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Messung
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## **Test Results**

# "Green 8" Harmonization Foil for Mobile Phones

Test results on the effect of electromagnetic fields of mobile phones to humans and the effect of the "Green 8" harmonization foil for mobile phones.

Test measurements to determine whether and how EM radiation and the protective effect of the harmonization foil for mobile phones can be measured.

#### Meridian measurements based on TCM

Biofeedback measurements of various physiological parameters, such as brain and body potentials, EEG, ECG, skin conductive value, muscle tension, temperature, tremor, blood volume beat.

- 1. Meridian measurements
- 1.1 Excerpt, summary and comments regarding the test measurements
- 1.2 Basics
- 1.3 Measurement device
- 1.4 Measurement points
- 1.4.1 Anatomic basics
- 1.5 Measurement structure
- 1.5.1 Mobile phone
- 1.6 Biofeedback measurements
- 1.7 Measurement graph

All measurements described in this document were conducted by the request of BAUER-BIOTEC- Bio-Protective-Systems.

G-8-Test-En.DOC Page 1 of 5

#### 1. Meridian Measurements

#### 1.1 Excerpt, Summary and Comments Regarding the Test Measurements

- These tests were aimed at determining the impact of and the change to the energy state of the meridians and the functional readiness of the most important organs in the use of mobile phones. The tests were based on a holistic statement on the energy state of the meridians by the TCM (Traditional Chinese Medicine) method.
- Meridian measurements are tests used to check the ability to measure the stress caused by electric smog during the use of mobile phones. In addition, they are aimed at checking whether or not the use of the "GREEN 8" mobile phone harmonization foil can lead to a measurable reduction or compensation of this stress.
- The meridian system is considered the fastest communication and information system of the body, responding with high sensitivity to all types of impact. For this reason, it is possible to measure the response to various kinds of impact after a very short exposure time.
- The results from these meridian measurement, which had been conducted with nine test subjects in a
  total of ten measurements series, indicate that the protective effect of this energizing foil, which has a
  harmonizing effect according to the manufacturer, protecting from the impact of pulsated electromagnetic
  radiation of mobile phones, can indeed be measured.
- In a total of six test subjects, the measurement results indicated a low load, or a positive effect from the harmonization foil (2 test subjects); see measurement charts.
- The findings gained from the comparative tests show very clear changes/loads in the energy state and
  thus in the functional readiness of the most important organs in the use of mobile phones, observed in the
  individual test objects, where different results were observed, but clearly declining in the minus range
  from up to minus 64% as an average, referred to all important organs measured (see graphical charts).
- The use of the "GREEN 8" harmonization foil shows that the measured minus values are in whole or in part not fully balanced, but rose even in some cases to plus 24%, which means in these cases that the energy state improved additionally, or has been supported, i.e., no load was observed due to the use of a mobile phone.
- We were surprises to observe that six test subjects with sympathicotonic background situation out of a total of
  nine responded positively to the mobile phone harmonization foil. There was a reduction of the energy drop,
  compared to the energy drop observed during phone calls without harmonization foil, and some test subjects
  reported even an increase in the total meridian energy, referred to the previous measurement.
- Two test subjects with vagotonic background situation responded with an increase in meridian energy.
- One test subject, who had suffered from a cold at the time the measurement was taken, responded to the phone call with the harmonization foil with a reduction of the meridian energy.
- A NOKIA 8810 device was used for all measurements. According to the Electrosmog Report, this device is listed on position 3 of all tested mobile phones, referred to the radiation values, out of a total of 46 tested devices, meaning that it has a very low radiation value.
- A total of ten measurement processes were conducted in 9 test subjects.

The **spleen-pancreas meridian** responded particularly strong in several test persons. This meridian **responds significantly under loads caused by electromagnetic fields**.

The tests conducted show a clear improvement and change when using the "GREEN 8" harmonization foil.

G-8-Test-En.DOC Page 2 of 5

#### 1.2 Basics

Meridians as they have been observed in humans as well as animals and plants are considered to be the oldest communication system of the living world. Acupuncture points and meridians had been described in Chinese medicine already 5000 years ago, and modern technologies have produced anatomic and histological proof of their existence; see Section 1.4.1.

Modern electric diagnostics assumes that the skin resistance values elevated in the start and end points of the meridians provide insight on the energy status of the respective meridian and on the functional readiness of the organs linked to the individual meridians.

The measurement system used (Prognos ®) allows the measurement and correct recording of changes in the energy status, so that the impact of various factors influencing the meridians can be tested.

#### 1.3 Measurement Device

The "Prognos®" system was used to conduct the meridian measurements reported in this study. This device has been used by the Russian space agency for air control for about 20 years for early detection of physical and psychical disturbances of cosmonauts and air traffic controllers.

