

FCC Partial Test Report

FCC ID : VQK-M02
Equipment : Mobile Phone
Model No. : M02
Brand Name : FUJITSU
Applicant : FUJITSU LIMITED
Address : 1-1, Kamikodanaka 4-chome, Nakahara-ku,
Kawasaki 211-8588, Japan
Standard : 47 CFR FCC Part 15.247
Received Date : Nov. 24, 2015
Tested Date : Nov. 24 ~ Dec. 03, 2015

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:



Gary Chang / Manager



Testing Laboratory
2732

Table of Contents

| | | |
|----------|--|-----------|
| 1 | GENERAL DESCRIPTION | 5 |
| 1.1 | Information..... | 5 |
| 1.2 | Local Support Equipment List | 8 |
| 1.3 | Test Setup Chart | 8 |
| 1.4 | The Equipment List | 9 |
| 1.5 | Test Standards | 10 |
| 1.6 | Measurement Uncertainty | 10 |
| 2 | TEST CONFIGURATION..... | 11 |
| 2.1 | Testing Condition | 11 |
| 2.2 | The Worst Test Modes and Channel Details | 11 |
| 3 | TRANSMITTER TEST RESULTS..... | 12 |
| 3.1 | Conducted Emissions..... | 12 |
| 3.2 | RF Output Power..... | 17 |
| 3.3 | Unwanted Emissions into Restricted Frequency Bands | 19 |
| 4 | TEST LABORATORY INFORMATION | 27 |

Release Record

| Report No. | Version | Description | Issued Date |
|---------------|---------|---------------|---------------|
| FR560301-02AC | Rev. 01 | Initial issue | Dec. 17, 2015 |

Summary of Test Results

| FCC Rules | Test Items | Measured | Result |
|---------------------|-----------------------------------|---|--------|
| 15.207 | AC Power Line Conducted Emissions | [dBuV]: 0.183MHz 45.17 (Margin -19.16dB) - QP | Pass |
| 15.247(d) 15.209 | Radiated Emissions | [dBuV/m at 3m]: 2483.50MHz 50.58 (Margin -3.42dB) - AV | Pass |
| 15.247(b)(3) | Fundamental Emission Output Power | Power [dBm]: 19.95 | Pass |

1 General Description

1.1 Information

This report is issued as a supplementary report to original ICC report no. FR560301AC. PCB/trace layouts, product form factor and antenna are identical except following items:

❖ Wi-Fi:

5GHz function is removed by software setting and hardware modification. Hardware modification-Remove components of 5GHz transmission path to cancel 5GHz function that will not affect 2.4GHz function since 2.4GHz and 5GHz transmission path is separately.

❖ LTE: B26 814 ~849 MHz: Activated by software.

❖ Without Fingerprint: Remove components.

❖ Change AC adapter.

❖ Same cradle as original report, change model name from F-51 to FAR-CR105.

In this report, AC power line conducted emission, radiated emission and conducted power had been re-tested and only its data was presented in the following sections.

1.1.1 Product Details

| | |
|--------------|-----------------------------------|
| Product Name | Mobile Phone |
| Brand Name | FUJITSU |
| Model Name | M02 |
| IMEI Code | 353546070006486 / 353546070006353 |
| H/W Version | v3.0.0 |
| S/W Version | R021.3 |

1.1.2 Specification of the Equipment under Test (EUT)

| RF General Information | | | | | |
|------------------------|------------------|-----------------|----------------|------------------------------------|-----------------|
| Frequency Range (MHz) | IEEE Std. 802.11 | Ch. Freq. (MHz) | Channel Number | Transmit Chains (N _{TX}) | Data Rate / MCS |
| 2400-2483.5 | b | 2412-2462 | 1-11 [11] | 1 | 1-11 Mbps |
| 2400-2483.5 | g | 2412-2462 | 1-11 [11] | 1 | 6-54 Mbps |
| 2400-2483.5 | n (HT20) | 2412-2462 | 1-11 [11] | 1 | MCS 0-7 |

Note 1: RF output power specifies that Maximum Peak Conducted Output Power.
 Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
 Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

1.1.3 Antenna Details

| Ant. No. | Type | Connector | Antenna Gain (dBi) |
|----------|----------------------|-----------|--------------------|
| 1 | $\lambda/4$ Monopole | No | -1.14 |

1.1.4 Power Supply Type of Equipment under Test (EUT)

| | |
|-------------------|---|
| Power Supply Type | 5.0Vdc from AC adapter 3.8Vdc from Battery |
|-------------------|---|

1.1.5 Accessories

| No. | Equipment | Description |
|-----|--------------------------|---|
| 1 | Adapter | Brand Name: Fujitsu Limited Model Name: FMV-AC346 Input rating: 100-240Vac, 50/60Hz, 0.3A Output rating: 5.0Vdc, 2A 1.1m USB shielded cable without core (for charging use) |
| 2 | Cradle | Brand Name: Fujitsu Limited Model Name: FAR-CR105 Input rating: 5Vdc, 1.5A Output rating: 5.0Vdc, 1.5A |
| 3 | Battery (Unremovable) | Brand Name: Fujitsu Limited Model Name: CA54310-0064 Power Rating: 3.8Vdc, 2330mAh, 8.9Wh |

1.1.6 Channel List

| Frequency band (MHz) | |
|----------------------|----------------|
| Channel | Frequency(MHz) |
| 1 | 2412 |
| 2 | 2417 |
| 3 | 2422 |
| 4 | 2427 |
| 5 | 2432 |
| 6 | 2437 |
| 7 | 2442 |
| 8 | 2447 |
| 9 | 2452 |
| 10 | 2457 |
| 11 | 2462 |

1.1.7 Test Tool

| | |
|-----------|-------------------------|
| Test Tool | QRCT, Version: 3.0.54.0 |
|-----------|-------------------------|

1.1.8 Power Setting

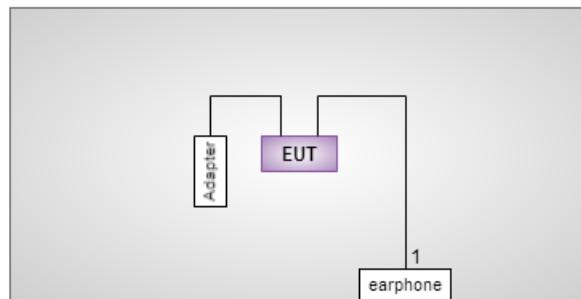
| Modulation Mode | Test Frequency (MHz) | Power Set |
|-----------------|----------------------|-----------|
| 11b | 2412 | 13 |
| 11b | 2437 | 13 |
| 11b | 2462 | 13 |
| 11g | 2412 | 12.5 |
| 11g | 2437 | 12.5 |
| 11g | 2462 | 12.5 |
| HT20 | 2412 | 11 |
| HT20 | 2437 | 11 |
| HT20 | 2462 | 11 |

1.2 Local Support Equipment List

| Support Equipment List | | | | | |
|------------------------|-----------|-------|-----------|-----|---------------------------|
| No. | Equipment | Brand | Model | S/N | Signal cable / Length (m) |
| 1 | Earphone | APPLE | MD827FE/A | 6 | 1.2m non-shielded. |

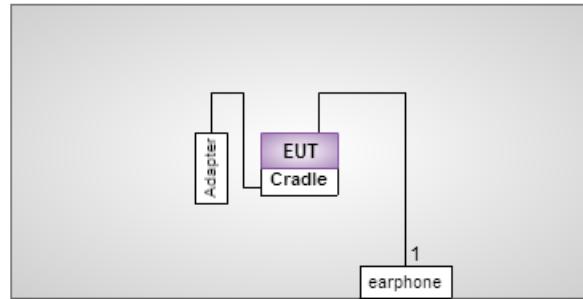
1.3 Test Setup Chart

Test Setup Diagram (Adapter mode)



