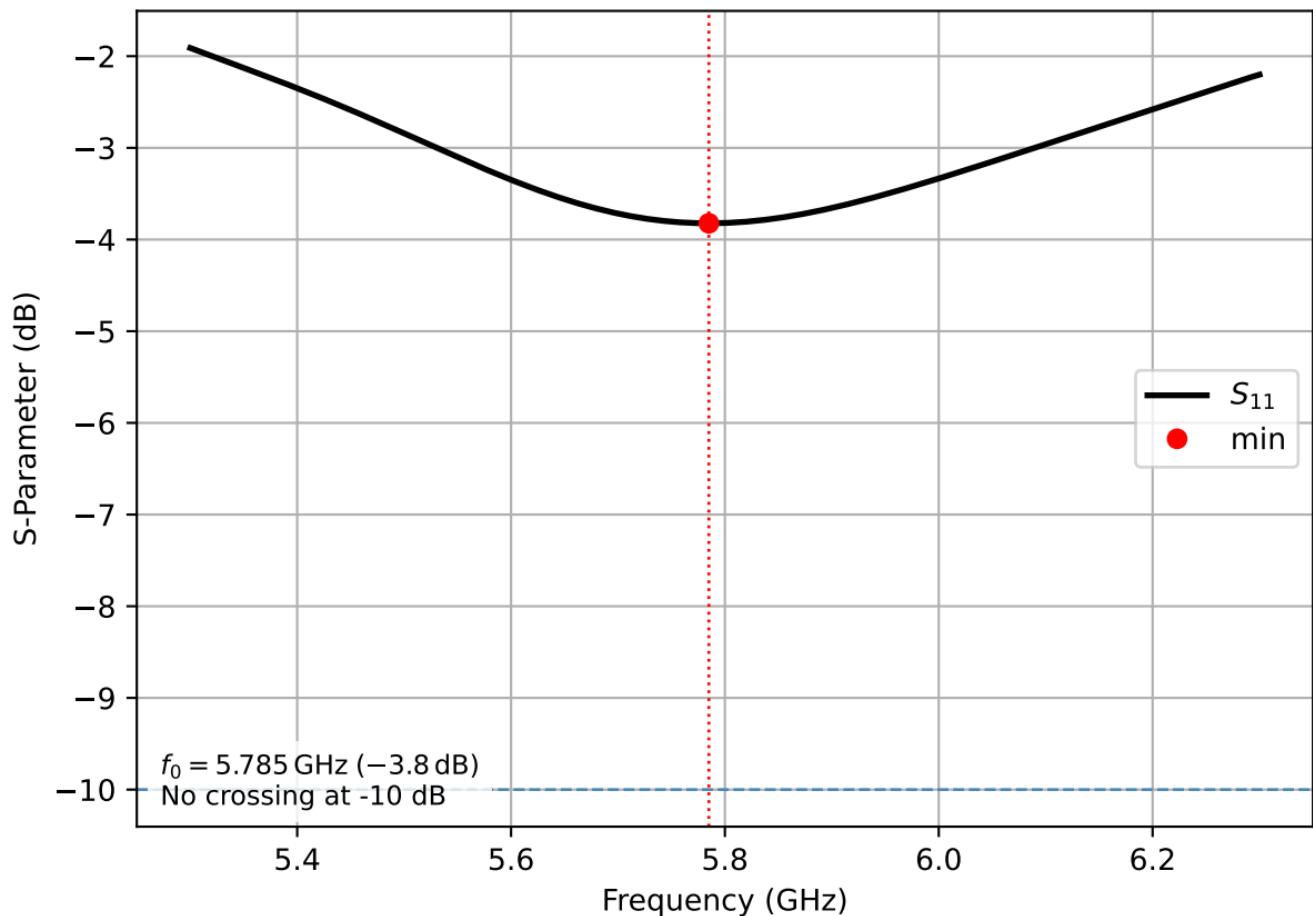
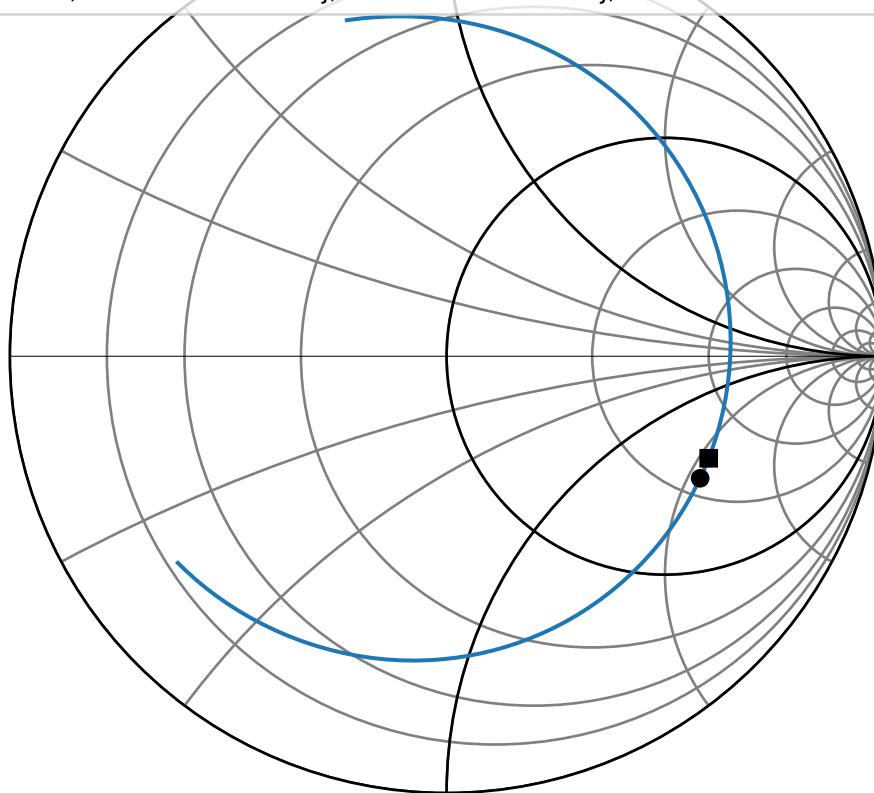


