

## Calculation: RF-Exposure

Type identification: **TN902-Q175L200-H1147**

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

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

$$6 \text{ W/m}^2$$

P: 0.661 W

G: 3.15 dBi = 2.07

D: Duty cycle: 100 % = 1

R: Distance in what the limit of S has to be reached: 0.2 m

$$S = \frac{P \cdot G \cdot D}{4 \cdot \pi \cdot R^2} \Rightarrow \underline{S} = \frac{0.661 \text{ W} \cdot 2.07 \cdot 1}{4 \cdot \pi \cdot (0.2 \text{ m})^2} = \underline{\underline{2.72 \frac{\text{W}}{\text{m}^2}}}$$

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