



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 FCC: 100mW ERP 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

Frequency	Output Power	Limit	Result
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

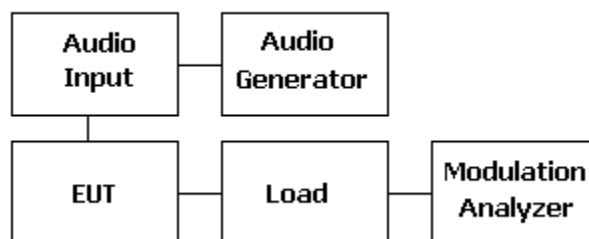
PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



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.

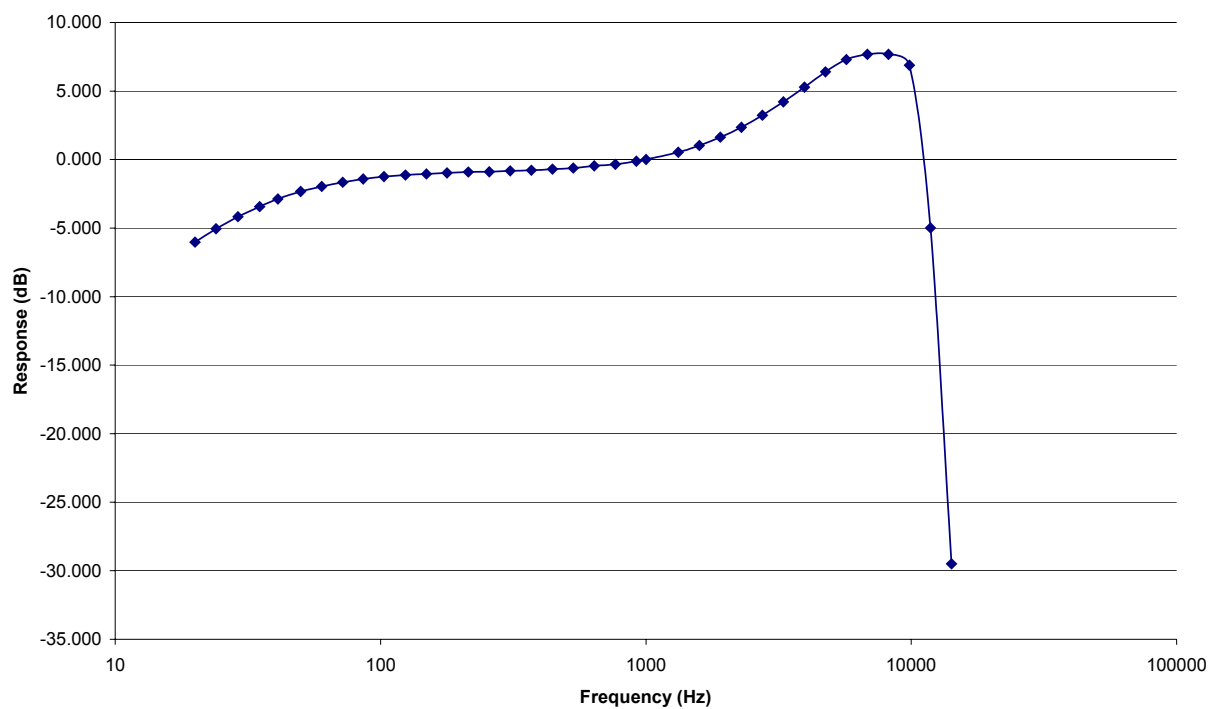
Audio Frequency Response Setup Diagram



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

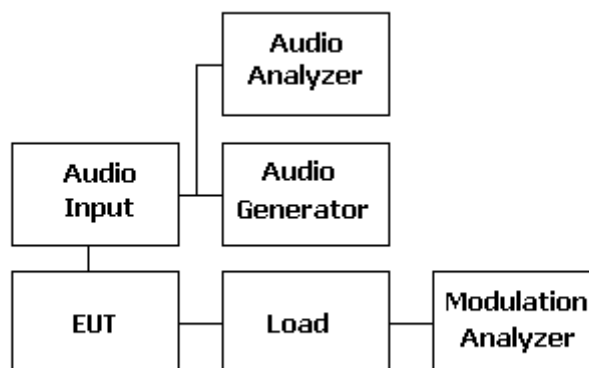
2.1047(a) Audio Frequency Response
Phonic Ear Model 560T216



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.

