

# FCC TEST REPORT

Prepared For :	Hopeful Electric CO., LTD
Product Name:	MID
Model :	MID727BT-RK326,SRF79,A7X,MID727BT-RK326A, MID727BT-RK326B,MID727BT-RK326C
Prepared By:	Shenzhen BATT Testing Technology Co., Ltd.
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Test Date:	April 18, 2014 to July 25, 2014
Date of Report :	July 28, 2014
Report No.:	BATT201407098-01FCC

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# **TEST CERTIFICATION**

Product: MID

MID727BT-RK326,SRF79,A7X,MID727BT-RK326A,

Model: MID727BT-RK326B,MID727BT-RK326C

Applicant: Hopeful Electric CO., LTD

22 Floor, Changhong Building, Hi-Tech Park, Nanshan District, Shenzhen City,

P.R.China

Factory: Hopeful Elecrtic CO., LTD / Associate Electronic Co., Ltd

148, Ronggui Road (Mid), Ronggui Town, Shunde District, Foshan City, Guangdong Prov., China / 4, Guixindong Road, Ronggui Town, Shunde District, Foshan City,

Guangdong Prov., China

Trade Mark: N/A

**Tested:** April 18, 2014 to July 25, 2014

**Test Voltage:** DC5V by power supply, 3.7V polymer lithium-ion battery

Operational IEEE 802.11b/g, 802.11n HT20: 2412-2462MHz Frequency IEEE 802.11n HT40: 2422MHz-2452MHz

Range:

IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)

Modulation IEEE 802.11g: OFDM (64QAM, 16AQM, QPSK, BPSK)

**Type:** IEEE 802.11n HT20/40 : OFDM (64QAM, 16QAM, QPSK, BPSK)

Channel IEEE 802.11b/g/n: 5MHz, 1MHz for Bluetooth

Spacing

IEEE 802.11b: 11, 5.5, 2, 1 Mbps

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

IEEE 802.11n HT20: 150, 117, 104, 78, 65, 58.5, 52, 39, 26, 19.5, 13, 6 Mbps IEEE 802.11n HT40: 150, 117, 104, 78, 65, 58.5, 52, 39, 26, 19.5, 13, 6 Mbps

Frequency By software

Selection

Channel IEEE 802.11b/g ,802.11n HT20 : 11 Channels

Number IEEE 802.11n HT40 : 7 Channels,

Antenna: Integral antenna with Gain 2.0 dBi

Model No.: HP0515D2-NA Power Supply:

Input:100-240V, 0.3A, 50/60Hz; Output: +5V, 1.5A Max

FCC ID: 2AAQZMID727B1-RK326

Applicable FCC Part 15.247

Standards:

The test report was prepared by Shenzhen BATT Testing Technology Co., Ltd.and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



Prepared by:	Hellenxiao
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Hellen XiaoAssistant

Mike Yong

Reviewer: Mike Yong/Supervisor

Approved & Authorized Signer:

Jones Song/ Manager



2.0 Test Equipments							
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date		
ESPI Test Receiver	ROHDE&SCHWA RZ	ESPI 3	100379	2013-08-27	2014-08-26		
EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	2013-08-27	2014-08-26		
Impuls-Begrenzer	ROHDE&SCHWA RZ	ESH3-Z2	100281	2013-08-27	2014-08-26		
Loop Antenna	EMCO	6502	00042960	2013-06-25	2014-06-24		
ESPI Test Receiver	ROHDE&SCHWA RZ	ESI26	838786/013	2013-08-27	2014-08-26		
Horn Antenna	SCHWARZBECK	ВВНА 9170	BBHA9170399	2013-09-15	2014-09-14		
Horn Antenna	SCHWARZBECK	BBHA 9120	D143	2013-09-15	2014-09-14		
Power meter	Anritsu	ML2487A	6K00003613	2013-08-27	2014-08-26		
Power sensor	Anritsu	MA2491A	32263	2013-08-27	2014-08-26		
Bilog Antenna	Schwarebeck	VULB916	9163/142	2013-12-13	2014-12-12		
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2013-08-27	2014-08-26		
9*6*6 Anechoic			N/A	2013-08-27	2014-08-26		
EMI Test Receiver	RS	ESCS30	100139	2013-08-27	2014-08-26		
LISN	RS	ESH2-Z5	100225	2013-08-27	2014-08-26		
Pre-Amplifier	A.H.	PAM-0126	1415261	2014-07-23	2015-07-22		



#### 3.0 **Technical Details**

#### 3.1 Summary of test results

#### The EUT has been tested according to the following specifications:

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

Note: This test report was based on original test with FCC ID: 2AAQZMID727BT-RK326. Products of FCC ID 2AAQZMID727B1-RK326 are electrically identical with original products of FCC ID: 2AAQZMID727BT-RK326 except FCC ID 2AAQZMID727B1-RK326 include additional battery package, so 0.15kHz to 30MHz conducted emission test and 30MHz to 1GHz radiated emission test are done at samples with additional battery package. Other data are from original report of FCC ID: 2AAQZMID727BT-RK326

#### 4.0 Test LAB Details

All Tests Performed at

Name: Shenzhen Emtek Co., Ltd.

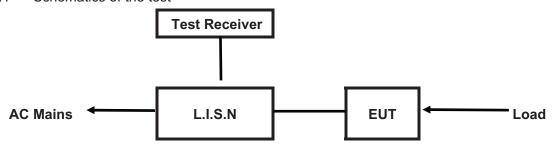
Address: Bldg. 69, Majialong Industry Zone,, Nanshan District, Shenzhen, Guangdong, 518052China

FCC Registration Number: 406365



#### 5. Power Line Conducted Emission Test

#### 5.1 Schematics of the test

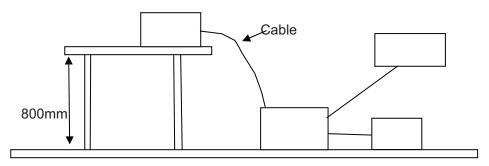


**EUT: Equipment Under Test** 

#### 5.2 Test Method and test Procedure

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

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



#### 5.3 Configuration of The EUT

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

79 channels are provided to the EUT

#### A. **EUT**

Device	Manufacturer	Model	FCC ID
	Hopeful Elecrtic CO., LTD /	MID727BT-RK326,SRF79,A7X,MID	2AAQZMID727B1-
MID	Associate Electronic Co.,Ltd	727BT-RK326,MID727BT-RK326A,	RK326
MID		MID727BT-RK326B,MID727BT-RK	
		326C,MID727BT-RK326	

#### B. Internal Device

Device	Manufacturer	Model	FCC
			ID/DOC
N/A			

#### C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable

#### 5.4 **EUT Operating Condition**

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

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

#### 5.5 Power line conducted Emission Limit according to Paragraph 15.107, 15.207

Fraguenay	Class A Lir	nits (dBµV)	Class B Limits (dBµV)		
Frequency (MHz)	Quasi-peak	Quasi-peak Average Level		Average Level	
(IVITIZ)	Level				
0.15 ~ 0.50	79.0	66.0	66.0~56.0*	56.0~46.0*	
0.50 ~ 5.00	73.0	60.0	56.0	46.0	
5.00 ~ 30.00	73.0	60.0	60.0	50.0	

Notes:

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

#### 5.6 Test Results

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

Worse case was recorded.



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

### **EUT Operating Environment**

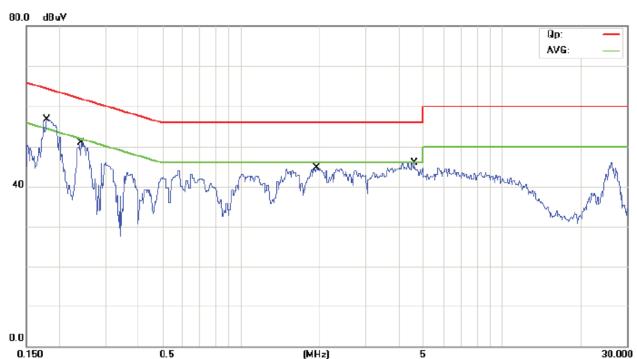
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1792	44.10	11.03	55.13	64.52	-9.39	QP	
2		0.1792	24.20	11.03	35.23	54.52	-19.29	AVG	
3		0.2436	37.74	11.10	48.84	61.97	-13.13	QP	
4		0.2436	23.34	11.10	34.44	51.97	-17.53	AVG	
5		1.9400	32.40	12.28	44.68	56.00	-11.32	QP	
6		1.9400	17.56	12.28	29.84	46.00	-16.16	AVG	
7		4.5690	28.20	13.33	41.53	56.00	-14.47	QP	
8		4.5690	19.00	13.33	32.33	46.00	-13.67	AVG	



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

### **EUT Operating Environment**

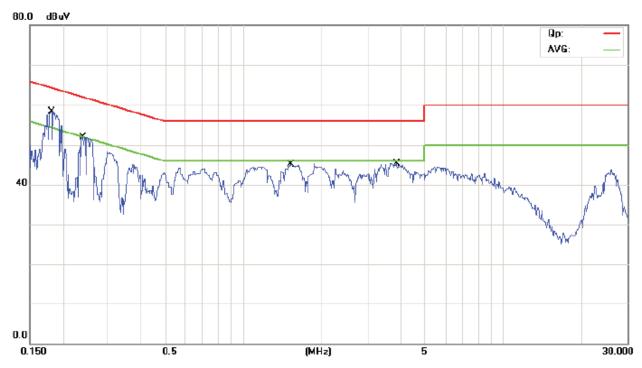
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1810	45.50	11.03	56.53	64.44	-7.91	QP	
2	0.1810	30.20	11.03	41.23	54.44	-13.21	AVG	
3	0.2406	38.90	11.10	50.00	62.08	-12.08	QP	
4	0.2406	24.20	11.10	35.30	52.08	-16.78	AVG	
5	1.5237	32.97	12.11	45.08	56.00	-10.92	QP	
6	1.5237	18.45	12.11	30.56	46.00	-15.44	AVG	
7	3.8750	31.18	13.05	44.23	56.00	-11.77	QP	
8	3.8750	18.89	13.05	31.94	46.00	-14.06	AVG	



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

**EUT Operating Environment** 

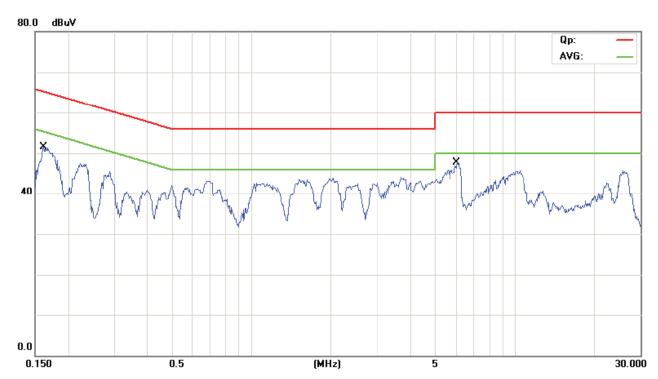
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1 *	0.1612	39.51	11.01	50.52	65.40	-14.88	QP
2	0.1612	26.85	11.01	37.86	55.40	-17.54	AVG
3	6.0625	27.31	13.05	40.36	60.00	-19.64	QP
4	6.0625	18.59	13.05	31.64	50.00	-18.36	AVG

Note: Test on additional battery and worse case was recorded.



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

**EUT Operating Environment** 

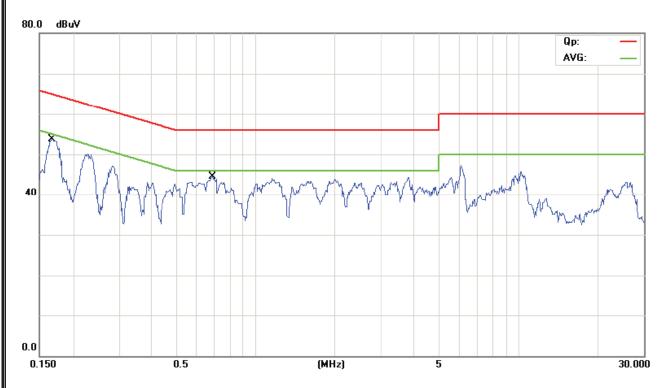
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



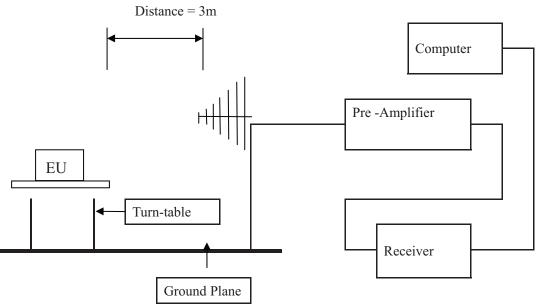
No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1 *	0.1683	41.64	11.02	52.66	65.04	-12.38	QP
2	0.1683	27.90	11.02	38.92	55.04	-16.12	AVG
3	0.6912	30.52	11.57	42.09	56.00	-13.91	QP
4	0.6912	18.04	11.57	29.61	46.00	-16.39	AVG

Note: Test on additional battery and worse case was recorded.

