FCC RADIO TEST REPORT

according to

47 CFR FCC Part 15 Subpart E § 15.407

Equipment	:	**SpectraGuard Sensor**
Model No.	:	**SS-300-AT**
Brand Name	:	**AirTight Networks**
Filing Type	:	**New Application**
Applicant	:	**AirTight Networks, Inc.** 339 N. Bernardo Avenue, Suite #200 Mountain View, CA 94043
FCC ID	:	**TOR-SS300AT**
Manufacturer	:	**DONG GUAN G-COM COMPUTER CO., LTD** **1st Row Yin Shan Rd., Yin Hwu Industrial Area, Qingxi Town, DongGuan City, Guang Dong, China**
Received Date	:	Apr. 29, 2008
Final Test Date	:	Jun. 13, 2008

Statement

Test result included is only for the 802.11a/n (5150~5350MHz; 5470~5725MHz) Omni-Direction Antenna (3CWE591) of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.4-2003** and **47 CFR FCC Part 15 Subpart E**.

The test equipment used to perform the test is calibrated and traceable to NML/ROC.

Testing Laboratory
1190

SPORTON International Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of This Test Report

Original Issue Date: Mar. 02, 2009

Report No.: FR843032-07AI

■ No additional attachment.

□ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

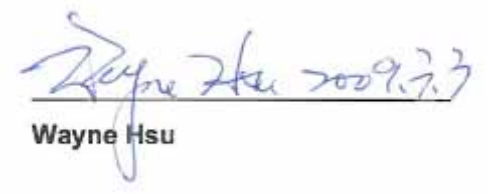
CERTIFICATE OF COMPLIANCE

according to

47 CFR FCC Part 15 Subpart E § 15.407

Equipment : SpectraGuard Sensor
Model No. : SS-300-AT
Brand Name : AirTight Networks
Applicant : AirTight Networks, Inc.
339 N. Bernardo Avenue, Suite #200
Mountain View, CA 94043

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Apr. 29, 2008 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.



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1 SUMMARY OF THE TEST RESULT

Applied Standard: 47 CFR FCC Part 15 Subpart E				
Part	**Rule Section**	**Description of Test**	**Result**	**Under Limit**
3.1	15.207	AC Power Line Conducted Emissions	Complies	8.22 dB
3.2	15.407(a)	26dB Spectrum Bandwidth	Complies	-
3.3	15.407(a)	Maximum Conducted Output Power	Complies	0.32 dB
3.4	15.407(a)	Power Spectral Density	Complies	0.05 dB
3.5	15.407(a)	Peak Excursion	Complies	6.91 dB
3.6	15.407(b)	Radiated Emissions	Complies	3.06 dB
3.7	15.407(b)	Band Edge Emissions	Complies	1.18 dB
3.8	15.407(g)	Frequency Stability	Complies	-
3.9	15.203	Antenna Requirements	Complies	-

Test Items	Uncertainty	Remark
AC Power Line Conducted Emissions	±2.3dB	Confidence levels of 95%
Maximum Conducted Output Power	±0.5dB	Confidence levels of 95%
Power Spectral Density	±0.5dB	Confidence levels of 95%
Peak Excursion	±0.5dB	Confidence levels of 95%
26dB Spectrum Bandwidth / Frequency Stability	$\pm 8.5\times10^{-8}$	Confidence levels of 95%
Radiated Emissions (9kHz~30MHz)	±0.8dB	Confidence levels of 95%
Radiated Emissions (30MHz~1000MHz)	±1.9dB	Confidence levels of 95%
Radiated / Band Edge Emissions (1GHz~18GHz)	±1.9dB	Confidence levels of 95%
Radiated Emissions (18GHz~40GHz)	±1.9dB	Confidence levels of 95%
Temperature	±0.7℃	Confidence levels of 95%
Humidity	±3.2%	Confidence levels of 95%
DC / AC Power Source	±1.4%	Confidence levels of 95%

2 GENERAL INFORMATION

2.1 Product Details

Only the radio detail of IEEE 802.11a/n of Omni-Direction Antenna (3CWE591) is shown in the table below. For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Items	Description
Modulation	See the below table for IEEE 802.11n
Data Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)
Data Rate (Mbps)	See the below table for IEEE 802.11n
Frequency Range	5150~5350MHz; 5470~5725MHz
Channel Band Width (99%)	1TX-11a Band 1: 17.28 MHz ; Band 2: 17.28 MHz ; Band 3: 17.28 MHz 1TX-11n MCS 0 (20MHz) Band 1: 18.24 MHz ; Band 2: 18.24 MHz ; Band 3: 18.24 MHz (40MHz) Band 1: 36.64 MHz ; Band 2: 36.60 MHz ; Band 3: 36.40 MHz
Conducted Output Power	1TX-11a Band 1: 12.29 dBm ; Band 2: 13.81 dBm ; Band 3: 12.93 dBm 1TX-11n MCS 0 (20MHz) Band 1: 12.74 dBm ; Band 2: 14.51 dBm ; Band 3: 13.07 dBm (40MHz) Band 1: 14.68 dBm ; Band 2: 14.09 dBm ; Band 3: 12.11 dBm

2.2 Accessories

Power	Brand	Model	Rating
Switching Adapter	DVE	DSA-15P-12 US 120150	INPUT: 100-240V~ 50/60Hz 0.7A OUTPUT: 12V 1.25A
Switching Adapter	DVE	DSA-20D-12 2 120150	INPUT: 100-240V~ 50/60Hz 0.7A OUTPUT: 12V 1.25A

2.3 Table for Filed Antenna

Antenna & Bandwidth

Antenna Mode	Single Chain	
Bandwidth Mode	20 MHz	40 MHz
802.11b	V	X
802.11g	V	X
802.11n(2.4GHz)	V	V
802.11a (5150~5350MHz; 5470~5725MHz)	V	X
802.11a (5725~5850MHz)	V	X
802.11n (5150~5350MHz; 5470~5725MHz)	V	V
802.11n (5725~5850MHz)	V	V

Ant.	Antenna Type	Model Name	Product description	2.4/5 GHz Gain (dBi)	Tx/Rx mode	REMARK
1	Omni Ant.	3CWE591	3Com® 6/8dBi Dual-Band Omni Antenna	6/8	1T1R/ 1T1R concurrent	Main Ant. for test
2	Omni Ant.	S24513BPX	CUSHCRAFT 2.4~2.5& 4.9~5.9 GHz DUAL BAND OMNI ANTENNA	6/6.5	1T1R/ 1T1R concurrent	-
3	Omni Ant.	SS-200-AT-AN-30	Airtight 2.4~2.5& 4.9~5.9 GHz Dual-band Omnidirectional Indoor/outdoor antenna	6/6.5	1T1R/ 1T1R concurrent	-
4	Omni Ant.	TGX-102XNXXX	Joymax Base Station Antenna	6/6	1T1R/ 1T1R concurrent	-
5	Panel Ant.	3CWE596	3Com® 18/20dBi Dual-Band Panel Antenna	18/20	2T2R/ 2T2R concurrent	Main Ant. for test
6	Panel Ant.	3CWE598	3Com® 8/10dBi Dual-Band Panel Antenna	8/10	2T2R/ 2T2R concurrent	-
7	Panel Ant.	SL24513P12SMF	CUSHCRAFT Tri-mode, dual band 802.11b/a/g ceiling mounted Omnidirectional panel antenna	3/3	2T2R/ 2T2R concurrent	-
8	Panel Ant.	SS-200-AT-AN-10	Airtight dual band 802.11b/a/g Omnidirectional Indoor panel antenna	3/3	2T2R/ 2T2R concurrent	-
9	Monopole Ant.	3CWE590	3Com 2dBi Dual-Band Omni Antenna Kit	2/2	2T3R	Main Ant. for test
10	PCB Ant.	TFF-A015MPAX-361	Integrated PCB Antenna	3/3	2T3R	Main Ant. for test

* There are four types of antenna in this project. Antenna 1, 5, 9,10 are the main antenna for test, according to the standard, the same type antenna with the highest gain could choose to test.

*For 3CWE591, the “1T1R concurrent" mode means it can transmit 2.4 GHz signal through one antenna and 5GHz signal through another antenna at the same time.

*For 3CWE596, the “2T2R concurrent" mode means it can transmit 2.4 GHz signal through 2 antennas and 5GHz signal through other 2 antennas at the same time.

Antenna Cable Model Name	Product description	2.4/5 GHz Cable Loss (dB)
3CWE580	3Com® Ultra Low Loss 6-Foot Antenna Cable	-0.6/-1.2
3CWE581	3Com® Ultra Low Loss 20-Foot Antenna Cable	-2/-4
3CWE582	3Com® Ultra Low Loss 50-Foot Antenna Cable	-5/-10

Omni-Direction Antenna (3CWE591)

Ant.	Antenna Type	Connector	Gain (dBi)		Remark
			2.4G	5G	
A	Omni-Direction Antenna	N Type	6	8	TX / RX

IEEE 802.11n Modulation Scheme

MCS Index	Nss	Modulation	R	NBPSC	NCBPS		NDBPS		Data rate(Mbps) 800nsGI	
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	486	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	guard interval

2.4 Table for Carrier Frequencies

Frequency Allocation

For 802.11a, 802.11n (20MHz): Use channel 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136and 140.

For 802.11n (40MHz): Use channel 38, 46, 54, 62, 102, 110, 118, 126 and 134.

Frequency Band	Channel No.	Frequency
5150~5250 MHz Band 1	36	5180 MHz
	38	5190 MHz
	40	5200 MHz
	44	5220 MHz
	46	5230 MHz
	48	5240 MHz

Frequency Band	Channel No.	Frequency
5250~5350 MHz Band 2	52	5260 MHz
	54	5270 MHz
	56	5280 MHz
	60	5300 MHz
	62	5310 MHz
	64	5320 MHz

Frequency Band	Channel No.		Frequency	
5470~5725 MHz Band 3	100	5500 MHz	120	5600 MHz
	102	5510 MHz	124	5620 MHz
	104	5520 MHz	126	5630 MHz
	108	5540 MHz	128	5640 MHz
	110	5550 MHz	132	5660 MHz
	112	5560 MHz	134	5670 MHz
	116	5580 MHz	136	5680 MHz
	118	5590 MHz	140	5700 MHz

2.5 Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible Configuration for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	Antenna
AC Power Conducted Emission	See the note	Auto	-	-
Max. Conducted Output Power	11a Band 1~3/BPSK	6Mbps	36/40/48/52/56 /64/100/116/120/140	A
	11n Band 1~3/BPSK MCS 0 (20MHz)	6.5Mbps		
	11n Band 1~3/BPSK MCS 0 (40MHz)	13.5Mbps	38/46/54/62/102/134	
26dB Spectrum Bandwidth 99% Occupied Bandwidth Measurement Power Spectral Density Peak Excursion	11a Band 1~3/BPSK	6Mbps	36/40/48/52/56 /64/100/116/120/140	A
	11n Band 1~3/BPSK MCS 0 (20MHz)	6.5Mbps		
	11n Band 1~3/BPSK MCS 0 (40MHz)	13.5Mbps	38/46/54/62/102/134	
Radiated Emission Below 1GHz	See the note	Auto	-	-
Radiated Emission Above 1GHz Band Edge Emission	11a Band 1~3/BPSK	6Mbps	36/40/48	A
	11n Band 1~3/BPSK MCS 0 (20MHz)	6.5Mbps	36/40/48	
	11n Band 1~3/BPSK MCS 0 (40MHz)	13.5Mbps	38/46	
Frequency Stability	11a Band 1~3/BPSK	6Mbps	40/100	A

Note: For EMI test, the following modes were tested:

AC Power Conducted Emission

LAN 1Gbps (Power Supply: POE20U-560(G) -R)

LAN 1Gbps (Adapter: DSA-20D-12 2 120150)

LAN 1Gbps (Adapter: DSA-15P-12 US 120150)

Radiated Emissions Below 1GHz

Power Supply: POE20U-560(G) -R

There are performed the worst test result; it was reported as final data.

2.6 Table for Testing Locations

Test Site No.	Site Category	Location	FCC Reg. No.	IC File No.	VCCI Reg. No
03CH03-HY	SAC	Hwa Ya	101377	IC 4086B-1	-
CO01-LK	Conduction	Lin Kou	93596	IC 4086C-1	-
TH01-HY	OVEN Room	Hwa Ya	-	-	-

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC); Fully Anechoic Chamber (FAC).

2.7 Table for Supporting Units

Support Unit	Brand	Model	FCC ID
P.C. (Remote Workstation)	COMPAQ	Evo D380mx	DoC
Notebook (Remote Workstation)	DELL	PP01L	DoC
Monitor (Remote Workstation)	COMPAQ	S510	DoC
Keyboard (PS2) (Remote Workstation)	COMPAQ	6511-VA	DoC
Mouse (PS2) (Remote Workstation)	COMPAQ	M-S69	JNZ211443
Notebook (Remote Workstation)	DELL	D400	DoC
Switching Power Supply	PHIHONG	POE20U-560(G) -R	-

2.8 Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. 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.

Power Parameters of IEEE 802.11a

Test Software Version	ART 0.5 BUILD#25		
Frequency	5180 MHz	5200 MHz	5240 MHz
IEEE 802.11a(20MHz)	14.5	14.5	14.5
Frequency	5260 MHz	5280 MHz	5320 MHz
IEEE 802.11a	15	13.5	13
Frequency	5500 MHz	5580 MHz	5600 MHz
IEEE 802.11a	13	12.5	15
Frequency	5700 MHz		
IEEE 802.11a	14		

Power Parameters of IEEE 802.11n (20MHz)

Test Software Version	ART 0.5 BUILD#25		
Frequency	5180 MHz	5200 MHz	5240 MHz
IEEE 802.11n	14.5	14.5	14
Frequency	5260 MHz	5280 MHz	5320 MHz
IEEE 802.11n	16	14	12.5
Frequency	5500 MHz	5580 MHz	5600 MHz
IEEE 802.11n	13.5	12.5	15
Frequency	5700 MHz		
IEEE 802.11n	13.5		

Power Parameters of IEEE 802.11n (40MHz)

Test Software Version	ART 0.5 BUILD#25		
Frequency	5190 MHz	5230 MHz	5270 MHz
IEEE 802.11n	8	16.5	15.5
Frequency	5310 MHz	5510 MHz	5670 MHz
IEEE 802.11n	8.5	13.5	14.5

2.9 EUT Operation during Test

An executive program, EMCTEST.EXE under WIN XP, which generates a complete line of continuously repeating " H " pattern was used as the test software.

The P.C. & NB sends " H " messages to the panel, and the panel displays "H " patterns on the screen.

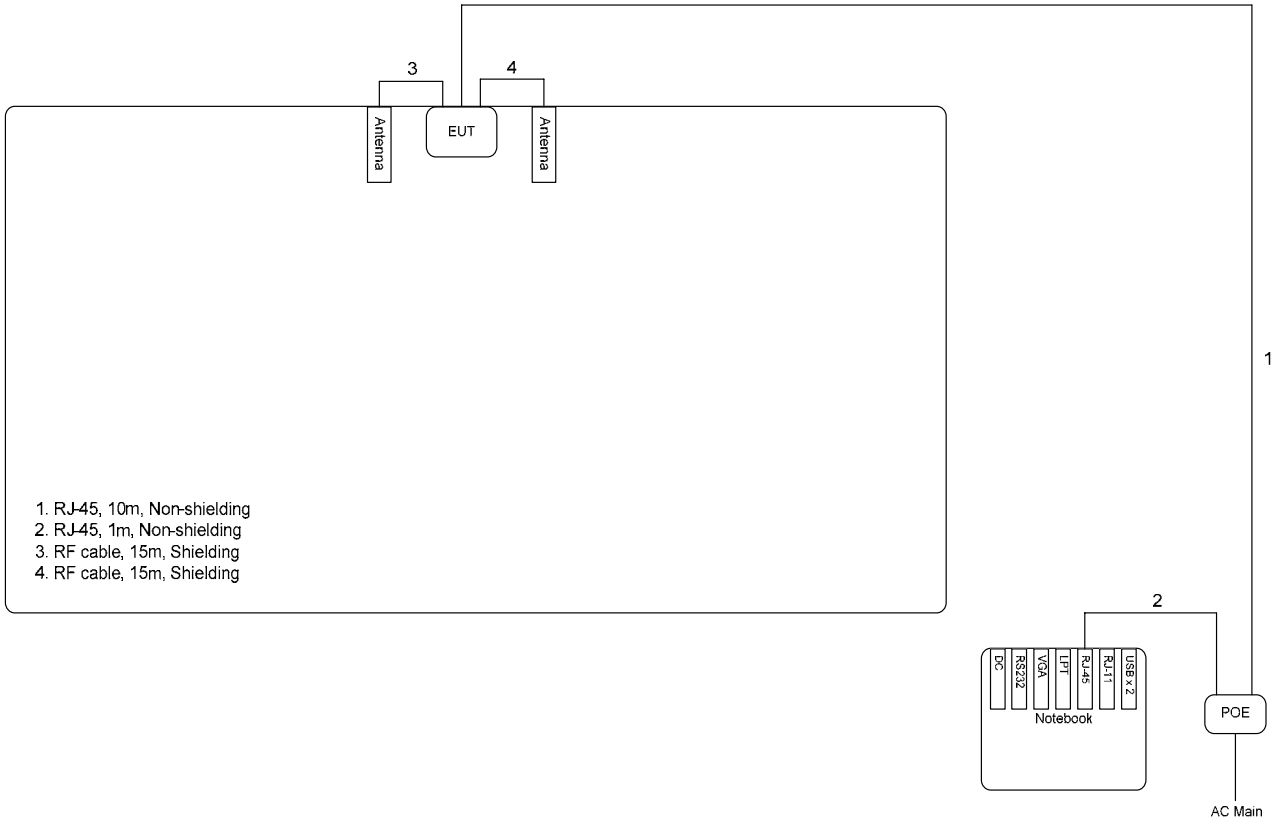
Executed " ART 0.5 BUILD#25 " to keep transmitting signals at fixed frequency.

Executed " ping.exe " to link with the remote workstation to receive and transmit data by LAN and WLAN.

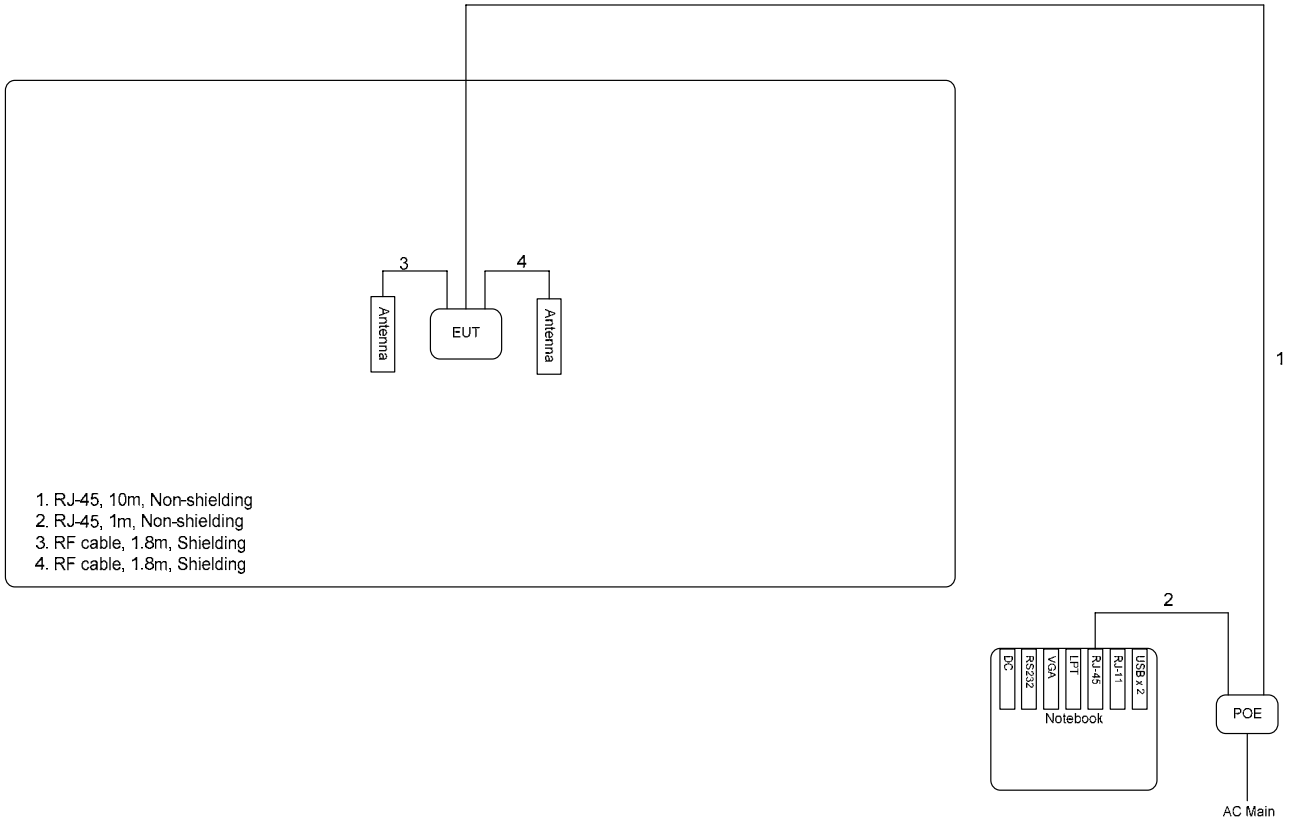
2.10 Test Configuration

2.10.1 Radiation Emissions Test Configuration

For radiated emissions 9kHz~1GHz



For radiated emissions above 1GHz



3 TEST RESULT

3.1 AC Power Line Conducted Emissions Measurement

3.1.1 Limit

For this product that is designed to connect to the 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 below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

3.1.2 Measuring Instruments and Setting

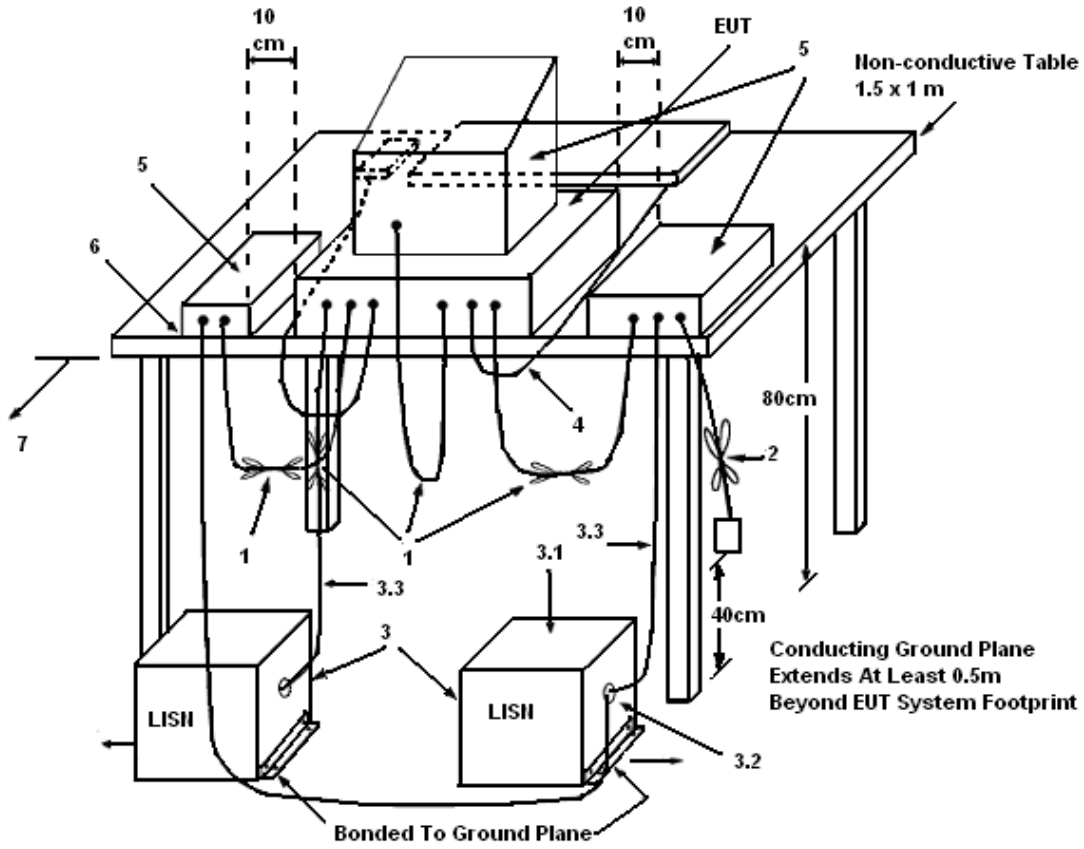
Please refer to section 4 of equipments list in this report. The following table is the setting of the receiver.

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

3.1.3 Test Procedures

1. Configure the EUT according to ANSI C63.4. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 KHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

3.1.4 Test Setup Layout



LEGEND:

(1) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

(2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

(3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference ground plane.

(3.1) All other equipment powered from additional LISN(s).

(3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

(3.3) LISN at least 80 cm from nearest part of EUT chassis.

(4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

(5) Non-EUT components of EUT system being tested.

(6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

(7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

3.1.5 Test Deviation

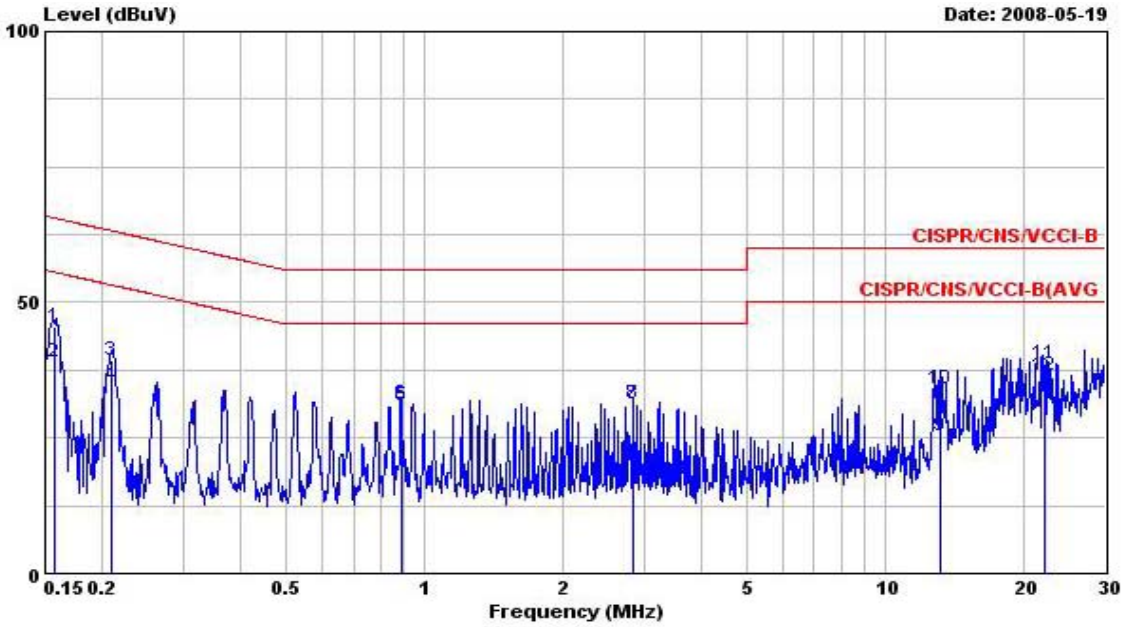
There is no deviation with the original standard.

3.1.6 EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

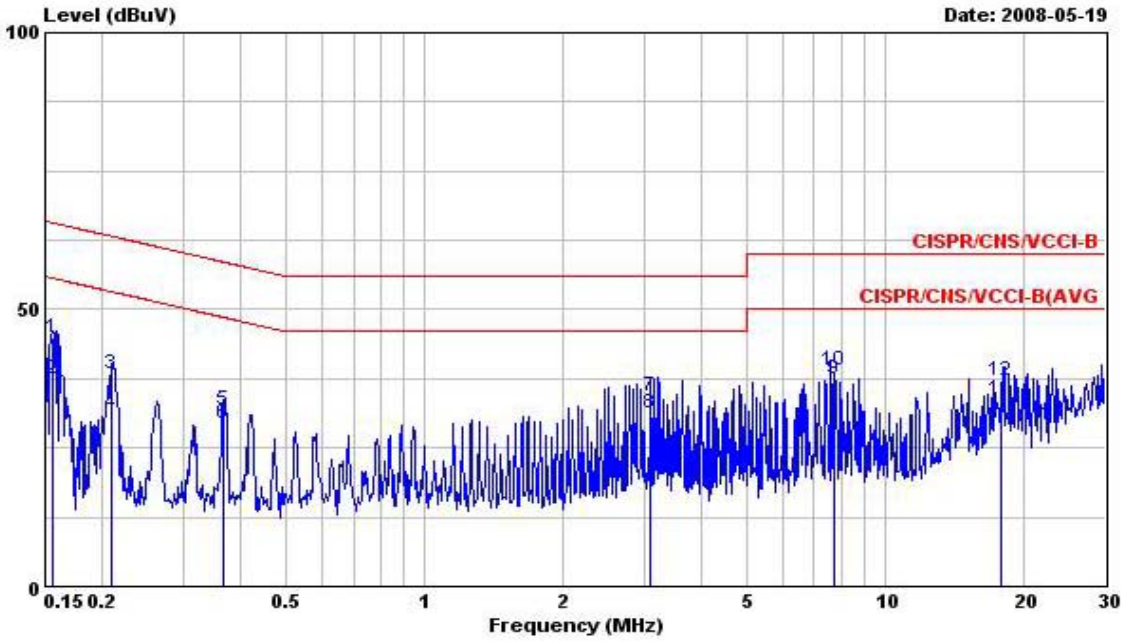
3.1.7 Results of AC Power Line Conducted Emissions Measurement

Test date	May 19, 2008	**Test Site No.**	CO01-LK
Temperature	25℃	**Humidity**	49%
Test Engineer	Peter	**Phase**	Line
Configuration	LAN 1Gbps (Power Supply: POE20U-560(G) -R)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.157	45.47	-20.13	65.60	45.33	0.10	0.04	QP
2	0.157	39.05	-16.55	55.60	38.91	0.10	0.04	Average
3	0.209	39.43	-23.81	63.24	39.28	0.10	0.05	QP
4	0.209	34.77	-18.47	53.24	34.62	0.10	0.05	Average
5	0.890	30.93	-25.07	56.00	30.73	0.10	0.10	QP
6	0.890	31.37	-14.63	46.00	31.17	0.10	0.10	Average
7	2.826	31.11	-24.89	56.00	30.79	0.20	0.12	QP
8	2.826	31.36	-14.64	46.00	31.04	0.20	0.12	Average
9	13.137	25.24	-24.76	50.00	24.30	0.57	0.37	Average
10	13.137	34.21	-25.79	60.00	33.27	0.57	0.37	QP
11	22.190	38.55	-21.45	60.00	37.28	0.85	0.42	QP
12	22.190	36.48	-13.52	50.00	35.21	0.85	0.42	Average

Test date	May 19, 2008	**Test Site No.**	CO01-LK
Temperature	21℃	**Humidity**	62%
Test Engineer	Steven	**Phase**	Neutral
Configuration	LAN 1Gbps (Power Supply: POE20U-560(G) -R)		

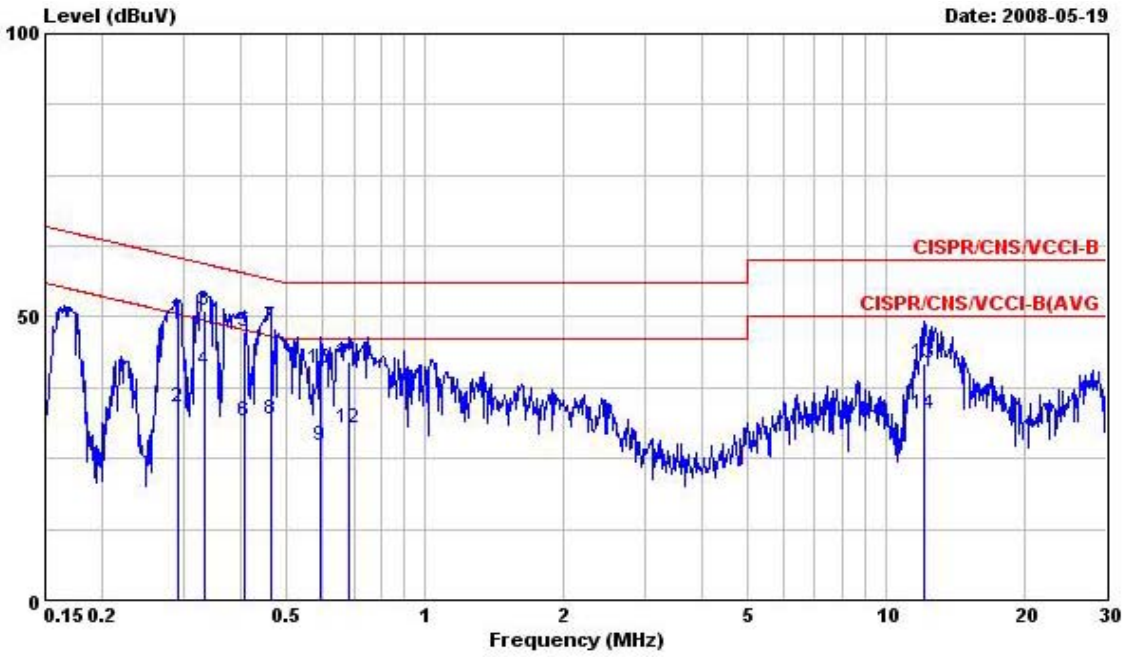


	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.156	44.77	-20.90	65.67	44.63	0.10	0.04	QP
2	0.156	37.35	-18.32	55.67	37.21	0.10	0.04	Average
3	0.209	38.52	-24.72	63.24	38.37	0.10	0.05	QP
4	0.209	31.35	-21.89	53.24	31.20	0.10	0.05	Average
5	0.367	31.95	-26.62	58.57	31.81	0.10	0.04	QP
6	0.367	29.48	-19.09	48.57	29.34	0.10	0.04	Average
7	3.090	34.23	-21.77	56.00	33.95	0.16	0.12	QP
8	3.090	31.29	-14.71	46.00	31.01	0.16	0.12	Average
9 @	7.702	37.37	-12.63	50.00	36.77	0.34	0.26	Average
10	7.702	38.96	-21.04	60.00	38.36	0.34	0.26	QP
11	17.763	33.61	-16.39	50.00	32.52	0.72	0.37	Average
12	17.763	37.25	-22.75	60.00	36.16	0.72	0.37	QP

Note:

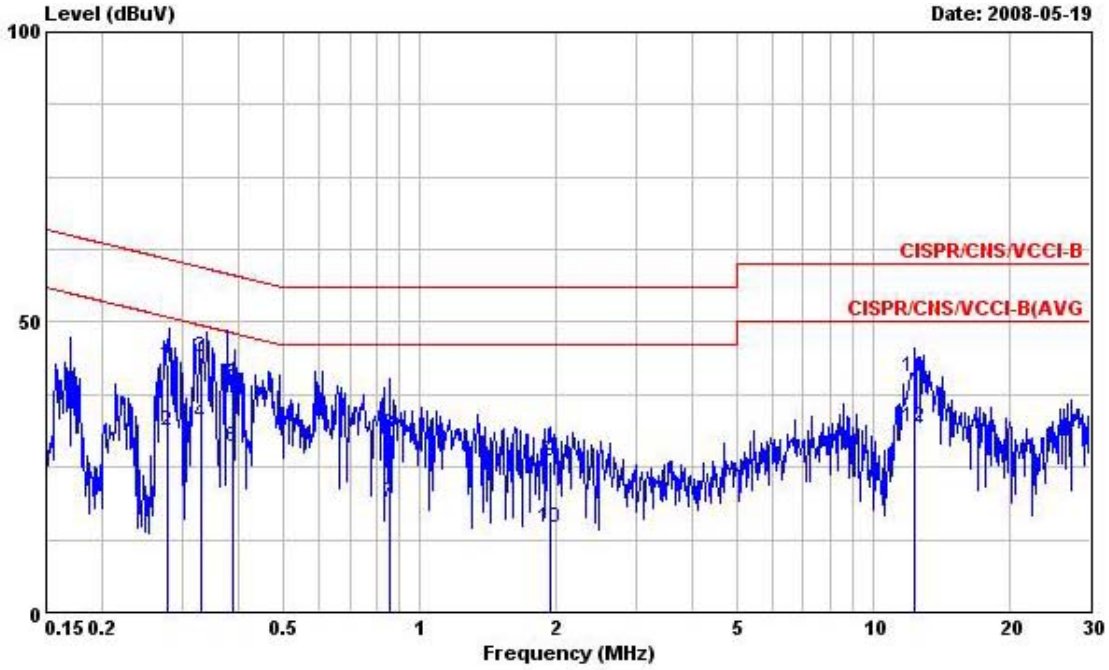
Level = Read Level + LISN Factor + Cable Loss.

