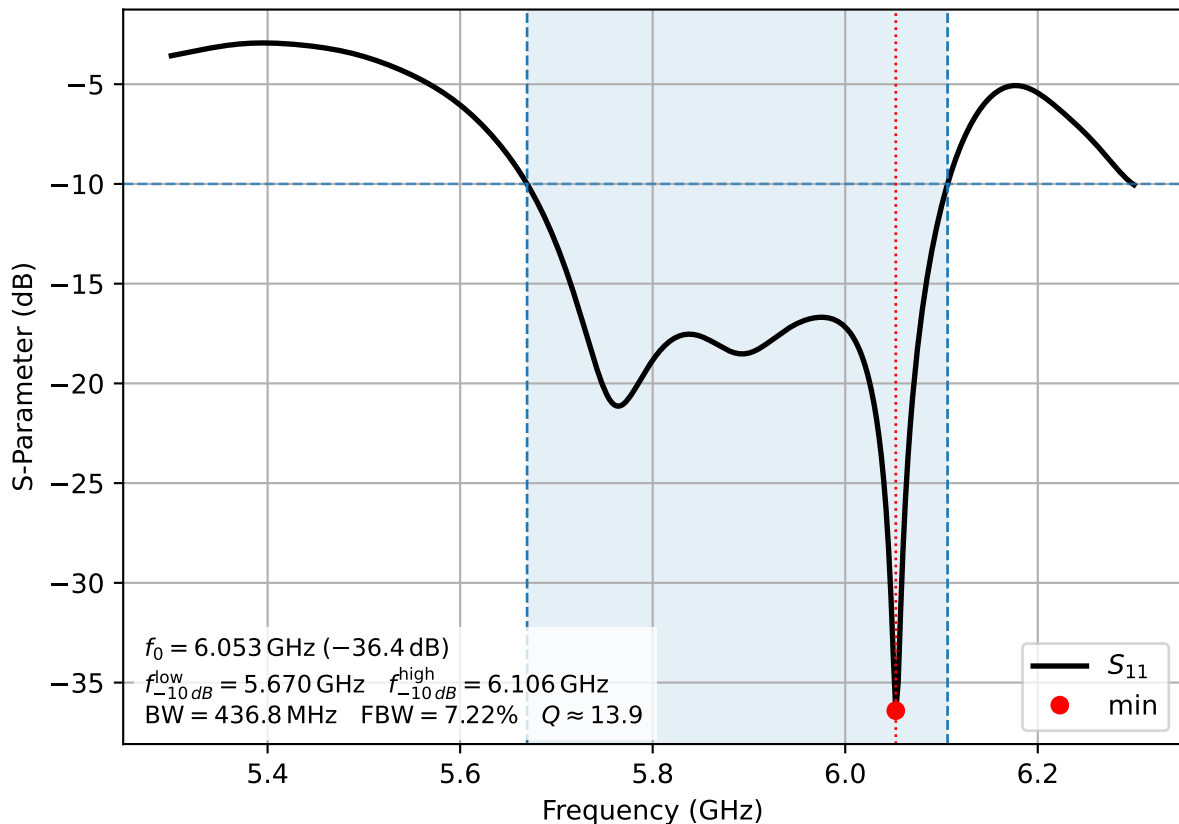


Reflection Coefficient S_{11}

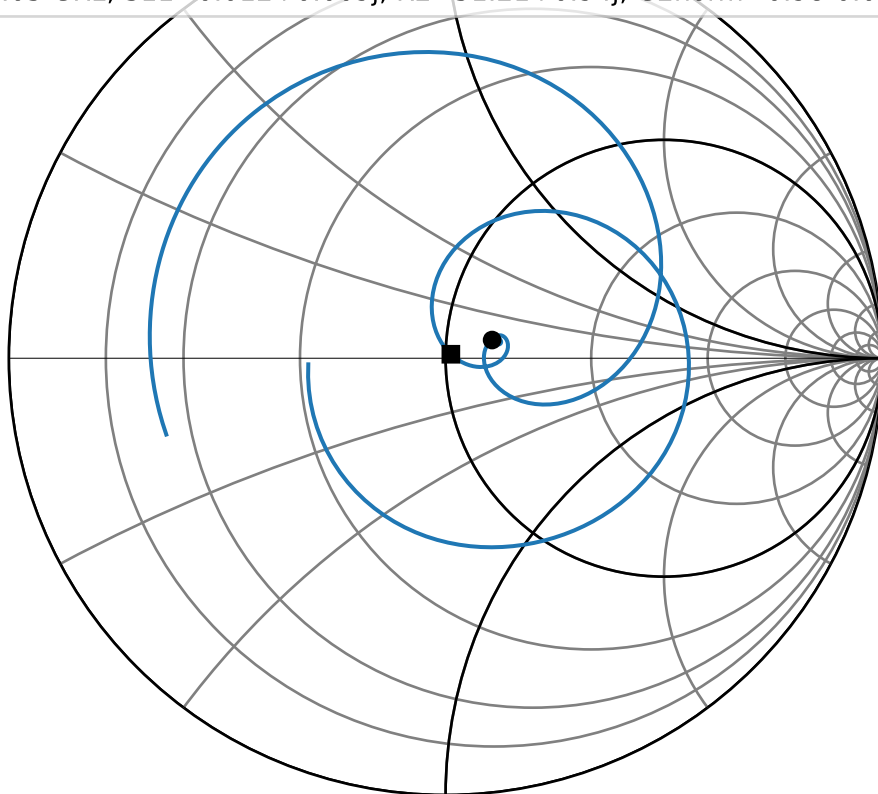