#### **Radiated Emission Test** 6

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.4 –2003. The radiated test was performed at Shenzhen Emtek Co., Ltd.. This site is on file with the FCC laboratory division, Registration No.406365
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2003.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

#### **Block diagram of Test setup**



- 6.2 Configuration of The EUT Same as section 5.3 of this report
- 6.3 **EUT Operating Condition** Same as section 5.4 of this report.



#### 6.4 Radiated Emission Limit

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

#### Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109

Frequency Range (MHz)	Distance (m)	Field strength (dBμV/m)	
30-88	3	40.0	
88-216	3	43.5	
216-960	3	46.0	
Above 960	3	54.0	

Note:

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

#### Test result

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

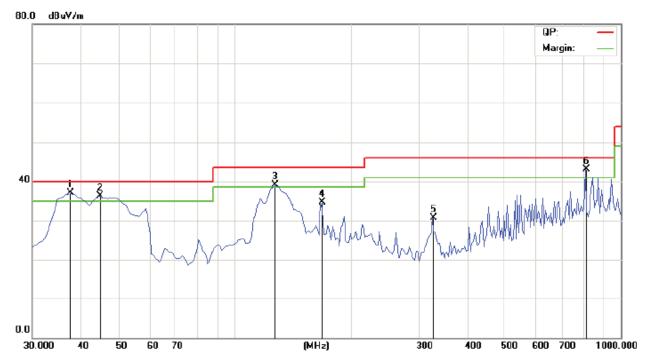
#### Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep WIFI Transmitting

**Results:** Pass

Test Figure:

Н

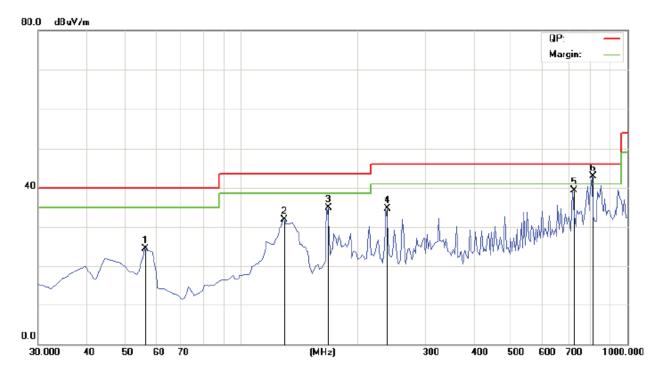


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	37.3510	49.42	-12.36	37.06	40.00	-2.94	peak		0	
2	ļ	44.5500	47.90	-11.56	36.34	40.00	-3.66	peak		0	
3	ļ	127.0000	53.51	-14.47	39.04	43.50	-4.46	peak		0	
4		168.2250	48.74	-14.03	34.71	43.50	-8.79	peak		0	
5		325.8500	38.26	-7.62	30.64	46.00	-15.36	peak		0	
6	ļ	813.2750	40.29	2.73	43.02	46.00	-2.98	peak		0	



Test Figure:

V



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		56.6750	36.40	-11.95	24.45	40.00	-15.55	peak		0	
2	,	129.4250	46.64	-14.73	31.91	43.50	-11.59	peak		0	
3		168.2250	49.00	-14.03	34.97	43.50	-8.53	peak		0	
4	2	238.5500	44.56	-9.87	34.69	46.00	-11.31	peak		0	
5	-	723.5500	38.07	1.18	39.25	46.00	-6.75	peak		0	
6	* (	813.2750	40.10	2.73	42.83	46.00	-3.17	peak		0	



#### **Test result**

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

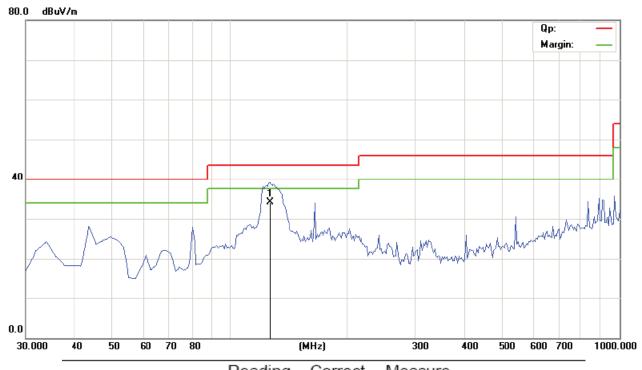
### Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep WIFI Transmitting

Results: Pass

Test Figure:

Н

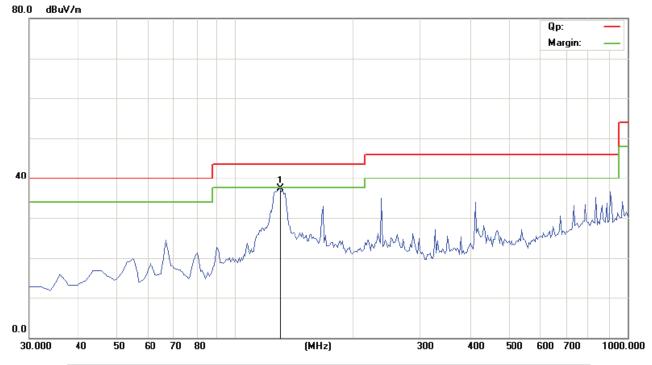


No.	M	k. Freq.	_	Correct Factor	Measure- ment	Limit	Over
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB
1	*	127.1944	48.68	-14.49	34.19	43.50	-9.31

Note: Test on additional battery and worse case was recorded

Test Figure:

V



No. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB
1 *	131.0822	52.22	-14.86	37.36	43.50	-6.14

Note: Test on additional battery and worse case was recorded

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

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2412.00	91.76 (PK)	Н	Fundamental
2412.00	91.26 (PK)	V	Frequency
4824.00	47.32 (PK)	Н	
4824.00	49.09 (PK)	V	
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16884		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

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



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

	<u> </u>		
Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2437.00	92.63 (PK)	Н	Fundamental
2437.00	62.65 (PK)	V	Frequency
4874.00	47.62 (PK)	Н	
4874.00	46.58 (PK)	V	
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

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



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

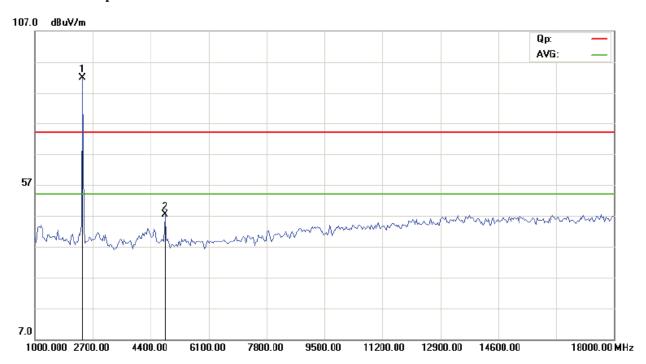
Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2462.00	92.24 (PK)	Н	Fundamental
2462.00	91.67 (PK)	V	Frequency
4924	47.29 (PK)	Н	
4924	48.63 (PK)	V	
7386		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310		H/V	74(Peak)/ 54(AV)
14772		H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24650		H/V	74(Peak)/ 54(AV)

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

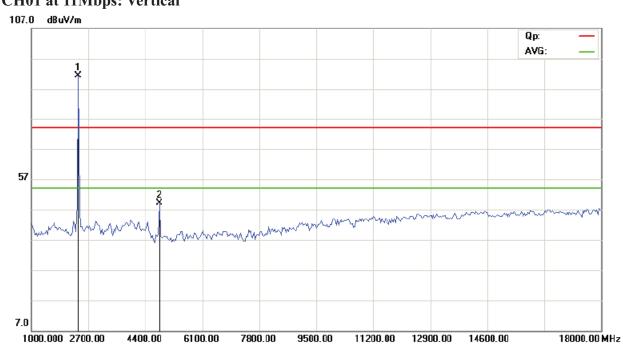


Please refer to the following test plots for details:

# CH01 at 11Mbps: Horizontal

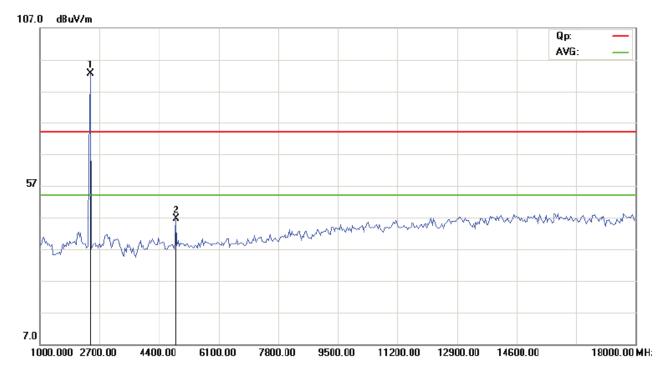


# CH01 at 11Mbps: Vertical

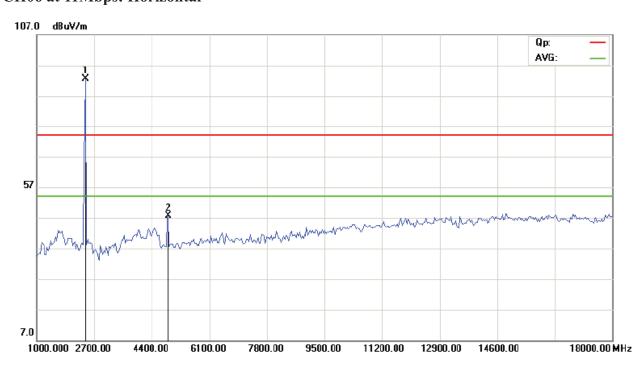




#### CH06 at 11Mbps: Vertical

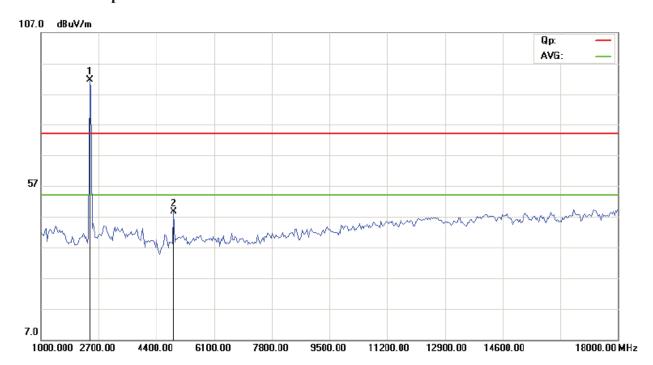


# CH06 at 11Mbps: Horizontal

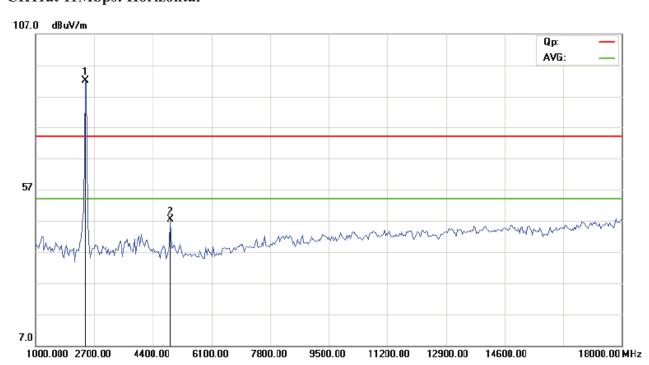




# CH11 at 11Mbps: Vertical



# CH11at 11Mbps: Horizontal



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



#### Operation Mode: Transmitting under CH01 for 11g at 54 Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2412.00	91.39 (PK)	Н	Fundamental
2412.00	91.69 (PK)	V	Frequency
4824.00	48.78 (PK)	Н	
4824.00	49.32 (PK)	V	
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

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

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11g mode 54Mbps

#### Operation Mode: Transmitting under CH06 for 11g at 54 Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2437.00	91.47 (PK)	Н	Fundamental
2437.00	91.44 (PK)	V	Frequency
4874.00	47.97 (PK)	Н	-
4874.00	48.32 (PK)	V	
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 54Mbps

