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Ant_A7 (2.4GHz) : 802.11n HT20



Ant_A7 (2.4GHz) : 802.11n HT40



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Ant_M1 (2.4GHz) : 802.11b



Ant_M1 (2.4GHz) : 802.11g



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Ant_M1 (2.4GHz) : 802.11n HT20



Ant_M1 (2.4GHz) : 802.11n HT40



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Ant_M2 (2.4GHz) : 802.11b



Ant_M2 (2.4GHz) : 802.11g



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Ant_M2 (2.4GHz) : 802.11n HT20



Ant_M2 (2.4GHz) : 802.11n HT40

2.1.3 Power Spectral Density

Procedure:

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

The spectrum analyzer is set to:

RBW = 3 kHz

VBW = (VBW ≥ RBW)

Sweep = 100 s (Span/3 kHz)

Span = 300 kHz

Detector function = peak

Trace = max hold

Test Results

Ant : A1 (5GHz)

	Measured Power Density (dBm)		
Mode	5745 MHz	5785 MHz	5825 MHz
802.11a	-14.636	-15.555	-14.581
802.11an HT20	-16.201	-15.315	-15.299
Mode	5755 MHz		5795 MHz
802.11an HT40	-18.133		-18.548
Measurement	± 3 dB		

Ant : A3 (5GHz)

	Measured Power Density (dBm)		
Mode	5745 MHz	5785 MHz	5825 MHz
802.11a	-17.326	-16.800	-16.624
802.11an HT20	-18.454	-16.760	-15.412
Mode	5755 MHz		5795 MHz
802.11an HT40	-21.100		-19.503
Measurement	± 3 dB		



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Ant : M1 (5GHz)

	Measured Power Density (dBm)		
Mode	5745 MHz	5785 MHz	5825 MHz
802.11a	-18.150	-17.756	-17.013
802.11an HT20	-18.491	-16.625	-17.135
Mode	5755 MHz		5795 MHz
802.11an HT40	-19.926		-20.350
Measurement	± 3 dB		

Ant : M2 (5GHz)

	Measured Power Density (dBm)		
Mode	5745 MHz	5785 MHz	5825 MHz
802.11a	-20.323	-19.225	-18.283
802.11an HT20	-21.493	-20.510	-18.893
Mode	5755 MHz		5795 MHz
802.11an HT40	-23.495		-21.906
Measurement	± 3 dB		

Ant : A5 (2.4GHz)

	Measured Power Density (dBm)		
Mode	2412 MHz	2437 MHz	2462 MHz
802.11b	-14.487	-13.916	-14.521
802.11g	-14.179	-14.645	-14.266
802.11n HT20	-14.860	-15.239	-14.682
Mode	2422 MHz	2437 MHz	2452 MHz
802.11n HT40	-17.891	-17.445	-17.597
Measurement	± 3 dB		

Ant : A7 (2.4GHz)

	Measured Power Density (dBm)		
Mode	2412 MHz	2437 MHz	2462 MHz
802.11b	-13.527	-14.444	-13.674
802.11g	-15.754	-15.986	-15.352
802.11n HT20	-15.068	-15.181	-16.194
Mode	2422 MHz	2437 MHz	2452 MHz
802.11n HT40	-17.826	-16.743	-17.456
Measurement	± 3 dB		



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Ant : M1 (2.4GHz)

	Measured Power Density (dBm)		
Mode	2412 MHz	2437 MHz	2462 MHz
802.11b	-16.465	-17.468	-16.486
802.11g	-17.780	-16.882	-17.772
802.11n HT20	-17.490	-17.157	-17.429
Mode	2422 MHz	2437 MHz	2452 MHz
802.11n HT40	-20.383	-19.942	-20.107
Measurement	± 3 dB		

Ant : M2 (2.4GHz)

	Measured Power Density (dBm)		
Mode	2412 MHz	2437 MHz	2462 MHz
802.11b	-16.065	-17.674	-17.552
802.11g	-16.243	-18.038	-18.610
802.11n HT20	-17.098	-17.800	-18.919
Mode	2422 MHz	2437 MHz	2452 MHz
802.11n HT40	-22.361	-22.077	-21.052
Measurement	± 3 dB		

Minimum Standard:

Power Spectral Density	< 8dBm @ 3 kHz BW
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See next pages for actual measured spectrum plots.



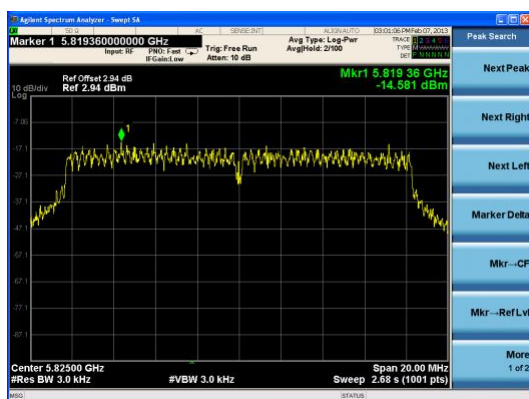
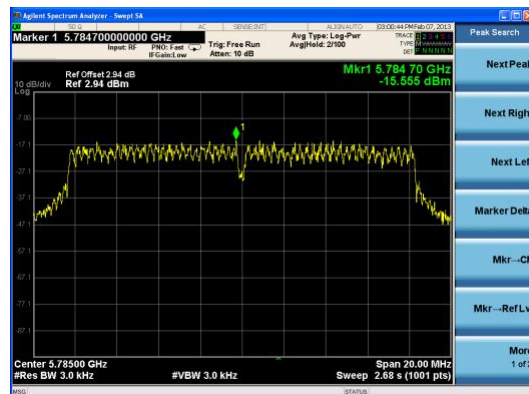
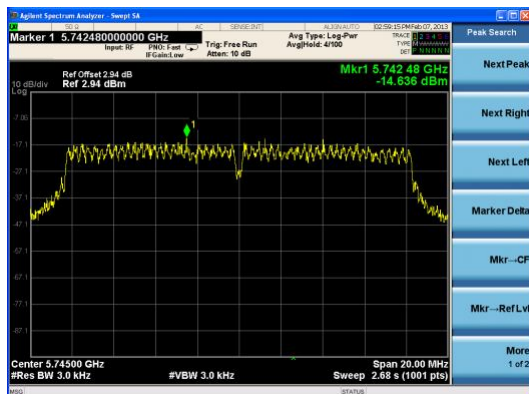
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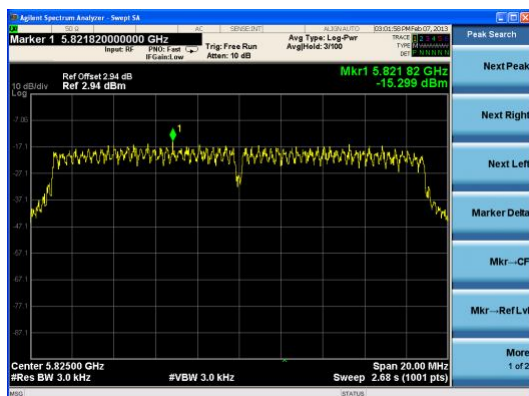
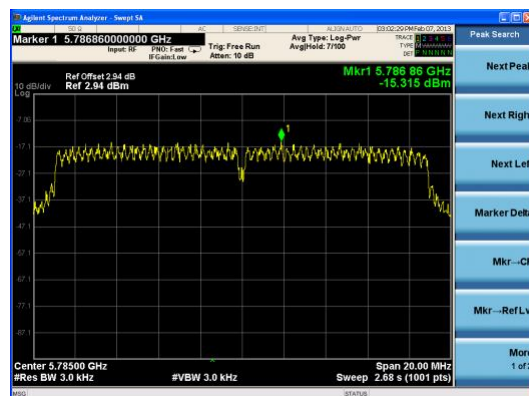
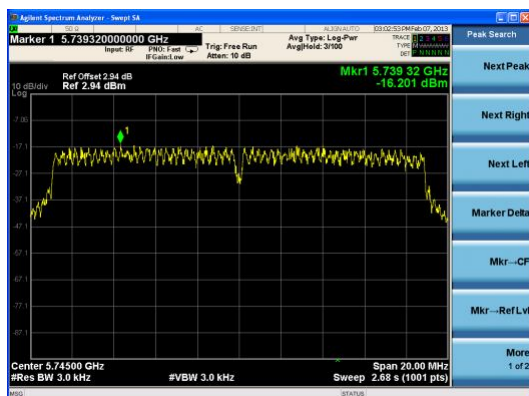
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Ant_A1 (5GHz) : 802.11a



Ant_A1 (5GHz) : 802.11a HT20



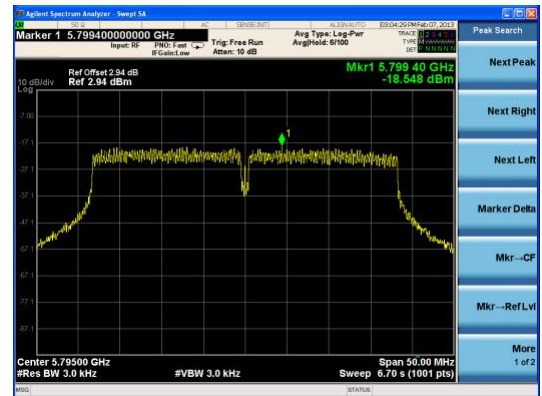
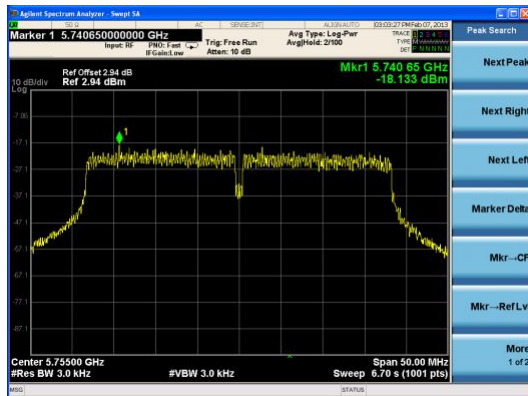
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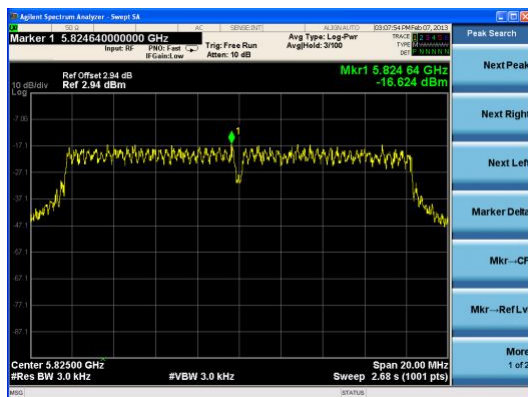
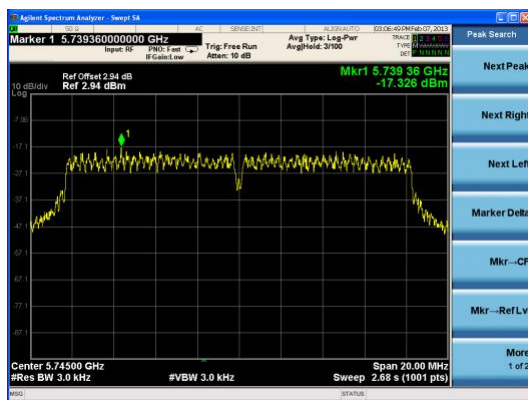
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Ant_A1 (5GHz) : 802.11a HT40