1. audio, 1.2m non-shielded

Test Setup Diagram (Cradle mode)



1. audio, 1.2m non-shielded

1.4 The Equipment List

| | | | | | |
|----------------------|-------------------------------|------------------|-------------------|-------------------------|--------------------------|
| Test Item | Conducted Emission | | | | |
| Test Site | Conduction room 1 / (CO01-WS) | | | | |
| Instrument | Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until |
| EMC Receiver | R&S | ESCS 30 | 100169 | Oct. 21, 2015 | Oct. 20, 2016 |
| LISN | SCHWARZBECK | Schwarzbeck 8127 | 8127-667 | Nov. 13, 2015 | Nov. 12, 2016 |
| RF Cable-CON | Woken | CFD200-NL | CFD200-NL-001 | Dec. 31, 2014 | Dec. 30, 2015 |
| Measurement Software | AUDIX | e3 | 6.120210k | NA | NA |

Note: Calibration Interval of instruments listed above is one year.

| | | | | | |
|----------------------|-----------------------------|------------------|-------------------|-------------------------|--------------------------|
| Test Item | Radiated Emission | | | | |
| Test Site | 966 chamber 2 / (03CH02-WS) | | | | |
| Instrument | Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until |
| Spectrum Analyzer | R&S | FSV40 | 101499 | Dec. 31, 2014 | Dec. 30, 2015 |
| Receiver | R&S | ESR3 | 101657 | Jan. 15, 2015 | Jan. 14, 2016 |
| Bilog Antenna | SCHWARZBECK | VULB9168 | VULB9168-523 | Nov. 09, 2015 | Nov. 08, 2016 |
| Horn Antenna 1G-18G | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1095 | Oct. 07, 2015 | Oct. 06, 2016 |
| Horn Antenna 18G-40G | SCHWARZBECK | BBHA 9170 | BBHA 9170517 | Nov. 04, 2015 | Nov. 03, 2016 |
| Loop Antenna | R&S | HFH2-Z2 | 11900 | Nov. 16, 2015 | Nov. 15, 2016 |
| Preamplifier | Burgeon | BPA-530 | 100218 | Nov. 03, 2015 | Nov. 02, 2016 |
| Preamplifier | Agilent | 83017A | MY39501309 | Sep. 22, 2015 | Sep. 21, 2016 |
| Preamplifier | EMC | EMC184045B | 980192 | Sep. 01, 2015 | Aug. 31, 2016 |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16140/4 | Dec. 16, 2014 | Dec. 15, 2015 |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16018/4 | Dec. 16, 2014 | Dec. 15, 2015 |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16015/4 | Dec. 16, 2014 | Dec. 15, 2015 |
| LF cable 3M | Woken | CFD400NL-LW | CFD400NL-003 | Dec. 16, 2014 | Dec. 15, 2015 |
| LF cable 10M | EMCC | CFD400-E | CFD400-001 | Jun. 17, 2015 | Jun. 16, 2016 |
| Measurement Software | AUDIX | e3 | 6.120210g | NA | NA |

Note: Calibration Interval of instruments listed above is one year.

| | | | | | |
|----------------------|---------------------|------------------|-------------------|-------------------------|--------------------------|
| Test Item | RF Conducted | | | | |
| Test Site | (TH01-WS) | | | | |
| Instrument | Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until |
| Spectrum Analyzer | R&S | FSV40 | 101063 | Feb. 03, 2015 | Feb. 02, 2016 |
| Power Meter | Anritsu | ML2495A | 1241002 | Sep. 21, 2015 | Sep. 20, 2016 |
| Power Sensor | Anritsu | MA2411B | 1207366 | Sep. 21, 2015 | Sep. 20, 2016 |
| AC POWER SOURCE | APC | AFC-500W | F312060012 | Oct. 26, 2015 | Oct. 25, 2016 |
| Measurement Software | Sporton | Sporton_1 | 1.3.30 | NA | NA |

Note: Calibration Interval of instruments listed above is one year.

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.247

ANSI C63.10-2013

FCC KDB 558074 D01 DTS Meas Guidance v03r03

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

| Measurement Uncertainty | |
|--------------------------|-------------|
| Parameters | Uncertainty |
| Conducted power | ±0.808 dB |
| AC conducted emission | ±2.90 dB |
| Radiated emission ≤ 1GHz | ±3.62 dB |
| Radiated emission > 1GHz | ±5.60 dB |

2 Test Configuration

2.1 Testing Condition

| Test Item | Test Site | Ambient Condition | Tested By |
|--------------------|-----------|-------------------|-----------------------------|
| AC Conduction | CO01-WS | 20°C / 61% | Peter Lin |
| Radiated Emissions | 03CH02-WS | 21°C / 62% | Anderson Hung Warren Lee |
| RF Conducted | TH01-WS | 23°C / 65% | Felix Sung |

➤ FCC site registration No.: 657002

➤ IC site registration No.: 10807A-2

2.2 The Worst Test Modes and Channel Details

The tests reported herein were performed according to the original worst case conditions in original report no. FR560301AC.

| Test item | Modulation Mode | Test Frequency (MHz) | Data Rate |
|-----------------------------------|-----------------|----------------------|-----------|
| Conducted Emissions | 11g | 2412 | 6 Mbps |
| Radiated Emissions ≤ 1GHz | 11g | 2412 | 6 Mbps |
| Radiated Emissions > 1GHz | 11g | 2462 | 6 Mbps |
| Fundamental Emission Output Power | 11g | 2462 | 6 Mbps |

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. The EUT had been tested by following test configurations for spurious emission below 1GHz.
 - 1) Configuration 1 : Adapter mode
 - 2) Configuration 2 : Cradle mode

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

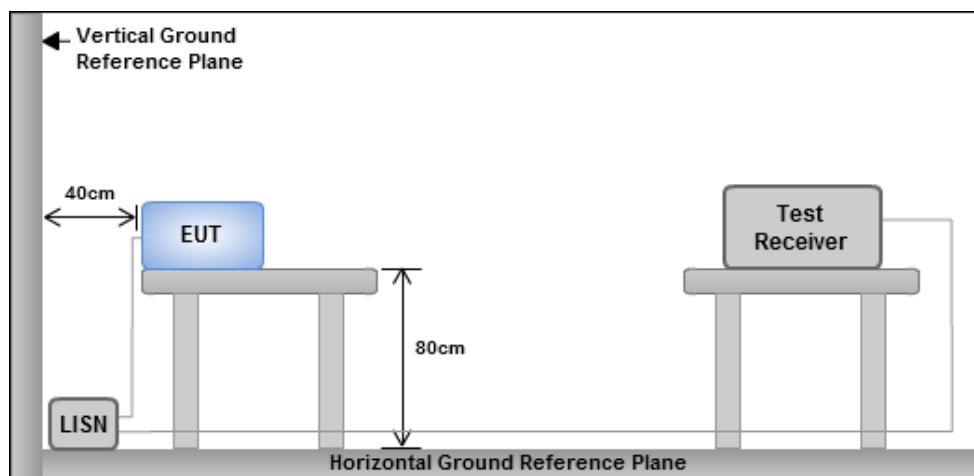
| Conducted Emissions Limit | | |
|---------------------------|------------|-----------|
| Frequency Emission (MHz) | Quasi-Peak | Average |
| 0.15-0.5 | 66 - 56 * | 56 - 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