Test date	May 19, 2008	**Test Site No.**	CO01-LK
Temperature	25℃	**Humidity**	49%
Test Engineer	Peter	**Phase**	Line
Configuration	LAN 1Gbps (Adapter: DSA-20D-12 2 120150)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.292	49.69	-10.78	60.47	49.55	0.10	0.04	QP
2	0.292	33.92	-16.55	50.47	33.78	0.10	0.04	Average
3	0.333	51.04	-8.35	59.39	50.90	0.10	0.04	QP
4	0.333	40.54	-8.85	49.39	40.40	0.10	0.04	Average
5	0.406	47.49	-10.24	57.73	47.35	0.10	0.04	QP
6	0.406	31.60	-16.13	47.73	31.46	0.10	0.04	Average
7	0.464	48.40	-8.22	56.62	48.25	0.10	0.05	QP
8	0.464	31.92	-14.70	46.62	31.77	0.10	0.05	Average
9	0.592	27.26	-18.74	46.00	27.09	0.10	0.07	Average
10	0.592	41.01	-14.99	56.00	40.84	0.10	0.07	QP
11	0.686	42.10	-13.90	56.00	41.92	0.10	0.08	QP
12	0.686	30.32	-15.68	46.00	30.14	0.10	0.08	Average
13	12.120	41.88	-18.12	60.00	40.98	0.55	0.35	QP
14	12.120	32.93	-17.07	50.00	32.03	0.55	0.35	Average

Test date	May 19, 2008	Test Site No.	CO01-LK
Temperature	21℃	Humidity	62%
Test Engineer	Steven	Phase	Neutral
Configuration	LAN 1Gbps (Adapter: DSA-20D-12 2 120150)		

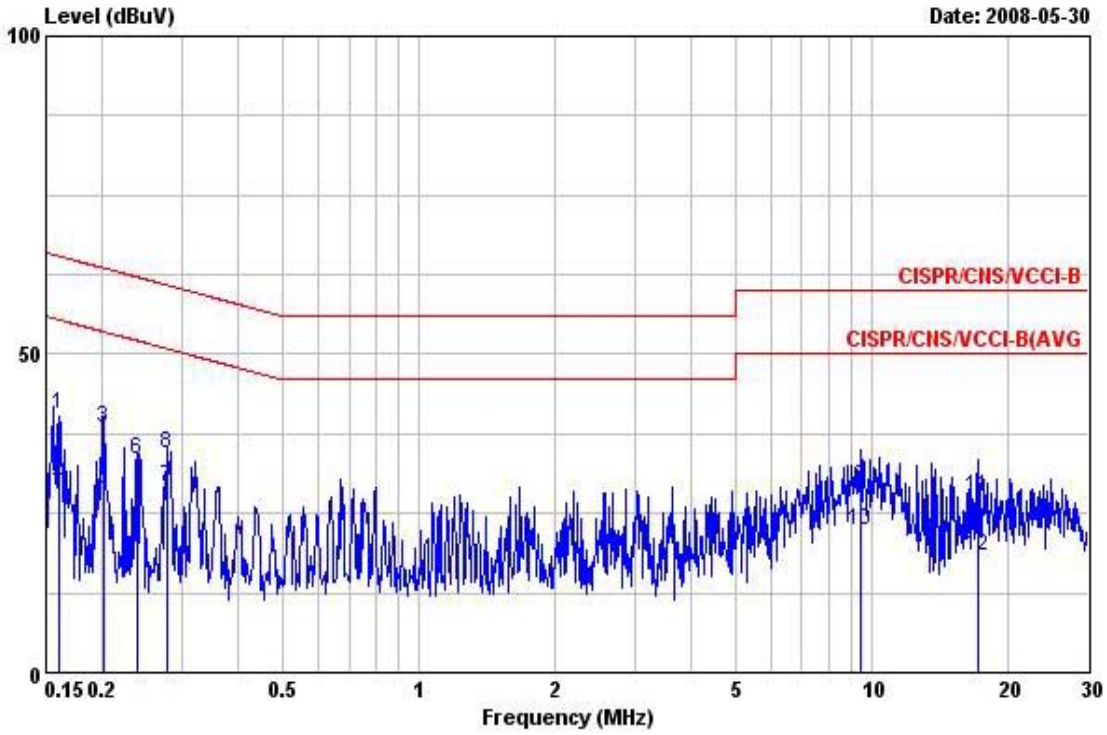


	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.279	42.61	-18.24	60.85	42.46	0.10	0.05	QP
2	0.279	31.28	-19.57	50.85	31.13	0.10	0.05	Average
3	0.330	43.90	-15.55	59.45	43.76	0.10	0.04	QP
4	0.330	32.40	-17.05	49.45	32.26	0.10	0.04	Average
5	0.386	39.37	-18.78	58.15	39.23	0.10	0.04	QP
6	0.386	28.33	-19.82	48.15	28.19	0.10	0.04	Average
7	0.862	18.91	-27.09	46.00	18.71	0.10	0.10	Average
8	0.862	30.63	-25.37	56.00	30.43	0.10	0.10	QP
9	1.940	25.86	-30.14	56.00	25.63	0.10	0.13	QP
10	1.940	14.62	-31.38	46.00	14.39	0.10	0.13	Average
11	12.320	40.46	-19.54	60.00	39.60	0.50	0.36	QP
12	12.320	31.97	-18.03	50.00	31.11	0.50	0.36	Average

Note:

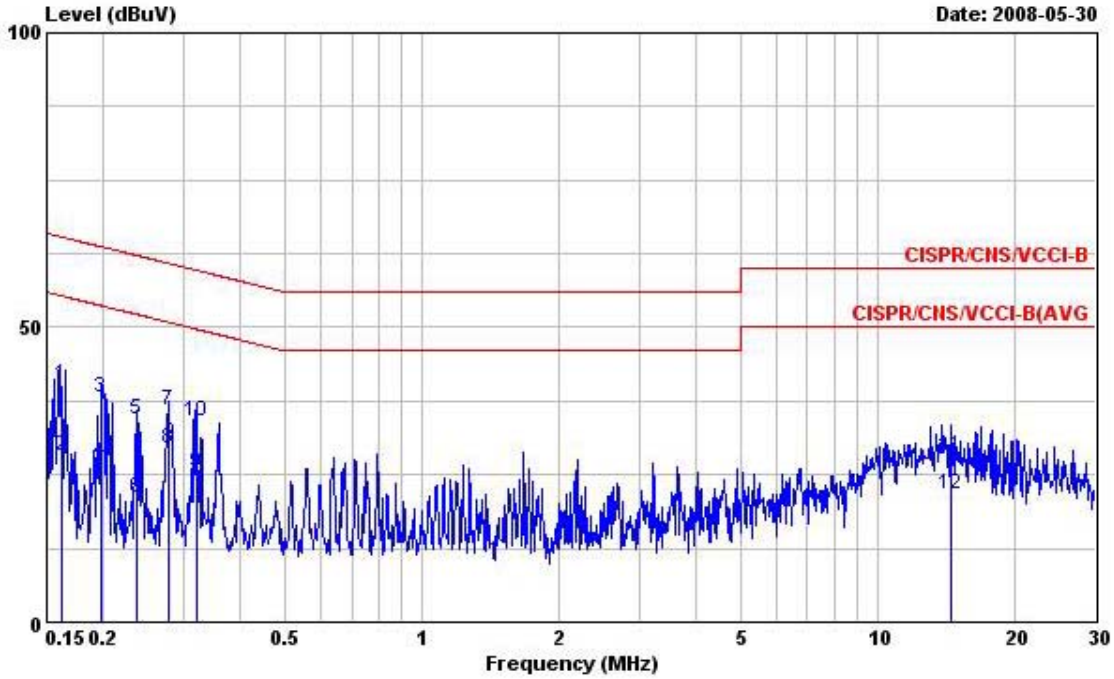
Level = Read Level + LISN Factor + Cable Loss.

Test date	May 30, 2008	**Test Site No.**	CO01-LK
Temperature	25℃	**Humidity**	49%
Test Engineer	Peter	**Phase**	Line
Configuration	LAN 1Gbps (Adapter: DSA-15P-12 US 120150)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.160	40.52	-24.95	65.47	40.38	0.10	0.04	QP
2	0.160	29.94	-25.53	55.47	29.80	0.10	0.04	Average
3	0.201	38.37	-25.21	63.58	38.22	0.10	0.05	QP
4	0.201	28.26	-25.32	53.58	28.11	0.10	0.05	Average
5	0.239	21.97	-30.16	52.13	21.82	0.10	0.05	Average
6	0.239	33.31	-28.82	62.13	33.16	0.10	0.05	QP
7	0.279	29.02	-21.83	50.85	28.87	0.10	0.05	Average
8	0.279	34.22	-26.63	60.85	34.07	0.10	0.05	QP
9	9.404	29.22	-30.78	60.00	28.43	0.48	0.31	QP
10	9.404	22.43	-27.57	50.00	21.64	0.48	0.31	Average
11	17.139	27.41	-32.59	60.00	26.35	0.69	0.37	QP
12	17.139	18.41	-31.59	50.00	17.35	0.69	0.37	Average

Test date	May 30, 2008	**Test Site No.**	CO01-LK
Temperature	21℃	**Humidity**	62%
Test Engineer	Steven	**Phase**	Neutral
Configuration	LAN 1Gbps (Adapter: DSA-15P-12 US 120150)		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.161	40.28	-25.11	65.39	40.14	0.10	0.04	QP
2	0.161	28.05	-27.34	55.39	27.91	0.10	0.04	Average
3	0.197	38.21	-25.54	63.75	38.06	0.10	0.05	QP
4	0.197	27.36	-26.39	53.75	27.21	0.10	0.05	Average
5	0.237	34.35	-27.85	62.20	34.20	0.10	0.05	QP
6	0.237	21.01	-31.19	52.20	20.86	0.10	0.05	Average
7	0.277	35.93	-24.98	60.91	35.78	0.10	0.05	QP
8	0.277	29.38	-21.53	50.91	29.23	0.10	0.05	Average
9	0.319	25.28	-24.45	49.73	25.14	0.10	0.04	Average
10	0.319	34.12	-25.61	59.73	33.98	0.10	0.04	QP
11	14.505	28.03	-31.97	60.00	27.07	0.58	0.38	QP
12	14.505	21.52	-28.48	50.00	20.56	0.58	0.38	Average

Note:

Level = Read Level + LISN Factor + Cable Loss.

3.2 99% Occupied Bandwidth Measurement

3.2.1 Limit

No restriction limits. But resolution bandwidth within band edge measurement is 1% of the 99% occupied bandwidth.

3.2.2 Measuring Instruments and Setting

Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RB	300 kHz
VB	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.2.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
2. The resolution bandwidth of 300 kHz and the video bandwidth of 1000 kHz were used.
3. Measured the spectrum width with power higher than 26dB below carrier.

3.2.4 Test Setup Layout

3.2.5 Test Deviation

There is no deviation with the original standard.

3.2.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.2.7 Test Result of 99% Occupied Bandwidth

Test date	Jun. 13, 2008	**Test Site No.**	TH01-HY
Temperature	27℃	**Humidity**	55%
Test Engineer	Sam	**Configuration**	802.11a/n

Configuration of IEEE 802.11a

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.16	16.96
40	5200 MHz	24.48	17.28
48	5240 MHz	24.64	17.12
52	5260 MHz	24.16	17.28
56	5280 MHz	23.68	17.28
64	5320 MHz	24.80	17.12
100	5500 MHz	24.16	17.12
116	5580 MHz	23.52	17.28
120	5600 MHz	23.52	17.12
140	5700 MHz	23.84	17.12

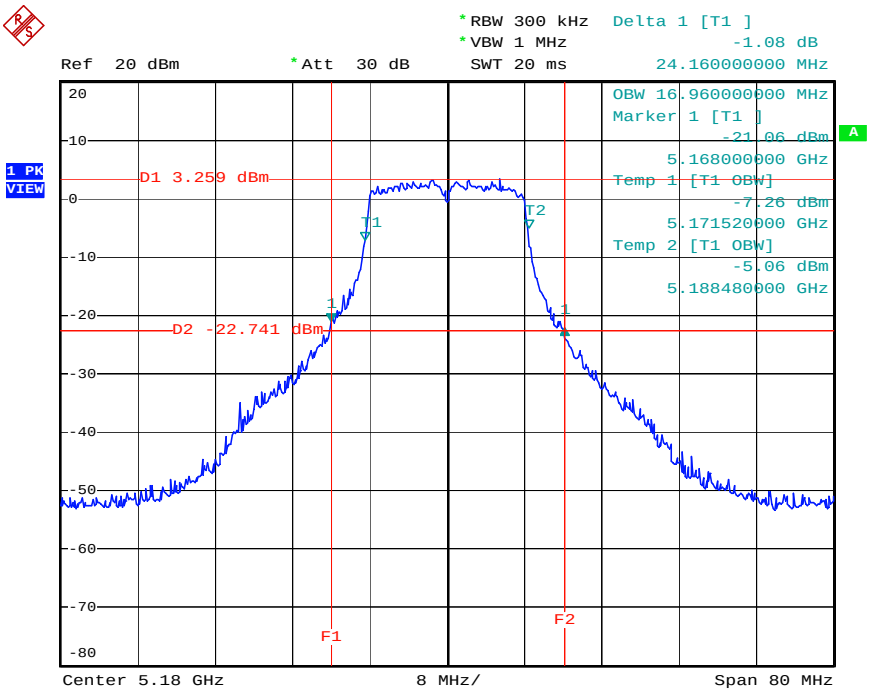
Configuration IEEE 802.11n (20MHz)

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.44	18.24
40	5200 MHz	26.08	18.24
48	5240 MHz	24.80	18.24
52	5260 MHz	24.64	18.24
56	5280 MHz	24.64	18.24
64	5320 MHz	24.80	18.08
100	5500 MHz	24.32	18.24
116	5580 MHz	24.48	18.24
120	5600 MHz	24.32	18.24
140	5700 MHz	24.64	18.24

Configuration IEEE 802.11n (40MHz)

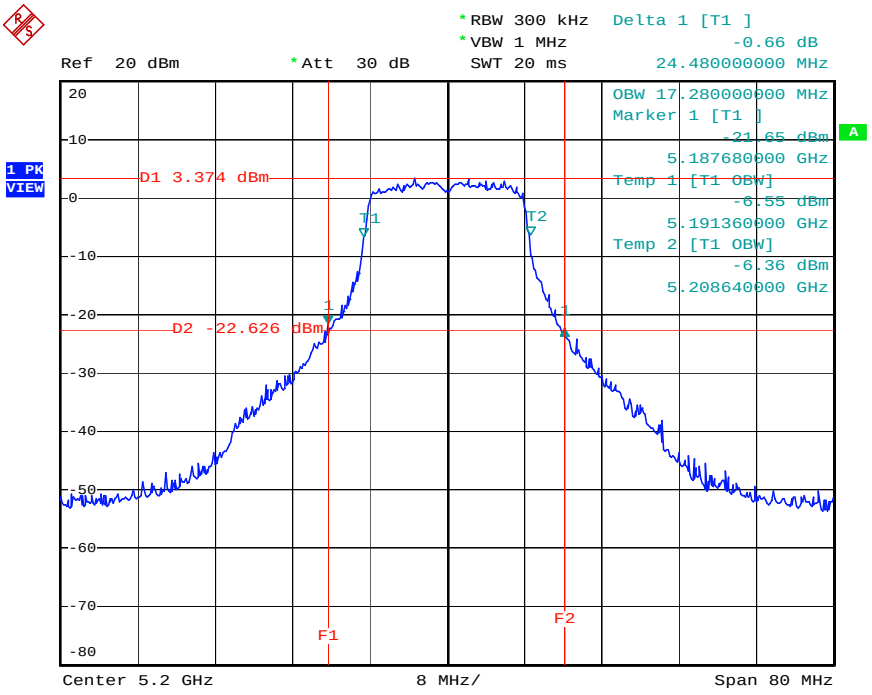
Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.60	36.64
46	5230 MHz	47.52	36.64
54	5270 MHz	45.60	36.60
62	5310 MHz	46.00	36.60
102	5510 MHz	46.00	36.40
134	5670 MHz	45.40	36.40

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5180 MHz



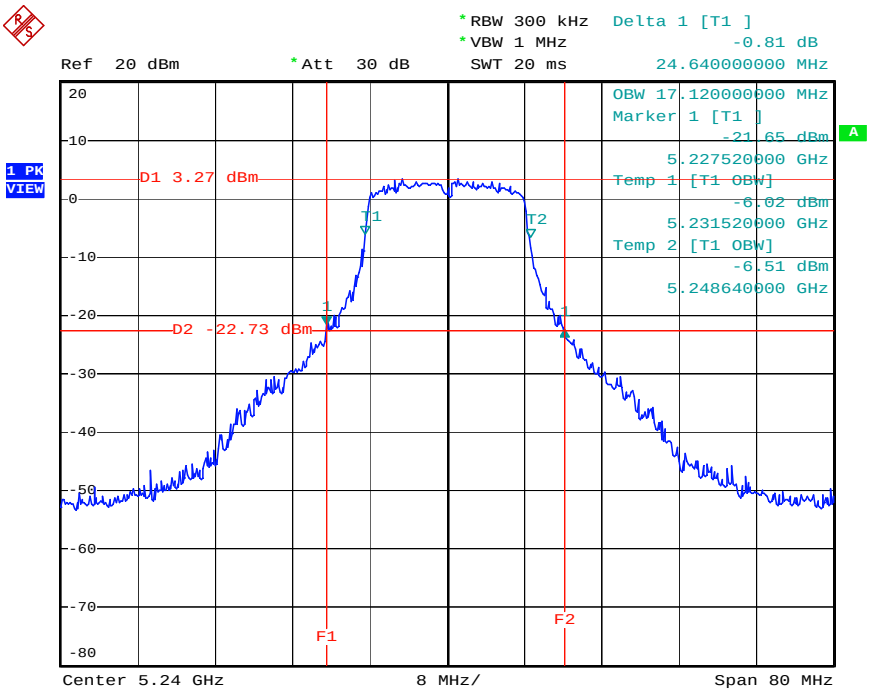
Date: 20.MAY.2008 10:59:06

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5200 MHz



Date: 20.MAY.2008 11:02:37

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5240 MHz



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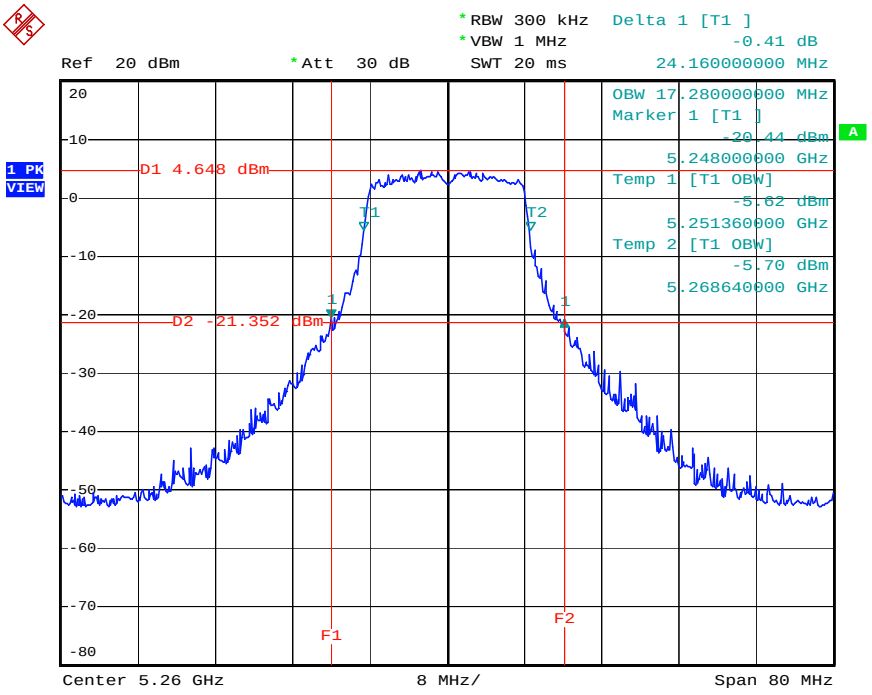
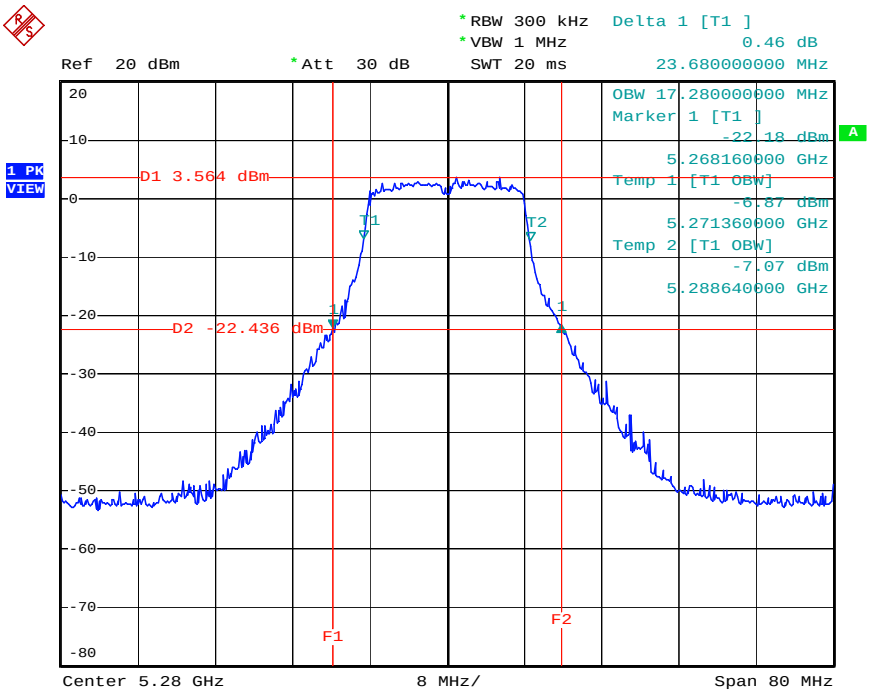
26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5260 MHz



Date: 13.JUN.2008 11:46:50

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5280 MHz



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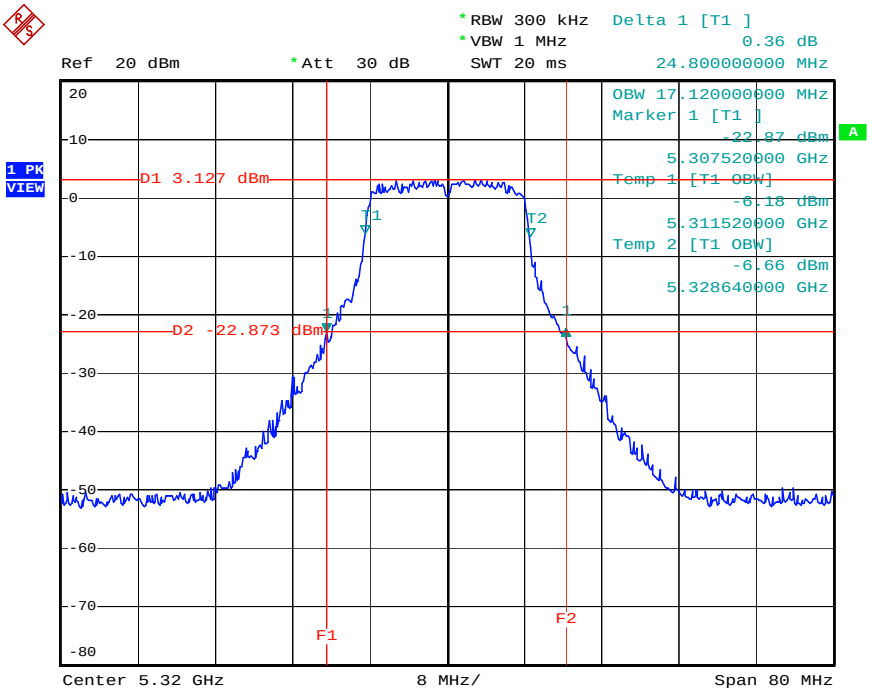
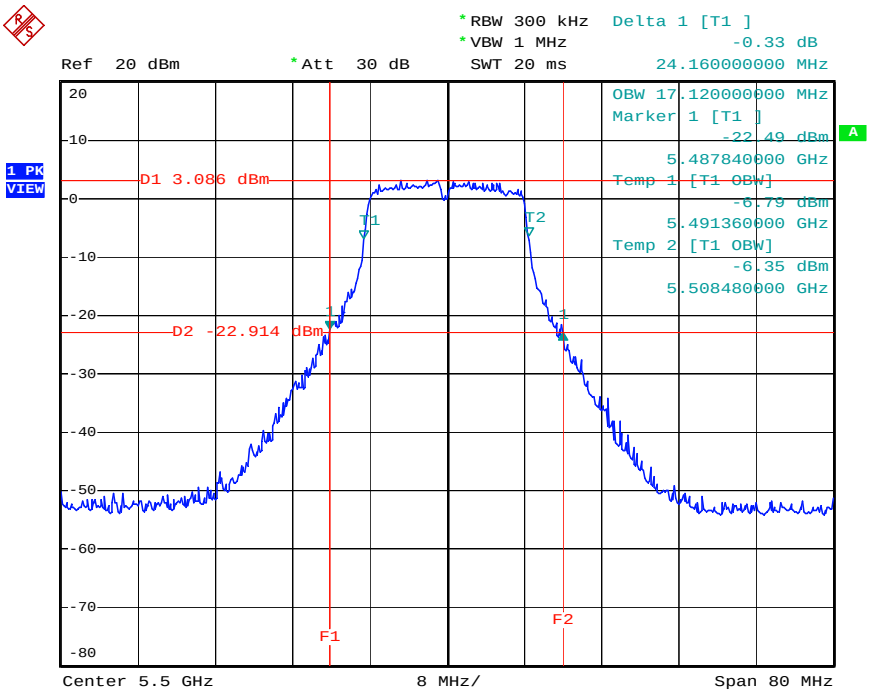
26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5320 MHz



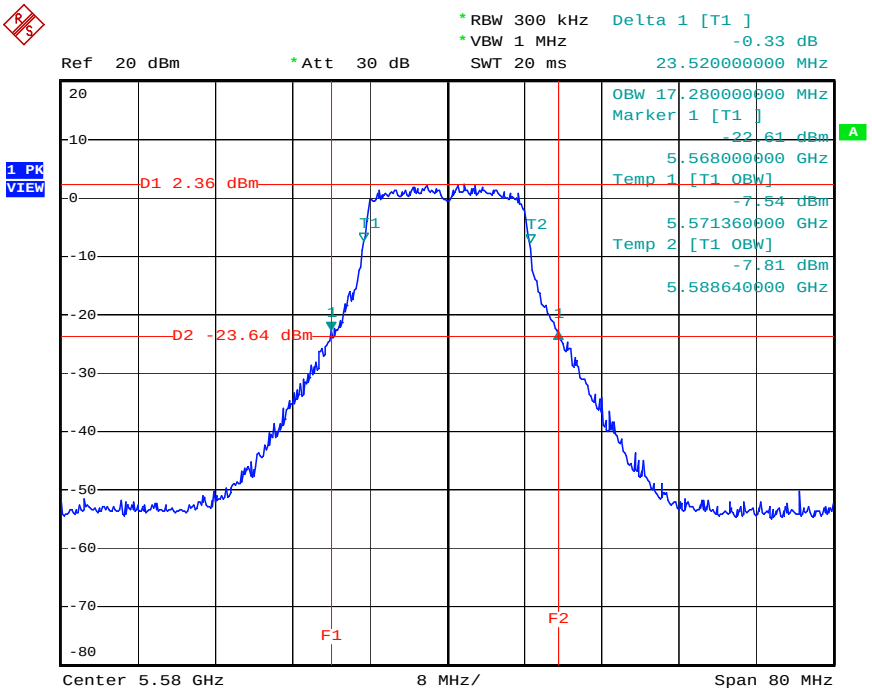
Date: 13.JUN.2008 14:16:13

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5500 MHz



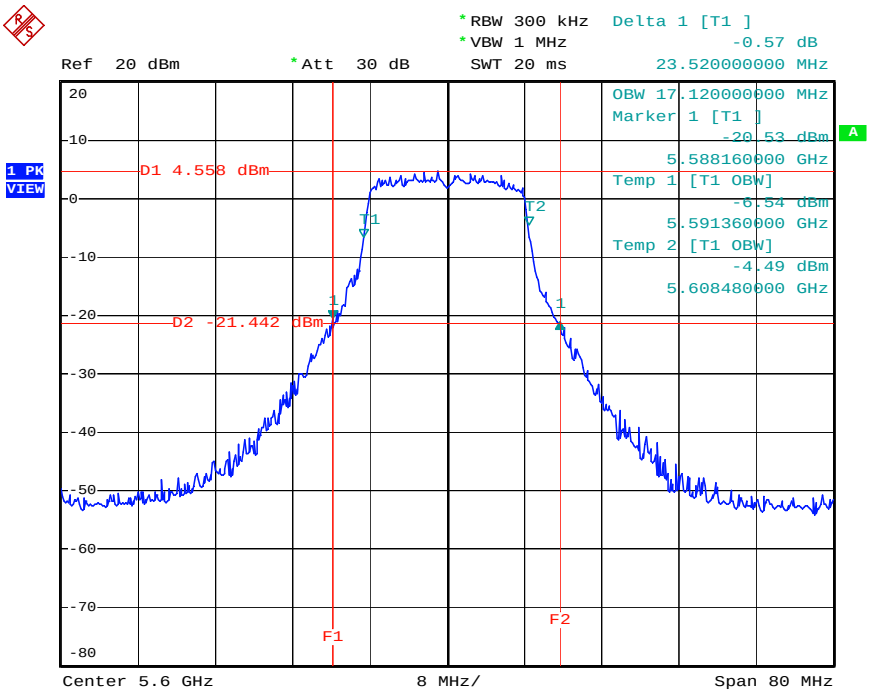
Date: 13.JUN.2008 14:18:35

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5580 MHz



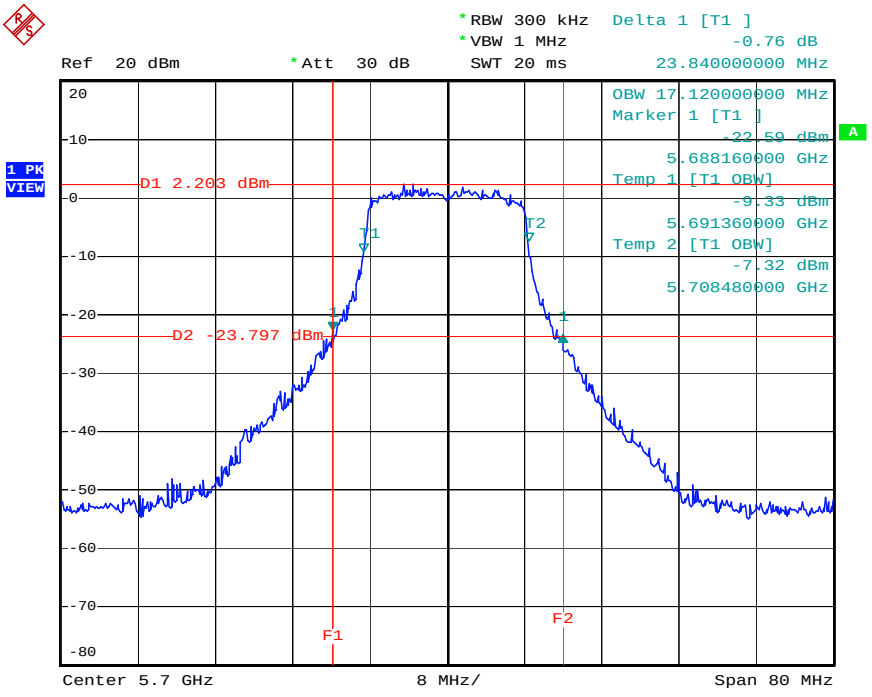
Date: 13.JUN.2008 14:22:39

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5600 MHz



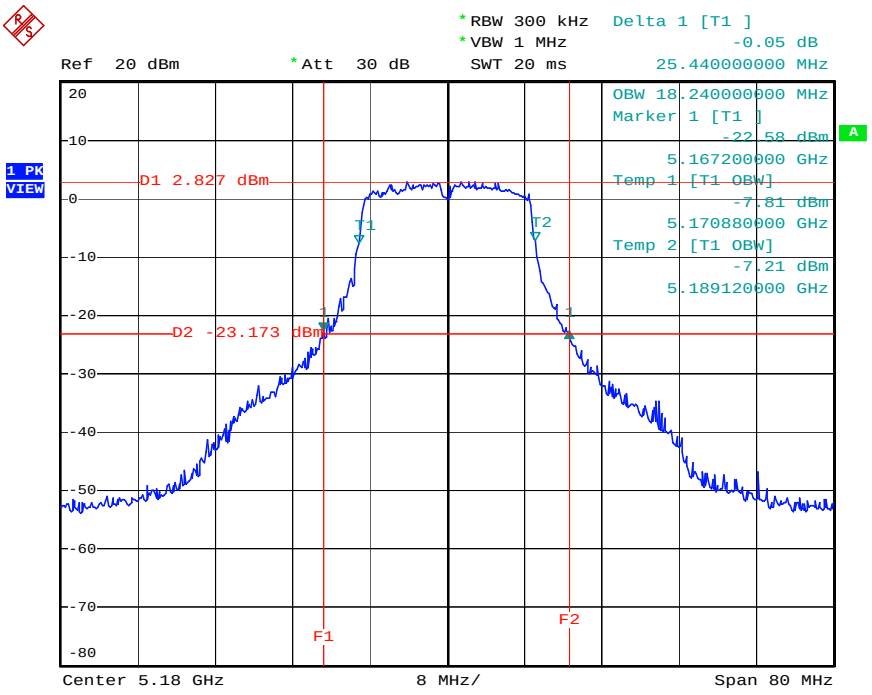
Date: 13.JUN.2008 14:28:10

26 dB Bandwidth Plot on Configuration IEEE 802.11a / 5700 MHz



Date: 13.JUN.2008 14:39:08

26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5180 MHz



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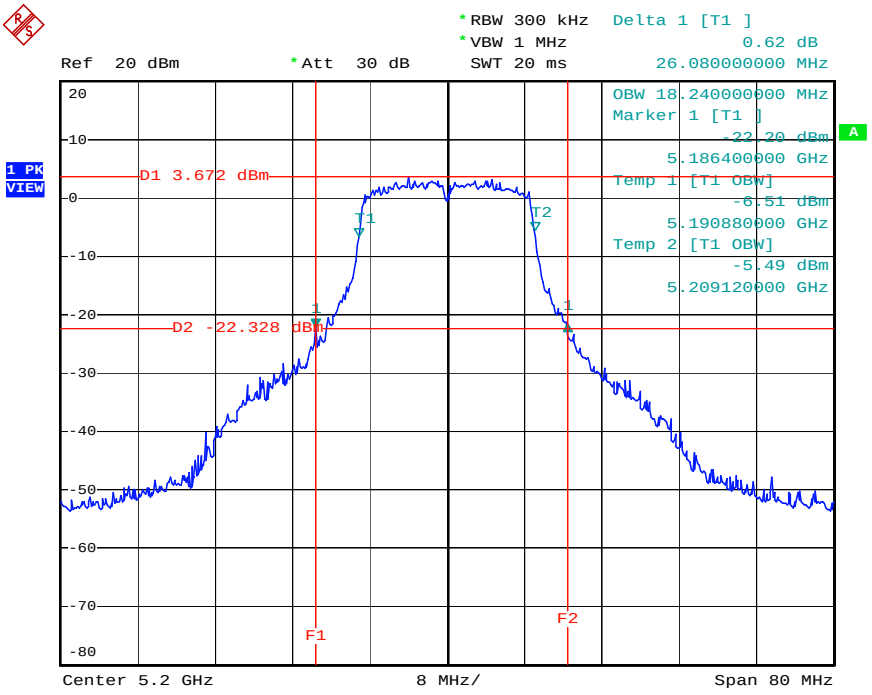
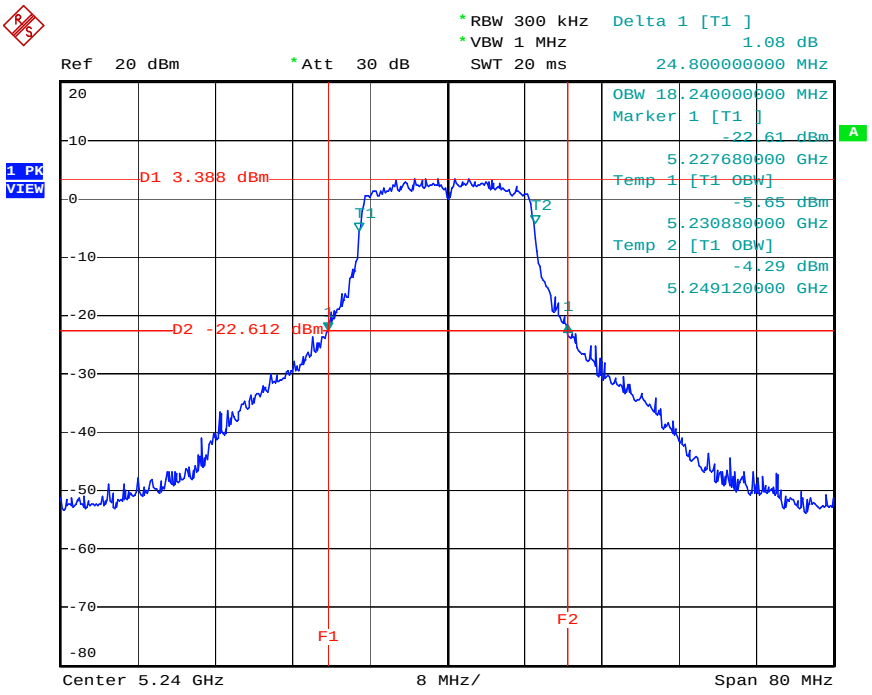
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz) / 5200 MHz



