



MEASUREMENT REPORT

FCC PART 15.247 WLAN 802.11b/g/n

FCC ID: SHZ-E71

APPLICANT: Shenzhen Boeye Technology Co., Ltd.

Application Type: Certification

Product: Tablet PC

Model No.: E71

FCC Classification: Digital Transmission System (DTS)

FCC Rule Part(s): Part 15.247

Test Procedure(s): ANSI C63.10-2009, KDB 558074 D01v03r01

Test Date: November 03, 2013 ~ November 10, 2013

Reviewed By :

(Supervisor: Robin Wu)

Approved By :

(Manager: Marlin Chen)

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 D01v03r01. Test results reported herein relate only to the item(s) tested.

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Revision History

Report No.	Version	Description	Issue Date
1311RSU01101	Rev. 01	Initial report	2013-11-11

§2.1033 General Information

Applicant:	Shenzhen Boeye Technology Co., Ltd.
Applicant Address:	Room No.401, Unit 3, Block C, Kexing Science Park, Keyuan Road, Nanshan Hi-tech Park, Nanshan District, Shenzhen P.R.C
Manufacturer:	Shenzhen Boeye Technology Co., Ltd.
Manufacturer Address:	Room No.401, Unit 3, Block C, Kexing Science Park, Keyuan Road, Nanshan Hi-tech Park, Nanshan District, Shenzhen P.R.C
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 Name:	E71
FCC ID:	SHZ-E71
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering
FCC Classification:	Digital Transmission System (DTS)
Date(s) of Test:	November 03, 2013 ~ November 08, 2013
Test Report S/N:	1311RSU01101

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	Tablet PC
Model No.	E71
Frequency Range	2412 ~ 2462 MHz
Maximum Output Power	802.11b: 9.21dBm 802.11g: 9.11dBm 802.11n(20MHz): 9.07dBm 802.11n(40MHz): 8.98dBm
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Antenna Type	Internal
Peak Antenna Gain	-2dBi

Channel List for 802.11b/g/n(20MHz)

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

Channel List for 802.11n(40MHz)

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	N/A	N/A	N/A	N/A

2.2. Device Capabilities

This device contains the following capabilities:

802.11b/g/n WLAN (DTS)

Note: 2.4GHz WLAN (DTS) operation is possible in 20MHz, and 40MHz 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 = peak per the guidance of Section 6.0 b) of KDB 558074 D01v03r01. 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:

- 802.11b - 99.9%
- 802.11g/n 20MHz Bandwidth - 98.8%
- 802.11n 40MHz Bandwidth - 98.2%

2.3. Test Configuration

The Tablet PC FCC ID: SHZ-E71 was tested per the guidance of KDB 558074 D01v03r01. ANSI C63.10-2009 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.4. EMI Suppression Device(s)/Modifications

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

2.5. 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 C63.10-2009), and the guidance provided in KDB 558074 D01v03r01 were used in the measurement of the **Tablet PC FCC ID: SHZ-E71**.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285. 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. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to 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 spectrum analyzer and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The spectrum was scanned from 150kHz to 30MHz with a spectrum analyzer. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 10kHz. 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 resolution, clock or data exchange speed, scrolling H pattern to the EUT and/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 is 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.

Line conducted emissions test results are shown in Section 7.9.

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. An 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 was placed on top of the 0.8 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.

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 the Tablet PC is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The **Tablet PC FCC ID: SHZ-E71** unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATA

AC Conducted Emissions

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESR7	101209	2014/07/17
Two-Line V-Network	R&S	ENV216	101683	2014/07/17
Two-Line V-Network	R&S	ENV216	101684	2014/07/17
Temperature/ Meter Humidity	Anymetre	TH101B	SR2-01	2014/08/15

Radiated Emission

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9038A	MY51210155	2014/08/15
Preamplifier	MRT	AP01G18	1310002	2014/10/08
Preamplifier	MRT	AP18G40	1310003	2014/10/08
Loop Antenna	Schwarzbeck	FMZB1519	1519-041	2014/09/13
TRILOG Antenna	Schwarzbeck	VULB9162	9162-047	2014/09.13
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1167	2014/09/13
Broadband Horn Antenna	Schwarzbeck	BBHA9170	9170-549	2014/09/13
Temperature/Humidity Meter	Anymetre	TH101B	AC1-01	2014/08/15

6dB Bandwidth / Out-of-Band Emission / Power Spectral Density / Output Power

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY5144016A	2014/08/15
Power Meter	Anritsu	ML2495A	0905006	2013/11/10
Power Sensor	Anritsu	MA2411B	0846014	2013/11/10
Temperature/Humidity Meter	Anymetre	TH101B	TR3-01	2014/08/15

6. MEASUREMENT UNCERTAINTY

AC Conducted Emission
The maximum measurement uncertainty is defined as: 9kHz~30MHz: $\pm 2.02\text{dB}$
Radiated Emission
The maximum measurement uncertainty is defined as: Below 1GHz: $\pm 3.8\text{dB}$ Above 1GHz: $\pm 3.9\text{dB}$
Conducted Spurious Emission
The maximum measurement uncertainty is defined as: $\pm 1.27\text{ dB}$.
Radiated Emission Band Edge
The maximum measurement uncertainty is defined as: Above 1GHz: $\pm 3.9\text{dB}$
Out-of-Band Emission
The maximum measurement uncertainty is defined as: $\pm 1\text{ kHz}$.
6dB Bandwidth
The maximum measurement uncertainty is defined as: $\pm 1\text{ kHz}$.
Output Power
The maximum measurement uncertainty is evaluated as $\pm 1.27\text{ dB}$.
Power Spectral Density
The maximum measurement uncertainty is evaluated as $\pm 1.27\text{ dB}$.

7. TEST RESULT

7.1. Summary

Company Name: Shenzhen Boeye Technology Co., Ltd.
FCC ID: SHZ-E71
FCC Classification: Digital Transmission System (DTS)
Data Rate(s) Tested: 1Mbps, 2Mbps, 5.5Mbps, 11Mbps (b)
6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps (g)
6.5/7.2Mbps, 13/14.4Mbps, 19.5/21.7Mbps, 26/28.9Mbps, 39/43.3Mbps,
52/57.8Mbps, 58.5/65Mbps, 65/72.2Mbps (n - 20MHz)
13.5/15Mbps, 27/30Mbps, 40.5/45Mbps, 54/60Mbps, 81/90Mbps,
108/120Mbps, 121.5/135Mbps, 135/150Mbps (n - 40MHz)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(2)	6dB Bandwidth	$\geq 500\text{kHz}$	Conducted	Pass	Section 7.2
15.247(b)(3)	Output Power	$\leq 1\text{Watt}$		Pass	Section 7.3
15.247(e)	Power Spectral Density	$\leq 8\text{dBm} / 3\text{kHz Band}$		Pass	Section 7.4
15.247(d)	Band Edge / Out-of-Band Emissions	$\geq 20\text{dBc(Peak)}$ $\geq 30\text{dBc(Average)}$		Pass	Section 7.5 & 7.6
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 7.7 & 7.8
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.9

Notes:

- 1) All modes of operation and data rates were investigated. 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.

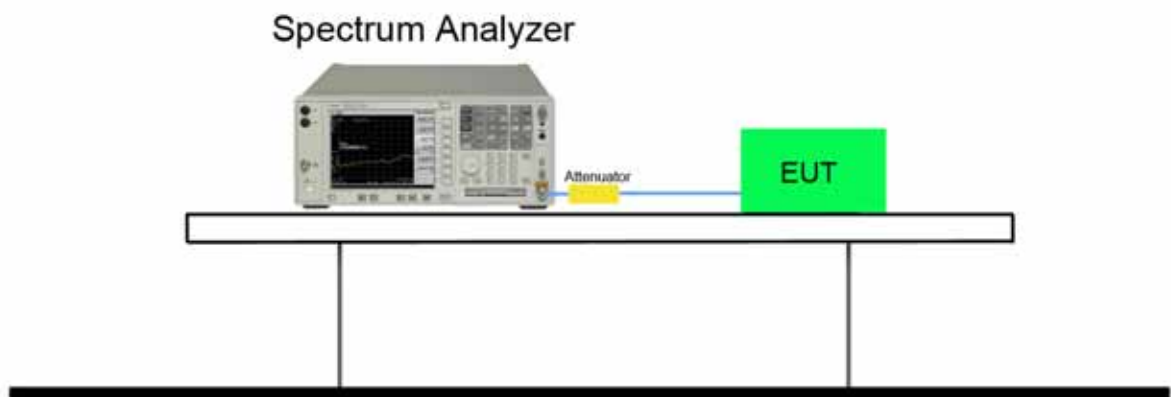
7.2.2. Test Procedure used

KDB 558074 D01v03r01 – Section 8.2 Option 1

7.2.3. Test Setting

1. Set RBW = 100 kHz
2. VBW $\geq 3 \times$ RBW
3. Detector = Peak
4. Trace mode = max hold
5. Sweep = auto couple
6. Allow the trace to stabilize
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.2.4. Test Setup



7.2.5. Test Result

Product	:	Tablet PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR3
Test Mode	:	802.11b - Data Rate 1Mbps

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	10105	≥500	Pass
06	2437	10130	≥500	Pass
11	2462	10130	≥500	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR3
Test Mode	:	802.11g - Data Rate 6Mbps

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16558	≥500	Pass
06	2437	16558	≥500	Pass
11	2462	16558	≥500	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR3
Test Mode	:	802.11n(20MHz) - Data Rate 6.5/7.2Mbps

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16558	≥500	Pass
06	2437	17834	≥500	Pass
11	2462	17784	≥500	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR3
Test Mode	:	802.11n(40MHz) - Data Rate 13.5/15Mbps

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	37410.0	≥500	Pass
06	2437	37500.0	≥500	Pass
09	2452	37460.0	≥500	Pass

Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



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

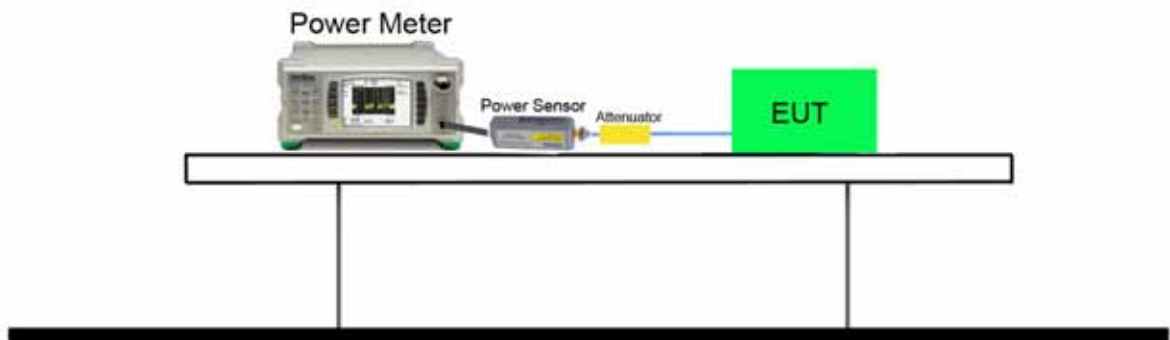
KDB 558074 D01v03r01 - Section 9.1.3 PKPM1 Peak Power Method (for signals with BW $\leq$ 50MHz)

