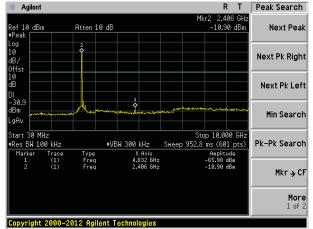
10GHz~25GHz



### Test mode:

# 802.11g

#### Lowest channel



30MHz~10GHz

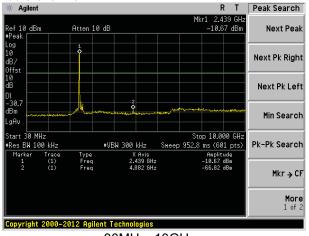
# 

10GHz~25GHz

#### Middle channel

Highest channel

tart 30 MHz Res BW 100 kHz

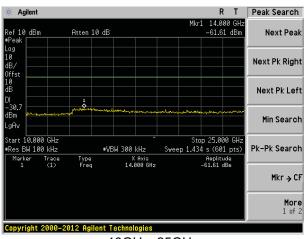


30MHz~10GHz

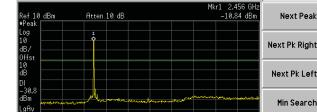
Peak Search

Pk-Pk Search

Mkr → CF



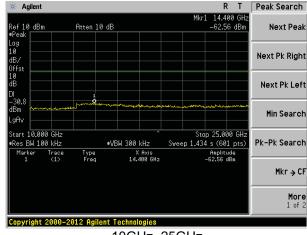
10GHz~25GHz



#VBW 300 kHz

X Axis 2.456 GHz





10GHz~25GHz

Sweep 952.8 ms (601 pts)

Amplitude -10.84 dBm

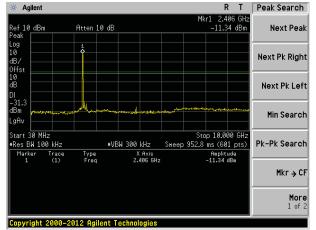
Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



#### Test mode:

### 802.11n(HT20)

#### Lowest channel



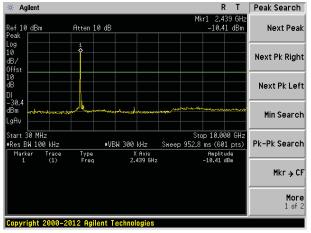
30MHz~10GHz

#### R T Peak Search Agilent 14.150 GH -62.60 dBm Atten 10 dB Next Peak Next Pk Right Next Pk Left Min Search Stop 25.000 GH: Sweep 1.434 s (601 pts) Start 10.000 GHz #VBW 300 kHz Pk-Pk Search Res BW 100 kHz Type Freq Amplitude -62.60 dBm Trace (1) X Axis 14.150 GHz Mkr → CF More 1 of 2

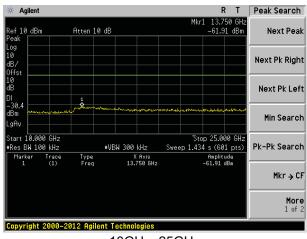
10GHz~25GHz

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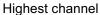
### Middle channel

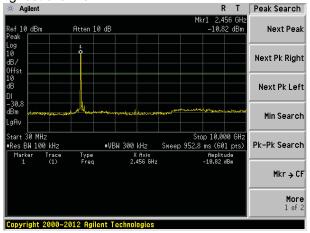


30MHz~10GHz

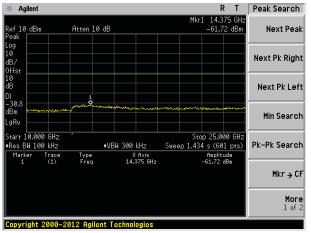


10GHz~25GHz





30MHz~10GHz



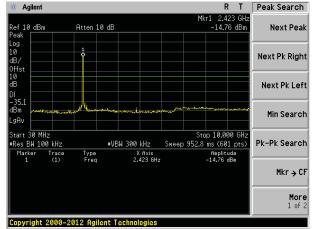
10GHz~25GHz



#### Test mode:

### 802.11n(HT40)

### Lowest channel

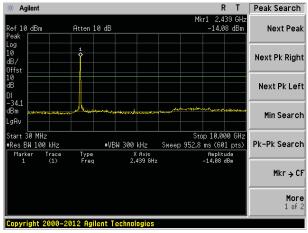


30MHz~10GHz

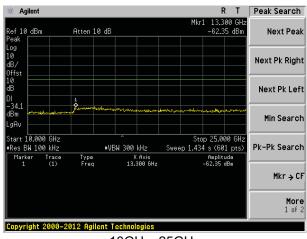
#### Agilent R T Peak Search 13.550 GHz -62.67 dBm ef 10 dBm Atten 10 dB Next Peak Next Pk Right Next Pk Left Min Search Stop 25.000 GH: Sweep 1.434 s (601 pts) #VBW 300 kHz Pk-Pk Search ■Res BW 100 kHz Type Freq X Axis 13.550 GHz Amplitude -62.67 dBm Mkr → CF More 1 of 2 Copyright 2000-2012 Agilent Technologies

