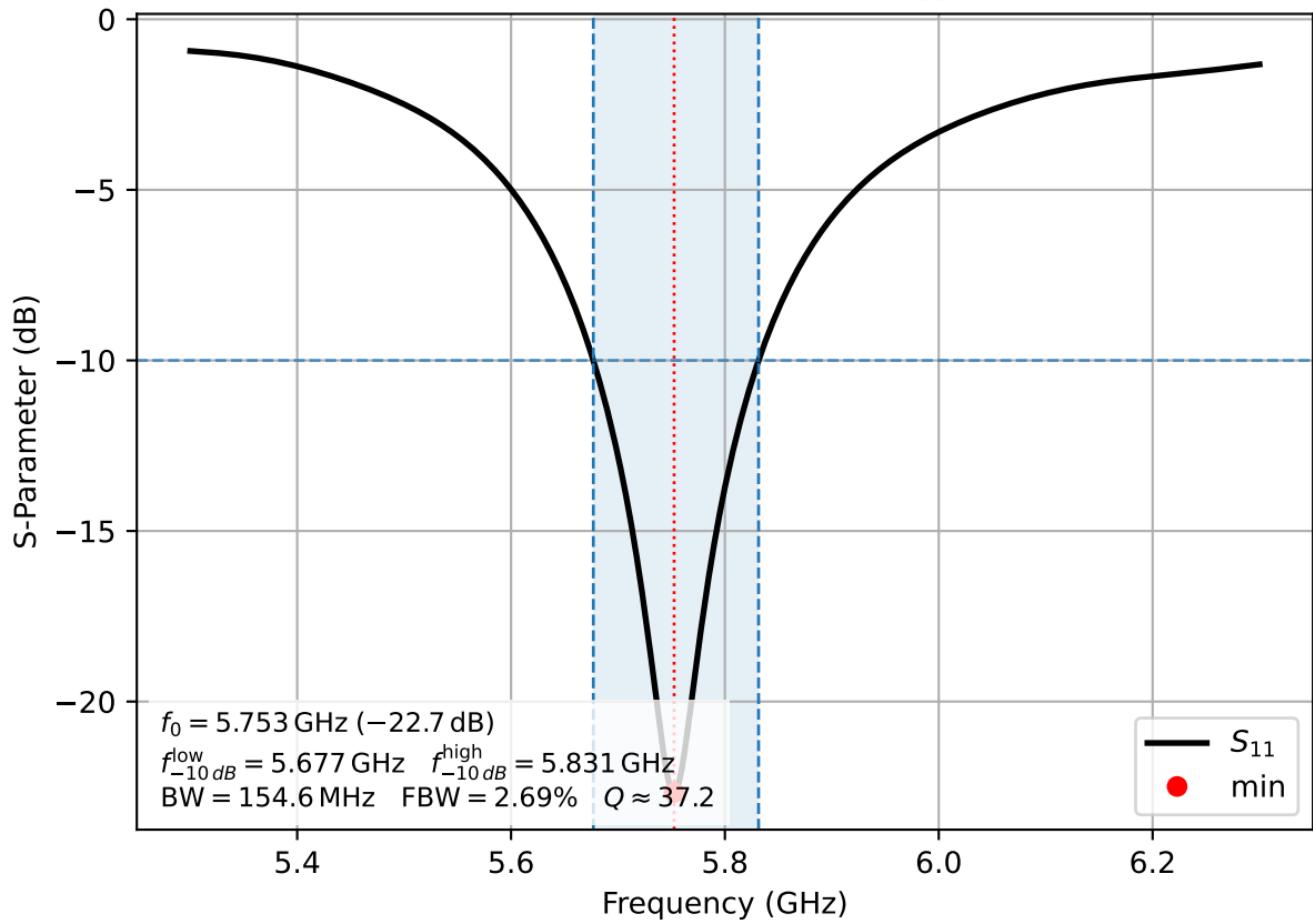
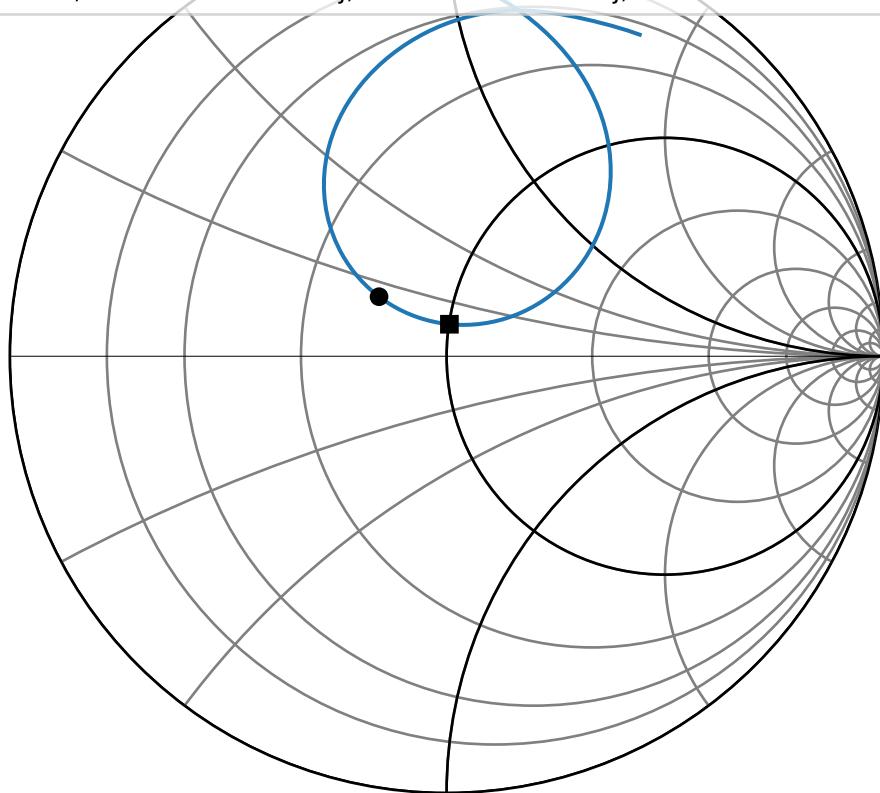


