MEASUREMENT REPORT
of
CORDLESS TELEPHONE

Applicant	**:**	CIDMATE International Technology Inc.
Model No.	**:**	XG3400** ; XG3401**
		(* could be blank, numbers or alphabetic characters)
EUT	**:**	2.4GHz Analog Cordless Phone
FCC ID	**:**	PIZXG34001
Report No.	**:**	C5015672

Test by :

Training Research Co., Ltd.

TEL : 886-2-26935155 FAX : 886-2-26934440

No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C.

CERTIFICATION

We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made mainly in accordance with the procedures given in ANSI C63.4 (1992) as a reference. All tests were conducted by ***Training Research Co., Ltd.***, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan. Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is **in compliance with** the technical requirements set forth in the FCC Rules Part 15 Subpart C Section 15.249.

Applicant	**:**	CIDMATE International Technology Inc.
Product Name	**:**	2.4Hz Analog Cordless Phone
Model Nane	**:**	XG3400** ; XG3401** (* could be blank, number or alphabetic characters)
FCC ID	**:**	PIZXG34001
Report No.	**:**	C5015672
Test Date	**:**	August 14, 2003

Prepared by: *JACK TSAI*

Approved by: *FRANK TSAI*

Test by :

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I. GENERAL

1.1 Introduction

The following measurement report is submitted on behalf of Applicant in support of a Cordless Telephone certification in accordance with Part 2 Subpart J and Part 15 Subpart A and C of the Commission's Rules and Regulations.

1.2 Description of EUT

Applicant	:	CID*MATE* International Technology Inc. 3F-B, No. 58, Sec. 1, Minsheng E. Road, Taipei 104, Taiwan
Product Name	:	2.4GHz Analog Cordless Phone
Model Nane	:	XG3400**；XG3401** (* could be blank, number or alphabetic characters)
Frequency Range	:	Base: 2402.55 – 2404.50 MHz Handset: 2474.00 – 2475.95 MHz
Support Channel	:	40 Channel
Power Type	:	Base powered by adaptor => I/P: 120Vac, 60 Hz ； O/P: 9Vdc, 300mA Handset powered by Ni-MH Battery => 3.6 V, 600mAh
Power Cord	:	Cable of power adapter => Non-shielded, 190cm long, No bead
Data Cable	:	RJ-11 x 1 => Non-shielded, 7' long, Plastic hoods, No bead

1.3 Description of Support Equipment

In order to construct the minimum testing, following equipment were used as the support units.

PABX	**:**	**King Design**
Model No.	:	KD8705-A
Serial No.	:	GV101101186
Power type	:	110 VAC 60Hz
Power cord	:	Non – Shielded, 185cm long
EarphoneMIC.	**:**	**God Information Inc.**
Model No.	:	Net8 EarphoneMic
Data cable	:	118cm long, Non – Shielded

1.4 Configuration of System Under Test

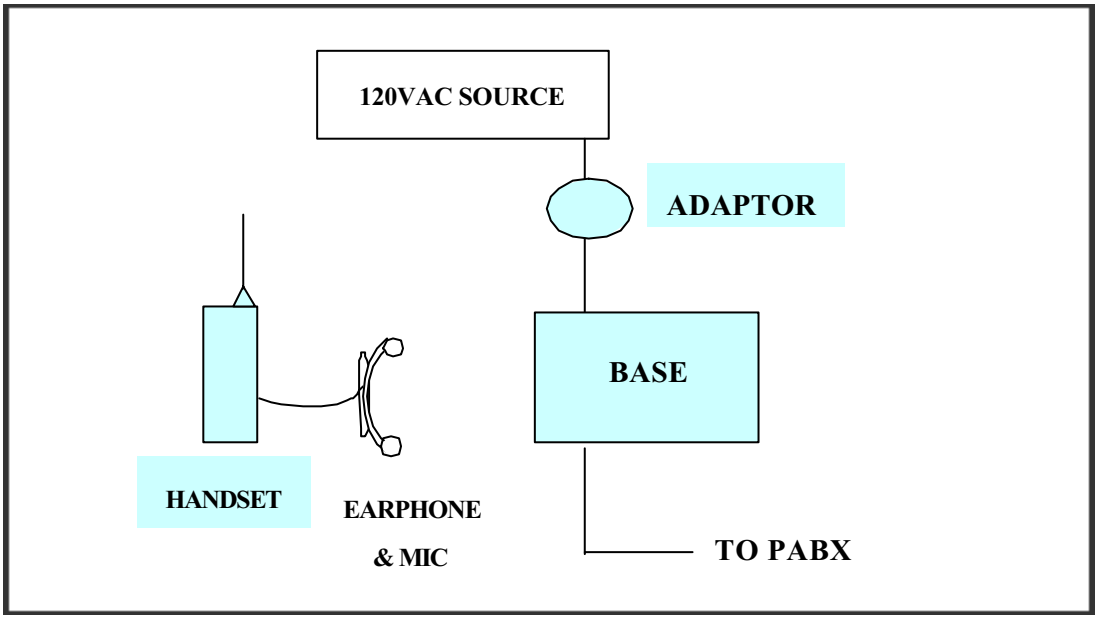


Fig.-1 Configuration of system under test

During testing the EUT was connected to PABX. A diagram of the complete test configuration was shown in Fig-1.

