

# FCC PART 15C TESTREPORT No. I15Z40879-SRD01

for

**TCL Communication Ltd.** 

CDMA+LTE mobile phone for Sprint

**MODEL NAME: 5017B** 

with

FCC ID: 2ACCJB011

**Hardware Version: VE** 

Software Version: 5017BA0B

Issued Date: 2015-05-21



#### Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

#### **Test Laboratory:**

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## **REPORT HISTORY**

Report Number	Revision	Description	Issue Date
I15Z40879-SRD01	Rev.0	1st edition	2015-5-21



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## 1. Test Laboratory

## 1.1. Testing Location

Location 1:CTTL(Huayuan North Road)

Address: No. 52, Hu

No. 52, Huayuan North Road, Haidian District, Beijing,

P. R. China100191

Location 2:CTTL(Shouxiang)

Address: No. 51 Shouxiang Science Building, Xueyuan Road,

Haidian District, Beijing, P. R. China100191

1.2. Testing Environment

Normal Temperature:  $15-35^{\circ}$ C Extreme Temperature:  $-20/+55^{\circ}$ C Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2015-05-05 Testing End Date: 2015-05-21

1.4. Signature

Xu Zhongfei

(Prepared this test report)

Li Zhibin

(Reviewed this test report)

Lv Songdong

(Approved this test report)



## 2. Client Information

## 2.1. Applicant Information

Company Name: TCL Communication Ltd.

Address: 5F, C building, No. 232, Liang Jing Road, ZhangJiang High-Tech

Park, Pudong Area, Shanghai, P.R. China.

City: Shanghai Postal Code: 201203 Country: China

Telephone: +86 21 51798260 Fax: +86 21 61460602

### 2.2. Manufacturer Information

Company Name: TCL Communication Ltd.

Address: 5F, C building, No. 232, Liang Jing Road, ZhangJiang High-Tech

Park, Pudong Area, Shanghai, P.R. China.

City: Shanghai Postal Code: 201203 Country: China

Telephone: +86 21 51798260 Fax: +86 21 61460602



## 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

## 3.1. About EUT

Description CDMA+LTE mobile phone for Sprint

Model name 5017B FCC ID 2ACCJB011

IC ID /

With WLAN Function Yes

Frequency Range ISM 2400MHz~2483.5MHz

Type of Modulation DSSS/CCK/OFDM

Number of Channels 11

Antenna Integral Antenna
MAX Conducted Power 27.89dBm(OFDM)
Power Supply 3.8V DC by Battery

### 3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	<b>HW Version</b>	SW Version
UT01a	35820406010174	VE	5017BA0B
UT02a	35820406010170	VE	5017BA0B

<sup>\*</sup>EUT ID: is used to identify the test sample in the lab internally.

### 3.3. Internal Identification of AE

AE ID*	Description	SN
AE1	Battery	TLi020F2
AF2	Traveler Charger	

#### AE1

Commercial name Battery
Type Li-ion
Manufacturer SCUD
Length of cable /

AE2

Commercial name Traveler Charger
Type CBA0058AG1C1

Manufacturer BYD Length of cable /

<sup>\*</sup>AE ID: is used to identify the test sample in the lab internally.



## 3.4. General Description

The Equipment under Test (EUT) is a model of CDMA+LTE mobile phone for Sprint with integrated antenna and inbuilt battery.

It has Bluetooth (EDR) function.

It consists of normal options: travel charger, USB cable and Phone.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

## 3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor k=2.

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

## 4. Reference Documents

## 4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

## 4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title		
	FCC CFR 47, Part 15, Subpart C:		
	15.205 Restricted bands of operation;		
FCC Part15	15.209 Radiated emission limits, general requirements;	2014-10-1	
	15.247 Operation within the bands 902-928MHz,		
	2400-2483.5 MHz, and 5725-5850 MHz.		
ANCI 062 10	American National Standard of Procedures for Compliance	2009	
ANSI C63.10	Testing of Unlicensed Wireless Devices	2009	
KDB558074	Guidance for Performing Compliance Measurements on		
v03r01	Digital Transmission Systems (DTS) Operating Under	2013	
VU31U I	§15.247		



## 5. Test Results

### 5.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.247 (b)	1	Р
Peak Power Spectral Density	15.247 (e)	1	Р
Occupied 6dB Bandwidth	15.247 (a)	1	Р
Band Edges Compliance	15.247 (d)	1	Р
Transmitter Spurious Emission - Conducted	15.247 (d)	1	Р
Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	/	Р
AC Powerline Conducted Emission	15.107, 15.207	1	Р

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

Р	Pass, The EUT complies with the essential requirements in the standard.				
NP	Not Perform, The test was not performed by CTTL				
NA	Not Applicable, The test was not applicable				
F	Fail, The EUT does not comply with the essential requirements in the				
	standard				
F	Fail, The EUT does not comply with the essential requirements in the				
	standard				

### 5.2. Statements

The test cases as listed in section 5.1 of this report for the EUT specified in section 3 was performed by CTTL and according to the standards or reference documents listed in section 4.2 The EUT met all requirements of the standards or reference documents, and only the WLAN function was tested in this report.

