

US Tech
FCC ID:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15 Class II Permissive Change
SQB-NIVISMOD0003
09-0128
August 21, 2009
Nivis, LLC
VN210

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 20 cm from the EUT.

Therefore, for:

Antenna 1

Peak Power (Watts) = .01124 (from Table 11, herein)

Gain of Transmit Antenna = 5.0 dBi = 3.16, numeric (from Table 4, herein)

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = EIRP / 4A = 0.01124 (3.16) / 4 * 0.2 * 0.2 \\ &= 0.033552 / 0.503 = 0.07062 \text{ w/m}^2 \\ &= (W/m^2) (1m^2/W) (0.1 \text{ mW/cm}^2) \\ &= 0.007062 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1 mW/cm²

Antenna 2

Peak Power (Watts) = .01124 (from Table 11, herein)

Gain of Transmit Antenna = 2.0 dBi = 1.58, numeric (from Table 4, herein)

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = EIRP / 4A = 0.01124 (1.58) / 4 * 0.2 * 0.2 \\ &= 0.01776 / 0.503 = 0.03531 \text{ w/m}^2 \\ &= (W/m^2) (1m^2/W) (0.1 \text{ mW/cm}^2) \\ &= 0.003531 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1 mW/cm²