

FCC Test Report

FCC Part 15 Subpart C §15.247

Product Name : WCDMA mobile phone
Model No. : Elite 4.7 HD
FCC ID : YHLBLUELITE47HD

Prepared By: : Inventec Appliances(Pudong) Corporation
Address: : No.789 Pu Xing Road,Shanghai,PRC
Date of Receipt : 2013.02.20
Date of Test : 2013.02.20-2013.03.04
Report No. : 20130220FCC-C



Test Report Certification


Date of Issue : Mar.07.2013

Report No. : 20130220FCC-C

Product Name : WCDMA mobile phone
Model No. : Elite 4.7 HD
Trade Name : BLU
Applicant : CT Asia (HK) Ltd
Address : Unit 1309-11, 13/F, 9 Wing Hong Street, Cheung Sha Wan, Kowloon,
Hong Kong
Standard : FCC Part 15 Subpart C §15.247
Classification : WiFi: Digital Transmission Systems (DTS)
TX/RX Frequency Range : WLAN 802.11b/g/n (2400 MHz ~ 2483.5 MHz)
Test Result : Complied

The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of
IAC regulatory Laboratory

Documented By :  , Mar.07.2013
Judy Ge/Engineer

Tested By :  , Mar.07.2013
Alice Lee/Engineer

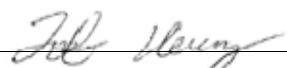
Approved By :  , Mar.07.2013
Jeff Huang/Director of Operations

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SUMMARY OF TEST RESULT

| Report Section | FCC Rule | IC Rule | Description | Limit | Result | Remark |
|----------------|-----------------------|-----------|--------------------------|--|--------|--------|
| 3.1 | 15.247(a)(2) | A8.2(a) | 6dB Bandwidth | $\geq 0.5\text{MHz}$ | Pass | - |
| 3.1 | - | Gen 4.4.1 | 99% Bandwidth | - | Pass | - |
| 3.2 | 15.247(b) | A8.4 | Output Power Measurement | $\leq 30\text{dBm}$ | Pass | - |
| 3.3 | 15.247(d) | A8.5 | Frequency Band Edges | $\leq 20\text{dBc}$ | Pass | - |
| 3.4 | 15.247(d) | A8.5 | Spurious Emission | $< 20\text{ dBc}$ | Pass | - |
| 3.5 | 15.247(e) | A8.2(b) | Power Spectral Density | $\leq 8\text{dBm}$ | Pass | - |
| 3.6 | 15.207 | Gen 7.2.2 | AC Conducted Emission | Section 15.207(a) | Pass | - |
| 3.7 | 15.247(d) | A8.5 | Radiated Emission | FCC 47 CFR Part 15 Subpart C/ Section 15.209(a) & 15.247(d) | Pass | - |
| 3.8 | 15.203 & 15.247(b) | A8.4 | Antenna Requirement | N/A | Pass | - |

1. GENERAL INFORMATION**1.1 Applicant**

Company Name: CT Asia (HK) Ltd

Address: Unit 1309-11, 13/F, 9 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

1.2 Manufacturer

Company Name: Cellon Communications Technology(Shenzhen)Co., Ltd.

Address: 13/F, Skyworth Building C Gaoxin S. Ave. 1st, High-Tech industrial Park NanShan,
ShenZhen

1.3 Feature of Equipment Under Test

| Product Feature & Specification | |
|-----------------------------------|---|
| Equipment | WCDMA mobile phone |
| Brand Name | BLU |
| Model Name | Elite 4.7 HD |
| FCC ID | YHLBLUELITE47HD |
| Tx/Rx Frequency Range | WLAN 802.11b/g/n (2400 MHz ~ 2483.5 MHz) |
| Number of Channels | 802.11b/g/n: CH01 CH06 CH11 |
| Carrier Frequency of Each Channel | 802.11b/g/n: 2412MHz 2437MHz 2462MHz |
| Channel Spacing | 802.11b/g/n: 5MHz |
| Maximum Output Power to Antenna | 802.11b: 16.81 (dBm) 802.11g: 14.49 (dBm) 802.11n: 14.45 (dBm) |
| Antenna Type | Fixed Internal Antenna |
| HW Version | P3 |
| SW Version | BLU_E800_V14_GENERIC |
| Type of Modulation | 802.11 b type of modulation: DSSS 802.11 g type of modulation: OFDM 802.11 n type of modulation: OFDM |

Remark:

1. For other wireless features of this EUT, test report will be issued separately.
2. This test report recorded only product characteristics and test results Digital Transmission Systems (DTS).
3. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description

1.4 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 DTS Measurement Guidance v03.
- ANSI C63.4-2003

Remark:

- 1 All test items were verified and recorded according to the standards and without any deviation during the test.
- 2 This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2. Test Configuration of Equipment Under Test

2.1 RF Power

Preliminary tests were performed in different data rate and recorded the RF Output Power in the following table:

| Channel | Frequency | 2.4GHz 802.11b RF Power (dBm) | | | |
|---------|-----------|-------------------------------|--------|----------|---------|
| | | At DSSS Data Rate | | | |
| | | 1 Mbps | 2 Mbps | 5.5 Mbps | 11 Mbps |
| CH 01 | 2412 MHz | 16.41 | 16.37 | 16.40 | 16.11 |
| CH 06 | 2437 MHz | 16.69 | 16.55 | 16.60 | 16.41 |
| CH 11 | 2462 MHz | 16.81 | 16.49 | 16.79 | 16.44 |

| Channel | Frequency | 2.4GHz 802.11g RF Power (dBm) | | | | | | | |
|---------|-----------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | At OFDM Data Rate | | | | | | | |
| | | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 |
| | | Mbps | Mbps | Mbps | Mbps | Mbps | Mbps | Mbps | Mbps |
| CH01 | 2412MHz | 14.01 | 13.98 | 13.87 | 13.55 | 13.33 | 12.96 | 12.48 | 12.43 |
| CH06 | 2437MHz | 14.41 | 14.30 | 14.03 | 13.85 | 13.56 | 13.27 | 12.91 | 12.79 |
| CH11 | 2462MHz | 14.49 | 14.32 | 14.21 | 13.95 | 13.74 | 13.33 | 12.95 | 12.83 |

| Channel | Frequency | 2.4GHz 802.11n RF Power (dBm) | | | | | | | |
|---------|-----------|-------------------------------|--------|----------|--------|--------|--------|----------|--------|
| | | At OFDM Data Rate | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
| | | 6.5Mbps | 13Mbps | 19.5Mbps | 26Mbps | 39Mbps | 52Mbps | 58.5Mbps | 65Mbps |
| CH01 | 2412MHz | 13.93 | 13.55 | 13.43 | 13.23 | 12.59 | 12.49 | 12.36 | 12.25 |
| CH06 | 2437MHz | 14.31 | 13.99 | 13.80 | 13.56 | 13.11 | 12.86 | 12.68 | 12.58 |
| CH11 | 2462MHz | 14.45 | 14.01 | 13.84 | 13.60 | 13.14 | 12.92 | 12.87 | 12.67 |

Remark:

The EUT is programmed to transmit signal continuously for all testing.

2.2 Test Modes

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz), radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Pre-scanned tests were conducted to determine the final configuration from all possible combinations.

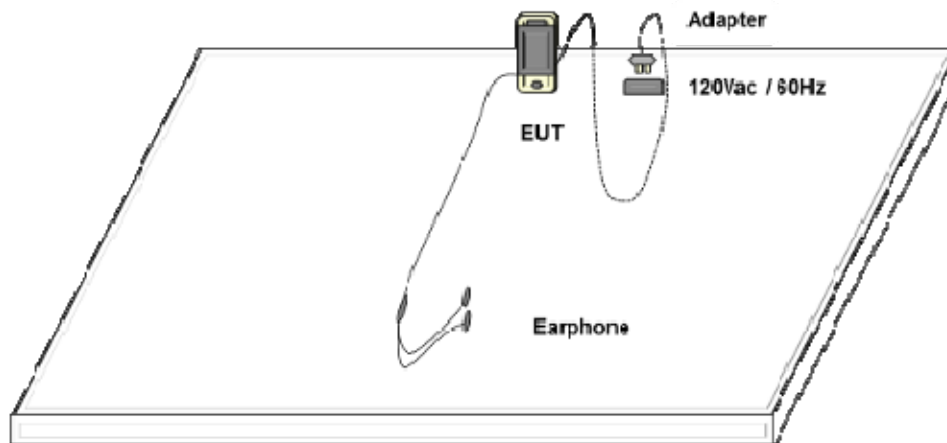
The following tables are showing the test modes as the worst cases and recorded in this report.

| Test Item | 802.11b (Modulation : DSSS) | 802.11g (Modulation : OFDM) | 802.11n (Modulation : OFDM) |
|---------------|--------------------------------|--------------------------------|--------------------------------|
| Conducted TCs | Mode 1: 802.11b_CH01_2412 MHz | Mode 4: 802.11g_CH01_2412 MHz | Mode 7: 802.11n_CH01_2412 MHz |
| | Mode 2: 802.11b_CH06_2437 MHz | Mode 5: 802.11g_CH06_2437 MHz | Mode 8: 802.11n_CH06_2437 MHz |
| | Mode 3: 802.11b_CH11_2462 MHz | Mode 6: 802.11g_CH11_2462 MHz | Mode 9: 802.11n_CH11_2462 MHz |

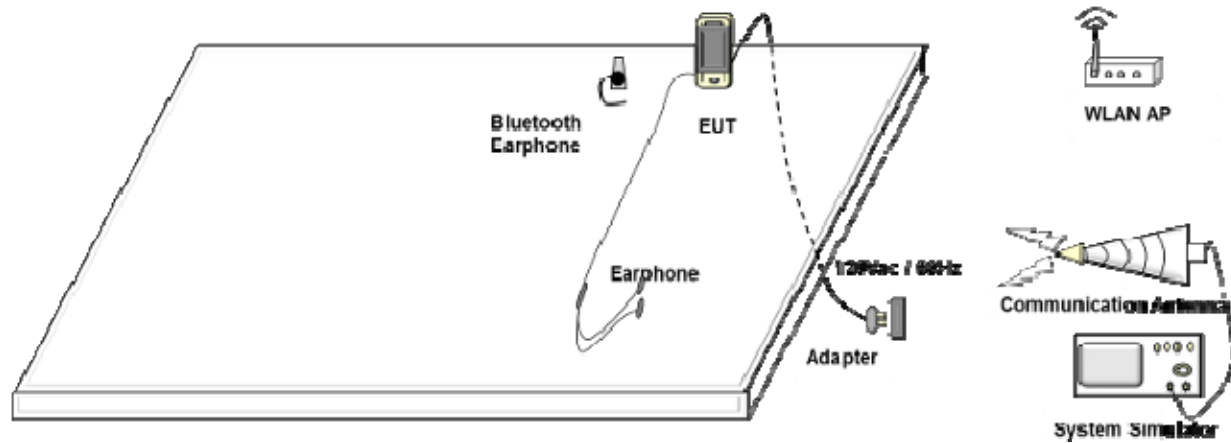
| Test Cases | | | |
|-----------------------------|--|--|--|
| Radiated TCs | Mode 1: 802.11b_CH01_ 2412 MHz + Battery | Mode 4 : 802.11g_CH01_ 2412 MHz + Battery | Mode 7 : 802.11n_CH01_ 2412 MHz + Battery |
| | Mode 2: 802.11b_CH06_ 2437 MHz + Battery | Mode 5 : 802.11g_CH06_ 2437 MHz + Battery | Mode 8 : 802.11n_CH06_ 2437 MHz + Battery |
| | Mode 3: 802.11b_CH11_ 2462 MHz + Battery | Mode 6 : 802.11g_CH11_ 2462 MHz + Battery | Mode 9 : 802.11n_CH11_ 2462 MHz + Battery |
| AC Conducted Emission | Mode 1 : GSM 850 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone + Adapter+ Battery + GPS RX Mode 2: GSM 1900 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone+ Adapter+ Battery + GPS RX Mode 3: WCDMA Band II Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone +Earphone+ Adapter+ Battery + GPS RX Mode 4: WCDMA Band V Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone +Earphone+ Adapter+ Battery + GPS RX | | |

2.3 Connection Diagram of Test System

Radiation Test



Conduction Test



3. Test Results

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

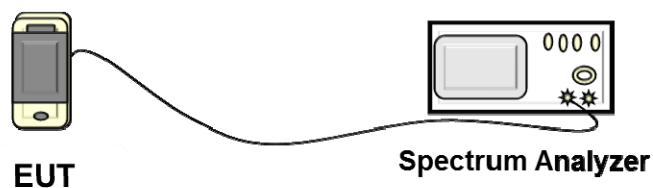
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Measurement Guidance v03.
2. Set resolution bandwidth (RBW) = 100kHz.
3. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.1.4 Test Setup

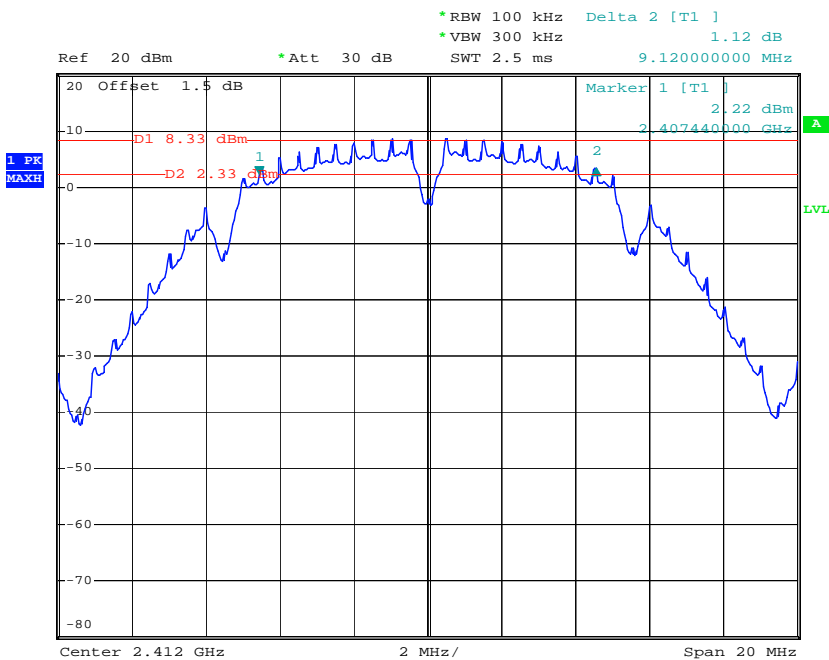


3.1.5 Test Result of 6dB Bandwidth

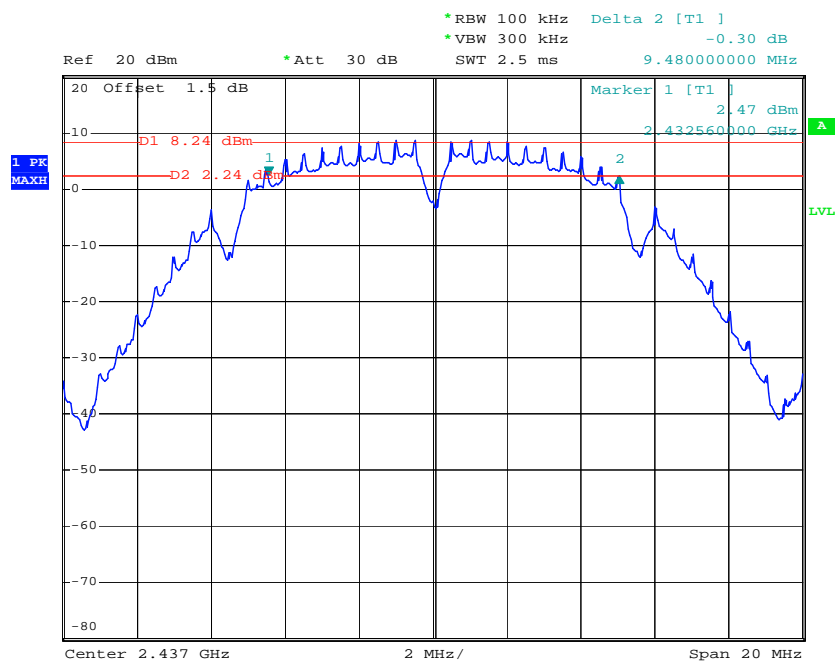
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 1, 2, 3 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11b 6dB Bandwidth (MHz) | 6dB Bandwidth Min. Limit (MHz) | Pass/Fail |
|---------|-----------------|-----------------------------|--------------------------------|-----------|
| 01 | 2412 | 9.12 | 0.5 | Pass |
| 06 | 2437 | 9.48 | 0.5 | Pass |
| 11 | 2462 | 9.56 | 0.5 | Pass |

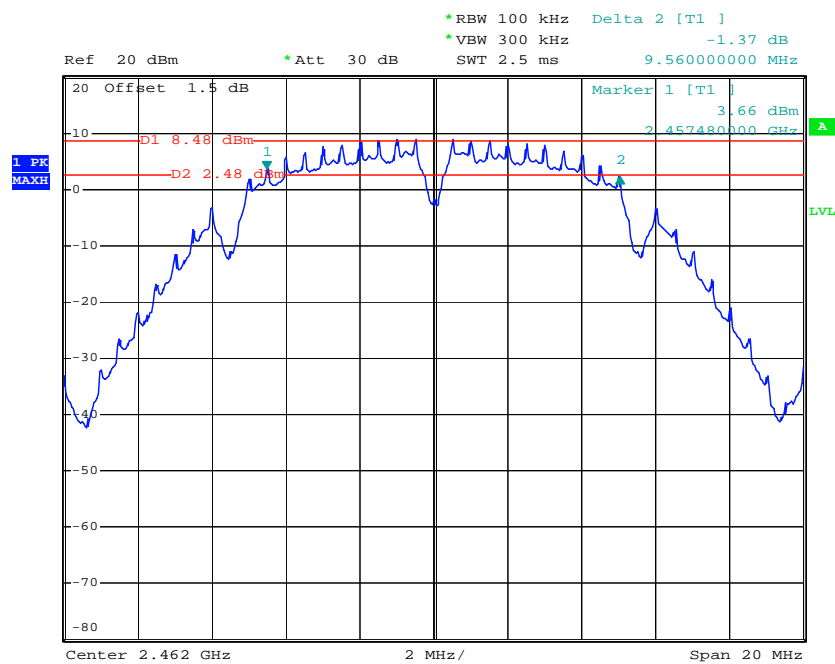
Mode 1 : 6 dB Bandwidth Plot on 802.11b Channel 01



Mode 2 : 6 dB Bandwidth Plot on 802.11b Channel 06



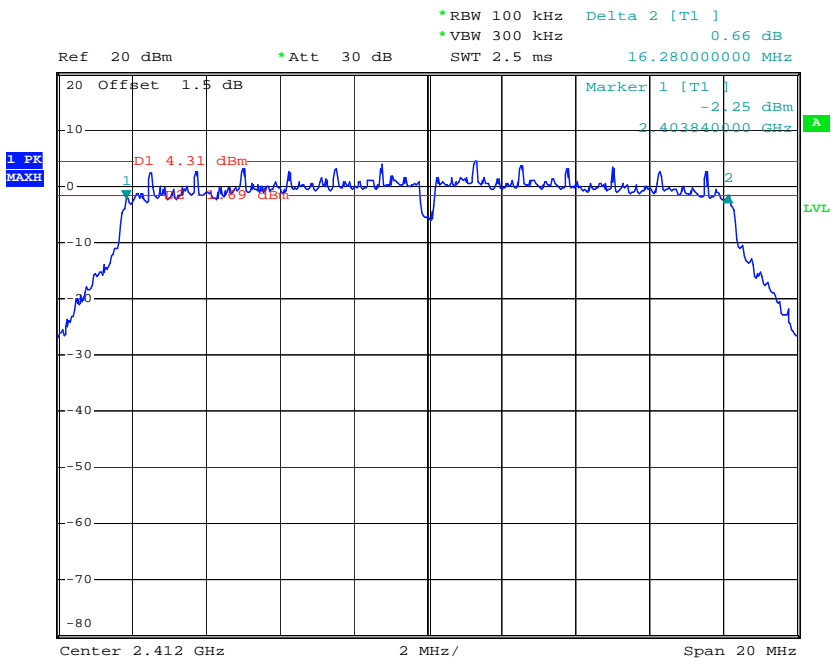
Mode 3 : 6 dB Bandwidth Plot on 802.11b Channel 11



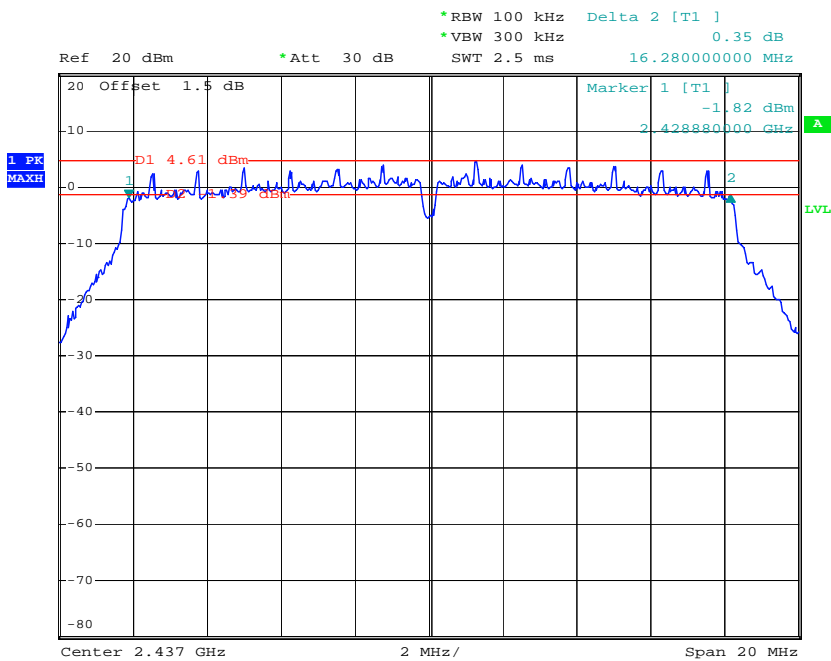
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 4, 5, 6 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11g 6dB Bandwidth (MHz) | 6dB Bandwidth Min. Limit (MHz) | Pass/Fail |
|---------|-----------------|-----------------------------|--------------------------------|-----------|
| 01 | 2412 | 16.28 | 0.5 | Pass |
| 06 | 2437 | 16.28 | 0.5 | Pass |
| 11 | 2462 | 16.32 | 0.5 | Pass |

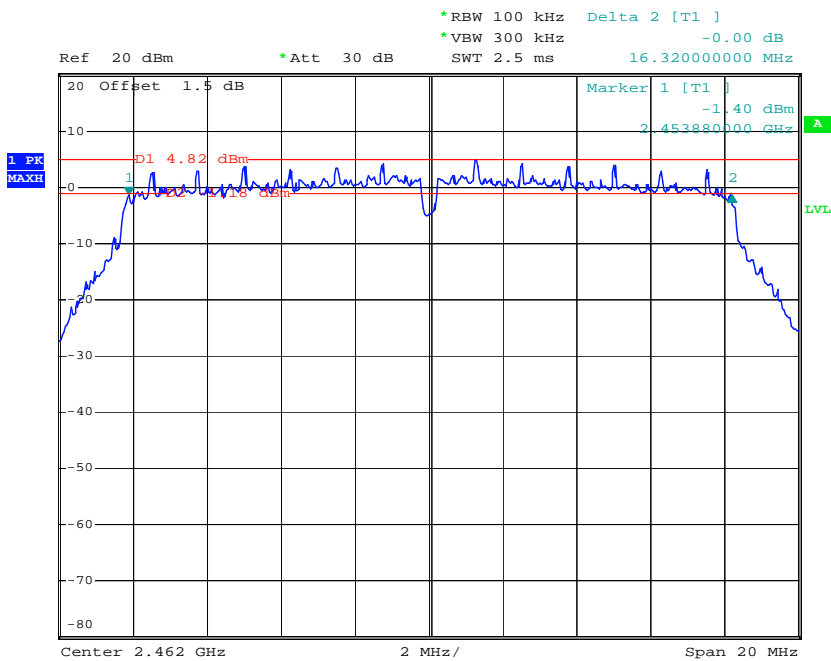
Mode 4 : 6 dB Bandwidth Plot on 802.11g Channel 01



Mode 5 : 6 dB Bandwidth Plot on 802.11g Channel 06



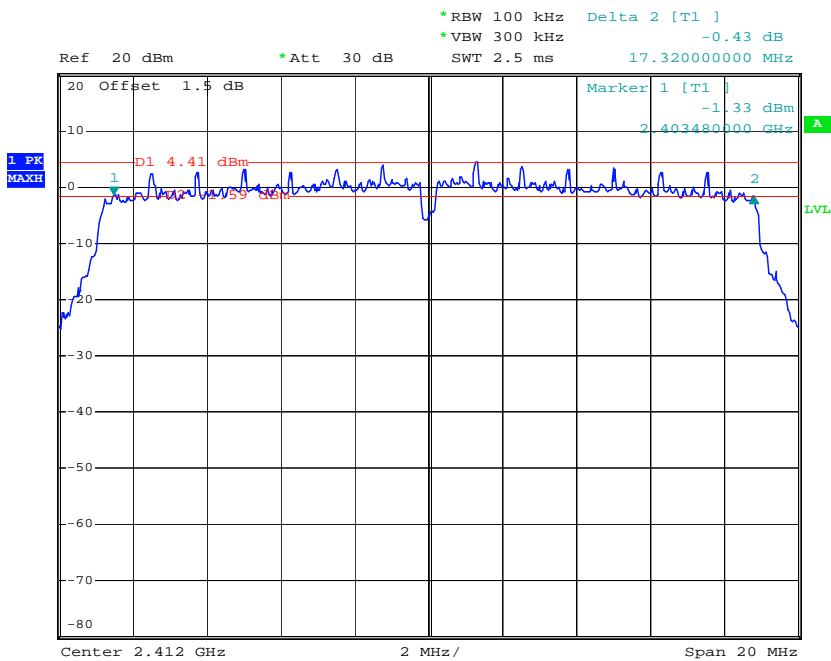
Mode 6 : 6 dB Bandwidth Plot on 802.11g Channel 11



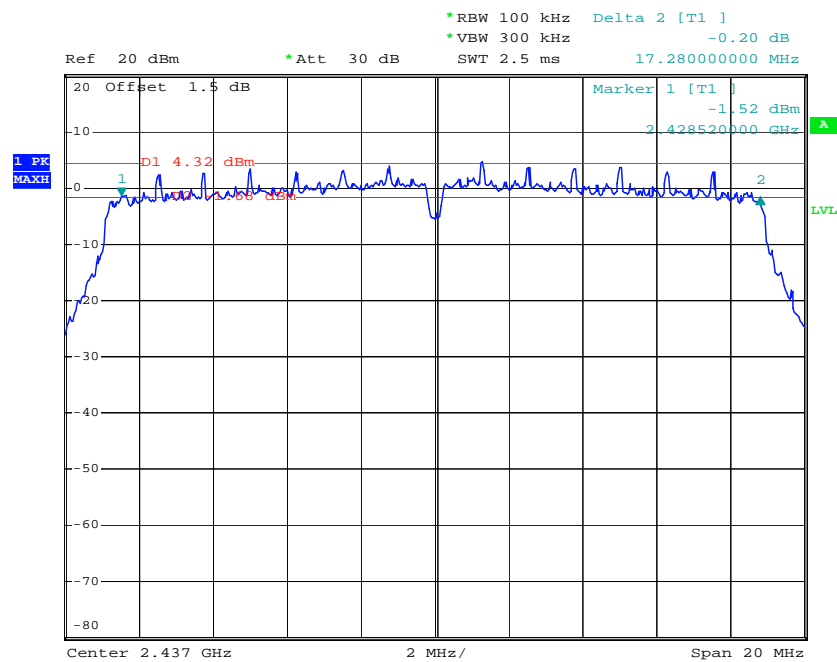
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 7, 8, 9 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11n 6dB Bandwidth (MHz) | 6dB Bandwidth Min. Limit (MHz) | Pass/Fail |
|---------|-----------------|-----------------------------|--------------------------------|-----------|
| 01 | 2412 | 17.32 | 0.5 | Pass |
| 06 | 2437 | 17.28 | 0.5 | Pass |
| 11 | 2462 | 17.56 | 0.5 | Pass |

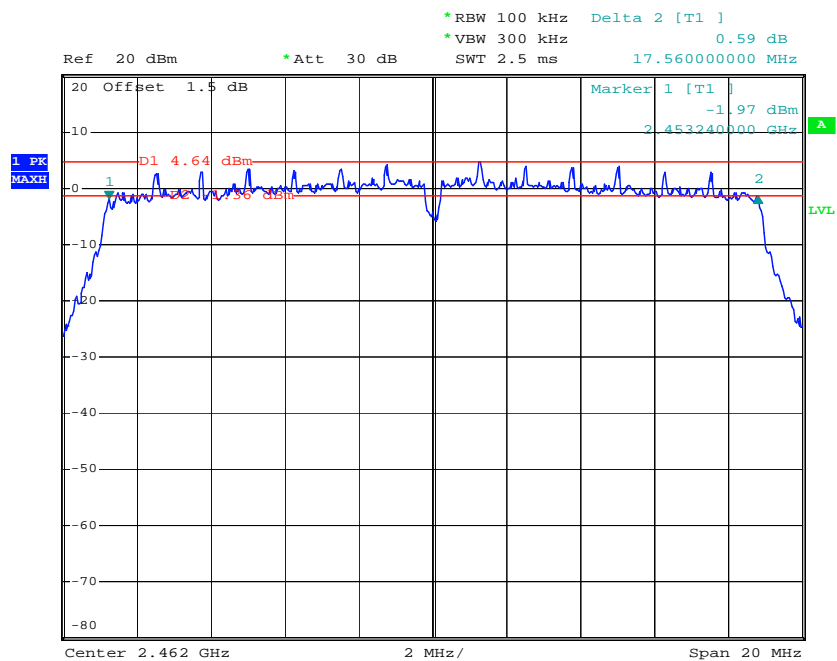
Mode 7 : 6 dB Bandwidth Plot on 802.11n Channel 01



Mode 8 : 6 dB Bandwidth Plot on 802.11n Channel 06



Mode 9 : 6 dB Bandwidth Plot on 802.11n Channel 11

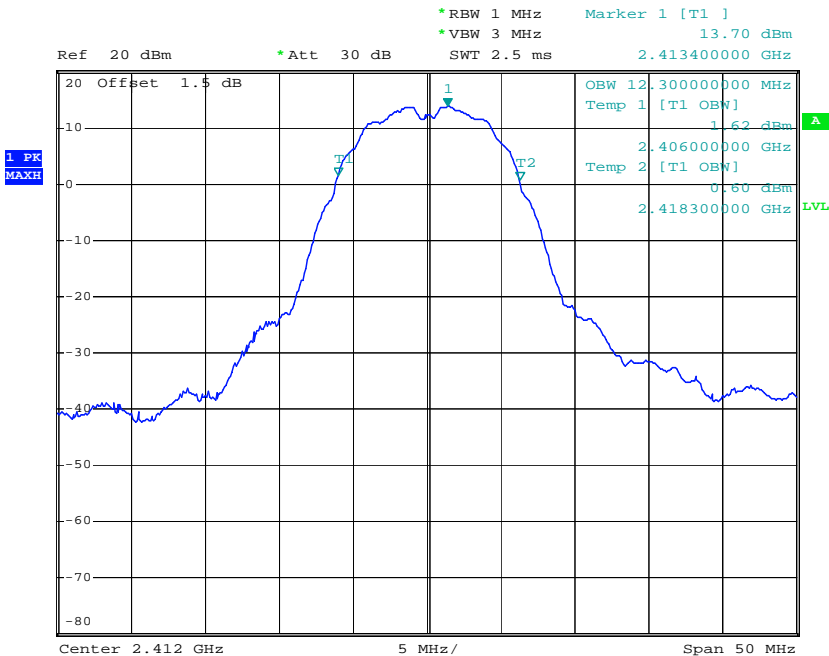


3.1.6 Test Result of 99% Occupied Bandwidth

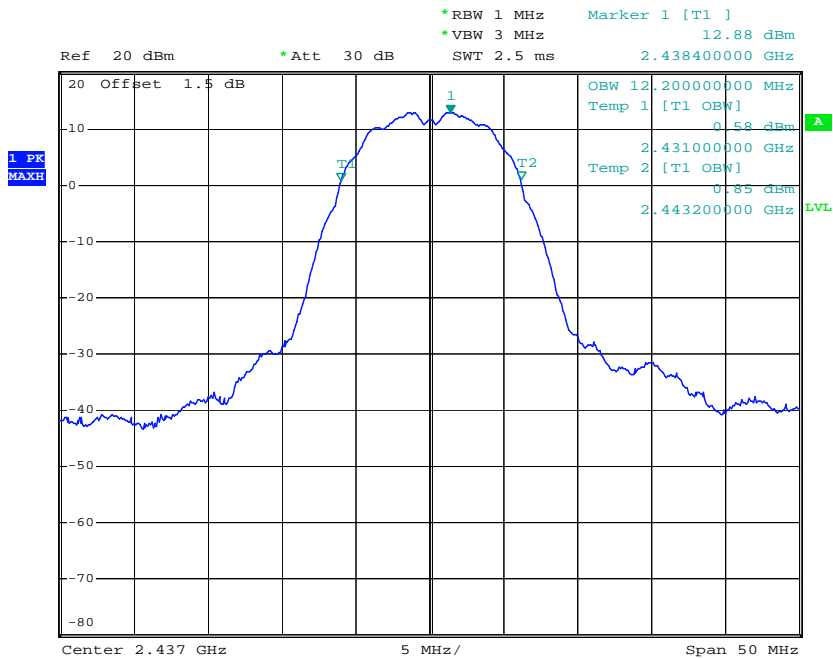
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 1, 2, 3 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11b 99% Occupied Bandwidth (MHz) | Pass/Fail |
|---------|-----------------|---|-----------|
| 01 | 2412 | 12.30 | Pass |
| 06 | 2437 | 12.20 | Pass |
| 11 | 2462 | 12.20 | Pass |

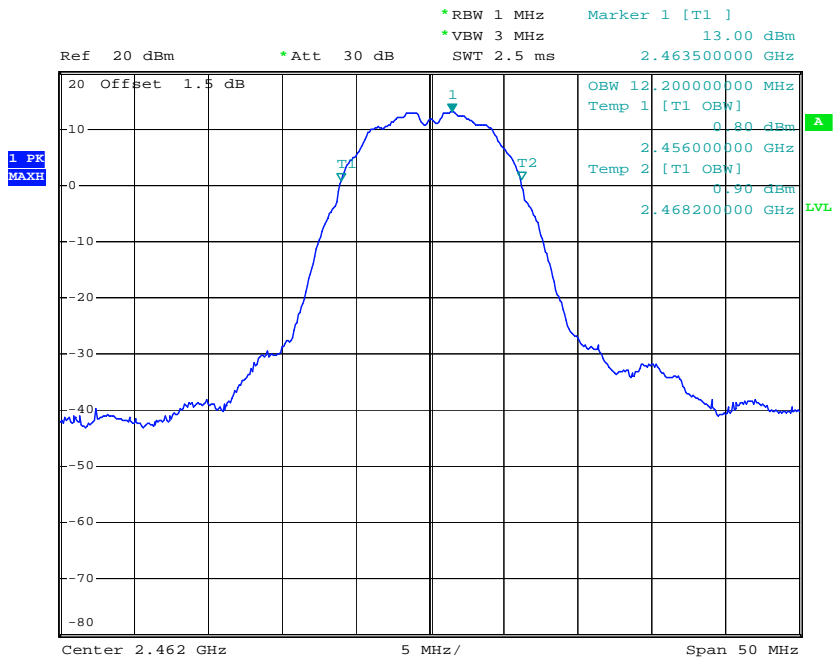
Mode 1 : 99% Occupied Bandwidth Plot on 802.11b Channel 01



Mode 2 : 99% Occupied Bandwidth Plot on 802.11b Channel 06



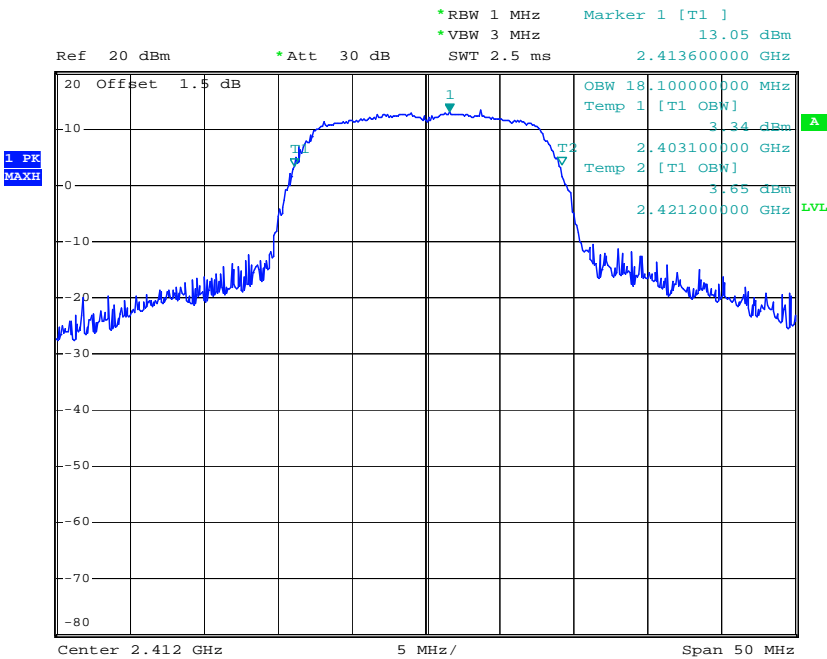
Mode 3 : 99% Occupied Bandwidth Plot on 802.11b Channel 11



