

FCC RF Test Report

APPLICANT : Getac Technology Corporation
EQUIPMENT : Notebook PC
BRAND NAME : Getac
MODEL NAME : B300
FCC ID : QYL3X03
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : Digital Transmission System (DTS)

The product was integrated the WLAN Module (Brand Name: Intel / Model Name: 633ANHMW, FCC ID: PD9633ANH) during the test.

The product was received on Feb. 15, 2011 and completely tested on Feb. 25, 2011. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:



Roy Wu / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.



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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	A8.2(a)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
3.2	15.247(b)	A8.4	Power Output Measurement	$\leq 30\text{dBm}$	Pass	-
3.3	15.247(d)	A8.5	Frequency Band Edges	$\leq 20\text{dBc}$	Pass	-
3.4	15.247(d)	A8.5	Spurious Emission	$< 20 \text{ dBc}$	Pass	-
3.5	15.247(e)	A8.2(b)	Power Spectral Density	$\leq 8\text{dBm}$	Pass	-
3.6	15.207	Gen 7.2.2	AC Conducted Emission	15.207(a)	Pass	Under limit 3.6 dB at 23.99 MHz
3.7	15.247(d)	A8.5	Transmitter Radiated Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.58 dB at 2389.61 MHz
3.8	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Getac Technology Corporation

5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.

1.2 Manufacturer

GeTAC Technology(Kunshan) LTD.

No. 269, 2nd Road, Export Processing Zone, Changjiang South Road, Kunshan, Jiangsu, P.R.C.

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Notebook PC
Brand Name	Getac
Model Name	B300
FCC ID	QYL3X03
Tx/Rx Frequency Range	802.11b/g/n : 2400 MHz ~ 2483.5 MHz 802.11a/n : 5725 MHz ~ 5850 MHz
Channel Spacing	802.11b/g : 5 MHz 802.11a : 20 MHz
Maximum Output Power to Antenna	<p><2400 MHz ~ 2483.5 MHz> 802.11b (Chain A) : 21.72 dBm (0.15 W) 802.11g (Chain B) : 25.84 dBm (0.38 W) 802.11n (BW 20MHz) (Chain B) : 25.82 dBm (0.38 W) 802.11n (BW 20MHz) (Chain A+B): 27.74 dBm (0.60 W) 802.11n (BW 20MHz) (Chain A+B+C) : 25.19 dBm (0.33 W) 802.11n (BW 40MHz) (Chain A) : 25.80 dBm (0.38 W) 802.11n (BW 40MHz) (Chain A+B) : 28.06 dBm (0.64 W) 802.11n (BW 40MHz) (Chain A+B+C) : 25.50 dBm (0.36 W)</p> <p><5725 MHz ~ 5850 MHz> 802.11a (Chain C) : 21.30 dBm (0.13 W) 802.11n (BW 20MHz) (Chain C) : 21.47 dBm (0.14 W) 802.11n (BW 40MHz) (Chain C) : 21.40 dBm (0.14 W)</p>
Antenna Type	802.11b/g/n : PIFA Antenna with gain 2.75 dBi 802.11a/n : PIFA Antenna with gain -0.30 dBi
HW Version	R0A
SW Version	R0.05.070520
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
EUT Stage	Identical Prototype

Remark:

1. For other wireless features of this EUT, test report will be issued separately.
2. This test report recorded only product characteristics and test results of Digital Transmission System (DTS).
3. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-3273456 / FAX: +886-3-3284978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	CO05-HY	03CH07HY	722060/4086B-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 (Measurement Guidelines of DTS)
- ♦ ANSI C63.4-2003
- ♦ IC RSS-210 Issue 8

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B (DoC), recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Vostro 1510	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	LCD Monitor	Acer	H223HQ	FCC DoC	N/A	Unshielded, 1.8 m
5.	LCD Monitor	Lenovo	6135-AB1	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
6.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
7.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
8.	(RS-232) Mouse	State	MS-303	FCC DoC	Shielded, 1.3 m	N/A
9.	Modem	ACCEX	DM1414	IFAXDM1414	Shielded, 1.5 m	N/A
10.	Exchange	Sun Moon Star	SMS-4 PLUS	95180108	Shielded, 1.6 m	N/A
11.	Earphone	Ergotech	ET-E200	FCC DoC	Unshielded, 1.8 m	N/A
12.	Earphone	Kolin	Kit-7460E	FCC DoC	Unshielded, 1.6 m	N/A

2 Test Configuration of Equipment Under Test

2.1 RF Power

Preliminary tests were performed in different data rate and recorded the RF power output in the following table:

Channel	Frequency	802.11b RF Power (dBm)		
		Data Rate: 1Mbps		
		Chain A	Chain B	Chain C
CH 01	2412 MHz	21.72	21.32	16.43
CH 06	2437 MHz	21.29	21.38	16.47
CH 11	2462 MHz	20.77	21.13	16.49

Channel	Frequency	802.11g RF Power (dBm)		
		Data Rate: 6Mbps		
		Chain A	Chain B	Chain C
CH 01	2412 MHz	25.40	24.65	20.89
CH 06	2437 MHz	25.81	25.84	21.30
CH 11	2462 MHz	25.17	25.35	21.25

Channel	Frequency	802.11n (BW 20MHz) RF Power (dBm)						
		Data Rate: HT0						
		Chain A	Chain B	Chain C	Chain A+B	Chain A+C	Chain B+C	Chain A+B+C
CH 01	2412 MHz	25.55	25.21	21.15	27.35	25.71	25.48	24.89
CH 06	2437 MHz	25.53	25.82	21.74	27.74	26.07	25.76	24.89
CH 11	2462 MHz	25.75	25.25	21.26	27.57	25.60	26.16	25.19



Channel	Frequency	802.11n (BW 20MHz) RF Power (dBm)						
		Data Rate: HT0						
		Chain A	Chain B	Chain C	Chain A+B	Chain A+C	Chain B+C	Chain A+B+C
CH 03	2422 MHz	24.07	22.67	18.48	25.60	23.92	23.41	25.50
CH 06	2437 MHz	25.80	25.46	20.96	28.06	26.21	26.25	24.84
CH 09	2452 MHz	23.42	23.16	18.88	25.28	23.65	23.46	25.32

Channel	Frequency	802.11a RF Power (dBm)
		Data Rate: 6Mbps
		Chain C
CH149	5745 MHz	21.10
CH157	5785 MHz	21.13
CH165	5825 MHz	21.30

Channel	Frequency	802.11n (BW 20MHz) RF Power (dBm)
		Data Rate: HT20
		Chain C
CH149	5745 MHz	21.47
CH157	5785 MHz	21.26
CH165	5825 MHz	21.35

Channel	Frequency	802.11n (BW 40MHz) RF Power (dBm)
		Data Rate: HT20
		Chain C
CH 151	5755 MHz	21.40
CH 159	5795 MHz	21.09

Remark: The EUT is programmed to transmit signals continuously for all testing.



2.2 Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz), radiated emission (30 MHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Pre-scanned tests were conducted to determine the final configuration from all possible combinations.

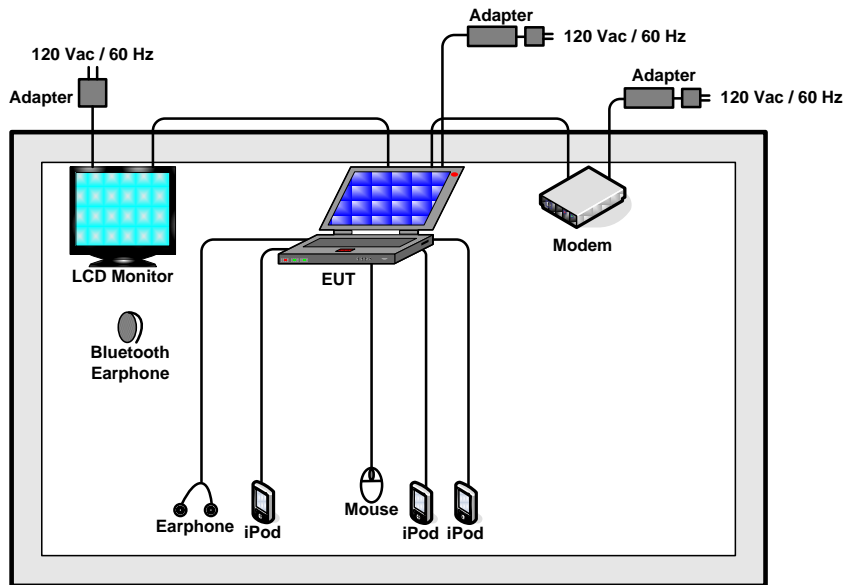
The following table is showing the total pre-scanned test modes, and the worst modes are recorded in this report only.

Test Cases		
Test Item	802.11b (Modulation : DSSS) 802.11g/n (Modulation : OFDM)	802.11a/n (Modulation : OFDM)
Conducted TCs	Mode 1: 802.11b_CH01_2412 MHz Mode 2: 802.11b_CH06_2437 MHz Mode 3: 802.11b_CH11_2462 MHz Mode 4: 802.11g_CH01_2412 MHz Mode 5: 802.11g_CH06_2437 MHz Mode 6: 802.11g_CH11_2462 MHz Mode 7: 802.11n_CH01_2412 MHz (BW 20M) Mode 8: 802.11n_CH06_2437 MHz (BW 20M) Mode 9: 802.11n_CH11_2462 MHz (BW 20M) Mode 10: 802.11n_CH03_2422 MHz (BW 40M) Mode 11: 802.11n_CH06_2437 MHz (BW 40M) Mode 12: 802.11n_CH09_2452 MHz (BW 40M)	Mode 13: 802.11a_CH149_5745 MHz Mode 14: 802.11a_CH157_5785 MHz Mode 15: 802.11a_CH165_5825 MHz Mode 16: 802.11n_CH149_5745 MHz (BW 20M) Mode 17: 802.11n_CH157_5785 MHz (BW 20M) Mode 18: 802.11n_CH165_5825 MHz (BW 20M) Mode 19: 802.11n_CH151_5755 MHz (BW 40M) Mode 20: 802.11n_CH159_5795 MHz (BW 40M)
Radiated TCs	Mode 1: 802.11b_CH01_2412 MHz Mode 2: 802.11b_CH06_2437 MHz Mode 3: 802.11b_CH11_2462 MHz Mode 4: 802.11g_CH01_2412 MHz Mode 5: 802.11g_CH06_2437 MHz Mode 6: 802.11g_CH11_2462 MHz Mode 7: 802.11n_CH01_2412 MHz (BW 20M) Mode 8: 802.11n_CH06_2437 MHz (BW 20M) Mode 9: 802.11n_CH11_2462 MHz (BW 20M) Mode 10: 802.11n_CH03_2422 MHz (BW 40M) Mode 11: 802.11n_CH06_2437 MHz (BW 40M) Mode 12: 802.11n_CH09_2452 MHz (BW 40M)	Mode 13: 802.11a_CH149_5745 MHz Mode 14: 802.11a_CH157_5785 MHz Mode 15: 802.11a_CH165_5825 MHz Mode 16: 802.11n_CH149_5745 MHz (BW 20M) Mode 17: 802.11n_CH157_5785 MHz (BW 20M) Mode 18: 802.11n_CH165_5825 MHz (BW 20M) Mode 19: 802.11n_CH151_5755 MHz (BW 40M) Mode 20: 802.11n_CH159_5795 MHz (BW 40M)

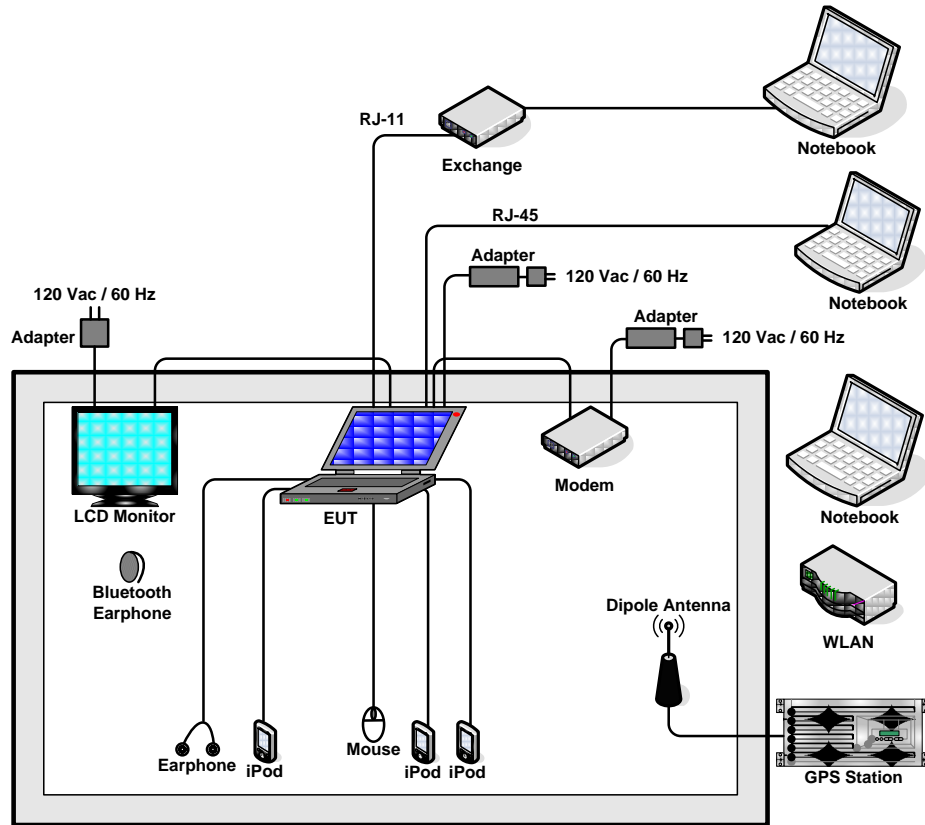
Test Cases	
AC	
Conducted Emission	Mode 1 : WLAN Link + Bluetooth Link + Adapter + TC
Remark: <ol style="list-style-type: none"> TC stands for Test Configuration, and consists of iPod, monitor, modem, earphone, mouse, exchange, GPS Rx, RJ-11, and RJ-45. Mode 4~9 and 16~20 of radiation test only performed Band Edges. 	

