APPLICATION CERTIFICATION FCC Part 15C On Behalf of

Syntek Semiconductor Co., Ltd.

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

FCC ID: V83BLUEW-2310MI

Prepared for : Syntek Semiconductor Co., Ltd.

Address : 10F, No. 1, Alley 30, Lane 358, Rueiguang Road, Neihu

District, Taipei, Taiwan 114, R.O.C.

Prepared by : ACCURATE TECHNOLOGY CO. LTD

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Report Number : ATE20100942-2
Date of Test : May 15-21, 2010
Date of Report : May 24, 2010

TABLE OF CONTENTS

Description	Page
1	\mathcal{L}

	1.1.	Description of Device (ECT)	
	1.2.	Description of Test Facility	
	1.3.	Measurement Uncertainty	(
2.	M	IEASURING DEVICE AND TEST EQUIPMENT	
3.	O	PERATION OF EUT DURING TESTING	
	3.1.	Operating Mode	
	3.2.	Configuration and peripherals	
4.	T	EST PROCEDURES AND RESULTS	
5.	6 I	DB BANDWIDTH MEASUREMENT	10
	5.1.	Block Diagram of Test Setup	
	5.2.	The Requirement For Section 15.247(a)(1)	
	5.3.	EUT Configuration on Measurement	
	5.4.	Operating Condition of EUT	10
	5.5.	Test Procedure	1
	5.6.	Test Result	1
6.	M	IAXIMUM PEAK OUTPUT POWER	18
	6.1.	Block Diagram of Test Setup	1
	6.2.	The Requirement For Section 15.247(b)(3)	
	6.3.	EUT Configuration on Measurement	
	6.4.	Operating Condition of EUT	
	6.5.	Test Procedure	
	6.6.	Test Result	
7.	P	OWER SPECTRAL DENSITY MEASUREMENT	20
	7.1.	Block Diagram of Test Setup	
	7.2.	The Requirement For Section 15.247(e)	
	7.3.	EUT Configuration on Measurement	
	7.4.	Operating Condition of EUT	
	7.5.	Test Procedure	
	7.6.	Test Result	
8.		AND EDGE COMPLIANCE TEST (WI-FI)	
	8.1. 8.2.	Block Diagram of Test Setup	
	8.2. 8.3.	The Requirement For Section 15.247(d)	
	8.4.	Operating Condition of EUT	
	8.5.	Test Procedure	
	8.6.	Test Result	
9.		ADIATED SPURIOUS EMISSION TEST	
	9.1.	Block Diagram of Test Setup	
	9.2.	The Limit For Section 15.247(d)	
	9.3.	Restricted bands of operation	
	9.4.	Configuration of EUT on Measurement	
	9.5.	Operating Condition of EUT	

9.6.	Test Procedure	43
9.7.	The Field Strength of Radiation Emission Measurement Results	44
10. CO	NDUCTED SPURIOUS EMISSION COMPLIANCE TEST	86
10.1.	Block Diagram of Test Setup	86
10.2.	The Requirement For Section 15.247(d)	
10.3.	EUT Configuration on Measurement	86
10.4.	Operating Condition of EUT	87
10.5.	Test Procedure	
10.6.	Test Result	87
11. AC	POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 1	15.207(A) 106
11.1.	Block Diagram of Test Setup	106
11.2.	The Emission Limit	106
11.3.	Configuration of EUT on Measurement	107
11.4.	Operating Condition of EUT	107
11.5.	Test Procedure	
11.6.	Power Line Conducted Emission Measurement Results	108
12. AN	TENNA REQUIREMENT (WI-FI)	114
12.1.	The Requirement	
12.2.	Antenna Construction	

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 :	May 15-21, 2010	
Prepared by :	Joe	
	(Engineer)	
Approved & Authorized Signer :	Searle	
	(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 114, R.O.C.

Manufacturer : Syntek Semiconductor Co., Ltd.

Address : 10F, No. 1, Alley 30, Lane 358, Rueiguang Road, Neihu

District, Taipei, Taiwan 114, R.O.C.

Date of sample received: May 7, 2010

Date of Test : May 15-21, 2010

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 = 3.08dB, k=2

(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

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	Jan. 9, 2011
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 9, 2011
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 9, 2011
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 9, 2011
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 9, 2011
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 9, 2011
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 9, 2011
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 9, 2011

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

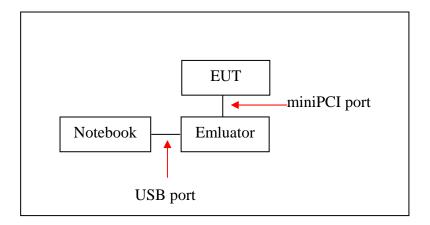


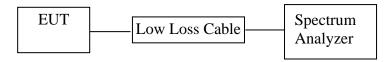
Figure 1 Setup: Transmitting mode

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.

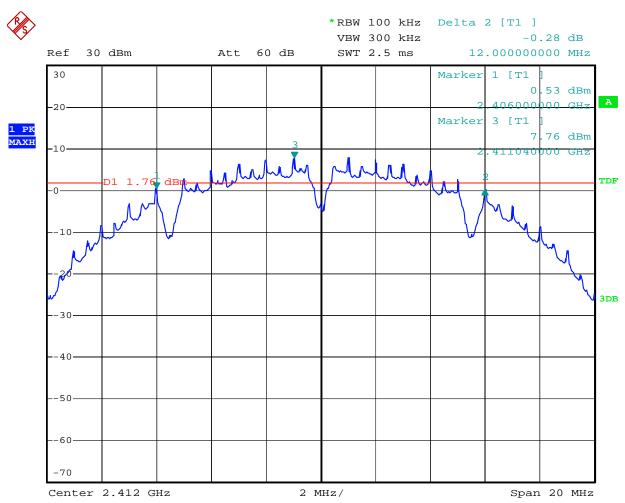
Date of Test:May 21, 2010Temperature:25°CEUT:Syntek BlueW-2310 miniCardHumidity:50%Model No.:BlueW-2310 miniCardPower Supply:DC 3.3VTest Mode:TXTest Engineer:Joe

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	12.000	> 0.5MHz	
Middle	2437	12.000	> 0.5MHz	
High	2462	12.000	> 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	16.440	> 0.5MHz	
Middle	2437	16.480	> 0.5MHz	
High	2462	16.480	> 0.5MHz	

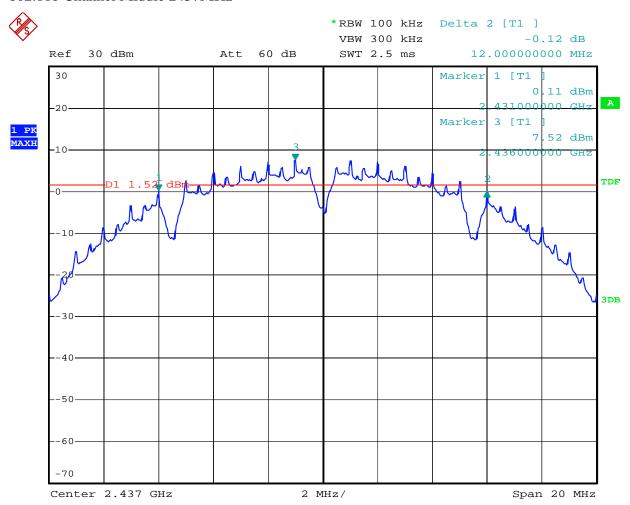
The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



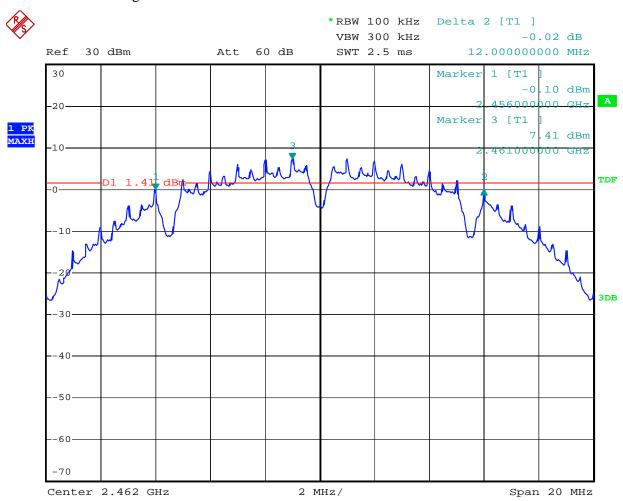
Date: 21.MAY.2010 13:52:41

802.11b Channel Middle 2437MHz



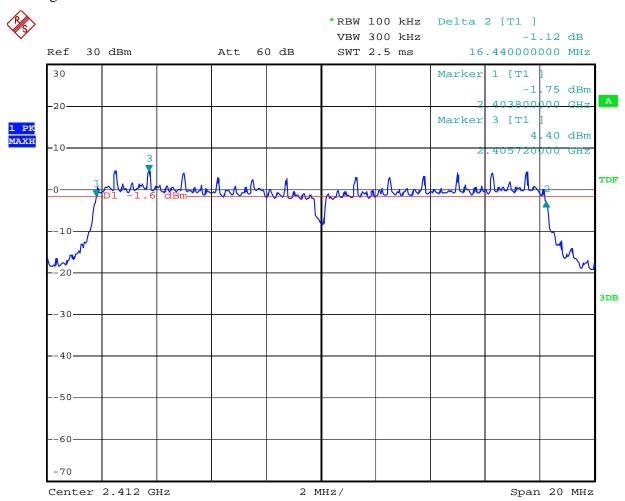
Date: 21.MAY.2010 13:50:28

802.11b Channel High 2462MHz



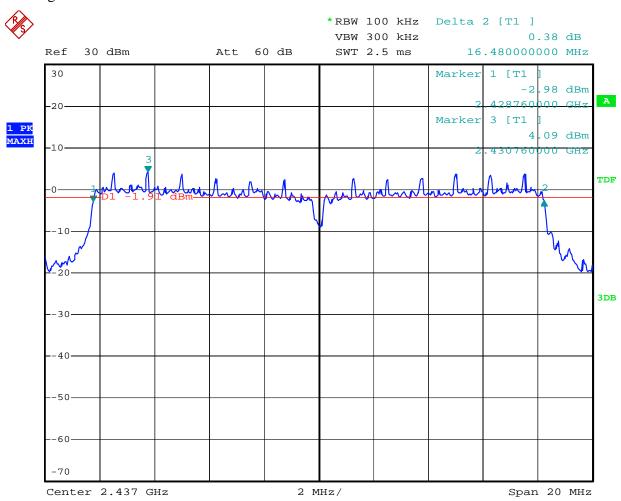
Date: 21.MAY.2010 13:55:08

802.11g Channel Low 2412MHz



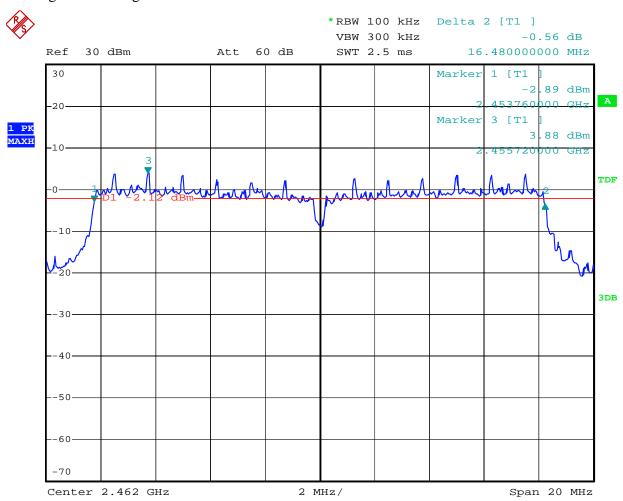
Date: 21.MAY.2010 13:59:55

802.11g Channel Middle 2437MHz



Date: 21.MAY.2010 14:04:24

802.11g Channel High 2462MHz



Date: 21.MAY.2010 14:08:16

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.

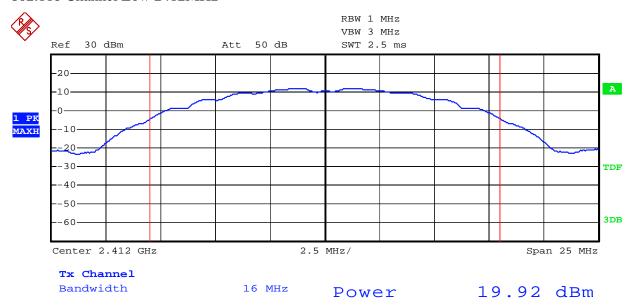
Date of Test:May 21, 2010Temperature:25°CEUT:Syntek BlueW-2310 miniCardHumidity:50%Model No.:BlueW-2310 miniCardPower Supply:DC 3.3VTest Mode:TXTest Engineer:Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps. Peak Output Power Peak Output Power Frequency Limits Channel (mW) dBm / W (MHz) (dBm) 98.2 $30\ dBm\ /\ 1\ W$ Low 2412 19.92 Middle 2437 19.84 96.4 30 dBm / 1 W97.5 19.89 30 dBm / 1 W High 2462

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	22.56	180.3	30 dBm / 1 W
Middle	2437	22.55	179.9	30 dBm / 1 W
High	2462	22.53	179.1	30 dBm / 1 W

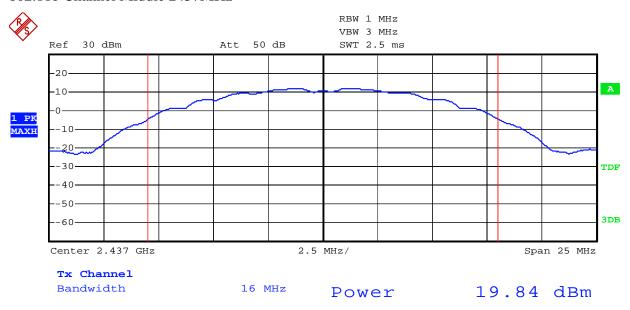
The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



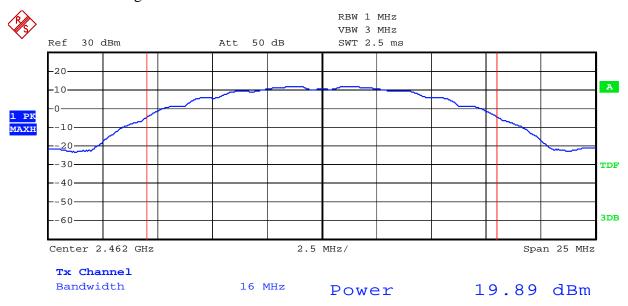
Date: 21.MAY.2010 14:40:29

802.11b Channel Middle 2437MHz



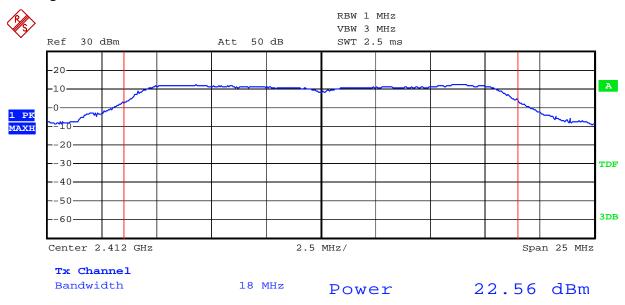
Date: 21.MAY.2010 14:42:59

802.11b Channel High 2462MHz



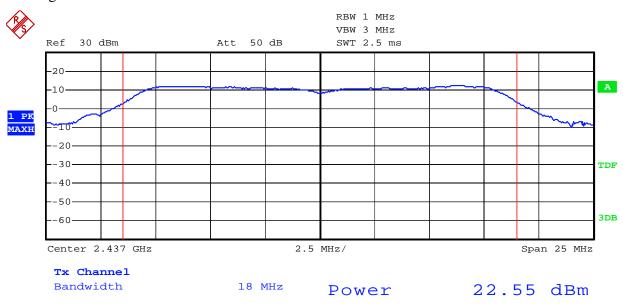
Date: 21.MAY.2010 14:45:06

802.11g Channel Low 2412MHz



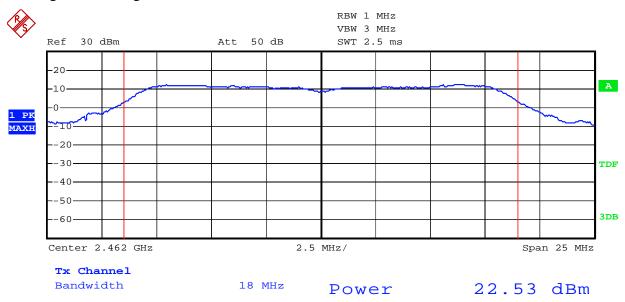
Date: 21.MAY.2010 14:47:53

802.11g Channel Middle 2437MHz



Date: 21.MAY.2010 14:50:11

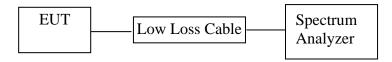
802.11g Channel High 2462MHz



Date: 21.MAY.2010 14:52:14

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.