1.5 Test Procedure

All measurements contained in this report were performed mainly according to the techniques described in Measurement procedure ANSI C63.4 (1992).

1.6 Location of the Test Site

The radiated emissions measurements required by the rules were performed on the **three-meter**, **Anechoic Chamber (Registration Number: 93906)** maintained by *Training Research Co., Ltd.* 1F, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Complete description and measurement data have been placed on file with the commission. The conducted power line emissions tests and other test items were performed in an anechoic chamber also located at Training Research Co., Ltd. 1F, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. *Training Research Co., Ltd.* is listed by the FCC as a facility available to do measurement work for others on a contract basis.

1.7 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests was chosen as that which produced the highest emission levels. However, only those conditions which the EUT was considered likely to encounter in normal use were investigated.

In test, the base and handset are tested separately. They were set in Ch01 and Ch40 of EUT and continuously transmitting mode that controlled by test mode of EUT.

II. Conducted Emissions Measurements

2.1 Test Condition & Setup

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the backwall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and Line Impedance Stabilization Networks (LISNs). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150KHz to 30MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in 2.3.

There is a test condition applies in this test item, the setting up procedure is recorded on <1.4>. Two channels were tested, one in the top (CH01) and the other in bottom (CH40).

2.2 List of Test Instruments

				Calibration Date	
Instrument Name	Model No.	Brand	Serial No.	Last time	Next time
EMI Receiver	8546A	HP	3520A00242	07/28/03	07/28/04
RF Filter Section	85460A	HP	3448A00217	07/28/03	07/28/04
LISN (EUT)	TRCLISN-01	TRC	LISN-01	09/03/02	09/03/03
LISN (Support E.)	LISN-01	TRC	9912-05	06/21/03	06/21/04
Auto Switch Box (< 30MHz)	ASB-01	TRC	9904-01	11/20/02	11/20/03

The level of confidence of 95%, the uncertainty of measurement of conducted emission is ± 2.02 dB.

2.3 Test Result of Conducted Emissions

The following table shows a summary of the highest emissions of power line conducted emissions on the HOT and NATURAL conductors of the EUT power cord.

Test Conditions: Temperature : 25 °C Humidity : 73 % RH

Table 1 Power Line Conducted Emissions (Channel 1 of base)

Power Connected Emissions					*FCC Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	155.000	32.84	---	---	65.86	55.86	-23.02
	205.000	47.56	---	---	64.43	54.43	-6.87
	214.000	42.39	---	---	64.17	54.17	-11.78
	226.000	37.99	---	---	63.83	53.83	-15.84
	236.000	33.09	---	---	63.54	53.54	-20.45
	240.000	33.13	---	---	63.43	53.43	-20.30
	370.000	37.46	---	---	59.71	49.71	-12.25
	409.000	36.68	---	---	58.60	48.60	-11.92
	490.000	32.24	---	---	56.29	46.29	-14.05
	509.000	33.36	---	---	56.00	46.00	-12.64
Line 2	155.000	33.01	---	---	65.86	55.86	-22.85
	193.000	41.40	---	---	64.77	54.77	-13.37
	205.000	48.54	---	---	64.43	54.43	-5.89
	224.000	38.38	---	---	63.89	53.89	-15.51
	229.000	36.15	---	---	63.74	53.74	-17.59
	252.000	34.02	---	---	63.09	53.09	-19.07
	370.000	37.15	---	---	59.71	49.71	-12.56
	499.000	33.16	---	---	56.03	46.03	-12.87
	---	---	---	---	---	---	---
	---	---	---	---	---	---	---

NOTE:

(1) Margin = Amplitude – Limit, ***The reading amplitudes are all under limit.***

(2) A "+" sign in the margin column means the emission is OVER the Class B Limit and "–" sign of means UNDER the Class B limit

Table 2 Power Line Conducted Emissions (Channel 40 of base)

Power Connected Emissions					*FCC Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	152.000	33.80	---	---	65.94	55.94	-22.14
	206.000	48.41	---	---	64.40	54.40	-5.99
	224.000	37.43	---	---	63.89	53.89	-16.46
	231.000	37.43	---	---	63.69	53.69	-16.26
	255.000	33.90	---	---	63.00	53.00	-19.10
	359.000	38.11	---	---	60.03	50.03	-11.92
	373.000	37.04	---	---	59.63	49.63	-12.59
	409.000	39.21	---	---	58.60	48.60	-9.39
	456.000	36.41	---	---	57.26	47.26	-10.85
	509.000	32.76	---	---	56.00	46.00	-13.24
Line 2	205.000	47.38	---	---	64.43	54.43	-7.05
	224.000	38.37	---	---	63.89	53.89	-15.52
	231.000	35.65	---	---	63.69	53.69	-18.04
	311.000	34.04	---	---	61.40	51.40	-17.36
	366.000	37.26	---	---	59.83	49.83	-12.57
	377.000	38.77	---	---	59.51	49.51	-10.74
	394.000	35.46	---	---	59.03	49.03	-13.57
	405.000	35.94	---	---	58.71	48.71	-12.77
	413.000	36.34	---	---	58.49	48.49	-12.15
	509.000	34.16	---	---	56.00	46.00	-11.84

NOTE:

(1)Margin = Amplitude – Limit, ***The reading amplitudes are all under limit.***

(2)A "+" sign in the margin column means the emission is OVER the Class B Limit and "–" sign of means UNDER the Class B limit

