APPLICATION CERTIFICATION FCC Part 15C On Behalf of SPX Transportation & Industrial Solutions (Suzhou) Co., Ltd.

PC-SCAN Model No.: GIDS, CHDS

FCC ID: YDJGIDSCHDS

Prepared for : SPX Transportation & Industrial Solutions (Suzhou) Co.,

Ltd.

Address : No.158-128 Huashan Road, Suzhou New District, Suzhou,

215129, China

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Report Number : ATE20100831
Date of Test : May 4-6, 2010
Date of Report : May 7, 2010

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Test Report Certification

Applicant : SPX Transportation & Industrial Solutions (Suzhou) Co., Ltd.

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou) Co., Ltd.

EUT Description: PC-SCAN

(A) MODEL NO.: GIDS, CHDS (The two models are only different in plastic enclosures)

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: AC 100-240V, 50-60Hz

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 4-6, 2010	
Prepared by:	9	
	Joe	
	(Engineer)	
Approved & Authorized Signer:	Seem (
	(Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : PC-SCAN

Model Number : GIDS, CHDS

(The two models are only different in plastic enclosures)

(Note: only model GIDS is tested.)

Frequency Band : 2412-2462MHz

Number of Channels : 11 Antenna Gain : 0dBi

Power Supply : AC 100-240V, 50-60Hz Adapter : Model: GM-120300

Input: 100-240V, 50/60Hz, 1.5A

Output: DC 12V, 3A

Output line: Non-shielded, non-detachable, 1.4m with one

ferrite core

Data Rate : IEEE 802.11b: 11/5.5/2/1Mbps

IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps

Applicant : SPX Transportation & Industrial Solutions (Suzhou) Co.,

Ltd.

Address : No.158-128 Huashan Road, Suzhou New District,

Suzhou, 215129, China

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou) Co.,

Ltd.

Address : No.158-128 Huashan Road, Suzhou New District,

Suzhou, 215129, China

Date of sample received: April 22, 2010

Date of Test : May 4-6, 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 = 4.42 dB, 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	Туре	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

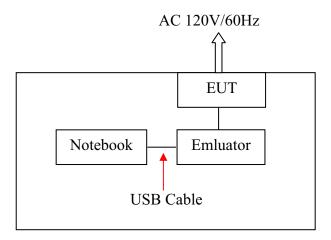


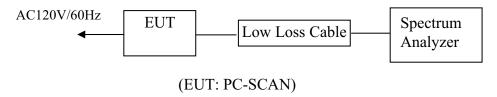
Figure 1 Setup: Transmitting mode

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)	Section 15.247(b)(3) Maximum Peak Output Power Test	
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Radiated Spurious Emission Test Section 15.209		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



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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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.

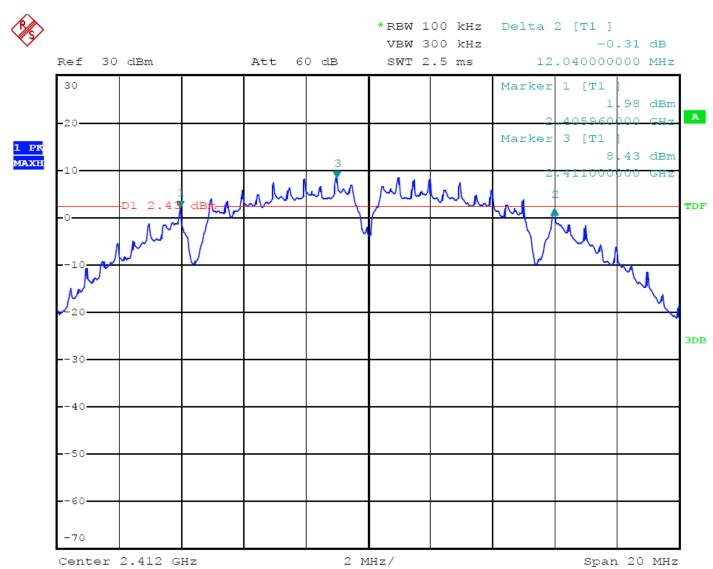
Date of Test:May 6, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:TXTest Engineer:Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps. Frequency 6dB Bandwidth Limit Channel (MHz) (MHz) (MHz) 2412 12.040 Low > 0.5MHz Middle 2437 12.040 > 0.5MHz 2462 12.040 > 0.5MHz High

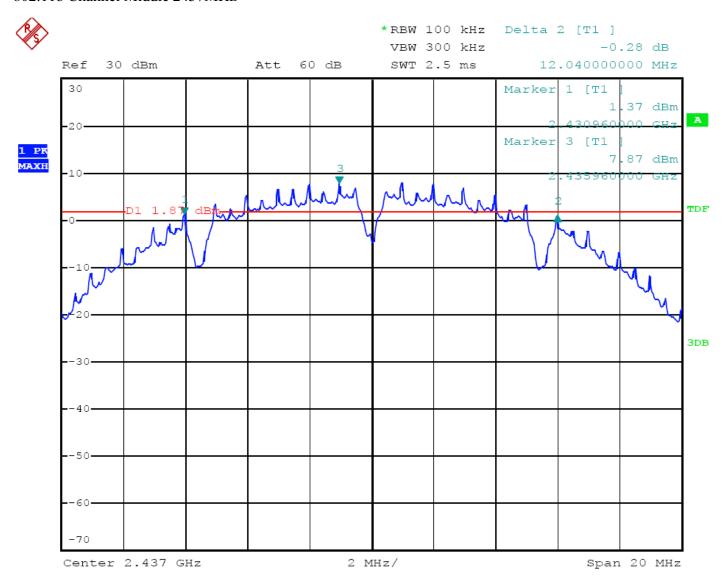
The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	16.360	> 0.5MHz
Middle	2437	16.400	> 0.5MHz
High	2462	16.400	> 0.5MHz

The spectrum analyzer plots are attached as below.

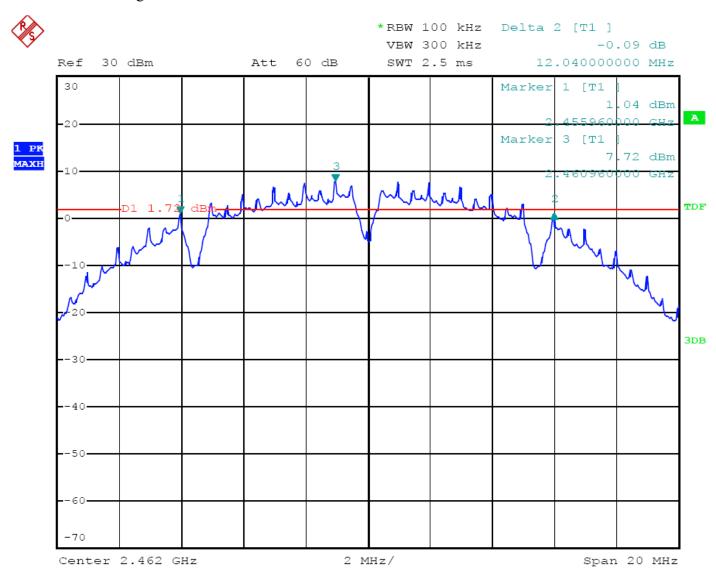
802.11b Channel Low 2412MHz



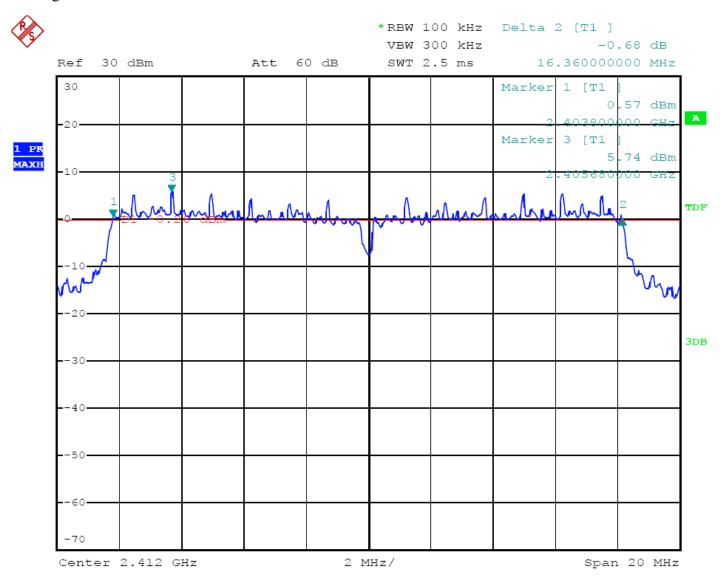
802.11b Channel Middle 2437MHz



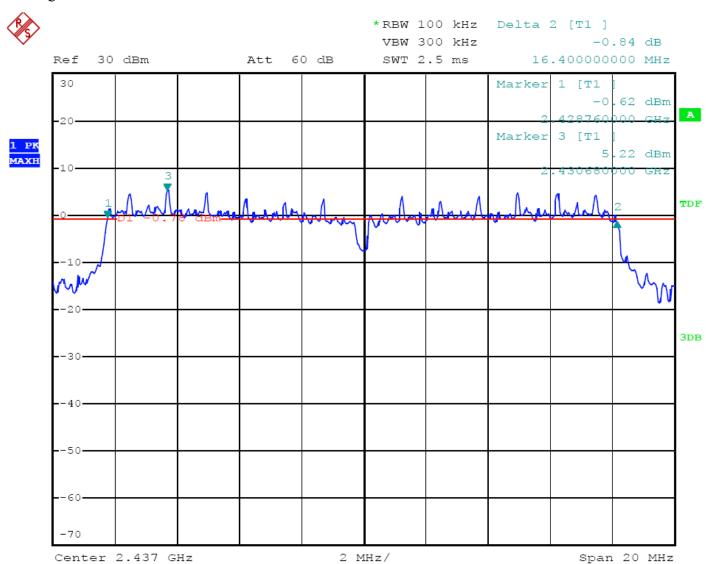
802.11b Channel High 2462MHz



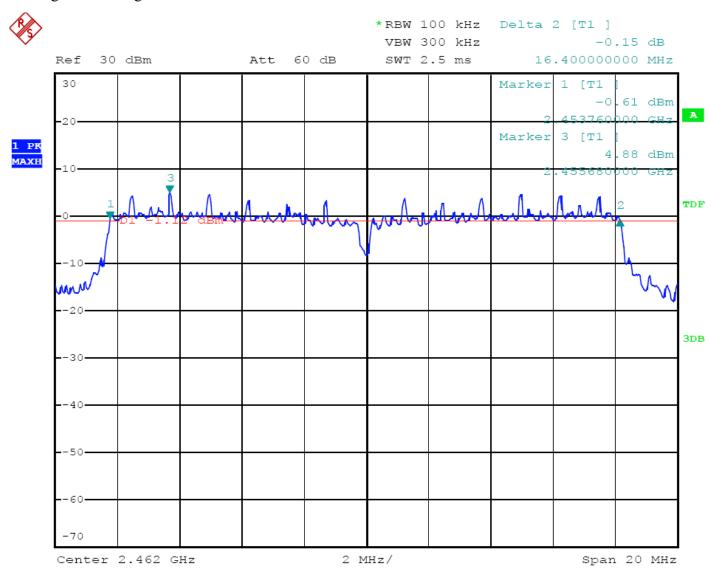
802.11g Channel Low 2412MHz



802.11g Channel Middle 2437MHz

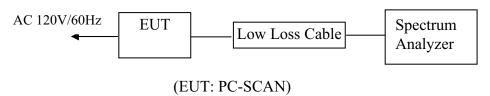


802.11g Channel High 2462MHz



6. MAXIMUM PEAK OUTPUT POWER

6.1.Block Diagram of Test Setup



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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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.

30 dBm / 1 W

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.

High

Date of Test: May 6, 2010

EUT: PC-SCAN

Model No.: GIDS

Temperature: 25°C

Humidity: 50%

AC 120V/60Hz

Test Mode: TX

Test Engineer: Joe

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps. Peak Output Power Frequency Peak Output Power Limits Channel dBm / W (MHz) (dBm) (mW) 30 dBm / 1 WLow 2412 20.83 121.1 Middle 30 dBm / 1 W2437 20.36 108.6

104.5

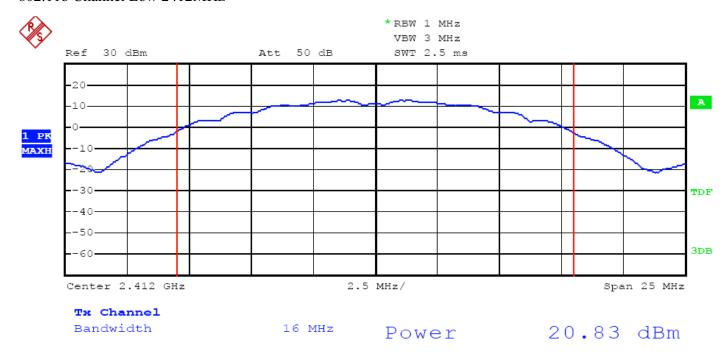
20.19

The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.				
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	23.98	250.0	30 dBm / 1 W
Middle	2437	23.58	228.0	30 dBm / 1 W
High	2462	23.31	214.3	30 dBm / 1 W

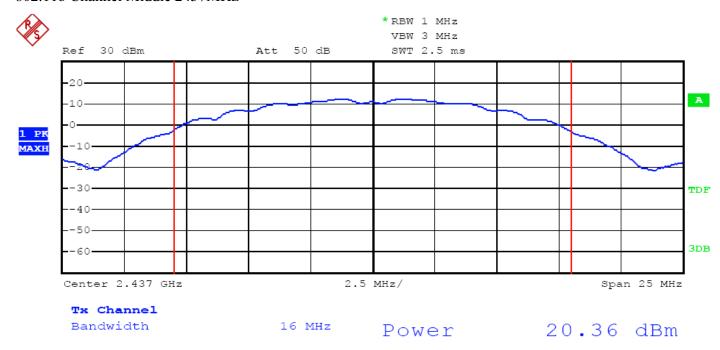
The spectrum analyzer plots are attached as below.

