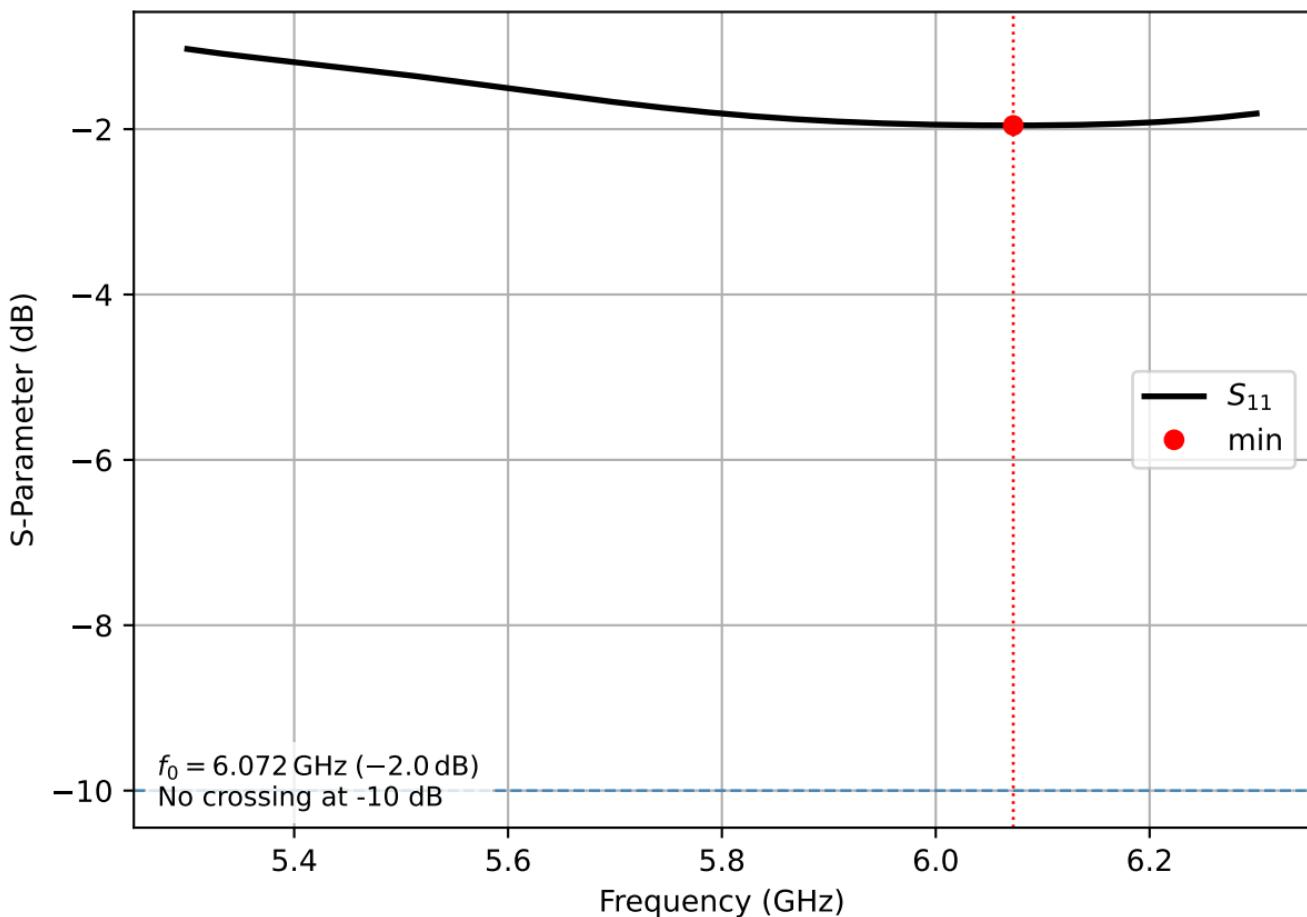
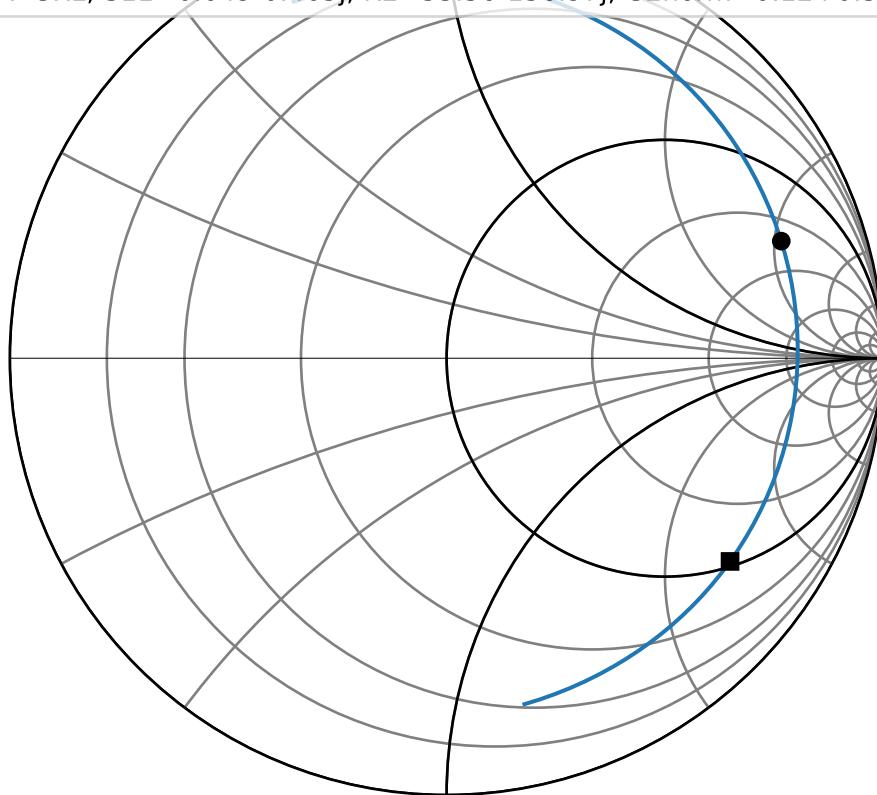


