APPLICANT: ISV CO., LTD.

FCC ID: PE3ISD-210

TABLE OF CONTENTS

TEST REPORT CONTAINING:

PAGE 1-2..........TEST PROCEDURE & EQUIPMENT LIST
PAGE 3............PRODUCT DESCRIPTION, SPREAD SPECTRUM BIT RATES AND SECURITY CODING INFORMATION
PAGE 4............POWER LINE CONDUCTED EMISSIONS
PAGE 5A-5B........POWER LINE CONDUCTED PLOTS
PAGE 6............6dB BANDWIDTH
PAGE 7A-7D........OCCUPIED BANDWIDTH PLOTS
PAGE 8............POWER OUTPUT
PAGE 9............METHOD OF MEASURING RF CONDUCTED EMISSIONS
PAGE 10-11........SPURIOUS EMISSIONS AT ANTENNA TERMINALS
PAGE 12-13........FIELD STRENGTH OF SPURIOUS EMISSIONS
PAGE 14...........METHOD OF MEASURING SPURIOUS EMISSIONS
PAGE 15...........POWER SPECTRAL DENSITY
PAGE 16A-16F......POWER SPECTRAL DENSITY PLOTS
PAGE 17...........PROCESSING GAIN
PAGE 18A-18D......PROCESSING GAIN DATA

EXHIBIT ATTACHMENTS:

EXHIBIT 1..........FCC ID LABEL SAMPLE
EXHIBIT 2..........SKETCH OF FCC ID LABEL LOCATION
EXHIBIT 3A-3B......BLOCK DIAGRAM
EXHIBIT 4A.........SCHEMATIC - TX/RX - RF
EXHIBIT 4B.........SCHEMATIC - HAND KEY
EXHIBIT 4C.........SCHEMATIC - BASE
EXHIBIT 4D.........SCHEMATIC
EXHIBIT 5A-5B......RADIATED TEST SETUP PHOTOGRAPH
EXHIBIT 5C.........POWERLINE SETUP PHOTOGRAPH
EXHIBIT 6A.........EXTERNAL PHOTOGRAPH - HANDSET - FRONT VIEW
EXHIBIT 6B.........EXTERNAL PHOTOGRAPH - BASE - FRONT VIEW
EXHIBIT 6C.........EXTERNAL PHOTOGRAPH - HANDSET - REAR VIEW
EXHIBIT 6D.........EXTERNAL PHOTOGRAPH - BASE - REAR VIEW
EXHIBIT 7A.........INTERNAL PHOTOGRAPH - HANDSET - COMPONENT VIEW
EXHIBIT 7B.........INTERNAL PHOTOGRAPH - BASE - COMPONENT VIEW
EXHIBIT 7C.........INTERNAL PHOTOGRAPH - HANDSET - COPPER VIEW
EXHIBIT 7D.........INTERNAL PHOTOGRAPH - BASE - COPPER VIEW
EXHIBIT 8A-8X......USERS'S MANUAL
EXHIBIT 9..........RF EXPOSURE STATEMENT FOR USER'S MANUAL
EXHIBIT 10A-10B...CIRCUIT DESCRIPTION

TEST EQUIPMENT LIST

1. _X_Spectrum Analyzer: HP 8566B-Opt 462, S/N 3138A07786, w/ preselector HP 85685A, S/N 3221A01400, Quasi-Peak Adapter HP 85650A, S/N 3303A01690 & Preamplifier HP 8449B-OPT H02, S/N 3008A00372 Cal. 10/17/99
2. _X_Biconnical Antenna: Eaton Model 94455-1, S/N 1057
3. ___Biconnical Antenna: Electro-Metrics Model BIA-25, S/N 1171
4. _X_Log-Periodic Antenna: Electro-Metrics Model EM-6950, S/N 632
5. ___Log-Periodic Antenna: Electro-Metrics Model LPA-30, S/N 409
6. ___Double-Ridged Horn Antenna: Electro-Metrics Model RGA-180, 1-18 GHz, S/N 2319
7. ___18-26.3GHz Systron Donner Standard Gain Horn #DBE-520-20
8. ___Horn 40-60GHz: ATM Part #19-443-6R
9. ___Line Impedance Stabilization Network: Electro-Metrics Model ANS-25/2, S/N 2604 Cal. 2/9/00
10. ___Temperature Chamber: Tenney Engineering Model TTRC, S/N 11717-7
11. ___Frequency Counter: HP Model 5385A, S/N 3242A07460 Cal 10/6/99
12. ___Peak Power Meter: HP Model 8900C, S/N 2131A00545
13. _X_Open Area Test Site #1-3meters Cal. 12/22/99
14. ___Signal Generator: HP 8640B, S/N 2308A21464 Cal. 9/23/99
15. ___Signal Generator: HP 8614A, S/N 2015A07428
16. ___Passive Loop Antenna: EMCO Model 6512, 9KHz to 30MHz, S/N 9706-1211 Cal. 6/10/00
17. ___Dipole Antenna Kit: Electro-Metrics Model TDA-30/1-4, S/N 153 Cal. 11/24/99
18. ___AC Voltmeter: HP Model 400FL, S/N 2213A14499 Cal. 9/21/99
19. ___Digital Multimeter: Fluke Model 8012A, S/N 4810047 Cal 9/21/99
20. ___Digital Multimeter: Fluke Model 77, S/N 43850817 Cal 9/21/99
21. ___Oscilloscope: Tektronix Model 2230, S/N 300572 Cal 9/23/99