#### Operation Mode: Transmitting under CH11 for 11g at 54 Mbps

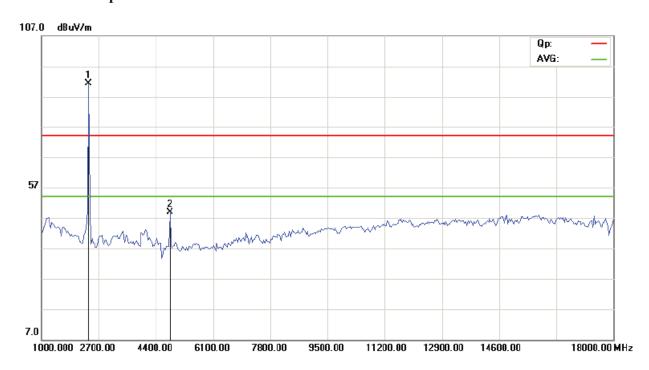
Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2462.00	90.93 (PK)	Н	Fundamental
2462.00	92.75 (PK)	V	Frequency
4924	48.08 (PK)	Н	74(Peak)/ 54(AV)
4924	47.14 (PK)	V	74(Peak)/ 54(AV)
7386		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310		H/V	74(Peak)/ 54(AV)
14772		H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24650		H/V	74(Peak)/ 54(AV)

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 54Mbps



Please refer to the following test plots for details:

# CH01 at 54Mbps: Horizontal

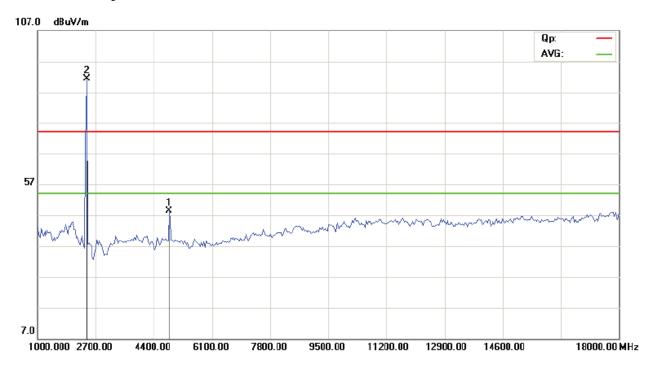


# CH01 at 54Mbps: Vertical

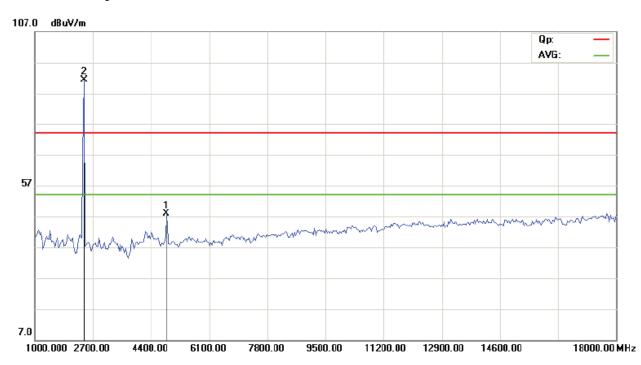




# CH06 at 54Mbps: Vertical

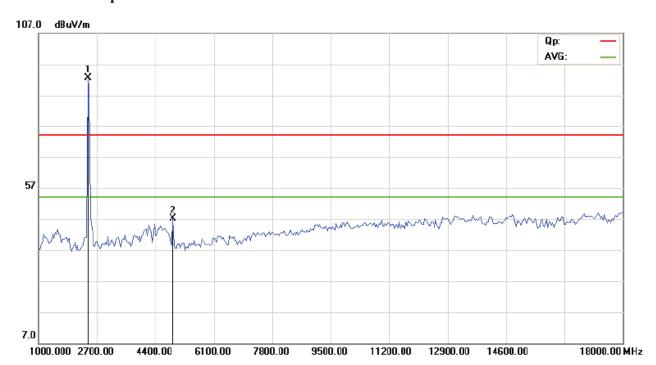


# CH06 at 54Mbps: Horizontal

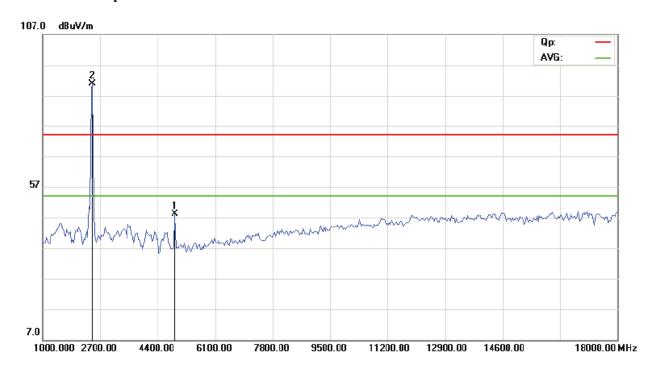




# CH11 at 54Mbps: Vertical



# CH11 at 54 Mbps: Horizontal



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



#### Operation Mode: Transmitting under CH01 for 11n HT20 at 65Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2412.00	92.88 (PK)	Н	Fundamental
2412.00	92.42 (PK)	V	Frequency
4824.00	48.85 (PK)	Н	74(Peak)/ 54(AV)
4824.00	47.59 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

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

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11n HT20 at 65Mbps

#### Operation Mode: Transmitting under CH06 for 11n HT20 at 65Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2437.00	91.55 (PK)	Н	Fundamental
2437.00	91.51 (PK)	V	Frequency
4874.00	46.54 (PK)	Н	74(Peak)/ 54(AV)
4874.00	46.69 (PK)	V	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802. 11n HT20 at 65bps

#### Operation Mode: Transmitting under CH11 for 11n HT20 at 65Mbps

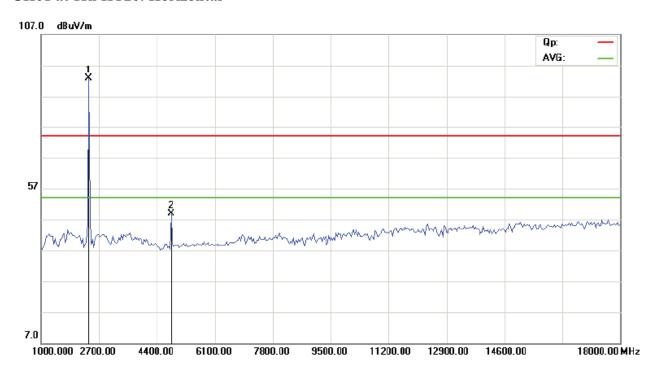
Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2462.00	92.12 (PK)	Н	Fundamental
2462.00	92.31 (PK)	V	Frequency
4924	47.69 (PK)	Н	74(Peak)/ 54(AV)
4924	48.14 (PK)	V	74(Peak)/ 54(AV)
7386		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310		H/V	74(Peak)/ 54(AV)
14772		H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24650		H/V	74(Peak)/ 54(AV)

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802. 11n HT20 at 65bps

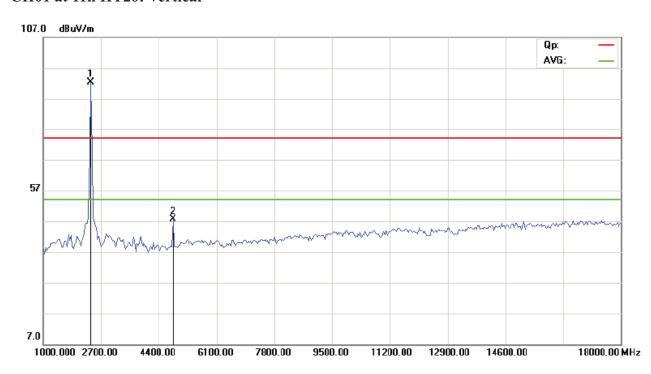


Please refer to the following test plots for details:

#### CH01 at 11n HT20: Horizontal

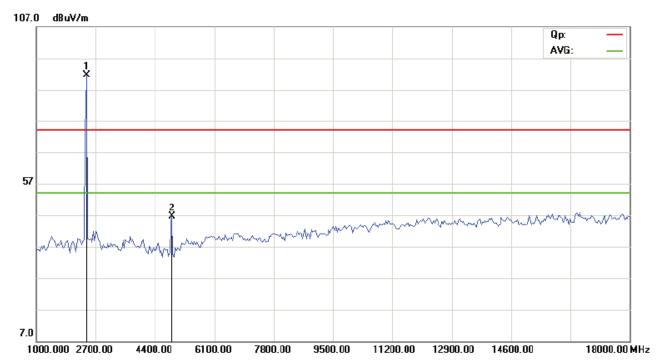


#### CH01 at 11n HT20: Vertical

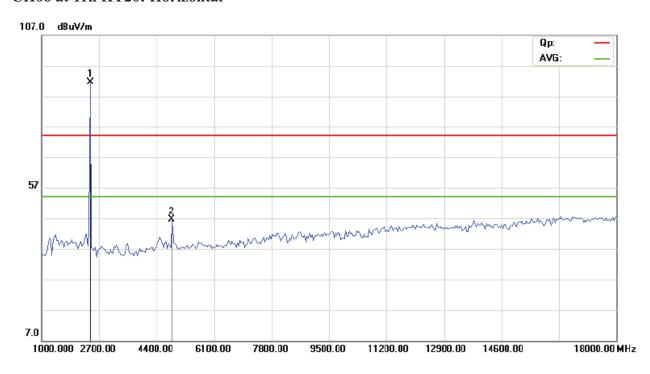




#### CH06 at 11n HT20: Vertical

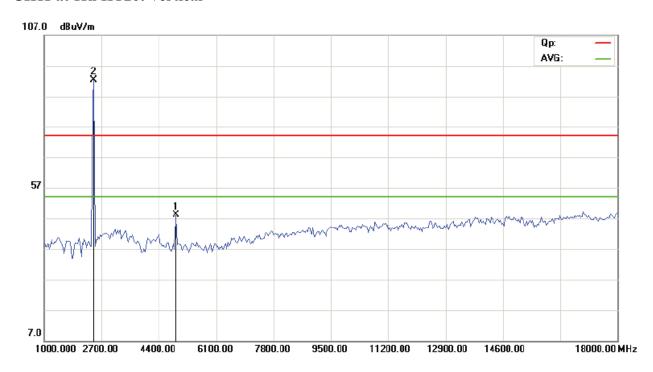


#### CH06 at 11n HT20: Horizontal

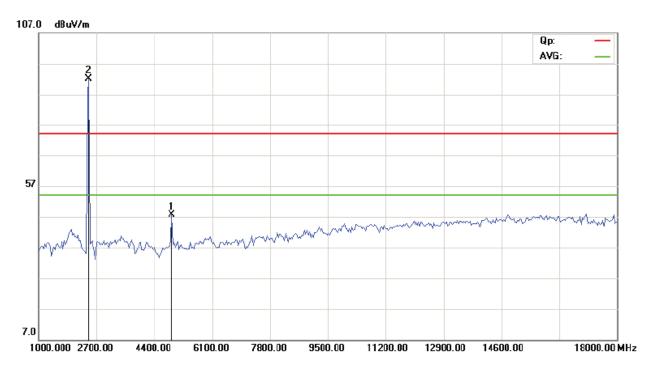




#### CH11 at 11n HT20: Vertical



#### CH11 at 11n HT20: Horizontal



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



### Operation Mode: Transmitting under CH01 for 11n HT40 at 65Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2422.00	87.01 (PK)	Н	Fundamental
2422.00	86.96 (PK)	V	Frequency
4844.00	47.51 (PK)	Н	74(Peak)/ 54(AV)
4844.00	48.77 (PK)	V	
7266.00		H/V	74(Peak)/ 54(AV)
9688.00		H/V	74(Peak)/ 54(AV)
12110		H/V	74(Peak)/ 54(AV)
14532		H/V	74(Peak)/ 54(AV)
16954		H/V	74(Peak)/ 54(AV)
19376		H/V	74(Peak)/ 54(AV)
21798		H/V	74(Peak)/ 54(AV)
24220		H/V	74(Peak)/ 54(AV)

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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n HT40 at 65bps

#### Operation Mode: Transmitting under CH04 for 11n HT40 at 65Mbps

Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2437.00	87.72 (PK)	Н	Fundamental
2437.00	86.15 (PK)	V	Frequency
4874.00	46.68 (PK)	Н	74(Peak)/ 54(AV)
4874.00	48.03 (PK)	V	
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802. 11n HT40 at 65bps