Date: 20.MAY.2008 14:49:12

26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5240 MHz



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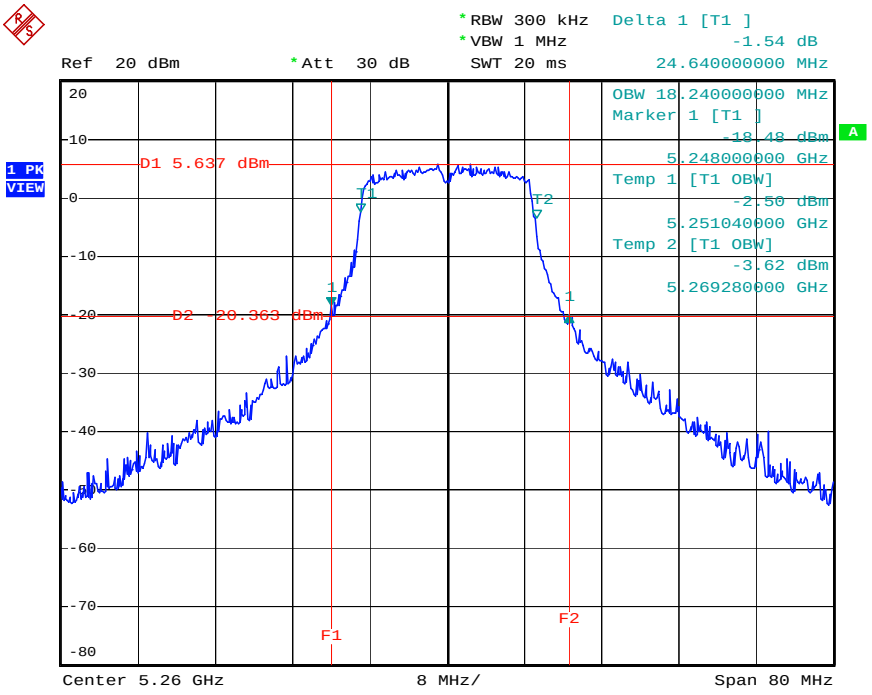
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5260 MHz



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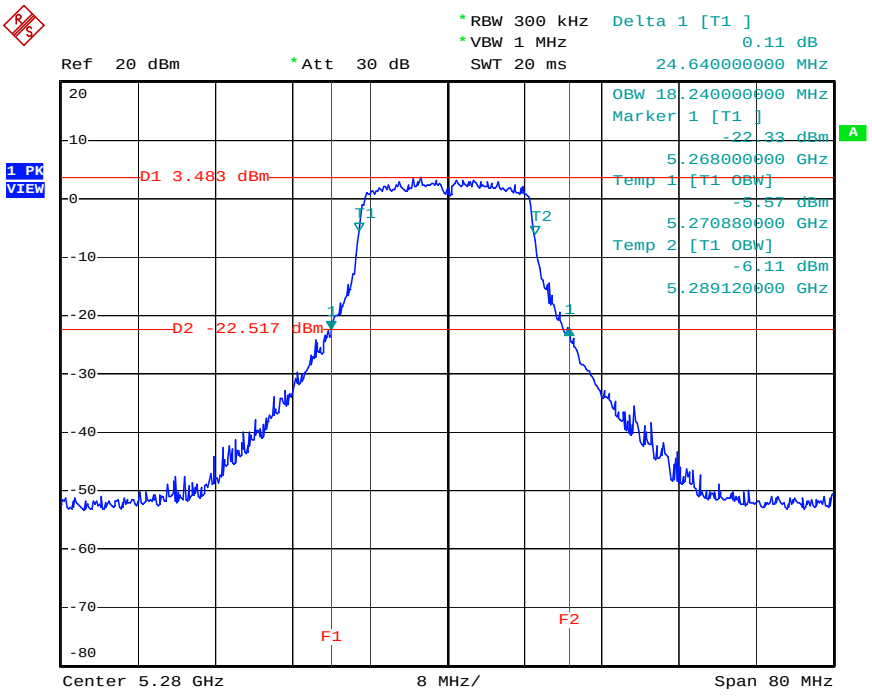
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz) / 5280 MHz



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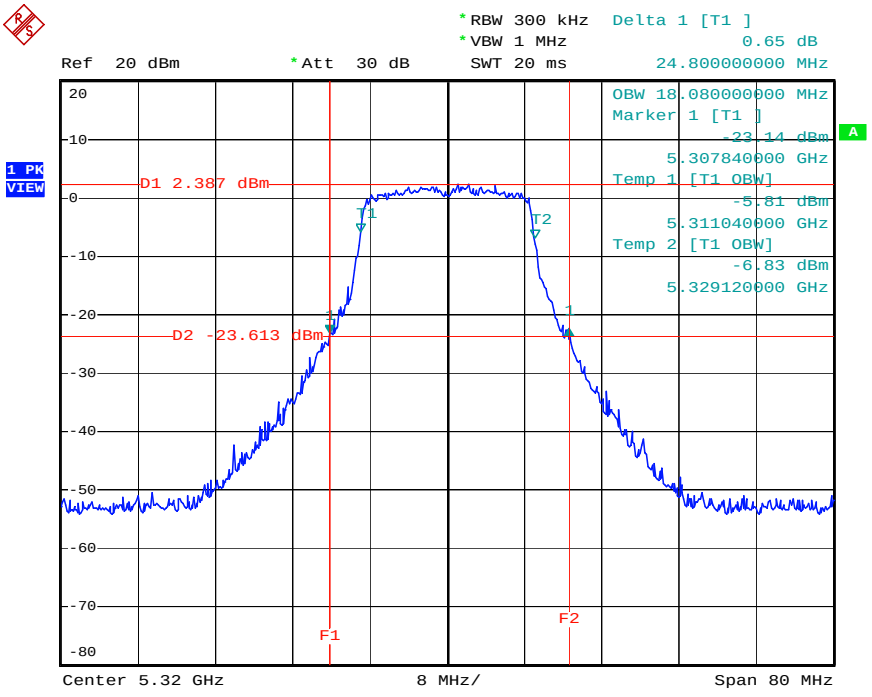
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5320 MHz



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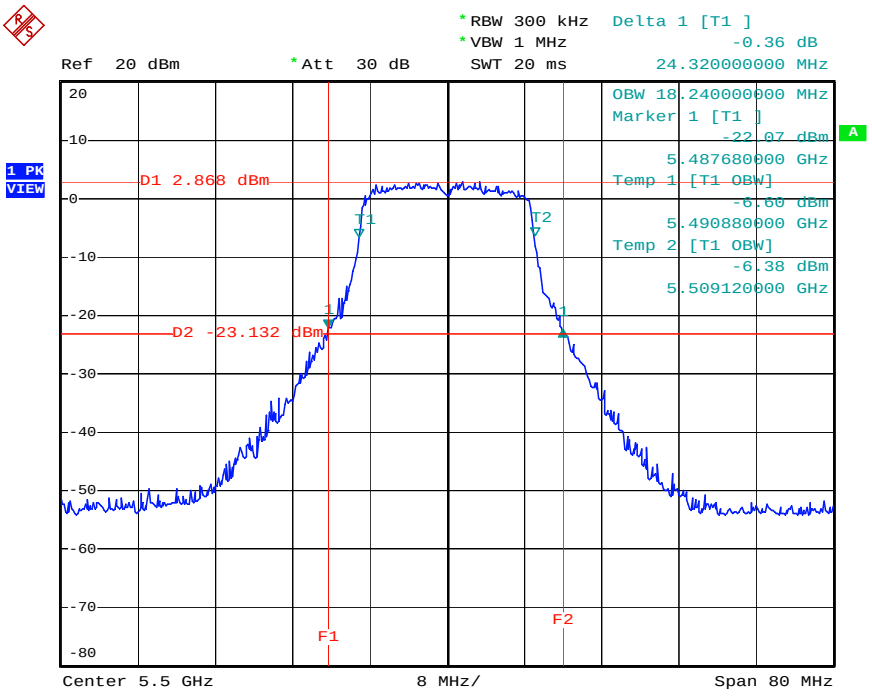
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5500 MHz



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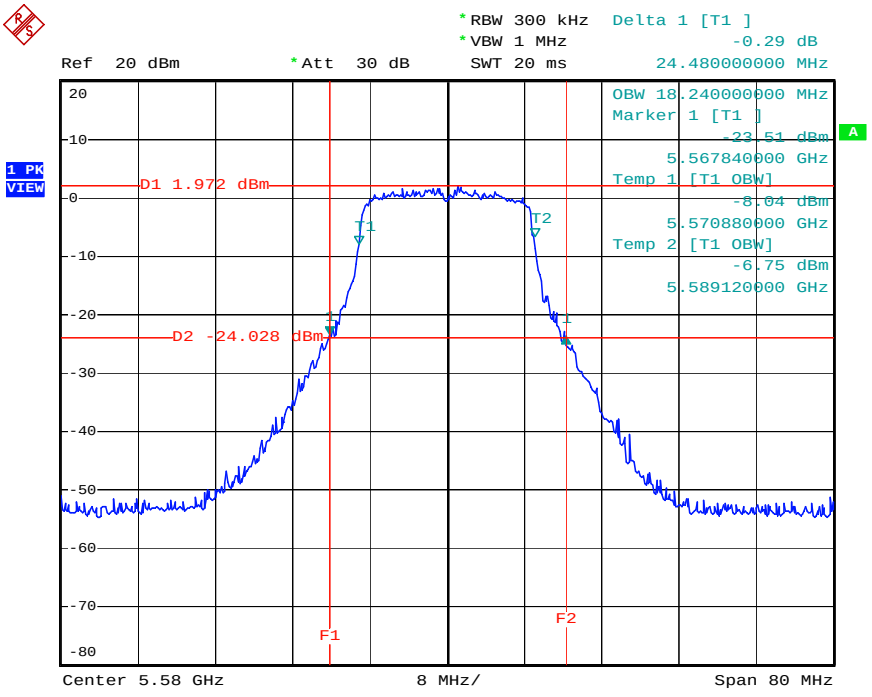
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz) / 5580 MHz



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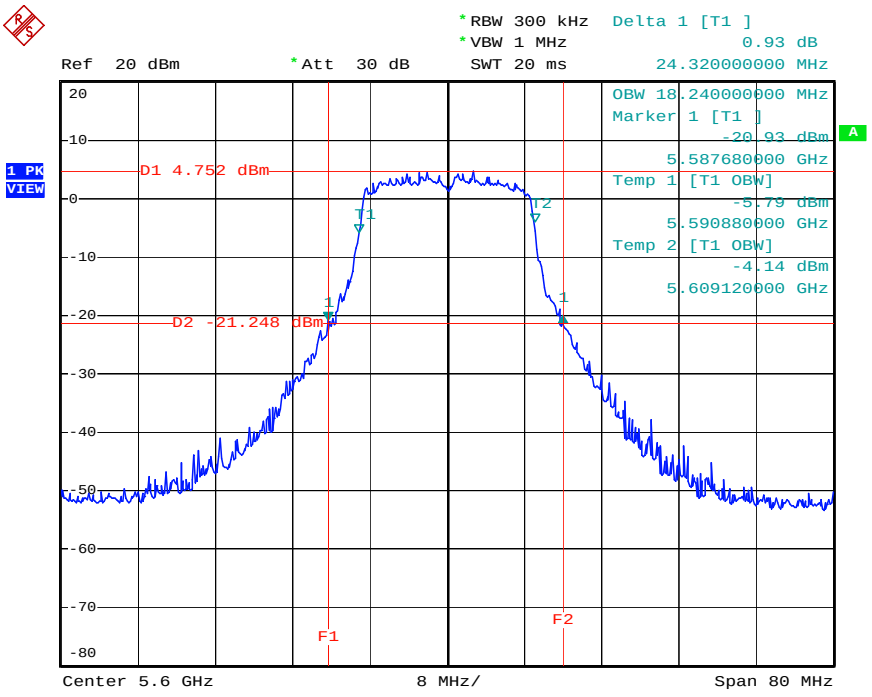
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5600 MHz



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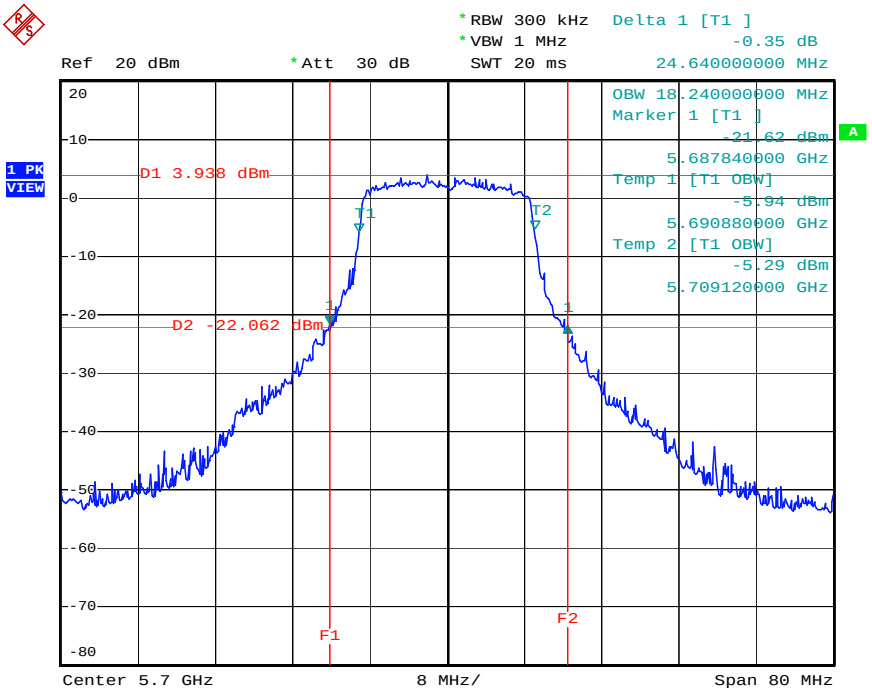
26 dB Bandwidth Plot on Configuration IEEE 802.11n (20MHz)/ 5700 MHz



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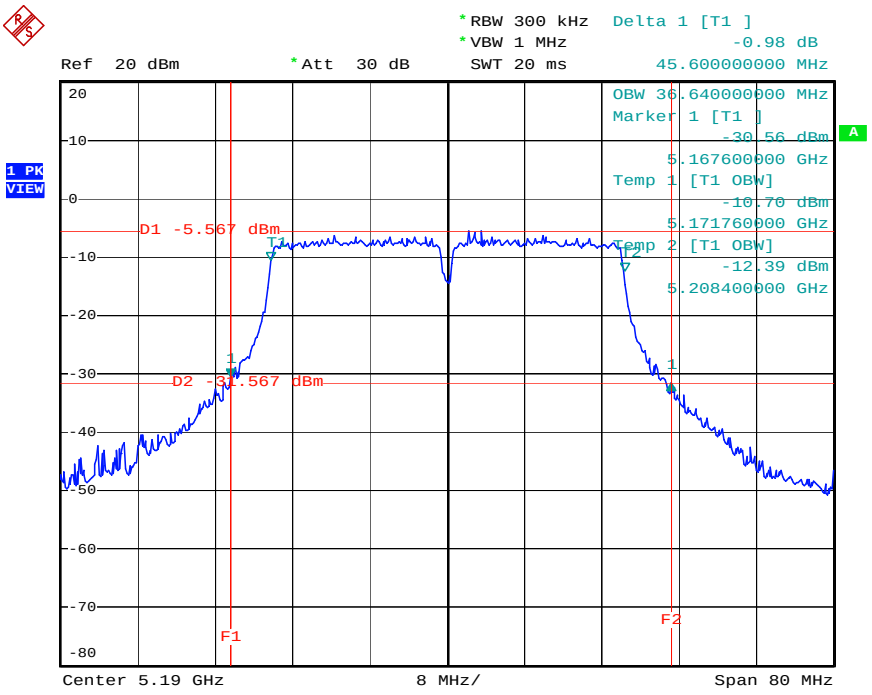
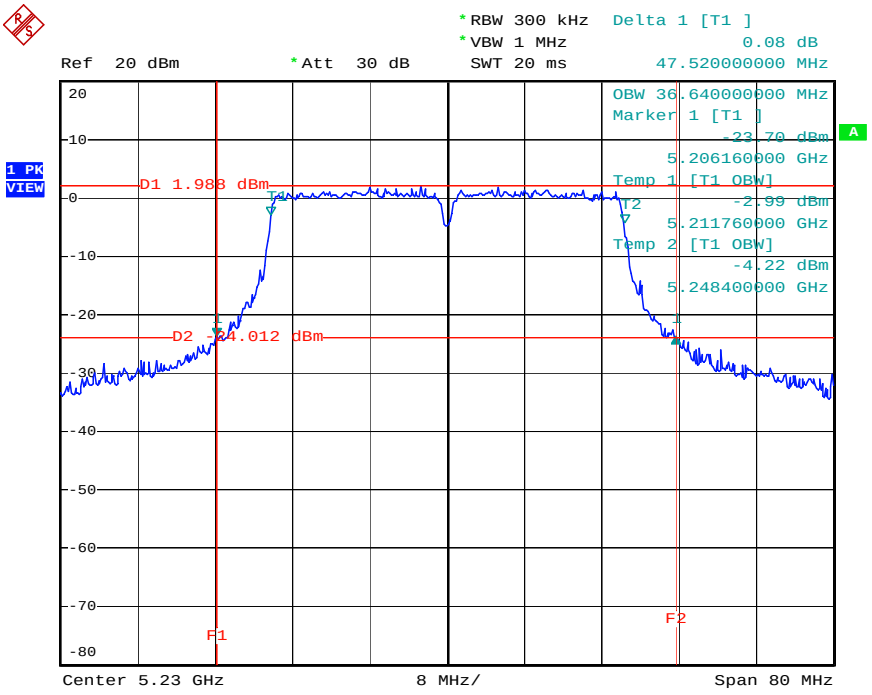
26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz)/ 5190 MHz



Date: 20.MAY.2008 15:52:26

26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz) / 5230 MHz



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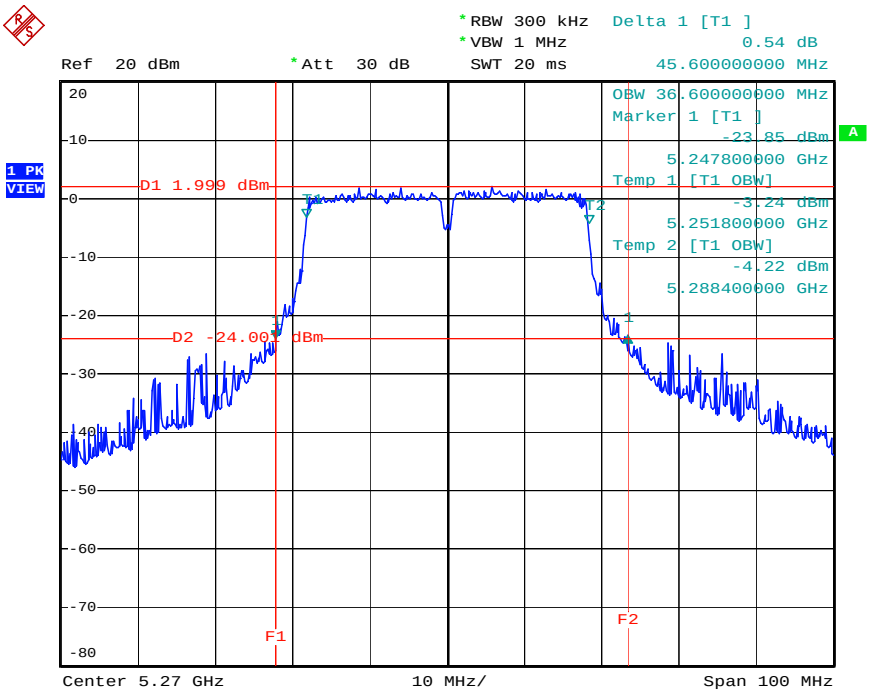
26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz)/ 5270 MHz



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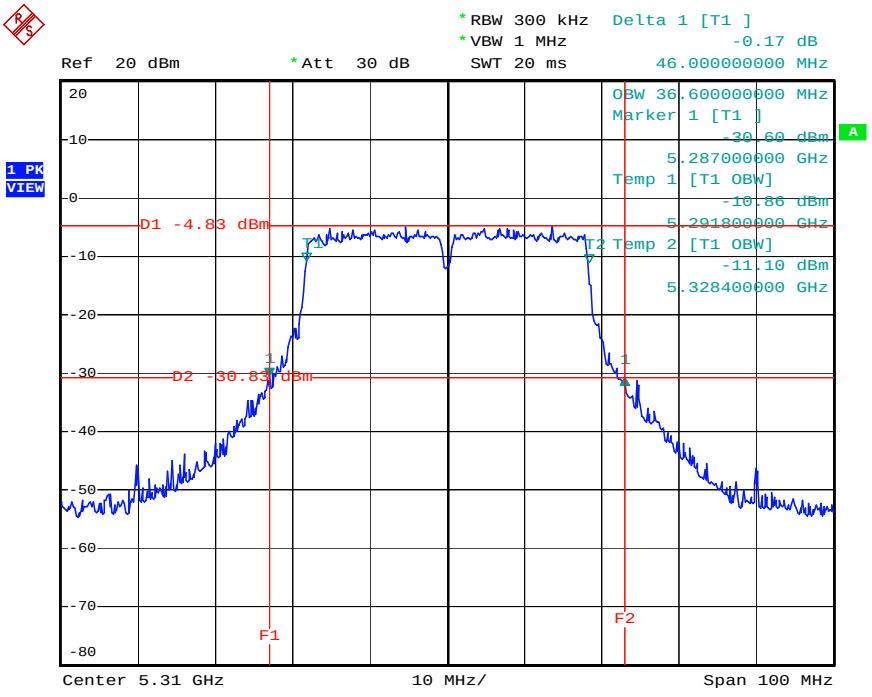
26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz) / 5310 MHz



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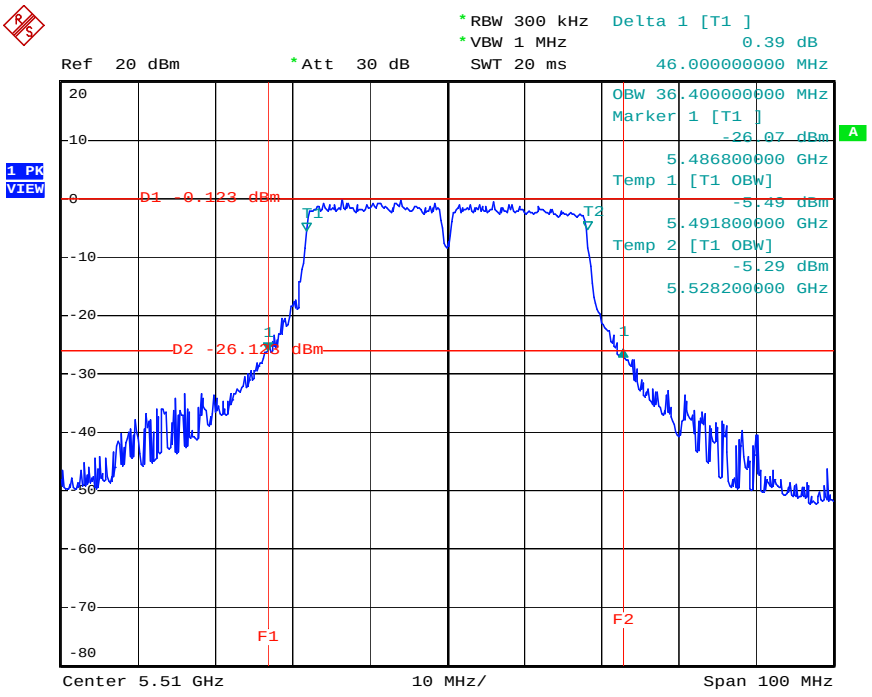
26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz)/ 5510 MHz



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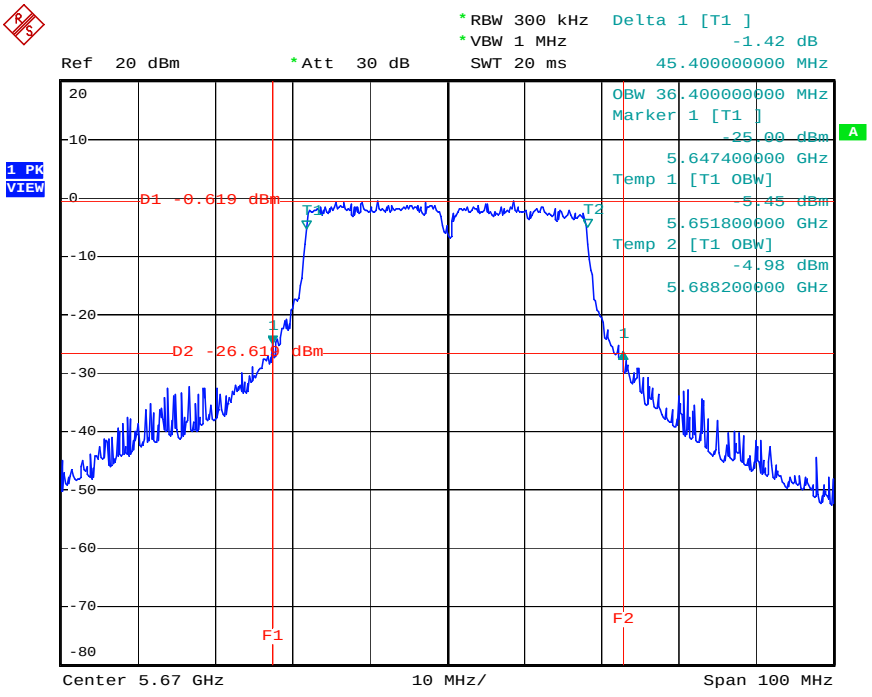
26 dB Bandwidth Plot on Configuration IEEE 802.11n (40MHz) / 5670 MHz



Date: 13.JUN.2008 15:32:06

3.3 Maximum Conducted Output Power Measurement

3.3.1 Limit

For the band 5.15~5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B, where B is the 26 dB emissions bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power and power density from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power and power density from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W (30dBm) or 17 dBm + 10log B. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power and power density from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power and peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required.

3.3.2 Measuring Instruments and Setting

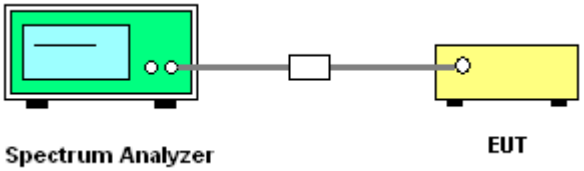
Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz
VB	300 kHz
Detector	Sample
Trace	Max Hold
Sweep Time	60s

3.3.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Test was performed in accordance with method #3 of FCC Public Notice DA-02-2138.

3.3.4 Test Setup Layout



3.3.5 Test Deviation

There is no deviation with the original standard.

3.3.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.3.7 Test Result of Maximum Conducted Output Power

Test date	Jun. 13, 2008	**Test Site No.**	TH01-HY
Temperature	27℃	**Humidity**	55%
Test Engineer	Sam	**Configuration**	802.11a/n

Configuration of IEEE 802.11a

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	12.17	15.00	**Complies**
40	5200 MHz	12.18	15.00	**Complies**
48	5240 MHz	12.29	15.00	**Complies**
52	5260 MHz	13.81	22.00	**Complies**
56	5280 MHz	12.23	22.00	**Complies**
64	5320 MHz	12.07	22.00	**Complies**
100	5500 MHz	11.98	22.00	**Complies**
116	5580 MHz	11.04	22.00	**Complies**
120	5600 MHz	12.93	22.00	**Complies**
140	5700 MHz	11.04	22.00	**Complies**

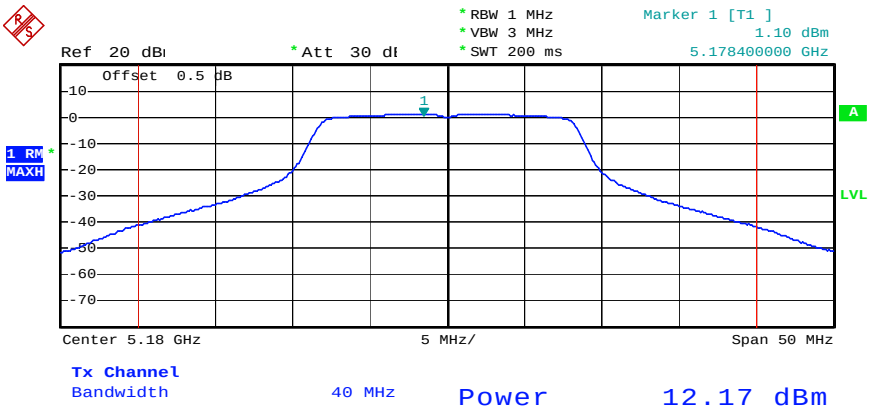
Configuration IEEE 802.11n (20MHz)

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	12.54	15.00	**Complies**
40	5200 MHz	12.35	15.00	**Complies**
48	5240 MHz	12.74	15.00	**Complies**
52	5260 MHz	14.51	22.00	**Complies**
56	5280 MHz	12.62	22.00	**Complies**
64	5320 MHz	11.39	22.00	**Complies**
100	5500 MHz	12.43	22.00	**Complies**
116	5580 MHz	10.89	22.00	**Complies**
120	5600 MHz	13.07	22.00	**Complies**
140	5700 MHz	11.26	22.00	**Complies**

Configuration IEEE 802.11n (40MHz)

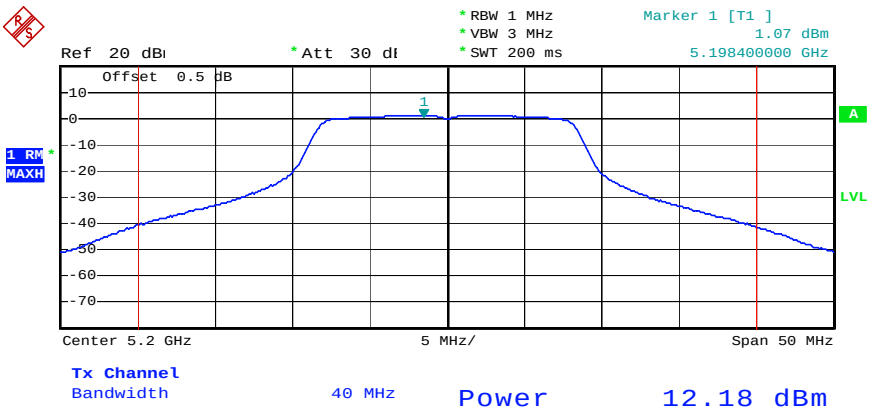
Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	5.97	15.00	**Complies**
46	5230 MHz	14.68	15.00	**Complies**
54	5270 MHz	14.09	22.00	**Complies**
62	5310 MHz	7.36	22.00	**Complies**
102	5510 MHz	11.95	22.00	**Complies**
134	5670 MHz	12.11	22.00	**Complies**

