



Life Saver Radiation Research Measurements and Tests
Certified EMC, Safety and Engineering



www.LifeSaver.co.il

29 August 2011

RE: EMI20602

To:

Mr. Omer Wax

Mono-tech ltd.

2 Jonathan St.

Kfar Saba, 44641

Israel

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RE: EMF Radiation Reduction: Justification and Measurements of Electromagnetic fields on Smart & Safe Air tube Headset for use with Cell phones.

Following your request, we measured, on August 23-30, 2011, the amounts Electromagnetic fields radiations from Cell phones sources including RF, ELF and EMF. The measurements were carried out at our Lab in Kfar Saba, Israel.

The purpose of the measurements is to compare the electro magnetic fields that are emitted from cell phones connected to conventional wired headsets with that radiated from cell phone that employ Smart&Safe™ air tube headsets which transmit the sound to the head through hollow Air in tubes that have no metal wires.

The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B). This classification is based on an increased risk for "glioma", a malignant type of brain cancer¹, associated with using wireless phone.(PR #208 Lyon, France, May 31, 2011)

The results of the test showed that the usage of Smart&Safe™ headset eliminated most of the electromagnetic radiation emitted from the cell phone. RF and ELF radiations are decreased by 99% and 95% respectively in comparison to direct talking on a cell phone.



Using Air Tubes headset to talk over the cell phone is totally safe and highly recommended by "WHO". .Health organizations and governments around the world issued recommendations and warnings regarding the usage of cell phones that emit radiation.



Review Protocol of Electromagnetic field Measurement

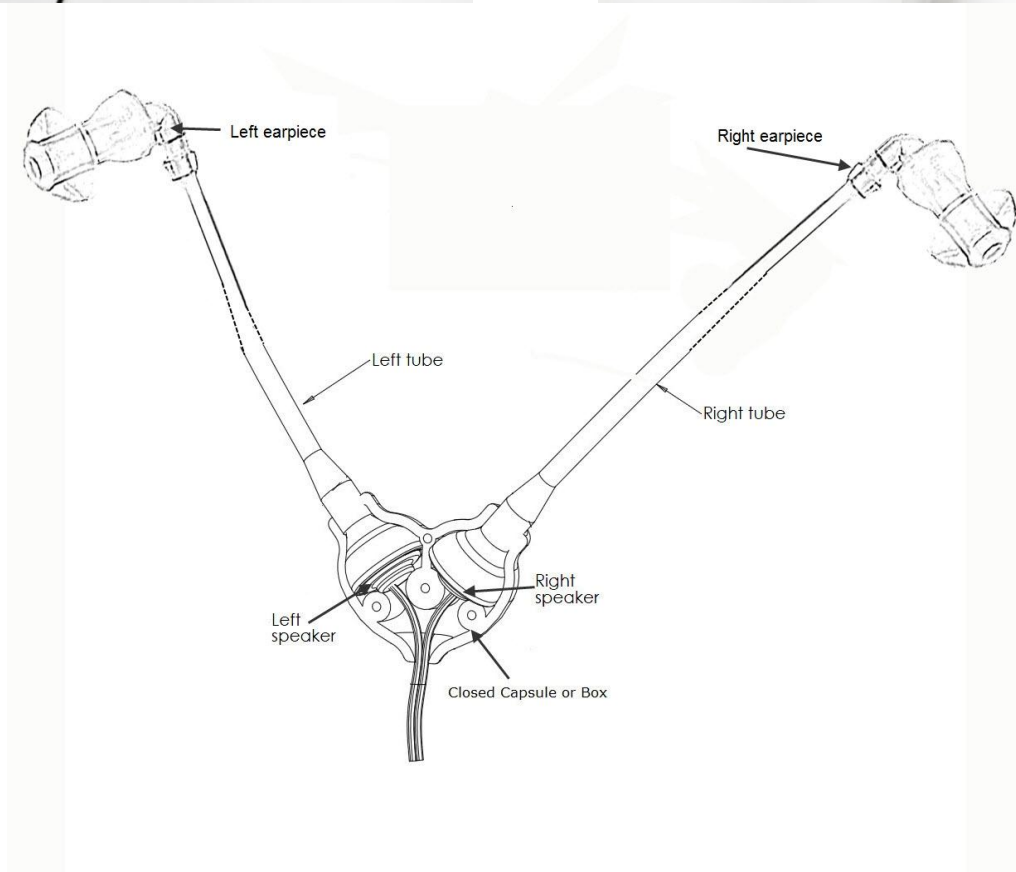
Name:	Smart&Safe™ Mono- Tech Ltd.
Address:	2 Jonathan St. Kfar Saba, 44641
Phone:	+972-9-765-4270
Cell:	+972-52-4032525
Place of Measurements:	Mono- Tech Labs, Kfar Saba
Measurement Type:	Electromagnetic field Measurements (RF +ELF)