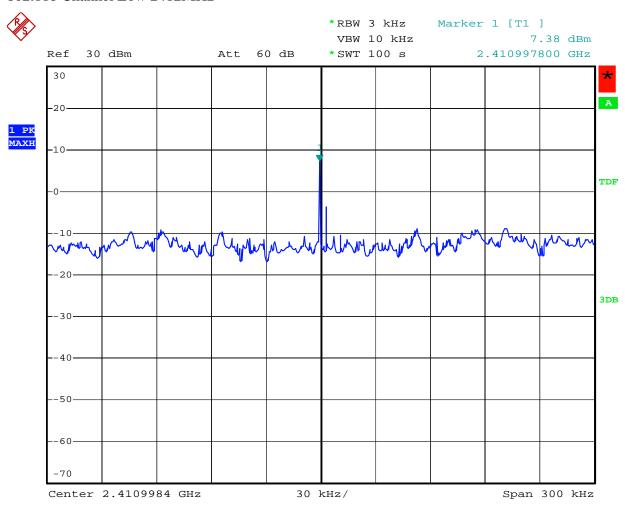
Date of Test:May 21, 2010Temperature:25°CEUT:Syntek BlueW-2310 miniCardHumidity:50%Model No.:BlueW-2310 miniCardPower Supply:DC 3.3VTest Mode:TXTest Engineer:Joe

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	7.38	8 dBm
Middle	2437	5.31	8 dBm
High	2462	5.84	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	-10.99	8 dBm
Middle	2437	-11.11	8 dBm
High	2462	-11.17	8 dBm

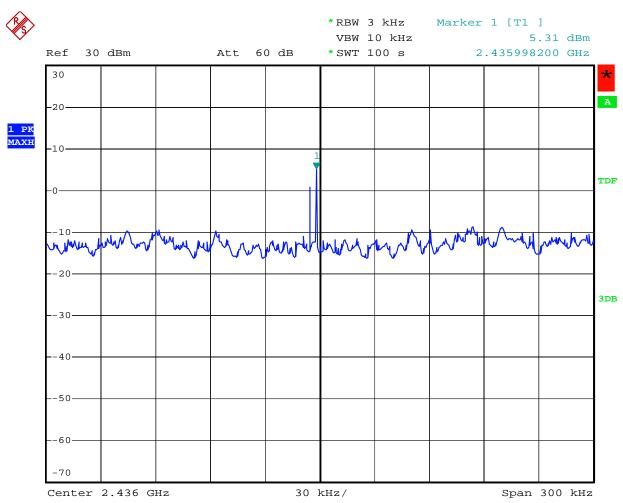
The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



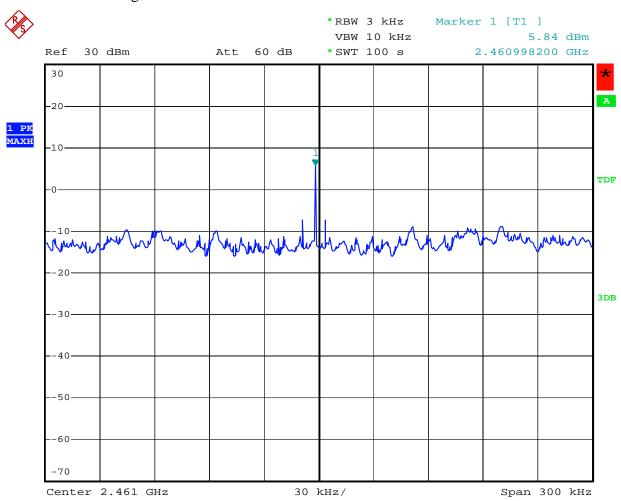
Date: 21.MAY.2010 15:11:39

802.11b Channel Middle 2437MHz



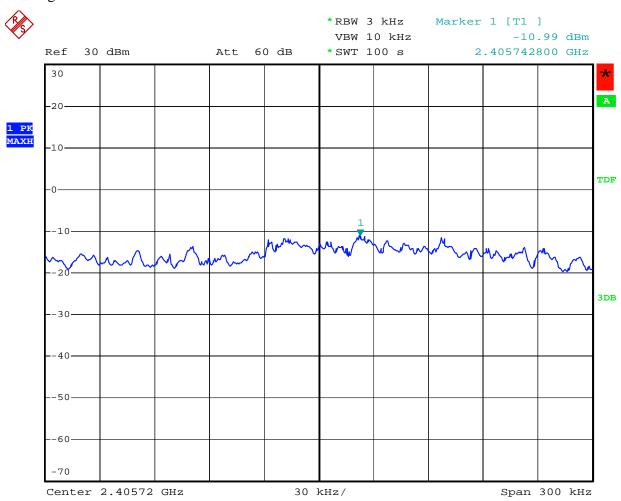
Date: 21.MAY.2010 15:16:51

802.11b Channel High 2462MHz



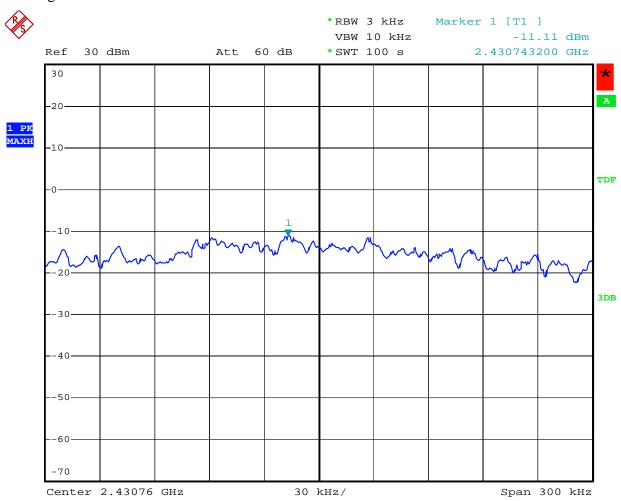
Date: 21.MAY.2010 15:20:35

802.11g Channel Low 2412MHz



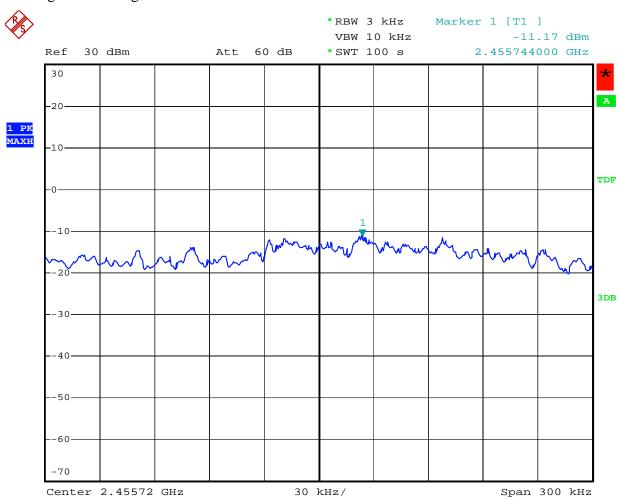
Date: 21.MAY.2010 15:31:37

802.11g Channel Middle 2437MHz



Date: 21.MAY.2010 15:35:27

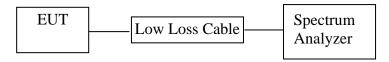
802.11g Channel High 2462MHz



Date: 21.MAY.2010 15:40:12

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

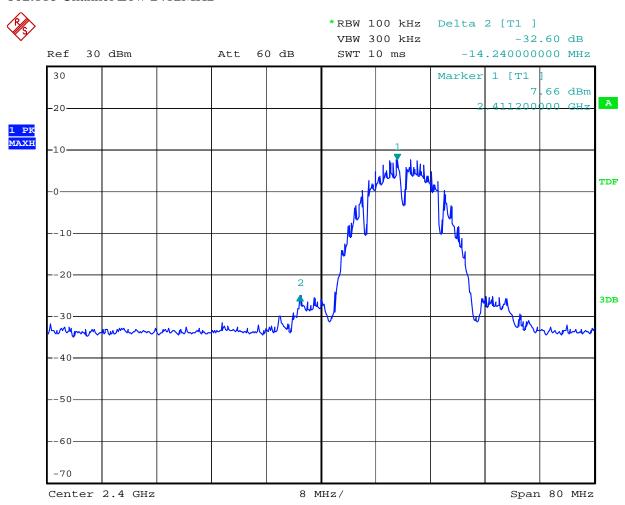
Pass

Date of Test:May 21, 2010Temperature:25°CEUT:Syntek BlueW-2310 miniCardHumidity:50%Model No.:BlueW-2310 miniCardPower Supply:DC 3.3VTest Mode:TXTest Engineer:Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.				
Frequency	Result of Band Edge (dBc)	Limit of Band Edge (dBc)		
(MHz)	, ,	, , ,		
2412	32.60	> 20dBc		
2462	39.13	> 20dBc		

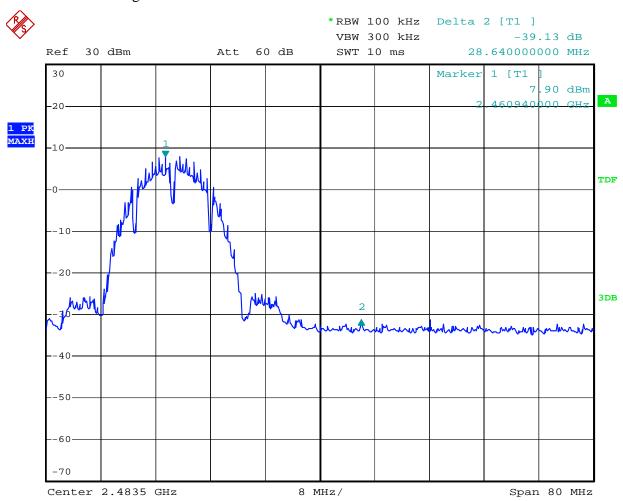
The test was performed with 802.11g, the data was shown the worst case 802.11g 1Mbps.		
Frequency	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
(MHz)	, ,	, ,
2412	24.64	> 20dBc
2462	33.63	> 20dBc

802.11b Channel Low 2412MHz



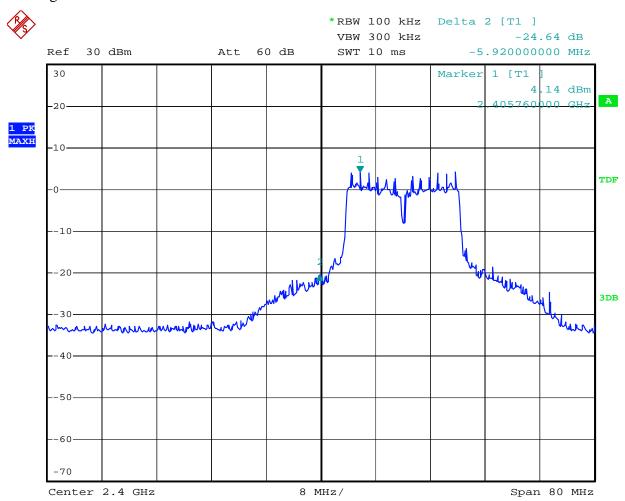
Date: 21.MAY.2010 15:43:57

802.11b Channel High 2462MHz



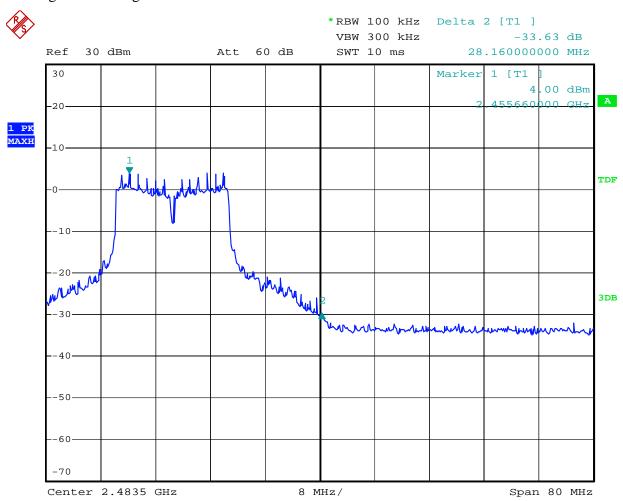
Date: 21.MAY.2010 15:46:25

802.11g Channel Low 2412MHz



Date: 21.MAY.2010 15:51:35

802.11g Channel High 2462MHz

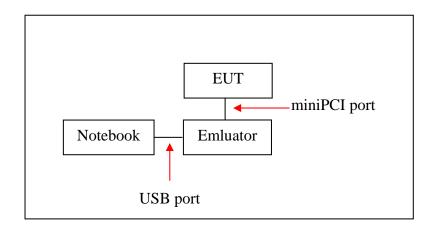


Date: 21.MAY.2010 15:48:43

9. RADIATED SPURIOUS EMISSION TEST

9.1.Block Diagram of Test Setup

9.1.1.Block diagram of connection between the EUT and simulators

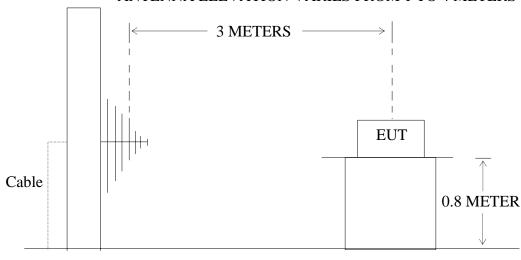


Setup: Transmitting mode

(EUT: Syntek BlueW-2310 miniCard)

9.1.2.Semi-Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



GROUND PLANE
(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	$\binom{2}{}$
13.36-13.41			

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

(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.

