

喬工科技股份有限公司
CHAW KHONG TECHNOLOGY CO., LTD.
台北縣五股工業區五權三路29號
NO.29, WU CHUANG 3RD., WU KU INDUSTRIAL PARK,
TAIPEI COUNTY, TAIWAN, R.O.C.
Tel: (82)259-2808
Fax: (82)259-2406
E-Mail: ysh099@ms22.hinet.net

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern :

This is to serve as proper written authorization that Spectrum Research and Testing Laboratory, Inc., 15200, Shady Grove Rd., Rockville, MD. 20850, will act as our representative in all matters relating to FCC applications for equipment approval. This includes the signing of all related documents, the transmitting of required fees, and receiving correspondence and notifications from the FCC. All acts performed by Spectrum Research and Testing Laboratory, Inc., especially modifications to our equipment under testing will be carried out on our behalf.

Meantime, the applicant certifies that in the case of an individual applicant (e.g., corporation), no party to the applicant is subject to a denial of federal benefits, that includes FCC denial of federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 862. For a definition of a " party " for these purposes see 47 C.F.R. 1.2002 (b).

If you have any questions regarding our applications for equipment approval, please contact Spectrum Research and Testing Laboratory, Inc. by calling (301) 670-2818.

Respectfully,

Tyler Wang
(Name, Surname)

H/W
(Position/Title)

DATE : Sep. 10, 1999

Effective Dates :

From Sep. 10, 1999 to Sep. 10, 2000

喬工科技股份有限公司
CHAW KHONG TECHNOLOGY CO., LTD.
台北縣五股工業區五權三路29號
NO.29, WU CHUAN 3RD RD., WU KU INDUSTRIAL PARK,
TAIPEI COUNTY, TAIWAN, R.O.C.
Tel : (02) 2298-2808
Fax : (02) 2298-2486
E-Mail : yw099@ms22.hinet.net

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern :

This is to serve as proper notice that our company agrees to make
all modifications to FCC ID : OHGMNP-300 as listed in section
3.0 of modification to submitted by Spectrum Research and Testing
Laboratory, Inc.

Respectfully,

Tyler Wang
(Name, Surname)

W/W
(Position/Title)

Effective Dates :

From Sep. 10, 1999 to Sep. 10, 2000

DATE : Sep. 10, 1999

Class B Certification Application

Under part 15, subpart B & C

EUT CORDLESS Mini Phone**MODEL** MNP-300**FCC ID** OHGMNP-300**SRT REPORT #** T9J07-1**PREPARED FOR****CHAW KHONG TECHNOLOGY CO., LTD.**

NO. 29 WU CHUANG 3RD RD.,

WU KU INDUSTRIAL PARK, TAIPEI COUNTY,
TAIWAN, R.O.C.**EMI TESTING REPORT****EUT** : CORDLESS Mini Phone**MODEL** : MNP-300**FCC ID** : OHGMNP-300

PREPARED FOR**CHAW KHONG TECHNOLOGY CO., LTD.****NO. 29 WU CHUANG 3RD RD.,****WU KU INDUSTRIAL PARK, TAIPEI COUNTY,****TAIWAN, R.O.C.****PREPARED BY****SPECTRUM RESEARCH & TESTING LABORATORY INC.****NO. 101-10, LING 8, SHAN-TONG LI CHUNG – LI CITY,
TAOYUAN, TAIWAN, R. O. C.****TEL (03) 4987684****FAX (03) 4986528*****TABLE OF CONTENTS***

1. TEST REPORT CERTIFICATION.....	4
2. TEST STATEMENT	
2.1 TEST STATEMENT.....	5
3. DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS, TEST STATEMENT.....	6
4. EUT MODIFICATIONS.....	7
5. CONDUCTED POWER LINE TEST	
5.1 TEST EQUIPMENT.....	8
5.2 TEST PROCEDURE.....	8
5.3 TEST SETUP.....	9
5.4 CONFIGURATION OF THE EUT.....	10-11
5.5 EUT OPERATING CONDITION.....	12
5.6 EMISSION LIMITS.....	12
5.7 EMISSION TEST RESULTS.....	13-16

6. RADIATED EMISSION TEST

6.1 TEST EQUIPMENT.....	17
6.2 TEST PROCEDURE.....	18
6.3 TEST SETUP.....	18-19
6.4 CONFIGURATION OF THE EUT.....	20
6.5 EUT OPERATING CONDITION.....	20
6.6 EMISSION LIMITS.....	20
6.7 RADIATION EMISSION TEST RESULTS.....	21-27

7. BANDWIDTH

7.1 LIMIT.....	28
7.2 RESULT.....	28

8. VERIFY CHANNELS AND FREQUENCIES.....	35
---	----

1. TEST REPORT CERTIFICATION

APPLICANT CHAW KHONG TECHNOLOGY CO., LTD.

ADDRESS NO. 29 WU CHUANG 3RD RD.,
WU KU INDUSTRIAL PARK, TAIPEI COUNTY,
TAIWAN, R.O.C.

EUT DESCRIPTION	<u>CORDLESS Mini Phone</u>
(A) POWER SUPPLY	<u>BASE BY ADAPTOR (120VAC / 60Hz)</u> <u>HANDSET BY BATTERY (3.6V / 280mAh)</u>
(B) MODEL	<u>MNP-300</u>
(C) FCC ID	<u>OHGMNP-300</u>
FINAL TEST DATE	<u>10/09/1999</u>

MEASUREMENT PROCEDURE USED

- * PART 15 SUBPART B & C OF FCC RULES AND REGULATIONS (47 CFR PART 15)
- * ANSI C63.4 - 1992
- * TEST PROCEDURE AND DATA ARE TRACEABLE TO NIST / USA.

We hereby certify that

The measurements contained in this report were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable.

TESTING ENGINEER : Addison Liu DATE 10/9/98
Addison Liu

SUPERVISOR : Jesse Ho DATE 10/9/98
Jesse Ho

APPROVED BY : Johnson Ho DATE 10/9/98
Johnson Ho

2. TEST STATEMENT**2.1 TEST STATEMENT**

1. This letter is to explain the EUT will be class II change.
2. The data was shown in this report reflects the worst – case data for the condition as listed above.
Please disregard any other oricessir(s) speed shown in this user manual.
3. EUT conditions:

Frequency Range : Base → 43.720 ~ 46.970 MHz
Handset → 48.760 ~ 49.970 MHz
Support Channel : 25 channel
4. NVLAP logo is to be approved by management (it is according to NVLAP requirement if it need) before use.

3. DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS , THE STATEMENT

A. Did have

Any departure from document policies & procedures or from specifications.

Yes _____, No √ _____ .

If yes , the description as below.

B. The certificate and report shall not be reproduced except in full , without the written approval of SRT laboratory.

C. The report must not be used by the client to claim product endorsement by NVLAP or any agency the government.

D. This product is a prototype product.

E. The effect that the results relate only to the items tested.

4. EUT MODIFICATIONS

The following accessories were added to the EUT during testing

No modifications by SRT lab.