Name of Test Engineer	<u>Liran Raz, Bsc</u>
MOE License No.	3000-01-4, 3000-01-5
Expiration	14.1.2012

ELF Measurement testing tool	<p>Aaronia Spectran NF-5035 SN:#05139 Calibration expiration January 14, 2012 Frequency range : 1Hz to 1MHz Aaronia Labs, Germany</p> 
RF Measurement testing tool	<p>Aaronia Spectran HF 60105 #55742 Calibration expiration January 14, 2012 Frequency range : 1MHz to 9,4GHz Aaronia Labs, Germany</p> 



Picture and draw of Smart&Safe™ Air tube headset





Testing Protocol

Environment Condition	<p>The Measurement took place at the Lab Area, in various distances from the cell phones transmitters.</p> <p>The Measurements were taken between 09:00-1800,</p> <p>With different models and service providers</p>
Source of Electromagnetic Fields	<p>In The cell phone there are different sources of RF and ELF electromagnetic fields.</p> <p>RF – (800Mhz- 2500Mhz) - Mobile phones use electromagnetic radiation in the microwave range to transmit and receive signals and data.</p> <p>800 -1000 MHz – 1st generation cell phone. 1700-1900 MHz – 2nd Generation cell phones 2000-2200 MHz – 3rd generation cell phone 2400-2500 MHz – Bluetooth and WiFi internet connection.</p> <p>EMF – magnetic fields that may be emitted from the speaker on regular headset or the cell phone itself.</p> <p>Those RF/ELF sources generate the Electromagnetic Fields that are required in order to transmit the signals and hear the sounds.</p> <p>Most of the sources are not working all the time, but only when the cell phone are activated.</p>



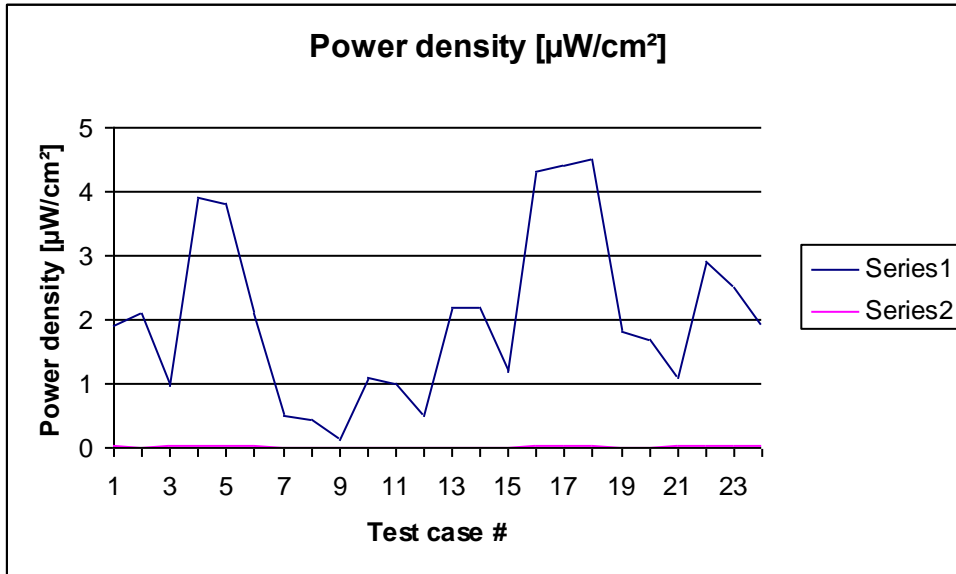
Parameters that checked	<ol style="list-style-type: none">1. Electric Field power [V/m]2. Power density [$\mu\text{w}/\text{cm}^2$]3. Magnetic Fields [mG]
Cell phone models use in this test.	<ol style="list-style-type: none">1. I phone 42. Blackberry 97003. Samsung Galaxy4. Nokia N95
Service provider and mobile TR systems.	<ol style="list-style-type: none">1. Cellcom GSM/TDMA2. Partner UMTS/GSM3. Pelephone UMTS/GSM
Areas of Measurements	<ol style="list-style-type: none">1. head of the user – ear area while speaking direct with cell phone2. head of the user – ear area while speaking with Smart&Safe™ headset connect to cell phone3. Mouth area.4. Heart -base of air tubes, and microphone
Measurement Process	<p>EMF radiations from cell. Phones of several makes and different models in use with the service providers outlined above were measured. The tests were performed in the following modes of operation:</p> <ol style="list-style-type: none">1. Transmission in low and high mode2. Stand bye3. Ringing4. Talking



