CFR 47 FCC Part 15.247

TEST REPORT

E.U.T.： **NoteBook PC**

Trade Name： MTC；GETAC

Model Number： 8212X

FCC ID： MAU8212X

Prepared for

MiTAC Technology Corp.

9th Fl., No. 75, Ming Sheng East Road, Sec. 3, Taipei, Taiwan, R.O.C.

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Prepared by

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Remark:

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2. The report prohibit used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Statement of Compliance

Applicant: MiTAC Technology Corp.

Manufacturer: Getac Technology (Kunshan) Co., Ltd.

EUT Description: NoteBook PC

Model No.: 8212X

Serial No.: N/A

Tested Power Supply: 120Vac; 60Hz

Date of Final Test: Nov. 28, 2007

Configuration of Measurements and Standards Used :

FCC Rules and Regulations Part 15 Subpart C

I HEREBY CERTIFY THAT: The data shown in this report were made in accordance with the procedures given in ANSI C63.4, and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Note: 1. The result of the testing report relate only to the item tested.

2. The testing report shall not be reproduced expect in full, without the written approval of IETC

Report Issued: 2007/12/10

Test Engineer: Anya Lee Checked: Danny Tang

Danny Tang

Approved: Jerry Liu

Jerry Liu

Table of Contents

1 General Information

1.1 Description of Equipment Under Test

Equipment Under Test	:	NoteBook PC
Model Number	:	8212X
Serial Number	:	N/A
Type of Sample Tested	:	☒Proto-type ☐Pre-Production ☐Mass Production
Applicant	:	**MiTAC Technology Corp.** 9th Fl., No. 75, Ming Sheng East Road, Sec. 3, Taipei, Taiwan, R.O.C.
Manufacturer	:	**Getac Technology (Kunshan) Co., Ltd.** Kunshan Export Processing Zone, 215300 Jiangsu, P.R.China
Power Adapter	:	Manufacturer: Delta, M/N: ADP-45AD A, S/N: 86W0731000118 Input: 100~240Vac, 50~60Hz, 1.2A Power cord: ☒Non-shielded ☒Detachable, 1.8 m ☒w/o core Output: 15Vdc, 3A Power cable: ☒Non-shielded ☒Un-detachable, 1.8m ☒ w/o core
Operating Frequency	:	2412 ~ 2462MHz；5745MHz ~ 5825MHz
Channel Number	:	Refer to section 1.3 page 7.
Type of Modulation	:	DSSS；OFDM
Antenna description	:	This device uses PCB Printed antenna.

Antenna Gain	：	1. 1.43dBi (For 2.4GHz) 2. 1.61dBi (For 5.7GHz)
Connector type	：	U.FL

Sample Receive date	:	Nov. 12, 2007
Date of Test	:	Nov. 26~28, 2007

REMARK

The imbeded wireless module (AW-NE770) is designed for 802.11a/b/g/n applications with a PCI Express Minicard interface. It has three receive chains and two transmit chains (2x3 configuration). The 2x3 configuration is implemented with two outside chains (Chain 0 and 2) as Tx/Rx and the middle Chain (chain 1) as Rx only.

1.2 Technical Specifications

Key parts	SKU A
Memory	Hynix 1Gbit DDR
CPU	Intel McCaslin - Stealey, 800MHz
LCD Monitor	Toshiba, PI-LTD121EW6S
Bluetooth	BTM-203B EDRV2.0 ver1.2
HDD	Toshiba, (40GB, 1.8”, PATA), Model: MK4009GAL
ODD	TEAK, (DVDSuper-multi) DVW28ECPUBA
Modem	Billionton, Model :RD002-D330
Wireless LAN	AzureWave, (802.11abgn, Mini PCI-E) Model : AW-NEW770 (1024)
3G	Novatel, EU870D
AC/DC Adapter	Delta, ADP-45ADA
Battery (LITHIUM)	SANYO, 6Cell, 11.1V/5.2AH

WIRELESS Module Information (AW-NE770)

Host Interface	MINI PCI Express
Chipset	Atheros AR5418 (MAC/Baseband) + AR5133 (Radio)
Network Standard	IEEE 802.11a/b/g
Modulation Techniques	BPSK, QPSK, 16QAM, 64QAM
Modulation Technology	OFDM, CCK, DSSS
Media Access Technology	CSMA/CA
Supported Data Rates	IEEE802.11a/b/g/n Stand Mode: up to 300Mbps

1.3 Table for Carrier Frequencies

802.11b

CH No.	1	2	3	4	5	6	7	8	9	10	11
CF (MHz)	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462

802.11g / 802.11n (20M)

CH No.	1	2	3	4	5	6	7	8	9	10	11
CF (MHz)	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462

802.11n (40M)

CH No.	3	4	5	6	7	8	9
CF (MHz)	2422	2427	2432	2437	2442	2447	2452

802.11a / 802.11n (20M)

CH No.	149	153	157	161	165
CF (MHz)	5745	5765	5785	5805	5825

802.11n (40M)

CH No.	151	159
CF (MHz)	5755	5795

1.4 Test Facility

Site Description : ☒OATS 2 ☒Conduction 1

Name of Firm : Interocean EMC Technology Corp.

Company web : http://www.ietc.com.tw

Site 1, 2 Location : No.5-2, Lin 1, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei County, Taiwan, R.O.C.

Site 3, 4 Location : No. 12, Ruei-Shu Valley, Ruei-Ping Tsun, Lin-Kou Hsiang, Taipei County, Taiwan, R.O.C.

Site Filing :

- Federal Communication Commissions – USA
  Registration No.: 96399 (OATS 1 & 2)
  Registration No.: 518958 (OATS 3 & 4)
- Voluntary Control Council for Interference by Information Technology Equipment (VCCI) – Japan
  Registration No. (Conducted Room): C-1094
  Registration No. (Conducted Room): T-271
  Registration No. (OATS 1): R-1040
  Registration No. (OATS 2): R-1041
- Industry Canada (IC)
  Submission: 113543
- Japan Electrical Safety & Environment Technology Laboratories (JET)
  Registration No.: 04S03-01

Site Accreditation :

- Bureau of Standards and Metrology and Inspection (BSMI) – Taiwan, R.O.C.
  Accreditation No.:
  SL2-IN-E-0026 for CNS13438 / CISPR22
  SL2-R1-E-0026 for CNS13439 / CISPR13
  SL2-R2-E-0026 for CNS13439 / CISPR13
  SL2-A1-E-0026 for CNS13783-1 / CISPR14-1
- National Voluntary Laboratory Accreditation Program (NVLAP) - USA
  NVLAP LAB CODE 200458
- Nemko AS
  Authorization No.: ELA 181A
  Authorization No.: ELA 181B
- Taiwan Accreditation Foundation (TAF)
  Accrditation No.: 1113

1.5 Test Equipment

Instrument	Manufacturer	Model	Serial No.	Last Calibration
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100135	2007/08/03
L.I.S.N.	Schwarzbeck	NNLK8121	8121417	2007/07/17
L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100176	2007/02/14
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	843602/02	2007/09/10
RF Cable	HARBOUR	RG400	CBL04	2007/08/09
Spectrum Analyzer	Agilent	8564EC	4046A00331	2007/03/29
Spectrum Analyzer	R&S	FSQ	200406	2007/03/29
Biconical Antenna	Schwarzbeck	VHA 9103	2484	2007/09/06
Log Antenna	Schwarzbeck	UHALP 9108	A 0765	2007/09/06
Pre-Amplifier	HP	8447D	2944A10321	2007/07/17
Preamplifier	Agilent	8449B	3008A01434	2007/04/03
RF Cable	Ultra Link	CBL02	CBL02	2007/05/04
Cable	IETC	CBL07	CBL07	2007/05/08

Note: All instrument upon which need to be calibrated are within calibration period of 1 year.

Instrument	Manufacturer	Model	Serial No.	Last Calibration
Horn Antenna	COM-POWER	AH-118	10081	2006/05/16
Horn Antenna	SCHWARZBECK	BBHA9120	9120D-583	2006/12/18

Note: All instrument upon which need to be calibrated are within calibration period of 2 year.

1.6 Summary of Measurement

Report Clause	Test Parameter	Reference Document CFR47 Part15	Results
2	RF Radiated spurious emission test	§15.205, 15.209	Pass
3	RF Conducted spurious emission	§15.247	Pass
4	Maximum Peak output power test	§15.247(b)	Pass
5	6dB Bandwidth	§15.247(a)(2)	Pass
6	Power spectral density	§15.247(e)	Pass
7	Emission on the Band Edge	§15.247(d)	Pass
8	AC Power Line Conducted Emission test	§15.247(b)	Pass

1.7 Justification

The test of radiated measurements according to FCC Part15 Section 15.33(a) had been conducted and the field strength of the frequency band were all arrive limit requirement, thus we evaluate the EUT pass the specified test.

