### Shenzhen Huatongwei International Inspection Co., Ltd.

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# TEST REPORT

R/C....: 21830 Report Reference No.....:: TRE1709016403

FCC ID.....:: ZSW-30-050

Applicant's name.....:: b mobile HK Limited

Address....: Flat 18; 14/F Block 1; Golden Industrial Building; 16-26 Kwai Tak

Street; Kwai Chung; New Territories; Hong Kong.

Manufacturer....: b mobile HK Limited

Flat 18; 14/F Block 1; Golden Industrial Building; 16-26 Kwai Tak Address....:

Street; Kwai Chung; New Territories; Hong Kong.

Test item description .....: **Mobile Phone** 

Trade Mark .....: **Bmobile** 

Model/Type reference.....: AX1071

Listed Model(s)....: AX1072

FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of receipt of test sample.....: Sep.20, 2017

Date of testing..... Sep.21, 2017 - Oct.09, 2017

Date of issue.....: Oct.10, 2017

Result....: **PASS** 

Compiled by

(position+printedname+signature)...: File administrators Candy Liu

Supervised by

(position+printedname+signature)....: Project Engineer: Edward Pan Candy Lieu Edward. Pan Ltoms HM

Approved by

(position+printedname+signature)....: RF Manager Hans Hu

Testing Laboratory Name .....: Shenzhen Huatongwei International Inspection Co., Ltd.

1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Address.....:

Tianliao, Gongming, Shenzhen, China

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The test report merely correspond to the test sample.

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### 1. TEST STANDARDS AND REPORT VERSION

### 1.1. Test Standards

The tests were performed according to following standards:

<u>FCC Rules Part 15.247:</u> Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

<u>KDB 558074 D01 DTS Meas Guidance v04:</u> Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating under §15.247

### 1.2. Report version

Version No.	Date of issue	Description
00	Oct.10, 2017	Original

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# 2. TEST DESCRIPTION

Test Item	FCC Rule	Result	Test Engineer
Antenna requirement	15.203/15.247(c)	Pass	William Wang
Line Conducted Emissions (AC Main)	15.207	Pass	William Wang
Conducted Peak Output Power	15.247(b)(3)	Pass	William Wang
Power Spectral Density	15.247(e)	Pass	William Wang
6dB Bandwidth	15.247(a)(2)	Pass	William Wang
Restricted band	15.247(d)/15.205	Pass	William Wang
Spurious Emissions	15.247(d)/15.209	Pass	William Wang

Note: The measurement uncertainty is not included in the test result.

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# 3. **SUMMARY**

### 3.1. Client Information

Applicant:	b mobile HK Limited
Address:	Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung; New Territories; Hong Kong.
Manufacturer:	b mobile HK Limited
Address:	Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung; New Territories; Hong Kong.

### 3.2. Product Description

3.2. Product Descrip	olion
Name of EUT:	Mobile Phone
Trade Mark:	Bmobile
Model No.:	AX1071
Listed Model(s):	AX1072
IMEI 1:	355408080203579
IMEI 2:	355408080203868
Power supply:	DC 3.8V From exchange battery
Adapter information:	Input: 100-240Va.c., 50/60Hz, 0.2A Output: 5Vd.c.,1A
Hardware version:	V00
Software version:	MX2135FA_B25_E5017_SA11_N_V01_170906 Web Sep 6 17:20:53 CST 2017
WIFI	
Supported type:	802.11b/802.11g/802.11n(HT20)/802.11n(HT40)
Modulation:	DSSS for 802.11b
	OFDM for 802.11g/802.11n(HT20)/802.11n(HT40)
Operation from the property	2412MHz~2462MHz for 802.11b/802.11g/802.11n(HT20)
Operation frequency:	2422MHz~2452MHz for 802.11n(HT40)
	11 for 802.11b/802.11g/802.11n(HT20)
Channel number:	7 for 802.11n(HT40)
Channel separation:	5MHz
Antenna type:	PIFA Antenna
Antenna gain:	0.5 dBi

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### 3.3. Operation state

### > Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

802.11b/g	/n(HT20)	802.11n(HT40)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
01	2412	01	-	
02	2417	02	-	
03	2422	03	2422	
04	2427	04	2427	
05	2432	05	2432	
06	2437	06	2437	
07	2442	07	2442	
08	2447	08	2447	
09	2452	09	2452	
10	2457	10	-	
11	2462	11	-	

### > Test mode

_			
⊢∩r	RF	teet	items

The engineering test program was provided and enabled to make EUT continuous transmit (duty cycle>98%).

For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For RF test axis

EUT in each of three orthogonal axis emissions had been tested ,but only the worst case (X axis) data Recorded in the report.

### 3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

supplied by the manufacturer

- supplied by the lab

0		Manufacturer:	1	
	)	1	Model No.:	1
	,		Manufacturer:	1
	)	7	Model No.:	1

### 3.5. Modifications

No modifications were implemented to meet testing criteria.

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### 4. TEST ENVIRONMENT

### 4.1. Address of the test laboratory

Laboratory: Shenzhen Huatongwei International Inspection Co., Ltd. Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

### 4.2. Test Facility

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files.

