PHONIC EAR TEST REPORT

FOR THE

AUDITORY ASSISTANCE DEVICE, 560T074

FCC PART 15 SUBPART C SECTIONS 15.207, 15.209 & 15.237 AND RSS-210

COMPLIANCE

DATE OF ISSUE: DECEMBER 20, 2004

PREPARED FOR:

Phonic Ear
3880 Cypress Drive
Petaluma, CA 94954-7600

P.O. No.: P114022
W.O. No.: 82963

PREPARED BY:

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Date of test: December 13-17, 2004

Report No.: FC04-091

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	December 13-17, 2004
DATE OF RECEIPT:	December 13, 2004
PURPOSE OF TEST:	To demonstrate the compliance of the Auditory Assistance Device, 560T074 with the requirements for FCC Part 15 Subpart C Sections 15.207, 15.209 & 15.237 and RSS-210 devices.
TEST METHOD:	ANSI C63.4 (2001) and RSS-212
MANUFACTURER:	Phonic Ear 3880 Cypress Drive Petaluma, CA 94954-7600
REPRESENTATIVE:	David Stodola
TEST LOCATION:	CKC Laboratories, Inc. 5473A Clouds Rest Mariposa, CA 95338

SUMMARY OF RESULTS

As received, the Phonic Ear Auditory Assistance Device, 560T074 was found to be fully compliant with the following standards and specifications:

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS-210	5.5	47CFR	15.203	Antenna Connector Requirements
RSS-210	6.3	47CFR	15.205	Restricted Bands of Operation
RSS-210	6.6	47CFR	15.207	AC Mains Conducted Emissions Requirement
	IC 3082-D		784962	Site File No.

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:

Mike Wilkinson, Lab Manager

Randy Clark, EMC Engineer

FCC 15.31(m) Number Of Channels
This device operates on 50 channels.

FCC 15.33(a) Frequency Ranges Tested
15.207 Conducted Emissions: 150 kHz – 30 MHz
15.209/15.237 Radiated Emissions: 10 kHz – 8 GHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	10 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	8 GHz	1 MHz

FCC 15.203 Antenna Requirements
The antenna is reverse thread TMC; therefore the EUT complies with Section 15.203 of the FCC rules.

FCC 15.205 Restricted Bands
The fundamental operating frequency lies outside the restricted bands and therefore complies with the requirements of Section 15.205 of the FCC rules. Any spurious emission coming from the EUT was investigated to determine if any portion lies inside the restricted band. If any portion of a spurious emissions signal was found to be within a restricted band, investigation was performed to ensure compliance with Section 15.209. The requirement called out in 15.205 restricted bands was met. No signals observed within 20 dB of the limit 30 MHz to 8 GHz.

Eut Operating Frequency
The EUT was operating at 72-73 MHz, 74.6-74.8 MHz and 75.2-76 MHz.

Temperature And Humidity During Testing
The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit. The following model name was referenced by CKC Laboratories during testing: **560T74.** The model name referenced was incorrect. The proper model name should have been **560T074.** The data sheets in Appendix B are screen captures taken at the time of testing and will reflect the wrong model number. Any differences between the names does not affect their EMC characteristics and therefore complies to the level of testing equivalent to the tested model name shown on the data sheets.

EQUIPMENT UNDER TEST

EUT Power Supply

Manuf:	Phihong
Model:	PSA-30U-120
Serial:	C1361930808

Auditory Assistance Device

Manuf:	Phonic Ear
Model:	560T074
Serial:	25
FCC ID:	Pending

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Audio Oscillator

Manuf:	HP
Model:	204D
Serial:	1105A02034

REPORT OF MEASUREMENTS

The following tables report the worst case emissions levels recorded during the tests performed on the EUT. All readings taken were peak readings unless otherwise stated. The data sheets from which the emissions tables were compiled are contained in Appendix C.

Table 1: FCC Part 15.207 Six Highest Conducted Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Lisn dB	HPF dB	Cable dB	dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
0.480876	38.9	0.3	0.2	0.1		39.5	46.3	-6.8	W
0.481603	39.5	0.3	0.2	0.1		40.1	46.3	-6.2	B
0.525235	41.1	0.3	0.3	0.1		41.8	46.0	-4.2	W
0.525235	40.5	0.3	0.3	0.1		41.2	46.0	-4.8	B
0.568140	38.5	0.3	0.2	0.1		39.1	46.0	-6.9	B
0.570322	38.6	0.2	0.2	0.1		39.1	46.0	-6.9	W

Test Method: ANSI C63.4 (2001)
Spec Limit: FCC Part 15 Subpart C Section 15.207

NOTES: B = Black Lead
W = White Lead

COMMENTS: EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 32 - 75.975. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 150 kHz - 30 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Note: The whip antenna configuration was used for AC conducted emissions as it is the worst case power setting of the EUT.

Table 2: FCC Part 15.209 Six Highest Radiated Emission Levels – 10-30 MHz									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	dB	Cable dB	Corr dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
10.000	29.2	9.0		0.7	-40.0	-1.1	29.5	-30.6	H-W
10.000	25.4	9.0		0.7	-40.0	-4.9	29.5	-34.4	H-W
10.000	24.3	9.0		0.7	-40.0	-6.0	29.5	-35.5	V-N
10.113	26.8	9.0		0.7	-40.0	-3.5	29.5	-33.0	H- N
10.174	24.3	9.0		0.7	-40.0	-6.0	29.5	-35.5	W-W
21.400	26.7	6.7		1.0	-40.0	-5.6	29.5	-35.1	V-W

Test Method: ANSI C63.4 (2001)
Spec Limit: FCC Part 15 Subpart C Section 15.209
Test Distance: 3 Meters

NOTES:
H = Horizontal Polarization
V = Vertical Polarization
N = Narrowband
W = Wideband

COMMENTS: EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025, 20 - 72.975, 32 - 75.975, 36 - 74.775. EUT transmitting on the following Wideband Channels: A - 72.1, E - 72.9, H - 75.9, I - 74.7. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 10 - 30 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Table 3: FCC 15.237 Six Highest Radiated Emission Levels - Carrier									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	dB	Cable dB	dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
72.016	90.0	5.9		1.9		97.8	98.1	-0.3	V-N
72.077	90.1	5.9		1.9		97.9	98.1	-0.2	V-W
72.900	90.1	6.0		1.9		98.0	98.1	-0.1	V-W
72.964	90.1	6.0		1.9		98.0	98.1	-0.1	V-N
74.700	89.9	6.2		1.9		98.0	98.1	-0.1	V-W
74.768	89.9	6.2		1.9		98.0	98.1	-0.1	V-N

Test Method: ANSI C63.4 (2001)
Spec Limit: FCC Part 15 Subpart C Section 15.237
Test Distance: 3 Meters

NOTES: V = Vertical Polarization
N = Narrowband
W = Wideband

COMMENTS: See individual data sheets for test conditions.

Table 4: FCC 15.237 Six Highest Radiated Emission Levels - 30-1000 MHz									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
144.267	51.8	10.7	-27.0	2.7		38.2	63.5	-25.3	V-W
146.026	52.2	10.6	-27.0	2.8		38.6	63.5	-24.9	V-N
149.496	51.4	10.4	-27.0	2.8		37.6	63.5	-25.9	V-W
149.598	52.7	10.4	-27.0	2.8		38.9	63.5	-24.6	V-N
224.354	50.8	10.2	-26.5	3.4		37.9	63.5	-25.6	H-W
303.991	50.2	12.9	-26.5	4.1		40.7	63.5	-22.8	V- N

Test Method: ANSI C63.4 (2001)
Spec Limit: FCC Part 15 Subpart C Section 15.237
Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
V = Vertical Polarization
N = Narrowband
W = Wideband

COMMENTS: See individual data sheets for test conditions.

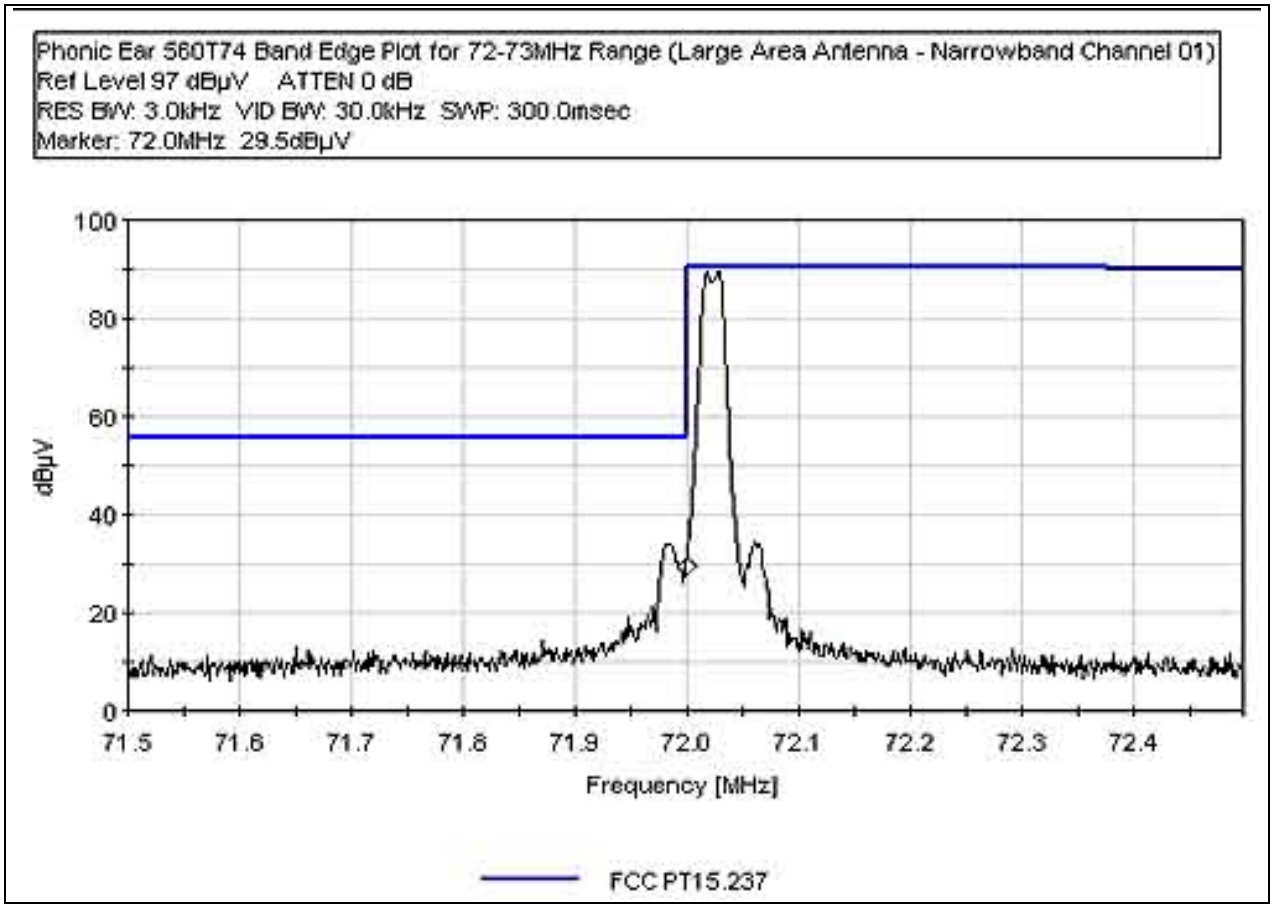
Table 5: FCC 15.237 Six Highest Radiated Emission Levels >1 GHz									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	Dist dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
5000.000	41.0	33.4	-34.3	15.5		55.6	63.5	-7.9	V-N
5000.000	40.7	33.4	-34.3	15.5		55.3	63.5	-8.2	V-W
6000.000	38.2	34.1	-34.7	17.3		54.9	63.5	-8.6	V-N
7000.000	38.1	35.3	-35.2	19.3		57.5	63.5	-6.0	H-N
8000.000	32.2	36.7	-35.2	20.7		54.4	63.5	-9.1	HA-N
8000.000	31.9	36.7	-35.2	20.7		54.1	63.5	-9.4	HA-W

Test Method: ANSI C63.4 (2001)
Spec Limit: FCC Part 15 Subpart C Section 15.237
Test Distance: 3 Meters

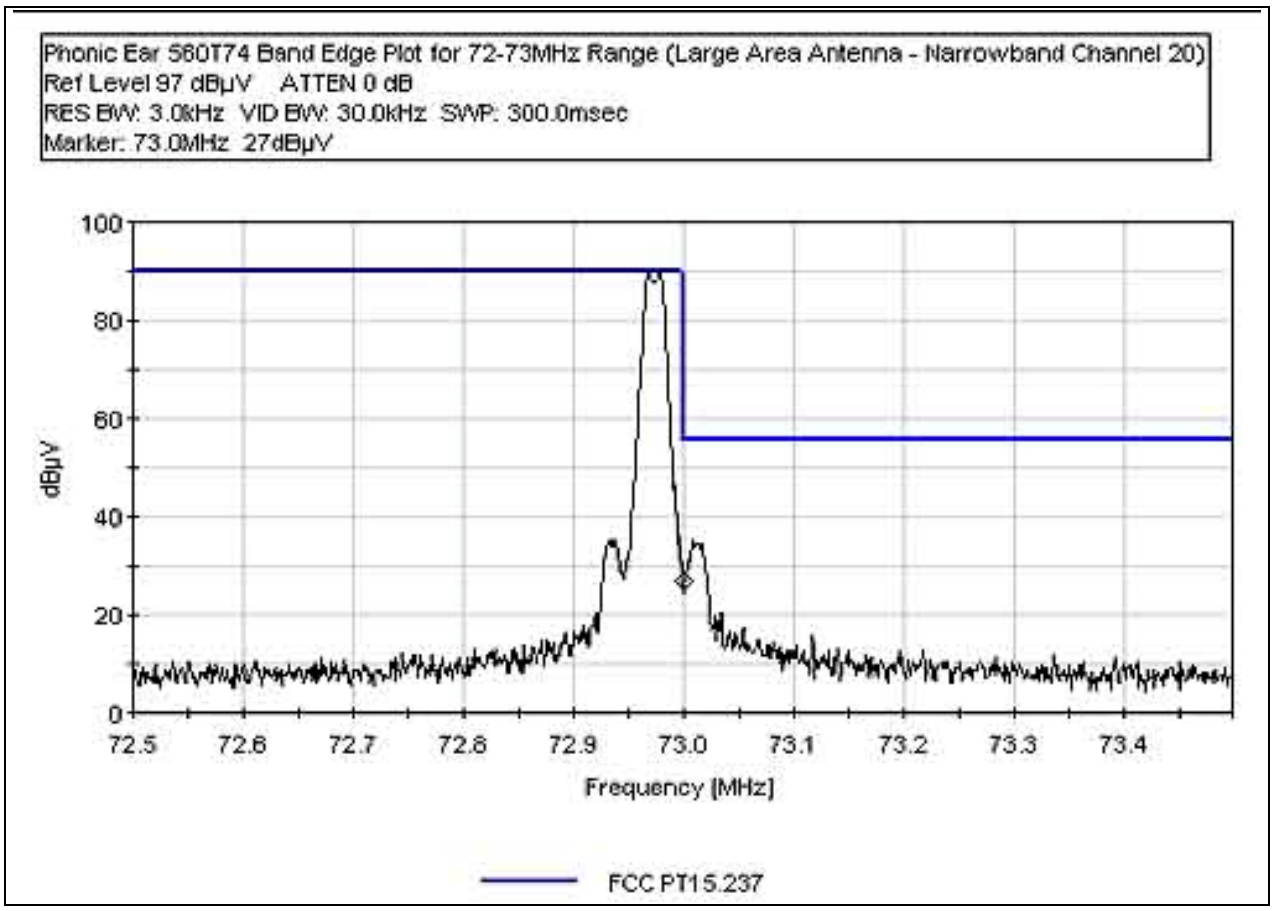
NOTES:
V = Vertical Polarization
A = Average Reading
H = Horizontal Polarization
N = Narrowband
W = Wideband

COMMENTS: See individual data sheets for test conditions.

