APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
Syntek Semiconductor Co., Ltd.

Syntek BlueW-2310 miniCard
Model No.: BlueW-2310 miniCard

FCC ID: V83BLUEW-2310M

Prepared for	:	Syntek Semiconductor Co., Ltd.
Address	:	10F, No. 1, Alley 30, Lane 358, Rueiguang Road, Neihu District, Taipei, Taiwan, R.O.C.
Prepared by	:	ACCURATE TECHNOLOGY CO. LTD
Address	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number	:	ATE20091643-2
Date of Test	:	August 19 - September 7, 2009
Date of Report	:	September 7, 2009

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Description Page

Test Report Certification

Applicant **:** Syntek Semiconductor Co., Ltd.

Manufacturer **:** Syntek Semiconductor Co., Ltd.

EUT Description **:** Syntek BlueW-2310 miniCard

(A) MODEL NO.: BlueW-2310 miniCard

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 3.3V

Measurement Procedure Used:

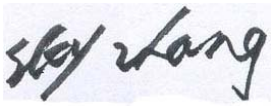
FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.4: 2003

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

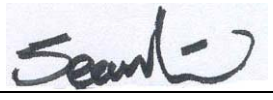
Date of Test : August 19 - September 7, 2009

Prepared by :



(Engineer)

Approved & Authorized Signer :



(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Syntek BlueW-2310 miniCard
Model Number	:	BlueW-2310 miniCard
Frequency Band	:	2412-2462MHz
Number of Channels	:	11
Antenna Gain	:	2.0dBi
Power Supply	:	DC 3.3V
Data Rate	:	IEEE 802.11b: 11/5.5/2/1Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps
Applicant	:	Syntek Semiconductor Co., Ltd.
Address	:	10F, No. 1, Alley 30, Lane 358, Rueiguang Road, Neihu District, Taipei, Taiwan, R.O.C.
Manufacturer	:	Syntek Semiconductor Co., Ltd.
Address	:	10F, No. 1, Alley 30, Lane 358, Rueiguang Road, Neihu District, Taipei, Taiwan, R.O.C.
Date of sample received	:	August 18, 2009
Date of Test	:	August 19 - September 7, 2009

1.2.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	03.28.2010
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	03.28.2010
Spectrum Analyzer	Agilent	E7405A	MY45115511	03.28.2010
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	03.30.2010
Loop Antenna	Schwarzbeck	FMZB1516	1516131	03.28.2010
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	03.28.2010
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	12.19.2009
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	10.09.2009
LISN	Rohde&Schwarz	ESH3-Z5	100305	03.28.2010
LISN	Schwarzbeck	NSLK8126	8126431	03.28.2010

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: **802.11b Transmitting mode**
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

802.11g Transmitting mode
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

3.2.Configuration and peripherals

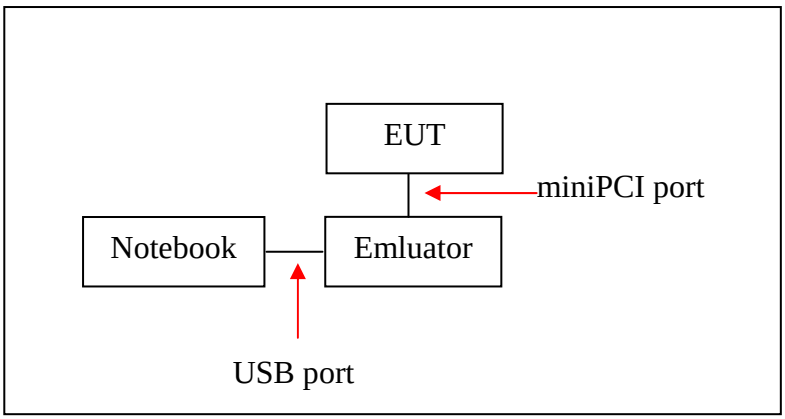


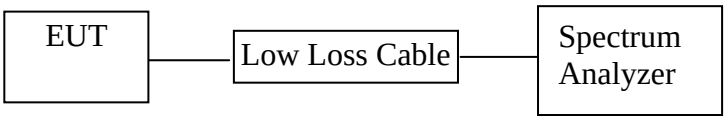
Figure 1 Setup: Transmitting mode

4. TEST PROCEDURES AND RESULTS

FCC Rules	**Description of Test**	**Result**
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. 6DB BANDWIDTH MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: Syntek BlueW-2310 miniCard)

5.2.The Requirement For Section 15.247(a)(1)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	:	BlueW-2310 miniCard
Serial Number	:	N/A
Manufacturer	:	Syntek Semiconductor Co., Ltd.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

5.5. Test Procedure

5.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

5.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

5.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

5.6. Test Result

PASS.

Date of Test:	August 19, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.

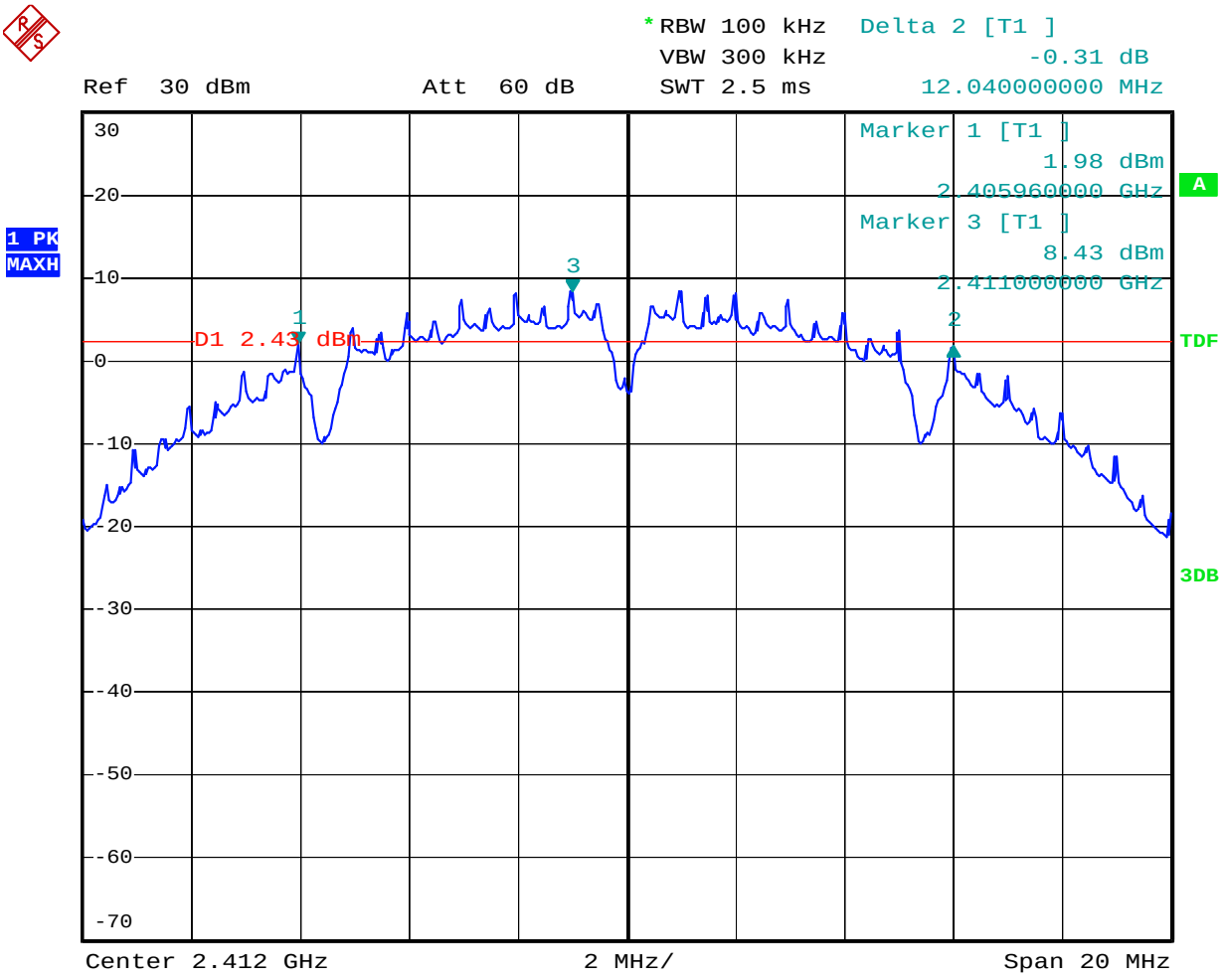
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	12.040	> 0.5MHz
Middle	2437	12.040	> 0.5MHz
High	2462	12.040	> 0.5MHz

The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	16.360	> 0.5MHz
Middle	2437	16.400	> 0.5MHz
High	2462	16.400	> 0.5MHz

The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



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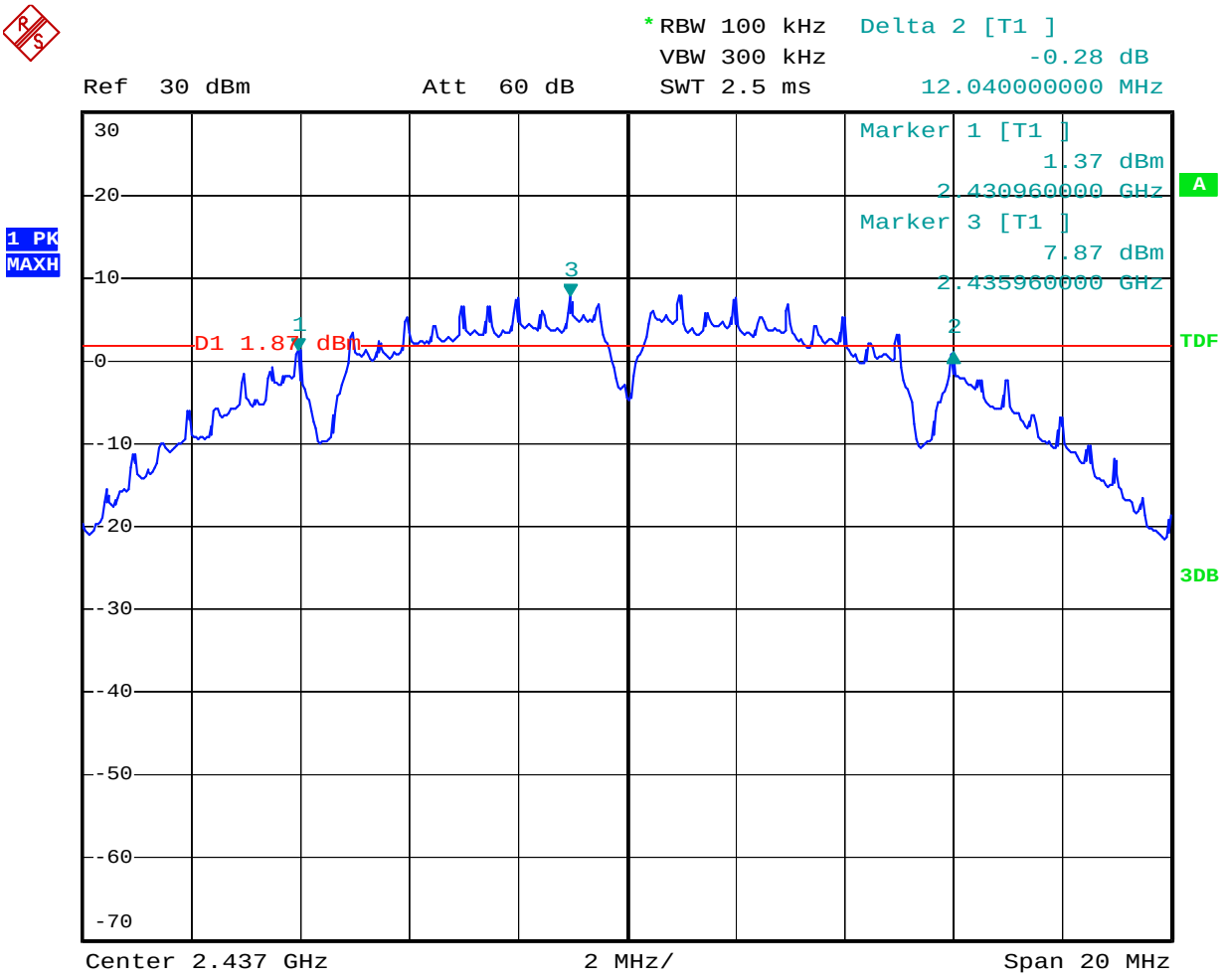
802.11b Channel Middle 2437MHz



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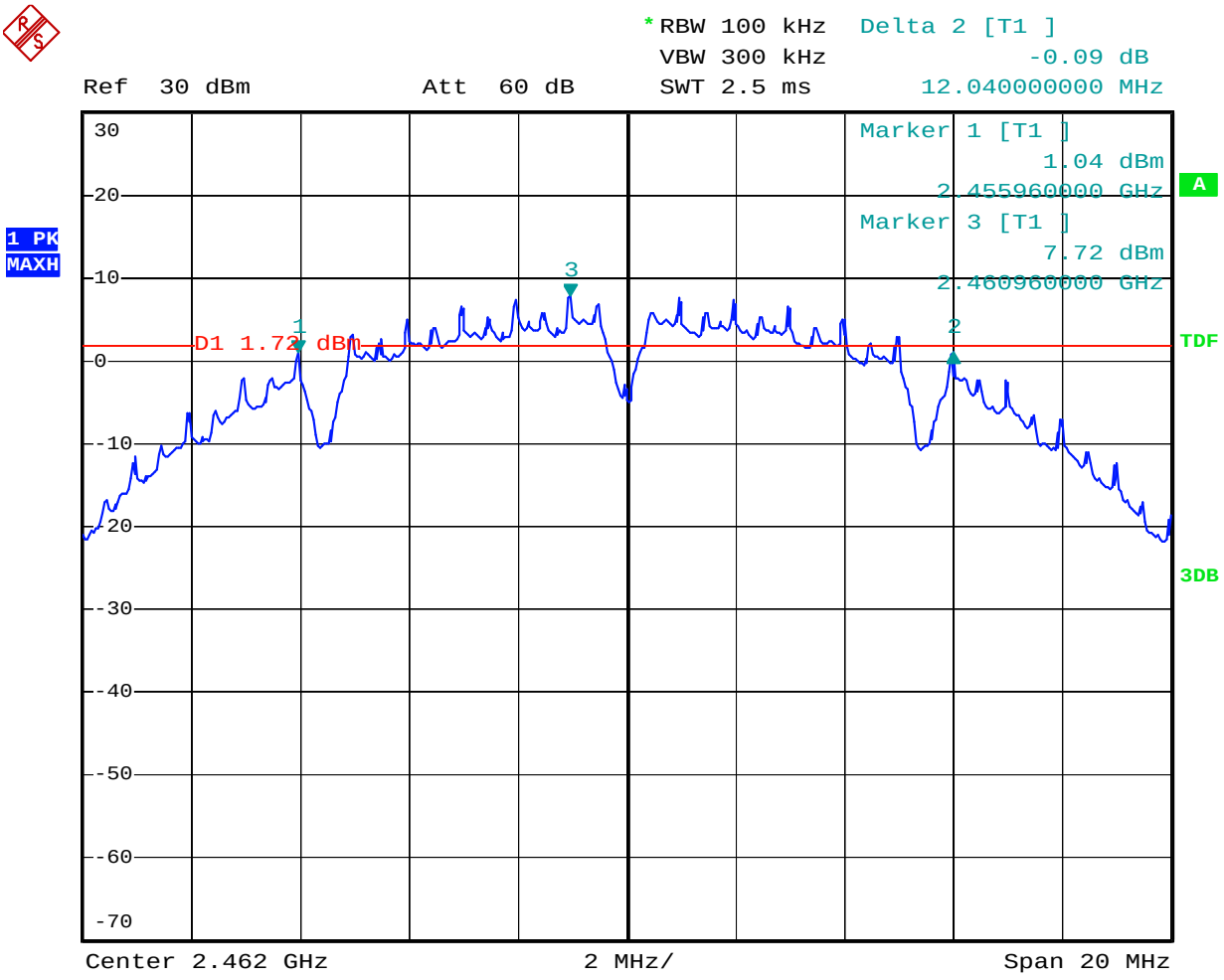
802.11b Channel High 2462MHz



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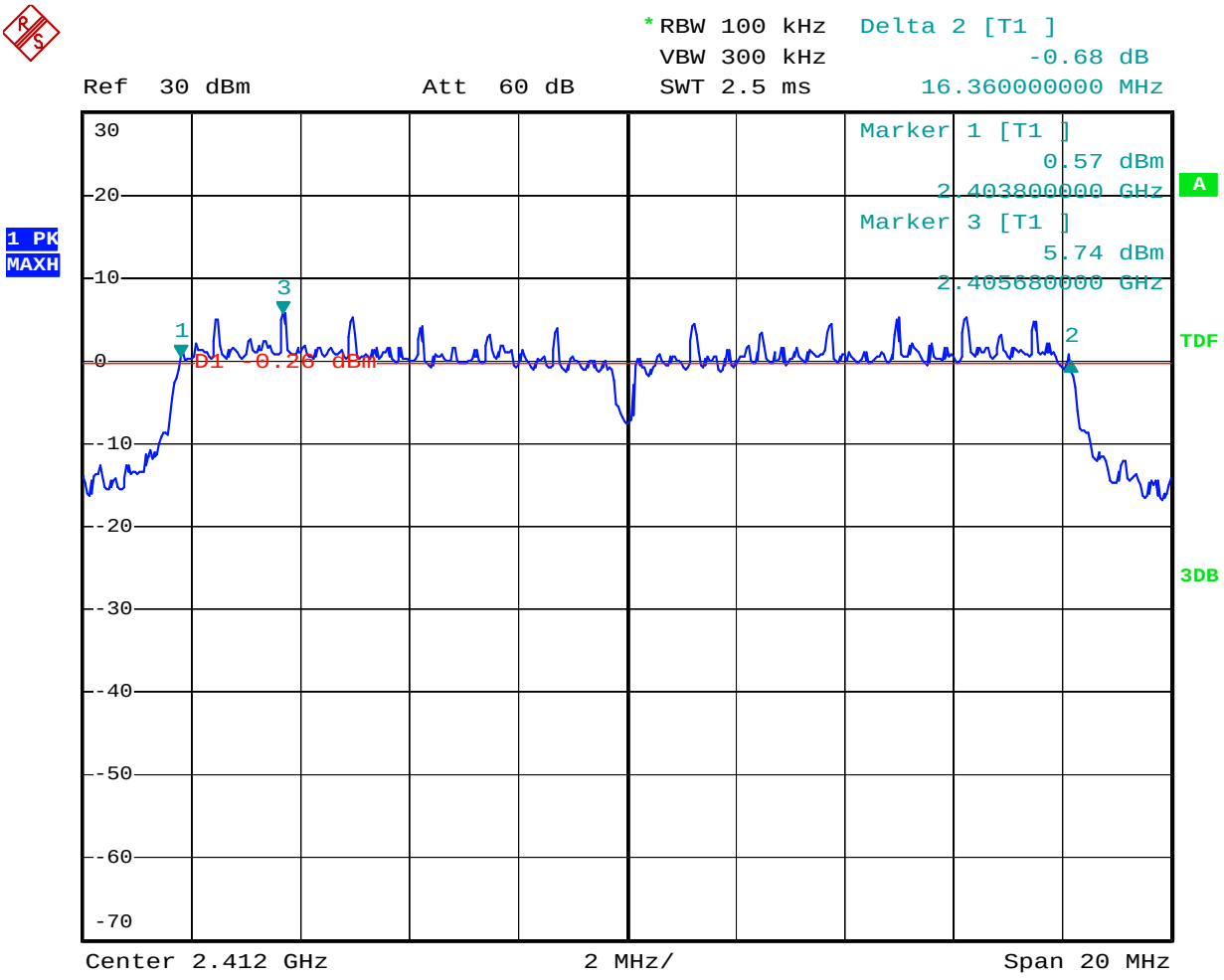
802.11g Channel Low 2412MHz



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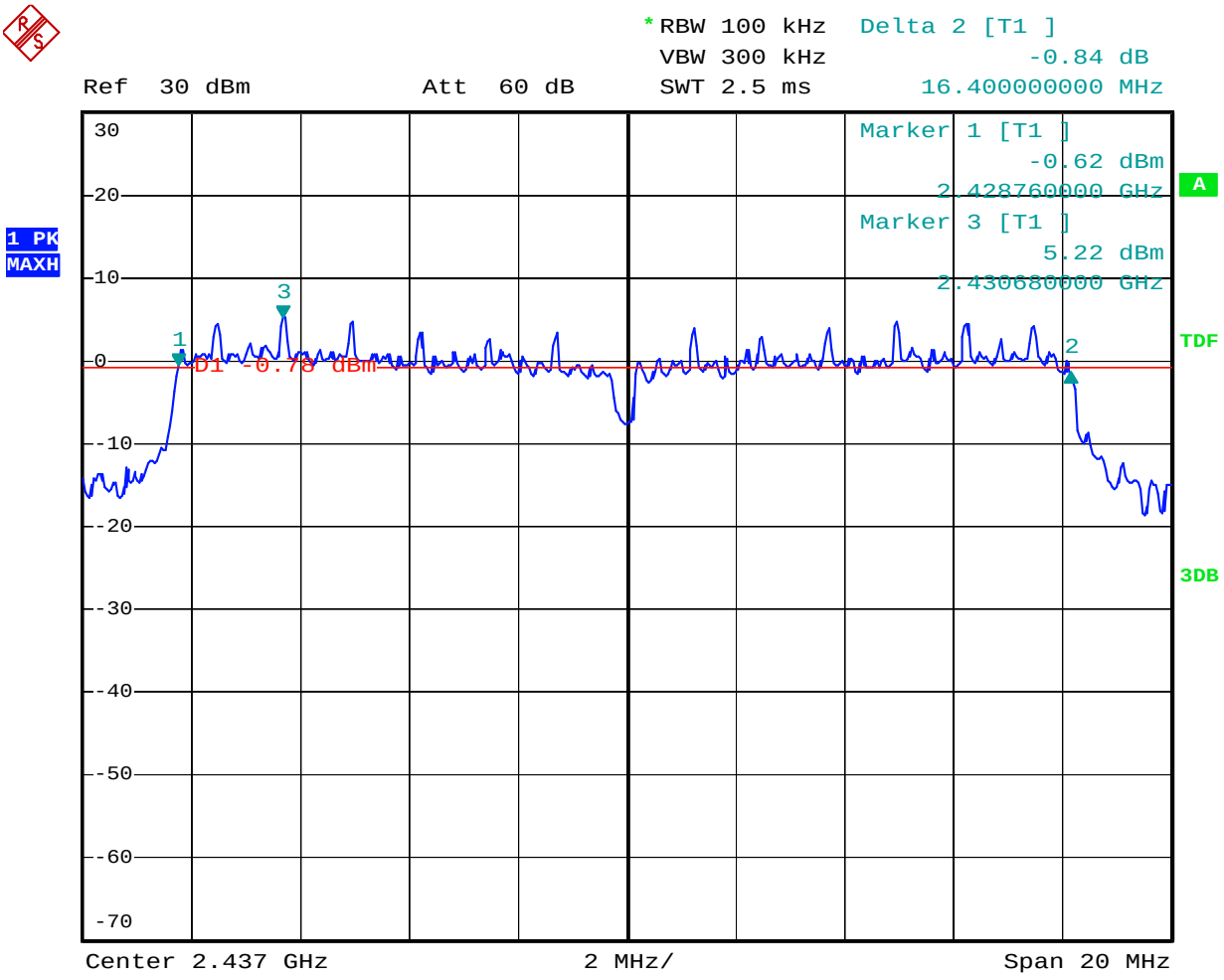
802.11g Channel Middle 2437MHz



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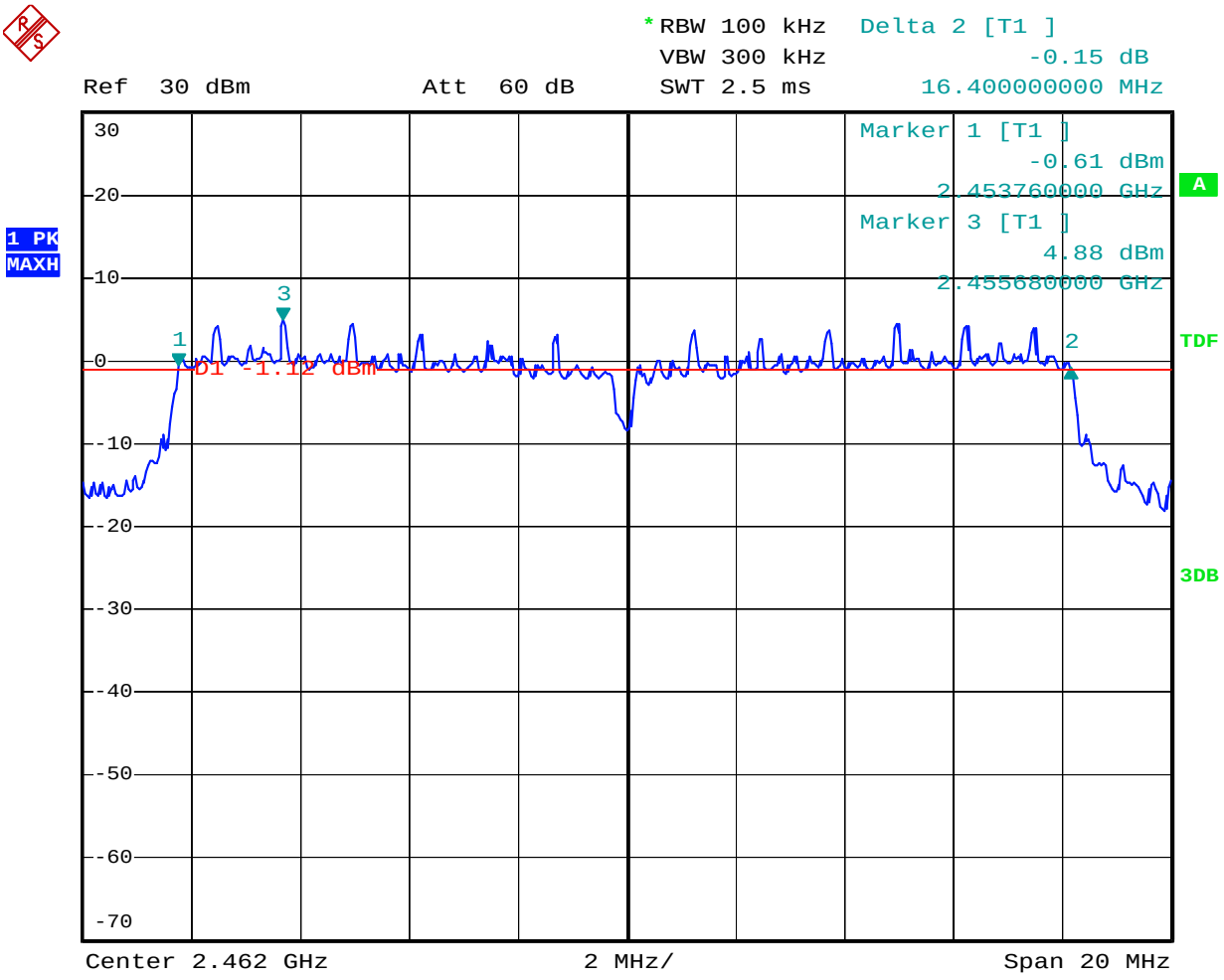
802.11g Channel High 2462MHz



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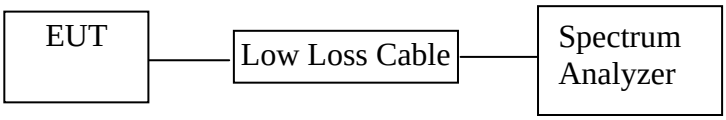
6. MAXIMUM PEAK OUTPUT POWER

6.1.Block Diagram of Test Setup



(EUT: Syntek BlueW-2310 miniCard)

6.2.The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

6.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.3.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	**:**	BlueW-2310 miniCard
Serial Number	**:**	N/A
Manufacturer	**:**	Syntek Semiconductor Co., Ltd.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

6.5. Test Procedure

6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2. Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.

6.5.3. Measurement the maximum peak output power.

6.6. Test Result

PASS.

Date of Test:	August 19, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.

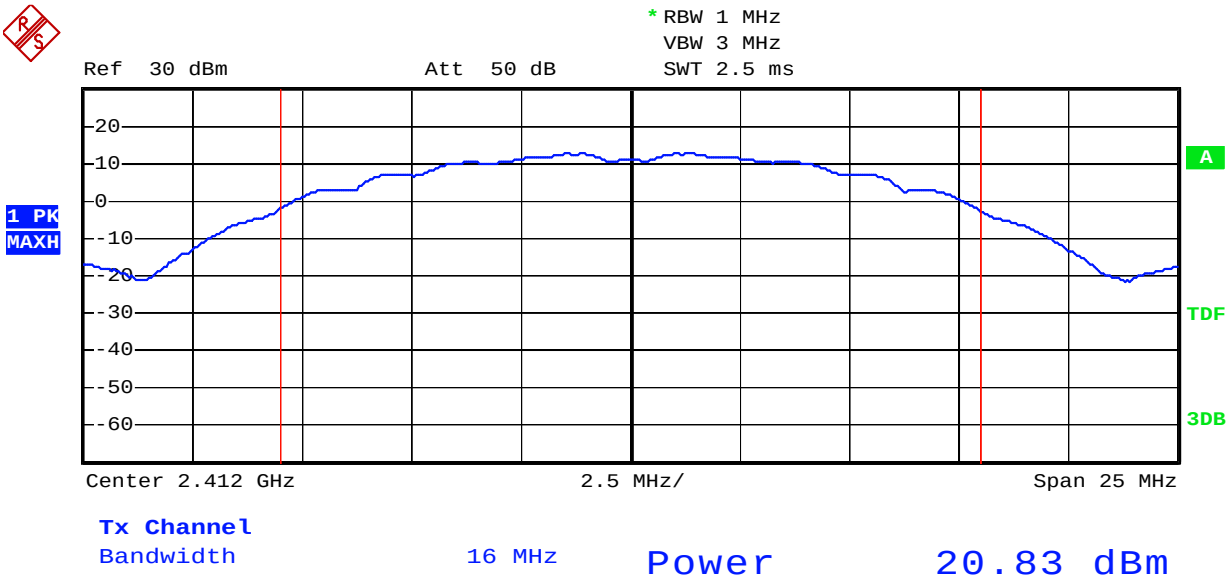
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	20.83	121.1	30 dBm / 1 W
Middle	2437	20.36	108.6	30 dBm / 1 W
High	2462	20.19	104.5	30 dBm / 1 W

The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.

Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	23.98	250.0	30 dBm / 1 W
Middle	2437	23.58	228.0	30 dBm / 1 W
High	2462	23.31	214.3	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



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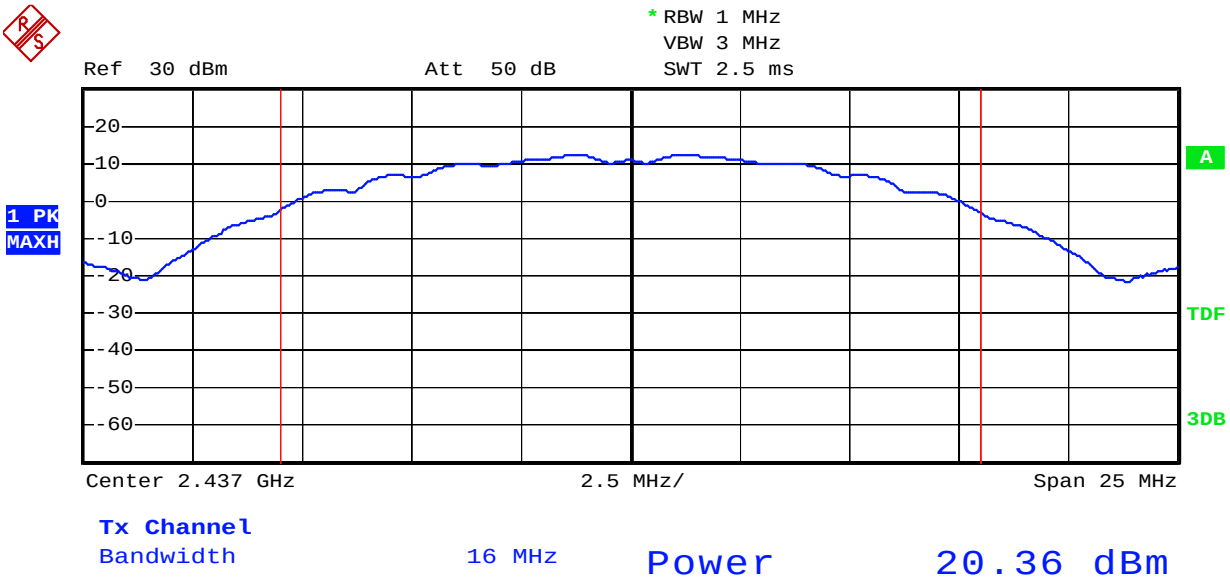
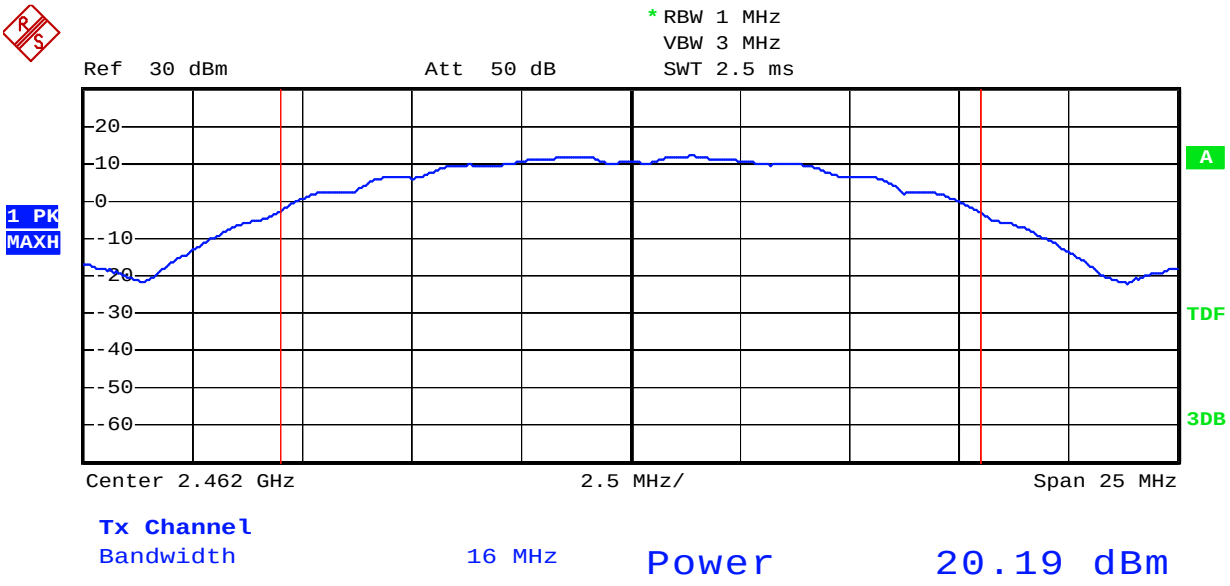
802.11b Channel Middle 2437MHz



Date: 19.AUG.2009 14:51:19

802.11b Channel High 2462MHz



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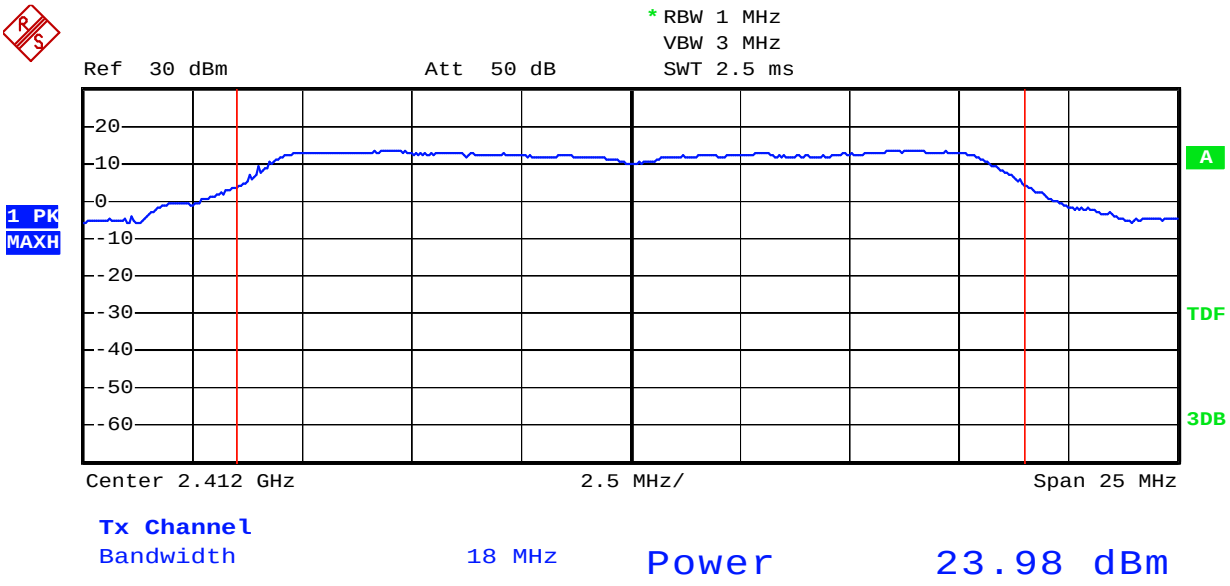
802.11g Channel Low 2412MHz



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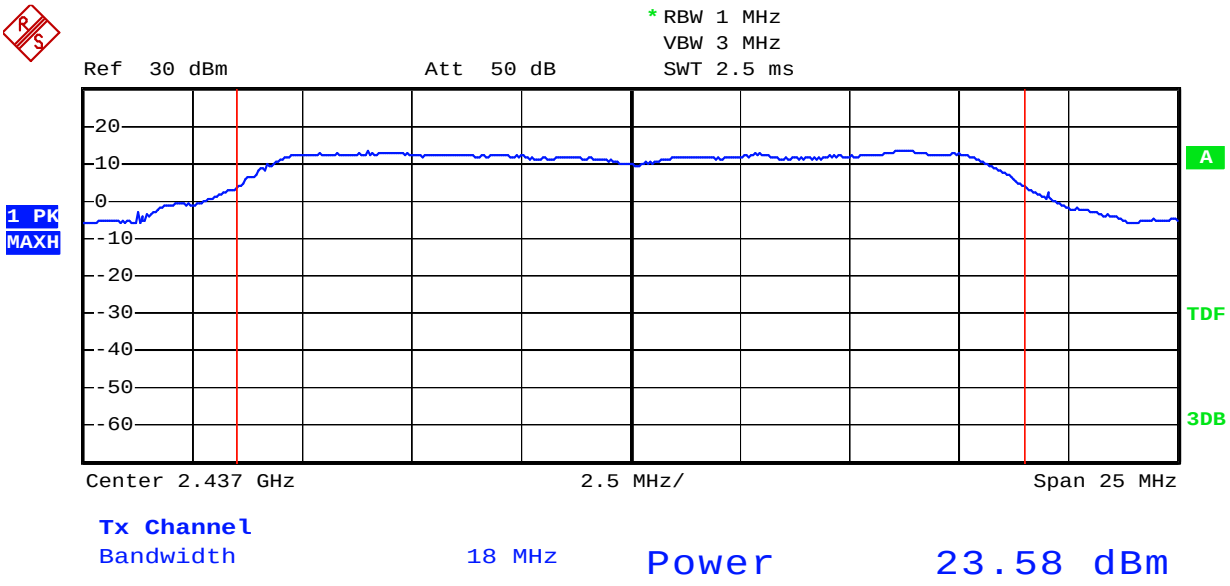
802.11g Channel Middle 2437MHz



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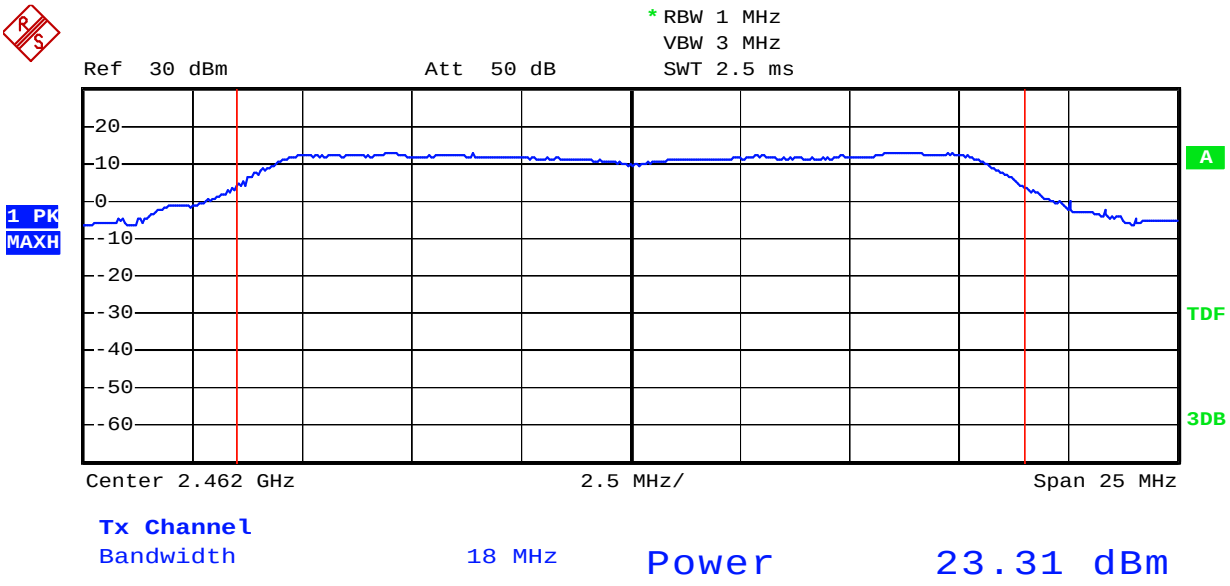
802.11g Channel High 2462MHz



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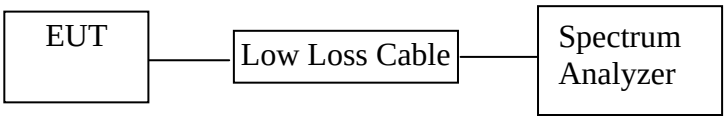
7. POWER SPECTRAL DENSITY MEASUREMENT

7.1.Block Diagram of Test Setup



(EUT: Syntek BlueW-2310 miniCard)

7.2.The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	:	BlueW-2310 miniCard
Serial Number	:	N/A
Manufacturer	:	Syntek Semiconductor Co., Ltd.