### IC-Registration No.:5377B-1

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No.: 5377B-1.

### ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

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### 4.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C	
Relative Humidity:	30~60 %	
Air Pressure:	950~1050mba	

### 4.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors in calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd. quality system according to ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Here after the best measurement capability for Shenzhen Huatongwei International Inspection Co., Ltd. is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emissions 9kHz~40GHz	1.60 dB	(1)
Radiated spurious emissions 9kHz~40GHz	2.20 dB	(1)
Conducted Emissions 9kHz~30MHz	3.39 dB	(1)
Radiated Emissions 30~1000MHz	4.24 dB	(1)
Radiated Emissions 1~18GHz	5.16 dB	(1)
Radiated Emissions 18~40GHz	5.54 dB	(1)

<sup>(1)</sup> This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

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### 4.5. Equipments Used during the Test

Condi	Conducted Emissions						
Item	n Test Equipment Manufacturer Model No. Serial No. Last Cal.						
1	Artificial Mains	Rohde&Schwarz	ESH2-Z5	100028	2016/11/13		
2	EMI Test Receiver	Rohde&Schwarz	ESCI3	100038	2016/11/13		
3	Pulse Limiter	Rohde&Schwarz	ESHSZ2	100044	2016/11/13		
4	EMI Test Software	Rohde&Schwarz	ES-K1 V1.71	-	-		

Radia	Radiated Emissions						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	EMI test receiver	Rohde&Schwarz	ESI 26	100009	2016/11/13		
2	Loop Antenna	Rohde&Schwarz	HFH2-Z2	100020	2016/11/13		
3	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2016/11/13		
4	Horn antenna	ShwarzBeck	9120D	1011	2016/11/13		
5	Horn Antenna	SCHWARZBECK	BBHA9170	25841	2016/11/13		
6	Amplifier	Sonoma	310N	E009-13	2016/11/13		
7	JS Amplifier	Rohde&Schwarz	JS4-00101800- 28-5A	F201504	2016/11/13		
8	Amplifier	Compliance Direction systems	PAP1-4060	120	2016/11/13		
9	High pass filter	Compliance Direction systems	BSU-6	34202	2016/11/13		
10	EMI test Software	Rohde&Schwarz	ESK1	-	-		
11	EMI test Software	Audix	E3	-	-		
12	TURNTABLE	MATURO	TT2.0	-	-		
13	ANTENNA MAST	MATURO	TAM-4.0-P	-	-		

RF Co	RF Conducted methods									
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.					
1	Spectrum Analyzer	Rohde&Schwarz	FSP	1164.4391.40	2016/11/13					
2 MXA Signal Analyzer Agilent Technologies N9020A MY5050187 2016/1										

The Cal.Interval was one year.

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### 5. TEST CONDITIONS AND RESULTS

### 5.1. Antenna requirement

### **REQUIREMENT:**

### FCC CFR Title 47 Part 15 Subpart C 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. The use of a permanently attached antenna or of anantenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

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

#### **TEST RESULTS**

oxtime Passed	☐ Not Applicable
---------------	------------------

The directional gain of the antenna less than 6 dBi, please refer to the below antenna photo.



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### 5.2. Conducted Emissions (AC Main)

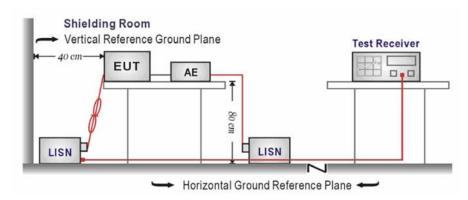
### **LIMIT**

FCC CFR Title 47 Part 15 Subpart C Section 15.207:

Erogueney rango (MHz)	Limit (d	BuV)
Frequency range (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

<sup>\*</sup> Decreases with the logarithm of the frequency.

#### **TEST CONFIGURATION**



#### **TEST PROCEDURE**

- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- 3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor,was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

#### TEST MODE:

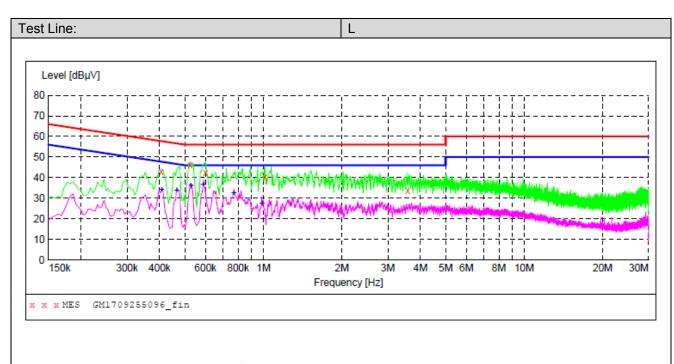
Please refer to the clause 3.3

#### **TEST RESULTS**

Note:

- 1) Transd=Cable lose+ Pulse Limiter Factor + Artificial Mains Factor
- 2) Margin= Limit -Level

