

Application for FCC Certification  
On behalf of  
Hang Zhou Mobile Electronics Co., Ltd.  
CAR ALARM (Transmitter)

Model No.: RE-1

FCC ID: P78525MO2002EL168

Prepared For : Hang Zhou Mobile Electronics Co., Ltd.  
2F No.7 Bldg, Li Jia Qiao Industrial District,  
He Mu Zhi Rd, Hang Zhou

Prepared By : Audix Technology (Shanghai) Co., Ltd.  
3 F 34 Bldg 680 Guiping Rd,  
Caohejing Hi-Tech Park,  
Shanghai, China 200233

Tel : +86-21-64955500

Fax : +86-21-64955491

Report No. : ACI-F02012  
Date of Test : Jan 28, 2002  
Date of Report : Feb 26, 2002

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## TEST REPORT FOR FCC CERTIFICATION

Applicant : Hang Zhou Mobile Electronics Co., Ltd.  
Manufacturer : Hang Zhou Mobile Electronics Co., Ltd.  
EUT Description : CAR ALARM (Transmitter)  
(A) Model No.: RE-1  
(B) Serial No.: N/A  
(C) Power Supply: DC 12V  
(D) Work Frequency: 315.8 MHz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B & C MAY 2001  
AND FCC/ANSI C63.4-1992*

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B & C limits.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report must not be used by the applicant to claim product endorsement by NVLAP or any agency of the U.S. Government.

Date of Test : Jan 28, 2002

Prepared by : Stella Tang 3/13/02  
STELLA TANG  
(Assistant)

Test Engineer : Sammy Chen 1/13/2002  
SAMMY CHEN  
(Engineer)

Reviewer : Byron Kwo 13 MAR 2002  
BYRON KWO  
(Supervisor)

Approved Signatory : Alex Chiu  
ALEX CHIU  
(Assistant Manager)

# 1 GENERAL INFORMATION

## 1.1 Description of Equipment Under Test

Description : CAR ALARM (Transmitter)

Type of EUT : ☒ Production ☐ Pre-product ☐ Pro-type

Model No. : RE-1

Serial No. : N/A

Button: Arm, Disarm, Open Trunk, Panic  
All the test cases were tested, and in this report,  
only the data for worst test case (Arm button) are reported.

FCC ID : P78525MO2002EL168

Applicant : Hang Zhou Mobile Electronics Co., Ltd.  
2F No.7 Bldg, Li Jia Qiao Industrial District,  
He Mu Zhi Rd, Hang Zhou

Manufacturer : Hang Zhou Mobile Electronics Co., Ltd.  
2F No.7 Bldg, Li Jia Qiao Industrial District,  
He Mu Zhi Rd, Hang Zhou

## 1.2 Description of Test Facility

Site Description : Sept. 17, 1998 file on  
(Semi-Anechoic Chamber) Federal Communications Commission  
FCC Engineering Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3 F 34 Bldg 680 Guiping Rd,  
Caohejing Hi-Tech Park,  
Shanghai, China 200233