# Reflection Coefficient $S_{11}$

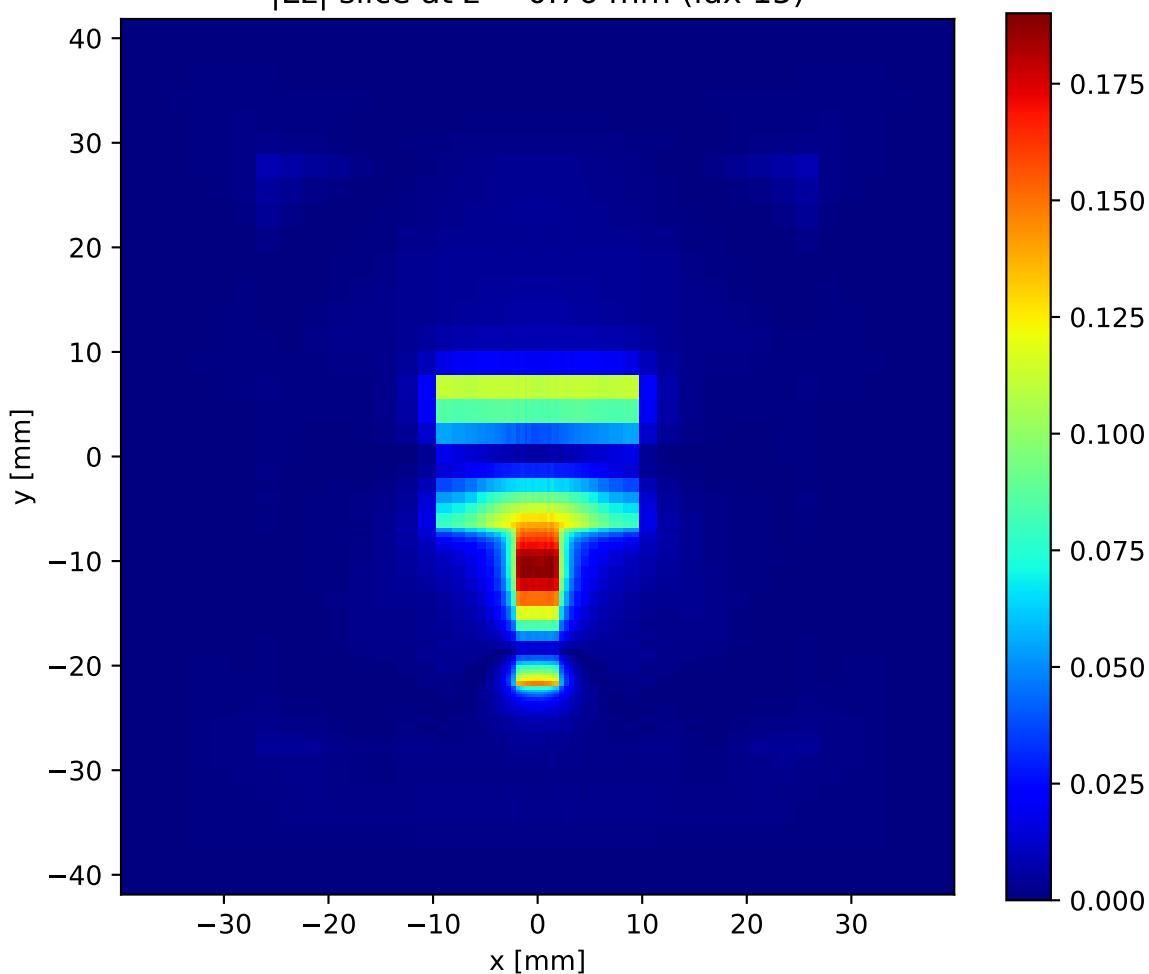


## Smith Chart

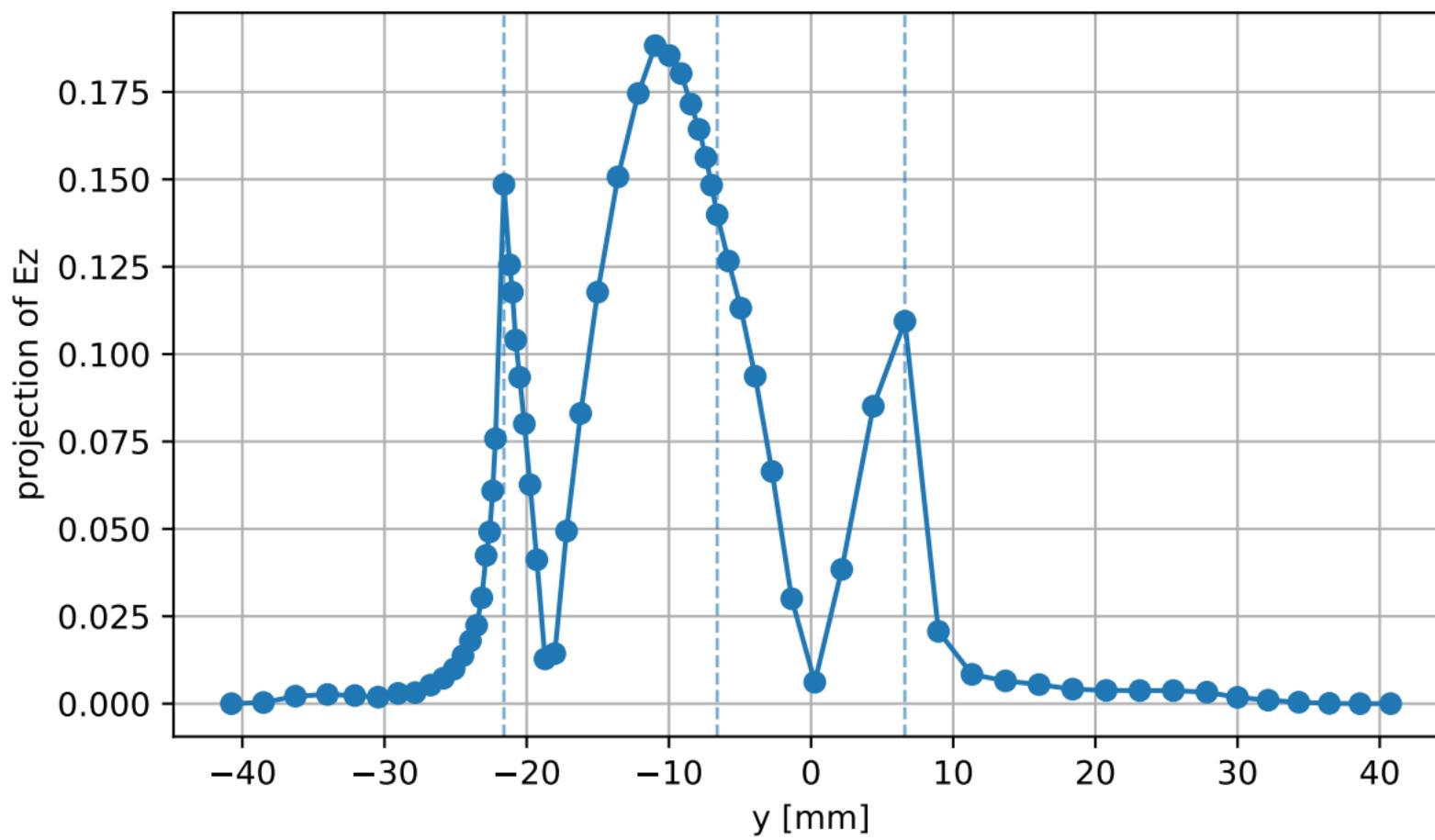
- S11 (Patch W=17.80 mm, L=13.20 mm)
- 5.80 GHz,  $S_{11}=0.580-0.279j$ ,  $R=115.12-109.97j$ ,  $G_{norm}=0.23+0.22j$
- 5.79 GHz,  $S_{11}=0.600-0.234j$ ,  $R_2=136.43-108.91j$ ,  $G_{2norm}=0.22+0.18j$



