







### ISO/IEC17025Accredited Lab.

Report No: FCC 1305056 File reference No: 2013-05-21

Applicant: Charter Profit Technologies Ltd

Product: Tablet PC

Model No: 0167, CP-700, CP-800, CP-900, CP-970, CP-100, 0118

Trademark: N/A

Test Standards: FCC Part 15 Subpart C, Paragraph 15.247

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.4 and FCC Part 15 Subpart C, Paragraph 15.247 regulations for the evaluation of

electromagnetic compatibility

Approved By

# Jack Chung

Jack Chung Manager

Dated: May 21, 2013

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

# SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO., LTD

5/F, Block 4, Anhua Industrial Zone., No.8 TaiRan Rd.CheGongMiao, FuTian District, Shenzhen, CHINA.

Tel (755) 83448688 Fax (755) 83442996

Report No: 1305056 Page 2 of 89

Date: 2013-05-21



# **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

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

### **CNAL-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of testing Laboratories.

### FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

### IC- Registration No.: IC5205A-02

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-02.

Page 3 of 89

Report No: 1305056 Date: 2013-05-21



# **Test Report Conclusion**

### Content

1.0	General Details	4
1.1	Test Lab Details.	4
1.2	Applicant Details	4
1.3	Description of EUT	4
1.4	Submitted Sample	5
1.5	Test Duration.	5
1.6	Test Uncertainty.	5
1.7	Test By	5
2.0	List of Measurement Equipment	6
3.0	Technical Details	9
3.1	Summary of Test Results	9
3.2	Test Standards	9
4.0	EUT Modification.	9
5.0	Power Line Conducted Emission Test.	10
5.1	Schematics of the Test.	10
5.2	Test Method and Test Procedure	10
5.3	Configuration of the EUT.	10
5.4	EUT Operating Condition.	11
5.5	Conducted Emission Limit.	11
5.6	Test Result.	11
6.0	Radiated Emission test.	14
5.1	Test Method and Test Procedure.	14
5.2	Configuration of the EUT.	14
6.3	EUT Operation Condition.	14
5.4	Radiated Emission Limit.	15
7.0	6dB Bandwidth Measurement.	34
8.0	Maximum Peak Output Power	50
9.0	Power Spectral Density Measurement.	53
10.0	Out of Band Measurement.	68
11.0	Antenna Requirement.	77
12.0	FCC ID Label	78
13.0	Photo of Test Setup and EUT View.	79

Date: 2013-05-21



### 1.0 General Details

### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO., LTD

Address: 5/F,Block 4, Anhua Industrial Zone.,No.8 TaiRan Rd.CheGongMiao,FuTian District,

Shenzhen, CHINA.

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-02

For 3m & 10 m OATS

### 1.2 Applicant Details

Applicant: Charter Profit Technologies Ltd

Address: 5F, Block 1, Zhongkenuo Industrial Park, Hezhou Development Zone, XiXiang Town,

Bao'an District, Shenzhen, China .518102.

Telephone: -Fax: --

### 1.3 Description of EUT

Product: Tablet PC

Manufacturer: Charter Profit Technologies Ltd

Address: 5F, Block 1, Zhongkenuo Industrial Park, Hezhou Development Zone,

XiXiang Town, Bao'an District, Shenzhen, China .518102.

Brand Name: N/A Model Number: 0167

Additional Model Number: CP-700, CP-800, CP-900, CP-970, CP-100, 0118

Type of Modulation IEEE 802.11b : DSSS (CCK, QPSK, DBPSK)

IEEE 802.11g/n (HT20): OFDM(64QAM, 16QAM, QPSK, BPSK)

Frequency range IEEE 802.11b/g/n (HT20) : 2412-2462MHz;

Channel Spacing IEEE 802.11b/g/n (HT20): 5MHz Air Data Rate IEEE 802.11b: 11, 5.5, 2, 1 Mbps

IEEE 802.11g: 54, 48,36, 24, 18, 12, 9, 6 Mbps

IEEE 802.11n HT20: 6.5,13,19.5,26,39,52,58.5,65,72Mbps

Frequency Selection By software

Channel Number IEEE 802.11b/g/n (HT20): 11 Channels

The report refers only to the sample tested and does not apply to the bulk.

Report No: 1305056

Page 5 of 89

Date: 2013-05-21



Antenna: Integral Antenna with maximum gain 3.0dBi

Power Supply: Model No.: DM050200

Input: 100-240VAC, 0.5A, 50/60Hz; Output: 5V, 2000mA

1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2013-05-14 to 2013-05-21

1.6 Test Uncertainty

Conducted Emissions Uncertainty = 3.6dB Radiated Emissions Uncertainty = 4.7dB

1.7 Test Engineer

Terry Tang

The sample tested by

Print Name: Terry Tang

Page 6 of 89

Report No: 1305056 Date: 2013-05-21



2.0		Test Equip	ments		
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	ROHDE&SCHWARZ	ESPI 3	100379	2012-08-21	2013-08-20
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100294	2012-08-21	2013-08-20
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100253	2012-08-21	2013-08-20
Ultra Broadband ANT	ROHDE&SCHWARZ	HL562	100157	2012-08-21	2013-08-20
ESDV Test Receiver	ROHDE&SCHWARZ	ESDV	100008	2012-08-21	2013-08-20
Impuls-Begrenzer	ROHDE&SCHWARZ	ESH3-Z2	100281	2012-08-21	2013-08-20
System Controller	CT	SC100	-		
Printer	EPSON	РНОТО ЕХЗ	CFNH234850		
Computer	IBM	8434	1S8434KCE99BLXL O*	-	-
Loop Antenna	EMCO	6502	00042960	2012-08-21	2013-08-20
ESPI Test Receiver	ROHDE&SCHWARZ	ESI26	838786/013	2012-08-21	2013-08-20
3m OATS			N/A	2012-08-21	2013-08-20
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170265	2012-08-21	2013-08-20
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-631	2012-08-21	2013-08-20
Power meter	Anritsu	ML2487A	6K00003613	2012-08-21	2013-08-20
Power sensor	Anritsu	MA2491A	32263	2012-08-21	2013-08-20
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2012-08-21	2013-08-20
LISN	AFJ	LS16C	10010947251	2012-08-21	2013-08-20
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2012-08-21	2013-08-20
9*6*6 Anechoic			N/A	2012-08-21	2013-08-20
EMI Test Receiver	RS	ESCS30	100139	2012-08-21	2013-08-20
LISN	AFJ	LS16C	10010947251	2012-08-21	2013-08-20
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2012-08-21	2013-08-20

Report No: 1305056 Page 7 of 89

Date: 2013-05-21



### 2.1 **Auxiliary Equipment**

Name	Model No.	Serial No.	Manufacturer	Cable	FCC ID/DOC
TF Card			Kingston		
Earphone					
LCD Monitor	PH3450		SAMSUNG		DOC

Report No: 1305056 Page 8 of 89

TIMEWAY TOTOTOKIS ATTS

### 3. DESCRIPTION OF TEST MODES

Date: 2013-05-21

### IEEE 802.11b, 802.11g, 802.11n (HT20) mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b mode: 11Mbps data rate (worst case) was chosen for full testing. IEEE 802.11g mode: 6Mbps data rate (worst case) was chosen for full testing. IEEE 802.11n (HT20) mode: 6.5Mbps data rate (worst case) were chosen for full testing

The worst-case data rates are determined according to the description above, based on the investigations by measuring the PSD and average power across all the data rates, bandwidths, modulations and spatial stream modes.



### 3.0 **Technical Details**

### 3.1 **Summary of test results**

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	<b>Conducted Emission Test</b>	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

### 3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247

### **EUT Modification** 4.0

No modification by Shenzhen Timeway Technology Consulting Co., Ltd

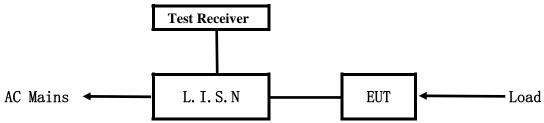
Page 10 of 89

Report No: 1305056 Date: 2013-05-21



### 5. Power Line Conducted Emission Test

### 5.1 Schematics of the test

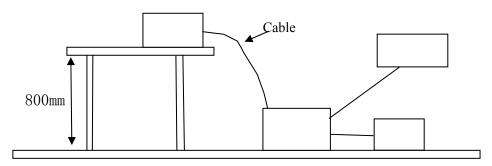


**EUT: Equipment Under Test** 

### 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2003. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2003.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



### 5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2003. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

### A. EUT

Device	Manufacturer	Model	FCC ID
Tablet PC	Charter Profit Technologies Ltd	0167, CP-700, CP-800, CP-900, CP-970, CP-100, 0118	2AAFSCP7891068

### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

The report refers only to the sample tested and does not apply to the bulk.

Report No: 1305056 Page 11 of 89

Date: 2013-05-21



### C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable
N/A				

### 5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2003.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207.

Frequency	Class A Lim	its (dB µ V)	Class B Limits (dB µ V)	
(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
$0.15 \sim 0.50$	79.0	66.0	66.0~56.0*	56.0~46.0*
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0
5.00 ~ 30.00	73.0	60.0	60.0	50.0

Notes:

- 1. \*Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

### 5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

Date: 2013-05-21



### A: Conducted Emission on Live Terminal (150kHz to 30MHz)

### **EUT Operating Environment**

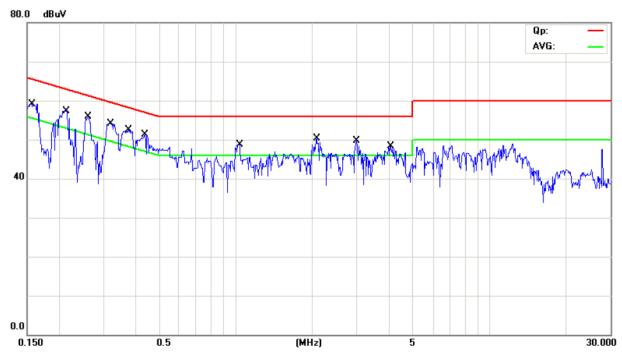
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Charging and Keep transmitting** 

**Equipment Level: Class B** 

**Results: PASS** 

Please refer to following diagram for individual



Frequency	Line	Reading	(dBµV)	Limit(e	dBμV)
(MHz)	Line	Quasi-peak	Average	Quasi-peak	Average
0.156	Live	58.08	46.68	65.67	55.67
0.214	Live	56.39	45.71	63.02	53.02
0.261	Live	54.82	43.94	61.40	51.40
0.319	Live	53.15	41.37	59.74	49.74
0.375	Live	51.50	40.96	58.37	48.37
0.436	Live	50.25	38.83	57.14	47.14
1.028	Live	47.71	36.38	56.00	46.00
4.055	Live	47.33	36.84	56.00	46.00
2.086	Live	49.27	37.51	56.00	46.00
2.963	Live	48.78	35.78	56.00	46.00

Report No: 1305056 Page 13 of 89

Date: 2013-05-21



### B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

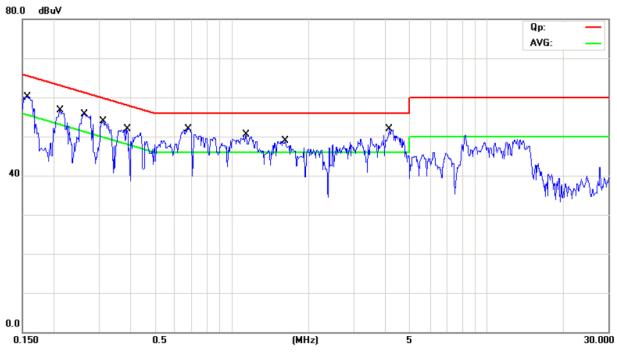
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Charging and Keep transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



Frequency	Lina	Line Reading(dBµV)		Limit(dBµV)	
(MHz)	Line	Quasi-peak	Average	Quasi-peak	Average
0.157	Neutral	59.13	47.25	65.62	55.62
0.210	Neutral	54.66	46.66	63.19	53.19
0.262	Neutral	53.78	41.91	61.34	51.34
0.311	Neutral	52.86	40.40	59.92	49.92
0.385	Neutral	50.98	38.62	58.16	48.16
0.680	Neutral	50.95	40.38	56.00	46.00
1.130	Neutral	49.57	38.26	56.00	46.00
4.133	Neutral	49.83	36.69	56.00	46.00
1.613	Neutral	48.92	36.76	56.00	46.00

Report No: 1305056 Page 14 of 89

Date: 2013-05-21



### 6 Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.4 –2003. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No.899988
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2003.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

# Block diagram of Test setup Distance = 3m Computer Pre -Amplifier Furn-table Receiver

- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition
  Same as section 5.4 of this report.

