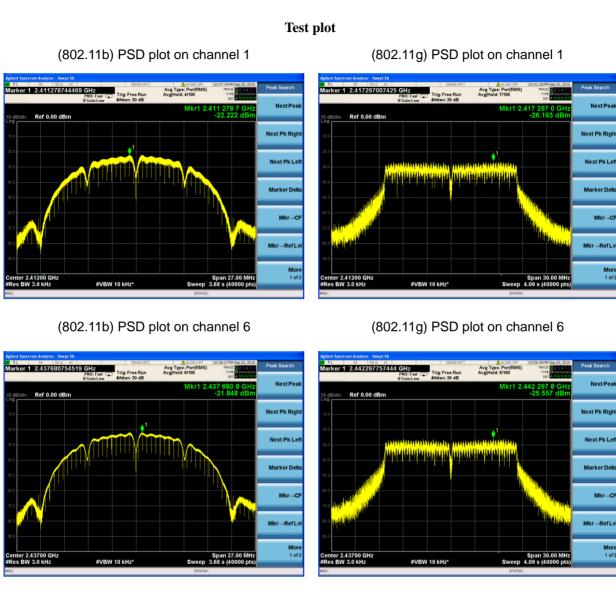


7.7.6 Test Results

EUT:	Wireless LAN equipment	Model Name. :	SBT200DI
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	TX 802.11b/g/n(20/40M)	Test By:	Lebron Wang

Mode	Channel	Frequency	Power Density	Limit	Result
Wode	Channel	(MHz)	(dBm/3KHz)	(dBm/3KHz)	
802.11b	Low	2412	-22.222	8.00	Pass
	Middle	2437	-21.848	8.00	Pass
	High	2462	-21.507	8.00	Pass
802.11g	Low	2412	-26.163	8.00	Pass
	Middle	2437	-25.557	8.00	Pass
	High	2462	-25.279	8.00	Pass
802.11n20	Low	2412	-24.672	8.00	Pass
	Middle	2437	-24.595	8.00	Pass
	High	2462	-24.239	8.00	Pass
802.11n40	Low	2422	-25.409	8.00	Pass
	Middle	2437	-27.019	8.00	Pass
	High	2452	-25.572	8.00	Pass

