



**PHONIC EAR TEST REPORT**

**FOR THE**

**AUDITORY ASSISTANCE DEVICE, 560T216**

**FCC PART 15 SUBPART B SECTIONS 15.107 & 15.109 CLASS B,  
PART 95 AND RSS-210**

**COMPLIANCE**

**DATE OF ISSUE: JANUARY 6, 2005**

**PREPARED FOR:**

Phonic Ear  
3880 Cypress Drive  
Petaluma, CA 94954-7600

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

**PREPARED BY:**

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

Date of test: December 13-20, 2004

**Report No.: FC05-004**

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## **ADMINISTRATIVE INFORMATION**

**DATE OF TEST:** December 13-20, 2004

**DATE OF RECEIPT:** December 13, 2004

**PURPOSE OF TEST:** To demonstrate the compliance of the Auditory Assistance Device, 560T216 with the requirements for FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B, Part 95 and RSS-210 devices.

**TEST METHOD:** ANSI C63.4 (2001), Part 95, TIA/EIA 603 and RSS-212

**FREQUENCY RANGE TESTED:** 10kHz-8GHz

**MANUFACTURER:** Phonic Ear  
3880 Cypress Drive  
Petaluma, CA 94954-7600

**REPRESENTATIVE:** David Stodola

**TEST LOCATION:** CKC Laboratories, Inc.  
5473A Clouds Rest  
Mariposa, CA 95338

## FCC TO CANADA STANDARD CORRELATION MATRIX

As received, the Phonic Ear Auditory Assistance Device, 560T216 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           | 6.2.2(L2)        | 47CFR        | 95.629      | Two Way Voice Prohibited                                              |
| RSS-210           | 6.2.2(L2)        | 47CFR        | 95.637      | Peak Output Power Requirements (100mW)                                |
| RSS-210           | 6.2.2(L2)        | 47CFR        | 95.1013     | Peak Output Power Requirements<br>FCC: 100mW ERP<br>Canada: 160mW ERP |
| RSS-210           | 6.2.2(L2)        | NA           | NA          | Canada Channel 13 Advisory                                            |
| RSS-210           | 6.2.2(L2)        | 47CFR        | 95.633      | Emission Bandwidth                                                    |
| RSS-210           | 6.2.2(L2)        | 47CFR        | 95.635      | Emission Mask                                                         |
| RSS-210           | 6.2.2(L2)        | NA           | NA          | Instrumentation for Mask (Peak 300Hz RBW)                             |
| RSS-210           | 6.3              | 47CFR        | 15.205      | Restricted Bands of Operation                                         |
| RSS-210           | 6.4              | 47CFR        | 15.215(c)   | Frequency Stability Recommendation                                    |
| RSS-210           | 6.5              | 47CFR        | 15.35(c)    | Pulsed 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:



Randy Clark, EMC Engineer



Mike Wilkinson, Lab Manager



## **EQUIPMENT UNDER TEST (EUT) DESCRIPTION**

The customer declares the EUT tested by CKC Laboratories was a production unit.

## **EQUIPMENT UNDER TEST**

### **EUT Power Supply**

Manuf: Phihong  
Model: PSA-30U-120  
Serial: C1361930808  
FCC ID: NA

### **Auditory Assistance Device**

Manuf: Phonic Ear  
Model: 560T216  
Serial: 02  
FCC ID: Pending

## **PERIPHERAL DEVICES**

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

### **Audio Oscillator**

Manuf: HP  
Model: 204D  
Serial: 1105A02034  
FCC ID: DoC

**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**

The necessary information is contained in a separate document.

**FCC 2.1033 (c)(5) FREQUENCY RANGE**

216.025 – 216.975MHz

**FCC 2.1033 (c)(6) OPERATING POWER**

66mW

**FCC 2.1033 (c)(7) MAXIMUM POWER RATING**

100mW

**FCC 2.1033 (c)(8) DC VOLTAGES**

The necessary information is contained in a separate document.

**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**

The necessary information is contained in a separate document.

## **FCC 2.1033(c)(14)/2.1046/95.639(e)/95.1013 - RF POWER OUTPUT**

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)  
 Customer: **Phonic Ear**  
 Specification: **FCC Part 95.639(e)/95.1013 Spurious**  
 Work Order #: **82963** Date: 12/15/2004  
 Test Type: **Maximized Emissions** Time: 10:33:22  
 Equipment: **Auditory Assistance Device** Sequence#: 20  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 Extra Band Channels: 41 - 216.025 60 - 216.975. Transmit antenna is the whip antenna. Frequency Range Investigated: Carrier. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

## **95.639(e) & 95.1013 Maximum Power Output Requirements**

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 Extra Band Channels:

41 - 216.025

60 - 216.975

Frequency Range Investigated: Carrier

Temperature: 17°C

Relative Humidity: 45%

## **95.1013 ERP Limitations**

| Frequency | Output (ERP) | Limit  | Result |
|-----------|--------------|--------|--------|
| 216.025   | 91 mW        | 100 mW | Pass   |
| 216.975   | 89 mW        | 100 mW | Pass   |

Antenna Substitution Method used in accordance with TIA/EIA 603. Transmit antenna is the 216MHz whip antenna. RBW = 3kHz, VBW = 10kHz.

#### 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> |
|-----------------------------------|----------------|---------------------|----------------|-----------------|-----------------|----------------|
| Antenna, Biconilog                | 01991          | Chase               | CBL6111C       | 2456            | 6/26/03         | 6/25/05        |
| Spectrum Analyzer 100Hz - 22.5GHz | 00490          | HP                  | 8566B          | 2209A01404      | 2/26/03         | 2/25/05        |
| Spectrum Analyzer Display         | 00489          | HP                  | 8566B          | 2403A08241      | 2/26/03         | 2/25/05        |

#### 95.639 Output Power Limitations

| <b>Frequency</b> | <b>Output Power</b> | <b>Limit</b> | <b>Result</b> |
|------------------|---------------------|--------------|---------------|
| 216.025          | 66 mW               | 100 mW       | Pass          |
| 216.975          | 66 mW               | 100 mW       | Pass          |

As measured with a power meter.

#### 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> |
|--------------------|----------------|---------------------|----------------|-----------------|-----------------|----------------|
| Power Meter        | 2189           | HP                  | 437B           | 2912U01300      | 1/31/03         | 1/30/05        |
| Power Sensor       | 02392          | HP                  | 8482A          | 2652A16108      | 1/31/03         | 1/30/05        |

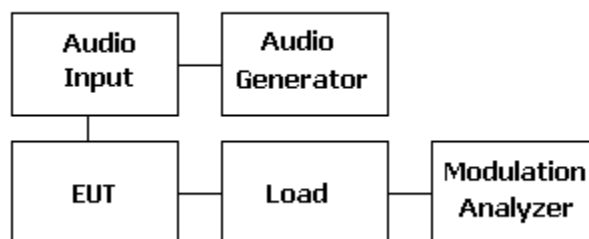
#### PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



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

The test setup is in accordance with TIA/EIA 603 2.2.6.2.2 Constant Input Method. The EUT is functioning normally on channel 60. The modulation limiting curve is plotted from 20Hz to 20kHz.

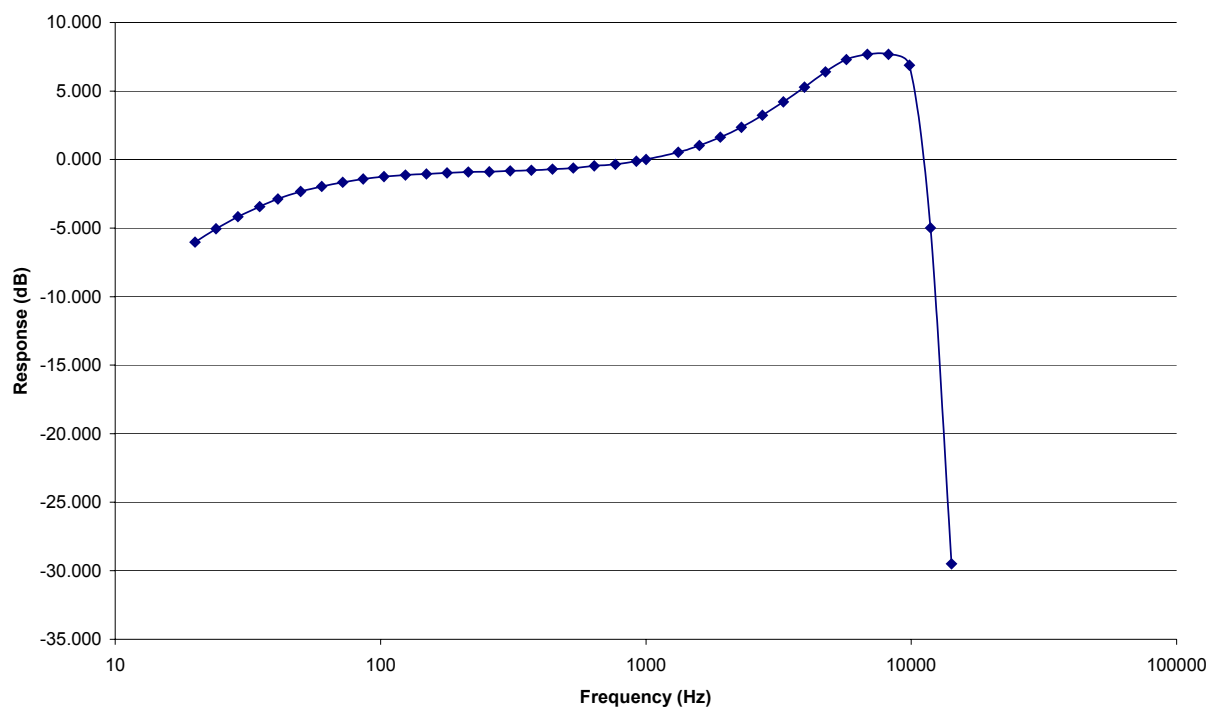
### **Audio Frequency Response Setup Diagram**



### **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      | 10/31/04        | 10/31/06       |
| Analyzer, Modulation | 02072          | HP                  | 8901A          | 2751A05181      | 10/25/04        | 10/25/06       |

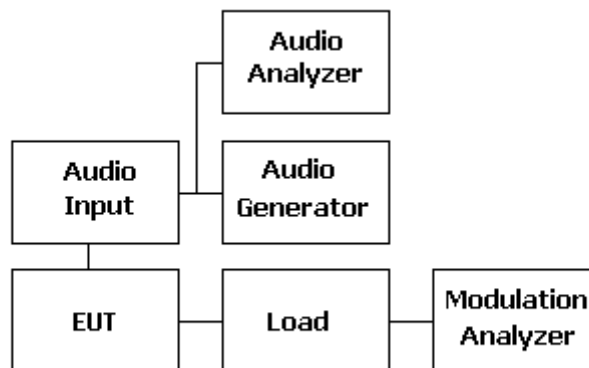
**2.1047(a) Audio Frequency Response**  
**Phonic Ear Model 560T216**



## **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 on channel 60. The EUT modulation input gain was adjusted for non-overload indication at the + 20 dB level. 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 500Hz, 1kHz, 2kHz and 3kHz.