2 RF Radiated spurious emission test

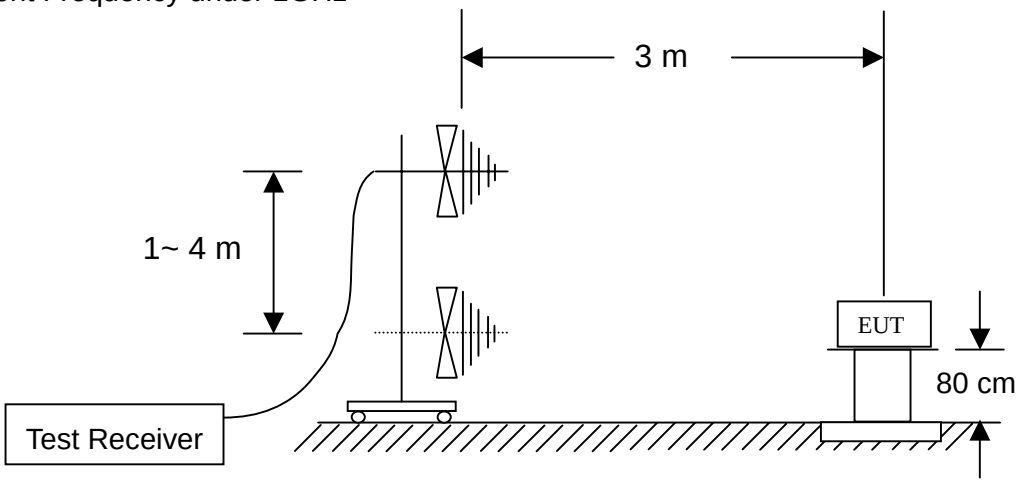
2.1 Limit

For intentional radiator, the radiated emission shall comply with §15.209(a).
For intentional radiators, according to §15.247 (a), operation under this provision is limited to frequency hopping and direct sequence spread spectrum, and the out band emission shall be comply with §15.247 (c)

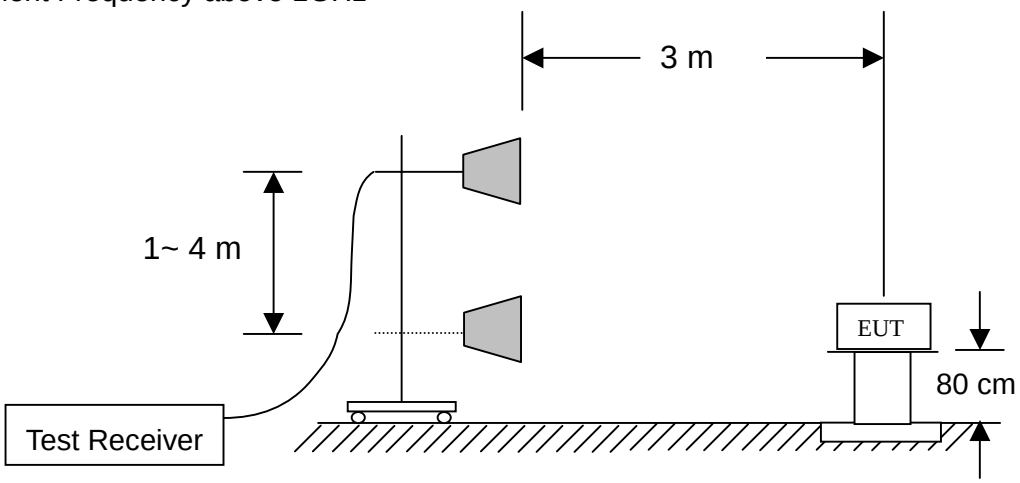
Frequency (MHz)	Field strength dB(μV/m)	Measurement distance (meters)
1.705~30.0	29.5	30
30 ~ 88	40	3
88~216	43.5	3
216~960	46	3
Above 960	54	3

2.2 Configuration of Measurement

Measurement Frequency under 1GHz



Measurement Frequency above 1GHz



2.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Radiated emission measurements were performed from 30MHz to 40GHz. Spectrum Analyzer Resolution Bandwidth is 100kHz or greater for frequencies 30MHz to 1GHz, 1MHz for frequencies above 1GHz.
The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meter and down to 1 meter.

2.4 Test Result

PASS.
The final test data is shown on as following pages.

Radiated spurious emission

Test Environment

Ambient temperature ： 26.3℃

Relative humidity ： 67%

2.4G (Radiated Emission below 1GHz)								
802.11b Mode CH06								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
52.640	H	49.10	29.64	7.97	27.43	40.00	-12.57	QP
240.000	H	55.50	29.55	13.35	39.30	46.00	-6.70	QP
305.456	H	49.30	29.58	15.98	5.70	46.00	-10.30	QP
566.993	H	43.30	29.46	24.80	38.64	46.00	-7.36	QP
914.438	H	40.40	29.10	29.57	40.87	46.00	-5.13	QP
120.013	V	52.30	29.54	12.78	35.54	40.00	-4.46	QP
239.998	V	53.70	29.55	13.50	37.65	46.00	-8.35	QP
566.995	V	41.80	29.46	24.93	37.27	46.00	-8.73	QP
710.115	V	35.73	29.13	26.15	32.75	46.00	-13.25	QP
914.430	V	39.70	29.10	29.56	40.16	46.00	-5.84	QP

5G (Radiated Emission below 1GHz)								
802.11n (HT40) Mode CH159								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
119.997	H	51.79	29.54	12.53	34.78	43.50	-8.72	QP
240.012	H	55.36	29.55	13.35	39.16	46.00	-6.84	QP
388.798	H	45.50	29.69	19.06	34.87	46.00	-11.13	QP
566.900	H	43.54	29.46	24.80	38.88	46.00	-7.12	QP
914.438	H	40.70	29.10	29.57	41.17	46.00	-4.83	QP
120.013	V	52.34	29.54	12.78	35.58	43.50	-7.20	QP
239.990	V	55.50	29.55	11.16	37.11	46.00	-8.89	QP
360.120	V	48.10	29.62	18.21	36.69	46.00	-9.31	QP
566.000	V	44.14	29.46	24.93	39.61	46.00	-6.39	QP
914.450	V	38.90	29.10	29.56	39.36	46.00	-6.64	QP

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

Radiated spurious emission

Radiated Emission above 1GHz

Worst case： 802.11b/g chain 0

Single Tx

After verifying 802.11b/g chain 0 / 2, 802.11n (HT20) chain 0 / chain 2 & 802.11n (HT40) chain 0 / chain 2, the worst case was found at 802.11b/g chain 0.

2.4G

802.11b Chain 0 CH01

Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
4824.00	H	36.36	26.01	37.50	47.85	74	-26.15	PK
4824.00	H	26.18	26.01	37.50	37.67	54	-16.33	AV
4824.05	V	39.53	26.01	37.50	51.02	74	-22.98	PK
4823.82	V	29.02	26.01	37.50	40.51	54	-13.49	AV

802.11b Chain 0 CH06

Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
4874.00	H	35.72	25.99	37.59	47.32	74	-26.68	PK
4873.90	H	26.13	25.99	37.59	37.73	54	-16.27	AV
4874.00	V	37.61	25.99	37.59	49.21	74	-24.79	PK
4874.00	V	27.18	25.99	37.59	38.78	54	-15.22	AV

802.11b Chain 0 CH11

Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
4924.07	H	36.25	25.98	37.67	47.94	74	-26.06	PK
4924.07	H	26.92	25.98	37.67	38.61	54	-15.39	AV
4924.24	V	37.11	25.98	37.67	48.80	74	-25.20	PK
4924.00	V	27.73	25.98	37.67	39.42	54	-14.58	AV

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

2.4G								
802.11g Chain 0 CH01								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4824.00	H	34.63	26.01	37.50	46.12	74	-27.88	PK
4824.00	H	25.42	26.01	37.50	36.91	54	-17.09	AV
4824.00	V	37.97	26.01	37.50	49.46	74	-24.54	PK
4824.00	V	26.98	26.01	37.50	38.47	54	-15.53	AV

802.11g Chain 0 CH06								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4874.00	H	34.76	25.99	37.59	46.36	74	-27.64	PK
4874.00	H	25.38	25.99	37.59	36.98	54	-17.02	AV
4874.00	V	35.69	25.99	37.59	47.29	74	-26.71	PK
4874.00	V	26.86	25.99	37.59	38.46	54	-15.54	AV

802.11g Chain 0 CH11								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4924.00	H	35.68	25.98	37.67	47.37	74	-26.63	PK
4924.00	H	25.59	25.98	37.67	37.28	54	-16.72	AV
4924.00	V	28.23	25.98	37.67	39.92	74	-34.08	PK
4924.00	V	26.98	25.98	37.67	38.67	54	-15.33	AV

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

Radiated spurious emission

Radiated Emission above 1GHz

Worst case： 802.11a chain 0

Single Tx

After verifying 802.11a chain 0 / 2, 802.11n (HT20) chain 0 / chain 2 & 802.11n (HT40) chain 0 / chain 2, the worst case was found at 802.11a chain 0.

