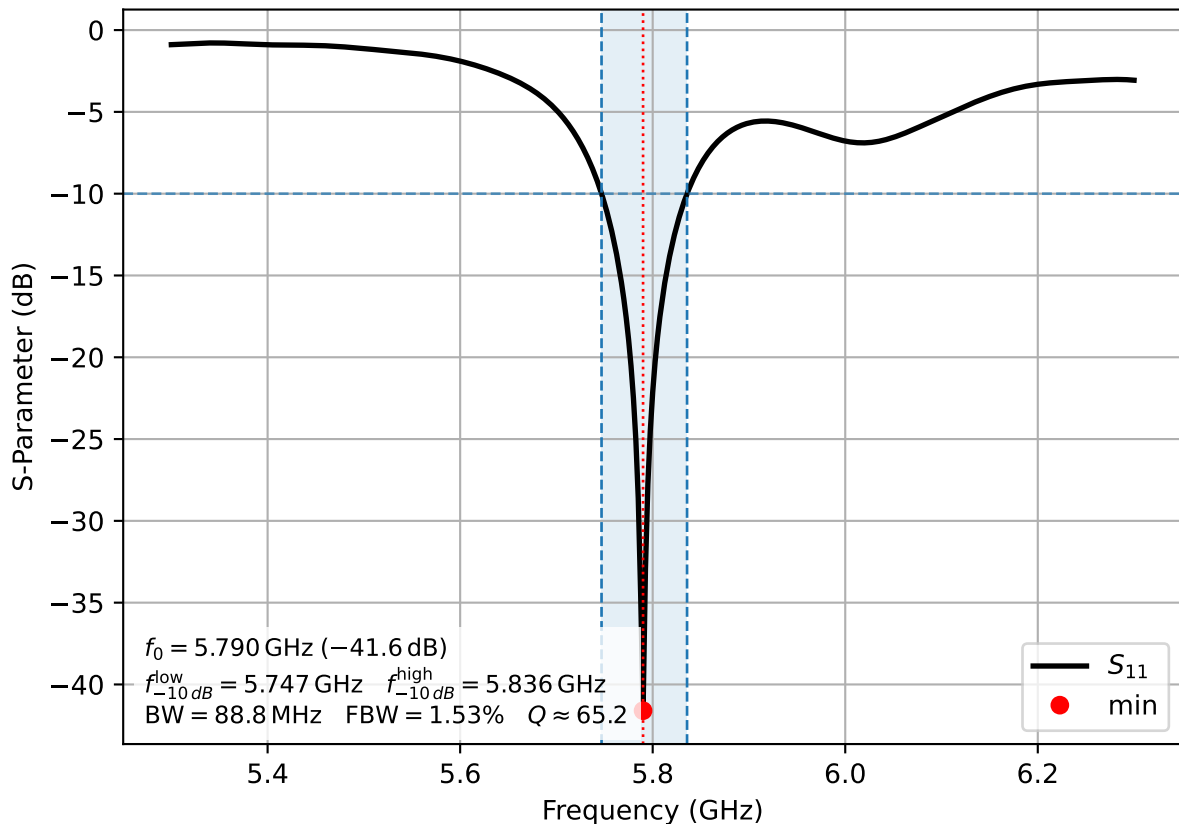


Reflection Coefficient S_{11}

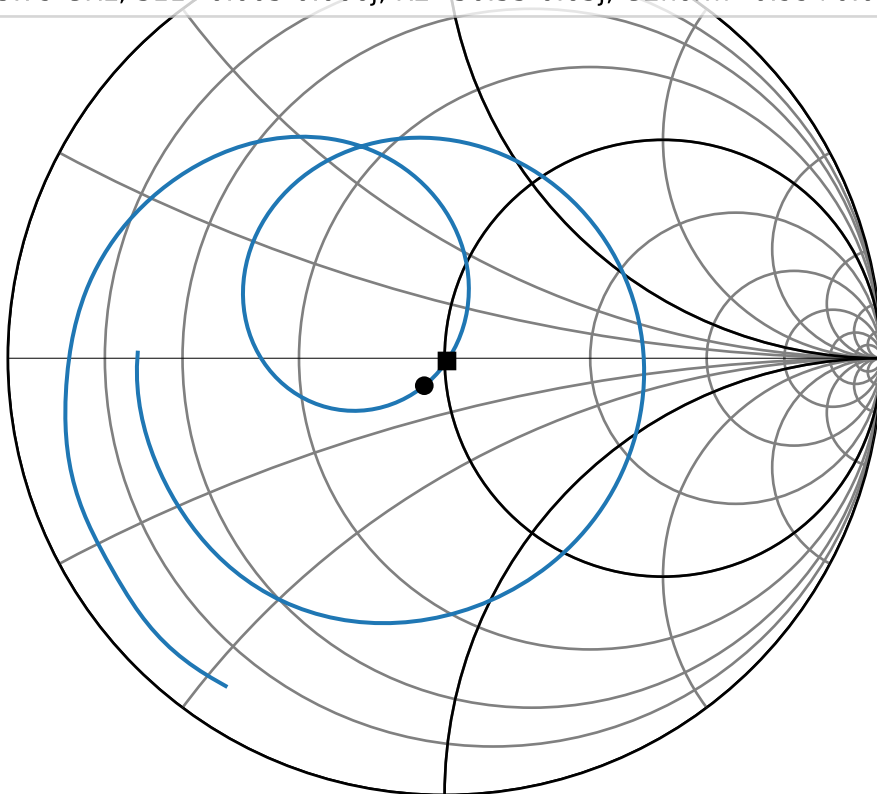


Smith Chart

