

US Tech
Test Report:
Date:
Model(s):
FCC ID:
IC:
Customer:

FCC Part 15.249/ RSS 210
13-0294
November 18, 2013
SW-24
RMS0217642477
10872A-SW24
Swirl Networks

Maximum Public Exposure to RF (MPE)

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 2.5 cm from the EUT.

Therefore, for:

Highest Gain Antenna (Inverted F) = 5.3 dBi

Peak Power (Watts) = 0.0025 (Manufacture's claimed highest output power)
Gain of Transmit Antenna = 5.3 dB_i = 3.388, numeric (from Table 3 of Test Report)
d = Distance = 2.5 cm = 0.025 m

$$\begin{aligned}\mathbf{S} &= (PG / 4\pi d^2) = EIRP/4A = 0.0025(3.388)/4\pi \cdot 0.025^2 \cdot 0.025 \\ &= 0.00847/0.0079 = 1.063 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.1063 \text{ mW/cm}^2\end{aligned}$$

which is << less than 1.0 mW/cm²