NVLAP Lab Code : 200371-0

## 1.3 Measurement Uncertainty

Radiated Emission Uncertainty :  $U = \pm 4.26\text{dB}$

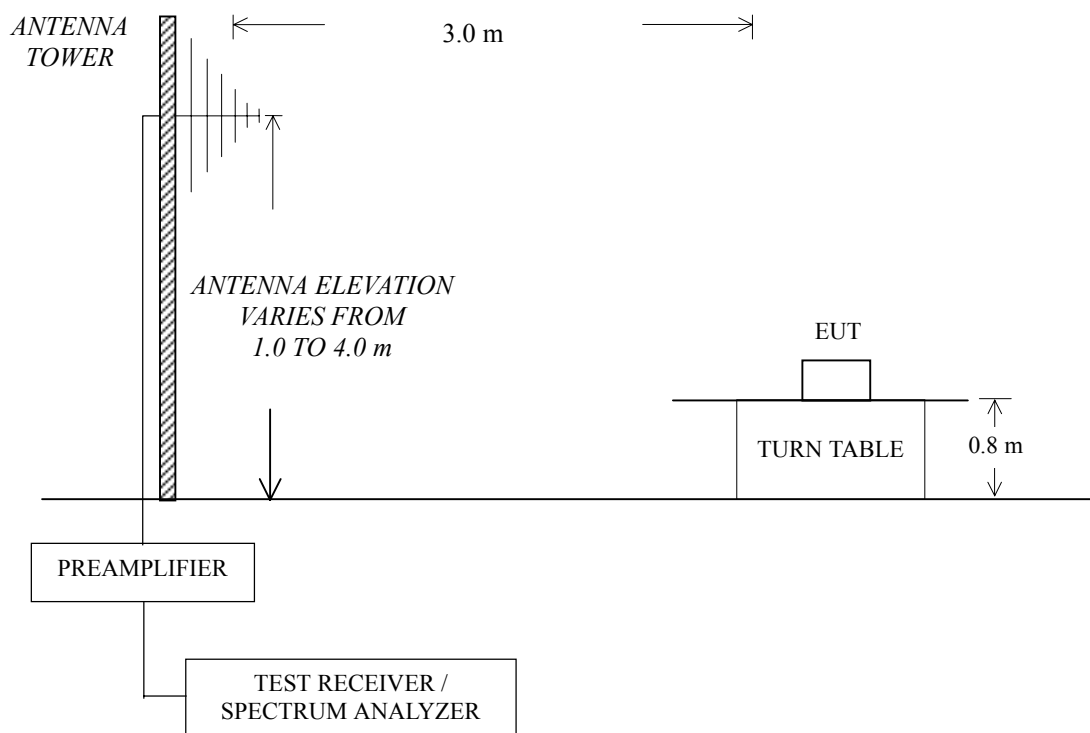
## 2 RADIATED EMISSION TEST

### 2.1 Test Equipment

The following test equipment are used during the radiated emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Preamplifier	HP	8447D	2944A06849	Nov 02, 2001	1/2 Year
2.	Bilog Antenna	Chase	CBL6111	1159	May 02, 2001	1 Year
3.	Test Receiver	R & S	ESVS10	844594/001	Apr 24, 2001	1 Year
4.	Spectrum Analyzer	HP	8591EM	3628A00908	May 03, 2001	1 Year

### 2.2 Block Diagram of Test Setup



## 2.3 Radiated Emission Limit

Frequency (MHz)	Distance (m)	Field strength limits (μV/m)	
		(μV/m)	dB(μV/m)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
NOTE 1 - Emission Level dB(μV/m) = 20 log Emission Level (μV/m) NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.			

## 2.4 Test Configuration

The EUT was installed as show on Sec. 2.2 in radiated emission test to meet FCC requirement and operating in a manner which tend to maximize emission level in a normal application.

## 2.5 Operating Condition of EUT

2.5.1 Setup the EUT as shown in Sec. 2.2.

2.5.2 The EUT worked in three attitudes (Stand & Side & Lie) and measured it.

## 2.6 Test Procedures

The EUT was placed on a turntable, which is 0.8 meter above the ground. The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (Calibrated Bilog Antenna) was used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C 63.4-1992 requirements during radiated emission test.

The IF bandwidth setting on Test Receiver ESVS10 is 120 kHz.

The frequency range from 30 MHz to 1000 MHz was checked.

## 2.7 Test Results

### <PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

EUT	:	CAR ALARM (Transmitter)	Temperature :	20.7°C
Model No.	:	RE-1	Humidity :	53%
Test Mode	:	Stand	Date of Test :	Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	37.760	15.88	0.77	25.48	28.67	19.84	40.00	20.16
	126.030	13.20	1.46	25.10	30.18	19.74	43.50	23.76
	164.830	11.48	1.78	25.10	33.39	21.55	43.50	21.95
	285.110	13.71	2.43	25.10	29.40	20.44	46.00	25.56
	501.420	18.72	3.50	26.70	29.22	24.74	46.00	21.26
	<b>737.130</b>	<b>22.62</b>	<b>4.25</b>	<b>26.64</b>	<b>30.34</b>	<b>30.57</b>	<b>46.00</b>	<b>15.43</b>
Vertical	36.790	16.33	0.76	25.49	28.47	20.07	40.00	19.93
	128.940	13.21	1.48	25.10	30.15	19.74	43.50	23.76
	164.830	11.48	1.78	25.10	33.39	21.55	43.50	21.95
	218.180	11.27	2.11	25.10	31.34	19.62	46.00	26.38
	400.540	17.78	3.06	26.01	31.19	26.02	46.00	19.98
	<b>799.210</b>	<b>23.12</b>	<b>4.41</b>	<b>26.55</b>	<b>30.05</b>	<b>31.03</b>	<b>46.00</b>	<b>14.97</b>

NOTE 1 – Factor = Antenna Factor + Cable Loss – Preamp Factor

NOTE 2 – Emission Level = Meter Reading + Factor

NOTE 3 – All reading are Quasi-Peak values.