TEST PROCEDURE

GENERAL: This report shall NOT be reproduced except in full without the written approval of TIMCO ENGINEERING, INC. Shielded interface cables were used in all cases except for cables connecting to the telephone line and the power cords. A test program was run which simulated a normal data transmission on a network.

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-1992 using a 50uH LISN. Both lines were observed with the UUT transmitting. The bandwidth of the spectrum analyzer was 10kHz with an appropriate sweep speed. The ambient temperature of the UUT was 59oF with a humidity of 45%.

TEST PROCEDURES CONTINUED

BANDWIDTH 6.0dB: The measurements were made withe the spectrum analyzer's resolution bandwidth(RBW)=1.0MHz and the video bandwidth(VBW) =3.0MHz and the span set as shown on plot.

POWER OUTPUT: The RF power output was measured at the antenna feed point using a peak power meter.

ANTENNA CONDUCTED EMISSIONS: The RBW=100KHz, VBW=300KHz and the span set to 10.0MHz and the spectrum was scanned from 30MHz to the 10th Harmonic of the fundamental. Above 1.0GHz the resolution bandwidth was 1.0MHz and the VBW = 3.0MHz and the span to 50MHz.

RADIATION INTERFERENCE: The test procedure used was ANSI STANDARD C63.4-1992 using a HEWLETT PACKARD spectrum analyzer with a preselector. The bandwidth(RBW) of the spectrum analyzer was 100kHz up to 1GHz and 1.0MHz above 1GHz with an appropriate sweep speed. The VBW above 1.0GHz was = 3.0MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was 59oF with a humidity of 45%.

PRODUCT DESCRIPTION:

The PE3ISD-210 is a direct sequence spread spectrum cordless telephone that operates in the 904-928 MHz band. The antenna used for the base and the handset is permenantly attached to the UUT. Its actual frequency range is;

CHANNEL 1	904.00MHz	Lowest
CHANNEL 20	928.00MHz	Highest

THE FOLLOWING SPREAD SPECTRUM INFORMATION WAS PROVIDED BY THE MANUFACTURER:

The Chipping Rate is: 12 chips/bit

The Bit Rate is: 1.92Mbps

The Data Rate is: 800Kbps Time Division Duplex

The Spreading Rate is: 12 chips/bit * 100Kbit/sec

SECURITY CODING INFORMATION

15.214(d) - THIS DEVICE COMPLIES WITH THE SECURITY CODE REQUIREMENTS OF 15.214(d)(1)(2) AND (3) BY MEANS OF THE FOLLOWING:

This telephone has 16 million auto-security code combinations. The code is changed each time the handset is placed on the base unit.

APPLICANT: ISV CO., LTD.

FCC ID: PE3ISD-210

NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE

RULES PART NUMBER: 15.107(a)

REQUIREMENTS: .45 - 30 MHz 250 uV OR 47.96 dBuV

TEST PROCEDURE: ANSI STANDARD C63.4-1992. The spectrum was scanned from .45 to 30 MHz.