Report No: 1305056 Page 15 of 89

TIMEWAY TO TOTAL AREA

### 6.4 Radiated Emission Limit

Date: 2013-05-21

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

### Frequencies in restricted band are complied to limit on Paragraph 15.209

	-	<b>E 1</b>
Frequency Range (MHz)	Distance (m)	Field strength (dB µ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.

Report No: 1305056 Page 16 of 89

Date: 2013-05-21



### Test result

### General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

**EUT set Condition: Charging and Keep transmitting** 

**Results: Pass** 

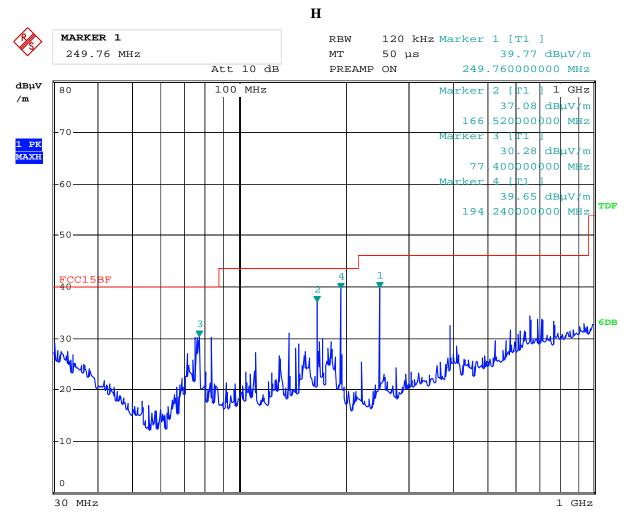
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \u03b4 V/m)	
249.760	39.77	Н	46.00	
166.520	37.08	Н	43.50	
77.400	30.28	Н	40.00	
194.240	194.240 39.65		43.50	
110.960	35.83	V	43.50	
249.760			46.00	
83.280	83.280 36.01		40.00	
194.280	35.03	V	43.50	

Report No: 1305056 Page 17 of 89

Date: 2013-05-21



### Test Figure:



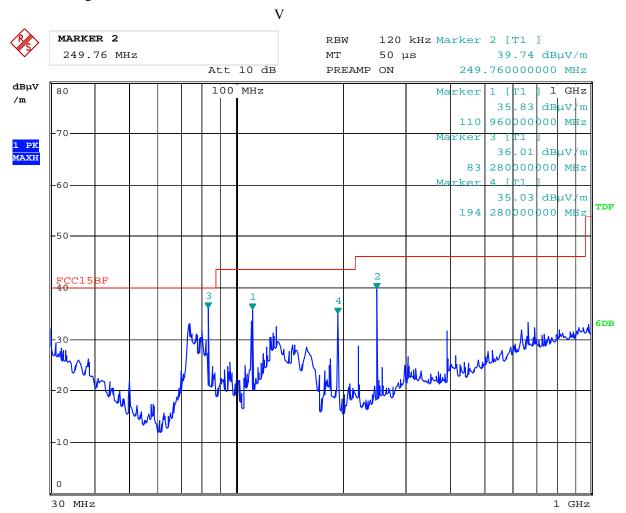
Date: 14.MAY.2013 17:03:03

Report No: 1305056 Page 18 of 89

Date: 2013-05-21



### Test Figure:



Date: 14.MAY.2013 17:06:36

Report No: 1305056 Page 19 of 89

Date: 2013-05-21



### Operation Mode: Transmitting under CH01 for 11g at 6Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \u03b4 V/m)	
2412.00	91.89(PK)	Н	Even dominantal Engavianos	
2412.00	90.69(PK)	V	Fundamental Frequency	
4824.00	47.28(PK)	Н	74(Peak)/ 54(AV)	
4824.00	45.82(PK)	V	74(Peak)/ 54(AV)	
7236.00		H/V	74(Peak)/ 54(AV)	
9648.00		H/V	74(Peak)/ 54(AV)	
12060	12060		74(Peak)/ 54(AV)	
14472		H/V	74(Peak)/ 54(AV)	
16884	16884		74(Peak)/ 54(AV)	
19296	19296		74(Peak)/ 54(AV)	
21708	21708		74(Peak)/ 54(AV)	
24120	24120		74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 6Mbps

Report No: 1305056 Page 20 of 89

Date: 2013-05-21



### Operation Mode: Transmitting under CH06 for 11g at 6Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)	
2437.00	90.47(PK)	Н	Fundamental Frequency	
2437.00	91.94(PK)	V	Fundamental Frequency	
4874.00	47.15(PK)	Н	74(Peak)/ 54(AV)	
4874.00	48.20(PK)	V	74(Peak)/ 54(AV)	
7311.00		H/V	74(Peak)/ 54(AV)	
9748.00		H/V	74(Peak)/ 54(AV)	
12185		H/V	74(Peak)/ 54(AV)	
14622		H/V	74(Peak)/ 54(AV)	
17059		H/V	74(Peak)/ 54(AV)	
19496		H/V	74(Peak)/ 54(AV)	
21933		H/V	74(Peak)/ 54(AV)	
24370	24370		74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 6Mbps

### Operation Mode: Transmitting under CH11 for 11g at 6Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)	
2462.00	92.34(PK)	Н	Eundamental Eraguenay	
2462.00	92.36 (PK)	V	Fundamental Frequency	
4924	47.08(PK)	Н	74(Peak)/ 54(AV)	
4924	46.14(PK)	V	74(Peak)/ 54(AV)	
7368		H/V	74(Peak)/ 54(AV)	
9848		H/V	74(Peak)/ 54(AV)	
12310		H/V	74(Peak)/ 54(AV)	
14772	-	H/V	74(Peak)/ 54(AV)	
17234		H/V	74(Peak)/ 54(AV)	
19696		H/V	74(Peak)/ 54(AV)	
22158		H/V	74(Peak)/ 54(AV)	
24620	24620		74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

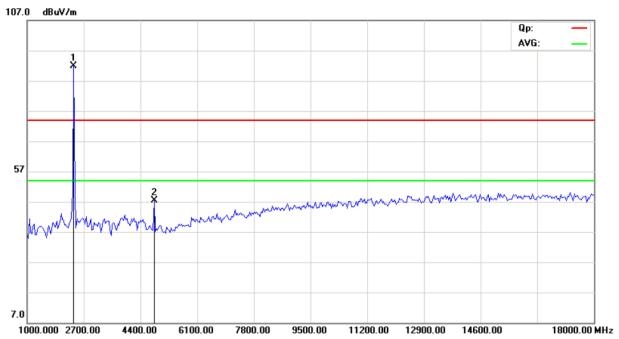
- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode at 6 Mbps

The report refers only to the sample tested and does not apply to the bulk.

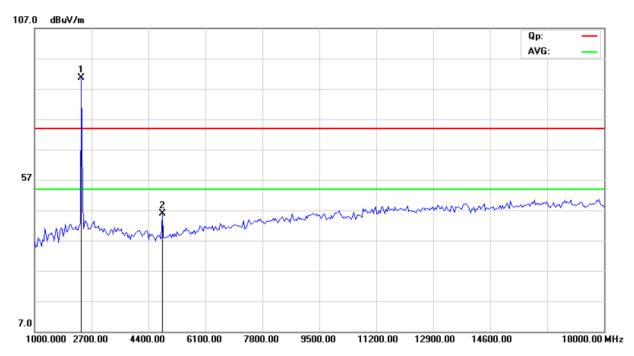


Please refer to the following test plots for details:

### CH01 for 11g at 6Mbps: Horizontal



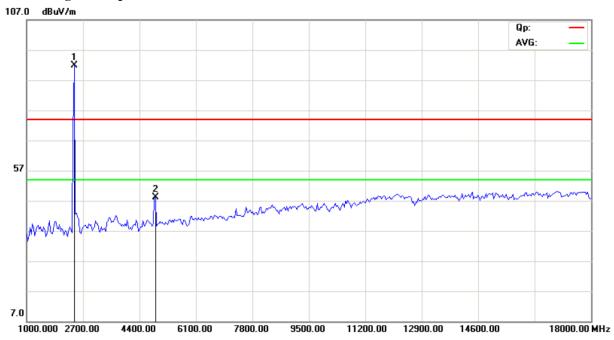
### CH01 for 11g at 6Mbps: Vertical



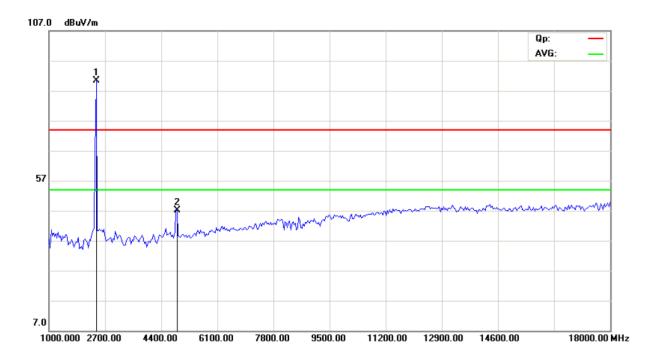
The report refers only to the sample tested and does not apply to the bulk.



### CH06 for 11g at 6Mbps: Vertical



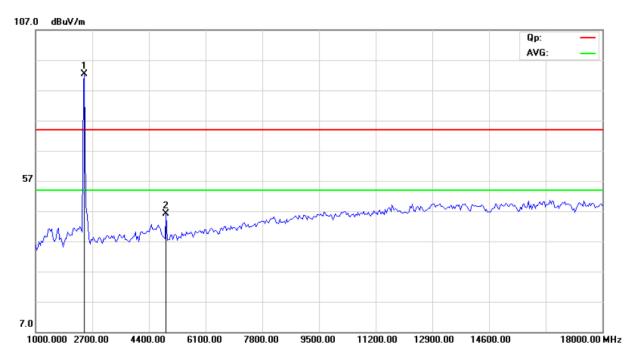
### CH06 for 11g at 6Mbps: Horizontal



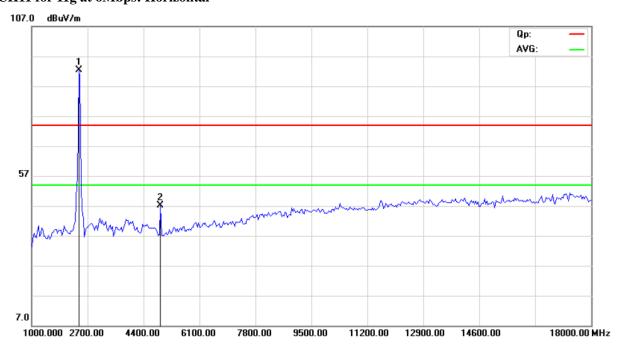
The report refers only to the sample tested and does not apply to the bulk.