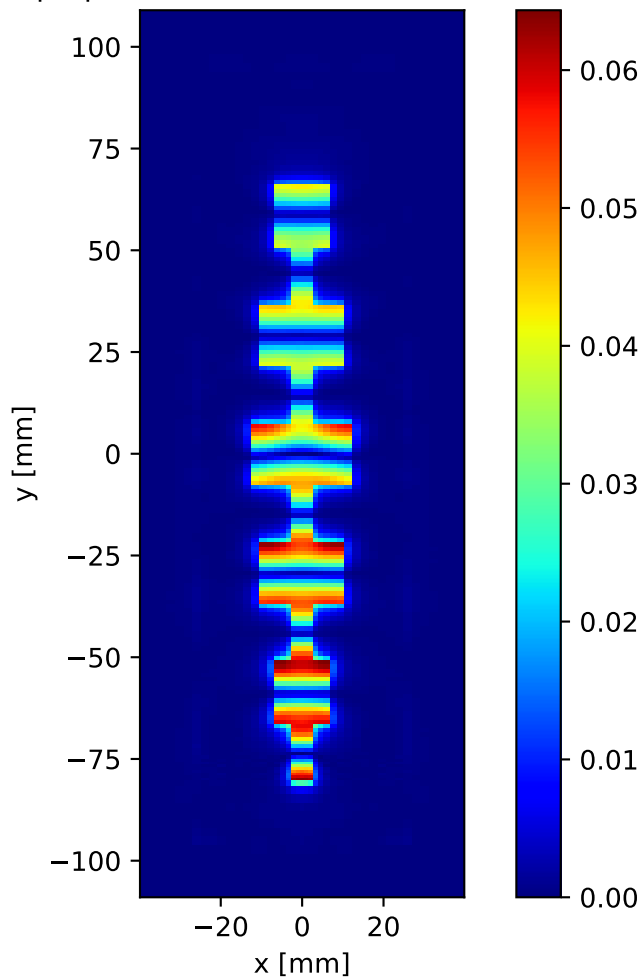
— S11 (Patch W=23.00 mm, L=13.90 mm)

● 5.80 GHz, $S_{11}=-0.047-0.063j$, $R=45.21-5.72j$, $G_{\text{norm}}=1.09+0.14j$