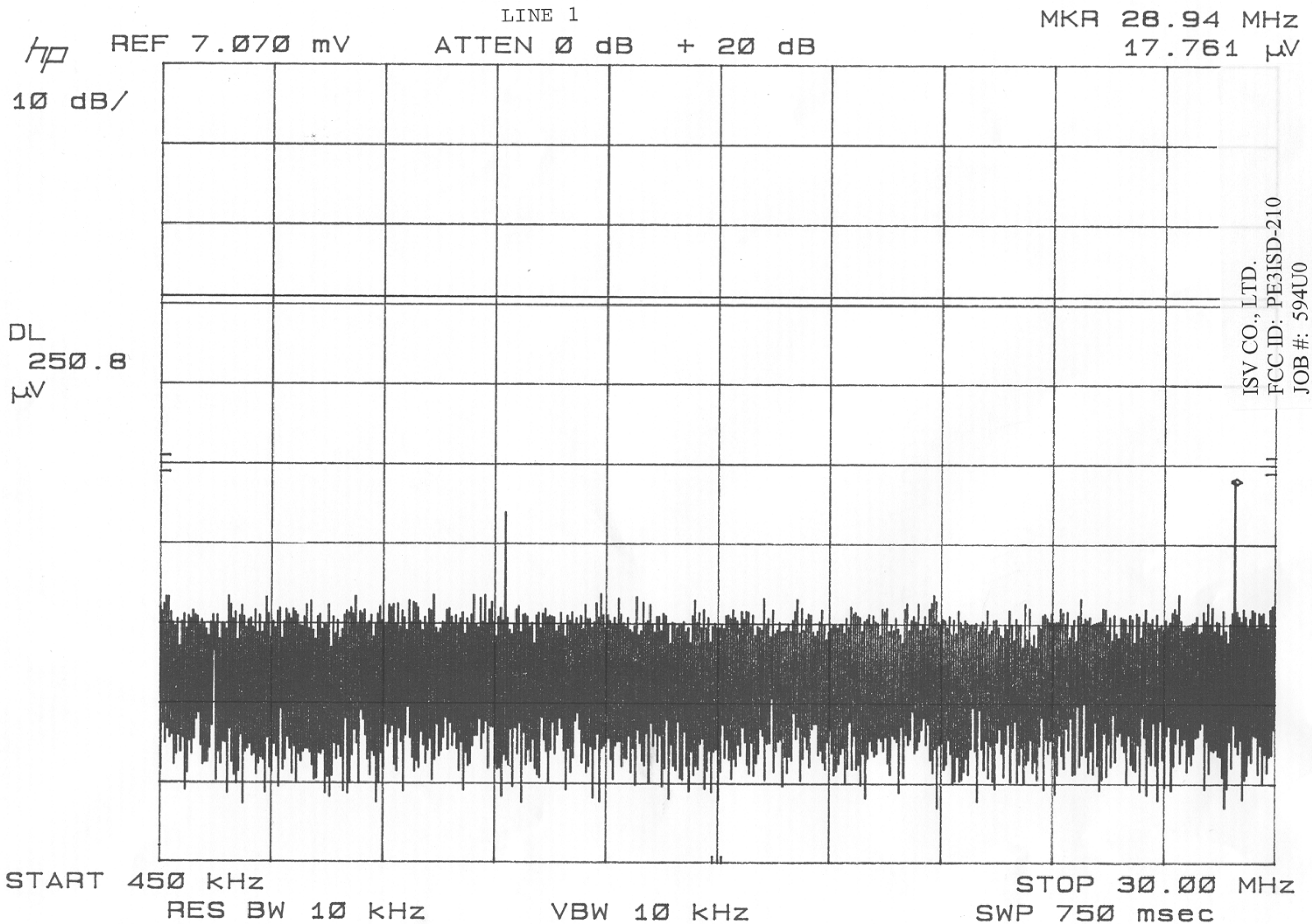
TEST DATA:

THE HIGHEST EMISSION READ FOR LINE 1 WAS 17.761 uV @ 28.94 MHz.