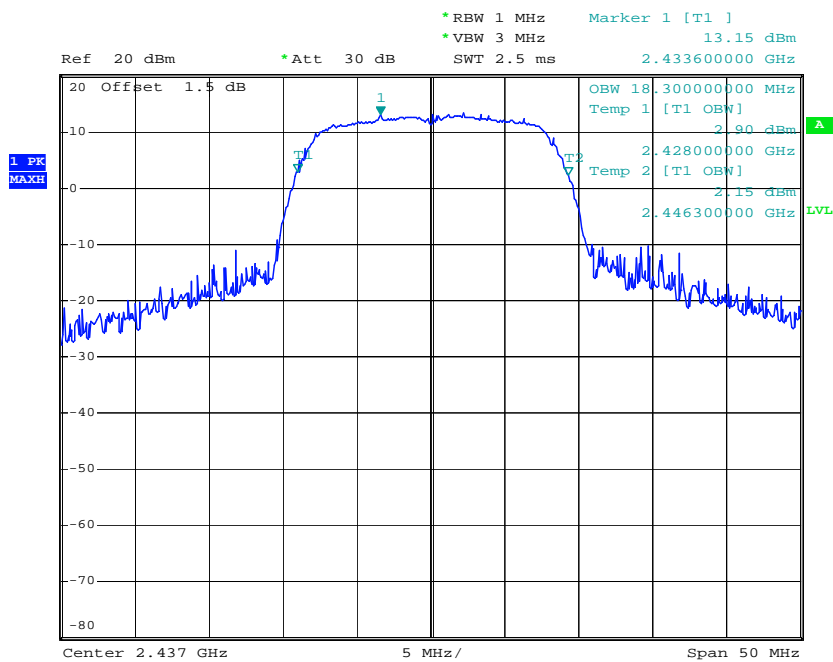
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 4, 5, 6 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11g 99% Occupied Bandwidth (MHz) | Pass/Fail |
|---------|-----------------|---|-----------|
| 01 | 2412 | 18.10 | Pass |
| 06 | 2437 | 18.30 | Pass |
| 11 | 2462 | 18.30 | Pass |

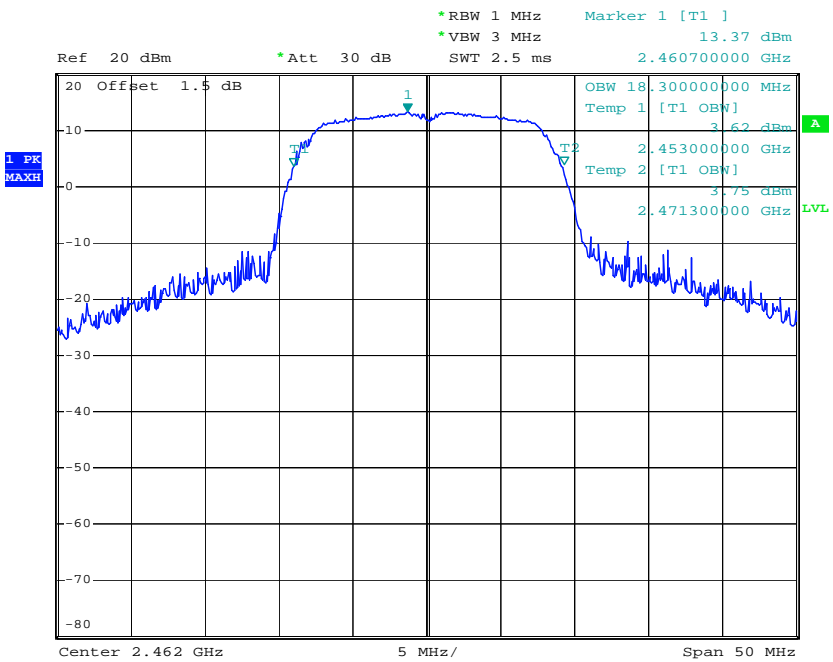
Mode 4 : 99% Occupied Bandwidth Plot on 802.11g Channel 01



Mode 5 : 99% Occupied Bandwidth Plot on 802.11g Channel 06



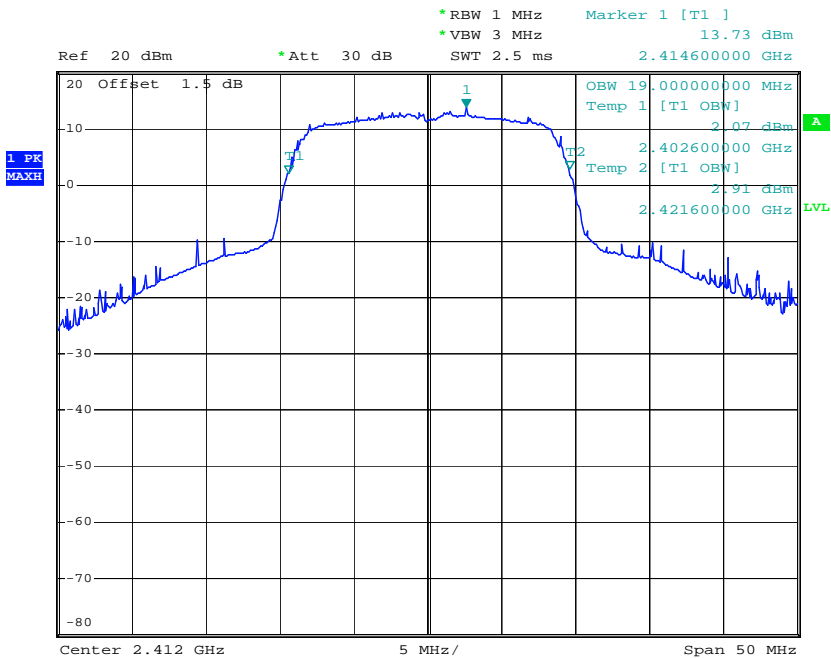
Mode 6 : 99% Occupied Bandwidth Plot on 802.11g Channel 11



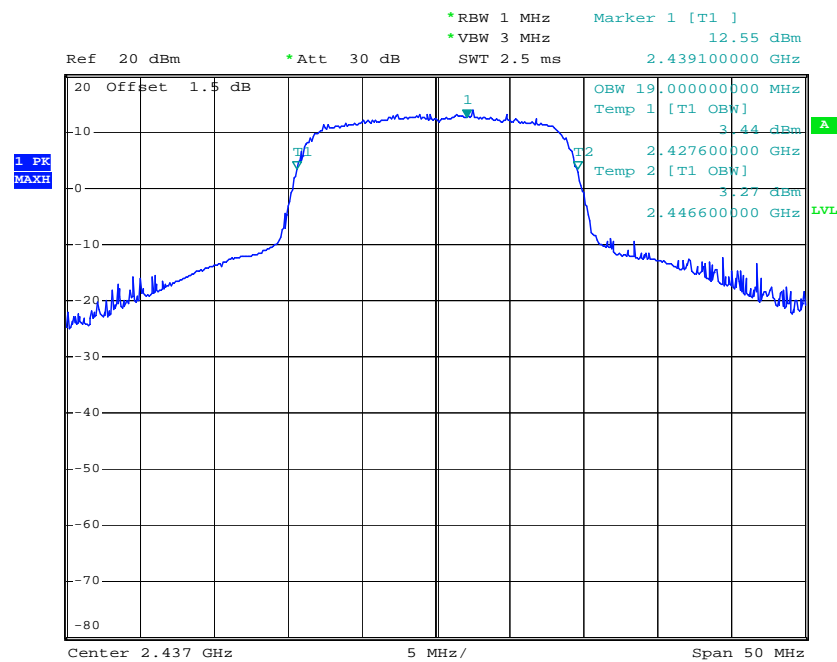
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 7, 8, 9 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11n 99% Occupied Bandwidth (MHz) | Pass/Fail |
|---------|-----------------|---|-----------|
| 01 | 2412 | 19.00 | Pass |
| 06 | 2437 | 19.00 | Pass |
| 11 | 2462 | 18.90 | Pass |

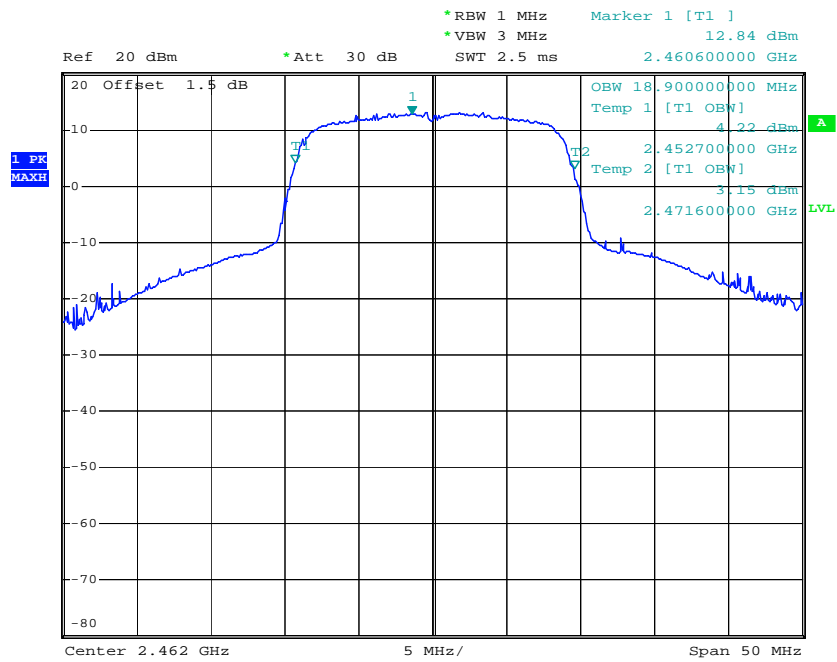
Mode 7 : 99% Occupied Bandwidth Plot on 802.11n Channel 01



Mode 8 : 99% Occupied Bandwidth Plot on 802.11n Channel 06



Mode 9 : 99% Occupied Bandwidth Plot on 802.11n Channel 11



3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz and 5725-5850MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi are used the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

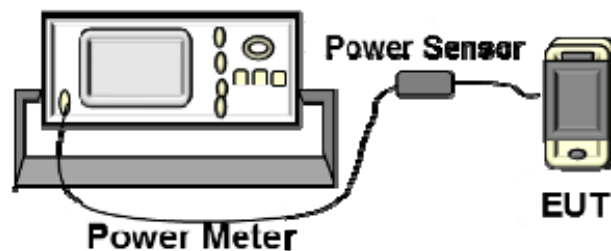
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03.
2. The RF output of EUT was connected to the power meter by RF cable. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power by power meter with peak power sensor and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Output Power

| Channel | Frequency (MHz) | 802.11b Measured Output Power (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|--|-------------------|-----------|
| 01 | 2412 | 16.41 | 30 | Pass |
| 06 | 2437 | 16.69 | 30 | Pass |
| 11 | 2462 | 16.81 | 30 | Pass |

| Channel | Frequency (MHz) | 802.11g Measured Output Power (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|--|-------------------|-----------|
| 01 | 2412 | 14.01 | 30 | Pass |
| 06 | 2437 | 14.41 | 30 | Pass |
| 11 | 2462 | 14.49 | 30 | Pass |

| Channel | Frequency (MHz) | 802.11n Measured Output Power (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|--|-------------------|-----------|
| 01 | 2412 | 13.93 | 30 | Pass |
| 06 | 2437 | 14.31 | 30 | Pass |
| 11 | 2462 | 14.45 | 30 | Pass |

3.3 Band Edges Measurement

3.3.1 Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. If the output power of this device was measured by power meter, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

3.3.2 Measuring Instruments

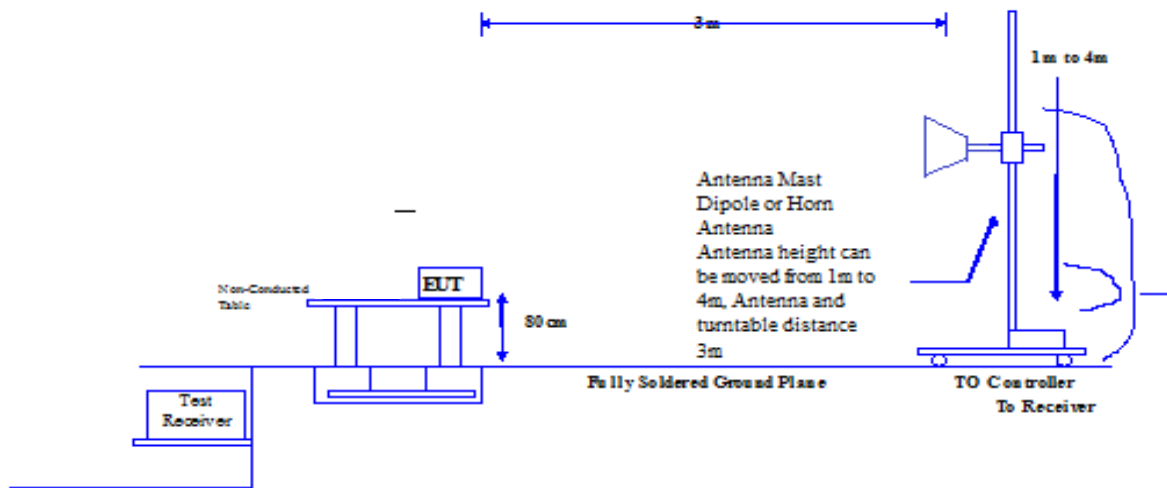
See list of measuring instruments of this test report.

3.3.3 Test Procedures

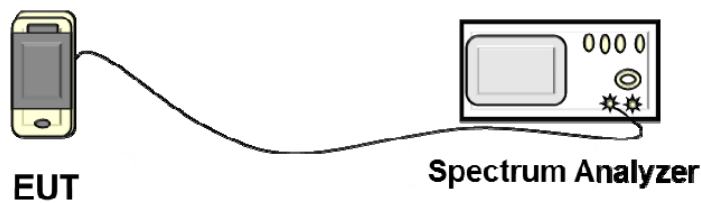
1. The testing follows the guidelines in ANSI C63.4-2003 and FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03.
2. Conducted emission test: Set RBW = 100 KHz, VBW=300 KHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz, when maximum peak conducted output power procedure is used. The attenuation is set to 30dB, when maximum conducted output power procedure is used.
3. §15.247(d) specifies that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20dB relative to the maximum measured in-band peak PSD level.
4. Radiated emission test: Apply to band edge emissions that fall in the restricted bands listed in FCC Section 15.205. The maximum permitted average field strength is listed in FCC Section 15.209. A pre-amp is necessary for this measurement. For measurements peak radiated emission above 1 GHz, set RBW = 1MHz, VBW = 1MHz, Sweep=Auto. For measurements average radiated emission above 1 GHz, set RBW = 1MHz, VBW = 10Hz, Sweep=Auto. If the emission is pulsed, modify the unit for continuous operation; use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation as in FCC Section 15.35(b) and (c)

3.3.4 Test Setup

Radiated Band Edges



Conducted Band Edges



3.3.5 Test Result of Radiated Band Edges

| | |
|---------------------|---------|
| Test Band : | 802.11b |
| Test Channel | 01 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.39(802.11b) | 66.87 | -7.13 | 74 | 56.38 | 27.5 | 6.99 | 24 | Peak | Vertical |
| 2.39(802.11b) | 48.01 | -5.99 | 54 | 37.52 | 27.5 | 6.99 | 24 | Average | Vertical |
| 2.39(802.11b) | 63.94 | -10.06 | 74 | 53.45 | 27.5 | 6.99 | 24 | Peak | Horizontal |
| 2.39(802.11b) | 46.93 | -7.07 | 54 | 36.44 | 27.5 | 6.99 | 24 | Average | Horizontal |

| | |
|---------------------|---------|
| Test Band : | 802.11b |
| Test Channel | 11 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.4835(802.11b) | 62.51 | -11.49 | 74 | 51.23 | 27.6 | 7.68 | 24 | Peak | Vertical |
| 2.4835(802.11b) | 43.63 | -10.37 | 54 | 32.35 | 27.6 | 7.68 | 24 | Average | Vertical |
| 2.4835(802.11b) | 63.43 | -10.57 | 74 | 52.15 | 27.6 | 7.68 | 24 | Peak | Horizontal |
| 2.4835(802.11b) | 40.73 | -13.27 | 54 | 29.45 | 27.6 | 7.68 | 24 | Average | Horizontal |

| | |
|---------------------|---------|
| Test Band : | 802.11g |
| Test Channel | 01 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.3875(802.11g) | 64.77 | -9.23 | 74 | 54.28 | 27.5 | 6.99 | 24 | Peak | Vertical |
| 2.3879(802.11g) | 47.03 | -6.97 | 54 | 36.54 | 27.5 | 6.99 | 24 | Average | Vertical |
| 2.3872(802.11g) | 63.59 | -10.41 | 74 | 53.1 | 27.5 | 6.99 | 24 | Peak | Horizontal |
| 2.3874(802.11g) | 43.73 | -10.27 | 54 | 33.24 | 27.5 | 6.99 | 24 | Average | Horizontal |

| | |
|---------------------|---------|
| Test Band : | 802.11g |
| Test Channel | 11 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.4835(802.11g) | 60.67 | -13.33 | 74 | 49.39 | 27.6 | 7.68 | 24 | Peak | Vertical |
| 2.4836(802.11g) | 43.92 | -10.08 | 54 | 32.64 | 27.6 | 7.68 | 24 | Average | Vertical |
| 2.4838(802.11g) | 62.75 | -11.25 | 74 | 51.47 | 27.6 | 7.68 | 24 | Peak | Horizontal |
| 2.4838(802.11g) | 43.87 | -10.13 | 54 | 32.59 | 27.6 | 7.68 | 24 | Average | Horizontal |

| | |
|---------------------|---------|
| Test Band : | 802.11n |
| Test Channel | 01 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.3884(802.11n) | 62.03 | -11.97 | 74 | 51.54 | 27.5 | 6.99 | 24 | Peak | Vertical |
| 2.3878(802.11n) | 43.74 | -10.26 | 54 | 33.25 | 27.5 | 6.99 | 24 | Average | Vertical |
| 2.3878(802.11n) | 61.84 | -12.16 | 74 | 51.35 | 27.5 | 6.99 | 24 | Peak | Horizontal |
| 2.3879(802.11n) | 45.95 | -8.05 | 54 | 35.46 | 27.5 | 6.99 | 24 | Average | Horizontal |

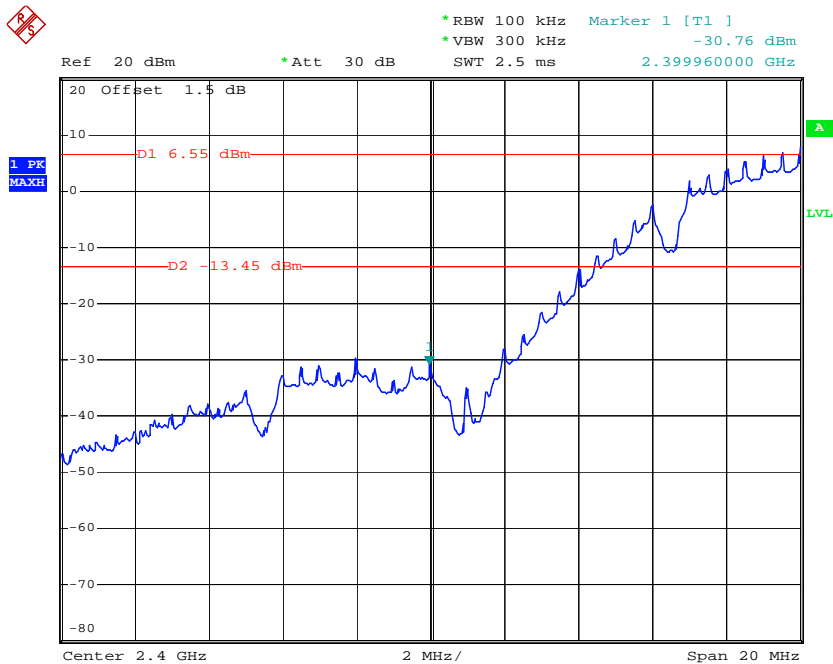
| | |
|---------------------|---------|
| Test Band : | 802.11n |
| Test Channel | 11 |

| Frequency GHz | Level dBuv/m | Over Limit dB | Limit Line dBuv/m | Read Level dBuv | Antenna Factor dB | Cable Loss dB | Preamp Factor dB | Remark | Polarity |
|------------------|-----------------|---------------------|-------------------------|-----------------------|-------------------------|---------------------|------------------------|---------|------------|
| 2.4835(802.11n) | 59.9 | -14.1 | 74 | 48.62 | 27.6 | 7.68 | 59.9 | Peak | Vertical |
| 2.4836(802.11n) | 42.63 | -11.37 | 54 | 31.35 | 27.6 | 7.68 | 42.63 | Average | Vertical |
| 2.4835(802.11n) | 62.74 | -11.26 | 74 | 51.46 | 27.6 | 7.68 | 62.74 | Peak | Horizontal |
| 2.4835(802.11n) | 45.66 | -8.34 | 54 | 34.38 | 27.6 | 7.68 | 45.66 | Average | Horizontal |

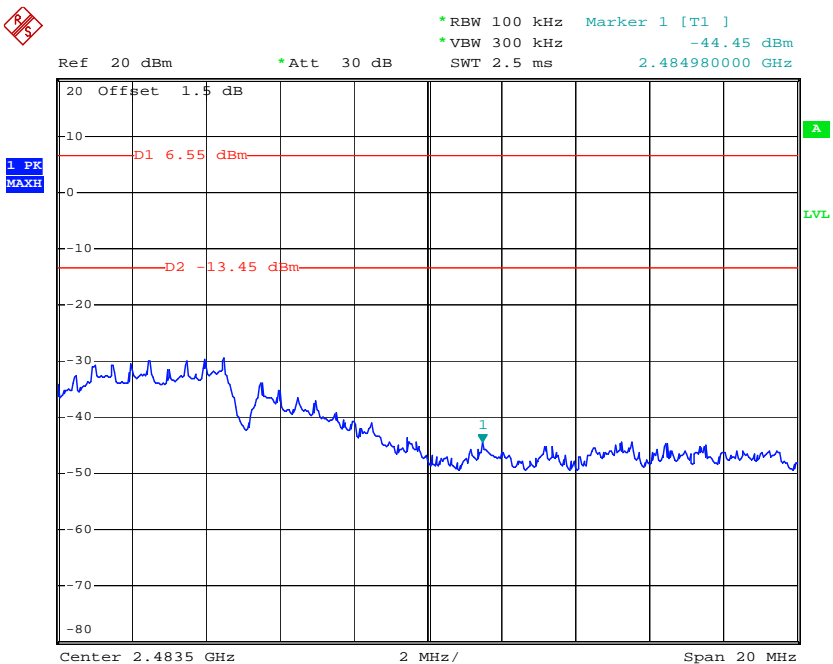
3.3.6 Test Result of Conducted Band Edges

| | | | |
|----------------|--------------|---------------------|----------|
| Test Mode : | Mode 1 and 3 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11b | Relative Humidity : | 35%~60% |
| Test Channel : | 01 and 11 | Test Engineer : | Hogan He |

Low Band Edge Plot on 802.11b Channel 01

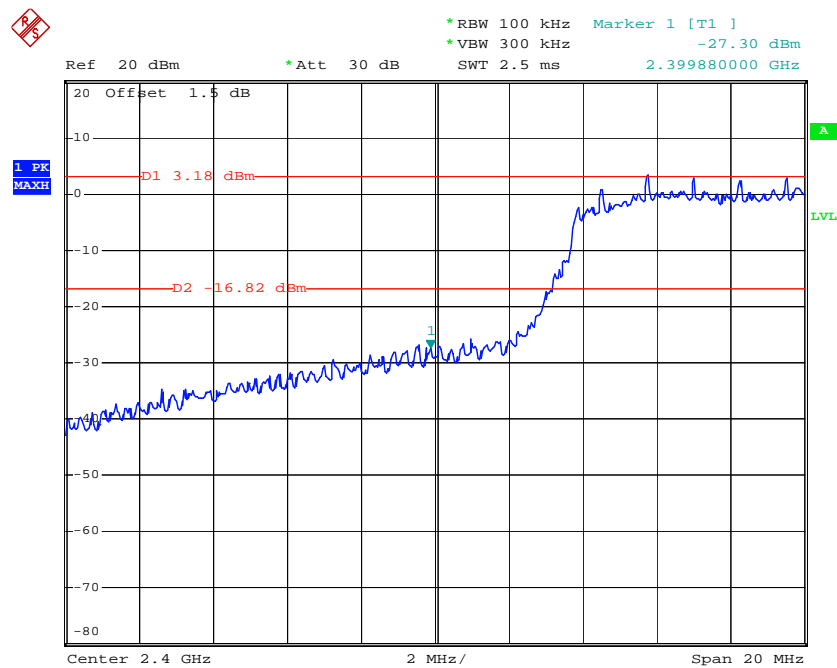


High Band Edge Plot on 802.11b Channel 11

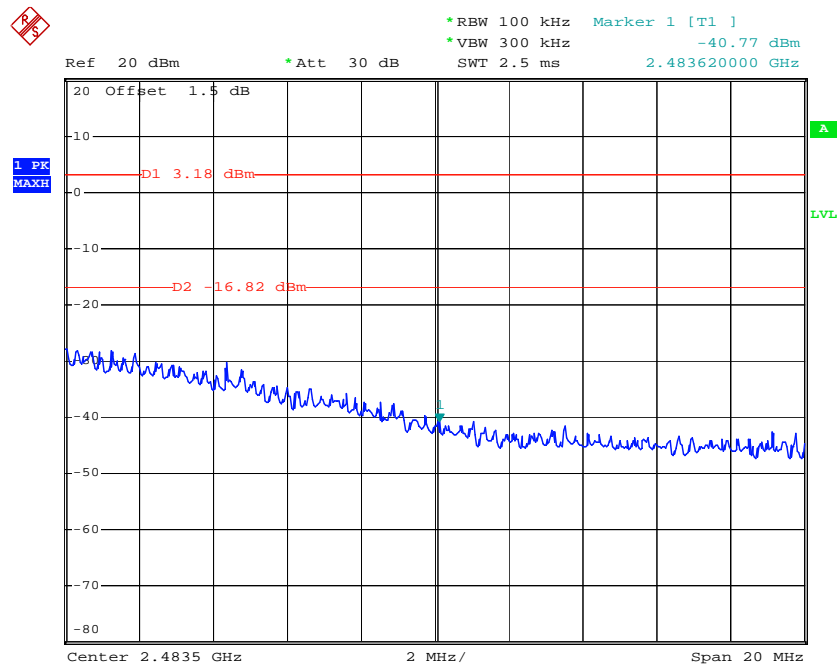


| | | | |
|----------------|--------------|---------------------|----------|
| Test Mode : | Mode 4 and 6 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11g | Relative Humidity : | 35%~60% |
| Test Channel : | 01 and 11 | Test Engineer : | Hogan He |

Low Band Edge Plot on 802.11g Channel 01

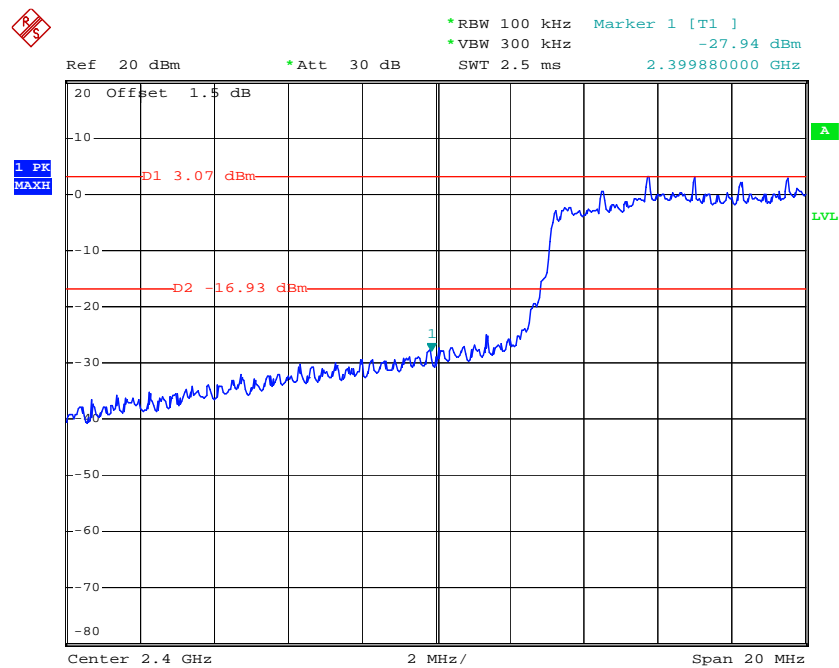


High Band Edge Plot on 802.11g Channel 11

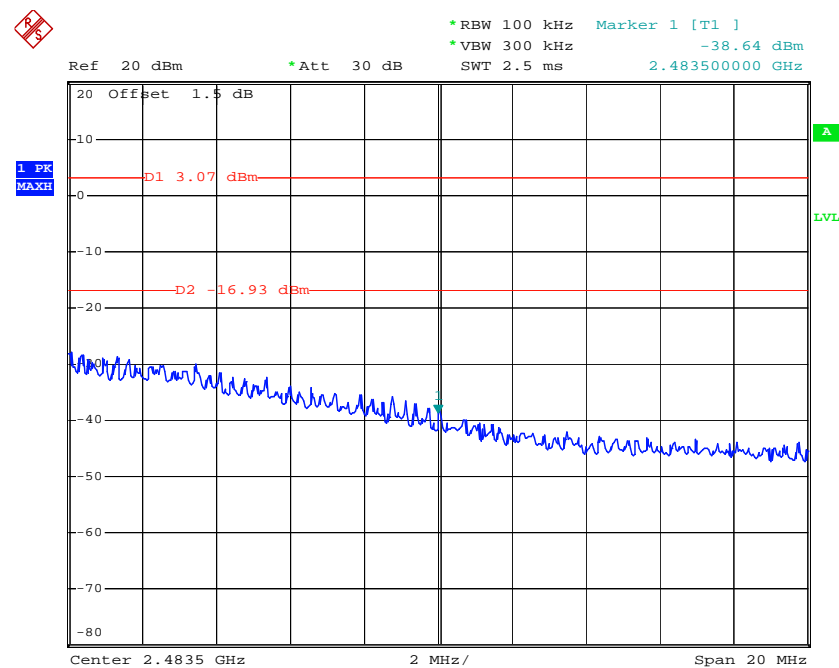


| | | | |
|----------------|--------------|---------------------|----------|
| Test Mode : | Mode 7 and 9 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11n | Relative Humidity : | 35%~60% |
| Test Channel : | 01 and 11 | Test Engineer : | Hogan He |

Low Band Edge Plot on 802.11n Channel 01



High Band Edge Plot on 802.11n Channel 11



3.3.7 Spurious Emission Measurement

3.3.8 Limit of Spurious Emission Measurement

All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band.

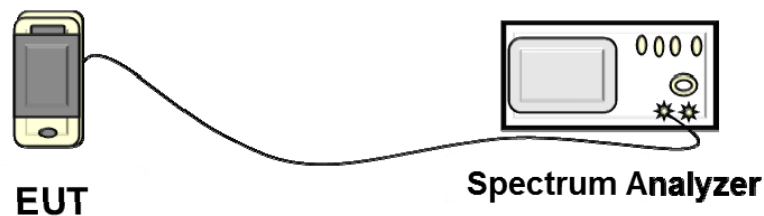
3.3.9 Measuring Instruments

See list of measuring instruments of this test report.

3.3.10 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set RBW = 100 kHz, Video bandwidth (VBW) \geq RBW, scan up through 10th harmonic. All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

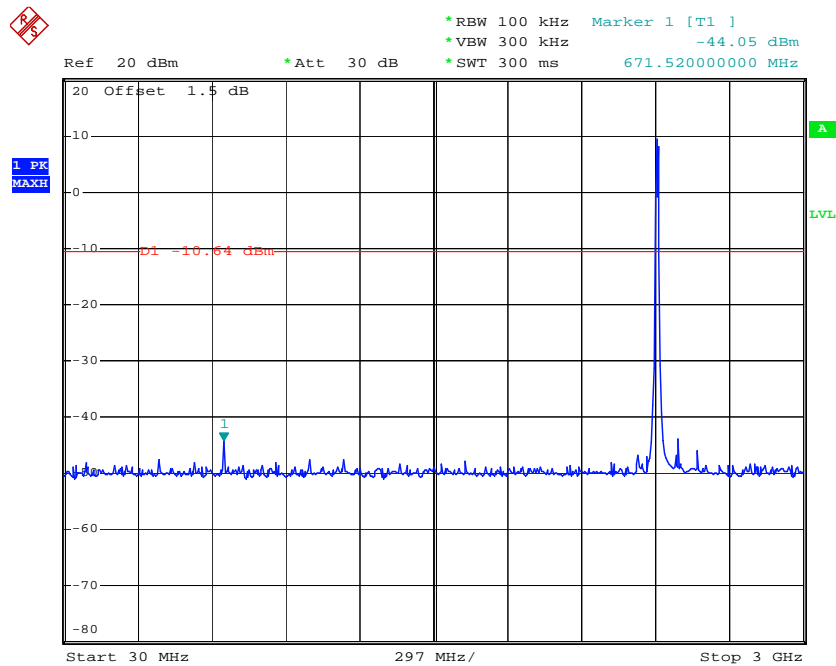
3.3.11 Test Setup



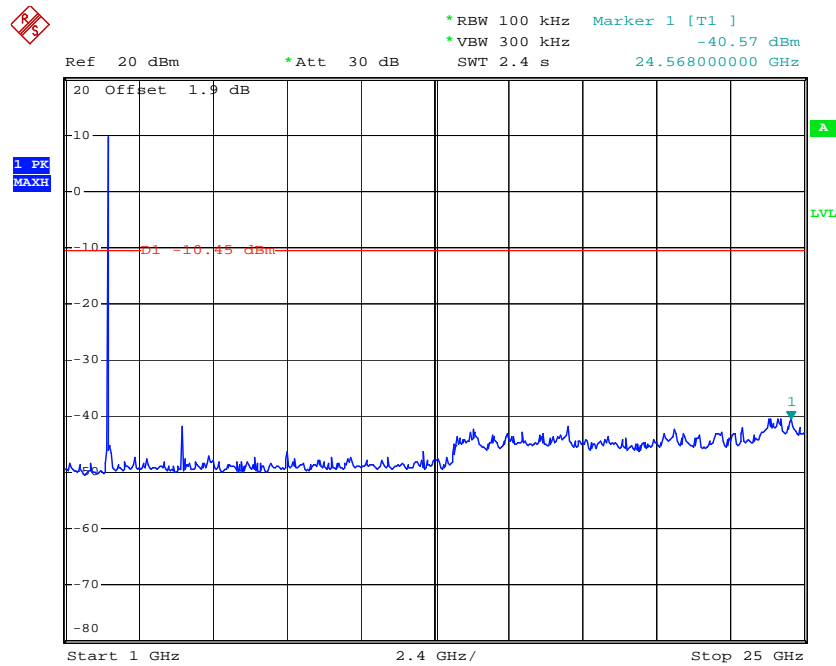
3.3.12 Test Result

| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 1 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11b | Relative Humidity : | 35%~60% |
| Test Channel : | 01 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

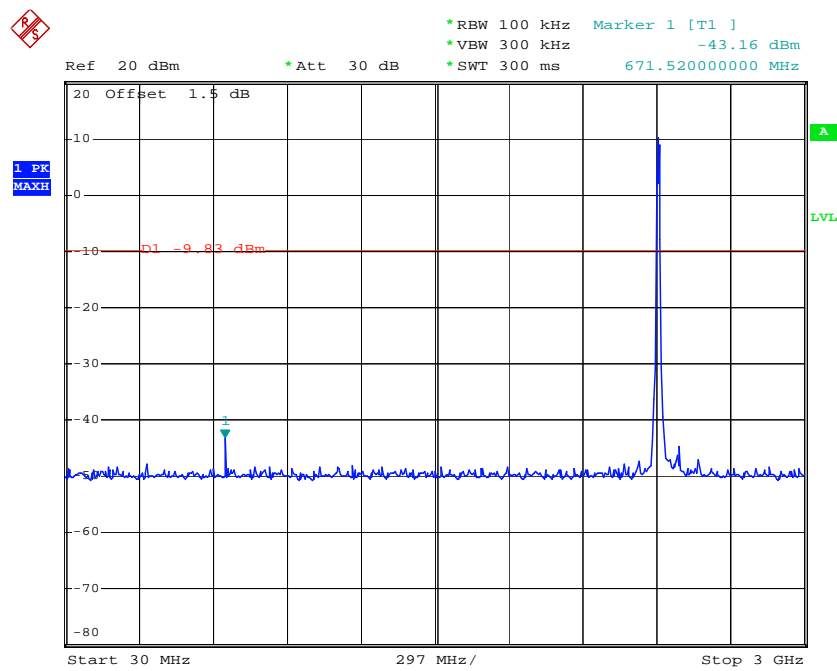


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

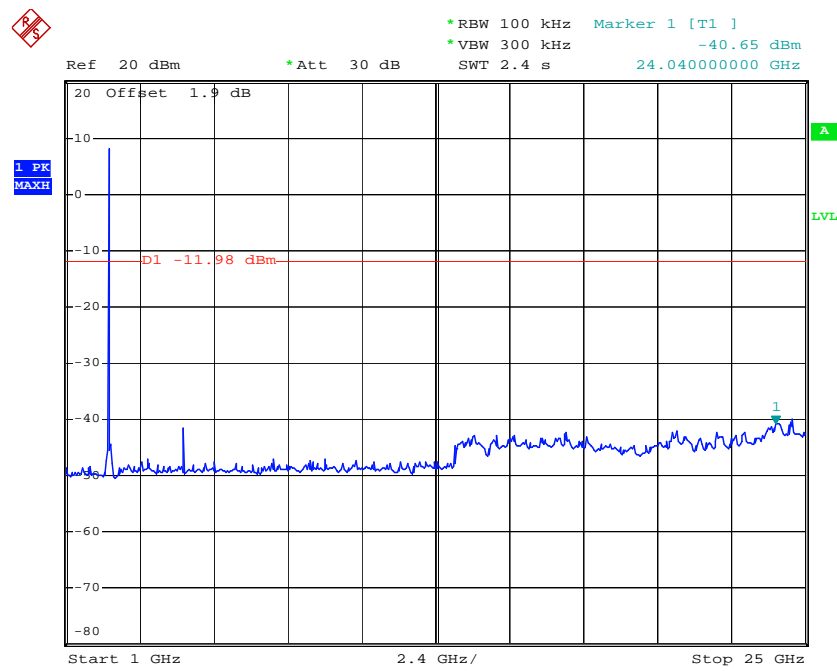


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 2 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11b | Relative Humidity : | 35%~60% |
| Test Channel : | 06 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

