3.6. Out-of-band Emissions

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 con-ducted or a radiated measurement, pro-vided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter com-plies 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. Attenuation below the general limits specified in §15.209(a) is not required.

Test Procedure

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector, and max hold. Measurements utilizing these setting are made of the in-band reference level, bandedge and out-of-band emissions.

Test Configuration

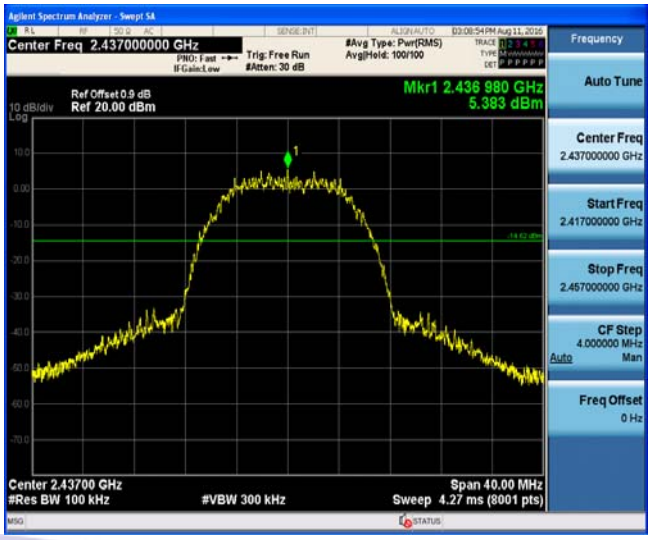
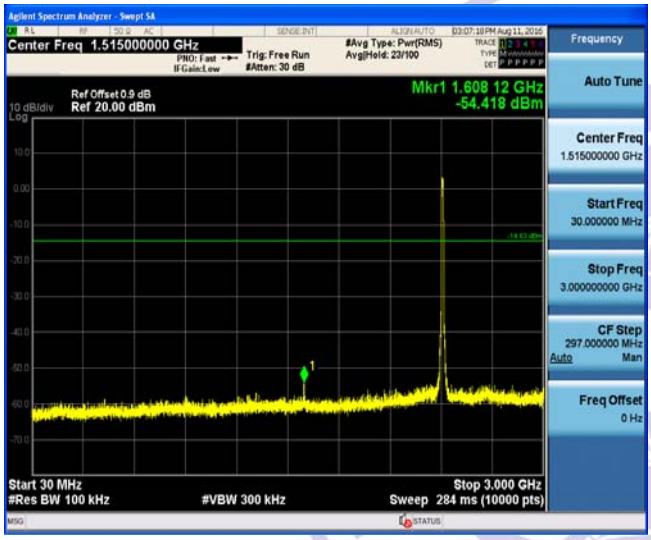
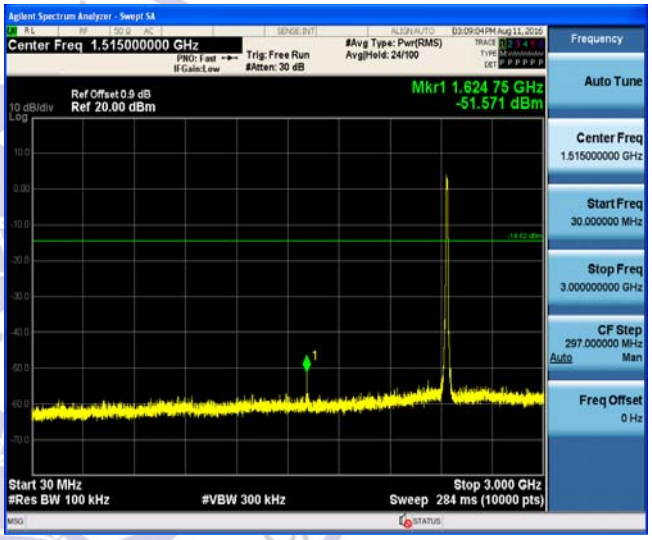
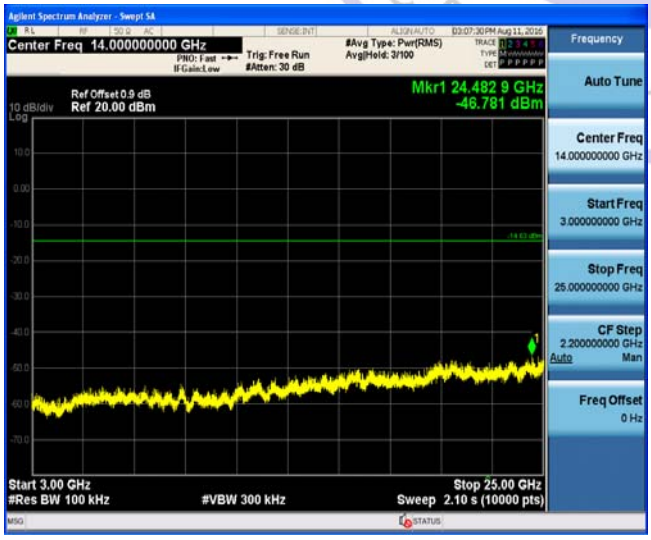
Test Results

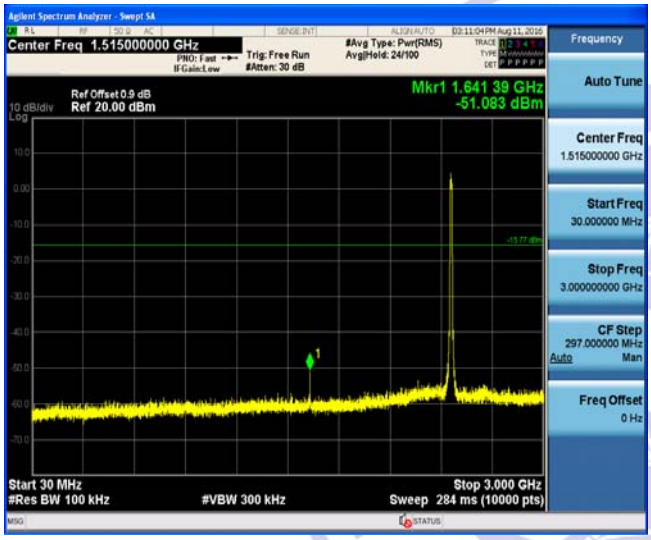
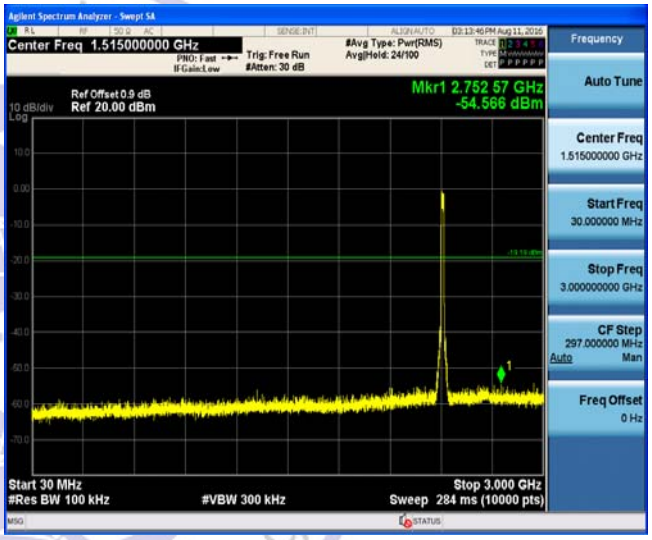
Remark: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandage measurement data.

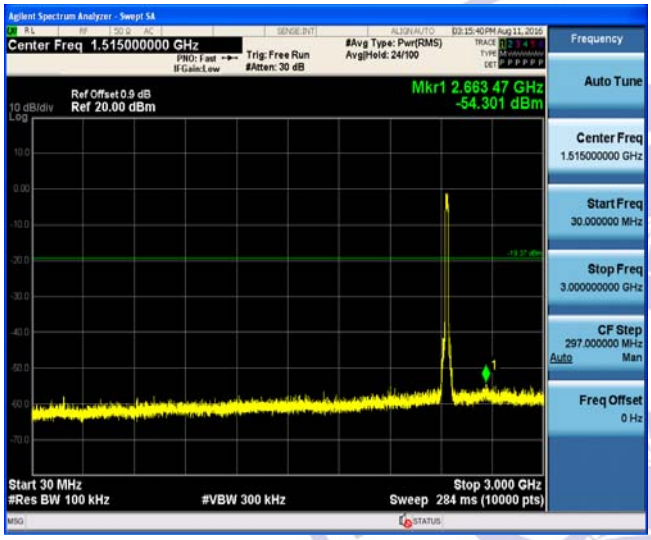
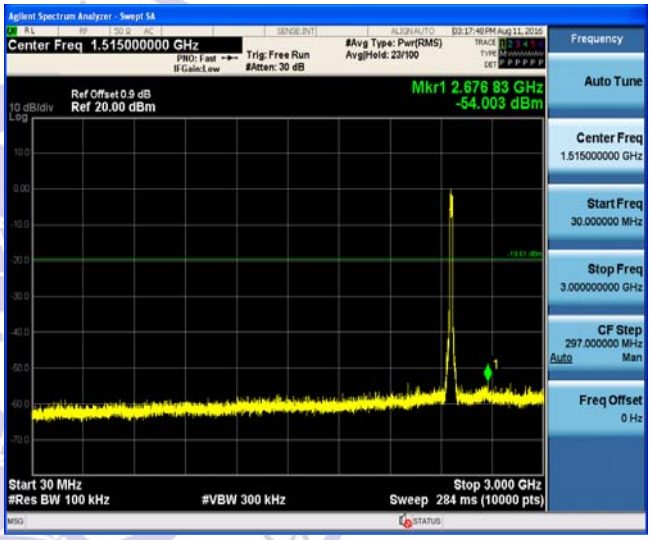
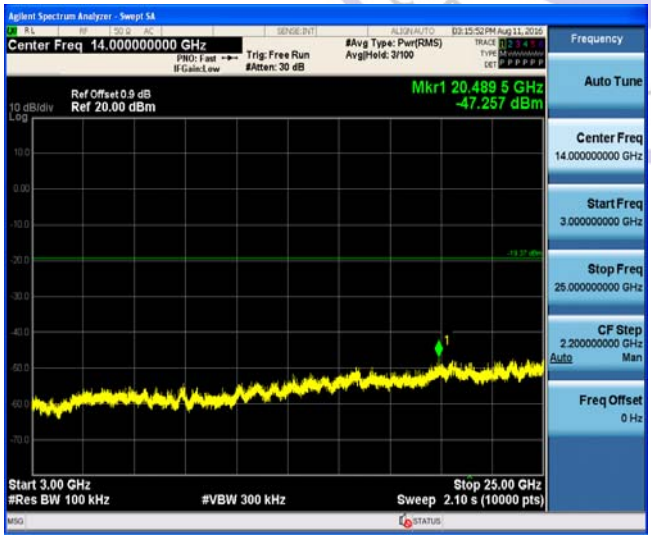
Test plot as follows:

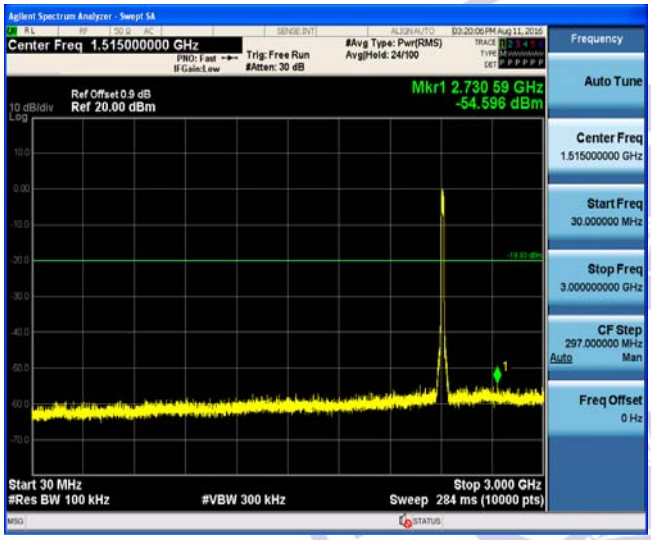
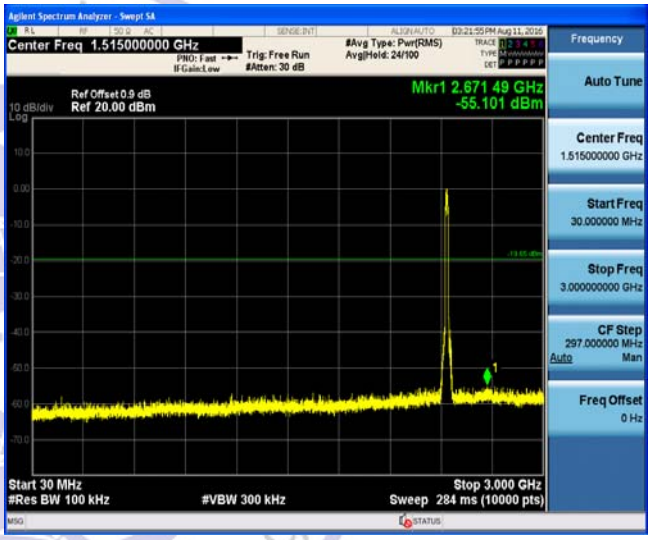
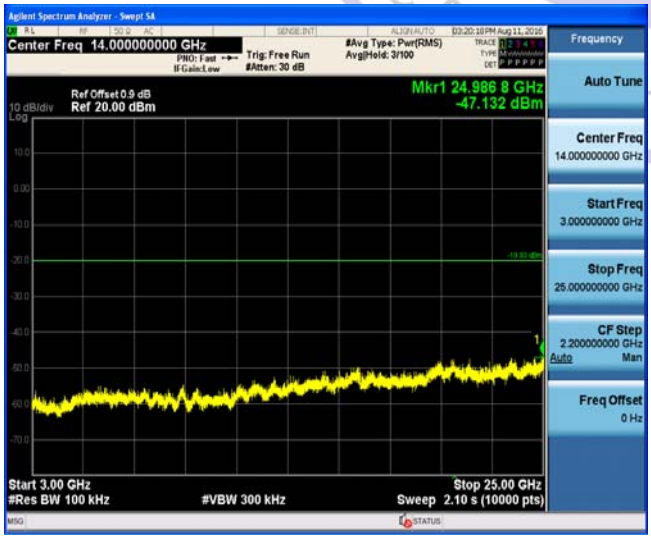
Shenzhen CTL Testing Technology Co.,Ltd.

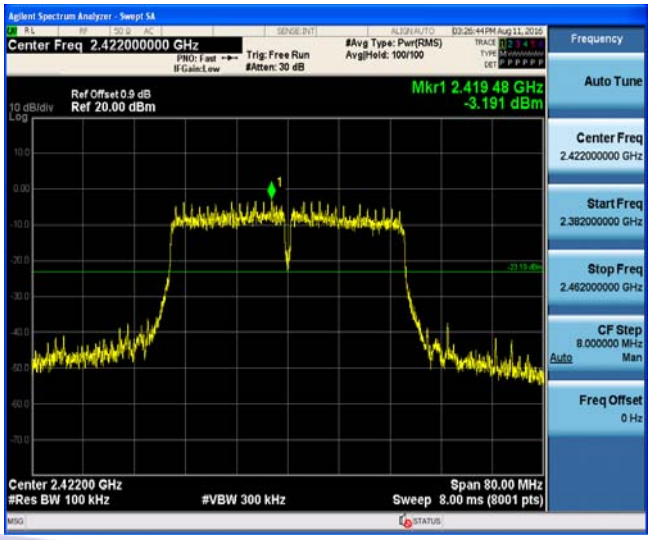
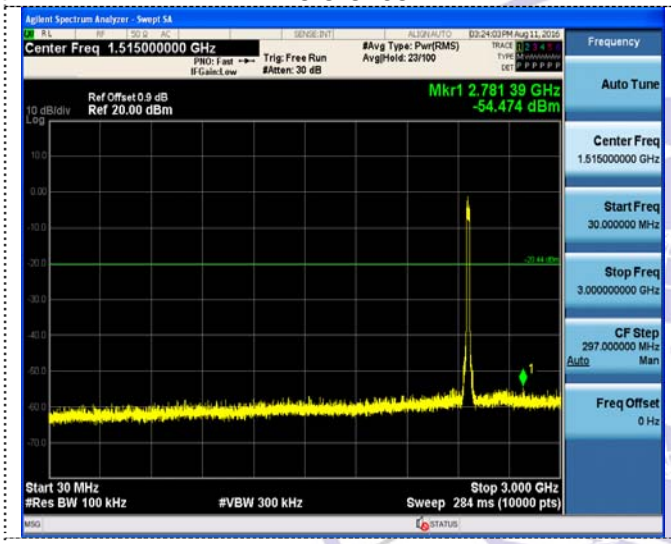
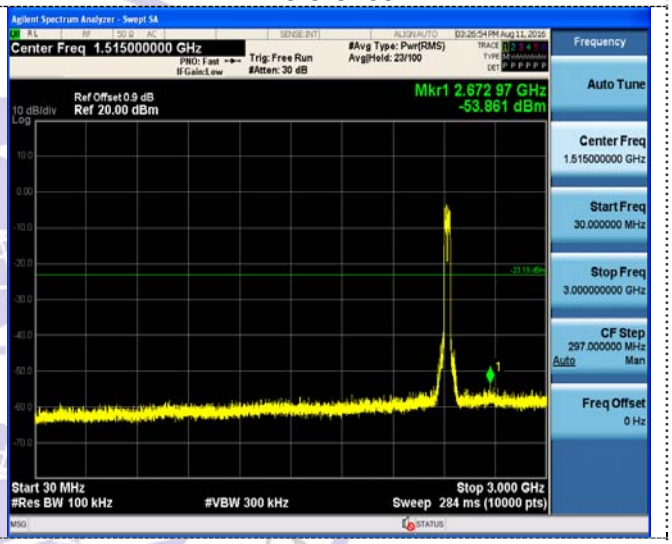
Ant1