NOTE 4 – The worst emission at horizontal polarization was detected at 737.130 MHz with corrected signal level of 30.57 dB(μV/m) (limit is 46.00dB(μV/m)), when the antenna was 1.10m height and the turn table was at 113°.

NOTE 5 – The worst emission at vertical polarization was detected at 799.210 MHz with corrected signal level of 31.03 dB(μV/m) (limit is 46.00 dB(μV/m)), when the antenna was 1.00m height and the turn table was at 200°.

NOTE 6 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

TEST ENGINEER: Sammy Chen  
(SAMMY CHEN)

EUT : CAR ALARM (Transmitter) Temperature : 20.7°C

Model No. : RE-1 Humidity : 53%

Test Mode : Side Date of Test : Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	35.820	16.71	0.75	25.50	29.03	20.99	40.00	19.01
	85.290	8.02	1.11	25.16	31.33	15.30	40.00	24.70
	127.000	13.21	1.47	25.10	30.00	19.58	43.50	23.92
	163.860	11.62	1.77	25.10	29.87	18.16	43.50	25.34
	430.610	18.08	3.20	26.24	29.64	24.68	46.00	21.32
	<b>784.660</b>	<b>23.01</b>	<b>4.37</b>	<b>26.57</b>	<b>30.01</b>	<b>30.82</b>	<b>46.00</b>	<b>15.18</b>
Vertical	35.820	16.71	0.75	25.50	29.16	21.12	40.00	18.88
	127.970	13.21	1.48	25.10	29.15	18.74	43.50	24.76
	164.830	11.48	1.78	25.10	29.88	18.04	43.50	25.46
	262.800	13.25	2.33	25.10	29.13	19.61	46.00	26.39
	<b>512.090</b>	<b>18.95</b>	<b>3.53</b>	<b>26.70</b>	<b>34.70</b>	<b>30.48</b>	<b>46.00</b>	<b>15.52</b>
	757.500	22.80	4.30	26.61	29.56	30.05	46.00	15.95
<p>NOTE 1 – Factor = Antenna Factor + Cable Loss – Preamplifier Factor</p> <p>NOTE 2 – Emission Level = Meter Reading + Factor</p> <p>NOTE 3 – All reading are Quasi-Peak values.</p> <p>NOTE 4 – The worst emission at horizontal polarization was detected at 784.660 MHz with corrected signal level of 30.82 dB(μV/m) (limit is 46.00dB(μV/m)), when the antenna was 1.40m height and the turn table was at 15°.</p> <p>NOTE 5 – The worst emission at vertical polarization was detected at 512.090 MHz with corrected signal level of 30.48 dB(μV/m) (limit is 46.00 dB(μV/m)), when the antenna was 1.00m height and the turn table was at 324°.</p> <p>NOTE 6 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.</p>								

TEST ENGINEER: Sammy Chen  
(SAMMY CHEN)



EUT : CAR ALARM (Transmitter) Temperature : 20.7°C

Model No. : RE-1 Humidity : 53%

Test Mode : Lie Date of Test : Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	33.880	17.47	0.72	25.52	29.26	21.93	40.00	18.07
	83.350	7.84	1.10	25.17	29.66	13.43	40.00	26.57
	121.180	12.86	1.41	25.10	31.45	20.62	43.50	22.88
	166.770	11.28	1.79	25.10	32.35	20.32	43.50	23.18
	422.850	18.01	3.16	26.19	29.37	24.35	46.00	21.65
	<b>730.340</b>	<b>22.56</b>	<b>4.23</b>	<b>26.65</b>	<b>29.66</b>	<b>29.80</b>	<b>46.00</b>	<b>16.20</b>
Vertical	33.880	17.47	0.72	25.52	29.84	22.51	40.00	17.49
	92.080	8.63	1.15	25.13	30.26	14.91	43.50	28.59
	124.090	13.12	1.44	25.10	29.60	19.06	43.50	24.44
	166.770	11.28	1.79	25.10	33.28	21.25	43.50	22.25
	512.090	18.95	3.53	26.70	34.12	29.90	46.00	16.10
	<b>764.290</b>	<b>22.84</b>	<b>4.32</b>	<b>26.60</b>	<b>30.38</b>	<b>30.94</b>	<b>46.00</b>	<b>15.06</b>
<p>NOTE 1 – Factor = Antenna Factor + Cable Loss – Preamplifier Factor</p> <p>NOTE 2 – Emission Level = Meter Reading + Factor</p> <p>NOTE 3 – All reading are Quasi-Peak values.</p> <p>NOTE 4 – The worst emission at horizontal polarization was detected at 730.340 MHz with corrected signal level of 29.80 dB(μV/m) (limit is 46.00dB(μV/m)), when the antenna was 1.08m height and the turn table was at 7°.</p> <p>NOTE 5 – The worst emission at vertical polarization was detected at 764.290 MHz with corrected signal level of 30.94 dB(μV/m) (limit is 46.00 dB(μV/m)), when the antenna was 1.00m height and the turn table was at 348°.</p> <p>NOTE 6 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.</p>								

