

FCC CERTIFICATION  
On Behalf of  
Norcon Communications Inc.

Wireless TTU  
Model No.: TTU-7W

FCC ID: X7STTU7W

Prepared for : Norcon Communications Inc.  
Address : 510 Burnside Ave. Inwood NY 11096 USA

Prepared by : ACCURATE TECHNOLOGY CO. LTD  
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Report Number : ATE20100210  
Date of Test : February 6-7, 2010  
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APPENDIX I ( TEST CURVES) (16 pages)

## Test Report Certification

Applicant : Norcon Communications Inc.  
Manufacturer : Norcon Communications Inc.  
EUT Description : Wireless TTU  
(A) MODEL NO.: TTU-7W  
(B) SERIAL NO.: N/A  
(C) POWER SUPPLY: 4.8V DC (battery pack)

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.249  
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 15.249 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 : February 6-7, 2010

Prepared by :   
(Engineer)

Approved & Authorized Signer :   
(Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

EUT : Wireless TTU

Model Number : TTU-7W

Power Supply : 4.8V DC (battery pack)

Operate Frequency : 903.5-923.6MHz

Channel Number : 32

Applicant : Norcon Communications Inc.  
Address : 510 Burnside Ave. Inwood NY 11096 USA

Manufacturer : Norcon Communications Inc.  
Address : 510 Burnside Ave. Inwood NY 11096 USA

Date of sample received : January 28, 2010

Date of Test : February 6-7, 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  
(9kHz-30MHz) = 3.08dB, k=2

Radiated emission expanded uncertainty  
(30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty  
(Above 1GHz) = 4.06dB, k=2

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	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. SUMMARY OF TEST RESULTS

<b>FCC Rules</b>	<b>Description of Test</b>	<b>Result</b>
Section 15.207	Conducted Emission	N/A
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: "N/A" means "Not applicable".

# 4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

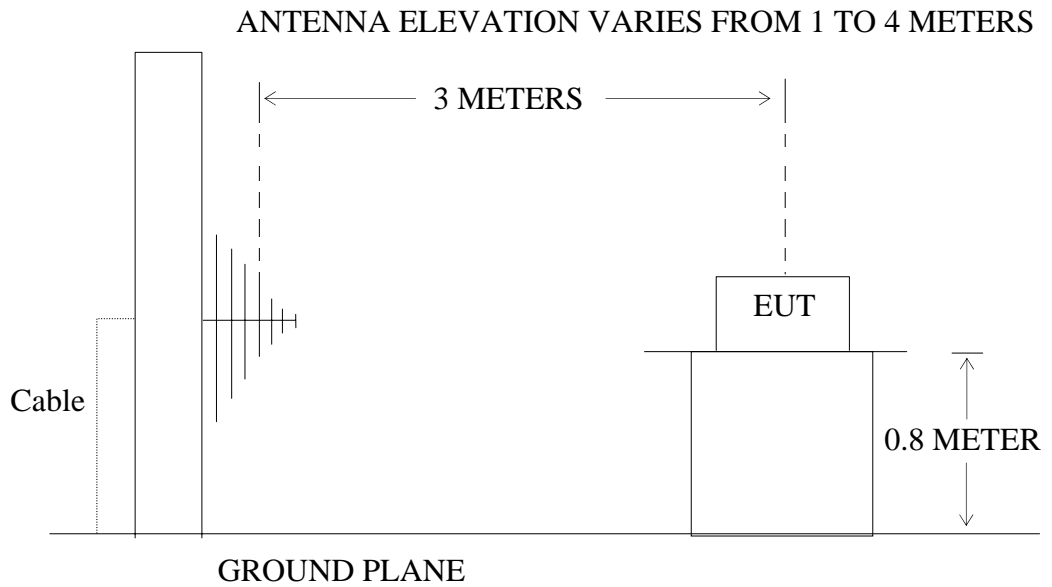
## 4.1. Block Diagram of Test Setup

### 4.1.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless TTU)

### 4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Wireless TTU)



## 4.2.The Emission Limit

4.2.1.For intentional radiators, According to section 15.249(a), Operation within the frequency band of 902 to 928MHz, The fundamental field strength shall not exceed 94 dB $\mu$ V/m and the harmonics shall not exceed 54 dB $\mu$ V/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

## 4.3.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.

### 4.3.1.Wireless TTU (EUT)

Model Number : TTU-7W  
 Serial Number : N/A  
 Manufacturer : Norcon Communications Inc.

## 4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 4.1.

4.4.2.Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 903.5MHz, 913.9MHz, 923.6MHz.

#### 4.5. 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 bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

## 4.6. The Field Strength of Radiation Emission Measurement Results

### PASS.

Date of Test:	February 6-7, 2010	Temperature:	25°C
EUT:	Wireless TTU	Humidity:	50%
Model No.:	TTU-7W	Power Supply:	4.8V DC
Test Mode:	TX 903.5MHz	Test Engineer:	Joe

#### Fundamental Radiated Emissions

Frequency (MHz)	Reading (dBμV/m)		Factor(dB) Corr.	Result (dBμV/m)		Limit (dBμV/m)	Margin (dB)		Polarization
	QP			QP			QP		
903.4600	61.43		28.79	90.22		94	-3.78		Vertical
903.4600	62.01		28.79	90.80		94	-3.20		Horizontal

#### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
1806.960	59.32	63.79	-9.97	49.35	53.82	54	74	-4.65	-20.18	Vertical
2710.492	54.21	58.68	-6.29	47.92	52.39	54	74	-6.08	-21.61	Vertical
1806.960	60.14	64.63	-9.97	50.17	54.66	54	74	-3.83	-19.34	Horizontal
2710.492	55.21	59.71	-6.29	48.92	53.42	54	74	-5.08	-20.58	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	February 6-7, 2010	Temperature:	25°C
EUT:	Wireless TTU	Humidity:	50%
Model No.:	TTU-7W	Power Supply:	4.8V DC
Test Mode:	TX 913.9MHz	Test Engineer:	Joe

### Fundamental Radiated Emissions

Frequency (MHz)	Reading (dBμV/m)		Factor(dB) Corr.	Result (dBμV/m)		Limit (dBμV/m)		Margin (dB)		Polarization
	QP			QP		QP		QP		
913.8560	61.19		28.90	90.09		94		-3.91		Vertical
913.8560	62.08		28.90	90.98		94		-3.02		Horizontal

### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
1827.820	59.37	63.83	-9.75	49.62	54.08	54	74	-4.38	-19.92	Vertical
2741.720	54.30	58.77	-6.14	48.16	52.63	54	74	-5.84	-21.37	Vertical
1827.820	59.82	64.30	-9.75	50.07	54.55	54	74	-3.93	-19.45	Horizontal
2741.720	54.72	59.20	-6.14	48.58	53.06	54	74	-5.42	-20.94	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	February 6-7, 2010	Temperature:	25°C
EUT:	Wireless TTU	Humidity:	50%
Model No.:	TTU-7W	Power Supply:	4.8V DC
Test Mode:	TX 923.6MHz	Test Engineer:	Joe

### Fundamental Radiated Emissions

Frequency (MHz)	Reading (dBμV/m)		Factor(dB) Corr.	Result (dBμV/m)		Limit (dBμV/m)		Margin (dB)		Polarization
	QP			QP		QP		QP		
923.6010	60.62		29.12	89.74		94		-4.26		Vertical
923.6010	61.83		29.12	90.95		94		-3.05		Horizontal

### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
1847.364	58.70	63.19	-9.56	49.14	53.63	54	74	-4.86	-20.37	Vertical
2771.020	53.82	58.29	-6.08	47.74	52.21	54	74	-6.26	-21.79	Vertical
1847.364	59.51	63.99	-9.56	49.95	54.43	54	74	-4.05	-19.57	Horizontal
2771.020	54.07	58.54	-6.08	47.99	52.46	54	74	-6.01	-21.54	Horizontal

Note:

- Emissions attenuated more than 20 dB below the permissible value are not reported.
- The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
- The spectral diagrams in appendix I display the measurement of peak values.