Test Result of Power density RF – I phone 4



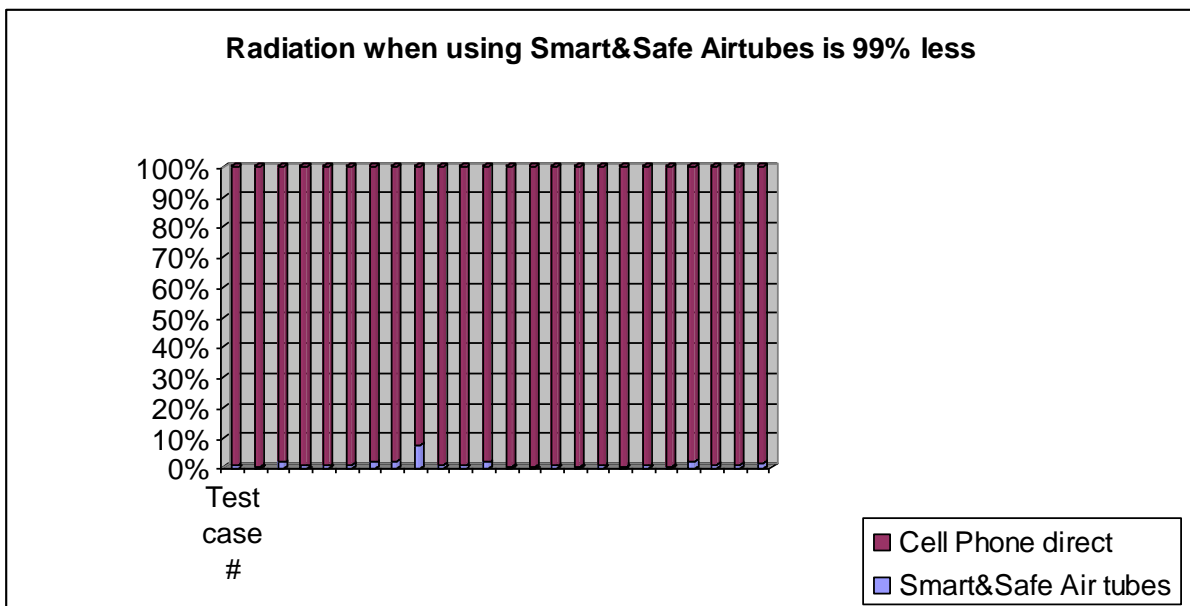
N o.	Phone Status	Test point	transmitters status	Smart& Safe™ Air tube [μW/cm²]	Cell phone direct [μW/cm²]	Power density Reduction %
1.	Ringing	Ear	Low	0.016	1.9	99.16%
2.	Ringing	Mouth	Low	0.009	2.1	99.57%
3.	Ringing	Heart	Low	0.018	0.98	98.16%
4.	Ringing	Ear	High	0.025	3.9	99.36%
5.	Ringing	Mouth	High	0.029	3.8	99.24%
6.	Ringing	Heart	High	0.022	2.1	98.95%
7.	Standby	Ear	Low	0.01	0.5	98.00%
8.	Standby	Mouth	Low	0.01	0.45	97.78%
9.	Standby	Heart	Low	0.01	0.12	91.67%
10.	Standby	Ear	High	0.01	1.1	99.09%
11.	Standby	Mouth	High	0.01	1.0	99.00%
12.	Standby	Heart	High	0.01	0.5	98.00%
13.	Calling	Ear	Low	0.012	2.2	99.45%
14.	Calling	Mouth	Low	0.009	2.2	99.59%
15.	Calling	Heart	Low	0.008	1.2	99.33%
16.	Calling	Ear	High	0.022	4.3	99.49%
17.	Calling	Mouth	High	0.029	4.4	99.34%
18.	Calling	Heart	High	0.025	4.5	99.44%
19.	Talking	Ear	Low	0.012	1.8	99.33%
20.	Talking	Mouth	Low	0.009	1.7	99.47%
21.	Talking	Heart	Low	0.023	1.1	97.91%
22.	Talking	Ear	High	0.031	2.9	98.93%
23.	Talking	Mouth	High	0.029	2.5	98.84%
24.	Talking	Heart	High	0.033	1.9	98.26%