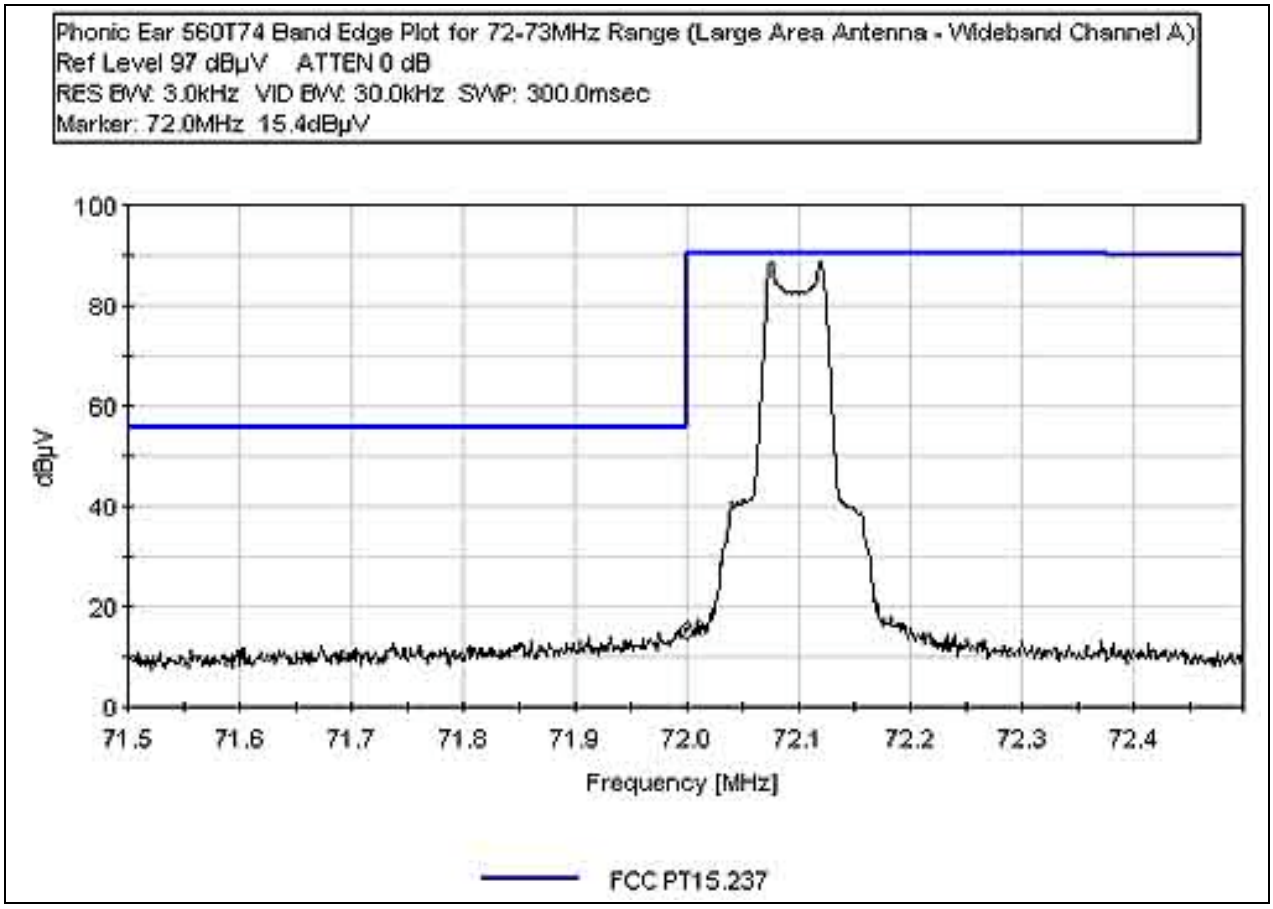
BAND EDGE PLOT 72-73 MHz LARGE AREA ANTENNA – NARROWBAND CHANNEL 01 LOW



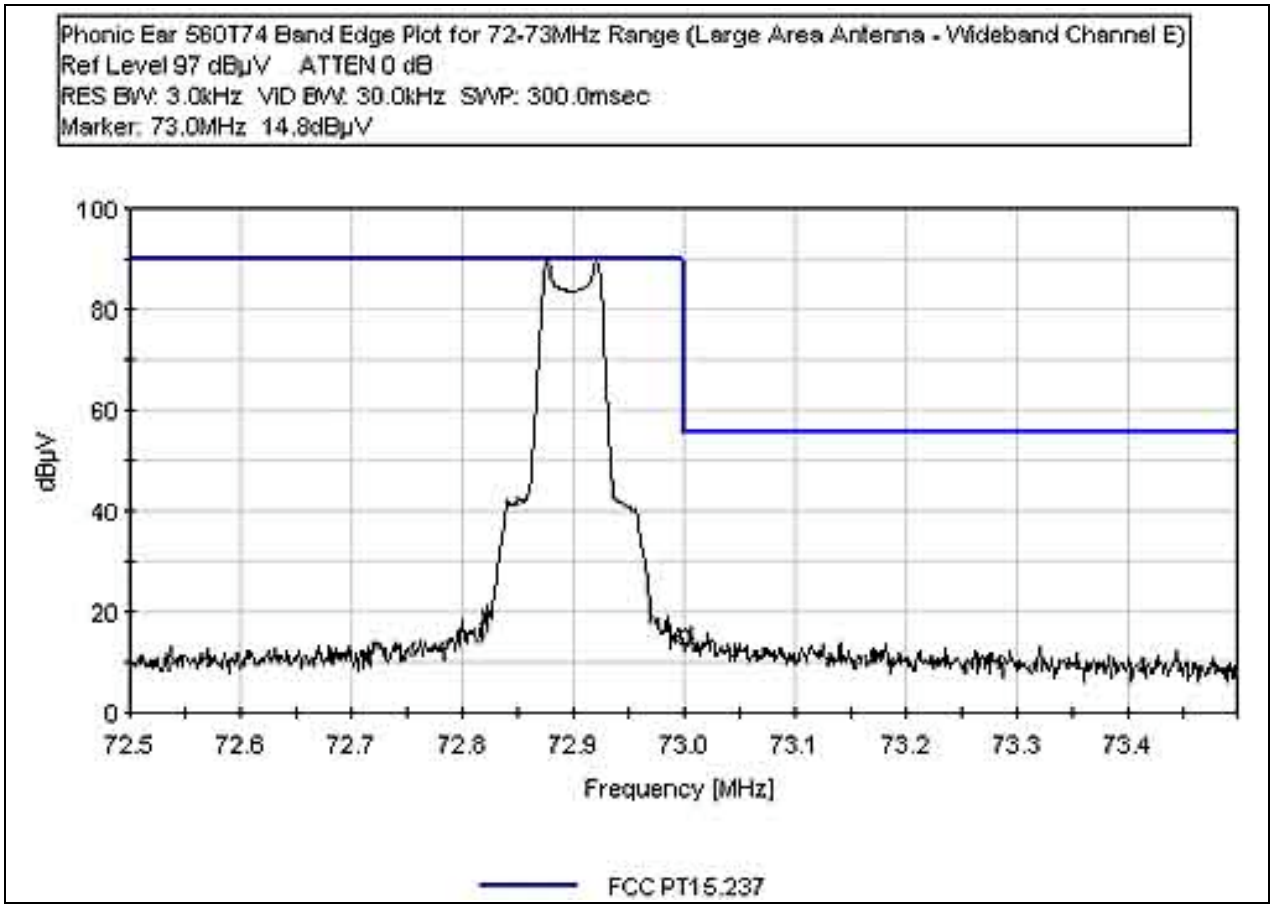
BAND EDGE PLOT 72-73 MHz LARGE AREA ANTENNA - NARROWBAND CHANNEL 20 HIGH



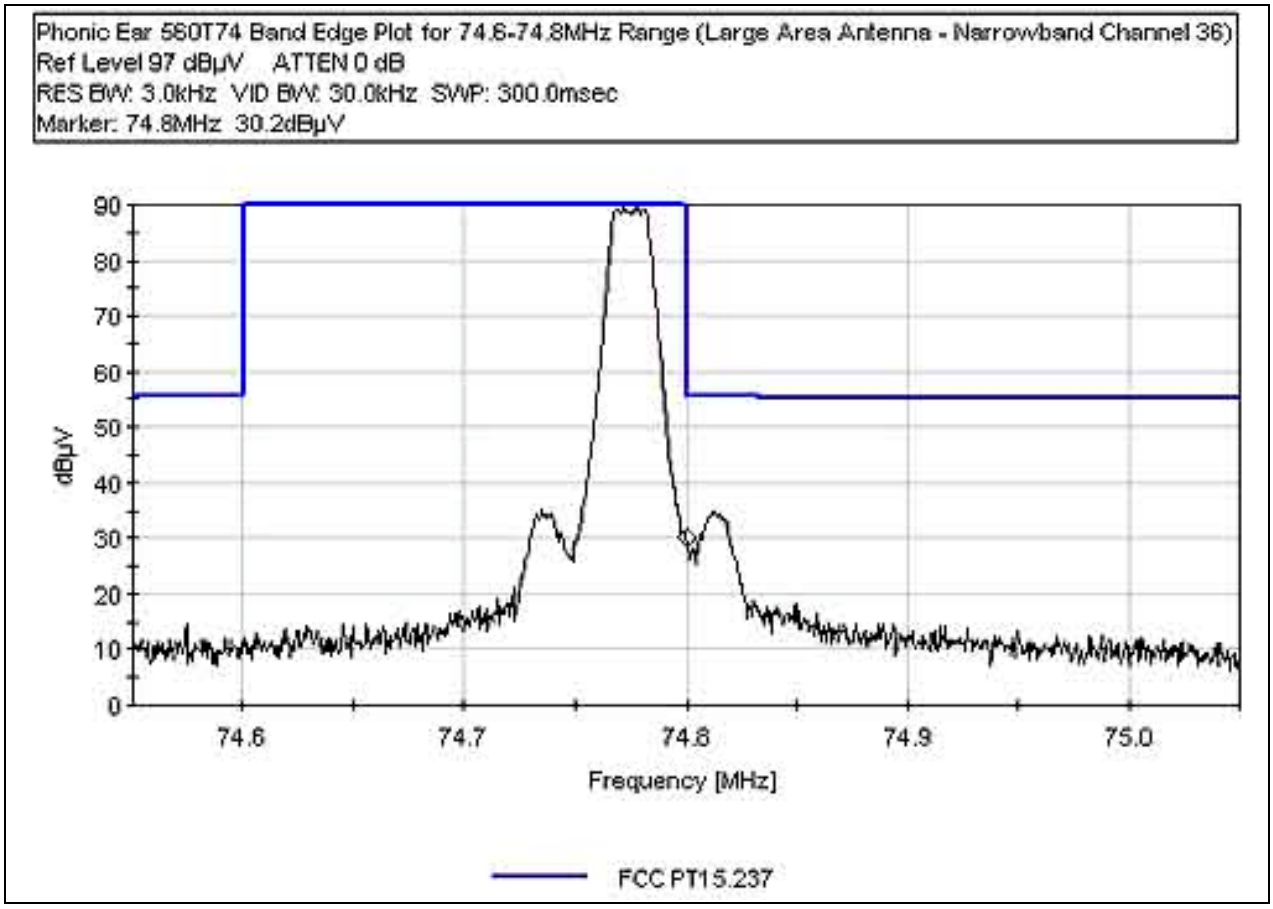
BAND EDGE PLOT 72-73 MHz LARGE AREA ANTENNA - WIDEBAND CHANNEL A LOW



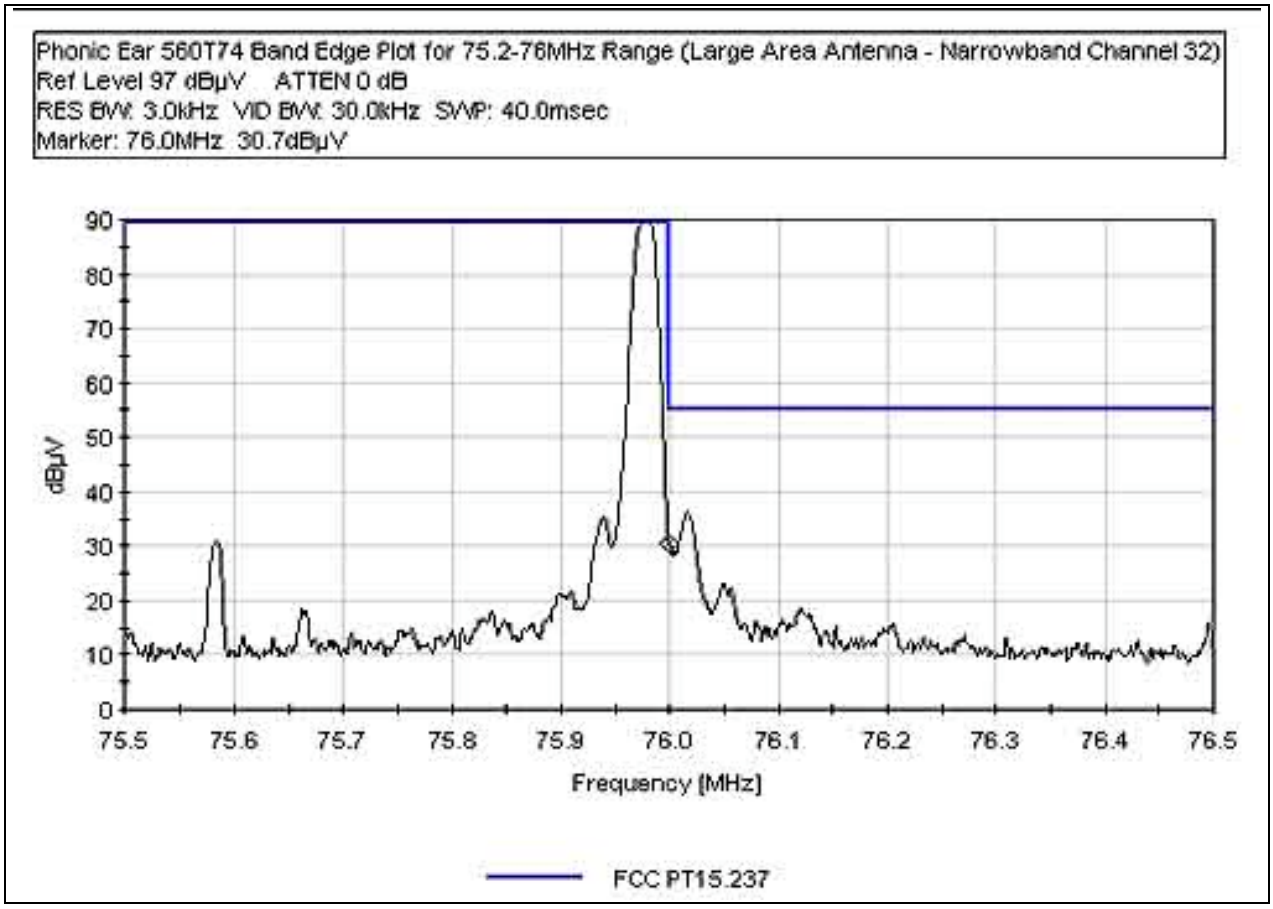
BAND EDGE PLOT 72-73 MHz LARGE AREA ANTENNA - WIDEBAND CHANNEL E HIGH



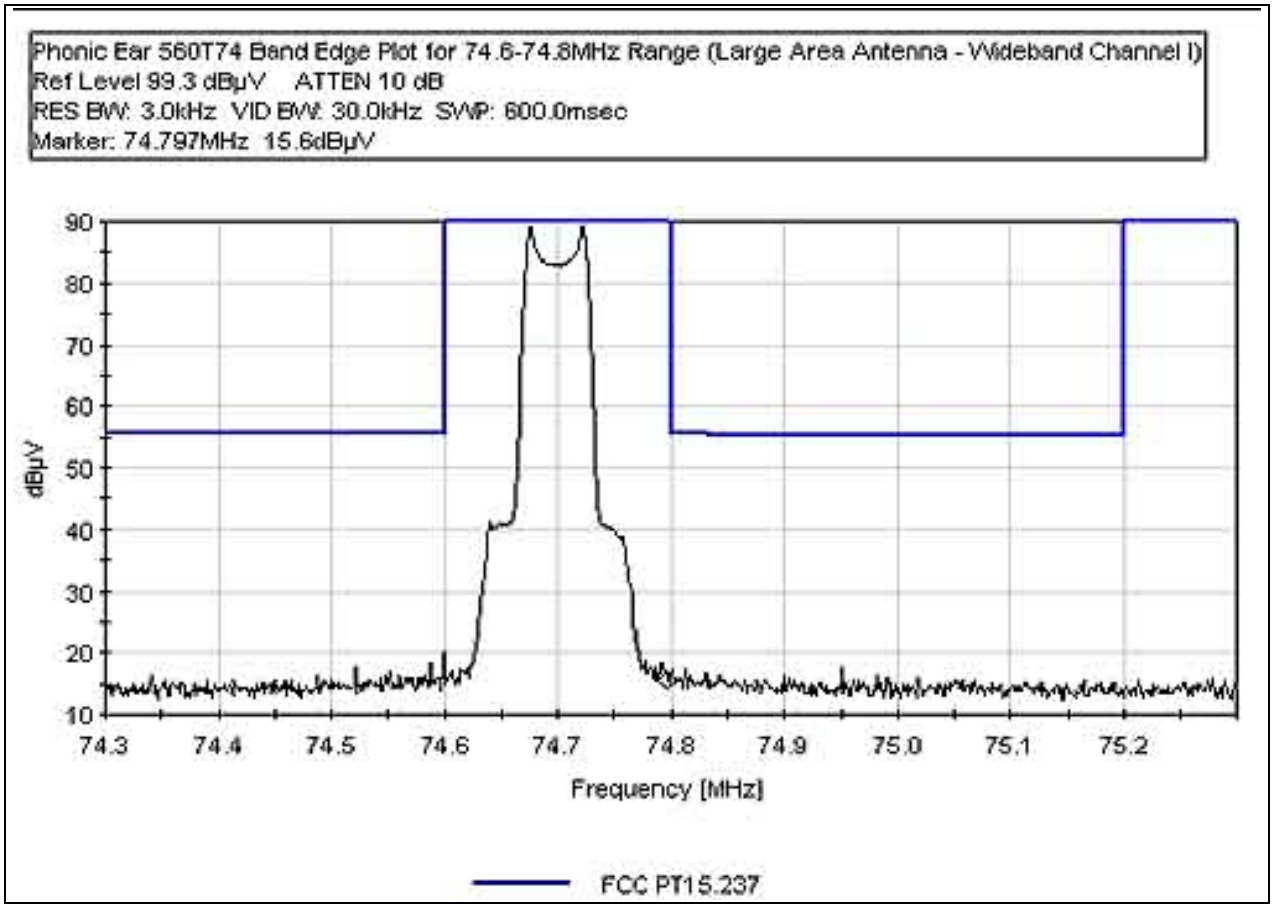