²Above 38.6

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: May 17-18, 2010 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	Reading	Factor	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP	(dB)	QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	_	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain

Frequency	Reading(dBμV/m)	Factor	Result(c	lBμV/m)	Limit(d	BμV/m)	Margin(dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2400.000	37.59	43.58	-7.46	30.13	36.12	54	74	-23.87	-37.88	Vertical
2412.020	106.42	112.43	-7.43	98.99	105.00	-	-	-	-	Vertical
4824.036	50.21	56.22	-0.19	50.02	56.03	54	74	-3.98	-17.97	Vertical
7236.052	41.97	47.96	3.05	45.02	51.01	54	74	-8.98	-22.99	Vertical
2400.000	37.52	43.48	-7.46	30.06	36.02	54	74	-23.94	-37.98	Horizontal
2412.020	105.59	111.56	-7.43	98.16	104.13	-	-	-	-	Horizontal
4824.036	49.22	55.22	-0.19	49.03	55.03	54	74	-4.97	-18.97	Horizontal
7236.052	41.13	47.15	3.05	44.18	50.20	54	74	-9.82	-23.80	Horizontal

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

Date of Test: May 17-18, 2010 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	Reading	Factor	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP	(dB)	QP	QP	QP	
-	-	1	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency	Reading(dBμV/m)	Factor	Result(c	lBμV/m)	Limit(d	BμV/m)	Margin(d	dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2437.018	106.08	112.10	-7.36	98.72	104.74	1	-	-	-	Vertical
4874.032	50.41	56.45	0.09	50.50	56.54	54	74	-3.50	-17.46	Vertical
7311.048	41.56	47.56	3.22	44.78	50.78	54	74	-9.22	-23.22	Vertical
2437.018	105.51	111.55	-7.36	98.15	104.19	-	-	-	-	Horizontal
4874.032	49.16	55.20	0.09	49.25	55.29	54	74	-4.75	-18.71	Horizontal
7311.048	40.78	46.82	3.22	44.00	50.04	54	74	-10.00	-23.96	Horizontal

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

Date of Test: May 17-18, 2010 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	Reading	Factor	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP	(dB)	QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain

Frequency	Reading(dBμV/m)	Factor	Result(c	lBμV/m)	Limit(d	BμV/m)	Margin(dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2462.020	105.77	111.79	-7.35	98.42	104.44	-	-	-	-	Vertical
2483.500	38.21	44.22	-7.37	30.84	36.85	54	74	-23.16	-37.15	Vertical
4924.038	49.75	55.79	0.34	50.09	56.13	54	74	-3.91	-17.87	Vertical
7386.054	41.51	47.55	3.39	44.90	50.94	54	74	-9.10	-23.06	Vertical
2462.020	105.44	111.45	-7.35	98.09	104.10	-	-	-	-	Horizontal
2483.500	38.54	44.55	-7.37	31.17	37.18	54	74	-22.83	-36.82	Horizontal
4924.038	48.93	54.96	0.34	49.27	55.30	54	74	-4.73	-18.70	Horizontal
7386.054	39.39	45.37	3.39	42.78	48.76	54	74	-11.22	-25.24	Horizontal

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

Date of Test:May 17-18, 2010Temperature:25°CEUT:Syntek BlueW-2310 miniCardHumidity:50%Model No.:BlueW-2310 miniCardPower Supply:DC 3.3VTest Mode:802.11g Channel Low 2412MHzTest Engineer:Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain

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

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency	Reading(dBμV/m)	Factor	Result(c	lBμV/m)	Limit(d	BμV/m)	Margin(c	dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2400.000	38.92	44.95	-7.46	31.46	37.49	54	74	-22.54	-36.51	Vertical
2412.016	105.11	111.16	-7.43	97.68	103.73	-	-	-	-	Vertical
4824.028	50.69	56.74	-0.19	50.50	56.55	54	74	-3.50	-17.45	Vertical
2400.000	37.72	43.71	-7.46	30.26	36.25	54	74	-23.74	-37.75	Horizontal
2412.016	104.82	110.86	-7.43	97.39	103.43	-	-	-	-	Horizontal
4824.028	49.36	55.40	-0.19	49.17	55.21	54	74	-4.83	-18.79	Horizontal

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

Date of Test: May 17-18, 2010 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	Reading	Factor	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP	(dB)	QP	QP	QP	
-	-	1	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain

Frequency	Reading(dBμV/m)	Factor	Result(c	dBμV/m)	Limit(d	BμV/m)	Margin(dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2437.018	105.04	111.07	-7.36	97.68	103.71	-	-	-	-	Vertical
4874.030	49.88	55.91	0.09	49.97	56.00	54	74	-4.03	-18.00	Vertical
2437.018	104.90	110.95	-7.36	97.54	103.59	-	-	-	-	Horizontal
4874.030	48.78	54.82	0.09	48.87	54.91	54	74	-5.13	-19.09	Horizontal

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

Date of Test: May 17-18, 2010 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	Reading	Factor	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP	(dB)	QP	QP	QP	
-	-	1	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency	Reading(dBµV/m)		Factor	Result(dBµV/m)		Limit(d	BμV/m)	Margin(dBμV/m)	Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2462.017	105.44	111.46	-7.35	98.09	104.11	-	-	-	-	Vertical
2483.500	39.19	45.18	-7.37	31.82	37.81	54	74	-22.18	-36.19	Vertical
4924.031	49.90	55.92	0.34	50.24	56.26	54	74	-3.76	-17.74	Vertical
2462.017	104.57	110.60	-7.35	97.22	103.25	1	-	-	-	Horizontal
2483.500	39.56	45.61	-7.37	32.19	38.24	54	74	-21.81	-35.76	Horizontal
4924.031	49.12	55.16	0.34	49.46	55.50	54	74	-4.54	-18.50	Horizontal

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



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Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4868

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 1 (802.11b) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

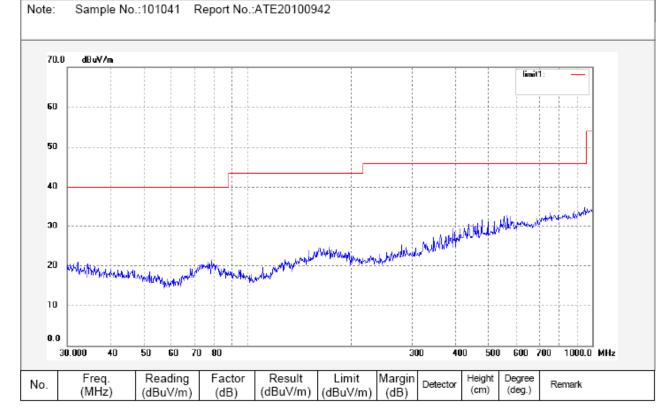
Power Source: DC 3.3V Date: 2010/05/17 Time: 15:14:31

Engineer Signature: Joe

Horizontal

Distance: 3m

Polarization:





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 #4869

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

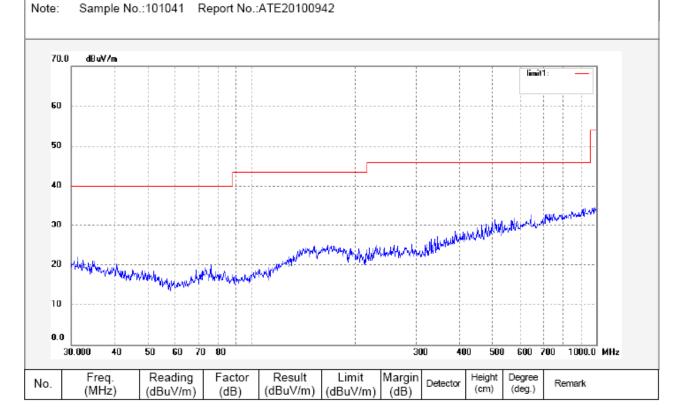
TX Channel 1 (802.11b) Mode: BlueW-2310 miniCard Model:

Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Power Source: DC 3.3V

Date: 2010/05/17 Time: 15:17:57

Engineer Signature: Joe





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 #4904

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

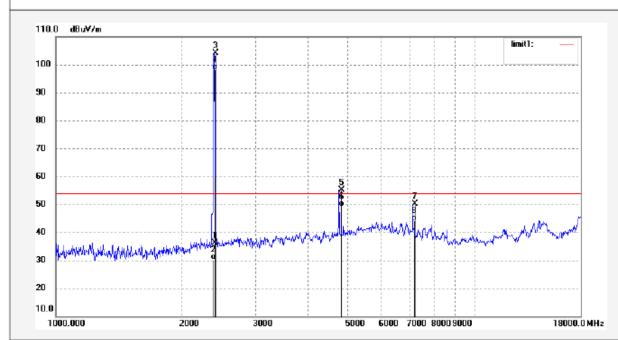
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:02:59

Engineer Signature: Joe



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	43.48	-7.46	36.02	74.00	-37.98	peak			
2	2400.000	37.52	-7.46	30.06	54.00	-23.94	AVG			
3	2412.020	111.56	-7.43	104.13	-	-	peak			
4	2412.020	105.59	-7.43	98.16	-	-	AVG			
5	4824.036	55.22	-0.19	55.03	74.00	-18.97	peak			
6	4824.036	49.22	-0.19	49.03	54.00	-4.97	AVG			
7	7236.052	47.15	3.05	50.20	74.00	-23.80	peak			
8	7236.052	41.13	3.05	44.18	54.00	-9.82	AVG			



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Job No.: RTTE #4905

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.

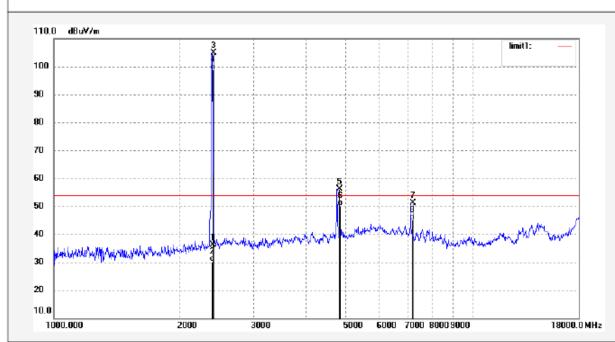
Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical

Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:07:10

Engineer Signature: Joe



No. Freq. (MHz) Reading (dBuV/m) Factor (dB) Result (dBuV/m) Limit (dBuV/m) Margin (dB) Detector (deg.) Height (deg.) Degree (deg.) Remark 1 2400.000 43.58 -7.46 36.12 74.00 -37.88 peak 9eak										
2 2400.000 37.59 -7.46 30.13 54.00 -23.87 AVG 3 2412.020 112.43 -7.43 105.00 - - peak 4 2412.020 106.42 -7.43 98.99 - - AVG 5 4824.036 56.22 -0.19 56.03 74.00 -17.97 peak 6 4824.036 50.21 -0.19 50.02 54.00 -3.98 AVG 7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	No.				1		Margin (dB)	Detector		Remark
3 2412.020 112.43 -7.43 105.00 - - peak 4 2412.020 106.42 -7.43 98.99 - - AVG 5 4824.036 56.22 -0.19 56.03 74.00 -17.97 peak 6 4824.036 50.21 -0.19 50.02 54.00 -3.98 AVG 7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	1	2400.000	43.58	-7.46	36.12	74.00	-37.88	peak		
4 2412.020 106.42 -7.43 98.99 - - AVG 5 4824.036 56.22 -0.19 56.03 74.00 -17.97 peak 6 4824.036 50.21 -0.19 50.02 54.00 -3.98 AVG 7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	2	2400.000	37.59	-7.46	30.13	54.00	-23.87	AVG		
5 4824.036 56.22 -0.19 56.03 74.00 -17.97 peak 6 4824.036 50.21 -0.19 50.02 54.00 -3.98 AVG 7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	3	2412.020	112.43	-7.43	105.00	-	-	peak		
6 4824.036 50.21 -0.19 50.02 54.00 -3.98 AVG 7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	4	2412.020	106.42	-7.43	98.99	-	-	AVG		
7 7236.052 47.96 3.05 51.01 74.00 -22.99 peak	5	4824.036	56.22	-0.19	56.03	74.00	-17.97	peak		
	6	4824.036	50.21	-0.19	50.02	54.00	-3.98	AVG		
8 7236.052 41.97 3.05 45.02 54.00 -8.98 AVG	7	7236.052	47.96	3.05	51.01	74.00	-22.99	peak		
	8	7236.052	41.97	3.05	45.02	54.00	-8.98	AVG		



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Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4916

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

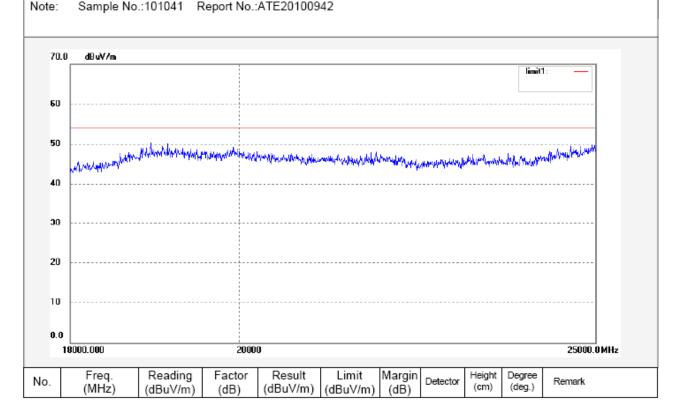
Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:57:50

Engineer Signature: Joe





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 #4917

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

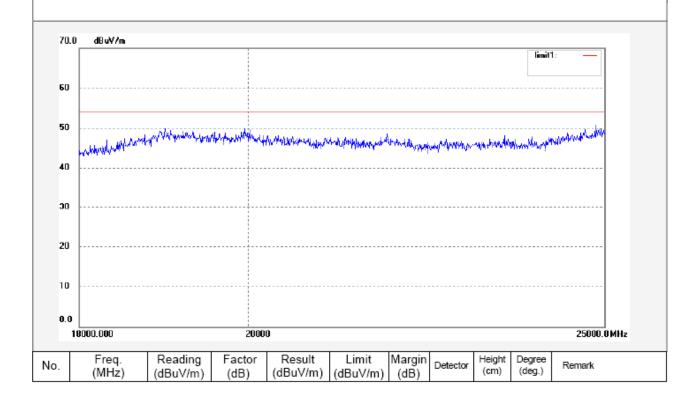
EUT: Syntek BlueW-2310 miniCard

Mode: TX Channal 1 (802.11b) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical
Power Source: DC 3.3V
Date: 2010/05/18
Time: 11:01:26
Engineer Signature: Joe