TEST ENGINEER: Sammy Chen  
(SAMMY CHEN)

### 3 FUNDAMENTAL AND SPURIOUS EMISSIONS TEST

#### 3.1 Test Equipment

The following test equipment are used during the fundamental and spurious emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Preamplifier	HP	8447D	2944A06849	Nov 02, 2001	1/2 Year
2.	Bilog Antenna	Chase	CBL6111	1145	Nov 02, 2001	1/2 Year
3.	Test Receiver	R & S	ESVS10	844594/001	Apr 24, 2001	1 Year
4.	Amplifier	HP	8449B	3008A00863	Jul 04, 2001	1 Year
5.	Spectrum	HP	8593EM	3628H00167	Jul 04, 2001	1 Year
6.	Horn Antenna	EMCO	3115	9510-4580	Jan 04, 2002	1/2 Year

#### 3.2 Block Diagram of Test Setup

Same as Sec.2.2, except the frequency range is above 1GHz, and the antenna is fixed in 1 m high.

#### 3.3 Fundamental and Spurious Emission Limit

Frequency (MHz)	Distance (m)	Field strength limits of fundamental		Field strength limits of spurious emissions	
		( $\mu\text{V/m}$ )	$\text{dB}(\mu\text{V/m})$	( $\mu\text{V/m}$ )	$\text{dB}(\mu\text{V/m})$
174 ~ 260	3	3750	71.48	375	51.48
260 ~ 470	3	3750-12500*	71.48-81.94	375-1250*	51.48-61.94
Above 470	3	12500	81.94	1250	61.94
NOTE 1 - Emission Level $\text{dB}(\mu\text{V/m}) = 20 \log \text{Emission Level } (\mu\text{V/m})$ NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system. NOTE 4 - “*” means linear interpolation.					

#### 3.4 Test Configuration

The EUT was installed as show on Sec. 3.2 in fundamental and spurious emission test to meet FCC requirement and operating in a manner which tend to maximize emission level in a normal application.

### 3.5 Operating Condition of EUT

3.5.1 Setup the EUT as shown in Sec. 3.2.

3.5.2 The EUT worked in three attitudes (Stand & Side & Lie) and measured it.

### 3.6 Test Procedures

The EUT was placed on a table which is 0.8 meter above ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated antenna) were used as receiving antenna below 1000MHz. Horn antenna were used as receiving antenna above 1000MHz. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C 63.4-1992 requirements during fundamental and spurious emission test.

The bandwidth setting on Test Receiver ESVS10 is 120 kHz below 1000 MHz.  
The bandwidth setting on Spectrum 8593EM is 1 MHz above 1000 MHz.

The frequency range from 30 MHz to 4000 MHz was checked. The EUT rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission.

### 3.7 Test Results

#### <PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

EUT	:	CAR ALARM (Transmitter)	Temperature :	20.7°C
Model No.	:	RE-1	Humidity :	53%
Test Mode	:	Stand	Date of Test :	Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Correction factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	315.8	14.65	2.59	25.27	-8.41	81.4	64.96	74.29	9.33
	631.5	21.21	3.94	26.70	-8.41	46.0	36.04	54.29	18.25
	947.2	24.79	4.74	26.36	-8.41	53.0	47.76	54.29	6.53
	1263.0	26.06	5.76	25.58	-8.41	50.0	47.83	54.29	6.46
Vertical	315.8	14.65	2.59	25.27	-8.41	86.9	70.46	74.29	3.83
	631.5	21.21	3.94	26.70	-8.41	58.8	48.84	54.29	5.45
	947.2	24.79	4.74	26.36	-8.41	57.1	51.86	54.29	2.43
	1263.0	26.06	5.76	25.58	-8.41	54.8	52.63	54.29	1.66

NOTE 1 – All readings are Peak values.