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

7.5.Test Procedure

7.5.1.The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2.Set RBW of spectrum analyzer to 3kHz and VBW to 10kHz, sweep time = Span/3kHz.

7.5.3.Measurement the maximum power spectral density.

7.6.Test Result

PASS.

Date of Test:	August 19, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.

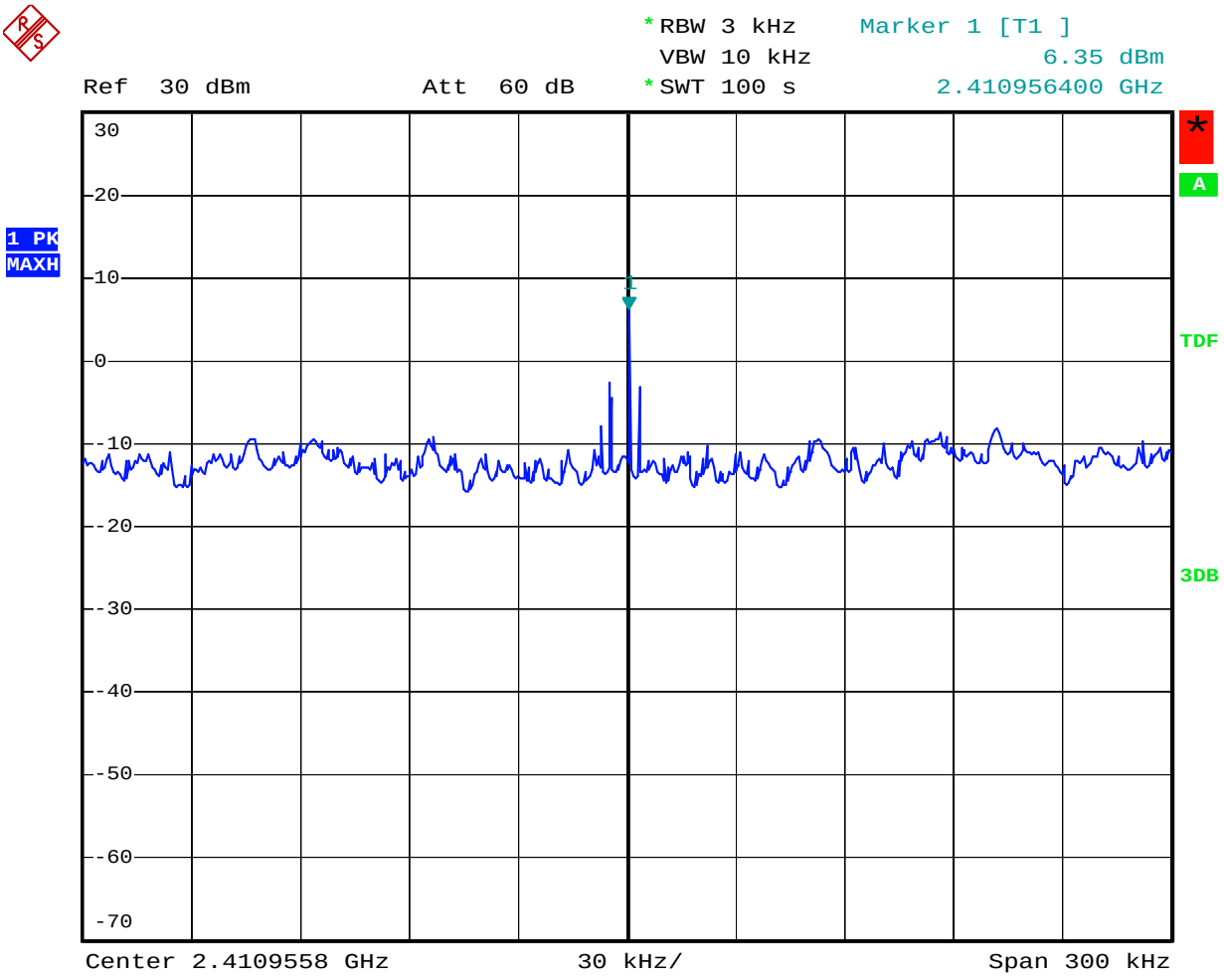
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	6.35	8 dBm
Middle	2437	4.42	8 dBm
High	2462	3.67	8 dBm

The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-11.12	8 dBm
Middle	2437	-11.48	8 dBm
High	2462	-11.53	8 dBm

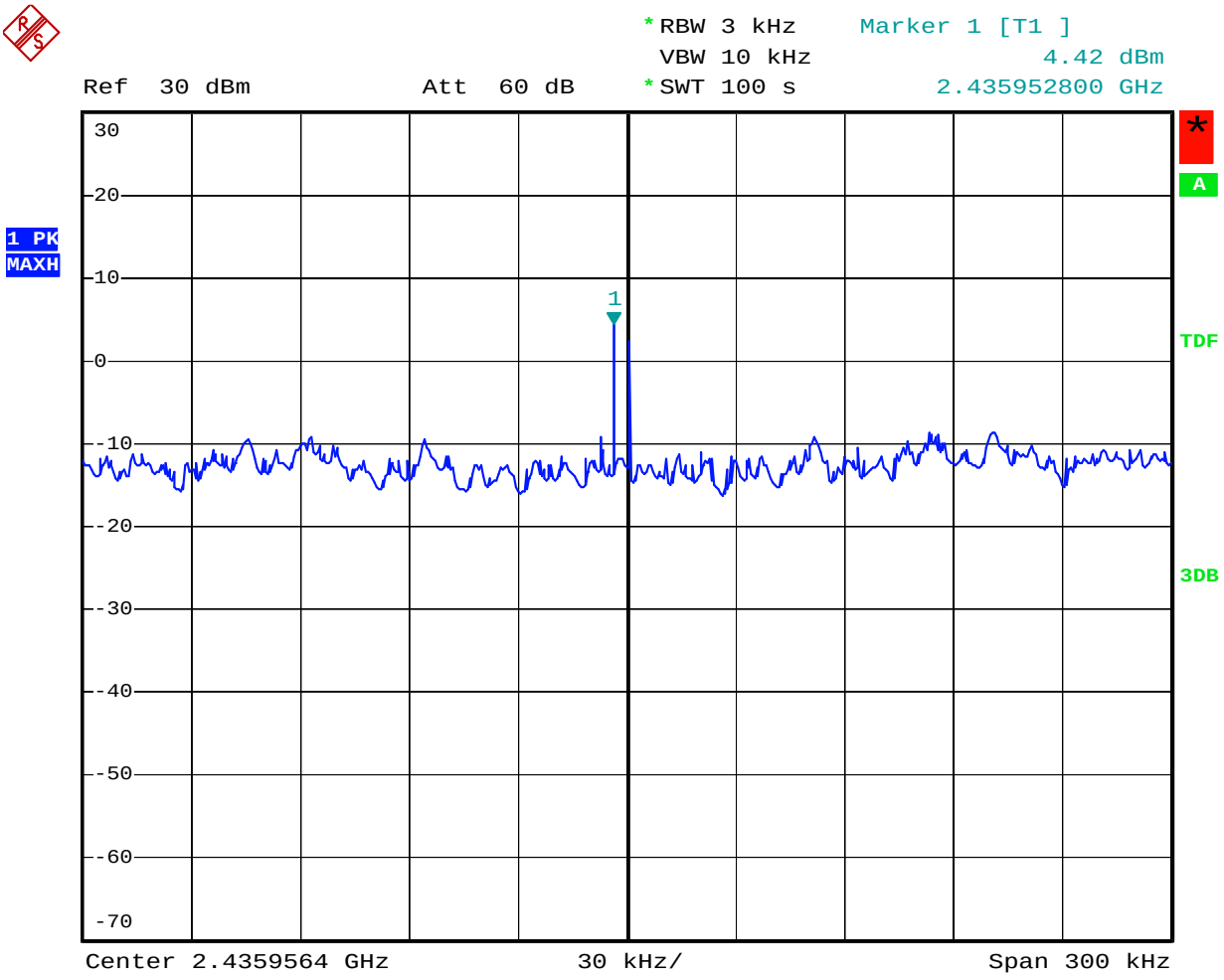
The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



Date: 19.AUG.2009 16:05:56

802.11b Channel Middle 2437MHz



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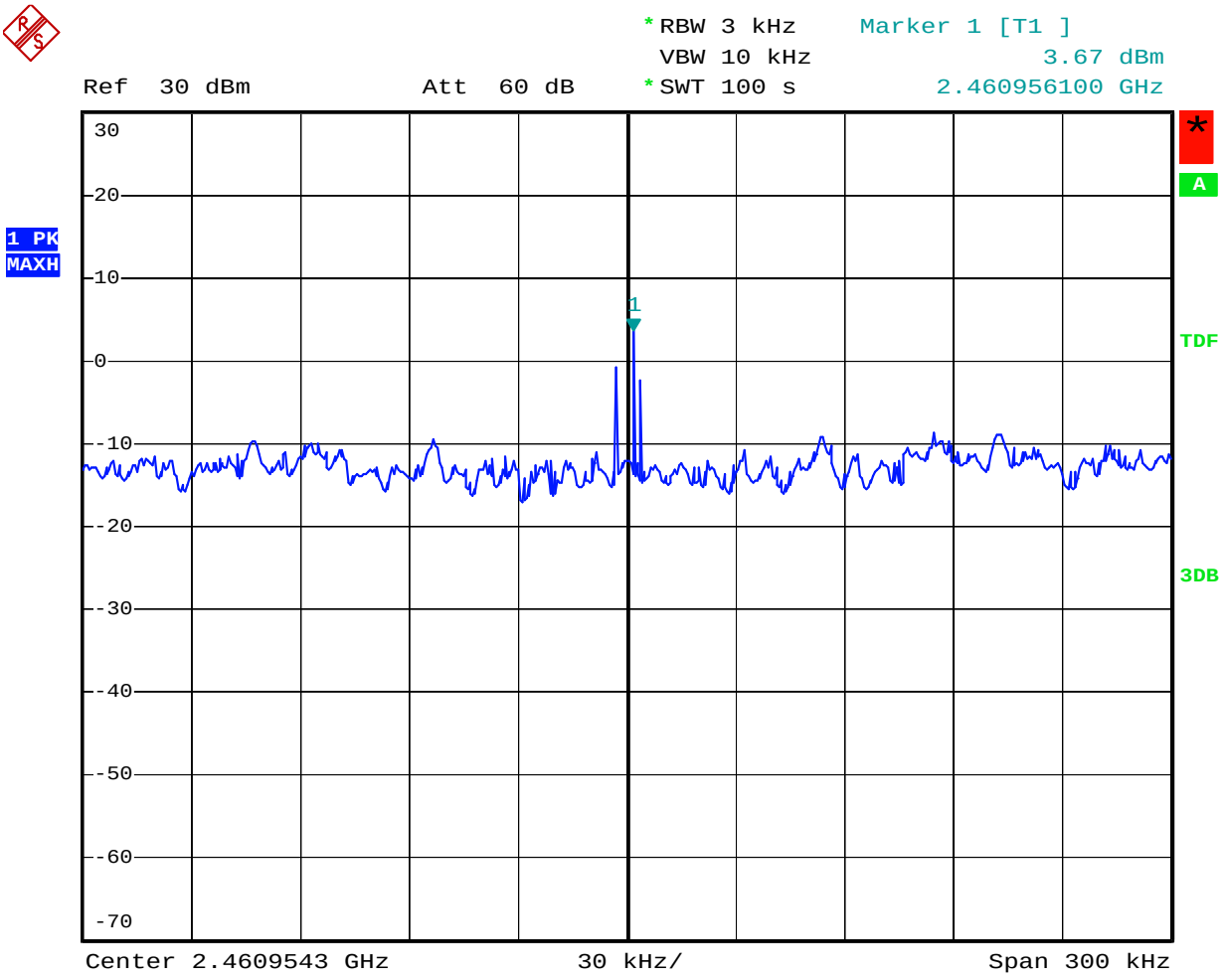
802.11b Channel High 2462MHz



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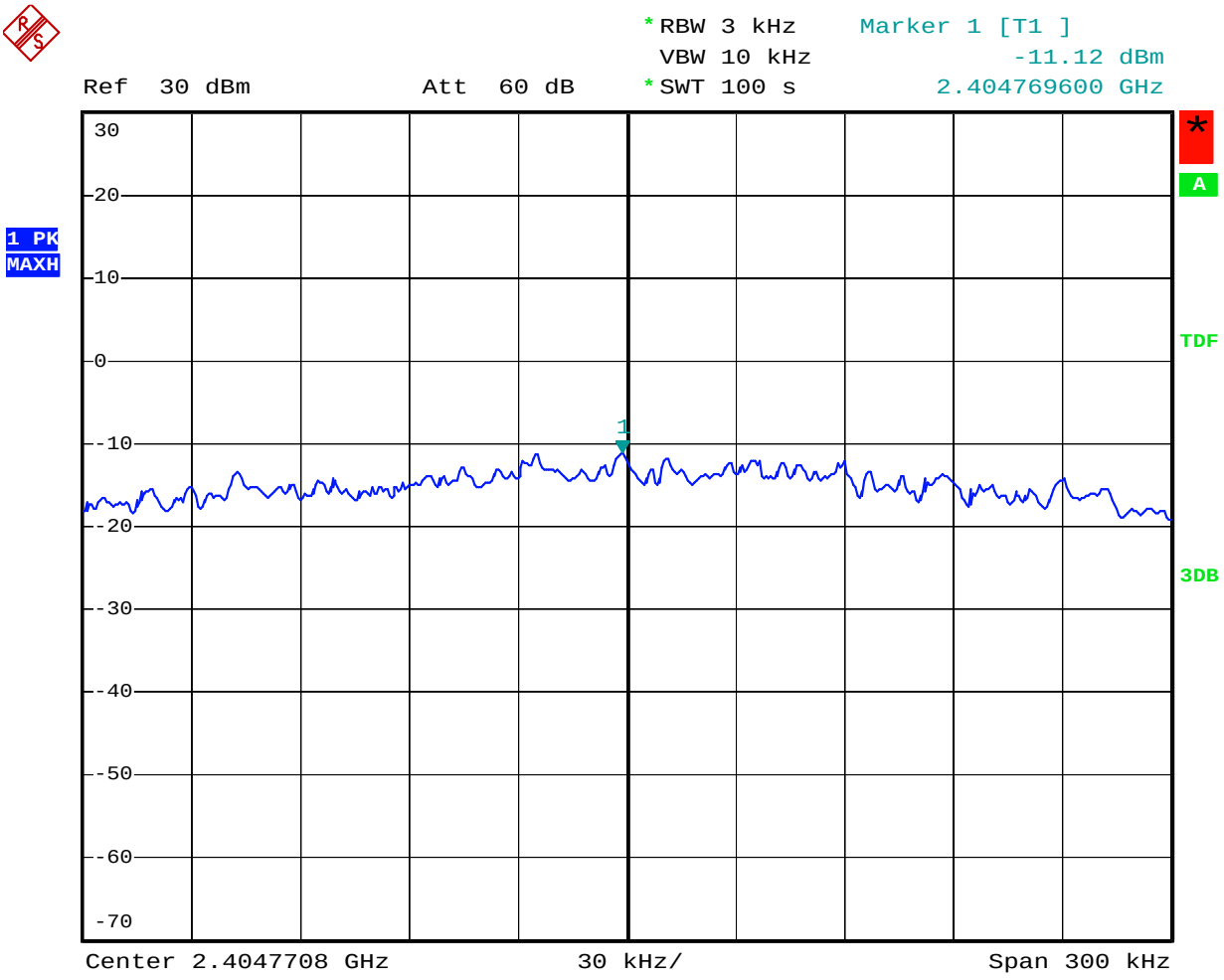
802.11g Channel Low 2412MHz



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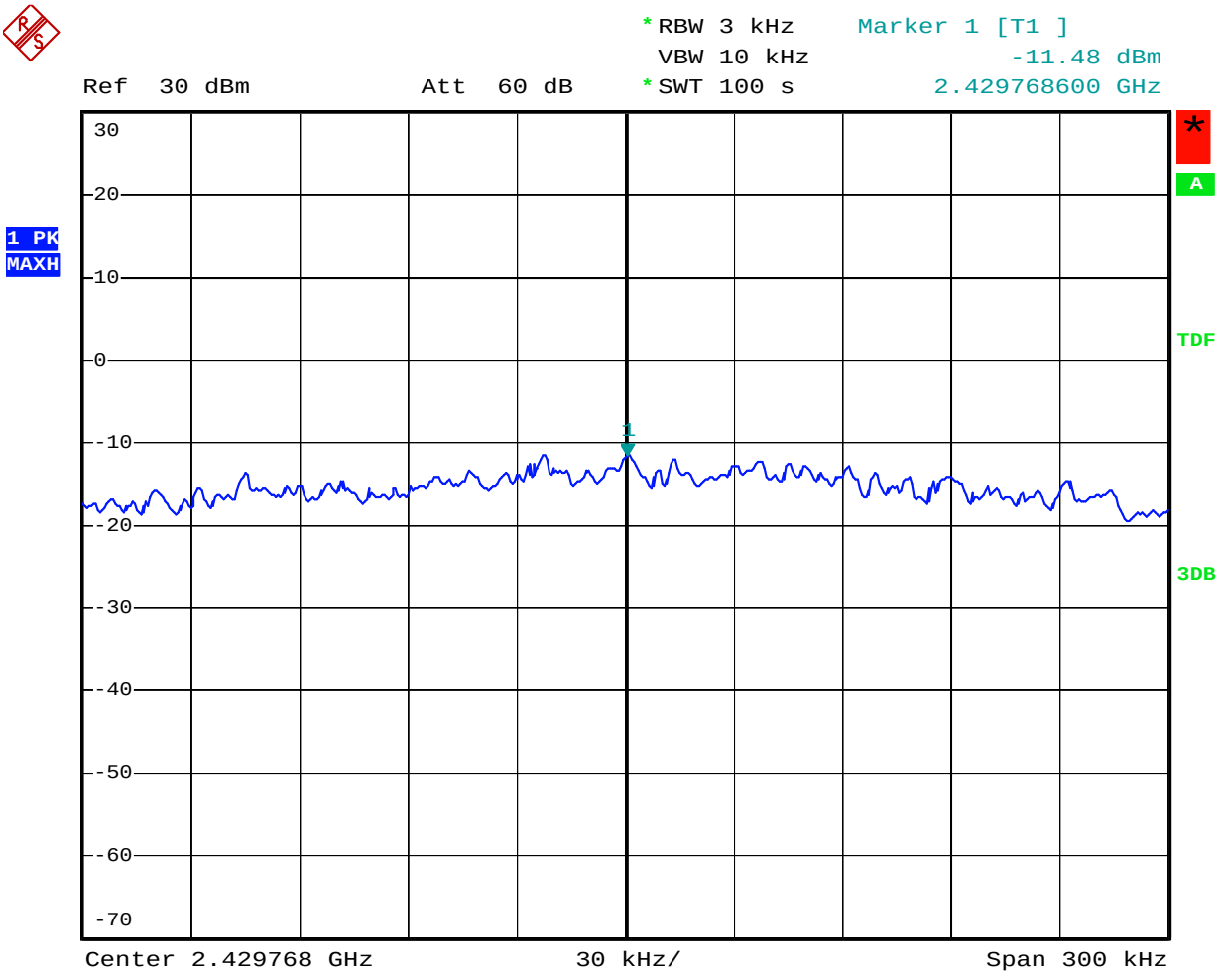
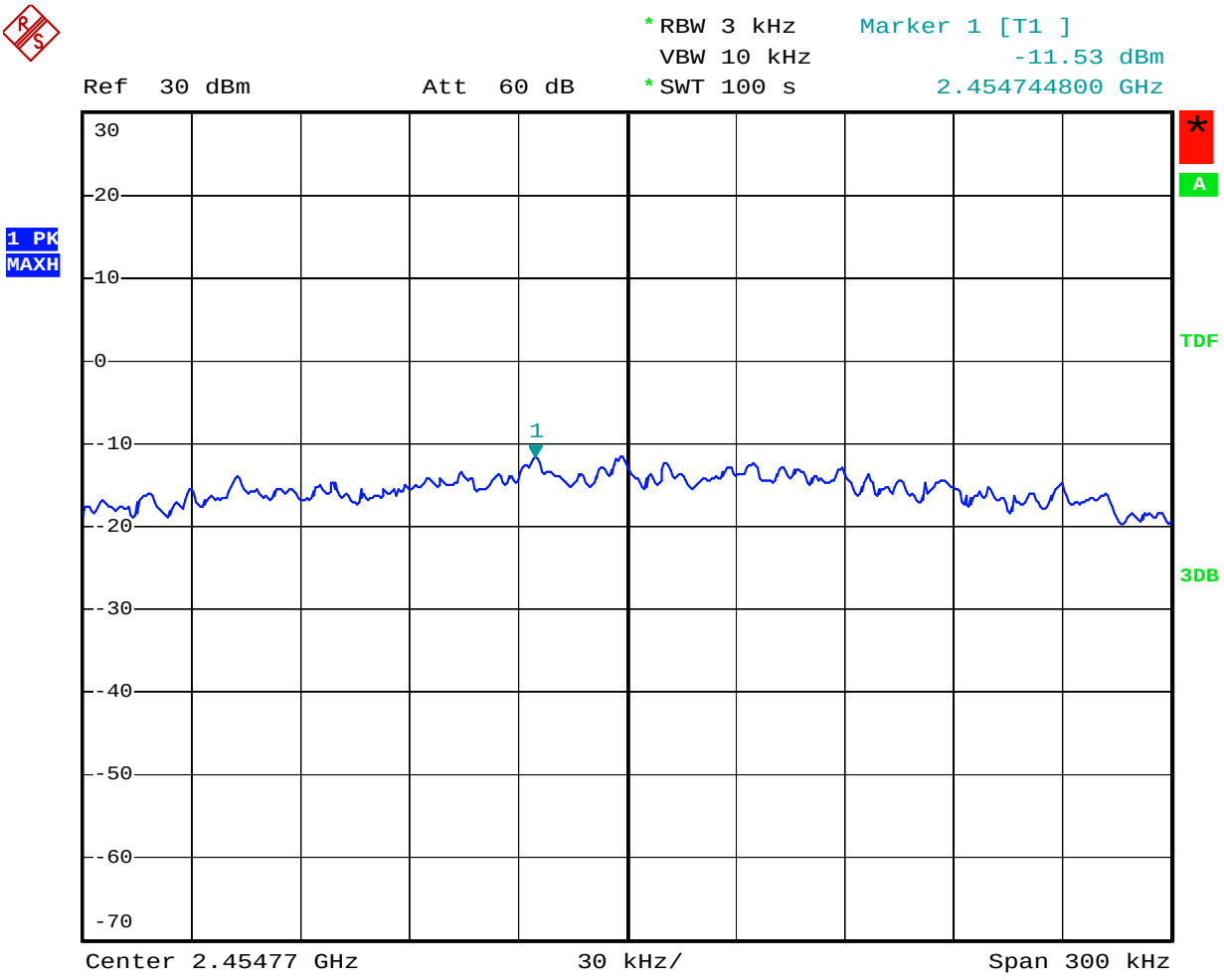
802.11g Channel Middle 2437MHz



Date: 19.AUG.2009 16:19:03

802.11g Channel High 2462MHz



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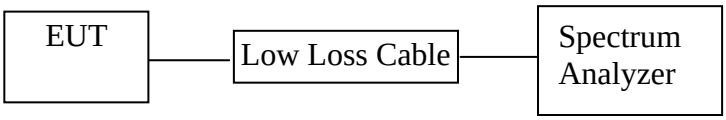
8. BAND EDGE COMPLIANCE TEST (WI-FI)

8.1.Block Diagram of Test Setup



(EUT: Syntek BlueW-2310 miniCard)

8.2.The Requirement For Section 15.247(d)

Section 15.247(d): 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

8.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.3.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	:	BlueW-2310 miniCard
Serial Number	:	N/A
Manufacturer	:	Syntek Semiconductor Co., Ltd.

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2462MHz TX frequency to transmit.

8.5.Test Procedure

8.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

8.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz with convenient frequency span.

8.5.3.The band edges was measured and recorded.

8.6.Test Result

Pass

Date of Test:	August 19, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

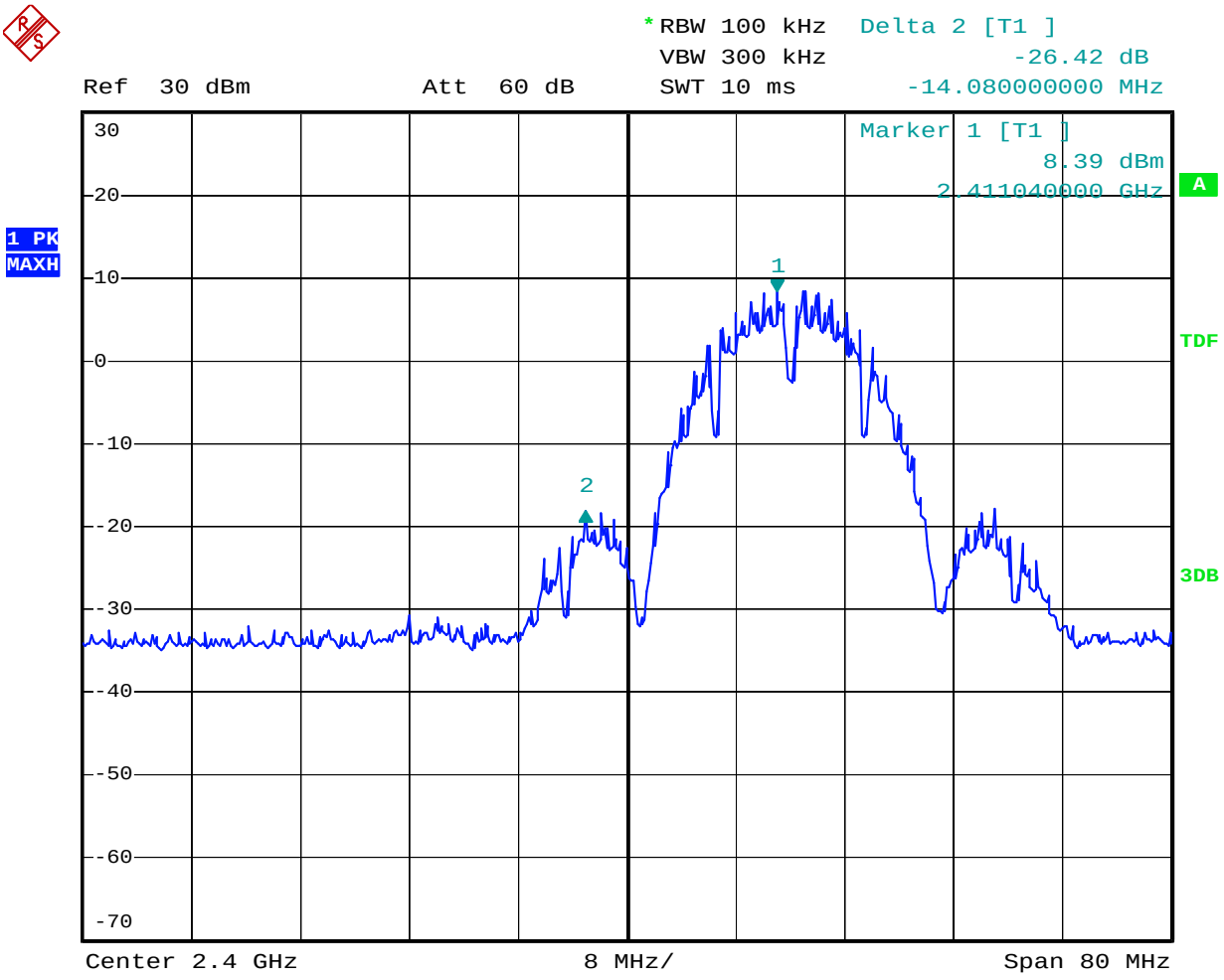
The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	26.42	> 20dBc
2462	39.41	> 20dBc

The test was performed with 802.11g, the data was shown the worst case 802.11g 1Mbps.

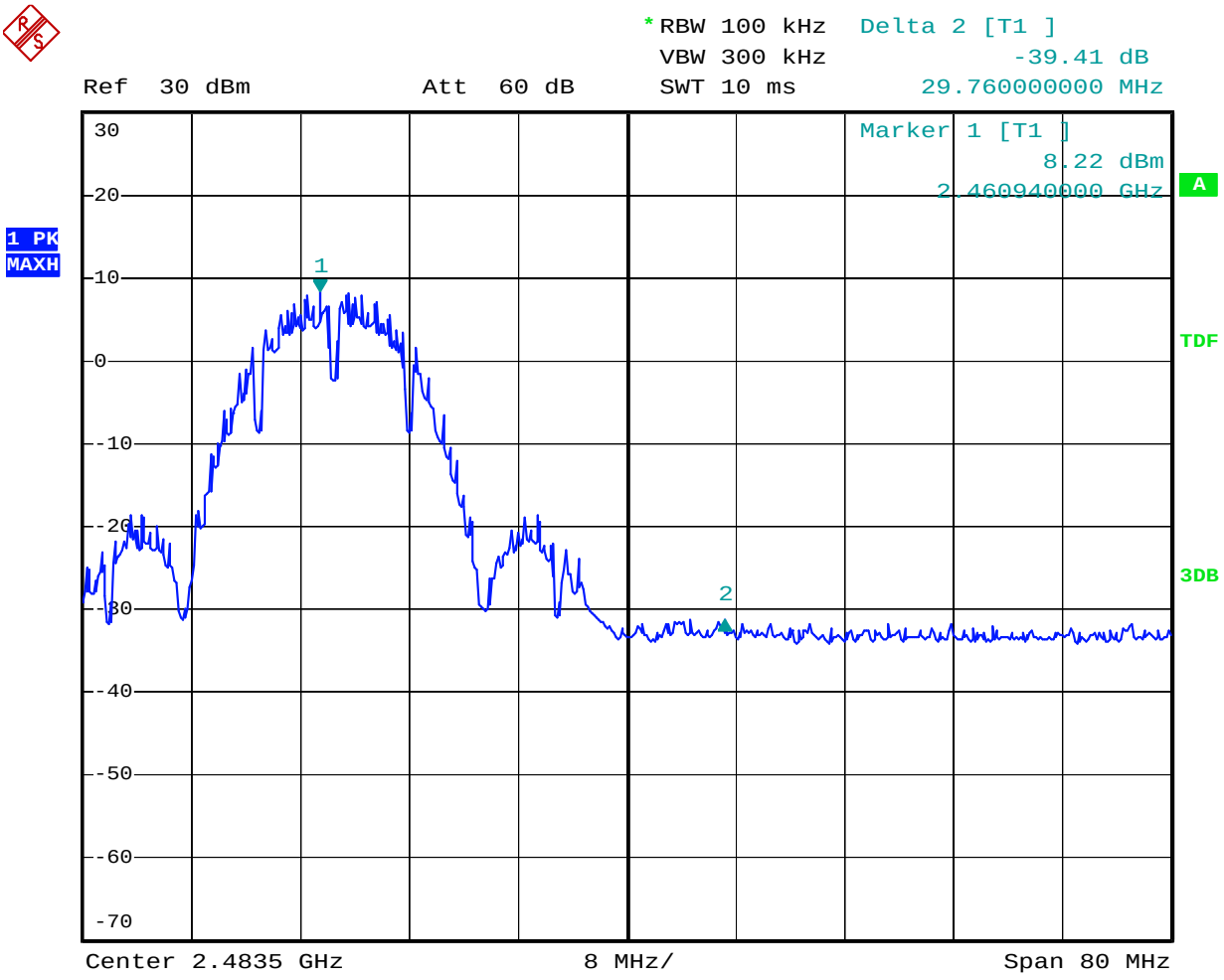
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	21.24	> 20dBc
2462	29.35	> 20dBc