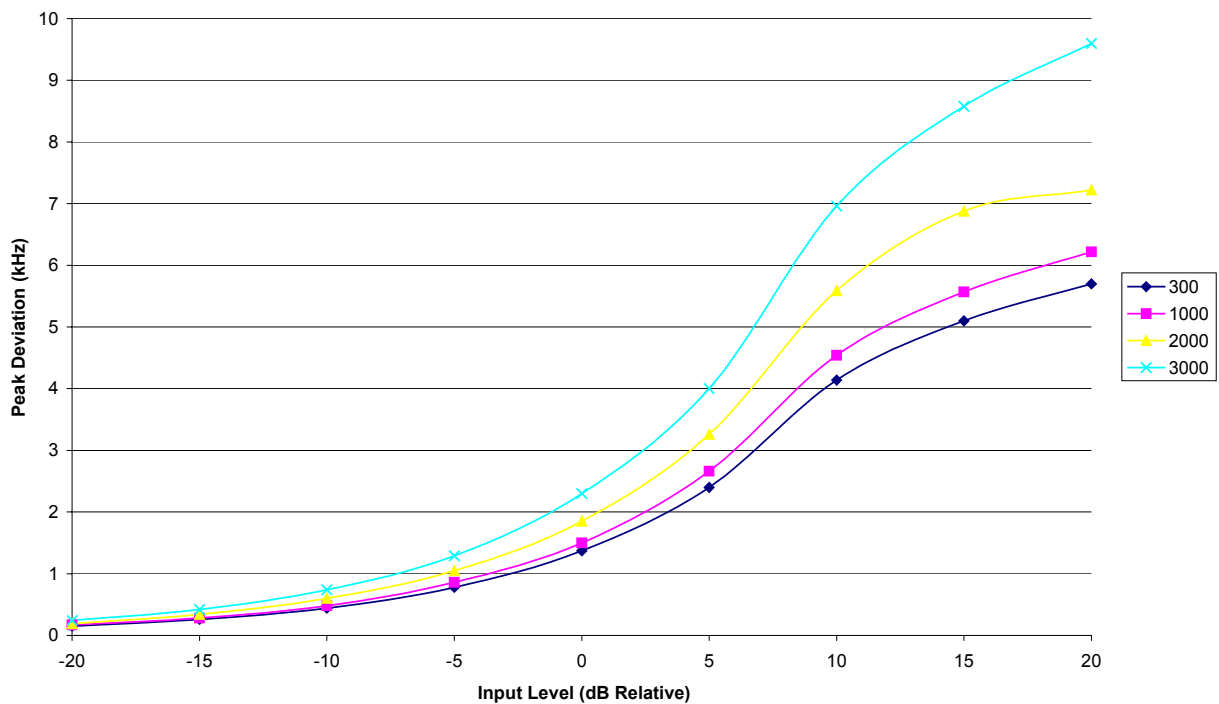
### **Modulation Limiting Setup**



### **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      | 10/31/04        | 10/31/06       |
| Analyzer, Modulation | 02072          | HP                  | 8901A          | 2751A05181      | 10/25/04        | 10/25/06       |

**Modulation Limiting ( $\pm$ Peak Deviation)**  
**Phonic Ear Model 560T216**



**PHOTOGRAPH SHOWING FCC 2.1047 MODULATION**



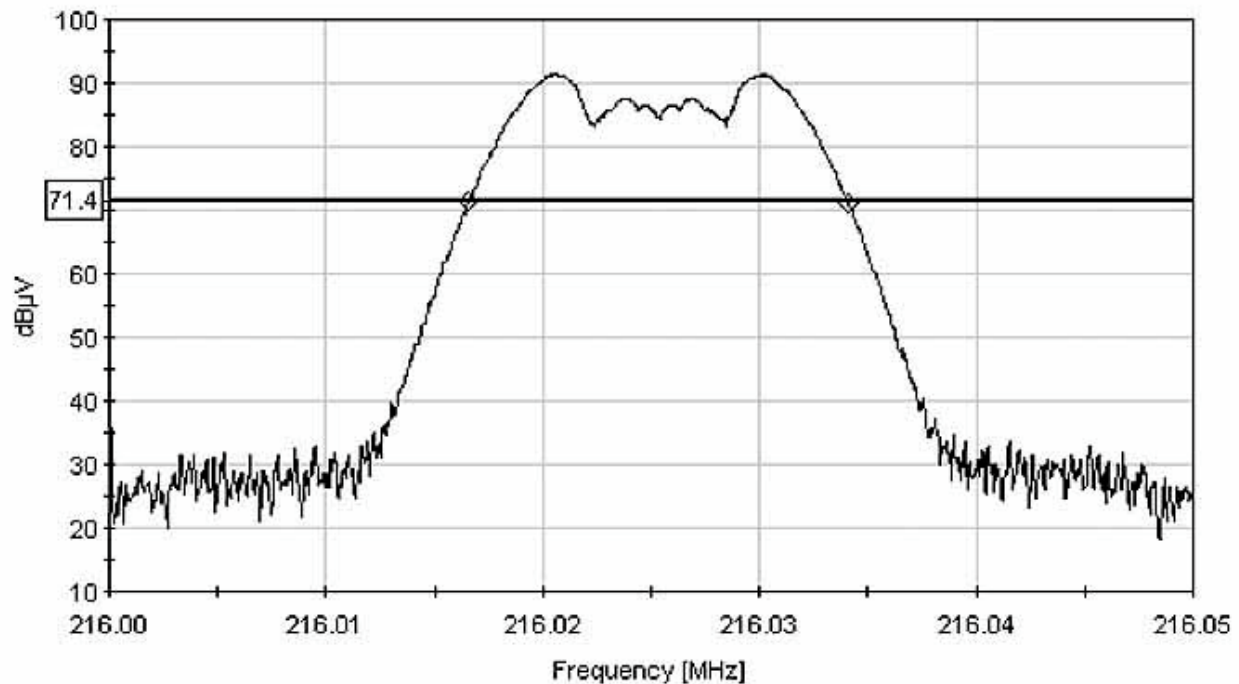
## FCC 2.1033(c)(14)/2.1055/95.629- FREQUENCY STABILITY

The necessary information is contained in a separate document.

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

**Test Conditions:** 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 Extra Band Channels: 41 - 216.025, 60 - 216.975.

Phonic Ear 560T216 20dB Emissions Bandwidth  
Ref Level 97 dBμV ATTN 0 dB  
RES BW: 1.0kHz VID BW: 10.0kHz SWP: 300.0msec  
Marker 1: 216.017MHz 71.4 dBμV Marker 2: 216.034MHz 71 dBμV Delta: 17.441kHz



***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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

**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 • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**  
 Specification: **95.635 Spurious**  
 Work Order #: **82963** Date: 12/20/2004  
 Test Type: **Antenna Terminals Conducted Emissions** Time: 09:40:21  
 Equipment: **Auditory Assistance Device** Sequence#: 28  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216 120V 60Hz  
 S/N: 02

### ***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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 is connected directly to spectrum analyzer through suitable attenuation. EUT transmitting on Extra Band Channel 60 - 216.975 MHz. Frequency Range Investigated: 10 MHz to 8GHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

### ***Transducer Legend:***

|                          |                     |
|--------------------------|---------------------|
| T1=6dB P02226 Attenuator | T2=ATT -P00082 10dB |
|--------------------------|---------------------|

### ***Measurement Data:***

Reading listed by margin.

Test Lead: RF Output

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB |  | Dist<br>dB | Corr<br>dBμV/m | Spec<br>dBμV     | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|--|------------|----------------|------------------|--------------|--------------|
| 1 | 216.975M    | 109.8        | +5.9     | +10.0    |  | +0.0       | 125.7          | 127.0<br>Carrier | -1.3         | RF Ou        |
| 2 | 216.938M    | 53.0         | +5.9     | +10.0    |  | +0.0       | 68.9           | 94.0             | -25.1        | RF Ou        |
| 3 | 217.014M    | 52.6         | +5.9     | +10.0    |  | +0.0       | 68.5           | 94.0             | -25.5        | RF Ou        |
| 4 | 195.519M    | 41.0         | +5.9     | +10.0    |  | +0.0       | 56.9           | 94.0             | -37.1        | RF Ou        |

|    |           |      |      |       |      |      |      |       |       |
|----|-----------|------|------|-------|------|------|------|-------|-------|
| 5  | 48.481M   | 39.6 | +5.9 | +9.8  | +0.0 | 55.3 | 94.0 | -38.7 | RF Ou |
| 6  | 650.395M  | 36.7 | +6.0 | +10.0 | +0.0 | 52.7 | 94.0 | -41.3 | RF Ou |
| 7  | 433.886M  | 33.5 | +6.0 | +10.1 | +0.0 | 49.6 | 94.0 | -44.4 | RF Ou |
| 8  | 174.175M  | 33.1 | +5.9 | +10.0 | +0.0 | 49.0 | 94.0 | -45.0 | RF Ou |
| 9  | 382.546M  | 31.6 | +6.0 | +10.1 | +0.0 | 47.7 | 94.0 | -46.3 | RF Ou |
| 10 | 1827.462M | 31.4 | +6.0 | +10.2 | +0.0 | 47.6 | 94.0 | -46.4 | RF Ou |
| 11 | 1917.697M | 31.4 | +6.0 | +10.2 | +0.0 | 47.6 | 94.0 | -46.4 | RF Ou |
| 12 | 1764.991M | 31.3 | +6.0 | +10.1 | +0.0 | 47.4 | 94.0 | -46.6 | RF Ou |
| 13 | 1858.201M | 31.2 | +6.0 | +10.2 | +0.0 | 47.4 | 94.0 | -46.6 | RF Ou |
| 14 | 1815.067M | 31.1 | +6.0 | +10.2 | +0.0 | 47.3 | 94.0 | -46.7 | RF Ou |
| 15 | 1833.411M | 31.0 | +6.0 | +10.2 | +0.0 | 47.2 | 94.0 | -46.8 | RF Ou |
| 16 | 13.393M   | 31.1 | +6.0 | +10.0 | +0.0 | 47.1 | 94.0 | -46.9 | RF Ou |
| 17 | 135.232M  | 31.2 | +6.0 | +9.9  | +0.0 | 47.1 | 94.0 | -46.9 | RF Ou |
| 18 | 192.067M  | 31.1 | +5.9 | +10.0 | +0.0 | 47.0 | 94.0 | -47.0 | RF Ou |
| 19 | 1442.654M | 30.9 | +6.1 | +10.0 | +0.0 | 47.0 | 94.0 | -47.0 | RF Ou |
| 20 | 100.379M  | 31.1 | +6.0 | +9.8  | +0.0 | 46.9 | 94.0 | -47.1 | RF Ou |
| 21 | 60.671M   | 30.9 | +6.0 | +9.9  | +0.0 | 46.8 | 94.0 | -47.2 | RF Ou |
| 22 | 794.454M  | 30.7 | +6.0 | +10.1 | +0.0 | 46.8 | 94.0 | -47.2 | RF Ou |

