

Minutes of meeting to discuss Ni mesh thickness

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The purpose of this meeting was to follow up from Filippo's calculations (attached note below) and he walked us through them.

The main additional point about the uniformity calculation was accounting for the fact that the Si topside has a resistive connection to the bias supply- where the resistance is determined by the doping profile in the p-layer.

There is obviously a ways to go before this is properly simulated but the general consensus was that this resistive layer is more likely to increase the field uniformity as calculated by Filippo's model.

So the conclusion is that we should go ahead with 5 micron grid layers but consider also lower transparency grids (ie smaller holes)- which are also likely to further improve the field uniformity.

One point that we are converging on and (should have confirmation from RMD) is that the p-n junction is ~ 60 micron away from the Si top surface. In that case that is where one should look at the field uniformity in Filippo's plots.