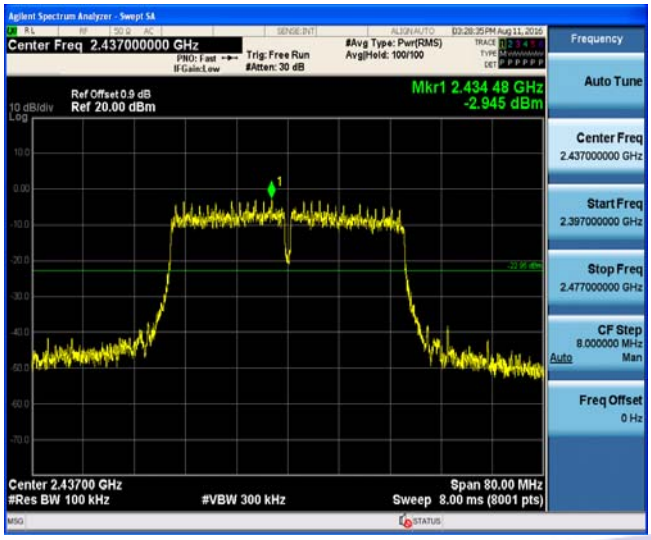
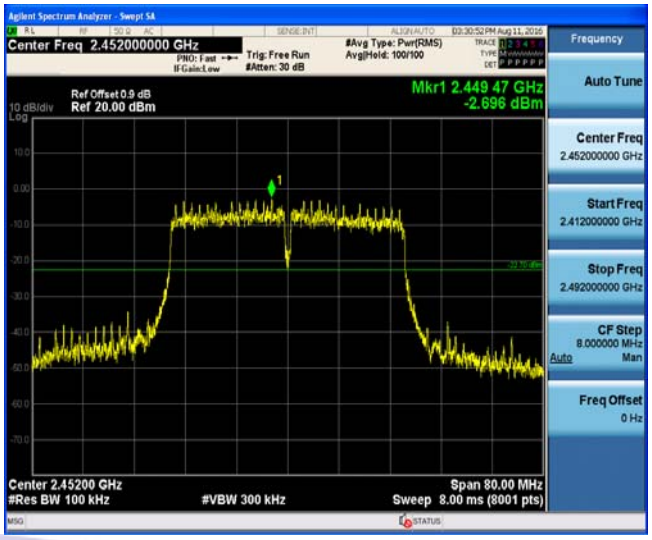
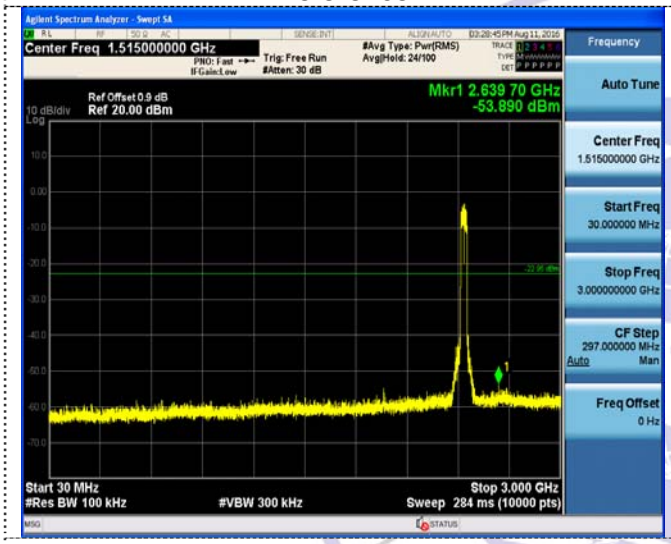
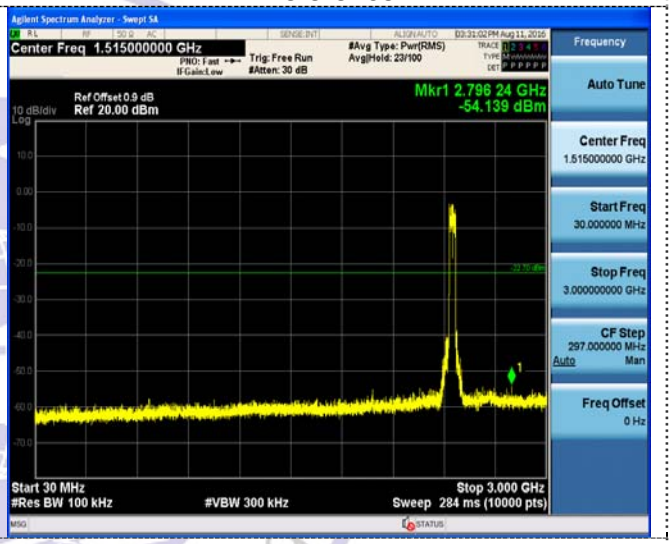
802.11b CH01	*802.11b CH06*
	
Reference	
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

802.11b CH11	802.11g CH01
Reference	
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

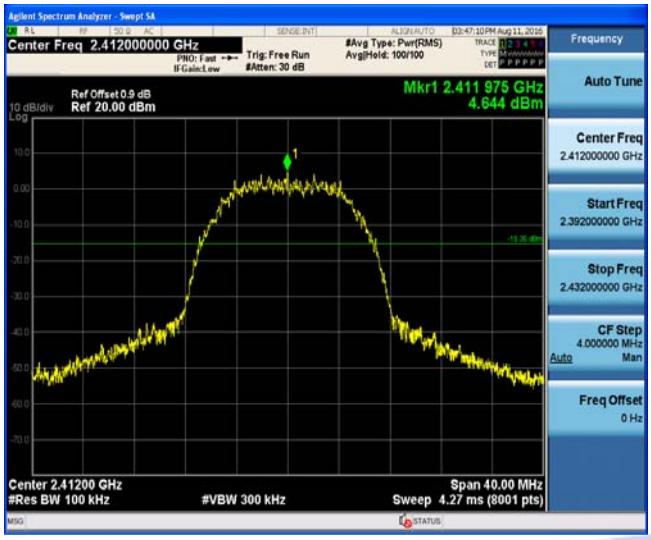
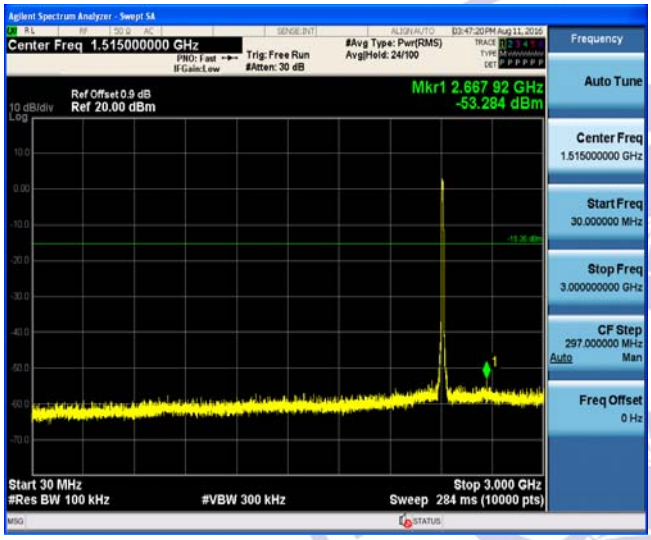
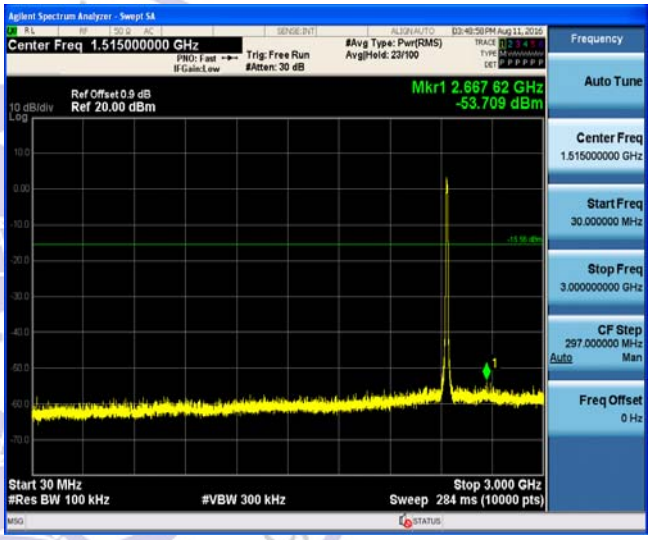
802.11g CH06	802.11g CH11
Reference	
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

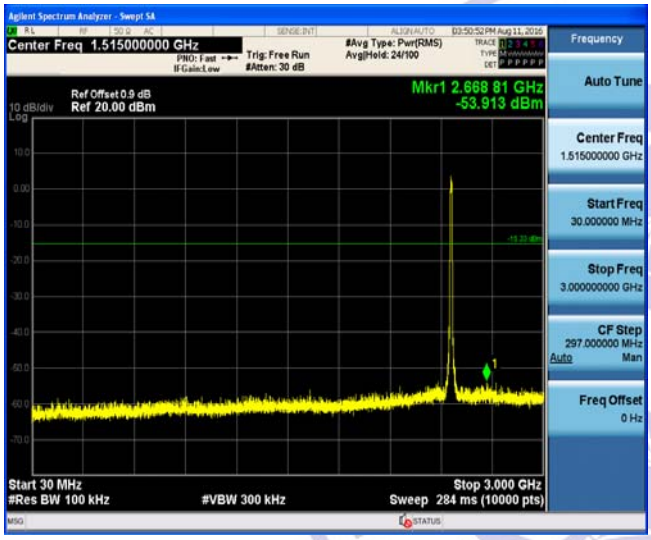
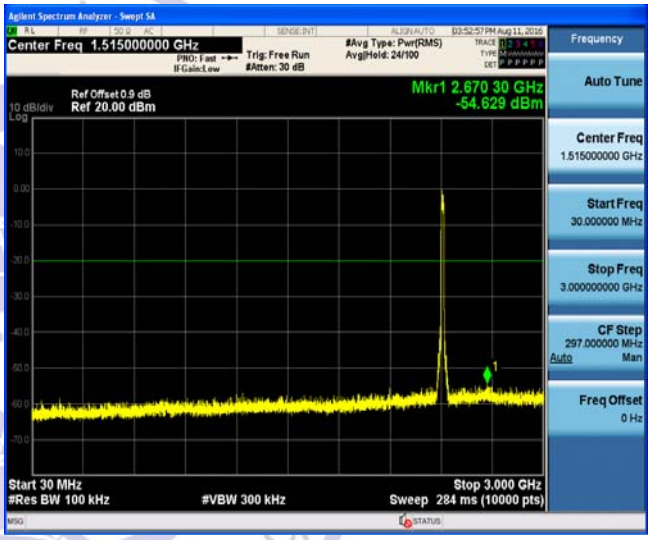
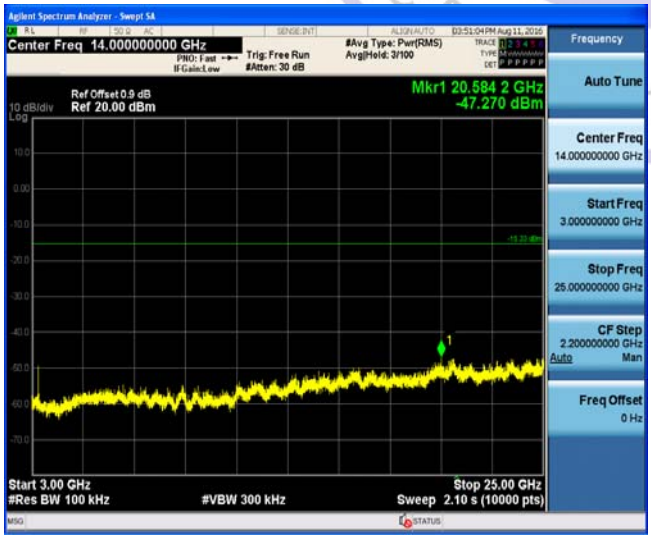
802.11n(HT20) CH01	802.11n(HT20) CH06
Reference	
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

