

FCC CERTIFICATION
On Behalf of
La Crosse Technology Ltd.

Outdoor Transmitter
Model No.: TX45UTH-IT

FCC ID: OMO-M-15

Prepared for : La Crosse Technology Ltd.
Address : 2809 Losey Blvd. South, La Crosse Wisconsin 54601,
USA

Prepared by : ACCURATE TECHNOLOGY CO., LTD
Address : F1, Bldg. A&D, Changyuan New Material Port, Keyuan
Rd., Science & Industry Park, Nanshan District, Shenzhen
518057, P. R. China

Tel: (0755) 26503290
Fax: (0755) 26503396

Report Number : ATE20112033
Date of Test : Oct. 2-10, 2011
Date of Report : Oct. 12, 2011

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APPENDIX I (TEST CURVES) (16 pages)

Test Report Certification

Applicant : La Crosse Technology Ltd.
EUT Description : Outdoor Transmitter
(A) MODEL NO.: TX45UTH-IT
(B) SERIAL NO.: N/A
(C) POWER SUPPLY: 3V DC (“AAA” batteries 2×)

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 : Oct. 2-10, 2011

Prepared by : Apple Lv
(Engineer)

Approved & Authorized Signer : Heunbo
(Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : Outdoor Transmitter

Model Number : TX45UTH-IT

Power Supply : 3V DC (“AAA” batteries 2×)

Transmitting Frequency : Channel 1: 910MHz
Channel 2: 915MHz
Channel 3: 920MHz

Channel Number : 3 Channels

Applicant : La Crosse Technology Ltd.
Address : 2809 Losey Blvd. South, La Crosse Wisconsin 54601,
USA

Date of sample received : Oct. 2, 2011

Date of Test : Oct. 2-10, 2011

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. 15, 2012
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 15, 2012
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 15, 2012
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 15, 2012
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2012
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2012
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2012
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 15, 2012
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 15, 2012
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 15, 2012

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
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)

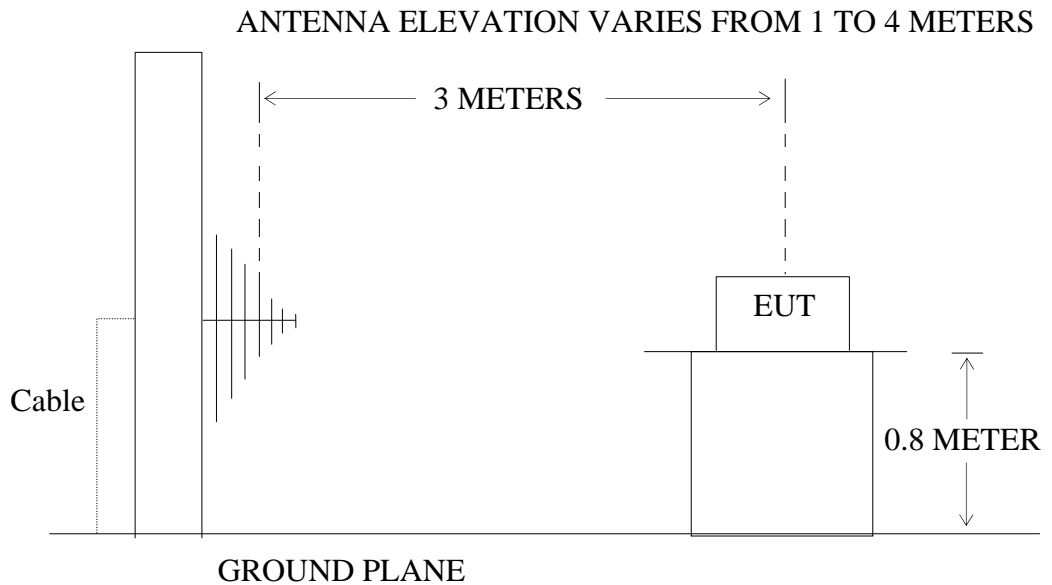
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: Outdoor Transmitter)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Outdoor Transmitter)

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 μ V/m and the harmonics shall not exceed 54 dB μ 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 is 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.Outdoor Transmitter (EUT)

Model Number : TX45UTH-IT
Serial Number : N/A

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 mode measure it. The transmit frequency are 910MHz, 915MHz, 920MHz.

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:	<u>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC ("AAA" batteries 2×)</u>
Test Mode:	<u>TX 910MHz</u>	Test Engineer:	<u>Kai</u>

Fundamental 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	
910.000	63.48		28.82	92.30		94		-1.7		Vertical
910.000	46.25		28.82	75.07		94		-18.93		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	
1820.000	58.36	62.06	-9.84	48.52	52.22	54	74	-5.48	-21.78	Vertical
2730.000	51.44	55.22	-6.20	45.24	49.02	54	74	-8.76	-24.98	
3640.000	44.53	48.67	-2.64	41.89	46.03	54	74	-12.11	-27.97	
4550.000	45.12	49.48	-1.22	43.90	48.26	54	74	-10.1	-25.74	
3640.000	45.37	49.33	-2.64	42.73	46.69	54	74	-11.27	-27.31	Horizontal
4550.000	43.28	47.62	-1.22	42.06	46.40	54	74	-11.94	-27.60	

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:	Oct. 5, 2011	Temperature:	21°C
EUT:	Outdoor Transmitter	Humidity:	55%
Model No.:	TX45UTH-IT	Power Supply:	3V DC ("AAA" batteries 2×)
Test Mode:	TX 915MHz	Test Engineer:	Kai

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m) QP	Margin(dB) QP		Polarization
	QP			QP			QP	QP	
915.000	60.11		28.92	89.03		94	-4.97		Vertical
915.000	44.57		28.92	73.49		94	-20.51		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	
1830.000	57.21	61.87	-9.73	47.48	52.14	54	74	-6.52	-21.86	Vertical
3660.000	45.55	49.61	-2.56	42.99	47.05	54	74	-11.01	-26.95	
4575.000	43.24	47.48	-1.18	42.06	46.30	54	74	-11.94	-27.7	
3660.000	43.42	47.82	-2.56	40.86	45.26	54	74	-13.14	-28.74	Horizontal
4575.000	46.61	50.16	-1.18	45.43	48.98	54	74	-8.57	-25.02	

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.

