

# FCC Test Report

Part 15 subpart C

### **Client Information:**

Applica	nt:	Proexpress Distrib	utor LLC	
Applicant ad	d.:	11011 GREENWO	OD AVE.N APT	۲5,SEATTLE,WA 98103
Product Informatio	n:			
EUT Nam	ne:	Tablet PC		
Model N	o.:	Y88X, Y88X Plus, Y88X Pro, Y88X Ultimate, Y88X HD, Y88X 4th Generation Y88X For Kids <b>(Details refer to page 4)</b>		
Brand Nam	ne:	DRAGON TOUCH, KINGPAD, AKASO, KINGSLIM		
FCC	ID:	S5V-D107A4		
Standard	s:	FCC PART 15 Su	bpart C: 2013	section 15.247
Prepared B	y:			
	[	Dongguan Yaxu (Ai	T) Technology	y Limited
Add.		No.22, Jinqianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China		
Date of Receipt: Dec.	06, 2	2015	Date of Test:	Dec. 06~ Dec. 16, 2015
Date of Issue: Dec.	17, 2	2015	Test Result:	Pass

This device described above has been tested by Dongguan Yaxu(AiT) Technology Limited, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report. \*This test report must not be used by the client to claim product endorsement by any agency of

the U.S. government.

Reviewed by: \_\_\_\_\_\_ Seal-Chen

Approved by:

Dongguan Yaxu (AiT) Technology Limited No.22, Jingianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China



## 1 Contents

<u></u>	OVER I	PACE	Page
1		DNTENTS	2
2	VE	ERSION	3
3	TE	ST SUMMARY	4
	3.1	COMPLIANCE WITH FCC PART 15 SUBPART C	4
	3.2	MEASUREMENT UNCERTAINTY	5
	3.3	TEST LOCATION	5
4	TE	ST FACILITY	6
	4.1	DEVIATION FROM STANDARD	6
	4.2	ABNORMALITIES FROM STANDARD CONDITIONS	6
5	GE	ENERAL INFORMATION	7
	5.1	GENERAL DESCRIPTION OF EUT	7
	5.2	EUT PERIPHERAL LIST	9
	5.3	TEST PERIPHERAL LIST	9
6	EC	QUIPMENTS LIST FOR ALL TEST ITEMS	10
7	TE	ST RESULT	11
	7.1	DESCRIPTION OF TEST CONDITIONS	11
	7.2	ANTENNA REQUIREMENT	12
	7.3	CONDUCTION EMISSIONS MEASUREMENT	13
	7.4	RADIATED EMISSIONS MEASUREMENT	17
	7.5	6 dB Bandwidth	73
	7.6	6 dB Bandwidth	73
	7.7	MAXIMUM PEAK OUTPUT POWER	82
	7.8	Peak Power Spectral Density	84
	7.9	BAND EDGES REQUIREMENT	93
	7.10	CONDUCTED SPURIOUS EMISSIONS	99
8	PH	IOTOGRAPHS	124
	8.1	RADIATED SPURIOUS EMISSION TEST SETUP	124
	8.2	CONDUCTED EMISSION TEST SETUP	125



## 2 Version

Revision Record					
Version	Chapter	Date	Modifier	Remark	
00		Dec. 11, 2015			



## 3 Test Summary

## 3.1 Compliance with FCC Part 15 subpart C

TEST	TEST REQUIREMENT	TEST METHOD	RESULT
Antenna Requirement	FCC PART 15 C section 15.247 (c) and Section 15.203	FCC PART 15 C section 15.247 (c) and Section 15.203	PASS
Conducted Emissions at Mains Terminals	FCC PART 15 C section 15.207	ANSI C63.10: Clause 6.2	PASS
Radiated Spurious Emission 30 MHz to 25 GHz)	FCC PART 15 C section 15.209 &15.247(d)	ANSI C63.10: Clause 6.4, 6.5 and 6.6	PASS**
6 dB Bandwidth	FCC PART 15 C section 15.247 (a)(2)	ANSI C63.10: Clause 6.9.1	PASS
Maximum Peak Output Power	FCC PART 15 C section 15.247(b)(3)	FCC/KDB-558074 D01 v03r03 Clause 9.1.2	PASS
Peak Power Spectral Density	FCC PART 15 C section 15.247(e)	ANSI C63.10: Clause 6.11.2.3	PASS
Band Edges Measurement	FCC PART 15 C section 15.247 (d) &15.205	FCC/KDB-558074 D01 v03r03 Clause 13.3.1	PASS
Conducted Spurious Emission (30MHz to 25GHz)	FCC PART 15 C section 15.209 &15.247(d)	ANSI C63.10: Clause 6.7	PASS

#### Remark:

N/A: not applicable. Refer to the relative section for the details.

EUT: In this whole report EUT means Equipment Under Test.

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radio Frequency.

ANSI C63.10: the detail version is ANSI C63.10:2009 in the whole report.

The pouduct support for Bluetooth and WiFi mode, this report is test for WiFi mode, for Bluetooth mode please refers to the report number E-F1512010-1.

According to the confirmation from the applicant, since the electrical circuit design, layout, components used and internal wiring were identical for the all models, with only difference being the memory, pixels and the model name and brand name.

Therefore only one model Y88X was tested in this report.



### 3.2 Measurement Uncertainty

All measurements involve certain levels of uncertainties, the following measurements uncertainty Levels have estimated based on standards, the maximum value of the uncertainty as below:

No.	Item	Uncertainty
1	Conducted Emission Test	1.20dB
2 Radiated Emission Test		3.30dB

### 3.3 Test Location

All tests were performed at:

Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang,Dongguan, Guangdong, China Tel.: +86.769.82020499 Fax.: +86.769.82020495



## 4 Test Facility

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

#### .CNAS- Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2005 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on Apr. 18, 2013

#### .FCC- Registration No: 248337

The 3m Semi-Anechoic Chamber, 3m/10m Open Area Test Site and Shielding Room of Dongguan Yaxu (AiT) Technology Limited have been registered by Federal Communications Commission (FCC) on Aug.29, 2014.

#### .Industry Canada(IC)-Registration No: IC6819A

The 3m Semi-Anechoic Chamber and 3m/10m Open Area Test Site of Dongguan Yaxu (AiT) Technology Limited have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing on Oct. 01, 2014.

#### .VCCI- Registration No: 2705

The 3m/10m Open Area Test Site, Shielding Room and 3m Chamber of Dngguan Yaxu (AiT) technology Limited have been registered by Voluntary Control Council for Interference on Nov. 21, 2012. The Telecommunication Ports Conducted Disturbance Measurement of Asia Institute Technology (Dongguan) Limited have been registered by Voluntary Control Council for Interference on May. 13, 2013.

### 4.1 Deviation from standard

None

### 4.2 Abnormalities from standard conditions

None



## **5** General Information

## 5.1 General Description of EUT

Manufacturer:	Proexpress Distributor LLC	
Manufacturer Address:	11011 GREENWOOD AVE.N APT 5,SEATTLE,WA 98103	
EUT Name:	Tablet PC	
Model No:	Y88X	
Brand Name:	DRAGON TOUCH, KINGPAD, AKASO, KINGSLIM	
Derivative model No.:	Y88X Plus, Y88X Pro, Y88X Ultimate, Y88X HD, Y88X 4th Generation, Y88X For Kids	
Operation frequency:	2412 MHz to 2462 MHz for 802.11b/g/n(HT20) 2422 MHz to 2452 MHz for 802.11n(HT40)	
Number of Channels:	11 Channels for 802.11b/g/n(HT20) 7 Channels for 802.11n(HT40)	
Modulation Technology:	802.11b: CCK/QPSK/BPSK 802.11g/n: BPSK/QPSK/16QAM/64QAM	
Transmit Data Rate:	802.11b :1/2/5.5/11 Mbps 802.11g :6/9/12/18/24/36/48/54 Mbps 802.11n(HT20): 7.2/14.4/21.7/28.9/43.3/57.8/65/72.2 Mbps 802.11n(HT40): 15/30/45/60/90/120/135/150 Mbps	
Channel Separation:	5 MHz	
Antenna Type:	Internal antenna	
Antenna Gain:	maximum 1.86 dBi	
H/W No.:	1.0	
S/W No.:	1.0	
Power Supply Range:	DC 5V from adapter, AC 120V/60Hz for adapter or DC 3.7V from battery	
Power Cord:	N/A	
Note:		
1.	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	



#### EUT channels and frequencies list:

1. Test frequencies are lowest channel: 2412 MHz, middle channel: 2437 MHz and highest channel: 2462 MHz for 802.11b/g/n(HT20)

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

 Test frequencies are lowest channel: 2422 MHz, middle channel: 2437 MHz and highest channel: 2452 MHz for 802.11n(HT40)

Channel	nannel Frequency Channel (MHz)		Frequency (MHz)
3	2422	7	2442
4	2427	8	2447
5	2432	9	2452
6	2437		



## 5.2 EUT Peripheral List

No	Equipment	Manufacturer	Model No.	Serial No.	Power cord	signal cable
1	Adapter	Shenzhen Wei Yi Tong Electronic Co., Ltd	WTA0502000 USB2	N/A	1.2m/unshielded /detachable	N/A

## 5.3 Test Peripheral List

No	Equipment	Manufacturer	Model No.	Serial No.	Power cord	signal cable
1	N/A	N/A	N/A	N/A	N/A	N/A



## 6 Equipments List for All Test Items

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	ADVANTEST	R3182	150900201	2015.06.29	2016.06.28
2	EMI Measuring Receiver	- R&S		101660	2015.06.29	2016.06.28
3	Low Noise Pre Amplifier	Tsj	MLA-10K01-B01-2 7	1205323	2015.06.29	2016.06.28
4	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2015.06.29	2016.06.28
5	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9160	9160-3206	2015.06.29	2016.06.28
6	Broadband Horn Antenna	SCHWARZBECK	BBHA9120D	452	2015.06.29	2016.06.28
7	SHF-EHF Horn	SCHWARZBECK	BBHA9170	BBHA917036 7	2015.06.29	2016.06.28
8	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2015.06.29	2016.06.28
9	EMI Test Receiver	R&S	ESCI	100124	2015.06.29	2016.06.28
10	LISN	Kyoritsu	KNW-242	8-837-4	2015.06.29	2016.06.28
11	LISN	Kyoritsu	KNW-407	8-1789-3	2015.06.29	2016.06.28
12	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2015.06.29	2016.06.28
13	Loop Antenna	ARA	PLA-1030/B	1029	2015.06.29	2016.06.28
14	Radiated Cable 1# (30MHz-1GHz)	FUJIKURA	5D-2W	01	2015.06.29	2016.06.28
15	Radiated Cable 2# (1GHz -25GHz)	FUJIKURA	10D2W	02	2015.06.29	2016.06.28
16	Conducted Cable 1#(9KHz-30MHz)	FUJIKURA	1D-2W	01	2015.06.29	2016.06.28
17	SMA Antenna connector	Dosin	Dosin-SMA	N/A	N/A	N/A
18	Power Meter	Anritsu	ML2495A	N/A	2015.06.29	2016.06.28
19	Power sensor	Anritsu	MA2411B	N/A	2015.06.29	2016.06.28
Note	: The SMA antenna conn SMA antenna connector			der to perform co	onducted tests a	nd this

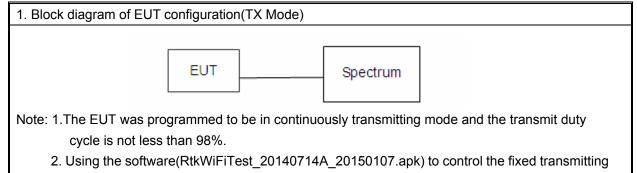


## 7 Test Result

## 7.1 Description of Test conditions

(1) EUT was tested in normal configuration (Please See following Block diagram)

power index A(0-63): 45, frequency, date rate and other test mode



(2) E.U.T. test conditions:

15.31(e): For intentional radiators, measurements of the variation of the input power or the adiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

15.32: Power supplies and CPU boards used with personal computers and for which separate authorizations are required to be obtained shall be tested as follows: Testing shall be in accordance with the procedures specified in Section 15.31 of this part.

(3) Test frequencies:

According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and. If required reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table:

Frequency range over	Number of	Location in
which device operates	frequencies	the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More then 10 MUz	2	1 near top, 1 near middle and
More than 10 MHz	3	1 near bottom

(4) Frequency range of radiated measurements:

According to the 15.33, the test range will be up to the tenth harmonic of the highest fundamental frequency.

(5) Pre-test the EUT in all transmitting mode at the lowest, middle and highest channel with different data rate and conducted to determine the worst-case mode, only the worst-case results are recorded in this report.



## 7.2 Antenna Requirement

#### 7.2.1 Standard requirement

15.203 requirement: For intentional device, according to 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.

15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

#### 7.2.2 EUT Antenna

The antenna is Internal antenna and no consideration of replacement. Antenna gain is maximum 1.86dBi from 2.4GHz to 2.5GHz.



## 7.3 Conduction Emissions Measurement

Test Requirement:	FCC Part 15 C section 15.207
Test Method:	ANSI C63.10: Clause 6.2
Frequency Range:	150 kHz to 30 MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

Test Limit

#### Limits for conducted disturbance at the mains ports of class B

Frequency Range	Class B Limit (dBuV)				
(MHz)	Quasi-peak	Average			
0.15 to 0.50	66 to 56	56 to 46			
0.50 to 5	56	46			
5 to 30	60	50			
NOTE 1 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.					

**EUT Operation:** Test in normal operating mode. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

#### Test procedure

1. The mains terminal disturbance voltage test was conducted in a shielded room.

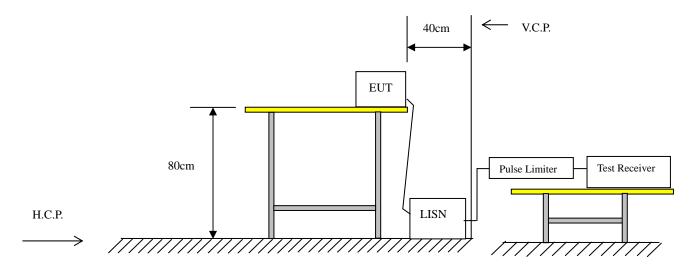
2. The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a  $50\Omega/50\mu$ H +  $5\Omega$  linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.

4. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0,4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0,8 m from the LISN 2.



#### **Test setup**



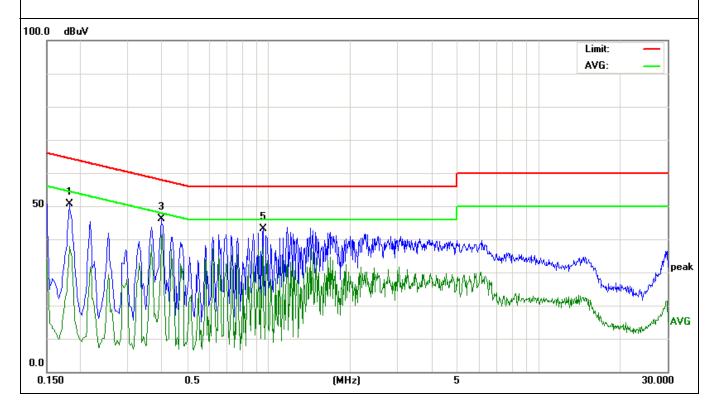


### 7.3.1 Test results

EUT:	Tablet PC	Model Name. :	Y88X		
Temperature:	<b>26</b> ℃	Relative Humidity:	54%		
Pressure:	1010hPa	Test Date :	2015-12-10		
Test Made	TX (802.11b:11Mbps)	Dhase :	Line		
Test Mode:	CH1 (worst case)	Phase :	Line		
Test Voltage :	DC 5V from adapter, AC 120V/60Hz for adapter				

Frequency (MHz)	Meter Reading (dBµV)	Factor(dB)	Emission Level (dBµV)	Limits (dBµV)	Over (dB)	Detector
0.1819	39.24	11.36	50.60	64.39	-13.79	Quasi-Peak
0.1819	26.49	11.36	37.85	54.39	-16.54	Average
0.3980	35.89	10.13	46.02	57.89	-11.87	Quasi-Peak
0.4020	31.41	10.12	41.53	47.81	-6.28	Average
0.9500	33.11	9.94	43.05	56.00	-12.95	Quasi-Peak
0.9500	27.64	9.94	37.58	46.00	-8.42	Average

Remark: Factor = LISN factor + Cable Loss + Pulse limiter factor.

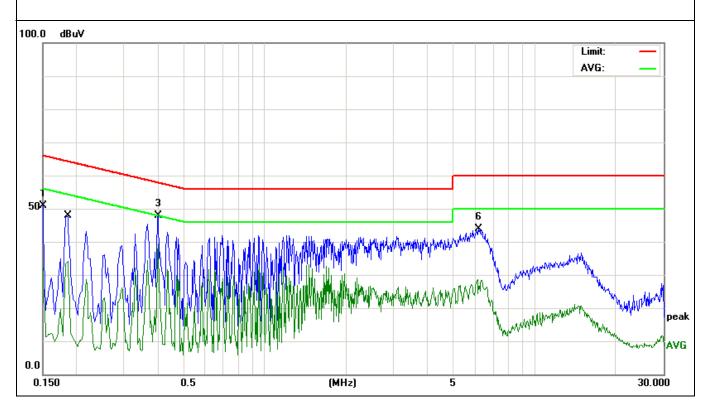




EUT:	Tablet PC	Model Name. :	Y88X		
Temperature:	<b>26</b> ℃	Relative Humidity:	54%		
Pressure:	1010hPa	Test Date :	2015-12-10		
Test Mode:	TX (802.11b:11Mbps)	Phase :	Neutral		
Test Mode:	CH1 (worst case)	Flidse .	neuliai		
Test Voltage :	DC 5V from adapter, AC 120V/60Hz for adapter				

Frequency (MHz)	Meter Reading (dBµV)	Factor(dB)	Emission Level (dBµV)	Limits (dBµV)	Over (dB)	Detector
0.1500	39.06	11.94	51.00	65.99	-14.99	Quasi-Peak
0.1860	22.73	11.31	34.04	54.21	-20.17	Average
0.4020	37.66	10.12	47.78	57.81	-10.03	Quasi-Peak
0.4020	29.31	10.12	39.43	47.81	-8.38	Average
6.1220	18.39	10.13	28.52	50.00	-21.48	Quasi-Peak
6.2020	33.63	10.13	43.76	60.00	-16.24	Average

Remark: Factor = LISN factor + Cable Loss + Pulse limiter factor.