Smith Chart

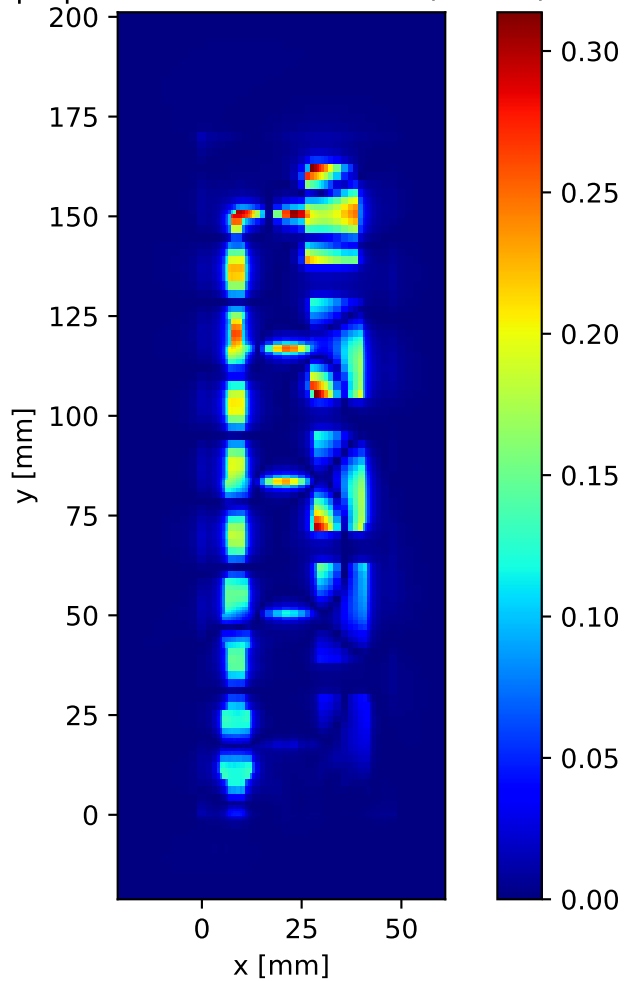
— S11 (Patch W=20.10 mm, L=10.70 mm)