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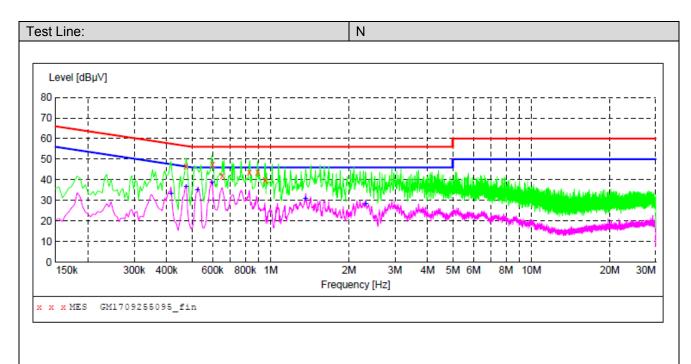
### MEASUREMENT RESULT: "GM1709255096\_fin"

9	/25/2017 10:	27PM						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.406500	42.90	10.2	58	14.8	QP	L1	GND
	0.523500	46.20	10.2	56	9.8	QP	L1	GND
	0.600000	42.40	10.2	56	13.6	QP	L1	GND
	1.014000	40.30	10.2	56	15.7	QP	L1	GND
	3.579000	33.50	10.3	56	22.5	QP	L1	GND

### MEASUREMENT RESULT: "GM1709255096\_fin2"

9/25/2017 10		myanad	Timit	Manain	Detector	Tino	PE
Frequency MHz	dBμV	dB	dBµV	dB	Detector	птие	PE
0.406500	34.20	10.2	48	13.5	AV	L1	GND
0.465000	33.80	10.2	47	12.8	AV	L1	GND
0.528000	36.10	10.2	46	9.9	AV	L1	GND
0.586500	36.70	10.2	46	9.3	AV	L1	GND
0.771000	32.50	10.2	46	13.5	AV	L1	GND
0.987000	27.30	10.2	46	18.7	AV	L1	GND

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### MEASUREMENT RESULT: "GM1709255095\_fin"

						24PM	9/25/2017 10:
PE	Line	Detector	Margin dB	Limit dBµV	Transd dB	Level dBµV	Frequency MHz
GND	N	QP	9.7	56	10.2	46.70	0.474000
GND	N	QP	8.7	56	10.2	47.30	0.600000
GND	N	QP	14.1	56	10.2	41.90	0.654000
GND	N	QP	12.1	56	10.2	43.90	0.829500
GND	N	QP	12.3	56	10.1	43.70	0.892500
GND	N	QP	16.2	56	10.2	39.80	0.955500

### MEASUREMENT RESULT: "GM1709255095\_fin2"

9/25/2017 1	L0:24PM						
Frequency	y Level	Transd	Limit	Margin	Detector	Line	PE
MH	z dBµV	dB	dΒμ∇	dB			
0.44550		40.0	4.0				
0.415500	33.10	10.2	48	14.4	AV	N	GND
0.474000	36.70	10.2	46	9.7	AV	N	GND
0.523500	35.10	10.2	46	10.9	AV	N	GND
0.595500	38.50	10.2	46	7.5	AV	N	GND
1.360500	30.90	10.2	46	15.1	AV	N	GND
2.319000	28.40	10.2	46	17.6	AV	N	GND

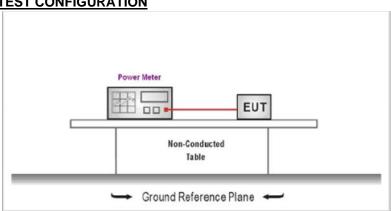
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### 5.3. Conducted Peak Output Power

### **LIMIT**

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3): 30dBm:

### **TEST CONFIGURATION**



### **TEST PROCEDURE**

- The EUT was tested according to ANSI C63.10: 2013 and KDB 558074 D01 for compliance to FCC 47 CFR 15.247 requirements.
- 2. The maximum peak conducted output power may be measured using a broadband peak RF power meter.
- The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and 3. shall utilize a fast-responding diode detector
- Record the measurement data.

### **TEST MODE:**

Please refer to the clause 3.3

#### **TEST RESULTS**

 □ Passed ■ Not Applicable

Туре	Channel	Output power (dBm)	Limit (dBm)	Result	
	01	13.29			
802.11b	06	13.29	≤30.00	Pass	
	11	13.29			
	01	12.43			
802.11g	06	12.43	≤30.00	Pass	
	11	12.43			
	01	11.5			
802.11n(HT20)	06	10.83	≤30.00	Pass	
	11	11.55			
	03	10.64			
802.11n(HT40)	06	11.7	≤30.00	Pass	
	09	12.25			

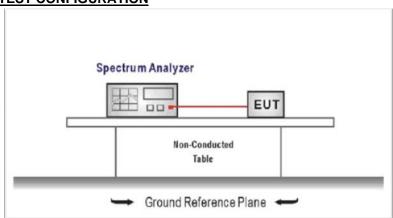
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### 5.4. Power Spectral Density

### **LIMIT**

**FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e):**For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### **TEST CONFIGURATION**



#### **TEST PROCEDURE**

- 1. Connect the antenna port(s) to the spectrum analyzer input,
- Configure the spectrum analyzer as shown below:

Center frequency=DTS channel center frequency

Span =1.5 times the DTS bandwidth

RBW = 3 kHz ≤ RBW ≤ 100 kHz, VBW ≥ 3 × RBW

Sweep time = auto couple

Detector = peak

Trace mode = max hold

- 3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
- 4. Use the peak marker function to determine the maximum amplitude level within the RBW.
- 5. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### **TEST MODE:**

Please refer to the clause 3.3

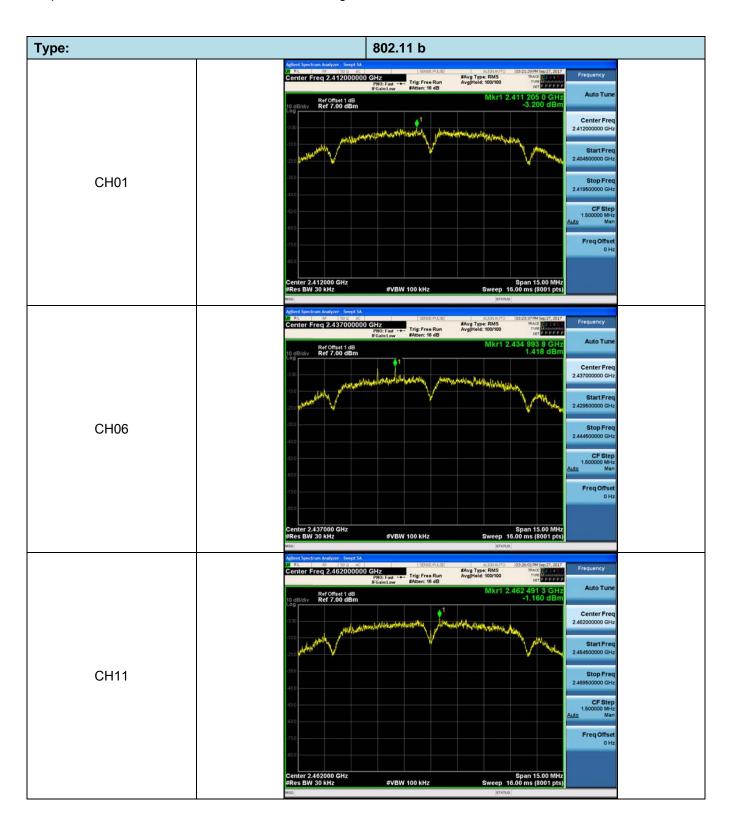
#### **TEST RESULTS**

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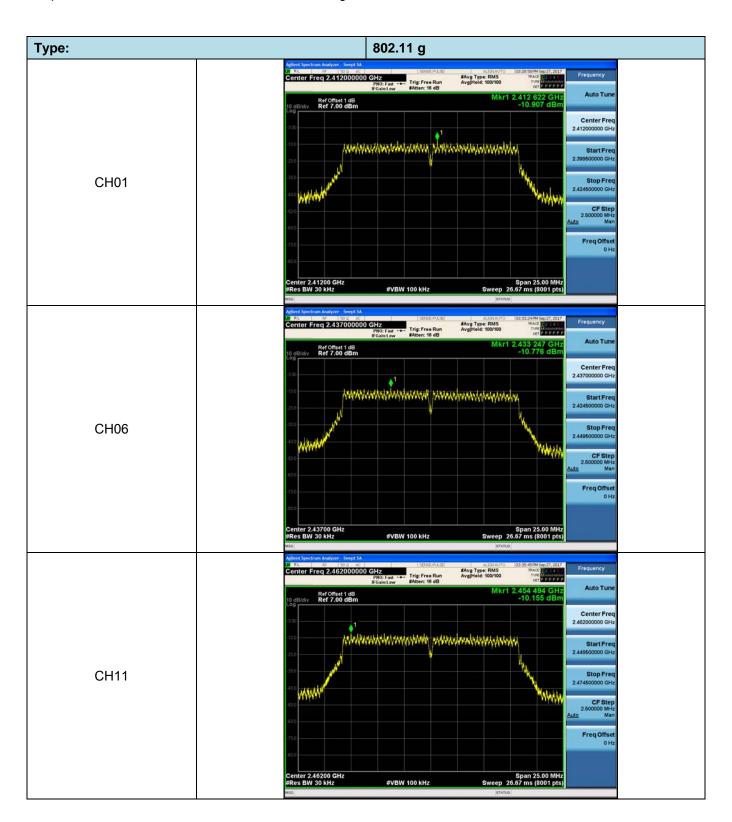
Туре	Channel	Power Spectral Density (dBm/RBW)	Limit (dBm/RBW)	Result	
	01	-3.200			
802.11b	06	1.418	≤8.00	Pass	
	11	-1.160			
	01	-10.907			
802.11g	06	-10.776	≤8.00	Pass	
	11	-10.155		<u> </u>	
	01	-11.805			
802.11n(HT20)	06	-12.698	≤8.00	Pass	
	11	-11.753			
	03	-15.667			
802.11n(HT40)	06	-14.759	≤8.00	Pass	
	09	-14.185			