## 5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

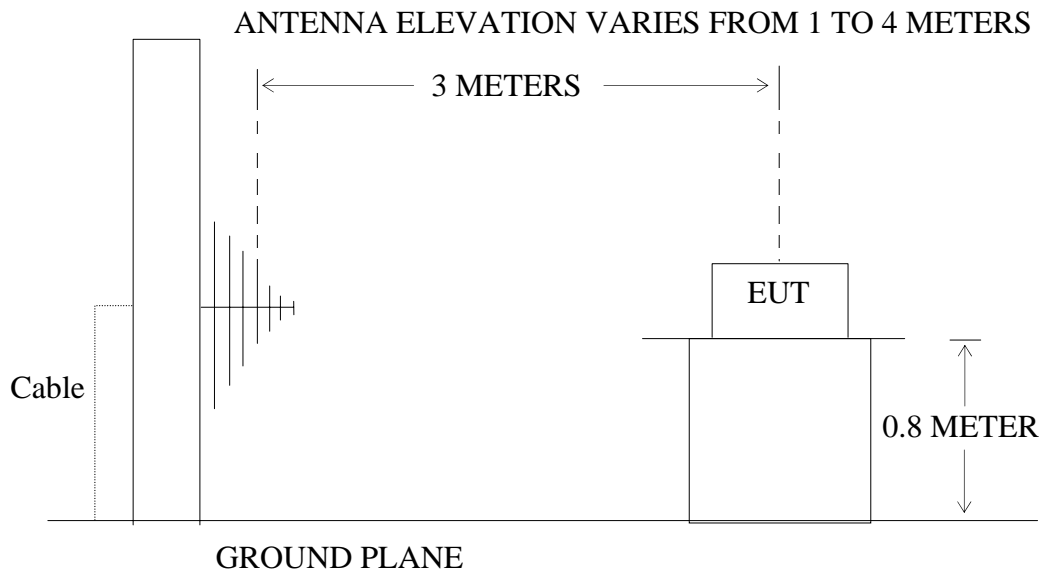
### 5.1. Block Diagram of Test Setup

#### 5.1.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless TTU)

#### 5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Wireless TTU)

## 5.2.The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

### Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		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.
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dB $\mu$ V/m)	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	

## 5.3.EUT Configuration on Measurement

The following equipment are installed on the Radiated 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.Wireless TTU (EUT)

Model Number : TTU-7W  
 Serial Number : N/A  
 Manufacturer : Norcon Communications Inc.

## 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 903.5MHz, 913.9MHz, 923.6MHz.

## 5.5. 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 bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 10000MHz 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.



## 5.6.The Emission Measurement Result

**PASS.**

Date of Test:	<u>February 6-7, 2010</u>	Temperature:	<u>25°C</u>
EUT:	<u>Wireless TTU</u>	Humidity:	<u>50%</u>
Model No.:	<u>TTU-7W</u>	Power Supply:	<u>4.8V DC</u>
Test Mode:	<u>TX 903.5MHz</u>	Test Engineer:	<u>Joe</u>

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

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	<u>February 6-7, 2010</u>	Temperature:	<u>25°C</u>
EUT:	<u>Wireless TTU</u>	Humidity:	<u>50%</u>
Model No.:	<u>TTU-7W</u>	Power Supply:	<u>4.8V DC</u>
Test Mode:	<u>TX 913.9MHz</u>	Test Engineer:	<u>Joe</u>

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

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	<u>February 6-7, 2010</u>	Temperature:	<u>25°C</u>
EUT:	<u>Wireless TTU</u>	Humidity:	<u>50%</u>
Model No.:	<u>TTU-7W</u>	Power Supply:	<u>4.8V DC</u>
Test Mode:	<u>TX 923.6MHz</u>	Test Engineer:	<u>Joe</u>

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

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

## 6. BAND EDGES

### 6.1.The Requirement

6.1.1.Band Edge from 902MHz to 928MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

### 6.2.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.

#### 6.2.1.Wireless TTU (EUT)

Model Number : TTU-7W  
Serial Number : N/A  
Manufacturer : Norcon Communications Inc.

### 6.3.Operating Condition of EUT

6.3.1.Setup the EUT and simulator as shown as Section 4.1.

6.3.2.Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 903.5MHz, 913.9MHz, 923.6MHz. We select 903.5MHz, 923.6MHz TX frequency to transmit.

#### 6.4. 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 bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

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.

## 6.5.The Measurement Result

**Pass.**

Date of Test:	<u>February 6, 2010</u>	Temperature:	<u>25°C</u>
EUT:	<u>Wireless TTU</u>	Humidity:	<u>50%</u>
Model No.:	<u>TTU-7W</u>	Power Supply:	<u>4.8V DC</u>
Test Mode:	<u>TX 903.5MHz</u>	Test Engineer:	<u>Joe</u>

Frequency (MHz)	Reading (dB $\mu$ V/m)	Factor(dB) Corr.	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
902.0000	12.28	28.78	41.06	46.00	-4.94	Vertical
902.0000	12.87	28.78	41.65	46.00	-4.35	Horizontal

Note:

- Emissions attenuated more than 20 dB below the permissible value are not reported.
- The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
- The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	<u>February 6, 2010</u>	Temperature:	<u>25°C</u>
EUT:	<u>Wireless TTU</u>	Humidity:	<u>50%</u>
Model No.:	<u>TTU-7W</u>	Power Supply:	<u>4.8V DC</u>
Test Mode:	<u>TX 923.6MHz</u>	Test Engineer:	<u>Joe</u>

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
928.0000	10.67	29.22	39.89	46.00	-6.11	Vertical
928.0000	12.25	29.22	41.47	46.00	-4.53	Horizontal

## Note:

- Emissions attenuated more than 20 dB below the permissible value are not reported.
- The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
- The spectral diagrams in appendix I display the measurement of peak values.

