# RF TEST REPORT



Report No.: 14021149-FCC-R3 Supersede Report No.: N/A

Applicant	Beneworld International (HK) Co., Limited		
Product Name	7inch Tablet PC		
Main Model	BW9		
Test Standard	FCC Part 15.2	247: 2014, ANSI C63.10: 2009	
Test Date	November 11	to November 13, 2014	
Issue Date	November 14	, 2014	
Test Result	Pass Fail		
Equipment complied with the specification			
Equipment did not comply with the specification			
Deon .	Qai`	Alex. Lin	
Deon Dai Test Engineer		Alex Liu Checked By	
This test report may be reproduced in full only			
Test result presented in this test report is applicable to the tested sample only			

Issued by:

SIEMIC (Nanjing-China) Laboratories

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# **Laboratories Introduction**

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In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

**Accreditations for Conformity Assessment** 

Acciditations for conformity Assessment		
Country/Region	Scope	
USA	EMC, RF/Wireless, SAR, Telecom	
Canada	EMC, RF/Wireless, SAR, Telecom	
Taiwan	EMC, RF, Telecom, SAR, Safety	
Hong Kong	RF/Wireless, SAR, Telecom	
Australia	EMC, RF, Telecom, SAR, Safety	
Korea	EMI, EMS, RF, SAR, Telecom, Safety	
Japan	EMI, RF/Wireless, SAR, Telecom	
Singapore	EMC, RF, SAR, Telecom	
Europe	EMC, RF, SAR, Telecom, Safety	



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# 1. Report Revision History

Report No.	Report Version	Description	Issue Date
14021149-FCC-R3	NONE	Original	November 14, 2014

# 2. <u>Customer information</u>

Applicant Name	Beneworld International (HK) Co., Limited	
Applicant Add	Unit 04, 7/F, Bright Way Tower, No. 33 Mong Kok Road, Kowloon, Hong Kong	
Manufacturer	Shenzhen Beneworld Technology Co. Ltd.	
Manufacturer Add	Building 3, Huangtian Industrial Park, Xixiang, Baoan District, Shenzhen, Guangdong, China	

# 3. Test site information

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and
Lab Address	Technology Development Park, Nanjing, China
FCC Test Site No.	986914
IC Test Site No.	4842B-1
Test Software	Labview of SIEMIC version 1.0



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## 4. Equipment under Test (EUT) Information

	<del></del>
Description of EUT:	7inch Tablet PC
Main Model:	BW9
Serial Model:	BW7D9, BW7D19, BW7D29, BW7D61, BW7D62, BW7D66, BW7D68,BW7D69, BW7D70, BW7D71
Date EUT received:	November 03, 2014
Test Date(s):	November 11 to November 13, 2014
Conducted AV Power (dBm)	17.88 dBm(802.11b)
Antenna Gain:	GSM850: -0.46 dBi PCS1900:1.19 dBi UMTS-FDD Band II: 1.3 dBi Bluetooth/ WIFI&BLE: 1.56 dBi
Type of Modulation:	GSM / GPRS: GMSK UMTS-FDD: QPSK 802.11b/g/n: DSSS/OFDM Bluetooth: GFSK&π/4DQPSK&8DPSK BLE: GFSK
RF Operating Frequency (ies):	GSM850 TX : 824.2 ~ 848.8 MHz; RX : 869.2 ~ 893.8 MHz PCS1900 TX : 1850.2 ~ 1909.8 MHz; RX : 1930.2 ~ 1989.8 MHz UMTS-FDD Band II TX :1852.4 ~ 1907.6 MHz; RX : 1932.4 ~ 1987.6 MHz 802.11b/g/n(20M): 2412-2462 MHz(TX/RX) 802.11n(40M): 2422-2452 MHz (TX/RX) Bluetooth&BLE: 2402-2480 MHz(TX/RX)
Number of Channels:	299CH (PCS1900) and 124CH (GSM850) UMTS-FDD Band II : 277CH 802.11b/g/n(20M): 11CH 802.11n(40M): 7CH Bluetooth: 79CH BLE: 40CH
Port:	USB Port, Earphone Port
Input Power:	Adapter: Model: XHY050200UUCH Input: AC 100-240V 50/60Hz 0.5A MAX Output: DC 5V 2.0A BATTERY: 3.7V 5200mAh
Trade Name :	N/A

FCC ID: 2AANC-BENEWORLD-BW9

Note: the difference between these models please refer to Annex E. DECLARATION OF SIMILARITY.



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# 5. Test Summary

The product was tested in accordance with the following specifications. All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§ 15.247 (i), §2.1093	RF Exposure	Compliance
§ 15.203	Antenna Requirement	Compliance
§ 15.247 (a)(2)	DTS (6 dB&20 dB) CHANNEL BANDWIDTH	Compliance
§ 15.247(b)(3)	Conducted Maximum Output Power	Compliance
§ 15.247(e)	Power Spectral Density	Compliance
§ 15.247(d)	Band-Edge & Unwanted Emissions into Non-Restricted Frequency Bands	Compliance
§ 15.207 (a),	AC Power Line Conducted Emissions	Compliance
§ 15.205, §15.209, § 15.247(d)	Radiated Spurious Emissions & Unwanted Emissions into Restricted Frequency Bands	Compliance

### **Measurement Uncertainty**

Emissions			
Test Item Description Uncertainty			
Radiated Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	3.952dB	



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# 6. Measurements, Examination And Derived Results

# 6.1 RF Exposure

The EUT is a portable device, thus requires please refer to SIEMIC SAR Report: 14021149-FCC-H.



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### 6.2 Antenna Requirement

### **Applicable Standard**

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit. And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### **Antenna Connector Construction**

The EUT has 2 antennas:

A PIFA antenna for Bluetooth/BLE/WIFI, the gain is 1.56 dBi for Bluetooth/BLE/WIFI.

A PIFA antenna for GSM and UMTS, the gain is -0.46 dBi for GSM850, the gain is 1.19 dBi for PCS1900, 1.3 dBi for UMTS-FDD Band II.

Result: Compliance.



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# 6.3 DTS (6 dB&20 dB) Channel Bandwidth

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	November 13, 2014
Tested By:	Deon Dai

Spec	Item	Requirement	Applicable	
§ 15.247(a)(2)	a)	6dB BW≥500kHz;	<b>V</b>	
RSSGen (4.6.1)	b)	20dB BW: For FCC reference only; required by IC.	<b>V</b>	
Test Setup		Spectrum Analyzer EUT		
Test Procedure	6dB Er - - - - -	558074 D01 DTS Meas Guidance v03r02, 8.1 DTS bandwidth  6dB Emission bandwidth measurement procedure  - Set RBW = 100 kHz.  - Set the video bandwidth (VBW) ≥ 3 x RBW.  - Detector = Peak.  - Trace mode = max hold.  - Sweep = auto couple.  - Allow the trace to stabilize.  Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.  - 20dB bandwidth  C63.10 Occupied Bandwidth (OBW=20dB bandwidth)  - Set RBW = 1%-5% OBW.  - Set the video bandwidth (VBW) ≥ 3 x RBW.  - Set the span range between 2 times and 5 times of the OBW.  - Sweep time=Auto, Detector=PK, Trace=Max hold.  - Once reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e., the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at		
Remark		the 20 dB level with respect to the reference level.		
Result	Pas	ss Fail		
Test Data	Yes			
Test Plot	Yes	s (See below)		