7.3.3. Test Setting

Method PKPM1 (Peak Power Measurement of Signals with DTS BW $\leq$ 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

Output power at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate (Mbps)	Peak Power (dBm)
802.11b	20	2437	6	1	9.08
				5.5	8.94
				11	8.88
802.11g	20	2437	6	6	8.98
				24	8.82
				54	8.79
802.11n	20	2437	6	6.5/7.2(MCS0)	9.01
				39/43.3(MCS4)	8.56
				65/72.2(MCS7)	8.24
802.11n	40	2437	6	13.5/15(MCS0)	8.84
				81/90(MCS4)	8.64
				135/150(MCS7)	8.49

Product	:	Tablet PC
Test Item	:	Output Power
Test Site	:	TR3
Test Mode	:	802.11b

Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Output Power (dBm)	Limit (dBm)	Result
1	2412	1	9.21	≤30.00	Pass
6	2437	1	9.08	≤30.00	Pass
11	2462	1	8.97	≤30.00	Pass

Product	:	Tablet PC
Test Item	:	Output Power
Test Site	:	TR3
Test Mode	:	802.11g

Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Output Power (dBm)	Limit (dBm)	Result
1	2412	6	9.11	≤30.00	Pass
6	2437	6	8.98	≤30.00	Pass
11	2462	6	8.86	≤30.00	Pass

Product	:	Tablet PC
Test Item	:	Output Power
Test Site	:	TR3
Test Mode	:	802.11n(20MHz)

Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Output Power (dBm)	Limit (dBm)	Result
1	2412	6.5/7.2(MCS0)	9.07	≤30.00	Pass
6	2437	6.5/7.2(MCS0)	9.01	≤30.00	Pass
11	2462	6.5/7.2(MCS0)	8.94	≤30.00	Pass

Product	:	Tablet PC
Test Item	:	Output Power
Test Site	:	TR3
Test Mode	:	802.11n(40MHz)

Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Output Power (dBm)	Limit (dBm)	Result
3	2422	13.5/15(MCS0)	8.98	≤30.00	Pass
6	2437	13.5/15(MCS0)	8.84	≤30.00	Pass
9	2452	13.5/15(MCS0)	8.79	≤30.00	Pass

7.4. Power Spectral Density Measurement

7.4.1. Test Limit

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

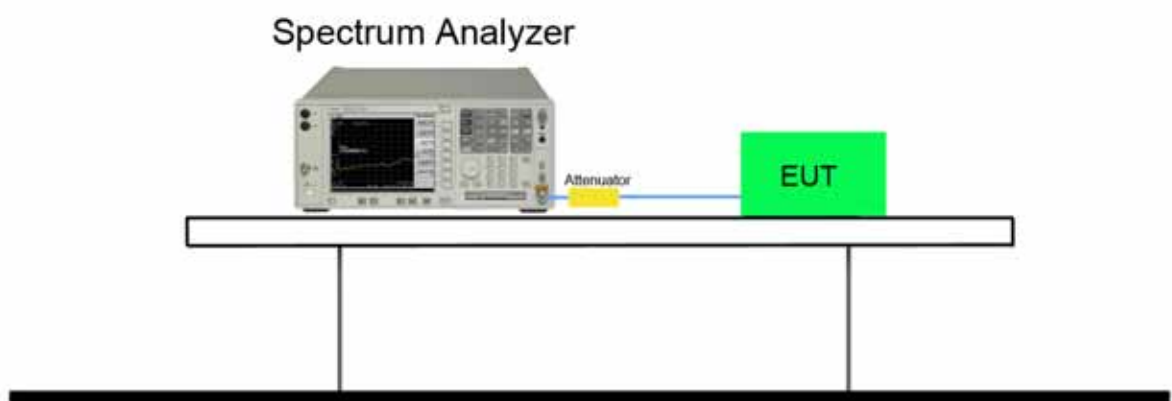
7.4.2. Test Procedure Used

KDB 558074 D01v03r01 - 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 = 100kHz
4. VBW = 300kHz
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

Product	:	Tablet PC
Test Item	:	Power Spectral Density
Test Site	:	TR3
Test Mode	:	802.11b - Data Rate 1Mbps

Channel No.	Frequency (MHz)	Measurement PSD (dBm)	Limit (dBm / 3kHz)	Result
01	2412	-5.91	≤8	Pass
06	2437	-5.56	≤8	Pass
11	2462	-5.56	≤8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



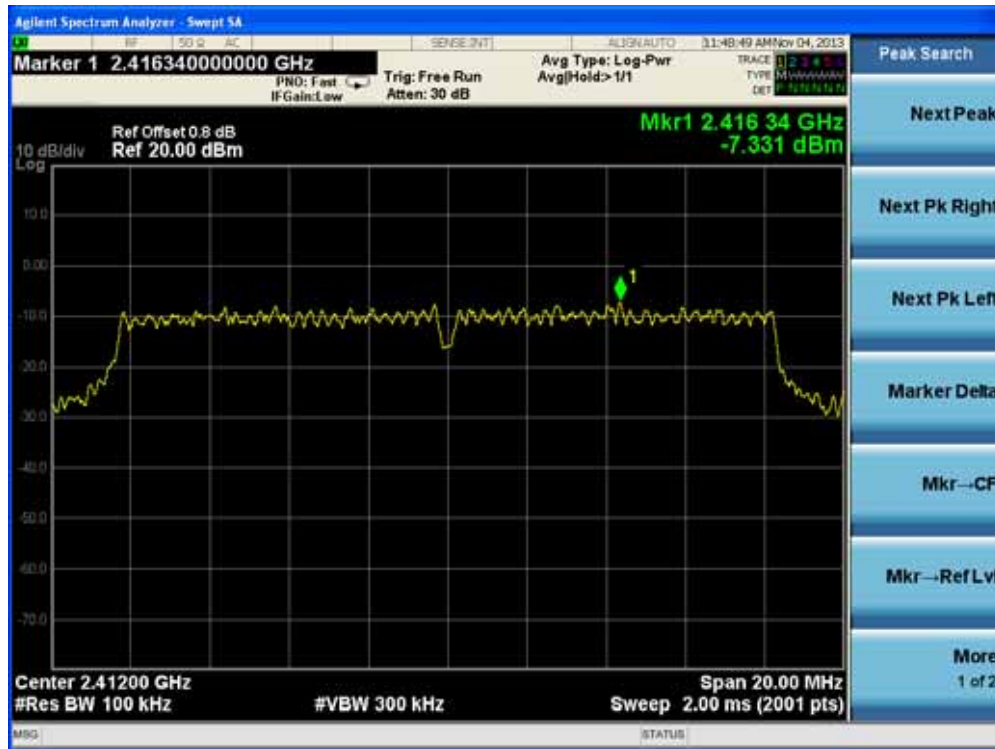
Channel 11 (2462MHz)



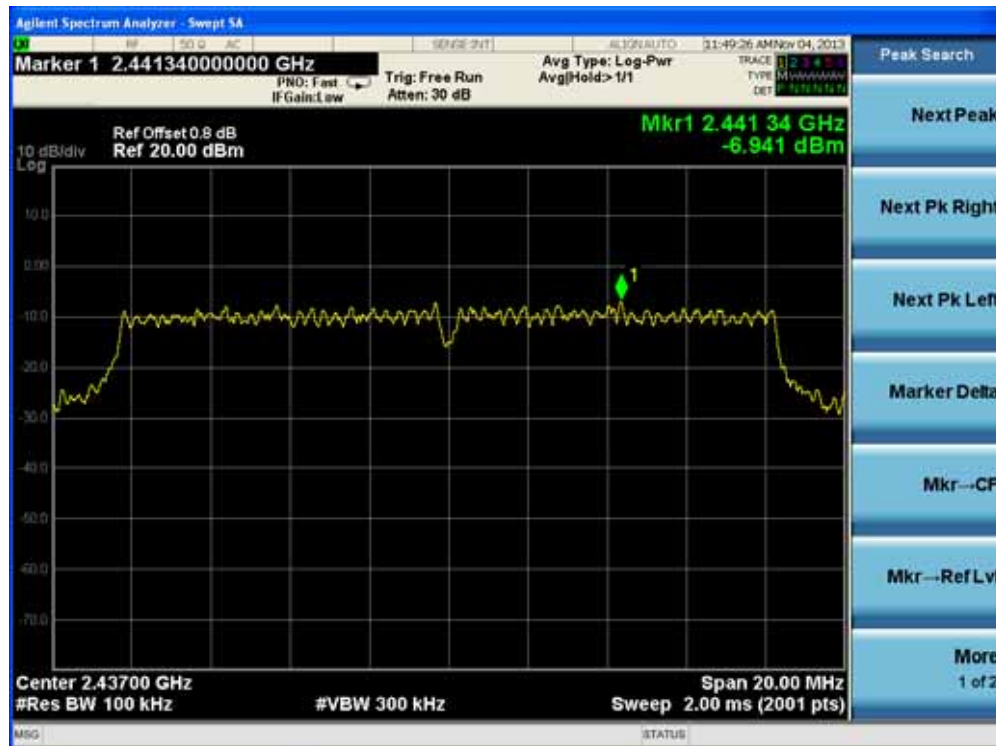
Product	:	Tablet PC
Test Item	:	Power Spectral Density
Test Site	:	TR3
Test Mode	:	802.11g - Data Rate 6Mbps

Channel No.	Frequency (MHz)	Measurement PSD (dBm)	Limit (dBm / 3kHz)	Result
01	2412	-7.33	≤8	Pass
06	2437	-6.94	≤8	Pass
11	2462	-7.09	≤8	Pass

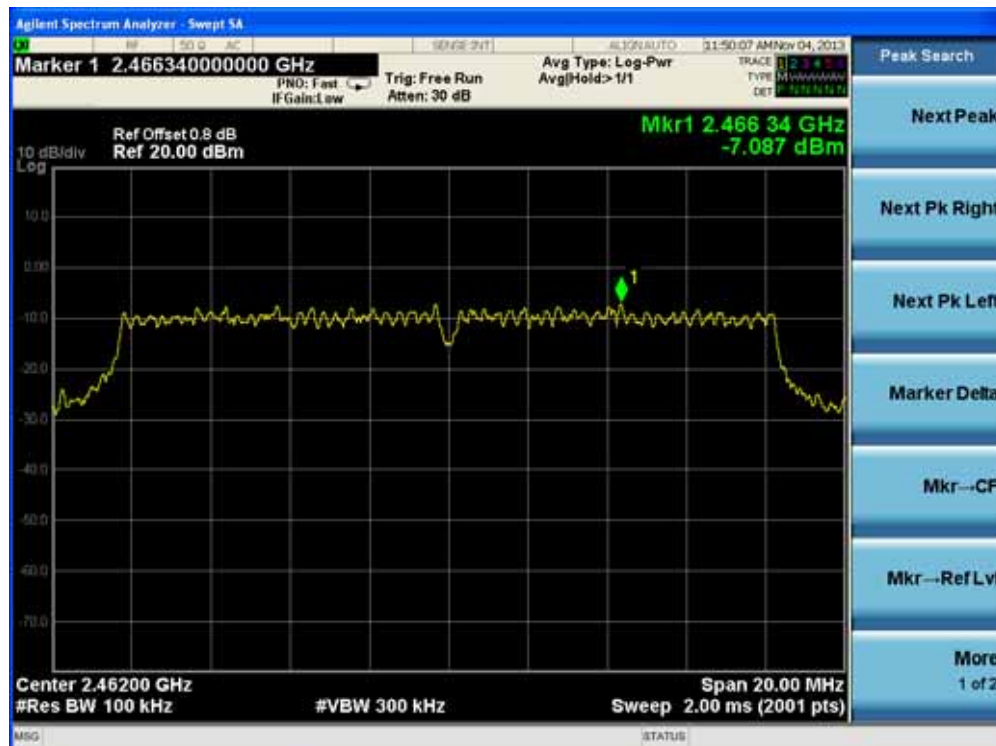
Channel 01 (2412MHz)



