



ADDENDUM TO PHONIC EAR TEST REPORT FC04-024

FOR THE

CLASSROOM AMPLIFICATION SYSTEM, PE922T

FCC PART 95 AND RSS 210

COMPLIANCE

DATE OF ISSUE: APRIL 2, 2004

PREPARED FOR:

Phonic Ear
3880 Cypress Drive
Petaluma, CA 94954-7600

P.O. No.: P112518
W.O. No.: 81873

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5473A Clouds Rest
Mariposa, CA 95338

Date of test: February 19 – April 2, 2004

Report No.: FC04-024A

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ADMINISTRATIVE INFORMATION

DATE OF TEST: February 19 – April 2, 2004

DATE OF RECEIPT: February 19, 2004

PURPOSE OF TEST: To demonstrate the compliance of the Classroom Amplification System, PE922T with the requirements for FCC Part 95 and RSS 210 devices. **Addendum A** is to add the Canadian matrix and Canadian spurious emissions OATS data and revise the FCC spurious emissions OATS data.

TEST METHOD: FCC Part 95
TIA/EIA 603

FREQUENCY RANGE TESTED: 10 - 2200MHz

MANUFACTURER: E-J Electronic Co. LTD
4F., No. 11, Lane 125, Sec. 1, Kuo Kwang Road,
Ta-li City, Tachung Hsien, Taiwan

REPRESENTATIVE: Lee Henderson

TEST LOCATION: CKC Laboratories, Inc.
480 Los Viboras Road, Hollister, CA 95023
1120 Fulton Place, Fremont, CA 94539
5473-A Clouds Rest, Mariposa, CA 95338

SUMMARY OF RESULTS

As received, the Phonic Ear Classroom Amplification System, PE922T was found to be fully compliant with the following standards and specifications:

FCC Standard	FCC Section	Canadian Standard	Canadian Section	Test Description
47CFR	15.203	RSS 210	5.5	Antenna Connector Requirements
47CFR	95.629	RSS 210	6.2.2(L2)	Two Way Voice Prohibited
47CFR	95.637	RSS 210	6.2.2(L2)	Peak Output Power Requirements (100mW)
47CFR	95.1013	RSS 210	6.2.2(L2)	Peak Output Power Requirements FCC: 100mW ERP Canada: 160mW ERP
NA	NA	RSS 210	6.2.2(L2)	Canada Channel 13 Advisory
47CFR	95.633	RSS 210	6.2.2(L2)	Emission Bandwidth
47CFR	95.635	RSS 210	6.2.2(L2)	Emission Mask
NA	NA	RSS 210	6.2.2(L2)	Instrumentation for Mask (Peak 300Hz RBW)
47CFR	15.205	RSS 210	6.3	Restricted Bands of Operation
47CFR	15.215(c)	RSS 210	6.4	Frequency Stability Recommendation
47CFR	15.35(c)	RSS 210	6.5	Pulsed Operation
47CFR	15.207	RSS 210	6.6	AC Mains Conducted Emissions Requirement
TIA/EIA 603 Method				
FCC Site No. 90479		Industry of Canada File No. IC 3171-B		
FCC Site No. 90477		Industry of Canada File No. IC 3082-B		

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:



Randy Clark, EMC Engineer



Matthew Pettersen, EMC Test Engineer



Mike Wilkinson, Lab Manager

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was a production unit

EQUIPMENT UNDER TEST

Classroom Amplification System

Manuf: Phonic Ear, Inc.
Model: PE922T
Serial: 2004001
FCC ID: pending

PERIPHERAL DEVICES

The EUT was not tested with peripheral devices.

MEASUREMENT UNCERTAINTY

TEST	HIGHEST UNCERTAINTY
Radiated Emissions	+/- 2.94 dB
Conducted Emissions	+/- 1.56 dB

Note: Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Statements of compliance are based on the nominal values only.

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

FCC 2.1033(c)(3) USER'S MANUAL

The necessary information is contained in a separate document.

FCC 2.1033 (c)(4) TYPE OF EMISSIONS

F3E

FCC 2.1033 (c)(5) FREQUENCY RANGE

Operates on Extra Band channels every 50kHz, with the center frequency starting at 216.025MHz and ending at 216.875MHz, excluding restricted bands at 216.450MHz & 216.500MHz. The device also does not use channel 49 at 216.425MHz and channel 50 at 216.475MHz.

FCC 2.1033 (c)(6) OPERATING POWER

2.57 mWatts EIRP

FCC 2.1033 (c)(7) MAXIMUM POWER RATING

The maximum output power of this type transmitter 100mWatts.

FCC 2.1033 (c)(8) DC VOLTAGES

The unit's operating voltage is 2.0 to 3.1 Volts, and its power to be provided by two internal, AA replaceable rechargeable or primary batteries. Typical current draw with a 3 Volt input is < 100 mA. At the low battery warning of 2.1 Volts, the supply current rises to approximately 160 mA. The increase in current is due to the internal DC/DC power supply converter compensating for the low power supply voltage.

FCC 2.1033 (c)(9) TUNE-UP PROCEDURE

The necessary information is contained in a separate document.

FCC 2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION

The necessary information is contained in a separate document.

FCC 2.1033(c)(11) LABEL AND PLACEMENT

The necessary information is contained in a separate document.

FCC 2.1033(c)(12) SUBMITTAL PHOTOS

The necessary information is contained in a separate document.

FCC 2.1033 (c)(13) MODULATION INFORMATION

NA

FCC 2.1033(c)(14)/2.1046/95.637 - RF POWER OUTPUT - ANT

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**
 Specification: **Phonic- PPO Ant**
 Work Order #: **81873** Date: 02/19/2004
 Test Type: **RF Power Output** Time: 15:32:10
 Equipment: **Hand Held Transmitter** Sequence#: 2
 Manufacturer: Phonic Ear, Inc. Tested By: Matthew Pettersen
 Model: PE922T
 S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	06/24/2002	06/24/2004	783
Signal Generator	2409A06553	10/30/2002	10/30/2004	508

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for Part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer. RF Power Output. Frequency Range Investigated: Fundamental 216.875MHz, Channel 58. Output Ratings: All: 10mW. Spec limit: All: 100mW. RBW=100kHz, VBW=100kHz.

Transducer Legend:

--

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dBμV	dB	dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	216.875M	112.0					+0.0	112.0	127.0	-15.0	None

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**
 Specification: **Phonic- PPO Ant**
 Work Order #: **81873**
 Test Type: **RF Power Output**
 Equipment: **Hand Held Transmitter**
 Manufacturer: **Phonic Ear, Inc.**
 Model: **PE922T**
 S/N: **2004001**

Date: 02/19/2004
 Time: 15:29:12
 Sequence#: 1
 Tested By: Matthew Pettersen

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	06/24/2002	06/24/2004	783
Signal Generator	2409A06553	10/30/2002	10/30/2004	508

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer. RF Power Output. Frequency Range Investigated: Fundamental 216.025MHz, Channel 41. Output Ratings: All: 10mW. Spec limit: All: 100mW. RBW=100kHz, VBW=100kHz.

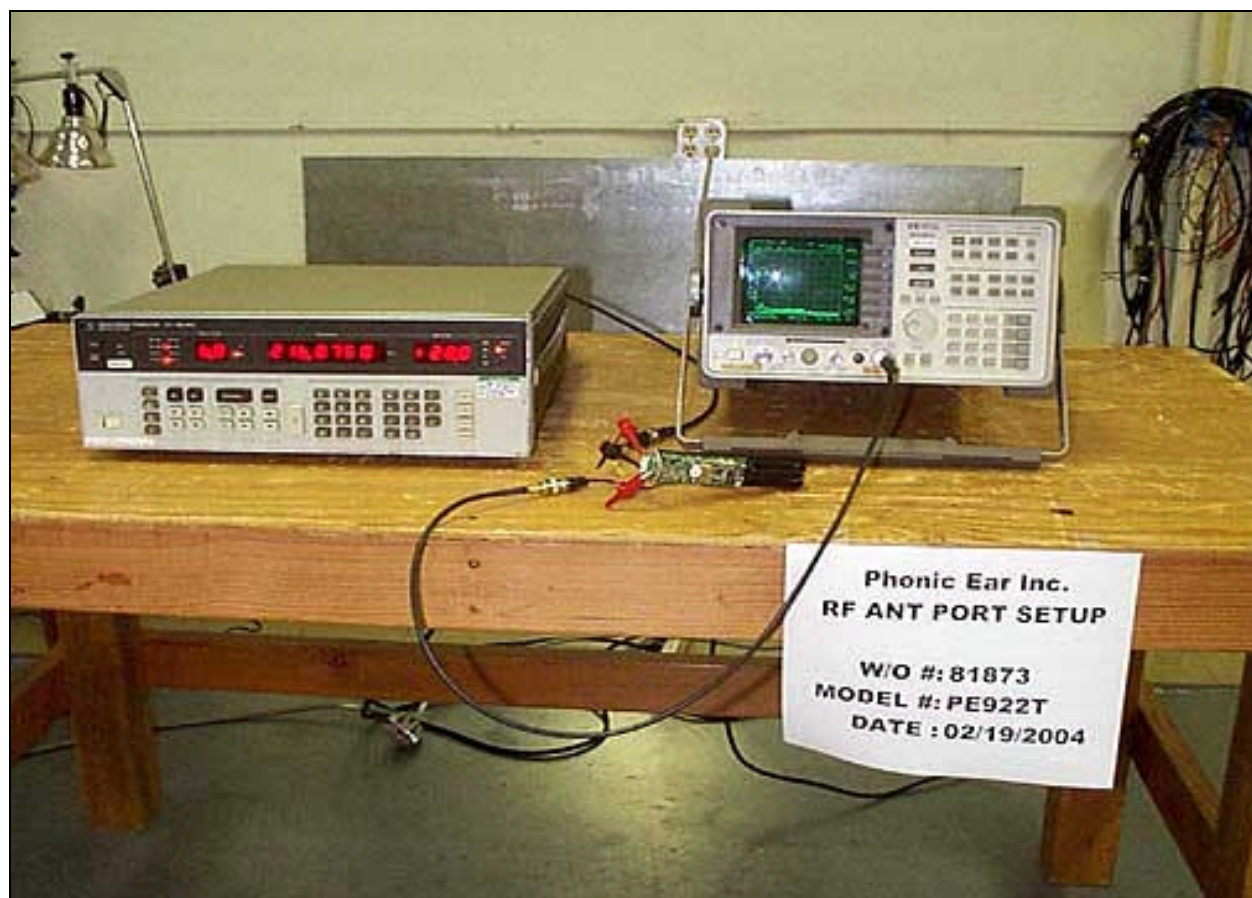
Transducer Legend:

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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dBμV	dB	dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	216.025M	112.2					+0.0	112.2	127.0	-14.8	None

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



FCC 95.1013 - RF POWER OUTPUT - OATS

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Phonic- PPO OATS**

Work Order #: **81873**

Date: 02/23/2004

Test Type: **RF Power Output**

Time: 12:20:11

Equipment: **Hand Held Transmitter**

Sequence#: 5

Manufacturer: Phonic Ear, Inc.