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 RF Utility

The programmed RF utility "CRTU", is installed in EUT to provide channel selection, power level, data rate and the application type. RF utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

3 Test Result

3.1 6dB Bandwidth Measurement

3.1.1 Limit of 6dB Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

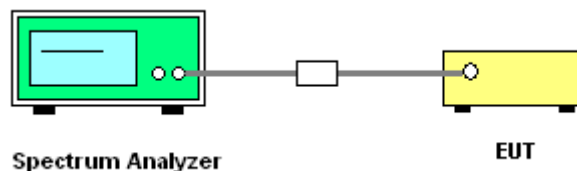
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW. The 6 dB bandwidth must be greater than 500 kHz.
4. The marker-delta reading at this point is the 6 dB bandwidth of the emission.

3.1.4 Test Setup





3.1.5 Test Result of 6dB Bandwidth

Test Mode :	Mode 1, 2, 3	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11b 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A		
01	2412	12.04	0.5	Pass
06	2437	12.04	0.5	Pass
11	2462	12.04	0.5	Pass

Test Mode :	Mode 4, 5, 6	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11g 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain B		
01	2412	15.08	0.5	Pass
06	2437	15.08	0.5	Pass
11	2462	15.08	0.5	Pass



Test Mode :	Mode 7, 8, 9	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 20MHz) 6dB Bandwidth (MHz)			6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain B	Chain A+B(A)	Chain A+B(B)		
01	2412	15.10	15.12	15.04	0.5	Pass
06	2437	15.08	15.12	15.08	0.5	Pass
11	2462	15.08	15.12	15.04	0.5	Pass

Channel	Frequency (MHz)	802.11n (BW 20MHz) 6dB Bandwidth (MHz)			6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B+C(A)	Chain A+B+C(B)	Chain A+B+C(C)		
01	2412	15.68	15.04	15.68	0.5	Pass
06	2437	15.68	15.08	15.68	0.5	Pass
11	2462	15.68	15.04	15.72	0.5	Pass

Test Mode :	Mode 10, 11 12	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 40MHz) 6dB Bandwidth (MHz)			6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A	Chain A+B(A)	Chain A+B(B)		
03	2422	32.56	32.56	32.56	0.5	Pass
06	2437	32.56	32.64	32.56	0.5	Pass
09	2452	32.56	32.60	32.60	0.5	Pass

Channel	Frequency (MHz)	802.11n (BW 40MHz) 6dB Bandwidth (MHz)			6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B+C(A)	Chain A+B+C(B)	Chain A+B+C(C)		
03	2422	25.72	32.56	32.56	0.5	Pass
06	2437	25.76	32.56	32.56	0.5	Pass
09	2452	25.76	32.56	32.56	0.5	Pass



Test Mode :	Mode 13, 14, 15	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11a 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain C		
149	5745	15.10	0.5	Pass
157	5785	16.25	0.5	Pass
165	5825	16.30	0.5	Pass

Test Mode :	Mode 16, 17, 18	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 20MHz) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain C		
149	5745	16.80	0.5	Pass
157	5785	16.75	0.5	Pass
165	5825	17.25	0.5	Pass

Test Mode :	Mode 19, 20	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

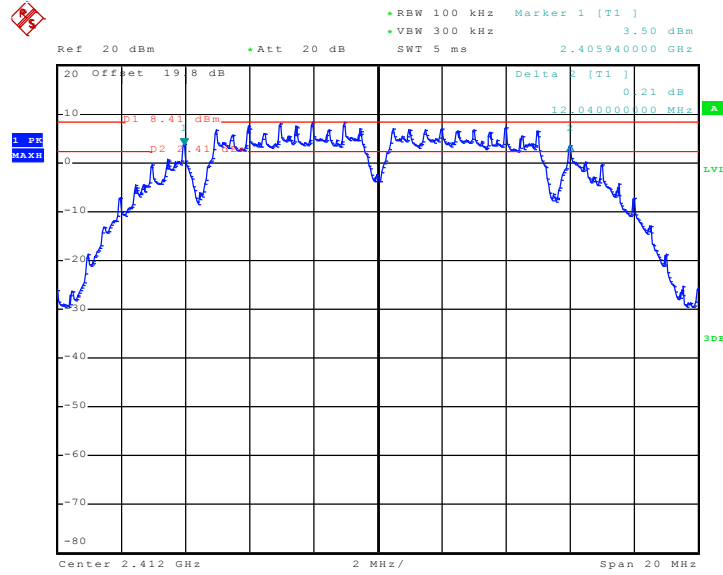
Channel	Frequency (MHz)	802.11n (BW 40MHz) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain C		
151	5755	32.58	0.5	Pass
159	5795	32.58	0.5	Pass



3.1.6 Test Result of 6dB Bandwidth Plots

Mode 1 :

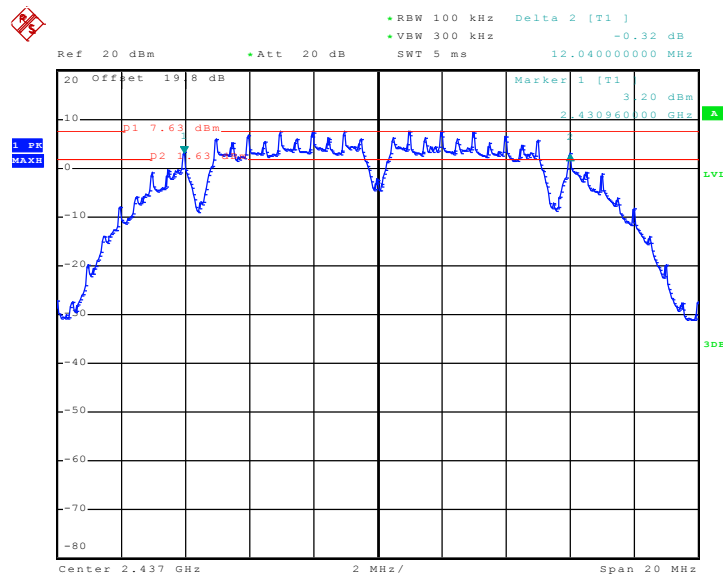
6 dB Bandwidth Plot on 802.11b Channel 01 – Chain A



Date: 17.FEB.2011 17:47:43

Mode 2 :

6 dB Bandwidth Plot on 802.11b Channel 06 – Chain A

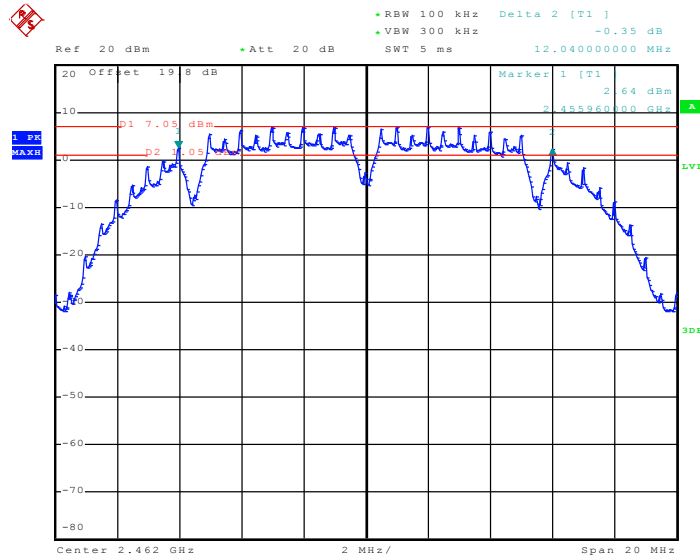


Date: 17.FEB.2011 18:05:34



Mode 3 :

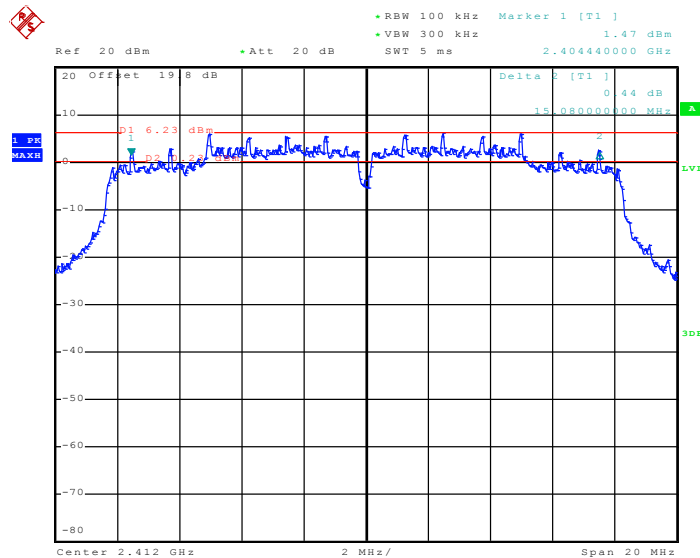
6 dB Bandwidth Plot on 802.11b Channel 11 – Chain A



Date: 17.FEB.2011 18:27:22

Mode 4 :

6 dB Bandwidth Plot on 802.11g Channel 01 – Chain B

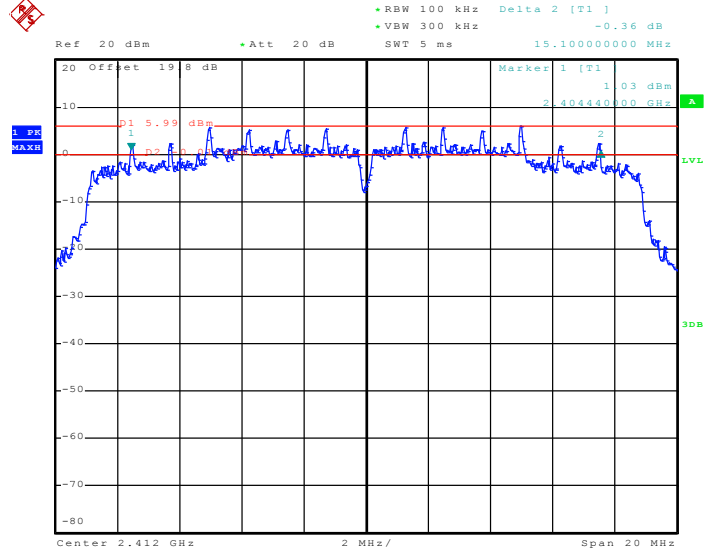


Date: 28.FEB.2011 19:42:17



Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain B

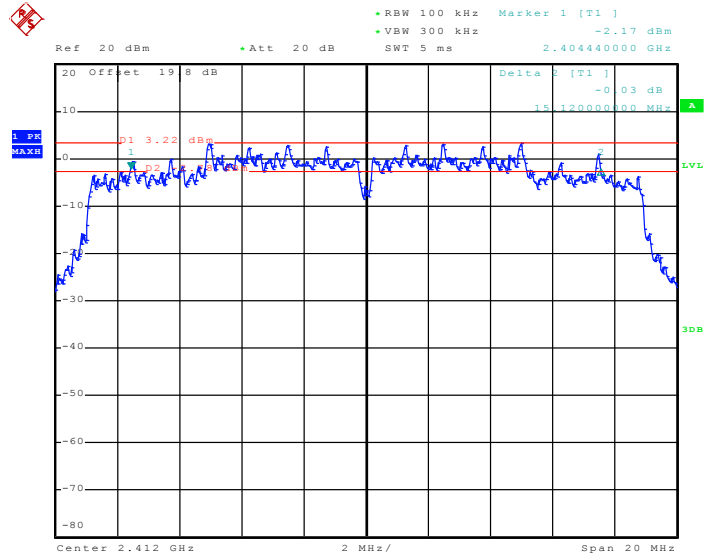


Date: 17.FEB.2011 20:22:37

Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B(A)



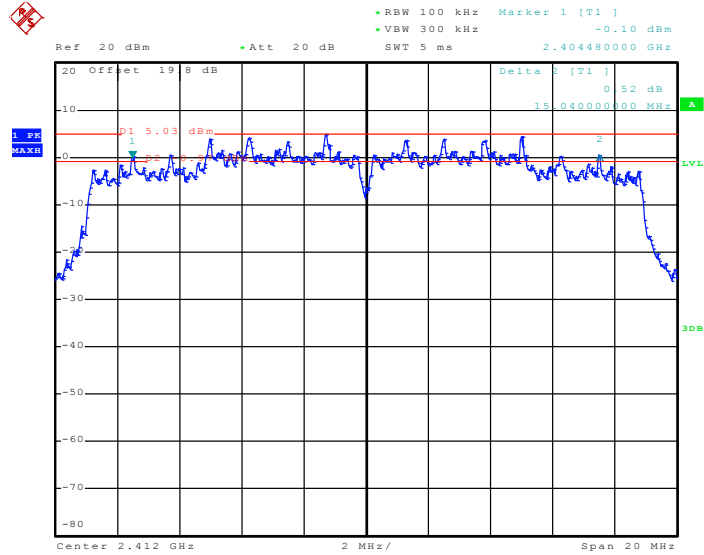
Date: 17.FEB.2011 22:24:17



Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B(B)

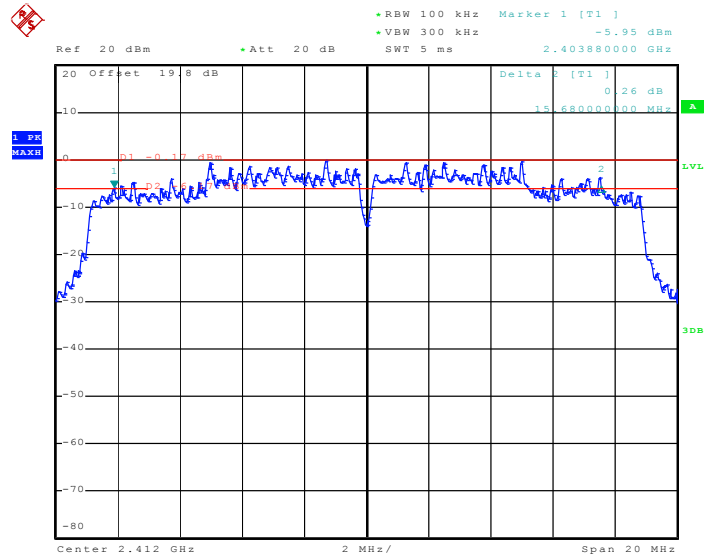


Date: 17.FEB.2011 23:12:19

Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B+C(A)