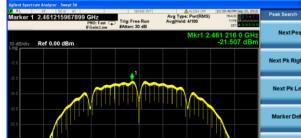




Mkr→C

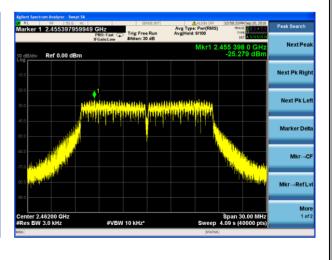
r→RefL

Span 27.00 MHz 3.68 s (40000 nts More 1 of 3 (802.11g) PSD plot on channel 11



SW 10 KH

r 2.46200 GHz BW 3.0 kHz



(802.11b) PSD plot on channel 11

NextPe

Next Pk Rigi

Next Pk Le

Marker De

Mkr→C

→RefL

1 of

Span 31.50



rker 1 2.418521056776 GHz

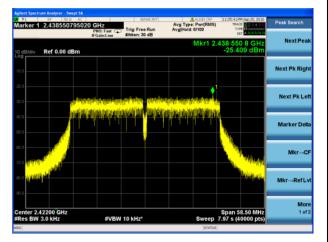
Ref 0.00 dBm

2.41200 G W 3.0 kHz a na ang ang ang ang

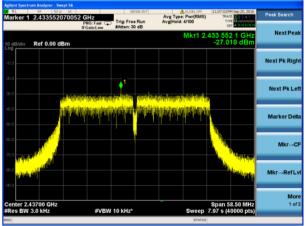
#VBW 10 kHz

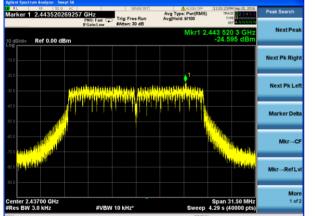
Test plot

(802.11n40) PSD plot on channel 3



(802.11n40) PSD plot on channel 6



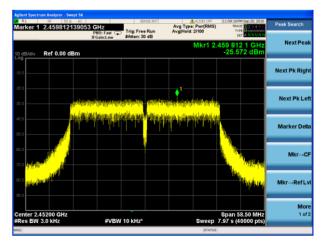


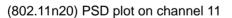
(802.11n20) PSD plot on channel 6

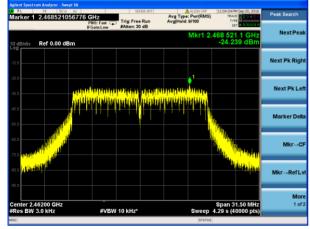
(802.11n20) PSD plot on channel 1

Avg Type: F











7.8 CONDUCTED BAND EDGE MEASUREMENT

7.8.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 DTS 01 Meas. Guidance v03r04

When performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. The integration method described below can be used when performing conducted or radiated average measurements.

7.8.2 Conformance Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

7.8.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.8.4 Test Setup

Please refer to Section 6.1 of this test report.

7.8.5 Marker-delta method

The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level at the band-edges provided that the 99% OBW of the fundamental emission is within 2 MHz of the authorized band edge.

7.8.6 Integration method

The following procedures may be used to determine the average power or power density of any unwanted emission. Use the procedure described in 13.3.1 when the EUT can be configured to transmit continuously (i.e., duty cycle \ge 98%). Use the procedure described in 13.3.2 when the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.3.3 when the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent).



7.8.5 Test Setup

Reference level measurement

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 \geq 3 x RBW.

e) Detector = peak.

f) Sweep time = auto couple.

g) Trace mode = max hold.

h) Allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum PSD level.

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

Emission level measurement

a) Set the center frequency and span to encompass frequency range to be measured.

b) Set the RBW = 100 kHz.

c) Set the VBW \ge 3 x RBW.

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.

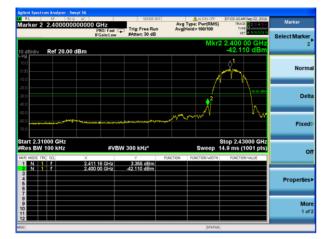
Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

7.8.6 Test Results

EUT:	Wireless LAN equipment	Model Name. :	SBT200DI
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	TX 802.11b/g/n(20/40M)	Test By:	Lebron Wang



(802.11b) Band Edge-Low Channel



(802.11g) Band Edge-Low Channel



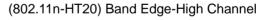
(802.11n-HT20) Band Edge-Low Channel



(802.11b) Band Edge-High Channel

(802.11g) Band Edge-High Channel











(802.11n-HT40) Band Edge-Low Channel



(802.11n-HT40) Band Edge-Low Channel





7.9 SPURIOUS RF CONDUCTED EMISSIONS

7.9.1 Conformance Limit

1. Below -20dB of the highest emission level in operating band.

2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

7.9.2 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.9.3 Test Setup

Please refer to Section 6.1 of this test report.

7.9.4 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and mwasure frequeny range from 9KHz to 26.5GHz.

7.9.5 Test Results

Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.