2462

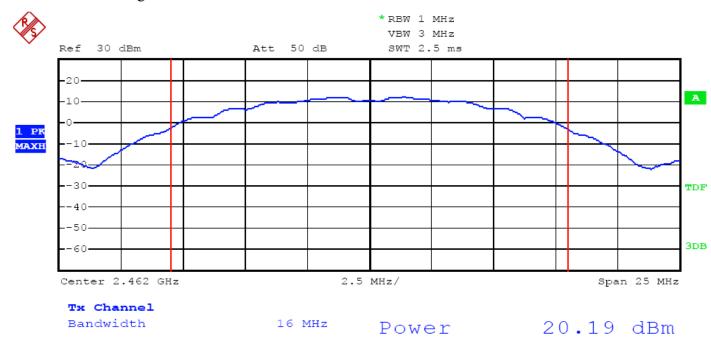
802.11b Channel Low 2412MHz



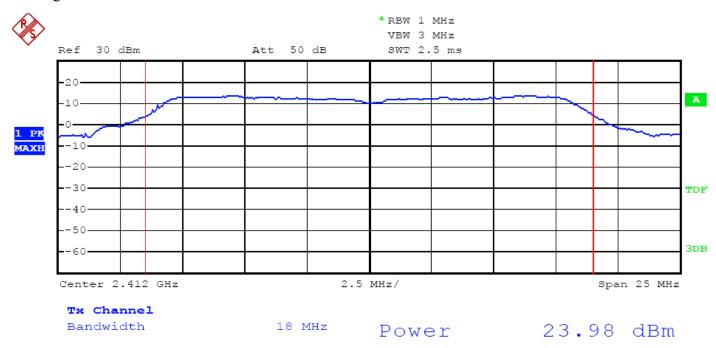
802.11b Channel Middle 2437MHz



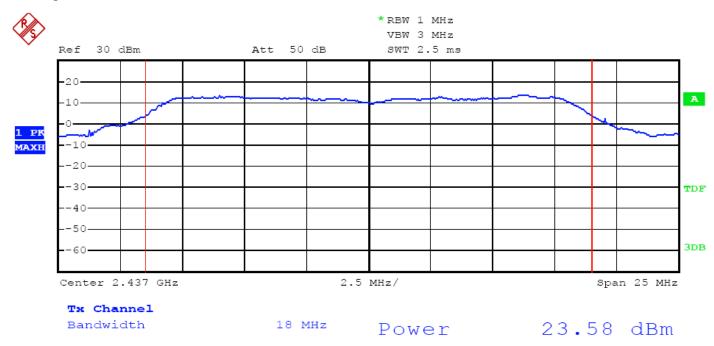
802.11b Channel High 2462MHz



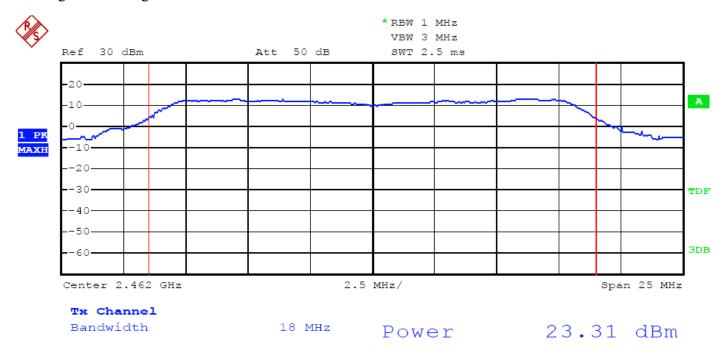
802.11g Channel Low 2412MHz



802.11g Channel Middle 2437MHz

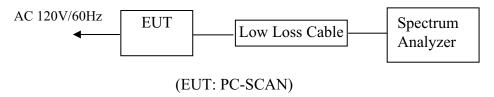


802.11g Channel High 2462MHz



7. POWER SPECTRAL DENSITY MEASUREMENT

7.1.Block Diagram of Test Setup



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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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.

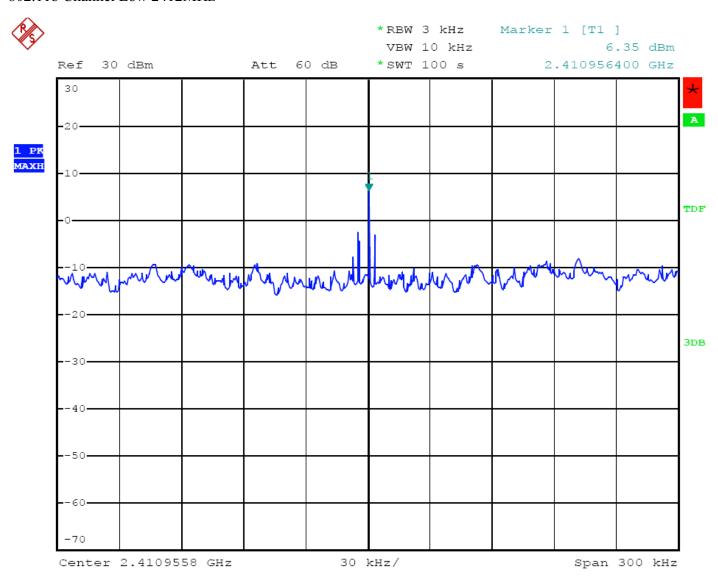
Date of Test:May 6, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:TXTest Engineer:Joe

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	6.35	8 dBm
Middle	2437	4.42	8 dBm
High	2462	3.67	8 dBm

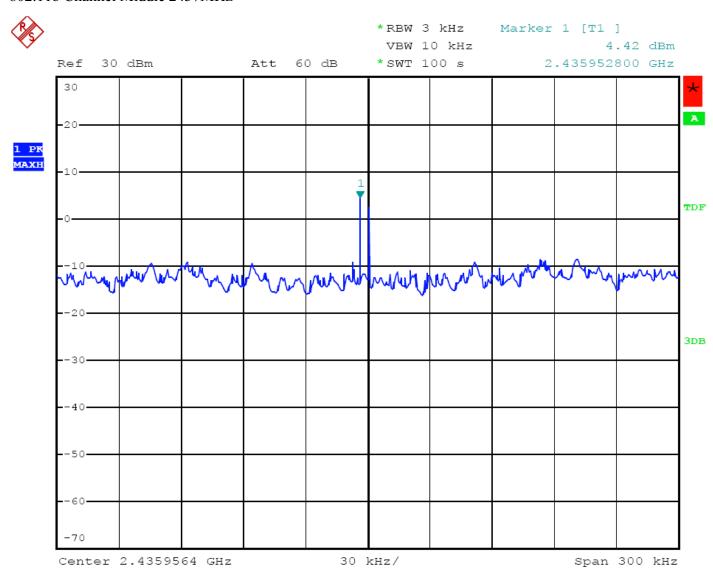
The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-11.12	8 dBm
Middle	2437	-11.48	8 dBm
High	2462	-11.53	8 dBm

The spectrum analyzer plots are attached as below.

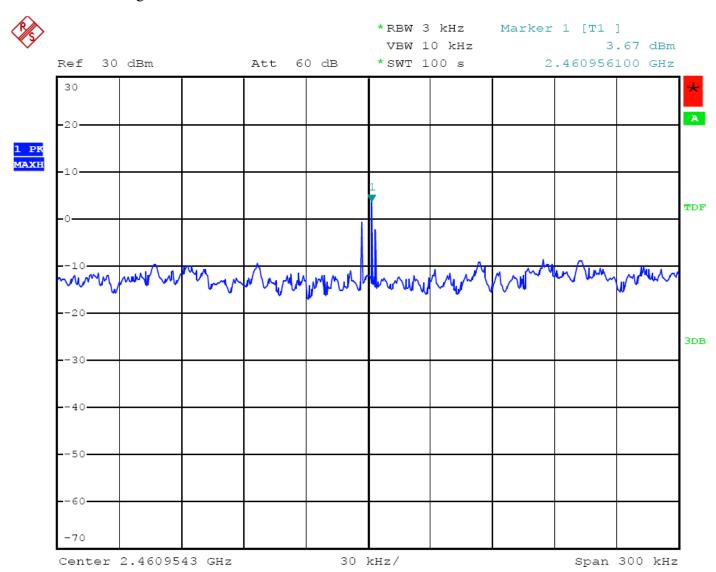
802.11b Channel Low 2412MHz



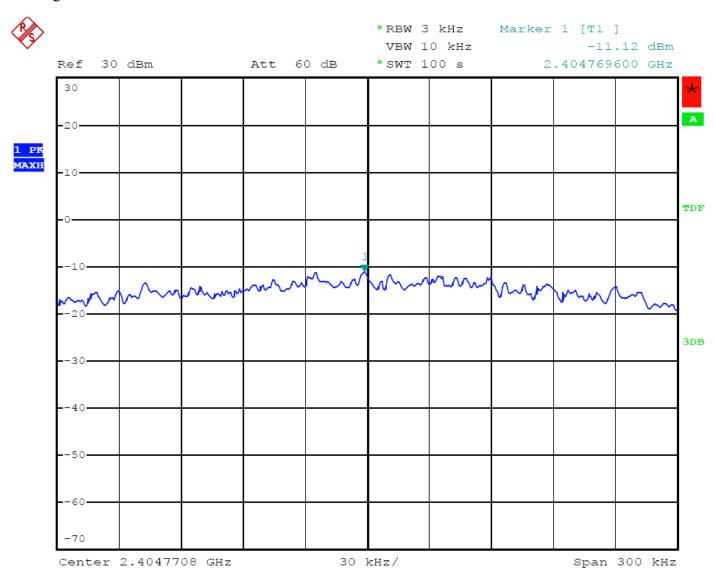
802.11b Channel Middle 2437MHz



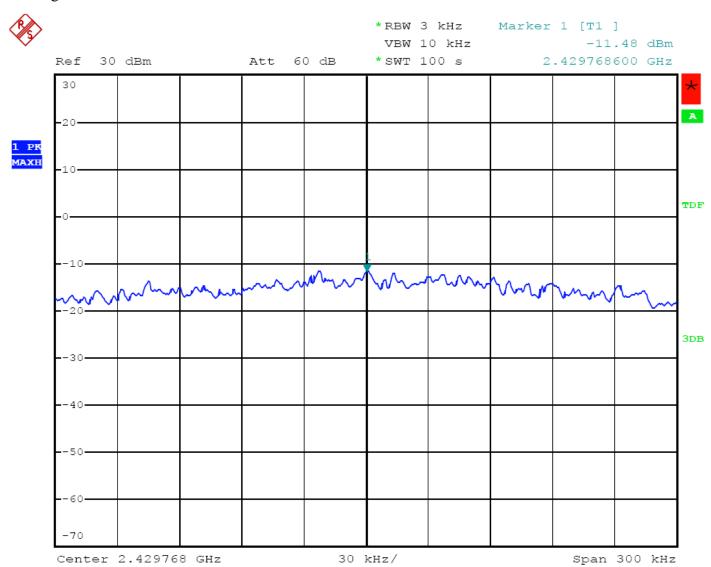
802.11b Channel High 2462MHz



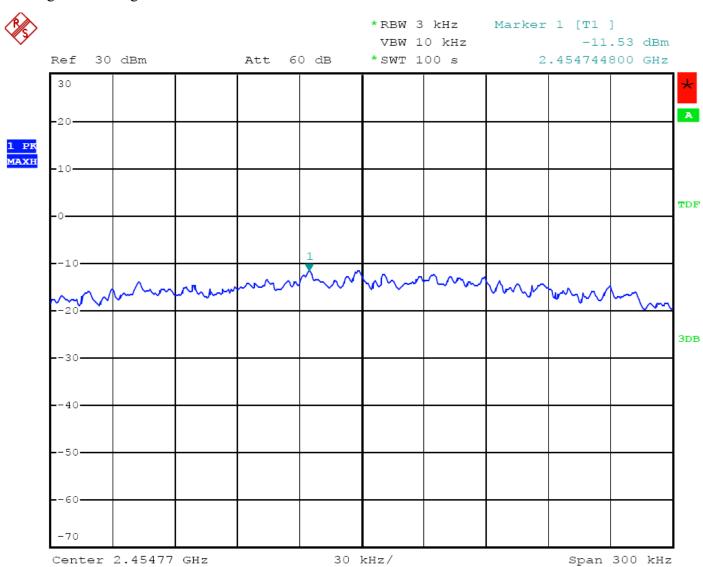
802.11g Channel Low 2412MHz



802.11g Channel Middle 2437MHz

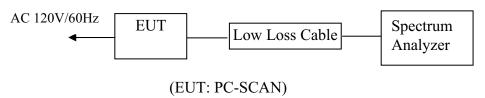


802.11g Channel High 2462MHz



8. BAND EDGE COMPLIANCE TEST (WI-FI)

8.1.Block Diagram of Test Setup



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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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

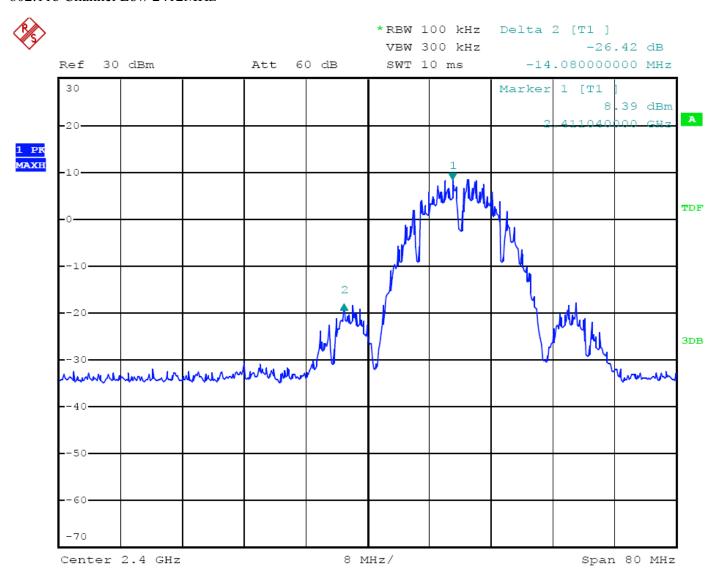
Pass

Date of Test:May 6, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:TXTest Engineer:Joe

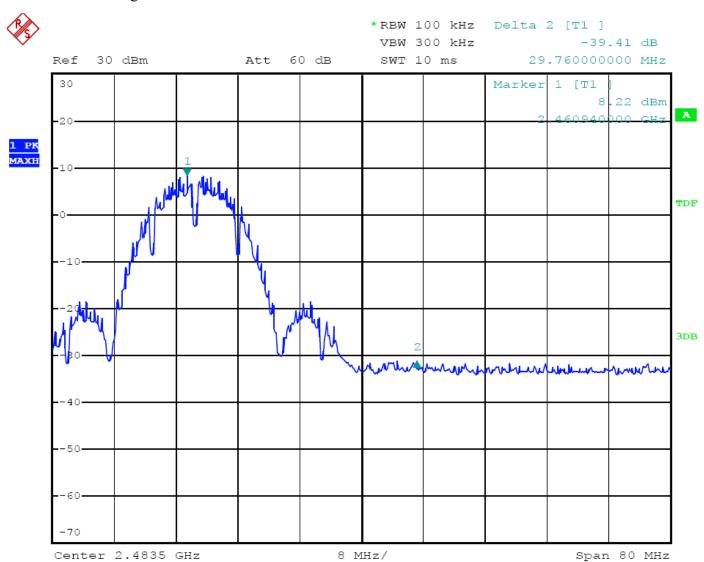
The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.			
Frequency	Result of Band Edge (dBc)	Limit of Band Edge (dBc)	
(MHz)			
2412	26.42	> 20dBc	
2462	39.41	> 20dBc	

The test was performed with 802.11g, the data was shown the worst case 802.11g 1Mbps.			
Frequency	Result of Band Edge (dBc)	Limit of Band Edge (dBc)	
(MHz)		, ,	
2412	21.24	> 20dBc	
2462	29.35	> 20dBc	