Test plot as follows:

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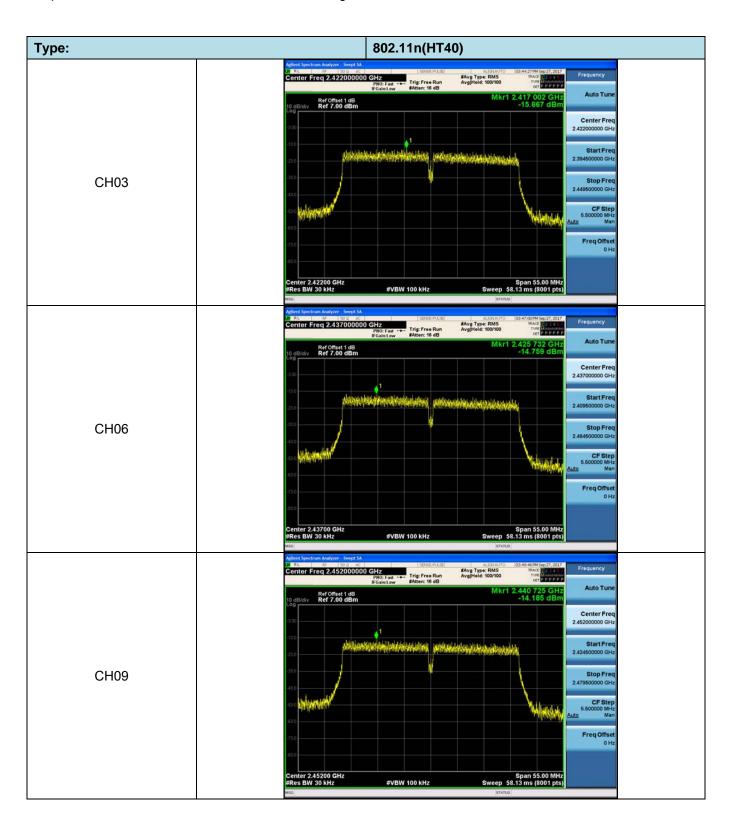
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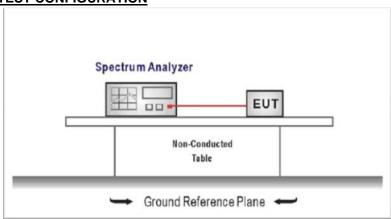
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#### 5.5. 6dB bandwidth

### **LIMIT**

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2):For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

#### **TEST CONFIGURATION**



#### **TEST PROCEDURE**

- 1. Connect the antenna port(s) to the spectrum analyzer input.
- Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

Center Frequency =DTS channel center frequency

Span=2 x DTS bandwidth

RBW = 100 kHz, VBW ≥ 3 × RBW

Sweep time= auto couple

Detector = Peak

Trace mode = max hold

- 3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
- 4. 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, and record the pertinent measurements.