# CH11 for 11g at 6Mbps: Vertical



### CH11 for 11g at 6Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co.,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: 1305056 Page 24 of 89

Date: 2013-05-21



### Operation Mode: Transmitting under CH01 for 11b at 11Mbps

Frequency (MHz)	Level@3m (dB \u03ba V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
2412.00	90.76(PK)	V	Fundamental Frequency
2412.00	90.26(PK)	Н	
4824.00	47.82(PK)	Н	74(Peak)/ 54(AV)
4824.00	47.09(PK)	V	74(Peak)/ 54(AV)
7236.00	1	H/V	74(Peak)/ 54(AV)
9648.00	1	H/V	74(Peak)/ 54(AV)
12060	1	H/V	74(Peak)/ 54(AV)
14472	1	H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120	24120		74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 11Mbps

### Operation Mode: Transmitting under CH06 for 11b at 11Mbps

Frequency (MHz)	Level@3m (dB \u03bc V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)	
2437.00	92.13(PK)	Н	Fundamental Frequency	
2437.00	92.15(PK)	V	Fundamental Frequency	
4874.00	47.12(PK)	Н	74(Peak)/ 54(AV)	
4874.00	47.50(PK)	V	74(Peak)/ 54(AV)	
7311.00		H/V	74(Peak)/ 54(AV)	
9748.00		H/V	74(Peak)/ 54(AV)	
12185		H/V	74(Peak)/ 54(AV)	
14622		H/V	74(Peak)/ 54(AV)	
17059		H/V	74(Peak)/ 54(AV)	
19496		H/V	74(Peak)/ 54(AV)	
21933		H/V	74(Peak)/ 54(AV)	
24370	24370		74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 11Mbps

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co.,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: 1305056 Page 25 of 89

Date: 2013-05-21



### Operation Mode: Transmitting under CH11 for 11b at 11Mbps

_					
	Frequency (MHz)	quency (MHz) Level@3m (dB \mu V/m)		Limit@3m (dB \mu V/m)	
	2462.00	90.38(PK)	Н	Even dominantal Englavior av	
	2462.00	90.95(PK)	V	Fundamental Frequency	
	4924	45.79(PK)	Н	74(Peak)/ 54(AV)	
	4924	47.63(PK)	V	74(Peak)/ 54(AV)	
	7368		H/V	74(Peak)/ 54(AV)	
	9848		H/V	74(Peak)/ 54(AV)	
	12310	12310 14772 17234 19696		74(Peak)/ 54(AV)	
	14772			74(Peak)/ 54(AV)	
	17234			74(Peak)/ 54(AV)	
	19696			74(Peak)/ 54(AV)	
	22158 24620		H/V	74(Peak)/ 54(AV)	
			H/V	74(Peak)/ 54(AV)	

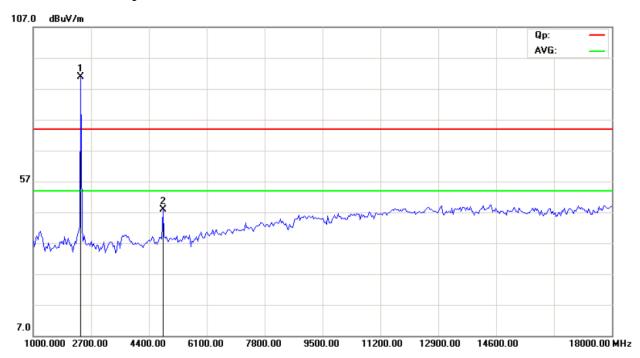
Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode at 11Mbps

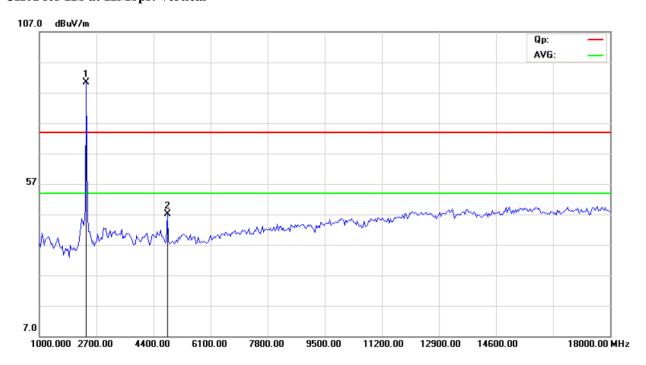


Please refer to the following test plots for details:

### CH01 for 11b at 11Mbps: Horizontal



# CH01 for 11b at 11Mbps: Vertical



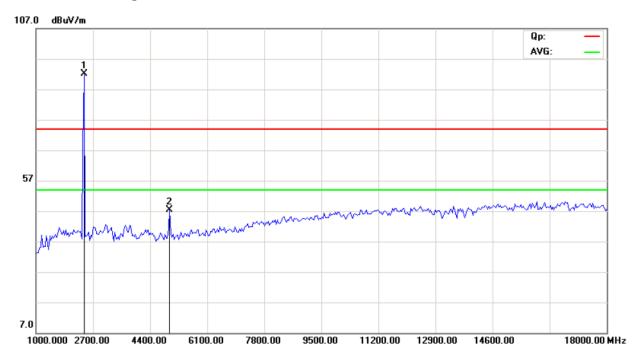
The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

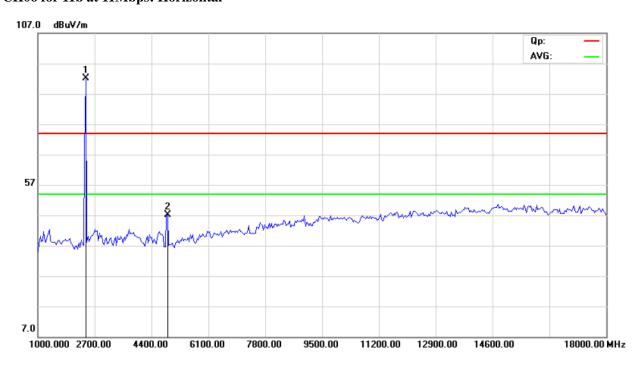
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### CH06 for 11b at 11Mbps: Vertical



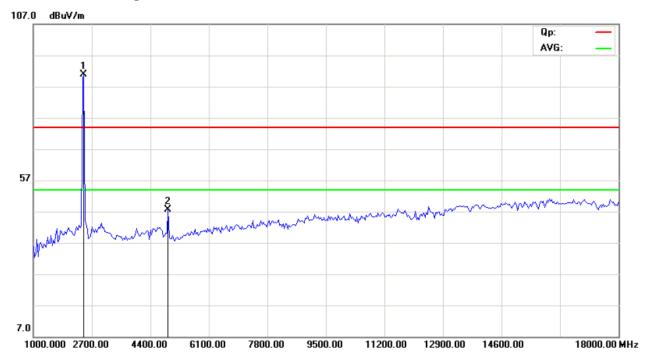
### CH06 for 11b at 11Mbps: Horizontal



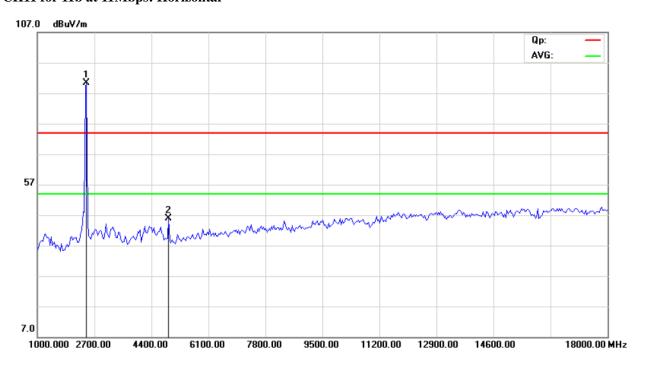
The report refers only to the sample tested and does not apply to the bulk.



### CH11 for 11b at 11Mbps: Vertical



### CH11 for 11b at 11Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co.,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: 1305056 Page 29 of 89

Date: 2013-05-21



### Operation Mode: Transmitting under CH01 for 11n HT20 at 6.5Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)	
2412.00	92.36(PK)	Н	Fundamental Frequency	
2412.00	92.42(PK)	V	Fundamental Frequency	
4824.00	46.85(PK)	Н	74(Peak)/ 54(AV)	
4824.00	47.09(PK)	V	74(Peak)/ 54(AV)	
7236.00		H/V	74(Peak)/ 54(AV)	
9648.00		H/V	74(Peak)/ 54(AV)	
12060		H/V	74(Peak)/ 54(AV)	
14472		H/V	74(Peak)/ 54(AV)	
16684		H/V	74(Peak)/ 54(AV)	
19296	19296		74(Peak)/ 54(AV)	
21708		H/V	74(Peak)/ 54(AV)	
24120	24120		74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode 6.5Mbps

### Operation Mode: Transmitting under CH06 for 11n HT20 at 6.5Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \) V/m)	
2437.00	90.05(PK)	Н	Evendom antal Engavanov	
2437.00	91.01(PK)	V	Fundamental Frequency	
4874.00	48.04(PK)	Н	74(Peak)/ 54(AV)	
4874.00	47.38(PK)	V	74(Peak)/ 54(AV)	
7311.00	1	H/V	74(Peak)/ 54(AV)	
9748.00	-1	H/V	74(Peak)/ 54(AV)	
12185	12185		74(Peak)/ 54(AV)	
14622	1	H/V	74(Peak)/ 54(AV)	
17059	17059		74(Peak)/ 54(AV)	
19496	-	H/V	74(Peak)/ 54(AV)	
21933		H/V	74(Peak)/ 54(AV)	
24370		H/V	74(Peak)/ 54(AV)	

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode 6.5Mbps

The report refers only to the sample tested and does not apply to the bulk.

Report No: 1305056 Page 30 of 89

Date: 2013-05-21



# Operation Mode: Transmitting under CH11 for 11n HT20 at 6.5Mbps

			_	
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)	
2462.00	92.12(PK)	Н	Even do ma antal Engavan av	
2462.00	91.81(PK)	V	Fundamental Frequency	
4924	46.19(PK)	Н	74(Peak)/ 54(AV)	
4924	45.64(PK)	V	74(Peak)/ 54(AV)	
7368		H/V	74(Peak)/ 54(AV)	
9848		H/V	74(Peak)/ 54(AV)	
12310		H/V	74(Peak)/ 54(AV)	
14772		H/V	74(Peak)/ 54(AV)	
17234		H/V	74(Peak)/ 54(AV)	
19696		H/V	74(Peak)/ 54(AV)	
22158		H/V	74(Peak)/ 54(AV)	
24620		H/V	74(Peak)/ 54(AV)	

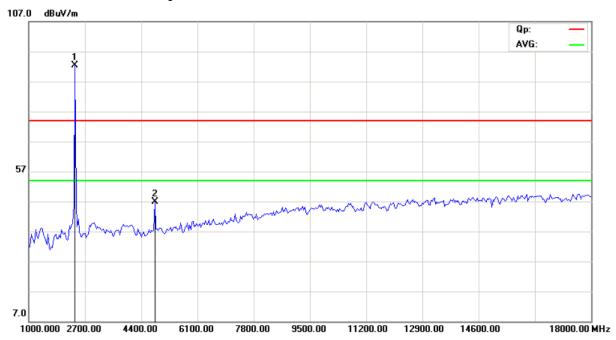
Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode 6.5Mbps