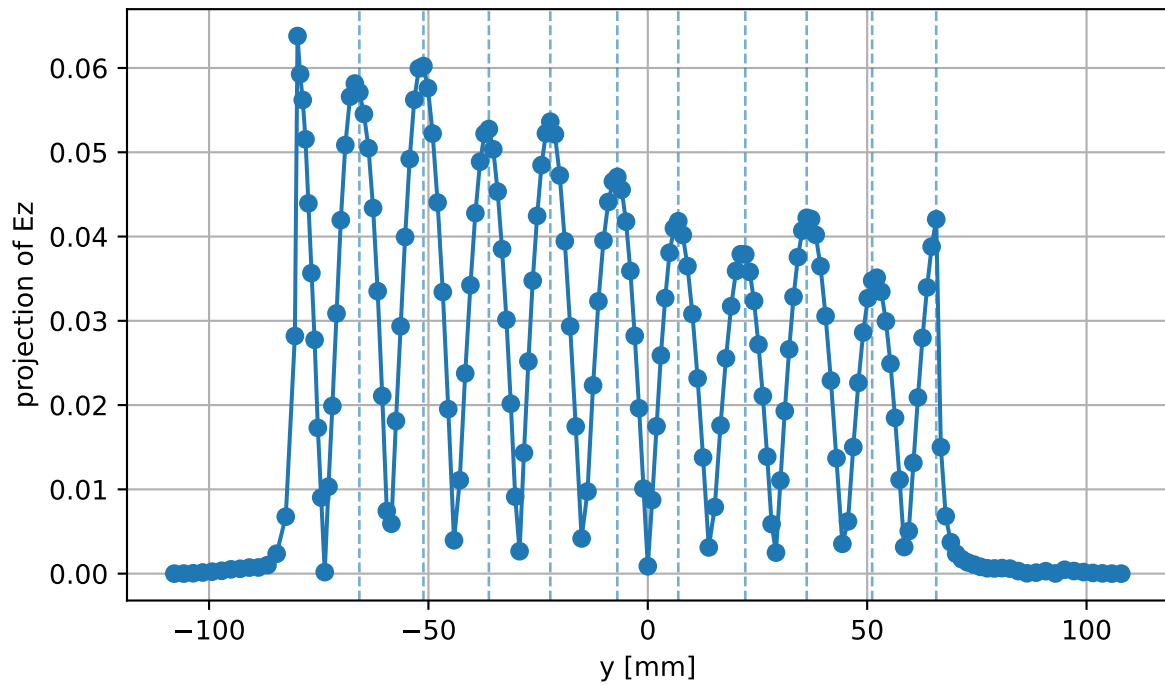
■ 5.79 GHz, $S_{11}=0.005-0.006j$, $R_2=50.55-0.63j$, $G_{2\text{norm}}=0.99+0.01j$