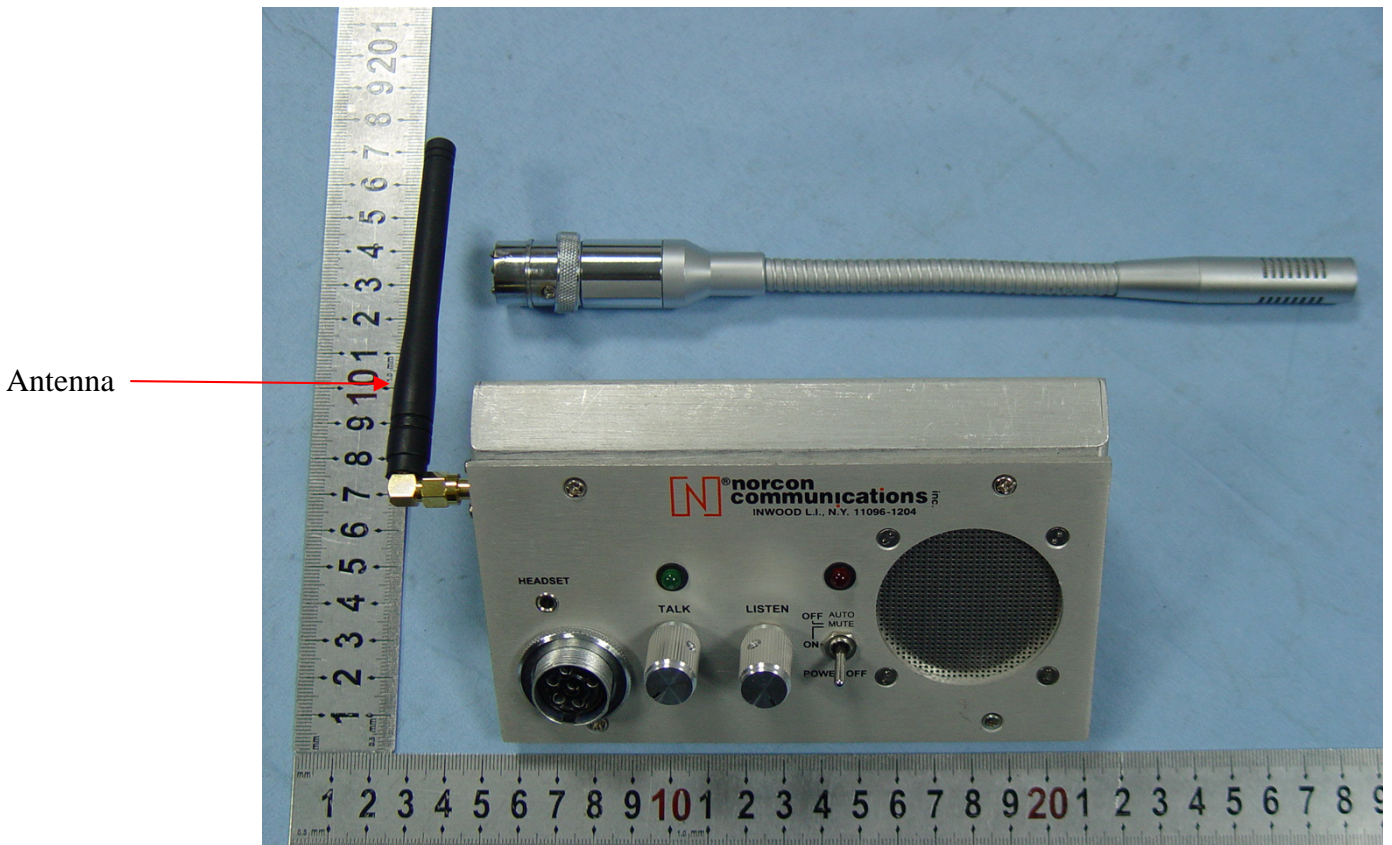
## 7. ANTENNA REQUIREMENT

### 7.1.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.

### 7.2.Antenna Construction

The antenna used with Reverse Polarity SMA connector, no consideration of replacement other than that furnished by the responsible party. Therefore, the equipment complies with the antenna requirement of Section 15.203.





# APPENDIX I (Test Curves)



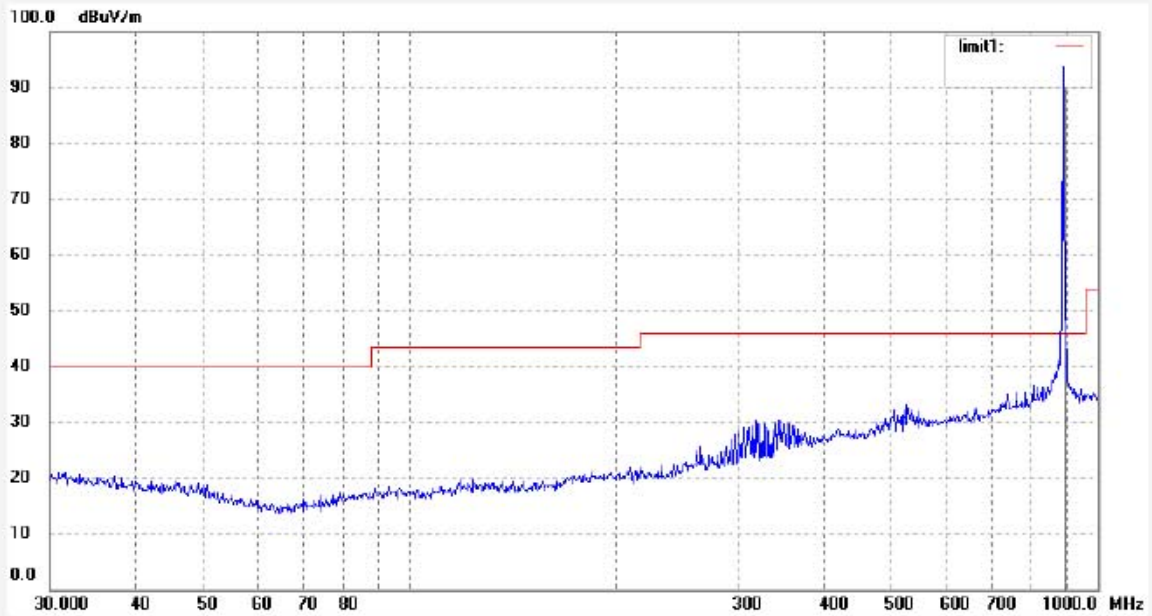
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4167	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 16:40:57
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 903.5MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	903.4600	62.01	28.79	90.80	94.00	-3.20	QP			



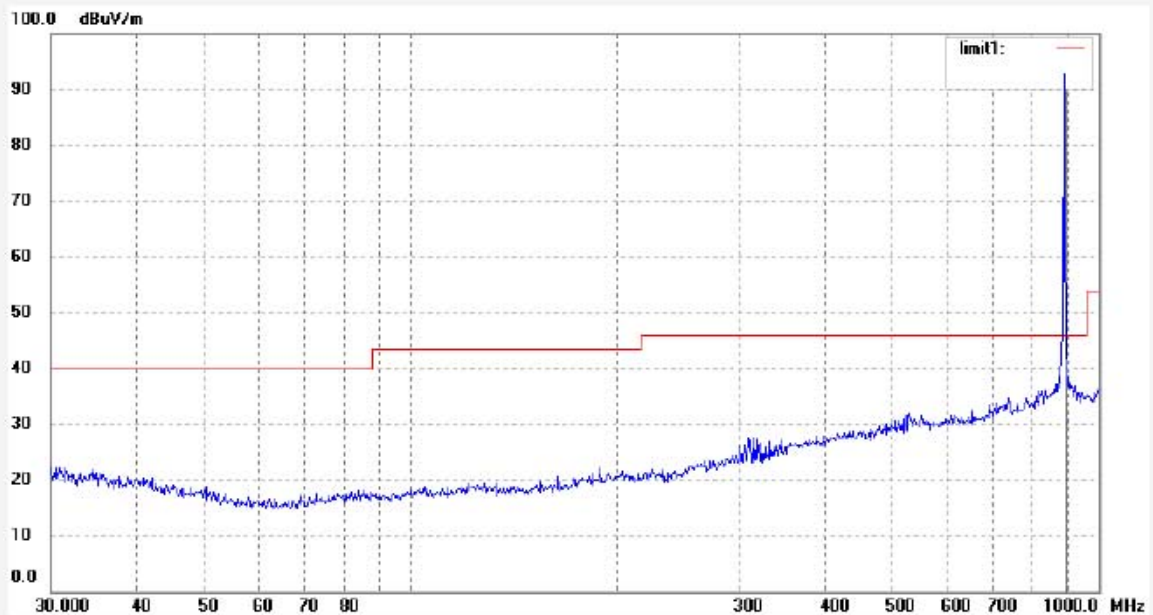
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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: RTTE #4168	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 16:44:49
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 903.5MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	903.4600	61.43	28.79	90.22	94.00	-3.78	QP			