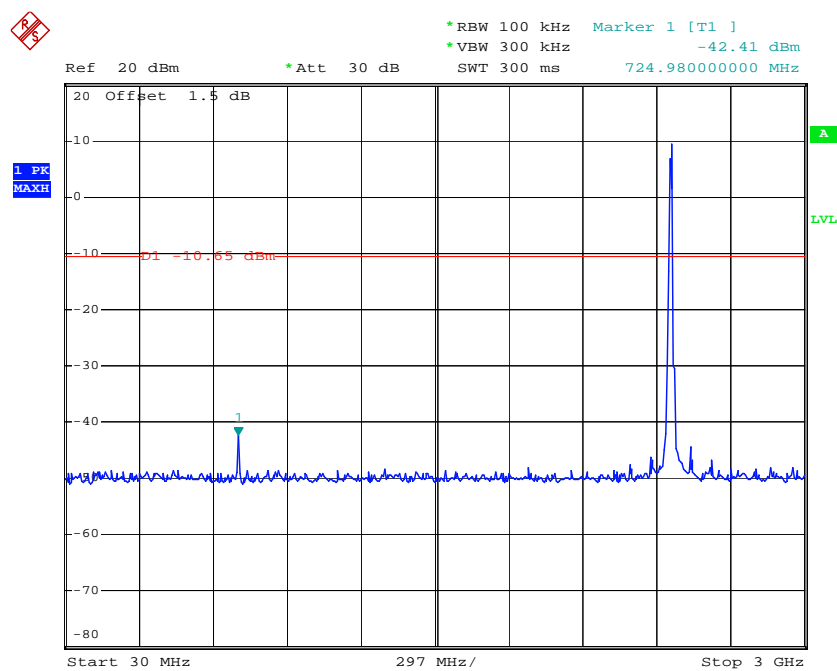


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

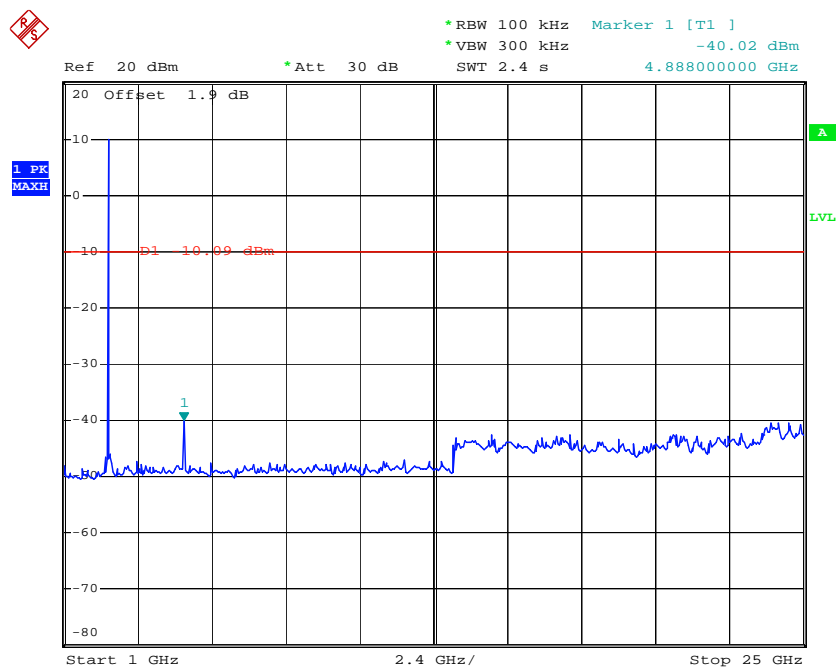


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 3 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11b | Relative Humidity : | 35%~60% |
| Test Channel : | 11 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

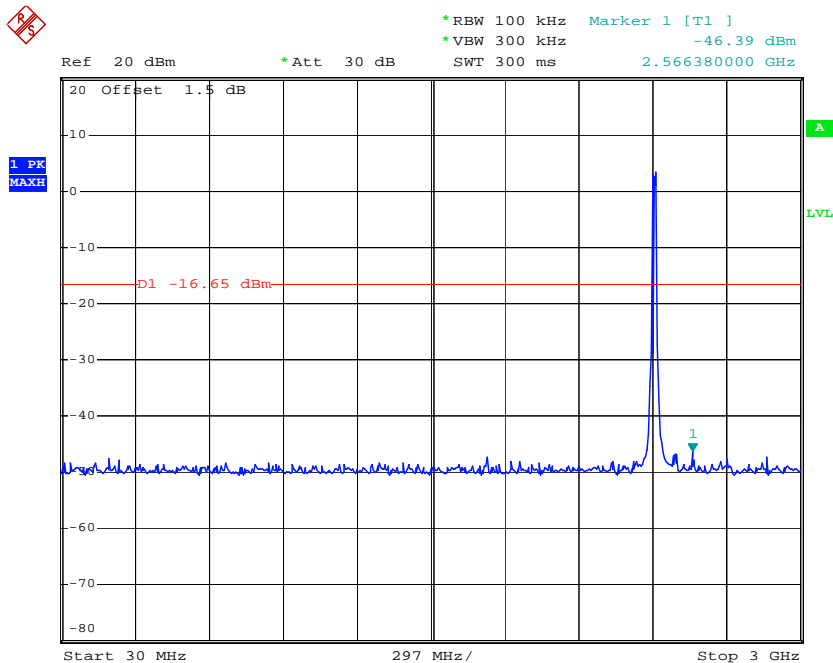


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

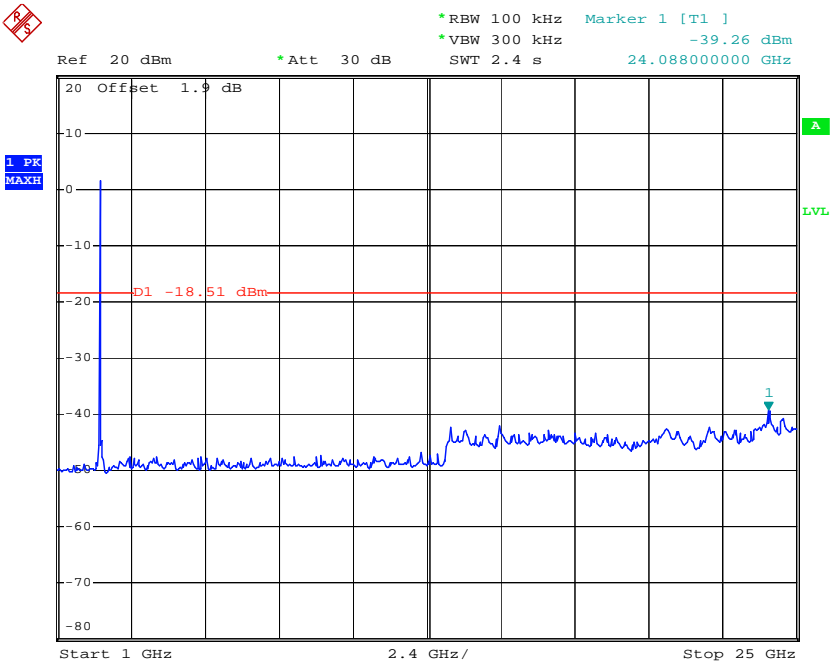


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 4 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11g | Relative Humidity : | 35%~60% |
| Test Channel : | 01 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

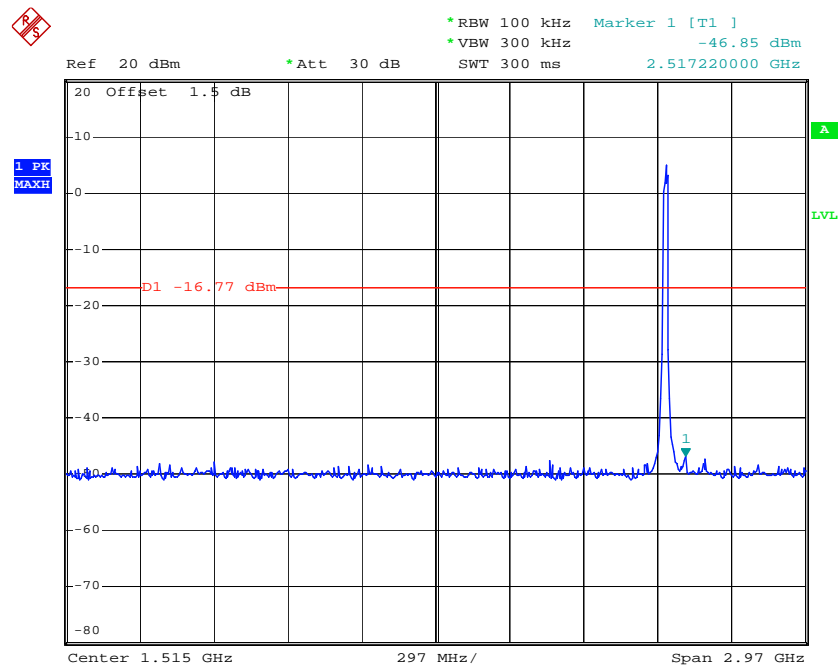


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

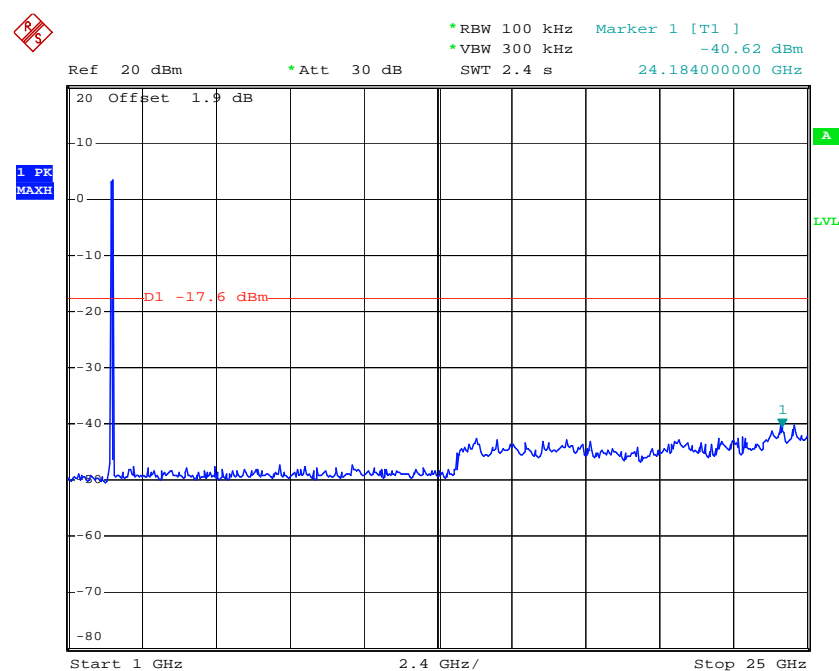


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 5 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11g | Relative Humidity : | 35%~60% |
| Test Channel : | 06 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

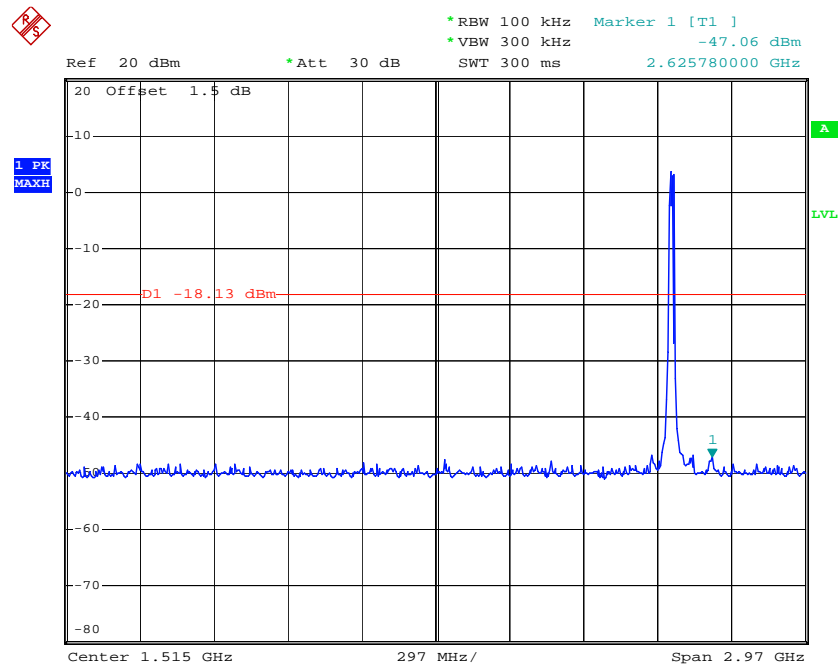


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

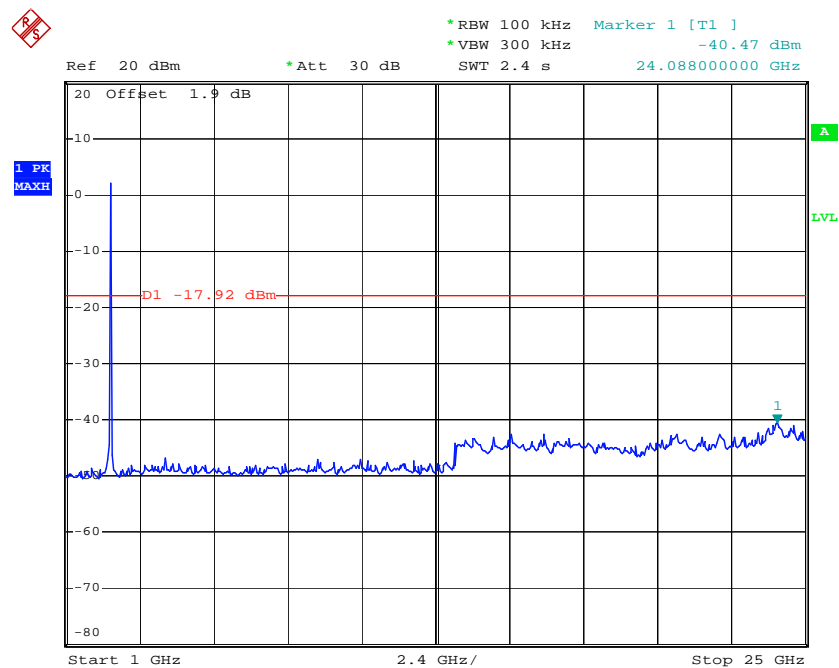


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 6 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11g | Relative Humidity : | 35%~60% |
| Test Channel : | 11 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

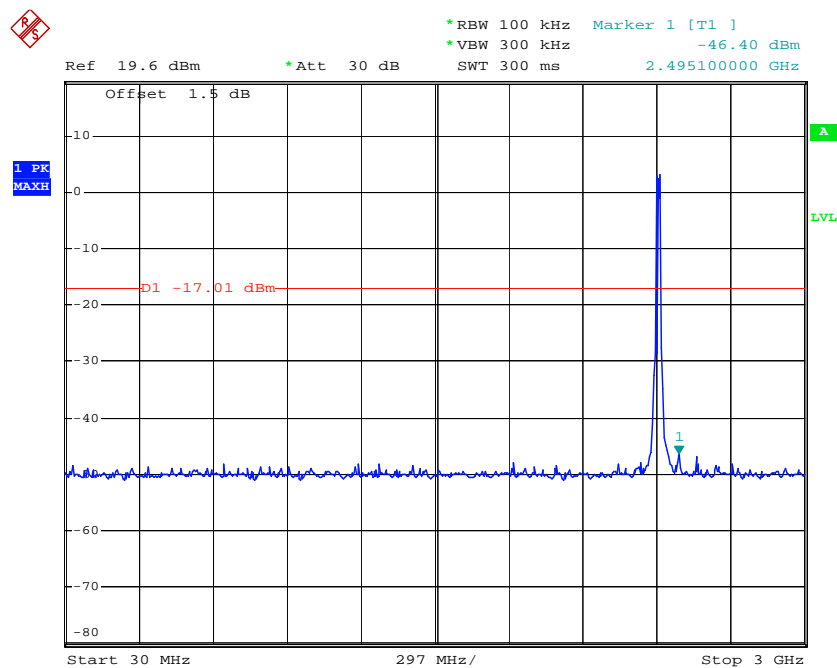


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

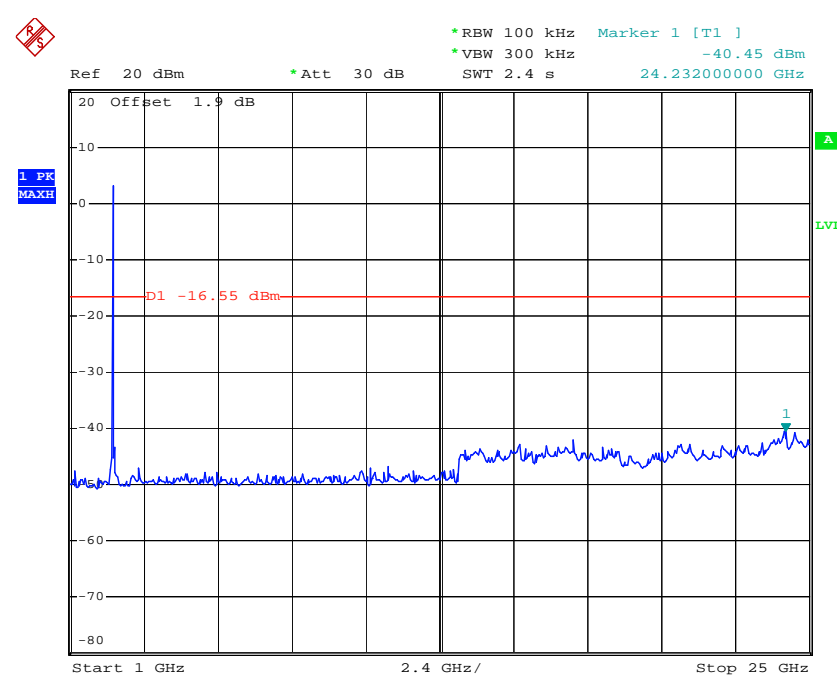


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 7 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11n | Relative Humidity : | 35%~60% |
| Test Channel : | 01 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

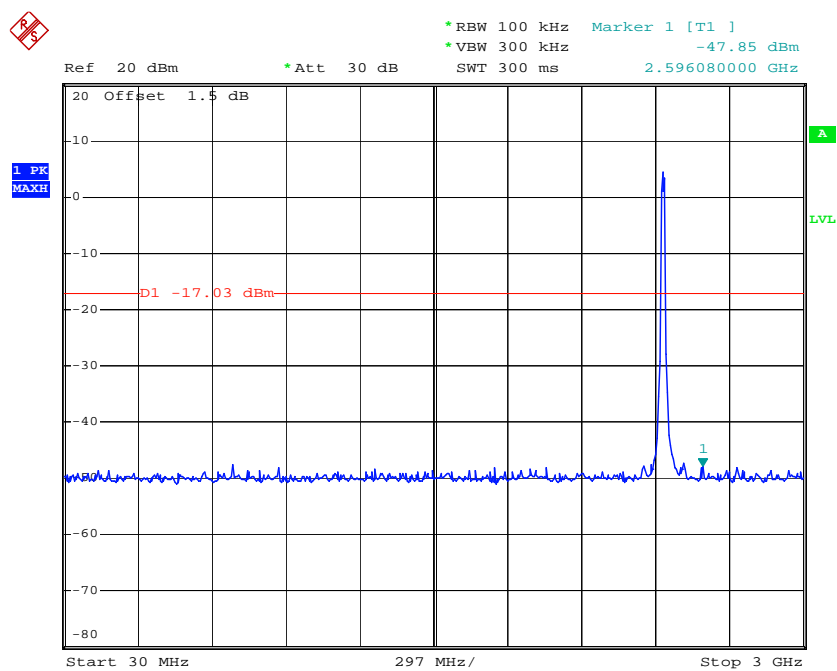


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

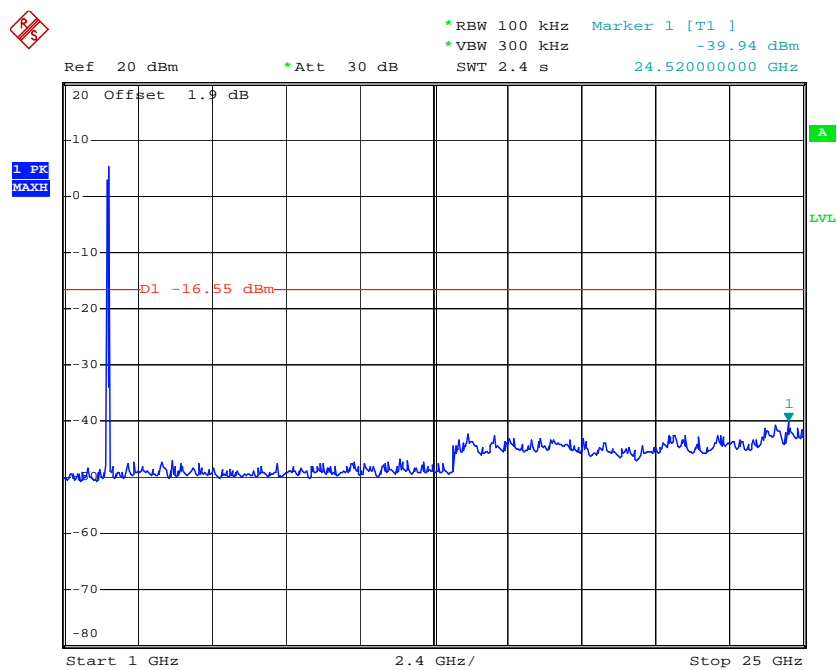


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 8 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11n | Relative Humidity : | 35%~60% |
| Test Channel : | 06 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz

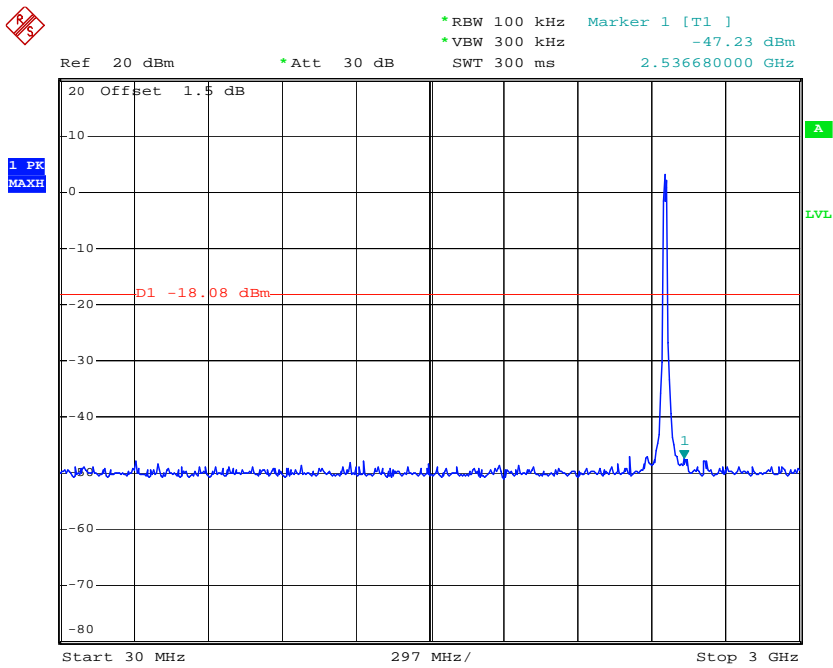


Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz

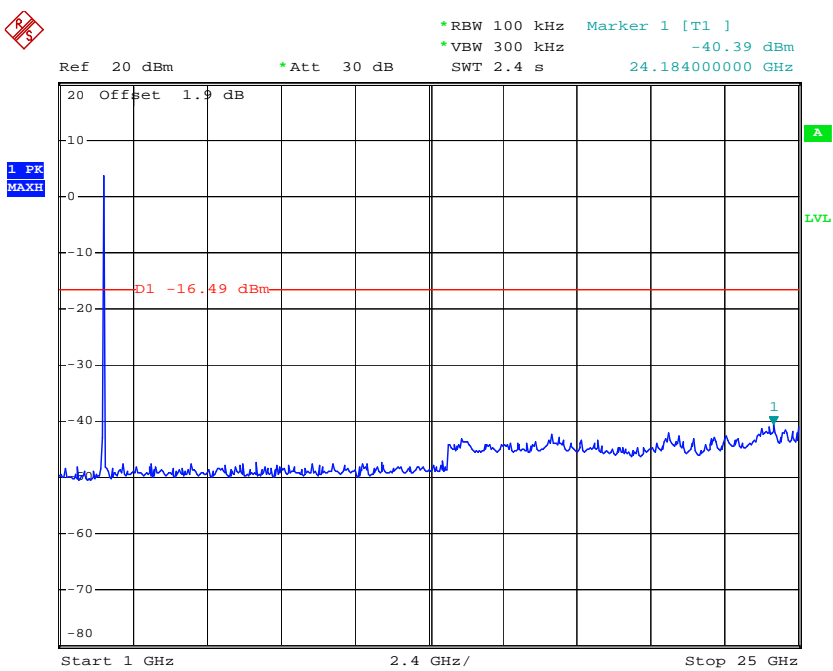


| | | | |
|----------------|---------|---------------------|----------|
| Test Mode : | Mode 9 | Temperature : | 23℃~26℃ |
| Test Band : | 802.11n | Relative Humidity : | 35%~60% |
| Test Channel : | 11 | Test Engineer : | Hogan He |

Conducted Spurious Emission Plot between 9 kHz ~ 3 GHz



Conducted Spurious Emission Plot between 1 GHz ~ 25 GHz



3.4 Power Spectral Density Measurement

3.4.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3 kHz band at any time interval of continuous transmission.

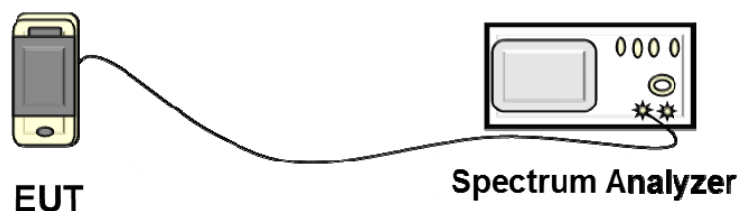
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03.
2. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
3. Set the span to 1.5 times the DTS channel bandwidth.
4. Set the RBW to : $3 \text{ kHz} \leq \text{RBW} \leq 10 \text{ kHz}$.
5. Set the VBW $\geq 3 \times \text{RBW}$.
6. Detector = peak.
7. Sweep time = auto couple
8. Trace mode = max hold.
9. Allow trace to fully stabilize.
10. Use the peak marker function to determine the maximum amplitude level.

3.4.4 Test Setup

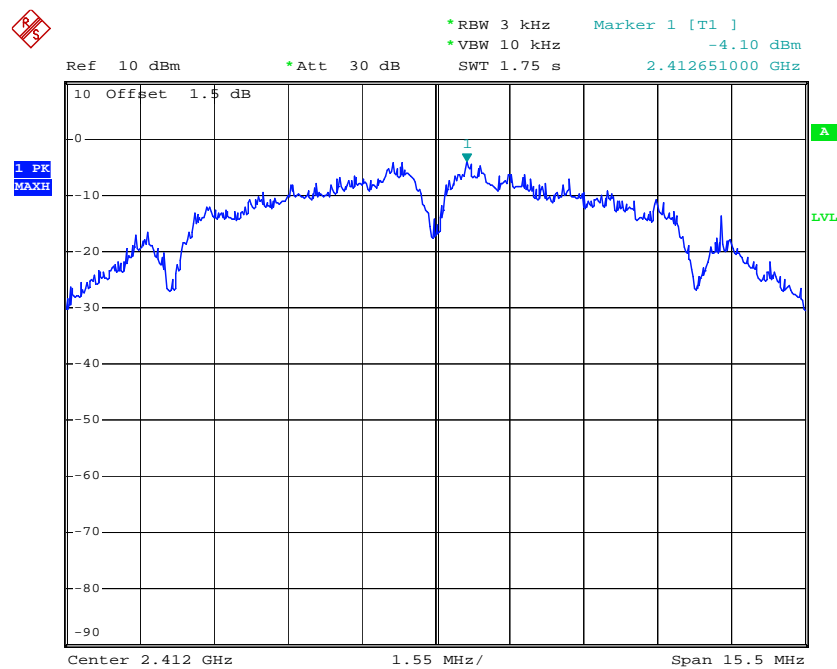


3.4.5 Test Result of Power Spectral Density

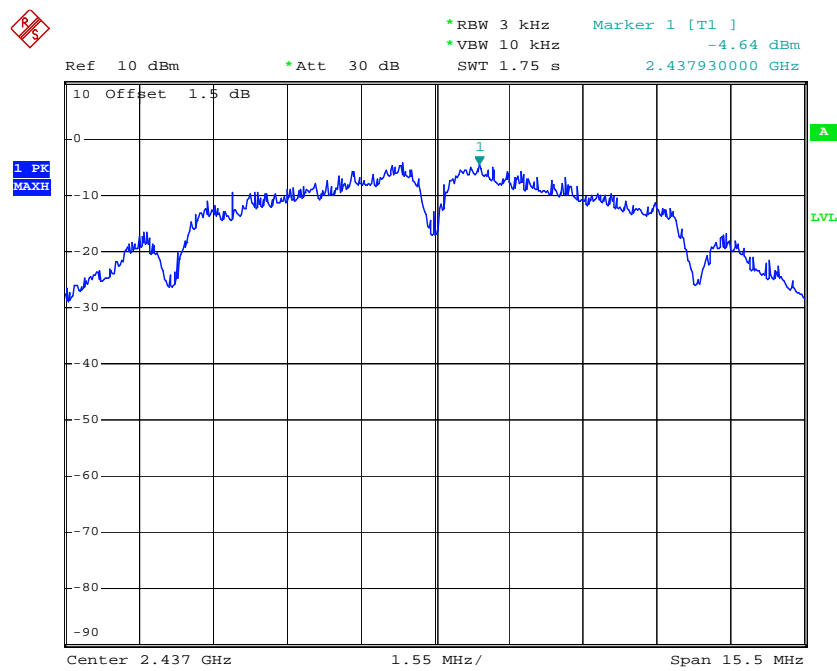
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 1, 2, 3 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11b Measured PSD (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|----------------------------|-------------------|-----------|
| 01 | 2412 | -4.10 | 8 | Pass |
| 06 | 2437 | -4.64 | 8 | Pass |
| 11 | 2462 | -3.63 | 8 | Pass |

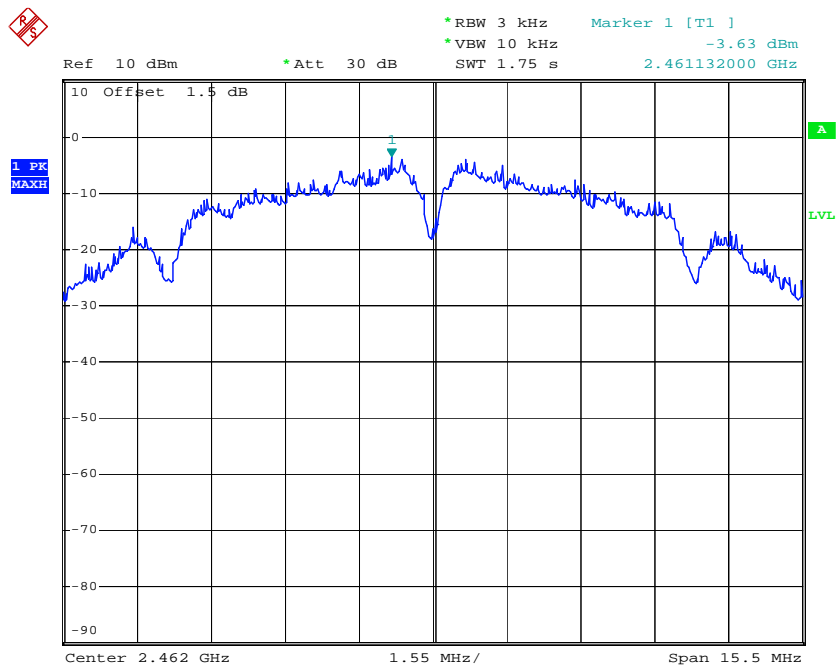
Mode 1 : PSD Plot on 802.11b Channel 01



Mode 2 : PSD Plot on 802.11b Channel 06



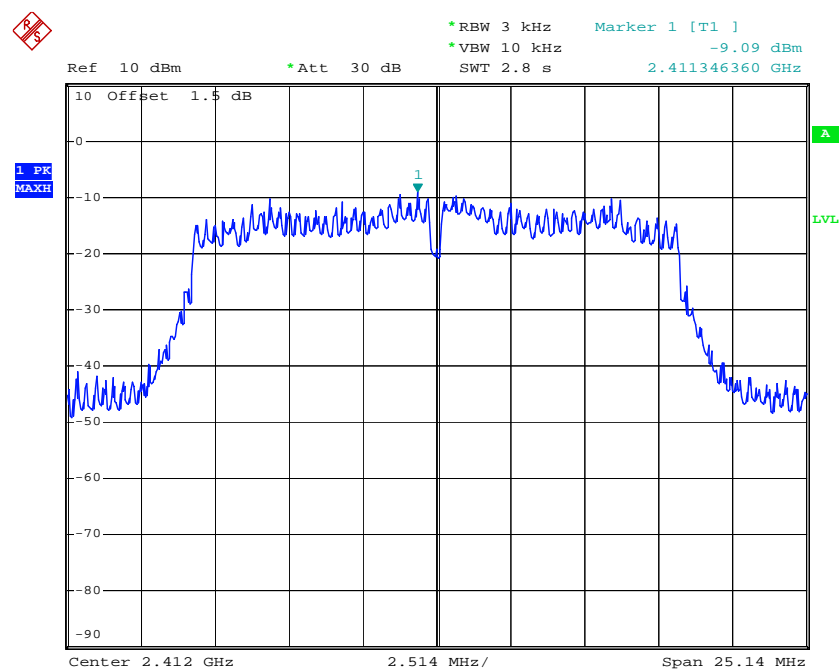
Mode 3 : PSD Plot on 802.11b Channel 11



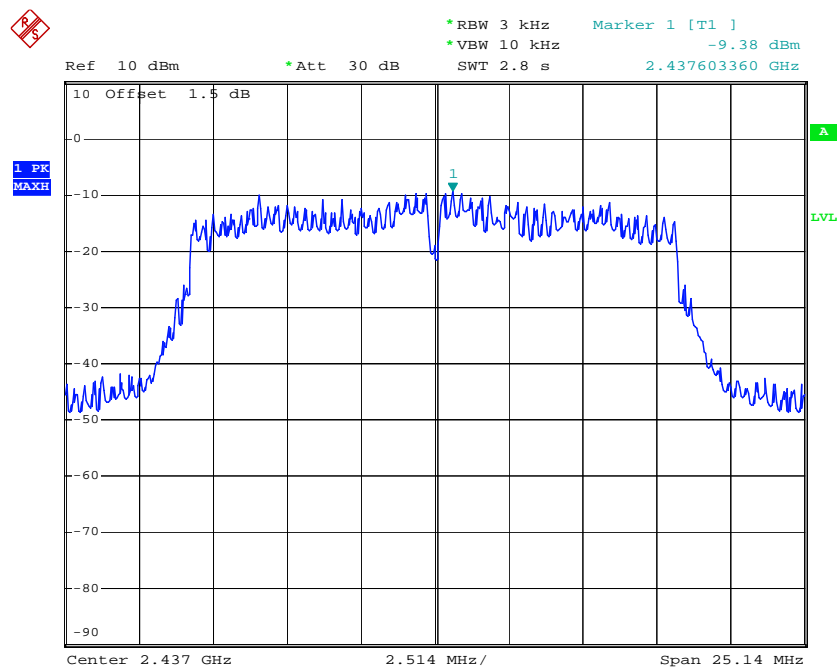
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 4, 5, 6 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11g Measured PSD (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|----------------------------|-------------------|-----------|
| 01 | 2412 | -9.09 | 8 | Pass |
| 06 | 2437 | -9.38 | 8 | Pass |
| 11 | 2462 | -8.96 | 8 | Pass |