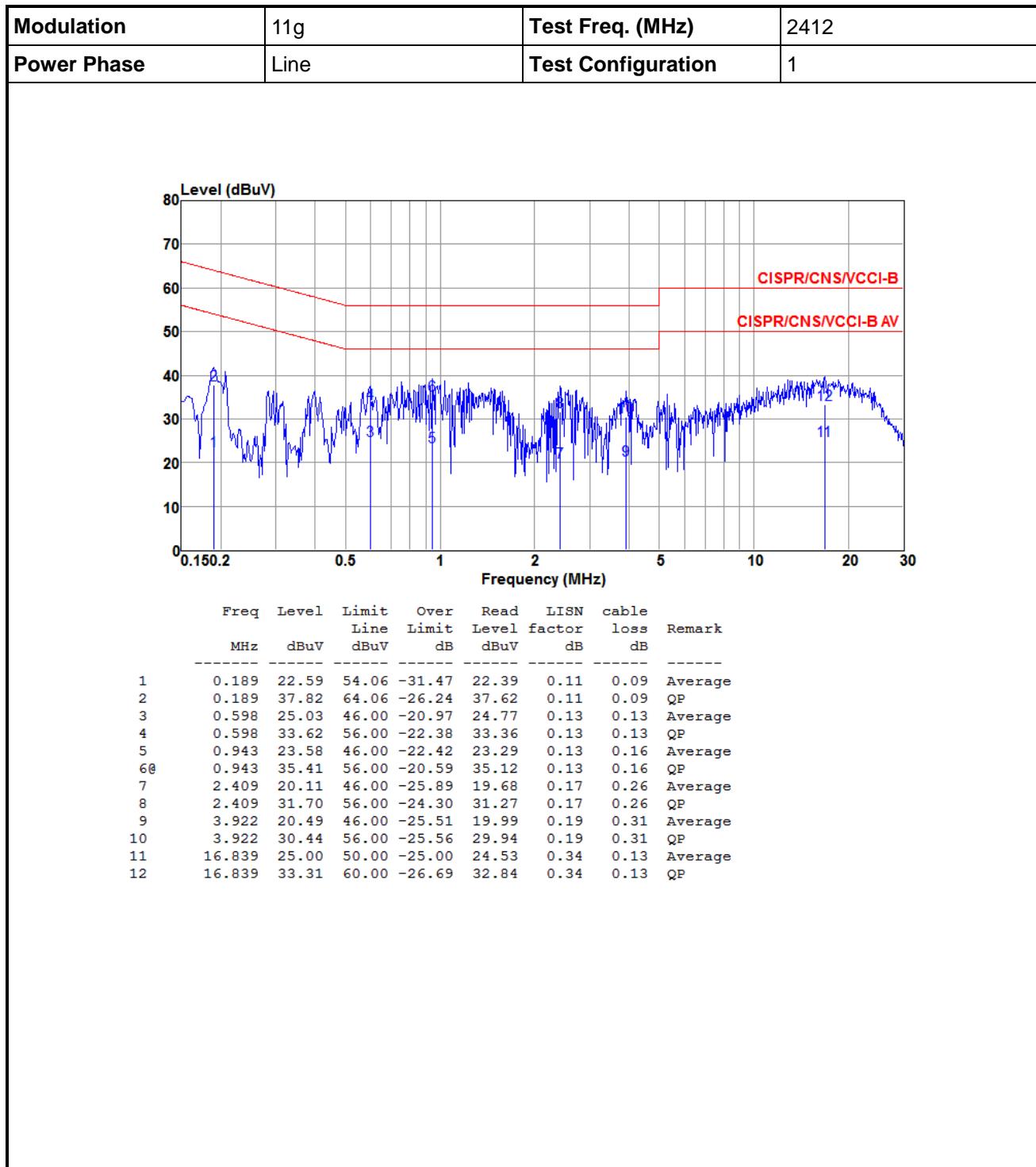
1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

3.1.3 Test Setup



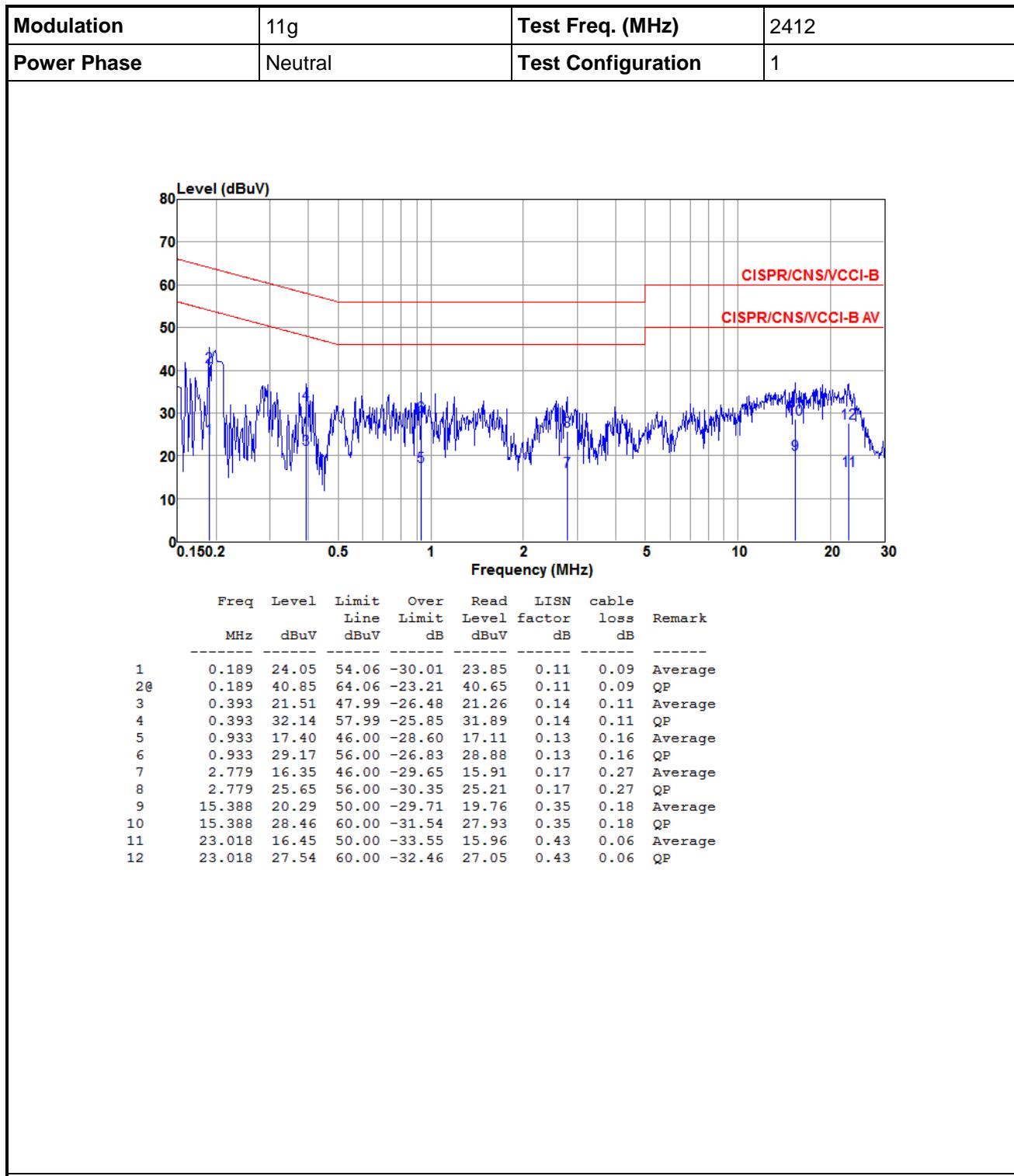
Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions



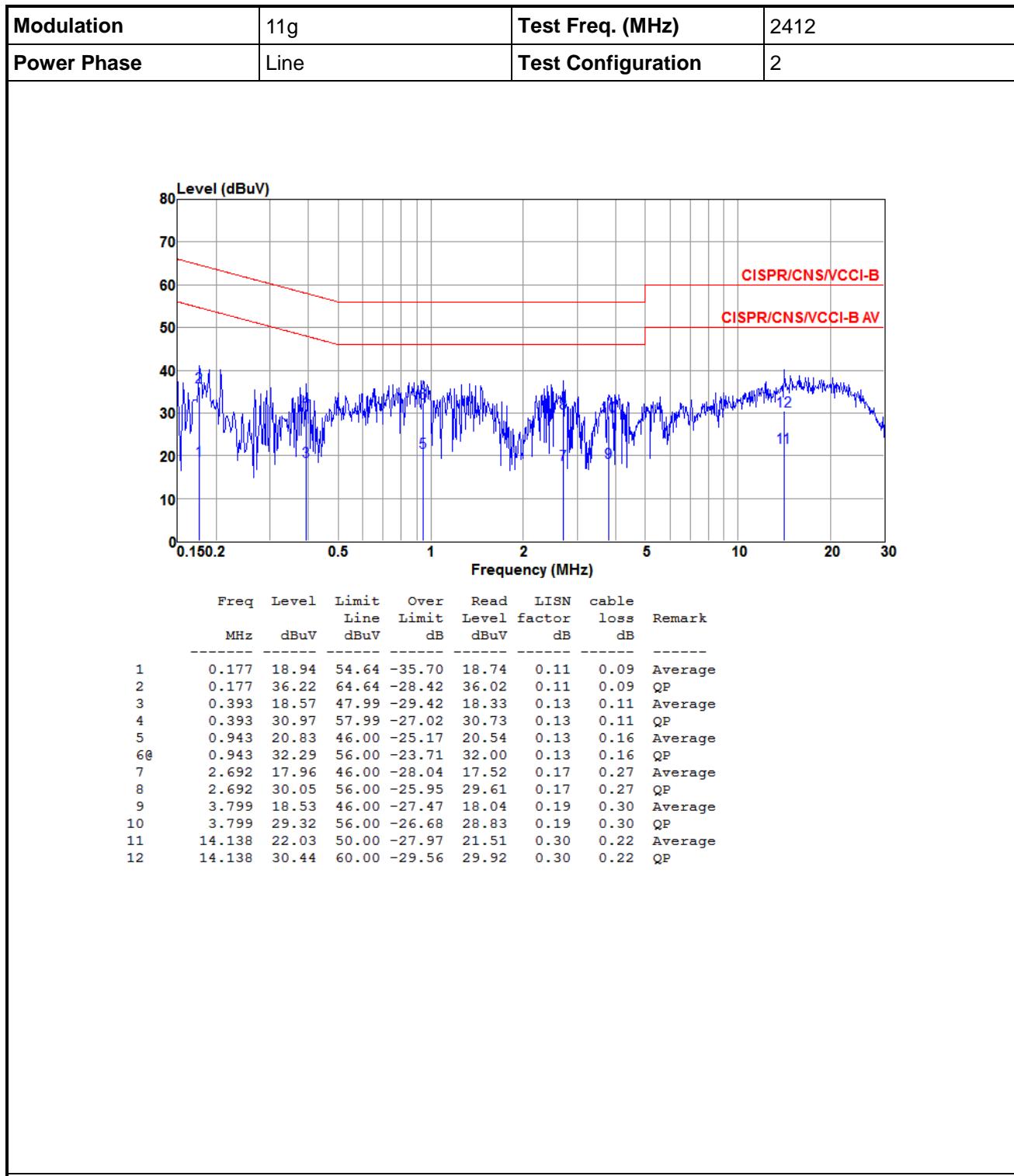
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).



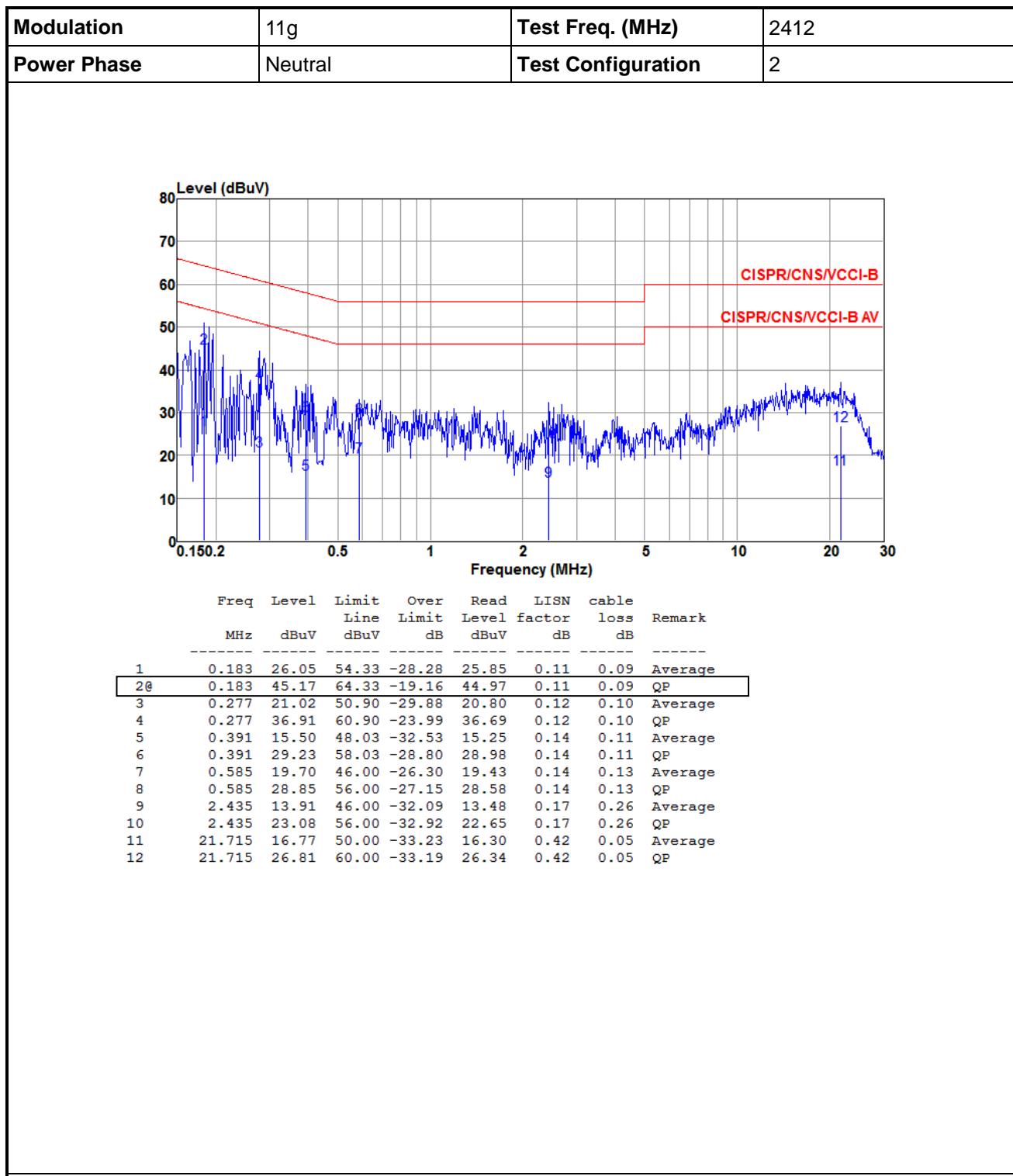
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).



Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).



Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 RF Output Power

3.2.1 Limit of RF Output Power

Conducted power shall not exceed 1Watt.

- Antenna gain <= 6dBi, no any corresponding reduction is in output power limit.
- Antenna gain > 6dBi
 - Non Fixed, point to point operations.
The conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dB
 - Fixed, point to point operations
Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point Operations, maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.
Systems operating in the 5725–5850 MHz band that are used exclusively for fixed, point-to-point operations ,no any corresponding reduction is in transmitter peak output power

3.2.2 Test Procedures

- Maximum Peak Conducted Output Power
 - Spectrum analyzer**
 1. Set RBW = 1MHz, VBW = 3MHz, Detector = Peak.
 2. Sweep time = auto, Trace mode = max hold, Allow trace to fully stabilize.
 3. Use the spectrum analyzer channel power measurement function with the band limits set equal to the DTS bandwidth edges.
 - Power meter**
 1. A broadband Peak RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.
- Maximum Conducted Output Power (For reference only)
 - Power meter**
 1. A broadband Average RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.2.3 Test Setup



3.2.4 Test Result of Maximum Output Power

| Modulation Mode | Freq. (MHz) | Peak Power (dBm) | Total Power (mW) | Total Power (dBm) | Limit (dBm) |
|-----------------|-------------|------------------|------------------|-------------------|-------------|
| 11b | 2412 | 16.45 | 44.157 | 16.45 | 30 |
| 11b | 2437 | 16.02 | 39.994 | 16.02 | 30 |
| 11b | 2462 | 16.46 | 44.259 | 16.46 | 30 |
| 11g | 2412 | 19.95 | 98.855 | 19.95 | 30 |
| 11g | 2437 | 19.57 | 90.573 | 19.57 | 30 |
| 11g | 2462 | 19.62 | 91.622 | 19.62 | 30 |
| HT20 | 2412 | 19.02 | 79.799 | 19.02 | 30 |
| HT20 | 2437 | 18.24 | 66.681 | 18.24 | 30 |
| HT20 | 2462 | 18.87 | 77.090 | 18.87 | 30 |

| Modulation Mode | Freq. (MHz) | Average Power (dBm) | Total Power (mW) | Total Power (dBm) | Limit (dBm) |
|-----------------|-------------|---------------------|------------------|-------------------|-------------|
| 11b | 2412 | 13.82 | 24.099 | 13.82 | 30 |
| 11b | 2437 | 13.39 | 21.827 | 13.39 | 30 |
| 11b | 2462 | 13.87 | 24.378 | 13.87 | 30 |
| 11g | 2412 | 12.84 | 19.231 | 12.84 | 30 |
| 11g | 2437 | 12.49 | 17.742 | 12.49 | 30 |
| 11g | 2462 | 12.55 | 17.989 | 12.55 | 30 |
| HT20 | 2412 | 11.24 | 13.305 | 11.24 | 30 |
| HT20 | 2437 | 10.51 | 11.246 | 10.51 | 30 |
| HT20 | 2462 | 11.08 | 12.823 | 11.08 | 30 |

Note: Average power is for reference only

3.3 Unwanted Emissions into Restricted Frequency Bands

3.3.1 Limit of Unwanted Emissions into Restricted Frequency Bands

| Restricted Band Emissions Limit | | | |
|---------------------------------|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz) | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 |
| 1.705~30.0 | 30 | 29 | 30 |
| 30~88 | 100 | 40 | 3 |
| 88~216 | 150 | 43.5 | 3 |
| 216~960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

Note 1:
Quasi-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.3.2 Test Procedures

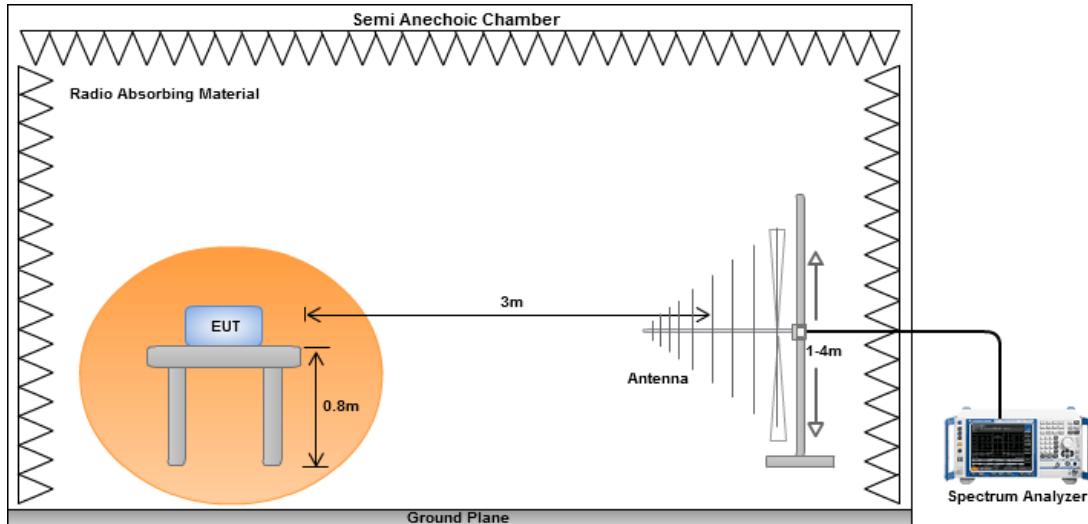
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

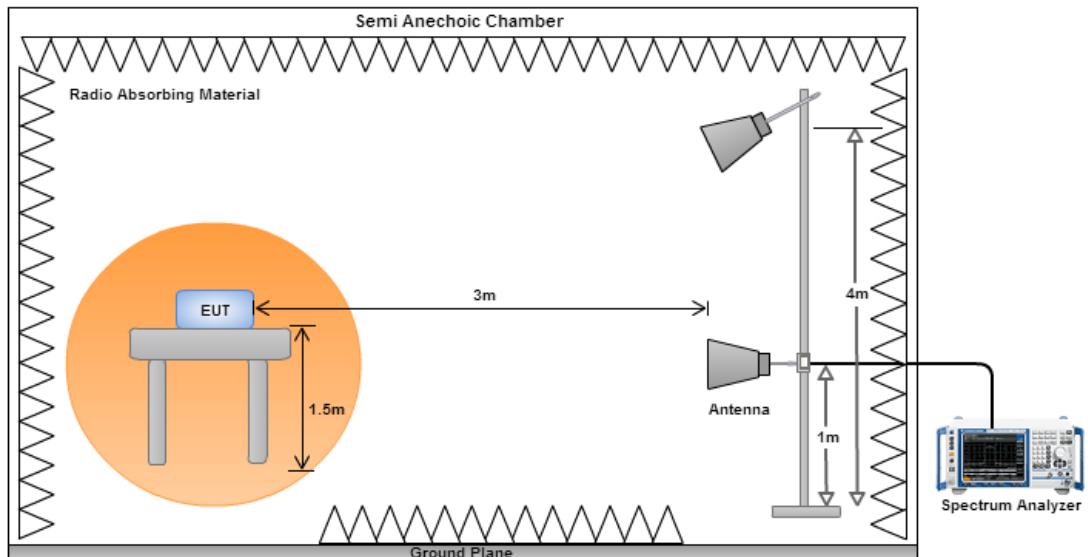
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.3.3 Test Setup