Channel 06 (2437MHz)



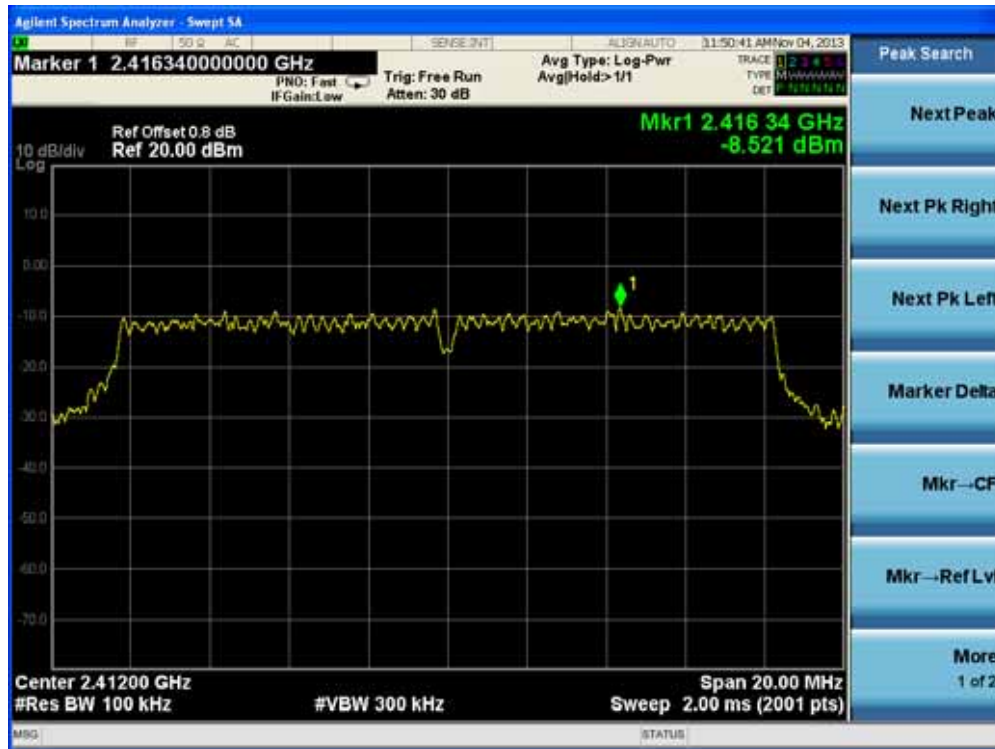
Channel 11 (2462MHz)



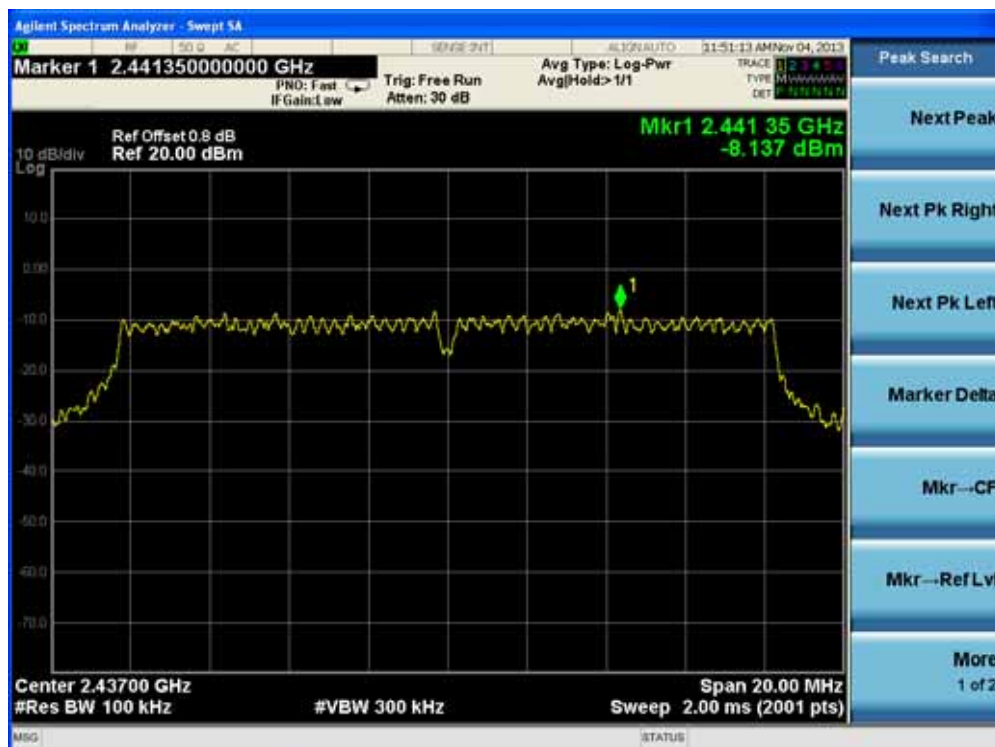
Product	:	Tablet PC
Test Item	:	Power Spectral Density
Test Site	:	TR3
Test Mode	:	802.11n(20MHz) - Data Rate 6.5/7.2Mbps

Channel No.	Frequency (MHz)	Measurement PSD (dBm)	Limit (dBm / 3kHz)	Result
01	2412	-8.52	≤8	Pass
06	2437	-8.14	≤8	Pass
11	2462	-8.15	≤8	Pass

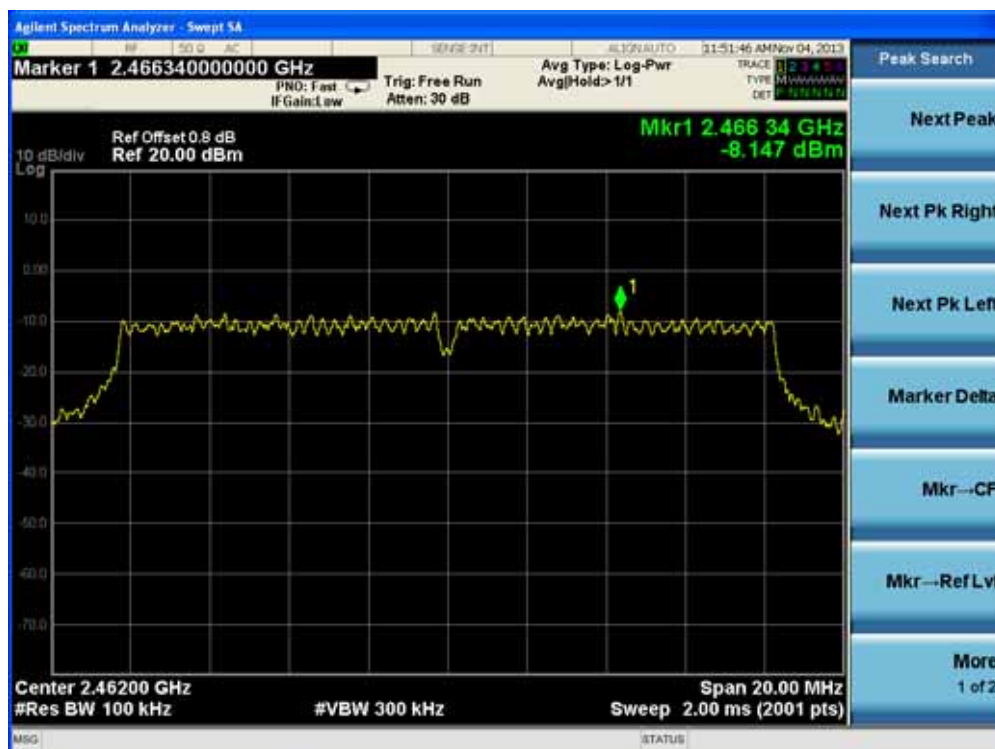
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Power Spectral Density
Test Site	:	TR3
Test Mode	:	802.11n(40MHz) - Data Rate 13.5/15Mbps

Channel No.	Frequency (MHz)	Measurement PSD (dBm)	Limit (dBm / 3kHz)	Result
03	2422	-11.88	≤8	Pass
06	2437	-11.71	≤8	Pass
09	2452	-11.55	≤8	Pass

Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



7.5. Conducted Emissions at the Band Edge

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 100kHz bandwidth per the PSD procedure (Section 9.1).

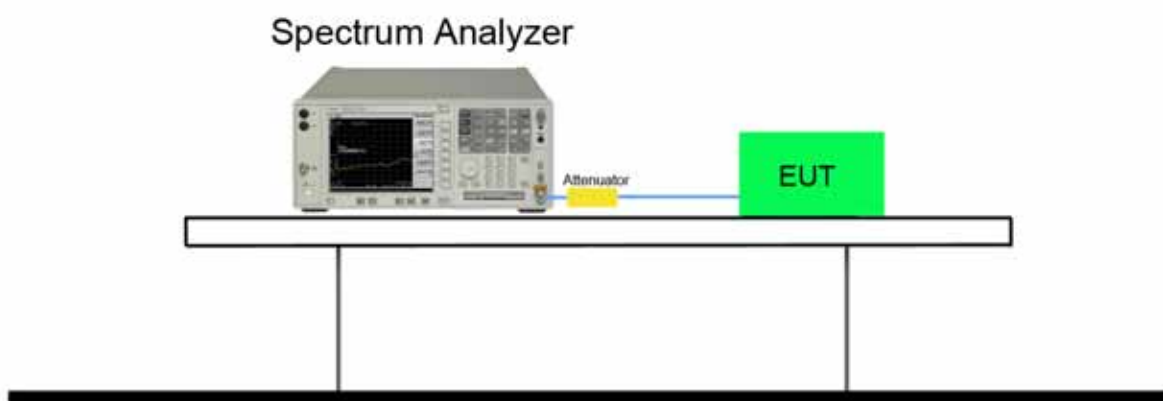
7.5.2. Test Procedure Used

KDB 558074 D01v03r01 – Section 11.3

7.5.3. Test Settling

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Number of sweep points $\geq 2 \times \text{Span/RBW}$
6. Trace mode = max hold
7. Sweep time = auto couple
8. The trace was allowed to stabilize

7.5.4. Test Setup



7.5.5. Test Result

Product	:	Tablet PC
Test Item	:	Conducted Emissions at the Band Edge
Test Site	:	TR3
Test Mode	:	802.11b - Data Rate 1Mbps

Channel 01 (2412MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Emissions at the Band Edge
Test Site	:	TR3
Test Mode	:	802.11g - Data Rate 6Mbps

Channel 01 (2412MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Emissions at the Band Edge
Test Site	:	TR3
Test Mode	:	802.11n(20MHz) - Data Rate 6.5/7.2Mbps

Channel 01 (2412MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Emissions at the Band Edge
Test Site	:	TR3
Test Mode	:	802.11n(40MHz) - Data Rate 13.5/15Mbps

Channel 03 (2422MHz)



Channel 09 (2452MHz)



7.6. Conducted Spurious Emissions Measurement

7.6.1. 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 100kHz bandwidth per the procedure in Section 11.1 of KDB 558074 D01v03r01.