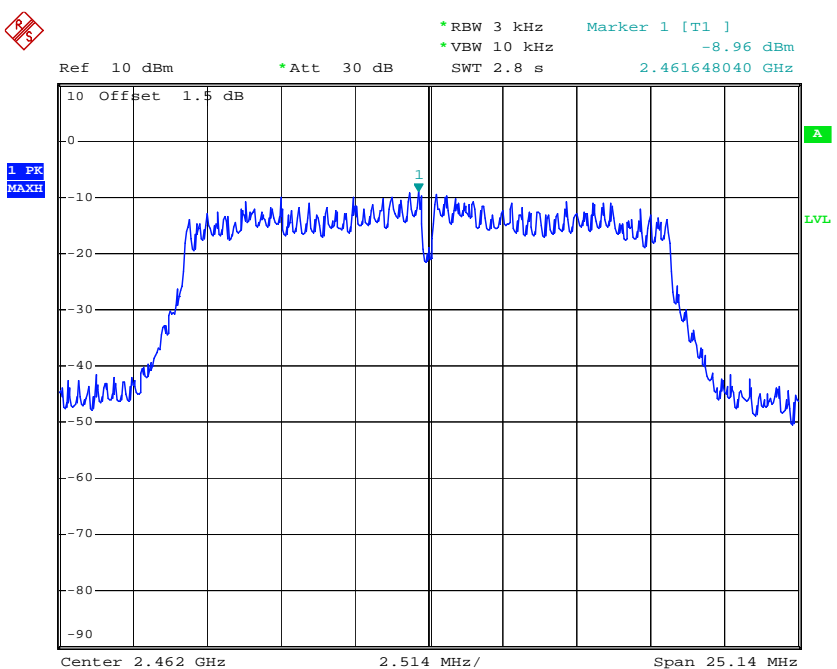
Mode 4 : PSD Plot on 802.11g Channel 01



Mode 5 : PSD Plot on 802.11g Channel 06



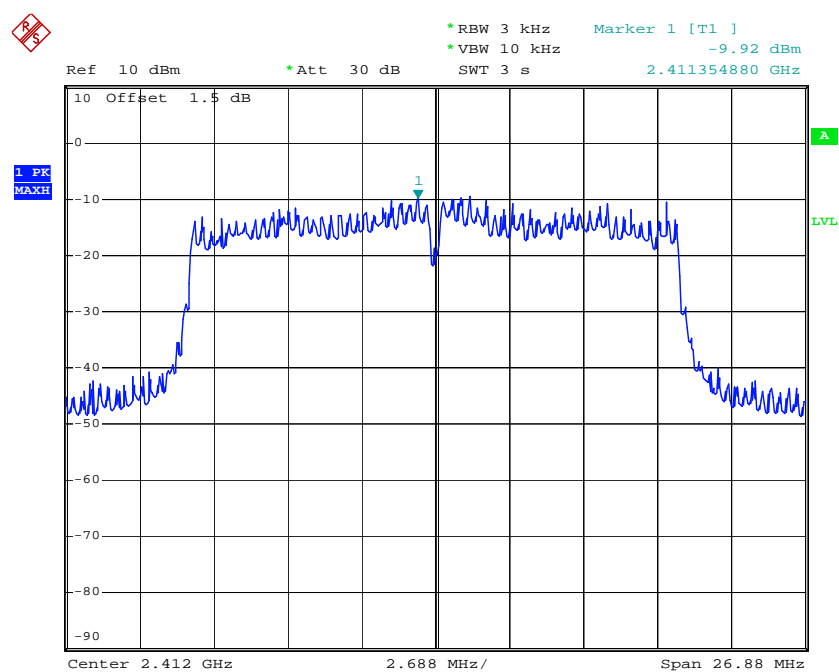
Mode 6 : PSD Plot on 802.11g Channel 11



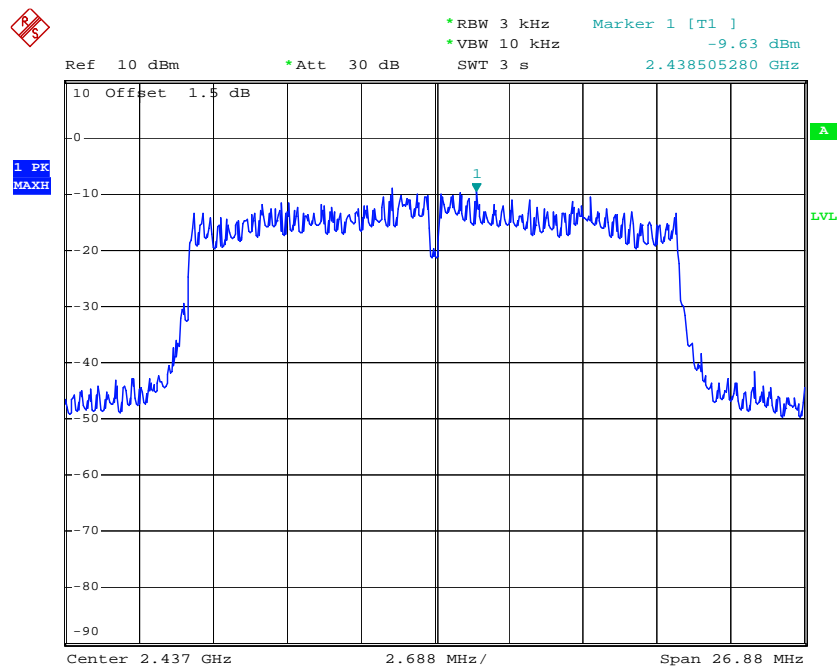
| | | | |
|-----------------|--------------|---------------------|---------|
| Test Mode : | Mode 7, 8, 9 | Temperature : | 23℃~26℃ |
| Test Engineer : | Hogan He | Relative Humidity : | 35%~60% |

| Channel | Frequency (MHz) | 802.11n Measured PSD (dBm) | Max. Limits (dBm) | Pass/Fail |
|---------|-----------------|----------------------------|-------------------|-----------|
| 01 | 2412 | -9.92 | 8 | Pass |
| 06 | 2437 | -9.63 | 8 | Pass |
| 11 | 2462 | -10.00 | 8 | Pass |

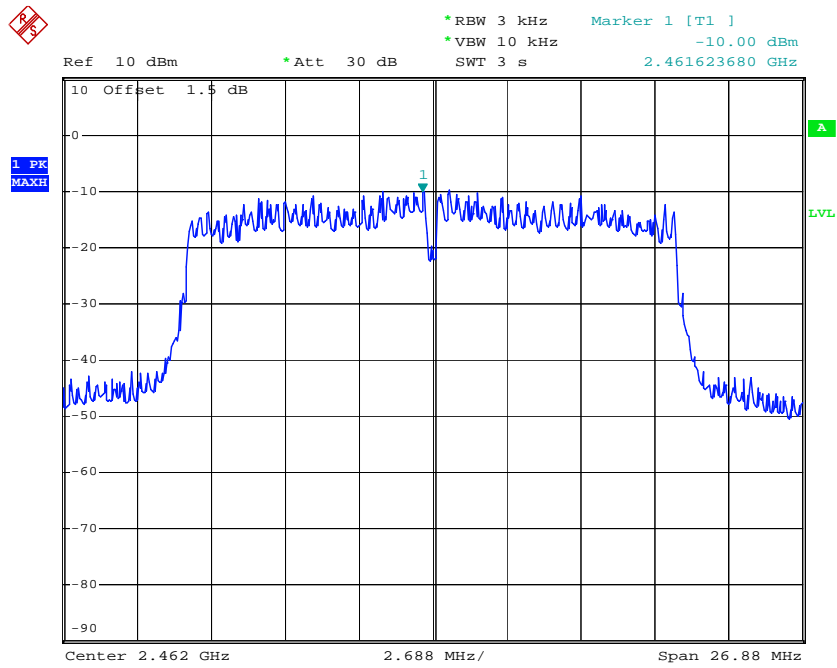
Mode 7 : PSD Plot on 802.11n Channel 01



Mode 8 : PSD Plot on 802.11n Channel 06



Mode 9 : PSD Plot on 802.11n Channel 11



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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

*Decreases with the logarithm of the frequency.

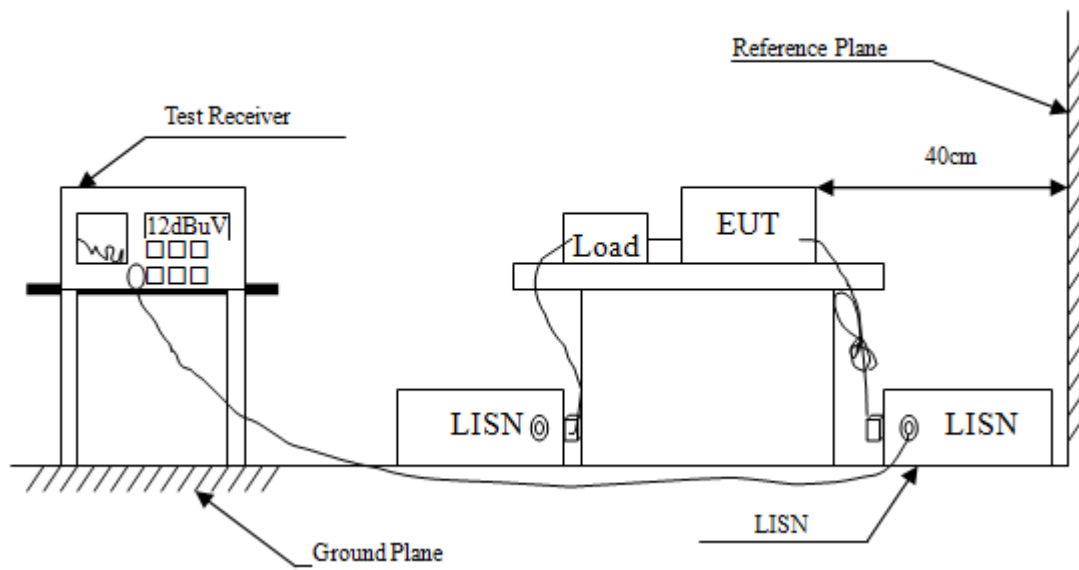
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The testing follows the guidelines in ANSI C63.4-2003.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth (RBW=9kHz and VBW=30kHz) with Maximum Hold Mode for QP limit measurement.
10. Set the test-receiver system to Average Detect Function and specified bandwidth (RBW=9kHz and VBW=30kHz) with Maximum Hold Mode for QP limit measurement.

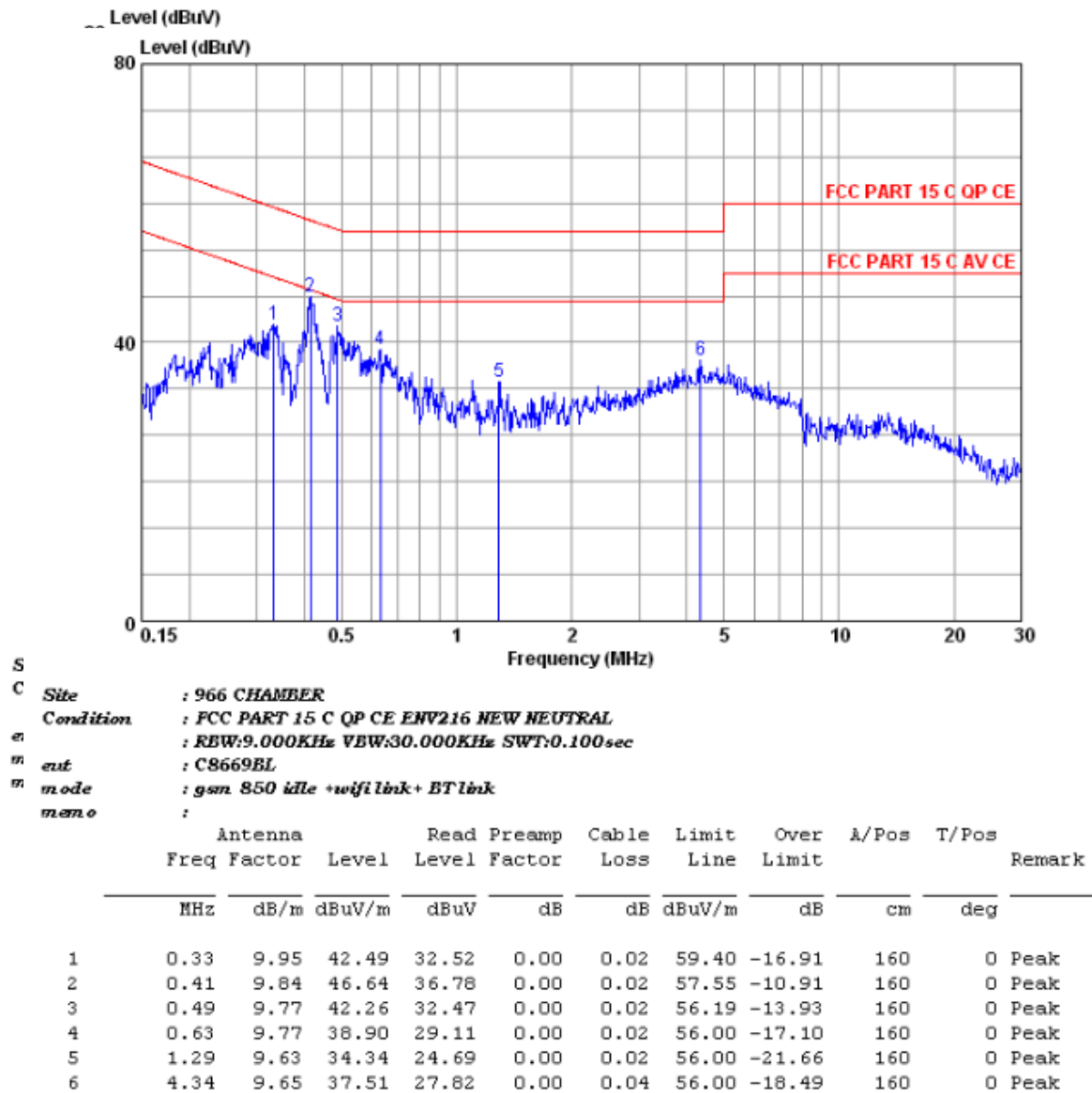
3.5.4 Test Setup



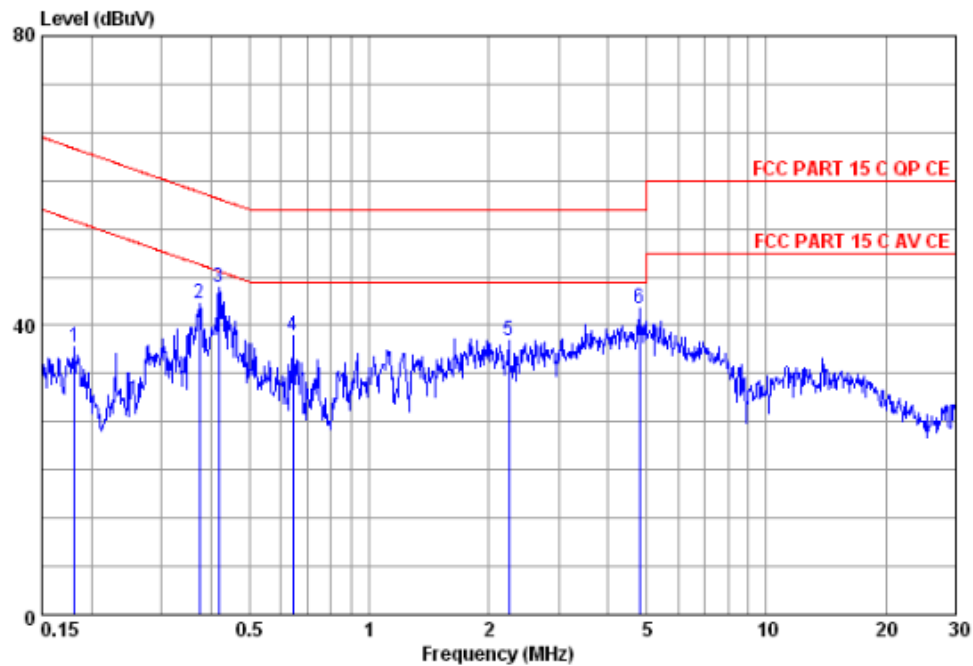
3.5.5 Test Result of AC Conducted Emission

Test Voltage:120V/60Hz

Test mode 1: GSM 850 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone + Adapter+ Battery +Neutral



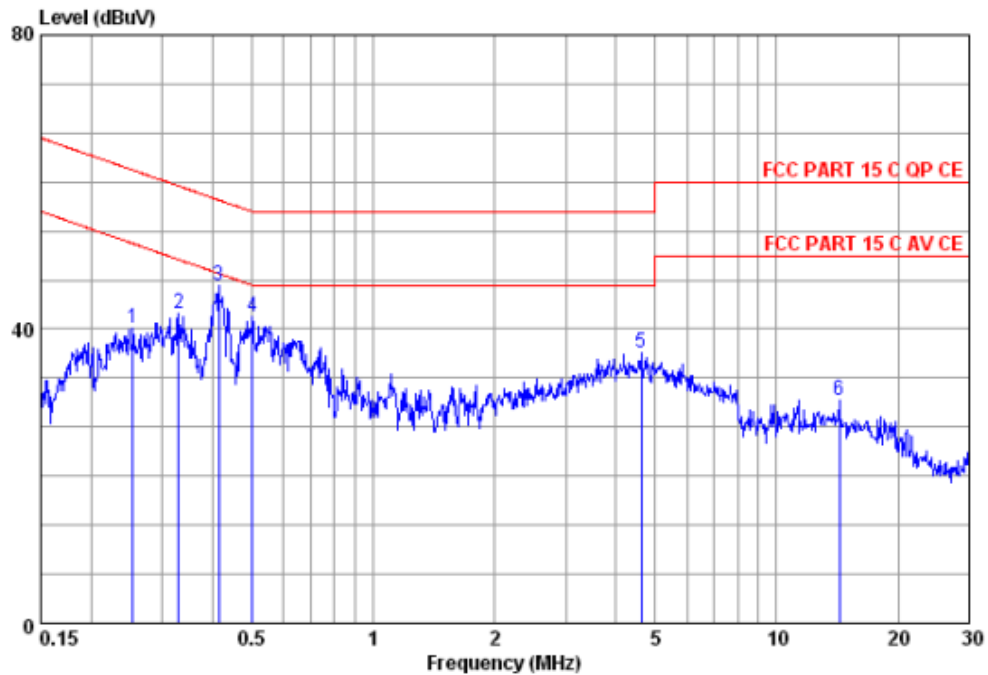
Test mode 1: GSM 850 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone + Adapter+ Battery +Line



Site : 966 CHAMBER
 Condition : FCC PART 15 C QP CE ENV216 NEW LINE
 : RBW:9.000KHz VBW:30.000KHz SWT:0.100sec
 ant : C8669BL
 mode : gsm 850 idle +wifi link+ BT link
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 0.18 | 9.54 | 36.98 | 27.43 | 0.00 | 0.01 | 64.42 | -27.44 | 160 | 0 Peak |
| 2 | 0.37 | 9.67 | 42.98 | 33.29 | 0.00 | 0.02 | 58.43 | -15.45 | 160 | 0 Peak |
| 3 | 0.42 | 9.67 | 45.28 | 35.59 | 0.00 | 0.02 | 57.46 | -12.18 | 160 | 0 Peak |
| 4 | 0.64 | 9.69 | 38.55 | 28.84 | 0.00 | 0.02 | 56.00 | -17.45 | 160 | 0 Peak |
| 5 | 2.25 | 9.65 | 37.85 | 28.18 | 0.00 | 0.02 | 56.00 | -18.15 | 160 | 0 Peak |
| 6 | 4.80 | 9.69 | 42.33 | 32.63 | 0.00 | 0.01 | 56.00 | -13.67 | 160 | 0 Peak |

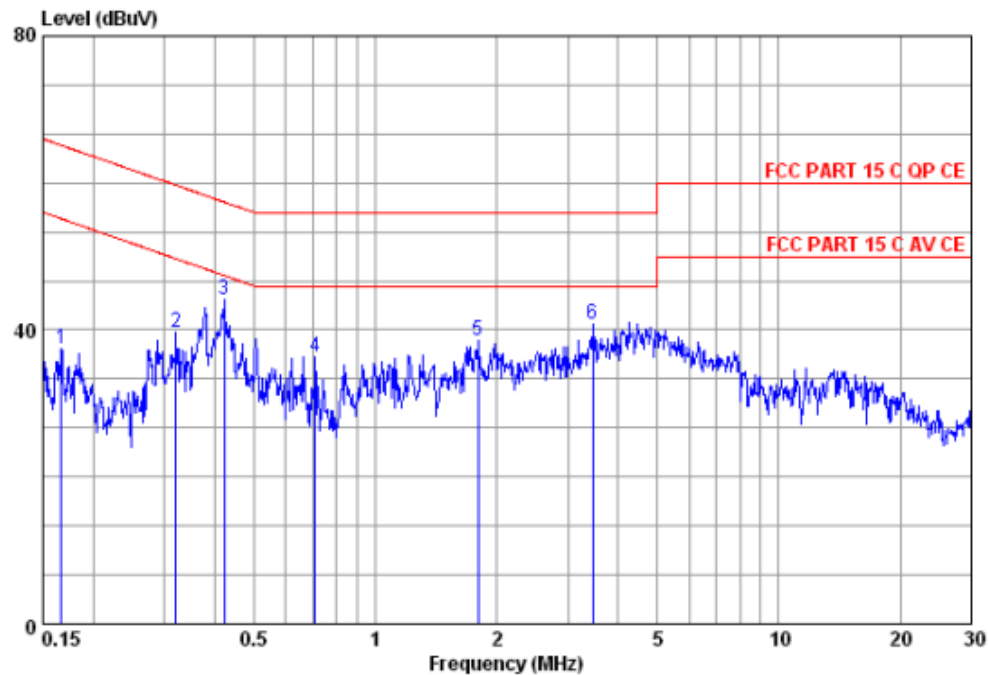
Test mode 2: GSM 1900 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone+ Adapter+ Battery + Neutral



Site : 966 CHAMBER
 Condition : FCC PART 15 C QP CE ENV216 NEW NEUTRAL
 : REW:9.000KHz VBW:30.000KHz SWT:0.100sec
 ext : C8669BL
 mode : gsm 1900 idle +wifi link+ BT link
 memo :

| | Antenna | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|-------|--------|------|--------|--------|------------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | |
| 1 | 0.25 | 10.11 | 40.01 | 29.88 | 0.00 | 0.02 | 61.64 | -21.63 | 160 0 Peak |
| 2 | 0.33 | 9.96 | 42.06 | 32.08 | 0.00 | 0.02 | 59.44 | -17.38 | 160 0 Peak |
| 3 | 0.41 | 9.84 | 45.99 | 36.13 | 0.00 | 0.02 | 57.55 | -11.56 | 160 0 Peak |
| 4 | 0.50 | 9.76 | 41.64 | 31.86 | 0.00 | 0.02 | 56.00 | -14.36 | 160 0 Peak |
| 5 | 4.62 | 9.66 | 36.76 | 27.08 | 0.00 | 0.02 | 56.00 | -19.24 | 160 0 Peak |
| 6 | 14.29 | 9.82 | 30.29 | 20.39 | 0.00 | 0.08 | 60.00 | -29.71 | 160 0 Peak |

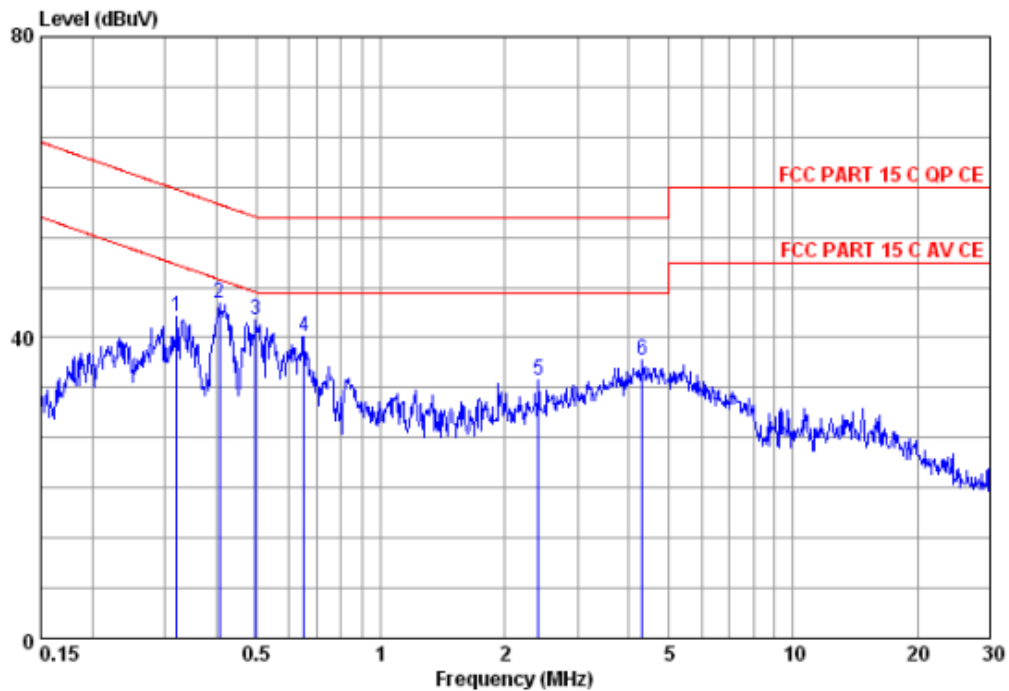
Test mode 2: GSM 1900 Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone + Earphone+ Adapter+ Battery + Line



Site : 966 CHAMBER
 Condition : FCC PART 15 C QP CE ENV216 NEW LINE
 : RBW:9.000KHz VBW:30.000KHz SWT:0.100sec
 ext : C8669BL
 mode : gsm 1900 idle +wifi link+ BT link
 memo :

| | Antenna Freq | Factor | Level | Read Level | Preamp Factor | Cable Loss | Limit Line | Over Limit | A/Pos | T/Pos | Remark |
|---|-----------------|--------|-------|---------------|------------------|---------------|---------------|---------------|-------|-------|--------|
| | MHz | | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 0.17 | 9.46 | 37.50 | 28.03 | 0.00 | 0.01 | 65.12 | -27.62 | 160 | 0 | Peak |
| 2 | 0.32 | 9.66 | 39.67 | 29.99 | 0.00 | 0.02 | 59.71 | -20.04 | 160 | 0 | Peak |
| 3 | 0.42 | 9.67 | 44.07 | 34.38 | 0.00 | 0.02 | 57.42 | -13.35 | 160 | 0 | Peak |
| 4 | 0.71 | 9.70 | 36.41 | 26.69 | 0.00 | 0.02 | 56.00 | -19.59 | 160 | 0 | Peak |
| 5 | 1.80 | 9.65 | 38.66 | 29.00 | 0.00 | 0.01 | 56.00 | -17.34 | 160 | 0 | Peak |
| 6 | 3.45 | 9.67 | 40.70 | 30.97 | 0.00 | 0.06 | 56.00 | -15.30 | 160 | 0 | Peak |

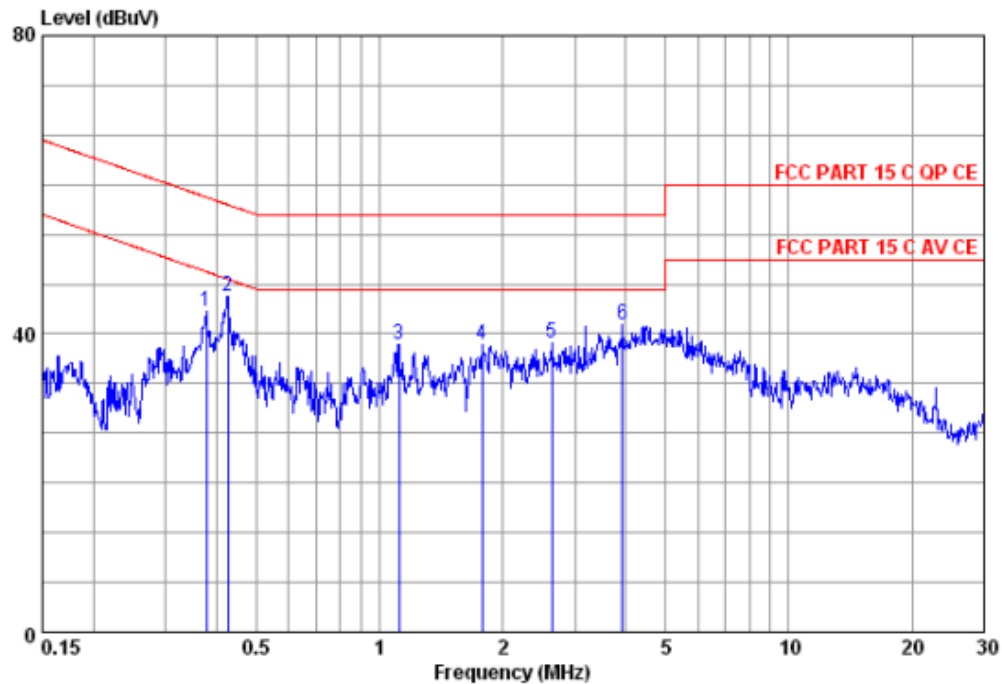
Test mode 3: WCDMA Band II Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone
+Earphone+ Adapter+ Battery + GPS RX +Neutral



Site : 966 CHAMBER
Condition : FCC PART 15 C QP CE ENV216 NEW NEUTRAL
RBW:9.000KHz VBW:30.000KHz SWT:0.100sec
ant : C8669BL
mode : WCDMA 1900 idle +wifi link+ BT link
memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|-------|--------|-------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | | dB/m | dBUV/m | dB | | dBUV/m | dB | cm | deg |
| 1 | 0.32 | 9.98 | 42.74 | 32.74 | 0.00 | 0.02 | 59.71 | -16.97 | 160 | 0 Peak |
| 2 | 0.41 | 9.85 | 44.64 | 34.77 | 0.00 | 0.02 | 57.73 | -13.09 | 160 | 0 Peak |
| 3 | 0.50 | 9.76 | 42.42 | 32.64 | 0.00 | 0.02 | 56.05 | -13.63 | 160 | 0 Peak |
| 4 | 0.65 | 9.78 | 40.17 | 30.37 | 0.00 | 0.02 | 56.00 | -15.83 | 160 | 0 Peak |
| 5 | 2.41 | 9.55 | 34.37 | 24.79 | 0.00 | 0.03 | 56.00 | -21.63 | 160 | 0 Peak |
| 6 | 4.31 | 9.65 | 36.98 | 27.29 | 0.00 | 0.04 | 56.00 | -19.02 | 160 | 0 Peak |

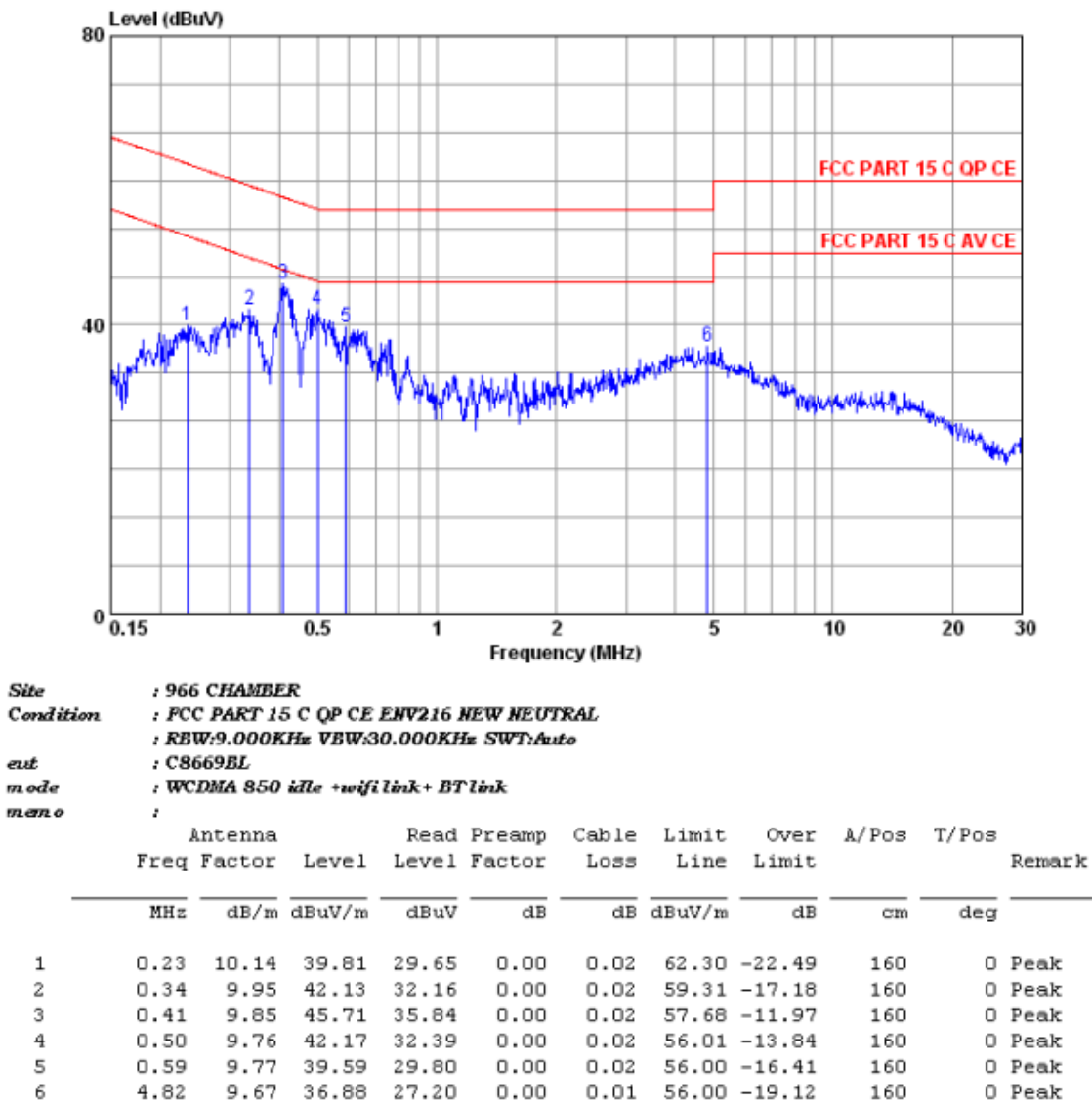
Test mode 3: WCDMA Band II Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone
+Earphone+ Adapter+ Battery + GPS RX +Line



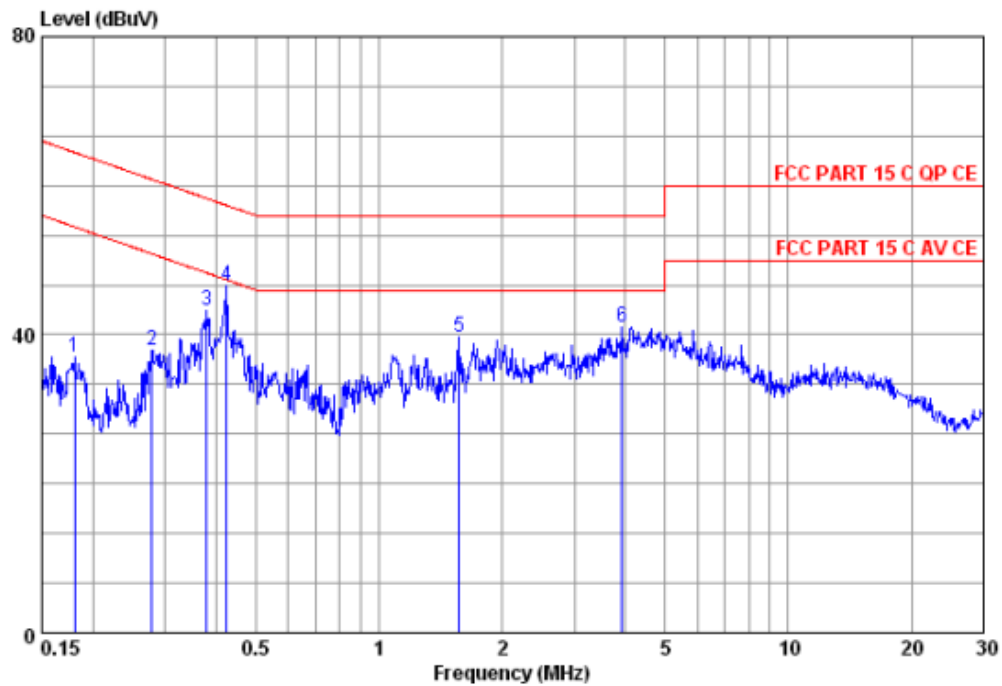
Site : 966 CHAMBER
Condition : FCC PART 15 C QP CE ENV216 NEW LINE
: RBW:9.000KHz VBW:30.000KHz SWT:0.100sec
ant : C8669BL
mode : WCDMA 1900 idle +wifi link+ BT link
memo :

| | Antenna | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|-------|--------|------|--------|--------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm |
| 1 | 0.38 | 9.67 | 43.01 | 33.32 | 0.00 | 0.02 | 58.34 | -15.33 | 160 |
| 2 | 0.43 | 9.67 | 45.11 | 35.42 | 0.00 | 0.02 | 57.33 | -12.22 | 160 |
| 3 | 1.12 | 9.68 | 38.62 | 28.92 | 0.00 | 0.02 | 56.00 | -17.38 | 160 |
| 4 | 1.78 | 9.65 | 38.54 | 28.88 | 0.00 | 0.01 | 56.00 | -17.46 | 160 |
| 5 | 2.64 | 9.65 | 38.76 | 29.08 | 0.00 | 0.03 | 56.00 | -17.24 | 160 |
| 6 | 3.92 | 9.68 | 41.33 | 31.58 | 0.00 | 0.07 | 56.00 | -14.67 | 160 |

Test mode 4: WCDMA Band V Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone
+Earphone+ Adapter+ Battery + GPS RX +Neutral



Test mode 4: WCDMA Band V Idle + WLAN Link (2.4G) + Bluetooth Link +Bluetooth earphone
+Earphone+ Adapter+ Battery + GPS RX +Line



Site : 966 CHAMBER
Condition : FCC PART 15 C QP CE ENV216 NEW LINE
RBW:9.000KHz VBW:30.000KHz SWT:Auto
cut : C8669BL
mode : WCDMA 850 idle +wifi link+ BT link
memo :

| | Antenna | | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|-------|--------|-------|--------|--------|-------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg | |
| 1 | 0.18 | 9.54 | 36.90 | 27.35 | 0.00 | 0.01 | 64.46 | -27.56 | 160 | 0 | Peak |
| 2 | 0.28 | 9.65 | 37.94 | 28.27 | 0.00 | 0.02 | 60.85 | -22.91 | 160 | 0 | Peak |
| 3 | 0.38 | 9.67 | 43.33 | 33.64 | 0.00 | 0.02 | 58.30 | -14.97 | 160 | 0 | Peak |
| 4 | 0.42 | 9.67 | 46.56 | 36.87 | 0.00 | 0.02 | 57.37 | -10.81 | 160 | 0 | Peak |
| 5 | 1.57 | 9.66 | 39.66 | 29.99 | 0.00 | 0.01 | 56.00 | -16.34 | 160 | 0 | Peak |
| 6 | 3.92 | 9.68 | 41.10 | 31.35 | 0.00 | 0.07 | 56.00 | -14.90 | 160 | 0 | Peak |

3.6 Radiated Emission Measurement

3.6.1 Limit of Radiated Emission

Radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|--------------------|--------------------------------------|----------------------------------|
| 0.009 – 0.490 | 2400/F(kHz) | 300 |
| 0.490 – 1.705 | 24000/F(kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |
| 30 – 88 | 100 | 3 |
| 88 – 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

3.6.2 Measuring Instruments

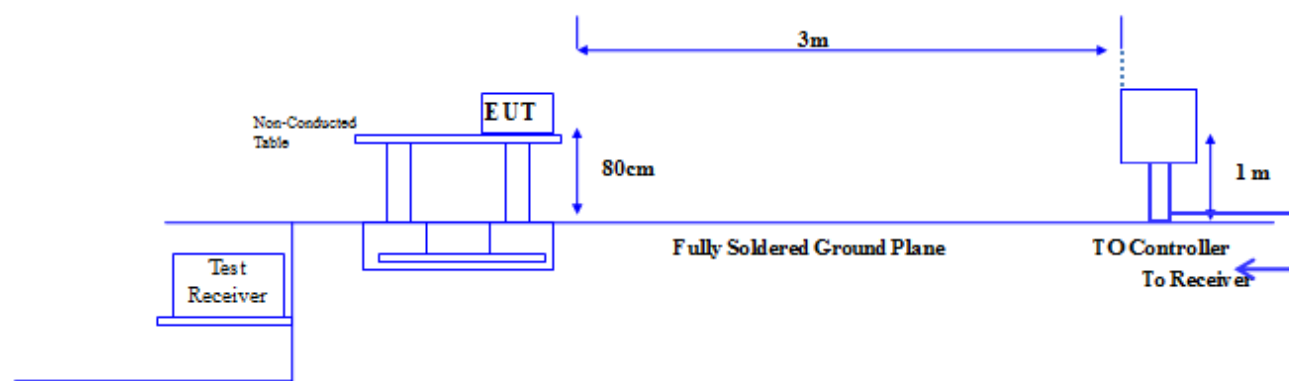
See list of measuring instruments of this test report.