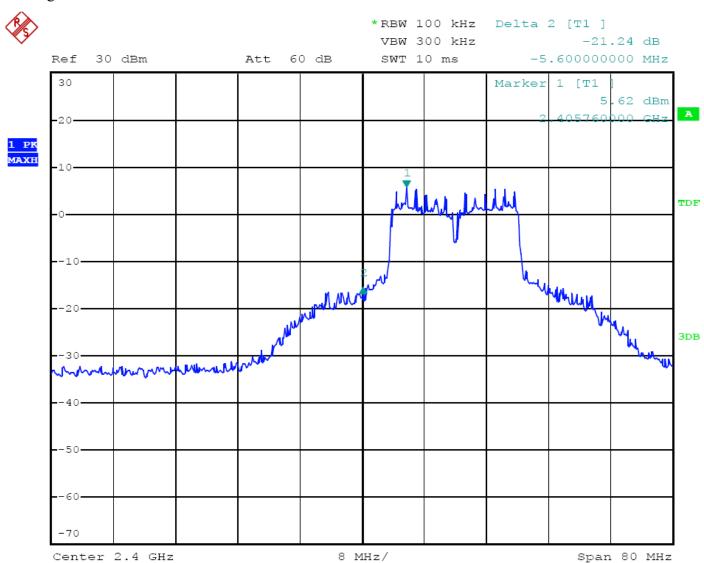
802.11b Channel Low 2412MHz



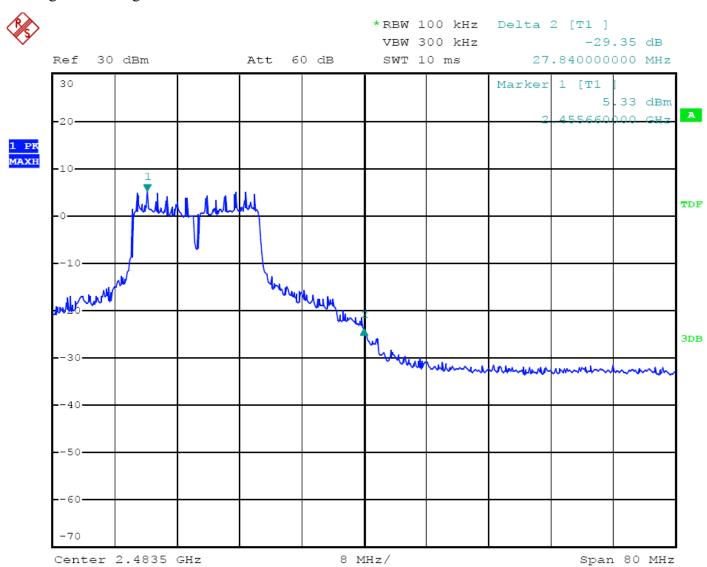
802.11b Channel High 2462MHz



802.11g Channel Low 2412MHz



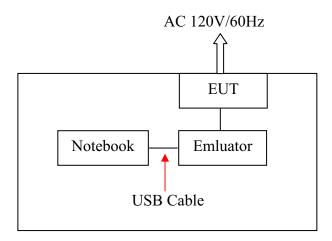
802.11g Channel High 2462MHz



9. RADIATED SPURIOUS EMISSION TEST

9.1.Block Diagram of Test Setup

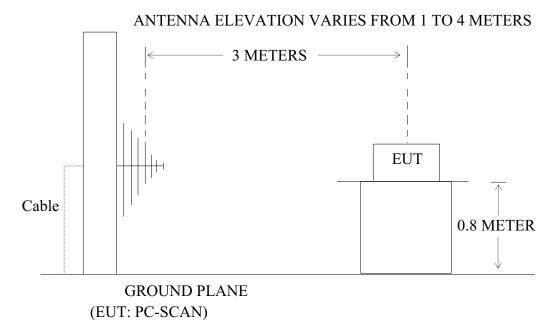
9.1.1.Block diagram of connection between the EUT and simulators



Setup: Transmitting mode

(EUT: PC-SCAN)

9.1.2.Semi-Anechoic Chamber Test Setup Diagram



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:

peni	inted in any of the freque	ncy 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			

¹Until 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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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 5, 2010 Temperature: 25°C

EUT: PC-SCAN Humidity: 50%

Model No.: GIDS Power Supply: AC 120V/60Hz

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	43.24	49.26	-7.46	35.78	41.80	54	74	-18.22	-32.20	Vertical
2412.014	106.08	112.13	-7.43	98.65	104.70	-	-	-	-	Vertical
*4824.024	50.39	56.45	-0.19	50.20	56.26	54	74	-3.80	-17.74	Vertical
7236.032	43.41	49.48	3.05	46.46	52.53	54	74	-7.54	-21.47	Vertical
2400.000	42.16	48.19	-7.46	34.70	40.73	54	74	-19.30	-33.27	Horizontal
2412.014	105.91	111.96	-7.43	98.48	104.53	-	-	-	-	Horizontal
*4824.024	48.22	54.27	-0.19	48.03	54.08	54	74	-5.97	-19.92	Horizontal
7236.032	39.53	45.58	3.05	42.58	48.63	54	74	-11.42	-25.37	Horizontal

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

Date of Test:May 5, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:802.11b Channel Middle 2437MHzTest 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
2437.013	106.11	112.18	-7.36	98.75	104.82	-	-	-	-	Vertical
*4874.022	47.85	53.91	0.09	47.94	54.00	54	74	-6.06	-20.00	Vertical
*7311.031	41.09	47.17	3.22	44.31	50.39	54	74	-9.69	-23.61	Vertical
2437.013	105.79	111.86	-7.36	98.43	104.50	-	-	-	-	Horizontal
*4874.022	47.95	54.04	0.09	48.04	54.13	54	74	-5.96	-19.87	Horizontal
*7311.031	39.73	45.82	3.22	42.95	49.04	54	74	-11.05	-24.96	Horizontal

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

Date of Test:May 5, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:802.11b Channel High 2462MHzTest 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
2462.014	106.31	112.38	-7.35	98.96	105.03	-	-	-	-	Vertical
*2483.500	40.96	47.00	-7.37	33.59	39.63	54	74	-20.41	-34.37	Vertical
*4924.024	48.49	54.62	0.34	48.83	54.96	54	74	-5.17	-19.04	Vertical
*7386.032	40.76	46.79	3.39	44.15	50.18	54	74	-9.85	-23.82	Vertical
2462.014	106.30	112.43	-7.35	98.95	105.08	-	-	-	-	Horizontal
*2483.500	41.33	47.37	-7.37	33.96	40.00	54	74	-20.04	-34.00	Horizontal
*4924.024	47.95	54.01	0.34	48.29	54.35	54	74	-5.71	-19.65	Horizontal
*7386.032	37.82	43.88	3.39	41.21	47.27	54	74	-12.79	-26.73	Horizontal

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

Date of Test:May 5, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest 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	
-	-	-	-	-	-	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	42.54	48.59	-7.46	35.08	41.13	54	74	-18.92	-32.87	Vertical
2412.016	106.77	112.89	-7.43	99.34	105.46	-	-	-	-	Vertical
*4824.026	48.67	54.76	-0.19	48.48	54.57	54	74	-5.52	-19.43	Vertical
7236.034	39.10	45.15	3.05	42.15	48.20	54	74	-11.85	-25.80	Vertical
2400.000	43.75	49.86	-7.46	36.29	42.40	54	74	-17.71	-31.60	Horizontal
2412.016	106.32	112.41	-7.43	98.89	104.98	-	-	-	-	Horizontal
*4824.026	49.02	55.09	-0.19	48.83	54.90	54	74	-5.17	-19.10	Horizontal

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

Date of Test:May 5, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:802.11g Channel Middle 2437MHzTest 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(dBµV/m)		Limit(dBµV/m)		Margin(dBµV/m)		Polarizati
(MHz)	AV	PEAK	Corr. (dB)	AV	PEAK	AV	PEAK	AV	PEAK	on
2437.015	106.21	112.33	-7.36	98.85	104.97	-	-	-	-	Vertical
*4874.027	48.49	54.61	0.09	48.58	54.70	54	74	-5.42	-19.30	Vertical
*7311.034	39.72	45.85	3.22	42.94	49.07	54	74	-11.06	-24.93	Vertical
2437.015	106.58	112.74	-7.36	99.22	105.38	-	-	-	-	Horizontal
*4874.027	45.69	51.82	0.09	45.78	51.91	54	74	-8.22	-22.09	Horizontal

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

Date of Test: May 5, 2010 Temperature: 25°C

EUT: PC-SCAN Humidity: 50%

Model No.: GIDS 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	
-	-	-	-	-	-	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
2462.016	106.34	112.46	-7.35	98.99	105.11	-	-	-	-	Vertical
*2483.500	41.77	47.92	-7.37	34.40	40.55	54	74	-19.60	-33.45	Vertical
*4924.026	49.08	55.18	0.34	49.42	55.52	54	74	-4.58	-18.48	Vertical
*7386.035	41.54	47.64	3.39	44.93	51.03	54	74	-9.07	-22.97	Vertical
2462.016	106.00	112.08	-7.35	98.65	104.73	-	-	-	-	Horizontal
*2483.500	41.17	47.25	-7.37	33.80	39.88	54	74	-20.20	-34.12	Horizontal
*4924.026	47.65	53.78	0.34	47.99	54.12	54	74	-6.01	-19.88	Horizontal

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



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Job No.: RTTE #4714

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

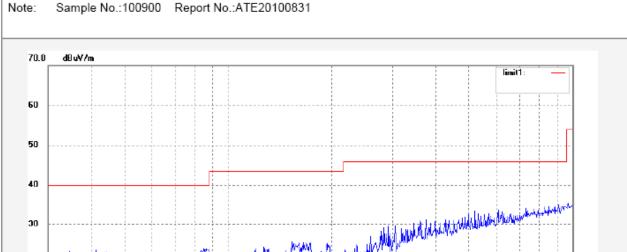
Mode: TX Channal 1(802.11b)

Model: GIDS Manufacturer: SPX Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 10:51:12

Engineer Signature: Joe



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	30	.000	40	50	60	70	80			30	00 40	00 500	600	700 1000.0	MHz
0.		Fred (MH:		Rea (dBu	_		Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	



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 #4715

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 1(802.11b)

Model: GIDS Manufacturer: SPX

Note:

Polarization: Vertical

Power Source: AC 120V/60Hz

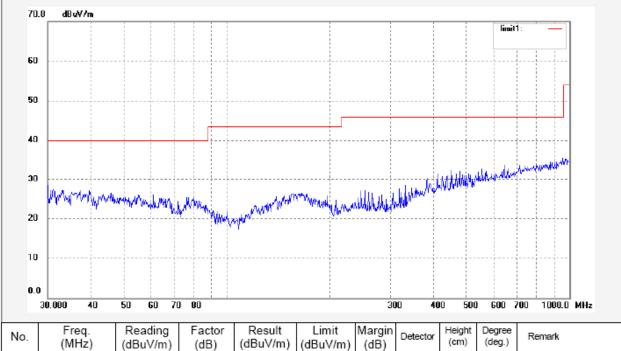
Date: 2010/05/05 Time: 10:54:55

Engineer Signature: Joe

Distance: 3m



Sample No.:100900 Report No.:ATE20100831





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 #4726

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 1(802.11b)

Model: GIDS Manufacturer: SPX

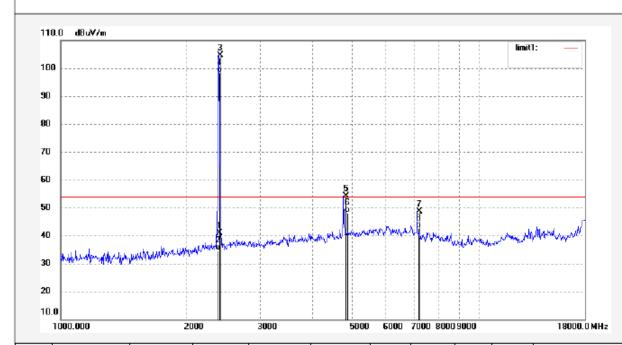
Note: Sample No.:100900 Report No.:ATE20100831

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 11:50:04

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	48.19	-7.46	40.73	54.00	-13.27	peak			
2	2400.000	42.16	-7.46	34.70	54.00	-19.30	AVG			
3	2412.014	111.96	-7.43	104.53	54.00	50.53	peak			
4	2412.014	105.91	-7.43	98.48	54.00	44.48	AVG			
5	4824.024	54.27	-0.19	54.08	54.00	0.08	peak			
6	4824.024	48.22	-0.19	48.03	54.00	-5.97	AVG			
7	7236.032	45.58	3.05	48.63	54.00	-5.37	peak			
8	7236.032	39.53	3.05	42.58	54.00	-11.42	AVG			



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Job No.: RTTE #4727

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 1(802.11b)

Model: GIDS Manufacturer: SPX

Manufactures: SDV

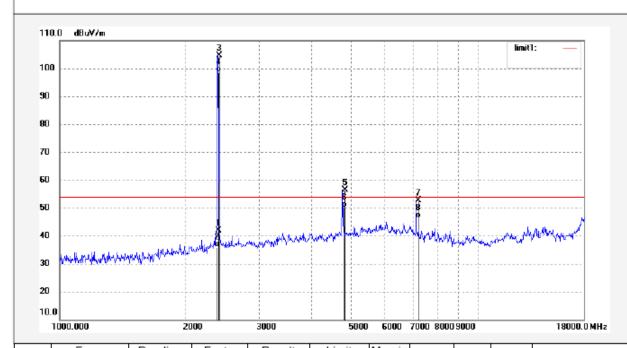
Sample No.:100900 Report No.:ATE20100831

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 11:54:28

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	49.26	-7.46	41.80	54.00	-12.20	peak			
2	2400.000	43.24	-7.46	35.78	54.00	-18.22	AVG			
3	2412.014	112.13	-7.43	104.70	54.00	50.70	peak			
4	2412.014	106.08	-7.43	98.65	54.00	44.65	AVG			
5	4824.024	56.45	-0.19	56.26	54.00	2.26	peak			
6	4824.024	50.39	-0.19	50.20	54.00	-3.80	AVG			
7	7236.032	49.48	3.05	52.53	54.00	-1.47	peak			
8	7236.032	43.41	3.05	46.46	54.00	-7.54	AVG			



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

Horizontal

Power Source: AC 120V/60Hz

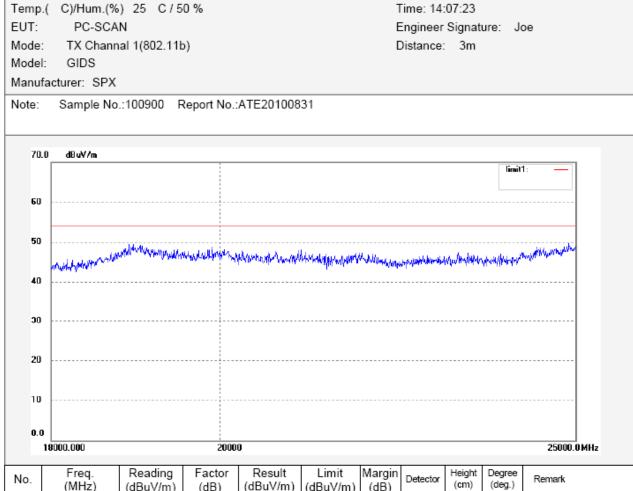
Polarization:

Date: 2010/05/05

Job No.: RTTE #4738

Standard: FCC Class B 3M Radiated

Test item: Radiation Test





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

Polarization:

Date: 2010/05/05

Vertical

Power Source: AC 120V/60Hz

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

Job No.: RTTE #4739

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % Time: 14:11:29 EUT: PC-SCAN Engineer Signature: Joe Mode: TX Channal 1(802.11b) Distance: 3m Model: GIDS Manufacturer: SPX Note: Sample No.:100900 Report No.:ATE20100831 70.0 dBuV/m 60 50 40 30 20 10 0.0 18000.000 20000 25000.0 MHz