#### 5.3. Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage

For this report, if the test cases listed above are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	T nom	26℃	
Voltage	V nom	3.8V(By battery)	
Humidity	H nom	44%	



## 6. Test Facilities Utilized

**Conducted test system** 

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibration Due date
1	Vector Signal	FSQ40	200089	Rohde &	2014-07-08	2015-07-07
!	Analyzer	1 3040	200009	Schwarz	2014-07-06	2013-07-07
2	Test Receiver	ESCI	100344	Rohde &	2015-03-04	2016-03-03
2	rest Receiver	ESCI	100344	Schwarz	2015-03-04	2010-03-03
2	LISN	ENV216	101200	Rohde &	2014-07-08	2015 07 07
3	LISIN	ENVZIO	101200	Schwarz	2014-07-08	2015-07-07
4	Shielding Room	S81	/	ETS-Lindgren	1	/

Radiated emission test system

itau	Radiated emission test system							
No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibratio n Due date		
1	Test Receiver	ESCI 7	100948	Rohde & Schwarz	2014-07-17	2015-07-16		
2	Loop antenna	HFH2-Z2	829324/007	Rohde & Schwarz	2014-12-17	2017-12-16		
3	BiLog Antenna	VULB9163	234	Schwarzbeck	2013-09-16	2016-09-15		
4	Dual-Ridge Waveguide Horn Antenna	3115	6914	EMCO	2014-12-16	2017-12-15		
5	Dual-Ridge Waveguide Horn Antenna	3116	2661	ETS-Lindgren	2014-06-18	2017-06-17		
6	Vector Signal Analyzer	FSV	101047	Rohde & Schwarz	2014-07-04	2015-07-03		
7	Semi-anechoic chamber	1	CT000332-1 074	Frankonia German	1	/		



## **ANNEX A: Detailed Test Results**

## A.1. Measurement Method

#### A.1.1. Conducted Measurements

Connect the EUT to the test system as Fig.A.1.1.1 shows.

Set the EUT to the required work mode.

Set the EUT to the required channel.

Set the Vector Signal Analyzer and start measurement.

Record the values. Vector Signal Analyzer

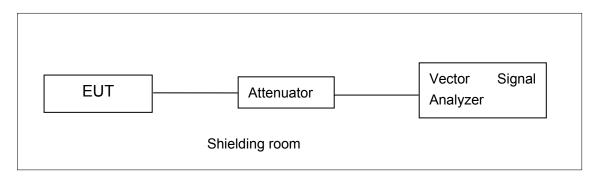


Fig.A.1.1.1: Test Setup Diagram for Conducted Measurements

#### A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows, Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz; Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 10Hz;

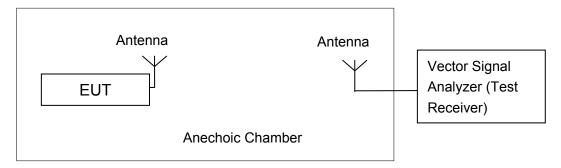


Fig.A.1.2.1: Test Setup Diagram for Radiated Measurements



## A.2. Maximum Output Power

#### Method of Measurement: See ANSI C63.10-2009-clause 6.10

- a) Set span to encompass the entire EBW of the signal.
- b) Set RBW = 1 MHz
- c) Set VBW =3 MHz
- d) Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise, use peak detector mode
- e) Use a video trigger with the trigger level set to enable triggering only on full power pulses. Unlicensed wireless device must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to "free run." Power-gated sweeping may be used to ensure the analyzer sweeps only while the device is transmitting.
- f) Trace average across 100 traces in power averaging mode.
- g) Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer band-power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

#### **Measurement Limit:**

Standard	Limit (dBm)	
FCC CRF Part 15.247(b)	< 30	

**EUT ID: EUT2** 

### A.2.1. Peak Output Power-conducted

#### **Measurement Results:**

#### 802.11b/g mode

	Data Rate -	Test Result (dBm)			
Mode	(Mbps)	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)	
	4		(6110)	(01111)	
-	1	23.05	1	1	
802.11b	2	23.16	1	1	
002.110	5.5	24.65	1	1	
	11	26.08	27.20	26.83	
	6	26.56	1	1	
	9	26.63	1	1	
	12	26.36	1	1	
000 11 ~	18	26.29	1	1	
802.11g	24	26.80	1	1	
	36	26.83	1	1	
	48	26.88	27.89	27.43	
	54	26.82	1	1	



The data rate 11Mbps and 48Mbps are selected as worse condition, and the following cases are performed with this condition.