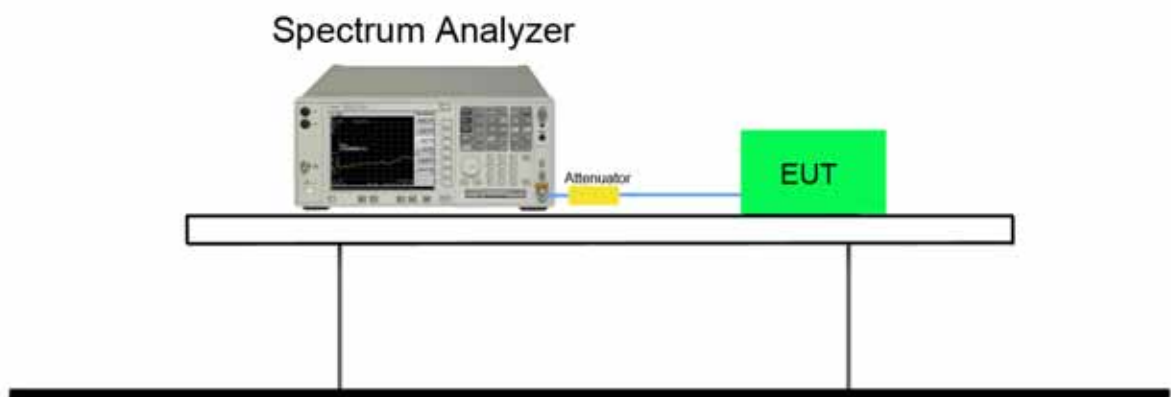
7.6.2. Test Procedure Used

KDB 558074 D01v03r01 - Section 11.3

7.6.3. Test Settling

1. Start frequency was set to 30MHz and stop frequency was set to 25GHz
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

7.6.4. Test Setup



7.6.5. Test Result

Product	:	Tablet PC
Test Item	:	Conducted Spurious Emissions
Test Site	:	TR3
Test Mode	:	802.11b - Data Rate 1Mbps

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Spurious Emissions
Test Site	:	TR3
Test Mode	:	802.11g - Data Rate 6Mbps

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Spurious Emissions
Test Site	:	TR3
Test Mode	:	802.11n(20MHz) - Data Rate 6.5/7.2Mbps

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Product	:	Tablet PC
Test Item	:	Conducted Spurious Emissions
Test Site	:	TR3
Test Mode	:	802.11n(40MHz) - Data Rate 13.5/15Mbps

Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



7.7. Radiated Spurious Emission Measurement

7.7.1. 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

7.7.2. Test Procedure Used

KDB 558074 D01v03r01 – Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r01 – Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r01 – Section 12.2.5 (average power measurements)

7.7.3. Test Setting

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r01

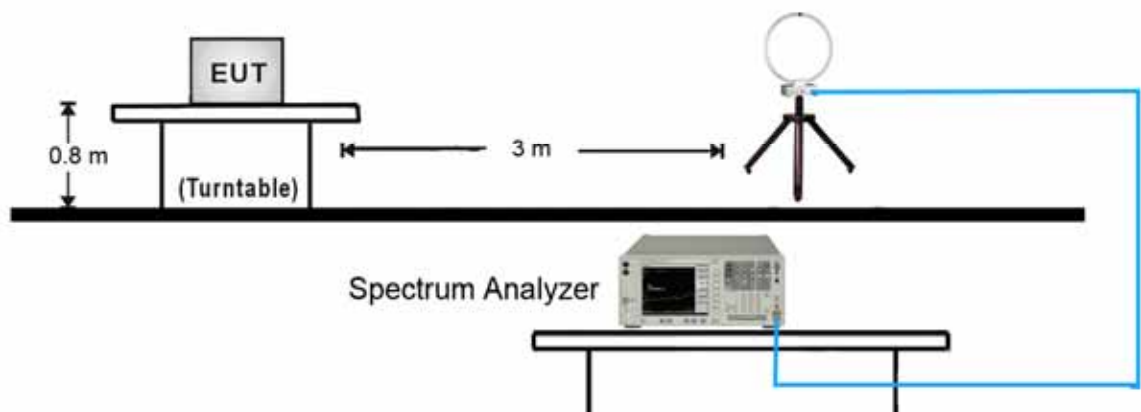
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements per Section 12.2.5.1 of KDB 558074 D01v03r01

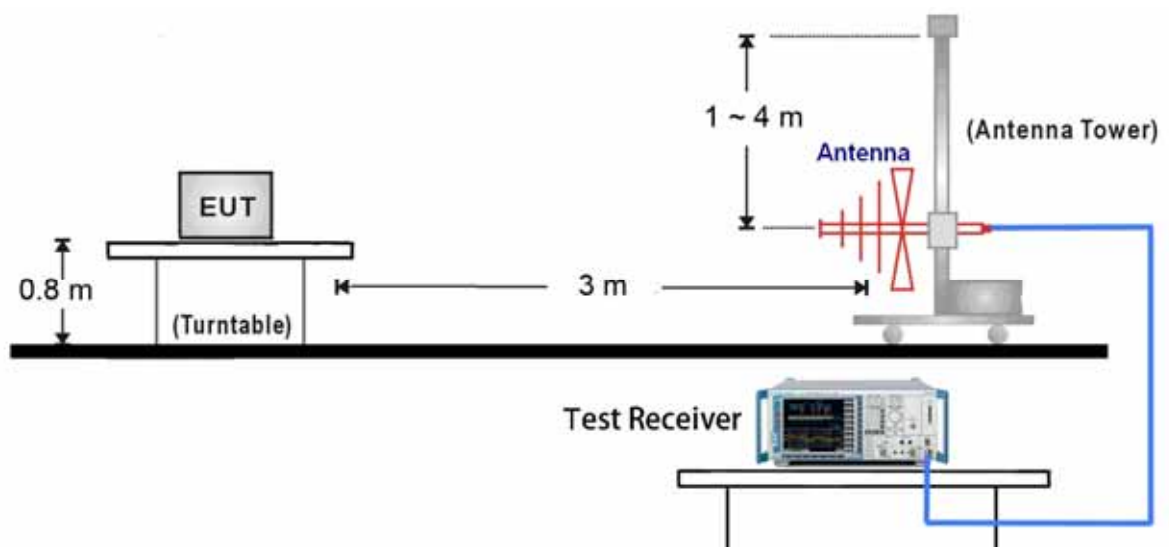
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span/RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces

7.7.4. Test Setup

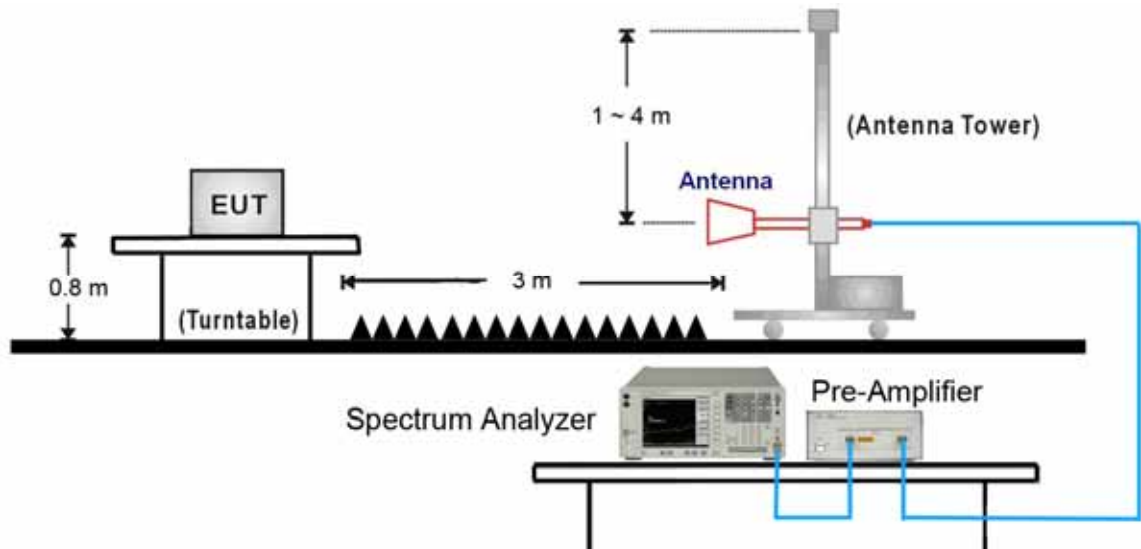
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.7.5. Test Result

802.11b - Data Rate 1Mbps

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	3176.0	39.6	3.6	43.2	54(note3)	-10.8	PK
	V	3176.0	39.3	3.6	42.9	54(note3)	-11.1	PK
	H	4825.0	43.1	6.4	49.5	54(note3)	-4.5	PK
	V	4825.0	51.2	6.4	57.6	74.0	-16.4	PK
	V	4824.7	45.6	6.4	52.0	54.0	-2.0	AV
	H	7236.0	34.4	13.8	48.2	54(note3)	-5.8	PK
	V	7236.0	33.6	13.8	47.4	54(note3)	-6.6	PK
	H	9648.0	35.9	15.5	51.4	54(note3)	-2.6	PK
	V	9648.0	35.5	15.5	51.0	54(note3)	-3.0	PK
6	H	3176.0	38.9	3.6	42.5	54(note3)	-11.5	PK
	V	3193.0	36.3	3.6	39.9	54(note3)	-14.1	PK
	H	4876.0	45.7	6.6	52.3	54(note3)	-1.7	PK
	V	4876.0	51.1	6.6	57.7	74	-16.3	PK
	V	4875.7	46.3	6.6	52.9	54	-1.1	AV
	H	7311.0	33.9	14.0	47.9	54(note3)	-6.1	PK
	V	7311.0	33.5	14.0	47.5	54(note3)	-6.5	PK
	H	9748.0	35.0	16.2	51.2	54(note3)	-2.8	PK
	V	9748.0	35.1	16.2	51.3	54(note3)	-2.7	PK
11	H	3176.0	38.5	3.6	42.1	54(note3)	-11.9	PK
	V	3261.0	36.0	3.3	39.3	54(note3)	-14.7	PK
	H	4927.0	45.5	6.7	52.2	54(note3)	-1.8	PK
	V	4927.0	48.7	6.7	55.4	74	-18.6	PK
	V	4925.7	40.2	6.7	46.9	54	-7.1	AV
	H	7386.0	33.9	14.1	48.0	54(note3)	-6.0	PK
	V	7386.0	34.6	14.1	48.7	54(note3)	-5.3	PK
	H	9848.0	35.0	16.4	51.4	54(note3)	-2.6	PK
	V	9848.0	35.2	16.4	51.6	54(note3)	-2.4	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

