

FCC RF Test Report

APPLICANT : Meru Networks Inc.
EQUIPMENT : Single Radio Access Point AP1000
BRAND NAME : Meru Networks Inc.
MODEL NAME : AP1010i
FCC ID : RE7-AP1010
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : Digital Transmission System (DTS)

The product was received on Aug. 26, 2010 and completely tested on Sep. 28, 2010. 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:



Anderson Chiu / Deputy 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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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR082617-01A	Rev. 01	Initial issue of report	Sep. 29, 2010

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	-
3.1	-	Gen 4.4.1	99% Bandwidth	-	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 2.31 dB at 10.402 MHz
3.7	15.247(d)	A8.5	Transmitter Radiated Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.16 dB at 2390.00 MHz
3.8	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Meru Networks Inc.

894 Ross Drive Sunnyvale, CA 94089 USA

1.2 Manufacturer

Universal Scientific Industrial (Shanghai)

No. 1558, Zhang Dong Road, Zhangjiang Hi-Tech Park, Shanghai 201203, P.R. China

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Single Radio Access Point AP1000
Brand Name	Meru Networks Inc.
Model Name	AP1010i
FCC ID	RE7-AP1010
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	<2400 MHz ~ 2483.5 MHz> 802.11b : 23.80 dBm (0.240 W) 802.11g : 25.66 dBm (0.368 W) 802.11n (BW 20MHz) : 26.47 dBm (0.443 W) 802.11n (BW 40MHz) : 25.33 dBm (0.341 W) <5725 MHz ~ 5850 MHz> 802.11a : 23.15 dBm (0.207 W) 802.11n (BW 20MHz) : 25.04 dBm (0.319 W) 802.11n (BW 40MHz) : 24.34 dBm (0.272 W)
HW Version	MVT 3.0
SW Version	MVT 3.0
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
EUT Stage	Production Unit

Antenna Information		
Antenna	Model Name	N-I1-XX-F
	Antenna Type	PIFA Antenna
	Antenna Gain	3.5 dBi for WLAN (2.4G) ; 6 dBi for WLAN (5G)

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.
	03CH07HY	TW1022/4086B-1

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C. TEL: +886-2-2603-5367 / +886-2-2601-1640 FAX: +886-2-2601-1695	
Test Site No.	Sporton Site No. : CO01-LK	

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 7

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.	Notebook	DELL	Vostro 1510	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	LCD Monitor	Lenovo	6135-AB1	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
3.	iPod	Apple	A1199	FCC DoC	Shielded, 1.0 m	N/A
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
5.	POE	PHIHONG	POE20U-560(G)	N/A	N/A	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	Chain	2.4GHz 802.11b RF Power (dBm)			
			Data Rate			
			1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
CH 01	2412 MHz	A	22.06	21.75	21.74	21.88
CH 02	2417 MHz	A	23.73	23.60	23.58	23.62
CH 06	2437 MHz	A	23.80	23.72	23.77	23.62
CH 10	2457 MHz	A	22.14	22.06	21.77	21.72
CH 11	2462 MHz	A	22.17	22.04	21.88	21.75
CH 01	2412 MHz	B	22.01	21.96	21.89	21.91
CH 02	2417 MHz	B	23.65	23.52	23.59	23.50
CH 06	2437 MHz	B	23.75	23.66	23.52	23.63
CH 10	2457 MHz	B	22.15	22.44	22.43	22.41
CH 11	2462 MHz	B	22.23	22.44	22.48	22.29

Channel	Frequency	Chain	2.4GHz 802.11g RF Power (dBm)							
			Data Rate							
			6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 01	2412 MHz	A	25.10	24.46	24.39	24.25	24.47	24.54	24.14	24.58
CH 02	2417 MHz	A	25.66	25.27	25.02	25.04	25.20	25.22	24.84	25.04
CH 06	2437 MHz	A	25.25	25.26	25.13	25.16	25.02	25.03	25.05	25.00
CH 10	2457 MHz	A	25.64	25.51	25.49	25.31	25.45	25.25	25.33	25.38
CH 11	2462 MHz	A	24.51	24.51	24.17	24.50	24.14	23.99	23.86	24.21
CH 01	2412 MHz	B	24.64	24.63	24.27	24.47	24.58	24.46	24.43	24.42
CH 02	2417 MHz	B	25.32	25.21	25.13	25.25	25.28	25.25	25.11	25.23
CH 06	2437 MHz	B	25.32	25.24	25.20	25.17	25.26	25.21	25.22	25.30
CH 10	2457 MHz	B	25.15	24.88	25.08	25.13	24.94	24.99	25.11	25.06
CH 11	2462 MHz	B	24.41	24.37	24.26	24.39	24.30	24.40	24.30	24.24

Channel	Frequency	Chain	2.4GHz 802.11n (BW 20MHz) RF Power (dBm)							
			Data Rate							
			6.5 Mbps	13 Mbps	19.5 Mbps	26 Mbps	39 Mbps	52 Mbps	58.5 Mbps	65 Mbps
CH 01	2412 MHz	A+B	25.98	-	-	-	-	-	-	-
CH 02	2417 MHz	A+B	26.47	25.89	25.91	26.12	26.29	26.15	26.12	25.96
CH 06	2437 MHz	A+B	26.15	-	-	-	-	-	-	-
CH 10	2457 MHz	A+B	26.25	-	-	-	-	-	-	-
CH 11	2462 MHz	A+B	25.56	-	-	-	-	-	-	-
Channel	Frequency	Chain	13 Mbps	26 Mbps	39 Mbps	52 Mbps	78 Mbps	104 Mbps	117 Mbps	130 Mbps
CH 01	2412 MHz	A+B	-	-	-	-	-	-	-	-
CH 02	2417 MHz	A+B	26.00	25.86	25.98	25.88	25.77	26.04	25.85	25.61
CH 06	2437 MHz	A+B	-	-	-	-	-	-	-	-
CH 10	2457 MHz	A+B	-	-	-	-	-	-	-	-
CH 11	2462 MHz	A+B	-	-	-	-	-	-	-	-

Channel	Frequency	Chain	2.4GHz 802.11n (BW 40MHz) RF Power (dBm)							
			Data Rate							
			13.5 Mbps	27 Mbps	40.5 Mbps	54 Mbps	81 Mbps	108 Mbps	121.5 Mbps	135 Mbps
CH 03	2422 MHz	A+B	23.99	-	-	-	-	-	-	-
CH 04	2427 MHz	A+B	23.77	-	-	-	-	-	-	-
CH 06	2437 MHz	A+B	25.33	24.91	25.17	25.29	24.79	25.30	25.28	25.10
CH 08	2447 MHz	A+B	25.12	-	-	-	-	-	-	-
CH 09	2452 MHz	A+B	23.61	-	-	-	-	-	-	-
Channel	Frequency	Chain	27 Mbps	54 Mbps	81 Mbps	108 Mbps	162 Mbps	216 Mbps	243 Mbps	270 Mbps
CH 03	2422 MHz	A+B	-	-	-	-	-	-	-	-
CH 04	2427 MHz	A+B	-	-	-	-	-	-	-	-
CH 06	2437 MHz	A+B	25.23	25.29	25.02	25.18	25.26	25.00	24.98	25.01
CH 08	2447 MHz	A+B	-	-	-	-	-	-	-	-
CH 09	2452 MHz	A+B	-	-	-	-	-	-	-	-

Channel	Frequency	Chain	5GHz 802.11a RF Power (dBm)							
			Data Rate							
			6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 149	5745 MHz	A	22.88	22.81	22.55	22.50	22.84	22.85	22.46	22.63
CH 157	5785 MHz	A	22.57	22.50	22.35	22.16	22.45	22.36	22.14	22.47
CH 165	5825 MHz	A	23.15	22.75	22.30	22.42	22.37	22.65	22.37	22.41
CH 149	5745 MHz	B	22.87	22.78	22.57	22.84	22.82	22.70	22.68	22.70
CH 157	5785 MHz	B	23.08	22.47	22.00	22.21	22.14	22.23	22.09	22.20
CH 165	5825 MHz	B	22.95	22.29	22.37	22.41	22.27	22.56	22.33	22.45

Channel	Frequency	Chain	5GHz 802.11n (BW 20MHz) RF Power (dBm)							
			Data Rate							
			6.5 Mbps	13 Mbps	19.5 Mbps	26 Mbps	39 Mbps	52 Mbps	58.5 Mbps	65 Mbps
CH 149	5745 MHz	A+B	24.62	-	-	-	-	-	-	-
CH 157	5785 MHz	A+B	24.74	-	-	-	-	-	-	-
CH 165	5825 MHz	A+B	25.04	24.89	24.51	24.80	24.67	24.35	24.71	24.62
Channel	Frequency	Chain	13 Mbps	26 Mbps	39 Mbps	52 Mbps	78 Mbps	104 Mbps	117 Mbps	130 Mbps
CH 149	5745 MHz	A+B	-	-	-	-	-	-	-	-
CH 157	5785 MHz	A+B	-	-	-	-	-	-	-	-
CH 165	5825 MHz	A+B	25.02	24.88	24.60	24.67	24.73	24.82	24.70	24.53

Channel	Frequency	Chain	5GHz 802.11n (BW 40MHz) RF Power (dBm)							
			Data Rate							
			13.5 Mbps	27 Mbps	40.5 Mbps	54 Mbps	81 Mbps	108 Mbps	121.5 Mbps	135.0 Mbps
CH 151	5755 MHz	A+B	24.29	-	-	-	-	-	-	-
CH 159	5795 MHz	A+B	24.34	24.19	24.24	24.33	24.16	24.31	23.93	24.10
Channel	Frequency	Chain	27 Mbps	54 Mbps	81 Mbps	108 Mbps	162 Mbps	216 Mbps	243 Mbps	270 Mbps
CH 151	5755 MHz	A+B	-	-	-	-	-	-	-	-
CH 159	5795 MHz	A+B	24.09	24.19	24.14	24.13	23.96	23.95	24.16	23.91

Remark:

- Chain A+B was tested by combiner, and the chain A and B was tested individually and calculated with the formula of $10 \cdot \log(10^{(chain A/10)} + 10^{(chain B/10)})$.
- The data rates of WLAN 802.11b were set in 1Mbps, 6Mbps for 802.11g, 6.5Mbps for 2.4GHz 802.11n (BW 20MHz), 13.5Mbps for 2.4GHz 802.11n (BW 40MHz), 6Mbps for 802.11a, 6.5Mbps for 5GHz 802.11n (BW 20MHz), 13.5Mbps for 5GHz 802.11n (BW 40MHz) for all the test cases due to the highest RF output power.



3. The EUT is programmed to transmit signals continuously for all testing.
4. SISO stands for single input and single output. It means that only one chain transmits signals at a time.
5. 2Tx is one type of MIMO, which means that two chains transmit signals at the same time.

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, X, Y, Z in three orthogonal panels, were conducted to determine the final configuration from all possible combinations modes.

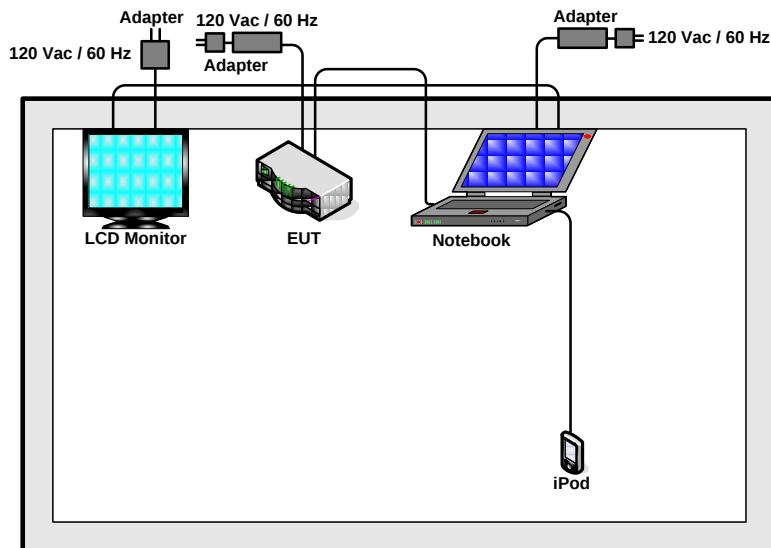
The following table is showing the total pre-scanned test modes, and the worst modes are recorded in this report only.

Test Cases	
Test Item	802.11b (Modulation : DSSS) 802.11a/g/n (Modulation : OFDM)
Conducted TCs	Mode 1: 802.11b_CH01_2412 MHz Mode 2: 802.11b_CH02_2417 MHz Mode 3: 802.11b_CH06_2437 MHz Mode 4: 802.11b_CH10_2457 MHz Mode 5: 802.11b_CH11_2462 MHz Mode 6: 802.11g_CH01_2412 MHz Mode 7: 802.11g_CH02_2417 MHz Mode 8: 802.11g_CH06_2437 MHz Mode 9: 802.11g_CH10_2457 MHz Mode 10: 802.11g_CH11_2462 MHz Mode 11: 802.11n_CH01_2412 MHz (BW 20M) Mode 12: 802.11n_CH02_2417 MHz (BW 20M) Mode 13: 802.11n_CH06_2437 MHz (BW 20M) Mode 14: 802.11n_CH10_2457 MHz (BW 20M) Mode 15: 802.11n_CH11_2462 MHz (BW 20M) Mode 16: 802.11n_CH03_2422 MHz (BW 40M) Mode 17: 802.11n_CH04_2427 MHz (BW 40M) Mode 18: 802.11n_CH06_2437 MHz (BW 40M) Mode 19: 802.11n_CH08_2447 MHz (BW 40M) Mode 20: 802.11n_CH09_2452 MHz (BW 40M) Mode 21: 802.11a_CH149_5745 MHz Mode 22: 802.11a_CH157_5785 MHz Mode 23: 802.11a_CH165_5825 MHz Mode 24: 802.11n_CH149_5745 MHz (BW 20M) Mode 25: 802.11n_CH157_5785 MHz (BW 20M) Mode 26: 802.11n_CH165_5825 MHz (BW 20M) Mode 27: 802.11n_CH151_5755 MHz (BW 40M) Mode 28: 802.11n_CH159_5795 MHz (BW 40M)

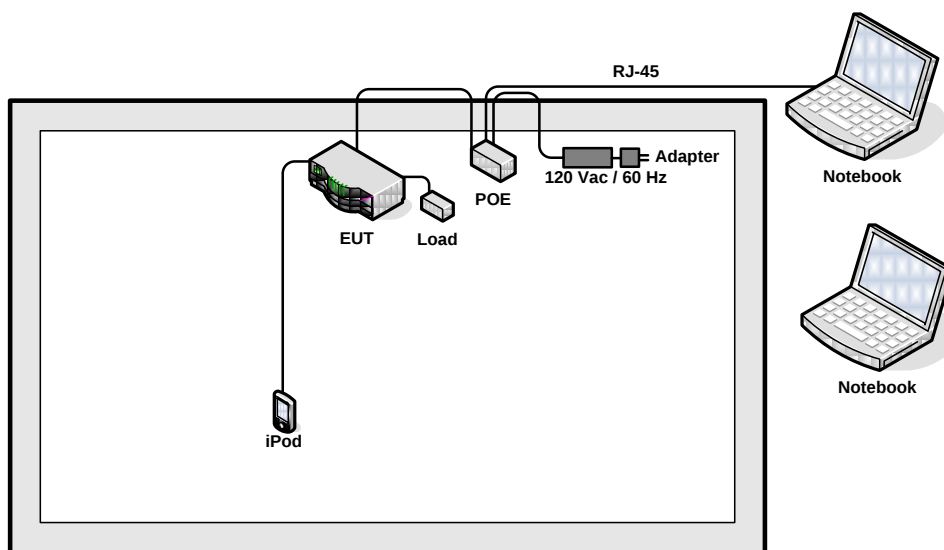
Test Cases	
Radiated TCs	Mode 1: 802.11b_CH01_2412 MHz Mode 2: 802.11b_CH02_2417 MHz Mode 3: 802.11b_CH06_2437 MHz Mode 4: 802.11b_CH10_2457 MHz Mode 5: 802.11b_CH11_2462 MHz Mode 6: 802.11g_CH01_2412 MHz Mode 7: 802.11g_CH02_2417 MHz Mode 8: 802.11g_CH06_2437 MHz Mode 9: 802.11g_CH10_2457 MHz Mode 10: 802.11g_CH11_2462 MHz Mode 11: 802.11n_CH01_2412 MHz (BW 20M) Mode 12: 802.11n_CH02_2417 MHz (BW 20M) Mode 13: 802.11n_CH06_2437 MHz (BW 20M) Mode 14: 802.11n_CH10_2457 MHz (BW 20M) Mode 15: 802.11n_CH11_2462 MHz (BW 20M) Mode 16: 802.11n_CH03_2422 MHz (BW 40M) Mode 17: 802.11n_CH04_2427 MHz (BW 40M) Mode 18: 802.11n_CH06_2437 MHz (BW 40M) Mode 19: 802.11n_CH08_2447 MHz (BW 40M) Mode 20: 802.11n_CH09_2452 MHz (BW 40M) Mode 21: 802.11a_CH149_5745 MHz Mode 22: 802.11a_CH157_5785 MHz Mode 23: 802.11a_CH165_5825 MHz Mode 24: 802.11n_CH149_5745 MHz (BW 20M) Mode 25: 802.11n_CH157_5785 MHz (BW 20M) Mode 26: 802.11n_CH165_5825 MHz (BW 20M) Mode 27: 802.11n_CH151_5755 MHz (BW 40M) Mode 28: 802.11n_CH159_5795 MHz (BW 40M)
AC Conducted Emission	Mode 1 : WLAN (5G) Link + POE

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<EUT with POE Mode>



2.4 RF Utility

The programmed RF utility “Hyperterminal” is installed in notebook 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 and 99% Bandwidth Measurement

3.1.1 Limit of 6dB Bandwidth

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

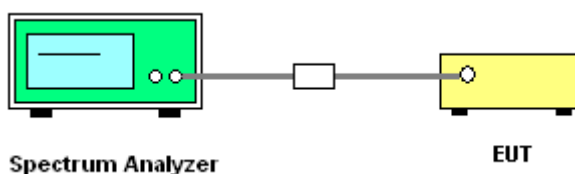
3.1.2 Measuring Instruments

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 1~5	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11b 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A		
01	2412	8.08	0.5	Pass
02	2417	8.12	0.5	Pass
06	2437	8.12	0.5	Pass
10	2457	8.08	0.5	Pass
11	2462	8.08	0.5	Pass

Test Mode :	Mode 6~10	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11g 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A		
01	2412	16.32	0.5	Pass
02	2417	15.04	0.5	Pass
06	2437	15.12	0.5	Pass
10	2457	15.36	0.5	Pass
11	2462	15.68	0.5	Pass

Test Mode :	Mode 11~15	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B		
01	2412	16.32	0.5	Pass
02	2417	16.32	0.5	Pass
06	2437	16.32	0.5	Pass
10	2457	16.08	0.5	Pass
11	2462	16.32	0.5	Pass

Test Mode :	Mode 16~20	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B		
03	2422	35.84	0.5	Pass
04	2427	35.84	0.5	Pass
06	2437	35.84	0.5	Pass
08	2447	35.84	0.5	Pass
09	2452	35.84	0.5	Pass

Test Mode :	Mode 21~23	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11a 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A		
149	5745	16.40	0.5	Pass
157	5785	16.36	0.5	Pass
165	5825	16.40	0.5	Pass

Test Mode :	Mode 24~26	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B		
149	5745	16.08	0.5	Pass
157	5785	16.08	0.5	Pass
165	5825	16.08	0.5	Pass

Test Mode :	Mode 27~28	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
		Chain A+B		
151	5755	35.76	0.5	Pass
159	5795	35.60	0.5	Pass

3.1.6 Test Result of 99% Occupied Bandwidth

Test Mode :	Mode 1~5	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11b 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A	
01	2412	10.48	Pass
02	2417	10.72	Pass
06	2437	10.72	Pass
10	2457	10.48	Pass
11	2462	10.48	Pass

Test Mode :	Mode 6~10	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11g 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A	
01	2412	17.12	Pass
02	2417	17.28	Pass
06	2437	17.12	Pass
10	2457	17.20	Pass
11	2462	17.12	Pass

Test Mode :	Mode 11~15	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A+B	
01	2412	17.44	Pass
02	2417	17.52	Pass
06	2437	17.44	Pass
10	2457	17.44	Pass
11	2462	17.52	Pass

Test Mode :	Mode 16~20	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A+B	
03	2422	37.12	Pass
04	2427	37.12	Pass
06	2437	37.12	Pass
08	2447	37.12	Pass
09	2452	37.12	Pass

Test Mode :	Mode 21~23	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11a 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A	
149	5745	17.36	Pass
157	5785	17.36	Pass
165	5825	17.36	Pass

Test Mode :	Mode 24~26	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A+B	
149	5745	17.52	Pass
157	5785	17.40	Pass
165	5825	17.44	Pass

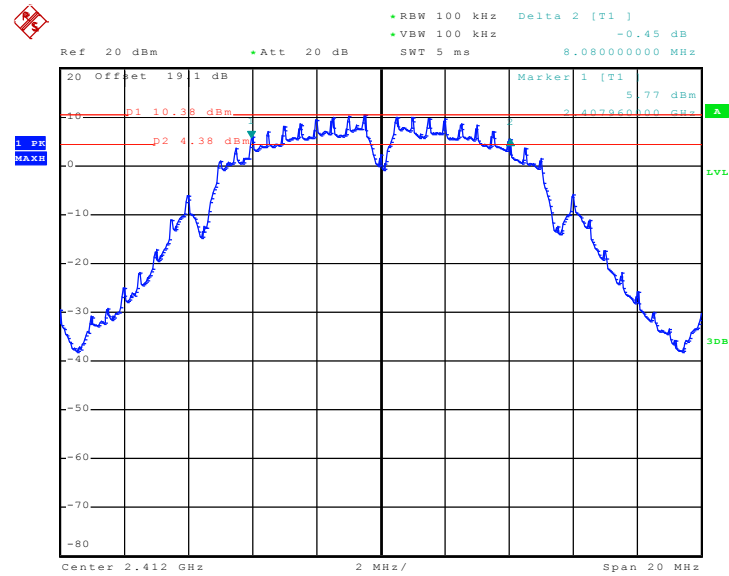
Test Mode :	Mode 27~28	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) 99% Occupied Bandwidth (MHz)	Pass/Fail
		Chain A+B	
151	5755	37.12	Pass
159	5795	37.12	Pass

3.1.7 Test Result of 6dB Bandwidth Plots

Mode 1 :

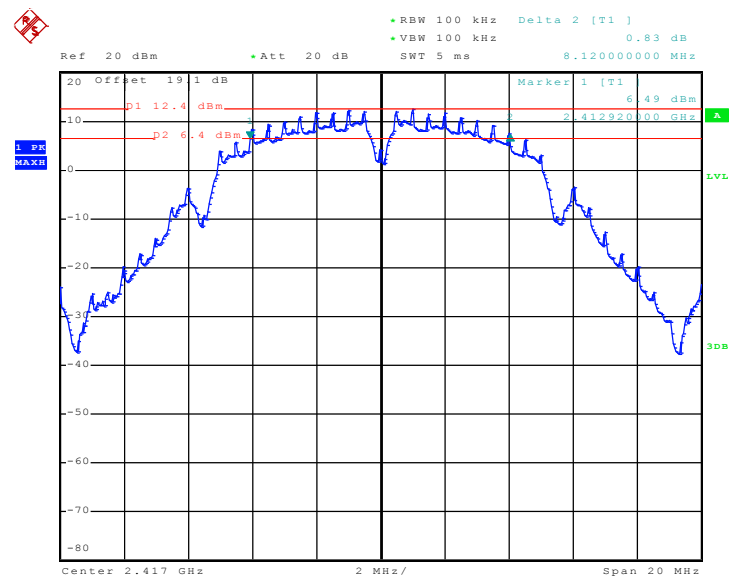
6 dB Bandwidth Plot on 802.11b Channel 01 - Chain A



Date: 13.SEP.2010 11:38:20

Mode 2 :

6 dB Bandwidth Plot on 802.11b Channel 02 - Chain A

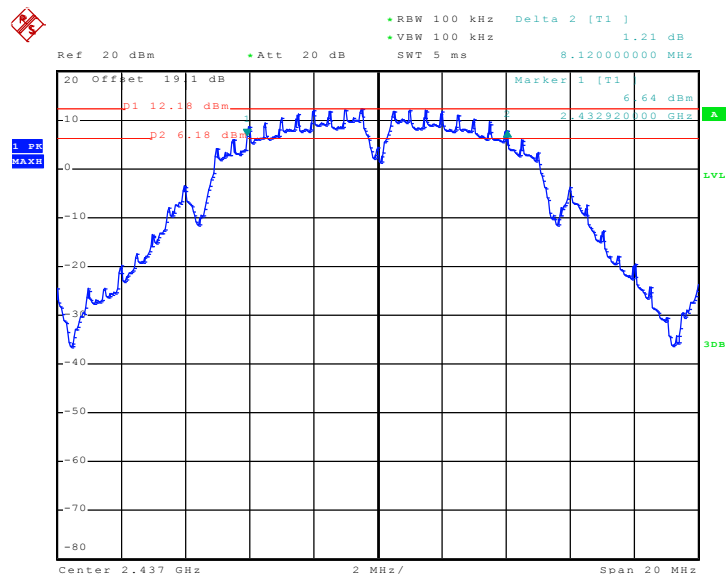


Date: 13.SEP.2010 11:43:09



Mode 3 :

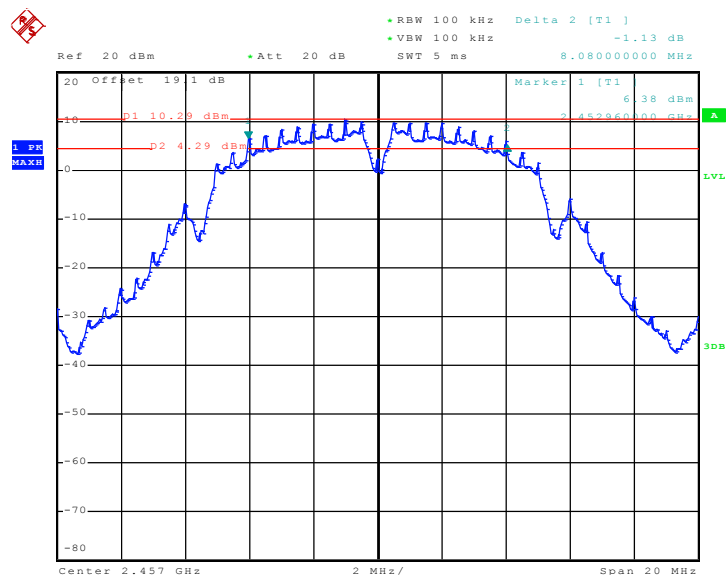
6 dB Bandwidth Plot on 802.11b Channel 06 - Chain A



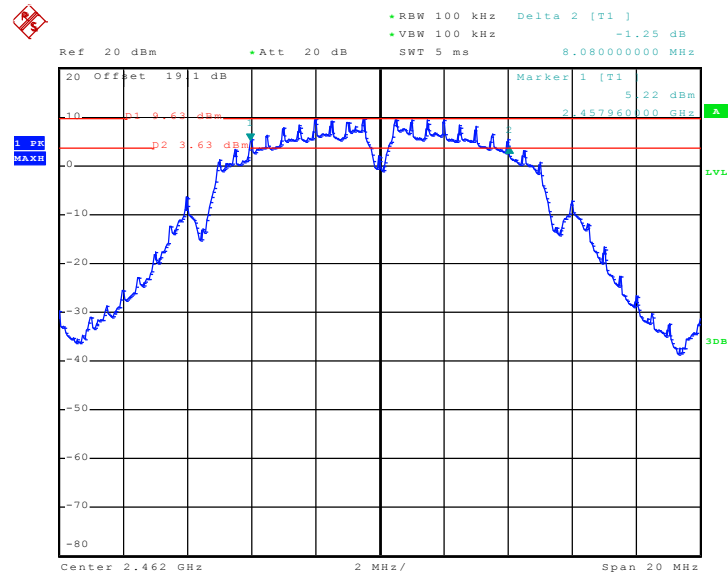
Date: 13.SEP.2010 11:47:19

Mode 4 :

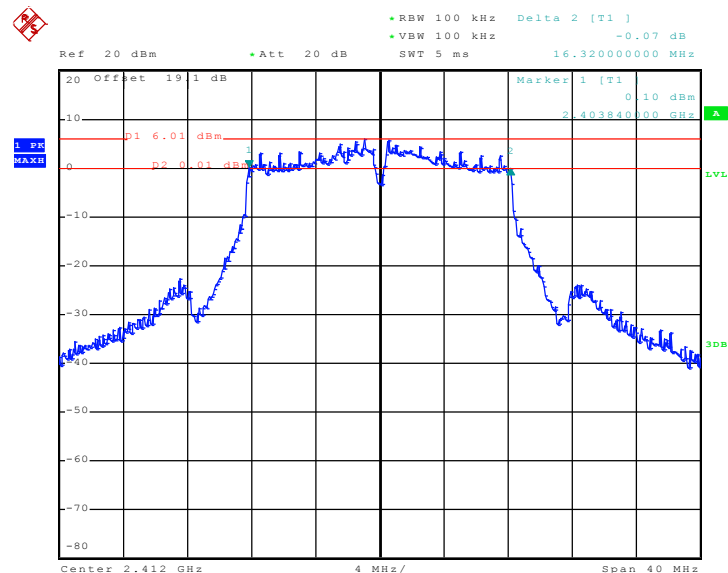
6 dB Bandwidth Plot on 802.11b Channel 10 - Chain A



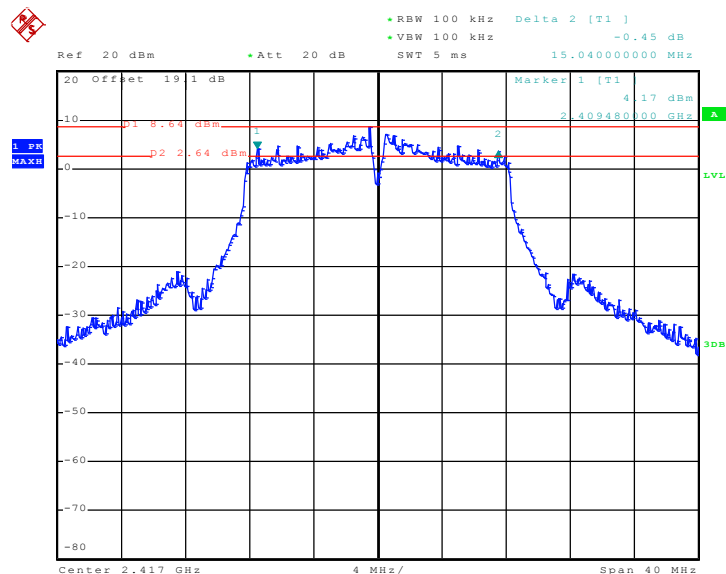
Date: 13.SEP.2010 11:49:26

Mode 5 :
6 dB Bandwidth Plot on 802.11b Channel 11 - Chain A


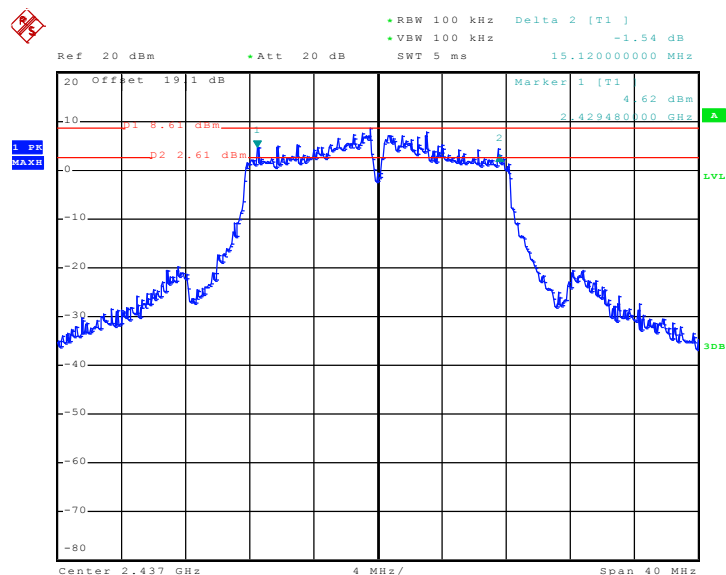
Date: 13.SEP.2010 11:32:03

Mode 6 :
6 dB Bandwidth Plot on 802.11g Channel 01 - Chain A


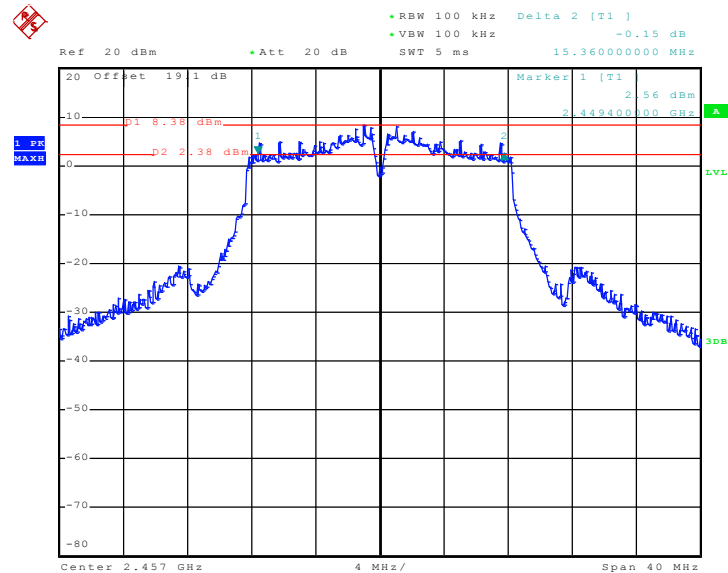
Date: 13.SEP.2010 17:34:17

Mode 7 :
6 dB Bandwidth Plot on 802.11g Channel 02 - Chain A


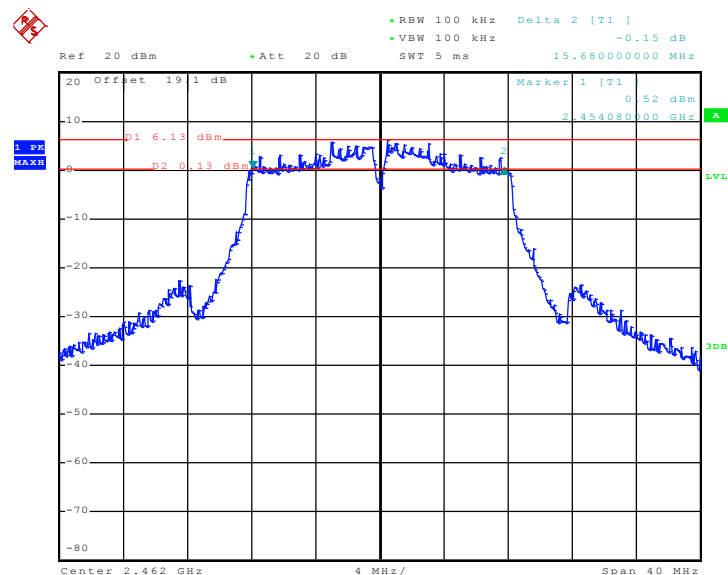
Date: 13.SEP.2010 17:31:18

Mode 8 :
6 dB Bandwidth Plot on 802.11g Channel 06 - Chain A


Date: 13.SEP.2010 17:28:54

Mode 9 :
6 dB Bandwidth Plot on 802.11g Channel 10 - Chain A


Date: 13.SEP.2010 17:26:22

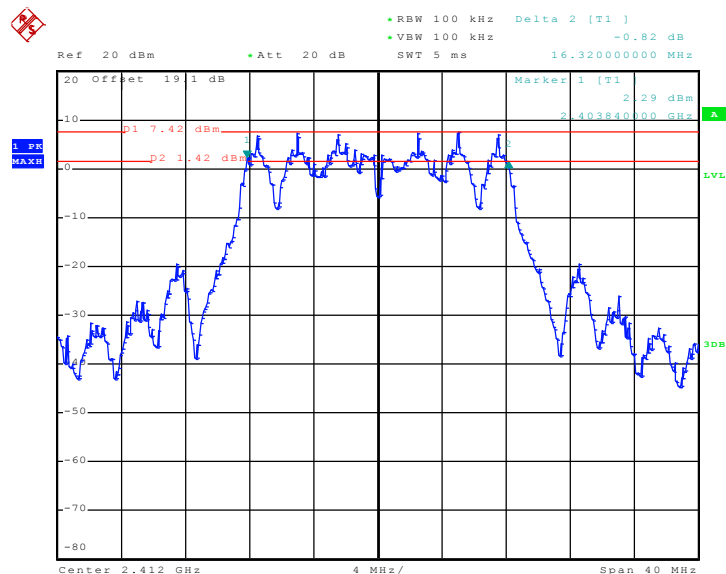
Mode 10 :
6 dB Bandwidth Plot on 802.11g Channel 11 - Chain A


Date: 13.SEP.2010 17:21:27



Mode 11 : 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel

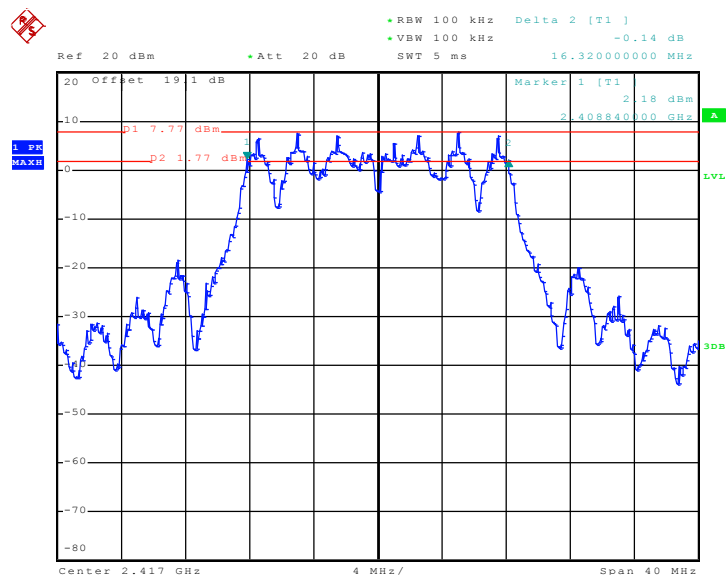
01 - Chain A+B



Date: 16.SEP.2010 09:41:43

Mode 12 : 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel

02 - Chain A+B



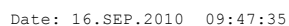
Date: 16.SEP.2010 09:43:50

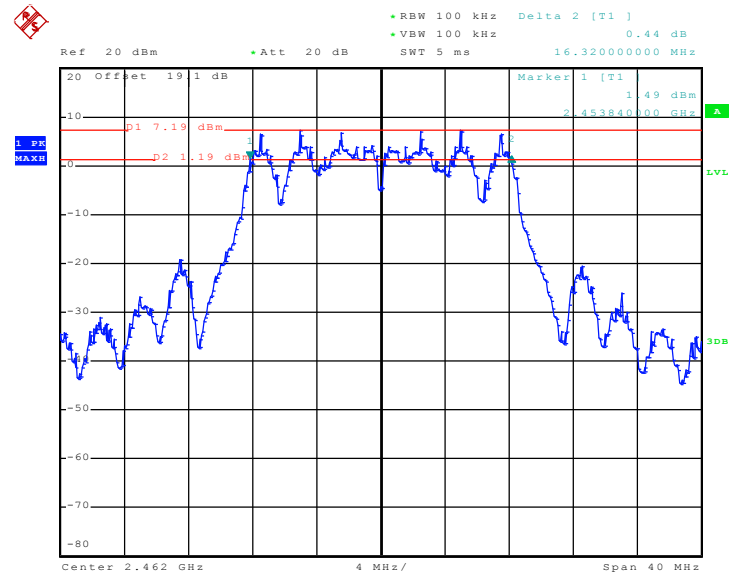


06 - Chain A+B

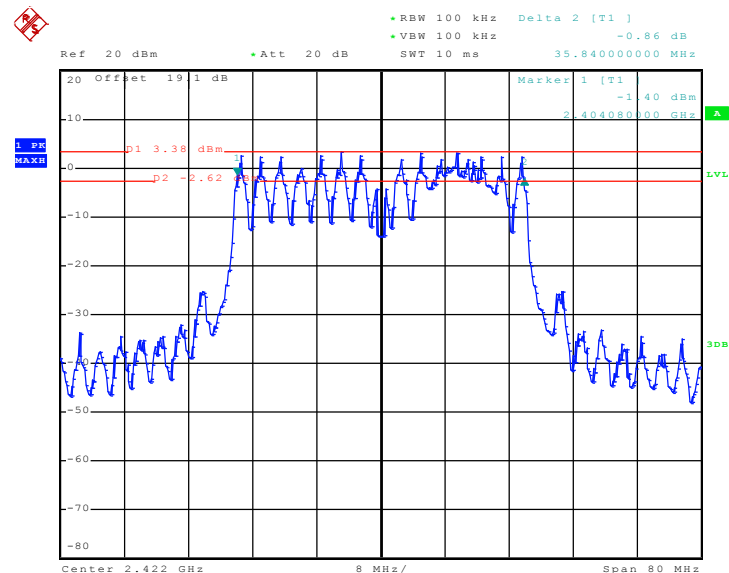


10 - Chain A+B

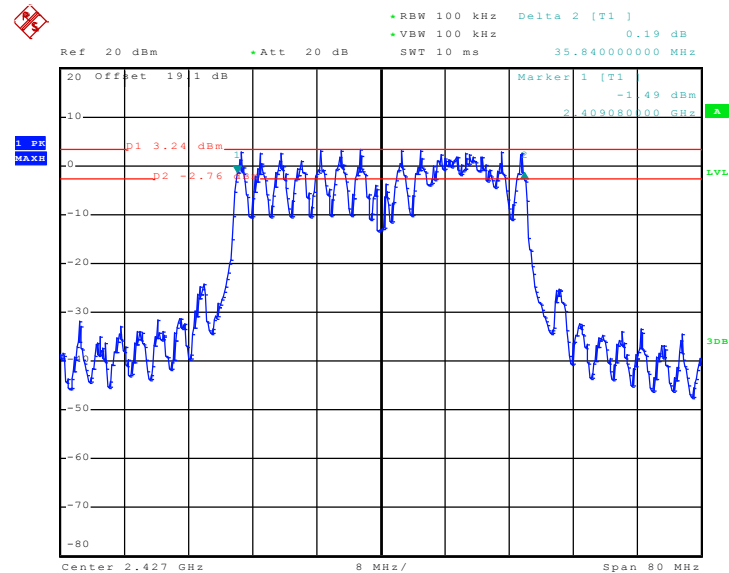


Mode 15 : 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel
11 - Chain A+B


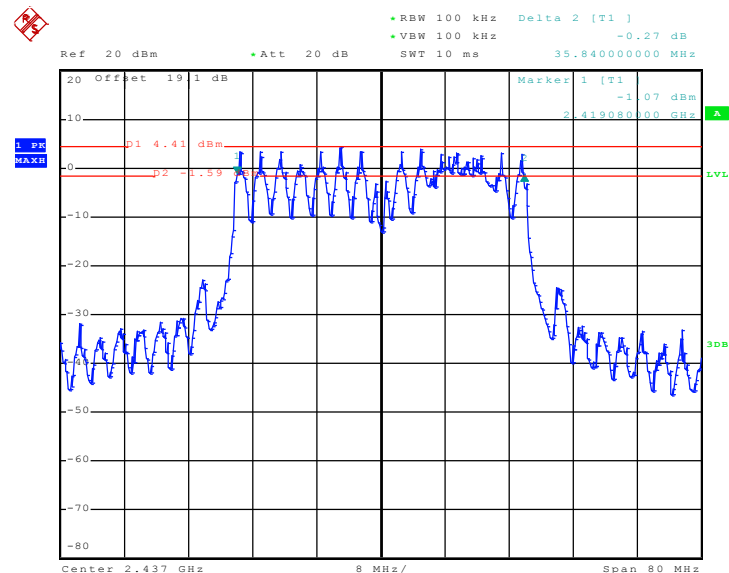
Date: 16.SEP.2010 09:50:14

Mode 16 : 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel
03 - Chain A+B


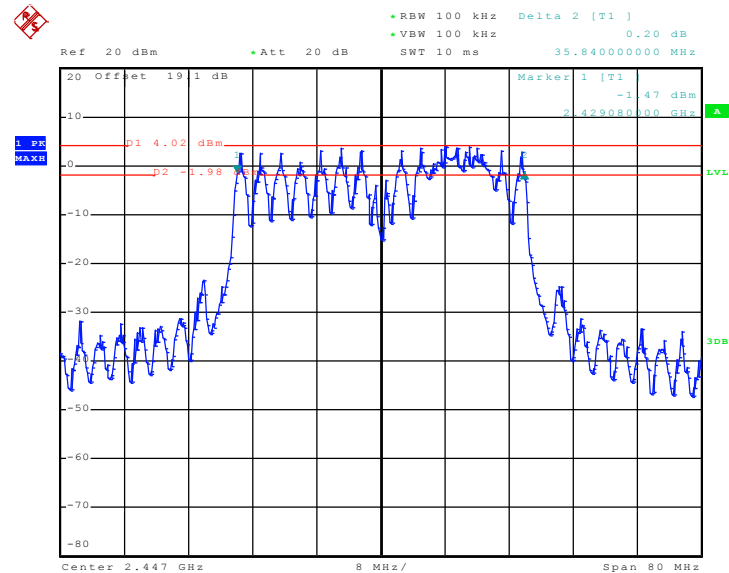
Date: 16.SEP.2010 11:37:49

Mode 17 : 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel
04 - Chain A+B


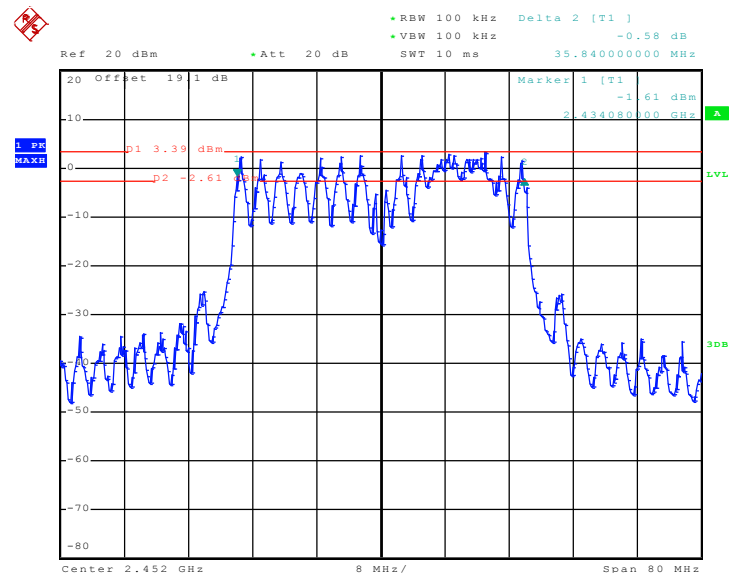
Date: 16.SEP.2010 11:40:17

Mode 18 : 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel
06 - Chain A+B


Date: 16.SEP.2010 11:41:55

Mode 19: 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel
08 - Chain A+B


Date: 16.SEP.2010 11:45:21

Mode 20: 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel
09 - Chain A+B


Date: 16.SEP.2010 11:50:01



Ref 20 dBm Att 20 dB SWT 20 ms Delta 2 [T1] 0.22 dB 16.40000000 MHz

RBW 100 kHz VBW 100 kHz

Marker 1 [T1] -2.59 dBm 5.73676000 GHz

01 3.11 dBm

02 -2.59 dBm

Center 5.745 GHz 2 MHz / Span 20 MHz

Date: 20.SEP.2010 16:01:05

Mode 22:

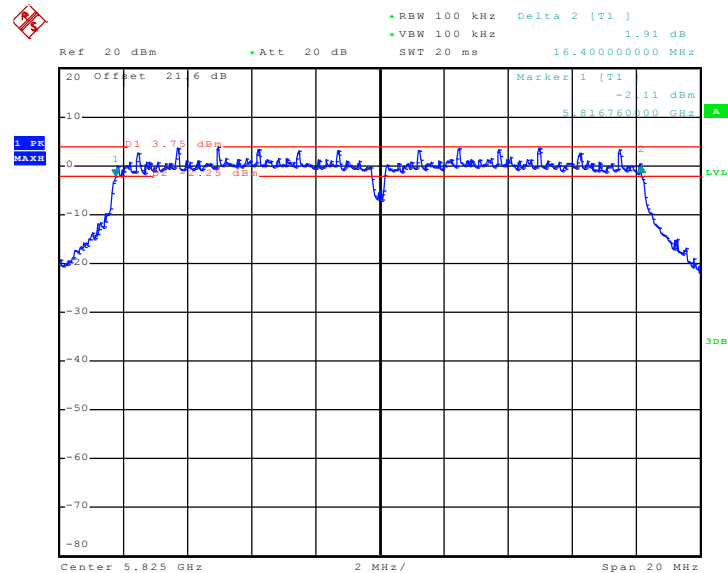
• RBW 100 kHz Delta 2 [T1]
 • VBW 100 kHz -0.78 dB
 Ref 20 dBm • Att 20 dB SWT 20 ms 16.360000000 MHz

20 Offset 21 6 dB
 Marker 1 [T1] -0.85 dBm
 5.776800000 GHz

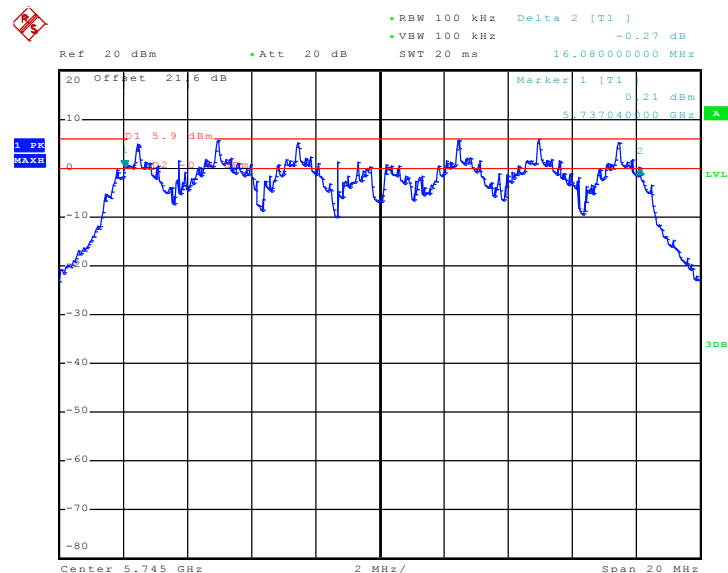
1 7% MAX
 P1 3.11 dBm
 P2 -2.89 dBm

Center 5.785 GHz 2 MHz/
 Span 20 MHz

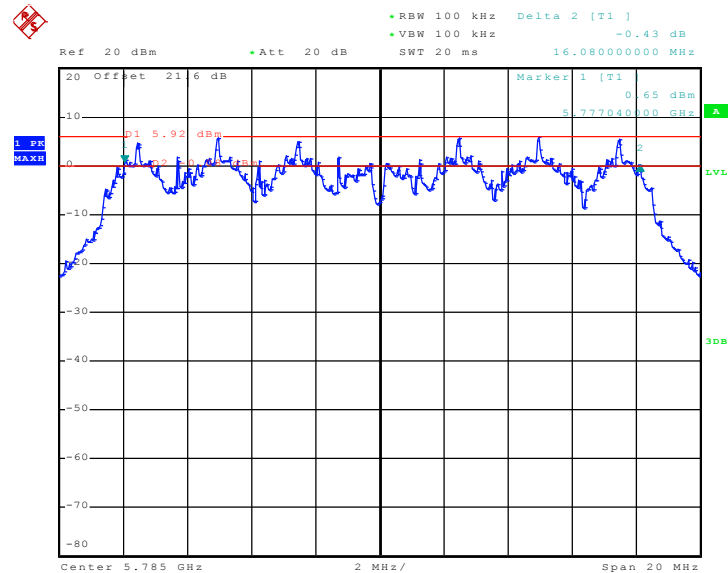
Date: 20.SEP.2010 19:21:51

Mode 23:
6 dB Bandwidth Plot on 802.11a Channel 165 - Chain A


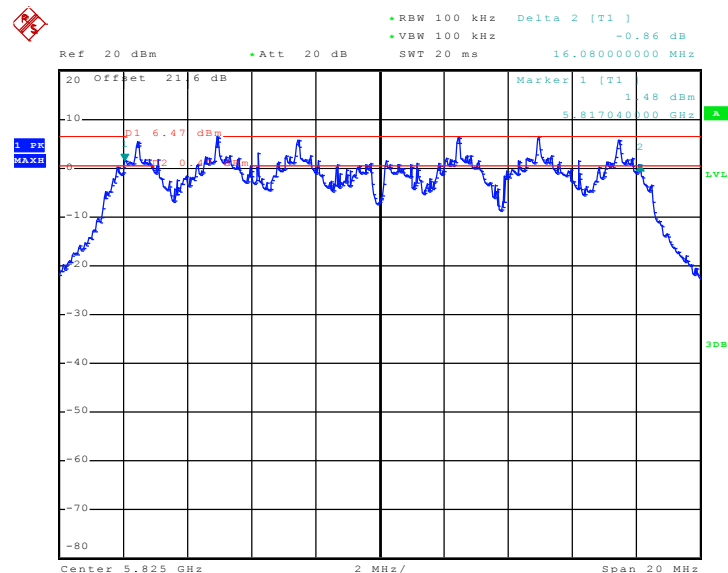
Date: 20.SEP.2010 19:17:40

Mode 24: 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel 149 - Chain A+B


Date: 23.SEP.2010 06:51:44

Mode 25: 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel
157 - Chain A+B


Date: 23.SEP.2010 06:56:28

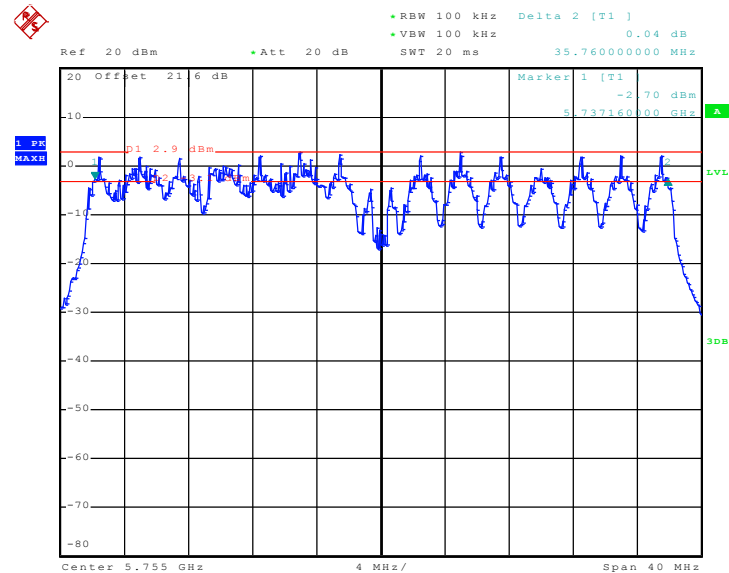
Mode 26: 6 dB Bandwidth Plot on 802.11n (BW 20MHz) Channel
165 - Chain A+B


Date: 23.SEP.2010 07:05:14



Mode 27: 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel

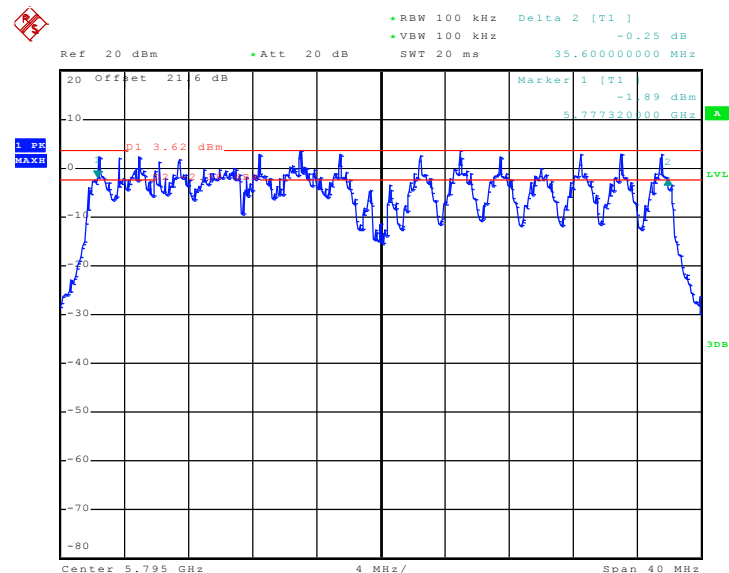
151 - Chain A+B



Date: 23.SEP.2010 07:23:34

Mode 28: 6 dB Bandwidth Plot on 802.11n (BW 40MHz) Channel

159 - Chain A+B

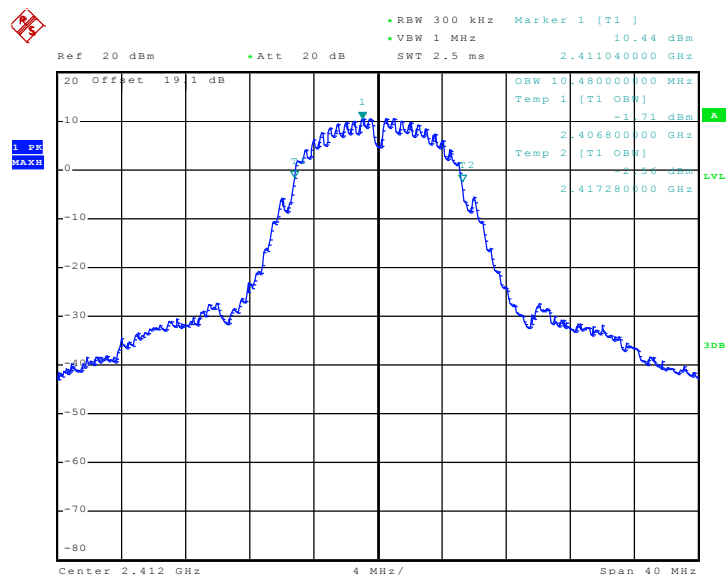


Date: 23.SEP.2010 07:26:08

3.1.8 Test Result of 99% Bandwidth Plots

Mode 1 :

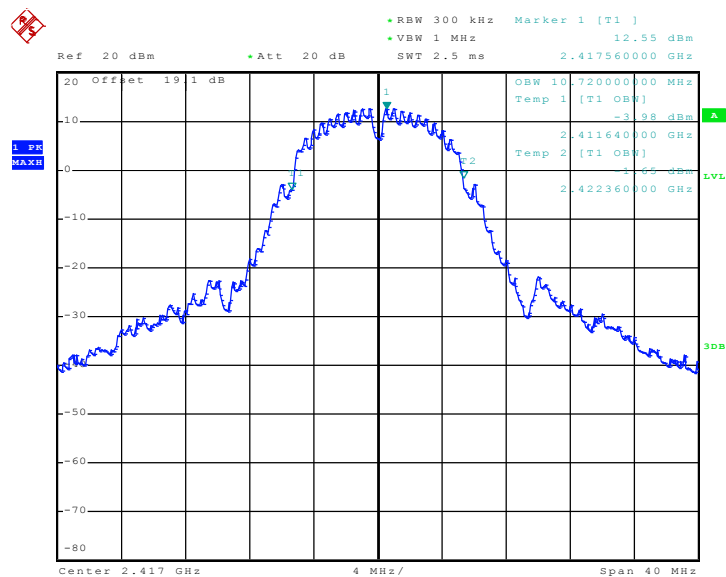
99% Occupied Bandwidth Plot on 802.11b Channel 01 - Chain A



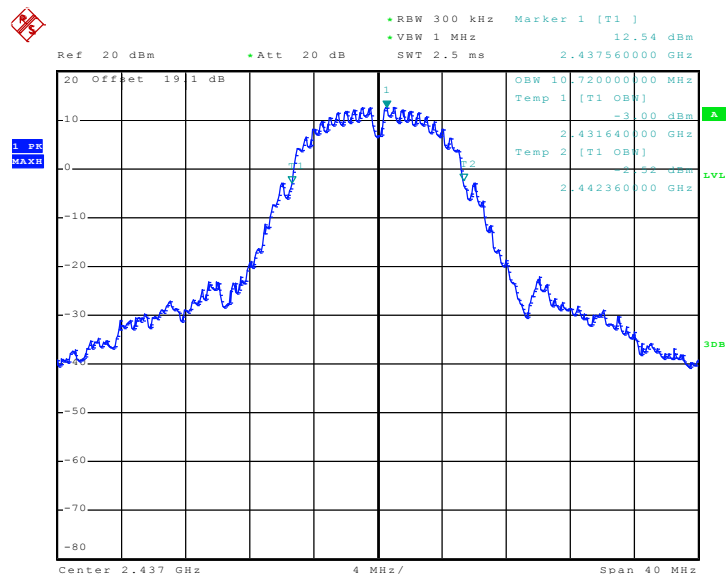
Date: 13.SEP.2010 18:25:36

Mode 2 :

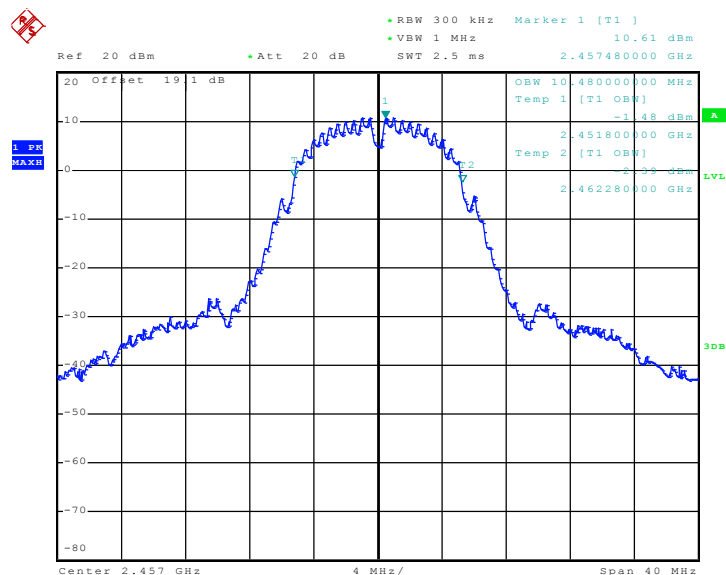
99% Occupied Bandwidth Plot on 802.11b Channel 02 - Chain A



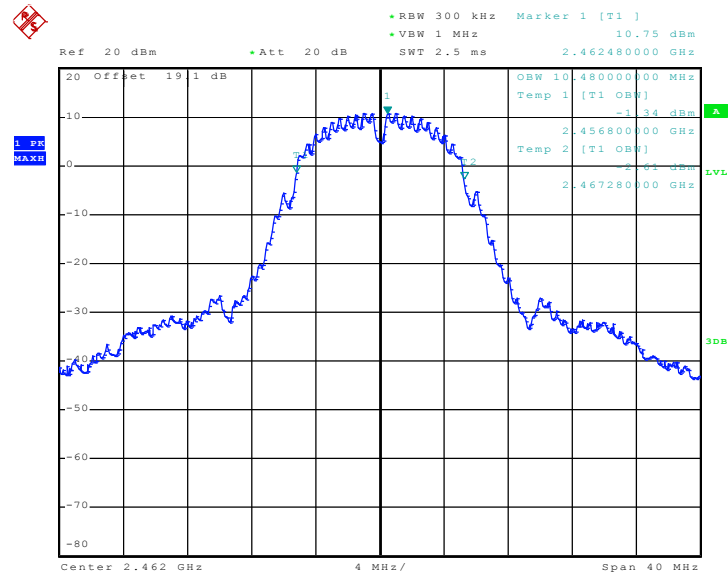
Date: 13.SEP.2010 18:26:21

Mode 3 :
99% Occupied Bandwidth Plot on 802.11b Channel 06 - Chain A


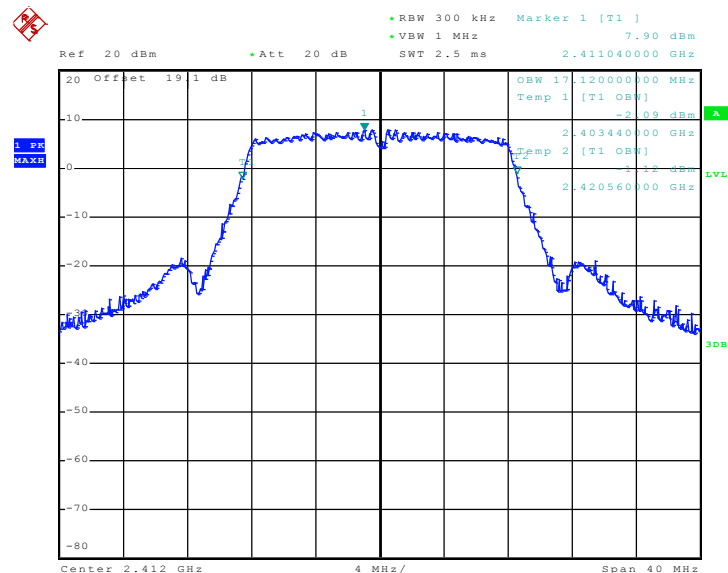
Date: 13.SEP.2010 18:27:11

Mode 4 :
99% Occupied Bandwidth Plot on 802.11b Channel 10 - Chain A


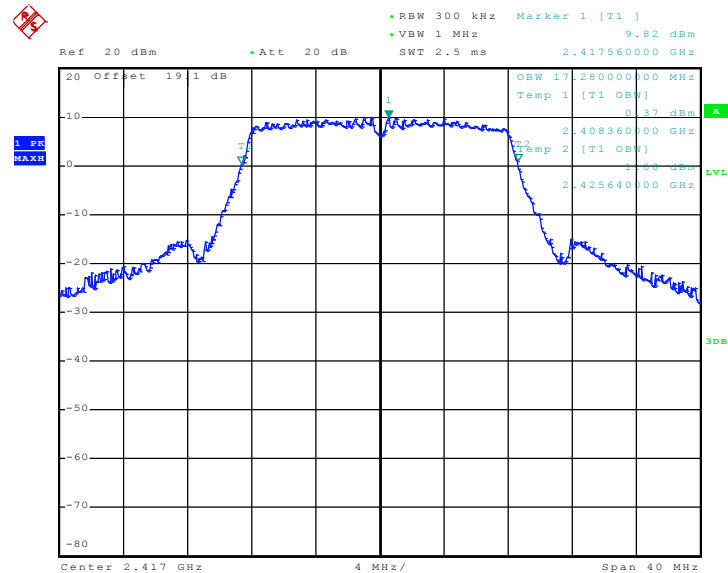
Date: 13.SEP.2010 18:28:41

Mode 5 :
99% Occupied Bandwidth Plot on 802.11b Channel 11 - Chain A


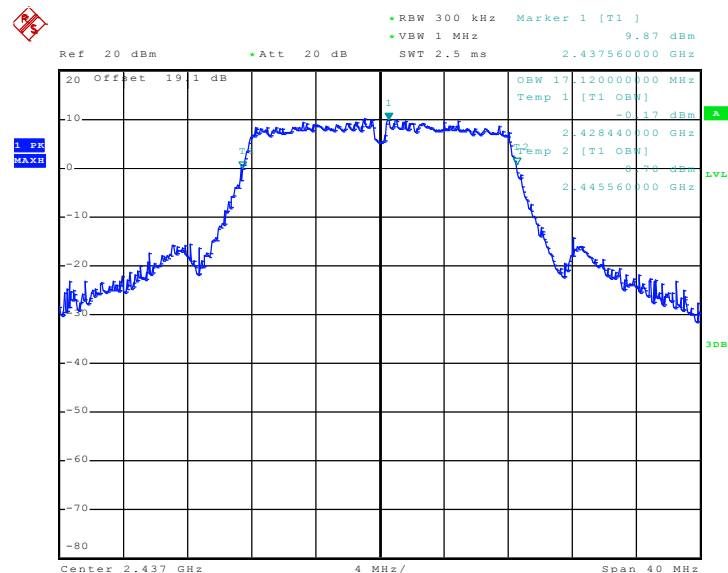
Date: 13.SEP.2010 18:29:20

Mode 6 :
99% Occupied Bandwidth Plot on 802.11g Channel 01 - Chain A


Date: 13.SEP.2010 18:31:37

Mode 7 :
99% Occupied Bandwidth Plot on 802.11g Channel 02 - Chain A


Date: 13.SEP.2010 18:34:00

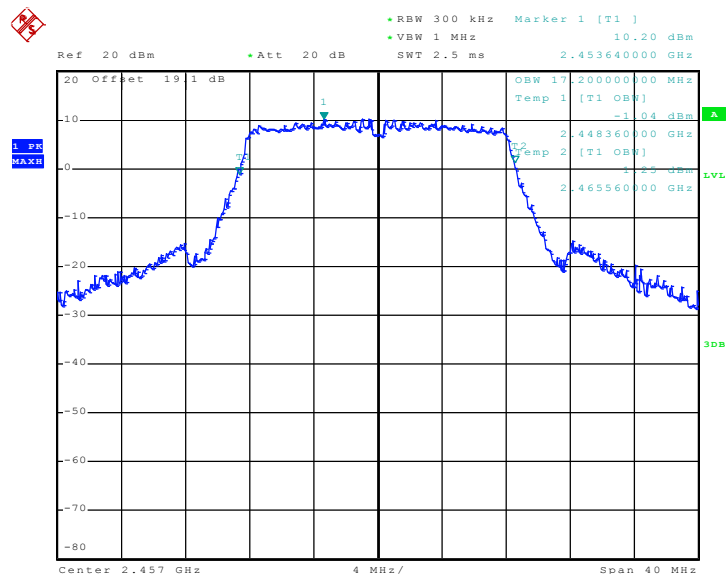
Mode 8 :
99% Occupied Bandwidth Plot on 802.11g Channel 06 - Chain A


Date: 13.SEP.2010 18:34:53



Mode 9 :

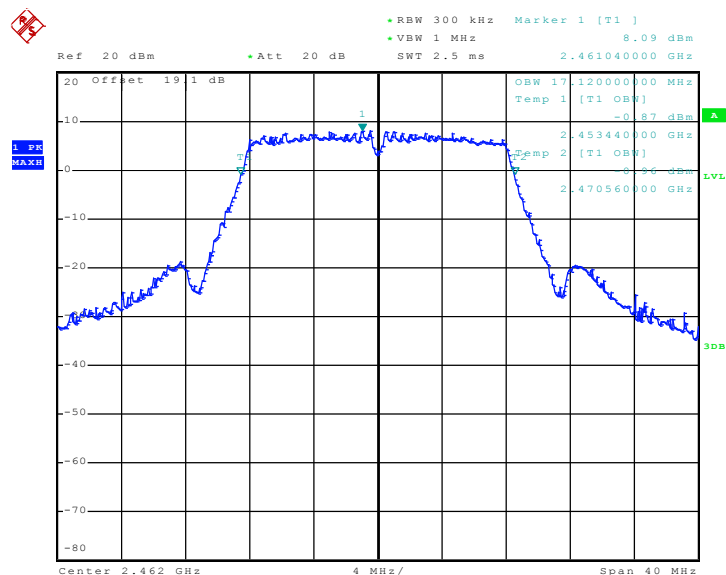
99% Occupied Bandwidth Plot on 802.11g Channel 10 - Chain A



Date: 13.SEP.2010 19:11:04

Mode 10 :

99% Occupied Bandwidth Plot on 802.11g Channel 11 - Chain A

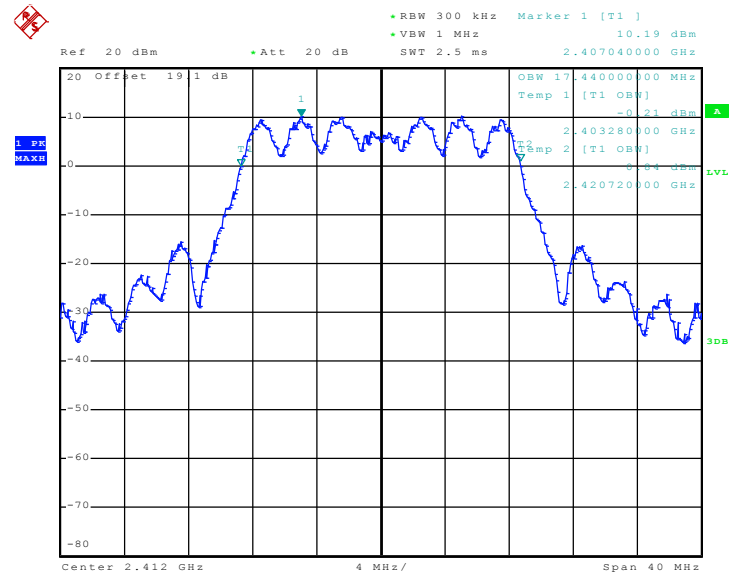


Date: 13.SEP.2010 19:12:13



Mode 11 : 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)

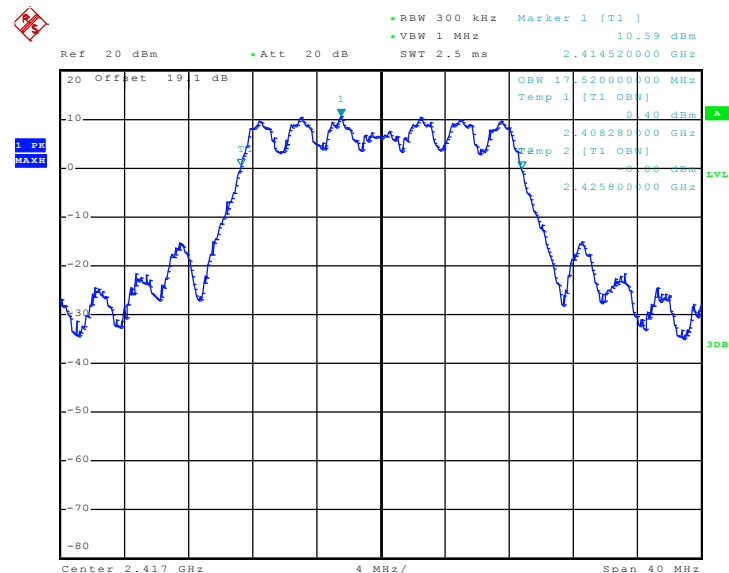
Channel 01 - Chain A+B



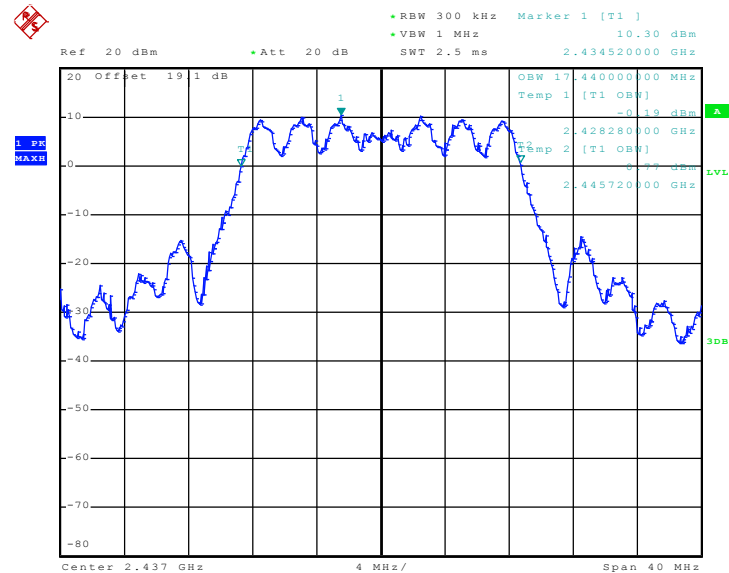
Date: 16.SEP.2010 10:25:06

Mode 12 : 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)

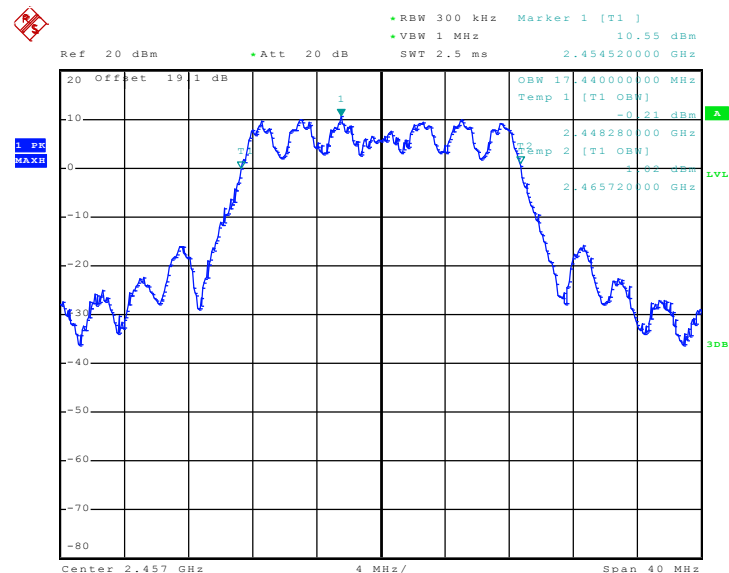
Channel 02 - Chain A+B



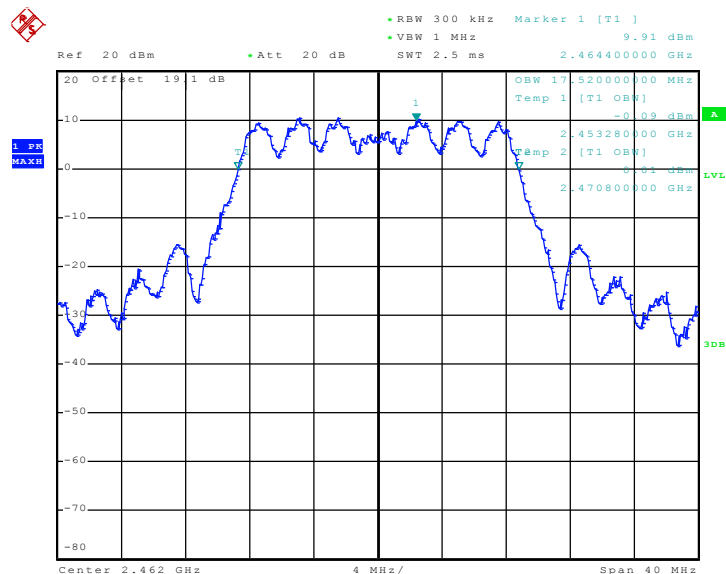
Date: 16.SEP.2010 10:24:04

Mode 13 : 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)
Channel 06 - Chain A+B


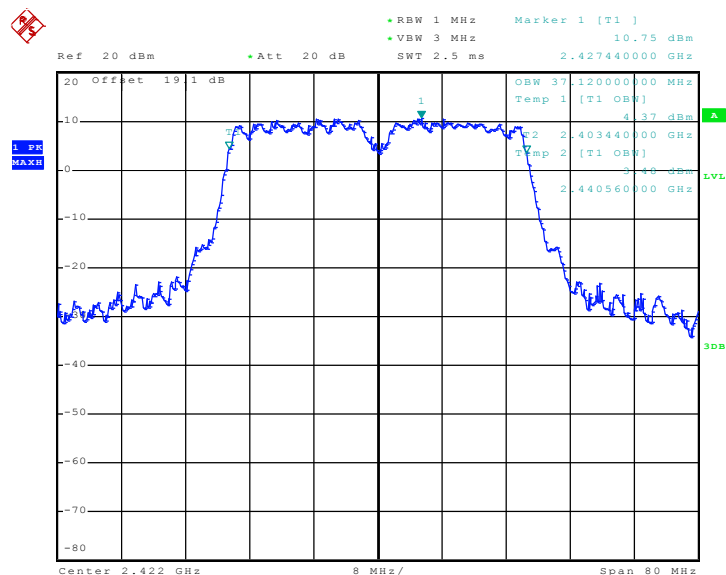
Date: 16.SEP.2010 10:21:37

Mode 14 : 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)
Channel 10 - Chain A+B


Date: 16.SEP.2010 10:20:40

Mode 15 : 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)
Channel 11 - Chain A+B


Date: 16.SEP.2010 09:53:50

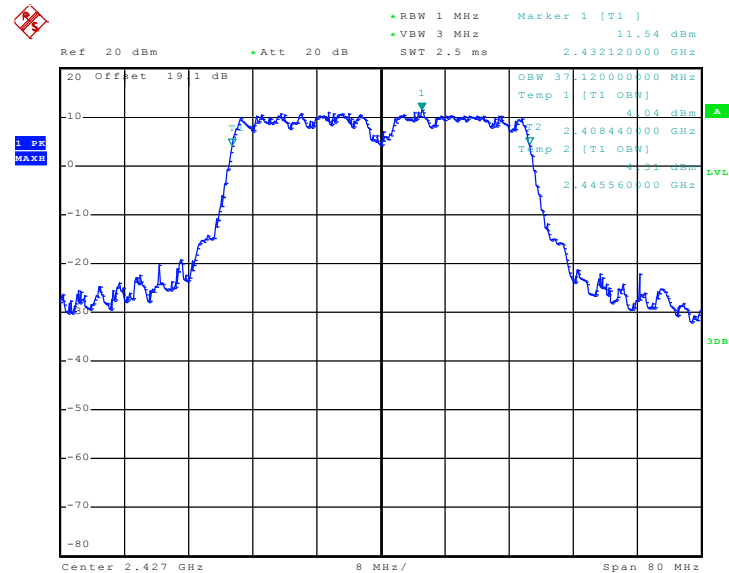
Mode 16 : 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)
Channel 03 - Chain A+B


Date: 24.SEP.2010 00:34:16



Mode 17 : 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

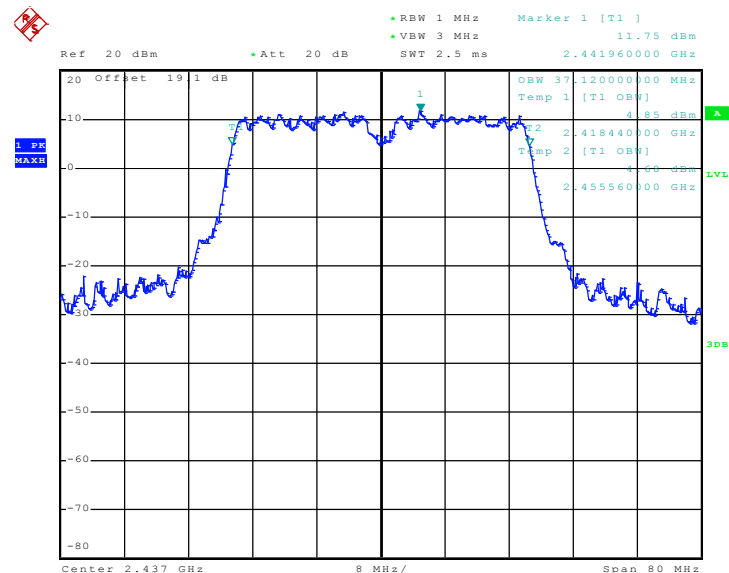
Channel 04 - Chain A+B



Date: 24.SEP.2010 00:33:28

Mode 18 : 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

Channel 06 - Chain A+B

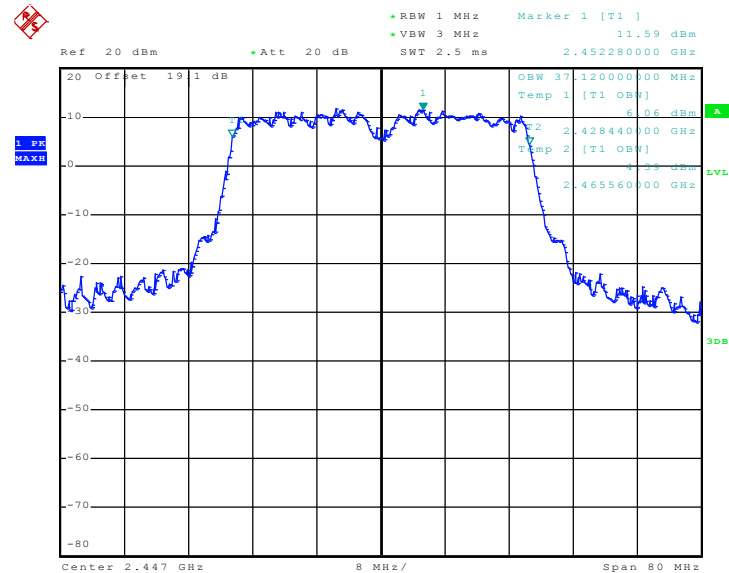


Date: 24.SEP.2010 00:32:38



Mode 19: 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

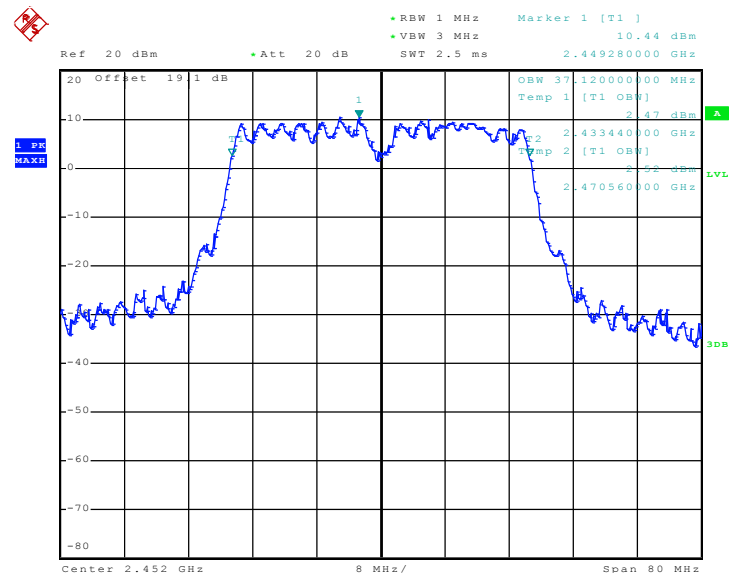
Channel 08 - Chain A+B



Date: 24.SEP.2010 00:31:45

Mode 20: 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

Channel 09 - Chain A+B

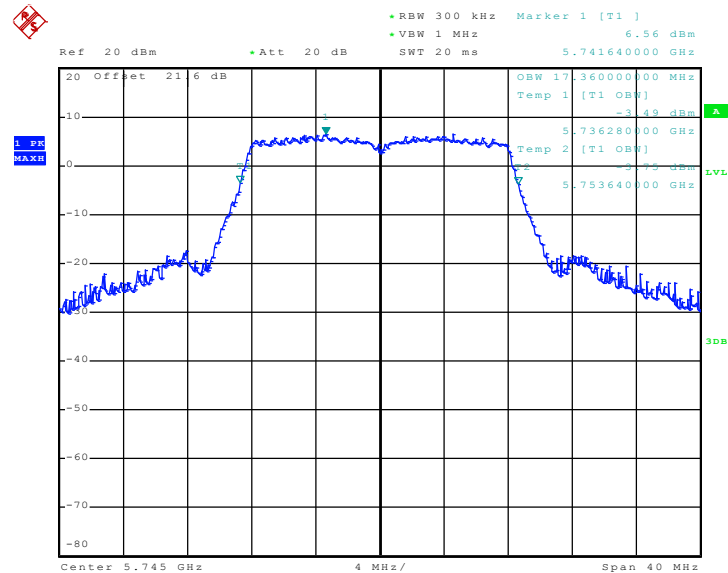


Date: 24.SEP.2010 00:30:07



Mode 21:

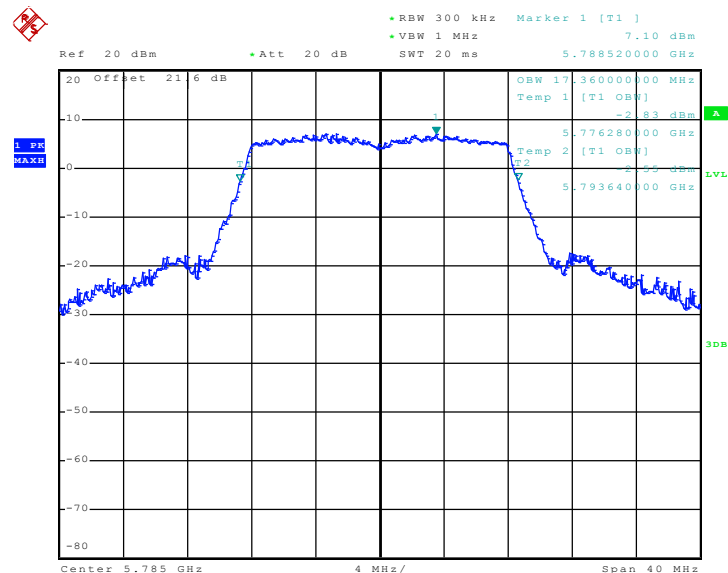
99% Occupied Bandwidth Plot on 802.11a Channel 149 - Chain A



Date: 20.SEP.2010 16:03:31

Mode 22:

99% Occupied Bandwidth Plot on 802.11a Channel 157 - Chain A

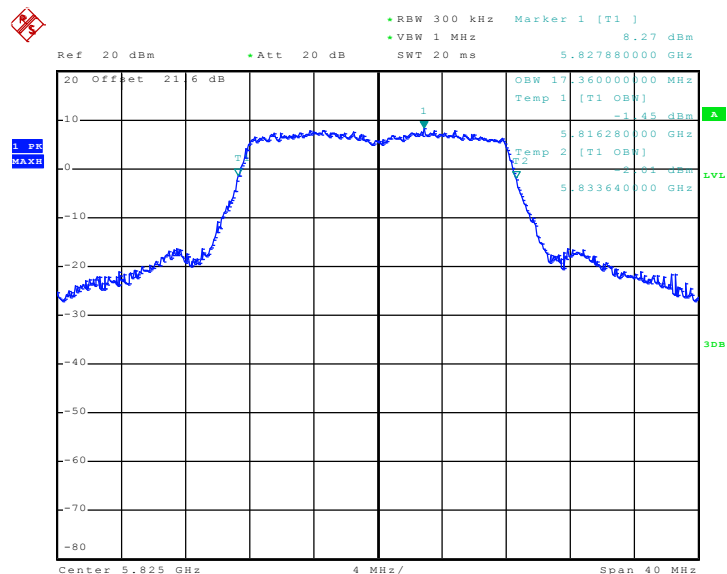


Date: 20.SEP.2010 19:20:36



Mode 23:

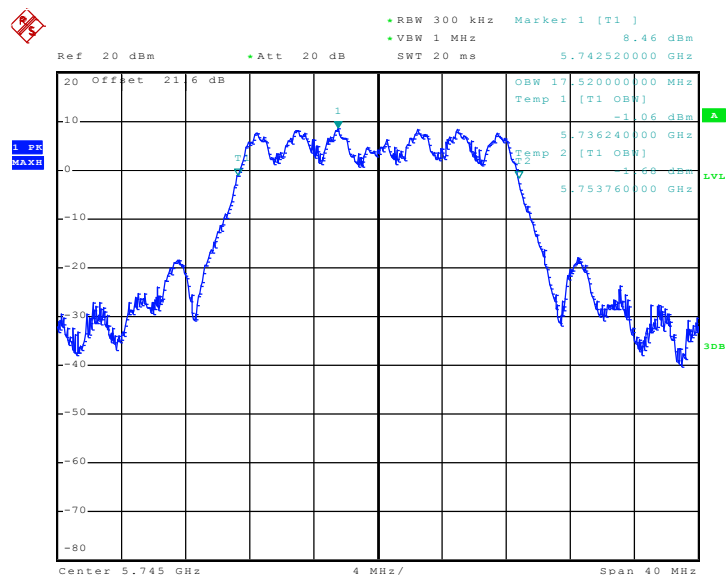
99% Occupied Bandwidth Plot on 802.11a Channel 165 - Chain A



Date: 20.SEP.2010 19:19:40

Mode 24: 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)

Channel 149 - Chain A+B

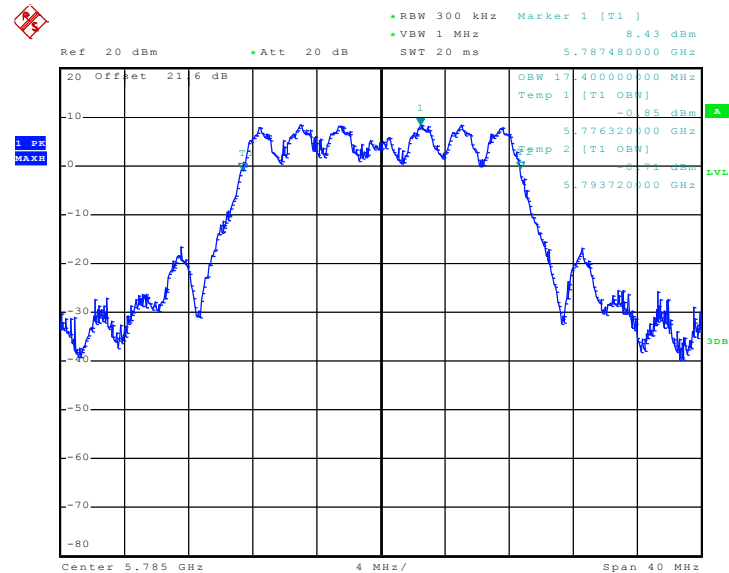


Date: 24.SEP.2010 03:04:13



Mode 25: 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)

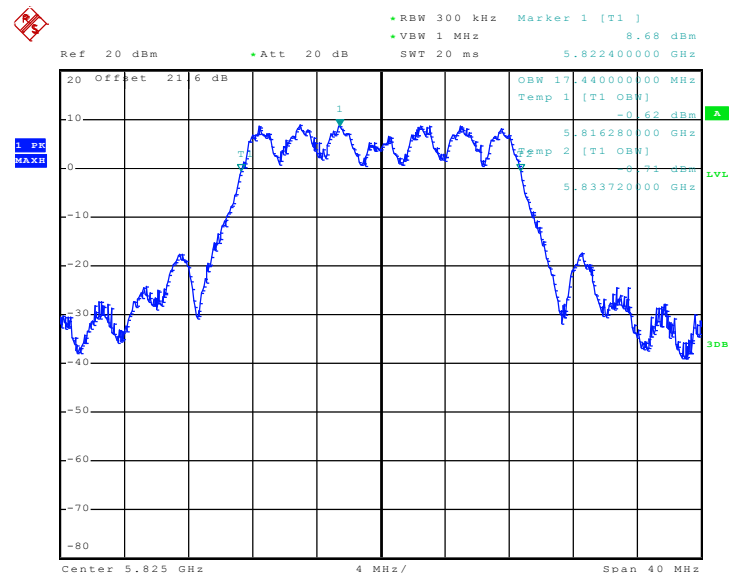
Channel 157 - Chain A+B



Date: 24.SEP.2010 03:04:54

Mode 26: 99% Occupied Bandwidth Plot on 802.11n (BW 20MHz)

Channel 165 - Chain A+B

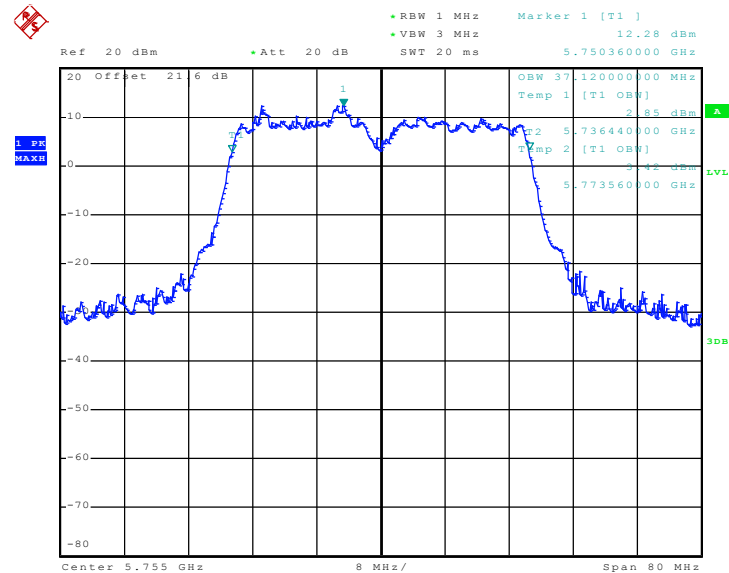


Date: 24.SEP.2010 03:05:49



Mode 27: 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

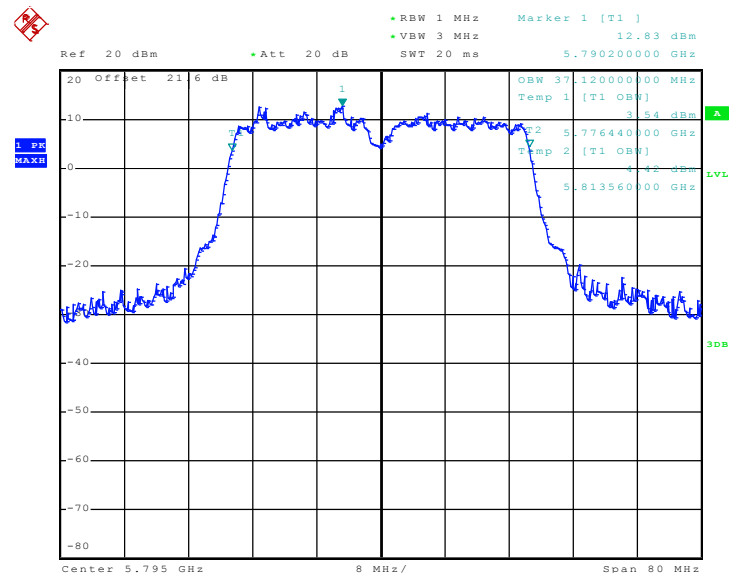
Channel 151 - Chain A+B



Date: 24.SEP.2010 03:39:26

Mode 28: 99% Occupied Bandwidth Plot on 802.11n (BW 40MHz)

Channel 159 - Chain A+B



Date: 24.SEP.2010 03:40:07

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.

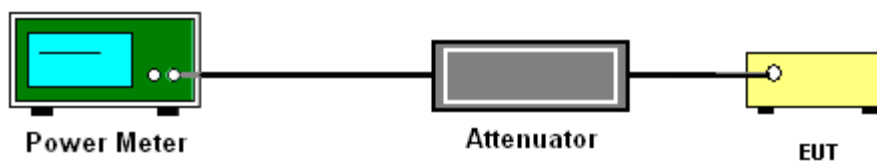
3.2.2 Measuring Instruments

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 1~5	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11b Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
01	2412	22.06	30	Pass
02	2417	23.73	30	Pass
06	2437	23.80	30	Pass
10	2457	22.14	30	Pass
11	2462	22.17	30	Pass

Test Mode :	Mode 6~10	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11g Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
01	2412	25.10	30	Pass
02	2417	25.66	30	Pass
06	2437	25.25	30	Pass
10	2457	25.64	30	Pass
11	2462	24.51	30	Pass

Test Mode :	Mode 11~15	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A+B		
01	2412	25.98	30	Pass
02	2417	26.47	30	Pass
06	2437	26.15	30	Pass
10	2457	26.25	30	Pass
11	2462	25.56	30	Pass

Test Mode :	Mode 16~20	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A+B		
03	2422	23.99	30	Pass
04	2427	23.77	30	Pass
06	2437	25.33	30	Pass
08	2447	25.12	30	Pass
09	2452	23.61	30	Pass

Test Mode :	Mode 21~23	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
149	5745	22.88	30	Pass
157	5785	22.57	30	Pass
165	5825	23.15	30	Pass

Test Mode :	Mode 24~26	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A+B		
149	5745	24.62	30	Pass
157	5785	24.74	30	Pass
165	5825	25.04	30	Pass



Test Mode :	Mode 27~28	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) Measured Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A+B		
151	5755	24.29	30	Pass
159	5795	24.34	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

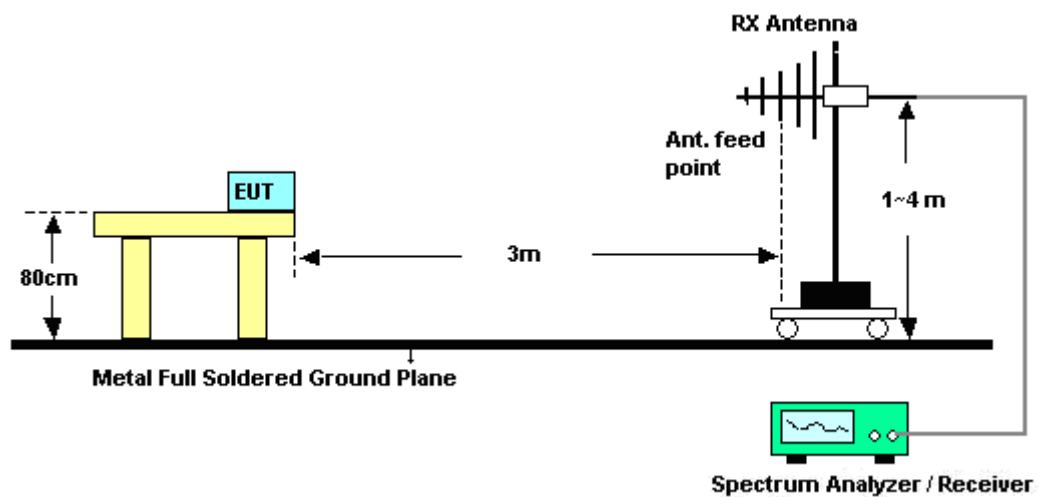
See list of measuring instruments of this test report.

3.3.3 Test Procedures

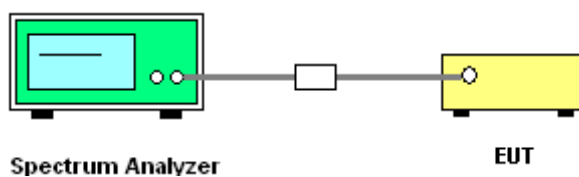
1. The testing follows the guidelines in ANSI C63.4-2003 and FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. Conducted emission test: Set RBW = 100 kHz, Video bandwidth (VBW) > RBW. Band edge emissions must be at least 20 dB below the highest emission level within the authorized band 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 :	25~26°C
Test Band :	802.11b	Relative Humidity :	45~46%
Test Channel :	01	Test Engineer :	David Yang

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	53.76	-20.24	74	49.08	32.18	6.03	33.53	100	231	Peak
2389.61	41.89	-12.11	54	37.21	32.18	6.03	33.53	100	231	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	56.97	-17.03	74	52.29	32.18	6.03	33.53	100	347	Peak
2389.99	45.79	-8.21	54	41.11	32.18	6.03	33.53	100	347	Average

Test Mode :	Mode 5	Temperature :	25~26°C
Test Band :	802.11b	Relative Humidity :	45~46%
Test Channel :	11	Test Engineer :	David Yang

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	49.01	-24.99	74	44.11	32.28	6.18	33.56	164	338	Peak
2483.66	37.98	-16.02	54	33.08	32.28	6.18	33.56	164	338	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
2484.42	57.56	-16.44	74	52.66	32.28	6.18	33.56	123	168	Peak
2484.42	47.67	-6.33	54	42.77	32.28	6.18	33.56	123	168	Average



Test Mode :	Mode 6	Temperature :	25~26°C
Test Band :	802.11g	Relative Humidity :	45~46%
Test Channel :	01	Test Engineer :	David Yang

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	64.86	-9.14	74	60.18	32.18	6.03	33.53	100	230	Peak
2389.99	46.35	-7.65	54	41.67	32.18	6.03	33.53	100	230	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	68.36	-5.64	74	63.68	32.18	6.03	33.53	100	347	Peak
2389.99	49.85	-4.15	54	45.17	32.18	6.03	33.53	100	347	Average

Test Mode :	Mode 10	Temperature :	25~26°C
Test Band :	802.11g	Relative Humidity :	45~46%
Test Channel :	11	Test Engineer :	David Yang

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	56.68	-17.32	74	51.78	32.28	6.18	33.56	194	230	Peak
2483.5	41.28	-12.72	54	36.38	32.28	6.18	33.56	194	230	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	66.25	-7.75	74	61.35	32.28	6.18	33.56	124	168	Peak
2483.5	49.74	-4.26	54	44.84	32.28	6.18	33.56	124	168	Average



Test Mode :	Mode 11	Temperature :	25~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	45~46%
Test Channel :	01	Test Engineer :	David Yang

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	69.3	-4.7	74	64.62	32.18	6.03	33.53	130	233	Peak
2389.61	50.04	-3.96	54	45.36	32.18	6.03	33.53	130	233	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
2388.85	68.11	-5.89	74	63.43	32.18	6.03	33.53	100	166	Peak
2388.85	48.14	-5.86	54	43.46	32.18	6.03	33.53	100	166	Average

Test Mode :	Mode 15	Temperature :	25~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	45~46%
Test Channel :	11	Test Engineer :	David Yang

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
2485.18	64.82	-9.18	74	59.92	32.28	6.18	33.56	195	233	Peak
2485.18	46.11	-7.89	54	41.21	32.28	6.18	33.56	195	233	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	65.6	-8.4	74	60.7	32.28	6.18	33.56	124	349	Peak
2483.66	47.57	-6.43	54	42.67	32.28	6.18	33.56	124	349	Average



Test Mode :	Mode 16	Temperature :	25~26°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	45~46%
Test Channel :	03	Test Engineer :	David Yang

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
2385.05	68.91	-5.09	74	64.25	32.16	6.03	33.53	200	233	Peak
2385.05	51.25	-2.75	54	46.59	32.16	6.03	33.53	200	233	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
2376.69	68.49	-5.51	74	63.87	32.16	5.99	33.53	100	71	Peak
2376.69	49.89	-4.11	54	45.27	32.16	5.99	33.53	100	71	Average

Test Mode :	Mode 20	Temperature :	25~26°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	45~46%
Test Channel :	09	Test Engineer :	David Yang

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
2485.37	66.36	-7.64	74	61.46	32.28	6.18	33.56	200	235	Peak
2485.37	49.55	-4.45	54	44.65	32.28	6.18	33.56	200	235	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
2485.18	64.55	-9.45	74	59.65	32.28	6.18	33.56	121	197	Peak
2485.18	50.5	-3.5	54	45.6	32.28	6.18	33.56	121	197	Average



Test Mode :	Mode 21	Temperature :	25~26°C
Test Band :	802.11a	Relative Humidity :	45~46%
Test Channel :	149	Test Engineer :	David Yang

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	69.92	-12.34	82.26	61.02	34.82	9.92	35.84	100	358	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	77.8	-11.36	89.16	68.9	34.82	9.92	35.84	129	5	Peak

Test Mode :	Mode 23	Temperature :	25~26°C
Test Band :	802.11a	Relative Humidity :	45~46%
Test Channel :	165	Test Engineer :	David Yang

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	64.38	-15.87	80.25	55.34	34.94	9.87	35.77	100	2	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	72.71	-14.92	87.63	63.67	34.94	9.87	35.77	125	3	Peak



Test Mode :	Mode 24	Temperature :	25~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	45~46%
Test Channel :	149	Test Engineer :	David Yang

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	66.58	-13.2	79.78	57.68	34.82	9.92	35.84	100	349	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	72.67	-13.71	86.38	63.77	34.82	9.92	35.84	117	354	Peak

Test Mode :	Mode 26	Temperature :	25~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	45~46%
Test Channel :	165	Test Engineer :	David Yang

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	57.04	-22.86	79.9	48	34.94	9.87	35.77	100	348	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	66.39	-19.13	85.52	57.35	34.94	9.87	35.77	103	2	Peak



Test Mode :	Mode 27	Temperature :	25~26°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	45~46%
Test Channel :	151	Test Engineer :	David Yang

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	64.86	-13.49	78.35	55.96	34.82	9.92	35.84	100	349	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	71.01	-12.63	83.64	62.11	34.82	9.92	35.84	104	354	Peak

Test Mode :	Mode 28	Temperature :	25~26°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	45~46%
Test Channel :	159	Test Engineer :	David Yang

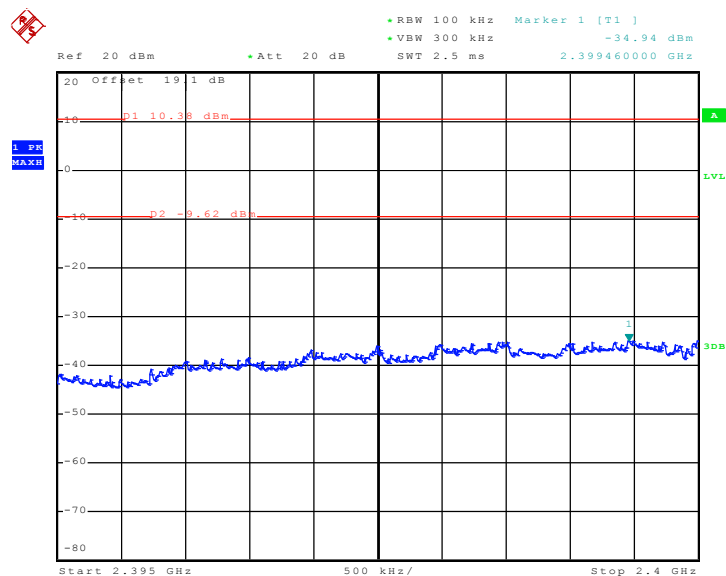
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Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	52.03	-25.33	77.36	42.99	34.94	9.87	35.77	100	348	Peak

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	58.39	-24.37	82.76	49.35	34.94	9.87	35.77	115	0	Peak

3.3.6 Test Result of Conducted Band Edges

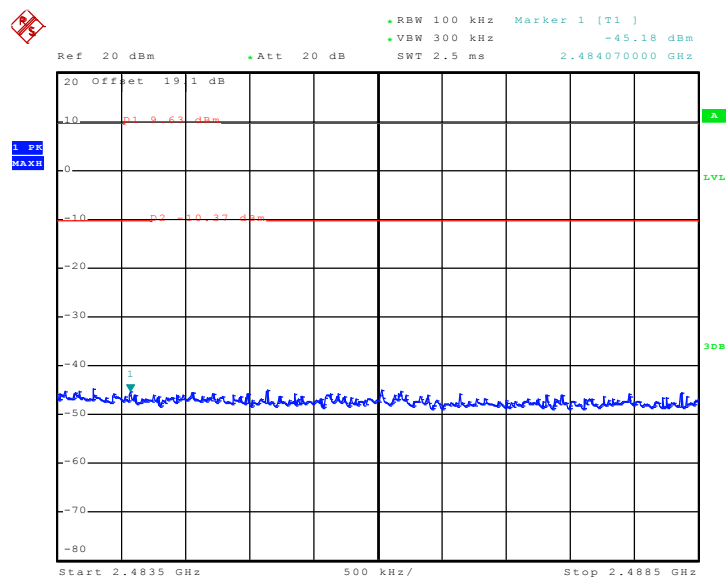
Test Mode :	Mode 1 and 5	Temperature :	24~26°C
Test Band :	802.11b	Relative Humidity :	46~48%
Test Channel :	01 and 11	Test Engineer :	Ken Hsu

Low Band Edge Plot on 802.11b Channel 01



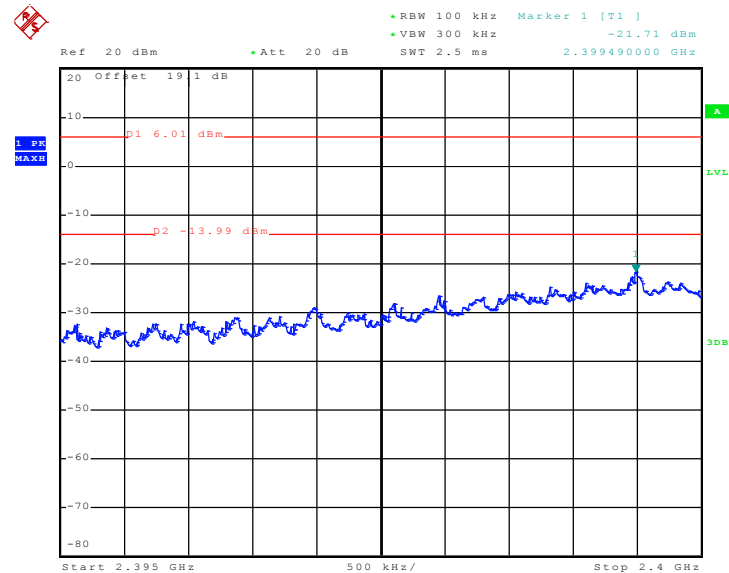
Date: 13.SEP.2010 11:40:42

High Band Edge Plot on 802.11b Channel 11

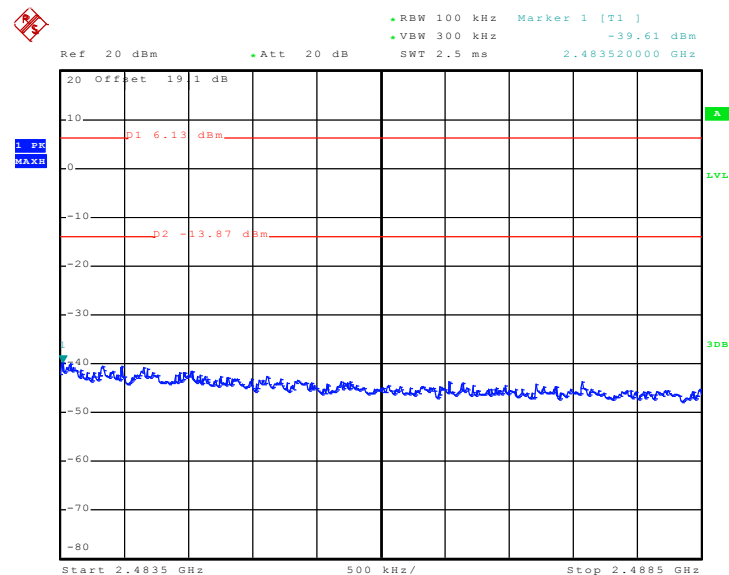


Date: 13.SEP.2010 11:33:43

Test Mode :	Mode 6 and 10	Temperature :	24~26°C
Test Band :	802.11g	Relative Humidity :	46~48%
Test Channel :	01 and 11	Test Engineer :	Ken Hsu

Low Band Edge Plot on 802.11g Channel 01


Date: 13.SEP.2010 17:49:58

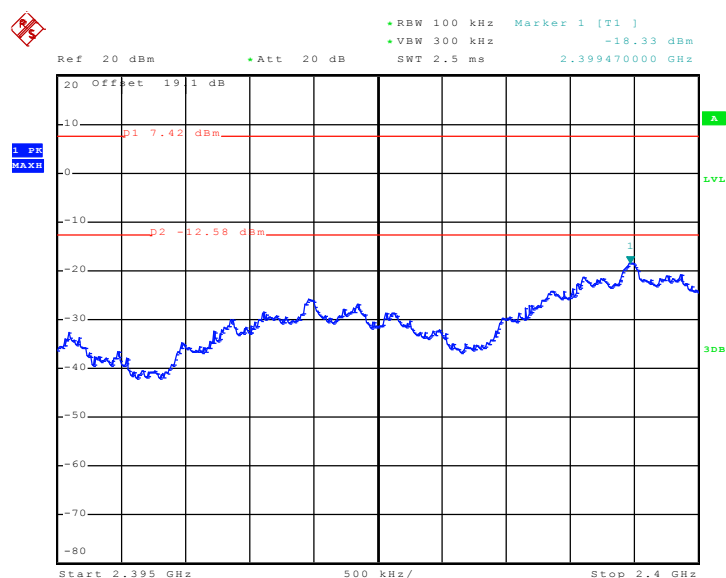
High Band Edge Plot on 802.11g Channel 11


Date: 13.SEP.2010 18:13:38



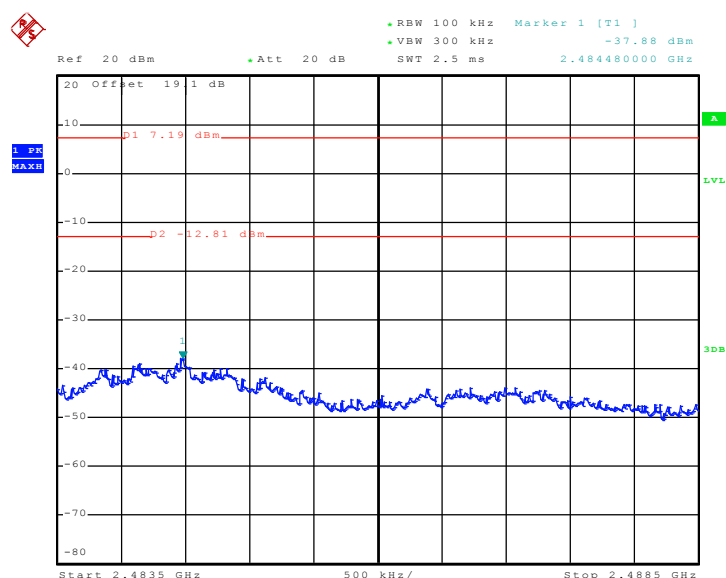
Test Mode :	Mode 11 and 15	Temperature :	24~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	46~48%
Test Channel :	01 and 11	Test Engineer :	Ken Hsu

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



Date: 16.SEP.2010 10:41:52

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



Date: 16.SEP.2010 10:37:16



Test Mode :	Mode 16 and 20	Temperature :	24~26℃
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	46~48%
Test Channel :	03 and 09	Test Engineer :	Ken Hsu

1.9%
MAXIM

Ref 20 dBm Att 20 dB SWT 2.5 ms

RBW 100 kHz VBW 300 kHz Marker 1 [T1] -24.67 dBm 2.399480000 GHz

20 Offset 19.1 dBm

p1 3.38 dBm

p2 -16.62 dBm

2.39948 GHz

Start 2.395 GHz 500 kHz/ Stop 2.4 GHz

Date: 24.SEP.2010 00:23:23

RBW 100 kHz Marker 1 [T1]
 VBW 300 kHz -36.24 dBm
 SWT 2.5 ms 2.484480000 GHz

Ref 20 dBm Att 20 dB

1 PK MAXH

20 Offset 19.1 dBm
 -10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80

p1 3.39 dBm
 p2 -16.61 dBm

1
 2

3 dBm

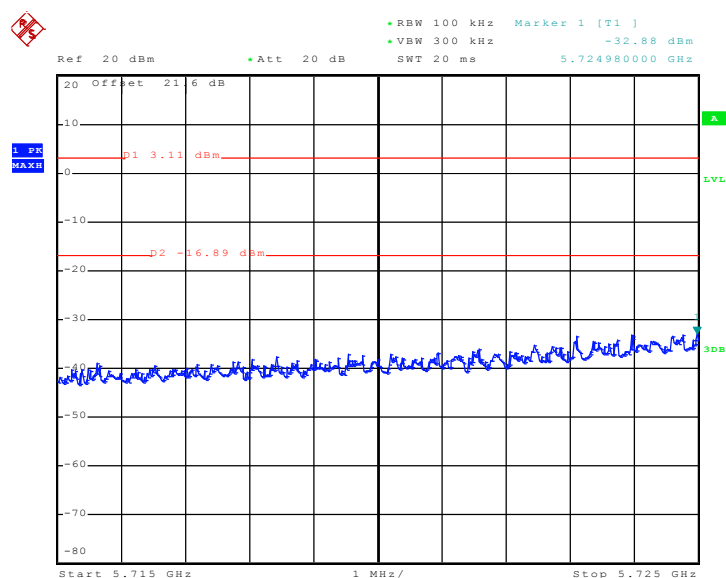
Start 2.4835 GHz 500 kHz/ Step 2.4885 GHz

Date: 24.SEP.2010 00:26:25



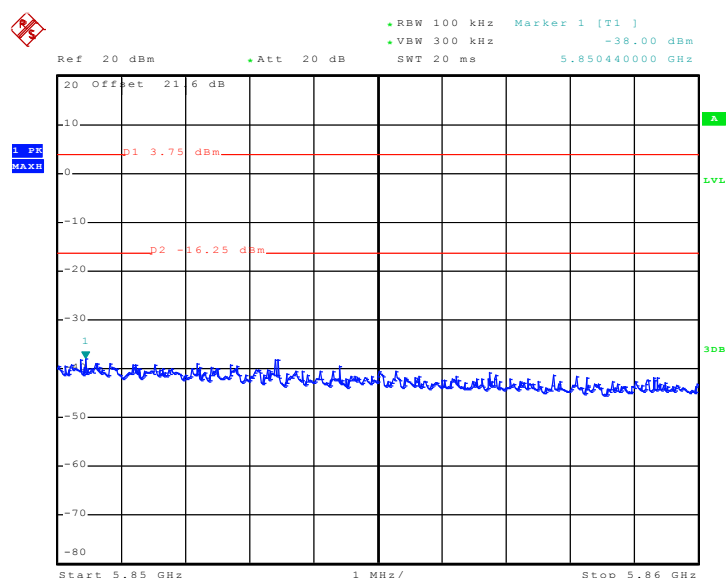
Test Mode :	Mode 21 and 23	Temperature :	24~26°C
Test Band :	802.11a	Relative Humidity :	46~48%
Test Channel :	149 and 165	Test Engineer :	Ken Hsu

Low Band Edge Plot on 802.11a Channel 149



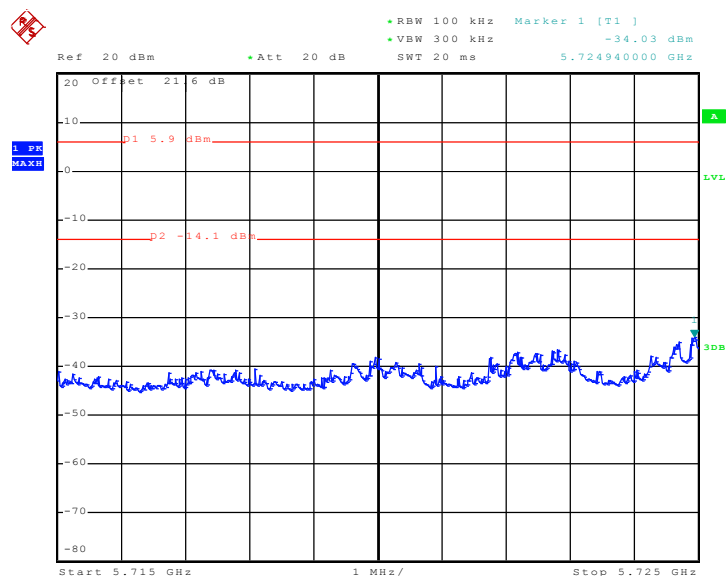
Date: 23.SEP.2010 06:35:56

High Band Edge Plot on 802.11a Channel 165

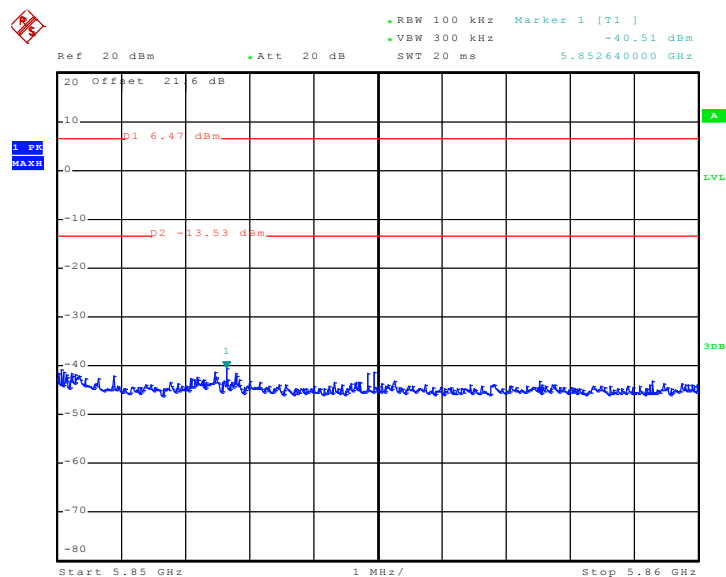


Date: 23.SEP.2010 06:43:22

Test Mode :	Mode 24 and 26	Temperature :	24~26°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	46~48%
Test Channel :	149 and 165	Test Engineer :	Ken Hsu

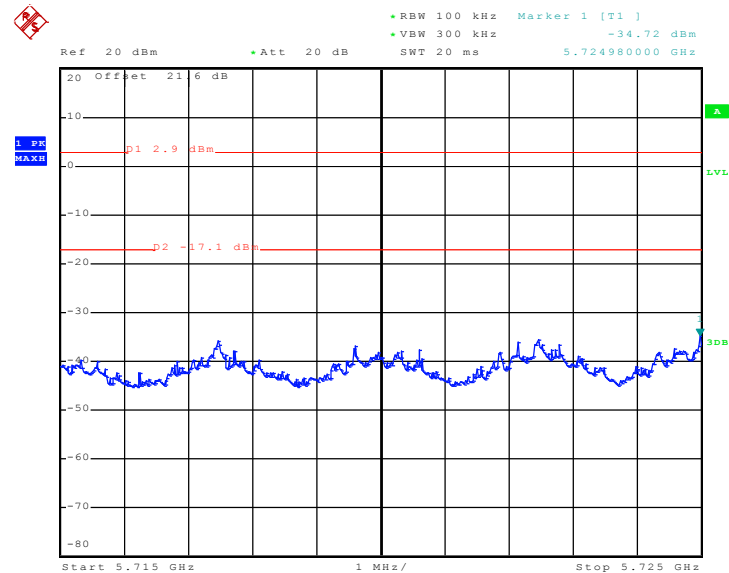
Low Band Edge Plot on 802.11n (BW 20MHz) Channel 149


Date: 23.SEP.2010 07:17:47

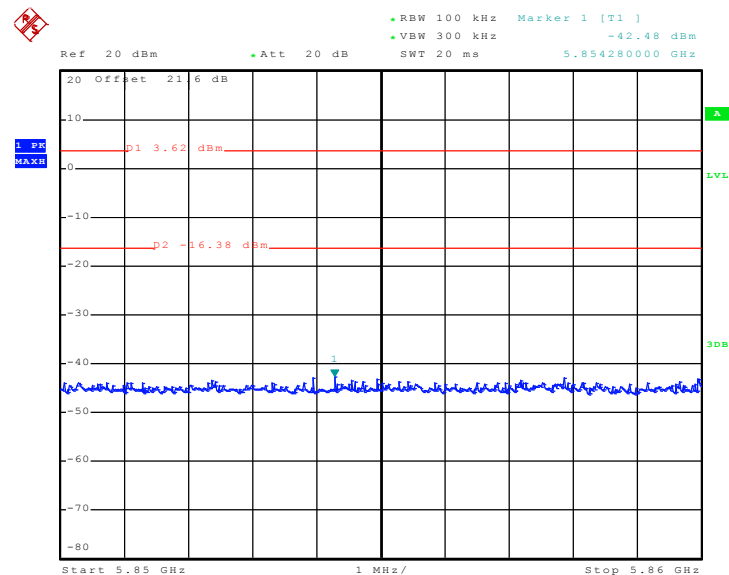
High Band Edge Plot on 802.11n (BW 20MHz) Channel 165


Date: 23.SEP.2010 07:09:52

Test Mode :	Mode 27 and 28	Temperature :	24~26°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	46~48%
Test Channel :	151 and 159	Test Engineer :	Ken Hsu

Low Band Edge Plot on 802.11n (BW 40MHz) Channel 151


Date: 23.SEP.2010 07:31:53

High Band Edge Plot on 802.11n (BW 40MHz) Channel 159


Date: 23.SEP.2010 07:28:13

3.4 Spurious Emission Measurement

3.4.1 Limit of Spurious Emission Measurement

All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band.

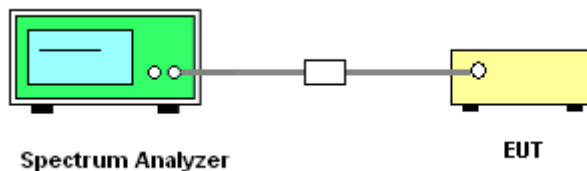
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set RBW = 100 kHz, Video bandwidth (VBW) > RBW, scan up through 10th harmonic. All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

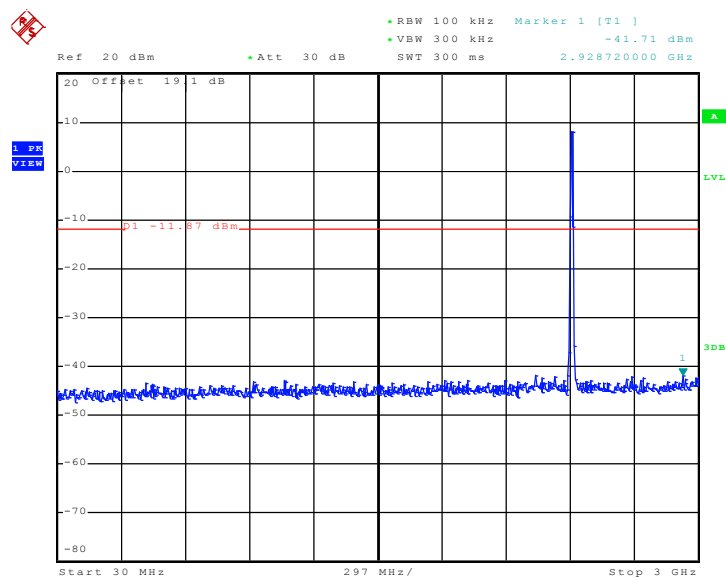
3.4.4 Test Setup



3.4.5 Test Result

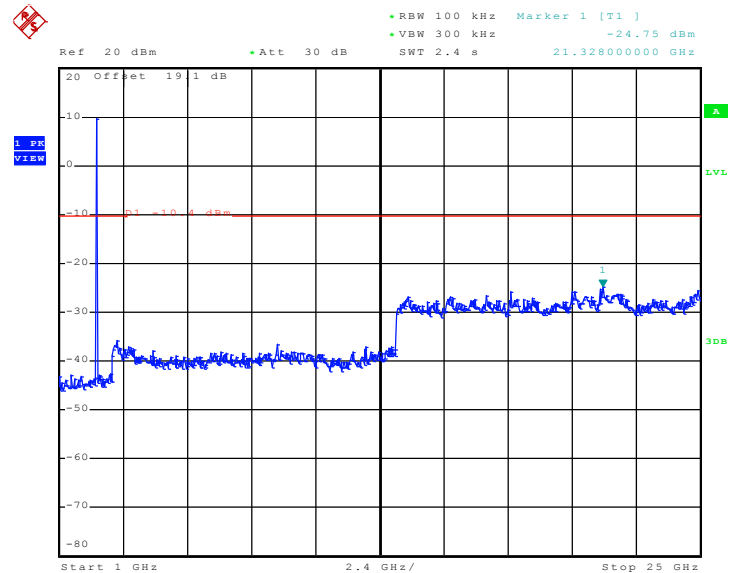
Test Mode :	Mode 1~5	Temperature :	24~26℃
Test Band :	802.11b	Relative Humidity :	46~48%
Test Channel :	01, 02, 06, 10, 11	Test Engineer :	Ken Hsu

