

## **Calculation: RF-Exposure**

Type identification: **SePem01 Master**

In accordance to the **CFR Part 47, §1.1310**

S: Limit for power density according to CFR Part 47, §1.1310:

$$f(\text{MHz})/1500 \text{ (mW/cm}^2\text{)} = 466/1500 \text{ (mW/cm}^2\text{)} = 0.311 \text{ mW/cm}^2 = 3.107 \text{ W/m}^2$$

P: 89.1 mW \*

G: \*

Because the radiated output power was measured, this measurement Value taken instead of the theoretical value for P \* G.

D: Duty cycle: 10 % = 0.1

R: Distance in what the limit of S has to be reached: 0.02 m

$$S = \frac{P \cdot G \cdot D}{4 \cdot \pi \cdot R^2} \Rightarrow S = \frac{0.0891 \text{ W} \cdot 0.1}{4 \cdot \pi \cdot (0.02 \text{ m})^2} = \underline{\underline{1.773 \frac{\text{W}}{\text{m}^2}}}$$

The value for the “General population / Uncontrolled Exposure” of the power density is below the limit of CFR Part 47, §1.1310.