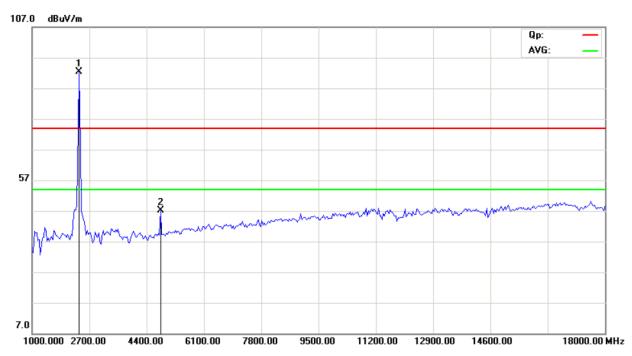


Please refer to the following test plots for details:

### CH01 for 11n HT20 at 6.5Mbps: Horizontal



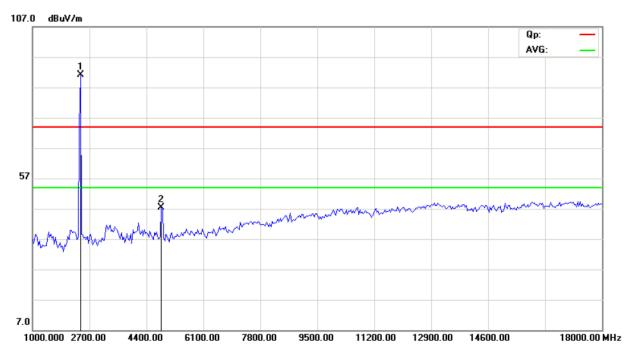
### CH01 for 11n HT20 at 6.5Mbps: Vertical



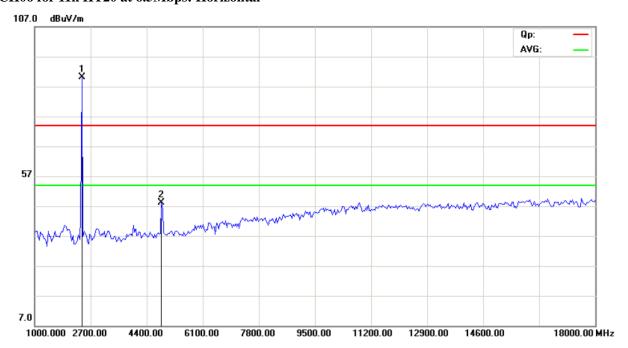
The report refers only to the sample tested and does not apply to the bulk.



# CH06 for 11n HT20 at 6.5Mbps: Vertical



### CH06 for 11n HT20 at 6.5Mbps: Horizontal



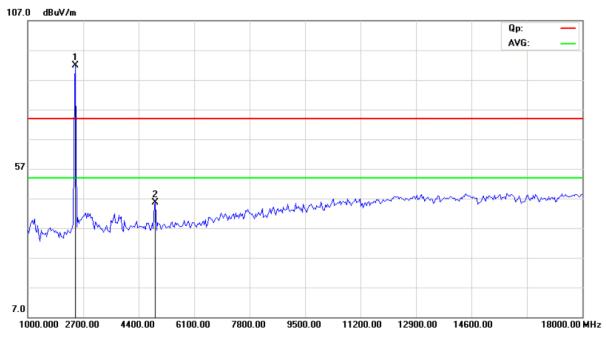
The report refers only to the sample tested and does not apply to the bulk.

Page 33 of 89

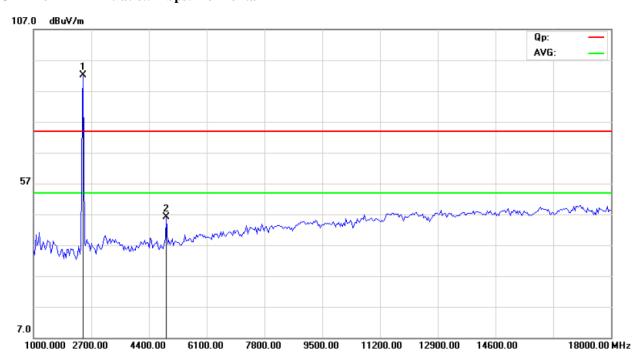
Report No: 1305056 Date: 2013-05-21



# CH11 for 11n HT20 at 6.5Mbps: Vertical



### CH11 for 11n HT20 at 6.5Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

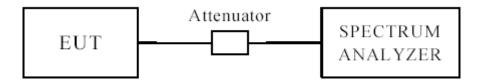
Report No: 1305056 Page 34 of 89

Date: 2013-05-21



### 7.0 6dB Bandwidth Measurement

### 7.1 Test Setup



### 7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

### 7.3 Test Procedure

- 1. Set resolution bandwidth (RBW) = 100 kHz
- 2. Set the video bandwidth (VBW)  $\geq$  3 x 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) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 7.4 Test Result

Report No: 1305056 Page 35 of 89

Date: 2013-05-21



### 6dB Occupied Bandwidth

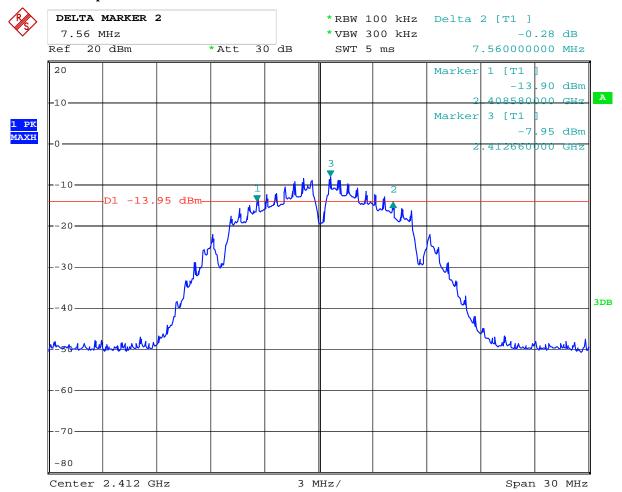
EUT	EUT Tablet PC Model			0167				
Mode		802.111	)	Input Voltage			AC 120V	
Temperat	ure	24 deg.	C,	Humidity			56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)		mum Limit MHz)	Pass/ Fail	
1		2412	1	7.56		0.5	Pass	
6		2437	1	7.56		0.5	Pass	
11		2462	1	7.56		0.5	Pass	
1		2412	11	7.44		0.5	Pass	
6		2437	11	7.20		0.5	Pass	
11		2462	11	7.20		0.5	Pass	

Report No: 1305056 Page 36 of 89

Date: 2013-05-21



### 1. 802.11b at 1Mbps of CH01



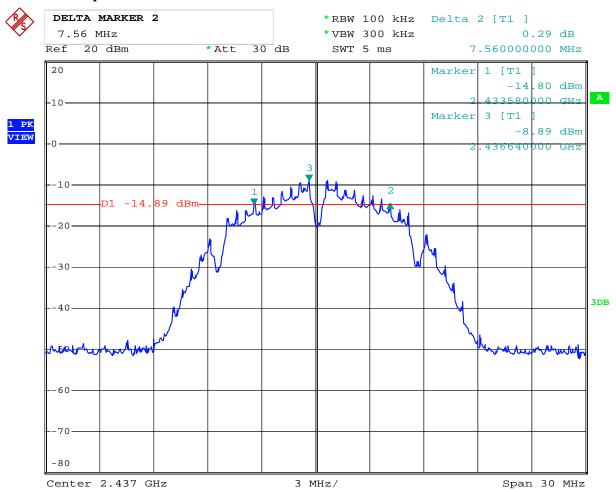
Date: 17.MAY.2013 15:47:28

Report No: 1305056 Page 37 of 89

Date: 2013-05-21



### 2. 802.11b at 1Mbps of CH06



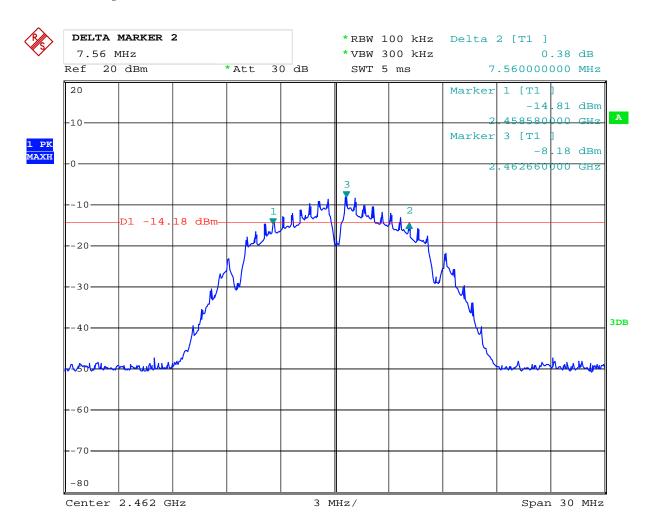
Date: 17.MAY.2013 15:49:28

Report No: 1305056 Page 38 of 89

Date: 2013-05-21



## 3. 802.11b at 1Mbps of CH11



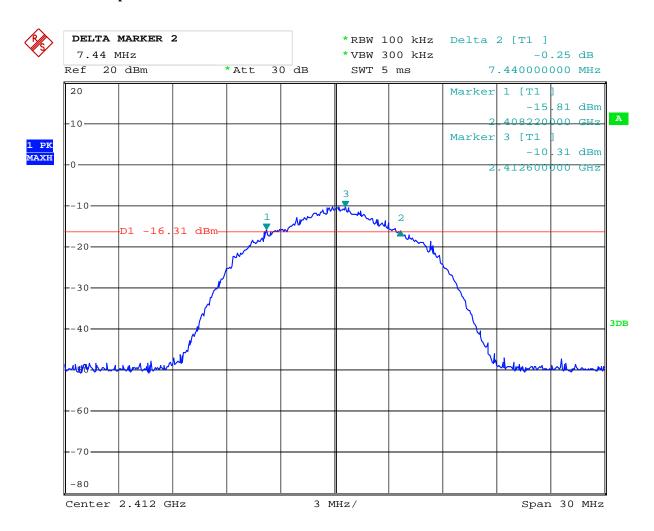
Date: 17.MAY.2013 15:51:38

Report No: 1305056 Page 39 of 89

Date: 2013-05-21



### 4. 802.11b at 11Mbps of CH01



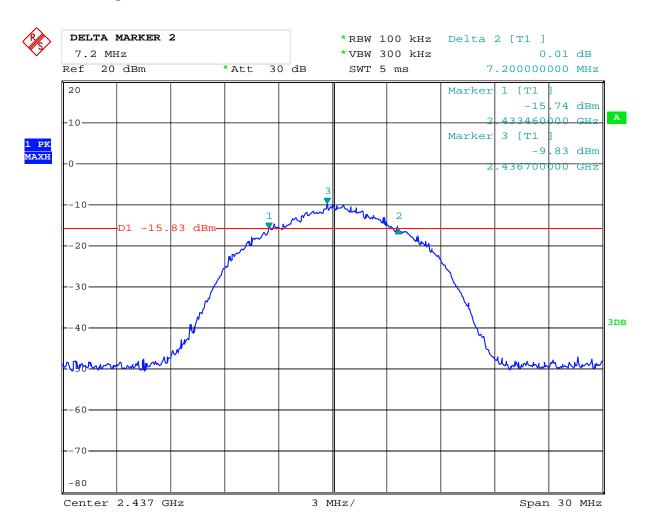
Date: 17.MAY.2013 16:04:00

Report No: 1305056 Page 40 of 89

Date: 2013-05-21



## 5. 802.11b at 11Mbps of CH06



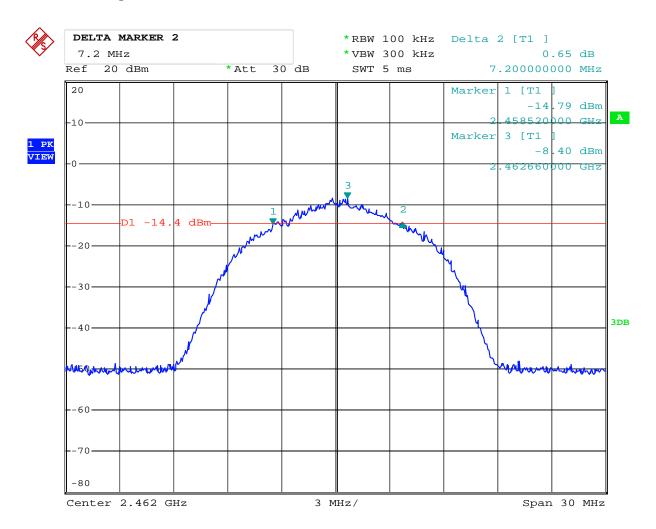
Date: 17.MAY.2013 15:56:27

Report No: 1305056 Page 41 of 89

Date: 2013-05-21



### 6. 802.11b at 11Mbps of CH11



Date: 17.MAY.2013 15:52:47

Report No: 1305056 Page 42 of 89

Date: 2013-05-21



# 6dB Occupied Bandwidth

EUT	Tablet PC Model			0167			
Mode		802.11g	Input Voltag	e	AC 120V		
Temperat	ure	24 deg. C,	Humidity			56% RH	
Channel	Chanr	nel Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass/ Fail
1	2412 6		6	15.18		0.5	Pass
6	2437		6	15.30		0.5	Pass
11		2462	6		15.12	0.5	Pass