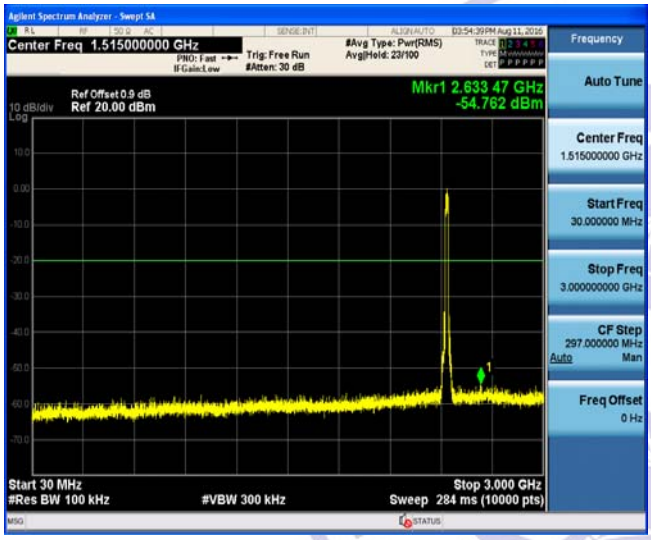
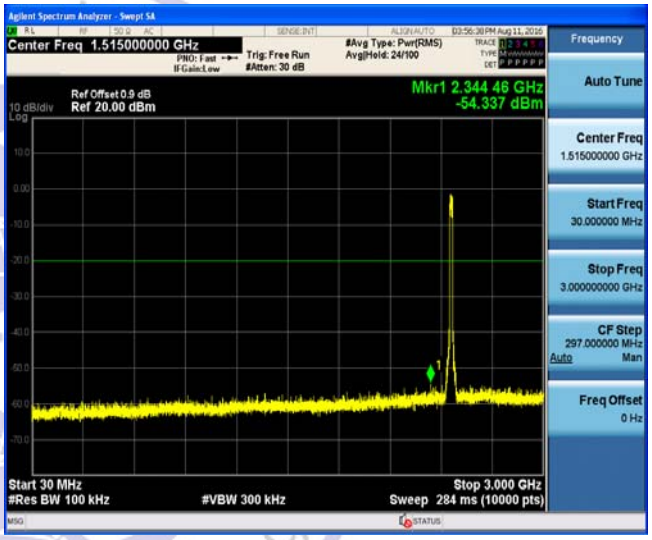
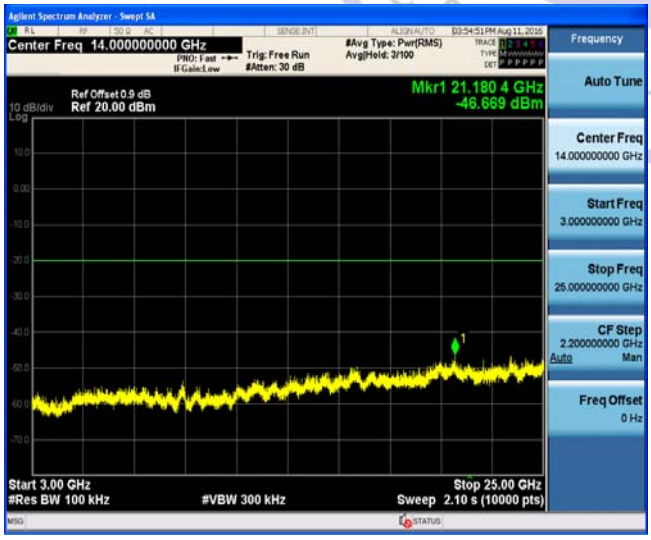
802.11n(HT20) CH11	802.11n(HT40) CH03
	
Reference	Reference
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

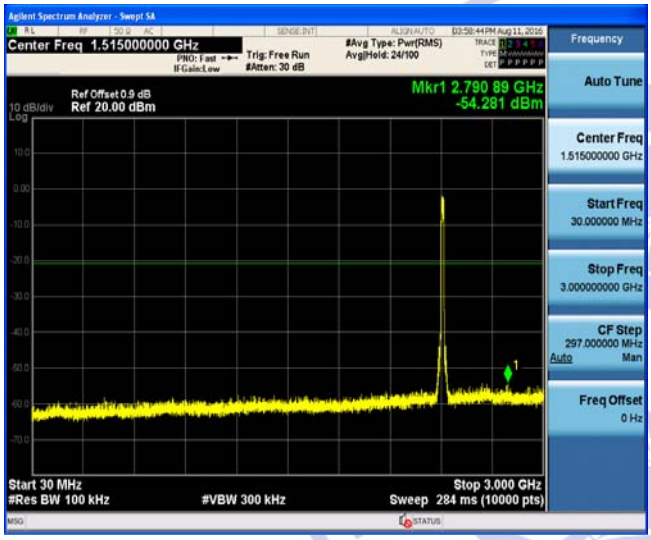
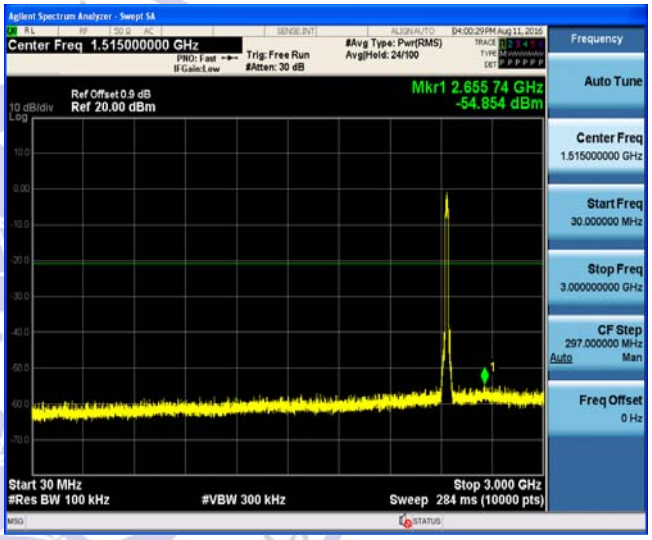
802.11n(HT40) CH06	802.11n(HT40) CH09
	
Reference	Reference
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

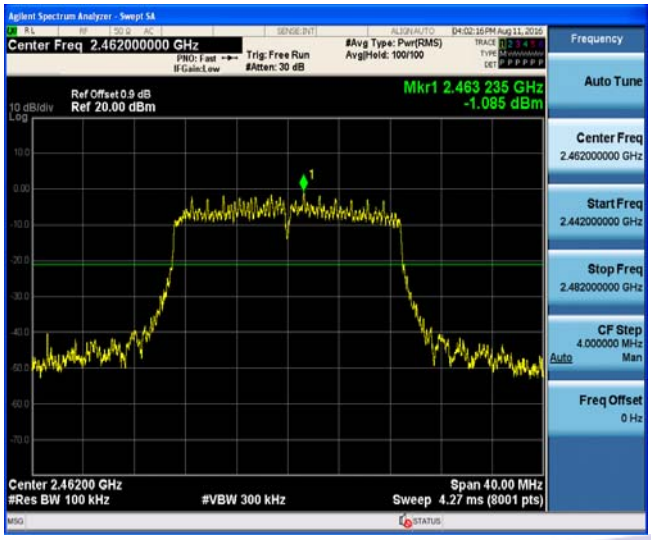
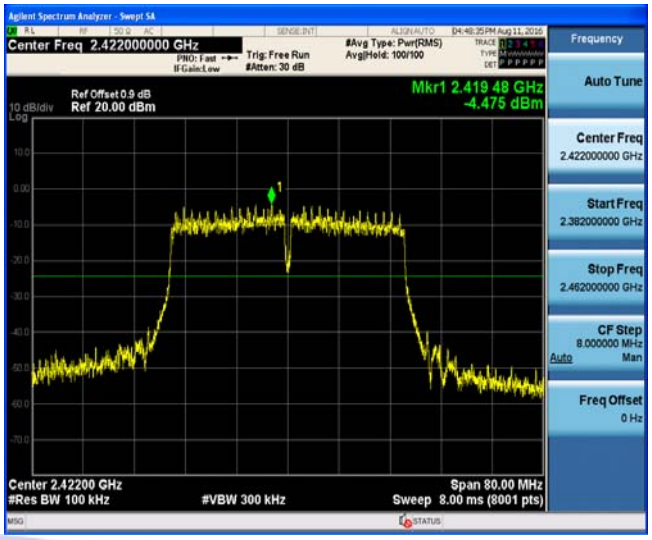
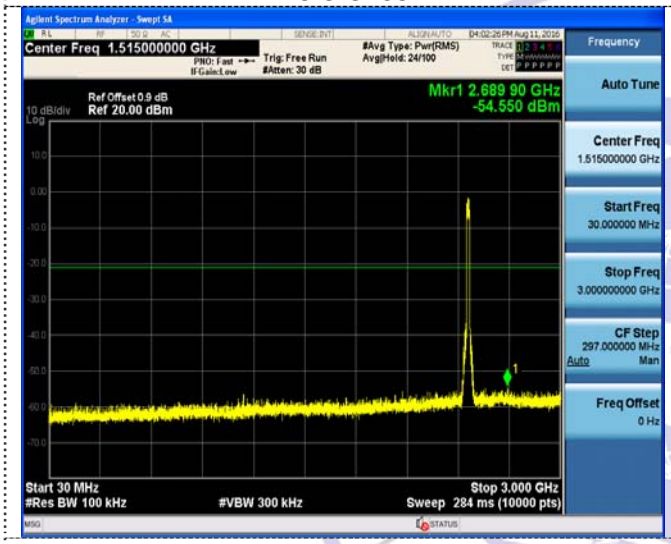
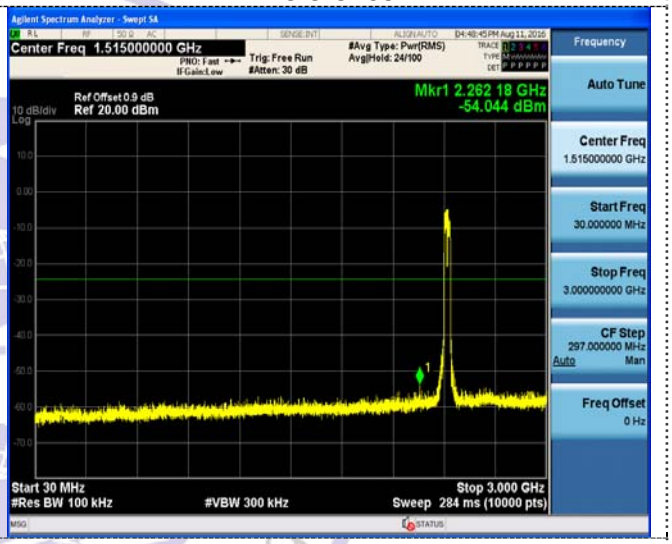
Ant2

