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Report No.: SZEMO09110669202

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## RF Exposure Evaluation declaration

**Application No.:** SZEMO091106692RF  
**Applicant:** Seecode Technology Ltd & Co KG  
**Address of Applicant:** Rösrather Strasse 333, 51107 Köln, Germany  
**Manufacturer:** UNIFAT Technology Ltd  
**Address of Manufacturer:** 7/F., Sui Hong Ind. Bldg., 547-549 Castle Peak Rd., Kwai Chung, N.T., H.K.  
**Factory**  
**Address of Factory:** Sheima Sheung, Shueng ping chang, Dongguan, People's Republic of China  
**FCC ID:** VUMVOSSORPBV3  
**Fundamental Carrier Frequency :** 2.402GHz-2.480GHz

**Equipment Under Test (EUT):**

Name: Bluetooth hands-free system  
Trade Mark: SEECODE  
Model: MHF88

**Date of Receipt:** 2009-11-30

**Date of Test:** 2009-12-02 to 2010-07-07

**Date of Issue:** 2010-07-09

<b>Test Result :</b>	<b>PASS*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



July 2010

Jack Zhang  
Laboratory Manager

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## 2 RF Exposure Evaluation

### 2.1 Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	300

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

## 2.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 2.3 Test Result of RF Exposure Evaluation

Product : Bluetooth hands-free system

Test Item : RF Exposure Evaluation

Test Site : No.3 OATS

Antenna Gain: 3dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.995 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )
Lowest	2402	1.87	1.538	0.00061

The distance r (4th column) calculated from the Fries transmission formula is far shorter than 20 cm separation requirement.