5. CONDUCTED POWER LINE TEST

5 . 1 TEST EQUIPMENT

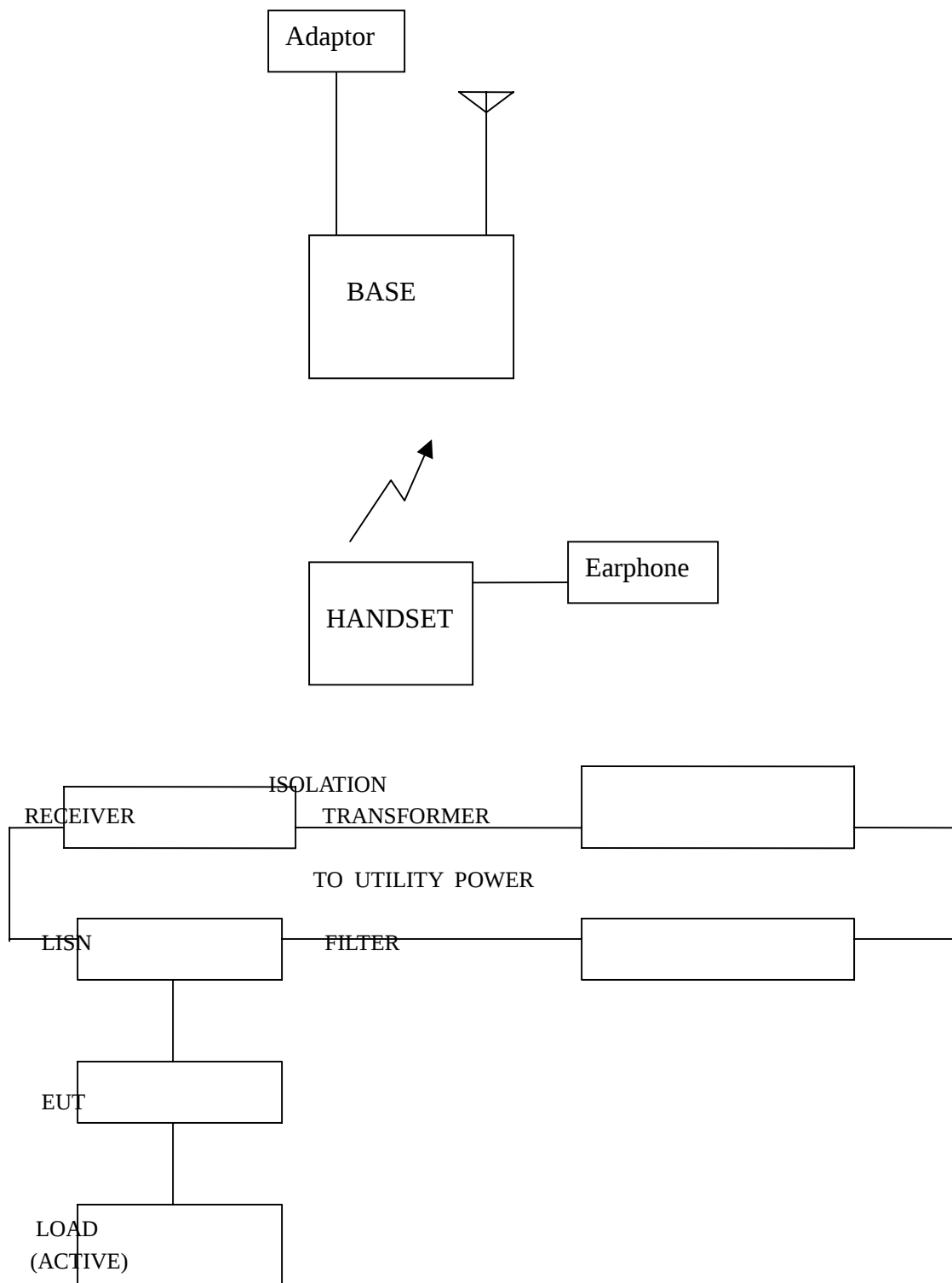
The following test equipment were used during the conducted power line test

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DATE OF CAL. & CAL. CENTER	DUE DATE	FINAL TEST
SPECTRUM ANALYZER	9 KHz TO 1 GHz	HP	8590L/ 3624A01317	AUGUST 1999 ETC	1Y	
EMI TEST RECEIVER	9 KHz TO 30 MHz	ROHDE & SCHWARZ	ESHS30/ 826003/008	AUGUST 1999 ETC	1Y	√
LISN	50 uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951315	AUGUST 1999 ETC	1Y	√
LISN	50uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951318	AUGUST 1999 ETC	1Y	√
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	APRIL 1999 ETC	1Y	√
POWER CONVERTER	0 TO 300 VAC VAC 47-500 Hz	AFC	AFC-1KW/ 850510	MARCH 1999 SRT	1Y	√

5 . 2 TEST PROCEDURE

The EUT was tested according to ANSI C63.4 - 1992. The frequency spectrum from 0.45 MHz to 30 MHz was investigated. The LISN used was 50 ohm / 50 uHenry as specified by section 5.1 of ANSI C63.4 - 1992. Cables and peripherals were moved to find the maximum emission levels for each frequency.

5 . 3 TEST SETUP



5 . 4 CONFIGURATION OF THE EUT

The EUT was configured according to ANSI C63.4 - 1992. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

A. EUT

DEVICE	MANUFACTURER	MODEL #	FCCID
CORDLESS Mini Phone	CHAW KHONGTECHNOLOGY CO., LTD.	MNP-300	OHGMNP-300

B. INTERNAL DEVICES

DEVICE	MANUFACTURER	MODEL #	FCCID / DoC
NONE			

C. PERIPHERALS

DEVICE	MANUFAC-TURER	MODEL # SERIAL #	FCCID / DoC	CABLE
EARPHONE	TECH STRONG	97300E0711	N/A	1.8m unshielded data cable
ADAPTOR	AMIGO	AM-12600N	N/A	1.8m unshielded power cord

- REMARK

- (1). Cable - S1 Single point shielding
S2 360° shielding
S3 Double shielding

- (2). Cables - All 1m or greater in length – bundled according to ANSI C63.4 – 1992.

5 . 5 EUT OPERATING CONDITION

Operating condition is according to ANSI C63.4 - 1992.

1. EUT power on.
2. Frequency Range : Base → 43.720 ~ 46.970 MHz
Handset → 48.760 ~ 49.970 MHz

5 . 6 CONDUCTED POWER LINE EMISSION LIMITS

FREQUENCY RANGE (MHz)	CLASS B
0 . 45 - 1.705	48.0 dBuV
1.705 - 30	48.0 dBuV

NOTE In the above table , the tougher limit applies at the band edges.

5 . 7 CONDUCTED POWER LINE TEST RESULTS

The frequency spectrum from 0.45 MHz to 30 MHz was investigated.
All readings are quasi – peak values with a resolution bandwidth
of 9 KHz.

Temperature 22 °CHumidity 56 %RH

FREQUENCY (MHz)	LINE 1 (dBuV)	LINE 2 (dBuV)	LIMIT (dBuV)
1.05	2.30	2.30	48
10.2	13.7	14.1	48
12.0	22.6	22.8	48
20.0	19.2	19.0	48

REMARKS

- (1). * = measurement does not apply for this frequency
(2). uncertainty in conducted emission measured is <+/- 2dB
(3). any departure from specification N/A
(4). Charge mode

SIGNED BY TESTING ENGINEER**5 . 7 CONDUCTED POWER LINE TEST RESULTS**

The frequency spectrum from 0.45 MHz to 30 MHz was investigated.
All readings are quasi – peak values with a resolution bandwidth

of 9 KHz.