802.11g - Data Rate 6Mbps

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	3176.0	38.6	3.6	42.2	54(note3)	-11.8	PK
	V	3074.0	35.6	3.5	39.1	54(note3)	-14.9	PK
	H	4825.0	39.5	6.4	45.9	54(note3)	-8.1	PK
	V	4825.0	48.6	6.4	55.0	74.0	-19.0	PK
	V	4824.4	42.4	6.4	48.8	54.0	-5.2	AV
	H	7236.0	33.8	13.8	47.6	54(note3)	-6.4	PK
	V	7236.0	34.0	13.8	47.8	54(note3)	-6.2	PK
	H	9648.0	35.8	15.5	51.3	54(note3)	-2.7	PK
	V	9648.0	35.3	15.5	50.8	54(note3)	-3.2	PK
6	H	3125.0	37.1	3.5	40.6	54(note3)	-13.4	PK
	V	3159.0	36.8	3.6	40.4	54(note3)	-13.6	PK
	H	4876.0	41.0	6.6	47.6	54(note3)	-6.4	PK
	V	4876.0	49.0	6.6	55.6	74.0	-18.4	PK
	V	4874.6	43.7	6.6	50.3	54.0	-3.7	AV
	H	7311.0	34.4	14.0	48.4	54(note3)	-5.6	PK
	V	7311.0	34.6	14.0	48.6	54(note3)	-5.4	PK
	H	9748.0	35.0	16.2	51.2	54(note3)	-2.8	PK
	V	9748.0	35.8	16.2	52.0	54(note3)	-2.0	PK
11	H	3142.0	36.5	3.6	40.1	54(note3)	-13.9	PK
	V	3023.0	37.1	3.4	40.5	54(note3)	-13.5	PK
	H	4927.0	39.0	6.7	45.7	54(note3)	-8.3	PK
	V	4927.0	44.7	6.7	51.4	54(note3)	-2.6	PK
	H	7386.0	33.5	14.1	47.6	54(note3)	-6.4	PK
	V	7386.0	33.6	14.1	47.7	54(note3)	-6.3	PK
	H	9848.0	34.7	16.4	51.1	54(note3)	-2.9	PK
	V	9848.0	34.3	16.4	50.7	54(note3)	-3.3	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

802.11n (20MHz) – Data Rate 6.5/7.2Mbps

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	3142.0	36.4	3.6	40.0	54(note3)	-14.0	PK
	V	3227.0	37.1	3.5	40.6	54(note3)	-13.4	PK
	H	4825.0	38.7	6.4	45.1	54(note3)	-8.9	PK
	V	4825.0	44.9	6.4	51.3	54(note3)	-2.7	PK
	H	7236.0	33.3	13.8	47.1	54(note3)	-6.9	PK
	V	7236.0	33.6	13.8	47.4	54(note3)	-6.6	PK
	H	9648.0	35.4	15.5	50.9	54(note3)	-3.1	PK
	V	9648.0	35.2	15.5	50.7	54(note3)	-3.3	PK
6	H	3363.0	37.5	3.1	40.6	54(note3)	-13.4	PK
	V	3108.0	35.5	3.5	39.0	54(note3)	-15.0	PK
	H	4876.0	38.9	6.6	45.5	54(note3)	-8.5	PK
	V	4876.0	45.1	6.6	51.7	54(note3)	-2.3	PK
	H	7311.0	33.4	14.0	47.4	54(note3)	-6.6	PK
	V	7311.0	33.2	14.0	47.2	54(note3)	-6.8	PK
	H	9748.0	34.8	16.2	51.0	54(note3)	-3.0	PK
	V	9748.0	34.1	16.2	50.3	54(note3)	-3.7	PK
11	H	3159.0	36.5	3.6	40.1	54(note3)	-13.9	PK
	V	3244.0	35.6	3.4	39.0	54(note3)	-15.0	PK
	H	4927.0	38.8	6.7	45.5	54(note3)	-8.5	PK
	V	4927.0	44.7	6.7	51.4	54(note3)	-2.6	PK
	H	7386.0	34.0	14.1	48.1	54(note3)	-5.9	PK
	V	7386.0	33.3	14.1	47.4	54(note3)	-6.6	PK
	H	9848.0	34.4	16.4	50.8	54(note3)	-3.2	PK
	V	9848.0	34.3	16.4	50.7	54(note3)	-3.3	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

802.11n (40MHz) – Data Rate 13.5/15Mbps

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
3	H	3431.0	36.5	3.4	39.9	54(note3)	-14.1	PK
	V	3278.0	37.2	3.3	40.5	54(note3)	-13.5	PK
	H	4842.0	37.4	6.5	43.9	54(note3)	-10.1	PK
	V	4842.0	44.7	6.5	51.2	54(note3)	-2.8	PK
	H	7266.0	33.8	13.9	47.7	54(note3)	-6.3	PK
	V	7266.0	33.1	13.9	47.0	54(note3)	-7.0	PK
	H	9688.0	36.4	15.6	52.0	54(note3)	-2.0	PK
	V	9688.0	35.7	15.6	51.3	54(note3)	-2.7	PK
6	H	3074.0	35.6	3.5	39.1	54(note3)	-14.9	PK
	V	3176.0	36.9	3.6	40.5	54(note3)	-13.5	PK
	H	4876.0	37.6	6.6	44.2	54(note3)	-9.8	PK
	V	4876.0	46.4	6.6	53.0	54(note3)	-1.0	PK
	H	7311.0	33.5	14.0	47.5	54(note3)	-6.5	PK
	V	7311.0	33.3	14.0	47.3	54(note3)	-6.7	PK
	H	9748.0	34.3	16.2	50.5	54(note3)	-3.5	PK
	V	9748.0	34.8	16.2	51.0	54(note3)	-3.0	PK
9	H	3193.0	36.5	3.6	40.1	54(note3)	-13.9	PK
	V	3159.0	35.8	3.6	39.4	54(note3)	-14.6	PK
	H	4910.0	37.5	6.7	44.2	54(note3)	-9.8	PK
	V	4910.0	45.4	6.7	52.1	54(note3)	-1.9	PK
	H	7356.0	33.4	14.0	47.4	54(note3)	-6.6	PK
	V	7356.0	33.7	14.0	47.7	54(note3)	-6.3	PK
	H	9808.0	34.2	16.4	50.6	54(note3)	-3.4	PK
	V	9808.0	34.4	16.4	50.8	54(note3)	-3.2	PK

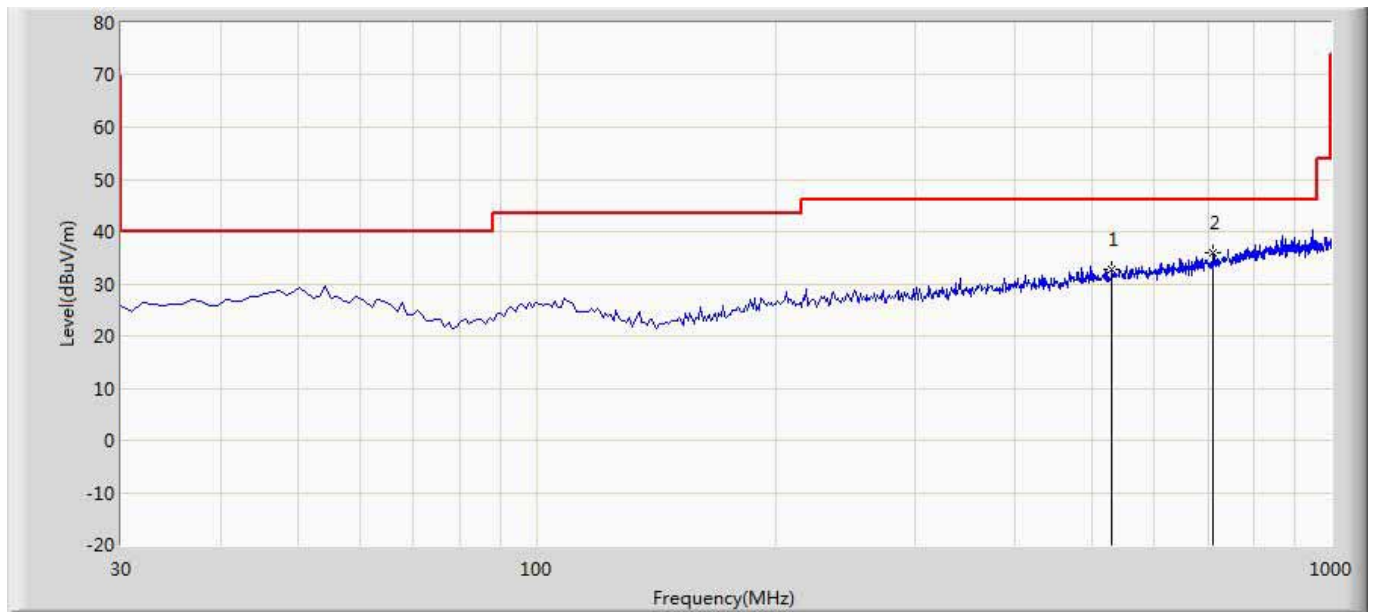
Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

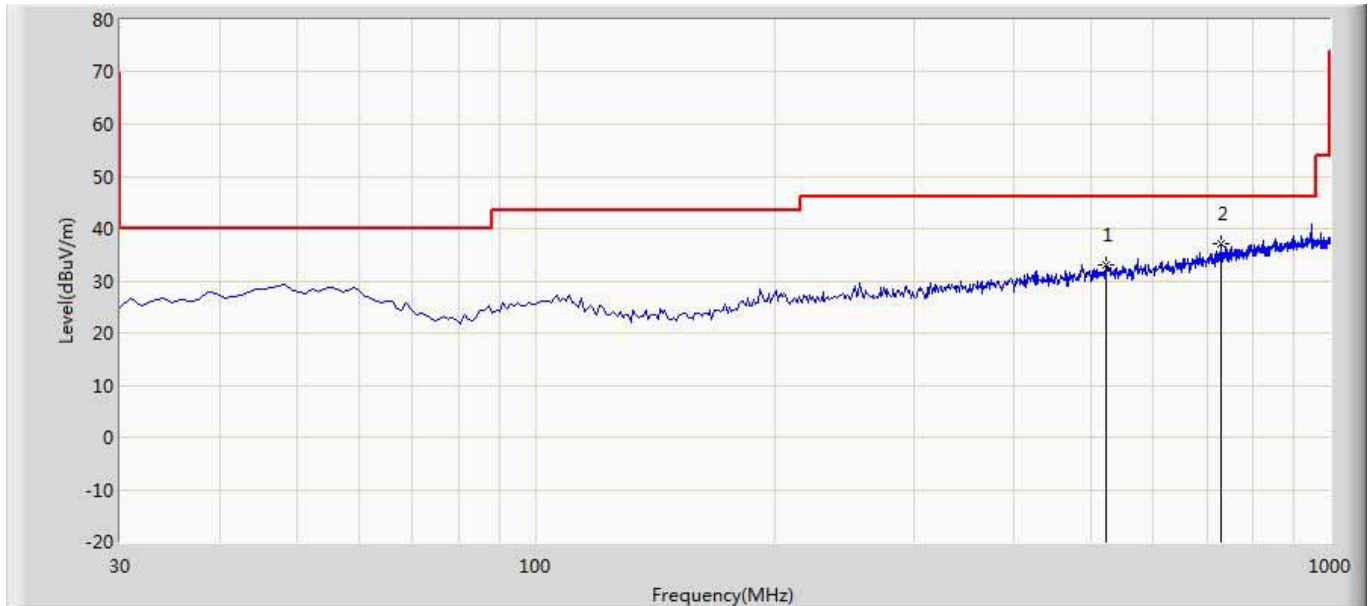
The worst case of Radiated Emission below 1GHz:

Engineer: Roy Cheng	
Site: AC1	Time: 2013/11/03 - 17:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Tablet PC	Power: AC 120V/60Hz
Note: 802.11b – Data Rate 1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		530.520	32.717	13.989	-13.283	46.000	18.728	PK
2	*	710.940	35.997	14.629	-10.003	46.000	21.368	PK

Engineer: Roy Cheng	
Site: AC1	Time: 2013/11/03 - 17:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Tablet PC	Power: AC 120V/60Hz
Note: 802.11b – Data Rate 1Mbps	

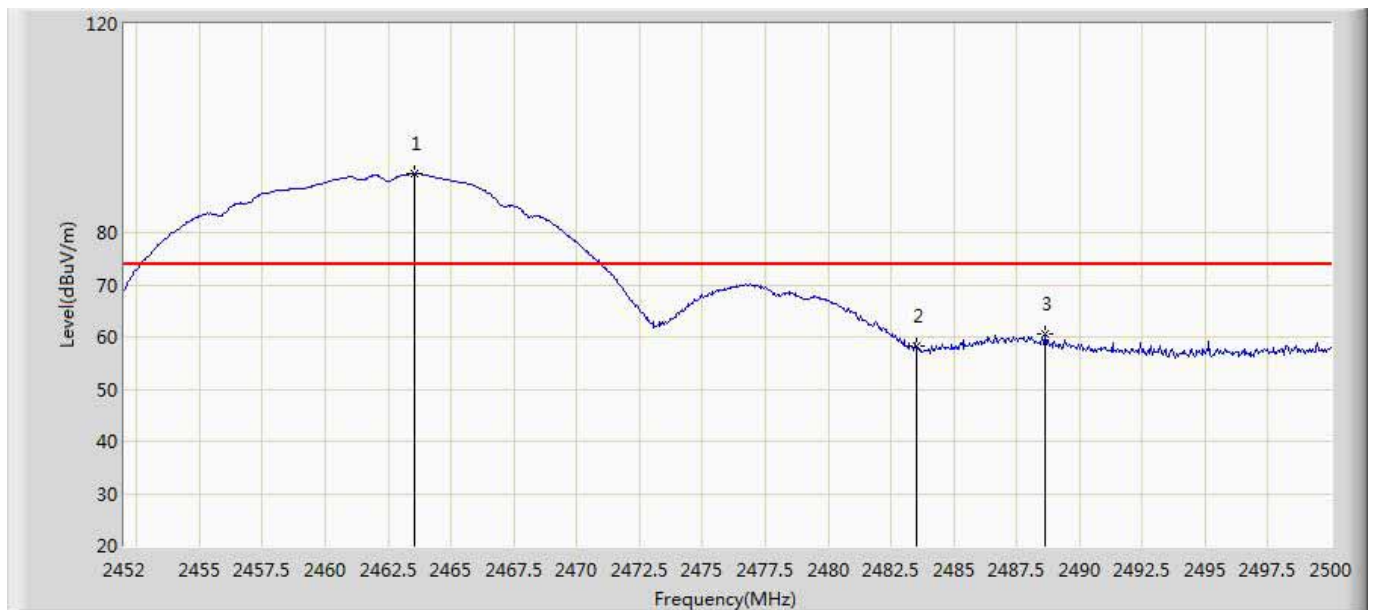


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		523.730	33.114	14.481	-12.886	46.000	18.633	PK
2	*	728.400	37.156	15.582	-8.844	46.000	21.574	PK

7.8. Radiated Restricted Band Edge Measurement

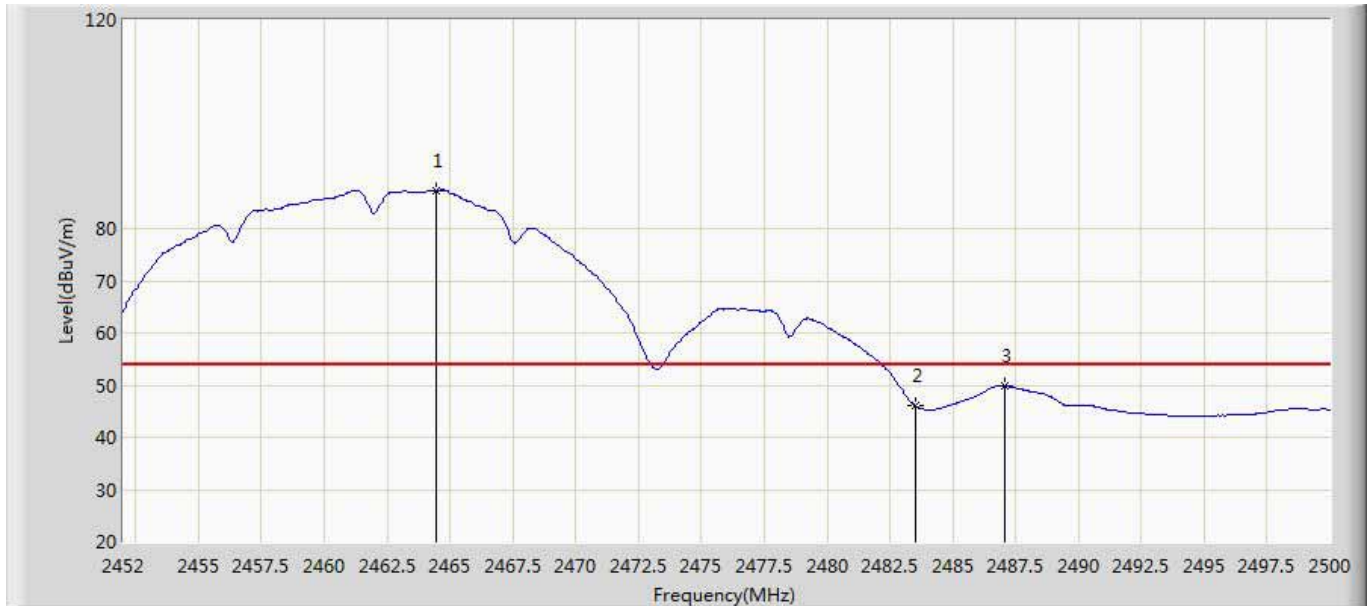
7.8.1. Test Result

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11b Channel 2462MHz – Data Rate 1Mbps	



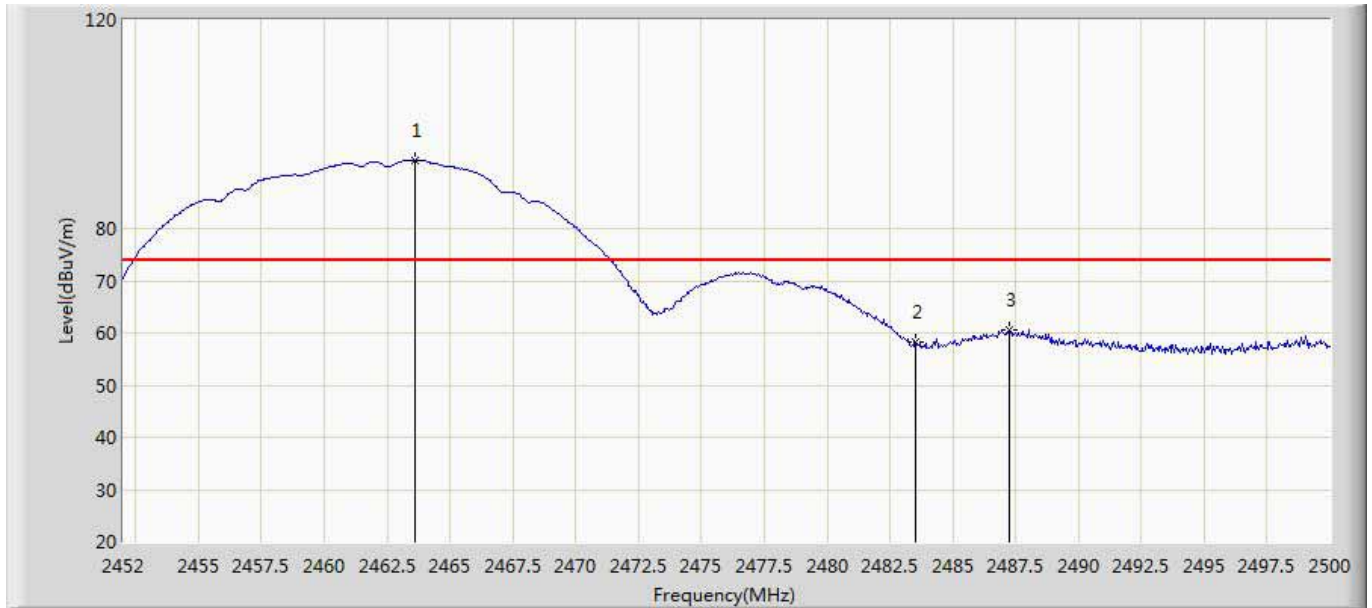
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		2463.568	91.219	60.604	N/A	N/A	30.615	PK
2		2483.500	58.221	27.548	-15.779	74.000	30.673	PK
3	*	2488.624	60.707	30.019	-13.293	74.000	30.688	PK

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11b Channel 2462MHz – Data Rate 1Mbps	