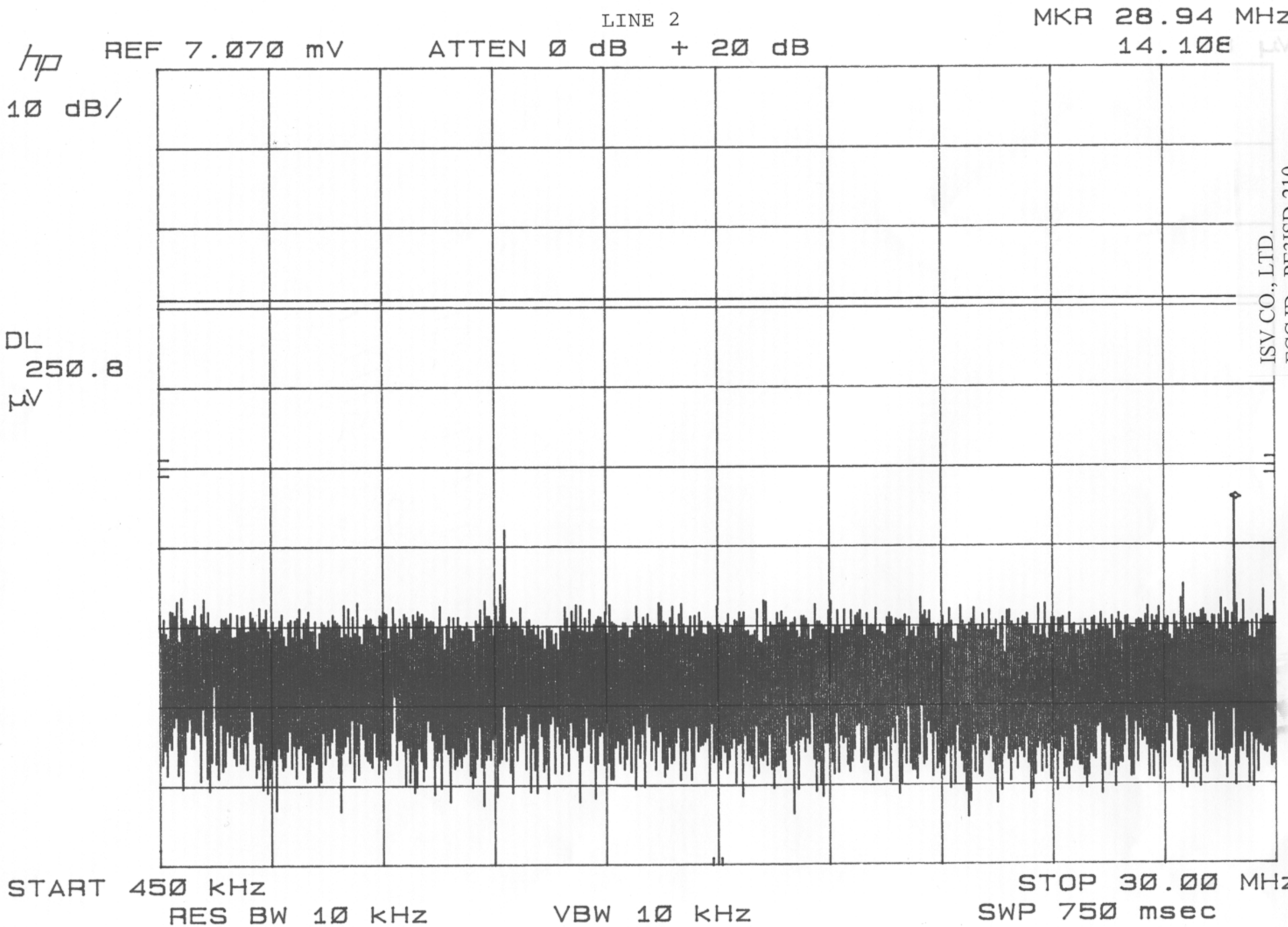
THE HIGHEST EMISSION READ FOR LINE 2 WAS 14.108 uV @ 28.94 MHz.

THE GRAPHS IN EXHIBITS 10A & 10B REPRESENT THE EMISSIONS TAKEN FOR THIS DEVICE.

TEST RESULTS: Both lines were observed. The measurements indicate that the unit DOES appear to meet the FCC requirements for this class of equipment.



ISV CO., LTD.
FCC ID: PE3ISD-210
JOB #: 594U0
EXHIBIT #: 10A



ISV CO., LTD.
FCC ID: PE3ISD-210
JOB #: 594U0
EXHIBIT #: 10B

NAME OF TEST: 6.0dB BANDWIDTH

RULES PART NUMBER: 15.247(a)(2)

REQUIREMENTS: The 6.0dB bandwidth must be greater than 500KHz.

MEASUREMENT: The 6.0dB bandwidth for the handset measured:
@ 914.40 MHz was 1.450 MHz

The 6.0dB bandwidth measured for the base:
@ 913.19 MHz was 1.470 MHz

MEASUREMENT DATA: The 6dB bandwidth was measured a the Low end of band, middle of band, and the high end of the band for both the handset & the base unit. See Following Plots.

NAME OF TEST: POWER OUTPUT

RULES PART NUMBER: 15.247(b) 1.0Watt or +30dBm

MEASUREMENT:

Frequency:	Power Output milliwatts	Unit
904.19	.325	Base
914.40	.325	Base
923.99	.325	Base
904.19	.975	Handset
914.40	.975	Handset
923.99	.900	Handset

15.247(c) Method of Measuring RF Power output:

The antenna was disconnected and a Peak power Sensor was connected in place of the antenna. The Power output was measured a the Low end of band, middle of band, and the high end of the band for both the hand-set & the base unit.

```
                                                  /--------\
                                                  |HP      |
                                                  |PEAK    |
                                                  |PWR MTR |
                                                  |8900C   |
                                                  \--------/
/-----------\      /-----------------\                 |
|  UUT Less |      | PEAK POWER      |                 |
| antenna   |------| SENSOR HP84811A |-----------------/
\-----------/      \-----------------/
 /----------\
 | LAPTOP   |
 | CPU      |  Note Laptop was used to change  the channel
 |          |
 \----------/
```

15.247(c)   Method of Measuring RF Conducted Spurious Emissions

```
                                                         /--------\
                                                         |HP      |
                                                         |Spectrum|
                                                         |Analyzer|
                                                         |8566B   |
                                                         \--------/
                                                               |
/-----------\      /-----------------\                         |
|TRANSMITTER|      | 50 OHM RESISTIVE|                         |
| UNDER TEST|------|  LOAD           |-----\         /--------/
\-----------/      \-----------------/     |         |
                                           |/-------\|
                                           \|       |/
                                            \-------/
                                            ATTENUATOR
```

NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

REQUIREMENTS: Emissions must be at least 20dB down from the highest emission level within the authorized band as measured with a 100KHz RBW.