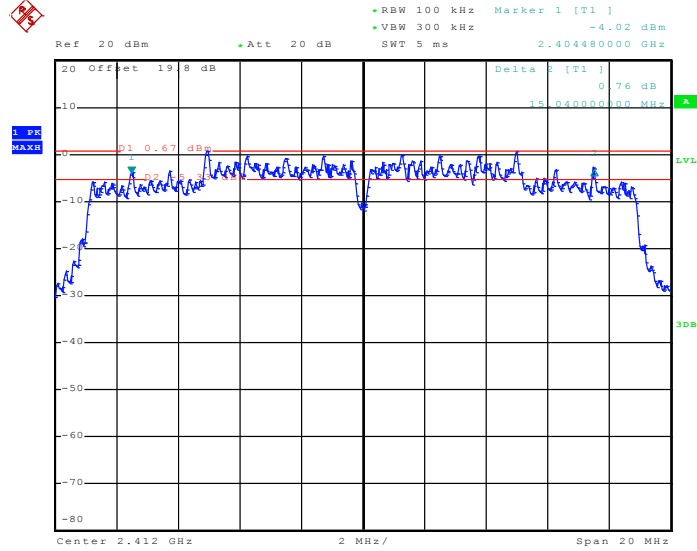
Date: 28.FEB.2011 20:14:12



Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B+C(B)

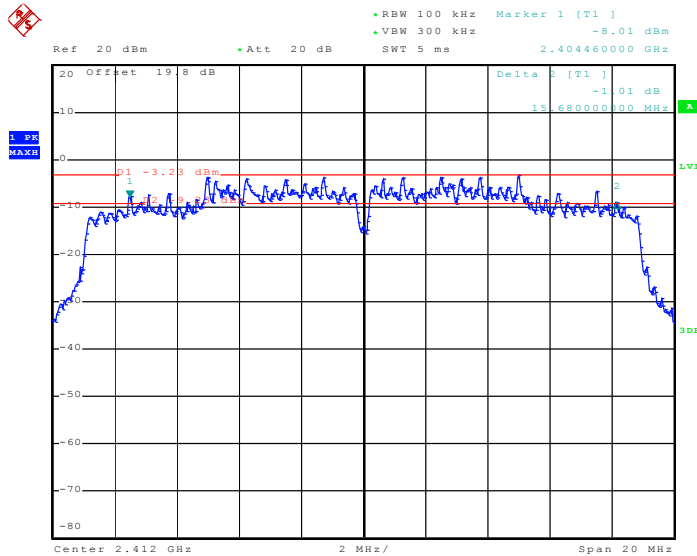


Date: 18.FEB.2011 02:21:29

Mode 7 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B+C(C)

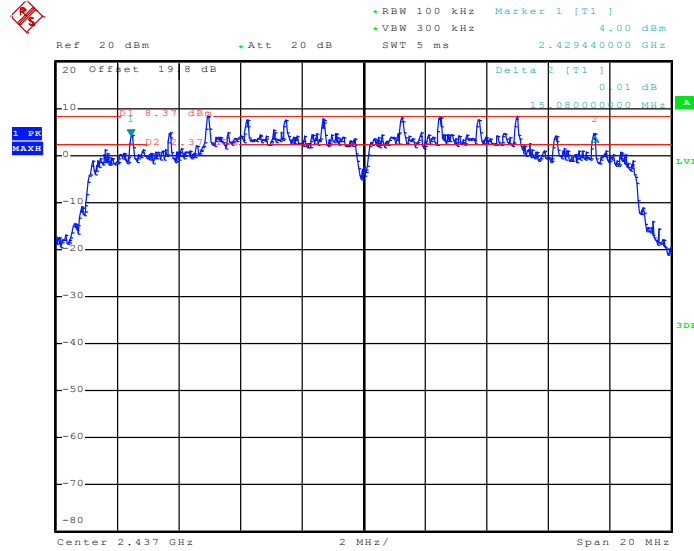


Date: 18.FEB.2011 03:06:59



Mode 8 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 06 – Chain B

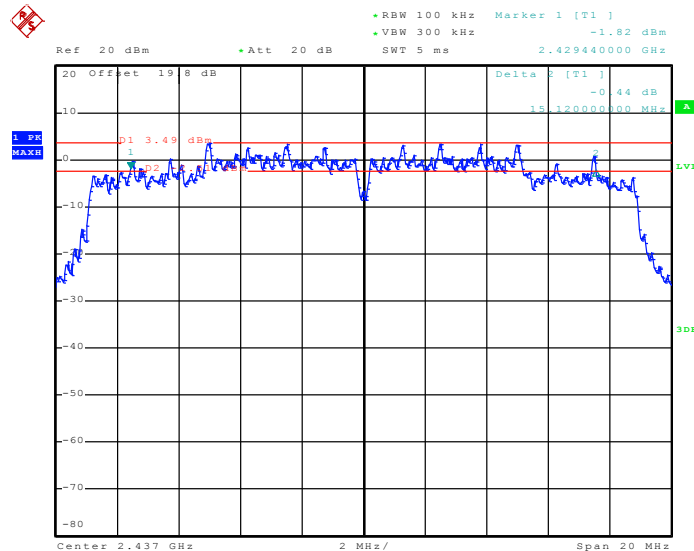


Date: 17.FEB.2011 20:49:26

Mode 8 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 06 – Chain

A+B(A)



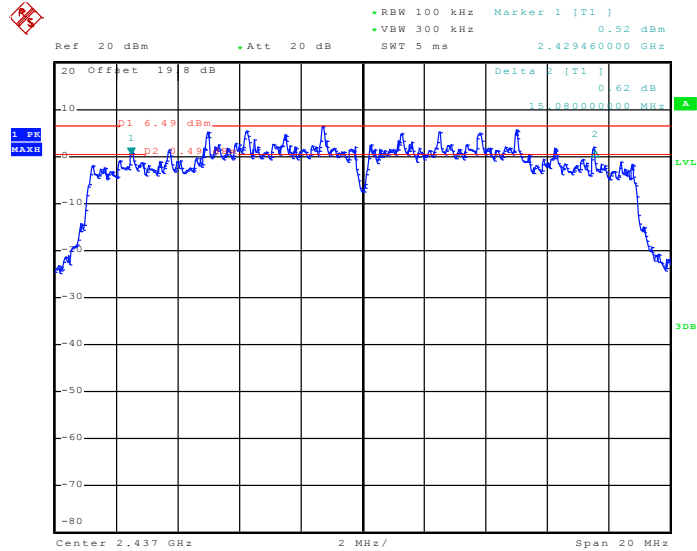
Date: 17.FEB.2011 22:39:28



Mode 8 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 06– Chain

A+B(B)

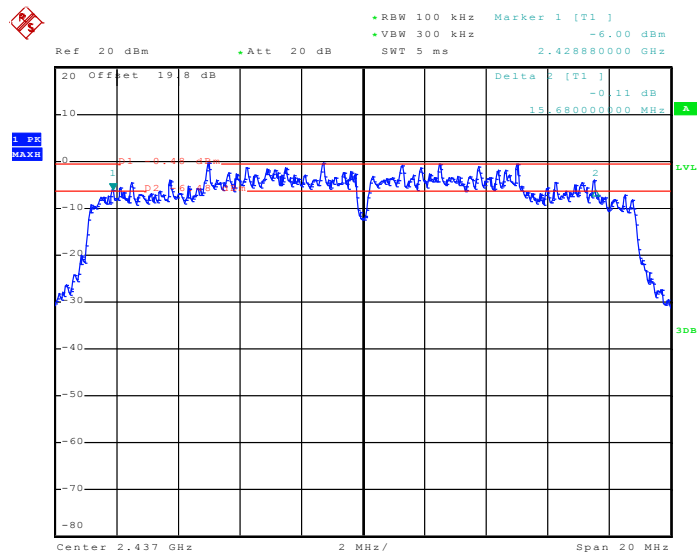


Date: 17.FEB.2011 23:26:06

Mode 8 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 06 – Chain

A+B+C(A)

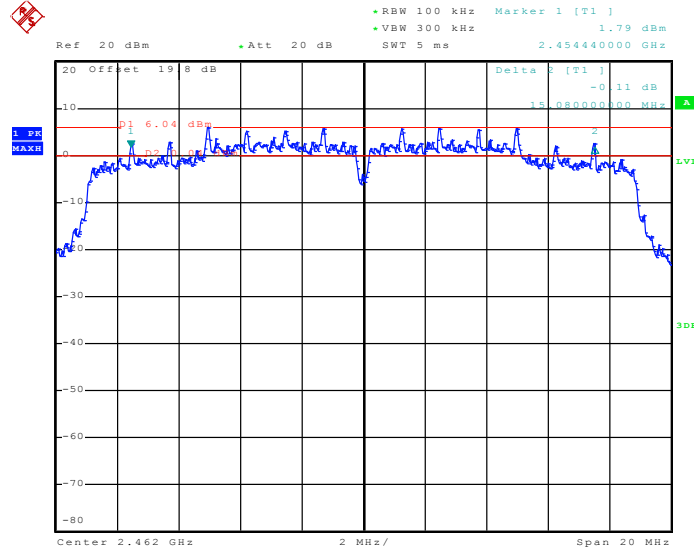


Date: 18.FEB.2011 01:51:45



Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain B

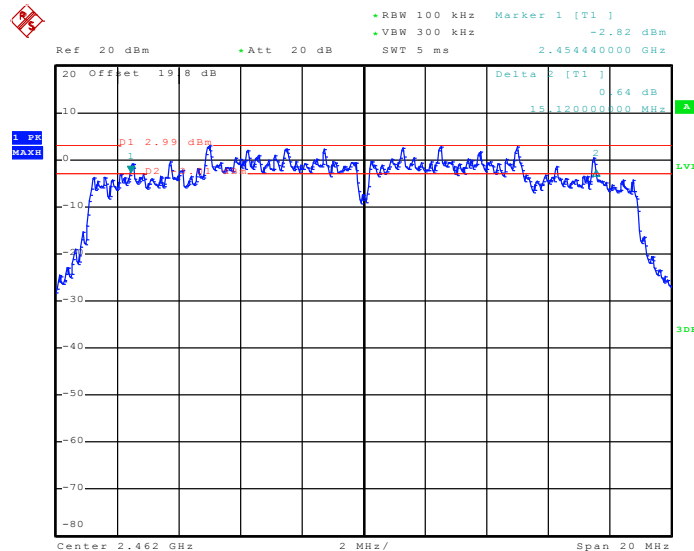


Date: 28.FEB.2011 19:47:58

Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B(A)



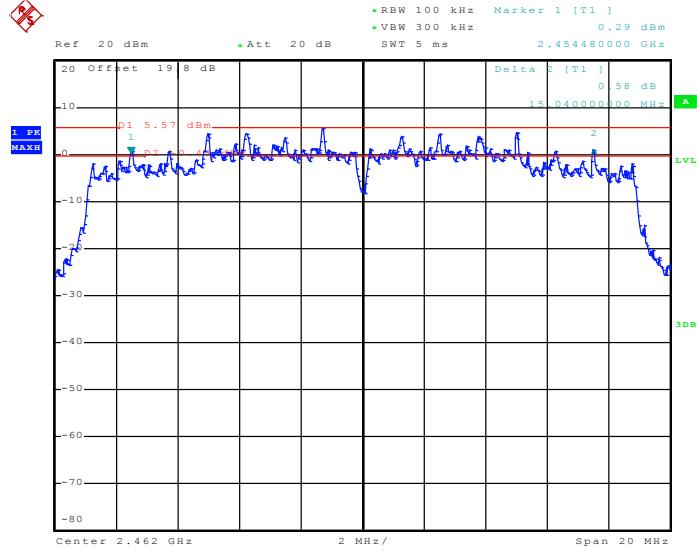
Date: 17.FEB.2011 22:52:53



Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B(B)

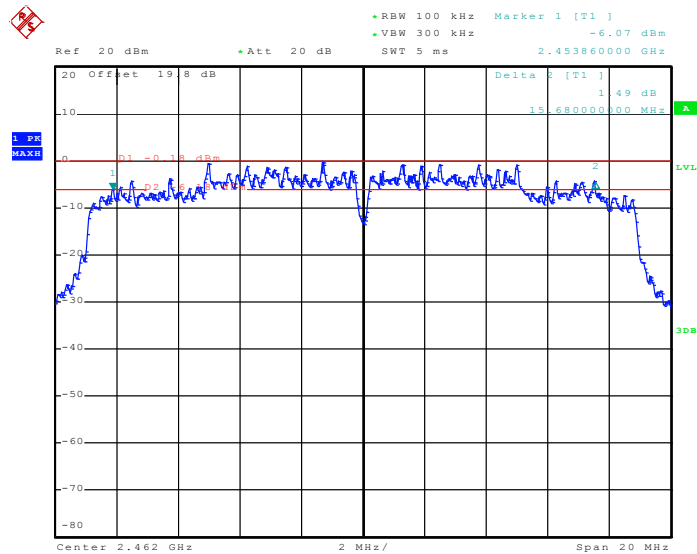


Date: 17.FEB.2011 23:39:21

Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B+C(A)