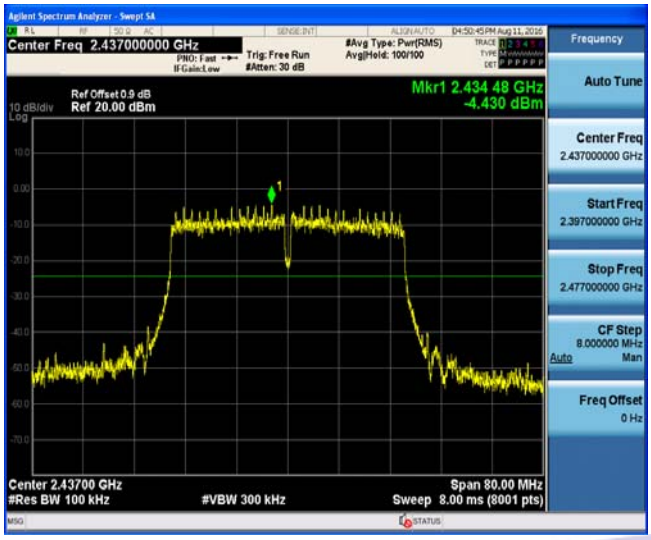
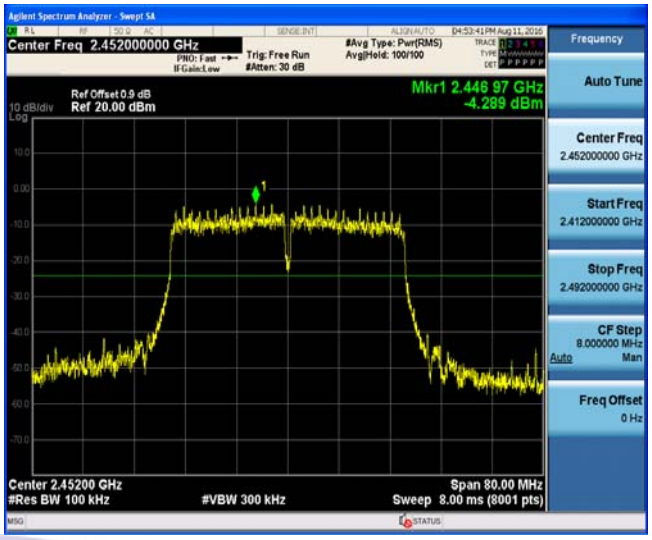
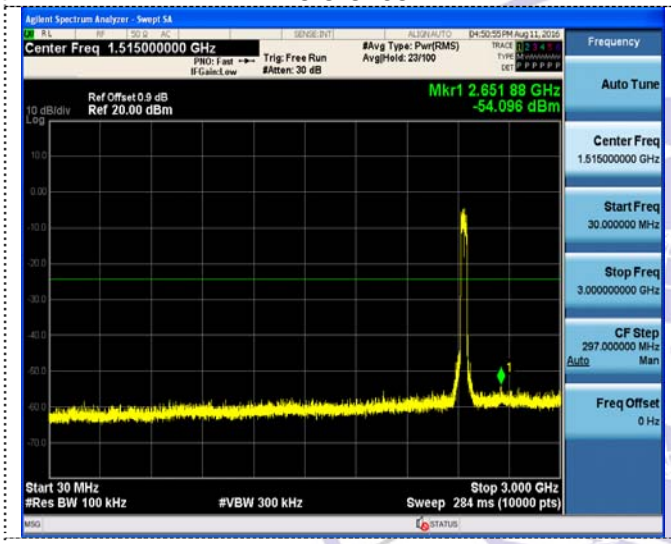
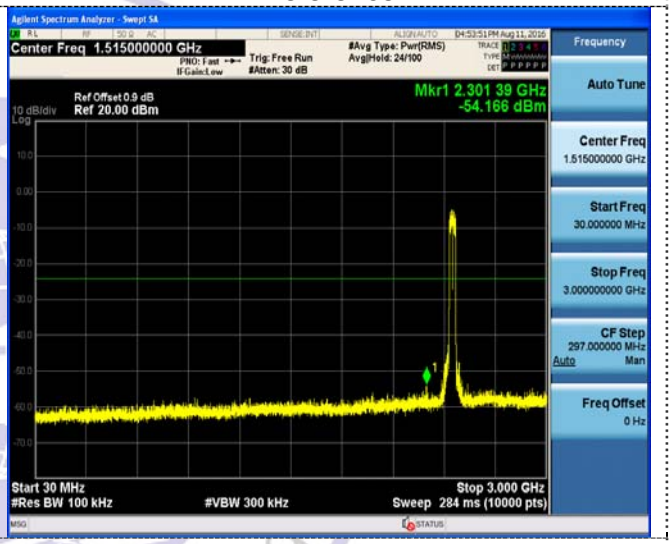
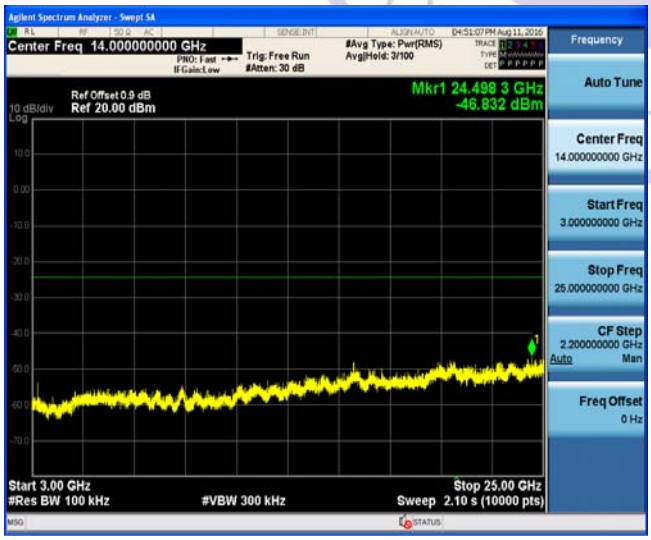
802.11b CH01	*802.11b CH06*
	
Reference	
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

802.11b CH11	802.11g CH01
Reference	
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

802.11g CH06	802.11g CH11
Reference	
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

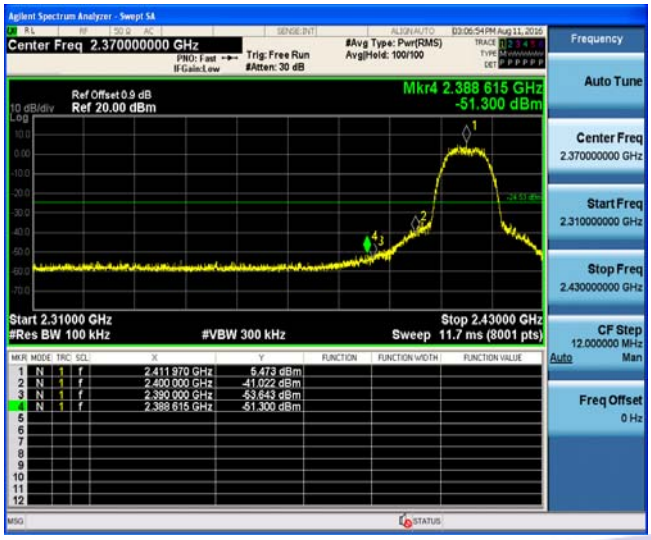
802.11n(HT20) CH01	802.11n(HT20) CH06
Reference	
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