### **TEST MODE:**

Please refer to the clause 3.3

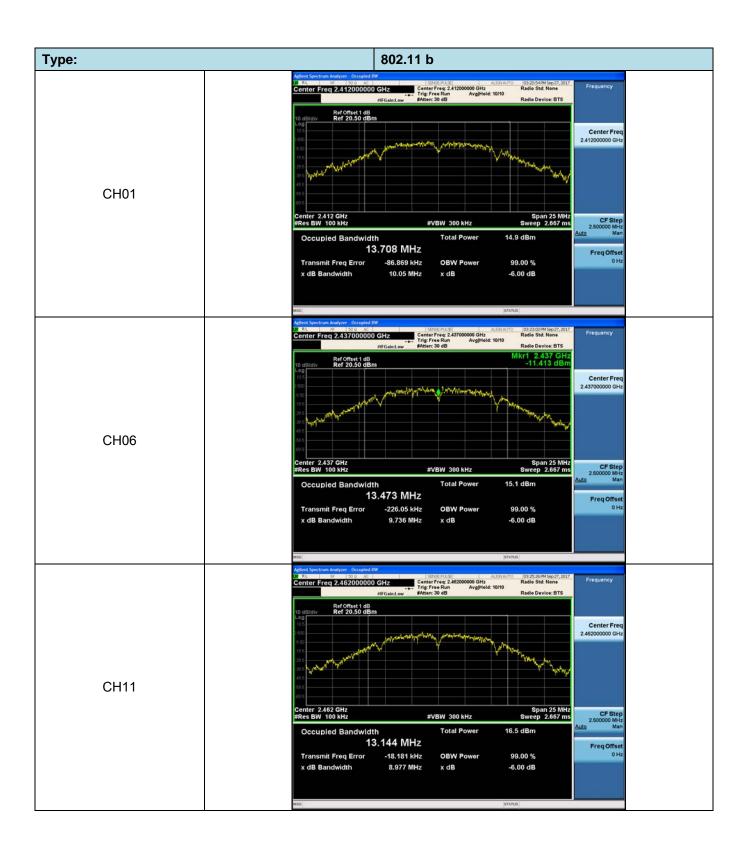
#### **TEST RESULTS**

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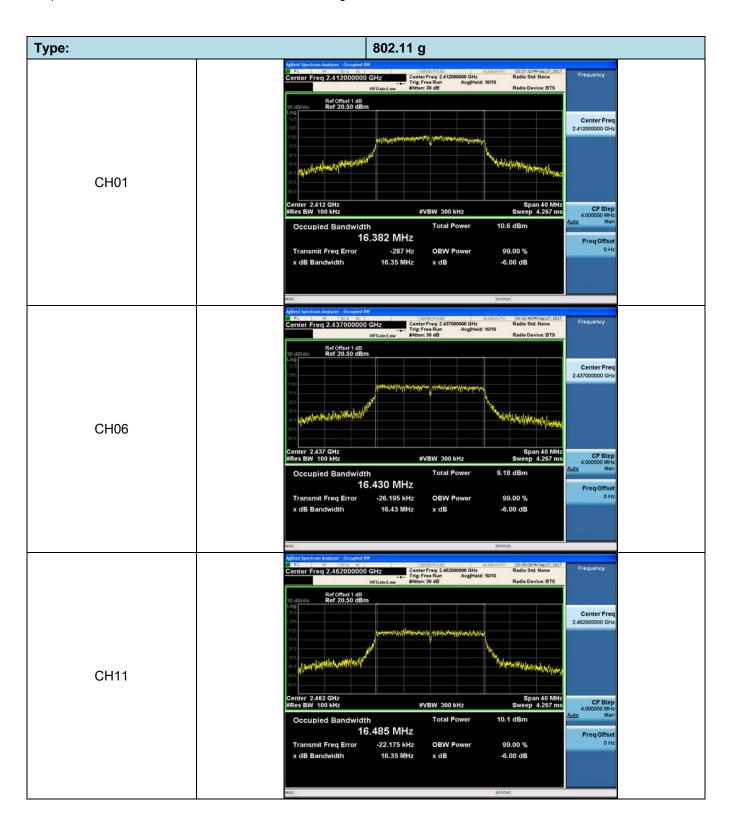
Туре	Channel	6dB Bandwidth (MHz)	Limit (kHz)	Result	
	01	10.05			
802.11b	06	9.736	≥500	Pass	
	11	8.977			
	01	16.35			
802.11g	06	16.43	≥500	Pass	
	11	16.35			
	01	17.56			
802.11n(HT20)	06	17.45	≥500	Pass	
	11	17.78			
	03	28.58			
802.11n(HT40)	06	25.67	≥500	Pass	
	09	35.66			

Test plot as follows:

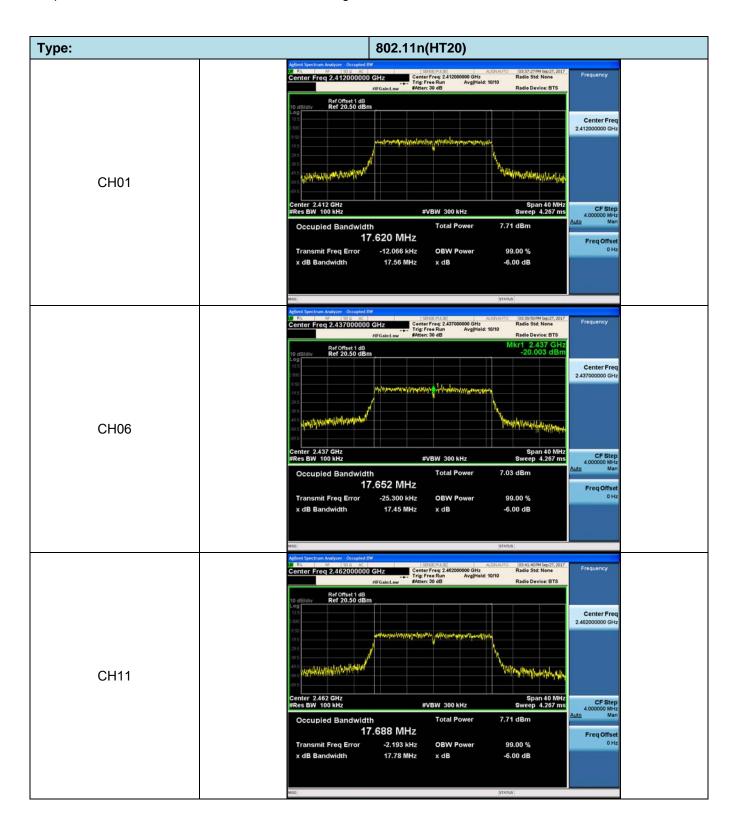
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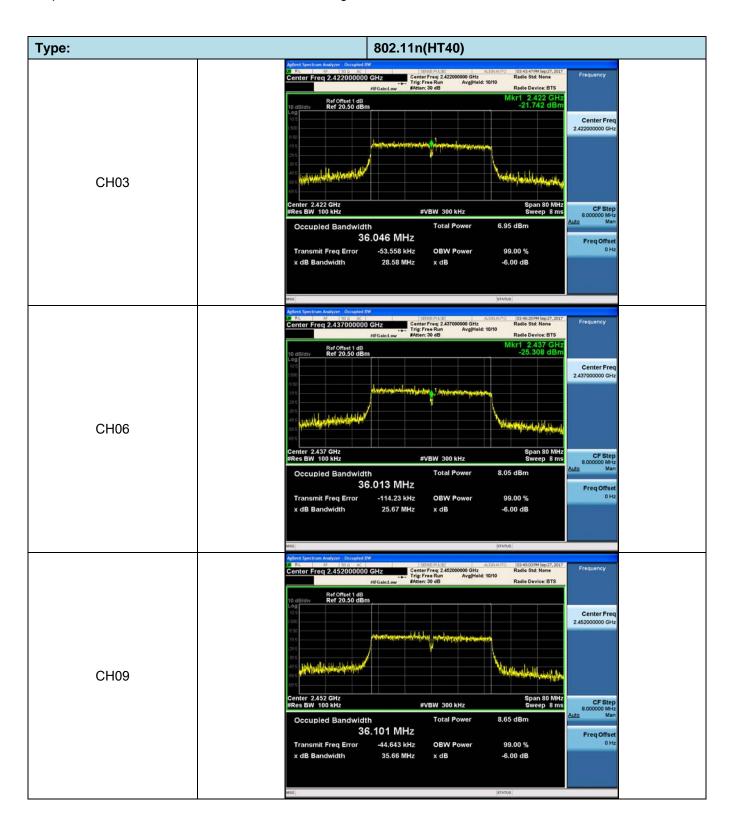
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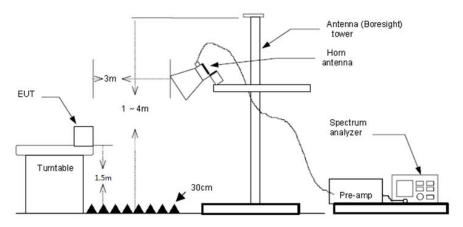
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### 5.6. Restricted band