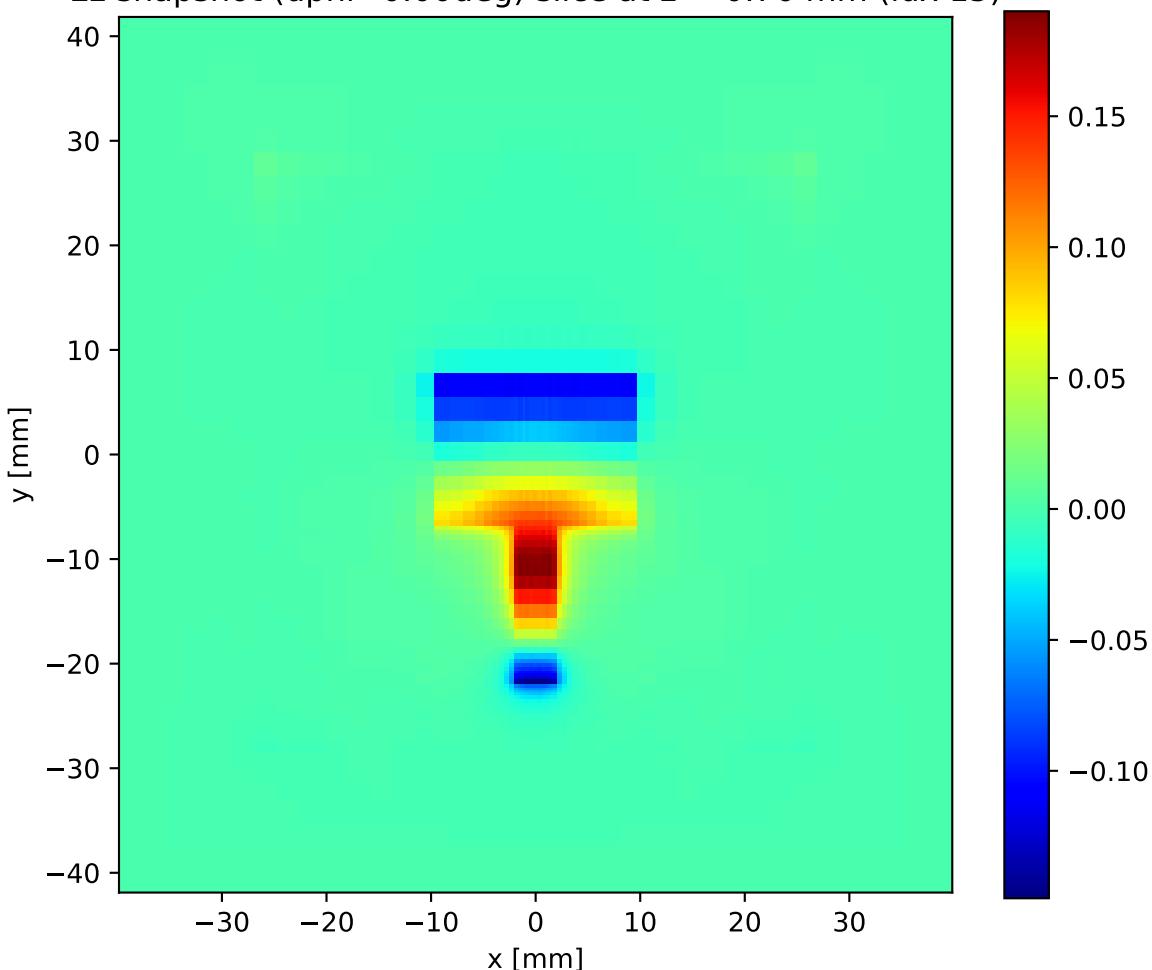
$|E_z|$  slice at  $z = 0.76$  mm (idx 15)