Table 3 Power Line Conducted Emissions (Charging mode)

Power Connected Emissions					*FCC Class B*		
Conductor	*Frequency (KHz)*	*Peak (dBμV)*	*QP (dBμV)*	*Average (dBμV)*	*QP-limit (dBμV)*	*AVG-limit (dBμV)*	*Margin (dB)*
Line 1	201.000	45.04	---	---	64.54	54.54	-9.50
	205.000	45.56	---	---	64.43	54.43	-8.87
	229.000	36.08	---	---	63.74	53.74	-17.66
	363.000	39.17	---	---	59.91	49.91	-10.74
	373.000	37.60	---	---	59.63	49.63	-12.03
	380.000	37.71	---	---	59.43	49.43	-11.72
	391.000	35.94	---	---	59.11	49.11	-13.17
	409.000	36.75	---	---	58.60	48.60	-11.85
	499.000	35.15	---	---	56.03	46.03	-10.88
Line 2	155.000	33.91	---	---	65.86	55.86	-21.95
	203.000	47.41	---	---	64.49	54.49	-7.08
	224.000	37.31	---	---	63.89	53.89	-16.58
	231.000	36.14	---	---	63.69	53.69	-17.55
	359.000	38.17	---	---	60.03	50.03	-11.86
	377.000	37.66	---	---	59.51	49.51	-11.85
	409.000	35.02	---	---	58.60	48.60	-13.58
	461.000	34.65	---	---	57.11	47.11	-12.46
	494.000	34.07	---	---	56.17	46.17	-12.10

NOTE:

(1)Margin = Amplitude – Limit, ***The reading amplitudes are all under limit.***

(2)A "+" sign in the margin column means the emission is OVER the Class B Limit and "–" sign of means UNDER the Class B limit

III. Radiated Emissions Measurements

3.1 Test Condition & Setup

The EUT was placed in an anechoic chamber and scanned at 3 meter distance to determine its emission characteristics. The physical arrangement of the EUT was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude, directivity, and frequency. The exact system configuration which produced the highest emissions was noted so it could be reproduced later during the final tests. This was done to ensure that the final measurements would demonstrate the worst-case interference potential of the EUT.

Final radiation measurements were made on a three-meter, anechoic chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter.

The spectrum was examined from 30 MHz to 1000 MHz using an Hewlett Packard EMI Receiver, CHASE whole range Bi-log antenna (Model No.: CBL 6141A) is used to measure frequency from 30 MHz to 1GHz. The final test is used the HP 85460A spectrum and 8564E spectrum was examined from 1GHz to 25GHz using an Hewlett Packard Spectrum Analyzer, EMCO/CMT Horn Antenna (Model 3115 / RA42-K-F-4B-C) for 1G - 25GHz.

At each frequency, the handset of EUT stands on three orthogonal planes respectively and the EUT was rotated 360 degrees. The antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. There are two spectrum analyzers use on this testing, HP 8546A for frequency 30MHz to 1000MHz, and HP8564E for frequency 1 GHz to 25GHz. No post-detector video filters were used in the test. The spectrum analyzer's 6 dB bandwidth was set to 120KHz (spectrum was examined from 30 MHz to 1000 MHz), the spectrum analyzer's 6 dB bandwidth was set to 1 MHz (spectrum was examined from 1 GHz to 25GHz) and the analyzer was operated in the maximum hold mode.

The actual field intensity in decibels referenced to 1 microvolt per meter (dBì V/m) is determined by algebraically adding the measured reading in dBì V, the antenna factor (dB), and cable loss (dB) at the appropriate frequency.

For frequency between 30MHz to 1000MHz

FIa (dBì V/m) = FIr (dBì V) + Correction Factors

FIa : Actual Field Intensity

FIr : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss

For frequency between 1GHz to 25GHz

FIa (dBì V/m) = FIr (dBì V) + Correction Factor

FIa : Actual Field Intensity

FIr : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss – Amplifier Gain

3.2 List of Test Instruments

Instrument Name	Model No.	Brand	Serial No.	Last time	Next time
EMI Receiver	8546A	HP	3520A00242	07/28/03	07/28/04
RF Filter Section	85460A	HP	3448A00217	07/28/03	07/28/04
Bi-log Antenna	CBL 6141A	CHASE	4206	05/27/03	05/27/04
Auto Switch Box (>30MHz)	ASB-01	TRC	9904-01	11/20/02	11/20/03
Spectrum Analyzer	8564E	HP	3720A00840	07/31/03	07/31/04
Microwave Preamplifier	84125C	HP	US36433002	07/30/03	07/30/04
Horn Antenna	RA42-K-F-4B-C	CMT	961505-003	02/01/03	02/01/04
Anechoic Chamber (cable calibrated together)				05/20/03	05/20/04

The level of confidence of 95% , the uncertainty of measurement of radiated emission is ± 3.44dB.