**Mode 1: Conducted Spurious Emission Plot on 802.11b between
30 MHz ~ 3 GHz - Chain A**



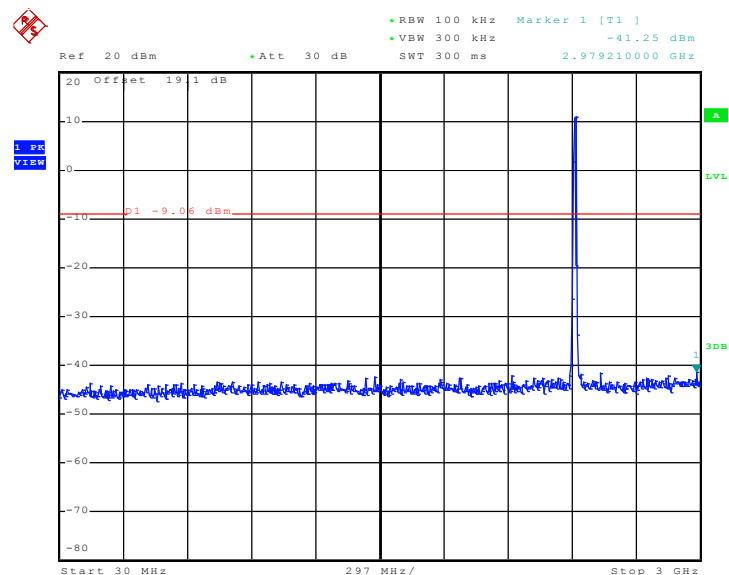
Date: 24.SEP.2010 00:41:54

**Mode 1: Conducted Spurious Emission Plot on 802.11b between
1 GHz ~ 25 GHz - Chain A**



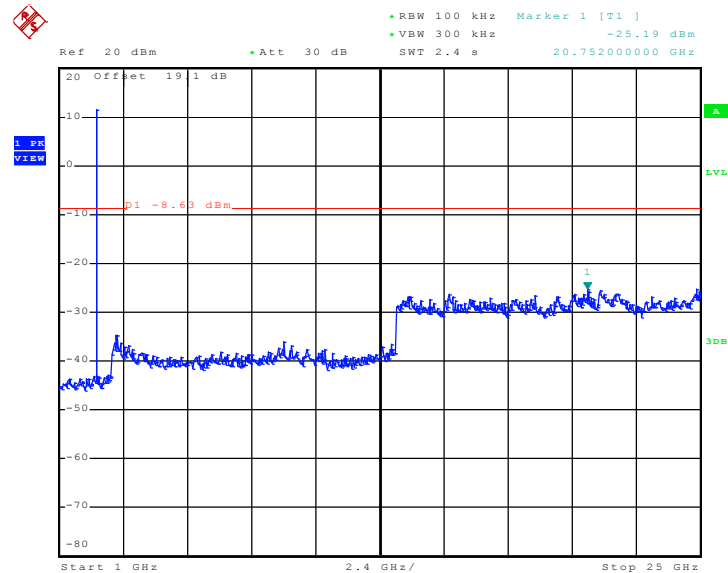
Date: 24.SEP.2010 00:42:11

**Mode 2: Conducted Spurious Emission Plot on 802.11b between
30 MHz ~ 3 GHz - Chain A**



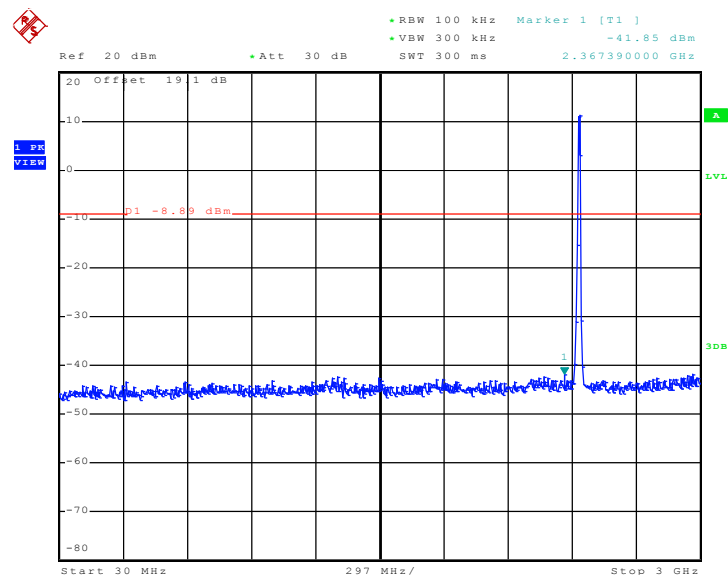
Date: 24.SEP.2010 00:45:44

**Mode 2: Conducted Spurious Emission Plot on 802.11b between
1 GHz ~ 25 GHz - Chain A**



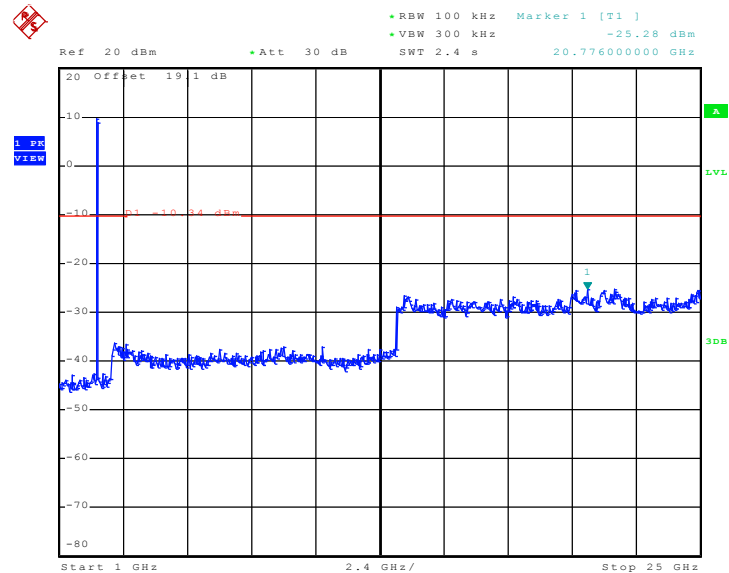
Date: 24.SEP.2010 00:46:01

**Mode 3: Conducted Spurious Emission Plot on 802.11b between
30 MHz ~ 3 GHz - Chain A**



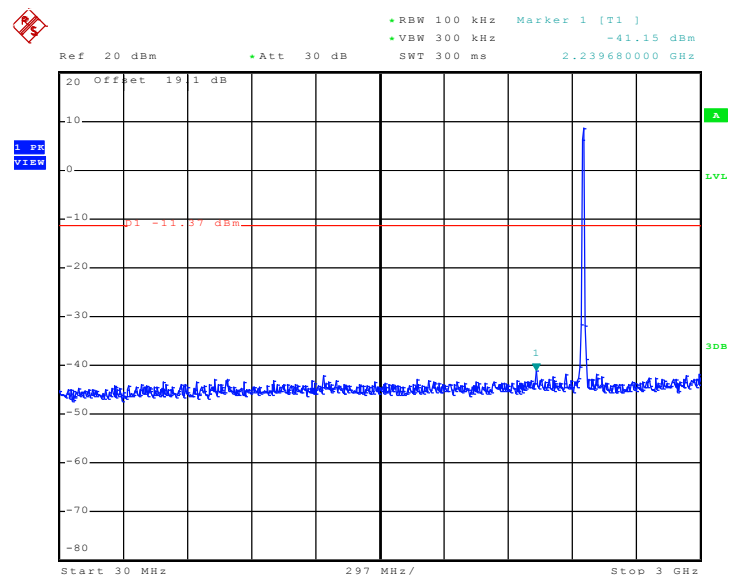
Date: 24.SEP.2010 00:47:17

**Mode 3: Conducted Spurious Emission Plot on 802.11b between
1 GHz ~ 25 GHz - Chain A**



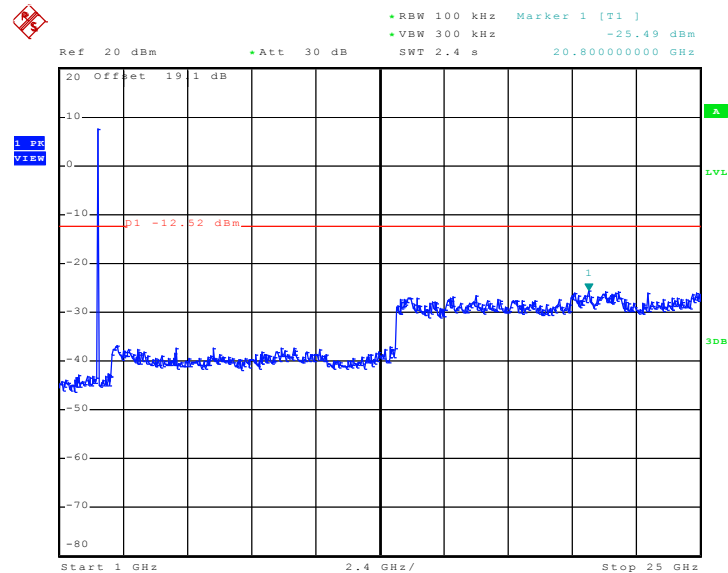
Date: 24.SEP.2010 00:47:33

**Mode 4: Conducted Spurious Emission Plot on 802.11b between
30 MHz ~ 3 GHz - Chain A**



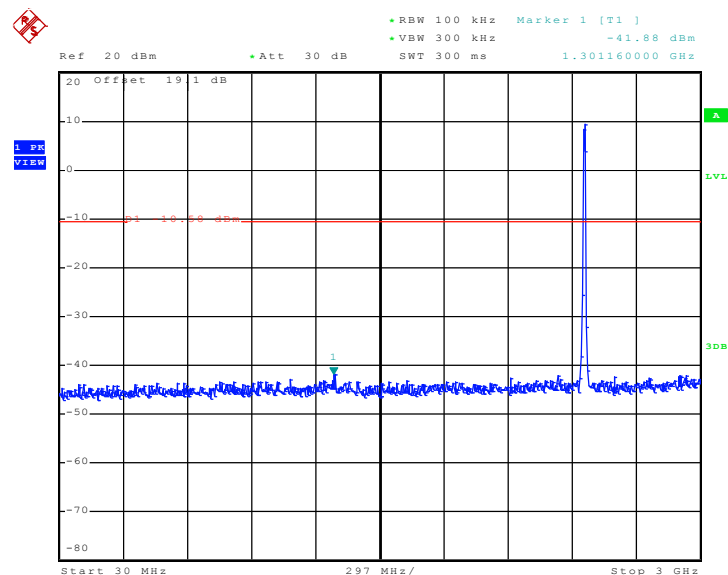
Date: 24.SEP.2010 00:48:29

**Mode 4: Conducted Spurious Emission Plot on 802.11b between
1 GHz ~ 25 GHz - Chain A**



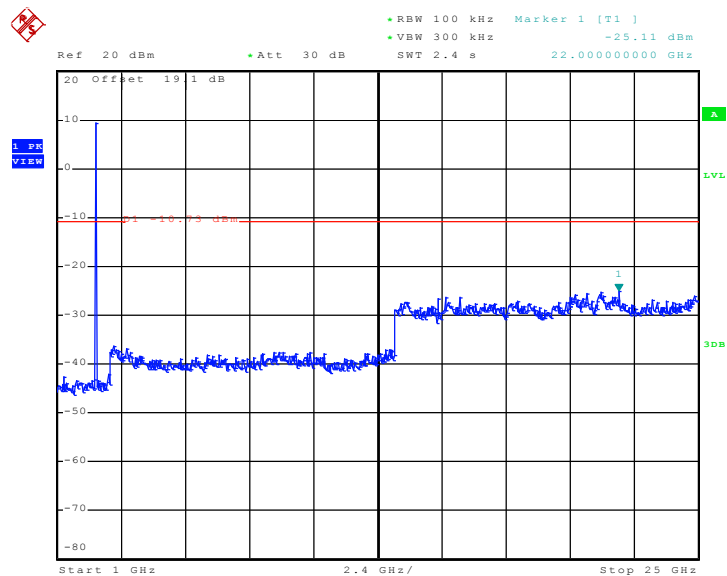
Date: 24.SEP.2010 00:48:45

**Mode 5: Conducted Spurious Emission Plot on 802.11b between
30 MHz ~ 3 GHz - Chain A**



Date: 24.SEP.2010 00:49:18

Mode 5: Conducted Spurious Emission Plot on 802.11b between
1 GHz ~ 25 GHz - Chain A

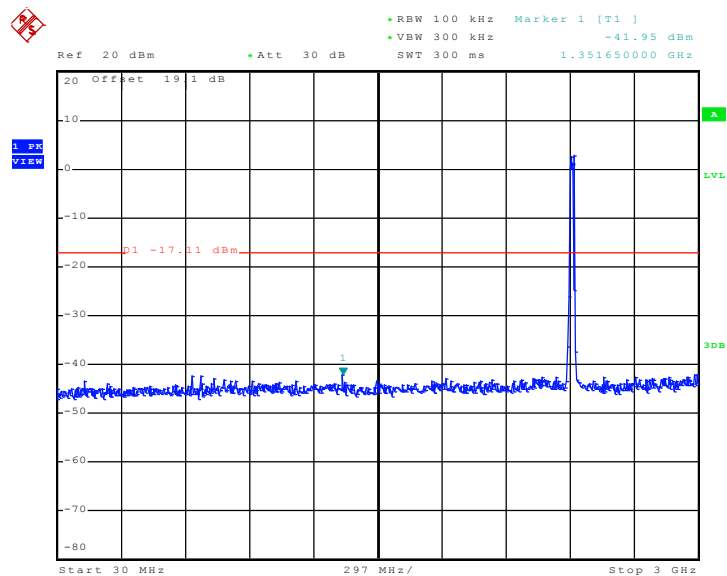


Date: 24.SEP.2010 00:49:34



Test Mode :	Mode 6~10	Temperature :	24~26℃
Test Band :	802.11g	Relative Humidity :	46~48%
Test Channel :	01, 02, 06, 10, 11	Test Engineer :	Ken Hsu

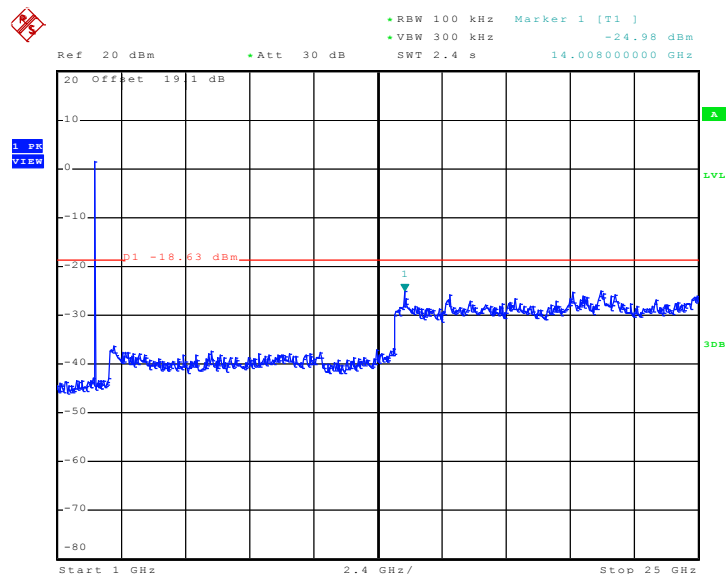
Mode 6: Conducted Spurious Emission Plot on 802.11g between
30 MHz ~ 3 GHz - Chain A



Date: 24.SEP.2010 00:51:38

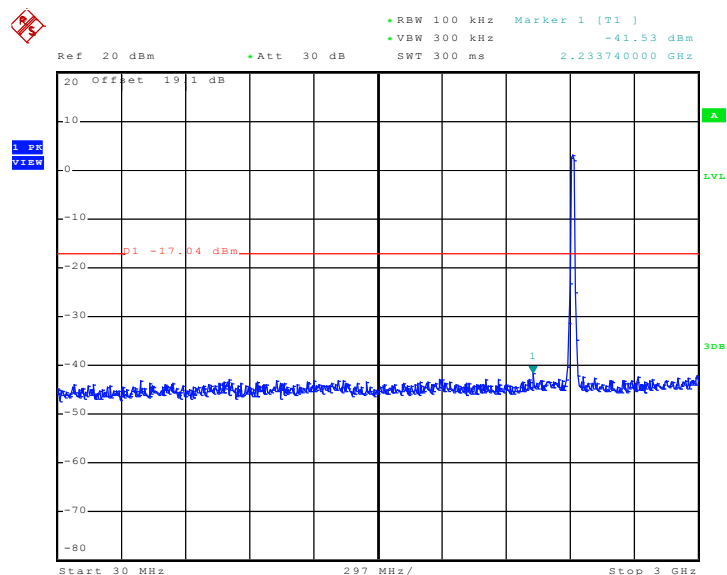


Mode 6: Conducted Spurious Emission Plot on 802.11g between
1 GHz ~ 25 GHz - Chain A



Date: 24.SEP.2010 00:51:55

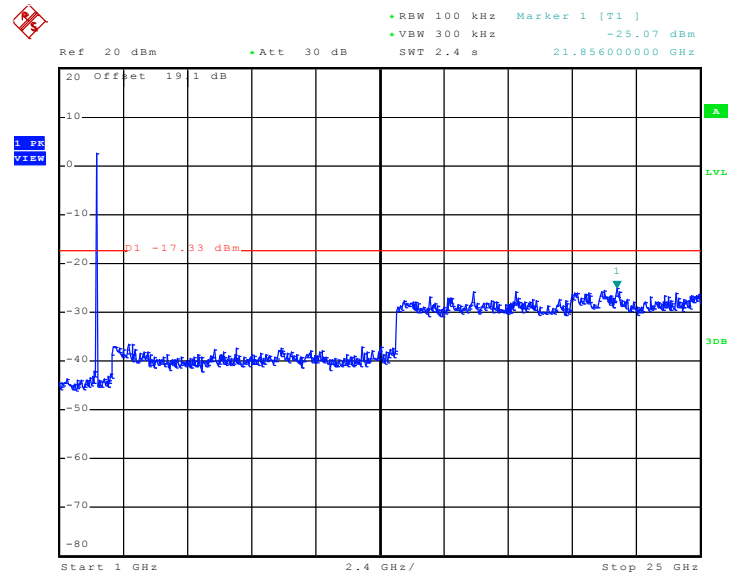
Mode 7: Conducted Spurious Emission Plot on 802.11g between
30 MHz ~ 3 GHz - Chain A



Date: 24.SEP.2010 00:52:36

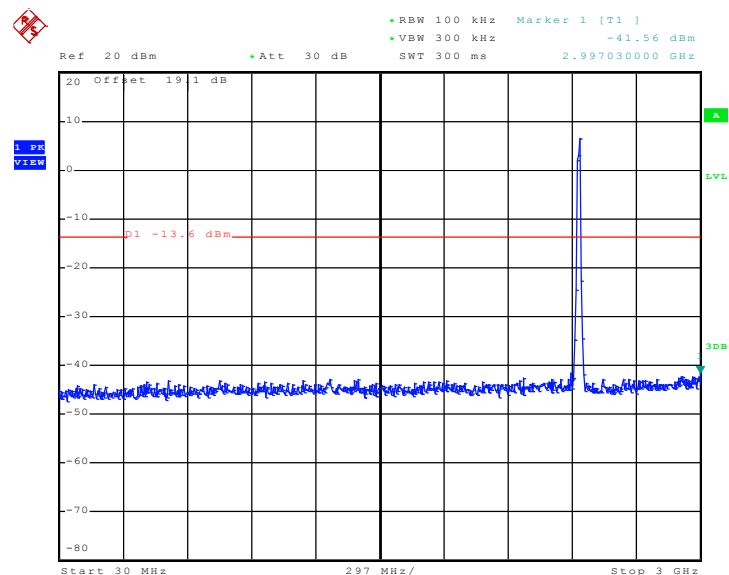


Mode 7: Conducted Spurious Emission Plot on 802.11g between
1 GHz ~ 25 GHz - Chain A



Date: 24.SEP.2010 00:52:52

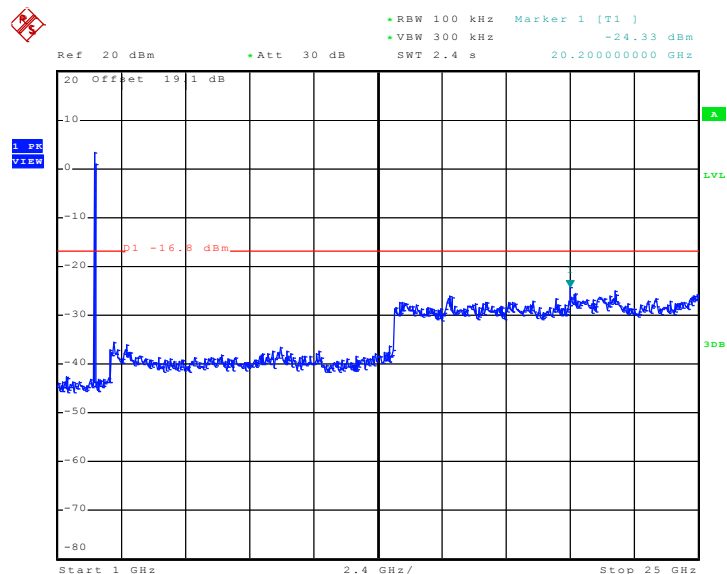
Mode 8: Conducted Spurious Emission Plot on 802.11g between
30 MHz ~ 3 GHz - Chain A



Date: 24.SEP.2010 00:53:28

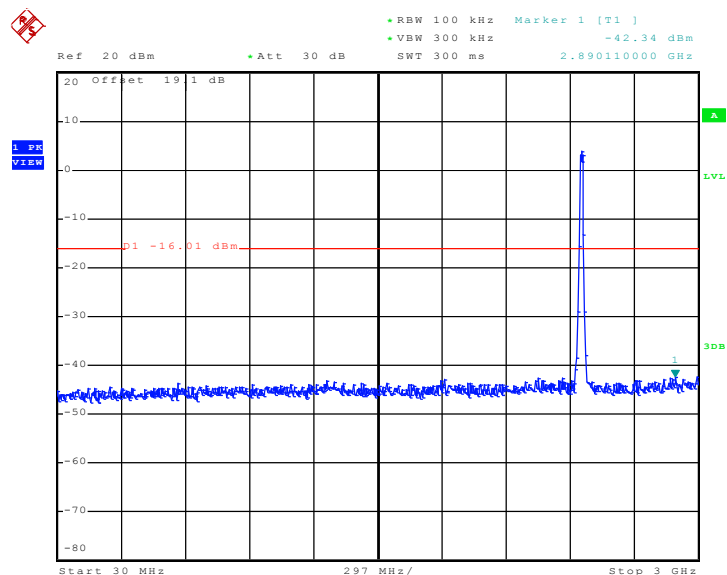


Mode 8: Conducted Spurious Emission Plot on 802.11g between
1 GHz ~ 25 GHz - Chain A



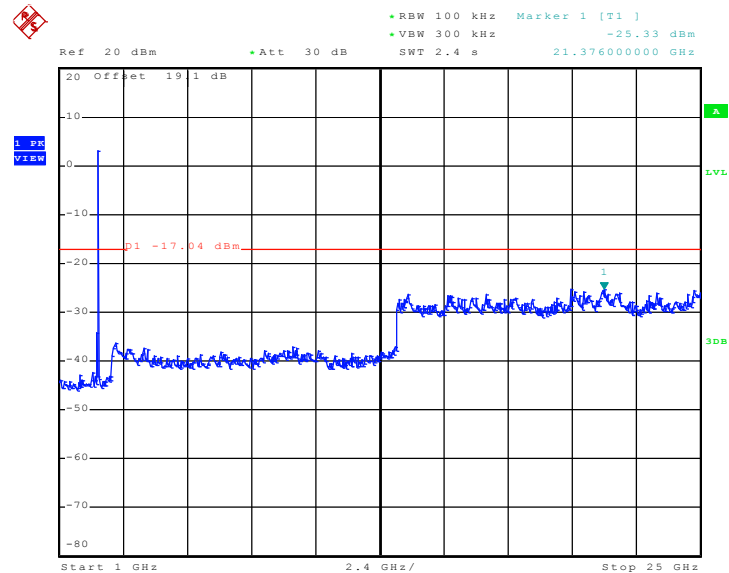
Date: 24.SEP.2010 00:55:29

Mode 9: Conducted Spurious Emission Plot on 802.11g between
30 MHz ~ 3 GHz - Chain A



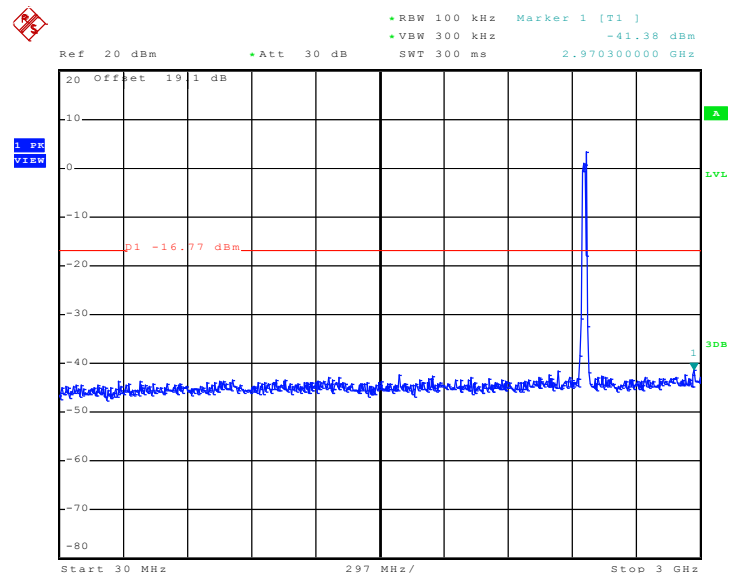
Date: 24.SEP.2010 02:40:34

**Mode 9: Conducted Spurious Emission Plot on 802.11g between
1 GHz ~ 25 GHz - Chain A**



Date: 24.SEP.2010 00:57:23

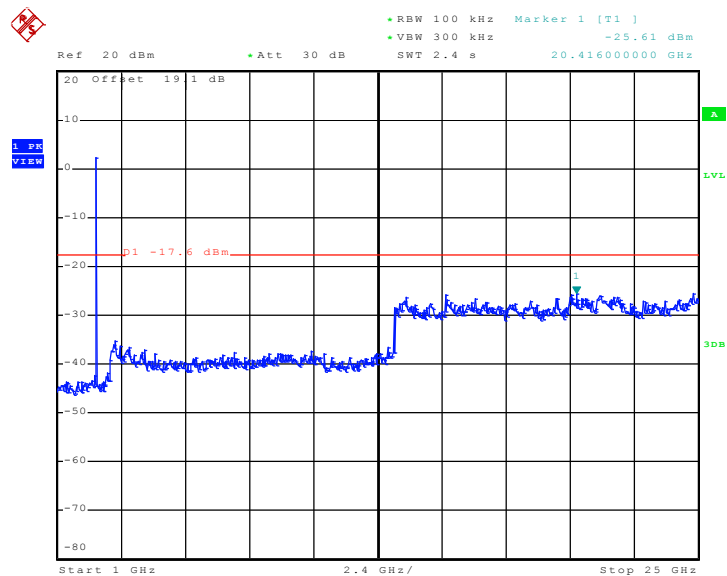
**Mode 10: Conducted Spurious Emission Plot on 802.11g
between 30 MHz ~ 3 GHz - Chain A**



Date: 24.SEP.2010 00:58:57



Mode 10: Conducted Spurious Emission Plot on 802.11g
between 1 GHz ~ 25 GHz - Chain A

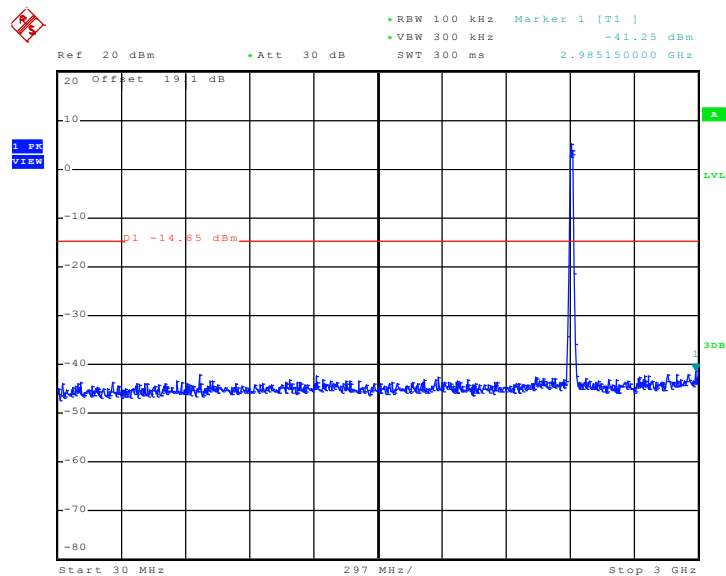


Date: 24.SEP.2010 00:59:14



Test Mode :	Mode 11~15	Temperature :	24~26℃
Test Band :	802.11n (BW 20MHz, 2Tx)	Relative Humidity :	46~48%
Test Channel :	01, 02, 06, 10, 11	Test Engineer :	Ken Hsu

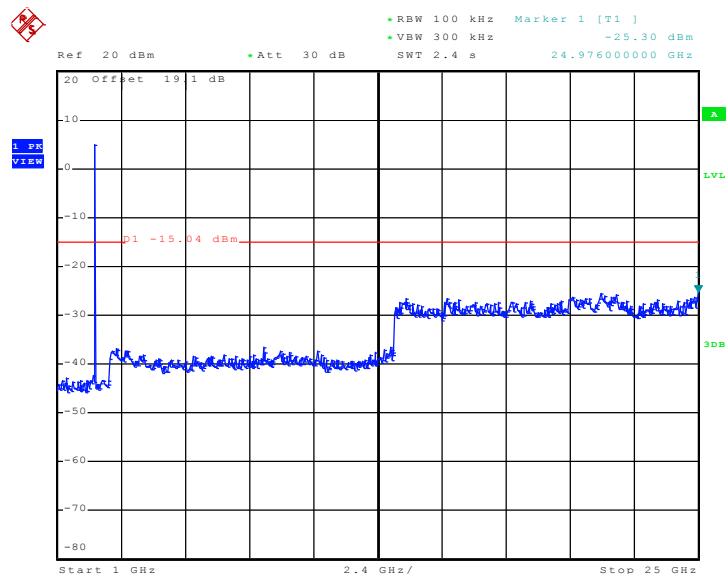
Mode 11: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 30 MHz ~ 3 GHz - Chain A+B



Date: 24.SEP.2010 01:02:36

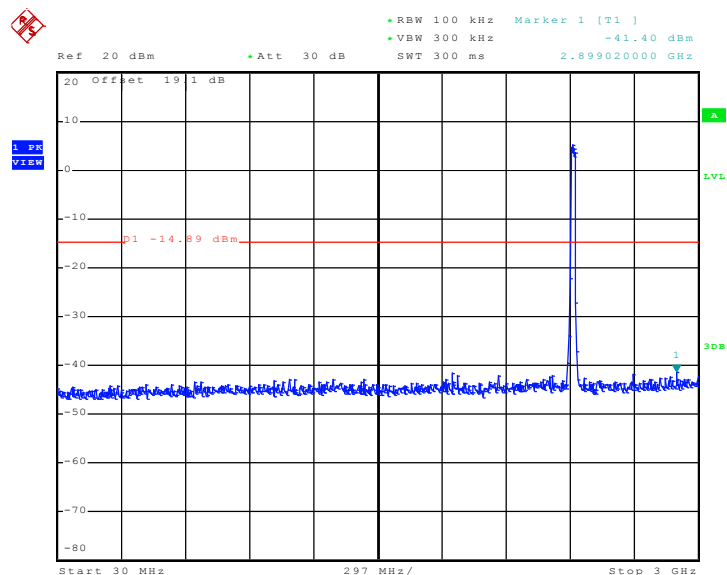


**Mode 11: Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 1 GHz ~ 25 GHz - Chain A+B**



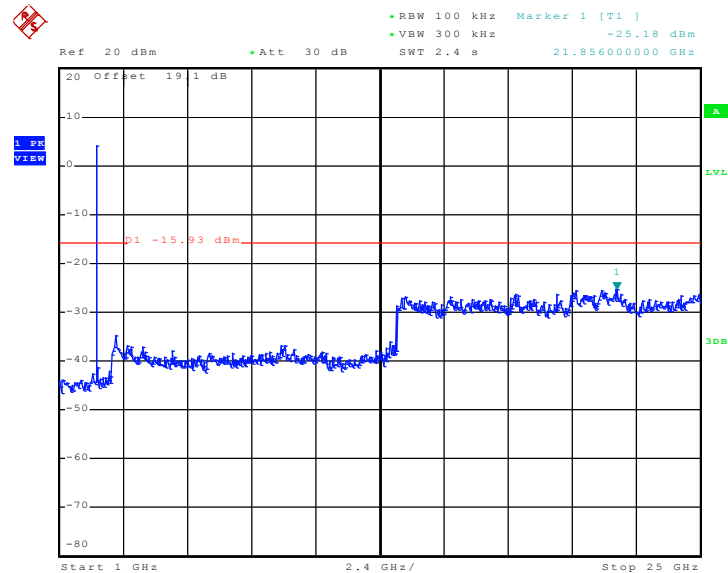
Date: 24.SEP.2010 01:02:52

**Mode 12: Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 30 MHz ~ 3 GHz - Chain A+B**



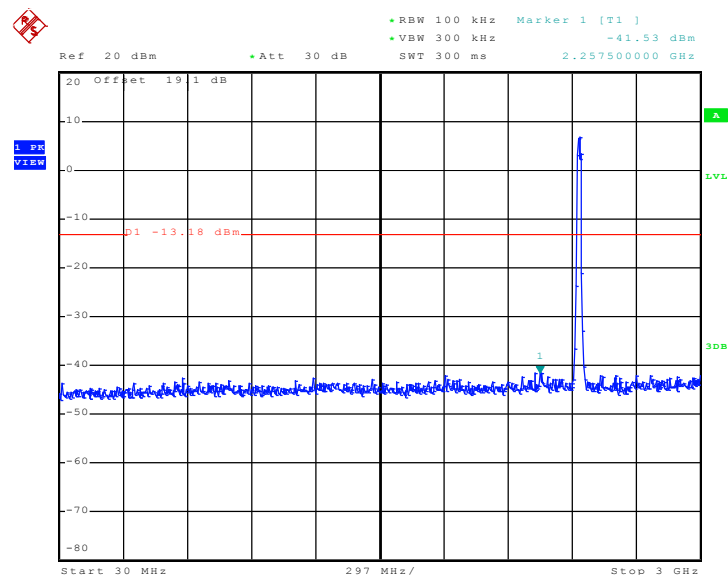
Date: 24.SEP.2010 01:03:43

Mode 12: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 1 GHz ~ 25 GHz - Chain A+B



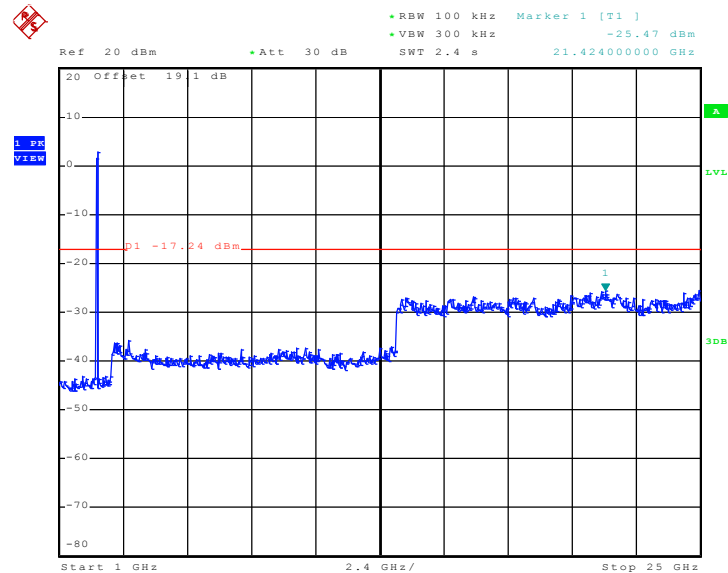
Date: 24.SEP.2010 01:03:59

Mode 13: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 30 MHz ~ 3 GHz - Chain A+B



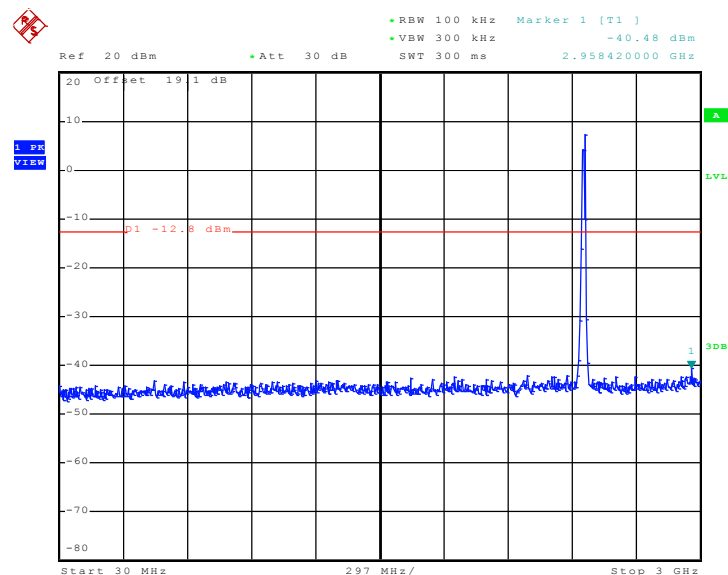
Date: 24.SEP.2010 02:43:24

Mode 13: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 1 GHz ~ 25 GHz - Chain A+B



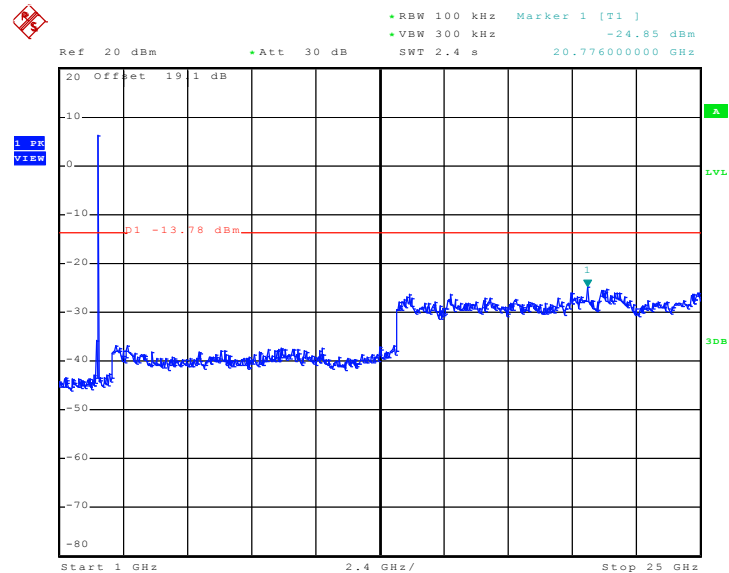
Date: 24.SEP.2010 01:05:49

Mode 14: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 30 MHz ~ 3 GHz - Chain A+B



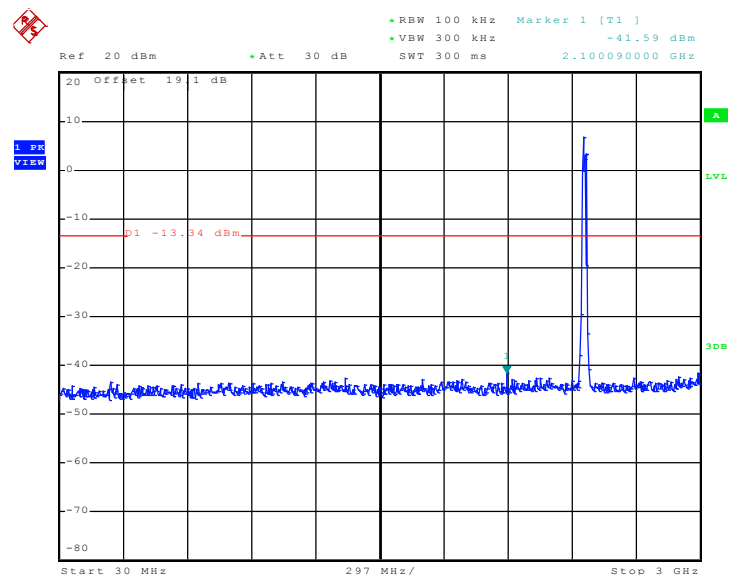
Date: 24.SEP.2010 01:07:13

Mode 14: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 1 GHz ~ 25 GHz - Chain A+B



Date: 24.SEP.2010 01:07:29

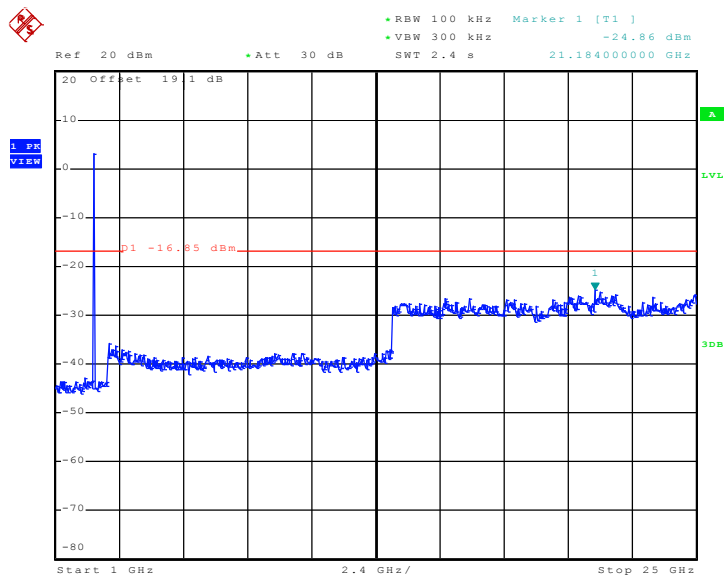
Mode 15: Conducted Spurious Emission Plot on 802.11n (BW 20MHz) between 30 MHz ~ 3 GHz - Chain A+B



Date: 24.SEP.2010 01:17:44



Mode 15: Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 1 GHz ~ 25 GHz - Chain A+B

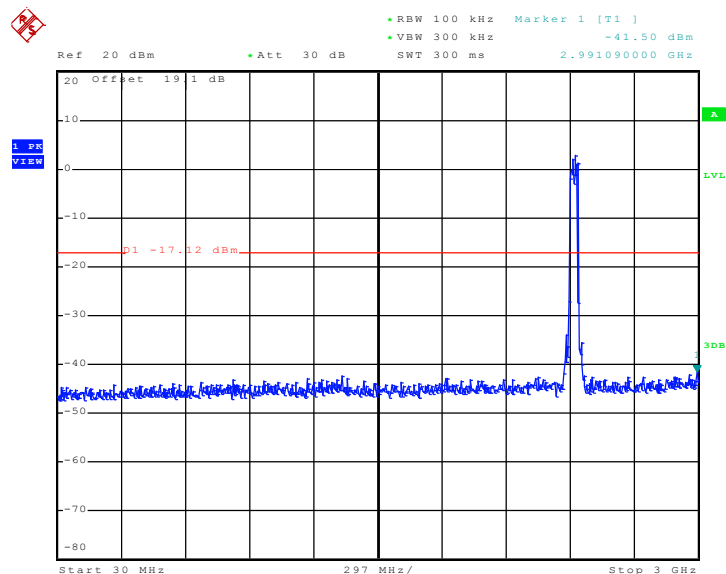


Date: 24.SEP.2010 01:18:01



Test Mode :	Mode 16~20	Temperature :	24~26℃
Test Band :	802.11n (BW 40MHz, 2Tx)	Relative Humidity :	46~48%
Test Channel :	03, 04, 06, 08, 09	Test Engineer :	Ken Hsu

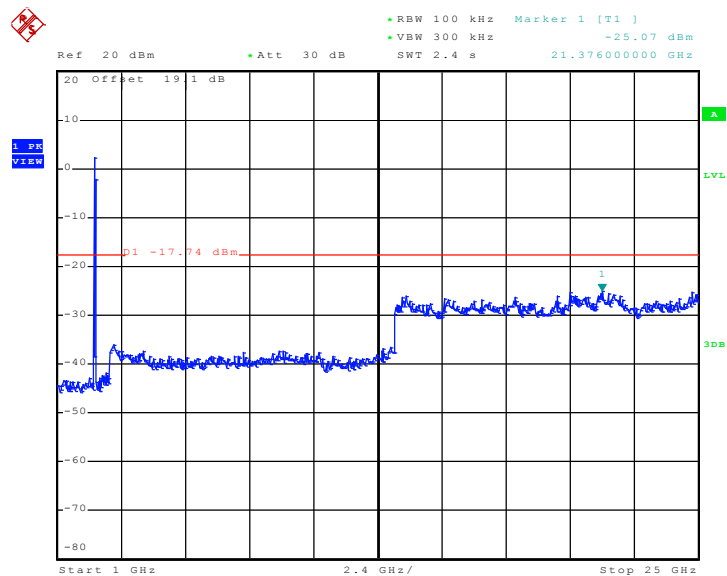
Mode 16: Conducted Spurious Emission Plot on 802.11n (BW 40MHz) between 30 MHz ~ 3 GHz - Chain A+B



Date: 24.SEP.2010 01:46:19

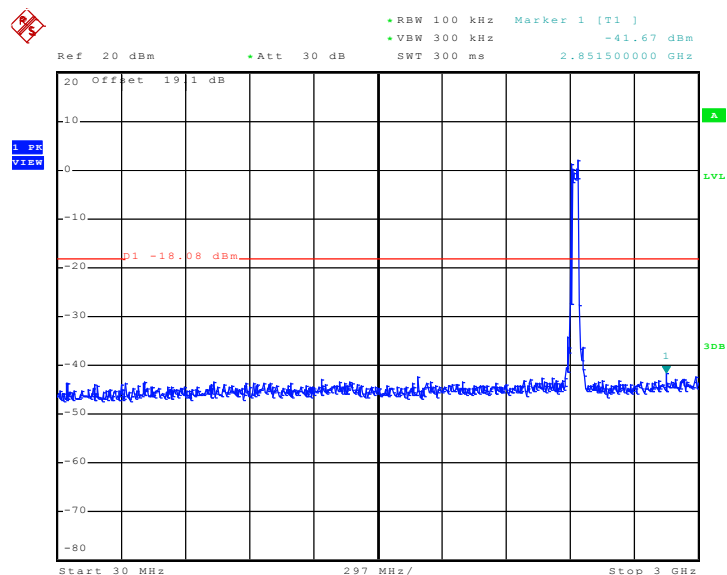


Mode 16: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 1 GHz ~ 25 GHz - Chain A+B



Date: 24.SEP.2010 01:36:27

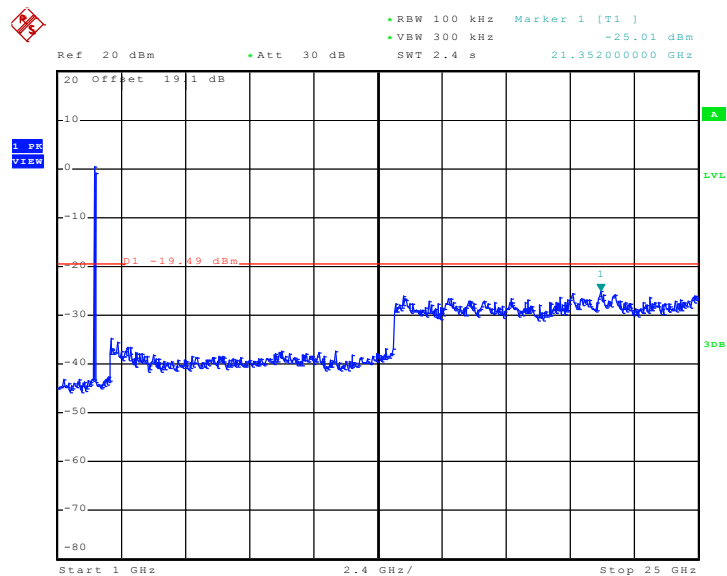
Mode 17: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 30 MHz ~ 3 GHz - Chain A+B



Date: 24.SEP.2010 01:45:22

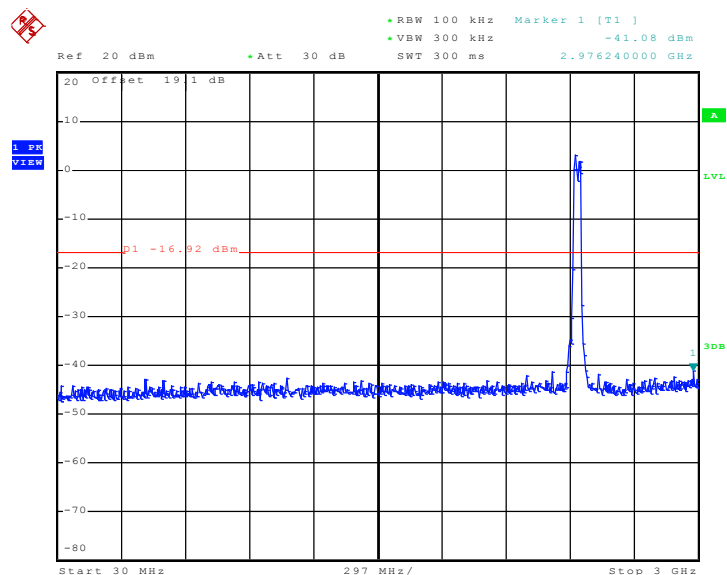


Mode 17: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 1 GHz ~ 25 GHz - Chain A+B