Ant_A3 (5GHz) : 802.11a



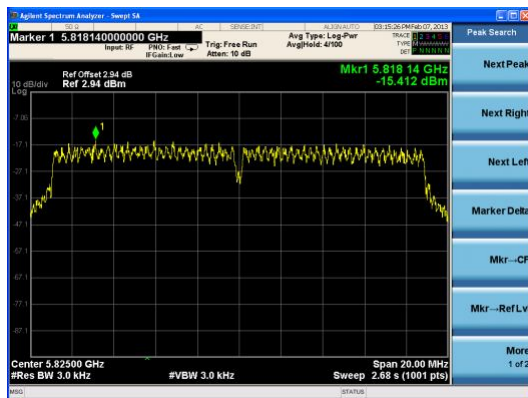
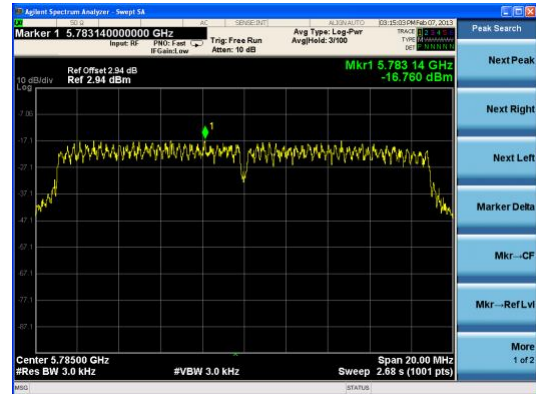
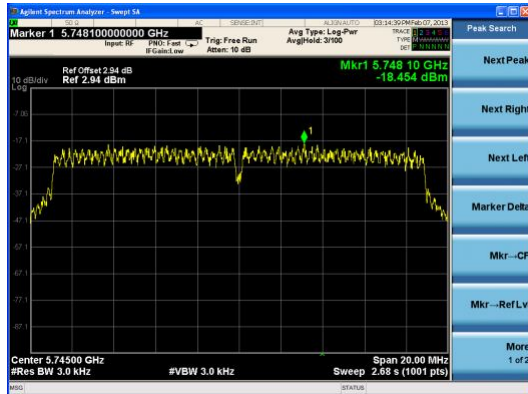
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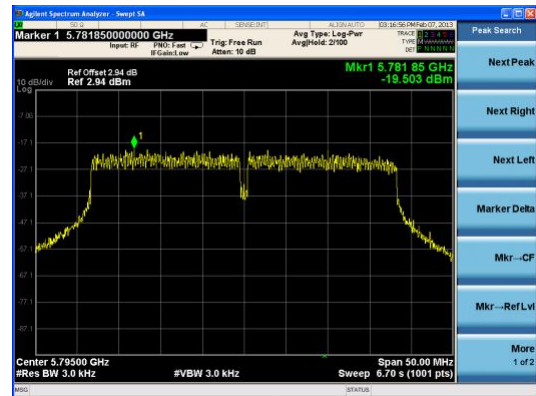
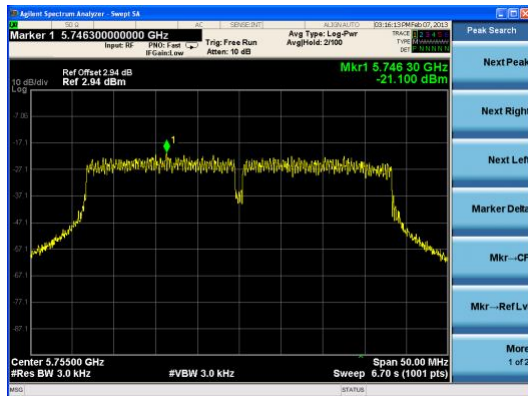
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Ant_A3 (5GHz) : 802.11a HT20



Ant_A3 (5GHz) : 802.11a HT40



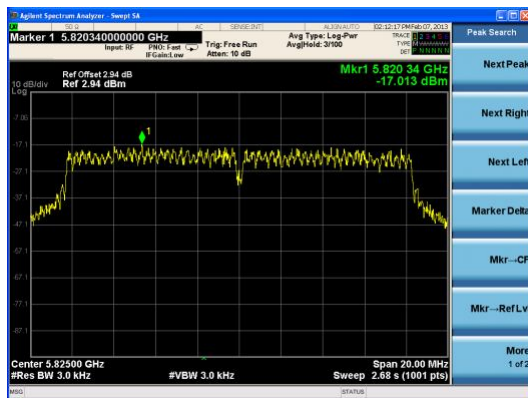
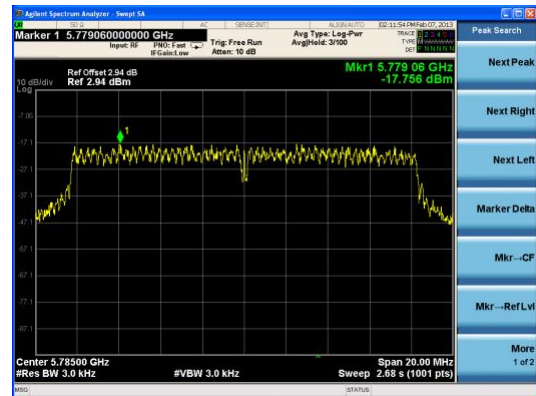
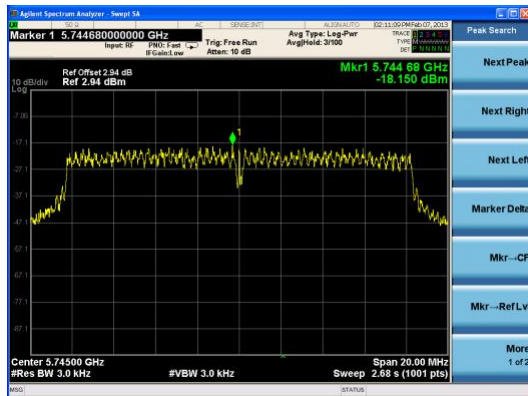
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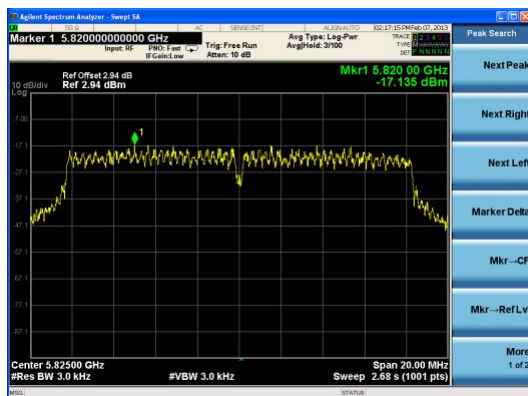
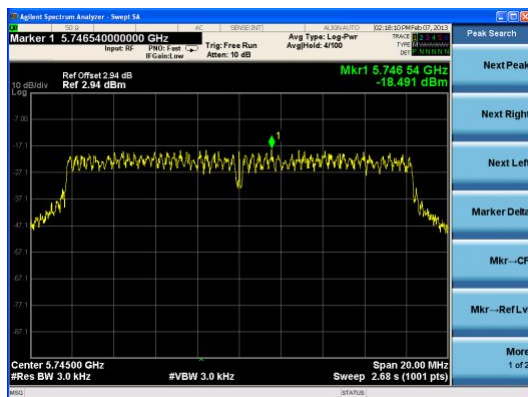
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Ant_M1 (5GHz) : 802.11a



Ant_M1 (5GHz) : 802.11a HT20



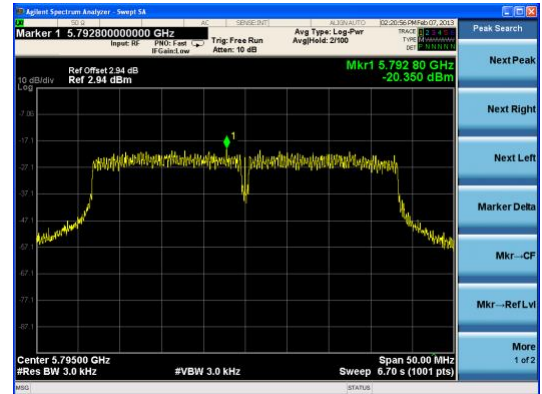
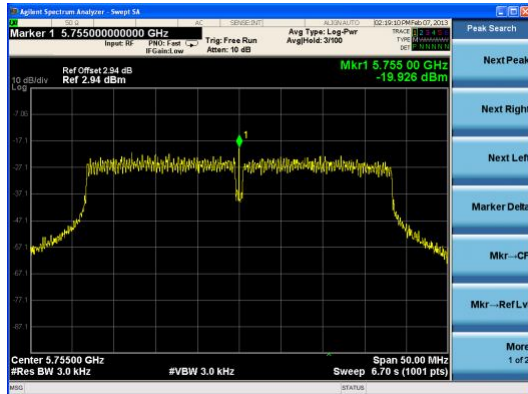
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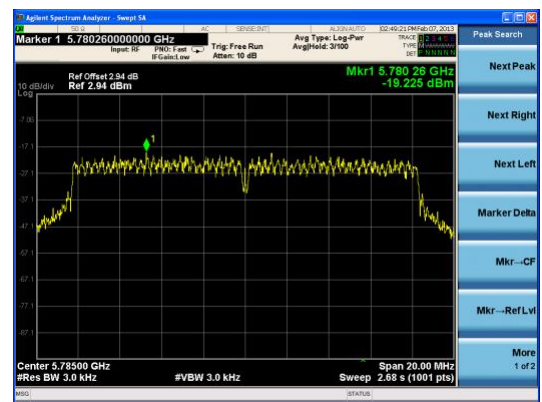
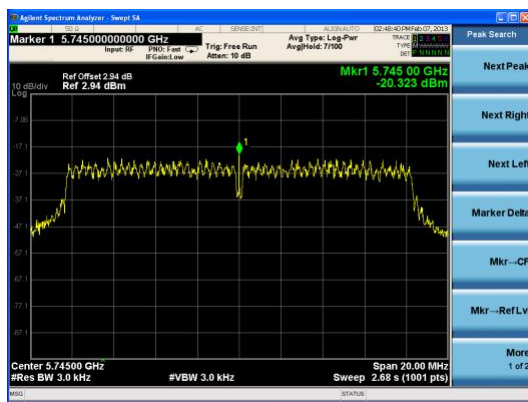
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Ant_M1 (5GHz) : 802.11a HT40