# Reflection Coefficient $S_{11}$

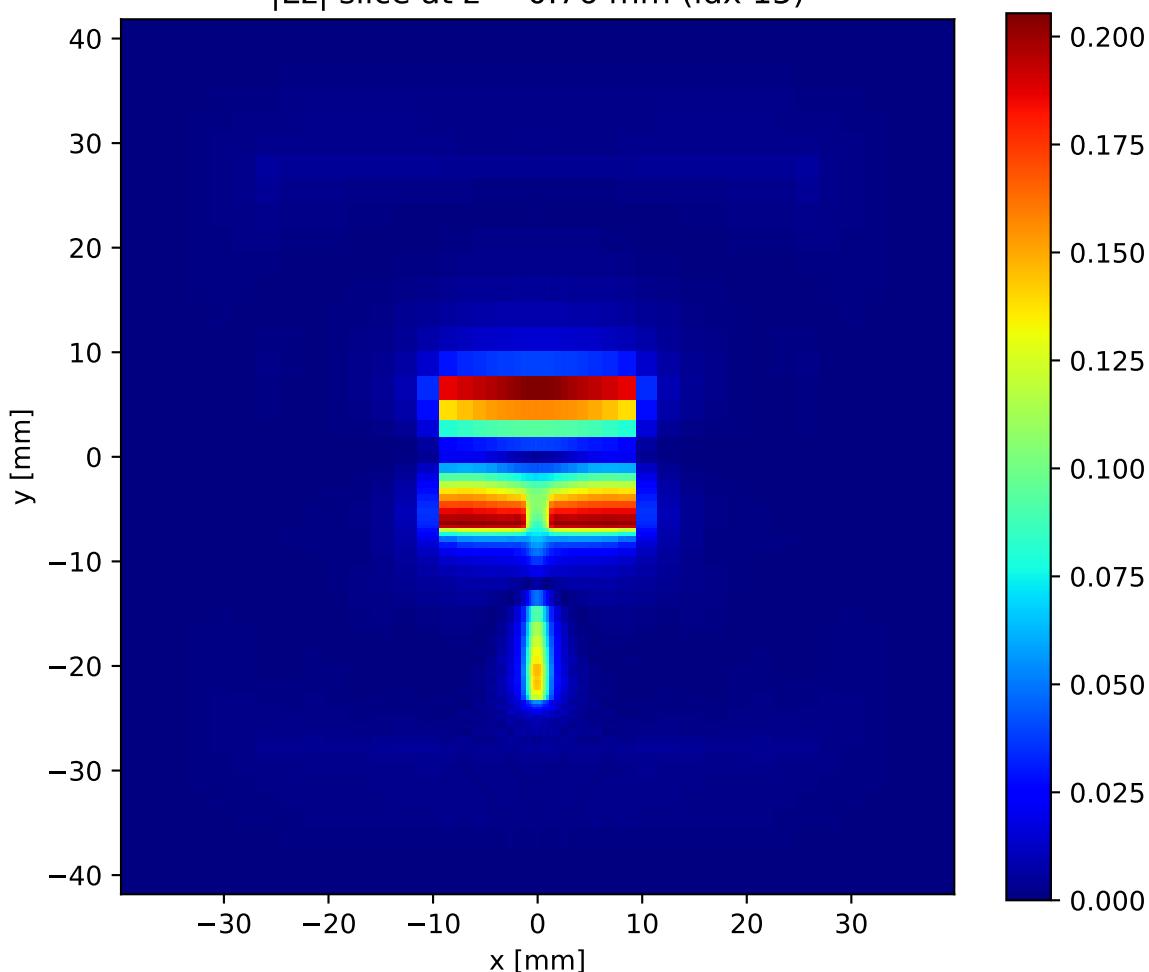


## Smith Chart

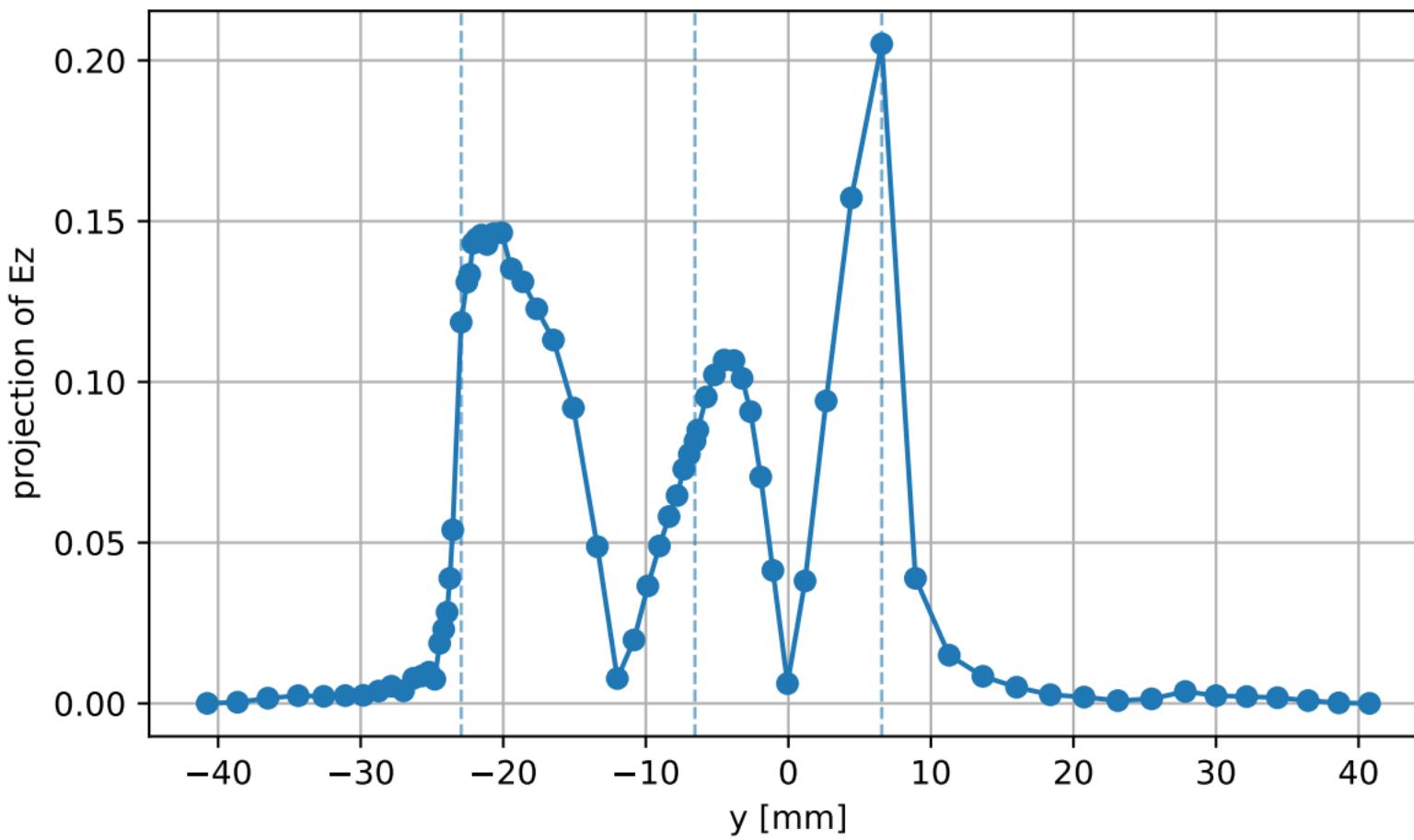
- S11 (Patch W=17.00 mm, L=13.10 mm)
- 5.80 GHz,  $S_{11}=-0.155+0.136j$ ,  $R=70.83+20.17j$ ,  $G_{norm}=1.31-0.37j$
- 5.75 GHz,  $S_{11}=0.006+0.073j$ ,  $R=100.21+14.76j$ ,  $G_{2norm}=0.98-0.14j$