Channel Output Power Plot on Configuration IEEE 802.11a / 5180 MHz



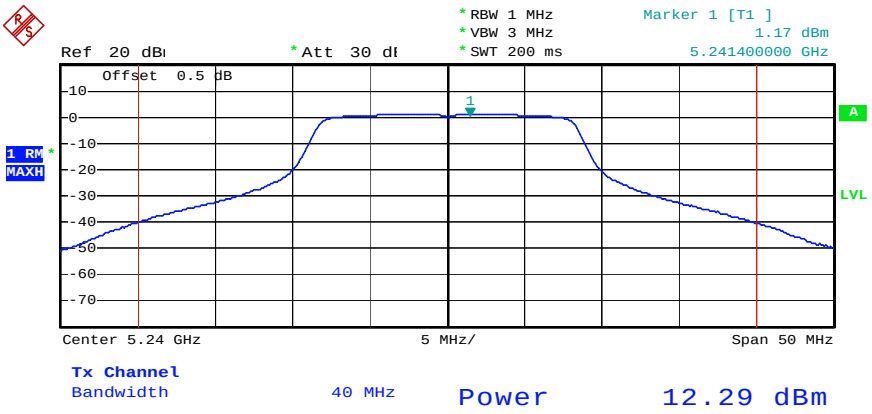
Date: 20.MAY.2008 10:59:54

Channel Output Power Plot on Configuration IEEE 802.11a / 5200 MHz



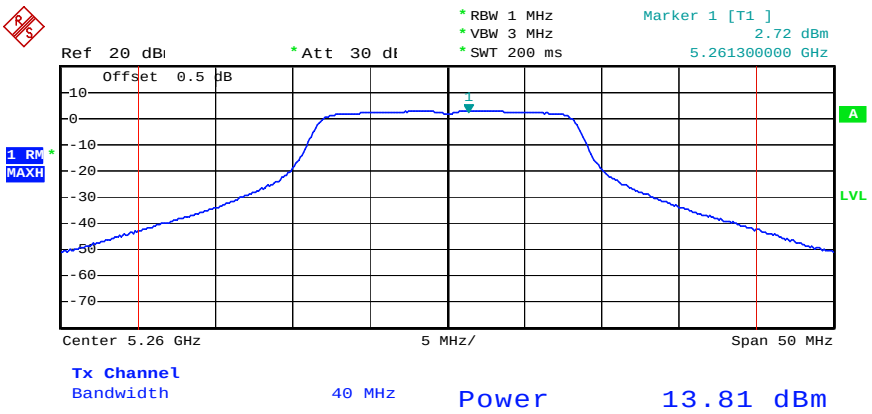
Date: 20.MAY.2008 11:03:26

Channel Output Power Plot on Configuration IEEE 802.11a / 5240 MHz



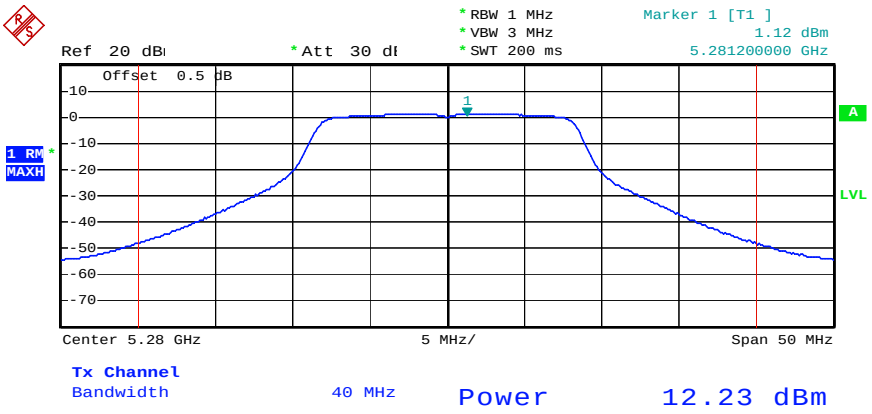
Date: 20.MAY.2008 11:05:13

Channel Output Power Plot on Configuration IEEE 802.11a / 5260 MHz



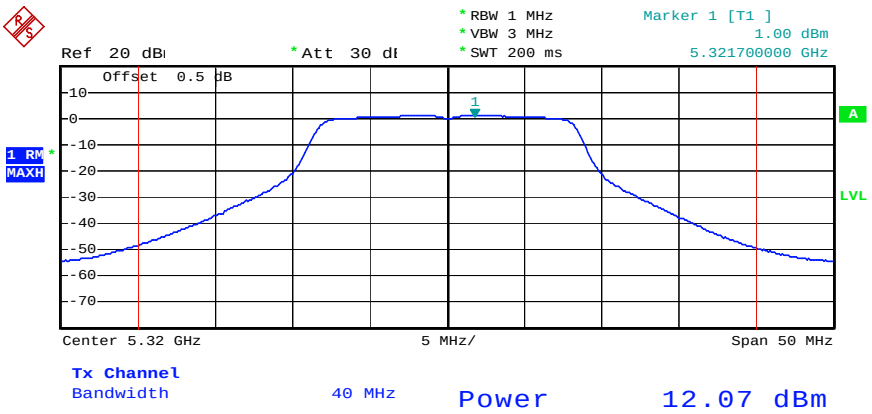
Date: 13.JUN.2008 11:47:39

Channel Output Power Plot on Configuration IEEE 802.11a / 5280 MHz



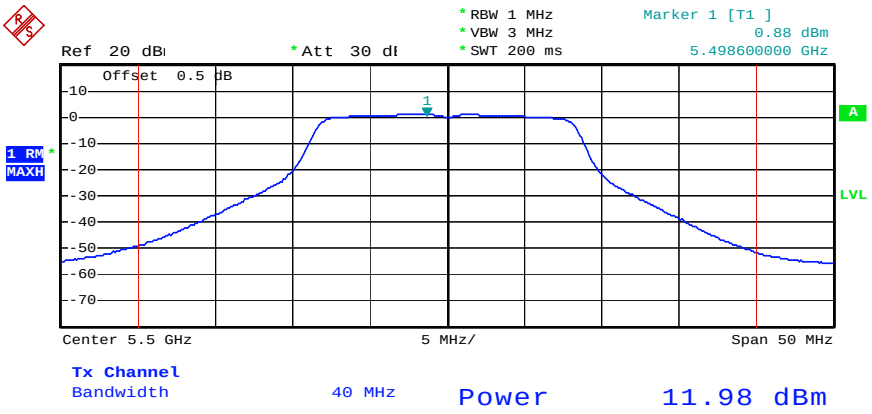
Date: 13.JUN.2008 14:15:27

Channel Output Power Plot on Configuration IEEE 802.11a / 5320 MHz



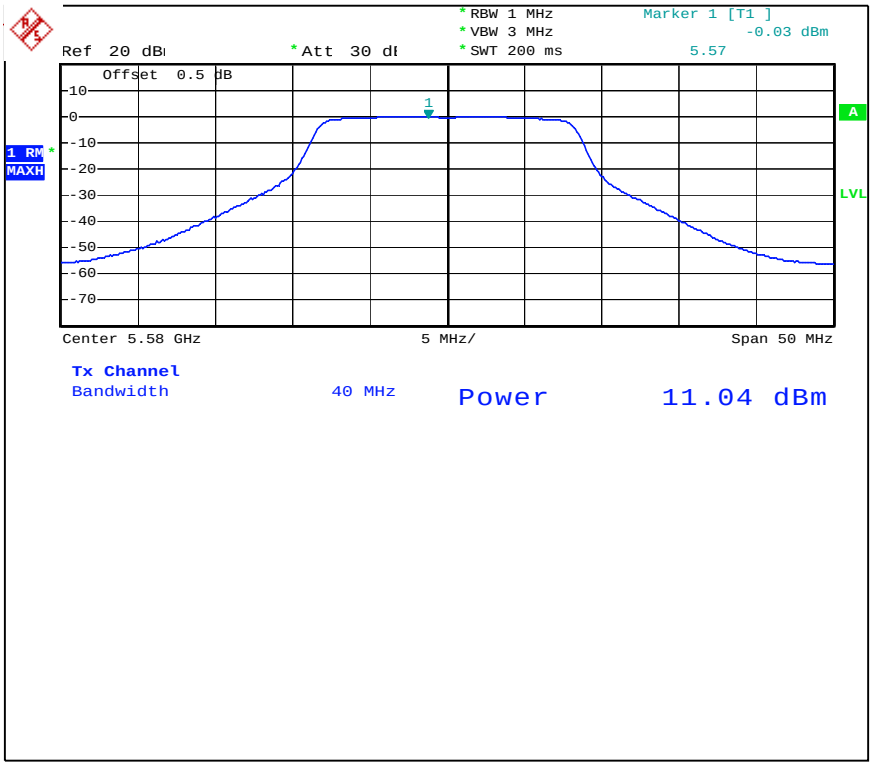
Date: 13.JUN.2008 14:17:02

Channel Output Power Plot on Configuration IEEE 802.11a / 5500 MHz

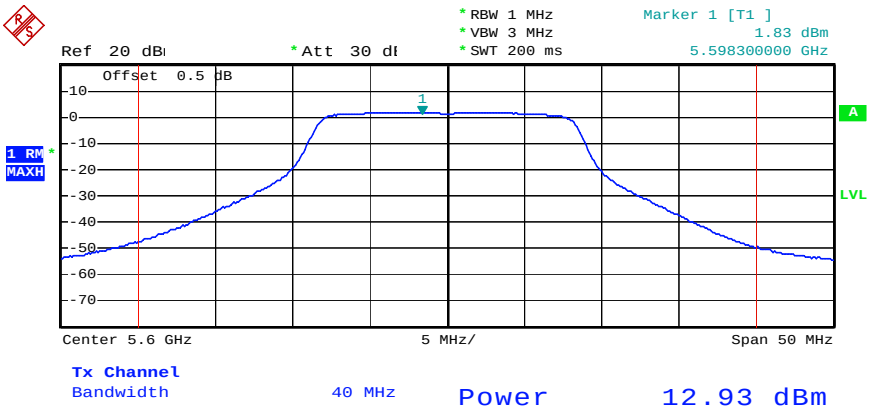


Date: 13.JUN.2008 14:19:26

Channel Output Power Plot on Configuration IEEE 802.11a / 5580 MHz

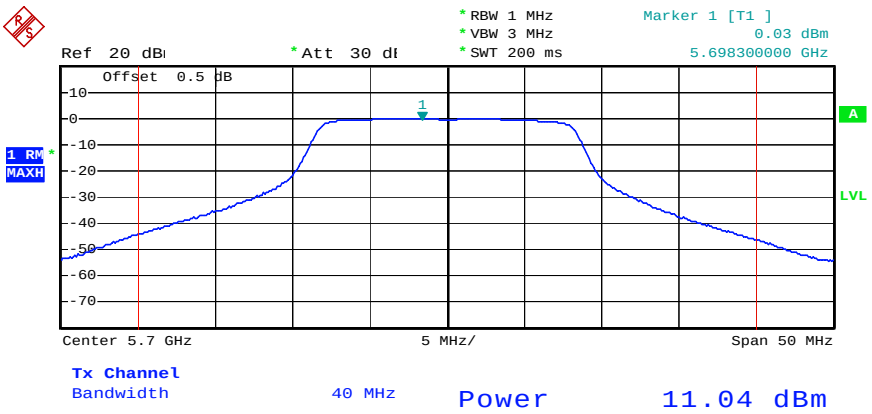


Channel Output Power Plot on Configuration IEEE 802.11a / 5600 MHz



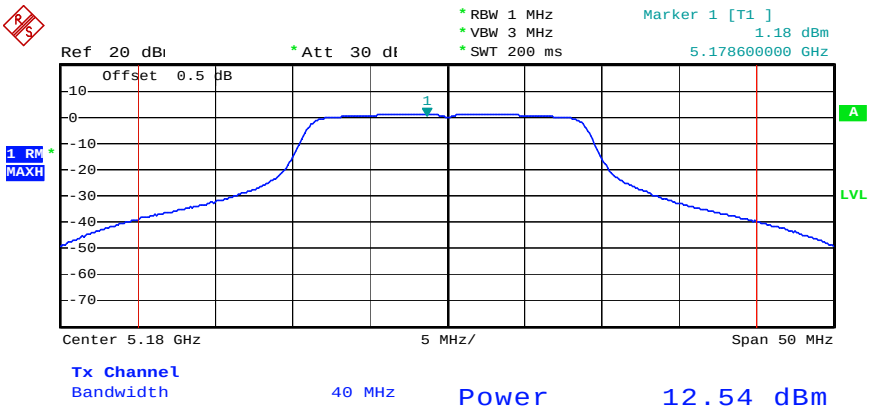
Date: 13.JUN.2008 14:29:00

Channel Output Power Plot on Configuration IEEE 802.11a / 5700 MHz



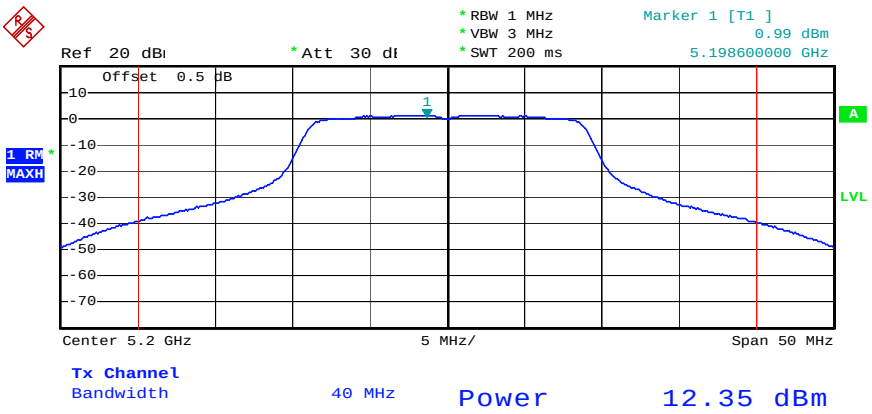
Date: 13.JUN.2008 14:39:58

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5180 MHz



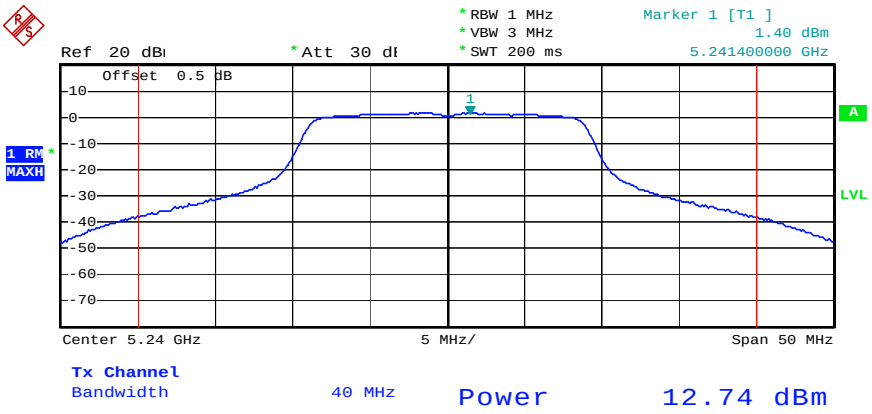
Date: 20.MAY.2008 14:36:23

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5200 MHz



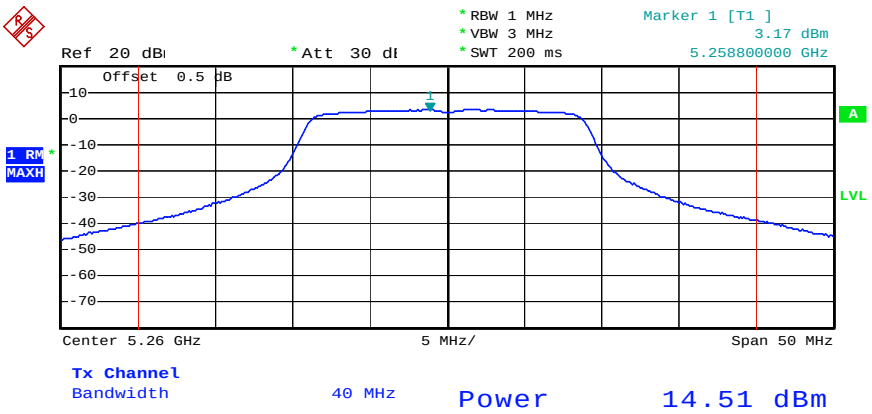
Date: 20.MAY.2008 14:50:00

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5240 MHz



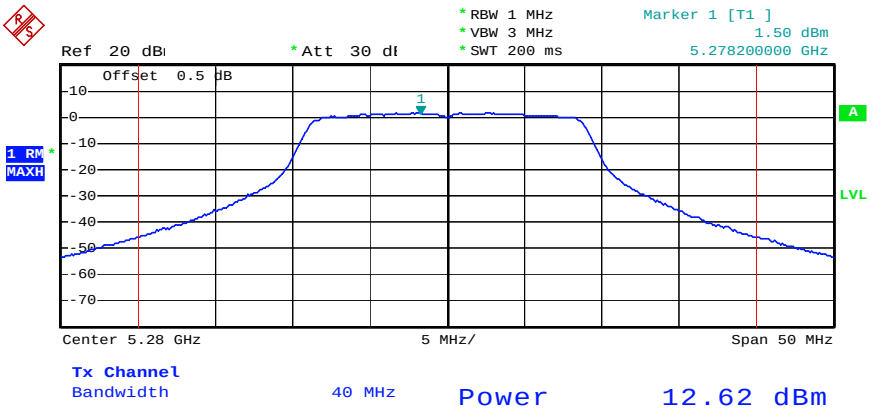
Date: 20.MAY.2008 14:51:45

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5260 MHz



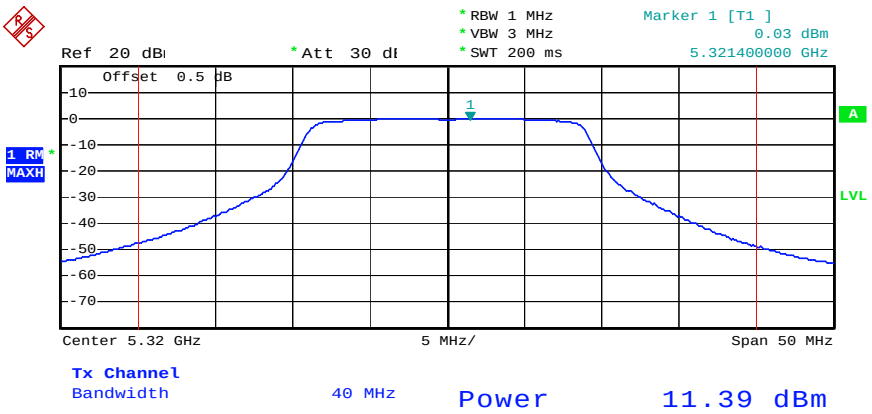
Date: 13.JUN.2008 14:45:30

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5280 MHz



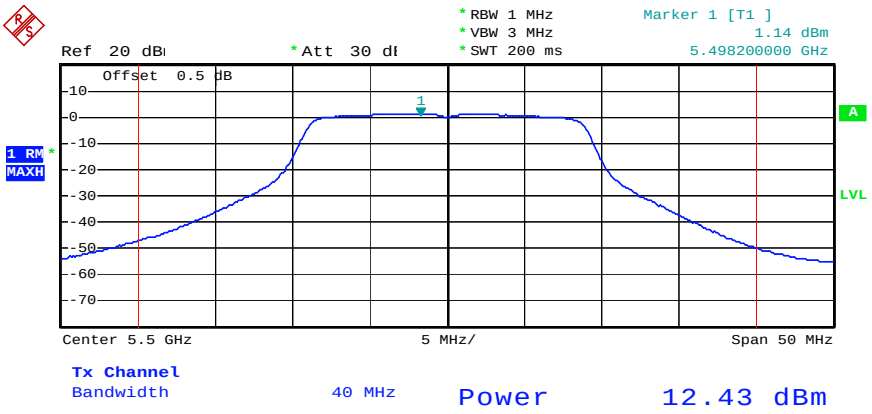
Date: 13.JUN.2008 14:46:56

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5320 MHz



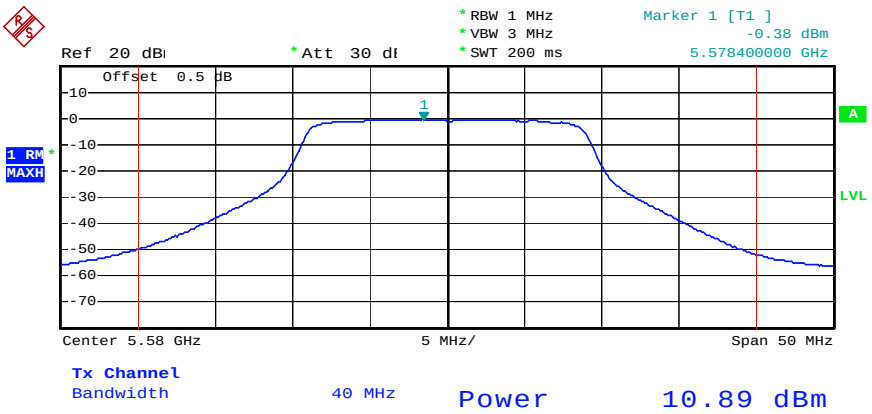
Date: 13.JUN.2008 15:02:09

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5500 MHz



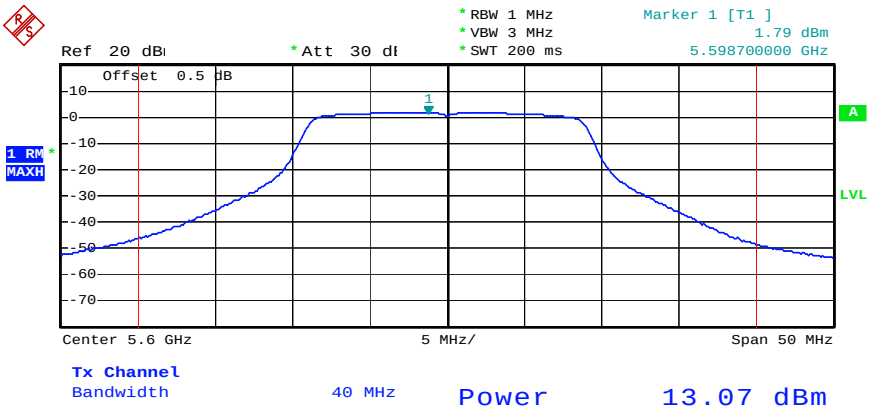
Date: 13.JUN.2008 15:07:16

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5580 MHz



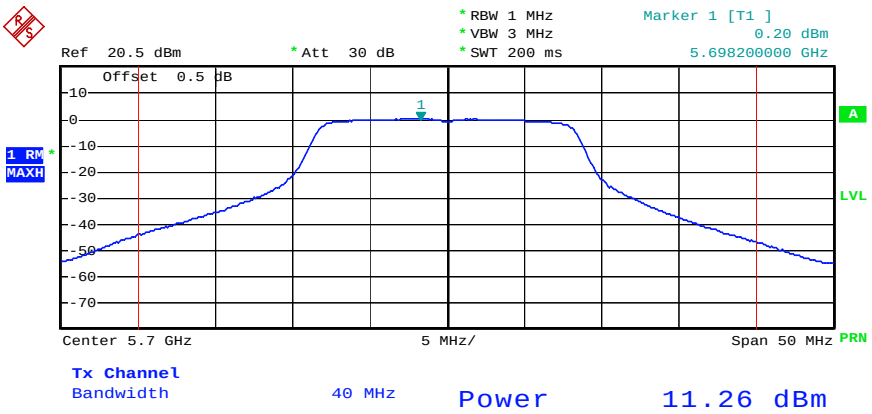
Date: 13.JUN.2008 15:22:31

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5600 MHz



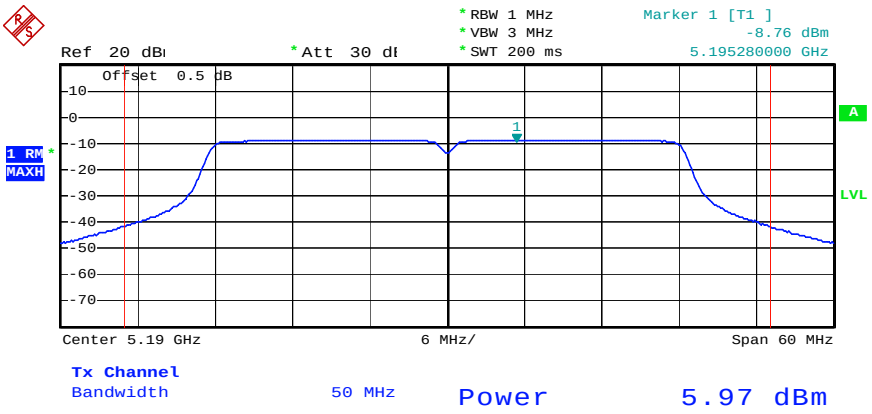
Date: 13.JUN.2008 15:10:54

Channel Output Power Plot on Configuration IEEE 802.11n (20MHz) / 5700 MHz



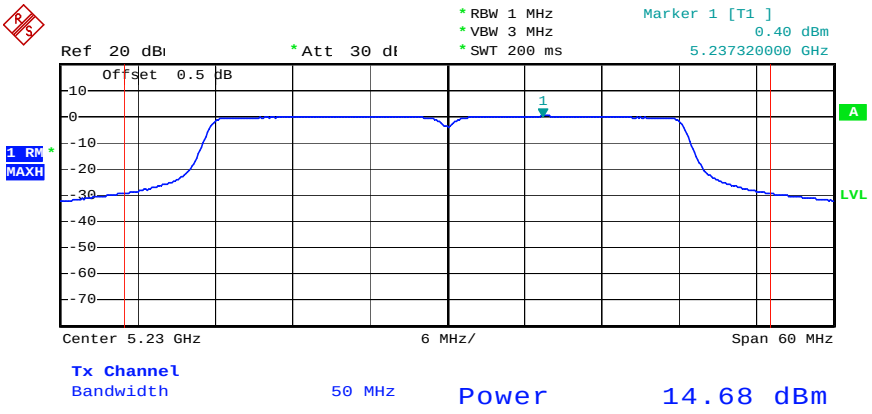
Date: 13.JUN.2008 16:40:38

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5190 MHz



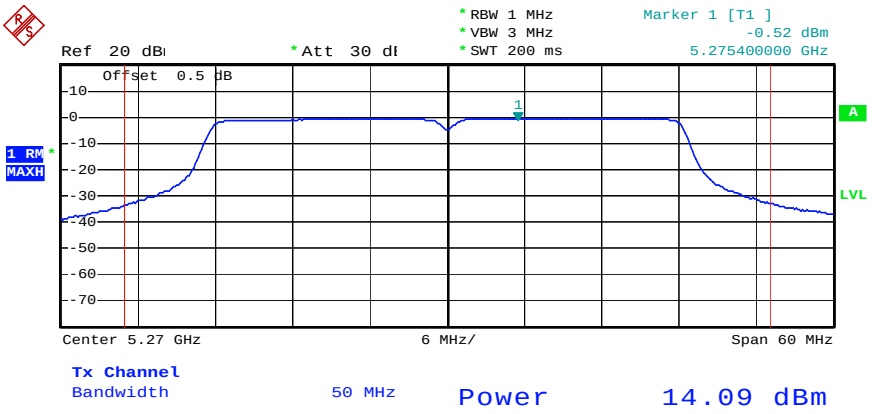
Date: 20.MAY.2008 15:53:15

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5230 MHz



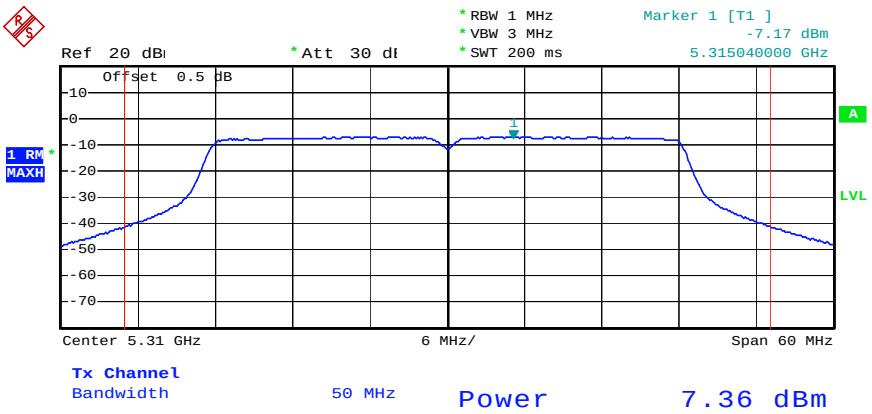
Date: 20.MAY.2008 15:56:27

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5270 MHz



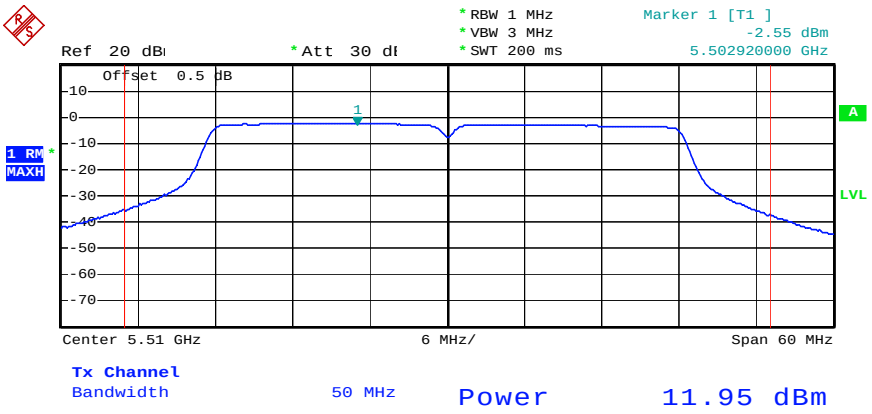
Date: 13.JUN.2008 15:25:20

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5310 MHz



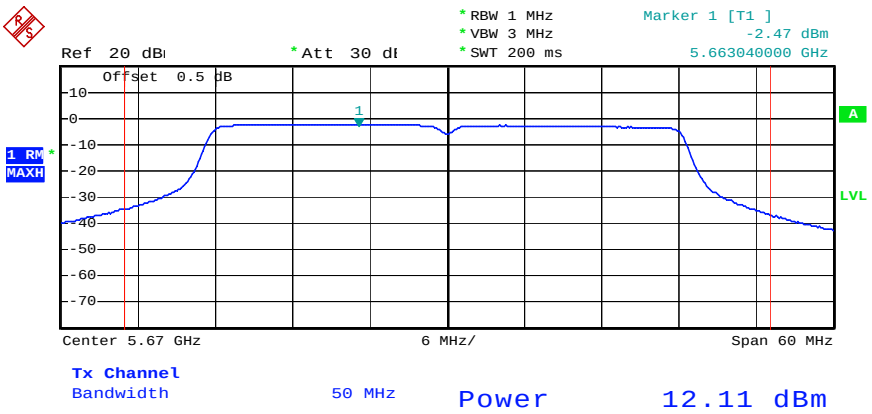
Date: 13.JUN.2008 15:29:21

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5510 MHz



Date: 13.JUN.2008 15:31:00

Channel Output Power Plot on Configuration IEEE 802.11n (40MHz) / 5670 MHz



Date: 13.JUN.2008 15:32:57

3.4 Power Spectral Density Measurement

3.4.1 Limit

The power spectral density is defined as the highest level of power in dBm per MHz generated by the transmitter within the power envelope. The following table is power spectral density limits and decrease power density limit rule refer to section 3.3.1.

Frequency Range	Power Spectral Density limit (dBm/MHz)
5.15~5.25 GHz	4
5.25-5.35 GHz	11
5.725-5.825	17

3.4.2 Measuring Instruments and Setting

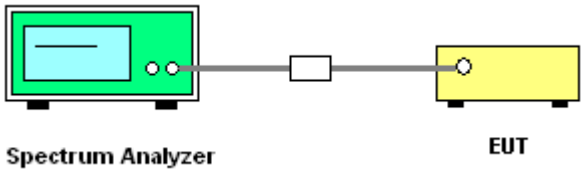
Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz
VB	3000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.4.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set RBW of spectrum analyzer to 1000kHz and VBW to 3000kHz. Set Detector to Peak, Trace to Max Hold. Mark the frequency with maximum peak power as the center of the display of the spectrum.

3.4.4 Test Setup Layout



3.4.5 Test Deviation

There is no deviation with the original standard.

3.4.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.4.7 Test Result of Power Spectral Density

Test date	Jun. 13, 2008	**Test Site No.**	TH01-HY
Temperature	27°C	**Humidity**	55%
Test Engineer	Sam	**Configuration**	802.11a/n

Configuration of IEEE 802.11a

Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
5180 MHz	1.61	2.00	**Complies**
5200 MHz	1.66	2.00	**Complies**
5240 MHz	1.67	2.00	**Complies**
5260 MHz	3.33	9.00	**Complies**
5280 MHz	1.88	9.00	**Complies**
5320 MHz	1.82	9.00	**Complies**
5500 MHz	1.49	9.00	**Complies**
5580 MHz	0.56	9.00	**Complies**
5600 MHz	2.52	9.00	**Complies**
5700 MHz	0.48	9.00	**Complies**

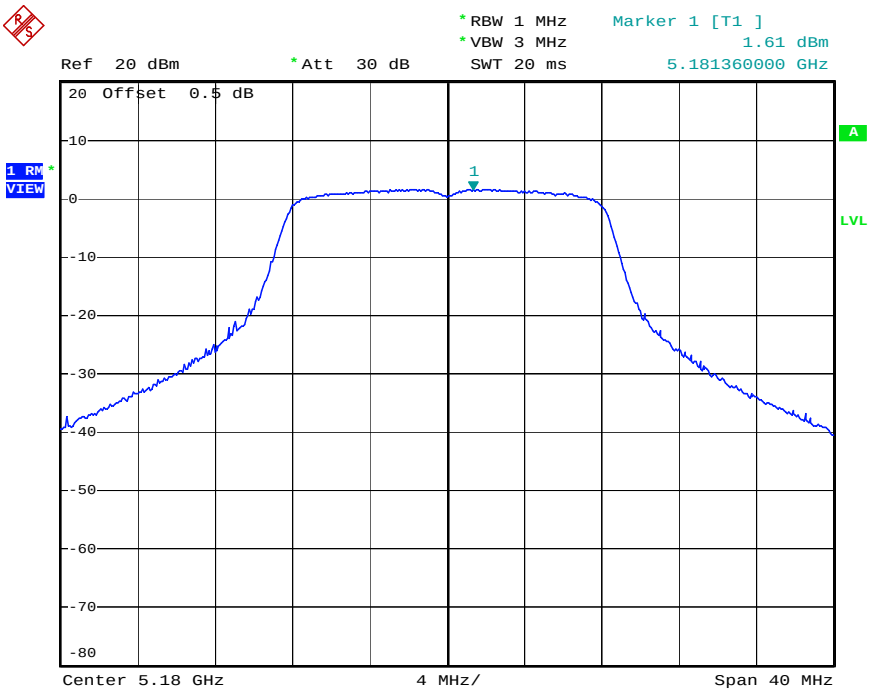
Configuration IEEE 802.11n (20MHz)

Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
5180 MHz	1.76	2.00	**Complies**
5200 MHz	1.95	2.00	**Complies**
5240 MHz	1.82	2.00	**Complies**
5260 MHz	3.89	9.00	**Complies**
5280 MHz	1.95	9.00	**Complies**
5320 MHz	0.70	9.00	**Complies**
5500 MHz	1.67	9.00	**Complies**
5580 MHz	0.10	9.00	**Complies**
5600 MHz	2.43	9.00	**Complies**
5700 MHz	1.81	9.00	**Complies**

Configuration IEEE 802.11n (40MHz)

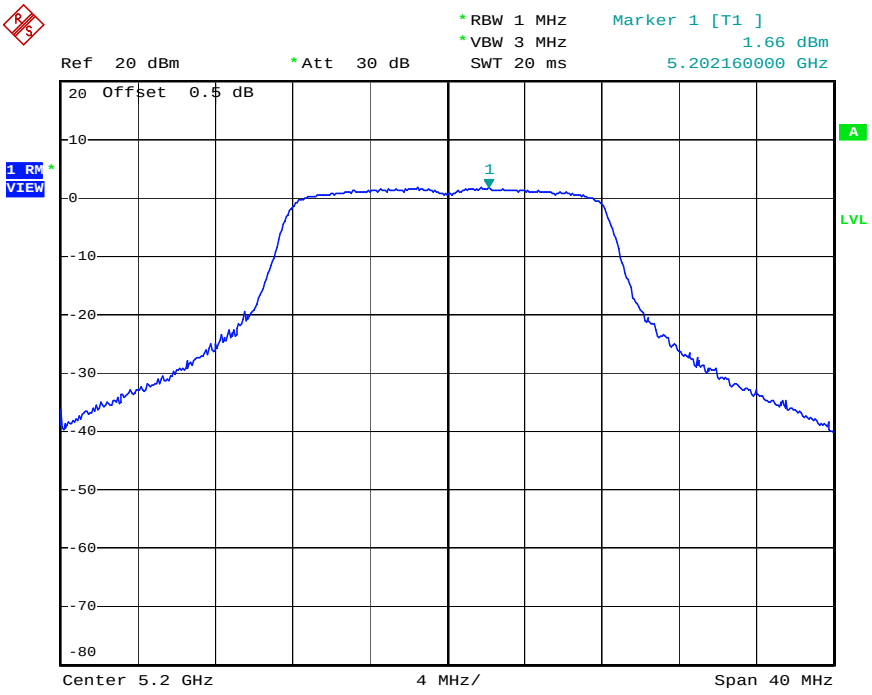
Frequency	Power Density (dBm)	Max. Limit (dBm)	Result
5190 MHz	-8.13	2.00	**Complies**
5230 MHz	0.28	2.00	**Complies**
5270 MHz	0.39	9.00	**Complies**
5310 MHz	-6.73	9.00	**Complies**
5510 MHz	-1.96	9.00	**Complies**
5670 MHz	-1.91	9.00	**Complies**