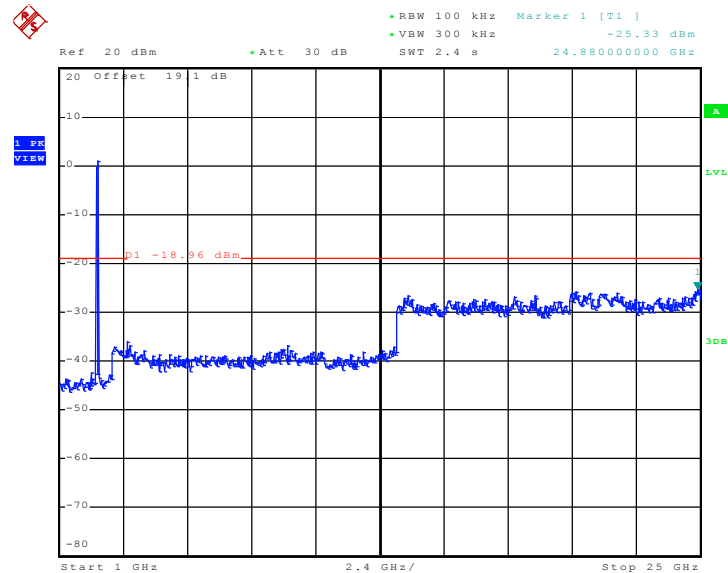
Date: 24.SEP.2010 01:33:57

Mode 18: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 30 MHz ~ 3 GHz - Chain A+B



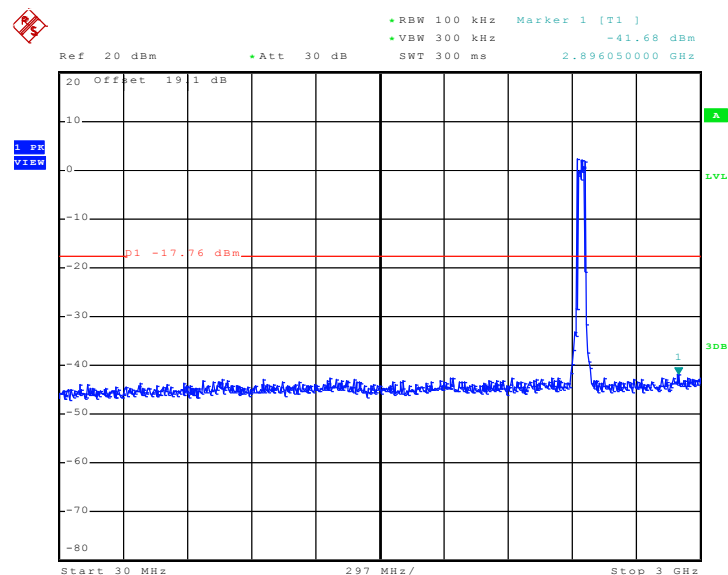
Date: 24.SEP.2010 01:43:55

**Mode 18: Conducted Spurious Emission Plot on 802.11n(BW
40MHz) between 1 GHz ~ 25 GHz - Chain A+B**



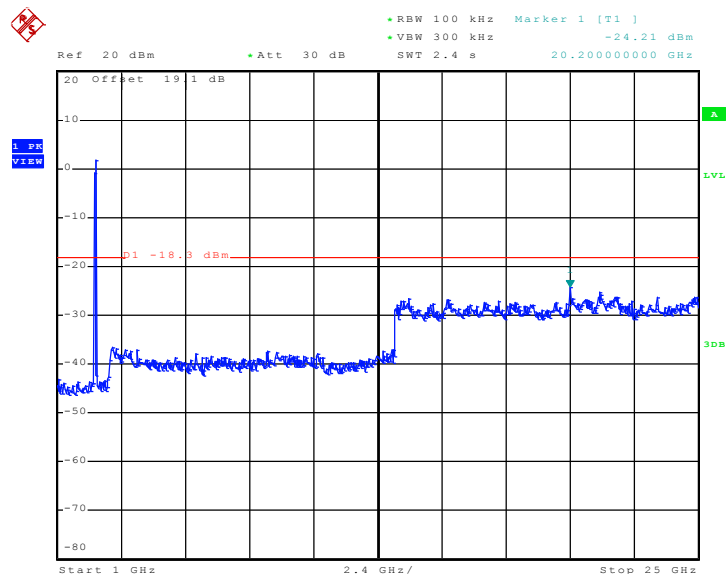
Date: 24.SEP.2010 01:37:23

**Mode 19: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 30 MHz ~ 3 GHz - Chain A+B**



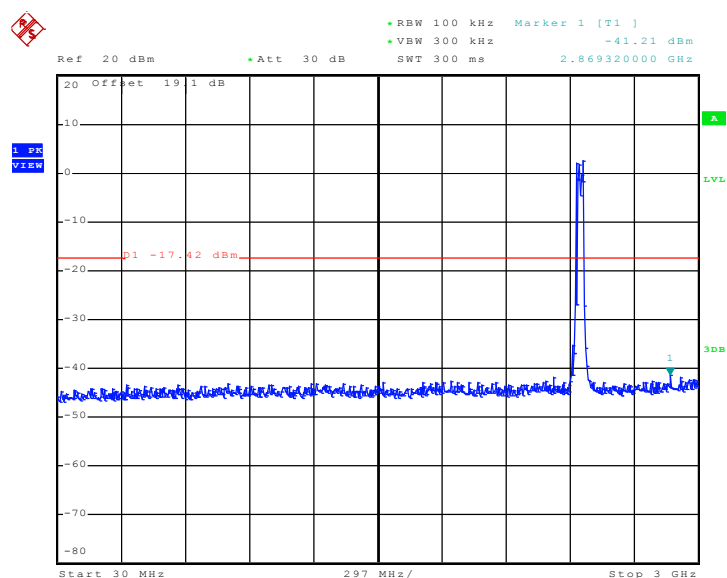
Date: 24.SEP.2010 01:43:04

Mode 19: Conducted Spurious Emission Plot on 802.11n (BW 40MHz) between 1 GHz ~ 25 GHz - Chain A+B



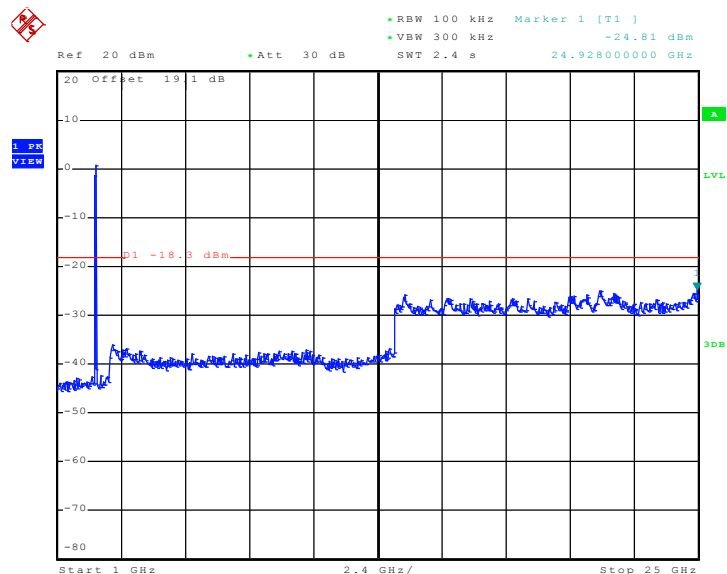
Date: 24.SEP.2010 01:38:20

Mode 20: Conducted Spurious Emission Plot on 802.11n (BW 40MHz) between 30 MHz ~ 3 GHz - Chain A+B



Date: 24.SEP.2010 01:41:54

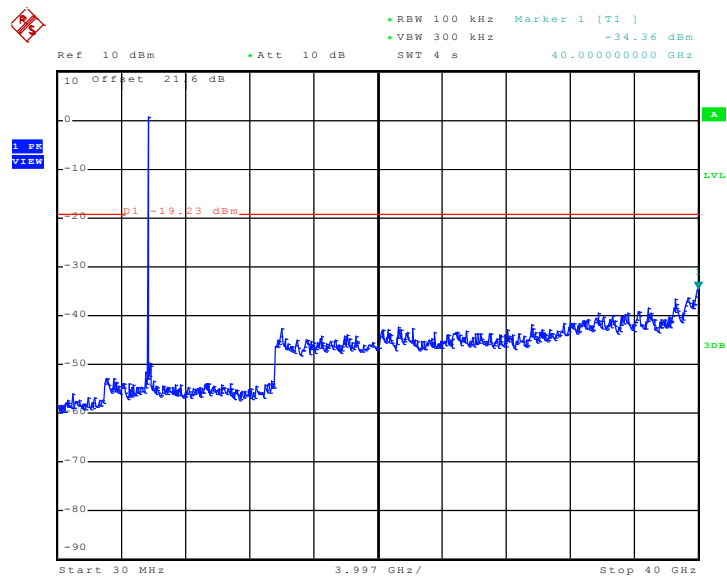
**Mode 20: Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 1 GHz ~ 25 GHz - Chain A+B**



Date: 24.SEP.2010 01:39:16

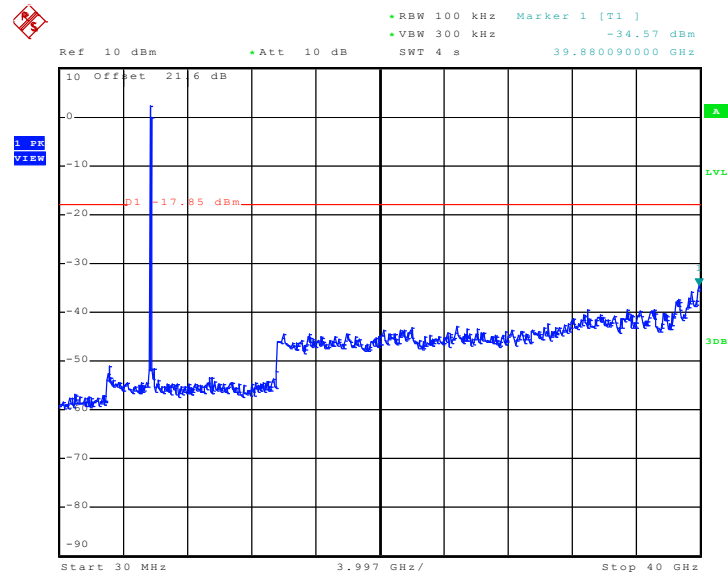
Test Mode :	Mode 21~23	Temperature :	24~26°C
Test Band :	802.11a	Relative Humidity :	46~48%
Test Channel :	149, 157, 165	Test Engineer :	Ken Hsu

Mode 21:Conducted Spurious Emission Plot on 802.11a between 30 MHz ~ 40 GHz Chain A



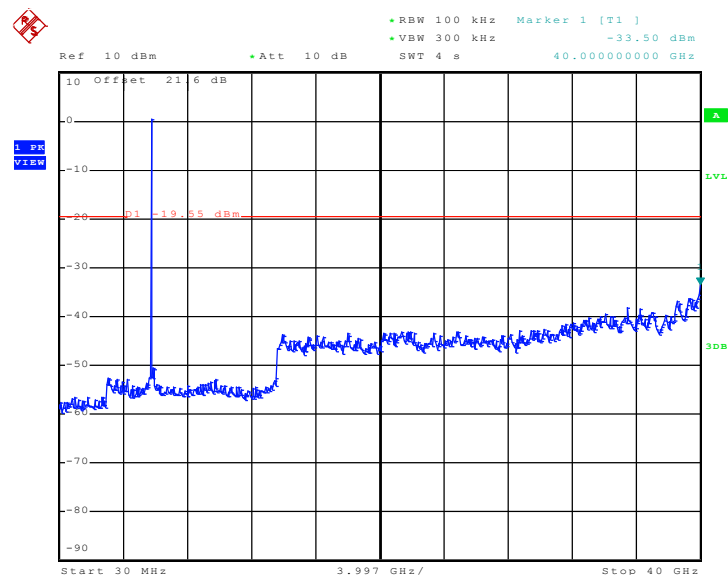
Date: 24.SEP.2010 02:49:30

**Mode 22:Conducted Spurious Emission Plot on 802.11a between
30 MHz ~ 40 GHz Chain A**



Date: 24.SEP.2010 02:50:28

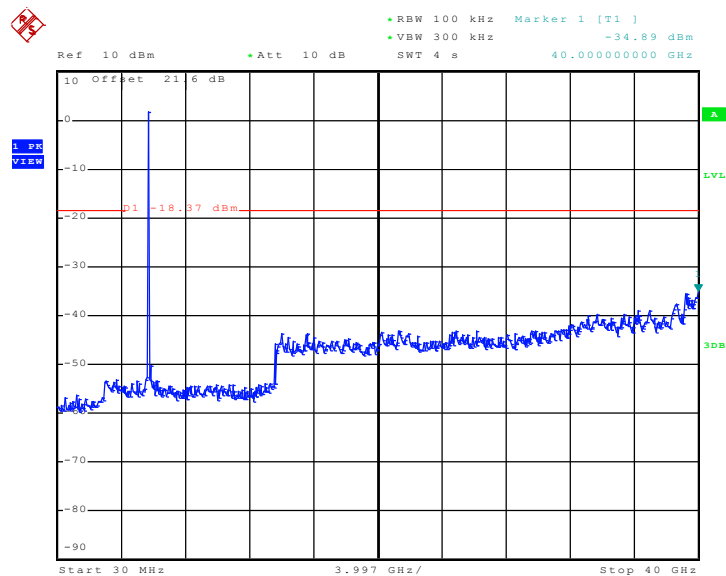
**Mode 23:Conducted Spurious Emission Plot on 802.11a between
30 MHz ~ 40 GHz Chain A**



Date: 24.SEP.2010 02:51:34

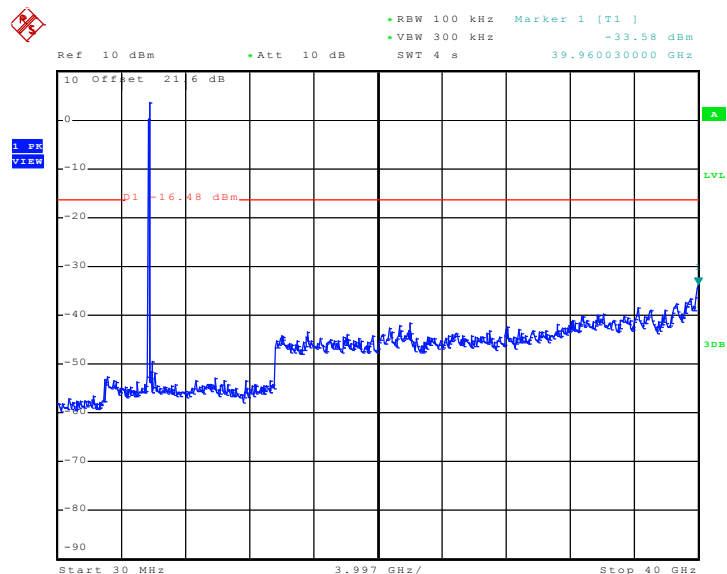
Test Mode :	Mode 24~26	Temperature :	24~26°C
Test Band :	802.11n (BW 20MHz, 2Tx)	Relative Humidity :	46~48%
Test Channel :	149, 157, 165	Test Engineer :	Ken Hsu

**Mode 24:Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 30 MHz ~ 40 GHz Chain A+B**



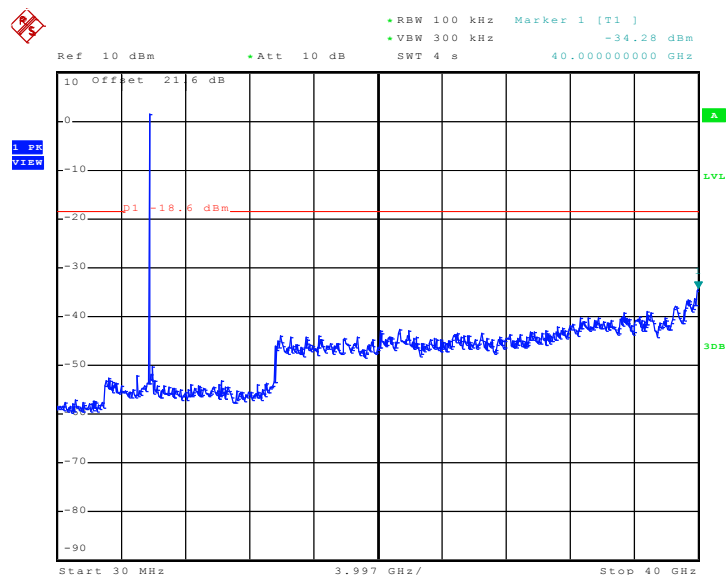
Date: 24.SEP.2010 02:53:20

**Mode 25: Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 30 MHz ~ 40 GHz Chain A+B**



Date: 24.SEP.2010 02:54:31

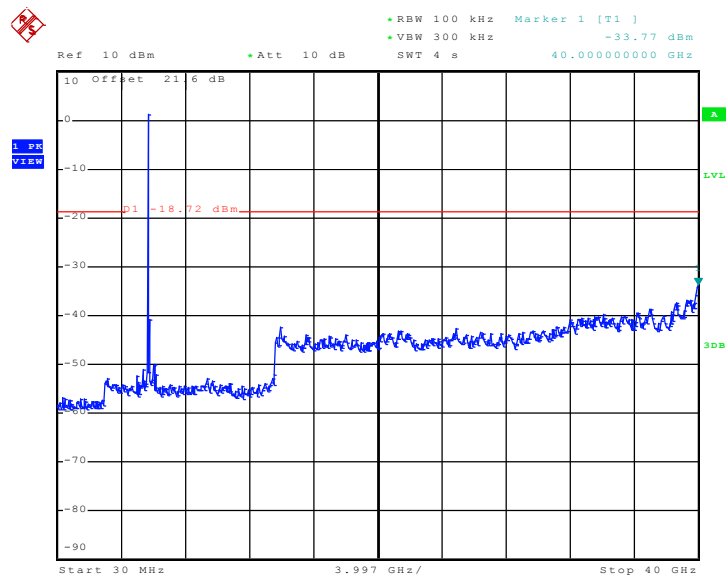
**Mode 26: Conducted Spurious Emission Plot on 802.11n (BW
20MHz) between 30 MHz ~ 40 GHz Chain A+B**



Date: 24.SEP.2010 02:55:15

Test Mode :	Mode 27~28	Temperature :	24~26°C
Test Band :	802.11n (BW 40MHz, 2Tx)	Relative Humidity :	46~48%
Test Channel :	151 and 159	Test Engineer :	Ken Hsu

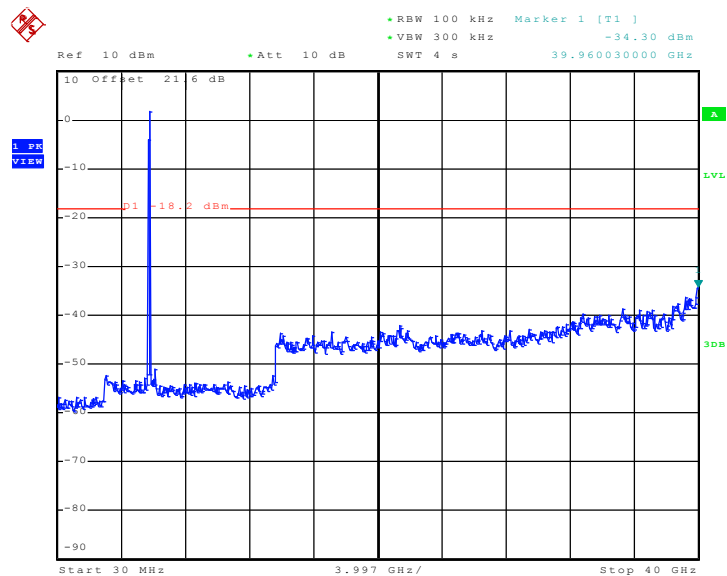
**Mode 27:Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 30 MHz ~ 40 GHz Chain A+B**



Date: 24.SEP.2010 02:58:37



Mode 28:Conducted Spurious Emission Plot on 802.11n (BW
40MHz) between 30 MHz ~ 40 GHz Chain A+B



Date: 24.SEP.2010 02:57:43

3.5 Power Spectral Density Measurement

3.5.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

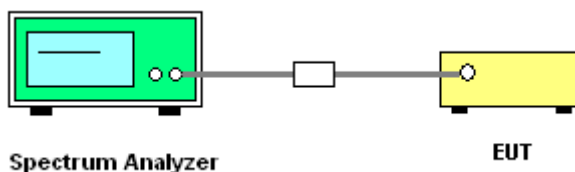
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The test 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. Take the measured data from spectrum analyzer.

3.5.4 Test Setup



3.5.5 Test Result of Power Spectral Density

Test Mode :	Mode 1~5	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11b Measured PSD (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
01	2412	-3.12	8	Pass
02	2417	-0.09	8	Pass
06	2437	1.70	8	Pass
10	2457	-3.04	8	Pass
11	2462	-2.99	8	Pass

Test Mode :	Mode 6~10	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11g Measured PSD (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
01	2412	1.71	8	Pass
02	2417	-4.18	8	Pass
06	2437	-3.86	8	Pass
10	2457	-3.96	8	Pass
11	2462	-6.17	8	Pass

Test Mode :	Mode 11~15	Temperature :	24~26°C
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A	Chain B	Chain A+B		
01	2412	-9.03	-8.53	-5.76	8	Pass
02	2417	-8.57	-8.06	-5.30	8	Pass
06	2437	-8.53	-6.45	-4.36	8	Pass
10	2457	-6.24	-7.36	-3.75	8	Pass
11	2462	-8.71	-7.97	-5.31	8	Pass

Note: Chain A+B was tested by combiner, and the chain A and B was tested individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{chain A}/10} + 10^{\text{chain B}/10})$.

Test Mode :	Mode 16~20	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A	Chain B	Chain A+B		
03	2422	-15.06	-14.32	-11.66	8	Pass
04	2427	-14.90	-14.06	-11.45	8	Pass
06	2437	-14.06	-13.60	-10.81	8	Pass
08	2447	-13.31	-13.59	-10.44	8	Pass
09	2452	-15.06	-14.23	-11.61	8	Pass

Note: Chain A+B was tested by combiner, and the chain A and B was tested individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{(chain A/10)}} + 10^{\text{(chain B/10)}})$.

Test Mode :	Mode 21~23	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11a Measured PSD (dBm)	Max. Limits (dBm)	Pass/Fail
		Chain A		
149	5745	-9.24	8	Pass
157	5785	-9.06	8	Pass
165	5825	-8.61	8	Pass

Test Mode :	Mode 24~26	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

Channel	Frequency (MHz)	802.11n (BW 20MHz, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A	Chain B	Chain A+B		
149	5745	-13.95	-13.77	-10.85	8	Pass
157	5785	-13.90	-13.43	-10.65	8	Pass
165	5825	-13.57	-13.24	-10.39	8	Pass

Note: Chain A+B was tested by combiner, and the chain A and B was tested individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{(chain A/10)}} + 10^{\text{(chain B/10)}})$.



Test Mode :	Mode 27~28	Temperature :	24~26℃
Test Engineer :	Ken Hsu	Relative Humidity :	46~48%

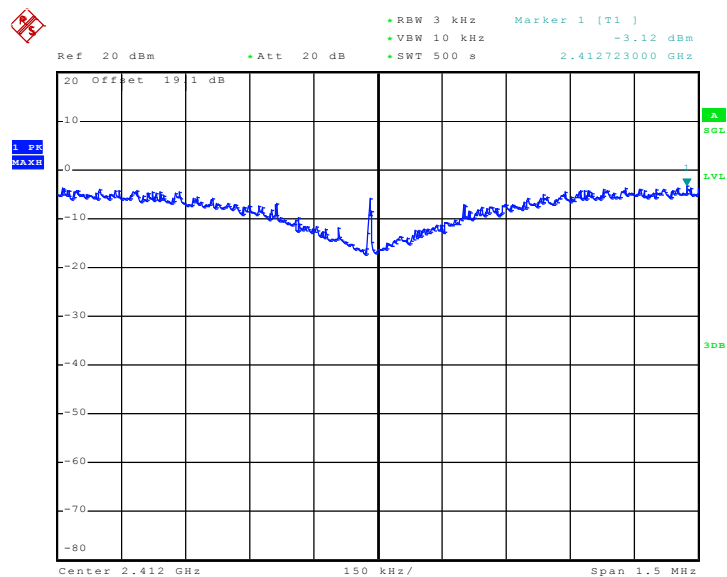
Channel	Frequency (MHz)	802.11n (BW 40MHz, 2Tx) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain A	Chain B	Chain A+B		
151	5755	-15.95	-15.79	-12.86	8	Pass
159	5795	-15.24	-15.07	-12.14		

Note: Chain A+B was tested by combiner, and the chain A and B was tested individually and calculated with the formula of $10 \cdot \text{LOG} (10^{\text{(chain A/10)}} + 10^{\text{(chain B/10)}})$.

3.5.6 Test Result of Power Spectral Density Plots

Mode 1 :

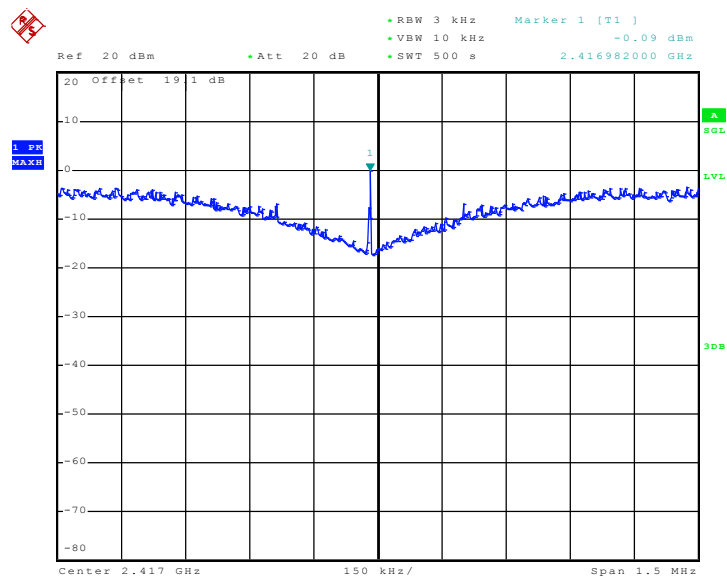
PSD Plot on 802.11b Channel 01 - Chain A



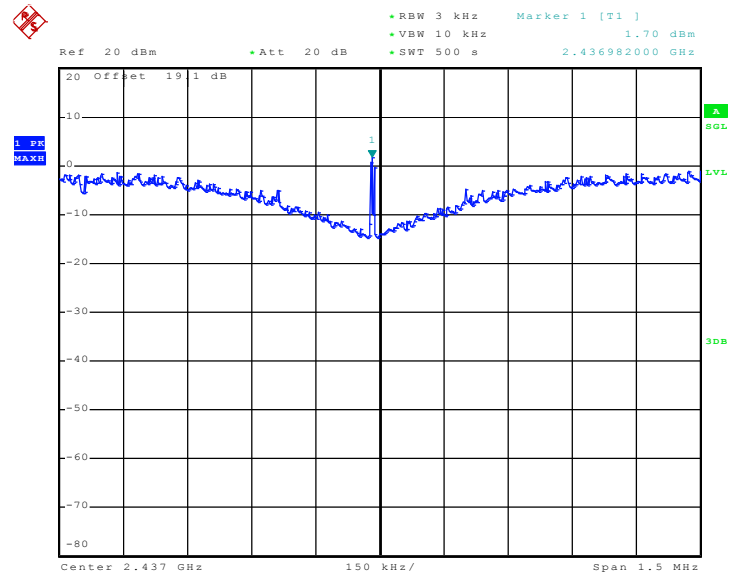
Date: 13.SEP.2010 14:23:01

Mode 2 :

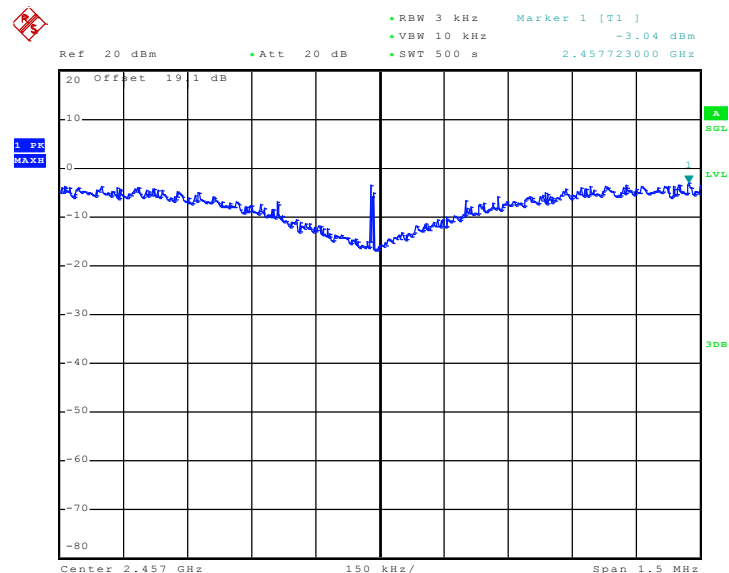
PSD Plot on 802.11b Channel 02 - Chain A



Date: 13.SEP.2010 14:32:05

Mode 3 :
PSD Plot on 802.11b Channel 06 - Chain A


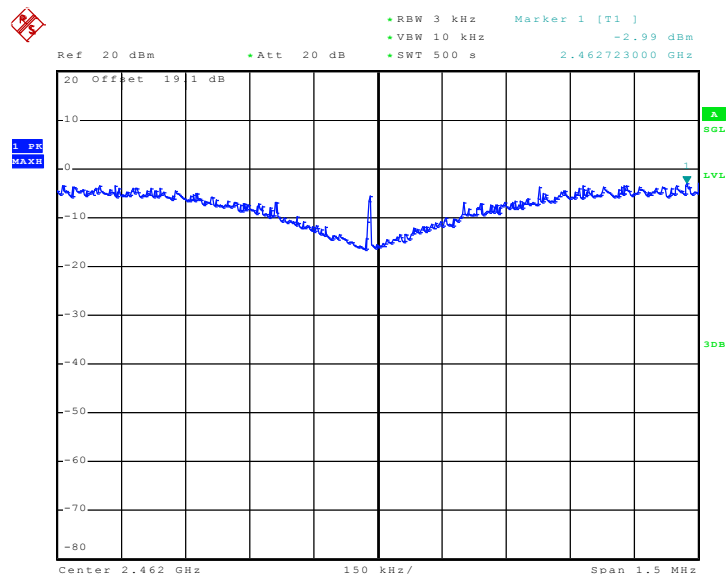
Date: 13.SEP.2010 14:41:35

Mode 4 :
PSD Plot on 802.11b Channel 10 - Chain A


Date: 13.SEP.2010 15:15:23



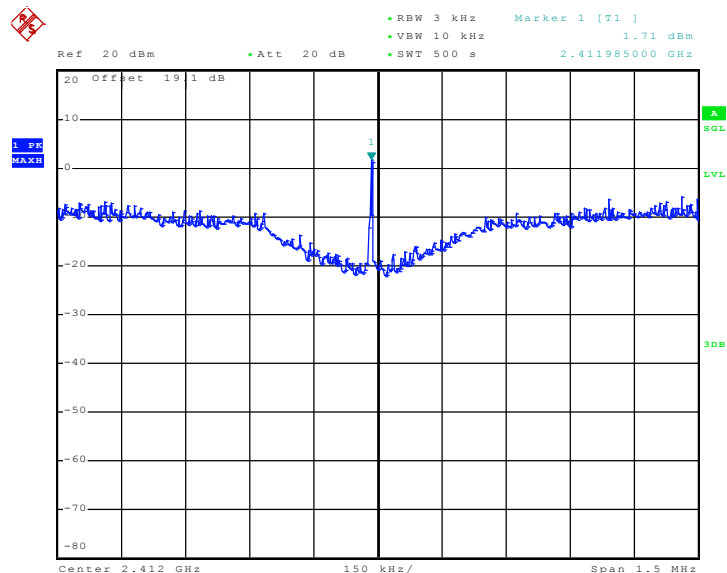
PSD Plot on 802.11b Channel 11 - Chain A



Date: 13.SEP.2010 15:47:21

Mode 6 :

PSD Plot on 802.11g Channel 01 - Chain A

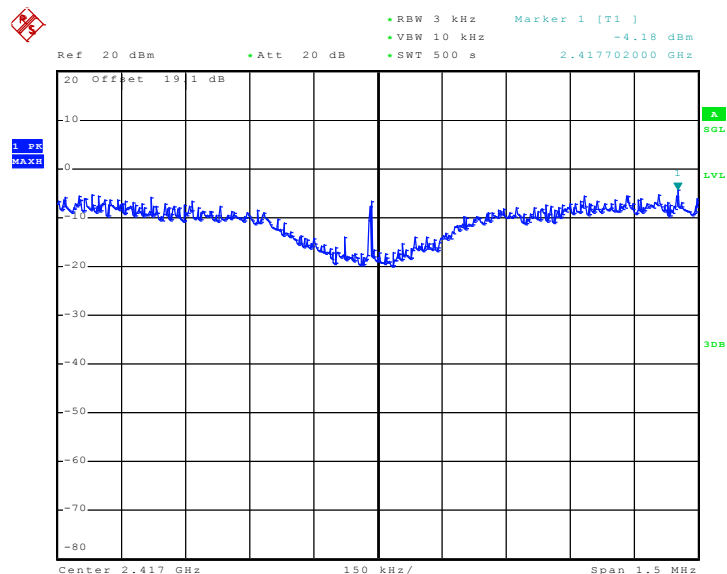


Date: 13.SEP.2010 15:59:07



Mode 7 :

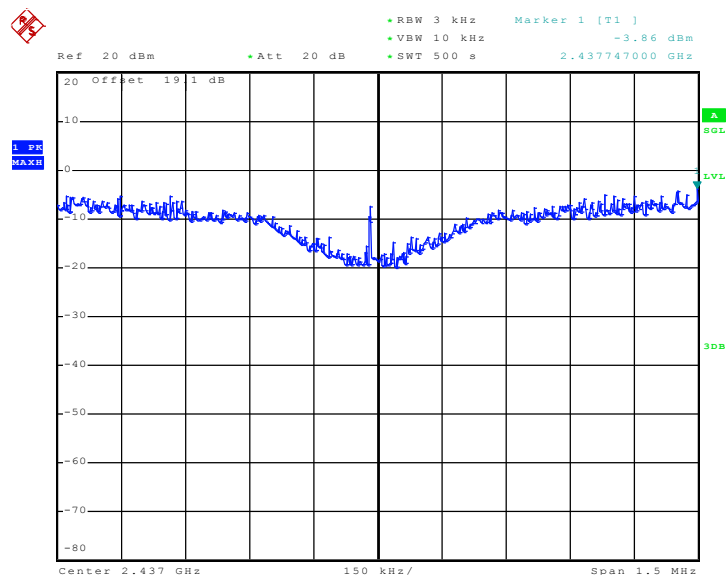
PSD Plot on 802.11g Channel 02 - Chain A



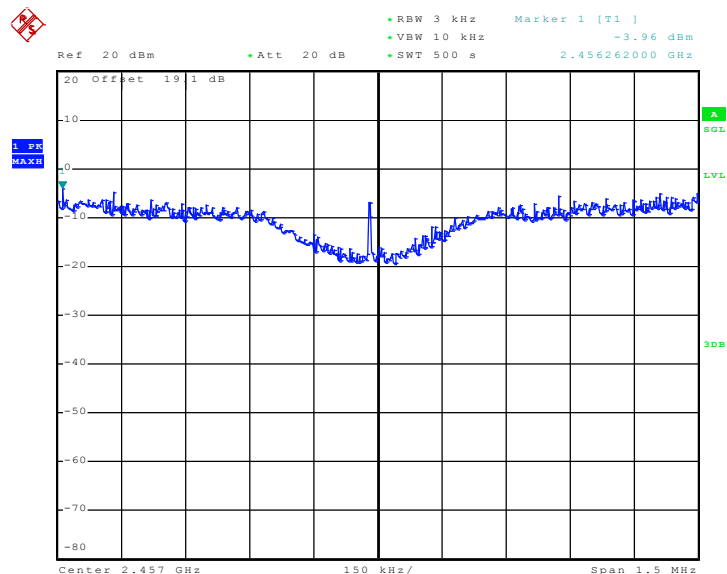
Date: 13.SEP.2010 16:29:07

Mode 8 :

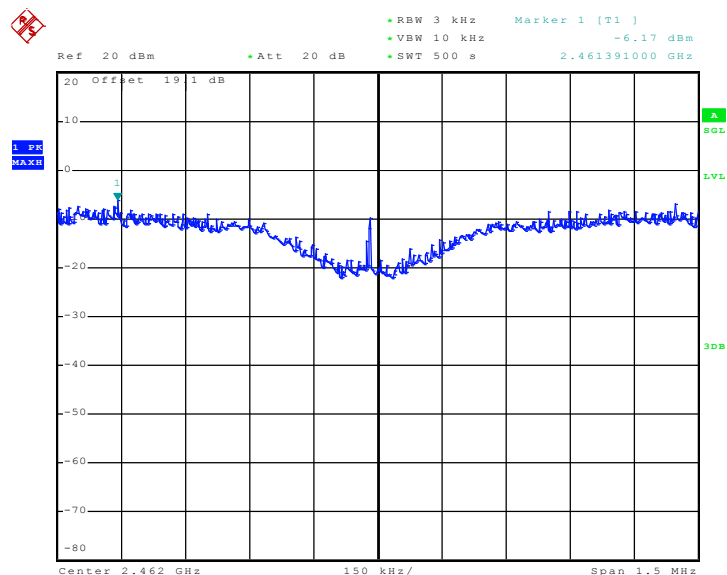
PSD Plot on 802.11g Channel 06 - Chain A



Date: 13.SEP.2010 16:39:56

Mode 9 :
PSD Plot on 802.11g Channel 10 - Chain A


Date: 13.SEP.2010 16:58:46

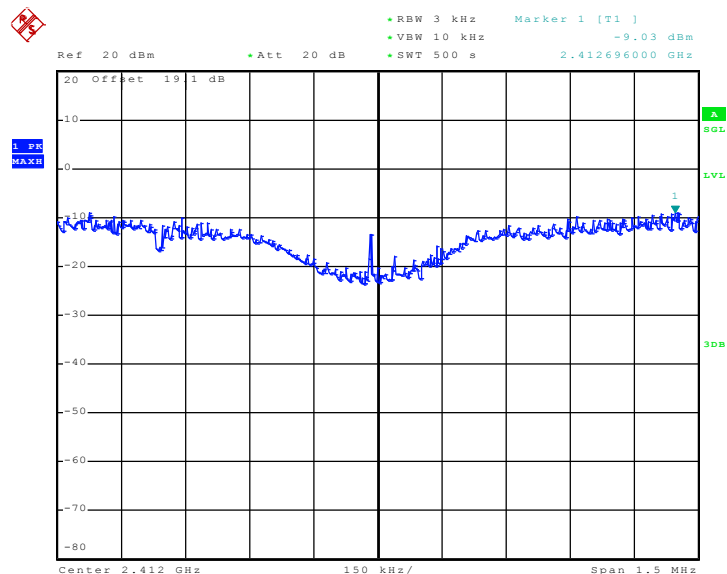
Mode 10 :
PSD Plot on 802.11g Channel 11 - Chain A


Date: 13.SEP.2010 17:13:07



Mode 11 :

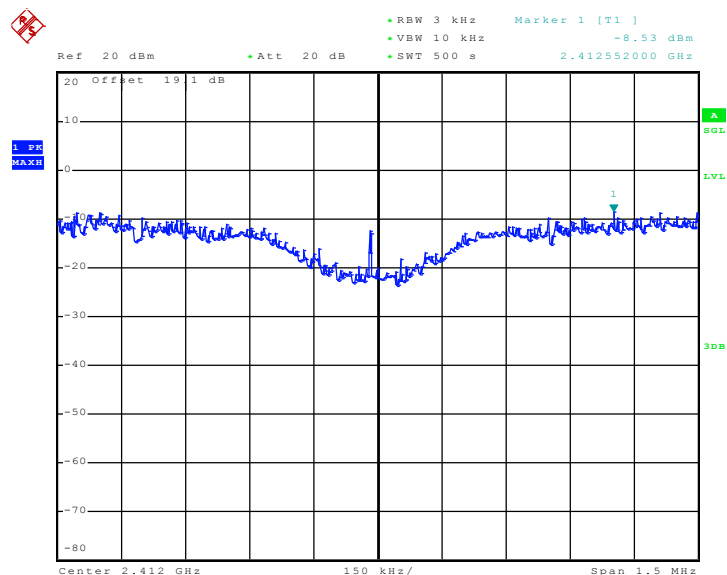
PSD Plot on 802.11n (BW 20MHz) Channel 01 - Chain A



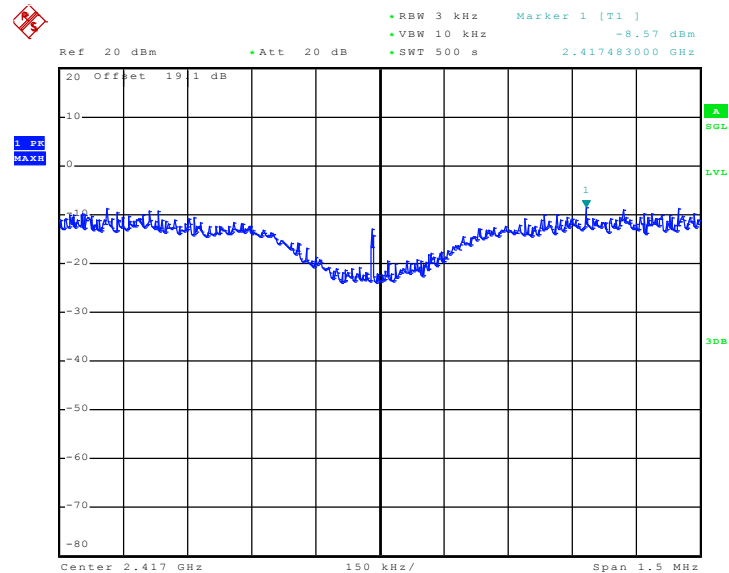
Date: 14.SEP.2010 09:46:23

Mode 11 :

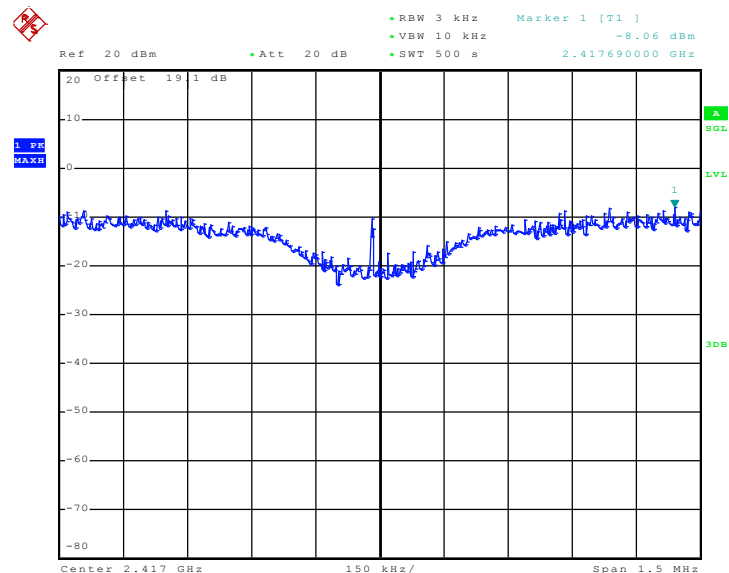
PSD Plot on 802.11n (BW 20MHz) Channel 01 - Chain B