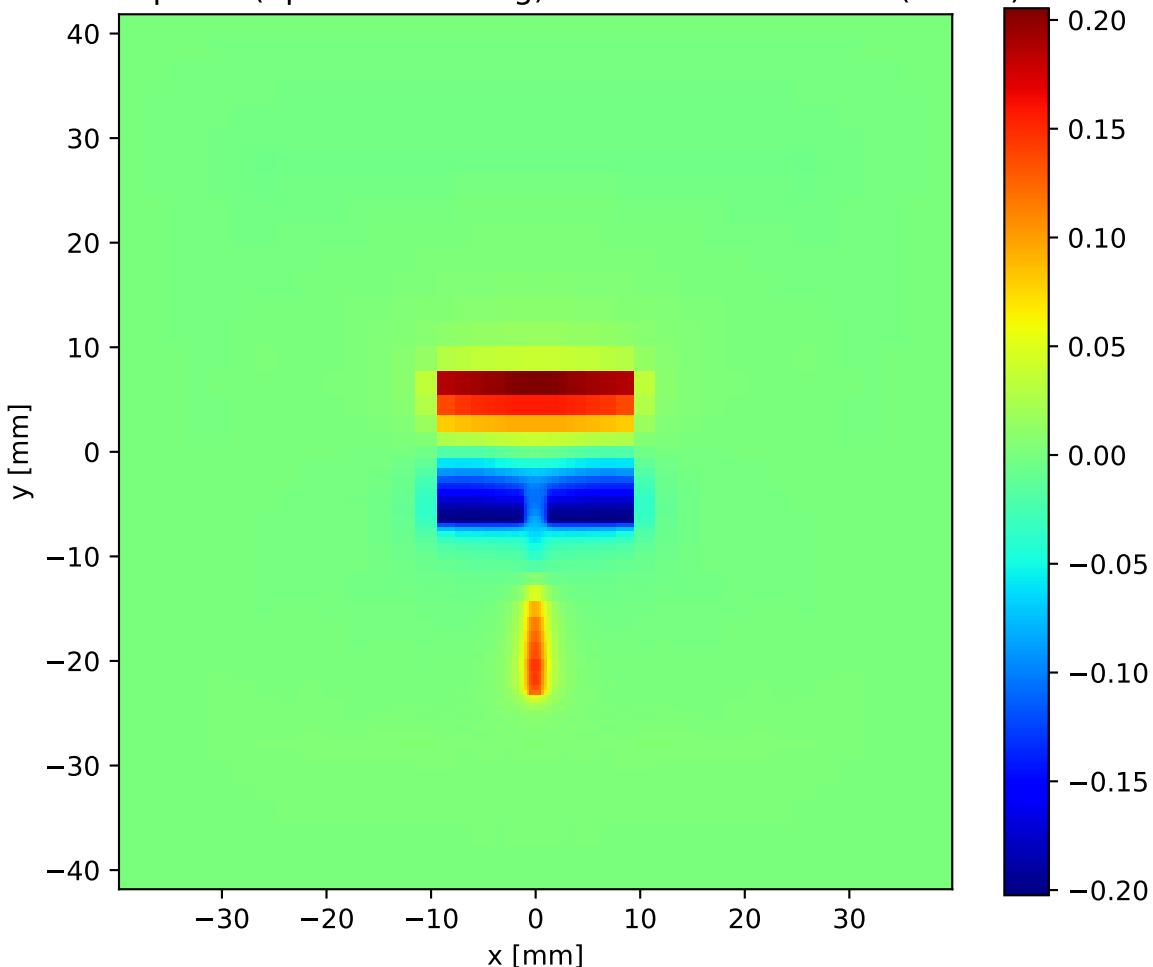
$|E_z|$  slice at  $z = 0.76$  mm (idx 15)