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

Polarization:

Date: 2010/05/05

Time: 11:03:19

Distance: 3m

Horizontal

Power Source: AC 120V/60Hz

Engineer Signature: Joe

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

Job No.: RTTE #4717

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

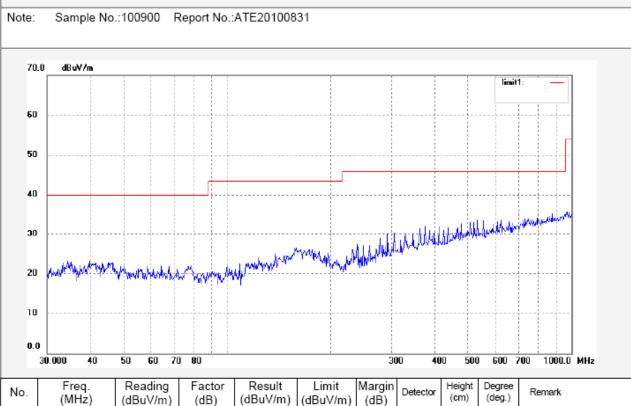
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Mode:

Model: GIDS Manufacturer: SPX

TX Channal 6(802.11b)





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

Polarization:

Date: 2010/05/05

Time: 10:59:37

Distance: 3m

Vertical

Power Source: AC 120V/60Hz

Engineer Signature: Joe

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

Job No.: RTTE #4716

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

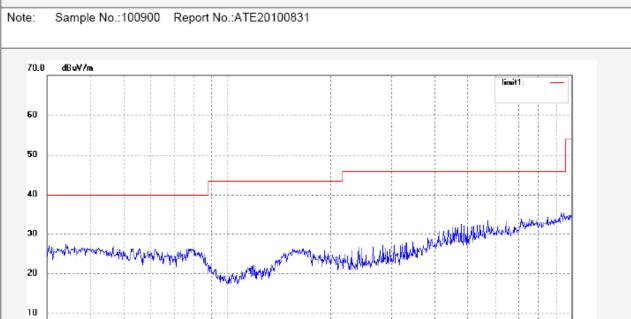
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Mode:

Model: GIDS Manufacturer: SPX

TX Channal 6(802.11b)



300

400

600 700

0.0

40

60

70 80



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Job No.: RTTE #4729

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 6(802.11b)

Model: GIDS Manufacturer: SPX

Mode. 1X Onannai 0(002.11b)

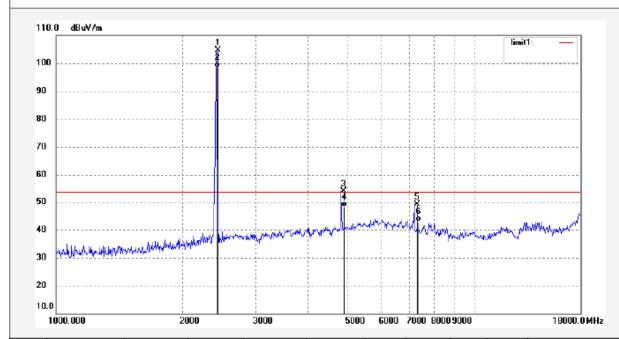
Note: Sample No.:100900 Report No.:ATE20100831

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 12:04:14

Engineer Signature: Joe



1	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1		2437.013	111.86	-7.36	104.50	54.00	50.50	peak			
2		2437.013	105.79	-7.36	98.43	54.00	44.43	AVG			
3		4874.022	54.04	0.09	54.13	54.00	0.13	peak			
4		4874.022	47.95	0.09	48.04	54.00	-5.96	AVG			
5		7311.031	45.82	3.22	49.04	54.00	-4.96	peak			
6		7311.031	39.73	3.22	42.95	54.00	-11.05	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 #4728

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Mode: TX Channal 6(802.11b)

Model: GIDS Manufacturer: SPX Polarization: Vertical

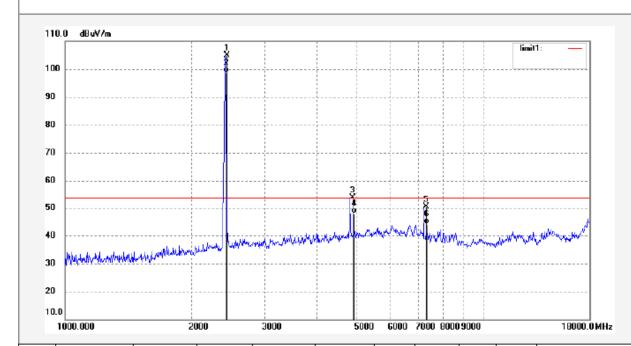
Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 11:59:39

Engineer Signature: Joe

Distance: 3m

Note: Sample No.:100900 Report No.:ATE20100831



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.013	112.18	-7.36	104.82	54.00	50.82	peak			
2	2437.013	106.11	-7.36	98.75	54.00	44.75	AVG			
3	4874.022	53.91	0.09	54.00	54.00	0.00	peak			
4	4874.022	47.85	0.09	47.94	54.00	-6.06	AVG			
5	7311.031	47.17	3.22	50.39	54.00	-3.61	peak			
6	7311.031	41.09	3.22	44.31	54.00	-9.69	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

Horizontal

Power Source: AC 120V/60Hz

Polarization:

Job No.: RTTE #4741

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Date: 2010/05/05 Temp.(C)/Hum.(%) 25 C / 50 % Time: 14:20:03 EUT: PC-SCAN Engineer Signature: Joe Mode: TX Channal 6(802.11b) Distance: 3m Model: GIDS Manufacturer: SPX Note: Sample No.:100900 Report No.:ATE20100831 70.0 dBuV/m 60 50 30 20 10 0.0 18000.000 20000 25000.0 MHz Reading Factor Result Limit Height



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 #4740

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 6(802.11b)

Model: GIDS Manufacturer: SPX

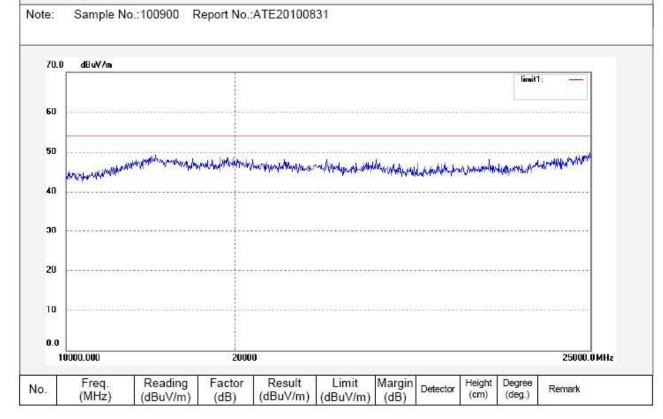
facturer: SPX

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 14:15:54

Engineer Signature: Joe





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

Polarization:

Date: 2010/05/05

Time: 11:07:54

Distance: 3m

300

Detector

Margin

(dB)

400

Height

(cm)

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

1000.0 MHz

Remark

600 700

Degree

(deg.)

Horizontal

Power Source: AC 120V/60Hz

Engineer Signature: Joe

Job No.: RTTE #4718

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode:

Model: GIDS Manufacturer: SPX

30.000

No.

40

Freq.

(MHz)

50

60

Reading

(dBuV/m)

70 80

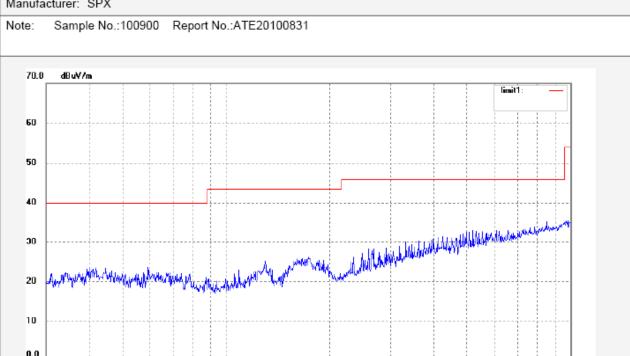
Factor

(dB)

Result

(dBuV/m)

TX Channal 11(802.11b)



Limit

(dBuV/m)



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 #4719

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11b)

Model: GIDS Manufacturer: SPX

Note:

Sample No.:100900 Report No.:ATE20100831

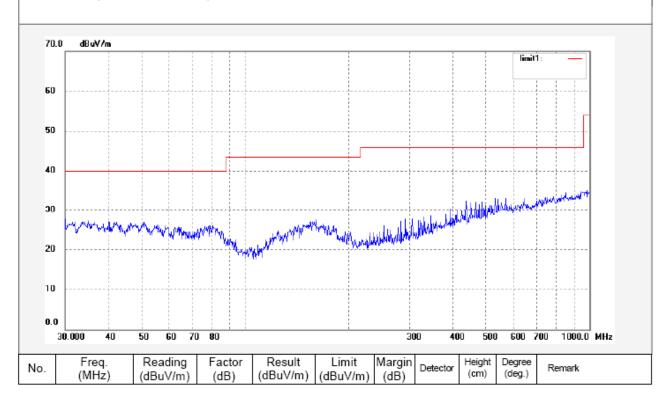
Time: 11:11:39 Engineer Signature: Joe

Date: 2010/05/05

Polarization:

Vertical

Power Source: AC 120V/60Hz





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 #4730

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11b)

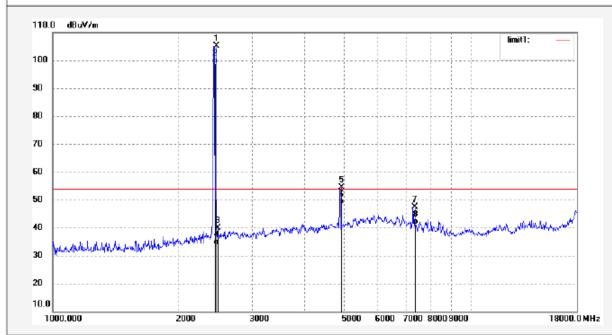
Model: GIDS Manufacturer: SPX

Note: Sample No.:100900 Report No.:ATE20100831

Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 12:09:36

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	2462.014	112.43	-7.35	105.08	54.00	51.08	peak			
2	2462.014	106.30	-7.35	98.95	54.00	44.95	AVG			
3	2483.500	47.37	-7.37	40.00	54.00	-14.00	peak			
4	2483.500	41.33	-7.37	33.96	54.00	-20.04	AVG			
5	4924.024	54.01	0.34	54.35	54.00	0.35	peak			
6	4924.024	47.95	0.34	48.29	54.00	-5.71	AVG			
7	7386.032	43.88	3.39	47.27	54.00	-6.73	peak			
8	7386.032	37.82	3.39	41.21	54.00	-12.79	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 #4731

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11b)

Model: GIDS Manufacturer: SPX

Manufacturer: SPX

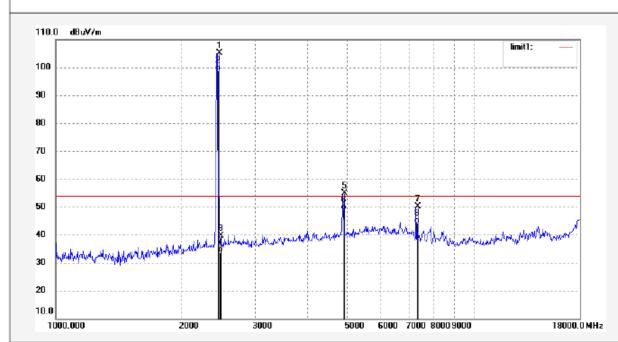
Sample No.:100900 Report No.:ATE20100831

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 12:13:57

Engineer Signature: Joe



No. Freq. (MHz) Reading (dBuV/m) Factor (dBuV/m) Result (dBuV/m) Limit (dBuV/m) Margin (dB) Detector (deg.) Height (deg.) Degree (deg.) Remark 1 2462.014 112.38 -7.35 105.03 54.00 51.03 peak 54.00 51.03 peak 54.00 AVG 54.00 AVG 54.00 54.00 AVG 54.00 54.00 AVG 54.00 54.00 54.00 AVG 54.00 54.00 AVG 54.00 <th></th>										
2 2462.014 106.31 -7.35 98.96 54.00 44.96 AVG 3 2483.500 47.00 -7.37 39.63 54.00 -14.37 peak 4 2483.500 40.96 -7.37 33.59 54.00 -20.41 AVG 5 4924.024 54.62 0.34 54.96 54.00 0.96 peak 6 4924.024 48.49 0.34 48.83 54.00 -5.17 AVG 7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	No.			1				Detector		Remark
3 2483.500 47.00 -7.37 39.63 54.00 -14.37 peak 4 2483.500 40.96 -7.37 33.59 54.00 -20.41 AVG 5 4924.024 54.62 0.34 54.96 54.00 0.96 peak 6 4924.024 48.49 0.34 48.83 54.00 -5.17 AVG 7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	1	2462.014	112.38	-7.35	105.03	54.00	51.03	peak		
4 2483.500 40.96 -7.37 33.59 54.00 -20.41 AVG 5 4924.024 54.62 0.34 54.96 54.00 0.96 peak 6 4924.024 48.49 0.34 48.83 54.00 -5.17 AVG 7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	2	2462.014	106.31	-7.35	98.96	54.00	44.96	AVG		
5 4924.024 54.62 0.34 54.96 54.00 0.96 peak 6 4924.024 48.49 0.34 48.83 54.00 -5.17 AVG 7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	3	2483.500	47.00	-7.37	39.63	54.00	-14.37	peak		
6 4924.024 48.49 0.34 48.83 54.00 -5.17 AVG 7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	4	2483.500	40.96	-7.37	33.59	54.00	-20.41	AVG		
7 7386.032 46.79 3.39 50.18 54.00 -3.82 peak	5	4924.024	54.62	0.34	54.96	54.00	0.96	peak		
7 7300.032 40.79 3.39 30.10 34.00 -3.02 peak	6	4924.024	48.49	0.34	48.83	54.00	-5.17	AVG		
8 7386.032 40.76 3.39 44.15 54.00 -9.85 AVG	7	7386.032	46.79	3.39	50.18	54.00	-3.82	peak		
	8	7386.032	40.76	3.39	44.15	54.00	-9.85	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

Horizontal

Power Source: AC 120V/60Hz

Polarization:

Job No.: RTTE #4742

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Date: 2010/05/05 Temp.(C)/Hum.(%) 25 C / 50 % Time: 14:24:36 EUT: PC-SCAN Engineer Signature: Joe Mode: TX Channal 11(802.11b) Distance: 3m Model: GIDS Manufacturer: SPX Note: Sample No.:100900 Report No.:ATE20100831 70.0 dBuV/m 60 50 30 20 10 0.0 18000.000 20000 25000.0 MHz

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



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

Polarization:

Vertical

Power Source: AC 120V/60Hz

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

Job No.: RTTE #4743

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Date: 2010/05/05 Temp.(C)/Hum.(%) 25 C / 50 % Time: 14:28:47 EUT: PC-SCAN Engineer Signature: Joe Mode: TX Channal 11(802.11b) Distance: 3m Model: GIDS Manufacturer: SPX Note: Sample No.:100900 Report No.:ATE20100831 70.0 dBuV/m 60 50 30 20 10 0.0 18000.000 20000 25000.0 MHz



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

Power Source: AC 120V/60Hz

Engineer Signature: Joe

Polarization:

Date: 2010/05/05

Time: 11:22:35

Distance: 3m

Job No.: RTTE #4721

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode:

Model: GIDS

Freq.