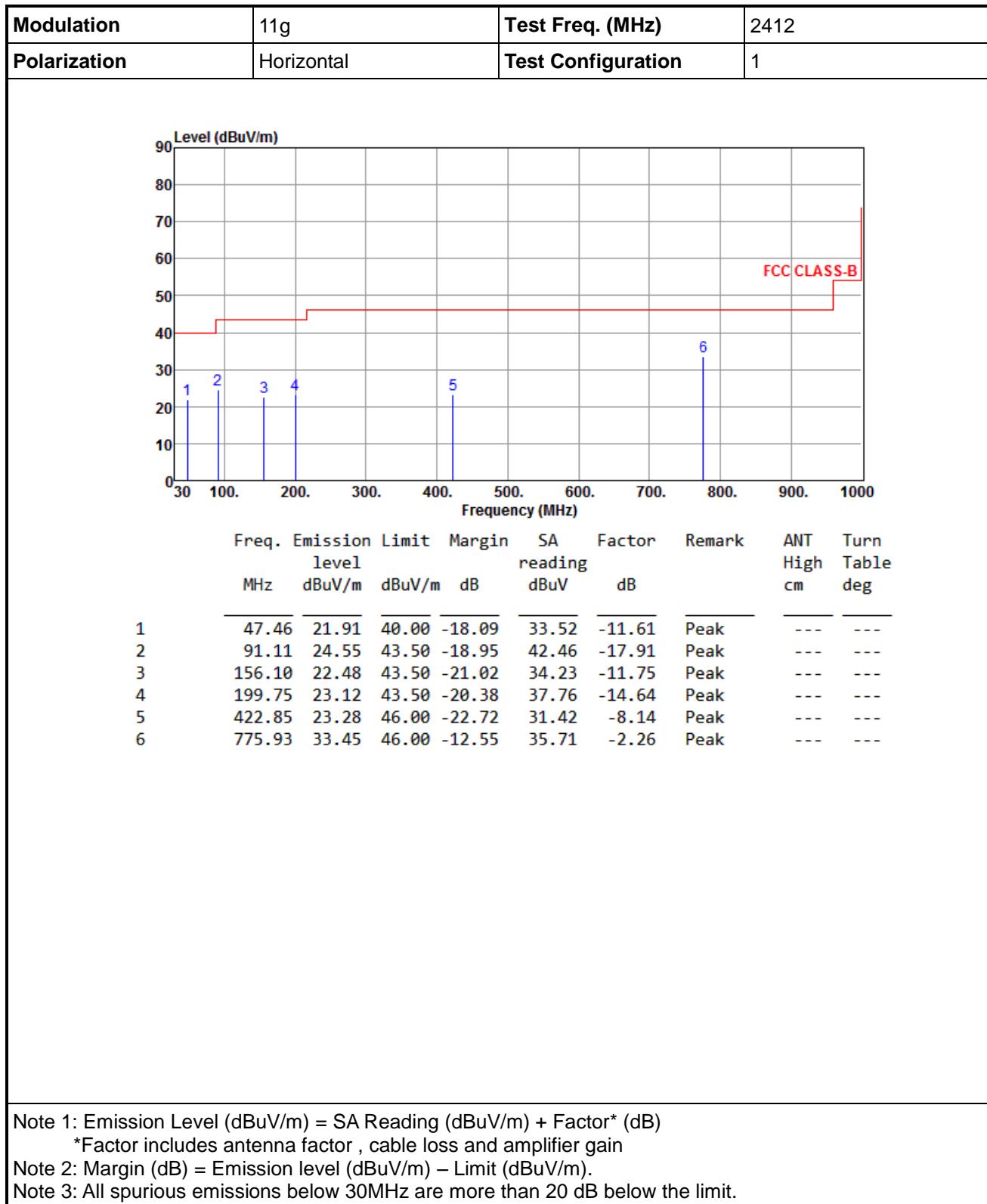
Radiated Emissions below 1 GHz

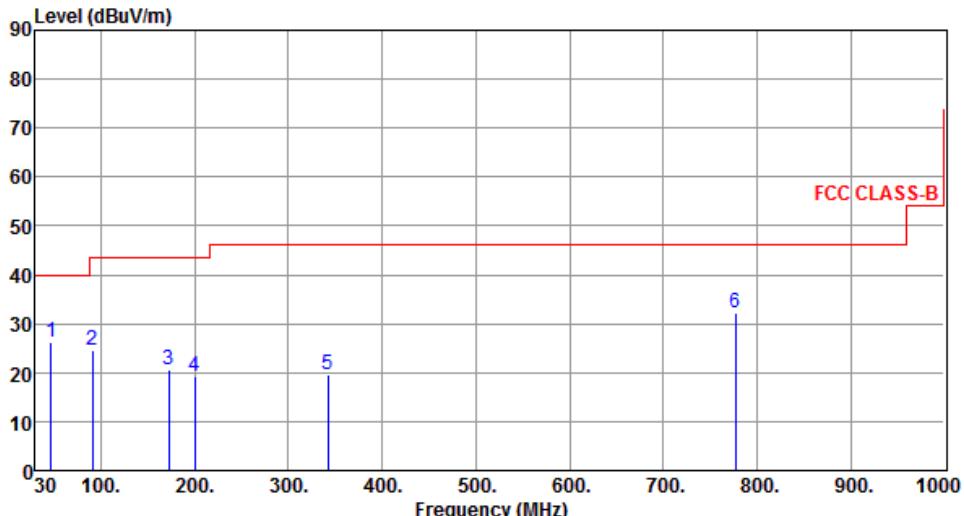


Radiated Emissions above 1 GHz



3.3.4 Transmitter Radiated Unwanted Emissions (Below 1GHz) _Adapter mode



| Modulation | 11g | Test Freq. (MHz) | 2412 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|-----------------------------|-----------------|-------------------|-----------------------|--------------|--------|-------------------|----------------------|---|-------|-------|-------|--------|-------|--------|------|-----|-----|---|-------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|-------|------|-----|-----|
| Polarization | Vertical | Test Configuration | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <table border="1"> <thead> <tr> <th></th> <th>Freq. MHz</th> <th>Emission level dBuV/m</th> <th>Limit dBuV/m</th> <th>Margin dB</th> <th>SA reading dBuV</th> <th>Factor dB</th> <th>Remark</th> <th>ANT High cm</th> <th>Turn Table deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>46.49</td> <td>26.20</td> <td>40.00</td> <td>-13.80</td> <td>37.80</td> <td>-11.60</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>2</td> <td>91.11</td> <td>24.58</td> <td>43.50</td> <td>-18.92</td> <td>42.49</td> <td>-17.91</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>3</td> <td>172.59</td> <td>20.65</td> <td>43.50</td> <td>-22.85</td> <td>32.92</td> <td>-12.27</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>4</td> <td>199.75</td> <td>19.35</td> <td>43.50</td> <td>-24.15</td> <td>33.99</td> <td>-14.64</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>5</td> <td>342.34</td> <td>19.54</td> <td>46.00</td> <td>-26.46</td> <td>29.71</td> <td>-10.17</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>6</td> <td>776.90</td> <td>32.31</td> <td>46.00</td> <td>-13.69</td> <td>34.56</td> <td>-2.25</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> </tbody> </table> | | | | | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB | Remark | ANT High cm | Turn Table deg | 1 | 46.49 | 26.20 | 40.00 | -13.80 | 37.80 | -11.60 | Peak | --- | --- | 2 | 91.11 | 24.58 | 43.50 | -18.92 | 42.49 | -17.91 | Peak | --- | --- | 3 | 172.59 | 20.65 | 43.50 | -22.85 | 32.92 | -12.27 | Peak | --- | --- | 4 | 199.75 | 19.35 | 43.50 | -24.15 | 33.99 | -14.64 | Peak | --- | --- | 5 | 342.34 | 19.54 | 46.00 | -26.46 | 29.71 | -10.17 | Peak | --- | --- | 6 | 776.90 | 32.31 | 46.00 | -13.69 | 34.56 | -2.25 | Peak | --- | --- |
| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB | Remark | ANT High cm | Turn Table deg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 46.49 | 26.20 | 40.00 | -13.80 | 37.80 | -11.60 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 91.11 | 24.58 | 43.50 | -18.92 | 42.49 | -17.91 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 172.59 | 20.65 | 43.50 | -22.85 | 32.92 | -12.27 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 199.75 | 19.35 | 43.50 | -24.15 | 33.99 | -14.64 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 342.34 | 19.54 | 46.00 | -26.46 | 29.71 | -10.17 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 776.90 | 32.31 | 46.00 | -13.69 | 34.56 | -2.25 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