BAND EDGE PLOT 74.6-74.8 MHz LARGE AREA ANTENNA - NARROWBAND CHANNEL 36



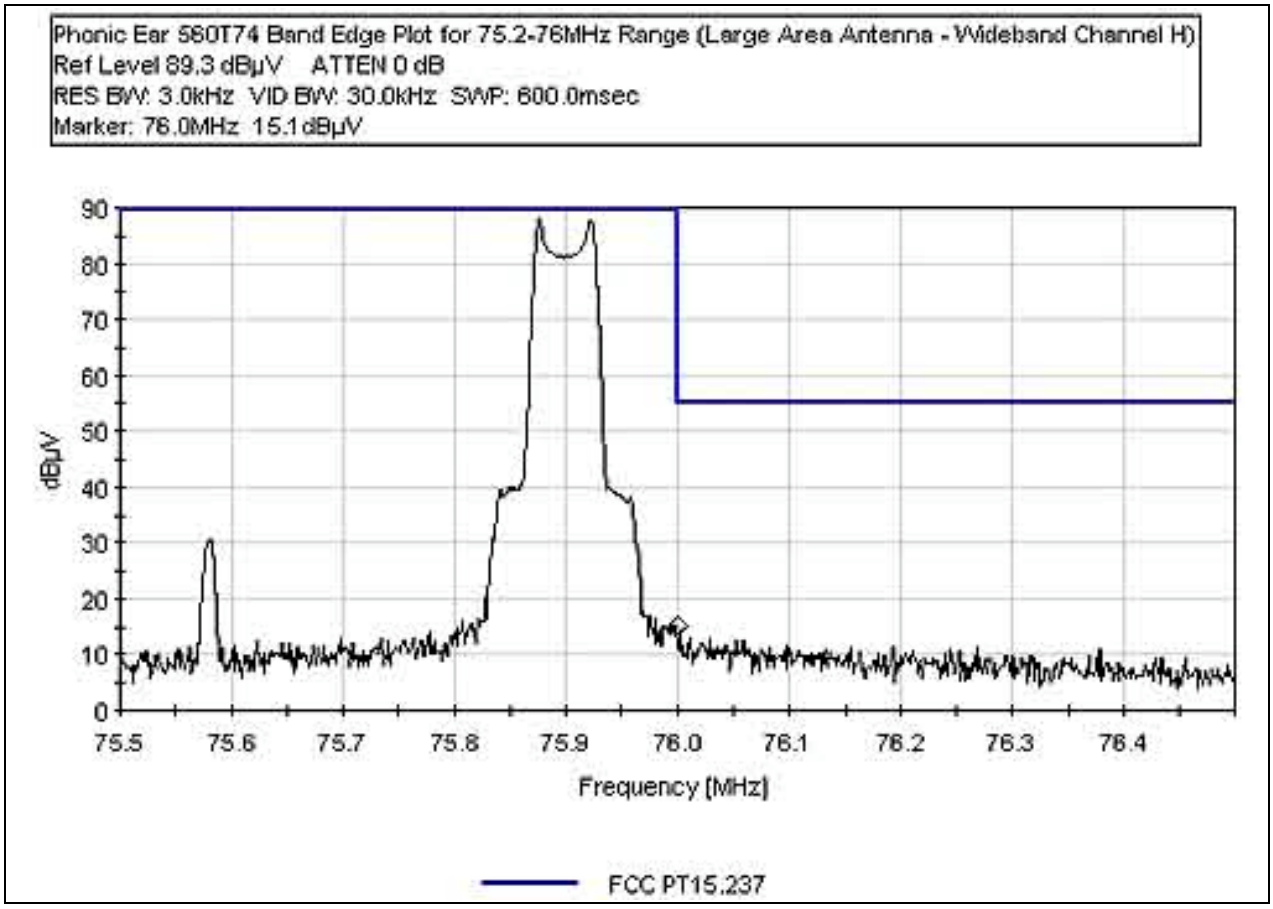
BAND EDGE PLOT 75.2-76 MHz LARGE AREA ANTENNA - NARROWBAND CHANNEL 32



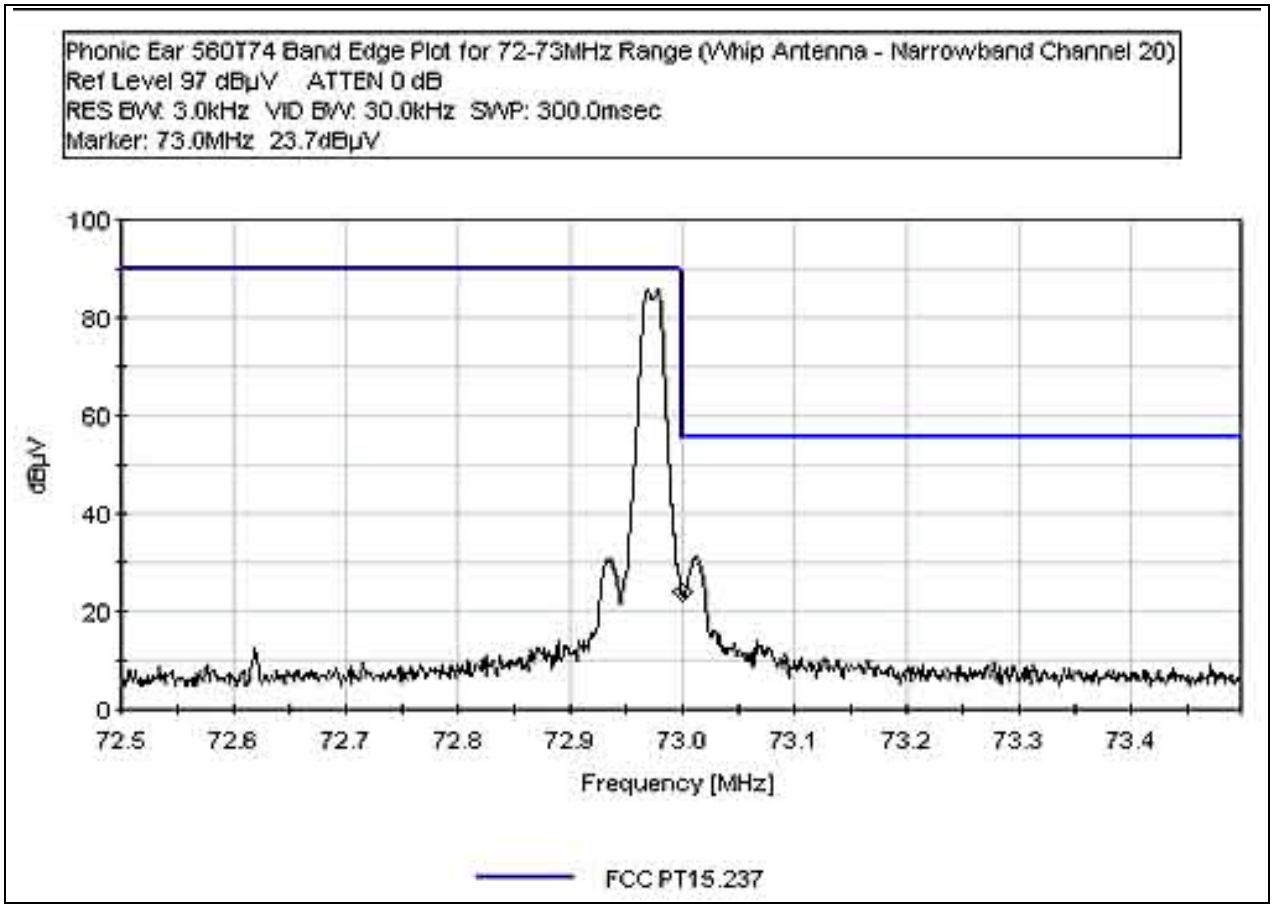
BAND EDGE PLOT 74.6-74.8 MHz LARGE AREA ANTENNA - WIDEBAND CHANNEL 1



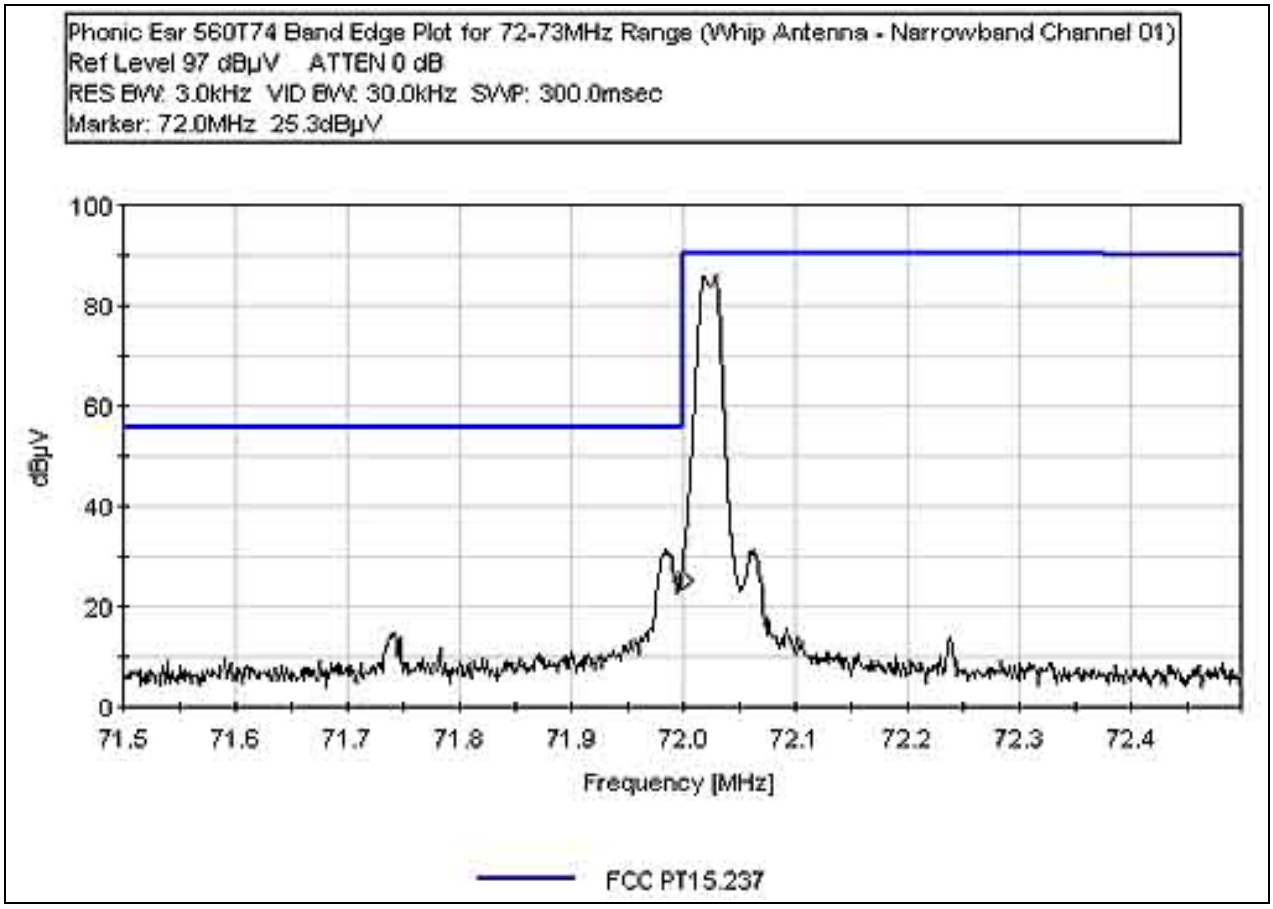
BAND EDGE PLOT 75.2-76 MHz LARGE AREA ANTENNA - WIDEBAND CHANNEL H



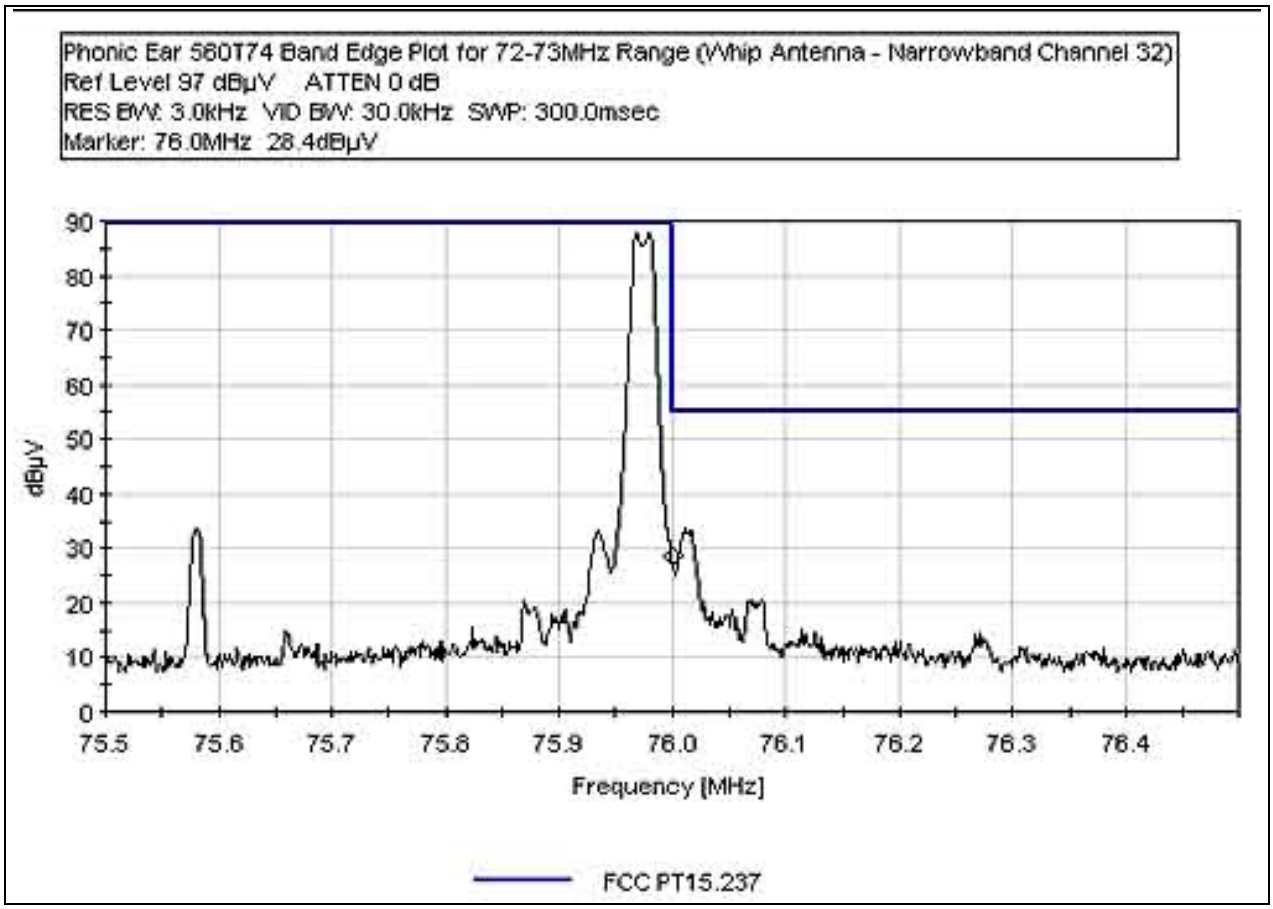
BAND EDGE PLOT 72-73 MHz WHIP ANTENNA -
NARROWBAND CHANNEL 20 HIGH



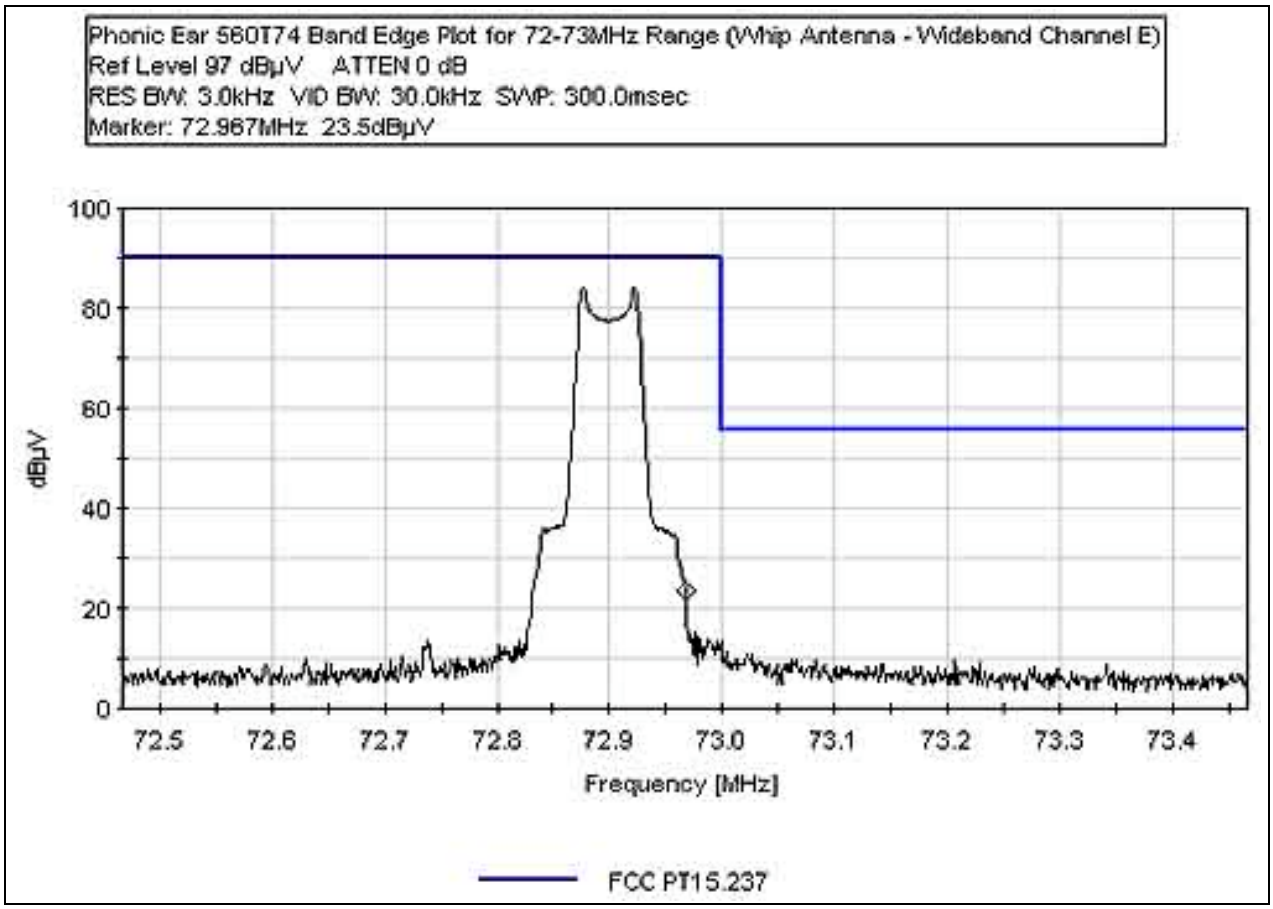