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 #4871

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 6 (802.11b)
Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Time: 15:25:40

Engineer Signature: Joe

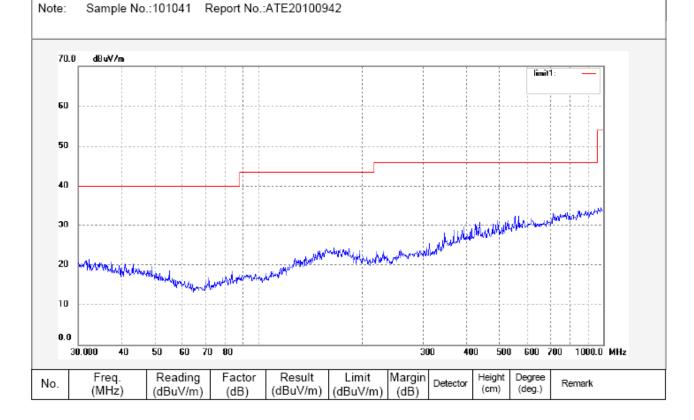
Power Source: DC 3.3V

Horizontal

Distance: 3m

Date: 2010/05/17

Polarization:





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 #4870

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard Mode: TX Channel 6 (802.11b)

Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

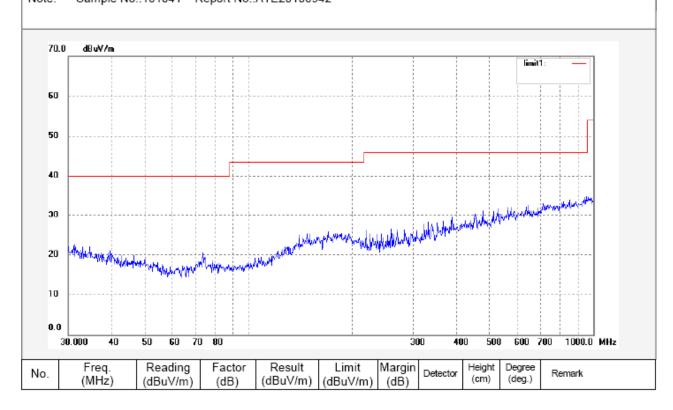
Note: Sample No.:101041 Report No.:ATE20100942

Power Source: DC 3.3V Date: 2010/05/17 Time: 15:22:02

Engineer Signature: Joe

Distance: 3m

Polarization:





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 #4907

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.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:15:49

Engineer Signature: Joe

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80													
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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 #4906

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

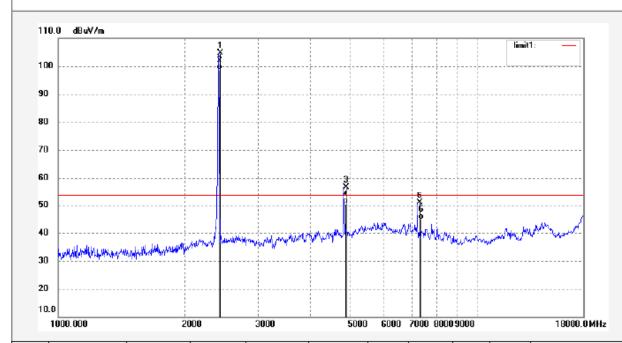
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:11:41

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.018	112.10	-7.36	104.74	-	-	peak			
2	2437.018	106.08	-7.36	98.72	-	-	AVG			
3	4874.032	56.45	0.09	56.54	74.00	-17.46	peak			
4	4874.032	50.41	0.09	50.50	54.00	-3.50	AVG			
5	7311.048	47.56	3.22	50.78	74.00	-23.22	peak			
6	7311.048	41.56	3.22	44.78	54.00	-9.22	AVG			



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 #4919

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

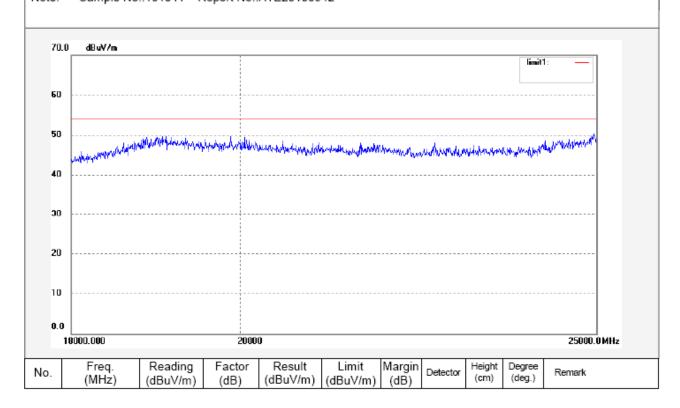
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 11:09:14

Engineer Signature: Joe





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 #4918

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

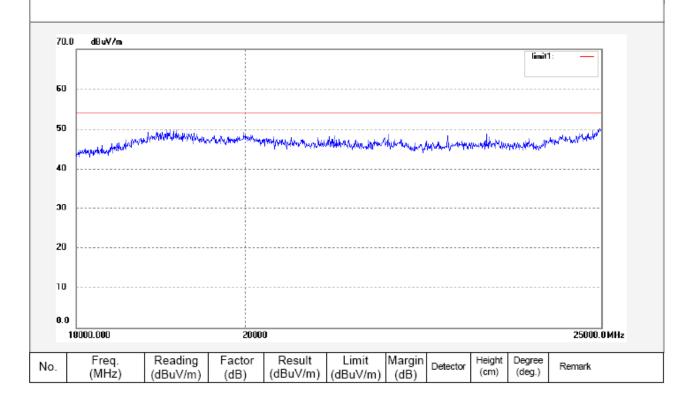
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical
Power Source: DC 3.3V

Date: 2010/05/18 Time: 11:05:40

Engineer Signature: Joe





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 #4872

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 11 (802.11b)
Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Time: 15:29:47

Power Source: DC 3.3V

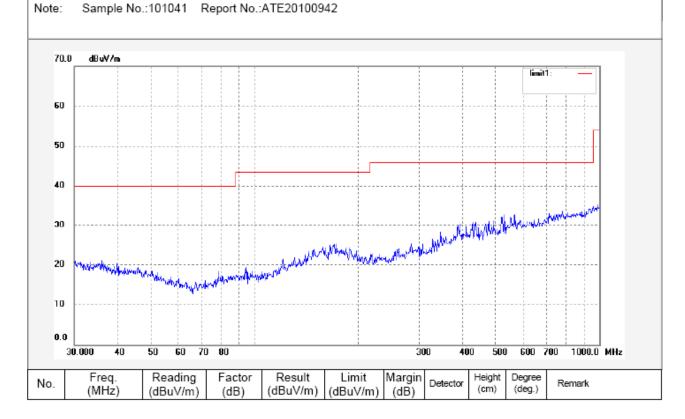
Engineer Signature: Joe

Horizontal

Distance: 3m

Date: 2010/05/17

Polarization:





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Polarization:

Date: 2010/05/17

Time: 15:33:20

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4873

Standard: FCC Class B 3M Radiated

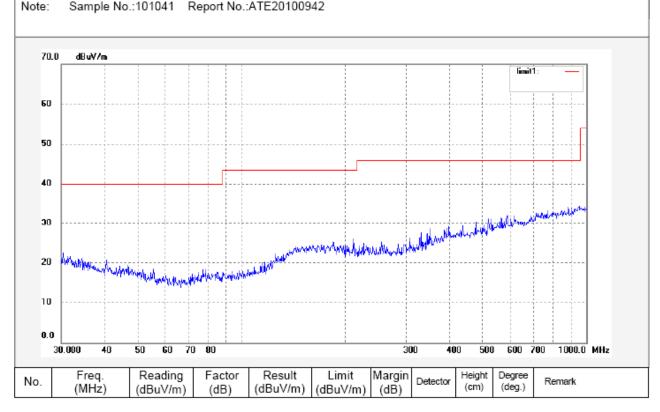
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 11 (802.11b) BlueW-2310 miniCard Model:

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942





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 #4908

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

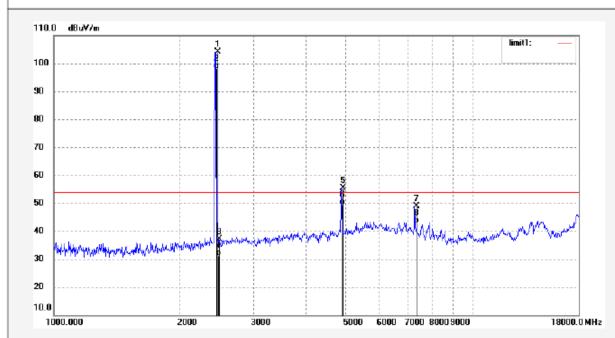
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:20:24

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.020	111.45	-7.35	104.10	-	-	peak			
2	2462.020	105.44	-7.35	98.09	-	-	AVG			
3	2483.500	44.55	-7.37	37.18	74.00	-36.82	peak			
4	2483.500	38.54	-7.37	31.17	54.00	-22.83	AVG			
5	4924.038	54.96	0.34	55.30	74.00	-18.70	peak			
6	4924.038	48.93	0.34	49.27	54.00	-4.73	AVG			
7	7386.054	45.37	3.39	48.76	74.00	-25.24	peak		·	
8	7386.054	39.39	3.39	42.78	54.00	-11.22	AVG			



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 #4909

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.

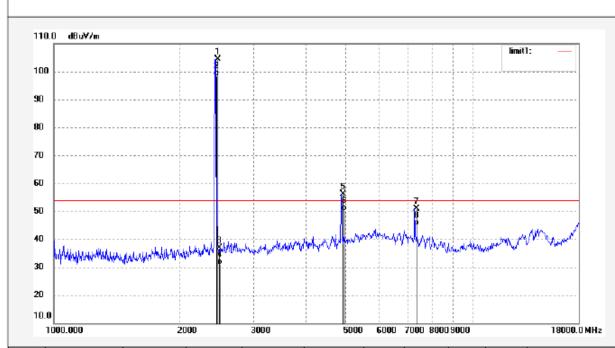
Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical

Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:24:30

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.020	111.79	-7.35	104.44	-	-	peak			
2	2462.020	105.77	-7.35	98.42	-	-	AVG			
3	2483.500	44.22	-7.37	36.85	74.00	-37.15	peak			
4	2483.500	38.21	-7.37	30.84	54.00	-23.16	AVG			
5	4924.038	55.79	0.34	56.13	74.00	-17.87	peak			
6	4924.038	49.75	0.34	50.09	54.00	-3.91	AVG			
7	7386.054	47.55	3.39	50.94	74.00	-23.06	peak			
8	7386.054	41.51	3.39	44.90	54.00	-9.10	AVG			



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 #4920

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.

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Date: 2010/05/18 Time: 11:13:25

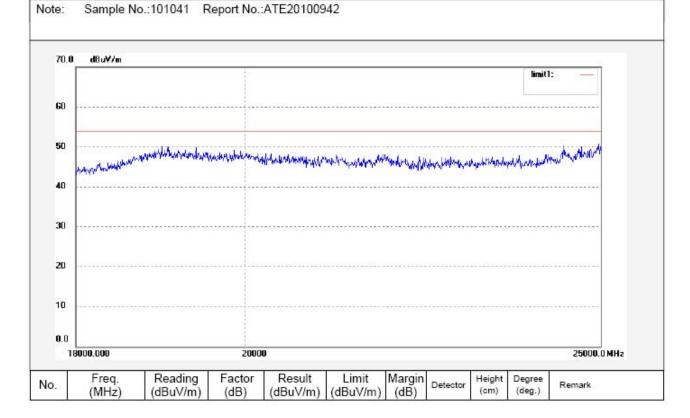
Power Source: DC 3.3V

Engineer Signature: Joe

Horizontal

Distance: 3m

Polarization:





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

Vertical

Polarization:

Date: 2010/05/18

Time: 11:16:58

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Job No.: RTTE #4921

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

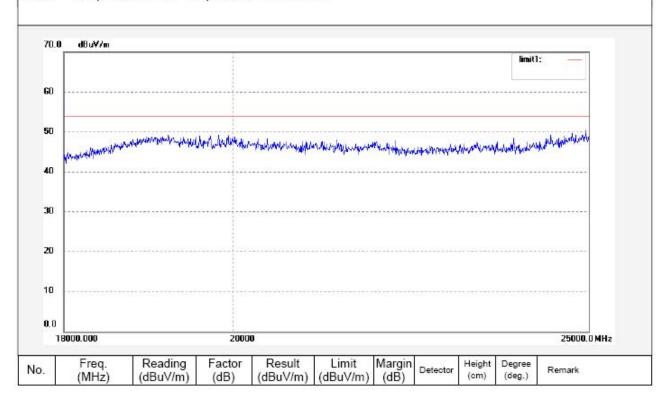
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channal 11 (802.11b) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942 Note:





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 #4875

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

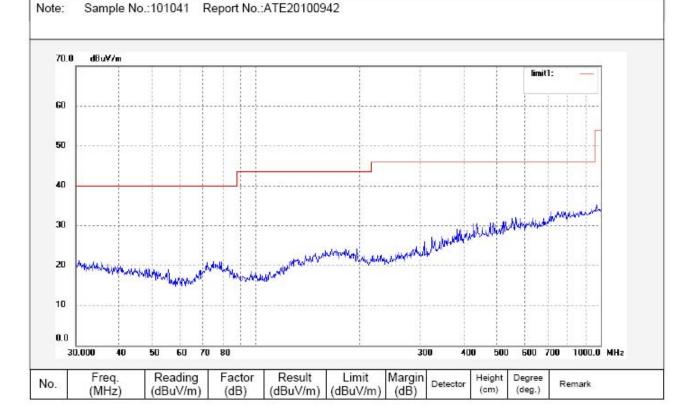
Mode: TX Channel 1 (802.11g)
Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/17 Time: 15:42:15

Engineer Signature: Joe





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Polarization:

Date: 2010/05/17

Time: 15:38:41

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Vertical

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4874

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

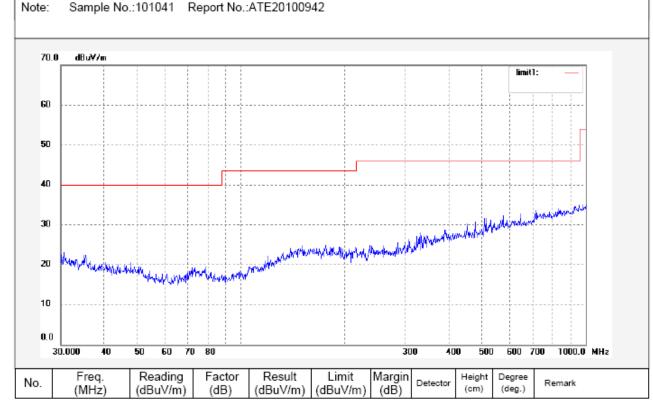
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 1 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942