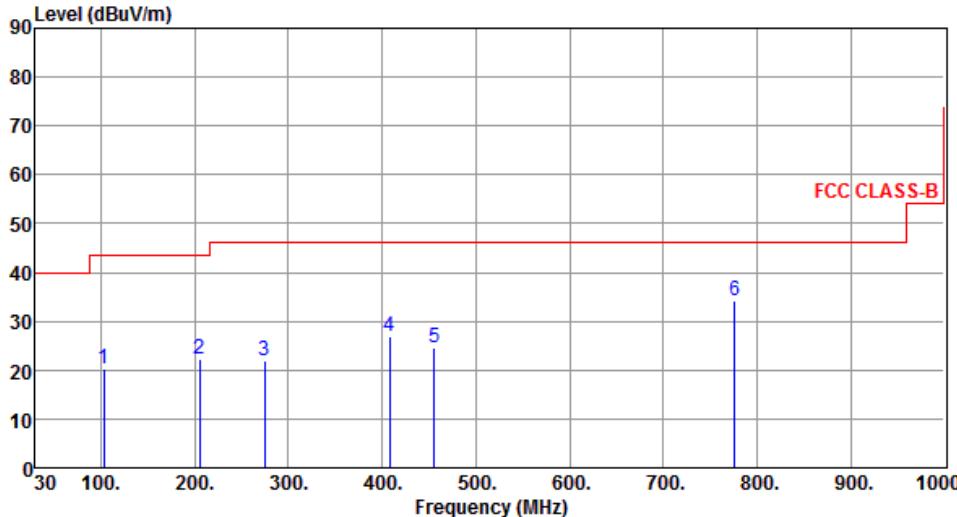
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

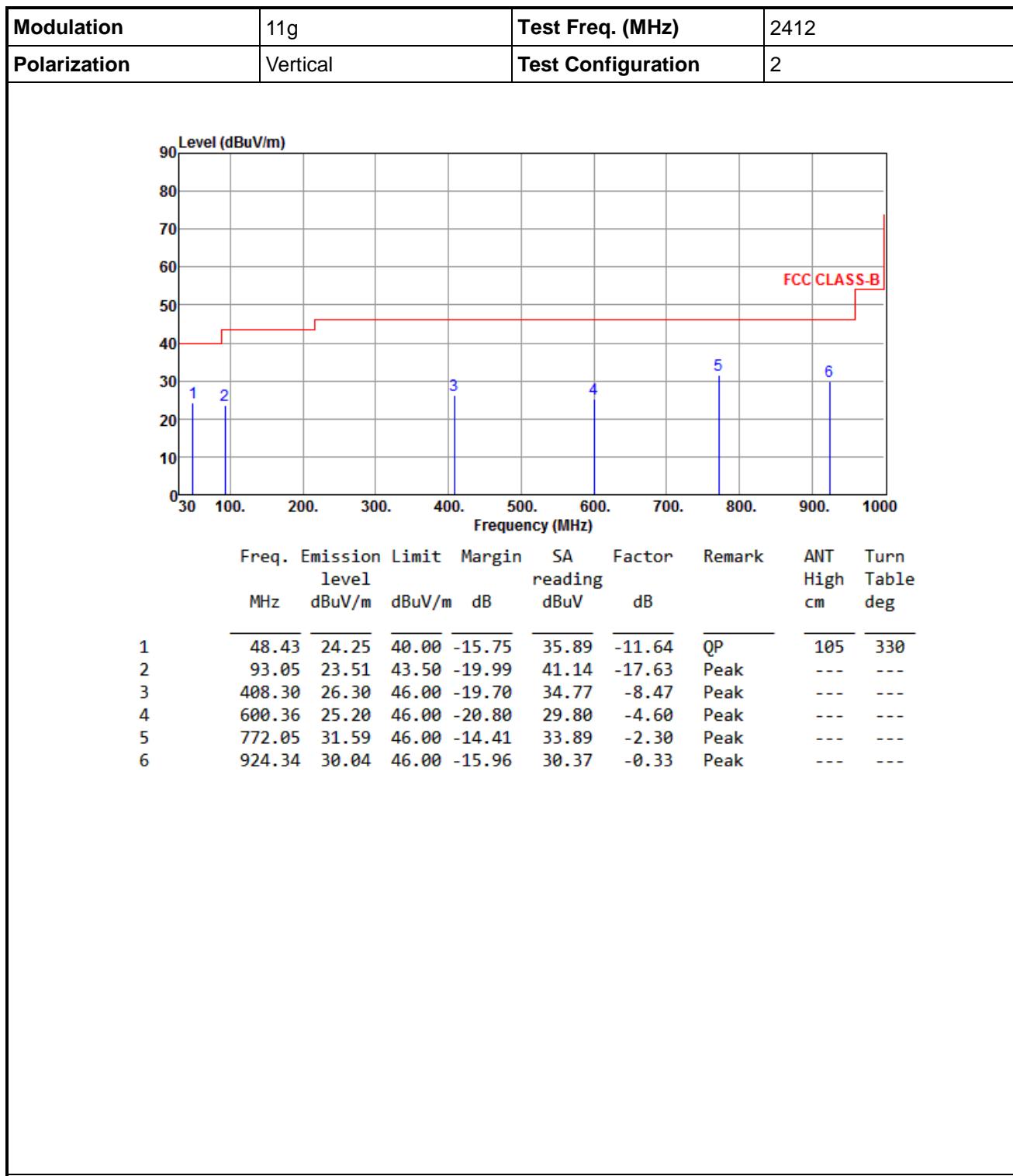
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.3.5 Transmitter Radiated Unwanted Emissions (Below 1GHz) Cradle mode

| Modulation | 11g | Test Freq. (MHz) | 2412 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------|---------------------------|------------|--------|----------------|----------|------------|--------|--------|----------|------------|-----|--------|--------|----|----|--|----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|--------|------|-----|-----|---|--------|-------|-------|--------|-------|-------|------|-----|-----|---|--------|-------|-------|--------|-------|-------|------|-----|-----|---|--------|-------|-------|--------|-------|-------|------|-----|-----|
| Polarization | Horizontal | Test Configuration | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Freq. | Emission level | Margin | SA reading | Factor | Remark | ANT High | Turn Table | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MHz | dBuV/m | dBuV/m | dB | dB | | cm | deg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 102.75 | 20.37 | 43.50 | -23.13 | 36.54 | -16.17 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 205.57 | 22.09 | 43.50 | -21.41 | 36.61 | -14.52 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 274.44 | 21.86 | 46.00 | -24.14 | 33.68 | -11.82 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 408.30 | 26.81 | 46.00 | -19.19 | 35.28 | -8.47 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 455.83 | 24.44 | 46.00 | -21.56 | 31.85 | -7.41 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 775.93 | 34.20 | 46.00 | -11.80 | 36.46 | -2.26 | Peak | --- | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <hr/> <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m). Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