Temperature 22 °C

Humidity 56 %RH

FREQUENCY (MHz)	LINE1 (dBuV)	LINE2 (dBuV)	LIMIT (dBuV)
1.05	2.30	*	48
4.00	6.30	6.50	48
10.2	17.1	17.6	48
12.0	*	20.7	48
19.9	18.0	*	48
22.6	*	22.6	48

REMARKS

- (1). * = measurement does not apply for this frequency
 (2). uncertainty in conducted emission measured is <+/-2dB
 (3). any departure from specification N/A
 (4). Base channel CH1



SIGNED BY TESTING ENGINEER

5 . 7 CONDUCTED POWER LINE TEST RESULTS

The frequency spectrum from 0.45 MHz to 30 MHz was investigated.
 All readings are quasi – peak values with a resolution bandwidth
 of 9 KHz.

Temperature 22 °CHumidity 56 %RH

FREQUENCY (MHz)	LINE1 (dBuV)	LINE2 (dBuV)	LIMIT (dBuV)
0.77	0.20	2.70	48
1.42	6.30	6.70	48
4.00	5.90	6.30	48
10.2	12.7	12.9	48
12.0	19.7	19.9	48
20.0	17.3	17.3	48

REMARKS

- (1). * = measurement does not apply for this frequency
 (2). uncertainty in conducted emission measured is <+/-2dB
 (3). any departure from specification N/A
 (4). Base channel CH13



SIGNED BY TESTING ENGINEER

5 . 7 CONDUCTED POWER LINE TEST RESULTS

The frequency spectrum from 0.45 MHz to 30 MHz was investigated.
 All readings are quasi – peak values with a resolution bandwidth
 of 9 KHz.

Temperature 22 °CHumidity 56 %RH

FREQUENCY (MHz)	LINE1 (dBuV)	LINE2 (dBuV)	LIMIT (dBuV)
4.00	6.10	6.10	48
10.2	17.3	17.2	48
11.9	20.0	20.3	48
20.0	17.6	17.4	48

- REMARKS**
- (1). * = measurement does not apply for this frequency
 - (2). uncertainty in conducted emission measured is ± 2 dB
 - (3). any departure from specification N/A
 - (4). Base channel CH25



SIGNED BY TESTING ENGINEER

6. RADIATED EMISSION TEST

6.1 TEST EQUIPMENT

The following test equipment were used during the radiated emission test :

EQUIPMENT / FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL # / SERIAL #	DATE OF CAL. & CAL. CENTER	DUE DATE	FINAL TEST
RECEIVER	20 MHz TO 1000 MHz	R & S	ESVS30/841977/003	APRIL 1999 ETC	1Y	√
SPECTRUM ANALYZER	100 Hz TO 1500 MHz	HP	8568B/3019A05294	OCT. 1998 ETC	1Y	
SPECTRUM ANALYZER	9 KHz TO 22 GHz	HP	8593E/3322A00670	MAY 1999 ETC	1Y	√
SPECTRUM ANALYZER	100 Hz TO 1000 MHz	IFR	A-7550/2684/1248	JULY 1998 ETC	1Y	
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/841104/019	APRIL 1999 ETC	1Y	√
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/9003-534	MARCH 1999 SRT	1Y	
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/9611-1239	SEP. 1998 SRT	1Y	
BI-LOG ANTENNA	26 MHz TO 2000 MHz	EMCO	3142/9608-1073	SEP. 1998 SRT	1Y	√
BI-LOG ANTENNA	26 MHz TO 1100 MHz	EMCO	3143/9509-1152	SEP. 1998 SRT	1Y	
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/2944A08402	APRIL 1999 ETC	1Y	
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/2944A06412	AUGUST 1999 ETC	1Y	
HORN ANTENNA	1 GHz TO 18 GHz	EMCO	3115/9012-3619	JAN. 1999 EMCO	1Y	√

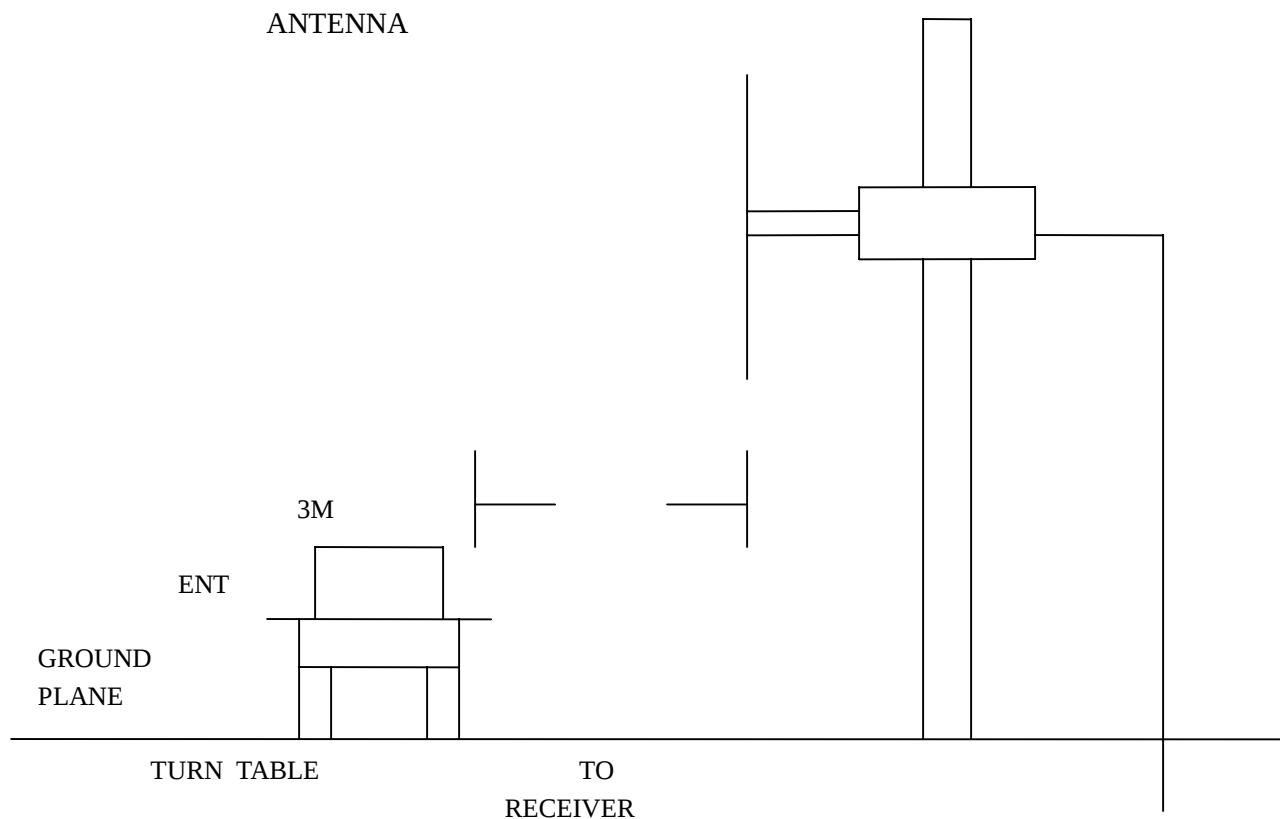
6 . 2 TEST PROCEDURE

- (1).The EUT was tested according to ANSI C63.4 - 1992. The radiated test was performed at SRT lab's open site. this site is on file with the FCC laboratory division, reference 31040 / SIT.
- (2).The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-1992.
- (3).The frequency spectrum from 30 MHz to 10 GHz was investigated.