Ant_M2 (5GHz) : 802.11a



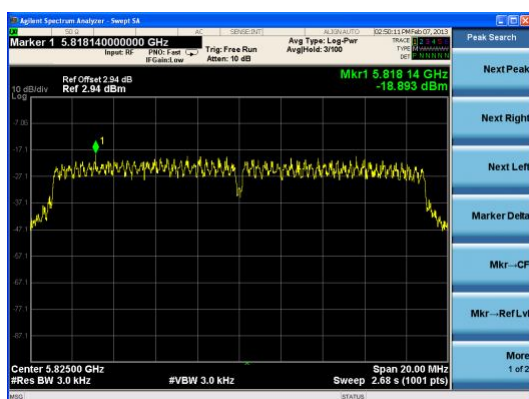
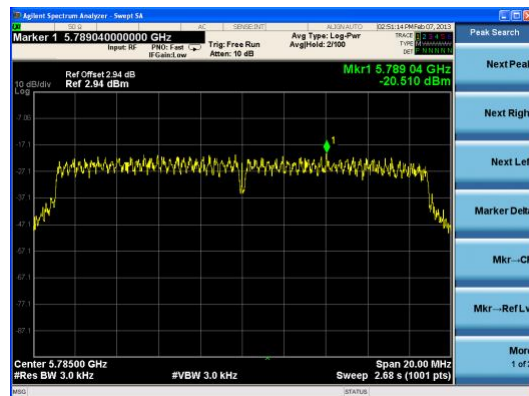
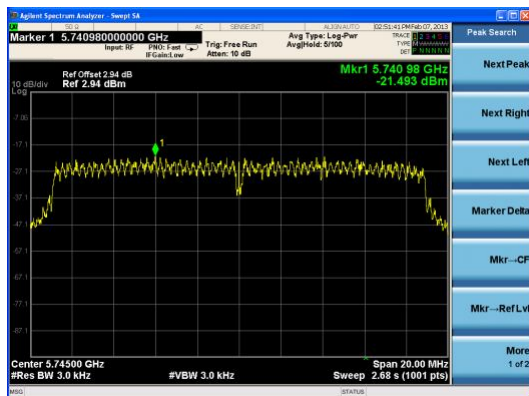
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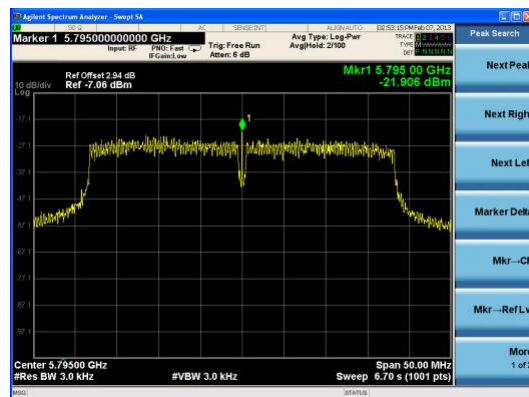
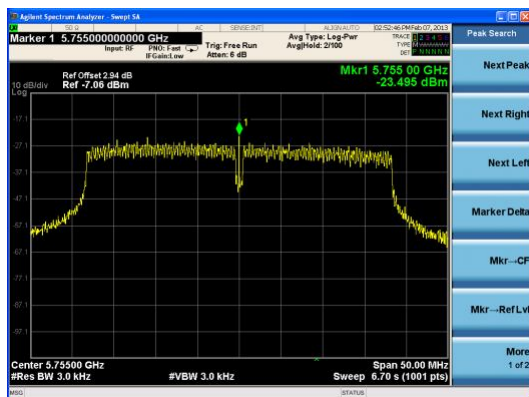
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Ant_M2 (5GHz) : 802.11a HT20



Ant_M2 (5GHz) : 802.11a HT40



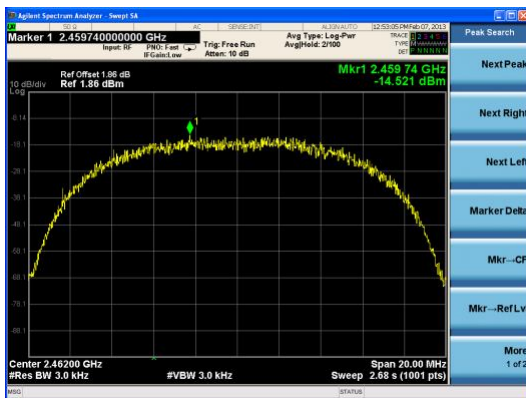
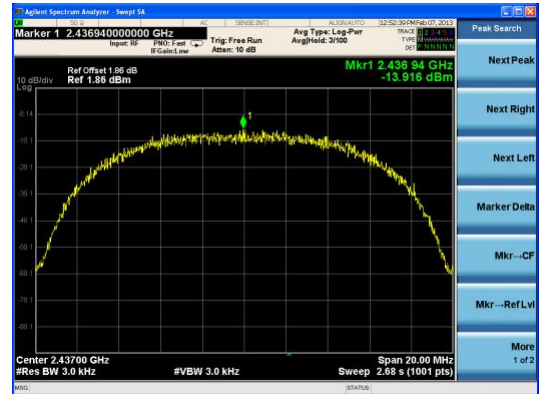
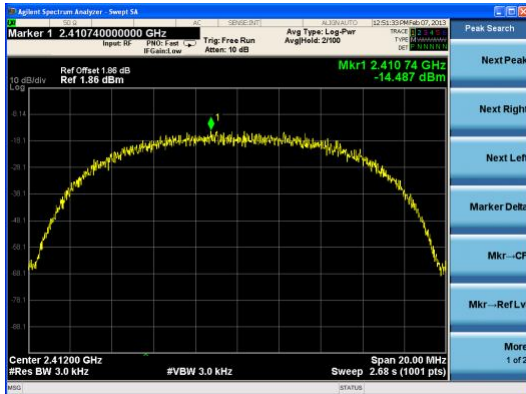
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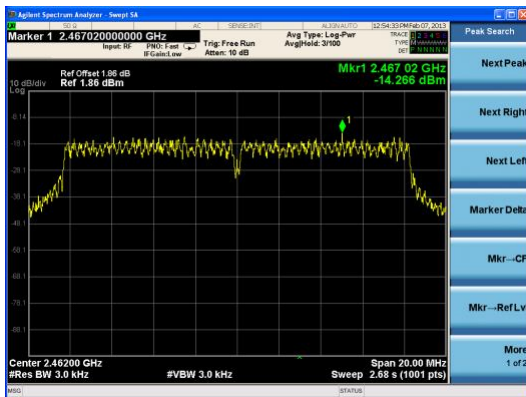
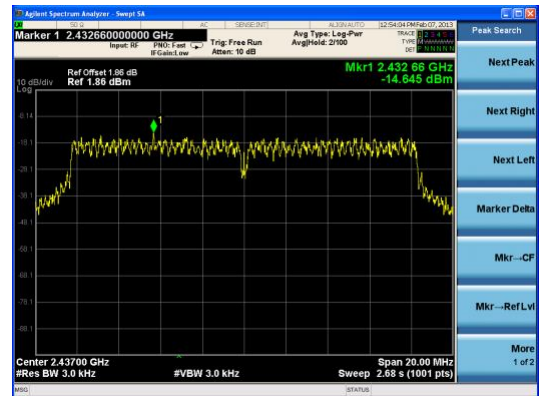
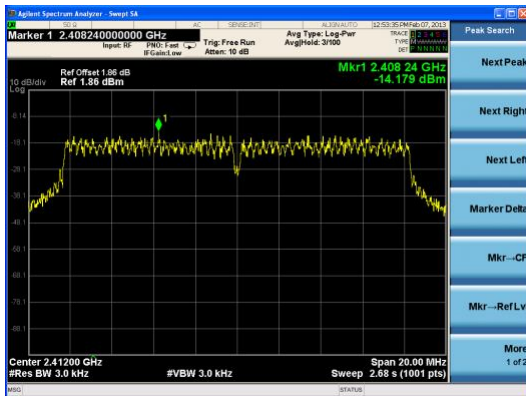
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Ant_A5 (2.4GHz) : 802.11g



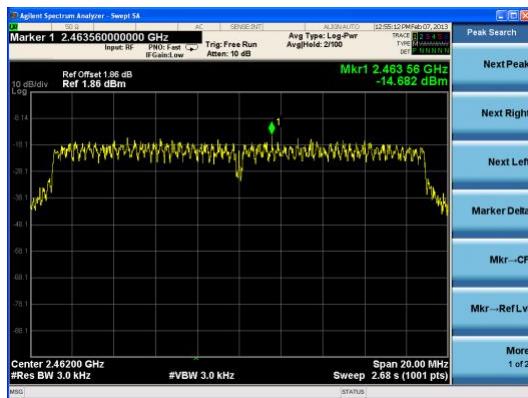
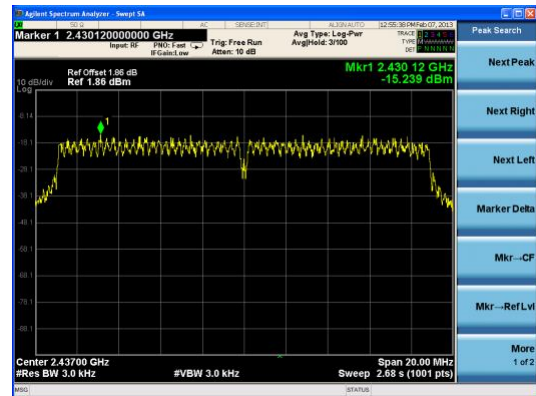
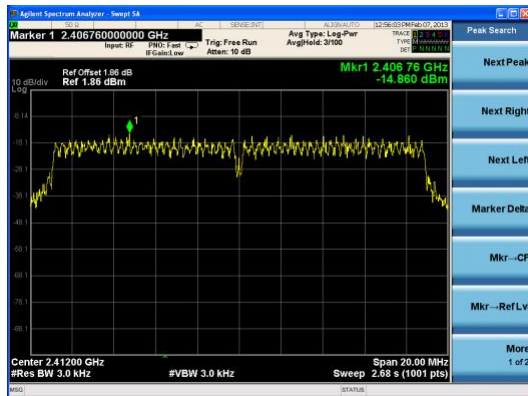
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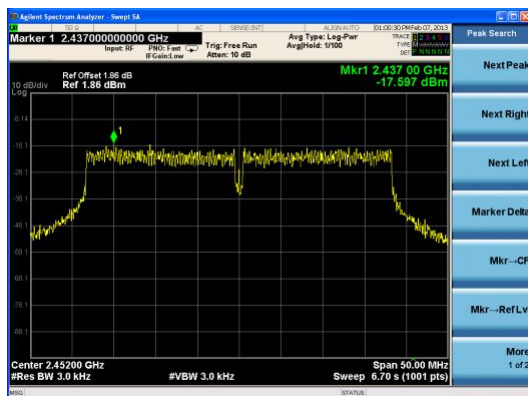
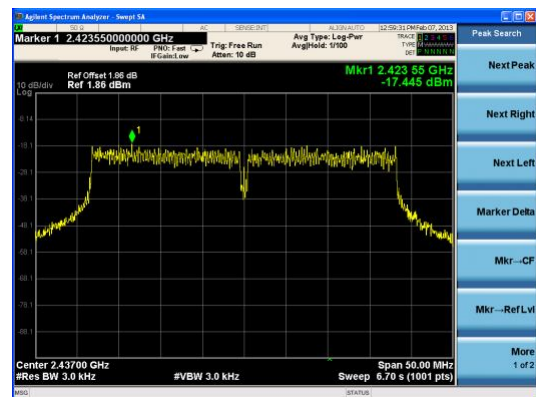
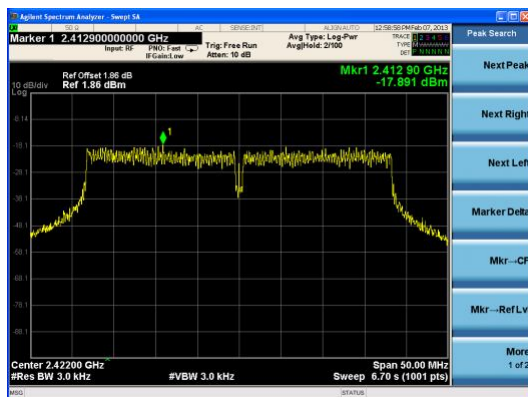
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Ant_A5 (2.4GHz) : 802.11n HT20