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### 6dB Bandwidth measurement result

Туре	Test mode	СН	Freq (MHz)	Result (MHz)	Limit (MHz)	Result
		Low	2412	10.08	≥0.5	Pass
	802.11b	Mid	2437	10.08	≥0.5	Pass
		High	2462	10.08	≥0.5	Pass
		Low	2412	15.42	≥0.5	Pass
	802.11g	Mid	2437	15.48	≥0.5	Pass
6dB BW		High	2462	15.60	≥0.5	Pass
		Low	2412	15.43	≥0.5	Pass
	802.11n(20M)	Mid	2437	15.54	≥0.5	Pass
		High	2462	15.48	≥0.5	Pass
	802.11n(40M)	Low	2422	35.40	≥0.5	Pass
		Mid	2437	35.40	≥0.5	Pass
		High	2452	35.40	≥0.5	Pass

### 20 dB Bandwidth measurement result

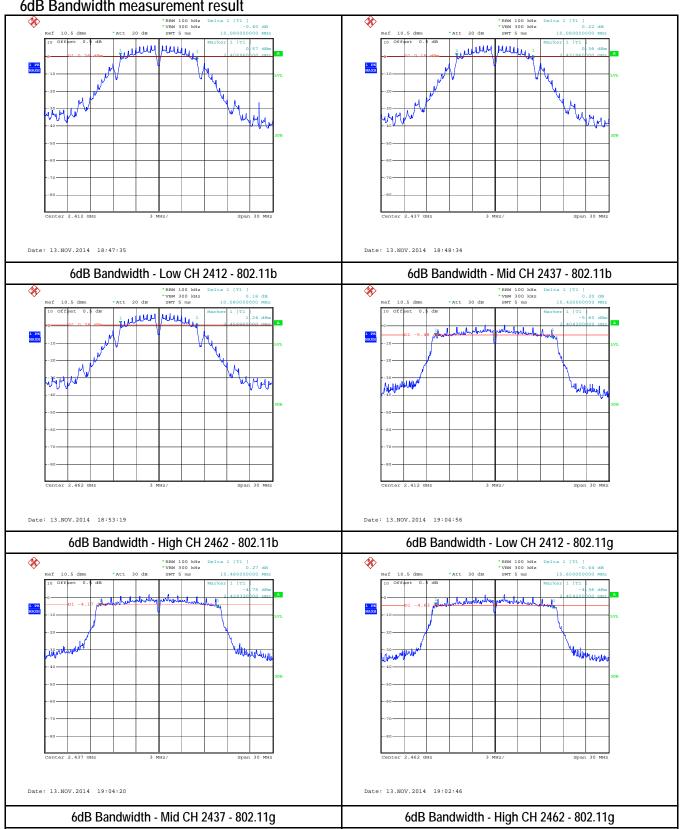
Туре	Test mode	СН	Freq (MHz)	Result (MHz)	Limit (MHz)	Result
		Low	2412	14.34	≥0.5	Pass
	802.11b	Mid	2437	14.34	≥0.5	Pass
		High	2462	14.40	≥0.5	Pass
		Low	2412	17.70	≥0.5	Pass
	802.11g	Mid	2437	17.70	≥0.5	Pass
20dB BW		High	2462	17.76	≥0.5	Pass
ZOUB BVV		Low	2412	18.54	≥0.5	Pass
	802.11n(20M)	Mid	2437	18.48	≥0.5	Pass
		High	2462	18.48	≥0.5	Pass
	802.11n(40M)	Low	2422	37.40	≥0.5	Pass
		Mid	2437	37.20	≥0.5	Pass
		High	2452	37.20	≥0.5	Pass



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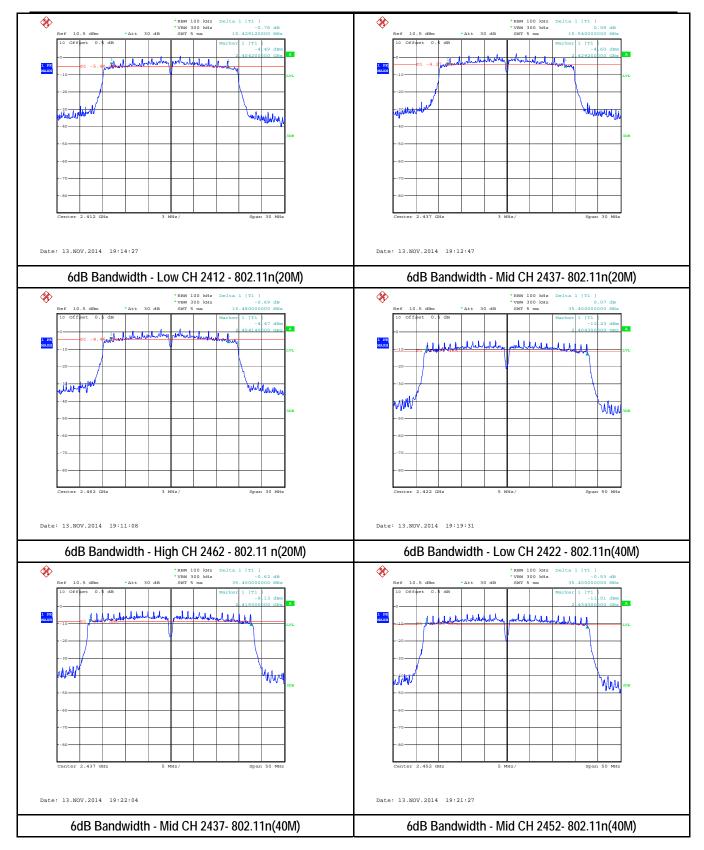
### **Test Plots**