Power Density Plot on Configuration IEEE 802.11a / 5180 MHz



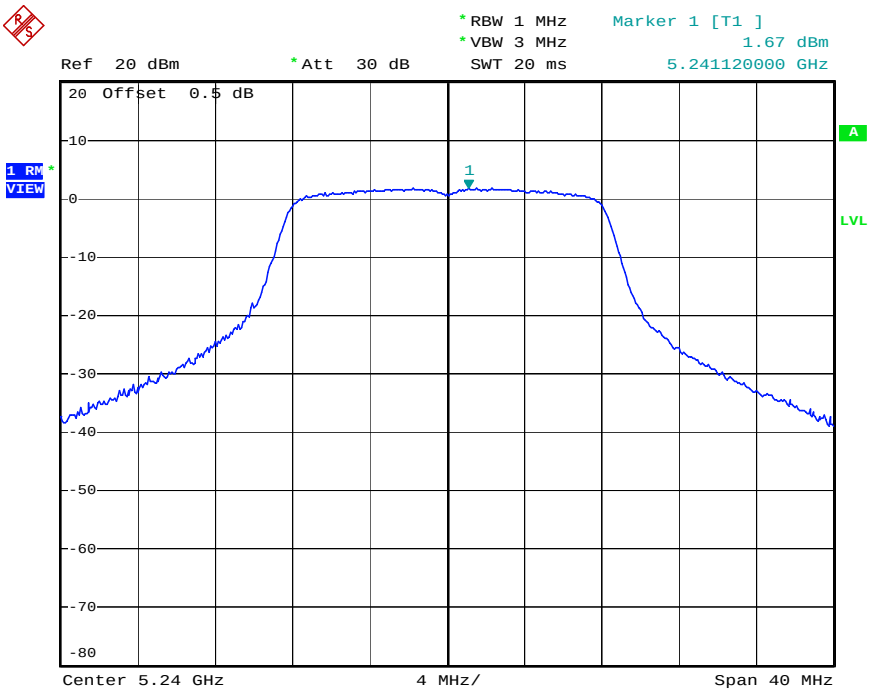
Date: 20.MAY.2008 10:59:19

Power Density Plot on Configuration IEEE 802.11a / 5200 MHz



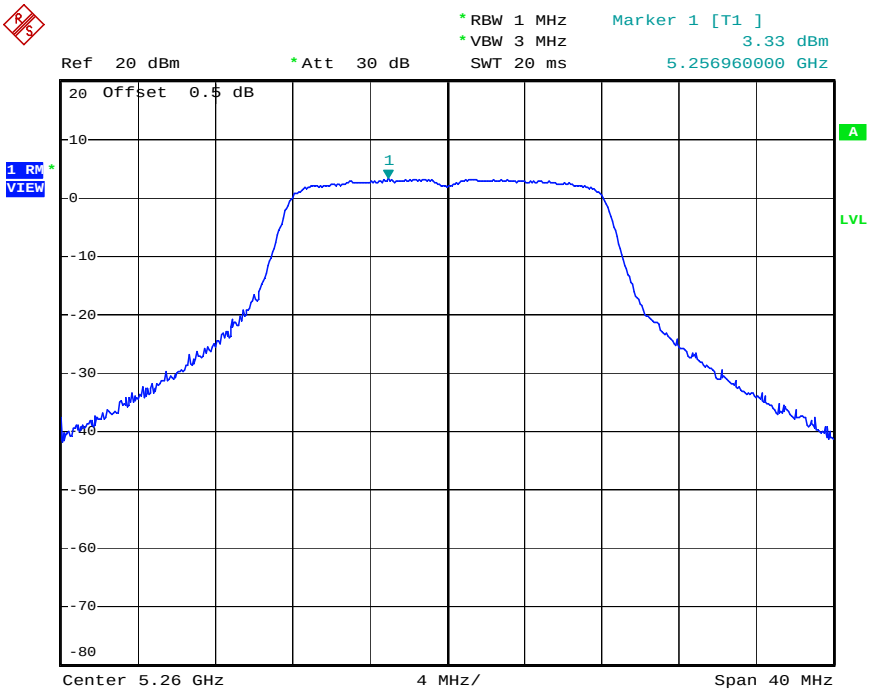
Date: 20.MAY.2008 11:02:50

Power Density Plot on Configuration IEEE 802.11a / 5240 MHz



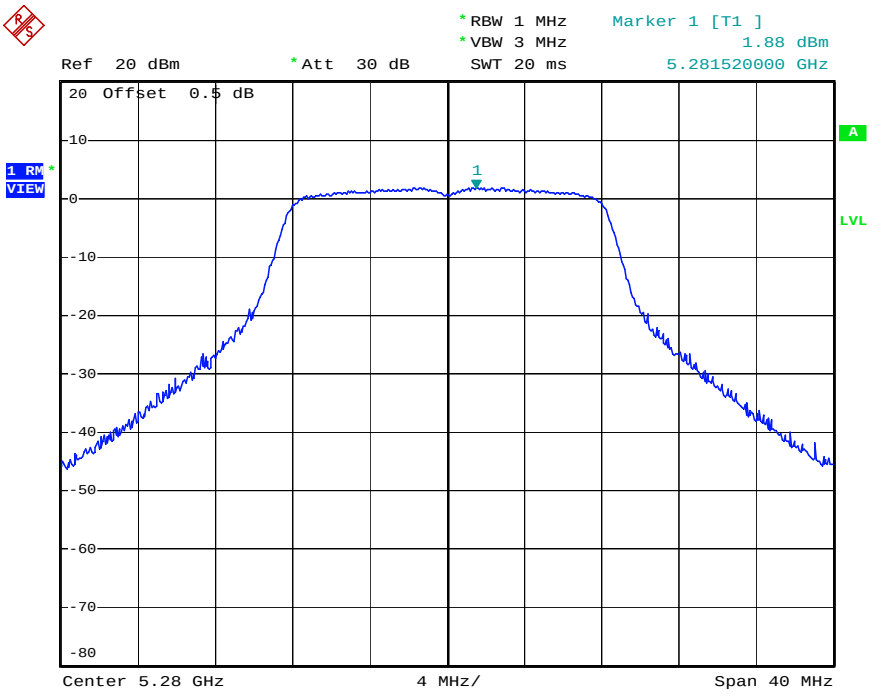
Date: 20.MAY.2008 11:04:38

Power Density Plot on Configuration IEEE 802.11a / 5260 MHz



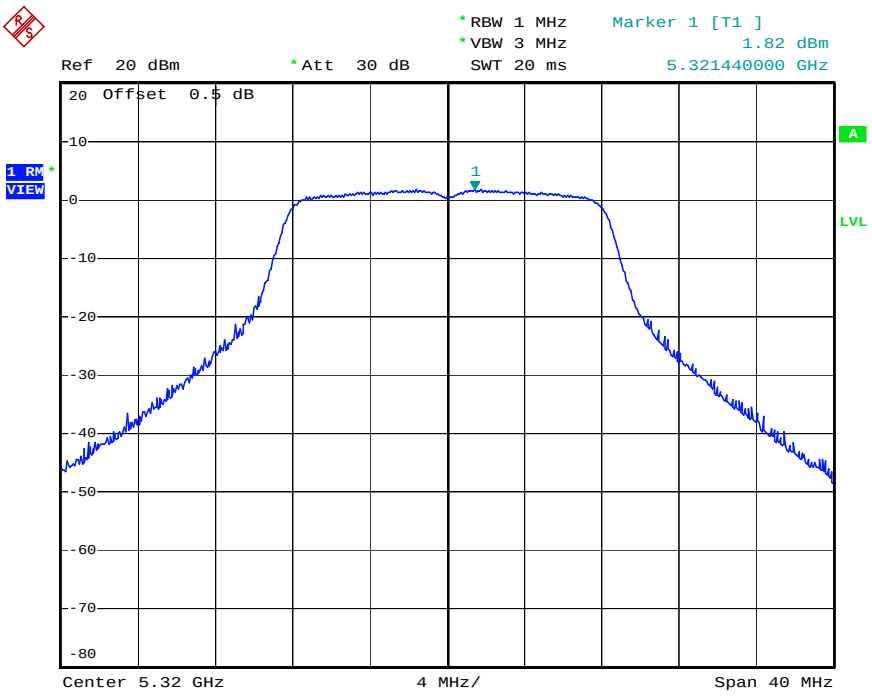
Date: 13.JUN.2008 11:47:03

Power Density Plot on Configuration IEEE 802.11a / 5280 MHz



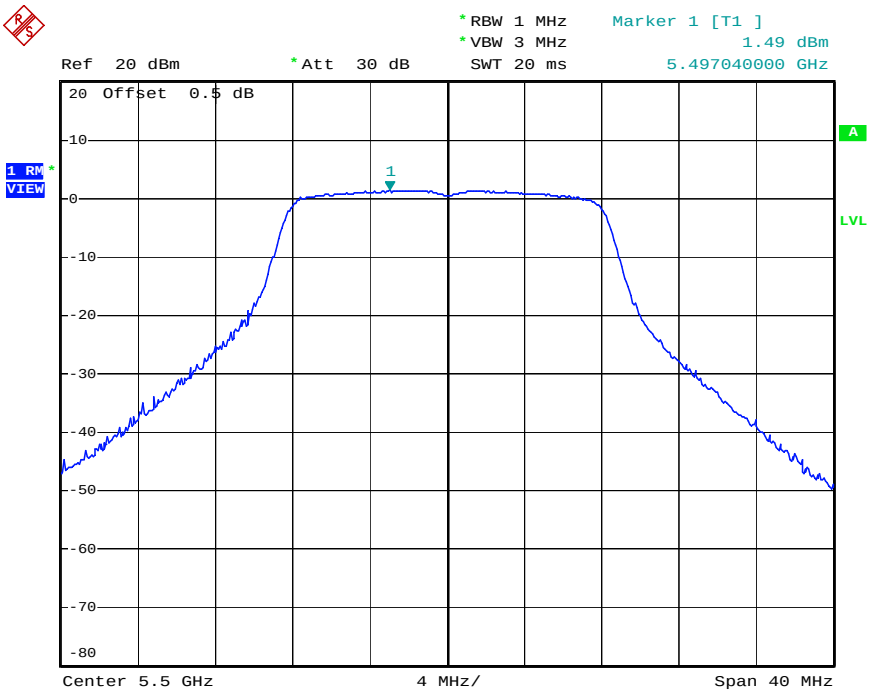
Date: 13.JUN.2008 14:14:52

Power Density Plot on Configuration IEEE 802.11a / 5320 MHz

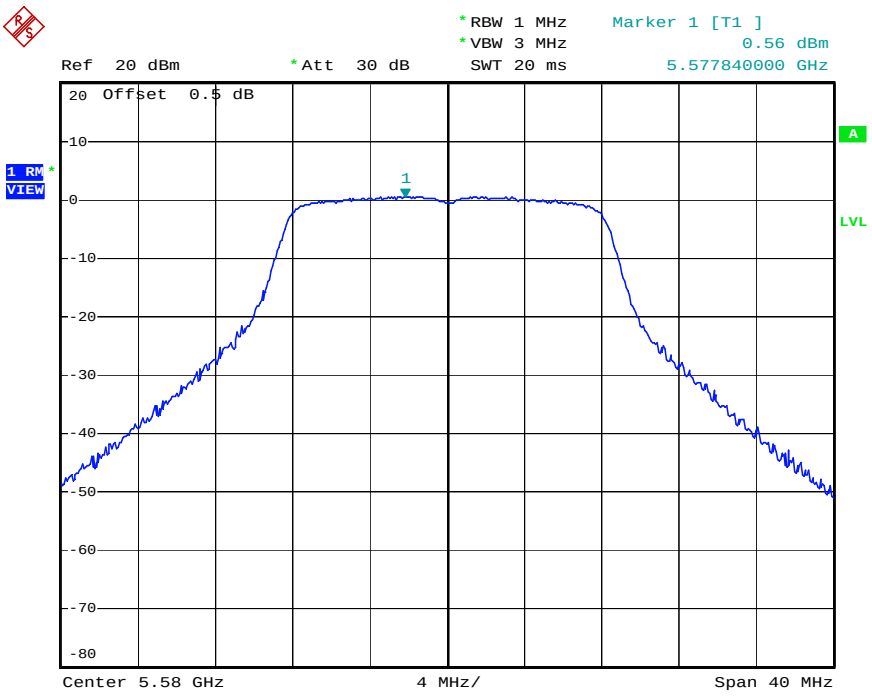


Date: 13.JUN.2008 14:16:26

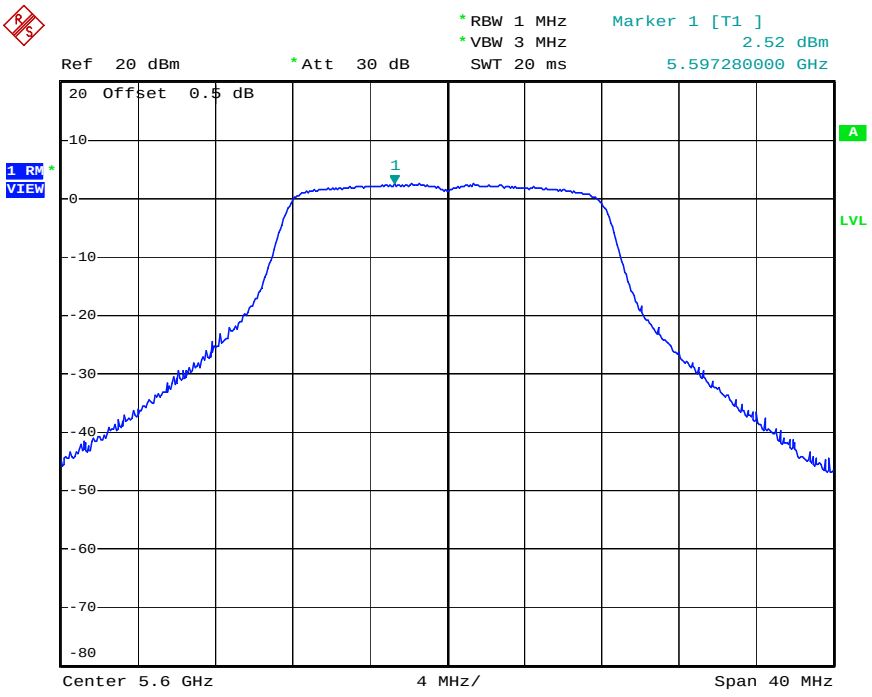
Power Density Plot on Configuration IEEE 802.11a / 5500 MHz



Power Density Plot on Configuration IEEE 802.11a / 5580 MHz

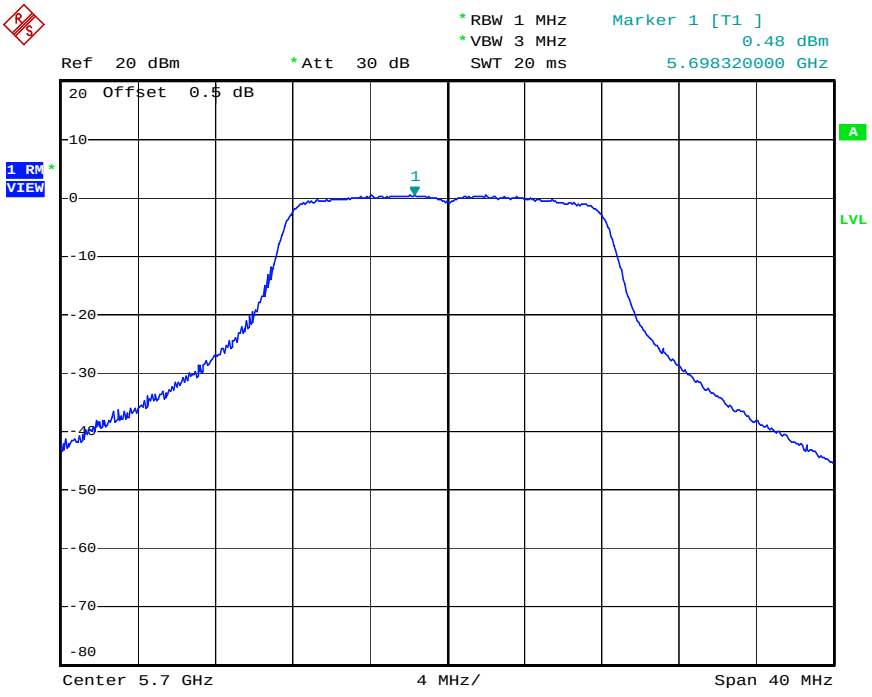


Power Density Plot on Configuration IEEE 802.11a / 5600 MHz



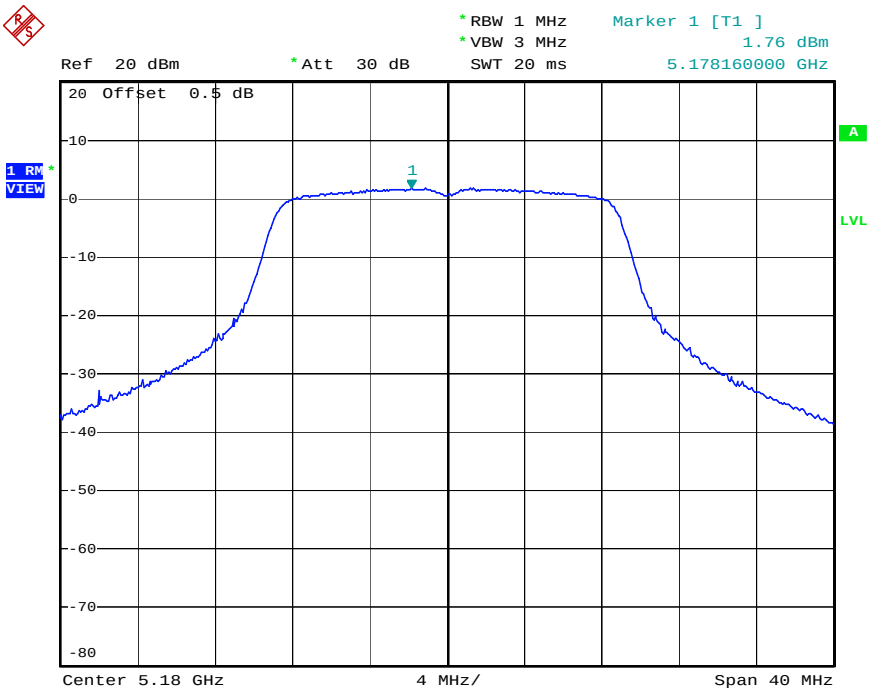
Date: 13.JUN.2008 14:28:24

Power Density Plot on Configuration IEEE 802.11a / 5700 MHz



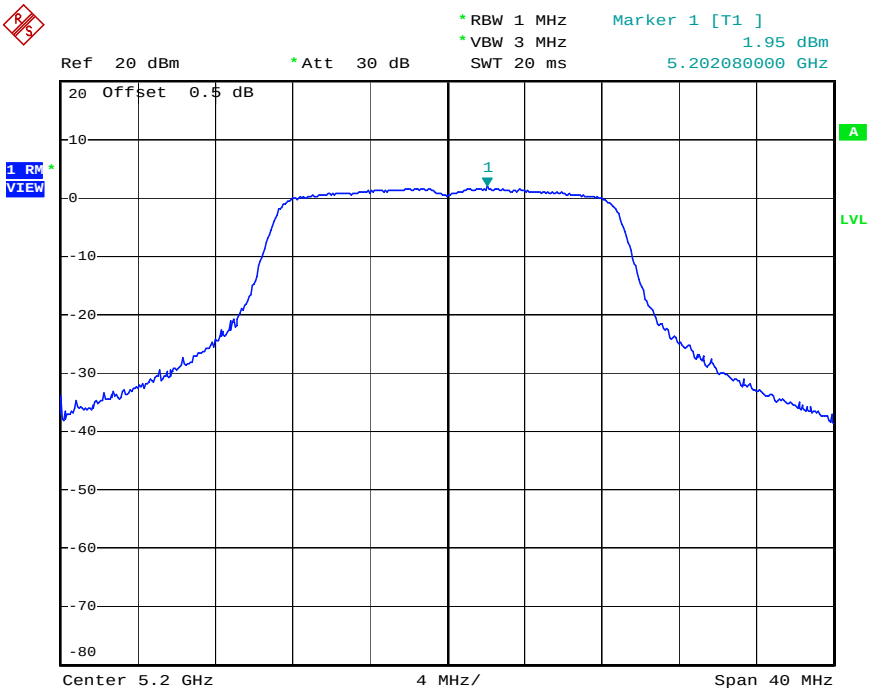
Date: 13.JUN.2008 14:39:22

Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5180 MHz



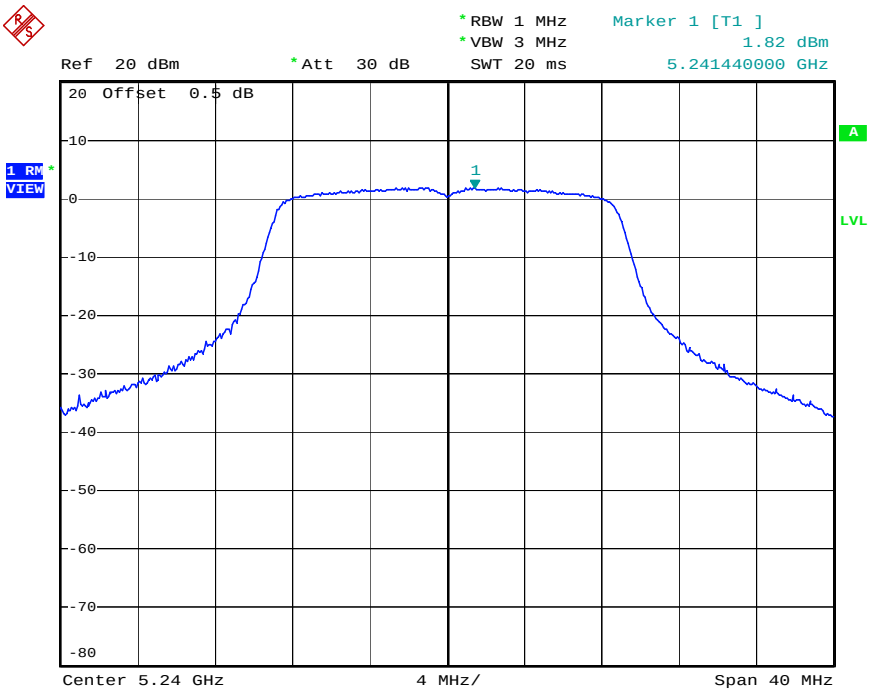
Date: 20.MAY.2008 14:35:48

Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5200 MHz



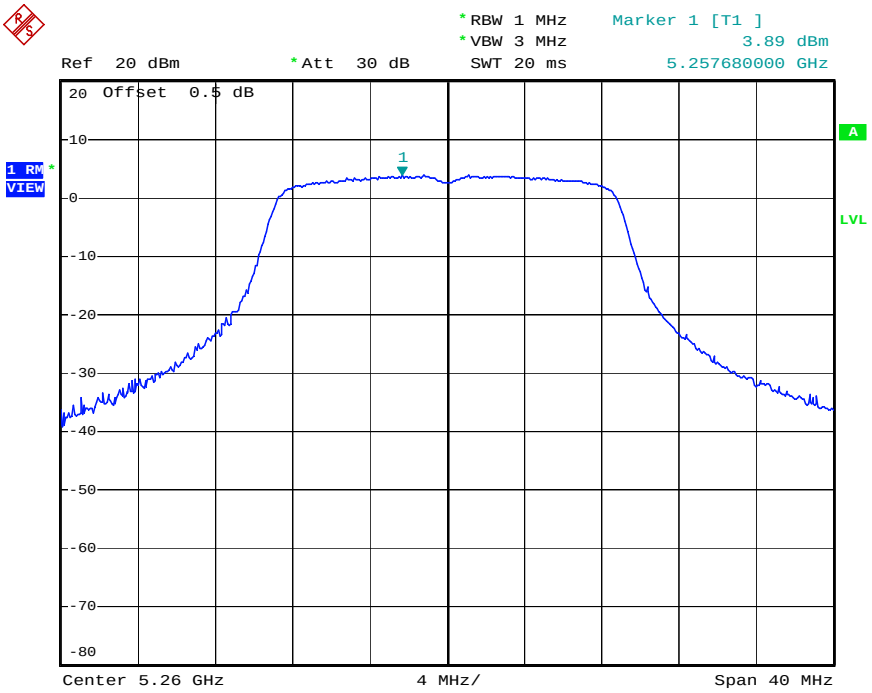
Date: 20.MAY.2008 14:49:25

Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5240 MHz



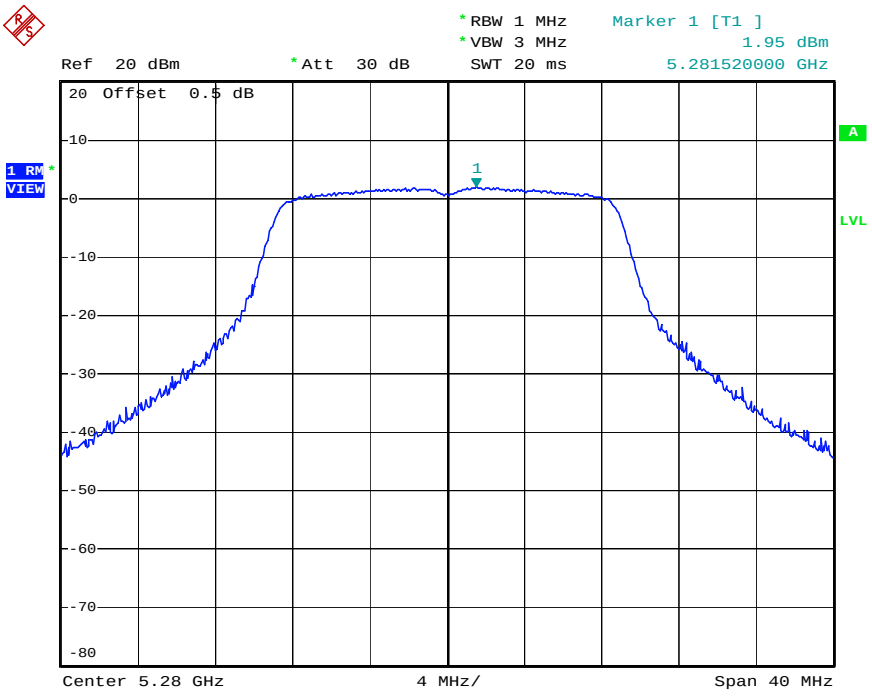
Date: 20.MAY.2008 14:51:09

Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5260 MHz

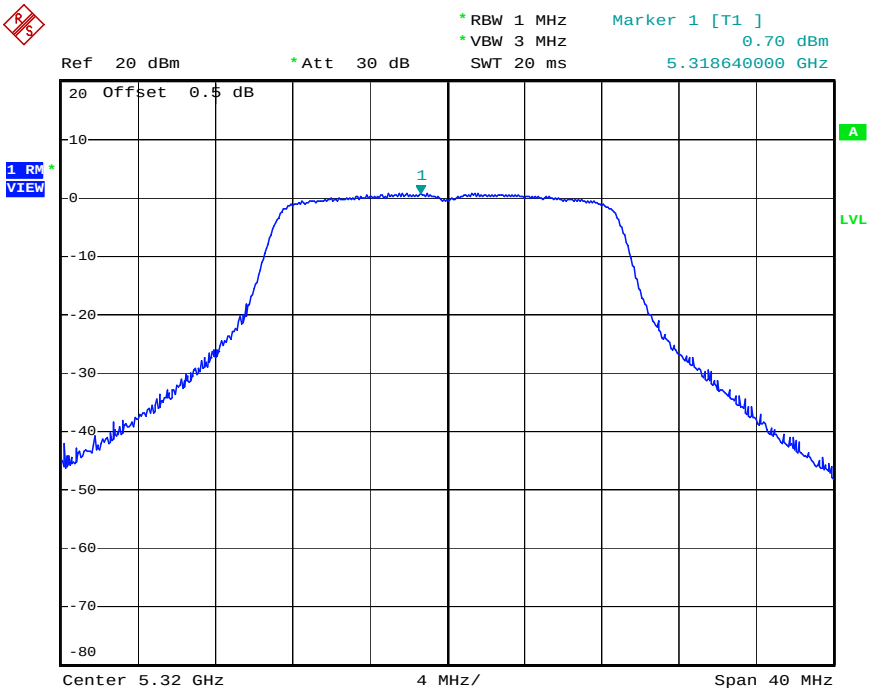


Date: 13.JUN.2008 14:44:55

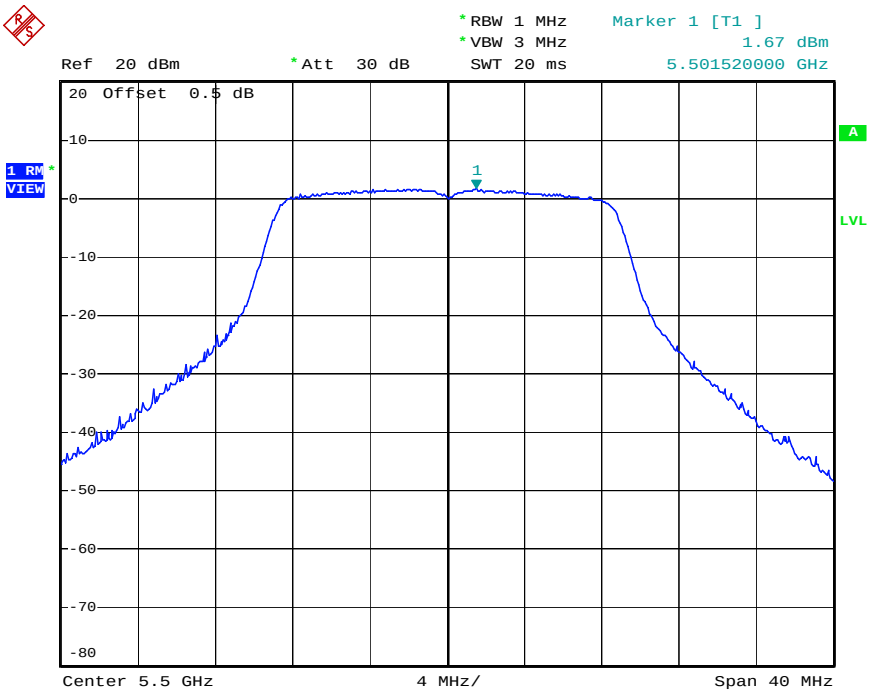
Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5280 MHz



Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5320 MHz

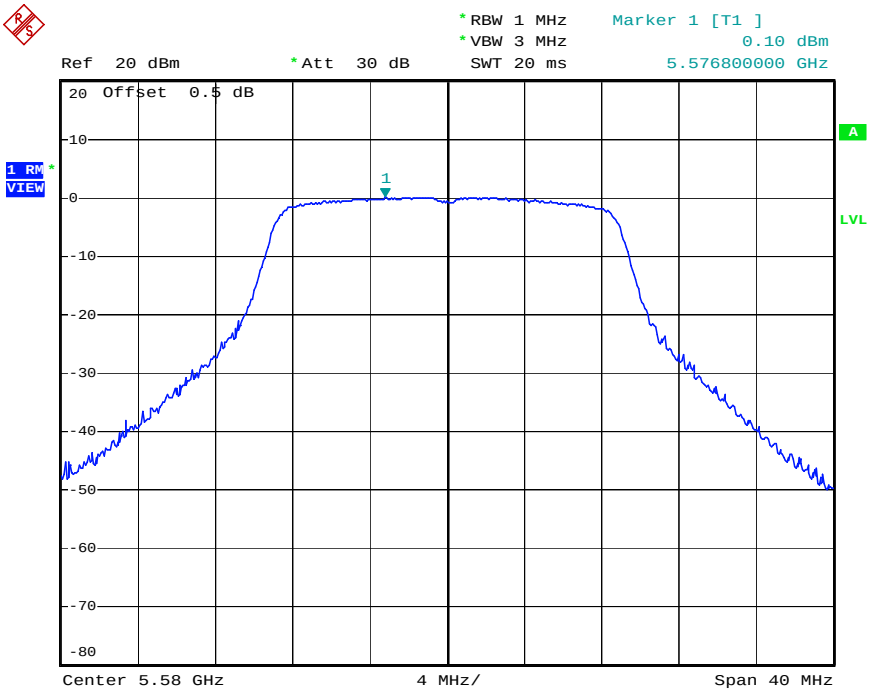


Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5500 MHz



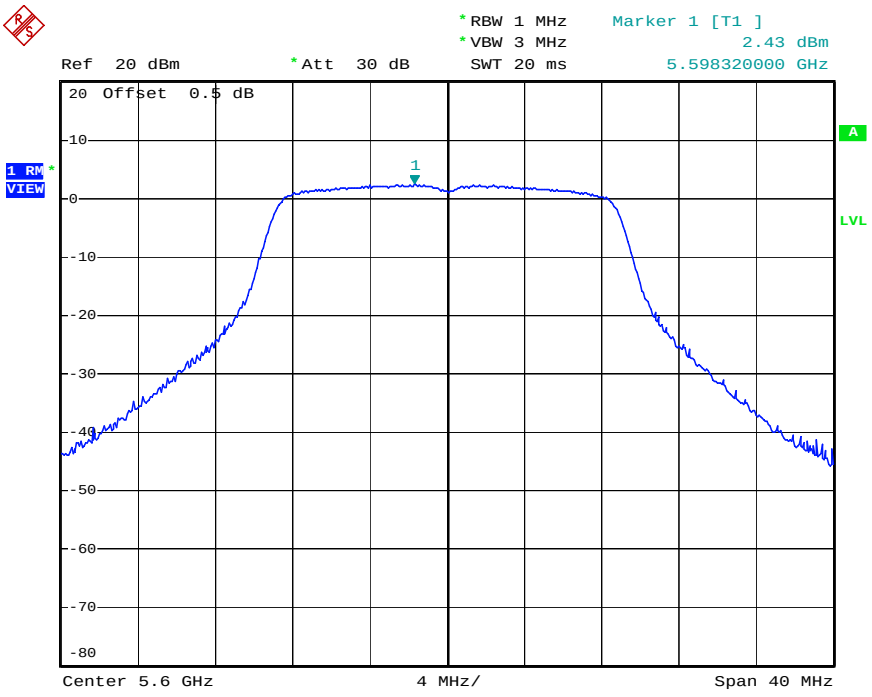
Date: 13.JUN.2008 15:06:39

Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5580 MHz

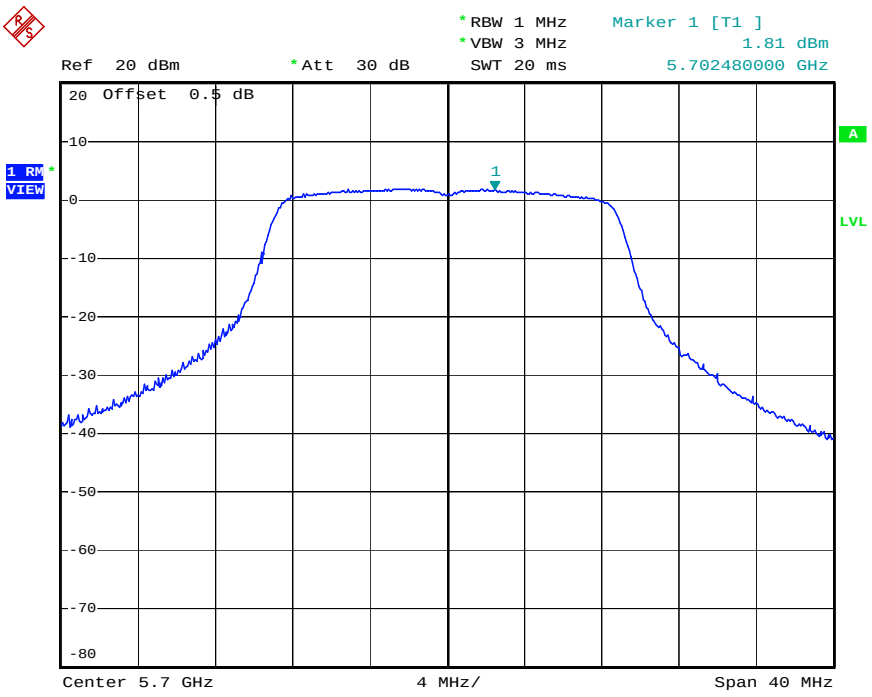


Date: 13.JUN.2008 15:21:55

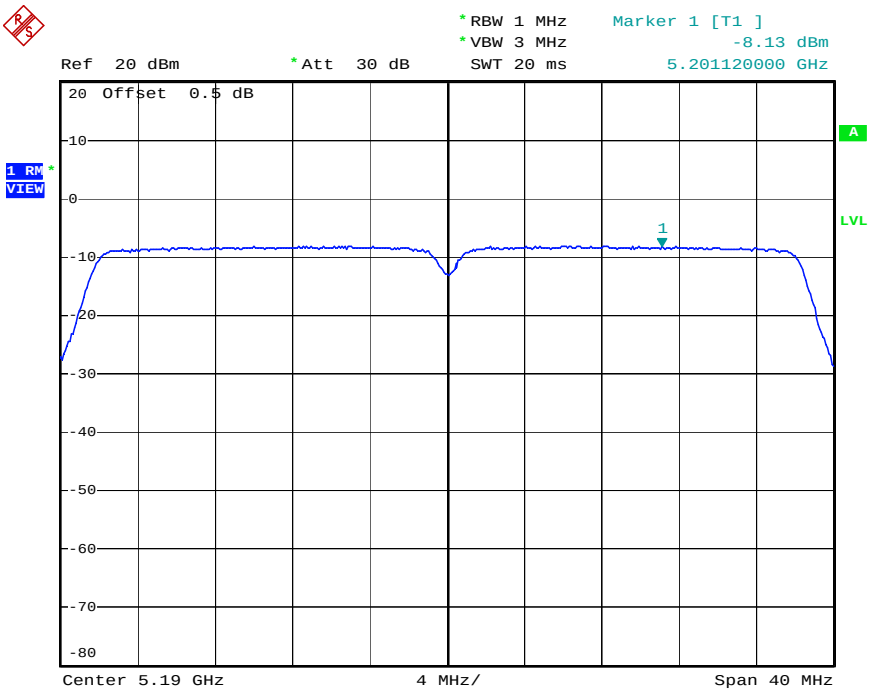
Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5600 MHz



