So there are 2 main goals that were not properly addressed in this project namely

1) range enhancement

2) area coverage

Before trying to achieve these goals, it is imperative to familiarize oneself with the cst software, with the s11 parameters, magnetic field strength and surface current being the main factors to consider when designing the antenna. You can look into liaising with Dr Qing and his colleagues with exporting the data to graphs to show a more comprehensive result where you can better compare data when you execute parameter sweeps.

1) range enhancement is mostly from magnetic field strength where the -dB values are greater with a smaller range while still keeping it even.

2) area coverage can use increase area.png picture as attached for reference where it attempts to increase the area which the antenna is able to read the tags without compromising the reading rate.