Tested By: Matthew Pettersen

Model: PE922T

S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Ant., Bilog, Chase CBL6111C	2630	10/04/2002	10/04/2004	852
QP Adapter HP-85650A	2043A00188	10/08/2002	10/08/2004	1508
S.A., RF Section HP-8568B	2601A02378	03/11/2003	03/11/2005	1377
S.A., Display HP-85662A	2542A10641	03/11/2003	03/11/2005	1377
Cable, H-B 3M Rad., .01-1000MHz	rad_cab_3M_03_hol-b.01-1000MHz	08/04/2003	08/04/2005	0

Test Conditions: The EUT is a hand held, transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier.

Test Configuration:

The EUT was located on the OATS with a measuring antenna located at 3 meters. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Test Results

Frequency (MHz)	Power Output EIRP (milliWatts)	Power Output Limit (milliWatts)	Results
216.025	2.57	100	PASS
216.875	2.30	100	PASS

EIRP calculated using the following formula,

$$P = \frac{(E \cdot D)^2}{30 \cdot G}$$

Where E is the field strength in V/m, D is the test distance in meters and G is the numeric antenna gain.

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

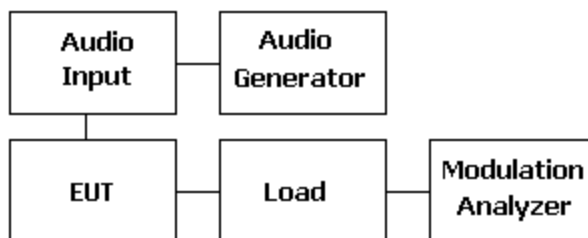


Radiated Emissions - Back View

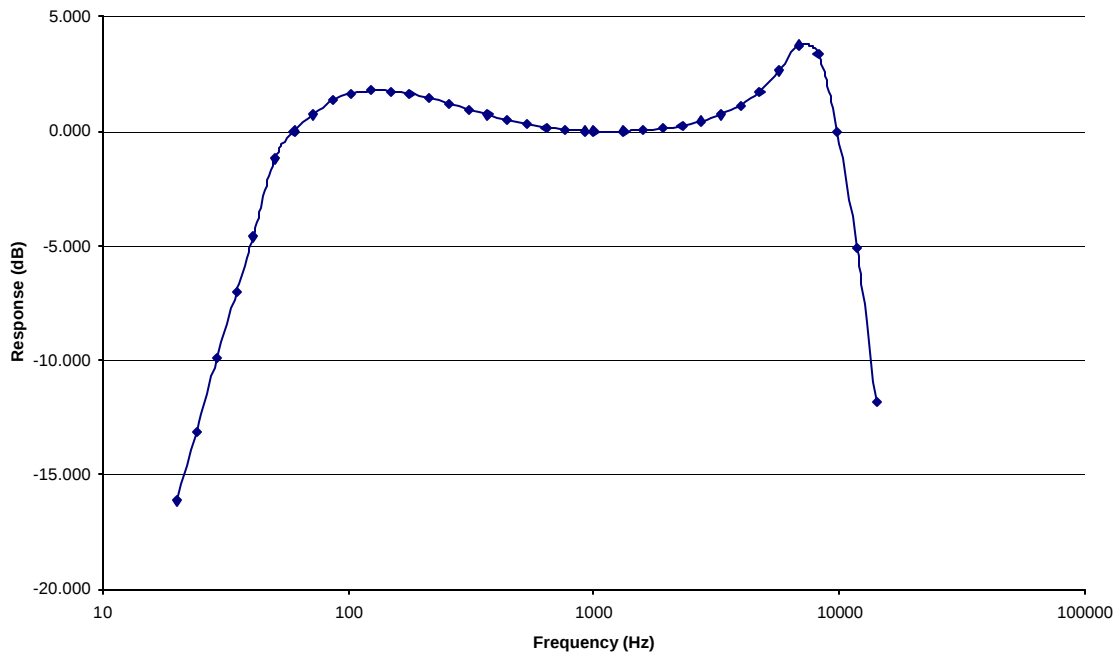
FCC 2.1033(c)(14)/2.1047(a) - MODULATION CHARACTERISTICS - AUDIO FREQUENCY RESPONSE

Test Conditions: The test setup is in accordance with TIA/EIA 603 2.2.6.2.2 Constant Input Method. The EUT is functioning normally. EUT is powered by an external DC power source for consistency. The modulation limiting curve is plotted from 20Hz to 20kHz.

Audio Frequency Response Setup Diagram



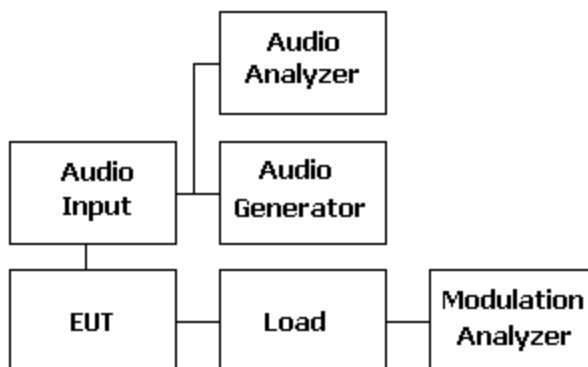
Audio Frequency Response
Phonic Ear PE922T Channel 45



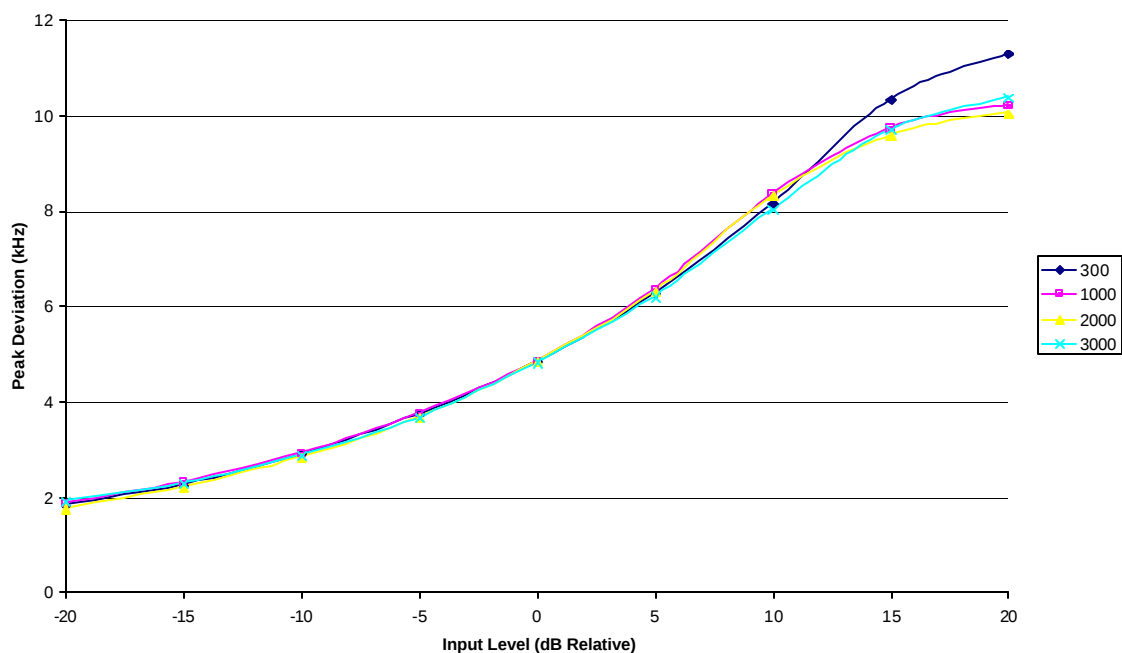
FCC 2.1033(c)(14)/2.1047(b) MODULATION CHARACTERISTICS - Modulation Limiting Response

The test setup is in accordance with TIA/EIA 603. The EUT is functioning normally. EUT is powered by an external DC power source for consistency. A family of curves is plotted as a function of input modulation relative to 60% of the manufacturer's declared maximum system deviation. The frequencies chosen are 300Hz, 1kHz, 2kHz and 3kHz.