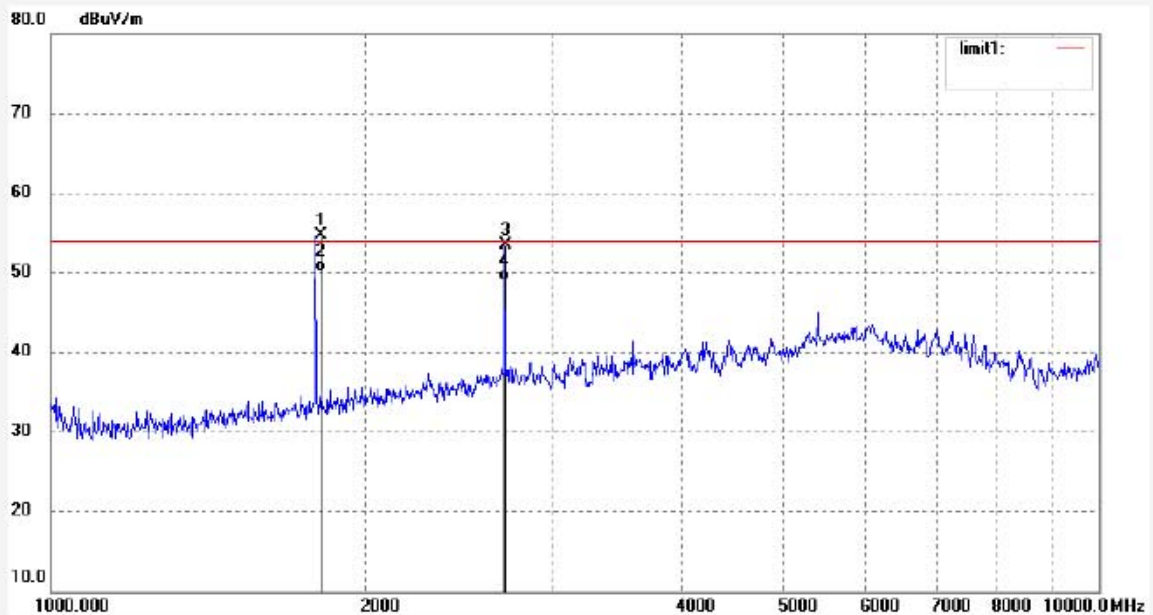
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4178	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/07
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 14:50:24
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 903.5MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1806.960	64.63	-9.97	54.66	74.00	-19.34	peak			
2	1806.960	60.14	-9.97	50.17	54.00	-3.83	AVG			
3	2710.492	59.71	-6.29	53.42	74.00	-20.58	peak			
4	2710.492	55.21	-6.29	48.92	54.00	-5.08	AVG			



**ACCURATE TECHNOLOGY CO., LTD.**

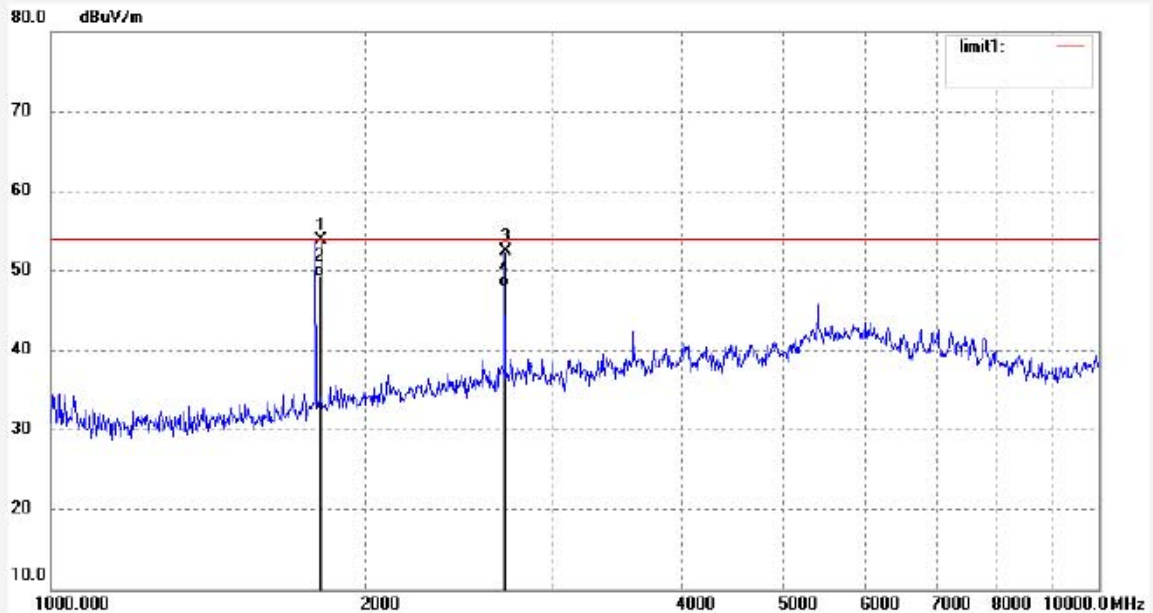
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: RTTE #4177  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 50 %  
EUT: Wireless TTU  
Mode: TX 903.5MHz  
Model: TTU-7W  
Manufacturer: Norcon Communications Inc.

Polarization: Vertical  
Power Source: DC 4.8V  
Date: 2010/02/07  
Time: 14:46:10  
Engineer Signature: Joe  
Distance: 3m

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1806.960	63.79	-9.97	53.82	74.00	-20.18	peak			
2	1806.960	59.32	-9.97	49.35	54.00	-4.65	AVG			
3	2710.492	58.68	-6.29	52.39	74.00	-21.61	peak			
4	2710.492	54.21	-6.29	47.92	54.00	-6.08	AVG			



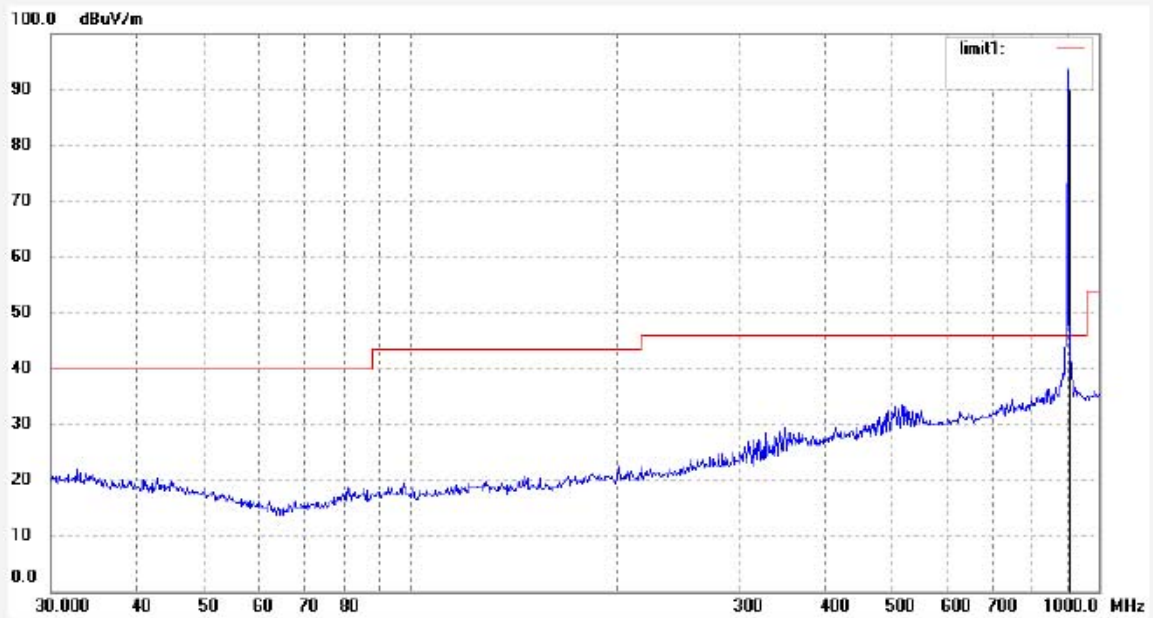
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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: RTTE #4170	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 16:53:04
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 913.9MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	913.8560	62.08	28.90	90.98	94.00	-3.02	QP			