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 #4911

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

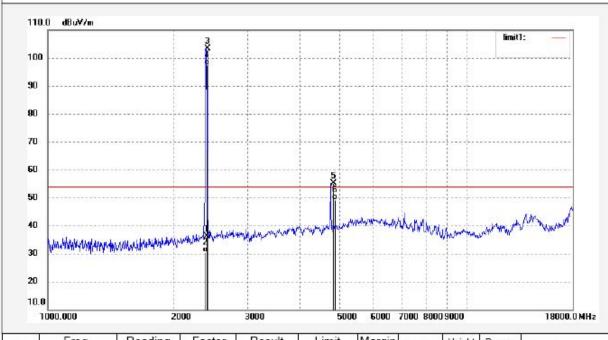
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:34:36

Engineer Signature: Joe



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	43.71	-7.46	36.25	74.00	-37.75	peak			
2	2400.000	37.72	-7.46	30.26	54.00	-23.74	AVG			
3	2412.016	110.86	-7.43	103.43	844	-	peak			
4	2412.016	104.82	-7.43	97.39	871	-	AVG			
5	4824.028	55.40	-0.19	55.21	74.00	-18.79	peak			
6	4824.028	49.36	-0.19	49.17	54.00	-4.83	AVG			



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 #4910

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

(MHz)

1

2

3

Δ 5

6

2400.000

2400.000

2412.016

2412.016

4824.028

4824.028

(dBuV/m)

44.95

38.92

111.16

105.11

56.74

50.69

(dB)

-7.46

-7.46

-7.43

-7.43

-0.19

-0.19

(dBuV/m)

37.49

31.46

103.73

97.68

56.55

50.50

(dBuV/m)

74.00

54.00

74.00

54.00

(dB)

-36.51

-22.54

-17.45

-3.50

peak

AVG

peak

AVG

peak

AVG

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channal 1 (802.11g) BlueW-2310 miniCard Model:

Manufacturer: Syntek Semiconductor Co., Ltd.

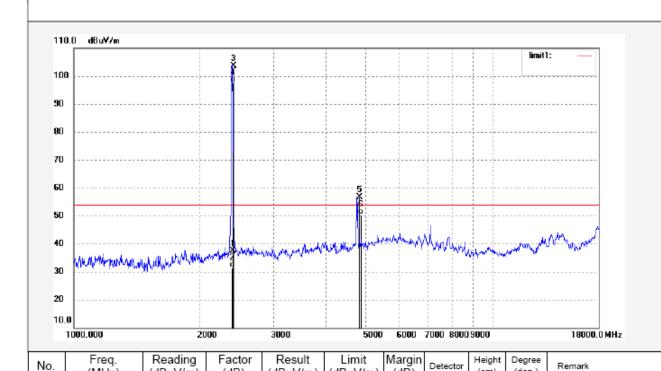
Sample No.:101041 Report No.:ATE20100942 Note:

Polarization: Vertical Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:30:27

Engineer Signature: Joe

Distance: 3m



(deg.)



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 #4923

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

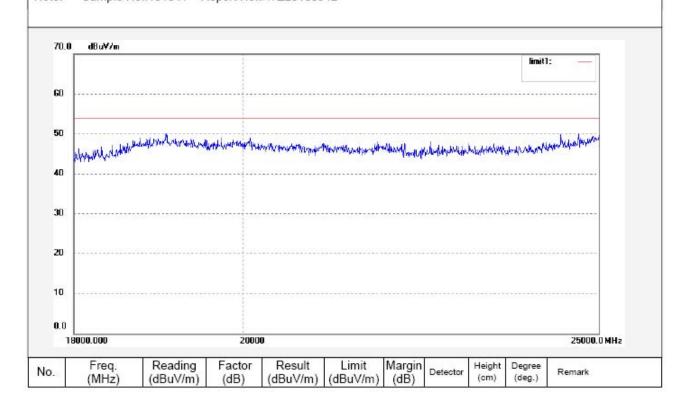
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 11:26:21

Engineer Signature: Joe





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 #4922

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

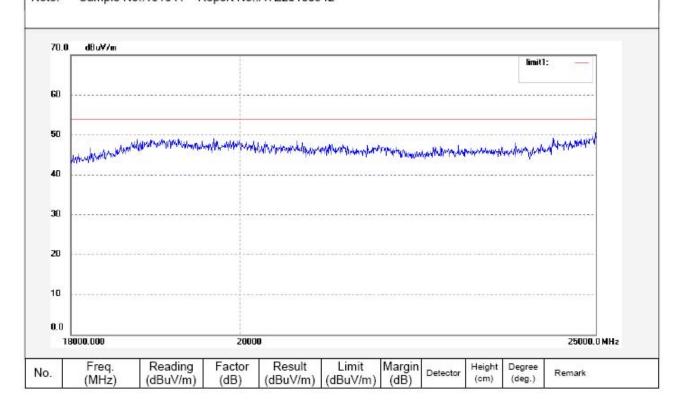
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical Power Source: DC 3.3V

Date: 2010/05/18 Time: 11:22:46

Engineer Signature: Joe





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Polarization:

Date: 2010/05/17

Time: 15:46:19

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Horizontal

Job No.: RTTE #4876

Standard: FCC Class B 3M Radiated

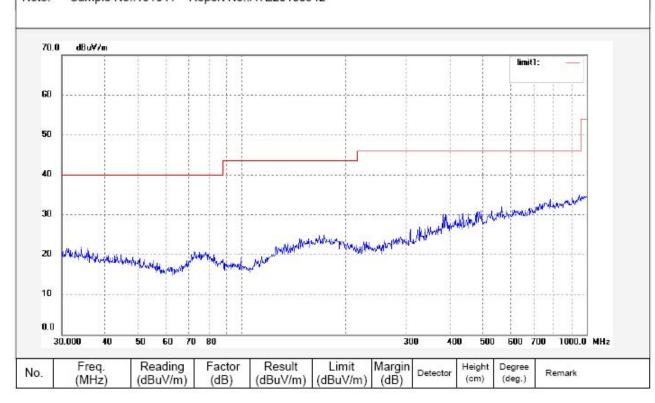
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 6 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942 Note:





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 #4877

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 6 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Date: 2010/05/17 Time: 15:49:50

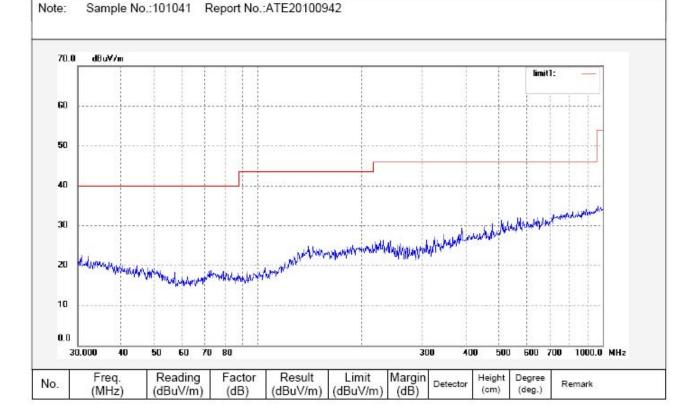
Power Source: DC 3.3V

Engineer Signature: Joe

Vertical

Distance: 3m

Polarization:





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 #4912

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

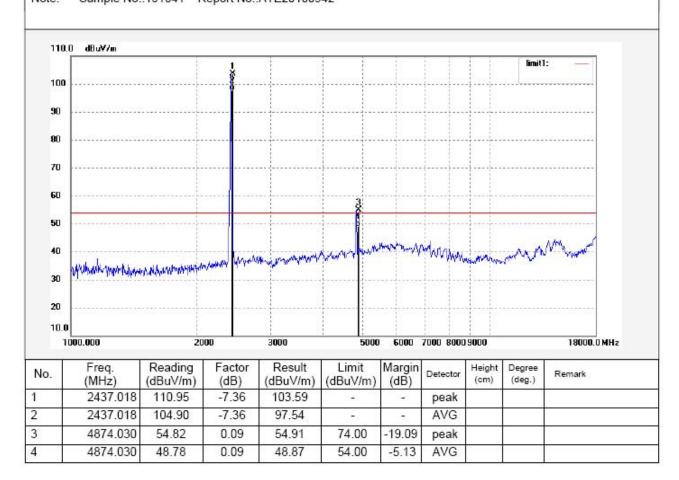
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:38:58

Engineer Signature: Joe





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 #4913

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

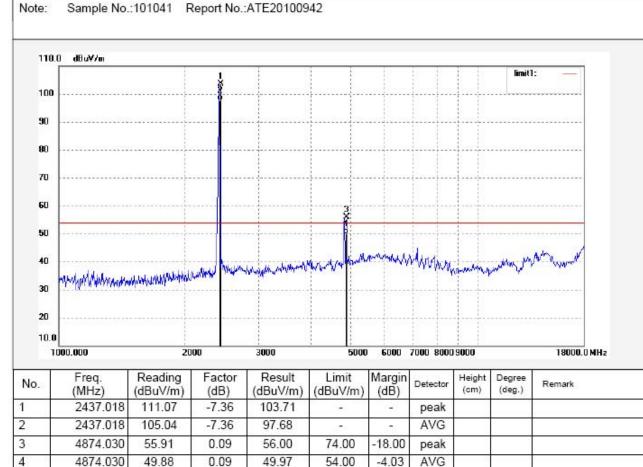
Manufacturer: Syntek Semiconductor Co., Ltd.

Vertical Polarization: Power Source: DC 3.3V

Date: 2010/05/18

Time: 10:43:06

Engineer Signature: Joe Distance: 3m



49.97

54.00

AVG

-4.03

4

4874.030

49.88



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Polarization:

Date: 2010/05/18

Time: 11:30:38

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Horizontal

Job No.: RTTE #4924

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

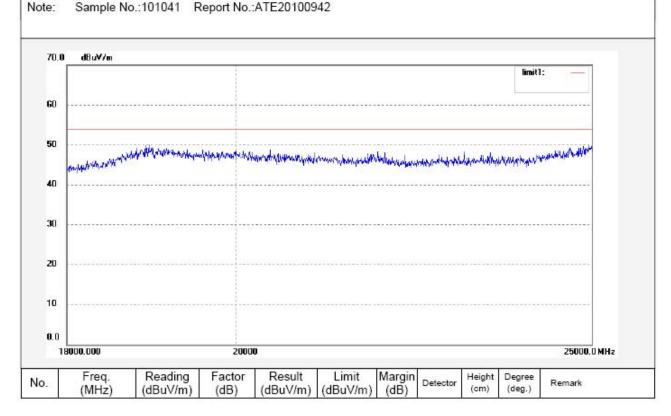
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channal 6 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942





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

Vertical

Polarization:

Date: 2010/05/18

Time: 11:34:11

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Job No.: RTTE #4925

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

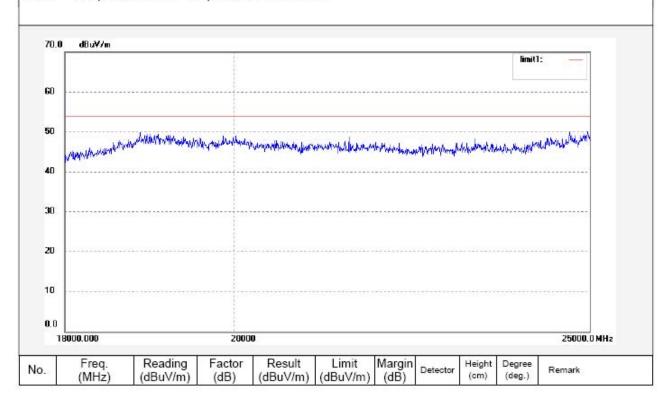
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Syntek BlueW-2310 miniCard

Mode: TX Channal 6 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942 Note:





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

Horizontal

Job No.: RTTE #4879

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 11 (802.11g)

Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Distance: 3m

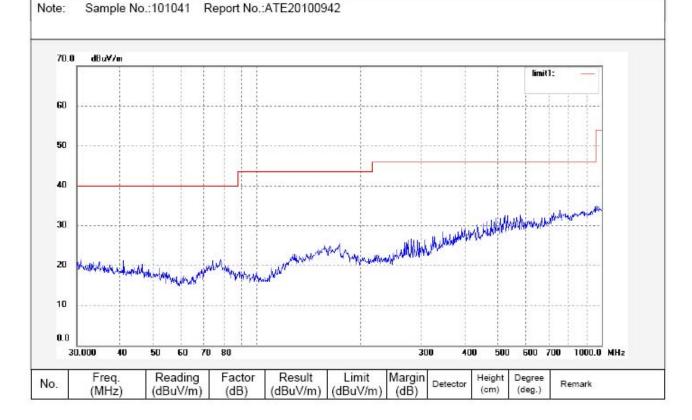
Polarization:

Date: 2010/05/17

Time: 15:57:29

Power Source: DC 3.3V

Engineer Signature: Joe





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Polarization:

Date: 2010/05/17

Time: 15:53:55

Distance: 3m

Power Source: DC 3.3V

Engineer Signature: Joe

Vertical

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4878

Standard: FCC Class B 3M Radiated

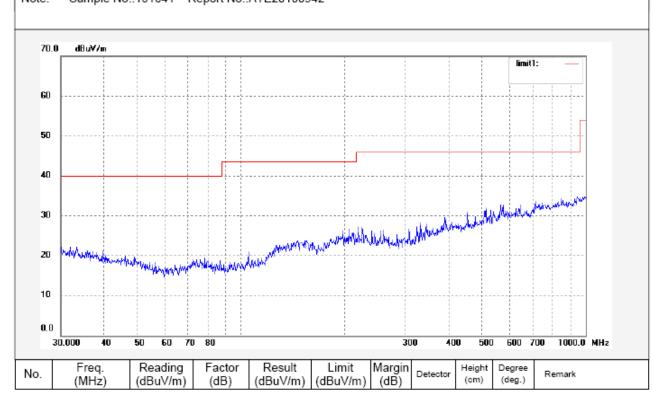
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Syntek BlueW-2310 miniCard

Mode: TX Channel 11 (802.11g) Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Sample No.:101041 Report No.:ATE20100942 Note:





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 #4915

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

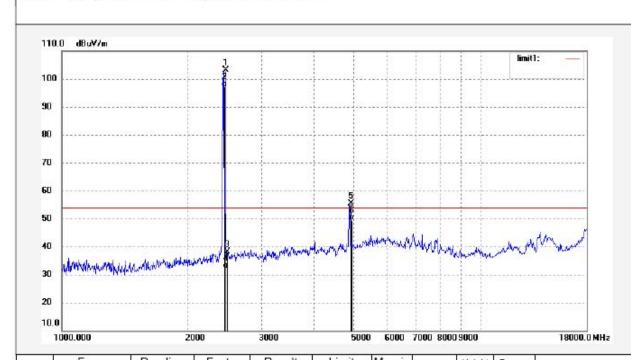
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:51:23

Engineer Signature: Joe



No.	Freq. (MHz)	(dBuV/m)	Factor (dB)	(dBuV/m)	(dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2462.017	110.60	-7.35	103.25	3. 4 1	-	peak				
2	2462.017	104.57	-7.35	97.22	-	- 7	AVG				
3	2483.500	45.61	-7.37	38.24	74.00	-35.76	peak				
4	2483.500	39.56	-7.37	32.19	54.00	-21.81	AVG			2	
5	4924.031	55.16	0.34	55.50	74.00	-18.50	peak				
6	4924.031	49.12	0.34	49.46	54.00	-4.54	AVG				



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 #4914

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

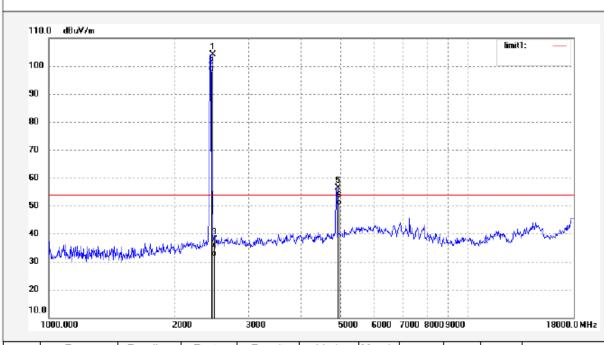
Manufacturer: Syntek Semiconductor Co., Ltd.