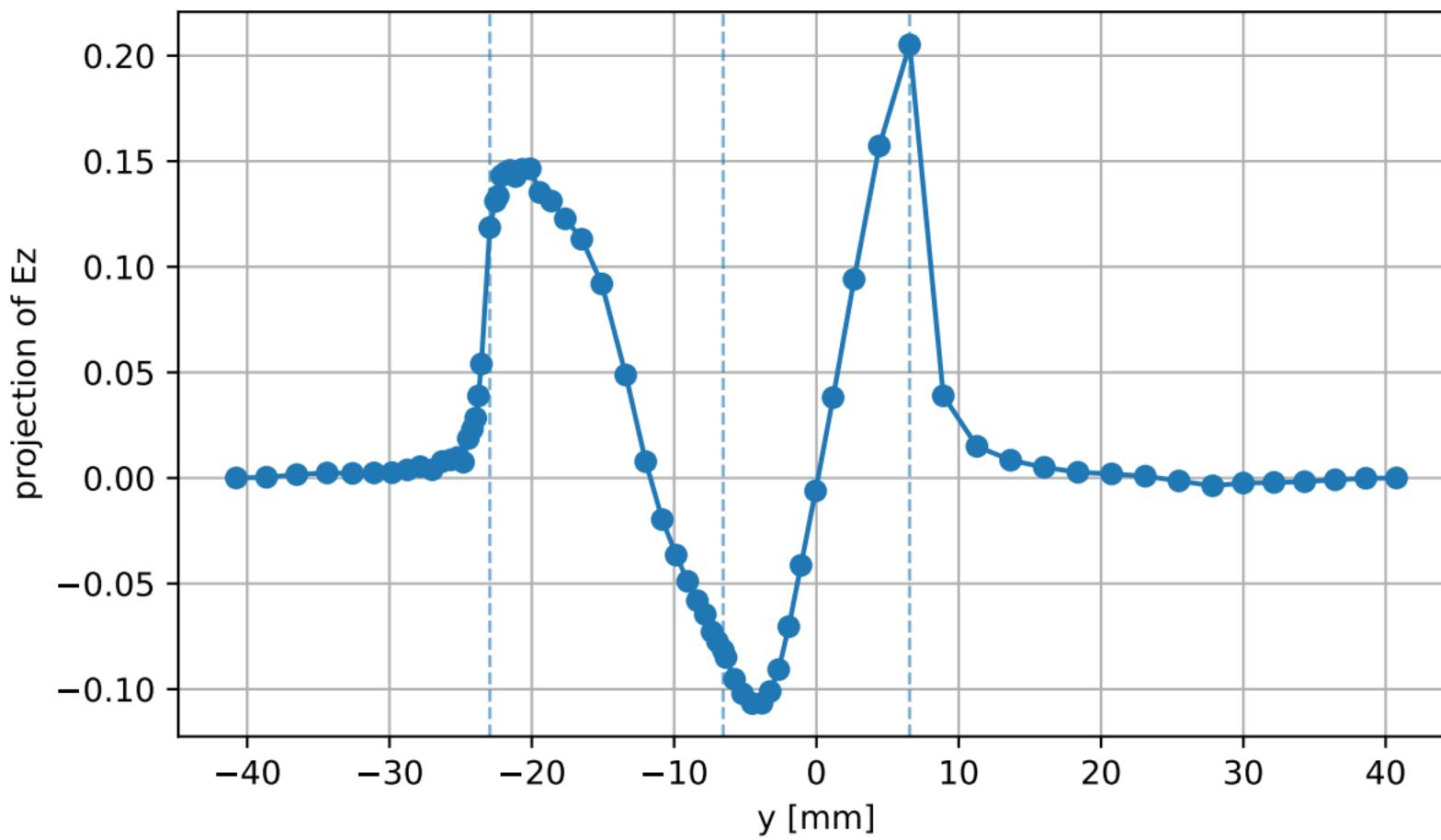
$|E_z|$  line cut along Y at  $x=0.10$  mm,  $z=0.76$  mm  
(idx  $x=27, z=15$ )