BAND EDGE PLOT 72-73 MHz WHIP ANTENNA - NARROWBAND CHANNEL 01 LOW



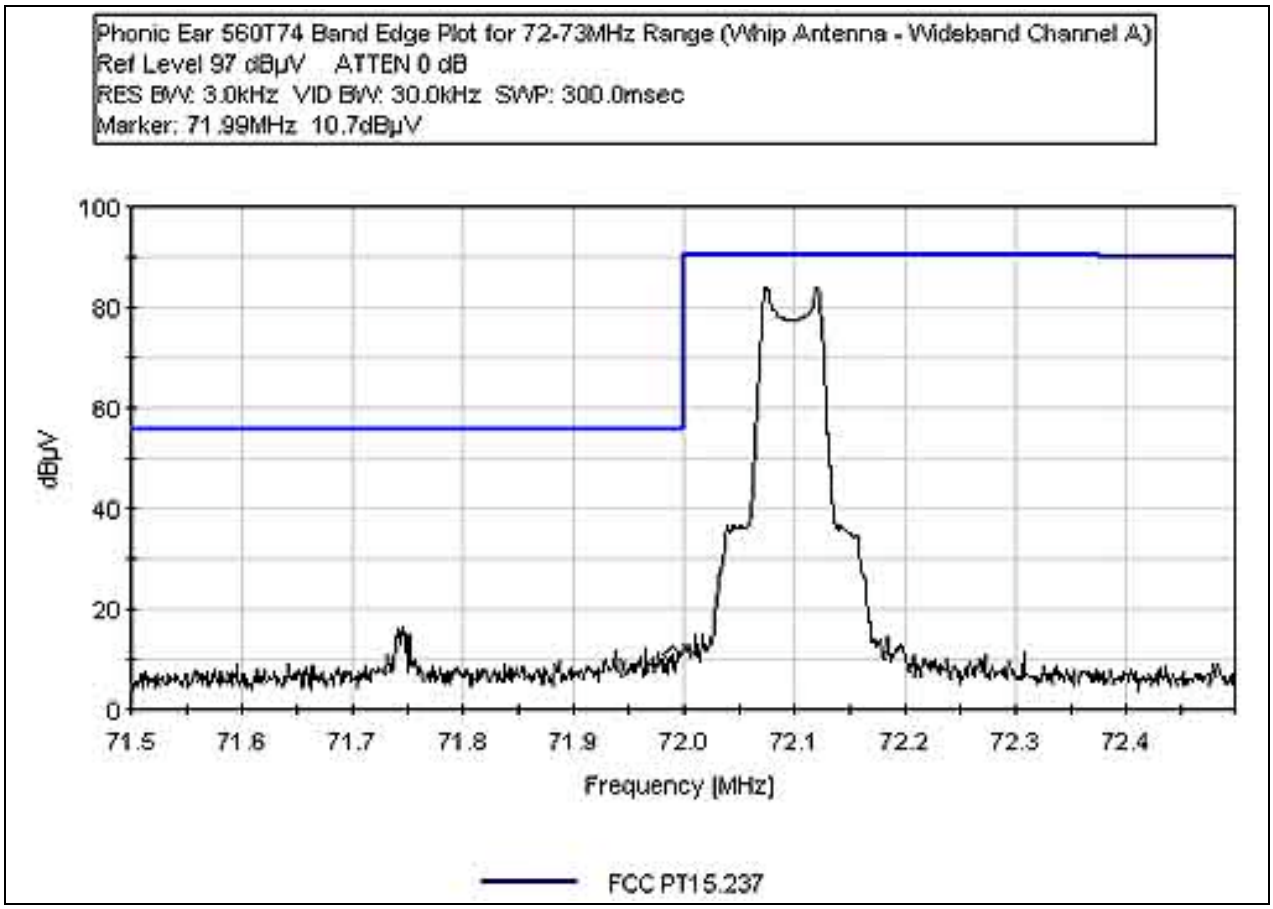
BAND EDGE PLOT 72-73 MHz WHIP ANTENNA - NARROWBAND CHANNEL 32



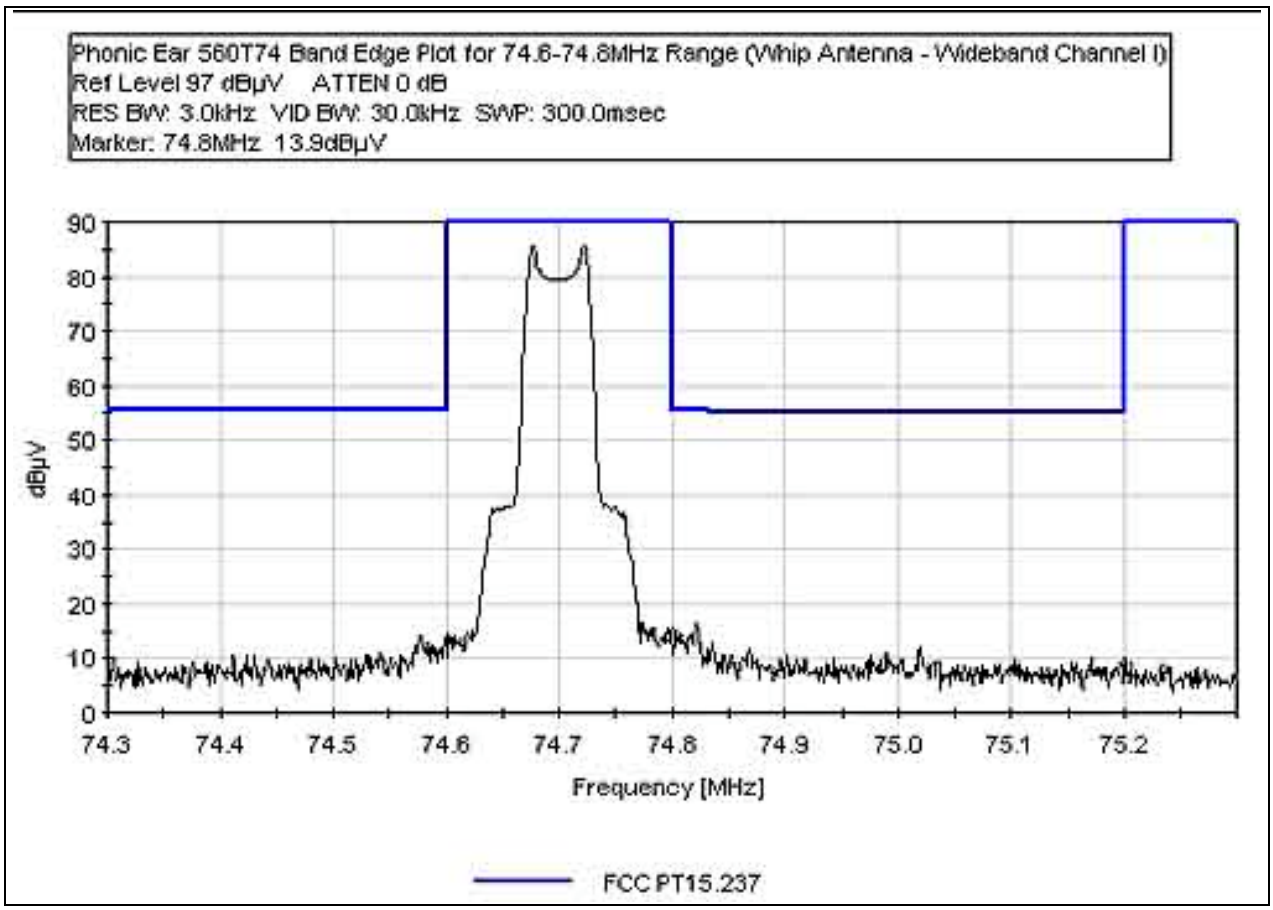
BAND EDGE PLOT 72-73 MHz WHIP ANTENNA - WIDEBAND CHANNEL E HIGH



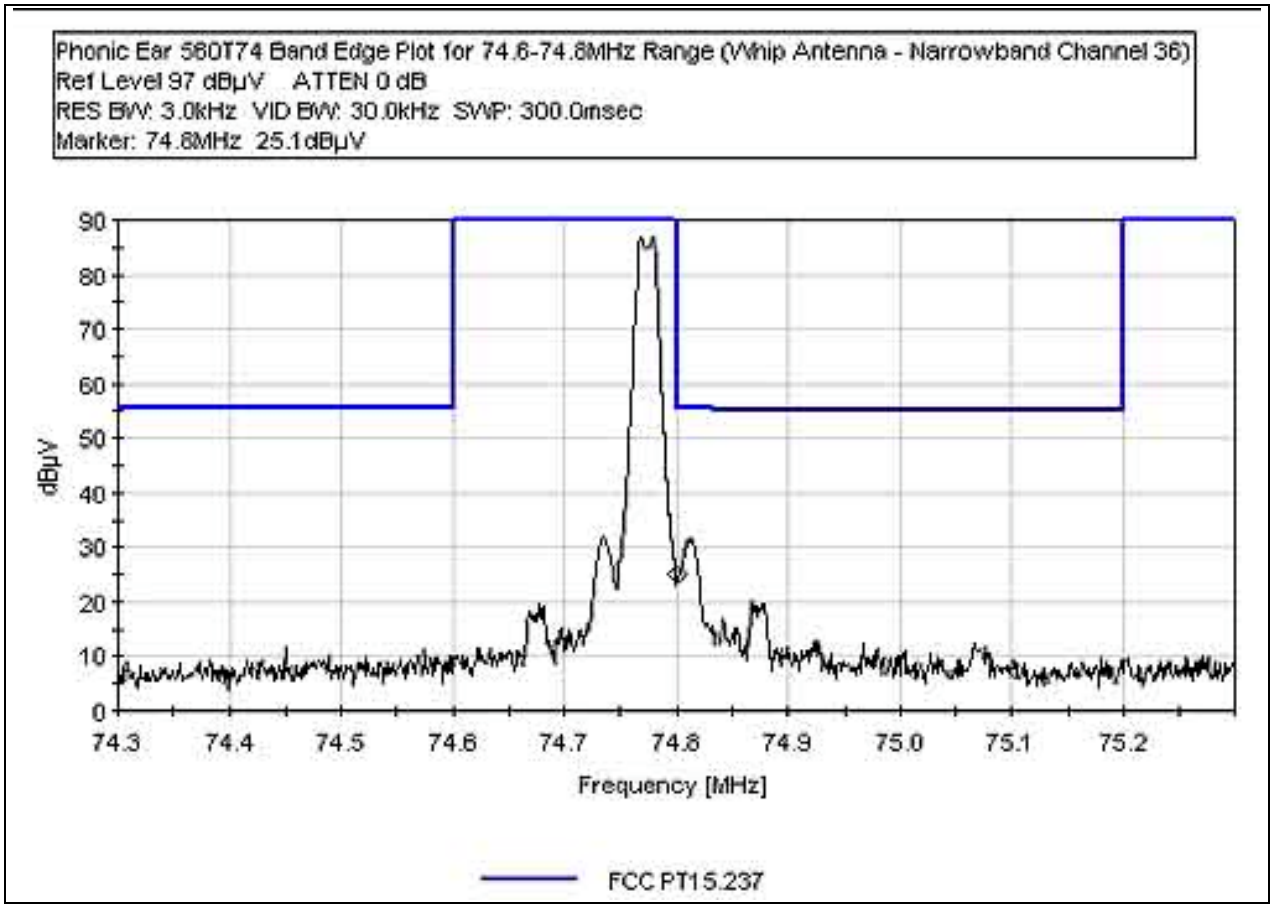
BAND EDGE PLOT 72-73 MHz WHIP ANTENNA - WIDEBAND CHANNEL A LOW



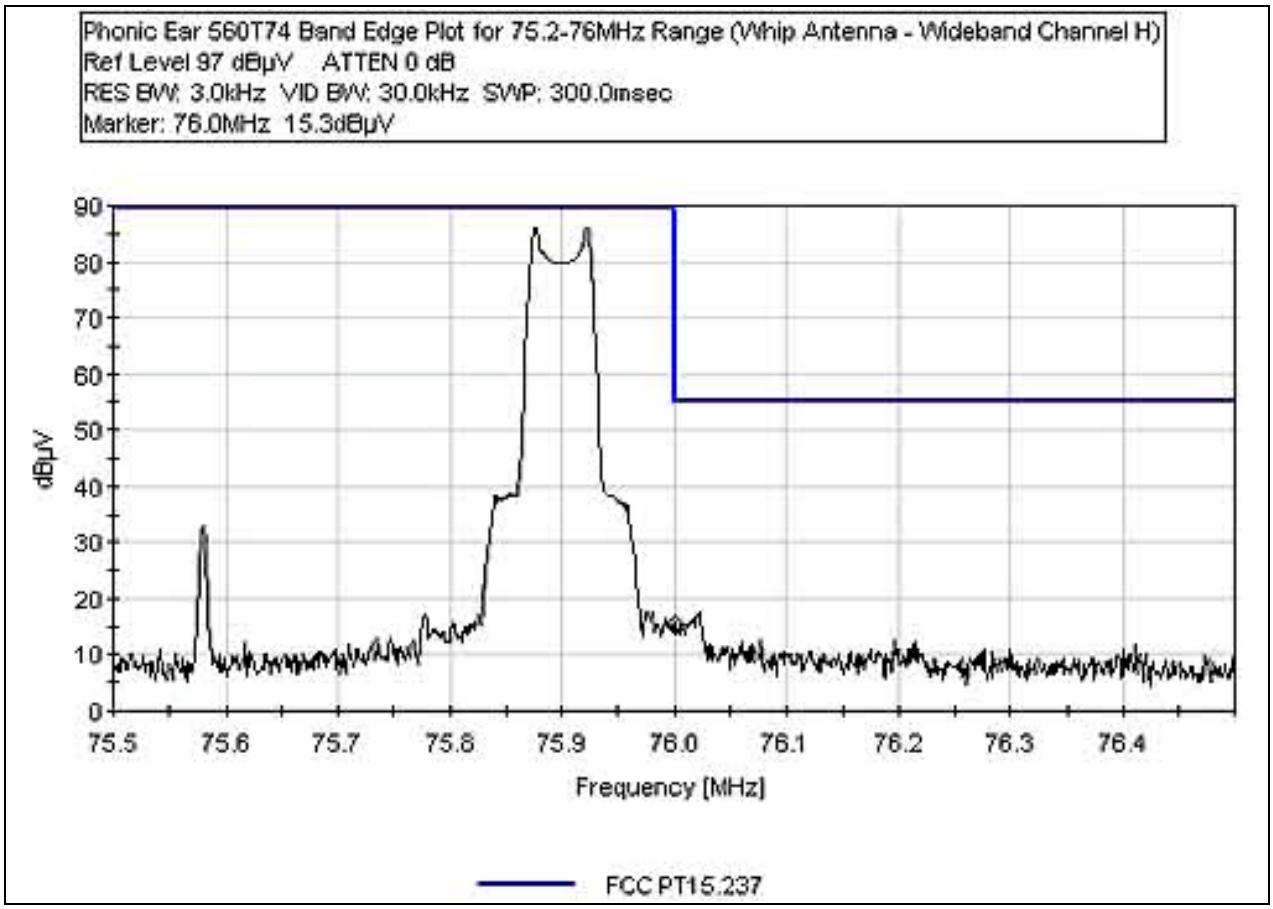
BAND EDGE PLOT 74.6-74.8 MHz WHIP ANTENNA - WIDEBAND CHANNEL 1