802.11b Channel Low 2412MHz



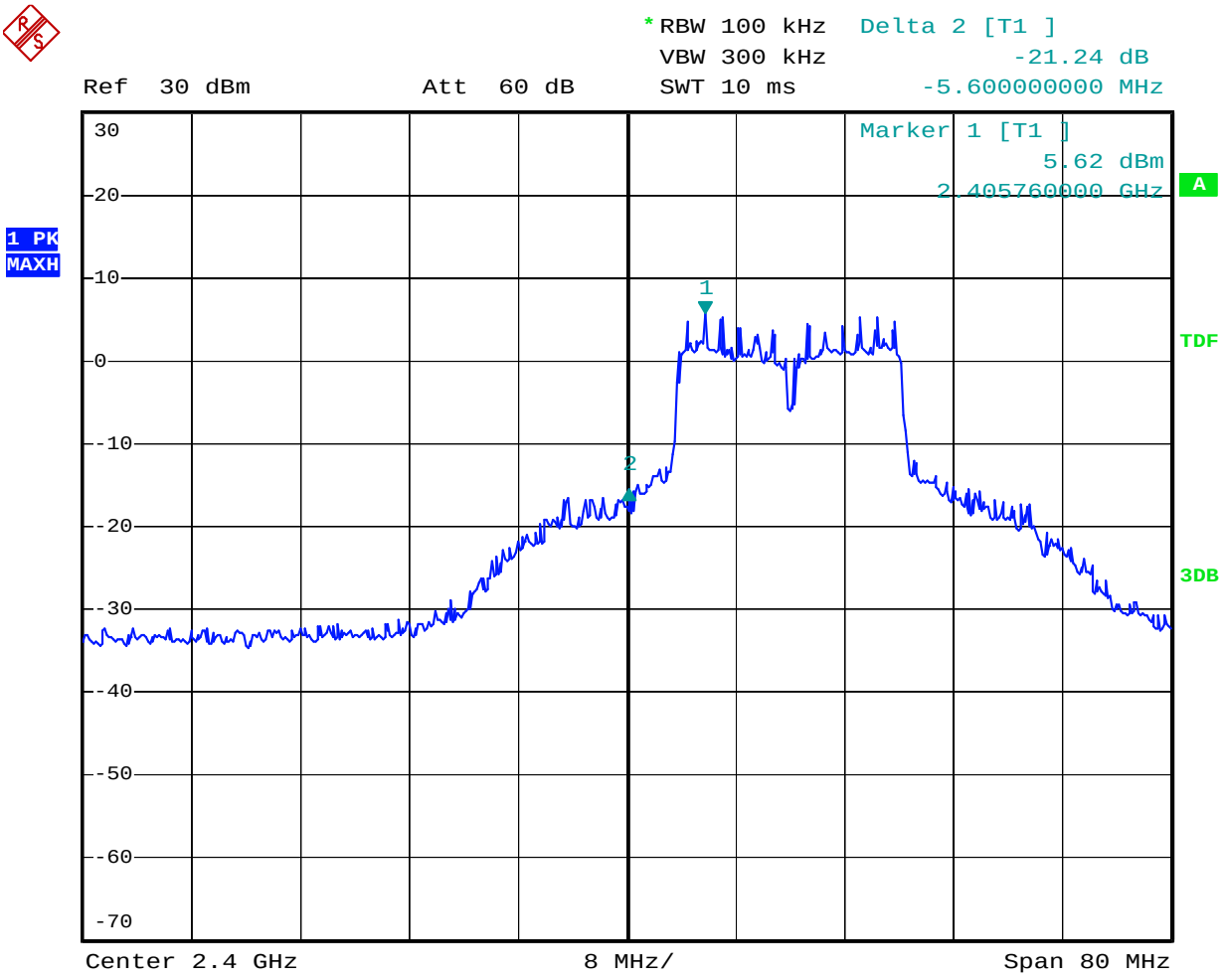
Date: 19.AUG.2009 16:41:23

802.11b Channel High 2462MHz



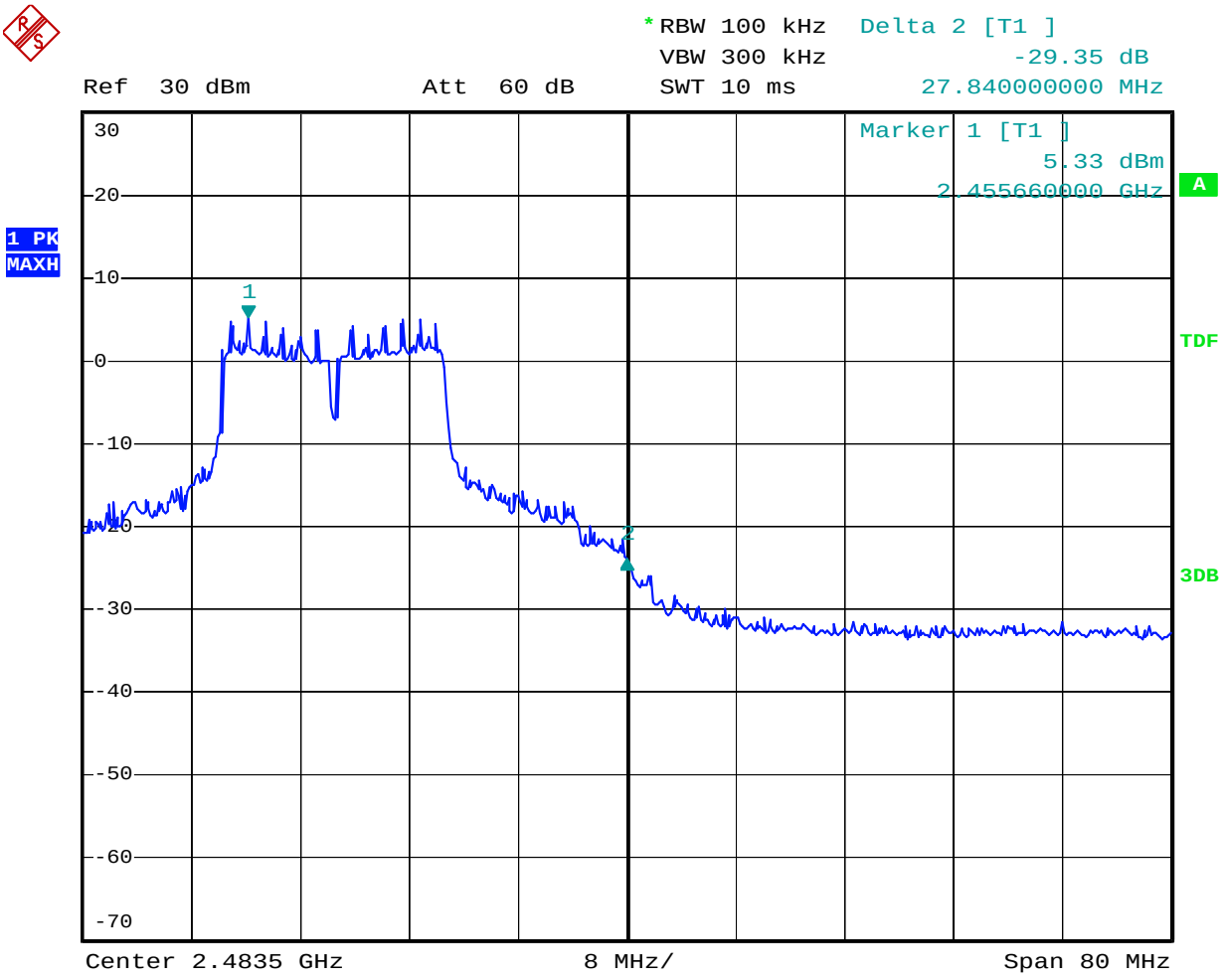
Date: 19.AUG.2009 16:37:30

802.11g Channel Low 2412MHz



Date: 19.AUG.2009 16:48:12

802.11g Channel High 2462MHz

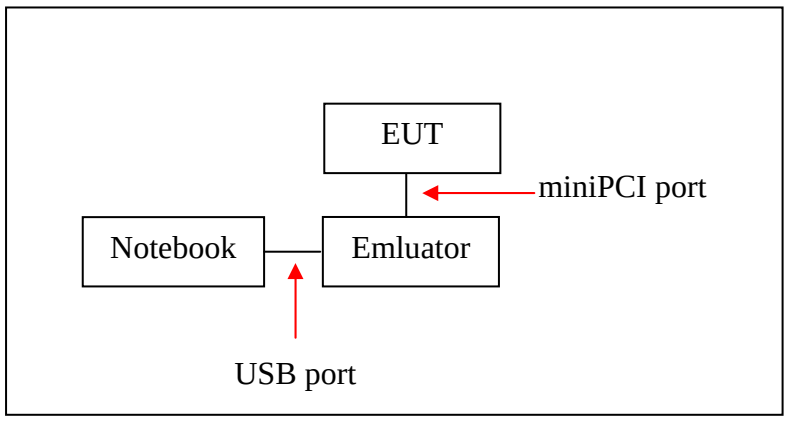


Date: 19.AUG.2009 17:08:14

9. RADIATED SPURIOUS EMISSION TEST

9.1.Block Diagram of Test Setup

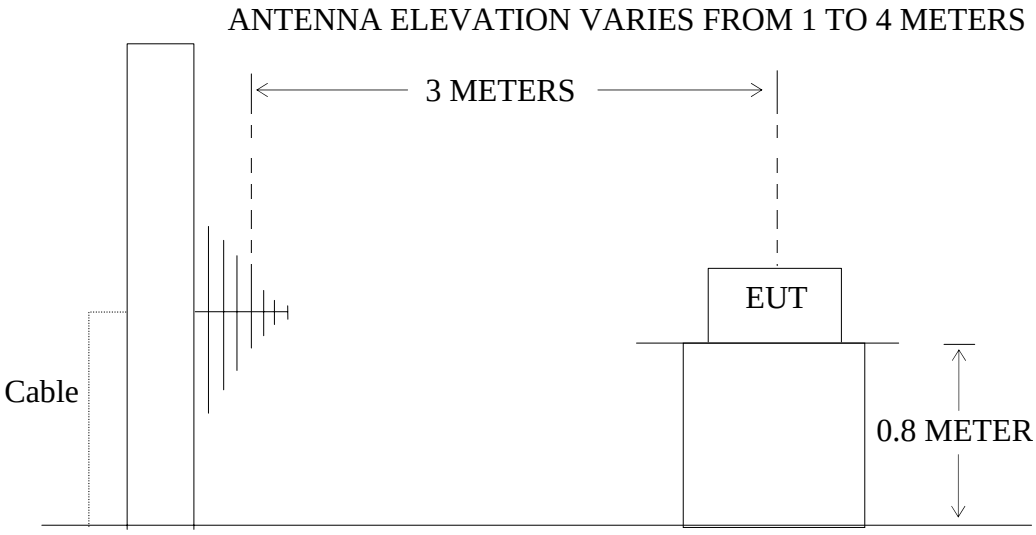
9.1.1.Block diagram of connection between the EUT and simulators



Setup: Transmitting mode

(EUT: Syntek BlueW-2310 miniCard)

9.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Syntek BlueW-2310 miniCard)

9.2. The Limit For Section 15.247(d)

Section 15.247(d): 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3. Restricted bands of operation

9.3.1. FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510

[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

9.4.Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	:	BlueW-2310 miniCard
Serial Number	:	N/A
Manufacturer	:	Syntek Semiconductor Co., Ltd.

9.5.Operating Condition of EUT

9.5.1.Setup the EUT and simulator as shown as Section 8.1.

9.5.2.Turn on the power of all equipment.

9.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

9.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.
The worst-case data rate for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode, based on previous with 802.11 WLAN product design architectures.

The bandwidth of test receiver (R&S ESI26) is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.
The frequency range from 30MHz to 25000MHz is checked.
The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:
Result = Reading + Corrected Factor
Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

9.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	August 27 - September 1, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	802.11b Channel Low 2412MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	43.31	49.30	-7.46	35.85	41.84	54	74	-18.15	-32.16	Vertical
2412.016	106.10	112.17	-7.43	98.67	104.74	-	-	-	-	Vertical
4824.027	50.41	56.49	-0.19	50.22	56.30	54	74	-3.78	-17.70	Vertical
7236.035	43.35	49.47	3.05	46.40	52.52	54	74	-7.60	-21.48	Vertical
2400.000	42.21	48.22	-7.46	34.75	40.76	54	74	-19.25	-33.24	Horizontal
2412.016	105.90	111.99	-7.43	98.47	104.56	-	-	-	-	Horizontal
4824.027	48.24	54.30	-0.19	48.05	54.11	54	74	-5.95	-19.89	Horizontal
7236.035	39.54	45.56	3.05	42.69	48.61	54	74	-11.41	-25.39	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 15, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel Middle 2437MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2437.015	106.09	112.22	-7.36	98.73	104.86	-	-	-	-	Vertical
4874.027	47.84	53.89	0.09	47.93	53.98	54	74	-6.07	-20.02	Vertical
7311.034	41.02	47.14	3.22	44.24	50.36	54	74	-9.76	-23.64	Vertical
2437.015	105.81	111.88	-7.36	98.45	104.52	-	-	-	-	Horizontal
4874.027	47.94	54.02	0.09	48.03	54.11	54	74	-5.97	-19.89	Horizontal
7311.034	39.77	45.79	3.22	42.99	49.01	54	74	-11.01	-24.99	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 15, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel High 2462MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2462.016	106.31	112.38	-7.35	98.96	105.03	-	-	-	-	Vertical
2483.500	40.96	47.00	-7.37	33.59	39.63	54	74	-20.41	-34.37	Vertical
4924.026	48.49	54.62	0.34	48.83	54.96	54	74	-5.17	-19.04	Vertical
7386.035	40.76	46.79	3.39	44.15	50.18	54	74	-9.85	-23.82	Vertical
2462.016	106.30	112.43	-7.35	98.95	105.08	-	-	-	-	Horizontal
2483.500	41.33	47.37	-7.37	33.96	40.00	54	74	-20.04	-34.00	Horizontal
4924.026	47.95	54.01	0.34	48.29	54.35	54	74	-5.71	-19.65	Horizontal
7386.035	37.82	43.88	3.39	41.21	47.27	54	74	-12.79	-26.73	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	August 27 - September 1, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	DC 3.3V
Test Mode:	802.11g Channel Low 2412MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	42.54	48.59	-7.46	35.08	41.13	54	74	-18.92	-32.87	Vertical
2412.016	106.77	112.89	-7.43	99.34	105.46	-	-	-	-	Vertical
4824.027	48.67	54.76	-0.19	48.48	54.57	54	74	-5.52	-19.43	Vertical
7236.035	39.10	45.15	3.05	42.15	48.20	54	74	-11.85	-25.80	Vertical
2400.000	43.75	49.86	-7.46	36.29	42.40	54	74	-17.71	-31.60	Horizontal
2412.016	106.32	112.41	-7.43	98.89	104.98	-	-	-	-	Horizontal
4824.027	49.02	55.09	-0.19	48.83	54.90	54	74	-5.17	-19.10	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 15, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel Middle 2437MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2437.015	106.21	112.33	-7.36	98.85	104.97	-	-	-	-	Vertical
4874.027	48.49	54.61	0.09	48.58	54.70	54	74	-5.42	-19.30	Vertical
7311.034	39.72	45.85	3.22	42.94	49.07	54	74	-11.06	-24.93	Vertical
2437.015	106.58	112.74	-7.36	99.22	105.38	-	-	-	-	Horizontal
4874.027	45.69	51.82	0.09	45.78	51.91	54	74	-8.22	-22.09	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 15, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel High 2462MHz	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2462.016	106.34	112.46	-7.35	98.99	105.11	-	-	-	-	Vertical
2483.500	41.77	47.92	-7.37	34.40	40.55	54	74	-19.60	-33.45	Vertical
4924.026	49.08	55.18	0.34	49.42	55.52	54	74	-4.58	-18.48	Vertical
7386.035	41.54	47.64	3.39	44.93	51.03	54	74	-9.07	-22.97	Vertical
2462.016	106.00	112.08	-7.35	98.65	104.73	-	-	-	-	Horizontal
2483.500	41.17	47.25	-7.37	33.80	39.88	54	74	-20.20	-34.12	Horizontal
4924.026	47.65	53.78	0.34	47.99	54.12	54	74	-6.01	-19.88	Horizontal

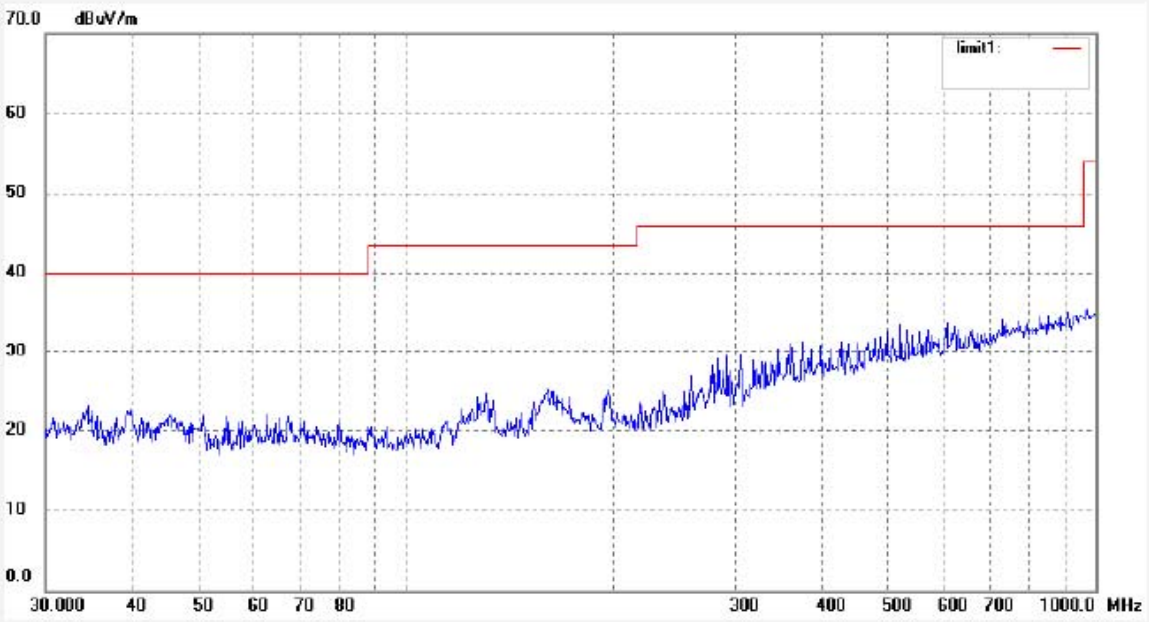
Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2715	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 22:57:55
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643

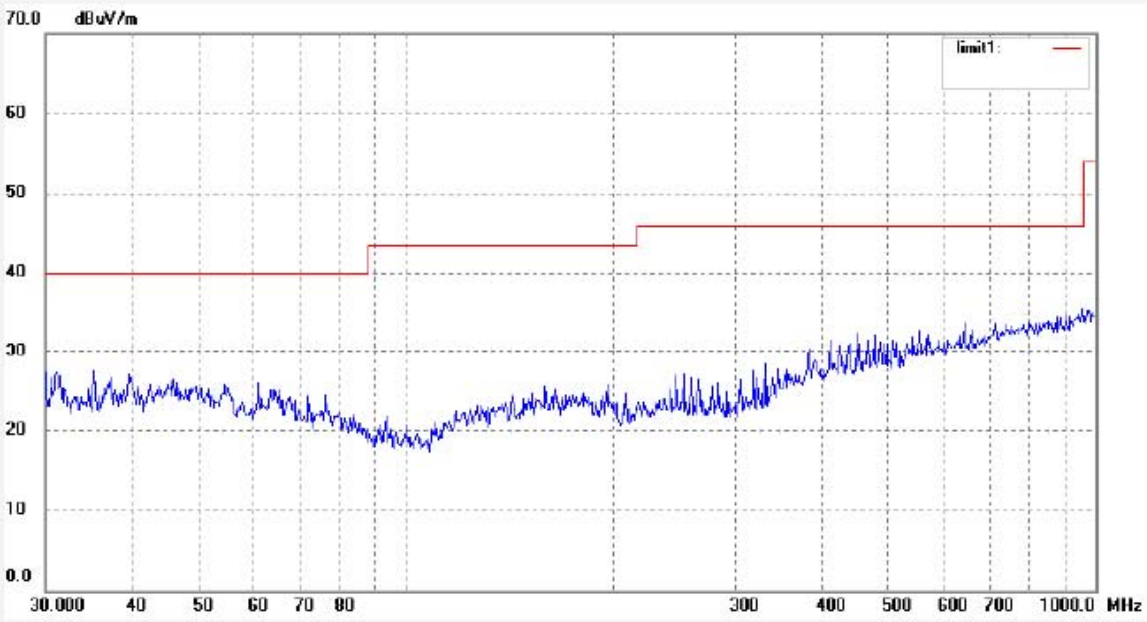


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2716	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:00:47
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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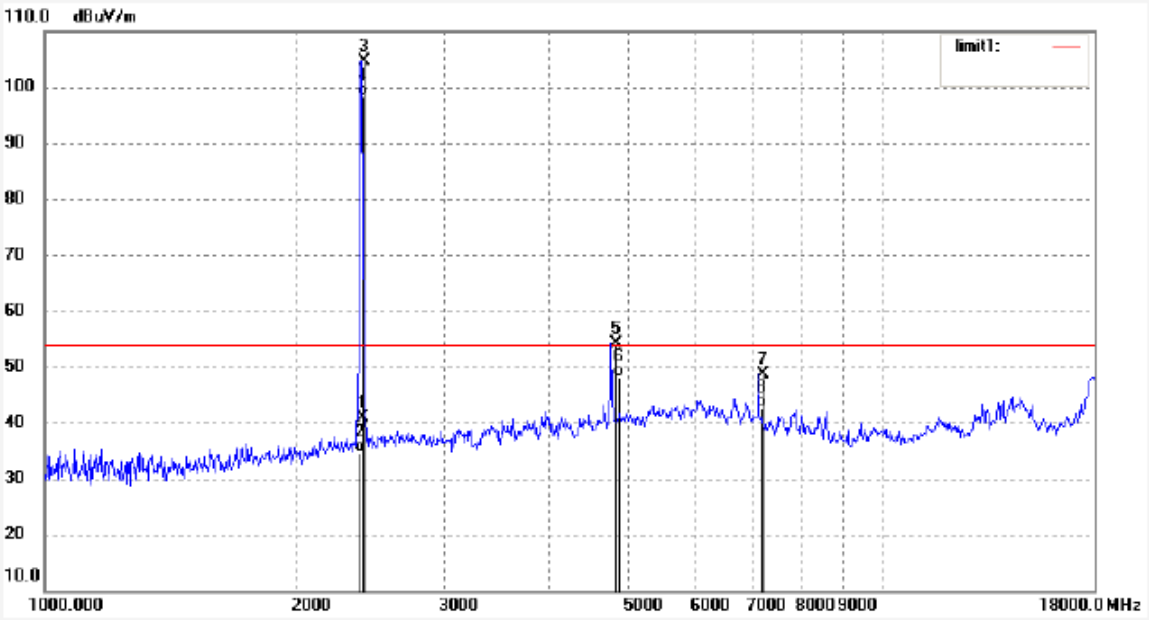
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2818
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 1(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:38:45
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	48.22	-7.46	40.76	74.00	-33.24	peak			
2	2400.000	42.21	-7.46	34.75	54.00	-19.25	AVG			
3	2412.016	111.99	-7.43	104.56	-	-	peak			
4	2412.016	105.90	-7.43	98.47	-	-	AVG			
5	4824.027	54.30	-0.19	54.11	74.00	-19.89	peak			
6	4824.027	48.24	-0.19	48.05	54.00	-5.95	AVG			
7	7236.035	45.56	3.05	48.61	74.00	-25.39	peak			
8	7236.035	39.54	3.05	42.59	54.00	-11.41	AVG			

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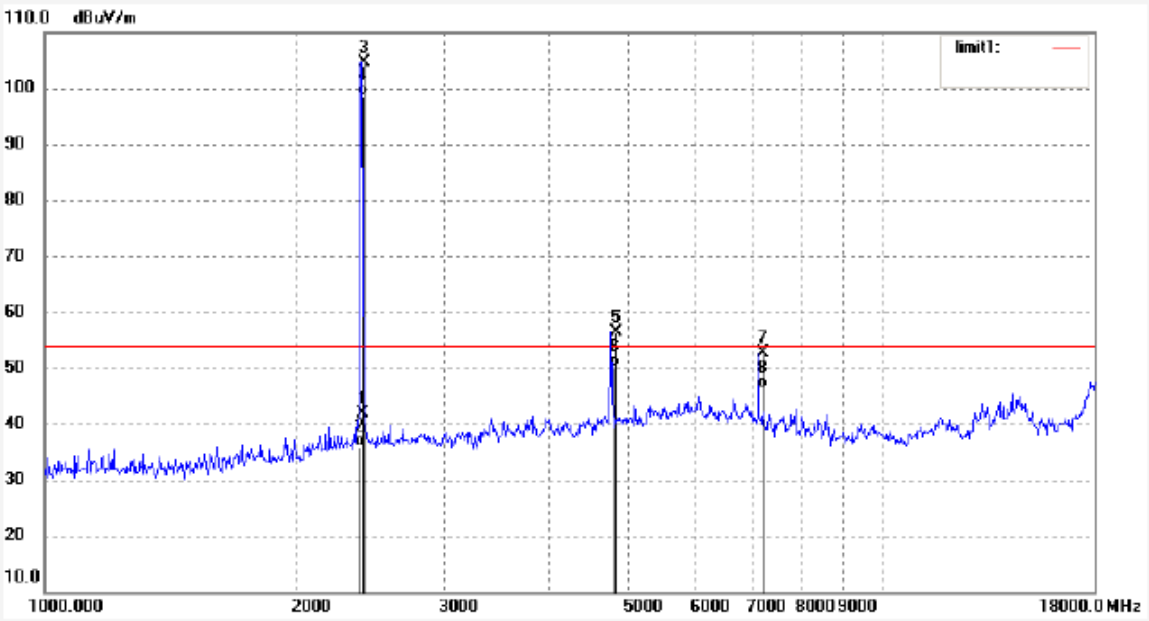
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2817
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 1(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:35:41
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	49.30	-7.46	41.84	74.00	-32.16	peak			
2	2400.000	43.31	-7.46	35.85	54.00	-18.15	AVG			
3	2412.016	112.17	-7.43	104.74	-	-	peak			
4	2412.016	106.10	-7.43	98.67	-	-	AVG			
5	4824.027	56.49	-0.19	56.30	74.00	-17.70	peak			
6	4824.027	50.41	-0.19	50.22	54.00	-3.78	AVG			
7	7236.035	49.47	3.05	52.52	74.00	-21.48	peak			
8	7236.035	43.35	3.05	46.40	54.00	-7.60	AVG			

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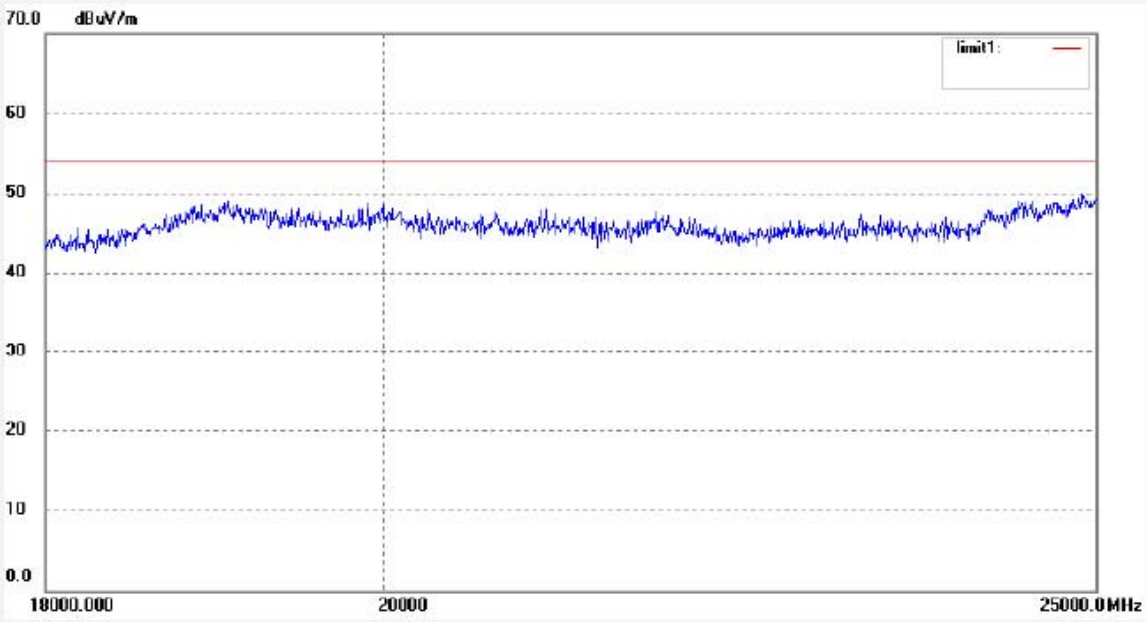
Job No.: RTTE #2842	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:19:20
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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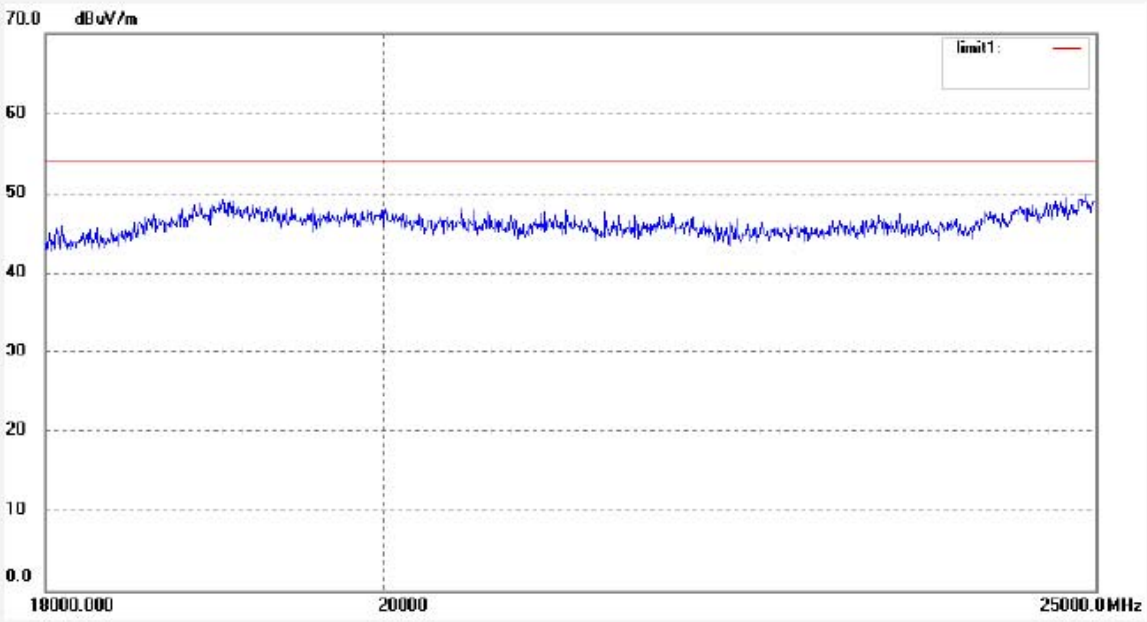
Job No.: RTTE #2841	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:16:13
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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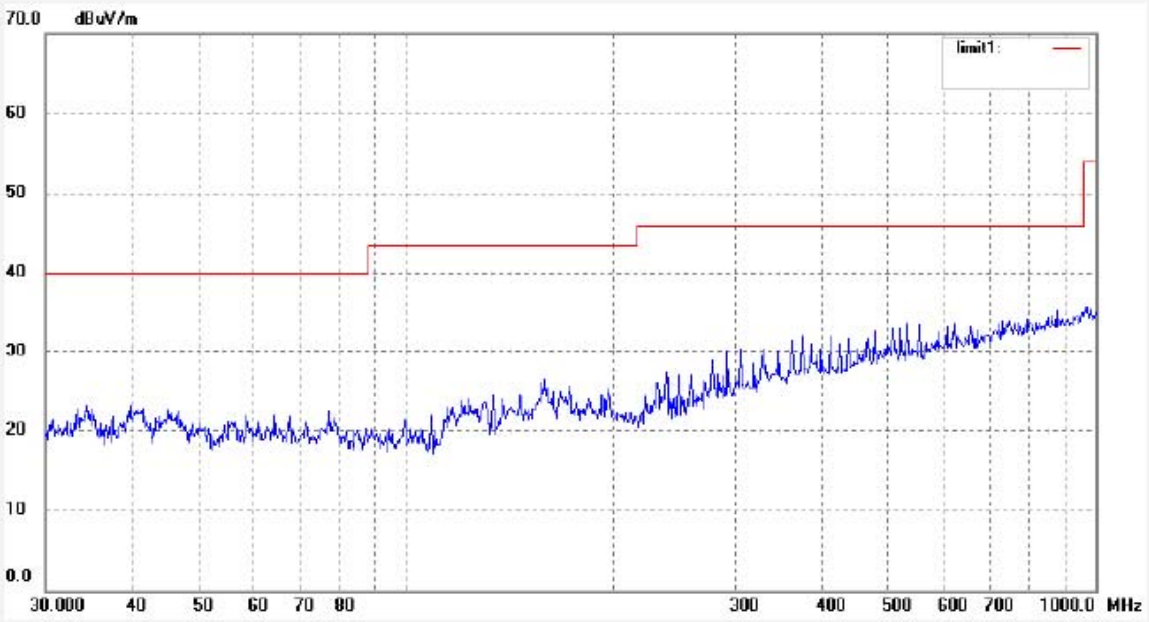
Job No.: RTTE #2718	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:07:16
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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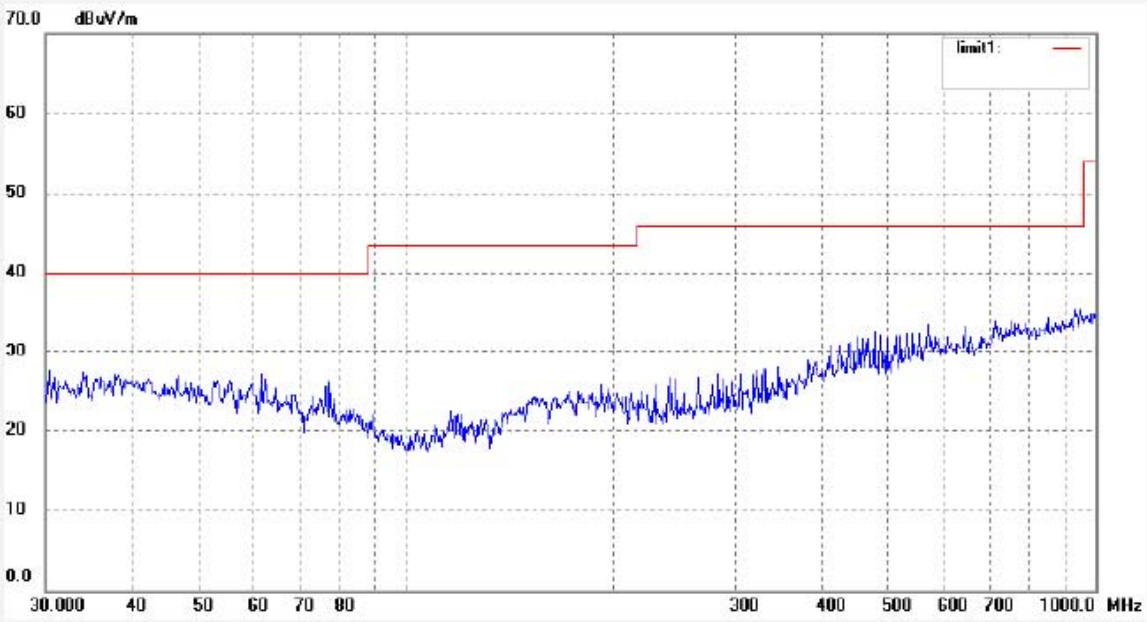
Job No.: RTTE #2717	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:04:15
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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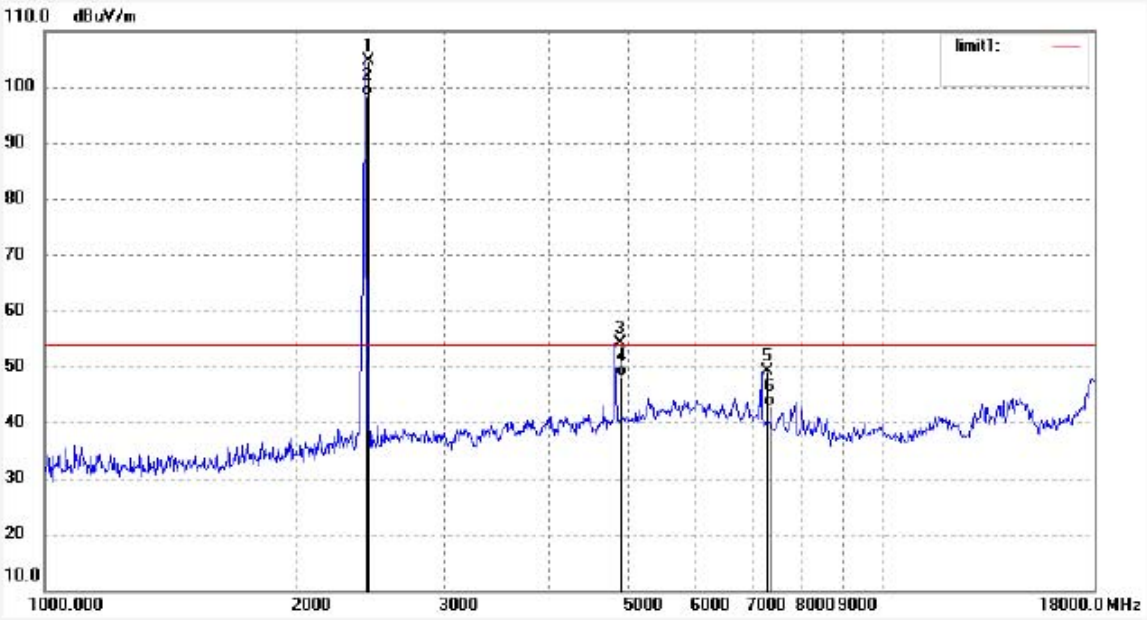
Job No.: RTTE #2819
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 6(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:42:16
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	111.88	-7.36	104.52	-	-	peak			
2	2437.015	105.81	-7.36	98.45	-	-	AVG			
3	4874.027	54.02	0.09	54.11	74.00	-19.89	peak			
4	4874.027	47.94	0.09	48.03	54.00	-5.97	AVG			
5	7311.034	45.79	3.22	49.01	74.00	-24.99	peak			
6	7311.034	39.77	3.22	42.99	54.00	-11.01	AVG			

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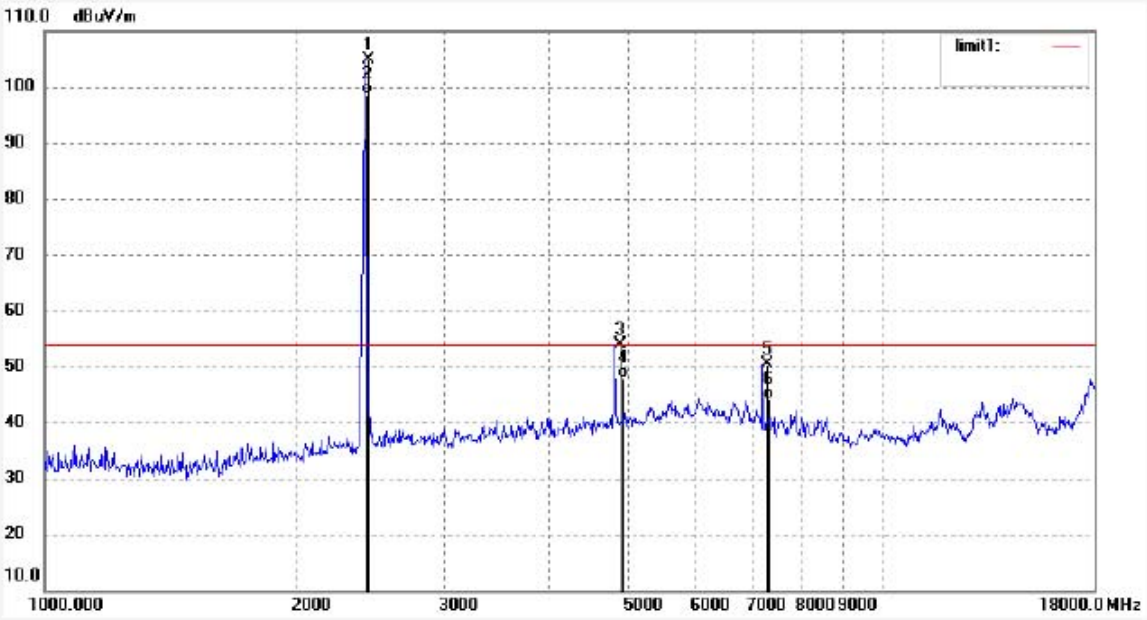
Job No.: RTTE #2820
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 6(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:45:24
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	112.22	-7.36	104.86	-	-	peak			
2	2437.015	106.09	-7.36	98.73	-	-	AVG			
3	4874.027	53.89	0.09	53.98	74.00	-20.02	peak			
4	4874.027	47.84	0.09	47.93	54.00	-6.07	AVG			
5	7311.034	47.14	3.22	50.36	74.00	-23.64	peak			
6	7311.034	41.02	3.22	44.24	54.00	-9.76	AVG			