#### 802.11n-HT20 mode

	Data Rate (Index)	Test Result (dBm)			
Mode		2412MHz	2437MHz	2462 MHz	
		(Ch1)	(Ch6)	(Ch11)	
	MCS0	26.63	27.75	27.24	
	MCS1	24.39	1	1	
	MCS2	24.38	1	1	
802.11n	MCS3	24.90	1	1	
(20MHz)	MCS4	24.82	1	1	
	MCS5	24.91	1	1	
	MCS6	22.29	1	1	
	MCS7	24.95	1	1	

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

**Conclusion: Pass** 

## A.2.2. Average Output Power-conducted

### 802.11b/g mode

Mode	Test Result (dBm)			
Mode	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)	
802.11b	18.38	18.25	18.54	
802.11g	16.55	16.23	16.24	

#### 802.11n-HT20 mode

Mode	Test Result (dBm)			
Mode	2412MHz (Ch1)	2437MHz (Ch6)	2462 MHz (Ch11)	
802.11n (20MHz)	16.59	16.26	16.23	

**Conclusion: Pass** 



#### A.3. Peak Power Spectral Density

#### Method of Measurement: See ANSI C63.10-2009-clause 6.11.2.4

The measurement procedure shall be as follows:

Connect the antenna port to be measured through the 20 dB pad to the spectrum analyzer input. Configure the spectrum analyzer as described below (all losses between the unlicensed wireless device output and the spectrum analyzer, such as attenuator value, cable losses and other offsets shall be recorded). Locate and zoom in on emission peak(s) within the passband.

- a) Set RBW = 3 kHz
- b) Set VBW ≥ 9 kHz
- c) Set Sweep time to Automatic
- d) Use a peak detector. A sample detector mode can be used only if the following conditions can be achieved with automatic sweep time and adjusting the bin width.
  - 1) Bin width (i.e., span/number of points in spectrum display) < 0.5 RBW.
  - 2) The transmission pulse or sequence of pulses remains at maximum transmit power throughout each of the 100 sweeps of averaging and that the interval between pulses is not included in any of the sweeps.

NOTE—If condition 2) cannot be achieved, then PSD Option 1 (method of 6.11.2.3) shall be used and trace averaging cannot be used.

- e) Use a video trigger (or RF gating) with the trigger level set to enable the sweep only during full power pulses. Transmitter shall operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to "free run."
- f) Trace average 100 traces in power averaging mode. Do not use video averaging mode.

NOTE—Some analyzers will automatically select sample mode when trace averaging is selected. If a peak detector is used, then peak detector must be manually selected when trace averaging is enabled.

#### **Measurement Limit:**

Standard	Limit	
FCC CRF Part 15.247(e)	< 8 dBm/3 kHz	

#### Measurement Results:

#### 802.11b/g mode

Mode	Channel	Power Spectral Density ( dBm/3 kHz )		Conclusion
	1	Fig.A.3.1	-2.15	Р
802.11b	6	Fig.A.3.2	-1.92	Р
	11	Fig.A.3.3	-3.10	Р
	1	Fig.A.3.4	-5.94	Р
802.11g	6	Fig.A.3.5	-5.91	Р
	11	Fig.A.3.6	-6.02	Р



#### 802.11n-HT20 mode

Mode	Channel	-	ctral Density /3 kHz )	Conclusion
802.11n (HT20)	1	Fig.A.3.7	-6.08	Р
	6	Fig.A.3.8	-6.28	Р
	11	Fig.A.3.9	-6.09	Р

**Conclusion: Pass** 

### Test graphs as below:

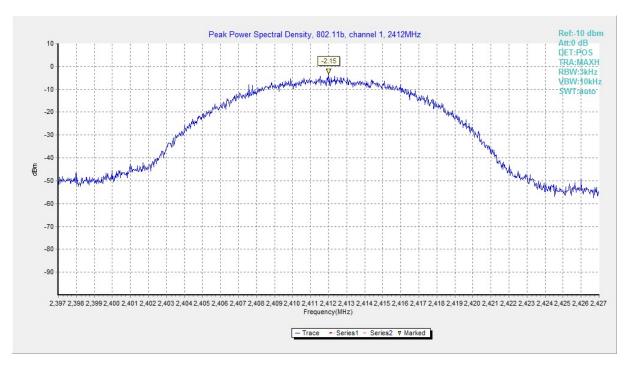


Fig.A.3.1 Power Spectral Density(802.11b,Ch1)



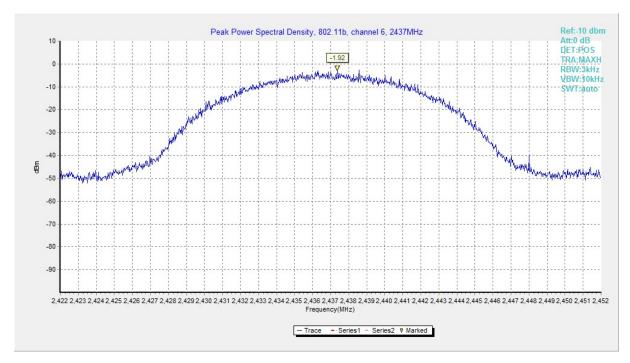


Fig.A.3.2 Power Spectral Density (802.11b, Ch 6)

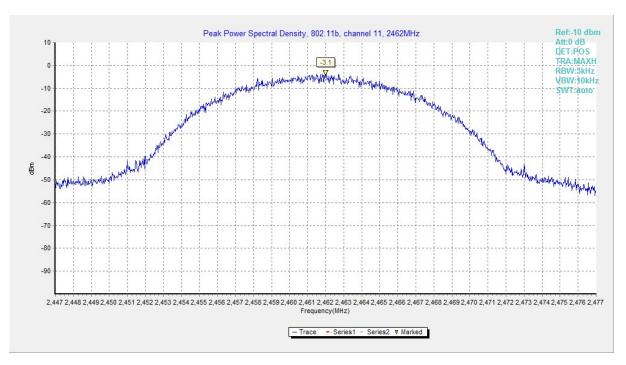


Fig.A.3.3 Power Spectral Density (802.11b, Ch 11)