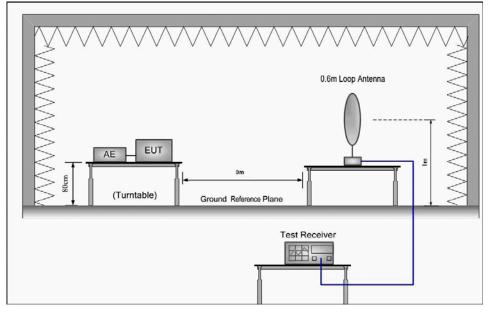
## 7.4 Radiated Emissions Measurement

Test Requirement:	FCC Part 15 C section 15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating. The radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that Contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, and provided the transmitter demonstrates compliance with the peak conducted power limits.
Test Method:	ANSI C63.10: Clause 6.4, 6.5 and 6.6
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery. For PK value:
Detector:	
	RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for $f < 1$ GHz
	VBW ≥ RBW
	Sweep = auto
	Detector function = peak
	Trace = max hold
	For AV value:
	RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for $f < 1$ GHz
	VBW =10Hz
	Sweep = auto
	Detector function = peak
	Trace = max hold
15.209 Limit:	40.0 dB $\mu$ V/m between 30MHz & 88MHz 43.5 dB $\mu$ V/m between 88MHz & 216MHz 46.0 dB $\mu$ V/m between 216MHz & 960MHz 54.0 dB $\mu$ V/m above 960MHz

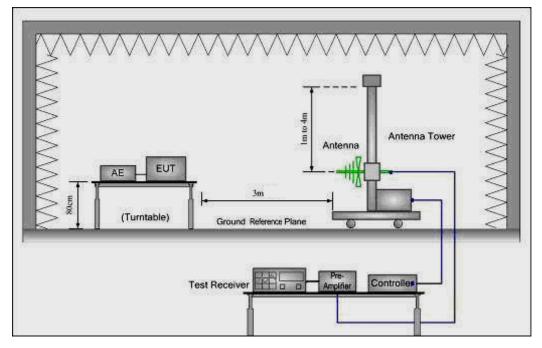


#### **Test Configuration:**

1) 9 kHz to 30 MHz emissions:

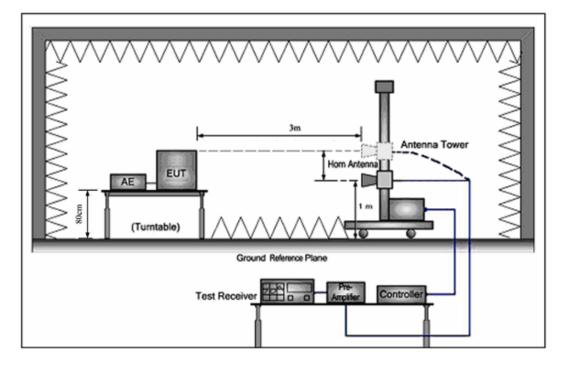


2) 30 MHz to 1 GHz emissions:





3) 1 GHz to 40 GHz emissions:



Report No.: E-F1512010-2 Page 20 of 125 Rev: 00



#### Test procedure:

Test site with RF absorbing material covering the ground plane that met the site validation criterion called out in CISPR 16-1-4:2007 was used to perform radiated emission test above 1 GHz.

The receiver was scanned from 30MHz to 25GHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.

From 30MHz to 1GHz, read the Quasi-Peak field strength of the emissions with receiver QP detector RBW=120KHz.

Above 1GHz, read the Peak field strength and Average field strength.

Read the Peak field strength through RBW=1MHz,VBW=3MHz in spectrum analyzer setting;

Read the Average field strength through RBW=1MHz,VBW=10Hz in spectrum analyzer setting;

For measurement at frequency above 1GHz

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

While maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the dwell time per channel of the hopping signal is less than 100 ms, then the average field strength reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from 20log(dwell time/100 ms), in an effort to demonstrate compliance with the 15.209 limit.



### 7.4.1 Test Result

### 7.4.1.1 Radiated Emissions Test Data Below 30MHz

EUT:	Tablet PC	Model Name :	Y88X		
Temperature:	<b>25</b> ℃	Test Data	2015-12-10		
Pressure:	1005 hPa	Relative Humidity:	60%		
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery		
Measurement Distance	3 m Frenqucy Range 9KHz to 30MHz				
RBW/VBW	9KHz~150KHz/RB 200Hz for QP, 150KHz~30MHz/RB 9KHz for QP				

No emission found between lowest internal used/generated frequencies to 30MHz.



#### 7.4.1.2 802.11b mode with 11Mbps data rate

EUT:	Tablet PC	Model Name :	Y88X		
Temperature:	<b>25</b> ℃	Test Data	2015-12-10		
Pressure:	1010 hPa	Relative Humidity:	60%		
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery		
Measurement Distance	3 m Frenqucy Range 30MHz to 1GHz				
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.				

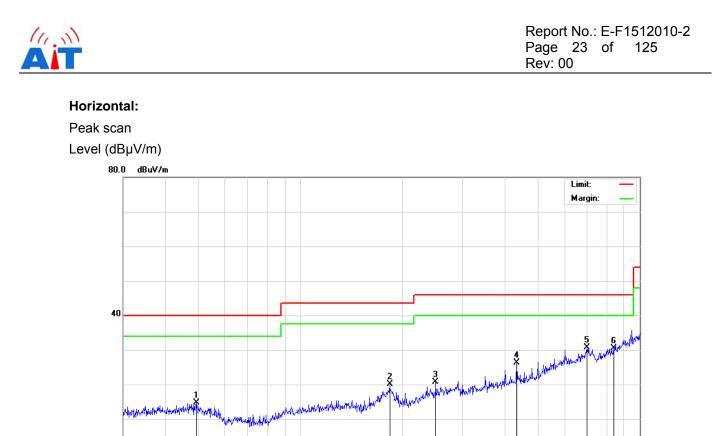
Test at Channel 1 (2.412 GHz) in transmitting status

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement Vertical: Peak scan Level (dBµV/m) 80.0 dBuV/m Limit: Margin: 40 ŝ 5 Advand 0.0 30.000 50 60 70 80 (MHz) 300 1000.000 400 500 600 700 40

Quasi-peak measurement

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.7661	36.34	-16.72	19.62	40.00	-20.38	QP
2		126.7723	32.19	-15.07	17.12	43.50	-26.38	QP
3		225.3079	32.77	-13.56	19.21	46.00	-26.79	QP
4		455.9057	36.68	-6.92	29.76	46.00	-16.24	QP
5		601.4265	31.19	-0.89	30.30	46.00	-15.70	QP
6	*	801.7862	29.67	3.30	32.97	46.00	-13.03	QP

Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang,Dongguan, Guangdong, China



Quasi-peak measurement

40

50 60

70 80

0.0 30.000

No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		49.3594	28.83	-14.21	14.62	40.00	-25.38	QP
2		183.2005	30.58	-10.48	20.10	43.50	-23.40	QP
3		250.3011	31.89	-11.09	20.80	46.00	-25.20	QP
4		434.0650	32.98	-6.61	26.37	46.00	-19.63	QP
5	*	699.3046	30.25	0.44	30.69	46.00	-15.31	QP
6		839.1817	29.44	1.07	30.51	46.00	-15.49	QP

(MHz)

300

400

500 600 700

1000.000



Report No.: E-F1512010-2 Page 24 of 125 Rev: 00

EUT:	Tablet PC	Model Name :	Y88X	
Temperature:	emperature: 25 °C		2015-12-10	
Pressure:	1010 hPa	Relative Humidity:	60%	
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery	
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz	
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.			
	non-restricted band: 100KHz/300KHz for Peak.			

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

		intai				
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4824.000	55.35	5.08	60.43	74.00	-13.57	PEAK
4824.000	43.68	5.08	48.76	54.00	-5.24	AVERAGE
7236.000	48.72	7.16	55.88	74.00	-18.12	PEAK
7236.000	38.39	7.16	45.55	54.00	-8.45	AVERAGE

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4824.000	55.33	5.08	60.41	74.00	-13.59	PEAK
4824.000	42.47	5.08	47.55	54.00	-6.45	AVERAGE
7236.000	47.86	7.16	55.02	74.00	-18.98	PEAK
7236.000	36.28	7.16	43.44	54.00	-10.56	AVERAGE



EUT:	Tablet PC	Model Name :	Y88X				
Temperature:	<b>25</b> ℃	Test Data	2015-12-10				
Pressure:	1010 hPa	Relative Humidity:	60%				
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery				
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz				
RBW/VBW	00KHz / 300KHz for spectrum, RBW=120KHz for receiver.						

Test at Channel 6 (2.437 GHz) in transmitting status

eak scan											
evel (dBµV/m)											
80.0 dBuV/	m										
										Limit:	<u> </u>
										Margin:	
									<u> </u>		
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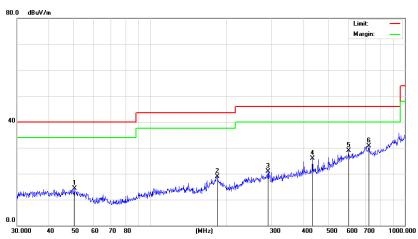
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.1550	34.94	-16.72	18.22	40.00	-21.78	QP
2		104.1701	30.15	-13.63	16.52	43.50	-26.98	QP
3		249.4250	31.05	-11.14	19.91	46.00	-26.09	QP
4	4	480.5276	33.39	-5.90	27.49	46.00	-18.51	QP
5		601.4265	31.32	-0.89	30.43	46.00	-15.57	QP
6	*	900.1473	33.00	2.80	35.80	46.00	-10.20	QP



#### Horizontal:

Peak scan

Level (dBµV/m)



Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		50.4089	28.66	-14.36	14.30	40.00	-25.70	QP
2	,	183.2005	29.29	-10.48	18.81	43.50	-24.69	QP
3		290.0172	30.68	-9.68	21.00	46.00	-25.00	QP
4		434.0650	32.52	-6.61	25.91	46.00	-20.09	QP
5	(	601.4265	30.70	-1.74	28.96	46.00	-17.04	QP
6	* .	721.7259	31.15	-0.41	30.74	46.00	-15.26	QP



Report No.: E-F1512010-2 Page 27 of 125 Rev: 00

EUT:	Tablet PC	Model Name :	Y88X					
Temperature:	<b>25</b> ℃	Test Data	2015-12-10					
Pressure:	1010 hPa	Relative Humidity:	60%					
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery					
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz					
RBW/VBW	Spurious emission: 1MHz/3MHz fo	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.						
	non-restricted band: 100KHz/300K	non-restricted band: 100KHz/300KHz for Peak.						

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

		inter				
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	56.31	5.13	61.44	74.00	-12.56	PEAK
4874.000	43.43	5.13	48.56	54.00	-5.44	AVERAGE
7311.000	47.20	7.49	54.69	74.00	-19.31	PEAK
7311.000	36.67	7.49	44.16	54.00	-9.84	AVERAGE

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	55.84	5.13	60.97	74.00	-13.03	PEAK
4874.000	40.32	5.13	45.45	54.00	-8.55	AVERAGE
7311.000	47.50	7.49	54.99	74.00	-19.01	PEAK
7311.000	35.43	7.49	42.92	54.00	-11.08	AVERAGE



EUT:	Tablet PC	Model Name :	Y88X				
Temperature:	<b>25</b> ℃	Test Data	2015-12-10				
Pressure:	1010 hPa	Relative Humidity:	60%				
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery				
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz				
RBW/VBW	00KHz / 300KHz for spectrum, RBW=120KHz for receiver.						

Test at Channel 11 (2.462 GHz) in transmitting status

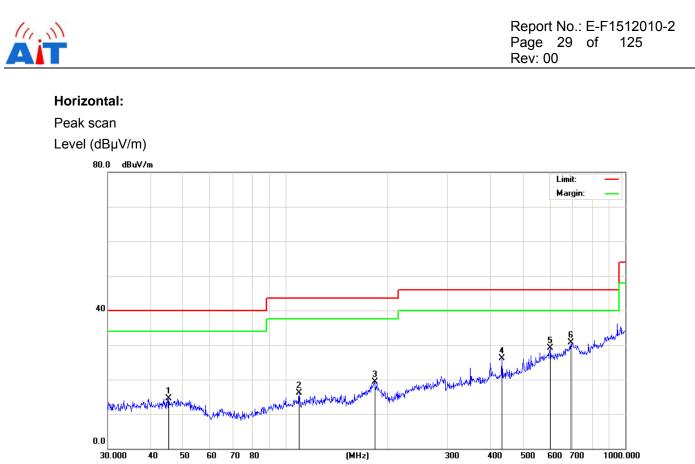
Vertical:

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement

80.0	dBu¥/m										.imit: Margin:	_
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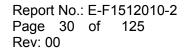
Quasi-peak measurement

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.1550	35.74	-16.72	19.02	40.00	-20.98	QP
2		109.7960	30.44	-13.40	17.04	43.50	-26.46	QP
3		188.4124	31.77	-14.57	17.20	43.50	-26.30	QP
4		333.6865	29.06	-8.66	20.40	46.00	-25.60	QP
5		560.6928	31.51	-3.44	28.07	46.00	-17.93	QP
6	*	801.7862	28.63	3.30	31.93	46.00	-14.07	QP



Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		45.3755	29.02	-14.43	14.59	40.00	-25.41	QP
2		109.7960	31.58	-15.40	16.18	43.50	-27.32	QP
3		183.2005	29.82	-10.48	19.34	43.50	-24.16	QP
4		434.0650	32.80	-6.61	26.19	46.00	-19.81	QP
5		601.4265	30.88	-1.74	29.14	46.00	-16.86	QP
6	*	691.9867	30.85	-0.16	30.69	46.00	-15.31	QP





EUT:	Tablet PC	Model Name :	Y88X		
Temperature:	<b>25</b> ℃	Test Data	2015-12-10		
Pressure:	1010 hPa	Relative Humidity:	60%		
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery		
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz		
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.				
	non-restricted band: 100KHz/300KHz for Peak.				

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

		inter				
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4924.000	54.17	5.18	59.35	74.00	-14.65	PEAK
4924.000	41.65	5.18	46.83	54.00	-7.17	AVERAGE
7386.000	48.23	7.82	56.05	74.00	-17.95	PEAK
7386.000	35.86	7.82	43.68	54.00	-10.32	AVERAGE

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4924.000	55.21	5.18	60.39	74.00	-13.61	PEAK
4924.000	39.76	5.18	44.94	54.00	-9.06	AVERAGE
7386.000	49.45	7.82	57.27	74.00	-16.73	PEAK
7386.000	36.12	7.82	43.94	54.00	-10.06	AVERAGE

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Loss –Preamplifier Factor.

As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

No any other emissions level which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.



### 7.4.1.3 802.11g mode with 54Mbps data rate

EUT:	Tablet PC	Model Name :	Y88X
Temperature:	<b>25</b> ℃	Test Data	2015-12-10
Pressure:	1010 hPa	Relative Humidity:	60%
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz
RBW/VBW	100KHz / 300KHz for spectrum, RB	N=120KHz for receiv	/er.

Test at Channel 1 (2.412 GHz) in transmitting status

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement Vertical: Peak scan Level (dBµV/m) 80.0 dBuV/m Limit: Margin: 40 5 X 1 ab later MM White W 0.0 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 1000.000

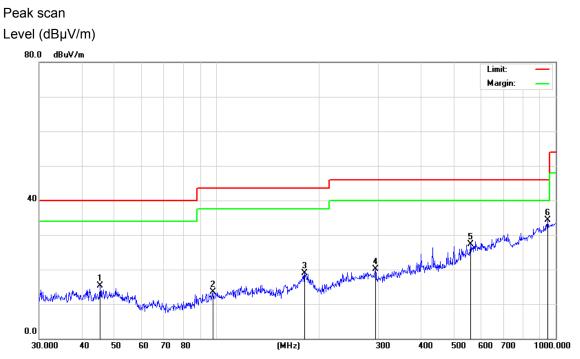
Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.6798	35.99	-16.70	19.29	40.00	-20.71	QP
2		103.8054	30.12	-13.65	16.47	43.50	-27.03	QP
3		268.4852	30.02	-11.08	18.94	46.00	-27.06	QP
4		400.4318	30.91	-5.93	24.98	46.00	-21.02	QP
5		699.3046	30.50	-0.50	30.00	46.00	-16.00	QP
6	*	807.4290	30.19	2.35	32.54	46.00	-13.46	QP

Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang,Dongguan, Guangdong, China

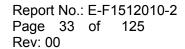
#### Horizontal:

11,



Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		45.3755	29.81	-14.43	15.38	40.00	-24.62	QP
2		97.4560	29.78	-16.28	13.50	43.50	-30.00	QP
3		181.9201	29.67	-10.82	18.85	43.50	-24.65	QP
4		294.1136	30.04	-9.98	20.06	46.00	-25.94	QP
5		560.6928	30.76	-3.44	27.32	46.00	-18.68	QP
6	*	948.7609	30.70	3.68	34.38	46.00	-11.62	QP





EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz			
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

		intai				
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4824.000	54.08	5.08	59.16	74.00	-14.84	PEAK
4824.000	41.65	5.08	46.73	54.00	-7.27	AVERAGE
7236.000	47.70	7.16	54.86	74.00	-19.14	PEAK
7236.000	36.31	7.16	43.47	54.00	-10.53	AVERAGE

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4824.000	54.20	5.08	59.28	74.00	-14.72	PEAK
4824.000	42.00	5.08	47.08	54.00	-6.92	AVERAGE
7236.000	47.91	7.16	55.07	74.00	-18.93	PEAK
7236.000	35.42	7.16	42.58	54.00	-11.42	AVERAGE

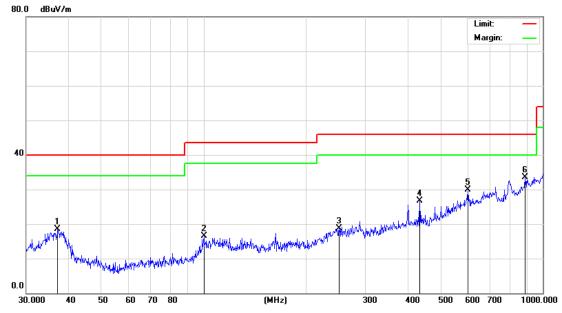


EUT:	Tablet PC	Model Name :	Y88X
Temperature:	<b>25</b> ℃	Test Data	2015-12-10
Pressure:	1010 hPa	Relative Humidity:	60%
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz
RBW/VBW	100KHz / 300KHz for spectrum, RB	N=120KHz for receiv	/er.