Modulation Limiting Setup



Modulation Limiting ($\pm$ Peak Deviation)
Phonic Ear PE922T Channel 45



Test Equipment

<i>Description</i>	<i>Asset #</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Analyzer, Audio	02338	HP	8903B	3011A09432	11/27/02	11/26/04
Analyzer, Modulation	02072	HP	8901A	2751A05181	11/27/02	11/26/04
Power Supply, DC	00762	HP	6205C	2228A01775	6/5/03	6/4/05

PHOTOGRAPH SHOWING AUDIO MODULATION TEST SETUP

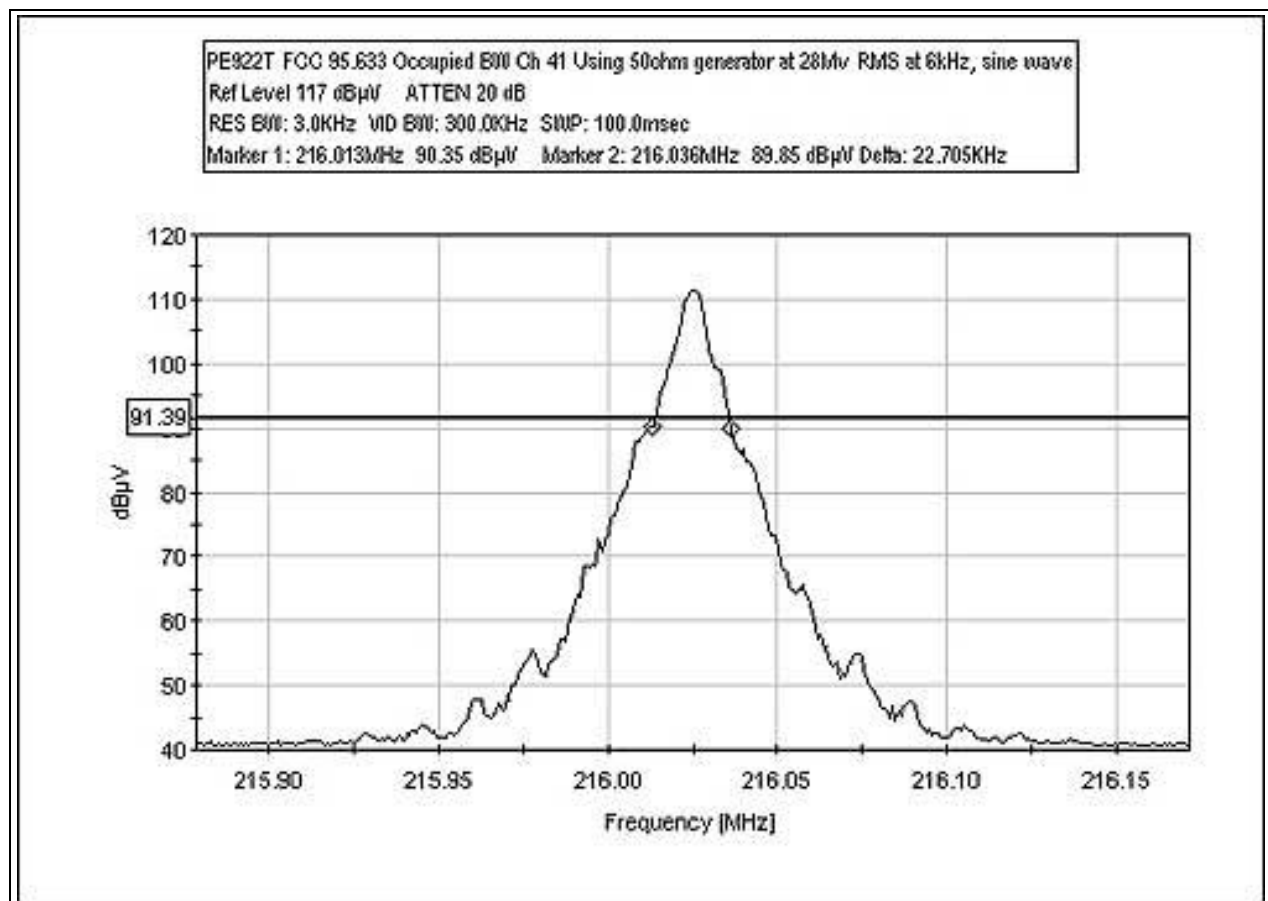


FCC 2.1033(c)(14)/2.1049(i)/95.633 - OCCUPIED BANDWIDTH

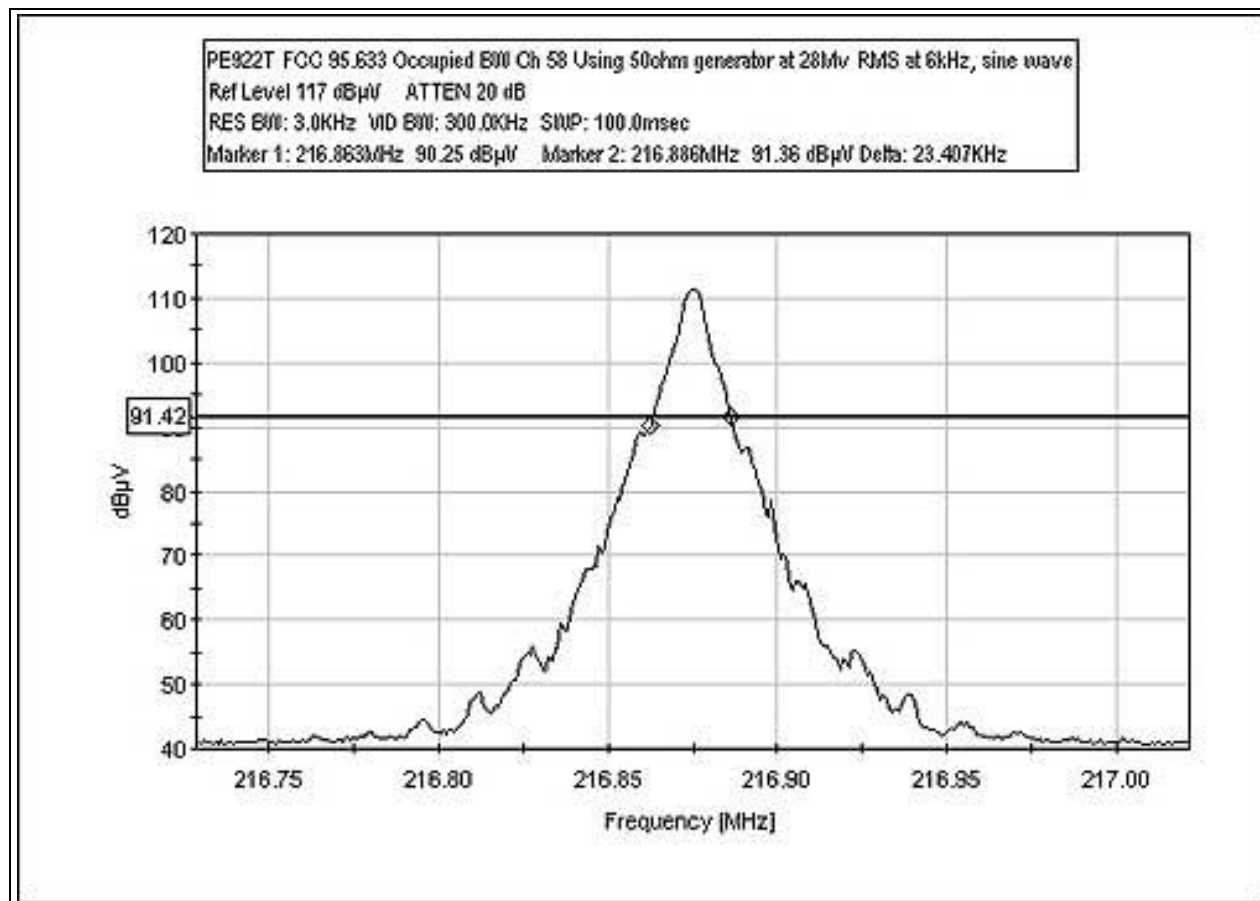
Test Conditions:

The EUT is a body worn, transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm-signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer.

FCC 95.633 - OCCUPIED BANDWIDTH CHANNEL 41



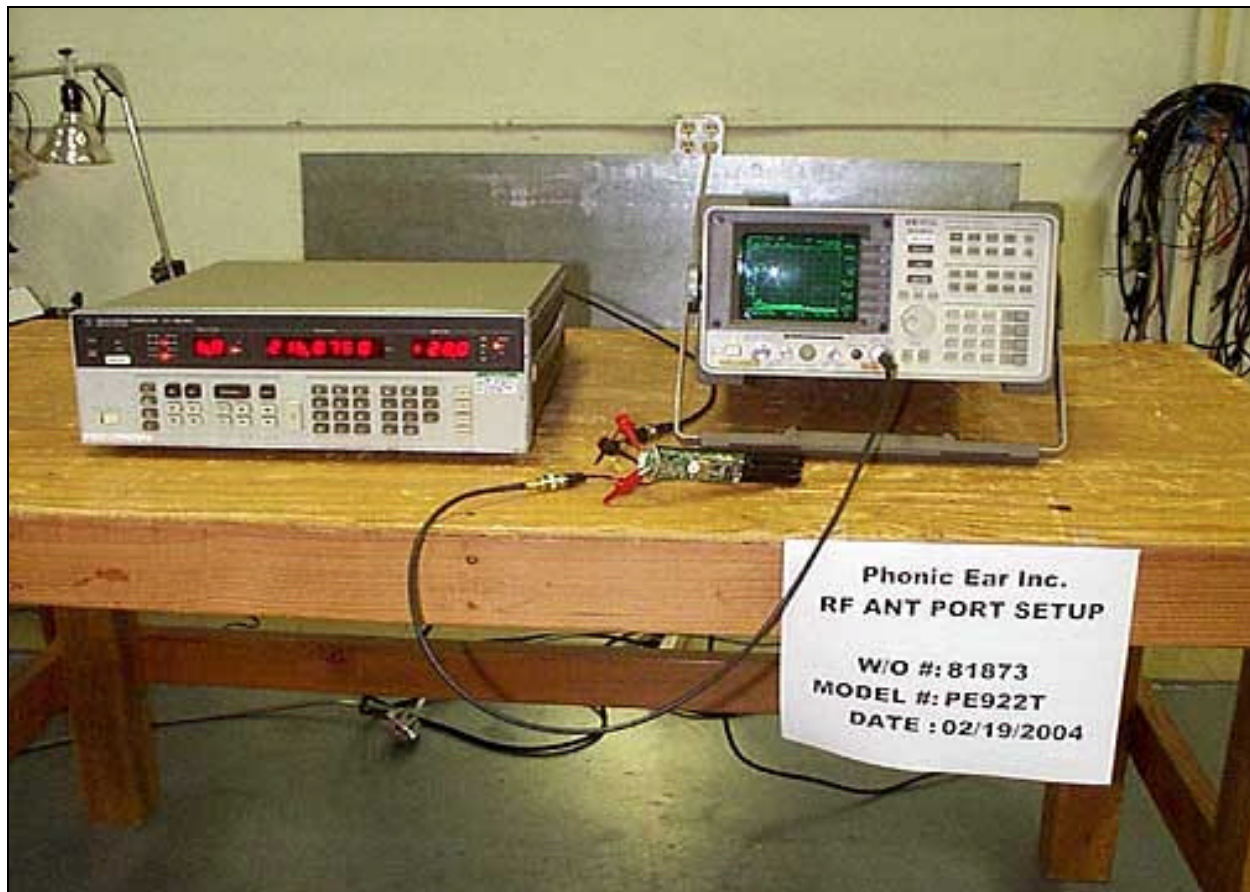
FCC 95.633 - OCCUPIED BANDWIDTH CHANNEL 58



Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	01/19/03	1/19/05	784

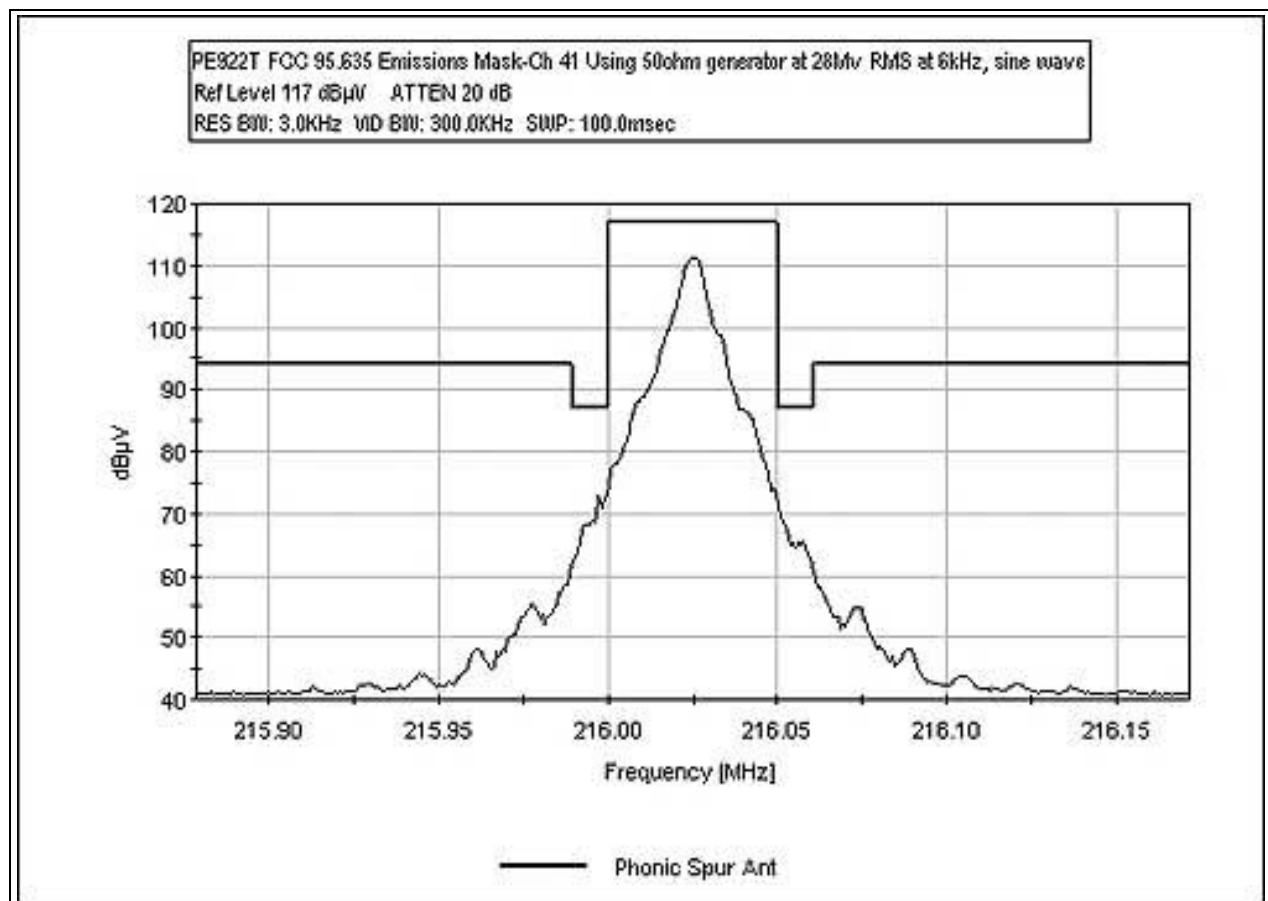
PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



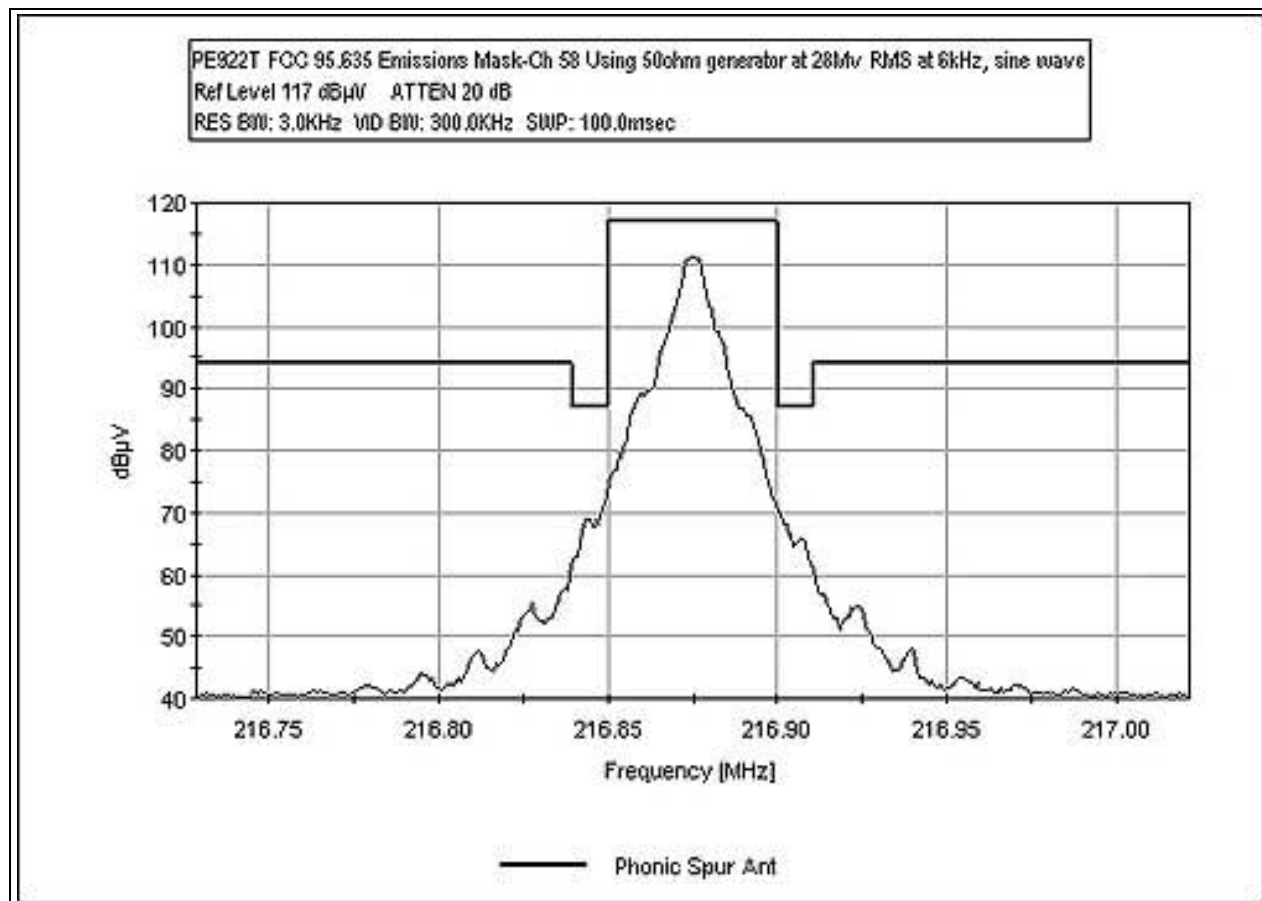
FCC 95.635 - EMISSIONS MASK CHANNEL 41

Test Conditions:

The EUT is a body worn, transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm-signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer.