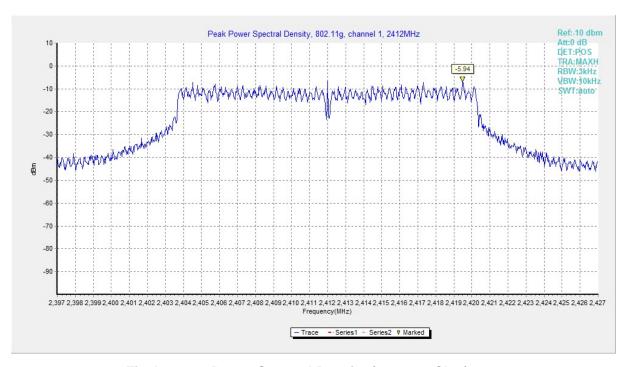


Fig.A.3.4 Power Spectral Density (802.11g, Ch 1)

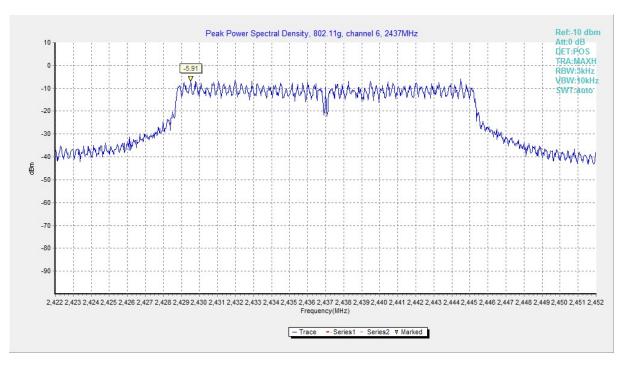


Fig.A.3.5 Power Spectral Density (802.11g, Ch 6)



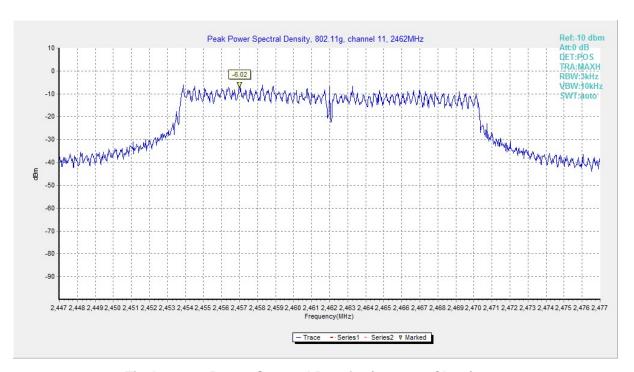


Fig.A.3.6 Power Spectral Density (802.11g, Ch 11)

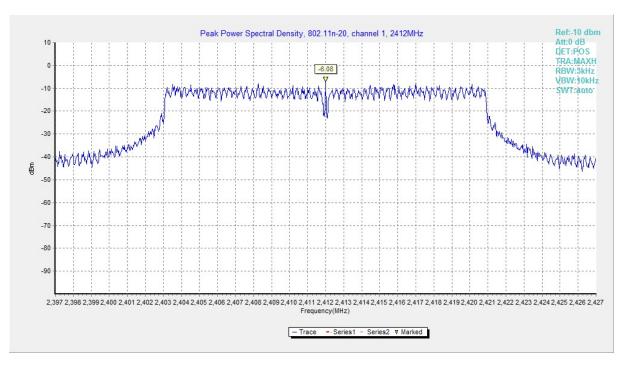


Fig.A.3.7 Power Spectral Density (802.11n-HT20, Ch 1)



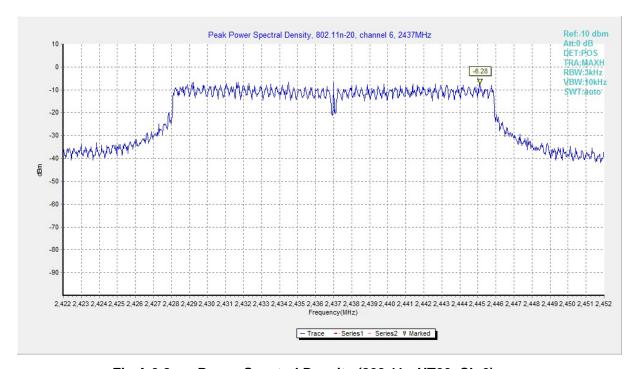


Fig.A.3.8 Power Spectral Density (802.11n-HT20, Ch 6)

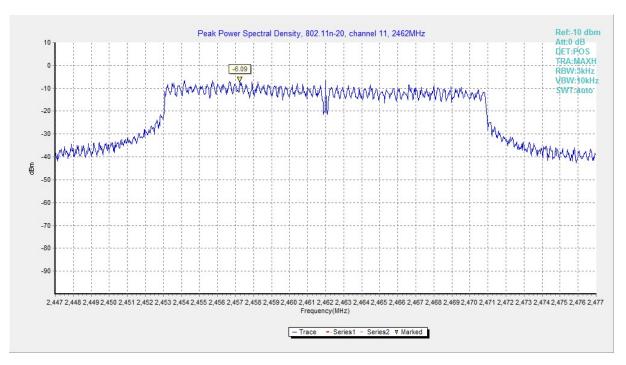


Fig.A.3.9 Power Spectral Density (802.11n-HT20, Ch 11)



## A.4. DTS 6-dB Signal Bandwidth

Method of Measurement: See KDB558074 section 8.1 (Option 1).