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

Customer: **Phonic Ear**  
 Specification: **95.635 Spurious**  
 Work Order #: **82963**  
 Test Type: **Antenna Terminals Conducted Emissions**  
 Equipment: **Auditory Assistance Device**  
 Manufacturer: **Phonic Ear**  
 Model: **560T216**  
 S/N: **02**

Date: 12/20/2004  
 Time: 09:33:34  
 Sequence#: 29  
 Tested By: Randal Clark  
 120V 60Hz

**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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

**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 is connected directly to spectrum analyzer through suitable attenuation. EUT transmitting on Extra Band Channel 41 - 216.025 MHz. Frequency Range Investigated: 10 MHz to 8GHz. Temperature: 17°C Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

**Transducer Legend:**

|                          |                     |
|--------------------------|---------------------|
| T1=6dB P02226 Attenuator | T2=ATT -P00082 10dB |
|--------------------------|---------------------|

**Measurement Data:**

Reading listed by margin.

Test Lead: RF Output

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV/m | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|----------------|--------------|--------------|--------------|
| 1 | 216.025M    | 109.9        | +5.9     | +10.0    |    |    | +0.0          | 125.8          | 127.0        | -1.2         | RF Ou        |
|   |             |              |          |          |    |    |               |                | Carrier      |              |              |
| 2 | 215.985M    | 52.6         | +5.9     | +10.0    |    |    | +0.0          | 68.5           | 94.0         | -25.5        | RF Ou        |
| 3 | 216.064M    | 52.2         | +5.9     | +10.0    |    |    | +0.0          | 68.1           | 94.0         | -25.9        | RF Ou        |
| 4 | 194.541M    | 40.0         | +5.9     | +10.0    |    |    | +0.0          | 55.9           | 94.0         | -38.1        | RF Ou        |
| 5 | 6915.779M   | 39.0         | +6.1     | +10.0    |    |    | +0.0          | 55.1           | 94.0         | -38.9        | RF Ou        |
| 6 | 6688.479M   | 38.4         | +6.1     | +10.0    |    |    | +0.0          | 54.5           | 94.0         | -39.5        | RF Ou        |
| 7 | 647.547M    | 37.1         | +6.0     | +10.1    |    |    | +0.0          | 53.2           | 94.0         | -40.8        | RF Ou        |

|    |           |      |      |       |      |      |      |       |       |
|----|-----------|------|------|-------|------|------|------|-------|-------|
| 8  | 7997.727M | 36.0 | +6.2 | +10.0 | +0.0 | 52.2 | 94.0 | -41.8 | RF Ou |
| 9  | 7263.548M | 35.9 | +6.2 | +10.0 | +0.0 | 52.1 | 94.0 | -41.9 | RF Ou |
| 10 | 7518.124M | 35.8 | +6.3 | +10.0 | +0.0 | 52.1 | 94.0 | -41.9 | RF Ou |
| 11 | 7079.435M | 35.8 | +6.2 | +10.0 | +0.0 | 52.0 | 94.0 | -42.0 | RF Ou |
| 12 | 4509.256M | 33.2 | +6.1 | +10.1 | +0.0 | 49.4 | 94.0 | -44.6 | RF Ou |
| 13 | 431.848M  | 32.7 | +6.0 | +10.1 | +0.0 | 48.8 | 94.0 | -45.2 | RF Ou |
| 14 | 220.561M  | 32.7 | +5.9 | +10.0 | +0.0 | 48.6 | 94.0 | -45.4 | RF Ou |
| 15 | 4758.340M | 32.2 | +6.2 | +10.1 | +0.0 | 48.5 | 94.0 | -45.5 | RF Ou |
| 16 | 2564.014M | 32.0 | +6.0 | +10.2 | +0.0 | 48.2 | 94.0 | -45.8 | RF Ou |
| 17 | 4008.208M | 32.0 | +6.1 | +10.1 | +0.0 | 48.2 | 94.0 | -45.8 | RF Ou |
| 18 | 2149.566M | 31.3 | +6.0 | +10.2 | +0.0 | 47.5 | 94.0 | -46.5 | RF Ou |
| 19 | 1745.388M | 31.3 | +6.0 | +10.1 | +0.0 | 47.4 | 94.0 | -46.6 | RF Ou |
| 20 | 67.676M   | 31.4 | +6.0 | +9.9  | +0.0 | 47.3 | 94.0 | -46.7 | RF Ou |
| 21 | 97.164M   | 31.1 | +6.0 | +9.8  | +0.0 | 46.9 | 94.0 | -47.1 | RF Ou |
| 22 | 534.395M  | 30.9 | +6.0 | +10.0 | +0.0 | 46.9 | 94.0 | -47.1 | RF Ou |

**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 • 5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Phonic Ear**  
 Specification: **95.635 Spurious**  
 Work Order #: **82963** Date: 12/17/2004  
 Test Type: **Maximized Emissions** Time: 14:52:18  
 Equipment: **Auditory Assistance Device** Sequence#: 25  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

### ***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       | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display           |            |                  |              |         |
| HP 85650A QPA     | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| EMCO Loop Antenna | 1074       | 05/21/2003       | 05/21/2005   | 00226   |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 Extra Band Channels: 41 - 216.025 60 - 216.975 Transmit antenna is the whip antenna. Frequency Range Investigated: 10 - 30 MHz. **No EUT signals were observed within 20dB of the limit.** Temperature: 17°C Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

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

Customer: **Phonic Ear**  
 Specification: **95.635 Spurious**  
 Work Order #: **82963** Date: 12/15/2004  
 Test Type: **Maximized Emissions** Time: 11:55:38  
 Equipment: **Auditory Assistance Device** Sequence#: 21  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

**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     | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display         |            |                  |              |         |
| HP 85650A QPA   | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| HP 85685A RF    | 2510A00167 | 02/24/2003       | 02/24/2005   | 00484   |
| Preselector     |            |                  |              |         |
| HP 8447D Preamp | 1937A02604 | 03/07/2003       | 03/07/2005   | 00099   |
| Chase CBL6111C  | 2456       | 06/26/2003       | 06/26/2005   | 01991   |
| Bilog           |            |                  |              |         |

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

| Function            | Manufacturer | Model #     | S/N         |
|---------------------|--------------|-------------|-------------|
| EUT Power Supply    | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance | Phonic Ear   | 560T216     | 02          |
| Device*             |              |             |             |

**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 Extra Band Channels: 41 - 216.025 60 - 216.975. Transmit antenna is the whip antenna. Frequency Range Investigated: 30-1000 MHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

Operating Frequency: 216.025 MHz - 216.975 MHz

Channels: \_\_\_\_\_

Highest Measured Output Power: 19.59 ERP(dBm)= 0.091 ERP(Watts)

Distance: 3 meters

Limit:  $43+10\text{Log(P)}$  32.59 dBc

| Freq. (MHz) | Reference Level (dBm) | Antenna Polarity (H/V) | dBc   |
|-------------|-----------------------|------------------------|-------|
| 216.94      | -38                   |                        | 57.59 |
| 217.01      | -37.9                 |                        | 57.49 |
| 195.60      | -61                   |                        | 80.59 |
| 195.60      | -64.1                 |                        | 83.69 |
| 216.93      | -46.7                 |                        | 66.29 |
| 217.01      | -45.3                 |                        | 64.89 |
| 216.07      | -45.4                 |                        | 64.99 |
| 215.99      | -44.4                 |                        | 63.99 |
| 215.99      | -37.8                 |                        | 57.39 |
| 216.06      | -38                   |                        | 57.59 |
| 194.65      | -63.8                 |                        | 83.39 |
| 432.06      | -31.8                 |                        | 51.39 |
| 778.60      | -38.8                 |                        | 58.39 |
| 778.60      | -39                   |                        | 58.59 |



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

Customer: **Phonic Ear**  
 Specification: **95.635 Spurious**  
 Work Order #: **82963** Date: 12/17/2004  
 Test Type: **Maximized Emissions** Time: 14:08:15  
 Equipment: **Auditory Assistance Device** Sequence#: 24  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

**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     | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display         |            |                  |              |         |
| HP 85650A QPA   | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| EMCO 3115 Horn  | 9006-3413  | 04/15/2003       | 04/25/2005   | 327     |
| Antenna         |            |                  |              |         |
| HP 8449B Preamp | 3008A00301 | 12/14/2004       | 12/14/2006   | 2010    |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

**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 Extra Band Channels: 41 - 216.025 60 - 216.975 Transmit antenna is the whip antenna. Frequency Range Investigated: 1.0 - 8.0 GHz All readings are noise floor. No EUT signals were observed. Temperature: 17°C Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

Operating Frequency: 216.025 MHz - 216.975 MHz

Channels: \_\_\_\_\_

Highest Measured Output Power: 19.59 ERP(dBm)= 0.091 ERP(Watts)

Distance: 3 meters

Limit:  $43+10\log(P)$  32.59 dBc

| Freq. (MHz) | Reference Level (dBm) | Antenna Polarity (H/V) | dBc   |
|-------------|-----------------------|------------------------|-------|
| 5,860.89    | -58.7                 |                        | 78.29 |
| 3,026.82    | -59.2                 |                        | 78.79 |
| 5,207.42    | -59.4                 |                        | 78.99 |
| 3,024.32    | -60.1                 |                        | 79.69 |
| 2,160.22    | -61.2                 |                        | 80.79 |
| 1,080.10    | -62.4                 |                        | 81.99 |
| 1,080.10    | -63.4                 |                        | 82.99 |
| 1,296.12    | -63.4                 |                        | 82.99 |
| 2,823.24    | -67.4                 |                        | 86.99 |
| 1,084.89    | -69.3                 |                        | 88.89 |
| 1,084.89    | -70                   |                        | 89.59 |
| 1,518.84    | -70.7                 |                        | 90.29 |
| 1,301.87    | -71                   |                        | 90.59 |
| 1,952.79    | -77.7                 |                        | 97.29 |