802.11n(HT20) CH11	802.11n(HT40) CH03
	
Reference	Reference
	
30MHz-3GHz	30MHz-3GHz
3GHz-25GHz	3GHz-25GHz

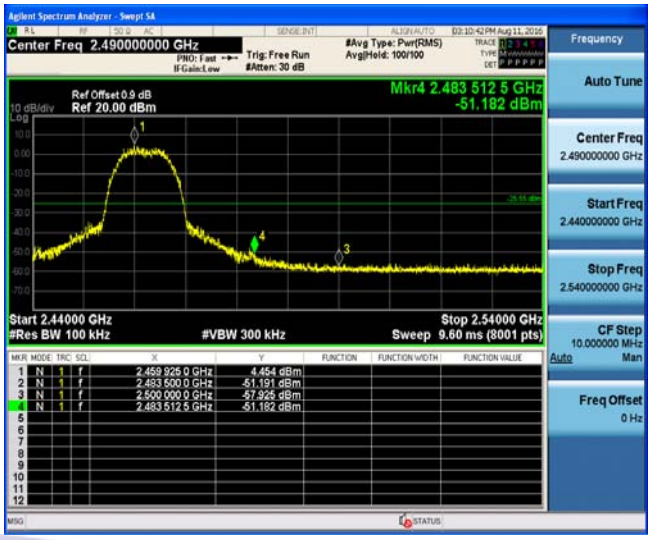
802.11n(HT40) CH06	802.11n(HT40) CH09
	
Reference	Reference
	
30MHz-3GHz	30MHz-3GHz
	
3GHz-25GHz	3GHz-25GHz

Band-edge Measurements for RF Conducted Emissions at antenna 1:

802.11b

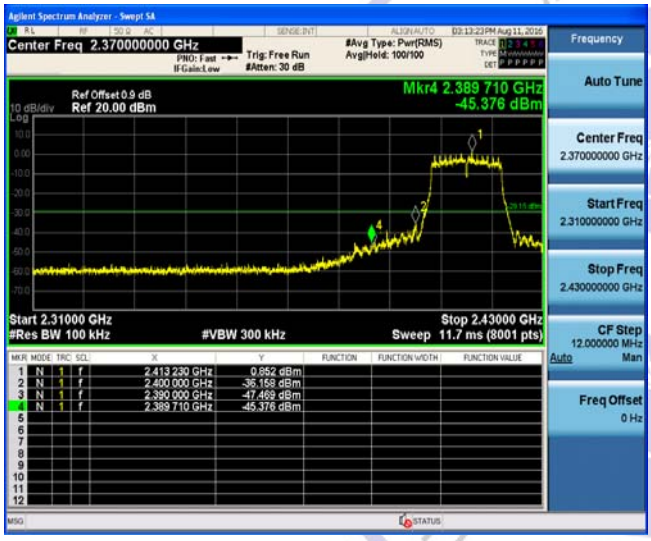


Left bandedge

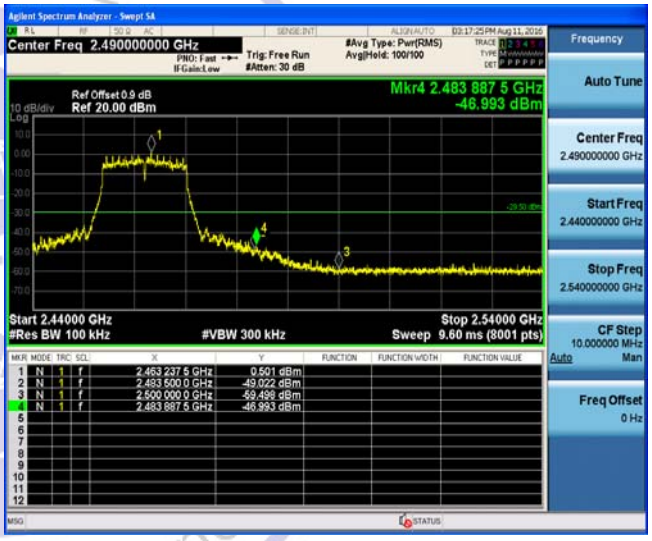


Right bandedge

802.11g

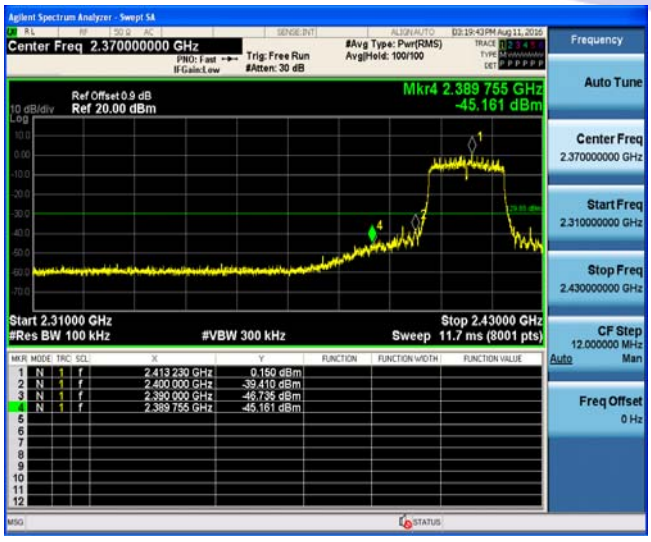


Left bandedge

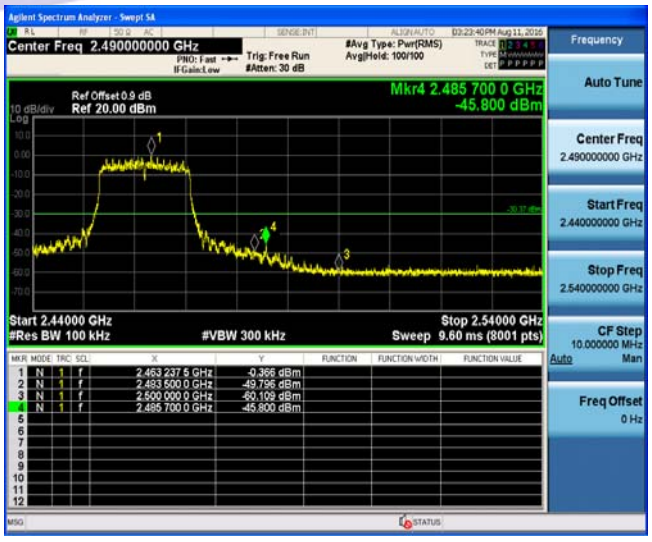


Right bandedge

802.11n(HT20)

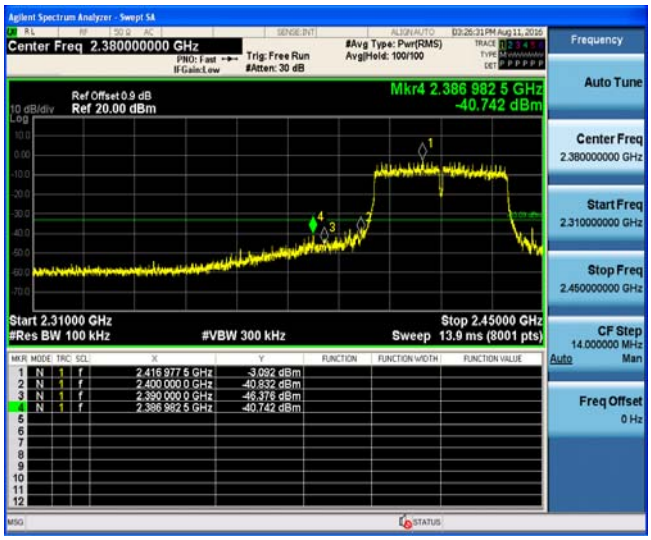


Left bandedge

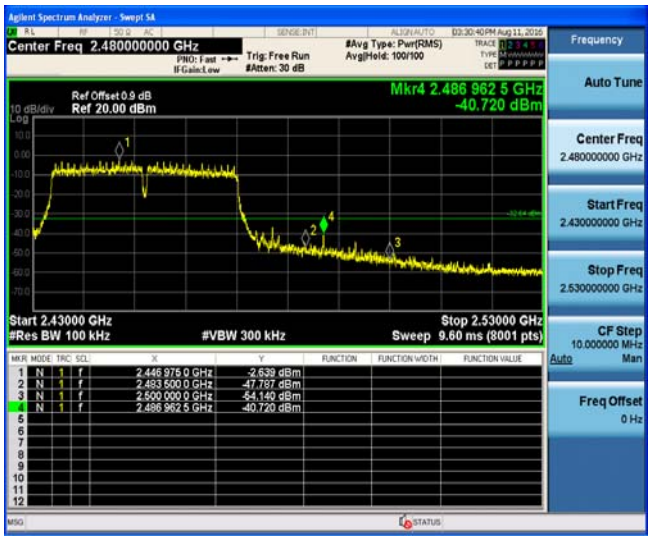


Right bandedge

802.11n(HT40)