NOTE 2 – Factor = Antenna Factor + Cable Loss – Preamp Factor + Correction Factor

NOTE 3 – Emission Level = Meter Reading + Factor

NOTE 4 – Correction factor is calculated by averaging the sum of the pulse train.

Per narrow pulse: 310 μs

Per wide pulse: 930 μs

Period of pulse train: 40 ms

In the high level, there are 13 narrow pulses and 12 wide pulse.

$20\lg[(13*0.31+12*0.93)/40] = -8.41$

(See Appendix I)

TEST ENGINEER:

*Sammy Chen*  
(SAMMY CHEN)

EUT : CAR ALARM (Transmitter) Temperature : 20.7°C

Model No. : RE-1 Humidity : 53%

Test Mode : Side Date of Test : Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Correction factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	315.8	14.65	2.59	25.27	-8.41	84.7	68.26	74.29	6.03
	631.5	21.21	3.94	26.70	-8.41	56.0	46.04	54.29	8.25
	947.2	24.79	4.74	26.36	-8.41	54.5	49.26	54.29	5.03
	1263.0	26.06	5.76	25.58	-8.41	49.2	47.03	54.29	7.26
Vertical	315.8	14.65	2.59	25.27	-8.41	86.0	69.56	74.29	4.73
	631.5	21.21	3.94	26.70	-8.41	54.1	44.14	54.29	10.15
	947.2	24.79	4.74	26.36	-8.41	52.5	47.26	54.29	7.03
	1263.0	26.06	5.76	25.58	-8.41	48.7	46.53	54.29	7.76

NOTE 1 – All readings are Peak values.

NOTE 2 – Factor = Antenna Factor + Cable Loss – Preamp Factor + Correction Factor

NOTE 3 – Emission Level = Meter Reading + Factor

NOTE 4 – Correction factor is calculated by averaging the sum of the pulse train.

Per narrow pulse: 310 μs

Per wide pulse: 930 μs

Period of pulse train: 40 ms

In the high level, there are 13 narrow pulses and 12 wide pulse.

$20\lg[(13*0.31+12*0.93)/40] = -8.41$

(See Appendix I)

TEST ENGINEER: Sammy Chen  
(SAMMY CHEN)

EUT : CAR ALARM (Transmitter) Temperature : 20.7°C

Model No. : RE-1 Humidity : 53%

Test Mode : Lie Date of Test : Jan 28, 2002

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Correction factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	315.8	14.65	2.59	25.27	-8.41	90.0	73.56	74.29	0.73
	631.5	21.21	3.94	26.70	-8.41	58.0	48.04	54.29	6.25
	947.2	24.79	4.74	26.36	-8.41	56.0	50.76	54.29	3.53
	1263.0	26.06	5.76	25.58	-8.41	48.0	45.83	54.29	8.46
Vertical	315.8	14.65	2.59	25.27	-8.41	73.7	57.26	74.29	17.03
	631.5	21.21	3.94	26.70	-8.41	53.2	43.24	54.29	11.05
	947.2	24.79	4.74	26.36	-8.41	52.3	47.06	54.29	7.23
	1263.0	26.06	5.76	25.58	-8.41	46.1	43.93	54.29	10.36

NOTE 1 – All readings are Peak values.

NOTE 2 – Factor = Antenna Factor + Cable Loss – Preamp Factor + Correction Factor

NOTE 3 – Emission Level = Meter Reading + Factor

NOTE 4 – Correction factor is calculated by averaging the sum of the pulse train.

Per narrow pulse: 310 μs

Per wide pulse: 930 μs

Period of pulse train: 40 ms

In the high level, there are 13 narrow pulses and 12 wide pulse.