Ant_A5 (2.4GHz) : 802.11n HT40



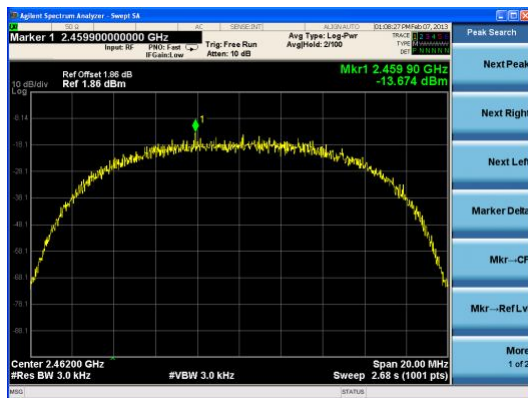
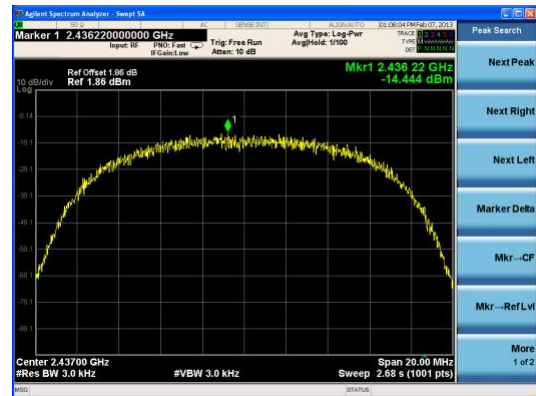
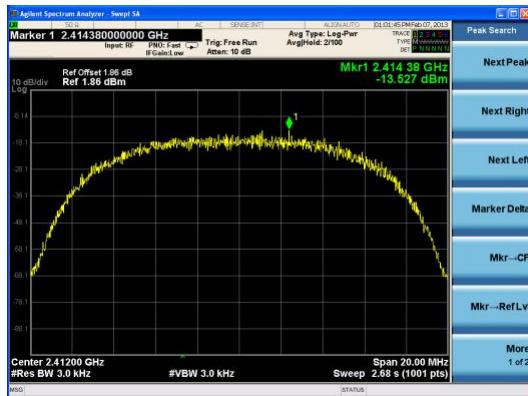
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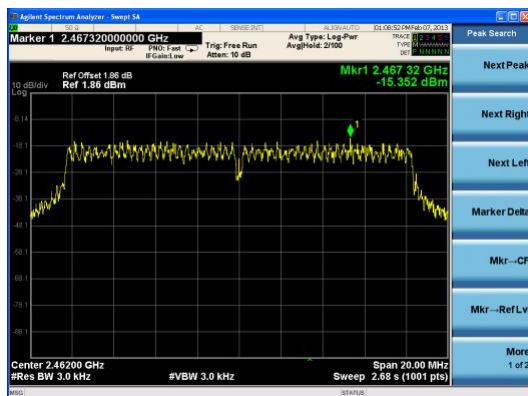
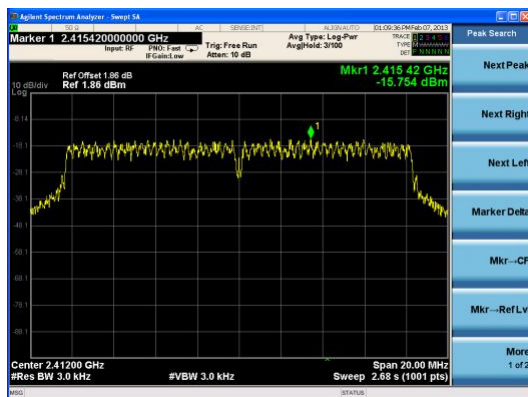
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Ant_A7 (2.4GHz) : 802.11b



Ant_A7 (2.4GHz) : 802.11g



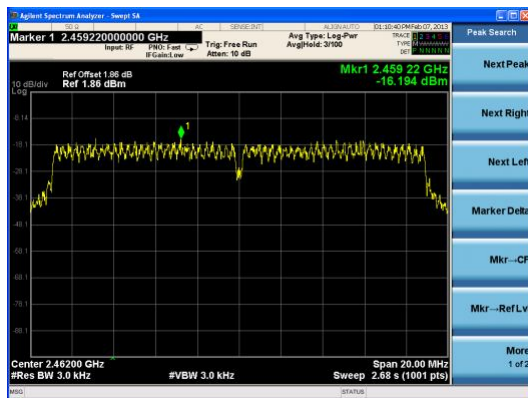
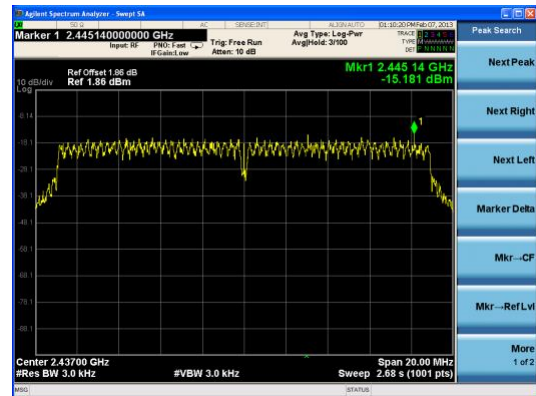
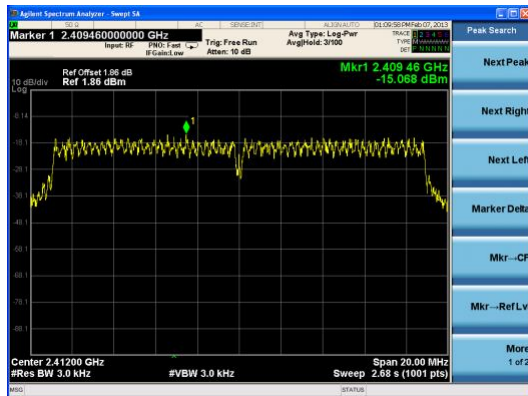
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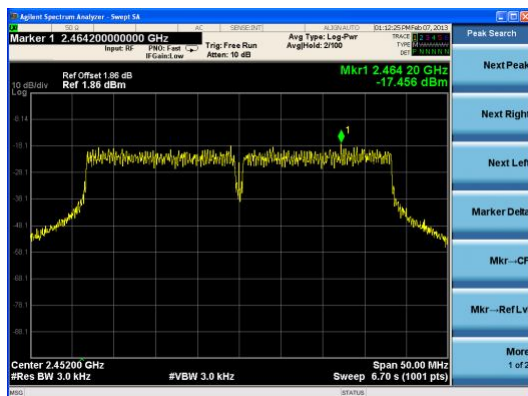
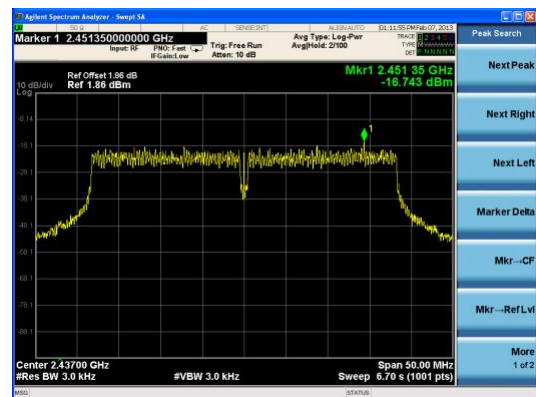
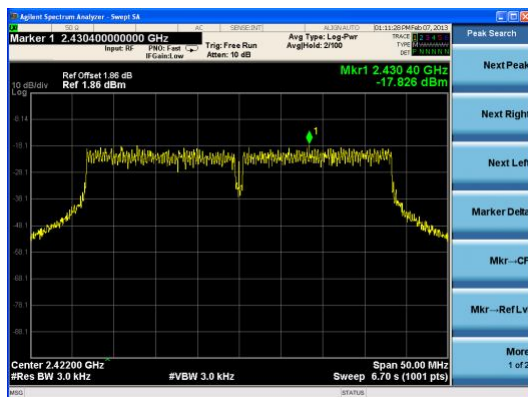
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Ant_A7 (2.4GHz) : 802.11n HT20



Ant_A7 (2.4GHz) : 802.11n HT40



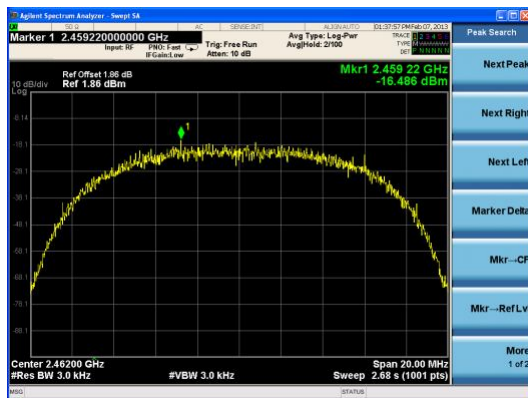
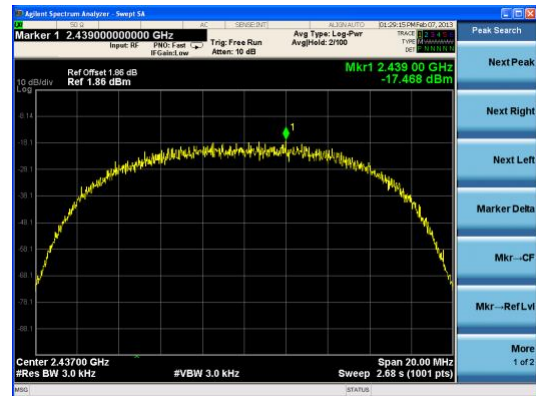
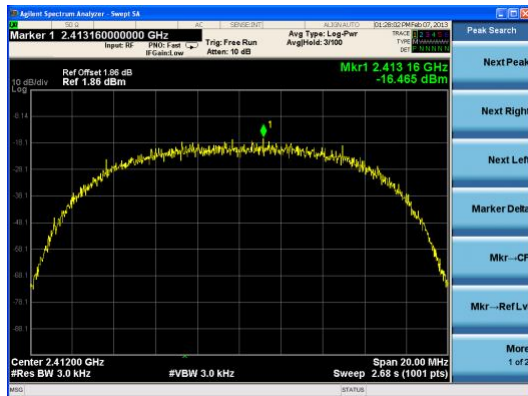
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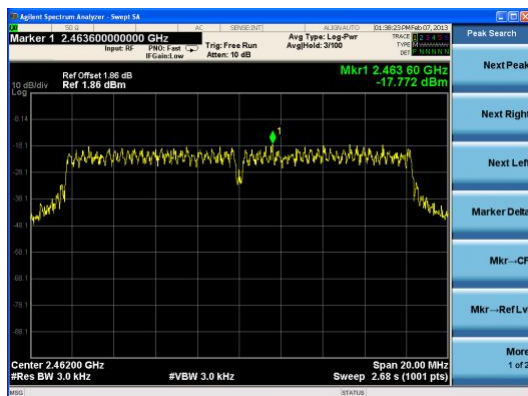
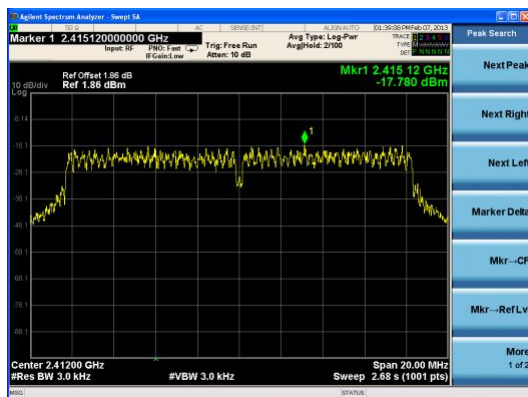
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Ant_M1 (2.4GHz) : 802.11b