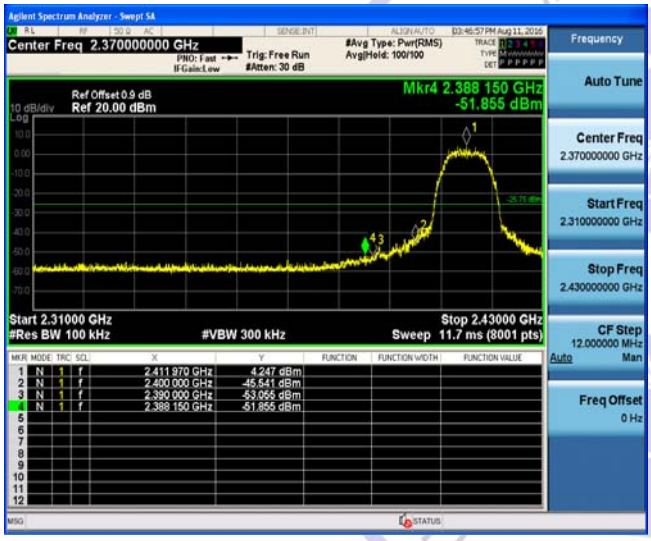
Left bandedge



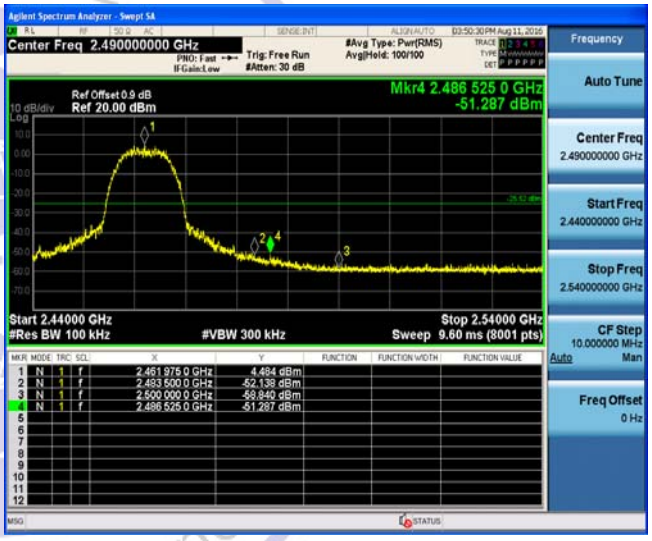
Right bandedge

Band-edge Measurements for RF Conducted Emissions at antenna 2:

802.11b

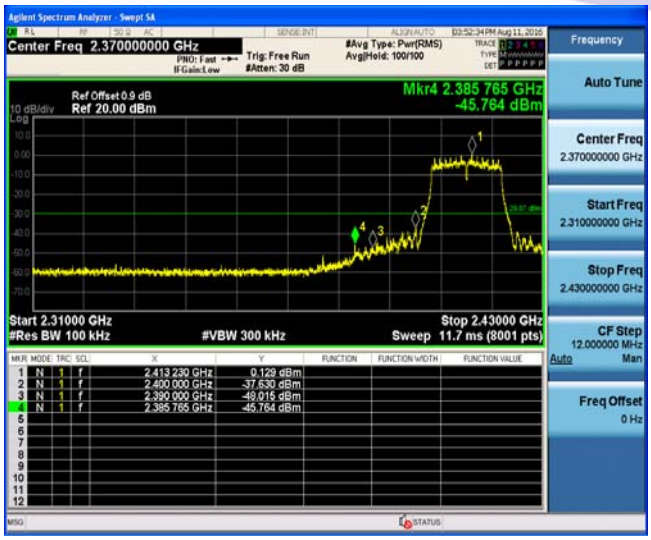


Left bandedge

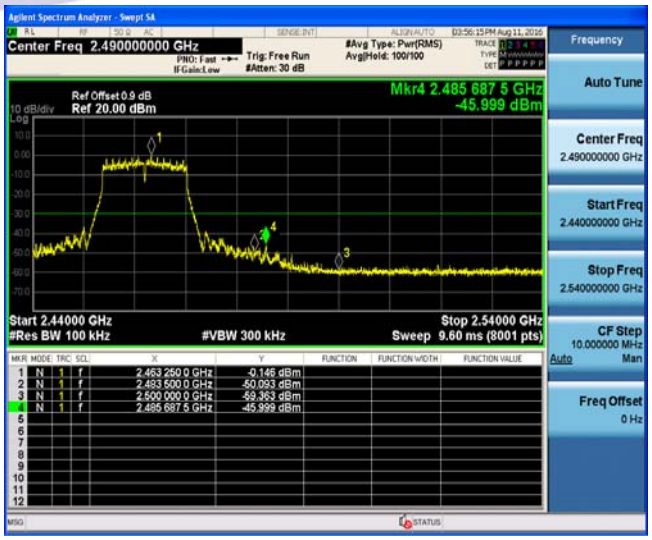


Right bandedge

802.11g

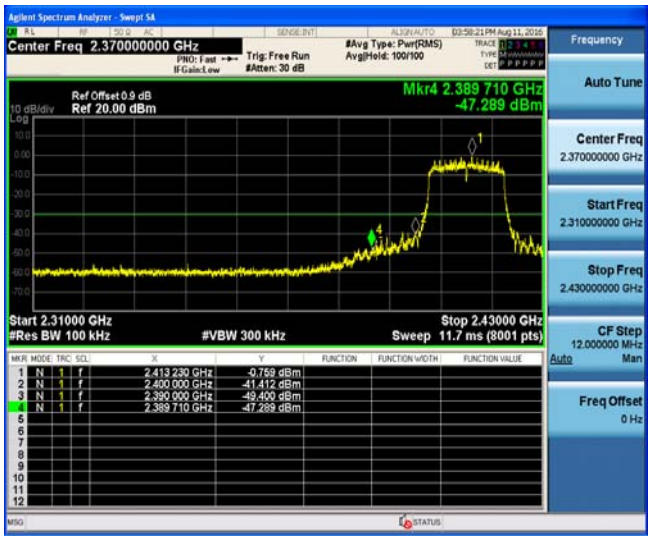


Left bandedge

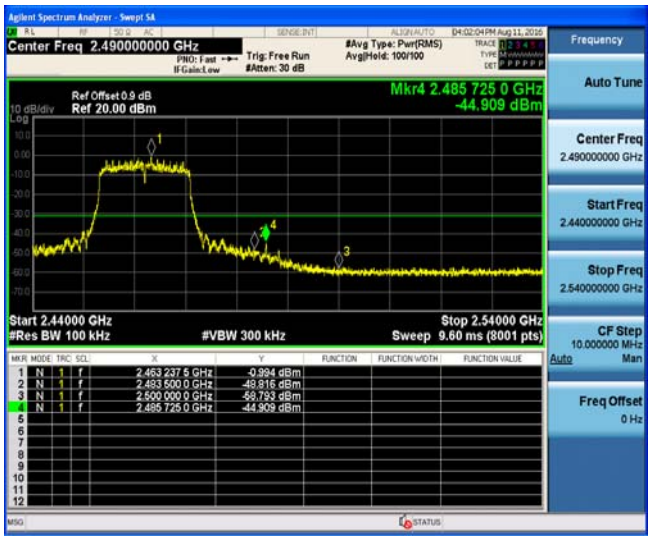


Right bandedge

802.11n(HT20)

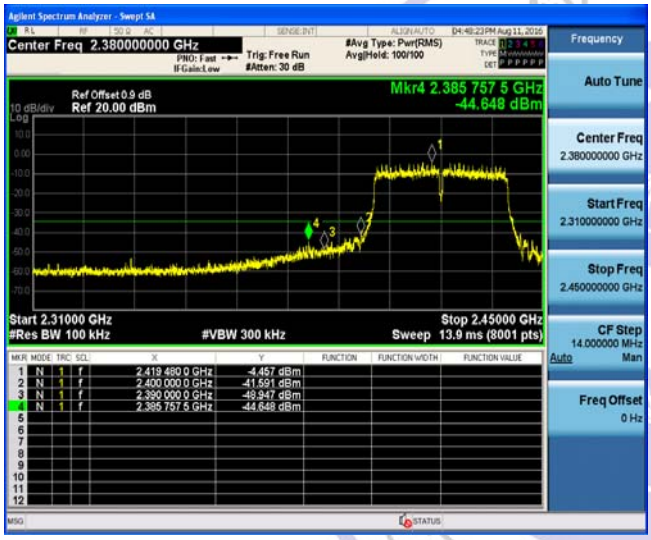


Left bandedge

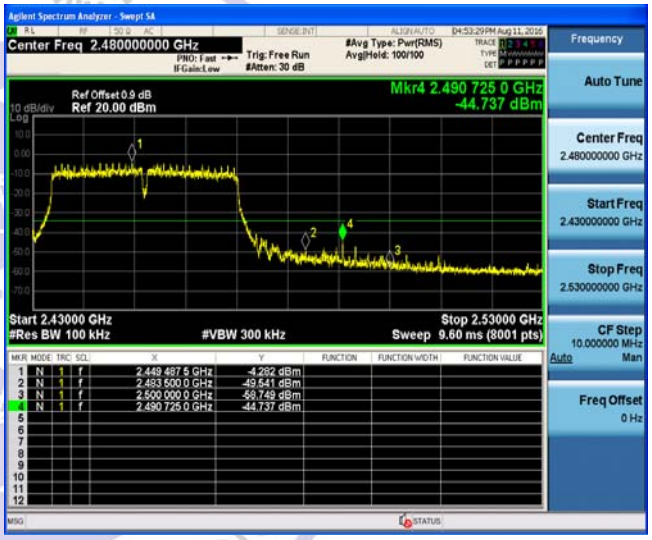


Right bandedge

802.11n(HT40)