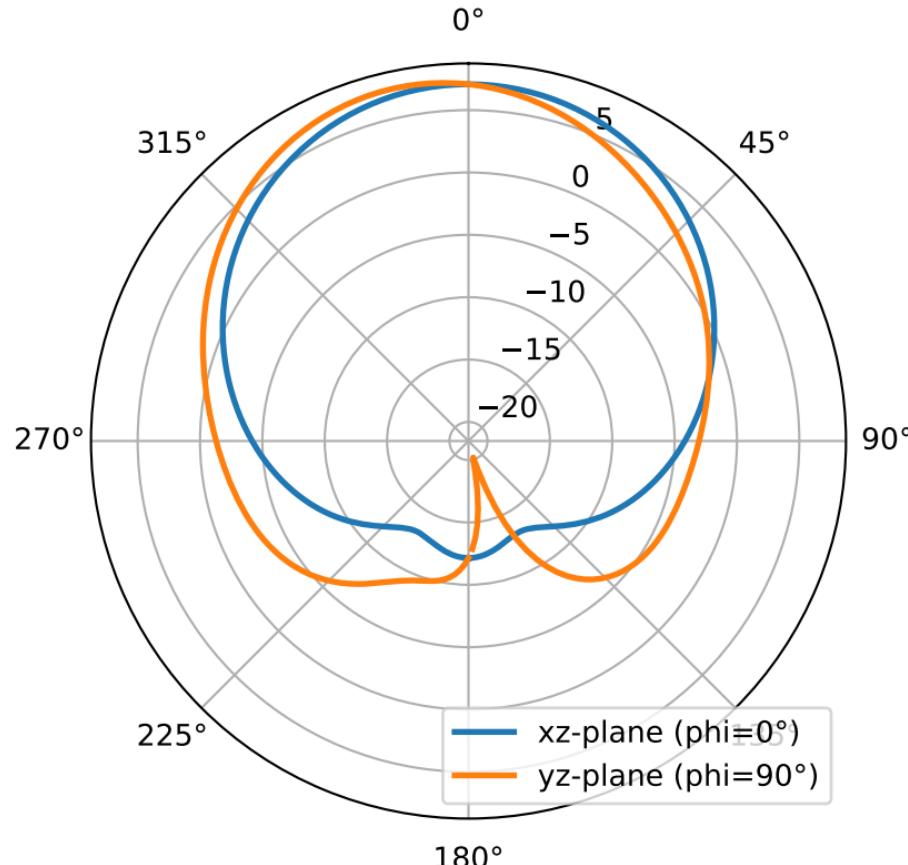
Ez snapshot (dphi=180.00deg) slice at z = 0.76 mm (idx 15)