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) = 300 kHz.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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.

#### **Measurement Limit:**

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

#### **EUT ID: EUT2**

#### **Measurement Result:**

#### 802.11b/g mode

Mode	Channel	Occupied 6dB Bandwidth (kHz)		conclusion
	1	Fig.A.4.1	8400	Р
802.11b	6	Fig.A.4.2	8200	Р
	11	Fig.A.4.3	9350	Р
	1	Fig.A.4.4	16500	Р
802.11g	6	Fig.A.4.5	16500	Р
	11	Fig.A.4.6	16400	Р

## 802.11n-HT20 mode

Mode	Channel	Occupied 6dB Bandwidth ( kHz)		conclusion		
000 11n	1	Fig.A.4.7	17600	Р		
802.11n (HT20)	6	Fig.A.4.8	17600	Р		
	11	Fig.A.4.9	16950	Р		

**Conclusion: Pass** 

#### Test graphs as below:



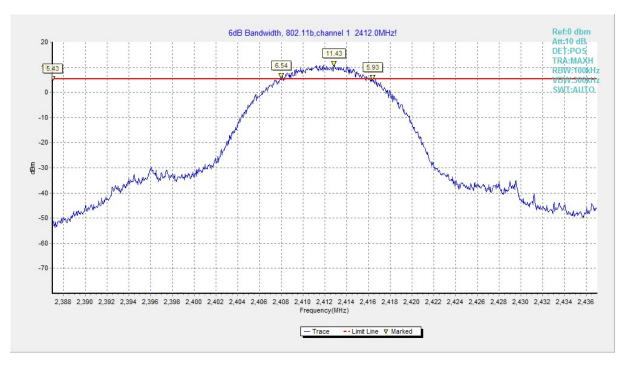


Fig.A.4.1 Occupied 6dB Bandwidth(802.11b,Ch 1)



Fig.A.4.2 Occupied 6dB Bandwidth (802.11b, Ch 6)



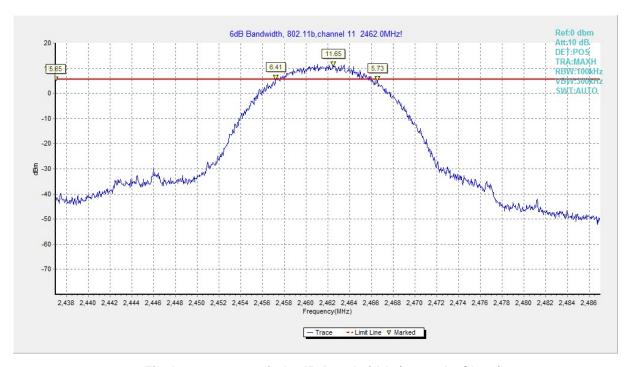


Fig.A.4.3 Occupied 6dB Bandwidth (802.11b, Ch 11)

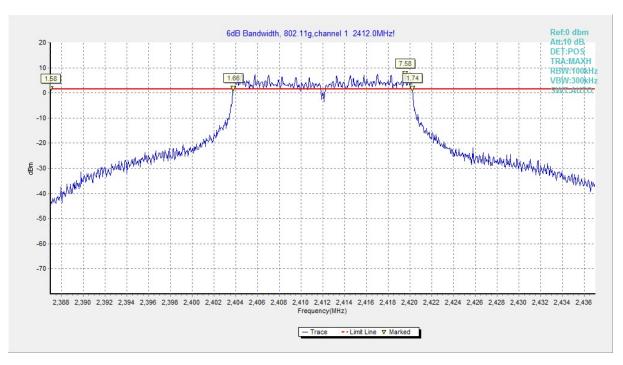


Fig.A.4.4 Occupied 6dB Bandwidth (802.11g, Ch 1)



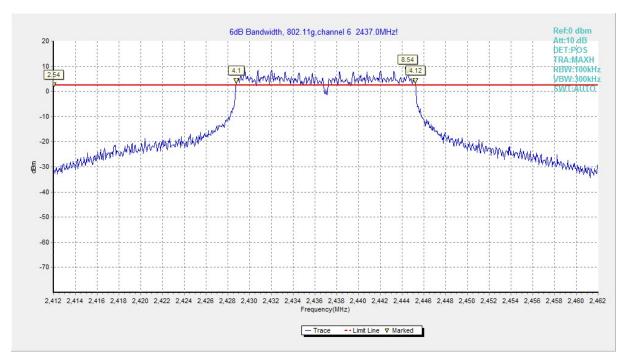


Fig.A.4.5 Occupied 6dB Bandwidth (802.11g, Ch 6)