### 6dB Bandwidth measurement result





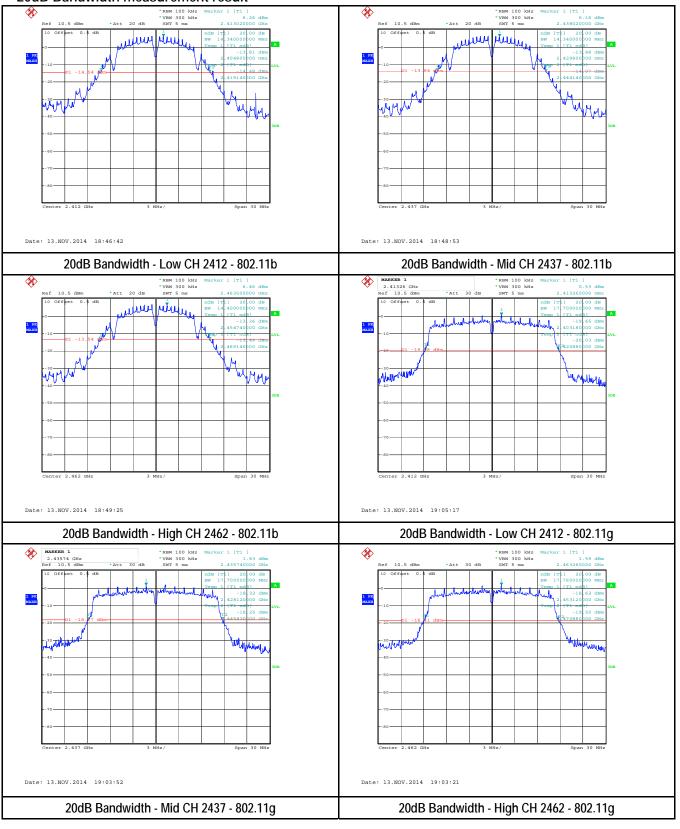
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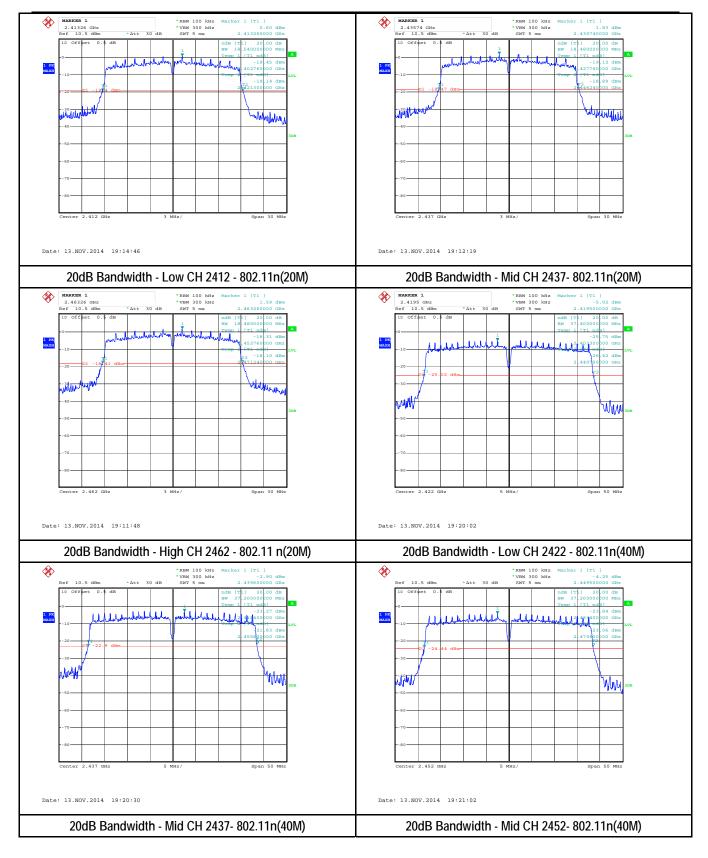
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### 20dB Bandwidth measurement result





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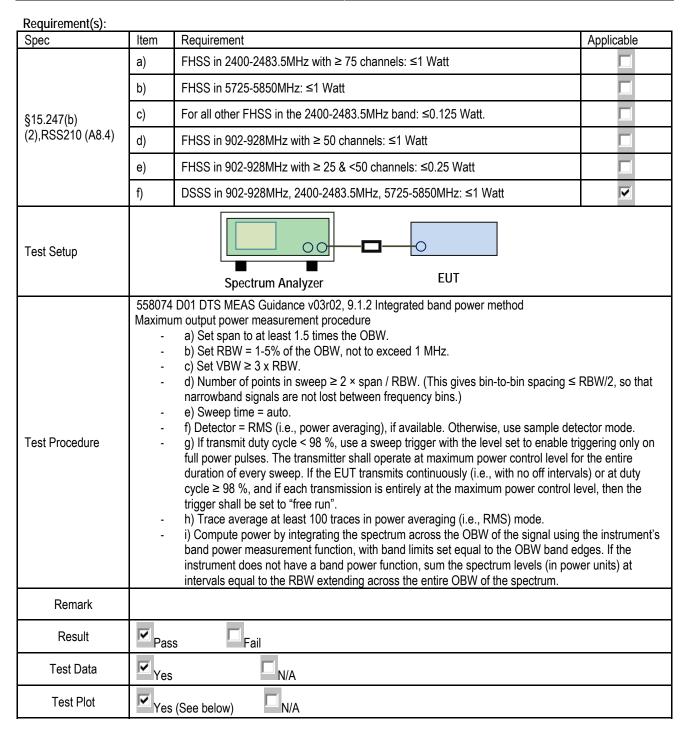




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### 6.4 Maximum Output Power

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	November 13, 2014
Tested By :	Deon Dai





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**Output Power measurement result** 

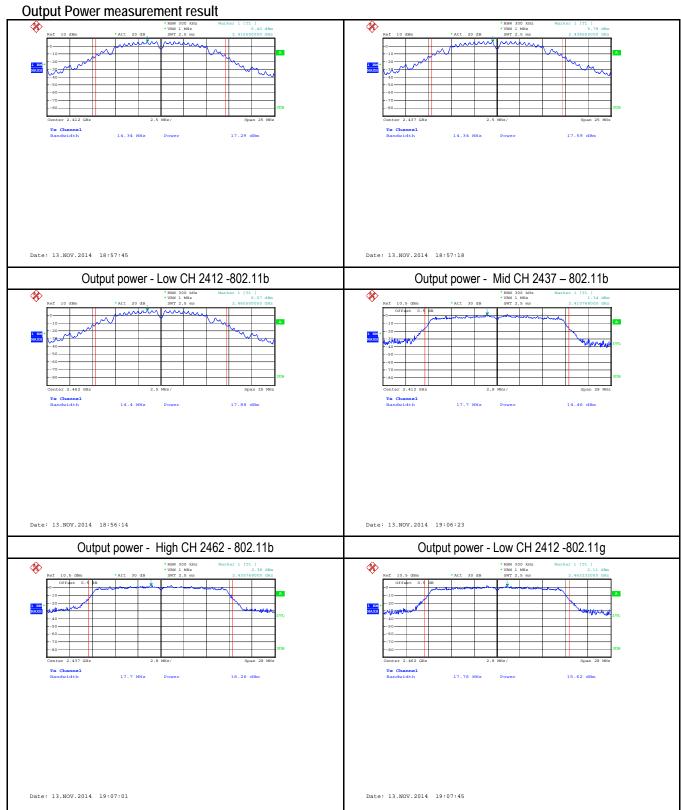
Туре	Test mode	СН	Freq (MHz)	Conducted AV Power (dBm)	Limit (dBm)	Result
		Low	2412	17.29	30	Pass
	802.11b	Mid	2437	17.59	30	Pass
		High	2462	17.88	30	Pass
		Low	2412	14.46	30	Pass
	802.11g	Mid	2437	16.26	30	Pass
Output		High	2462	15.62	30	Pass
power	802.11n(20M)	Low	2412	14.56	30	Pass
		Mid	2437	16.04	30	Pass
		High	2462	15.81	30	Pass
		Low	2422	10.12	30	Pass
	802.11n(40M)	Mid	2437	12.55	30	Pass
		High	2452	10.96	30	Pass



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Output power - High CH 2462 - 802.11g