● 5.80 GHz, $S_{11}=0.106+0.042j$, $R=61.67+5.21j$, $G_{\text{norm}}=0.80-0.07j$

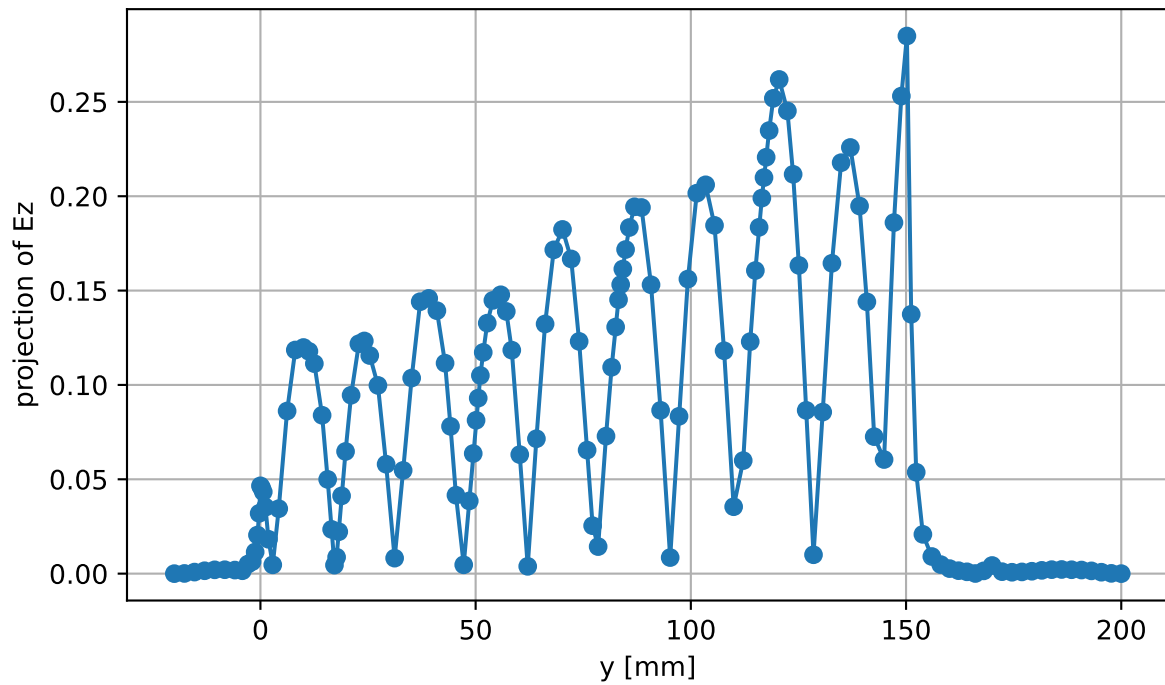
■ 6.05 GHz, $S_{11}=0.012+0.009j$, $R_2=51.21+0.94j$, $G_2\text{norm}=0.98-0.02j$



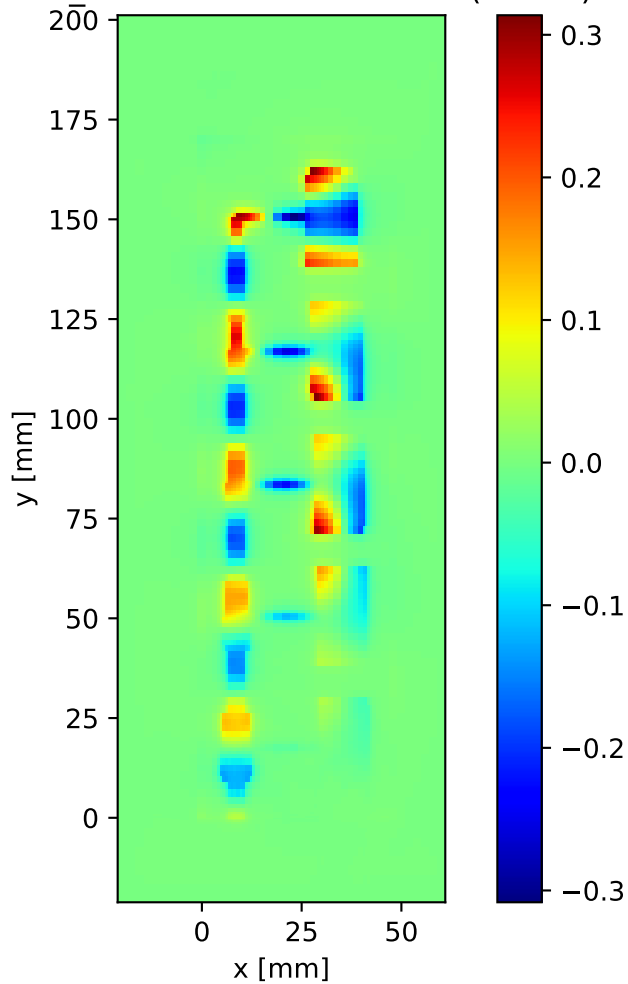
$|E_z|$ slice at $z = 0.76$ mm (idx 10)