#### Operation Mode: Transmitting under CH7 for 11n HT40 at 65Mbps

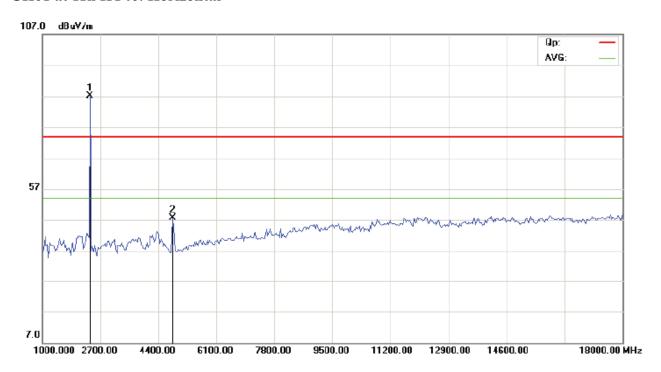
Frequency	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
(MHz)			
2452.00	87.85 (PK)	Н	Fundamental
2452.00	87.56 (PK)	V	Frequency
4904	46.73 (PK)	Н	74(Peak)/ 54(AV)
4904		V	
7356		H/V	74(Peak)/ 54(AV)
9808		H/V	74(Peak)/ 54(AV)
12260		H/V	74(Peak)/ 54(AV)
14712		H/V	74(Peak)/ 54(AV)
17164		H/V	74(Peak)/ 54(AV)
19616		H/V	74(Peak)/ 54(AV)
22068		H/V	74(Peak)/ 54(AV)
24520		H/V	74(Peak)/ 54(AV)

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802. 11n HT40 at 65bps

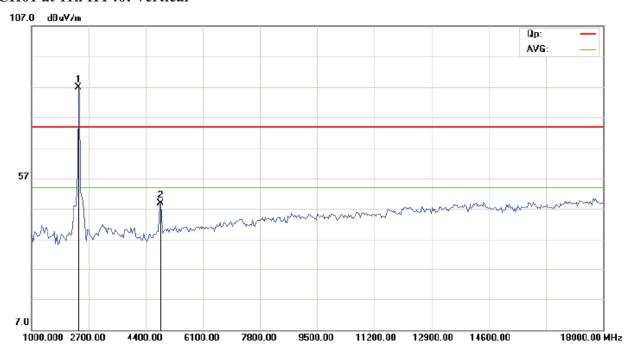


Please refer to the following test plots for details:

# CH01 at 11n HT40: Horizontal

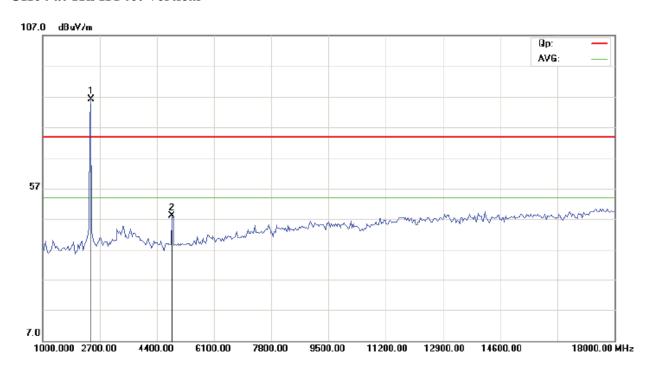


# CH01 at 11n HT40: Vertical

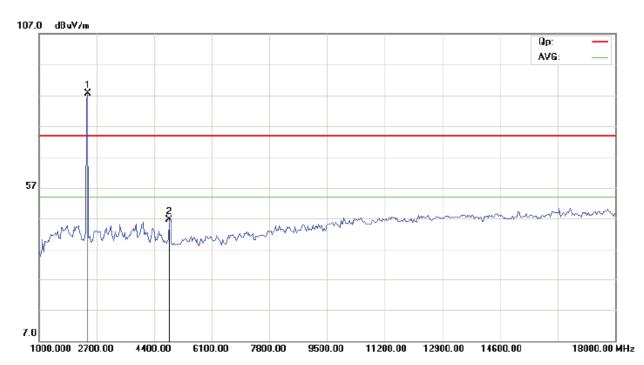




# CH04 at 11n HT40: Vertical

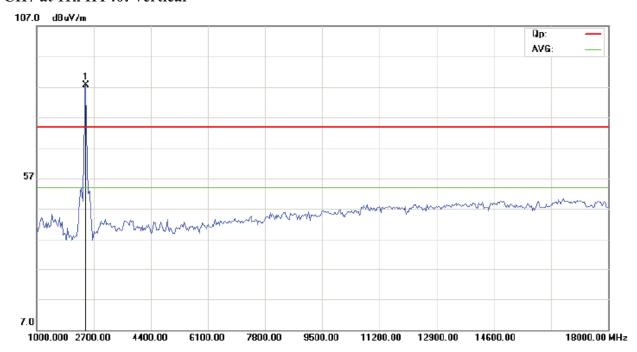


# CH04 at 11n HT40: Horizontal

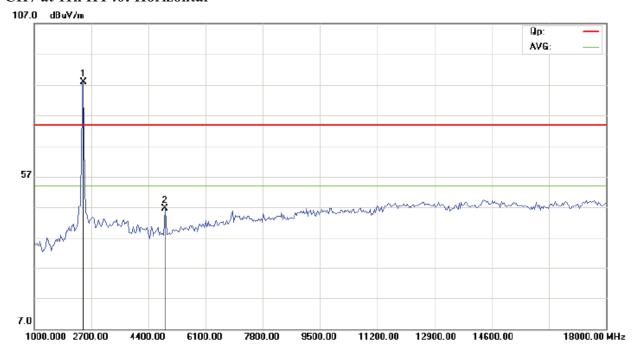




# CH7 at 11n HT40: Vertical



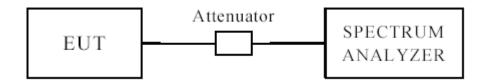
### CH7 at 11n HT40: Horizontal



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

### 7.0 6dB Bandwidth Measurement

### 7.1 Test Setup



#### 7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500kHz

#### 7.3 Test Procedure

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

## 7.4 Test Result



EUT			MID		Model		MID7	727BT-RK326
Mode			802.11b		Input Vol	tage		120V~
Temperatu	re	2	4 deg. C,		Humidity		:	56% RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		andwidth Hz)	Minimum Limit (MHz)		Pass/ Fail
1		2412	1	10.08		0.5		Pass
6		2437	1	10	.08		0.5	Pass
11		2462	1	10	.08		0.5	Pass
1		2412	11	9.	48		0.5	Pass
6		2437	11	9.	48		0.5	Pass
11		2462	11	9.	48		0.5	Pass

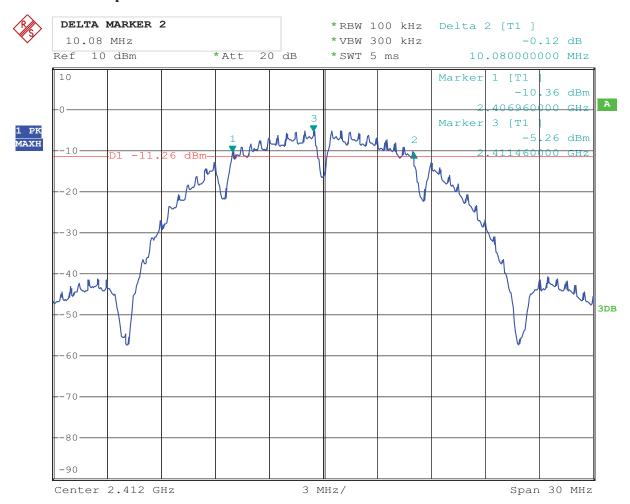
EUT			MID		Model	N		27BT-RK326
Mode			802.11g		Input Vol	tage		120V~
Temperatu	re	2	4 deg. C,		Humidity	,	:	56% RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		andwidth Hz)		num Limit MHz)	Pass/ Fail
1		2412	54	16	5.56		0.5	Pass
6		2437	54	16	5.56		0.5	Pass
11		2462	54	16	5.56		0.5	Pass



EUT			MID		Model		MID	727BT-RK326	
Mode		8	302.11n		Input Vol	tage		120V~	
Temperat	ure	24	4 deg. C,		Humidity			56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Ba			num Limit MHz)	Pass/ Fail	
1		2412	HT20	Г20 17.76			0.5	Pass	
6		2437	HT20	17	.76		0.5	Pass	
11		2462	HT20	17	.76	0.5		Pass	
1		2422	HT40	36	.40		0.5	Pass	
4		2437	HT40	36	.40	0.5		Pass	
7		2452	HT40	36	.40		0.5	Pass	