$20\lg[(13*0.31+12*0.93)/40] = -8.41$

(See Appendix I)

TEST ENGINEER:

*Sammy Chen*  
(SAMMY CHEN)

## 4 BANDWIDTH MEASUREMENT

### 4.1 Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Preamplifier	HP	8447D	2944A06849	Nov 02, 2001	1/2 Year
2.	Bilog Antenna	Chase	CBL6111	1159	Nov 02, 2001	1/2 Year
3.	Test Receiver	R & S	ESVS10	844594/001	Apr 24, 2001	1 Year

### 4.2 Bandwidth Limit

The bandwidth of the emission shall be no wider than 0.25% of the center frequency.

Bandwidth is determined at the points 20dB down from the modulated carrier.

Bandwidth Limit = 0.25% \* 315.8MHz = 0.7895MHz

### 4.3 Test Results

<PASS>

The bandwidth of the Fundament emission is

B.W. = 315.865 - 315.751 = 0.114MHz

(See Appendix II)

NOTE: The resolution bandwidth used for the bandwidth test is 9kHz.

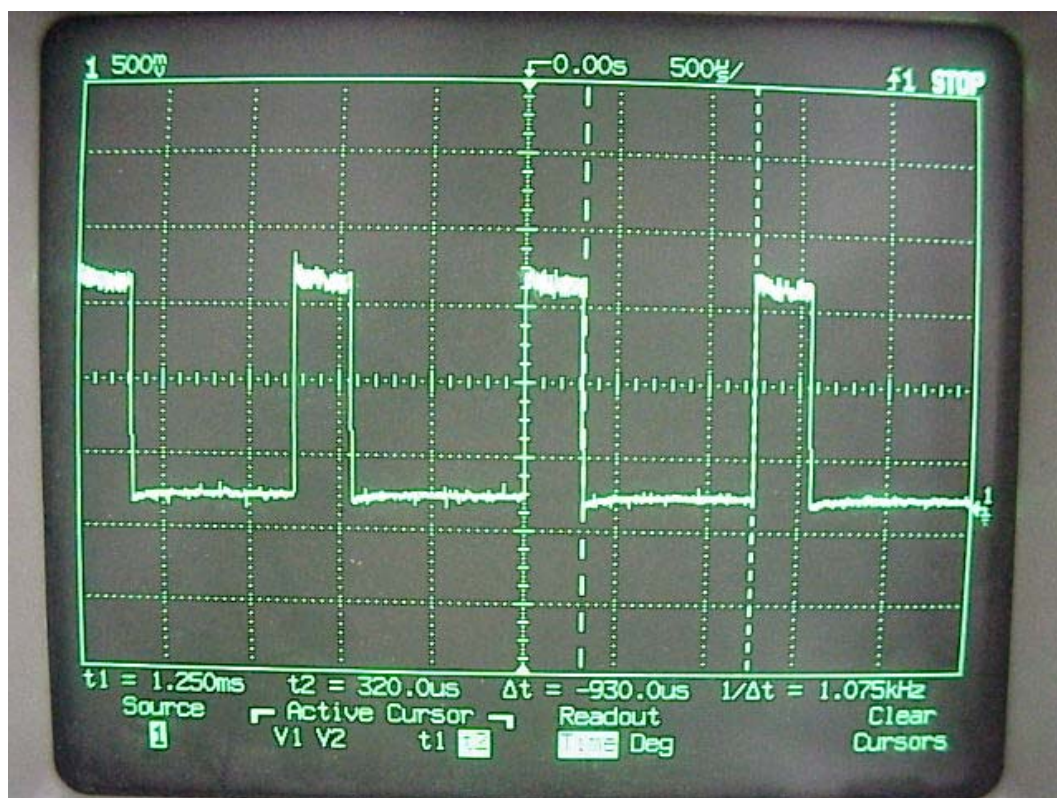
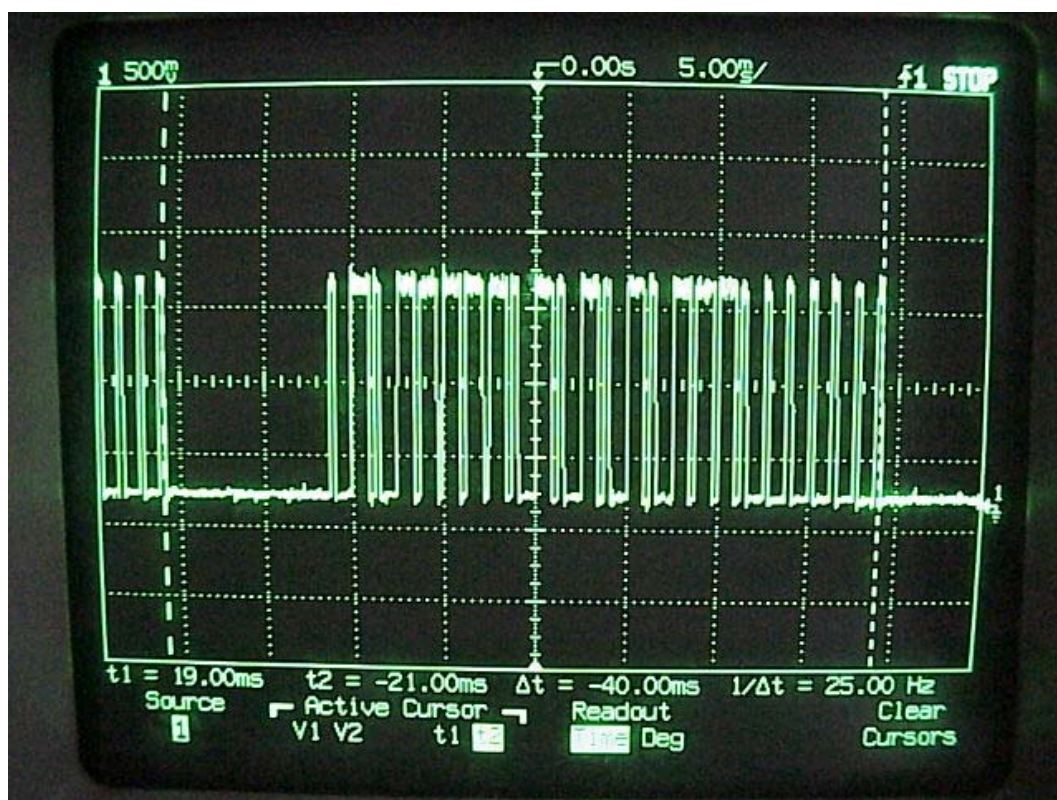
## **5 OPERATION DESCRIPTION**