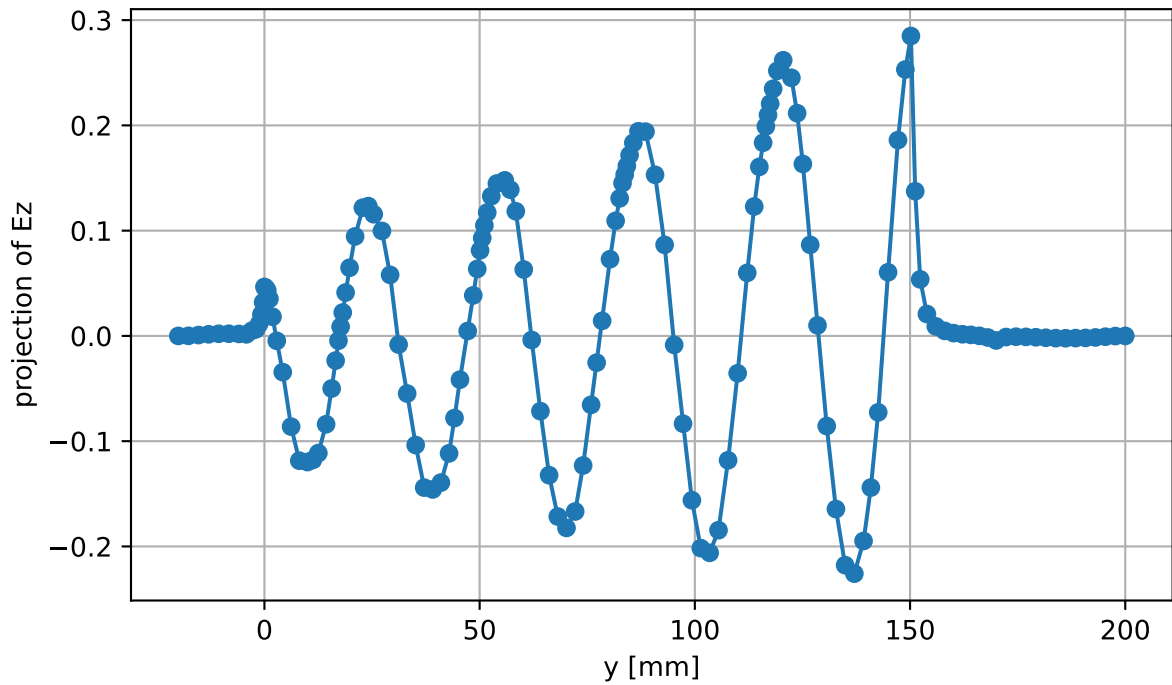
$|E_z|$ line cut along Y at $x=8.20$ mm, $z=0.76$ mm
(idx $x=19$, $z=10$)



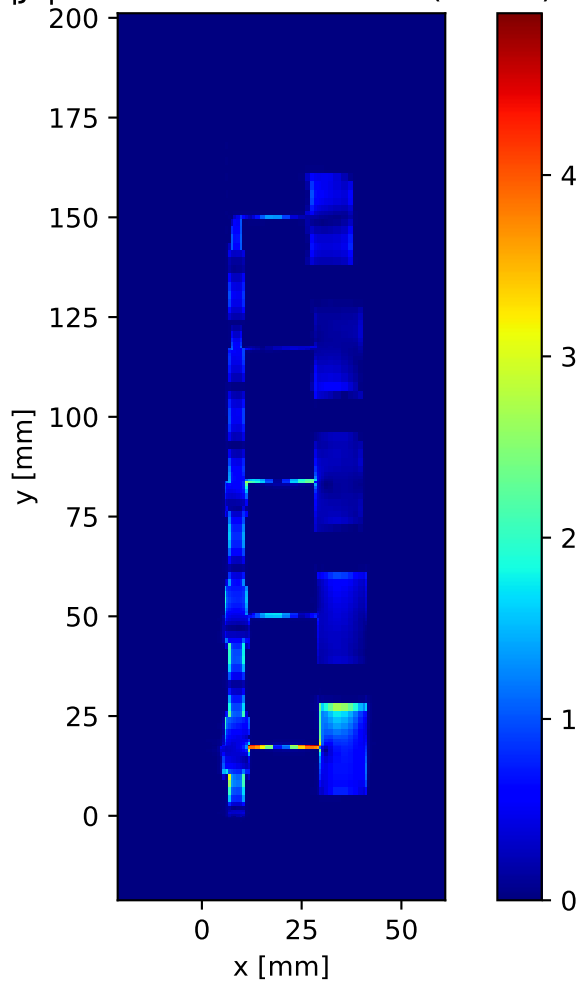
Real E_{fd} slice at z = 0.76 mm (idx 10)