**PHOTOGRAPH SHOWING RADIATED EMISSIONS**



Radiated Emissions - Front View

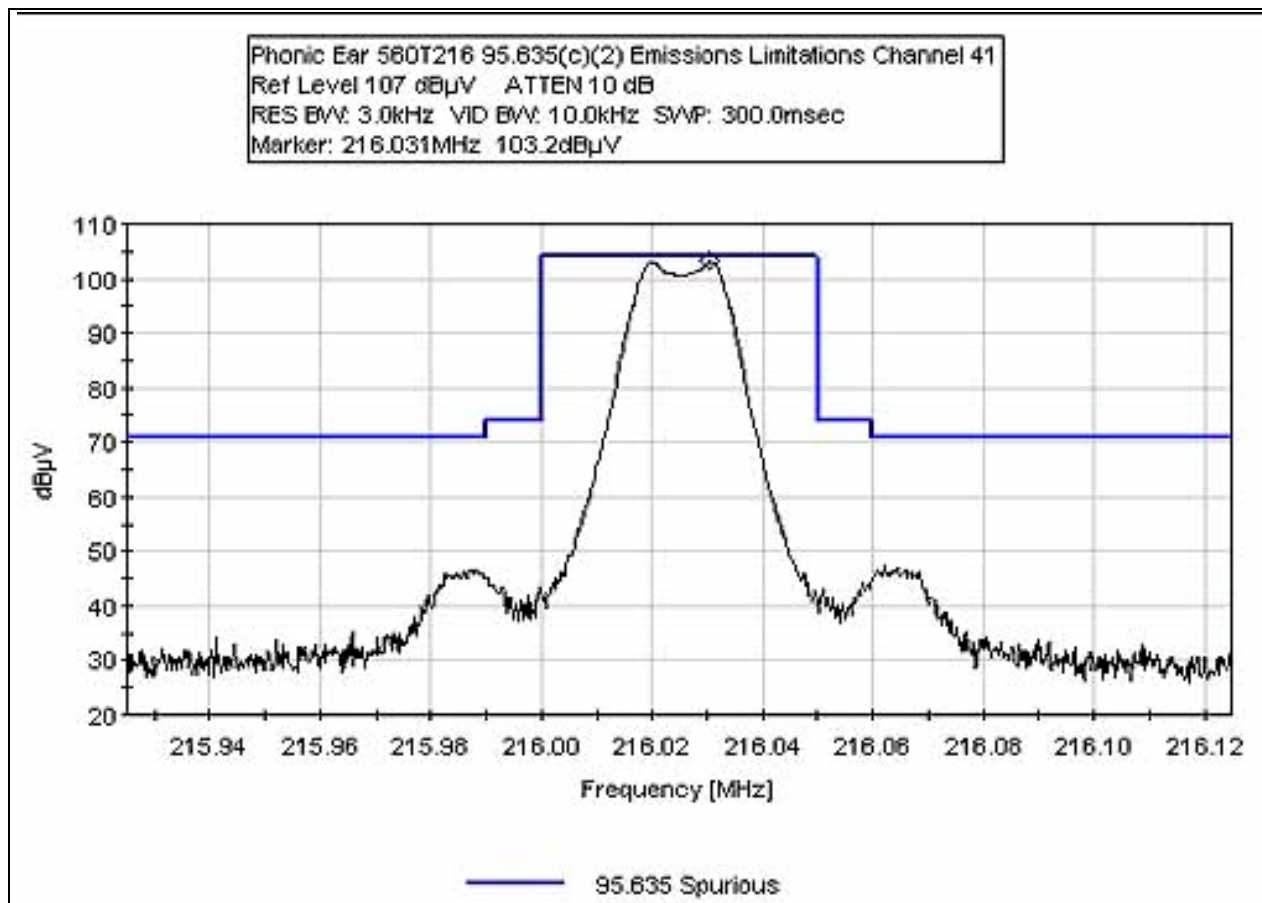
**PHOTOGRAPH SHOWING RADIATED EMISSIONS**



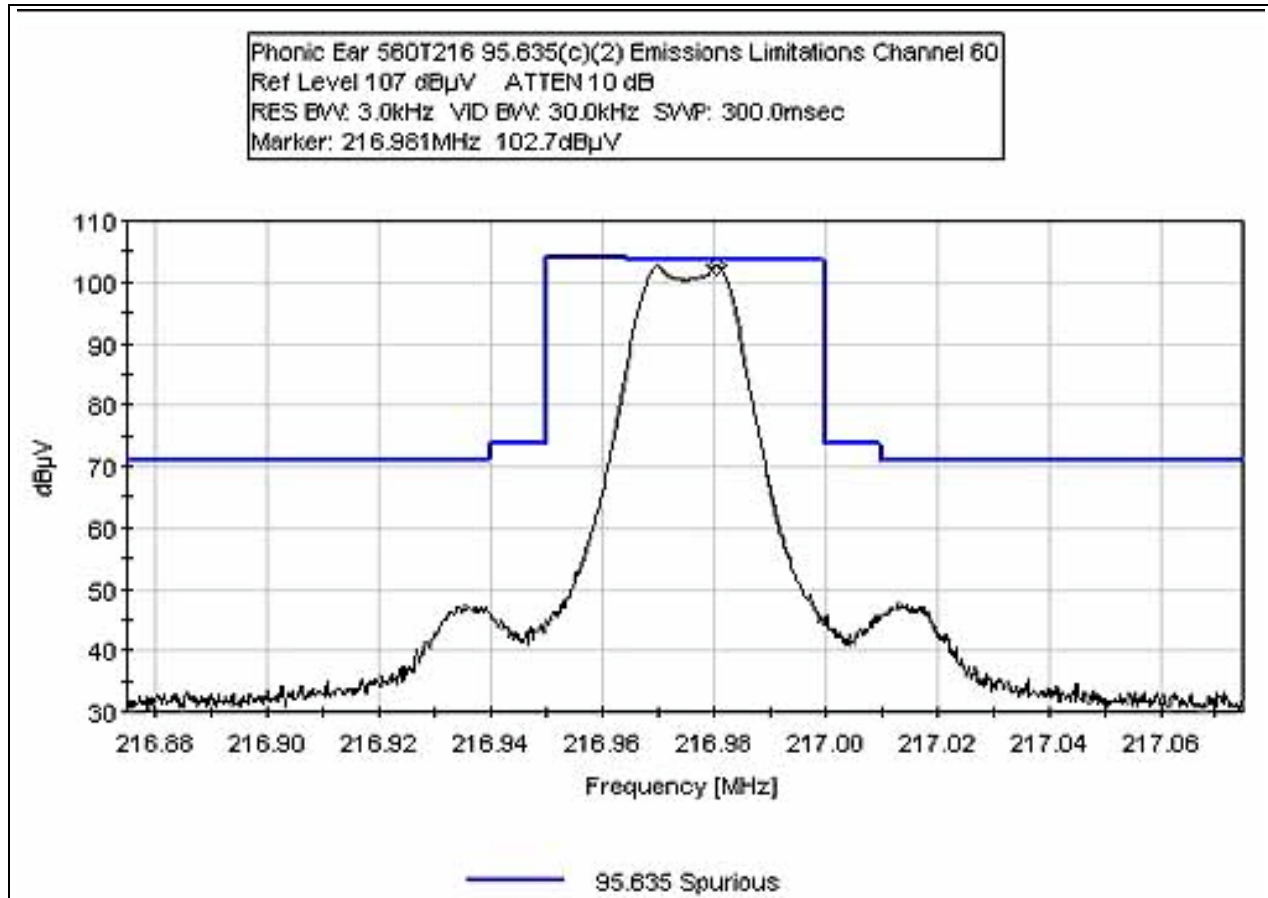
Radiated Emissions - Back View

## FCC 95.635(c)(2) EMISSIONS MASK CHANNEL 41

**Test Conditions:** 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 Extra Band Channels: 41 - 216.025, 60 - 216.975.



## FCC 95.635(c)(2) EMISSIONS MASK CHANNEL 60



### 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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

**PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP**



## FCC 15.107/15.207 – AC CONDUCTED EMISSIONS

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

Customer: **Phonic Ear**  
 Specification: **FCC 15.107(a) Class B - AVE**  
 Work Order #: **82963** Date: 12/17/2004  
 Test Type: **Conducted Emissions** Time: 1:22:08 PM  
 Equipment: **Auditory Assistance Device** Sequence#: 22  
 Manufacturer: Phonic Ear Tested By: Mike Wilkinson  
 Model: 560T216 120V 60Hz  
 S/N: 02

### ***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             | 2403A08241   | 02/26/2003       | 02/26/2005   | 00489       |
| Display                 |              |                  |              |             |
| 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 |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 Extra Band Channel: 41 - 216.025 MHz. Transmit antenna is the whip antenna. Frequency Range Investigated: 150 kHz - 30 MHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

### ***Transducer Legend:***

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

### ***Measurement Data:***

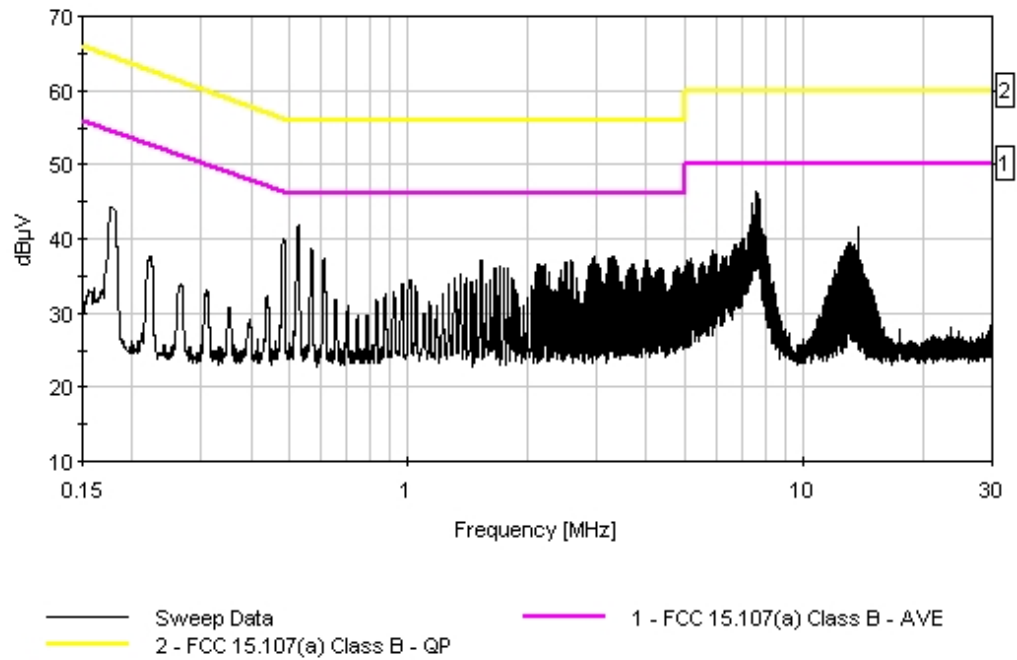
Reading listed by margin.