3.6.3 Test Procedures

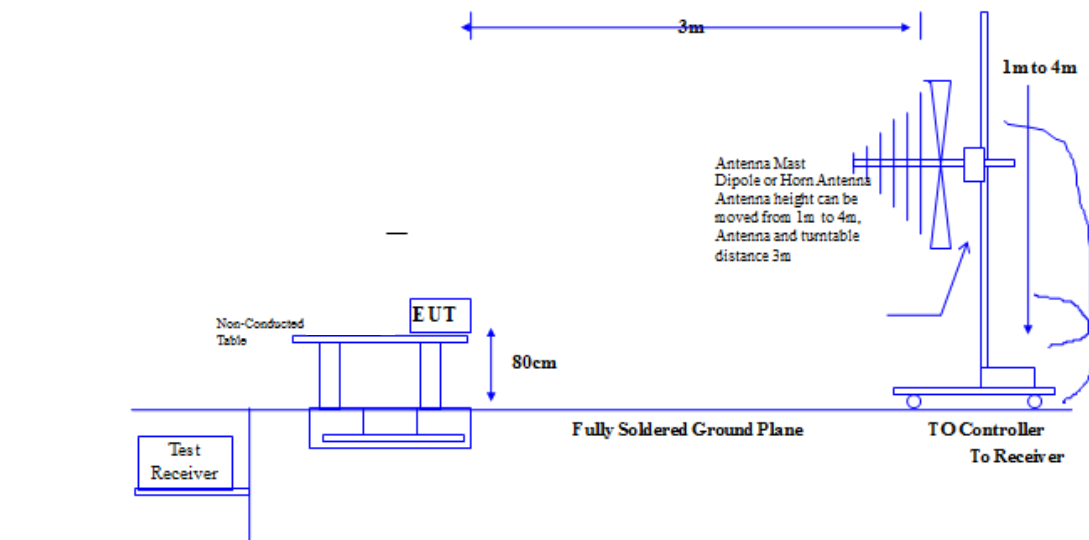
1. The testing follows the guidelines in FCC KDB Publication No. 558074 D01 DTS Measurement Guidance v03.
2. Use the following spectrum analyzer settings:
 - (1) Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold.
 - (2) Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.
Distance extrapolation factor = $20 \log (\text{specific distance [3m]} / \text{test distance [1m]})$ (dB)
3. Follow the guidelines in ANSI C63.4-2003 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

3.6.4 Test Setup

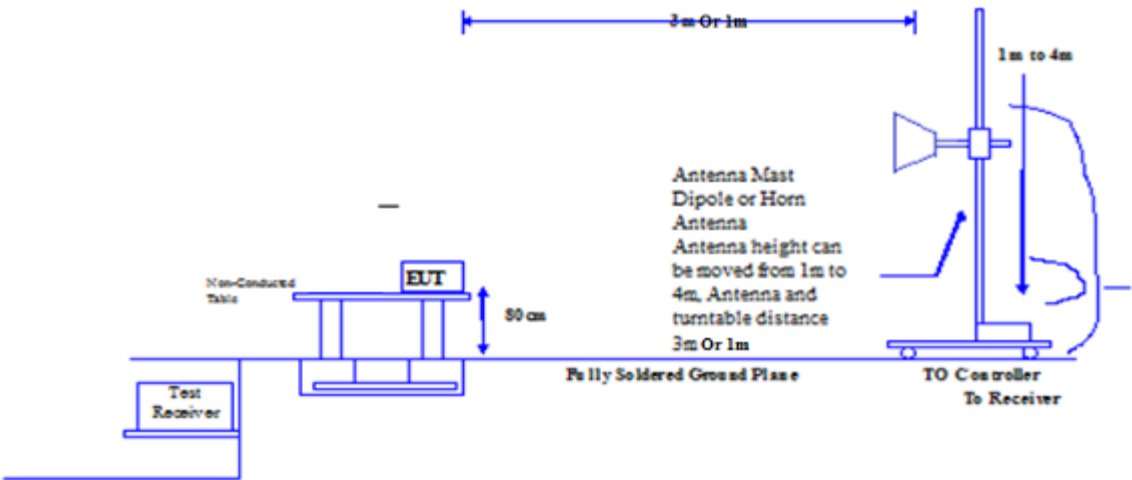
9kHz~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Radiated Emission Measurement Results (9kHz ~ 30MHz)

| | | | |
|------------------------|-----------|----------------------------|---------|
| Test Engineer : | Hogan. He | Temperature : | 23℃~26℃ |
| | | Relative Humidity : | 35%~60% |

| Frequency (MHz) | Reading (dBu V/m) | Factor(dB) Corr. | Result (dBu V/m) | Limit (dBu V/m) | Margin (dB) | Polarization |
|----------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------|------------------------|---------------------|
| 1.079 | 25.97 | 14.89 | 40.86 | 62.97 | -22.11 | Horizontal |
| 1.079 | 26.08 | 14.89 | 40.97 | 62.97 | -22.00 | Vertical |

Notes:

1 , No emission found between lowest internal or generated frequency to 30MHz.

2 , Laboratory's Information :

Prepared By : Accurate Technology Co., Ltd

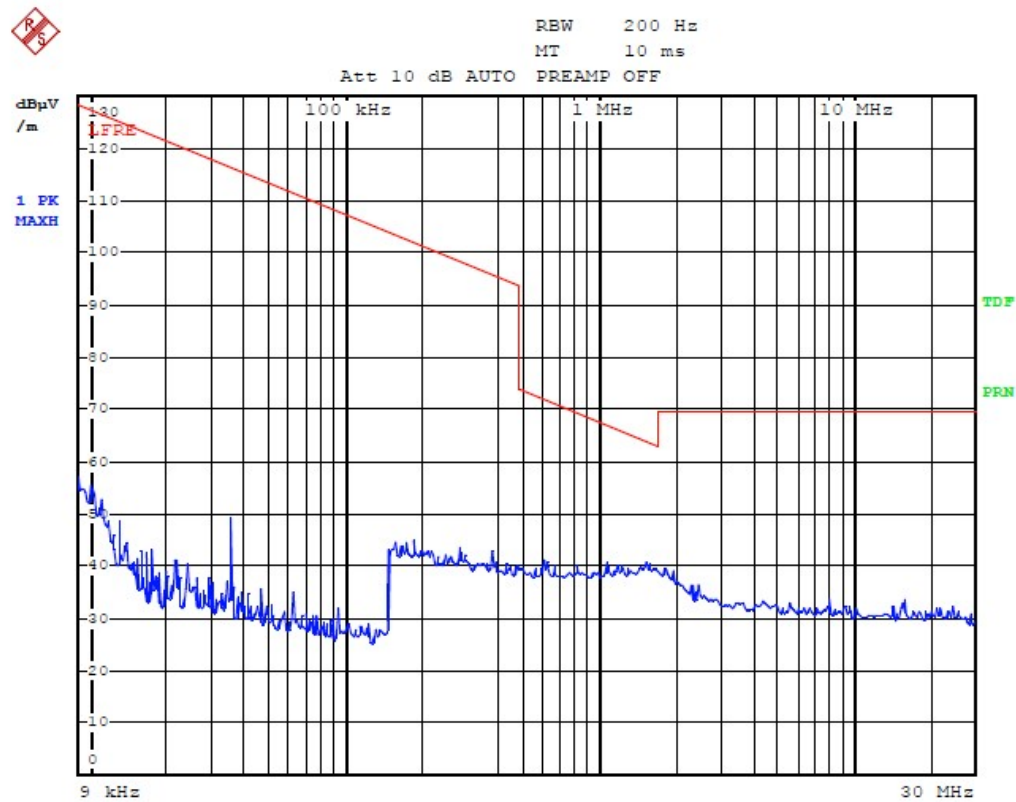
Address: F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park

Nanshan District, Shenzhen 518057, P.R. China

Company Registration Number : 752051

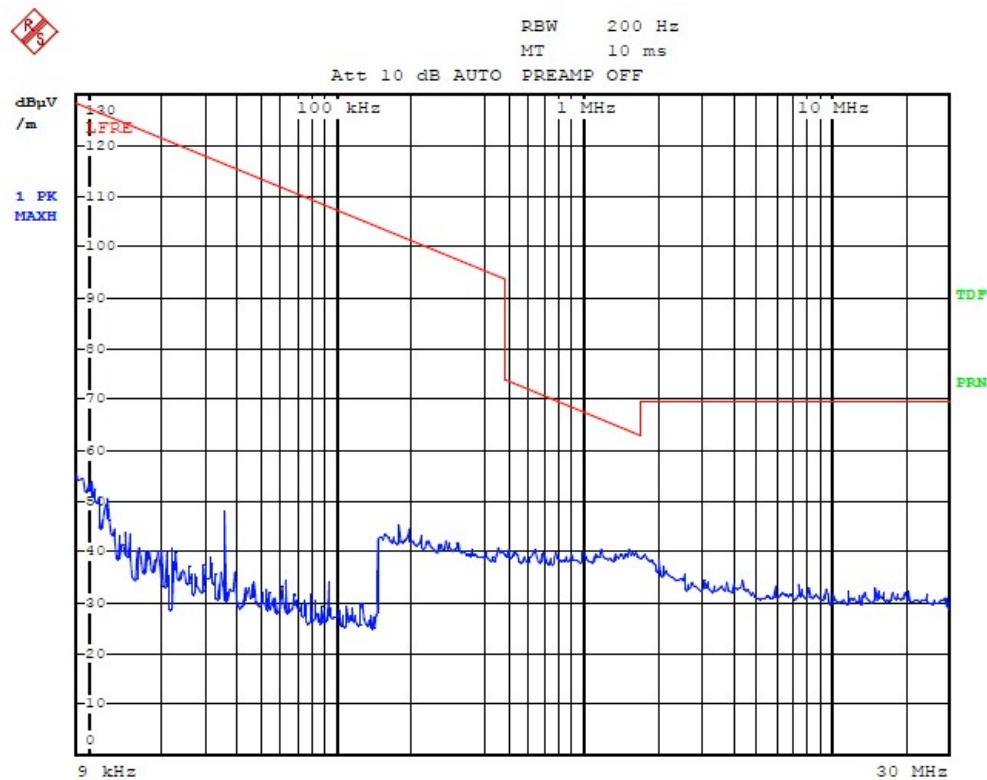
Date of Receipt : 2013.02.27

Radiated Emission Plot between 9 kHz ~ 30MHz (Horizontal)



Date: 27.FEB.2013 13:33:34 X

Radiated Emission Plot between 9 kHz ~ 30MHz (Vertical)

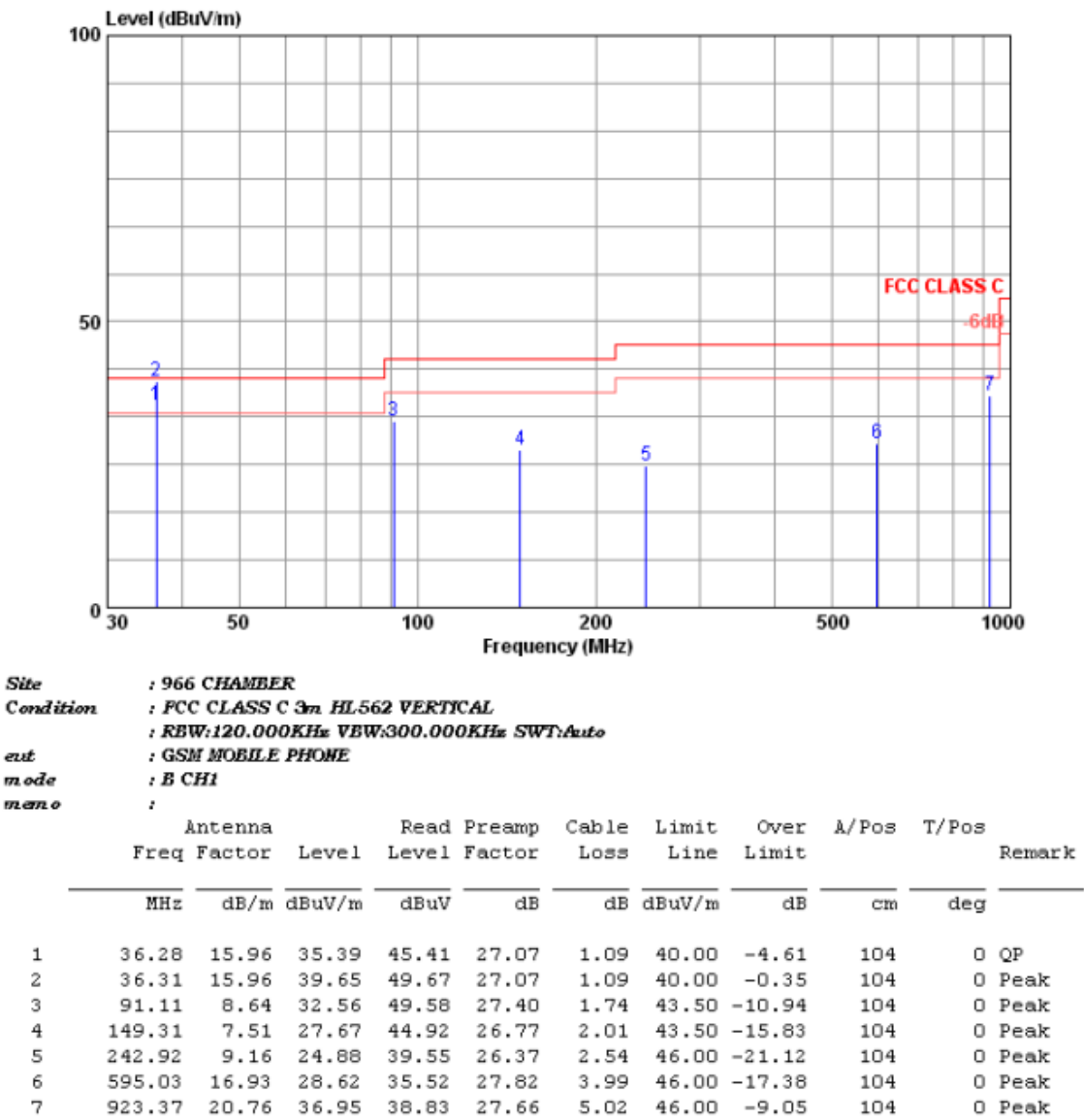


Date: 27.FEB.2013 13:36:50 Y

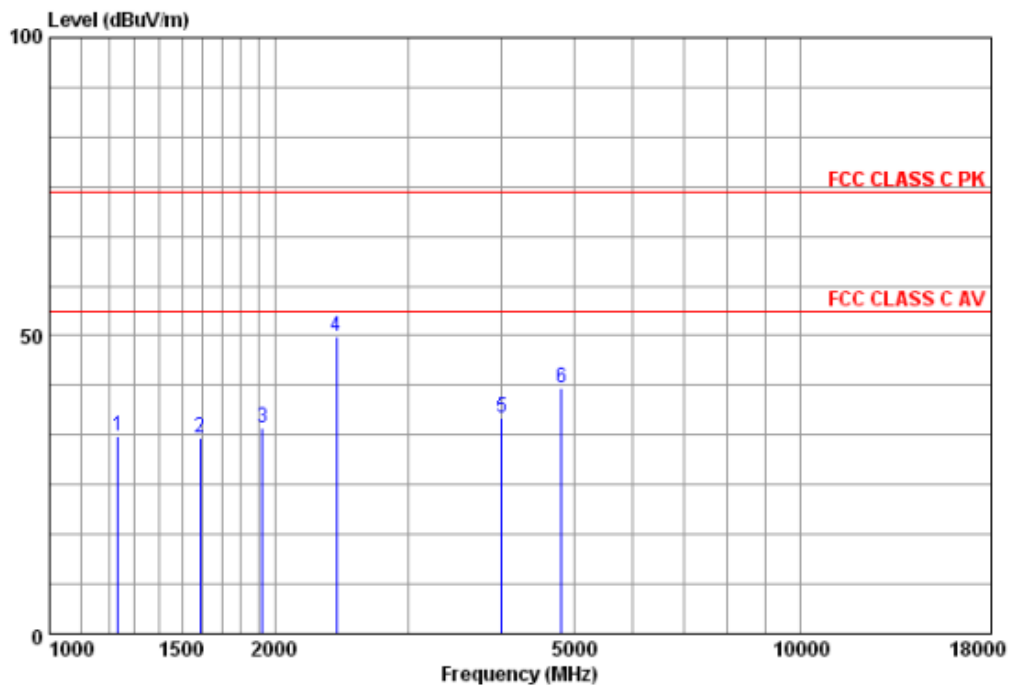
3.6.6 Radiated Emission Measurement Results (30MHz-18GHz)

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 01 | Test Mode | Mode 1 |
| Test Band : | 802.11b | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical



Radiated Emission 1GHz-18GHz Vertical

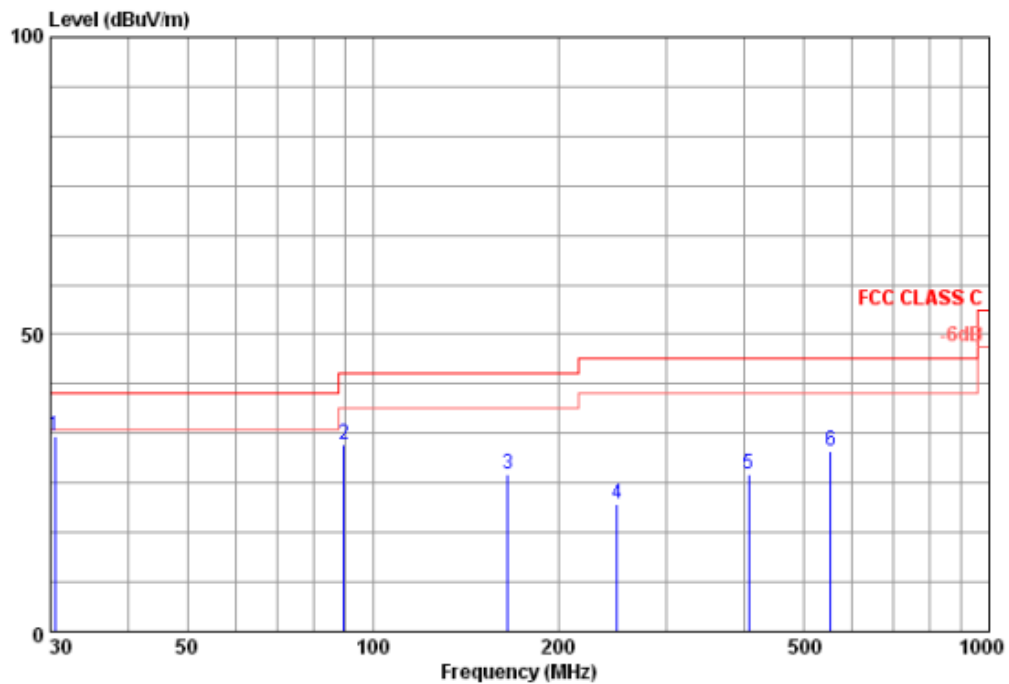


Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 VERTICAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 cut : GSM MOBILE PHONE
 mode : WIFI B CH1
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 1234.91 | 24.15 | 33.26 | 51.76 | 45.89 | 3.24 | 74.00 | -40.74 | 200 | 0 Peak |
| 2 | 1587.98 | 25.32 | 32.84 | 49.29 | 45.31 | 3.54 | 74.00 | -41.16 | 200 | 0 Peak |
| 3 | 1921.73 | 26.75 | 34.66 | 48.65 | 44.70 | 3.96 | 74.00 | -39.34 | 200 | 0 Peak |
| 4 | 2414.67 | 27.60 | 49.93 | 62.99 | 45.09 | 4.43 | 74.00 | -24.07 | 200 | 0 Peak |
| 5 | 4004.34 | 31.60 | 36.32 | 42.92 | 44.00 | 5.80 | 74.00 | -37.68 | 200 | 0 Peak |
| 6 | 4818.02 | 32.31 | 41.26 | 45.88 | 43.81 | 6.88 | 74.00 | -32.74 | 200 | 0 Peak |

Remark: Marker #4 is Fundamental signal which can be ignored

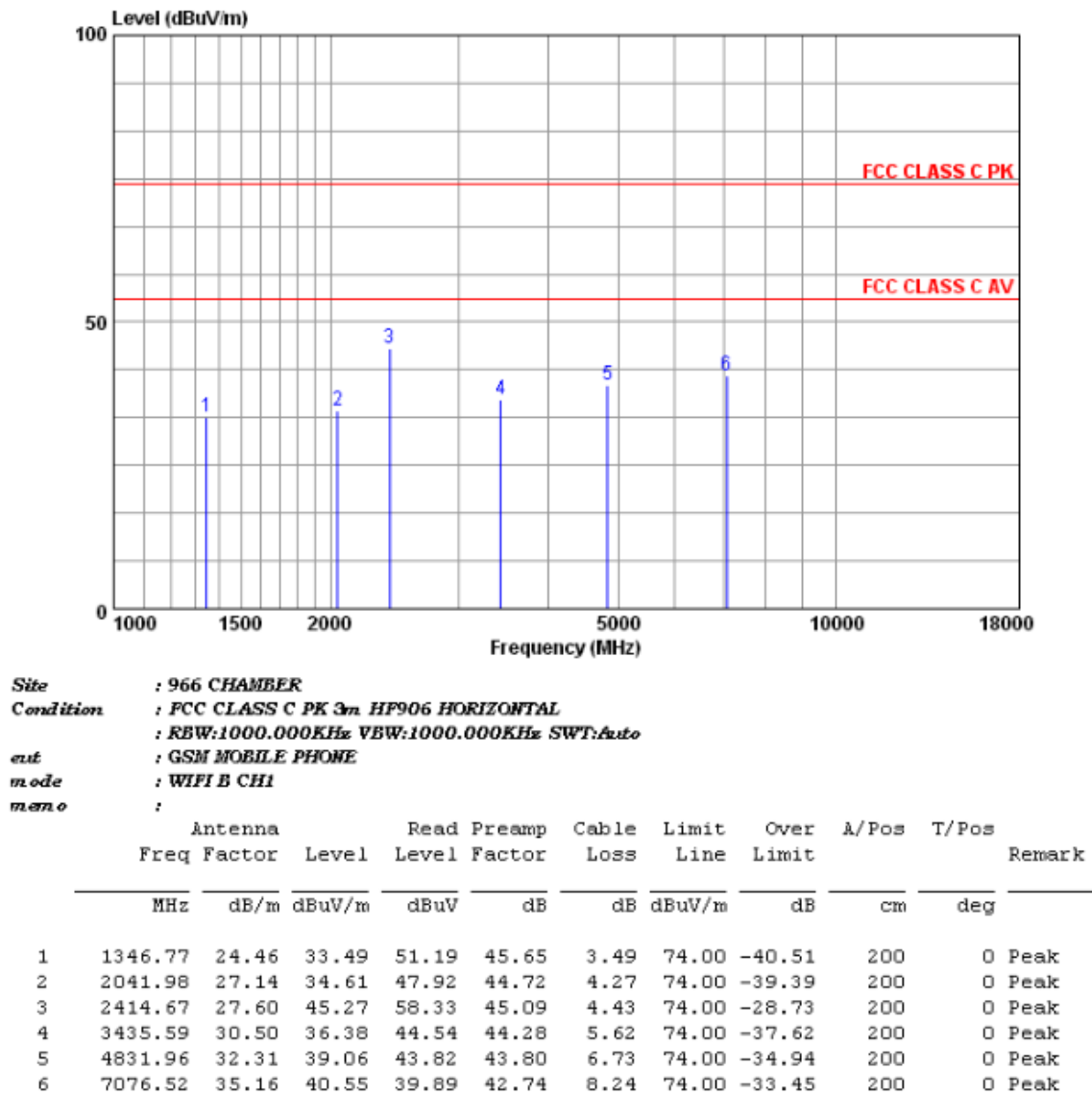
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VEW:300.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : B CH1
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 30.49 | 18.96 | 32.93 | 40.16 | 27.28 | 1.09 | 40.00 | -7.07 | 104 | 0 Peak |
| 2 | 89.66 | 8.61 | 31.34 | 48.43 | 27.44 | 1.74 | 43.50 | -12.16 | 104 | 0 Peak |
| 3 | 165.80 | 7.45 | 26.59 | 44.05 | 27.06 | 2.15 | 43.50 | -16.91 | 104 | 0 Peak |
| 4 | 248.74 | 9.36 | 21.38 | 35.77 | 26.42 | 2.67 | 46.00 | -24.62 | 104 | 0 Peak |
| 5 | 407.82 | 13.65 | 26.45 | 36.62 | 27.23 | 3.41 | 46.00 | -19.55 | 104 | 0 Peak |
| 6 | 552.83 | 16.24 | 30.36 | 37.85 | 27.64 | 3.91 | 46.00 | -15.64 | 104 | 0 Peak |

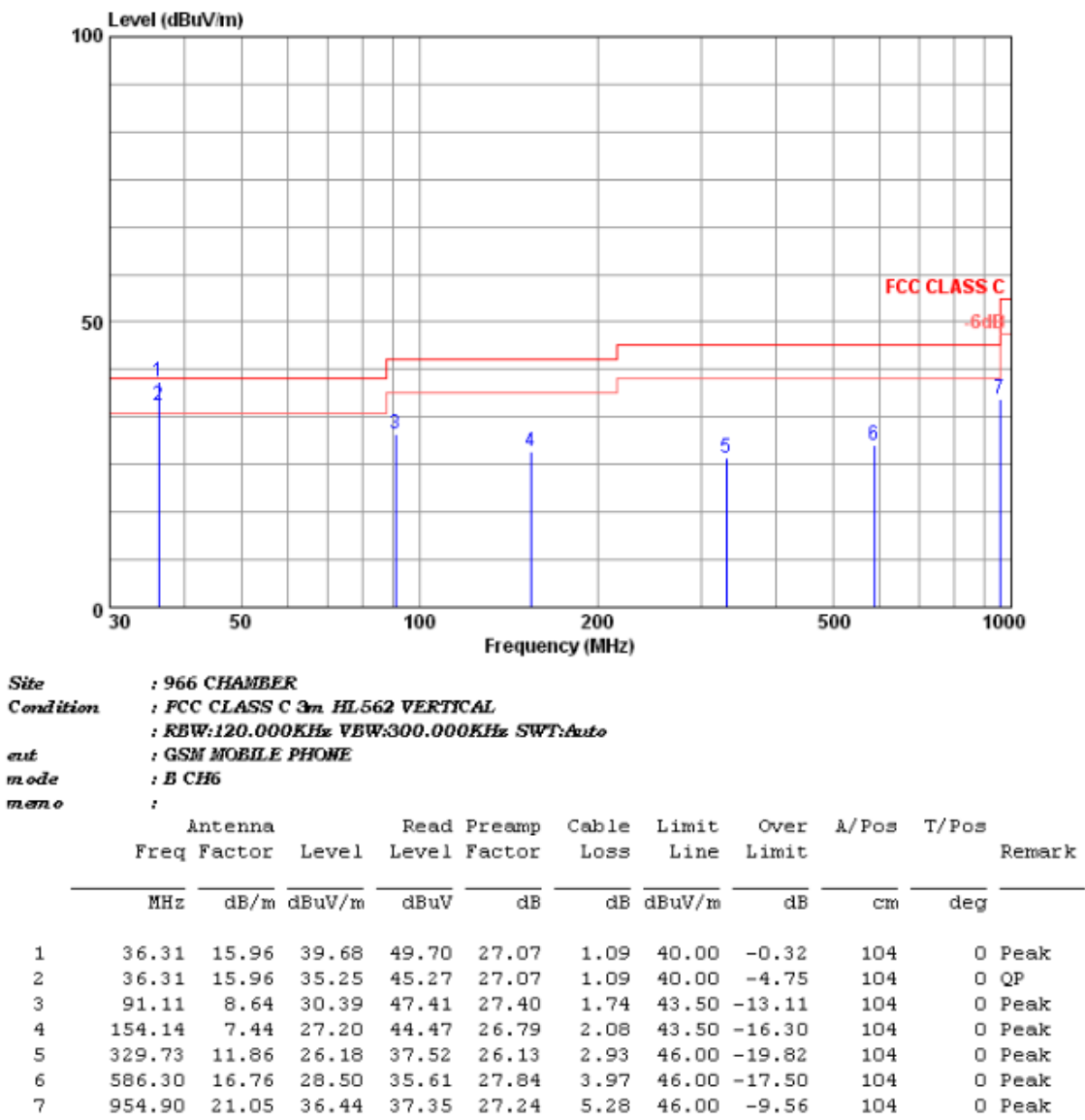
Radiated Emission 1GHz-18GHz Horizontal



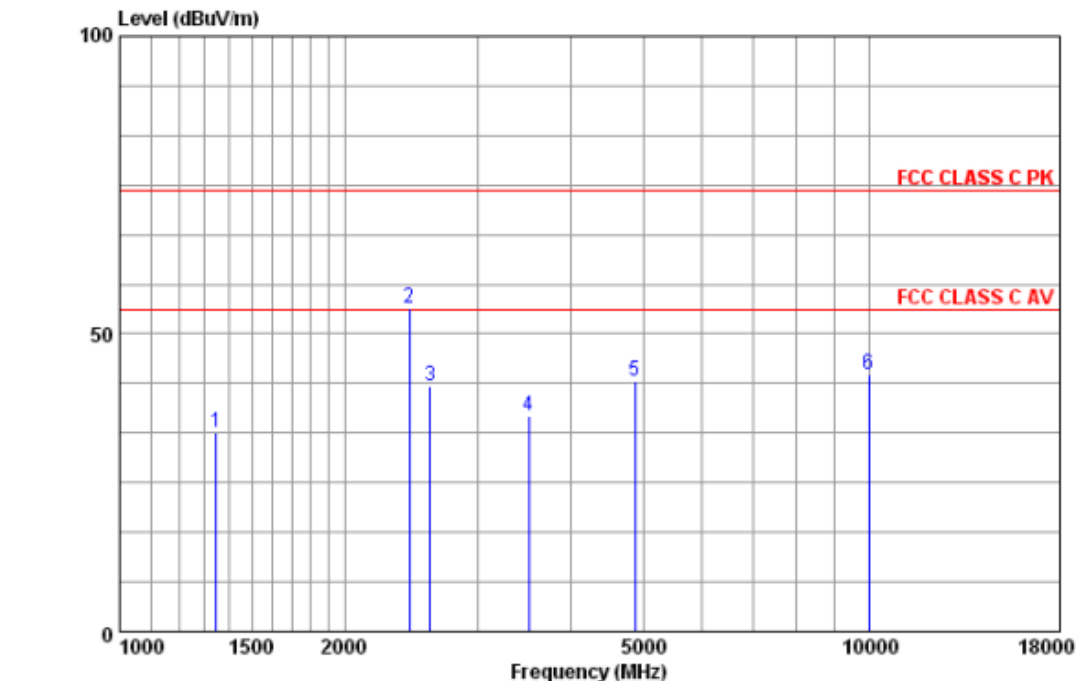
Remark: Marker #3 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 06 | Test Mode | Mode 2 |
| Test Band : | 802.11b | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical



Radiated Emission 1GHz-18GHz Vertical

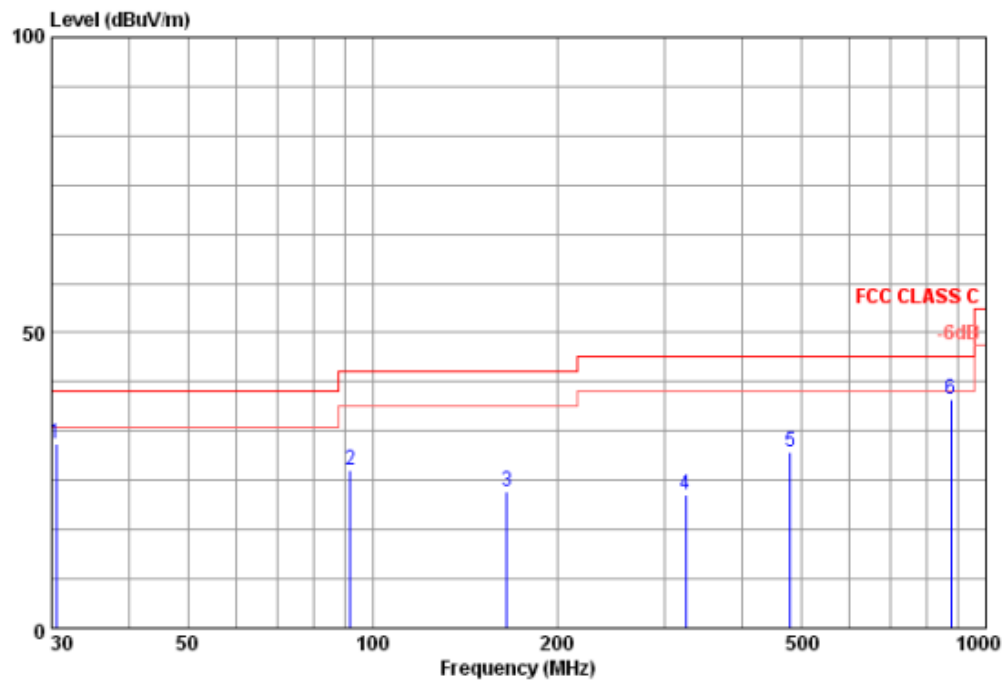


Site : 966 CHAMBER
Condition : FCC CLASS C PK 3m HP906 VERTICAL
RBW:1000.000KHz *VEW*:1000.000KHz *SWT*:Auto
test mode : GSM MOBILE PHONE
memo : WIFI B CH6

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|----------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 1346.77 | 24.46 | 33.56 | 51.26 | 45.65 | 3.49 | 74.00 | -40.44 | 200 | 0 Peak |
| 2 | 2435.70 | 27.62 | 54.42 | 67.42 | 45.08 | 4.46 | 74.00 | -19.58 | 200 | 0 Peak |
| 3 | 2595.61 | 27.97 | 41.25 | 53.60 | 45.00 | 4.68 | 74.00 | -32.75 | 200 | 0 Peak |
| 4 | 3515.96 | 30.73 | 36.33 | 44.36 | 44.20 | 5.44 | 74.00 | -37.67 | 200 | 0 Peak |
| 5 | 4874.04 | 32.43 | 42.18 | 47.02 | 43.77 | 6.50 | 74.00 | -31.82 | 200 | 0 Peak |
| 6 | 10010.42 | 37.10 | 43.20 | 39.12 | 43.60 | 10.58 | 74.00 | -30.80 | 200 | 0 Peak |