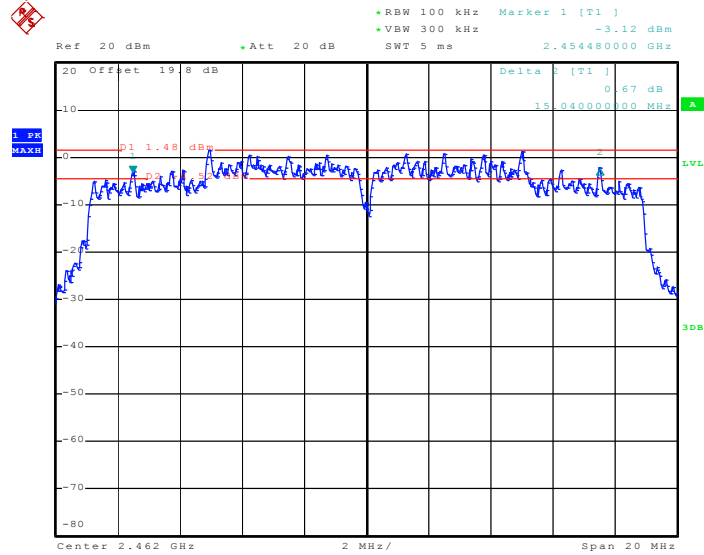
Date: 18.FEB.2011 02:05:18



Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B+C(B)

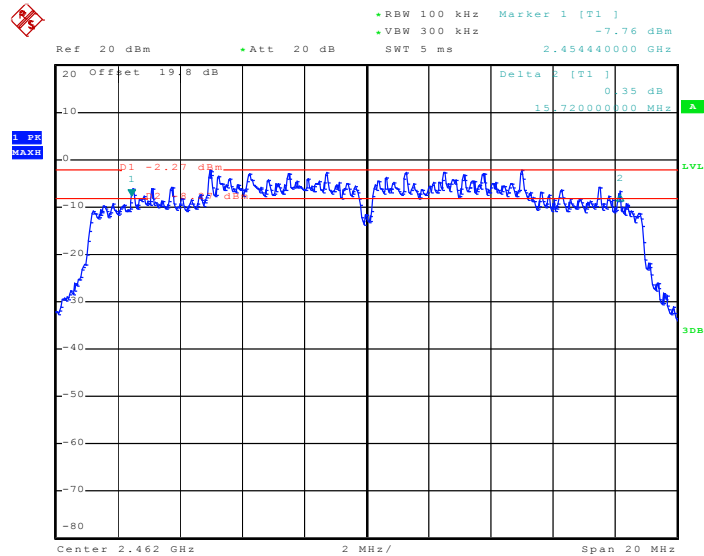


Date: 18.FEB.2011 02:48:39

Mode 9 :

6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B+C(C)



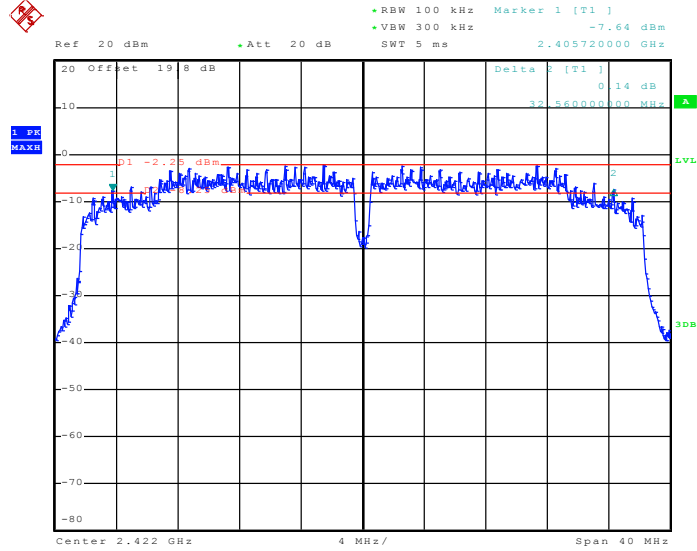
Date: 18.FEB.2011 03:32:29



Mode 10 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 03 – Chain

A+B(B)

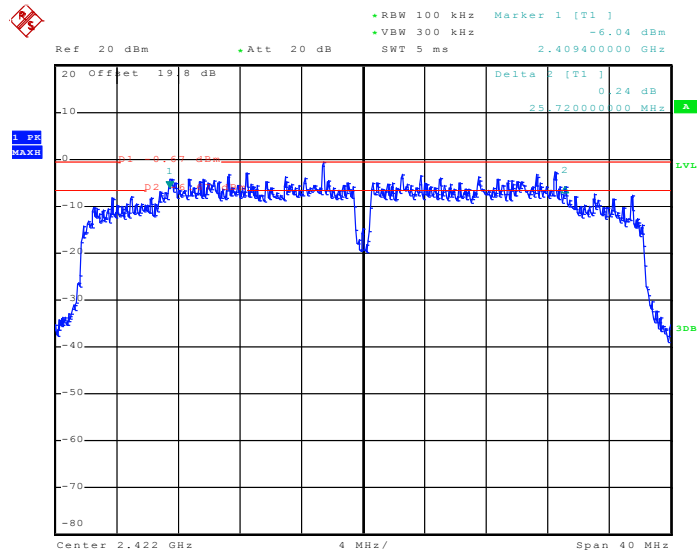


Date: 17.FEB.2011 23:55:45

Mode 10 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 03 – Chain

A+B+C(A)

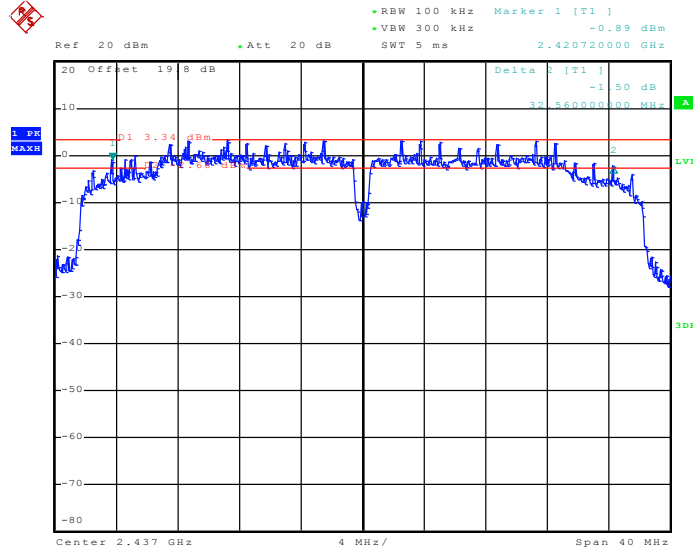


Date: 18.FEB.2011 05:11:12



Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – Chain A

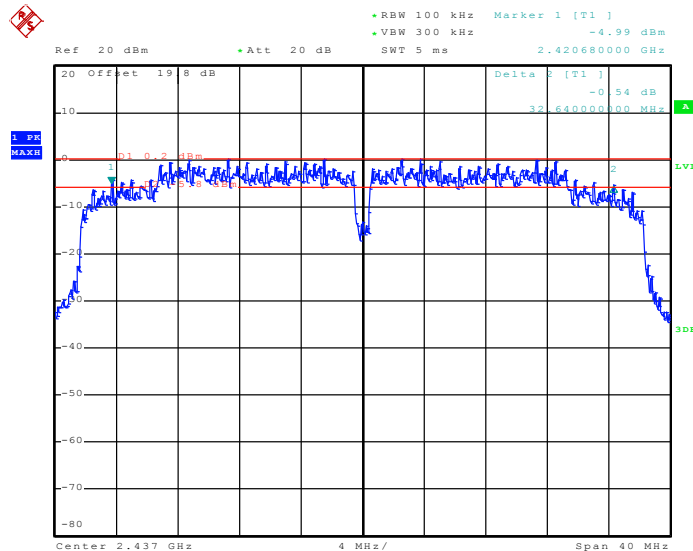


Date: 17.FEB.2011 21:42:43

Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – Chain

A+B(A)



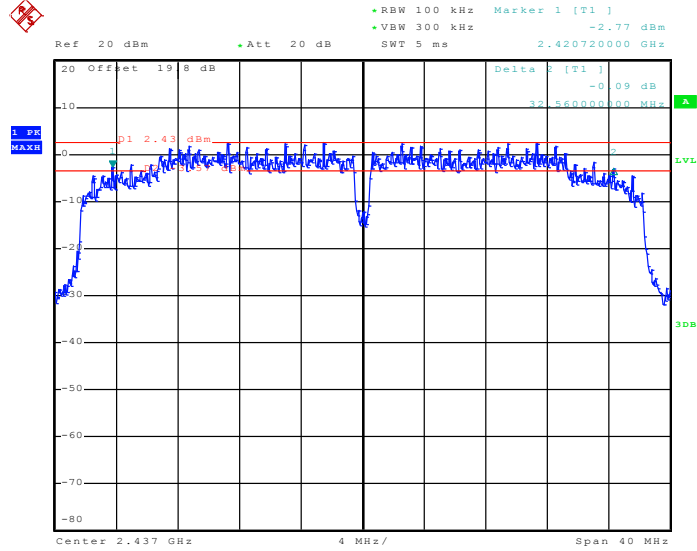
Date: 18.FEB.2011 01:06:48



Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – of Chain

A+B(B)

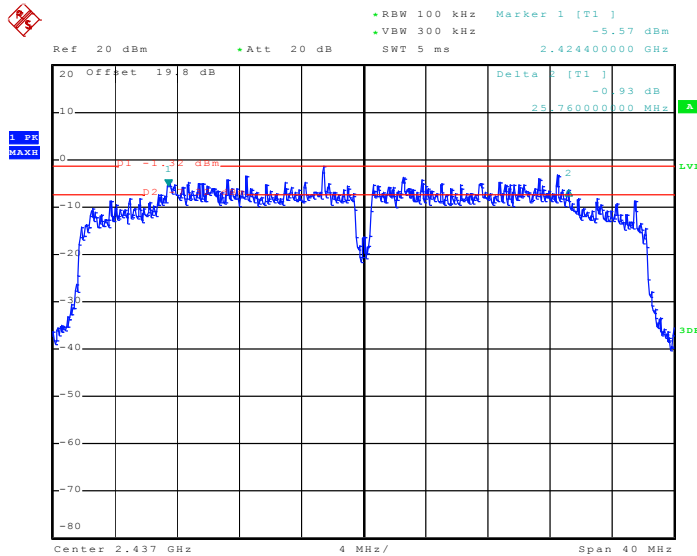


Date: 18.FEB.2011 00:12:36

Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – Chain

A+B+C(A)



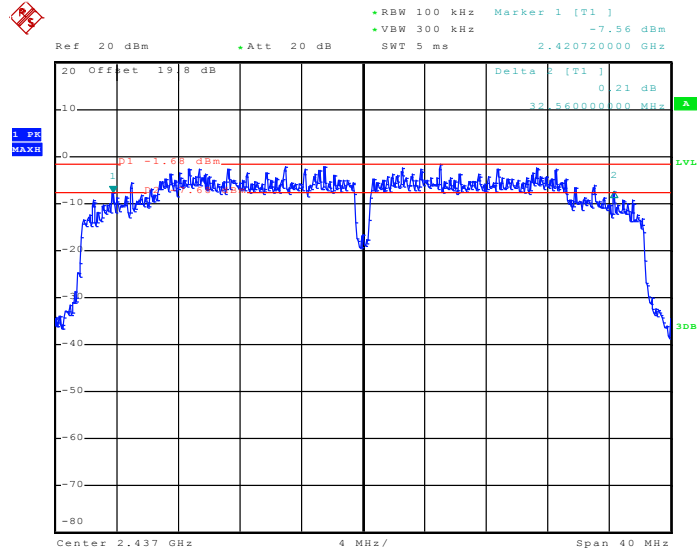
Date: 18.FEB.2011 05:24:45



Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – Chain

A+B+C(B)

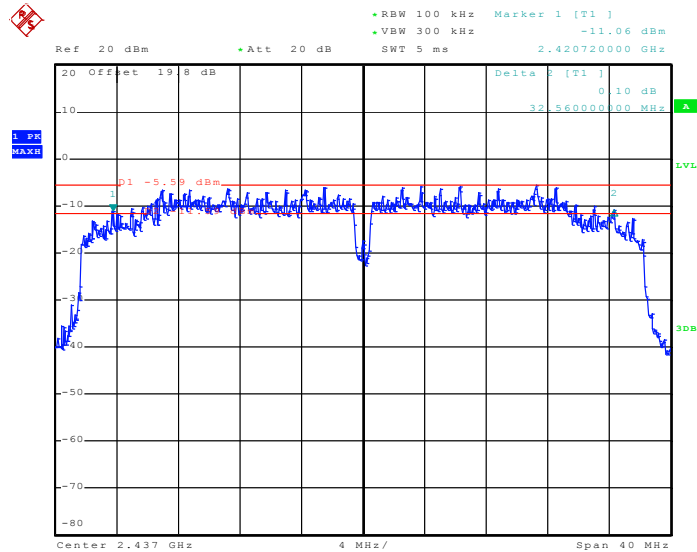


Date: 18.FEB.2011 04:43:45

Mode 11 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 06 – Chain

A+B+C(C)