Test at Channel 6 (2.437GHz) in transmitting status

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement
Vertical:
Peak scan

Level (dBµV/m)

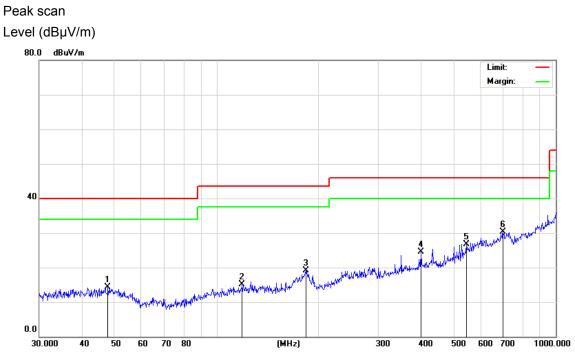


Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.1550	35.20	-16.72	18.48	40.00	-21.52	QP
2		100.2286	30.51	-13.99	16.52	43.50	-26.98	QP
3		251.1803	29.72	-11.07	18.65	46.00	-27.35	QP
4	4	434.0650	33.25	-6.61	26.64	46.00	-19.36	QP
5	(	601.4265	30.88	-0.89	29.99	46.00	-16.01	QP
6	* (	887.6099	30.86	2.65	33.51	46.00	-12.49	QP

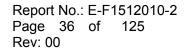
#### Horizontal:

111



Quasi-peak measurement

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		47.8260	28.54	-14.23	14.31	40.00	-25.69	QP
2		119.0180	30.11	-14.94	15.17	43.50	-28.33	QP
3		183.2005	29.50	-10.48	19.02	43.50	-24.48	QP
4		400.4318	31.32	-6.89	24.43	46.00	-21.57	QP
5		545.1825	30.57	-3.86	26.71	46.00	-19.29	QP
6	*	699.3046	29.95	0.44	30.39	46.00	-15.61	QP





EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	25 °C Test Data 207		2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range				
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector		
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре		
	(dBuV)	(dB)	(dBuV/m)					
4874.000	53.80	5.13	58.93	74.00	-15.07	PEAK		
4874.000	41.93	5.13	47.06	54.00	-6.94	AVERAGE		
7311.000	45.34	7.49	52.83	74.00	-21.17	PEAK		
7311.000	35.41	7.49	42.90	54.00	-11.10	AVERAGE		

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	54.21	5.13	59.34	74.00	-14.66	PEAK
4874.000	40.67	5.13	45.80	54.00	-8.20	AVERAGE
7311.000	47.32	7.49	54.81	74.00	-19.19	PEAK
7311.000	35.44	7.49	42.93	54.00	-11.07	AVERAGE

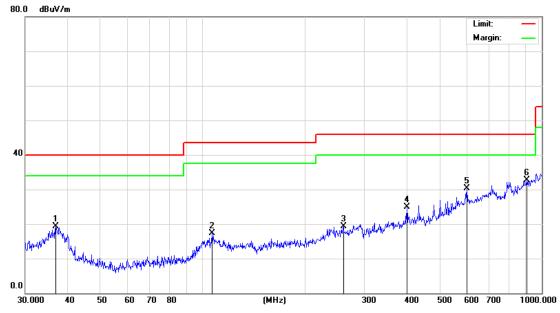


EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	m Frenqucy Range 30MHz to 1GHz				
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

Test at Channel 11 (2.462 GHz) in transmitting status

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement	
Vertical:	
Peak scan	

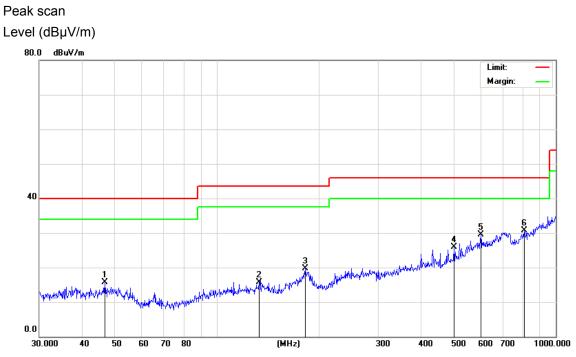
Level (dBµV/m)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.8952	36.04	-16.72	19.32	40.00	-20.68	QP
2		106.7587	30.75	-13.50	17.25	43.50	-26.25	QP
3	1	260.1444	30.23	-10.83	19.40	46.00	-26.60	QP
4		400.4318	30.84	-5.93	24.91	46.00	-21.09	QP
5		601.4265	31.14	-0.89	30.25	46.00	-15.75	QP
6	*	903.3093	29.83	2.81	32.64	46.00	-13.36	QP

#### Horizontal:

11,



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		46.8303	29.91	-14.29	15.62	40.00	-24.38	QP
2	,	133.6187	30.56	-14.78	15.78	43.50	-27.72	QP
3	,	182.5592	30.16	-10.55	19.61	43.50	-23.89	QP
4	Ę	501.1789	31.49	-5.61	25.88	46.00	-20.12	QP
5	6	601.4265	31.30	-1.74	29.56	46.00	-16.44	QP
6	* 8	307.4290	29.84	0.84	30.68	46.00	-15.32	QP

Report No.: E-F1512010-2 Page 39 of 125 Rev: 00



EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz			
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector				
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре				
	(dBuV)	(dB)	(dBuV/m)							
4924.000	54.77	5.18	59.95	74.00	-14.05	PEAK				
4924.000	42.24	5.18	47.42	54.00	-6.58	AVERAGE				
7386.000	47.53	7.82	55.35	74.00	-18.65	PEAK				
7386.000	34.68	7.82	42.50	54.00	-11.50	AVERAGE				

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4924.000	54.73	5.18	59.91	74.00	-14.09	PEAK
4924.000	38.68	5.18	43.86	54.00	-10.14	AVERAGE
7386.000	48.29	7.82	56.11	74.00	-17.89	PEAK
7386.000	34.30	7.82	42.12	54.00	-11.88	AVERAGE

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor –Preamplifier Factor.

No any other emissions level which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

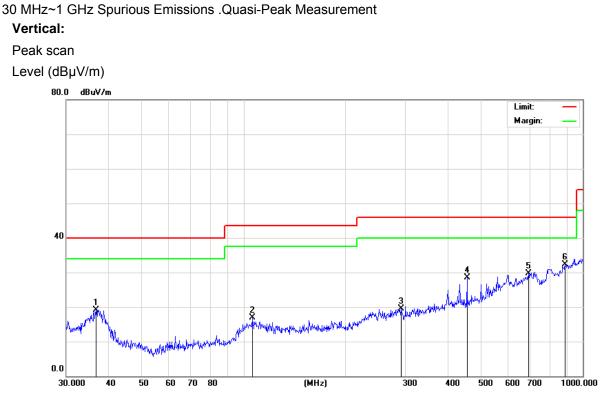
Hence there no other emissions have been reported.



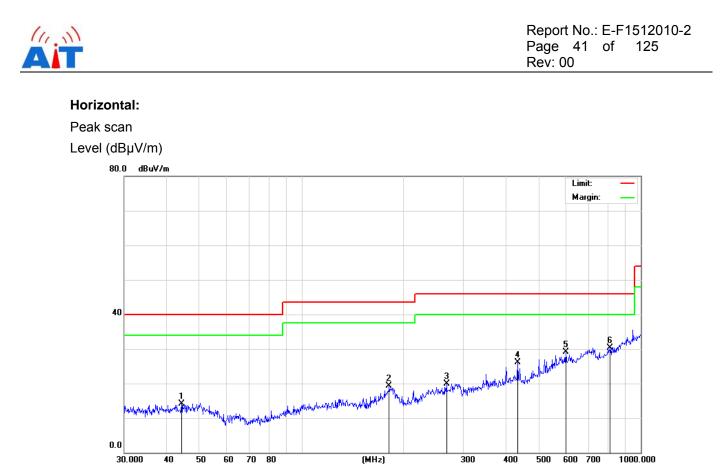
### 7.4.1.4 802.11n(HT20) mode with 72.2Mbps data rate

EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	тх	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range 30MHz to 1GHz				
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

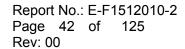
Test at Channel 1 (2.412 GHz) in transmitting status



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.7661	35.86	-16.72	19.14	40.00	-20.86	QP
2		106.0126	30.35	-13.52	16.83	43.50	-26.67	QP
3		291.0360	29.26	-9.75	19.51	46.00	-26.49	QP
4		455.9057	35.50	-6.92	28.58	46.00	-17.42	QP
5		691.9867	30.28	-0.52	29.76	46.00	-16.24	QP
6	*	887.6099	29.68	2.65	32.33	46.00	-13.67	QP



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		44.2751	28.69	-14.63	14.06	40.00	-25.94	QP
2	,	181.2834	30.29	-11.07	19.22	43.50	-24.28	QP
3	:	267.5455	31.09	-11.10	19.99	46.00	-26.01	QP
4		434.0650	32.77	-6.61	26.16	46.00	-19.84	QP
5	(	601.4265	30.85	-1.74	29.11	46.00	-16.89	QP
6	*	813.1115	29.55	0.83	30.38	46.00	-15.62	QP





EUT:	Tablet PC	Model Name :	Y88X		
Temperature:	<b>25</b> ℃	Test Data	2015-12-10		
Pressure:	1010 hPa	Relative Humidity:	60%		
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery		
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz		
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.				
	non-restricted band: 100KHz/300KHz for Peak.				

# 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector				
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре				
	(dBuV)	(dB)	(dBuV/m)							
4824.000	53.96	5.08	59.04	74.00	-14.96	PEAK				
4824.000	41.23	5.08	46.31	54.00	-7.69	AVERAGE				
7236.000	47.41	7.16	54.57	74.00	-19.43	PEAK				
7236.000	35.38	7.16	42.54	54.00	-11.46	AVERAGE				

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4824.000	54.65	5.08	59.73	74.00	-14.27	PEAK
4824.000	41.33	5.08	46.41	54.00	-7.59	AVERAGE
7236.000	46.72	7.16	53.88	74.00	-20.12	PEAK
7236.000	35.68	7.16	42.84	54.00	-11.16	AVERAGE



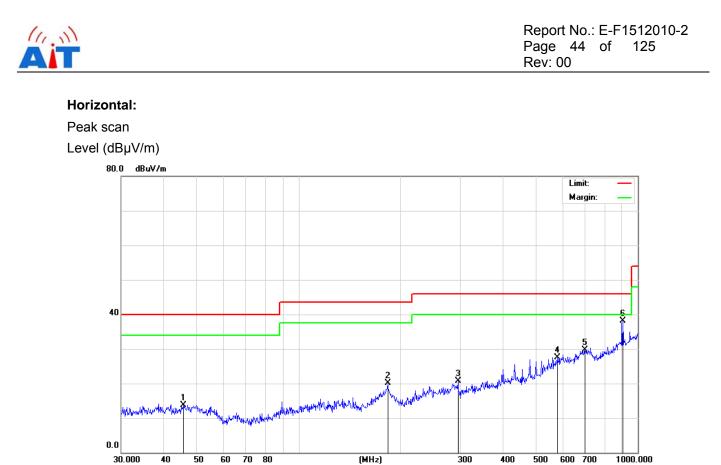
EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz			
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

Test at Channel 6 (2.437 GHz) in transmitting status

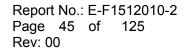
30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement

Vertical:	
Peak scan	
Level (dBµV/m)	
80.0 dBuV/m	
Margin:	
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Quasi-peak measurement	

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.8952	35.30	-16.72	18.58	40.00	-21.42	QP
2	,	106.0126	29.81	-13.52	16.29	43.50	-27.21	QP
3	2	291.0360	29.99	-9.75	20.24	46.00	-25.76	QP
4	4	434.0650	33.00	-6.61	26.39	46.00	-19.61	QP
5	(	601.4265	30.82	-0.89	29.93	46.00	-16.07	QP
6	* {	307.4290	30.03	2.35	32.38	46.00	-13.62	QP



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		45.6948	28.14	-14.39	13.75	40.00	-26.25	QP
2		183.2005	30.60	-10.48	20.12	43.50	-23.38	QP
3		295.1469	30.79	-10.03	20.76	46.00	-25.24	QP
4		578.6698	30.20	-2.65	27.55	46.00	-18.45	QP
5		699.3046	29.23	0.44	29.67	46.00	-16.33	QP
6	*	903.3093	35.21	2.81	38.02	46.00	-7.98	QP





EUT:	Tablet PC	Model Name :	Y88X				
Temperature:	<b>25</b> ℃	Test Data	2015-12-10				
Pressure:	1010 hPa	Relative Humidity:	60%				
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery				
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz				
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.						
	non-restricted band: 100KHz/300KHz for Peak.						

## 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector						
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре						
	(dBuV)	(dB)	(dBuV/m)									
4874.000	53.66	5.13	58.79	74.00	-15.21	PEAK						
4874.000	41.71	5.13	46.84	54.00	-7.16	AVERAGE						
7311.000	47.06	7.49	54.55	74.00	-19.45	PEAK						
7311.000	35.32	7.49	42.81	54.00	-11.19	AVERAGE						

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	54.01	5.13	59.14	74.00	-14.86	PEAK
4874.000	39.68	5.13	44.81	54.00	-9.19	AVERAGE
7311.000	46.75	7.49	54.24	74.00	-19.76	PEAK
7311.000	35.38	7.49	42.87	54.00	-11.13	AVERAGE



EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz			
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

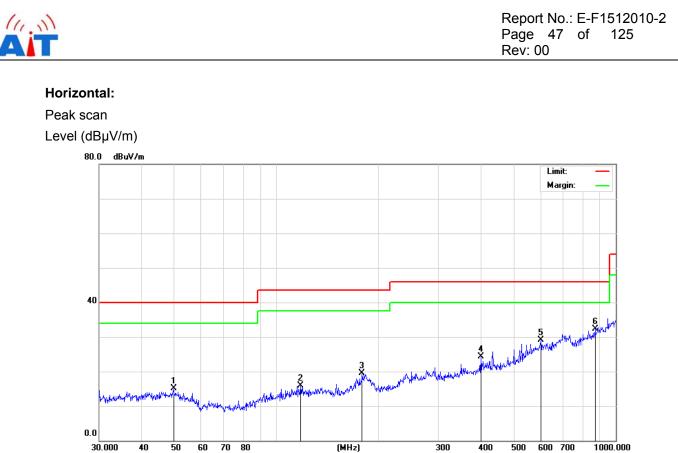
Test at Channel 11 (2.462 GHz) in transmitting status

Vertical:

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement

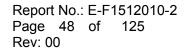
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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.4164	35.37	-16.70	18.67	40.00	-21.33	QP
2		110.9570	29.63	-13.55	16.08	43.50	-27.42	QP
3		275.1569	31.98	-10.69	21.29	46.00	-24.71	QP
4		434.0650	32.67	-6.61	26.06	46.00	-19.94	QP
5		601.4265	32.95	-0.89	32.06	46.00	-13.94	QP
6	*	801.7862	28.90	3.30	32.20	46.00	-13.80	QP



30.000 40 50 60 70 80 (МНг) 3 Quasi-peak measurement

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		49.7068	29.31	-14.21	15.10	40.00	-24.90	QP
2		117.7724	30.92	-15.00	15.92	43.50	-27.58	QP
3		178.7583	31.36	-11.89	19.47	43.50	-24.03	QP
4		400.4318	31.12	-6.89	24.23	46.00	-21.77	QP
5		601.4265	30.92	-1.74	29.18	46.00	-16.82	QP
6	*	869.1301	30.45	1.92	32.37	46.00	-13.63	QP





EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data 2015-12-10				
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz			
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

## 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector			
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре			
	(dBuV)	(dB)	(dBuV/m)						
4924.000	53.83	5.18	59.01	74.00	-14.99	PEAK			
4924.000	41.54	5.18	46.72	54.00	-7.28	AVERAGE			
7386.000	46.76	7.82	54.58	74.00	-19.42	PEAK			
7386.000	34.52	7.82	42.34	54.00	-11.66	AVERAGE			

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector	
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре	
	(dBuV)	(dB)	(dBuV/m)				
4924.000	53.48	5.18	58.66	74.00	-15.34	PEAK	
4924.000	40.25	5.18	45.43	54.00	-8.57	AVERAGE	
7386.000	46.33	7.82	54.15	74.00	-19.85	PEAK	
7386.000	35.17	7.82	42.99	54.00	-11.01	AVERAGE	

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Loss –Preamplifier Factor.

As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

No any other emissions level which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

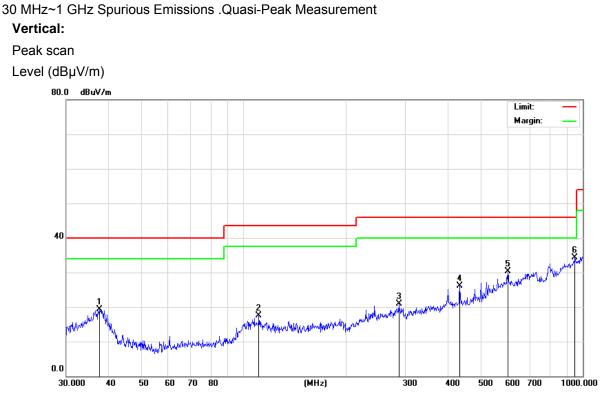
Hence there no other emissions have been reported.



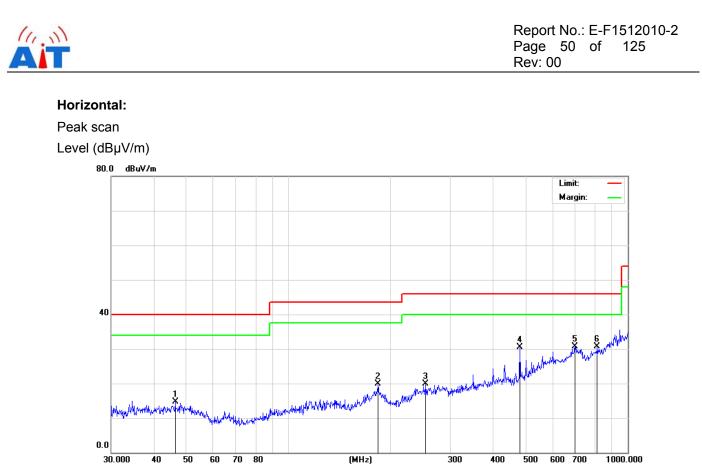
### 7.4.1.5 802.11n(HT40) mode with 150Mbps data rate

EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data 2015-1				
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	тх	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz			
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

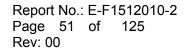
Test at Channel 3 (2.422 GHz) in transmitting status



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.5478	36.02	-16.70	19.32	40.00	-20.68	QP
2	,	110.9570	30.96	-13.55	17.41	43.50	-26.09	QP
3		286.9823	30.92	-9.95	20.97	46.00	-25.03	QP
4	4	434.0650	32.65	-6.61	26.04	46.00	-19.96	QP
5	(	601.4265	31.20	-0.89	30.31	46.00	-15.69	QP
6	* (	948.7609	30.70	3.68	34.38	46.00	-11.62	QP



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		46.3402	29.05	-14.32	14.73	40.00	-25.27	QP
2		183.8439	30.71	-10.81	19.90	43.50	-23.60	QP
3		253.8367	30.88	-10.99	19.89	46.00	-26.11	QP
4		480.5276	36.38	-5.90	30.48	46.00	-15.52	QP
5		699.3046	30.20	0.44	30.64	46.00	-15.36	QP
6	*	813.1115	29.86	0.83	30.69	46.00	-15.31	QP





EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data 2015-12-10				
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m Frenqucy Range 1GHz to 25GHz					
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

## 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector			
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре			
	(dBuV)	(dB)	(dBuV/m)						
4844.000	51.31	5.11	56.42	74.00	-17.58	PEAK			
4844.000	39.57	5.11	44.68	54.00	-9.32	AVERAGE			
7266.000	43.64	7.29	50.93	74.00	-23.07	PEAK			
7266.000	31.68	7.29	38.97	54.00	-15.03	AVERAGE			

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector	
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре	
	(dBuV)	(dB)	(dBuV/m)				
4844.000	51.81	5.11	56.92	74.00	-17.08	PEAK	
4844.000	38.42	5.11	43.53	54.00	-10.47	AVERAGE	
7266.000	42.69	7.29	49.98	74.00	-24.02	PEAK	
7266.000	30.43	7.29	37.72	54.00	-16.28	AVERAGE	

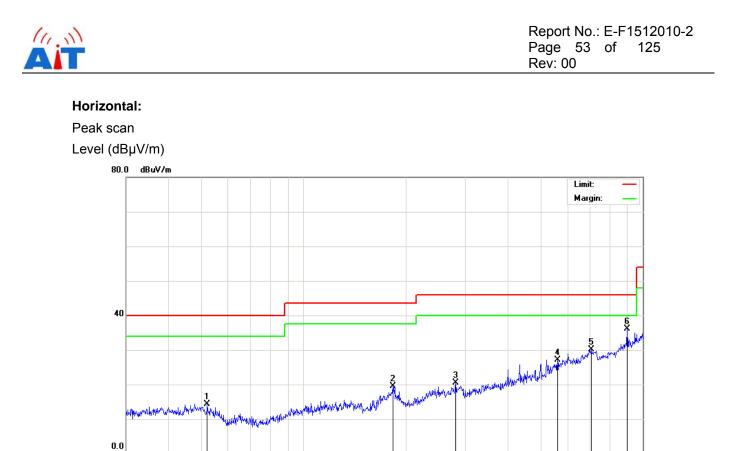


EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	irement Distance 3 m		30MHz to 1GHz			
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.					