Ant_M1 (2.4GHz) : 802.11g



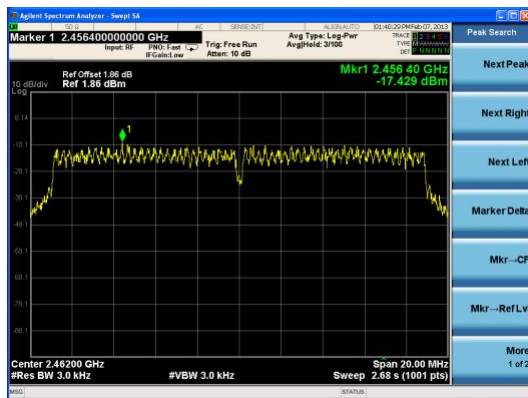
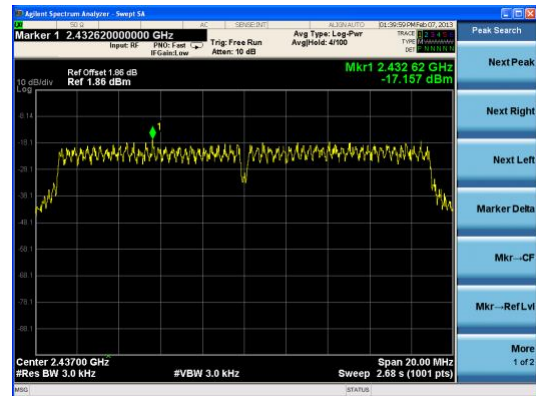
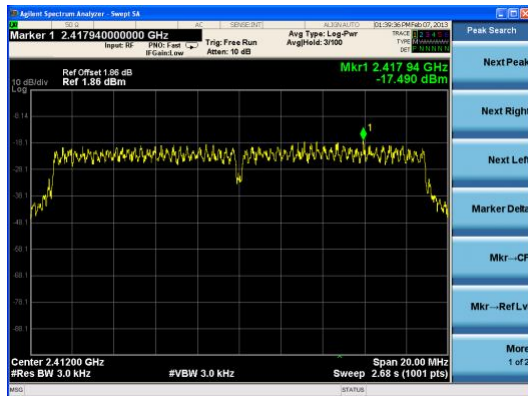
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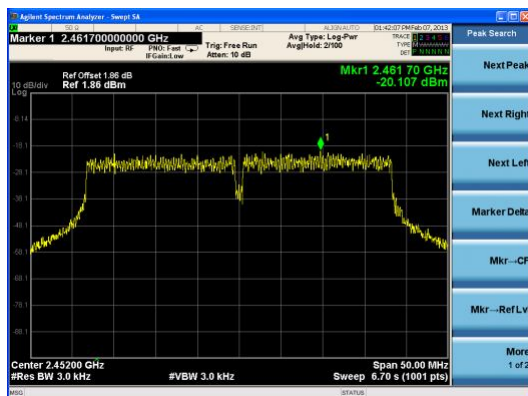
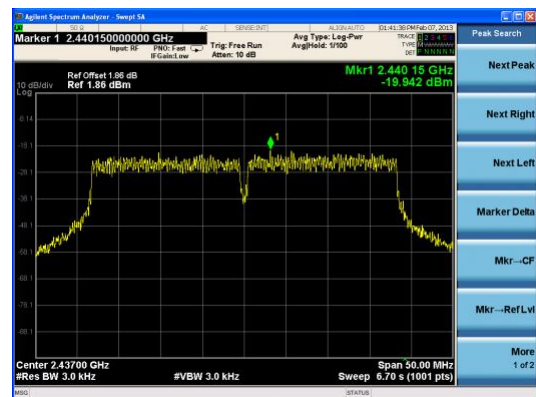
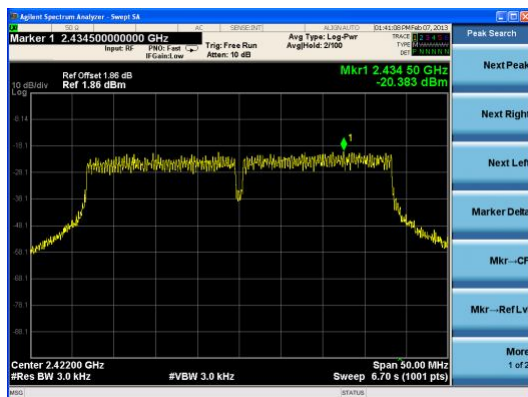
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Ant_M1 (2.4GHz) : 802.11n HT20



Ant_M1 (2.4GHz) : 802.11n HT40



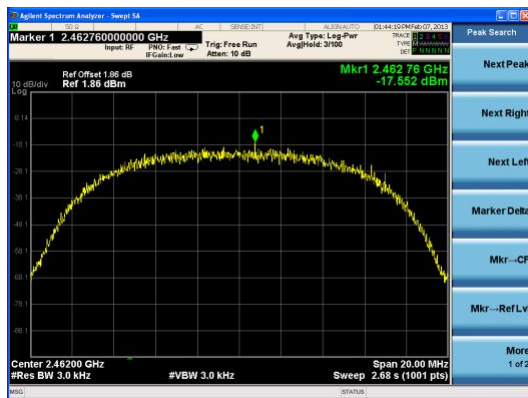
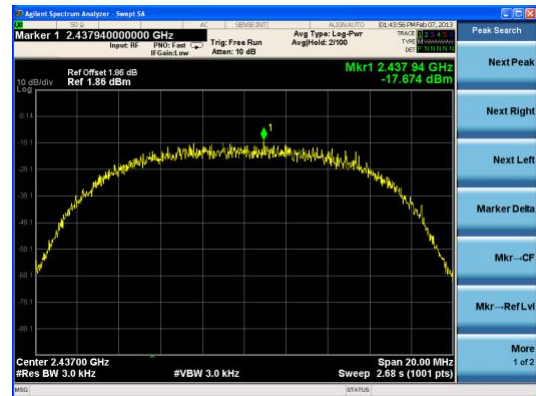
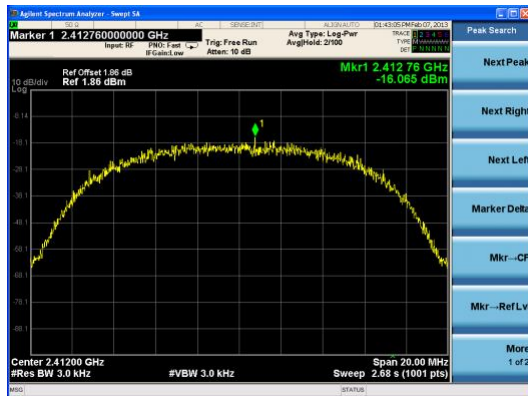
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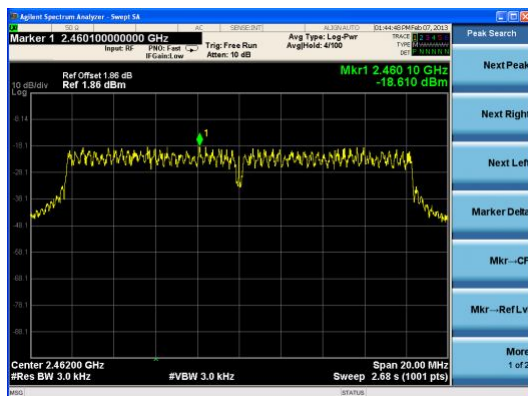
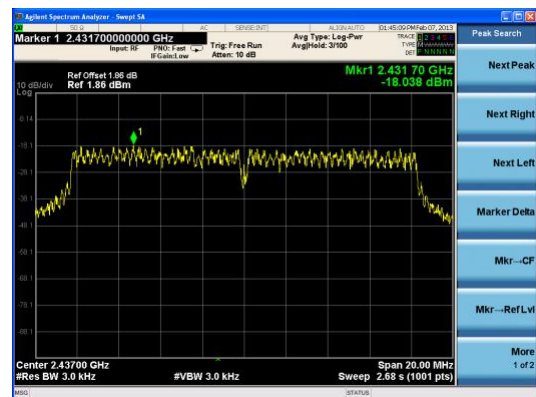
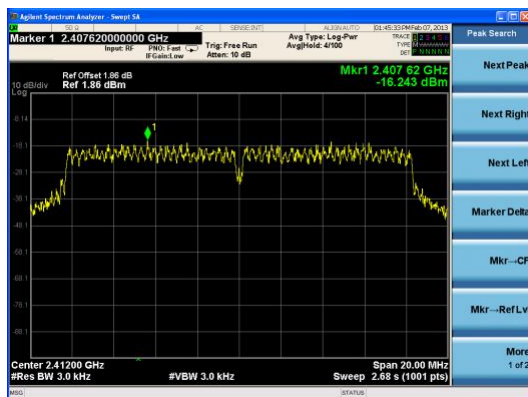
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Ant_M2 (2.4GHz) : 802.11b