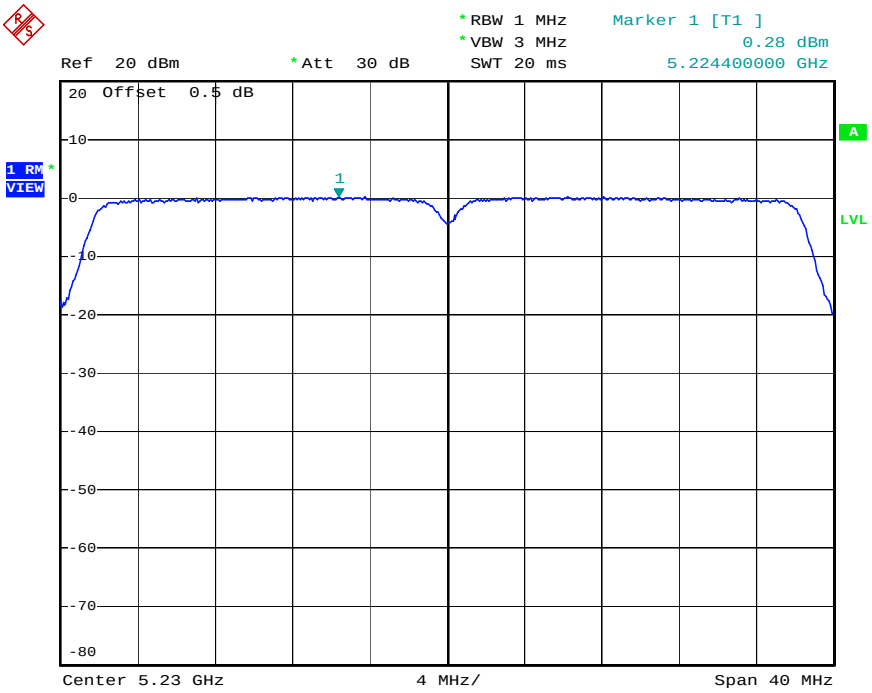
Power Density Plot on Configuration IEEE 802.11n (20MHz) / 5700 MHz



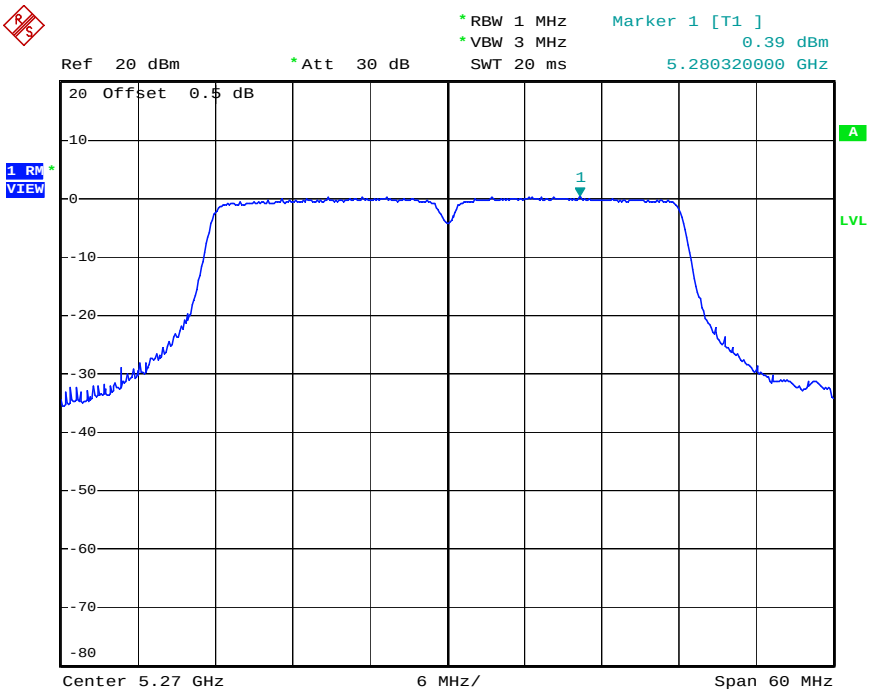
Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5190 MHz



Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5230 MHz

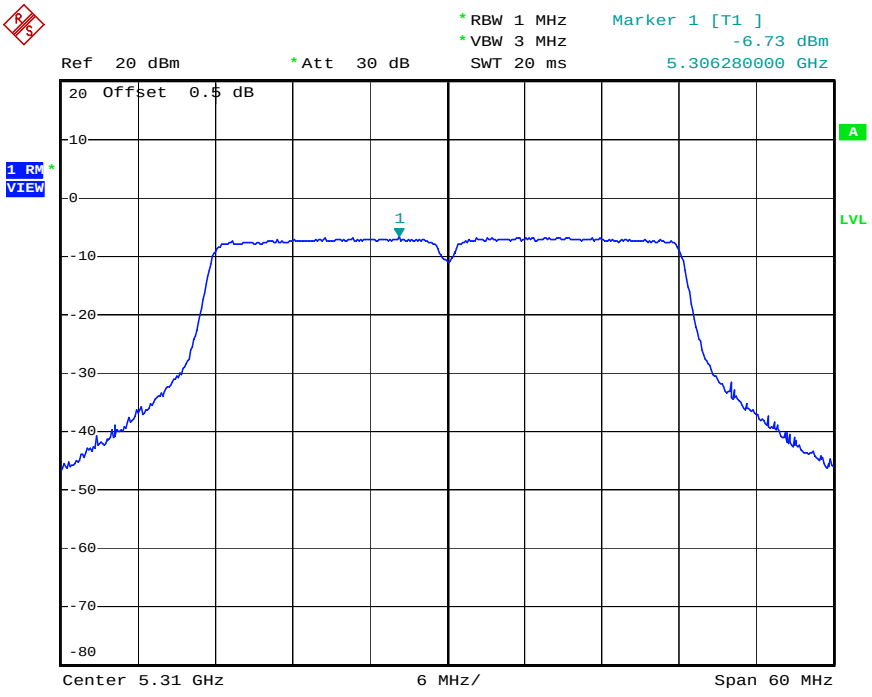


Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5270 MHz



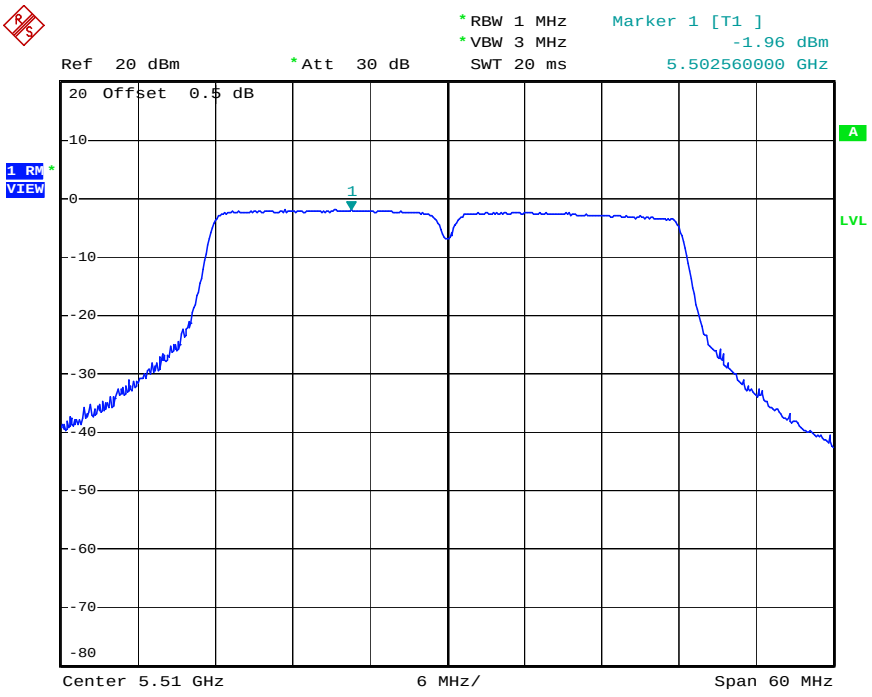
Date: 13.JUN.2008 15:24:45

Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5310 MHz



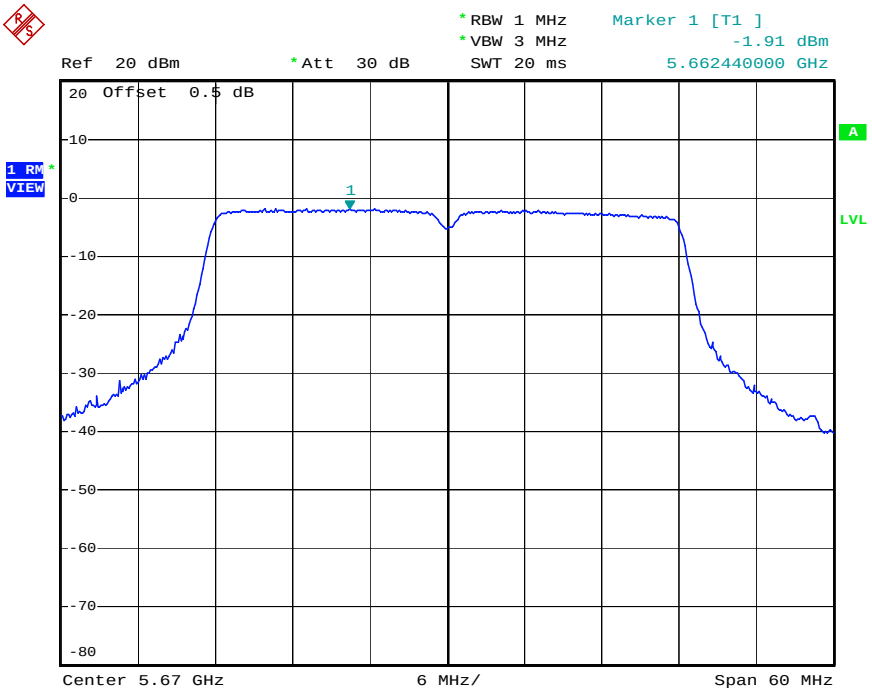
Date: 13.JUN.2008 15:28:44

Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5510 MHz



Date: 13.JUN.2008 15:30:24

Power Density Plot on Configuration IEEE 802.11n (40MHz) / 5670 MHz



Date: 13.JUN.2008 15:32:20

3.5 Peak Excursion Measurement

3.5.1 Limit

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emissions bandwidth whichever is less.

3.5.2 Measuring Instruments and Setting

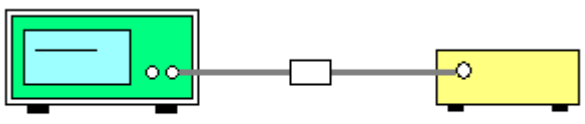
Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

3.5.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set the spectrum analyzer span to view the entire emissions bandwidth. The largest difference between the following two traces (Peak Trace and Average Trace) must be ≤ 13 dB for all frequencies across the emissions bandwidth. Submit a plot.
3. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and max-hold settings.
4. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to “free run”. Set RBW = 1 MHz. Set VBW ≥ 1/T (IEEE 802.11a VBW = 300kHz ≥ 1/4μs). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode. Set max hold. Allow max hold to run for 60 seconds.

3.5.4 Test Setup Layout



3.5.5 Test Deviation

There is no deviation with the original standard.

3.5.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.5.7 Test Result of Peak Excursion

Test date	Jun. 13, 2008	**Test Site No.**	TH01-HY
Temperature	27℃	**Humidity**	55%
Test Engineer	Sam	**Configuration**	802.11a/n

Configuration of IEEE 802.11a

Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
5180 MHz	5.29	13	**Complies**
5200 MHz	5.35	13	**Complies**
5240 MHz	5.40	13	**Complies**
5260 MHz	5.33	13	**Complies**
5280 MHz	5.18	13	**Complies**
5320 MHz	5.49	13	**Complies**
5500 MHz	6.09	13	**Complies**
5580 MHz	6.00	13	**Complies**
5600 MHz	5.30	13	**Complies**
5700 MHz	5.69	13	**Complies**

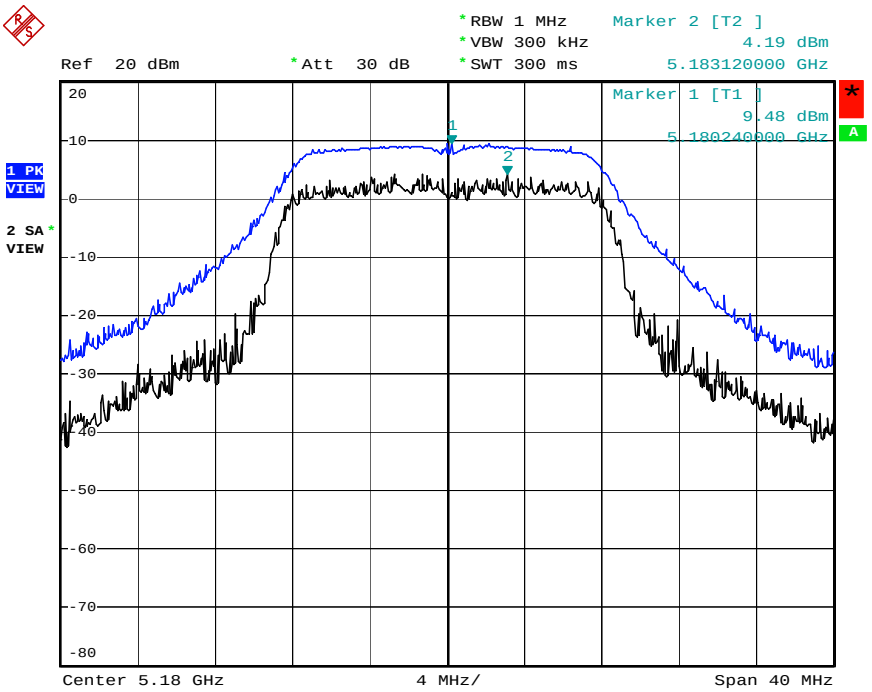
Configuration IEEE 802.11n (20MHz)

Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
5180 MHz	5.15	13	**Complies**
5200 MHz	5.85	13	**Complies**
5240 MHz	5.39	13	**Complies**
5260 MHz	4.93	13	**Complies**
5280 MHz	5.62	13	**Complies**
5320 MHz	5.27	13	**Complies**
5500 MHz	5.90	13	**Complies**
5580 MHz	5.63	13	**Complies**
5600 MHz	5.50	13	**Complies**
5700 MHz	4.32	13	**Complies**

Configuration IEEE 802.11n (40MHz)

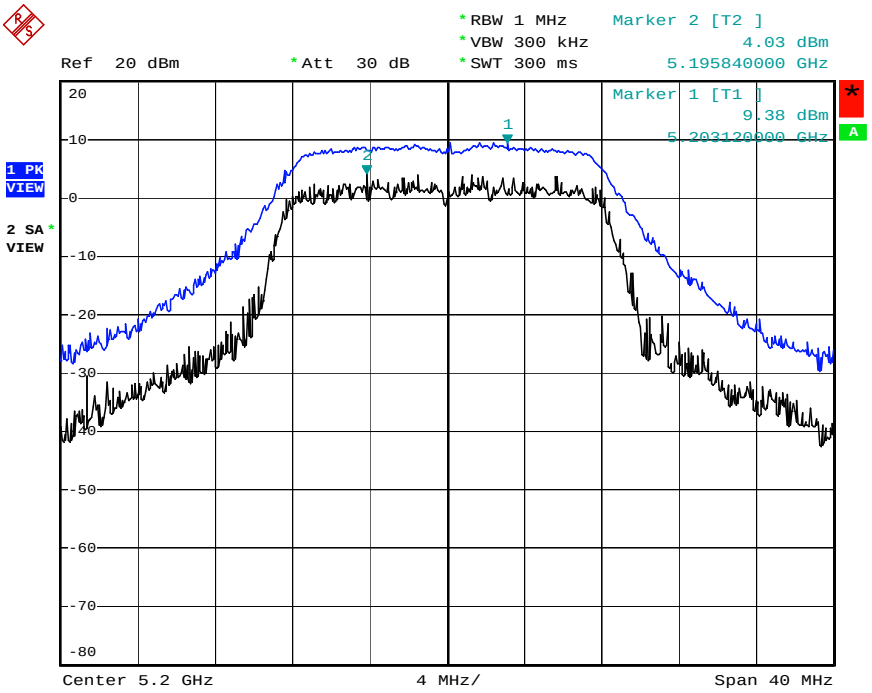
Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
5190 MHz	5.52	13	**Complies**
5230 MHz	5.88	13	**Complies**
5270 MHz	5.37	13	**Complies**
5310 MHz	5.34	13	**Complies**
5510 MHz	6.01	13	**Complies**
5670 MHz	5.46	13	**Complies**