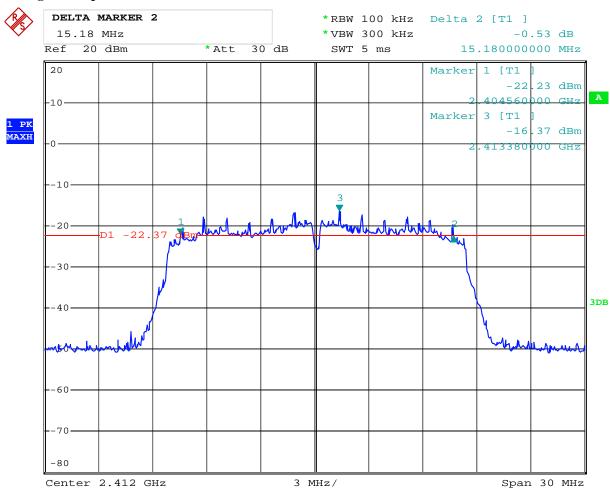
Report No: 1305056 Page 43 of 89

Date: 2013-05-21



#### **Test Plots:**

### 1. 802.11g at 6Mbps of CH01



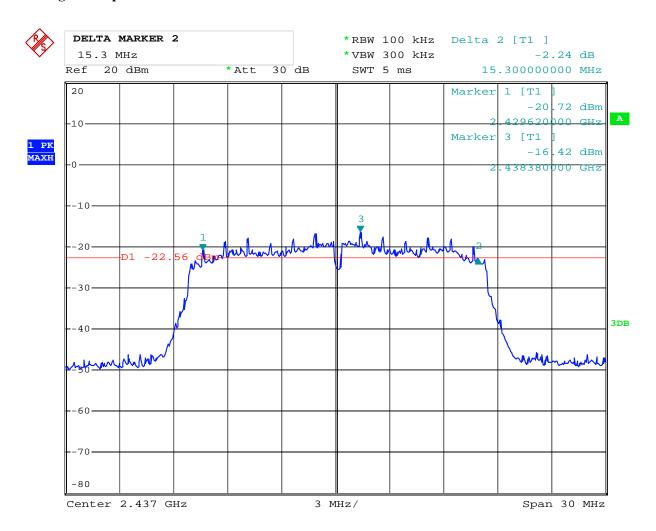
Date: 17.MAY.2013 16:05:17

Report No: 1305056 Page 44 of 89

Date: 2013-05-21



### 2. 802.11g at 6Mbps of CH06



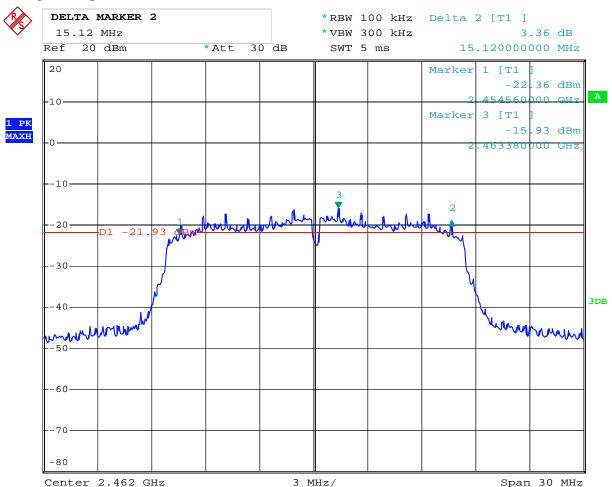
Date: 17.MAY.2013 16:07:03

Report No: 1305056 Page 45 of 89

Date: 2013-05-21



## 3. 802.11g at 6Mbps of CH11



Date: 17.MAY.2013 16:10:28

Report No: 1305056 Page 46 of 89

Date: 2013-05-21



### 6dB Occupied Bandwidth

EUT			Tablet PC			Model		0167	
Mode		8	02.11n HT20	1n HT20 Input Volt				AC 120V	
Temperat	ure		24 deg. C,		Humidity			56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		andwidth Hz)	ridth Minimum Li (MHz)		Pass/ Fail	
1	2412		6.5Mbps	16.02		0.5		Pass	
6	2437 6.5Mbps 1		16	16.02		0.5	Pass		
11	2462 6.5Mbj		6.5Mbps	16.26			0.5	Pass	

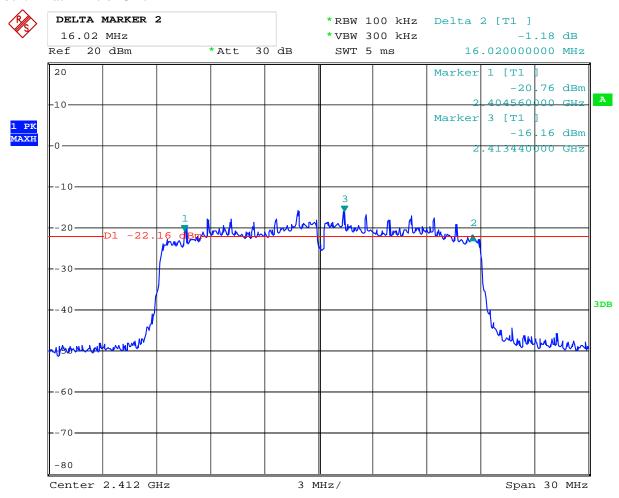
Report No: 1305056 Page 47 of 89

Date: 2013-05-21



#### **Test Plots:**

#### 1. 802.11n at HT20 of CH01



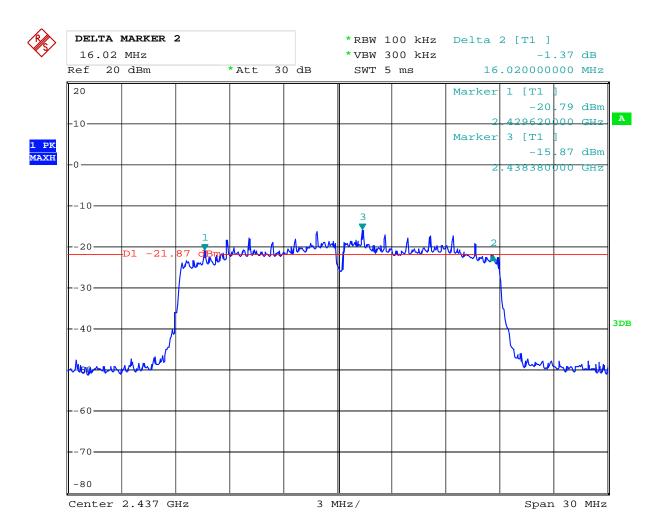
Date: 17.MAY.2013 16:13:12

Report No: 1305056 Page 48 of 89

Date: 2013-05-21



#### 2. 802.11n at HT20 of CH06



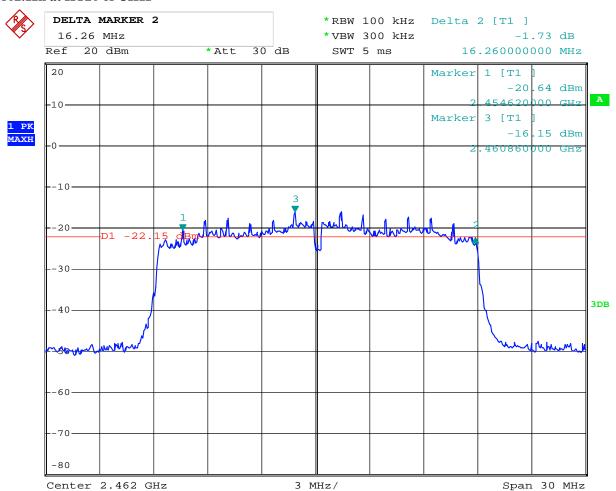
Date: 17.MAY.2013 16:14:08

Report No: 1305056 Page 49 of 89

Date: 2013-05-21



#### 3. 802.11n at HT20 of CH11



Date: 17.MAY.2013 16:15:16

Report No: 1305056 Page 50 of 89



# 8. Maximum Peak Output Power

### 8.1 Test Setup

Date: 2013-05-21



# 8.2 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

#### **8.3 Test Procedure**

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: the peak power was measured

Report No: 1305056 Page 51 of 89

Date: 2013-05-21



#### **8.4Test Results**

EUT	Tablet PC		Model Model			0167		
Mode	Mode 802.11b		Input Voltage		ge	AC 120V		
Temperati	ure	24 deg. C, Humidity		56% RH				
Channel	Cha	annel Frequency (MHz)		wer Output		Peak Power Limit (dBm)	Pass/ Fail	
1		2412		5.89		30	Pass	
6		2437	2437			30	Pass	
11		2462		5.73		30	Pass	

Note: 1. At finial test to get the worst-case emission at 11Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

3. The test voltage varied from AC102V-138V. The worse case was recorded

EUT		Tablet PC		Model		0167		
Mode		802.11g		Input Voltage AC 120V			AC 120V	
Temperati	ure	24 deg. C,	Humidity		Humidity 56% RH			
Channel	Cha	Channel Frequency		Peak Power Output		Peak Power Limit	Pass/ Fail	
		(MHz)		(dBm)		(dBm)		
1		2412		5.00		30	Pass	
6	·	2437		4.92		30	Pass	
11		2462		5.28		30 Pass		

Note: 1. At finial test to get the worst-case emission at 6Mbps for CH01, CH06 and CH11

- The result basic equation calculation as follow:
   Peak Power Output = Peak Power Reading + Cable loss + Attenuator
- 3. The test voltage varied from AC102V-138V. The worse case was recorded

Report No: 1305056 Page 52 of 89

	d
W	H
TIMEWAY TESTING LARS	視機

EUT	EUT Tablet PC		Model			0167		
Mode		802.11n (HT20) Input Voltage			AC 120V			
Temperati	ure	24 deg. C,		Humidity		56% RH		
Channel	Cha	Channel Frequency (MHz)		ak Power Output (dBm)	Peak Power Limit (dBm)	Pass/ Fail		
1		2412		3.84	30	Pass		
6		2437		3.75	30	Pass		
11		2462		4.14	30	Pass		

Note: 1. At finial test to get the worst-case emission at 6.5Mbps of 11n HT20 for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Date: 2013-05-21

3. The test voltage varied from AC102V-138V. The worse case was recorded

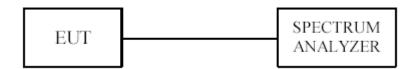
Report No: 1305056 Page 53 of 89

Date: 2013-05-21



# 9. Power Spectral Density Measurement

### 9.1 Test Setup



### 9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

#### 9.3 Test Procedure

- 1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
- 2. Set the RBW = 10 kHz.
- 3. Set the VBW  $\geq$  30 kHz.
- 4. Set the span to 1.5 times the DTS channel bandwidth.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode =  $\max$  hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
- 11. The resulting peak PSD level must be  $\leq 8$  dBm.