Test at Channel 6 (2.437 GHz) in transmitting status

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement Vertical:	
Peak scan	
Level (dBµV/m)	
80.0 dBuV/m	
	Limit: — Margin: —
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Quasi-peak measurement	

No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.8952	35.40	-16.72	18.68	40.00	-21.32	QP
2		104.1701	30.60	-13.63	16.97	43.50	-26.53	QP
3		282.9852	31.46	-10.17	21.29	46.00	-24.71	QP
4		501.1789	32.49	-5.61	26.88	46.00	-19.12	QP
5		599.3212	30.31	-0.80	29.51	46.00	-16.49	QP
6	*	798.9796	29.32	3.44	32.76	46.00	-13.24	QP



Quasi-peak measurement

40

50 60

70 80

30.000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		52.0251	29.28	-14.99	14.29	40.00	-25.71	QP
2		183.2005	30.08	-10.48	19.60	43.50	-23.90	QP
3		281.0074	30.71	-10.23	20.48	46.00	-25.52	QP
4		560.6928	30.50	-3.44	27.06	46.00	-18.94	QP
5		704.2260	30.04	0.08	30.12	46.00	-15.88	QP
6	*	900.1473	33.33	2.80	36.13	46.00	-9.87	QP

(MHz)

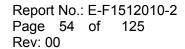
300

400

500

600 700

1000.000





EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz			
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

## 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement (a) Antenna polarization: Horizontal

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	49.93	5.13	55.06	74.00	-18.94	PEAK
4874.000	38.10	5.13	43.23	54.00	-10.77	AVERAGE
7311.000	42.63	7.49	50.12	74.00	-23.88	PEAK
7311.000	30.24	7.49	37.73	54.00	-16.27	AVERAGE

#### (b) Antenna polarization: Vertical

Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4874.000	50.62	5.13	55.75	74.00	-18.25	PEAK
4874.000	37.85	5.13	42.98	54.00	-11.02	AVERAGE
7311.000	43.47	7.49	50.96	74.00	-23.04	PEAK
7311.000	33.31	7.49	40.80	54.00	-13.20	AVERAGE



EUT:	Tablet PC	Model Name :	Y88X		
Temperature:	<b>25</b> ℃	Test Data	2015-12-10		
Pressure:	1010 hPa	Relative Humidity:	60%		
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery		
Measurement Distance	3 m	Frenqucy Range	30MHz to 1GHz		
RBW/VBW	100KHz / 300KHz for spectrum, RBW=120KHz for receiver.				

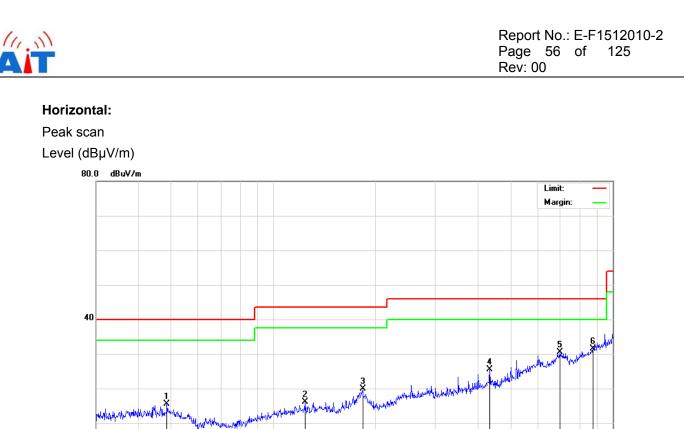
Test at Channel 9 (2.452 GHz) in transmitting status

Vertical:

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement

Margin: -
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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.0248	36.63	-16.72	19.91	40.00	-20.09	QP
2		99.8777	30.60	-14.08	16.52	43.50	-26.98	QP
3		239.9874	31.38	-11.64	19.74	46.00	-26.26	QP
4		434.0650	32.63	-6.61	26.02	46.00	-19.98	QP
5		601.4265	30.78	-0.89	29.89	46.00	-16.11	QP
6	*	801.7862	29.15	3.30	32.45	46.00	-13.55	QP



30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Quasi-peak measurement

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		48.5016	29.64	-14.22	15.42	40.00	-24.58	QP
2	1	123.6984	31.13	-15.09	16.04	43.50	-27.46	QP
3	1	183.2005	30.32	-10.48	19.84	43.50	-23.66	QP
4	4	134.0650	32.04	-6.61	25.43	46.00	-20.57	QP
5	6	699.3046	30.10	0.44	30.54	46.00	-15.46	QP
6	* 8	375.2469	29.38	2.21	31.59	46.00	-14.41	QP

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Report No.: E-F1512010-2 Page 57 of 125 Rev: 00



EUT:	Tablet PC	Model Name :	Y88X			
Temperature:	<b>25</b> ℃	Test Data	2015-12-10			
Pressure:	1010 hPa	Relative Humidity:	60%			
Test Mode :	ТХ	Test Voltage :	DC 3.7V from battery			
Measurement Distance	3 m	Frenqucy Range	1GHz to 25GHz			
RBW/VBW	Spurious emission: 1MHz/3MHz for Peak, 1MHz/10Hz for Average.					
	non-restricted band: 100KHz/300KHz for Peak.					

#### 1~25 GHz Harmonics & Spurious Emissions. Peak & Average Measurement

(a) Antenna pola	arization: Horizo	ontal				
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4904.000	49.56	5.16	54.72	74.00	-19.28	PEAK
4904.000	38.77	5.16	43.93	54.00	-10.07	AVERAGE
7356.000	42.38	7.69	50.07	74.00	-23.93	PEAK
7356.000	32.25	7.69	39.94	54.00	-14.06	AVERAGE

### (b) Antenna polarization: Vertical

. ,						
Frequency	Reading	Correct	Measure	Limit	Margin	Detector
(MHz)	Level	Factor	Level	(dBuV/m)	(dB)	Туре
	(dBuV)	(dB)	(dBuV/m)			
4904.000	49.73	5.16	54.89	74.00	-19.11	PEAK
4904.000	38.80	5.16	43.96	54.00	-10.04	AVERAGE
7356.000	42.61	7.69	50.30	74.00	-23.70	PEAK
7356.000	32.48	7.69	40.17	54.00	-13.83	AVERAGE

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Loss –Preamplifier Factor.

As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

No any other emissions level which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.



Remark:

- 1) .For this intentional radiator operates below 25 GHz. The spectrum shall be investigated to the tenth harmonics of the highest fundamental frequency. And above the third harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 3<sup>rd</sup> harmonic.
- 2). As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.
- 3). The test only perform the EUT in transmitting status since the test frequencies were over 1GHz only required transmitting status.

Test result: The unit does meet the FCC requirements.



### 7.4.2 Radiated Emissions which fall in the restricted bands

Test Requirement:	FCC Part 15 C section 15.247
	(d) In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).
Test Method:	ANSI C63.10: Clause 6.4, 6.5 and 6.6
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery.
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Limit:	40.0 dBμV/m between 30MHz & 88MHz;
	43.5 dB $\mu$ V/m between 88MHz & 216MHz;
	46.0 dBμV/m between 216MHz & 960MHz;
	54.0 dB $\mu$ V/m above 960MHz.
Detector:	For PK value:
	RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for $f < 1$ GHz
	$VBW \ge RBW$
	Sweep = auto
	Detector function = peak
	Trace = max hold
	For AV value:
	RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for $f < 1$ GHz
	VBW =10Hz
	Sweep = auto
	Detector function = peak
	Trace = max hold



Section 15.205 Restricted bands of operation.

(a) Except as shown in paragraph (d) of this section. only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	
13.36 - 13.41	322 - 335.4		



#### **Test Result:**

#### 7.4.2.1 802.11b mode with 11Mbps data rate

Test at Channel 1 (2.412 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	55.41	27.93	4.74	35.09	52.99	74.00	Vertical
2390.000	54.78	27.63	4.96	35.05	52.32	74.00	V
2483.500	54.39	27.55	4.9	34.99	51.85	74.00	V
2500.000	53.68	27.55	5.00	34.98	51.25	74.00	V
2310.000	54.12	27.93	4.74	35.09	51.70	74.00	Horizontal
2390.000	55.67	27.63	4.96	35.05	53.21	74.00	Н
2483.500	55.24	27.55	4.9	34.99	52.70	74.00	Н
2500.000	56.33	27.55	5.00	34.98	53.90	74.00	Н

Frequency (MHz)	Reading Level (dBμV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	44.13	27.93	4.74	35.09	41.71	54.00	Vertical
2390.000	45.52	27.63	4.96	35.05	43.06	54.00	V
2483.500	44.37	27.55	4.9	34.99	41.83	54.00	V
2500.000	45.86	27.55	5.00	34.98	43.43	54.00	V
2310.000	44.25	27.93	4.74	35.09	41.83	54.00	Horizontal
2390.000	44.77	27.63	4.96	35.05	42.31	54.00	Н
2483.500	43.65	27.55	4.9	34.99	41.11	54.00	Н
2500.000	45.42	27.55	5.00	34.98	42.99	54.00	Н



#### Test at Channel 6 (2.437 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna actors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	53.73	27.93	4.74	35.09	51.31	74.00	Vertical
2390.000	54.46	27.63	4.96	35.05	52.00	74.00	V
2483.500	54.37	27.55	4.90	34.99	51.83	74.00	V
2500.000	53.51	27.55	5.00	34.98	51.08	74.00	V
2310.000	52.69	27.93	4.74	35.09	50.27	74.00	Horizontal
2390.000	52.74	27.63	4.96	35.05	50.28	74.00	Н
2483.500	54.60	27.55	4.90	34.99	52.06	74.00	Н
2500.000	52.38	27.55	5.00	34.98	49.95	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	43.17	27.93	4.74	35.09	40.75	54.00	Vertical
2390.000	42.23	27.63	4.96	35.05	39.77	54.00	V
2483.500	43.94	27.55	4.90	34.99	41.40	54.00	V
2500.000	42.31	27.93	4.74	35.09	39.89	54.00	V
2310.000	43.56	27.93	4.74	35.09	41.14	54.00	Horizontal
2390.000	42.28	27.63	4.96	35.05	39.82	54.00	Н
2483.500	42.10	27.55	4.90	34.99	39.56	54.00	Н
2500.000	43.43	27.93	4.74	35.09	41.01	54.00	Н



#### Test at Channel 11 (2.462 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	54.11	27.93	4.74	35.09	51.69	74.00	Vertical
2390.000	53.62	27.63	4.96	35.05	51.16	74.00	V
2483.500	53.76	27.55	4.90	34.99	51.22	74.00	V
2500.000	52.54	27.93	4.74	35.09	50.12	74.00	V
2310.000	51.07	27.93	4.74	35.09	48.65	74.00	Horizontal
2390.000	51.57	27.63	4.96	35.05	49.11	74.00	Н
2483.500	52.82	27.55	4.90	34.99	50.28	74.00	Н
2500.000	52.34	27.93	4.74	35.09	49.92	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	42.15	27.93	4.74	35.09	39.73	54.00	Vertical
2390.000	41.36	27.63	4.96	35.05	38.90	54.00	V
2483.500	43.24	27.55	4.90	34.99	40.70	54.00	V
2500.000	44.09	27.93	4.74	35.09	41.67	54.00	V
2310.000	43.48	27.93	4.74	35.09	41.06	54.00	Horizontal
2390.000	45.32	27.63	4.96	35.05	42.86	54.00	Н
2483.500	42.74	27.55	4.90	34.99	40.20	54.00	Н
2500.000	43.62	27.93	4.74	35.09	41.20	54.00	Н



### 7.4.2.2 802.11g mode with 54Mbps data rate

Test at Channel 1 (2.412 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	53.24	27.93	4.74	35.09	50.82	74.00	Vertical
2390.000	52.06	27.63	4.96	35.05	49.60	74.00	V
2483.500	51.69	27.55	4.90	34.99	49.15	74.00	V
2500.000	52.43	27.55	5.00	34.98	50.00	74.00	V
2310.000	53.71	27.93	4.74	35.09	51.29	74.00	Horizontal
2390.000	52.35	27.63	4.96	35.05	49.89	74.00	Н
2483.500	51.60	27.55	4.90	34.99	49.06	74.00	Н
2500.000	53.62	27.55	5.00	34.98	51.19	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	43.55	27.93	4.74	35.09	41.13	54.00	Vertical
2390.000	44.80	27.63	4.96	35.05	42.34	54.00	V
2483.500	43.76	27.55	4.90	34.99	41.22	54.00	V
2500.000	42.54	27.55	5.00	34.98	40.11	54.00	V
2310.000	44.63	27.93	4.74	35.09	42.21	54.00	Horizontal
2390.000	45.12	27.63	4.96	35.05	42.66	54.00	Н
2483.500	42.73	27.55	4.90	34.99	40.19	54.00	Н
2500.000	43.88	27.55	5.00	34.98	41.45	54.00	Н



#### Test at Channel 6 (2.437 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	53.61	27.93	4.74	35.09	51.19	74.00	Vertical
2390.000	53.54	27.63	4.96	35.05	51.08	74.00	V
2483.500	52.90	27.55	4.90	34.99	50.36	74.00	V
2500.000	53.68	27.55	5.00	34.98	51.25	74.00	V
2310.000	52.41	27.93	4.74	35.09	49.99	74.00	Horizontal
2390.000	53.52	27.63	4.96	35.05	51.06	74.00	Н
2483.500	52.78	27.55	4.90	34.99	50.24	74.00	Н
2500.000	53.05	27.55	5.00	34.98	50.62	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	42.38	27.93	4.74	35.09	39.96	54.00	Vertical
2390.000	43.20	27.63	4.96	35.05	40.74	54.00	V
2483.500	43.17	27.55	4.90	34.99	40.63	54.00	V
2500.000	42.65	27.55	5.00	34.98	40.22	54.00	V
2310.000	42.84	27.93	4.74	35.09	40.42	54.00	Horizontal
2390.000	43.37	27.63	4.96	35.05	40.91	54.00	Н
2483.500	42.51	27.55	4.90	34.99	39.97	54.00	Н
2500.000	44.29	27.55	5.00	34.98	41.86	54.00	Н



#### Test at Channel 11 (2.462 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	52.41	27.93	4.74	35.09	49.99	74.00	Vertical
2390.000	53.86	27.63	4.96	35.05	51.40	74.00	V
2483.500	53.53	27.55	4.90	34.99	50.99	74.00	V
2500.000	53.11	27.55	5.00	34.98	50.68	74.00	V
2310.000	52.46	27.93	4.74	35.09	50.04	74.00	Horizontal
2390.000	52.45	27.63	4.96	35.05	49.99	74.00	Н
2483.500	54.70	27.55	4.90	34.99	52.16	74.00	Н
2500.000	52.68	27.55	5.00	34.98	50.25	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	44.98	27.93	4.74	35.09	42.56	54.00	Vertical
2390.000	43.35	27.63	4.96	35.05	40.89	54.00	V
2483.500	42.27	27.55	4.90	34.99	39.73	54.00	V
2500.000	43.45	27.55	5.00	34.98	41.02	54.00	V
2310.000	42.62	27.93	4.74	35.09	40.20	54.00	Horizontal
2390.000	42.13	27.63	4.96	35.05	39.67	54.00	Н
2483.500	43.66	27.55	4.90	34.99	41.12	54.00	Н
2500.000	41.35	27.55	5.00	34.98	38.92	54.00	Н



#### 7.4.2.3 802.11n(HT20) mode with 72.2Mbps data rate

Test at Channel 1 (2.412 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	62.37	27.93	4.74	35.09	59.95	74.00	Vertical
2390.000	64.68	27.63	4.96	35.05	62.22	74.00	V
2483.500	62.50	27.55	4.90	34.99	59.96	74.00	V
2500.000	62.89	27.55	5.00	34.98	60.46	74.00	V
2310.000	59.34	27.93	4.74	35.09	56.92	74.00	Horizontal
2390.000	58.12	27.63	4.96	35.05	55.66	74.00	Н
2483.500	58.52	27.55	4.90	34.99	55.98	74.00	Н
2500.000	59.66	27.55	5.00	34.98	57.23	74.00	Н

Frequency (MHz)	Reading Level (dBμV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	49.35	27.93	4.74	35.09	46.93	54.00	Vertical
2390.000	50.46	27.63	4.96	35.05	48.00	54.00	V
2483.500	49.21	27.55	4.90	34.99	46.67	54.00	V
2500.000	48.77	27.55	5.00	34.98	46.34	54.00	V
2310.000	51.62	27.93	4.74	35.09	49.20	54.00	Horizontal
2390.000	49.84	27.63	4.96	35.05	47.38	54.00	Н
2483.500	49.34	27.55	4.90	34.99	46.80	54.00	Н
2500.000	49.68	27.55	5.00	34.98	47.25	54.00	Н



#### Test at Channel 6 (2.437 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	59.78	27.93	4.74	35.09	57.36	74.00	Vertical
2390.000	58.41	27.63	4.96	35.05	55.95	74.00	V
2483.500	57.62	27.55	4.90	34.99	55.08	74.00	V
2500.000	59.13	27.55	5.00	34.98	56.70	74.00	V
2310.000	58.62	27.93	4.74	35.09	56.20	74.00	Horizontal
2390.000	57.33	27.63	4.96	35.05	54.87	74.00	Н
2483.500	55.52	27.55	4.90	34.99	52.98	74.00	Н
2500.000	58.65	27.55	5.00	34.98	56.22	74.00	Н