•1

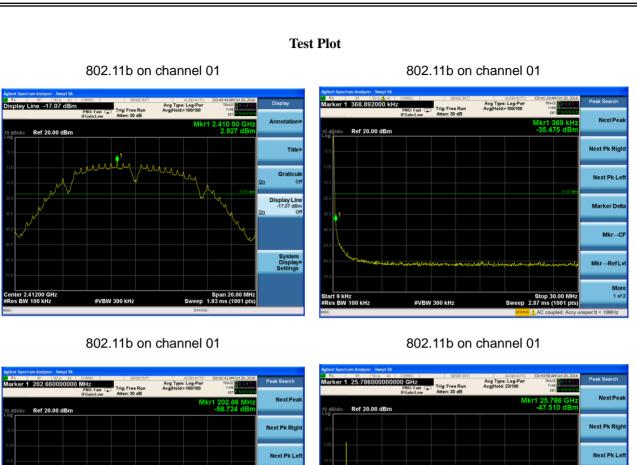
#VBW 300 kHz

Start 30.0 MHz #Res BW 100 kHz Marker Delt

Mkr→RefLv

Stop 26.50 GHz Sweep 2.44 s (1001 pts) Mkr→CF

More 1 of 2



Marker Delt

Mkr→CF

Mkr→RefLv

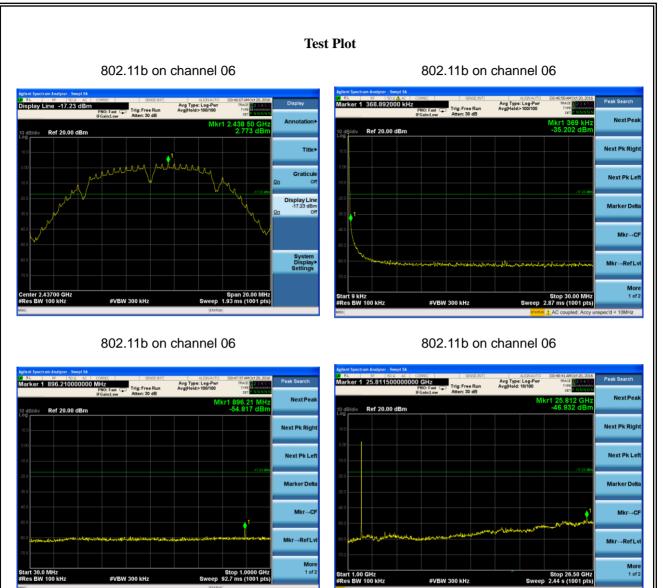
Stop 1.0000 GHz Sweep 92.7 ms (1001 pts More 1 of 2

art 1.00 GHz tes BW 100 kHz

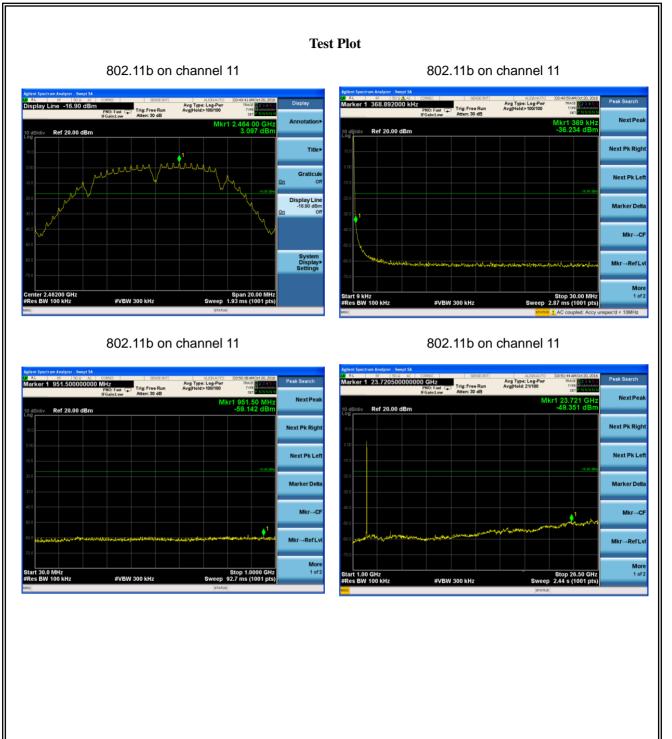
#VBW 300 kHz

Page 49 of 61

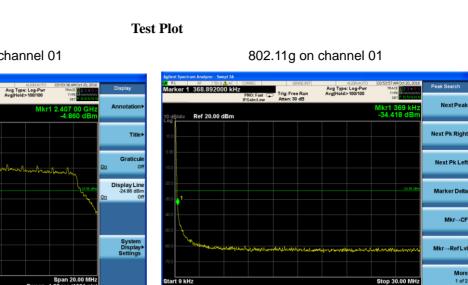












Start 9 kHz #Res BW 100 kHz

Page 52 of 61

802.11g on channel 01



802.11g on channel 01

802.11g on channel 01

#VBW 300 kHz

Stop 30.00 MHz Sweep 2.87 ms (1001 pts)