10GHz~25GHz

#### Middle channel

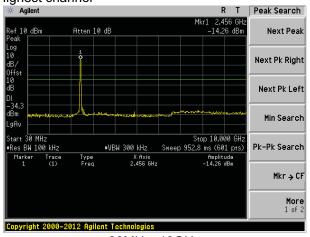


30MHz~10GHz

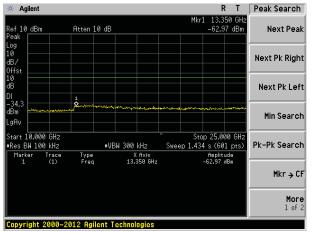


10GHz~25GHz





30MHz~10GHz



10GHz~25GHz



## 7.7.2 Radiated Emission Method

| Test Requirement:     | FCC Part15 C Se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FCC Part15 C Section 15.209 |             |            |            |  |  |  |  |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------|------------|------------|--|--|--|--|
| Test Method:          | ANSI C63.10:201                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13                          |             |            |            |  |  |  |  |
| Test Frequency Range: | 30MHz to 25GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                             |             |            |            |  |  |  |  |
| Test site:            | Measurement Dis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | stance: 3m                  |             |            |            |  |  |  |  |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Detector                    | RBW         | VBW        | Value      |  |  |  |  |
|                       | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quasi-peak                  | 120KHz      | 300KHz     | Quasi-peak |  |  |  |  |
|                       | Above 4CU-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Peak                        | 1MHz        | 3MHz       | Peak       |  |  |  |  |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS                         | 1MHz        | 3MHz       | Average    |  |  |  |  |
| Limit:                | Frequen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | су                          | Limit (dBuV | /m @3m)    | Value      |  |  |  |  |
|                       | 30MHz-88                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30MHz-88MHz 40.00           |             |            |            |  |  |  |  |
|                       | 88MHz-216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 88MHz-216MHz 43.50          |             |            |            |  |  |  |  |
|                       | 216MHz-96                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 216MHz-960MHz 46.00         |             |            |            |  |  |  |  |
|                       | 960MHz-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 960MHz-1GHz 54.00           |             |            |            |  |  |  |  |
|                       | Abovo 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Above 1GHz                  |             |            |            |  |  |  |  |
|                       | Above ic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 74.00                       |             |            |            |  |  |  |  |
|                       | Search Antenna  RF Test Receiver  Tum Table 0.8m Im Table |                             |             |            |            |  |  |  |  |
|                       | Ground Plane —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | urgun <del>u</del>          |             | 777        |            |  |  |  |  |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ungun <del>u</del>          | minn        | <i>777</i> |            |  |  |  |  |

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| Test Procedure:   | <ol> <li>The EUT was placed on the top of a rotating table (0.8 meters below<br/>1G and 1.5 meters above 1G) above the ground at a 3 meter camber.<br/>The table was rotated 360 degrees to determine the position of the<br/>highest radiation.</li> </ol>                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | <ol><li>The EUT was set 3 meters away from the interference-receiving<br/>antenna, which was mounted on the top of a variable-height antenna<br/>tower.</li></ol>                                                                                                                                                                                                      |
|                   | <ol> <li>The antenna height is varied from one meter to four meters above the<br/>ground to determine the maximum value of the field strength. Both<br/>horizontal and vertical polarizations of the antenna are set to make the<br/>measurement.</li> </ol>                                                                                                           |
|                   | 4. For each suspected emission, the EUT was arranged to its worst case<br>and then the antenna was tuned to heights from 1 meter to 4 meters<br>and the rota table was turned from 0 degrees to 360 degrees to find<br>the maximum reading.                                                                                                                            |
|                   | <ol><li>The test-receiver system was set to Peak Detect Function and<br/>Specified Bandwidth with Maximum Hold Mode.</li></ol>                                                                                                                                                                                                                                         |
|                   | 6. If the emission level of the EUT in peak mode was 10dB lower than<br>the limit specified, then testing could be stopped and the peak values<br>of the EUT would be reported. Otherwise the emissions that did not<br>have 10dB margin would be re-tested one by one using peak, quasi-<br>peak or average method as specified and then reported in a data<br>sheet. |
|                   | 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.                                                                                                                                                                             |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                       |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                       |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                   |

#### Remark:

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**

## ■ Below 1GHz

| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| 30.64              | 48.73                   | 14.33                       | 0.56                  | 30.10                    | 33.52             | 40.00                  | -6.48                 | Vertical     |
| 39.02              | 44.76                   | 15.34                       | 0.65                  | 30.05                    | 30.70             | 40.00                  | -9.30                 | Vertical     |
| 54.84              | 47.43                   | 15.02                       | 0.82                  | 29.96                    | 33.31             | 40.00                  | -6.69                 | Vertical     |
| 124.57             | 41.00                   | 11.80                       | 1.40                  | 29.54                    | 24.66             | 43.50                  | -18.84                | Vertical     |
| 172.00             | 41.78                   | 11.10                       | 1.70                  | 29.31                    | 25.27             | 43.50                  | -18.23                | Vertical     |
| 419.11             | 28.30                   | 17.43                       | 2.94                  | 29.46                    | 19.21             | 46.00                  | -26.79                | Vertical     |
| 37.68              | 34.90                   | 15.01                       | 0.64                  | 30.06                    | 20.49             | 40.00                  | -19.51                | Horizontal   |
| 53.69              | 41.26                   | 15.07                       | 0.81                  | 29.97                    | 27.17             | 40.00                  | -12.83                | Horizontal   |
| 67.68              | 44.40                   | 11.61                       | 0.92                  | 29.87                    | 27.06             | 40.00                  | -12.94                | Horizontal   |
| 121.98             | 36.38                   | 12.19                       | 1.38                  | 29.56                    | 20.39             | 43.50                  | -23.11                | Horizontal   |
| 170.20             | 41.42                   | 10.97                       | 1.69                  | 29.32                    | 24.76             | 43.50                  | -18.74                | Horizontal   |
| 210.79             | 39.72                   | 12.90                       | 1.90                  | 29.30                    | 25.22             | 43.50                  | -18.28                | Horizontal   |



#### ■ Above 1GHz

| Test mode:         |                         | 802.11b                     |                       |                    | Test o | channel:          |                  | Lowe | est                   |               |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------|--------|-------------------|------------------|------|-----------------------|---------------|
| Peak value:        |                         |                             |                       |                    |        |                   | \\               |      |                       |               |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fac<br>(dE | tor    | Level<br>(dBuV/m) | Limit I<br>(dBuV |      | Over<br>Limit<br>(dB) | polarization  |
| 4824.00            | 41.06                   | 31.79                       | 8.62                  | 32.                | 10     | 49.37             | 74.0             | 00   | -24.63                | Vertical      |
| 7236.00            | 34.71                   | 36.19                       | 11.68                 | 31.9               | 97     | 50.61             | 74.0             | 00   | -23.39                | Vertical      |
| 9648.00            | 33.06                   | 38.07                       | 14.16                 | 31.                | 56     | 53.73             | 74.0             | 00   | -20.27                | Vertical      |
| 12060.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Vertical      |
| 14472.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Vertical      |
| 16884.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Vertical      |
| 4824.00            | 39.61                   | 31.79                       | 8.62                  | 32.                | 10     | 47.92             | 74.0             | 00   | -26.08                | Horizontal    |
| 7236.00            | 34.39                   | 36.19                       | 11.68                 | 31.9               | 97     | 50.29             | 74.0             | 00   | -23.71                | Horizontal    |
| 9648.00            | 32.61                   | 38.07                       | 14.16                 | 31.                | 56     | 53.28             | 74.0             | 00   | -20.72                | Horizontal    |
| 12060.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Horizontal    |
| 14472.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Horizontal    |
| 16884.00           | *                       |                             |                       |                    |        |                   | 74.0             | 00   |                       | Horizontal    |
| Average val        |                         |                             | 1                     | ı                  | 1      |                   |                  |      |                       |               |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fac<br>(dE | tor    | Level<br>(dBuV/m) | Limit l<br>(dBuV |      | Over<br>Limit<br>(dB) | polarization  |
| 4824.00            | 30.09                   | 31.79                       | 8.62                  | 32.                | 10     | 38.40             | 54.0             | 0    | -15.60                | Vertical      |
| 7236.00            | 23.56                   | 36.19                       | 11.68                 | 31.9               | 97     | 39.46             | 54.0             | 00   | -14.54                | Vertical      |
| 9648.00            | 23.40                   | 38.07                       | 14.16                 | 31.5               | 56     | 44.07             | 54.0             | 00   | -9.93                 | Vertical      |
| 12060.00           | *                       |                             |                       |                    |        |                   | 54.0             | 0    |                       | Vertical      |
| 14472.00           | *                       |                             |                       |                    |        |                   | 54.0             | 00   |                       | Vertical      |
| 16884.00           | *                       |                             |                       |                    |        |                   | 54.0             | 0    |                       | Vertical      |
| 4824.00            | 29.11                   | 31.79                       | 8.62                  | 32.                | 10     | 37.42             | 54.0             | 0    | -16.58                | Horizontal    |
| 7236.00            | 22.96                   | 36.19                       | 11.68                 | 31.9               | 97     | 38.86             | 54.0             | 0    | -15.14                | Horizontal    |
| 9648.00            | 22.35                   | 38.07                       | 14.16                 | 31.                | 56     | 43.02             | 54.0             | 0    | -10.98                | Horizontal    |
| 12060.00           | *                       |                             |                       |                    |        |                   | 54.0             | 0    |                       | Horizontal    |
| 14472.00           | *                       |                             |                       |                    |        |                   | 54.0             | 0    |                       | Horizontal    |
|                    |                         |                             |                       | l                  |        | -                 |                  | _    |                       | l <del></del> |