Ant_M2 (2.4GHz) : 802.11g



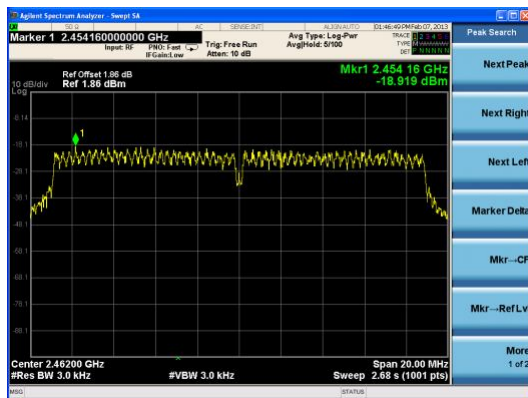
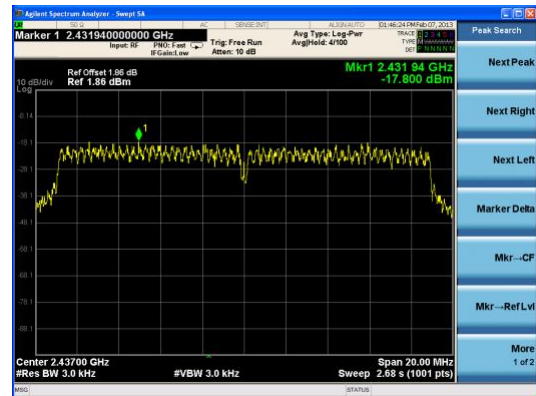
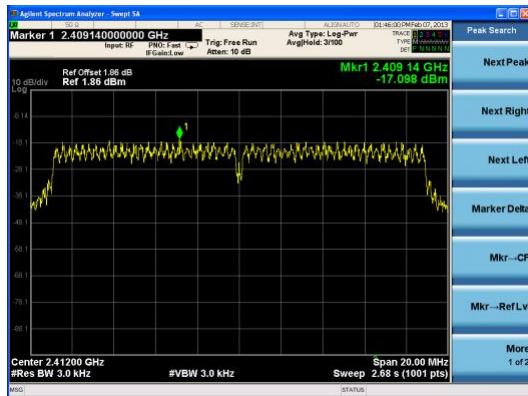
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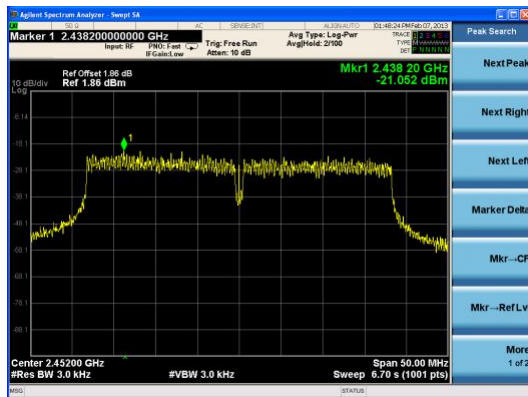
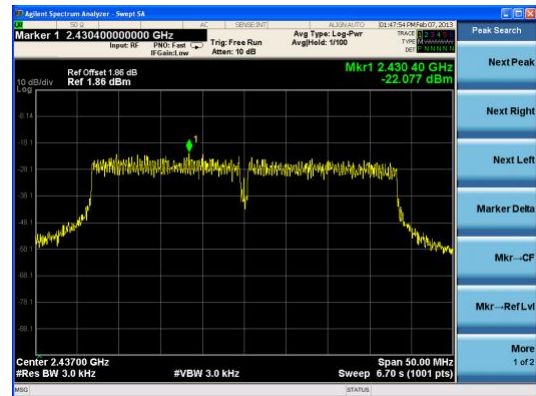
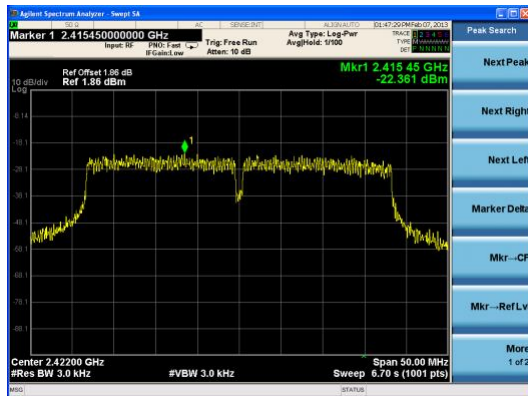
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Ant_M2 (2.4GHz) : 802.11n HT20



Ant_M2 (2.4GHz) : 802.11n HT40

2.1.4 Band - edge

Procedure:

The bandwidth at 20dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate frequencies.

After the trace being stable, Use the marker-to-peak function to measure 20 dB down both sides of the intentional emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz

VBW = 100 kHz

Span = 50 MHz

Detector function = peak

Trace = max hold

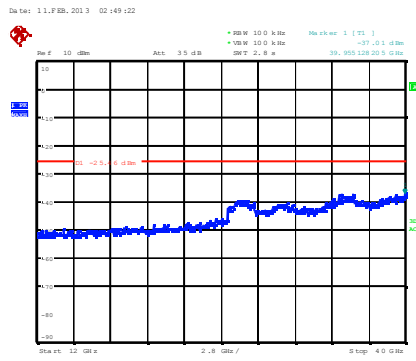
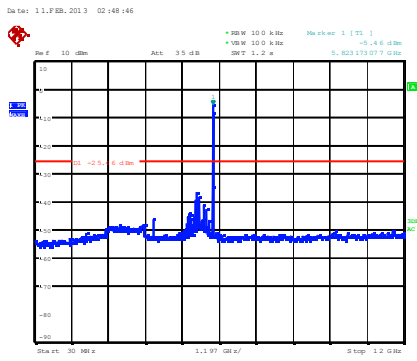
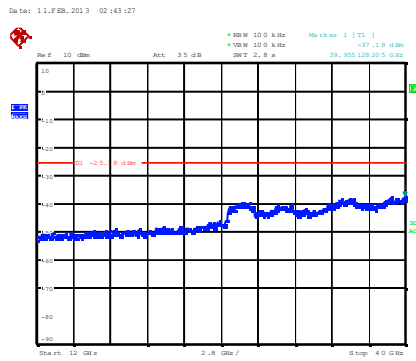
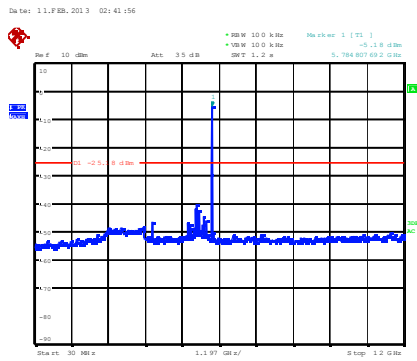
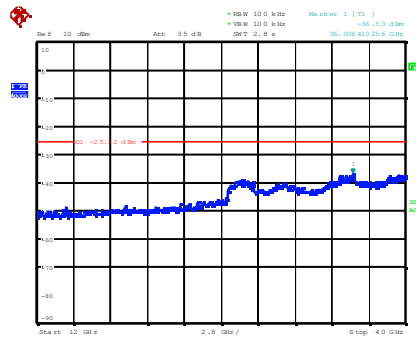
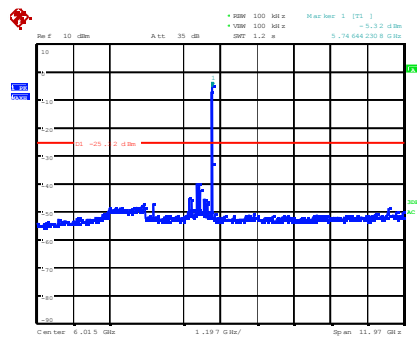
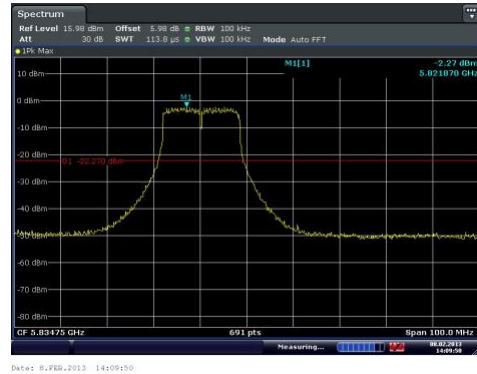
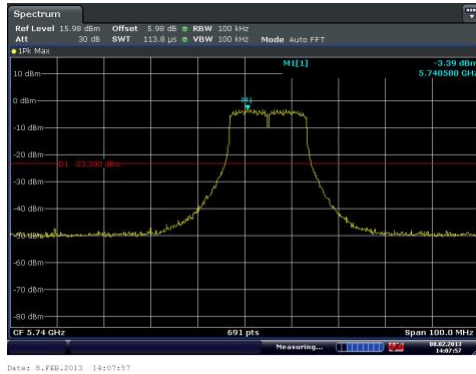
Sweep = auto

Measurement Data: Complies

- All conducted emission in any 100 kHz bandwidth outside of the spread spectrum band was at least 20dB lower than the highest inband spectral density. Therefore the applying equipment meets the requirement.

Minimum Standard:	> 20 dBc
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See next pages for actual measured spectrum plots.



Ant_A1 (5GHz) : 802.11a



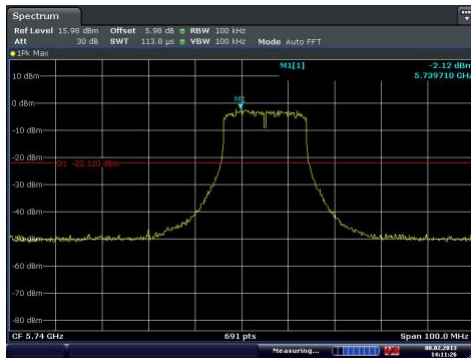
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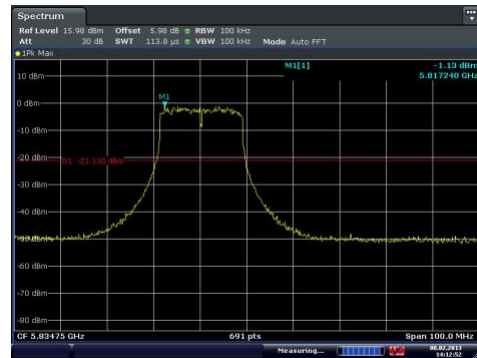
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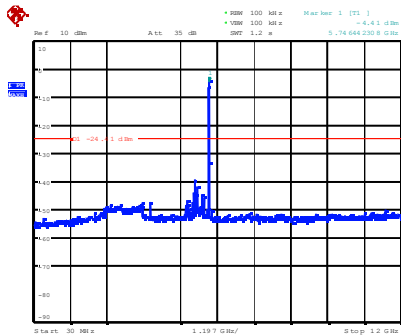
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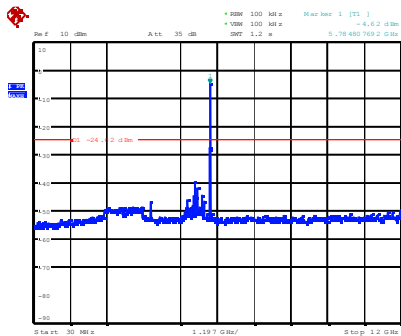
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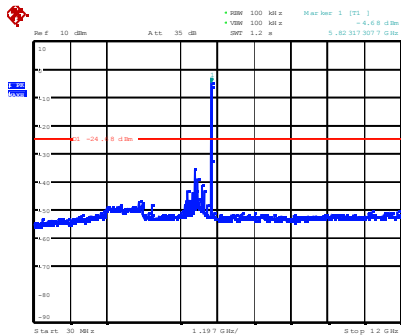
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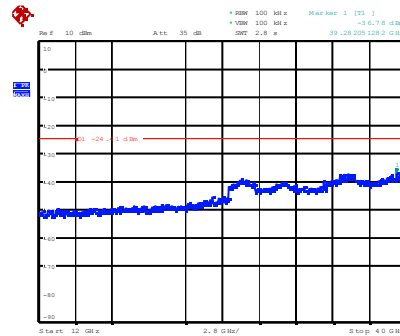
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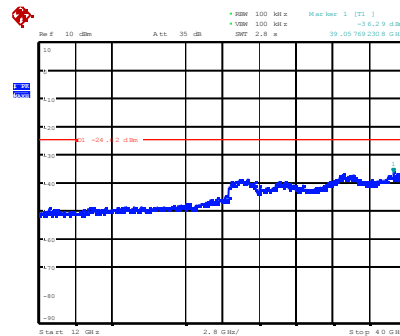
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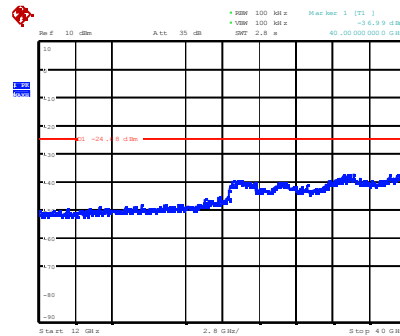
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Date: 11.FEB.2013 03:05:22