### Test Plots



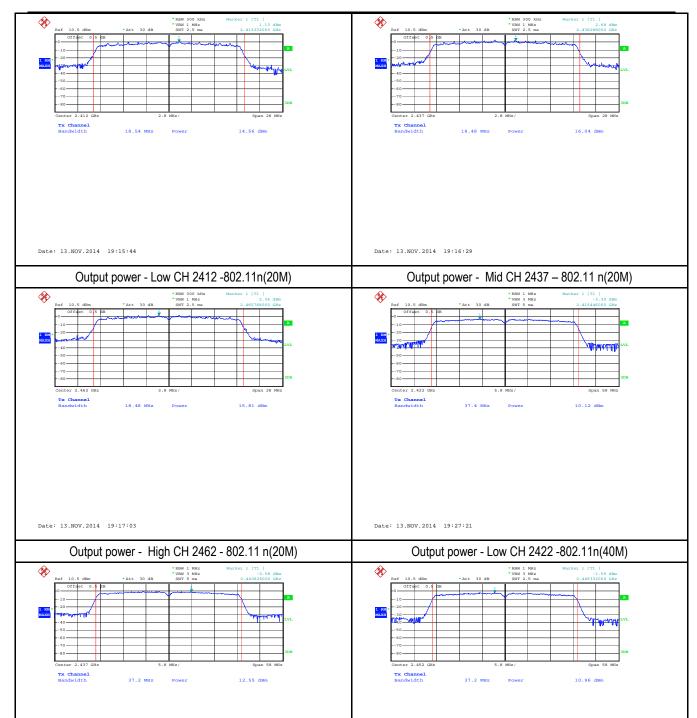
Output power - Mid CH 2437 - 802.11g



Date: 13.NOV.2014 19:26:50

Output power - Mid CH 2437 - 802.11 n(40M)

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Date: 13.NOV.2014 19:26:13

Output power - High CH 2452 - 802.11 n(40M)



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6.5 Power Spectral Density

Temperature	20°C	
Relative Humidity	50%	
Atmospheric Pressure	1019mbar	
Test date :	November 13, 2014	
Tested By:	Deon Dai	

	T	T	T			
Spec	Item	Requirement	Applicable			
§15.247(e)	a)	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.				
Test Setup		Spectrum Analyzer EUT				
Test Procedure	power spe	a) DTS MEAS Guidance v03r02, 10.2 power spectral density method ectral density measurement procedure a) Set analyzer center frequency to DTS channel center frequency. b) Set the span to 1.5 times the DTS bandwidth. c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz. d) Set the VBW ≥ 3 × RBW. e) Detector = peak. f) Sweep time = auto couple. g) Trace mode = max hold. h) Allow trace to fully stabilize. i) Use the peak marker function to determine the maximum amplitude level within j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.	the RBW.			
Remark						
Result	Pass	Fail				
Test Data	Yes	□ <sub>N/A</sub>				
Test Plot	Yes (S	See below)				



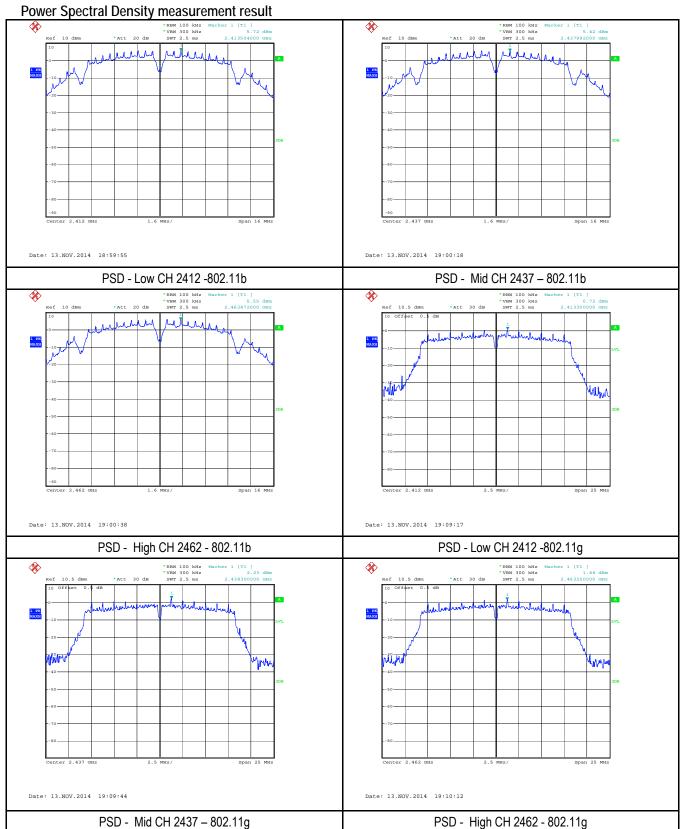
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Туре	Test mode	СН	Freq (MHz)	PSD (dBm)	Limit (dBm)	Result
		Low	2412	5.72	8	Pass
	802.11b	Mid	2437	5.42	8	Pass
		High	2462	5.55	8	Pass
		Low	2412	0.72	8	Pass
	802.11g 802.11n(20M)	Mid	2437	2.23	8	Pass
PSD		High	2462	1.44	8	Pass
PSD		Low	2412	0.96	8	Pass
		Mid	2437	1.65	8	Pass
		High	2462	1.84	8	Pass
	802.11n(40M)	Low	2422	-5.15	8	Pass
		Mid	2437	-2.60	8	Pass
		High	2452	-4.18	8	Pass



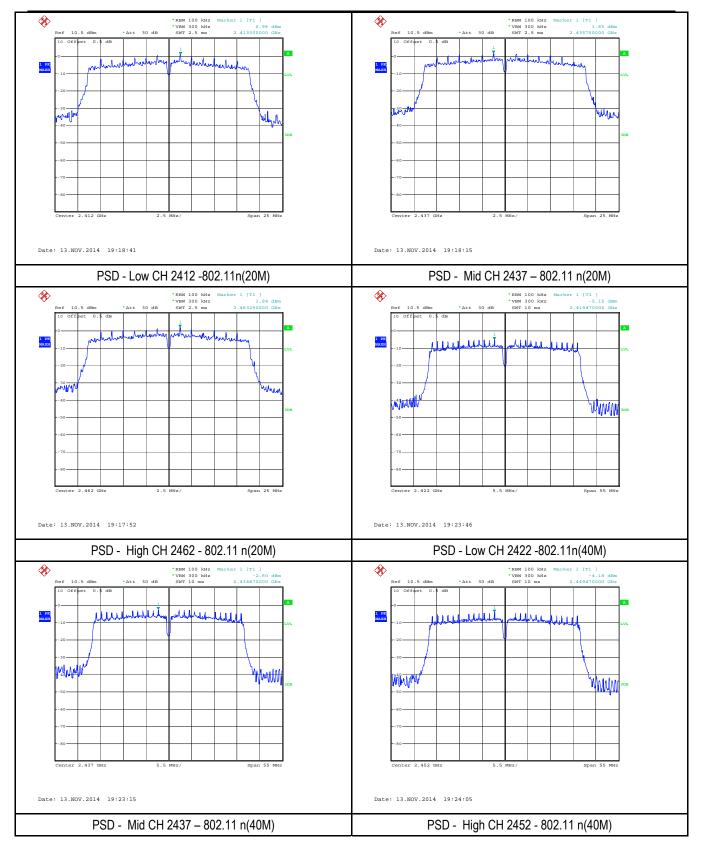
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**Test Plots** 





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# 6.6 Band-Edge & Unwanted Emissions into Non-Restricted Frequency Bands

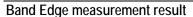
Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	November 13, 2014
Tested By:	Deon Dai

Requirement(s):