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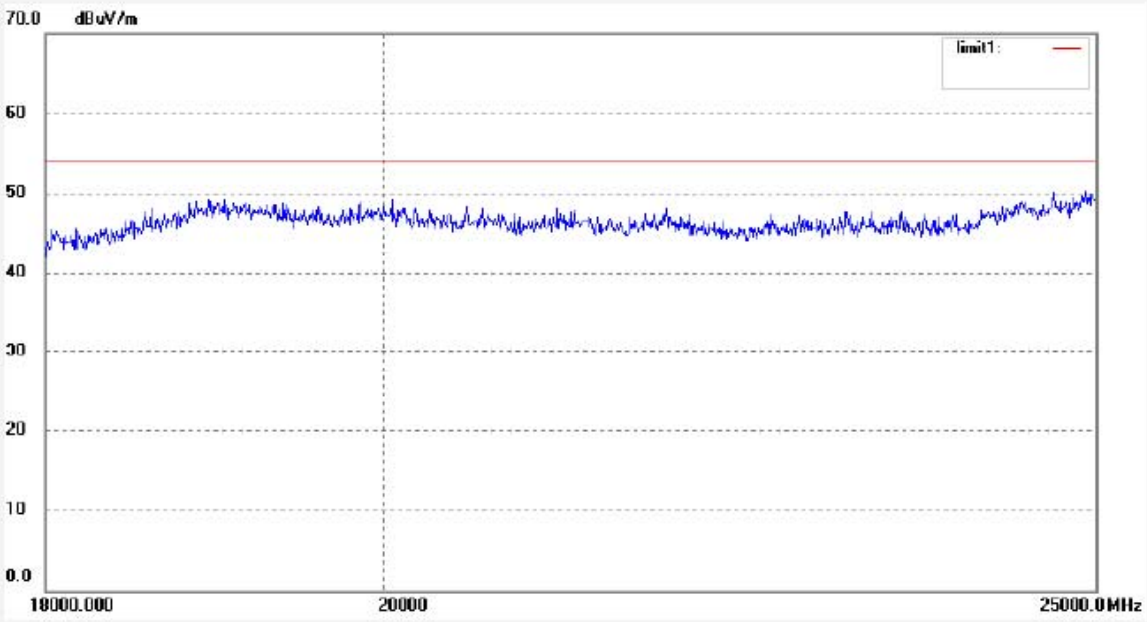
Job No.: RTTE #2843	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:23:26
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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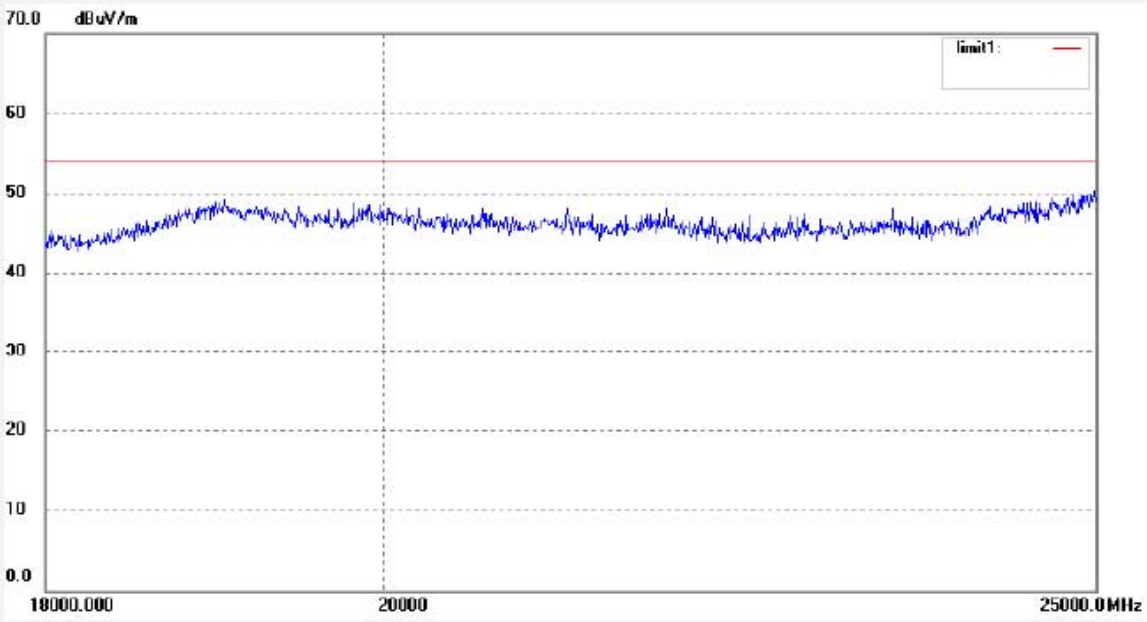
Job No.: RTTE #2844	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:26:31
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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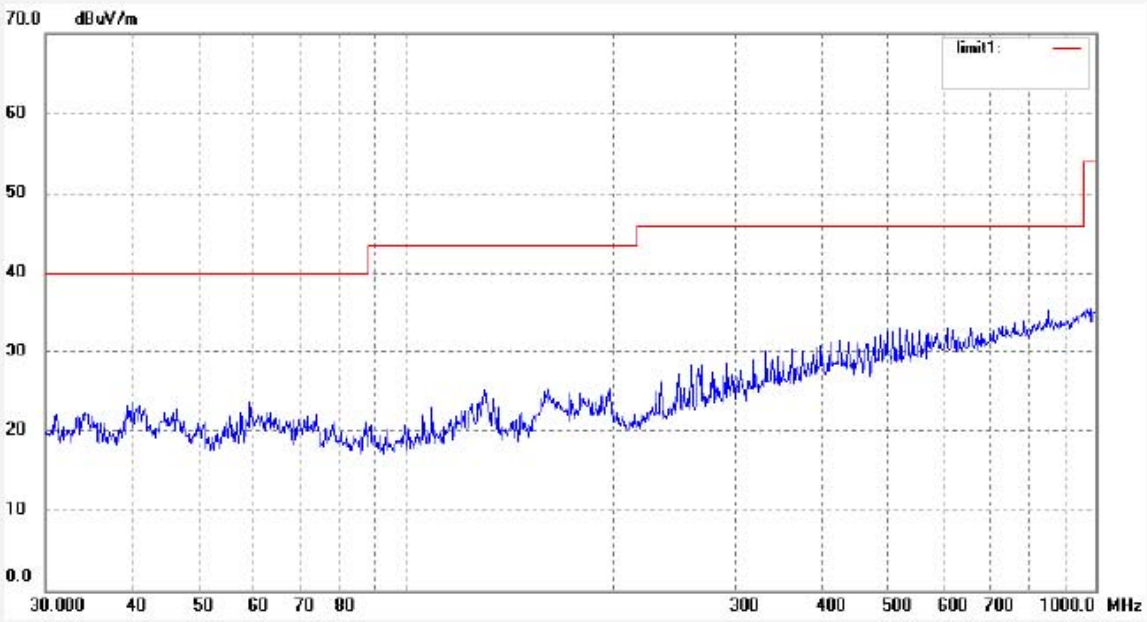
Job No.: RTTE #2719	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:10:51
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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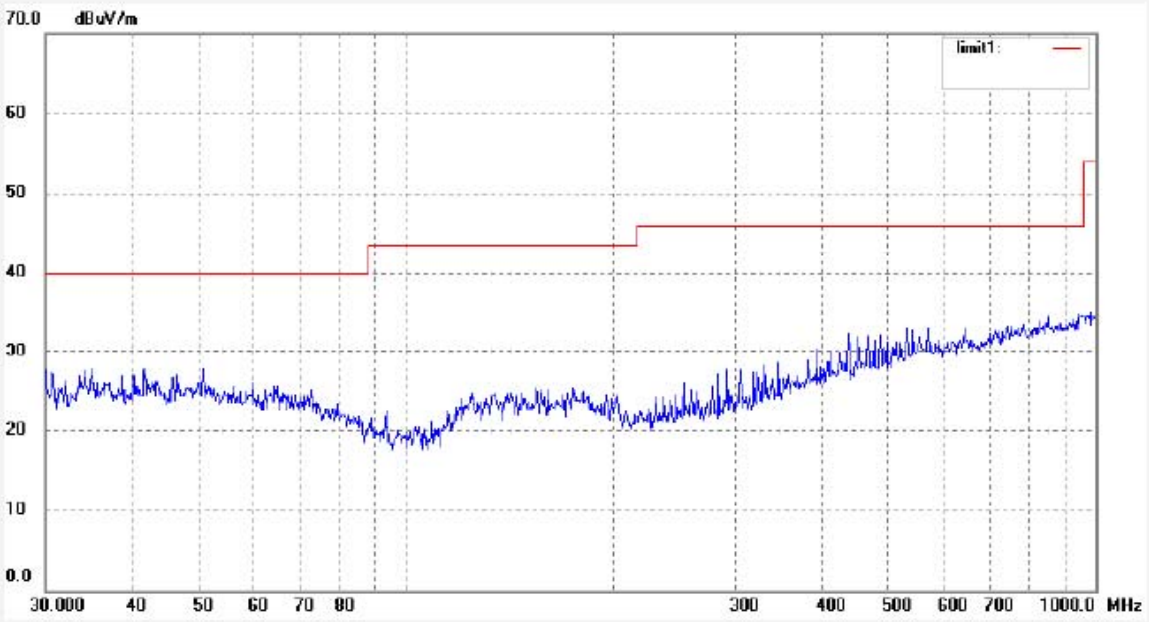
Job No.: RTTE #2720	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:13:40
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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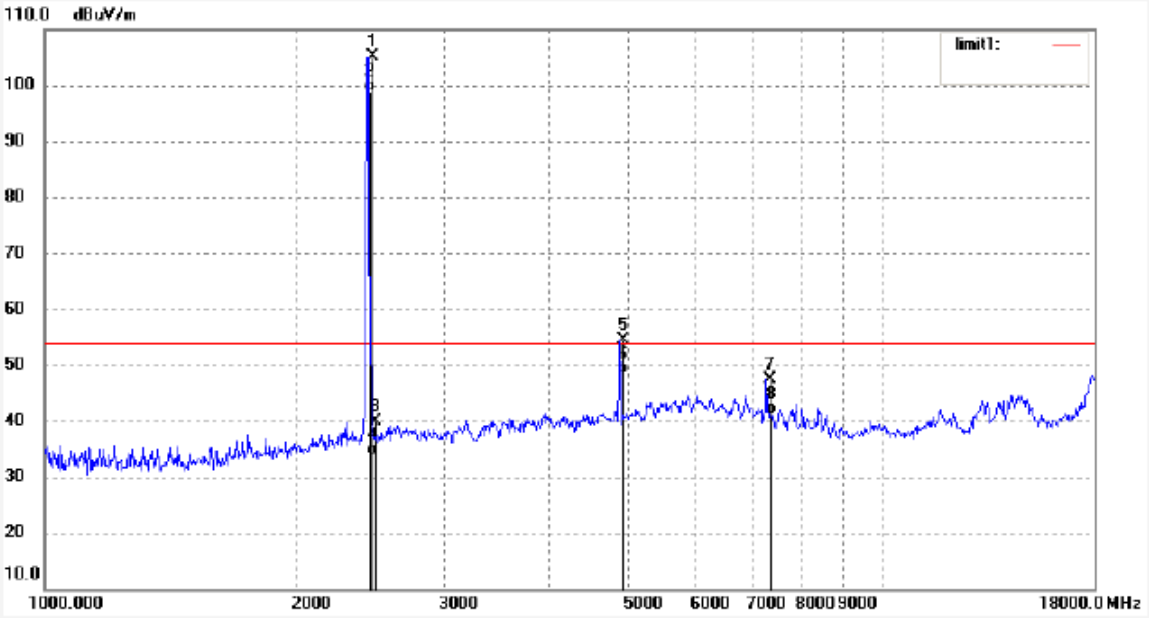
Job No.: RTTE #2822
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 11(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:52:31
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.43	-7.35	105.08	-	-	peak			
2	2462.016	106.30	-7.35	98.95	-	-	AVG			
3	2483.500	47.37	-7.37	40.00	74.00	-34.00	peak			
4	2483.500	41.33	-7.37	33.96	54.00	-20.04	AVG			
5	4924.026	54.01	0.34	54.35	74.00	-19.65	peak			
6	4924.026	47.95	0.34	48.29	54.00	-5.71	AVG			
7	7386.035	43.88	3.39	47.27	74.00	-26.73	peak			
8	7386.035	37.82	3.39	41.21	54.00	-12.79	AVG			

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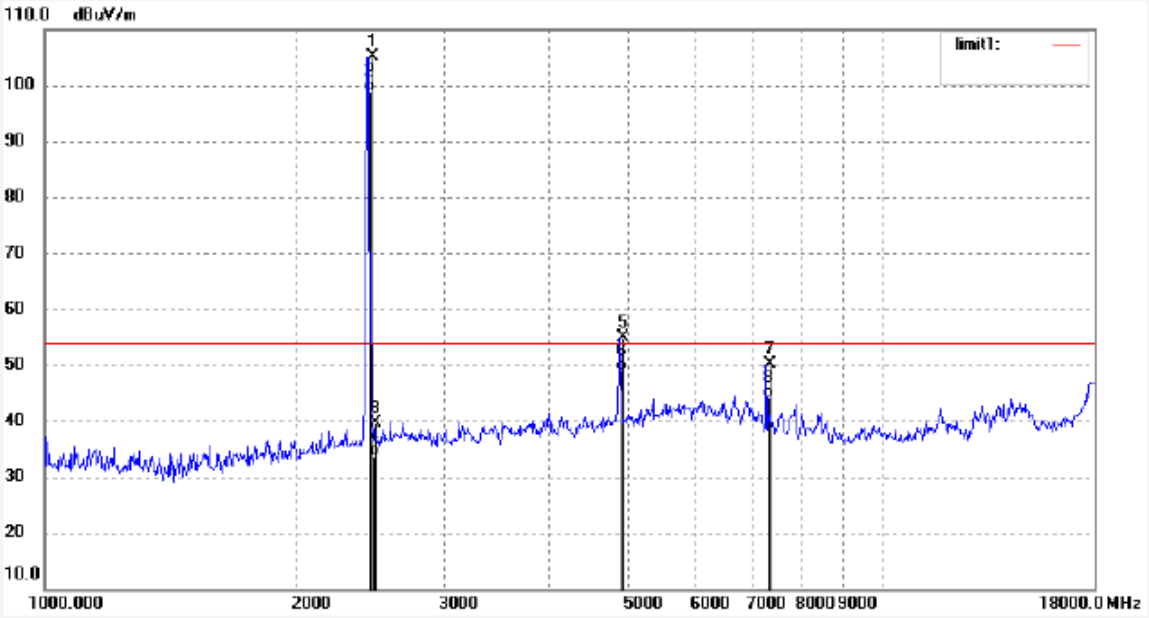
Job No.: RTTE #2821
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 11(802.11b)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 18:49:27
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.38	-7.35	105.03	-	-	peak			
2	2462.016	106.31	-7.35	98.96	-	-	AVG			
3	2483.500	47.00	-7.37	39.63	74.00	-34.37	peak			
4	2483.500	40.96	-7.37	33.59	54.00	-20.41	AVG			
5	4924.026	54.62	0.34	54.96	74.00	-19.04	peak			
6	4924.026	48.49	0.34	48.83	54.00	-5.17	AVG			
7	7386.035	46.79	3.39	50.18	74.00	-23.82	peak			
8	7386.035	40.76	3.39	44.15	54.00	-9.85	AVG			

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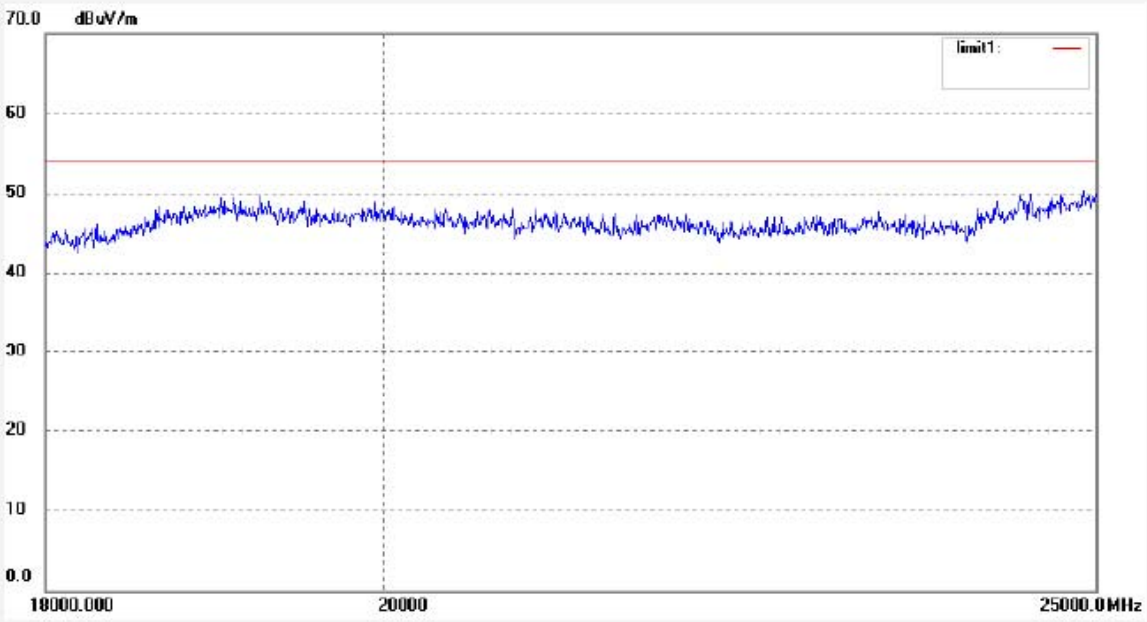
Job No.: RTTE #2846	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:33:42
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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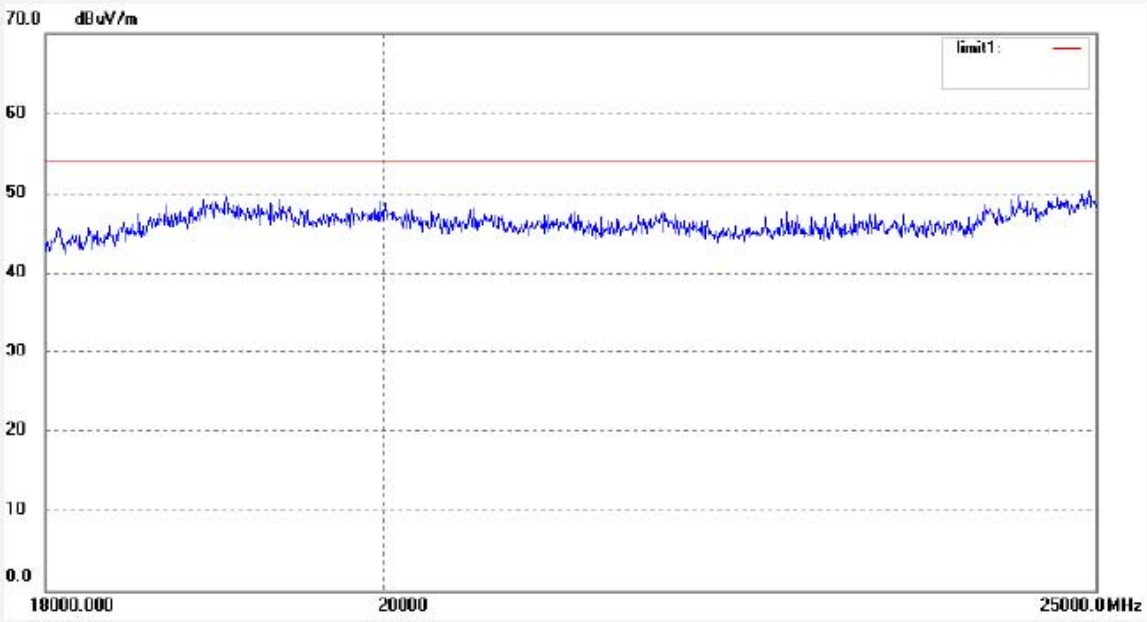
Job No.: RTTE #2845	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:30:37
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11b)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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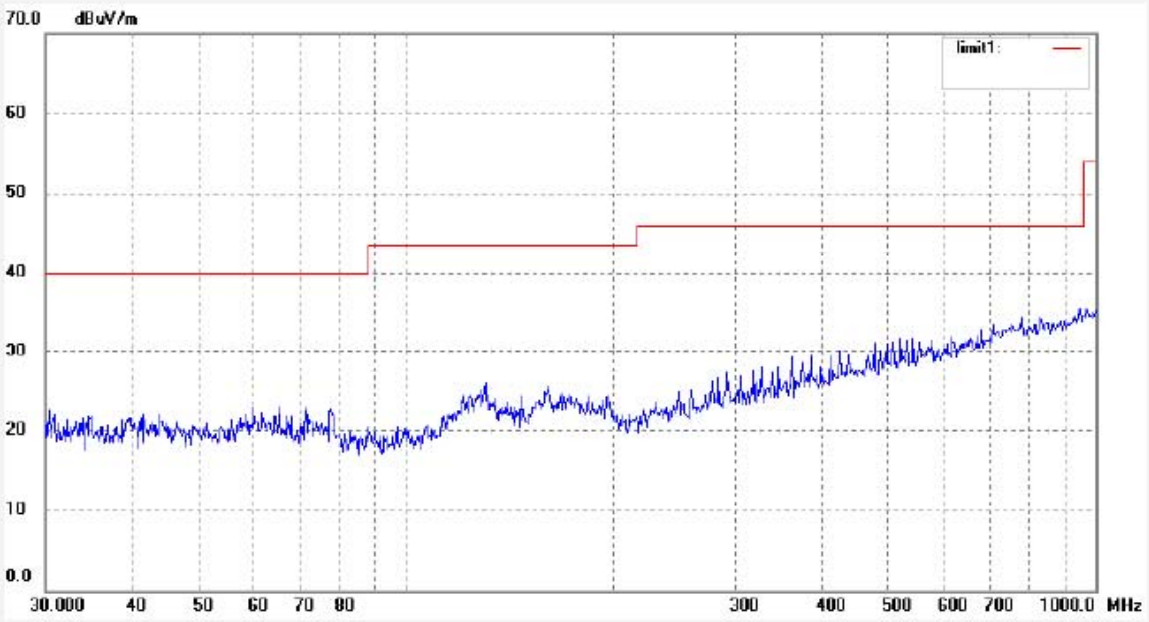
Job No.: RTTE #2722	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:20:10
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643

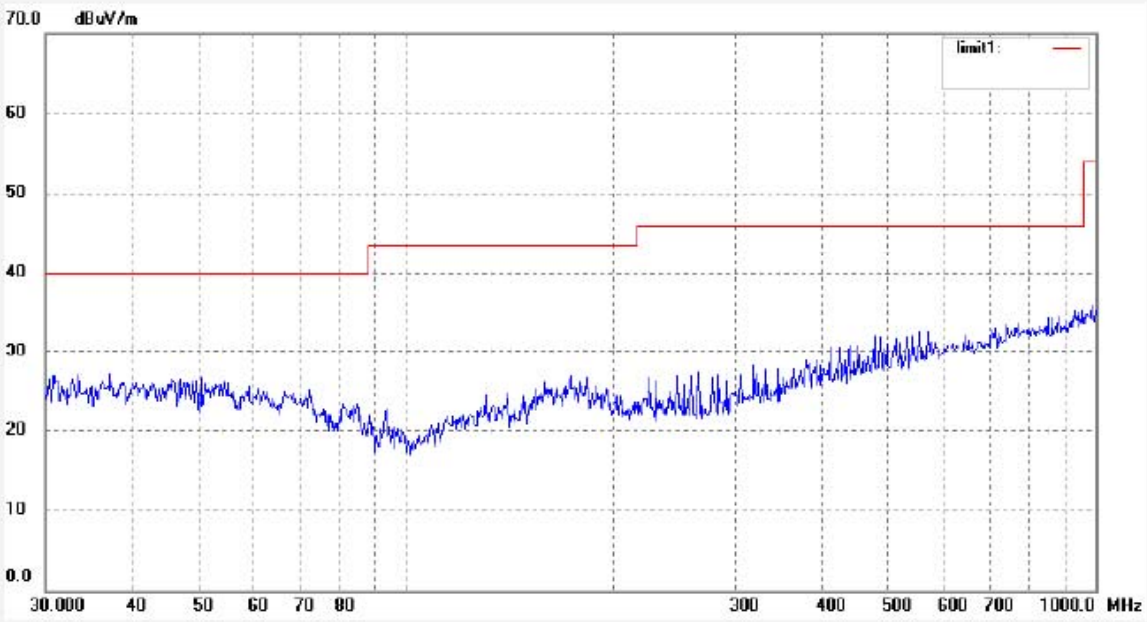


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2721	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:17:05
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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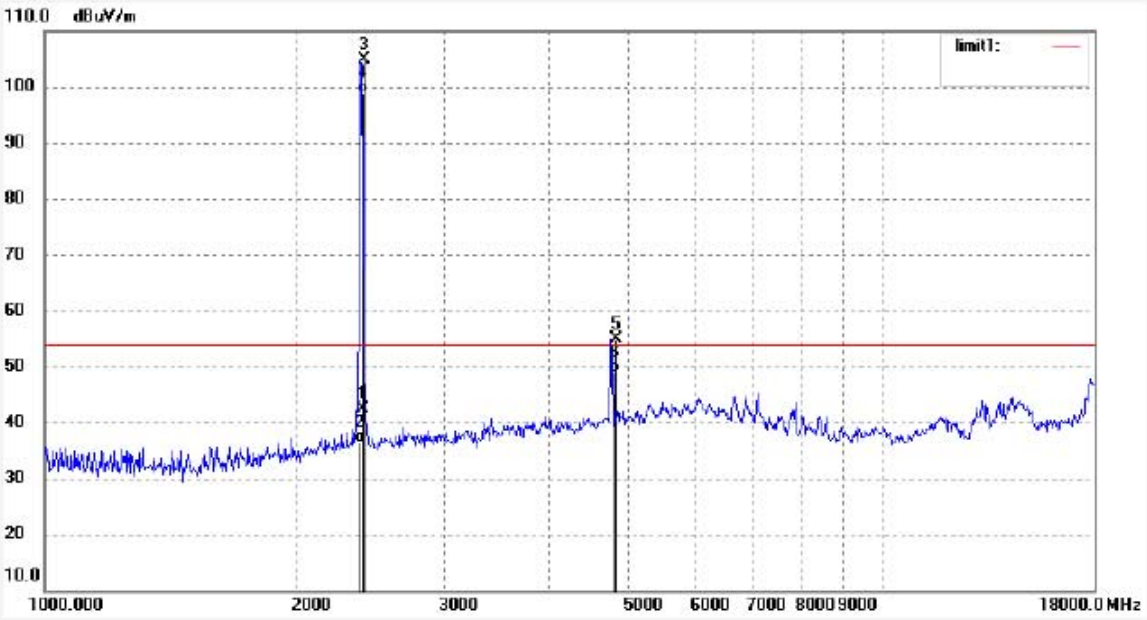
Job No.: RTTE #2823	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 19:00:34
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	49.86	-7.46	42.40	74.00	-31.60	peak			
2	2400.000	43.75	-7.46	36.29	54.00	-17.71	AVG			
3	2412.016	112.41	-7.43	104.98	-	-	peak			
4	2412.016	106.32	-7.43	98.89	-	-	AVG			
5	4824.027	55.09	-0.19	54.90	74.00	-19.10	peak			
6	4824.027	49.02	-0.19	48.83	54.00	-5.17	AVG			

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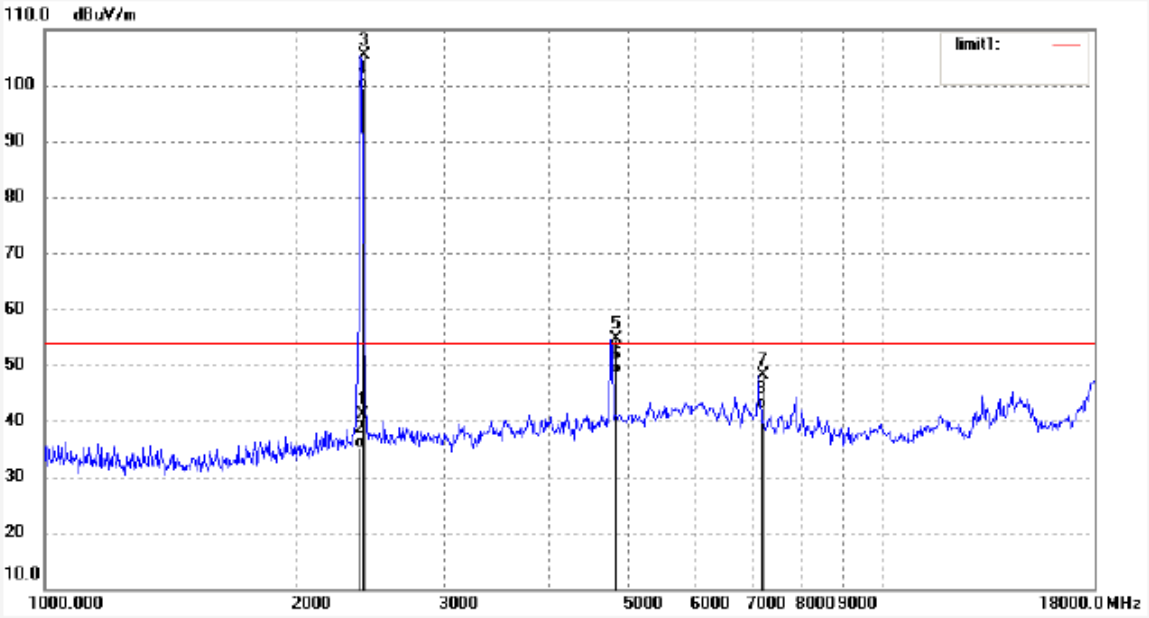
Fax:+86-0755-26503396

Job No.: RTTE #2824
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 1(802.11g)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 19:03:42
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	48.59	-7.46	41.13	74.00	-32.87	peak			
2	2400.000	42.54	-7.46	35.08	54.00	-18.92	AVG			
3	2412.016	112.89	-7.43	105.46	-	-	peak			
4	2412.016	106.77	-7.43	99.34	-	-	AVG			
5	4824.027	54.76	-0.19	54.57	74.00	-19.43	peak			
6	4824.027	48.67	-0.19	48.48	54.00	-5.52	AVG			
7	7236.035	45.15	3.05	48.20	74.00	-25.80	peak			
8	7236.035	39.10	3.05	42.15	54.00	-11.85	AVG			

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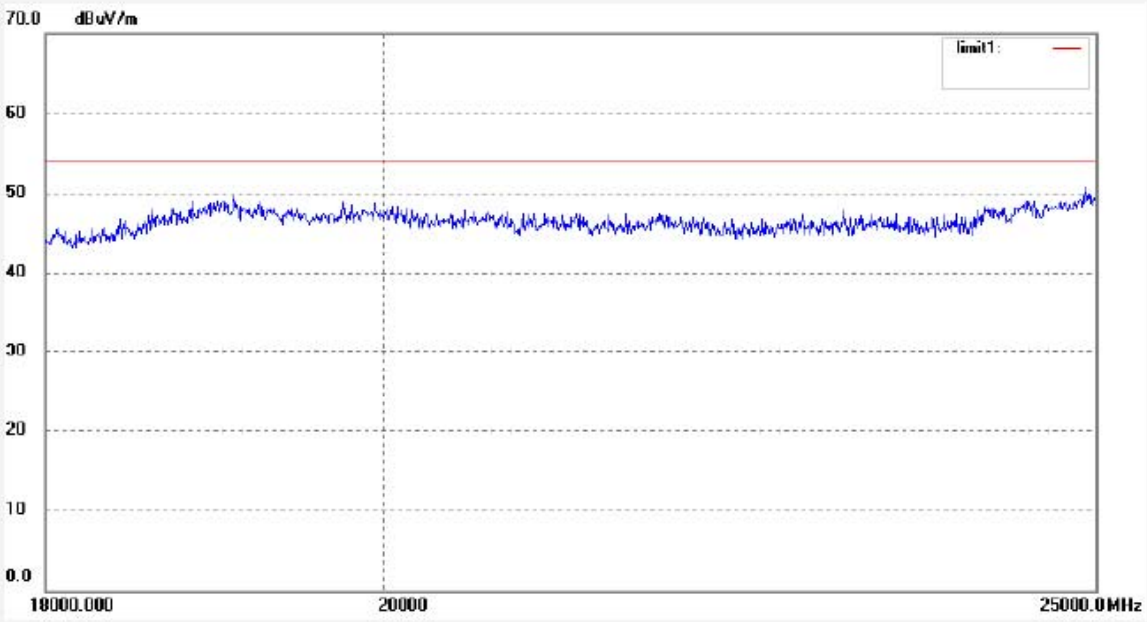
Fax:+86-0755-26503396

Job No.: RTTE #2847	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:41:28
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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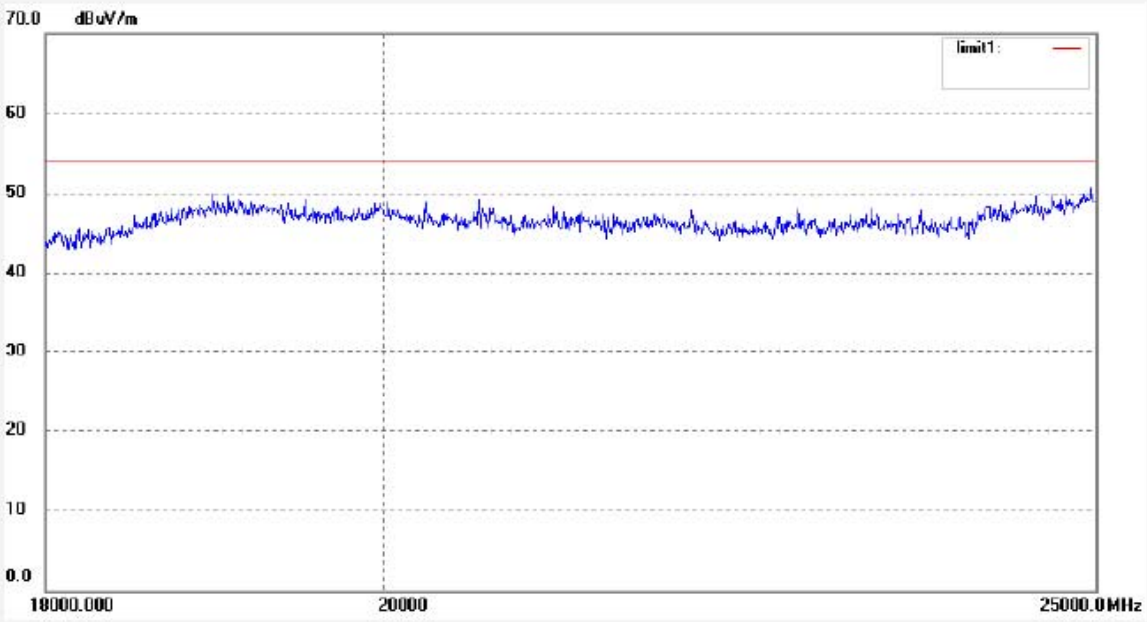
Fax:+86-0755-26503396

Job No.: RTTE #2848	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:44:32
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 1(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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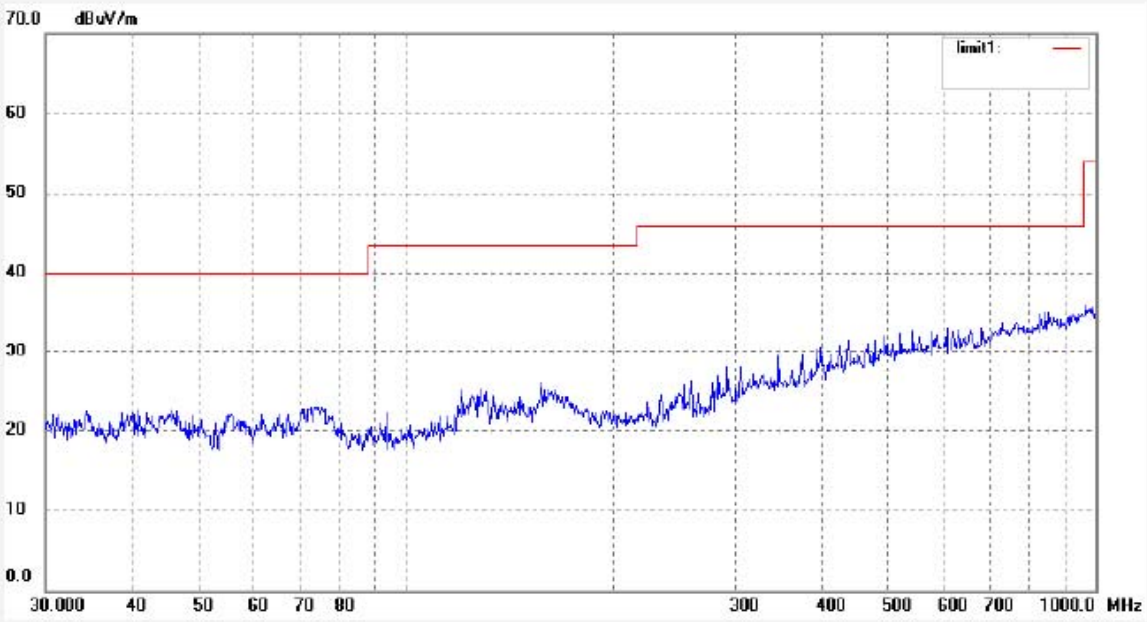
Job No.: RTTE #2723	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:23:46
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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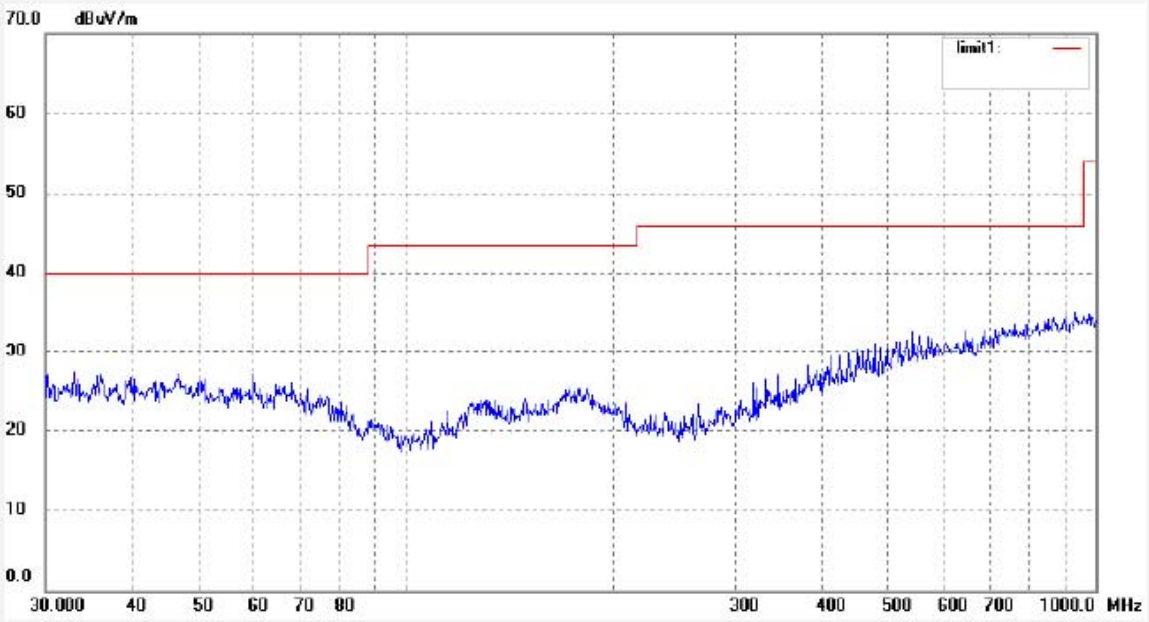
Fax:+86-0755-26503396