Date of Test:	Oct. 5, 2011	Temperature:	21°C
EUT:	Outdoor Transmitter	Humidity:	55%
Model No.:	TX45UTH-IT	Power Supply:	3V DC ("AAA" batteries 2×)
Test Mode:	TX 920MHz	Test Engineer:	Kai

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m) QP	Margin(dB) QP		Polarization
	QP			QP			QP		
920.000	61.45		29.03	90.48		94	-3.52		Vertical
920.000	46.38		29.03	75.41		94	-18.59		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	
1840.000	57.48	61.19	-9.63	47.85	51.56	54	74	-6.15	-22.44	Vertical
2760.000	48.34	52.88	-6.09	42.25	46.79	54	74	-11.75	-27.21	
4600.000	42.14	46.02	-1.14	41.00	44.88	54	74	-13.0	-29.12	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.

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

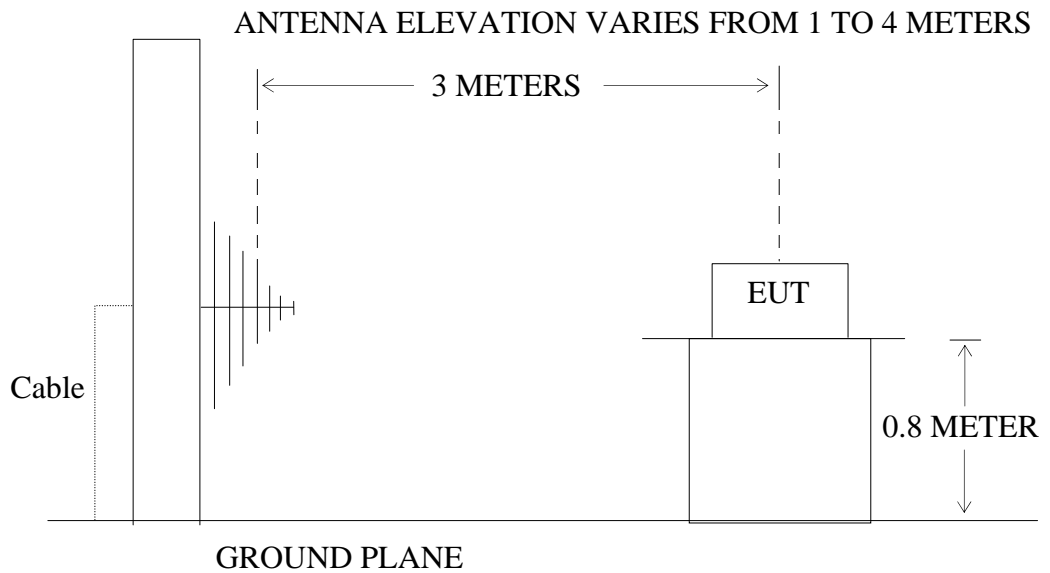
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: Outdoor Transmitter)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Outdoor Transmitter)

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 μ 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 is 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.Outdoor Transmitter (EUT)

Model Number : TX45UTH-IT
Serial Number : N/A

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 mode measure it. The transmit frequency are 910MHz, 915MHz, 920MHz.

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>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC (“AAA” batteries 2×)</u>
Test Mode:	<u>TX 910MHz</u>	Test Engineer:	<u>Kai</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>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC (“AAA” batteries 2×)</u>
Test Mode:	<u>TX 915MHz</u>	Test Engineer:	<u>Kai</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>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC (“AAA” batteries 2×)</u>
Test Mode:	<u>TX 920MHz</u>	Test Engineer:	<u>Kai</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.

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 is 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.Outdoor Transmitter (EUT)

Model Number : TX45UTH-IT
Serial Number : N/A

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 mode measure it. The transmit frequency are 910MHz, 915MHz, 920MHz. We select 910MHz, 920MHz 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.

6.5. The Measurement Result

PASS.

Date of Test:	<u>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC (“AAA” batteries 2×)</u>
Test Mode:	<u>TX 910MHz</u>	Test Engineer:	<u>Kai</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>Oct. 5, 2011</u>	Temperature:	<u>21°C</u>
EUT:	<u>Outdoor Transmitter</u>	Humidity:	<u>55%</u>
Model No.:	<u>TX45UTH-IT</u>	Power Supply:	<u>3V DC (“AAA” batteries 2×)</u>
Test Mode:	<u>TX 920MHz</u>	Test Engineer:	<u>Kai</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.

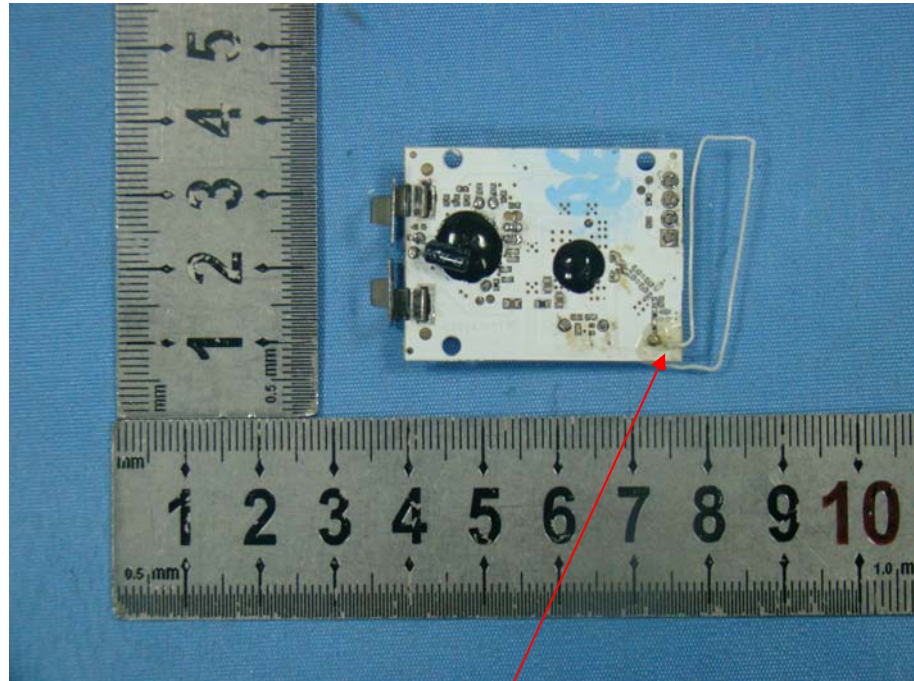
7. ANTENNA REQUIREMENT

7.1.The Requirement

7.1.1.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 is formed by a copper wire inside the plate, no consideration of replacement.