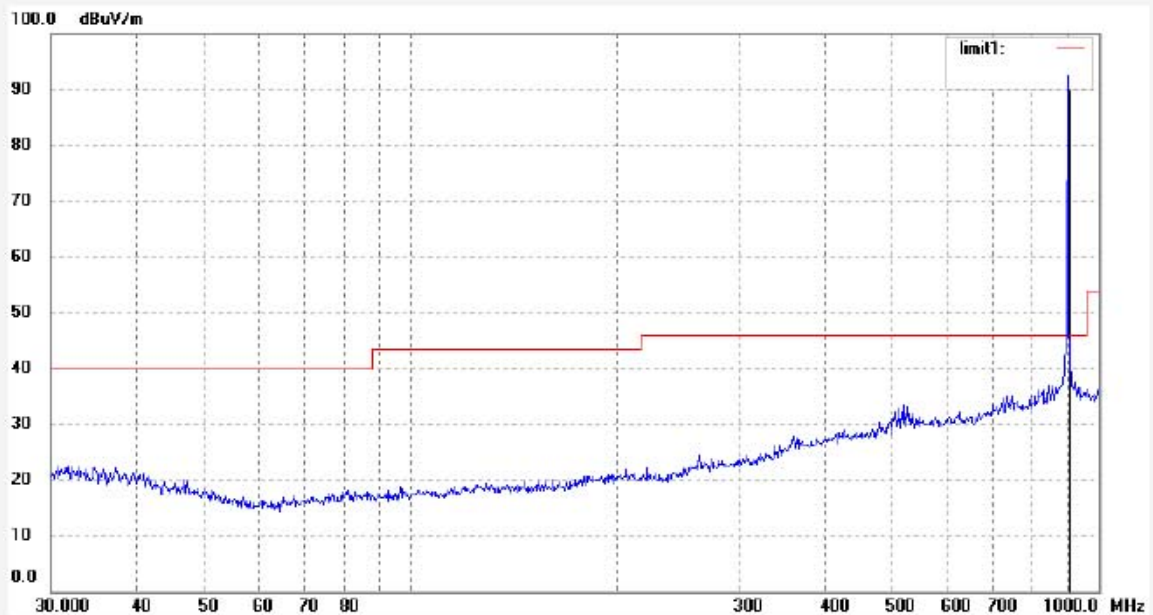
**ACCURATE TECHNOLOGY CO., LTD.**

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Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: RTTE #4169	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 16:49:10
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 913.9MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	913.8560	61.19	28.90	90.09	94.00	-3.91	QP			



**ACCURATE TECHNOLOGY CO., LTD.**

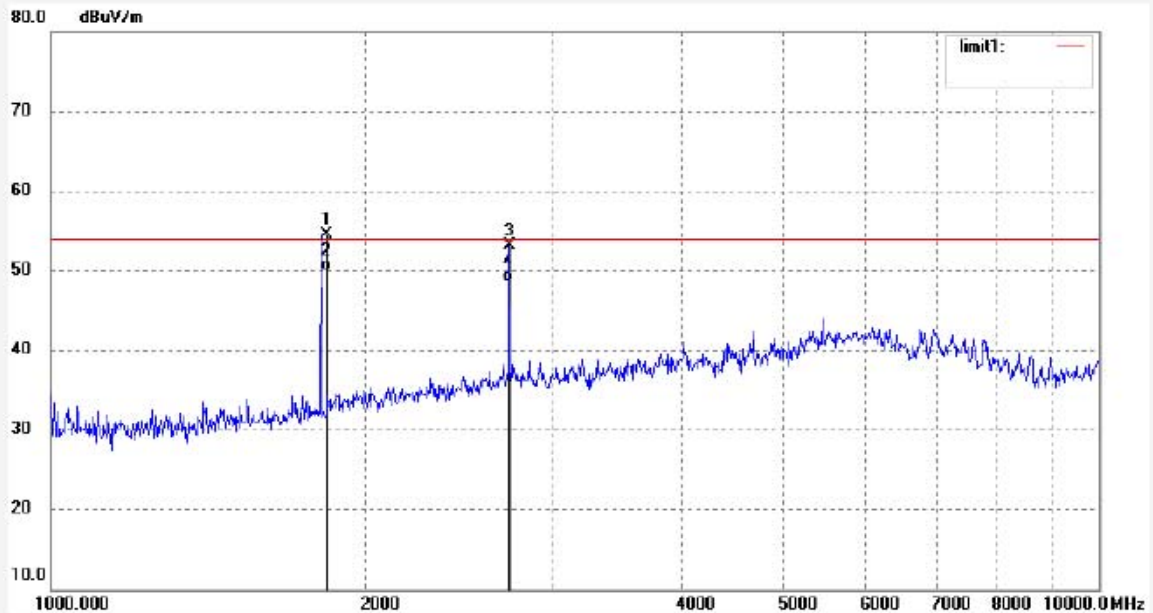
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: RTTE #4179  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 50 %  
EUT: Wireless TTU  
Mode: TX 913.9MHz  
Model: TTU-7W  
Manufacturer: Norcon Communications Inc.

Polarization: Horizontal  
Power Source: DC 4.8V  
Date: 2010/02/07  
Time: 14:54:56  
Engineer Signature: Joe  
Distance: 3m

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1827.820	64.30	-9.75	54.55	74.00	-19.45	peak			
2	1827.820	59.82	-9.75	50.07	54.00	-3.93	AVG			
3	2741.720	59.20	-6.14	53.06	74.00	-20.94	peak			
4	2741.720	54.72	-6.14	48.58	54.00	-5.42	AVG			