### **LIMIT**

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

#### **TEST CONFIGURATION**



#### **TEST PROCEDURE**

- The EUT was setup and tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
- 2) The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3) The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
- 4) The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna. In order to find themaximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- 5) The receiver set as follow: RBW=1MHz, VBW=3MHz PEAK detector for Peak value. RBW=1MHz, VBW=3MHz RMS detector for Average value.

### **TEST MODE:**

Please refer to the clause 3.3

#### **TEST RESULTS**

#### Note:

1) Final level= Read level + Antenna Factor+ Cable Loss- Preamp Factor

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802.11b CH01										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value	
2310.00	14.75	28.05	6.62	0.00	49.42	74.00	-24.58	Vertical	Peak	
2390.01	12.88	27.65	6.75	0.00	47.28	74.00	-26.72	Vertical	Peak	
2310.00	12.55	28.05	6.62	0.00	47.22	74.00	-26.78	Horizontal	Peak	
2390.01	12.46	27.65	6.75	0.00	46.86	74.00	-27.14	Horizontal	Peak	

802.11b					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2483.49	14.10	27.26	6.83	0.00	48.19	74.00	-25.81	Vertical	Peak
2500.00	11.84	27.20	6.84	0.00	45.88	74.00	-28.12	Vertical	Peak
2483.49	13.65	27.26	6.83	0.00	47.74	74.00	-26.26	Horizontal	Peak
2500.00	15.25	27.20	6.84	0.00	49.29	74.00	-24.71	Horizontal	Peak

802.11g	B02.11g CH01											
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value			
2310.00	13.86	28.05	6.62	0.00	48.53	74.00	-25.47	Vertical	Peak			
2390.01	13.55	27.65	6.75	0.00	47.95	74.00	-26.05	Vertical	Peak			
2310.00	13.50	28.05	6.62	0.00	48.17	74.00	-25.83	Horizontal	Peak			
2390.01	12.96	27.65	6.75	0.00	47.36	74.00	-26.64	Horizontal	Peak			

802.11g	802.11g CH11											
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value			
2483.49	15.03	27.26	6.83	0.00	49.12	74.00	-24.88	Vertical	Peak			
2500.00	12.56	27.20	6.84	0.00	46.60	74.00	-27.40	Vertical	Peak			
2483.49	13.73	27.26	6.83	0.00	47.82	74.00	-26.18	Horizontal	Peak			
2500.00	13.43	27.20	6.84	0.00	47.47	74.00	-26.53	Horizontal	Peak			

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802.11n(HT	20)				CH01						
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value		
2310.00	13.86	28.05	6.62	0.00	48.53	74.00	-25.47	Vertical	Peak		
2390.01	13.55	27.65	6.75	0.00	47.95	74.00	-26.05	Vertical	Peak		
2310.00	13.50	28.05	6.62	0.00	48.17	74.00	-25.83	Horizontal	Peak		
2390.01	12.96	27.65	6.75	0.00	47.36	74.00	-26.64	Horizontal	Peak		