BAND EDGE PLOT 74.6-74.8 MHz WHIP ANTENNA - NARROWBAND CHANNEL 36

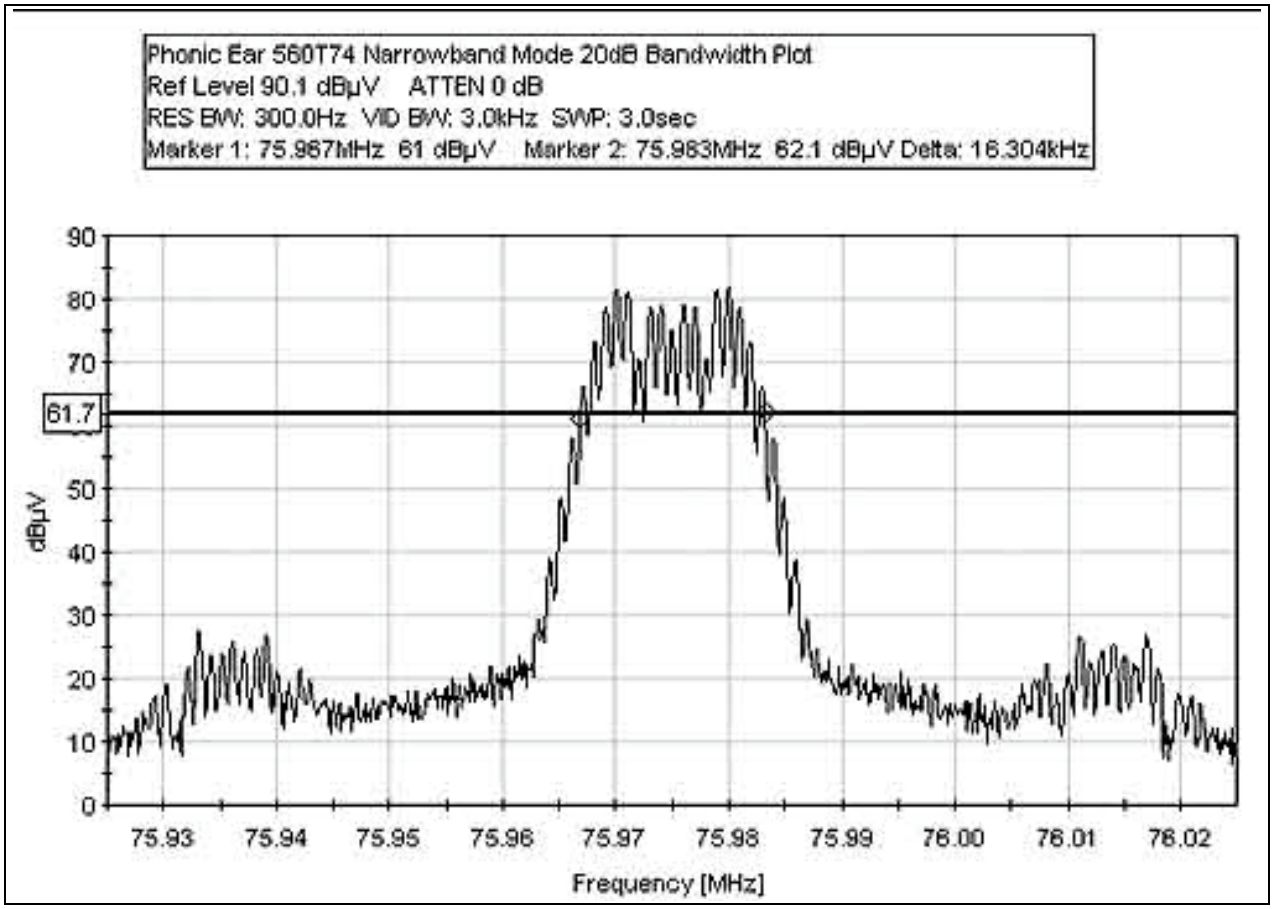


BAND EDGE PLOT 75.2-76 MHz WHIP ANTENNA - WIDEBAND CHANNEL H

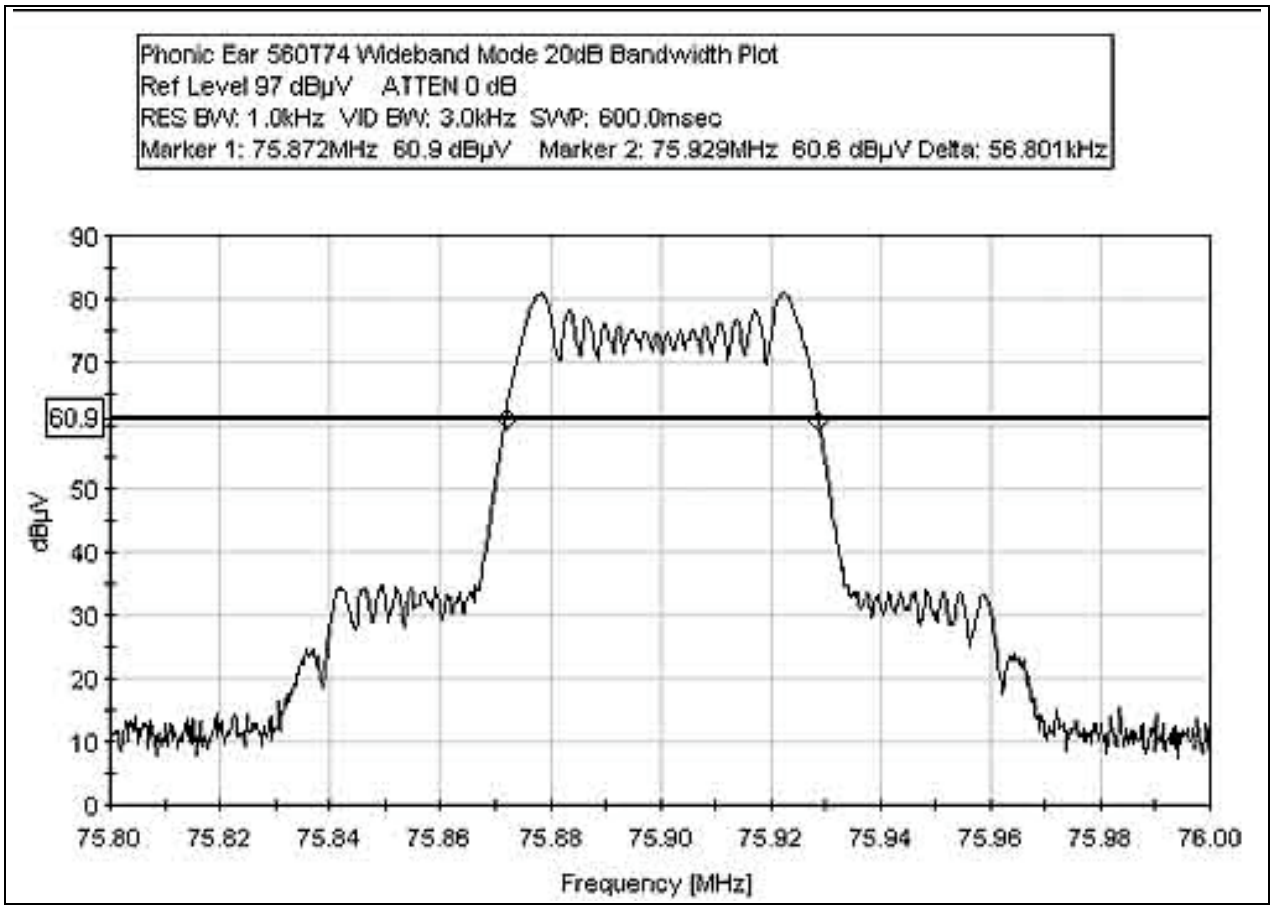


20dB BANDWIDTH PLOT NARROWBAND

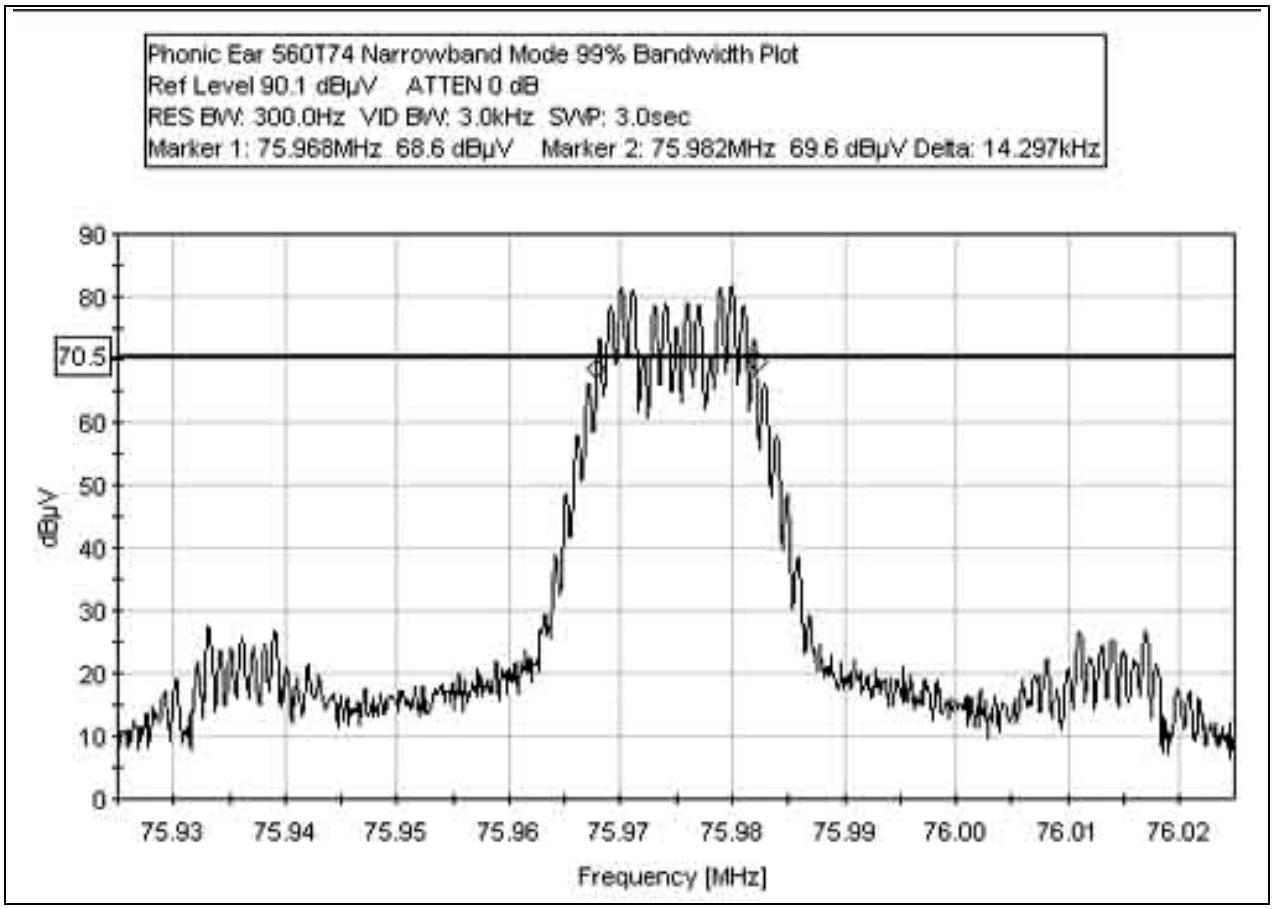
Note: Compliance is demonstrated using the occupied bandwidth plots for reference. For all bandwidth plots, the span of the analyzer is set to 200 kHz or less. As demonstrated by these plots, the carrier lies wholly within the required 200 kHz band.