Remark: Marker #2 is Fundamental signal which can be ignored

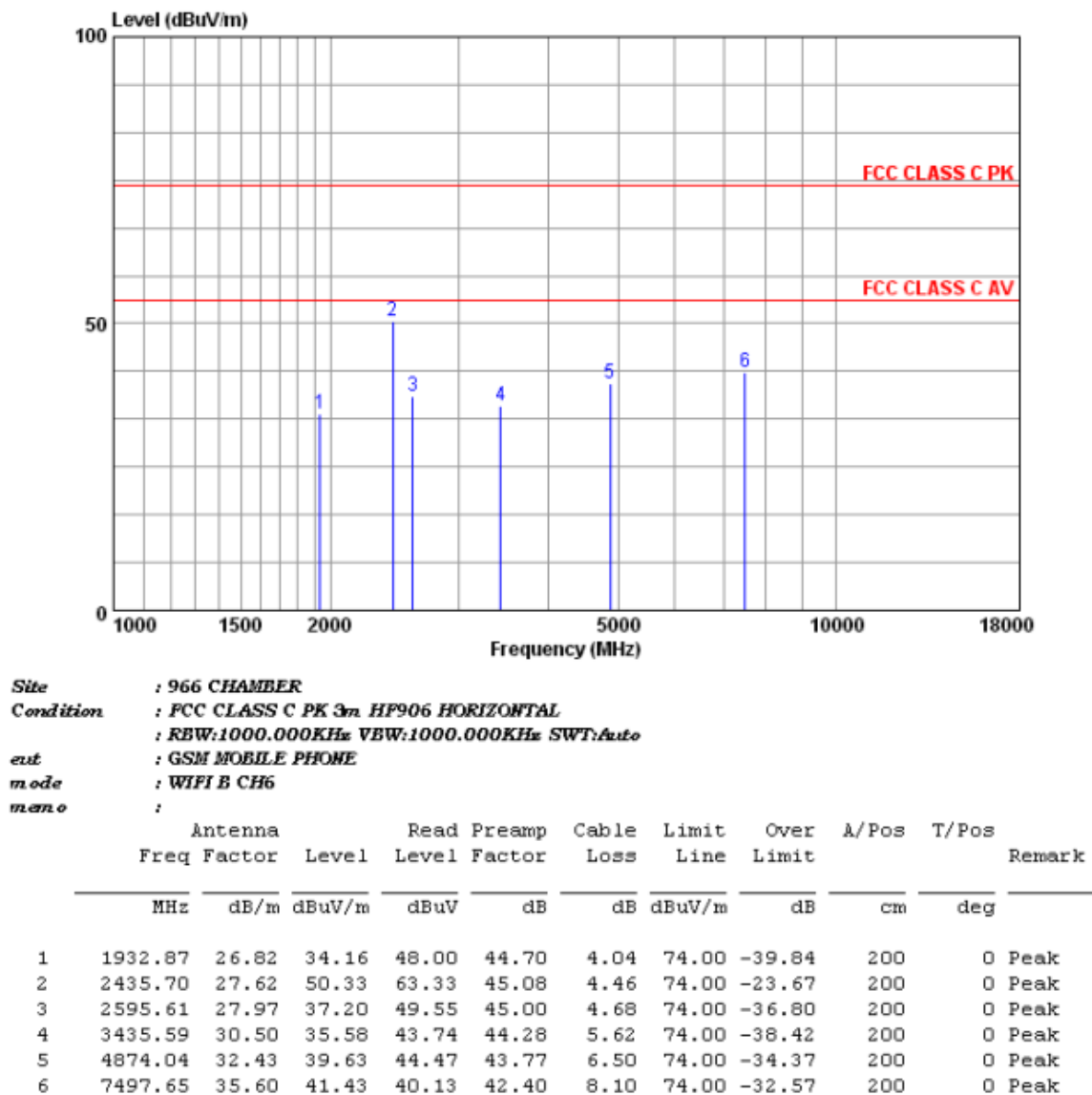
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 ant : GSM MOBILE PHONE
 mode : B CH6
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 30.49 | 18.96 | 31.21 | 38.44 | 27.28 | 1.09 | 40.00 | -8.79 | 104 | 0 Peak |
| 2 | 92.08 | 8.67 | 26.81 | 43.77 | 27.38 | 1.75 | 43.50 | -16.69 | 104 | 0 Peak |
| 3 | 165.80 | 7.45 | 23.01 | 40.47 | 27.06 | 2.15 | 43.50 | -20.49 | 104 | 0 Peak |
| 4 | 324.40 | 11.70 | 22.49 | 33.88 | 26.05 | 2.96 | 46.00 | -23.51 | 104 | 0 Peak |
| 5 | 480.08 | 15.12 | 29.82 | 38.75 | 27.53 | 3.48 | 46.00 | -16.18 | 104 | 0 Peak |
| 6 | 876.33 | 20.32 | 38.61 | 40.74 | 27.39 | 4.94 | 46.00 | -7.39 | 104 | 0 Peak |

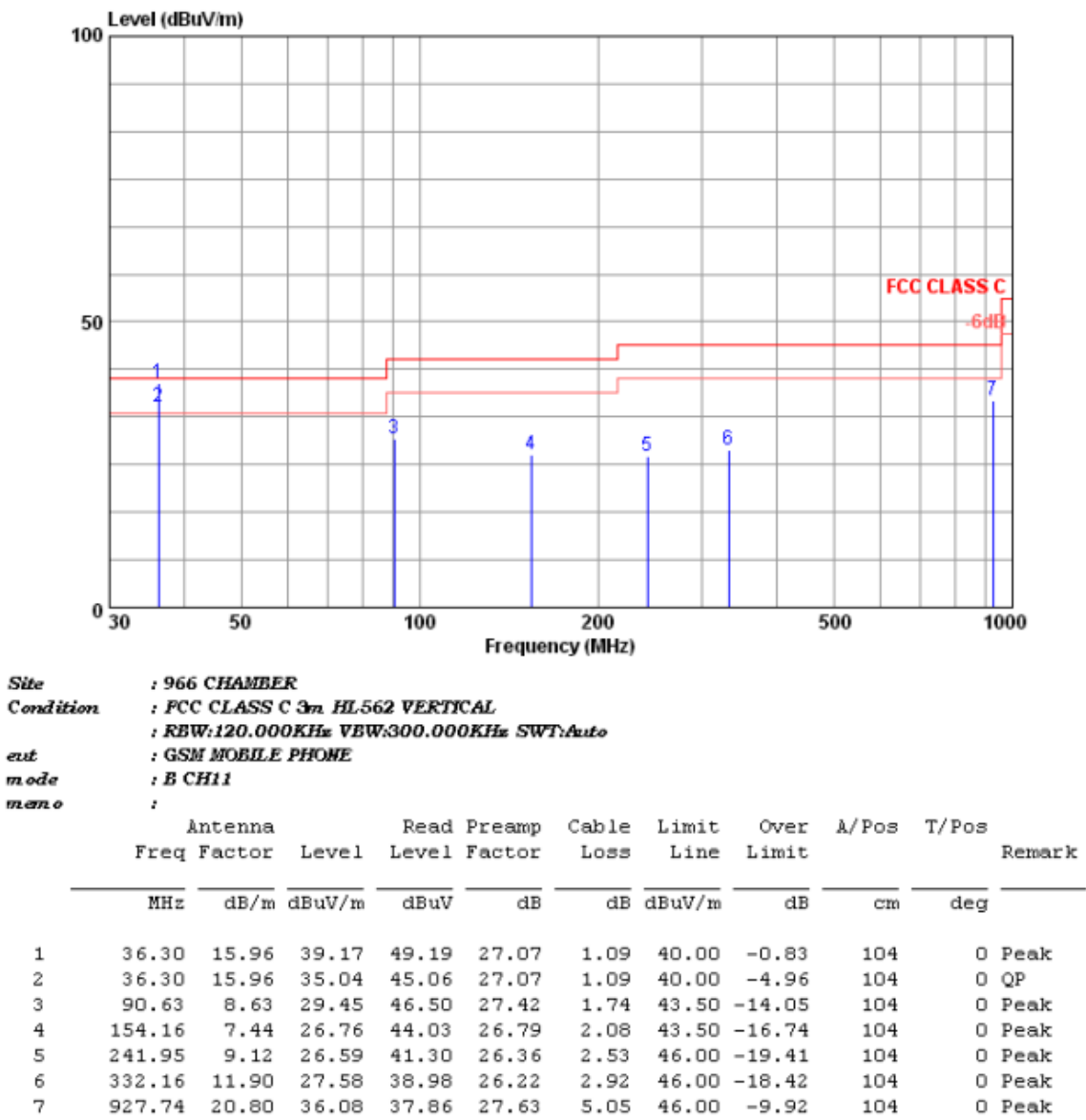
Radiated Emission 1GHz-18GHz Horizontal



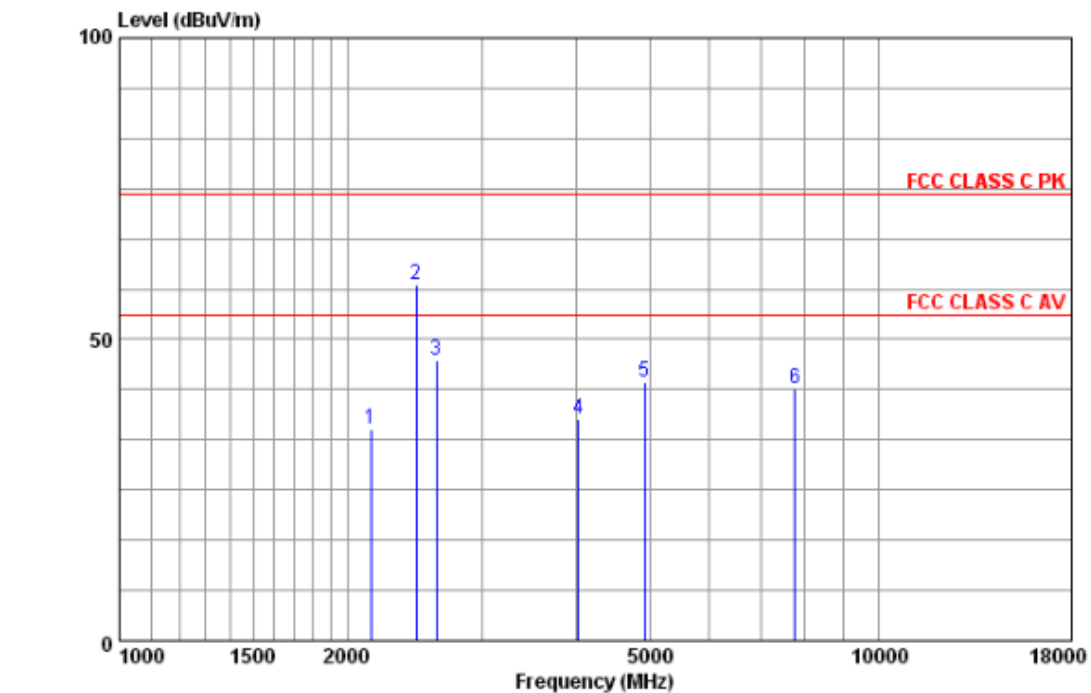
Remark: Marker #2 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 11 | Test Mode | Mode 3 |
| Test Band : | 802.11b | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical



Radiated Emission 1GHz-18GHz Vertical

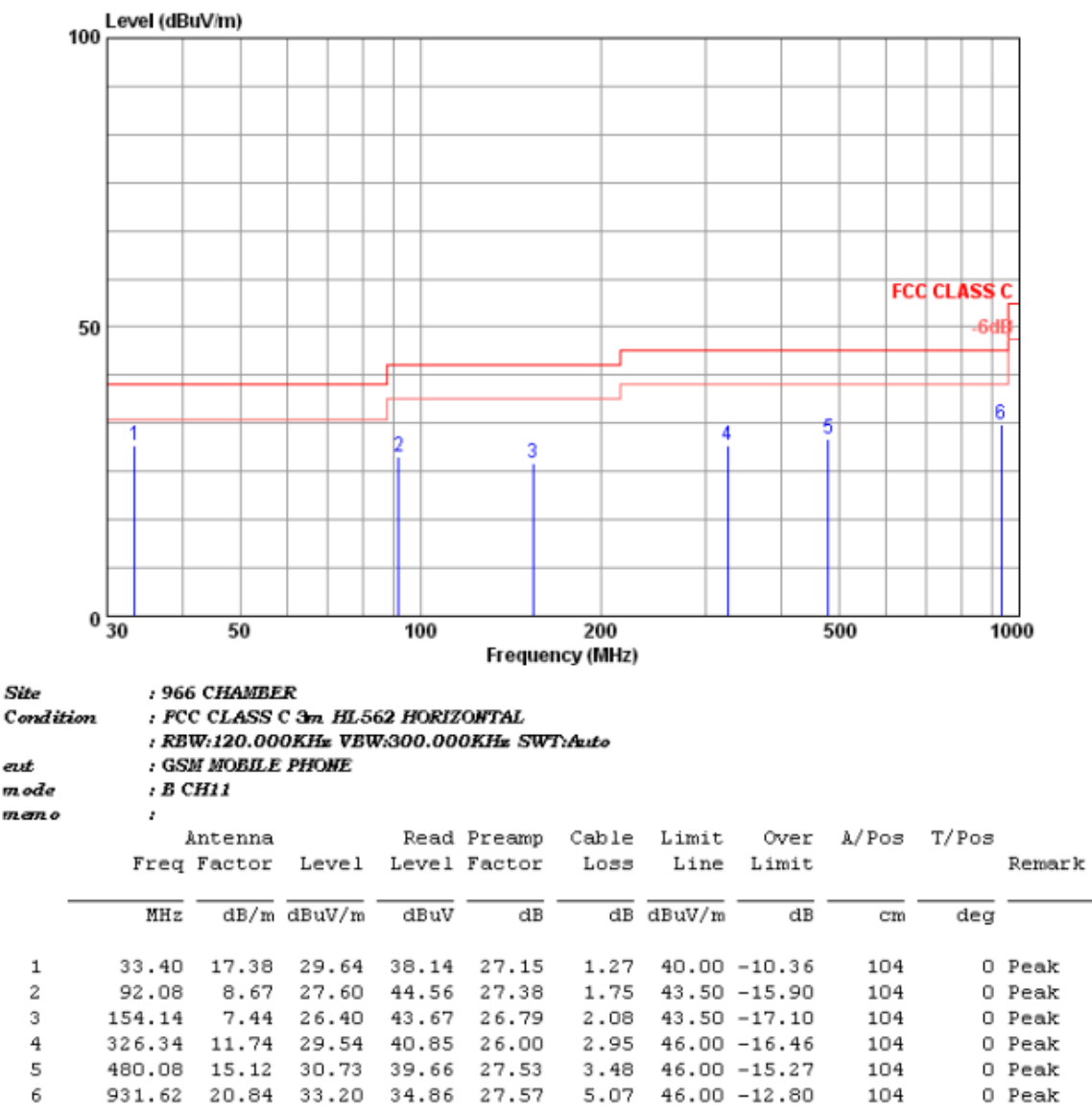


Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 VERTICAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI B CH11
 memo :

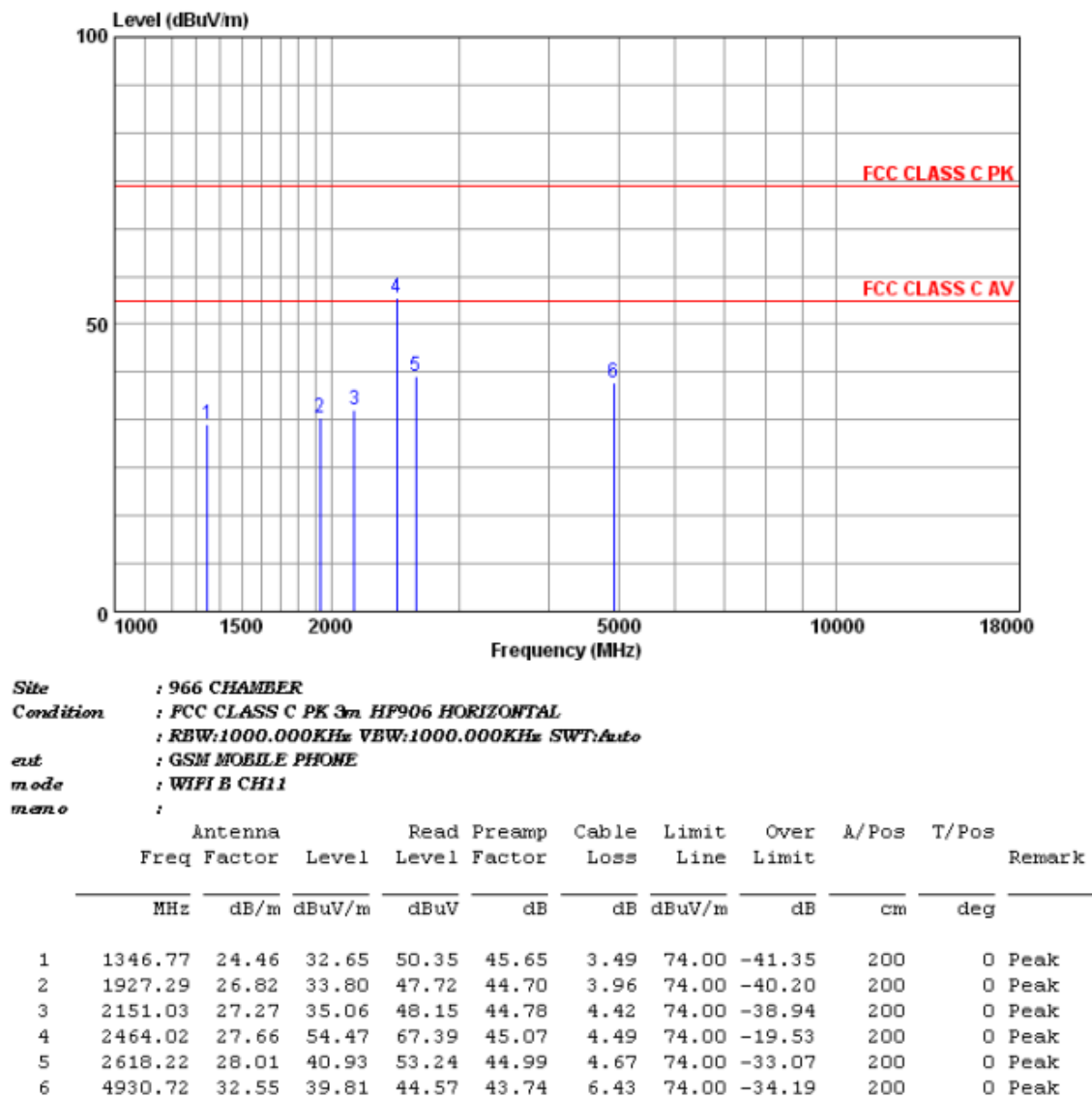
| | Antenna | | Read | Preamplifier | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|--------------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 2144.83 | 27.25 | 35.14 | 48.24 | 44.77 | 4.42 | 74.00 | -38.86 | 200 | 0 Peak |
| 2 | 2464.02 | 27.66 | 58.93 | 71.85 | 45.07 | 4.49 | 74.00 | -15.07 | 200 | 0 Peak |
| 3 | 2618.22 | 28.01 | 46.50 | 58.81 | 44.99 | 4.67 | 74.00 | -27.50 | 200 | 0 Peak |
| 4 | 4027.55 | 31.59 | 36.69 | 43.53 | 44.00 | 5.57 | 74.00 | -37.31 | 200 | 0 Peak |
| 5 | 4930.72 | 32.55 | 43.03 | 47.79 | 43.74 | 6.43 | 74.00 | -30.97 | 200 | 0 Peak |
| 6 | 7762.26 | 35.55 | 41.80 | 39.87 | 42.67 | 9.05 | 74.00 | -32.20 | 200 | 0 Peak |

Remark: Marker #2 is Fundamental signal which can be ignored

Radiated Emission 30MHz-1GHz Horizontal



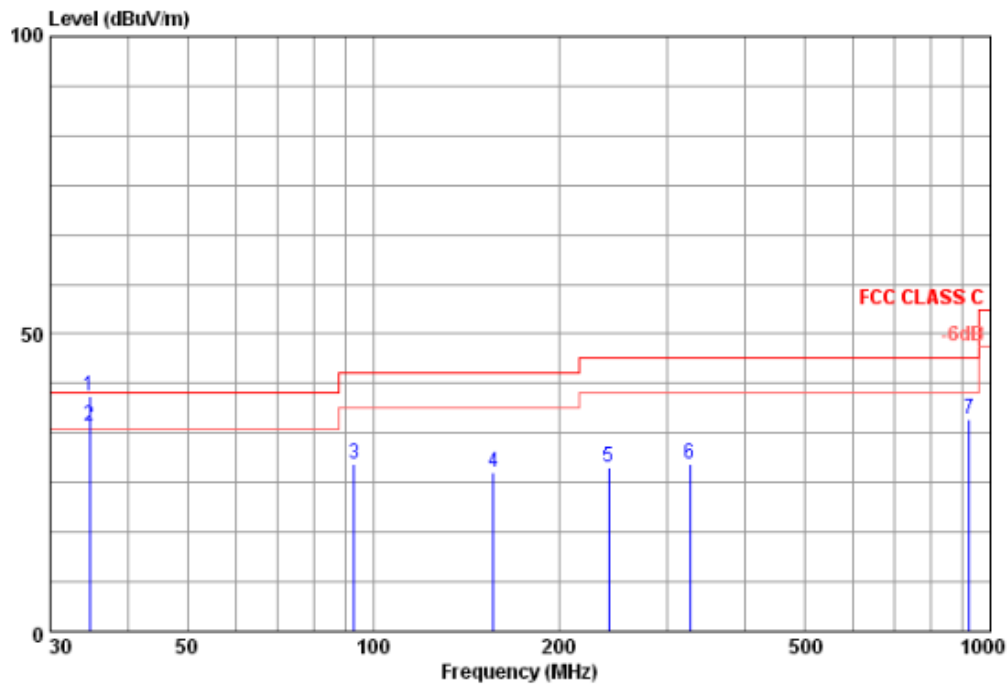
Radiated Emission 1GHz-18GHz Horizontal



Remark: Marker #4 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 01 | Test Mode | Mode 4 |
| Test Band : | 802.11g | Test Engineer : | Guo-Zheng Li |

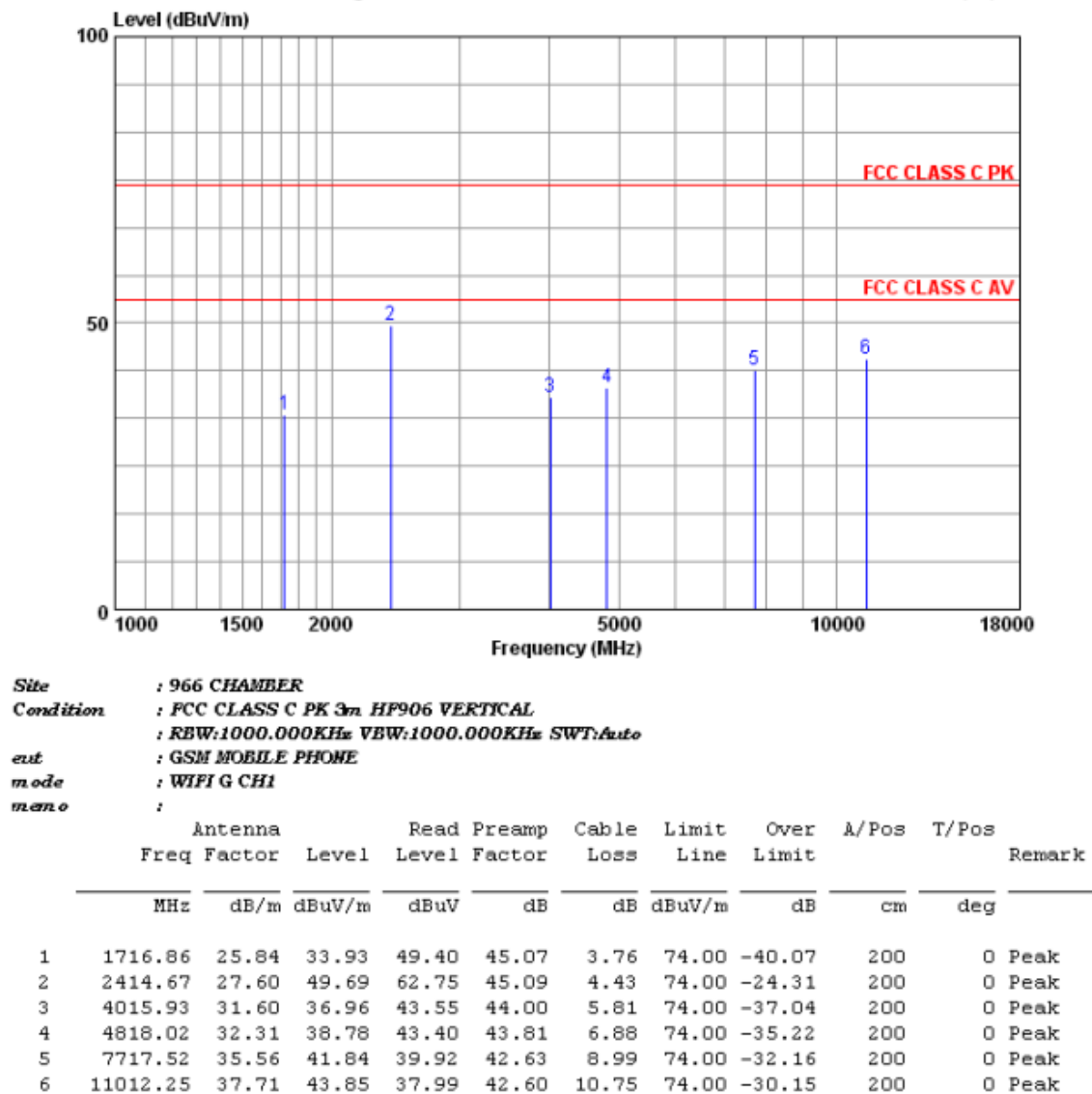
Radiated Emission 30MHz-1GHz Vertical



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 VERTICAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 Ant : GSM MOBILE PHONE
 mode : G CH1
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 34.73 | 16.73 | 39.44 | 48.67 | 27.10 | 1.14 | 40.00 | -0.56 | 104 | O Peak |
| 2 | 34.73 | 16.73 | 34.44 | 43.67 | 27.10 | 1.14 | 40.00 | -5.56 | 104 | O QP |
| 3 | 93.05 | 8.69 | 28.22 | 45.14 | 27.36 | 1.75 | 43.50 | -15.28 | 104 | O Peak |
| 4 | 156.59 | 7.41 | 26.84 | 44.13 | 26.82 | 2.12 | 43.50 | -16.66 | 104 | O Peak |
| 5 | 240.98 | 9.08 | 27.48 | 42.23 | 26.35 | 2.52 | 46.00 | -18.52 | 104 | O Peak |
| 6 | 325.85 | 11.74 | 28.06 | 39.38 | 26.02 | 2.96 | 46.00 | -17.94 | 104 | O Peak |
| 7 | 923.37 | 20.76 | 35.60 | 37.48 | 27.66 | 5.02 | 46.00 | -10.40 | 104 | O Peak |

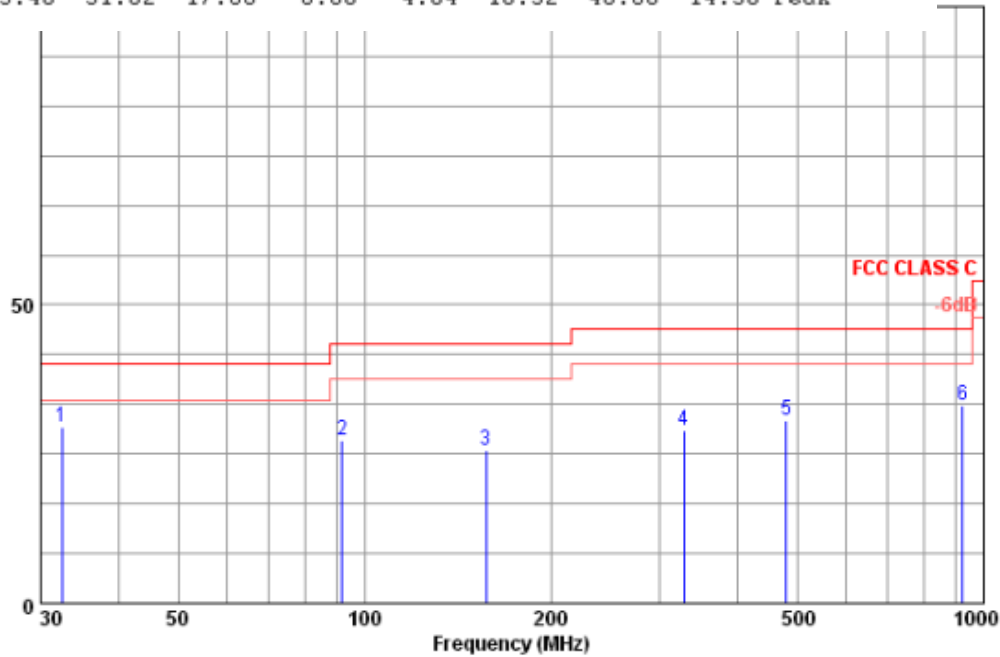
Radiated Emission 1GHz-18GHz Vertical



Remark: Marker #2 is Fundamental signal which can be ignored

| | Freq | Antenna Level | Factor | Aux Factor | Cable Loss | Read Level | Limit Line | Over Limit | Remark |
|---|--------|------------------|--------|---------------|---------------|---------------|---------------|---------------|--------|
| | MHz | dBuV/m | dB/m | dB | dB | dBuV | dBuV/m | dB | |
| 1 | 36.57 | 30.43 | 15.77 | 0.00 | 1.09 | 13.57 | 40.00 | -9.57 | Peak |
| 2 | 59.64 | 24.20 | 3.72 | 0.00 | 1.39 | 19.09 | 40.00 | -15.80 | Peak |
| 3 | 86.11 | 25.46 | 8.55 | 0.00 | 1.74 | 15.17 | 40.00 | -14.54 | Peak |
| 4 | 207.14 | 20.33 | 7.64 | 0.00 | 2.27 | 10.42 | 43.50 | -23.17 | Peak |
| 5 | 315.12 | 24.18 | 11.46 | 0.00 | 2.95 | 9.77 | 46.00 | -21.82 | Peak |
| 6 | 603.48 | 31.62 | 17.06 | 0.00 | 4.04 | 10.52 | 46.00 | -14.38 | Peak |

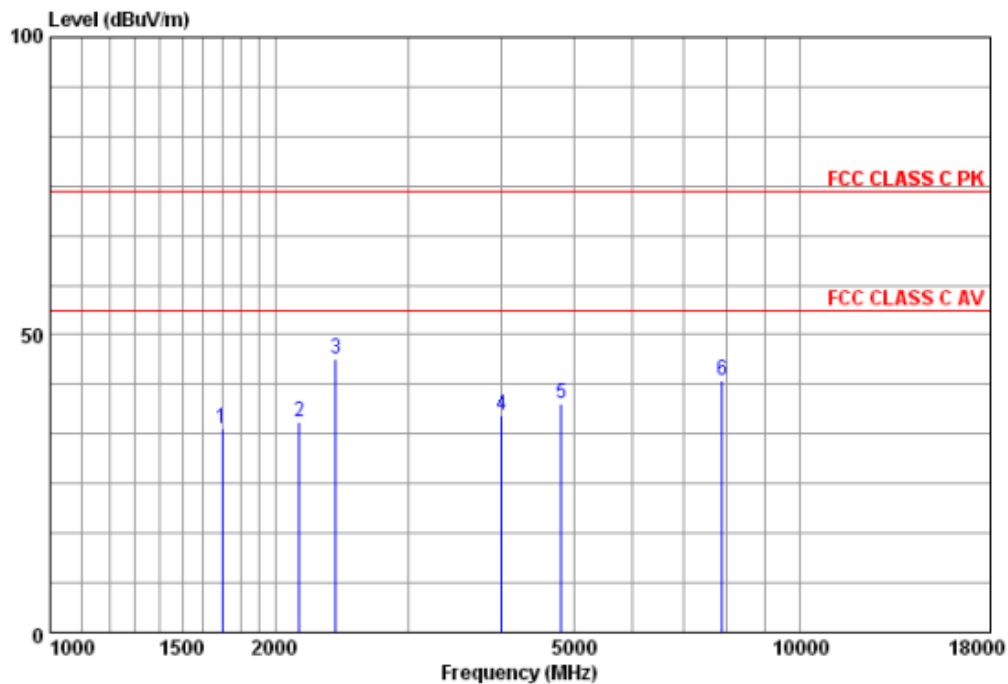
0220FCC-C



Site : 966 CHAMBER
Condition : FCC CLASS C 3m HL562 HORIZONTAL
: RBW:120.000KHz VBW:300.000KHz SWT:Auto
ant : GSM MOBILE PHONE
mode : G CH1
memo :

| | Antenna Freq | Factor | Level | Read Level | Preamplifier Factor | Cable Loss | Limit Line | Over Limit | A/Pos | T/Pos | Remark |
|---|-----------------|--------|--------|---------------|------------------------|---------------|---------------|---------------|-------|-------|--------|
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg | |
| 1 | 32.43 | 17.84 | 29.53 | 37.52 | 27.19 | 1.36 | 40.00 | -10.47 | 104 | 0 | Peak |
| 2 | 92.08 | 8.67 | 27.35 | 44.31 | 27.38 | 1.75 | 43.50 | -16.15 | 104 | 0 | Peak |
| 3 | 157.07 | 7.41 | 25.70 | 42.99 | 26.83 | 2.13 | 43.50 | -17.80 | 104 | 0 | Peak |
| 4 | 328.28 | 11.82 | 29.06 | 40.34 | 26.04 | 2.94 | 46.00 | -16.94 | 104 | 0 | Peak |
| 5 | 480.08 | 15.12 | 30.54 | 39.47 | 27.53 | 3.48 | 46.00 | -15.46 | 104 | 0 | Peak |
| 6 | 924.34 | 20.76 | 33.04 | 34.91 | 27.66 | 5.03 | 46.00 | -12.96 | 104 | 0 | Peak |

Radiated Emission 1GHz-18GHz Horizontal



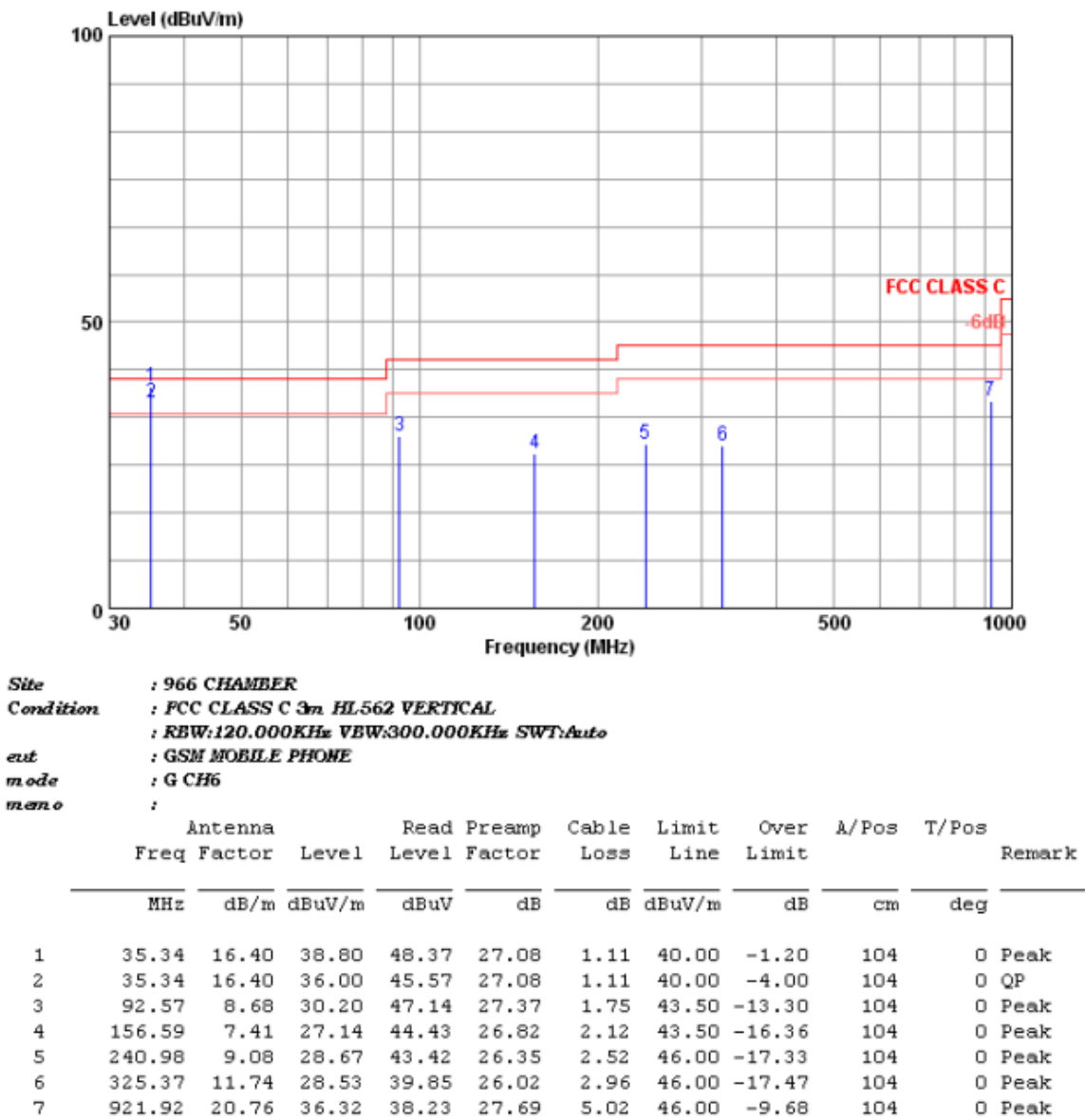
Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI G CH1
 memo :

| | Antenna | | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|-------|--------|-------|--------|--------|-------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg | |
| 1 | 1697.13 | 25.77 | 34.34 | 49.92 | 45.11 | 3.76 | 74.00 | -39.66 | 200 | 0 | Peak |
| 2 | 2151.03 | 27.27 | 35.49 | 48.58 | 44.78 | 4.42 | 74.00 | -38.51 | 200 | 0 | Peak |
| 3 | 2407.70 | 27.60 | 46.06 | 59.14 | 45.10 | 4.42 | 74.00 | -27.94 | 200 | 0 | Peak |
| 4 | 4004.34 | 31.60 | 36.38 | 42.98 | 44.00 | 5.80 | 74.00 | -37.62 | 200 | 0 | Peak |
| 5 | 4818.02 | 32.31 | 38.47 | 43.09 | 43.81 | 6.88 | 74.00 | -35.53 | 200 | 0 | Peak |
| 6 | 7898.05 | 35.52 | 42.24 | 41.19 | 42.80 | 8.33 | 74.00 | -31.76 | 200 | 0 | Peak |