	EMISSION FREQUENCY MHz	dB BELOW CARRIER
Channel 1 Handset	903.70	0.00
	1807.40	-27.30
	2711.10	-42.30
	3614.80	-51.30
	4518.60	-60.60
	5422.20	-63.20
	6325.90	-63.70
	7229.60	-66.70
	8133.30	-74.80
	9037.00	-59.10
channel 9	913.90	0.00
	1827.80	-26.40
	2741.70	-46.80
	3655.60	-37.10
	4569.50	-45.90
	5483.40	-47.80
	6397.30	-56.60
	7311.20	-57.90
	8225.10	-66.30
	9139.00	-56.00
Channel 18	923.50	0.00
	1847.00	-25.20
	2770.50	-30.50
	3694.00	-27.50
	4617.50	-37.90
	5541.00	-41.50
	6464.50	-51.60
	7388.00	-47.50
	8311.50	-53.60
	9235.00	-54.80

NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINAL CONTINUED

REQUIREMENTS: Emissions must be at least 20dB down from the highest emission level within the authorized band as measured with a 100KHz RBW.

	EMISSION FREQUENCY MHz	dB BELOW CARRIER
BASE		
Channel 1	903.70	0.00
	1807.40	-44.40
	2711.10	-62.30
	3614.80	-67.60
	4518.50	-64.00
	5422.20	-60.50
	6325.90	-66.90
	7229.60	-69.50
	8133.30	-70.50
	9037.00	-67.10
Channel 9	912.70	0.00
	1825.40	-42.20
	2738.10	-62.00
	3650.80	-63.20
	4563.50	-62.20
	5476.20	-63.60
	6388.90	-69.90
	7301.60	-71.10
	8214.30	-70.50
	9127.00	-65.50
Channel 18	923.50	0.00
	1847.00	-44.30
	2770.50	-65.80
	3694.00	-56.70
	4617.50	-68.50
	5541.00	-62.90
	6464.50	-70.00
	7388.00	-64.80
	8311.50	-70.50
	9535.00	-64.60

NOTE: THE SPECTRUM WAS SCANNED TO THE TENTH HARMONIC.

15.247(c),15.205 &15.209(b) Field_strength_of_spurious_emissions:

REQUIREMENTS:

FIELD STRENGTH of Fundamental:	FIELD STRENGTH of Harmonics	S15.209	
902-928MHz		30 - 88 MHz	40 dBuV/m @3M
2.4-2.4835GHz		88 - 216 MHz	43.5
		216 -960 MHz	46
127.38dBuV/m @3m	54 dBuV/m @3m	ABOVE 960 MHz	54dBuV/m

REQUIREMENTS: Emissions that fall in the restricted bands (15.205) must be less than 54dBuV/m otherwise the spurious and harmonics must be attenuated by at least 20dB.

TEST DATA:

EMISSION FREQUENCY MHz	METER READING @ 3m dBuV	COAX LOSS dB	ACF dB	FIELD STRENGTH dBuV/m	FCC. LIMIT dB	MARGIN dB	ANT.
BASE TUNED FREQUENCY 904.20							
903.70	65.80	2.90	24.19	92.89	127.38	39.58	V
1808.40	15.40	1.00	27.23	43.63	72.89	29.26	H
2712.80R	10.20	1.14	29.78	41.12	54.00	12.80	H
3616.70R	2.50	1.27	32.04	35.81	54.00	18.19	H
4520.00R	1.70	1.41	33.58	36.69	54.00	17.31	V
4520.60R	1.70	1.41	33.59	36.69	54.00	17.31	V
BASE TUNED FREQUENCY 913.20							
912.17	65.30	2.90	24.15	92.35	127.38	35.03	V
1826.40	16.50	1.00	27.31	44.81	72.35	27.54	H
2739.30R	8.30	1.14	29.85	39.29	54.00	14.71	H
3652.80R	4.40	1.28	32.13	37.81	54.00	16.19	H
4565.50R	0.60	1.42	33.64	35.65	54.00	18.35	V
BASET TUNED FREQUENCY 924.00							
923.50	64.10	2.90	24.11	91.11	127.38	36.27	V
1848.00	17.50	1.01	27.39	45.90	71.11	25.10	H
2771.70R	12.10	1.15	29.93	43.18	54.00	10.82	H
3696.00R	9.60	1.28	32.24	43.12	54.00	10.88	H
5544.00	0.20	1.56	34.74	36.50	71.11	34.61	V