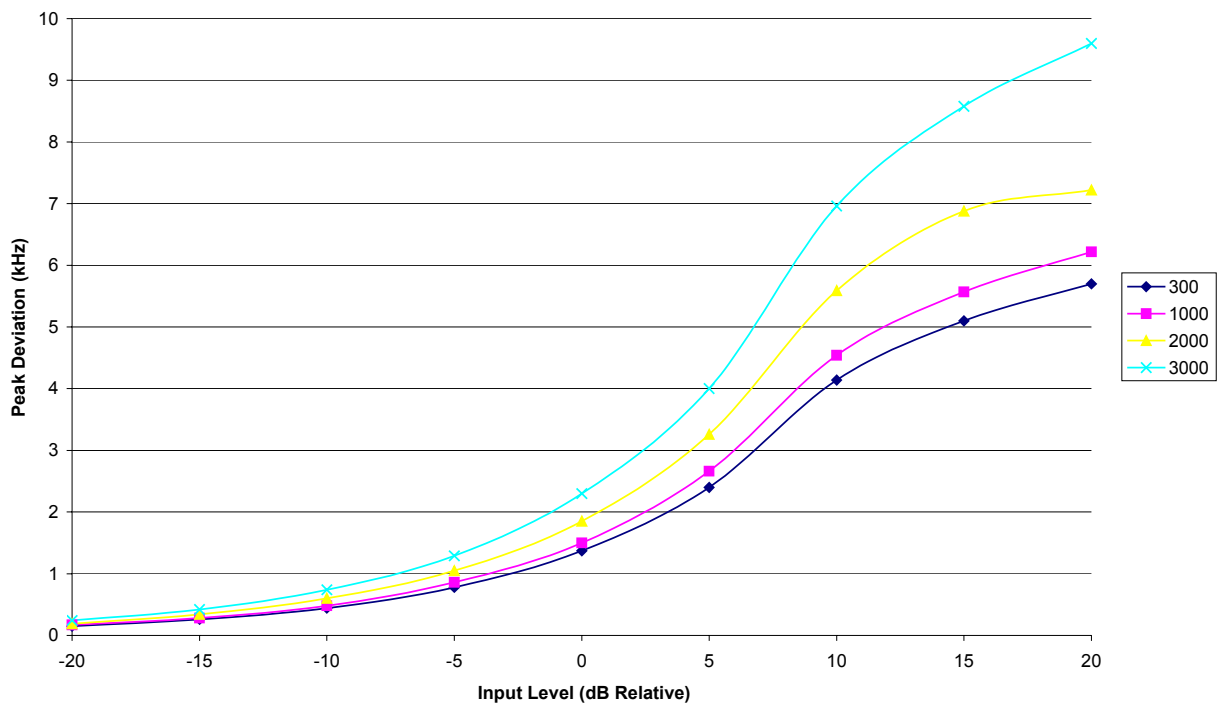
Modulation Limiting Setup



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



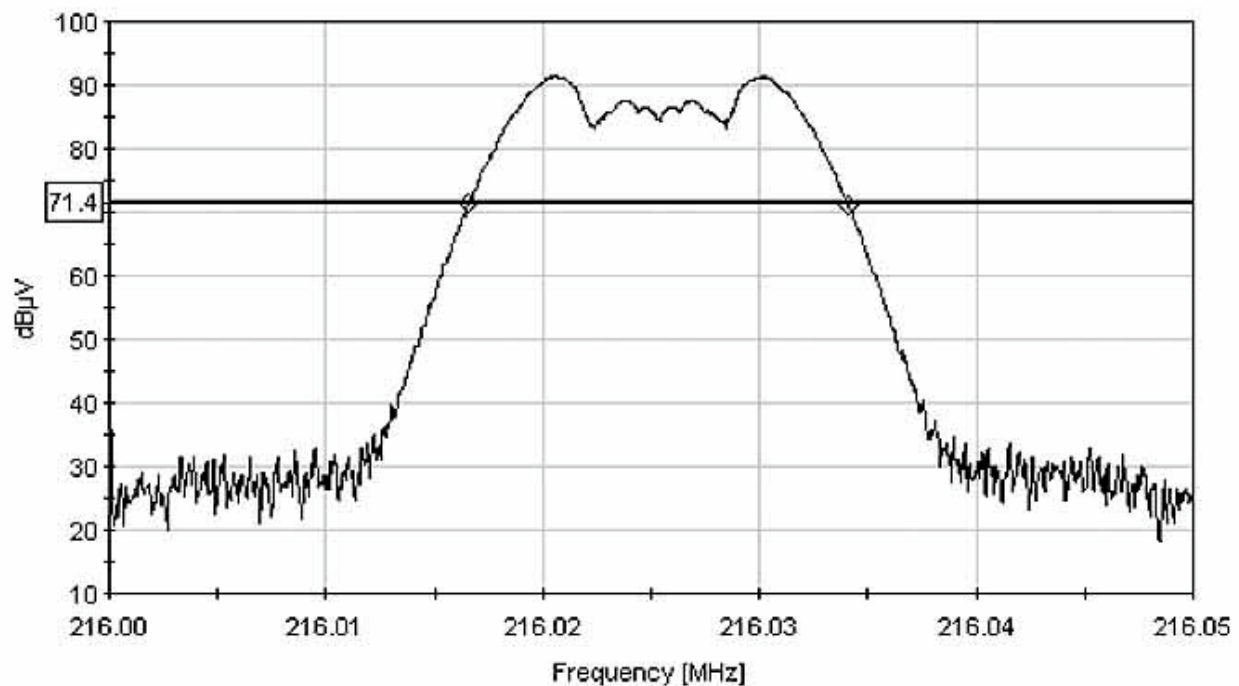
FCC 2.1033(c)(14)/2.1055/95.629- FREQUENCY STABILITY