# Reflection Coefficient $S_{11}$

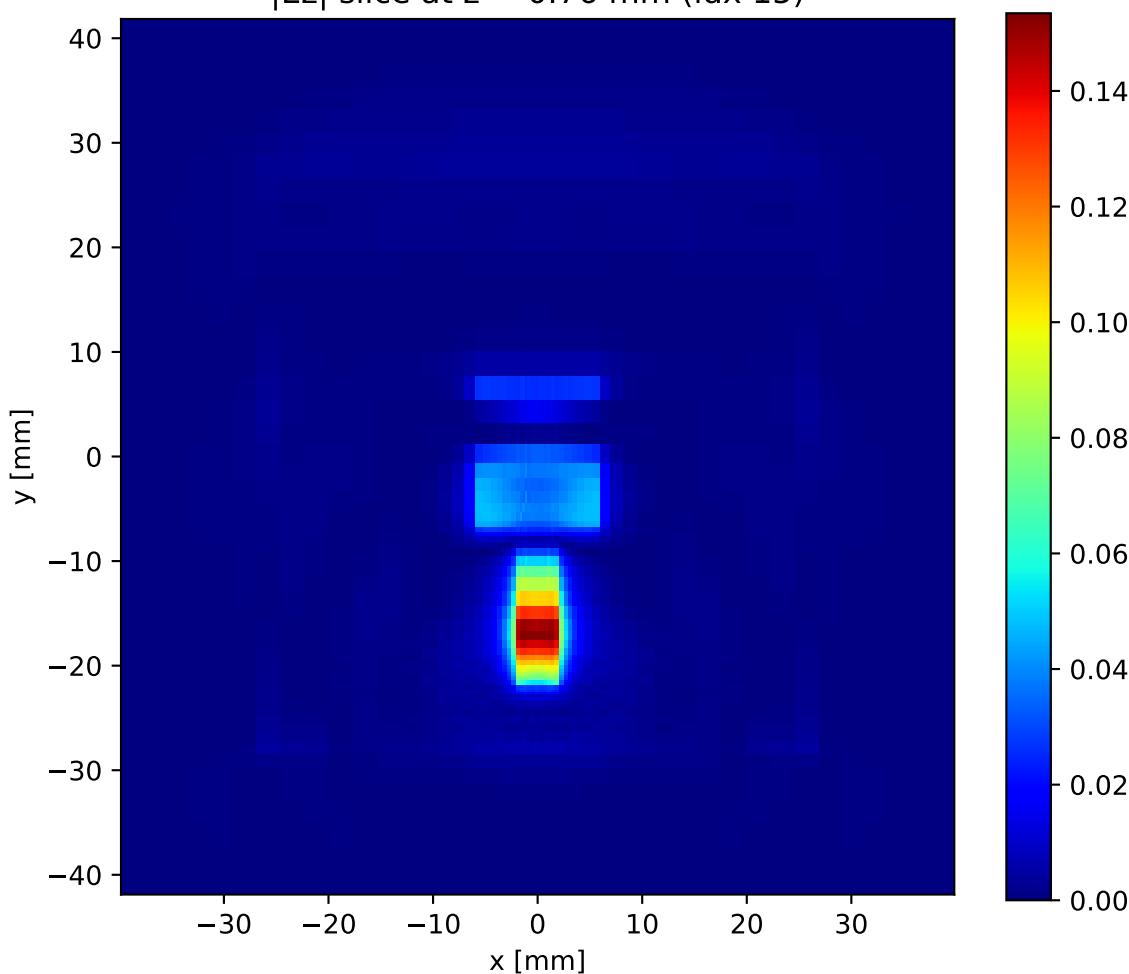


## Smith Chart

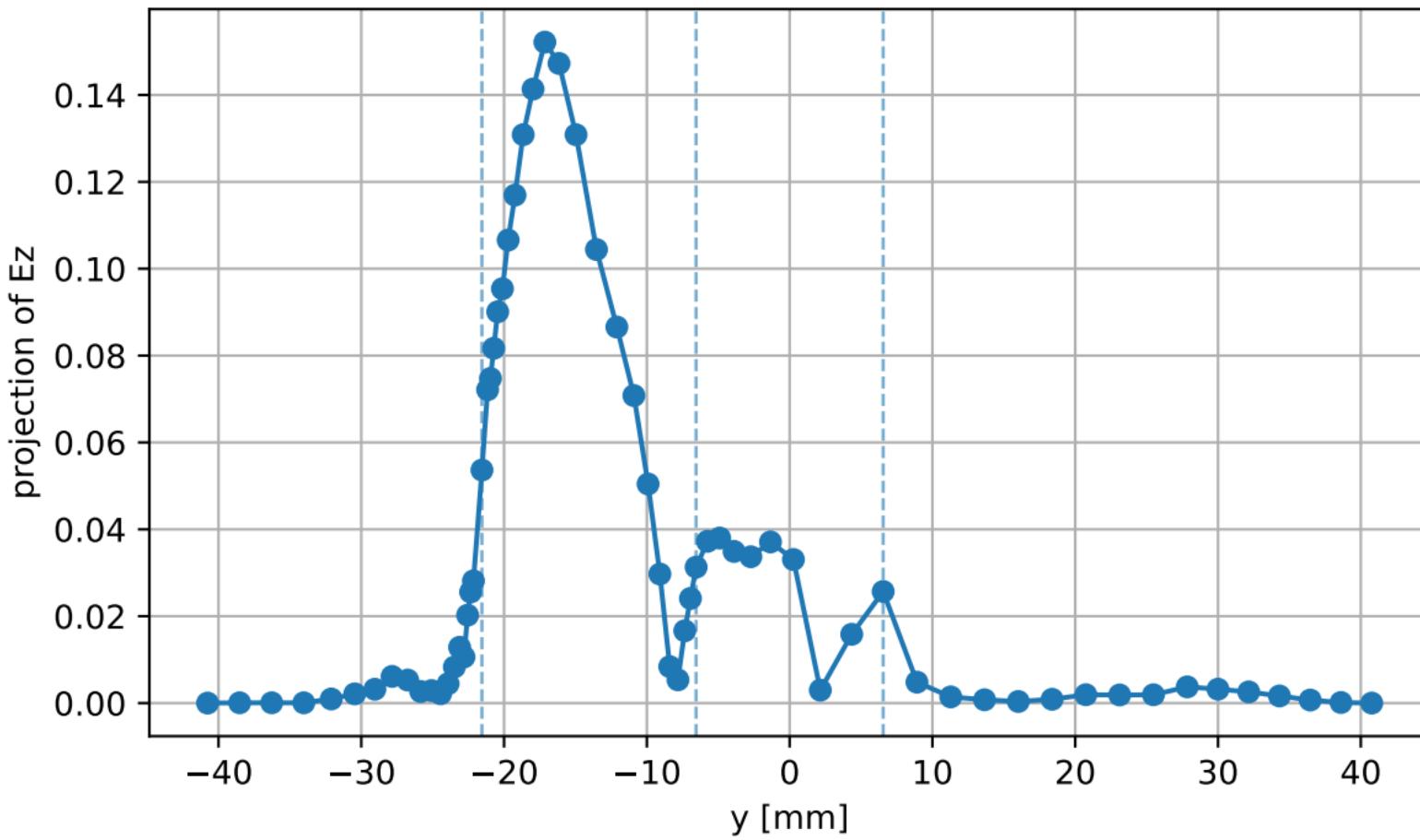
- S11 (Patch W=11.10 mm, L=13.10 mm)
- 5.80 GHz,  $S_{11}=0.766+0.268j$ ,  $R=134.77+211.88j$ ,  $G_{norm}=0.11-0.17j$
  - 6.07 GHz,  $S_{11}=0.649-0.465j$ ,  $R=53.36-136.97j$ ,  $G_{2norm}=0.12+0.32j$