15.247(c),15.205 &15.209(b) Field_strength_of_spurious_emissions:

REQUIREMENTS:

FIELD STRENGTH	FIELD STRENGTH	S15.209	
of Fundamental:	of Harmonics	30 - 88 MHz	40 dBuV/m @3M
902-928MHz		88 - 216 MHz	43.5
2.4-2.4835GHz		216 -960 MHz	46
127.38dBuV/m @3m	54 dBuV/m @3m	ABOVE 960 MHz	54dBuV/m

REQUIREMENTS: Emissions that fall in the restricted bands (15.205) must be less than 54dBuV/m otherwise the spurious and harmonics must be attenuated by at least 20dB.

TEST DATA:

EMISSION FREQUENCY MHz	METER READING @ 3m dBuV	COAX LOSS dB	ACF dB	FIELD STRENGTH dBuV/m	FCC. LIMIT dB	MARGIN dB	ANT.
HANDSET TUNED FREQUENCY 904.20							
904.60	60.60	2.90	24.18	87.68	127.38	39.70	V
1808.40	28.80	1.00	27.23	57.03	67.03	10.00	H
2712.90R	18.00	1.14	29.78	48.92	54.00	5.08	H
3616.80R	15.90	1.27	32.04	49.21	54.00	4.79	H
4520.50R	11.60	1.41	33.59	46.59	54.00	7.41	V
5425.20R	11.60	1.54	34.60	47.75	54.00	6.25	H
6329.60	6.00	1.68	35.62	43.30	67.03	23.73	H
7233.60R	6.20	1.82	36.64	44.65	54.00	9.35	V
8137.80R	2.10	1.95	37.58	41.63	54.00	12.37	H
9042.00R	8.20	2.06	38.19	48.44	54.00	5.56	V
HANDSET TUNED FREQUENCY 913.20							
912.70	59.80	2.90	24.15	86.85	127.38	40.53	V
1826.40	32.10	1.00	27.31	60.41	66.85	6.44	H
2739.10R	17.00	1.14	29.85	47.99	54.00	6.01	H
3652.80R	15.20	1.28	32.13	48.61	54.00	5.39	H
4566.00R	14.00	1.42	33.64	49.05	54.00	4.95	V
5479.20	13.40	1.55	34.66	49.62	66.85	17.23	V
6391.90	4.90	1.69	35.69	42.28	66.85	24.57	H
7305.60R	5.30	1.83	36.72	43.85	54.00	10.15	V
9132.00R	7.50	2.06	38.25	47.81	54.00	6.19	V
HANDSET TUNED FREQUENCY 924.00							
923.50	62.40	2.90	24.11	89.41	127.38	37.97	V
1848.00	34.40	1.01	27.39	62.80	69.41	6.61	H
2771.60R	15.90	1.15	29.93	46.97	54.00	7.03	H
3696.00R	16.80	1.28	32.24	50.32	54.00	3.68	H
4619.50R	13.80	1.42	33.70	48.92	54.00	5.08	V
5544.00R	16.40	1.56	34.74	52.70	54.00	1.30	V
6467.50	4.20	1.70	35.78	41.68	69.41	27.73	H
7392.00R	10.70	1.84	36.82	49.36	54.00	4.64	H
9240.00	5.10	2.07	38.32	45.49	69.41	23.92	V

2.993(a)(b)
2.993(a)(b) Continued Field_strength_of_spurious_emissions:

METHOD OF MEASUREMENT: The procedure used was ANSI STANDARD C63.4-1992 & the Guidance on Measurements for Direct Sequence Spread Spectrum Systems. Measurements were made at the open field test site of TIMCO ENGINEERING INC. located at 849 N.W. State Road 45, NEWBERRY, FL 32669.

Method of Measuring Radiated Spurious Emissions

```
                                                                Hewlett Packard
                                                                    Spectrum
                                                                    Analyzer
                                                                    HP8566A

/-----------\       /----------------\                                /----\
|CPU With   |       | ANTENNA        |                |      |    |
|TRANSMITTER|--------|                |                \-----|    |
| UNDER TEST|       |                |                      |    |
\-----------/       \----------------/                      \----/
     |                                 |                |
     |                                 |                |
     |                                 |? 3.0 meters--?|
     |
     |                                   Tuned, Calibrated
     |                                     Antenna which may
/--------------\                             be raised from 4
|              |                             to 20' above ground
|POWER SUPPLY  |                             and changed
|              |                             in  polarization
\--------------/
```

Equipment placed 4' above ground
on a rotatable platform.