Report No: 1305056 Page 54 of 89

Date: 2013-05-21



#### 9.4Test Result

EUT	Γ Tablet PC		Model			0167	
Mode	Mode 802.11b 11Mbps		Input Voltag	е	AC 120V		
Temperati	Temperature 24 deg. C, Humidity		56% RH				
Channel	Channel Channel Frequency Final RF Power Level in (dBm)		Maximum Limit (dBm)	Limit Pass/ Fail			
				11Mbps			
1		2412 -		-17.69	8	Pass	
6		2437 -		-18.16	8	Pass	
11		2462	-	-17.32	8	Pass	

EUT	EUT Tablet PC		Model Model			0167		
Mode	Mode 802.11b 1Mbps		ops	s Input Voltage		AC 120V		
Temperati	ure	24 deg. C	,	Humidity		56% RH		
Channel	Channel Frequency   Final RF Power		Maximum Limit (dBm)	Pass/ Fail Limit				
				1Mbps				
1		2412 -		-16.29	8	Pass		
6		2437		-16.76	8	Pass		
11		2462		-16.06	8	Pass		

Report No: 1305056 Page 55 of 89

Date: 2013-05-21



EUT		Tablet PC	Model		0167		
Mode		802.11g 6Mbps	Input Voltage		AC 120V		
Temperature	;	24 deg. C,	Humidity		56% RH		
	Ch	annel Frequency	Final RF	N	Maximum	Pass/ Fail	
Channel	CII	• •	Power Level		Limit	1 455/ 1 411	
	(MHz)		in (dBm)		(dBm)		
			6Mbps				
1		2412	-21.75		8	Pass	
6		2437	-23.83		8	Pass	
11		2462	-22.07		8	Pass	

EUT		Tablet PC	Model		0167		
Mode	Mode 802.11n HT20		Input Voltage		AC 120V		
Temperat	ure	24 deg. C,	Humidity	midity		56% RH	
Channel	Cha	annel Frequency (MHz)	Final RF Power Level (dBm)		(dBm)	Pass/ Fail	
			6.5Mbps				
1		2412	-23.03		8	Pass	
6		2437	-22.94		8	Pass	
11		2462	-25.18		8 Pass		

