MRT Technology (Suzhou) Co., Ltd
Phone: +86-512-66308358
Fax: +86-512-66308368
Web: www.mrt-cert.com

Report No.: 1510RSU01301
Report Version: V01
Issue Date: 10-21-2015

MEASUREMENT REPORT
FCC PART 15.247 WLAN 802.11b/g/n

FCC ID:	SRQ-ZTEBLADEC341
APPLICANT:	ZTE Corporation

Application Type:	Certification
Product:	WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone
Model No.:	ZTE Blade C341, ZTE Blade Q2 3G, ZTE T221
Trademark:	ZTE
FCC Classification:	Digital Transmission System (DTS)
FCC Rule Part(s):	Part 15.247
Test Procedure(s):	ANSI C63.10-2013, KDB 558074 D01v03r03
Test Date:	June 24 ~ July 09, 2015

Reviewed By : Robin Wu
(Robin Wu)

Approved By : Marlinchen
(Marlin Chen)

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01v03r03. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date
1510RSU01301	Rev. 01	Initial report	10-21-2015

Note: The test report was based on MRT report no. 1506RSU03001. This modification just updated the model number and FCC ID of the product.

CONTENTS

Description Page

§2.1033 General Information 5

1. INTRODUCTION 6

1.1. Scope 6
1.2. MRT Test Location 6

2. PRODUCT INFORMATION 7

2.1. Equipment Description 7
2.2. Working Frequencies 7
2.3. Test Mode 7
2.4. Device Capabilities 8
2.5. Test Configuration 9
2.6. Test Software 9
2.7. EMI Suppression Device(s)/Modifications 9
2.8. Labeling Requirements 9

3. DESCRIPTION of TEST 10

3.1. Evaluation Procedure 10
3.2. AC Line Conducted Emissions 10
3.3. Radiated Emissions 11

4. ANTENNA REQUIREMENTS 12

5. TEST EQUIPMENT CALIBRATION DATE 13

6. MEASUREMENT UNCERTAINTY 14

7. TEST RESULT 15

7.1. Summary 15
7.2. 6dB Bandwidth Measurement 16
7.2.1. Test Limit 16
7.2.2. Test Procedure used 16
7.2.3. Test Setting 16
7.2.4. Test Setup 16
7.2.5. Test Result 17
7.3. Output Power Measurement 20
7.3.1. Test Limit 20
7.3.2. Test Procedure Used 20
7.3.3. Test Setting 20

7.3.4. Test Setup 20
7.3.5. Test Result of Output Power 21
7.4. Power Spectral Density Measurement 22
7.4.1. Test Limit 22
7.4.2. Test Procedure Used 22
7.4.3. Test Setting 22
7.4.4. Test Setup 22
7.4.5. Test Result 23
7.5. Conducted Band Edge and Out-of-Band Emissions 26
7.5.1. Test Limit 26
7.5.2. Test Procedure Used 26
7.5.3. Test Settitng 26
7.5.4. Test Setup 27
7.5.5. Test Result 28
7.6. Radiated Spurious Emission Measurement 34
7.6.1. Test Limit 34
7.6.2. Test Procedure Used 34
7.6.3. Test Setting 34
7.6.4. Test Setup 36
7.6.5. Test Result 38
7.7. Radiated Restricted Band Edge Measurement 53
7.7.1. Test Result 53
7.8. AC Conducted Emissions Measurement 77
7.8.1. Test Limit 77
7.8.2. Test Setup 77
7.8.3. Test Result 78

8. CONCLUSION 80

§2.1033 General Information

Applicant:	ZTE Corporation
Applicant Address:	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R. China
Manufacturer:	ZTE Corporation
Manufacturer Address:	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R. China
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
MRT Registration No.:	809388
FCC Rule Part(s):	Part 15.247
Model No.:	ZTE Blade C341, ZTE Blade Q2 3G, ZTE T221
FCC ID:	SRQ-ZTEBLADEC341
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering
FCC Classification:	Digital Transmission System (DTS)

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- **MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.**
- **MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.**
- **MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.**
- **MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.**

American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

MRT TECHNOLOGY (SUZHOU) CO., LTD.

Suzhou, China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 17th day of June 2014.

President & CEO
For the Accreditation Council
Certificate Number 3628.01
Valid to August 31, 2016

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

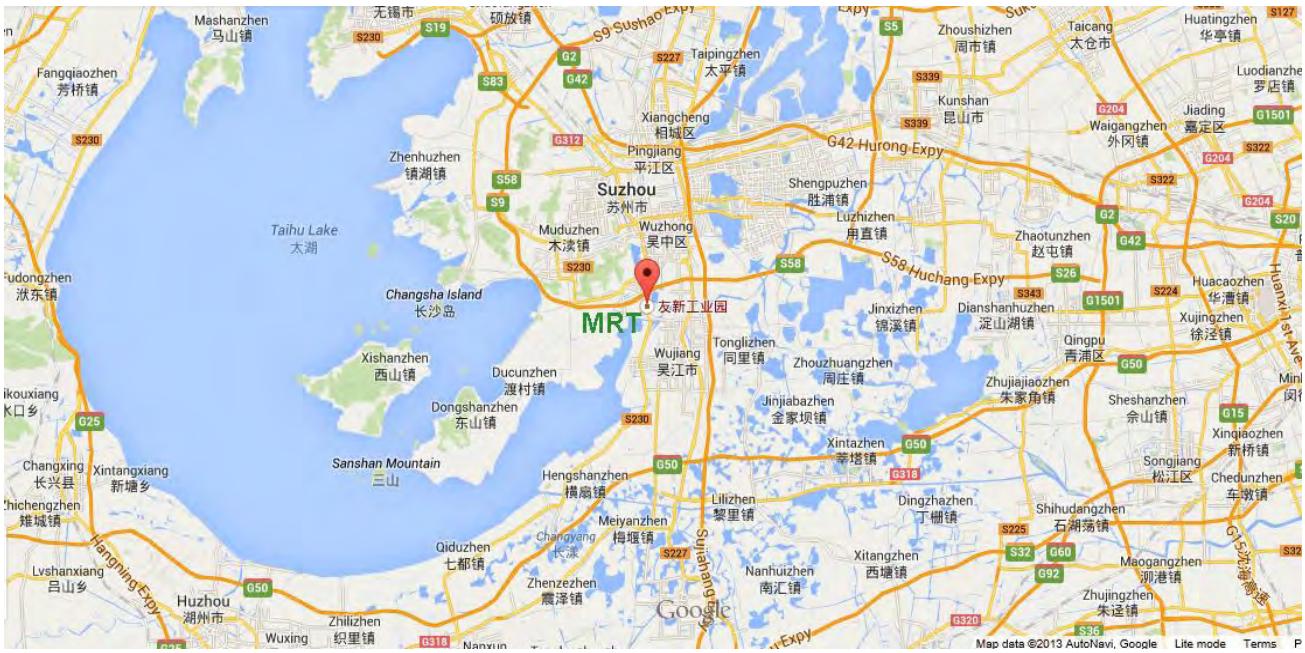
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone
Model No.	ZTE Blade C341, ZTE Blade Q2 3G, ZTE T221
Brand Name	ZTE
Wi-Fi Specification	802.11b/g/n
Frequency Range	802.11b/g/n-HT20: 2412 ~ 2462 MHz
Maximum Output Power	802.11b: 19.47dBm 802.11g: 23.36dBm 802.11n-HT20: 23.18dBm
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Antenna Type	Internal
Antenna Gain	-2.75dBi
Bluetooth Specification	v2.1 + EDR
2G/3G Specification	GSM850/PCS1900 WCDMA Band II/V

Note: The difference of models is for different marketing requirement.

2.2. Working Frequencies

Channel List for 802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	N/A	N/A

2.3. Test Mode

Test Mode	Mode 1: Transmit by 802.11b
	Mode 2: Transmit by 802.11g
	Mode 3: Transmit by 802.11n-HT20

2.4. Device Capabilities

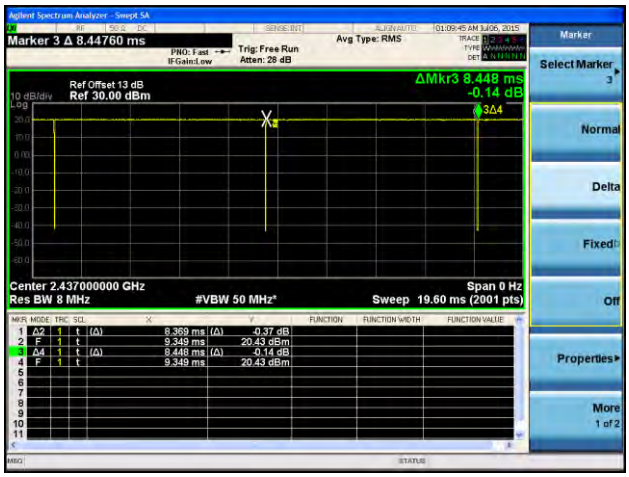
This device contains the following capabilities:

802.11b/g/n WLAN & v2.1+EDR Bluetooth & GSM/GPRS/EDGE 850/1900 & WCDMA Band II/V

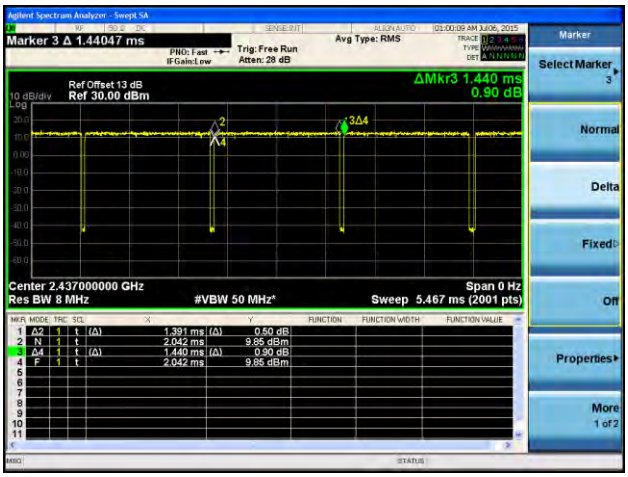
Note: 2.4GHz WLAN (DTS) operation is possible in 20MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = average per the guidance of Section 6.0 b) of KDB 558074 D01v03r03. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
802.11b	99.1%
802.11g	96.6%
802.11n-HT20	96.3%

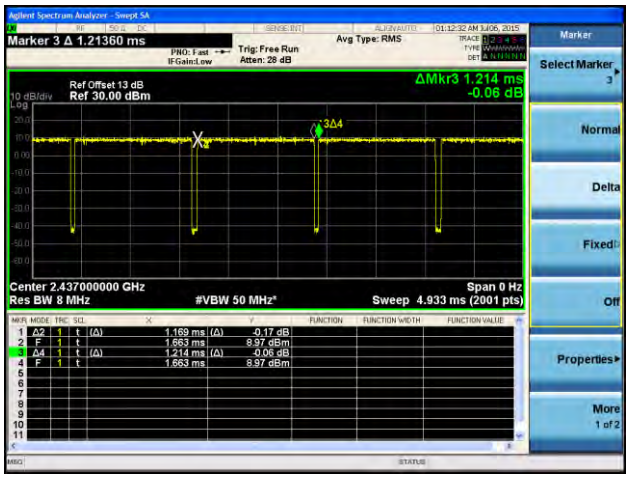
802.11 b – Duty Cycle



802.11 g – Duty Cycle



802.11 n-HT20 – Duty Cycle



2.5. Test Configuration

The **WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone FCC ID: SRQ-ZTEBLADEC341** was tested per the guidance of KDB 558074 D01v03r03. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.6. Test Software

The test utility software used during testing was engineering directive order by applicant.

2.7. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.8. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the trade name and FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

3. DESCRIPTION of TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 558074 D01v03r03 were used in the measurement of the **WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone FCC ID: SRQ-ZTEBLADEC341 .**

Deviation from measurement procedure…….....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

Line conducted emissions test results are shown in Section 7.8.

3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antenna of **WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone** is **permanently attached.**
- There are no provisions for connection to an external antenna.

Conclusion:

The **WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone FCC ID: SRQ-ZTEBLADEC341** unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2015/11/07
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2015/11/07
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2015/11/07
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06114	1 year	2015/11/20

Radiated Emission

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	E4447A	MRTSUE06028	1 year	2015/12/09
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2015/11/07
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2016/04/15
Preamplifier	Agilent	83017A	MRTSUE06019	1 year	2015/12/13
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2015/11/08
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2015/11/08
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2016/01/05
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06115	1 year	2015/11/20

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/04/23
USB Wideband Power Sensor	Boonton	55006	MRTSUE06109	1 year	2016/05/08
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06112	1 year	2015/11/20

Software	**Version**	**Function**
e3	V 8.3.5	EMI Test Software

6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 150kHz~30MHz: 3.46dB
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 9kHz ~ 1GHz: 4.18dB 1GHz ~ 25GHz: 4.76dB

7. TEST RESULT

7.1. Summary

Product Name: **WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone**

FCC ID: **SRQ-ZTEBLADEC341**

FCC Classification: **Digital Transmission System (DTS)**

Data Rate(s) Tested: **1Mbps ~ 11Mbps (b);**
6Mbps ~ 54Mbps (g);
6.5/7.2Mbps ~ 65/72.2Mbps (n-HT20)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(2)	6dB Bandwidth	≥ 500kHz	Conducted	Pass	Section 7.2
15.247(b)(3)	Output Power	≤ 30dBm		Pass	Section 7.3
15.247(e)	Power Spectral Density	≤ 8dBm/3kHz		Pass	Section 7.4
15.247(d)	Band Edge / Out-of-Band Emissions	≥ 20dBc		Pass	Section 7.5
15.205 15.209	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 7.6 & 7.7
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.8

Notes:

1) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.

7.2. 6dB Bandwidth Measurement

7.2.1. Test Limit

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

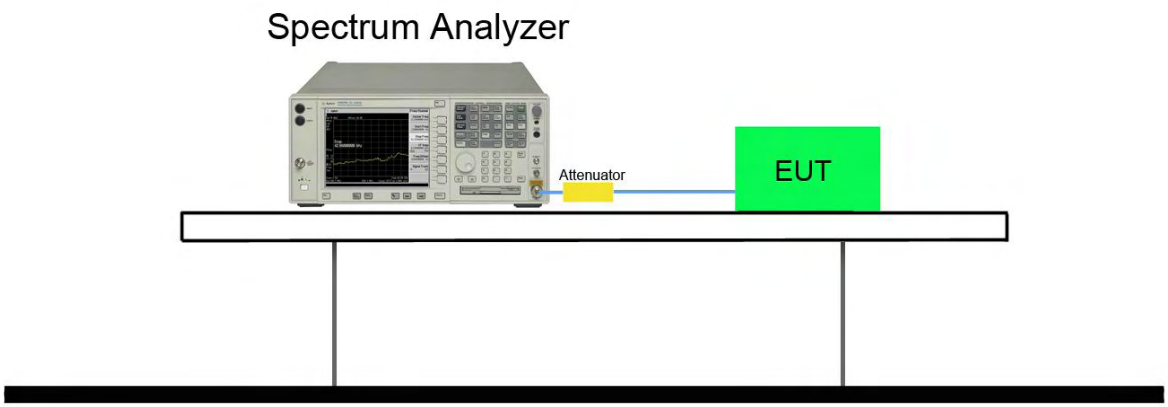
7.2.2. Test Procedure used

KDB 558074 D01v03r03 - Section 8.2 Option 2

7.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 6. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. Set RBW = 100 kHz
3. VBW ≥ 3 × RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace was allowed to stabilize

7.2.4. Test Setup



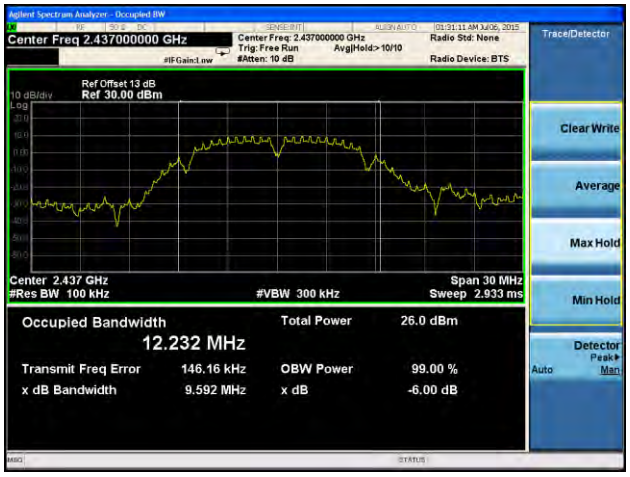
7.2.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1	01	2412	9.57	≥ 0.5	Pass
802.11b	1	06	2437	9.59	≥ 0.5	Pass
802.11b	1	11	2462	9.59	≥ 0.5	Pass
802.11g	6	01	2412	15.93	≥ 0.5	Pass
802.11g	6	06	2437	15.46	≥ 0.5	Pass
802.11g	6	11	2462	15.79	≥ 0.5	Pass
802.11n-HT20	6.5	01	2412	17.44	≥ 0.5	Pass
802.11n-HT20	6.5	06	2437	17.42	≥ 0.5	Pass
802.11n-HT20	6.5	11	2462	17.43	≥ 0.5	Pass

802.11b 6dB Bandwidth

Channel 01 (2412MHz)

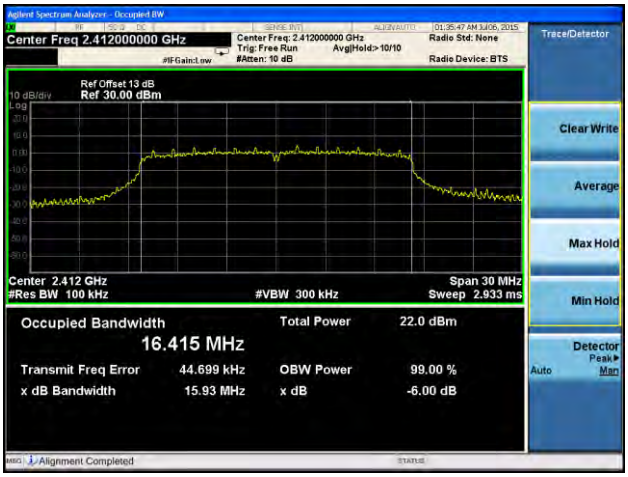
Channel 06 (2437MHz)



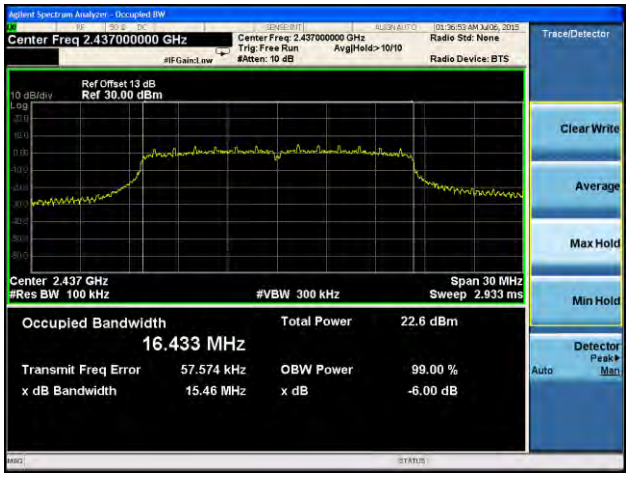
Channel 11 (2462MHz)