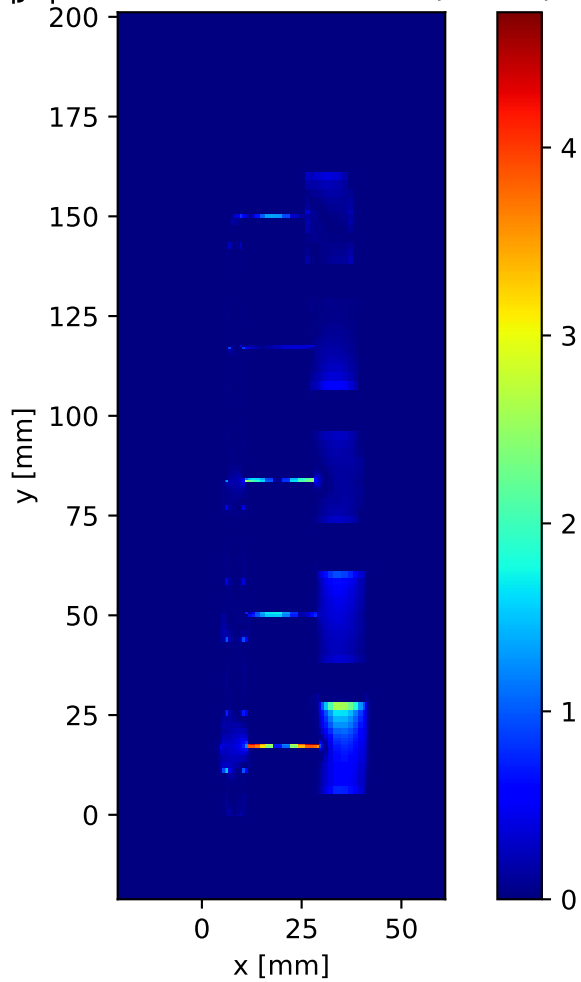
Real E_{fd} line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)



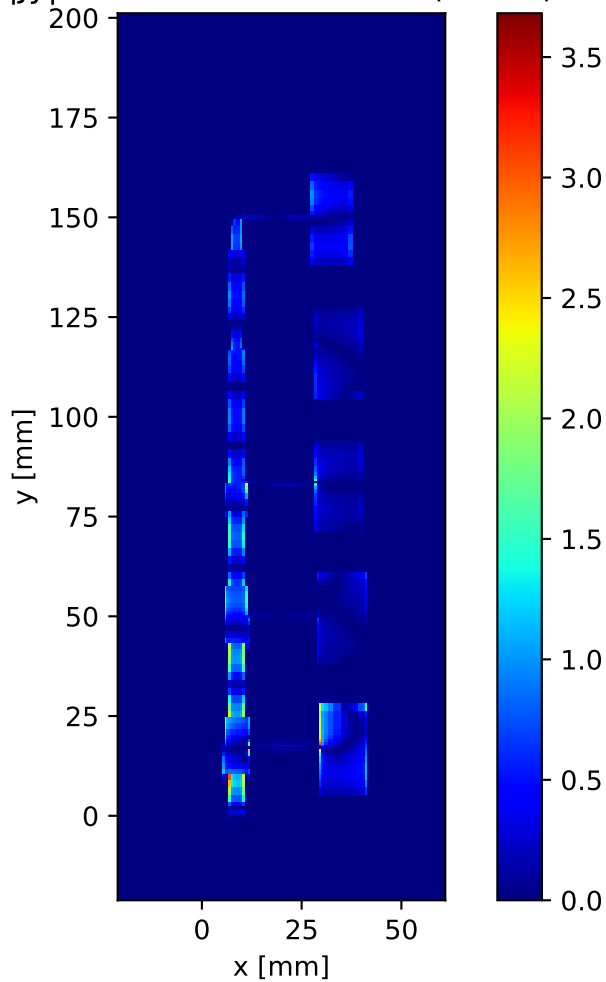
$|J_s|$ slice at $z = 1.525$ mm (idx 12)