Peak Excursion Plot on Configuration IEEE 802.11a / 5180 MHz



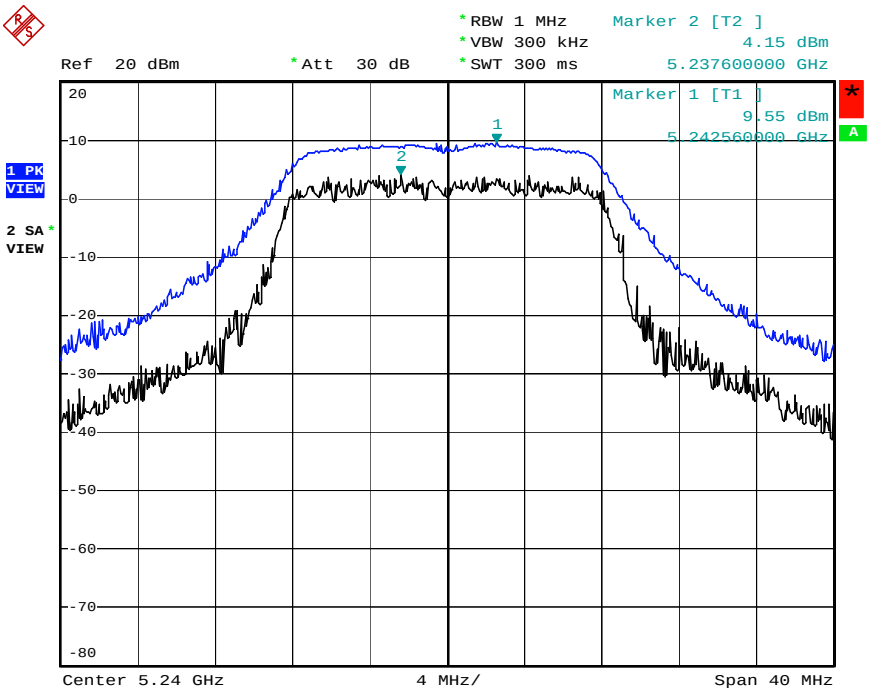
Date: 20.MAY.2008 11:00:07

Peak Excursion Plot on Configuration IEEE 802.11a / 5200 MHz



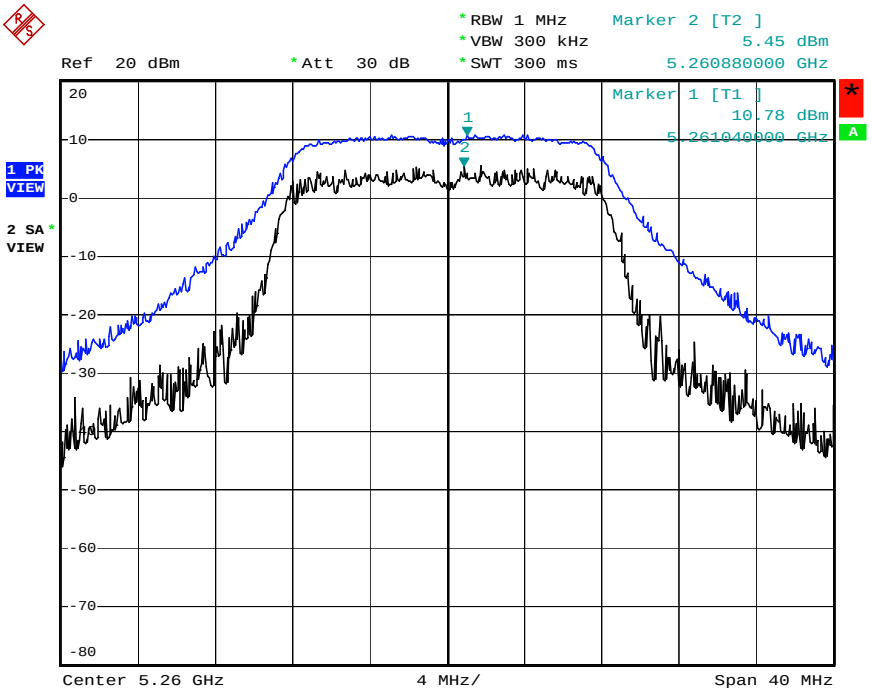
Date: 20.MAY.2008 11:03:38

Peak Excursion Plot on Configuration IEEE 802.11a / 5240 MHz



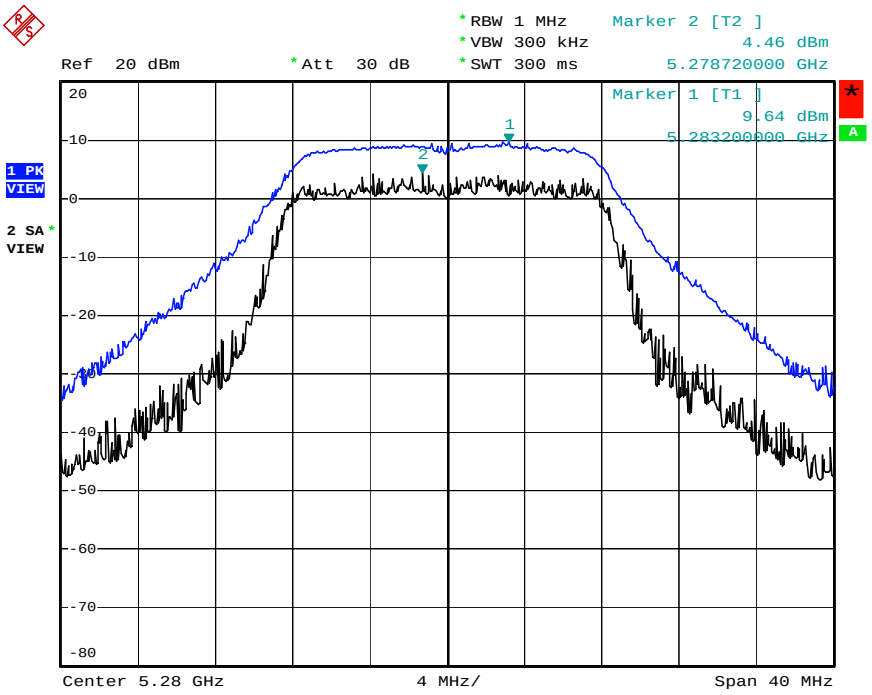
Date: 20.MAY.2008 11:05:26

Peak Excursion Plot on Configuration IEEE 802.11a / 5260 MHz



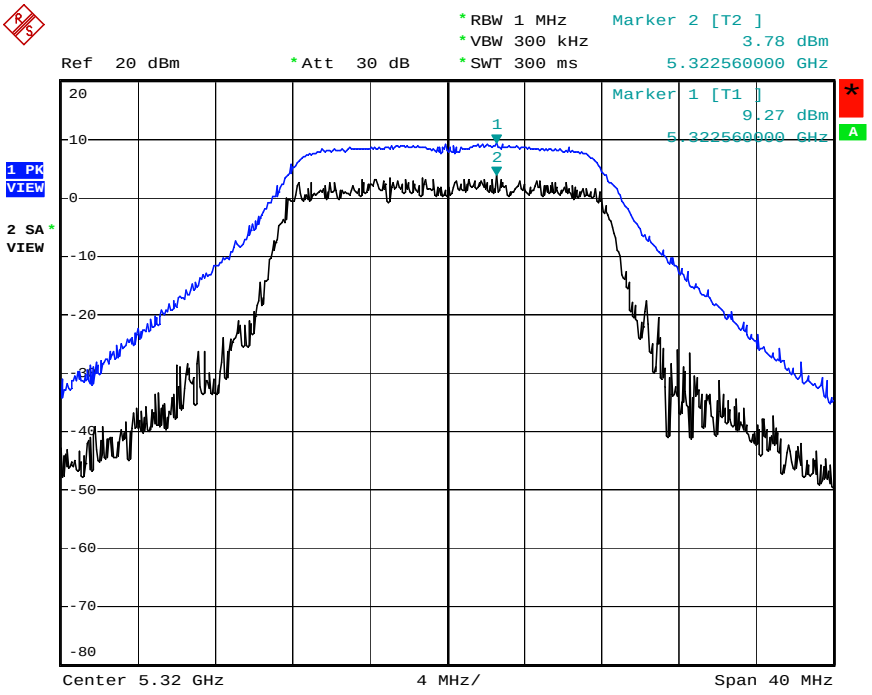
Date: 13.JUN.2008 11:47:51

Peak Excursion Plot on Configuration IEEE 802.11a / 5280 MHz



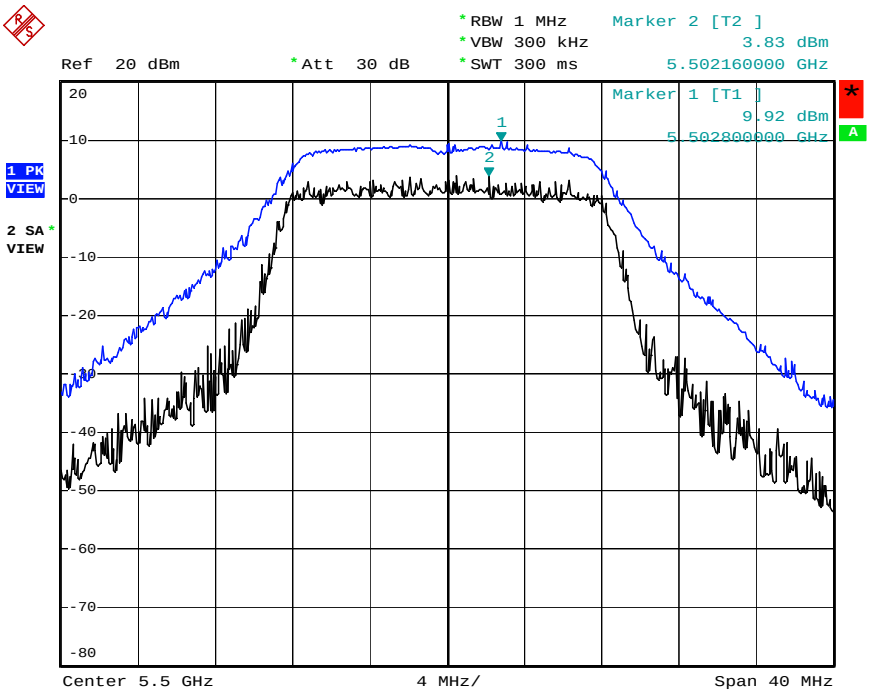
Date: 13.JUN.2008 14:15:40

Peak Excursion Plot on Configuration IEEE 802.11a / 5320 MHz



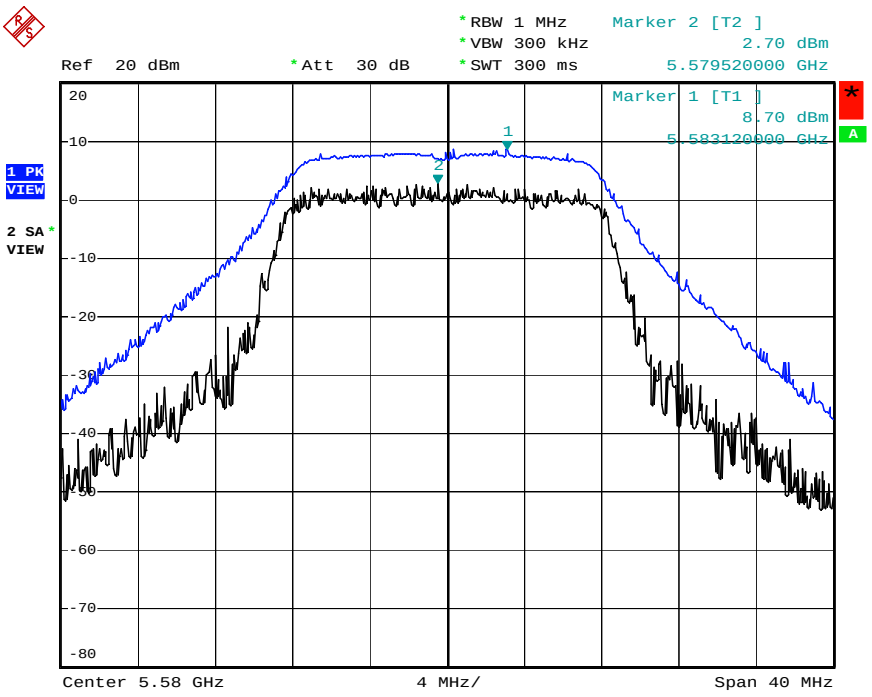
Date: 13.JUN.2008 14:17:14

Peak Excursion Plot on Configuration IEEE 802.11a / 5500 MHz



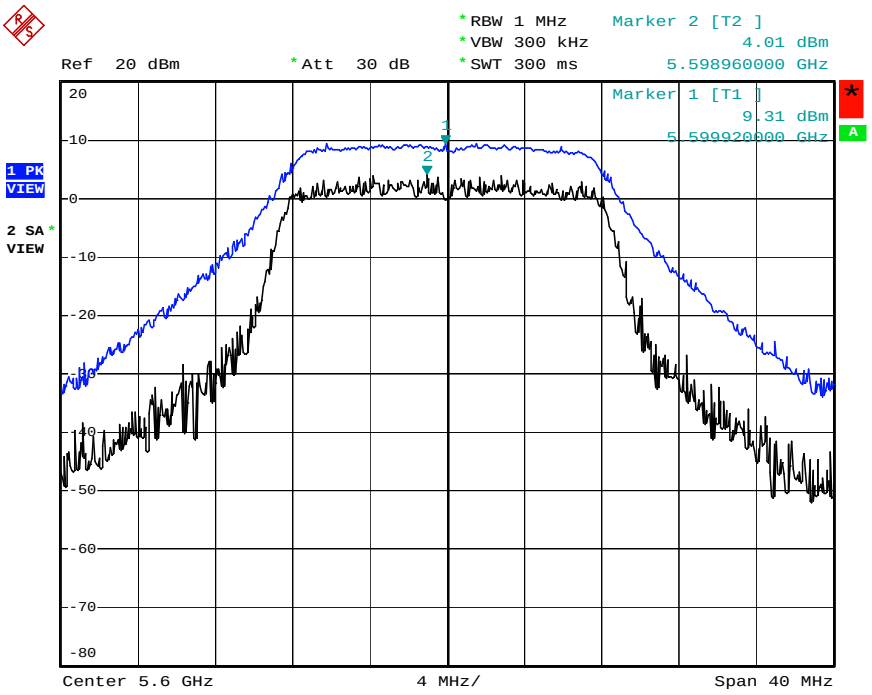
Date: 13.JUN.2008 14:19:39

Peak Excursion Plot on Configuration IEEE 802.11a / 5580 MHz



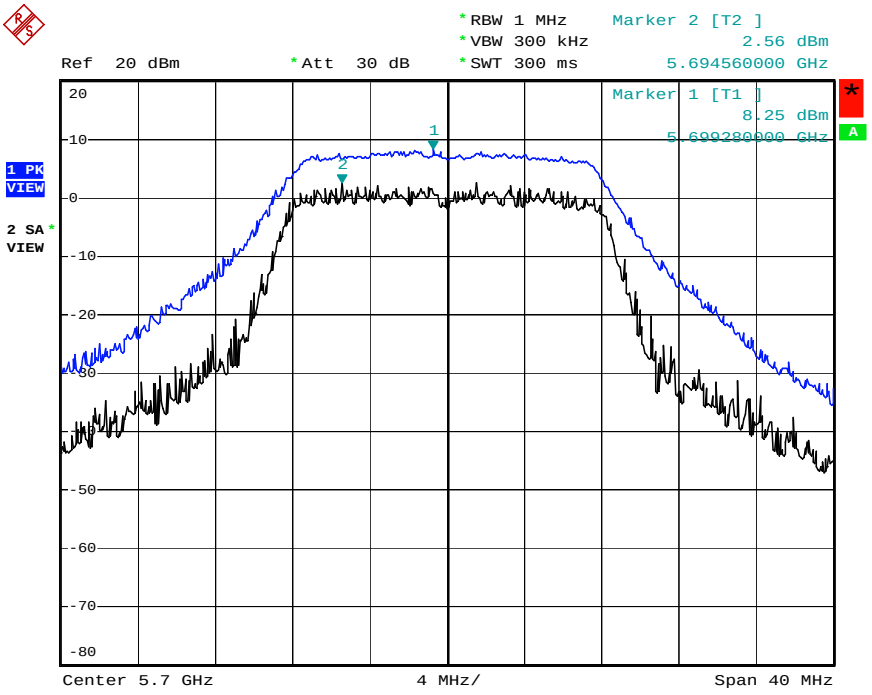
Date: 13.JUN.2008 14:23:43

Peak Excursion Plot on Configuration IEEE 802.11a / 5600 MHz



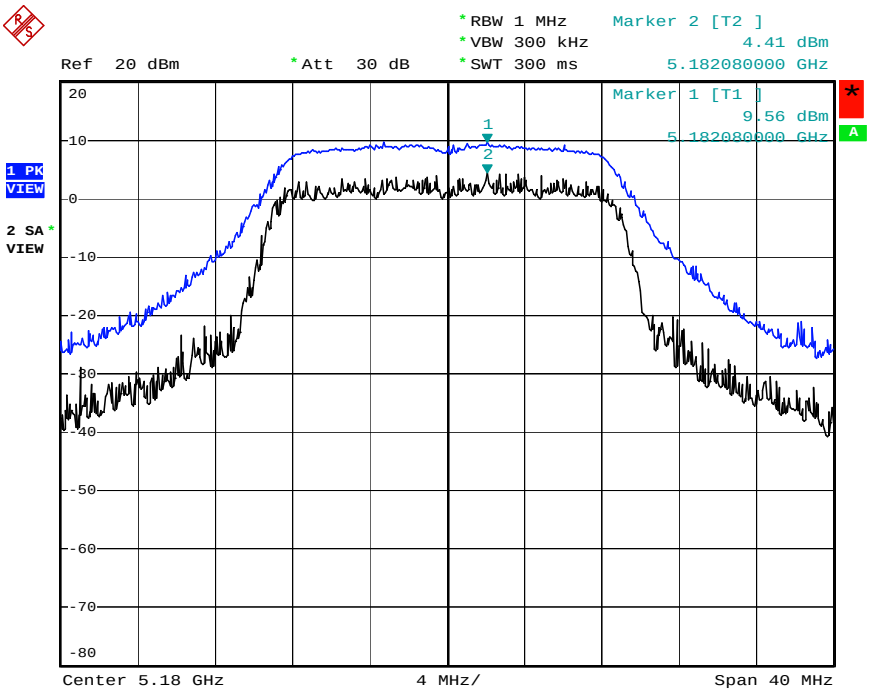
Date: 13.JUN.2008 14:29:14

Peak Excursion Plot on Configuration IEEE 802.11a / 5700 MHz



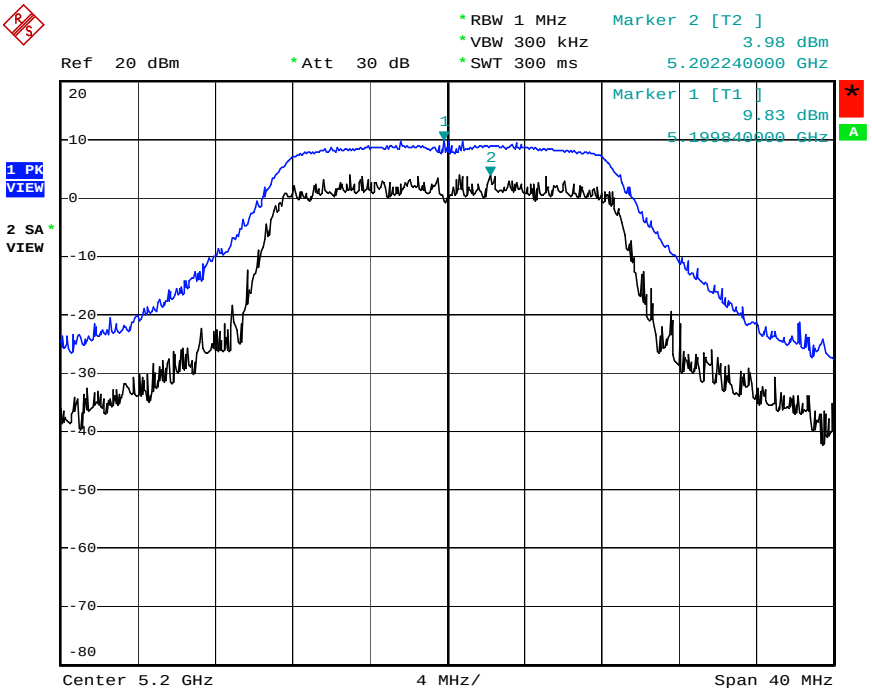
Date: 13.JUN.2008 14:40:11

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5180 MHz



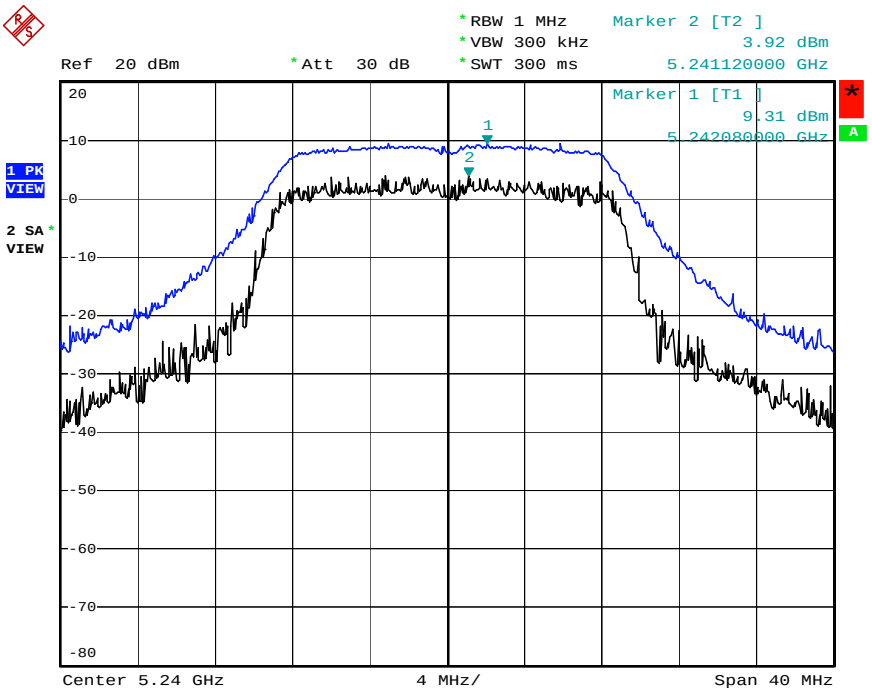
Date: 20.MAY.2008 14:36:35

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5200 MHz



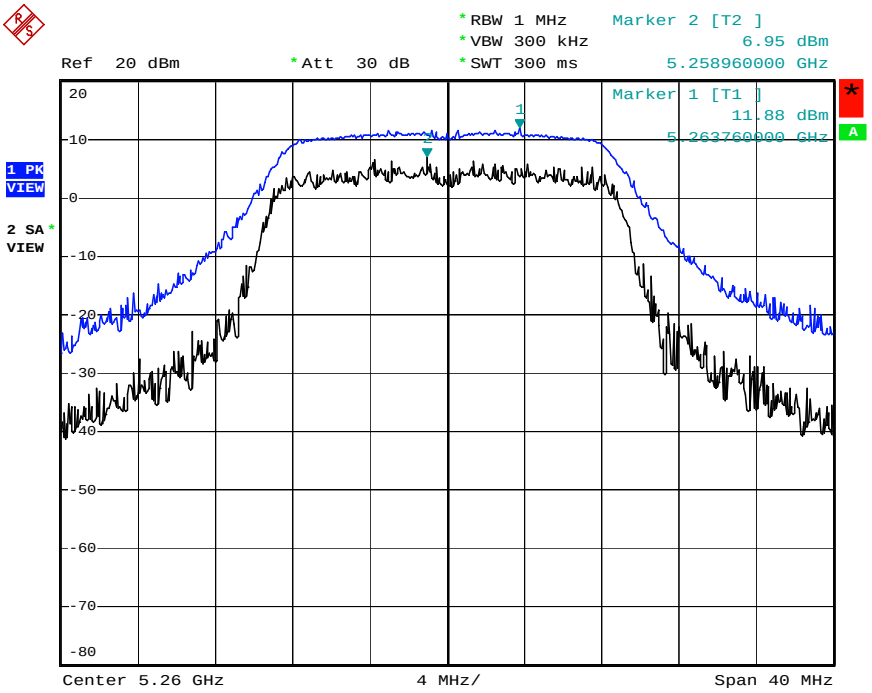
Date: 20.MAY.2008 14:50:12

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5240 MHz



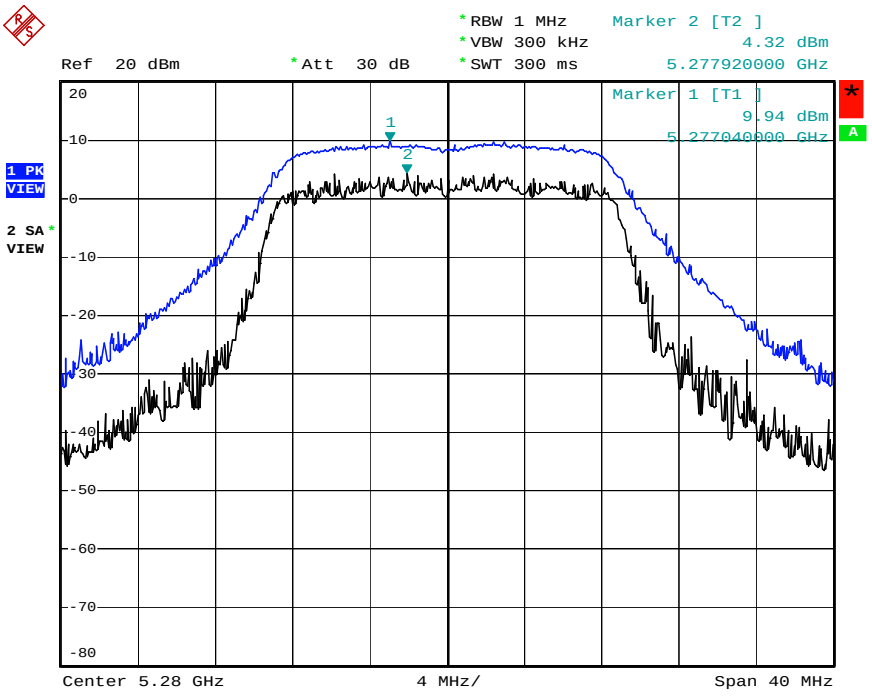
Date: 20.MAY.2008 14:51:57

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5260 MHz



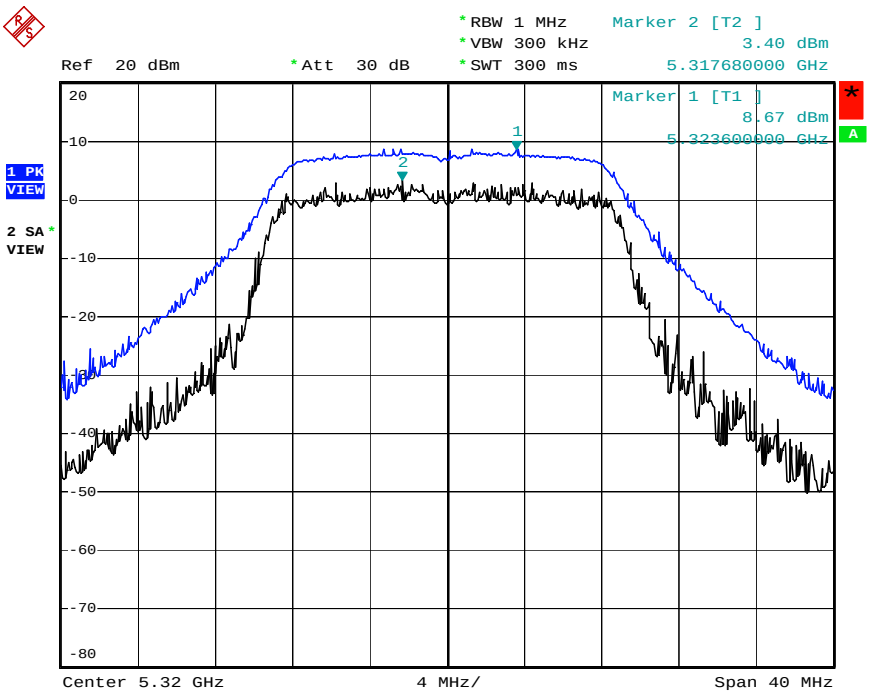
Date: 13.JUN.2008 14:45:42

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5280 MHz



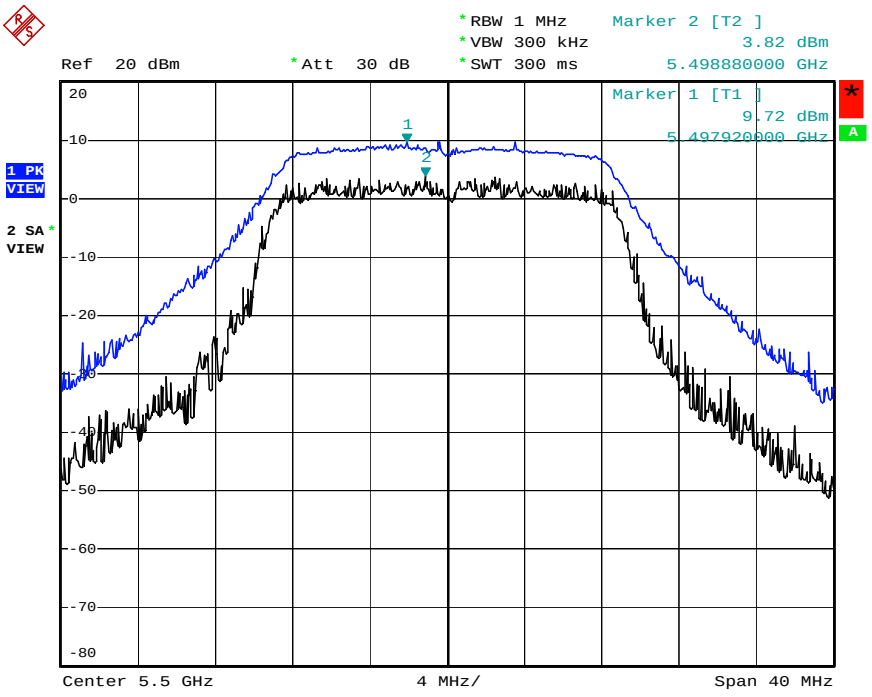
Date: 13.JUN.2008 14:47:09

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5320 MHz



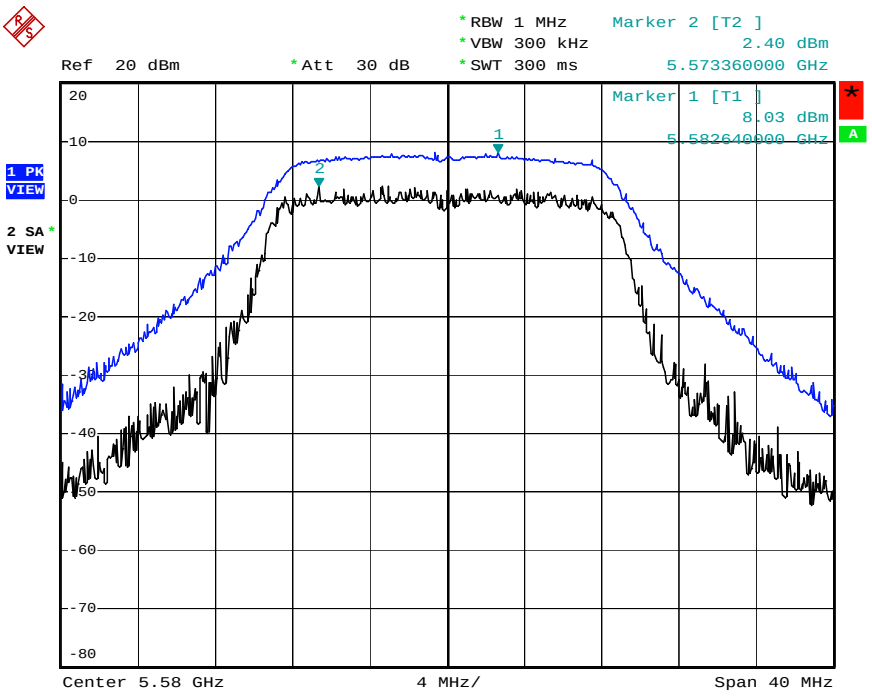
Date: 13.JUN.2008 15:02:22

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5500 MHz



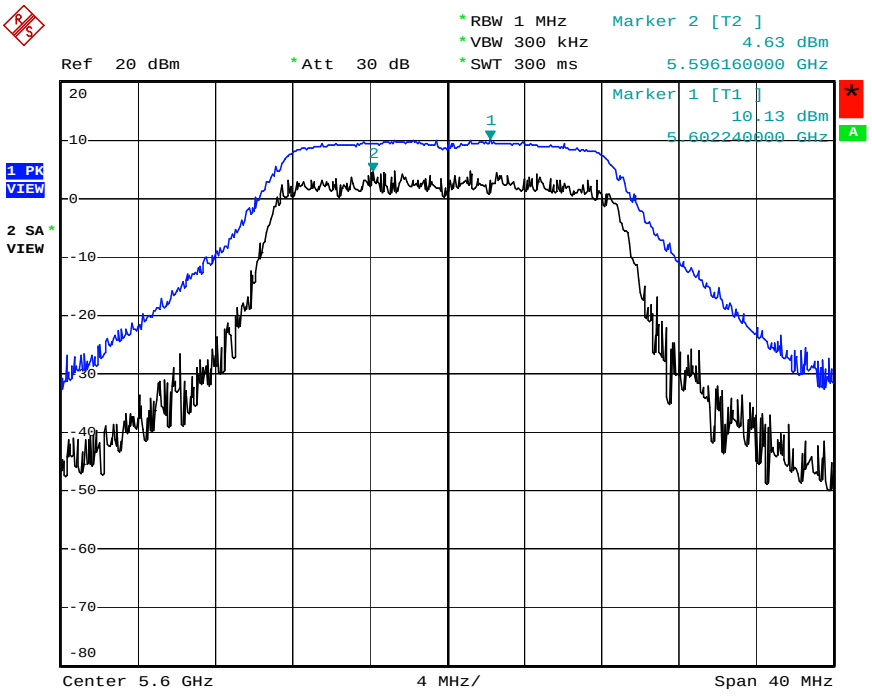
Date: 13.JUN.2008 15:07:29

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5580 MHz



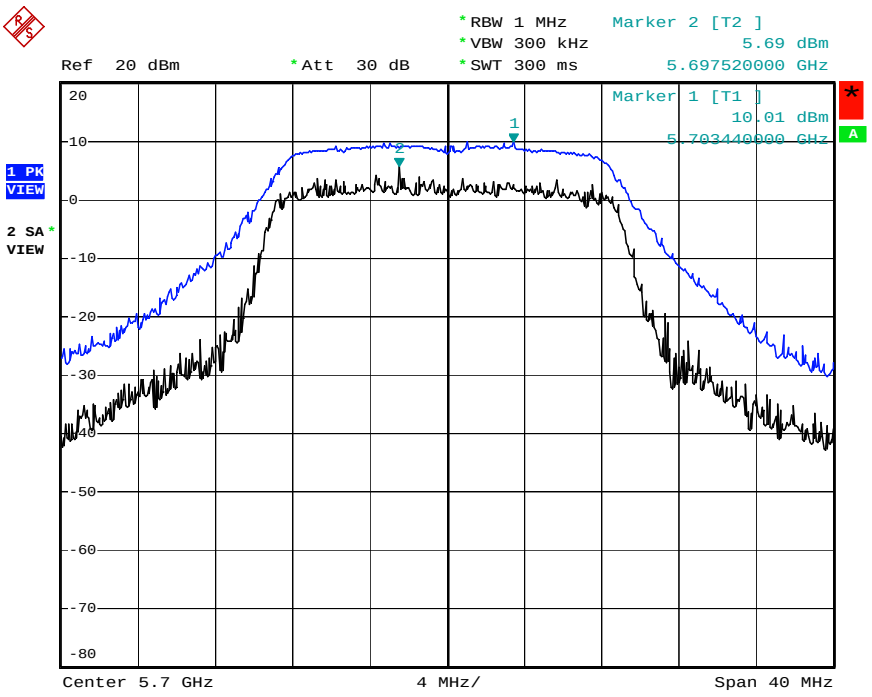
Date: 13.JUN.2008 15:22:44

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5600 MHz



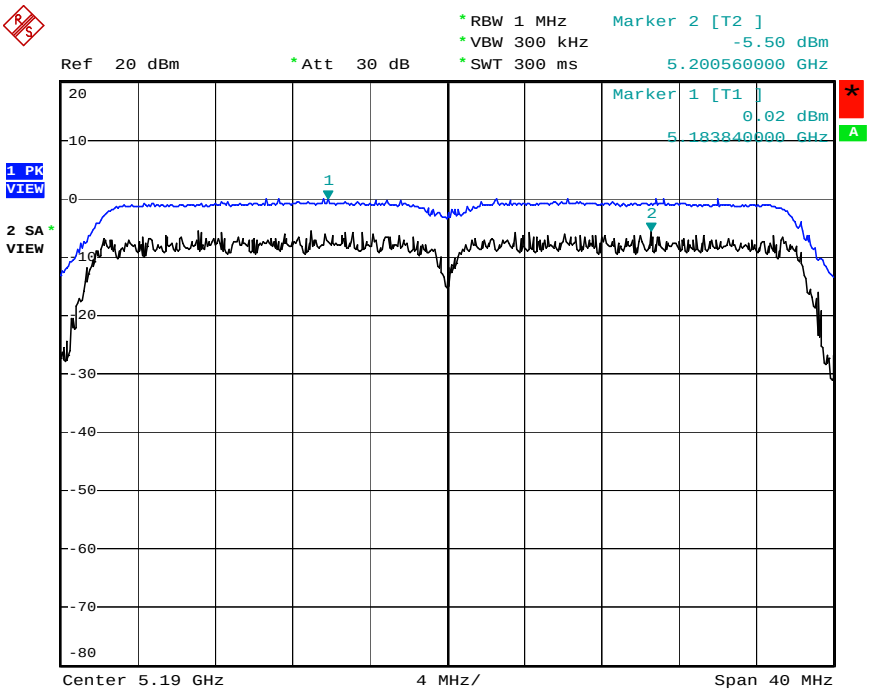
Date: 13.JUN.2008 15:11:08

Peak Excursion Plot on Configuration IEEE 802.11n (20MHz) / 5700 MHz



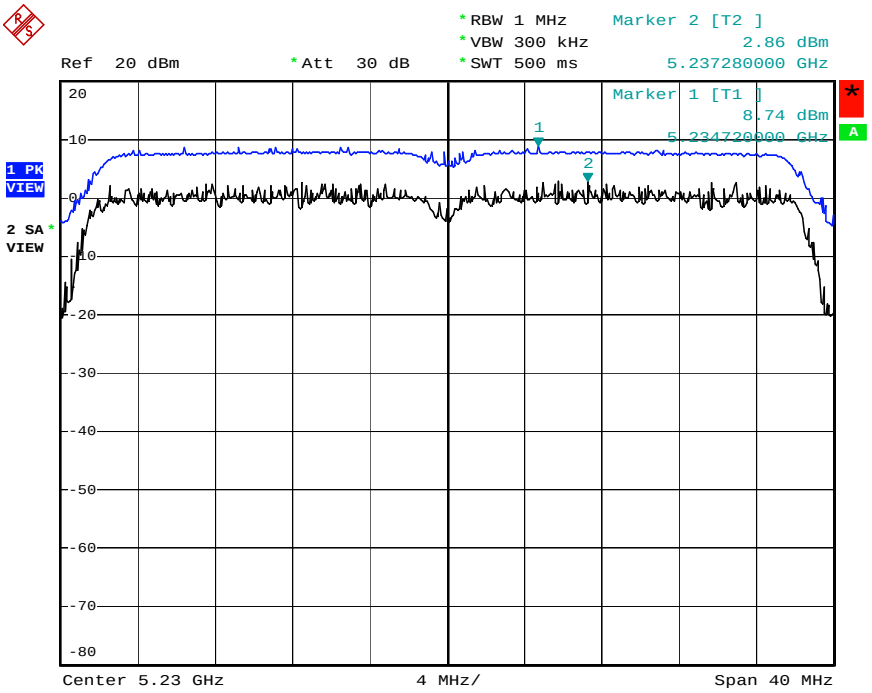
Date: 13.JUN.2008 15:13:16

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5190 MHz



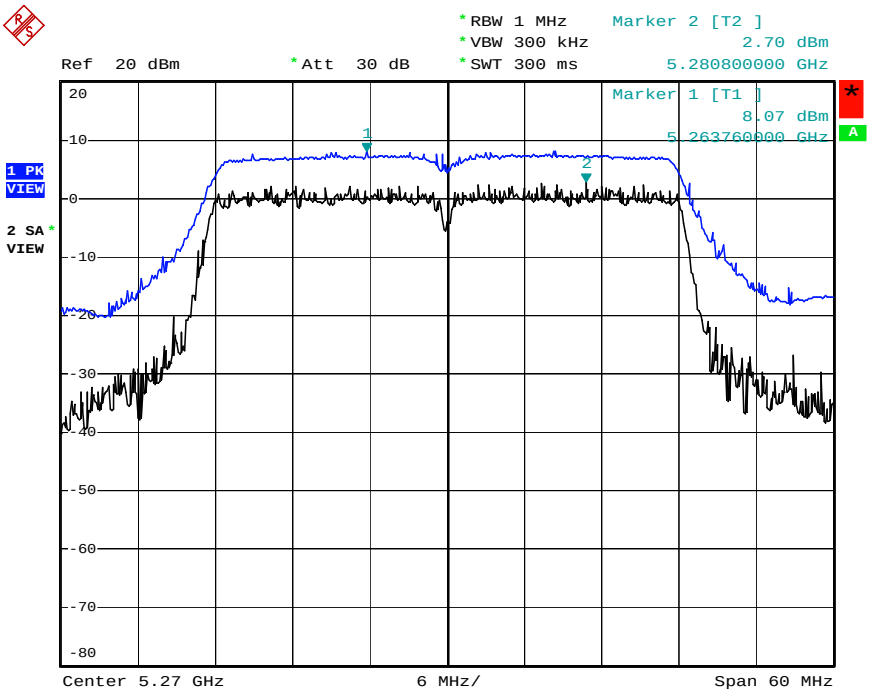
Date: 20.MAY.2008 15:53:27

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5230 MHz



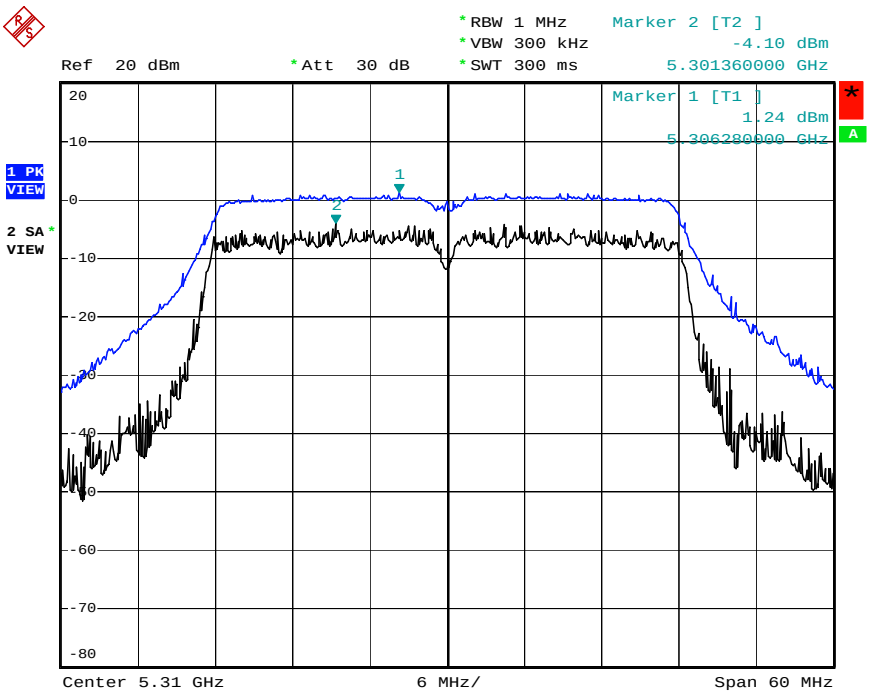
Date: 20.MAY.2008 15:56:39

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5270 MHz



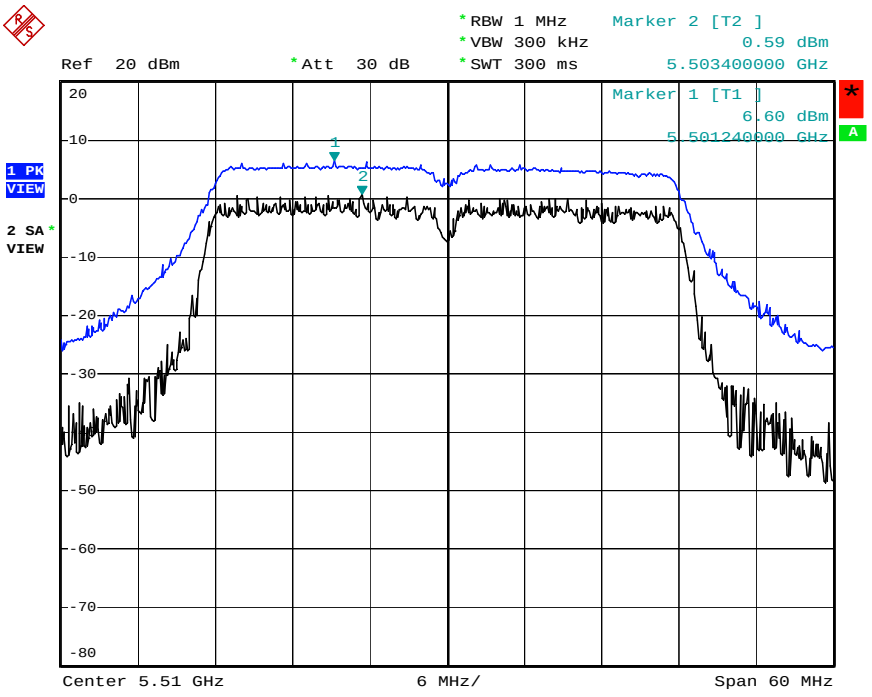
Date: 13.JUN.2008 15:25:32

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5310 MHz



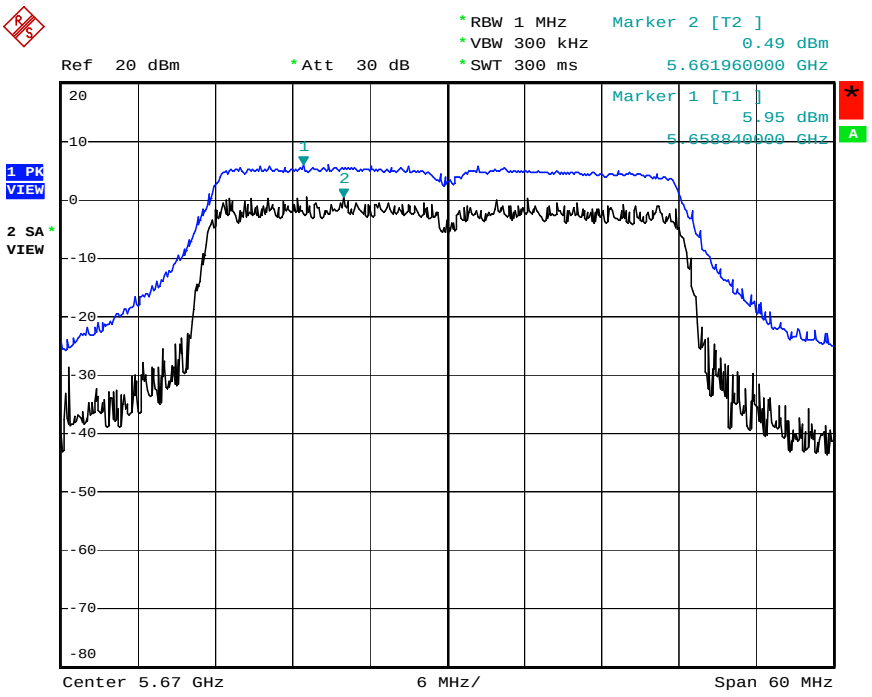
Date: 13.JUN.2008 15:29:34

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5510 MHz



Date: 13.JUN.2008 15:31:13

Peak Excursion Plot on Configuration IEEE 802.11n (40MHz) / 5670 MHz



Date: 13.JUN.2008 15:33:10

3.6 Radiated Emissions Measurement

3.6.1 Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/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

3.6.2 Measuring Instruments and Setting

Please refer to section 4 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1000KHz / 1000KHz for peak

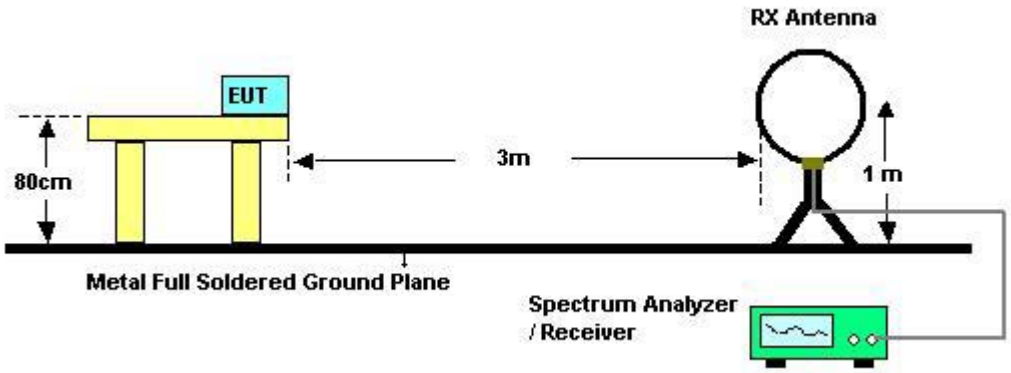
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.6.3 Test Procedures

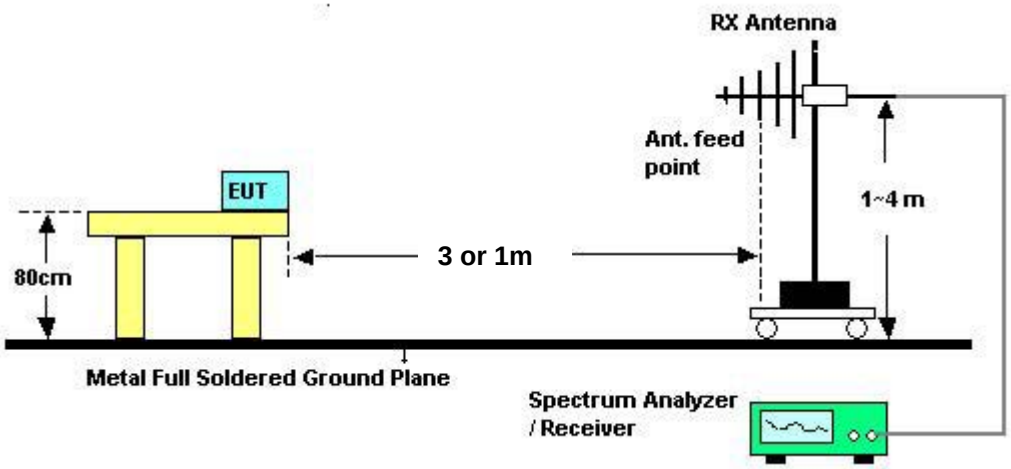
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

3.6.4 Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 dB].

3.6.5 Test Deviation

There is no deviation with the original standard.

3.6.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.6.7 Results of Radiated Emissions (9kHz~30MHz)

Test date	Sep. 19, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan		

Freq. (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.