Test Lead: Black

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | T3<br>dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----------|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 7.597M      | 45.5         | +0.3     | +0.4     | +0.1     |    | +0.0          | 46.3         | 50.0         | -3.7         | Black        |
| 2 | 7.688M      | 45.2         | +0.3     | +0.4     | +0.1     |    | +0.0          | 46.0         | 50.0         | -4.0         | Black        |
| 3 | 527.417k    | 41.1         | +0.1     | +0.3     | +0.3     |    | +0.0          | 41.8         | 46.0         | -4.2         | Black        |

|    |          |      |      |      |      |      |      |      |      |       |
|----|----------|------|------|------|------|------|------|------|------|-------|
| 4  | 7.769M   | 44.4 | +0.3 | +0.5 | +0.1 | +0.0 | 45.3 | 50.0 | -4.7 | Black |
| 5  | 7.552M   | 44.4 | +0.3 | +0.4 | +0.1 | +0.0 | 45.2 | 50.0 | -4.8 | Black |
| 6  | 7.372M   | 44.1 | +0.3 | +0.4 | +0.1 | +0.0 | 44.9 | 50.0 | -5.1 | Black |
| 7  | 7.634M   | 43.5 | +0.3 | +0.4 | +0.1 | +0.0 | 44.3 | 50.0 | -5.7 | Black |
| 8  | 7.417M   | 43.0 | +0.3 | +0.4 | +0.1 | +0.0 | 43.8 | 50.0 | -6.2 | Black |
| 9  | 482.330k | 39.3 | +0.1 | +0.3 | +0.2 | +0.0 | 39.9 | 46.3 | -6.4 | Black |
| 10 | 7.742M   | 42.5 | +0.3 | +0.5 | +0.1 | +0.0 | 43.4 | 50.0 | -6.6 | Black |
| 11 | 7.516M   | 42.5 | +0.3 | +0.4 | +0.1 | +0.0 | 43.3 | 50.0 | -6.7 | Black |
| 12 | 568.867k | 38.1 | +0.1 | +0.2 | +0.2 | +0.0 | 38.6 | 46.0 | -7.4 | Black |
| 13 | 7.336M   | 41.1 | +0.3 | +0.4 | +0.1 | +0.0 | 41.9 | 50.0 | -8.1 | Black |
| 14 | 7.462M   | 41.1 | +0.3 | +0.4 | +0.1 | +0.0 | 41.9 | 50.0 | -8.1 | Black |
| 15 | 3.263M   | 37.0 | +0.3 | +0.3 | +0.1 | +0.0 | 37.7 | 46.0 | -8.3 | Black |
| 16 | 2.961M   | 36.9 | +0.3 | +0.3 | +0.1 | +0.0 | 37.6 | 46.0 | -8.4 | Black |
| 17 | 3.310M   | 36.9 | +0.3 | +0.3 | +0.1 | +0.0 | 37.6 | 46.0 | -8.4 | Black |
| 18 | 13.823M  | 40.7 | +0.4 | +0.4 | +0.1 | +0.0 | 41.6 | 50.0 | -8.4 | Black |
| 19 | 2.914M   | 36.7 | +0.3 | +0.3 | +0.1 | +0.0 | 37.4 | 46.0 | -8.6 | Black |
| 20 | 3.220M   | 36.7 | +0.3 | +0.3 | +0.1 | +0.0 | 37.4 | 46.0 | -8.6 | Black |

CKC Laboratories Date: 12/17/2004 Time: 1:22:08 PM Phonic Ear W/O#: 82963  
 FCC 15.107(a) Class B - AVE Test Lead: Black 120V 60Hz Sequence#: 22  
 Phonic Ear MN 560T216





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

Customer: **Phonic Ear**  
 Specification: **FCC 15.107(a) Class B - AVE**  
 Work Order #: **82963**  
 Test Type: **Conducted Emissions**  
 Equipment: **Auditory Assistance Device**  
 Manufacturer: **Phonic Ear**  
 Model: **560T216**  
 S/N: **02**

Date: 12/17/2004  
 Time: 1:27:37 PM  
 Sequence#: 23  
 Tested By: Mike Wilkinson  
 120V 60Hz

**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             | 2403A08241   | 02/26/2003       | 02/26/2005   | 00489       |
| Display                 |              |                  |              |             |
| 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 |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

**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 Extra Band Channel: 41 - 216.025 MHz. Transmit antenna is the whip antenna. Frequency Range Investigated: 150 kHz - 30 MHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

**Transducer Legend:**

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

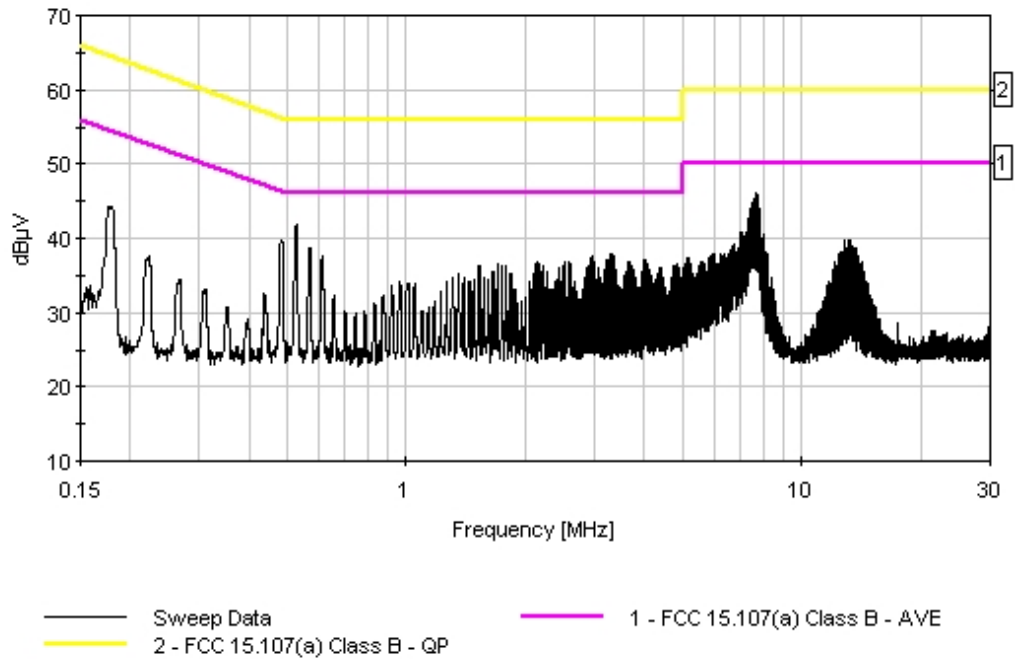
**Measurement Data:** Reading listed by margin.

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 | 7.679M   | 45.1      | +0.3  | +0.5  | +0.1  |    | +0.0       | 46.0      | 50.0      | -4.0      | White     |
| 2 | 526.690k | 41.2      | +0.1  | +0.3  | +0.3  |    | +0.0       | 41.9      | 46.0      | -4.1      | White     |
| 3 | 7.724M   | 45.0      | +0.3  | +0.5  | +0.1  |    | +0.0       | 45.9      | 50.0      | -4.1      | White     |
| 4 | 7.643M   | 44.7      | +0.3  | +0.5  | +0.1  |    | +0.0       | 45.6      | 50.0      | -4.4      | White     |
| 5 | 7.597M   | 44.4      | +0.3  | +0.5  | +0.1  |    | +0.0       | 45.3      | 50.0      | -4.7      | White     |

|    |          |      |      |      |      |      |      |      |      |       |
|----|----------|------|------|------|------|------|------|------|------|-------|
| 6  | 7.769M   | 44.2 | +0.3 | +0.5 | +0.1 | +0.0 | 45.1 | 50.0 | -4.9 | White |
| 7  | 7.507M   | 44.0 | +0.3 | +0.5 | +0.1 | +0.0 | 44.9 | 50.0 | -5.1 | White |
| 8  | 7.417M   | 43.2 | +0.3 | +0.4 | +0.1 | +0.0 | 44.0 | 50.0 | -6.0 | White |
| 9  | 7.471M   | 43.2 | +0.3 | +0.4 | +0.1 | +0.0 | 44.0 | 50.0 | -6.0 | White |
| 10 | 7.814M   | 43.0 | +0.3 | +0.5 | +0.1 | +0.0 | 43.9 | 50.0 | -6.1 | White |
| 11 | 483.058k | 39.1 | +0.1 | +0.3 | +0.2 | +0.0 | 39.7 | 46.3 | -6.6 | White |
| 12 | 7.372M   | 42.6 | +0.3 | +0.4 | +0.1 | +0.0 | 43.4 | 50.0 | -6.6 | White |
| 13 | 7.850M   | 42.1 | +0.3 | +0.5 | +0.1 | +0.0 | 43.0 | 50.0 | -7.0 | White |
| 14 | 568.867k | 38.0 | +0.1 | +0.3 | +0.2 | +0.0 | 38.6 | 46.0 | -7.4 | White |
| 15 | 7.336M   | 41.8 | +0.3 | +0.4 | +0.1 | +0.0 | 42.6 | 50.0 | -7.4 | White |
| 16 | 7.552M   | 41.4 | +0.3 | +0.5 | +0.1 | +0.0 | 42.3 | 50.0 | -7.7 | White |
| 17 | 3.305M   | 37.2 | +0.3 | +0.3 | +0.1 | +0.0 | 37.9 | 46.0 | -8.1 | White |
| 18 | 3.263M   | 37.1 | +0.3 | +0.3 | +0.1 | +0.0 | 37.8 | 46.0 | -8.2 | White |
| 19 | 615.408k | 36.9 | +0.1 | +0.3 | +0.3 | +0.0 | 37.6 | 46.0 | -8.4 | White |
| 20 | 3.352M   | 36.8 | +0.3 | +0.3 | +0.1 | +0.0 | 37.5 | 46.0 | -8.5 | White |

CKC Laboratories Date: 12/17/2004 Time: 1:27:37 PM Phonic Ear WVO#: 82963  
 FCC 15.107(a) Class B - AVE Test Lead: White 120V 60Hz Sequence#: 23  
 Phonic Ear M/N 560T216



**PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS**



Mains Conducted Emissions - Front View

## FCC 15.109 – RADIATED EMISSIONS

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

Customer: **Phonic Ear**  
 Specification: **15.109 CLASS B**  
 Work Order #: **82963** Date: 12/15/2004  
 Test Type: **Maximized Emissions** Time: 11:55:38  
 Equipment: **Auditory Assistance Device** Sequence#: 41  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