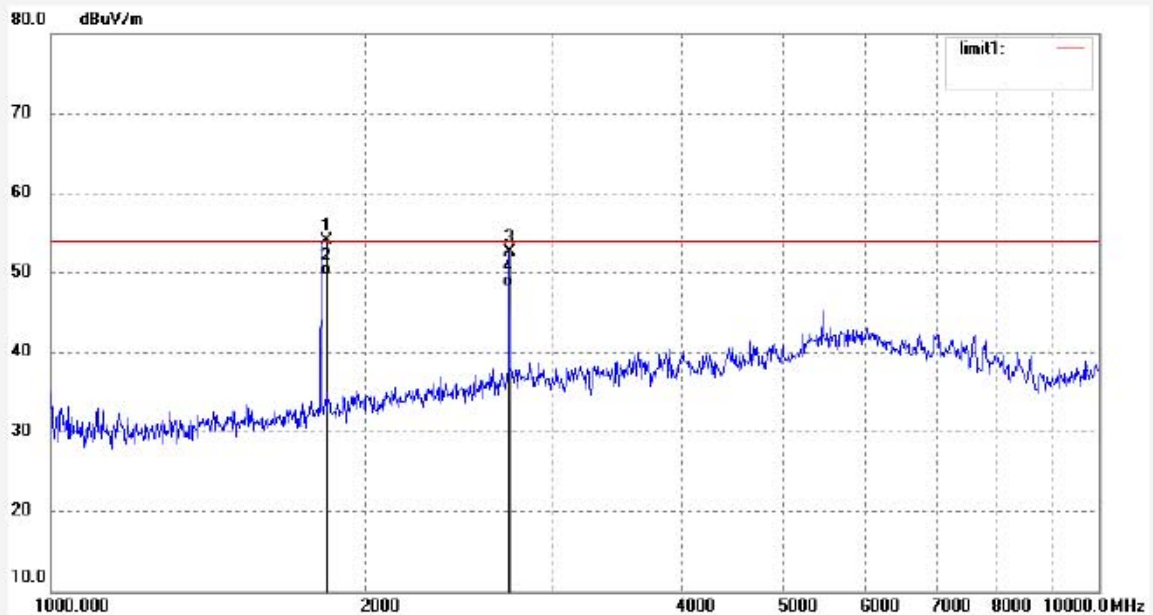
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4180	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/07
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 14:59:10
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 913.9MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1827.820	63.83	-9.75	54.08	74.00	-19.92	peak			
2	1827.820	59.37	-9.75	49.62	54.00	-4.38	AVG			
3	2741.720	58.77	-6.14	52.63	74.00	-21.37	peak			
4	2741.720	54.30	-6.14	48.16	54.00	-5.84	AVG			



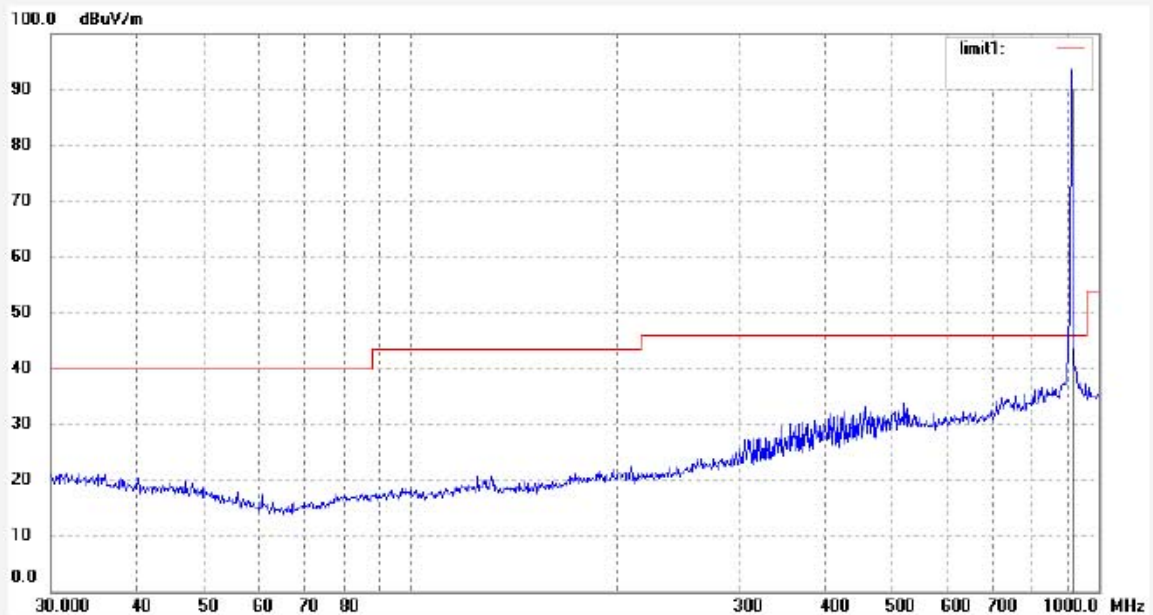
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4171	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 16:57:38
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	923.6010	61.83	29.12	90.95	94.00	-3.05	QP			



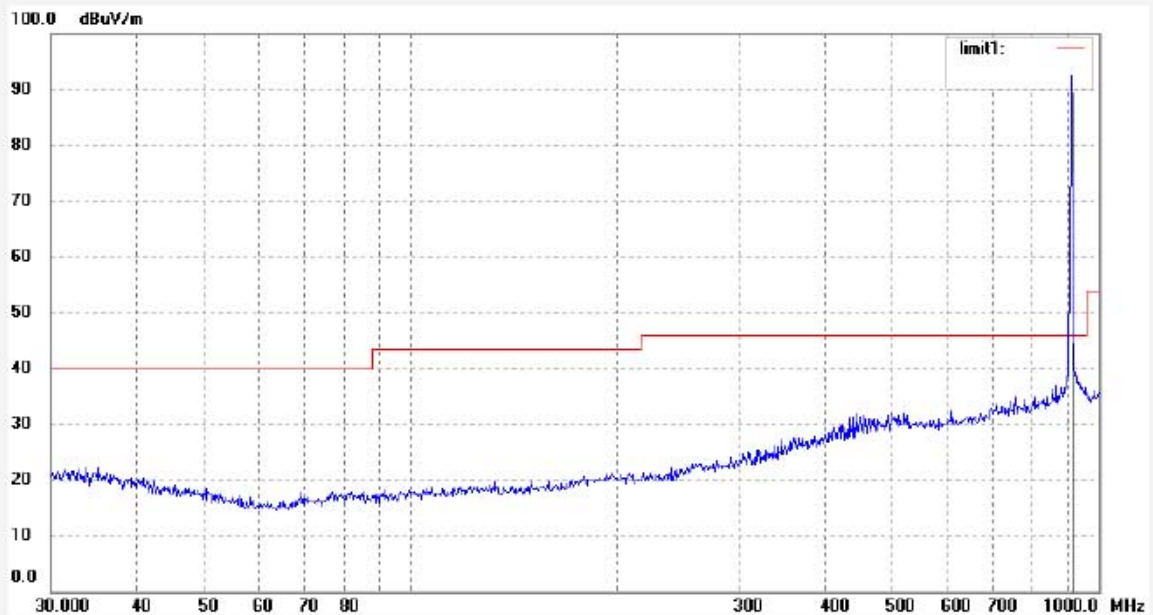
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4172	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 17:01:32
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	923.6010	60.62	29.12	89.74	94.00	-4.26	QP			