3.3 Test Result of Radiated Emissions

The peak values of fundamental emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Testing room : Temperature : 25 ° C Humidity : 73 % RH

Table 4 Fundamental Emissions

Channel	Frequency (MHz)	A. P. (H/V)	A.H. (m)	Table (degree)	Peak (dBì V/m)	Limit (dBì V)	Margin (dBì V)
Base 1	2402.55	H	1.00	91	82.23	94.00	-11.77
		V	1.00	106	77.65	94.00	-16.35
Base 40	2404.50	H	1.00	227	82.29	94.00	-11.71
		V	1.00	35	82.04	94.00	-11.96
Handset 1	2474.00	H	1.00	164	76.09	94.00	-17.91
		V	1.00	182	75.65	94.00	-18.35
Handset 40	2475.95	H	1.00	267	75.90	94.00	-18.10
		V	1.00	84	75.01	94.00	-18.99

Note:

1. A. P. means antenna polarization, horizontal and vertical.
2. A. H. means antenna height.
3. Table means turntable turning position.
4. Amplitude means the fundamental emission measured.
5. Margin = Amplitude – limit

3.4 Test Result of Spurious Radiated Emissions

The highest peak values of radiated emissions form the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Testing room : Temperature : 25 ° C Humidity : 73 % RH

Table 5 Radiated Emissions for 30MHz to 1GHz [Base Ch 01, Y-axis] [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
145.19	32.55	1.00	156	-2.02	30.53	46.00	-15.47
290.69	35.16	1.00	213	-2.45	32.71	46.00	-13.29
801.50	31.23	1.00	127	13.78	45.01	46.00	-0.99
830.25	24.79	1.00	164	14.75	39.54	46.00	-6.46
930.89	23.09	1.00	22	18.36	41.45	46.00	-4.55

Table 6 Radiated Emissions for 30MHz to 1GHz [Base Ch 01, Y-axis] [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
42.12	26.87	1.00	18	5.88	32.75	40.00	-7.25
55.46	29.43	1.00	319	3.74	33.17	40.00	-6.83
106.39	35.28	1.00	244	-0.68	34.60	43.50	-8.90
141.55	36.34	1.00	3	-1.91	34.43	43.50	-9.07
802.36	29.28	1.00	314	13.81	43.09	46.00	-2.91

Note:

1. Margin = Corrected ─ Limit.
2. Peak Amplitude + Correction Factors = Corrected

Table 7 Radiated Emissions for 1GHz to 25GHz [Base Ch1, X-axis] [Horizontal]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m) Limit (dBμV/m)		Margin (dB)
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Peak	Ave.	
*1605.00	1.00	52	3.27	41.76	---	74.00	53.96	-12.20
*2487.50	1.00	249	3.46	42.85	---	74.00	53.96	-11.11

Table 8 Radiated Emissions for 1GHz to 25GHz [Base Ch1, X-axis] [Vertical]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m) Limit (dBμV/m)		Margin (dB)
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Peak	Ave.	
*1605.00	1.00	82	3.27	41.05	---	74.00	53.96	-12.91
*2487.50	1.00	177	3.46	41.69	---	74.00	53.96	-12.27

Note:

1. Margin = Corrected - Limit.
2. Peak Amplitude + Correction Factor = Corrected
3. "*" In Restricted Band

Table 9 Radiated Emissions for 30MHz to 1GHz [Base Ch40, X-axis] [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
259.16	39.11	1.00	276	-2.87	36.24	46.00	-9.76
290.69	41.08	1.00	272	-2.45	38.63	46.00	-7.37
318.59	42.25	1.00	276	-1.99	40.26	46.00	-5.74
376.77	35.45	1.00	256	-0.40	35.05	46.00	-10.95
436.19	31.76	1.00	109	2.12	33.88	46.00	-12.12
829.04	24.94	1.00	310	14.71	39.65	46.00	-6.35

Table 10 Radiated Emissions for 30MHz to 1GHz [Base Ch40, X-axis] [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
42.12	27.06	1.00	322	5.88	32.94	40.00	-7.06
45.76	27.92	1.00	345	5.13	33.05	40.00	-6.95
55.46	28.89	1.00	34	3.74	32.63	40.00	-7.37
113.66	34.01	1.00	268	-1.03	32.98	43.50	-10.52
146.40	36.86	1.00	23	-2.05	34.81	43.50	-8.69
802.36	29.89	1.00	69	13.81	43.70	46.00	-2.30

Table 11 Radiated Emissions for 1GHz to 25GHz [Base Ch40, X-axis] [Horizontal]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m)		
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Limit (dBμV/m) Peak	Limit (dBμV/m) Ave.	Margin (dB)
*1607.50	1.00	40	3.26	42.35	---	74.00	53.96	-11.61
*2487.50	1.00	162	3.46	42.37	---	74.00	53.96	-11.59

Table 12 Radiated Emissions for 1GHz to 25GHz [Base Ch40, X-axis] [Vertical]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m)		
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Limit (dBμV/m) Peak	Limit (dBμV/m) Ave.	Margin (dB)
*1610.00	1.00	224	3.25	41.57	---	74.00	53.96	-12.39
*2487.50	1.00	109	3.46	43.25	---	74.00	53.96	-10.71

Table 13 Radiated Emissions for 30MHz to 1GHz [Handset Ch1, Z-axis] [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
797.28	29.61	1.00	332	13.68	43.29	46.00	-2.71
824.67	28.79	1.00	135	14.56	43.35	46.00	-2.65

Table 14 Radiated Emissions for 30MHz to 1GHz [Handset Ch 1, X-axis] [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
797.93	25.15	1.00	242	13.69	38.84	46.00	-7.16
825.32	28.47	1.00	190	14.58	43.05	46.00	-2.95