(MHz)

No.

Reading

(dBuV/m)

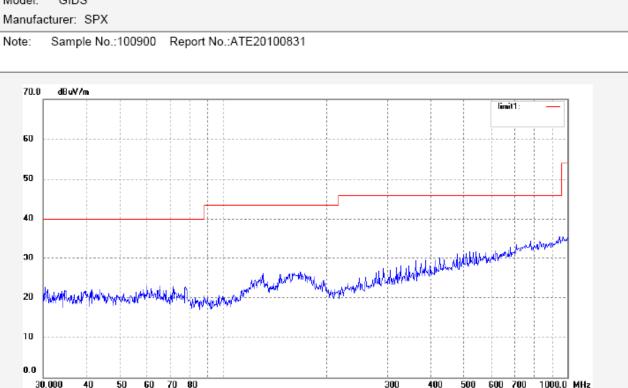
Factor

(dB)

Result

(dBuV/m)

TX Channal 1(802.11g)



Limit

(dBuV/m)

Margin

(dB)

Detector

Degree

(deg.)

Remark

Height

(cm)



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 #4720

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 1(802.11g)

Model: **GIDS** Manufacturer: SPX Polarization: Vertical

Power Source: AC 120V/60Hz

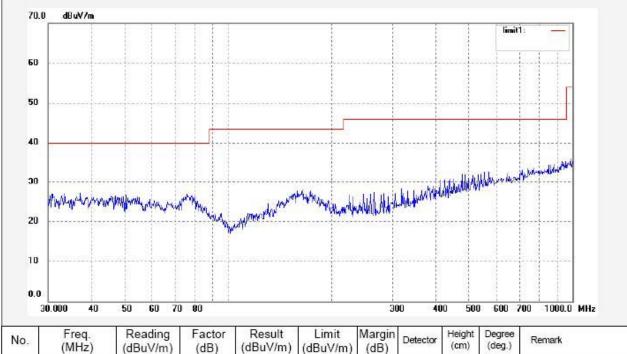
Date: 2010/05/05 Time: 11:17:56

Engineer Signature: Joe

Distance: 3m



Sample No.:100900 Report No.:ATE20100831





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 #4733

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 1(802.11g)

Model: GIDS Manufacturer: SPX

Note:

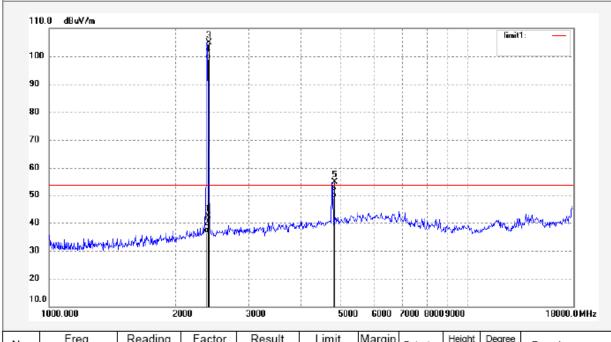
Model: GIDS

Sample No.:100900 Report No.:ATE20100831

Polarization: Horizontal Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 13:39:20

Engineer Signature: Joe



No.	Freq. (MHz)	(dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	49.86	-7.46	42.40	54.00	-11.60	peak			
2	2400.000	43.75	-7.46	36.29	54.00	-17.71	AVG			
3	2412.016	112.41	-7.43	104.98	54.00	50.98	peak			
4	2412.016	106.32	-7.43	98.89	54.00	44.89	AVG			
5	4824.026	55.09	-0.19	54.90	54.00	0.90	peak			
6	4824.026	49.02	-0.19	48.83	54.00	-5.17	AVG			



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

Job No.: RTTE #4732

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Model: GIDS Manufacturer: SPX

Note:

Mode: TX Channal 1(802.11g)

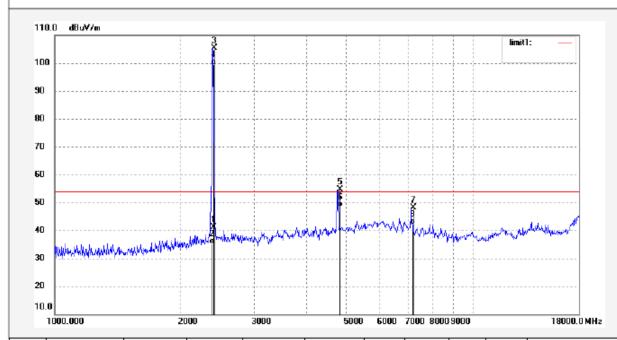
Sample No.:100900 Report No.:ATE20100831

Polarization:

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 13:34:59

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	48.59	-7.46	41.13	54.00	-12.87	peak			
2	2400.000	42.54	-7.46	35.08	54.00	-18.92	AVG			
3	2412.016	112.89	-7.43	105.46	54.00	51.46	peak			
4	2412.016	106.77	-7.43	99.34	54.00	45.34	AVG			
5	4824.026	54.76	-0.19	54.57	54.00	0.57	peak			
6	4824.026	48.67	-0.19	48.48	54.00	-5.52	AVG			
7	7236.034	45.15	3.05	48.20	54.00	-5.80	peak			
8	7236.034	39.10	3.05	42.15	54.00	-11.85	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 #4745

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

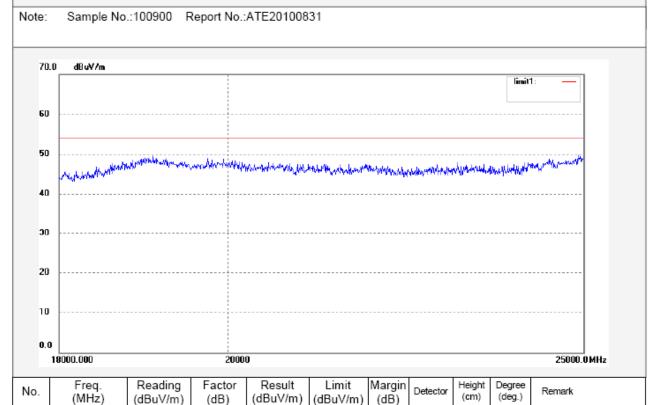
EUT: PC-SCAN

Mode: TX Channal 1(802.11g)

Model: GIDS Manufacturer: SPX Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 14:39:24

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 #4744

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode:

Model: GIDS Manufacturer: SPX

Note:

TX Channal 1(802.11g)

Sample No.:100900 Report No.:ATE20100831

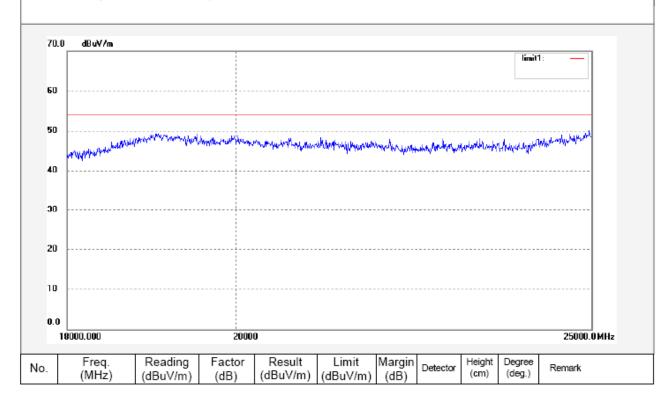
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 14:35:11

Engineer Signature: Joe

Distance: 3m





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

Power Source: AC 120V/60Hz

Engineer Signature: Joe

Polarization:

Date: 2010/05/05

Time: 11:27:18

Distance: 3m

Job No.: RTTE #4722

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 6(802.11g)

Model: GIDS Manufacturer: SPX

30.000

No.

40

Freq.

(MHz)

50

60

Reading

(dBuV/m)

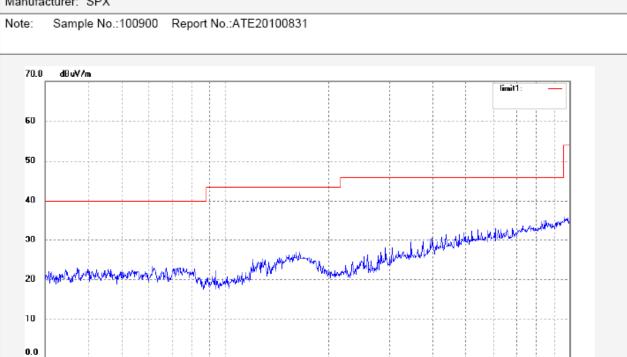
70 80

Factor

(dB)

Result

(dBuV/m)



Limit

(dBuV/m)

600 700

Degree

(deg.)

300

Detector

Margin

(dB)

400

Height

(cm)

1000.0 MHz

Remark



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

Polarization:

Date: 2010/05/05

Time: 11:31:00

Distance: 3m

Vertical

Power Source: AC 120V/60Hz

Engineer Signature: Joe

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

Job No.: RTTE #4723

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

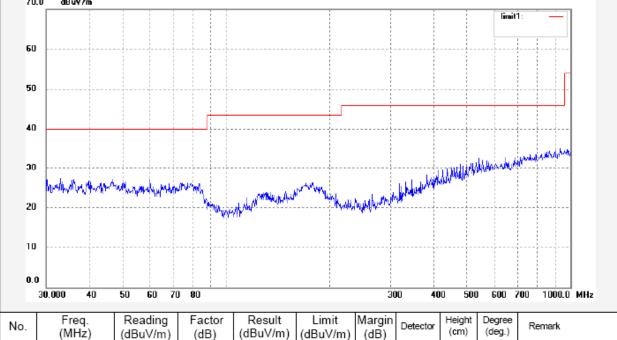
Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Mode: TX Channal 6(802.11g)

Model: GIDS Manufacturer: SPX

Note: Sample No.:100900 Report No.:ATE20100831 70.0 dBuV/m





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 #4734

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 6(802.11g)

Model: GIDS Manufacturer: SPX

Note: Sample No.:100900 Report No.:ATE20100831

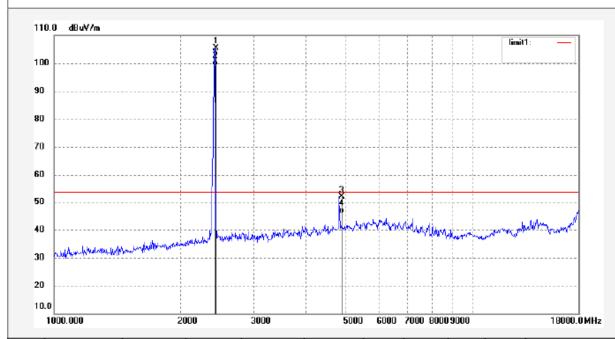
Time: 13:44:28 Engineer Signature: Joe

Date: 2010/05/05

Polarization: Horizontal

Power Source: AC 120V/60Hz

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	112.74	-7.36	105.38	54.00	51.38	peak			
2	2437.015	106.58	-7.36	99.22	54.00	45.22	AVG			
3	4874.027	51.82	0.09	51.91	54.00	-2.09	peak			
4	4874.027	45.69	0.09	45.78	54.00	-8.22	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 #4735

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 6(802.11g)

Model: GIDS Manufacturer: SPX

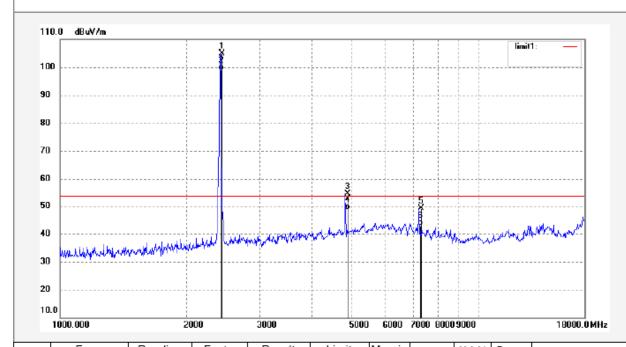
Note: Sample No.:100900 Report No.:ATE20100831 Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 13:48:49

Engineer Signature: Joe

Distance: 3m



No.	Freq. (MHz)	(dBuV/m)	Factor (dB)	Result (dBuV/m)	(dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2437.015	112.33	-7.36	104.97	54.00	50.97	peak			
2	2437.015	106.21	-7.36	98.85	54.00	44.85	AVG			
3	4874.027	54.61	0.09	54.70	54.00	0.70	peak			
4	4874.027	48.49	0.09	48.58	54.00	-5.42	AVG			
5	7311.034	45.85	3.22	49.07	54.00	-4.93	peak			
6	7311.034	39.72	3.22	42.94	54.00	-11.06	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

Horizontal

Power Source: AC 120V/60Hz

Polarization:

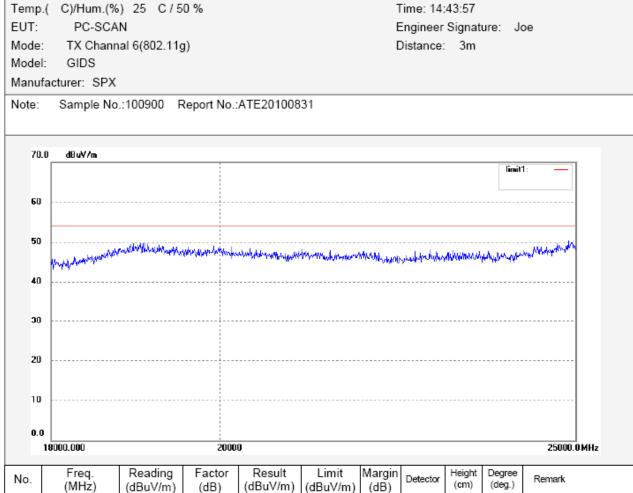
Date: 2010/05/05

Job No.: RTTE #4746

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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





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

Polarization:

Date: 2010/05/05

Time: 14:48:08

Vertical

Power Source: AC 120V/60Hz

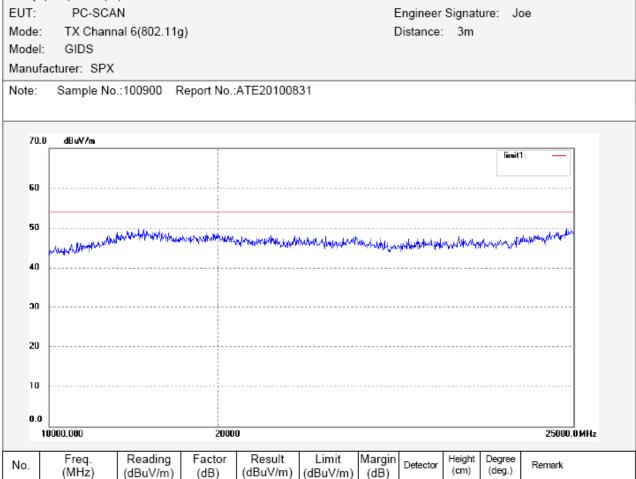
Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: RTTE #4747

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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





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

Power Source: AC 120V/60Hz

Engineer Signature: Joe

Polarization:

Date: 2010/05/05

Time: 11:39:26

Distance: 3m

Job No.: RTTE #4725

Standard: FCC Class B 3M Radiated

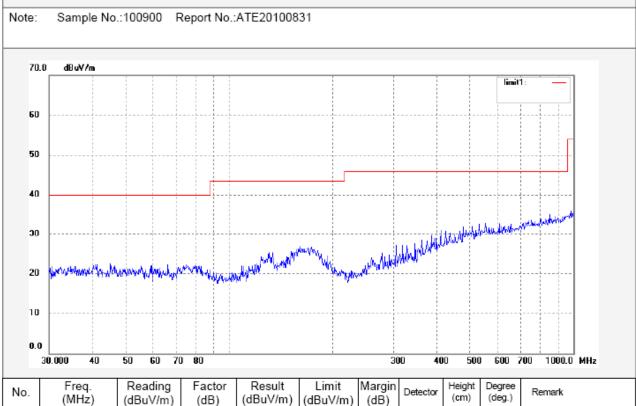
Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11g)

Model: GIDS Manufacturer: SPX





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 #4724

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11g)

Model: GIDS Manufacturer: SPX Polarization: Vertical

Power Source: AC 120V/60Hz

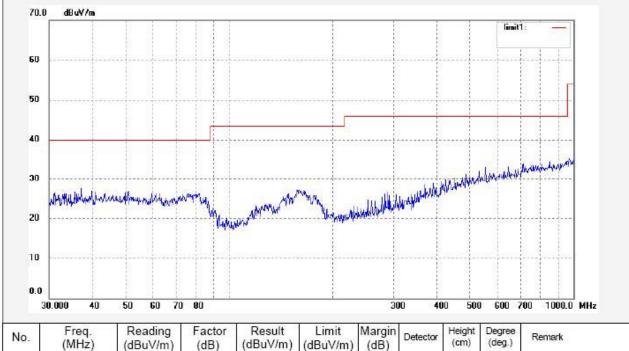
Date: 2010/05/05 Time: 11:35:41

Engineer Signature: Joe

Distance: 3m



Sample No.:100900 Report No.:ATE20100831





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 #4737

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11g)

Model: GIDS Manufacturer: SPX

Sample No.:100900 Report No.:ATE20100831 Note:

Date: 2010/05/05

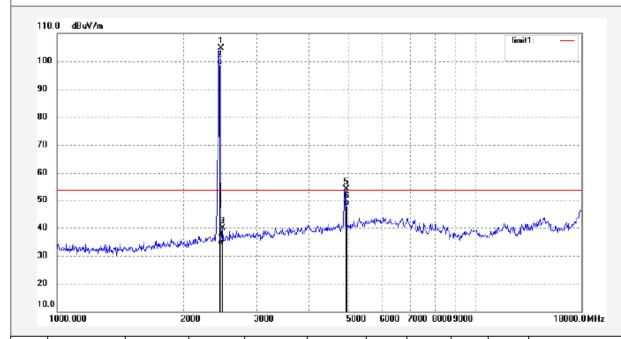
Time: 13:58:19

Engineer Signature: Joe

Polarization: Horizontal

Power Source: AC 120V/60Hz

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.08	-7.35	104.73	54.00	50.73	peak			
2	2462.016	106.00	-7.35	98.65	54.00	44.65	AVG			
3	2483.500	47.25	-7.37	39.88	54.00	-14.12	peak			
4	2483.500	41.17	-7.37	33.80	54.00	-20.20	AVG			
5	4924.026	53.78	0.34	54.12	54.00	0.12	peak			
6	4924.026	47.65	0.34	47.99	54.00	-6.01	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 #4736

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 %

EUT: PC-SCAN

Mode: TX Channal 11(802.11g)

Model: GIDS Manufacturer: SPX

Note:

Model: GIDS

Sample No.:100900 Report No.:ATE20100831

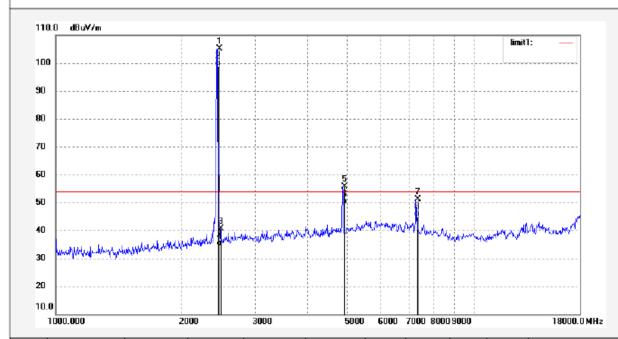
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 13:53:52

Engineer Signature: Joe

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2462.016	112.46	-7.35	105.11	54.00	51.11	peak			
2	2462.016	106.34	-7.35	98.99	54.00	44.99	AVG			
3	2483.500	47.92	-7.37	40.55	54.00	-13.45	peak			
4	2483.500	41.77	-7.37	34.40	54.00	-19.60	AVG			
5	4924.026	55.18	0.34	55.52	54.00	1.52	peak			
6	4924.026	49.08	0.34	49.42	54.00	-4.58	AVG			
7	7386.035	47.64	3.39	51.03	54.00	-2.97	peak			
8	7386.035	41.54	3.39	44.93	54.00	-9.07	AVG			



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

Polarization:

Date: 2010/05/05

Time: 14:56:58

Horizontal

Power Source: AC 120V/60Hz

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

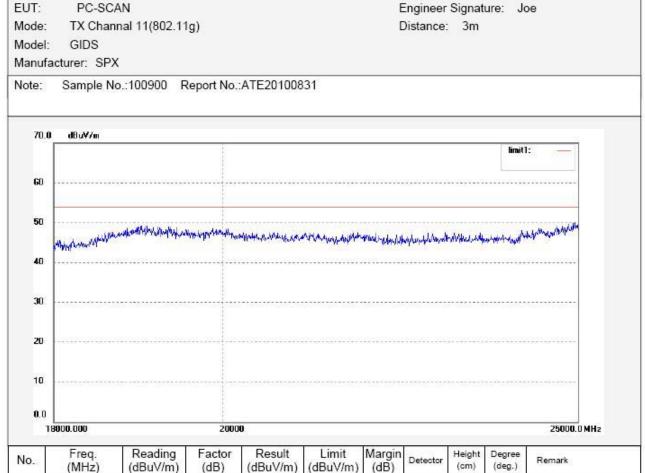
Job No.: RTTE #4749

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN





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 #4748

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: PC-SCAN

Mode: TX Channal 11(802.11g)

Model: GIDS Manufacturer: SPX

(MHz)

(dBuV/m)

(dB)

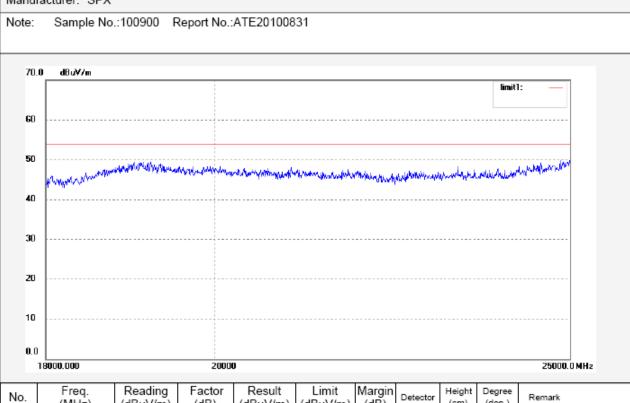
Vertical

Power Source: AC 120V/60Hz

Date: 2010/05/05 Time: 14:52:49

Engineer Signature: Joe

Distance: 3m



(dBuV/m)

(dB)

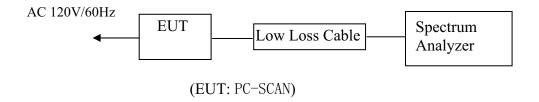
(dBuV/m)

(deg.)

(cm)

10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

10.1.Block Diagram of Test Setup



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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

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.

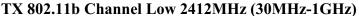
10.5.Test Procedure

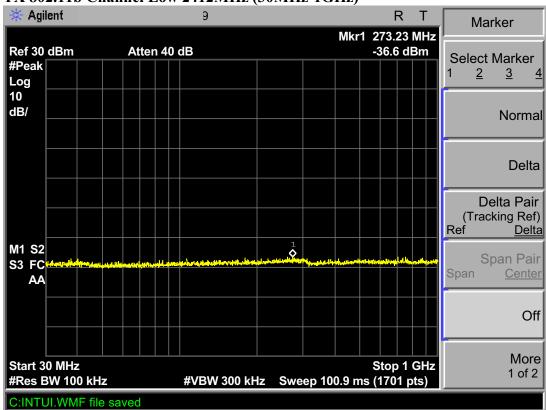
- 10.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.
- 10.5.3. The Conducted Spurious Emission was measured and recorded.

10.6.Test Result

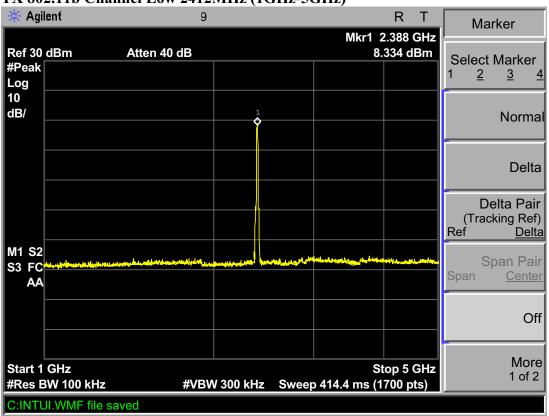
Pass.

The spectrum analyzer plots are attached as below.

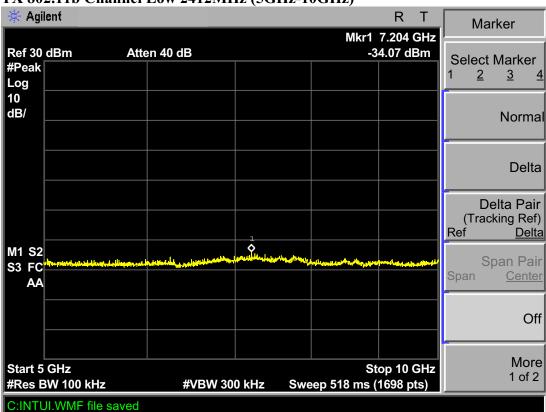




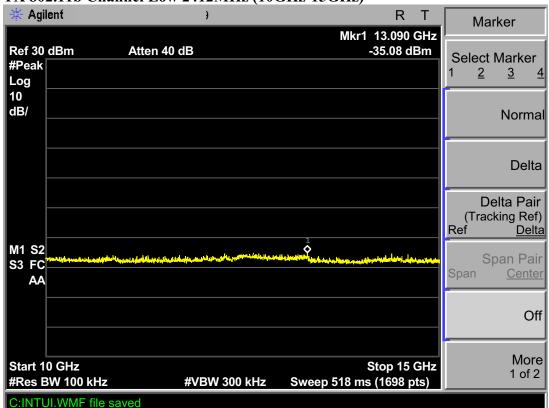
TX 802.11b Channel Low 2412MHz (1GHz-5GHz)

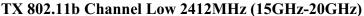


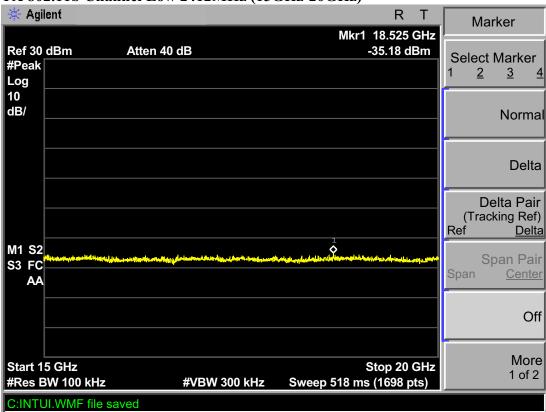




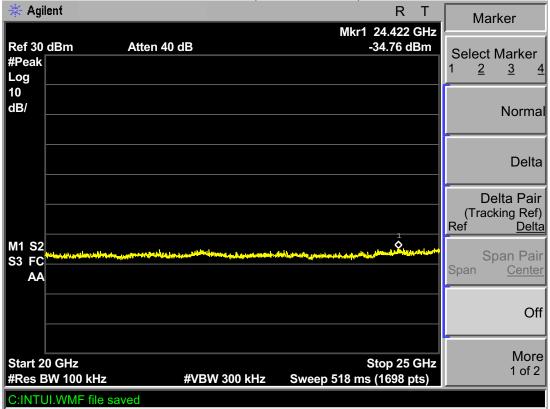
TX 802.11b Channel Low 2412MHz (10GHz-15GHz)



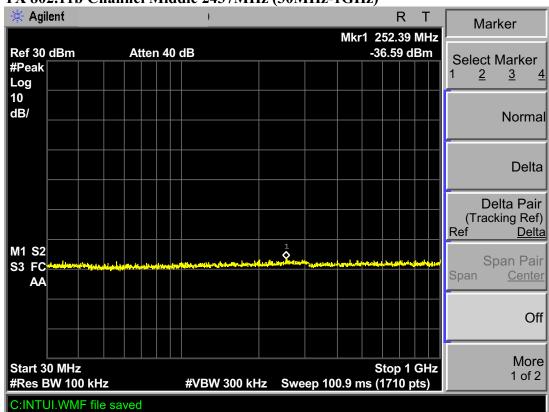




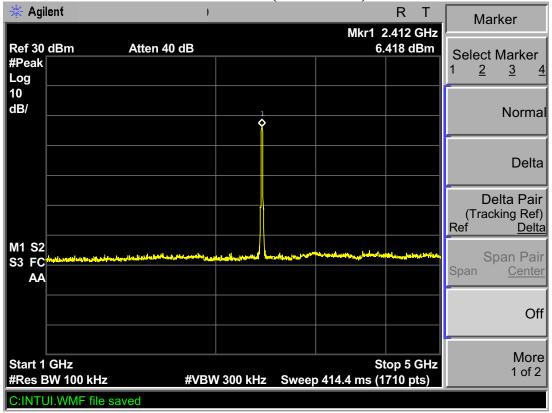
TX 802.11b Channel Low 2412MHz (20GHz-25GHz)



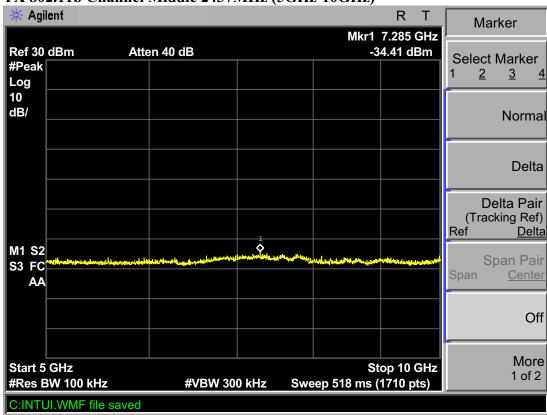




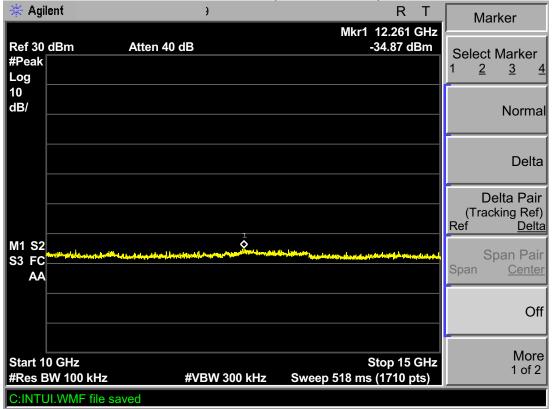
TX 802.11b Channel Middle 2437MHz (1GHz-5GHz)