Average P while using cell phone direct is: 2.05 [µW/cm²]

Average P while using Air Tube headset is: 0.017 [µW/cm²]

Power density difference between type of use is: - 99% less

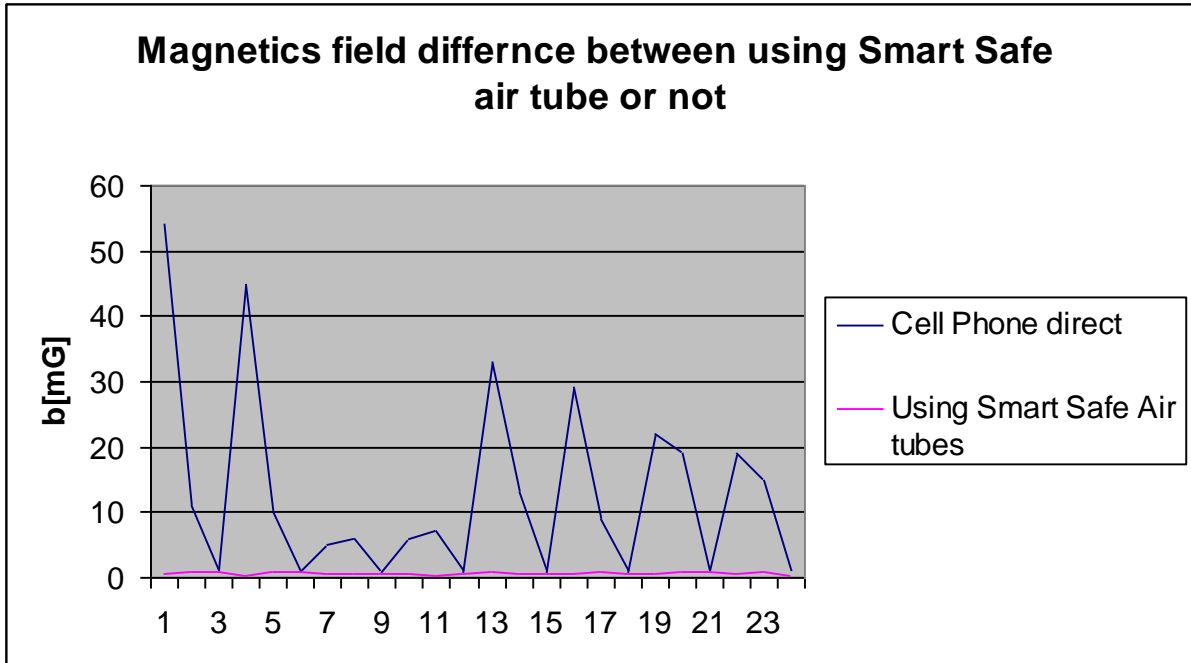




Test Result of Electromagnetic Fields ELF – I phone 4



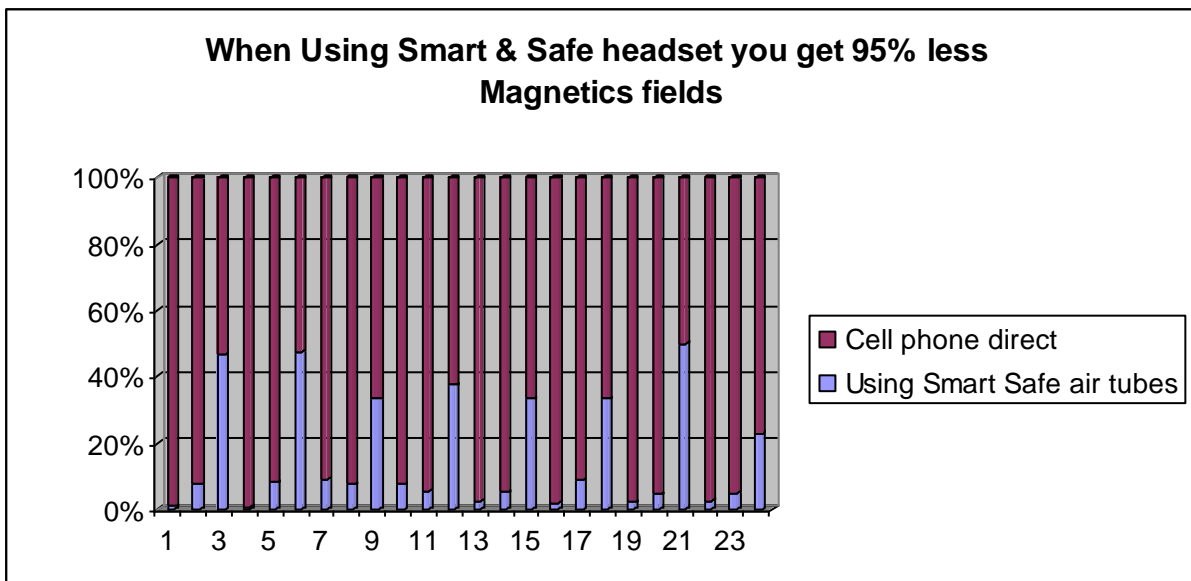
N o.	Phone Status	Test point	transmitters status	Smart& Safe™ Air tube [mG]	Cell phone direct [mG]	Power density Reduction %
25.	Ringing	Ear	Low	0.5	54	99.07%
26.	Ringing	Mouth	Low	0.9	11	91.82%
27.	Ringing	Heart	Low	0.8	0.9	11.11%
28.	Ringing	Ear	High	0.4	45	99.11%
29.	Ringing	Mouth	High	0.9	10	91.00%
30.	Ringing	Heart	High	0.9	1	10.00%
31.	Standby	Ear	Low	0.5	5	90.00%
32.	Standby	Mouth	Low	0.5	6	91.67%
33.	Standby	Heart	Low	0.5	1	50.00%
34.	Standby	Ear	High	0.5	6	91.67%
35.	Standby	Mouth	High	0.4	7	94.29%
36.	Standby	Heart	High	0.6	1	40.00%
37.	Calling	Ear	Low	0.8	33	97.58%
38.	Calling	Mouth	Low	0.7	13	94.62%
39.	Calling	Heart	Low	0.5	1	50.00%
40.	Calling	Ear	High	0.6	29	97.93%
41.	Calling	Mouth	High	0.9	9	90.00%
42.	Calling	Heart	High	0.5	1	50.00%
43.	Talking	Ear	Low	0.5	22	97.73%
44.	Talking	Mouth	Low	0.9	19	95.26%
45.	Talking	Heart	Low	1	1	0.00%
46.	Talking	Ear	High	0.5	19	97.37%
47.	Talking	Mouth	High	0.8	15	94.67%
48.	Talking	Heart	High	0.3	1	70.00%



Average B[mG] while using cell phone direct is: 12.65 [mG]

Average B[mG] while using Air Tube headset is: 0.64 [mG]

Magnetic field difference between type of use is: - 95% less





Summery of Test Results Conclusions and advises:

After running all the required tests and measurements and analyzing the data, we determine that using the headset Smart&Safe™ Air tubes, is the best way to prevent Electro-magnetic Radiation from the cell phone.

Radiation emissions from cell phone has caused concerns to the World Health Organization who, on May.31. 2011, issued a statement that cell phones can be a possible cause for cancer. They now list mobile phone usage in the same "carcinogenic hazard" category as lead, engine exhaust fumes and chloroform.

Using Smart&Safe™ headset eliminates most of the EMF radiation from cell phone. The technology employed in the Smart&Safe air tube is based on transmitting only sound waves through a hollow air tube without any metal wires involved.

1. Using Smart&Safe™ air tubes headset **reduces the RF radiation by 99%** in comparison to talking direct on the cell phone.
2. using Smart & Safe air tubes **headset reduces the ELF radiation by 95%** in comparison to talking direct on the cell phone
3. throughout the world today governments and health organisations have put restrictions on the use of cell.phones, especially with kids; but using
4. We recommend you use the hand free device in all of your cell phone conversations as a caution, as it is always better to be on the safe side

Please don't hesitate to contact me in any issue regarding this Report,

Truly Yours,


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