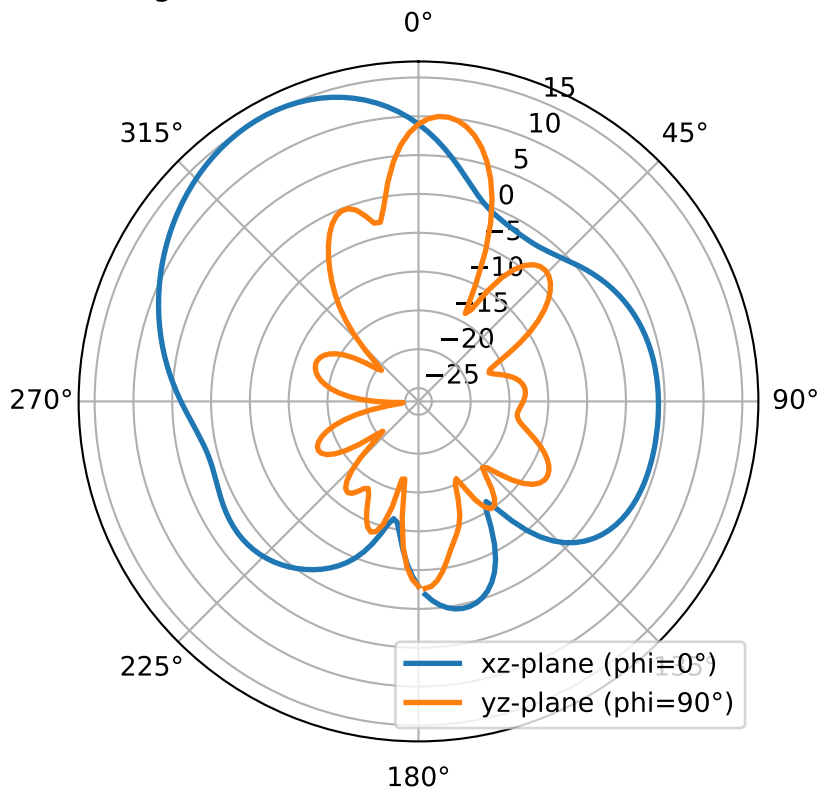
$|j_x|$ slice at $z = 1.525$ mm (idx 12)



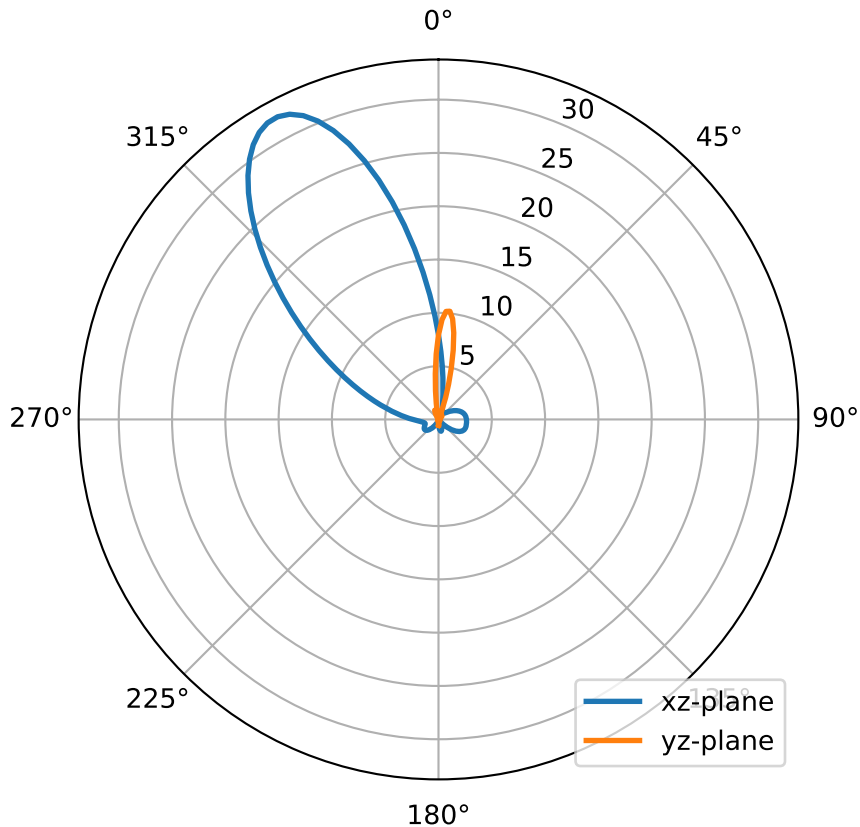
$|j_y|$ slice at $z = 1.525$ mm (idx 12)