Table 15 Radiated Emissions for 1GHz to 25GHz [Handset Ch 1, Y-axis] [Horizontal]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m) Limit (dBμV/m)		Margin (dB)
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Peak	Ave.	
1652.50	1.00	88	3.10	50.16	---	74.00	53.96	-3.80

Table 16 Radiated Emissions for 1GHz to 25GHz [Handset Ch 1, Y-axis] [Vertical]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m) Limit (dBμV/m)		Margin (dB)
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Peak	Ave.	
1652.50	1.00	243	3.10	46.38	---	74.00	53.96	-7.58

Table 17 Radiated Emissions for 30MHz to 1GHz [Handset Ch 40, Y-axis] [Horizontal]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
797.93	24.65	1.00	325	13.69	38.34	46.00	-7.66
825.32	28.88	1.00	127	14.58	43.46	46.00	-2.54

Table 18 Radiated Emissions for 30MHz to 1GHz [Handset Ch 40, Z-axis] [Vertical]

Radiated Emission				Correction Factors	Corrected Amplitude	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBì V)	Ant. H. (m)	Table (°)	(dB)	(dBì V/m)	Limit (dBì V/m)	Margin (dB)
797.93	23.73	1.00	206	13.69	37.42	46.00	-8.58
825.32	24.82	1.00	125	14.58	39.40	46.00	-6.60

Table 19 Radiated Emissions for 1GHz to 25GHz [Handset Ch 40, Y-axis] [Horizontal]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m)		
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Limit (dBμV/m) Peak	Ave.	Margin (dB)
1655.00	1.00	296	3.09	49.44	---	74.00	53.96	-4.52

Table 20 Radiated Emissions for 1GHz to 25GHz [Handset Ch 40, Y-axis] [Vertical]

Radiated Emission				Corrected Amplitude (dBμV/m)		FCC Class B (3m)		
Frequency (MHz)	Ant. H. (m)	Table (°)	Correction Factors (dB)	Peak	Average	Limit (dBμV/m) Peak	Ave.	Margin (dB)
1655.00	1.00	87	3.09	46.97	---	74.00	53.96	-6.99

Ⅳ. Verify Frequencies and Channels

This is for sure that all frequencies are in 2402MHz to 2476MHz that verifies the frequency as follow

Table 21 Verify the Frequency Pairs

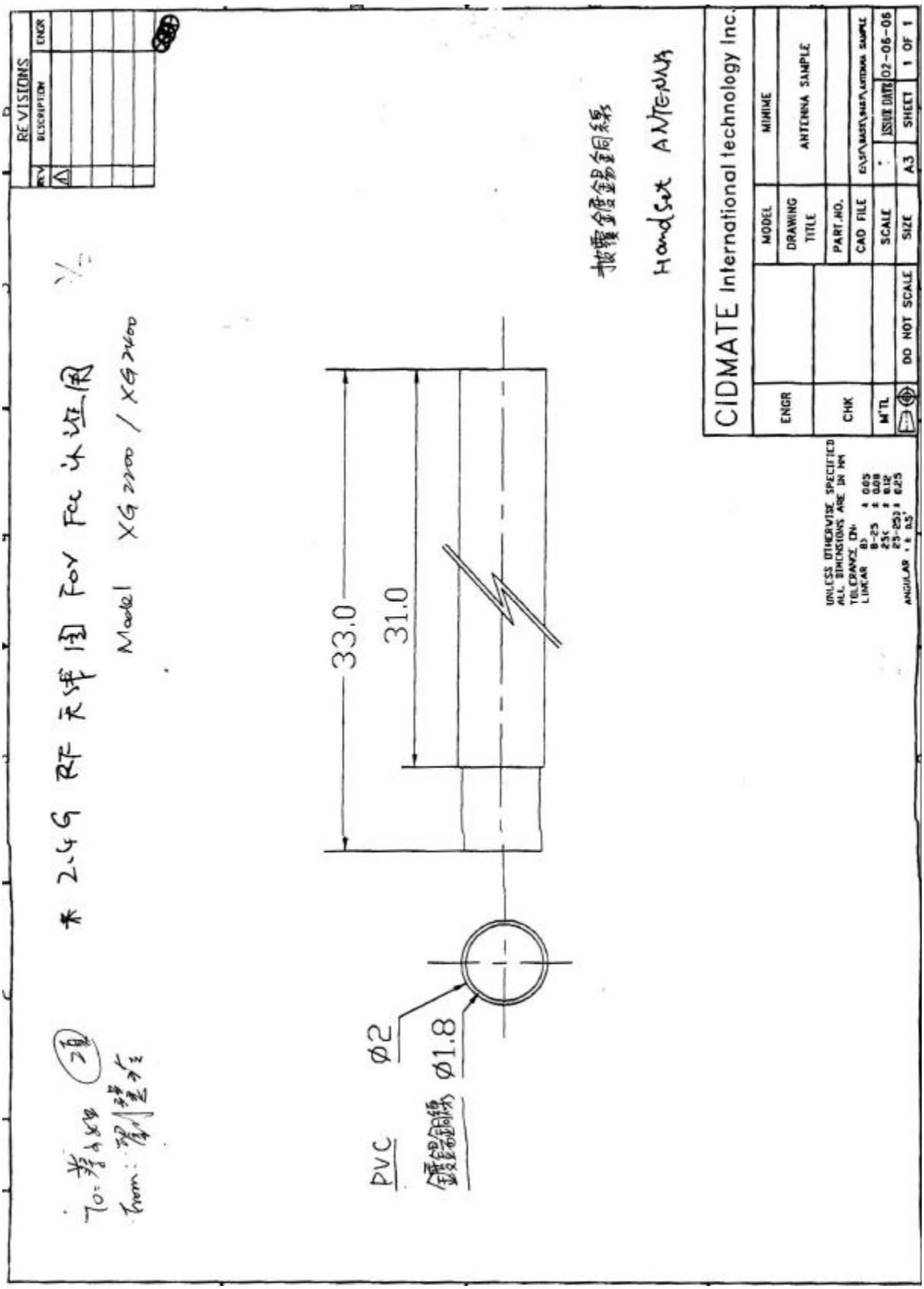
Channel	Handset (MHz)	Base (MHz)	Channel	Handset (MHz)	Base (MHz)
1	2474.00	2402.55	21	2475.00	2403.55
2	2474.05	2402.60	22	2475.05	2403.60
3	2474.10	2402.65	23	2475.10	2403.65
4	2474.15	2402.70	24	2475.15	2403.70
5	2474.20	2402.75	25	2475.20	2403.75
6	2474.25	2402.80	26	2475.25	2403.80
7	2474.30	2402.85	27	2475.30	2403.85
8	2474.35	2402.90	28	2475.35	2403.90
9	2474.40	2402.95	29	2475.40	2403.95
10	2474.45	2403.00	30	2475.45	2404.00
11	2474.50	2403.05	31	2475.50	2404.05
12	2474.55	2403.10	32	2475.55	2404.10
13	2474.60	2403.15	33	2475.60	2404.15
14	2474.65	2403.20	34	2475.65	2404.20
15	2474.70	2403.25	35	2475.70	2404.25
16	2474.75	2403.30	36	2475.75	2404.30
17	2474.80	2403.35	37	2475.80	2404.35
18	2474.85	2403.40	38	2475.85	2404.40
19	2474.90	2403.45	39	2475.90	2404.45
20	2474.95	2403.50	40	2475.95	2404.50