APPLICANT: ISV CO., LTD.

FCC ID: PE3ISD-210

NAME OF TEST: POWER SPECTRAL DENSITY

RULES PART NUMBER: 15.247(d)

REQUIREMENTS: The peak level measured must be no greater tha +8.0dBm.

DATA: THE PLOTS ARE SHOWN IN THE FOLLOWING PAGES.

The antenna was disconnected and the output was connected to a coaxial attenuator and to the Spectrum analyzer and the power spectrual density was measured a the Low end of band, middle of band, and the high end of the band for both the handset & the base unit. The plots of the power spectrual power density for the low end of the band, middle of the band, and the high end of the band for both the handset & the base are on the following pages.

RULES PART NUMBER: 15.247(e)

REQUIREMENTS:

DATA: The processing gain information supplied by the manufacturer is 12.1 dB.

The processing gain data can be found on the following pages.

Processing Gain Measurements for ISD-210 DCT TEST report

Introduction

Scope

This document is a Cherish Engineering test report for ISD-210 DCT cordlessphone.
This document details the results of measurement of the processing gain of a DCT FFF phone.

Reference Documents

This section lists documents that are referenced within or are materially relevant to this document.
Code of Federal Regulations, Title 47, Chapter 1, Part 15 Radio Frequency Devices (FCC)

Definitions

FCC	Federal Communications Commission
SNR	Signal to Noise Ratio
JSR	Jammer to Signal Ratio
CW	Continuous wave (jammer)
HS	Handset
BS	Basestation
DBPSK	Differential Binary Phase Shift Keying

Table 1: Definitions and Abbreviations

An Overview of the FCC Method for measuring Processing Gain

The FCC in 15.247 (e) specifies two methods for measuring processing gain. The first method simply involves calculating the signal to ratio noise (SNR) with the spreading code switched on with the SNR when the spreading code is switched off.

The difference between the two is the processing gain.

The SNR is measured at the demodulated output of the receiver.

In principle this an acceptable method to measure the processing gain of any direct sequence spread spectrum communication system, however, it does not take into consideration that the non-spread spectrum portion of the system may operate under the assumption that the signal being transmitted is a spread spectrum signal and when the spreading code is switched off the system may fail to operate or operate at greatly reduced efficiency, In either case the measurement of processing gain will be meaningless. The second method specified by the FCC to measure processing gain is

detailed in 15.247 (e)(1).

This involves transmitting a CW jammer in the RF passband of the system and measuring the jammer to signal ratio (JSR) required to achieve a certain bit error rate.

The choice of the actual value of the bit error rate is left up to the tester.

The jammer is stepped in 50 kHz increments across the entire passband and in each case the JSR to achieve the desired bit error rate is measured.

The JSR is measured at the RF input to the system under test.

The lowest 20% of the JSR data (in dB) is discarded.

The processing gain can then be calculated as follows:-

$$G_p = \left(\frac{S}{N}\right)_{theory} + \left(\frac{J}{S}\right)_{measured} + L_{system}$$

where G_p is the processing gain, the SNR is that theoretically predicted for the system under the test to achieve the desired bit error rate, the JSR is the lowest value (in dB) in the remaining data set and L_{sys} adjusts for non-ideal system losses. L_{sys} can not be greater than 2 dB.

Processing Gain Measurement Results

The following parameters were used in the test setup.

HS Tx power (dBm)	-4.3	
BS LNA gain (dB)	0	
Test system losses (signal) (dB)	-14.55	-4.05 dB (system), -3 dB (signal combiner), -7.5 dB (2 cables)
Test system losses (jammer) (dB)	-5.6	-3 dB (signal combiner), -2.6 dB (2cables)

Table 2: Test Setup Parameters

The following measurement results were taken at the basestation.
The desired bit error rate was set at 10^{-3}.

Jammer Frequency (MHz)	BER (BS)	Received jammer power (dBm)	Received signal power (dBm)	Jammer/Signal ratio (dB)
904.20	1.54×10^{-3}	--15.1	-17.1	2.0
904.80	1.25×10^{-3}	-14.9	-16.9	2.0
906.00	9.6×10^{-4}	-15.0	-17.3	2.3
907.20	9.6×10^{-4}	-14.5	-16.8	2.3
908.40	1.23×10^{-3}	-14.9	-17.4	2.5
909.60	9.8×10^{-4}	-15.3	-17.2	1.9
910.80	1.13×10^{-3}	-14.7	-16.9	2.2
912.00	9.23×10^{-4}	-14.8	-16.6	1.8
913.20	1.12×10^{-3}	-14.9	-17.1	2.2
914.40	1.2×10^{-3}	-14.8	-16.9	2.1
915.60	9.89×10^{-4}	-15.0	-17.5	2.5
916.80	1.11×10^{-3}	-14.7	-16.9	2.2
918.00	1.21×10^{-3}	-15.2	-16.9	1.7
919.20	1.08×10^{-3}	-14.9	-17.0	2.1
920.40	9.87×10^{-4}	-15.1	-17.3	2.2
921.60	1.8×10^{-3}	-15.3	-17.6	2.3
922.80	9.87×10^{-4}	-15.1	-17.6	2.5
924.00	1.54×10^{-3}	-15.3	-17.0	1.7
925.20	1.65×10^{-3}	-15.3	-17.3	2.0
925.80	9.98×10^{-3}	-15.4	-17.5	2.1