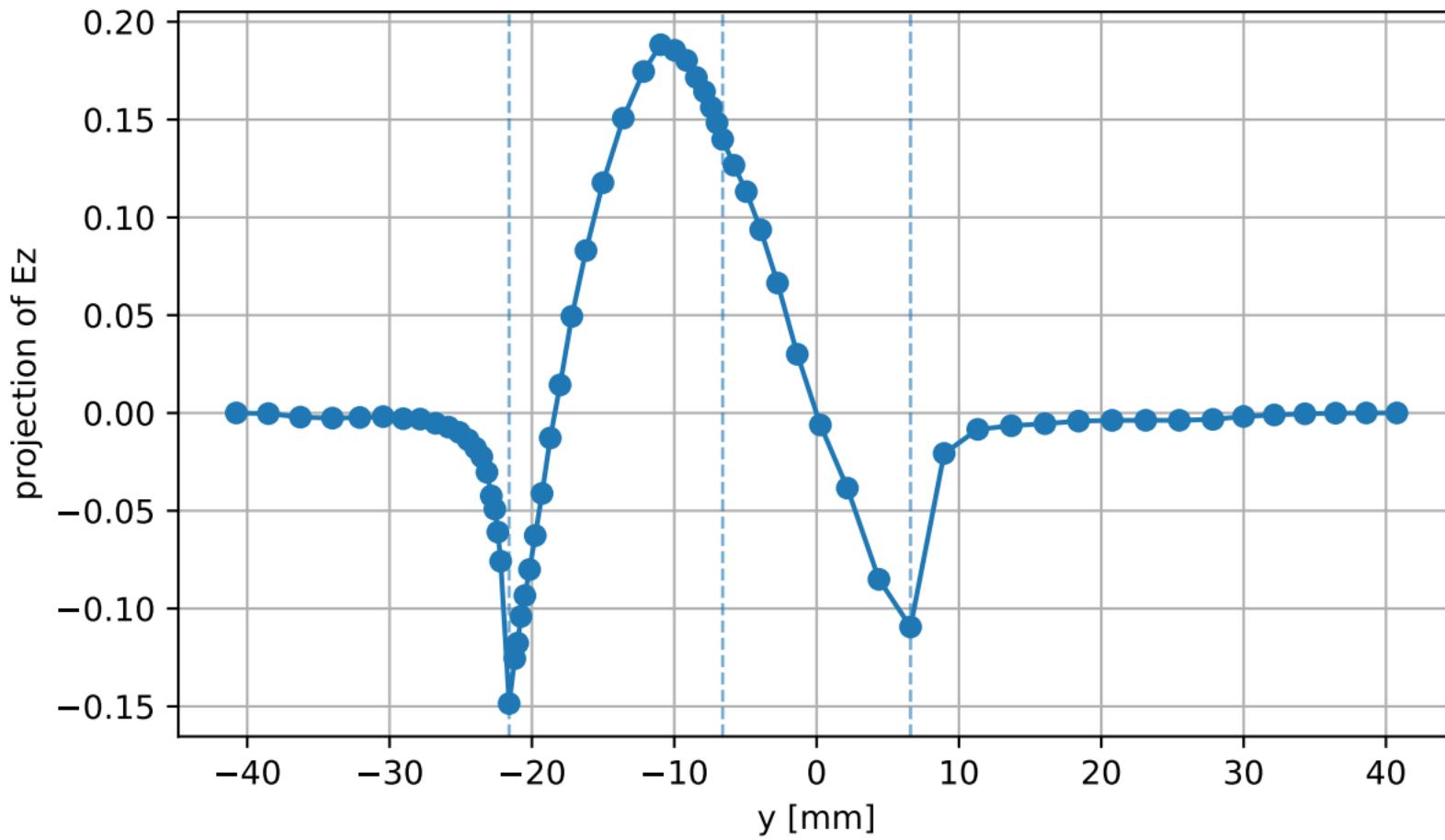
$|E_z|$  line cut along Y at  $x=0.00$  mm,  $z=0.76$  mm  