Job No.: RTTE #2724	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:26:44
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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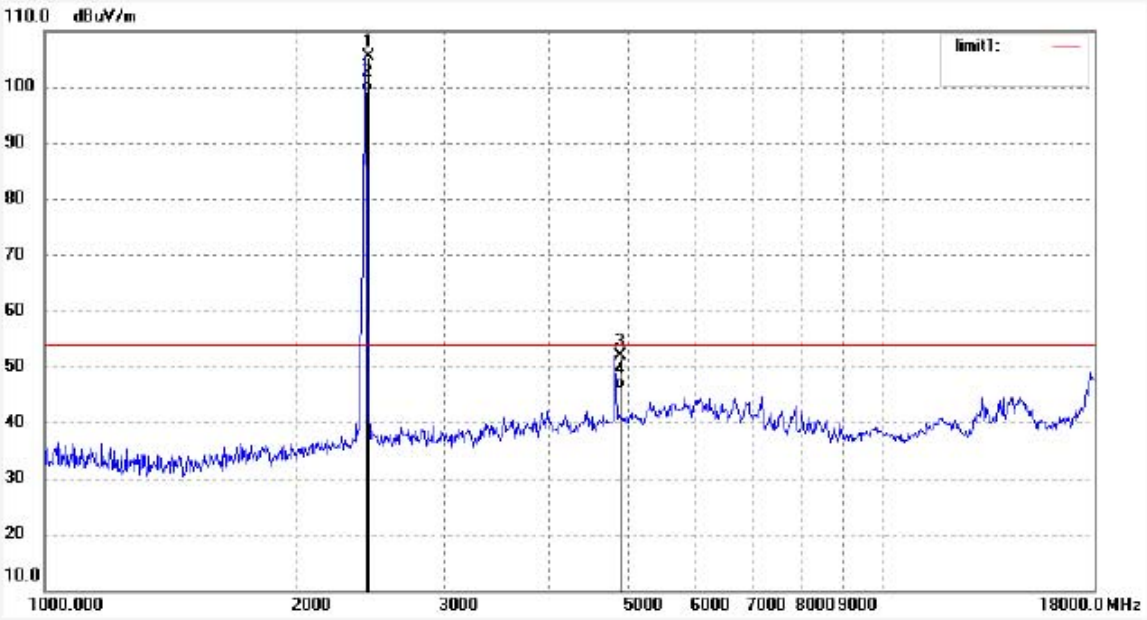
Fax:+86-0755-26503396

Job No.: RTTE #2826
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 6(802.11g)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal
Power Source: DC 3.3V
Date: 2009/09/01
Time: 19:10:45
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	112.74	-7.36	105.38	-	-	peak			
2	2437.015	106.58	-7.36	99.22	-	-	AVG			
3	4874.027	51.82	0.09	51.91	74.00	-22.09	peak			
4	4874.027	45.69	0.09	45.78	54.00	-8.22	AVG			

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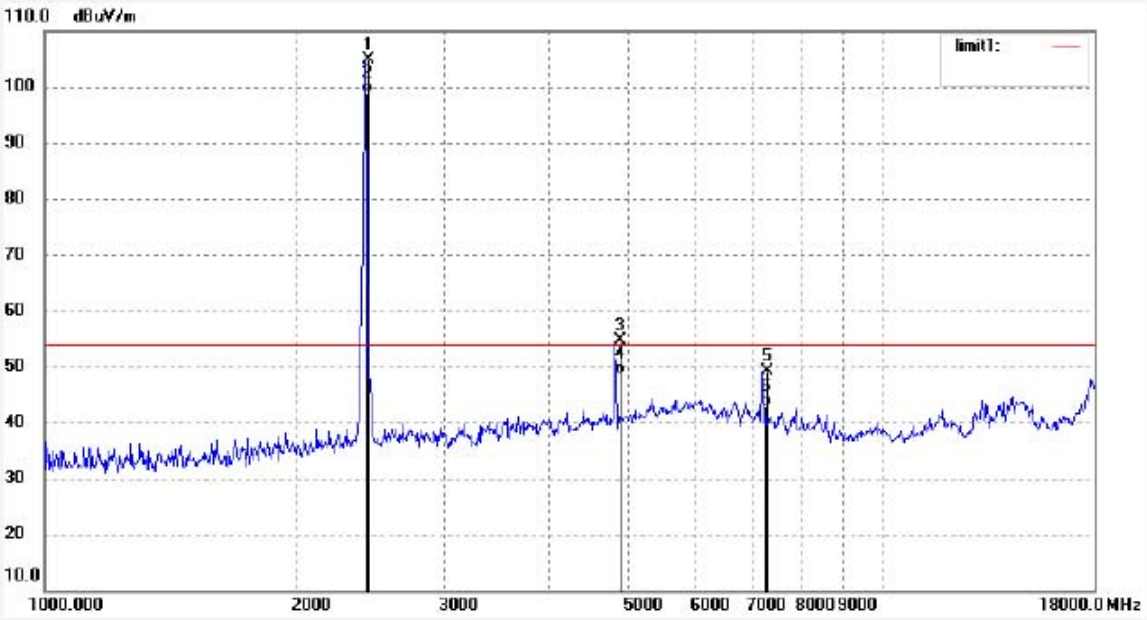
Job No.: RTTE #2825
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 6(802.11g)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 19:07:39
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	112.33	-7.36	104.97	-	-	peak			
2	2437.015	106.21	-7.36	98.85	-	-	AVG			
3	4874.027	54.61	0.09	54.70	74.00	-19.30	peak			
4	4874.027	48.49	0.09	48.58	54.00	-5.42	AVG			
5	7311.034	45.85	3.22	49.07	74.00	-24.93	peak			
6	7311.034	39.72	3.22	42.94	54.00	-11.06	AVG			

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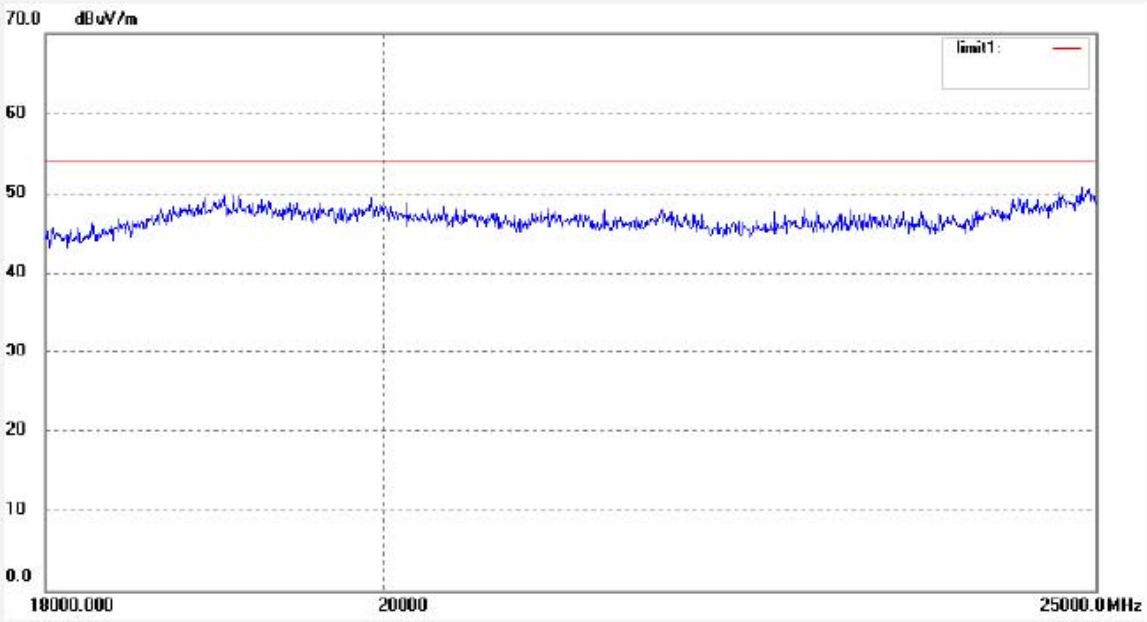
Fax:+86-0755-26503396

Job No.: RTTE #2850	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:51:42
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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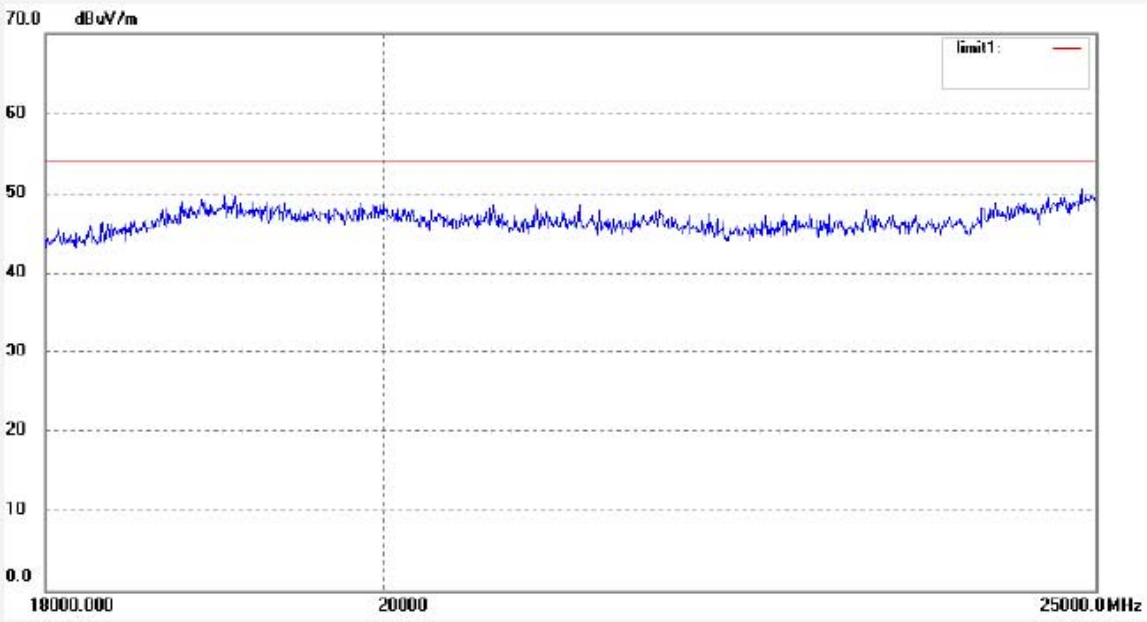
Job No.: RTTE #2849	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:48:40
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 6(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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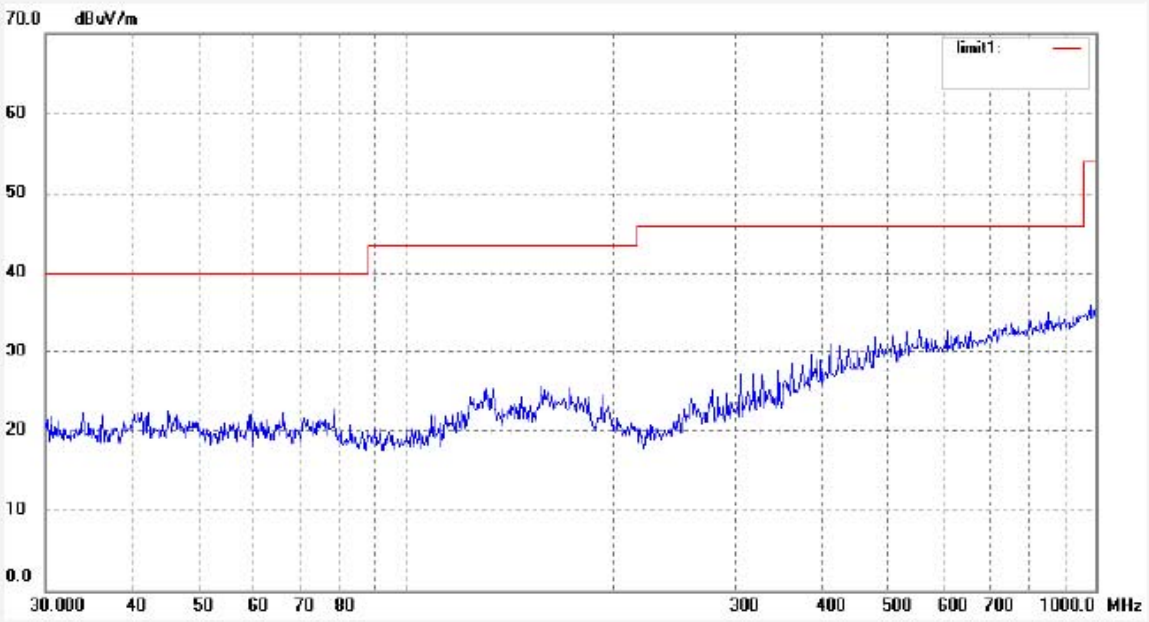
Job No.: RTTE #2726	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:32:59
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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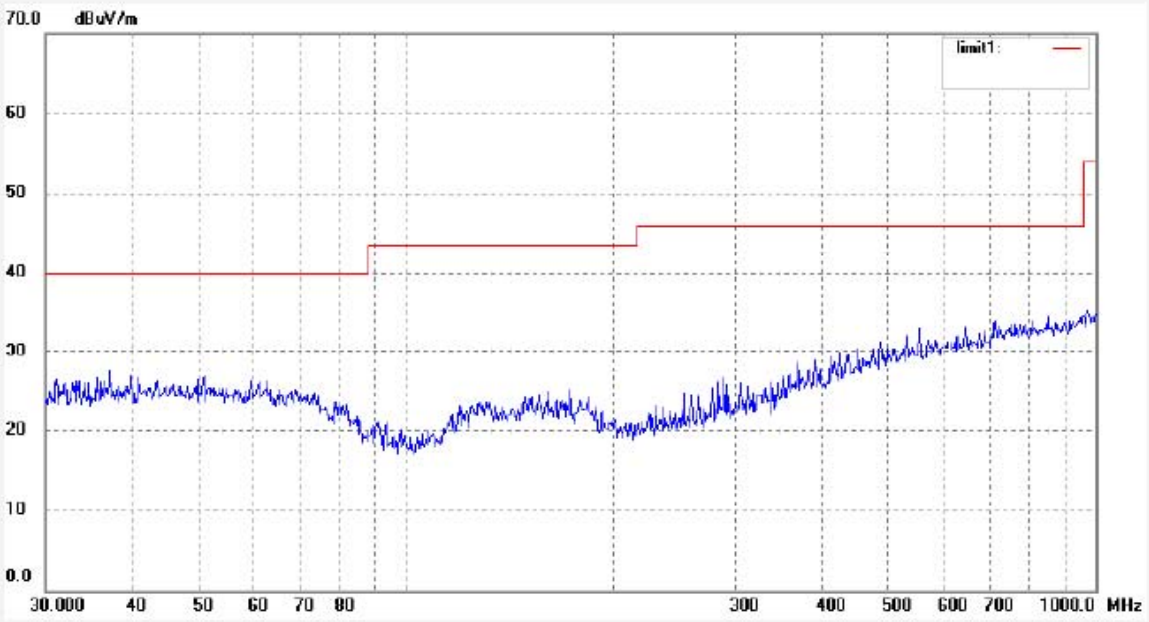
Job No.: RTTE #2725	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/08/27
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 23:29:59
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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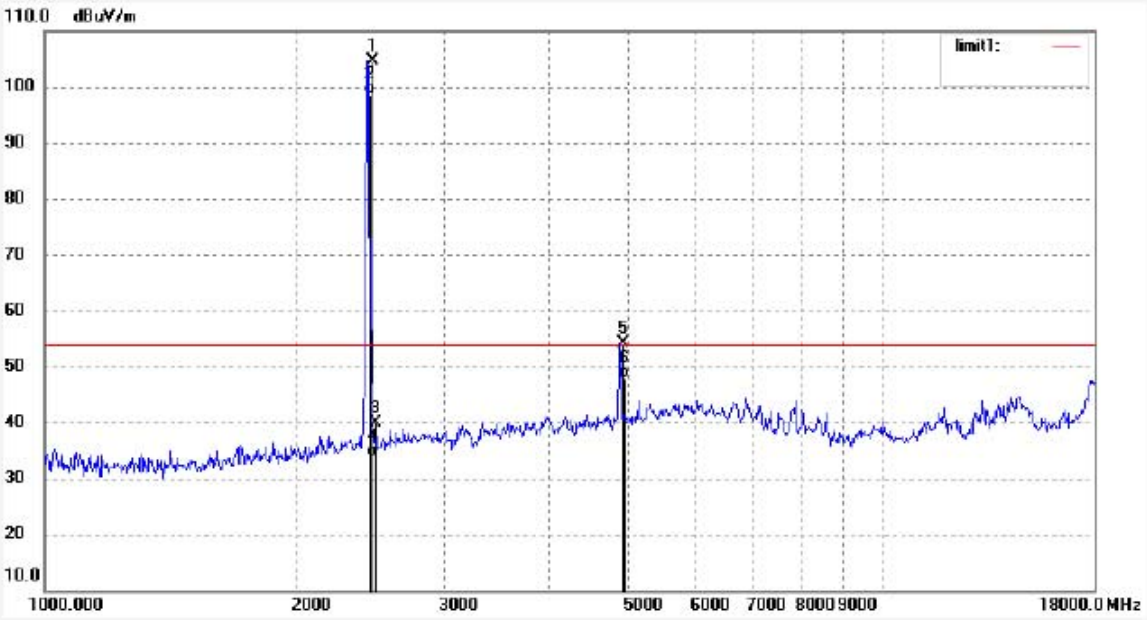
Job No.: RTTE #2827
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 11(802.11g)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal
Power Source: DC 3.3V
Date: 2009/09/01
Time: 19:14:56
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.08	-7.35	104.73	-	-	peak			
2	2462.016	106.00	-7.35	98.65	-	-	AVG			
3	2483.500	47.25	-7.37	39.88	74.00	-34.12	peak			
4	2483.500	41.17	-7.37	33.80	54.00	-20.20	AVG			
5	4924.026	53.78	0.34	54.12	74.00	-19.88	peak			
6	4924.026	47.65	0.34	47.99	54.00	-6.01	AVG			

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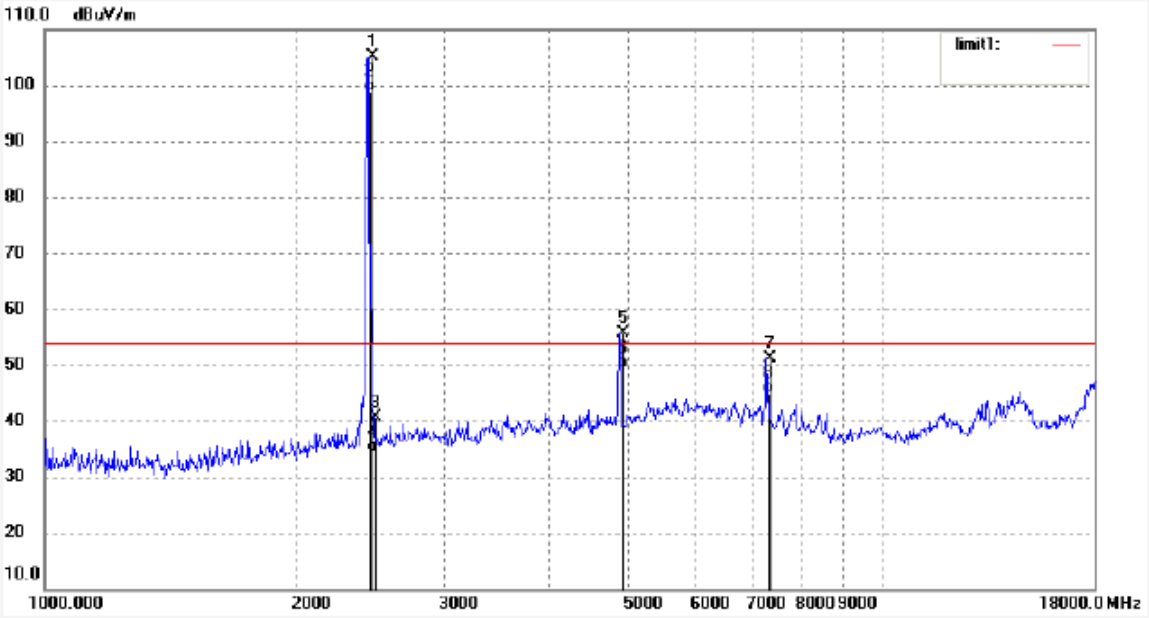
Job No.: RTTE #2828
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Syntek BlueW-2310 miniCard
Mode: TX Channal 11(802.11g)
Model: BlueW-2310 miniCard
Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical
Power Source: DC 3.3V
Date: 2009/09/01
Time: 19:18:04
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.46	-7.35	105.11	-	-	peak			
2	2462.016	106.34	-7.35	98.99	-	-	AVG			
3	2483.500	47.92	-7.37	40.55	74.00	-33.45	peak			
4	2483.500	41.77	-7.37	34.40	54.00	-19.60	AVG			
5	4924.026	55.18	0.34	55.52	74.00	-18.48	peak			
6	4924.026	49.08	0.34	49.42	54.00	-4.58	AVG			
7	7386.035	47.64	3.39	51.03	74.00	-22.97	peak			
8	7386.035	41.54	3.39	44.93	54.00	-9.07	AVG			

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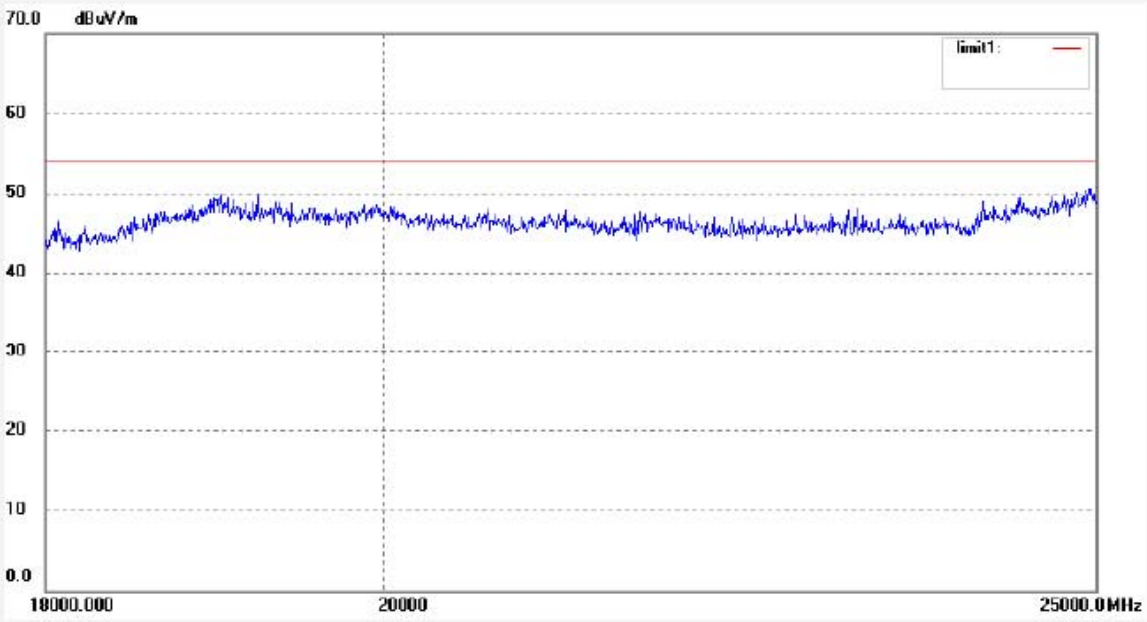
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2851	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:55:46
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

Note: Sample No.:091864 Report No.:ATE20091643

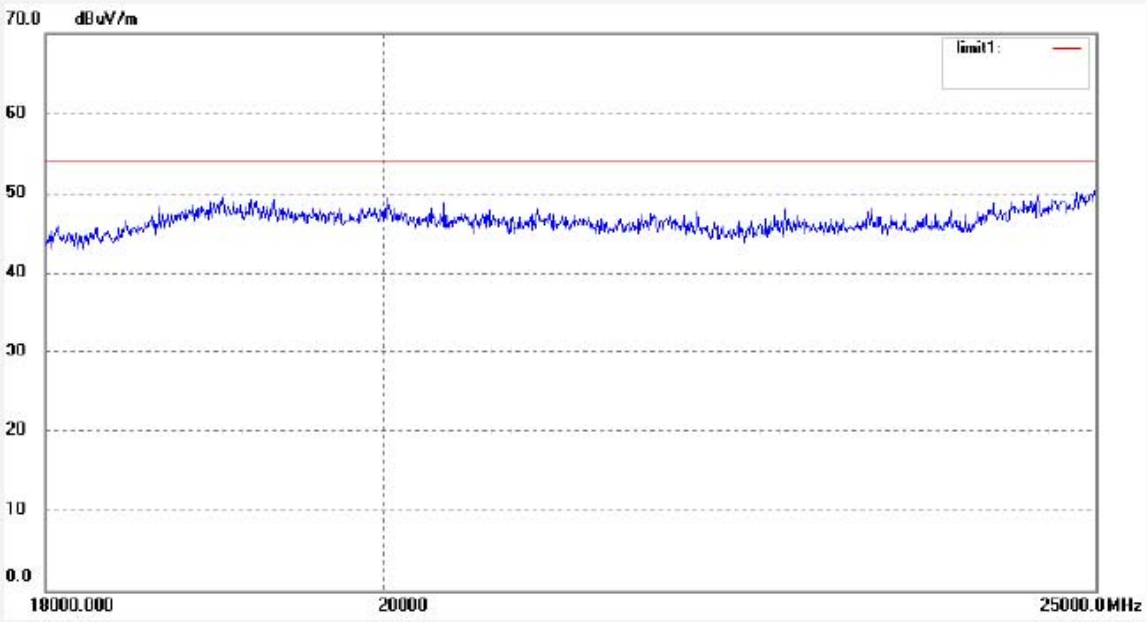


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2852	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 2009/09/01
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 20:58:51
EUT: Syntek BlueW-2310 miniCard	Engineer Signature: Joe
Mode: TX Channal 11(802.11g)	Distance: 3m
Model: BlueW-2310 miniCard	
Manufacturer: Syntek Semiconductor Co., Ltd.	

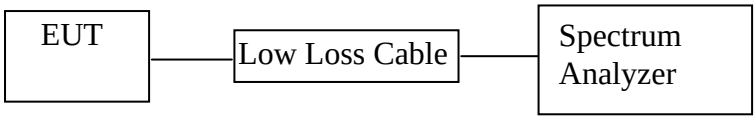
Note: Sample No.:091864 Report No.:ATE20091643



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

10.1. Block Diagram of Test Setup



(EUT: Syntek BlueW-2310 miniCard)

10.2. The Requirement For Section 15.247(d)

Section 15.247(d): 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3. EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.3.1. Syntek BlueW-2310 miniCard (EUT)

Model Number	:	BlueW-2310 miniCard
Serial Number	:	N/A
Manufacturer	:	Syntek Semiconductor Co., Ltd.

10.4.Operating Condition of EUT

10.4.1.Setup the EUT and simulator as shown as Section 10.1.

10.4.2.Turn on the power of all equipment.

10.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462MHz. We select 2412MHz, 2437MHz, 2462MHz TX frequency to transmit.

10.5.Test Procedure

10.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

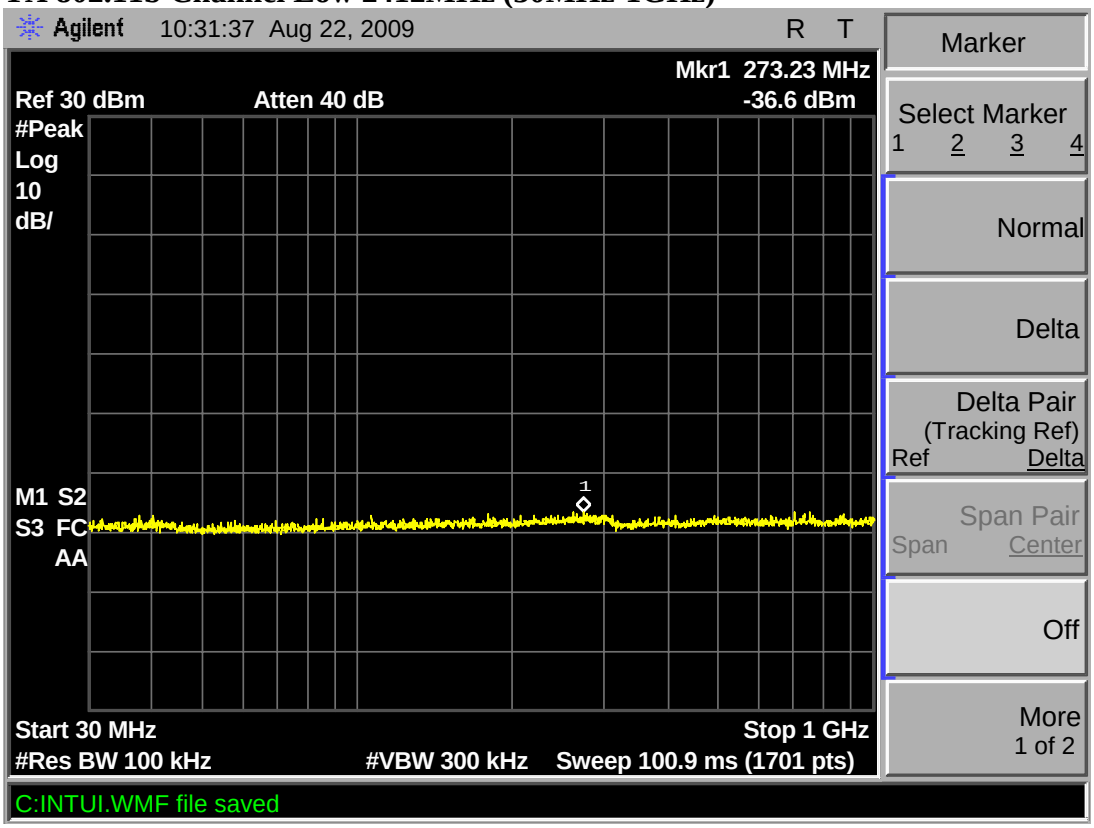
10.5.3.The Conducted Spurious Emission was measured and recorded.

10.6.Test Result

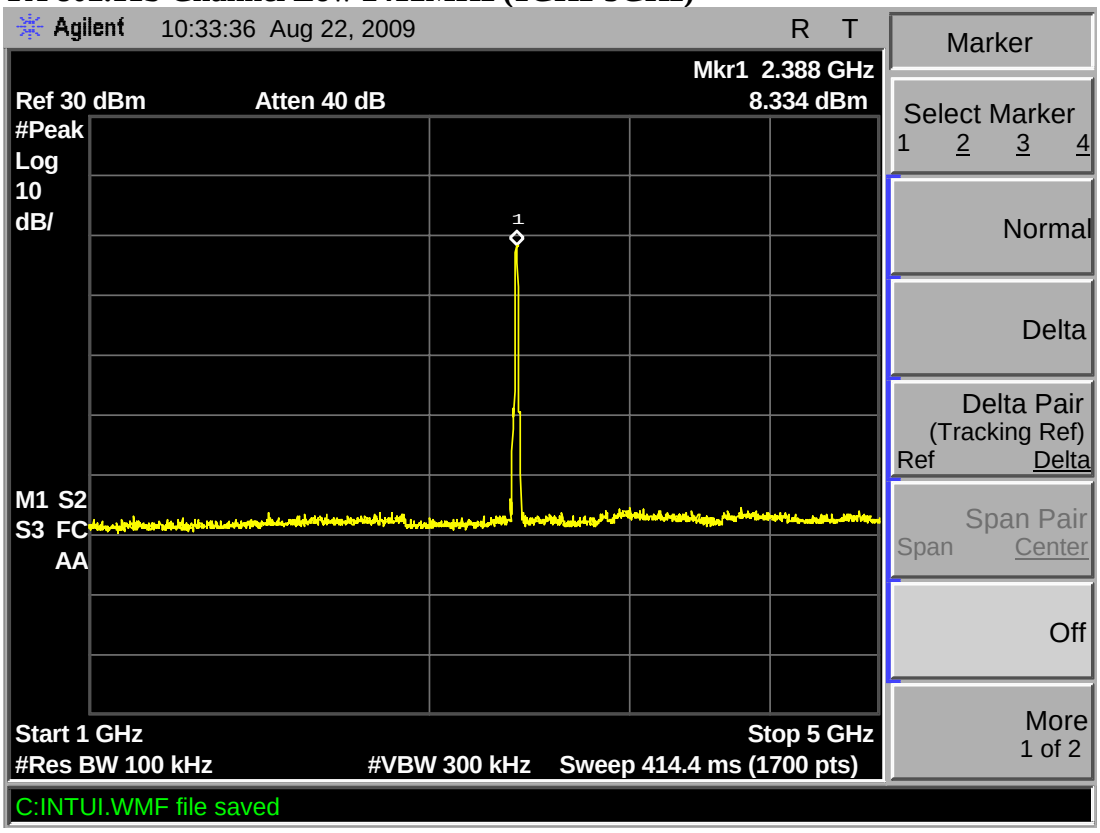
Pass.

The spectrum analyzer plots are attached as below.