Antenna

APPENDIX I (Test Curves)



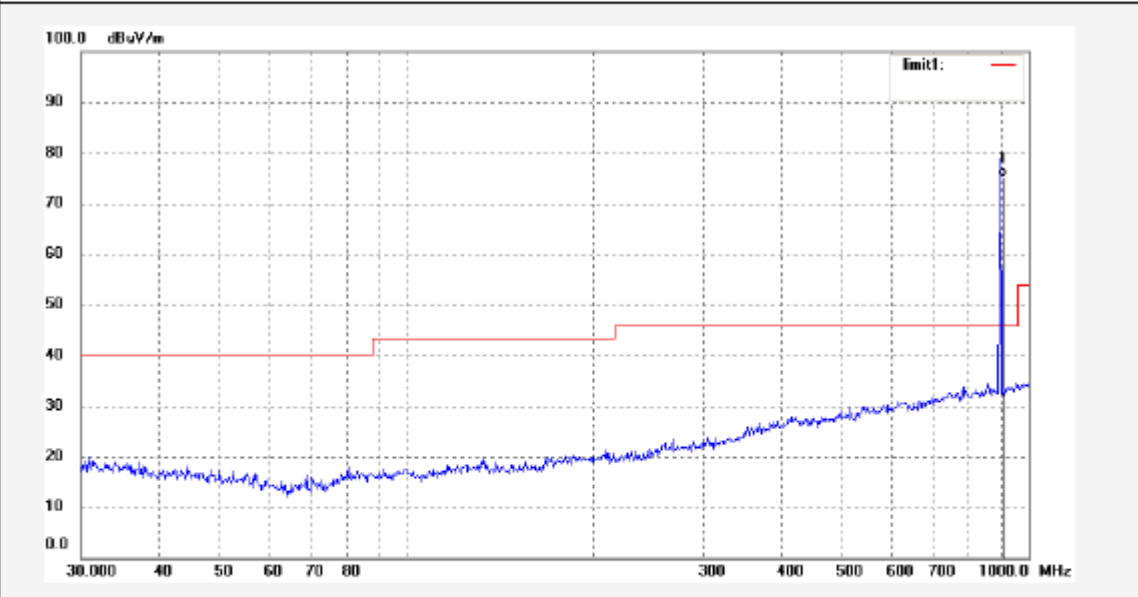
ACCURATE TECHNOLOGY CO., LTD.

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.: Star #1160	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/05/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10/05/09
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	910.0000	46.25	28.82	75.07	94.00	-18.93	QP			



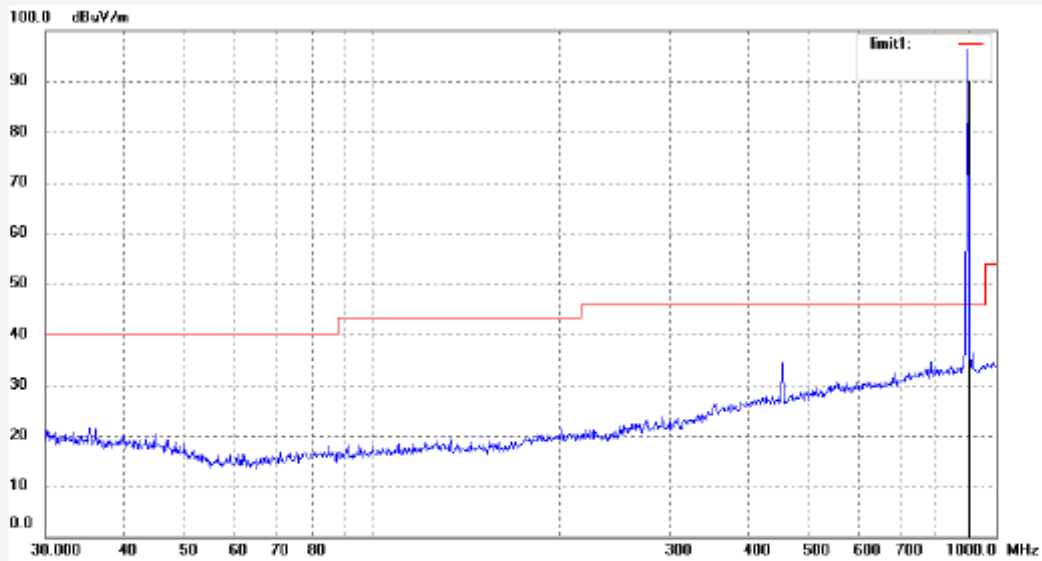
ACCURATE TECHNOLOGY CO., LTD.

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.: Star #1159	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/05/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10/01/42
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	910.0000	63.48	28.82	92.30	94.00	-1.7	QP			



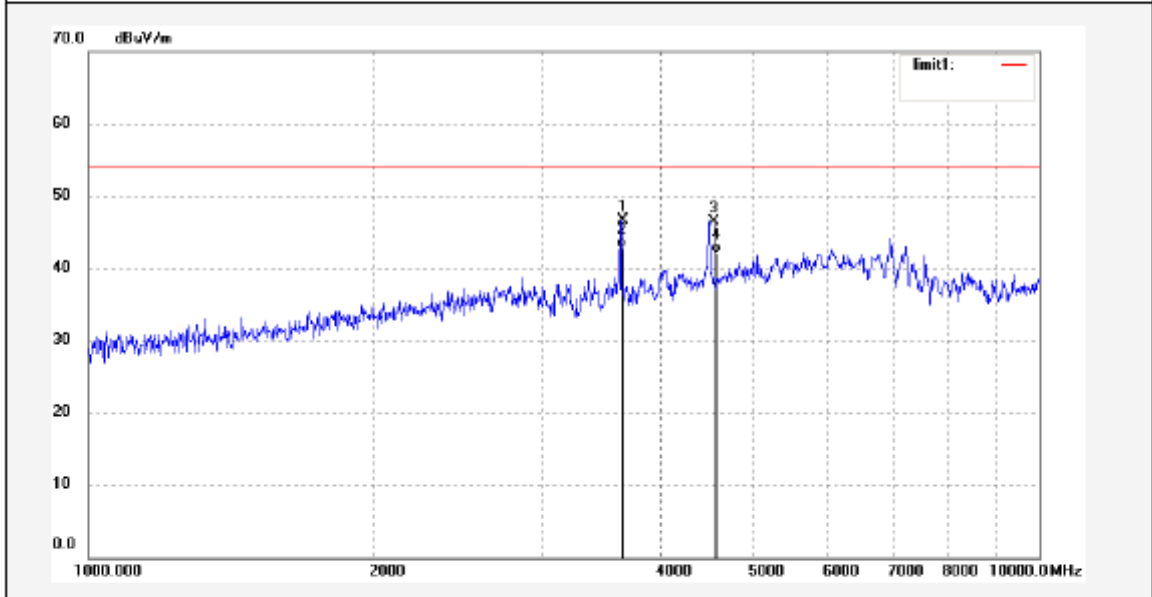
ACCURATE TECHNOLOGY CO., LTD.