All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz , peak values with a resolution bandwidth of 1 MHz . Measurements were made at 3 meters.

- (4). The antenna high were varied from 1 m to 4 m high to find the maximum emission for each frequency.
 (5). The antenna polarization Vertical polarization and horizontal polarization.

6 . 3 RADIATED TEST SET-UP

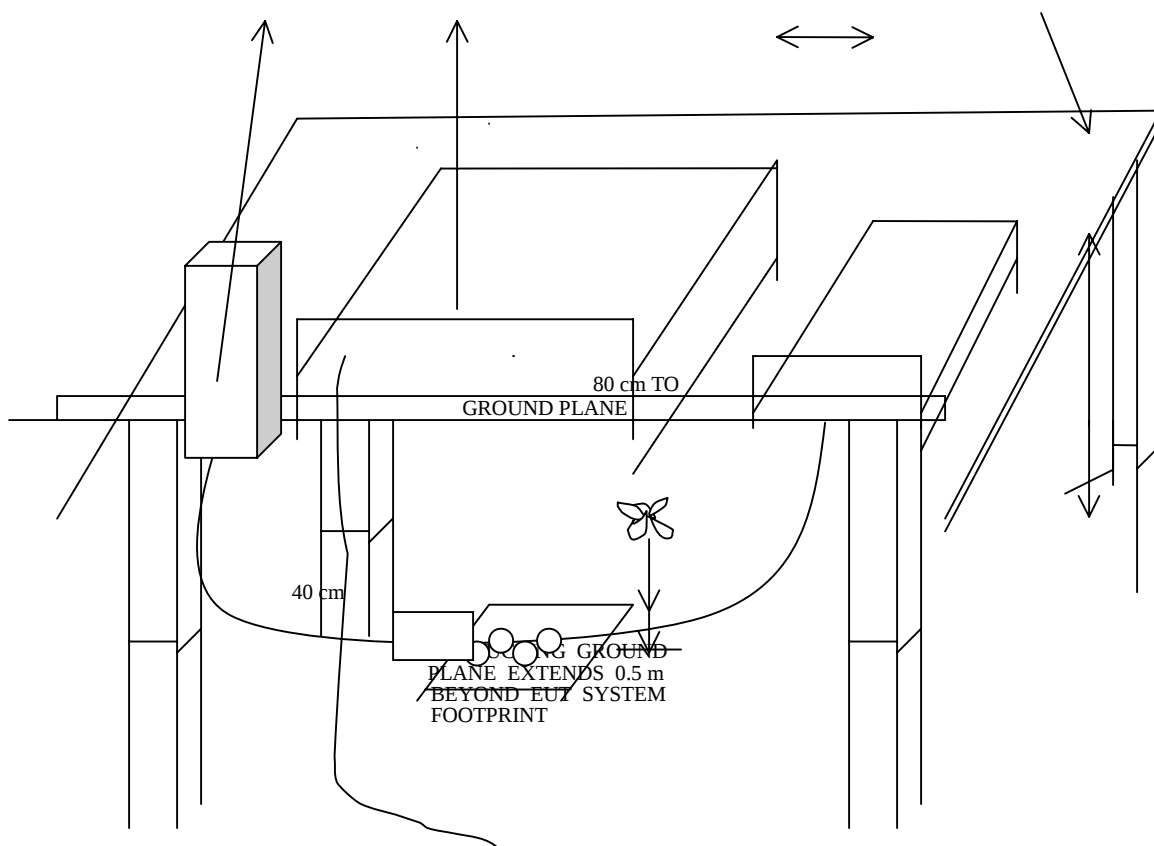


6 . 3 RADIATED TEST SET-UP

ANSI C63.4-1992
 ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE RANGE IN THE RANGE OF 9 KHz TO 40 GHz

HANDSET BASE NONCONDUCTIVE
 10 cm TABLE 1.5 × 1 METER

PAGE 19 OF 35



6 . 4 CONFIGURATION OF THE THE EUT

Same as section 5.4 of this report

6 . 5 EUT OPERATING CONDITION

Same as section 5.5 of this report.

6 . 6 RADIATED EMISSION LIMITS

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below

CLASS B

FREQUENCY (MHz)	DISTANCE (m)	FIELDS STRENGTH (dBuV/m)
30 - 88	3	40.0
88 - 216	3	43.5
216 - 960	3	46.0

ABOVE 960	3	54.0
-----------	---	------

FUNDAMENTAL AND HARMONICS

FUNDAMENTAL FREQUENCY	FIELD STRENGTH OF FUNDAMENTAL (MILLIVOLTS/METER)	FIELD STRENGTH OF HARMONICS (MILLIVOLTS/METER)
902MHz - 928MHz	50	500
2400MHz - 2483.5MHz	50	500
5725MHz - 5875MHz	50	500
24.0GHz - 24.25GHz	250	2500

- NOTE** 1. In the emission tables above, the tighter limit applies at the band edges.
2. Distance refers to the distance between measuring instrument, antenna, and the closest point of any part of the device or system.

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °C

Humidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
36.79	0.5	13.5	12.50	15.60	26.50	29.60	40.0
56.19	0.6	9.40	*	11.50	*	21.50	40.0
77.53	0.7	7.90	12.40	*	21.00	*	40.0
558.6	1.9	21.0	*	11.40	*	34.30	46.0

656.6	2.2	22.4	*	10.50	*	35.10	46.0
683.7	2.2	22.0	9.800	*	34.00	*	46.0

REMARKS

- (1). *= Measurement does not apply for this frequency.
 (2). Uncertainty in radiated emission measured is <+/-4dB
 (3). Any departure from specification N/A
 (4). Factor will include cable loss and correction factor.
 (5). Sample calculation
 $20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$
 (6). Charge mode



SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °CHumidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
43.72	0.4	11.5	35.50	44.70	47.40	56.60	80.0
117.2	0.9	9.70	17.30	14.10	27.90	24.70	43.5
131.1	1.0	10.5	17.80	19.80	29.30	31.30	43.5
140.9	1.0	11.8	19.50	20.80	32.30	33.60	43.5

185.7	1.1	11.1	*	19.80	*	32.00	43.5
420.8	1.8	17.0	18.80	16.90	37.60	35.70	46.0

REMARKS

- (1). *= Measurement does not apply for this frequency.
 (2). Uncertainty in radiated emission measured is <+/-4dB
 (3). Any departure from specification N/A
 (4). Factor will include cable loss and correction factor.
 (5). Sample calculation
 $20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$
 (6). Base channel CH01



SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °CHumidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
44.40	0.4	11.3	36.10	44.80	47.80	56.50	80.0
117.2	0.9	9.70	17.50	13.90	28.10	24.50	43.5
133.2	1.0	10.9	18.10	19.90	30.00	31.80	43.5
140.9	1.0	11.8	19.50	20.80	32.30	33.60	43.5