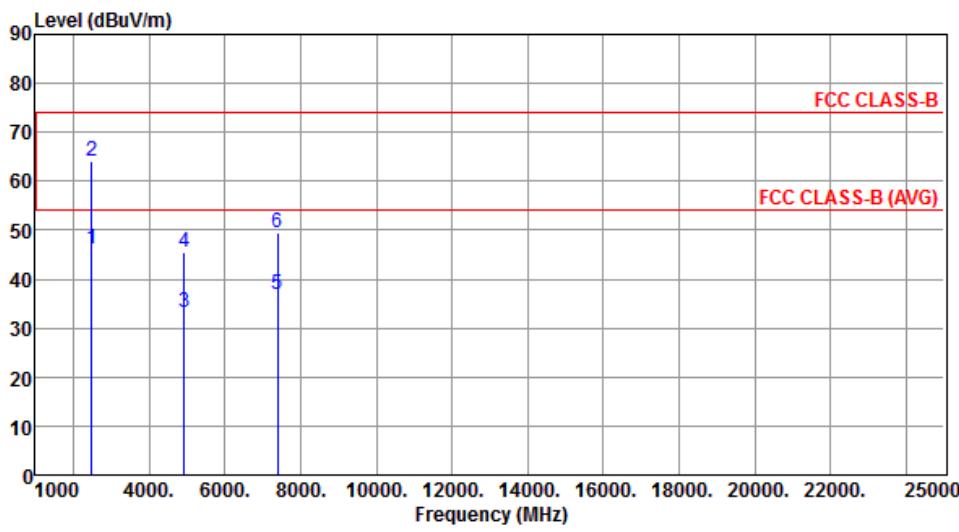
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

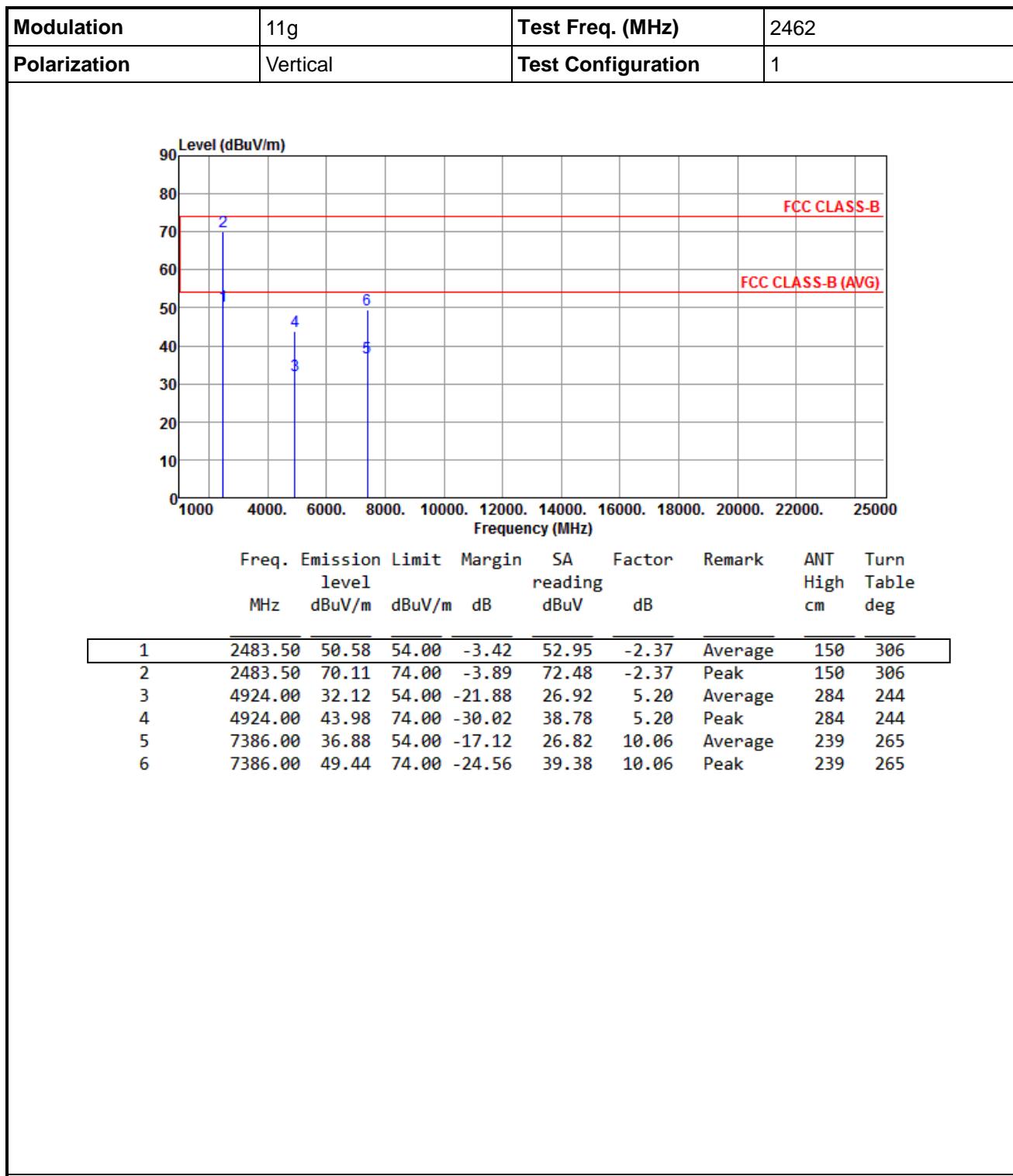
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.3.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

| | | | | | | | | | |
|---|-------------------------------------|---------------------------|-------------------------------|---------------------|---------------|----------------------------|-------------------------------|-----|-----|
| Modulation | 11g | Test Freq. (MHz) | 2462 | | | | | | |
| Polarization | Horizontal | Test Configuration | 1 | | | | | | |
| <hr/> | | | | | | | | | |
|  | | | | | | | | | |
| Freq. MHz | Emission level dBuV/m | Margin dB | SA reading dBuV | Factor dB | Remark | ANT High cm | Turn Table deg | | |
| 1 | 2483.50 | 46.00 | 54.00 | -8.00 | 48.37 | -2.37 | Average | 150 | 287 |
| 2 | 2483.50 | 64.13 | 74.00 | -9.87 | 66.50 | -2.37 | Peak | 150 | 287 |
| 3 | 4924.00 | 33.11 | 54.00 | -20.89 | 27.91 | 5.20 | Average | 260 | 235 |
| 4 | 4924.00 | 45.59 | 74.00 | -28.41 | 40.39 | 5.20 | Peak | 260 | 235 |
| 5 | 7386.00 | 37.00 | 54.00 | -17.00 | 26.94 | 10.06 | Average | 214 | 115 |
| 6 | 7386.00 | 49.42 | 74.00 | -24.58 | 39.36 | 10.06 | Peak | 214 | 115 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
 *Factor includes antenna factor, cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan,
R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==