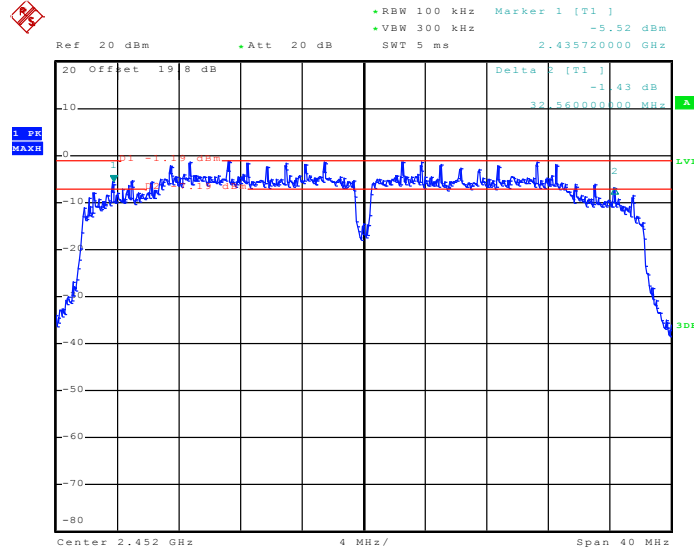


Date: 18.FEB.2011 04:03:49



Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain A

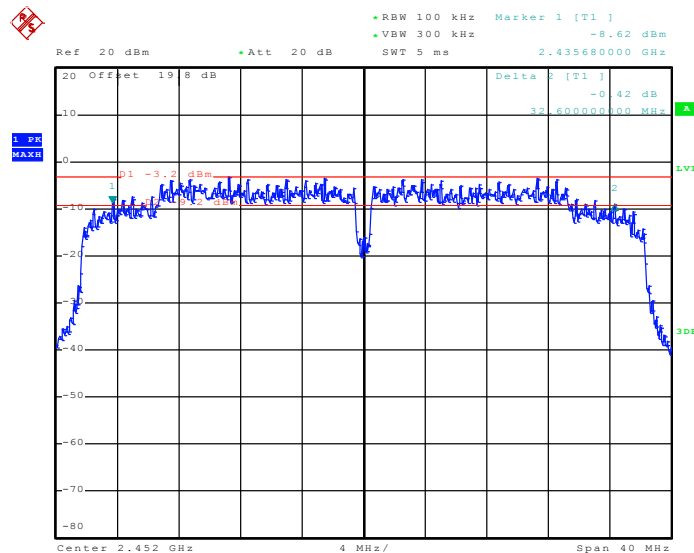


Date: 17.FEB.2011 22:07:20

Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain

A+B(A)



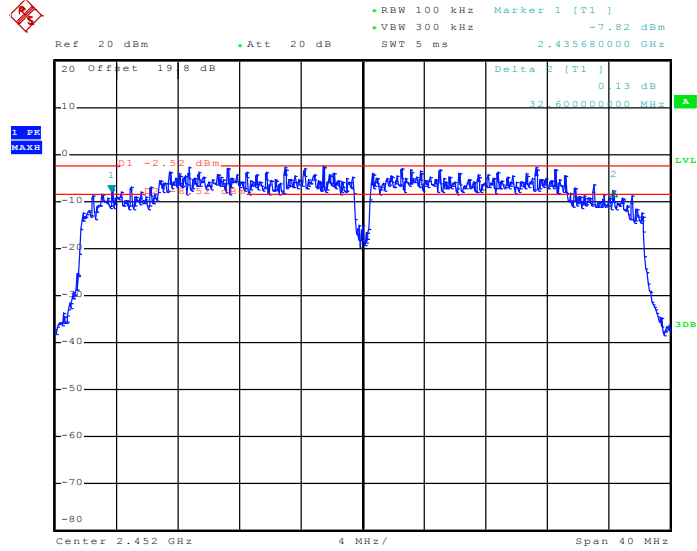
Date: 18.FEB.2011 01:19:37



Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain

A+B(B)

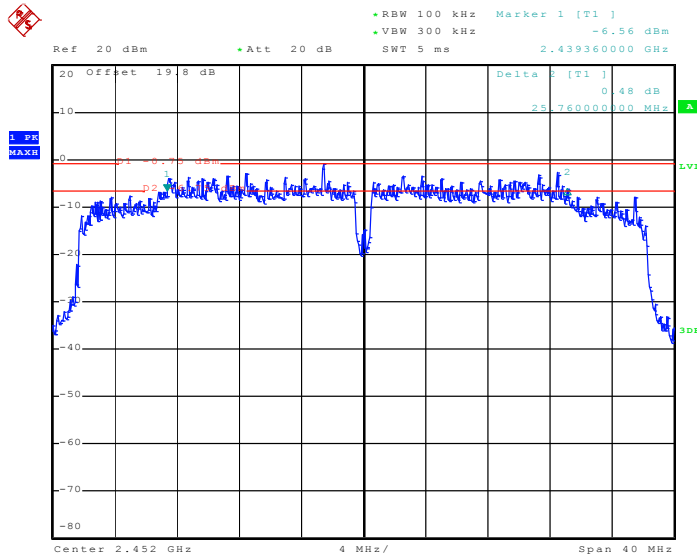


Date: 28.FEB.2011 20:03:51

Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain

A+B+C(A)



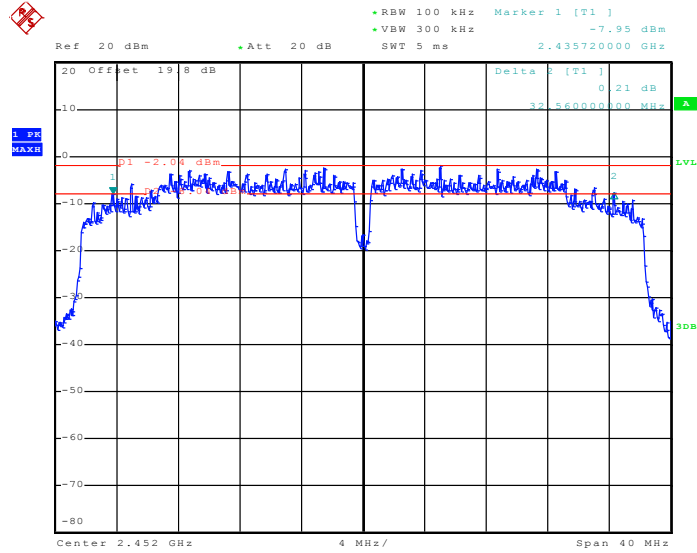
Date: 18.FEB.2011 05:41:59



Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain

A+B+C(B)

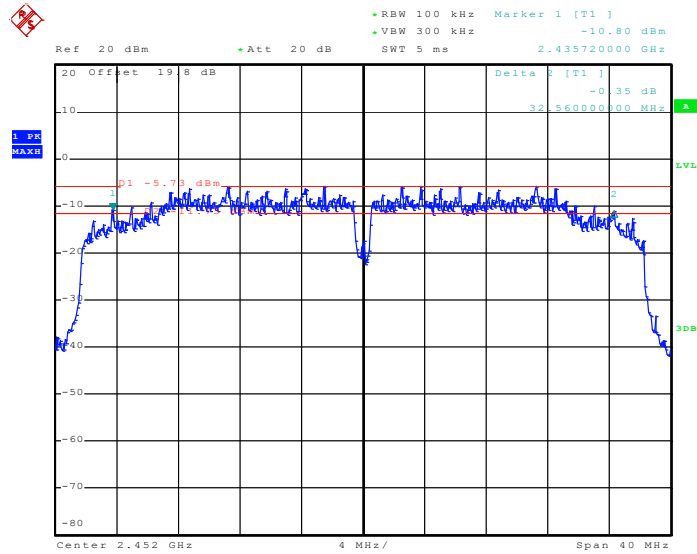


Date: 18.FEB.2011 04:54:45

Mode 12 :

6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel 09 – Chain

A+B+C(C)

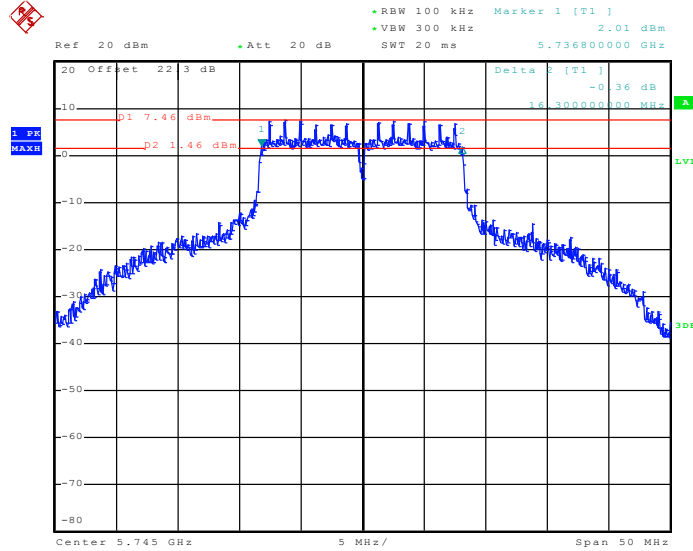


Date: 18.FEB.2011 04:15:18



Mode 13:

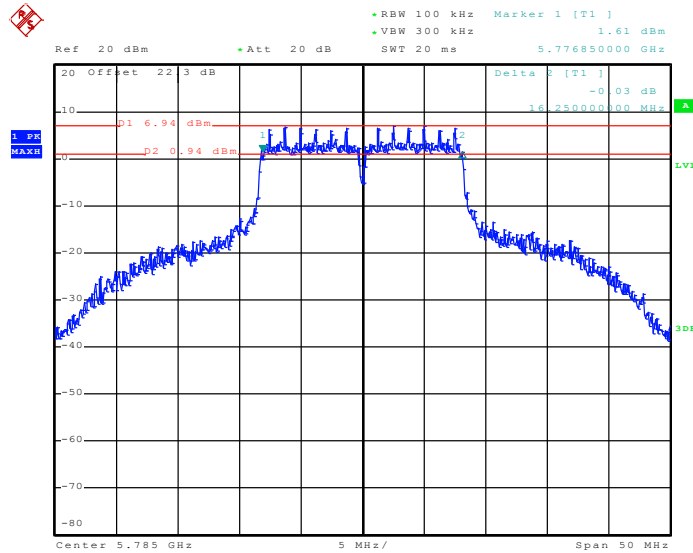
6 dB Bandwidth Plot on 802.11a Channel 149 – Chain C



Date: 23.FEB.2011 01:51:11

Mode 14:

6 dB Bandwidth Plot on 802.11a Channel 157 – Chain C

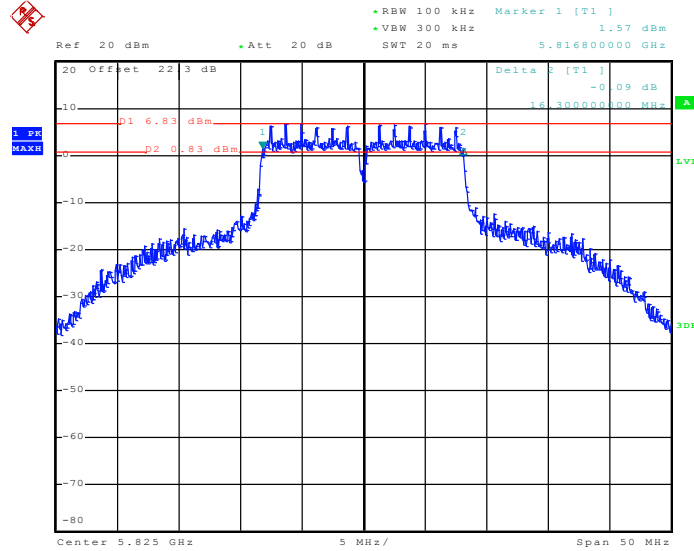


Date: 23.FEB.2011 02:12:31



Mode 15:

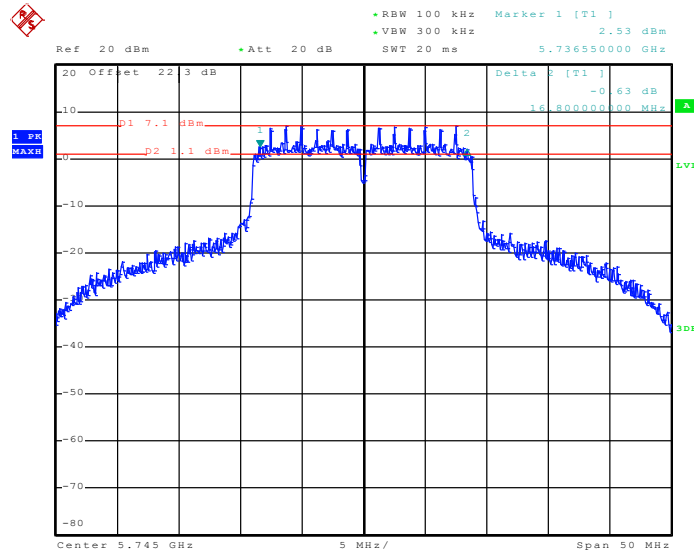
6 dB Bandwidth Plot on 802.11a Channel 165 – Chain C



Date: 23.FEB.2011 02:24:07

Mode 16:

6 dB Bandwidth Plot on 802.11n Channel 149 – Chain C

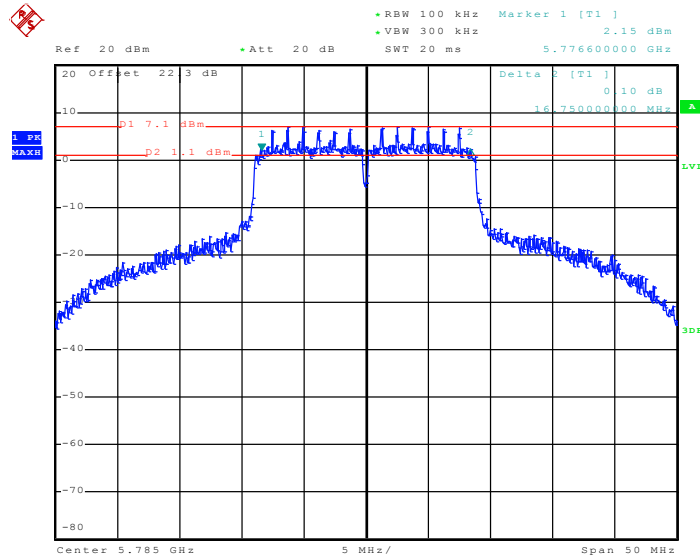


Date: 23.FEB.2011 02:37:32



Mode 17:

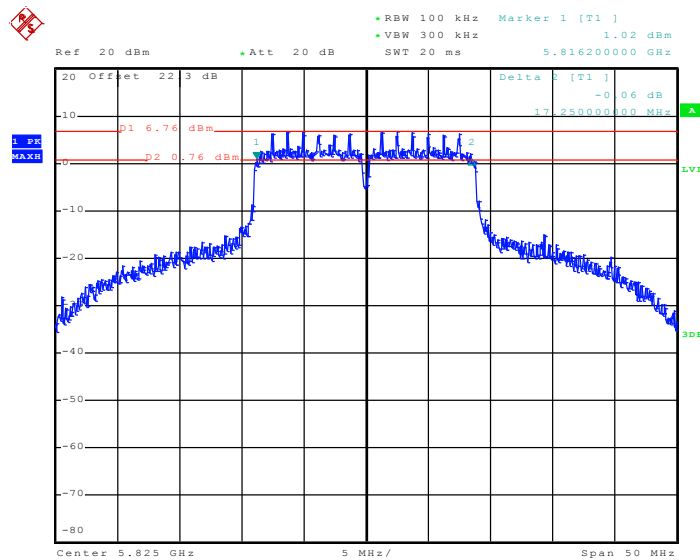
6 dB Bandwidth Plot on 802.11n Channel 157 – Chain C



Date: 23.FEB.2011 02:50:29

Mode 18:

6 dB Bandwidth Plot on 802.11n Channel 165 – Chain C

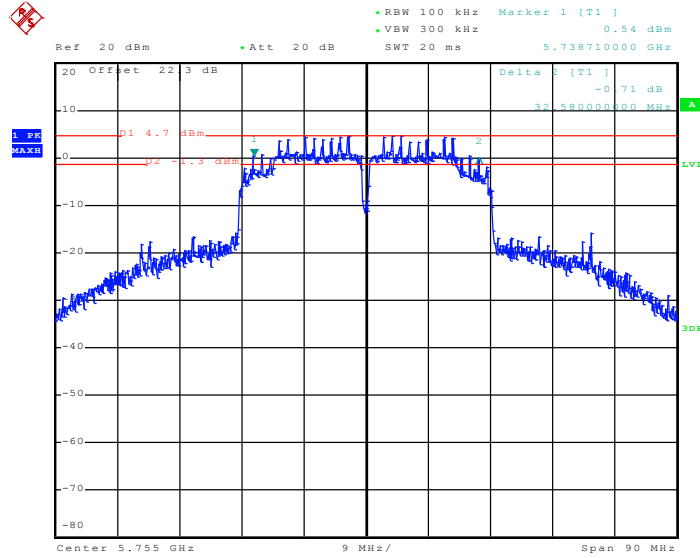


Date: 23.FEB.2011 03:05:53



Mode 19:

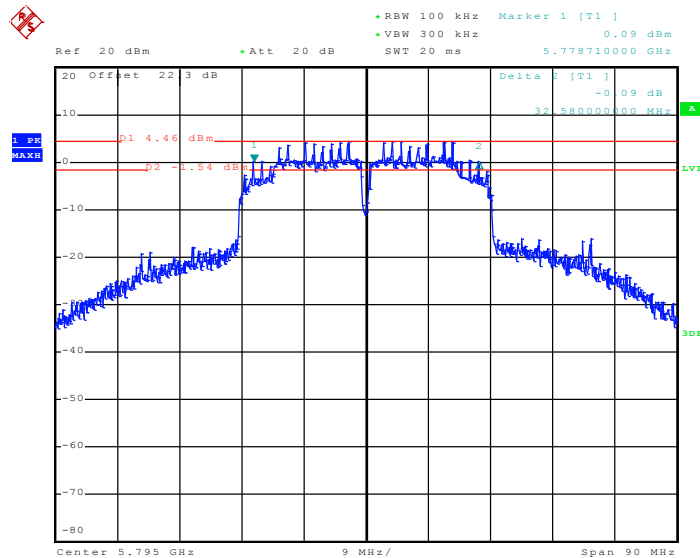
6 dB Bandwidth Plot on 802.11n Channel 151 – Chain C



Date: 23.FEB.2011 03:23:13

Mode 20:

6 dB Bandwidth Plot on 802.11n Channel 159 – Chain C



Date: 23.FEB.2011 03:35:40

3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz and 5725-5850MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi are used the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

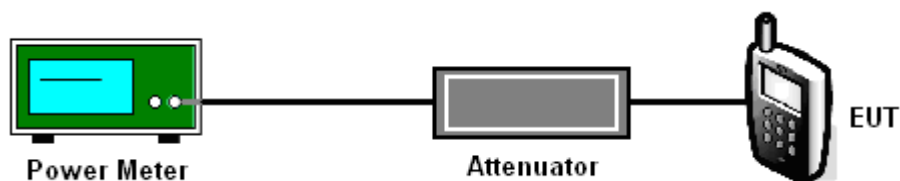
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The RF output of EUT was connected to the power meter by a low loss cable.
3. Measure the power by power meter.

3.2.4 Test Setup





3.2.5 Test Result of Output Power

Test Mode :	Mode 1, 2, 3	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11b Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
01	2412	21.72	30	Pass
06	2437	21.29	30	Pass
11	2462	20.77	30	Pass

Test Mode :	Mode 4, 5, 6	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11g Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain B		
01	2412	24.65	30	Pass
06	2437	25.84	30	Pass
11	2462	25.35	30	Pass



Test Mode :	Mode 7, 8, 9	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 20MHz) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain B				
01	2412	25.21			30	Pass
06	2437	25.82			30	Pass
11	2462	25.25			30	Pass

Channel	Frequency (MHz)	802.11n (BW 20MHz) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A+B(A)	Chain A+B(B)	Total Power		
01	2412	24.17	24.50	27.35	30	Pass
06	2437	24.93	24.53	27.74	30	Pass
11	2462	24.71	24.41	27.57	30	Pass

Channel	Frequency (MHz)	802.11n (BW 20MHz) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain A+B+C(A)	Chain A+B+C(B)	Chain A+B+C(C)	Total Power		
01	2412	20.69	22.08	14.75	24.89	30	Pass
06	2437	20.51	22.01	15.72	24.89	30	Pass
11	2462	21.09	22.04	16.19	25.19	30	Pass

Note: Each chain was measured individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{chain A}/10} + 10^{\text{chain B}/10} + 10^{\text{chain C}/10})$.



Test Mode :	Mode 10, 11 12	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 40MHz) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A				
03	2422	24.07			30	Pass
06	2437	25.80			30	Pass
09	2452	23.42			30	Pass

Channel	Frequency (MHz)	802.11n (BW 40MHz) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A+B(A)	Chain A+B(B)	Total Power		
03	2422	22.83	22.34	25.60	30	Pass
06	2437	24.70	25.37	28.06	30	Pass
09	2452	22.21	22.33	25.28	30	Pass

Channel	Frequency (MHz)	802.11n (BW 40MHz) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain A+B+C(A)	Chain A+B+C(B)	Chain A+B+C(C)	Total Power		
03	2422	21.91	22.18	15.40	25.50	30	Pass
06	2437	20.33	22.18	15.02	24.84	30	Pass
09	2452	21.36	22.03	16.47	25.32	30	Pass

Note: Each chain was measured individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{chain A}/10} + 10^{\text{chain B}/10} + 10^{\text{chain C}/10})$.



Test Mode :	Mode 13, 14, 15	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain C		
149	5745	21.10	30	Pass
157	5785	21.13	30	Pass
165	5825	21.30	30	Pass

Test Mode :	Mode 16, 17, 18	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 20MHz) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain C		
149	5745	21.47	30	Pass
157	5785	21.26	30	Pass
165	5825	21.35	30	Pass

Test Mode :	Mode 19, 20	Temperature :	26~29°C
Test Engineer :	Alan Liu	Relative Humidity :	48~51%

Channel	Frequency (MHz)	802.11n (BW 40MHz) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain C		
151	5755	21.40	30	Pass
159	5795	21.09	30	Pass



3.3 Band Edges Measurement

3.3.1 Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

3.3.2 Measuring Instruments

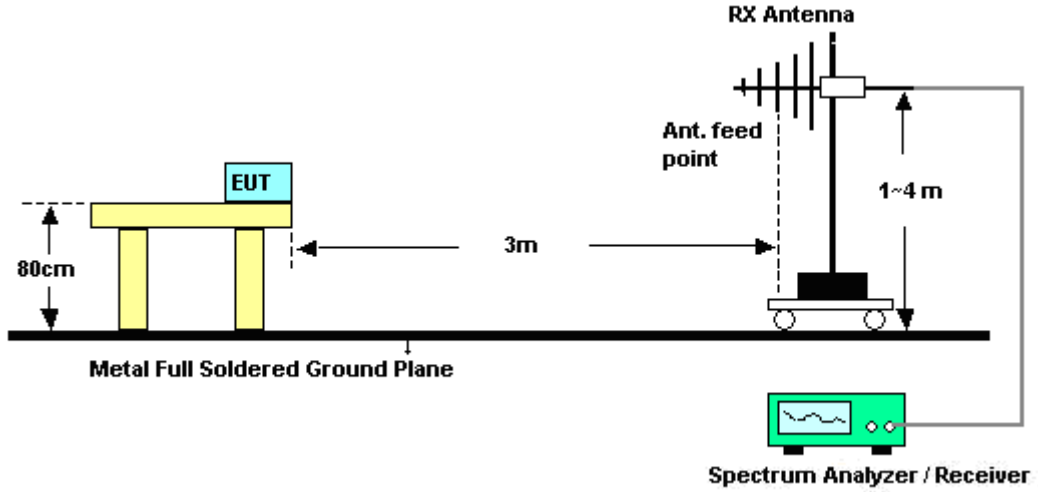
See list of measuring instruments of this test report.

3.3.3 Test Procedures

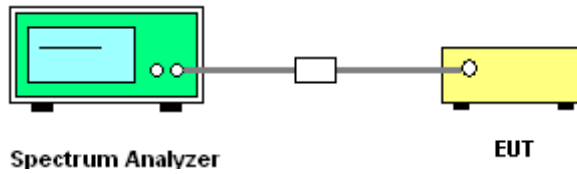
1. The testing follows the guidelines in ANSI C63.4-2003 and FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. Conducted emission test: Set RBW = 100 kHz, Video bandwidth (VBW) > RBW. Band edge emissions must be at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz RBW. Note: If the output power of this device was measured by power meter, the attenuation under this paragraph shall be 30 dB instead of 20 dB.
3. Radiated emission test: Apply to band edge emissions that fall in the restricted bands listed in FCC Section 15.205. The maximum permitted average field strength is listed in FCC Section 15.209. A pre-amp is necessary for this measurement. For measurements above 1 GHz, set RBW = 1MHz, VBW = 10 Hz, Sweep=Auto. If the emission is pulsed, modify the unit for continuous operation; use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation as in FCC Section 15.35(b) and (c).

3.3.4 Test Setup

<Radiated Band Edges>



<Conducted Band Edges>





3.3.5 Test Result of Radiated Band Edges

Test Mode :	Mode 1	Temperature :	23~24°C
Test Band :	802.11b	Relative Humidity :	50~51%
Test Channel :	01	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	61.68	-12.32	74	57.32	32.18	6.03	33.85	151	348	Peak
2389.99	46.39	-7.61	54	42.03	32.18	6.03	33.85	151	348	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	60.2	-13.8	74	55.84	32.18	6.03	33.85	118	315	Peak
2389.99	46.38	-7.62	54	42.02	32.18	6.03	33.85	118	315	Average

Test Mode :	Mode 3	Temperature :	23~24°C
Test Band :	802.11b	Relative Humidity :	50~51%
Test Channel :	11	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	58.77	-15.23	74	54.21	32.28	6.18	33.9	116	192	Peak
2483.5	41.19	-12.81	54	36.63	32.28	6.18	33.9	116	192	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	62.52	-11.48	74	57.96	32.28	6.18	33.9	114	312	Peak
2483.5	43.68	-10.32	54	39.12	32.28	6.18	33.9	114	312	Average



Test Mode :	Mode 4	Temperature :	23~24°C
Test Band :	802.11g	Relative Humidity :	50~51%
Test Channel :	01	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	65.43	-8.57	74	61.07	32.18	6.03	33.85	108	8	Peak
2389.99	45.39	-8.61	54	41.03	32.18	6.03	33.85	108	8	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	63.1	-10.9	74	58.74	32.18	6.03	33.85	149	67	Peak
2389.99	42.96	-11.04	54	38.6	32.18	6.03	33.85	149	67	Average

Test Mode :	Mode 6	Temperature :	23~24°C
Test Band :	802.11g	Relative Humidity :	50~51%
Test Channel :	11	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.66	63.88	-10.12	74	59.32	32.28	6.18	33.9	195	10	Peak
2483.66	43.96	-10.04	54	39.4	32.28	6.18	33.9	195	10	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.66	64.97	-9.03	74	60.41	32.28	6.18	33.9	137	46	Peak
2483.66	43.65	-10.35	54	39.09	32.28	6.18	33.9	137	46	Average



Test Mode :	Mode 7	Temperature :	23~24°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	50~51%
Test Channel :	01	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.61	66.93	-7.07	74	62.57	32.18	6.03	33.85	174	360	Peak
2389.61	47.6	-6.4	54	43.24	32.18	6.03	33.85	174	360	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	65.47	-8.53	74	61.11	32.18	6.03	33.85	117	348	Peak
2389.99	46.14	-7.86	54	41.78	32.18	6.03	33.85	117	348	Average

Test Mode :	Mode 9	Temperature :	23~24°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	50~51%
Test Channel :	11	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.85	63.08	-10.92	74	58.52	32.28	6.18	33.9	150	4	Peak
2483.85	45.98	-8.02	54	41.42	32.28	6.18	33.9	150	4	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	63.56	-10.44	74	59	32.28	6.18	33.9	114	12	Peak
2483.5	47.21	-6.79	54	42.65	32.28	6.18	33.9	114	12	Average