Note: Sample No.:101041 Report No.:ATE20100942

Polarization: Vertical Power Source: DC 3.3V

Date: 2010/05/18 Time: 10:47:17

Engineer Signature: Joe



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.017	111.46	-7.35	104.11	-	-	peak			
2	2462.017	105.44	-7.35	98.09	-	-	AVG			
3	2483.500	45.18	-7.37	37.81	74.00	-36.19	peak			
4	2483.500	39.19	-7.37	31.82	54.00	-22.18	AVG			
5	4924.031	55.92	0.34	56.26	74.00	-17.74	peak			
6	4924.031	49.90	0.34	50.24	54.00	-3.76	AVG			



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 #4927

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

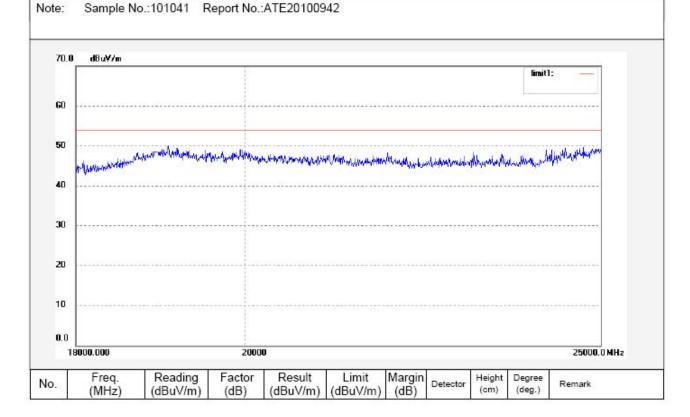
Manufacturer: Syntek Semiconductor Co., Ltd.

manadada of Officer Commondador Co., Etc.

Polarization: Horizontal Power Source: DC 3.3V

Date: 2010/05/18 Time: 11:41:59

Engineer Signature: Joe





Note:

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 #4926

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)

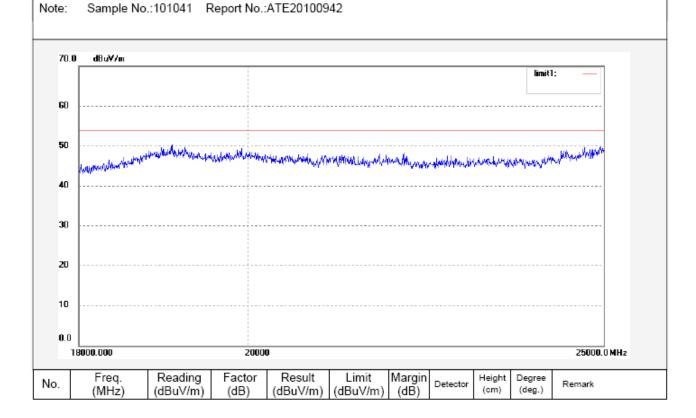
Model: BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Polarization: Vertical Power Source: DC 3.3V

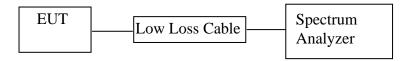
Date: 2010/05/18 Time: 11:38:24

Engineer Signature: Joe



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.

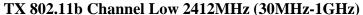
10.5.Test Procedure

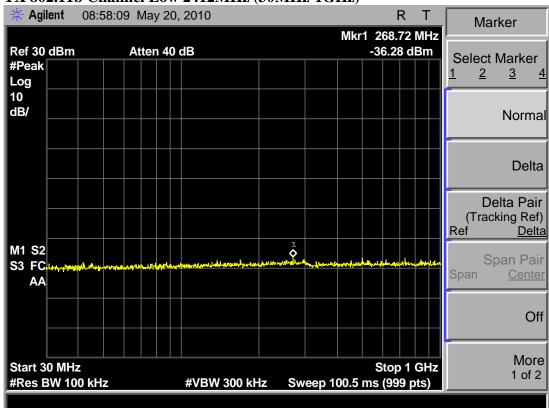
- 10.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.
- 10.5.3. The Conducted Spurious Emission was measured and recorded.

10.6.Test Result

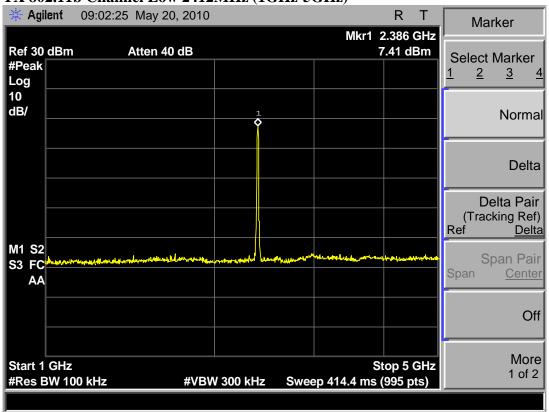
Pass.

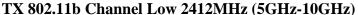
The spectrum analyzer plots are attached as below.

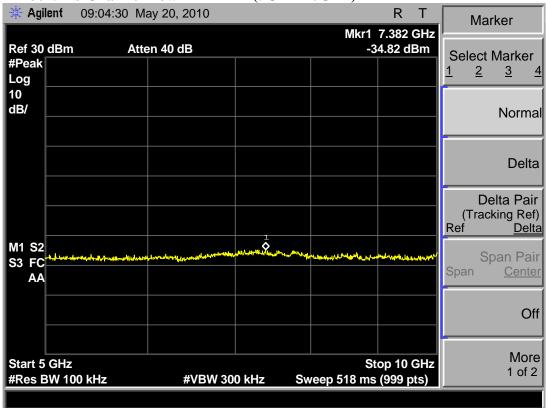




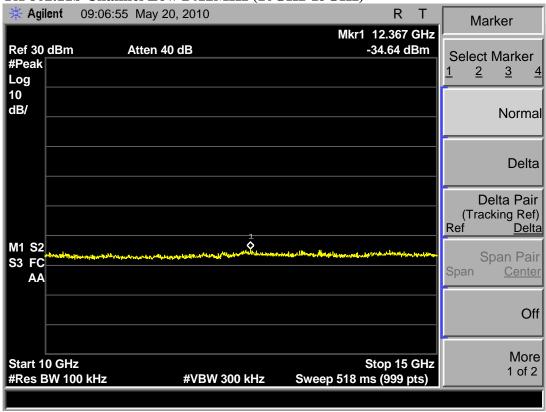
TX 802.11b Channel Low 2412MHz (1GHz-5GHz)



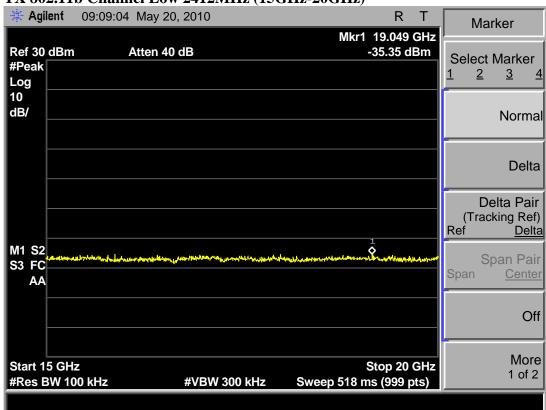




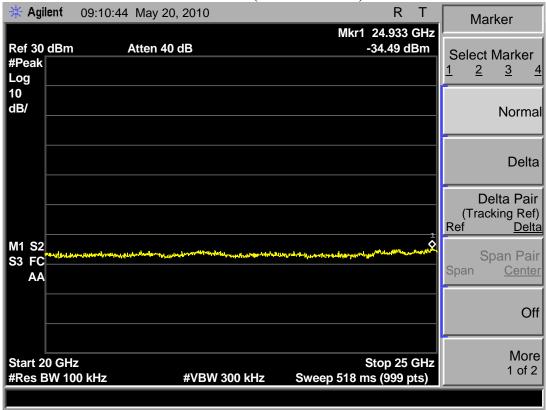
TX 802.11b Channel Low 2412MHz (10GHz-15GHz)



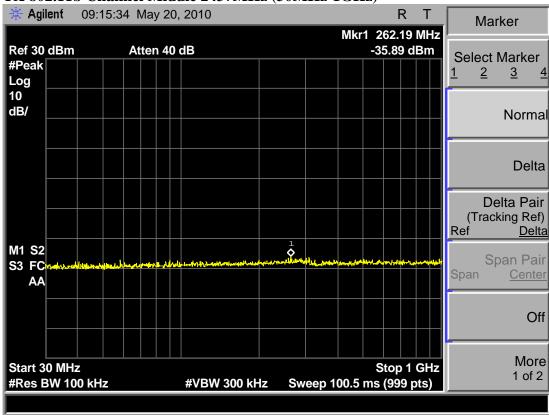
TX 802.11b Channel Low 2412MHz (15GHz-20GHz)



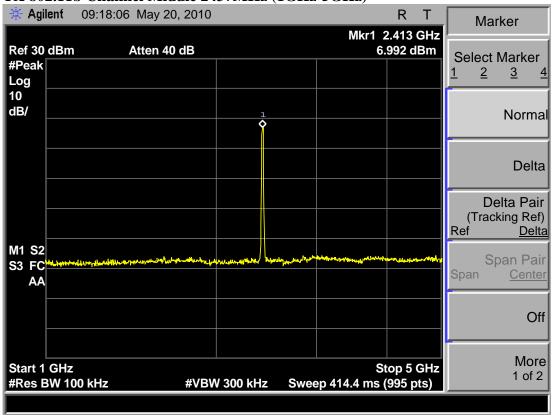
TX 802.11b Channel Low 2412MHz (20GHz-25GHz)



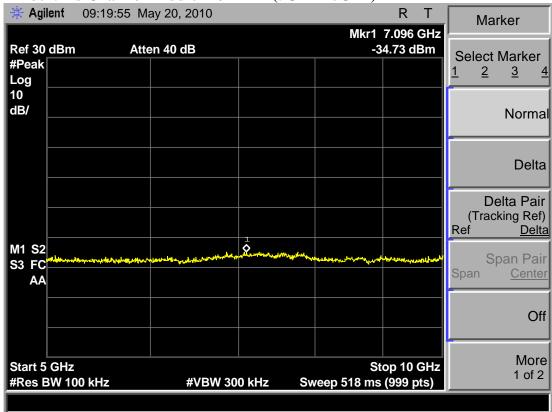




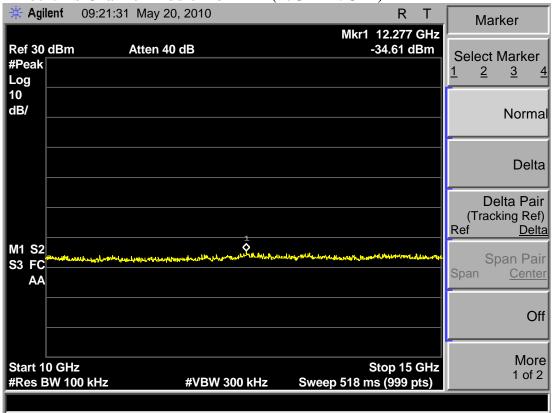
TX 802.11b Channel Middle 2437MHz (1GHz-5GHz)



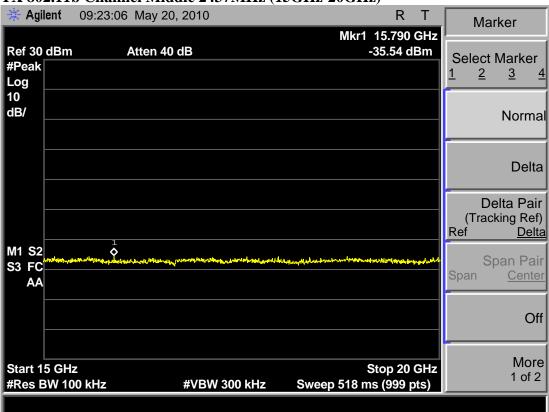




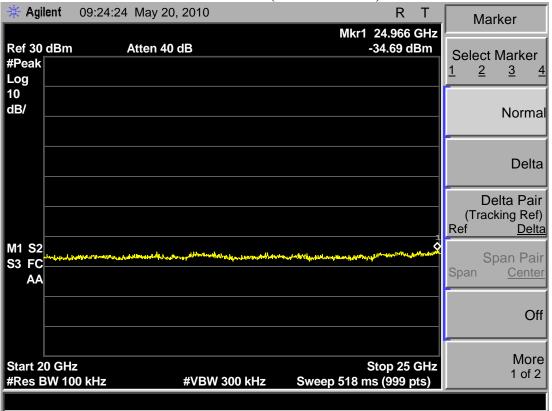
TX 802.11b Channel Middle 2437MHz (10GHz-15GHz)

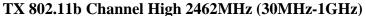


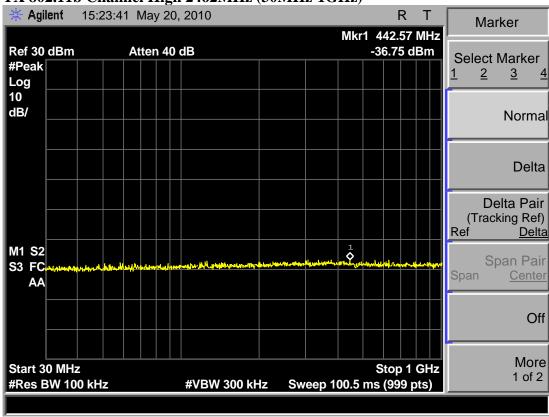
TX 802.11b Channel Middle 2437MHz (15GHz-20GHz)