5G								
802.11a Chain 0 CH149								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
11490.40	H	35.76	25.03	48.20	58.93	74	-15.07	PK
11490.40	H	25.56	25.03	48.20	48.73	54	-5.27	AV
11490.40	V	35.86	25.03	48.20	59.03	74	-14.97	PK
11490.40	V	25.52	25.03	48.20	48.69	54	-5.31	AV

802.11a Chain 0 CH157								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
11570.32	H	35.65	25.10	48.19	58.74	74	-15.26	PK
11570.32	H	25.52	25.10	48.19	48.61	54	-5.39	AV
11569.67	V	35.67	25.10	48.19	58.76	74	-15.24	PK
11569.67	V	25.48	25.10	48.19	48.57	54	-5.43	AV

802.11a Chain 0 CH165								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
11649.86	H	35.43	25.20	48.17	58.40	74	-15.60	PK
11649.86	H	25.62	25.20	48.17	48.59	54	-5.41	AV
11649.67	V	35.49	25.20	48.17	58.46	74	-15.54	PK
11649.67	V	25.63	25.20	48.17	48.60	54	-5.40	AV

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

Radiated spurious emission

Radiated Emission above 1GHz

Dual Tx

2.4G								
802.11n (HT20) CH01								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4824.00	H	35.20	26.01	37.50	46.69	74	-27.31	PK
4824.00	H	25.45	26.01	37.50	36.94	54	-17.06	AV
4824.00	V	35.02	26.01	37.50	46.51	74	-27.49	PK
4824.00	V	27.05	26.01	37.50	38.54	54	-15.46	AV

802.11n (HT20) CH06								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4874.32	H	34.86	25.99	37.59	46.46	74	-27.54	PK
4874.32	H	25.38	25.99	37.59	36.98	54	-17.02	AV
4874.00	V	34.25	25.99	37.59	45.85	74	-28.15	PK
4874.00	V	25.47	25.99	37.59	37.07	54	-16.93	AV

802.11n (HT20) CH11								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4924.00	H	35.00	25.98	37.67	46.69	74	-27.31	PK
4924.00	H	25.50	25.98	37.67	37.19	54	-16.81	AV
4924.00	V	36.58	25.98	37.67	48.27	74	-25.73	PK
4924.00	V	25.63	25.98	37.67	37.32	54	-16.68	AV

802.11n (HT40) CH03								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4844.56	H	35.12	26.00	37.54	46.66	74	-27.34	PK
4844.56	H	25.31	26.00	37.54	36.85	54	-17.15	AV
4844.56	V	35.90	26.00	37.54	47.44	74	26.56	PK
4844.56	V	25.30	26.00	37.54	36.84	54	-17.16	AV

802.11n (HT40) CH06								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4884.61	H	34.30	25.99	37.60	45.91	74	-28.09	PK
4884.61	H	25.42	25.99	37.60	37.03	54	-16.97	AV
4884.61	V	35.31	25.99	37.60	46.92	74	-27.08	PK
4884.61	V	25.38	25.99	37.60	36.99	54	-17.01	AV

802.11n (HT40) CH09								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
4904.00	H	34.58	25.98	37.63	46.23	74	-27.77	PK
4904.00	H	25.44	25.98	37.63	37.09	54	-16.91	AV
4904.00	V	34.94	25.98	37.63	46.59	74	-27.41	PK
4904.00	V	25.54	25.98	37.63	37.19	54	-16.81	AV

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

5G

802.11n (HT20) CH149

Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
11489.80	H	35.50	25.03	48.20	58.67	74	-15.33	PK
11489.80	H	25.54	25.03	48.20	48.71	54	-5.29	AV
11489.59	V	36.02	25.03	48.20	59.19	74	-14.81	PK
11489.59	V	25.53	25.03	48.20	48.70	54	-5.30	AV

802.11n (HT20) CH157

Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
11569.50	H	37.43	25.10	48.19	60.52	74	-13.48	PK
11569.50	H	25.52	25.10	48.19	48.61	54	-5.39	AV
11569.27	V	36.28	25.10	48.19	59.37	74	-14.63	PK
11569.27	V	25.48	25.10	48.19	48.57	54	-5.43	AV

802.11n (HT20) CH165

Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
11649.83	H	35.62	25.20	48.17	58.59	74	-15.41	PK
11649.83	H	25.66	25.20	48.17	48.63	54	-5.37	AV
11649.60	V	36.77	25.20	48.17	59.74	74	-14.26	PK
11649.60	V	25.64	25.20	48.17	48.61	54	-5.39	AV

802.11n (HT40) CH151 5755 MHz								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
11508.87	H	36.44	25.03	48.20	59.61	74	-14.39	PK
11508.87	H	25.51	25.03	48.20	48.68	54	-5.32	AV
11508.87	V	35.85	25.03	48.20	59.02	74	-14.98	PK
11508.87	V	25.52	25.03	48.20	48.69	54	-5.31	AV

802.11n (HT40) CH159 5795 MHz								
Frequency (MHz)	Antenna Polarization	Reading (dB μ V)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Det. Mode
11589.52	H	37.52	25.13	48.18	60.57	74	-13.43	PK
11589.52	H	25.53	25.13	48.18	48.58	54	-5.42	AV
11589.75	V	35.66	25.13	48.18	58.71	74	-15.29	PK
11589.75	V	25.58	25.13	48.18	48.63	54	-5.37	AV

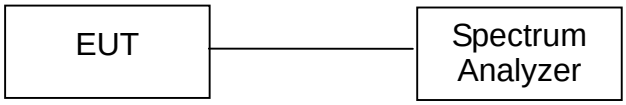
Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

3 RF Conducted spurious emission

3.1 Limit

According to 15.247(d) requirement：
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

3.2 Configuration of Measurement



3.3 Test Procedure

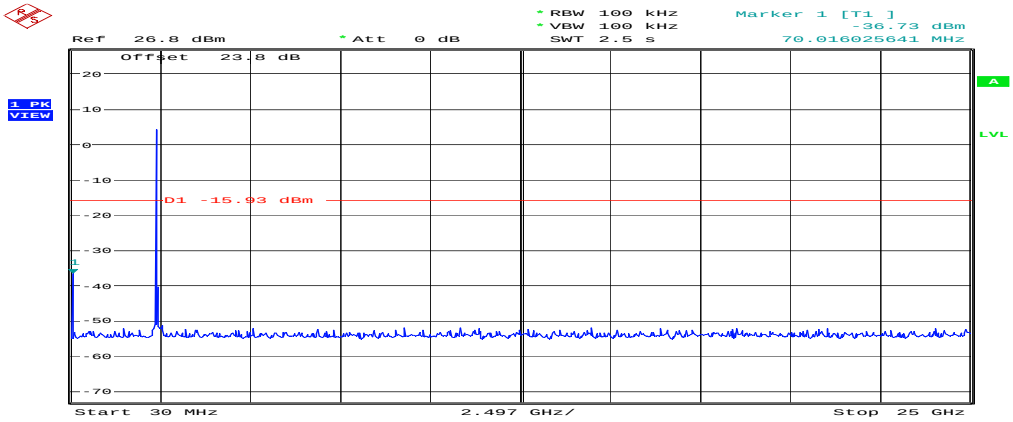
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The measurements were performed from 30MHz to 40GHz RF antenna conducted per FCC 15.247 (c) was measured from the EUT antenna port using a 50ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 100 kHz.
Harmonics and spurious noise must be at least 20dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The table below is the results from the highest emission for each channel within the authorized band. This table was used to determine the spurious limit for each channel.