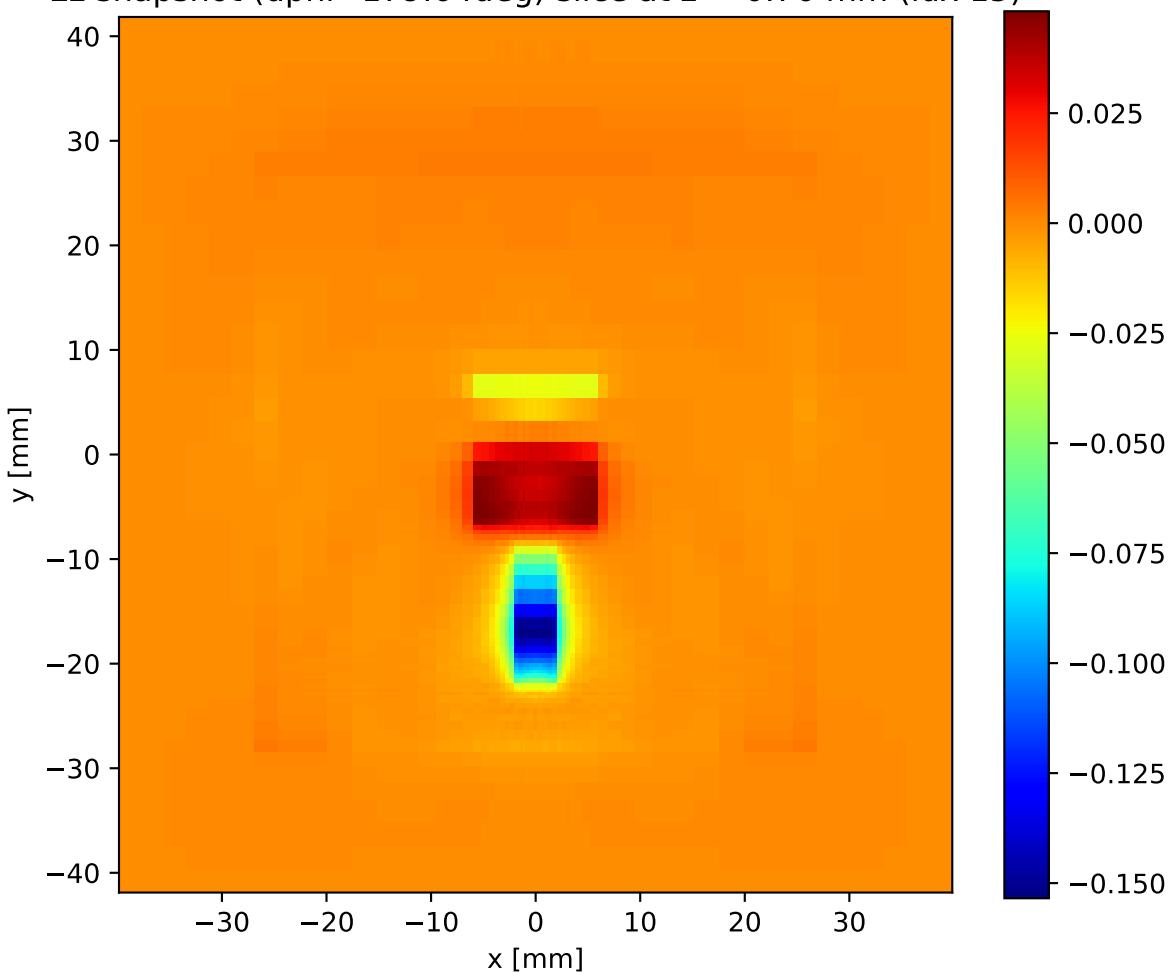
$|E_z|$  slice at  $z = 0.76$  mm (idx 15)