Table 3: Test Results

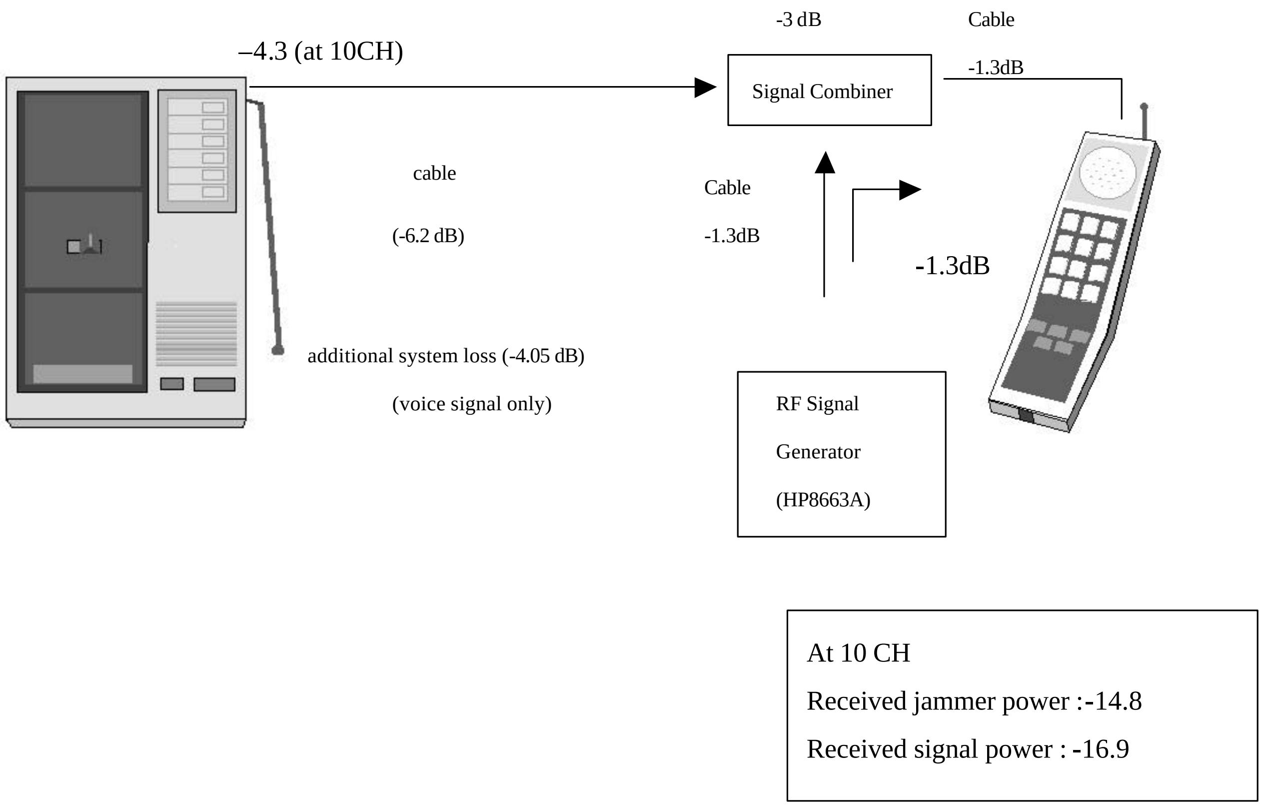


Figure 1: Test Setup

For DBPSK at 10^{-3} bit error rate the required SNR is 8.0 dB. Using the results above and the data in the table below the processing gain is calculated to be 12.1 dB.

Required SNR (dB)	8.0
System losses (dB)	2.0
J/S ratio at 80% point (dB)	2.1
FCC Processing gain (dB)	12.1

Table 4: Processing Gain Calculation data

Conclusions

The result measured for processing gain of 12.1 dB is close to the actual processing gain due to a 12 chip spreading code of

$$10 \times \log_{10}(12.1) = 10.828\ dB$$