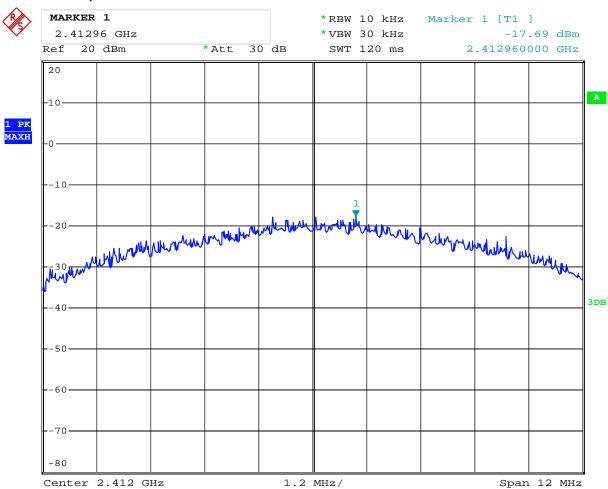
Report No: 1305056 Page 56 of 89

Date: 2013-05-21



### 9.5 Photo of Power Spectral Density Measurement

1.802.11b at 11Mbps of CH01



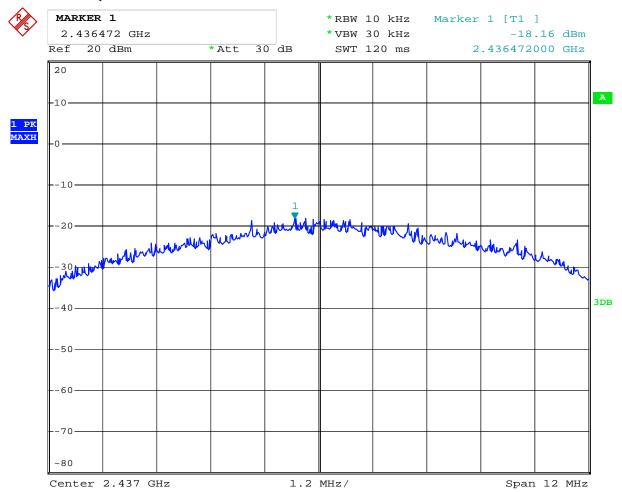
Date: 17.MAY.2013 16:58:01

Report No: 1305056 Page 57 of 89

Date: 2013-05-21



### 2. 802.11b at 11Mbps at CH06



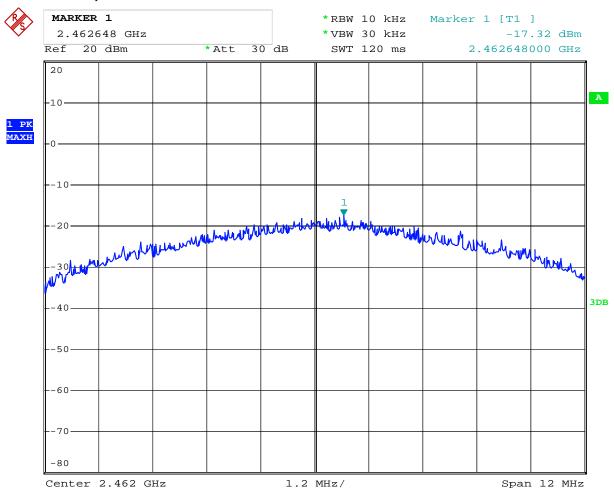
Date: 17.MAY.2013 16:57:32

Report No: 1305056 Page 58 of 89

Date: 2013-05-21



### 3. 802.11b at 11Mbps of CH11



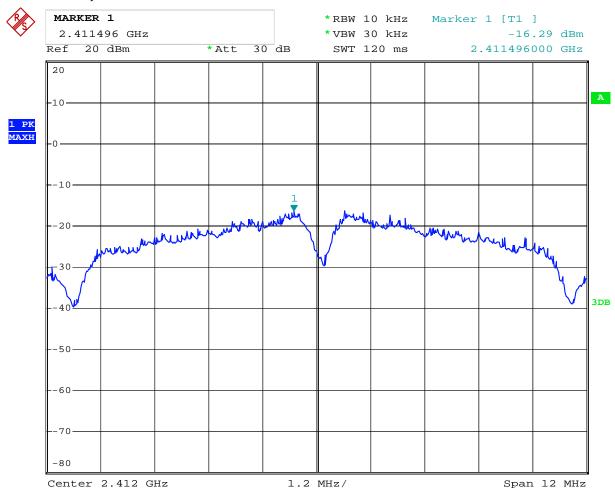
Date: 17.MAY.2013 16:56:50

Report No: 1305056 Page 59 of 89

Date: 2013-05-21



### 4. 802.11b at 1Mbps of CH1



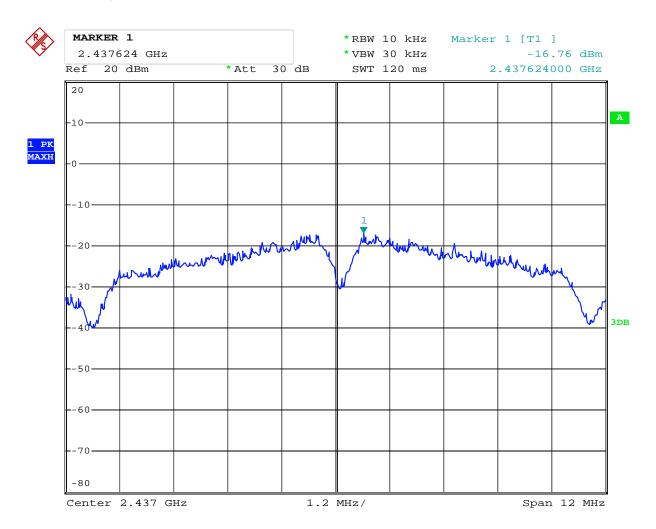
Date: 17.MAY.2013 16:54:59

Page 60 of 89

Report No: 1305056 Date: 2013-05-21



### 5. 802.11b at 1Mbps of CH6



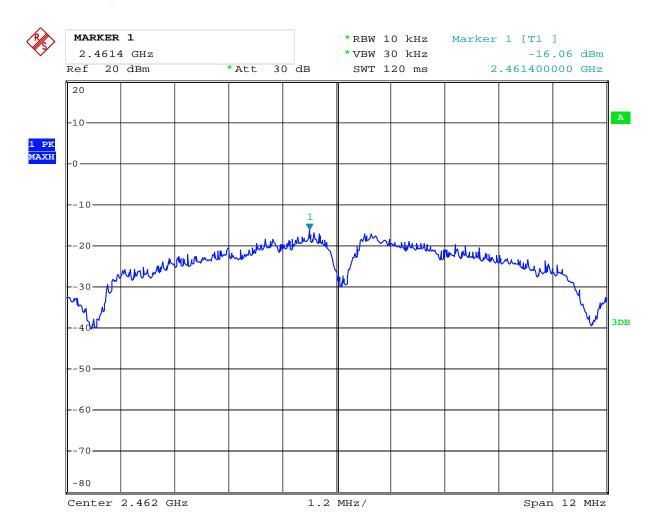
Date: 17.MAY.2013 16:55:43

Report No: 1305056 Page 61 of 89

Date: 2013-05-21



### 6. 802.11b at 1Mbps of CH11



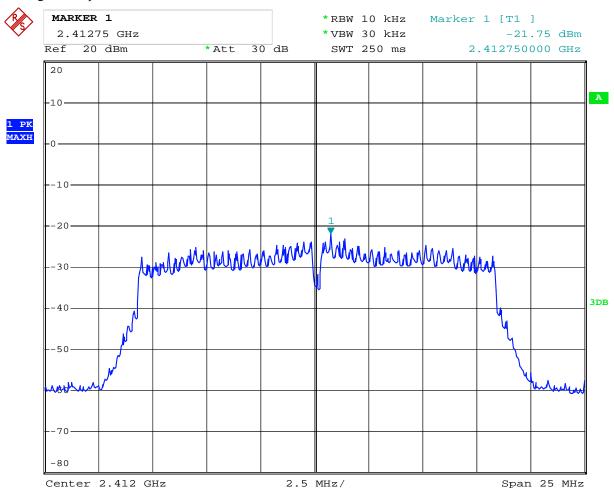
Date: 17.MAY.2013 16:56:12

Report No: 1305056 Page 62 of 89

Date: 2013-05-21



### 7. 802.11g at 6Mbps of CH1



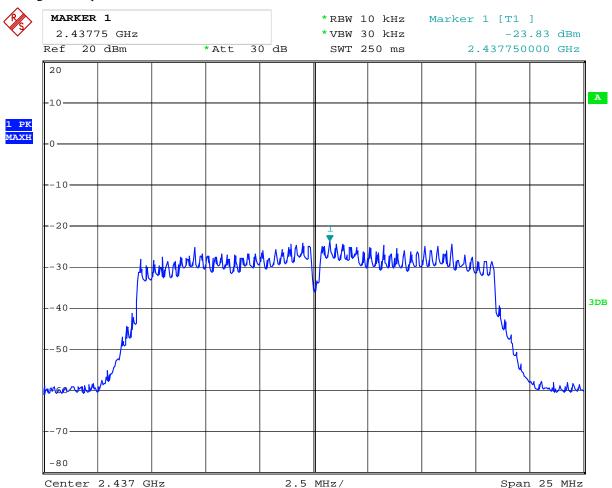
Date: 17.MAY.2013 17:00:58

Report No: 1305056 Page 63 of 89

Date: 2013-05-21



### 8. 802.11g at 6 Mbps of CH6



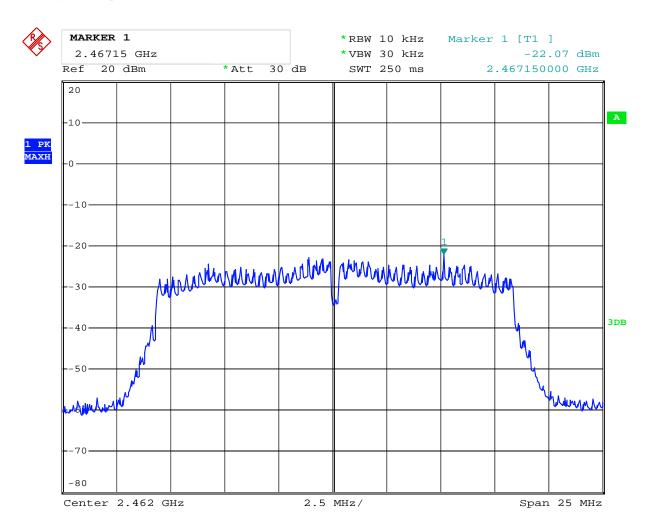
Date: 17.MAY.2013 17:02:06

Report No: 1305056 Page 64 of 89

Date: 2013-05-21



### 9. 802.11g at 6 Mbps of CH11



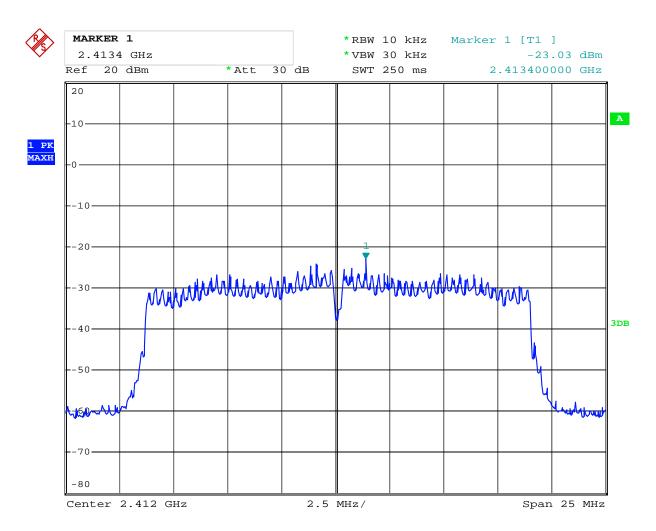
Date: 17.MAY.2013 17:02:46

Report No: 1305056 Page 65 of 89

Date: 2013-05-21



#### 10. 802.11n at HT20 of CH01



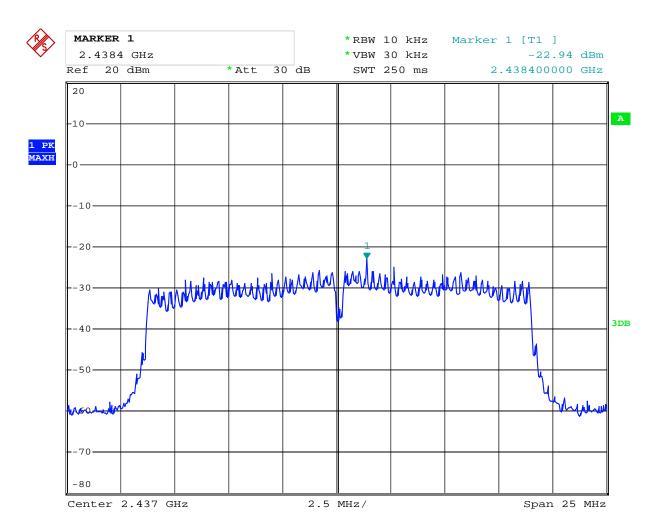
Date: 17.MAY.2013 17:05:03

Report No: 1305056 Page 66 of 89

Date: 2013-05-21



#### 11. 802.11n at HT20 of CH06



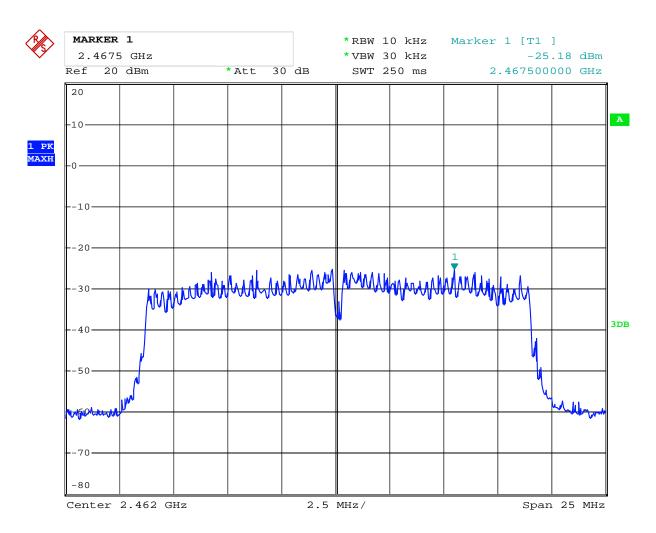
Date: 17.MAY.2013 17:04:10

Report No: 1305056 Page 67 of 89

Date: 2013-05-21



#### 12. 802.11n at HT20 of CH11



Date: 17.MAY.2013 17:03:27

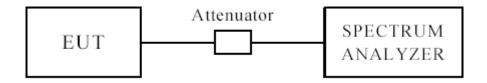
Report No: 1305056 Page 68 of 89

Date: 2013-05-21



# **10 Out of Band Measurement**

# 10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

#### 10.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

#### **10.3 Test Procedure**

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of radiated emission test.( Peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK detector)

For bandage test, the spectrum set as follows: RBW=VBW=100 kHz. A conducted measurement used

### 10.4 Test Result

Please see next pages

Note: 1. this is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), after pre-test. It was found that the worse radiated emission was get at the lying position. the worse case was recorded

2. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

Report No: 1305056 Date: 2013-05-21



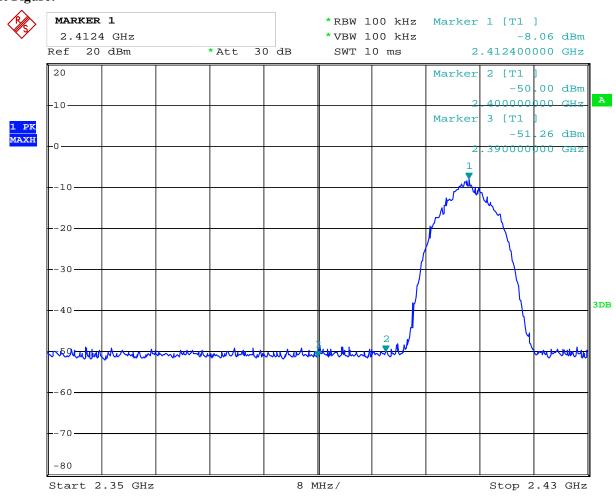
#### For 802.11b mode

### CH01 at 11Mbps

### 10.4 Band-edge and Restricted band Measurement

EUT	Ta	ablet PC	Model	0167
Mode	Keeping	g Transmitting	Input Voltage	AC 120V
Temperature	24	deg. C,	Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBμV/m)	48.21	T 10014	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)
2390	PK (dBμV/m)	39.13	Limit	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



Date: 17.MAY.2013 17:08:55

Page 70 of 89

Report No: 1305056 Date: 2013-05-21

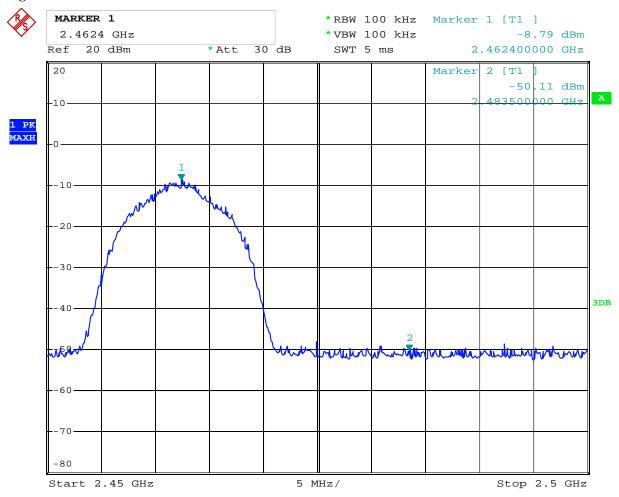


#### CH11 at 11Mbps

#### **10.4** Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167
Mode	Keeping	g Transmitting	Input Voltage	AC 120V
Temperature	24	4 deg. C,	Humidity	56% RH
Test Result:		Pass	Detector	PK
2483.5	PK (dBμV/m) 40.13		T * */	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



Date: 17.MAY.2013 17:09:53

Report No: 1305056 Date: 2013-05-21



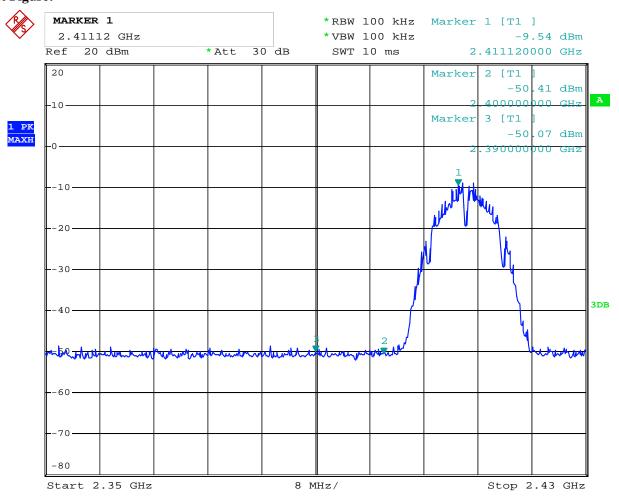
### For 802.11b mode

CH01 at 1Mbps

10.4 Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167			
Mode	Keeping Transmitting		Input Voltage	AC 120V			
Temperature	24 deg. C,		Humidity	56% RH			
Test Result:	Pass		Detector	PK			
2400	PK (dBµV/m)	46.53	Limit	$74(dB\mu V/m)$			
	AV (dBμV/m)			54(dBμV/m)			
2390	PK (dBμV/m)	39.73	Limit	74(dBμV/m)			
	AV (dBμV/m)			54(dBμV/m)			

#### **Test Figure:**



Date: 17.MAY.2013 17:07:31

Page 72 of 89

Report No: 1305056 Date: 2013-05-21

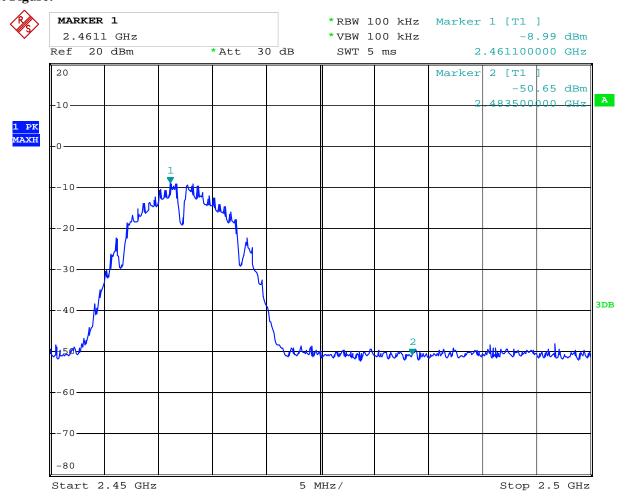


#### CH11 at 1Mbps

#### **10.4** Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167
Mode	Keeping Transmitting		Input Voltage	AC 120V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	40.56	Limit	74(dBμV/m)
	AV (dBμV/m)			54(dBμV/m)