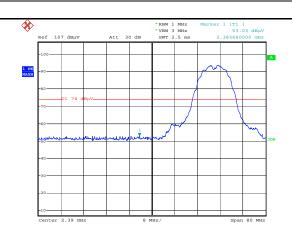
Requirement(s):			
Spec	Item Require		Applicable
§15.247(d)	spectrur frequence a) 20 dB be highest radiated	00 kHz bandwidth outside the frequency band in which the spread m or digitally modulated intentional radiator is operating, the radio cy power that is produced by the intentional radiator shall be at least elow that in the 100 kHz bandwidth within the band that contains the level of the desired power, based on either an RF conducted or a I measurement, provided the transmitter demonstrates compliance peak conducted power limits.	<b>~</b>
Test Setup		Ant. Tower  Support Units  Turn Table  Ground Plane  Test Receiver	
Test Procedure	Radiated Method Only  1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.  2. Position the EUT without connection to measurement instrument. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.  3. First, set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, check the emission of EUT, if pass then set Spectrum Analyzer as below:  a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi Peak detection at frequency below 1GHz.  b. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.  c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth for Average detection (AV) as below at frequency above 1GHz.  ■ 1/T kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%)  4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.  5. Repeat above procedures until all measured frequencies were complete.		
Remark			
Result	Pass	Fail	
Test Data	Yes	N/A	
Test Plot	Yes (See below	y)	



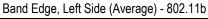
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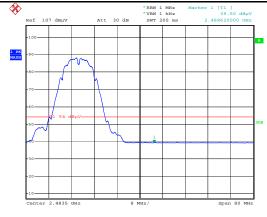




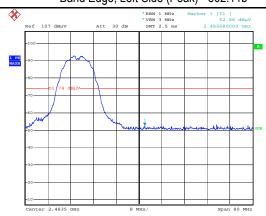


Date: 13.NOV.2014 19:36:18





Band Edge, Left Side (Peak) - 802.11b

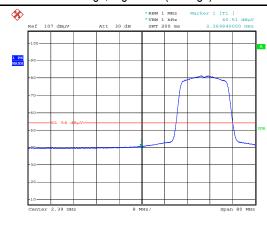


Date: 13.NOV.2014 19:42:34

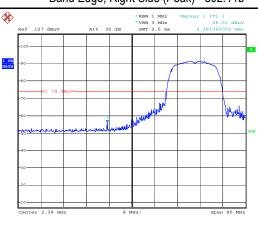
### Band Edge, Right Side (Average) - 802.11b

Date: 13.NOV.2014 19:45:03

Date: 13.NOV.2014 19:54:19



### Band Edge, Right Side (Peak) - 802.11b



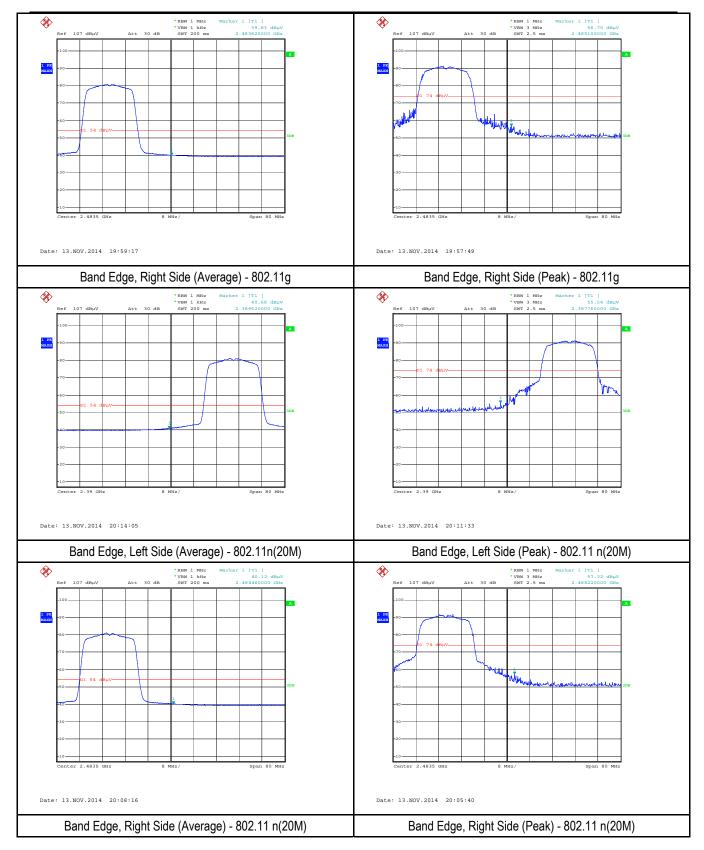
Date: 13.NOV.2014 19:50:48

Band Edge, Left Side (Average) - 802.11g

Band Edge, Left Side (Peak) - 802.11g

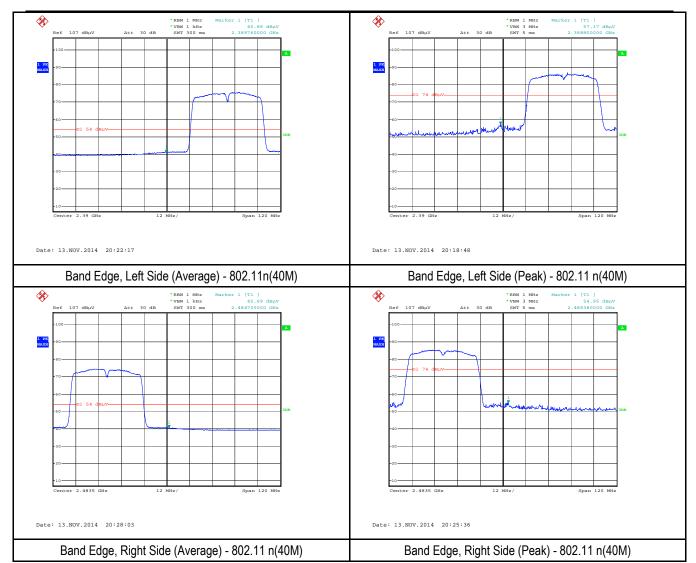


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# 6.7 AC Power Line Conducted Emissions

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	November 11, 2014
Tested By:	Deon Dai

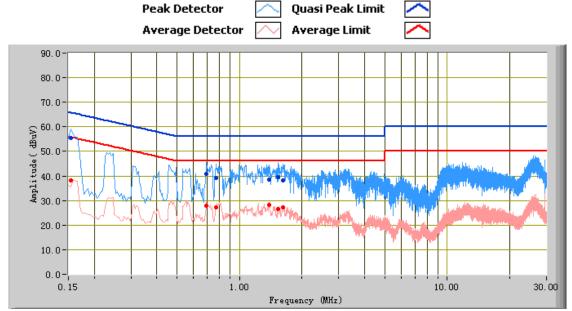
Requirement(s):

Spec	Item	Requirement			Applicable			
47CFR§15.207, RSS210 (A8.1)	a)	For Low-power radio-frequency devices that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu]H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.  Frequency ranges  (MHz)  QP  Average  0.15 ~ 0.5  66 – 56  56 – 46  0.5 ~ 5  60 50  50						
Test Setup		Note: 1.Support us 2.Both of LIS	al Ground rence Plane  80cm  sits were connected to see in the see	EUT and at least 80cm				
Procedure	- - - - -							
Remark	Different RF configuration has been evaluated but not much difference was found. The data presented here is the worst case data with EUT under 802.11n(20M)-2437MHz mode.							
Result	Pass	Fail						
Test Data	Yes	□ <sub>N/A</sub>						
Test Plot	Yes (	See below)						