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.: STAR #1166	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:25:10
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	3640.000	49.33	-2.64	46.69	74.00	-27.31	peak			
2	3640.000	45.37	-2.64	42.73	54.00	-11.27	AVG			
3	4550.000	47.62	-1.22	46.40	74.00	-27.60	peak			
4	4550.000	43.28	-1.22	42.06	54.00	-11.94	AVG			



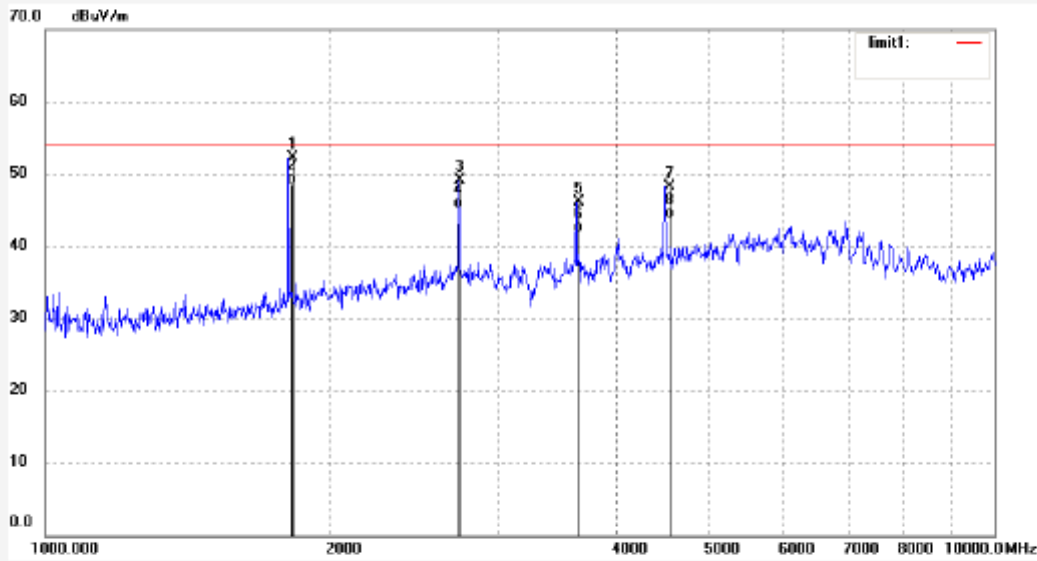
ACCURATE TECHNOLOGY CO., LTD.

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.: STAR #1165	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:22:15
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1820.000	62.06	-9.84	52.22	74.00	-21.78	peak			
2	1820.000	58.36	-9.84	48.52	54.00	-5.48	AVG			
3	2730.000	55.22	-6.20	49.02	74.00	-24.98	peak			
4	2730.000	51.44	-6.20	45.24	54.00	-8.76	AVG			
5	3640.000	48.67	-2.64	46.03	74.00	-27.97	peak			
6	3640.000	44.53	-2.64	41.89	54.00	-12.11	AVG			
7	4550.000	49.48	-1.22	48.26	74.00	-25.74	peak			
8	4550.000	45.12	-1.22	43.90	54.00	-10.10	AVG			

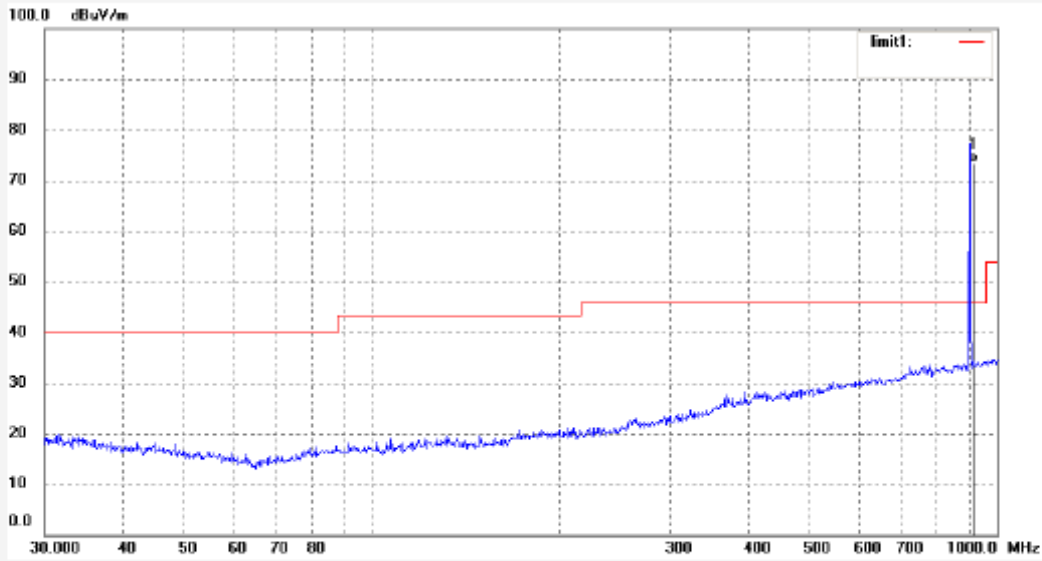


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Star #1161	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/05/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10/08/08
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 915MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	915.0000	44.57	28.92	73.49	94.00	-20.51	QP			