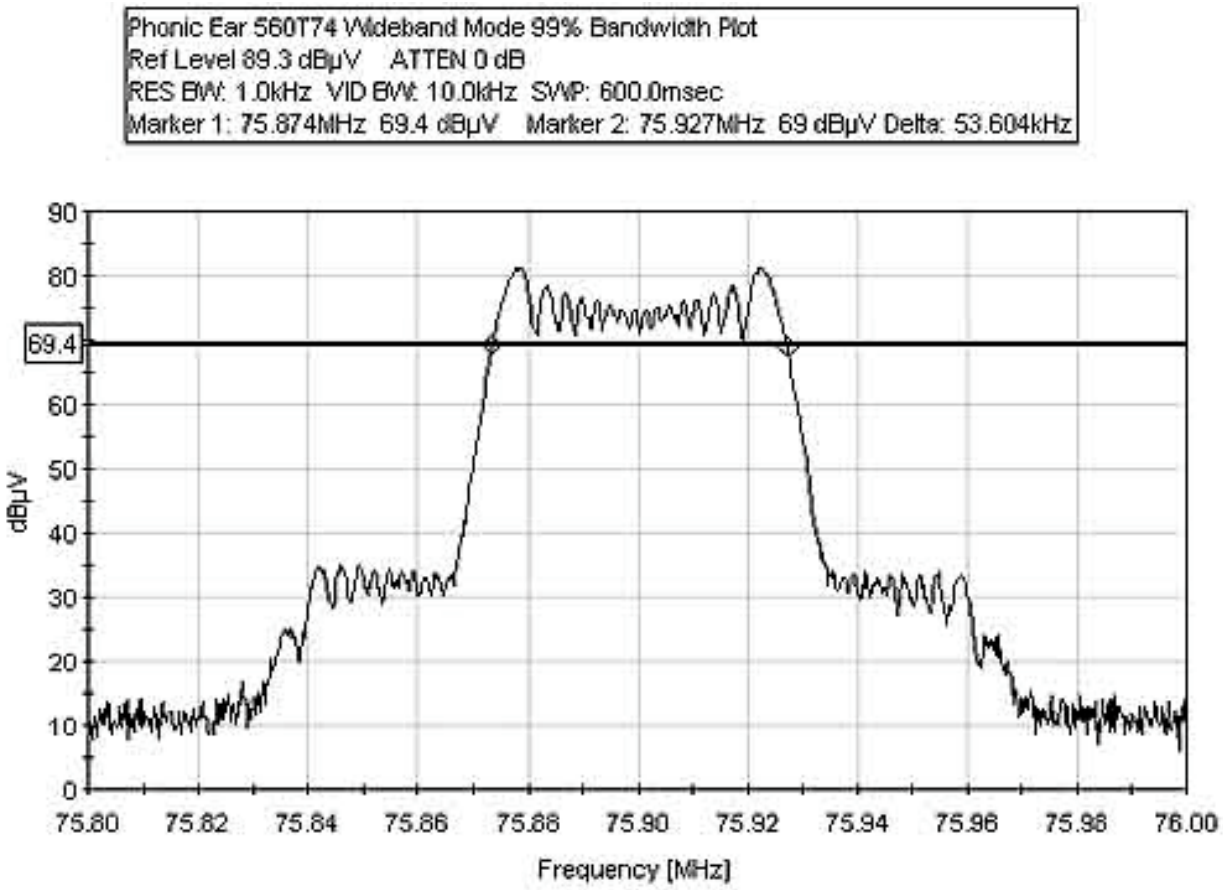
20dB BANDWIDTH PLOT WIDEBAND



99% BANDWIDTH PLOT NARROWBAND



99% BANDWIDTH PLOT WIDEBAND



EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available I/O ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. I/O cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The radiated and conducted emissions data of the EUT was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in Table A.

Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS		
	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Appendix B were used to collect both the radiated and conducted emissions data. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. For frequencies from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. Conducted emissions tests required the use of the FCC type LISNs.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBµV, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the Tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. One wall of the room where the EUT was located has a minimum 2 meter by 2 meter conductive plane. The EUT was mounted on the wooden table 40 cm away from the conductive plane, and 80 cm from any other conductive surface.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were 50 µH-/+50 ohms. Above 150 kHz, a 0.15 µF series capacitor was added in-line prior to connecting the analyzer to restore the proper impedance for the range. A 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 500 kHz, and 500 kHz to 30 MHz. All readings within 20 dB of the limit were recorded, and those within 6 dB of the limit were examined with additional measurements using a slower sweep time.

Radiated Emissions

The EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable and raising and lowering the antenna from one to four meters as needed. The test engineer maximized the readings with respect to the table rotation, antenna height, and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.

APPENDIX A

TEST SETUP PHOTOGRAPHS

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

Mains Conducted Emissions - Front View

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

Mains Conducted Emissions - Side View

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View - Antenna A

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - Antenna A

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View - Antenna B

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - Antenna B

APPENDIX B

TEST EQUIPMENT LIST

15.207

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
LISN, 8028-50-TS-24-BNC	8379276, 280	06/05/2003	06/05/2005	1248 & 1249

15.209 – 10 kHz – 30 MHz

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
HP 85685A RF Preselector	2510A00167	02/24/2003	02/24/2005	00484
EMCO Loop Antenna	1074	05/21/2003	05/21/2005	00226

15.237 Carrier

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
Chase CBL6111C Bilog	2456	12/13/2002	12/13/2004	1991

15.237 30-1000 MHz

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
HP 8447D Preamp	1937A02604	03/07/2003	03/07/2005	00099
Chase CBL6111C Bilog	2456	12/13/2002	12/13/2004	1991
HP 85685A RF Preselector	2510A00167	02/24/2003	02/24/2005	00484

15.237 1-8 GHz

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	12/14/2004	12/14/2006	2010

APPENDIX C:

MEASUREMENT DATA SHEETS

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

Customer:	**Phonic Ear**		
Specification:	**FCC 15.207 - AVE**		
Work Order #:	**82963**	Date:	12/17/2004
Test Type:	**Conducted Emissions**	Time:	11:45:49 AM
Equipment:	**Auditory Assistance Device**	Sequence#:	17
Manufacturer:	Phonic Ear	Tested By:	Mike Wilkinson
Model:	560T74		120V 60Hz
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 32 - 75.975. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 150 kHz - 30 MHz. Temperature: 17ºC, Relative Humidity: 45%. Note: The whip antenna configuration was used for AC conducted emissions as it is the worst case power setting of the EUT.

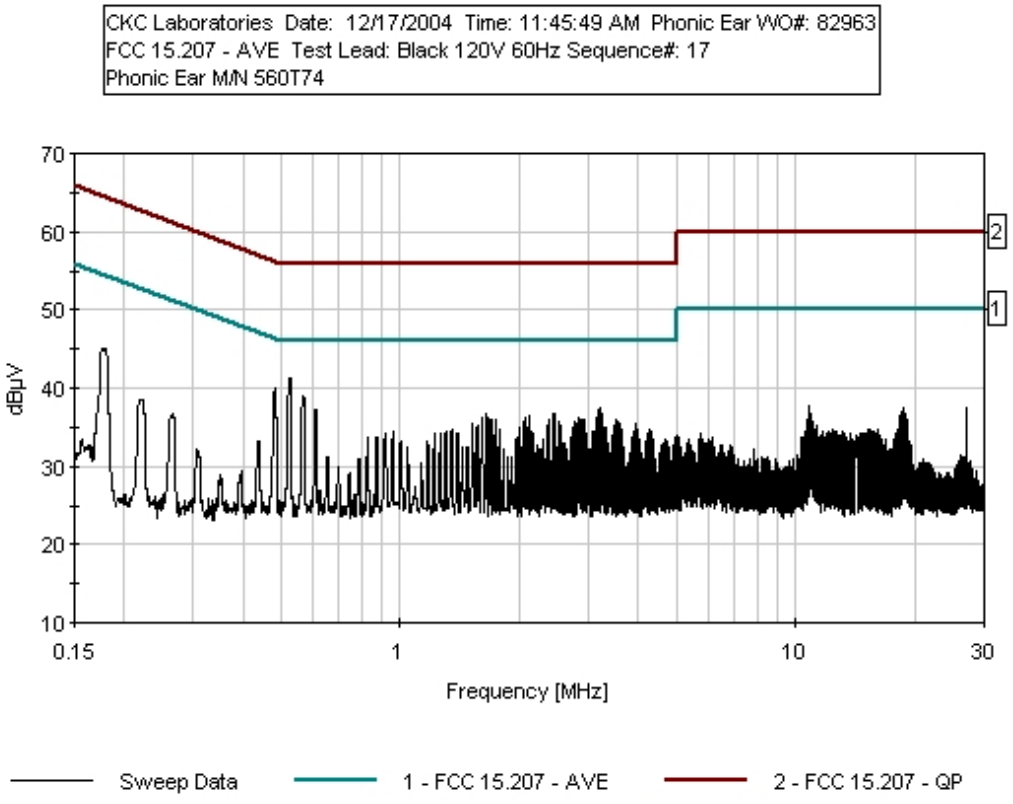
Transducer Legend:

T1=Cable - Internal + cab	T2=LISN Insertion Loss s/n276
T3=HP Filter AN02608	

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	525.235k	40.5	+0.1	+0.3	+0.3		+0.0	41.2	46.0	-4.8	Black
2	481.603k	39.5	+0.1	+0.3	+0.2		+0.0	40.1	46.3	-6.2	Black
3	568.140k	38.5	+0.1	+0.3	+0.2		+0.0	39.1	46.0	-6.9	Black
4	3.208M	36.9	+0.3	+0.3	+0.1		+0.0	37.6	46.0	-8.4	Black
5	611.045k	36.5	+0.1	+0.3	+0.3		+0.0	37.2	46.0	-8.8	Black
6	3.169M	36.5	+0.3	+0.3	+0.1		+0.0	37.2	46.0	-8.8	Black
7	2.429M	36.0	+0.3	+0.4	+0.1		+0.0	36.8	46.0	-9.2	Black
8	1.651M	36.0	+0.2	+0.4	+0.1		+0.0	36.7	46.0	-9.3	Black

9	2.472M	35.9	+0.3	+0.3	+0.1	+0.0	36.6	46.0	-9.4	Black
10	3.250M	35.9	+0.3	+0.3	+0.1	+0.0	36.6	46.0	-9.4	Black
11	2.127M	35.8	+0.2	+0.4	+0.1	+0.0	36.5	46.0	-9.5	Black
12	176.179k	44.1	+0.1	+0.4	+0.5	+0.0	45.1	54.7	-9.6	Black
13	1.613M	35.4	+0.2	+0.4	+0.1	+0.0	36.1	46.0	-9.9	Black
14	2.085M	35.4	+0.2	+0.4	+0.1	+0.0	36.1	46.0	-9.9	Black
15	2.821M	35.4	+0.3	+0.3	+0.1	+0.0	36.1	46.0	-9.9	Black
16	3.127M	35.4	+0.3	+0.3	+0.1	+0.0	36.1	46.0	-9.9	Black
17	1.740M	35.3	+0.2	+0.4	+0.1	+0.0	36.0	46.0	-10.0	Black
18	2.387M	35.2	+0.3	+0.4	+0.1	+0.0	36.0	46.0	-10.0	Black
19	3.514M	35.2	+0.3	+0.4	+0.1	+0.0	36.0	46.0	-10.0	Black
20	2.906M	35.2	+0.3	+0.3	+0.1	+0.0	35.9	46.0	-10.1	Black


CKC Laboratories Date: 12/17/2004 Time: 11:45:49 AM Phonic Ear WO#: 82963
FCC 15.207 - AVE Test Lead: Black 120V 60Hz Sequence#: 17
Phonic Ear M/N 560T74
70
60
50
40
30
20
10
dBµV
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 - AVE
2 - FCC 15.207 - QP

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

Customer:	**Phonic Ear**		
Specification:	**FCC 15.207 - AVE**		
Work Order #:	**82963**	Date:	12/17/2004
Test Type:	**Conducted Emissions**	Time:	11:52:27 AM
Equipment:	**Auditory Assistance Device**	Sequence#:	18
Manufacturer:	Phonic Ear	Tested By:	Mike Wilkinson
Model:	560T74		120V 60Hz
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 32 - 75.975. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 150 kHz - 30 MHz. Temperature: 17ºC, Relative Humidity: 45%.

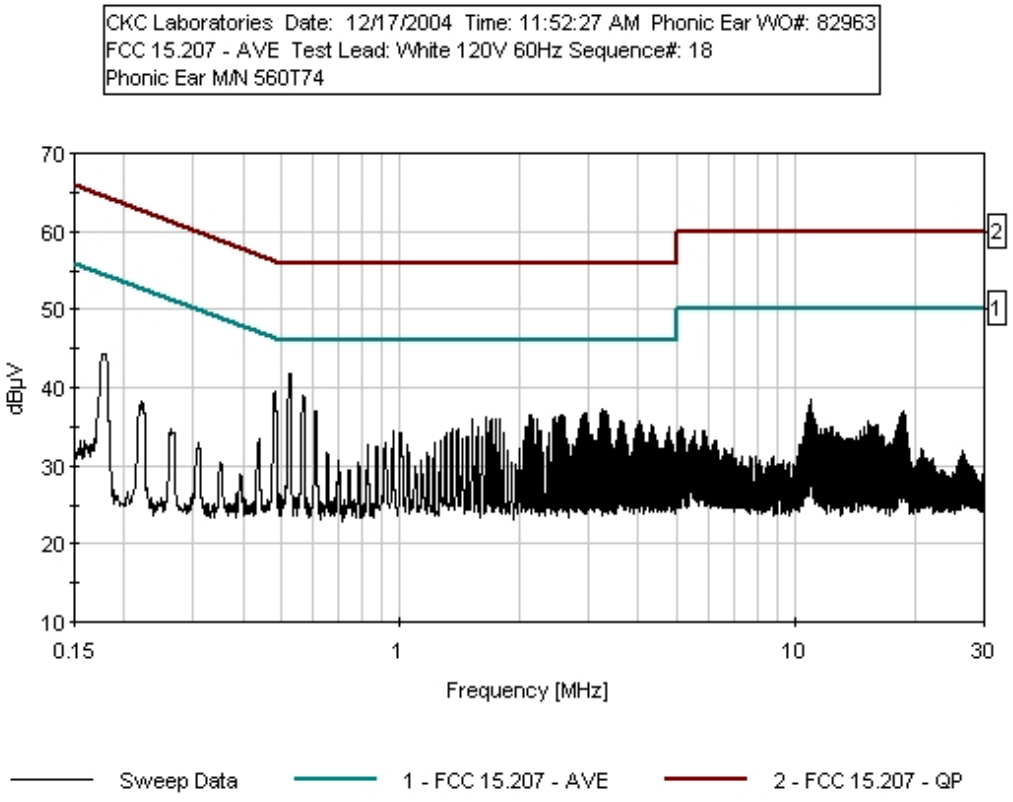
Transducer Legend:

T1=Cable - Internal + cab	T2=LISN Insertion Loss s/n280
T3=HP Filter AN02608	

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	525.235k	41.1	+0.1	+0.3	+0.3		+0.0	41.8	46.0	-4.2	White
2	480.876k	38.9	+0.1	+0.3	+0.2		+0.0	39.5	46.3	-6.8	White
3	570.322k	38.6	+0.1	+0.2	+0.2		+0.0	39.1	46.0	-6.9	White
4	3.254M	36.6	+0.3	+0.3	+0.1		+0.0	37.3	46.0	-8.7	White
5	3.297M	36.4	+0.3	+0.3	+0.1		+0.0	37.1	46.0	-8.9	White
6	611.045k	36.4	+0.1	+0.2	+0.3		+0.0	37.0	46.0	-9.0	White
7	3.212M	36.1	+0.3	+0.3	+0.1		+0.0	36.8	46.0	-9.2	White
8	2.910M	36.0	+0.3	+0.3	+0.1		+0.0	36.7	46.0	-9.3	White
9	2.952M	35.9	+0.3	+0.3	+0.1		+0.0	36.6	46.0	-9.4	White

10	2.127M	35.9	+0.2	+0.3	+0.1	+0.0	36.5	46.0	-9.5	White
11	2.565M	35.8	+0.3	+0.3	+0.1	+0.0	36.5	46.0	-9.5	White
12	3.344M	35.7	+0.3	+0.3	+0.1	+0.0	36.4	46.0	-9.6	White
13	1.651M	35.7	+0.2	+0.3	+0.1	+0.0	36.3	46.0	-9.7	White
14	2.476M	35.6	+0.3	+0.3	+0.1	+0.0	36.3	46.0	-9.7	White
15	2.608M	35.6	+0.3	+0.3	+0.1	+0.0	36.3	46.0	-9.7	White
16	2.519M	35.4	+0.3	+0.3	+0.1	+0.0	36.1	46.0	-9.9	White
17	1.698M	35.4	+0.2	+0.3	+0.1	+0.0	36.0	46.0	-10.0	White
18	1.740M	35.4	+0.2	+0.3	+0.1	+0.0	36.0	46.0	-10.0	White
19	1.783M	35.4	+0.2	+0.3	+0.1	+0.0	36.0	46.0	-10.0	White
20	2.217M	35.4	+0.2	+0.3	+0.1	+0.0	36.0	46.0	-10.0	White


CKC Laboratories Date: 12/17/2004 Time: 11:52:27 AM Phonic Ear WO#: 82963
FCC 15.207 - AVE Test Lead: White 120V 60Hz Sequence#: 18
Phonic Ear M/N 560T74
70
60
50
40
30
20
10
dBµV
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 - AVE
2 - FCC 15.207 - QP

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

Customer: **Phonic Ear**
Specification: **FCC 15.209**
Work Order #: **82963** Date: 12/16/2004
Test Type: **Maximized Emissions** Time: 15:48:32
Equipment: **Auditory Assistance Device** Sequence#: 9
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 10 - 30 MHz. Temperature: 17ºC, Relative Humidity: 45% .