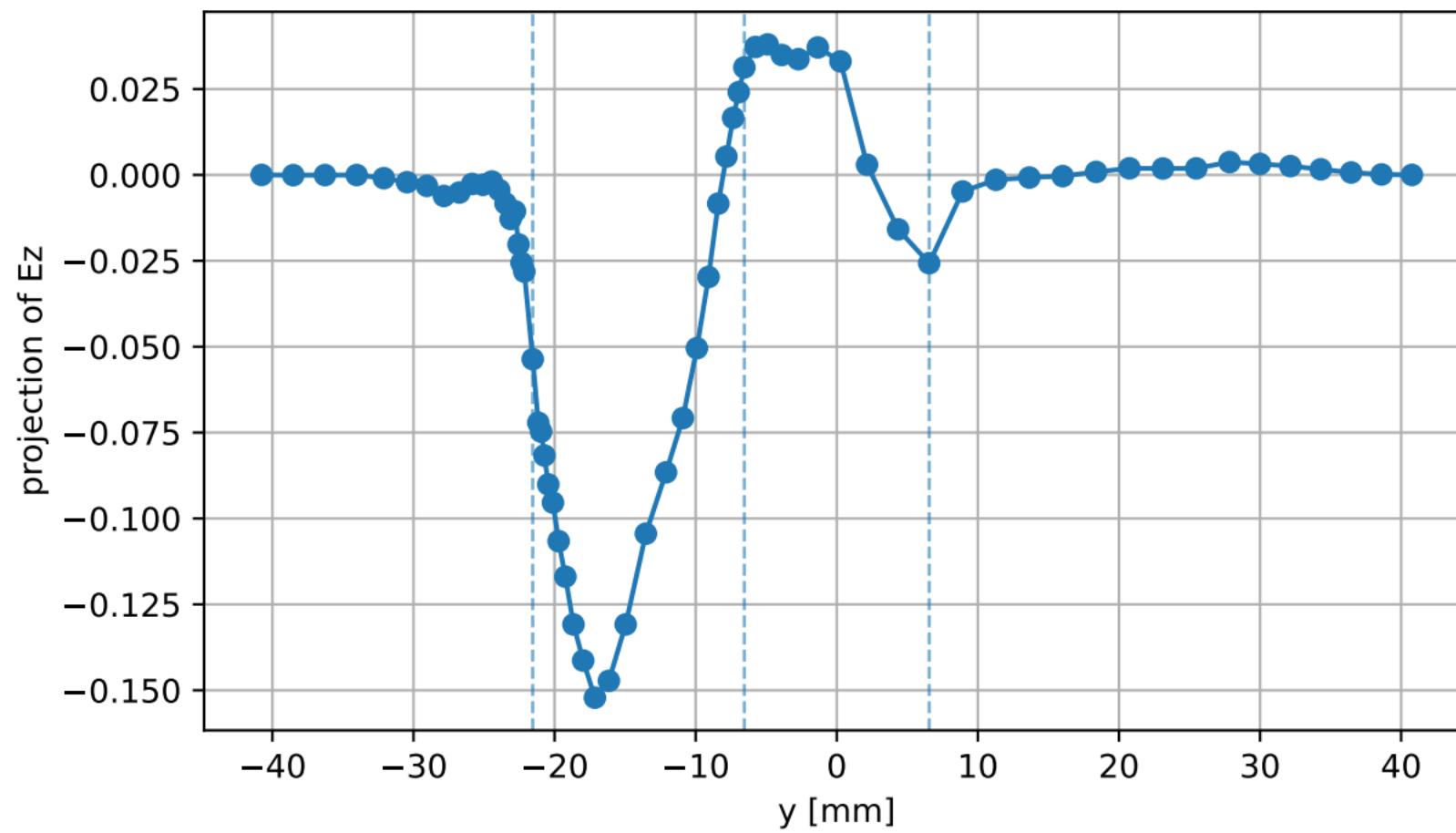
$|E_z|$  line cut along Y at  $x=0.00$  mm,  $z=0.76$  mm  
(idx  $x=30$ ,  $z=15$ )