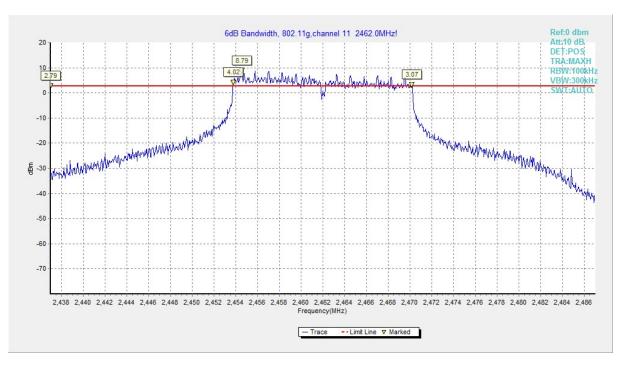


Fig.A.4.6 Occupied 6dB Bandwidth (802.11g, Ch 11)



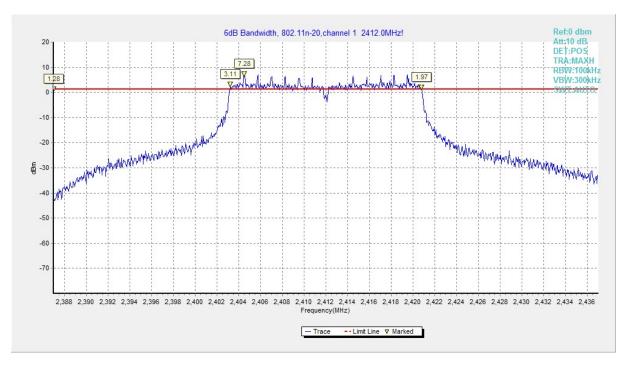


Fig.A.4.7 Occupied 6dB Bandwidth (802.11n-20MHz, Ch 1)

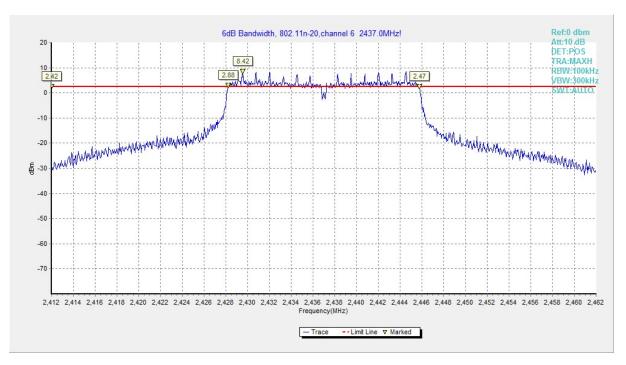


Fig.A.4.8 Occupied 6dB Bandwidth (802.11n-HT20, Ch 6)



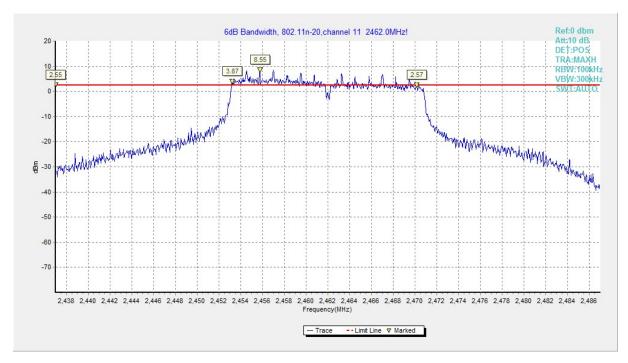


Fig.A.4.9 Occupied 6dB Bandwidth (802.11n-HT20, Ch 11)



## A.5. Band Edges Compliance

Method of Measurement: See ANSI C63.10-2009-clause 6.9.2

#### **Measurement Limit:**

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

**EUT ID: EUT2** 

#### **Measurement Result:**

#### 802.11b/g mode

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.A.5.1	Р
	11	Fig.A.5.2	Р
802.11g	1	Fig.A.5.3	Р
	11	Fig.A.5.4	Р

#### 802.11n-HT20 mode

Mode	Channel	Test Results	Conclusion
802.11n	1	Fig.A.5.5	Р
(HT20)	11	Fig.A.5.6	Р

## Conclusion: Pass Test graphs as below:

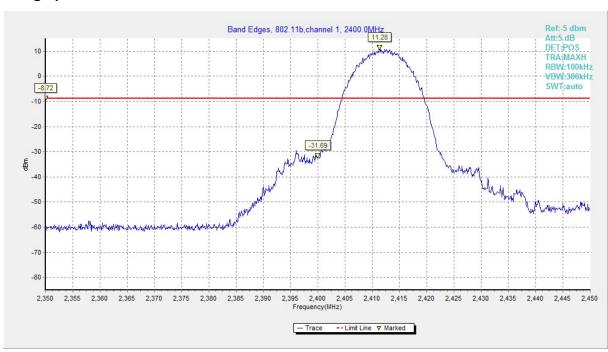


Fig.A.5.1 Band Edges (802.11b, Ch 1)





Fig.A.5.2 Band Edges (802.11b, Ch 11)