185.7	1.1	11.1	*	19.70	*	31.90	43.5
420.8	1.8	17.0	18.40	16.70	37.20	35.50	46.0

REMARKS

- (1). *= Measurement does not apply for this frequency.
 (2). Uncertainty in radiated emission measured is <+/-4dB
 (3). Any departure from specification N/A
 (4). Factor will include cable loss and correction factor.
 (5). Sample calculation
 $20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$
 (6). Base channel CH13



SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °CHumidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
46.97	0.4	10.8	35.80	44.60	47.00	55.80	80.0
117.2	0.9	9.70	17.40	13.80	28.00	24.40	43.5
140.5	1.0	11.9	17.90	17.60	30.80	30.50	43.5
140.9	1.0	11.8	19.70	21.10	32.50	33.90	43.5

185.7	1.1	11.1	*	20.10	*	32.30	43.5
420.8	1.8	17.0	18.50	16.80	37.30	35.60	46.0

REMARKS

- (1). *= Measurement does not apply for this frequency.
 (2). Uncertainty in radiated emission measured is <+/-4dB
 (3). Any departure from specification N/A
 (4). Factor will include cable loss and correction factor.
 (5). Sample calculation
 $20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$
 (6). Base channel CH25



SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °CHumidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
48.78	0.5	10.6	48.00	50.70	59.10	61.80	80.0
143.1	1.0	11.1	15.00	16.00	27.10	28.10	43.5
146.2	1.1	10.2	20.10	18.50	31.40	29.80	43.5

438.8	1.8	17.2	18.90	19.10	37.90	38.10	46.0
487.5	1.7	17.8	18.70	16.40	38.20	35.90	46.0
536.3	1.8	19.9	15.40	14.10	37.10	35.80	46.0

REMARKS (1). *= Measurement does not apply for this frequency.

(2). Uncertainty in radiated emission measured is <+/-4dB

(3). Any departure from specification N/A

(4). Factor will include cable loss and correction factor.

(5). Sample calculation

$20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$

(6). Handset channel CH01

Addison

SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °C

Humidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
49.40	0.5	10.5	52.10	54.20	63.10	65.20	80.0
143.1	1.0	11.1	14.70	15.80	26.80	27.90	43.5
148.2	1.1	9.60	19.80	19.70	30.50	30.40	43.5

444.6	1.8	17.3	18.70	18.90	37.80	38.00	46.0
487.5	1.7	17.8	19.10	16.80	38.60	36.30	46.0
536.3	1.8	19.9	15.60	14.70	37.30	36.40	46.0

REMARKS (1). *= Measurement does not apply for this frequency.

(2). Uncertainty in radiated emission measured is <+/-4dB

(3). Any departure from specification N/A

(4). Factor will include cable loss and correction factor.

(5). Sample calculation

$20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$

(6). Handset channel CH13

Addison

SIGNED BY TESTING ENGINEER

6 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . Measurements were made at 3 meters.

Temperature : 25 °C

Humidity : 55 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
49.97	0.5	10.4	50.10	51.40	61.00	62.30	80.0
143.1	1.0	11.1	14.20	15.50	26.30	27.60	43.5
149.9	1.1	9.00	19.50	20.10	29.60	30.20	43.5

487.5	1.7	17.8	18.80	17.50	38.30	37.00	46.0
501.2	1.7	18.1	18.90	14.70	38.70	34.50	46.0
549.2	1.9	20.6	15.40	*	37.90	*	46.0

REMARKS

- (1). *= Measurement does not apply for this frequency.
 (2). Uncertainty in radiated emission measured is <+/-4dB
 (3). Any departure from specification N/A
 (4). Factor will include cable loss and correction factor.
 (5). Sample calculation
 $20 \log (\text{emission}) \text{ uV/m} = \text{Factor(dB)} + \text{Ant. factor(dB/m)} + \text{reading(dBuV)}$
 (6). Handset channel CH25