Ant_A1 (5GHz) : 802.11a HT20



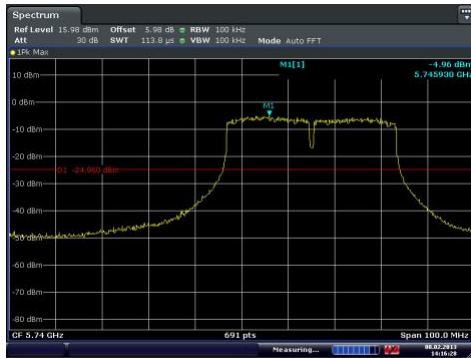
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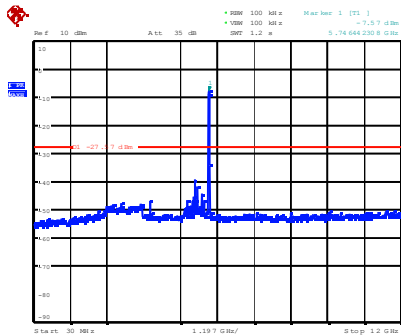
386-1, Ho-dong, Cheoin-gu, Yongin-si, Gyeonggi-do, 449-100, Korea

Tel: +82-31-339-9970 Fax: +82-31-339-9855

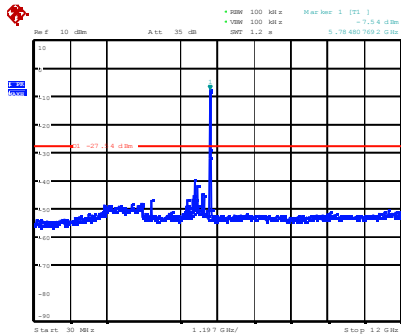
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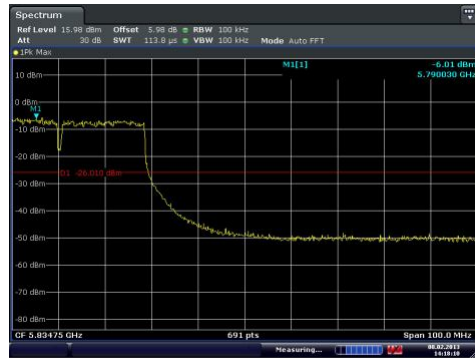
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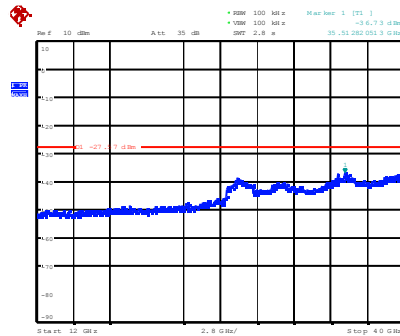
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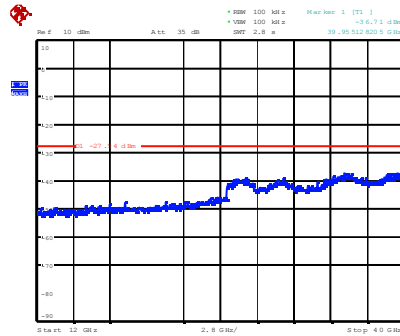
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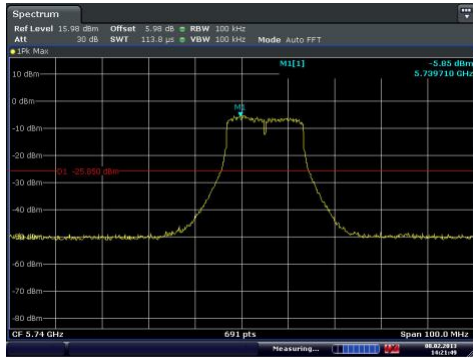


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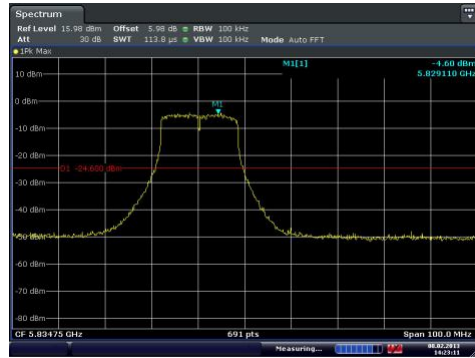


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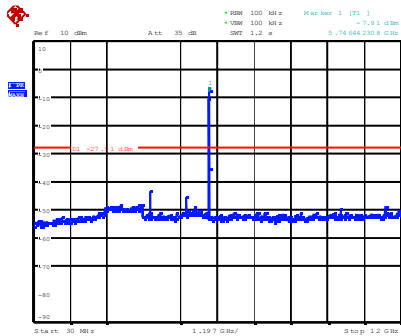
Ant_A1 (5GHz) : 802.11a HT40



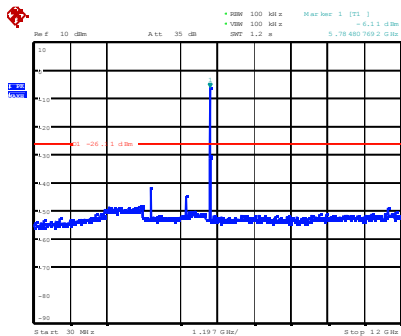
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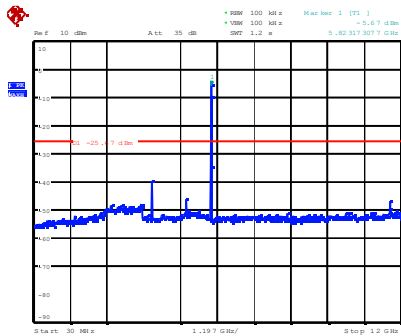
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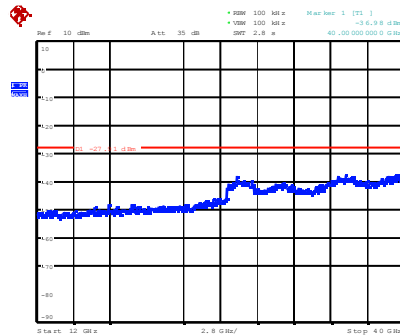
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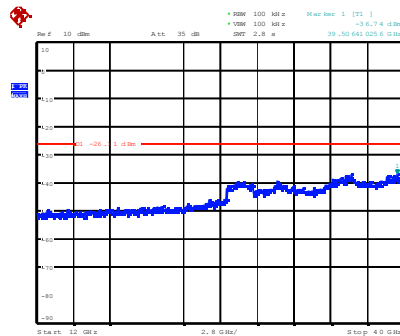
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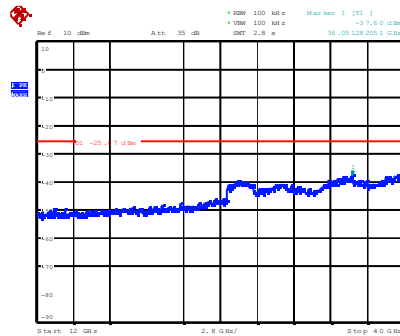
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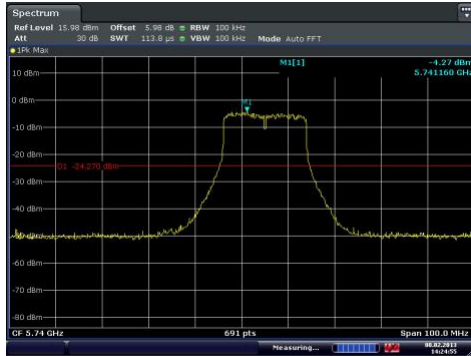


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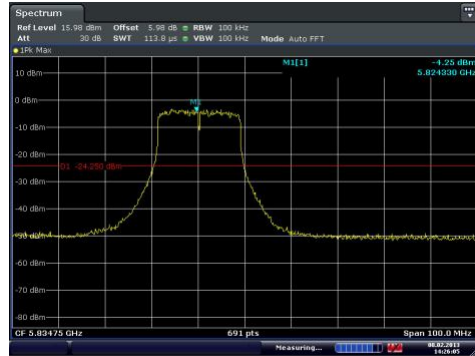


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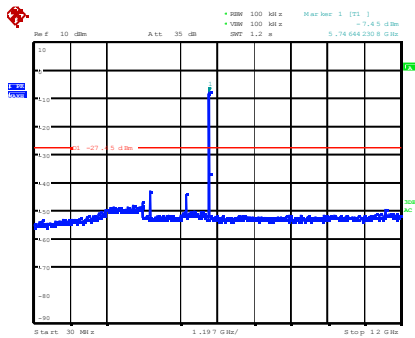
Ant_A3 (5GHz) : 802.11a



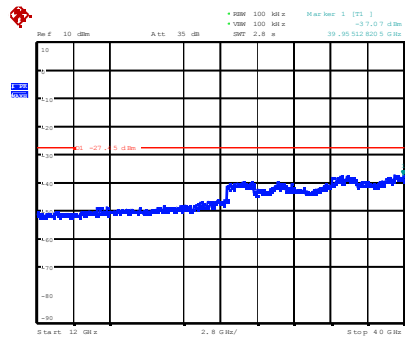
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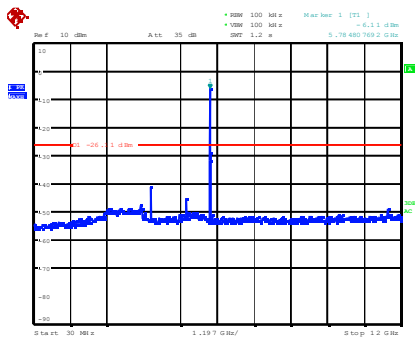
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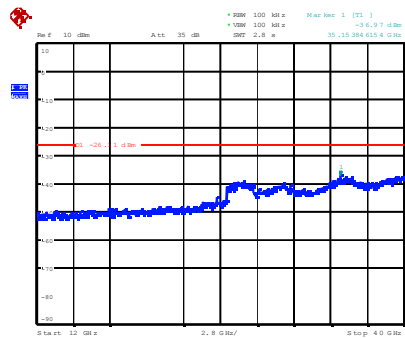
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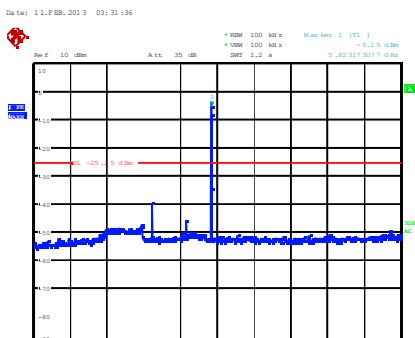
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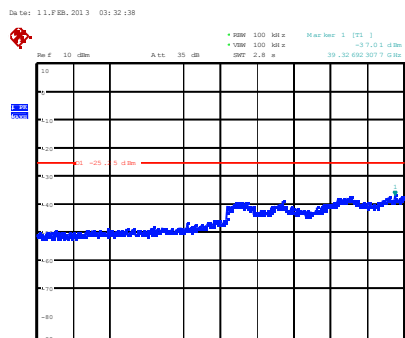
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Ant_A3 (5GHz) : 802.11a HT20