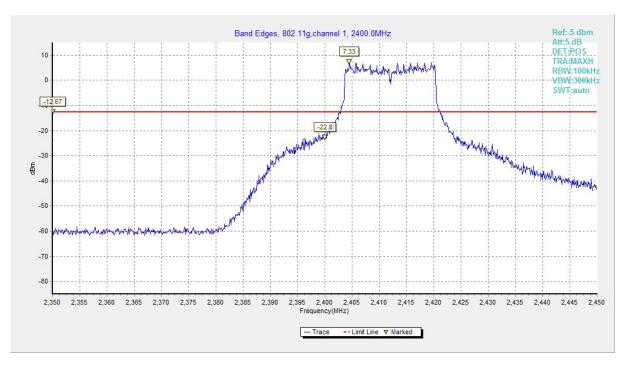


Fig.A.5.3 Band Edges (802.11g, Ch 1)



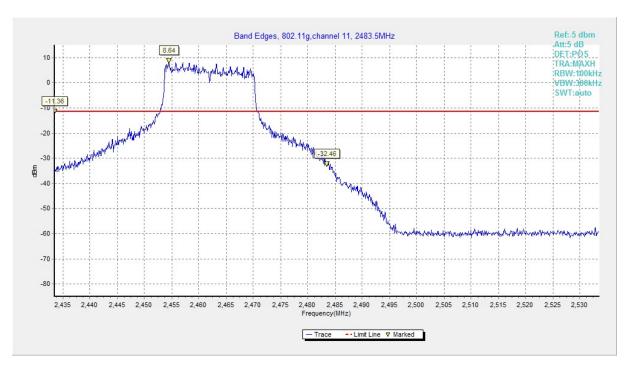


Fig.A.5.4 Band Edges (802.11g, Ch 11)

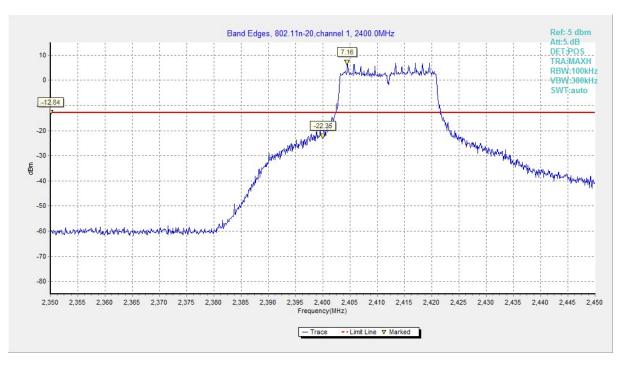


Fig.A.5.5 Band Edges (802.11n-HT20, Ch 1)



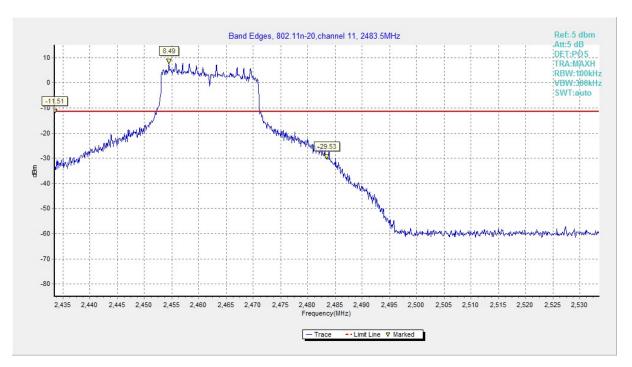


Fig.A.5.6 Band Edges (802.11n-HT20, Ch 11)



## A.6. Transmitter Spurious Emission

#### A.6.1 Transmitter Spurious Emission – Conducted

#### Method of Measurement: See ANSI C63.10-2009-clause 6.5&6.6

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency
- b) Set the span to  $\geq$  1.5 times the DTS bandwidth
- c) Set the RBW= 100 kHz
- d) Set the VBW= 300 kHz
- 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 PSD level

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW = 300 kHz.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

#### **Measurement Limit:**

Standard	Limit	
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz	
	bandwidth	

**EUT ID: EUT2** 

#### **Measurement Results:**



### 802.11b mode

MODE	Channel	Frequency Range	Test Results	Conclusion
		2.412 GHz	Fig.A.6.1.1	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.2	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.3	Р
	1	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.4	Р
	ı	7.5 GHz ~ 10 GHz	Fig.A.6.1.5	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.6	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.7	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.8	Р
		2.437 GHz	Fig.A.6.1.9	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.10	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.11	Р
802.11b	6	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.12	Р
002.110	0	7.5 GHz ~ 10 GHz	Fig.A.6.1.13	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.14	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.15	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.16	Р
		2.462 GHz	Fig.A.6.1.17	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.18	Р
11	1 GHz ~ 2.5 GHz	Fig.A.6.1.19	Р	
	11	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.20	Р
	"1	7.5 GHz ~ 10 GHz	Fig.A.6.1.21	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.22	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.23	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.24	Р