3.4 Test Result

PASS.
The final test data is shown on as following pages.

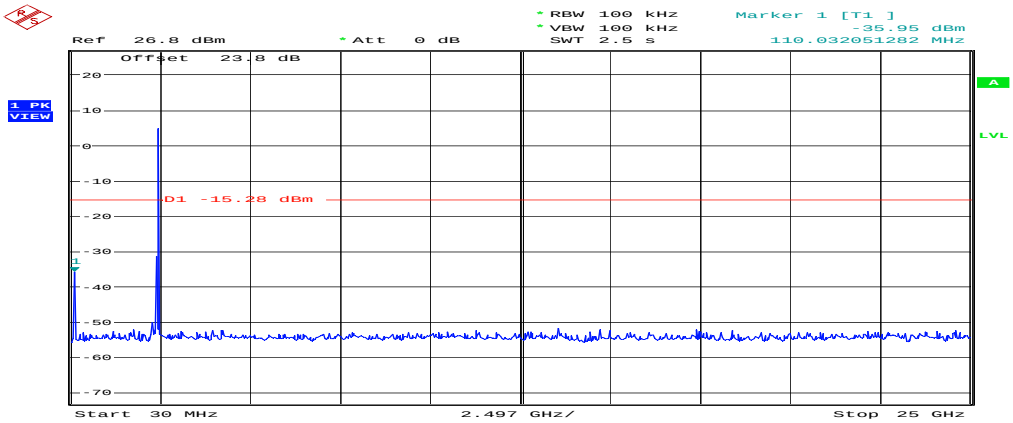
2.4G Conducted spurious emission

802.11 b Chain 0 CH01 2412MHz



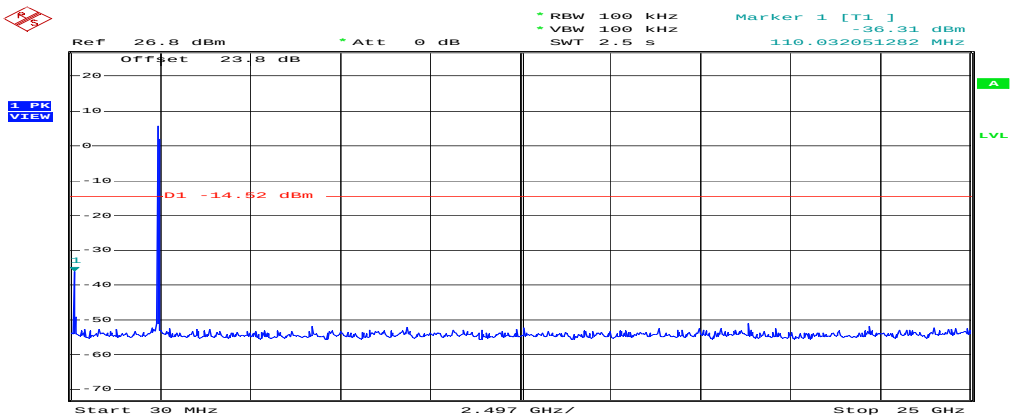
Conducted spurious
802.11 b Chain 0 CH1
Date: 27.NOV.2007 15:57:50

802.11 b Chain 0 CH06 2437MHz



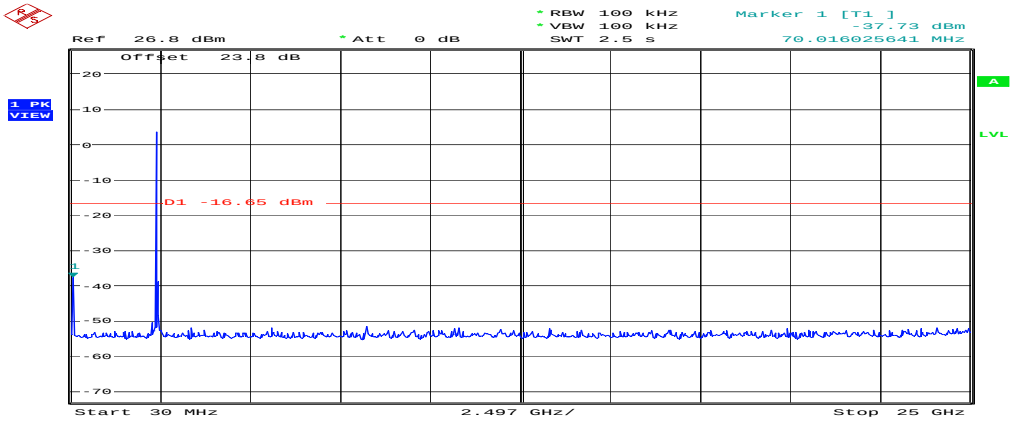
Conducted spurious
802.11 b Chain 0 CH6
Date: 27.NOV.2007 15:58:48

802.11 b Chain 0 CH11 2462MHz



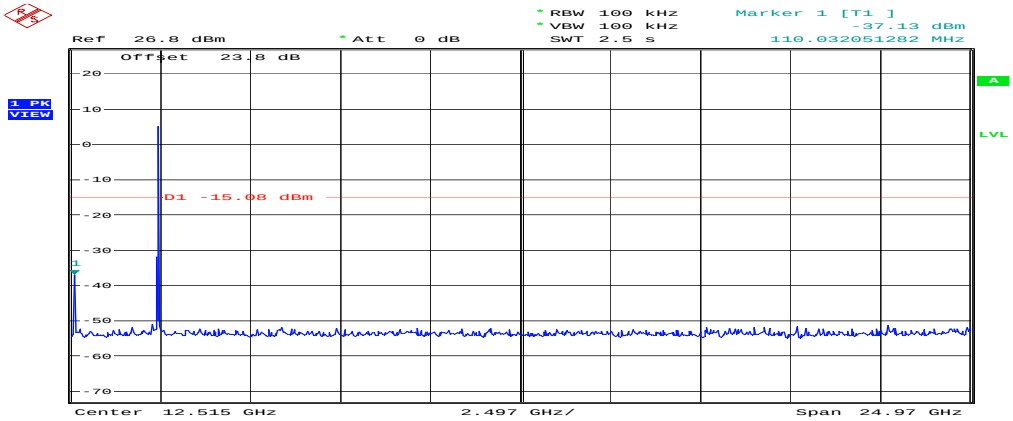
Conducted spurious
802.11 b Chain 0 CH11
Date: 27.NOV.2007 15:59:58

802.11 b Chain 2 CH01 2412MHz



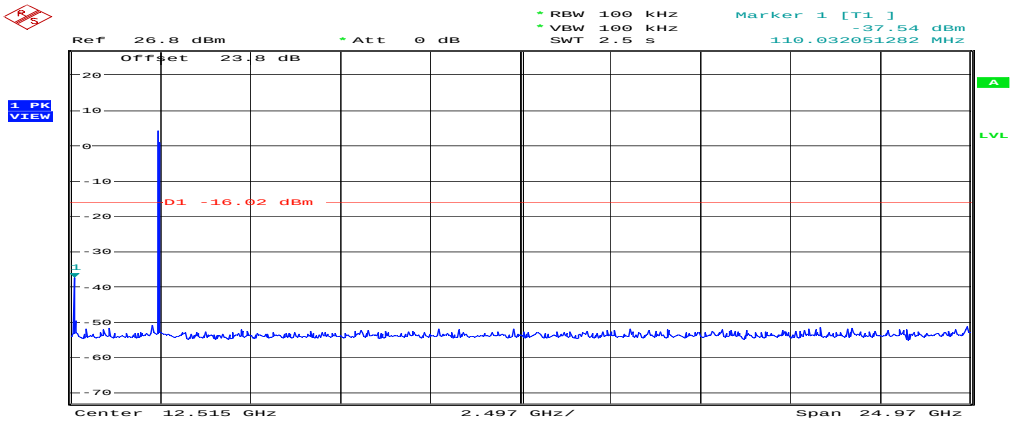
Conducted spurious
802.11b Chain 2 CH1
Date: 27.NOV.2007 16:16:10