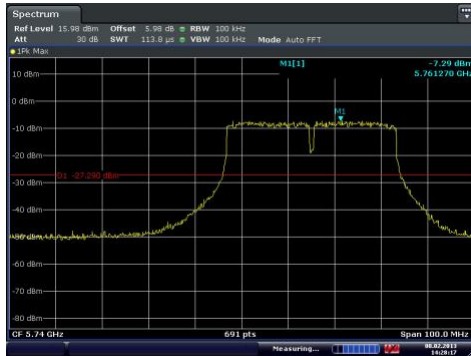
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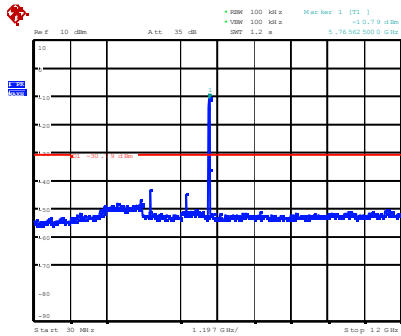
386-1, Ho-dong, Cheoin-gu, Yongin-si, Gyeonggi-do, 449-100, Korea

Tel: +82-31-339-9970 Fax: +82-31-339-9855

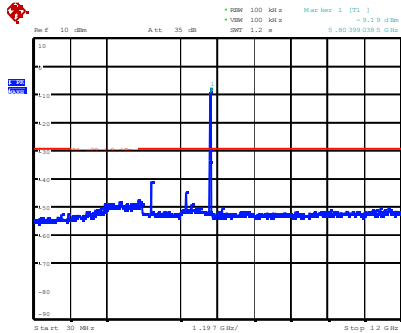
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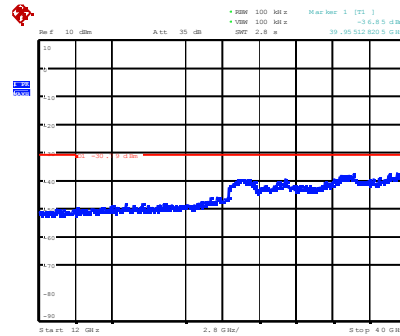
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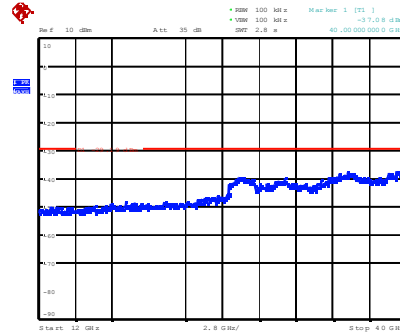
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Ant_A3 (5GHz) : 802.11a HT40



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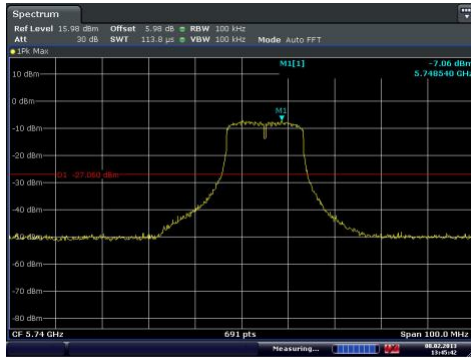
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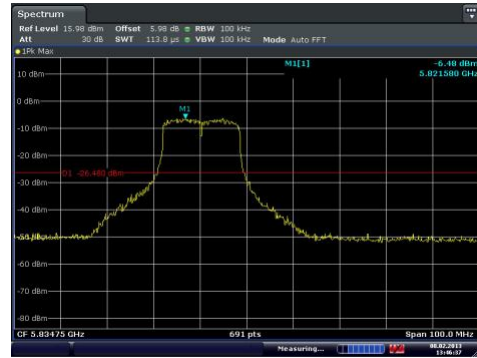
Tel: +82-31-339-9970

Fax: +82-31-339-9855

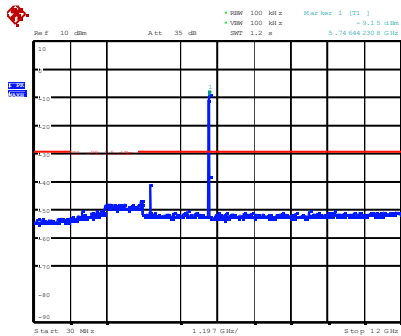
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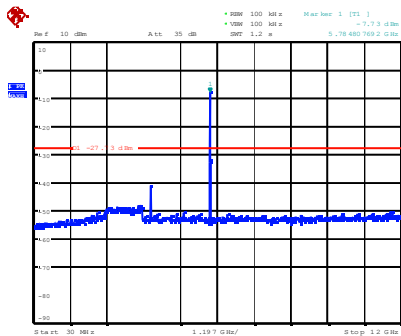
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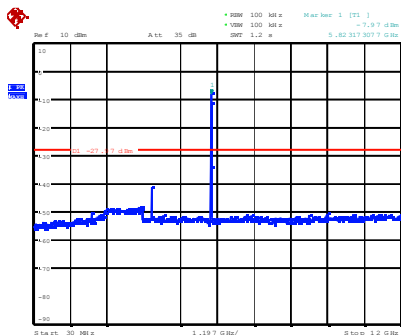
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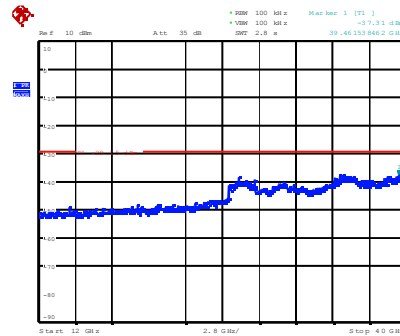
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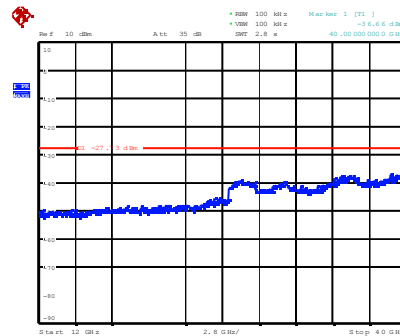
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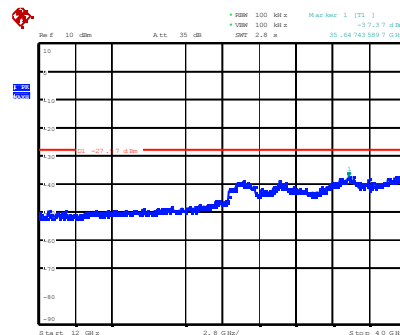
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Ant_M1 (5GHz) : 802.11a



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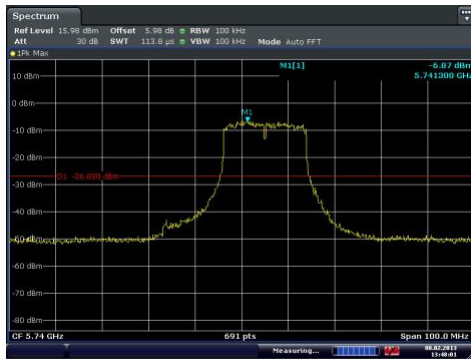
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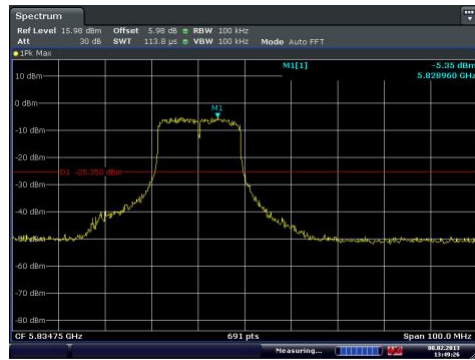
Tel: +82-31-339-9970

Fax: +82-31-339-9855

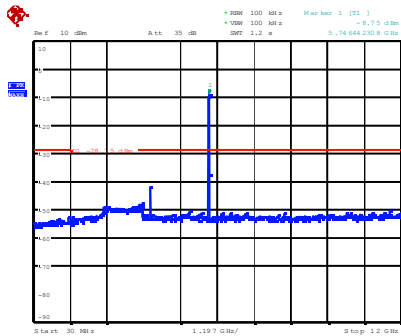
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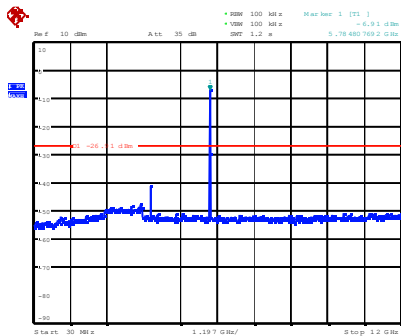
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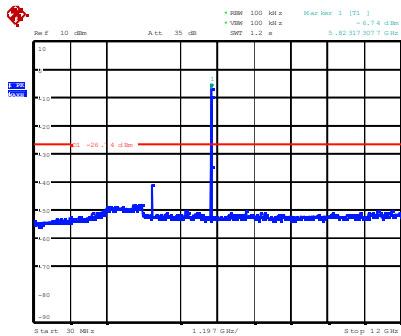
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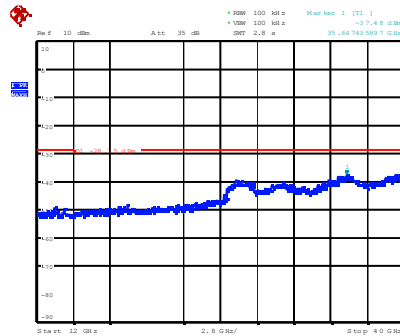
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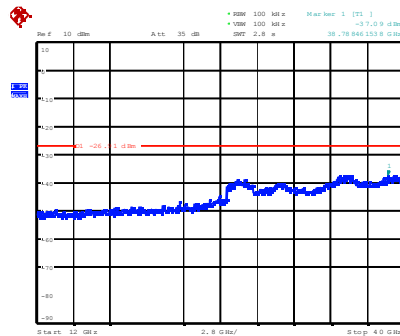
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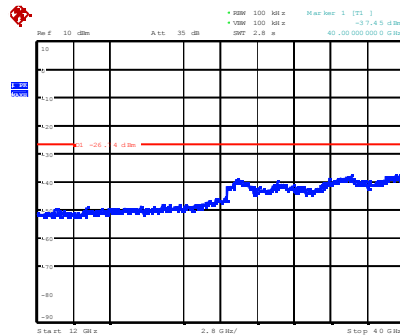
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Date: 11.FEB.2013 04:12:14



Date: 11.FEB.2013 04:15:19



Date: 11.FEB.2013 04:18:50

Ant_M1 (5GHz) : 802.11a HT20