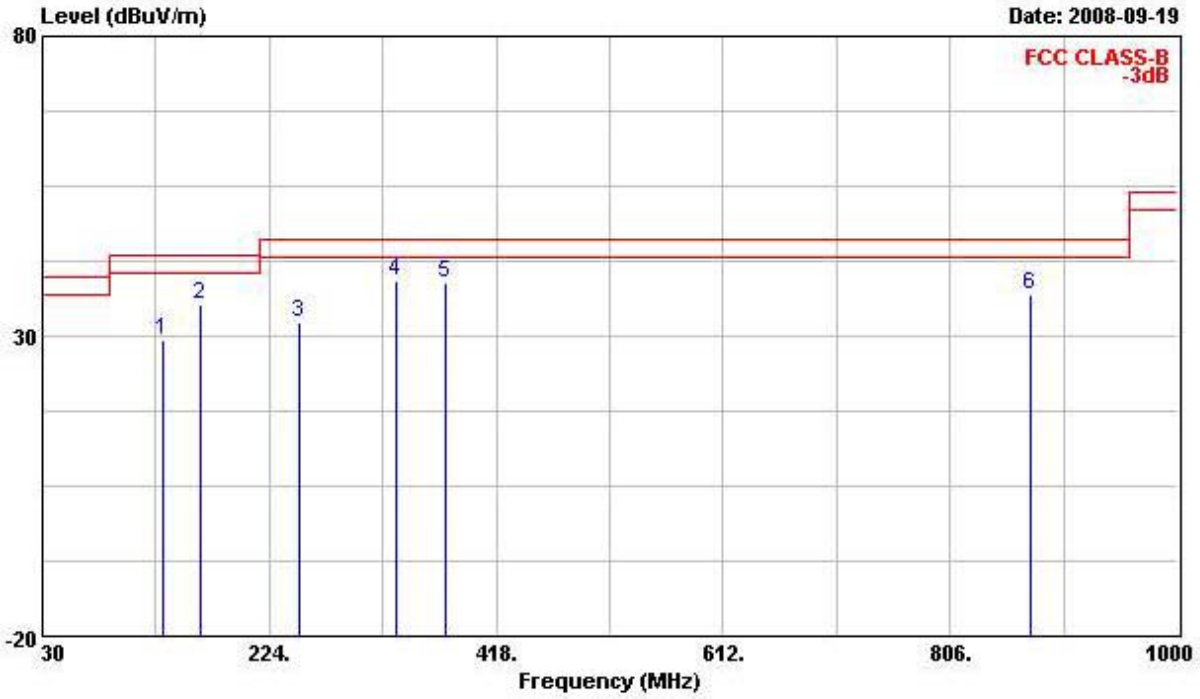
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

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

3.6.8 Results of Radiated Emissions (30MHz~1GHz)

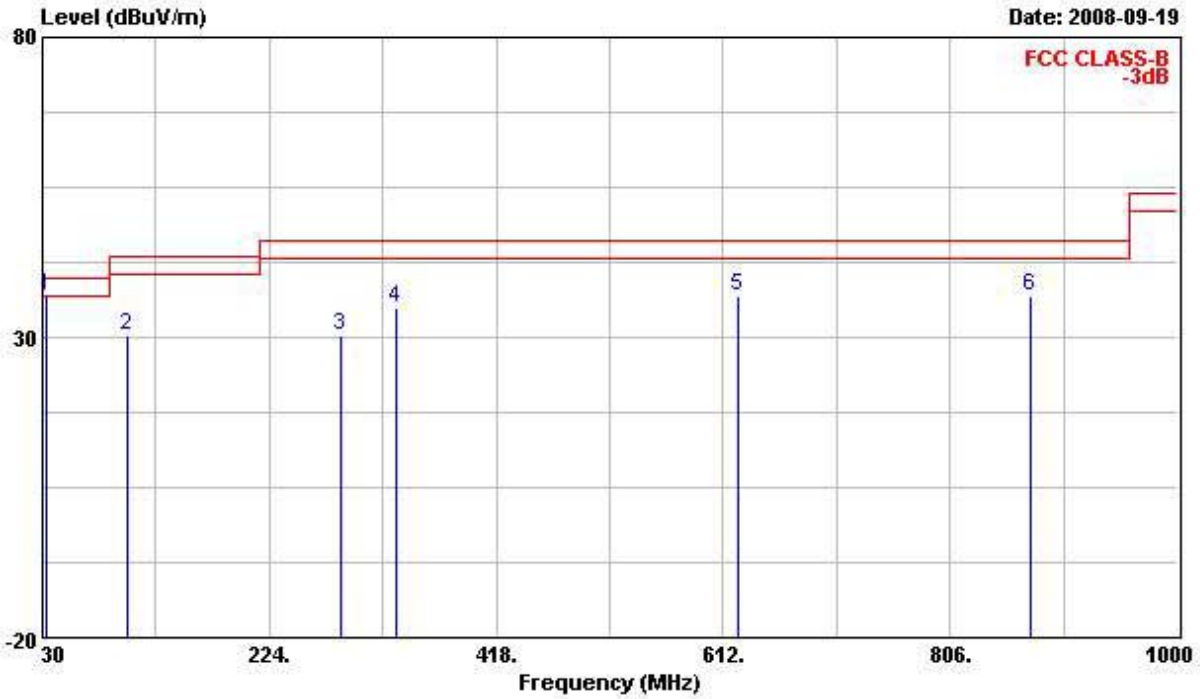
Test date	Sep. 19, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	(Power Supply: POE20U-560(G) -R)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	132.820	29.22	-14.28	43.50	42.94	12.10	2.05	27.87	Peak
2	164.830	35.28	-8.22	43.50	51.20	9.89	2.17	27.98	Peak
3	249.220	32.20	-13.80	46.00	45.18	12.58	2.69	28.25	Peak
4	331.670	39.15	-6.85	46.00	50.09	14.59	3.11	28.64	Peak
5	374.350	38.75	-7.25	46.00	48.47	15.62	3.42	28.76	Peak
6	874.870	36.95	-9.05	46.00	40.03	20.94	5.15	29.17	Peak

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	32.910	36.82	-3.18	40.00	46.78	16.71	1.03	27.70	QP
2	102.750	30.36	-13.14	43.50	44.87	11.56	1.74	27.81	Peak
3	285.110	30.48	-15.52	46.00	42.71	13.32	2.83	28.38	Peak
4	331.670	34.78	-11.22	46.00	45.72	14.59	3.11	28.64	Peak
5	625.580	36.99	-9.01	46.00	42.73	19.47	4.29	29.50	Peak
6	874.870	37.05	-8.95	46.00	40.13	20.94	5.15	29.17	Peak

Note:

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

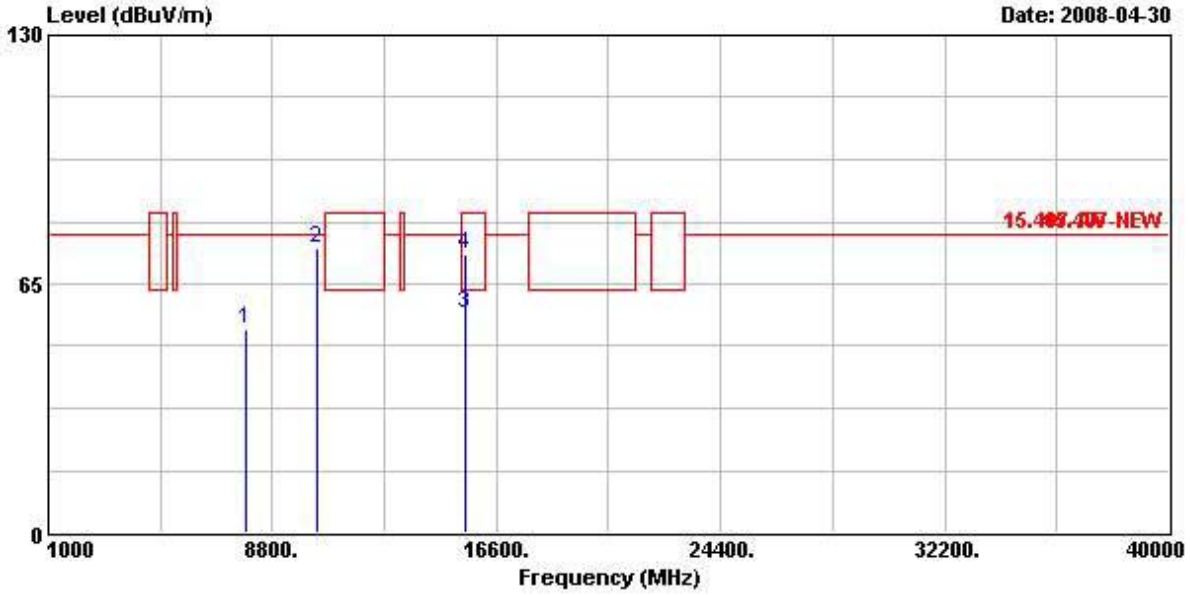
Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.6.9 Results for Radiated Emissions (1GHz~40GHz)

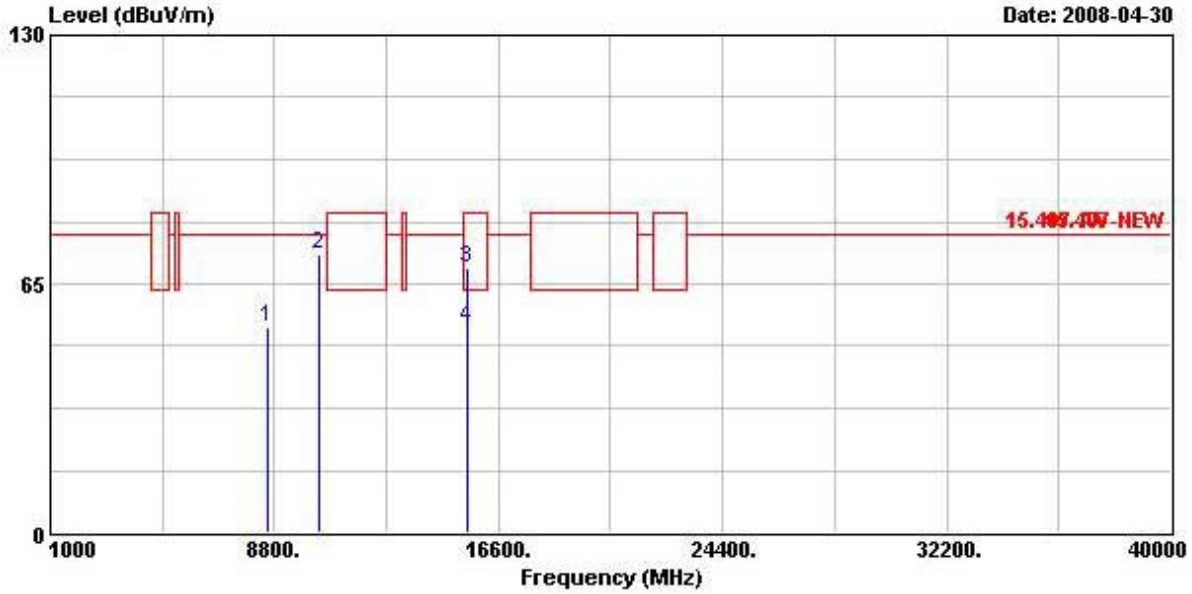
Test date	Apr. 30, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 36

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7852.000	53.29	-24.55	77.84	43.84	37.65	4.65	32.85	PEAK
2 @	10360.000	74.46	-3.38	77.84	60.72	39.33	6.09	31.67	PEAK
3	15540.200	57.16	-6.38	63.54	41.96	37.51	7.37	29.69	AVERAGE
4	15540.200	72.89	-10.65	83.54	57.70	37.51	7.37	29.69	Peak

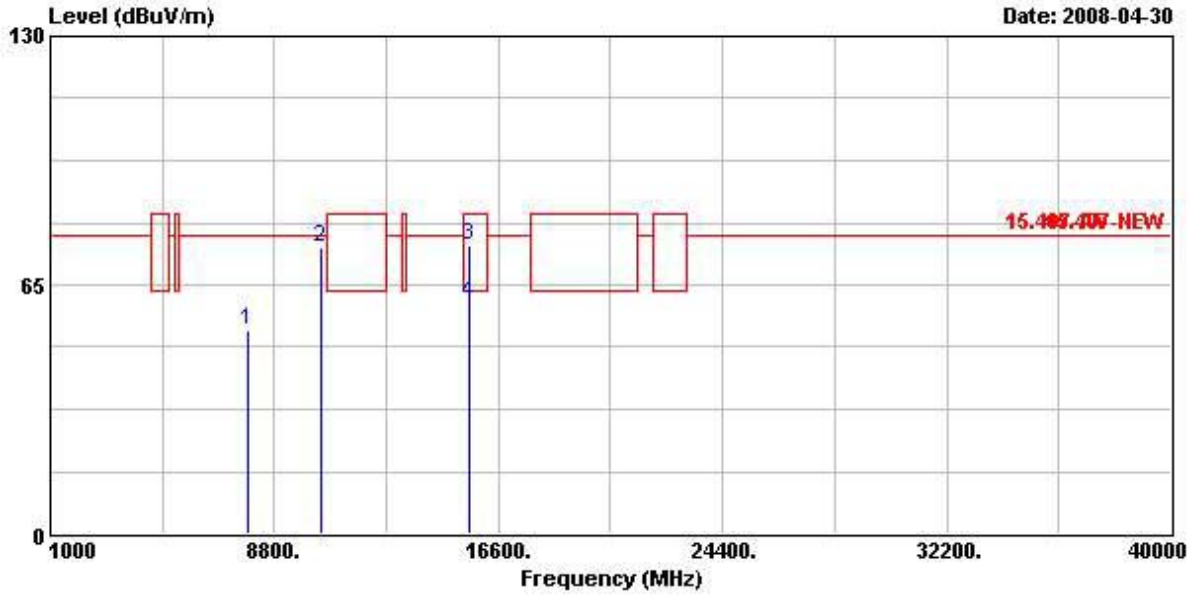
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8532.000	53.87	-23.97	77.84	42.94	38.32	5.42	32.81	PEAK
2	10360.000	72.74	-5.10	77.84	58.99	39.33	6.09	31.67	PEAK
3	15540.000	69.28	-14.26	83.54	54.09	37.51	7.37	29.69	Peak
4	15540.000	53.48	-10.06	63.54	38.29	37.51	7.37	29.69	AVERAGE

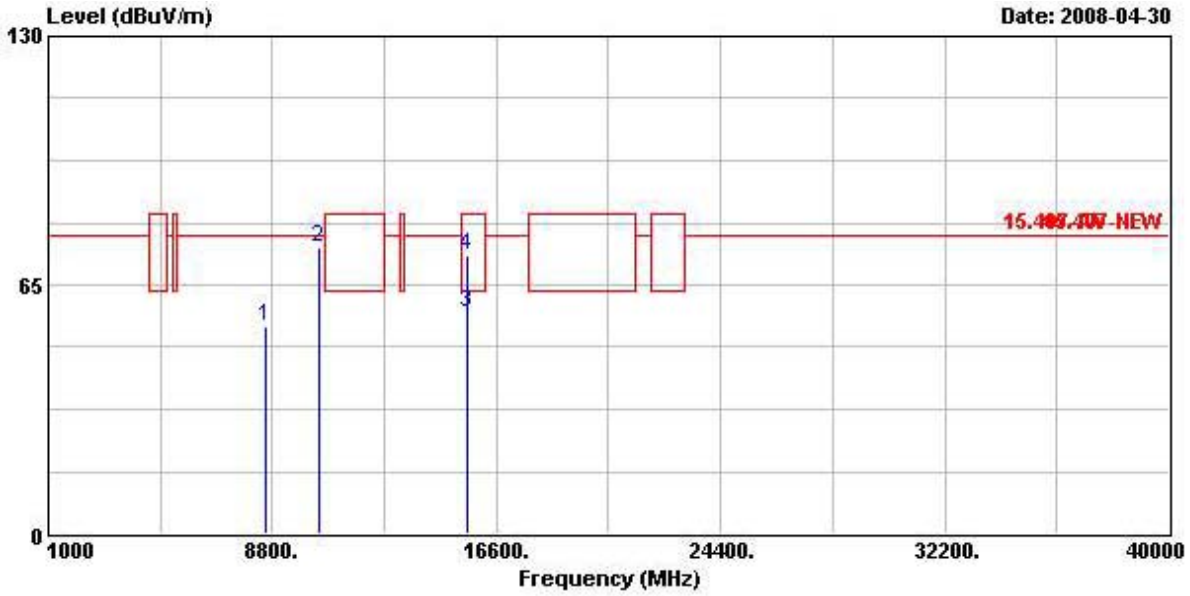
Test date	Apr. 30, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 40

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7896.000	52.96	-24.88	77.84	43.43	37.70	4.67	32.84	PEAK
2 @	10396.000	74.71	-3.13	77.84	60.85	39.32	6.14	31.59	PEAK
3	15600.400	75.51	-8.03	83.54	60.24	37.54	7.38	29.65	Peak
4 @	15600.400	60.42	-3.12	63.54	45.16	37.54	7.38	29.65	AVERAGE

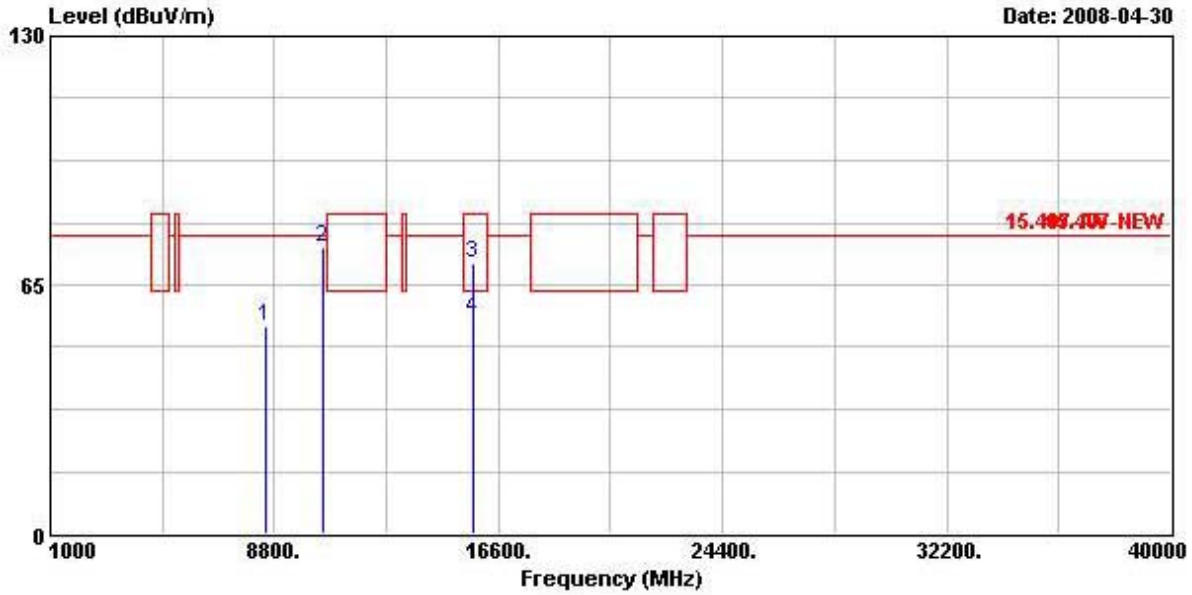
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8572.000	54.08	-23.76	77.84	43.20	38.34	5.35	32.81	PEAK
2 @	10400.000	74.58	-3.26	77.84	60.63	39.32	6.14	31.51	PEAK
3	15600.800	57.97	-5.57	63.54	42.70	37.54	7.38	29.65	AVERAGE
4	15600.800	72.49	-11.05	83.54	57.22	37.54	7.38	29.65	Peak

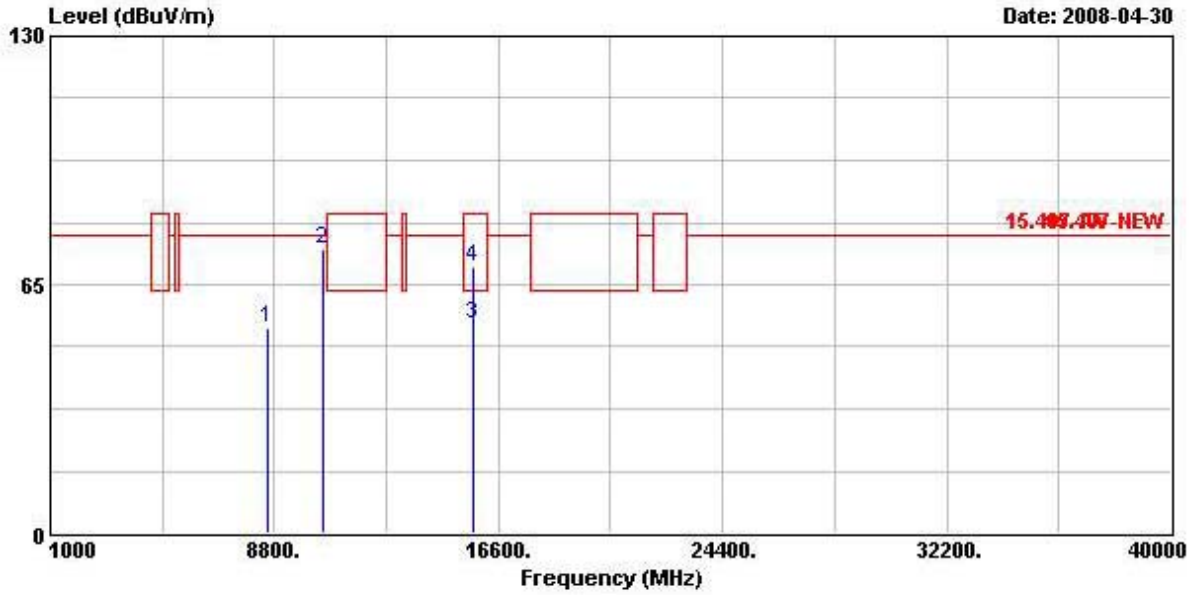
Test date	Apr. 30, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 48

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8508.000	54.21	-23.63	77.84	43.29	38.31	5.42	32.81	PEAK
2 @	10480.000	74.75	-3.09	77.84	60.47	39.30	6.23	31.25	PEAK
3	15718.400	70.70	-12.84	83.54	55.31	37.59	7.40	29.60	Peak
4	15718.400	56.25	-7.29	63.54	40.86	37.59	7.40	29.60	AVERAGE

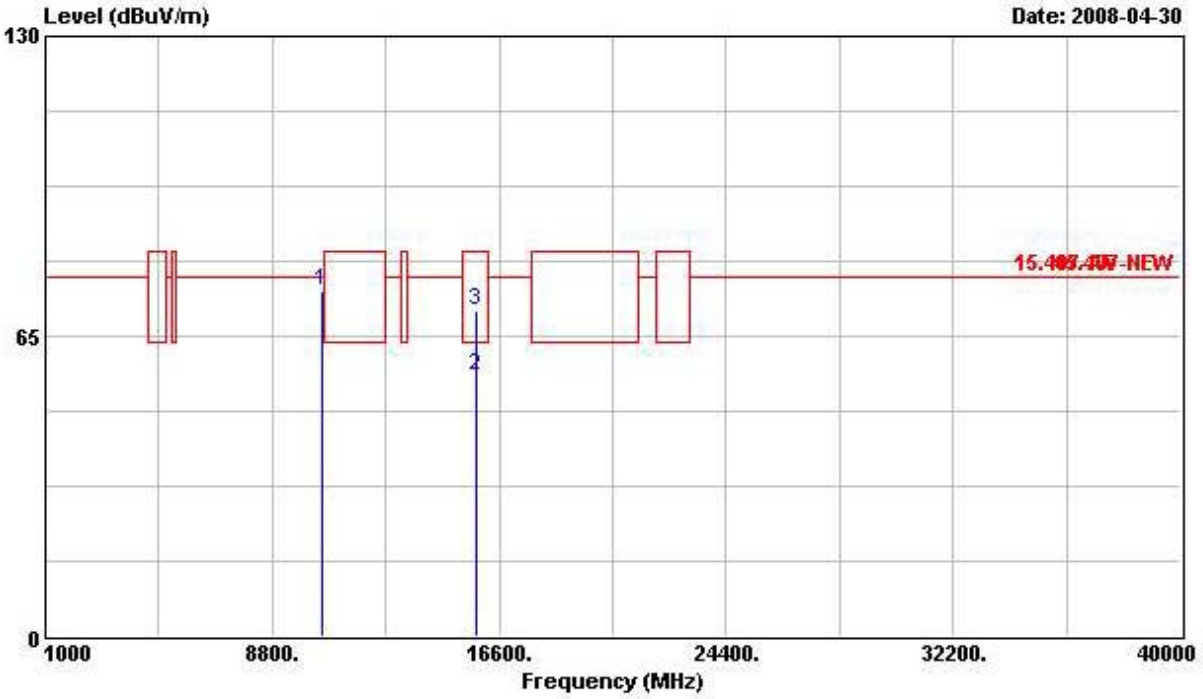
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8592.000	53.82	-24.02	77.84	42.98	38.36	5.28	32.81	PEAK
2 @	10484.000	74.28	-3.56	77.84	60.00	39.30	6.23	31.25	PEAK
3	15721.200	54.82	-8.72	63.54	39.42	37.59	7.41	29.60	AVERAGE
4	15721.200	69.60	-13.94	83.54	54.20	37.59	7.41	29.60	Peak

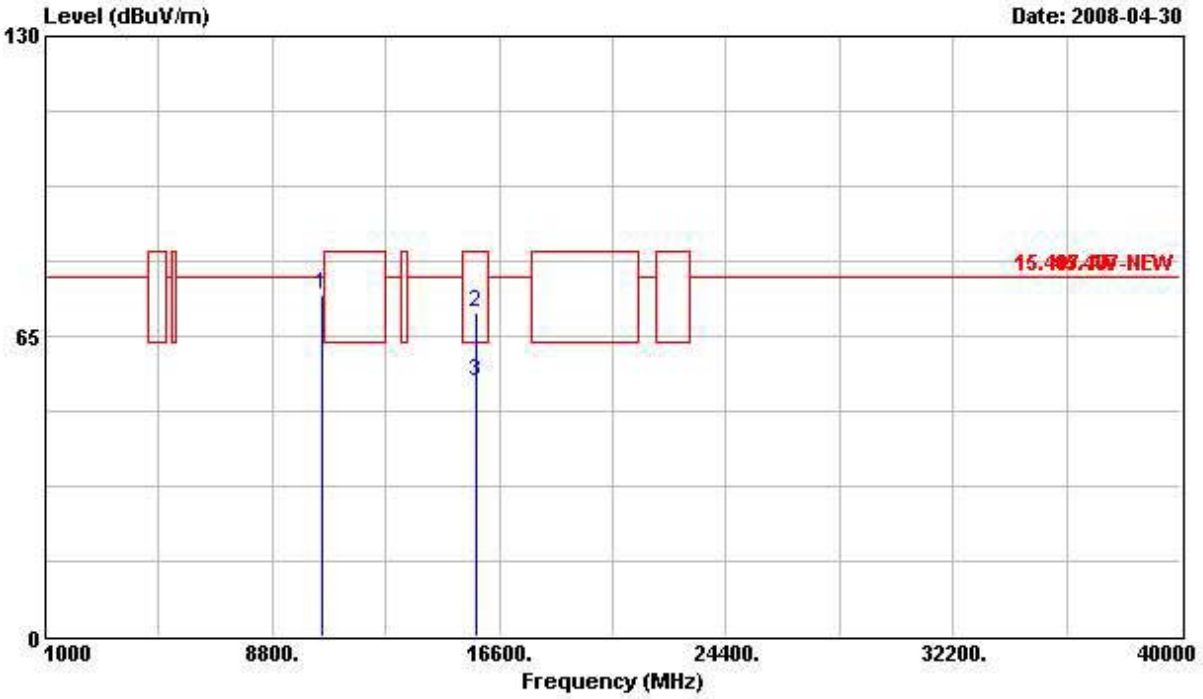
Test date	Apr. 30, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 52

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10516.000	74.69	-3.15	77.84	60.30	39.29	6.28	31.17	PEAK
2	15779.200	56.35	-7.19	63.54	40.88	37.61	7.42	29.56	AVERAGE
3	15779.200	70.48	-13.06	83.54	55.01	37.61	7.42	29.56	Peak

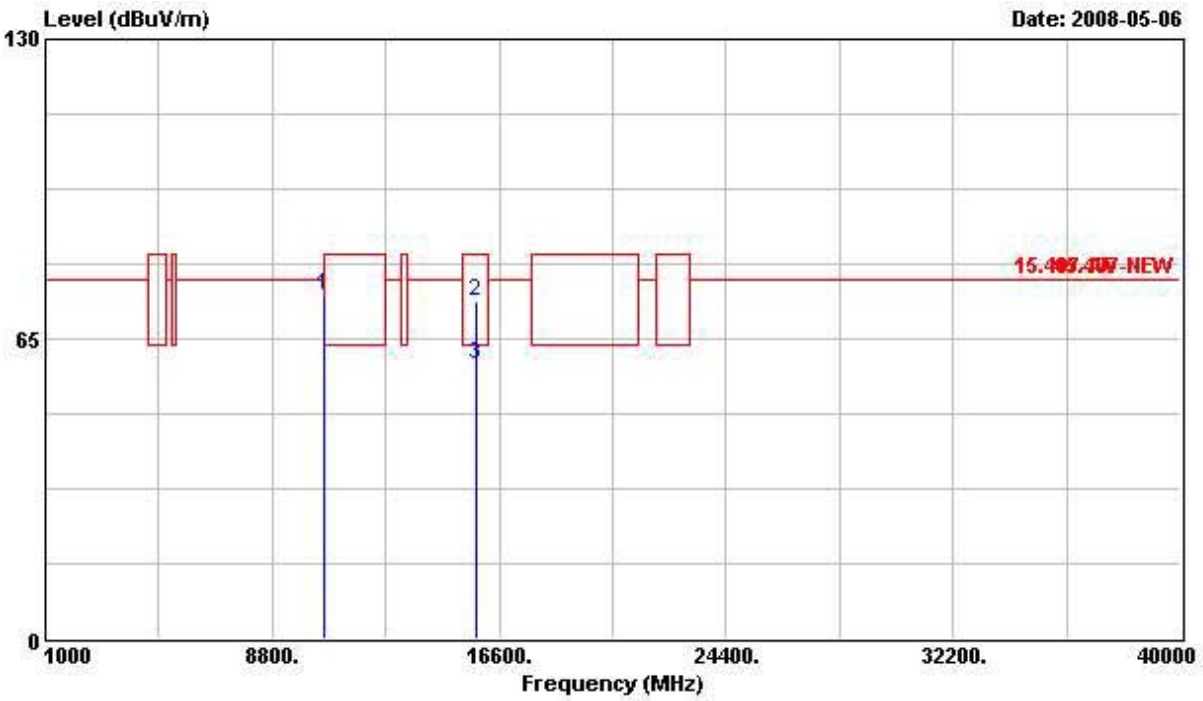
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10516.000	74.08	-3.76	77.84	59.68	39.29	6.28	31.17	PEAK
2	15779.400	70.27	-13.27	83.54	54.80	37.61	7.42	29.56	Peak
3	15779.400	55.35	-8.19	63.54	39.88	37.61	7.42	29.56	AVERAGE

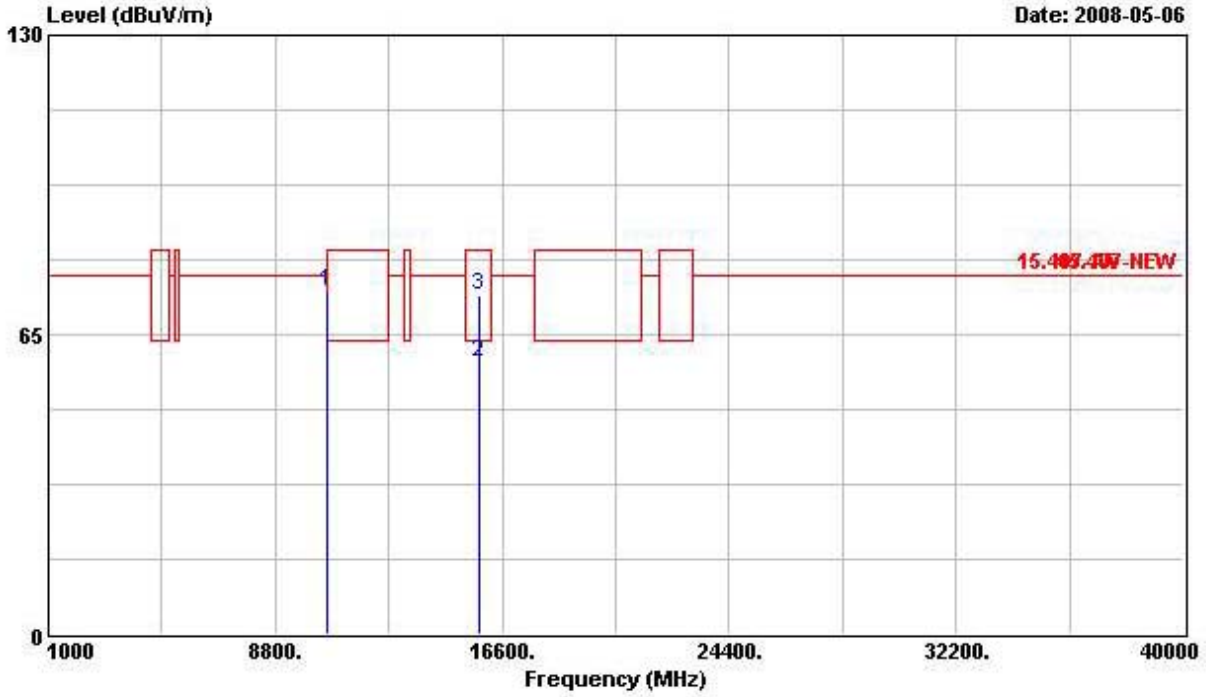
Test date	May 06, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 56

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10568.000	74.53	-3.31	77.84	60.00	39.26	6.30	31.03	PEAK
2	15842.500	73.09	-10.45	83.54	57.55	37.64	7.43	29.53	Peak
3	15842.500	59.23	-4.31	63.54	43.69	37.64	7.43	29.53	AVERAGE

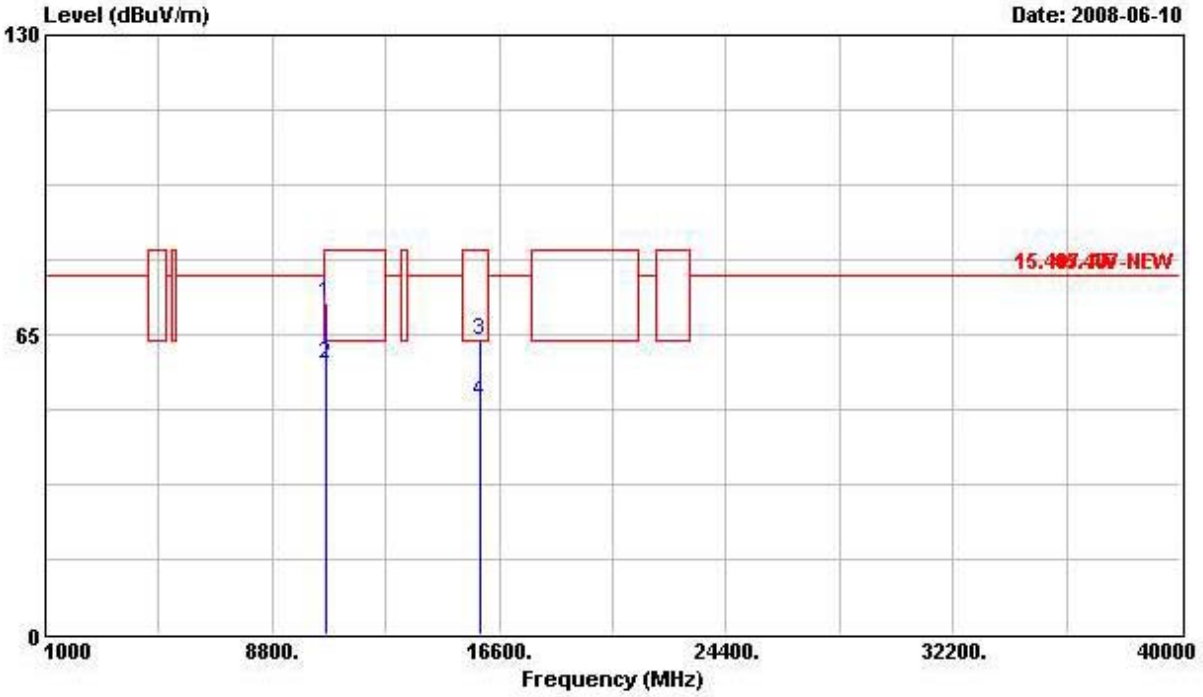
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10564.000	74.35	-3.49	77.84	59.82	39.26	6.30	31.03	PEAK
2	15839.600	58.84	-4.70	63.54	43.30	37.64	7.43	29.53	AVERAGE
3	15839.600	73.36	-10.18	83.54	57.82	37.64	7.43	29.53	Peak

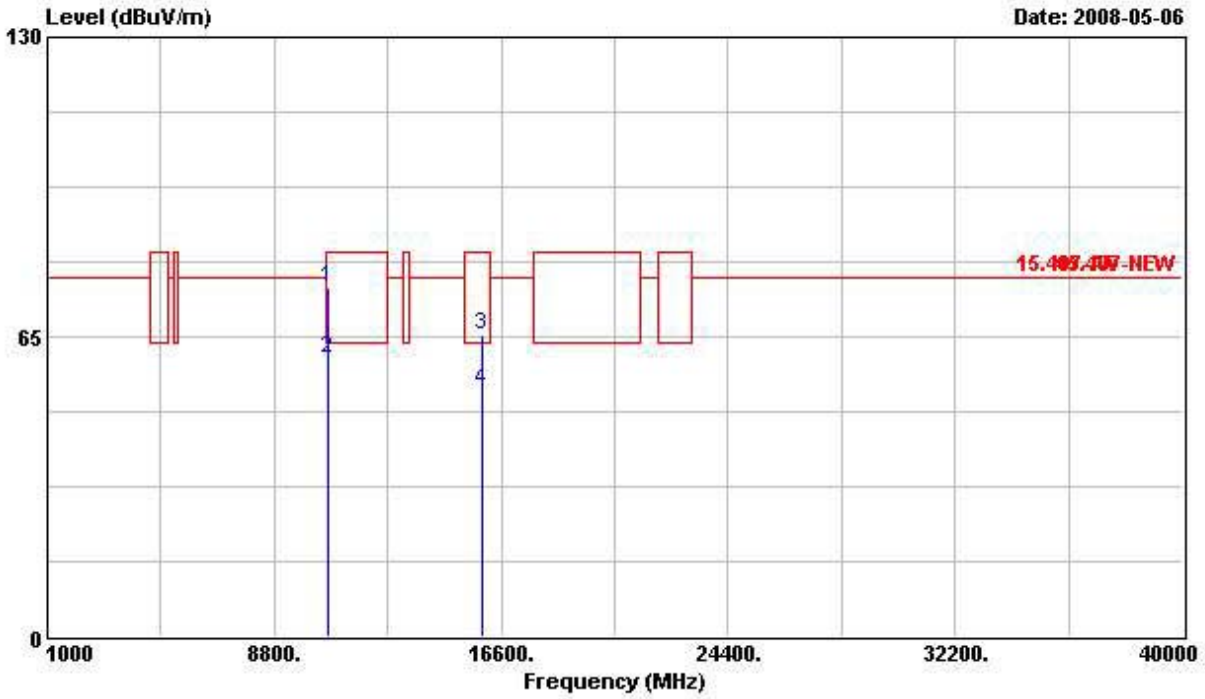
Test date	Jun. 10, 2008	**Test Site No.**	03CH03-HY
Temperature	26℃	**Humidity**	54%
Test Engineer	Duncan	**Configuration**	802.11a CH 64

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10640.680	71.72	-11.82	83.54	56.97	39.22	6.34	30.81	Peak
2	10640.680	58.51	-5.03	63.54	43.76	39.22	6.34	30.81	AVERAGE
3	15958.680	63.59	-19.95	83.54	47.91	37.69	7.46	29.46	Peak
4	15958.680	50.59	-12.95	63.54	34.91	37.69	7.46	29.46	AVERAGE

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10640.240	75.64	-7.90	83.54	60.89	39.22	6.34	30.81	Peak
2	10640.240	60.17	-3.37	63.54	45.42	39.22	6.34	30.81	AVERAGE
3	15962.840	65.42	-18.12	83.54	49.74	37.69	7.46	29.46	Peak
4	15962.840	53.24	-10.30	63.54	37.56	37.69	7.46	29.46	AVERAGE