Frequency (MHz)	Reading Level (dBμV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	45.87	27.93	4.74	35.09	43.45	54.00	Vertical
2390.000	46.22	27.63	4.96	35.05	43.76	54.00	V
2483.500	45.41	27.55	4.90	34.99	42.87	54.00	V
2500.000	45.62	27.55	5.00	34.98	43.19	54.00	V
2310.000	43.68	27.93	4.74	35.09	41.26	54.00	Horizontal
2390.000	44.70	27.63	4.96	35.05	42.24	54.00	Н
2483.500	43.18	27.55	4.90	34.99	40.64	54.00	Н
2500.000	44.49	27.55	5.00	34.98	42.06	54.00	Н



#### Test at Channel 11 (2.462 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	55.13	27.93	4.74	35.09	52.71	74.00	Vertical
2390.000	54.21	27.63	4.96	35.05	51.75	74.00	V
2483.500	56.36	27.55	4.90	34.99	53.82	74.00	V
2500.000	53.71	27.55	5.00	34.98	51.28	74.00	V
2310.000	53.54	27.93	4.74	35.09	51.12	74.00	Horizontal
2390.000	54.89	27.63	4.96	35.05	52.43	74.00	Н
2483.500	52.20	27.55	4.90	34.99	49.66	74.00	Н
2500.000	54.87	27.55	5.00	34.98	52.44	74.00	Н

Frequency (MHz)	Reading Level	Antenna factors	Cable loss	Preamp factor	Emission Level	Limit (dBµV/m)	Antenna polarization
	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)		
2310.000	42.31	27.93	4.74	35.09	39.89	54.00	Vertical
2390.000	43.50	27.63	4.96	35.05	41.04	54.00	V
2483.500	41.46	27.55	4.90	34.99	38.92	54.00	V
2500.000	39.21	27.55	5.00	34.98	36.78	54.00	V
2310.000	39.06	27.93	4.74	35.09	36.64	54.00	Horizontal
2390.000	41.33	27.63	4.96	35.05	38.87	54.00	Н
2483.500	43.58	27.55	4.90	34.99	41.04	54.00	Н
2500.000	42.17	27.55	5.00	34.98	39.74	54.00	Н



### 7.4.2.4 802.11n(HT40) mode with 150Mbps data rate

Test at Channel 3 (2.422 GHz) in transmitting status

#### Peak Measurement:

Frequency (MHz)	Reading Level (dBμV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	53.32	27.93	4.74	35.09	50.90	74.00	Vertical
2390.000	54.67	27.63	4.96	35.05	52.21	74.00	V
2483.500	53.85	27.55	4.90	34.99	51.31	74.00	V
2500.000	53.51	27.55	5.00	34.98	51.08	74.00	V
2310.000	54.66	27.93	4.74	35.09	52.24	74.00	Horizontal
2390.000	52.76	27.63	4.96	35.05	50.30	74.00	Н
2483.500	54.05	27.55	4.90	34.99	51.51	74.00	Н
2500.000	53.21	27.55	5.00	34.98	50.78	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	42.01	27.93	4.74	35.09	39.59	54.00	Vertical
2390.000	42.34	27.63	4.96	35.05	39.88	54.00	V
2483.500	43.67	27.55	4.90	34.99	41.13	54.00	V
2500.000	42.51	27.55	5.00	34.98	40.08	54.00	V
2310.000	40.32	27.93	4.74	35.09	37.90	54.00	Horizontal
2390.000	41.94	27.63	4.96	35.05	39.48	54.00	Н
2483.500	40.62	27.55	4.90	34.99	38.08	54.00	Н
2500.000	39.33	27.55	5.00	34.98	36.90	54.00	Н



#### Test at Channel 6 (2.437 GHz) in transmitting status

#### **Peak Measurement:**

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	54.58	27.93	4.74	35.09	52.16	74.00	Vertical
2390.000	54.73	27.63	4.96	35.05	52.27	74.00	V
2483.500	55.35	27.55	4.90	34.99	52.81	74.00	V
2500.000	55.34	27.55	5.00	34.98	52.91	74.00	V
2310.000	51.69	27.93	4.74	35.09	49.27	74.00	Horizontal
2390.000	51.55	27.63	4.96	35.05	49.09	74.00	Н
2483.500	50.27	27.55	4.90	34.99	47.73	74.00	Н
2500.000	50.61	27.55	5.00	34.98	48.18	74.00	Н

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	43.05	27.93	4.74	35.09	40.63	54.00	Vertical
2390.000	42.57	27.63	4.96	35.05	40.11	54.00	V
2483.500	42.31	27.55	4.90	34.99	39.77	54.00	V
2500.000	41.59	27.55	5.00	34.98	39.16	54.00	V
2310.000	39.43	27.93	4.74	35.09	37.01	54.00	Horizontal
2390.000	40.27	27.63	4.96	35.05	37.81	54.00	Н
2483.500	38.60	27.55	4.90	34.99	36.06	54.00	Н
2500.000	38.16	27.55	5.00	34.98	35.73	54.00	Н



#### Test at Channel 9 (2.452 GHz) in transmitting status

#### **Peak Measurement:**

Frequency (MHz)	Reading Level (dBµV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	53.20	27.93	4.74	35.09	50.78	74.00	Vertical
2390.000	53.19	27.63	4.96	35.05	50.73	74.00	V
2483.500	52.43	27.55	4.90	34.99	49.89	74.00	V
2500.000	52.77	27.55	5.00	34.98	50.34	74.00	V
2310.000	50.26	27.93	4.74	35.09	47.84	74.00	Horizontal
2390.000	50.54	27.63	4.96	35.05	48.08	74.00	Н
2483.500	50.70	27.55	4.90	34.99	48.16	74.00	Н
2500.000	50.31	27.55	5.00	34.98	47.88	74.00	Н

Frequency (MHz)	Reading Level (dBμV)	Antenna factors (dB/m)	Cable loss (dB)	Preamp factor (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Antenna polarization
2310.000	42.34	27.93	4.74	35.09	39.92	54.00	Vertical
2390.000	43.16	27.63	4.96	35.05	40.70	54.00	V
2483.500	39.02	27.55	4.90	34.99	36.48	54.00	V
2500.000	40.35	27.55	5.00	34.98	37.92	54.00	V
2310.000	39.21	27.93	4.74	35.09	36.79	54.00	Horizontal
2390.000	38.67	27.63	4.96	35.05	36.21	54.00	Н
2483.500	39.82	27.55	4.90	34.99	37.28	54.00	Н
2500.000	38.94	27.55	5.00	34.98	36.51	54.00	Н

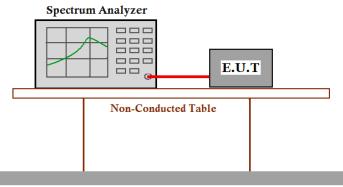


# 7.5 6 dB Bandwidth

# 7.6 6 dB Bandwidth

Test Requirement:	FCC Part 15 C section 15.247
	(a)(2)Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10: Clause 6.9.1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
	Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery.

Test Configuration:



Ground Reference Plane

Test Procedure:

- 1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =1.5dB) from the antenna port to the spectrum.
- 2. Set the spectrum analyzer:

Sweep = auto; Detector Function = Peak; ace = Max Hold

RBW: 1%~5% OBW; VBW: ≥3\*RBW

Span: two times and five times the OBW.

- 3. Mark the peak power frequency and -6dB (upper and lower) power frequency.
- 4. Repeat until all the test status is investigated.

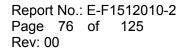


5. Report the worse case.



Channel No.	Frequency (MHz)	Mode	Data Rate	Measured 6dB bandwidth (MHz)	Limit	Result
1	2412		11 Mbps	10.202		Pass
6	2437	802.11b	11 Mbps	10.202	≥500KHz	Pass
11	2462		11 Mbps	10.274		Pass
1	2412		54 Mbps	16.642		Pass
6	2437	802.11g	54 Mbps	16.642	≥500KHz	Pass
11	2462		54 Mbps	16.642		Pass
1	2412	802.11n	72.2 Mbps	17.946		Pass
6	2437	(HT20)	72.2 Mbps	17.946	≥500KHz	Pass
11	2462	(1120)	72.2 Mbps	17.946		Pass
3	2422	802.11n	150 Mbps	36.580		Pass
6	2437	802.11h (HT40)	150 Mbps	36.580	≥500KHz	Pass
9	2452	(П140)	150 Mbps	36.580		Pass

Test result: The unit does meet the FCC requirements.

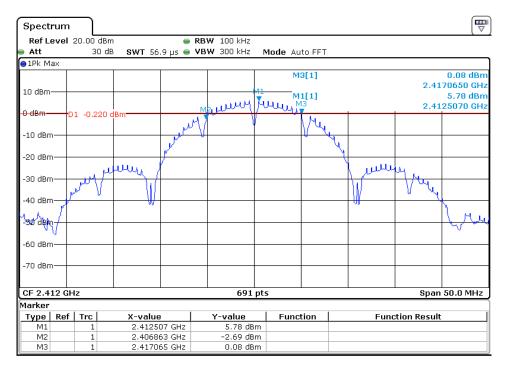




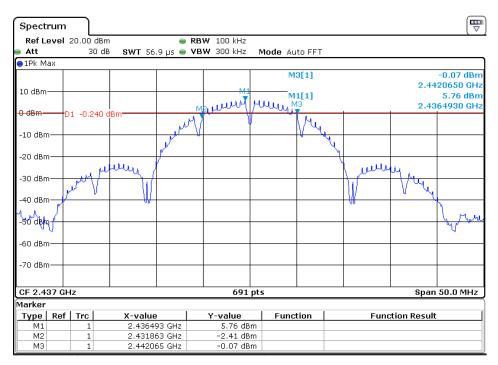
#### **Result plot as follows:**

#### 802.11b mode with 11Mbps data rate

#### Channel 1: 2.412GHz:

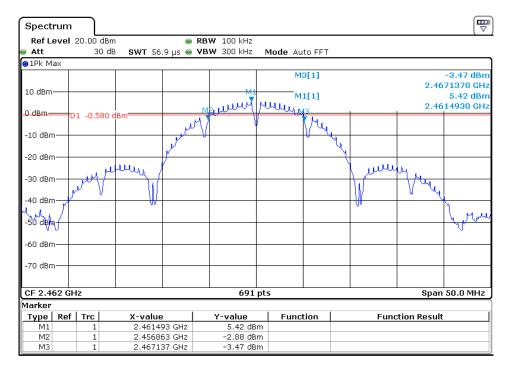


#### Channel 6: 2.437GHz:



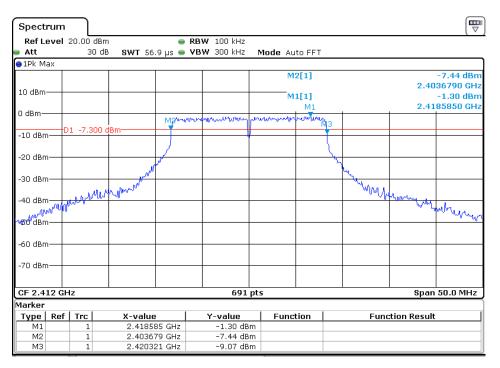


## Channel 11: 2.462GHz:



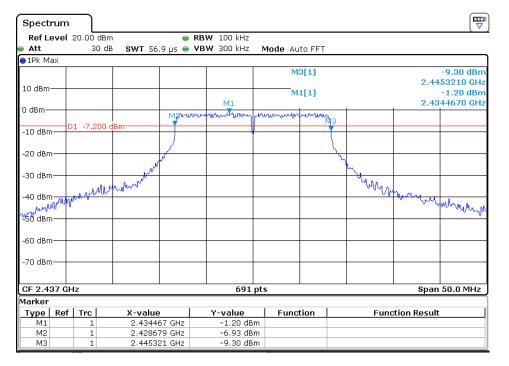
#### 802.11g mode with 54Mbps data rate

Channel 1: 2.412GHz:

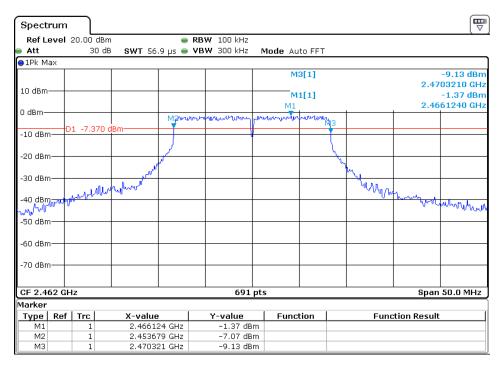


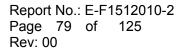


## Channel 6: 2.437GHz:



#### Channel 11: 2.462GHz:

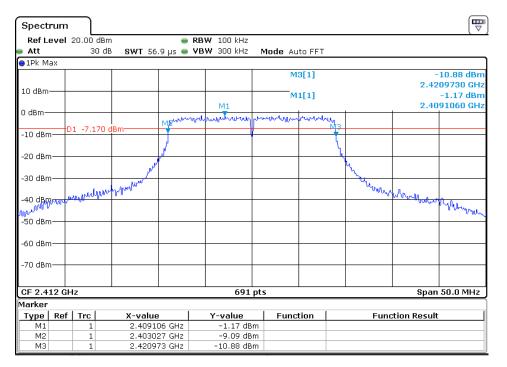






# 802.11n(HT20) mode with 72.2Mbps data rate

Channel 1: 2.412GHz:

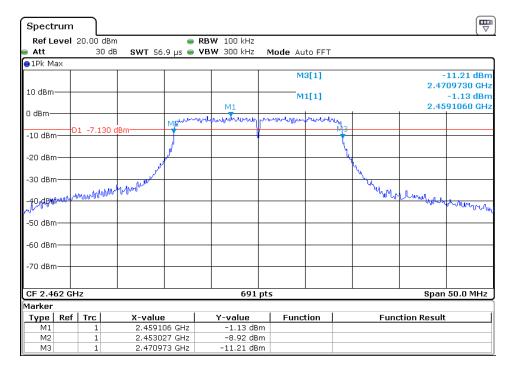


#### Channel 6: 2.437GHz:

Spect	rum										
Ref L	evel	20.00 c	lBm		RBW 100 kHz						
Att		30	dB <b>SWT</b> 56	.9 µs 👄	<b>VBW</b> 300 kHz	Mode A	uto FFT				
∋1Pk M	ах										
-						Γ	M3[1]				-10.68 dBn
10 40										2.4	459730 GH
10 dBm						P	M1[1]				-0.80 dBr
0 dBm-					M1					2.4	341060 GH
o ubiii-				Maum	whenter	mound	norman	nun			
-10 dBn	D	1 -6.80	IO dBm	1 F				-M3-			
-10 000	'							- <u> </u>			
-20 dBn				J.				٦.			
-20 0011	'		الر.	ſ				լ	ι		
-30 dBn									h.		
-50 001	'		white						Wy a		no human
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W MAR										0 10 00.	portuning
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-60 dBn	∩						_				
-70 dBn	η <u> </u>						_				
05.0.4		-								0	. 50 0 MU-
CF 2.4	37 GH	IZ			691	pts				spar	n 50.0 MHz
Marker						1 -		1			-
Type	Ref		X-value		Y-value	_	ction		Fund	tion Resul	t
M1 M2		1	2.4341		-0.80 dB -8.47 dB						
M2 M3		1	2.4280		-8.47 dB -10.68 dB						
1413		1	2.4439		10.00 UD			1			

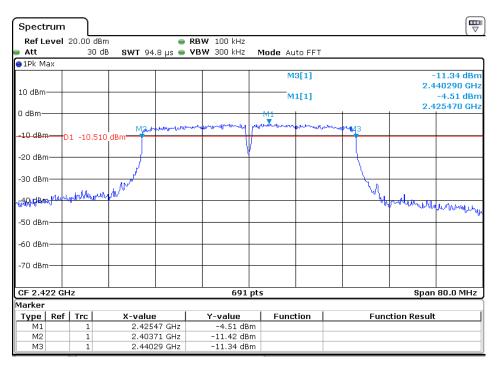


## Channel 11: 2.462GHz:



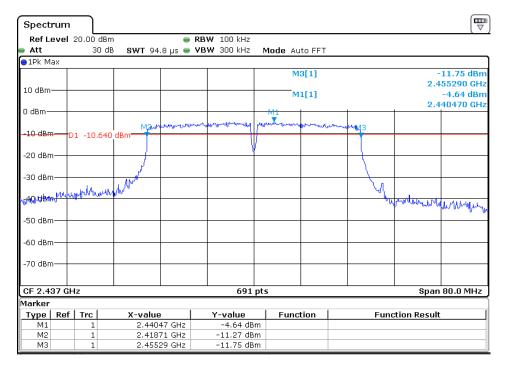
### 802.11n(HT40) mode with 150Mbps data rate

Channel 3: 2.422GHz:





## Channel 6: 2.437GHz:



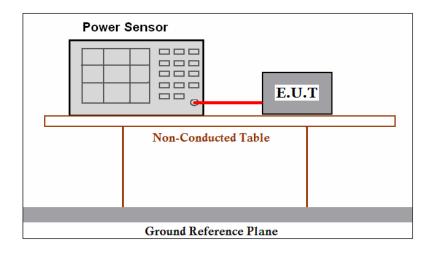
## Channel 9: 2.452GHz:

Spect	rum									Ē
Ref L	evel :	20.00 0	lBm		<b>RBW</b> 100 kHz					
🕨 Att		30	dB <b>SWT</b> 94.8	µs 👄 '	<b>VBW</b> 300 kHz	Mode A	uto FFT			
⊖1Pk M	ах									
						N	13[1]			-11.69 dBn
10 dBm									2	.470290 GH
TO UBIII						N	11[1]			-5.03 dBn
0 dBm-									2	.455470 GH
o abiii						1911 Japan Turana				
-10 dBn				Non-line	we see you aprile the	Manan	ronner			
	-	1 -11.0	)30 dBm							
-20 dBn	<u> </u>									
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han abu	MAN	իլուտ	~00 <b>0</b> 0 00.						Jul vantur v	Malentham
·									of accorde	1 Marth a Ward and
-50 dBn	n——									_
-60 dBn	י—⊢-									
-70 dBn	י <b>−</b> ר									
CF 2.4	52 GH	z			691	ots			Sp	an 80.0 MHz
Marker										
Type	Ref	Trc	X-value	1	Y-value	Eun	ction	FL	Inction Res	ult
M1		1	2.45547	' GHz	-5.03 dB	_				
M2		1	2.43371	. GHz	-11.17 dB	m				
MЗ		1	2.47029	GHz	-11.69 dB	m				



# 7.7 Maximum Peak Output Power

Test Requirement:	FCC Part 15 C section 15.247 (b)(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b) (1), (b) (2), and (b) (3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
Test Method:	FCC/KDB-558074 D01 v03r03 9.1.1 RBW≥DTS bandwidth
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery.
Test Configuration:	





Test Procedure:

1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable

(Cable loss =1.5dB) from the antenna port to the spectrum.

- 2. Set the RBW $\geq$ DTS bandwidth
- 3. Set the VBW  $\ge$  3 x RBW
- 4. Set the span  $\ge$  3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Use peak marker function to determine the peak amplitude level.
- 9. Report the worse case.