Transducer Legend:

T1=Cable - 10 Meter T2=Mag Loop - Site B - AN 00226 - 9kHz-30M
T3=15.31 3m 40dB/Dec Correction

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	10.660M	22.3	+0.7	+8.9	-40.0		+0.0 40	-8.1	29.5 Channel 36	-37.6	Verti 100
2	10.150M	20.9	+0.7	+9.0	-40.0		+0.0 40	-9.4	29.5 Channel 1	-38.9	Horiz 100
3	10.150M	20.3	+0.7	+9.0	-40.0		+0.0 40	-10.0	29.5 Channel 1	-39.5	Verti 100
4	10.140M	19.6	+0.7	+9.0	-40.0		+0.0 40	-10.7	29.5 Channel 36	-40.2	Horiz 100
5	10.510M	18.8	+0.7	+8.9	-40.0		+0.0 40	-11.6	29.5 Channel 20	-41.1	Horiz 100
6	10.490M	18.7	+0.7	+8.9	-40.0		+0.0 40	-11.7	29.5 Channel 32	-41.2	Verti 100
7	10.490M	18.6	+0.7	+8.9	-40.0		+0.0 40	-11.8	29.5 Channel 32	-41.3	Horiz 100
8	21.440M	19.5	+1.0	+6.7	-40.0		+0.0 40	-12.8	29.5 Channel 20	-42.3	Verti 100
9	21.440M	19.1	+1.0	+6.7	-40.0		+0.0 40	-13.2	29.5 Channel 1	-42.7	Horiz 100

10	20.110M	18.1	+1.0	+7.2	-40.0	+0.0 40	-13.7	29.5 Channel 36	-43.2	Horiz 100
11	21.440M	17.8	+1.0	+6.7	-40.0	+0.0 40	-14.5	29.5 Channel 36	-44.0	Horiz 100
12	21.440M	17.5	+1.0	+6.7	-40.0	+0.0 40	-14.8	29.5 Channel 1	-44.3	Verti 100
13	19.180M	16.6	+1.0	+7.3	-40.0	+0.0 40	-15.1	29.5 Channel 32	-44.6	Verti 100
14	29.080M	18.8	+1.2	+4.3	-40.0	+0.0 40	-15.7	29.5 Channel 20	-45.2	Horiz 100
15	19.180M	15.2	+1.0	+7.3	-40.0	+0.0 40	-16.5	29.5 Channel 32	-46.0	Horiz 100
16	21.400M	14.9	+1.0	+6.7	-40.0	+0.0 40	-17.4	29.5 Channel 36	-46.9	Verti 100
17	20.000M	13.8	+1.0	+7.2	-40.0	+0.0 40	-18.0	29.5 Channel 36	-47.5	Verti 100
18	10.510M	9.9	+0.7	+8.9	-40.0	+0.0 40	-20.5	29.5 Channel 20	-50.0	Verti 100

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

Customer: **Phonic Ear**
Specification: **FCC 15.209**
Work Order #: **82963** Date: 12/17/2004
Test Type: **Maximized Emissions** Time: 11:09:27
Equipment: **Auditory Assistance Device** Sequence#: 16
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

Test Equipment:

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the large area antenna, 8dBi gain. Frequency Range Investigated: 10 - 30 MHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Cable - 10 Meter T2=Mag Loop - Site B - AN 00226 - 9kHz-30M
T3=15.31 3m 40dB/Dec Correction

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	10.113M	26.8	+0.7	+9.0	-40.0		+0.0 289	-3.5	29.5 Channel 20	-33.0	Horiz 101
2	10.000M	24.3	+0.7	+9.0	-40.0		+0.0 289	-6.0	29.5 Channel 1	-35.5	Verti 101
3	10.000M	22.6	+0.7	+9.0	-40.0		+0.0 289	-7.7	29.5 Channel 36	-37.2	Verti 101
4	14.763M	20.6	+0.9	+8.2	-40.0		+0.0 289	-10.3	29.5 Channel 32	-39.8	Verti 101
5	21.400M	21.3	+1.0	+6.7	-40.0		+0.0 289	-11.0	29.5 Channel 36	-40.5	Verti 101
6	21.400M	20.7	+1.0	+6.7	-40.0		+0.0 289	-11.6	29.5 Channel 20	-41.1	Verti 101
7	21.400M	19.5	+1.0	+6.7	-40.0		+0.0 289	-12.8	29.5 Channel 1	-42.3	Horiz 101
8	20.000M	16.9	+1.0	+7.2	-40.0		+0.0 289	-14.9	29.5 Channel 20	-44.4	Horiz 101

9	20.000M	16.6	+1.0	+7.2	-40.0	+0.0 289	-15.2	29.5 Channel 36	-44.7	Horiz 101
10	20.000M	16.4	+1.0	+7.2	-40.0	+0.0 289	-15.4	29.5 Channel 32	-44.9	Verti 101
11	29.995M	17.2	+1.2	+4.0	-40.0	+0.0 289	-17.6	29.5 Channel 20	-47.1	Verti 101
12	25.000M	15.3	+1.1	+5.7	-40.0	+0.0 289	-17.9	29.5 Channel 32	-47.4	Horiz 101
13	24.719M	12.1	+1.1	+5.8	-40.0	+0.0 289	-21.0	29.5 Channel 36	-50.5	Horiz 101

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

Customer: **Phonic Ear**
Specification: **FCC 15.209**
Work Order #: **82963** Date: 12/16/2004
Test Type: **Maximized Emissions** Time: 16:08:39
Equipment: **Auditory Assistance Device** Sequence#: 10
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 10 - 30 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Cable - 10 Meter T2=Mag Loop - Site B - AN 00226 - 9kHz-30M
T3=15.31 3m 40dB/Dec Correction

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	10.130M	22.2	+0.7	+9.0	-40.0		+0.0 40	-8.1	29.5 Channel A	-37.6	Verti 100
2	10.130M	20.6	+0.7	+9.0	-40.0		+0.0 40	-9.7	29.5 Channel A	-39.2	Horiz 100
3	10.270M	20.4	+0.7	+8.9	-40.0		+0.0 40	-10.0	29.5 Channel I	-39.5	Verti 100
4	10.450M	20.3	+0.7	+8.9	-40.0		+0.0 40	-10.1	29.5 Channel I	-39.6	Horiz 100
5	10.530M	19.3	+0.7	+8.9	-40.0		+0.0 40	-11.1	29.5 Channel H	-40.6	Verti 100
6	10.450M	19.2	+0.7	+8.9	-40.0		+0.0 40	-11.2	29.5 Channel H	-40.7	Horiz 100
7	21.530M	20.6	+1.0	+6.7	-40.0		+0.0 40	-11.7	29.5 Channel A	-41.2	Horiz 100
8	10.310M	18.6	+0.7	+8.9	-40.0		+0.0 40	-11.8	29.5 Channel E	-41.3	Verti 100
9	21.530M	20.4	+1.0	+6.7	-40.0		+0.0 40	-11.9	29.5 Channel A	-41.4	Verti 100

10	10.250M	17.9	+0.7	+9.0	-40.0	+0.0 40	-12.4	29.5 Channel E	-41.9	Horiz 100
11	21.930M	19.0	+1.0	+6.6	-40.0	+0.0 40	-13.4	29.5 Channel H	-42.9	Verti 100
12	21.850M	18.4	+1.0	+6.6	-40.0	+0.0 40	-14.0	29.5 Channel H	-43.5	Horiz 100
13	20.130M	16.7	+1.0	+7.2	-40.0	+0.0 40	-15.1	29.5 Channel E	-44.6	Verti 100
14	21.850M	17.1	+1.0	+6.6	-40.0	+0.0 40	-15.3	29.5 Channel I	-44.8	Verti 100
15	20.130M	16.4	+1.0	+7.2	-40.0	+0.0 40	-15.4	29.5 Channel E	-44.9	Horiz 100
16	20.130M	16.3	+1.0	+7.2	-40.0	+0.0 40	-15.5	29.5 Channel A	-45.0	Verti 100
17	20.130M	16.0	+1.0	+7.2	-40.0	+0.0 40	-15.8	29.5 Channel A	-45.3	Horiz 100
18	20.450M	15.0	+1.0	+7.1	-40.0	+0.0 40	-16.9	29.5 Channel I	-46.4	Horiz 100

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

Customer: **Phonic Ear**
Specification: **FCC 15.209**
Work Order #: **82963** Date: 12/17/2004
Test Type: **Maximized Emissions** Time: 10:49:15
Equipment: **Auditory Assistance Device** Sequence#: 15
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is the large area antenna, 8dBi gain. Frequency Range Investigated: 10 - 30 MHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Cable - 10 Meter T2=Mag Loop - Site B - AN 00226 - 9kHz-30M
T3=15.31 3m 40dB/Dec Correction

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	10.000M	29.2	+0.7	+9.0	-40.0		+0.0 289	-1.1	29.5 Channel A	-30.6	Horiz 101
2	10.000M	25.4	+0.7	+9.0	-40.0		+0.0 289	-4.9	29.5 Channel E	-34.4	Horiz 101
3	21.400M	26.7	+1.0	+6.7	-40.0		+0.0 289	-5.6	29.5 Channel E	-35.1	Verti 101
4	10.174M	24.3	+0.7	+9.0	-40.0		+0.0 289	-6.0	29.5 Channel A	-35.5	Verti 101
5	10.000M	23.5	+0.7	+9.0	-40.0		+0.0 289	-6.8	29.5	-36.3	Verti 101
6	21.400M	25.0	+1.0	+6.7	-40.0		+0.0 289	-7.3	29.5	-36.8	Verti 101
7	20.000M	21.4	+1.0	+7.2	-40.0		+0.0 289	-10.4	29.5 Channel A	-39.9	Horiz 101

8	10.119M	18.0	+0.7	+9.0	-40.0	+0.0 289	-12.3	29.5 Channel H	-41.8	Horiz 101
9	25.000M	20.4	+1.1	+5.7	-40.0	+0.0 289	-12.8	29.5 Channel E	-42.3	Verti 101
10	20.000M	18.6	+1.0	+7.2	-40.0	+0.0 289	-13.2	29.5 Channel H	-42.7	Verti 101
11	21.400M	18.9	+1.0	+6.7	-40.0	+0.0 289	-13.4	29.5	-42.9	Horiz 101
12	25.000M	12.6	+1.1	+5.7	-40.0	+0.0 289	-20.6	29.5 Channel H	-50.1	Verti 101

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/14/2004
Test Type: **Maximized Emissions** Time: 11:03:54
Equipment: **Auditory Assistance Device** Sequence#: 4
Manufacturer: Phonic Ear Tested By: Randal Clark
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is large area antenna, 8dBi gain. Frequency Range Investigated: Carrier. Temperature: 17ºC, Relative Humidity: 45%. All reported readings are in terms of average measurements as defined by 15.237.

Transducer Legend:

T1=Bilog Site B	T2=Cable - 10 Meter

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	74.768M	89.9	+6.2	+1.9			+0.0 207	98.0	98.1 Channel 36	-0.1	Verti 183
2	72.964M	90.1	+6.0	+1.9			+0.0 221	98.0	98.1 Channel 20	-0.1	Verti 170
3	72.016M	90.0	+5.9	+1.9			+0.0 135	97.8	98.1 Channel 1	-0.3	Verti 186
4	75.968M	89.3	+6.3	+2.0			+0.0 108	97.6	98.1 Channel 32	-0.5	Verti 175
5	75.970M	78.3	+6.3	+2.0			+0.0 155	86.6	98.1 Channel 32	-11.5	Horiz 270
6	74.768M	74.9	+6.2	+1.9			+0.0 358	83.0	98.1 Channel 36	-15.1	Horiz 298
7	72.967M	69.3	+6.0	+1.9			+0.0 236	77.2	98.1 Channel 20	-20.9	Horiz 269
8	72.018M	68.3	+5.9	+1.9			+0.0 184	76.1	98.1 Channel 1	-22.0	Horiz 234

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

Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/14/2004
Test Type:	**Maximized Emissions**	Time:	16:11:53
Equipment:	**Auditory Assistance Device**	Sequence#:	6
Manufacturer:	Phonic Ear	Tested By:	Randal Clark
Model:	560T74		
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: Carrier. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Bilog Site B	T2=Cable - 10 Meter

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	74.750M	88.3	+6.2	+1.9			+0.0 186	96.4	98.1 Channel 36	-1.7	Verti 141
2	75.974M	88.0	+6.3	+2.0			+0.0 211	96.3	98.1 Channel 32	-1.8	Verti 121
3	72.053M	86.9	+5.9	+1.9			+0.0 311	94.7	98.1 Channel 01	-3.4	Verti 214
4	72.981M	86.4	+6.0	+1.9			+0.0 205	94.3	98.1 Channel 20	-3.8	Verti 246
5	72.056M	85.0	+5.9	+1.9			+0.0 360	92.8	98.1 Channel 01	-5.3	Horiz 262
6	75.964M	84.2	+6.3	+2.0			+0.0 121	92.5	98.1 Channel 32	-5.6	Horiz 242
7	72.979M	84.4	+6.0	+1.9			+0.0 164	92.3	98.1 Channel 20	-5.8	Horiz 267
8	74.778M	84.2	+6.2	+1.9			+0.0 141	92.3	98.1 Channel 36	-5.8	Horiz 260

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

Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/14/2004
Test Type:	**Maximized Emissions**	Time:	11:44:56
Equipment:	**Auditory Assistance Device**	Sequence#:	1
Manufacturer:	Phonic Ear	Tested By:	Randal Clark
Model:	560T74		
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is large area antenna, 8dBi gain. Frequency Range Investigated: Carrier. Temperature: 17ºC, Relative Humidity: 45%. All reported readings are in terms of average measurements as defined by 15.237.

Transducer Legend:

T1=Bilog Site B	T2=Cable - 10 Meter

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	72.900M	90.1	+6.0	+1.9			+0.0 256	98.0	98.1 Channel E	-0.1	Verti 176
2	74.700M	89.9	+6.2	+1.9			+0.0 170	98.0	98.1 Channel I	-0.1	Verti 245
3	72.077M	90.1	+5.9	+1.9			+0.0 214	97.9	98.1 Channel A	-0.2	Verti 161
4	75.900M	89.5	+6.3	+2.0			+0.0 205	97.8	98.1 Channel H	-0.3	Verti 169
5	75.902M	78.8	+6.3	+2.0			+0.0 178	87.1	98.1 Channel H	-11.0	Horiz 187
6	74.697M	76.7	+6.2	+1.9			+0.0 182	84.8	98.1 Channel I	-13.3	Horiz 294
7	72.900M	76.0	+6.0	+1.9			+0.0 199	83.9	98.1 Channel E	-14.2	Horiz 300
8	72.109M	71.3	+5.9	+1.9			+0.0 168	79.1	98.1 Channel A	-19.0	Horiz 261

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/14/2004
Test Type: **Maximized Emissions** Time: 15:19:20
Equipment: **Auditory Assistance Device** Sequence#: 5
Manufacturer: Phonic Ear Tested By: Randal Clark
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: Carrier. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Bilog Site B	T2=Cable - 10 Meter

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	75.928M	88.1	+6.3	+2.0			+0.0 203	96.4	98.1 Channel H	-1.7	Verti 125
2	74.750M	88.0	+6.2	+1.9			+0.0 216	96.1	98.1 Channel I	-2.0	Verti 139
3	72.974M	86.9	+6.0	+1.9			+0.0	94.8	98.1 Channel E	-3.3	Verti
4	72.074M	85.9	+5.9	+1.9			+0.0 357	93.7	98.1 Channel A	-4.4	Verti 159
5	74.720M	84.9	+6.2	+1.9			+0.0 336	93.0	98.1 Channel I	-5.1	Horiz 266
6	72.100M	84.5	+5.9	+1.9			+0.0 148	92.3	98.1 Channel A	-5.8	Horiz 229
7	72.934M	84.2	+6.0	+1.9			+0.0 137	92.1	98.1 Channel E	-6.0	Horiz 306
8	75.910M	83.5	+6.3	+2.0			+0.0 330	91.8	98.1 Channel H	-6.3	Horiz 227