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Test Mode: Transmitting Mode



### Test Data

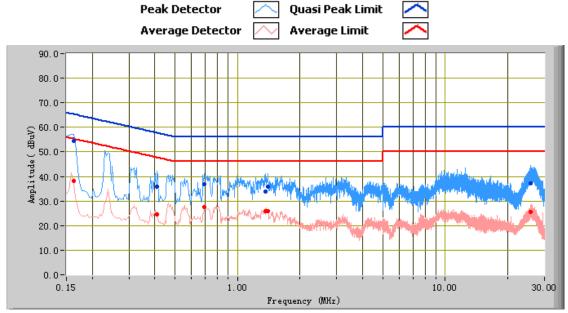
### Phase Line Plot at 120Vac, 60Hz

Thuse Ellie Flot at 120 vac, conz							
Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Factors (dB)
0.15	55.36	65.78	-10.42	38.05	55.78	-17.73	12.16
0.69	41.01	56.00	-14.99	27.93	46.00	-18.07	10.93
1.53	39.51	56.00	-16.49	26.56	46.00	-19.44	10.79
1.62	38.27	56.00	-17.73	27.17	46.00	-18.83	10.80
0.77	39.23	56.00	-16.77	27.37	46.00	-18.63	10.87
1.39	38.41	56.00	-17.59	28.10	46.00	-17.90	10.76



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Test Mode: Transmitting Mode



Test Data

### Phase Neutral Plot at 120Vac, 60Hz

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Factors (dB)
0.16	54.51	65.36	-10.86	38.19	55.36	-17.17	12.04
1.40	35.71	56.00	-20.29	25.82	46.00	-20.18	10.79
1.37	33.72	56.00	-22.28	25.98	46.00	-20.02	10.78
0.69	36.79	56.00	-19.21	27.41	46.00	-18.59	10.92
0.41	35.88	57.65	-21.76	24.52	47.65	-23.13	11.20
25.80	37.35	60.00	-22.65	25.72	50.00	-24.28	11.76



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# 6.8 Radiated Spurious Emissions

Temperature	20°C
Relative Humidity	50%
Atmospheric Pressure	1019mbar
Test date :	November 11, 2014
Tested By:	Deon Dai

Requirement(s):

Requirement(s):	ltom	Doguiroment		Applicable			
Spec	Item	Requirement	to allow a state of the control of the	Applicable			
47CFR§15.247(d ), RSS210 (A8.5)	a)	Except higher limit as specified elsewhere is the low-power radio-frequency devices shat specified in the following table and the level exceed the level of the fundamental emission band edges  Frequency range (MHz)  30 – 88  88 – 216  216 960  Above 960	Il not exceed the field strength levels I of any unwanted emissions shall not on. The tighter limit applies at the  Field Strength (µV/m)  100  150  200	V			
	b)	For non-restricted band, 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 or 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, determined by the measurement method on output power to be used. Attenuation below the general limits specified in § 15.209(a) is not required  20 dB down  30 dB down					
	c)	or restricted band, emission must also comply with the radiated emission limits specified in 15.209					
Test Setup	Ant. Tower  Support Units  Turn Table  Ground Plane  Test Receiver						
Procedure	<ol> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>The test was carried out at the selected frequency points obtained from the EUT characterization.         Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:         <ol> <li>Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.</li> <li>The EUT was then rotated to the direction that gave the maximum emission.</li> <li>Finally, the antenna height was adjusted to the height that gave the maximum emission.</li> </ol> </li> <li>The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.</li> <li>The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with</li> </ol>						

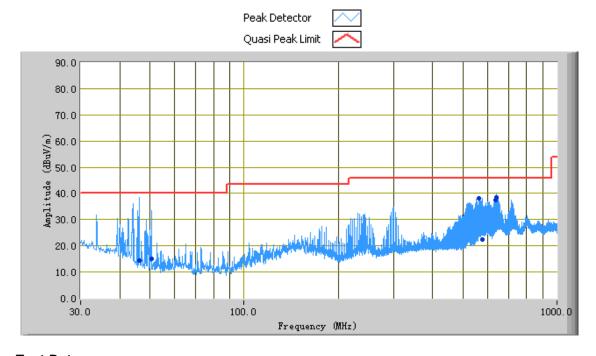


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	Peak detection for Peak measurement at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz with Peak detection for Average Measurement as below at frequency above 1GHz.  Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.
Remark	Different RF configuration has been evaluated but not much difference was found. The data presented here is the worst case data with EUT under 802.11n(20M)-2437MHz mode.
Result	Pass Fail
Test Data	Yes N/A
Test Plot	Yes (See below)

Test Mode:	Transmitting Mode

### (Below 1GHz)



### Test Data

# Vertical Polarity Plot @3m

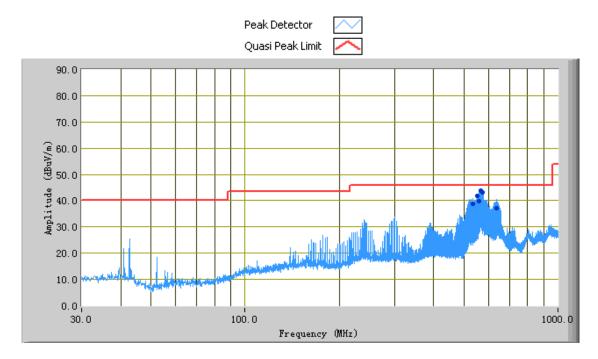
Frequency (MHz)	Quasi Peak (dBµV/m)	Azimuth	Polarity (H/V)	Height (cm)	Factors (dB)	Limit (dBµV/m)	Margin (dB)
46.01	14.34	310.00	V	398.00	-32.47	40.00	-25.66
641.18	38.32	257.00	V	118.00	-21.37	46.00	-7.68
50.58	15.15	275.00	V	110.00	-34.64	40.00	-24.85
564.43	38.24	227.00	V	103.00	-25.82	46.00	-7.76
638.19	37.33	360.00	V	120.00	-21.47	46.00	-8.67
578.19	22.27	118.00	V	109.00	-24.77	46.00	-23.73



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Test Mode:	Transmitting Mode
	1

### (Below 1GHz)



### Test Data

### Horizontal Polarity Plot @3m

	Honzontan olanty not com						
Frequency (MHz)	Quasi Peak (dBµV/m)	Azimuth	Polarity (H/V)	Height (cm)	Factors (dB)	Limit (dBµV/m)	Margin (dB)
567.37	43.84	205.00	Η	171.00	-23.03	46.00	-2.16
573.29	43.32	201.00	Η	168.00	-22.61	46.00	-2.68
558.40	39.82	30.00	Н	217.00	-23.67	46.00	-6.18
552.67	41.68	210.00	Н	176.00	-24.07	46.00	-4.32
534.98	38.74	229.00	Н	194.00	-25.50	46.00	-7.26
635.31	36.99	27.00	Н	192.00	-20.79	46.00	-9.01



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Test Mode: Transmitting Mode

Note: Other modes were verified, only the result of worst case basic rate mode was presented.