Channel	Frequency	Mada	Dete Dete	Measured Channel Power	Lingit	Result	
No.	(MHz)	Mode	Data Rate	(dBm)	Limit	Result	
1	2412		11 Mbps	8.17		Pass	
6	2437	802.11b	11 Mbps	8.29		Pass	
11	2462		11 Mbps	8.07		Pass	
1	2412		54 Mbps	8.29		Pass	
6	2437	802.11g	54 Mbps	8.44		Pass	
11	2462		54 Mbps	8.13	1W(30dBm)	Pass	
1	2412	802 11 n	72.2 Mbps	8.38	ти(зоаып)	Pass	
6	2437	802.11n (HT20)	72.2 Mbps	8.53		Pass	
11	2462	(1120)	72.2 Mbps	8.21		Pass	
3	2422	802.11n	150 Mbps	7.20		Pass	
6	2437	(HT40)	150 Mbps	7.25		Pass	
9	2452	(11140)	150 Mbps	7.36		Pass	

Test result:

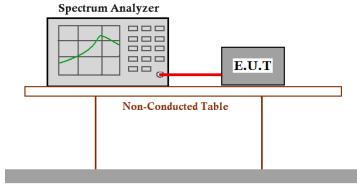
Remark: Level = Read Level + Cable Loss.

The unit does meet the FCC requirements.



# 7.8 Peak Power Spectral Density

Test Requirement:	FCC Part 15 C section 15.247 (e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10: Clause 6.11.2.3
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by
Test Configuration:	using internal battery.
-	



Ground Reference Plane



Test Procedure:

- 1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =2.5dB) from the antenna port to the spectrum analyzer or power meter.
- 2. Set the spectrum analyzer:
  - a) Set CENTER FREQUENCY = Frequency from Power Spectral Density Test Matrix (see 6.10.2)
  - b) Set SPAN = 20 MHz (For devices with a nominal 40 MHz BW, 50 MHz span will be needed)
  - c) Set REFERENCE LEVEL = 20 dBm
  - d) Set ATTENUATION = 0 dB (add internal attenuation, if necessary)
  - e) Set SWEEP TIME = Coupled
  - f) Set RBW = 3 kHz
  - g) Set VBW = 10 kHz
  - h) Set DETECTOR = Peak
  - i) Set MKR = Center Frequency
  - j) Set TRACE = CLEAR WRITE

Place the radio in continuous transmit mode. Set the TRACE to MAX HOLD, and after the trace stabilizes, the TRACE to VIEW. Set the marker on the peak of the signal and then adjust the center frequency of the spectrum analyzer to the marker frequency.

After viewing the EUT waveform on the spectrum analyzer, perform the following spectrum analyzer functions to capture the trace:

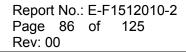
Set SPAN = 300 kHz

Set SWEEP TIME = 100 s

Set TRACE = MAX HOLD

Set MKR = PEAK SEARCH

- 3. Measure the Power Spectral Density of the test frequency with special test status.
- 4. Repeat until all the test status is investigated.
- 5. Report the worse case.

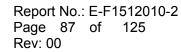




Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Peak Power Spectral Density (dBm/3KHz)	Limit	Result
1	2412		11 Mbps	-15.02		Pass
6	2437	802.11b	11 Mbps	-14.99		Pass
11	2462		11 Mbps	-15.32		Pass
1	2412	802.11g	54 Mbps	-16.13		Pass
6	2437		54 Mbps	-15.82		Pass
11	2462		54 Mbps	-16.14	8dBm/3KHz	Pass
1	2412	802.11n	72.2 Mbps	-15.35		Pass
6	2437		72.2 Mbps	-14.85		Pass
11	2462	(HT20)	72.2 Mbps	-15.15		Pass
3	2422	000 11-	150 Mbps	-15.93		Pass
6	2437	802.11n	150 Mbps	-15.82		Pass
9	2452	(HT40)	150 Mbps	-15.83		Pass

Test result: Level = Read Level + Cable Loss.

The unit does meet the FCC requirements.

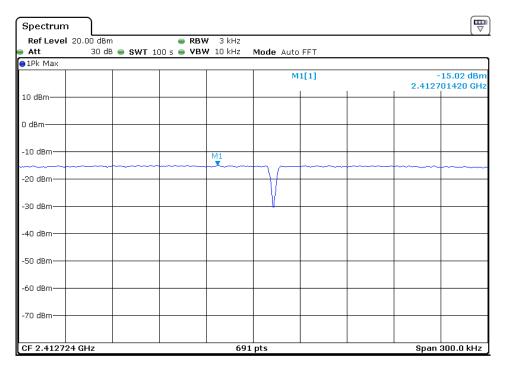


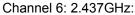


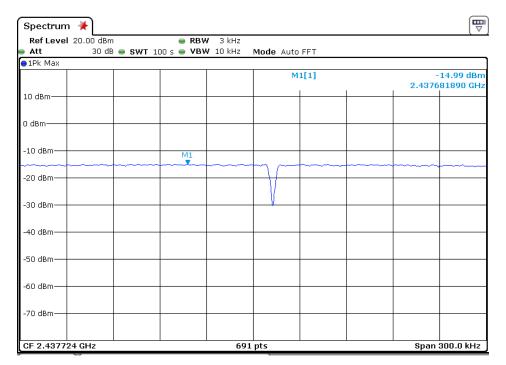
#### **Result plot as follows:**

#### 802.11b mode with 11Mbps data rate

#### Channel 1: 2.412GHz:

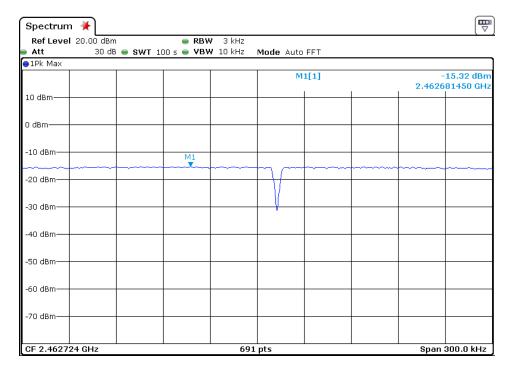






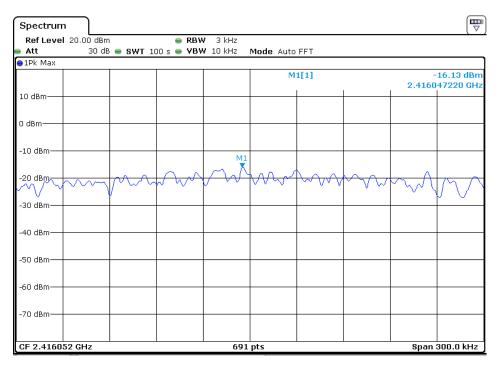


## Channel 11: 2.462GHz:



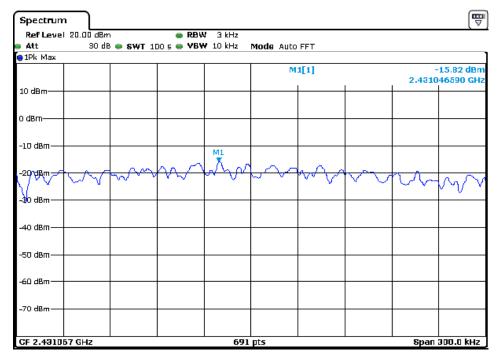
# 802.11g mode with 54Mbps data rate

Channel 1: 2.412GHz:

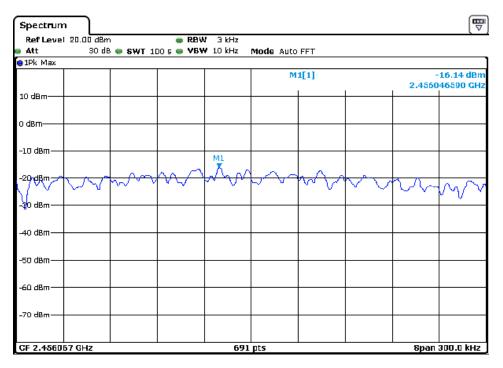


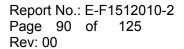


## Channel 6: 2.437GHz:



Channel 11: 2.462GHz:

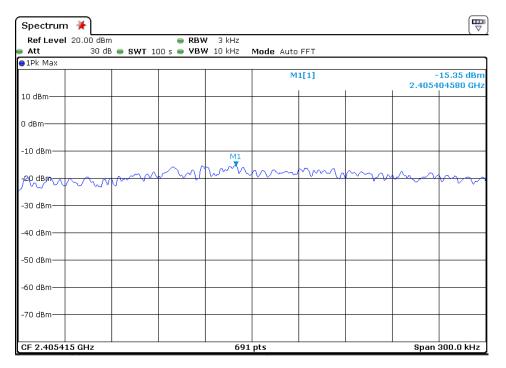




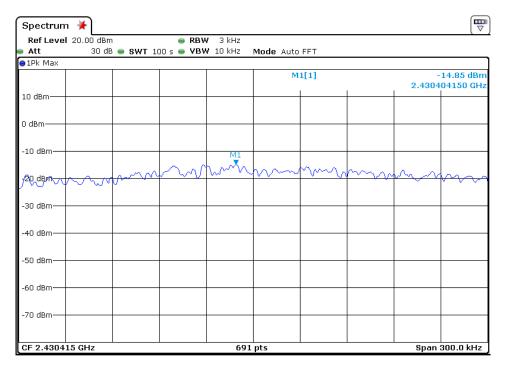


# 802.11n(HT20) mode with 72.2Mbps data rate

Channel 1: 2.412GHz:

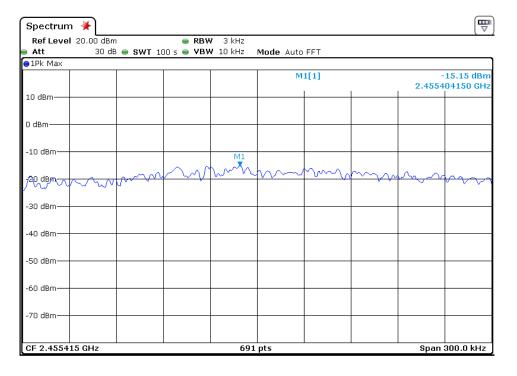


#### Channel 6: 2.437GHz:



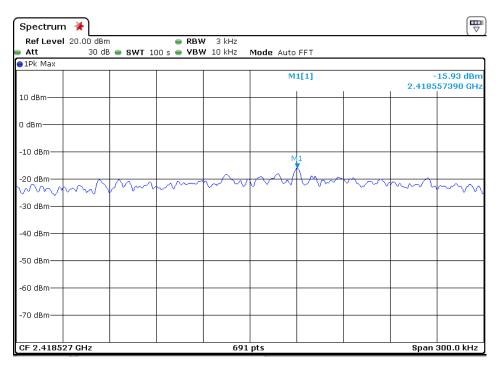


# Channel 11: 2.462GHz:



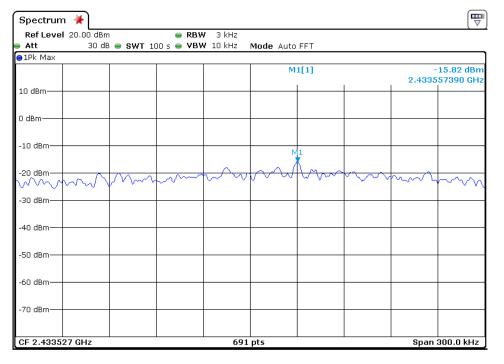
# 802.11n(HT40) mode with 150Mbps data rate

Channel 3: 2.422GHz:

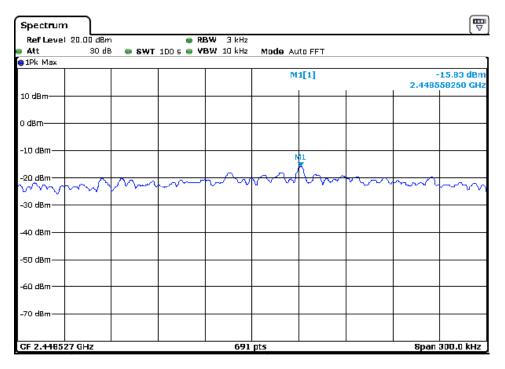




## Channel 6: 2.437GHz:



Channel 9: 2.452GHz:

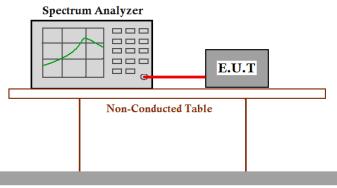


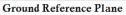


# 7.9 Band Edges Requirement

Test Requirement:	FCC Part 15 C section 15.247
	(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating. The radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Based on either an RF conducted or a radiated measurement. Provided the transmitter demonstrates compliance with the peak conducted power limits.
Frequency Band:	2400 MHz to 2483.5 MHz
Test Method:	FCC/KDB-558074 D01 v03r03 Clause 13.3.1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery.

Test Configuration:





Test Procedure:

- 1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum analyzer or power meter.
- 2. Set instrument center frequency to the frequency of the emission to be measured(must be within 2MHz of the authorized band edge).
- 3. Set span to 2MHz,
- 4. RBW=100kHz,
- 5. VBW $\geq$ 3×RBW
- 6. Detector=RMS
- 7. Sweep time =auto,



- 8. Trace mode=max hold.
- 9. Allow sweep to continue until the trace stabilizes(required measurement time may increase for low duty cycle applications)
- 10. Compute the power by integrating the spectrum over 1MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency( $f_{emission}$ )±0.5MHz.If the instrument does not have a band power function,the sum the amplitude levels(in power units) at 100kHz intervals extending across the 1MHz spectrum defined by femission±0.5MHz.



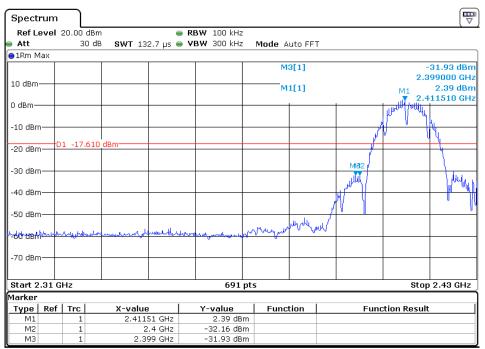
#### Test result with plots as follows:

Compare with the output power of the lowest frequency, the Lower Edges attenuated more than 20dB

Compare with the output power of the highest frequency, the Upper Edges attenuated more than 20dB.

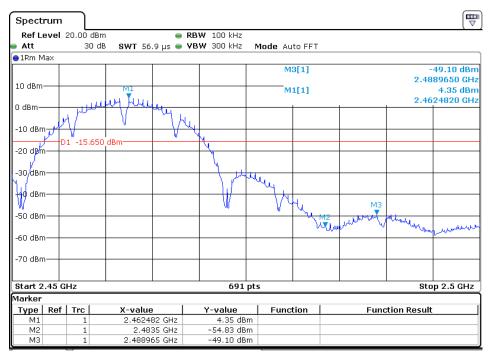
#### 802.11b mode with 11 Mbps data rate

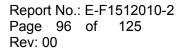
Channel1: 2.412 GHz



### 802.11b mode with 11 Mbps data rate

Channel11: 2.462 GHz

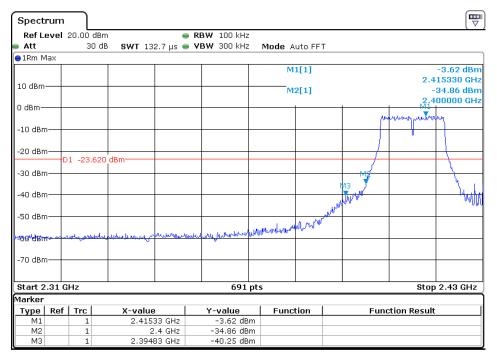






## 802.11g mode with 54 Mbps data rate

#### Channel1: 2.412 GHz



## 802.11g mode with 54 Mbps data rate

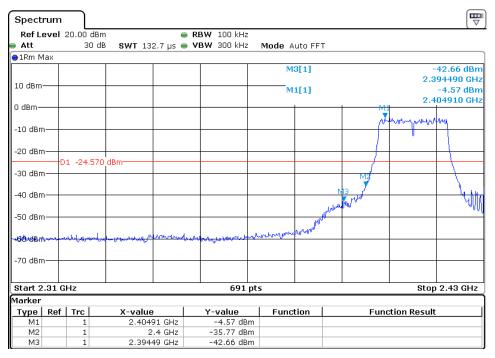
Channel11: 2.462 GHz

Spectrun	n									
Ref Leve	1 20.00 dB	m		RBW 100 kHz						
🖷 Att	30 0	dB <b>SWT</b> 56.	9 µs 👄	<b>VBW</b> 300 kHz	Mode Au	uto FFT				
●1Rm Max										
					M	3[1]				47.11 dBm
10 dBm										49130 GHz
					IV.	1[1]				-2.42 dBm 42330 GHz
0 dBm 🕌				_		1			2.43	42330 GH2
john john	nament	menory primerone	manuful	unu						
-10 dBm		- V - I								
-20 dBm-	D1 -22.42	20 dBm		<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>						
<sub>0</sub> ≇0 dBm—				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
Joso anu				Ч.						
-40 dBm				M.	. او					
-40 080					Walkingh ~	4 4 4	<sub>M2</sub> M	3		whenme
-50 dBm						and cal	Jus	there and		
-50 000								·· w	money	Monoral
-60 dBm										
-70 dBm—										
Start 2.45	GHZ			691	pts				Sto	p 2.5 GHz
Marker										
Type Re		X-value		Y-value	Func	tion		Func	tion Result	
M1 M2	1	2.45423	33 GHz 35 GHz	-2.42 dB -49.06 dB						
M2 M3	1	2.483		-49.06 dB -47.11 dB						
		2.70491		Tr.11 UD						



# 802.11n(HT20) mode with 72.2Mbps data rate

Channel1: 2.412 GHz



## 802.11n(HT20) mode with 72.2Mbps data rate

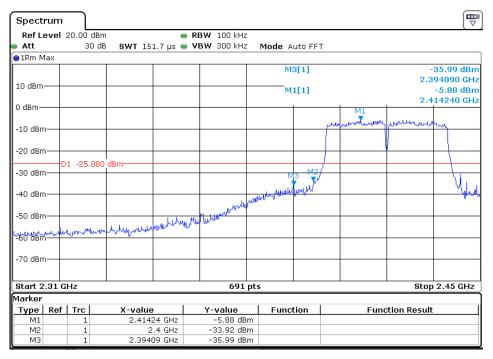
Channel11: 2.462 GHz

Spectru	m									
Ref Lev	el 20.00	dBm		<b>RBW</b> 100 kHz						, , , , , , , , , , , , , , , , , , ,
🛛 Att	3	O dB SWT	56.9 µs 👄	<b>VBW</b> 300 kHz	Mode	Auto FF	Т			
●1Rm Max	<									
						M1[1]				-2.16 dBm
10 dBm-										66210 GHz
10 UBIII-						M2[1]				-50.30 dBm
0 dBm	M1								2.48	35000 GHz
	mound	Nutration to	und the own	looberly.						
-10 dBm-		~ · [ * ]		<u></u> }						
10 00		V V								
-20 d8m-										
میں مرکز	-D1 -22	.160 dBm		N.						
, so dBm−				N.						
V				પ્ય						
-40 dBm—				<del>ر</del>	No.		MR			
					- man	my work	. Ma			hallow
-50 dBm—	_					. w.w. M	sign.	Marsh Marsh	black tracks	
										hamber
-60 dBm—										
-70 dBm—	_									
Start 2.4	5 GHz			691	. pts				Sto	p 2.5 GHz
Marker										
Type R	ef Trc	X-va		Y-value		unction		Fund	tion Result	
M1	1		56621 GHz	-2.16 di						
M2	1		.4835 GHz	-50.30 di						
M3	1	2	.4839 GHz	-45.29 di	3m					