Ez snapshot (dphi=180.00deg) line cut along Y at x=0.10 mm, z=0.76 mm  
(idx x=27, z=15)

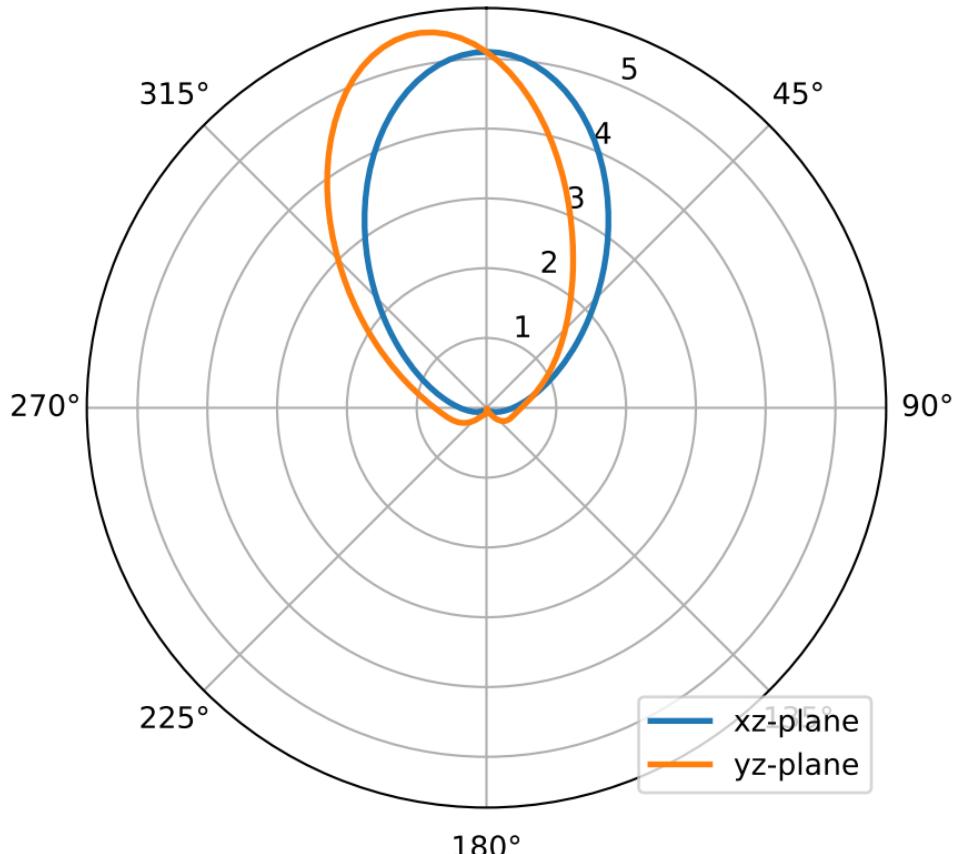


$f = 5.753 \text{ GHz}$  — Directivity (dB)  
 $D_{\max} (\text{integrated}) \approx 7.37 \text{ dB}$ , nf2ff  $D_{\max} = 7.37 \text{ dB}$