SIGNED BY TESTING ENGINEER

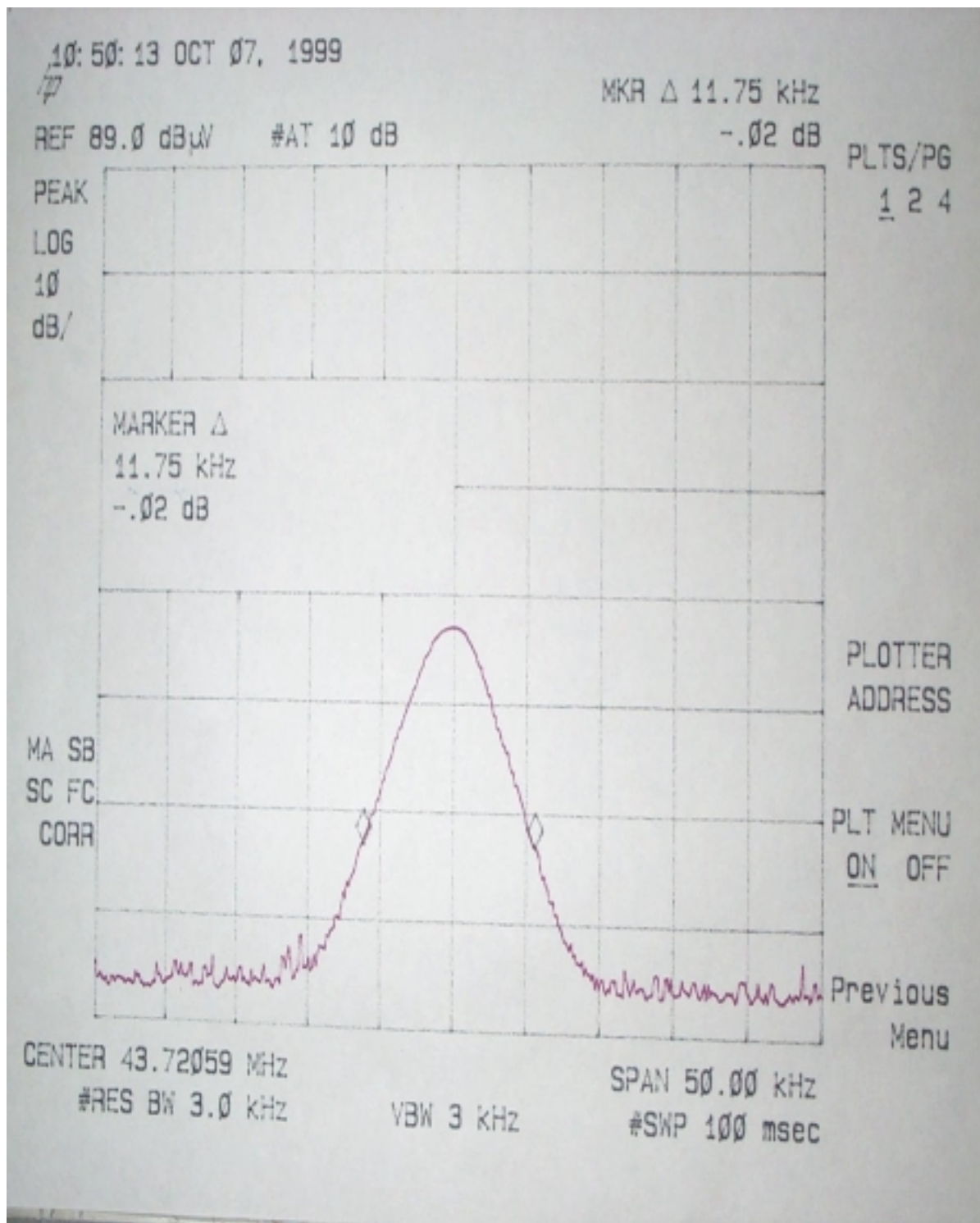
7 BANDWIDTH**7.1 Limit**

Base channel CH01 : Minimum 20dB bandwidth = 11.75 KHz
 Base channel CH13 : Minimum 20dB bandwidth = 12.00 KHz
 Base channel CH25 : Minimum 20dB bandwidth = 11.25 KHz
 Handset channel CH01 : Minimum 20dB bandwidth = 10.50 KHz
 Handset channel CH13 : Minimum 20dB bandwidth = 10.50 KHz
 Handset channel CH25 : Minimum 20dB bandwidth = 10.38 KHz

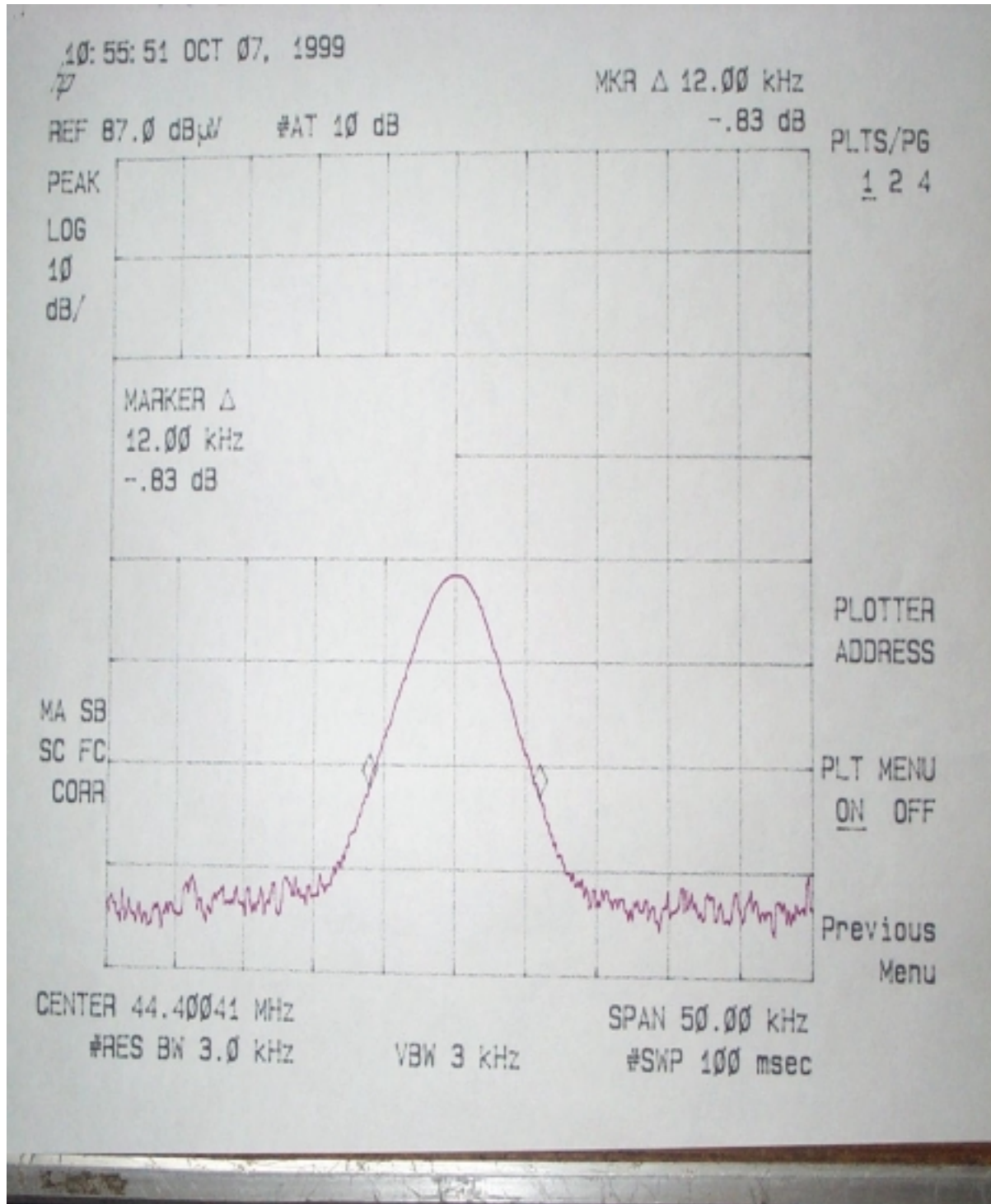
7.2 Test Result

Please see attached plotter.

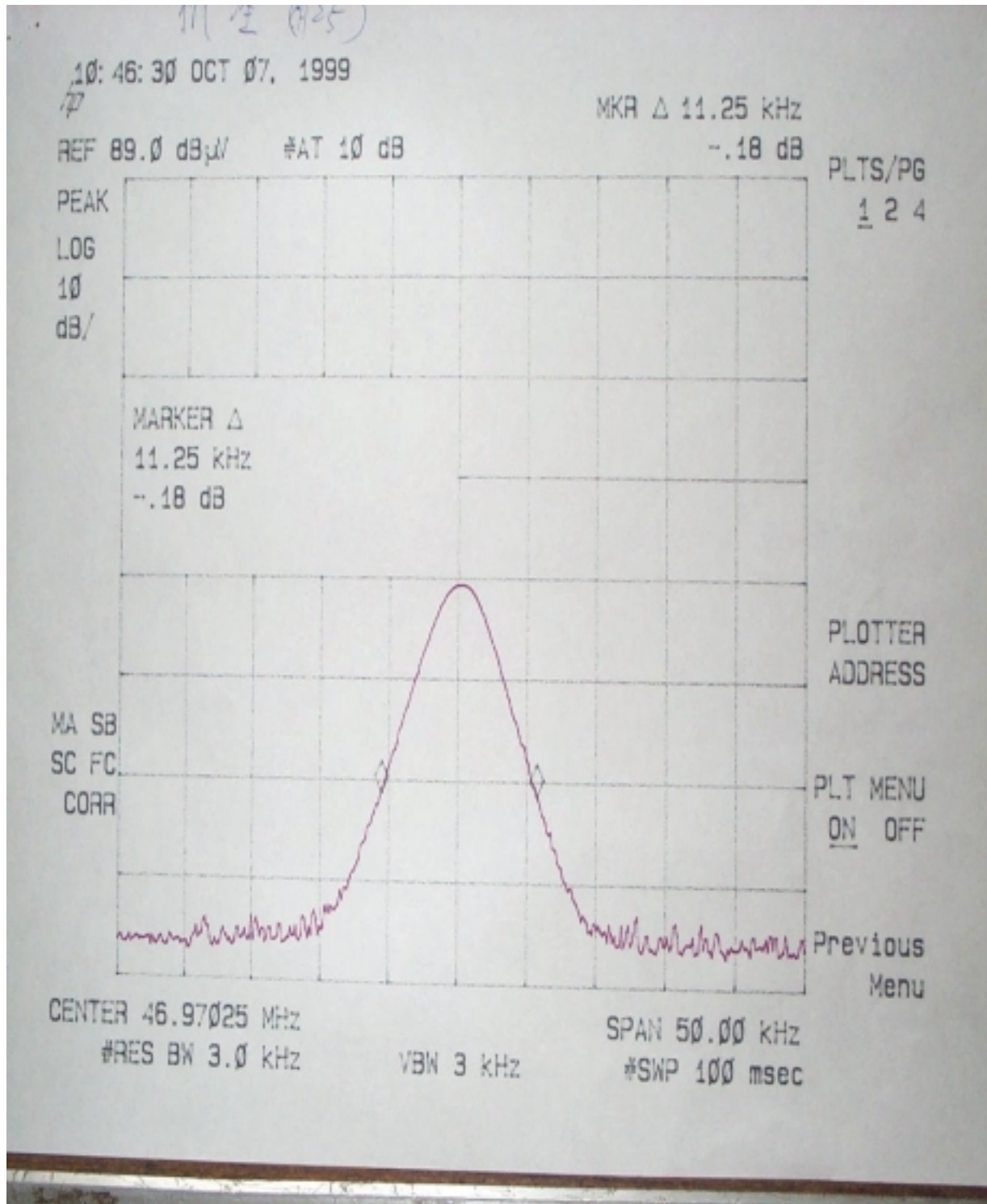
***Base channel CH01**



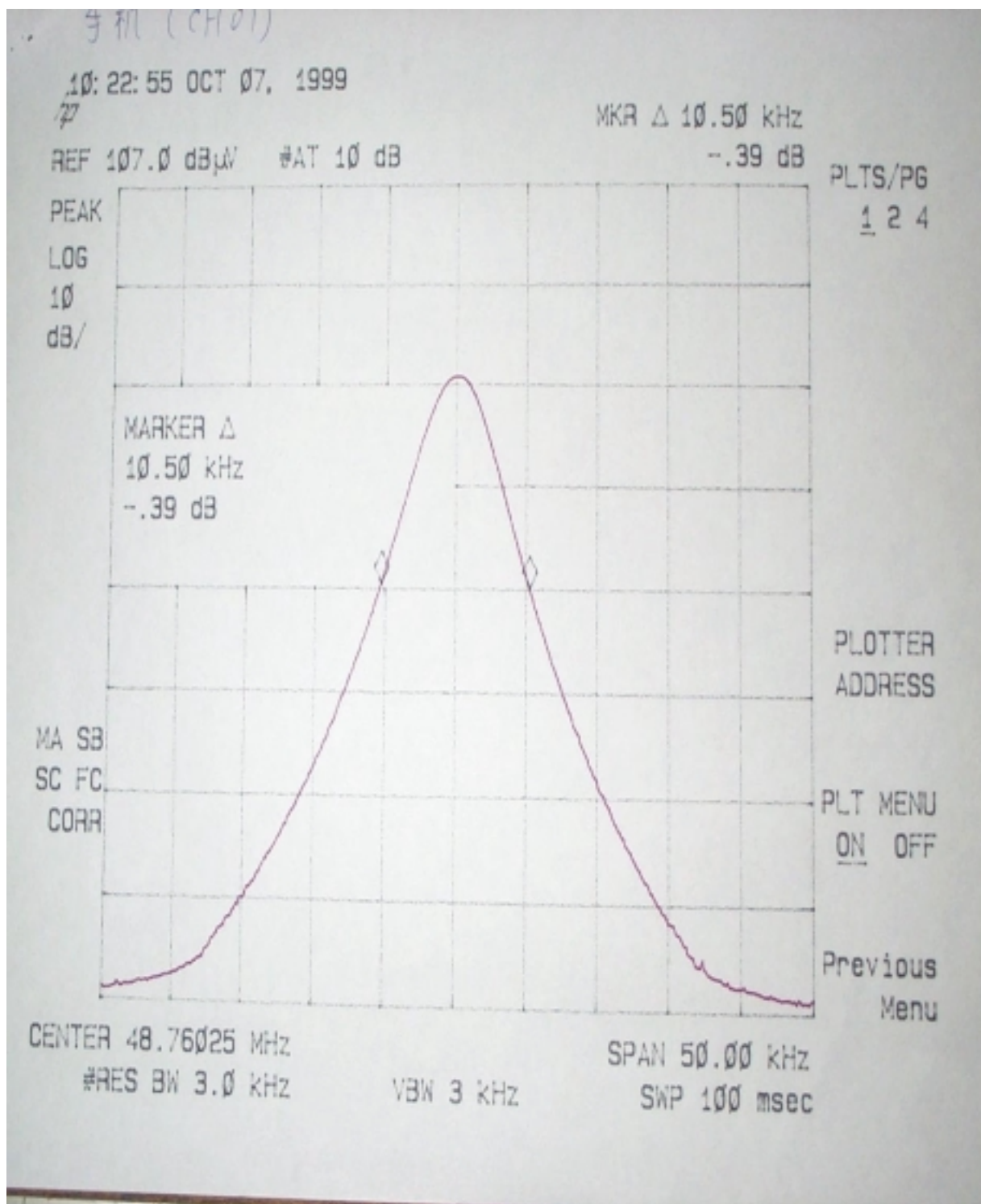
*Base channel CH13



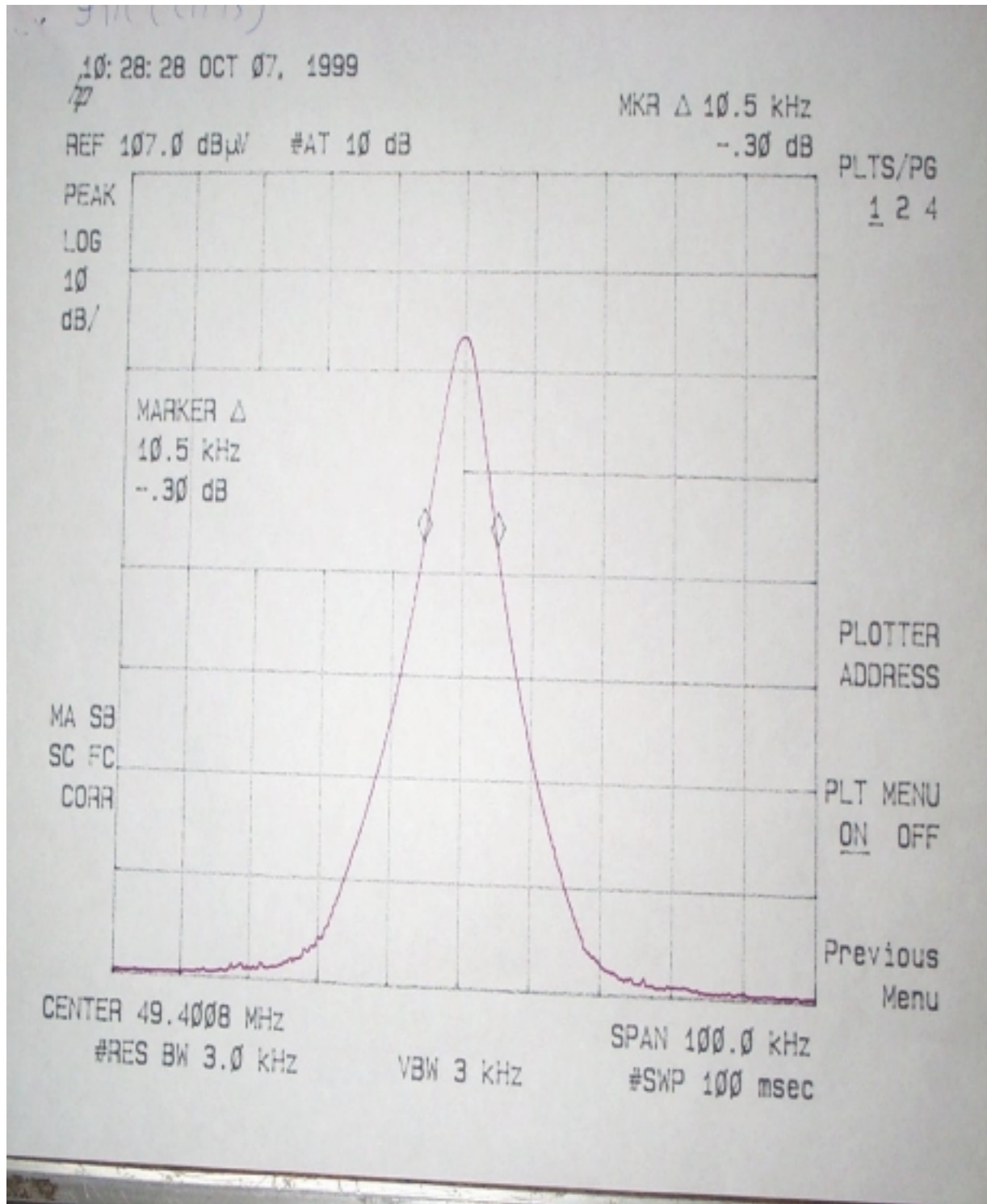
*Base channel CH25



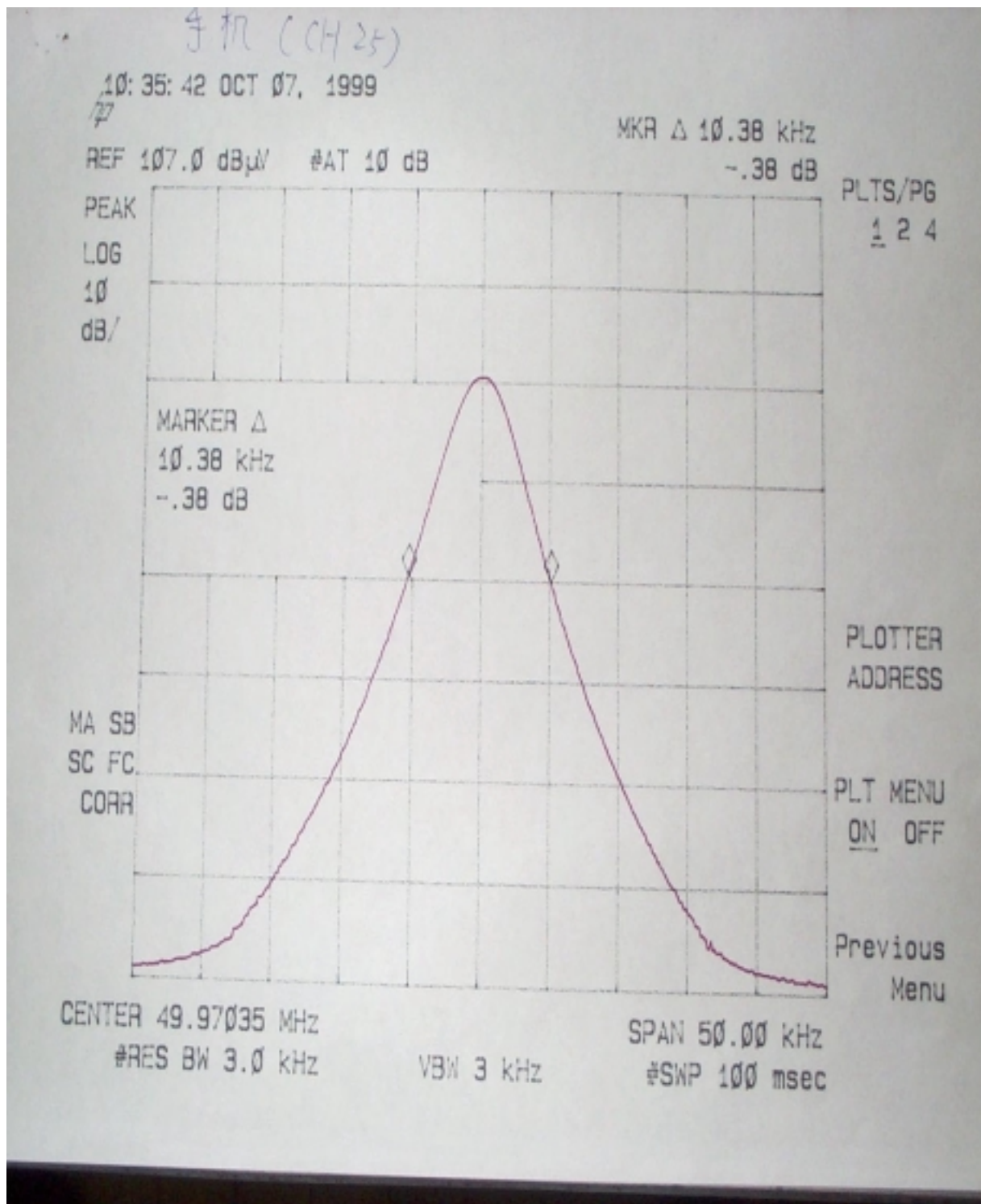
***Handset channel CH01**



***Handset channel CH13**



***Handset channel CH25**



8. VERIFY CHANNELS AND FREQUENCIES

Verify the Frequency Pairs

Channel	Handset (MHz)	Base (MHz)	Channel	Handset (MHz)	Base (MHz)
1	48.780	43.720	14	49.460	44.460
2	48.840	43.740	15	49.500	44.480
3	48.860	43.820	16	49.670	46.610
4	48.920	43.840	17	49.845	46.630
5	49.020	43.920	18	49.860	46.670
6	49.080	43.960	19	49.770	46.710
7	49.100	44.120	20	49.875	46.730
8	49.160	44.160	21	49.830	46.770
9	49.200	44.180	22	49.890	46.830
10	49.240	44.200	23	49.930	46.870
11	49.280	44.320	24	49.990	46.930
12	49.360	44.360	25	49.970	46.970
13	49.400	44.400			

Note : This is for sure that all frequencies are in 43.72 MHz to 49.97 MHz.

Section 15.233(d) The security code is set automatic:

Every time when you place the handset in the base, your cordless will randomly select one of 65,530 possible security codes.