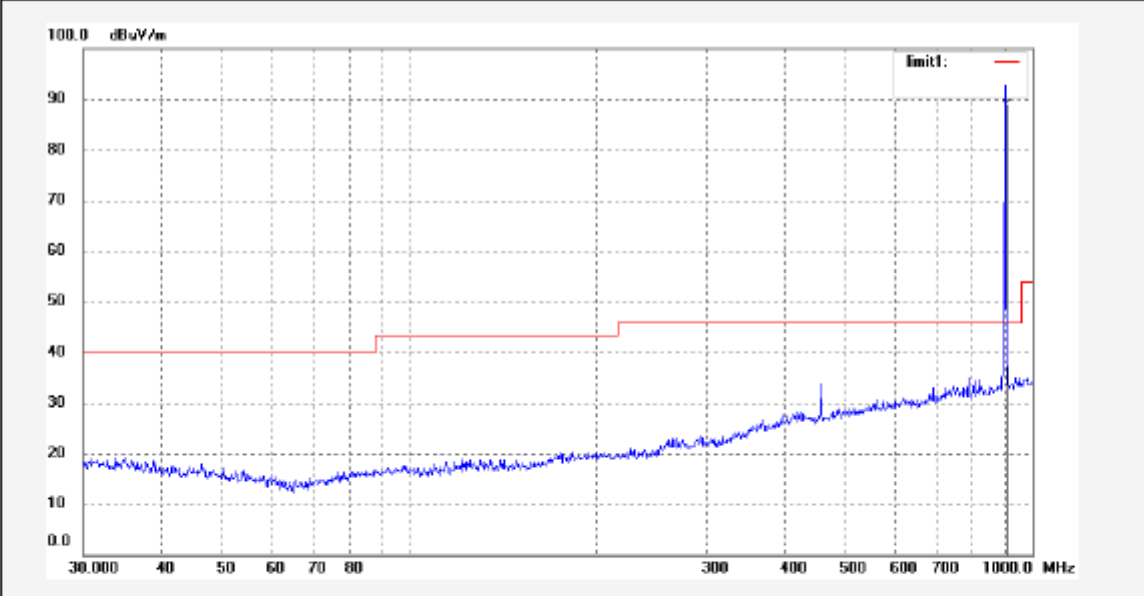


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Star #1162	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/05/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10/12/30
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 915MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	915.0000	60.11	28.92	89.03	94.00	-4.97	QP			

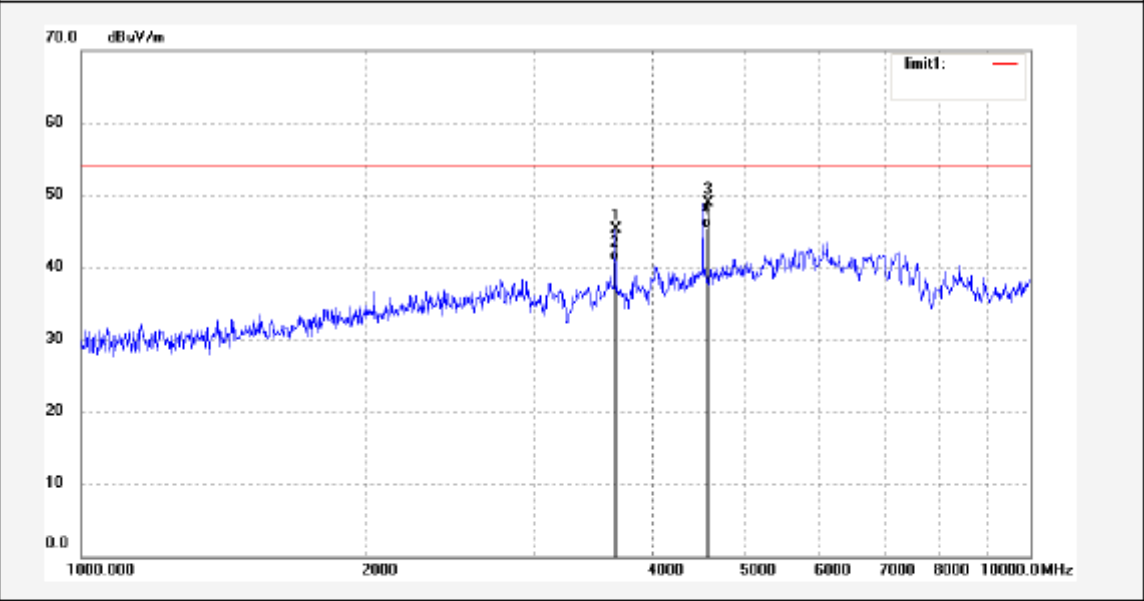


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #1167	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:26:55
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 915MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	3660.000	47.82	-2.56	45.26	74.00	-28.74	peak			
2	3660.000	43.42	-2.56	40.86	54.00	-13.14	AVG			
3	4575.000	50.16	-1.18	48.98	74.00	-25.02	peak			
4	4575.000	46.61	-1.18	45.43	54.00	-8.57	AVG			

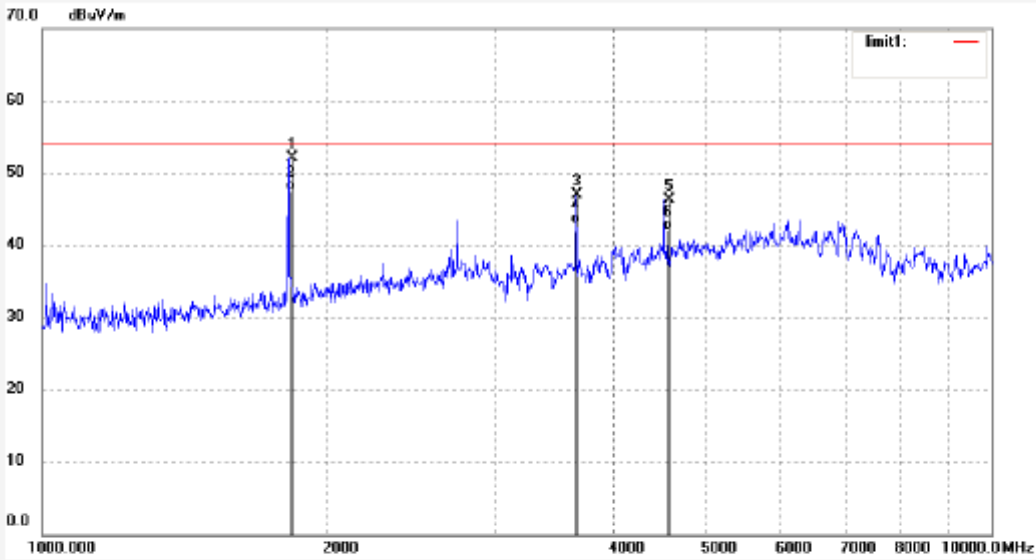


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #1168	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:29:50
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 915MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1830.000	61.87	-9.73	52.14	74.00	-12.86	peak			
2	1830.000	57.21	-9.73	47.48	54.00	-6.52	AVG			
3	3660.000	49.61	-2.56	47.05	74.00	-26.95	peak			
4	3660.000	45.55	-2.56	42.99	54.00	-11.01	AVG			
5	4575.000	47.48	-1.18	46.30	74.00	-27.70	peak			
6	4575.000	43.24	-1.18	42.06	54.00	-11.94	AVG			