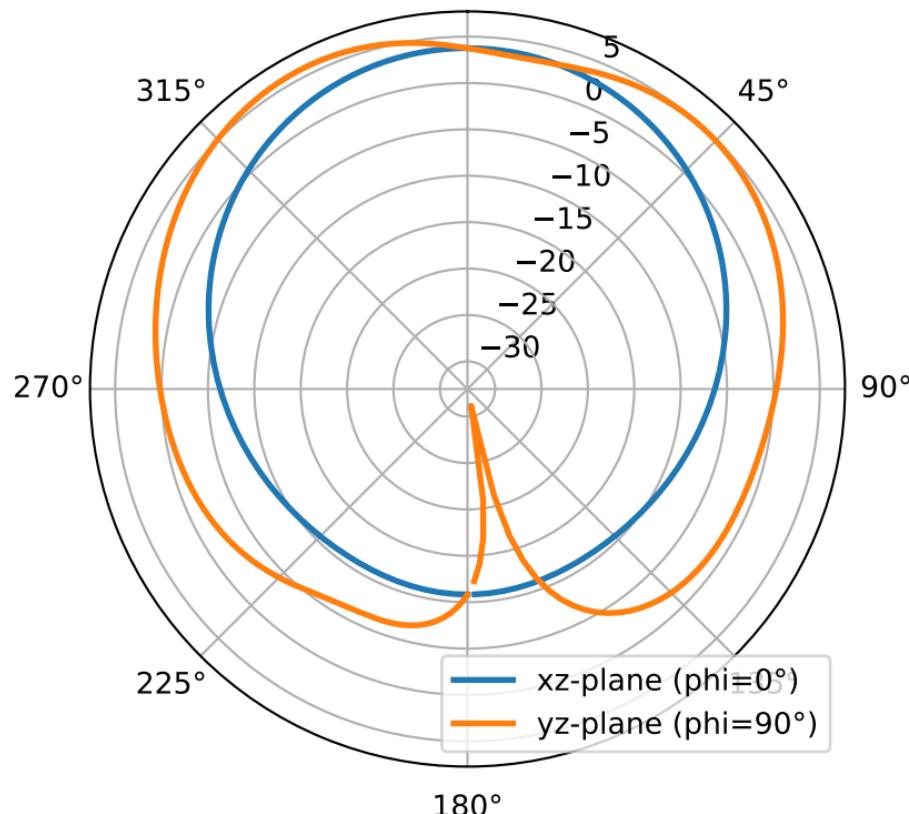
Ez snapshot (dphi=179.64deg) slice at z = 0.76 mm (idx 15)