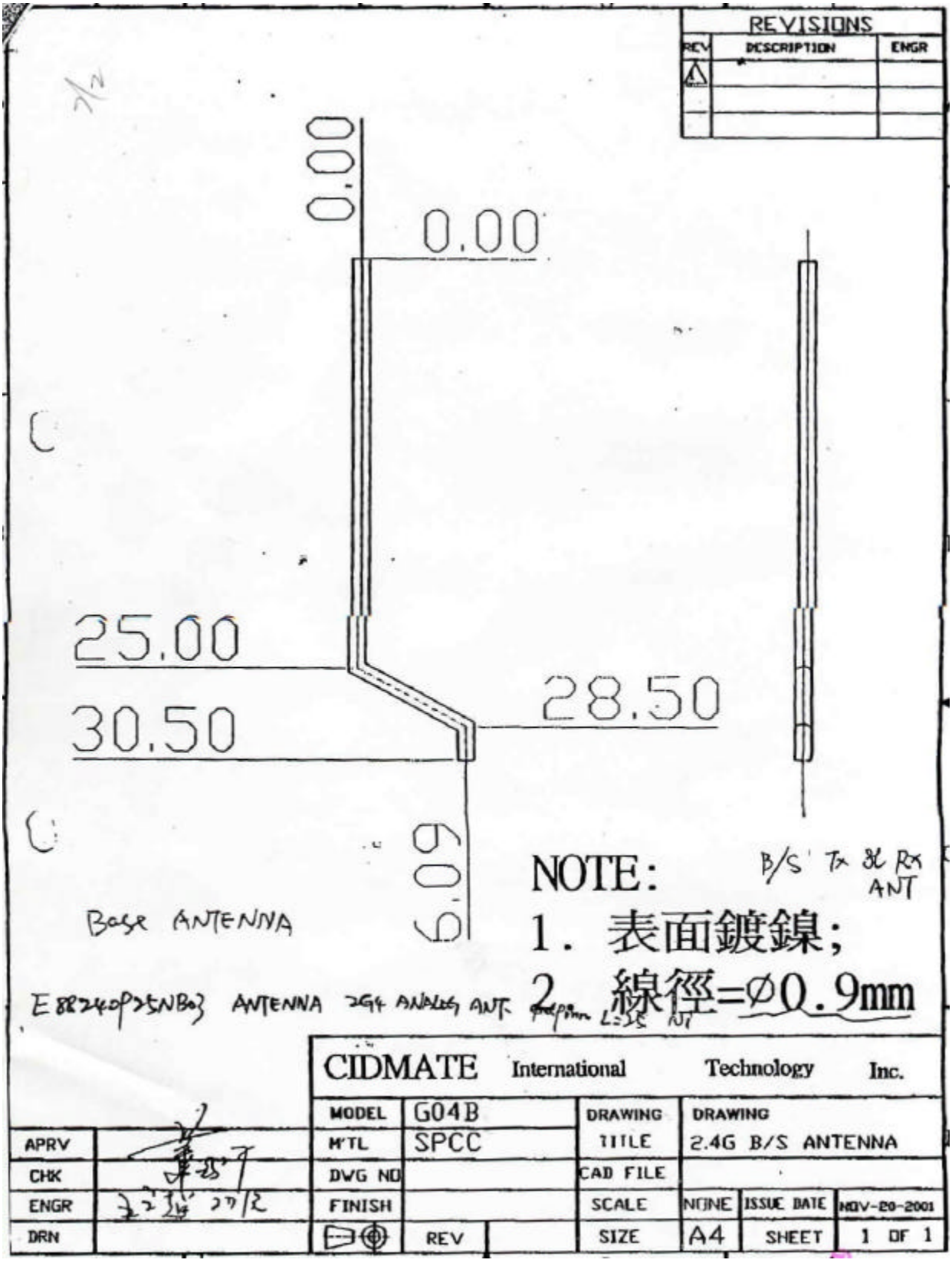
Section 15.214(d) <u>The security code is set automatic:</u>