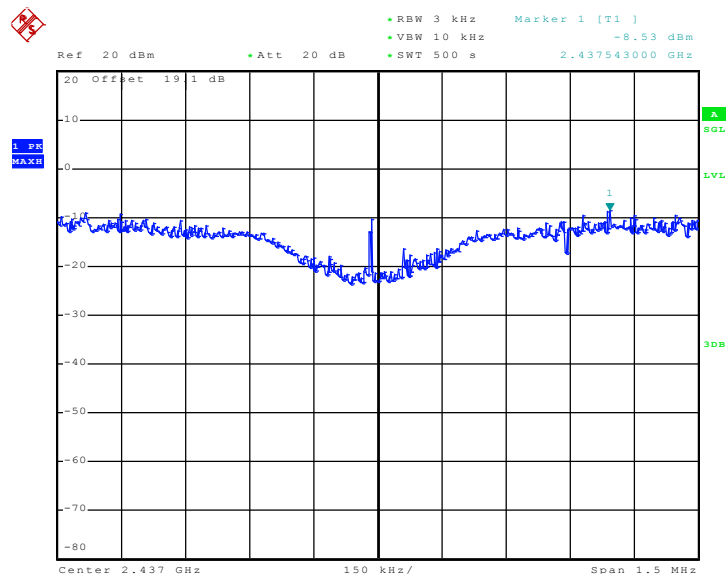
Date: 14.SEP.2010 09:57:56

Mode 12 :
PSD Plot on 802.11n (BW 20MHz) Channel 02 - Chain A


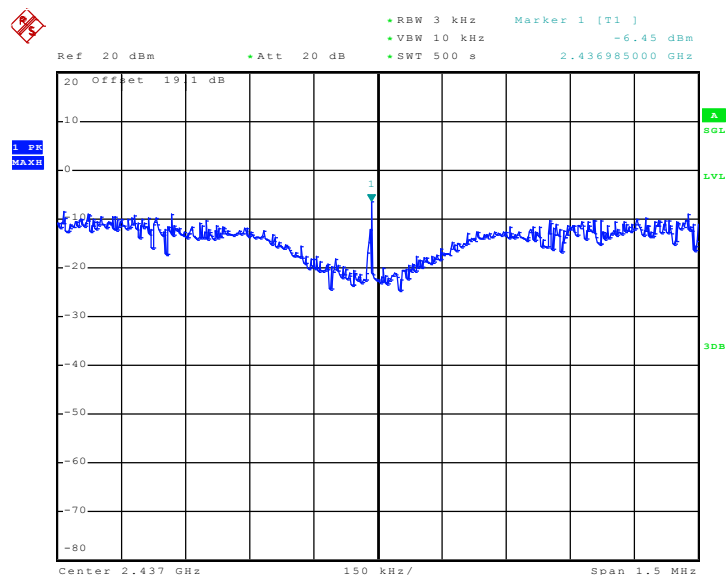
Date: 14.SEP.2010 11:12:45

Mode 12 :
PSD Plot on 802.11n (BW 20MHz) Channel 02 - Chain B


Date: 14.SEP.2010 10:12:54

Mode 13 :
PSD Plot on 802.11n (BW 20MHz) Channel 06 - Chain A


Date: 14.SEP.2010 11:28:21

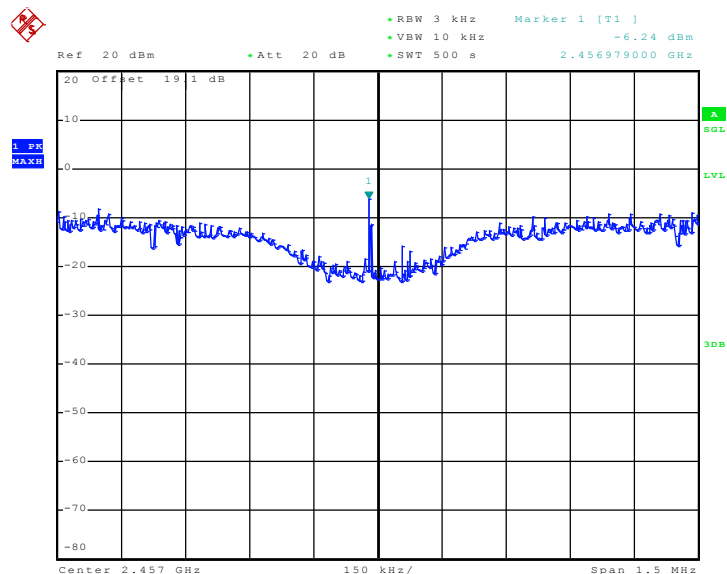
Mode 13 :
PSD Plot on 802.11n (BW 20MHz) Channel 06 - Chain B


Date: 14.SEP.2010 11:38:49



Mode 14 :

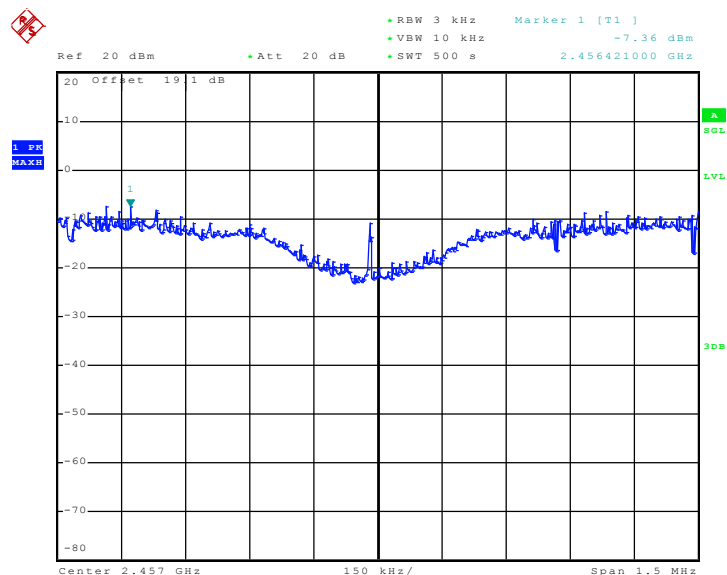
PSD Plot on 802.11n (BW 20MHz) Channel 10 - Chain A



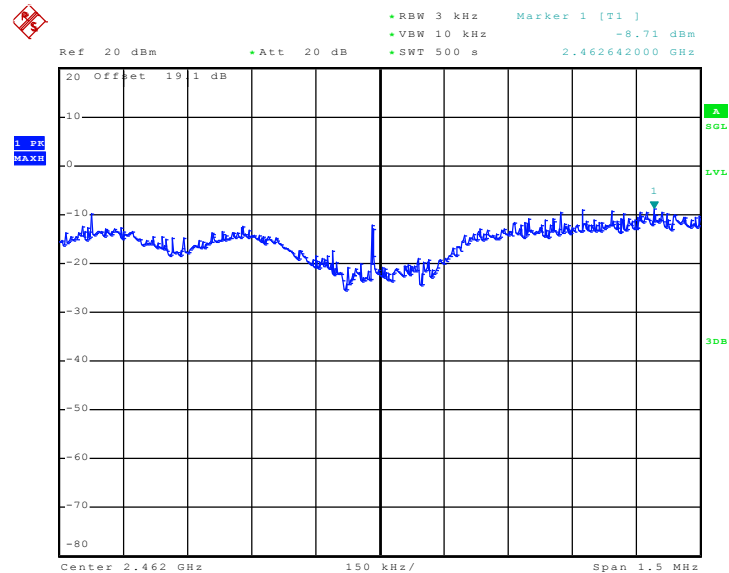
Date: 14.SEP.2010 11:59:49

Mode 14 :

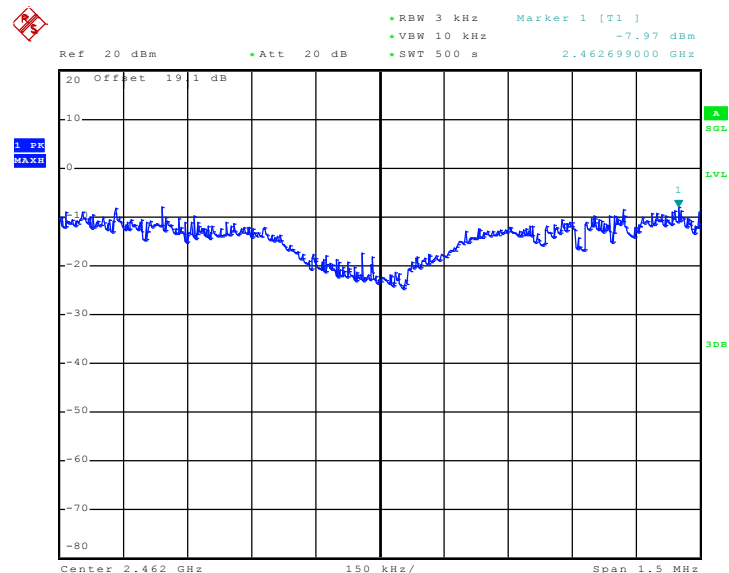
PSD Plot on 802.11n (BW 20MHz) Channel 10 - Chain B



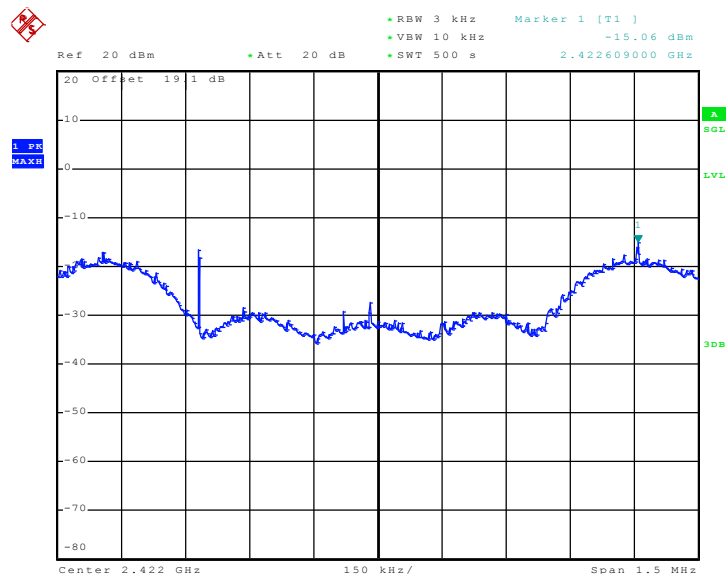
Date: 14.SEP.2010 11:49:10

Mode 15 :
PSD Plot on 802.11n (BW 20MHz) Channel 11 - Chain A


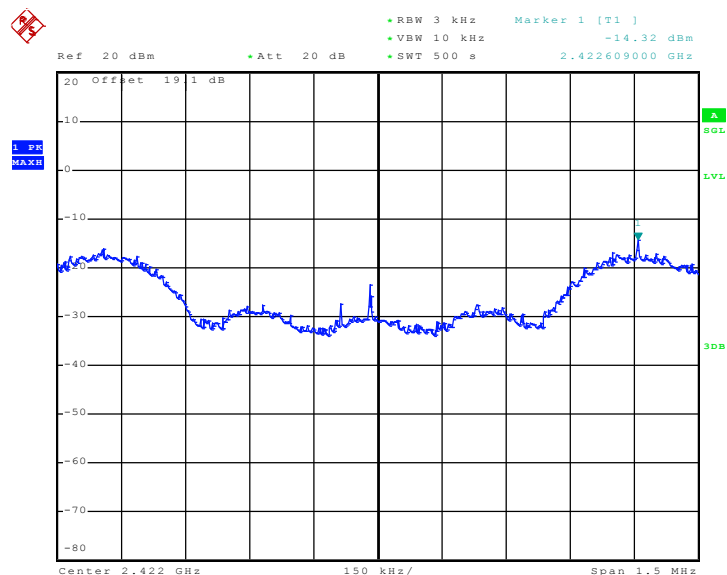
Date: 14.SEP.2010 13:55:02

Mode 15 :
PSD Plot on 802.11n (BW 20MHz) Channel 11 - Chain B


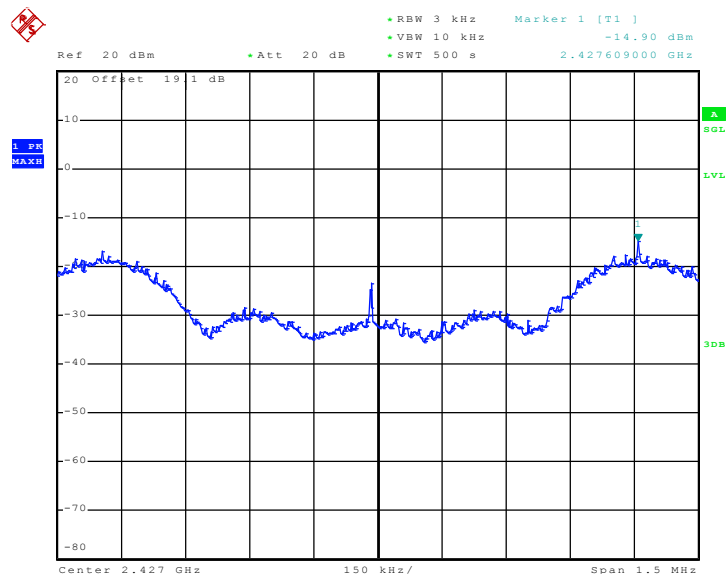
Date: 14.SEP.2010 14:04:33

Mode 16 :
PSD Plot on 802.11n (BW 40MHz) Channel 03 - Chain A


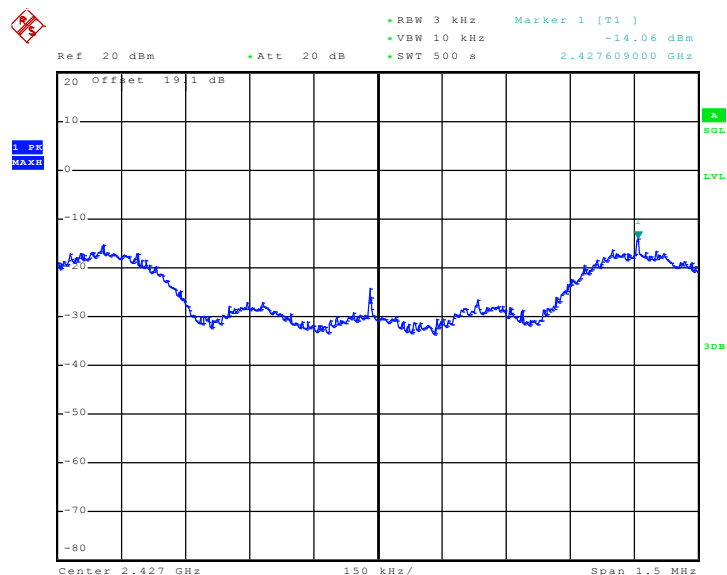
Date: 14.SEP.2010 14:27:11

Mode 16 :
PSD Plot on 802.11n (BW 40MHz) Channel 03 - Chain B


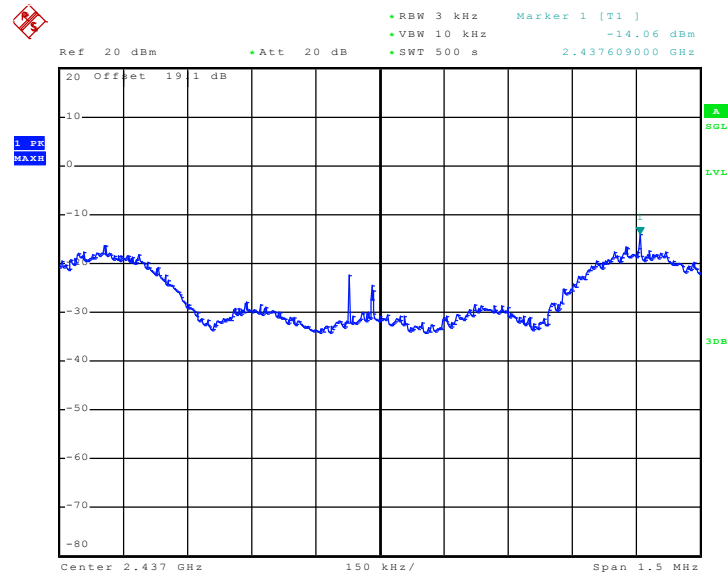
Date: 14.SEP.2010 14:17:19

Mode 17 :
PSD Plot on 802.11n (BW 40MHz) Channel 04 - Chain A


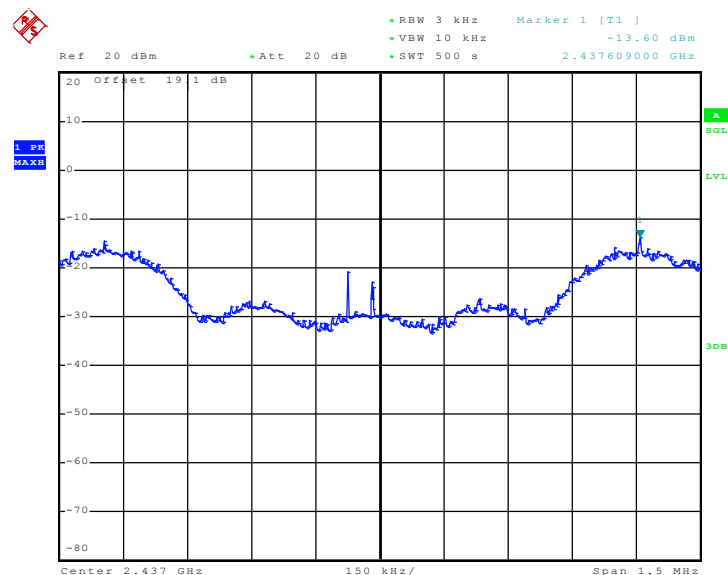
Date: 14.SEP.2010 14:45:21

Mode 17 :
PSD Plot on 802.11n (BW 40MHz) Channel 04 - Chain B


Date: 14.SEP.2010 14:54:45

Mode 18 :
PSD Plot on 802.11n (BW 40MHz) Channel 06 - Chain A


Date: 14.SEP.2010 15:24:51

Mode 18 :
PSD Plot on 802.11n (BW 40MHz) Channel 06 - Chain B


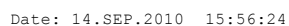
Date: 14.SEP.2010 15:10:35

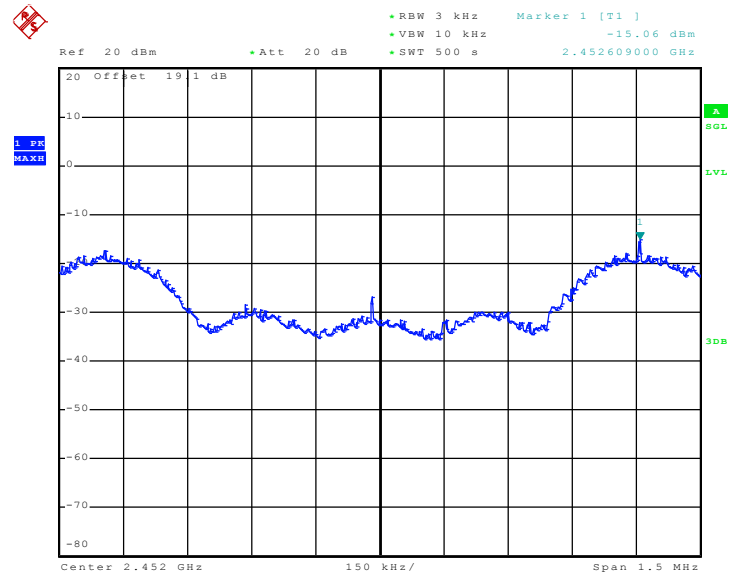


PSD Plot on 802.11n (BW 40MHz) Channel 08 - Chain A

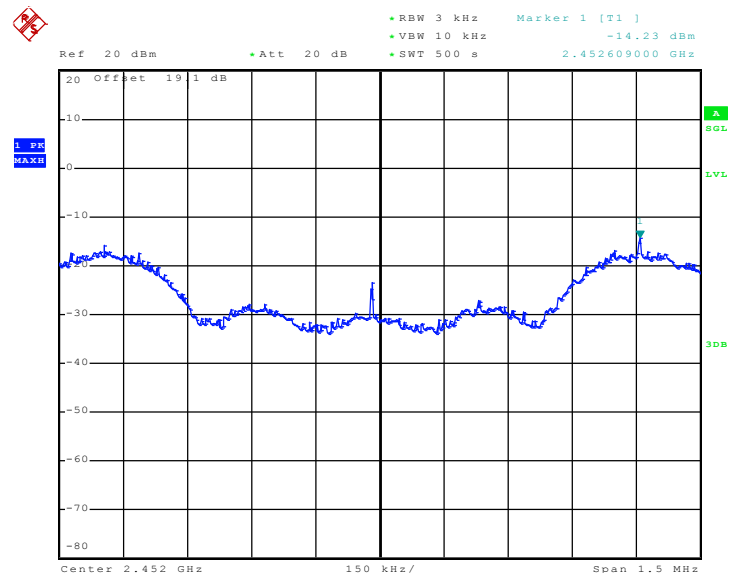


PSD Plot on 802.11n (BW 40MHz) Channel 08 - Chain B



Mode 20 :
PSD Plot on 802.11n (BW 40MHz) Channel 09 - Chain A


Date: 14.SEP.2010 17:30:02

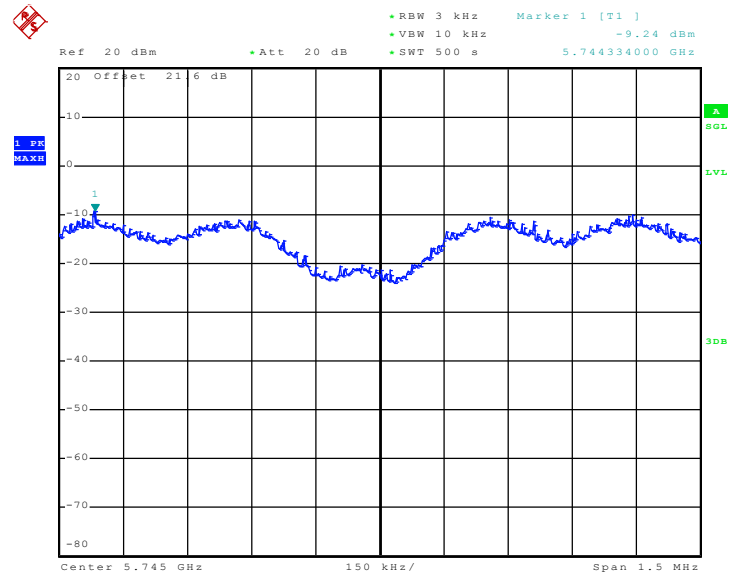
Mode 20 :
PSD Plot on 802.11n (BW 40MHz) Channel 09 - Chain B


Date: 14.SEP.2010 16:11:24



Mode 21:

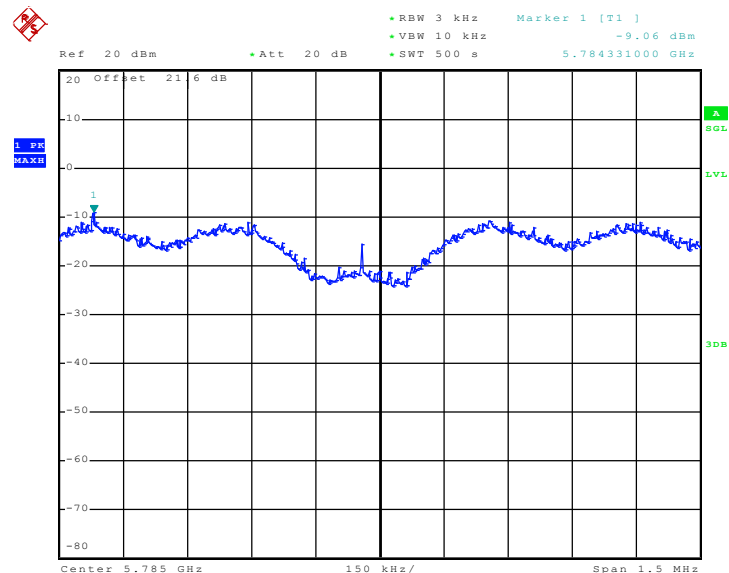
PSD Plot on 802.11a Channel 149 - Chain A



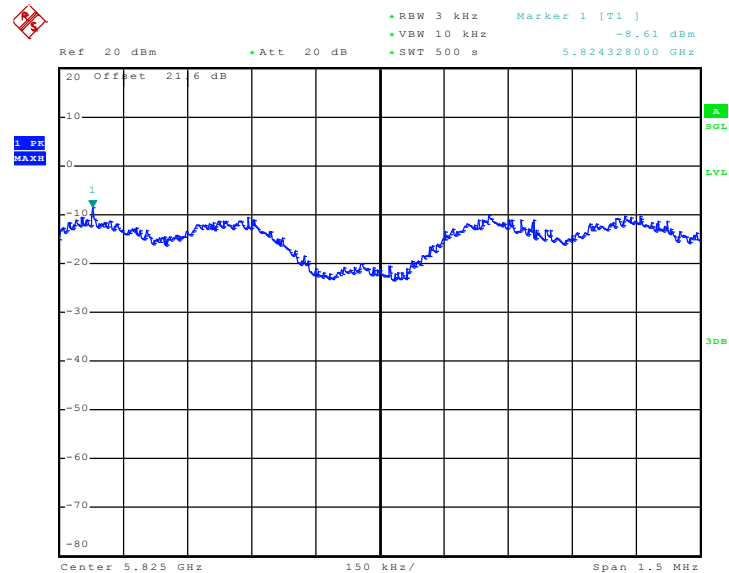
Date: 20.SEP.2010 16:14:44

Mode 22:

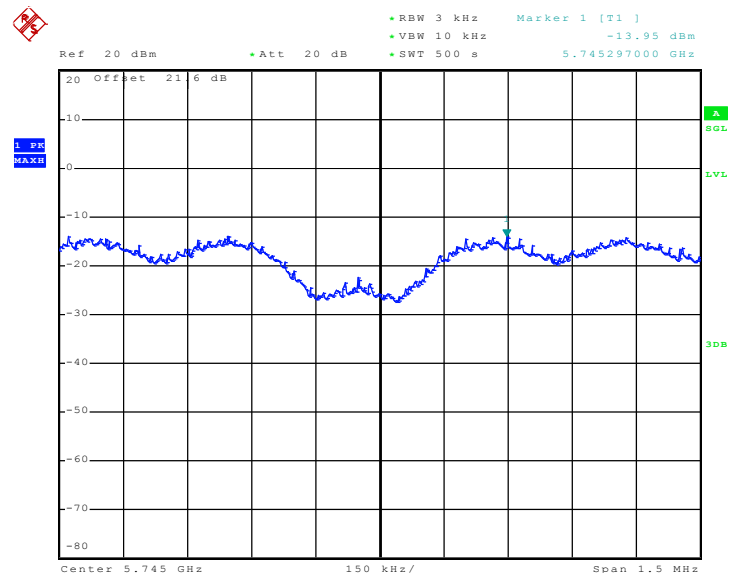
PSD Plot on 802.11a Channel 157 - Chain A



Date: 20.SEP.2010 17:03:28

Mode 23:
PSD Plot on 802.11a Channel 165 - Chain A


Date: 20.SEP.2010 17:15:41

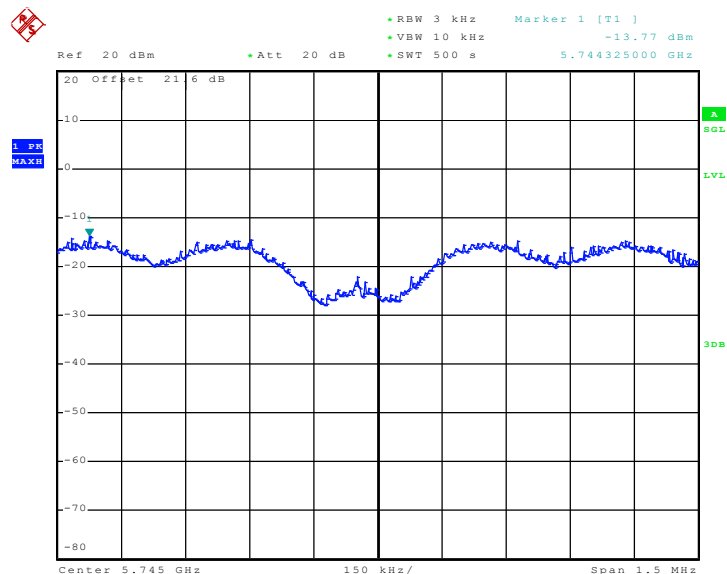
Mode 24 :
PSD Plot on 802.11n (BW 20MHz) Channel 149 - Chain A


Date: 23.SEP.2010 04:09:49



Mode 24 :

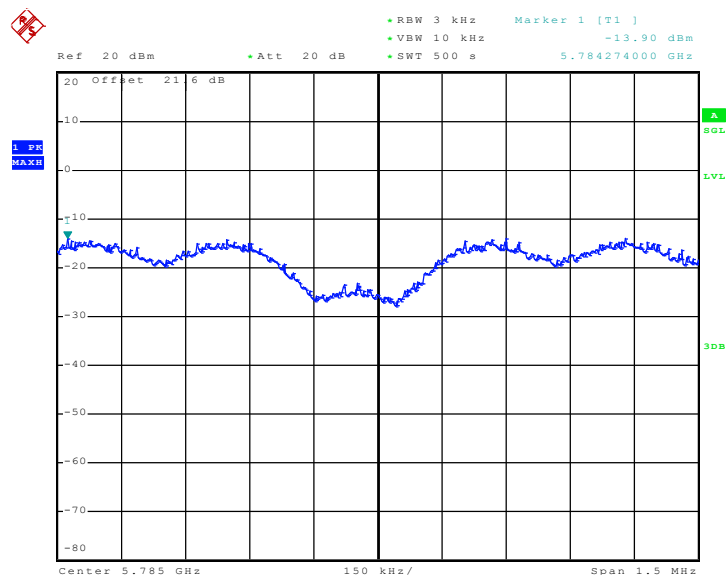
PSD Plot on 802.11n (BW 20MHz) Channel 149 - Chain B



Date: 23.SEP.2010 04:25:45

Mode 25 :

PSD Plot on 802.11n (BW 20MHz) Channel 157 - Chain A

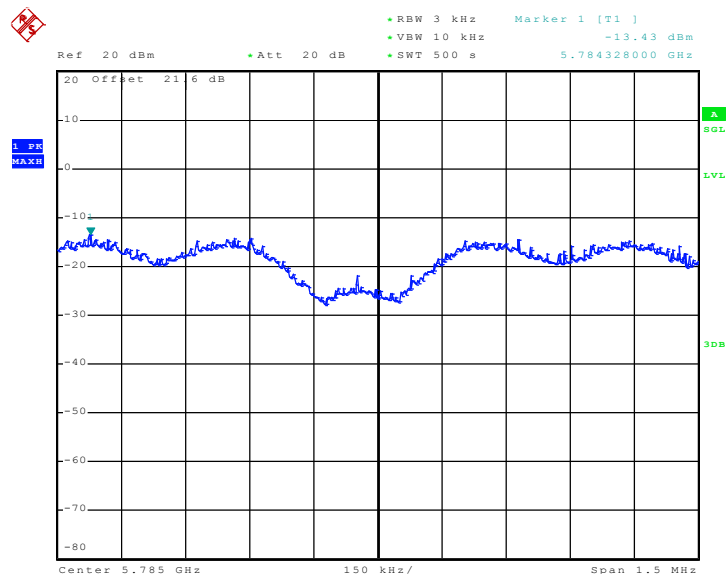


Date: 23.SEP.2010 04:53:53



Mode 25 :

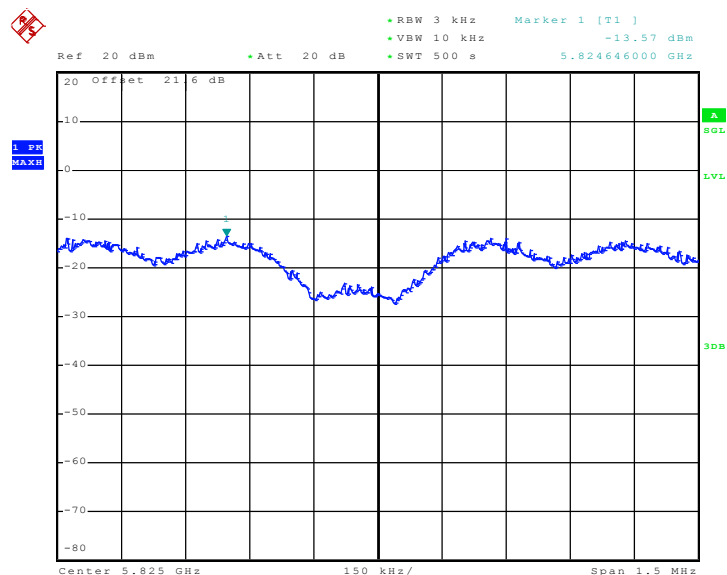
PSD Plot on 802.11n (BW 20MHz) Channel 157 - Chain B



Date: 23.SEP.2010 04:38:37

Mode 26 :

PSD Plot on 802.11n (BW 20MHz) Channel 165 - Chain A

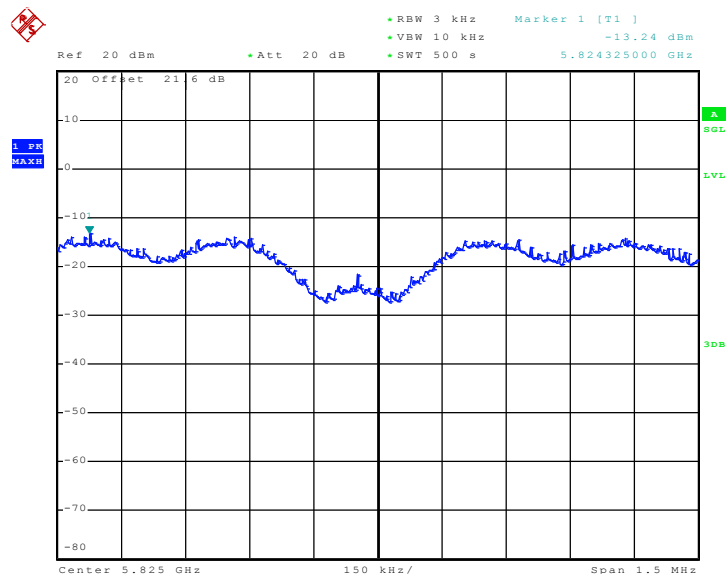


Date: 23.SEP.2010 05:10:04



Mode 26 :

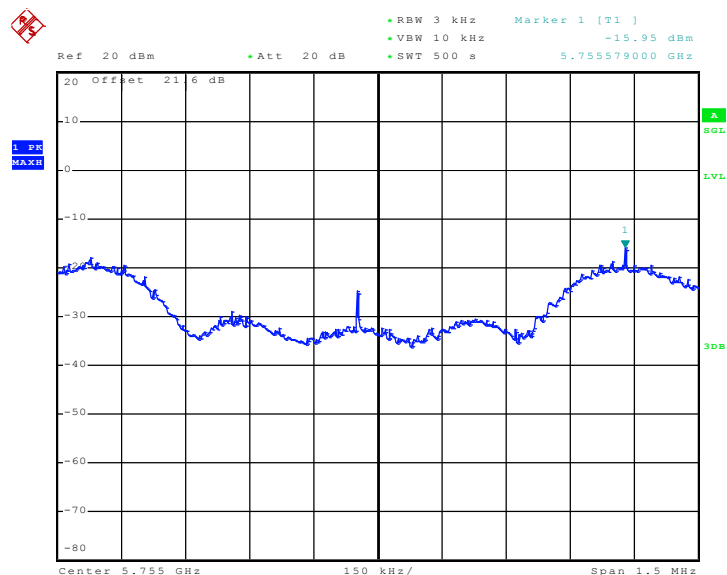
PSD Plot on 802.11n (BW 20MHz) Channel 165 - Chain B



Date: 23.SEP.2010 05:24:47

Mode 27 :

PSD Plot on 802.11n (BW 40MHz) Channel 151 - Chain A

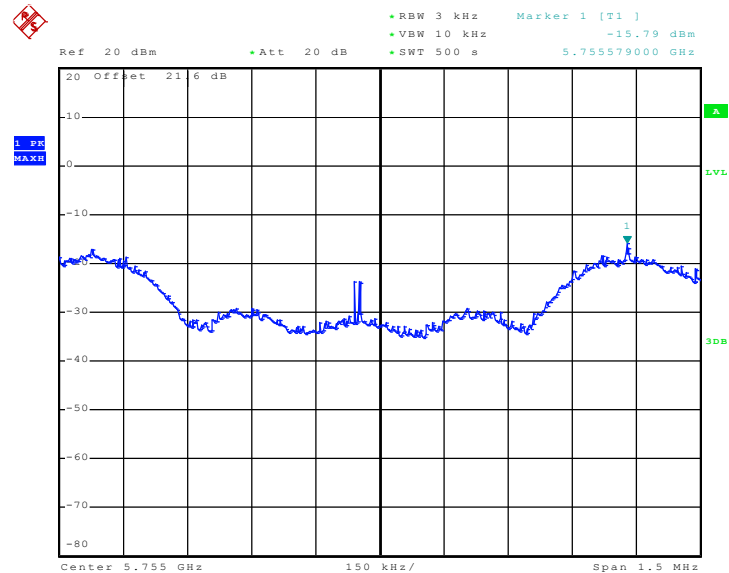


Date: 23.SEP.2010 05:54:12



Mode 27 :

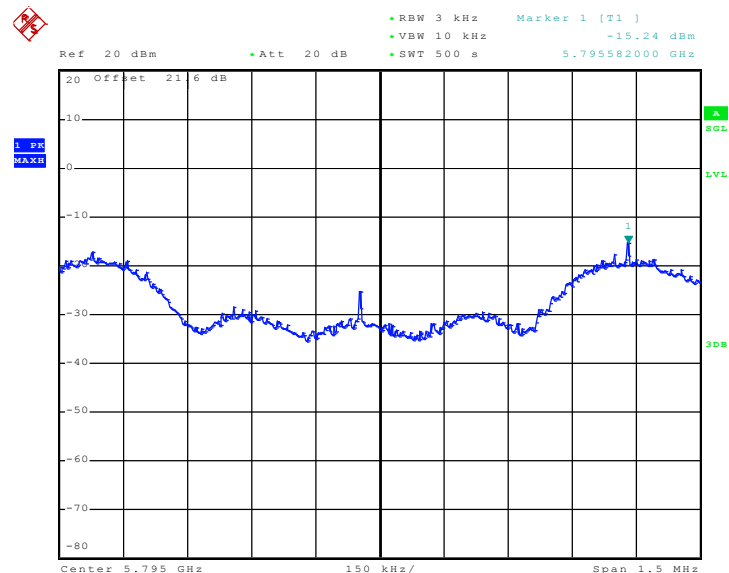
PSD Plot on 802.11n (BW 40MHz) Channel 151 - Chain B



Date: 23.SEP.2010 05:40:33

Mode 28 :

PSD Plot on 802.11n (BW 40MHz) Channel 159 - Chain A

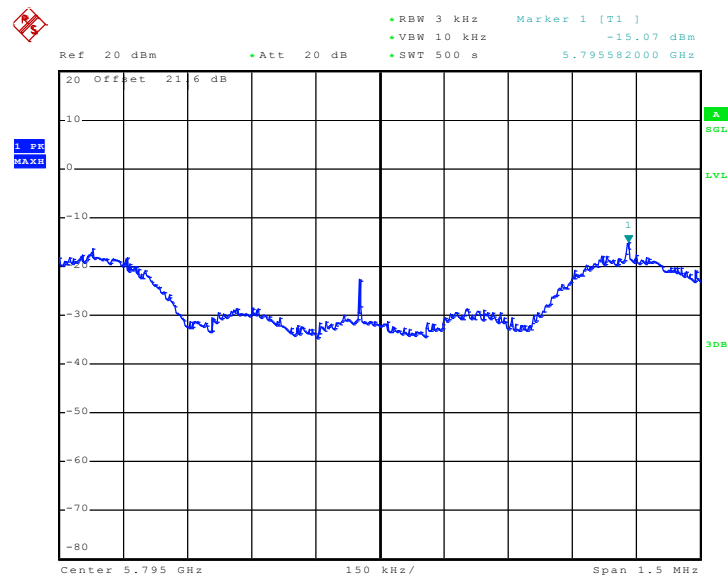


Date: 23.SEP.2010 06:10:57



Mode 28 :

PSD Plot on 802.11n (BW 40MHz) Channel 159 - Chain B



Date: 23.SEP.2010 06:25:19

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

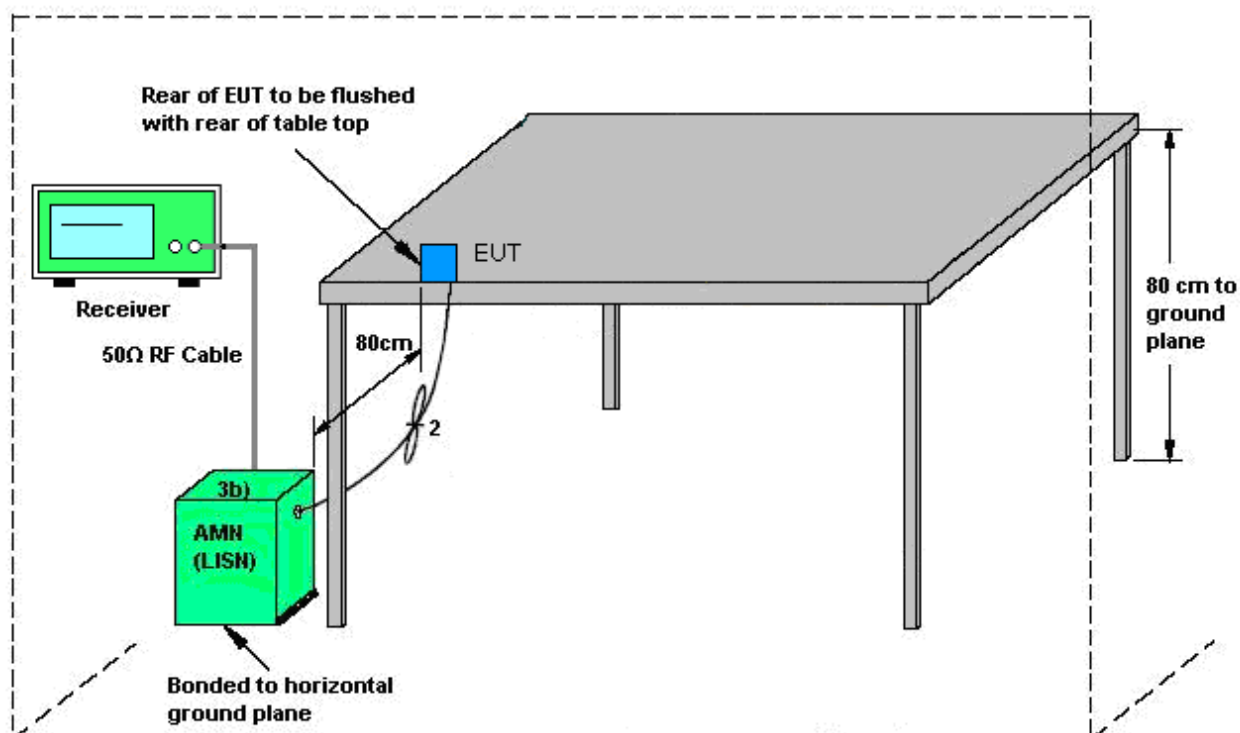
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

4. The testing follows the guidelines in ANSI C63.4-2003.
5. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
6. Connect EUT to the power mains through a line impedance stabilization network (LISN).
7. All the support units are connecting to the other LISN.
8. The LISN provides 50 ohm coupling impedance for the measuring instrument.
9. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
10. Both sides of AC line were checked for maximum conducted interference.
11. The frequency range from 150 kHz to 30 MHz was searched.
12. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

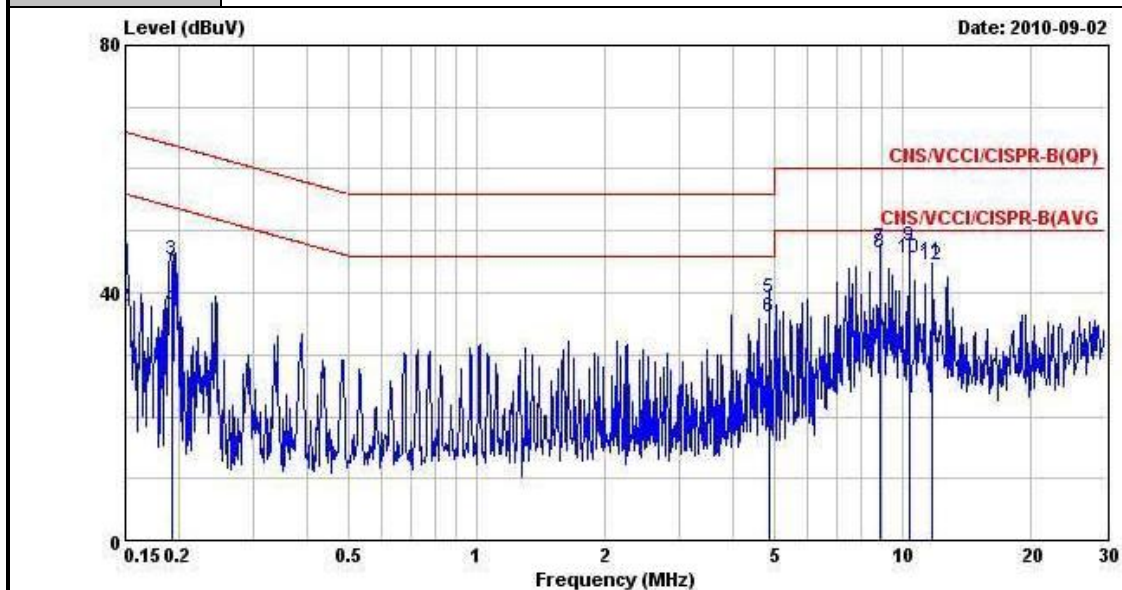
3.6.4 Test Setup



AMN = Artificial mains network (LISN)
 AE = Associated equipment
 EUT = Equipment under test
 ISN = Impedance stabilization network

3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	25°C
Test Engineer :	Novic Jiang	Relative Humidity :	63%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (5G) Link + POE		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

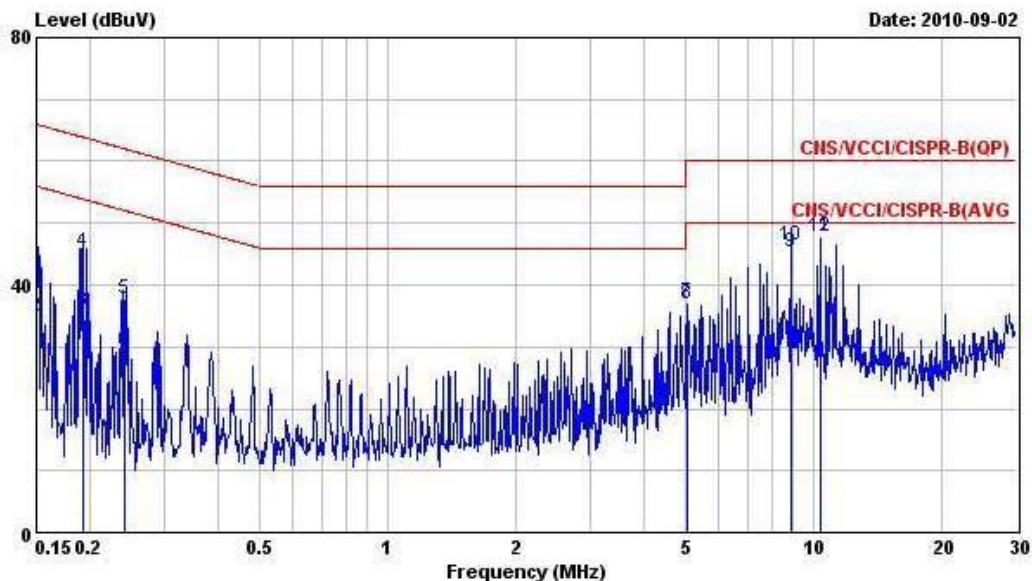


Site : LK_CO01
 Condition : LISN_98087_20091008 LINE
 Project : FR082617
 Mode : Mode 1
 Temp : 25 C
 Humidity : 63 %

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	46.45	-19.55	66.00	46.24	0.17	0.04	QP
2	0.150	37.69	-18.31	56.00	37.48	0.17	0.04	Average
3	0.193	45.45	-18.46	63.91	45.28	0.16	0.01	QP
4	0.193	37.34	-16.57	53.91	37.17	0.16	0.01	Average
5	4.897	39.14	-16.86	56.00	38.65	0.30	0.19	QP
6	4.897	36.09	-9.91	46.00	35.60	0.30	0.19	Average
7	8.873	47.22	-12.78	60.00	46.51	0.46	0.25	QP
8	8.873	46.43	-3.57	50.00	45.72	0.46	0.25	Average
9	10.401	47.48	-12.52	60.00	46.70	0.52	0.26	QP
10	10.401	45.53	-4.47	50.00	44.75	0.52	0.26	Average
11	11.780	45.02	-14.98	60.00	44.16	0.58	0.28	QP
12	11.780	44.41	-5.59	50.00	43.55	0.58	0.28	Average



Test Mode :	Mode 1	Temperature :	25°C
Test Engineer :	Novic Jiang	Relative Humidity :	63%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (5G) Link + POE		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : LK_C001
Condition : LISN_98087_20091008 NEUTRAL
Project : FR082617
Mode : Mode 1
Temp : 25 C
Humidity : 63 %

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.150	43.73	-22.27	66.00	43.46	0.23	0.04	QP
2	0.150	34.87	-21.13	56.00	34.60	0.23	0.04	Average
3	0.193	35.91	-18.00	53.91	35.68	0.22	0.01	Average
4	0.193	45.24	-18.67	63.91	45.01	0.22	0.01	QP
5	0.241	37.84	-24.21	62.05	37.60	0.22	0.02	QP
6	0.241	29.29	-22.76	52.05	29.05	0.22	0.02	Average
7	5.048	37.12	-22.88	60.00	36.58	0.35	0.19	QP
8	5.048	36.97	-13.03	50.00	36.43	0.35	0.19	Average
9	8.870	45.36	-4.64	50.00	44.63	0.48	0.25	Average
10	8.870	46.44	-13.56	60.00	45.71	0.48	0.25	QP
11	10.400	47.78	-12.22	60.00	46.98	0.54	0.26	QP
12	10.402	47.69	-2.31	50.00	46.89	0.54	0.26	Average

3.7 Radiated Emission Measurement

3.7.1 Limit of Radiated Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. 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. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.7.2 Measuring Instruments

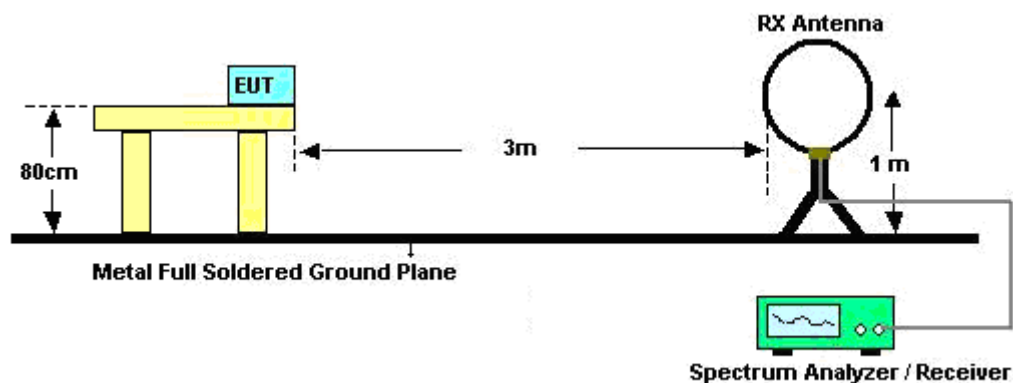
See list of measuring instruments of this test report.