802.11 b Chain 2 CH06 2437MHz



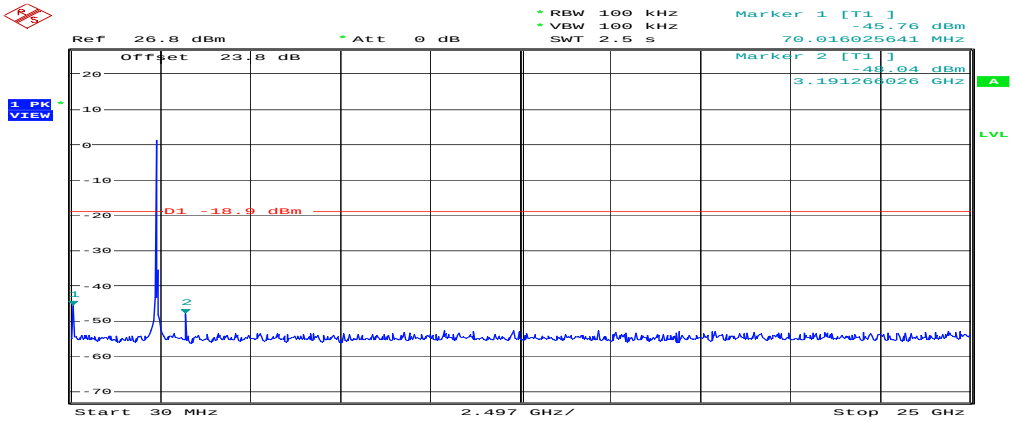
Conducted spurious
802.11b Chain 2 CH6
Date: 27.NOV.2007 16:17:53

802.11 b Chain 2 CH11 2462MHz



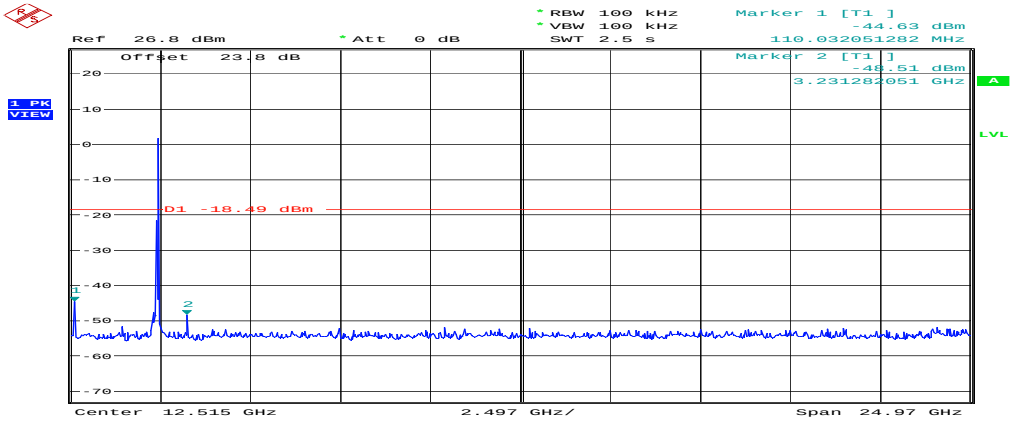
Conducted spurious
802.11b Chain 2 CH11
Date: 27.NOV.2007 16:19:11

802.11 g Chain 0 CH01 2412MHz



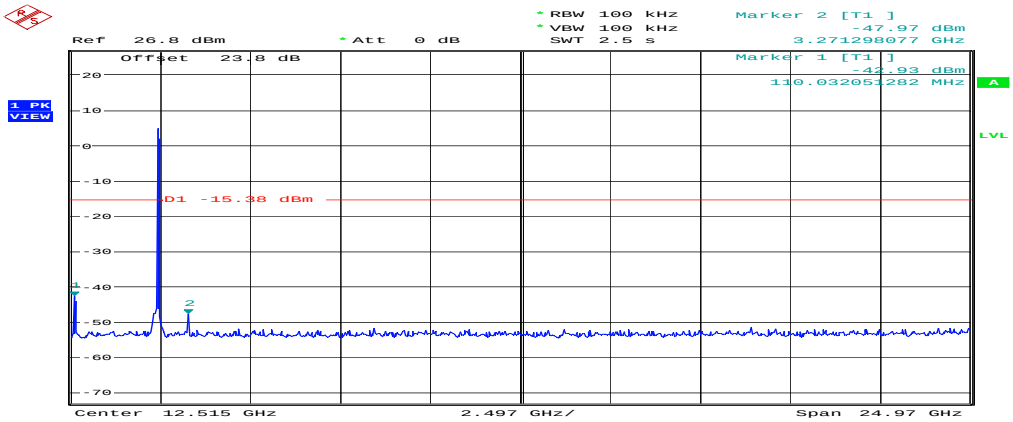
Conducted spurious
802.11 g Chain 0 CH1
Date: 27.NOV.2007 15:56:16

802.11 g Chain 0 CH06 2437MHz



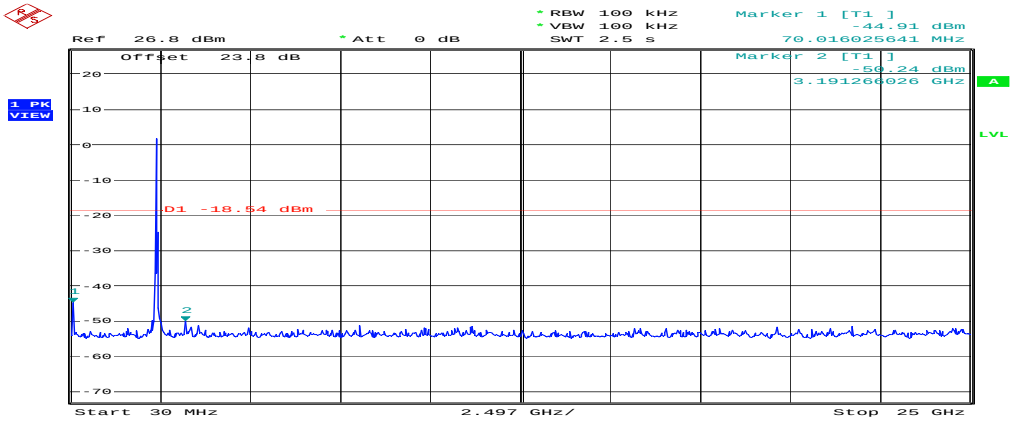
Conducted spurious
802.11 g Chain 0 CH6
Date: 27.NOV.2007 15:51:48

802.11 g Chain 0 CH11 2462MHz



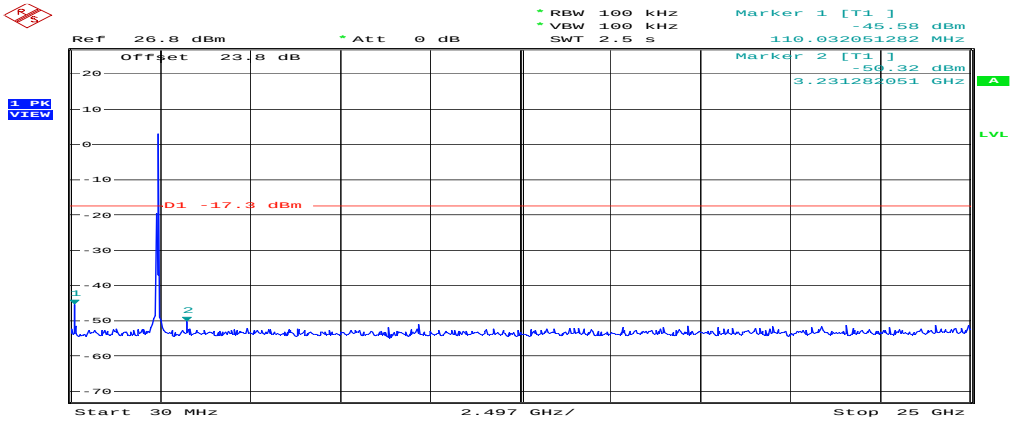
Conducted spurious
802.11 g Chain 0 CH11
Date: 27.NOV.2007 15:50:23

802.11 g Chain 2 CH01 2412MHz



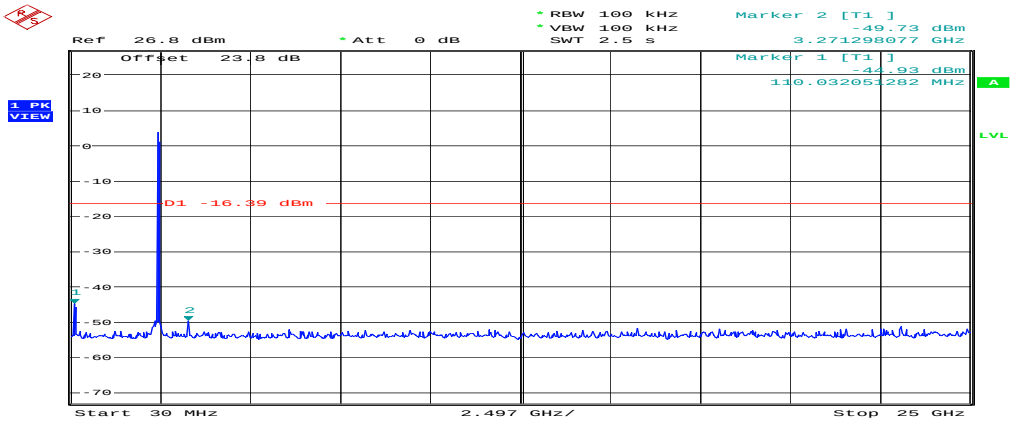
Conducted spurious
802.11g Chain 2 CH1
Date: 27.NOV.2007 16:24:06