#### **Test Figure:**



Date: 17.MAY.2013 17:10:27

Page 73 of 89

Report No: 1305056 Date: 2013-05-21



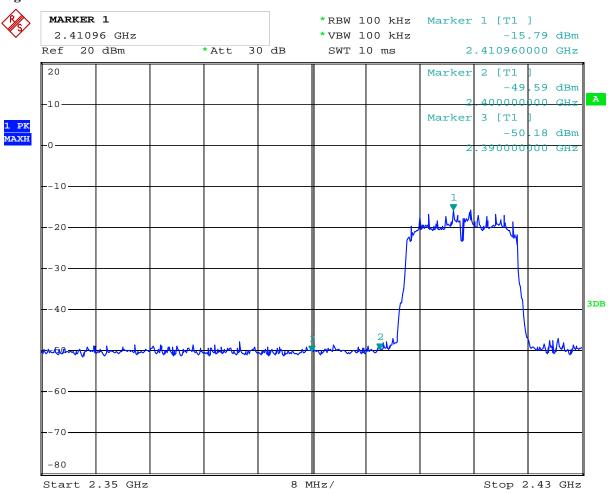
# For 802.11g mode

CH01 at 6Mbps

### **10.4** Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167
Mode	Keeping Transmitting		Input Voltage	AC 120V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBμV/m)	50.46	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	$54(dB\mu V/m)$
2390	PK (dBμV/m)	41.37	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Liffilt	54(dBμV/m)

## **Test Figure:**



Date: 17.MAY.2013 17:07:00

Page 74 of 89

Report No: 1305056 Date: 2013-05-21

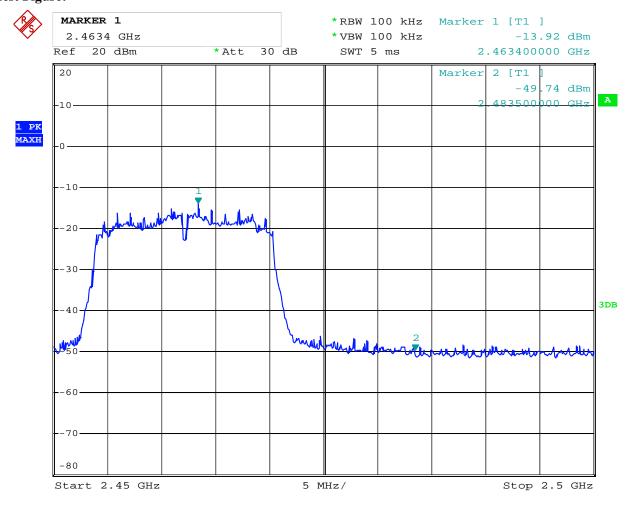


### CH11 at 6Mbps

## **10.4** Band-edge and Restricted band Measurement

EUT	Ta	Tablet PC		lel	0167	
Mode	Keeping Transmitting		Input Voltage		AC 120V	
Temperature	24 deg. C,		Humidity		56% RH	
Test Result:	Pass		Detec	ctor	PK	
2483.5	PK (dBµV/m)	42.04	T ::4	74(dBμV/m)		
	AV (dBμV/m)		Limit		54(dBμV/m)	

# **Test Figure:**



Date: 17.MAY.2013 17:11:28

Page 75 of 89

Report No: 1305056 Date: 2013-05-21



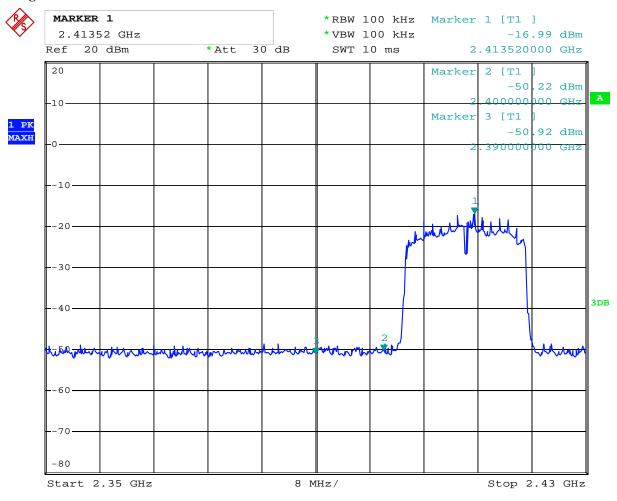
# For 802.11n (HT20) mode

CH01 at 6.5Mbps

# 10.4 Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167
Mode	Keeping Transmitting		Input Voltage	AC 120V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBμV/m)	48.92	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBµV/m)
2390	PK (dBµV/m)	42.73	Limit	74(dBµV/m)
	AV (dBμV/m)		Lillit	54(dBµV/m)

### **Test Figure:**



Date: 17.MAY.2013 17:05:51

Page 76 of 89

Report No: 1305056 Date: 2013-05-21

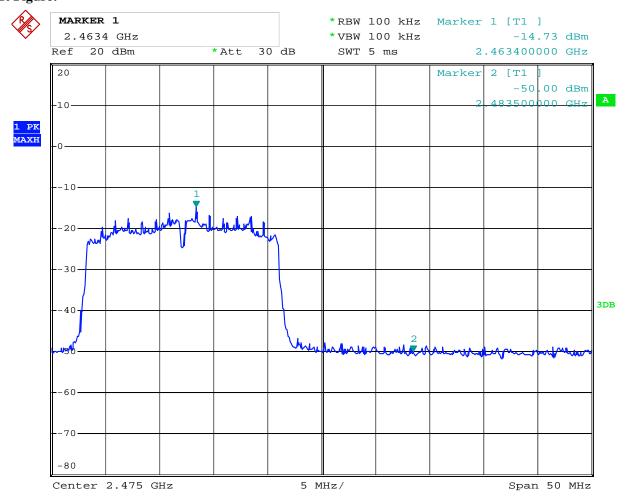


### CH11 at 6.5Mbps

#### **10.4** Band-edge and Restricted band Measurement

EUT	Tablet PC		Model	0167
Mode	Keeping Transmitting		Input Voltage	AC 120V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	42.43	Timil	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

# **Test Figure:**



Date: 17.MAY.2013 17:12:47

Report No: 1305056 Page 77 of 89

Date: 2013-05-21



# 11.0 Antenna Requirement

## 11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

### 11.2 Antenna Connected construction

Integral Antenna used. The maximum Gain of the antennas is 3.0dBi.

Report No: 1305056 Page 78 of 89

Date: 2013-05-21



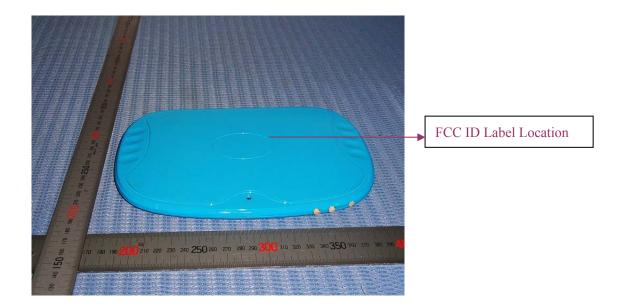
### 12.0 FCC ID Label

# **FCC ID: 2AAFSCP7891068**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### Mark Location:



Report No: 1305056 Page 79 of 89

Date: 2013-05-21



#### 13.0 **Photo of testing**

Conducted Emission Test Setup:



Report No: 1305056 Date: 2013-05-21



# Radiated Emission Test Setup:





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: 1305056 Date: 2013-05-21



# Photographs - EUT

### Outside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to

Page 82 of 89

Report No: 1305056 Date: 2013-05-21



Outside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd vill not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co.,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Page 83 of 89

Report No: 1305056 Date: 2013-05-21



Outside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to

Page 84 of 89

Report No: 1305056 Date: 2013-05-21



# Outside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to

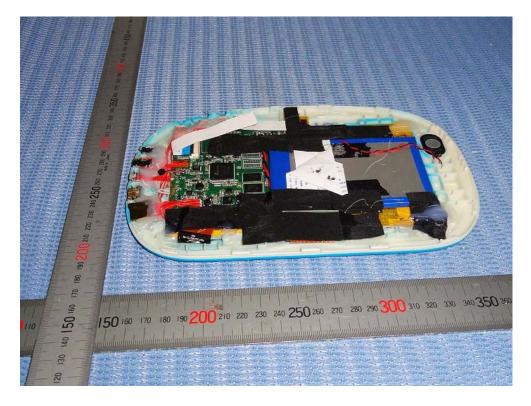
Page 85 of 89

Report No: 1305056 Date: 2013-05-21



### Inside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

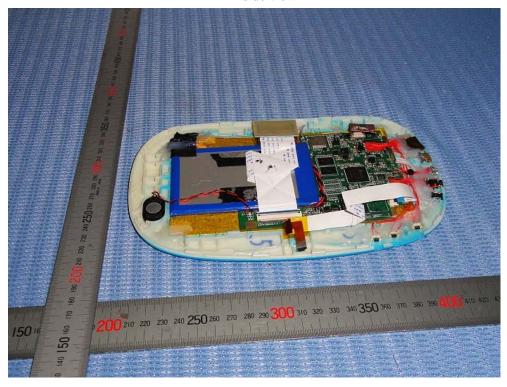
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to

Page 86 of 89

Report No: 1305056 Date: 2013-05-21



Inside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Page 87 of 89

Report No: 1305056 Date: 2013-05-21



# Inside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co .,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

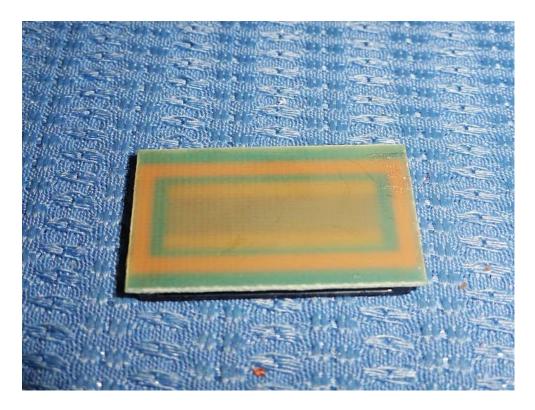
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co .,Ltd reserves the rights to withdraw it and to

Report No: 1305056 Date: 2013-05-21



### Inside view





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co.,Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it. or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co.,Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co.,Ltd vill not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

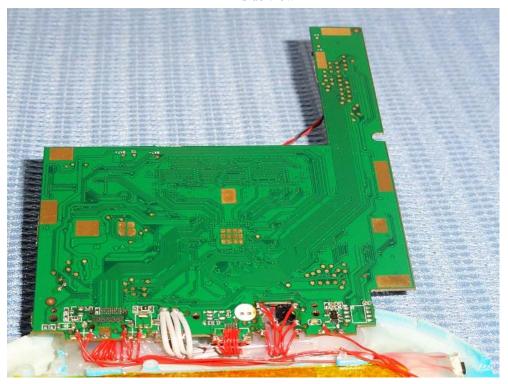
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co.,Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: 1305056 Page 89 of 89

Date: 2013-05-21



### Inside view



End of the report