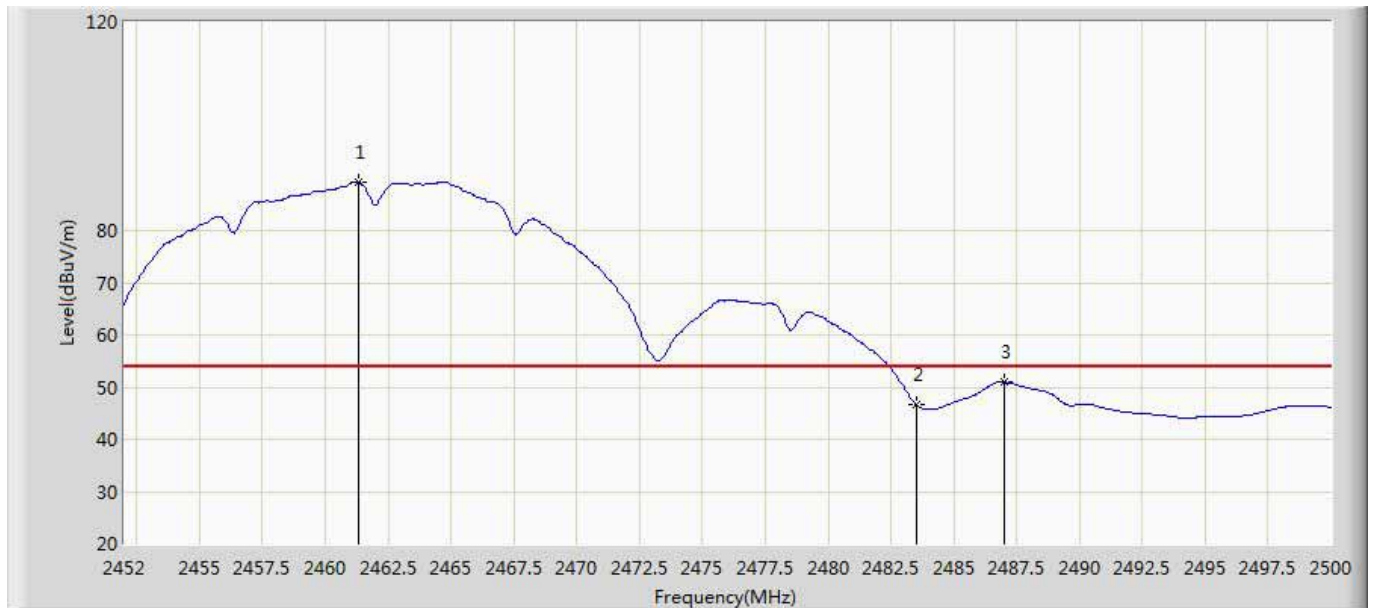
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		2464.480	87.242	56.625	N/A	N/A	30.617	AV
2		2483.500	46.081	15.408	-7.919	54.000	30.673	AV
3	*	2487.088	49.793	19.110	-4.207	54.000	30.683	AV

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11b Channel 2462MHz – Data Rate 1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		2463.616	93.106	62.491	N/A	N/A	30.615	PK
2		2483.500	58.364	27.691	-15.636	74.000	30.673	PK
3	*	2487.232	60.673	29.989	-13.327	74.000	30.683	PK

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11b Channel 2462MHz – Data Rate 1Mbps	



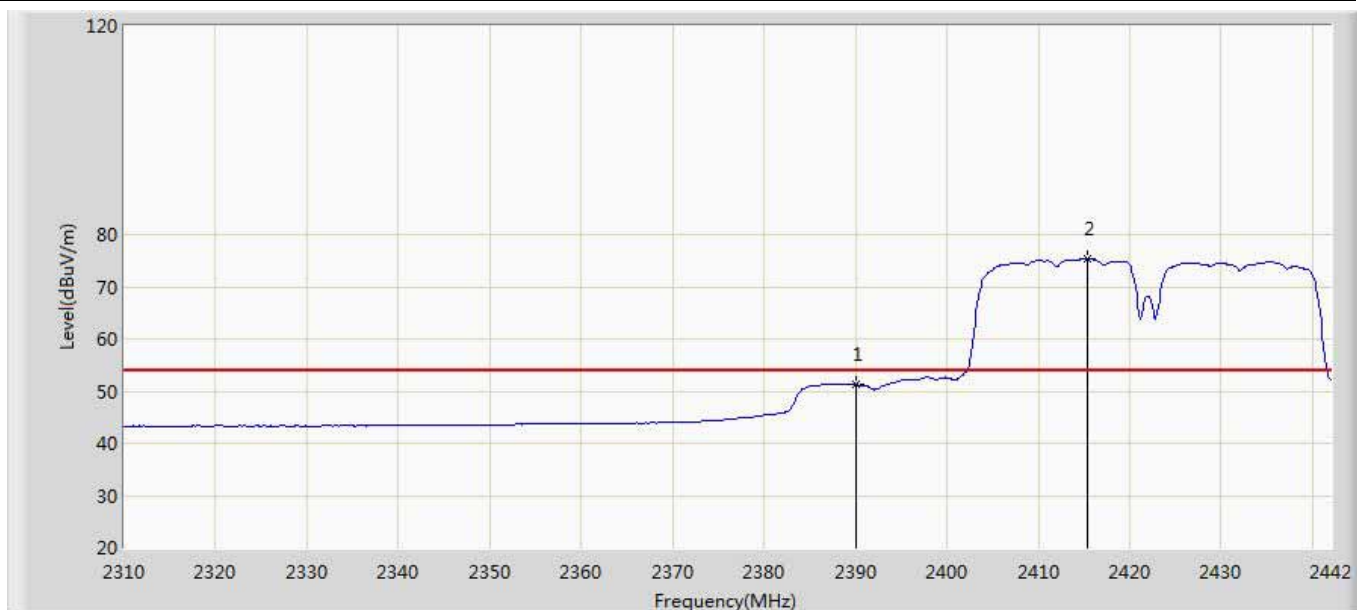
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		2461.312	89.275	58.665	N/A	N/A	30.611	AV
2		2483.500	46.740	16.067	-7.260	54.000	30.673	AV
3	*	2486.992	50.915	20.232	-3.085	54.000	30.683	AV

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11n(40MHz) Channel 2412MHz – Data Rate 13.5/15Mbps	



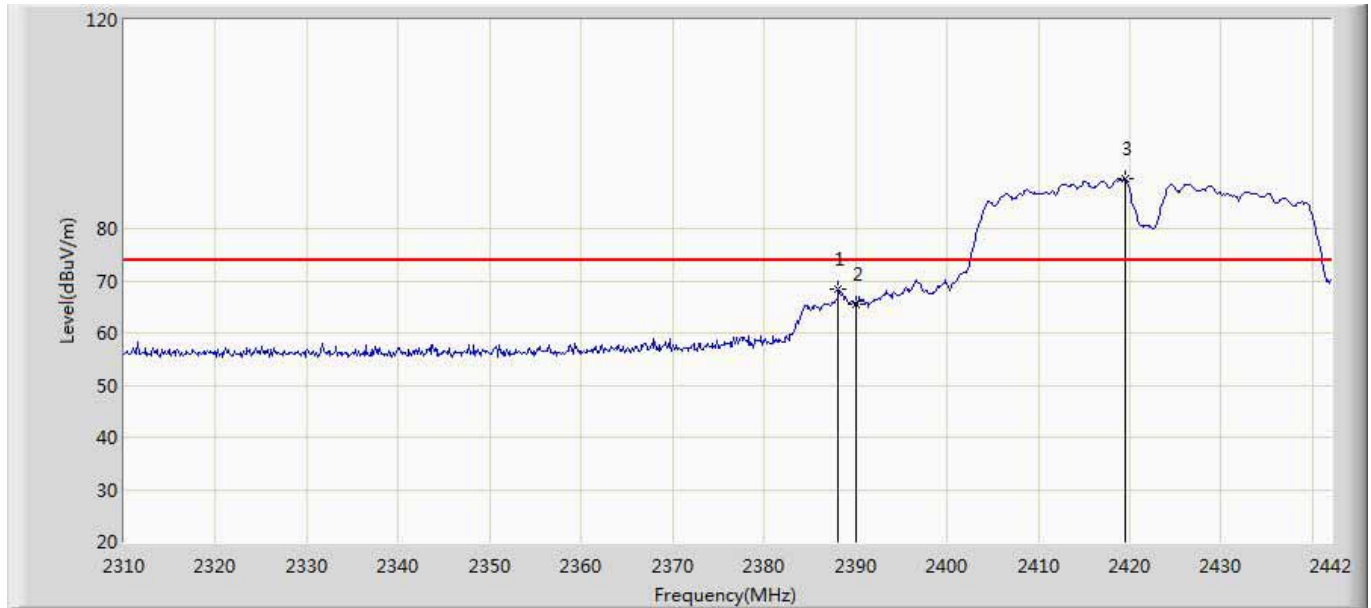
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	2388.144	65.832	35.144	-8.168	74.000	30.688	PK
2		2390.000	63.053	32.369	-10.947	74.000	30.684	PK
3		2419.296	85.850	55.217	N/A	N/A	30.634	PK

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11n(40MHz) Channel 2412MHz – Data Rate 13.5/15Mbps	



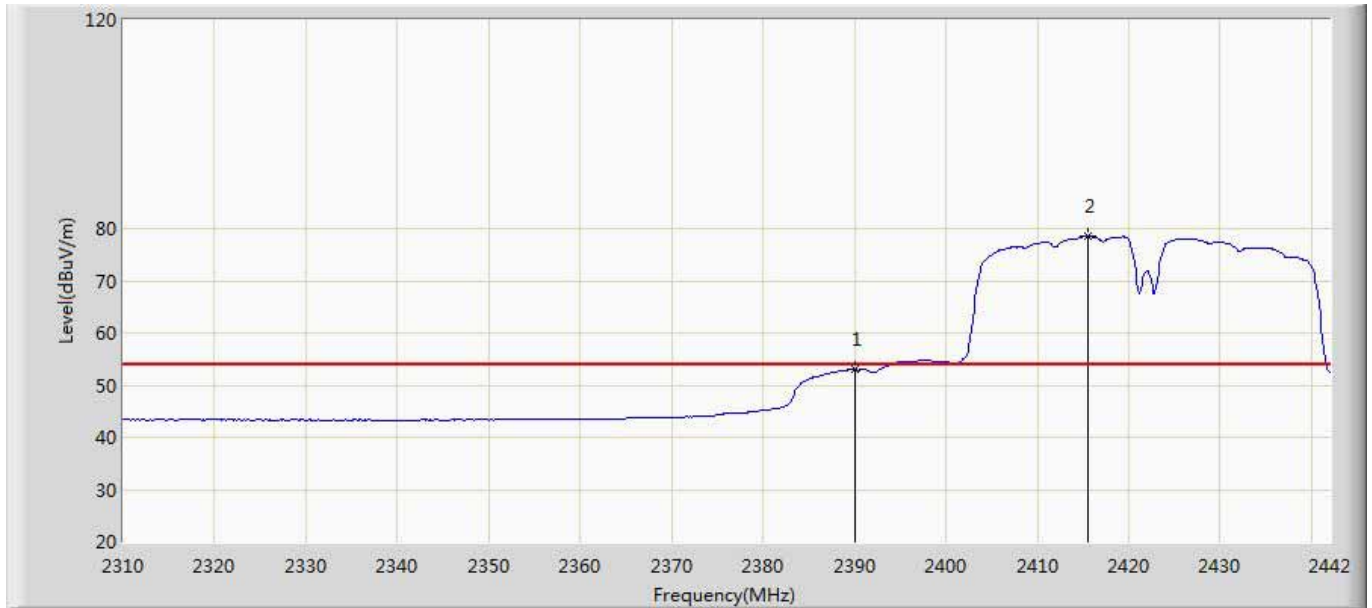
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	2390.000	51.304	20.620	-2.696	54.000	30.684	AV
2		2415.336	75.442	44.802	N/A	N/A	30.640	AV

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11n(40MHz) Channel 2412MHz – Data Rate 13.5/15Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	2388.144	68.285	37.597	-5.715	74.000	30.688	PK
2		2390.000	65.562	34.878	-8.438	74.000	30.684	PK
3		2419.428	89.562	58.929	N/A	N/A	30.633	PK

Engineer: Roy	
Site: AC1	Time: 2013/11/01 - 20:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Tablet PC	Power: By Battery
Worst Case Mode: 802.11n(40MHz) Channel 2412MHz – Data Rate 13.5/15Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	2390.000	52.994	22.310	-1.006	54.000	30.684	AV
2		2415.468	78.550	47.911	N/A	N/A	30.640	AV

7.9. AC Conducted Emissions Measurement

7.9.1. 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.