Mode: 802.11(20M)

Low Channel (2412 MHz)

Frequency (MHz)	Substituted level (dBµV/m)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824	32.25	AV	V	33.83	4.87	24	46.95	54	-7.05
4824	43.21	PK	V	33.83	4.87	24	57.91	74	-16.09
4824	30.54	AV	Н	33.83	4.87	24	45.24	54	-8.76
4824	44.92	PK	Н	33.83	4.87	24	59.62	74	-14.38

### Middle Channel (2437 MHz)

Frequency	Substituted	Detector	Polarity	Ant.	Cable	Pre-Amp.	Cord	Limit	Margin
(MHz)	level	(PK/AV)	(H/V)	Factor	Loss	Gain	Amp.	(dBµV/m)	(dB)
	(dBµV/m)			(dB/m)	(dB)	(dB)	(dBµV/m)		
4874	31.52	AV	V	33.83	4.87	24	46.22	54	-7.78
4874	42.41	PK	V	33.83	4.87	24	57.11	74	-16.89
4874	31.25	AV	Н	33.83	4.87	24	45.95	54	-8.05
4874	45.25	PK	Н	33.83	4.87	24	59.95	74	-14.05

### High Channel (2462 MHz)

Frequency	Substituted	Detector	Polarity	Ant.	Cable	Pre-Amp.	Cord	Limit	Margin
(MHz)	level	(PK/AV)	(H/V)	Factor	Loss	Gain	Amp.	(dBµV/m)	(dB)
	(dBµV/m)			(dB/m)	(dB)	(dB)	(dBµV/m)		
4924	32.08	AV	V	33.9	4.87	24	46.85	54	-7.15
4924	44.15	PK	V	33.9	4.87	24	58.92	74	-15.08
4924	31.91	AV	Н	33.9	4.87	24	46.68	54	-7.32
4924	44.54	PK	Н	33.9	4.87	24	59.31	74	-14.69



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# Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted Emission	ins				
R&S EMI Test Receiver	ESPI3	101216	09/27/2014	09/26/2015	~
V-LISN	ESH3-Z5	838979/005	09/27/2014	09/26/2015	~
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	10/09/2014	10/08/2015	V
SIEMIC Labview Conducted Emissions software	V1.0	N/A	N/A	N/A	<b>~</b>
RF conducted test					
R&S EMI Receiver	ESPI3	101216	09/27/2014	09/26/2015	~
Power Splitter	1#	1#	02/02/2014	02/01/2015	~
Hp Spectrum Analyzer	8563E	3821A09023	09/27/2014	09/26/2015	~
Temperature/Humidity Chamber	1007H	N/A	01/07/2014	01/06/2015	<b>~</b>
Radiated Emissions					
Hp Spectrum Analyzer	8563E	3821A09023	09/27/2014	09/26/2015	~
R&S EMI Receiver	ESPI3	101216	09/27/2014	09/26/2015	~
Antenna (30MHz~6GHz)	JB6	A121411	04/15/2014	04/14/2015	•
EMCO Horn Antenna (1 ~18GHz)	3115	N/A	10/09/2014	10/08/2015	V
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	10/09/2014	10/08/2015	V
Horn Antenna (18~40GHz)	AH-840	101013	04/22/2014	04/22/2015	>
Microwave Pre-Amp (18~40GHz)	PA-840	181250	05/29/2014	05/28/2015	V
Hp Agilent Pre-Amplifier	8447F	1937A01160	10/27/2014	10/26/2015	<b>V</b>
MITEQ Pre-Amplifier (0.1 ~ 18GHz)	AMF-7D- 00101800-30- 10P	1451709	10/27/2014	10/26/2015	V
SIEMIC Labview Radiated Emissions software	V1.0	N/A	N/A	N/A	<b>V</b>



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# Annex B. EUT And Test Setup Photographs

### Annex B.i. Photograph EUT Internal Photo



All Packages – Front View



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Front View of EUT



Rear View of EUT



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Top View of EUT



Bottom View of EUT



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Left View of EUT



Right View of EUT



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#### Annex B.ii. Photograph EUT Internal Photo



Uncover- Front View 1



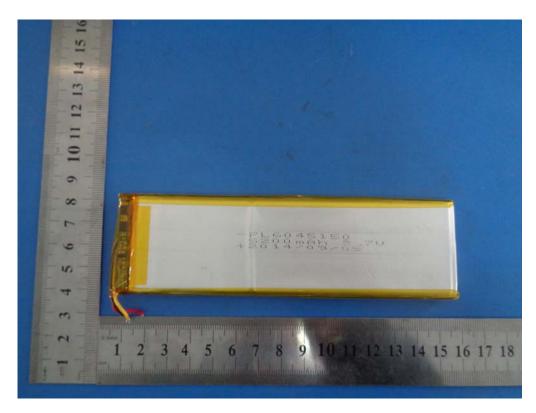
Uncover- Front View 2

GSM/WCDMA Antenna

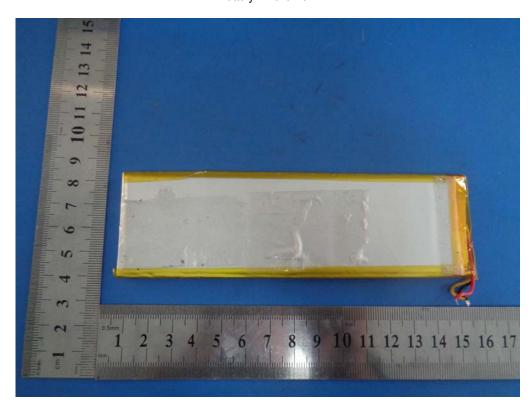
> BT/WIFI/GPS Antenna



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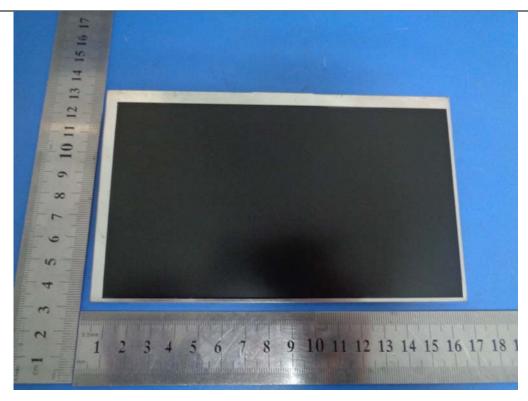
Battery- Front View



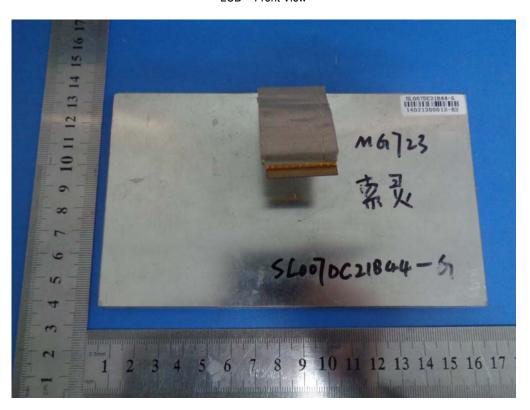
Battery- Rear View



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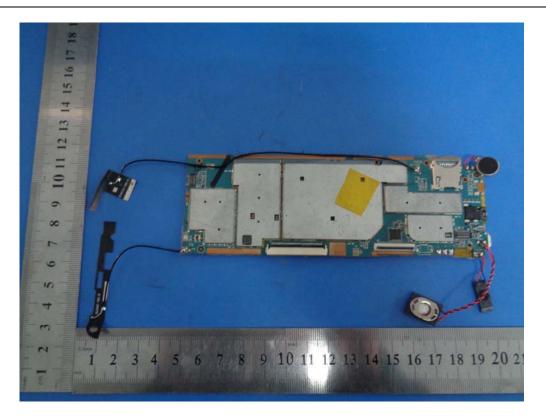
LCD - Front View