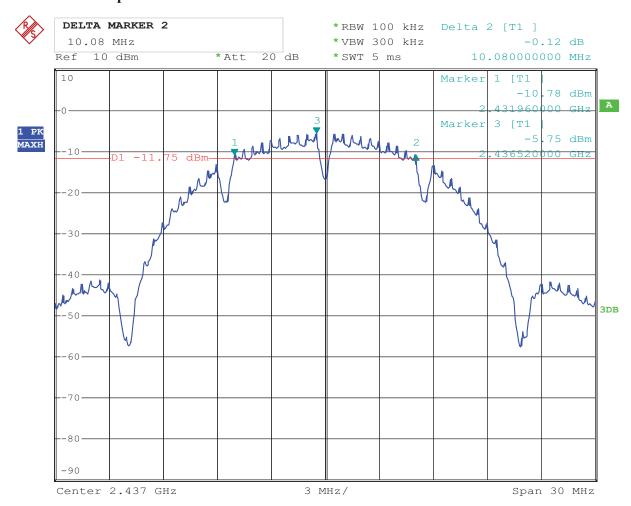
# 1. 802.11b at 1Mbps of CH01



Date: 24.APR.2014 11:17:32



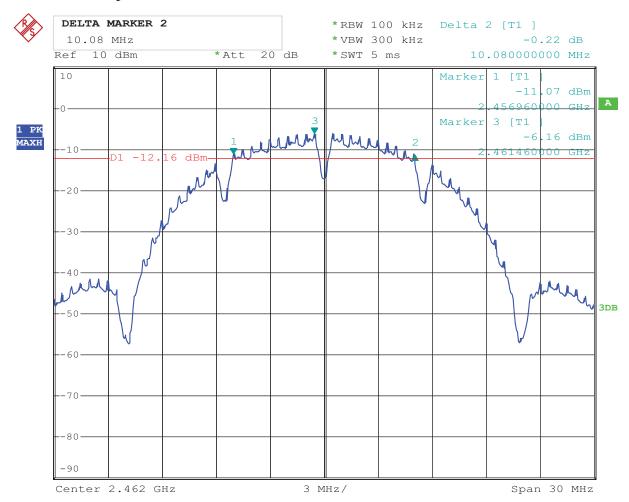
# 2. 802.11b at 1Mbps of CH06



Date: 24.APR.2014 11:30:29



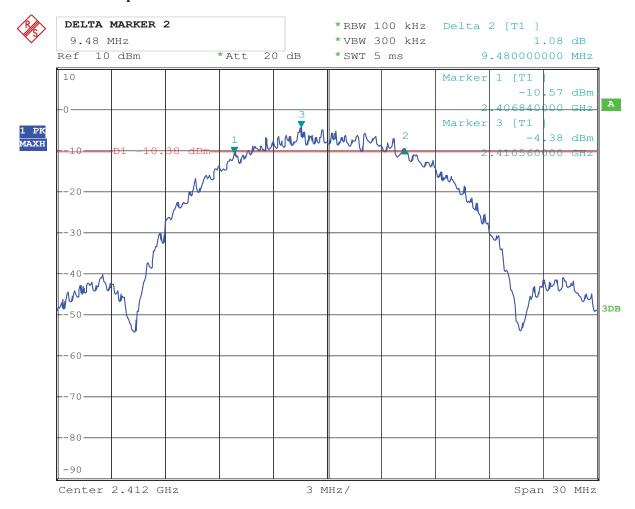
# 3. 802.11b at 1Mbps of CH11



Date: 24.APR.2014 11:32:24



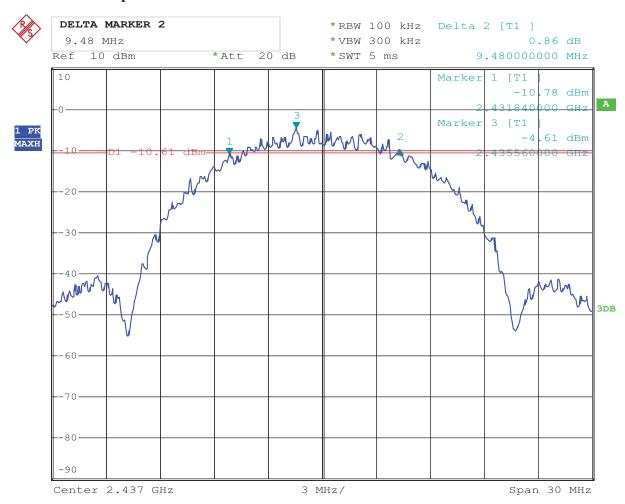
# 4. 802.11b at 11Mbps of CH01



Date: 24.APR.2014 11:22:30



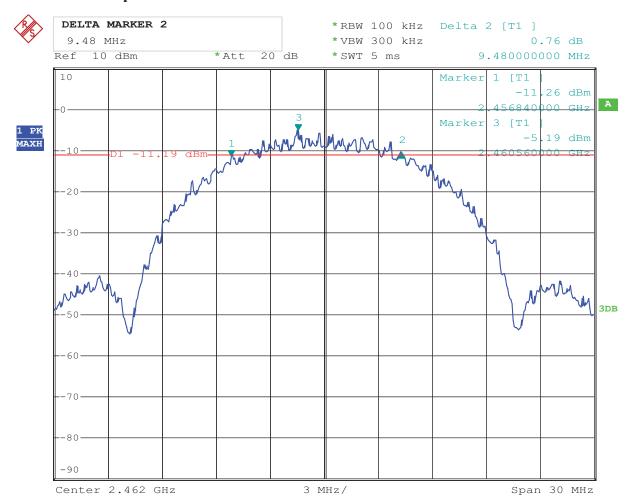
# 5. 802.11b at 11Mbps of CH06



Date: 24.APR.2014 11:26:39



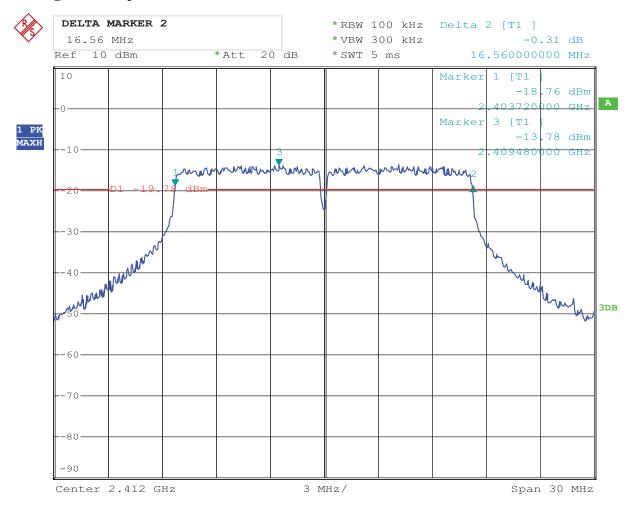
# 6. 802.11b at 11Mbps of CH11



Date: 24.APR.2014 11:36:10



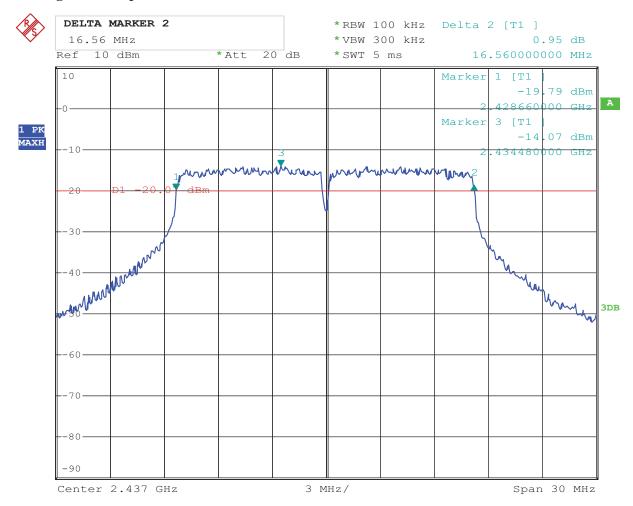
# 7. 802.11g at 54 Mbps of CH01



Date: 24.APR.2014 11:20:40



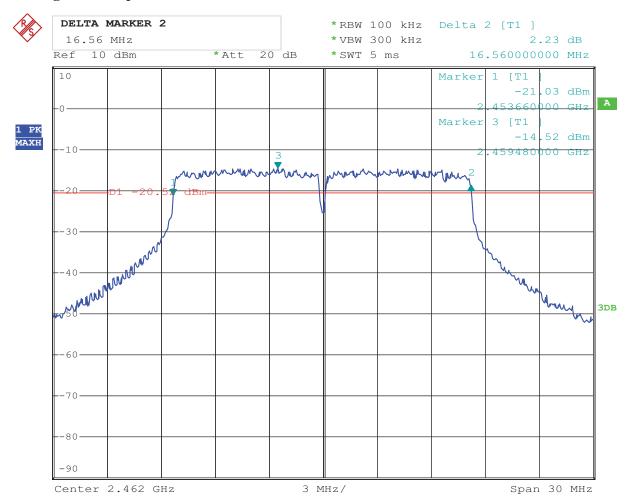
# 8. 802.11g at 54 Mbps of CH06



Date: 24.APR.2014 11:29:09



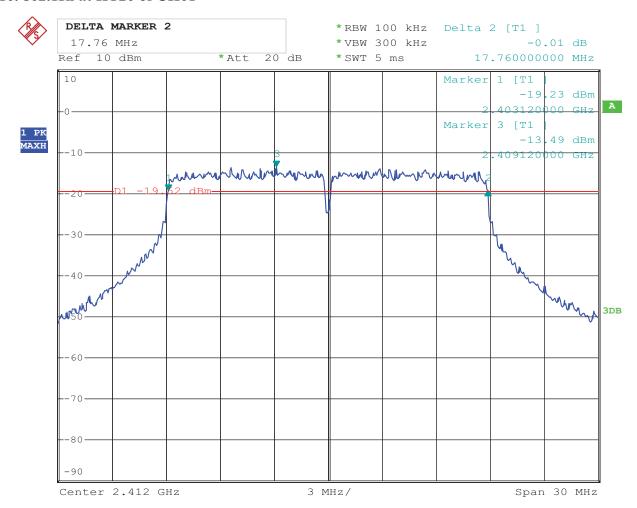
# 9. 802.11g at 54 Mbps of CH11



Date: 24.APR.2014 11:34:29



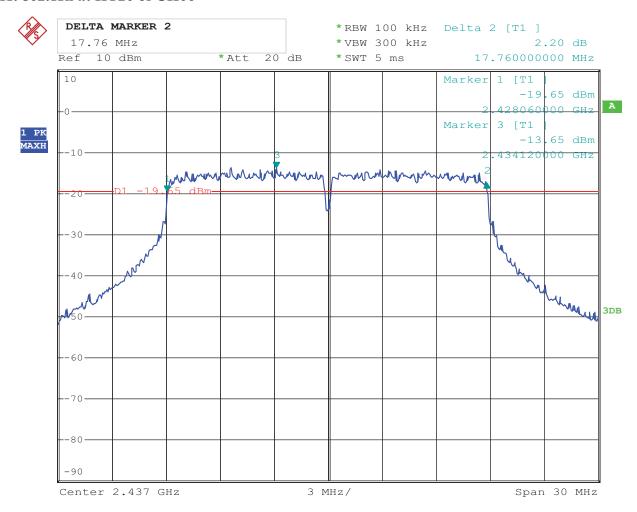
### 10. 802.11n at HT20 of CH01



Date: 24.APR.2014 11:24:20



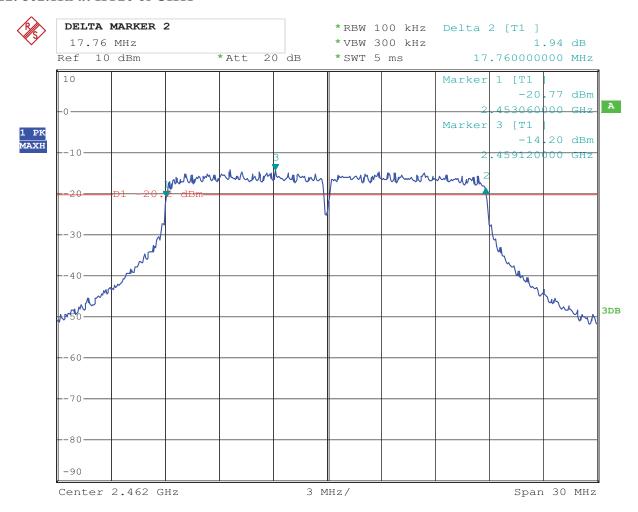
### 11. 802.11n at HT20 of CH06



Date: 24.APR.2014 11:25:36



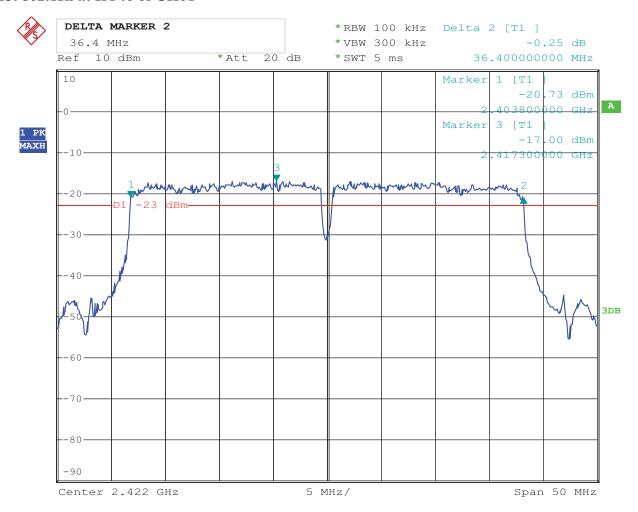
### 12. 802.11n at HT20 of CH11



Date: 24.APR.2014 11:38:19



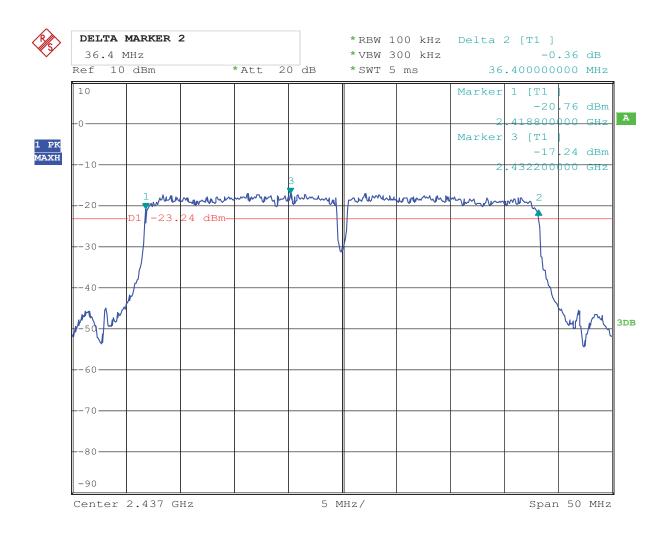
### 13. 802.11n at HT40 of CH01



Date: 24.APR.2014 11:40:45



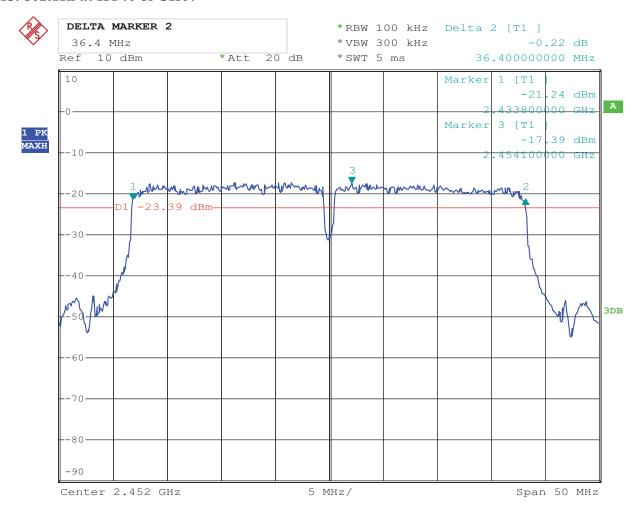
### 14. 802.11n at HT40 of CH04



24.APR.2014 11:42:40 Date:



### 15. 802.11n at HT40 of CH07



Date: 24.APR.2014 11:45:18



# 8. Maximum Peak Output Power

# 8.1 Test Setup



# 8.2 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

### **8.3 Test Procedure**

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

Note: the peak power was measured



### **8.4Test Results**

EUT	EUT Mi		D	Model		M	ID727BT-RK326	
Mode	Mode		802.11b 11Mbps		Input Voltage		120V~	
Temperati	ure	24 deg	g. C,	Humidi	ity		56% RH	
Channel	Cha	annel Frequency (MHz)	Peak Power (dBm)	Output	Peak Power Limit (dBm)		Pass/ Fail	
1		2412	9.47		30	)	Pass	
6	2437		9.28		30		Pass	
11 2462		8.86		30	)	Pass		

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

2. The result basic equation calculation as follow:

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

EUT	EUT		MID			M	IID727BT-RK326
Mode		802.11g		Input Voltage			120V~
Temperati	demperature 24 deg. C, Humidity		ty	56% RH			
Channel	Cha	annel Frequency (MHz)	Peak Power (dBm)	Output	Peak P Lin (dB	nit	Pass/ Fail
1		2412	8.24		30	)	Pass
6		2437	2437 8.03		3(	)	Pass
11	2462 7.65			3(	)	Pass	