3.7.3 Test Procedures

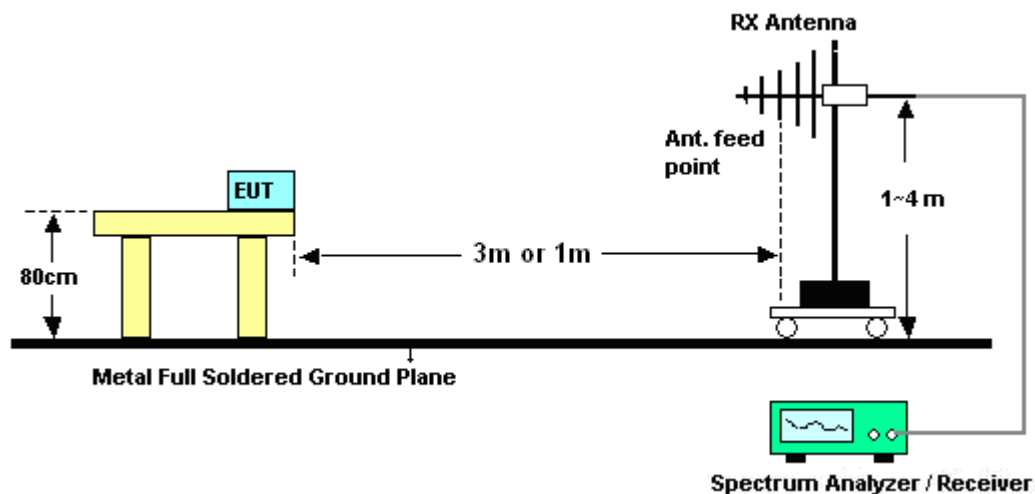
- The testing follows the guidelines in FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
- Use the following spectrum analyzer settings:
 - Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold.
 - Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.
Distance extrapolation factor = $20 \log (\text{specific distance [3m]} / \text{test distance [1m]})$ (dB)
- Follow the guidelines in ANSI C63.4-2003 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

3.7.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz



3.7.5 Test Results of Radiated Emissions (9kHz ~ 30MHz)

Test Engineer :	David Yang	Temperature :	25~26°C	
		Relative Humidity :	45~46%	

Frequency (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

3.7.6 Test Result of Radiated Emission (30MHz ~ 10th Harmonic)

Test Mode :	Mode 1	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
46.74	36.36	-3.64	40	57.26	9.94	0.67	31.51	-	-	Peak
191.73	38.41	-5.09	43.5	59.72	8.9	1.29	31.5	-	-	Peak
250.05	42.68	-3.32	46	59.79	12.77	1.53	31.41	120	344	Peak
323.8	39.23	-6.77	46	54.62	14.1	1.83	31.32	-	-	Peak
500.2	34.17	-11.83	46	44.61	18.18	2.45	31.07	-	-	Peak
875.4	37.09	-8.91	46	41.54	22.95	3.31	30.71	-	-	Peak
2389.61	53.76	-20.24	74	49.08	32.18	6.03	33.53	100	231	Peak
2389.61	41.89	-12.11	54	37.21	32.18	6.03	33.53	100	231	Average
2412	107.8	-	-	103.07	32.2	6.07	33.54	100	231	Peak
2412	103.43	-	-	98.7	32.2	6.07	33.54	100	231	Average
2494	39.54	-14.46	54	34.63	32.3	6.18	33.57	100	231	Average
2494	49.46	-24.54	74	44.55	32.3	6.18	33.57	100	231	Peak
8301	54.13	-19.87	74	41.74	35.56	10.93	34.1	131	345	Peak
8301	42.25	-11.75	54	29.86	35.56	10.93	34.1	131	345	Average
9645	45.37	-42.43	87.8	78.05	-10.32	11.99	34.35	100	0	Peak



Test Mode :	Mode 1	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.88	-3.12	40	49.39	18.4	0.55	31.46	100	358	Peak
95.61	39.7	-3.8	43.5	60.49	9.76	0.98	31.53	-	-	Peak
191.73	36.62	-6.88	43.5	57.93	8.9	1.29	31.5	-	-	Peak
374.2	33.67	-12.33	46	47.39	15.44	2.09	31.25	-	-	Peak
500.2	36.31	-9.69	46	46.75	18.18	2.45	31.07	-	-	Peak
750.1	38.15	-7.85	46	44.27	21.52	3.06	30.7	-	-	Peak
2389.99	56.97	-17.03	74	52.29	32.18	6.03	33.53	100	347	Peak
2389.99	45.79	-8.21	54	41.11	32.18	6.03	33.53	100	347	Average
2412	108.78	-	-	104.05	32.2	6.07	33.54	100	347	Peak
2412	104.3	-	-	99.57	32.2	6.07	33.54	100	347	Average
2500	41.69	-12.31	54	36.78	32.3	6.18	33.57	100	347	Average
2500	49.02	-24.98	74	44.11	32.3	6.18	33.57	100	347	Peak
4824	52.82	-21.18	74	43.66	34.07	9.12	34.03	144	344	Peak
4824	47.26	-6.74	54	38.1	34.07	9.12	34.03	144	344	Average
8394	53.9	-20.1	74	41.45	35.58	10.96	34.09	109	115	Peak
8394	41.78	-12.22	54	29.33	35.58	10.96	34.09	109	115	Average
9648	52.4	-36.38	88.78	85.08	-10.32	11.99	34.35	100	0	Peak



Test Mode :	Mode 2	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.16	-3.84	40	48.67	18.4	0.55	31.46	-	-	Peak
46.74	36.52	-3.48	40	57.42	9.94	0.67	31.51	116	267	Peak
250.05	42.09	-3.91	46	59.2	12.77	1.53	31.41	-	-	Peak
310.5	38.87	-7.13	46	54.66	13.74	1.79	31.32	-	-	Peak
500.2	33.97	-12.03	46	44.41	18.18	2.45	31.07	-	-	Peak
800.5	33.96	-12.04	46	39.28	22.22	3.14	30.68	-	-	Peak
2381.06	56.31	-17.69	74	51.65	32.16	6.03	33.53	100	230	Peak
2381.06	43.05	-10.95	54	38.39	32.16	6.03	33.53	100	230	Average
2417	109.48	-	-	104.75	32.2	6.07	33.54	100	230	Peak
2417	105.02	-	-	100.29	32.2	6.07	33.54	100	230	Average
2500	39.72	-14.28	54	34.81	32.3	6.18	33.57	100	230	Average
2500	48.71	-25.29	74	43.8	32.3	6.18	33.57	100	230	Peak
8286	53.1	-20.9	74	40.71	35.56	10.93	34.1	141	235	Peak
8286	42.16	-11.84	54	29.77	35.56	10.93	34.1	141	235	Average
9668	47.69	-41.79	89.48	80.32	-10.26	11.98	34.35	100	0	Peak



Test Mode :	Mode 2	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
30.81	36.38	-3.62	40	48.35	18.95	0.54	31.46	106	356	Peak
87.78	36.03	-3.97	40	58.01	8.62	0.93	31.53	-	-	Peak
95.61	40.96	-2.54	43.5	61.75	9.76	0.98	31.53	-	-	Peak
374.2	33.24	-12.76	46	46.96	15.44	2.09	31.25	-	-	Peak
663.3	37.42	-8.58	46	44.85	20.56	2.87	30.86	-	-	Peak
750.1	37.05	-8.95	46	43.17	21.52	3.06	30.7	-	-	Peak
2384.29	56.9	-17.1	74	52.24	32.16	6.03	33.53	100	345	Peak
2384.29	45.3	-8.7	54	40.64	32.16	6.03	33.53	100	345	Average
2417	110.3	-	-	105.56	32.22	6.07	33.55	100	345	Peak
2417	105.92	-	-	101.19	32.2	6.07	33.54	100	345	Average
2500	40.86	-13.14	54	35.95	32.3	6.18	33.57	100	345	Average
2500	48.94	-25.06	74	44.03	32.3	6.18	33.57	100	345	Peak
4834	54.28	-19.72	74	45.12	34.07	9.12	34.03	126	347	Peak
4834	50.77	-3.23	54	41.61	34.07	9.12	34.03	126	347	Average
7251	54.73	-19.27	74	43.28	35.51	10.03	34.09	100	7	Peak
7251	48.28	-5.72	54	36.86	35.49	10.03	34.1	100	7	Average
9668	56.36	-33.94	90.3	88.99	-10.26	11.98	34.35	100	0	Peak

Test Mode :	Mode 3	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
32.7	36.72	-3.28	40	49.79	17.84	0.56	31.47	-	-	Peak
191.73	39.72	-3.78	43.5	61.03	8.9	1.29	31.5	-	-	Peak
250.05	42.8	-3.2	46	59.91	12.77	1.53	31.41	127	283	Peak
310.5	38.94	-7.06	46	54.73	13.74	1.79	31.32	-	-	Peak
666.1	32.53	-13.47	46	39.93	20.58	2.87	30.85	-	-	Peak
788.6	34	-12	46	39.5	22.06	3.12	30.68	-	-	Peak
2356	54.75	-19.25	74	50.19	32.13	5.95	33.52	125	233	Peak
2356	45.23	-8.77	54	40.67	32.13	5.95	33.52	125	233	Average
2437	102.8	-	-	98	32.24	6.11	33.55	125	233	Average
2437	107.25	-	-	102.45	32.24	6.11	33.55	125	233	Peak
2492	48.54	-25.46	74	43.63	32.3	6.18	33.57	125	233	Peak
2492	38.67	-15.33	54	33.76	32.3	6.18	33.57	125	233	Average
7311	54.26	-19.74	74	42.85	35.45	10.06	34.1	144	44	Peak
7311	43.85	-10.15	54	32.44	35.45	10.06	34.1	144	44	Average
9748	45.73	-41.52	87.25	78.24	-10.12	11.94	34.33	100	0	Peak



Test Mode :	Mode 3	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.7	-3.3	40	49.21	18.4	0.55	31.46	107	350	Peak
95.61	39.36	-4.14	43.5	60.15	9.76	0.98	31.53	-	-	Peak
250.05	36.81	-9.19	46	53.92	12.77	1.53	31.41	-	-	Peak
374.2	33.48	-12.52	46	47.2	15.44	2.09	31.25	-	-	Peak
500.2	36.28	-9.72	46	46.72	18.18	2.45	31.07	-	-	Peak
750.1	38.03	-7.97	46	44.15	21.52	3.06	30.7	-	-	Peak
2374	53.76	-20.24	74	49.14	32.16	5.99	33.53	126	347	Peak
2374	43.83	-10.17	54	39.21	32.16	5.99	33.53	126	347	Average
2437	105.64	-	-	100.84	32.24	6.11	33.55	126	347	Average
2437	110.08	-	-	105.3	32.22	6.11	33.55	126	347	Peak
2484	49.15	-24.85	74	44.25	32.28	6.18	33.56	126	347	Peak
2484	37.18	-16.82	54	32.28	32.28	6.18	33.56	126	347	Average
4874	53.64	-20.36	74	44.47	34.08	9.13	34.04	100	347	Peak
4874	50.05	-3.95	54	40.88	34.08	9.13	34.04	100	347	Average
7311	55.79	-18.21	74	44.38	35.45	10.06	34.1	100	6	Peak
7311	49.28	-4.72	54	37.87	35.45	10.06	34.1	100	6	Average
9748	55.13	-34.95	90.08	87.64	-10.12	11.94	34.33	100	0	Peak

Test Mode :	Mode 4	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.2	-3.8	40	48.71	18.4	0.55	31.46	-	-	Peak
46.74	35.78	-4.22	40	56.68	9.94	0.67	31.51	-	-	Peak
250.05	42.5	-3.5	46	59.61	12.77	1.53	31.41	131	255	Peak
323.8	39.67	-6.33	46	55.06	14.1	1.83	31.32	-	-	Peak
666.1	33.44	-12.56	46	40.84	20.58	2.87	30.85	-	-	Peak
794.9	37.3	-8.7	46	42.7	22.15	3.13	30.68	-	-	Peak
2380	50.51	-23.49	74	45.85	32.16	6.03	33.53	194	231	Peak
2380	40.98	-13.02	54	36.32	32.16	6.03	33.53	194	231	Average
2457	107.63	-	-	102.79	32.26	6.14	33.56	194	231	Peak
2457	103.06	-	-	98.22	32.26	6.14	33.56	194	231	Average
2499.81	50.08	-23.92	74	45.17	32.3	6.18	33.57	194	231	Peak
2499.81	42.12	-11.88	54	37.21	32.3	6.18	33.57	194	231	Average
8298	53.47	-20.53	74	41.08	35.56	10.93	34.1	127	89	Peak
8298	41.54	-12.46	54	29.15	35.56	10.93	34.1	127	89	Average
9828	43.19	-44.44	87.63	75.56	-9.96	11.89	34.3	100	0	Peak



Test Mode :	Mode 4	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.06	-3.94	40	48.57	18.4	0.55	31.46	-	-	Peak
95.61	39.86	-3.64	43.5	60.65	9.76	0.98	31.53	132	336	Peak
250.05	36.61	-9.39	46	53.72	12.77	1.53	31.41	-	-	Peak
374.2	34.02	-11.98	46	47.74	15.44	2.09	31.25	-	-	Peak
500.2	38.15	-7.85	46	48.59	18.18	2.45	31.07	-	-	Peak
750.1	37.32	-8.68	46	43.44	21.52	3.06	30.7	-	-	Peak
2380	54.13	-19.87	74	49.47	32.16	6.03	33.53	127	168	Peak
2380	44.89	-9.11	54	40.23	32.16	6.03	33.53	127	168	Average
2457	103.52	-	-	98.68	32.26	6.14	33.56	127	168	Average
2457	107.83	-	-	102.99	32.26	6.14	33.56	127	168	Peak
2483.66	54.2	-19.8	74	49.3	32.28	6.18	33.56	127	168	Peak
2483.66	41.92	-12.08	54	37.02	32.28	6.18	33.56	127	168	Average
4914	55.06	-18.94	74	45.89	34.08	9.14	34.05	100	352	Peak
4914	50.36	-3.64	54	41.19	34.08	9.14	34.05	100	352	Average
7371	55.23	-18.77	74	43.85	35.41	10.08	34.11	100	3	Peak
7371	46.53	-7.47	54	35.16	35.4	10.08	34.11	100	3	Average
9828	51.35	-36.48	87.83	83.72	-9.96	11.89	34.3	100	0	Peak

Test Mode :	Mode 5	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.29	-3.71	40	48.8	18.4	0.55	31.46	-	-	Peak
95.61	34.76	-8.74	43.5	55.55	9.76	0.98	31.53	-	-	Peak
250.05	42.96	-3.04	46	60.07	12.77	1.53	31.41	126	319	Peak
335	37.62	-8.38	46	52.67	14.39	1.87	31.31	-	-	Peak
794.9	34.31	-11.69	46	39.71	22.15	3.13	30.68	-	-	Peak
875.4	36.76	-9.24	46	41.21	22.95	3.31	30.71	-	-	Peak
2382	47.46	-26.54	74	42.8	32.16	6.03	33.53	164	338	Peak
2382	37.91	-16.09	54	33.25	32.16	6.03	33.53	164	338	Average
2462	99.24	-	-	94.4	32.26	6.14	33.56	164	338	Average
2462	103.85	-	-	99.01	32.26	6.14	33.56	164	338	Peak
2483.66	49.01	-24.99	74	44.11	32.28	6.18	33.56	164	338	Peak
2483.66	37.98	-16.02	54	33.08	32.28	6.18	33.56	164	338	Average
8397	53.61	-20.39	74	41.16	35.58	10.96	34.09	148	106	Peak
8397	42.17	-11.83	54	29.72	35.58	10.96	34.09	148	106	Average
9848	40.31	-43.54	83.85	72.63	-9.9	11.88	34.3	100	0	Peak



Test Mode :	Mode 5	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.97	-3.03	40	49.48	18.4	0.55	31.46	102	357	Peak
95.61	37.68	-5.82	43.5	58.47	9.76	0.98	31.53	-	-	Peak
250.05	35.56	-10.44	46	52.67	12.77	1.53	31.41	-	-	Peak
374.2	32.54	-13.46	46	46.26	15.44	2.09	31.25	-	-	Peak
500.2	36.36	-9.64	46	46.8	18.18	2.45	31.07	-	-	Peak
750.1	36.4	-9.6	46	42.52	21.52	3.06	30.7	-	-	Peak
2364	51.43	-22.57	74	46.83	32.13	5.99	33.52	123	168	Peak
2364	41.11	-12.89	54	36.51	32.13	5.99	33.52	123	168	Average
2462	107.42	-	-	102.58	32.26	6.14	33.56	123	168	Peak
2462	103.28	-	-	98.44	32.26	6.14	33.56	123	168	Average
2484.42	57.56	-16.44	74	52.66	32.28	6.18	33.56	123	168	Peak
2484.42	47.67	-6.33	54	42.77	32.28	6.18	33.56	123	168	Average
4924	52.85	-21.15	74	43.67	34.09	9.15	34.06	100	350	Peak
4924	50.07	-3.93	54	40.89	34.09	9.15	34.06	100	350	Average
7386	54.46	-19.54	74	43.09	35.38	10.1	34.11	101	4	Peak
7386	48.18	-5.82	54	36.81	35.38	10.1	34.11	101	4	Average
9848	44.19	-43.23	87.42	76.51	-9.9	11.88	34.3	100	0	Peak

Test Mode :	Mode 6	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
46.74	36.34	-3.66	40	57.24	9.94	0.67	31.51	-	-	Peak
83.73	34.69	-5.31	40	57.37	7.96	0.9	31.54	-	-	Peak
250.05	42.78	-3.22	46	59.89	12.77	1.53	31.41	130	286	Peak
310.5	38.15	-7.85	46	53.94	13.74	1.79	31.32	-	-	Peak
663.3	29.92	-16.08	46	37.35	20.56	2.87	30.86	-	-	Peak
786.5	33.31	-12.69	46	38.85	22.03	3.12	30.69	-	-	Peak
2389.99	64.86	-9.14	74	60.18	32.18	6.03	33.53	100	230	Peak
2389.99	46.35	-7.65	54	41.67	32.18	6.03	33.53	100	230	Average
2412	106.69	-	-	101.96	32.2	6.07	33.54	100	230	Peak
2412	95.73	-	-	91	32.2	6.07	33.54	100	230	Average
2500	38.7	-15.3	54	33.79	32.3	6.18	33.57	100	230	Average
2500	48.27	-25.73	74	43.36	32.3	6.18	33.57	100	230	Peak
8421	54.36	-19.64	74	41.89	35.59	10.97	34.09	150	122	Peak
8421	41.6	-12.4	54	29.13	35.59	10.97	34.09	150	122	Average
9648	38.66	-48.03	86.69	71.34	-10.32	11.99	34.35	100	0	Peak

Test Mode :	Mode 6	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
33.51	36.37	-3.63	40	49.98	17.29	0.57	31.47	100	355	Peak
95.61	38.29	-5.21	43.5	59.08	9.76	0.98	31.53	-	-	Peak
250.05	38.25	-7.75	46	55.36	12.77	1.53	31.41	-	-	Peak
374.2	31.79	-14.21	46	45.51	15.44	2.09	31.25	-	-	Peak
500.2	37.49	-8.51	46	47.93	18.18	2.45	31.07	-	-	Peak
750.1	37.44	-8.56	46	43.56	21.52	3.06	30.7	-	-	Peak
2389.99	68.36	-5.64	74	63.68	32.18	6.03	33.53	100	347	Peak
2389.99	49.85	-4.15	54	45.17	32.18	6.03	33.53	100	347	Average
2412	107.54	-	-	102.81	32.2	6.07	33.54	100	347	Peak
2412	96.75	-	-	92.02	32.2	6.07	33.54	100	347	Average
2500	37.77	-16.23	54	32.86	32.3	6.18	33.57	100	347	Average
2500	47.24	-26.76	74	42.33	32.3	6.18	33.57	100	347	Peak
8313	53.89	-20.11	74	41.49	35.56	10.94	34.1	100	288	Peak
8313	42.21	-11.79	54	29.81	35.56	10.94	34.1	100	288	Average
9648	45.64	-41.9	87.54	78.33	-10.32	11.99	34.36	100	0	Peak



Test Mode :	Mode 7	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.53	-3.47	40	49.04	18.4	0.55	31.46	112	76	Peak
95.61	34.94	-8.56	43.5	55.73	9.76	0.98	31.53	-	-	Peak
250.05	42.38	-3.62	46	59.49	12.77	1.53	31.41	-	-	Peak
310.5	38.66	-7.34	46	54.45	13.74	1.79	31.32	-	-	Peak
788.6	34.58	-11.42	46	40.08	22.06	3.12	30.68	-	-	Peak
875.4	36.04	-9.96	46	40.49	22.95	3.31	30.71	-	-	Peak
2389.61	63.43	-10.57	74	58.75	32.18	6.03	33.53	100	230	Peak
2389.61	44.52	-9.48	54	39.84	32.18	6.03	33.53	100	230	Average
2417	107.6	-	-	102.87	32.2	6.07	33.54	100	230	Peak
2417	97.35	-	-	92.62	32.2	6.07	33.54	100	230	Average
2500	38.76	-15.24	54	33.85	32.3	6.18	33.57	100	230	Average
2500	48.22	-25.78	74	43.31	32.3	6.18	33.57	100	230	Peak
8358	53.88	-20.12	74	41.45	35.57	10.95	34.09	147	121	Peak
8358	41.76	-12.24	54	29.33	35.57	10.95	34.09	147	121	Average
9668	39.05	-48.55	87.6	71.68	-10.26	11.98	34.35	100	0	Peak



Test Mode :	Mode 7	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.47	-3.53	40	48.98	18.4	0.55	31.46	100	358	Peak
95.61	37.7	-5.8	43.5	58.49	9.76	0.98	31.53	-	-	Peak
250.05	37.52	-8.48	46	54.63	12.77	1.53	31.41	-	-	Peak
374.2	31.71	-14.29	46	45.43	15.44	2.09	31.25	-	-	Peak
500.2	36.3	-9.7	46	46.74	18.18	2.45	31.07	-	-	Peak
750.1	35.33	-10.67	46	41.45	21.52	3.06	30.7	-	-	Peak
2388.85	65.88	-8.12	74	61.2	32.18	6.03	33.53	100	345	Peak
2388.85	46.68	-7.32	54	42	32.18	6.03	33.53	100	345	Average
2417	107.98	-	-	103.24	32.22	6.07	33.55	100	345	Peak
2417	97.64	-	-	92.91	32.2	6.07	33.54	100	345	Average
2484	37.93	-16.07	54	33.03	32.28	6.18	33.56	100	345	Average
2484	48.52	-25.48	74	43.62	32.28	6.18	33.56	100	345	Peak
8373	54.08	-19.92	74	41.64	35.58	10.95	34.09	110	278	Peak
8373	42.26	-11.74	54	29.82	35.58	10.95	34.09	110	278	Average
9668	47.98	-40	87.98	80.61	-10.26	11.98	34.35	100	0	Peak

Test Mode :	Mode 8	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.1	-3.9	40	48.61	18.4	0.55	31.46	-	-	Peak
47.01	35.64	-4.36	40	57.04	9.45	0.67	31.52	-	-	Peak
250.05	42.18	-3.82	46	59.29	12.77	1.53	31.41	122	274	Peak
323.8	38.57	-7.43	46	53.96	14.1	1.83	31.32	-	-	Peak
360.2	33.65	-12.35	46	47.8	15.06	2.06	31.27	-	-	Peak
794.2	33.47	-12.53	46	38.88	22.14	3.13	30.68	-	-	Peak
2390	46.81	-27.19	74	42.13	32.18	6.03	33.53	100	313	Peak
2390	35.71	-18.29	54	31.03	32.18	6.03	33.53	100	313	Average
2437	94.51	-	-	89.71	32.24	6.11	33.55	100	313	Average
2437	104.9	-	-	100.1	32.24	6.11	33.55	100	313	Peak
2494	46.86	-27.14	74	41.95	32.3	6.18	33.57	100	313	Peak
2494	36.9	-17.1	54	31.99	32.3	6.18	33.57	100	313	Average
8409	53.83	-20.17	74	41.37	35.58	10.97	34.09	136	121	Peak
8409	42.12	-11.88	54	29.66	35.58	10.97	34.09	136	121	Average
9748	41.3	-43.6	84.9	73.81	-10.12	11.94	34.33	100	0	Peak

Test Mode :	Mode 8	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.75	-3.25	40	49.26	18.4	0.55	31.46	110	96	Peak
95.61	38.58	-4.92	43.5	59.37	9.76	0.98	31.53	-	-	Peak
250.05	37.61	-8.39	46	54.72	12.77	1.53	31.41	-	-	Peak
374.2	31.5	-14.5	46	45.22	15.44	2.09	31.25	-	-	Peak
500.2	35.78	-10.22	46	46.22	18.18	2.45	31.07	-	-	Peak
750.1	36.08	-9.92	46	42.2	21.52	3.06	30.7	-	-	Peak
2390	53.29	-20.71	74	48.61	32.18	6.03	33.53	100	351	Peak
2390	40.91	-13.09	54	36.23	32.18	6.03	33.53	100	351	Average
2437	95.64	-	-	90.84	32.24	6.11	33.55	100	351	Average
2437	106.88	-	-	102.1	32.22	6.11	33.55	100	351	Peak
2500	47.26	-26.74	74	42.35	32.3	6.18	33.57	100	351	Peak
2500	37.34	-16.66	54	32.43	32.3	6.18	33.57	100	351	Average
8316	53.5	-20.5	74	41.1	35.56	10.94	34.1	105	336	Peak
8316	41.67	-12.33	54	29.27	35.56	10.94	34.1	105	336	Average
9748	48.39	-38.49	86.88	80.9	-10.12	11.94	34.33	100	0	Peak

Test Mode :	Mode 9	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.49	-3.51	40	49	18.4	0.55	31.46	106	82	Peak
45.66	35.75	-4.25	40	56.17	10.43	0.66	31.51	-	-	Peak
250.05	42.06	-3.94	46	59.17	12.77	1.53	31.41	-	-	Peak
310.5	37.98	-8.02	46	53.77	13.74	1.79	31.32	-	-	Peak
430.9	31.43	-14.57	46	43.56	16.75	2.25	31.13	-	-	Peak
875.4	36.61	-9.39	46	41.06	22.95	3.31	30.71	-	-	Peak
2374	52.16	-21.84	74	47.54	32.16	5.99	33.53	139	314	Peak
2374	41.22	-12.78	54	36.6	32.16	5.99	33.53	139	314	Average
2457	96.48	-	-	91.64	32.26	6.14	33.56	139	314	Average
2457	106.94	-	-	102.14	32.24	6.11	33.55	139	314	Peak
2484.61	55.4	-18.6	74	50.5	32.28	6.18	33.56	139	314	Peak
2484.61	41.53	-12.47	54	36.63	32.28	6.18	33.56	139	314	Average
8442	54.39	-19.61	74	41.91	35.59	10.98	34.09	155	283	Peak
8442	41.37	-12.63	54	28.89	35.59	10.98	34.09	155	283	Average
9828	40.06	-46.88	86.94	72.43	-9.96	11.89	34.3	100	0	Peak

Test Mode :	Mode 9	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.74	-3.26	40	49.25	18.4	0.55	31.46	100	360	Peak
95.61	37.19	-6.31	43.5	57.98	9.76	0.98	31.53	-	-	Peak
250.05	38.02	-7.98	46	55.13	12.77	1.53	31.41	-	-	Peak
374.2	31.64	-14.36	46	45.36	15.44	2.09	31.25	-	-	Peak
500.2	37.42	-8.58	46	47.86	18.18	2.45	31.07	-	-	Peak
750.1	36.89	-9.11	46	43.01	21.52	3.06	30.7	-	-	Peak
2332	52.11	-21.89	74	47.58	32.09	5.95	33.51	128	169	Peak
2332	42.82	-11.18	54	38.29	32.09	5.95	33.51	128	169	Average
2457	98.24	-	-	93.4	32.26	6.14	33.56	128	169	Average
2457	108.74	-	-	103.94	32.24	6.11	33.55	128	169	Peak
2484.61	61.06	-12.94	74	56.16	32.28	6.18	33.56	128	169	Peak
2484.61	46.28	-7.72	54	41.38	32.28	6.18	33.56	128	169	Average
8253	53.1	-20.9	74	40.74	35.55	10.91	34.1	109	114	Peak
8253	41.5	-12.5	54	29.14	35.55	10.91	34.1	109	114	Average
9828	47.92	-40.82	88.74	80.31	-9.98	11.9	34.31	100	0	Peak

Test Mode :	Mode 10	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.56	-3.44	40	49.07	18.4	0.55	31.46	-	-	Peak
83.73	34.56	-5.44	40	57.24	7.96	0.9	31.54	-	-	Peak
250.05	42.78	-3.22	46	59.89	12.77	1.53	31.41	139	281	Peak
323.8	37.36	-8.64	46	52.75	14.1	1.83	31.32	-	-	Peak
663.3	29.86	-16.14	46	37.29	20.56	2.87	30.86	-	-	Peak
794.9	34.31	-11.69	46	39.71	22.15	3.13	30.68	-	-	Peak
2358	46.85	-27.15	74	42.25	32.13	5.99	33.52	194	230	Peak
2358	36.33	-17.67	54	31.73	32.13	5.99	33.52	194	230	Average
2462	95.12	-	-	90.28	32.26	6.14	33.56	194	230	Average
2462	105.73	-	-	100.89	32.26	6.14	33.56	194	230	Peak
2483.5	56.68	-17.32	74	51.78	32.28	6.18	33.56	194	230	Peak
2483.5	41.28	-12.72	54	36.38	32.28	6.18	33.56	194	230	Average
8334	53.57	-20.43	74	41.15	35.57	10.95	34.1	151	310	Peak
8334	40.87	-13.13	54	28.45	35.57	10.95	34.1	151	310	Average
9848	37.87	-47.86	85.73	70.19	-9.9	11.88	34.3	100	0	Peak

Test Mode :	Mode 10	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.7	-3.3	40	49.21	18.4	0.55	31.46	102	356	Peak
95.61	38.06	-5.44	43.5	58.85	9.76	0.98	31.53	-	-	Peak
250.05	36.62	-9.38	46	53.73	12.77	1.53	31.41	-	-	Peak
374.2	31.92	-14.08	46	45.64	15.44	2.09	31.25	-	-	Peak
500.2	35.84	-10.16	46	46.28	18.18	2.45	31.07	-	-	Peak
624.1	29.23	-16.77	46	37.12	20.25	2.76	30.9	-	-	Peak
2358	50.8	-23.2	74	46.2	32.13	5.99	33.52	124	168	Peak
2358	40.08	-13.92	54	35.48	32.13	5.99	33.52	124	168	Average
2462	94.85	-	-	90.01	32.26	6.14	33.56	124	168	Average
2462	106.04	-	-	101.2	32.26	6.14	33.56	124	168	Peak
2483.5	66.25	-7.75	74	61.35	32.28	6.18	33.56	124	168	Peak
2483.5	49.74	-4.26	54	44.84	32.28	6.18	33.56	124	168	Average
8322	54.15	-19.85	74	41.74	35.57	10.94	34.1	105	360	Peak
8322	41.77	-12.23	54	29.36	35.57	10.94	34.1	105	360	Average
9848	44.04	-42	86.04	76.36	-9.9	11.88	34.3	100	0	Peak

Test Mode :	Mode 11	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.11	-3.89	40	48.62	18.4	0.55	31.46	-	-	Peak
83.73	34.28	-5.72	40	56.96	7.96	0.9	31.54	-	-	Peak
250.05	42.24	-3.76	46	59.35	12.77	1.53	31.41	124	273	Peak
310.5	38.32	-7.68	46	54.11	13.74	1.79	31.32	-	-	Peak
794.2	34.07	-11.93	46	39.48	22.14	3.13	30.68	-	-	Peak
875.4	37.27	-8.73	46	41.72	22.95	3.31	30.71	-	-	Peak
2389.61	69.3	-4.7	74	64.62	32.18	6.03	33.53	130	233	Peak
2389.61	50.04	-3.96	54	45.36	32.18	6.03	33.53	130	233	Average
2412	106.64	-	-	101.91	32.2	6.07	33.54	130	233	Peak
2412	96.04	-	-	91.31	32.2	6.07	33.54	130	233	Average
2500	47.73	-26.27	74	42.82	32.3	6.18	33.57	130	233	Peak
2500	39.55	-14.45	54	34.64	32.3	6.18	33.57	130	233	Average
8118	55.87	-18.13	74	43.61	35.52	10.86	34.12	121	245	Peak
8118	40.98	-13.02	54	28.72	35.52	10.86	34.12	121	245	Average
9648	39.5	-47.14	86.64	72.18	-10.32	11.99	34.35	100	0	Peak

Test Mode :	Mode 11	Temperature :	25~26°C
Test Channel :	01	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.88	-3.12	40	49.39	18.4	0.55	31.46	101	351	Peak
95.61	39.25	-4.25	43.5	60.04	9.76	0.98	31.53	-	-	Peak
250.05	37.78	-8.22	46	54.89	12.77	1.53	31.41	-	-	Peak
374.2	31.65	-14.35	46	45.37	15.44	2.09	31.25	-	-	Peak
500.2	38.09	-7.91	46	48.53	18.18	2.45	31.07	-	-	Peak
750.1	35.29	-10.71	46	41.41	21.52	3.06	30.7	-	-	Peak
2388.85	68.11	-5.89	74	63.43	32.18	6.03	33.53	100	166	Peak
2388.85	48.14	-5.86	54	43.46	32.18	6.03	33.53	100	166	Average
2412	104.07	-	-	99.34	32.2	6.07	33.54	100	166	Peak
2412	93.89	-	-	89.16	32.2	6.07	33.54	100	166	Average
2500	33.75	-20.25	54	28.84	32.3	6.18	33.57	100	166	Average
2500	45.35	-28.65	74	40.44	32.3	6.18	33.57	100	166	Peak
8289	56.09	-17.91	74	43.7	35.56	10.93	34.1	116	351	Peak
8289	41.8	-12.2	54	29.41	35.56	10.93	34.1	116	351	Average
9648	44.65	-39.42	84.07	77.33	-10.32	11.99	34.35	100	0	Peak



Test Mode :	Mode 12	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
32.97	36.25	-3.75	40	49.32	17.84	0.56	31.47	-	-	Peak
83.46	34.29	-5.71	40	56.97	7.96	0.9	31.54	-	-	Peak
250.05	42.29	-3.71	46	59.4	12.77	1.53	31.41	132	288	Peak
309.8	38.51	-7.49	46	54.33	13.72	1.79	31.33	-	-	Peak
430.9	31.53	-14.47	46	43.66	16.75	2.25	31.13	-	-	Peak
794.9	33.6	-12.4	46	39	22.15	3.13	30.68	-	-	Peak
2387.33	59.79	-14.21	74	55.11	32.18	6.03	33.53	130	233	Peak
2387.33	42.16	-11.84	54	37.48	32.18	6.03	33.53	130	233	Average
2417	106.49	-	-	101.76	32.2	6.07	33.54	130	233	Peak
2417	95.71	-	-	90.98	32.2	6.07	33.54	130	233	Average
2500	39.71	-14.29	54	34.8	32.3	6.18	33.57	130	233	Average
2500	48.71	-25.29	74	43.8	32.3	6.18	33.57	130	233	Peak
8346	55.47	-18.53	74	43.05	35.57	10.95	34.1	131	334	Peak
8346	40.87	-13.13	54	28.45	35.57	10.95	34.1	131	334	Average
9668	38.83	-47.66	86.49	71.5	-10.3	11.98	34.35	100	0	Peak



Test Mode :	Mode 12	Temperature :	25~26°C
Test Channel :	02	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2417 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.77	-3.23	40	49.28	18.4	0.55	31.46	100	357	Peak
95.61	38.45	-5.05	43.5	59.24	9.76	0.98	31.53	-	-	Peak
250.05	37.51	-8.49	46	54.62	12.77	1.53	31.41	-	-	Peak
374.2	31.17	-14.83	46	44.89	15.44	2.09	31.25	-	-	Peak
500.2	36.61	-9.39	46	47.05	18.18	2.45	31.07	-	-	Peak
666.1	32.07	-13.93	46	39.47	20.58	2.87	30.85	-	-	Peak
2389.42	62.74	-11.26	74	58.06	32.18	6.03	33.53	100	63	Peak
2389.42	44.68	-9.32	54	40	32.18	6.03	33.53	100	63	Average
2417	106.61	-	-	101.88	32.2	6.07	33.54	100	63	Peak
2417	96.8	-	-	92.07	32.2	6.07	33.54	100	63	Average
2500	37.23	-16.77	54	32.32	32.3	6.18	33.57	100	63	Average
2500	49.6	-24.4	74	44.69	32.3	6.18	33.57	100	63	Peak
8301	55.53	-18.47	74	43.14	35.56	10.93	34.1	152	302	Peak
8301	42.27	-11.73	54	29.88	35.56	10.93	34.1	152	302	Average
9668	44.09	-42.52	86.61	76.72	-10.26	11.98	34.35	100	0	Peak

Test Mode :	Mode 13	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
32.97	36.73	-3.27	40	49.8	17.84	0.56	31.47	109	81	Peak
46.74	35.26	-4.74	40	56.16	9.94	0.67	31.51	-	-	Peak
250.05	42.1	-3.9	46	59.21	12.77	1.53	31.41	-	-	Peak
304.2	37.85	-8.15	46	53.81	13.59	1.78	31.33	-	-	Peak
663.3	29.21	-16.79	46	36.64	20.56	2.87	30.86	-	-	Peak
786.5	34.25	-11.75	46	39.79	22.03	3.12	30.69	-	-	Peak
2390	48.62	-25.38	74	43.94	32.18	6.03	33.53	200	235	Peak
2390	39.05	-14.95	54	34.37	32.18	6.03	33.53	200	235	Average
2437	105.74	-	-	100.94	32.24	6.11	33.55	200	235	Peak
2437	96.98	-	-	92.18	32.24	6.11	33.55	200	235	Average
2500	48.46	-25.54	74	43.55	32.3	6.18	33.57	200	235	Peak
2500	39.89	-14.11	54	34.98	32.3	6.18	33.57	200	235	Average
8322	55.59	-18.41	74	43.18	35.57	10.94	34.1	122	140	Peak
8322	41.04	-12.96	54	28.63	35.57	10.94	34.1	122	140	Average
9748	39.35	-46.39	85.74	71.86	-10.12	11.94	34.33	100	0	Peak

Test Mode :	Mode 13	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
32.7	36.52	-3.48	40	49.59	17.84	0.56	31.47	-	-	Peak
84.54	36.62	-3.38	40	59.17	8.09	0.9	31.54	114	193	Peak
250.05	37.18	-8.82	46	54.29	12.77	1.53	31.41	-	-	Peak
374.2	31.7	-14.3	46	45.42	15.44	2.09	31.25	-	-	Peak
500.2	36.65	-9.35	46	47.09	18.18	2.45	31.07	-	-	Peak
750.1	34.9	-11.1	46	41.02	21.52	3.06	30.7	-	-	Peak
2350	50.82	-23.18	74	46.28	32.11	5.95	33.52	159	71	Peak
2350	40.39	-13.61	54	35.85	32.11	5.95	33.52	159	71	Average
2437	105.64	-	-	100.84	32.24	6.11	33.55	159	71	Peak
2437	95.73	-	-	90.93	32.24	6.11	33.55	159	71	Average
2500	49.84	-24.16	74	44.93	32.3	6.18	33.57	159	71	Peak
2500	38.79	-15.21	54	33.88	32.3	6.18	33.57	159	71	Average
8289	55.31	-18.69	74	42.92	35.56	10.93	34.1	114	306	Peak
8289	41.2	-12.8	54	28.81	35.56	10.93	34.1	114	306	Average
9748	44	-41.64	85.64	76.51	-10.12	11.94	34.33	100	0	Peak

Test Mode :	Mode 14	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.54	-3.46	40	49.05	18.4	0.55	31.46	112	79	Peak
83.46	34.5	-5.5	40	57.18	7.96	0.9	31.54	-	-	Peak
250.05	42.33	-3.67	46	59.44	12.77	1.53	31.41	-	-	Peak
310.5	37.64	-8.36	46	53.43	13.74	1.79	31.32	-	-	Peak
794.9	32.78	-13.22	46	38.18	22.15	3.13	30.68	-	-	Peak
875.4	36.5	-9.5	46	40.95	22.95	3.31	30.71	-	-	Peak
2374	49.36	-24.64	74	44.74	32.16	5.99	33.53	195	232	Peak
2374	33.61	-20.39	54	28.99	32.16	5.99	33.53	195	232	Average
2457	104.72	-	-	99.88	32.26	6.14	33.56	195	232	Peak
2457	94.72	-	-	89.88	32.26	6.14	33.56	195	232	Average
2484.61	57.54	-16.46	74	52.64	32.28	6.18	33.56	195	232	Peak
2484.61	41.4	-12.6	54	36.5	32.28	6.18	33.56	195	232	Average
8334	55.7	-18.3	74	43.28	35.57	10.95	34.1	142	261	Peak
8334	41.08	-12.92	54	28.66	35.57	10.95	34.1	142	261	Average
9828	38.63	-46.09	84.72	71	-9.96	11.89	34.3	100	0	Peak

Test Mode :	Mode 14	Temperature :	25~26°C
Test Channel :	10	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2457 MHz is Fundamental Signals which can be ignored.		