Test Mode :	Mode 10	Temperature :	23~24°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	50~51%
Test Channel :	03	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.61	72.42	-1.58	74	68.06	32.18	6.03	33.85	176	0	Peak
2389.61	50.67	-3.33	54	46.31	32.18	6.03	33.85	176	0	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.61	71.5	-2.5	74	67.14	32.18	6.03	33.85	115	349	Peak
2389.61	49.65	-4.35	54	45.29	32.18	6.03	33.85	115	349	Average

Test Mode :	Mode 12	Temperature :	23~24°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	50~51%
Test Channel :	09	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.61	70.69	-3.31	74	66.13	32.28	6.18	33.9	200	0	Peak
2484.61	49.24	-4.76	54	44.68	32.28	6.18	33.9	200	0	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.61	69.76	-4.24	74	65.2	32.28	6.18	33.9	116	347	Peak
2484.61	48.14	-5.86	54	43.58	32.28	6.18	33.9	116	347	Average



Test Mode :	Mode 13	Temperature :	23~24°C
Test Band :	802.11a	Relative Humidity :	50~51%
Test Channel :	149	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	75.19	-9.94	85.13	63.63	34.82	9.92	33.18	109	306	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.42	-9	87.42	66.86	34.82	9.92	33.18	100	307	Peak

Test Mode :	Mode 15	Temperature :	23~24°C
Test Band :	802.11a	Relative Humidity :	50~51%
Test Channel :	165	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	62.87	-21.86	84.73	51.38	34.94	9.87	33.32	100	311	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	64.98	-20.99	85.97	53.49	34.94	9.87	33.32	100	329	Peak



Test Mode :	Mode 16	Temperature :	23~24°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	50~51%
Test Channel :	149	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	62.56	-13.77	76.33	51	34.82	9.92	33.18	130	310	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	65.05	-14.85	79.9	53.49	34.82	9.92	33.18	102	328	Peak

Test Mode :	Mode 18	Temperature :	23~24°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	50~51%
Test Channel :	165	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	53.47	-25.1	78.57	41.98	34.94	9.87	33.32	110	301	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	53.38	-26.1	79.48	41.89	34.94	9.87	33.32	112	309	Peak



Test Mode :	Mode 19	Temperature :	23~24°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	50~51%
Test Channel :	151	Test Engineer :	Ivan Chiang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	66.23	-8.6	74.83	54.67	34.82	9.92	33.18	100	314	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	68.53	-8.53	77.06	56.97	34.82	9.92	33.18	123	308	Peak

Test Mode :	Mode 20	Temperature :	23~24°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	50~51%
Test Channel :	159	Test Engineer :	Ivan Chiang

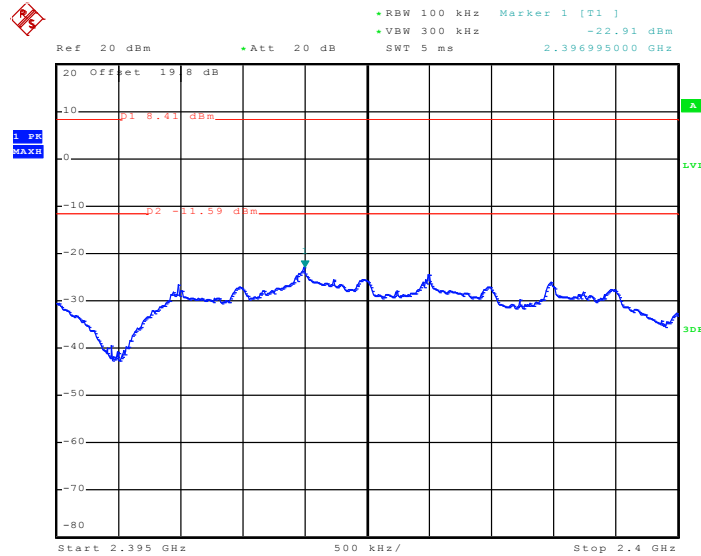
ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	52.6	-27.22	79.82	41.11	34.94	9.87	33.32	120	302	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	53.28	-29.02	82.3	41.79	34.94	9.87	33.32	123	308	Peak

3.3.6 Test Result of Conducted Band Edges

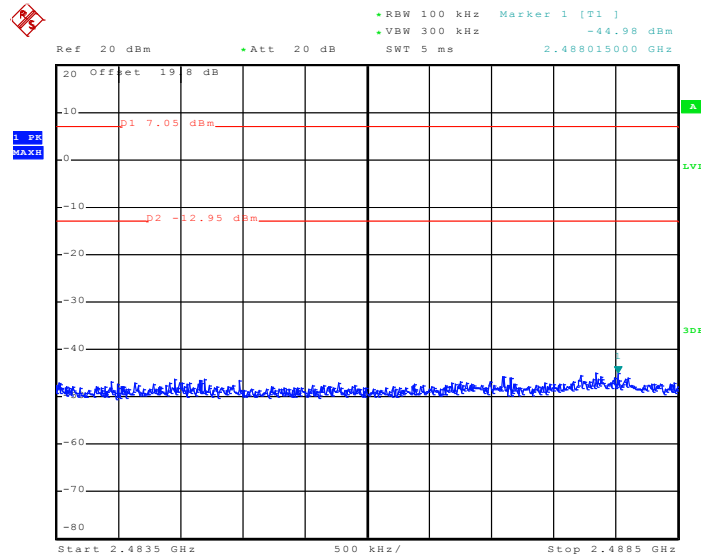
Test Mode :	Mode 1 and 3	Temperature :	26~29°C
Test Band :	802.11b	Relative Humidity :	48~51%
Test Channel :	01 and 11	Test Engineer :	Alan Liu

Low Band Edge Plot on 802.11b Channel 01- Chain A



Date: 17.FEB.2011 17:49:17

High Band Edge Plot on 802.11b Channel 11 – Chain A

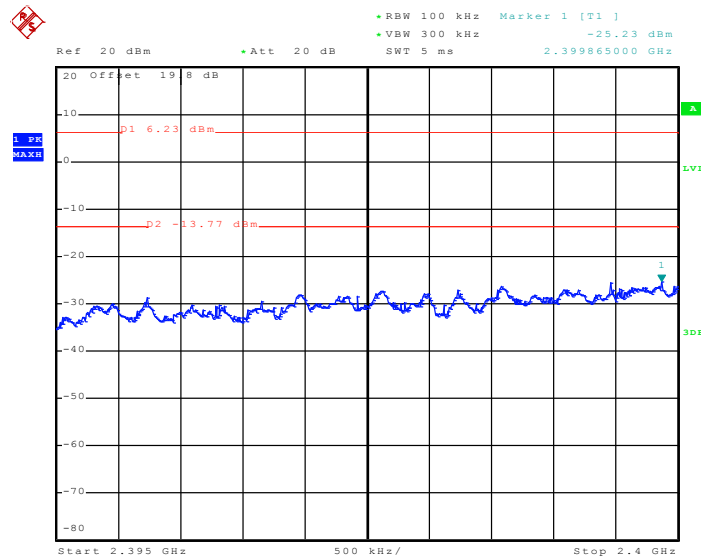


Date: 17.FEB.2011 18:28:24



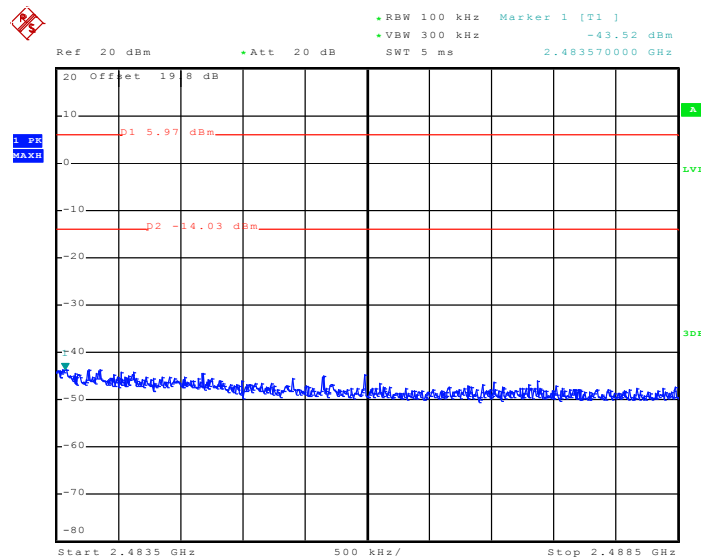
Test Mode :	Mode 4 and 6	Temperature :	26~29°C
Test Band :	802.11g	Relative Humidity :	48~51%
Test Channel :	01 and 11	Test Engineer :	Alan Liu

Low Band Edge Plot on 802.11g Channel 01 – Chain B



Date: 28.FEB.2011 19:43:40

High Band Edge Plot on 802.11g Channel 11 – Chain B



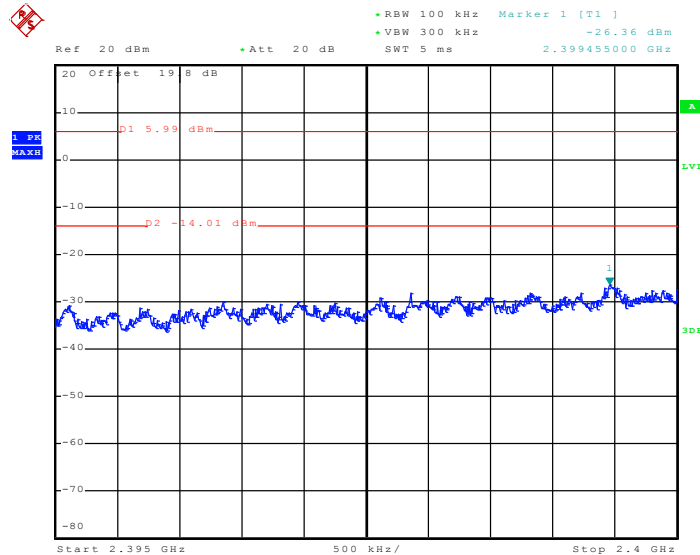
Date: 17.FEB.2011 19:55:43



Test Mode :	Mode 7 and 9	Temperature :	26~29°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	48~51%
Test Channel :	01 and 11	Test Engineer :	Alan Liu

Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain

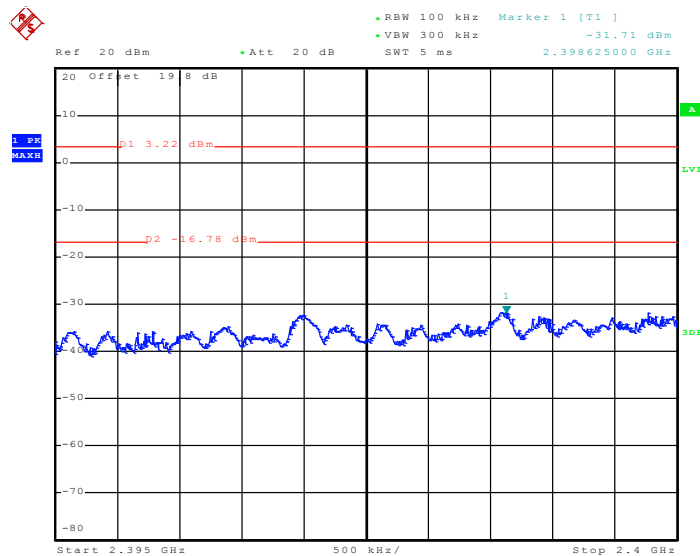
B



Date: 17.FEB.2011 20:23:56

Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain

A+B(A)

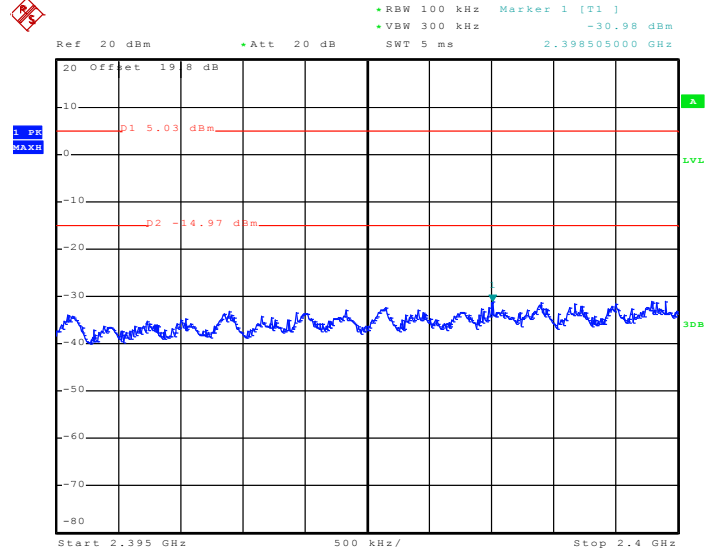


Date: 17.FEB.2011 22:26:24



Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain

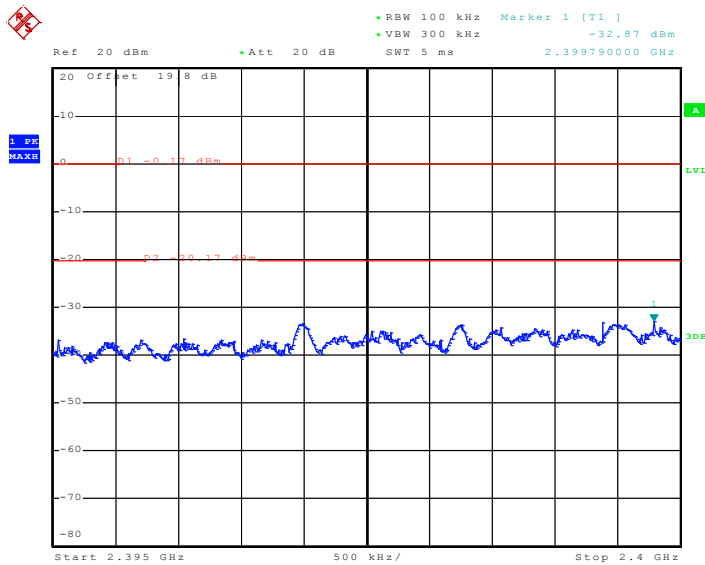
A+B(B)