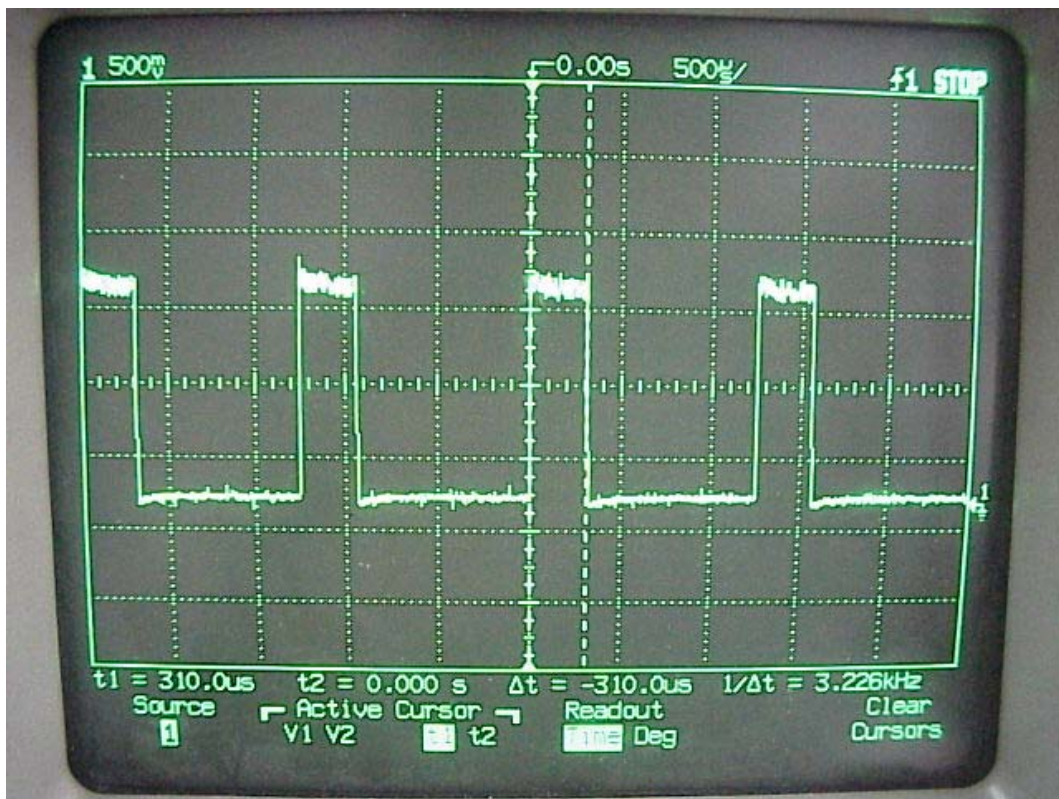
CAR ALARM (Transmitter) (M/N: RE-1) employs a switch that will automatically deactivate the Controller within not more than 5 seconds of being released.