Appendiszer manufacture 1990 AC 0028EC Services 198 RL 6F 500 AC 0028EC Services Marker 1 884,5700000000 MHz PNO: Fast Control Trig: Free Run PNO: Fast Control Trig: Free Run Atten: 20 dB Avg Type: Log-Pwr Avg[Hold>100/100 Peak Search TYPE DET Next Pea 884.57 M -59.846 dE Ref 20.00 dBm Next Pk Righ Next Pk Lef Marker Delt Mkr→CF ٨ Mkr→RefLv More 1 of 2 Start 30.0 MHz #Res BW 100 kHz Stop 1.0000 GH Sweep 92.7 ms (1001 pts #VBW 300 kHz

Open Type Transmission Sec Costepic Transmission RL 8F 920 4C Costepic Marker 1 25.862500000000 GHz Trig: Free Run Trig: Free Run PNO: Fast C Atten: 30 dB Peak Search Avg Type: Log-Pwr Avg|Hold: 17/100 NextPea Ref 20.00 dBm Next Pk Right Next Pk Lef Marker Delt Mkr→CF Mkr→RefLv More 1 of 2 Stop 26.50 GHz Sweep 2.44 s (1001 pts) tart 1.00 GHz Res BW 100 kHz #VBW 300 kHz



Start 30.0 MHz #Res BW 100 kHz

#VBW 300 kHz

NextPea

Mkr→CF

More 1 of 2

NextPea

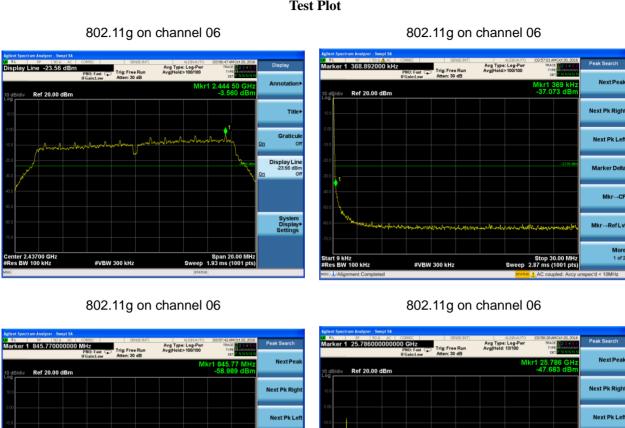
Marker Delt

Mkr→RefLv

Stop 26.50 GHz Sweep 2.44 s (1001 pts)