Note: 1. At finial test to get the worst-case emission at 54Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

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



EUT	EUT MI		D Model			M	IID727BT-RK326
Mode	Mode 802.11n HT20 Input Voltage		oltage		120V~		
Temperati	ure	24 deg	g. C,	Humidi	ty		56% RH
Channel	Cha	annel Frequency (MHz)	Peak Power (dBm)	Output	Peak P Lin (dB	nit	Pass/ Fail
1		2412	8.49		3(	)	Pass
6		2437 8.31			3(	)	Pass
11		2462 7.90			30	)	Pass

Note: 1. At finial test to get the worst-case emission at 65Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

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

EUT	EUT N		D	Model		M	IID727BT-RK326
Mode	Mode 802.11n HT40		HT40	Input Voltage			120V~
Temperat	ure	24 deg	g. C,	Humidi	ty		56% RH
Channel	Cha	annel Frequency (MHz)	Peak Power (dBm)	Output	Peak P Lin (dB	nit	Pass/ Fail
1		2422	8.47		3(	)	Pass
5		2437	8.37		30		Pass
7		2452	8.14		30	)	Pass

Note: 1. At finial test to get the worst-case emission at 65Mbps for CH01, CH06 and CH11

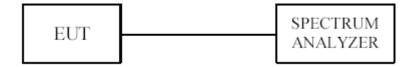
2. The result basic equation calculation as follow:

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



# 9. Power Spectral Density Measurement

### 9.1 Test Setup



### 9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

### 9.3 Test Procedure

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



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EUT		MII	D	Model			MID727BT-RK326		
Mode		802.11b	1 Mbps	Input V	oltage		120V~		
Temperat	ure	24 deg	g. C,	Humidi	ty 56% RH		ty		56% RH
Channel	Channel Frequency F		Final RF Po	Final RF Power		n Limit	Pass/ Fail		
Chamiei		(MHz)	Level (dB:	m)	(dB	m)			
				1Mbps					
1		2412	-16.14		8		Pass		
6		2437	-16.24		8		Pass		
11		2462	-16.62	•	8		Pass		

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

EUT	MI		D Model				MID727BT-RK326
Mode		802.11b 1	1Mbps	Input V	oltage		120V~
Temperat	ure	24 deg	g. C,	Humidi	dity 56% RH		56% RH
Channel	Channel Frequency		Final RF Power		Maximum Limit		Pass/ Fail
Chamilei		(MHz)	Level (dBm)		(dB	m)	
				11Mbps			
1		2412	-14.46		8		Pass
6	2437		-14.51		8		Pass
11		2462	-14.89		8		Pass

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



11

Shenzhen BATT Testing Technology Co., Ltd. Report No.: BATT201407098-01FCC

EUT		MID		Model		MI	D727BT-RK326
Mode	e 802.11g		Input Voltage			120V~	
Temperatu	ure	e 24 deg. C, Humidity		56% RH			
Channel	Channel Frequency		Final RF Power		Maximur	n Limit	Pass/ Fail
Chaimei		(MHz)	Level (dB	m)	(dBi	m)	
			54Mbp	S			
1		2412 -22.08			8		Pass
6		2437	-22.25		8		Pass

-22.68

8

Pass

Note: At finial test to get the worst-case emission at 54Mbps for CH01, CH06 and CH11

2462

EUT	EUT MIL		D Mode			MI	D727BT-RK326
Mode		802.11n HT20 Input Voltage			120V~		
Temperati	ure	24 deg	g. C,	Humid	lity		56% RH
Channel	Ch	annel Frequency	Final RF Power		Maximum Limit		Pass/ Fail
Chamiei	(MHz)		Level (dB	m)	(dB	m)	
			11n HT20 6	5Mbps			
1		2412	-21.07		8		Pass
6		2437	-21.60		8		Pass
11		2462	-22.10		8		Pass

Note: At finial test to get the worst-case emission at 65M for CH01, CH06 and CH11



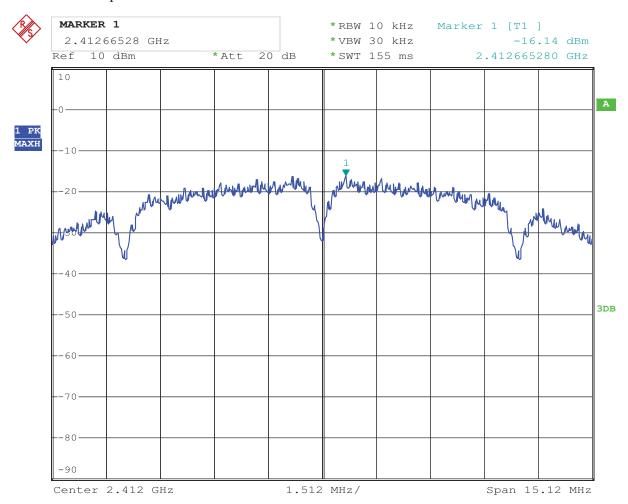
EUT		MID		Model		MID727BT-RK326	
Mode		802.11n HT40		Input Voltage		120V~	
Temperature		24 deg. C,		Humidity		56% RH	
Channel	Cha	annel Frequency	Final RF Power		Maximum Limit		Pass/ Fail
	(MHz)		Level (dBm)		(dBm)		
11n HT40 65Mbps							
1	2422		-24.78		8		Pass
5	2437		-23.05		8		Pass
7	7 2452		-24.57		8		Pass

**Note:** At finial test to get the worst-case emission at 65Mfor CH01, CH04 and CH07



# 9.5 Photo of Power Spectral Density Measurement

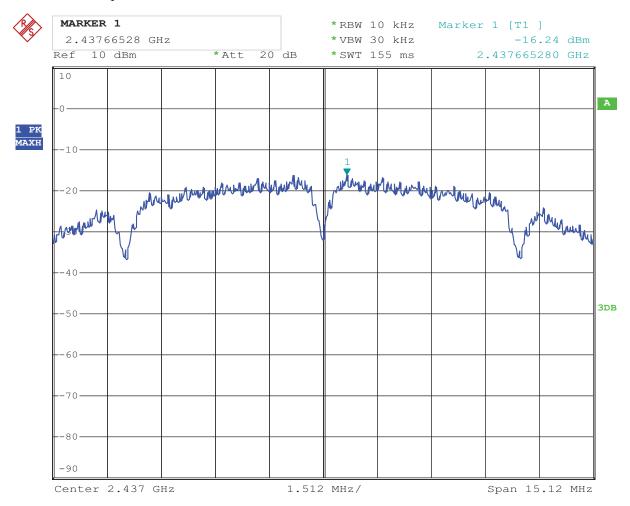
# 1. 802.11b at 1Mbps of CH01



24.APR.2014 12:31:00 Date:



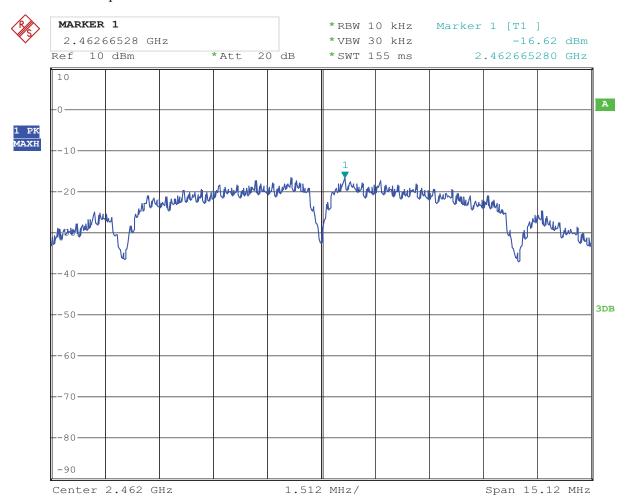
# 2. 802.11b at 1Mbps of CH06



24.APR.2014 12:32:06 Date:



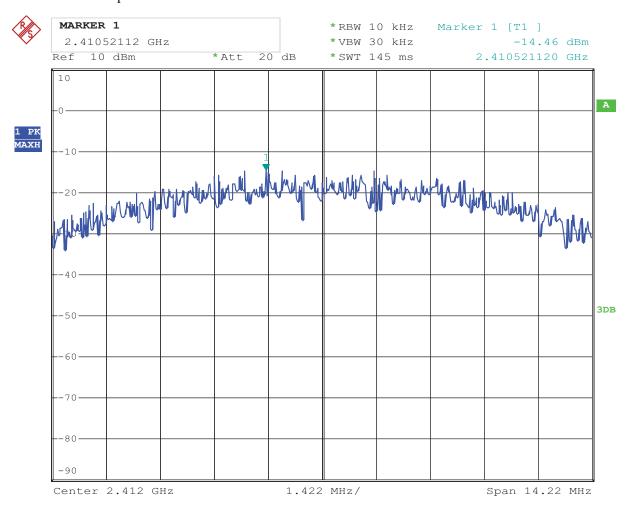
# 3. 802.11b at 1Mbps of CH11



24.APR.2014 12:32:41 Date:



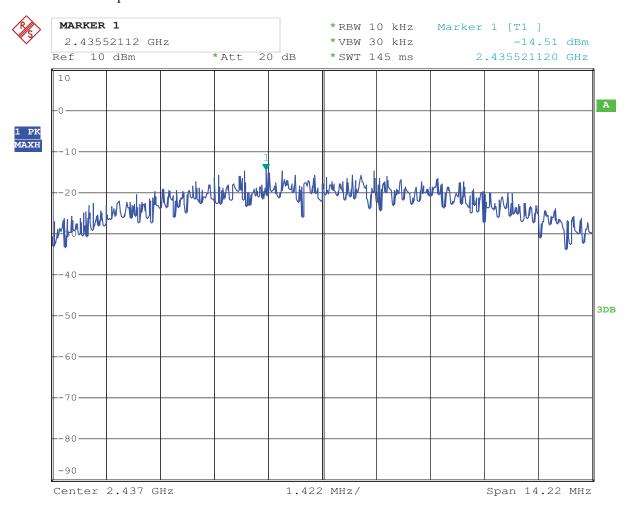
# 4. 802.11b at 11Mbps of CH01



Date: 24.APR.2014 12:37:05



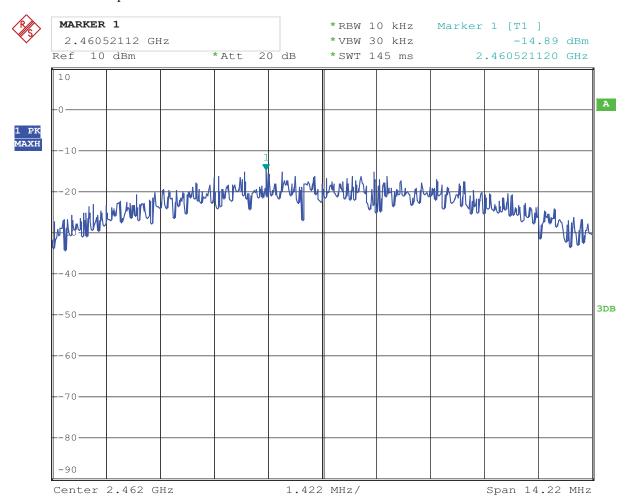
# 5. 802.11b at 11Mbps of CH06



Date: 24.APR.2014 12:37:41



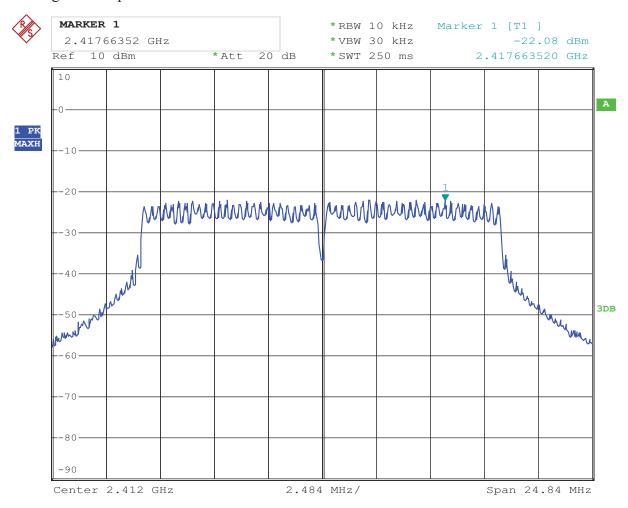
# 6. 802.11b at 11Mbps of CH11



Date: 24.APR.2014 12:38:14



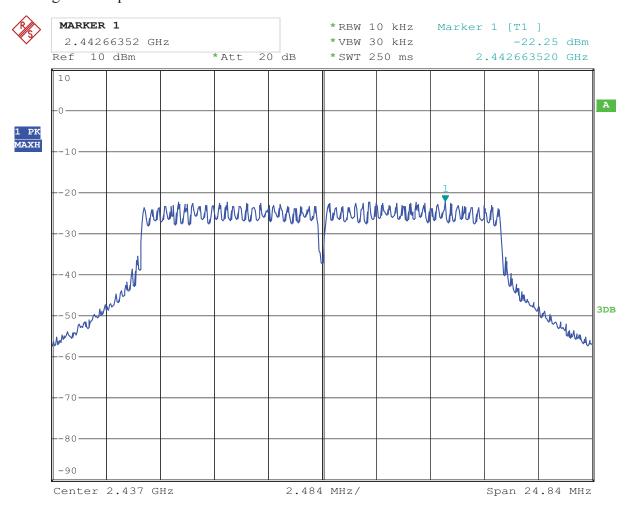
# 7. 802.11g at 54Mbps of CH1



Date: 24.APR.2014 12:35:49



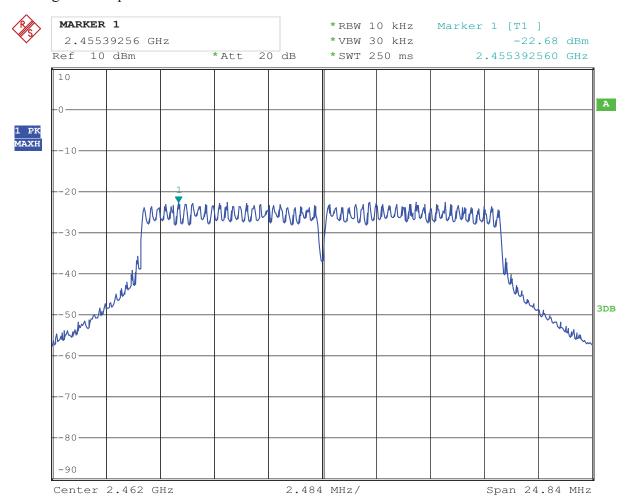
# 8. 802.11g at 54Mbps of CH6



Date: 24.APR.2014 12:35:14



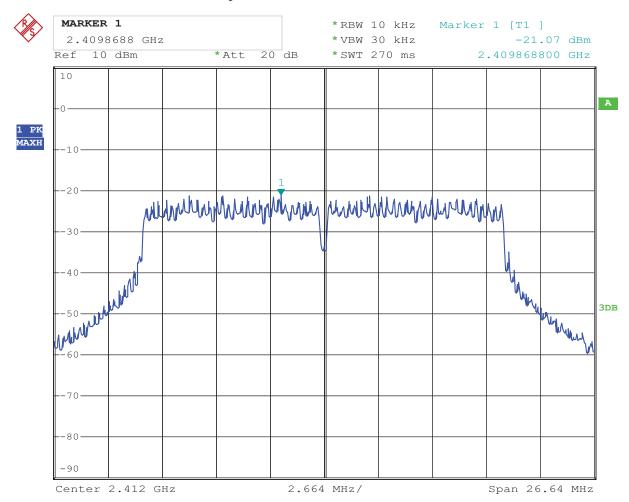
## 9. 802.11g at 54Mbps of CH11



Date: 24.APR.2014 12:34:38



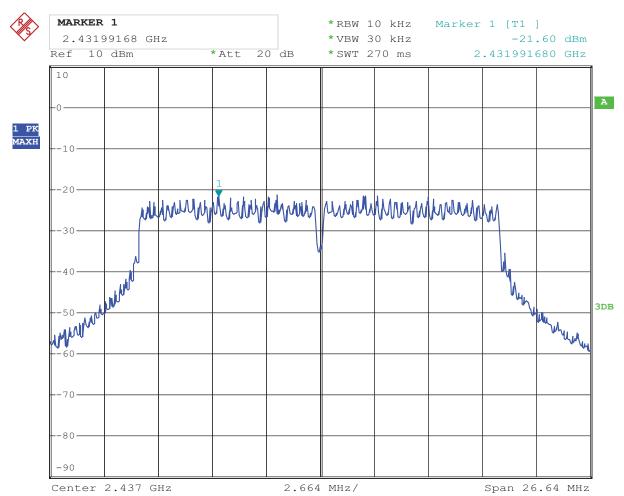
### 10. 802.11n at HT20 of CH01 65Mbps



Date: 24.APR.2014 12:42:43



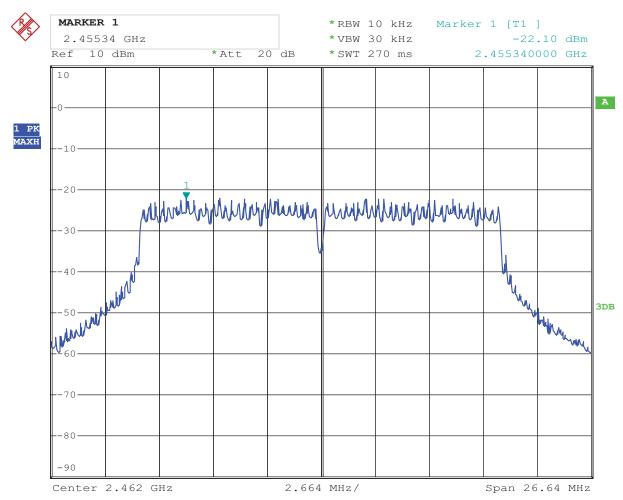
### 11. 802.11n at HT20 of CH06 65Mbps



Date: 24.APR.2014 12:40:41



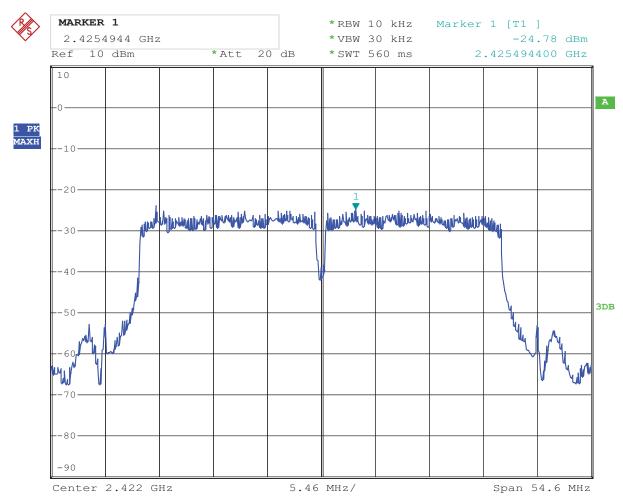
### 12. 802.11n at HT20 of CH11 65Mbps



24.APR.2014 12:39:50 Date:



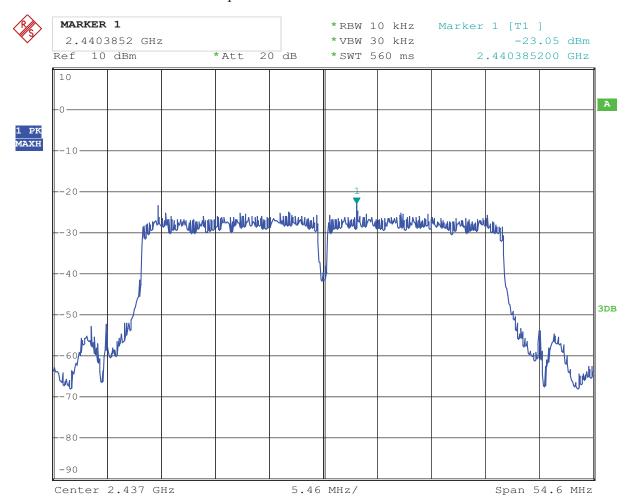
### 13. 802.11n at HT40 of CH01 65Mbps



Date: 24.APR.2014 12:44:17



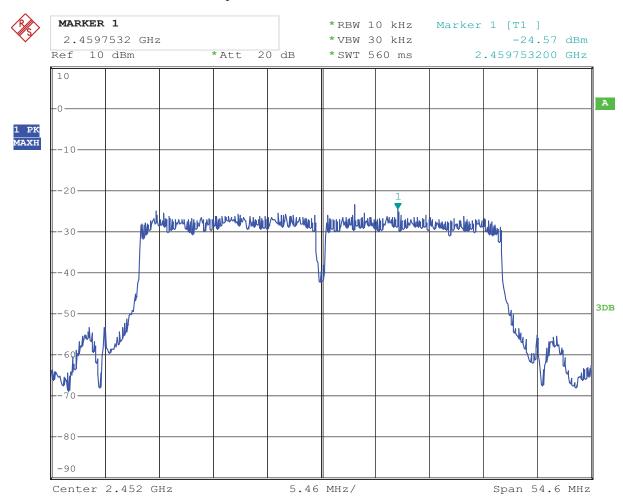
### 14. 802.11n at HT40 of CH04 65Mbps



Date: 24.APR.2014 12:44:59



### 15. 802.11n at HT40 of CH07 65Mbps

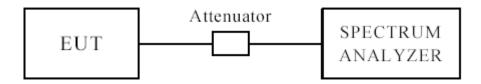


Date: 24.APR.2014 12:45:36



#### 10 Out of Band Measurement

#### 10.1 Test Setup for band edge



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

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

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

#### **10.3 Test Procedure**

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

For bandage test, the spectrum set as follows: RBW=100kHz,VBW=300 kHz. A conducted measurement used

#### 10.4 Test Result

Please see next pages

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

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



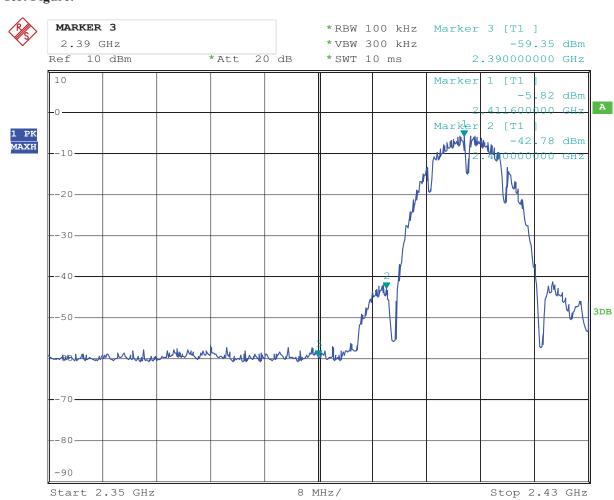
### For 802.11b mode

CH01 at 1Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBμV/m)	48.15	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBμV/m)
2390MHz	PK (dBμV/m)	37.27	Limit	74(dBμV/m)
	AV (dBμV/m)		LIIIII	54(dBμV/m)

### **Test Figure:**



Date: 24.APR.2014 12:47:05

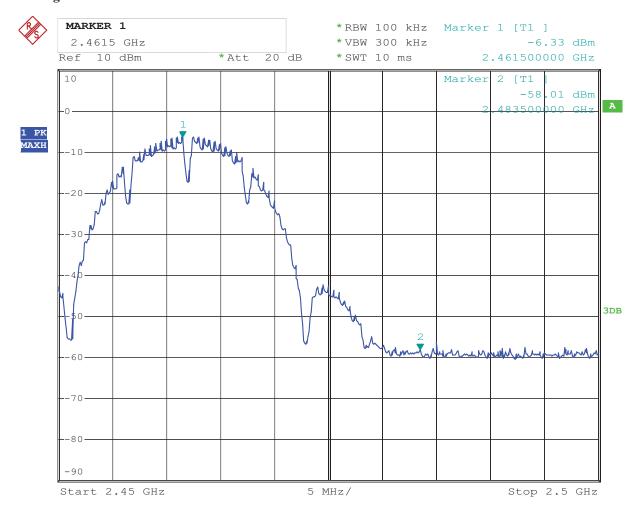


### CH11 at 1Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping 7	Fransmitting	Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	41.20	T :it	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



24.APR.2014 12:58:14 Date:

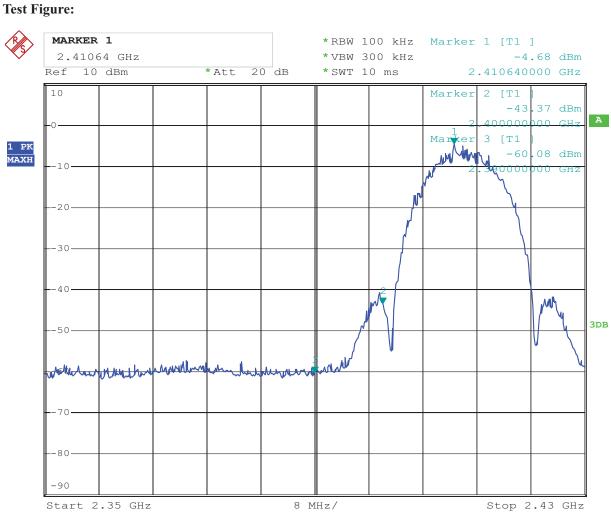


#### For 802.11b mode

CH01 at 11Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBµV/m)	49.82	Limit	74(dBµV/m)
	AV (dBμV/m)		Liiiit	54(dBµV/m)
2390MHz	PK (dBµV/m)	40.24	Limit	74(dBµV/m)
	AV (dBμV/m)		LIIIII	54(dBµV/m)