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
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Measurement Data:

Reading listed by margin.

Test Lead: RF Output

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB		Dist dB	Corr dBμV/m	Spec dBμV	Margin dB	Polar Ant
1	216.975M	109.8	+5.9	+10.0		+0.0	125.7	127.0 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 MHz	Rdng dBμV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBμV/m	Spec dBμV	Margin dB	Polar 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: $43+10\log(P)$ 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: $43+10\text{Log}(P)$ 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

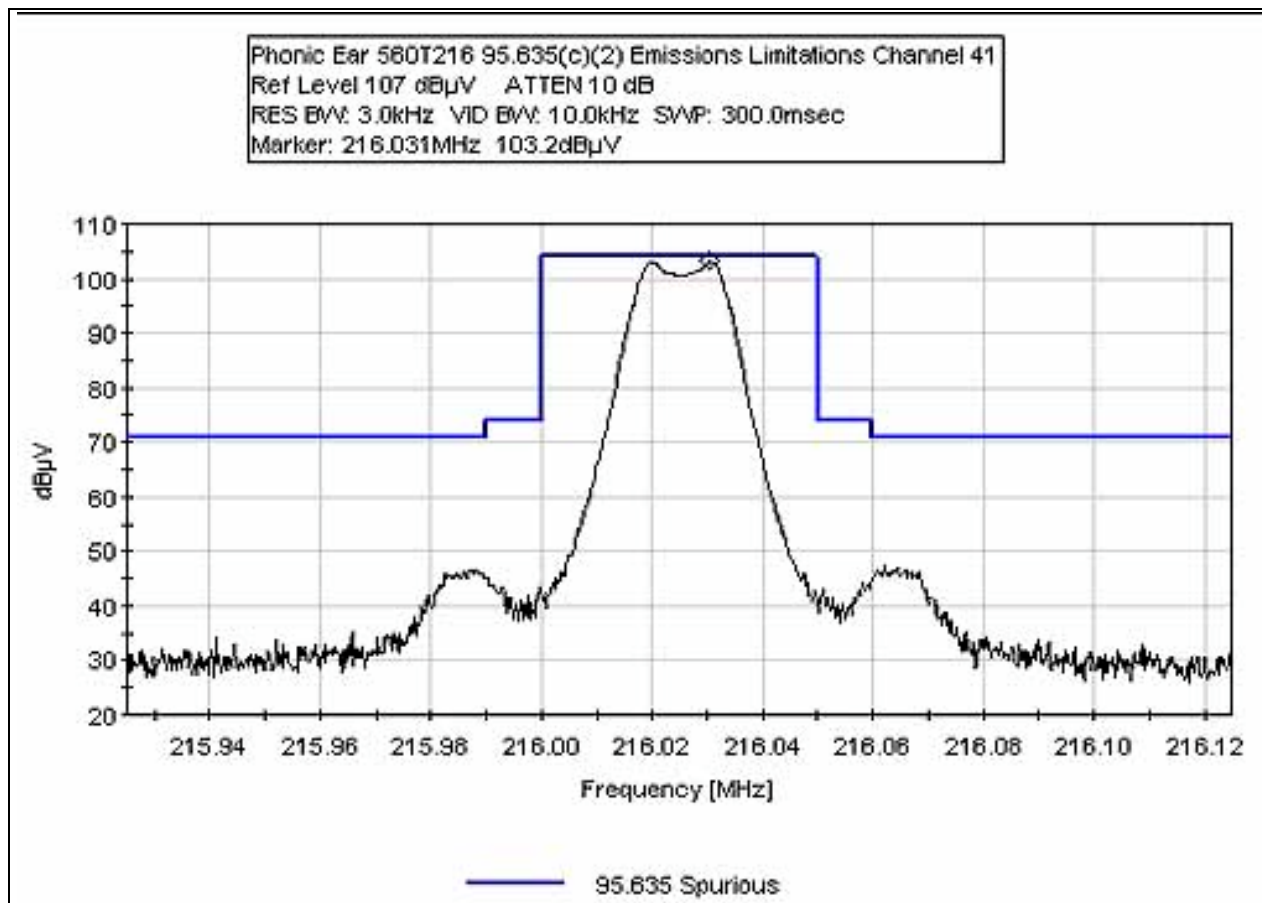
PHOTOGRAPH SHOWING RADIATED EMISSIONS



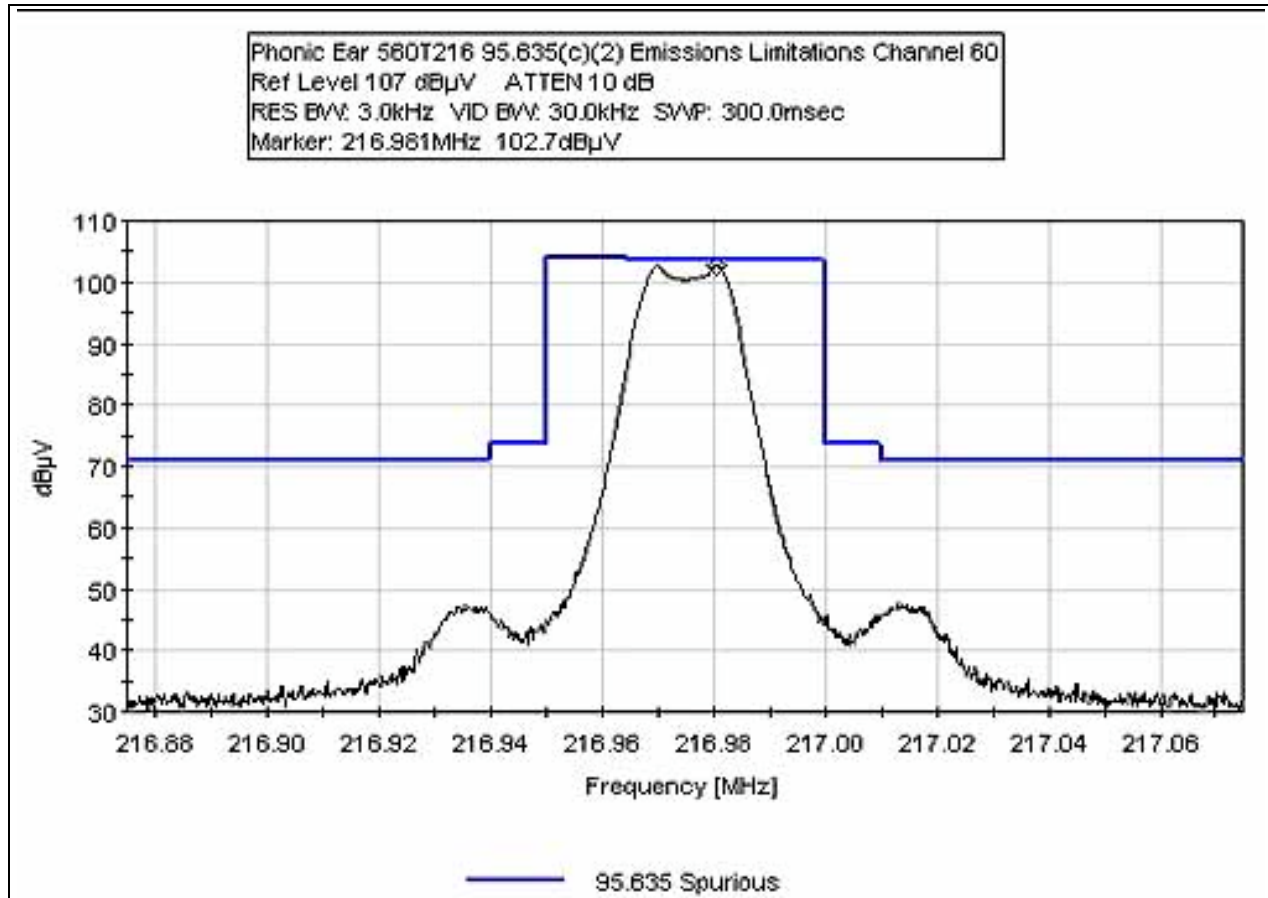
Radiated Emissions - Back View

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:

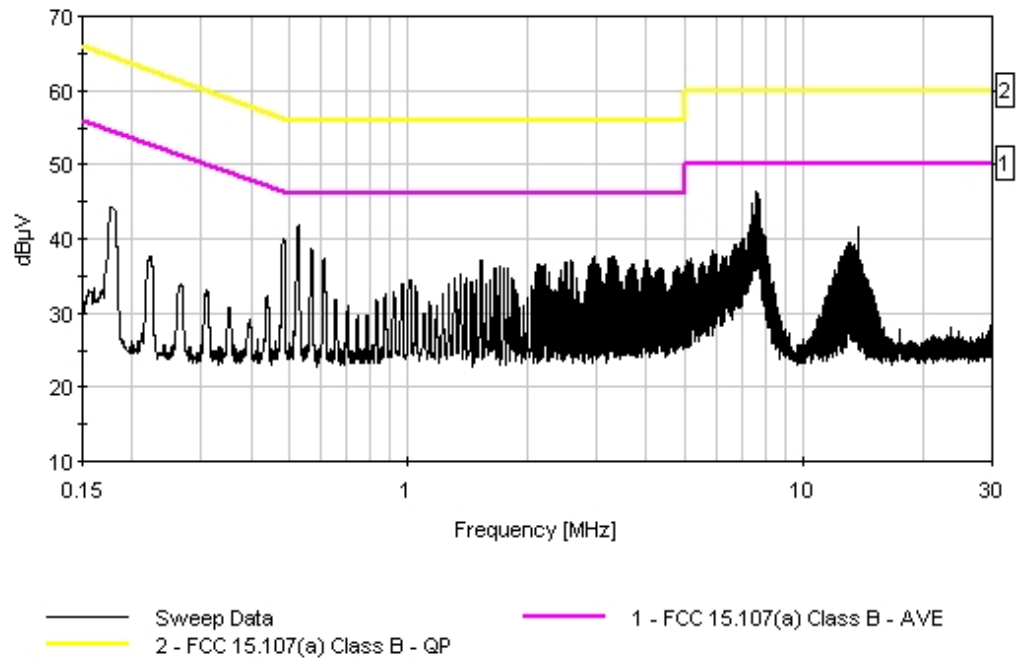
Reading listed by margin.

Test Lead: Black

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar 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:

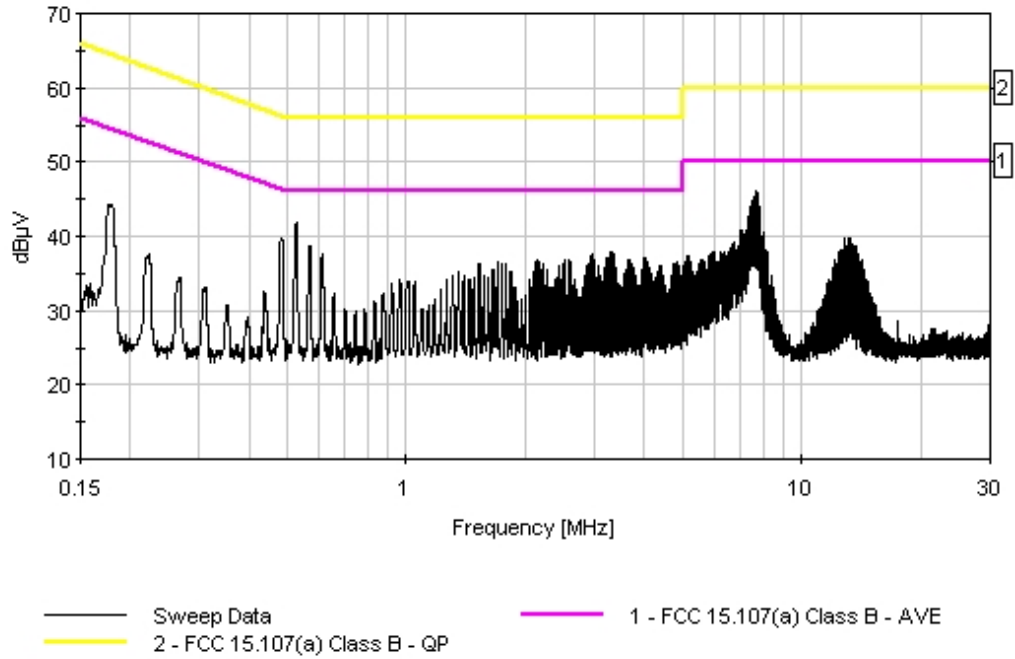
Reading listed by margin.