# 802.11n(HT40) mode with 150Mbps data rate

Channel 3: 2.422 GHz



#### 802.11n(HT40) mode with 150Mbps data rate

Channel 9: 2.452 GHz

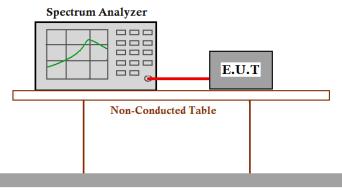
Spectrum										
Ref Level	20.00 dBm	1		<b>RBW</b> 100 kHz						
Att	30 dB	SWT 75.	8 µs 👄	<b>VBW</b> 300 kHz	Mode Au	uto FFT				
●1Rm Max										
					M	3[1]				-38.61 dBm
10 dBm									2.	486070 GHz
					M	1[1]				-4.53 dBm
									2	444230 GHz
-10 dBm		C								
-10 dBm	www.www	and marked a sub-of	1 porto	where we wanted and the second	Monutery					
			Ų.							
-20 dBm			A							
/D	1 -24.530	dBm			<u> </u>					
<mark>₁30</mark> dBm——					<u>ا</u>					
J~0						MAL	(L.c.	, M2 <sup>N</sup>	з	and which was
-40 dBm						- WW	JAA	White a Minus	d Muldia	ا بيا بيا الله
									···· •••••••••••••••••••••••••••••••••	alather when
-50 dBm										
-60 dBm										
-70 dBm						<u> </u>				
Start 2.43 G	Hz			691	pts				St	op 2.5 GHz
Marker										
Type Ref		X-value		Y-value	Func	tion		Fund	ction Resul	t
M1	1	2.4442		-4.53 dB						
M2	1		35 GHz	-39.63 dB						
M3	1	2.4860	J7 GHz	-38.61 dB	m					



# 7.10Conducted Spurious Emissions

Test Requirement:	FCC Part 15 C section 15.247
	(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating. the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Based on either an RF conducted or a radiated measurement. Provided the transmitter demonstrates compliance with the peak conducted power limits.
Test Method:	ANSI C63.10: Clause 6.7
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. Pre-test the EUT under 2 modes: power-supplied by using the AC adapter and power-supplied by using internal battery. After pre-testing, we found the worst case is the test mode of EUT power-supplied by using internal battery.

Test Configuration:



Ground Reference Plane

Test Procedure:

- 1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum analyzer or power meter.
- 2. Set the spectrum analyzer: RBW=100 KHz, VBW = 300KHz. Sweep = auto; Detector Function = Peak. Trace = Max Hold, Scan up through 10th harmonic.
- 3. Measure the Conducted Spurious Emissions of the test frequency with special test status.
- 4. Repeat until all the test status is investigated.
- 5. Report the worse case.

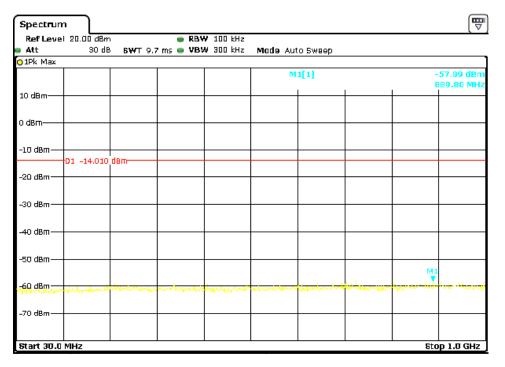


#### **Result plot as follows:**

#### 802.11b mode with 11Mbps data rate

Channel 1: 2.412GHz:

#### 30 MHz to 1 GHz



# 1 G to 3 GHz

Att	1 20.00 dBm 30 dB		oms 👄 VBW	/ 100 kHz / 300 kHz	Mode Auto	o Sweep				
)1Pk Max 10 dBm						2[1] 1[1] <sub>N</sub>		-56.99 dBm 2.09260 GHz 5.99 dBm 2.41100 GHz		
) dBm			_							
-10 dBm —	<b>D</b> 1 -14.010	dam								
-20 dBm —										
-30 dBm —										
40 dBm —										
-50 dBm —					MZ					
60.dBm;~~		فرموسيه والم		al the assessments	rable marked	mound	n na kilingi	wheelshap	and the case of the second	
-70 dBm —										



# 3 G to 13 GHz

Ref Level 20.00 dBm	1	🔵 RBW 100 kHz			
Att 30 dB	3 <b>6W</b> T 100 ms	👄 VBW 300 kHz	Mode Auto Sweep		
1Pk Max			· · · ·		
			M1[1]		-51.97 dBn 12.5590 GH
.0 dBm				+ +	
I dBm					
10 dBm	damene				
20 dBm					
30 dBm					
40 dBm					
50 dBm					M1
60 dBm	Hillim and have the most	revolution all the report	and more all when	englyther and on	والمعامل والمعاد والمعالية وال
70 dBm					

13 G to 25 GHz

Spectrum	, T								(₩)
Ref Level	20.00 dBm	ì	👄 RB\	🛚 100 kHz					
🖷 Att	30 dB	5WT 120	) ms 🥌 🛛 🗛	<b>W</b> 300 kHz	Mode Aut	to Sweep			
⊙1Pk Max									
					м	1[1]			48.26 dBm ).1110 GHz
10 dBm									
0 dBm									
-10 dBm	<b>D1</b> -14.010	dam							
-20 dBm	BI -14010								
-30 dBm									
-40 dBm									
					MI				
-50 dBm به بلوسلامی حلول	Heren ally the	ᡁᡯᡁᡰᡊ᠕ᡃᠰᡀᡟ	"Wetweeters	or the standing	where	W Under Laghered	w.AlizonauHual	ne where where	warden the
-60 dBm									
-70 dBm									
Start 13.0	GHz							Stop	25.0 GHz

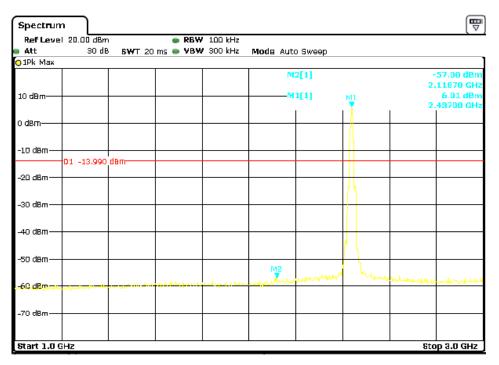


## Channel 6: 2.437GHz:

# 30 MHz to 1 GHz

Spectrum Ref Level 20.00 dBm	🖷 RBW	100 642		√ ]
Att 30 dB			ep	
)1Pk Max			<u>-r</u>	
		M1[1]		-58.38 dBm 938.90 MHz
10 dBm				
) dBm				
-10 dBm				
-20 dBm				
-30 dBm				
40 dBm				
-50 dBm				
sq.dBm	- Dottom Toda a province de la composition	and the second and the second se	12 400 - 14 40 14 1000 10 40 10 - 1000 10 - 1000 10	M1
-70 dBm				

## 1 G to 3 GHz





# 3 G to 13 GHz

<b>Ref Leve</b> l	20.00 dBm	1	e RB	₩ 100 kHz					
Att	30 de	5WT 10	00 ms 🥌 ۷ B'	<b>W</b> 300 kHz	Mode Au	to Sweep			
j1Pk Max		_							
					м	1[1]			51.83 dBm 2.5880 GHz
10 dBm									
0 dBm									
-10 dBm	D1 -13.990	d8m							
-20 dBm									
-30 dBm									
-40 dBm									
-50 dBm									M1
60 dBm	whenever	an Innador	La your marker of	Luna	hallowerty	dur when a	And a contraction	A work and a street and	Mulhingthe
-70 dBm									

13 G to 25 GHz

Spectrum	n								<b>⊞</b>
<b>Ref Leve</b>	i 20.00 dBm	1	👄 RB\	🕅 100 kHz					
🖷 Att	30 dB	<b>6WT</b> 120	D ms 👄 VBV	<b>W</b> 300 kHz	Mode Aut	to Sweep			
🔾 1Pk Max						-			
					М	1[1]			47.97 dBm ).1110 GHz
10 dBm									
0 dBm									
-10 dBm		dom							
-20 dBm	D1 -13.990								
-30 dBm									
-40 dBm									
50 dBm مىمىلىرىنىرىتىر	والمروعات والعربي	1 1 1	Jehnard and	ر بر المراجع	IM And the second second	Maria and	س اور ایداد به اور	en ette stan A	ليواده لمريده والمدرو
مىسىسى مىرى -60 dBm						-00.	~U.Je~~~~	and a set of the set.	
-70 dBm									
Start 13.0	GHz							Stop	25.0 GHz

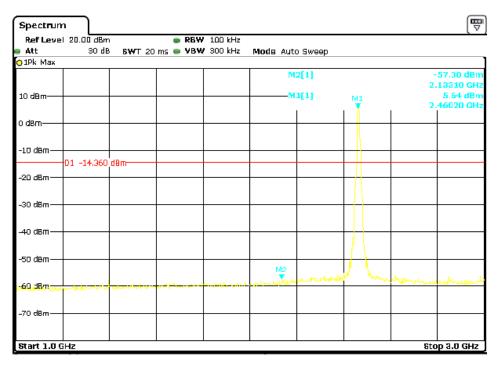


## Channel 11:2.462 GHz

# 30 MHz to 1 GHz

Spectrun Ref Leve	1 20.00 dBm	)	👄 RBY	<b>Y</b> 100 kHz					[⊽
Att	30 de		r ms 😐 VBV		Mode Aut	o Sweep			
)1Pk Max									
					M	1[1]			-58.80 dBm 941.70 MHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	D1 -14.360	d8m							
-30 dBm —									
-40 dBm									
-50 dBm —									
€9.dBm	Lund Mallander	us-mun-jas	malalantura	- Mayon allow	www.water	Marth and	م ایر، <del>مزیر آبر</del> ه و	a a a a a a a a a a a a a a a a a a a	M1
-70 dBm —									

#### 1 G to 3 GHz





# 3 G to 13 GHz

<b>Ref Leve</b>	1 20.00 dBm	n	👄 RB'	₩ 100 kHz					
Att	30 dB	3 <b>6WT</b> 10	00 ms 🥌 🗸 🛛	₩ 300 kHz	Mode Au	to Sweep			
)1Pk Max									
					М	1[1]			-52.14 dBm 7.3780 GHz
10 dBm									
0 dBm									
-10 dBm	D1 -14.360	dBro							
-20 dBm	01 -14,300								
-30 dBm									
40 dBm —									
-50 dBm				M1					
60 d8m	Herburn	huthenthoused	nunken	hardengen	www.phpan	Un Marrie	hypeld-with them	and the second sec	Jahan Anger State
-70 dBm —									
Start 3.0 G									) 13.0 GHz

13 G to 25 GHz

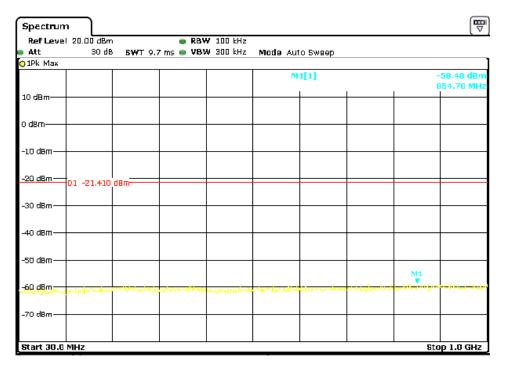
Spectrum	'n								Ē
Ref Level	1 20.00 dBm	1	👄 RB\	₩ 100 kHz					
👄 Att	30 de	6WT 120	D ms 🥌 VBV	<b>W</b> 300 kHz	Mode Au	to Sweep			
⊙1Pk Max									1
					М	1[1]			49.18 dBm I.4010 GHz
10 dBm									
0 dBm									
-10 dBm	P4 44.000	40-							
-20 dBm	D1 -14.360	0801							
-30 dBm									
-40 dBm									
-50 dBm	Maran for Maran	www.www.	- Alter Marchard	Allower Laborer	www.	Munu	munderha	سهيدر والعربية	M1 multilitetete
-60 dBm									
-70 dBm									
Start 13.0	GHz							Stop	25.0 GHz



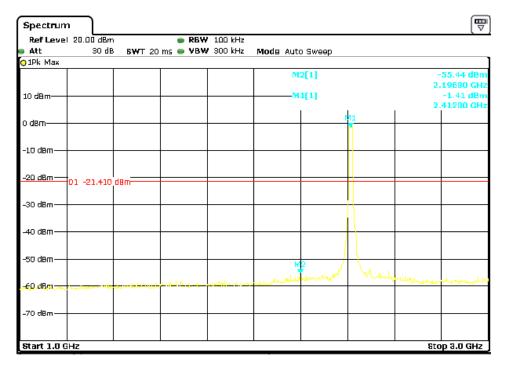
## 802.11g mode with 54Mbps data rate

Channel 1: 2.412GHz:

#### 30 MHz to 1 GHz



#### 1 G to 3 GHz





# 3 G to 13 GHz

20.00 dBm	1	👄 RB	<b>W</b> 100 kHz					
30 dB	6WT 1	00 ms 🥌 ۷ B	₩ 300 kHz	Mode Au	to Sweep			
				M	1[1]			52.46 dBn 0.5470 GH
01 -21.410	d8m							
						ML		
the month and a	myburged	for the second	mounder	Muskelow	and Helenahlera	AND THE AND	verthe spectra	George and the second sec
	30 dP	01 -21.410 dBm	30 dB <b>SWT</b> 100 ms <b>• VB</b>	30 dB <b>BWT</b> 100 ms <b>• VBW</b> 300 kHz	30 dB 6WT 100 ms @ VBW 300 kHz Mode Au	30 dB 6WT 100 ms • VBW 300 kHz Mode Auto Sweep	30 dB 6WT 100 ms • VBW 300 kHz Mode Auto Sweep	30 dB BWT 100 ms • VBW 300 kHz Mode Auto Sweep

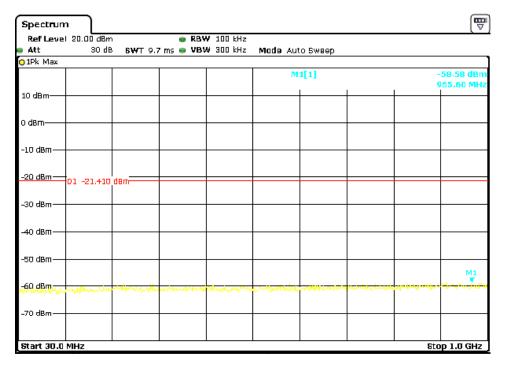
13 G to 25 GHz

Spectrum									
	20.00 dBm			₩ 100 kHz					
Att	30 dB	SWT 120	) ms 😑 VBN	₩ 300 kHz	Mode Au	to Sweep			
⊙1Pk Max									
					м	1[1]			49.17 dBm 9.6770 GHz
10 dBm									
0 dBm									
-10 dBm									
<u>-20 dBm</u>	01 -21.410	dBm <del></del>							
-30 dBm									
-40 dBm					M1				
-50 dBm		And MUS	la Deta constato	who think it	Martin March	M			aldere
-50 dBm whin when	Charle Colored	a no a a	- va - den velande	1		Meringer	genere hardly	www.www.	Vishington
-60 dBm									
-70 dBm									
Start 13.0 (				691	nte			Pton	25.0 GHz
Jacan 13.0 (	3112			091	prs			acup	20.0 GHZ

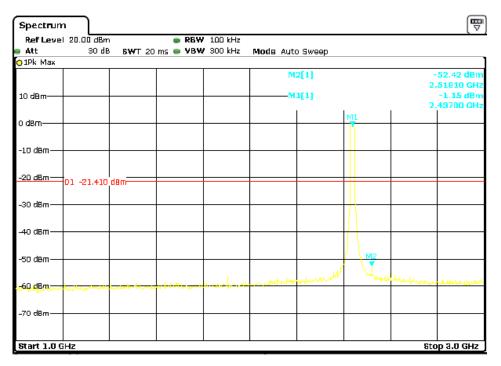


## Channel 6: 2.437GHz:

## 30 MHz to 1 GHz



## 1 G to 3 GHz





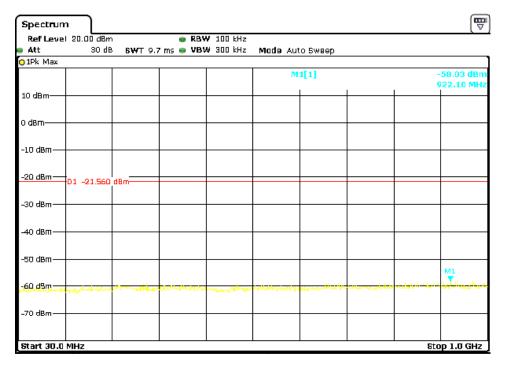
<b>Ref Leve</b>	20.00 dBm	1	👄 RBV	₩ 100 kHz						
Att	30 de	5 <b>₩</b> T 10	0 ms 👄 ٧ B ។	<b>W</b> 300 kHz	Mode Au	to Sweep				
⊖1Pk Max										
					м	1[1]		-51.67 dBm 10.7060 GHz		
10 dBm										
0 dBm										
-10 dBm										
-20 dBm	01 -21,410	d8m								
-30 dBm —										
-40 dBm										
-50 dBm							MI			
-60 dBm	shahaayaan	Warden	namle-man	h how with	olden gjokanska	phankenedeter	loster mu	and the second	har an	
-70 dBm										

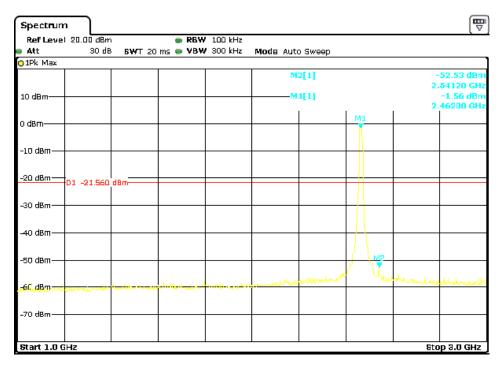
Spectrum	<u>`</u>								₽
<b>Ref Level</b>	20.00 dBm	1	👄 RB\	🕅 100 kHz					
🖷 Att	30 dB	<b>6WT</b> 12	0 ms 🥌 🛛 🗛	<b>W</b> 300 kHz	Mode Au	to Sweep			
⊙1Pk Max									
					М	1[1]			47.15 dBm ).1460 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	D1 -21.410	d8m							
-30 dBm									
-40 dBm					м				
-50 dBm-	المهيدالعالموط	Marto	The second	when the second	A M		مەربىر بەر يەر يەر يەر يەر يەر يەر يەر يەر يەر ي	and the server of	ر میلامی الاروانس
-60 dBm									
-70 dBm									
Start 13.0 (	GHz							Stop	25.0 GHz