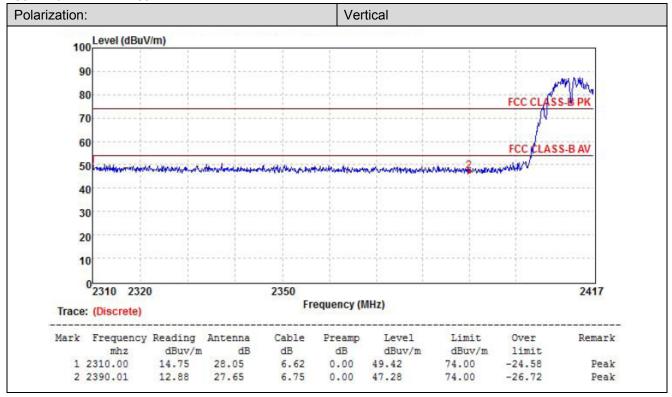
802.11n(HT	20)				CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2483.49	15.03	27.26	6.83	0.00	49.12	74.00	-24.88	Vertical	Peak
2500.00	12.56	27.20	6.84	0.00	46.60	74.00	-27.40	Vertical	Peak
2483.49	13.73	27.26	6.83	0.00	47.82	74.00	-26.18	Horizontal	Peak
2500.00	13.43	27.20	6.84	0.00	47.47	74.00	-26.53	Horizontal	Peak

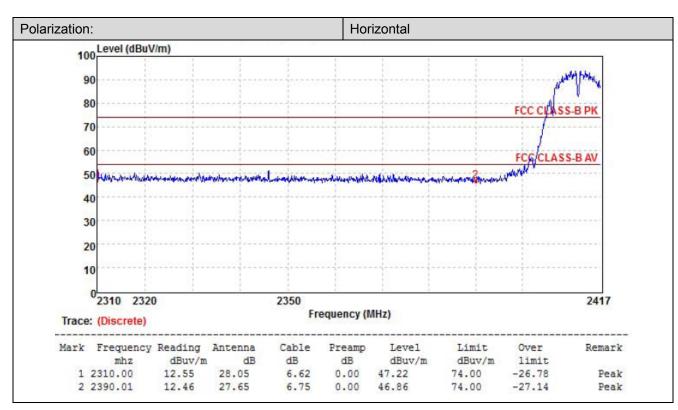
802.11n(HT	40)				CH03					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value	
2310.00	13.34	28.05	6.62	0.00	48.01	74.00	-25.99	Vertical	Peak	
2389.99	15.25	27.65	6.75	0.00	49.65	74.00	-24.35	Vertical	Peak	
2310.00	13.76	28.05	6.62	0.00	48.43	74.00	-25.57	Horizontal	Peak	
2389.99	20.90	27.65	6.75	0.00	55.30	74.00	-18.70	Horizontal	Peak	

802.11n(HT	40)				CH09				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
2483.50	15.48	27.26	6.83	0.00	49.57	74.00	-24.43	Vertical	Peak
2500.00	14.00	27.20	6.84	0.00	48.04	74.00	-25.96	Vertical	Peak
2483.50	15.66	27.26	6.83	0.00	49.75	74.00	-24.25	Horizontal	Peak
2500.00	13.49	27.20	6.84	0.00	47.53	74.00	-26.47	Horizontal	Peak

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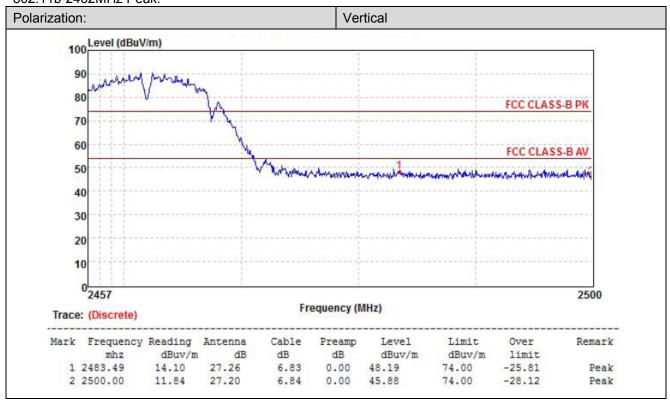
#### 802.11b-2412MHz Peak:

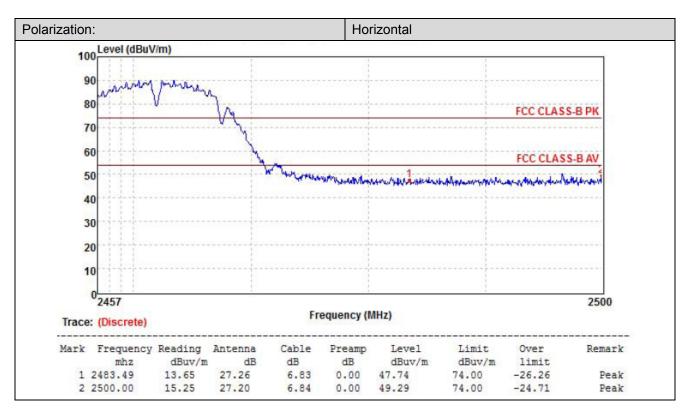




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#### 802.11b-2462MHz Peak:





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802.11g-2412MHz Peak:

