

relating to item 1)

MPE estimation analysis for base unit as mobile device:

Because of the low transmitted peak power of less than 26 dBm this device complies with the MPE requirements.

Determination of Power Density at 2.4 GHz according to OET Bulletin 65 (97-01):

1. Power density

$$S = \frac{\text{EIRP}}{4 R^2 \pi}$$

EIRP – equivalent isotropically radiated power
R – distance to the centre of radiation of the antenna

2. Power density calculation:

$$\begin{aligned}\text{EIRP} &= 332 \text{ mW (25.21 dBm)} \\ R &= 20 \text{ cm}\end{aligned}$$

Calculated power density in consideration of the above mentioned formula and values:

$$\underline{S = 0.07 \text{ mW / cm}^2}$$

3. Limit according to Appendix A of Supplement C (01-01) to OET Bulletin 65 (97-01) for uncontrolled exposure:

Frequency range 1500-100000 MHz:

$$\text{For 2.4 GHz: } \underline{S = 1.0 \text{ mW / cm}^2}$$

4. Assessment

The sample complies to the MPE requirements because the radiated output power provide a power density as calculated according to the formula above, below the requested limit.