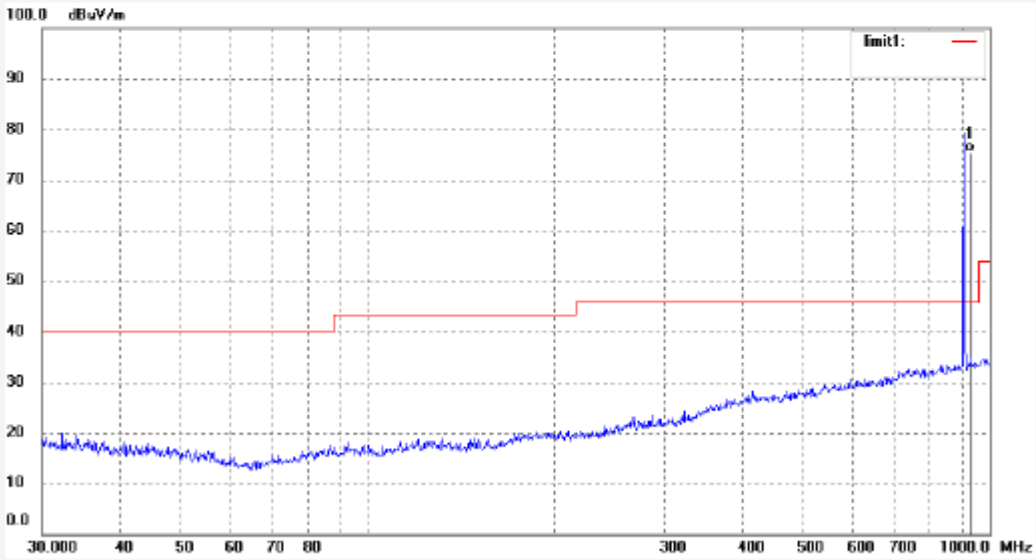


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Star #1163	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:15:00
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	920.0000	46.38	29.03	75.41	94.00	-18.59	QP			



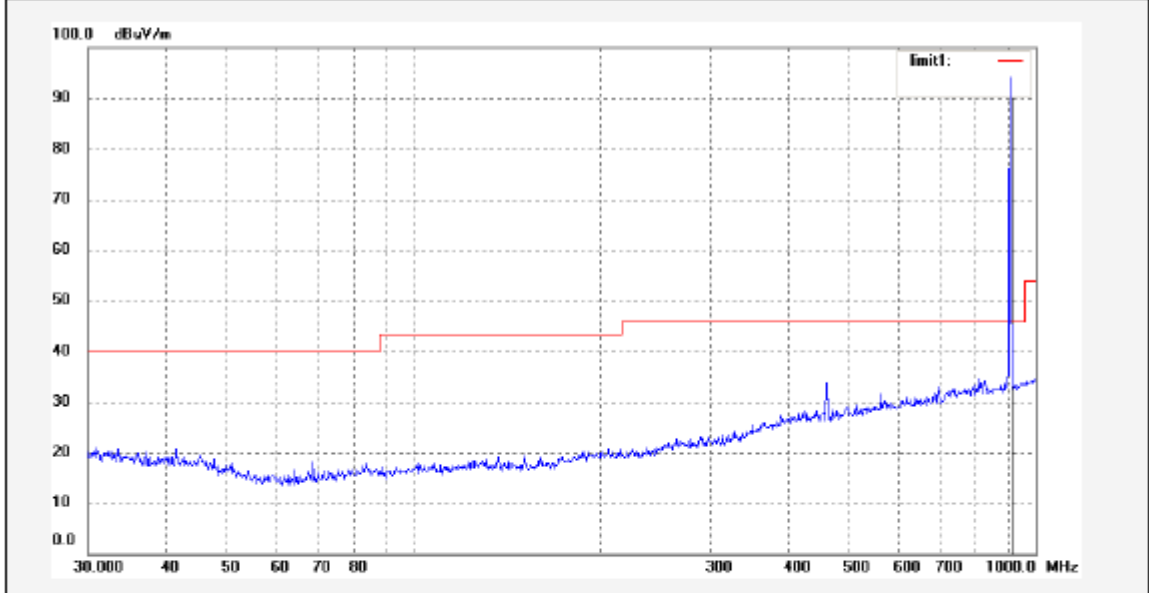
ACCURATE TECHNOLOGY CO., LTD.

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.: Star #1164	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:16:20
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	920.0000	61.45	29.03	90.48	94.00	-3.52	QP			

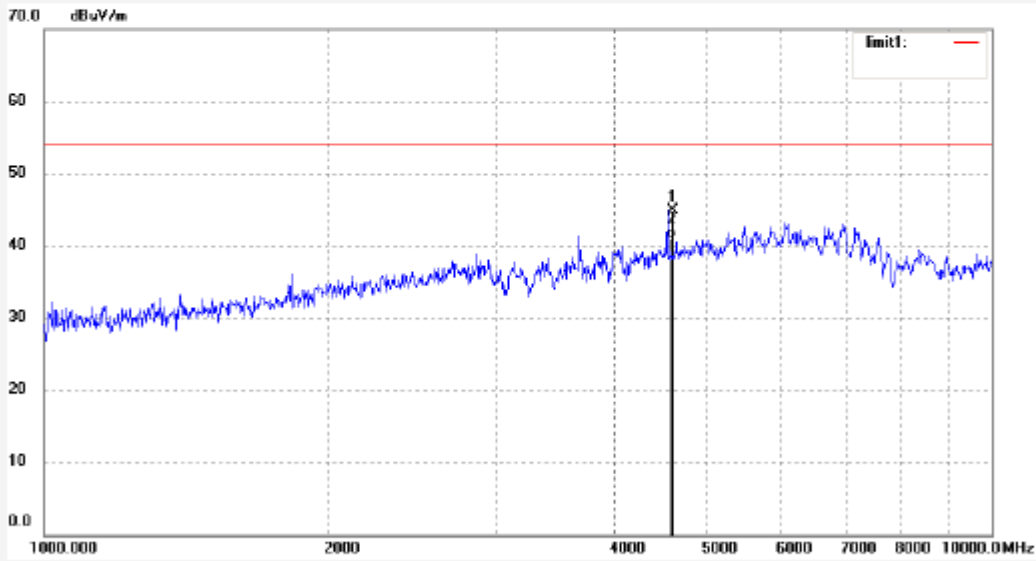


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #1170	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:37:12
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4600.000	46.02	-1.14	44.88	74.00	-29.12	peak			
2	4600.000	42.14	-1.14	41.00	54.00	-13.00	AVG			