Date: 17.FEB.2011 23:14:09

Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain

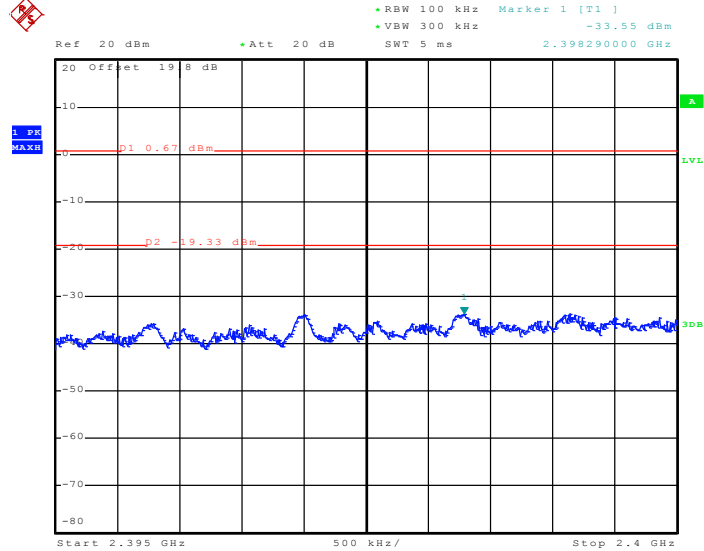
A+B+C(A)



Date: 28.FEB.2011 20:15:39

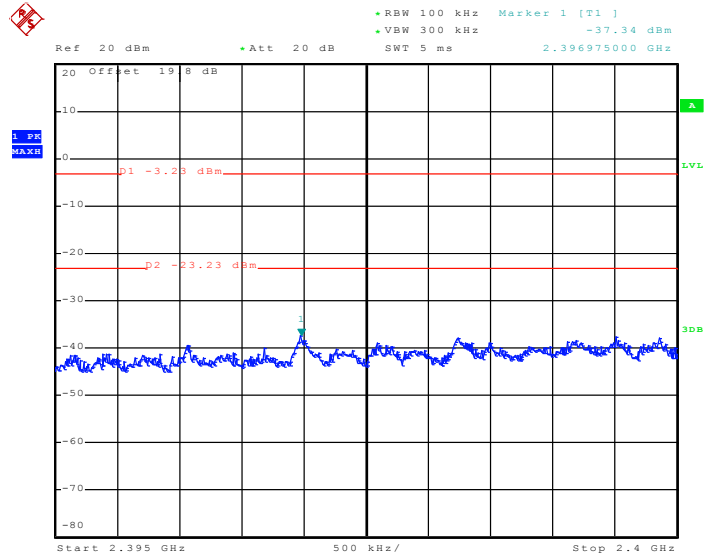


Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain
A+B+C(B)



Date: 18.FEB.2011 02:23:23

Low Band Edge Plot on 802.11n (BW 20MHz) Channel 01 – Chain
A+B+C(C)

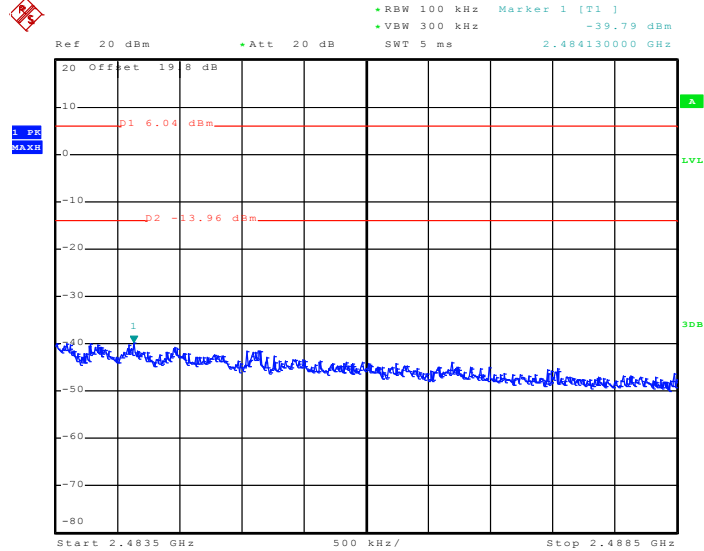


Date: 18.FEB.2011 03:08:30



High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

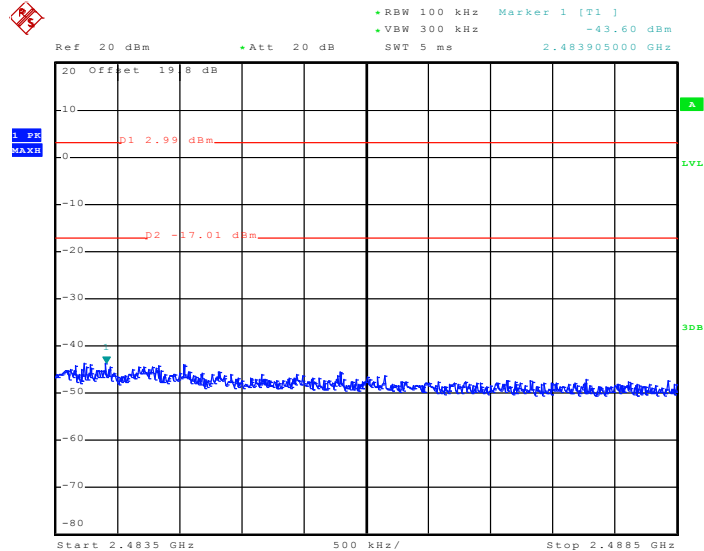
B



Date: 28.FEB.2011 19:49:27

High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B(A)

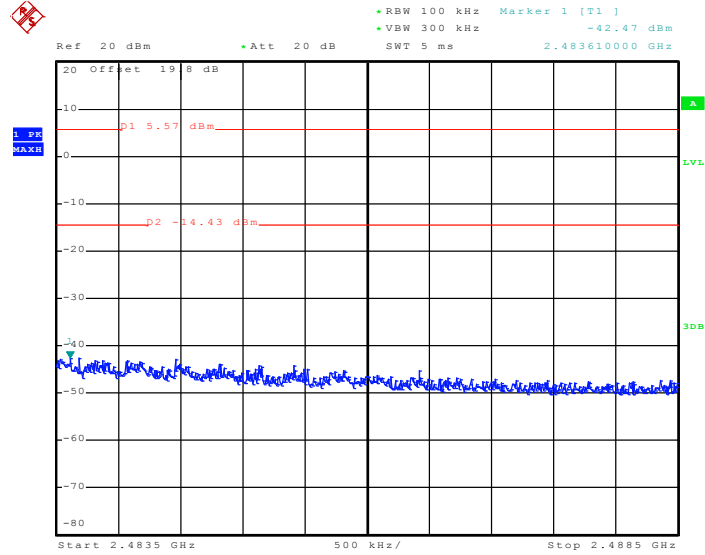


Date: 17.FEB.2011 22:54:31



High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

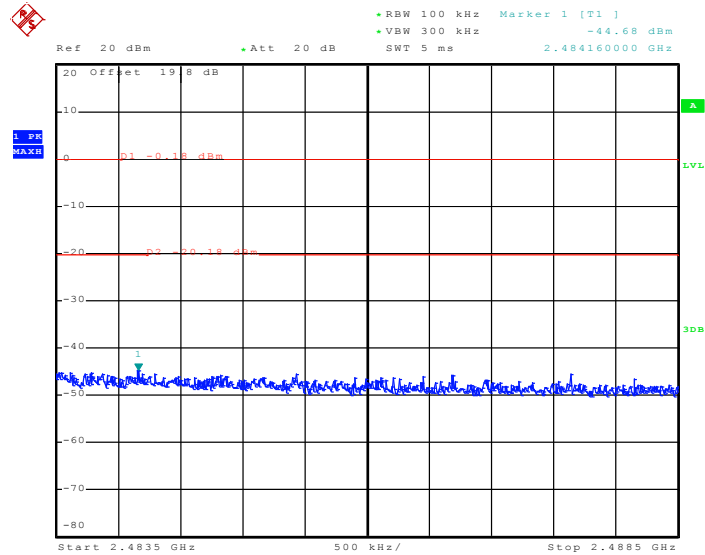
A+B(B)



Date: 17.FEB.2011 23:40:32

High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B+C(A)

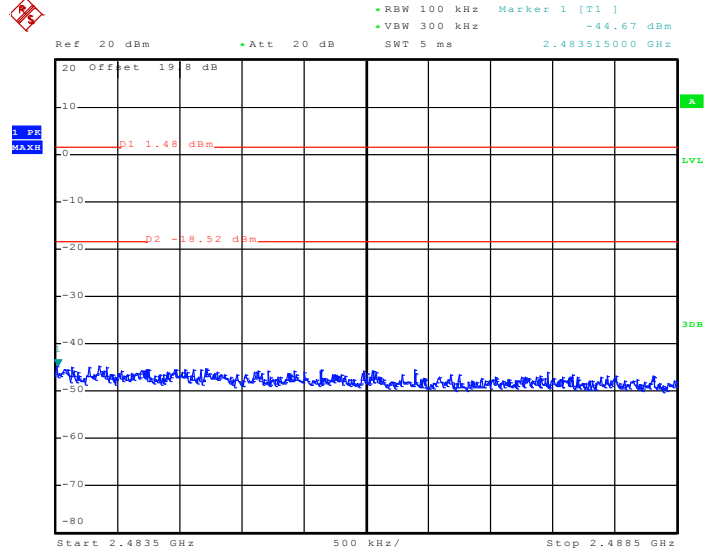


Date: 18.FEB.2011 02:06:23



High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

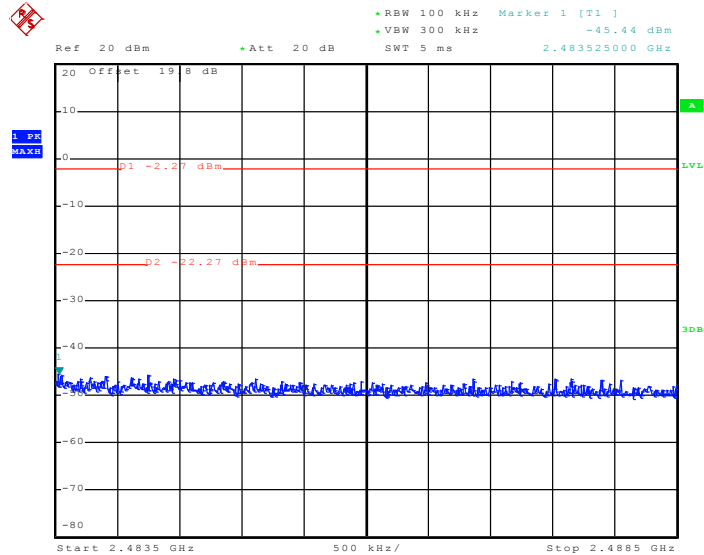
A+B+C(B)



Date: 18.FEB.2011 02:49:41

High Band Edge Plot on 802.11n (BW 20MHz) Channel 11 – Chain

A+B+C(C)



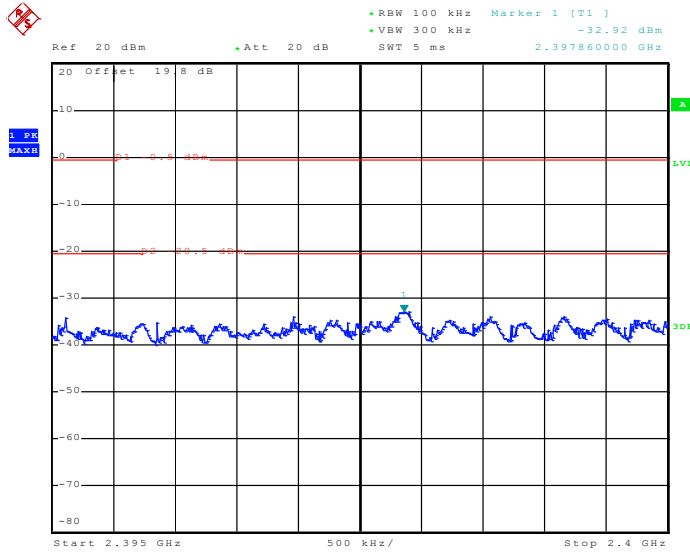
Date: 18.FEB.2011 03:33:48



Test Mode :	Mode 10 and 12	Temperature :	26~29°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	48~51%
Test Channel :	03 and 09	Test Engineer :	Alan Liu

Low Band Edge Plot on 802.11n (BW 40MHz) Channel 03 – Chain

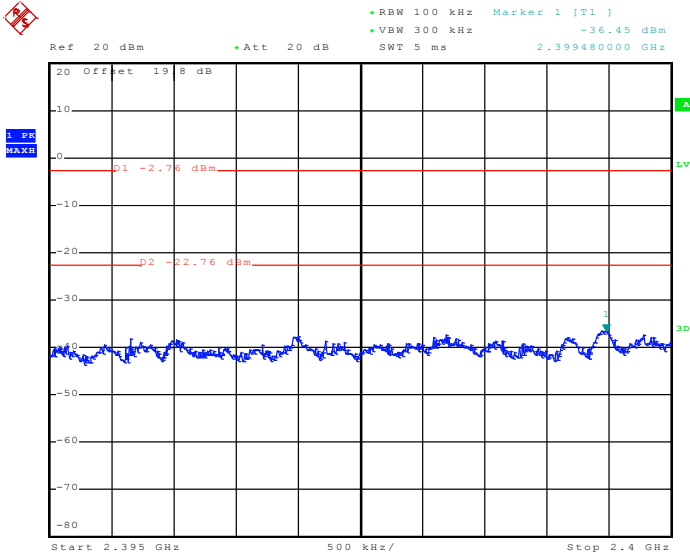
A



Date: 17.FEB.2011 21:28:01

Low Band Edge Plot on 802.11n (BW 40MHz) Channel 03 – Chain

A+B(A)



Date: 18.FEB.2011 00:53:07