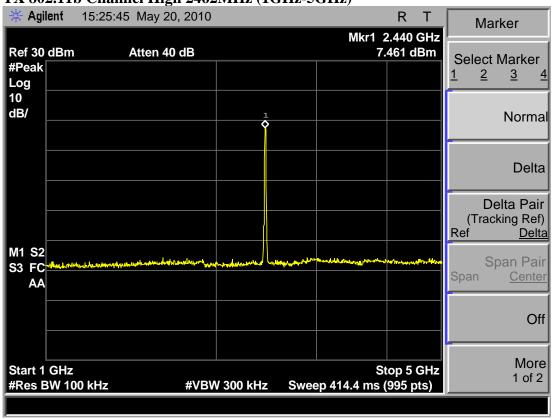
TX 802.11b Channel Middle 2437MHz (20GHz-25GHz)

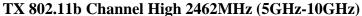


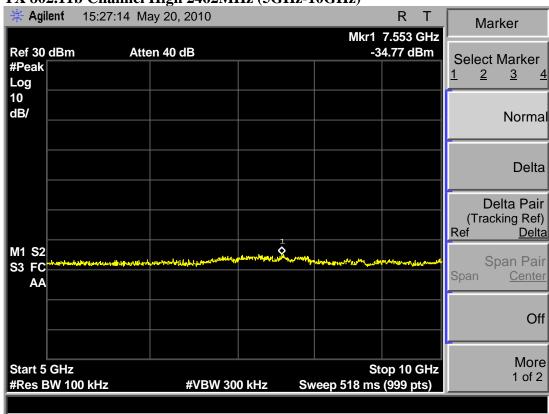




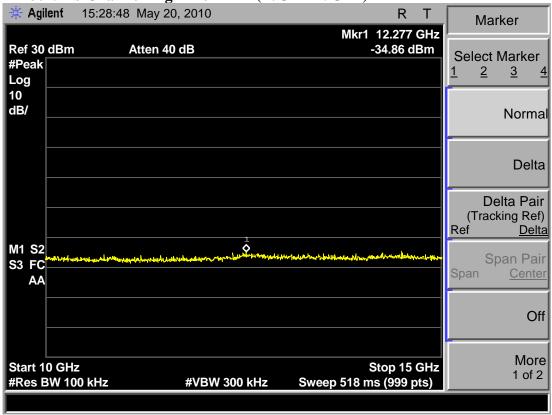
TX 802.11b Channel High 2462MHz (1GHz-5GHz)

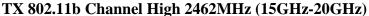


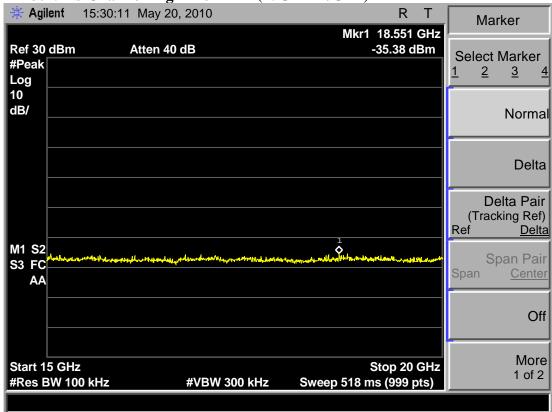




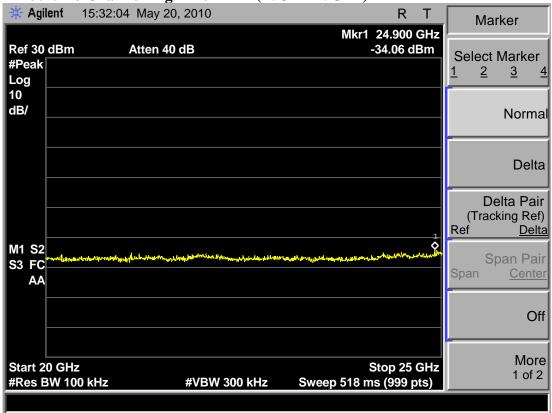
TX 802.11b Channel High 2462MHz (10GHz-15GHz)

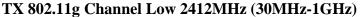


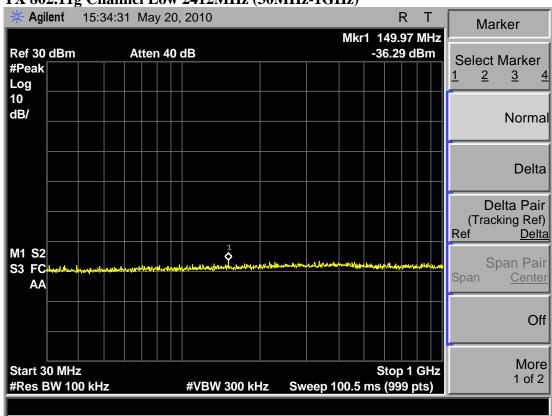




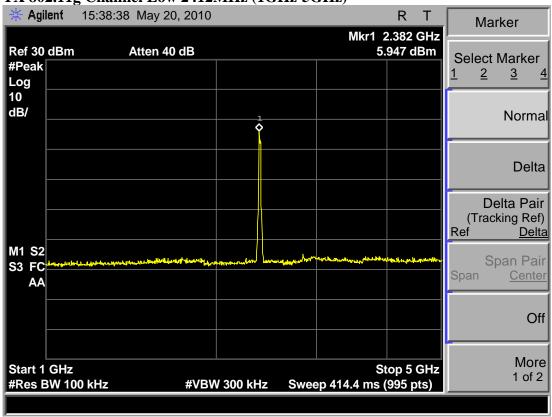
TX 802.11b Channel High 2462MHz (20GHz-25GHz)

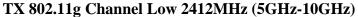


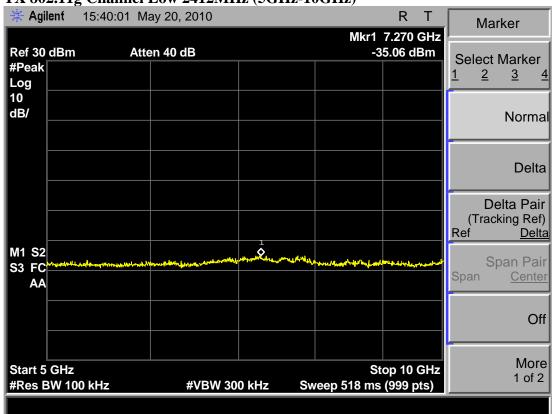




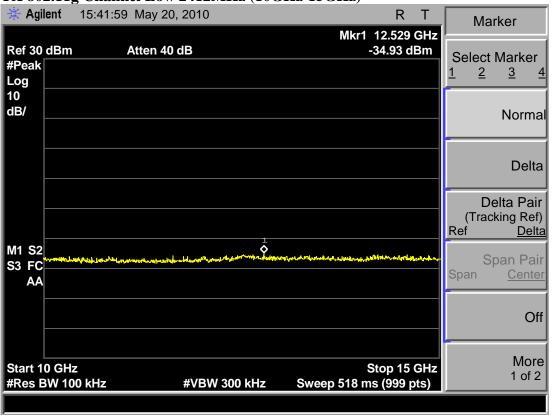
TX 802.11g Channel Low 2412MHz (1GHz-5GHz)

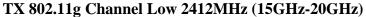


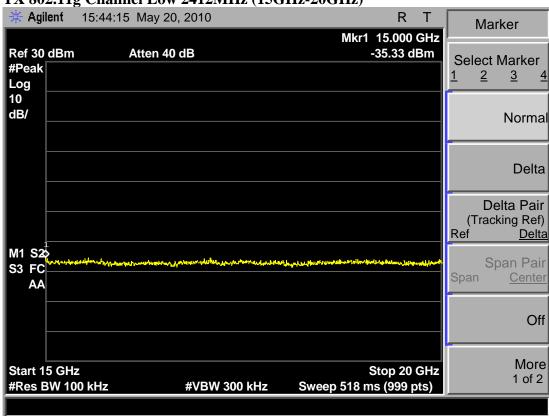




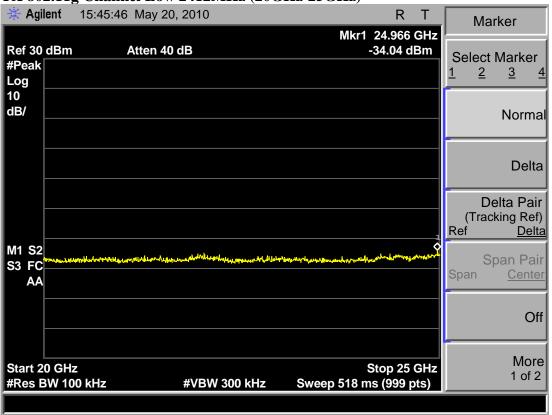
TX 802.11g Channel Low 2412MHz (10GHz-15GHz)



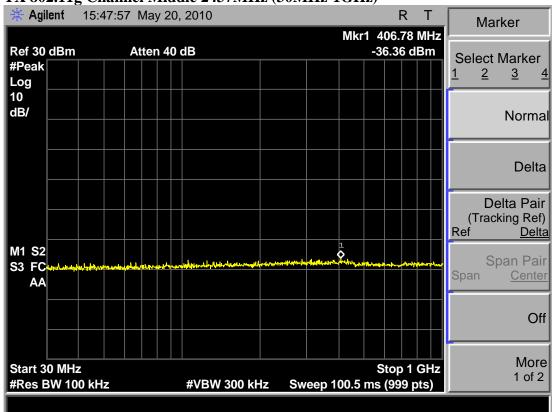




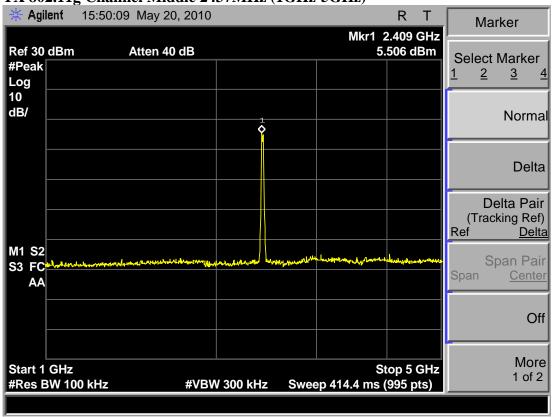
TX 802.11g Channel Low 2412MHz (20GHz-25GHz)



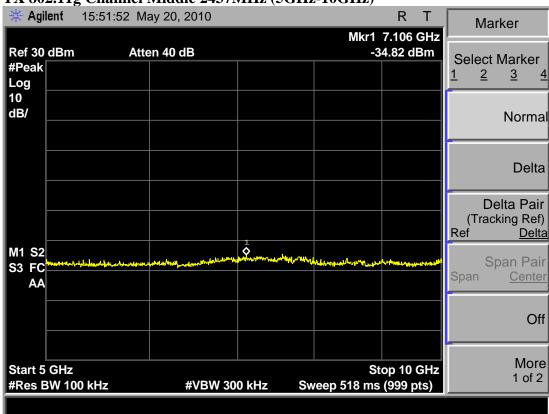




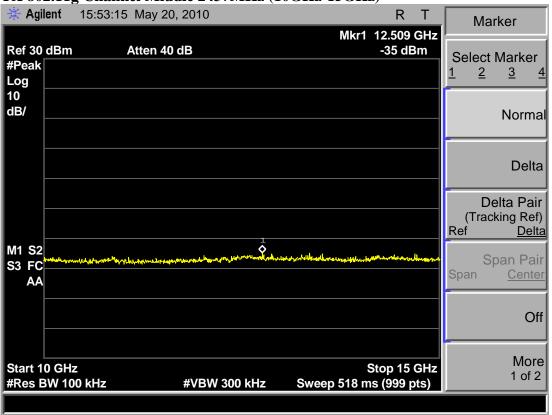
TX 802.11g Channel Middle 2437MHz (1GHz-5GHz)



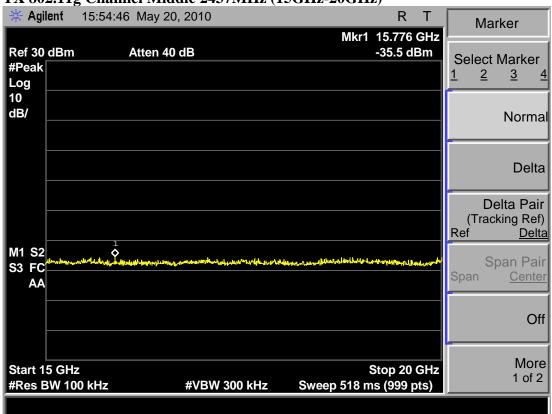




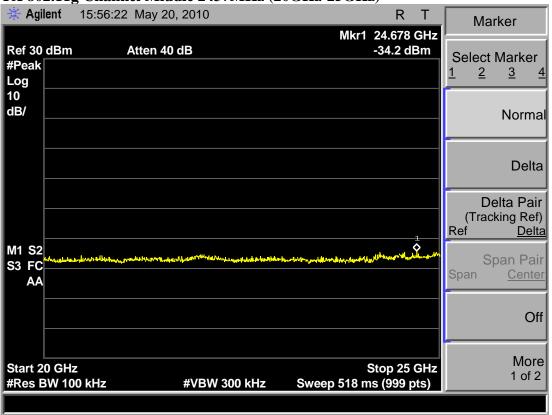
TX 802.11g Channel Middle 2437MHz (10GHz-15GHz)

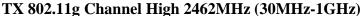


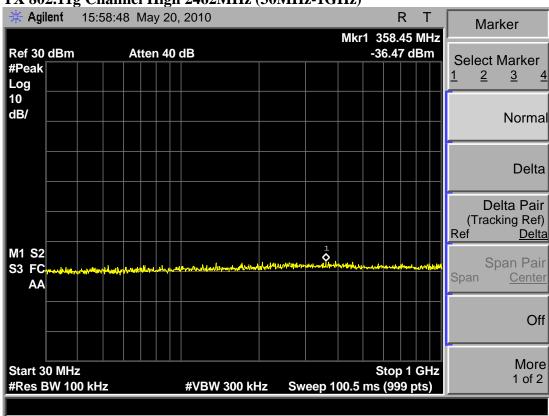




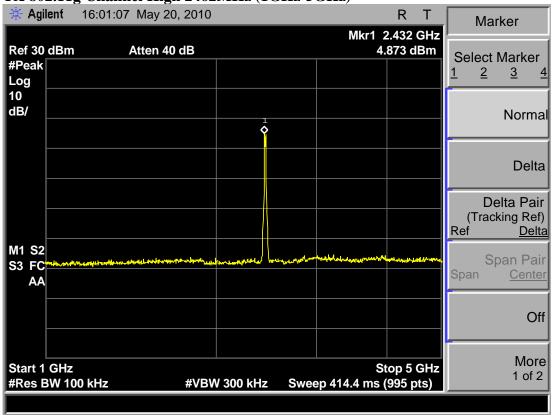
TX 802.11g Channel Middle 2437MHz (20GHz-25GHz)