The hardware consists of a measurement computer, equipped with a special measurement pen used to determine the skin resistance in the 24 start and end points of the 12-pair meridians, so that the entire meridian network can be acquired.

The Prognos® software, Version 4.02, installed on the measurement computer, is used to evaluate the data acquired. Mathematical algorithms, which were created on the basis of more than 12 million measurement data sets, are used to produce an analysis based on the TCM (Traditional Chinese Medicine) basics.

The measurement values are reproducible (see Dr. Treugut; University of Tübingen).

#### 1.4 Measurement Points

To register the 12-öpair meridians in both body halves, 24 individual measurements are conducted in each test measurement.

A representative acquisition of the meridian network is done at its end points; the measurement points can be easily located next to the finger nails and toe nails. The measurement values are taken at the following points, each for the left and right body halves:

Lung 11, large intestine 1, stomach 45, spleen-pancreas 1, heart 9, small intestine 1, bladder 67, kidney 1, circulation 9, triple heater 1, gall 44, liver 1.

#### 1.4.1 Anatomic Basics

The existence of acupuncture points has been proven anatomically and histologically in the modern world. Between the neighboring start and end points, there are concrete links, connecting the individual meridians into a meridian network.

G-8-Test-En.DOC Page 3 of 5

#### 1.5 Measurement Structure

In April 2000, a total of ten documented measurement series with nine test subjects were conducted in the premises of the Institute for Potential Research on different days.

Each test subject filled in a short guestionnaire.

First, a basic measurement (0% mention in the measurement chart) was conducted. This basic test involved the measurement of the current status of the meridian energy, which was then used as background value for the subsequent comparative measurements.

In preparation for the tests, the test persons were asked to relax on a day-bed. For a basic measurement, the values were determined to serve as background values for the subsequent tests. Each test person rested quietly and fully relaxed on a day-bed over the entire duration of the measurement, while instrumental music was played from a CD in the adjacent room. Next, an active mobile phone was mounted on a tripod and placed near the ear of each test person. The receiver of the other phone was placed near the CD player so that the test person could hear the same music that was played from the CD either directly, or nothing at all.

Although the test subjects knew that mobile phone tests were run, they did not know what exactly would be tested. Also, they did not know the "GREEN 8" and didn't know whether and when the mobile phone would be tested with the foil attached.

#### 1.5.1 Mobile Phone

The Electrosmog Report (Nova Institute, April 2000) lists the SAR values of various mobile phones. The SAR values (specific absorption rates) are determined by defined measurement rules and refer to the head area.

The SAR value range of the mobile phones listed in the report extends from 0.10 to 2.67W/kg.

Depending on the model, there are various radiation loads onto the head. In fact, there is a factor of 27 between the best and the worst model!!

The test measurements had been conducted with a Nokia 8810, belonging to the Institute, which is on rank 3 among 46 mobile phone models, according to the list published in the Electrosmog Report, i.e., a device with a very low radiation.

#### 1.6 Biofeedback Measurement

Upon completion of the meridian measurement, each test person was subjected to a standardized stress test, accompanied by a biofeedback measurement. This test involved the measurement of the response to various stress stimuli, again to determine very individual response of each test subject to stress. We were interested in observing whether the response would be more sympathicotonic or more vagotonic.

G-8-Test-En.DOC Page 4 of 5

#### 1.7 Measurement Graph

Evaluation of the Prognos calculation program shows differences in some instances regarding the impact of the mobile phone with and without the use of the "GREEN 8", respectively.

Each person has its own very individual measurement curve, reflecting the current energy distribution in the meridians at the time of measurement. In addition, the response to a stimulus (disturbance factor or remedy) is very individual and different in each person. Since the individual meridians cannot be compared between any two people for these reasons, or only with a large number of individual measurements with comparable test subjects, we have used the calculation of the total meridian energy as a comparison.

The calculation mode was set so that the values of the basic measurement is shown with 0% in the graph.

The values gained from the first comparative measurement show the change in percent, referred to the basic measurement. In the calculation of the second comparative measurement, the measurement data from the first comparative measurement were used as reference, and the changes are again shown in percent, however referring to the first comparative measurement. The third comparative measurements gives the relative change in percent, but this time referred to the second comparative measurement, etc.; see measurement charts 1 through 4.

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Enclosure: Test graphs 1 through 4

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Legend to test graphs

Basic measurement

With "GREEN 8"

Without "GREEN 8"

Stress test

Information provided by:

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Link to related graphs: www.emfsafe.com/green8/prognosgraph.jpg also /prognosgraph2.jpg

G-8-Test-En.DOC Page 5 of 5