Ez snapshot (dphi=179.64deg) line cut along Y at x=0.00 mm, z=0.76 mm  
(idx x=30, z=15)

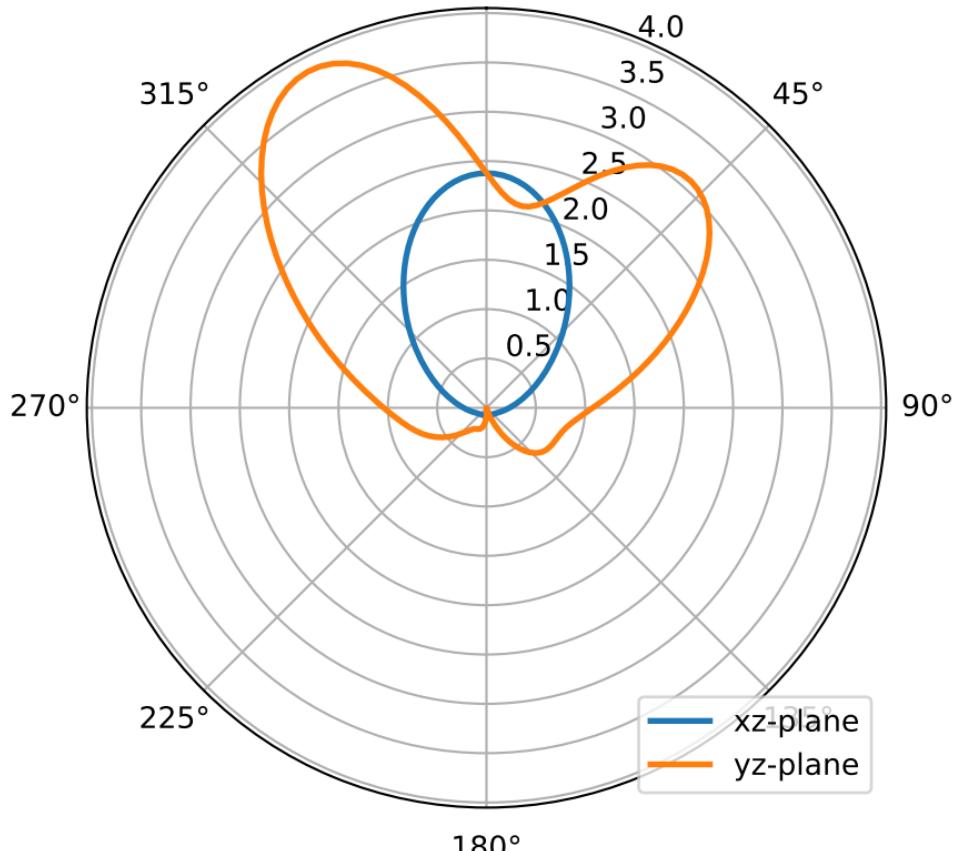


$f = 6.072 \text{ GHz}$  — Directivity (dB)  
 $D_{\max} (\text{integrated}) \approx 5.86 \text{ dB}$ , nf2ff  $D_{\max} = 5.86 \text{ dB}$



Frequency: 6.072 GHz — Directivity (linear). Dmax: 3.858

0°



Frequency: 6.072 GHz  
xz-plane: HPBW=86.4°  
yz-plane: HPBW=135.6°