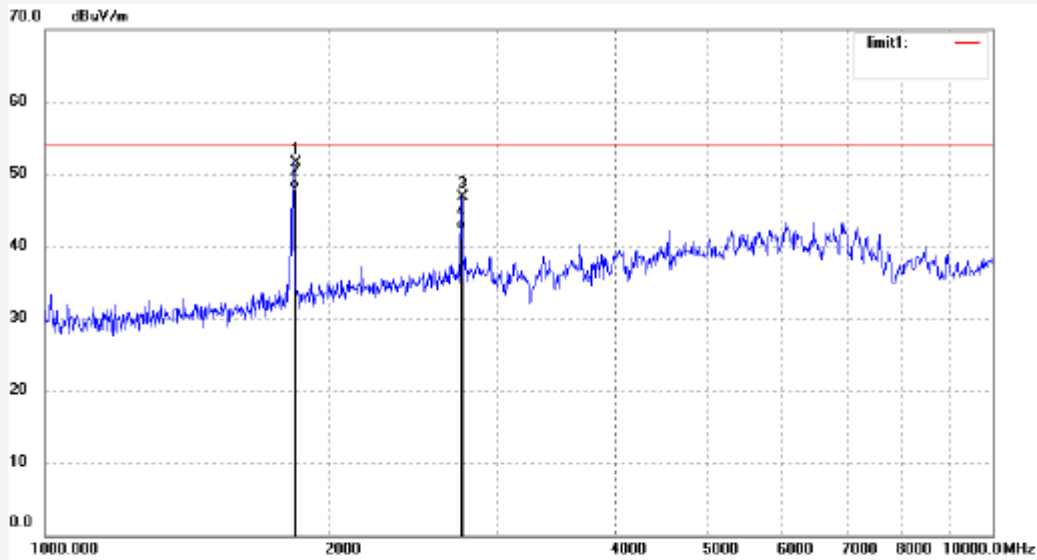


ACCURATE TECHNOLOGY CO., LTD.
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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: STAR #1169	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2011/10/05
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:34:44
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1840.000	61.19	-9.63	51.56	74.00	-22.44	peak			
2	1840.000	57.48	-9.63	47.85	54.00	-6.15	AVG			
3	2760.000	52.88	-6.09	46.79	74.00	-27.21	peak			
4	2760.000	48.34	-6.09	42.25	54.00	-11.75	AVG			

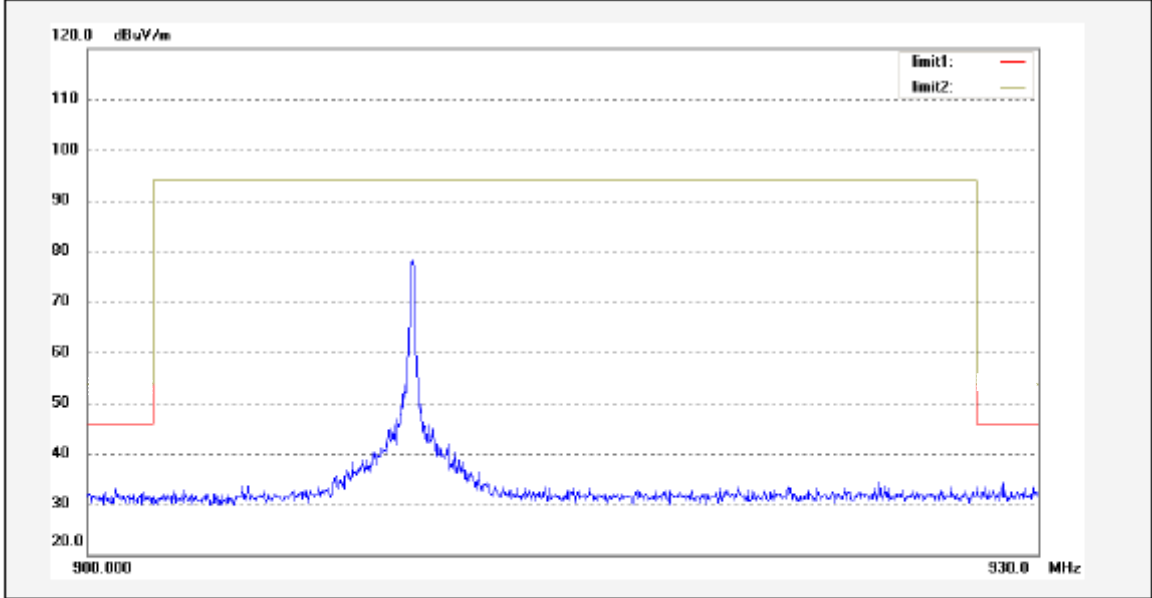


ACCURATE TECHNOLOGY CO., LTD.
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Star #1184	Polarization: Horizontal
Standard: FCC 900MHz Band Edge	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/08/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/02/04
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