(idx  $x=29$ ,  $z=15$ )



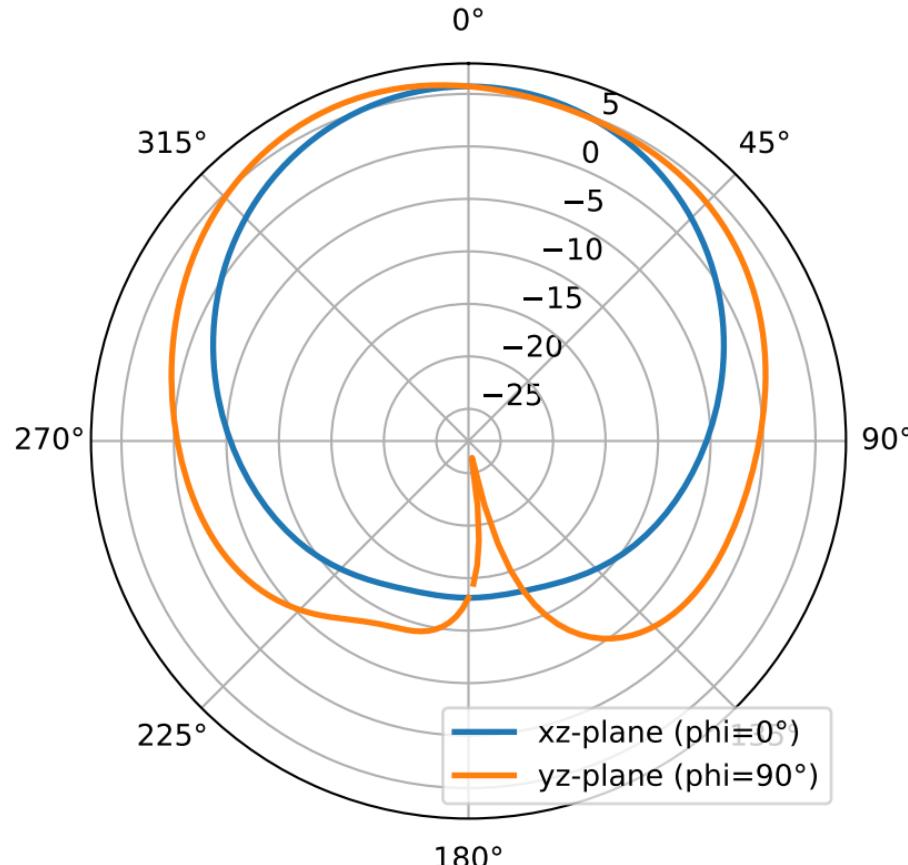
Ez snapshot (dphi=0.00deg) slice at z = 0.76 mm (idx 15)