# APPENDIX I

## Plot of the Pulse Train





## **APPENDIX II**

### **Plot of the Occupied Bandwidth**



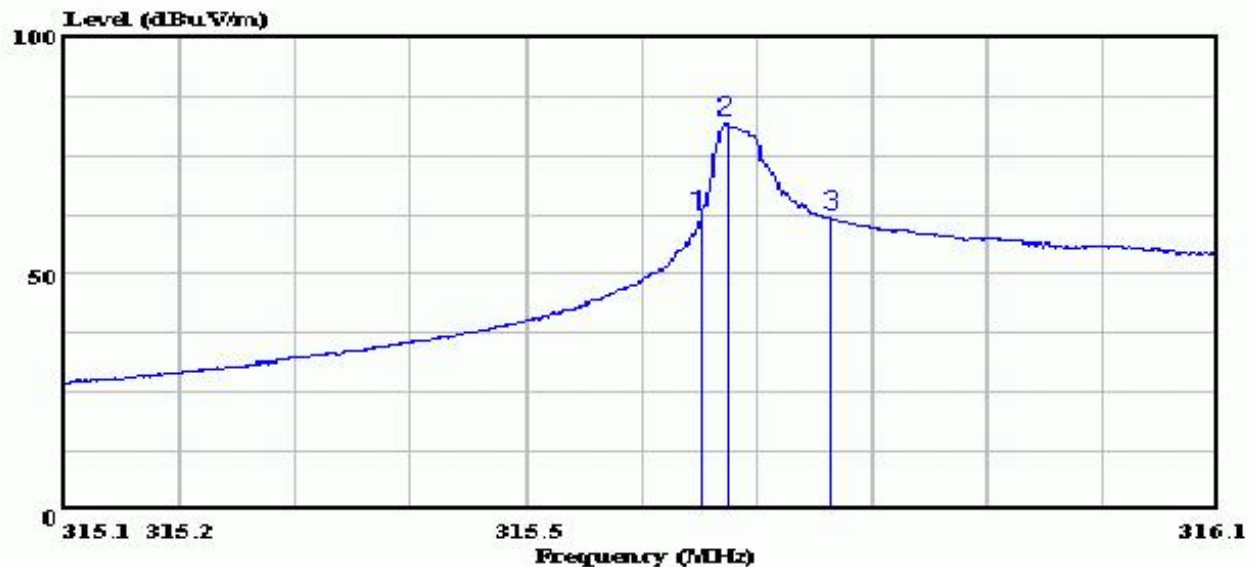


Audix Technology (Shanghai) Co., Ltd.  
敦吉電子(上海)有限公司

3F #34Bldg. No.680 GuiPing Rd.,  
CaoHeJing Hi-Tech Park,  
Shanghai, China  
Tel:+86-21-64955500  
Fax:+86-21-64955491  
audixaci@8848.net

Data#: 54 File#: E:\EMI\_TEST\TESTreport\C\Car Alarm.EMI

Date: 2002-03-01 Time: 16:58:32



Site : audix-aci NO.3 CHAMBER  
Condition : 3m V-1145-2000.12 VERTICAL  
Project No. :  
Applicant :  
EUT : Car Alarm  
M/N : RE-1  
Power Supply : 12Vdc  
Ambient : 20.7C, 53%  
Test Mode : lying  
Test Engineer: Sammy

Page: 1

	Freq	Read Level	Level	Limit Line	Over Limit	Preamp Factor	Cable Loss	Probe Factor
	MHz	dBuV	dBuV/m	dBuV/m	dB	dB	dB	dB
1	315.751	70.00	61.99	-----	-----	-8.01	25.27	14.67
2	315.774	89.81	81.80	-----	-----	-8.01	25.27	14.67
3	315.865	69.75	61.75	-----	-----	-8.00	25.27	14.68