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
32.7	36.52	-3.48	40	49.59	17.84	0.56	31.47	100	355	Peak
95.61	37.12	-6.38	43.5	57.91	9.76	0.98	31.53	-	-	Peak
250.05	37.25	-8.75	46	54.36	12.77	1.53	31.41	-	-	Peak
374.2	31.54	-14.46	46	45.26	15.44	2.09	31.25	-	-	Peak
500.2	35.12	-10.88	46	45.56	18.18	2.45	31.07	-	-	Peak
750.1	36.49	-9.51	46	42.61	21.52	3.06	30.7	-	-	Peak
2372	52.55	-21.45	74	47.93	32.16	5.99	33.53	131	347	Peak
2372	36.29	-17.71	54	31.67	32.16	5.99	33.53	131	347	Average
2457	103.76	-	-	98.92	32.26	6.14	33.56	141	347	Peak
2457	95.46	-	-	90.62	32.26	6.14	33.56	131	347	Average
2483.5	55.74	-18.26	74	50.84	32.28	6.18	33.56	131	347	Peak
2483.5	40.6	-13.4	54	35.7	32.28	6.18	33.56	131	347	Average
8250	55.82	-18.18	74	43.47	35.55	10.91	34.11	113	162	Peak
8250	41.48	-12.52	54	29.13	35.55	10.91	34.11	113	162	Average
9828	42.38	-41.38	83.76	74.77	-9.98	11.9	34.31	100	0	Peak



Test Mode :	Mode 15	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
30.81	35.49	-4.51	40	47.46	18.95	0.54	31.46	-	-	Peak
191.73	37.34	-6.16	43.5	58.65	8.9	1.29	31.5	-	-	Peak
250.05	42.75	-3.25	46	59.86	12.77	1.53	31.41	142	269	Peak
309.8	37.86	-8.14	46	53.68	13.72	1.79	31.33	-	-	Peak
430.9	31.68	-14.32	46	43.81	16.75	2.25	31.13	-	-	Peak
799.8	33.88	-12.12	46	39.2	22.22	3.14	30.68	-	-	Peak
2374	49.33	-24.67	74	44.71	32.16	5.99	33.53	195	233	Peak
2374	33.95	-20.05	54	29.33	32.16	5.99	33.53	195	233	Average
2462	105.88	-	-	101.04	32.26	6.14	33.56	195	233	Peak
2462	95.3	-	-	90.46	32.26	6.14	33.56	195	233	Average
2485.18	64.82	-9.18	74	59.92	32.28	6.18	33.56	195	233	Peak
2485.18	46.11	-7.89	54	41.21	32.28	6.18	33.56	195	233	Average
8421	55.75	-18.25	74	43.28	35.59	10.97	34.09	120	148	Peak
8421	41.02	-12.98	54	28.55	35.59	10.97	34.09	120	148	Average

Test Mode :	Mode 15	Temperature :	25~26°C
Test Channel :	11	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.25	-3.75	40	48.76	18.4	0.55	31.46	108	72	Peak
95.61	36.83	-6.67	43.5	57.62	9.76	0.98	31.53	-	-	Peak
250.05	36.41	-9.59	46	53.52	12.77	1.53	31.41	-	-	Peak
374.2	32.3	-13.7	46	46.02	15.44	2.09	31.25	-	-	Peak
500.2	35.89	-10.11	46	46.33	18.18	2.45	31.07	-	-	Peak
750.1	36.65	-9.35	46	42.77	21.52	3.06	30.7	-	-	Peak
2390	50.12	-23.88	74	45.44	32.18	6.03	33.53	124	349	Peak
2390	37.26	-16.74	54	32.58	32.18	6.03	33.53	124	349	Average
2462	103.93	-	-	99.09	32.26	6.14	33.56	124	349	Peak
2462	94.94	-	-	90.1	32.26	6.14	33.56	124	349	Average
2483.66	65.6	-8.4	74	60.7	32.28	6.18	33.56	124	349	Peak
2483.66	47.57	-6.43	54	42.67	32.28	6.18	33.56	124	349	Average
8130	54.84	-19.16	74	42.58	35.52	10.86	34.12	117	325	Peak
8130	41.43	-12.57	54	29.17	35.52	10.86	34.12	117	325	Average
9848	41.07	-42.86	83.93	73.4	-9.92	11.89	34.3	100	0	Peak



Test Mode :	Mode 16	Temperature :	25~26°C
Test Channel :	03	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2422 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.14	-3.86	40	48.65	18.4	0.55	31.46	-	-	Peak
83.46	34.06	-5.94	40	56.74	7.96	0.9	31.54	-	-	Peak
250.05	42.83	-3.17	46	59.94	12.77	1.53	31.41	126	274	Peak
323.8	38.46	-7.54	46	53.85	14.1	1.83	31.32	-	-	Peak
430.9	32.31	-13.69	46	44.44	16.75	2.25	31.13	-	-	Peak
875.4	35.68	-10.32	46	40.13	22.95	3.31	30.71	-	-	Peak
2385.05	68.91	-5.09	74	64.25	32.16	6.03	33.53	200	233	Peak
2385.05	51.25	-2.75	54	46.59	32.16	6.03	33.53	200	233	Average
2422	103.45	-	-	98.71	32.22	6.07	33.55	200	233	Peak
2422	92.21	-	-	87.47	32.22	6.07	33.55	200	233	Average
2484	37.34	-16.66	54	32.44	32.28	6.18	33.56	200	233	Average
2484	48.88	-25.12	74	43.98	32.28	6.18	33.56	200	233	Peak
8238	55.52	-18.48	74	43.17	35.55	10.91	34.11	131	240	Peak
8238	41.71	-12.29	54	29.36	35.55	10.91	34.11	131	240	Average

Test Mode :	Mode 16	Temperature :	25~26°C
Test Channel :	03	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2422 MHz is Fundamental Signals which can be ignored.		

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
32.7	36.64	-3.36	40	49.71	17.84	0.56	31.47	102	355	Peak
95.61	37.47	-6.03	43.5	58.26	9.76	0.98	31.53	-	-	Peak
250.05	37.34	-8.66	46	54.45	12.77	1.53	31.41	-	-	Peak
374.2	31.46	-14.54	46	45.18	15.44	2.09	31.25	-	-	Peak
500.2	36.19	-9.81	46	46.63	18.18	2.45	31.07	-	-	Peak
750.1	35.93	-10.07	46	42.05	21.52	3.06	30.7	-	-	Peak
2376.69	68.49	-5.51	74	63.87	32.16	5.99	33.53	100	71	Peak
2376.69	49.89	-4.11	54	45.27	32.16	5.99	33.53	100	71	Average
2422	102.92	-	-	98.18	32.22	6.07	33.55	100	71	Peak
2422	91.86	-	-	87.12	32.22	6.07	33.55	100	71	Average
2500	35.54	-18.46	54	30.63	32.3	6.18	33.57	100	71	Average
2500	49.83	-24.17	74	44.92	32.3	6.18	33.57	100	71	Peak
8370	55.56	-18.44	74	43.12	35.58	10.95	34.09	115	131	Peak
8370	41.58	-12.42	54	29.14	35.58	10.95	34.09	115	131	Average
9688	39.57	-43.35	82.92	72.16	-10.22	11.97	34.34	100	0	Peak



Test Mode :	Mode 17	Temperature :	25~26°C
Test Channel :	04	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2427 MHz is Fundamental Signals which can be ignored.		

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
31.89	36.25	-3.75	40	48.76	18.4	0.55	31.46	-	-	Peak
95.61	34.61	-8.89	43.5	55.4	9.76	0.98	31.53	-	-	Peak
250.05	42.69	-3.31	46	59.8	12.77	1.53	31.41	129	243	Peak
321.7	37.72	-8.28	46	53.17	14.05	1.82	31.32	-	-	Peak
430.9	31.17	-14.83	46	43.3	16.75	2.25	31.13	-	-	Peak
794.2	33.46	-12.54	46	38.87	22.14	3.13	30.68	-	-	Peak
2382.58	67	-7	74	62.34	32.16	6.03	33.53	200	232	Peak
2382.58	48.05	-5.95	54	43.39	32.16	6.03	33.53	200	232	Average
2427	102.6	-	-	97.86	32.22	6.07	33.55	200	232	Peak
2427	91.22	-	-	86.48	32.22	6.07	33.55	200	232	Average
2484	37.73	-16.27	54	32.83	32.28	6.18	33.56	200	232	Average
2484	52.23	-21.77	74	47.33	32.28	6.18	33.56	200	232	Peak
8346	55.85	-18.15	74	43.43	35.57	10.95	34.1	118	315	Peak
8346	41.05	-12.95	54	28.63	35.57	10.95	34.1	118	315	Average

Test Mode :	Mode 17	Temperature :	25~26°C
Test Channel :	04	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2427 MHz is Fundamental Signals which can be ignored.		

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
33.78	36.33	-3.67	40	49.94	17.29	0.57	31.47	103	360	Peak
95.61	38.53	-4.97	43.5	59.32	9.76	0.98	31.53	-	-	Peak
209.82	33.81	-9.69	43.5	54.95	8.97	1.36	31.47	-	-	Peak
374.2	31.79	-14.21	46	45.51	15.44	2.09	31.25	-	-	Peak
500.2	36.78	-9.22	46	47.22	18.18	2.45	31.07	-	-	Peak
750.1	35.15	-10.85	46	41.27	21.52	3.06	30.7	-	-	Peak
2390	67.57	-6.43	74	62.89	32.18	6.03	33.53	100	196	Peak
2390	52.84	-1.16	54	48.16	32.18	6.03	33.53	100	196	Average
2427	103.35	-	-	98.61	32.22	6.07	33.55	100	196	Peak
2427	91.36	-	-	86.62	32.22	6.07	33.55	100	196	Average
2484	34.51	-19.49	54	29.61	32.28	6.18	33.56	100	196	Average
2484	47.33	-26.67	74	42.43	32.28	6.18	33.56	100	196	Peak
8298	55.92	-18.08	74	43.53	35.56	10.93	34.1	137	178	Peak
8298	40.88	-13.12	54	28.49	35.56	10.93	34.1	137	178	Average
9708	38.63	-44.72	83.35	71.22	-10.2	11.95	34.34	100	0	Peak

Test Mode :	Mode 18	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.25	-3.75	40	48.76	18.4	0.55	31.46	-	-	Peak
45.93	36.1	-3.9	40	56.52	10.43	0.66	31.51	-	-	Peak
250.05	42.81	-3.19	46	59.92	12.77	1.53	31.41	145	182	Peak
310.5	38.13	-7.87	46	53.92	13.74	1.79	31.32	-	-	Peak
797	33.72	-12.28	46	39.08	22.18	3.14	30.68	-	-	Peak
875.4	36.63	-9.37	46	41.08	22.95	3.31	30.71	-	-	Peak
2390	64.55	-9.45	74	59.87	32.18	6.03	33.53	200	234	Peak
2390	46.13	-7.87	54	41.45	32.18	6.03	33.53	200	234	Average
2437	103.85	-	-	99.05	32.24	6.11	33.55	200	234	Peak
2437	93.22	-	-	88.42	32.24	6.11	33.55	200	234	Average
2484	62.92	-11.08	74	58.02	32.28	6.18	33.56	200	234	Peak
2484	44.27	-9.73	54	39.37	32.28	6.18	33.56	200	234	Average
8337	54.89	-19.11	74	42.47	35.57	10.95	34.1	121	188	Peak
8337	41.25	-12.75	54	28.83	35.57	10.95	34.1	121	188	Average

Test Mode :	Mode 18	Temperature :	25~26°C
Test Channel :	06	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.91	-3.09	40	49.42	18.4	0.55	31.46	103	353	Peak
95.61	38.01	-5.49	43.5	58.8	9.76	0.98	31.53	-	-	Peak
250.05	37.69	-8.31	46	54.8	12.77	1.53	31.41	-	-	Peak
374.2	32.02	-13.98	46	45.74	15.44	2.09	31.25	-	-	Peak
500.2	35.47	-10.53	46	45.91	18.18	2.45	31.07	-	-	Peak
666.1	31.95	-14.05	46	39.35	20.58	2.87	30.85	-	-	Peak
2390	65.38	-8.62	74	60.7	32.18	6.03	33.53	100	196	Peak
2390	50.24	-3.76	54	45.56	32.18	6.03	33.53	100	196	Average
2437	102.41	-	-	97.61	32.24	6.11	33.55	100	196	Peak
2437	92.72	-	-	87.92	32.24	6.11	33.55	100	196	Average
2484	59.74	-14.26	74	54.84	32.28	6.18	33.56	100	196	Peak
2484	40.27	-13.73	54	35.37	32.28	6.18	33.56	100	196	Average
8247	54.53	-19.47	74	42.18	35.55	10.91	34.11	140	263	Peak
8247	40.8	-13.2	54	28.45	35.55	10.91	34.11	140	263	Average
9748	42.05	-40.36	82.41	74.46	-10.02	11.92	34.31	100	0	Peak



Test Mode :	Mode 19	Temperature :	25~26°C
Test Channel :	08	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2447 MHz is Fundamental Signals which can be ignored.		

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
32.97	36.24	-3.76	40	49.31	17.84	0.56	31.47	-	-	Peak
83.73	34.07	-5.93	40	56.75	7.96	0.9	31.54	-	-	Peak
250.05	42.67	-3.33	46	59.78	12.77	1.53	31.41	129	184	Peak
310.5	38.82	-7.18	46	54.61	13.74	1.79	31.32	-	-	Peak
430.9	31.81	-14.19	46	43.94	16.75	2.25	31.13	-	-	Peak
794.2	33.51	-12.49	46	38.92	22.14	3.13	30.68	-	-	Peak
2390	54.34	-19.66	74	49.66	32.18	6.03	33.53	196	235	Peak
2390	37.8	-16.2	54	33.12	32.18	6.03	33.53	196	235	Average
2447	103.44	-	-	98.64	32.24	6.11	33.55	196	235	Peak
2447	92.7	-	-	87.9	32.24	6.11	33.55	196	235	Average
2485.18	65.27	-8.73	74	60.37	32.28	6.18	33.56	196	235	Peak
2485.18	49.52	-4.48	54	44.62	32.28	6.18	33.56	196	235	Average
8358	55.34	-18.66	74	42.91	35.57	10.95	34.09	137	285	Peak
8358	41.65	-12.35	54	29.22	35.57	10.95	34.09	137	285	Average

Test Mode :	Mode 19	Temperature :	25~26°C
Test Channel :	08	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2447 MHz is Fundamental Signals which can be ignored.		

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
34.05	36.89	-3.11	40	50.5	17.29	0.57	31.47	113	102	Peak
96.69	37.81	-5.69	43.5	58.46	9.9	0.98	31.53	-	-	Peak
206.58	34.12	-9.38	43.5	55.32	8.92	1.35	31.47	-	-	Peak
374.2	31.89	-14.11	46	45.61	15.44	2.09	31.25	-	-	Peak
500.2	36.57	-9.43	46	47.01	18.18	2.45	31.07	-	-	Peak
750.1	36.5	-9.5	46	42.62	21.52	3.06	30.7	-	-	Peak
2390	55.44	-18.56	74	50.76	32.18	6.03	33.53	119	197	Peak
2390	38.49	-15.51	54	33.81	32.18	6.03	33.53	119	197	Average
2447	100.37	-	-	95.57	32.24	6.11	33.55	119	197	Peak
2447	91.28	-	-	86.48	32.24	6.11	33.55	119	197	Average
2485.18	63.45	-10.55	74	58.55	32.28	6.18	33.56	119	197	Peak
2485.18	48.48	-5.52	54	43.58	32.28	6.18	33.56	119	197	Average
8169	54.27	-19.73	74	41.97	35.53	10.88	34.11	113	353	Peak
8169	40.99	-13.01	54	28.69	35.53	10.88	34.11	113	353	Average
9788	40.35	-40.02	80.37	72.72	-9.96	11.89	34.3	100	0	Peak

Test Mode :	Mode 20	Temperature :	25~26°C
Test Channel :	09	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	2452 MHz is Fundamental Signals which can be ignored.		

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
46.74	36.77	-3.23	40	57.67	9.94	0.67	31.51	108	94	Peak
191.73	39.94	-3.56	43.5	61.25	8.9	1.29	31.5	-	-	Peak
250.05	42.36	-3.64	46	59.47	12.77	1.53	31.41	-	-	Peak
310.5	39.31	-6.69	46	55.1	13.74	1.79	31.32	-	-	Peak
500.2	34.68	-11.32	46	45.12	18.18	2.45	31.07	-	-	Peak
788.6	35	-11	46	40.5	22.06	3.12	30.68	-	-	Peak
2390	54.79	-19.21	74	50.11	32.18	6.03	33.53	200	235	Peak
2390	38.67	-15.33	54	33.99	32.18	6.03	33.53	200	235	Average
2452	104.18	-	-	99.38	32.24	6.11	33.55	200	235	Peak
2452	92.03	-	-	87.23	32.24	6.11	33.55	200	235	Average
2485.37	66.36	-7.64	74	61.46	32.28	6.18	33.56	200	235	Peak
2485.37	49.55	-4.45	54	44.65	32.28	6.18	33.56	200	235	Average
8277	54.96	-19.04	74	42.58	35.56	10.92	34.1	144	296	Peak
8277	41.08	-12.92	54	28.7	35.56	10.92	34.1	144	296	Average

Test Mode :	Mode 20	Temperature :	25~26°C
Test Channel :	09	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	2452 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.22	-3.78	40	48.73	18.4	0.55	31.46	101	357	Peak
97.5	39.39	-4.11	43.5	59.89	10.05	0.99	31.54	-	-	Peak
250.05	37.8	-8.2	46	54.91	12.77	1.53	31.41	-	-	Peak
374.2	34.58	-11.42	46	48.3	15.44	2.09	31.25	-	-	Peak
500.2	37.77	-8.23	46	48.21	18.18	2.45	31.07	-	-	Peak
666.1	37.12	-8.88	46	44.52	20.58	2.87	30.85	-	-	Peak
2388	53.97	-20.03	74	49.29	32.18	6.03	33.53	121	197	Peak
2388	36.49	-17.51	54	31.81	32.18	6.03	33.53	121	197	Average
2452	101.02	-	-	96.22	32.24	6.11	33.55	121	197	Peak
2452	90.93	-	-	86.13	32.24	6.11	33.55	121	197	Average
2485.18	64.55	-9.45	74	59.65	32.28	6.18	33.56	121	197	Peak
2485.18	50.5	-3.5	54	45.6	32.28	6.18	33.56	121	197	Average
8337	55.91	-18.09	74	43.49	35.57	10.95	34.1	122	193	Peak
8337	41.77	-12.23	54	29.35	35.57	10.95	34.1	122	193	Average



Test Mode :	Mode 21	Temperature :	25~26°C
Test Channel :	149	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5745 MHz is Fundamental Signals which can be ignored.		

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
45.66	36.67	-3.33	40	57.09	10.43	0.66	31.51	-	-	Peak
191.73	39.78	-3.72	43.5	61.09	8.9	1.29	31.5	-	-	Peak
250.05	42.82	-3.18	46	59.93	12.77	1.53	31.41	118	184	Peak
323.8	38.74	-7.26	46	54.13	14.1	1.83	31.32	-	-	Peak
500.2	34.49	-11.51	46	44.93	18.18	2.45	31.07	-	-	Peak
663.3	32.98	-13.02	46	40.41	20.56	2.87	30.86	-	-	Peak
5725	69.92	-12.34	82.26	61.02	34.82	9.92	35.84	100	358	Peak
5745	102.26	-	-	93.34	34.84	9.91	35.83	100	358	Peak
5745	90.45	-	-	81.53	34.84	9.91	35.83	100	358	Average
5850	49.82	-32.44	82.26	40.78	34.94	9.87	35.77	100	358	Peak
8444	56.67	-17.33	74	44.19	35.59	10.98	34.09	112	351	Peak
8444	41.06	-12.94	54	28.58	35.59	10.98	34.09	112	351	Average

Test Mode :	Mode 21	Temperature :	25~26°C
Test Channel :	149	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5745 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.97	-3.03	40	49.48	18.4	0.55	31.46	102	358	Peak
96.42	39.16	-4.34	43.5	59.95	9.76	0.98	31.53	-	-	Peak
250.05	37.81	-8.19	46	54.92	12.77	1.53	31.41	-	-	Peak
374.2	34.34	-11.66	46	48.06	15.44	2.09	31.25	-	-	Peak
500.2	37.96	-8.04	46	48.4	18.18	2.45	31.07	-	-	Peak
750.1	38.88	-7.12	46	45	21.52	3.06	30.7	-	-	Peak
5725	77.8	-11.36	89.16	68.9	34.82	9.92	35.84	129	5	Peak
5745	109.16	-	-	100.24	34.84	9.91	35.83	129	5	Peak
5745	99.52	-	-	90.6	34.84	9.91	35.83	129	5	Average
5850	51.53	-37.63	89.16	42.49	34.94	9.87	35.77	129	5	Peak
8312	54.49	-19.51	74	42.09	35.56	10.94	34.1	127	210	Peak
8312	41.53	-12.47	54	29.13	35.56	10.94	34.1	127	210	Average



Test Mode :	Mode 22	Temperature :	25~26°C
Test Channel :	157	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5785 MHz is Fundamental Signals which can be ignored.		

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
31.35	36.64	-3.36	40	48.61	18.95	0.54	31.46	113	68	Peak
191.73	39.17	-4.33	43.5	60.48	8.9	1.29	31.5	-	-	Peak
250.05	42.15	-3.85	46	59.26	12.77	1.53	31.41	-	-	Peak
335	39.68	-6.32	46	54.73	14.39	1.87	31.31	-	-	Peak
500.2	33.55	-12.45	46	43.99	18.18	2.45	31.07	-	-	Peak
786.5	34.52	-11.48	46	40.06	22.03	3.12	30.69	-	-	Peak
5725	50.45	-30.25	80.7	41.55	34.82	9.92	35.84	123	349	Peak
5785	100.7	-	-	91.73	34.88	9.9	35.81	123	349	Peak
5785	91.04	-	-	82.07	34.88	9.9	35.81	123	349	Average
5850	50.03	-30.67	80.7	40.99	34.94	9.87	35.77	123	349	Peak
8268	54.89	-19.11	74	42.51	35.56	10.92	34.1	136	124	Peak
8268	42.14	-11.86	54	29.76	35.56	10.92	34.1	136	124	Average

Test Mode :	Mode 22	Temperature :	25~26°C
Test Channel :	157	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5785 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.3	-3.7	40	48.81	18.4	0.55	31.46	100	360	Peak
95.61	38.19	-5.31	43.5	58.98	9.76	0.98	31.53	-	-	Peak
250.05	37.49	-8.51	46	54.6	12.77	1.53	31.41	-	-	Peak
374.2	33.77	-12.23	46	47.49	15.44	2.09	31.25	-	-	Peak
500.2	36.9	-9.1	46	47.34	18.18	2.45	31.07	-	-	Peak
750.1	37.95	-8.05	46	44.07	21.52	3.06	30.7	-	-	Peak
5725	53.62	-34.12	87.74	44.72	34.82	9.92	35.84	114	358	Peak
5785	107.74	-	-	98.77	34.88	9.9	35.81	114	358	Peak
5785	97.98	-	-	89.01	34.88	9.9	35.81	114	358	Average
5850	52.85	-34.89	87.74	43.81	34.94	9.87	35.77	114	358	Peak
8428	55.66	-18.34	74	43.18	35.59	10.98	34.09	118	315	Peak
8428	41.13	-12.87	54	28.65	35.59	10.98	34.09	118	315	Average
11570	44.77	-29.23	74	75	-9.8	13.18	33.61	100	0	Peak
17355	43.54	-44.2	87.74	70.12	-8.67	14.41	32.32	100	0	Peak



Test Mode :	Mode 23	Temperature :	25~26°C
Test Channel :	165	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5825 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.33	-3.67	40	48.84	18.4	0.55	31.46	-	-	Peak
191.73	39.57	-3.93	43.5	60.88	8.9	1.29	31.5	-	-	Peak
250.05	42.73	-3.27	46	59.84	12.77	1.53	31.41	132	253	Peak
335	39.39	-6.61	46	54.44	14.39	1.87	31.31	-	-	Peak
500.2	32.97	-13.03	46	43.41	18.18	2.45	31.07	-	-	Peak
875.4	38.18	-7.82	46	42.63	22.95	3.31	30.71	-	-	Peak
5725	50.87	-29.38	80.25	41.97	34.82	9.92	35.84	100	2	Peak
5825	100.25	-	-	91.22	34.93	9.88	35.78	100	2	Peak
5825	90.12	-	-	81.09	34.93	9.88	35.78	100	2	Average
5850	64.38	-15.87	80.25	55.34	34.94	9.87	35.77	100	2	Peak
8332	55.6	-18.4	74	43.18	35.57	10.95	34.1	145	230	Peak
8332	41.2	-12.8	54	28.78	35.57	10.95	34.1	145	230	Average



Test Mode :	Mode 23	Temperature :	25~26°C
Test Channel :	165	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5825 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.75	-3.25	40	49.26	18.4	0.55	31.46	102	354	Peak
95.61	39.72	-3.78	43.5	60.51	9.76	0.98	31.53	-	-	Peak
250.05	38.21	-7.79	46	55.32	12.77	1.53	31.41	-	-	Peak
374.2	33.97	-12.03	46	47.69	15.44	2.09	31.25	-	-	Peak
500.2	37.53	-8.47	46	47.97	18.18	2.45	31.07	-	-	Peak
750.1	37.85	-8.15	46	43.97	21.52	3.06	30.7	-	-	Peak
5725	54.71	-32.92	87.63	45.81	34.82	9.92	35.84	125	3	Peak
5825	107.63	-	-	98.6	34.93	9.88	35.78	125	3	Peak
5825	98.34	-	-	89.31	34.93	9.88	35.78	125	3	Average
5850	72.71	-14.92	87.63	63.67	34.94	9.87	35.77	125	3	Peak
8308	55.72	-18.28	74	43.33	35.56	10.93	34.1	110	96	Peak
8308	41.63	-12.37	54	29.24	35.56	10.93	34.1	110	96	Average



Test Mode :	Mode 24	Temperature :	25~26°C
Test Channel :	149	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5745 MHz is Fundamental Signals which can be ignored.		

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
83.73	35.22	-4.78	40	57.9	7.96	0.9	31.54	-	-	Peak
191.73	40.27	-3.23	43.5	61.58	8.9	1.29	31.5	-	-	Peak
250.05	42.93	-3.07	46	60.04	12.77	1.53	31.41	144	271	Peak
321.7	39.25	-6.75	46	54.7	14.05	1.82	31.32	-	-	Peak
500.2	34.69	-11.31	46	45.13	18.18	2.45	31.07	-	-	Peak
875.4	38.68	-7.32	46	43.13	22.95	3.31	30.71	-	-	Peak
5725	66.58	-13.2	79.78	57.68	34.82	9.92	35.84	100	349	Peak
5745	99.78	-	-	90.86	34.84	9.91	35.83	100	349	Peak
5745	90.45	-	-	81.53	34.84	9.91	35.83	100	349	Average
5850	49.92	-29.86	79.78	40.88	34.94	9.87	35.77	100	349	Peak
8182	54.1	-19.9	74	41.8	35.53	10.88	34.11	128	261	Peak
8182	40.96	-13.04	54	28.66	35.53	10.88	34.11	128	261	Average
17235	38.94	-40.84	79.78	65.55	-8.65	14.37	32.33	100	0	Peak

Test Mode :	Mode 24	Temperature :	25~26°C
Test Channel :	149	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5745 MHz is Fundamental Signals which can be ignored.		

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
34.05	36.56	-3.44	40	50.17	17.29	0.57	31.47	100	348	Peak
95.61	38.83	-4.67	43.5	59.62	9.76	0.98	31.53	-	-	Peak
250.05	37.65	-8.35	46	54.76	12.77	1.53	31.41	-	-	Peak
374.2	34	-12	46	47.72	15.44	2.09	31.25	-	-	Peak
500.2	36.45	-9.55	46	46.89	18.18	2.45	31.07	-	-	Peak
750.1	37.82	-8.18	46	43.94	21.52	3.06	30.7	-	-	Peak
5725	72.67	-13.71	86.38	63.77	34.82	9.92	35.84	117	354	Peak
5745	106.38	-	-	97.46	34.84	9.91	35.83	117	354	Peak
5745	96.23	-	-	87.31	34.84	9.91	35.83	117	354	Average
5850	51.07	-35.31	86.38	42.03	34.94	9.87	35.77	117	354	Peak
8252	54.79	-19.21	74	42.43	35.55	10.91	34.1	125	104	Peak
8252	41.73	-12.27	54	29.37	35.55	10.91	34.1	125	104	Average
11490	44	-30	74	74.12	-9.7	13.14	33.56	100	0	Peak
17235	40.37	-46.01	86.38	66.98	-8.65	14.37	32.33	100	0	Peak



Test Mode :	Mode 25	Temperature :	25~26°C
Test Channel :	157	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5785 MHz is Fundamental Signals which can be ignored.		

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
46.74	36.41	-3.59	40	57.31	9.94	0.67	31.51	-	-	Peak
191.73	39.39	-4.11	43.5	60.7	8.9	1.29	31.5	-	-	Peak
250.05	42.85	-3.15	46	59.96	12.77	1.53	31.41	121	176	Peak
310.5	39.3	-6.7	46	55.09	13.74	1.79	31.32	-	-	Peak
500.2	32.85	-13.15	46	43.29	18.18	2.45	31.07	-	-	Peak
875.4	37	-9	46	41.45	22.95	3.31	30.71	-	-	Peak
5725	50.04	-31.44	81.48	41.14	34.82	9.92	35.84	123	349	Peak
5785	101.48	-	-	92.51	34.88	9.9	35.81	123	349	Peak
5785	90.86	-	-	81.89	34.88	9.9	35.81	123	349	Average
5850	49.58	-31.9	81.48	40.54	34.94	9.87	35.77	123	349	Peak
8364	55.16	-18.84	74	42.73	35.57	10.95	34.09	133	327	Peak
8364	41.24	-12.76	54	28.81	35.57	10.95	34.09	133	327	Average

Test Mode :	Mode 25	Temperature :	25~26°C
Test Channel :	157	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5785 MHz is Fundamental Signals which can be ignored.		

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
30.81	36.27	-3.73	40	48.24	18.95	0.54	31.46	103	352	Peak
95.61	38.93	-4.57	43.5	59.72	9.76	0.98	31.53	-	-	Peak
250.05	37.92	-8.08	46	55.03	12.77	1.53	31.41	-	-	Peak
374.2	34.1	-11.9	46	47.82	15.44	2.09	31.25	-	-	Peak
500.2	37.21	-8.79	46	47.65	18.18	2.45	31.07	-	-	Peak
666.1	37.01	-8.99	46	44.41	20.58	2.87	30.85	-	-	Peak
5725	52.1	-33.92	86.02	43.2	34.82	9.92	35.84	114	13	Peak
5785	106.02	-	-	97.05	34.88	9.9	35.81	114	13	Peak
5785	95.95	-	-	86.98	34.88	9.9	35.81	114	13	Average
5850	50.71	-35.31	86.02	41.67	34.94	9.87	35.77	114	13	Peak
8134	54.54	-19.46	74	42.27	35.53	10.86	34.12	112	85	Peak
8134	42.12	-11.88	54	29.85	35.53	10.86	34.12	112	85	Average
11570	41.21	-32.79	74	71.44	-9.8	13.18	33.61	100	0	Peak
17355	40.85	-45.17	86.02	67.42	-8.67	14.42	32.32	100	0	Peak

Test Mode :	Mode 26	Temperature :	25~26°C
Test Channel :	165	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5825 MHz is Fundamental Signals which can be ignored.		

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
30.81	36.86	-3.14	40	48.83	18.95	0.54	31.46	113	88	Peak
191.73	40.22	-3.28	43.5	61.53	8.9	1.29	31.5	-	-	Peak
250.05	42.08	-3.92	46	59.19	12.77	1.53	31.41	-	-	Peak
321.7	38.92	-7.08	46	54.37	14.05	1.82	31.32	-	-	Peak
663.3	32.92	-13.08	46	40.35	20.56	2.87	30.86	-	-	Peak
875.4	36.98	-9.02	46	41.43	22.95	3.31	30.71	-	-	Peak
5725	49.54	-30.36	79.9	40.64	34.82	9.92	35.84	100	348	Peak
5825	99.9	-	-	90.87	34.93	9.88	35.78	100	348	Peak
5825	90.32	-	-	81.29	34.93	9.88	35.78	100	348	Average
5850	57.04	-22.86	79.9	48	34.94	9.87	35.77	100	348	Peak
8108	54.81	-19.19	74	42.55	35.52	10.86	34.12	131	248	Peak
8108	41.79	-12.21	54	29.53	35.52	10.86	34.12	131	248	Average
17475	40.01	-39.89	79.9	66.55	-8.7	14.46	32.3	100	0	Peak

Test Mode :	Mode 26	Temperature :	25~26°C
Test Channel :	165	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5825 MHz is Fundamental Signals which can be ignored.		

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
30.81	36.76	-3.24	40	48.73	18.95	0.54	31.46	102	355	Peak
96.42	39.54	-3.96	43.5	60.33	9.76	0.98	31.53	-	-	Peak
250.05	38.17	-7.83	46	55.28	12.77	1.53	31.41	-	-	Peak
374.2	34.12	-11.88	46	47.84	15.44	2.09	31.25	-	-	Peak
500.2	36.32	-9.68	46	46.76	18.18	2.45	31.07	-	-	Peak
750.1	38.11	-7.89	46	44.23	21.52	3.06	30.7	-	-	Peak
5725	51.42	-34.1	85.52	42.52	34.82	9.92	35.84	103	2	Peak
5825	105.52	-	-	96.49	34.93	9.88	35.78	103	2	Peak
5825	96.43	-	-	87.4	34.93	9.88	35.78	103	2	Average
5850	66.39	-19.13	85.52	57.35	34.94	9.87	35.77	103	2	Peak
8364	55.87	-18.13	74	43.44	35.57	10.95	34.09	115	337	Peak
8364	40.66	-13.34	54	28.23	35.57	10.95	34.09	115	337	Average
11650	42.03	-31.97	74	72.37	-9.91	13.22	33.65	100	0	Peak
17475	39.99	-45.53	85.52	66.53	-8.69	14.45	32.3	100	0	Peak



Test Mode :	Mode 27	Temperature :	25~26°C
Test Channel :	151	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5755 MHz is Fundamental Signals which can be ignored.		

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
47.28	36.56	-3.44	40	57.96	9.45	0.67	31.52	110	63	Peak
191.73	39.23	-4.27	43.5	60.54	8.9	1.29	31.5	-	-	Peak
250.05	42.27	-3.73	46	59.38	12.77	1.53	31.41	-	-	Peak
321.7	39.07	-6.93	46	54.52	14.05	1.82	31.32	-	-	Peak
666.1	33.29	-12.71	46	40.69	20.58	2.87	30.85	-	-	Peak
875.4	36.7	-9.3	46	41.15	22.95	3.31	30.71	-	-	Peak
5725	64.86	-13.49	78.35	55.96	34.82	9.92	35.84	100	349	Peak
5755	98.35	-	-	89.4	34.86	9.91	35.82	100	349	Peak
5755	87.78	-	-	78.83	34.86	9.91	35.82	100	349	Average
5850	49.89	-28.46	78.35	40.85	34.94	9.87	35.77	100	349	Peak
8388	55.59	-18.41	74	43.14	35.58	10.96	34.09	141	257	Peak
8388	40.79	-13.21	54	28.34	35.58	10.96	34.09	141	257	Average



Test Mode :	Mode 27	Temperature :	25~26°C
Test Channel :	151	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5755 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.45	-3.55	40	48.96	18.4	0.55	31.46	102	360	Peak
95.61	38.65	-4.85	43.5	59.44	9.76	0.98	31.53	-	-	Peak
250.05	37.66	-8.34	46	54.77	12.77	1.53	31.41	-	-	Peak
500.2	38.07	-7.93	46	48.51	18.18	2.45	31.07	-	-	Peak
666.1	37.03	-8.97	46	44.43	20.58	2.87	30.85	-	-	Peak
750.1	38.31	-7.69	46	44.43	21.52	3.06	30.7	-	-	Peak
5725	71.01	-12.63	83.64	62.11	34.82	9.92	35.84	104	354	Peak
5755	103.64	-	-	94.69	34.86	9.91	35.82	104	354	Peak
5755	92.61	-	-	83.66	34.86	9.91	35.82	104	354	Average
5850	51.49	-32.15	83.64	42.45	34.94	9.87	35.77	104	354	Peak
8166	53.17	-20.83	74	40.87	35.53	10.88	34.11	114	93	Peak
8166	41.62	-12.38	54	29.32	35.53	10.88	34.11	114	93	Average



Test Mode :	Mode 28	Temperature :	25~26°C
Test Channel :	159	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	5795 MHz is Fundamental Signals which can be ignored.		

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
32.7	36.43	-3.57	40	49.5	17.84	0.56	31.47	-	-	Peak
191.73	39.66	-3.84	43.5	60.97	8.9	1.29	31.5	-	-	Peak
250.05	42.79	-3.21	46	59.9	12.77	1.53	31.41	129	182	Peak
335	38.95	-7.05	46	54	14.39	1.87	31.31	-	-	Peak
500.2	33.26	-12.74	46	43.7	18.18	2.45	31.07	-	-	Peak
792.1	33.3	-12.7	46	38.74	22.11	3.13	30.68	-	-	Peak
5725	49.56	-27.8	77.36	40.66	34.82	9.92	35.84	100	348	Peak
5795	97.36	-	-	88.38	34.89	9.89	35.8	100	348	Peak
5795	87.13	-	-	78.15	34.89	9.89	35.8	100	348	Average
5850	52.03	-25.33	77.36	42.99	34.94	9.87	35.77	100	348	Peak
8236	55.05	-18.95	74	42.7	35.55	10.91	34.11	126	352	Peak
8236	42.03	-11.97	54	29.68	35.55	10.91	34.11	126	352	Average



Test Mode :	Mode 28	Temperature :	25~26°C
Test Channel :	159	Relative Humidity :	45~46%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	5795 MHz is Fundamental Signals which can be ignored.		

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
31.62	36.86	-3.14	40	49.37	18.4	0.55	31.46	102	351	Peak
95.61	39.62	-3.88	43.5	60.41	9.76	0.98	31.53	-	-	Peak
250.05	38.3	-7.7	46	55.41	12.77	1.53	31.41	-	-	Peak
374.2	34.4	-11.6	46	48.12	15.44	2.09	31.25	-	-	Peak
500.2	37.05	-8.95	46	47.49	18.18	2.45	31.07	-	-	Peak
750.1	37.03	-8.97	46	43.15	21.52	3.06	30.7	-	-	Peak
5725	53.75	-29.01	82.76	44.85	34.82	9.92	35.84	115	0	Peak
5795	102.76	-	-	93.78	34.89	9.89	35.8	115	0	Peak
5795	92.59	-	-	83.61	34.89	9.89	35.8	115	0	Average
5850	58.39	-24.37	82.76	49.35	34.94	9.87	35.77	115	0	Peak
8428	55.37	-18.63	74	42.89	35.59	10.98	34.09	105	78	Peak
8428	41.73	-12.27	54	29.25	35.59	10.98	34.09	105	78	Average
11590	40.12	-33.88	74	70.39	-9.83	13.18	33.62	100	0	Peak

3.8 Antenna Requirements

3.8.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.8.2 Antenna Connected Construction

The antennas type used in this product is PIFA Antenna with I-PEX connector and it is considered to meet antenna requirement.

3.8.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP30	101329	9kHz~30GHz	Apr. 26, 2010	Apr. 25, 2011	Conducted (TH02-HY)
Power Meter	Agilent	E4416A	GB41292344	N/A	Feb. 25, 2010	Feb. 24, 2011	Conducted (TH02-HY)
Power Sensor	Agilent	E9327A	US40441548	N/A	Feb. 25, 2010	Feb. 24, 2011	Conducted (TH02-HY)
Receiver	R&S	ESCS 30	838251/003	9 kHz~2.75 GHz	Apr. 16, 2010	Apr. 15, 2011	Conduction (CO01-LK)
LISN	Rolf Heine	NNB-2/16Z	98087	9 kHz~30 MHz	Oct. 07, 2009	Oct. 06, 2010	Conduction (CO01-LK)
RF Cable-CON	Suhner Switzerland	RG223/U	CB017	9 kHz~30 MHz	Nov. 04, 2009	Nov. 03, 2010	Conduction (CO01-LK)
ISN	TESEQ GMBH	T400A	24853	9kHz ~30MHz	Nov. 11, 2009	Nov. 10, 2010	Conduction (CO01-LK)
ISN	TESEQ GMBH	T800	24558	150kHz ~ 230MHz	Oct. 13, 2009	Oct. 12, 2010	Conduction (CO01-LK)
ISN	TESEQ GMBH	ST08	24347	150kHz ~ 230MHz	Sep. 14, 2010	Sep. 13, 2011	Conduction (CO01-LK)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz ~ 1GHz	Oct. 31, 2009	Oct. 30, 2010	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP	101067	9KHz ~ 30GHz	Dec. 04, 2009	Dec. 03, 2010	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 19, 2010	Aug. 18, 2011	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz- 40GHz	Oct. 14, 2009	Oct. 13, 2010	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Dec.09,2009	Dec. 08, 2010	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10-1000MHz.32 dB.GAIN	Mar. 27, 2010	Mar. 26, 2011	Radiation (03CH07-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz~30 MHz	Jul. 29, 2010	Jul. 28, 2011	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of X_i		$u(X_i)$
	dB	Probability Distribution	
Receiver Reading	0.10	Normal (k=2)	0.05
Cable Loss	0.10	Normal (k=2)	0.05
AMN Insertion Loss	2.50	Rectangular	0.63
Receiver Specification	1.50	Rectangular	0.43
Site Imperfection	1.39	Rectangular	0.80
Mismatch	+0.34 / -0.35	U-Shape	0.24
Combined Standard Uncertainty $U_c(y)$	1.13		
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of X_i		$u(X_i)$
	dB	Probability Distribution	
Receiver Reading	0.41	Normal (k=2)	0.21
Antenna Factor Calibration	0.83	Normal (k=2)	0.42
Cable Loss Calibration	0.25	Normal (k=2)	0.13
Pre-Amplifier Gain Calibration	0.27	Normal (k=2)	0.14
RCV/SPA Specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site Imperfection	1.43	Rectangular	0.83
Mismatch	+0.39 / -0.41	U-Shape	0.28
Combined Standard Uncertainty $U_c(y)$	1.27		
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.54		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of X_i		$u(X_i)$	C_i	$C_i * u(X_i)$
	dB	Probability Distribution			
Receiver Reading	± 0.10	Normal (k=2)	0.10	1	0.10
Antenna Factor Calibration	± 1.70	Normal (k=2)	0.85	1	0.85
Cable Loss Calibration	± 0.50	Normal (k=2)	0.25	1	0.25
Receiver Correction	± 2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	± 1.50	Rectangular	0.87	1	0.87
Site Imperfection	± 2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20\text{Log}(1-\Gamma_1*\Gamma_2)$	+0.34 / -0.35	U-Shape	0.244	1	0.244
Combined Standard Uncertainty $U_c(y)$	2.36				
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.72				



Appendix A. Photographs of EUT

Please refer to Sporton report number EP082617-01 as below.