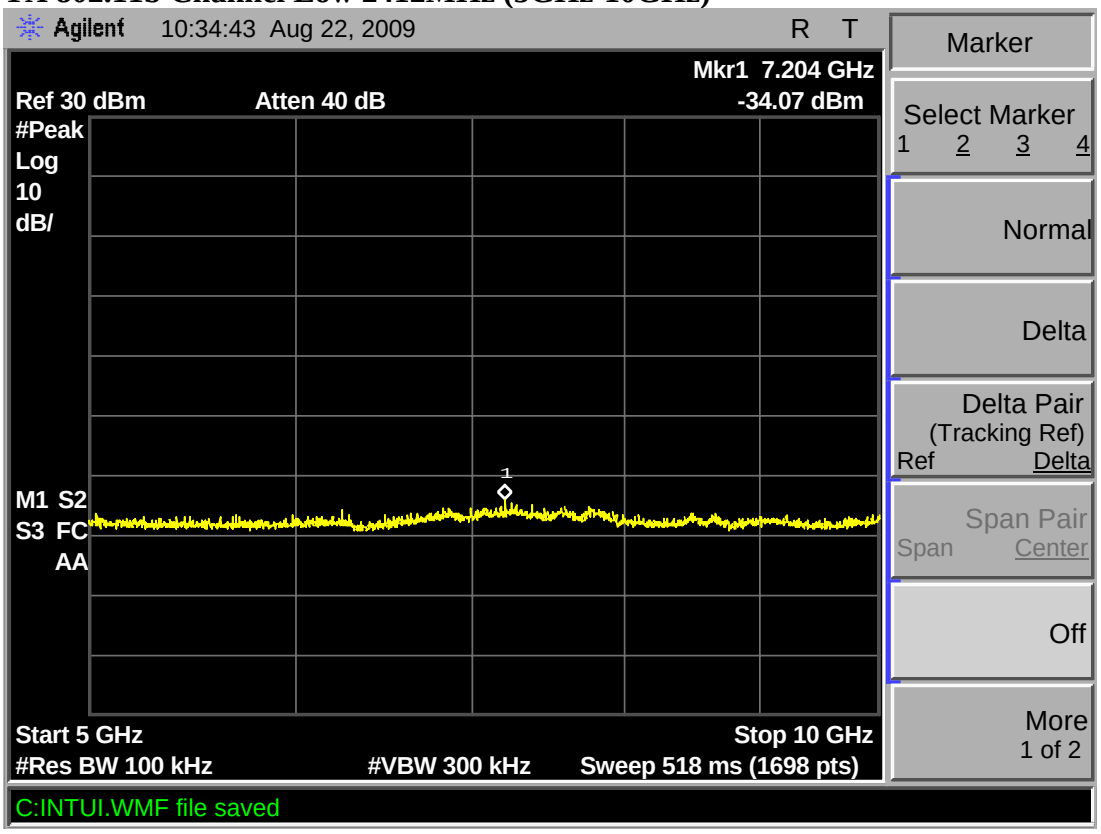
TX 802.11b Channel Low 2412MHz (30MHz-1GHz)



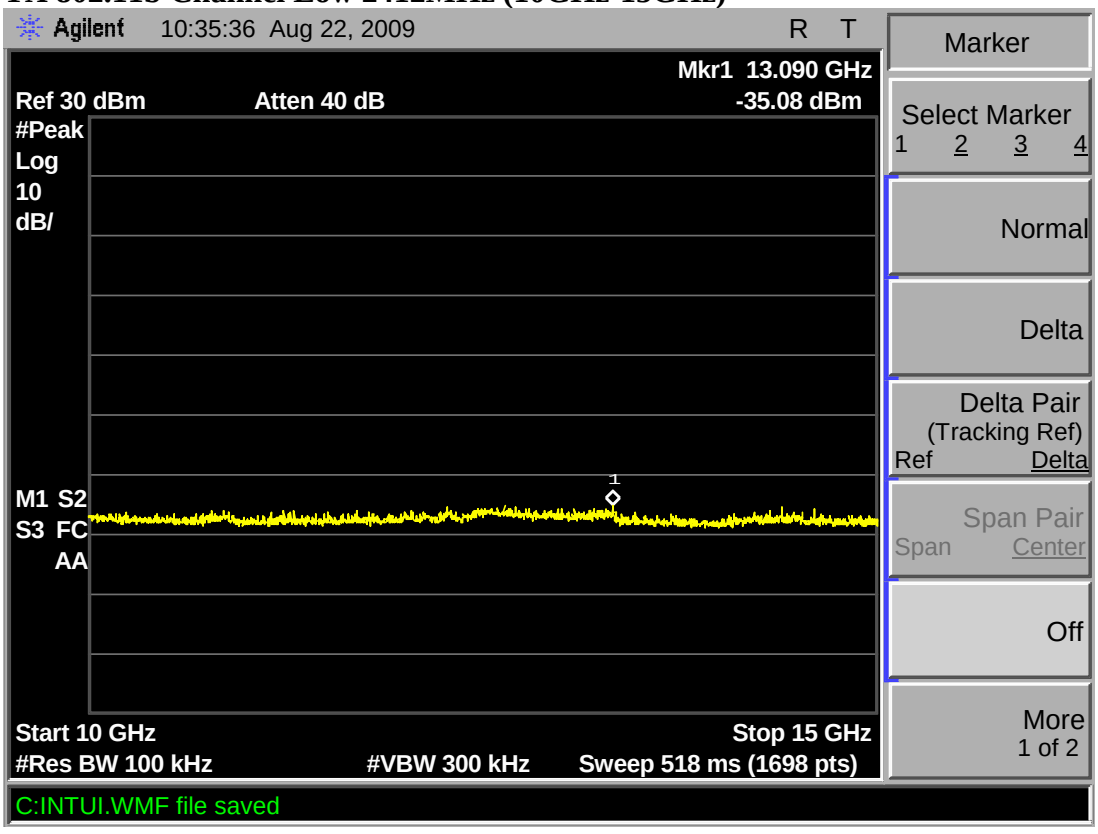
TX 802.11b Channel Low 2412MHz (1GHz-5GHz)



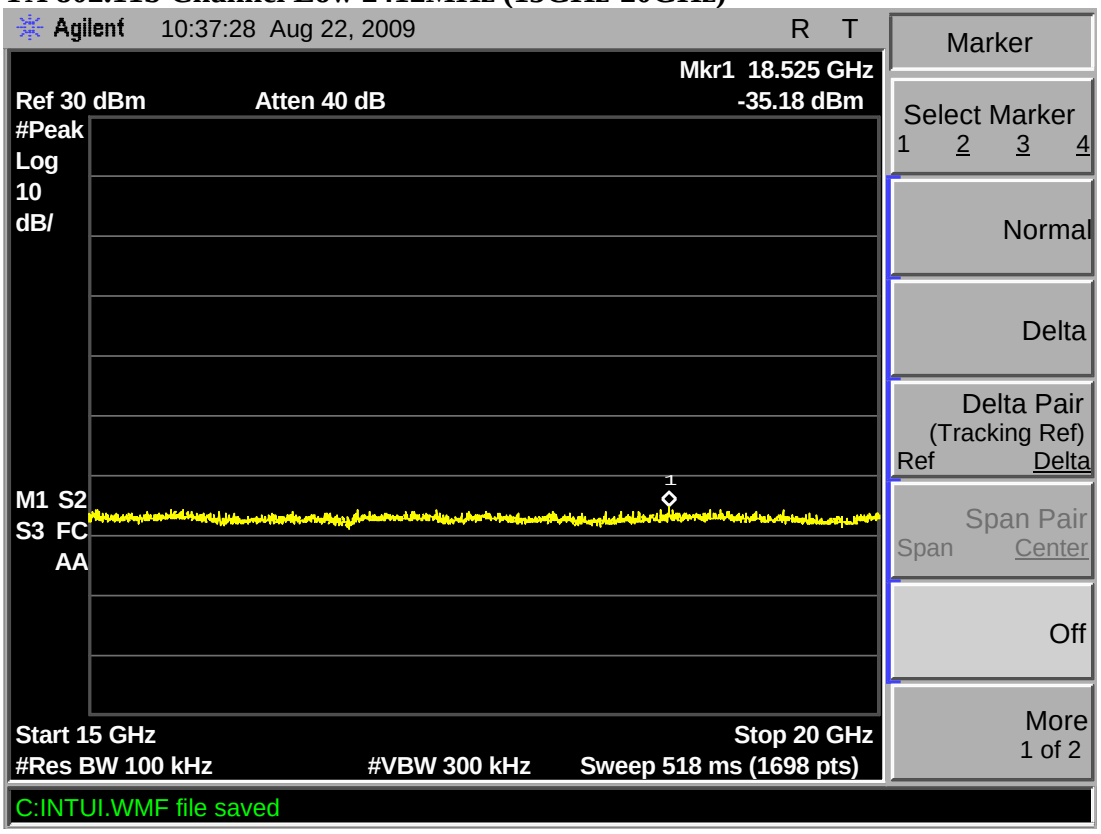
TX 802.11b Channel Low 2412MHz (5GHz-10GHz)



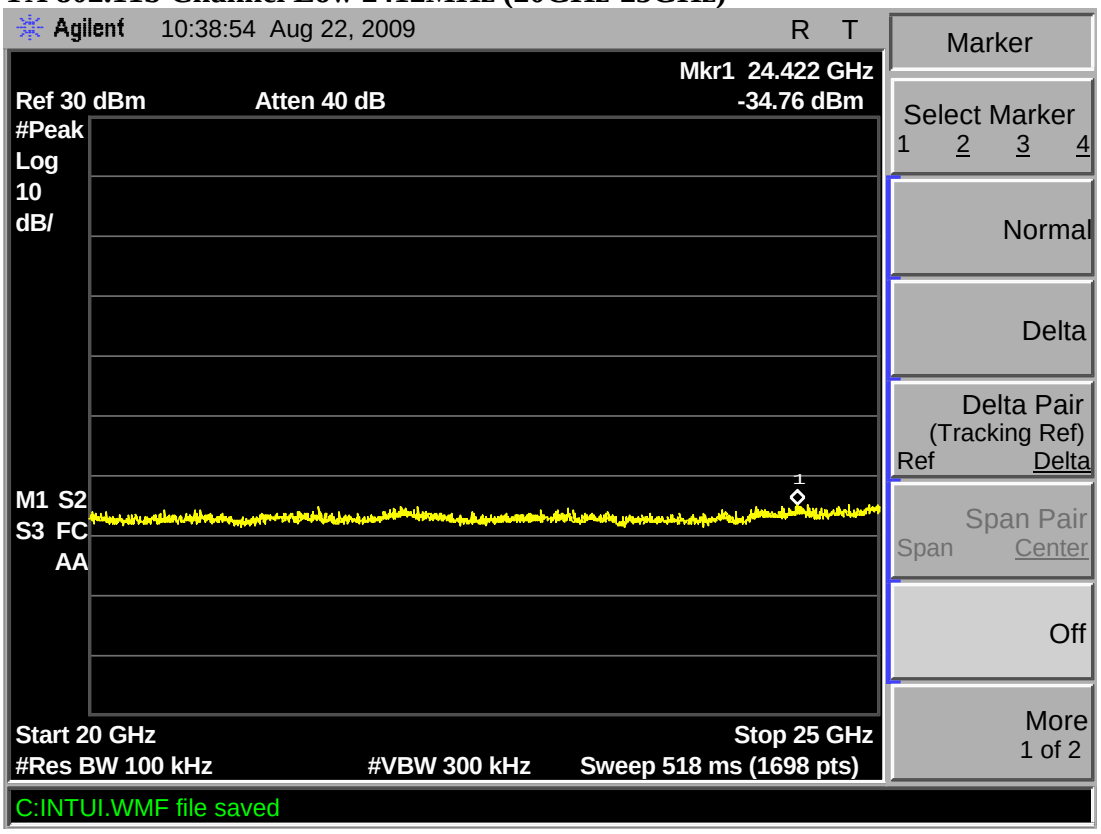
TX 802.11b Channel Low 2412MHz (10GHz-15GHz)



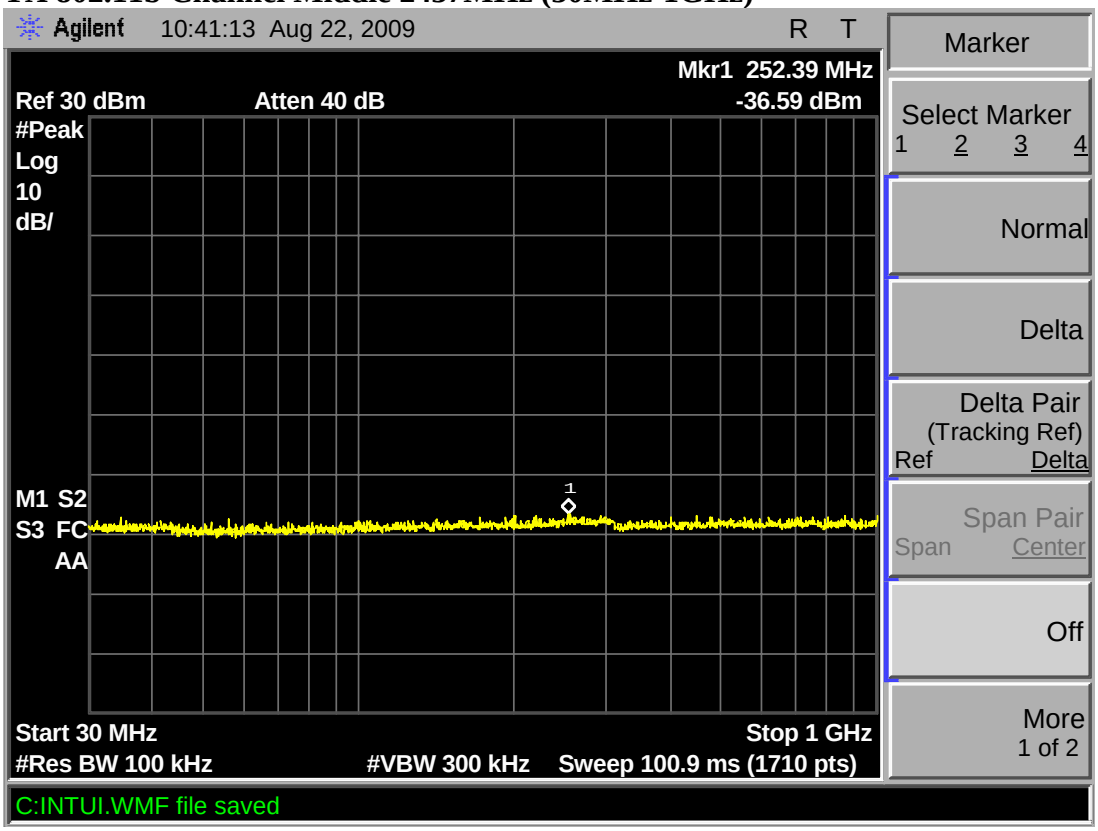
TX 802.11b Channel Low 2412MHz (15GHz-20GHz)



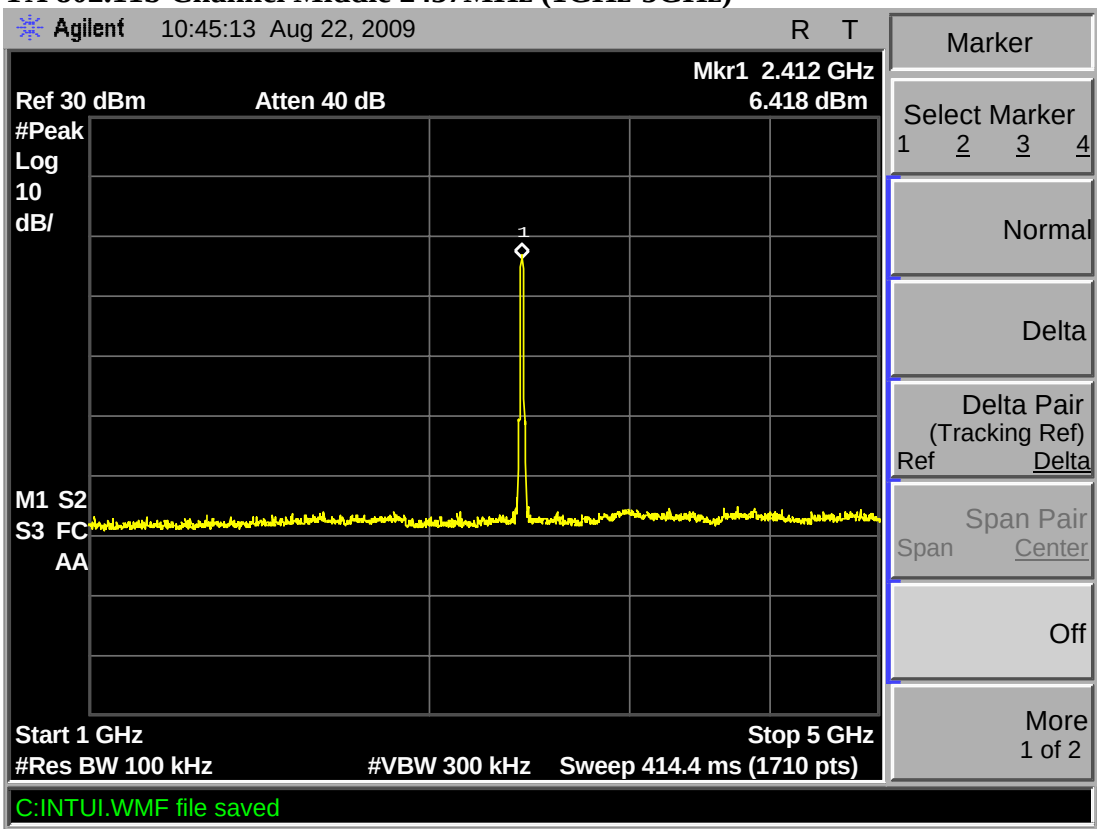
TX 802.11b Channel Low 2412MHz (20GHz-25GHz)



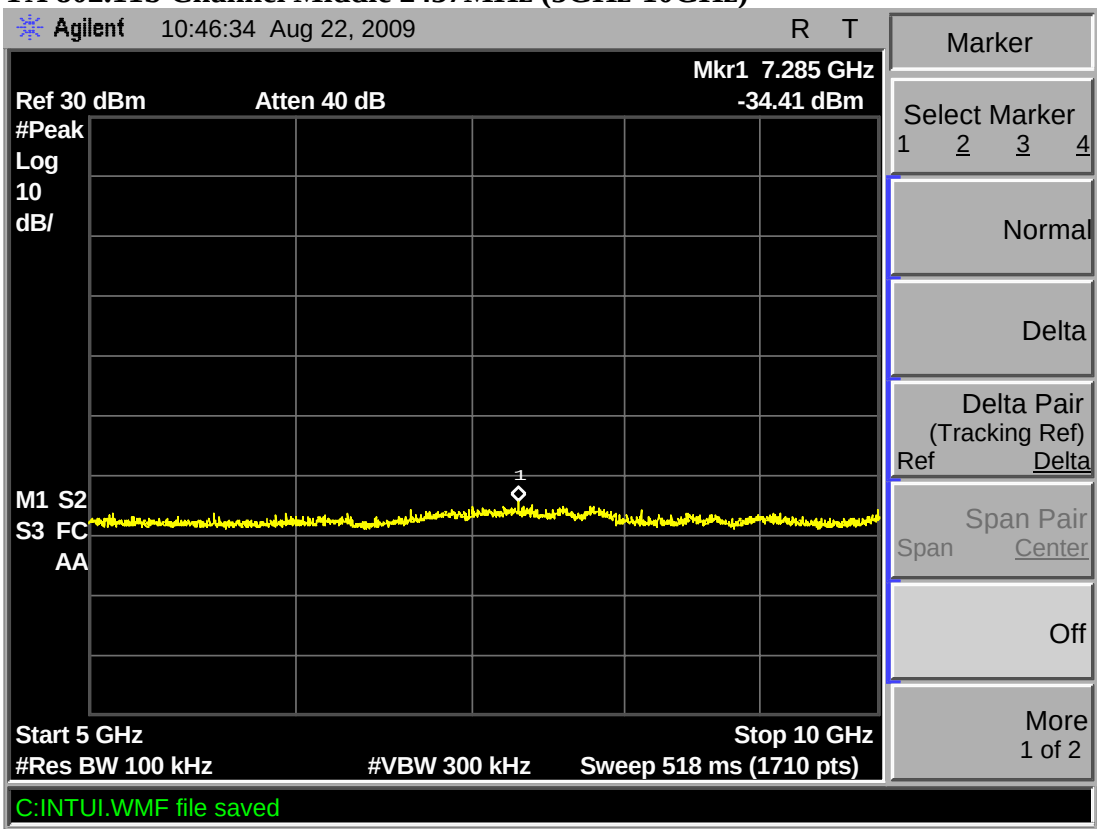
TX 802.11b Channel Middle 2437MHz (30MHz-1GHz)



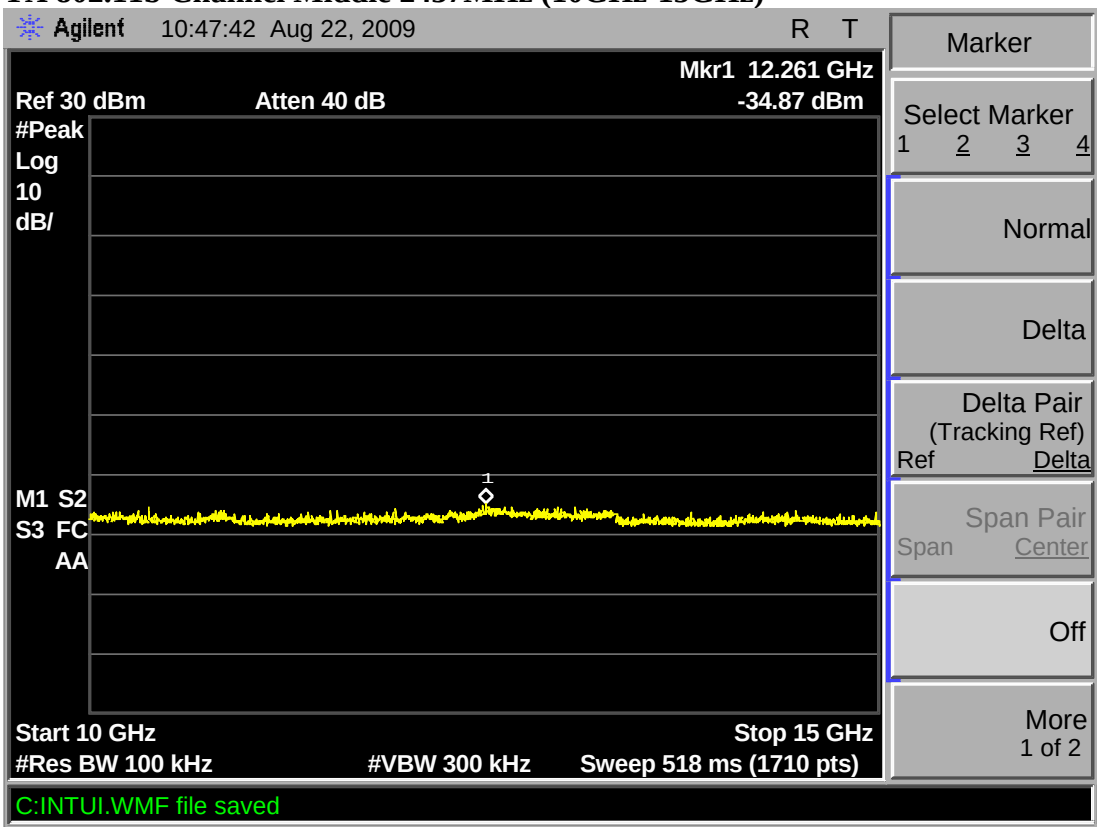
TX 802.11b Channel Middle 2437MHz (1GHz-5GHz)



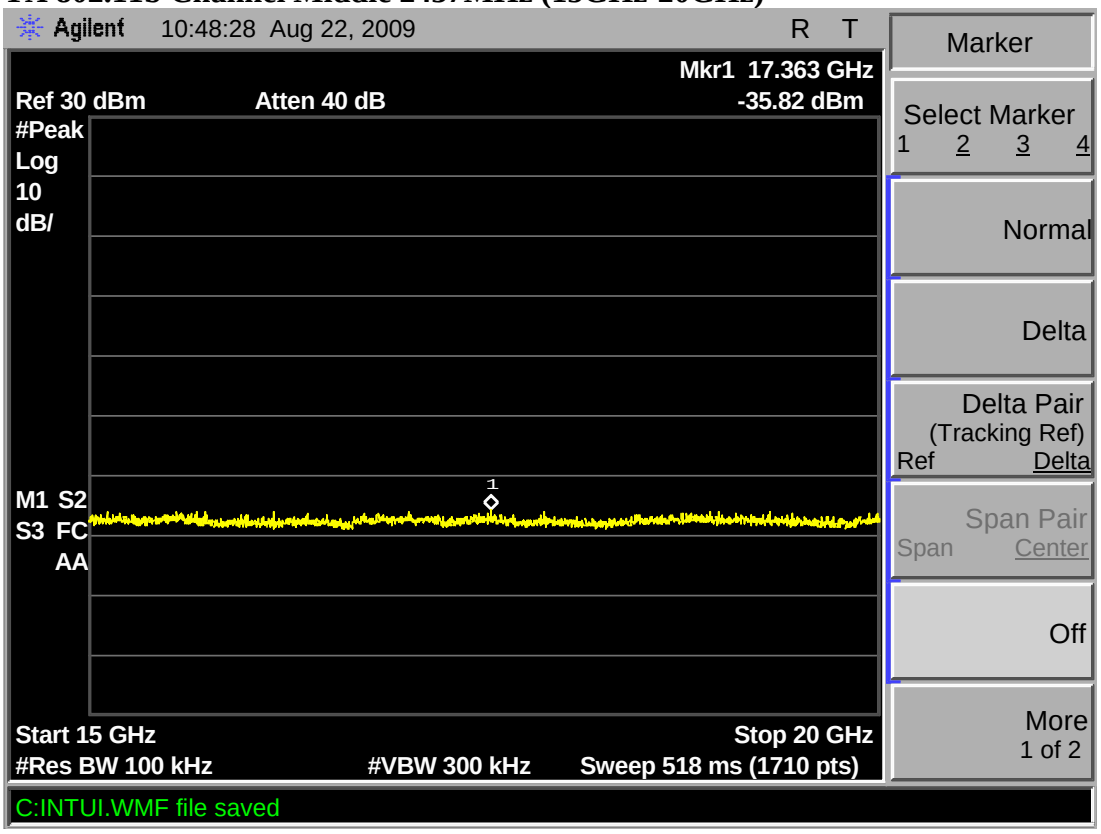
TX 802.11b Channel Middle 2437MHz (5GHz-10GHz)



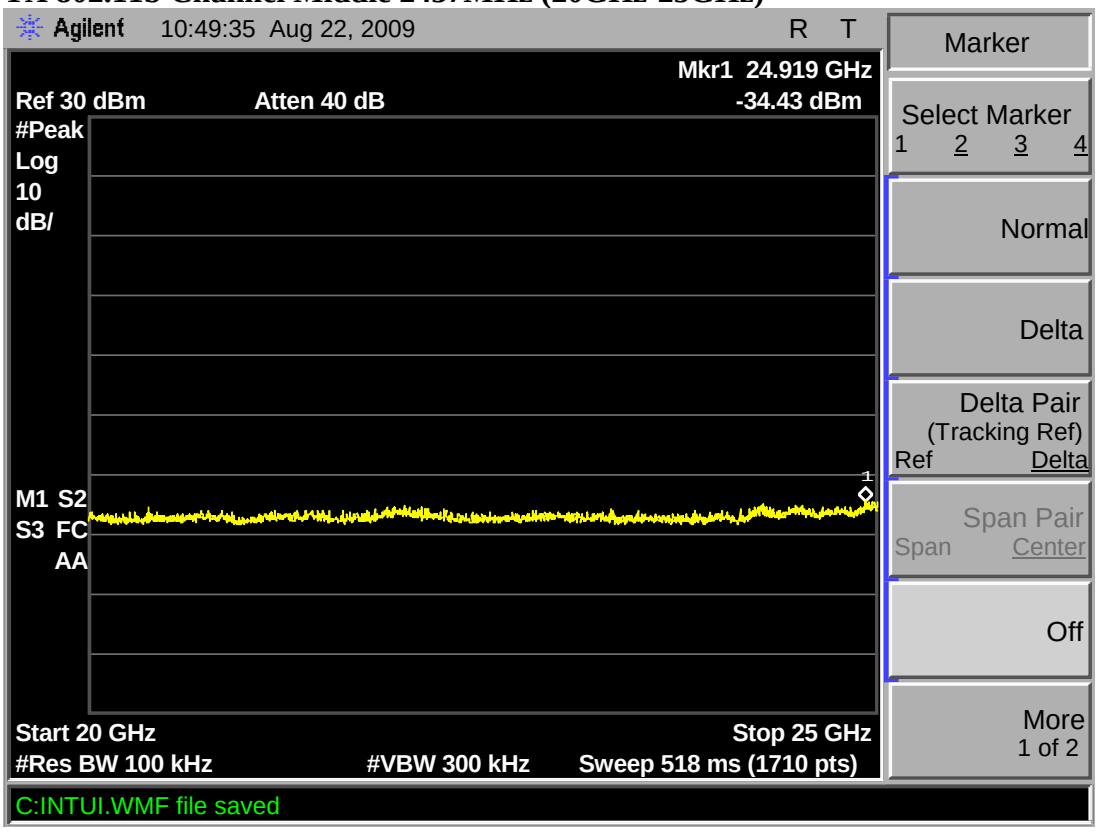
TX 802.11b Channel Middle 2437MHz (10GHz-15GHz)



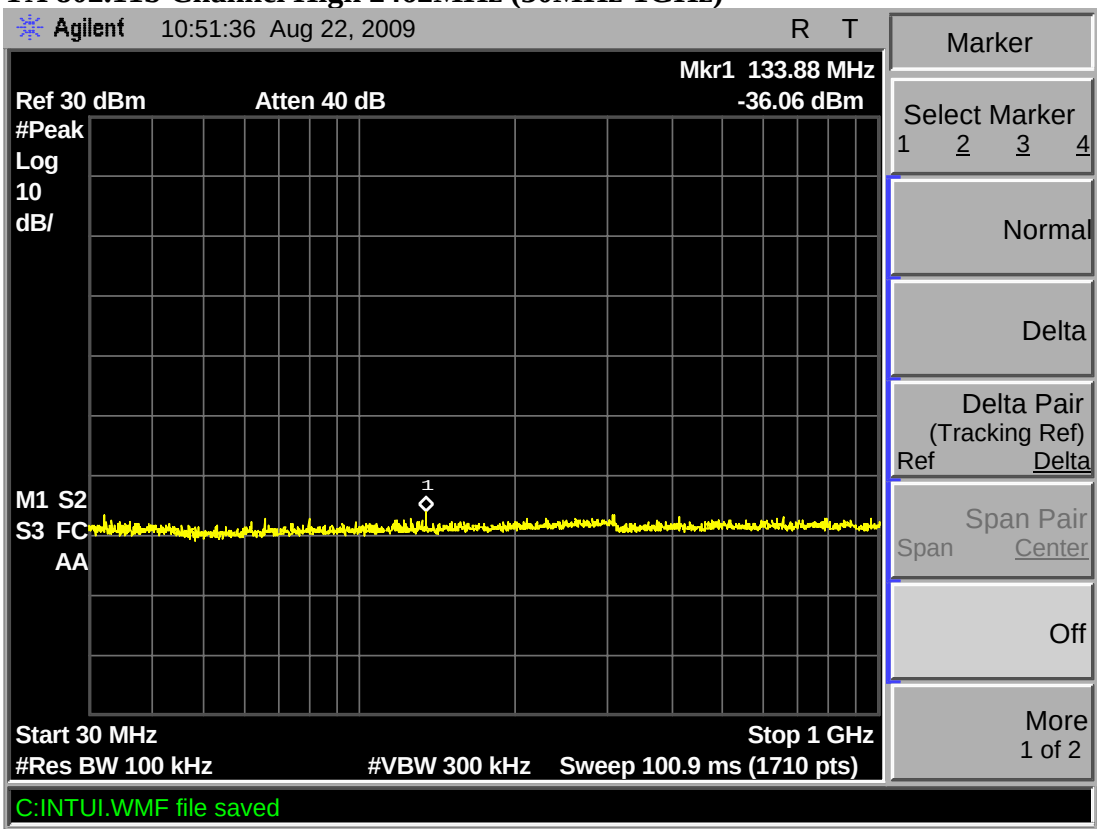
TX 802.11b Channel Middle 2437MHz (15GHz-20GHz)



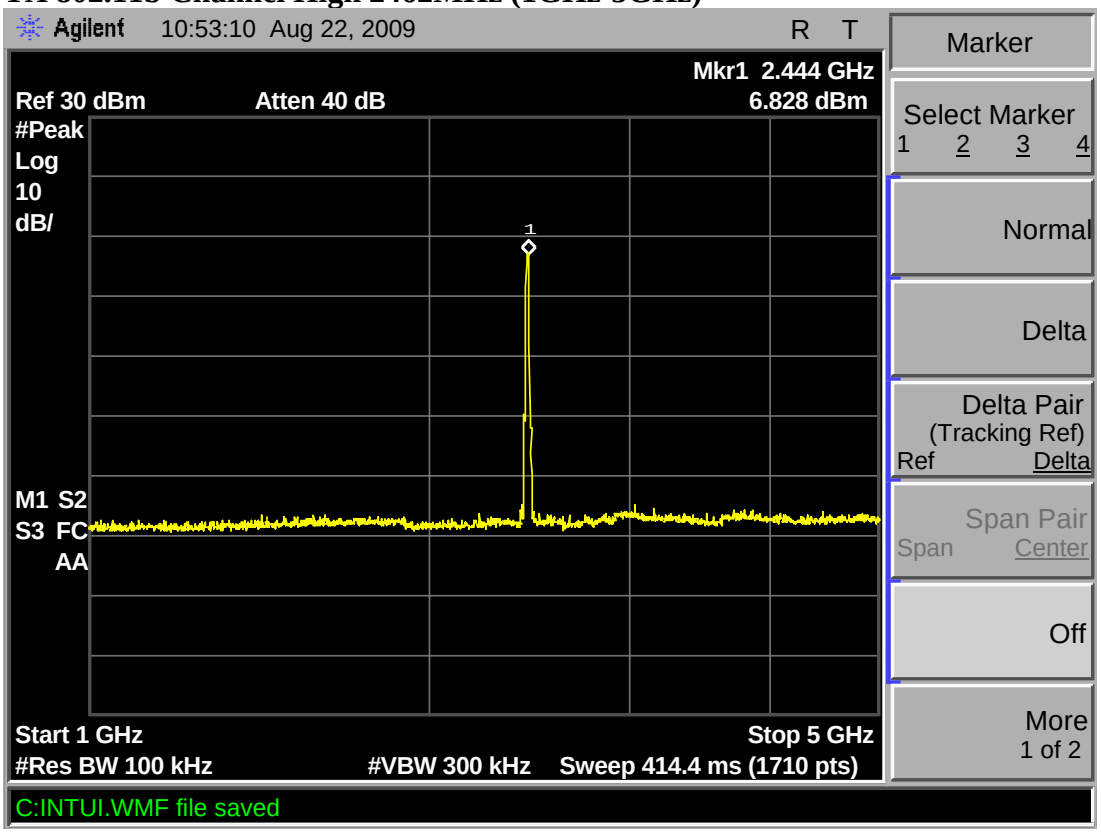
TX 802.11b Channel Middle 2437MHz (20GHz-25GHz)



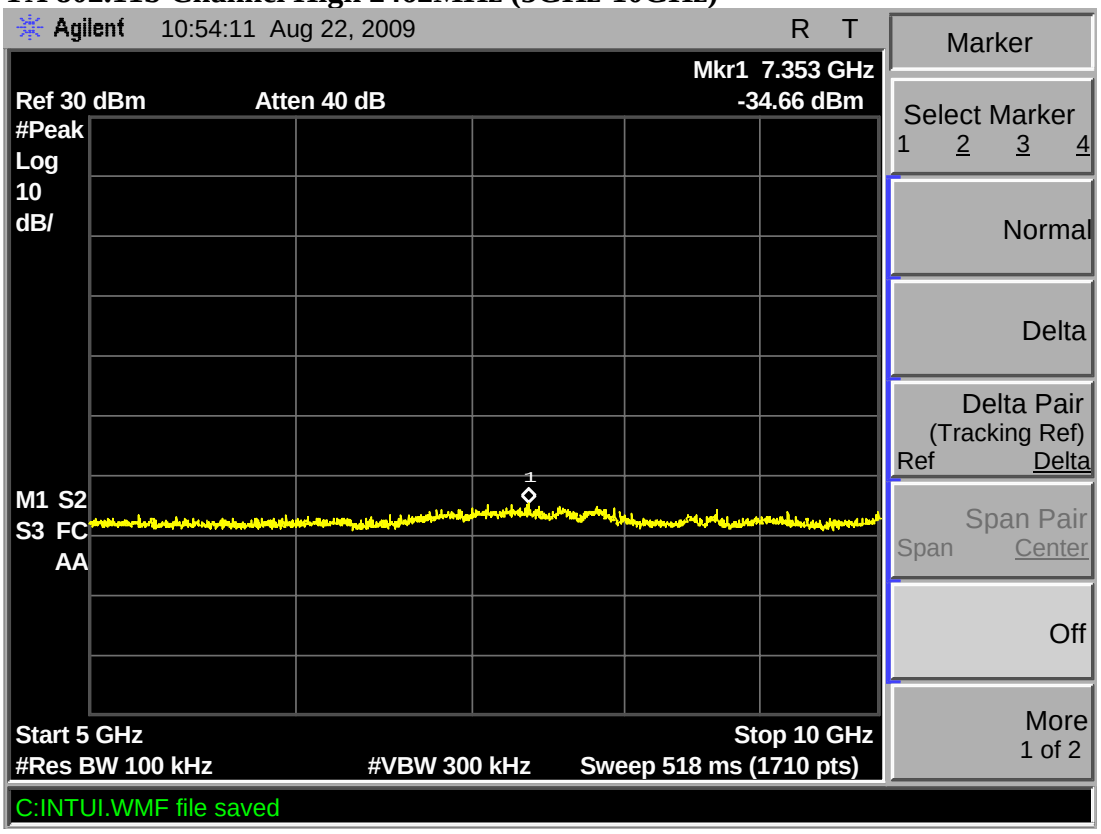
TX 802.11b Channel High 2462MHz (30MHz-1GHz)



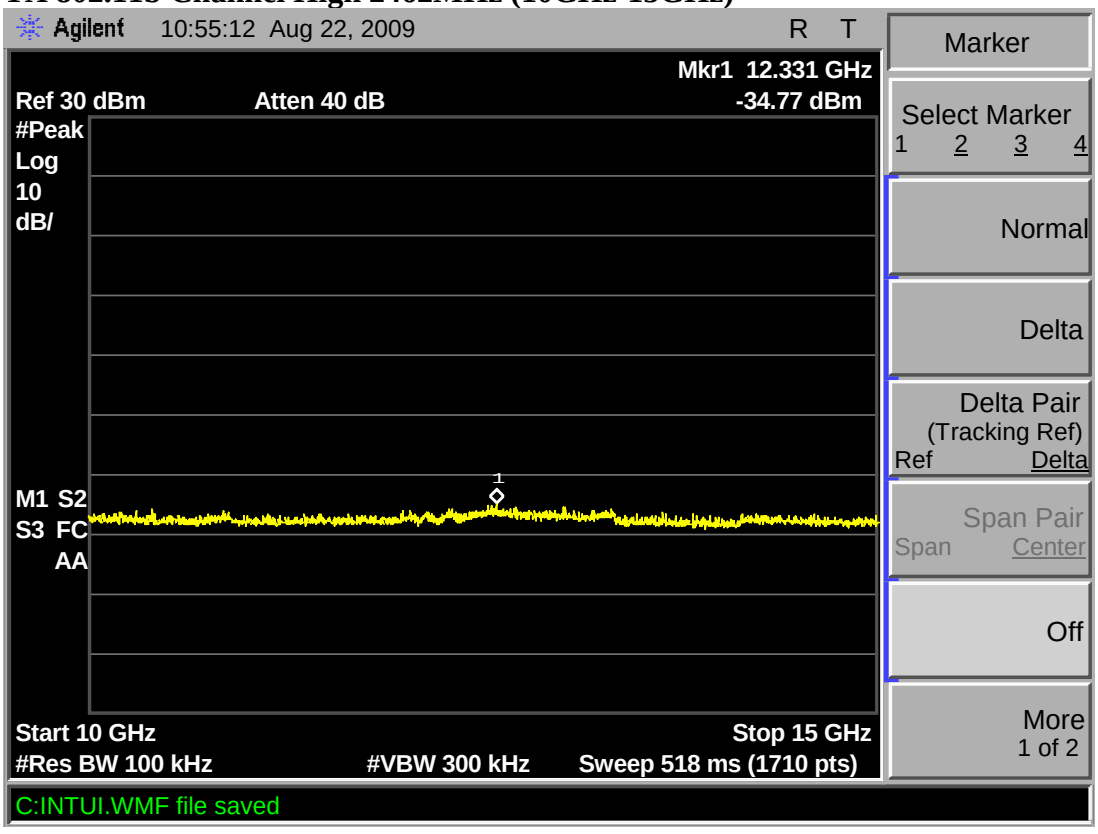
TX 802.11b Channel High 2462MHz (1GHz-5GHz)



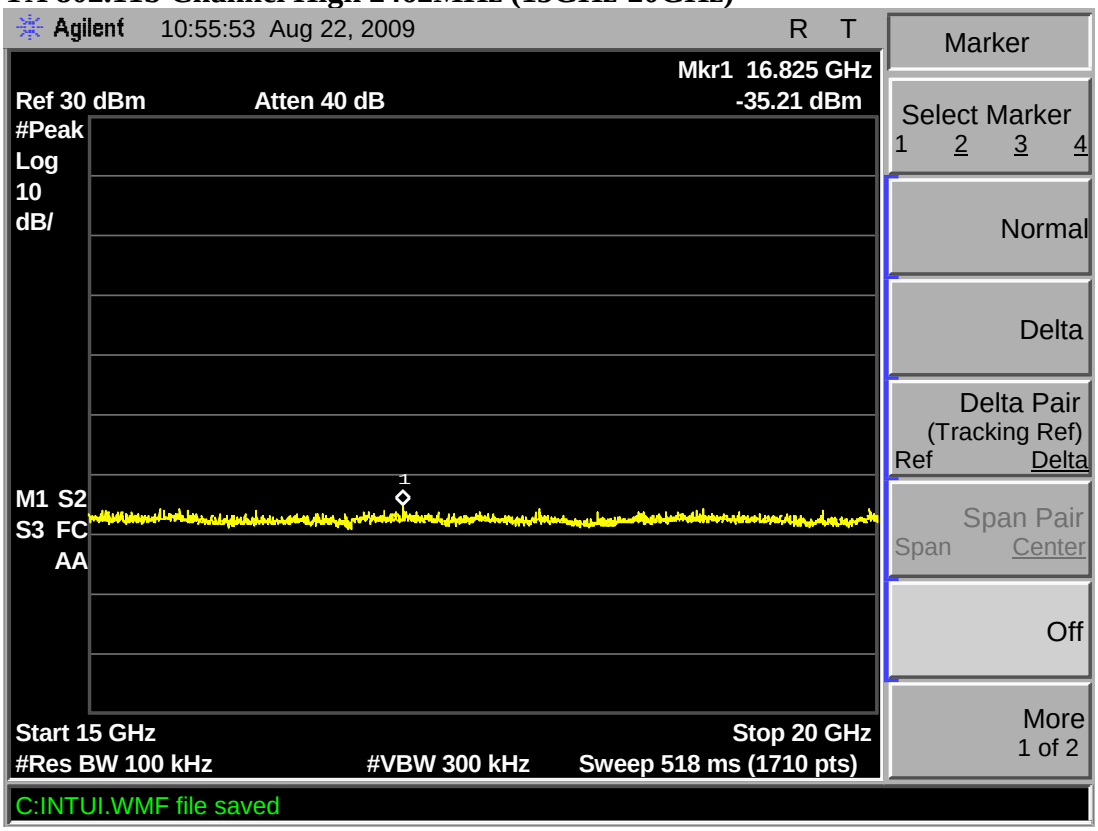
TX 802.11b Channel High 2462MHz (5GHz-10GHz)