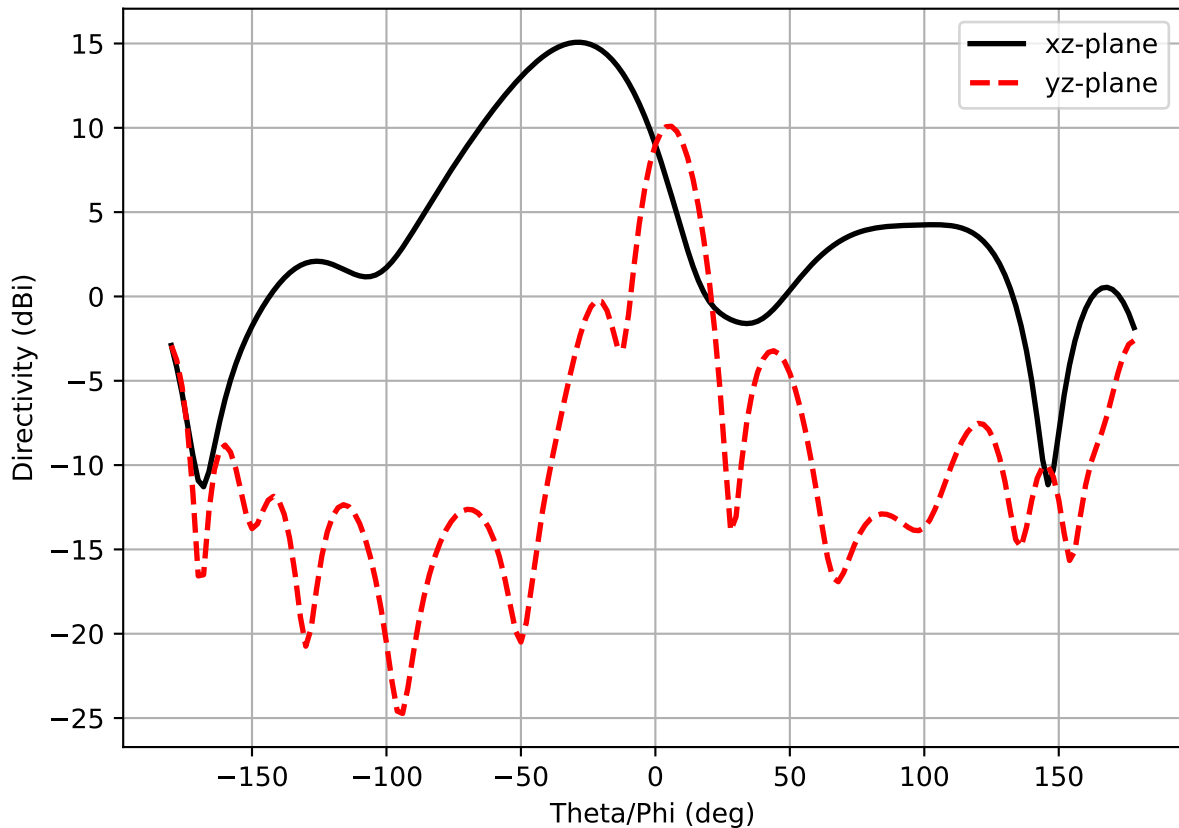
$f = 5.800 \text{ GHz}$ — Directivity (dB)
 $D_{\text{max}} (\text{integrated}) \approx 15.07 \text{ dB}$, $\text{nf2ff } D_{\text{max}} = 15.07 \text{ dB}$



Frequency: 5.800 GHz — Directivity (linear). Dmax: 32.158



Frequency: 5.800 GHz



3D Directivity Pattern
 $f = 5.800$ GHz, $D_{\max} = 15.91$ dBi