Mkr→CF

More 1 of 2



Marker Delt

Mkr→CF

Mkr→RefLv

Stop 1.0000 GF Sweep 92.7 ms (1001 pt

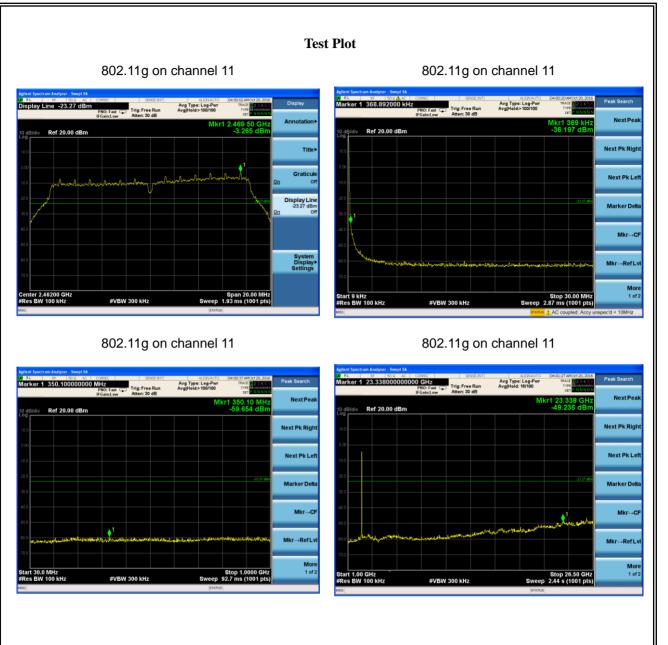
More 1 of 2

Start 1.00 GHz #Res BW 100 kHz

#VBW 300 kHz

Test Plot





Peak Sea

NextPea

Next Pk Right

Next Pk Lef

Marker Delta

Mkr→CF

Mkr→RefLvl

Peak Search

NextPea

Next Pk Right

Next Pk Left

Marker Delt

Mkr→RefLv

Stop 26.50 GHz 2.44 s (1001 pts)

Mkr→CF

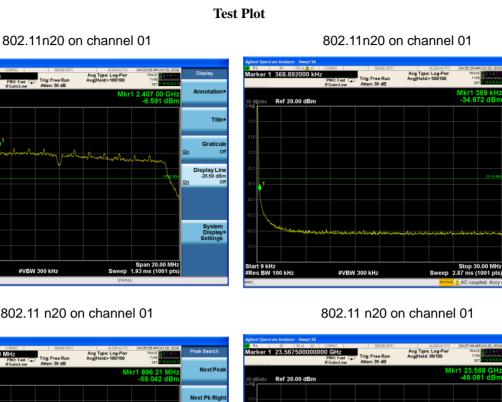
More 1 of 2

More 1 of 2



enter 2.41200 GHz Res BW 100 kHz

Page 55 of 61



art 1.00 GHz es BW 100 kHz

#VBW 300 kHz

Display Line -26.59 dBm Ref 20.00 dBm

802.11 n20 on channel 01

Marker 1		PNO: Fast 🔾	SENSE:IN	Avg Type:	LIGNAUTO Log-Pwr 100/100	TRAC	MOct 20, 2016	Peak Search
10 dB/div	Ref 20.00 dB	IFGain:Low	Atten: 30 dB		M	kr1 896.	21 MHz 42 dBm	Next Pea
10.0								Next Pk Rig
-10.0								Next Pk Le
-20.0							-26.59 dBn	Marker De
-40.0								Mkr→
-50.0 -60.0	-storestration	فيعادرهان ليروفها ورروماه	agajatonikoon (algota	uration and attached		octambought	1 04014409900	Mkr→RefL
-70.0	0 MHz					Stop 1.0	0000 GHz	M a 1 o
	100 kHz	#VBW	300 kHz	\$	Sweep	92.7 ms (1001 pts)	





Page 56 of 61

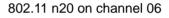


802.11 n20 on channel 06



802.11 n20 on channel 06

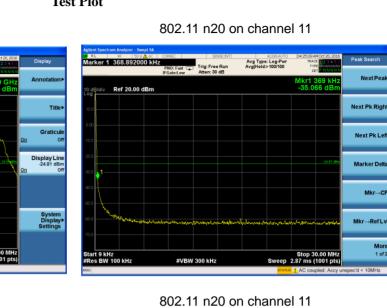
Aginal Spectra August 500 Ac COREC D 8 L 55 500 Ac COREC Marker 1 751.680000000 MHz PNO: Fast FGail any Atten 30 dB Avg Type: Log-Pwr Avg[Hold>100/100 Peak Search TYPE DET Next Pea 751.68 M -59.182 dE Ref 20.00 dBm Next Pk Righ Next Pk Lef Marker Delt Mkr→CF Mkr→RefLv More 1 of 2 Start 30.0 MHz #Res BW 100 kHz Stop 1.0000 GH Sweep 92.7 ms (1001 pt #VBW 300 kHz