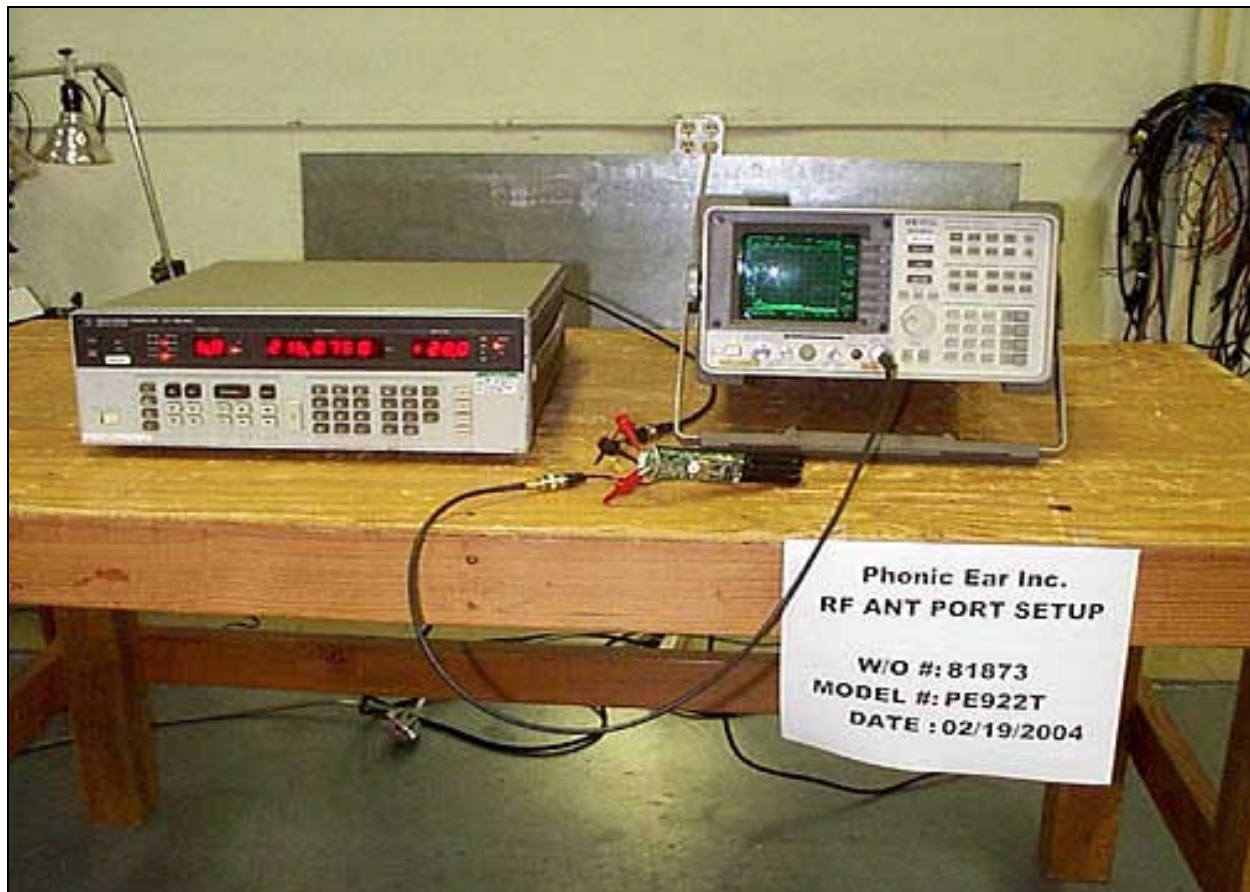
FCC 95.635 - EMISSIONS MASK CHANNEL 58



Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	01/19/03	1/19/05	784

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



FCC 2.1033(c)(14)/2.1051/95.635(c) - SPURIOUS EMISSIONS AT ANTENNA TERMINAL

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)
 Customer: **Phonic Ear**
 Specification: **Phonic Spur Ant**
 Work Order #: **81873** Date: 02/19/2004
 Test Type: **Spurious Emissions** Time: 4:30:00 PM
 Equipment: **Hand Held Transmitter** Sequence#: 3
 Manufacturer: Phonic Ear, Inc. Tested By: Matthew Pettersen
 Model: PE922T
 S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	06/24/2002	06/24/2004	783
Signal Generator	2409A06553	10/30/2002	10/30/2004	508

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a body worn transmit only device that operates on the extra channel bands for Part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer. Spurious emissions 10 - 2200MHz. RBW=100kHz, VBW=100kHz.

Transducer Legend:

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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dBμV	dB	dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	216.025M	112.5					+0.0	112.5	117.0	-4.5	None
									Fundamental		
2	1944.194M	65.9					+0.0	65.9	94.0	-28.1	None
3	674.932M	58.2					+0.0	58.2	94.0	-35.8	None
4	1296.414M	57.2					+0.0	57.2	94.0	-36.8	None
5	1727.205M	55.7					+0.0	55.7	94.0	-38.3	None
6	432.075M	55.4					+0.0	55.4	94.0	-38.6	None

7	2160.226M	55.2	+0.0	55.2	94.0	-38.8	None
8	1511.766M	55.1	+0.0	55.1	94.0	-38.9	None
9	603.486M	52.2	+0.0	52.2	94.0	-41.8	None
10	647.852M	47.6	+0.0	47.6	94.0	-46.4	None
11	679.542M	47.1	+0.0	47.1	94.0	-46.9	None
12	697.980M	46.2	+0.0	46.2	94.0	-47.8	None
13	1080.053M	46.2	+0.0	46.2	94.0	-47.8	None
14	98.536M	46.1	+0.0	46.1	94.0	-47.9	None
15	92.427M	44.7	+0.0	44.7	94.0	-49.3	None
16	891.613M	44.6	+0.0	44.6	94.0	-49.4	None
17	555.662M	44.1	+0.0	44.1	94.0	-49.9	None
18	100.349M	43.8	+0.0	43.8	94.0	-50.2	None
19	682.999M	43.3	+0.0	43.3	94.0	-50.7	None
20	93.382M	42.8	+0.0	42.8	94.0	-51.2	None
21	863.776M	42.6	+0.0	42.6	94.0	-51.4	None
22	543.562M	42.2	+0.0	42.2	94.0	-51.8	None
23	89.373M	41.6	+0.0	41.6	94.0	-52.4	None
24	105.694M	40.4	+0.0	40.4	94.0	-53.6	None
25	199.325M	40.4	+0.0	40.4	94.0	-53.6	None
26	101.304M	40.1	+0.0	40.1	94.0	-53.9	None
27	94.145M	40.0	+0.0	40.0	94.0	-54.0	None
28	703.742M	40.0	+0.0	40.0	94.0	-54.0	None
29	615.009M	39.7	+0.0	39.7	94.0	-54.3	None
30	884.506M	39.5	+0.0	39.5	94.0	-54.5	None

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Phonic Spur Ant**

Work Order #: **81873**

Test Type: **Spurious Emissions**

Equipment: **Hand Held Transmitter**

Manufacturer: **Phonic Ear, Inc.**

Model: **PE922T**

S/N: **2004001**

Date: 02/19/2004

Time: 4:57:51 PM

Sequence#: 4

Tested By: Matthew Pettersen

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	06/24/2002	06/24/2004	783
Signal Generator	2409A06553	10/30/2002	10/30/2004	508

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

The EUT is a body worn transmit only device that operates on the extra channel bands for Part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer. Spurious emissions 10 - 2200MHz. RBW=100kHz, VBW=100kHz.

Transducer Legend:

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Measurement Data:

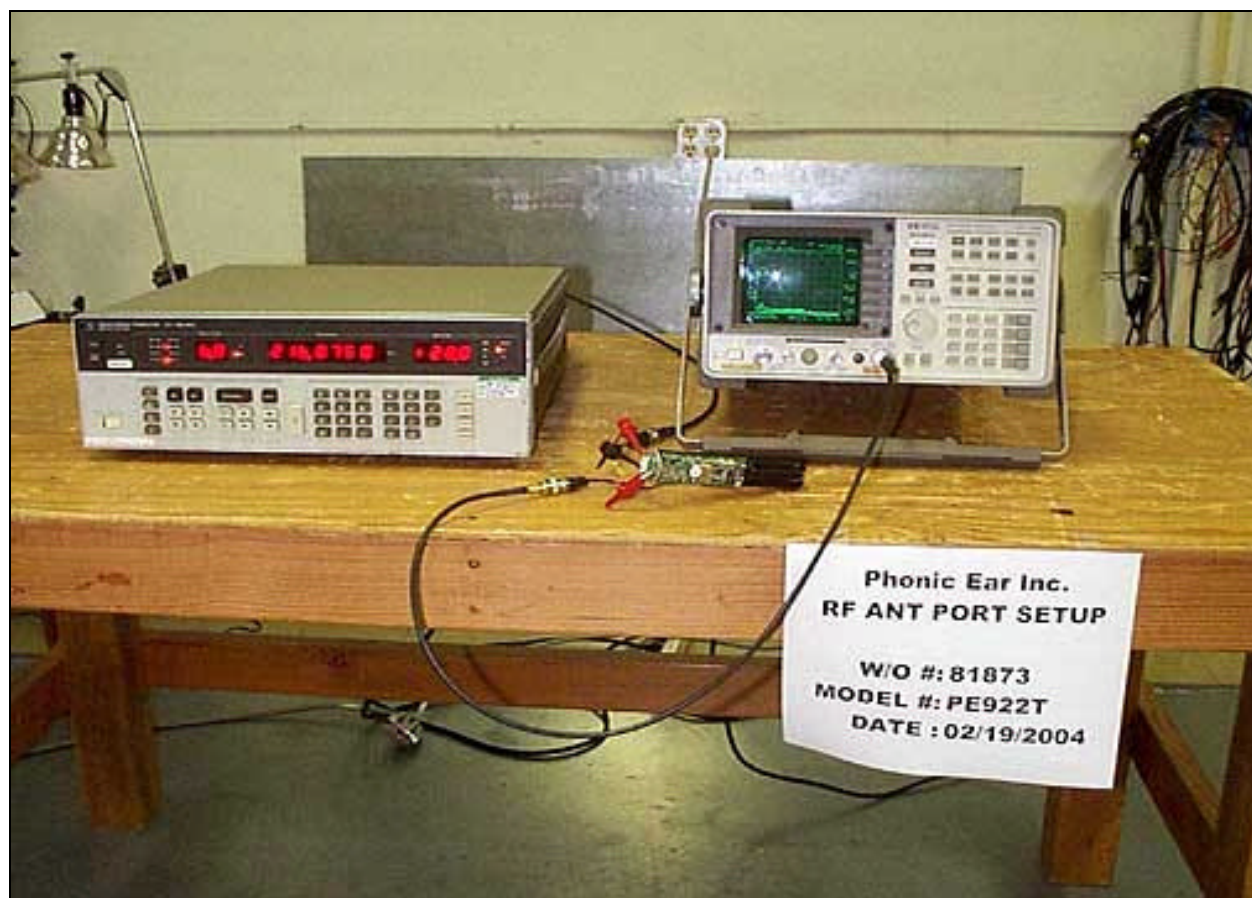
Reading listed by margin.