#### Remark:

16884.00

Horizontal

54.00

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



| Test mode:         |                         | 802.11b                     |                       | -                    | Test channel: |                   |                | Middl | е                     |              |
|--------------------|-------------------------|-----------------------------|-----------------------|----------------------|---------------|-------------------|----------------|-------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                      |               |                   |                |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prear<br>Fact<br>(dB | or            | Level<br>(dBuV/m) | Limit<br>(dBu\ |       | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 39.99                   | 31.85                       | 8.66                  | 32.1                 | 2             | 48.38             | 74.0           | 00    | -25.62                | Vertical     |
| 7311.00            | 34.69                   | 36.37                       | 11.71                 | 31.9                 | )1            | 50.86             | 74.0           | 00    | -23.14                | Vertical     |
| 9748.00            | 34.02                   | 38.27                       | 14.25                 | 31.5                 | 6             | 54.98             | 74.0           | 00    | -19.02                | Vertical     |
| 12185.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Vertical     |
| 4874.00            | 40.37                   | 31.85                       | 8.66                  | 32.1                 | 2             | 48.76             | 74.0           | 00    | -25.24                | Horizontal   |
| 7311.00            | 33.28                   | 36.37                       | 11.71                 | 31.9                 | )1            | 49.45             | 74.0           | 00    | -24.55                | Horizontal   |
| 9748.00            | 33.89                   | 38.27                       | 14.25                 | 31.5                 | 6             | 54.85             | 74.0           | 00    | -19.15                | Horizontal   |
| 12185.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                      |               |                   | 74.0           | 00    |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                      |               |                   |                |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prear<br>Fact<br>(dB | or            | Level<br>(dBuV/m) | Limit<br>(dBu\ |       | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 30.79                   | 31.85                       | 8.66                  | 32.1                 | 2             | 39.18             | 54.0           | 00    | -14.82                | Vertical     |
| 7311.00            | 23.00                   | 36.37                       | 11.71                 | 31.9                 | )1            | 39.17             | 54.0           | 00    | -14.83                | Vertical     |
| 9748.00            | 23.26                   | 38.27                       | 14.25                 | 31.5                 | 6             | 44.22             | 54.0           | 00    | -9.78                 | Vertical     |
| 12185.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Vertical     |
| 4874.00            | 30.45                   | 31.85                       | 8.66                  | 32.1                 | 2             | 38.84             | 54.0           | 00    | -15.16                | Horizontal   |
| 7311.00            | 22.36                   | 36.37                       | 11.71                 | 31.9                 | )1            | 38.53             | 54.0           | 00    | -15.47                | Horizontal   |
| 9748.00            | 23.59                   | 38.27                       | 14.25                 | 31.5                 | 6             | 44.55             | 54.0           | 00    | -9.45                 | Horizontal   |
| 12185.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                      |               |                   | 54.0           | 00    |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11b                     |                       | Т                      | est c | hannel:           | High                   | est                   |              |
|--------------------|-------------------------|-----------------------------|-----------------------|------------------------|-------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                        |       |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prean<br>Facto<br>(dB) | or    | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 45.98                   | 31.90                       | 8.70                  | 32.1                   | 5     | 54.43             | 74.00                  | -19.57                | Vertical     |
| 7386.00            | 35.66                   | 36.49                       | 11.76                 | 31.83                  | 3     | 52.08             | 74.00                  | -21.92                | Vertical     |
| 9848.00            | 37.53                   | 38.62                       | 14.31                 | 31.7                   | 7     | 58.69             | 74.00                  | -15.31                | Vertical     |
| 12310.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Vertical     |
| 4924.00            | 45.11                   | 31.90                       | 8.70                  | 32.1                   | 5     | 53.56             | 74.00                  | -20.44                | Horizontal   |
| 7386.00            | 34.47                   | 36.49                       | 11.76                 | 31.8                   | 3     | 50.89             | 74.00                  | -23.11                | Horizontal   |
| 9848.00            | 33.66                   | 38.62                       | 14.31                 | 31.7                   | 7     | 54.82             | 74.00                  | -19.18                | Horizontal   |
| 12310.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Horizontal   |
| 17234.00           | *                       |                             |                       |                        |       |                   | 74.00                  |                       | Horizontal   |
| Average val        |                         |                             |                       |                        |       |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prean<br>Facto<br>(dB) | or    | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 36.81                   | 31.90                       | 8.70                  | 32.1                   | 5     | 45.26             | 54.00                  | -8.74                 | Vertical     |
| 7386.00            | 25.55                   | 36.49                       | 11.76                 | 31.8                   | 3     | 41.97             | 54.00                  | -12.03                | Vertical     |
| 9848.00            | 26.01                   | 38.62                       | 14.31                 | 31.7                   | 7     | 47.17             | 54.00                  | -6.83                 | Vertical     |
| 12310.00           | *                       |                             |                       |                        |       |                   | 54.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                        |       |                   | 54.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                        |       |                   | 54.00                  |                       | Vertical     |
| 4924.00            | 35.42                   | 31.90                       | 8.70                  | 32.1                   | 5     | 43.87             | 54.00                  | -10.13                | Horizontal   |
| 7386.00            | 23.84                   | 36.49                       | 11.76                 | 31.8                   | 3     | 40.26             | 54.00                  | -13.74                | Horizontal   |
| 9848.00            | 22.90                   | 38.62                       | 14.31                 | 31.7                   | 7     | 44.06             | 54.00                  | -9.94                 | Horizontal   |
| 12310.00           | *                       |                             |                       |                        |       |                   | 54.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                        |       |                   | 54.00                  |                       | Horizontal   |
| 17234.00           | *                       | _                           |                       |                        |       |                   | 54.00                  |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. " $\ast$ ", means this data is the too weak instrument of signal is unable to test.



| Test mode:         |                         | 802.11g                     |                       |                    | Test | channel:          |                | lowes | st                    |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------|------|-------------------|----------------|-------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                    |      |                   |                |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fac<br>(dl | tor  | Level<br>(dBuV/m) | Limit<br>(dBu  |       | Over<br>Limit<br>(dB) | polarization |
| 4824.00            | 39.76                   | 31.79                       | 8.62                  | 32.                | 10   | 48.07             | 74.            | 00    | -25.93                | Vertical     |
| 7236.00            | 33.88                   | 36.19                       | 11.68                 | 31.                | 97   | 49.78             | 74.            | 00    | -24.22                | Vertical     |
| 9648.00            | 32.47                   | 38.07                       | 14.16                 | 31.                | 56   | 53.14             | 74.            | 00    | -20.86                | Vertical     |
| 12060.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Vertical     |
| 4824.00            | 38.51                   | 31.79                       | 8.62                  | 32.                | 10   | 46.82             | 74.            | 00    | -27.18                | Horizontal   |
| 7236.00            | 33.67                   | 36.19                       | 11.68                 | 31.                | 97   | 49.57             | 74.            | 00    | -24.43                | Horizontal   |
| 9648.00            | 32.07                   | 38.07                       | 14.16                 | 31.                | 56   | 52.74             | 74.            | 00    | -21.26                | Horizontal   |
| 12060.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                    |      |                   | 74.            | 00    |                       | Horizontal   |
| Average val        |                         |                             |                       | ,                  |      |                   |                |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fac<br>(dl | tor  | Level<br>(dBuV/m) | Limit<br>(dBu) |       | Over<br>Limit<br>(dB) | polarization |
| 4824.00            | 28.89                   | 31.79                       | 8.62                  | 32.                | 10   | 37.20             | 54.            | 00    | -16.80                | Vertical     |
| 7236.00            | 22.76                   | 36.19                       | 11.68                 | 31.                | 97   | 38.66             | 54.            | 00    | -15.34                | Vertical     |
| 9648.00            | 22.83                   | 38.07                       | 14.16                 | 31.                | 56   | 43.50             | 54.            | 00    | -10.50                | Vertical     |
| 12060.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Vertica      |
| 4824.00            | 28.08                   | 31.79                       | 8.62                  | 32.                | 10   | 36.39             | 54.            | 00    | -17.61                | Horizontal   |
| 7236.00            | 22.27                   | 36.19                       | 11.68                 | 31.                | 97   | 38.17             | 54.            | 00    | -15.83                | Horizontal   |
| 9648.00            | 21.83                   | 38.07                       | 14.16                 | 31.                | 56   | 42.50             | 54.            | 00    | -11.50                | Horizontal   |
| 12060.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                    |      |                   | 54.            | 00    |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. " $\ast$ ", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11g                     |                       |                     | Test o | channel:          |                  | Middl | е                     |              |
|--------------------|-------------------------|-----------------------------|-----------------------|---------------------|--------|-------------------|------------------|-------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                     |        |                   |                  |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fact<br>(dE | tor    | Level<br>(dBuV/m) | Limit L<br>(dBuV | -     | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 38.91                   | 31.85                       | 8.66                  | 32.1                | 12     | 47.30             | 74.0             | 0     | -26.70                | Vertical     |
| 7311.00            | 34.01                   | 36.37                       | 11.71                 | 31.9                | 91     | 50.18             | 74.0             | 0     | -23.82                | Vertical     |
| 9748.00            | 33.53                   | 38.27                       | 14.25                 | 31.5                | 56     | 54.49             | 74.0             | 0     | -19.51                | Vertical     |
| 12185.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Vertical     |
| 4874.00            | 39.46                   | 31.85                       | 8.66                  | 32.1                | 12     | 47.85             | 74.0             | 0     | -26.15                | Horizontal   |
| 7311.00            | 32.69                   | 36.37                       | 11.71                 | 31.9                | 91     | 48.86             | 74.0             | 0     | -25.14                | Horizontal   |
| 9748.00            | 33.44                   | 38.27                       | 14.25                 | 31.5                | 56     | 54.40             | 74.0             | 0     | -19.60                | Horizontal   |
| 12185.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                     |        |                   | 74.0             | 0     |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                     |        |                   |                  |       |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Prea<br>Fact<br>(dE | tor    | Level<br>(dBuV/m) | Limit L<br>(dBuV |       | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 29.80                   | 31.85                       | 8.66                  | 32.1                | 12     | 38.19             | 54.0             | 0     | -15.81                | Vertical     |
| 7311.00            | 22.34                   | 36.37                       | 11.71                 | 31.9                | 91     | 38.51             | 54.0             | 0     | -15.49                | Vertical     |
| 9748.00            | 22.80                   | 38.27                       | 14.25                 | 31.5                | 56     | 43.76             | 54.0             | 0     | -10.24                | Vertical     |
| 12185.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Vertical     |
| 4874.00            | 29.59                   | 31.85                       | 8.66                  | 32.1                | 12     | 37.98             | 54.0             | 0     | -16.02                | Horizontal   |
| 7311.00            | 21.78                   | 36.37                       | 11.71                 | 31.9                | 91     | 37.95             | 54.0             | 0     | -16.05                | Horizontal   |
| 9748.00            | 23.16                   | 38.27                       | 14.25                 | 31.5                | 56     | 44.12             | 54.0             | 0     | -9.88                 | Horizontal   |
| 12185.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                     |        |                   | 54.0             | 0     |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.