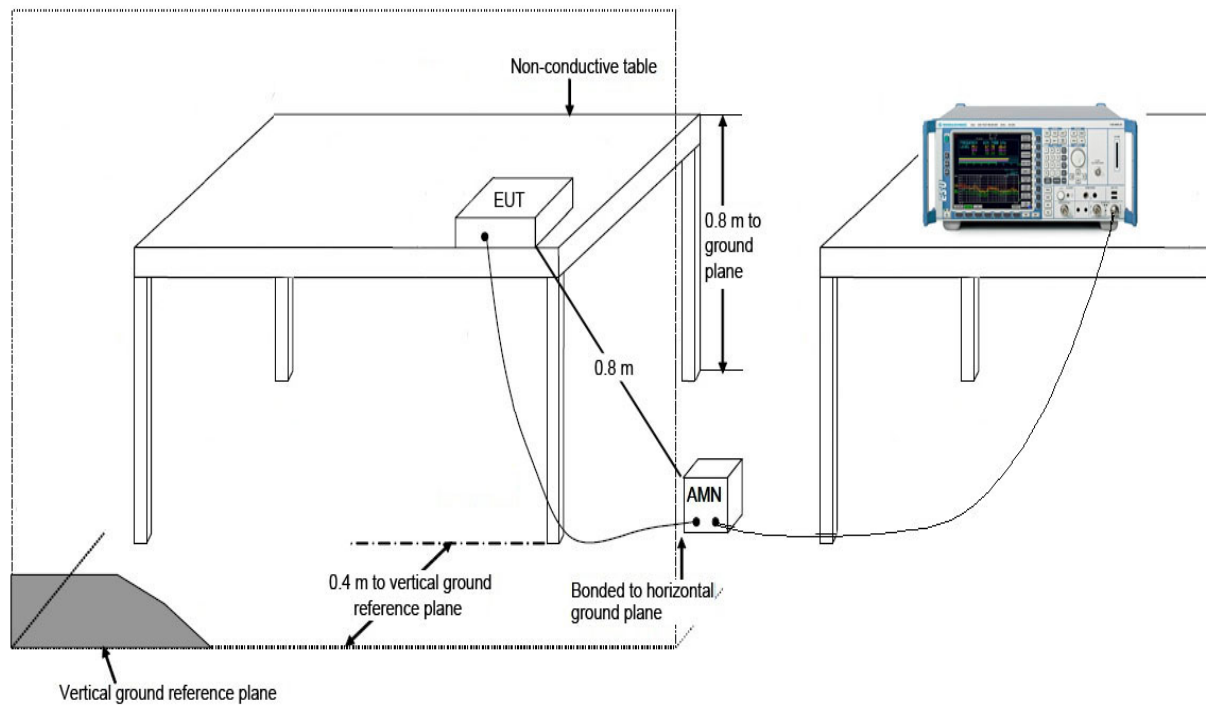
7.9.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

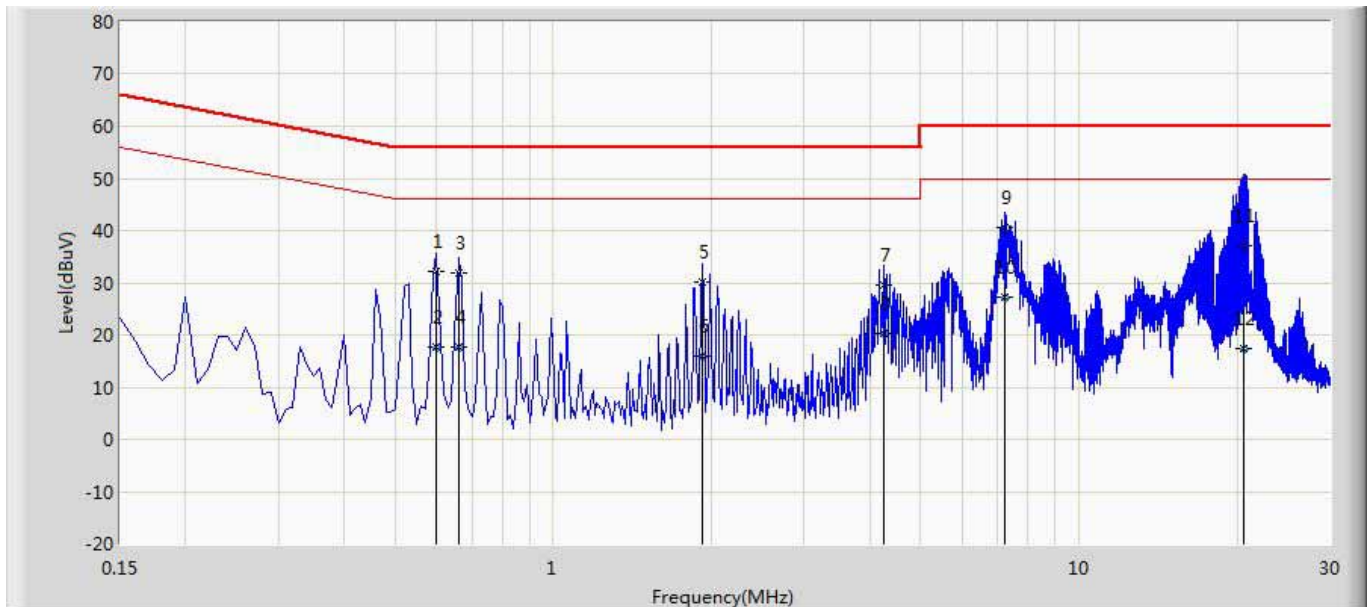
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7.9.3. Test Setup



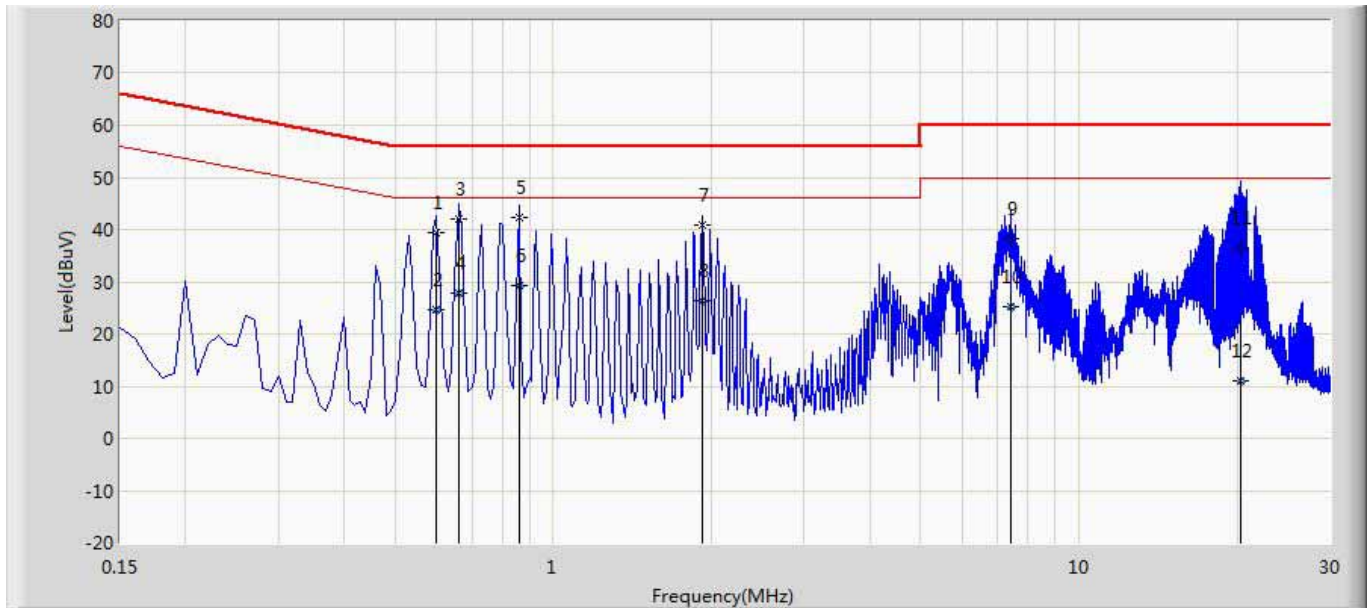
7.9.4. Test Result

Engineer: Roy	
Site: SR2	Time: 2013/11/03 - 18:04
Limit: FCC_Part15.207_Main_ClassB	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Tablet PC	Power: AC 120V/60Hz
Note: 802.11b – Data Rate 1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.600	32.036	15.921	-23.964	56.000	16.115	QP
2		0.600	17.558	1.443	-28.442	46.000	16.115	AV
3		0.660	31.771	15.687	-24.229	56.000	16.084	QP
4		0.660	17.764	1.680	-28.236	46.000	16.084	AV
5		1.920	30.183	14.309	-25.817	56.000	15.874	QP
6		1.920	15.821	-0.054	-30.179	46.000	15.874	AV
7		4.240	29.497	13.520	-26.503	56.000	15.977	QP
8		4.240	20.379	4.401	-25.621	46.000	15.977	AV
9	*	7.220	40.699	24.537	-19.301	60.000	16.161	QP
10		7.220	27.270	11.108	-22.730	50.000	16.161	AV
11		20.500	37.137	20.993	-22.863	60.000	16.145	QP
12		20.500	17.253	1.108	-32.747	50.000	16.145	AV

Engineer: Roy	
Site: SR2	Time: 2013/11/03 - 18:13
Limit: FCC_Part15.207_Main_ClassB	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Tablet PC	Power: AC 120V/60Hz
Note: 802.11b – Data Rate 1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.600	39.447	23.315	-16.553	56.000	16.131	QP
2		0.600	24.558	8.427	-21.442	46.000	16.131	AV
3		0.660	41.963	25.866	-14.037	56.000	16.098	QP
4		0.660	27.723	11.625	-18.277	46.000	16.098	AV
5	*	0.860	42.347	26.361	-13.653	56.000	15.986	QP
6		0.860	29.162	13.176	-16.838	46.000	15.986	AV
7		1.920	40.935	25.059	-15.065	56.000	15.876	QP
8		1.920	26.354	10.478	-19.646	46.000	15.876	AV
9		7.420	38.234	22.051	-21.766	60.000	16.183	QP
10		7.420	25.095	8.912	-24.905	50.000	16.183	AV
11		20.300	36.614	20.438	-23.386	60.000	16.176	QP
12		20.300	11.151	-5.025	-38.849	50.000	16.176	AV

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Tablet PC FCC ID: SHZ-E71** is in compliance with Part 15C of the FCC Rules.