Date: 24.APR.2014 12:50:53

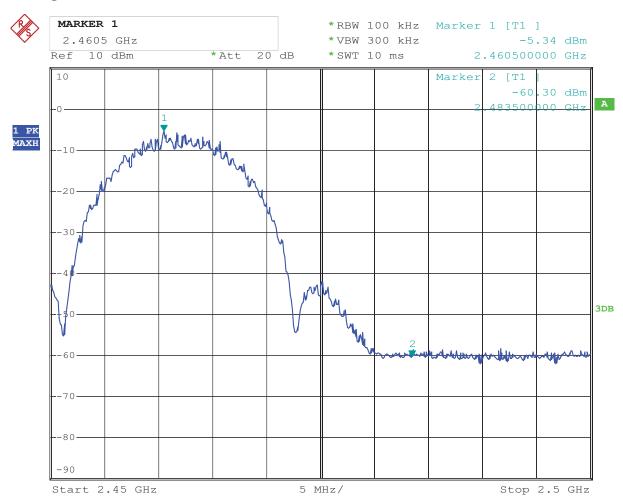


#### CH11 at 11Mbps

#### Band-edge Measurement 10.4

EUT	N	MID	Model	MID727BT-RK326
Mode	Keeping 7	Transmitting	Input Voltage	120V~
Temperature	24 d	leg. C,	Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	43.35	Limit	74(dBµV/m)
	AV (dBμV/m)		Liiiit	$54(dB\mu V/m)$

#### **Test Figure:**



24.APR.2014 13:00:37 Date:



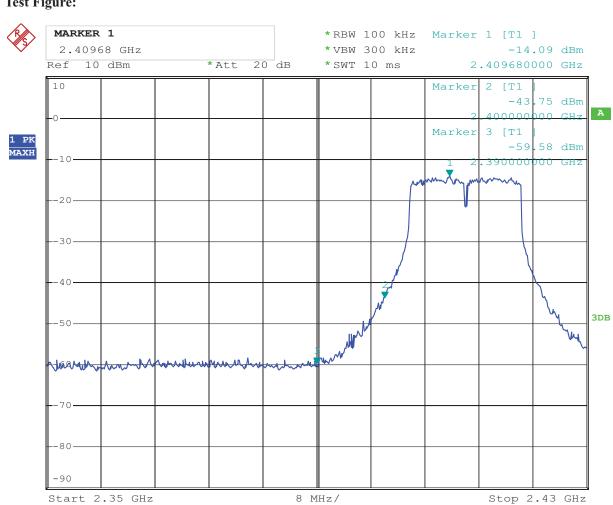
#### For 802.11g mode

CH01 at 54Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBµV/m)	50.19	Limit	74(dBµV/m)
	AV (dBμV/m)		Liiiit	54(dBµV/m)
2390MHz	PK (dBµV/m)	40.21	Limit	74(dBµV/m)
	AV (dBμV/m)		LIIIII	54(dBµV/m)

### **Test Figure:**



Date: 24.APR.2014 12:48:59

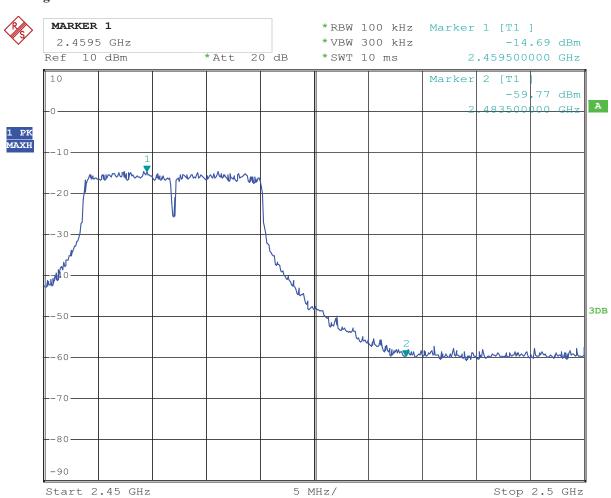


#### CH11 at 54Mbps

#### Band-edge Measurement 10.4

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	44.16	Limit	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



24.APR.2014 13:00:01 Date:



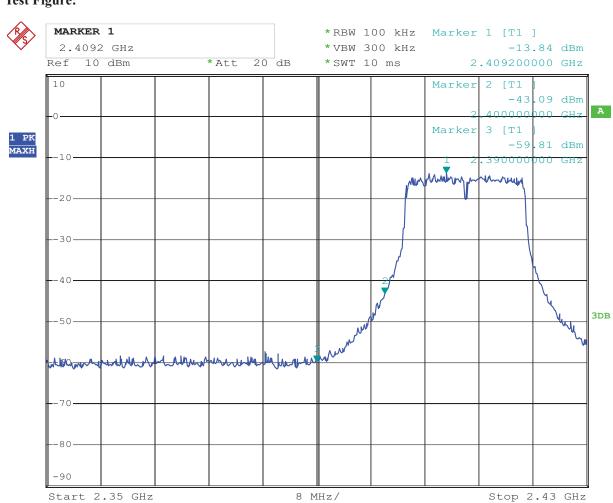
#### For 802.11n mode

CH01 at HT20 65Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBμV/m)	51.82	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBμV/m)
2390MHz	PK (dBµV/m)	41.83	Limit	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

### **Test Figure:**



Date: 24.APR.2014 12:51:35

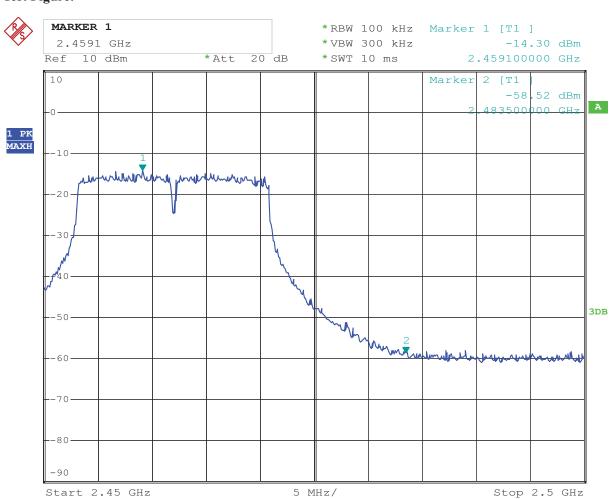


### CH11 at HT20 65Mbps

#### Band-edge Measurement 10.4

EUT	MID		Model	MID727BT-RK326
Mode	Keeping 7	Transmitting	Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	44.07	Limit	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



24.APR.2014 13:01:36 Date:



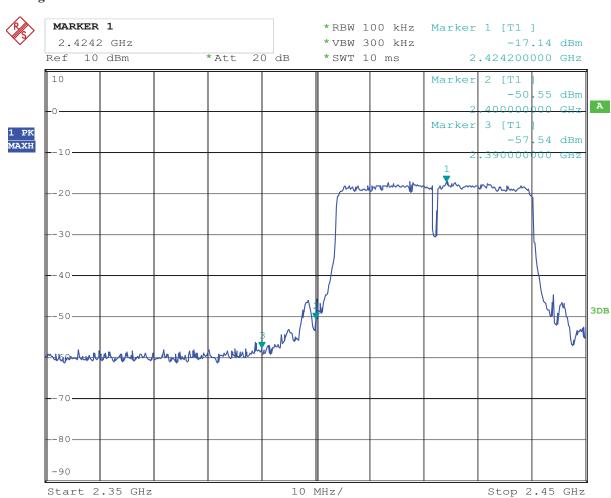
#### For 802.11n mode

CH01 at HT40 65Mbps

#### 10.4 Band-edge Measurement

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBµV/m)	47.89	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	$54(dB\mu V/m)$
2390MHz	PK (dBµV/m)	40.13	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	$54(dB\mu V/m)$

#### **Test Figure:**



Date: 24.APR.2014 12:52:36

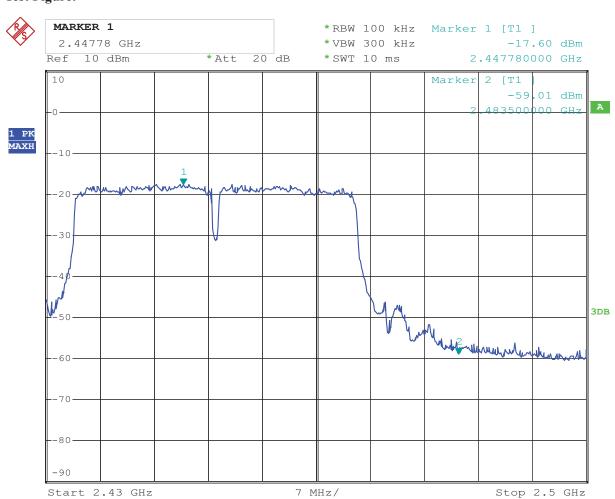


### CH11 at HT40 65Mbps

#### Band-edge Measurement 10.4

EUT	MID		Model	MID727BT-RK326
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	46.34	Limit	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

#### **Test Figure:**



24.APR.2014 13:02:44 Date:



#### 11.0 Antenna Requirement

#### 11.1 Standard Applicable

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

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

#### 11.2 Antenna Connected construction

Integral antenna used. The maximum Gain of the antennas is 2.0dBi.



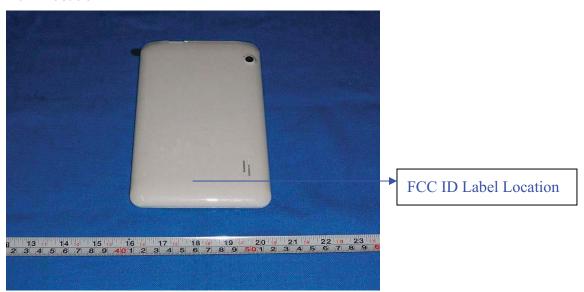
#### 12.0 FCC ID Label

#### FCC ID: 2AAQZMID727B1-RK326

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

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

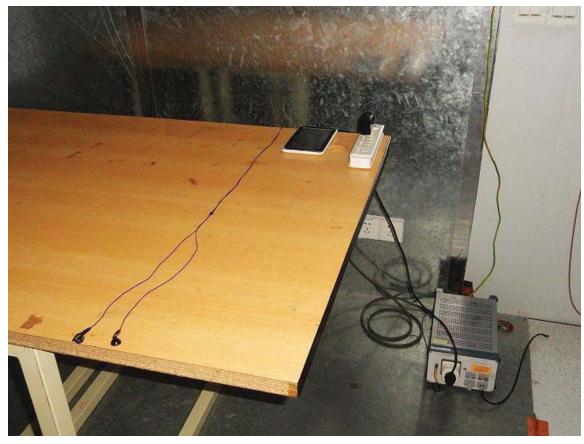
#### Mark Location:





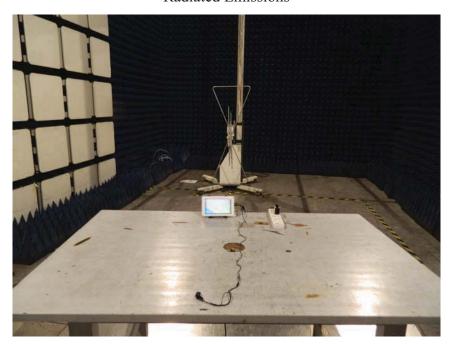
# 13 PHOTOGRAPHS OF THE TEST CONFIGURATION

**Conducted Emissions** 





## **Radiated Emissions**





# PHOTOGRAPHS OF EUT



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6





Photo 7



Photo 8





Photo 9



Photo 10





Photo 11



Photo 12

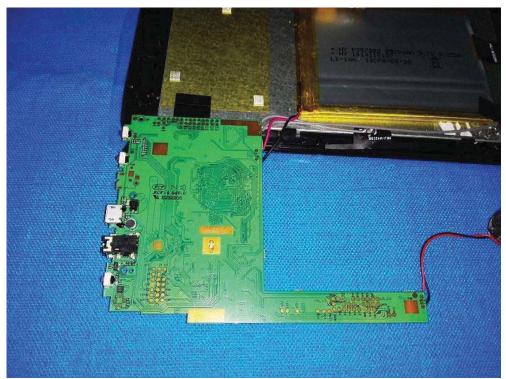


Photo 13



Photo 14 (Alternative Battery)





Photo 15 (Additional Battery)



Photo 16 (Additional Battery)





Photo 17 (Additional Battery)

The Report End