

## RF Exposure Report

### 1. Limits For Maximum Permissible Exposure (MPE)

According to §1.1310 and §2.1091 RF exposure is calculated.

**Table: Limits for General Population/Uncontrolled Exposure**

Frequency Range (MHz)	Power Density (S) (mW/cm <sup>2</sup> )
0.3–1.34	*(100)
1.34–30	*(180/f <sup>2</sup> )
30–300	0.2
300–1500	f/1500
1500–100,000	1.0

F = frequency in MHz

\* = Plane-wave equivalent power density

Maximum Permissible Exposure

The MPE was calculated at 20cm to show compliance with the power density limit.

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna.

Note:

1. Manufacturer declared that the antenna gain used for the EUT is 0.5dBi(Max.).
2. Manufacturer declared that the nearest distance between human and the EUT is 20cm.
3. Only record worst case data.

## 2. Calculation Results

Test Mode	Channel & Frequency (MHz)	Max. Tune Up Power (dBm, Average)	Max. Tune Up Power (mW)	MPE (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
GSM 850	Low Channel 824.2MHz	$32.0 \pm 1.0$	1995.26	0.4454	0.549
	Middle Channel 836.6MHz	$32.0 \pm 1.0$	1995.26	0.4454	0.558
	High Channel 848.8MHz	$32.0 \pm 1.0$	1995.26	0.4454	0.566
PCS 1900	Low Channel 1850.2MHz	$29.0 \pm 1.0$	1000.00	0.2232	1.0
	Middle Channel 1880.0MHz	$29.0 \pm 1.0$	1000.00	0.2232	1.0
	High Channel 1909.8MHz	$29.0 \pm 1.0$	1000.00	0.2232	1.0

Antenna Gain (typical): 0.5dBi / 1.122(numeric)

Prediction distance:  $\geq 20$ cm

The power density level worst case at 20 cm is below the uncontrolled exposure limit.