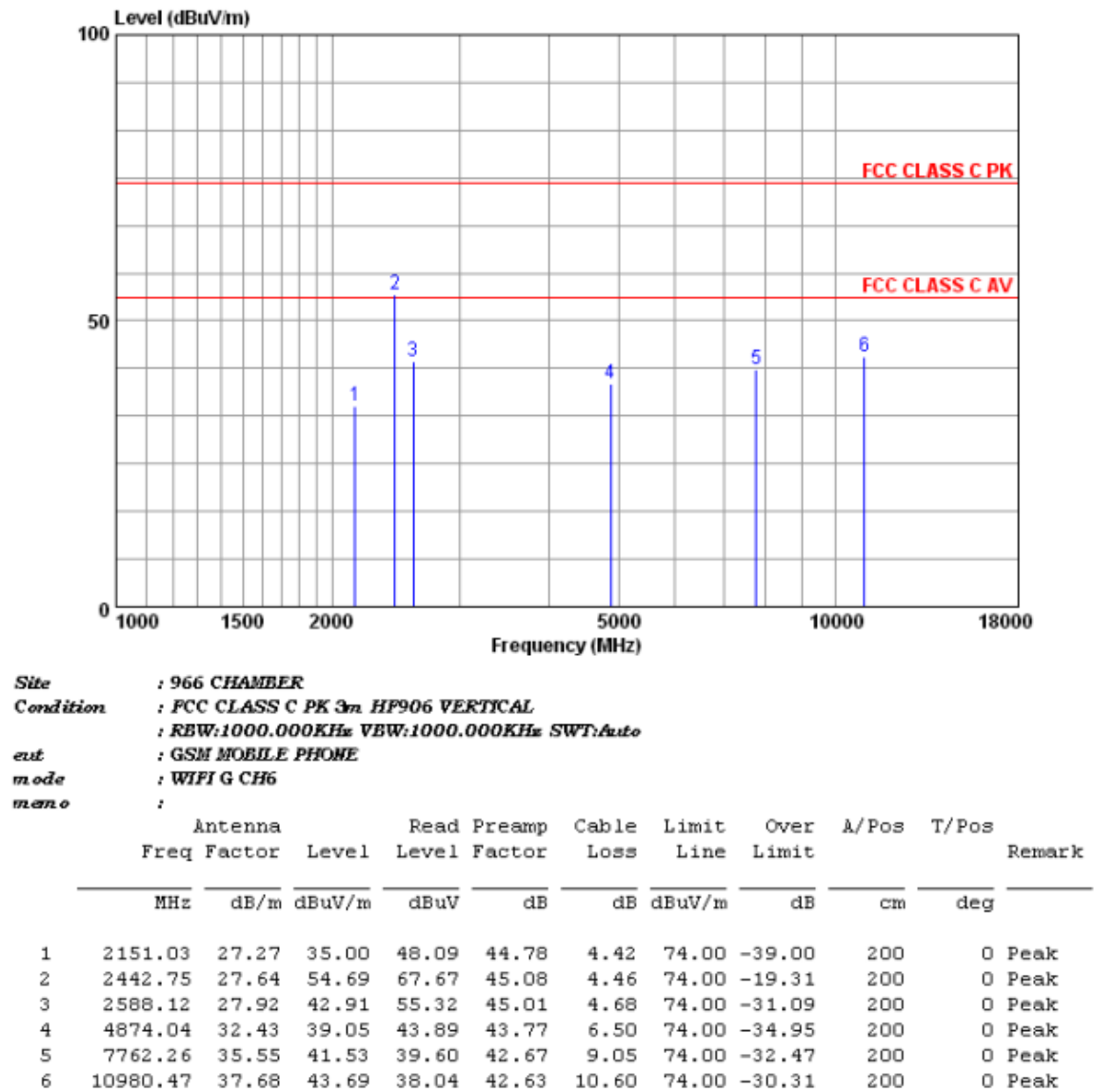
Remark: Marker #3 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 06 | Test Mode | Mode 5 |
| Test Band : | 802.11g | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical

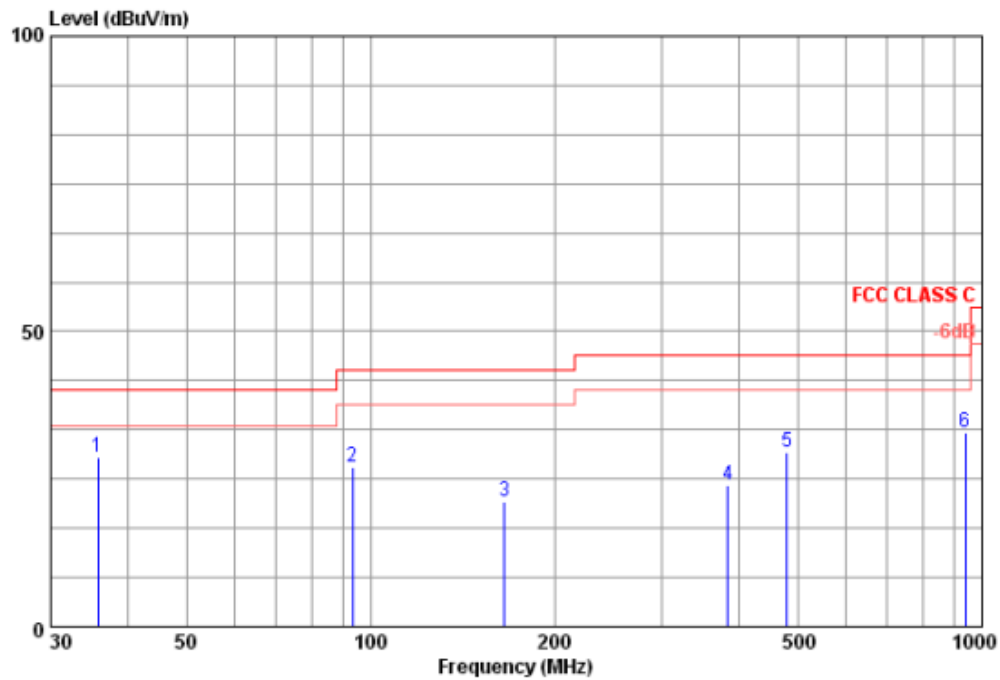


Radiated Emission 1GHz-18GHz Vertical



Remark: Marker #2 is Fundamental signal which can be ignored

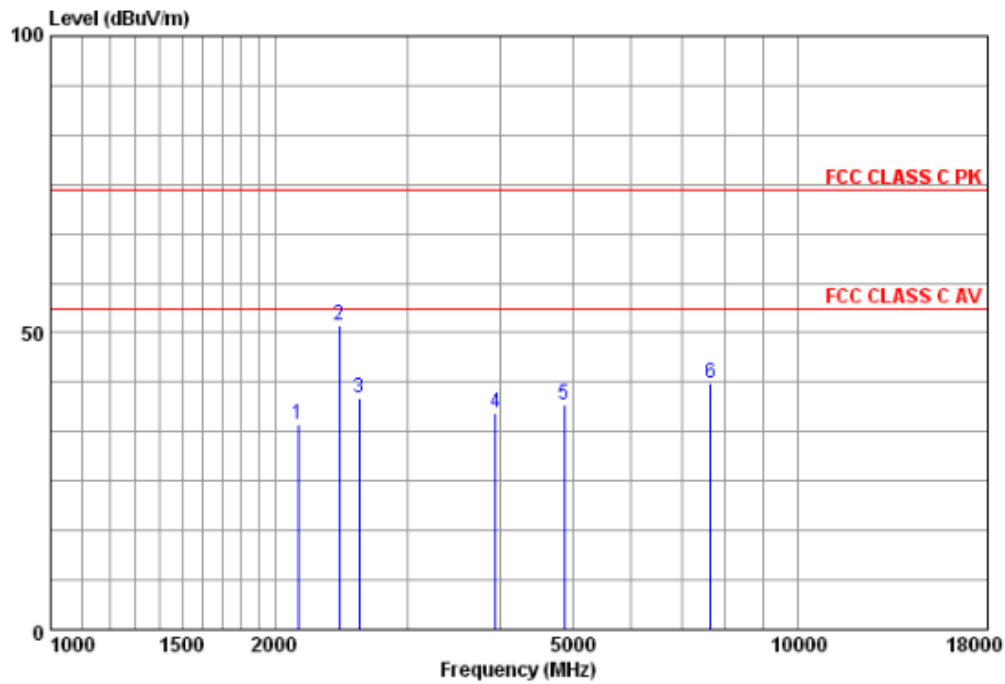
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VEW:300.000KHz SWT:Auto
 eut : GSM MOBILE PHONE
 mode : G CH6
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 35.82 | 16.14 | 28.76 | 38.61 | 27.08 | 1.09 | 40.00 | -11.24 | 104 | 0 Peak |
| 2 | 93.54 | 8.70 | 26.99 | 43.91 | 27.36 | 1.74 | 43.50 | -16.51 | 104 | 0 Peak |
| 3 | 165.80 | 7.45 | 21.27 | 38.73 | 27.06 | 2.15 | 43.50 | -22.23 | 104 | 0 Peak |
| 4 | 384.05 | 13.12 | 23.94 | 34.76 | 27.15 | 3.21 | 46.00 | -22.06 | 104 | 0 Peak |
| 5 | 480.08 | 15.12 | 29.39 | 38.32 | 27.53 | 3.48 | 46.00 | -16.61 | 104 | 0 Peak |
| 6 | 937.92 | 20.92 | 32.88 | 34.19 | 27.43 | 5.20 | 46.00 | -13.12 | 104 | 0 Peak |

Radiated Emission 1GHz-18GHz Horizontal



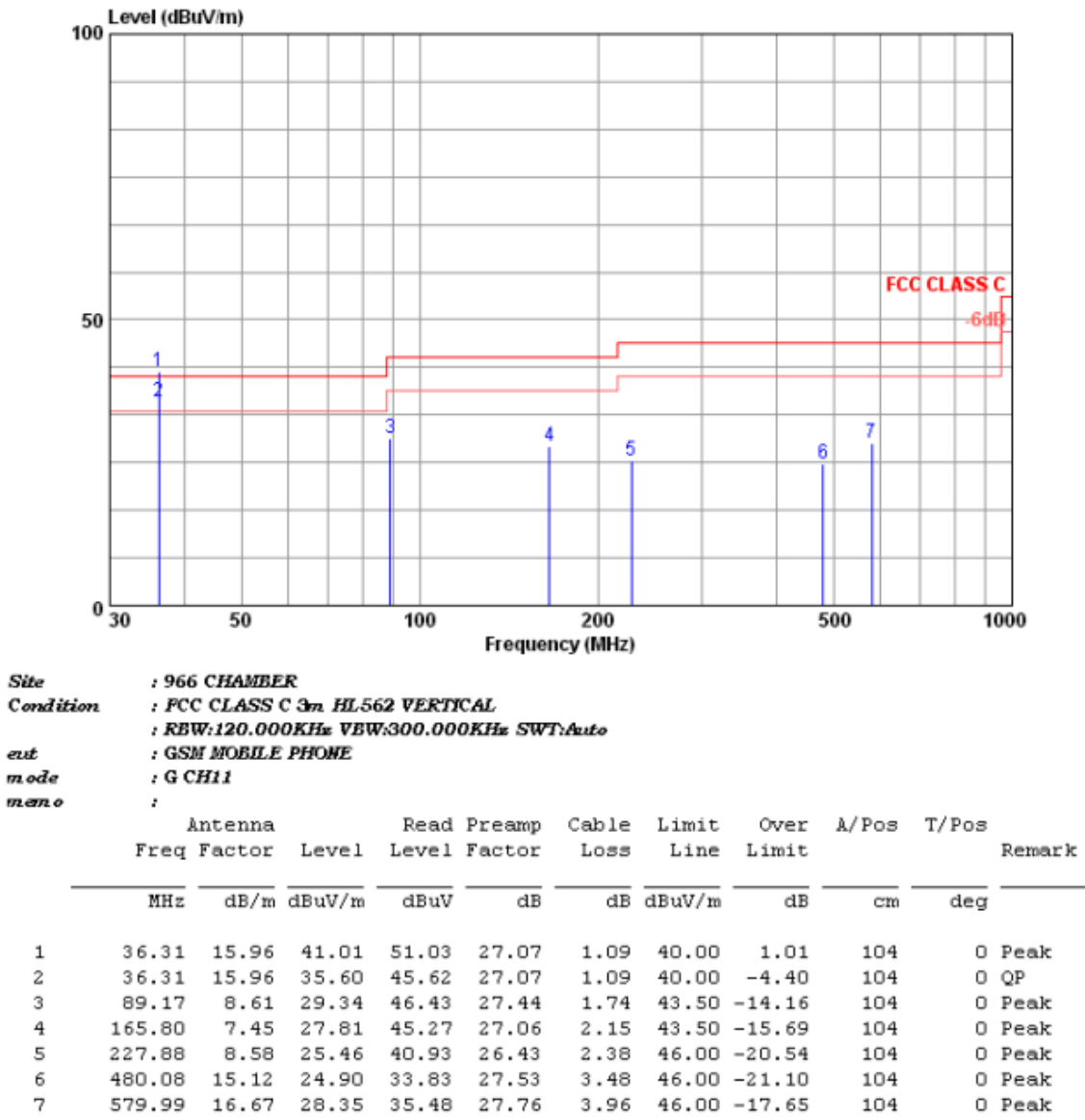
Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI G CH6
 memo :

| | Antenna | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|-------|--------|------|--------|--------|------------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | |
| | MHz | dB/m | dBUV/m | dBuV | dB | dB | dBUV/m | dB | |
| 1 | 2144.83 | 27.25 | 34.60 | 47.70 | 44.77 | 4.42 | 74.00 | -39.40 | 200 0 Peak |
| 2 | 2435.70 | 27.62 | 51.15 | 64.15 | 45.08 | 4.46 | 74.00 | -22.85 | 200 0 Peak |
| 3 | 2588.12 | 27.92 | 39.05 | 51.46 | 45.01 | 4.68 | 74.00 | -34.95 | 200 0 Peak |
| 4 | 3946.89 | 31.51 | 36.60 | 43.55 | 44.02 | 5.56 | 74.00 | -37.40 | 200 0 Peak |
| 5 | 4874.04 | 32.43 | 38.01 | 42.85 | 43.77 | 6.50 | 74.00 | -35.99 | 200 0 Peak |
| 6 | 7650.89 | 35.57 | 41.53 | 39.91 | 42.56 | 8.61 | 74.00 | -32.47 | 200 0 Peak |

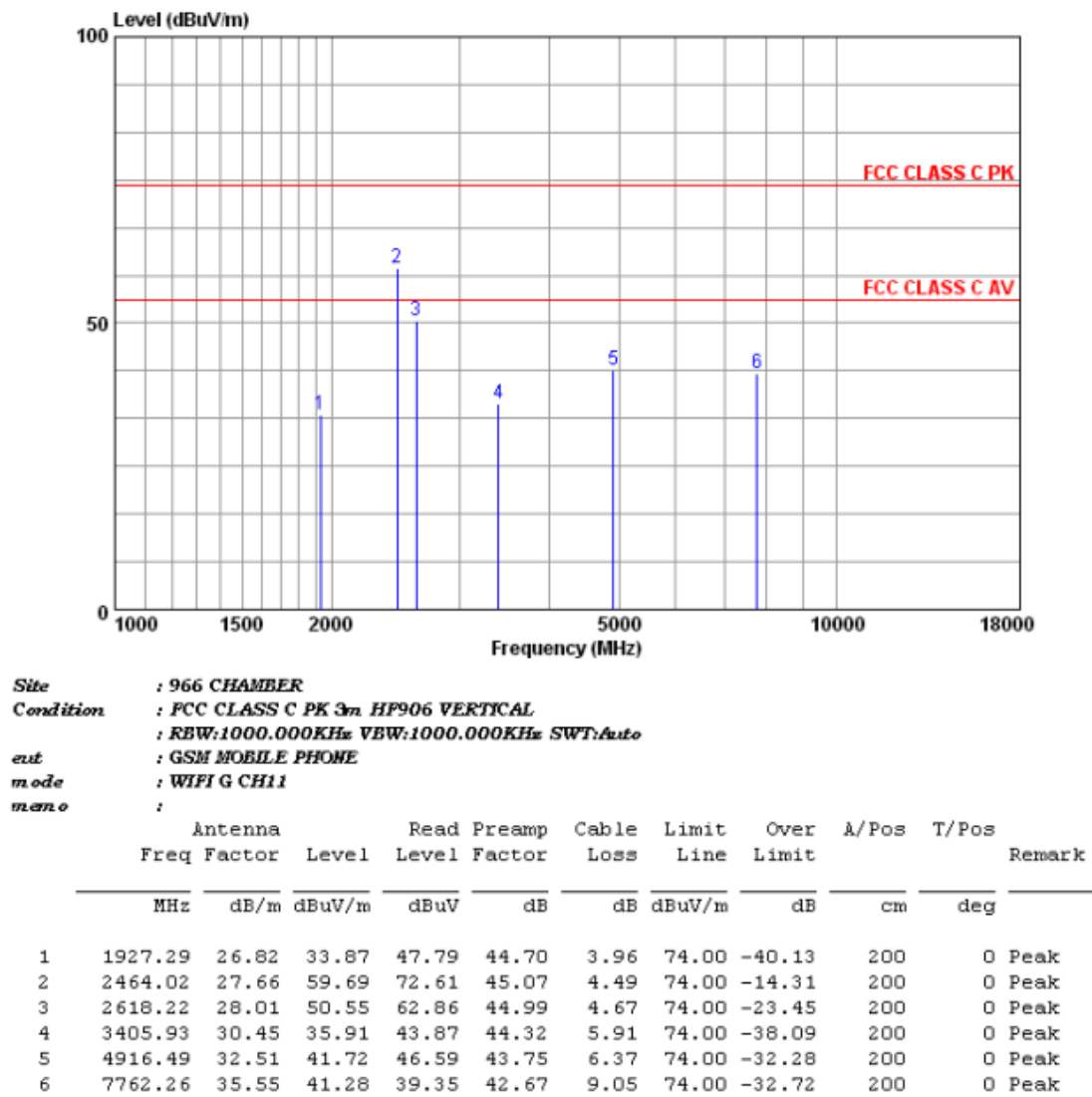
Remark: Marker #2 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 11 | Test Mode | Mode 6 |
| Test Band : | 802.11g | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical

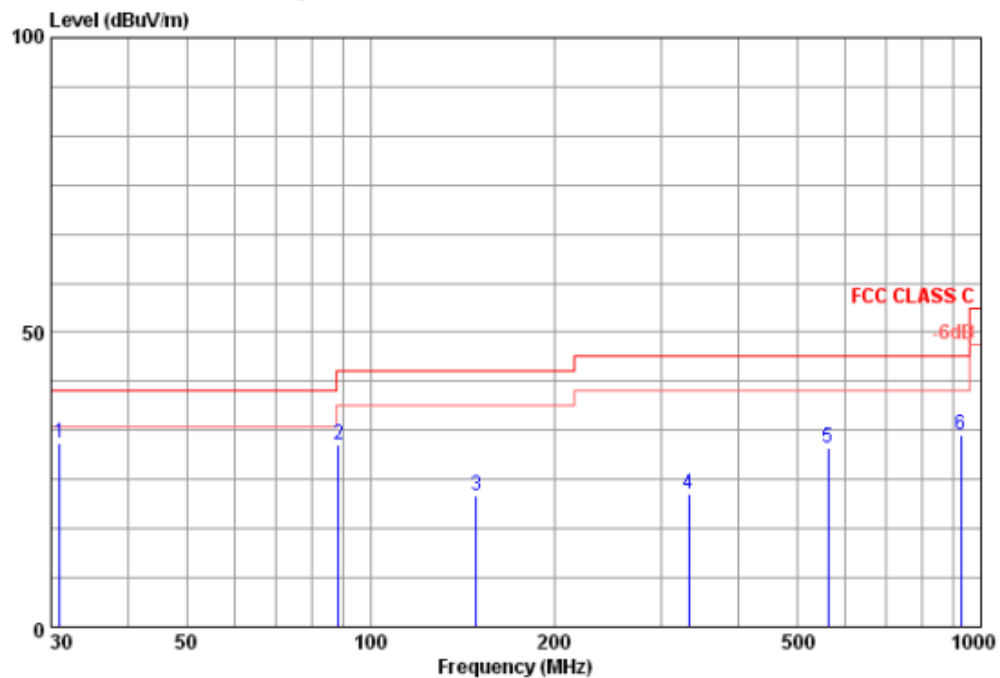


Radiated Emission 1GHz-18GHz Vertical



Remark: Marker #2 is Fundamental signal which can be ignored

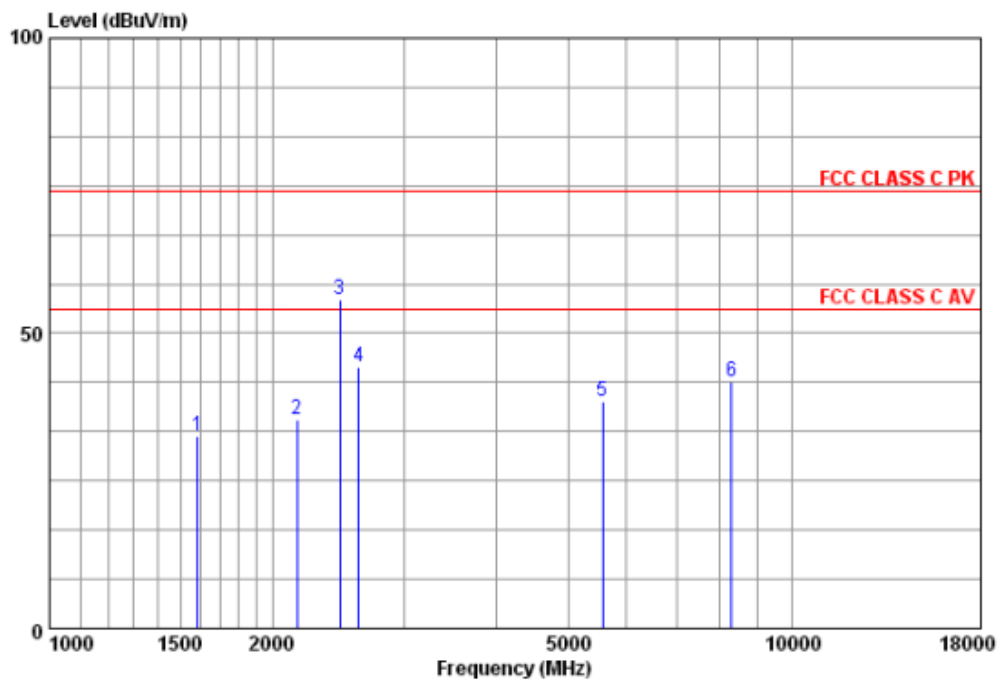
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 test mode : GSM MOBILE PHONE
 memo : G CH11

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 30.97 | 18.65 | 31.09 | 38.57 | 27.25 | 1.12 | 40.00 | -8.91 | 104 | 0 Peak |
| 2 | 88.69 | 8.59 | 30.78 | 47.91 | 27.46 | 1.74 | 43.50 | -12.72 | 104 | 0 Peak |
| 3 | 149.31 | 7.51 | 22.39 | 39.64 | 26.77 | 2.01 | 43.50 | -21.11 | 104 | 0 Peak |
| 4 | 332.16 | 11.90 | 22.48 | 33.88 | 26.22 | 2.92 | 46.00 | -23.52 | 104 | 0 Peak |
| 5 | 562.53 | 16.41 | 30.43 | 37.99 | 27.90 | 3.93 | 46.00 | -15.57 | 104 | 0 Peak |
| 6 | 925.80 | 20.80 | 32.46 | 34.29 | 27.66 | 5.03 | 46.00 | -13.54 | 104 | 0 Peak |

Radiated Emission 1GHz-18GHz Horizontal



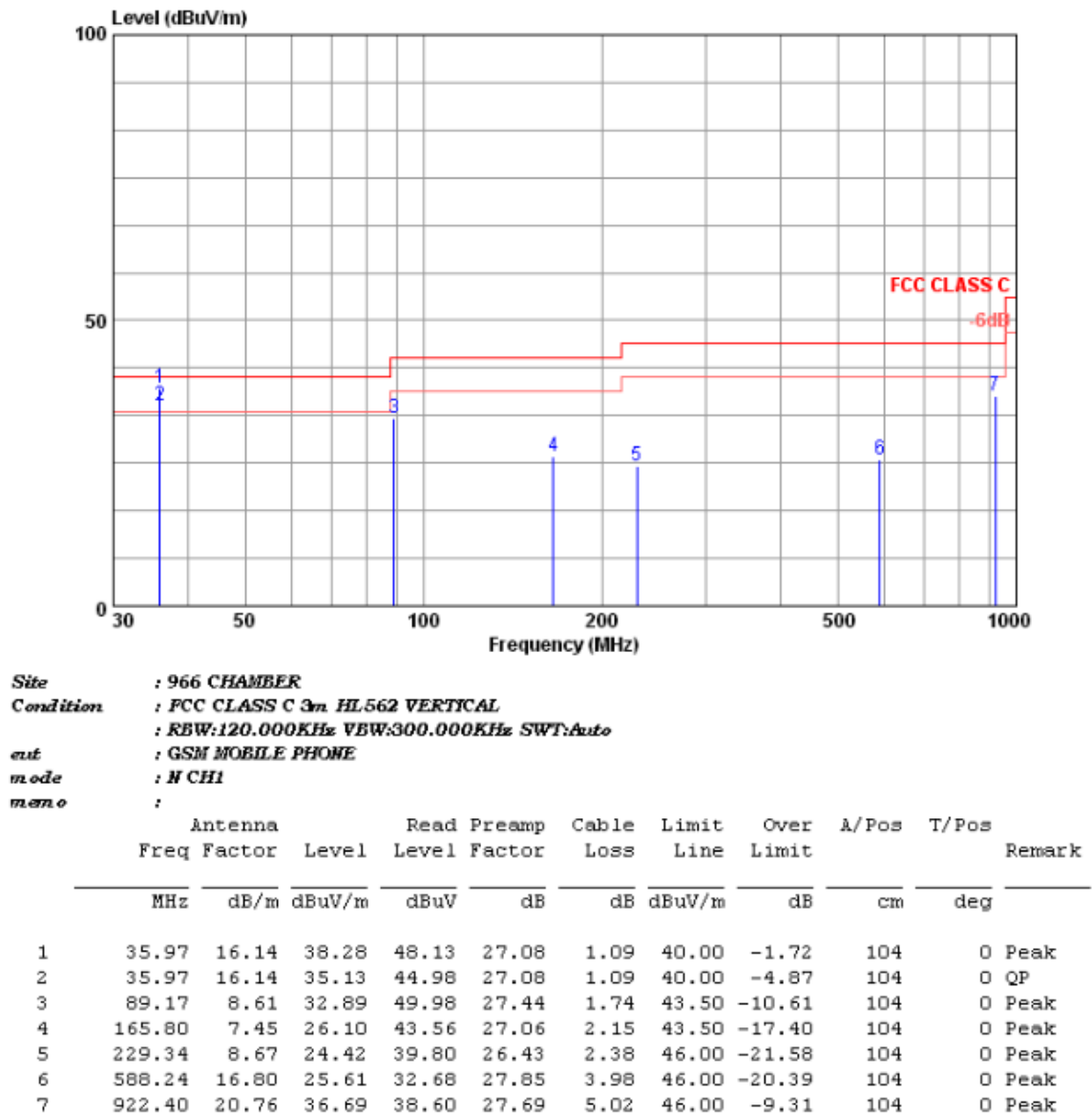
Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI G CH11
 memo :

| Antenna | | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---------|--------|--------|-------|--------|-------|--------|--------|-------|-------|--------|
| Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | | |
| MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg | |
| 1583.39 | 25.25 | 32.53 | 49.06 | 45.32 | 3.54 | 74.00 | -41.47 | 200 | 0 | Peak |
| 2157.26 | 27.27 | 35.39 | 48.47 | 44.78 | 4.43 | 74.00 | -38.61 | 200 | 0 | Peak |
| 2464.02 | 27.66 | 55.80 | 68.72 | 45.07 | 4.49 | 74.00 | -18.20 | 200 | 0 | Peak |
| 2610.66 | 28.01 | 44.39 | 56.71 | 45.00 | 4.67 | 74.00 | -29.61 | 200 | 0 | Peak |
| 5567.14 | 33.56 | 38.56 | 41.36 | 43.35 | 6.99 | 74.00 | -35.44 | 200 | 0 | Peak |
| 8295.82 | 35.74 | 41.69 | 40.10 | 43.14 | 8.99 | 74.00 | -32.31 | 200 | 0 | Peak |

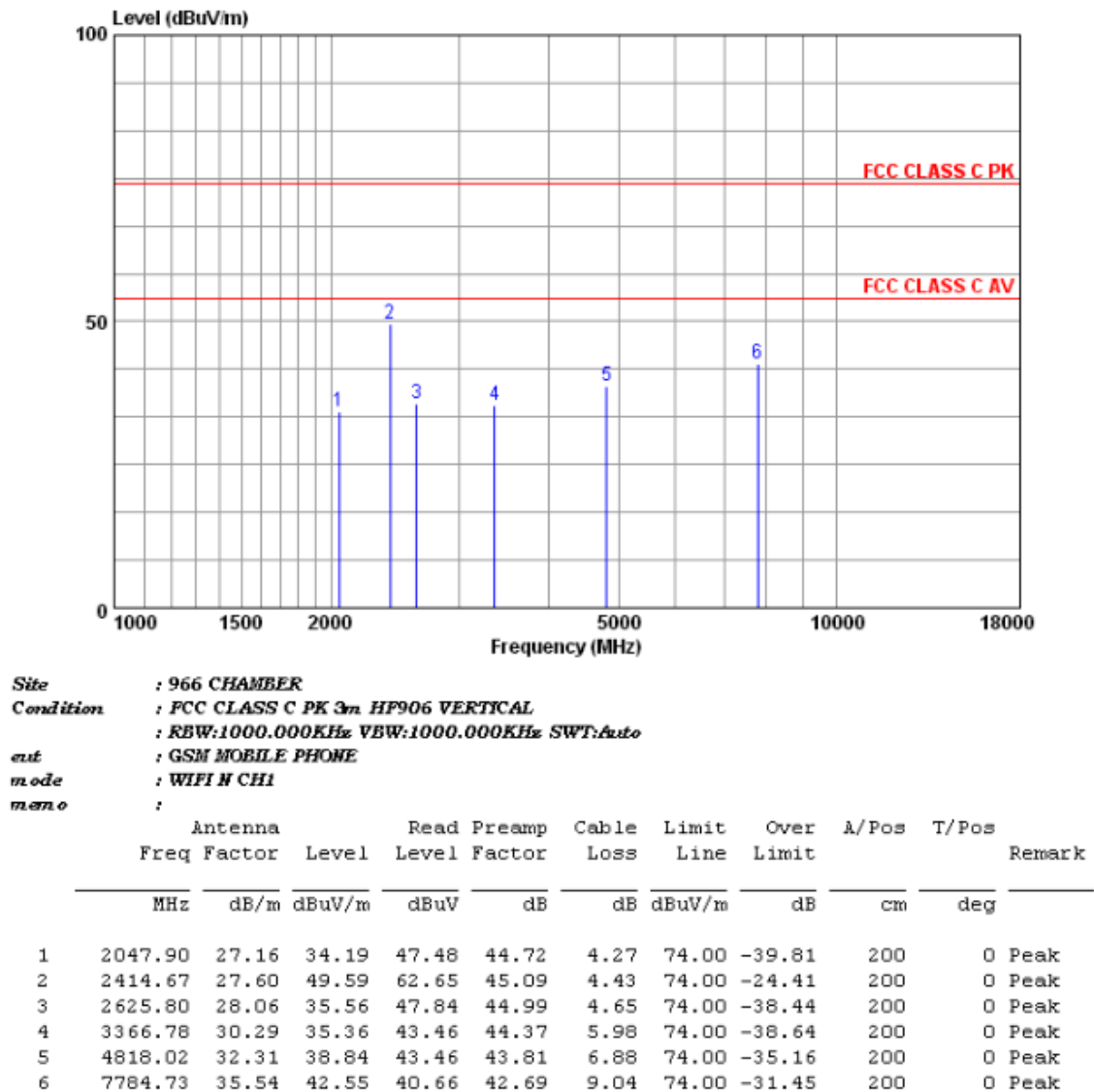
Remark: Marker #3 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 01 | Test Mode | Mode 7 |
| Test Band : | 802.11n | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical

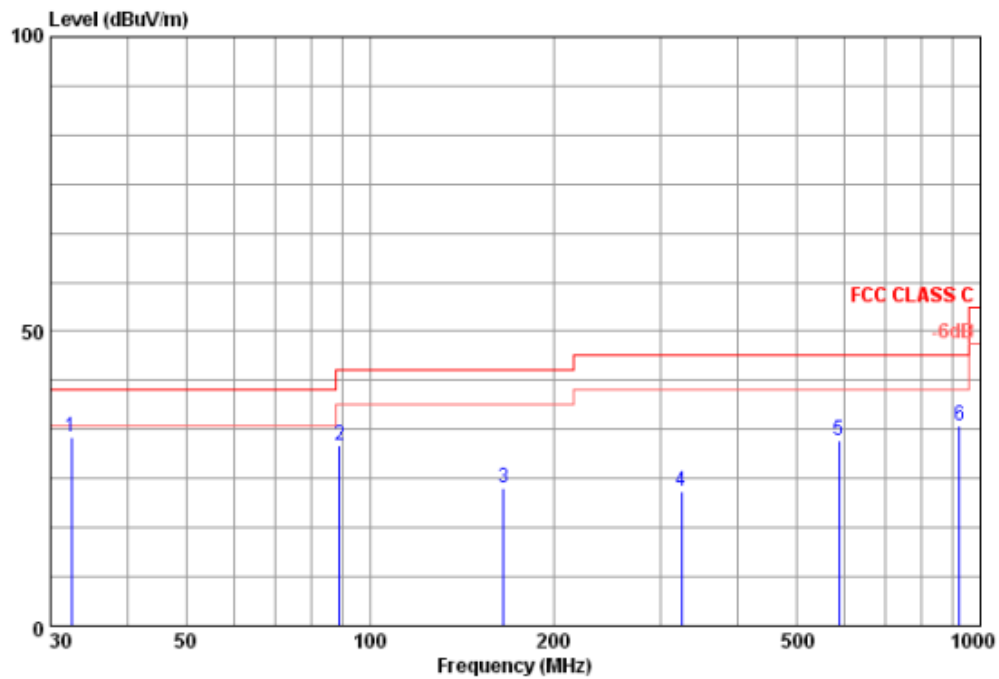


Radiated Emission 1GHz-18GHz Vertical



Remark: Marker #2 is Fundamental signal which can be ignored

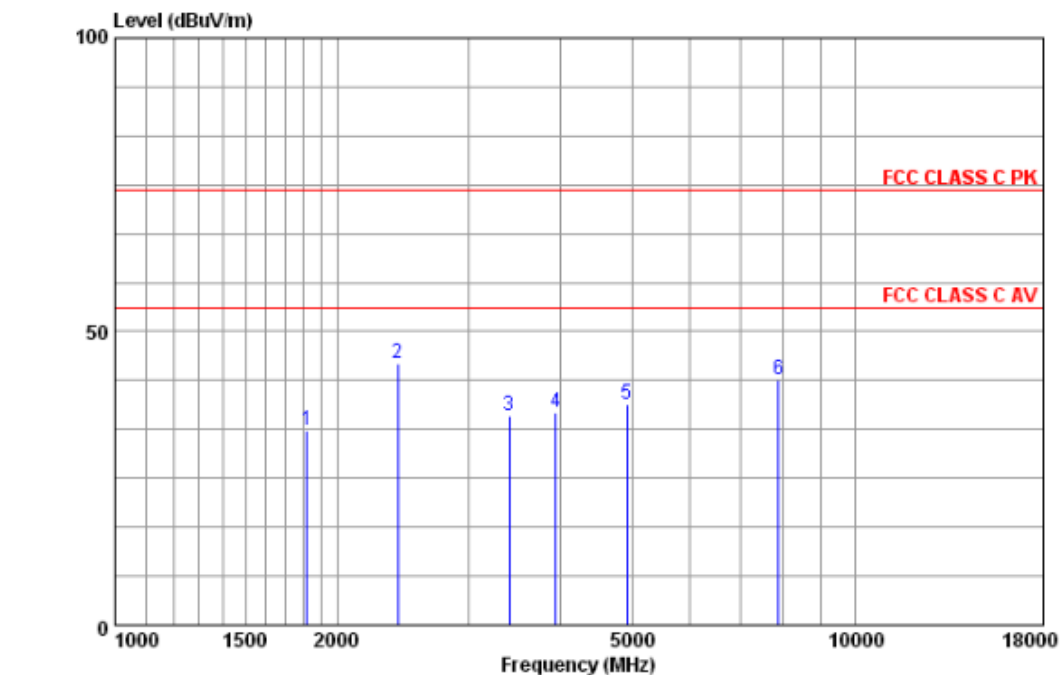
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VEW:300.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : N CH1
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 32.43 | 17.84 | 31.96 | 39.95 | 27.19 | 1.36 | 40.00 | -8.04 | 104 | 0 Peak |
| 2 | 89.17 | 8.61 | 30.65 | 47.74 | 27.44 | 1.74 | 43.50 | -12.85 | 104 | 0 Peak |
| 3 | 165.80 | 7.45 | 23.46 | 40.92 | 27.06 | 2.15 | 43.50 | -20.04 | 104 | 0 Peak |
| 4 | 323.91 | 11.70 | 22.88 | 34.27 | 26.05 | 2.96 | 46.00 | -23.12 | 104 | 0 Peak |
| 5 | 585.81 | 16.76 | 31.36 | 38.47 | 27.84 | 3.97 | 46.00 | -14.64 | 104 | 0 Peak |
| 6 | 924.83 | 20.76 | 33.90 | 35.77 | 27.66 | 5.03 | 46.00 | -12.10 | 104 | 0 Peak |