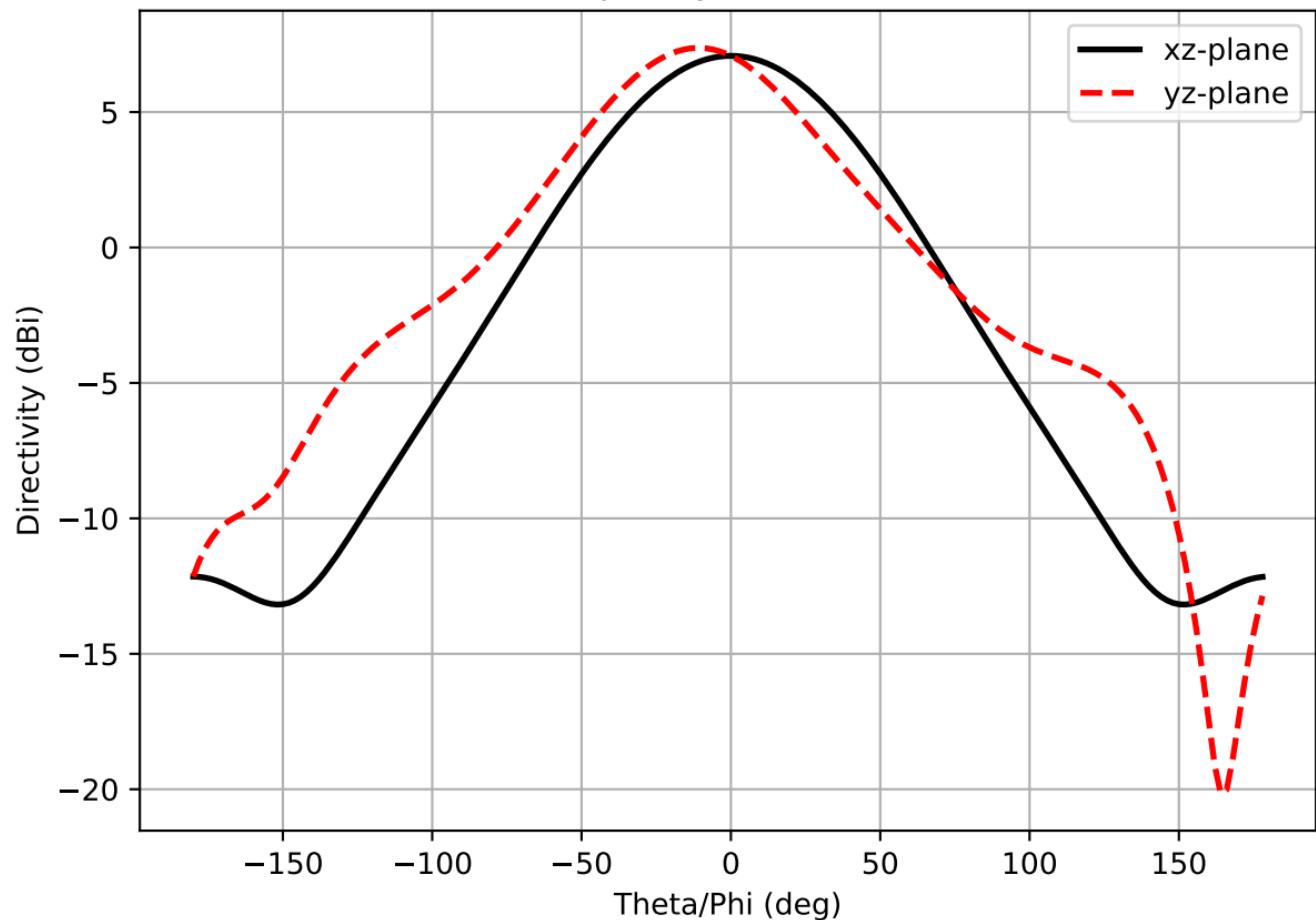


Frequency: 5.753 GHz — Directivity (linear). Dmax: 5.455

0°



Frequency: 5.753 GHz



3D Directivity Pattern  
 $f = 5.753 \text{ GHz}$ ,  $D_{\max} = 7.37 \text{ dBi}$