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

Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/14/2004
Test Type:	**Maximized Emissions**	Time:	10:20:57
Equipment:	**Auditory Assistance Device**	Sequence#:	3
Manufacturer:	Phonic Ear	Tested By:	Randal Clark
Model:	560T74		
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is large area antenna, 8dBi gain. Frequency Range Investigated: 30-1000 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 604	T2=Bilog Site B
T3=Cable - 10 Meter	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	149.598M	52.7	-27.0	+10.4	+2.8		+0.0 218	38.9	63.5 Channel 36	-24.6	Verti 125
2	146.026M	52.2	-27.0	+10.6	+2.8		+0.0 151	38.6	63.5 Channel 20	-24.9	Verti 137
3	152.018M	50.3	-27.0	+10.3	+2.8		+0.0 119	36.4	63.5 Channel 32	-27.1	Verti 165
4	144.119M	47.0	-27.0	+10.7	+2.7		+0.0 115	33.4	63.5 Channel 1	-30.1	Verti 148
5	224.247M	42.5	-26.5	+10.2	+3.4		+0.0 359	29.6	63.5 Channel 36	-33.9	Verti 266
6	292.100M	37.7	-26.5	+12.7	+4.0		+0.0 360	27.9	63.5 Channel 20	-35.6	Verti 163
7	227.993M	39.8	-26.5	+10.5	+3.4		+0.0	27.2	63.5 Channel 32	-36.3	Verti 165

8	144.172M	39.7	-27.0	+10.7	+2.7	+0.0 4	26.1	63.5 Channel 1	-37.4	Horiz 328
9	146.030M	38.9	-27.0	+10.6	+2.8	+0.0 54	25.3	63.5 Channel 20	-38.2	Horiz 341
10	149.607M	38.4	-27.0	+10.4	+2.8	+0.0 123	24.6	63.5 Channel 36	-38.9	Horiz 266
11	152.017M	38.1	-27.0	+10.3	+2.8	+0.0 220	24.2	63.5 Channel 32	-39.3	Horiz 213

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/16/2004
Test Type: **Maximized Emissions** Time: 14:56:08
Equipment: **Auditory Assistance Device** Sequence#: 8
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 30-1000 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 604	T2=Bilog Site B
T3=Cable - 10 Meter	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	303.991M	50.2	-26.5	+12.9	+4.1		+0.0	40.7	63.5 Channel 32	-22.8	Verti 157
2	288.316M	47.5	-26.5	+12.6	+4.0		+0.0 2	37.6	63.5 Channel 1	-25.9	Verti 132
3	144.141M	50.7	-27.0	+10.7	+2.7		+0.0 109	37.1	63.5 Channel 1	-26.4	Horiz 343
4	144.136M	50.4	-27.0	+10.7	+2.7		+0.0 2	36.8	63.5 Channel 1	-26.7	Verti 132
5	146.039M	50.1	-27.0	+10.6	+2.8		+0.0 140	36.5	63.5 Channel 20	-27.0	Horiz 295
6	152.038M	49.9	-27.0	+10.3	+2.8		+0.0	36.0	63.5 Channel 32	-27.5	Verti 157
7	149.638M	48.9	-27.0	+10.4	+2.8		+0.0 8	35.1	63.5 Channel 36	-28.4	Verti 119

8	149.642M	48.7	-27.0	+10.4	+2.8	+0.077	34.9	63.5 Channel 36	-28.6	Horiz 398
9	219.039M	48.0	-26.5	+9.8	+3.4	+0.140	34.7	63.5 Channel 20	-28.8	Horiz 295
10	146.039M	47.9	-27.0	+10.6	+2.8	+0.011	34.3	63.5 Channel 20	-29.2	Verti 118
11	152.038M	47.6	-27.0	+10.3	+2.8	+0.084	33.7	63.5 Channel 32	-29.8	Horiz 317

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

Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/14/2004
Test Type:	**Maximized Emissions**	Time:	09:25:21
Equipment:	**Auditory Assistance Device**	Sequence#:	2
Manufacturer:	Phonic Ear	Tested By:	Randal Clark
Model:	560T74		
S/N:	25		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is large area antenna, 8dBi gain. Frequency Range Investigated: 30-1000 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 604	T2=Bilog Site B
T3=Cable - 10 Meter	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	149.496M	51.4	-27.0	+10.4	+2.8		+0.0 186	37.6	63.5 Channel I	-25.9	Verti 156
2	144.220M	48.4	-27.0	+10.7	+2.7		+0.0 209	34.8	63.5 Channel A	-28.7	Verti 152
3	145.787M	48.0	-27.0	+10.6	+2.8		+0.0 203	34.4	63.5 Channel E	-29.1	Verti 171
4	151.870M	47.9	-27.0	+10.3	+2.8		+0.0 268	34.0	63.5 Channel H	-29.5	Verti 104
5	298.896M	39.6	-26.5	+12.8	+4.1		+0.0	30.0	63.5 Channel I (Noise Floor)	-33.5	Verti 183
6	218.599M	38.8	-26.5	+9.8	+3.4		+0.0 357	25.5	63.5 Channel E	-38.0	Horiz 281
7	145.789M	38.5	-27.0	+10.6	+2.8		+0.0 4	24.9	63.5 Channel E	-38.6	Horiz 281
8	149.496M	38.1	-27.0	+10.4	+2.8		+0.0	24.3	63.5 Channel I	-39.2	Horiz 263
9	218.638M	37.4	-26.5	+9.8	+3.4		+0.0 221	24.1	63.5 Channel E	-39.4	Verti 173

Test Location:	CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)		
Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/16/2004
Test Type:	**Maximized Emissions**	Time:	13:49:03
Equipment:	**Auditory Assistance Device**	Sequence#:	7
Manufacturer:	Phonic Ear	Tested By:	Mike Wilkinson
Model:	560T74	S/N:	25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 30-1000 MHz. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 604	T2=Bilog Site B
T3=Cable - 10 Meter	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	144.267M	51.8	-27.0	+10.7	+2.7		+0.0 166	38.2	63.5 Channel A	-25.3	Verti 104
2	224.354M	50.8	-26.5	+10.2	+3.4		+0.0 90	37.9	63.5 Channel I	-25.6	Horiz 343
3	144.294M	51.0	-27.0	+10.7	+2.7		+0.0 21	37.4	63.5 Channel A	-26.1	Horiz 100
4	149.574M	50.4	-27.0	+10.4	+2.8		+0.0 14	36.6	63.5 Channel I	-26.9	Verti 122
5	145.902M	50.2	-27.0	+10.6	+2.8		+0.0 90	36.6	63.5 Channel E	-26.9	Horiz 372
6	149.562M	50.0	-27.0	+10.4	+2.8		+0.0 90	36.2	63.5 Channel I	-27.3	Horiz 343
7	145.934M	49.4	-27.0	+10.6	+2.8		+0.0	35.8	63.5 Channel E	-27.7	Verti 104
8	224.354M	48.5	-26.5	+10.2	+3.4		+0.0 14	35.6	63.5 Channel I	-27.9	Verti 122
9	151.982M	47.9	-27.0	+10.3	+2.8		+0.0 90	34.0	63.5 Channel H	-29.5	Horiz 372
10	151.982M	46.9	-27.0	+10.3	+2.8		+0.0 4	33.0	63.5 Channel H	-30.5	Verti 100

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/17/2004
Test Type: **Maximized Emissions** Time: 09:16:17
Equipment: **Auditory Assistance Device** Sequence#: 12
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 1.0 - 8.0 GHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable 35' Blue SMA CKC P1352	T4=Cable - 3 Meter to bulkhead

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	6000.000M	38.2	-34.7	+34.1	+9.1	+8.2	+0.0	54.9	63.5 Channel 32	-8.6	Verti 152
2	8000.000M Ave	31.9	-35.2	+36.7	+11.0	+9.7	+0.0 166	54.1	63.5 Channel 1	-9.4	Horiz 128
3	5000.000M	39.3	-34.3	+33.4	+8.1	+7.4	+0.0 166	53.9	63.5 Channel 1	-9.6	Verti 128
4	7000.000M Ave	32.3	-35.2	+35.3	+10.0	+9.3	+0.0 79	51.7	63.5 Channel 20	-11.8	Verti 152
5	3000.000M	40.2	-34.3	+30.1	+5.9	+5.5	+0.0 79	47.4	63.5 Channel 20	-16.1	Horiz 152
6	3500.000M	36.4	-34.8	+30.8	+6.5	+6.0	+0.0 23	44.9	63.5 Channel 36	-18.6	Horiz 100

7	2500.000M	40.6	-34.5	+28.5	+5.3	+5.0	+0.0	44.9	63.5 Channel 32	-18.6	Horiz 152
8	2000.000M	40.8	-35.0	+27.2	+4.6	+4.4	+0.0 79	42.0	63.5 Channel 20	-21.5	Verti 152
9	1000.024M	43.9	-36.0	+24.2	+3.1	+3.1	+0.0 166	38.3	63.5 Channel 1	-25.2	Horiz 128
10	1200.000M	41.3	-35.6	+24.5	+3.5	+3.4	+0.0 23	37.1	63.5 Channel 36	-26.4	Verti 100

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/17/2004
Test Type: **Maximized Emissions** Time: 09:55:15
Equipment: **Auditory Assistance Device** Sequence#: 13
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Narrowband Channels: 01 - 72.025 20 - 72.975 32 - 75.975 36 - 74.775. Transmit antenna is the large area antenna, 8dBi gain. Frequency Range Investigated: 1.0 - 8.0 GHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable 35' Blue SMA CKC P1352	T4=Cable - 3 Meter to bulkhead

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	5000.000M	41.0	-34.3	+33.4	+8.1	+7.4	+0.0 112	55.6	63.5 Channel 32	-7.9	Verti 152
2	8000.000M Ave	31.7	-35.2	+36.7	+11.0	+9.7	+0.0 3	53.9	63.5 Channel 36	-9.6	Verti 180
3	5000.000M	38.4	-34.3	+33.4	+8.1	+7.4	+0.0 112	53.0	63.5 Channel 20	-10.5	Verti 152
4	4000.000M	39.6	-34.0	+32.5	+7.0	+6.7	+0.0 3	51.8	63.5 Channel 36	-11.7	Verti 180
5	7000.000M Ave	32.0	-35.2	+35.3	+10.0	+9.3	+0.0 112	51.4	63.5 Channel 1	-12.1	Horiz 152
6	3000.000M	40.6	-34.3	+30.1	+5.9	+5.5	+0.0 112	47.8	63.5 Channel 20	-15.7	Horiz 152
7	3500.000M	37.5	-34.8	+30.8	+6.5	+6.0	+0.0 112	46.0	63.5 Channel 1	-17.5	Verti 152

8	2000.000M	39.5	-35.0	+27.2	+4.6	+4.4	+0.0 112	40.7	63.5 Channel 20	-22.8	Horiz 152
9	1200.000M	42.4	-35.6	+24.5	+3.5	+3.4	+0.0 112	38.2	63.5 Channel 1	-25.3	Verti 152
10	1500.000M	40.5	-35.2	+24.9	+4.0	+3.8	+0.0 112	38.0	63.5 Channel 32	-25.5	Verti 152
11	5998.000M	21.0	-34.7	+34.1	+9.1	+8.2	+0.0 112	37.7	63.5 Channel 32	-25.8	Horiz 152
12	1000.600M	43.0	-36.0	+24.2	+3.1	+3.1	+0.0 3	37.4	63.5 Channel 36	-26.1	Horiz 180

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

Customer: **Phonic Ear**
Specification: **FCC PT15.237**
Work Order #: **82963** Date: 12/17/2004
Test Type: **Maximized Emissions** Time: 09:01:01
Equipment: **Auditory Assistance Device** Sequence#: 11
Manufacturer: Phonic Ear Tested By: Mike Wilkinson
Model: 560T74
S/N: 25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7 Transmit antenna is the whip antenna, 2dBi gain. Antenna is setup in a worst case configuration, the antenna is mounted on a counterpoise separated by a short cable of loss <0.1dB. Frequency Range Investigated: 1.0 - 8.0 GHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45% .

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable 35' Blue SMA CKC P1352	T4=Cable - 3 Meter to bulkhead

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	7000.000M	38.1	-35.2	+35.3	+10.0	+9.3	+0.0	57.5	63.5 Channel E	-6.0	Horiz 115
2	5000.000M	40.7	-34.3	+33.4	+8.1	+7.4	+0.0 40	55.3	63.5 Channel E	-8.2	Verti 100
3	8000.000M Ave	32.2	-35.2	+36.7	+11.0	+9.7	+0.0 40	54.4	63.5 Channel A	-9.1	Horiz 100
4	6000.000M	36.9	-34.7	+34.1	+9.1	+8.2	+0.0 360	53.6	63.5 Channel I	-9.9	Verti 115
5	4000.000M	40.2	-34.0	+32.5	+7.0	+6.7	+0.0 166	52.4	63.5 Channel I	-11.1	Horiz 128
6	4000.000M	38.6	-34.0	+32.5	+7.0	+6.7	+0.0 40	50.8	63.5 Channel A	-12.7	Verti 100

7	3500.000M	37.9	-34.8	+30.8	+6.5	+6.0	+0.0 360	46.4	63.5 Channel H	-17.1	Verti 115
8	3000.000M	39.1	-34.3	+30.1	+5.9	+5.5	+0.0 360	46.3	63.5 Channel H	-17.2	Horiz 115
9	1001.100M	49.0	-36.0	+24.2	+3.1	+3.1	+0.0 40	43.4	63.5 Channel E	-20.1	Verti 100
10	2000.000M	40.7	-35.0	+27.2	+4.6	+4.4	+0.0 252	41.9	63.5 Channel H	-21.6	Horiz 115
11	1500.000M	41.8	-35.2	+24.9	+4.0	+3.8	+0.0 40	39.3	63.5 Channel A	-24.2	Horiz 100
12	1200.000M	42.1	-35.6	+24.5	+3.5	+3.4	+0.0 166	37.9	63.5 Channel I	-25.6	Verti 128

Test Location:	CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)		
Customer:	**Phonic Ear**		
Specification:	**FCC PT15.237**		
Work Order #:	**82963**	Date:	12/17/2004
Test Type:	**Maximized Emissions**	Time:	10:07:29
Equipment:	**Auditory Assistance Device**	Sequence#:	14
Manufacturer:	Phonic Ear	Tested By:	Mike Wilkinson
Model:	560T74	S/N:	25

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
EUT Power Supply	Phihong	PSA-30U-120	C1361930808
Auditory Assistance Device*	Phonic Ear	560T74	25

Support Devices:

Function	Manufacturer	Model #	S/N
Audio Oscillator	HP	204D	1105A02034

Test Conditions / Notes:

EUT is an auditory assistance desktop transmitter. Audio input is supplied via the audio oscillator 1kHz at maximum input level. EUT is transmitting continuously. EUT transmitting on the following Wideband Channels: A - 72.1 E - 72.9 H - 75.9 I - 74.7 Transmit antenna is the large area antenna, 8dBi gain. Frequency Range Investigated: 1.0 - 8.0 GHz. All readings are noise floor, no EUT signals observed. Temperature: 17ºC, Relative Humidity: 45%.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn AN 00327 1-18GHz
T3=Cable 35' Blue SMA CKC P1352	T4=Cable - 3 Meter to bulkhead

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	5000.000M	39.5	-34.3	+33.4	+8.1	+7.4	+0.0 4	54.1	63.5 Channel E	-9.4	Horiz 181
2	6000.000M	37.2	-34.7	+34.1	+9.1	+8.2	+0.0	53.9	63.5 Channel H	-9.6	Horiz 203
3	8000.000M Ave	31.3	-35.2	+36.7	+11.0	+9.7	+0.0 112	53.5	63.5 Channel A	-10.0	Horiz 152
4	4000.000M	39.4	-34.0	+32.5	+7.0	+6.7	+0.0	51.6	63.5 Channel H	-11.9	Horiz 203
5	3500.000M	37.9	-34.8	+30.8	+6.5	+6.0	+0.0 289	46.4	63.5 Channel I	-17.1	Horiz 185
6	2500.000M	39.9	-34.5	+28.5	+5.3	+5.0	+0.0	44.2	63.5 Channel H	-19.3	Verti 203
7	2000.000M	39.2	-35.0	+27.2	+4.6	+4.4	+0.0 42	40.4	63.5 Channel A	-23.1	Verti 181
8	1500.000M	41.1	-35.2	+24.9	+4.0	+3.8	+0.0 289	38.6	63.5 Channel I	-24.9	Verti 185
9	1000.024M	42.1	-36.0	+24.2	+3.1	+3.1	+0.0 42	36.5	63.5 Channel A	-27.0	Verti 181
10	1200.000M	39.9	-35.6	+24.5	+3.5	+3.4	+0.0 4	35.7	63.5 Channel E	-27.8	Verti 181