802.11 g Chain 2 CH06 2437MHz



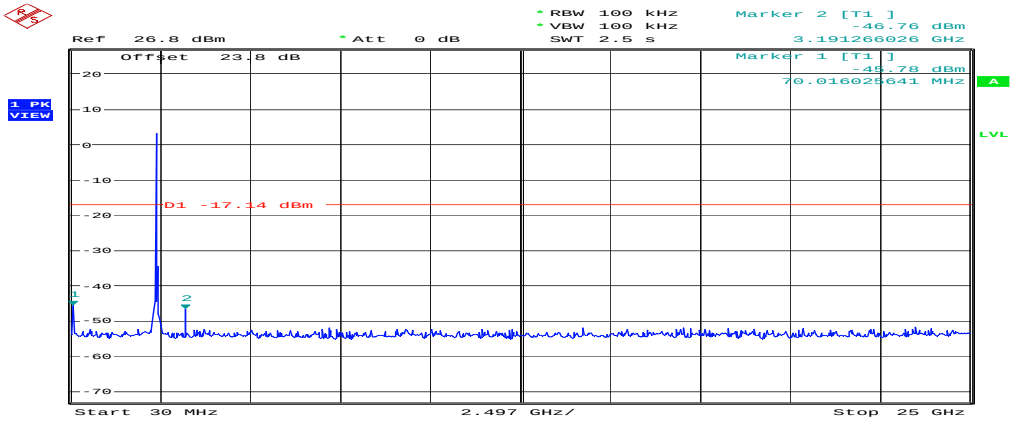
Conducted spurious
802.11g Chain 2 CH6
Date: 27.NOV.2007 16:22:40

802.11 g Chain 2 CH11 2462MHz



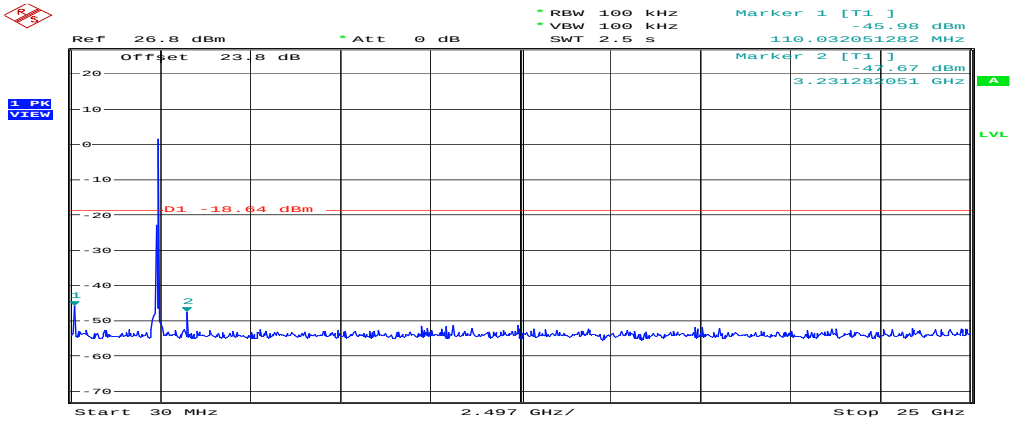
Conducted spurious
802.11g Chain 2 CH11
Date: 27.NOV.2007 16:21:01

802.11 n (HT20) Chain 0 CH01 2412MHz



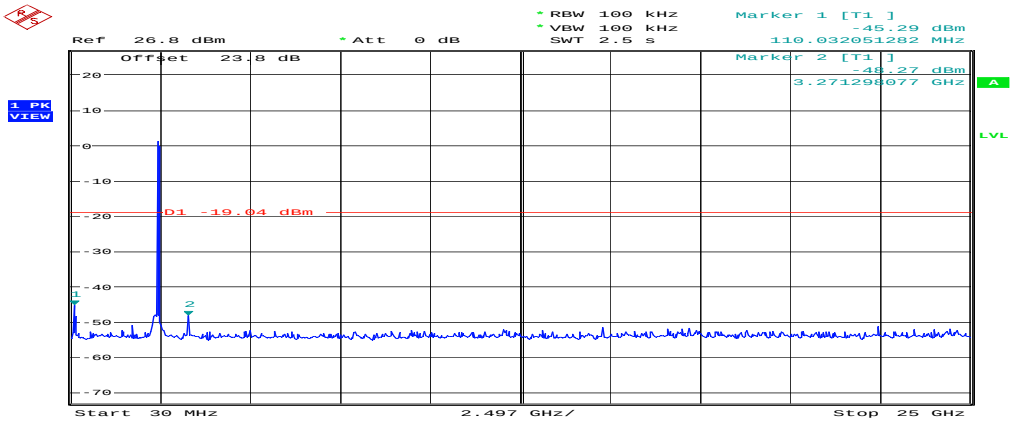
Conducted spurious
802.11n (HT20) Chain 0 CH1
Date: 27.NOV.2007 16:05:03

802.11 n (HT20) Chain 0 CH06 2437MHz



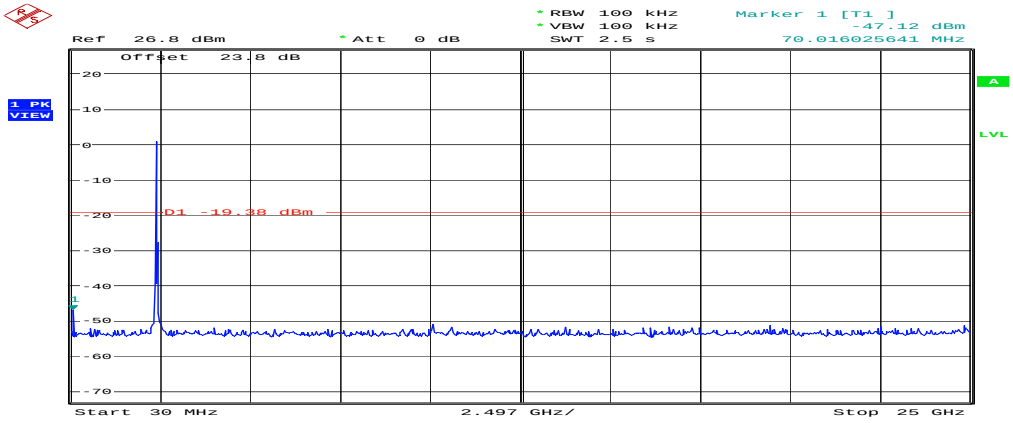
Conducted spurious
802.11n (HT20) Chain 0 CH6
Date: 27.NOV.2007 16:03:50

802.11 n (HT20) Chain 0 CH11 2462MHz



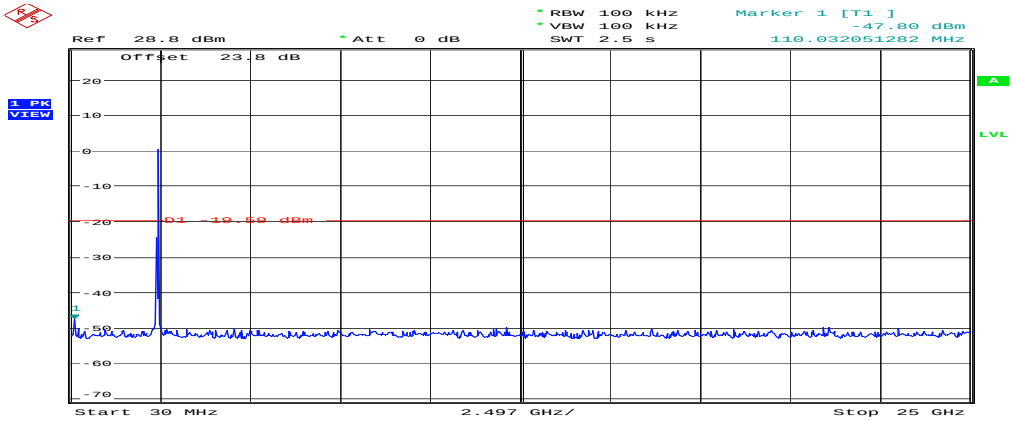
Conducted spurious
802.11n (HT20) Chain 0 CH11
Date: 27.NOV.2007 16:02:37