| Test mode:         |                         | 802.11g                     |                       | Test                     | channel:          | High                   | est                   |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 44.12                   | 31.90                       | 8.70                  | 32.15                    | 52.57             | 74.00                  | -21.43                | Vertical     |
| 7386.00            | 34.49                   | 36.49                       | 11.76                 | 31.83                    | 50.91             | 74.00                  | -23.09                | Vertical     |
| 9848.00            | 36.69                   | 38.62                       | 14.31                 | 31.77                    | 57.85             | 74.00                  | -16.15                | Vertical     |
| 12310.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 4924.00            | 43.55                   | 31.90                       | 8.70                  | 32.15                    | 52.00             | 74.00                  | -22.00                | Horizontal   |
| 7386.00            | 33.45                   | 36.49                       | 11.76                 | 31.83                    | 49.87             | 74.00                  | -24.13                | Horizontal   |
| 9848.00            | 32.88                   | 38.62                       | 14.31                 | 31.77                    | 54.04             | 74.00                  | -19.96                | Horizontal   |
| 12310.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 17234.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 35.10                   | 31.90                       | 8.70                  | 32.15                    | 43.55             | 54.00                  | -10.45                | Vertical     |
| 7386.00            | 24.42                   | 36.49                       | 11.76                 | 31.83                    | 40.84             | 54.00                  | -13.16                | Vertical     |
| 9848.00            | 25.20                   | 38.62                       | 14.31                 | 31.77                    | 46.36             | 54.00                  | -7.64                 | Vertical     |
| 12310.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4924.00            | 33.95                   | 31.90                       | 8.70                  | 32.15                    | 42.40             | 54.00                  | -11.60                | Horizontal   |
| 7386.00            | 22.85                   | 36.49                       | 11.76                 | 31.83                    | 39.27             | 54.00                  | -14.73                | Horizontal   |
| 9848.00            | 22.15                   | 38.62                       | 14.31                 | 31.77                    | 43.31             | 54.00                  | -10.69                | Horizontal   |
| 12310.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 17234.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11n(H                   | IT20)                 | Test                     | channel:          | Lowe                   | est                   |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4824.00            | 40.12                   | 31.79                       | 8.62                  | 32.10                    | 48.43             | 74.00                  | -25.57                | Vertical     |
| 7236.00            | 34.11                   | 36.19                       | 11.68                 | 31.97                    | 50.01             | 74.00                  | -23.99                | Vertical     |
| 9648.00            | 32.64                   | 38.07                       | 14.16                 | 31.56                    | 53.31             | 74.00                  | -20.69                | Vertical     |
| 12060.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 4824.00            | 38.82                   | 31.79                       | 8.62                  | 32.10                    | 47.13             | 74.00                  | -26.87                | Horizontal   |
| 7236.00            | 33.87                   | 36.19                       | 11.68                 | 31.97                    | 49.77             | 74.00                  | -24.23                | Horizontal   |
| 9648.00            | 32.22                   | 38.07                       | 14.16                 | 31.56                    | 52.89             | 74.00                  | -21.11                | Horizontal   |
| 12060.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4824.00            | 29.22                   | 31.79                       | 8.62                  | 32.10                    | 37.53             | 54.00                  | -16.47                | Vertical     |
| 7236.00            | 22.98                   | 36.19                       | 11.68                 | 31.97                    | 38.88             | 54.00                  | -15.12                | Vertical     |
| 9648.00            | 22.99                   | 38.07                       | 14.16                 | 31.56                    | 43.66             | 54.00                  | -10.34                | Vertical     |
| 12060.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4824.00            | 28.37                   | 31.79                       | 8.62                  | 32.10                    | 36.68             | 54.00                  | -17.32                | Horizontal   |
| 7236.00            | 22.46                   | 36.19                       | 11.68                 | 31.97                    | 38.36             | 54.00                  | -15.64                | Horizontal   |
| 9648.00            | 21.97                   | 38.07                       | 14.16                 | 31.56                    | 42.64             | 54.00                  | -11.36                | Horizontal   |
| 12060.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11n(H                   | IT20)                 | Test channel:            |                   | Midd                   | le                    |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 39.21                   | 31.85                       | 8.66                  | 32.12                    | 47.60             | 74.00                  | -26.40                | Vertical     |
| 7311.00            | 34.20                   | 36.37                       | 11.71                 | 31.91                    | 50.37             | 74.00                  | -23.63                | Vertical     |
| 9748.00            | 33.67                   | 38.27                       | 14.25                 | 31.56                    | 54.63             | 74.00                  | -19.37                | Vertical     |
| 12185.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 4874.00            | 39.71                   | 31.85                       | 8.66                  | 32.12                    | 48.10             | 74.00                  | -25.90                | Horizontal   |
| 7311.00            | 32.85                   | 36.37                       | 11.71                 | 31.91                    | 49.02             | 74.00                  | -24.98                | Horizontal   |
| 9748.00            | 33.56                   | 38.27                       | 14.25                 | 31.56                    | 54.52             | 74.00                  | -19.48                | Horizontal   |
| 12185.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4874.00            | 30.07                   | 31.85                       | 8.66                  | 32.12                    | 38.46             | 54.00                  | -15.54                | Vertical     |
| 7311.00            | 22.52                   | 36.37                       | 11.71                 | 31.91                    | 38.69             | 54.00                  | -15.31                | Vertical     |
| 9748.00            | 22.92                   | 38.27                       | 14.25                 | 31.56                    | 43.88             | 54.00                  | -10.12                | Vertical     |
| 12185.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14622.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 17059.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4874.00            | 29.83                   | 31.85                       | 8.66                  | 32.12                    | 38.22             | 54.00                  | -15.78                | Horizontal   |
| 7311.00            | 21.94                   | 36.37                       | 11.71                 | 31.91                    | 38.11             | 54.00                  | -15.89                | Horizontal   |
| 9748.00            | 23.28                   | 38.27                       | 14.25                 | 31.56                    | 44.24             | 54.00                  | -9.76                 | Horizontal   |
| 12185.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14622.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 17059.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

#### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11n(H                   | IT20)                 | Test                     | channel:          | Highe                  | est                   |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 44.64                   | 31.90                       | 8.70                  | 32.15                    | 53.09             | 74.00                  | -20.91                | Vertical     |
| 7386.00            | 34.81                   | 36.49                       | 11.76                 | 31.83                    | 51.23             | 74.00                  | -22.77                | Vertical     |
| 9848.00            | 36.92                   | 38.62                       | 14.31                 | 31.77                    | 58.08             | 74.00                  | -15.92                | Vertical     |
| 12310.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 4924.00            | 43.98                   | 31.90                       | 8.70                  | 32.15                    | 52.43             | 74.00                  | -21.57                | Horizontal   |
| 7386.00            | 33.73                   | 36.49                       | 11.76                 | 31.83                    | 50.15             | 74.00                  | -23.85                | Horizontal   |
| 9848.00            | 33.10                   | 38.62                       | 14.31                 | 31.77                    | 54.26             | 74.00                  | -19.74                | Horizontal   |
| 12310.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 17234.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| Average val        | ue:                     |                             |                       |                          |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4924.00            | 35.57                   | 31.90                       | 8.70                  | 32.15                    | 44.02             | 54.00                  | -9.98                 | Vertical     |
| 7386.00            | 24.73                   | 36.49                       | 11.76                 | 31.83                    | 41.15             | 54.00                  | -12.85                | Vertical     |
| 9848.00            | 25.43                   | 38.62                       | 14.31                 | 31.77                    | 46.59             | 54.00                  | -7.41                 | Vertical     |
| 12310.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14772.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 17234.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4924.00            | 34.36                   | 31.90                       | 8.70                  | 32.15                    | 42.81             | 54.00                  | -11.19                | Horizontal   |
| 7386.00            | 23.12                   | 36.49                       | 11.76                 | 31.83                    | 39.54             | 54.00                  | -14.46                | Horizontal   |
| 9848.00            | 22.36                   | 38.62                       | 14.31                 | 31.77                    | 43.52             | 54.00                  | -10.48                | Horizontal   |
| 12310.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14772.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 17234.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

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<sup>1</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

<sup>2 &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



| Test mode:         |                         | 802.11n(HT40)               |                       |                          | Test | channel:          |                        | Lowe | st                    |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|------|-------------------|------------------------|------|-----------------------|--------------|
| Peak value:        |                         | -                           |                       |                          |      |                   |                        |      |                       |              |
| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) |      | Over<br>Limit<br>(dB) | polarization |
| 4844.00            | 39.22                   | 31.81                       | 8.63                  | 32.11                    |      | 47.55             | 74.00                  |      | -26.45                | Vertical     |
| 7266.00            | 33.54                   | 36.28                       | 11.69                 | 31.94                    |      | 49.57             | 74.00                  |      | -24.43                | Vertical     |
| 9688.00            | 32.23                   | 38.13                       | 14.21                 | 31.52                    |      | 53.05             | 74.00                  |      | -20.95                | Vertical     |
| 12060.00           | *                       |                             |                       |                          |      |                   | 74.                    | 00   |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                          |      |                   | 74.                    | 00   |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                          |      |                   | 74.                    | 00   |                       | Vertical     |
| 4844.00            | 38.06                   | 31.81                       | 8.63                  | 32.11                    |      | 46.39             | 74.                    | 00   | -27.61                | Horizontal   |
| 7266.00            | 33.37                   | 36.28                       | 11.69                 | 31.94                    |      | 49.40             | 74.                    | 00   | -24.60                | Horizontal   |
| 9688.00            | 31.84                   | 38.13                       | 14.21                 | 31.52                    |      | 52.66             | 74.                    | 00   | -21.34                | Horizontal   |
| 12060.00           | *                       |                             |                       |                          |      |                   | 74.                    | 00   |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                          |      |                   | 74.                    | 00   |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                          |      | _                 | 74.                    | 00   |                       | Horizontal   |