Radiated Emission 1GHz-18GHz Horizontal



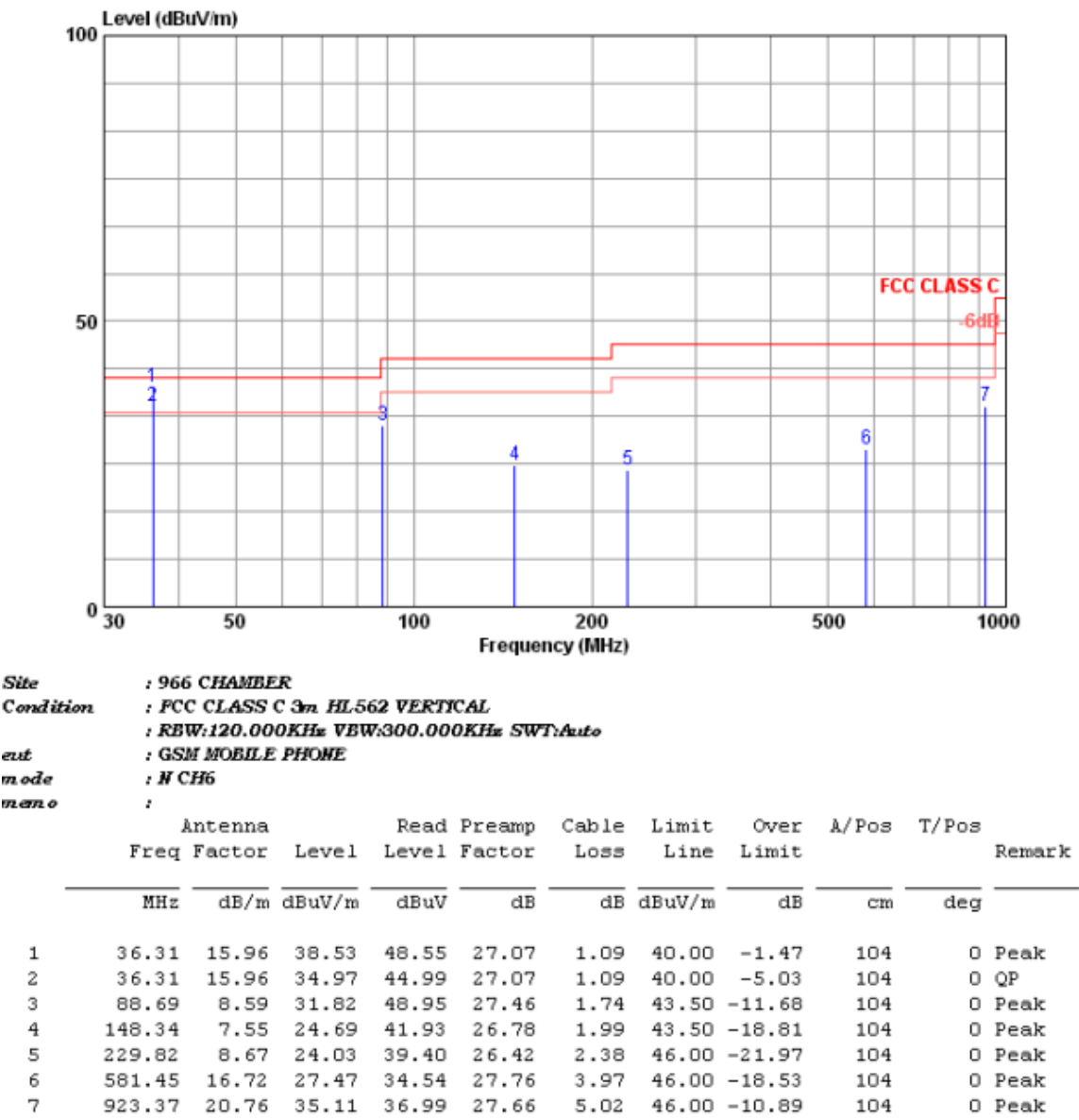
Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ant : GSM MOBILE PHONE
 mode : WIFI N CH1
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dBuV/m | dB | cm | deg | |
| 1 | 1819.04 | 26.31 | 33.05 | 47.77 | 44.87 | 3.84 | 74.00 | -40.95 | 200 | 0 Peak |
| 2 | 2414.67 | 27.60 | 44.66 | 57.72 | 45.09 | 4.43 | 74.00 | -29.34 | 200 | 0 Peak |
| 3 | 3415.79 | 30.45 | 35.68 | 43.63 | 44.31 | 5.91 | 74.00 | -38.32 | 200 | 0 Peak |
| 4 | 3946.89 | 31.51 | 36.31 | 43.26 | 44.02 | 5.56 | 74.00 | -37.69 | 200 | 0 Peak |
| 5 | 4930.72 | 32.55 | 37.57 | 42.33 | 43.74 | 6.43 | 74.00 | -36.43 | 200 | 0 Peak |
| 6 | 7898.05 | 35.52 | 41.71 | 40.66 | 42.80 | 8.33 | 74.00 | -32.29 | 200 | 0 Peak |

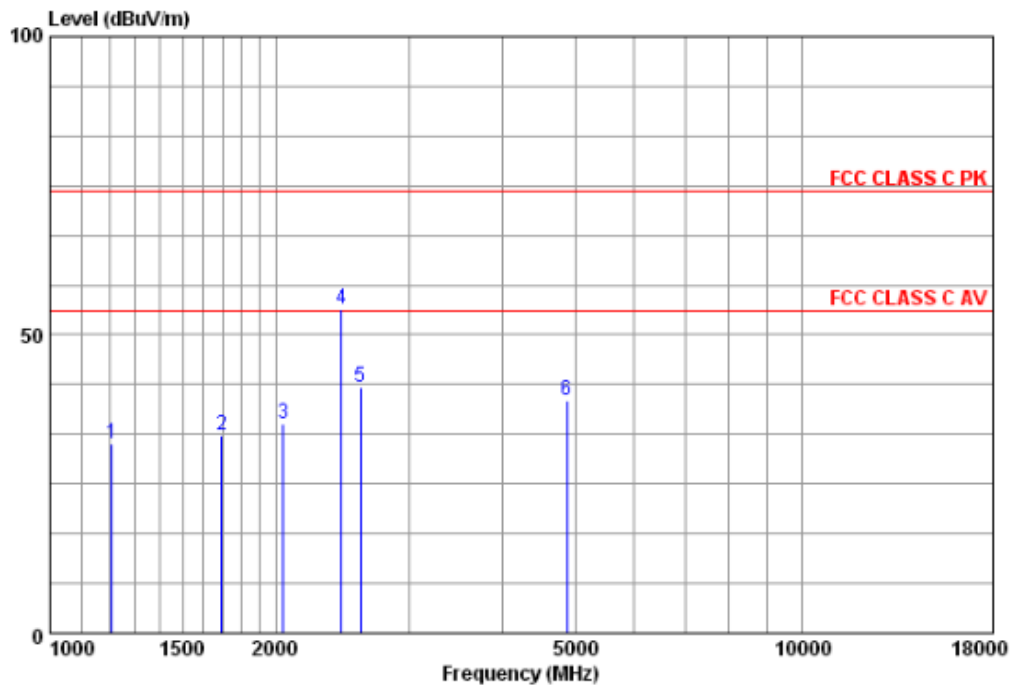
Remark: Marker #2 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 06 | Test Mode | Mode 8 |
| Test Band : | 802.11n | Test Engineer : | Guo-Zheng Li |

Radiated Emission 30MHz-1GHz Vertical



Radiated Emission 1GHz-18GHz Vertical

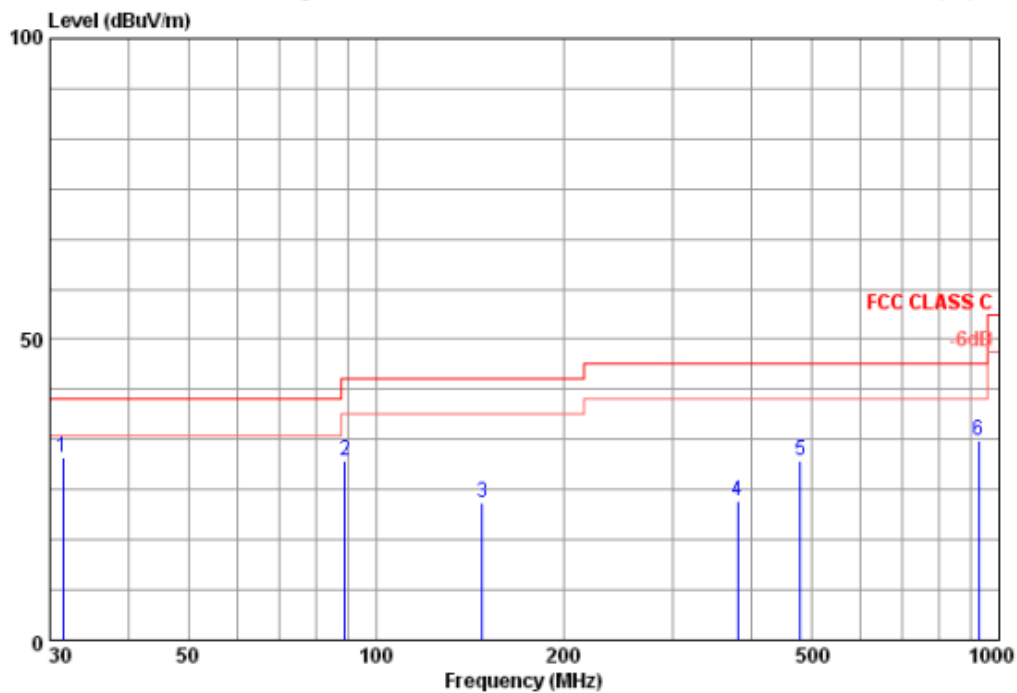


Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 VERTICAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 out : GSM MOBILE PHONE
 mode : WIFI N CH6
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 1210.17 | 24.04 | 31.73 | 50.52 | 45.97 | 3.14 | 74.00 | -42.27 | 200 | 0 Peak |
| 2 | 1692.23 | 25.77 | 33.21 | 48.80 | 45.12 | 3.76 | 74.00 | -40.79 | 200 | 0 Peak |
| 3 | 2041.98 | 27.14 | 35.11 | 48.42 | 44.72 | 4.27 | 74.00 | -38.89 | 200 | 0 Peak |
| 4 | 2442.75 | 27.64 | 54.20 | 67.18 | 45.08 | 4.46 | 74.00 | -19.80 | 200 | 0 Peak |
| 5 | 2588.12 | 27.92 | 41.22 | 53.63 | 45.01 | 4.68 | 74.00 | -32.78 | 200 | 0 Peak |
| 6 | 4874.04 | 32.43 | 39.13 | 43.97 | 43.77 | 6.50 | 74.00 | -34.87 | 200 | 0 Peak |

Remark: Marker #4 is Fundamental signal which can be ignored

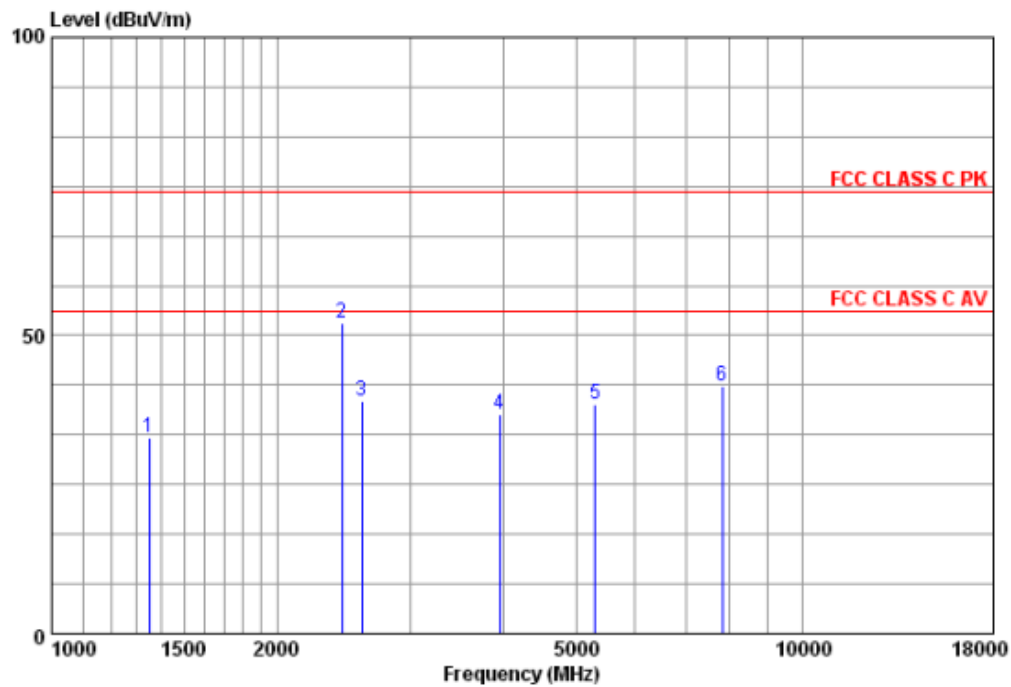
Radiated Emission 30MHz-1GHz Horizontal



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 HORIZONTAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : N CH6
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 31.46 | 18.41 | 30.44 | 38.05 | 27.22 | 1.20 | 40.00 | -9.56 | 104 | 0 Peak |
| 2 | 89.17 | 8.61 | 29.83 | 46.92 | 27.44 | 1.74 | 43.50 | -13.67 | 104 | 0 Peak |
| 3 | 148.34 | 7.55 | 22.71 | 39.95 | 26.78 | 1.99 | 43.50 | -20.79 | 104 | 0 Peak |
| 4 | 380.66 | 13.03 | 23.20 | 34.41 | 27.41 | 3.17 | 46.00 | -22.80 | 104 | 0 Peak |
| 5 | 480.08 | 15.12 | 29.75 | 38.68 | 27.53 | 3.48 | 46.00 | -16.25 | 104 | 0 Peak |
| 6 | 925.80 | 20.80 | 33.07 | 34.90 | 27.66 | 5.03 | 46.00 | -12.93 | 104 | 0 Peak |

Radiated Emission 1GHz-18GHz Horizontal



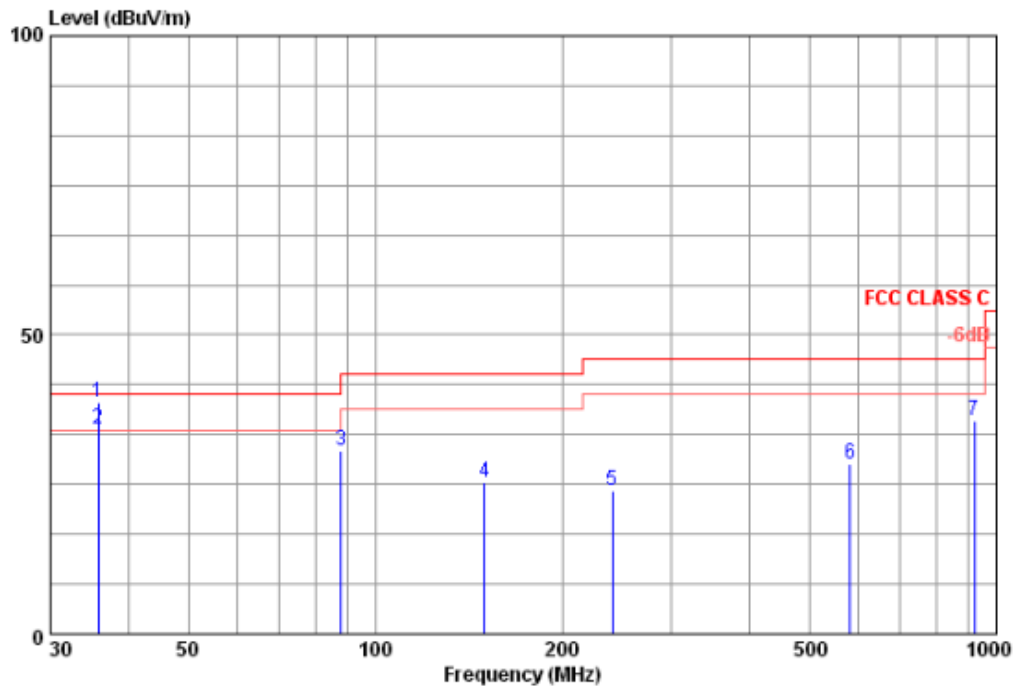
Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI N CH6
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | Remark |
| | MHz | dB/m | dBUV/m | dBuV | dB | dB | dBUV/m | dB | cm | deg |
| 1 | 1350.67 | 24.51 | 32.90 | 50.55 | 45.65 | 3.49 | 74.00 | -41.10 | 200 | 0 Peak |
| 2 | 2435.70 | 27.62 | 52.04 | 65.04 | 45.08 | 4.46 | 74.00 | -21.96 | 200 | 0 Peak |
| 3 | 2588.12 | 27.92 | 38.86 | 51.27 | 45.01 | 4.68 | 74.00 | -35.14 | 200 | 0 Peak |
| 4 | 3958.31 | 31.54 | 36.79 | 43.60 | 44.02 | 5.67 | 74.00 | -37.21 | 200 | 0 Peak |
| 5 | 5300.20 | 33.18 | 38.40 | 41.71 | 43.46 | 6.97 | 74.00 | -35.60 | 200 | 0 Peak |
| 6 | 7829.86 | 35.53 | 41.38 | 40.37 | 42.74 | 8.22 | 74.00 | -32.62 | 200 | 0 Peak |

Remark: Marker #2 is Fundamental signal which can be ignored

| | | | |
|----------------|---------|-----------------|--------------|
| Test Channel : | 11 | Test Mode | Mode 9 |
| Test Band : | 802.11n | Test Engineer : | Guo-Zheng Li |

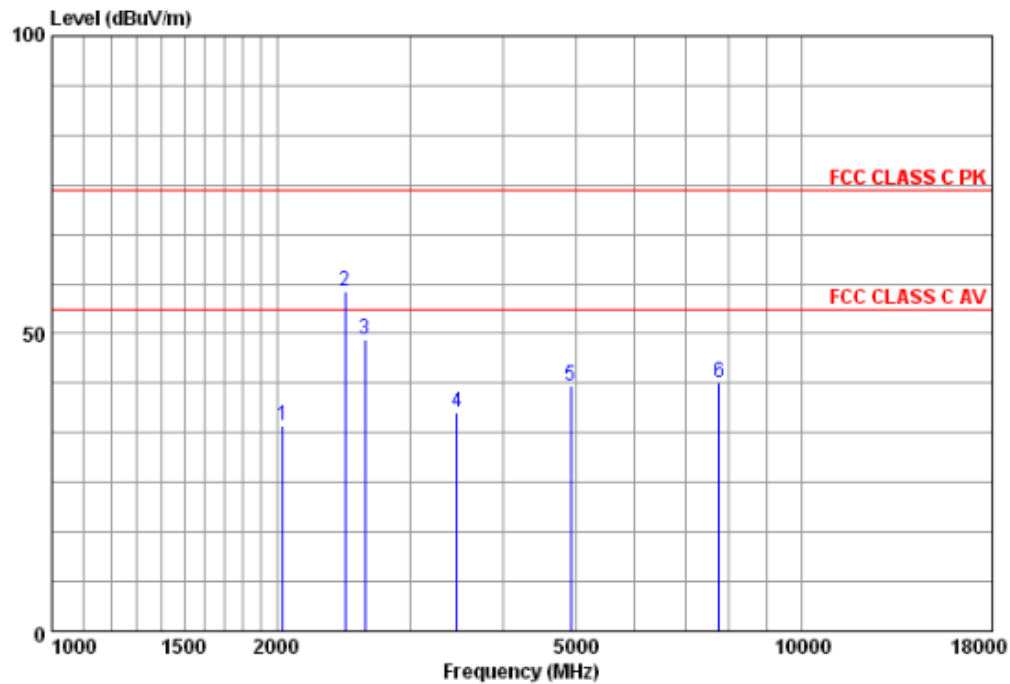
Radiated Emission 30MHz-1GHz Vertical



Site : 966 CHAMBER
 Condition : FCC CLASS C 3m HL562 VERTICAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 out : GSM MOBILE PHONE
 mode : N CH11
 memo :

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | |
|---|---------|--------|--------|--------|-------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Loss | Line | Limit | | | Remark |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 35.82 | 16.14 | 38.61 | 48.46 | 27.08 | 1.09 | 40.00 | -1.39 | 104 | 0 Peak |
| 2 | 35.82 | 16.14 | 34.35 | 44.20 | 27.08 | 1.09 | 40.00 | -5.65 | 104 | 0 QP |
| 3 | 88.20 | 8.59 | 30.66 | 47.80 | 27.47 | 1.74 | 43.50 | -12.84 | 104 | 0 Peak |
| 4 | 149.80 | 7.47 | 25.34 | 42.62 | 26.77 | 2.02 | 43.50 | -18.16 | 104 | 0 Peak |
| 5 | 240.98 | 9.08 | 23.94 | 38.69 | 26.35 | 2.52 | 46.00 | -22.06 | 104 | 0 Peak |
| 6 | 581.93 | 16.72 | 28.38 | 35.49 | 27.80 | 3.97 | 46.00 | -17.62 | 104 | 0 Peak |
| 7 | 922.40 | 20.76 | 35.60 | 37.51 | 27.69 | 5.02 | 46.00 | -10.40 | 104 | 0 Peak |

Radiated Emission 1GHz-18GHz Vertical

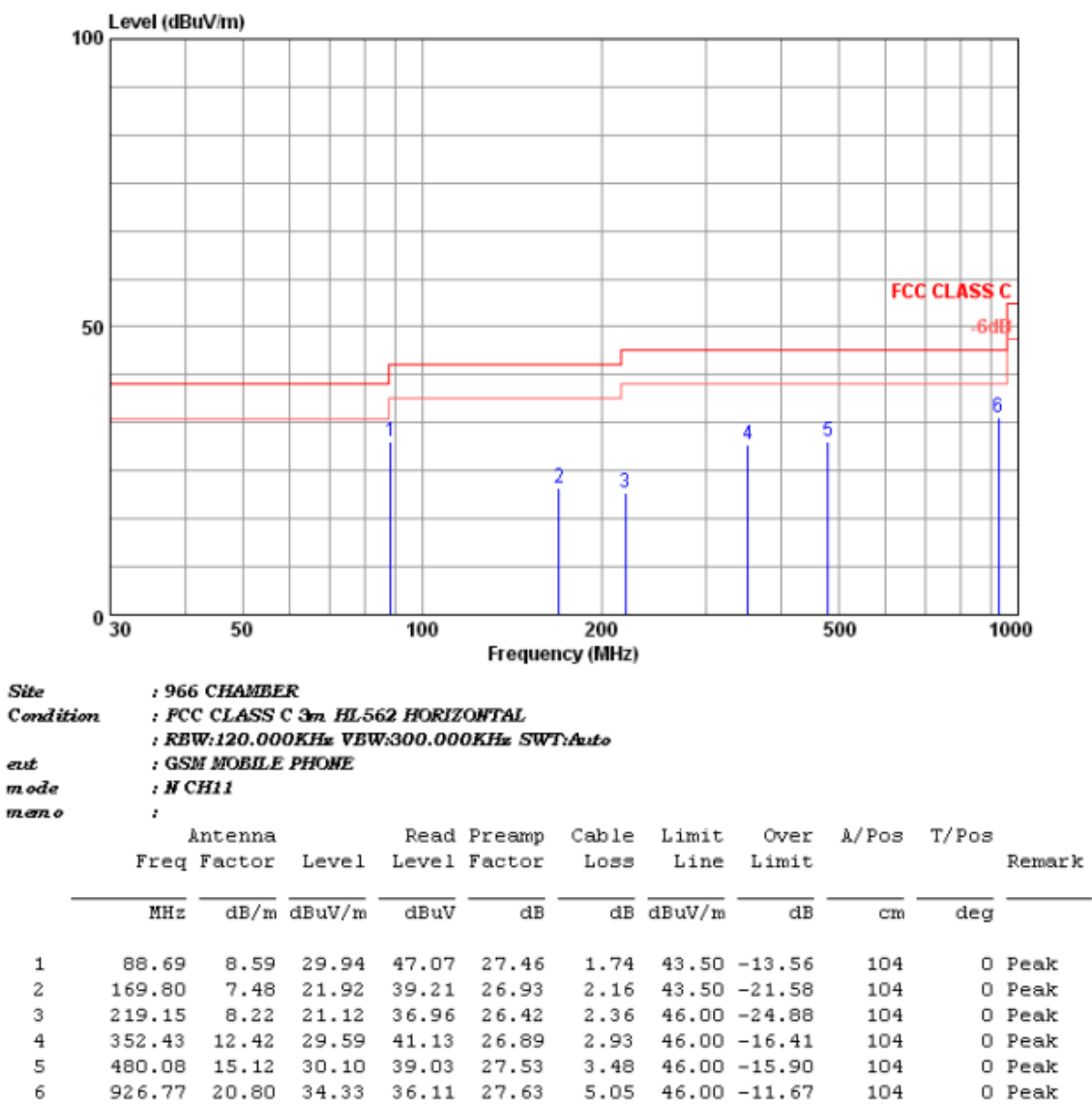


Site : 966 CHAMBER
 Condition : FCC CLASS C PK 3m HP906 VERTICAL
 : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto
 ext : GSM MOBILE PHONE
 mode : WIFI N CH11
 memo :

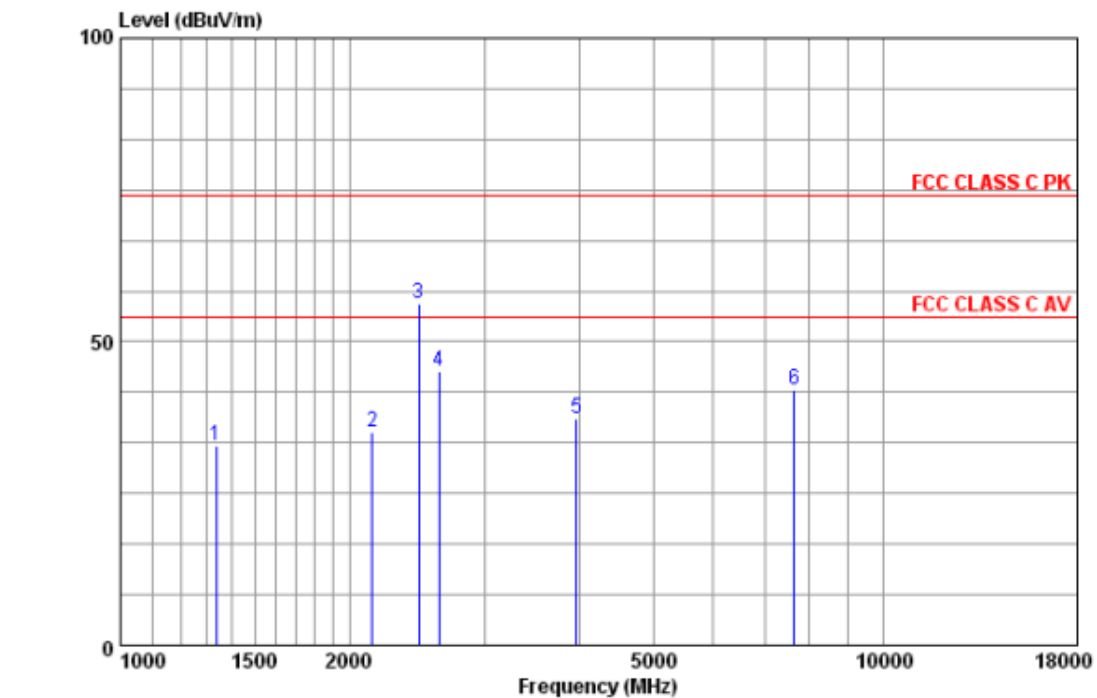
| | Antenna | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|-------|--------|------|--------|--------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm |
| 1 | 2036.09 | 27.14 | 34.64 | 47.95 | 44.72 | 4.27 | 74.00 | -39.36 | 200 |
| 2 | 2464.02 | 27.66 | 57.21 | 70.13 | 45.07 | 4.49 | 74.00 | -16.79 | 200 |
| 3 | 2618.22 | 28.01 | 48.97 | 61.28 | 44.99 | 4.67 | 74.00 | -25.03 | 200 |
| 4 | 3475.54 | 30.65 | 36.86 | 45.06 | 44.24 | 5.39 | 74.00 | -37.14 | 200 |
| 5 | 4930.72 | 32.55 | 41.27 | 46.03 | 43.74 | 6.43 | 74.00 | -32.73 | 200 |
| 6 | 7762.26 | 35.55 | 41.66 | 39.73 | 42.67 | 9.05 | 74.00 | -32.34 | 200 |

Remark: Marker #2 is Fundamental signal which can be ignored

Radiated Emission 30MHz-1GHz Horizontal



Radiated Emission 1GHz-18GHz Horizontal



Site : 966 CHAMBER
Condition : FCC CLASS C PK 3m HP906 HORIZONTAL
RBW:1000.000KHz *VBW*:1000.000KHz *SWT*:Auto
ext mode : GSM MOBILE PHONE
memo : WIFI N CH11

| | Antenna | | Read | Preamp | Cable | Limit | Over | A/Pos | T/Pos | Remark |
|---|---------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| | Freq | Factor | Level | Level | Factor | Loss | Line | Limit | | |
| | MHz | dB/m | dBuV/m | dBuV | dB | dB | dBuV/m | dB | cm | deg |
| 1 | 1335.14 | 24.46 | 32.85 | 50.59 | 45.67 | 3.47 | 74.00 | -41.15 | 200 | 0 Peak |
| 2 | 2138.64 | 27.25 | 34.97 | 48.07 | 44.77 | 4.42 | 74.00 | -39.03 | 200 | 0 Peak |
| 3 | 2464.02 | 27.66 | 56.35 | 69.27 | 45.07 | 4.49 | 74.00 | -17.65 | 200 | 0 Peak |
| 4 | 2618.22 | 28.01 | 45.06 | 57.37 | 44.99 | 4.67 | 74.00 | -28.94 | 200 | 0 Peak |
| 5 | 3969.77 | 31.57 | 37.26 | 44.03 | 44.01 | 5.67 | 74.00 | -36.74 | 200 | 0 Peak |
| 6 | 7650.89 | 35.57 | 42.00 | 40.38 | 42.56 | 8.61 | 74.00 | -32.00 | 200 | 0 Peak |

Remark: Marker #3 is Fundamental signal which can be ignored

3.6.7 Radiated Emission Measurement Results (18GHz-25GHz)

| | | | |
|------------------------|-----------|----------------------------|-----------|
| Test Engineer : | Hogan. He | Temperature : | 23°C~26°C |
| | | Relative Humidity : | 35%~60% |

| Frequency (MHz) | Level (dBuV) | Over Limit (dB) | Limit Line (dBuV) | Remark |
|----------------------------|-------------------------|----------------------------|------------------------------|---------------|
| - | - | - | - | See Note |

Notes:

The amplitude of radiated emissions that are attenuated by more than 20dB below the permissible value has no need to be reported. The measurement performed at 1meter distance from turn table to antenna.

4 List of Measuring Equipment

| No | Instrument/Ancillary | Provider | Type/Model | Cal. Date |
|----|----------------------|---------------|---------------------------|------------|
| 01 | Base Station | R&S | CMU200 | 2012.12.08 |
| 02 | Spectrum Analyzer | R&S | FSP30(9kHz~30GHz) | 2012.07.19 |
| 03 | Antenna | R&S | HL562 (30M-1G) | 2012.11.09 |
| 04 | Loop Antenna | Schwarzbeck | FMZB1516(9KHz~30MHz) | 2013.02.03 |
| 05 | Antenna | R&S | HF906(1G-18G) | 2012.08.02 |
| 06 | Antenna | Schwarzbeck | BBHA 9170 (15G-26.5G) | 2012.11.09 |
| 07 | High Pass Filter | R&S | System Integrated | 2012.11.14 |
| 08 | Thermal chamber | Hitachi | EC- 85MHP | 2012.12.25 |
| 09 | Pre-Amplifier | Agilent | 83006A(0.01GHz-26.5GHz) | 2012.08.06 |
| 10 | Pre-Amplifier | Agilent | 83006A(0.01GHz-26.5GHz) | 2012.08.06 |
| 11 | Helical Antenna | ETS | 3102 (1G-10G) | NCR |
| 12 | Power Meter | R&S | NRP(10MHz~8GHz) | 2012.12.05 |
| 13 | Relay Switch | R&S | TS-REMI | NCR |
| 14 | Signal Generator | R&S | SMR20(10MHz-20 GHz) | 2012.12.08 |
| 15 | LISN | ROHDE&SCHWARZ | ENV216 TWO-LINE V-NETWORK | 2012.11.13 |
| 16 | Power Meter | Agilent | E4418B (EPM Series) | 2012.12.08 |
| 17 | Power Sensor | Agilent | E4412A (E-series CW) | |

5 Ancillary Equipment List

| Product | Manufacturer | Model No. | Serial No. | FCC approval | Power Cord |
|-------------------|--------------|------------------|---------------|--------------------|---|
| Wlan AP | D-Link | DWL-2000 AP+A | B2D3161002856 | KA2DWLG700APB 1 | AC: I/P: Unshielded 1.8m DC:O/P: Unshielded 1.8m |
| Bluetooth headset | acer | S100FBT | N/A | HLZDMS100FBT | N/A |

6 Uncertainty Evaluation

6.1 Uncertainty of Radiated Spurious Emission evaluation (30MHz~1GHz)

| Radiated Spurious Emission Measurement Uncertainty Evaluation | | | | | |
|--|-------------------|--------------------------|-----------------------|-----------------------|---------------------|
| Contribution | | Probability Distribution | Partition Coefficient | u(xi) | |
| | | | | Horizontal 30-1000MHz | Vertical 30-1000MHz |
| Cable Loss Calibration | U ₀₁ | U-Shape | 1.41 | 0.16 | 0.16 |
| Sine wave voltage accuracy of Spectrum analyzer | U02 | Triangle | 2.45 | 0.82 | 0.82 |
| Impulse response of spectrum analyzer | U03 | Triangle | 2.45 | 0.61 | 0.61 |
| Pulse repetition rate of spectrum analyzer | U04 | Triangle | 2.45 | 0.61 | 0.61 |
| Spectrum analyzer noise level | U05 | Normal | 2.00 | 0.25 | 0.25 |
| Measurement of the signal path mismatch | U06 | U-Shape | 1.41 | 0.28 | 0.28 |
| Free-space antenna factor | U07 | Normal | 2.00 | 0.70 | 0.70 |
| Antenna Factor Interpolation for Frequency | U08 | Rectangular | 1.73 | 0.17 | 0.17 |
| Antenna factor with height in the correlation | U09 | Rectangular | 1.73 | 0.17 | 0.17 |
| Measurement antenna and the absorbing material lin the image of the mutual coupling effect | U10 | Rectangular | 1.73 | 0.58 | 0.58 |
| Antenna phase center variation | U11 | Rectangular | 1.73 | 0.13 | 0.13 |
| Antenna cross polarization response | U12 | Rectangular | 1.73 | 0.52 | 0.52 |
| Antenna imbalance | U13 | Rectangular | 1.73 | 0.52 | 0.52 |
| Test distance error | U14 | Rectangular | 2.45 | 1.02 | 1.22 |
| Desktop terrain clearance variation | U15 | Normal | 1.73 | 0.17 | 0.17 |
| Random uncertainty | U16 | Standard deviation | 2.00 | 0.05 | 0.05 |
| Pre-Amplifier gain Calibration | U17 | U-Shape | 1.00 | 0.10 | 0.11 |
| Combined Standard Uncertainty U _c (y) | U _c | Normal | 1.00 | 2.03 | 2.14 |
| Measuring Uncertainty for a level of Confidence of 95%(U=2U _c (y)) | U=kU _c | Normal | k | 4.05 | 4.28 |

6.2 Uncertainty of Radiated Spurious Emission evaluation (1GHz~26.5GHz)

| Radiated Spurious Emission Measurement Uncertainty Evaluation | | | | | |
|---|-------|--------------------------|-----------------------|----------------------|--------------------|
| Contribution | | Probability Distribution | Partition Coefficient | u(xi) | |
| | | | | Horizontal 1-26.5GHz | Vertical 1-26.5GHz |
| Cable Loss Calibration | U01 | U-Shape | 2.00 | 0.04 | 0.04 |
| Sine wave voltage accuracy of Spectrum analyzer | U02 | Triangle | 2.45 | 0.82 | 0.82 |
| Impulse response of spectrum analyzer | U03 | Triangle | 2.45 | 0.61 | 0.61 |
| Pulse repetition rate of spectrum analyzer | U04 | Triangle | 2.45 | 0.61 | 0.61 |
| Spectrum analyzer noise level | U05 | Normal | 2.00 | 0.25 | 0.25 |
| Measurement of the signal path mismatch | U06 | U-Shape | 1.41 | 0.69 | 0.69 |
| Free-space antenna factor | U07 | Normal | 2.00 | 0.50 | 0.50 |
| Antenna Factor Interpolation for Frequency | U08 | Rectangular | 1.73 | 0.17 | 0.17 |
| Antenna factor with height in the correlation | U09 | Rectangular | 1.73 | NA | NA |
| Measurement antenna and the absorbing material in the image of the mutual coupling effect | U10 | Rectangular | 1.73 | 0.58 | 0.58 |
| Antenna phase center variation | U11 | Rectangular | 1.73 | 0.13 | 0.13 |
| Antenna cross polarization response | U12 | Rectangular | 1.73 | 0.52 | 0.52 |
| Antenna imbalance | U13 | Rectangular | 1.73 | 0.52 | 0.52 |
| Test distance error | U14 | Rectangular | 2.45 | 2.36 | 2.36 |
| Desktop terrain clearance variation | U15 | Normal | 1.73 | 0.17 | 0.17 |
| Random uncertainty | U16 | Standard deviation | 2.00 | 0.05 | 0.05 |
| Pre-Amplifier gain Calibration | U17 | U-Shape | 1.00 | 0.09 | 0.10 |
| Combined Standard Uncertainty Uc(y) | Uc | Normal | 1.00 | 2.95 | 2.96 |
| Measuring Uncertainty for a level of Confidence of 95%(U=2Uc(y)) | U=kUc | Normal | k | 5.91 | 5.92 |