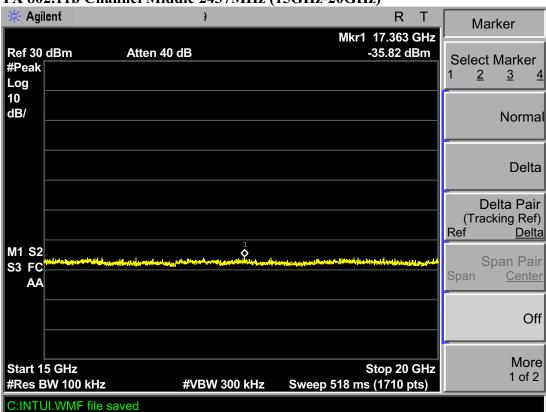




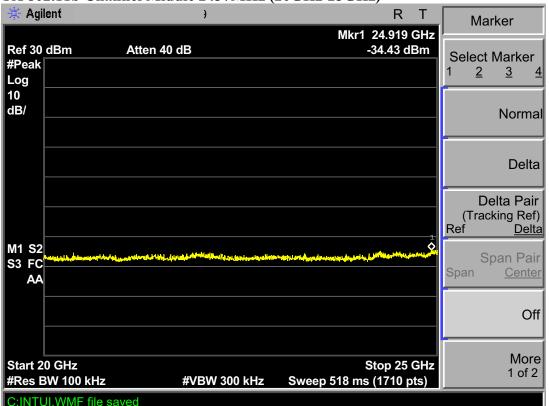
TX 802.11b Channel Middle 2437MHz (10GHz-15GHz)

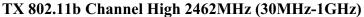


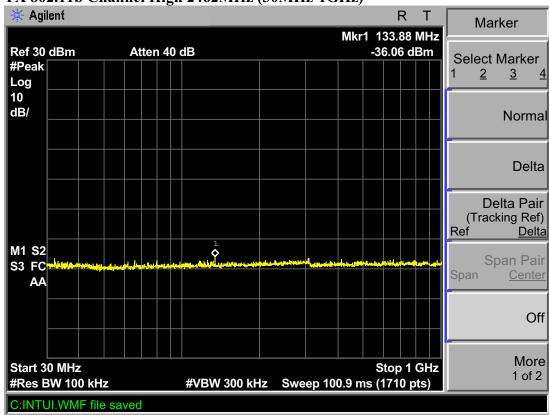




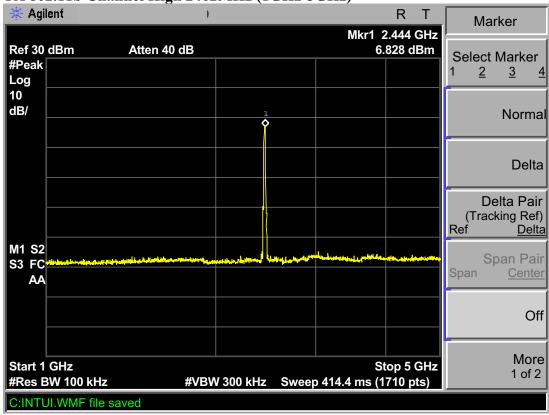
TX 802.11b Channel Middle 2437MHz (20GHz-25GHz)



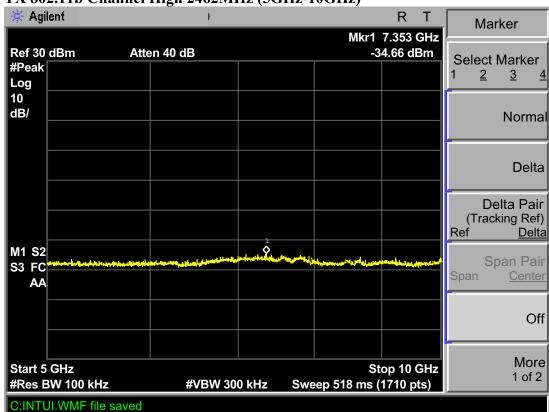




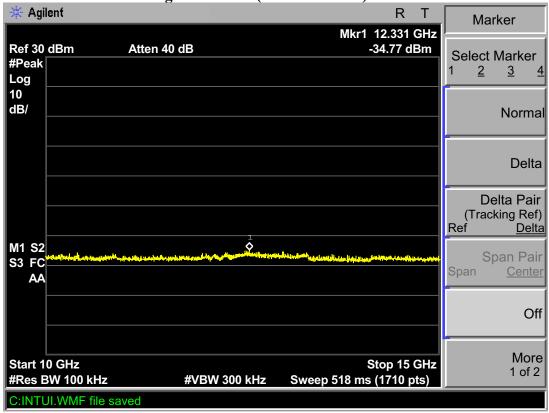
TX 802.11b Channel High 2462MHz (1GHz-5GHz)

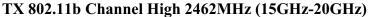


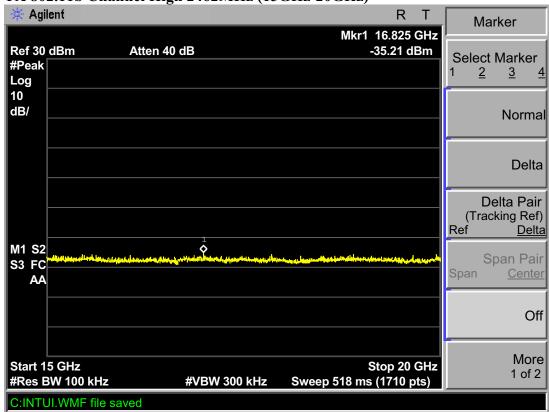




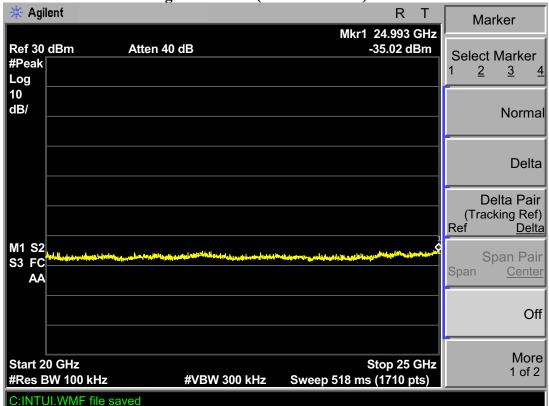
TX 802.11b Channel High 2462MHz (10GHz-15GHz)

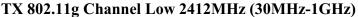


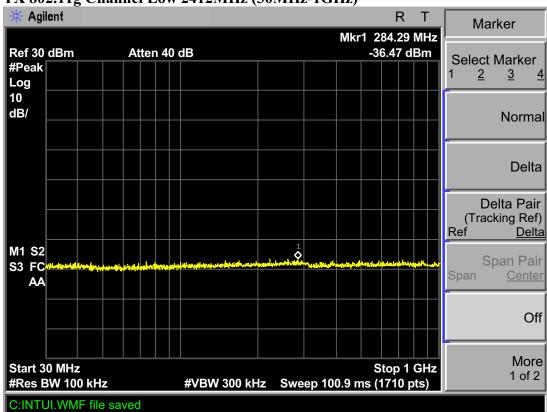




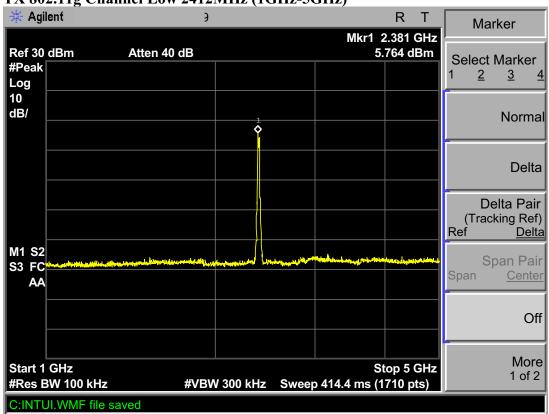
TX 802.11b Channel High 2462MHz (20GHz-25GHz)

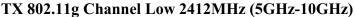


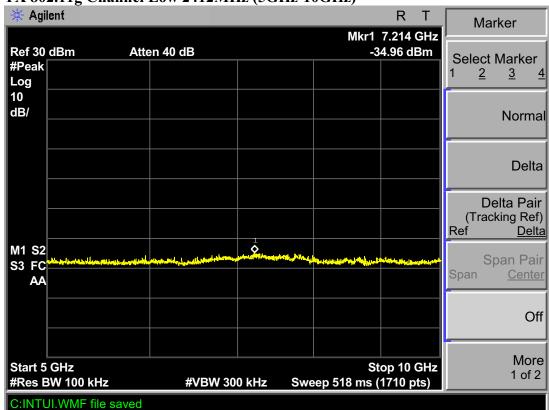




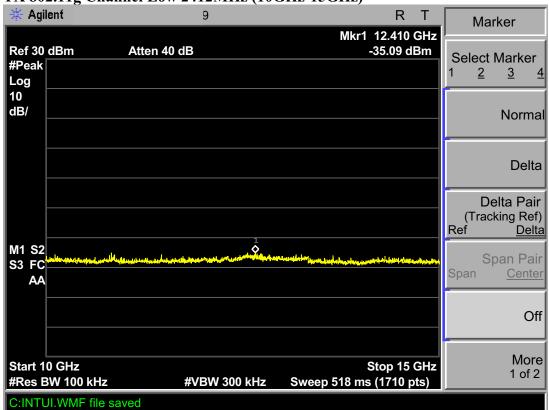
TX 802.11g Channel Low 2412MHz (1GHz-5GHz)

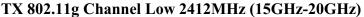


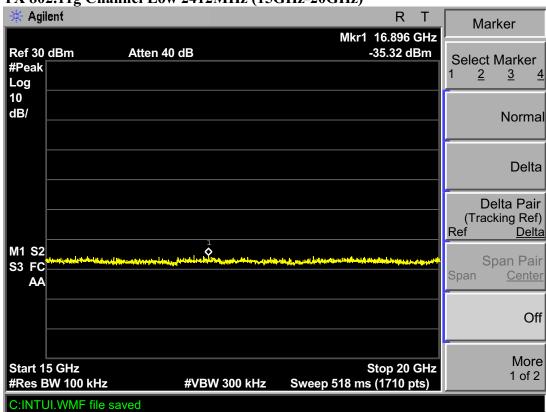




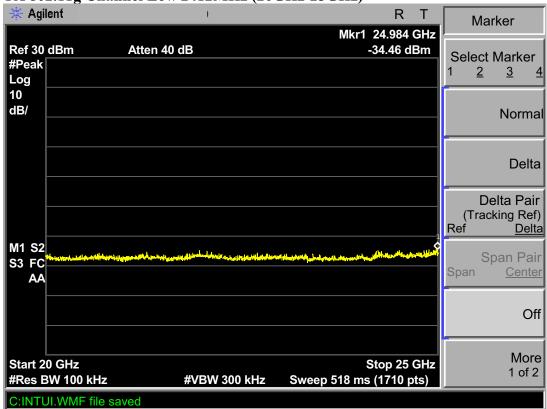
TX 802.11g Channel Low 2412MHz (10GHz-15GHz)



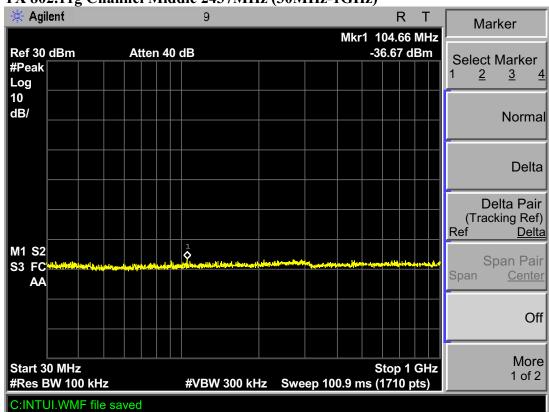




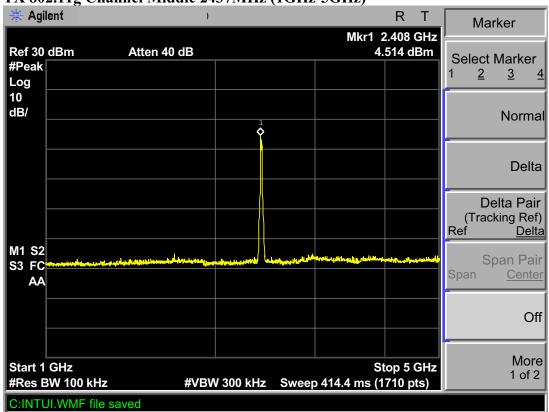
TX 802.11g Channel Low 2412MHz (20GHz-25GHz)



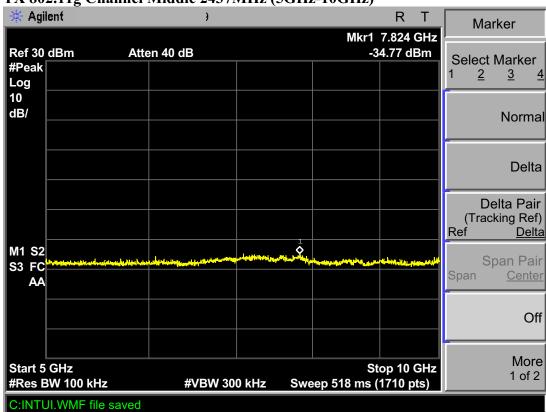




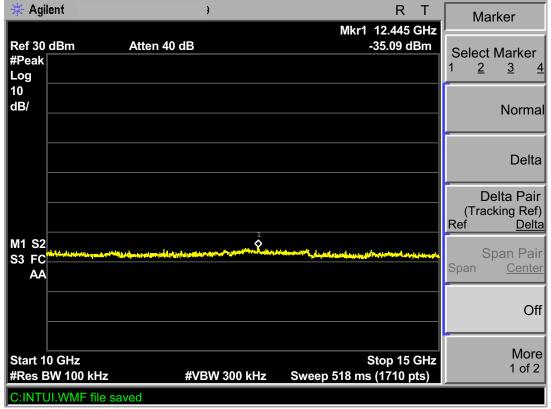
TX 802.11g Channel Middle 2437MHz (1GHz-5GHz)



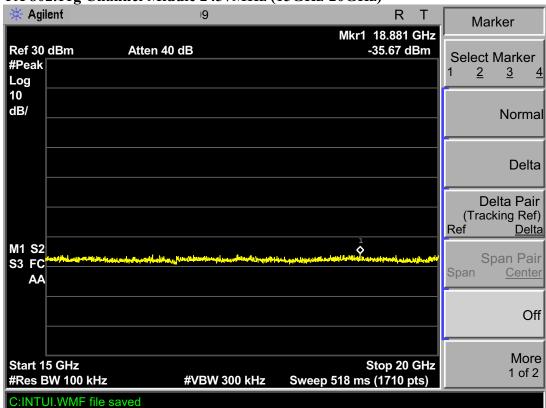




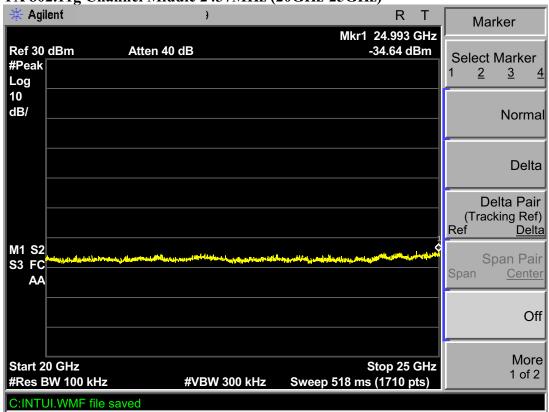
TX 802.11g Channel Middle 2437MHz (10GHz-15GHz)