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
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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	195.600M	24.4	+8.3	+3.3			+0.0 84	36.0	43.5	-7.5	Horiz
2	194.650M	21.7	+8.3	+3.2			+0.0 255	33.2	43.5	-10.3	Horiz
3	195.601M	21.3	+8.3	+3.3			+0.0 112	32.9	43.5	-10.6	Verti
											155

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

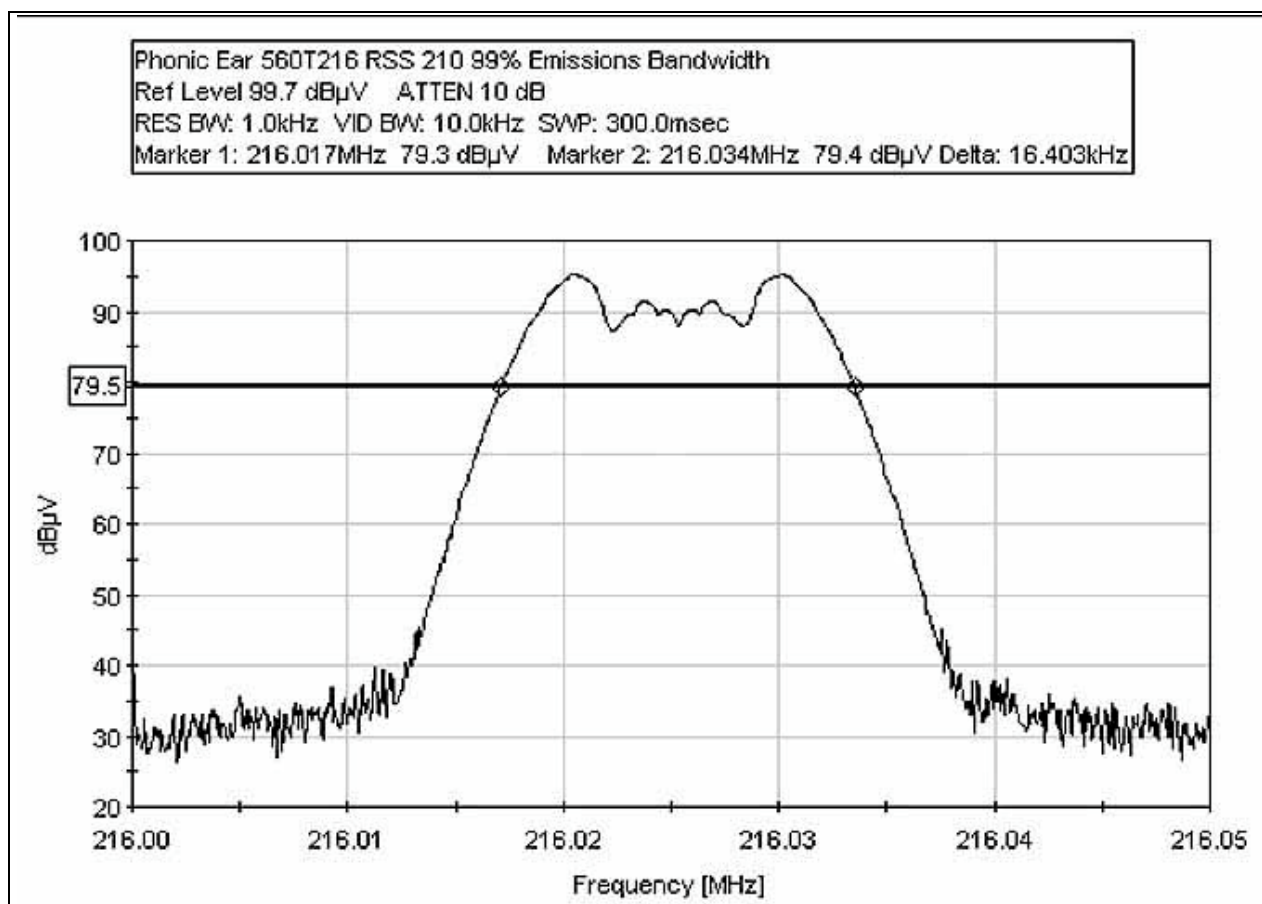
PHOTOGRAPH SHOWING RADIATED EMISSIONS



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:

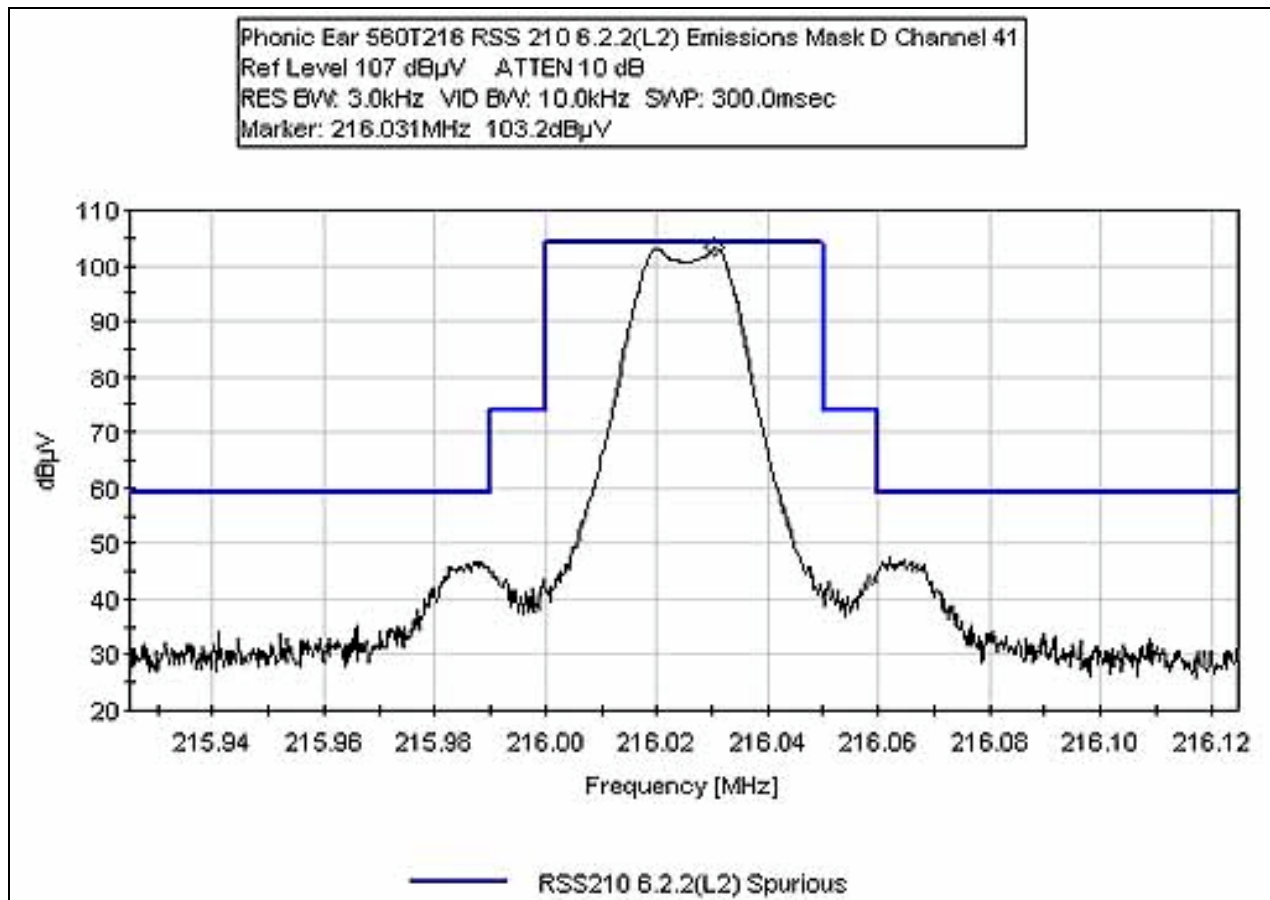
Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
Attenuator PE7004-6		09/29/2004	09/29/2006	P02226
Attenuator PE7002-10		09/29/2004	09/29/2006	P00082

