

US Tech	11-0046
Client	RFM/Cirronet
Issue Date	03-30-2011
Model:	DNT900
FCC ID:	HSW-DNT900
<u>IC ID:</u>	<u>4492A-DNT900</u>

Maximum Public Exposure to RF (MPE) CFR 15.247 (i)

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm² at a distance, **d**, of 23 cm from the EUT.

Therefore, for:

Highest Gain Dipole Antenna= 5 dBi

Peak Power (Watts) = 0.912 (from Table 9 of Test Report)

Gain of Transmit Antenna = 5 dB_i = 3.162, numeric (from Table 3 of Test Report)

d = Distance = 23 cm = 0.23 m

$$\begin{aligned}
 \mathbf{S} &= (PG/ 4\pi d^2) = EIRP/4A = 0.912 (3.162)/4\pi \cdot 0.23^2 \\
 &= 2.884/0.665 = 4.337 \text{ W/m}^2 \\
 &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\
 &= 0.4337 \text{ mW/cm}^2
 \end{aligned}$$

which is << less than 0.61 mW/cm²

Highest Gain Yagi Antenna= 6 dBi

Peak Power (Watts) = 0.912 (from Table 9 of Test Report)

Gain of Transmit Antenna = 6 dB_i = 3.981, numeric (from Table 3 of Test Report)

d = Distance = 23 cm = 0.23 m

$$\begin{aligned}
 \mathbf{S} &= (PG/ 4\pi d^2) = EIRP/4A = 0.912 (3.981)/4\pi \cdot 0.23^2 \\
 &= 3.6307/0.665 = 5.4597 \text{ W/m}^2 \\
 &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\
 &= 0.5460 \text{ mW/cm}^2
 \end{aligned}$$

which is << less than 0.61 mW/cm²