802.11 n (HT20) Chain 2 CH01 2412MHz



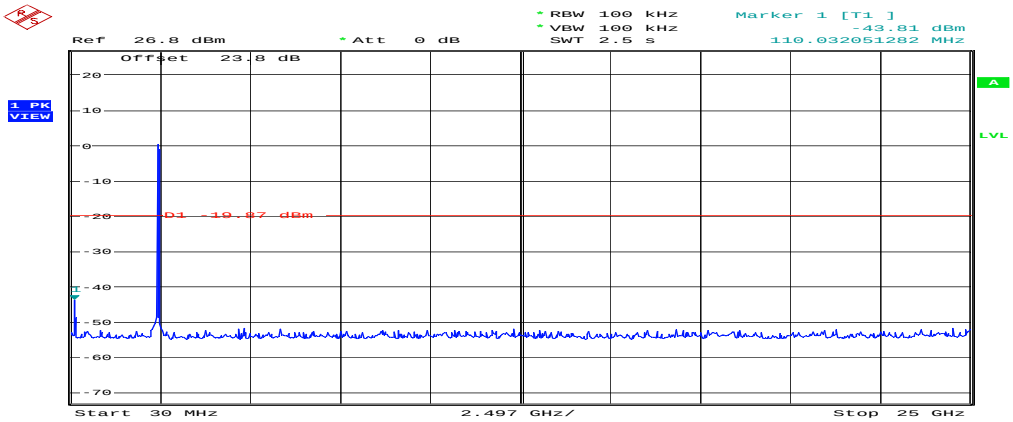
Conducted spurious
802.11n (HT20) Chain 2 CH1
Date: 27.NOV.2007 16:26:20

802.11 n (HT20) Chain 2 CH06 2437MHz



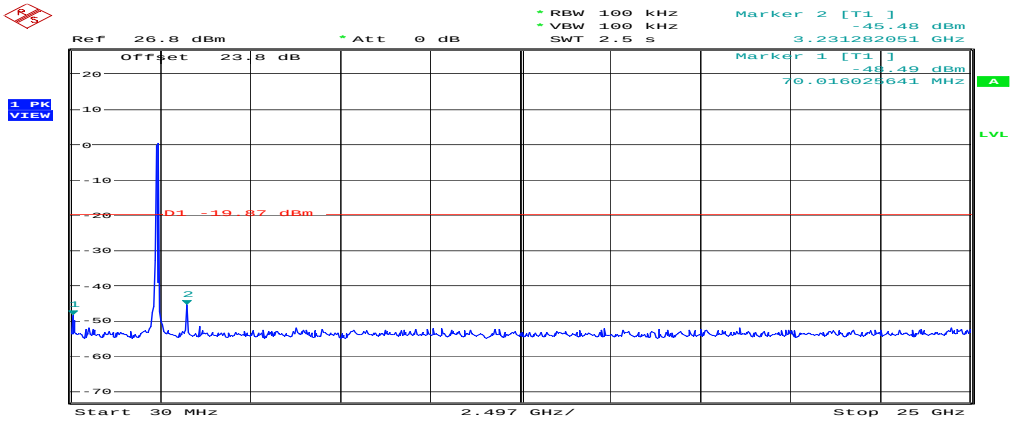
Conducted spurious
802.11n (HT20) Chain 2 CH6
Date: 27.NOV.2007 16:45:14

802.11 n (HT20) Chain 2 CH11 2462MHz



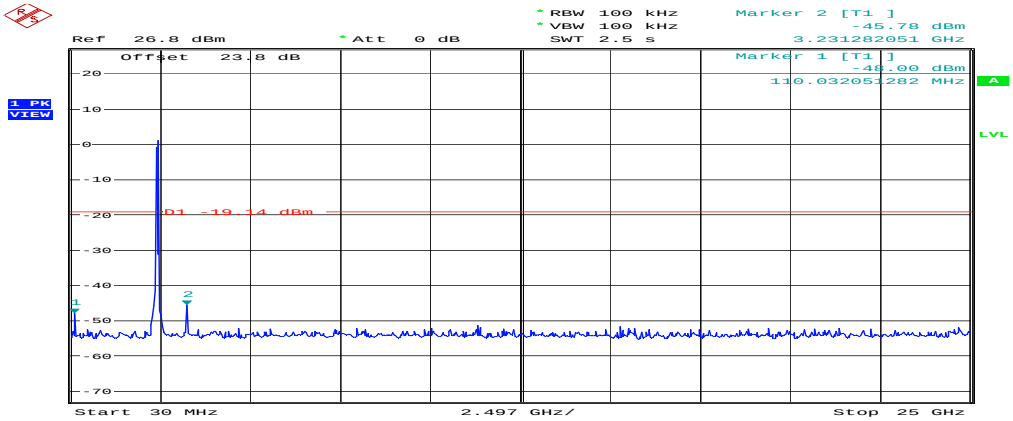
Conducted spurious
802.11n (HT20) Chain 2 CH11
Date: 27.NOV.2007 16:28:52

802.11 n (HT40) Chain 0 CH03 2422MHz



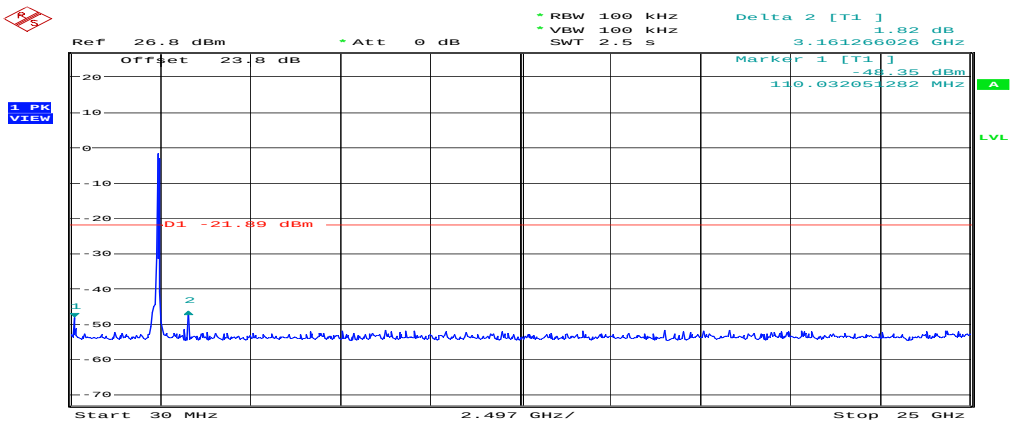
Conducted spurious
802.11n (HT40) Chain 0 CH3
Date: 27.NOV.2007 16:07:32

802.11 n (HT40) Chain 0 CH06 2437MHz



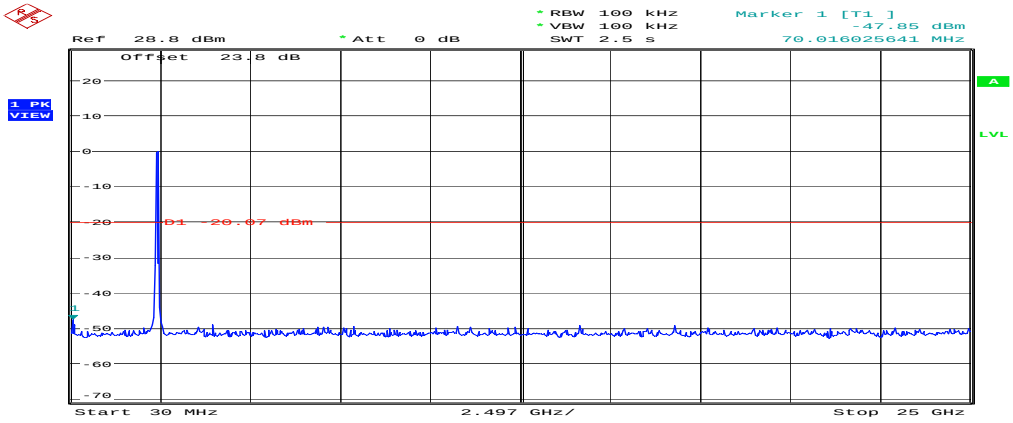
Conducted spurious
802.11n (HT40) Chain 0 CH6
Date: 27.NOV.2007 16:08:49