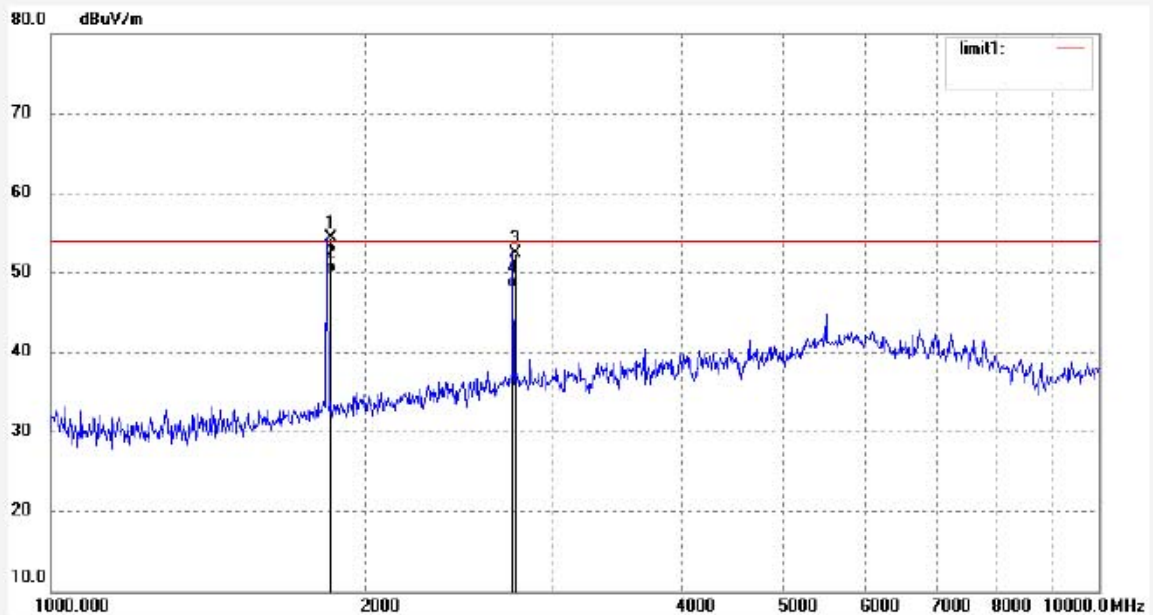
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4182	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/07
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 15:08:16
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1847.364	63.99	-9.56	54.43	74.00	-19.57	peak			
2	1847.364	59.51	-9.56	49.95	54.00	-4.05	AVG			
3	2771.020	58.54	-6.08	52.46	74.00	-21.54	peak			
4	2771.020	54.07	-6.08	47.99	54.00	-6.01	AVG			



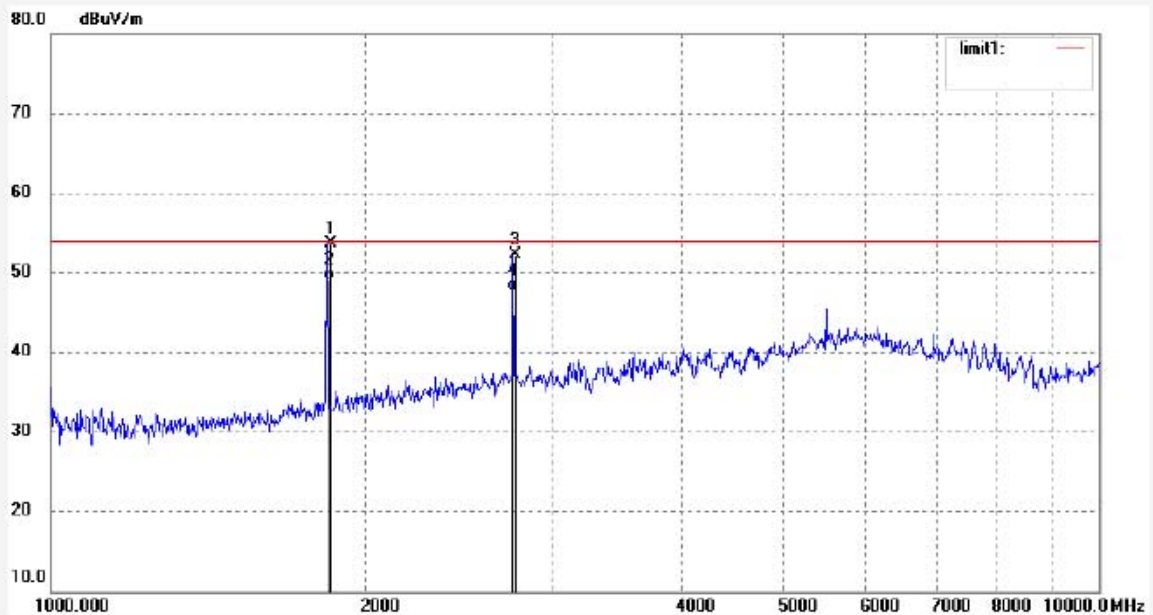
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4181	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/07
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 15:03:57
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1847.364	63.19	-9.56	53.63	74.00	-20.37	peak			
2	1847.364	58.70	-9.56	49.14	54.00	-4.86	AVG			
3	2771.020	58.29	-6.08	52.21	74.00	-21.79	peak			
4	2771.020	53.82	-6.08	47.74	54.00	-6.26	AVG			



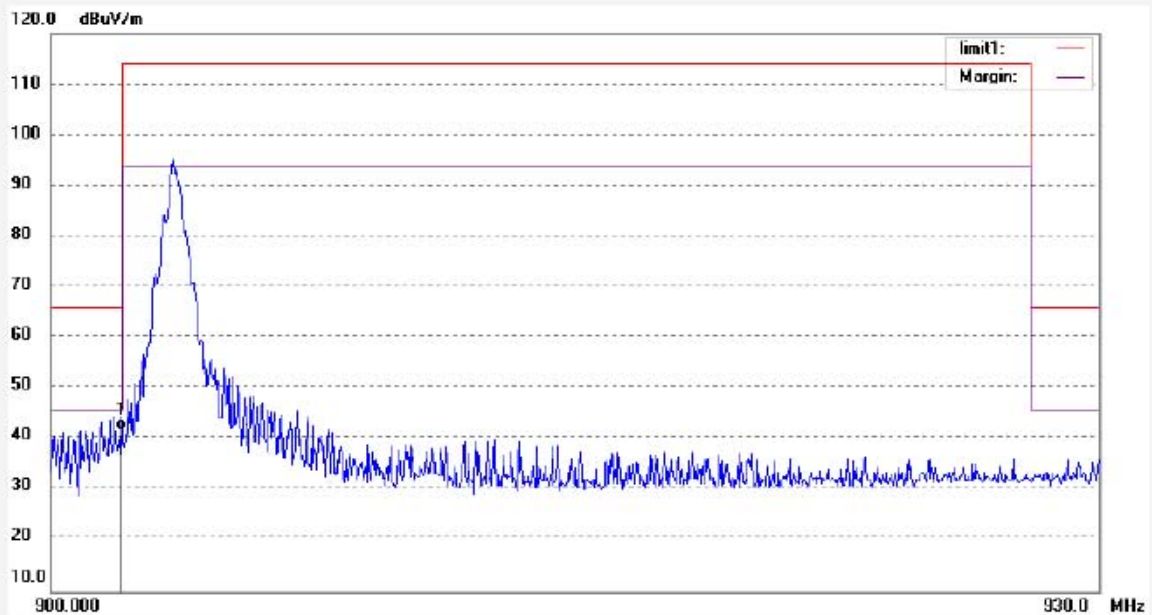
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4175	Polarization: Horizontal
Standard: FCC Band Edge	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 17:18:26
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 903.5MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	12.87	28.78	41.65	46.00	-4.35	QP			