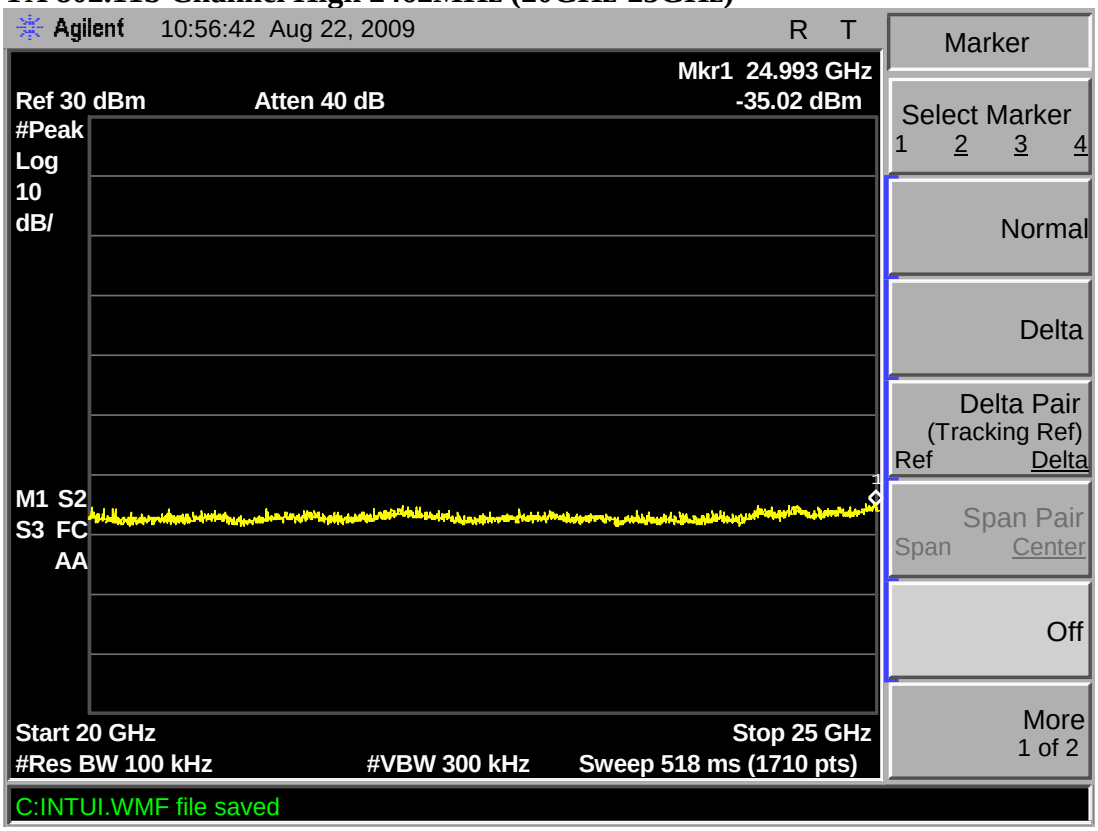
TX 802.11b Channel High 2462MHz (10GHz-15GHz)



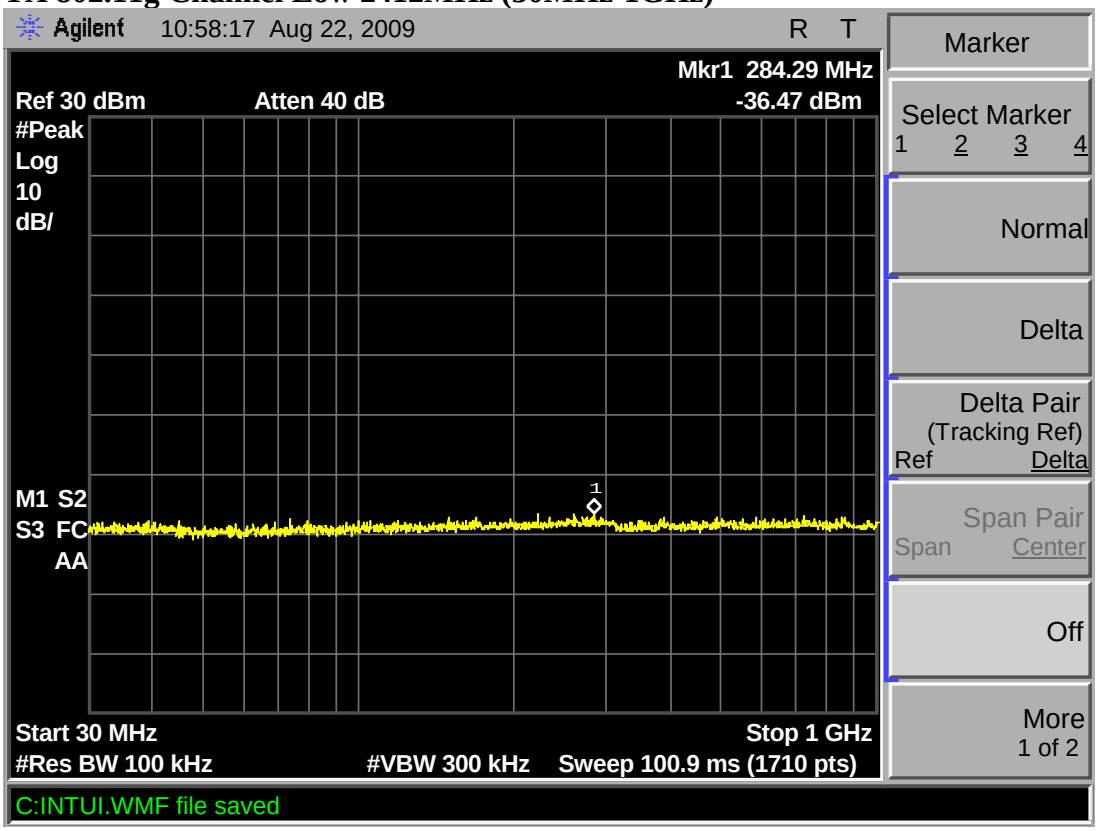
TX 802.11b Channel High 2462MHz (15GHz-20GHz)



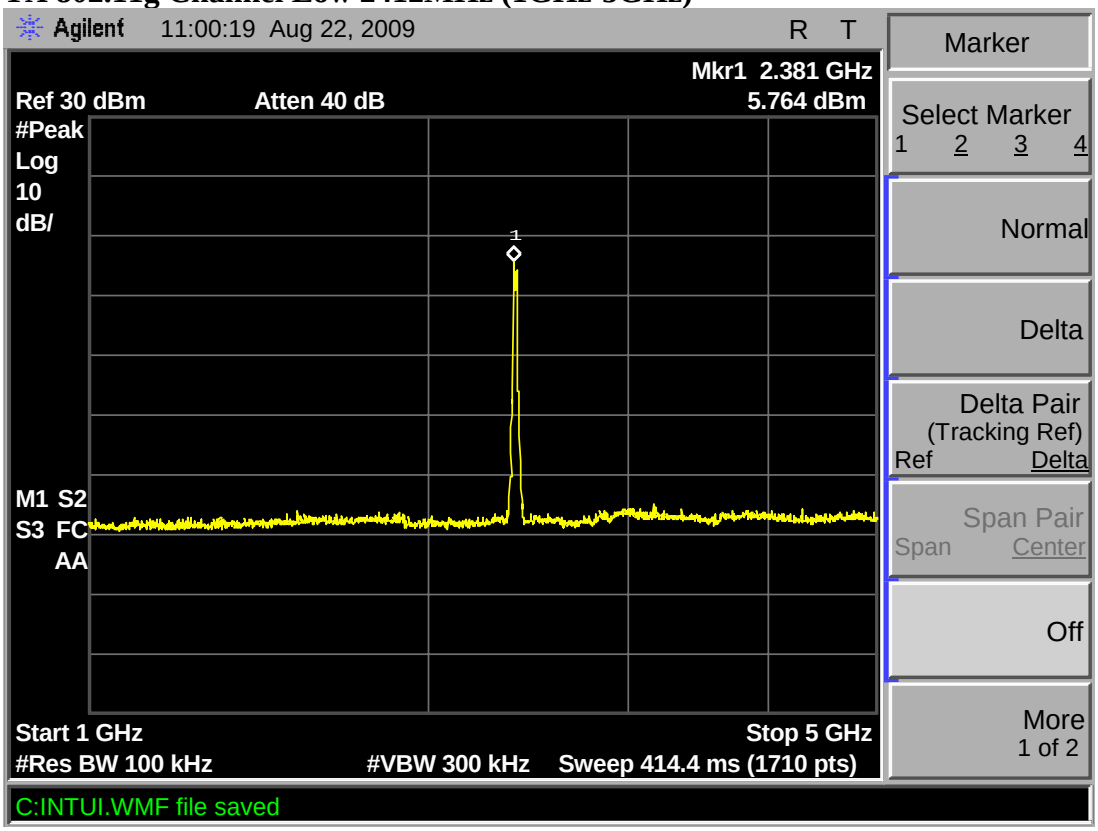
TX 802.11b Channel High 2462MHz (20GHz-25GHz)



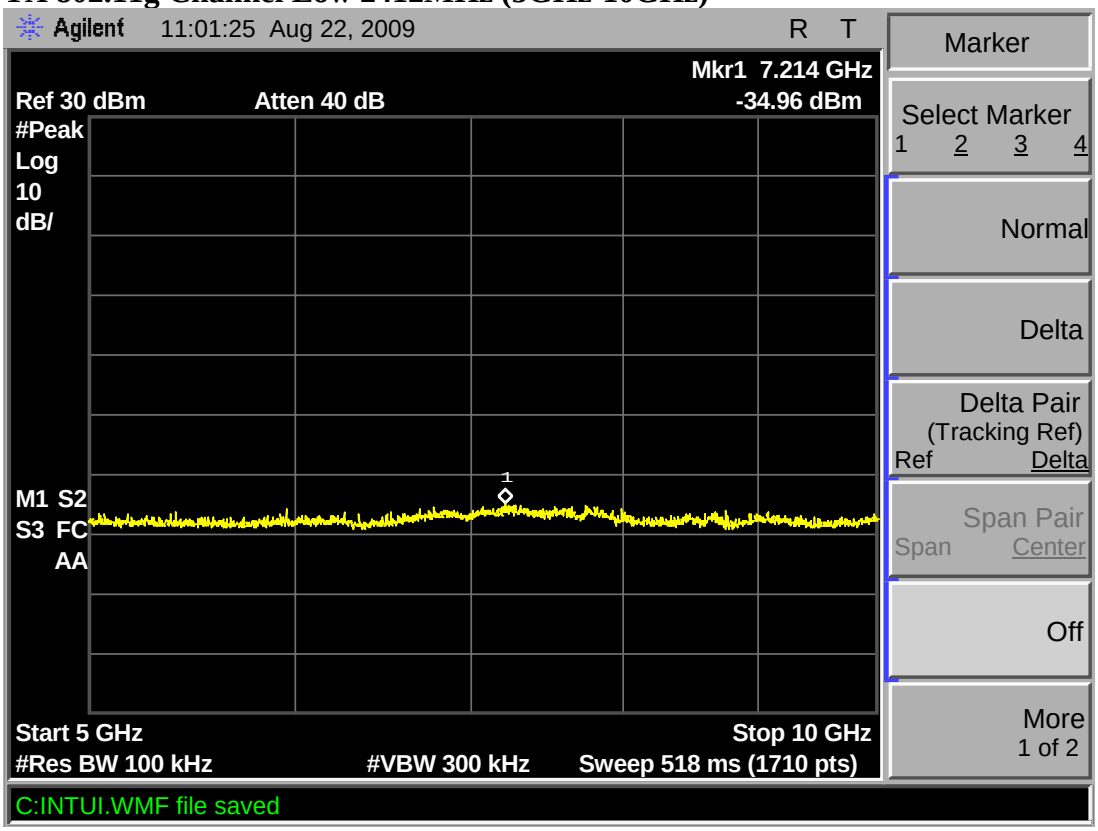
TX 802.11g Channel Low 2412MHz (30MHz-1GHz)



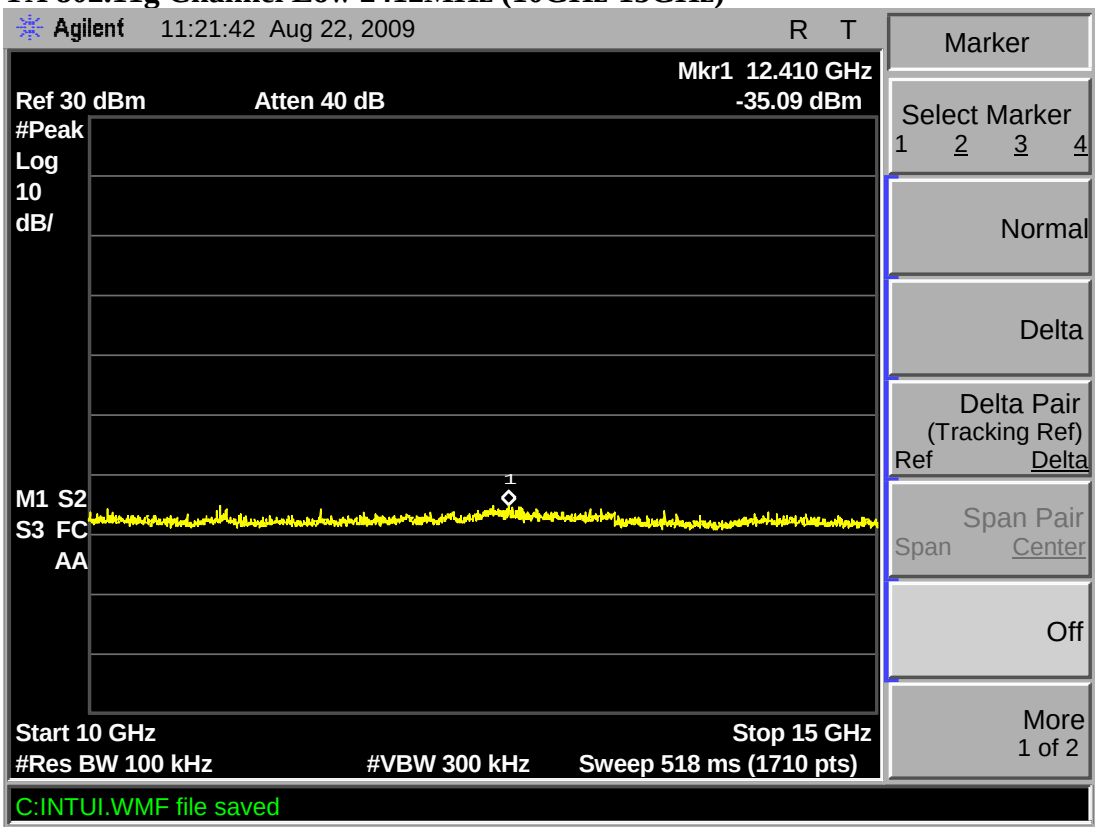
TX 802.11g Channel Low 2412MHz (1GHz-5GHz)



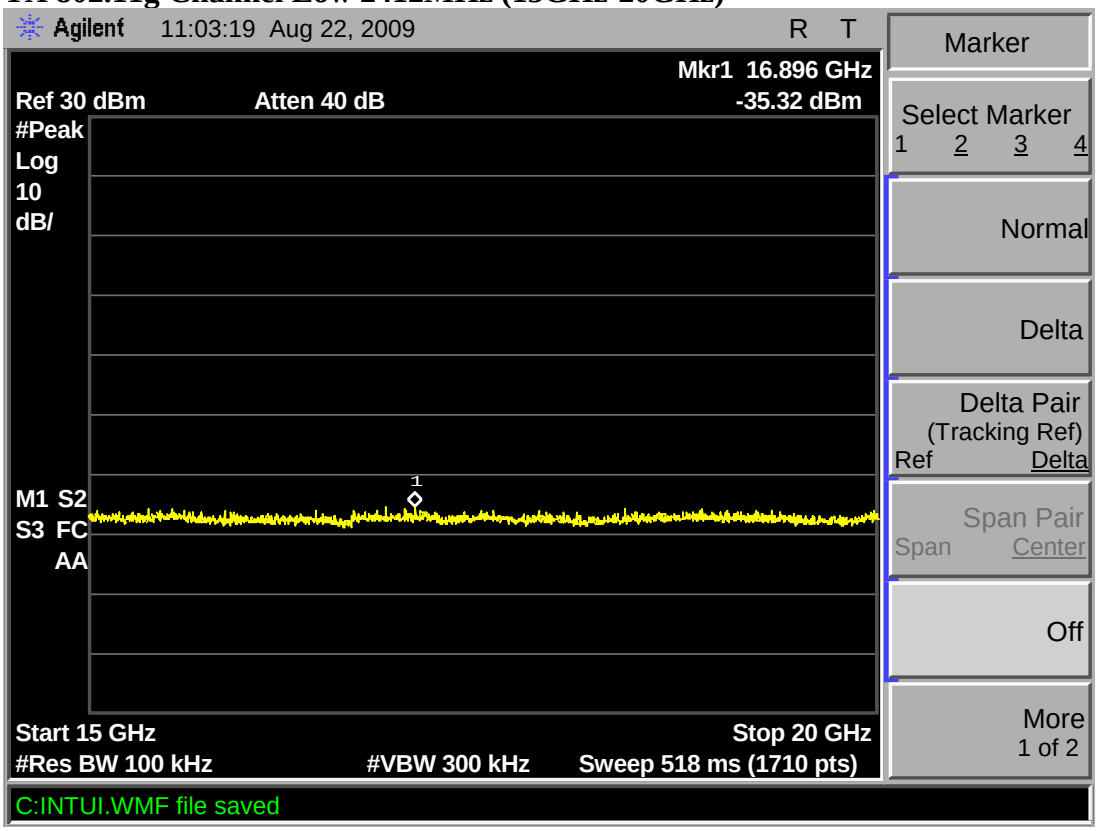
TX 802.11g Channel Low 2412MHz (5GHz-10GHz)



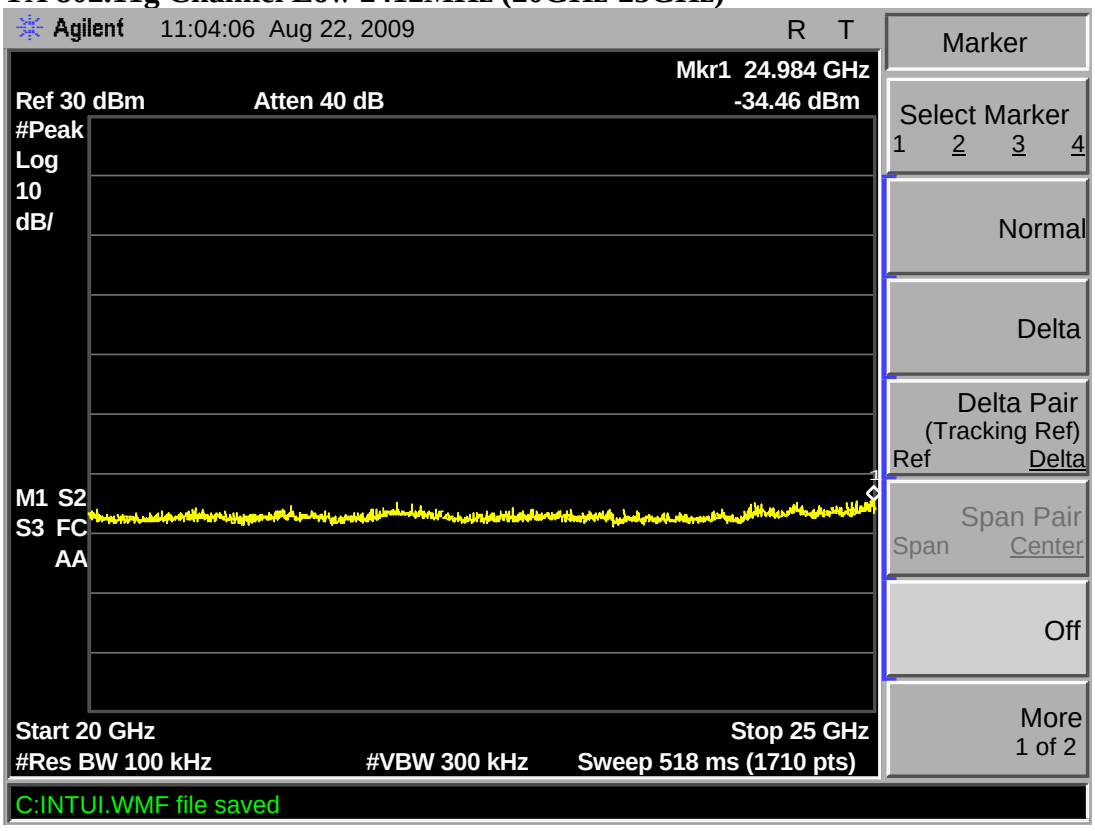
TX 802.11g Channel Low 2412MHz (10GHz-15GHz)



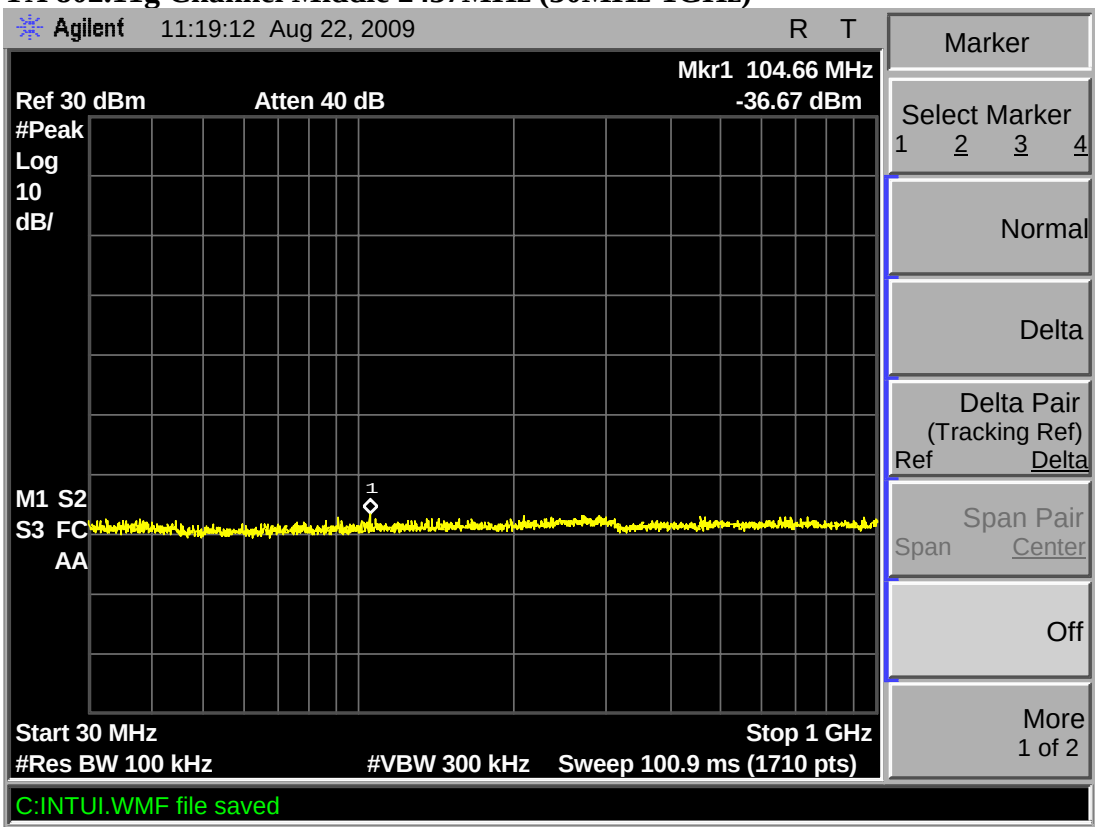
TX 802.11g Channel Low 2412MHz (15GHz-20GHz)



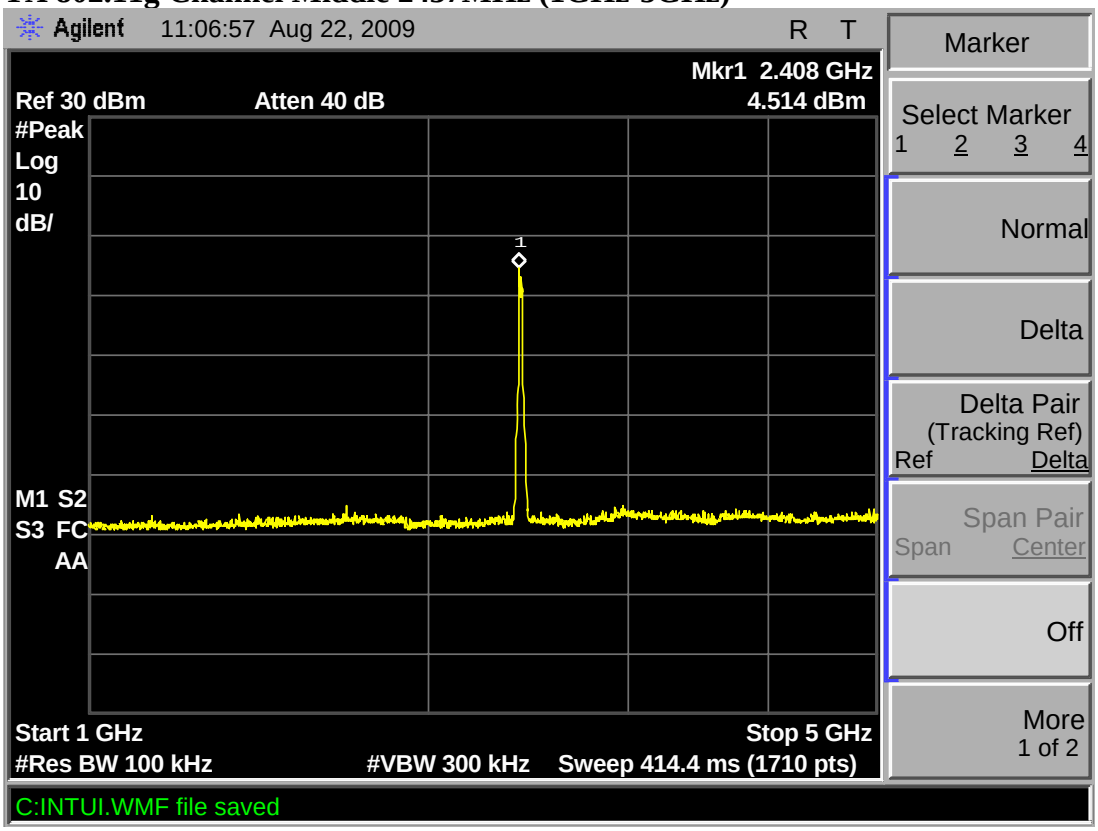
TX 802.11g Channel Low 2412MHz (20GHz-25GHz)



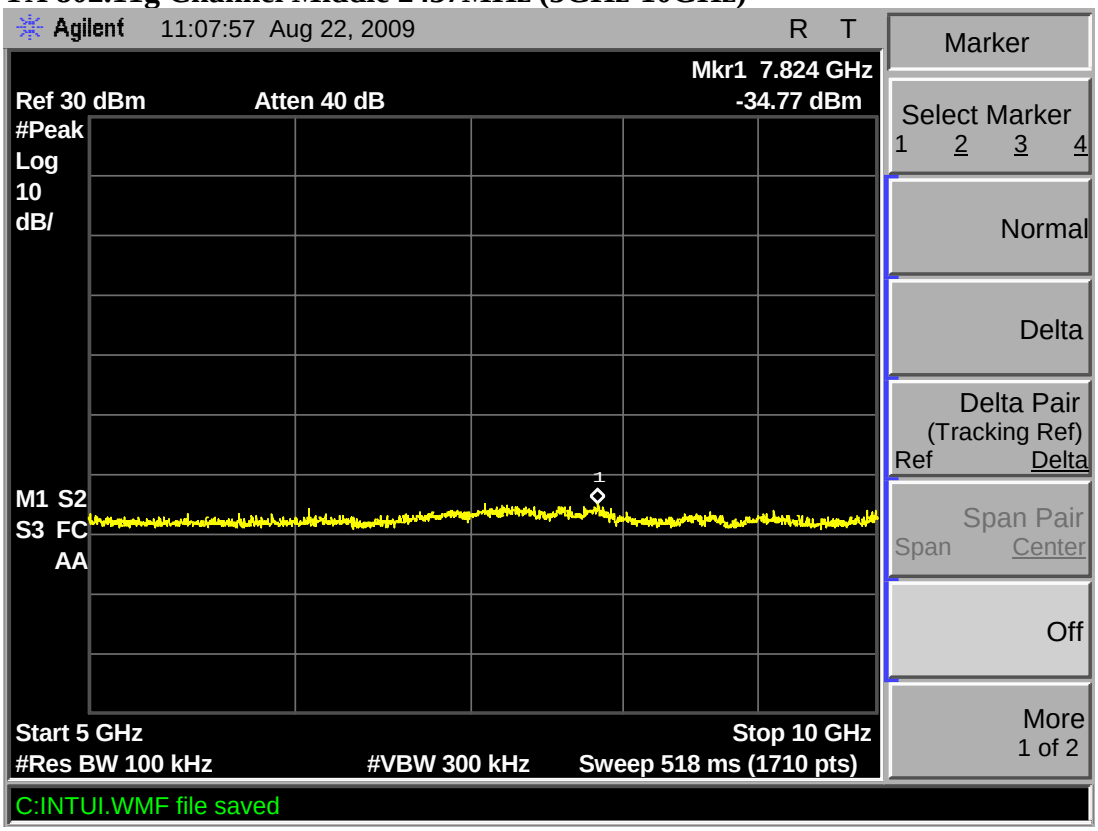
TX 802.11g Channel Middle 2437MHz (30MHz-1GHz)



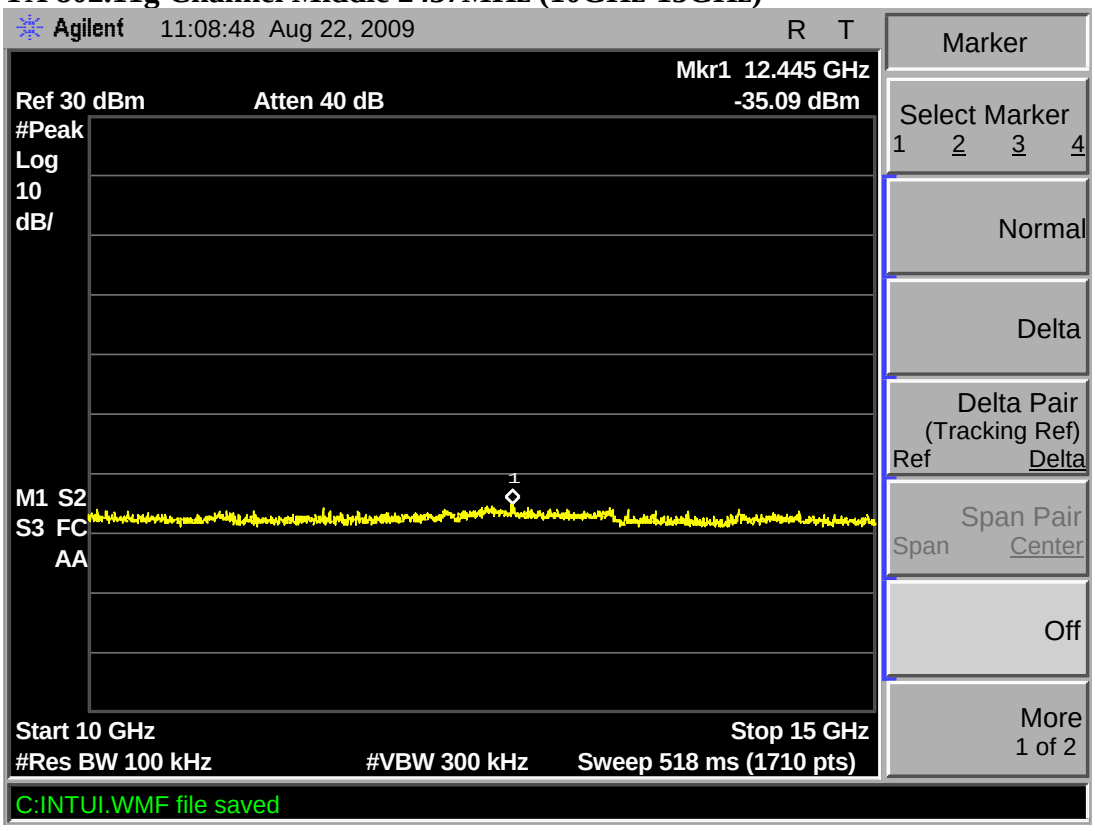
TX 802.11g Channel Middle 2437MHz (1GHz-5GHz)



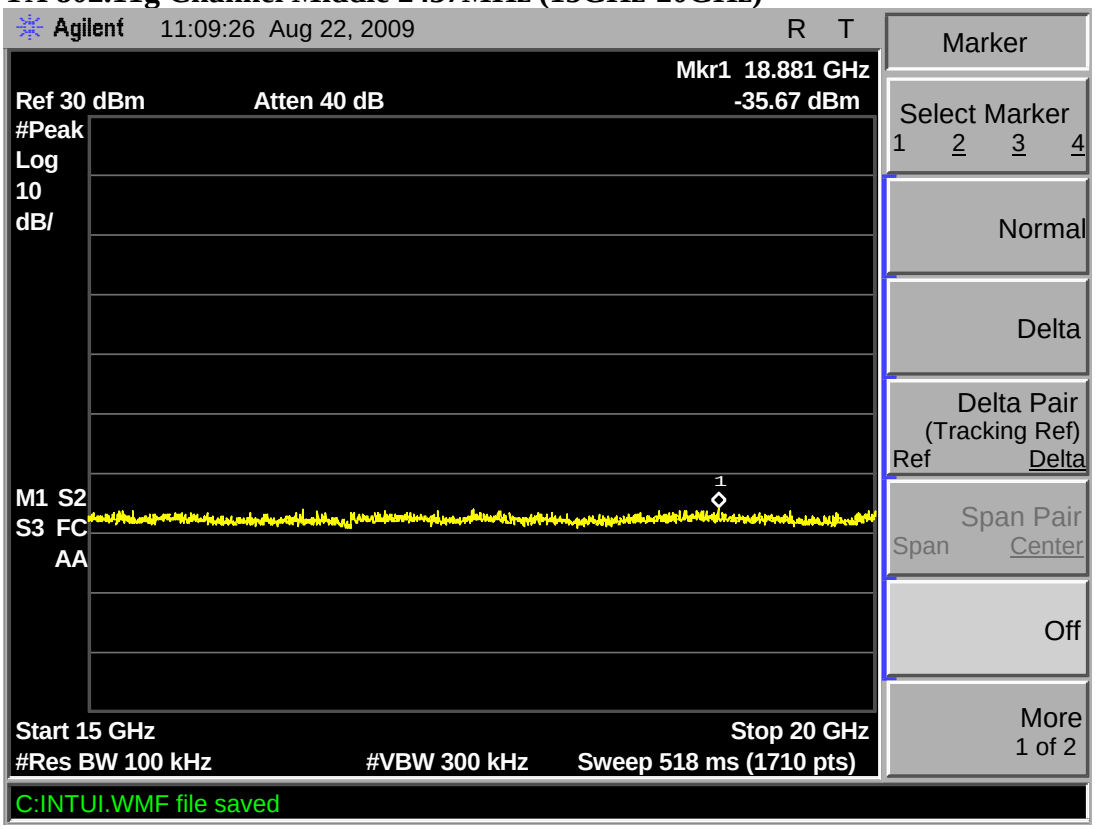
TX 802.11g Channel Middle 2437MHz (5GHz-10GHz)



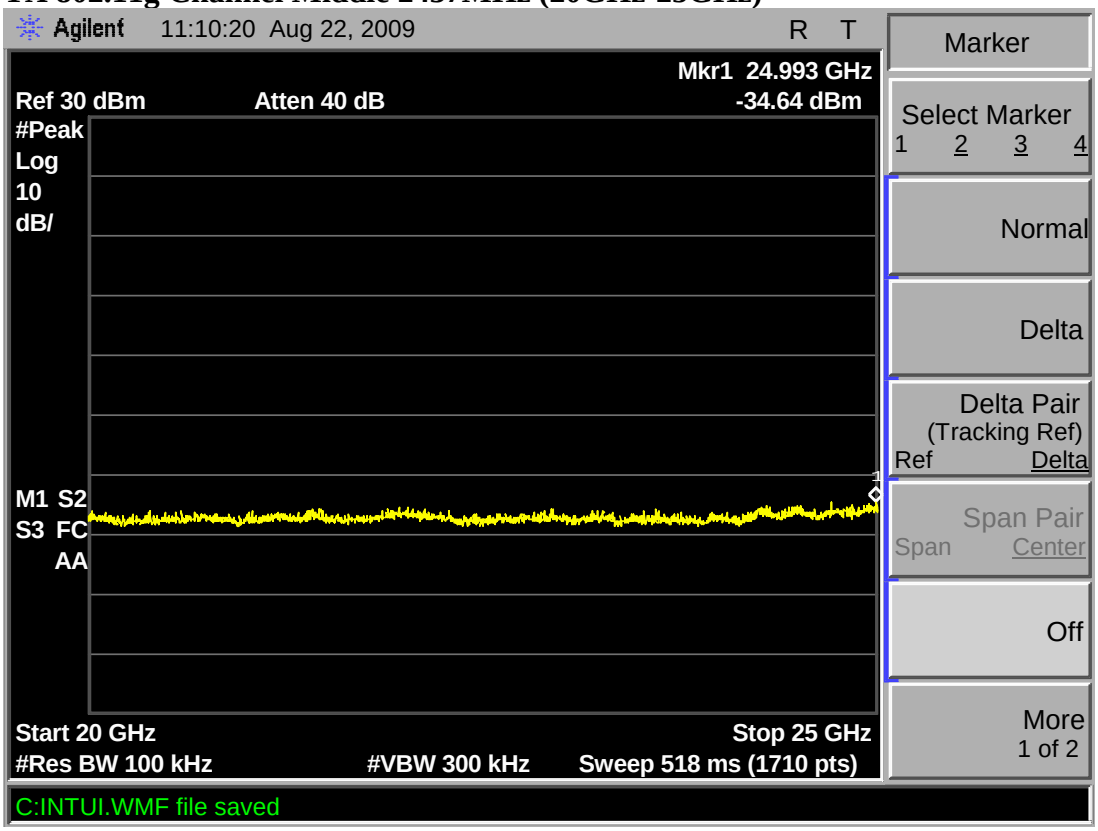
TX 802.11g Channel Middle 2437MHz (10GHz-15GHz)