Ez snapshot (dphi=0.00deg) line cut along Y at x=0.00 mm, z=0.76 mm  
(idx x=29, z=15)

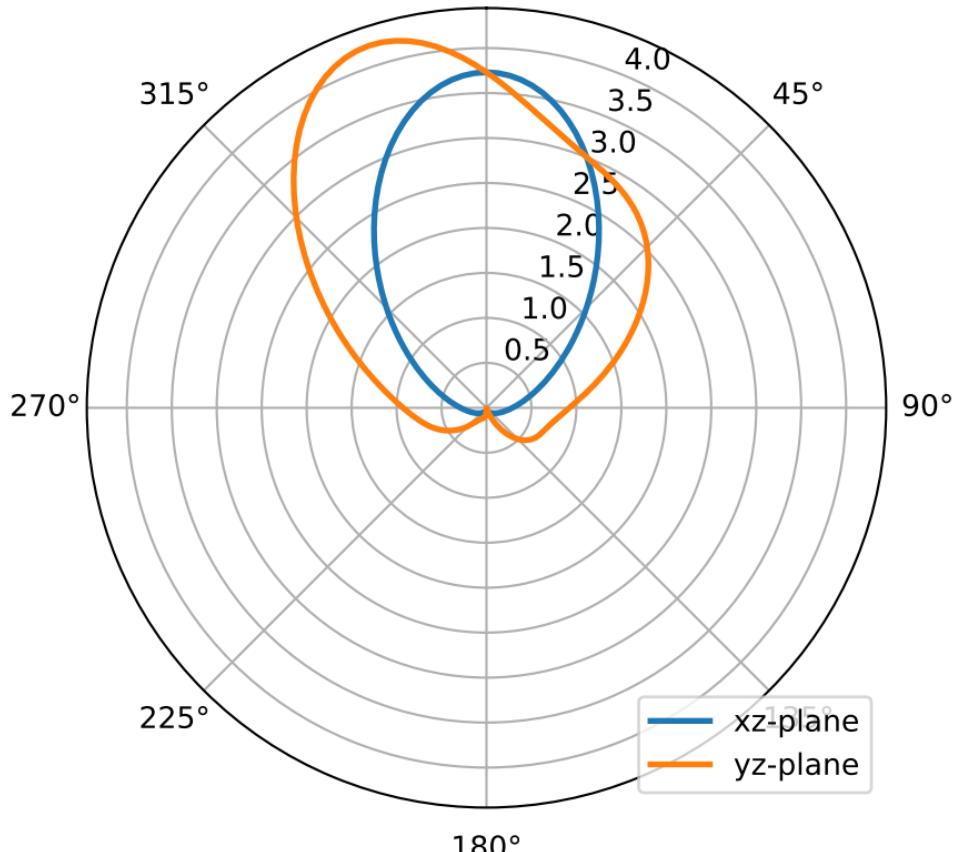


$f = 5.785 \text{ GHz}$  — Directivity (dB)  
 $D_{\max} (\text{integrated}) \approx 6.27 \text{ dB}$ , nf2ff  $D_{\max} = 6.27 \text{ dB}$



Frequency: 5.785 GHz — Directivity (linear). Dmax: 4.234

0°



Frequency: 5.785 GHz  
xz-plane: HPBW=79.8°  
yz-plane: HPBW=114.0°