802.11 n (HT40) Chain 0 CH09 2452MHz



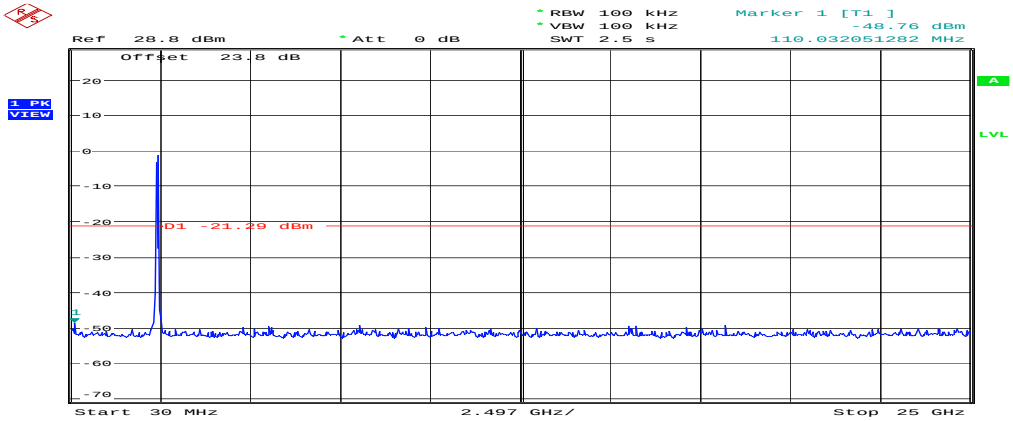
Conducted spurious
802.11n (HT40) Chain 0 CH9
Date: 27.NOV.2007 16:10:37

802.11 n (HT40) Chain 2 CH03 2422MHz



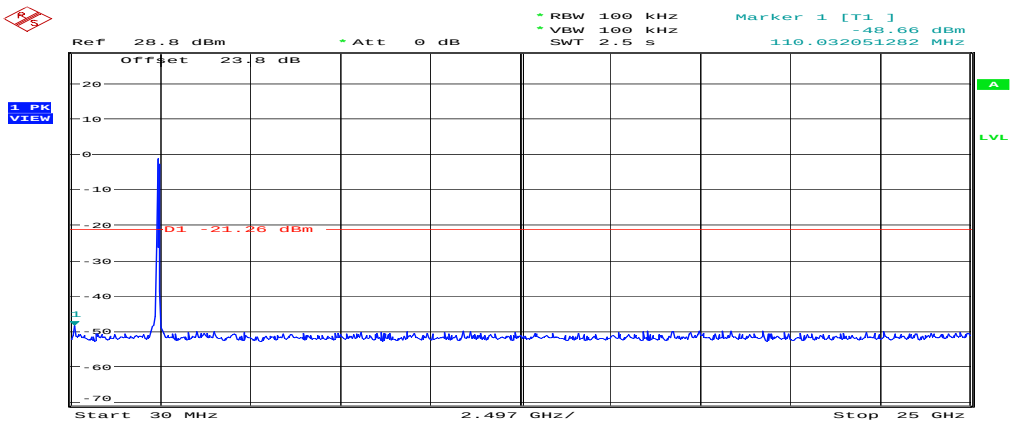
Conducted spurious
802.11n (HT40) Chain 2 CH3
Date: 27.NOV.2007 16:30:45

802.11 n (HT40) Chain 2 CH06 2437MHz



Conducted spurious
802.11n (HT40) Chain 2 CH6
Date: 27.NOV.2007 16:32:07

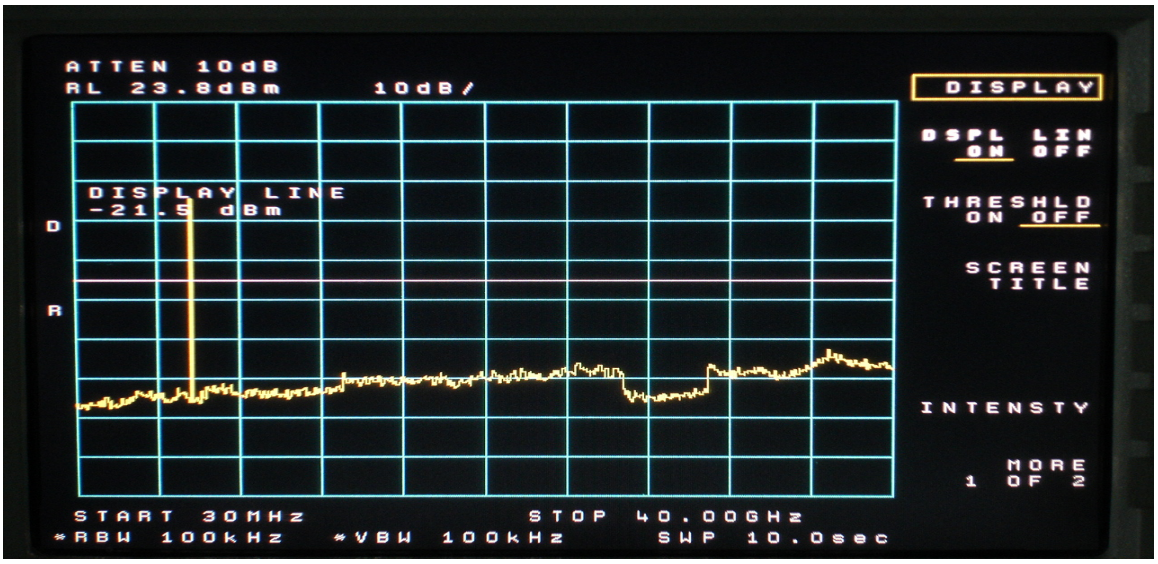
802.11 n (HT40) Chain 2 CH09 2452MHz



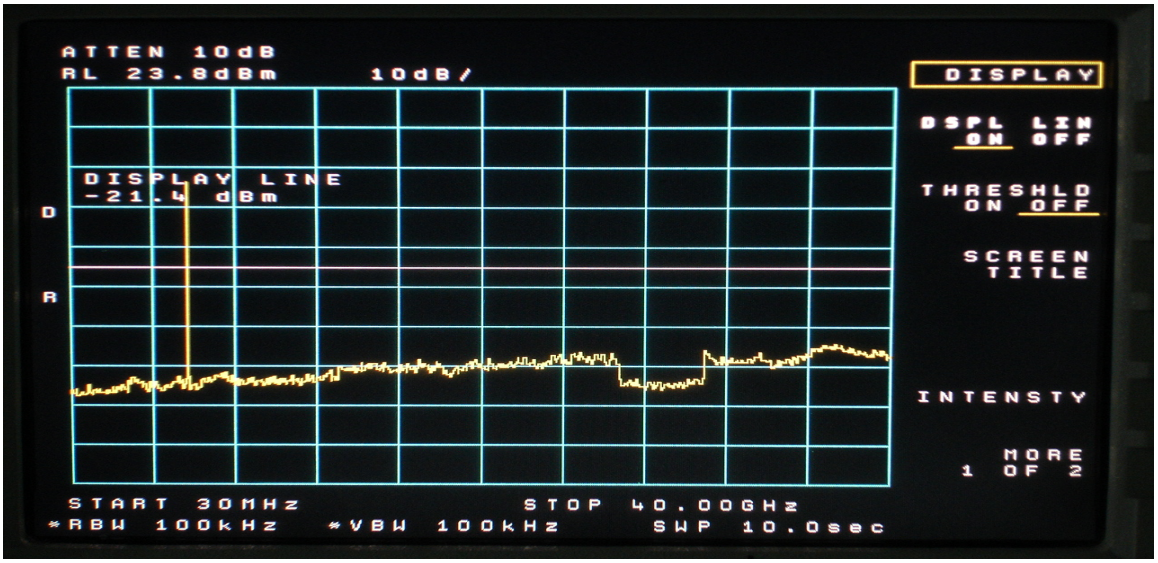
Conducted spurious
802.11n (HT40) Chain 2 CH9
Date: 27.NOV.2007 16:33:06

5G Conducted spurious

802.11a Chain 0 CH149 5745MHz



802.11a Chain 0 CH157 5785MHz



802.11a Chain 0 CH165 5825MHz