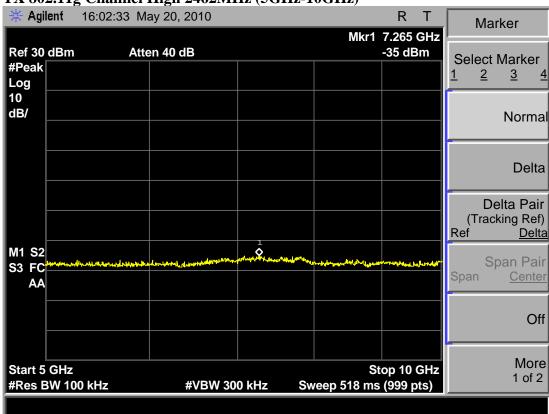




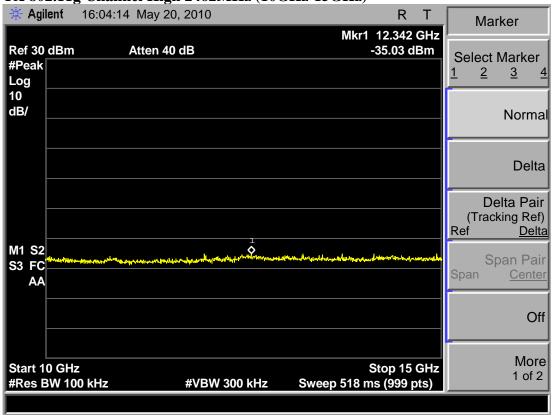
TX 802.11g Channel High 2462MHz (1GHz-5GHz)

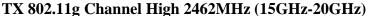


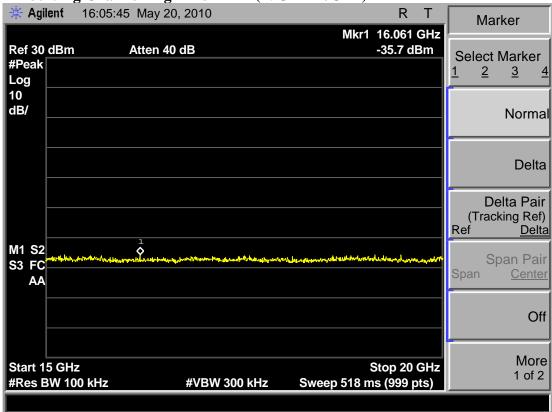




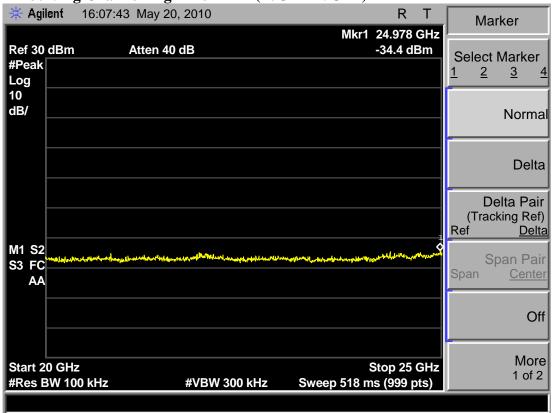
TX 802.11g Channel High 2462MHz (10GHz-15GHz)







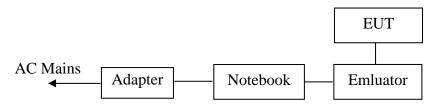
TX 802.11g Channel High 2462MHz (20GHz-25GHz)



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

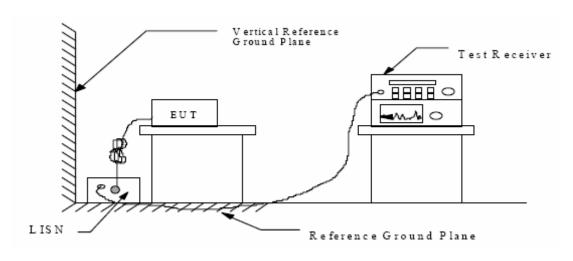
11.1.Block Diagram of Test Setup

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	Limit d	$B(\mu V)$
(MHz)	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 500hm 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: May 15, 2010

EUT: Syntek BlueW-2310 miniCard

Model No.: BlueW-2310 miniCard

Test Mode: TX 802.11b Channel Middle

Test Engineer: Joe

Frequency (MHz)			Margin (dB)	Detector	Line
0.199834	51.60	63.6	-12.0	QP	
0.499611	45.60	56.0	-10.4	QP	
1.998776	43.40	56.0	-12.6	QP	NT
0.201433	45.80	53.6	-7.8	AV	Neutral
0.499611	39.80	46.0	-6.2	AV	
1.998776	39.90	46.0	-6.1	AV	
0.199834	54.90	63.6	-8.7	QP	
0.300025	47.60	60.2	-12.6	QP	
0.499611	42.30	56.0	-13.7	QP	τ.
0.198248	44.10	53.7	-9.6	AV	Live
1.998776	38.60	46.0	-7.4	AV	
2.096657	37.80	46.0	-8.2	AV	

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

Date of Test: May 15, 2010 Temperature: 25°C

EUT: Syntek BlueW-2310 miniCard Humidity: 50%

Model No.:BlueW-2310 miniCardPower Supply:AC 120V/60HzTest Mode:TX 802.11g Channel MiddleTest Engineer:Joe

Frequency (MHz)	Result (dBμV)	Limit (dBµV)	Margin (dB)	Detector	Line
0.199834	51.80	63.6	-11.8	QP	
0.499611	45.40	56.0	-10.6	QP	
1.998776	43.50	56.0	-12.5	QP	NY . 1
0.201433	45.70	53.6	-7.9	AV	Neutral
0.499611	39.60	46.0	-6.4	AV	
1.998776	40.00	46.0	-6.0	AV	
0.199834	55.0	63.6	-8.6	QP	
0.300025	47.50	60.2	-12.7	QP	
0.499611	42.50	56.0	-13.5	QP	. .
0.198248	44.30	53.7	-9.4	AV	Live
1.998776	38.70	46.0	-7.3	AV	
2.096657	37.90	46.0	-8.1	AV	

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

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Syntek BlueW-2310 miniCard M/N:BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Operating Condition: TX Channel 6 (802.11b) Test Site: 1#Shielding Room

Operator: Joe

Test Specification: N 120V/60Hz

Comment: Sample No.:101041 Report No.:ATE20100942

Start of Test: 5/15/2010 / 8:57:30AM

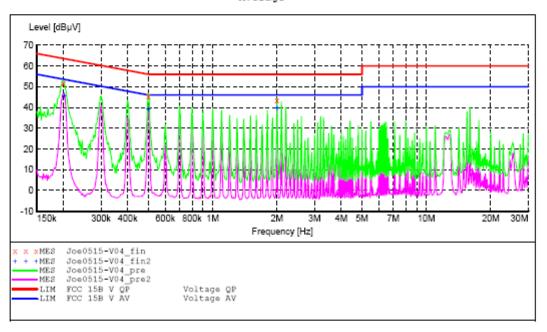
SCAN TABLE: "V 150K-30MHz fin"

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: "Joe0515-V04 fin"

5,	/15/2010 8:5	9AM						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.199834	51.60	11.2	64	12.0	QP	N	GND
	0.499611	45.60	12.0	56	10.4	QP	N	GND
	1.998776	43.40	11.7	56	12.6	OP	N	GND

MEASUREMENT RESULT: "Joe0515-V04 fin2"

57	1	5	/2	01	0	8	5	9AM
~,	-	~,	-	~-	~	•	~	

٠,	13/2010 0.3	JAL I						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.201433	45.80	11.2	54	7.8	AV	N	GND
	0.499611	39.80	12.0	46	6.2	AV	N	GND
	1.998776	39.90	11.7	46	6.1	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Syntek BlueW-2310 miniCard M/N:BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Operating Condition: TX Channel 6 (802.11b) Test Site: 1#Shielding Room

Operator: Joe

Test Specification: L 120V/60Hz

Sample No.:101041 Report No.:ATE20100942 Comment:

Start of Test: 5/15/2010 / 8:55:13AM

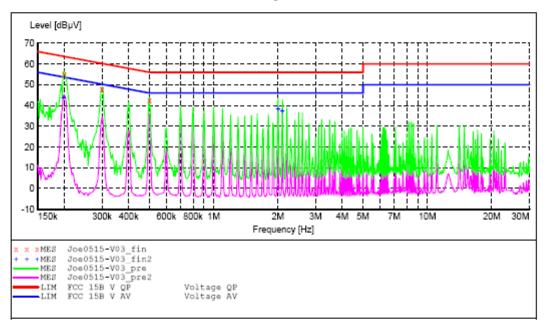
SCAN TABLE: "V 150K-30MHz fin" Short Description: SUB STD VTERM2 1.70

Step Start Detector Meas. TE Transducer Stop

Bandw. Time

Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % 9 kHz NSLK8126 2008 QuasiPeak 1.0 s

Average



MEASUREMENT RESULT: "Joe0515-V03 fin"

5/15/2010 8:5	6AM						
Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.199834	54.90	11.2	64	8.7	QP	L1	GND
0.300025	47.60	11.6	60	12.6	QP	L1	GND
0.499611	42.30	12.0	56	13.7	QP	L1	GND

MEASUREMENT RESULT: "Joe0515-V03_fin2"

6AM						
Level	Transd	Limit	Margin	Detector	Line	PE
dBuV	dB	dBuV	dB			
GD pt 1		G_ p	4.2			
44 10	11 2	5.4	9.6	2.17	T.1	GND
38.60	11.7	46	7.4	AV	L1	GND
37.80	11.6	46	8.2	AV	L1	GND
	Level dBµV 44.10 38.60	Level Transd dBμV dB 44.10 11.2 38.60 11.7	Level Transd Limit dBμV dB dBμV 44.10 11.2 54 38.60 11.7 46	Level Transd Limit Margin dBμV dB dBμV dB 44.10 11.2 54 9.6 38.60 11.7 46 7.4	Level Transd dB μV Limit dB μV Margin dB Detector dB 44.10 11.2 54 9.6 AV 38.60 11.7 46 7.4 AV	Level Transd Limit Margin Detector Line dBμV dB dB dB dB Line dB dB Line Lin

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Syntek BlueW-2310 miniCard M/N:BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Operating Condition: TX Channel 6 (802.11g) Test Site: 1#Shielding Room

Operator: Joe

Test Specification: N 120V/60Hz

Comment: Sample No.:101041 Report No.:ATE20100942

Start of Test: 5/15/2010 / 9:01:12AM

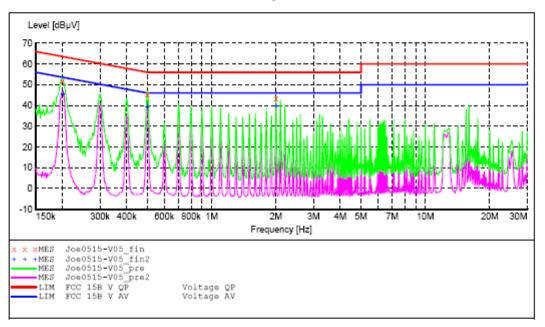
SCAN TABLE: "V 150K-30MHz fin"

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: "Joe0515-V05 fin"

5/15/2010 9:0	2AM						
Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.199834	51.80	11.2	64	11.8	QP	N	GND
0.499611	45.40	12.0	56	10.6	QP	N	GND
1.998776	43.50	11.7	56	12.5	QP	N	GND

MEASUREMENT RESULT: "Joe0515-V05 fin2"

5/15/2010 9:0	2AM						
Frequency				-	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.201433	45.70	11.2	54	7.9	AV	N	GND
0.499611	39.60	12.0	46	6.4	AV	N	GND
1.998776	40.00	11.7	46	6.0	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Syntek BlueW-2310 miniCard M/N:BlueW-2310 miniCard

Manufacturer: Syntek Semiconductor Co., Ltd.

Operating Condition: TX Channel 6 (802.11g) Test Site: 1#Shielding Room

Operator: Joe

Test Specification: L 120V/60Hz

Comment: Sample No.:101041 Report No.:ATE20100942

Start of Test: 5/15/2010 / 9:04:25AM

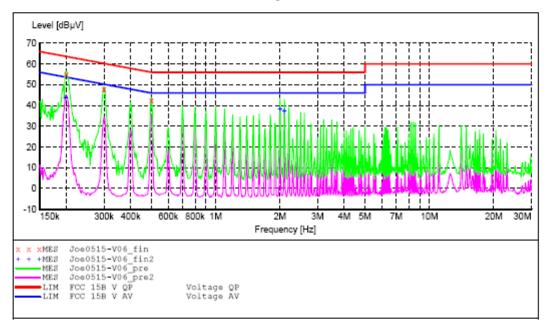
SCAN TABLE: "V 150K-30MHz fin"

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: "Joe0515-V06 fin"

5/15/2010 9:06AM										
Frequen M	cy Leve Hz dBµ'			Margin dB	Detector	Line	PE			
0.1998	34 55.0	0 11.2	64	8.6	QP	L1	GND			
0.3000	25 47.5	0 11.6	60	12.7	QP	L1	GND			
0.4996	11 42.5	0 12.0	56	13.5	QP	L1	GND			

MEASUREMENT RESULT: "Joe0515-V06 fin2"

5/15/2010 9:06AM										
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE		
	0.198248	44.30	11.2	54	9.4	AV	L1	GND		
	1.998776	38.70	11.7	46	7.3	AV	L1	GND		
	2.096657	37.90	11.6	46	8.1	AV	L1	GND		

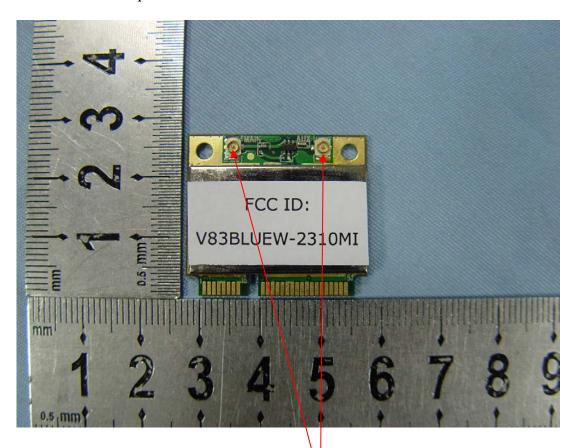
12.ANTENNA REQUIREMENT (WI-FI)

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