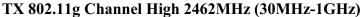


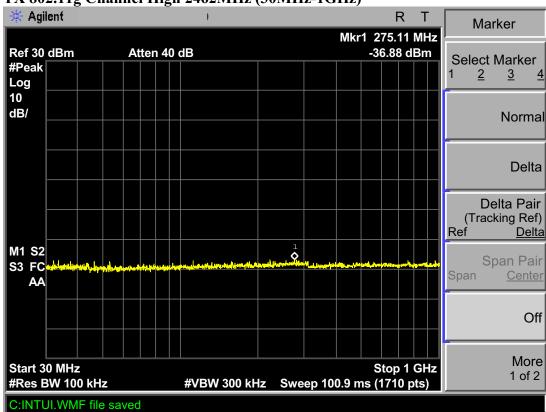




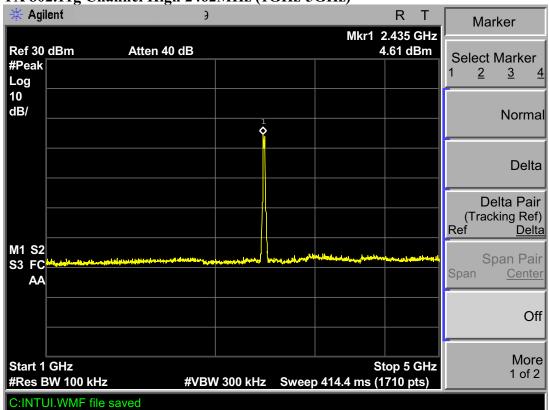
TX 802.11g Channel Middle 2437MHz (20GHz-25GHz)

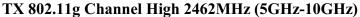


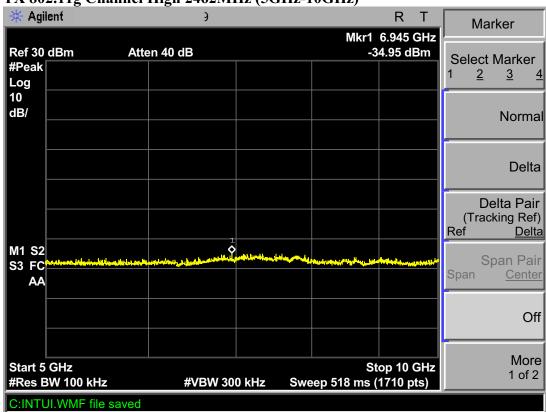




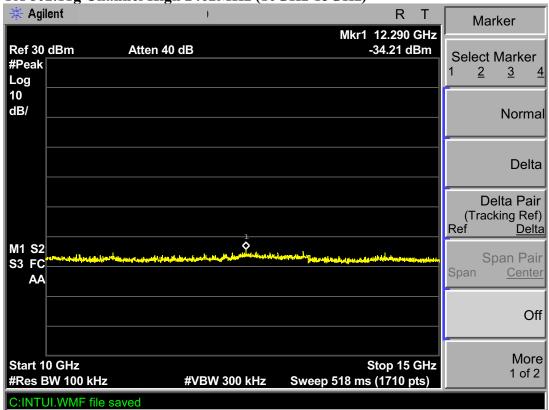
TX 802.11g Channel High 2462MHz (1GHz-5GHz)

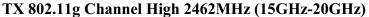


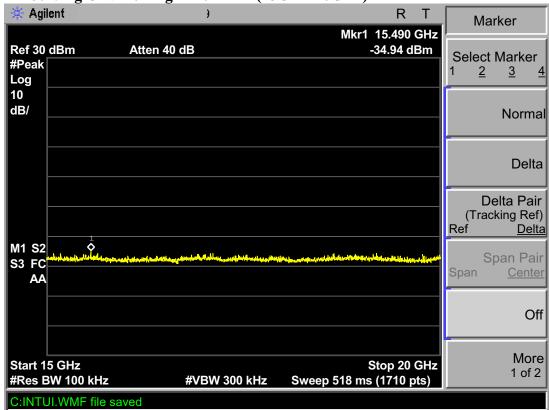




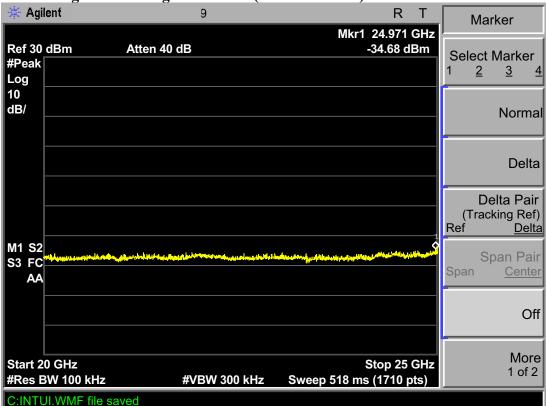
TX 802.11g Channel High 2462MHz (10GHz-15GHz)







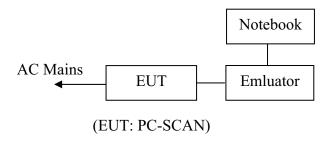
TX 802.11g Channel High 2462MHz (20GHz-25GHz)



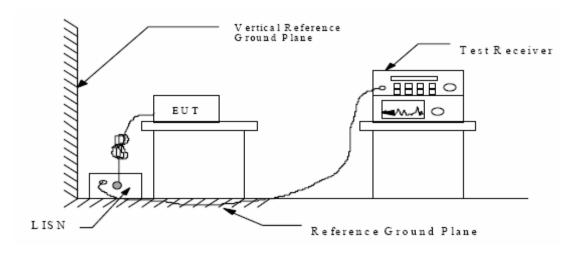
11.AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

11.1.Block Diagram of Test Setup

11.1.1.Block diagram of connection between the EUT and simulators



11.1.2.Shielding Room Test Setup Diagram



(EUT: PC-SCAN)

11.2. The Emission Limit

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

Frequency	Limit d	B(µV)
(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.PC-SCAN (EUT)

Model Number : GIDS Serial Number : N/A

Manufacturer : SPX Transportation & Industrial Solutions (Suzhou)

Co., Ltd.

11.4. Operating Condition of EUT

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

11.4.2. Turn on the power of all equipment.

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

11.5.Test Procedure

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

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

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

11.6.Power Line Conducted Emission Measurement Results

PASS.

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

Date of Test:May 4, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:TX 802.11b Channel MiddleTest Engineer:Joe

Frequency	Result	Limit	Margin	Detector	Line
(MHz)	(dBµV)	(dBµV)	(dB)		
0.665596	42.90	56	13.1	QP	
1.108370	42.10	56	13.9	QP	
1.905465	41.50	56	14.5	QP	NT . 1
0.665596	36.70	46	9.3	AV	Neutral
1.108370	35.00	46	11.0	AV	
1.936075	35.00	46	11.0	AV	
0.660314	42.70	56	13.3	QP	
1.117237	41.90	56	14.1	QP	
1.890342	41.20	56	14.8	QP	. .
0.665596	36.70	46	9.3	AV	Live
1.126175	34.20	46	11.8	AV	
1.905465	35.20	46	10.8	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 4, 2010Temperature:25°CEUT:PC-SCANHumidity:50%Model No.:GIDSPower Supply:AC 120V/60HzTest Mode:TX 802.11g Channel MiddleTest Engineer:Joe

Frequency	Result	Limit	Margin	Detector	Line
(MHz)	(dBµV)	(dBµV)	(dB)		
0.665596	42.90	56	13.1	QP	
1.108370	42.10	56	13.9	QP	
1.890342	41.30	56	14.7	QP	NT . 1
0.660314	36.70	46	9.3	AV	Neutral
1.108370	35.00	46	11.0	AV	
1.875340	35.20	46	10.8	AV	
0.660314	42.80	56	13.2	QP	
1.108370	42.10	56	13.9	QP	
1.905465	41.70	56	14.3	QP	. .
0.665596	36.70	46	9.3	AV	Live
1.108370	35.10	46	10.9	AV	
1.905465	35.20	46	10.8	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 15B

EUT: PC-SCAN M/N:GIDS

Manufacturer: SPX

Operating Condition: TX Channel 6 (802.11b)

Test Site: 1#Shielding Room

Operator: Joe

Test Specification: L 120V/60Hz

Comment: Report No.: ATE20100831 Sample No.: 100900

Start of Test: 5/4/2010 / 10:32:36AM

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

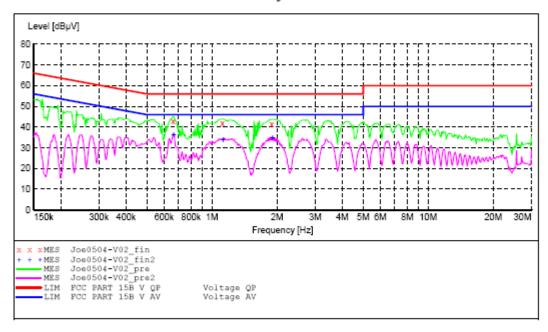
Short Description: SUB STD VTERM2 1.70

Stop Step Detector Meas. ΙF Transducer Start Stop Step Frequency Frequency Width

Time Bandw.

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

Average



MEASUREMENT RESULT: "Joe0504-V02 fin"

5	/4/2010 10:3	SAM						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.660314	42.70	11.9	56	13.3	QP	L1	GND
	1.117237	41.90	11.8	56	14.1	QP	L1	GND
	1.890342	41.20	11.7	56	14.8	OP	L1	GND

MEASUREMENT RESULT: "Joe0504-V02 fin2"

5/4/2010 10:35AM

-,	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.665596	36.70	11.9	46	9.3	AV	L1	GND
	1.126175	34.20	11.8	46	11.8	AV	L1	GND
	1.905465	35.20	11.7	46	10.8	AV	L1	GND

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: PC-SCAN M/N:GIDS

Manufacturer: SPX

Operating Condition: TX Channel 6 (802.11b) Test Site: 1 \$\frac{1}{2}\$ Shielding Room

Operator: Joe

Test Specification: N 120V/60Hz

Comment: Report No.:ATE20100831 Sample No.:100900

Start of Test: 5/4/2010 / 10:28:58AM

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

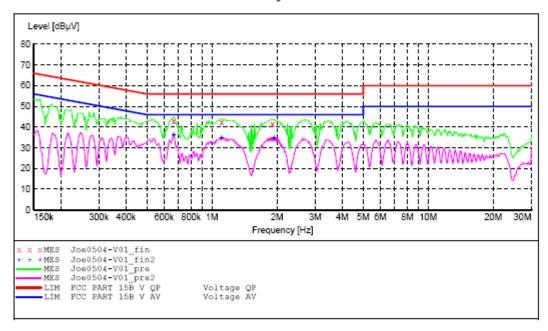
Short Description: SUB STD VTERM2 1.70

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: "Joe0504-V01 fin"

5/4/2010 10:31AM

Frequency MHz	Level		Limit dBµV	Margin dB	Detector	Line	PE
0.665596	42.90	11.9	56	13.1	QP	N	GND
1.108370		11.8	56	13.9	QP	N	GND
1.905465	41.50	11.7	56	14.5	QP	N	GND

MEASUREMENT RESULT: "Joe0504-V01 fin2"

5/4/2010 10:31AM

υ,	4/2010 10.3	THU						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.665596	36.70	11.9	46	9.3	AV	N	GND
	1.108370	35.00	11.8	46	11.0	AV	N	GND
	1.936075	35.00	11.7	46	11.0	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: PC-SCAN M/N:GIDS

Manufacturer: SPX

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

Operator: Joe

Test Specification: L 120V/60Hz

Comment: Report No.:ATE20100831 Sample No.:100900

Start of Test: 5/4/2010 / 10:35:42AM

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

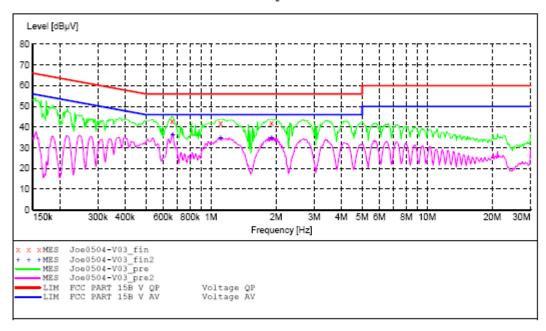
Short Description: SUB STD VTERM2 1.70

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: "Joe0504-V03 fin"

5/4/2010 10:37AM

3/4/20.	10.3	ABIT						
Fre	quency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.0	660314	42.80	11.9	56	13.2	QP	L1	GND
1.3	108370	42.10	11.8	56	13.9	QP	L1	GND
1.9	905465	41.70	11.7	56	14.3	QP	L1	GND

MEASUREMENT RESULT: "Joe0504-V03 fin2"

5/4/2010 10:37AM

3/4/2010 10.3) / PLI						
Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.665596	36.70	11.9	46	9.3	AV	L1	GND
1.108370	35.10	11.8	46	10.9	AV	L1	GND
1.905465	35.20	11.7	46	10.8	AV	L1	GND

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: PC-SCAN M/N:GIDS

Manufacturer: SPX

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

Operator: Joe

Test Specification: N 120V/60Hz

Comment: Report No.:ATE20100831 Sample No.:100900

Start of Test: 5/4/2010 / 10:38:33AM

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

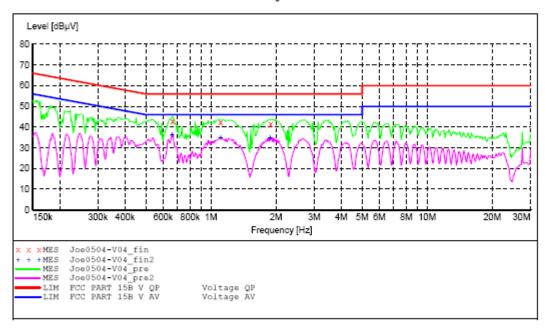
Short Description: SUB STD VTERM2 1.70

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: "Joe0504-V04 fin"

5/4/2010 10:41AM

5/4/2010	10.412	-171						
-	ncy MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.665	596	42.90	11.9	56	13.1	QP	N	GND
1.108	370	42.10	11.8	56	13.9	QP	N	GND
1.890	342	41.30	11.7	56	14.7	QP	N	GND

MEASUREMENT RESULT: "Joe0504-V04 fin2"

5/4/2010 10:41AM

5/4/2010 10	. ATMI						
Frequency MHz			Limit dBµV	Margin dB	Detector	Line	PE
0.660314	36.70	11.9	46	9.3	AV	N	GND
1.108370	35.00	11.8	46	11.0	AV	N	GND
1.875340	35.20	11.7	46	10.8	AV	N	GND

12.ANTENNA REQUIREMENT

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

The transmitter utilizes SMD chip antenna, no consideration of replacement. Therefore, the equipment complies with the antenna requirement of Section 15.203.