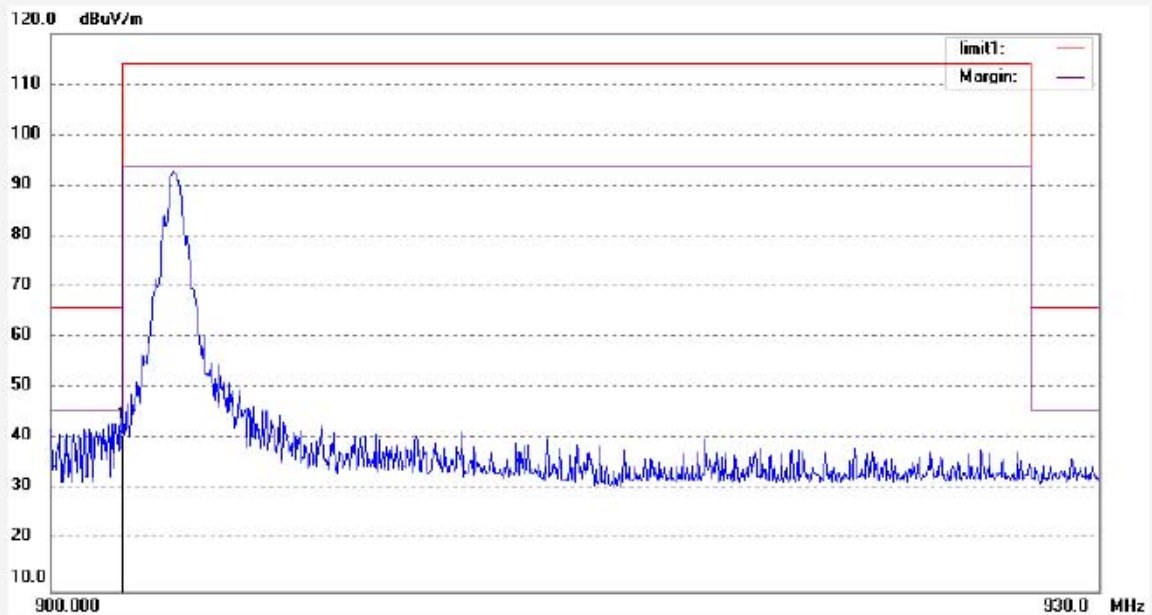
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4176	Polarization: Vertical
Standard: FCC Band Edge	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 17:22:10
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 903.5MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	12.28	28.78	41.06	46.00	-4.94	QP			



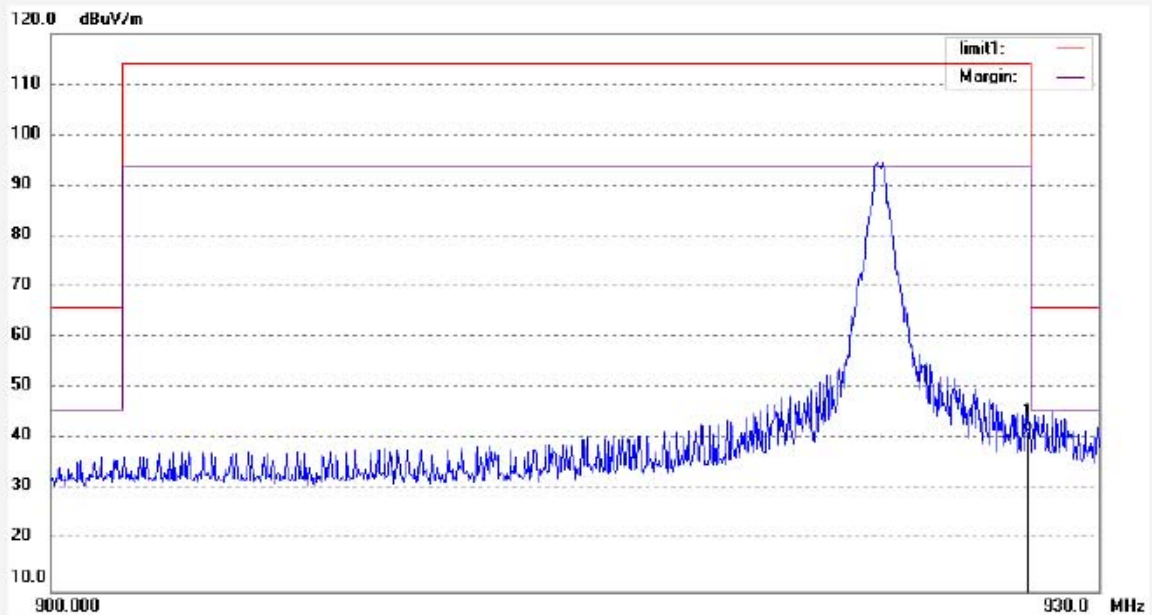
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4174	Polarization: Horizontal
Standard: FCC Band Edge	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 17:12:12
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	928.0000	12.25	29.22	41.47	46.00	-4.53	QP			





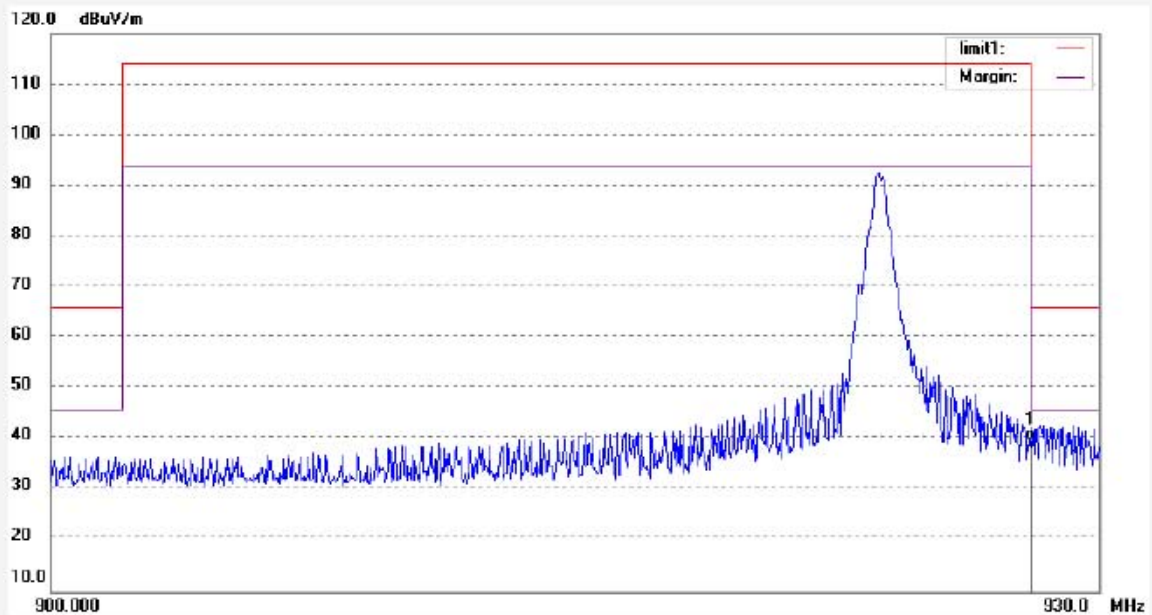
**ACCURATE TECHNOLOGY CO., LTD.**

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 #4173	Polarization: Vertical
Standard: FCC Band Edge	Power Source: DC 4.8V
Test item: Radiation Test	Date: 2010/02/06
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 17:08:29
EUT: Wireless TTU	Engineer Signature: Joe
Mode: TX 923.6MHz	Distance: 3m
Model: TTU-7W	
Manufacturer: Norcon Communications Inc.	

Note: Sample No.:100339 Report No.:ATE20100210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	928.0000	10.67	29.22	39.89	46.00	-6.11	QP			