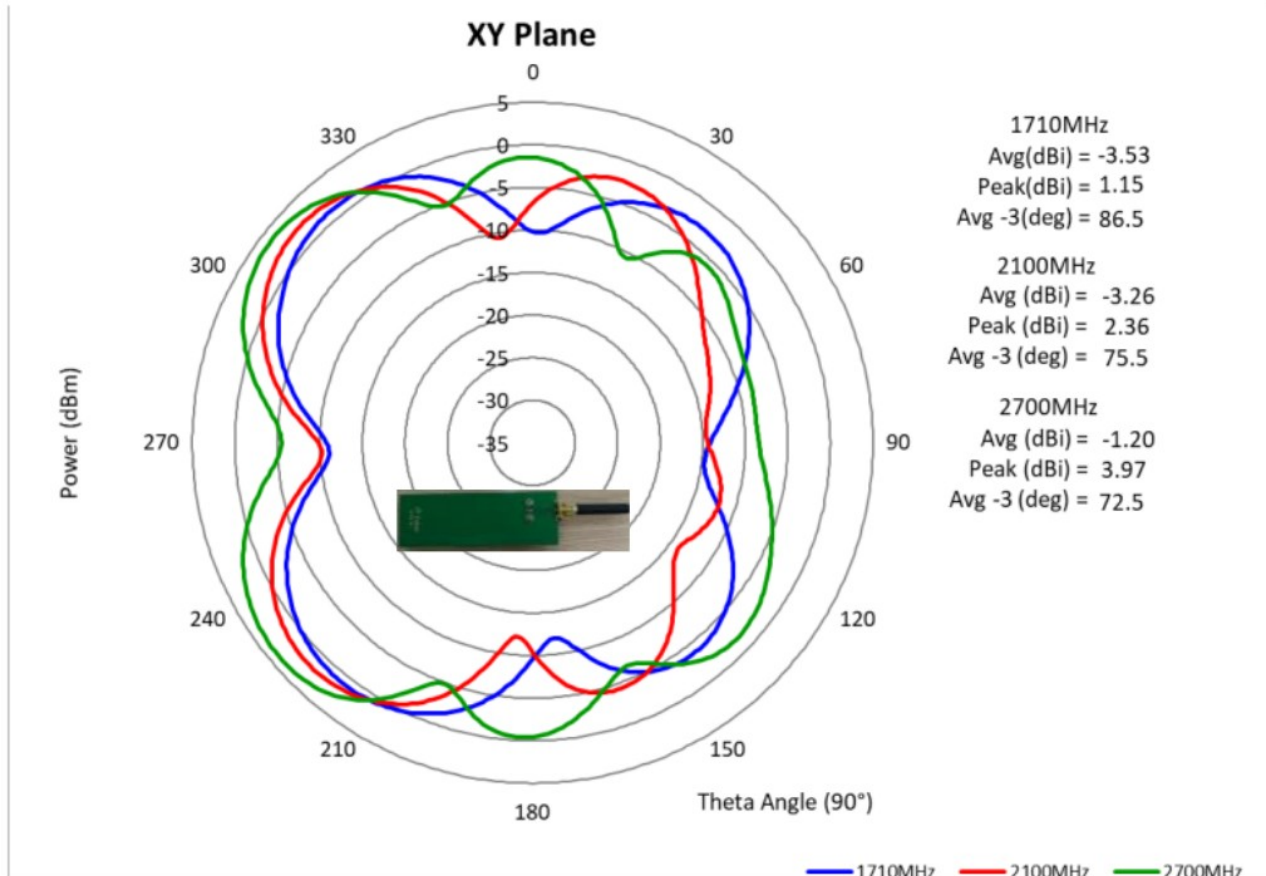


## Already made antenna

The chosen one has a frequency range between 617MHz and 3.8GHz

It can hold 5W as a maximum power.

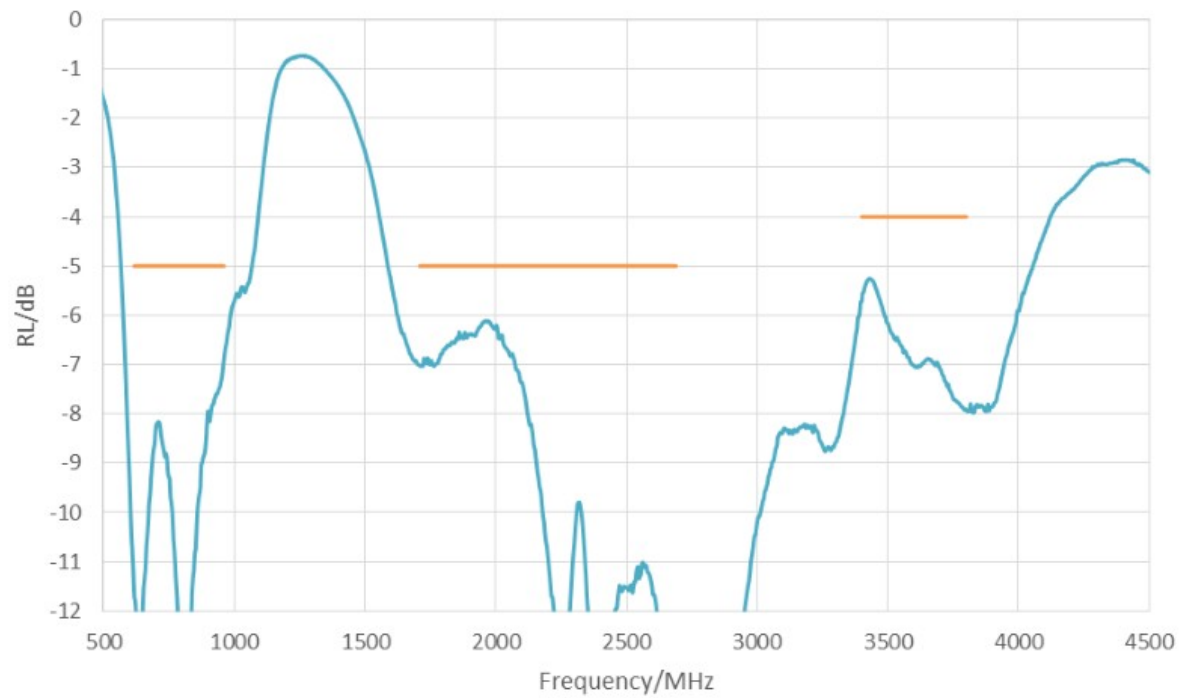
Here is the pattern diagram for 3 different frequencies, with the peak gain and the average gain. The gain is expressed compared to an isotropic antenna (this why dBi).



The pattern diagram says us in which direction the antenna has the highest directivity. In the one where there is the peak diagram.

In the datasheet, we can see as well the following diagram :

## Return Loss vs Frequency



For  $f=1.9\text{GHz}$ , the return loss is around  $-6.5\text{ dB}$   
 $RL = -20\log(\rho)$  and  $VSWR = (1+\rho)/(1-\rho)$   
 $\rho = 0.47$  and  $VSWR = 2.796$ . It is not that awful.