### ***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     | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display         |            |                  |              |         |
| HP 85650A QPA   | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| HP 85685A RF    | 2510A00167 | 02/24/2003       | 02/24/2005   | 00484   |
| Preselector     |            |                  |              |         |
| HP 8447D Preamp | 1937A02604 | 03/07/2003       | 03/07/2005   | 00099   |
| Chase CBL6111C  | 2456       | 06/26/2003       | 06/26/2005   | 01991   |
| Bilog           |            |                  |              |         |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 Extra Band Channels: 41 - 216.025 60 - 216.975. Transmit antenna is the whip antenna. Frequency Range Investigated: 30-1000MHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

### ***Transducer Legend:***

|                 |                     |
|-----------------|---------------------|
| T1=Bilog Site B | T2=Cable - 10 Meter |
|-----------------|---------------------|

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

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV/m | Spec<br>dBμV/m | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|----------------|----------------|--------------|--------------|
| 1 | 195.600M    | 24.4         | +8.3     | +3.3     |    |    | +0.0<br>84    | 36.0           | 43.5           | -7.5         | Horiz<br>149 |
| 2 | 194.650M    | 21.7         | +8.3     | +3.2     |    |    | +0.0<br>255   | 33.2           | 43.5           | -10.3        | Horiz<br>145 |
| 3 | 195.601M    | 21.3         | +8.3     | +3.3     |    |    | +0.0<br>112   | 32.9           | 43.5           | -10.6        | Verti<br>155 |

## PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

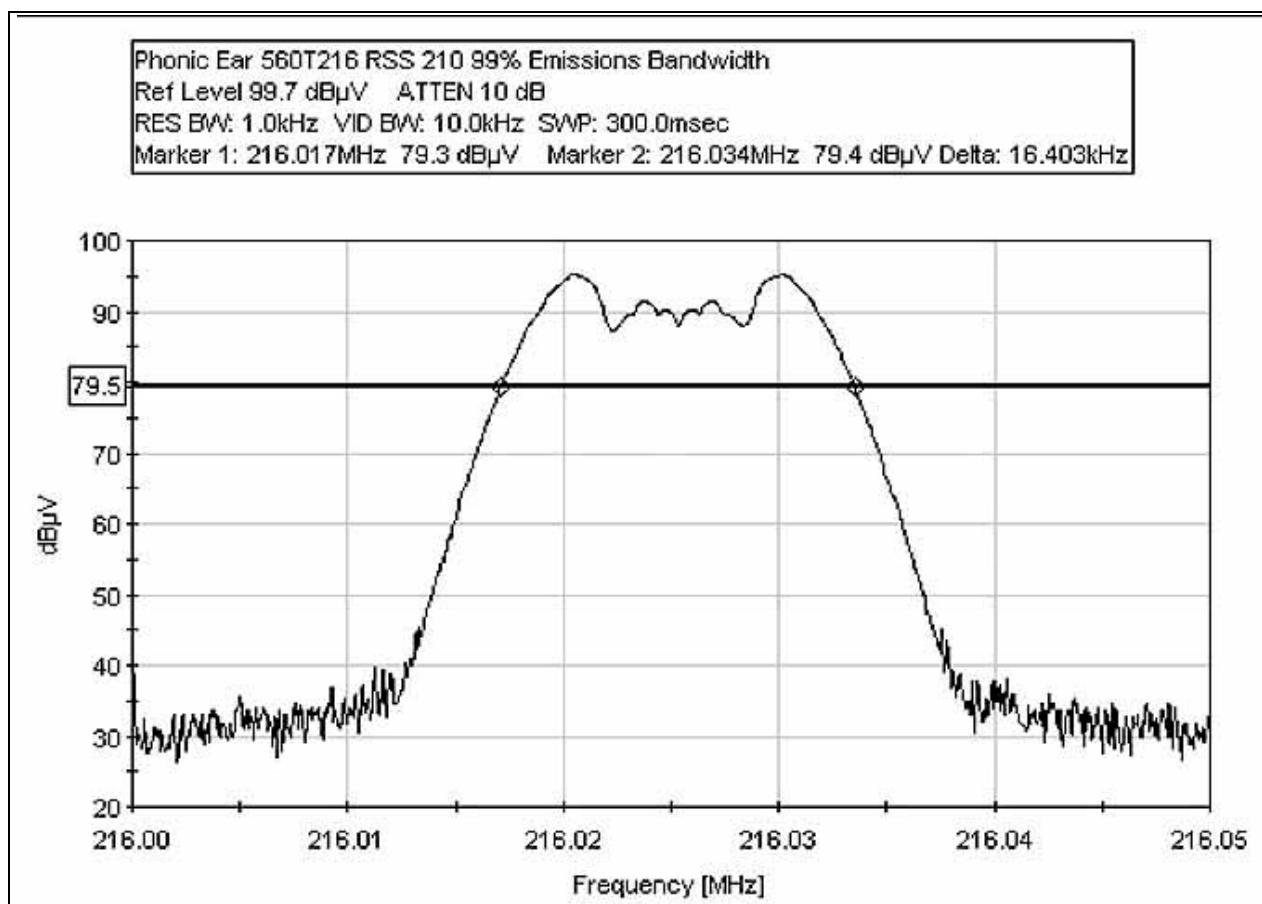
**PHOTOGRAPH SHOWING RADIATED EMISSIONS**



Radiated Emissions - Back View

## RSS-210 99% BANDWIDTH

**Test Conditions:** 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 Extra Band Channels: 41 - 216.025, 60 - 216.975.



***Test Equipment:***

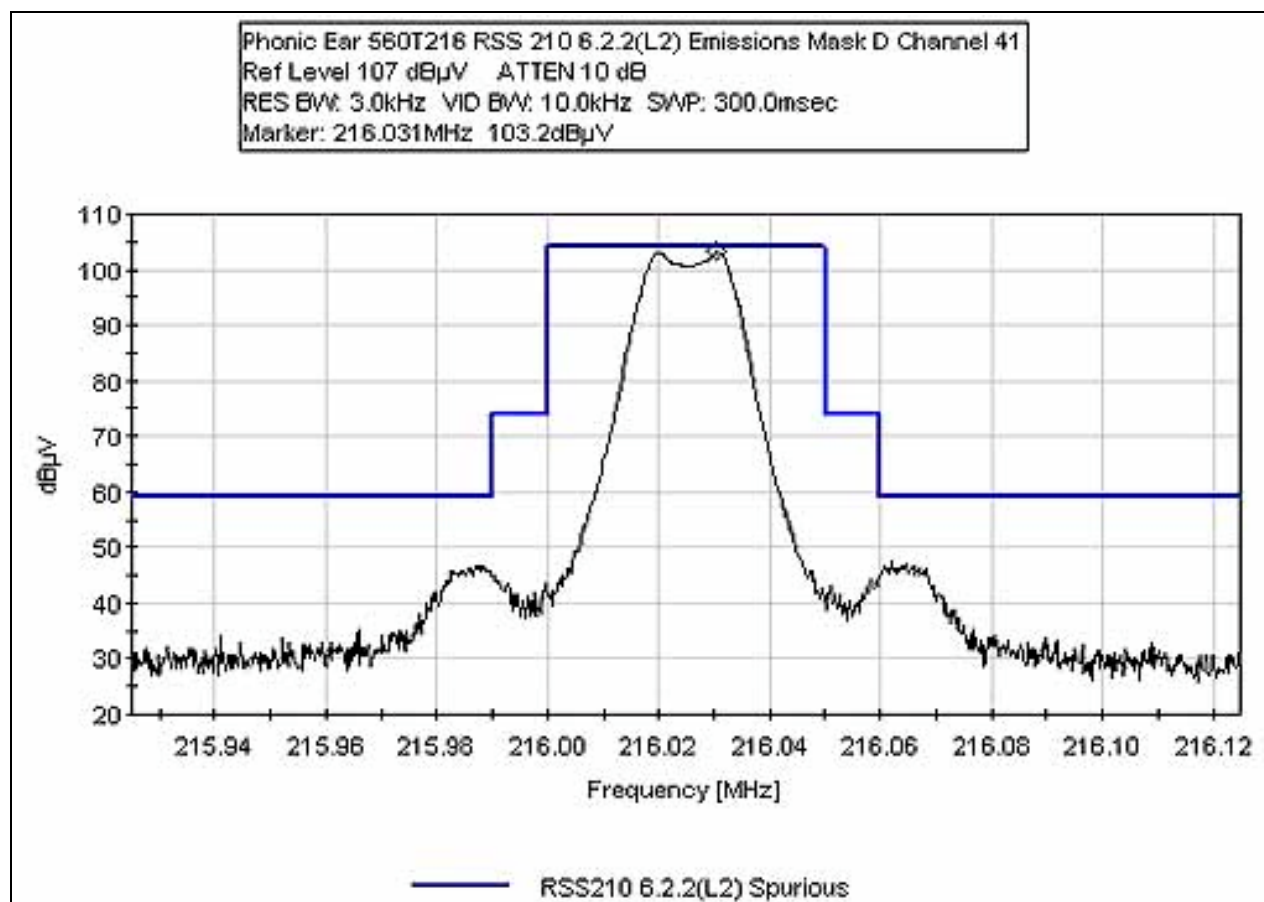
| Function             | S/N        | Calibration Date | Cal Due Date | Asset # |
|----------------------|------------|------------------|--------------|---------|
| HP 8566B SA          | 2209A01404 | 02/26/2003       | 02/26/2005   | 00490   |
| HP 8566B SA Display  | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

**PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP**

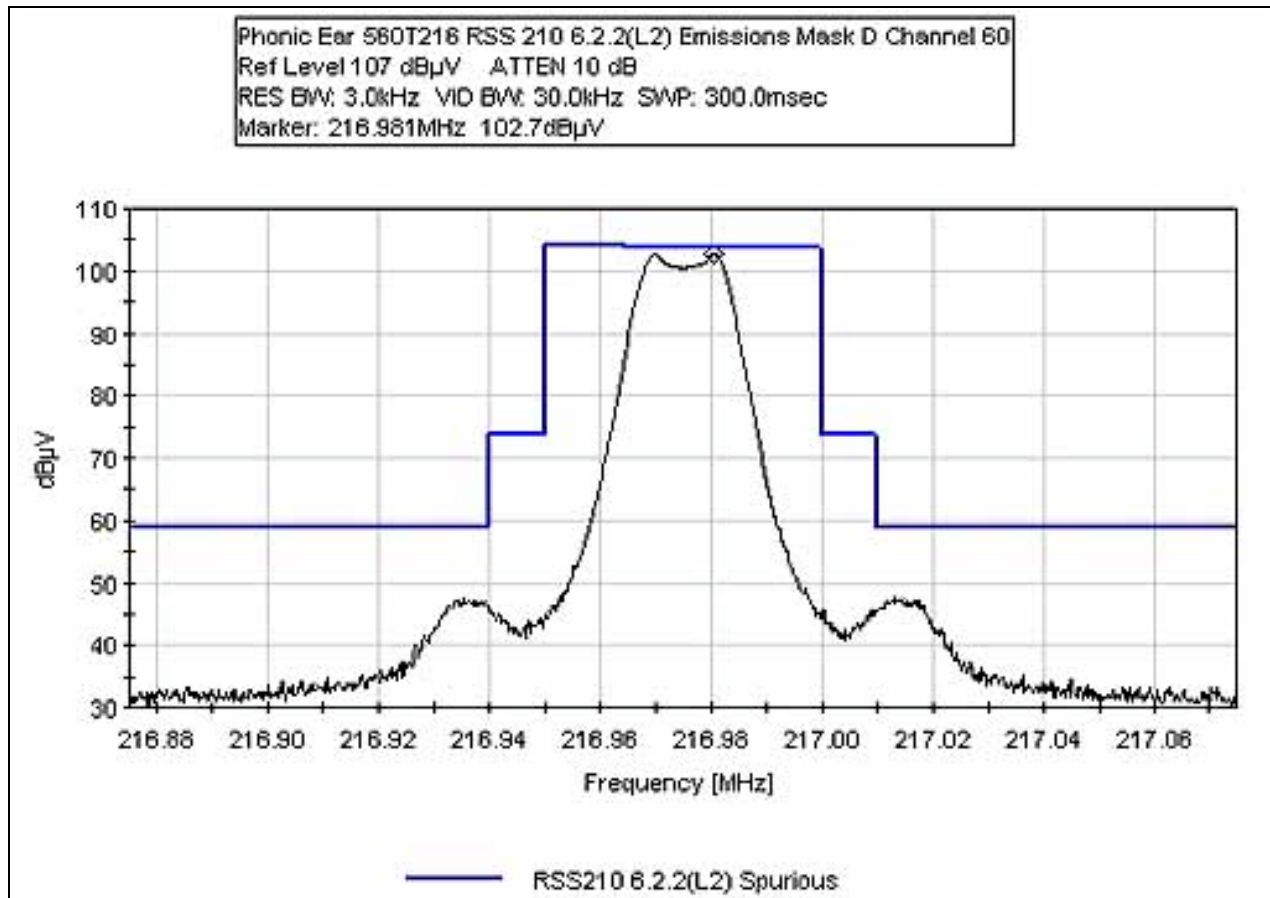


## RSS-210 6.2.2 (L2) EMISSIONS MASK D CHANNEL 41

**Test Conditions:** 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 Extra Band Channels: 41 - 216.025, 60 - 216.975.



## RSS-210 6.2.2 (L2) EMISSIONS MASK D CHANNEL 60



***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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

**PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP**



## **RSS-210 6.2.2 (L2) SPURIOUS EMISSIONS ANTENNA CONDUCTED**

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

Customer: **Phonic Ear**  
 Specification: **RSS210 6.2.2(L2) Spurious**  
 Work Order #: **82963** Date: 12/20/2004  
 Test Type: **Antenna Terminals Conducted Emissions** Time: 09:22:13  
 Equipment: **Auditory Assistance Device** Sequence#: 26  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216 120V 60Hz  
 S/N: 02

### ***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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 is connected directly to spectrum analyzer through suitable attenuation. EUT transmitting on Extra Band Channel 60 - 216.975 MHz. Frequency Range Investigated: 10 MHz to 8GHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

### ***Transducer Legend:***

|                          |                     |
|--------------------------|---------------------|
| T1=6dB P02226 Attenuator | T2=ATT -P00082 10dB |
|--------------------------|---------------------|

### ***Measurement Data:*** Reading listed by margin. Test Lead: RF Output

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 216.975M    | 109.8        | +5.9     | +10.0    |    |    | +0.0          | 125.7        | 127.0        | -1.3         | RF Ou        |
|   |             |              |          |          |    |    |               |              | Carrier      |              |              |
| 2 | 216.938M    | 53.0         | +5.9     | +10.0    |    |    | +0.0          | 68.9         | 82.0         | -13.1        | RF Ou        |
| 3 | 217.014M    | 52.6         | +5.9     | +10.0    |    |    | +0.0          | 68.5         | 82.0         | -13.5        | RF Ou        |
| 4 | 195.519M    | 41.0         | +5.9     | +10.0    |    |    | +0.0          | 56.9         | 82.0         | -25.1        | RF Ou        |

|    |           |      |      |       |      |      |      |       |       |
|----|-----------|------|------|-------|------|------|------|-------|-------|
| 5  | 48.481M   | 39.6 | +5.9 | +9.8  | +0.0 | 55.3 | 82.0 | -26.7 | RF Ou |
| 6  | 650.395M  | 36.7 | +6.0 | +10.0 | +0.0 | 52.7 | 82.0 | -29.3 | RF Ou |
| 7  | 433.886M  | 33.5 | +6.0 | +10.1 | +0.0 | 49.6 | 82.0 | -32.4 | RF Ou |
| 8  | 174.175M  | 33.1 | +5.9 | +10.0 | +0.0 | 49.0 | 82.0 | -33.0 | RF Ou |
| 9  | 382.546M  | 31.6 | +6.0 | +10.1 | +0.0 | 47.7 | 82.0 | -34.3 | RF Ou |
| 10 | 1827.462M | 31.4 | +6.0 | +10.2 | +0.0 | 47.6 | 82.0 | -34.4 | RF Ou |
| 11 | 1917.697M | 31.4 | +6.0 | +10.2 | +0.0 | 47.6 | 82.0 | -34.4 | RF Ou |
| 12 | 1764.991M | 31.3 | +6.0 | +10.1 | +0.0 | 47.4 | 82.0 | -34.6 | RF Ou |
| 13 | 1858.201M | 31.2 | +6.0 | +10.2 | +0.0 | 47.4 | 82.0 | -34.6 | RF Ou |
| 14 | 1815.067M | 31.1 | +6.0 | +10.2 | +0.0 | 47.3 | 82.0 | -34.7 | RF Ou |
| 15 | 1833.411M | 31.0 | +6.0 | +10.2 | +0.0 | 47.2 | 82.0 | -34.8 | RF Ou |
| 16 | 13.393M   | 31.1 | +6.0 | +10.0 | +0.0 | 47.1 | 82.0 | -34.9 | RF Ou |
| 17 | 135.232M  | 31.2 | +6.0 | +9.9  | +0.0 | 47.1 | 82.0 | -34.9 | RF Ou |
| 18 | 192.067M  | 31.1 | +5.9 | +10.0 | +0.0 | 47.0 | 82.0 | -35.0 | RF Ou |
| 19 | 1442.654M | 30.9 | +6.1 | +10.0 | +0.0 | 47.0 | 82.0 | -35.0 | RF Ou |
| 20 | 100.379M  | 31.1 | +6.0 | +9.8  | +0.0 | 46.9 | 82.0 | -35.1 | RF Ou |
| 21 | 60.671M   | 30.9 | +6.0 | +9.9  | +0.0 | 46.8 | 82.0 | -35.2 | RF Ou |
| 22 | 794.454M  | 30.7 | +6.0 | +10.1 | +0.0 | 46.8 | 82.0 | -35.2 | RF Ou |

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

Customer: **Phonic Ear**  
 Specification: **RSS210 6.2.2(L2) Spurious**  
 Work Order #: **82963**  
 Test Type: **Antenna Terminals Conducted Emissions**

Date: 12/20/2004  
 Time: 09:33:34

Equipment: **Auditory Assistance Device**  
 Manufacturer: Phonic Ear  
 Model: 560T216  
 S/N: 02

Sequence#: 27  
 Tested By: Randal Clark  
 120V 60Hz

**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   |
| Attenuator PE7004-6  |            | 09/29/2004       | 09/29/2006   | P02226  |
| Attenuator PE7002-10 |            | 09/29/2004       | 09/29/2006   | P00082  |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

**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 is connected directly to spectrum analyzer through suitable attenuation. EUT transmitting on Extra Band Channel 41 - 216.025 MHz. Frequency Range Investigated: 10 MHz to 8GHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

**Transducer Legend:**

|                          |                     |
|--------------------------|---------------------|
| T1=6dB P02226 Attenuator | T2=ATT -P00082 10dB |
|--------------------------|---------------------|

**Measurement Data:**

Reading listed by margin.

Test Lead: RF Output

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | Dist<br>dB | Corr<br>dBμV | Spec<br>dBμV     | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|------------|--------------|------------------|--------------|--------------|
| 1 | 216.025M    | 109.9        | +5.9     | +10.0    | +0.0       | 125.8        | 127.0<br>Carrier | -1.2         | RF Ou        |
| 2 | 215.985M    | 52.6         | +5.9     | +10.0    | +0.0       | 68.5         | 82.0             | -13.5        | RF Ou        |
| 3 | 216.064M    | 52.2         | +5.9     | +10.0    | +0.0       | 68.1         | 82.0             | -13.9        | RF Ou        |
| 4 | 194.541M    | 40.0         | +5.9     | +10.0    | +0.0       | 55.9         | 82.0             | -26.1        | RF Ou        |
| 5 | 6915.779M   | 39.0         | +6.1     | +10.0    | +0.0       | 55.1         | 82.0             | -26.9        | RF Ou        |
| 6 | 6688.479M   | 38.4         | +6.1     | +10.0    | +0.0       | 54.5         | 82.0             | -27.5        | RF Ou        |

|    |           |      |      |       |      |      |      |       |       |
|----|-----------|------|------|-------|------|------|------|-------|-------|
| 7  | 647.547M  | 37.1 | +6.0 | +10.1 | +0.0 | 53.2 | 82.0 | -28.8 | RF Ou |
| 8  | 7997.727M | 36.0 | +6.2 | +10.0 | +0.0 | 52.2 | 82.0 | -29.8 | RF Ou |
| 9  | 7263.548M | 35.9 | +6.2 | +10.0 | +0.0 | 52.1 | 82.0 | -29.9 | RF Ou |
| 10 | 7518.124M | 35.8 | +6.3 | +10.0 | +0.0 | 52.1 | 82.0 | -29.9 | RF Ou |
| 11 | 7079.435M | 35.8 | +6.2 | +10.0 | +0.0 | 52.0 | 82.0 | -30.0 | RF Ou |
| 12 | 4509.256M | 33.2 | +6.1 | +10.1 | +0.0 | 49.4 | 82.0 | -32.6 | RF Ou |
| 13 | 431.848M  | 32.7 | +6.0 | +10.1 | +0.0 | 48.8 | 82.0 | -33.2 | RF Ou |
| 14 | 220.561M  | 32.7 | +5.9 | +10.0 | +0.0 | 48.6 | 82.0 | -33.4 | RF Ou |
| 15 | 4758.340M | 32.2 | +6.2 | +10.1 | +0.0 | 48.5 | 82.0 | -33.5 | RF Ou |
| 16 | 2564.014M | 32.0 | +6.0 | +10.2 | +0.0 | 48.2 | 82.0 | -33.8 | RF Ou |
| 17 | 4008.208M | 32.0 | +6.1 | +10.1 | +0.0 | 48.2 | 82.0 | -33.8 | RF Ou |
| 18 | 2149.566M | 31.3 | +6.0 | +10.2 | +0.0 | 47.5 | 82.0 | -34.5 | RF Ou |
| 19 | 1745.388M | 31.3 | +6.0 | +10.1 | +0.0 | 47.4 | 82.0 | -34.6 | RF Ou |
| 20 | 67.676M   | 31.4 | +6.0 | +9.9  | +0.0 | 47.3 | 82.0 | -34.7 | RF Ou |
| 21 | 97.164M   | 31.1 | +6.0 | +9.8  | +0.0 | 46.9 | 82.0 | -35.1 | RF Ou |
| 22 | 534.395M  | 30.9 | +6.0 | +10.0 | +0.0 | 46.9 | 82.0 | -35.1 | RF Ou |

**PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP**



## RSS-210 6.2.2 (L2) SPURIOUS EMISSIONS OATS

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

Customer: **Phonic Ear**  
 Specification: **RSS210 6.2.2(L2) Spurious**  
 Work Order #: **82963** Date: 12/17/2004  
 Test Type: **Maximized Emissions** Time: 14:52:18  
 Equipment: **Auditory Assistance Device** Sequence#: 25  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

### ***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       | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display           |            |                  |              |         |
| HP 85650A QPA     | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| EMCO Loop Antenna | 1074       | 05/21/2003       | 05/21/2005   | 00226   |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

### ***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 Extra Band Channels: 41 - 216.025 60 - 216.975. Transmit antenna is the whip antenna. Frequency Range Investigated: 10 - 30 MHz. **No EUT signals were observed within 20dB of the limit.** Temperature: 17°C, Relative Humidity: 45%, RBW = 3kHz, VBW = 10kHz. Observed EUT emissions in this frequency range are outside of Table 2 restricted bands.

### ***Transducer Legend:***

|  |
|--|
|  |
|--|

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

| # | Freq<br>MHz | Rdng<br>dBμV |  |  |  |  | Dist<br>Table | Corr<br>dBμV/m | Spec<br>dBμV/m | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|--|--|--|--|---------------|----------------|----------------|--------------|--------------|
|---|-------------|--------------|--|--|--|--|---------------|----------------|----------------|--------------|--------------|

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

Customer: **Phonic Ear**  
 Specification: **RSS210 6.2.2(L2) Spurious**  
 Work Order #: **82963** Date: 12/15/2004  
 Test Type: **Maximized Emissions** Time: 11:55:38  
 Equipment: **Auditory Assistance Device** Sequence#: 21  
 Manufacturer: Phonic Ear Tested By: Randal Clark  
 Model: 560T216  
 S/N: 02

**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     | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display         |            |                  |              |         |
| HP 85650A QPA   | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| HP 85685A RF    | 2510A00167 | 02/24/2003       | 02/24/2005   | 00484   |
| Preselector     |            |                  |              |         |
| HP 8447D Preamp | 1937A02604 | 03/07/2003       | 03/07/2005   | 00099   |
| Chase CBL6111C  | 2456       | 06/26/2003       | 06/26/2005   | 01991   |
| Bilog           |            |                  |              |         |

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

| Function            | Manufacturer | Model #     | S/N         |
|---------------------|--------------|-------------|-------------|
| EUT Power Supply    | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance | Phonic Ear   | 560T216     | 02          |
| Device*             |              |             |             |

**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 Extra Band Channels: 41 - 216.025 60 - 216.975. Transmit antenna is the whip antenna. Frequency Range Investigated: 30-1000MHz. Temperature: 17°C, Relative Humidity: 45%. RBW = 3kHz, VBW = 10kHz.

Operating Frequency: 216.025 MHz - 216.975 MHz  
 Channels: Low, Mid and High  
 Highest Measured Output Power: 19.59 ERP(dBm)= 0.091 ERP(Watts)  
 Distance: 3 meters  
 Limit:  $43+10\log(P)$  32.59 dBc

| Freq. (MHz) | Reference Level (dBm) | Antenna Polarity (H/V) | dBc   |
|-------------|-----------------------|------------------------|-------|
| 216.94      | -26                   |                        | 45.59 |
| 217.01      | -25.9                 |                        | 45.49 |
| 195.60      | -49                   |                        | 68.59 |
| 195.60      | -52.1                 |                        | 71.69 |
| 216.93      | -34.7                 |                        | 54.29 |
| 217.01      | -33.3                 |                        | 52.89 |
| 216.07      | -33.4                 |                        | 52.99 |
| 215.99      | -32.4                 |                        | 51.99 |
| 215.99      | -25.8                 |                        | 45.39 |
| 216.06      | -26                   |                        | 45.59 |
| 194.65      | -51.8                 |                        | 71.39 |
| 432.06      | -19.8                 |                        | 39.39 |
| 778.60      | -26.8                 |                        | 46.39 |
| 778.60      | -27                   |                        | 46.59 |

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

Customer: **Phonic Ear**  
 Specification: **RSS-210 Table 3**  
 Work Order #: **82963**  
 Test Type: **Maximized Emissions**  
 Equipment: **Auditory Assistance Device**  
 Manufacturer: **Phonic Ear**  
 Model: **560T216**  
 S/N: **02**

Date: 12/17/2004  
 Time: 14:08:15  
 Sequence#: 24  
 Tested By: Randal Clark

**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     | 2403A08241 | 02/26/2003       | 02/26/2005   | 00489   |
| Display         |            |                  |              |         |
| HP 85650A QPA   | 2811A01267 | 02/26/2003       | 02/26/2005   | 00478   |
| EMCO 3115 Horn  | 9006-3413  | 04/15/2003       | 04/25/2005   | 327     |
| Antenna         |            |                  |              |         |
| HP 8449B Preamp | 3008A00301 | 12/14/2004       | 12/14/2006   | 2010    |

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

| Function                    | Manufacturer | Model #     | S/N         |
|-----------------------------|--------------|-------------|-------------|
| EUT Power Supply            | Phihong      | PSA-30U-120 | C1361930808 |
| Auditory Assistance Device* | Phonic Ear   | 560T216     | 02          |

**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 Extra Band Channels: 41 - 216.025 60 - 216.975 Transmit antenna is the whip antenna. Frequency Range Investigated: 1.0 - 8.0 GHz. **All readings are noise floor. No EUT signals were observed.** Temperature: 17°C, Relative Humidity: 45%.

**Transducer Legend:**

|                                 |                          |
|---------------------------------|--------------------------|
| T1=Amp - S/N 301                | T2=Horn AN 00327 1-18GHz |
| T3=Cable 35' Blue SMA CKC P1352 |                          |

**Measurement Data:**

Reading listed by margin.

Test Distance: 3 Meters

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | T3<br>dB | Dist<br>dB | Table | Corr<br>dBμV/m | Spec<br>dBμV/m     | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----------|------------|-------|----------------|--------------------|--------------|--------------|
| 1 | 5860.885M   | 29.7         | -34.6    | +34.2    | +9.0     | +0.0       | 357   | 38.3           | 54.0<br>Channel 60 | -15.7        | Horiz<br>101 |
| 2 | 3026.820M   | 36.1         | -34.3    | +30.1    | +5.9     | +0.0       | 357   | 37.8           | 54.0<br>Channel 41 | -16.2        | Verti<br>101 |
| 3 | 5207.415M   | 29.9         | -34.4    | +33.8    | +8.3     | +0.0       | 357   | 37.6           | 54.0<br>Channel 60 | -16.4        | Verti<br>101 |
| 4 | 3024.320M   | 35.2         | -34.3    | +30.1    | +5.9     | +0.0       | 357   | 36.9           | 54.0<br>Channel 41 | -17.1        | Verti<br>101 |

|    |           |      |       |       |      |             |      |                    |       |              |
|----|-----------|------|-------|-------|------|-------------|------|--------------------|-------|--------------|
| 5  | 2160.220M | 38.2 | -34.8 | +27.6 | +4.8 | +0.0<br>357 | 35.8 | 54.0<br>Channel 41 | -18.2 | Horiz<br>101 |
| 6  | 1080.095M | 42.8 | -35.8 | +24.3 | +3.3 | +0.0<br>357 | 34.6 | 54.0<br>Channel 41 | -19.4 | Horiz<br>101 |
| 7  | 1080.095M | 41.8 | -35.8 | +24.3 | +3.3 | +0.0<br>357 | 33.6 | 54.0<br>Channel 41 | -20.4 | Verti<br>101 |
| 8  | 1296.120M | 40.8 | -35.5 | +24.6 | +3.7 | +0.0<br>357 | 33.6 | 54.0<br>Channel 41 | -20.4 | Horiz<br>101 |
| 9  | 2823.235M | 28.7 | -34.4 | +29.6 | +5.7 | +0.0<br>357 | 29.6 | 54.0<br>Channel 60 | -24.4 | Horiz<br>101 |
| 10 | 1084.890M | 35.9 | -35.8 | +24.3 | +3.3 | +0.0<br>357 | 27.7 | 54.0<br>Channel 60 | -26.3 | Verti<br>101 |
| 11 | 1084.890M | 35.2 | -35.8 | +24.3 | +3.3 | +0.0<br>357 | 27.0 | 54.0<br>Channel 60 | -27.0 | Horiz<br>101 |
| 12 | 1518.840M | 32.5 | -35.2 | +25.0 | +4.0 | +0.0<br>357 | 26.3 | 54.0<br>Channel 60 | -27.7 | Verti<br>101 |
| 13 | 1301.865M | 33.1 | -35.5 | +24.7 | +3.7 | +0.0<br>357 | 26.0 | 54.0<br>Channel 60 | -28.0 | Verti<br>101 |
| 14 | 1952.790M | 22.7 | -35.0 | +27.0 | +4.6 | +0.0<br>357 | 19.3 | 54.0<br>Channel 60 | -34.7 | Horiz<br>101 |

## PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

**PHOTOGRAPH SHOWING RADIATED EMISSIONS**



Radiated Emissions - Back View