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

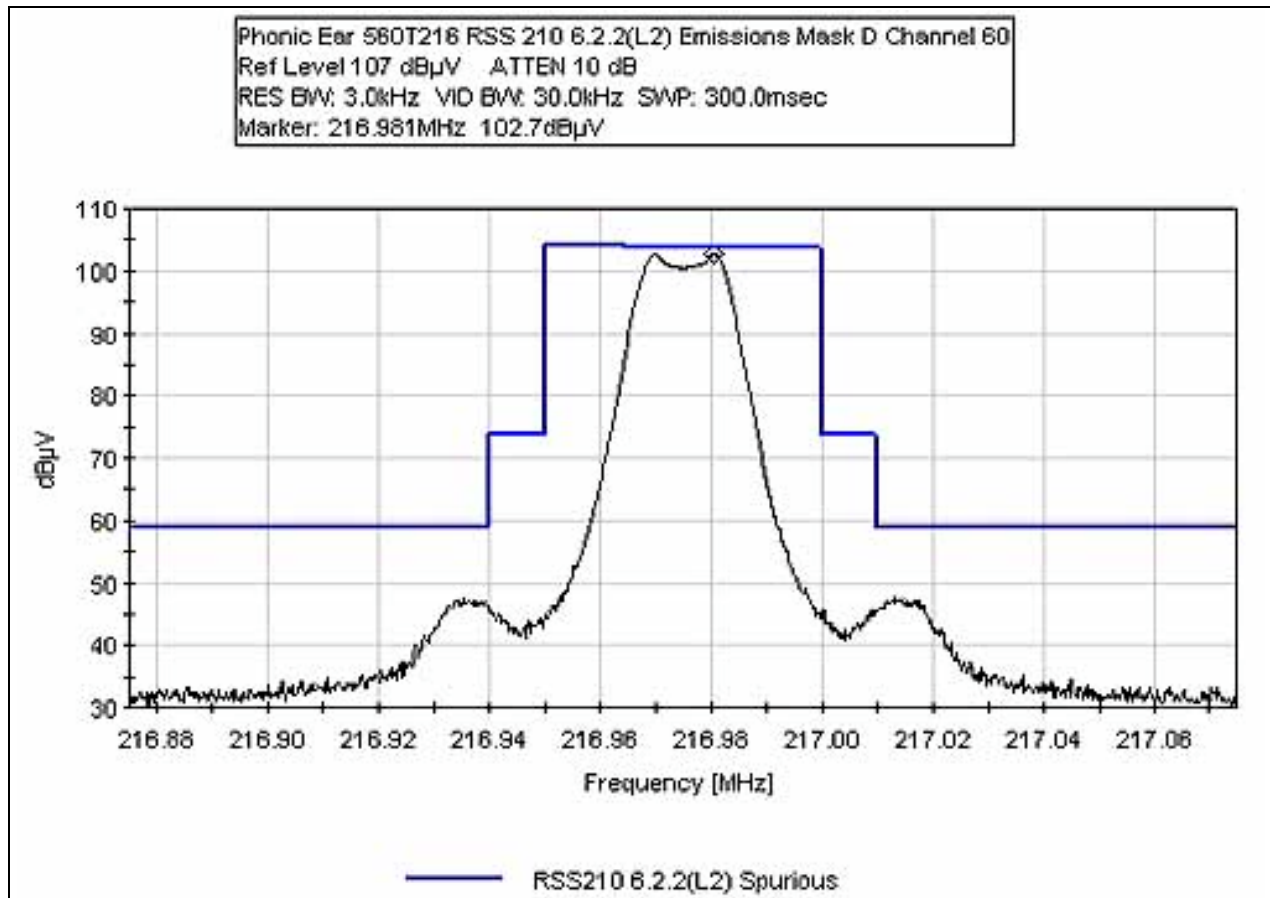


RSS-210 6.2.2 (L2) EMISSIONS MASK D CHANNEL 41

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

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar 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
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Measurement Data:

Reading listed by margin.

Test Lead: RF Output

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	Dist dB	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	216.025M	109.9	+5.9	+10.0	+0.0	125.8	127.0 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:

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

#	Freq MHz	Rdng dBμV					Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
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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: **Maximized Emissions**
 Equipment: **Auditory Assistance Device**
 Manufacturer: **Phonic Ear**
 Model: **560T216**
 S/N: **02**

Date: 12/15/2004
 Time: 11:55:38
 Sequence#: 21
 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
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.

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** 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%.

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

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

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View