## 802.11g mode

MODE	Channel	Frequency Range	Test Results	Conclusion
		2.412 GHz	Fig.A.6.1.25	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.26	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.27	Р
	1	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.28	Р
	ľ	7.5 GHz ~ 10 GHz	Fig.A.6.1.29	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.30	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.31	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.32	Р
		2.437 GHz	Fig.A.6.1.33	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.34	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.35	Р
902 11 a	6	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.36	Р
802.11g	0	7.5 GHz ~ 10 GHz	Fig.A.6.1.37	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.38	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.39	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.40	Р
		2.462 GHz	Fig.A.6.1.41	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.42	Р
11		1 GHz ~ 2.5 GHz	Fig.A.6.1.43	Р
	11	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.44	Р
	''	7.5 GHz ~ 10 GHz	Fig.A.6.1.45	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.46	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.47	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.48	Р



### 802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
		2.412 GHz	Fig.A.6.1.49	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.50	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.51	Р
	1	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.52	Р
	ľ	7.5 GHz ~ 10 GHz	Fig.A.6.1.53	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.54	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.55	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.56	Р
		2.437 GHz	Fig.A.6.1.57	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.58	Р
		1 GHz ~ 2.5 GHz	Fig.A.6.1.59	Р
802.11n	6	2.5 GHz ~ 7.5 GHz	Fig.A.6.1.60	Р
(HT20)	0	7.5 GHz ~ 10 GHz	Fig.A.6.1.61	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.62	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.63	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.64	Р
		2.462 GHz	Fig.A.6.1.65	Р
		30 MHz ~ 1 GHz	Fig.A.6.1.66	Р
	11	1 GHz ~ 2.5 GHz	Fig.A.6.1.67	Р
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.68	Р
		7.5 GHz ~ 10 GHz	Fig.A.6.1.69	Р
		10 GHz ~ 15 GHz	Fig.A.6.1.70	Р
		15 GHz ~ 20 GHz	Fig.A.6.1.71	Р
		20 GHz ~ 26 GHz	Fig.A.6.1.72	Р

Conclusion: Pass Test graphs as below:



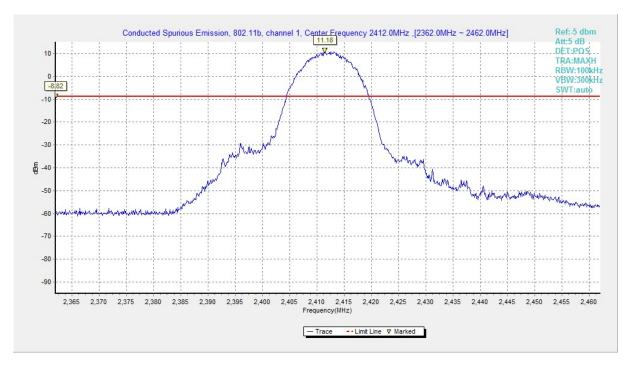


Fig.A.6.1.1 Transmitter Spurious Emission - Conducted (802.11b, Ch1, Center Frequency)

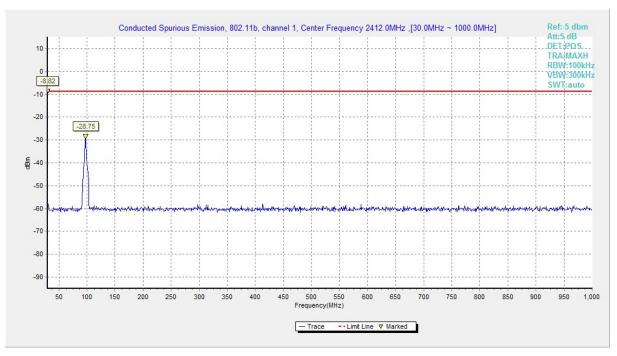


Fig.A.6.1.2 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 30 MHz-1 GHz)



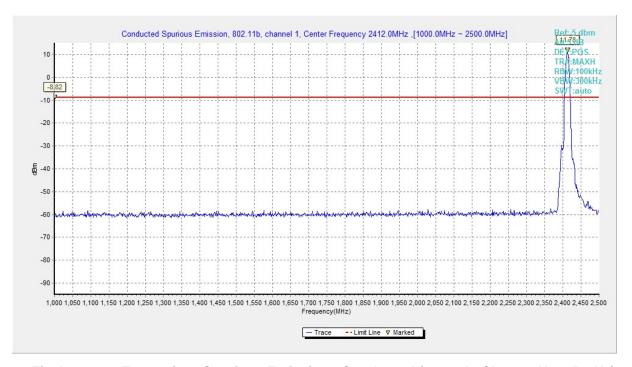


Fig.A.6.1.3 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 1 GHz-2.5 GHz)

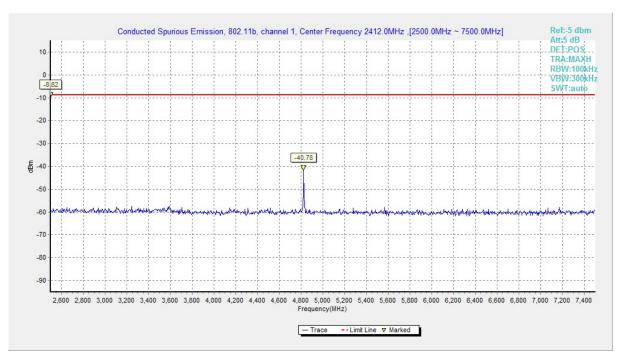


Fig.A.6.1.4 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 2.5 GHz-7.5 GHz)