Test Distance: None

#	Freq MHz	Rdng dBμV	dB	dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	216.875M	113.2					+0.0	113.2	117.0	-3.8	None
									Fundamental		
2	1951.943M	63.1					+0.0	63.1	94.0	-30.9	None
3	674.932M	62.0					+0.0	62.0	94.0	-32.0	None
4	2169.064M	58.6					+0.0	58.6	94.0	-35.4	None
5	433.683M	58.0					+0.0	58.0	94.0	-36.0	None
6	1300.741M	55.7					+0.0	55.7	94.0	-38.3	None
7	1733.405M	54.2					+0.0	54.2	94.0	-39.8	None

8	1517.966M	53.4	+0.0	53.4	94.0	-40.6	None
9	603.486M	52.9	+0.0	52.9	94.0	-41.1	None
10	650.733M	50.9	+0.0	50.9	94.0	-43.1	None
11	679.542M	49.9	+0.0	49.9	94.0	-44.1	None
12	697.980M	49.5	+0.0	49.5	94.0	-44.5	None
13	867.330M	46.4	+0.0	46.4	94.0	-47.6	None
14	1084.381M	46.4	+0.0	46.4	94.0	-47.6	None
15	98.536M	46.0	+0.0	46.0	94.0	-48.0	None
16	463.041M	44.8	+0.0	44.8	94.0	-49.2	None
17	92.427M	44.1	+0.0	44.1	94.0	-49.9	None
18	892.205M	44.1	+0.0	44.1	94.0	-49.9	None
19	199.325M	44.0	+0.0	44.0	94.0	-50.0	None
20	471.084M	43.4	+0.0	43.4	94.0	-50.6	None
21	543.562M	42.8	+0.0	42.8	94.0	-51.2	None
22	555.086M	42.6	+0.0	42.6	94.0	-51.4	None
23	507.279M	42.1	+0.0	42.1	94.0	-51.9	None
24	882.729M	41.9	+0.0	41.9	94.0	-52.1	None
25	93.382M	41.6	+0.0	41.6	94.0	-52.4	None
26	100.349M	41.2	+0.0	41.2	94.0	-52.8	None
27	607.519M	40.5	+0.0	40.5	94.0	-53.5	None
28	89.373M	40.0	+0.0	40.0	94.0	-54.0	None
29	94.909M	39.9	+0.0	39.9	94.0	-54.1	None
30	105.694M	39.5	+0.0	39.5	94.0	-54.5	None

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



FCC 2.1033(c)(14)/2.1053/95.635(c) - FIELD STRENGTH OF SPURIOUS RADIATION

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Pt 95.635 Spurious**

Work Order #: **81873**

Test Type: **Spurious Emissions**

Equipment: **Hand Held Transmitter**

Manufacturer: **Phonic Ear, Inc.**

Model: **PE922T**

S/N: **2004001**

Date: 02/23/2004

Time: 15:08:43

Sequence#: 8

Tested By: Matthew Pettersen

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Ant., Bilog, Chase CBL6111C	2630	10/04/2002	10/04/2004	852
QP Adapter HP-85650A	2043A00188	10/08/2002	10/08/2004	1508
S.A., RF Section HP-8568B	2601A02378	03/11/2003	03/11/2005	1377
S.A., Display HP-85662A	2542A10641	03/11/2003	03/11/2005	1377
Cable, H-B 3M Rad., .01-1000MHz	rad_cab_3M_03_hol-b.01-1000MHz	08/04/2003	08/04/2005	0
S.A., HP-8596E	3346A00209	01/19/2003	01/19/2005	784

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Spurious emissions 10 - 2200MHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Operating Frequency: 216.025MHz - 216.875MHz
 Channels: 41 & 58 Low Frequency
 Highest Measured Output Power: 4.10 EIRP(dBm)= 0.00257 EIRP(Watts)
 Distance: 3 meters
 Limit: $43+10\text{Log(P)}$ 17.10 dBc

Freq. (MHz)	Reference Level (dBm)	Antenna Polarity (H/V)	dBc
107.88	-61.8	Horiz	65.90
107.97	-60.5	Vert	64.60
143.54	-61.1	Horiz	65.20
143.72	-62.4	Vert	66.50
432.04	-40.8	Vert	44.90
432.06	-52.6	Horiz	56.70
648.06	-33.2	Vert	37.30
648.06	-46.1	Horiz	50.20
679.75	-49.7	Horiz	53.80
679.76	-50	Vert	54.10
784.74	-44.3	Horiz	48.40
784.75	-48.2	Vert	52.30
864.08	-45.4	Horiz	49.50
864.09	-34.5	Vert	38.60
144.38	-56.2	Vert	60.30
144.38	-62.6	Horiz	66.70
433.74	-41.1	Vert	45.20
433.76	-53.6	Horiz	57.70
650.61	-32.5	Vert	36.60
650.62	-45.6	Horiz	49.70
679.72	-48.5	Horiz	52.60
679.74	-49.2	Vert	53.30
784.75	-44.6	Horiz	48.70
784.75	-47.6	Vert	51.70
867.48	-45.6	Horiz	49.70
867.51	-34.9	Vert	39.00

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Pt 95.635 Spurious**

Work Order #: **81873**

Date: 04/02/2004

Test Type: **Maximized Emissions**

Time: 14:55:58

Equipment: **Hand Held Transmitter**

Sequence#: 11

Manufacturer: Phonic Ear

Tested By: Mike Wilkinson

Model: PE922T

S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
EMCO 3115 Horn Antenna	9006-3413	04/15/2003	04/25/2005	327
HP 8449B Preamp	3008A00301	10/21/2002	10/18/2004	2010

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Channel 41 and 58 selected. Spurious emissions 1.0- 2.2 GHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Operating Frequency: 216.025MHz - 216.875MHz
 Channels: 41 & 58 High Frequency
 Highest Measured Output Power: 4.10 EIRP(dBm)= 0.00257 EIRP(Watts)
 Distance: 3 meters
 Limit: $43+10\log(P)$ 17.10 dBc

Freq. (MHz)	Reference Level (dBm)	Antenna Polarity (H/V)	dBc
1,944.21	-25.4	Vert	29.50
1,728.18	-31.3	Vert	35.40
2,160.18	-33.6	Vert	37.70
1,512.18	-40	Vert	44.10
1,296.22	-40.1	Vert	44.20
1,944.20	-41.1	Horiz	45.20
1,728.17	-41.1	Horiz	45.20
2,160.14	-44	Horiz	48.10
1,080.22	-48.2	Vert	52.30
1,951.87	-26.2	Vert	30.30
1,734.99	-30.6	Vert	34.70
2,168.76	-36.3	Vert	40.40
1,301.23	-39	Vert	43.10
1,518.11	-40.9	Vert	45.00
2,168.78	-43.8	Horiz	47.90
1,084.40	-47.8	Vert	51.90
1,735.01	-50	Horiz	54.10
1,301.26	-51.4	Horiz	55.50
1,951.88	-51.8	Horiz	55.90
1,518.08	-57.9	Horiz	62.00

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View



Radiated Emissions - Back View

FCC 2.1033(c)(14)/2.1055(d)- FREQUENCY STABILITY

Test Conditions: EUT is functioning normally without modulation input. EUT is powered via external DC power supply. Frequency stability measurements under voltage variations are taken at the nominal operating voltage, voltage midpoint and battery end-point voltage. The RF output of the EUT is directly connected to the test equipment via a test fixture.

Customer: Phonic Ear
WO#: 81873
Date: 09-Mar-04
Test Engineer:

Device Model #: PE922T
Operating Voltage: 3 VDC/VAC
Frequency Limit: 50 PPM/%

Temperature Variations

Channel Frequency:		Channel 1 (MHz)	Dev. (MHz)
		216.2246	
Temp (C)	Voltage		
-30	3	216.22530	0.00070
-20	3	216.22620	0.00160
-10	3	216.22410	0.00050
0	3	216.22630	0.00170
10	3	216.22580	0.00120
20	3	216.22460	0.00000
30	3	216.22410	0.00050
40	3	216.22310	0.00150
50	3	216.22220	0.00240

Voltage Variations

20	3.0	216.22460	0.00000
20	2.5	216.22460	0.00000
20	1.8	216.22460	0.00000

Max Deviation (MHz)	0.00240
Max Deviation (PPM)	11.09957
PASS	

Test Equipment

<i>Description</i>	<i>Asset #</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Digital Multimeter	01241	Radio Shack	22-183	NA	NR	NR
Modulation Analyzer	2072	HP	8901A	2751A05181	11/27/02	11/27/04
Temp Chamber	01879	Thermotron	S-1.2 MiniMax	11899	1/31/03	1/31/05
Thermometer	02242	Omega	HH-26K	T-202884	8/15/03	8/14/05
Power Supply, DC	00765	Sorensen	DCR-60-30B	176	7/8/03	7/7/05