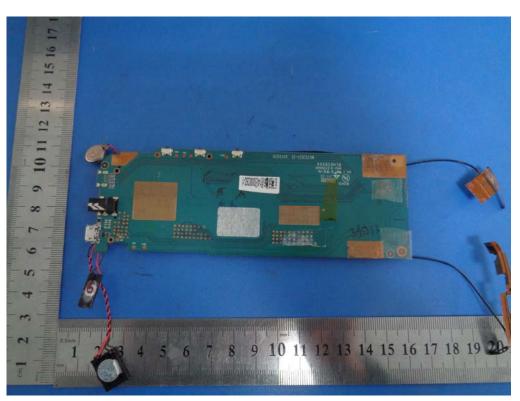
LCD - Rear View



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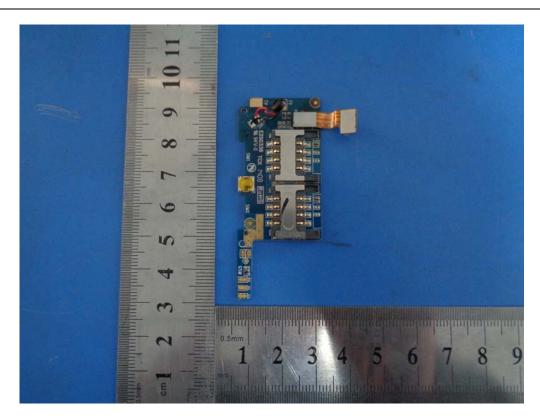
EUT PCB 1 - Front View



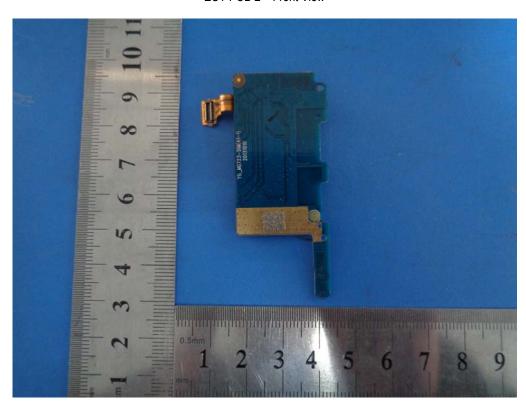
EUT PCB 1 – Rear View



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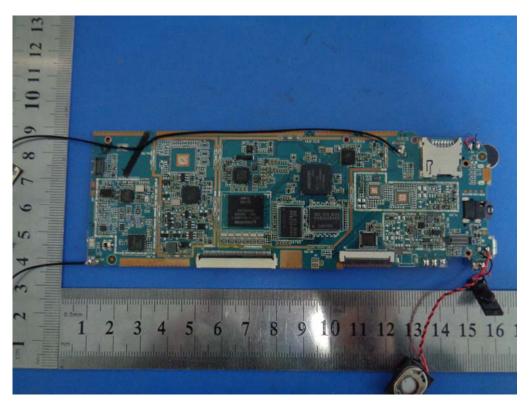
EUT PCB 2 – Front View



EUT PCB 2 - Rear View



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EUT PCB 1 – Withouting Shielding Front View



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# Annex B.iii. Photograph: Test Setup Photo



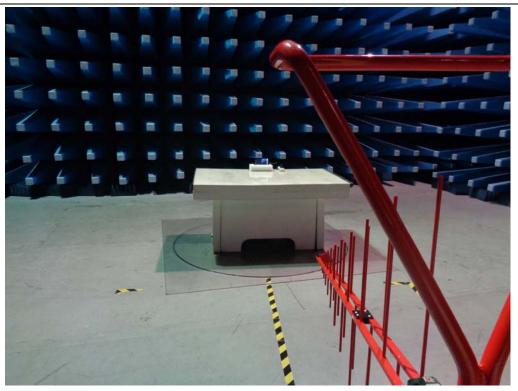
Conducted Emissions Test Setup – Front View



Conducted Emissions Test Setup – Side View



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Radiated Spurious Emissions Test Setup Below 1GHz



Radiated Spurious Emissions Test Setup Below 1GHz

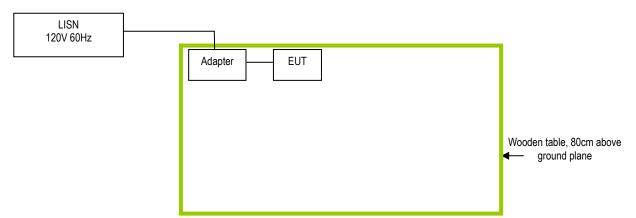


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# Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

### Annex C.i. TEST SET UP BLOCK

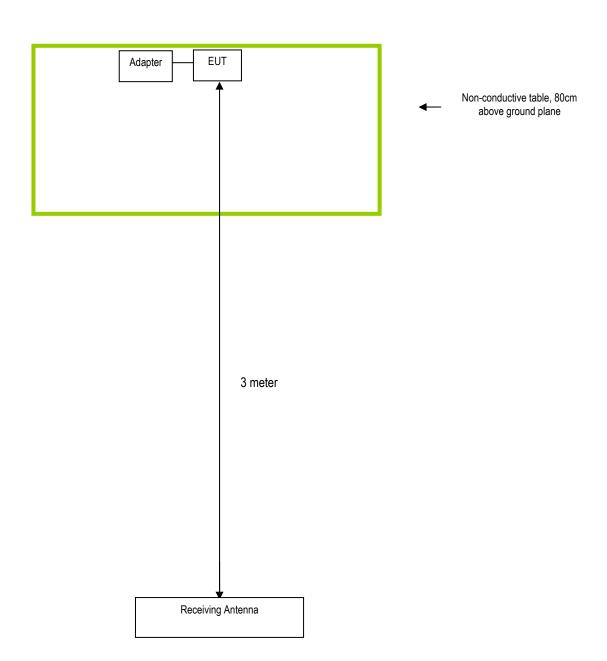
**Block Configuration Diagram for AC Line Conducted Emissions** 





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# **Block Configuration Diagram for Radiated Emissions**





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# Annex C. ii. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Manufacturer	<b>Equipment Description</b>	Model	Calibration Date	Calibration Due Date
N/A	N/A	N/A	N/A	N/A



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# Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment



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### Annex E. DECLARATION OF SIMILARITY

#### Beneworld International(HK) Co., Limited

HK: Unit 04, 7/F, Bright Way Tower, No. 33 Mong Kok Road, Kowloon, Hong Kong TEL: +852-69172443/ 30772819 FAX: +852-30772819

#### Statement

To whom it may concern

Date: November 18, 2014

We hereby state that the 7inch Tablet PC of our model number BW9 and serial numbers BW7D9, BW7D19, BW7D29, BW7D61, BW7D62, BW7D66, BW7D68,BW7D69, BW7D70, BW7D71 have the same constructions, circuit diagram and PCB layout. Only model name are different.

Sincerely,

Stephen 7ang