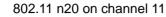




Page 57 of 61



Test Plot









Peak Sear

NextPea

Next Pk Right

Next Pk Lef

Marker Delt

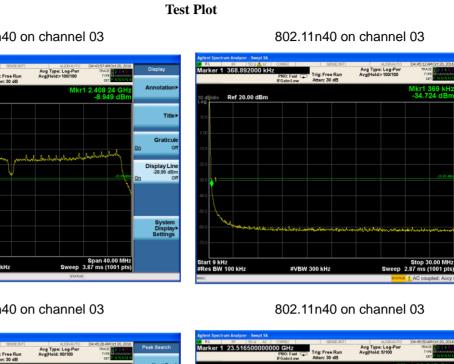
Mkr→CF

Mkr→RefLv

More 1 of 2



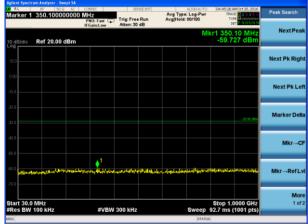
Page 58 of 61



802.11n40 on channel 03

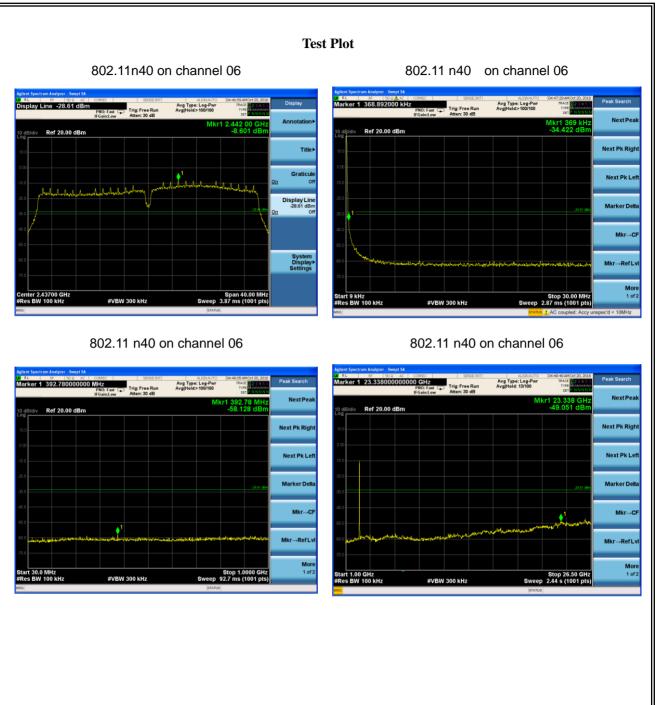


802.11n40 on channel 03

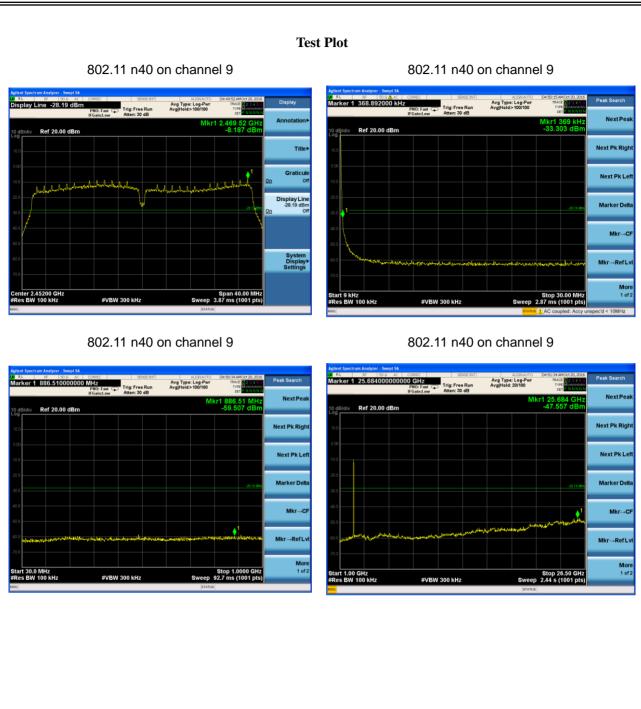














7.10 ANTENNA APPLICATION

7.10.1 Antenna Requirement

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

7.10.2 Result

The EUT antenna is permanent attached metal PIFA antenna. It comply with the standard requirement.