802.11g 6dB Bandwidth

Channel 01 (2412MHz)



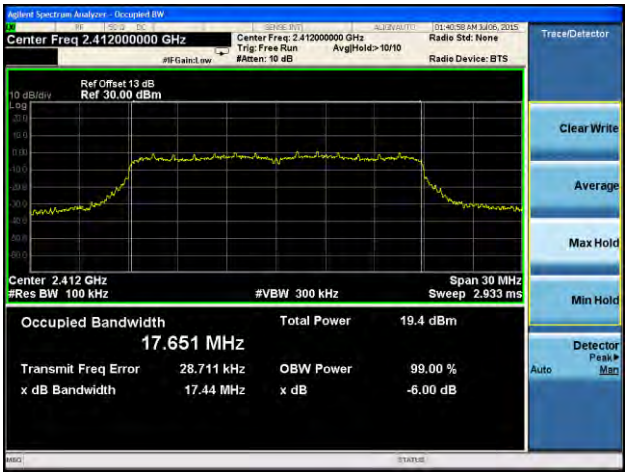
Channel 06 (2437MHz)



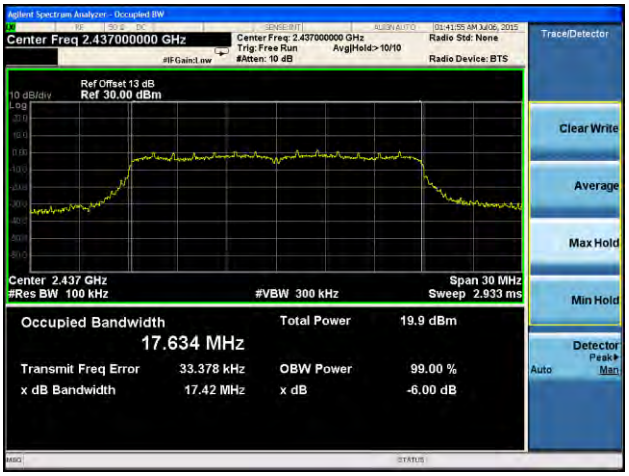
Channel 11 (2462MHz)

802.11n-HT20 6dB Bandwidth

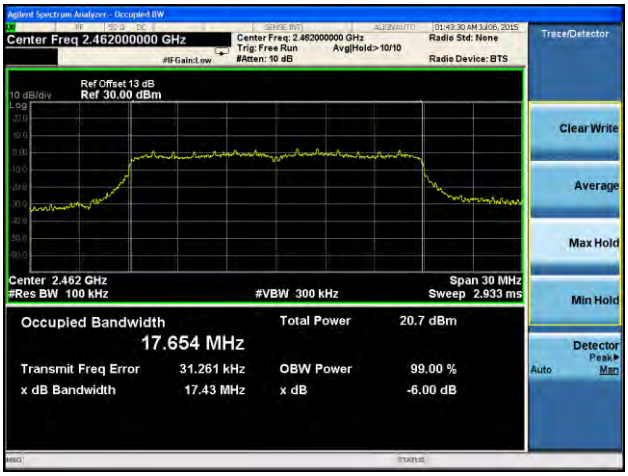
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



7.3. Output Power Measurement

7.3.1. Test Limit

The maximum out power shall be less 1 Watt (30dBm).

7.3.2. Test Procedure Used

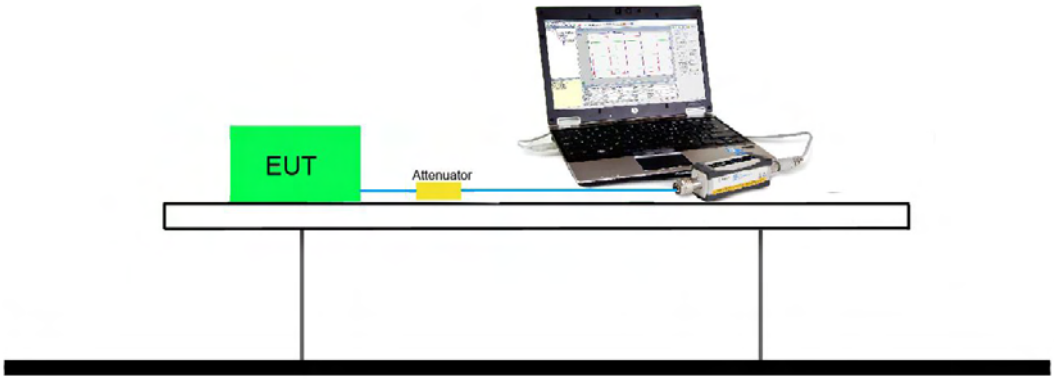
KDB 558074 D01v03r03 - Section 9.1.2 PKPM1 Peak Power Method (for signals with BW ≤ 50MHz)

7.3.3. Test Setting

Method PKPM1 (Peak Power Measurement of Signals with DTS BW ≤ 50MHz)

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

7.3.4. Test Setup



7.3.5. Test Result of Output Power

Output power at various data rates:

Test Mode	Bandwidth (MHz)	Channel No.	Frequency (MHz)	Data Rate (Mbps)	Peak Power (dBm)
802.11b	20	6	2437	1	19.19
				5.5	19.16
				11	18.11
802.11g	20	6	2437	6	23.36
				24	23.22
				54	22.04
802.11n	20	6	2437	7(MCS0)	23.18
				26(MCS3)	23.03
				65(MCS7)	20.63

Test Result of Peak Output Power

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Peak Power (dBm)	Limit (dBm)	Result
11b	1	1	2412	18.54	≤ 30	Pass
11b	1	6	2437	19.19	≤ 30	Pass
11b	1	11	2462	19.47	≤ 30	Pass
11g	6	1	2412	23.14	≤ 30	Pass
11g	6	6	2437	23.36	≤ 30	Pass
11g	6	11	2462	22.35	≤ 30	Pass
11n-HT20	7	1	2412	22.11	≤ 30	Pass
11n-HT20	7	6	2437	23.18	≤ 30	Pass
11n-HT20	7	11	2462	22.03	≤ 30	Pass

7.4. Power Spectral Density Measurement

7.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

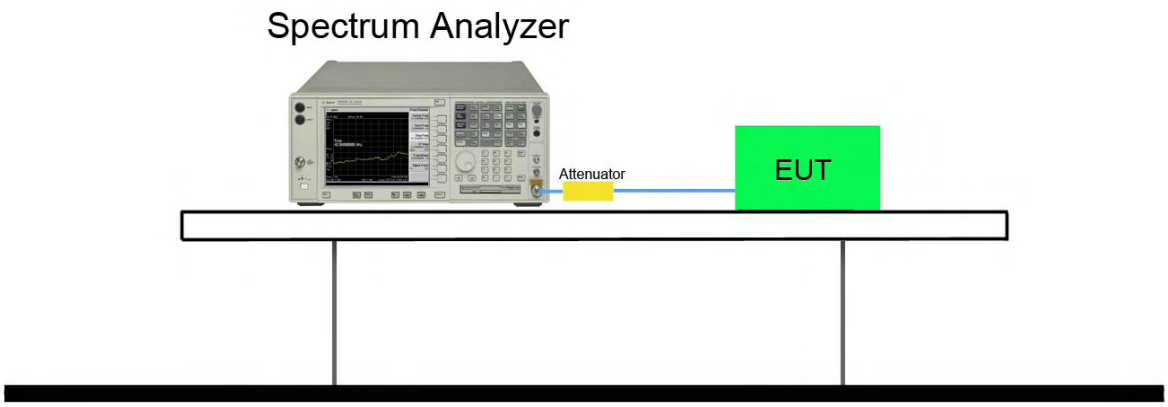
7.4.2. Test Procedure Used

KDB 558074 D01v03r02 - Section 10.2 Method PKPSD

7.4.3. Test Setting

1. Analyzer was set to the center frequency of the DTS channel under investigation
2. Span = 1.5 times the DTS channel bandwidth
3. RBW = 3kHz
4. VBW = 10kHz
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Trace was allowed to stabilize

7.4.4. Test Setup



7.4.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD Result (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
11b	1	1	2412	-2.47	≤ 8.0	Pass
11b	1	6	2437	-1.48	≤ 8.0	Pass
11b	1	11	2462	-0.55	≤ 8.0	Pass
11g	6	1	2412	-0.83	≤ 8.0	Pass
11g	6	6	2437	-3.13	≤ 8.0	Pass
11g	6	11	2462	-3.25	≤ 8.0	Pass
11n-HT20	6.5	1	2412	-5.71	≤ 8.0	Pass
11n-HT20	6.5	6	2437	-3.91	≤ 8.0	Pass
11n-HT20	6.5	11	2462	-4.08	≤ 8.0	Pass

802.11b PSD

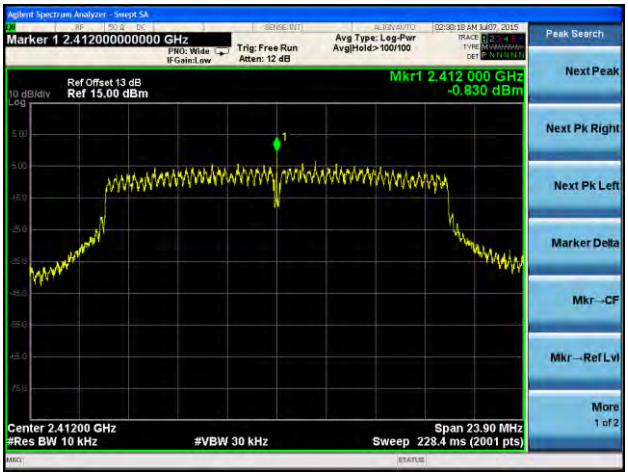
Channel 01 (2412MHz)

Channel 06 (2437MHz)

Channel 11 (2462MHz)

802.11g PSD

Channel 01 (2412MHz)

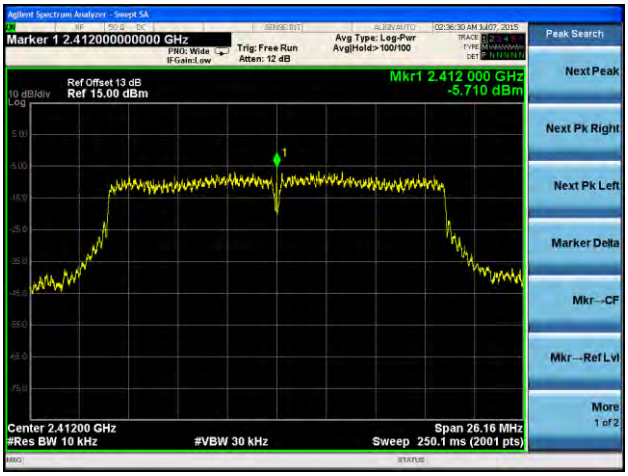


Channel 06 (2437MHz)

Channel 11 (2462MHz)

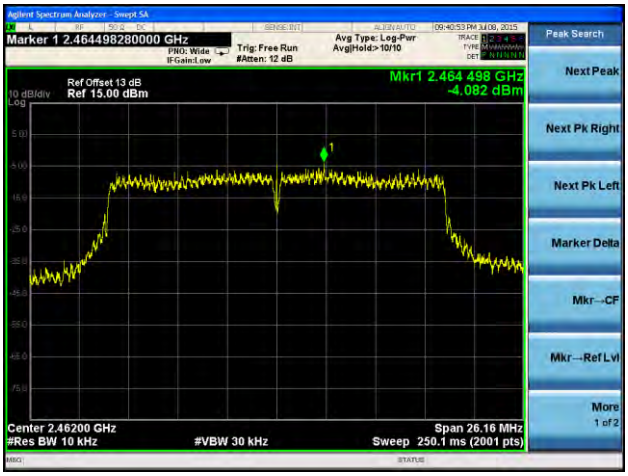
802.11n-HT20 PSD

Channel 01 (2412MHz)



Channel 06 (2437MHz)

Channel 11 (2462MHz)



7.5. Conducted Band Edge and Out-of-Band Emissions

7.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

7.5.2. Test Procedure Used

KDB 558074 D01v03r03 - Section 11.2 & Section 11.3

7.5.3. Test Settitng

1. Reference level measurement

(a) Set instrument center frequency to DTS channel center frequency

(b) Set the span to ≥ 1.5 times the DTS bandwidth

(c) Set the RBW = 100 kHz

(d) Set the VBW ≥ 3 x RBW

(e) Detector = peak

(f) Sweep time = auto couple

(g) Trace mode = max hold

(h) Allow trace to fully stabilize

2. Emission level measurement

(a) Set the center frequency and span to encompass frequency range to be measured

(b) RBW = 100kHz

(c) VBW = 300kHz

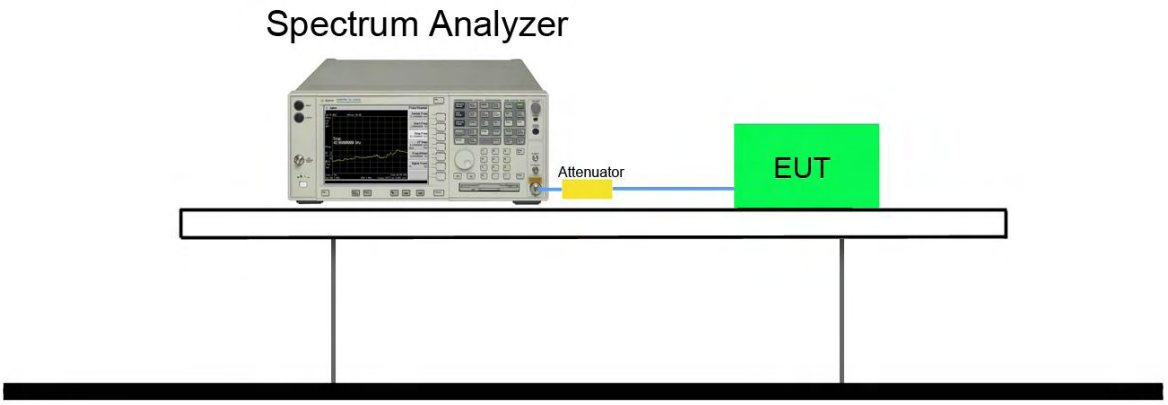
(d) Detector = Peak

(e) Trace mode = max hold

(f) Sweep time = auto couple

(g) The trace was allowed to stabilize

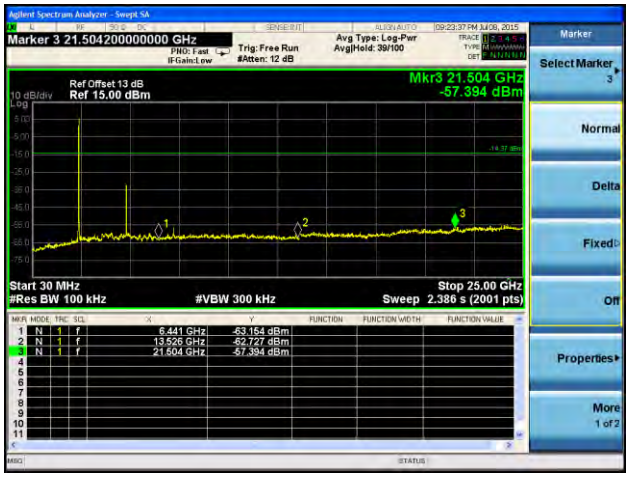
7.5.4. Test Setup



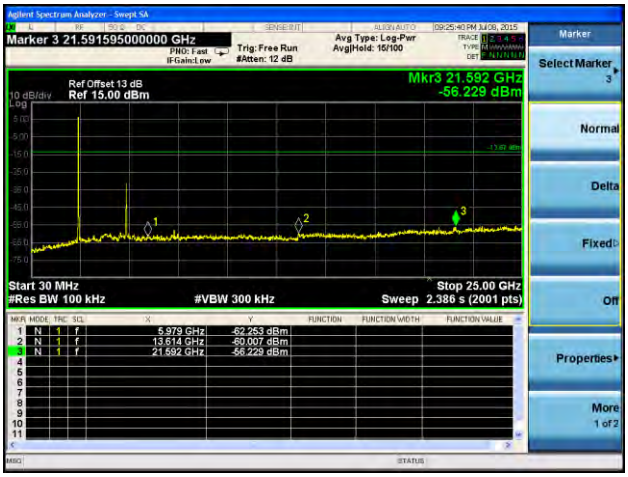
7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
802.11b	1	01	2412	20dBc	Pass
802.11b	1	06	2437	20dBc	Pass
802.11b	1	11	2462	20dBc	Pass
802.11g	6	01	2412	20dBc	Pass
802.11g	6	06	2437	20dBc	Pass
802.11g	6	11	2462	20dBc	Pass
802.11n-HT20	6.5	01	2412	20dBc	Pass
802.11n-HT20	6.5	06	2437	20dBc	Pass
802.11n-HT20	6.5	11	2462	20dBc	Pass

802.11b Out-of-Band Emissions	
Channel 01 (2412MHz)	
100kHz PSD reference Level	Low Band Edge

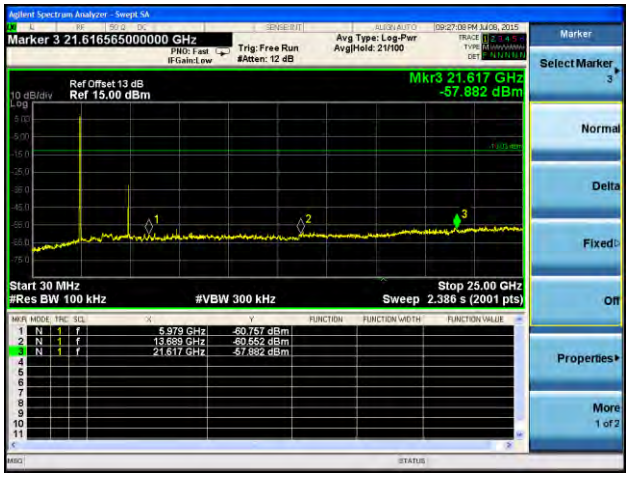
Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)

100kHz PSD reference Level	Spurious Emission 30MHz ~ 25GHz
	

Channel 11 (2462MHz)

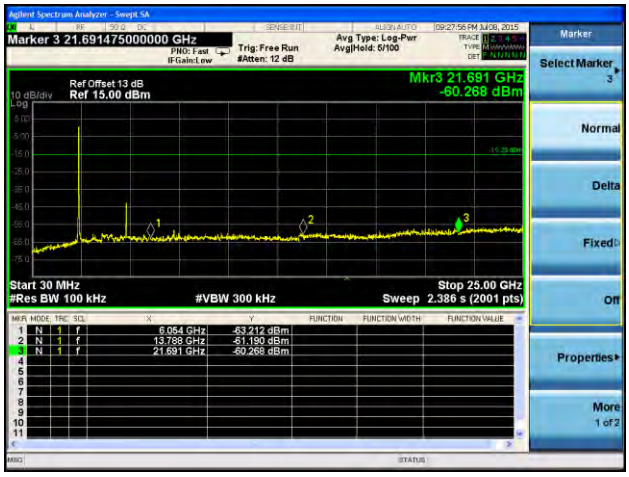
100kHz PSD reference Level	High Band Edge

Spurious Emission 30MHz ~ 25GHz	
	

802.11g Out-of-Band Emissions

Channel 01 (2412MHz)

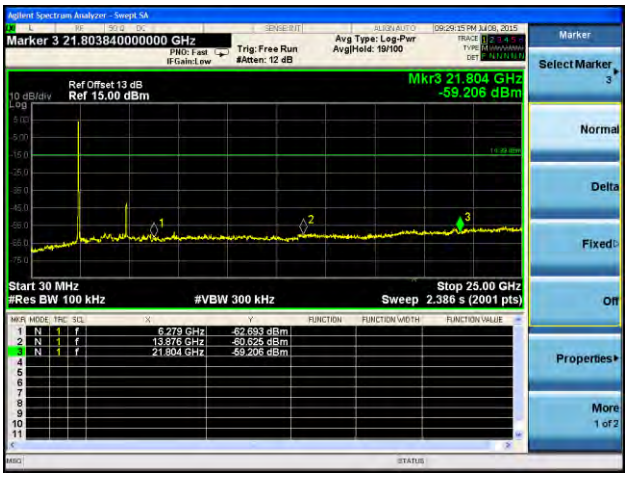
100kHz PSD reference Level	Low Band Edge

Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)

100kHz PSD reference Level

Spurious Emission 30MHz ~ 25GHz

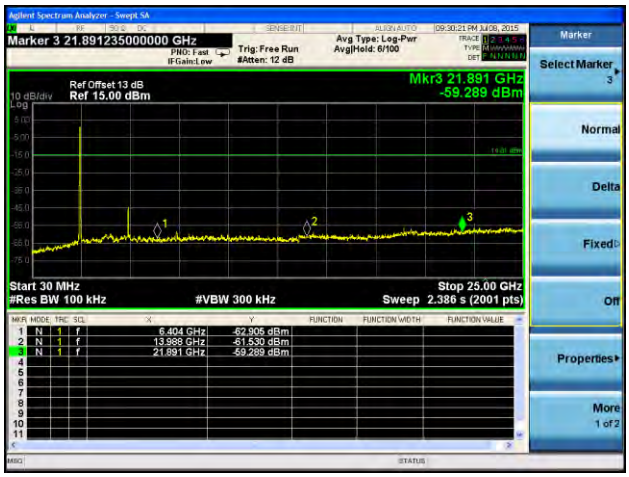


Channel 11 (2462MHz)

100kHz PSD reference Level

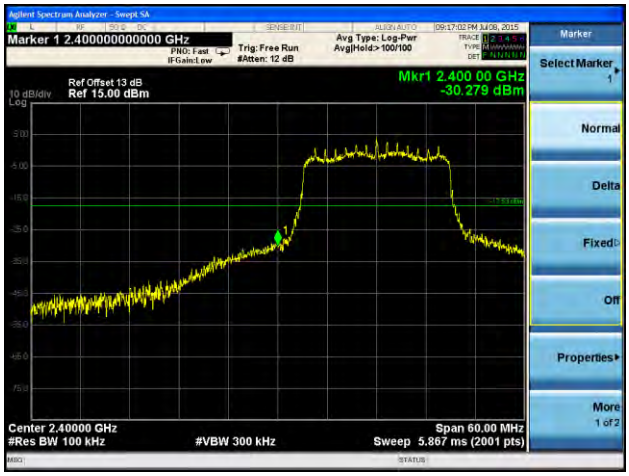
High Band Edge

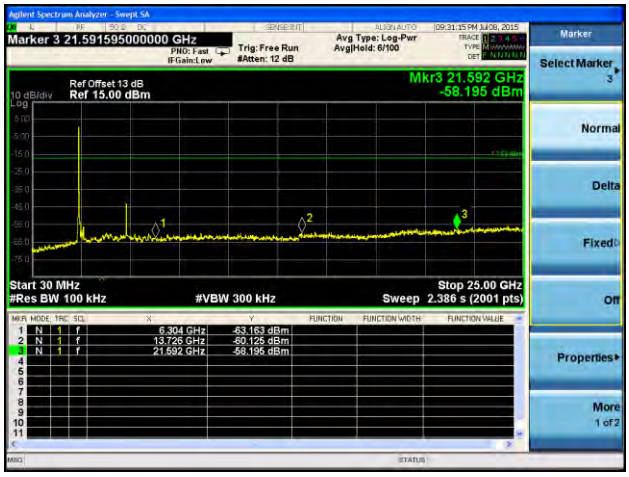
Spurious Emission 30MHz ~ 25GHz



802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

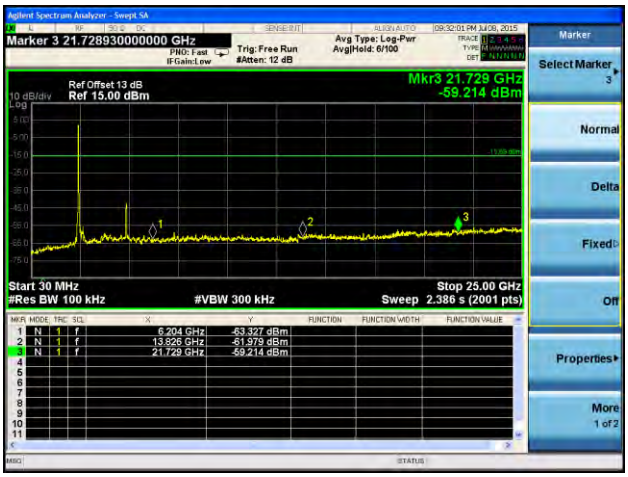
100kHz PSD reference Level	Low Band Edge
	

Spurious Emission 30MHz ~ 25GHz	
	

Channel 06 (2437MHz)

100kHz PSD reference Level

Spurious Emission 30MHz ~ 25GHz

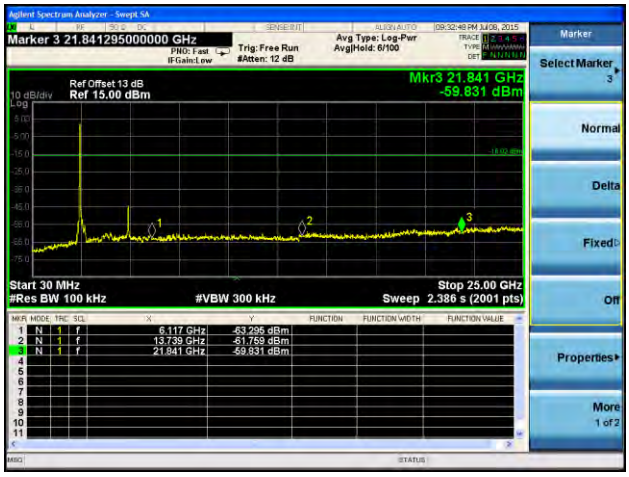


Channel 11 (2462MHz)

100kHz PSD reference Level

High Band Edge

Spurious Emission 30MHz ~ 25GHz



7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.6.2. Test Procedure Used

KDB 558074 D01v03r03 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r03 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r03 - Section 12.2.5 (average power measurements)

7.6.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak

5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

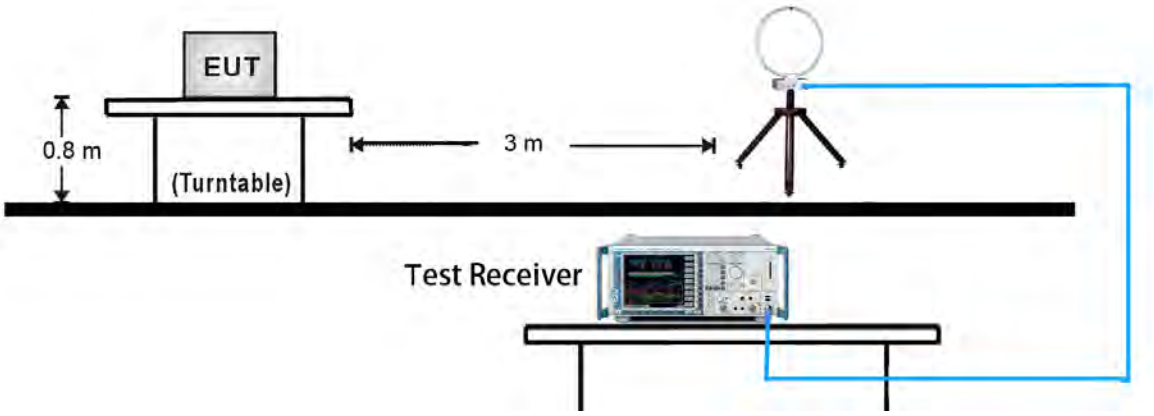
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

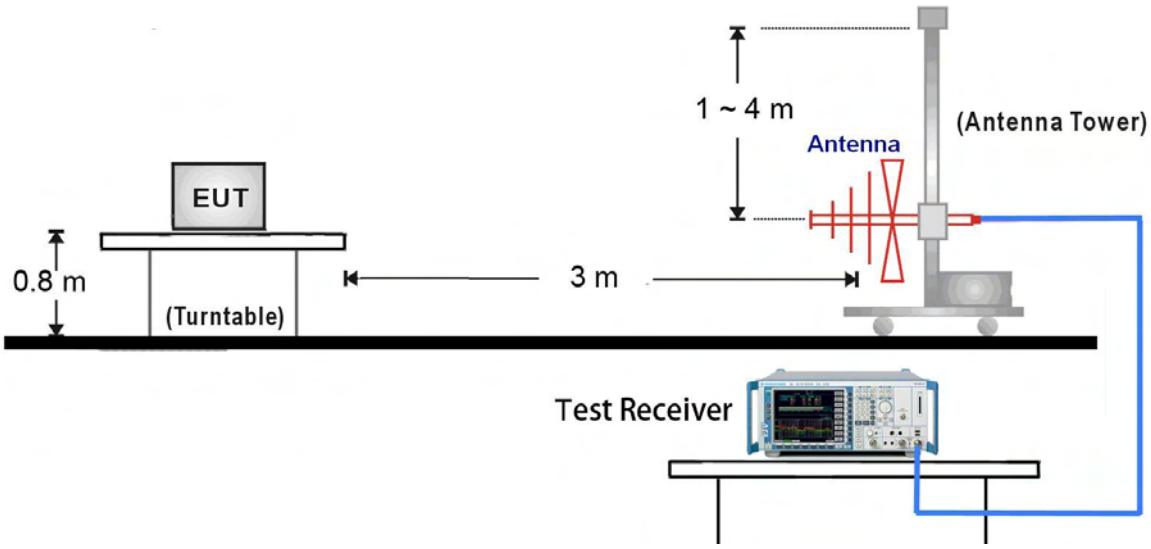
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4. Test Setup

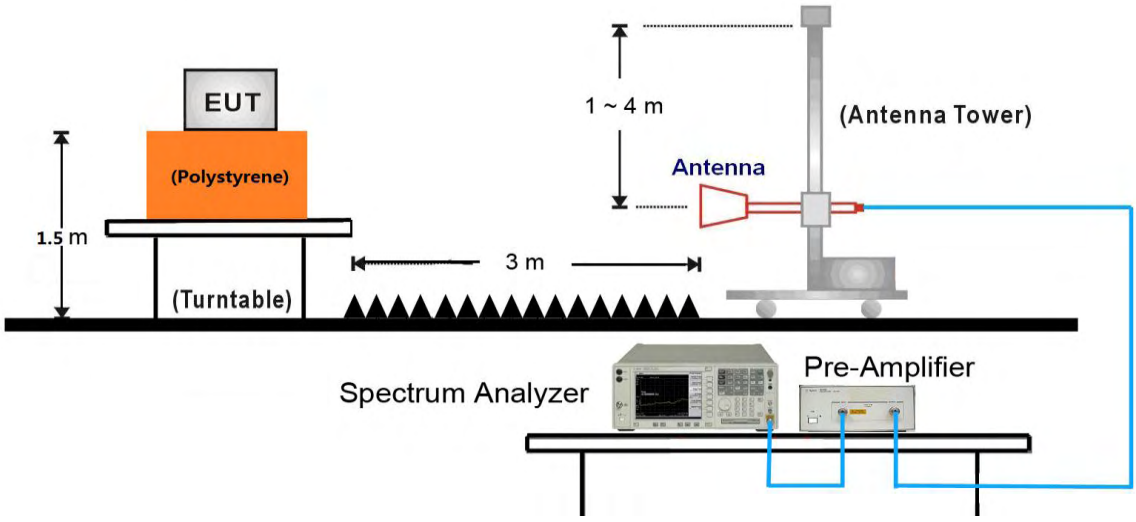
9kHz ~ 30MHz Test Setup:



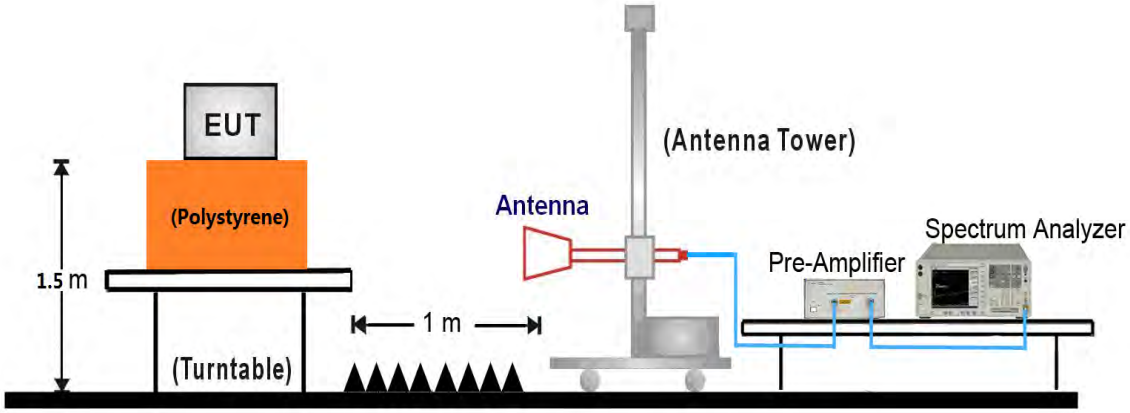
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~25GHz Test Setup:



7.6.5. Test Result

Note: The worst case emission was shown as below when the EUT was placed in Z axis.

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3148.8	39.5	-1.5	38.0	75.5	-37.5	Peak	Horizontal
*	3568.5	38.7	-0.8	37.9	75.5	-37.6	Peak	Horizontal
	4825.0	39.4	2.7	42.1	74.0	-31.9	Peak	Horizontal
	7239.0	40.1	7.8	47.9	74.0	-26.1	Peak	Horizontal
*	3043.4	39.7	-2.0	37.7	75.5	-37.8	Peak	Vertical
*	3568.2	38.2	-0.8	37.4	75.5	-38.1	Peak	Vertical
	4824.0	38.2	2.7	40.9	74.0	-33.1	Peak	Vertical
	7256.0	37.9	7.9	45.8	74.0	-28.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (95.5dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3143.4	39.5	-1.6	37.9	76.7	-38.8	Peak	Horizontal
*	3597.1	38.0	-0.7	37.3	76.7	-39.4	Peak	Horizontal
	4876.0	44.6	2.7	47.3	74.0	-26.7	Peak	Horizontal
	7307.0	38.8	8.0	46.8	74.0	-27.2	Peak	Horizontal
*	3043.1	39.5	-2.0	37.5	76.7	-39.2	Peak	Vertical
*	3523.5	38.2	-1.0	37.2	76.7	-39.5	Peak	Vertical
	4876.0	44.7	2.7	47.4	74.0	-26.6	Peak	Vertical
	7230.5	37.7	7.8	45.5	74.0	-28.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (96.7dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11b	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3124.5	39.2	-1.6	37.6	77.2	-39.6	Peak	Horizontal
*	3559.1	37.7	-0.8	36.9	77.2	-40.3	Peak	Horizontal
	4927.0	47.8	2.8	50.6	74.0	-23.4	Peak	Horizontal
	7392.0	38.8	7.9	46.7	74.0	-27.3	Peak	Horizontal
*	3104.5	38.8	-1.8	37.0	77.2	-40.2	Peak	Vertical
*	3590.1	38.3	-0.7	37.6	77.2	-39.6	Peak	Vertical
	4927.0	49.0	2.8	51.8	74.0	-22.2	Peak	Vertical
	7386.0	36.9	7.9	44.8	74.0	-29.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (97.2dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3015.2	38.9	-2.1	36.8	81.0	-44.2	Peak	Horizontal
*	3589.5	38.5	-0.7	37.8	81.0	-43.2	Peak	Horizontal
	4825.0	42.1	2.7	44.8	74.0	-29.2	Peak	Horizontal
	7230.5	39.8	7.8	47.6	74.0	-26.4	Peak	Horizontal
*	3104.2	38.5	-1.8	36.7	81.0	-44.3	Peak	Vertical
*	3568.5	37.9	-0.8	37.1	81.0	-43.9	Peak	Vertical
	4825.0	40.7	2.7	43.4	74.0	-30.6	Peak	Vertical
	7468.5	38.1	8.1	46.2	74.0	-27.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.0dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3154.1	39.3	-1.5	37.8	82.5	-44.7	Peak	Horizontal
*	3563.0	37.5	-0.8	36.7	82.5	-45.8	Peak	Horizontal
	4876.0	42.6	2.7	45.3	74.0	-28.7	Peak	Horizontal
	7307.0	38.0	8.0	46.0	74.0	-28.0	Peak	Horizontal
*	3014.1	38.4	-2.1	36.3	82.5	-46.2	Peak	Vertical
*	3596.1	37.8	-0.7	37.1	82.5	-45.4	Peak	Vertical
	4884.5	43.0	2.7	45.7	74.0	-28.3	Peak	Vertical
	7311.0	36.9	8.0	44.9	74.0	-29.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.5dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11g	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3024.1	39.7	-2.1	37.6	82.2	-44.6	Peak	Horizontal
*	3596.3	38.0	-0.7	37.3	82.2	-44.9	Peak	Horizontal
	4927.0	44.3	2.8	47.1	74.0	-26.9	Peak	Horizontal
	7392.0	39.1	7.9	47.0	74.0	-27.0	Peak	Horizontal
*	3013.4	38.6	-2.1	36.5	82.2	-45.7	Peak	Vertical
*	3593.5	37.8	-0.7	37.1	82.2	-45.1	Peak	Vertical
	4927.0	47.2	2.8	50.0	74.0	-24.0	Peak	Vertical
	7386.0	36.1	7.9	44.0	74.0	-30.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.2dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	01	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3140.2	39.6	-1.6	38.0	79.9	-41.9	Peak	Horizontal
*	3596.3	38.8	-0.7	38.1	79.9	-41.8	Peak	Horizontal
	4824.0	37.4	2.7	40.1	74.0	-33.9	Peak	Horizontal
	7256.0	36.8	7.9	44.7	74.0	-29.3	Peak	Horizontal
*	3124.5	38.6	-1.6	37.0	79.9	-42.9	Peak	Vertical
*	3595.5	37.5	-0.7	36.8	79.9	-43.1	Peak	Vertical
	4824.0	36.6	2.7	39.3	74.0	-34.7	Peak	Vertical
	7256.0	37.3	7.9	45.2	74.0	-28.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.9dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	06	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3054.1	38.8	-2.0	36.8	82.2	-45.4	Peak	Horizontal
*	3568.1	38.0	-0.8	37.2	82.2	-45.0	Peak	Horizontal
	4876.0	41.7	2.7	44.4	74.0	-29.6	Peak	Horizontal
	7311.0	36.9	8.0	44.9	74.0	-29.1	Peak	Horizontal
*	3144.0	39.0	-1.6	37.4	82.2	-44.8	Peak	Vertical
*	3579.1	37.9	-0.8	37.1	82.2	-45.1	Peak	Vertical
	4884.5	42.1	2.7	44.8	74.0	-29.2	Peak	Vertical
	7298.5	37.3	8.0	45.3	74.0	-28.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.2dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20	Test Site:	AC1
Test Channel:	11	Test Engineer:	Roy Cheng
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3129.2	39.0	-1.6	37.4	81.5	-44.1	Peak	Horizontal
*	3589.5	37.6	-0.7	36.9	81.5	-44.6	Peak	Horizontal
	4935.5	44.1	2.8	46.9	74.0	-27.1	Peak	Horizontal
	7386.0	37.6	7.9	45.5	74.0	-28.5	Peak	Horizontal
*	3142.1	37.9	-1.6	36.3	81.5	-45.2	Peak	Vertical
*	3535.5	37.4	-1.0	36.4	81.5	-45.1	Peak	Vertical
	4927.0	45.3	2.8	48.1	74.0	-25.9	Peak	Vertical
	7386.0	36.0	7.9	43.9	74.0	-30.1	Peak	Vertical

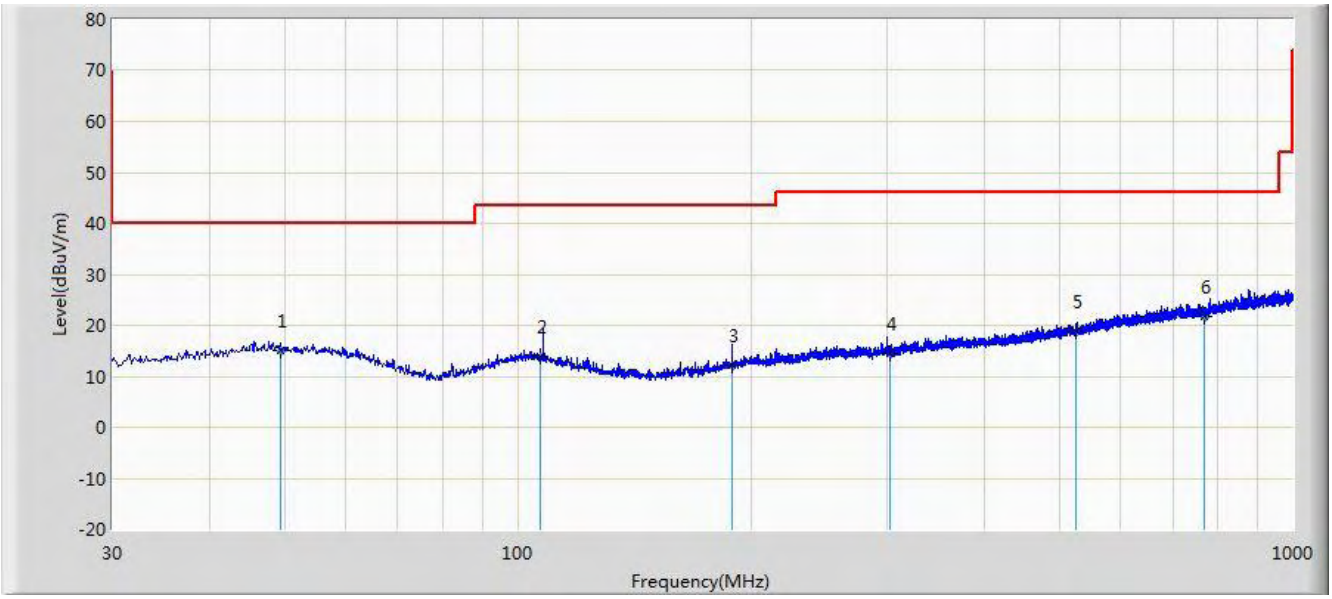
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.5dBμV/m).

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The worst case of Radiated Emission below 1GHz:

Site: AC 1	Time: 2015/07/08 - 16:12
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	

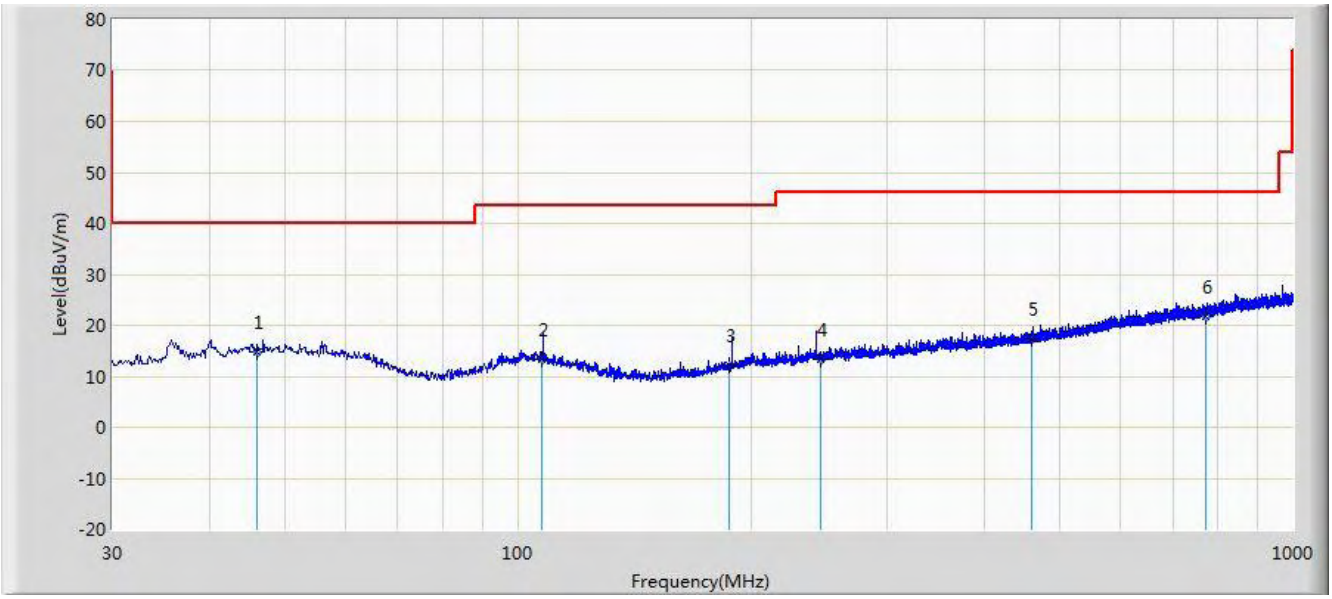


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			49.400	15.195	0.279	-24.805	40.000	14.916	QP
2			106.994	13.788	0.777	-29.712	43.500	13.011	QP
3			189.322	12.216	0.504	-31.284	43.500	11.711	QP
4			301.721	14.518	-0.031	-31.482	46.000	14.549	QP
5			525.185	18.814	0.212	-27.186	46.000	18.602	QP
6		*	768.655	21.850	-0.481	-24.150	46.000	22.331	QP

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/08 - 16:14
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	

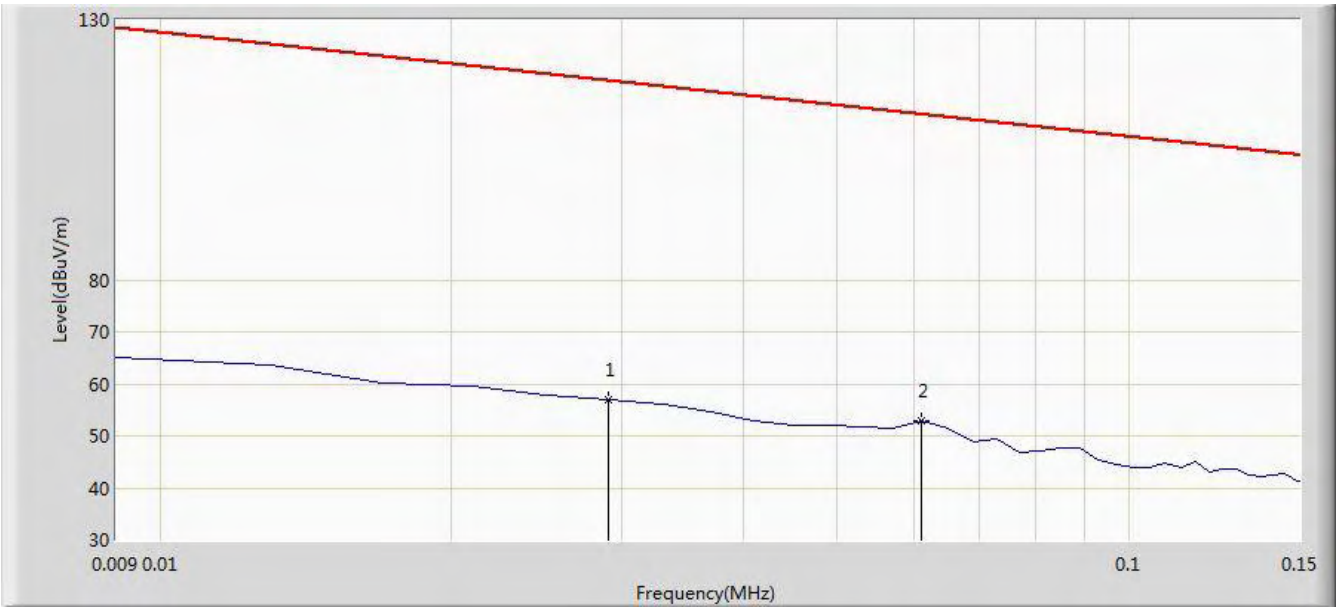


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			46.126	14.816	-0.152	-25.184	40.000	14.968	QP
2			107.357	13.371	0.371	-30.129	43.500	13.000	QP
3			187.140	12.222	0.706	-31.278	43.500	11.516	QP
4			245.946	13.290	-0.243	-32.710	46.000	13.533	QP
5			460.922	17.253	-0.265	-28.747	46.000	17.518	QP
6		*	772.414	21.707	-0.668	-24.293	46.000	22.376	QP

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2015/07/07 - 09:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

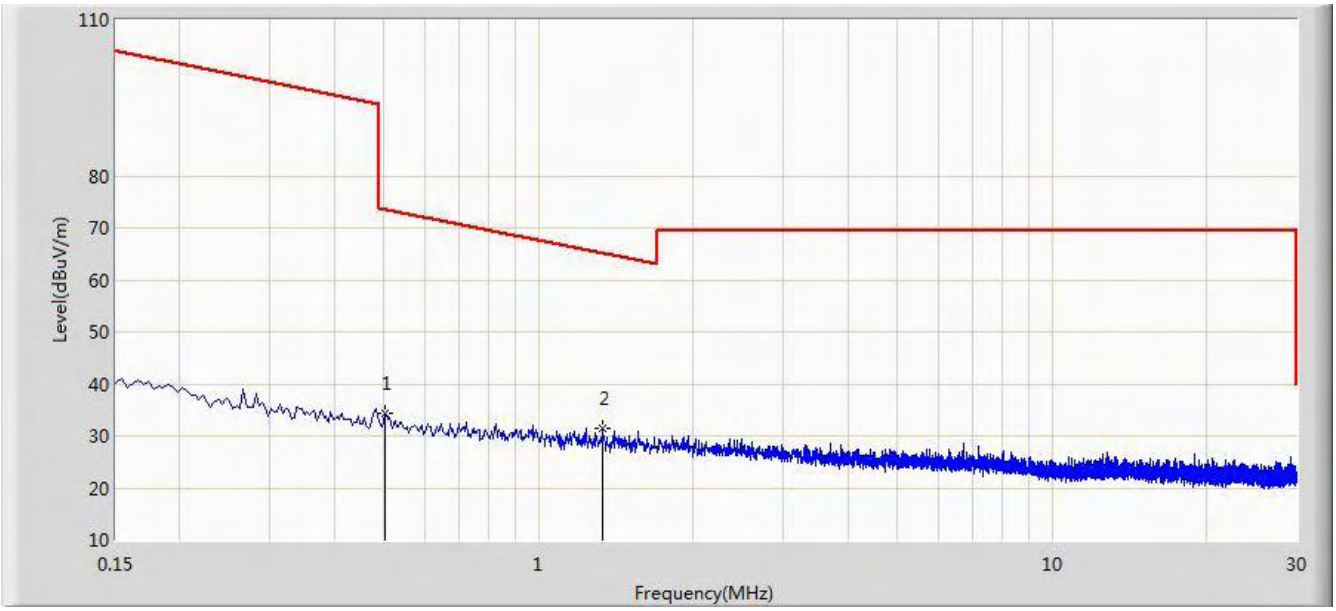


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.029	56.893	35.844	-61.463	118.356	21.049	QP
2		*	0.061	52.853	32.542	-59.045	111.898	20.311	QP

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2015/07/07 - 09:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face on
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 9kHz~30MHz.	

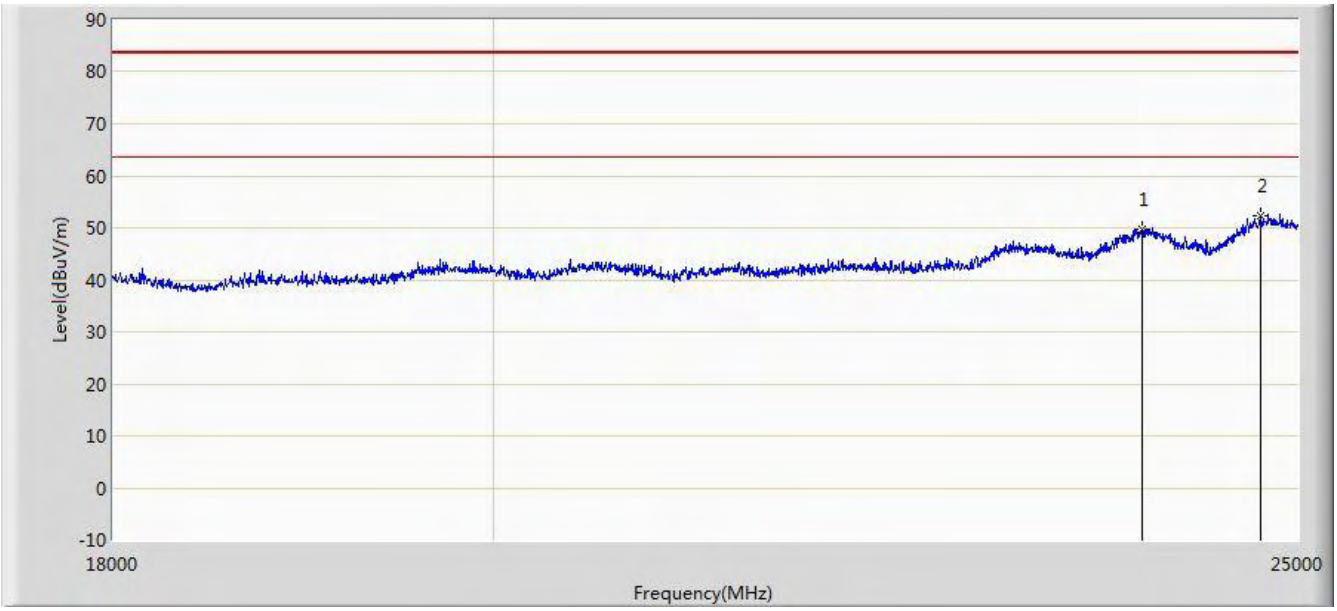


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			0.502	34.370	13.947	-39.220	73.590	20.423	QP
2		*	1.334	31.595	11.104	-33.530	65.125	20.491	QP

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2015/07/07 - 10:21
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	

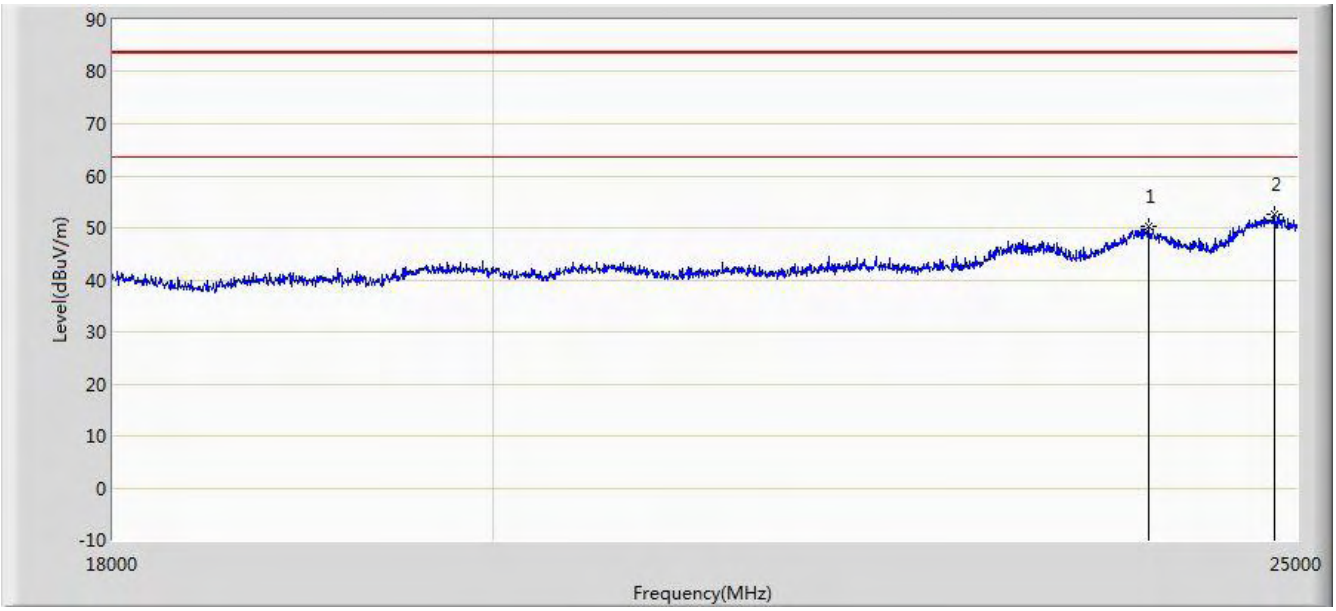


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23943.000	49.776	35.866	-33.724	83.500	13.910	PK
2		*	24741.000	52.375	37.681	-31.125	83.500	14.694	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Site: AC1	Time: 2015/07/07 - 10:26
Limit: FCC_Part15.209_RE(1m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: There is the ambient noise within frequency range 18GHz~25GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			23999.000	50.379	36.435	-33.121	83.500	13.944	PK
2		*	24846.000	52.503	37.735	-30.997	83.500	14.768	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

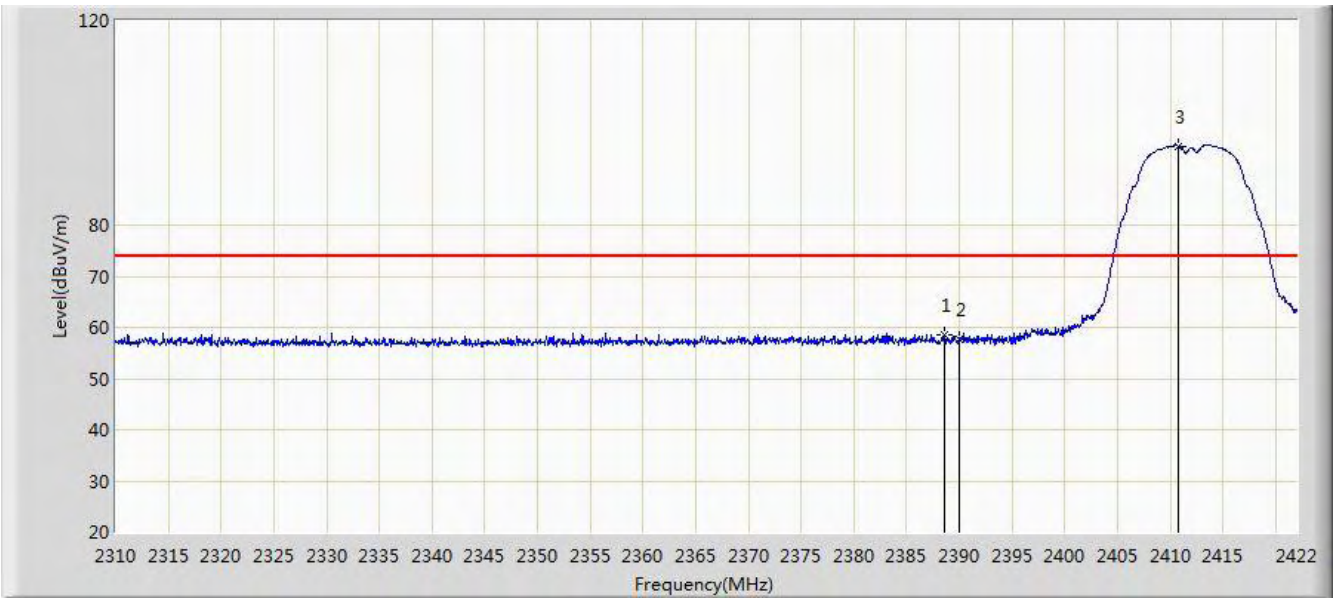
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Result

Note: The worst case band edge was shown as below when the EUT was placed in Z axis.

Site: AC 1	Time: 2015/07/09 - 04:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz	

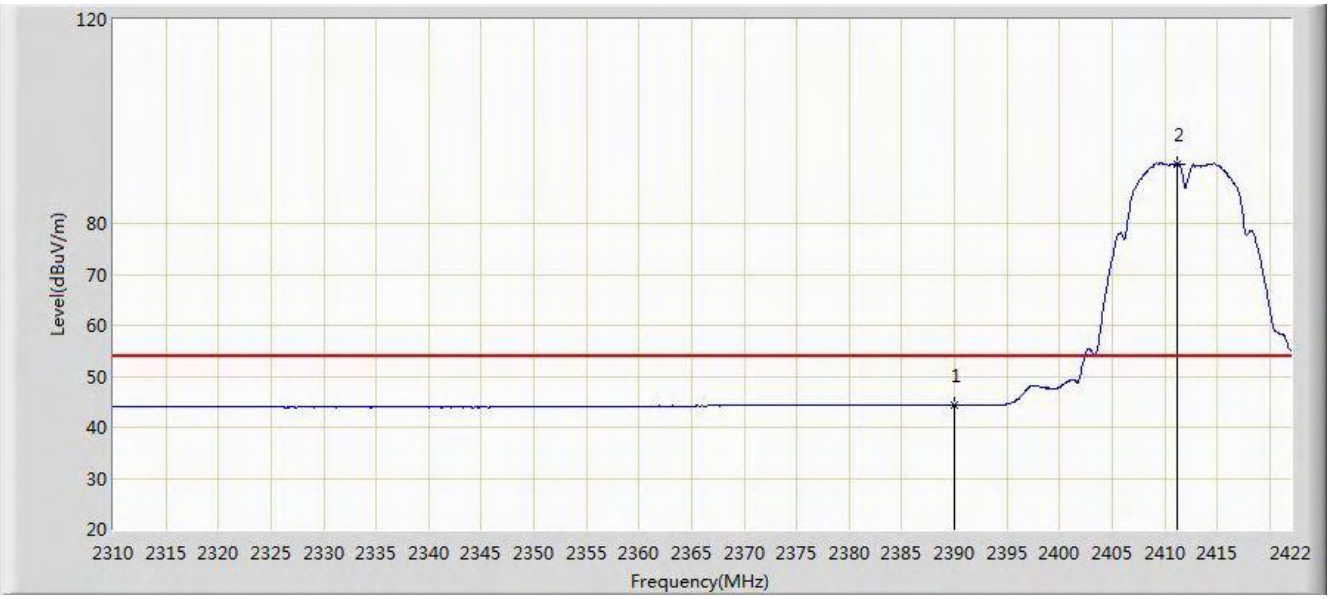


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.624	58.508	27.303	-15.492	74.000	31.205	PK
2			2390.000	57.605	26.402	-16.395	74.000	31.203	PK
3		*	2410.800	95.473	64.301	N/A	N/A	31.172	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 04:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0	

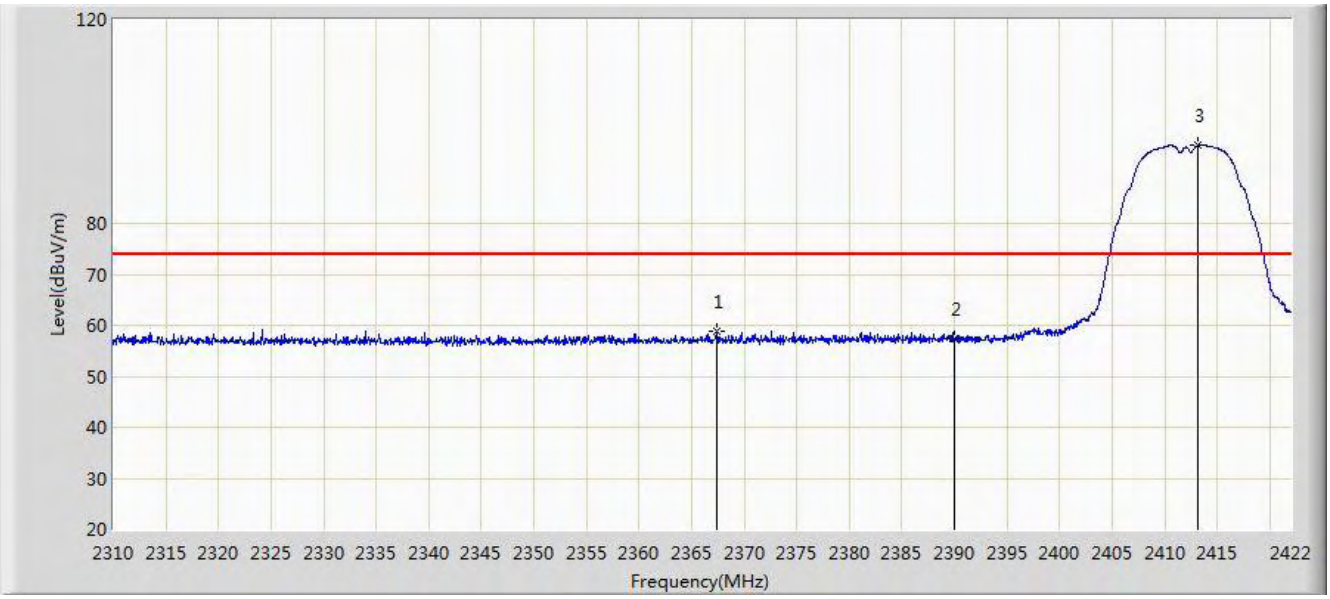


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.387	13.184	-9.613	54.000	31.203	AV
2		*	2411.136	91.720	60.549	N/A	N/A	31.171	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 04:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0	

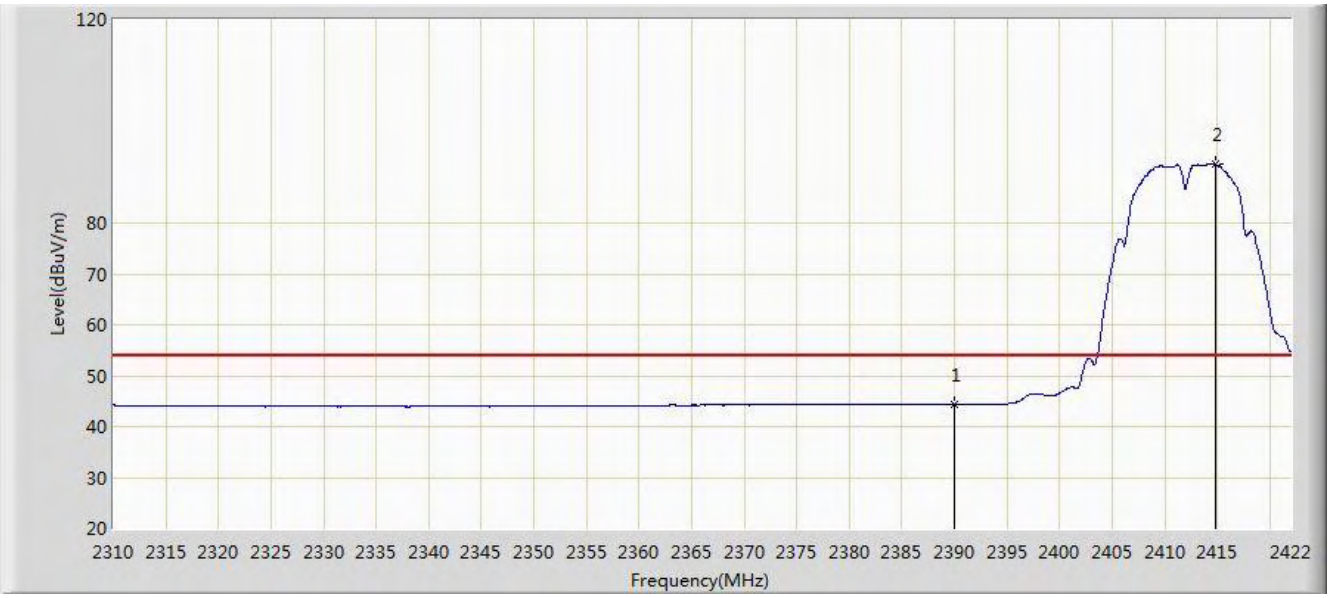


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2367.344	58.705	27.460	-15.295	74.000	31.245	PK
2			2390.000	57.319	26.116	-16.681	74.000	31.203	PK
3		*	2413.152	95.320	64.152	N/A	N/A	31.167	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0	

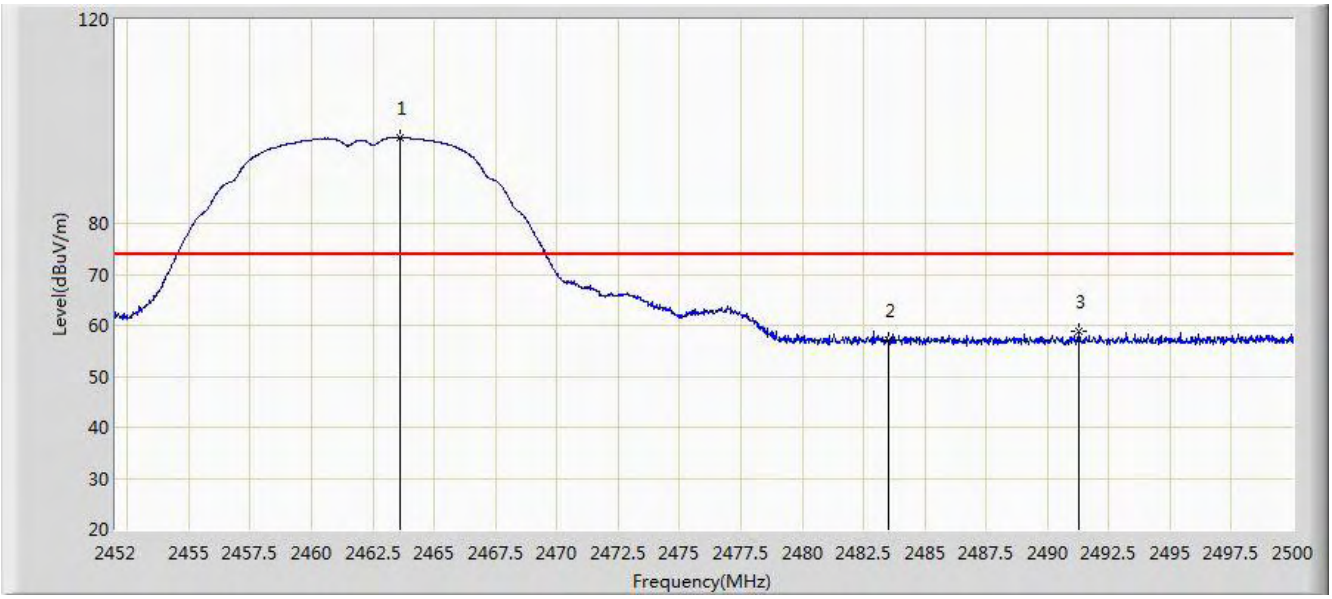


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.388	13.185	-9.612	54.000	31.203	AV
2		*	2414.776	91.694	60.529	N/A	N/A	31.164	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0	

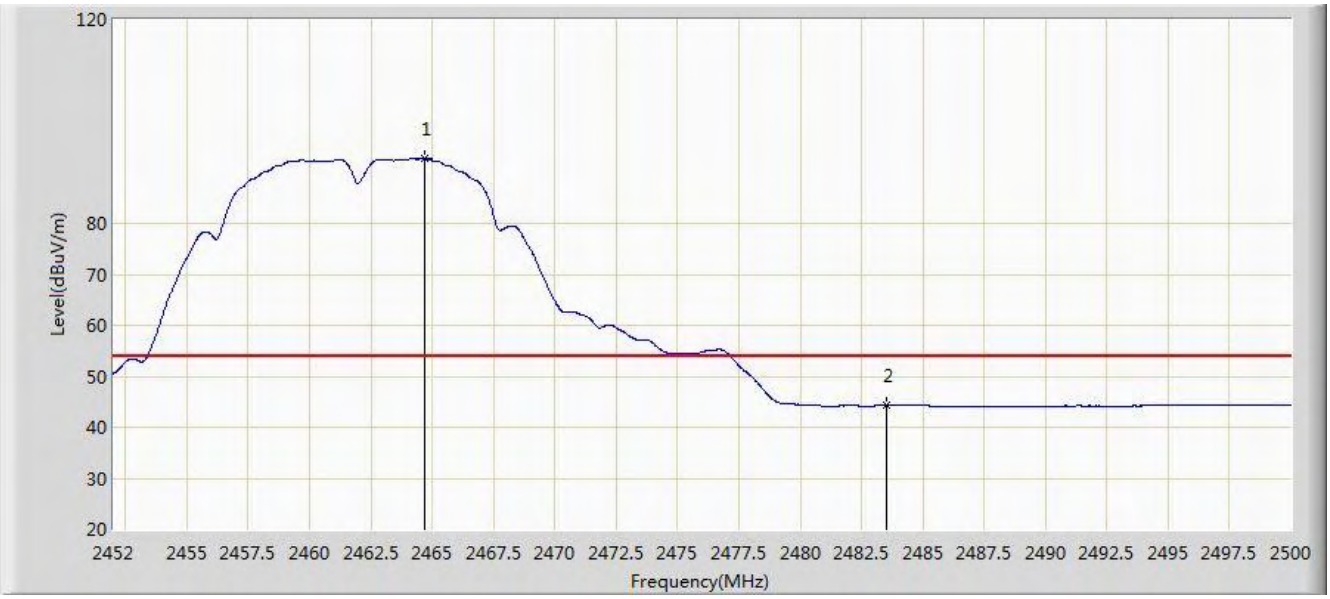


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.616	96.867	65.729	N/A	N/A	31.139	PK
2			2483.500	57.014	25.821	-16.986	74.000	31.194	PK
3			2491.288	58.894	27.680	-15.106	74.000	31.214	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0	

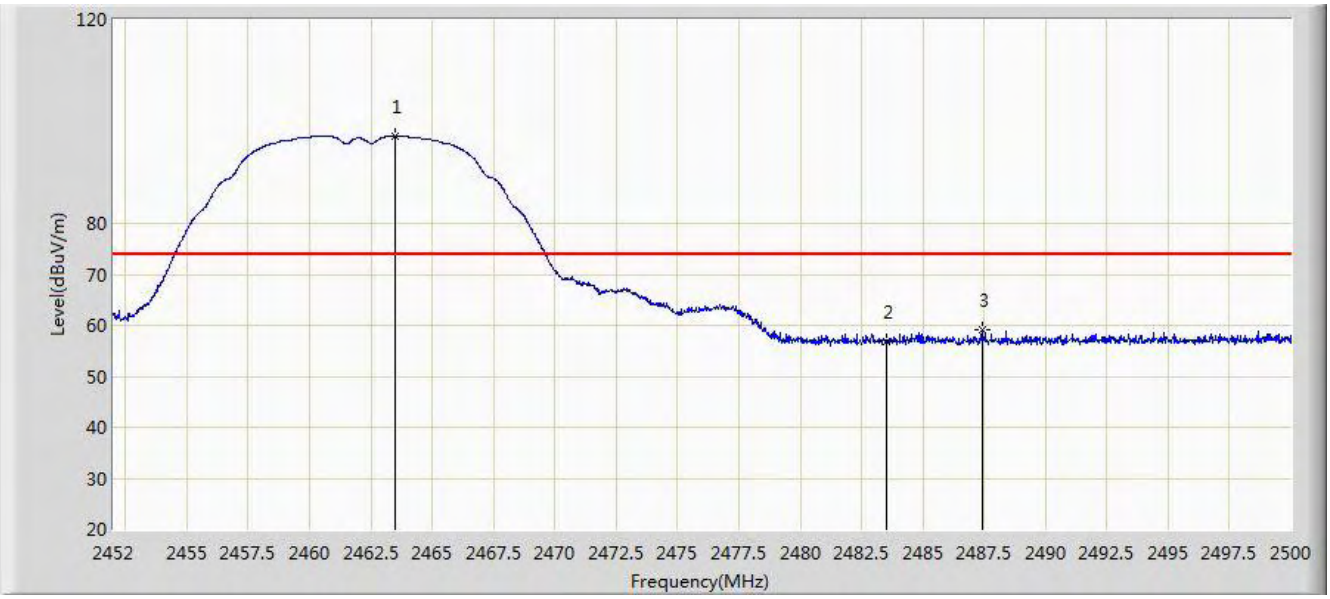


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.672	92.733	61.592	N/A	N/A	31.142	AV
2			2483.500	44.303	13.110	-9.697	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0	

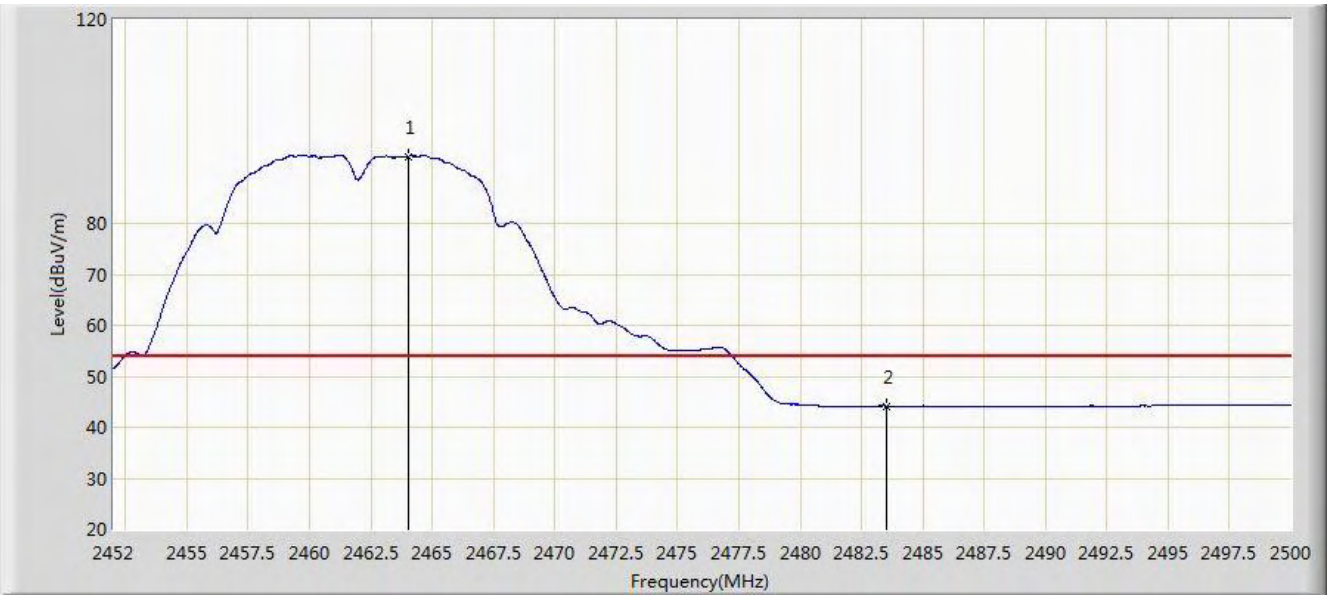


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.472	97.177	66.039	N/A	N/A	31.138	PK
2			2483.500	56.750	25.557	-17.250	74.000	31.194	PK
3			2487.400	59.016	27.812	-14.984	74.000	31.204	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0	

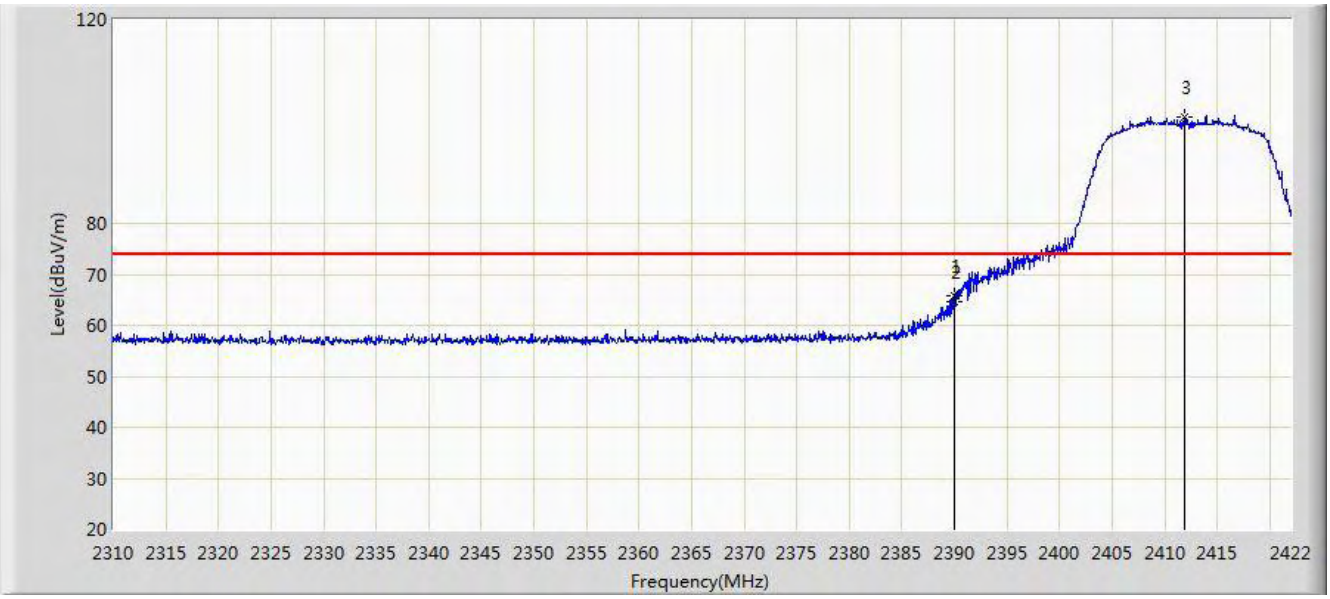


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.048	93.140	62.001	N/A	N/A	31.139	AV
2			2483.500	44.187	12.994	-9.813	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz Ant 0	

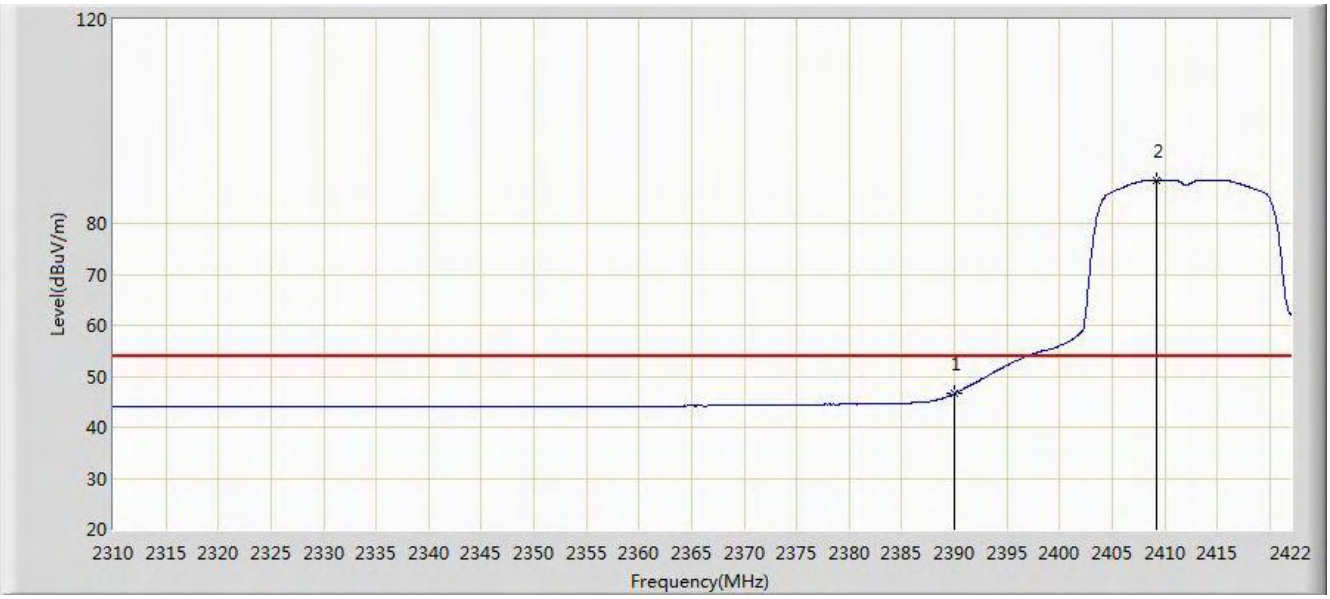


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.968	65.758	34.555	-8.242	74.000	31.203	PK
2			2390.000	64.723	33.520	-9.277	74.000	31.203	PK
3		*	2411.920	101.013	69.843	N/A	N/A	31.170	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:22
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz Ant 0	

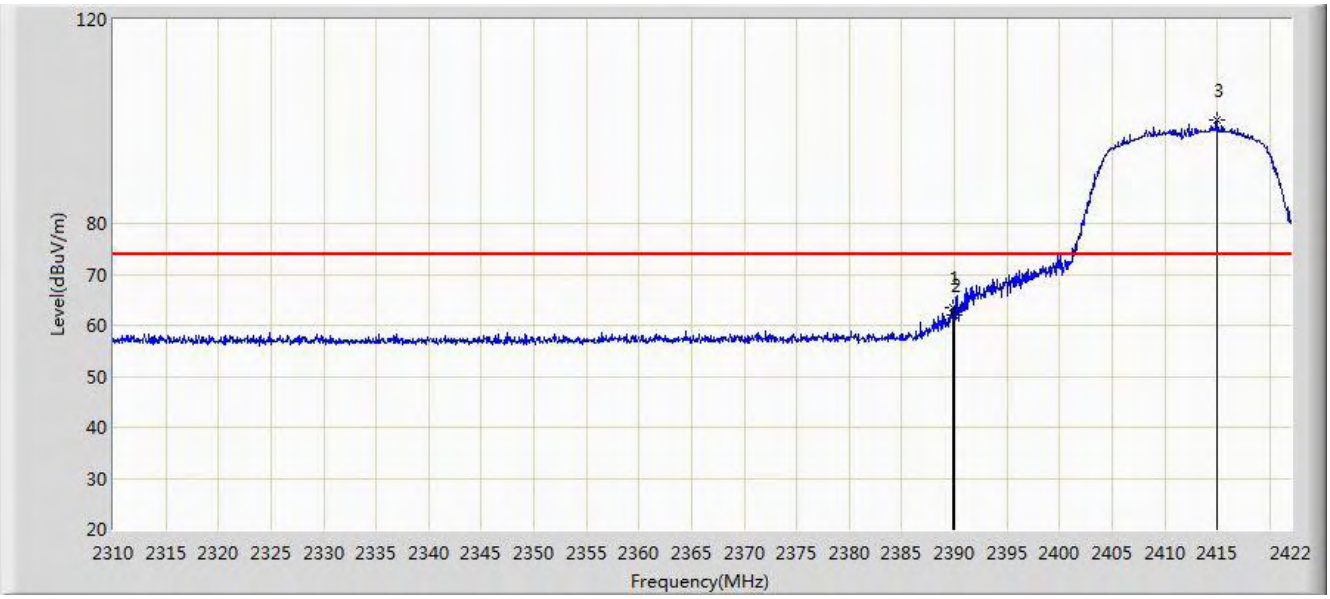


aa	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.601	15.398	-7.399	54.000	31.203	AV
2		*	2409.288	88.484	57.310	N/A	N/A	31.174	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz Ant 0	

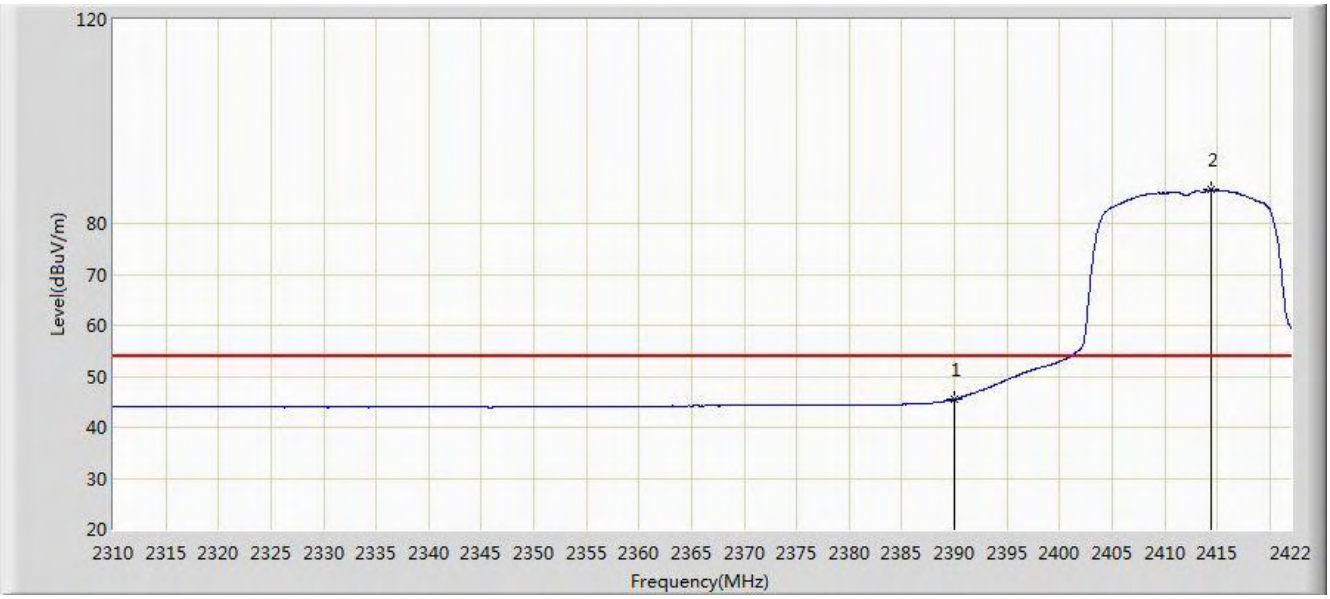


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.800	63.457	32.254	-10.543	74.000	31.203	PK
2			2390.000	61.954	30.751	-12.046	74.000	31.203	PK
3		*	2415.000	100.181	69.017	N/A	N/A	31.165	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2412MHz Ant 0	

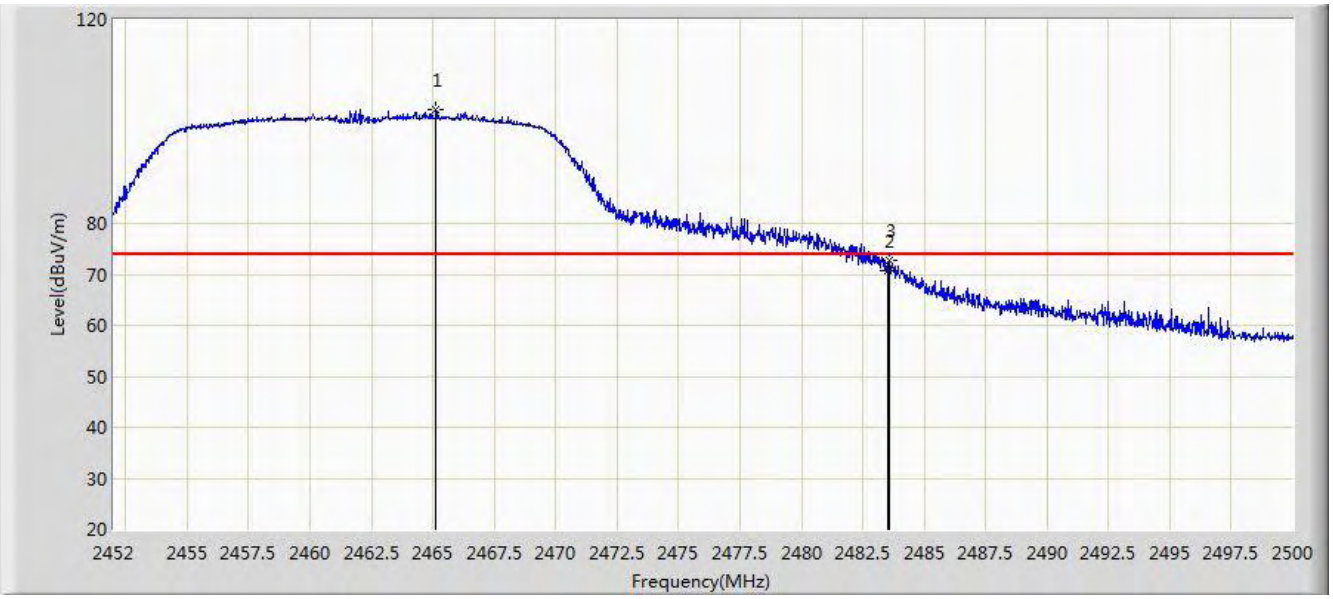


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.486	14.283	-8.514	54.000	31.203	AV
2		*	2414.440	86.569	55.404	N/A	N/A	31.165	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz Ant 0	

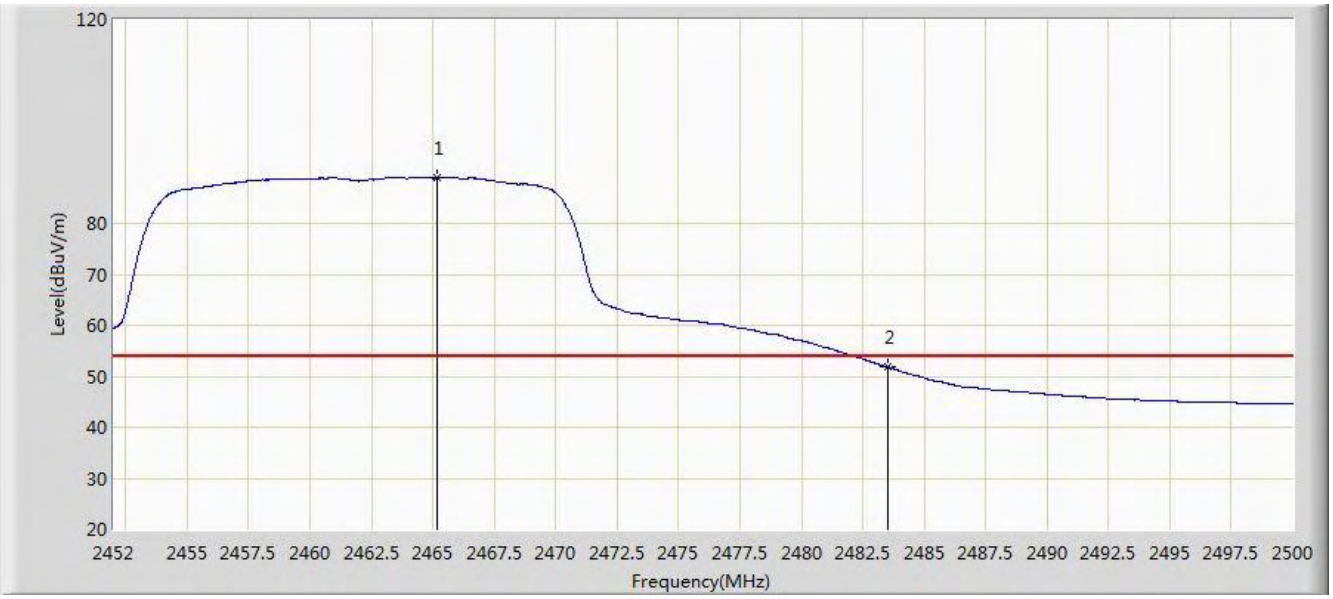


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.128	102.224	71.081	N/A	N/A	31.142	PK
2			2483.500	70.765	39.572	-3.235	74.000	31.194	PK
3			2483.584	72.755	41.561	-1.245	74.000	31.194	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz Ant 0	

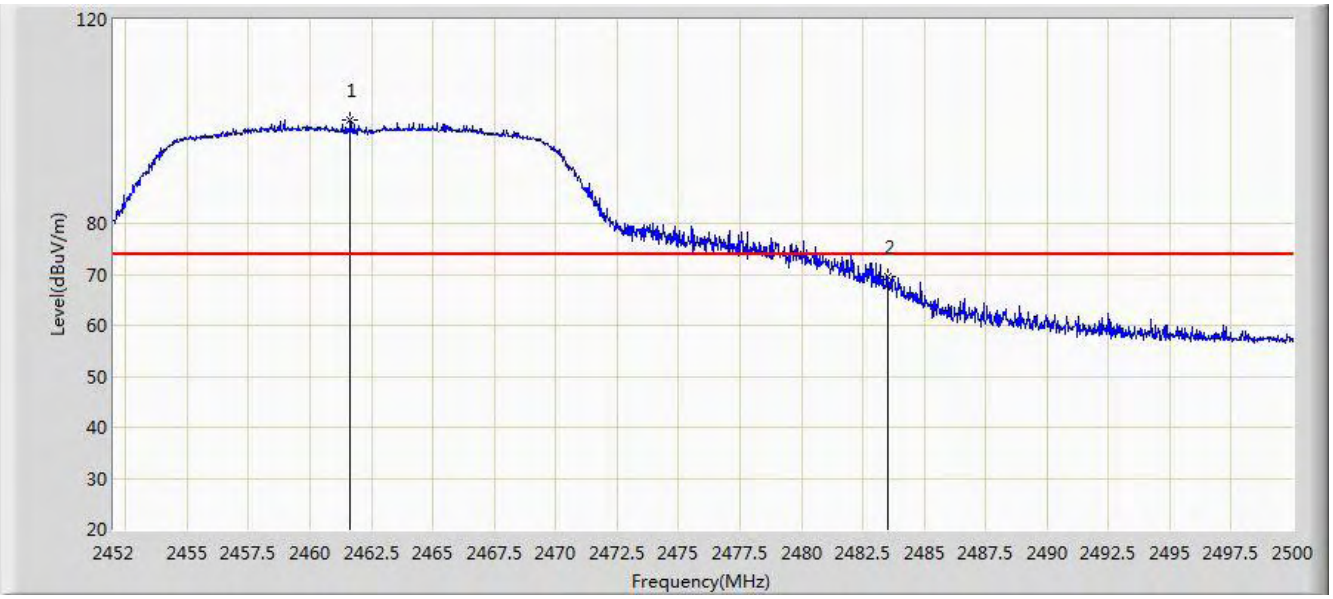


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.176	88.910	57.767	N/A	N/A	31.142	AV
2			2483.500	51.910	20.717	-2.090	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz Ant 0	

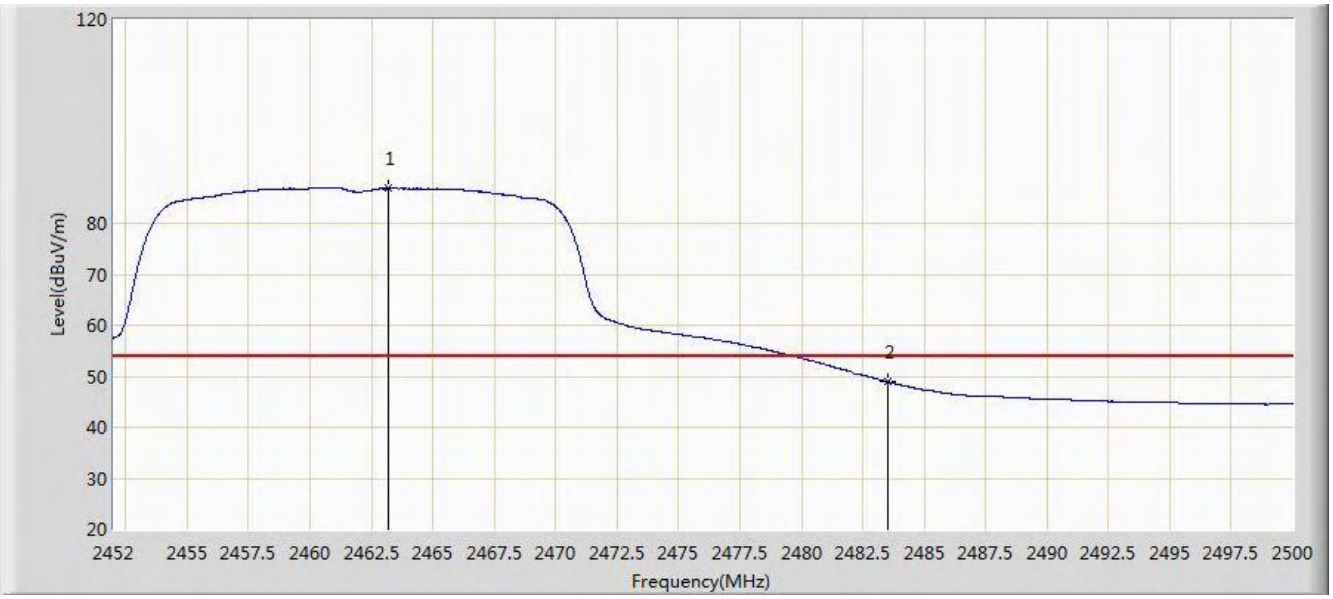


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.624	100.425	69.290	N/A	N/A	31.135	PK
2			2483.500	69.552	38.359	-4.448	74.000	31.194	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at channel 2462MHz Ant 0	

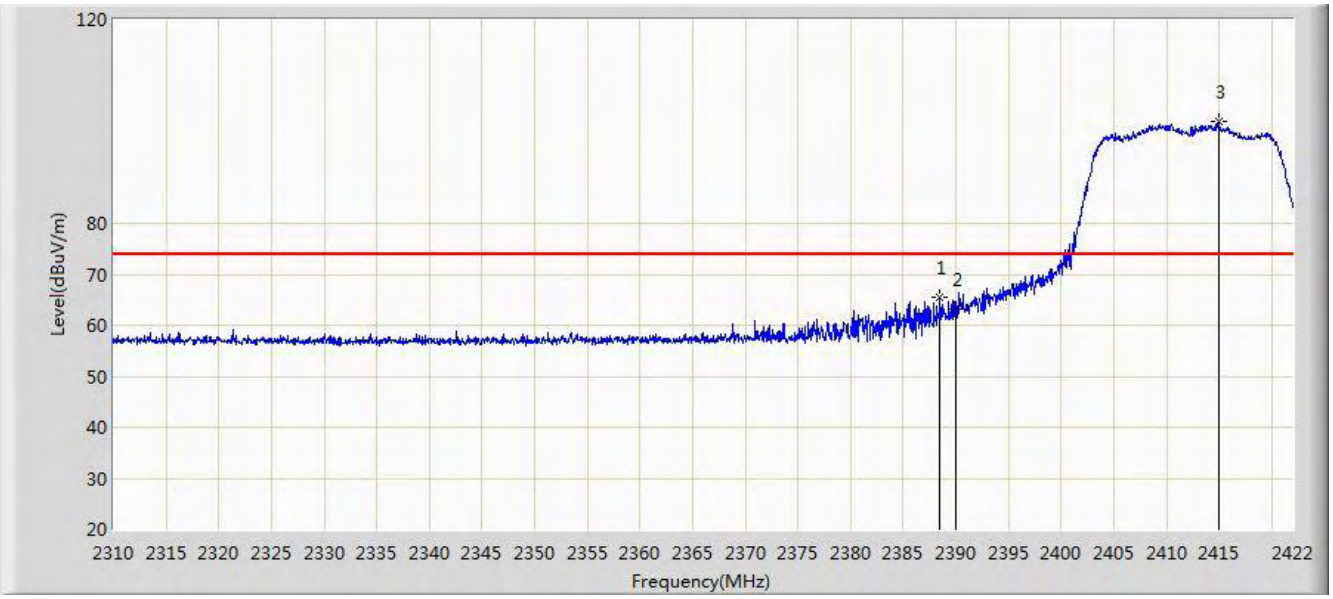


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.208	86.942	55.804	N/A	N/A	31.137	AV
2			2483.500	48.948	17.755	-5.052	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0	

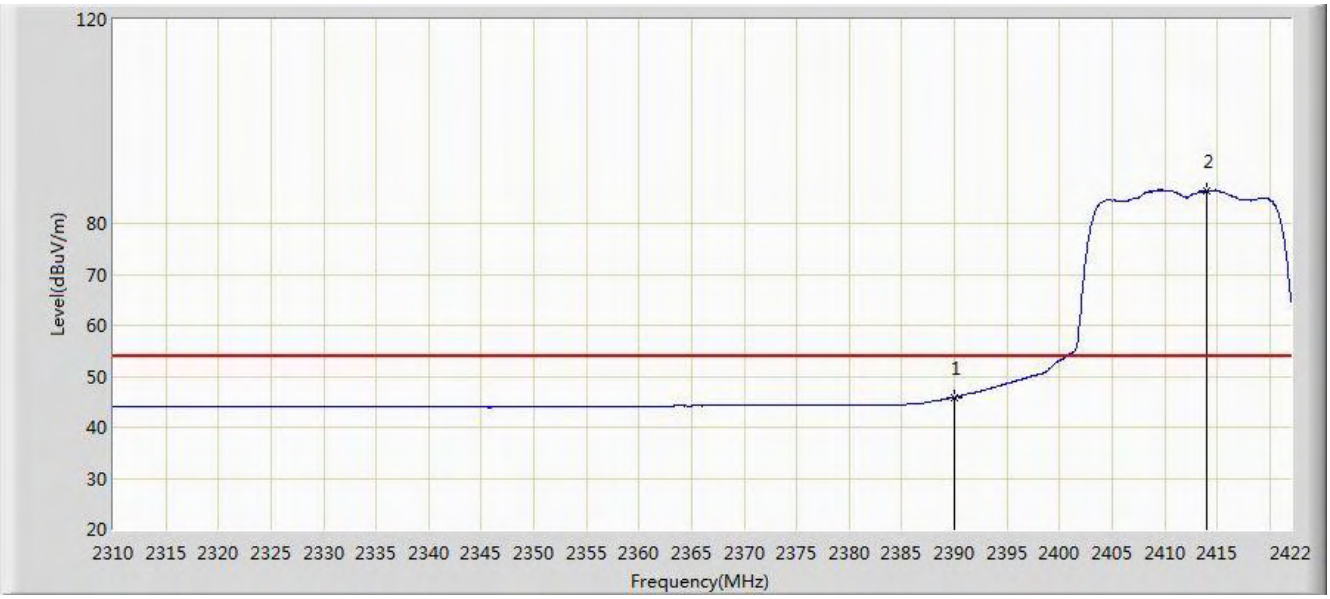


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.512	65.562	34.357	-8.438	74.000	31.206	PK
2			2390.000	63.263	32.060	-10.737	74.000	31.203	PK
3		*	2414.944	99.937	68.773	N/A	N/A	31.165	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0	

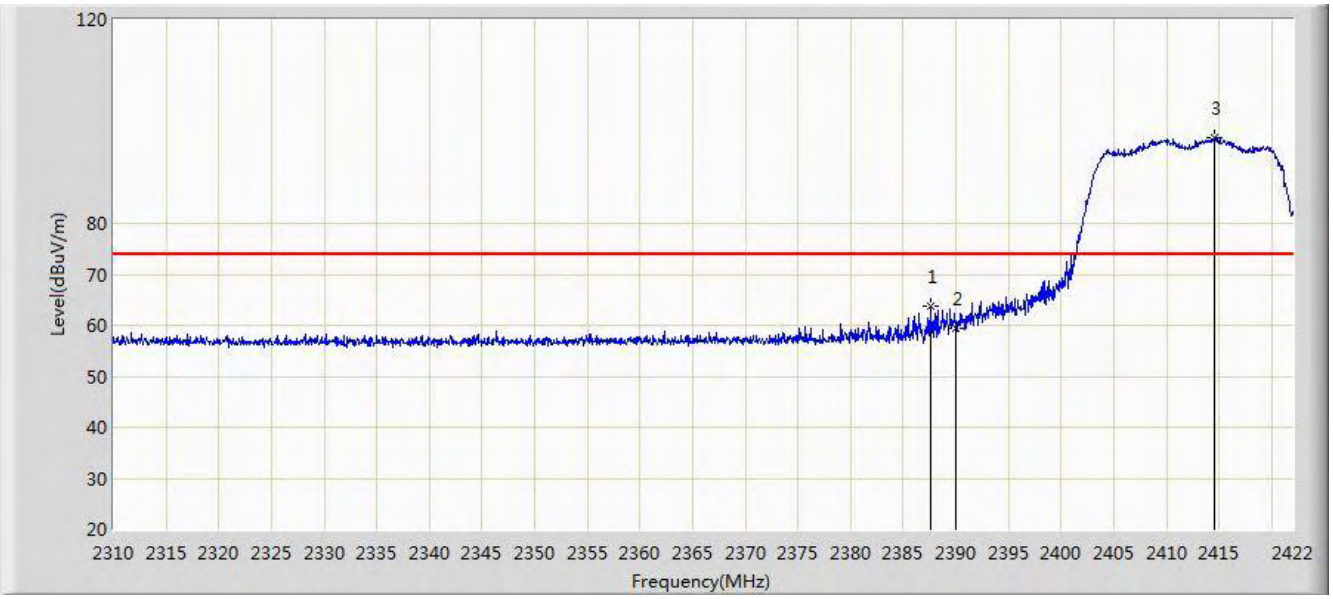


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.877	14.674	-8.123	54.000	31.203	AV
2		*	2413.936	86.344	55.178	N/A	N/A	31.166	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0	

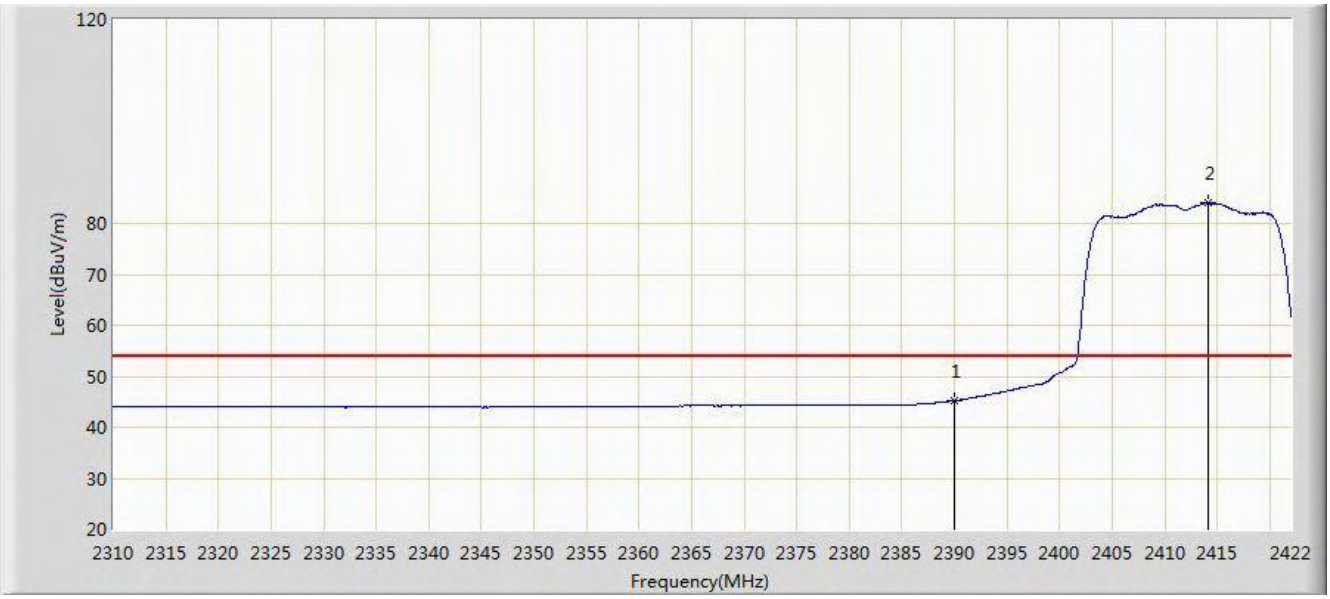


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.560	63.646	32.439	-10.354	74.000	31.207	PK
2			2390.000	59.510	28.307	-14.490	74.000	31.203	PK
3		*	2414.496	96.698	65.533	N/A	N/A	31.165	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz Ant 0	

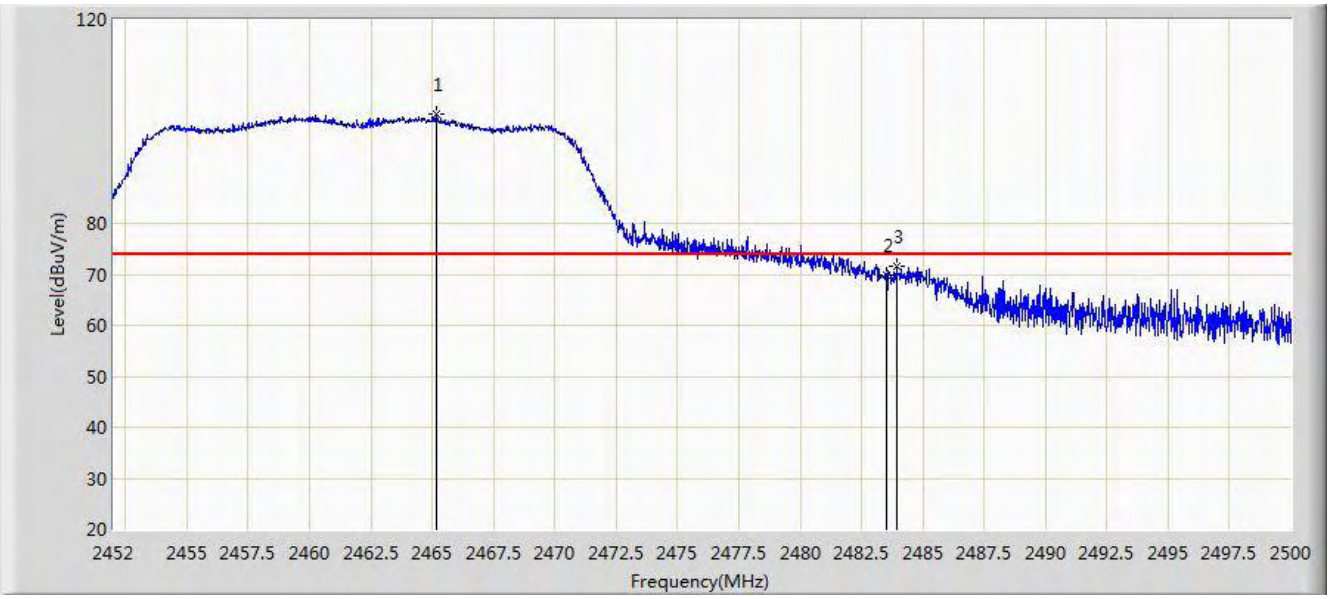


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.246	14.043	-8.754	54.000	31.203	AV
2		*	2414.104	83.936	52.770	N/A	N/A	31.166	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0	

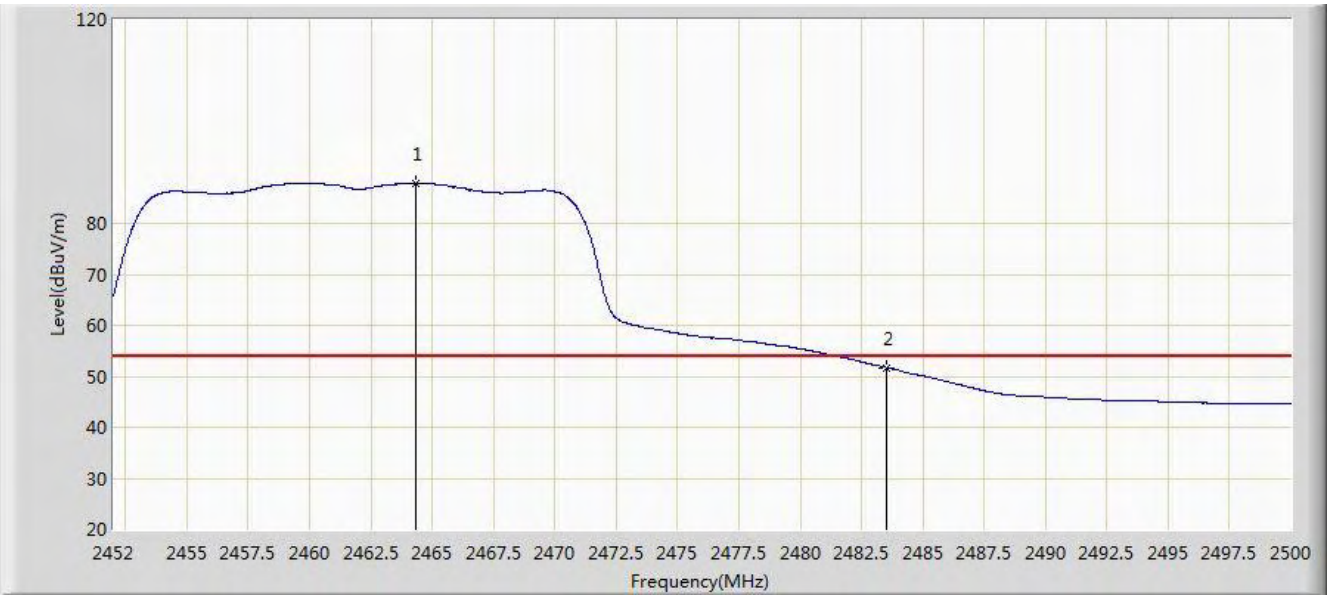


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.200	101.459	70.316	N/A	N/A	31.143	PK
2			2483.500	69.822	38.629	-4.178	74.000	31.194	PK
3			2483.944	71.491	40.297	-2.509	74.000	31.194	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0	

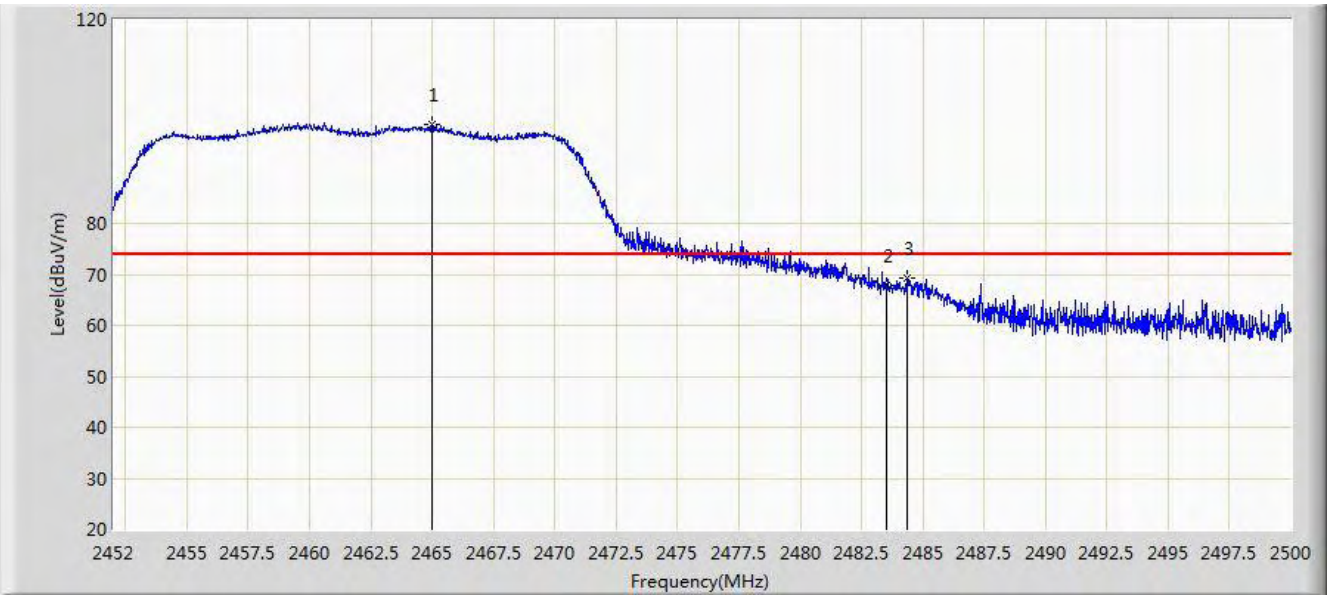


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.360	87.902	56.762	N/A	N/A	31.140	AV
2			2483.500	51.729	20.536	-2.271	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0	

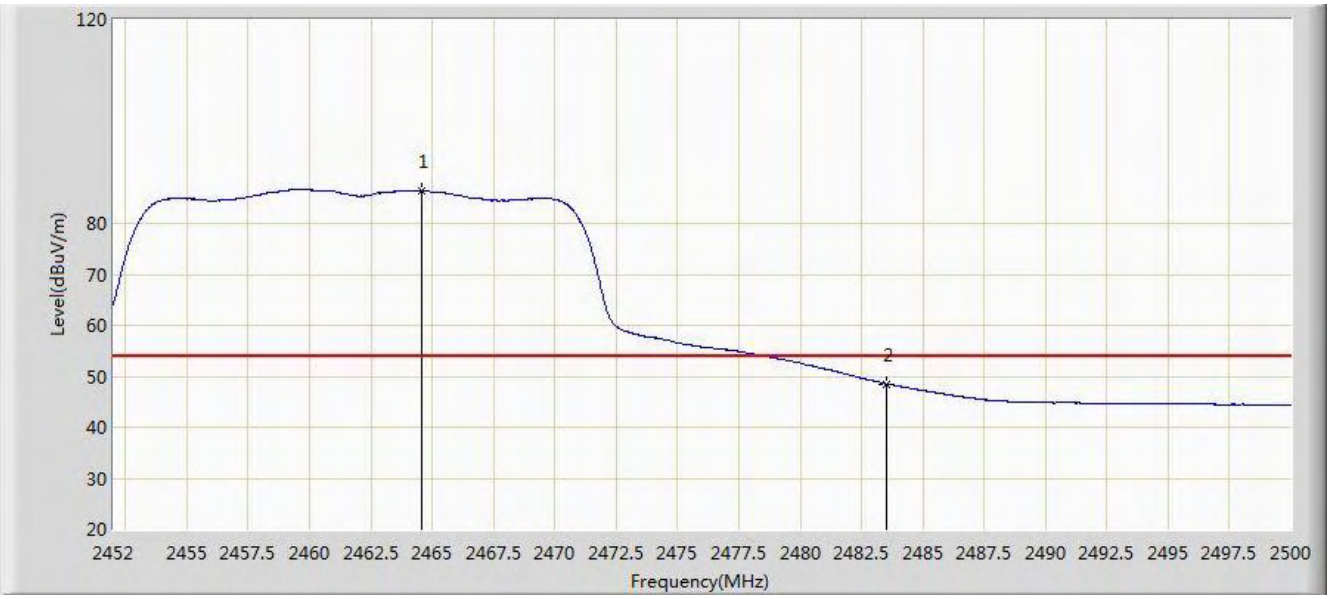


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.984	99.375	68.233	N/A	N/A	31.142	PK
2			2483.500	67.796	36.603	-6.204	74.000	31.194	PK
3			2484.376	69.173	37.977	-4.827	74.000	31.195	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC 1	Time: 2015/07/09 - 05:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Milo Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2462MHz Ant 0	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.600	86.380	55.239	N/A	N/A	31.141	AV
2			2483.500	48.507	17.314	-5.493	54.000	31.194	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

7.8. AC Conducted Emissions Measurement

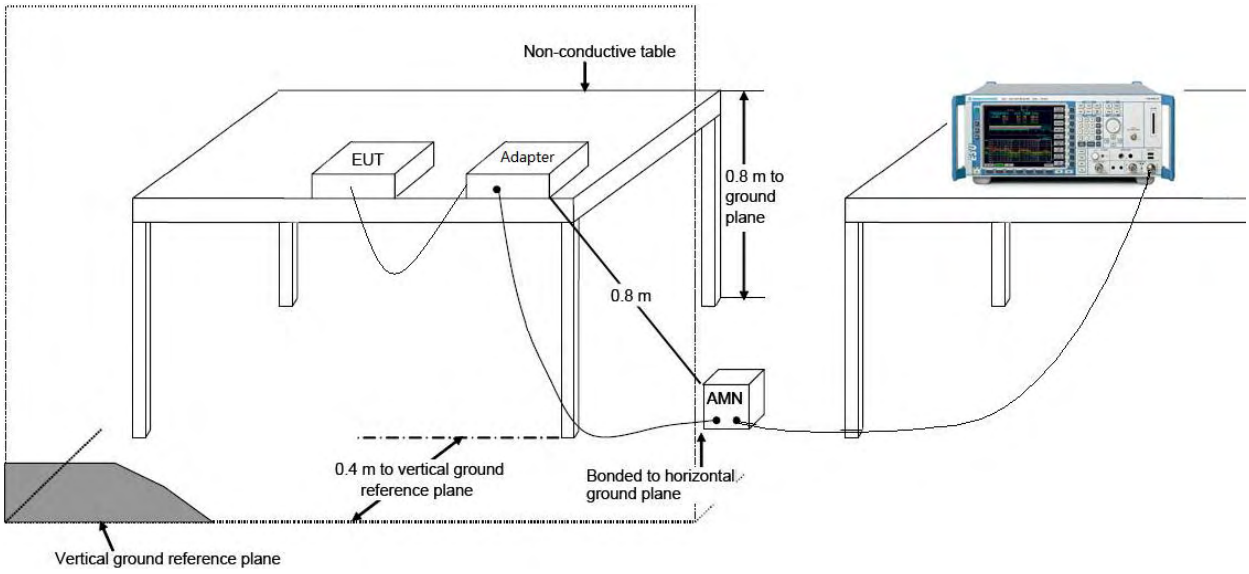
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

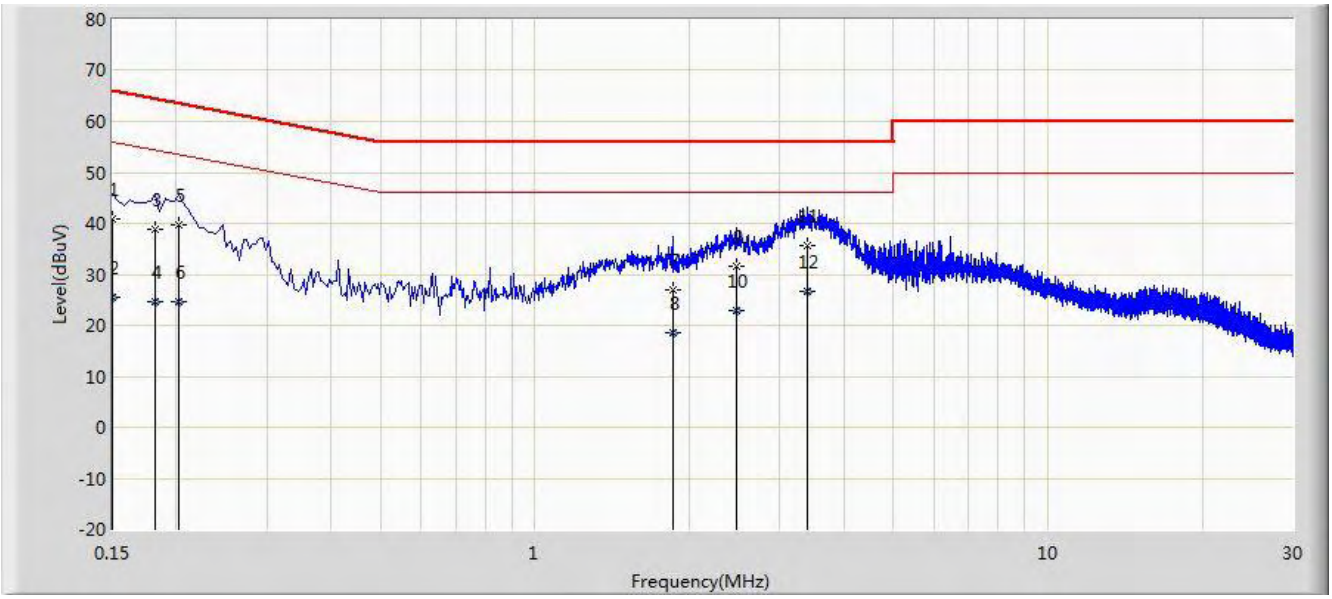
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

Site: SR2	Time: 2015/07/10 - 21:58
Limit: FCC_Part15.207_CE_AC Power	Engineer: Milo Li
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode1	

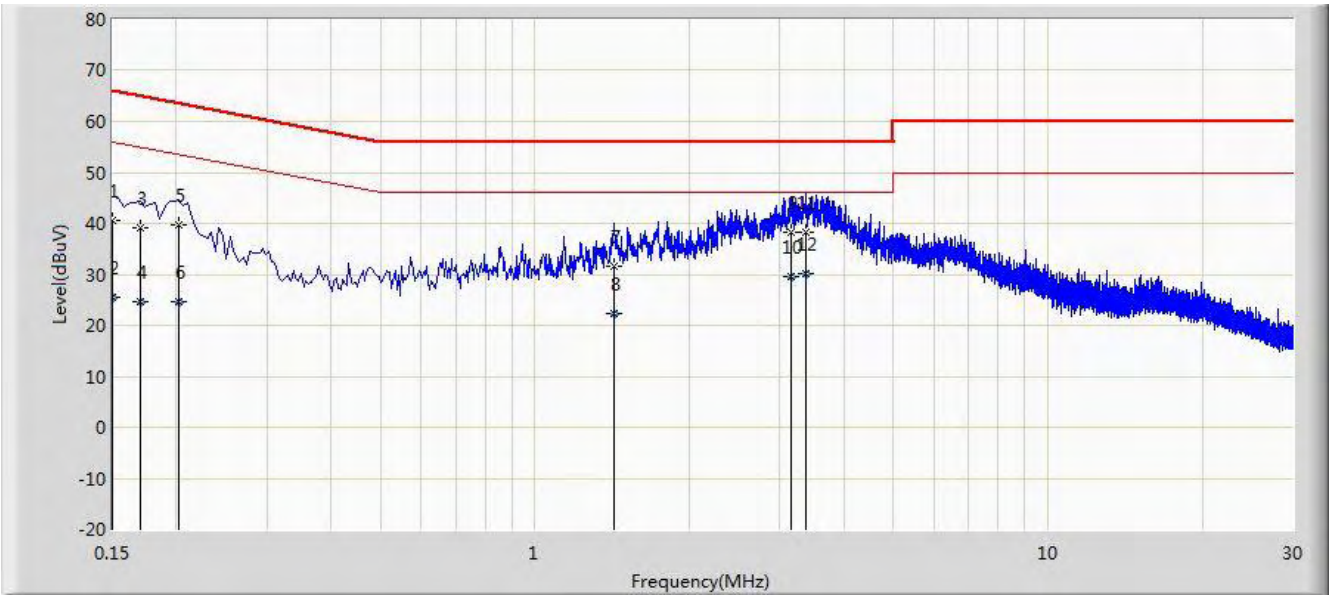


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor	Type
1			0.150	40.834	29.666	-25.166	66.000	11.168	QP
2			0.150	25.642	14.474	-30.358	56.000	11.168	AV
3			0.182	38.941	28.892	-25.453	64.394	10.048	QP
4			0.182	24.699	14.651	-29.694	54.394	10.048	AV
5			0.202	39.799	29.807	-23.729	63.528	9.993	QP
6			0.202	24.578	14.585	-28.950	53.528	9.993	AV
7			1.854	26.910	17.034	-29.090	56.000	9.876	QP
8			1.854	18.647	8.772	-27.353	46.000	9.876	AV
9			2.470	31.648	21.790	-24.352	56.000	9.858	QP
10			2.470	23.029	13.171	-22.971	46.000	9.858	AV
11			3.390	35.568	25.669	-20.432	56.000	9.899	QP
12		*	3.390	26.680	16.780	-19.320	46.000	9.899	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2015/07/10 - 22:06
Limit: FCC_Part15.207_CE_AC Power	Engineer: Milo Li
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor	Type
1			0.150	40.584	29.442	-25.416	66.000	11.142	QP
2			0.150	25.592	14.450	-30.408	56.000	11.142	AV
3			0.170	39.084	29.020	-25.876	64.960	10.064	QP
4			0.170	24.740	14.676	-30.220	54.960	10.064	AV
5			0.202	39.703	29.695	-23.825	63.528	10.008	QP
6			0.202	24.697	14.689	-28.831	53.528	10.008	AV
7			1.422	31.519	21.626	-24.481	56.000	9.893	QP
8			1.422	22.211	12.318	-23.789	46.000	9.893	AV
9			3.146	38.160	28.297	-17.840	56.000	9.862	QP
10			3.146	29.590	19.728	-16.410	46.000	9.862	AV
11			3.370	38.248	28.345	-17.752	56.000	9.903	QP
12		*	3.370	30.208	20.304	-15.792	46.000	9.903	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **WCDMA/GSM（GPRS）Dual-Mode Digital Mobile Phone FCC ID: SRQ-ZTEBLADEC341** is in compliance with Part 15C of the FCC Rules.

The End