## Average value:

| Frequency<br>(MHz) | Read<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 Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| 4844.00            | 28.39                   | 31.81                       | 8.63                  | 32.11                    | 36.72             | 54.00                  | -17.28                | Vertical     |
| 7266.00            | 22.43                   | 36.28                       | 11.69                 | 31.94                    | 38.46             | 54.00                  | -15.54                | Vertical     |
| 9688.00            | 22.59                   | 38.13                       | 14.21                 | 31.52                    | 43.41             | 54.00                  | -10.59                | Vertical     |
| 12060.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14472.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 16884.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4844.00            | 27.65                   | 31.81                       | 8.63                  | 32.11                    | 35.98             | 54.00                  | -18.02                | Horizontal   |
| 7266.00            | 21.97                   | 36.28                       | 11.69                 | 31.94                    | 38.00             | 54.00                  | -16.00                | Horizontal   |
| 9688.00            | 21.61                   | 38.13                       | 14.21                 | 31.52                    | 42.43             | 54.00                  | -11.57                | Horizontal   |
| 12060.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14472.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 16884.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.

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| Test mode:         |                         | 802.11n(H                   | IT40)                 |                          | Test channel:      |                   | Middle            |        |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|--------------------|-------------------|-------------------|--------|--------------|
| Peak value:        |                         |                             |                       |                          |                    |                   |                   |        |              |
| Frequency<br>(MHz) | Read<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 L<br>(dBuV/ | i imit | polarization |
| 4874.00            | 38.46                   | 31.85                       | 8.66                  | 32.12                    |                    | 46.85             | 74.00             | -27.15 | Vertical     |
| 7311.00            | 33.73                   | 36.37                       | 11.71                 | 31.91                    |                    | 49.90             | 74.00             | -24.10 | Vertical     |
| 9748.00            | 33.33                   | 38.27                       | 14.25                 | 31.56                    |                    | 54.29             | 74.00             | -19.71 | Vertical     |
| 12185.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Vertical     |
| 14622.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Vertical     |
| 17059.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Vertical     |
| 4874.00            | 39.08                   | 31.85                       | 8.66                  | 32                       | .12                | 47.47             | 74.00             | -26.53 | Horizontal   |
| 7311.00            | 32.44                   | 36.37                       | 11.71                 | 31                       | .91                | 48.61             | 74.00             | -25.39 | Horizontal   |
| 9748.00            | 33.25                   | 38.27                       | 14.25                 | 31.56                    |                    | 54.21             | 74.00             | -19.79 | Horizontal   |
| 12185.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Horizontal   |
| 14622.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Horizontal   |
| 17059.00           | *                       |                             |                       |                          |                    |                   | 74.00             | )      | Horizontal   |
| Average val        | ue:                     |                             |                       |                          |                    |                   |                   |        |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Fa                       | amp<br>ctor<br>IB) | Level<br>(dBuV/m) | Limit L<br>(dBuV/ | i imit | polarization |
| 4874.00            | 29.39                   | 31.85                       | 8.66                  | 32                       | .12                | 37.78             | 54.00             | -16.22 | Vertical     |
| 7311.00            | 22.06                   | 36.37                       | 11.71                 | 31                       | .91                | 38.23             | 54.00             | -15.77 | Vertical     |
| 9748.00            | 22.60                   | 38.27                       | 14.25                 | 31                       | .56                | 43.56             | 54.00             | -10.44 | Vertical     |
| 12185.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Vertical     |
| 14622.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Vertical     |
| 17059.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Vertical     |
| 4874.00            | 29.24                   | 31.85                       | 8.66                  | 32                       | .12                | 37.63             | 54.00             | -16.37 | Horizontal   |
| 7311.00            | 21.54                   | 36.37                       | 11.71                 | 31                       | .91                | 37.71             | 54.00             | -16.29 | Horizontal   |
| 9748.00            | 22.98                   | 38.27                       | 14.25                 | 31                       | .56                | 43.94             | 54.00             | -10.06 | Horizontal   |
| 12185.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Horizontal   |
| 14622.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Horizontal   |
| 17059.00           | *                       |                             |                       |                          |                    |                   | 54.00             | )      | Horizontal   |

#### Remark:

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<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