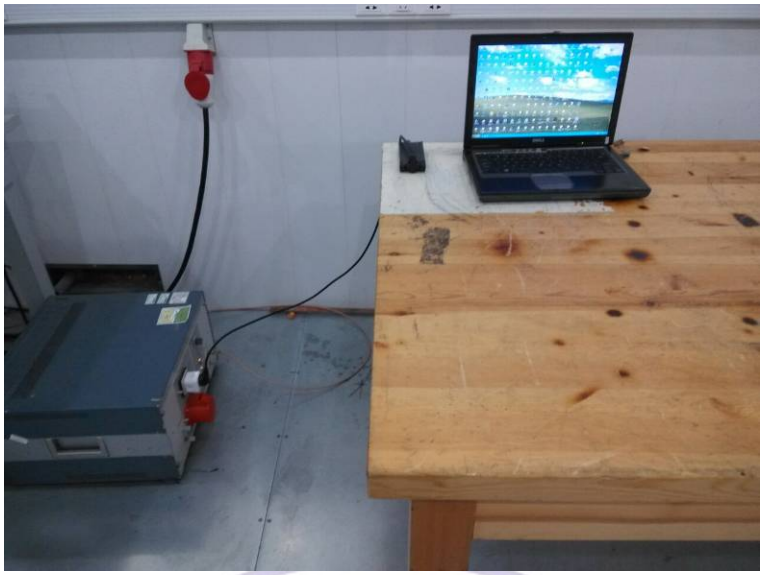


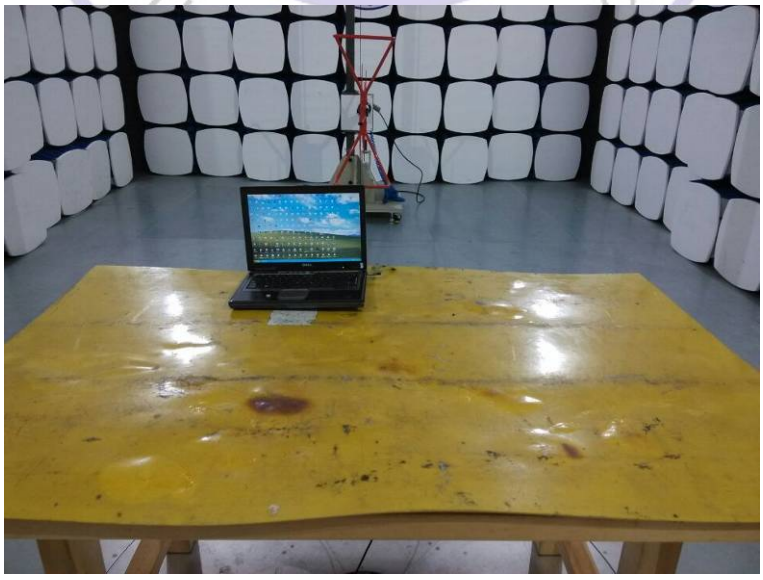
Left bandedge



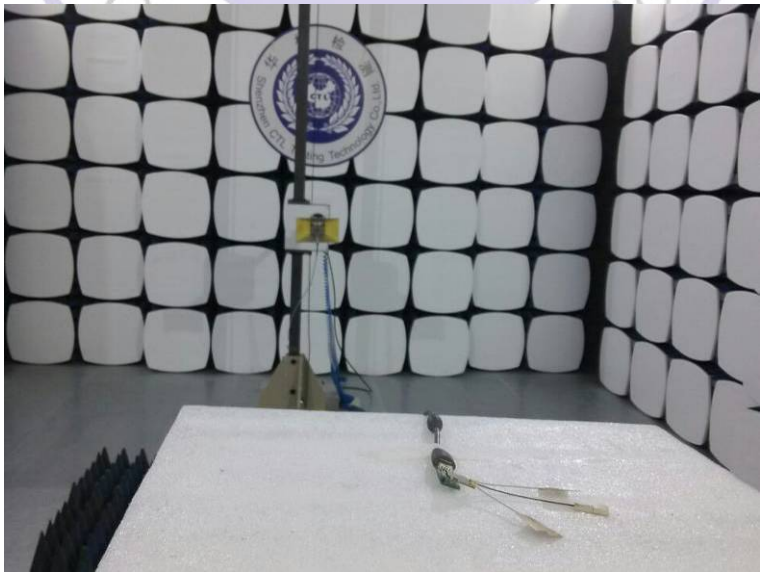
Right bandedge

4. Test Setup Photos of the EUT

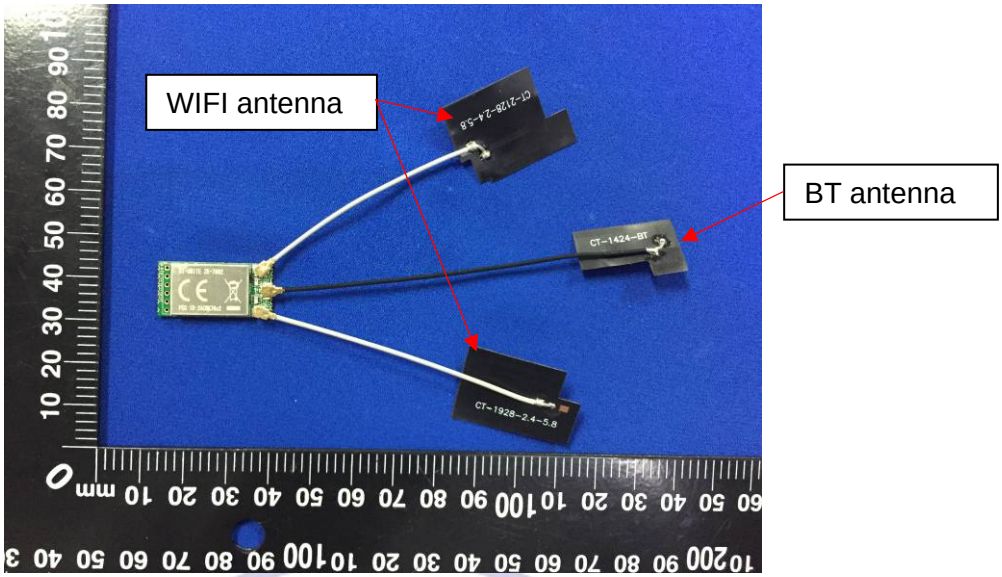


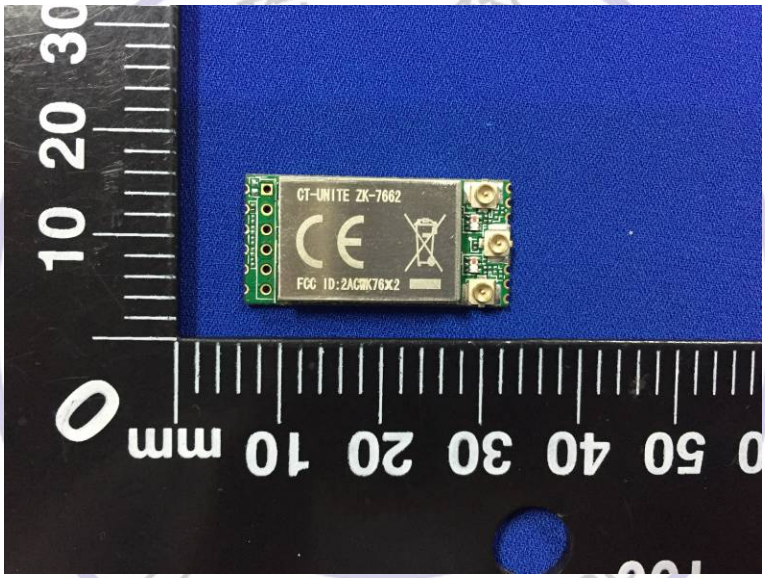


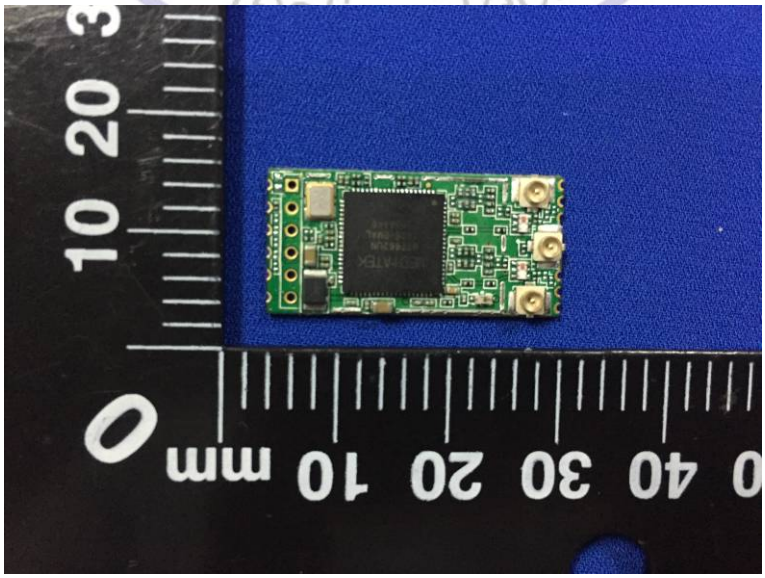
DELL

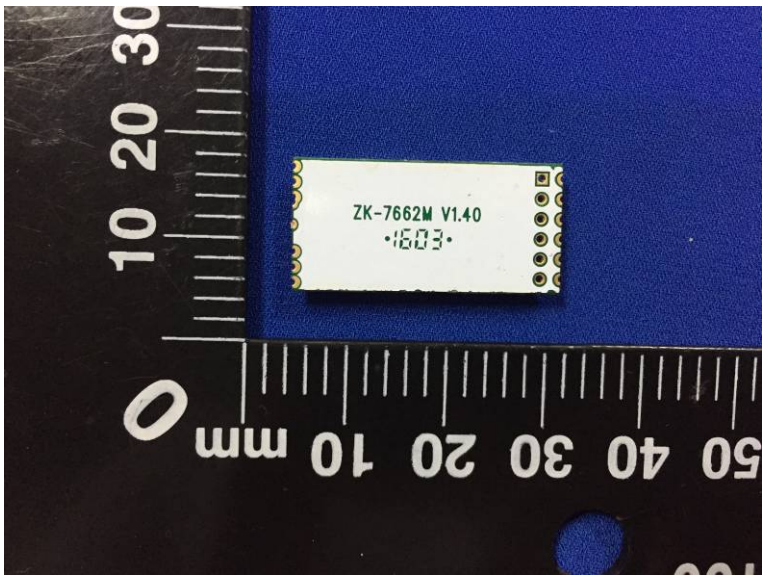


5. Photos of the EUT









********** End of Report **********

Shenzhen CTL Testing Technology Co.,Ltd.
检 检 华 测