NR = Not Required

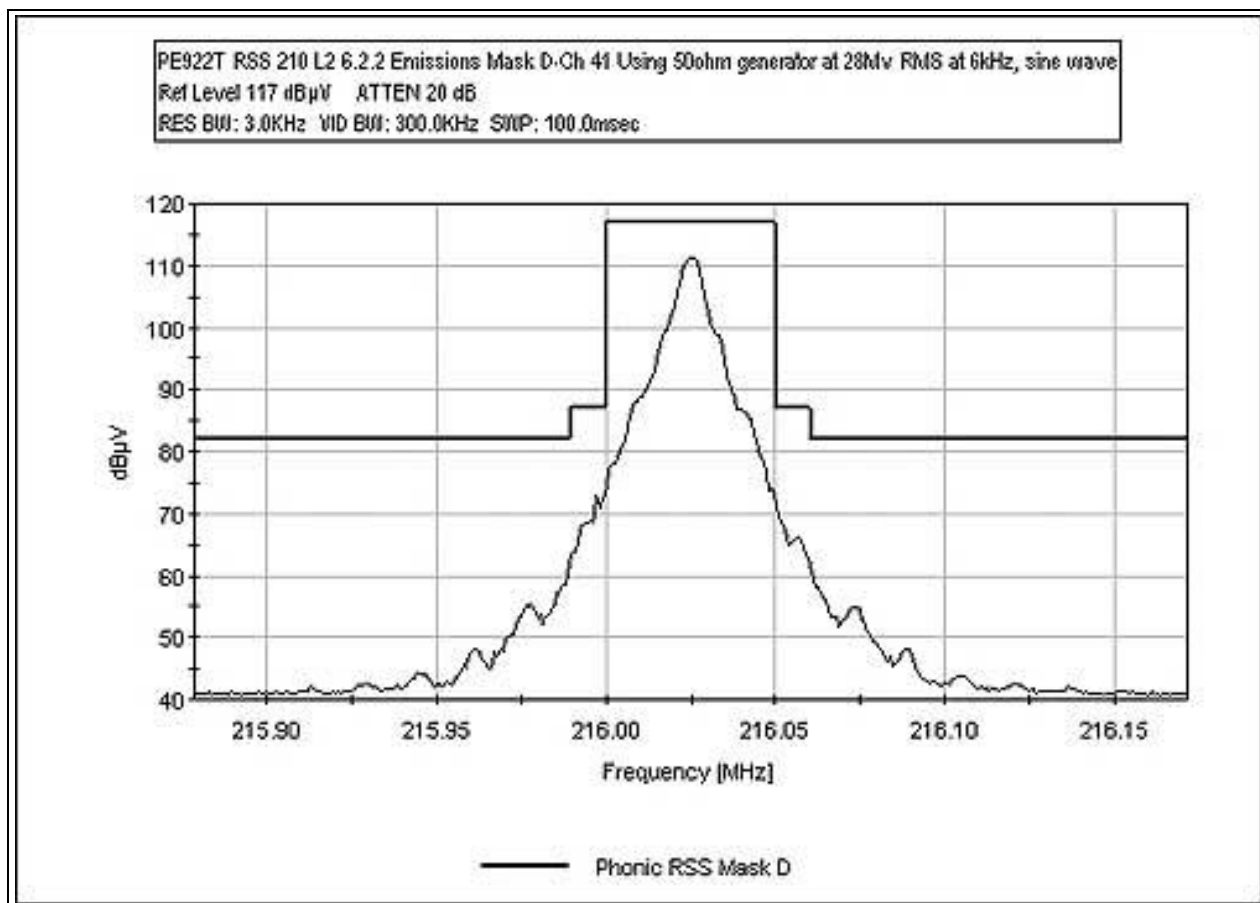
PHOTOGRAPH SHOWING TEMPERATURE TESTING



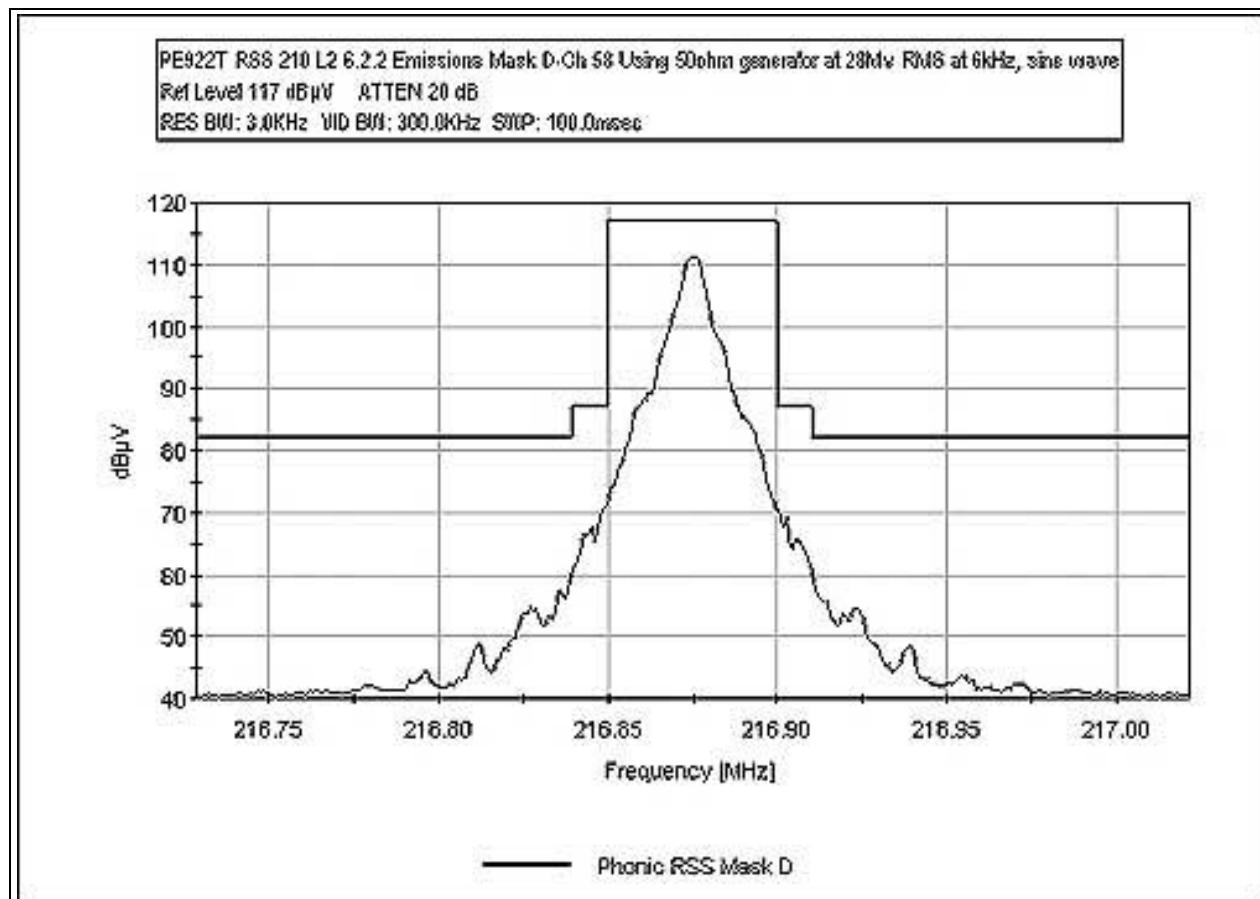
RSS 210 L2 6.2.2 - EMISSIONS MASK D CHANNEL 41

Test Conditions:

The EUT is a body worn, transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only, and is FM modulated by a 50ohm-signal generator injecting a 6kHz sine wave at 28mV RMS and transmits only analog data on the carrier. A manufacturer supplied test board is connected to the microphone port of the EUT. The RF out connector on the test fixture is connected to the spectrum analyzer.



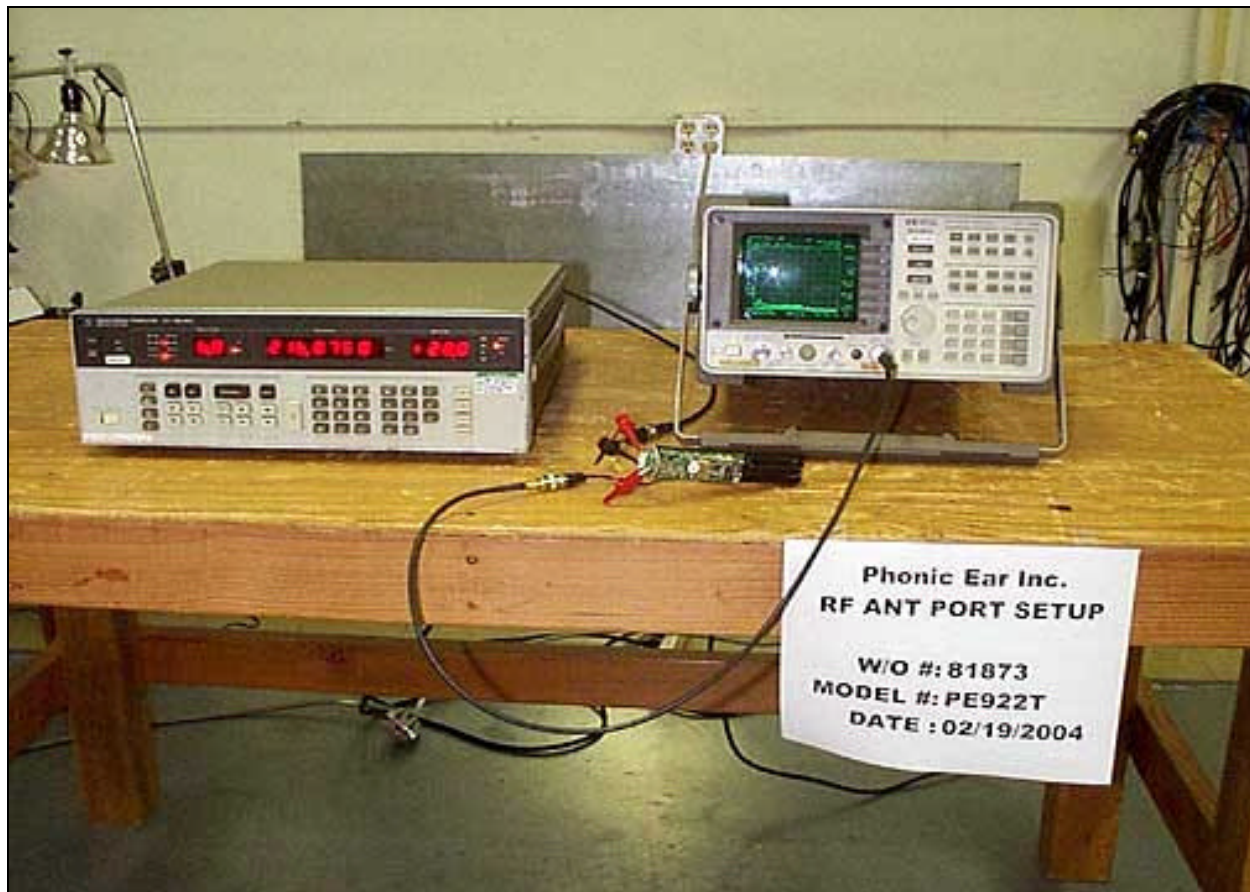
RSS 210 L2 6.2.2 - EMISSIONS MASK D CHANNEL 58



Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., HP-8596E	3346A00225	01/19/03	1/19/04	784

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



RSS 210 L2 6.2.2 - SPURIOUS EMISSIONS - OATS

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Canada RSS 210 6.2.2(L2)**

Work Order #: **81873**

Date: 02/23/2004

Test Type: **Spurious Emissions**

Time: 15:08:43

Equipment: **Hand Held Transmitter**

Sequence#: 8

Manufacturer: Phonic Ear, Inc.