Every time when you place the handset in the base, your cordless will randomly select over one million possible security codes.

Appendix A

The antenna of the device is screwed inside the device. The user can not remove it freely without any tools from outside the device. This is comply with the FCC rules part 15.203


REVISIONS
REV
DESCRIPTION
ENGR
CIDMATE International technology Inc.
ENGR
CHK
M'TL
MODEL
MINIME
DRAWING TITLE
ANTENNA SAMPLE
PART NO.
CAD FILE
SCALE
ISSUE DATE
02-06-06
SIZE
A3
SHEET
1 OF 1
DO NOT SCALE
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM
TOLERANCE IN:
LINEAR
ANGULAR
2.4G RF 天線用 For FCC 认证用
Model XG 2300 / XG 2400
Handset ANTENNA
33.0
31.0
PVC
Ø2
Ø1.8

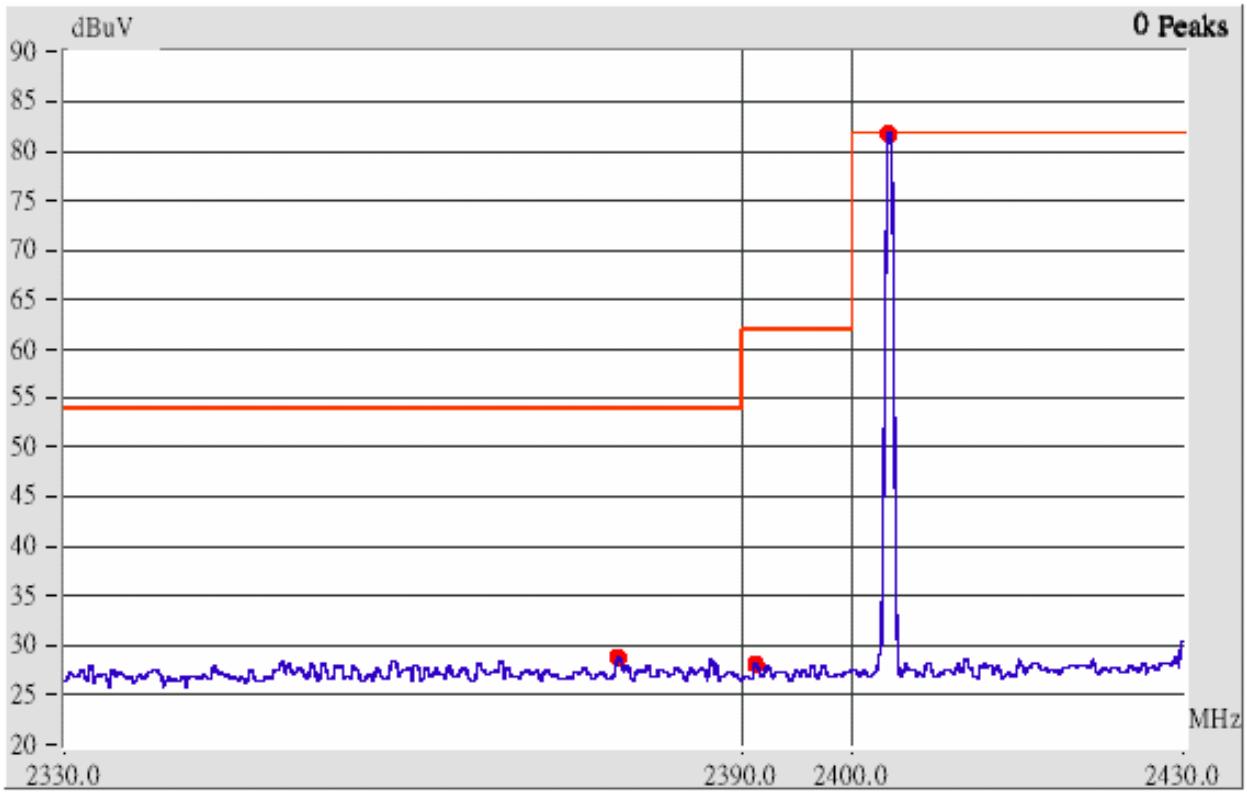

REVISIONS
REV
DESCRIPTION
ENGR
0.00
0.00
25.00
30.50
28.50
5.00
NOTE:
1. 表面鍍鎳;
2. 線徑=∅0.9mm
B/S Tx & Rx ANT
Base ANTENNA
E882440P25NB03 ANTENNA 2G4 ANALOG ANT.
CIDMATE International Technology Inc.
MODEL G04B
M'TL SPCC
DWG NO
FINISH
REV
DRAWING TITLE
2.4G B/S ANTENNA
CAD FILE
SCALE NONE
SIZE A4
ISSUE DATE NOV-20-2001
SHEET 1 OF 1
APRV
CHK
ENGR
DRN

Appendix B

§ 15.245 (b)(3) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

See as next page.