| Test mode:         |                         | 802.11n(H                   | IT40)                 | Te                                   | st channel: | Highest                |                       |              |  |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------------------|-------------|------------------------|-----------------------|--------------|--|
| Peak value:        |                         |                             |                       |                                      |             |                        |                       |              |  |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Pream<br>Factor<br>(dB)              | i evei      | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |
| 4904.00            | 43.35                   | 31.88                       | 8.68                  | 32.13                                | 51.78       | 74.00                  | -22.22                | Vertical     |  |
| 7356.00            | 34.00                   | 36.45                       | 11.75                 | 31.86                                | 50.34       | 74.00                  | -23.66                | Vertical     |  |
| 9808.00            | 36.34                   | 38.43                       | 14.29                 | 31.68                                | 57.38       | 74.00                  | -16.62                | Vertical     |  |
| 12310.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Vertical     |  |
| 14772.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Vertical     |  |
| 17234.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Vertical     |  |
| 4904.00            | 42.89                   | 31.88                       | 8.68                  | 32.13                                | 51.32       | 74.00                  | -22.68                | Horizontal   |  |
| 7356.00            | 33.02                   | 36.45                       | 11.75                 | 31.86                                | 49.36       | 74.00                  | -24.64                | Horizontal   |  |
| 9808.00            | 32.56                   | 38.43                       | 14.29                 | 31.68                                | 53.60       | 74.00                  | -20.40                | Horizontal   |  |
| 12310.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Horizontal   |  |
| 14772.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Horizontal   |  |
| 17234.00           | *                       |                             |                       |                                      |             | 74.00                  |                       | Horizontal   |  |
| Average val        | ue:                     |                             |                       |                                      |             |                        |                       |              |  |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Pream <sub>l</sub><br>Factor<br>(dB) | i evei      | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |
| 4904.00            | 34.39                   | 31.88                       | 8.68                  | 32.13                                | 42.82       | 54.00                  | -11.18                | Vertical     |  |
| 7356.00            | 23.95                   | 36.45                       | 11.75                 | 31.86                                | 40.29       | 54.00                  | -13.71                | Vertical     |  |
| 9808.00            | 24.87                   | 38.43                       | 14.29                 | 31.68                                | 45.91       | 54.00                  | -8.09                 | Vertical     |  |
| 12310.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Vertical     |  |
| 14772.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Vertical     |  |
| 17234.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Vertical     |  |
| 4904.00            | 33.34                   | 31.88                       | 8.68                  | 32.13                                | 41.77       | 54.00                  | -12.23                | Horizontal   |  |
| 7356.00            | 22.44                   | 36.45                       | 11.75                 | 31.86                                | 38.78       | 54.00                  | -15.22                | Horizontal   |  |
| 9808.00            | 21.84                   | 38.43                       | 14.29                 | 31.68                                | 42.88       | 54.00                  | -11.12                | Horizontal   |  |
| 12310.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Horizontal   |  |
| 14772.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Horizontal   |  |
| 17234.00           | *                       |                             |                       |                                      |             | 54.00                  |                       | Horizontal   |  |

#### Remark:

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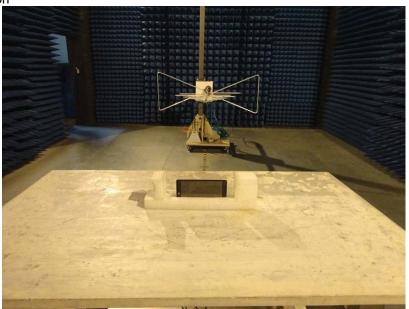
<sup>1</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

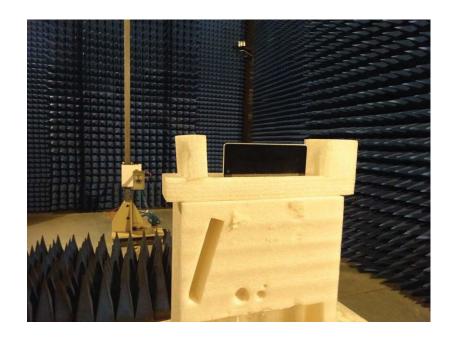
<sup>2 &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



# 8 Test Setup Photo

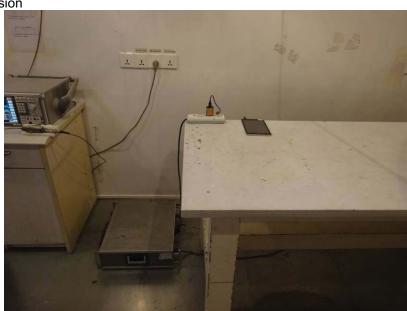
Radiated Emission







### Conducted Emission



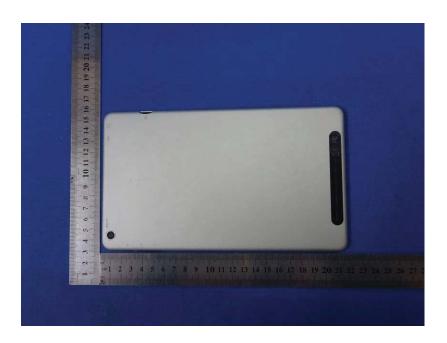


# 9 EUT Constructional Details









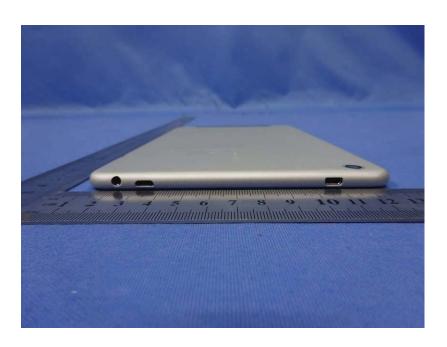














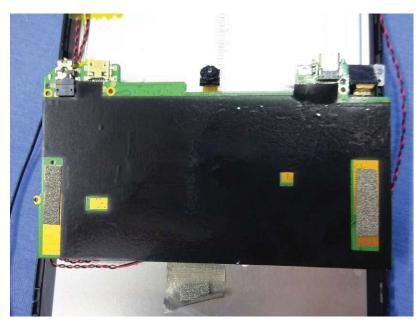




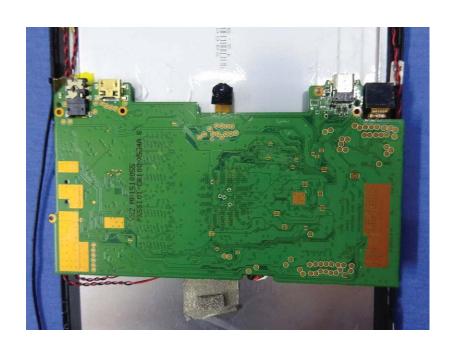
























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