Tested By: Matthew Pettersen

Model: PE922T

S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Ant., Bilog, Chase CBL6111C	2630	10/04/2002	10/04/2004	852
QP Adapter HP-85650A	2043A00188	10/08/2002	10/08/2004	1508
S.A., RF Section HP-8568B	2601A02378	03/11/2003	03/11/2005	1377
S.A., Display HP-85662A	2542A10641	03/11/2003	03/11/2005	1377
Cable, H-B 3M Rad., .01-1000MHz	rad_cab_3M_03_hol	08/04/2003	08/04/2005	0
S.A., HP-8596E	-b.01-1000MHz 3346A00209	01/19/2003	01/19/2005	784

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Spurious emissions 10 - 1000MHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Transducer Legend:

T1=Chase bilog 2630	T2=H-B 3m Rad cable .01-1000MHz
T3=H-B 3 meter rad. cable 1-13.5 GHz	T4=Horn 1-18 GHz (Hollister)

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	648.059M	39.4	+20.4	+4.0			+10.0	73.8	82.0	-8.2	Vert
2	864.092M	35.6	+22.6	+4.3			+10.0	72.5	82.0	-9.5	Vert
3	432.044M	36.5	+16.5	+3.2			+10.0	66.2	82.0	-15.8	Vert
4	784.738M	27.0	+21.6	+4.1			+10.0	62.7	82.0	-19.3	Horiz
5	864.084M	24.7	+22.6	+4.3			+10.0	61.6	82.0	-20.4	Horiz
6	648.064M	26.5	+20.4	+4.0			+10.0	60.9	82.0	-21.1	Horiz
7	784.748M	23.1	+21.6	+4.1			+10.0	58.8	82.0	-23.2	Vert
8	679.746M	23.0	+20.4	+3.9			+10.0	57.3	82.0	-24.7	Horiz
9	679.756M	22.7	+20.4	+3.9			+10.0	57.0	82.0	-25.0	Vert
10	432.058M	24.7	+16.5	+3.2			+10.0	54.4	82.0	-27.6	Horiz
11	107.970M	24.3	+10.6	+1.6			+10.0	46.5	82.0	-35.5	Vert
12	143.540M	22.7	+11.4	+1.8			+10.0	45.9	82.0	-36.1	Horiz
13	107.882M	23.0	+10.6	+1.6			+10.0	45.2	82.0	-36.8	Horiz
14	143.724M	21.5	+11.3	+1.8			+10.0	44.6	82.0	-37.4	Vert

Test Location: CKC Laboratories, Inc. • 1100 Fulton Place • Fremont, CA 94538 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**
 Specification: **Canada RSS 210 6.2.2(L2)**
 Work Order #: **81873**
 Test Type: **Spurious Emissions**
 Equipment: **Hand Held Transmitter**
 Manufacturer: Phonic Ear, Inc.
 Model: PE922T
 S/N: 2004001

Date: 02/23/2004
 Time: 15:02:19
 Sequence#: 7
 Tested By: Matthew Pettersen

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Ant., Bilog, Chase CBL6111C	2630	10/04/2002	10/04/2004	852
QP Adapter HP-85650A	2043A00188	10/08/2002	10/08/2004	1508
S.A., RF Section HP-8568B	2601A02378	03/11/2003	03/11/2005	1377
S.A., Display HP-85662A	2542A10641	03/11/2003	03/11/2005	1377
Cable, H-B 3M Rad., .01-1000MHz	rad_cab_3M_03_hol-b.01-1000MHz	08/04/2003	08/04/2005	0

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear, Inc.	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Spurious emissions 10 - 1000MHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Transducer Legend:

T1=Chase bilog 2630	T2=H-B 3m Rad cable .01-1000MHz
T3=H-B 3 meter rad. cable 1-13.5 GHz	T4=Horn 1-18 GHz (Hollister)

Measurement Data: Reading listed by order taken. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	433.741M	36.2	+16.5	+3.2			+10.0	65.9	82.0	-16.1	Vert
2	650.614M	40.1	+20.4	+4.0			+10.0	74.5	82.0	-7.5	Vert
3	867.505M	35.2	+22.6	+4.3			+10.0	72.1	82.0	-9.9	Vert
4	784.750M	23.7	+21.6	+4.1			+10.0	59.4	82.0	-22.6	Vert
5	144.380M	27.7	+11.3	+1.8			+10.0	50.8	82.0	-31.2	Vert

6	679.744M	23.5	+20.4	+3.9	+10.0	57.8	82.0	-24.2	Vert
7	679.715M	24.2	+20.4	+3.9	+10.0	58.5	82.0	-23.5	Horiz
8	433.761M	23.7	+16.5	+3.2	+10.0	53.4	82.0	-28.6	Horiz
9	650.615M	27.0	+20.4	+4.0	+10.0	61.4	82.0	-20.6	Horiz
10	867.481M	24.5	+22.6	+4.3	+10.0	61.4	82.0	-20.6	Horiz
11	784.745M	26.7	+21.6	+4.1	+10.0	62.4	82.0	-19.6	Horiz
12	144.384M	21.3	+11.3	+1.8	+10.0	44.4	82.0	-37.6	Horiz

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Canada RSS 210 6.2.2(L2)**

Work Order #: **81873**

Date: 04/02/2004

Test Type: **Maximized Emissions**

Time: 14:55:58

Equipment: **Hand Held Transmitter**

Sequence#: 11

Manufacturer: Phonic Ear

Tested By: Mike Wilkinson

Model: PE922T

S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
EMCO 3115 Horn Antenna	9006-3413	04/15/2003	04/25/2005	327
HP 8449B Preamp	3008A00301	10/21/2002	10/18/2004	2010

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Channel 41 selected. Spurious emissions 1.0- 2.2 GHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable HF P01527	T4=Cable 35' Blue SMA CKC P1352
T5=Cable HF-004-50	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	1944.213M	70.6	-35.2 +4.3	+27.0	+0.4	+4.5	+10.0	81.6	82.0	-0.4	Vert
2	1728.179M	66.5	-35.4 +4.0	+26.0	+0.3	+4.3	+10.0	75.7	82.0	-6.3	Vert
3	2160.179M	61.2	-35.1 +4.5	+27.6	+0.4	+4.8	+10.0	73.4	82.0	-8.6	Vert
4	1512.179M	59.5	-35.5 +3.7	+25.0	+0.3	+4.0	+10.0	67.0	82.0	-15.0	Vert

5	1296.224M	60.7	-35.8 +3.4	+24.6	+0.3	+3.7	+10.0	66.9	82.0	-15.1	Vert
6	1944.199M	54.9	-35.2 +4.3	+27.0	+0.4	+4.5	+10.0	65.9	82.0	-16.1	Horiz
7	1728.174M	56.7	-35.4 +4.0	+26.0	+0.3	+4.3	+10.0	65.9	82.0	-16.1	Horiz
8	2160.144M	50.8	-35.1 +4.5	+27.6	+0.4	+4.8	+10.0	63.0	82.0	-19.0	Horiz
9	1080.224M	54.0	-36.1 +3.1	+24.3	+0.2	+3.3	+10.0	58.8	82.0	-23.2	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**

Specification: **Canada RSS 210 6.2.2(L2)**

Work Order #: **81873**

Date: 04/02/2004

Test Type: **Maximized Emissions**

Time: 15:04:44

Equipment: **Hand Held Transmitter**

Sequence#: 12

Manufacturer: Phonic Ear

Tested By: Mike Wilkinson

Model: PE922T

S/N: 2004001

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
EMCO 3115 Horn Antenna	9006-3413	04/15/2003	04/25/2005	327
HP 8449B Preamp	3008A00301	10/21/2002	10/18/2004	2010

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held Transmitter*	Phonic Ear	PE922T	2004001

Support Devices:

Function	Manufacturer	Model #	S/N
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Test Conditions / Notes:

The EUT is a hand held transmit only device that operates on the extra channel bands for part 95. The EUT operates in the frequency range from 216.025MHz - 216.875MHz. The EUT operates in continuous mode only and transmits only analog data on the carrier. Channel 58 selected. Spurious emissions 1.0- 2.2 GHz. For peak power output measurements the transmitter and antenna were tested in all three orthogonal orientations including off of the wooden table and mounted on a PVC pipe to ensure the worst case orthogonal orientation of the EUT. This was to also make certain that the placement of the antenna on the table would not attenuate the RF signal. Placement of the antenna on the table did not affect the RF signal. The EUT was tested in the worst case orthogonal orientation.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable HF P01527	T4=Cable 35' Blue SMA CKC P1352
T5=Cable HF-004-50	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	1951.866M	69.8	-35.2 +4.3	+27.0	+0.4	+4.5	+10.0	80.8	82.0	-1.2	Vert
2	1734.987M	66.9	-35.3 +4.1	+26.1	+0.3	+4.3	+10.0	76.4	82.0	-5.6	Vert
3	2168.761M	58.3	-35.1 +4.5	+27.7	+0.4	+4.9	+10.0	70.7	82.0	-11.3	Vert
4	1301.231M	61.5	-35.7 +3.5	+24.7	+0.3	+3.7	+10.0	68.0	82.0	-14.0	Vert

5	1518.110M	58.6	-35.5 +3.7	+25.0	+0.3	+4.0	+10.0	66.1	82.0	-15.9	Vert
6	2168.776M	50.8	-35.1 +4.5	+27.7	+0.4	+4.9	+10.0	63.2	82.0	-18.8	Horiz
7	1084.404M	54.4	-36.1 +3.1	+24.3	+0.2	+3.3	+10.0	59.2	82.0	-22.8	Vert
8	1735.010M	47.5	-35.3 +4.1	+26.1	+0.3	+4.3	+10.0	57.0	82.0	-25.0	Horiz
9	1301.259M	49.1	-35.7 +3.5	+24.7	+0.3	+3.7	+10.0	55.6	82.0	-26.4	Horiz
10	1951.881M	44.2	-35.2 +4.3	+27.0	+0.4	+4.5	+10.0	55.2	82.0	-26.8	Horiz
11	1518.079M	41.6	-35.5 +3.7	+25.0	+0.3	+4.0	+10.0	49.1	82.0	-32.9	Horiz

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View



Radiated Emissions - Back View