Base: Channel 1

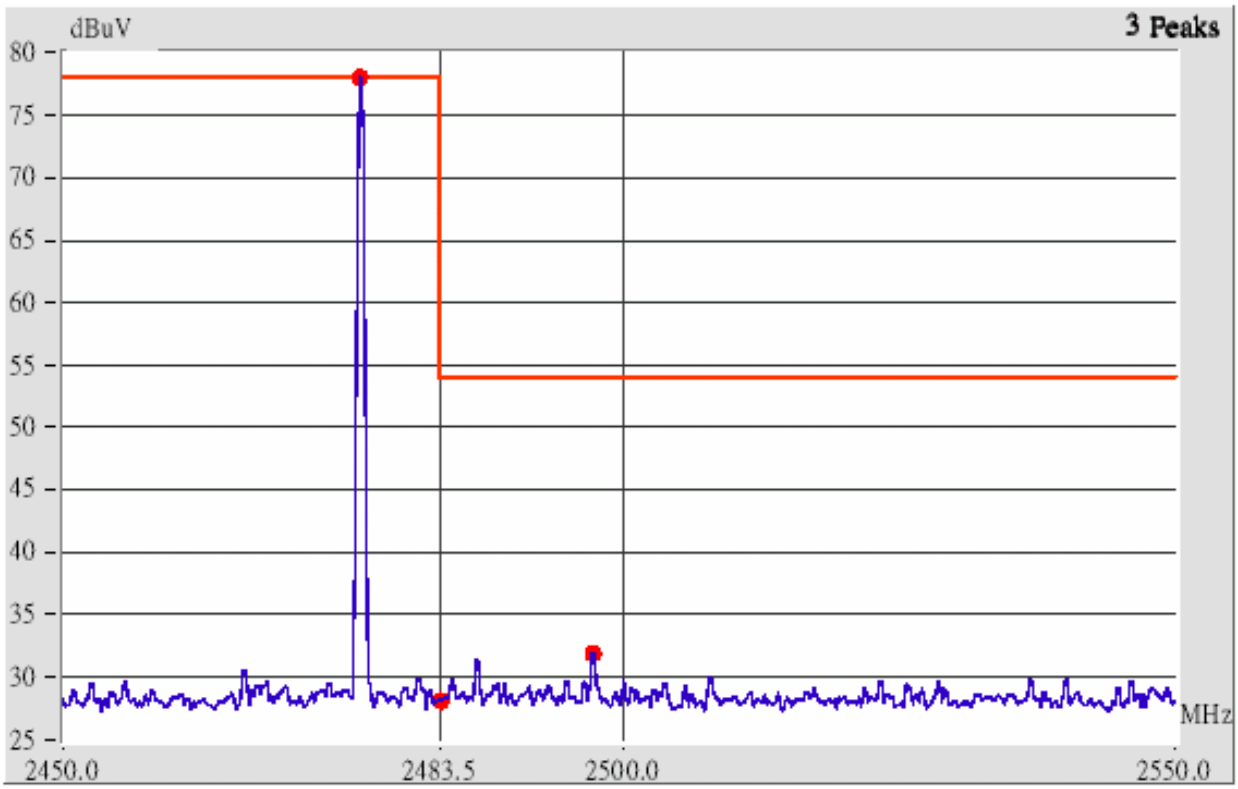


This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1 of base.

1. The lobe left by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*FCC Class B*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table (°)*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2373.20	Hor	1.00	304	3.08	35.66	---	74.00	53.96	-18.30
2396.22	Hor	1.00	77	3.16	34.06	---	74.00	53.96	-19.90
2400.05	Hor	1.00	250	3.17	38.45	---	74.00	53.96	-15.51
2388.35	Ver	1.00	158	3.13	36.15	---	74.00	53.96	-17.81
2391.95	Ver	1.00	48	3.14	34.95	---	74.00	53.96	-19.01
2400.05	Ver	1.00	289	3.17	35.69	---	74.00	53.96	-18.27

Handset: Channel 40



This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 40 of handset.

1. The lobe right by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

Radiated Emission					*Corrected Amplitude (dBμV/m)*		*FCC Class B*		
Frequency (MHz)	*Ant. P.*	*Ant. H. (m)*	*Table (°)*	*Factors (dB)*	*Peak*	*Average*	*Limit (dBμV/m) Peak*	*Ave.*	*Margin (dB)*
2486.47	Hor	1.00	174	3.46	37.59	---	74.00	53.96	-16.37
2500.12	Hor	1.00	22	3.50	35.04	---	74.00	53.96	-18.92
2511.45	Hor	1.00	239	3.52	36.26	---	74.00	53.96	-17.70
2496.53	Ver	1.00	146	3.48	36.83	---	74.00	53.96	-17.13
2500.12	Ver	1.00	284	3.50	35.71	---	74.00	53.96	-18.25
2503.50	Ver	1.00	320	3.54	36.67	---	74.00	53.96	-17.29