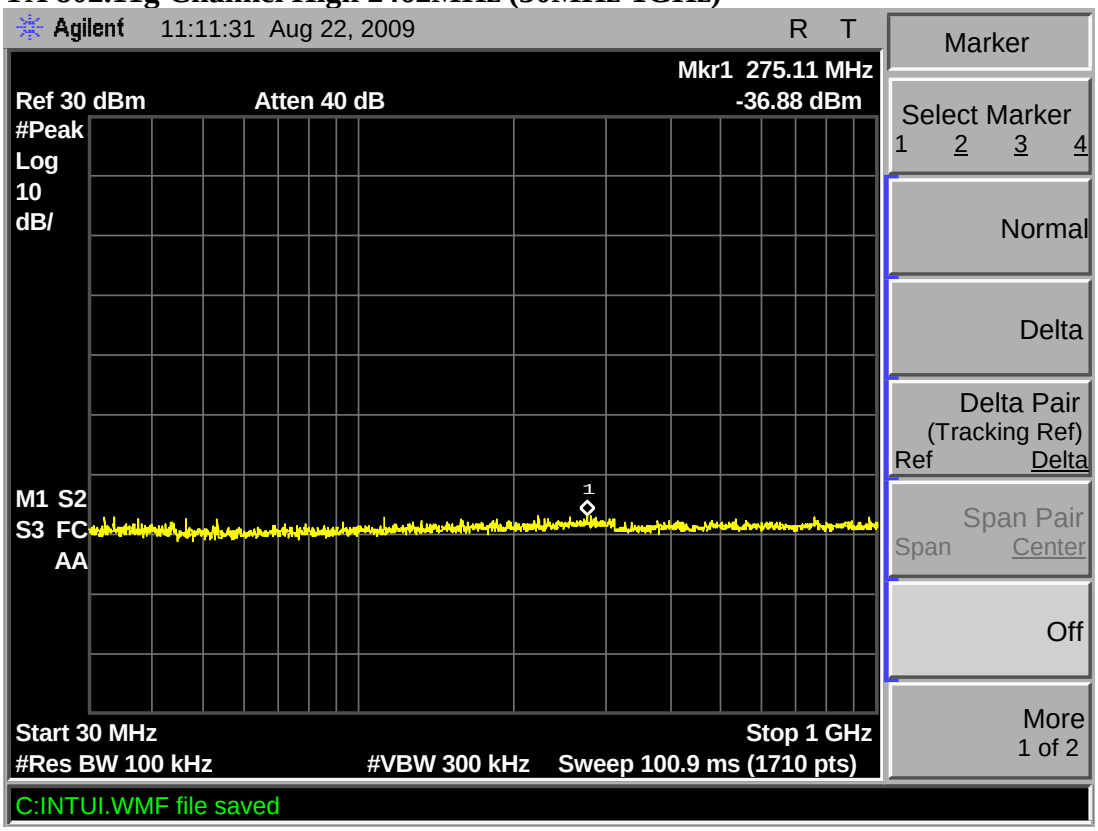
TX 802.11g Channel Middle 2437MHz (15GHz-20GHz)



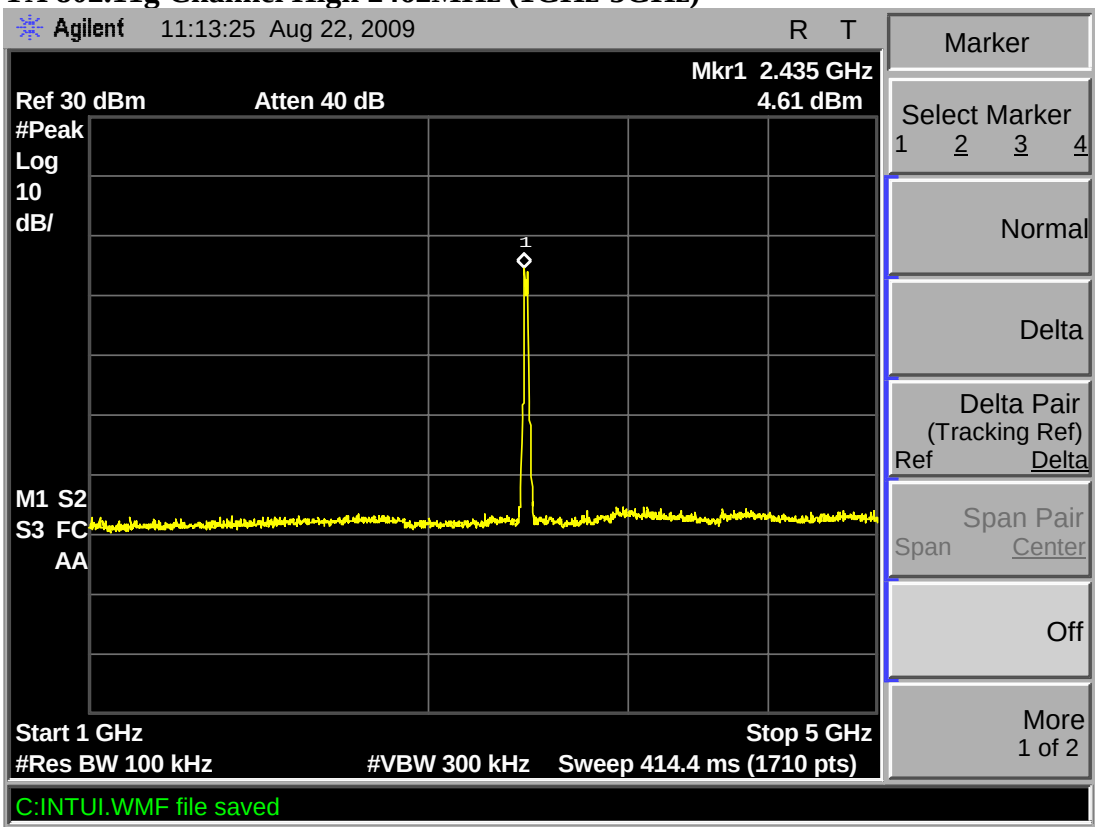
TX 802.11g Channel Middle 2437MHz (20GHz-25GHz)



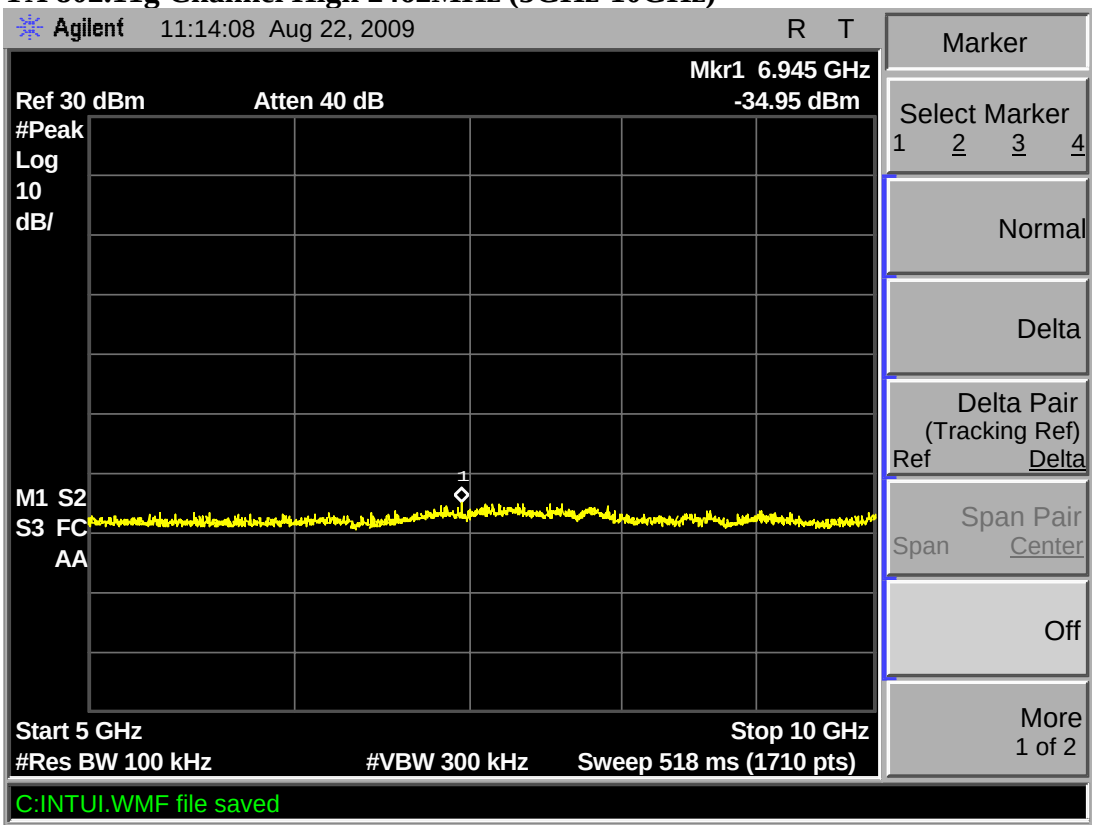
TX 802.11g Channel High 2462MHz (30MHz-1GHz)



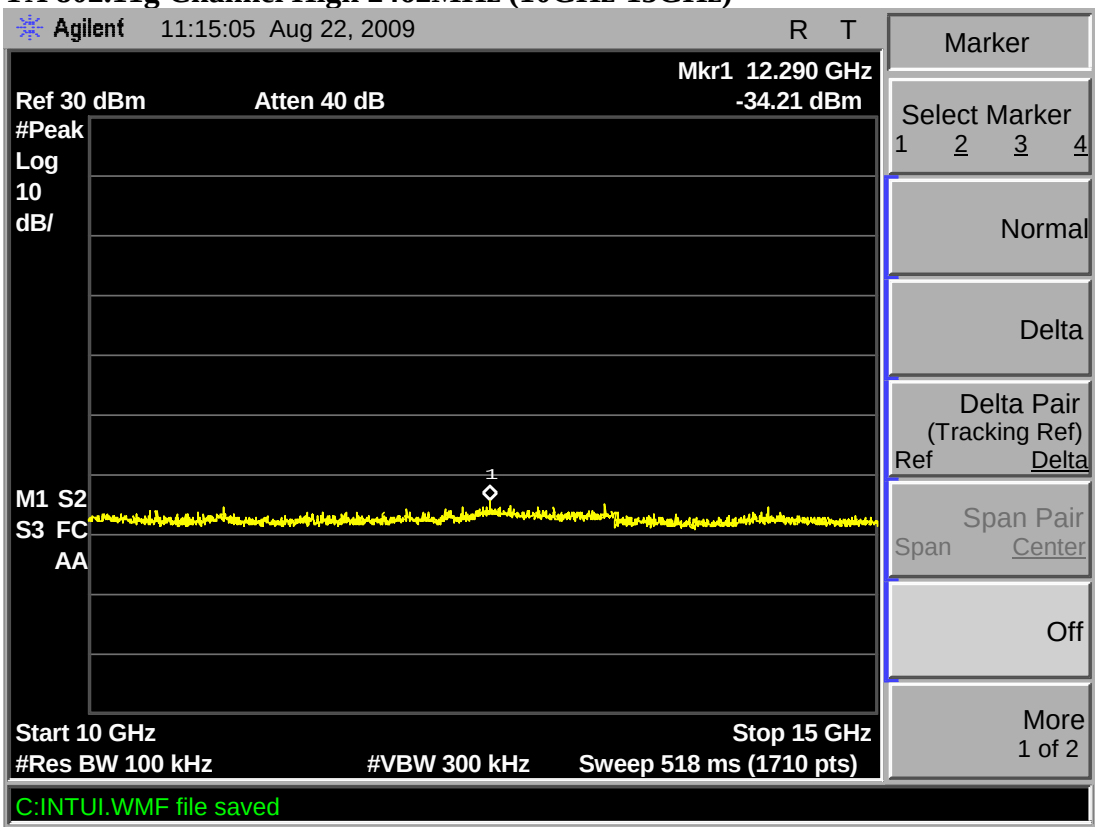
TX 802.11g Channel High 2462MHz (1GHz-5GHz)



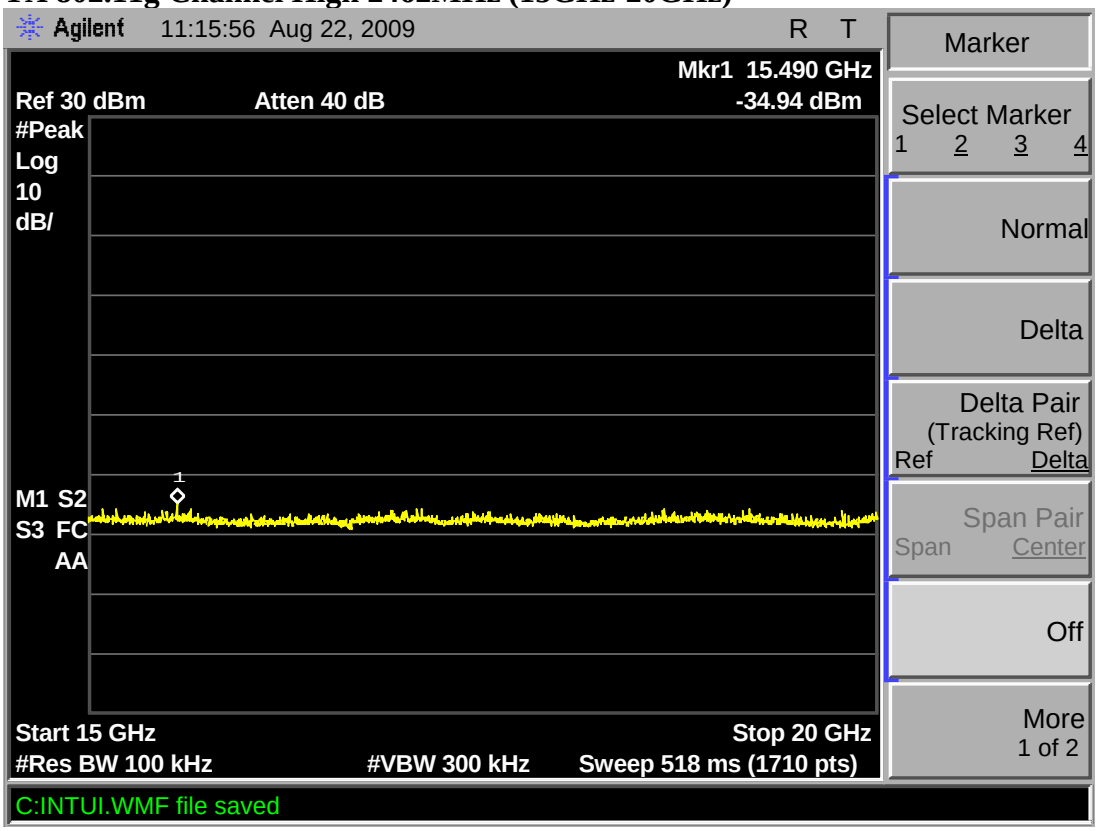
TX 802.11g Channel High 2462MHz (5GHz-10GHz)



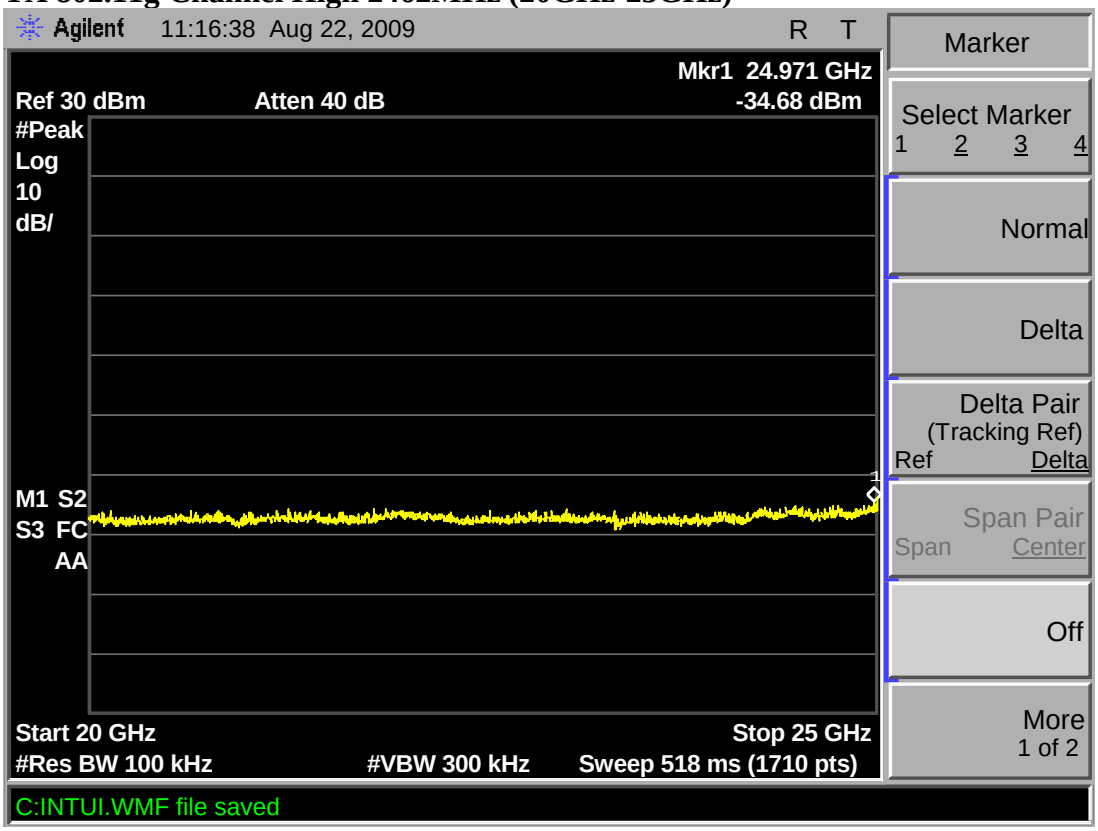
TX 802.11g Channel High 2462MHz (10GHz-15GHz)



TX 802.11g Channel High 2462MHz (15GHz-20GHz)



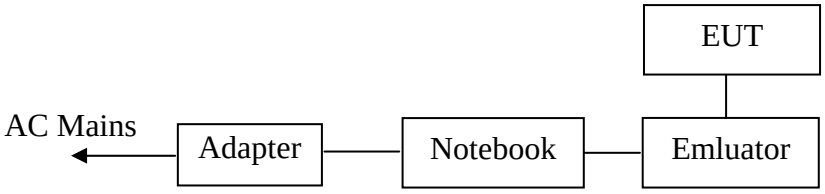
TX 802.11g Channel High 2462MHz (20GHz-25GHz)



11. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

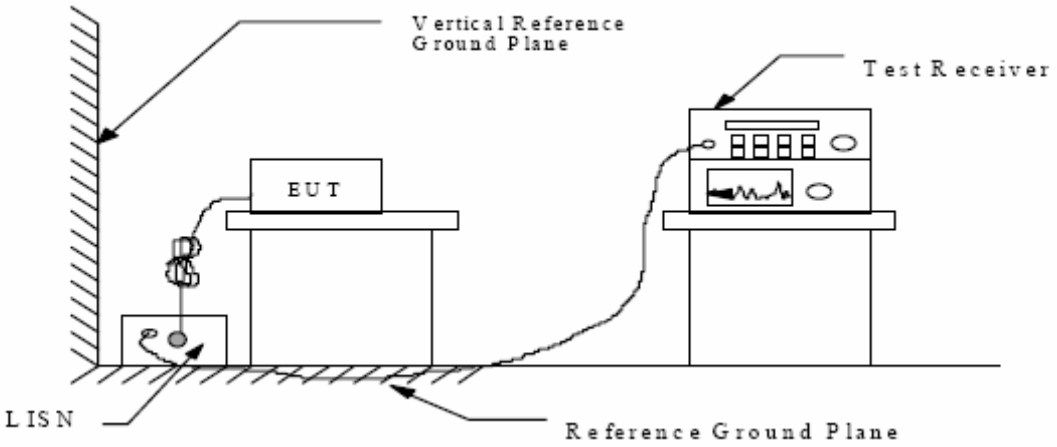
11.1. Block Diagram of Test Setup

11.1.1. Block diagram of connection between the EUT and simulators



(EUT: Syntek BlueW-2310 miniCard)

11.1.2. Shielding Room Test Setup Diagram



(EUT: Syntek BlueW-2310 miniCard)

11.2. The Emission Limit

11.2.1. Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

* Decreases with the logarithm of the frequency.

11.3.Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

11.3.1.Syntek BlueW-2310 miniCard (EUT)

Model Number	**:**	BlueW-2310 miniCard
Serial Number	**:**	N/A
Manufacturer	**:**	Syntek Semiconductor Co., Ltd.

11.4.Operating Condition of EUT

11.4.1.Setup the EUT and simulator as shown as Section 11.1.

11.4.2.Turn on the power of all equipment.

11.4.3.Let the EUT work in TX (802.11b Channel Middle, 802.11g Channel Middle) mode measure it.

11.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

11.6.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Date of Test:	August 28, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/ 60Hz
Test Mode:	TX 802.11b Channel Middle	Test Engineer:	Joe

Frequency (MHz)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector	Line
0.190505	46.10	64	-17.9	QP	Neutral
0.515791	38.40	56	-17.6	QP	
1.773602	36.70	56	-19.3	QP	
0.190505	39.20	54	-14.8	AV	
0.572085	30.70	46	-15.3	AV	
0.952653	28.90	46	-17.1	AV	
0.190505	45.50	64	-18.5	QP	Live
0.515791	38.00	56	-18.0	QP	
0.975700	37.20	56	-18.8	QP	
0.190505	37.90	54	-16.1	AV	
0.572085	30.70	46	-15.3	AV	
1.048241	29.40	46	-16.6	AV	

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

Date of Test:	August 28, 2009	Temperature:	25°C
EUT:	Syntek BlueW-2310 miniCard	Humidity:	50%
Model No.:	BlueW-2310 miniCard	Power Supply:	AC 120V/ 60Hz
Test Mode:	TX 802.11g Channel Middle	Test Engineer:	Joe

Frequency (MHz)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector	Line
0.190505	46.10	64	-17.9	QP	Neutral
0.515791	38.30	56	-17.7	QP	
0.879689	37.10	56	-18.9	QP	
0.188993	39.00	54	-15.1	AV	
0.532495	30.50	46	-15.5	AV	
0.952653	29.00	46	-17.0	AV	
0.190505	45.50	64	-18.5	QP	Live
0.515791	38.00	56	-18.0	QP	
0.975700	37.40	56	-18.6	QP	
0.188993	37.70	54	-16.4	AV	
0.572085	30.70	46	-15.3	AV	
1.048241	29.60	46	-16.4	AV	

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

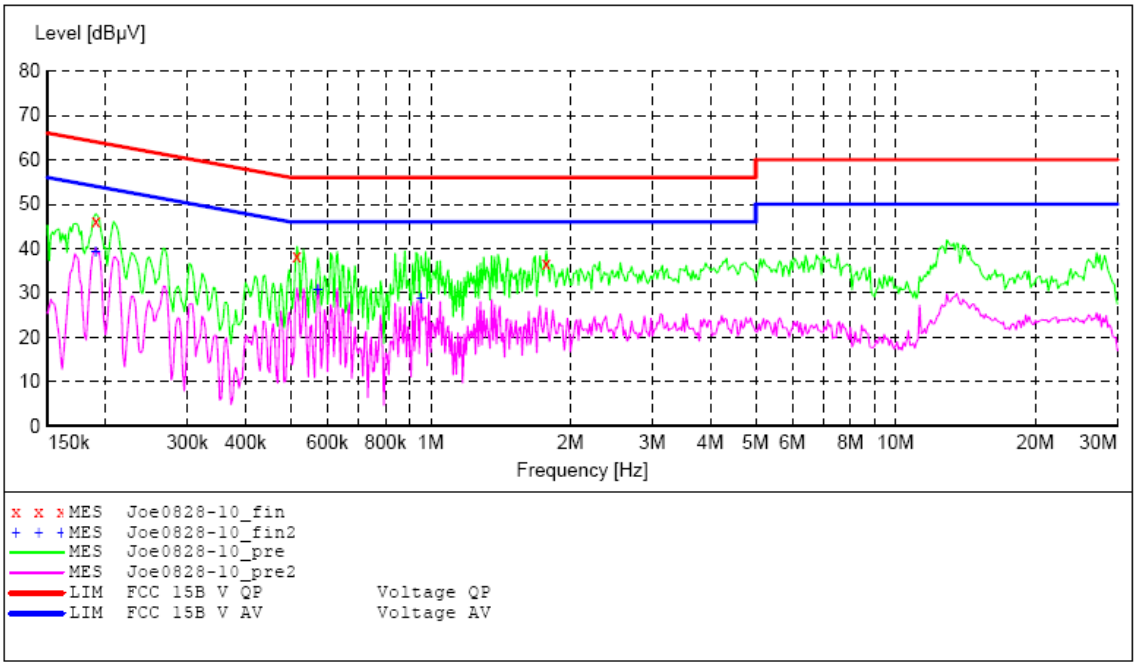
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Syntek BlueW-2310 miniCard   M/N:BlueW-2310 miniCard
Manufacturer:         Syntek Semiconductor Co., Ltd.
Operating Condition:  Wi-Fi (2437MHz 802.11b)
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Va 120V/60Hz
Comment:              Sample No.:091864  Report No.:ATE20091643
Start of Test:        8/28/2009 / 3:24:32PM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:              _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   0.8 %     QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "Joe0828-10_fin"

8/28/2009 3:26PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	46.10	11.2	64	17.9	QP	N	GND
0.515791	38.40	12.0	56	17.6	QP	N	GND
1.773602	36.70	11.7	56	19.3	QP	N	GND

MEASUREMENT RESULT: "Joe0828-10_fin2"

8/28/2009 3:26PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	39.20	11.2	54	14.8	AV	N	GND
0.572085	30.70	12.0	46	15.3	AV	N	GND
0.952653	28.90	11.8	46	17.1	AV	N	GND

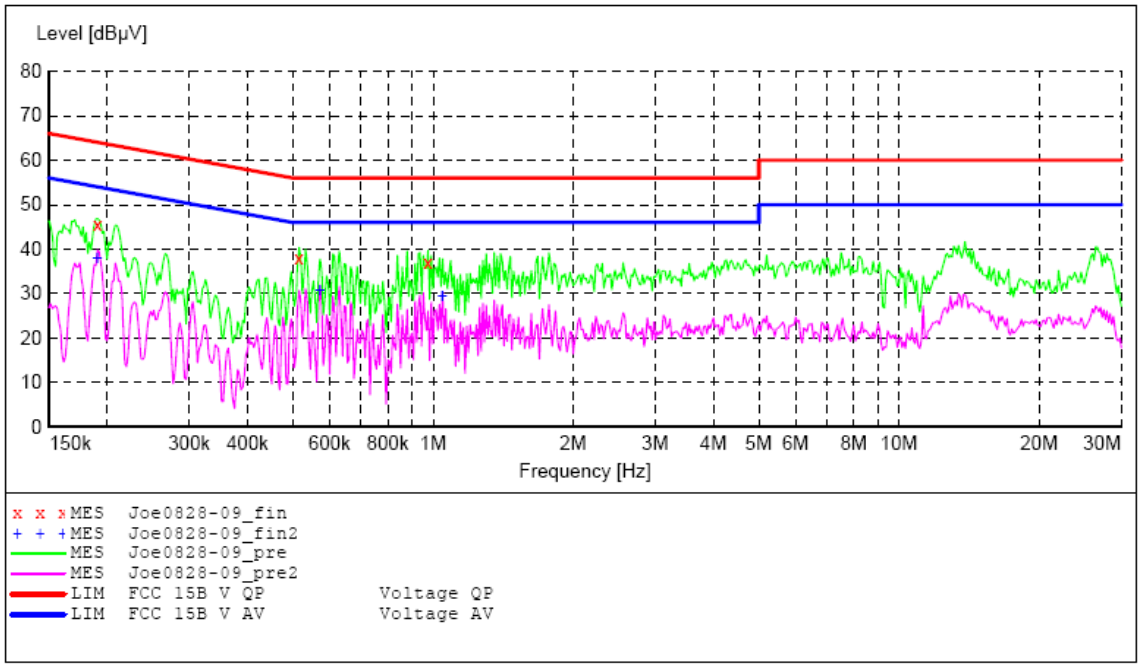
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Syntek BlueW-2310 miniCard   M/N:BlueW-2310 miniCard
Manufacturer:         Syntek Semiconductor Co., Ltd.
Operating Condition:  Wi-Fi (2437MHz 802.11b)
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Vb 120V/60Hz
Comment:              Sample No.:091864  Report No.:ATE20091643
Start of Test:        8/28/2009 / 3:21:53PM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   0.8 %     QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "Joe0828-09_fin"

8/28/2009 3:23PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	45.50	11.2	64	18.5	QP	L1	GND
0.515791	38.00	12.0	56	18.0	QP	L1	GND
0.975700	37.20	11.8	56	18.8	QP	L1	GND

MEASUREMENT RESULT: "Joe0828-09_fin2"

8/28/2009 3:23PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	37.90	11.2	54	16.1	AV	L1	GND
0.572085	30.70	12.0	46	15.3	AV	L1	GND
1.048241	29.40	11.8	46	16.6	AV	L1	GND

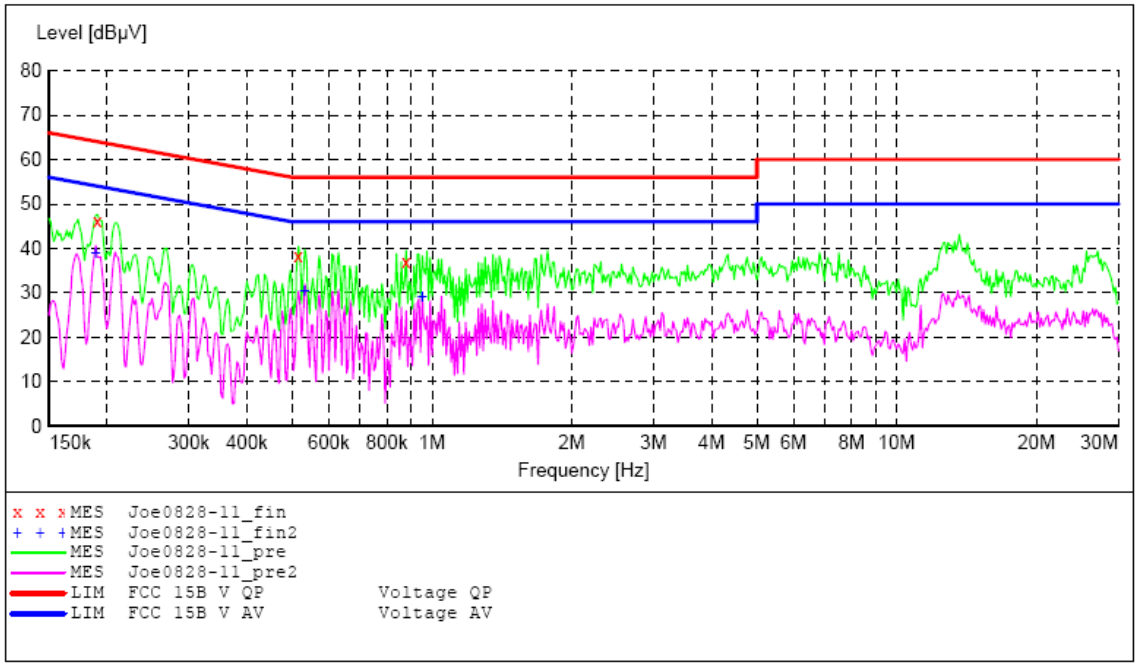
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Syntek BlueW-2310 miniCard   M/N:BlueW-2310 miniCard
Manufacturer:         Syntek Semiconductor Co., Ltd.
Operating Condition:  Wi-Fi (2437MHz 802.11g)
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Va 120V/60Hz
Comment:              Sample No.:091864  Report No.:ATE20091643
Start of Test:        8/28/2009 / 3:27:23PM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   0.8 %     QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "Joe0828-11_fin"

8/28/2009 3:29PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	46.10	11.2	64	17.9	QP	N	GND
0.515791	38.30	12.0	56	17.7	QP	N	GND
0.879689	37.10	11.9	56	18.9	QP	N	GND

MEASUREMENT RESULT: "Joe0828-11_fin2"

8/28/2009 3:29PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.188993	39.00	11.2	54	15.1	AV	N	GND
0.532495	30.50	12.0	46	15.5	AV	N	GND
0.952653	29.00	11.8	46	17.0	AV	N	GND

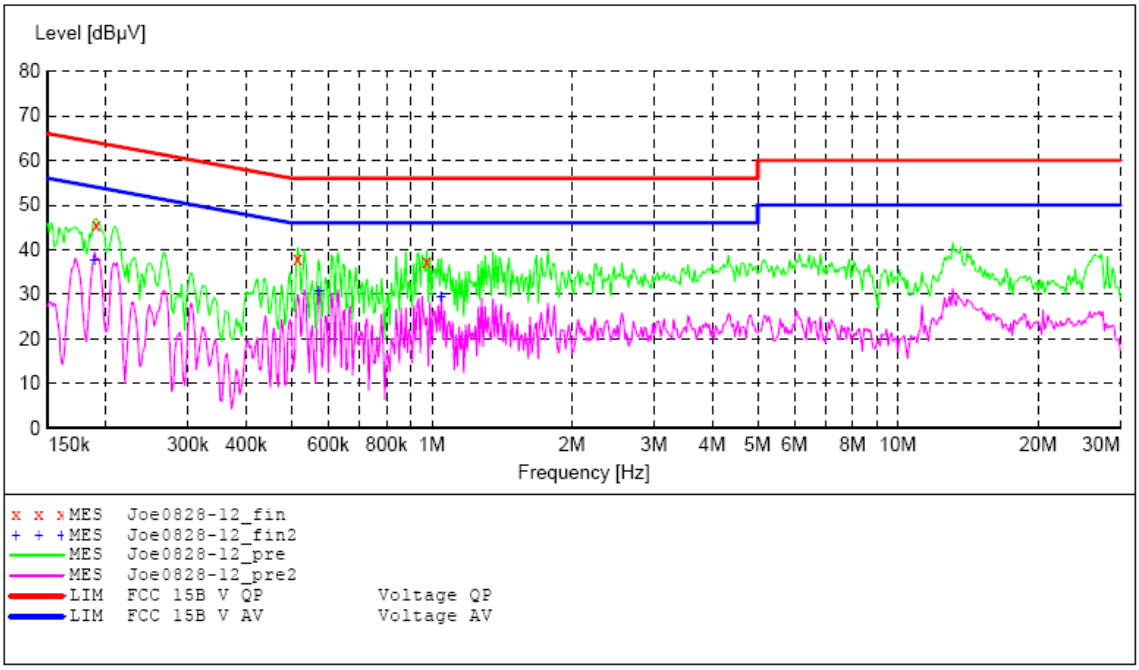
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Syntek BlueW-2310 miniCard   M/N:BlueW-2310 miniCard
Manufacturer:         Syntek Semiconductor Co., Ltd.
Operating Condition:  Wi-Fi (2437MHz 802.11g)
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Vb 120V/60Hz
Comment:              Sample No.:091864  Report No.:ATE20091643
Start of Test:        8/28/2009 / 3:30:16PM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   0.8 %     QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "Joe0828-12_fin"

8/28/2009 3:32PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190505	45.50	11.2	64	18.5	QP	L1	GND
0.515791	38.00	12.0	56	18.0	QP	L1	GND
0.975700	37.40	11.8	56	18.6	QP	L1	GND

MEASUREMENT RESULT: "Joe0828-12_fin2"

8/28/2009 3:32PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.188993	37.70	11.2	54	16.4	AV	L1	GND
0.572085	30.70	12.0	46	15.3	AV	L1	GND
1.048241	29.60	11.8	46	16.4	AV	L1	GND

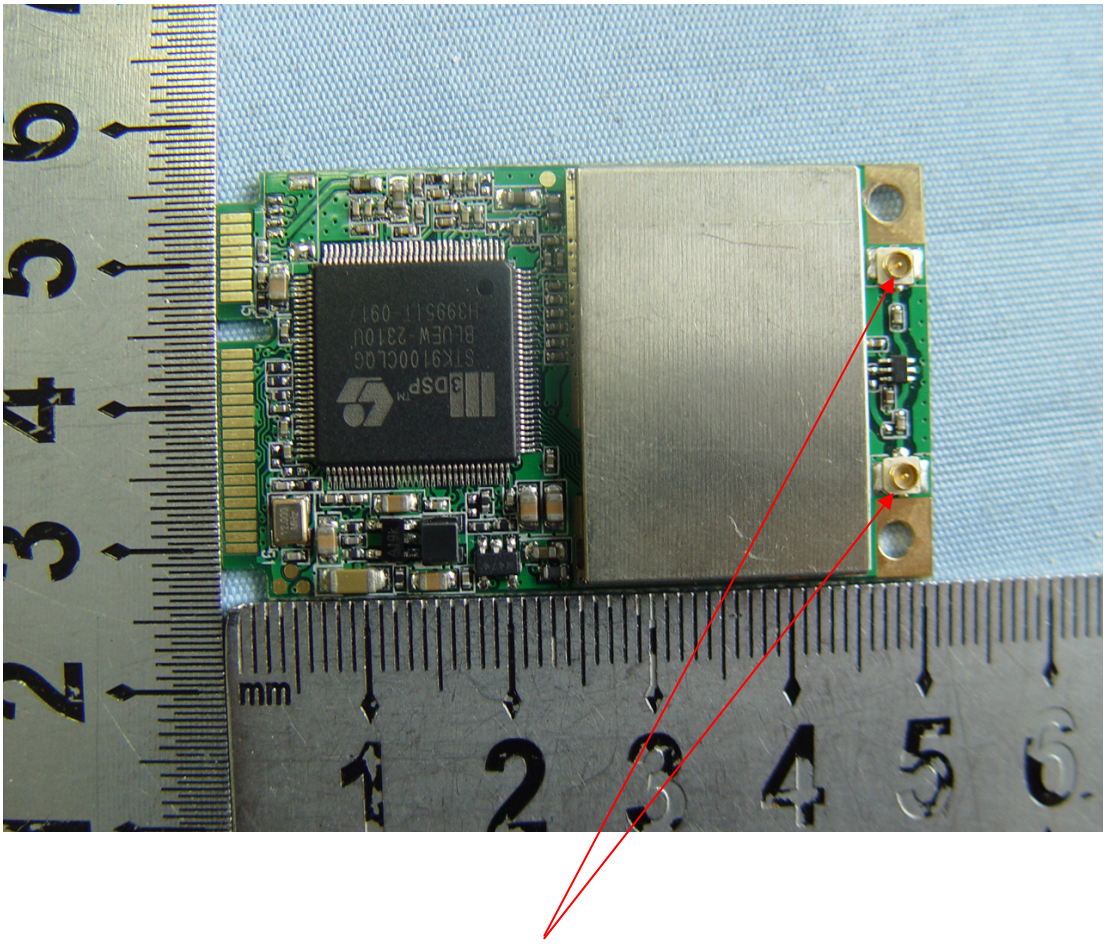
12. ANTENNA REQUIREMENT (WI-FI)

12.1. The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

12.2. Antenna Construction

Device is equipped with unique antenna connector. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna connector