## Channel 11:2.462 GHz

#### 30 MHz to 1 GHz

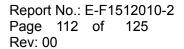






Ref Level 20	.00 dBm		👄 R	BW 100 kHz					`
Att	30 dB	<b>6WT</b> 1	00 ms 🥌 ۷	BW 300 kHz	Mode Au	to Sweep			
)1Pk Max									
					М	1[1]			52.44 dBn ).6190 GH
10 dBm									
0 dBm									
-10 dBm									
-20 dBm-01	-21.560	d8m							
-30 dBm									
-40 dBm									
-50 dBm				_			M1		
60 april 100	will and the	webbucht	moundary	munularyu	Art in a grad a later that	waln and the	your all all the second	whitehoute	بعريكن وسلعلوه
-70 dBm									

Spectrum	<u> </u>								( <b>B</b> )
Ref Level	20.00 dBm	1	👄 RB\	🕅 100 kHz					
🖷 Att	30 dB	5WT 120	) ms 🥌 VBN	<b>W</b> 300 kHz	Mode Au	to Sweep			
o1Pk Max									
					М	1[1]			48.52 dBm 9.3130 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	01 -21.560	d8m							
-30 dBm									
-40 dBm					ML				
					T				
-50 dBm 	wellowerwer	(Mullywork)	Mayon	Monternat	and all a second se	Murant	Nelson and States	wylla prior a	Lundon horn
-60 dBm									
-70 dBm									
Start 13.0 (	GHz							Stop	25.0 GHz

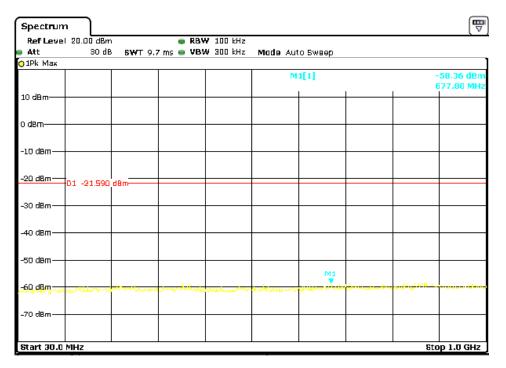


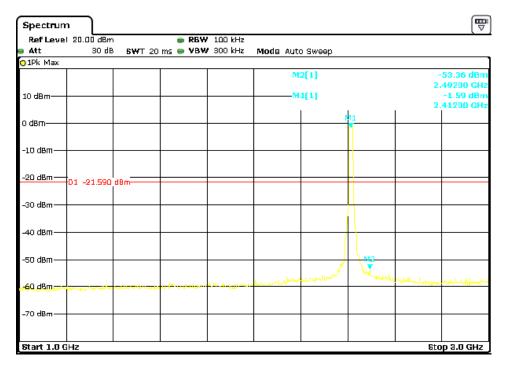


## 802.11n(HT20) mode with 72.2Mbps data rate

Channel 1: 2.412GHz:

#### 30 MHz to 1 GHz







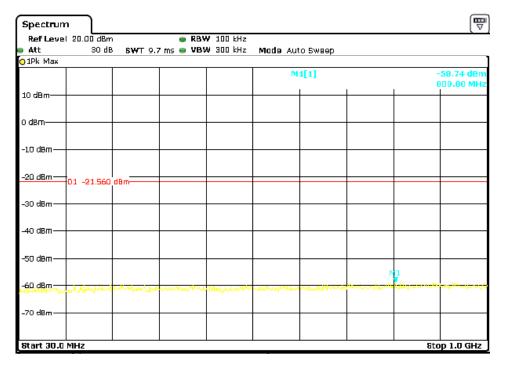
<b>Ref Leve</b> l	20.00 dBm	1	👄 RB	₩ 100 kHz					`		
Att	30 dB	<b>6WT</b> 1	00 ms 🥌 ۷ B	₩ 300 kHz	Mode Au	to Sweep					
∋1Pk Max											
					м	1[1]		-52.41 dBn 10.6050 GH			
10 dBm											
0 dBm											
-10 dBm											
-20 dBm	D1 -21.590	d8m									
-30 dBm											
-40 dBm											
-50 dBm							ML				
-60-dem	Warym	wheelight	(Muspukspillart	hand when the state	www.www.w	denter with service	www.lu	umand	olombleradul		
-70 dBm											

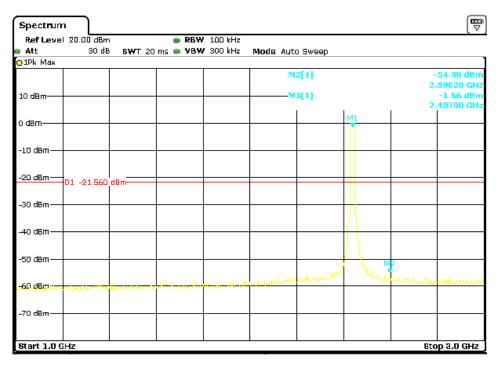
Spectrum	<u>`</u>								<b>T</b>
<b>Ref Level</b>	20.00 dBm	1	👄 RB\	₩ 100 kHz					
👄 Att	30 dB	6WT 120	) ms 🥌 🛛 🗛	<b>W</b> 300 kHz	Mode Au	to Sweep			
🔾 1Pk Max						-			1
					М	1[1]			48.87 dBm 0.1460 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	D1 -21.590	d8m							
-30 dBm									
-40 dBm									
					M	ļ.			
-50 dBm (ماسال مال)	houther	and the state of t	rething	ولأتمسط المرجع	N. M. M. M.	www.uhudura	Lugar Weber	Munderstand	بالملاطيب والملا
-60 dBm									
-70 dBm									
Start 13.0 (	GHz							Stop	25.0 GHz



## Channel 6: 2.437GHz:

#### 30 MHz to 1 GHz







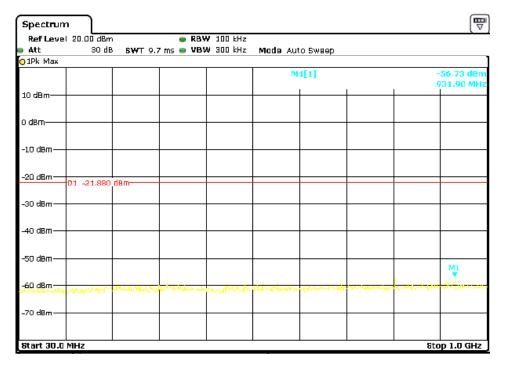
Ref Level	20.00 dBm	1	😑 RB'	₩ 100 kHz					
Att	30 dB	<b>6WT</b> 10	)0 ms 🥌 🛛 🗷	<b>W</b> 300 kHz	Mode Au	to Sweep			
∋1Pk Max									
					м	1[1]			52.71 dBn 0.6630 GHz
10 dBm									
-10 dBm									
	01 -21.560	d8m							
-30 dBm									
-40 dBm									
-50 dBm							<u>M</u>		
-60 <sup>1</sup> dbm	Mary Land	homentorional	allen har mar	nul ko wand	Un harden als	Jerely years and a port	WALK WALE	and the second second	welthalarthan
-70 dBm									

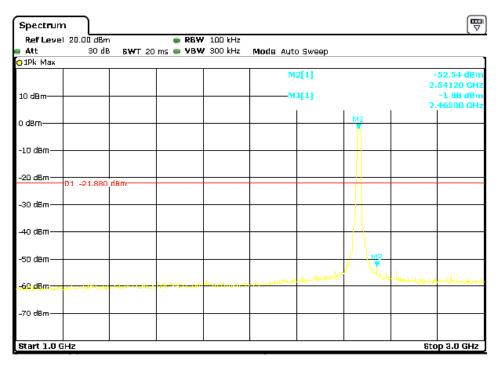
Spectrum	, I								
<b>Ref Leve</b> l	20.00 dBm	1	👄 RB\	🕅 100 kHz					
🖷 Att	30 dB	5WT 12	D ms 👄 VBV	<b>W</b> 300 kHz	Mode Aut	to Sweep			
🔾 1Pk Max						-			1
					м	1[1]			48.02 dBm 0.0940 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	01 -21.560	d8m							
-30 dBm									
-40 dBm					M				
-50 dBm unh	a. all all a and a start and a start a	Wangerto	Muddene	all work and	har water	W Westerland	undonum	السعلويلويلا	edina when when
-60 dBm									
-70 dBm									
Start 13.0	GHz							Stop	25.0 GHz



## Channel 11:2.462 GHz

#### 30 MHz to 1 GHz

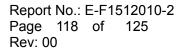






Ref Level	20.00 dBm		😑 RB	<b>W</b> 100 kHz					
Att	30 dB	SWT 1	00 ms 👄 🛛 🛛	<b>W</b> 300 kHz	Mode Au	to Sweep			
)1Pk Max					м	1[1]			-52.46 dBn 2.2840 GH
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	D1 -21.880	dBm							
-30 dBm									
-40 dBm									
-50 dBm									M1
-60'dBm	Antonio	der when	hen yutariy hudhad	hundhard	Herring and the second s	w <sup>an</sup> lluwmen	method Wi	her will pro-obly	and the second second
-70 dBm									
Start 3.0 G				691					) 13.0 GHz

Spectrum	<u>,                                     </u>								Ē
<b>Ref Leve</b> l	20.00 dBm	1	👄 RB\	🛚 100 kHz					
👄 Att	30 dB	<b>6W</b> T 120	) ms 🥌 VBY	<b>W</b> 300 kHz	Mode Au	to Sweep			
⊙1Pk Max									1
					М	1[1]			48.79 dBm 7.9750 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	01 -21.880	dam							
-30 dBm									
-40 dBm									
				M1 T					
-50 dBm Արտունին	here the altered the	arteret arteret	My Mary man	at whether	طريهه المحرر والمستركة	Wheelder	und hours	Northon	shunderstruk
-60 dBm									
-70 dBm									
Start 13.0	GHz			I		1	1	Stop	25.0 GHz

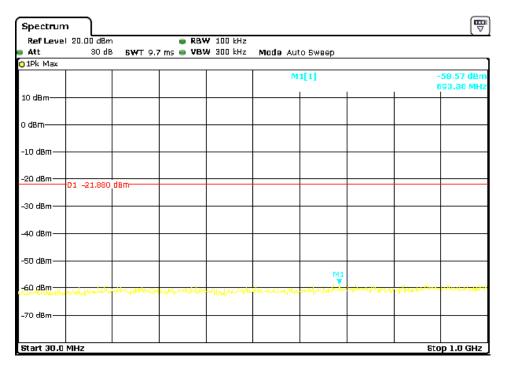


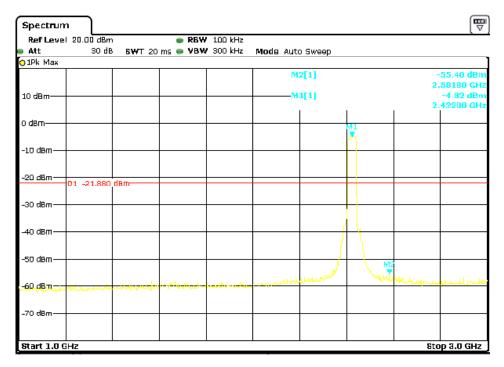


## 802.11n(HT40) mode with 150Mbps data rate

Channel 3: 2.422GHz:

#### 30 MHz to 1 GHz







RefLevel	20.00 dBm	1	e RB	₩ 100 kHz					
Att	30 dB	<b>6WT</b> 10	)0 ms 👄 🛛 🗷	<b>W</b> 300 kHz	Mode Au	to Sweep			
j1Pk Max									
					м	1[1]			·51.74 dBm 2.6160 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	1 -21.880	dem							
-30 dBm									
-40 dBm									
-50 dBm									ML
460 dom	Han un a	where were	Marianan	Munumber -	and hard hard a state	dane was	water	والمعد المعيول المعيولة	work-land
-70 dBm									

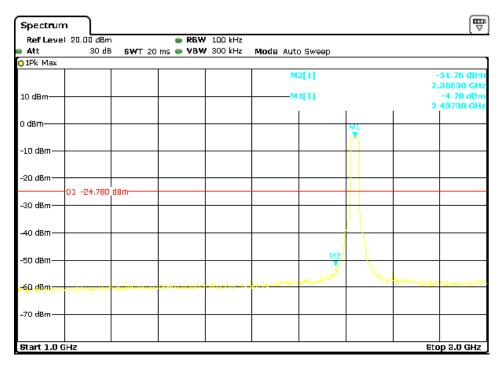
Spectrum	'n								₽
Ref Level	1 20.00 dBm	1	👄 RB\	🛚 100 kHz					
👄 Att	30 de	6WT 12	) ms 🥌 VBY	<b>W</b> 300 kHz	Mode Au	to Sweep			
⊙1Pk Max									
					М	1[1]			48.95 dBm ).1110 GHz
10 dBm									
0 dBm									
-10 dBm									
-20 dBm	01 -21.880	d8m							
-30 dBm									
-40 dBm					M				
-50 dam									
-50 dBm	homeshall	when when	noliter apples	en grand a state of the	war. Tuster	when have a	لسراد بالمراسط	بعريدلته مياحداله واللم	whenever
-60 dBm									
-70 dBm									
Start 13.0	GHz	1				1		Stop	25.0 GHz



## Channel 6: 2.437GHz:

# 30 MHz to 1 GHz

<b>Ref Leve</b>	1 20.00 dBm	n	😑 RBV	♥ 100 kHz					
Att	30 de	в <b>ж</b> т 9.7	r ms 😑 VBV	<b>N</b> 300 kHz	Mode Aut	о Sweep			
j1Pk Max									
					м		-58.23 dBm 224.40 MHz		
10 dBm									+
0 dBm									
-10 dBm									
-20 dBm —									
-30 dBm —	-D1 -24.780	080							
-40 dBm									
-50 dBm									<u> </u>
<del>69.480</del>	July marked	terhentoren	delternen en men	Martin Martin	therenand	and water	ana ang ang ang ang ang ang ang ang ang	and and the st	and the second
-70 dBm —									





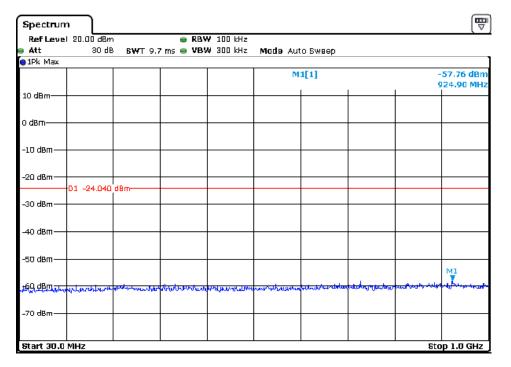
<b>Ref Leve</b> l	20.00 dBm	1	🖨 RB	W 100 kHz					· · · ·
Att	30 de	6WT 10	00 ms 🥌 VB	₩ 300 kHz	Mode Au	to Sweep			
∋1Pk Max									
					м	1[1]	-53.04 dBm 10.6770 GHz		
10 dBm									
-10 dBm									
-20 dBm									
-30 dBm	01 -24.780	08m							
-40 dBm									
-50 dBm									
-60 dBm	robulue	lly the server of the second second	http://www.alaw	houseday	and manife com	at all and the	east want and	portunation	ahilan jan har
-70 dBm									ļ

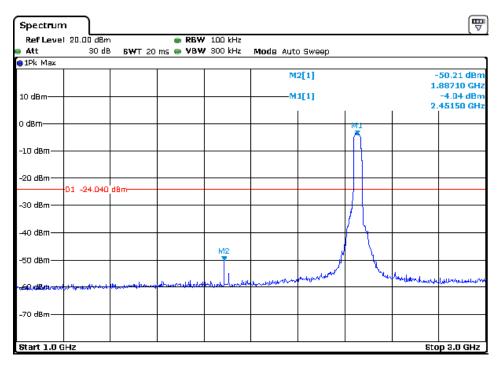
Spectrum	<u>,                                     </u>								Ē	
Ref Level	20.00 dBm	1	👄 RB\	🕅 100 kHz						
🖷 Att	30 dB	<b>6WT</b> 120	) ms 🥌 VBN	<b>W</b> 300 kHz	Mode Au	to Sweep				
⊙1Pk Max										
					М	1[1]		-48.67 dBn 19.6430 GH		
10 dBm										
0 dBm										
-10 dBm										
-20 dBm	01 -24.780	d8m								
-30 dBm	21 21/00									
-40 dBm					ML					
-50 dBm արհչյուսություն	unintriti	low Look May Party	<b>Whithuthare</b>	month	WHAN LAND	Hundred	han an a	www.ukud	Villowine	
-60 dBm										
-70 dBm										
Start 13.0	GHz							Stop	25.0 GHz	



## Channel 9:2.452 GHz

#### 30 MHz to 1 GHz







<b>Ref Leve</b>	1 20.00 dBm	)	e RBV	₩ 100 kHz					· · ·	
Att	30 de	<b>6WT 1</b>	00 ms 🥌 ۷ B	<b>W</b> 300 kHz	Mode Au	to Sweep				
1Pk Max										
					M1[1]			-52.20 dBm 10.6050 GHz		
10 dBm										
0 dBm										
-10 dBm										
-20 dBm —	01 -24.040	dBar								
-30 dBm	01 -24.040									
-40 dBm										
-50 dBm							M1			
webbranether	unnum	Wanter	Ummunula	uludlerane.	ankarsh film	41th Wighter	withthe	when the	وحاربهم كالمديا يعجم المعط	
-70 dBm										
Start 3.0 G									13.0 GHz	

Spectrum	<u>,                                     </u>								<b>T</b>	
Ref Level	20.00 dBm	1	👄 RBV	🖌 100 kHz						
🖷 Att	30 de	6WT 120	) ms 🥌 ٧ 🛚 🖲	<b>W</b> 300 kHz	Mode Au	to Sweep				
😑 1Pk Max									]	
					M1[1]			-49.12 dBm 16.5510 GHz		
10 dBm										
0 dBm										
-10 dBm										
-20 dBm	01 -24.040	d8m								
-30 dBm										
-40 dBm		M	1							
-50 dBm بریاندریاس	N. Markan			at which we are	Contra Poly and	we wanted was	mater which have	mluyemyor	Junear Contraction	
-60 dBm										
-70 dBm										
Start 13.0	GHz							Stop	25.0 GHz	



Report No.: E-F1512010-2 Page 124 of 125 Rev: 00

# 8 Photographs

# 8.1 Radiated Spurious Emission Test Setup

Below 1GHz:



Above 1GHz:



Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang,Dongguan, Guangdong, China



Report No.: E-F1512010-2 Page 125 of 125 Rev: 00

# 8.2 Conducted Emission Test Setup