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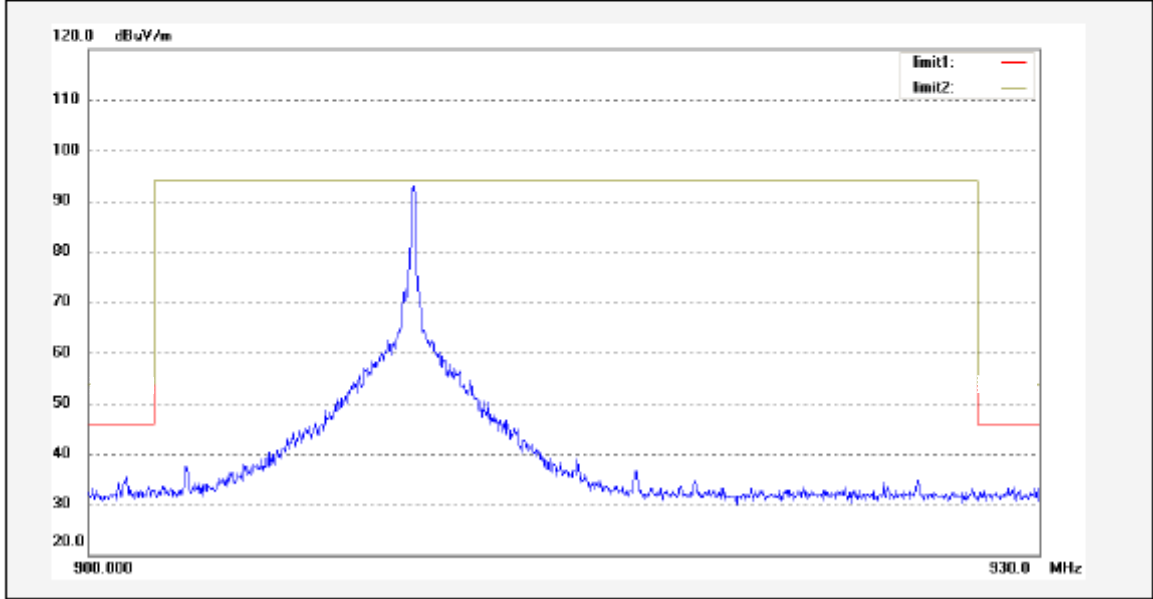


ACCURATE TECHNOLOGY CO., LTD.
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Site: 966 chamber
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 Fax:+86-0755-26503396

Job No.: Star #1183	Polarization: Vertical
Standard: FCC 900MHz Band Edge	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/08/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/00/54
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 910MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



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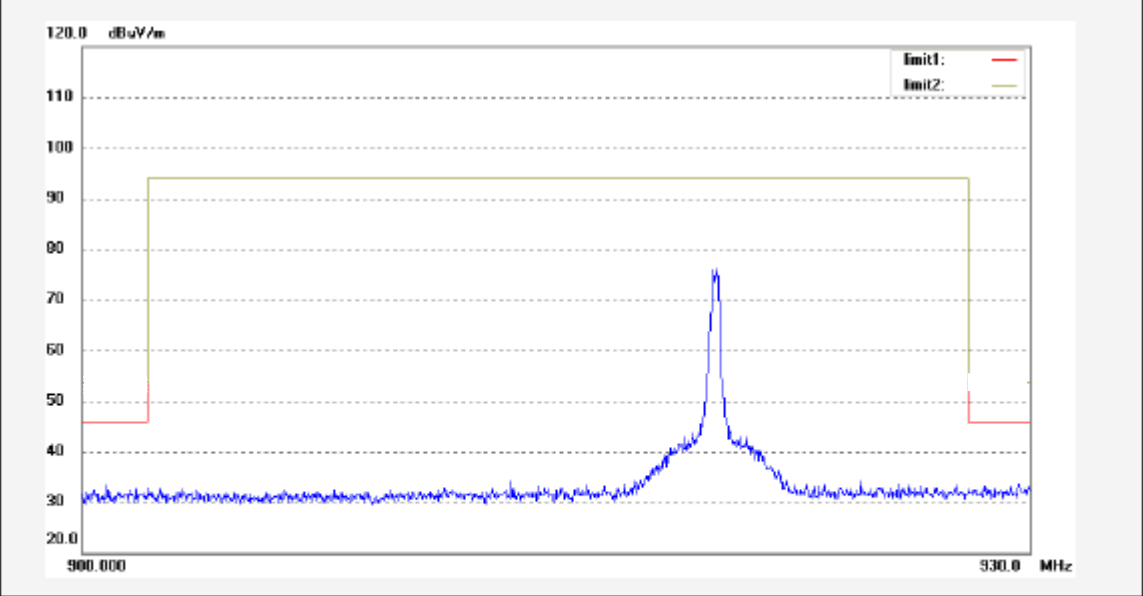
ACCURATE TECHNOLOGY CO., LTD.

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.: Star #1185	Polarization: Horizontal
Standard: FCC 900MHz Band Edge	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/08/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/04/11
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



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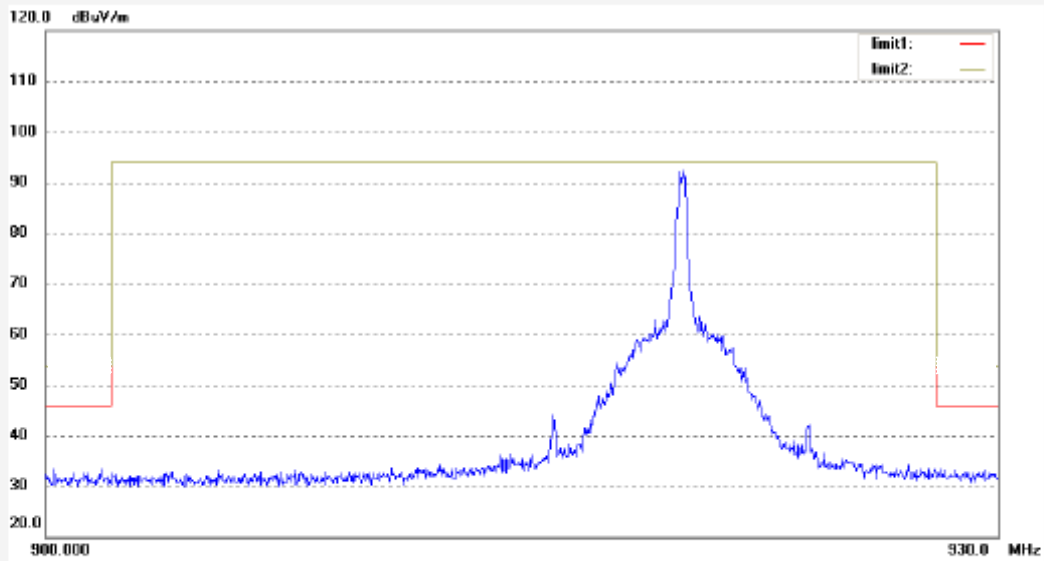


ACCURATE TECHNOLOGY CO., LTD.
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 Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: Star #1186	Polarization: Vertical
Standard: FCC 900MHz Band Edge	Power Source: DC 3V
Test item: Radiation Test	Date: 11/10/08/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/05/08
EUT: outdoor transmitter	Engineer Signature: Star
Mode: TX 920MHz	Distance: 3m
Model: TX45UTH-IT	
Manufacturer: LaCrosse Technology Ltd.	

Note: Report No.:ATE20112033



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