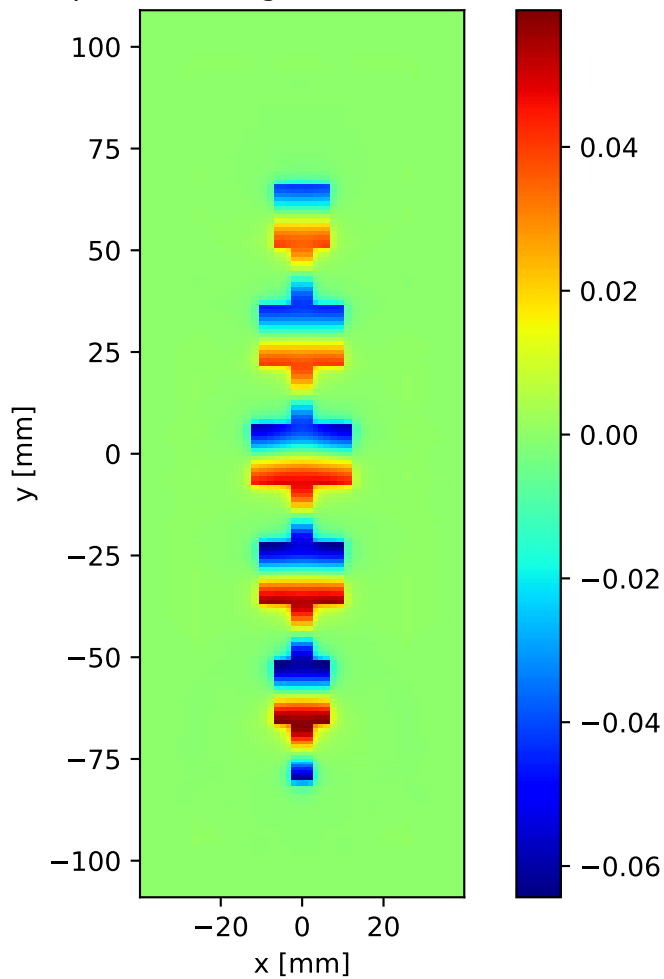
$|E_z|$ slice at $z = 0.76$ mm (idx 26)



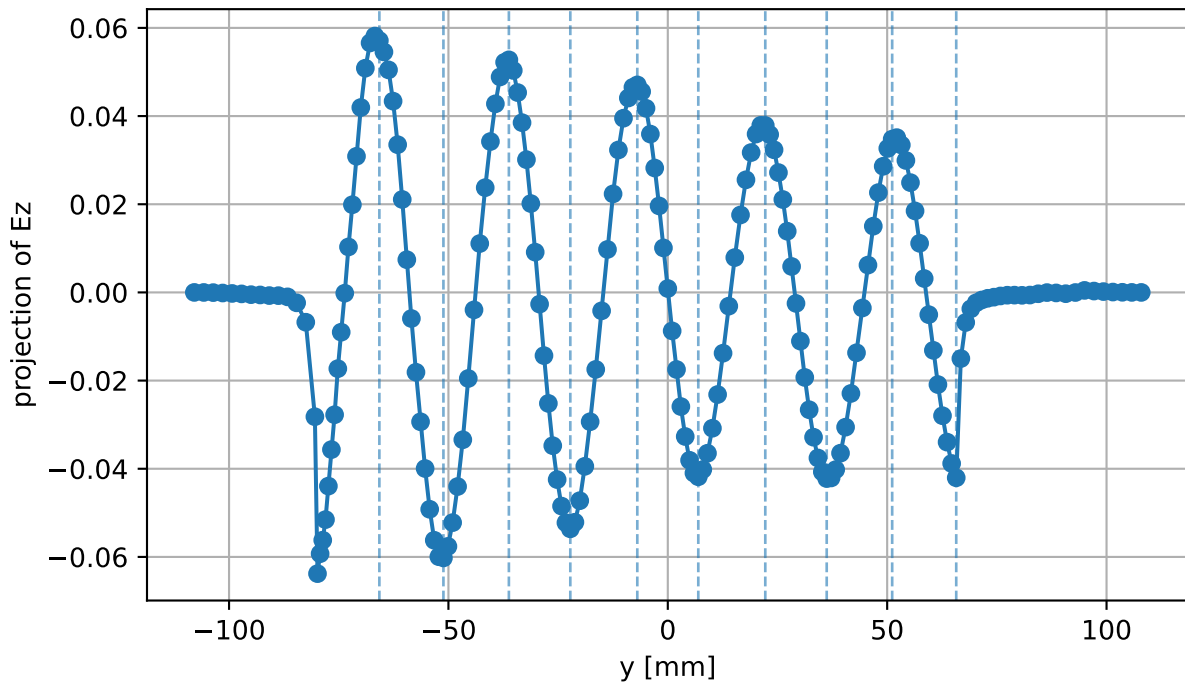
$|E_z|$ line cut along Y at $x=0.00$ mm, $z=0.76$ mm
(idx x=21, z=26)



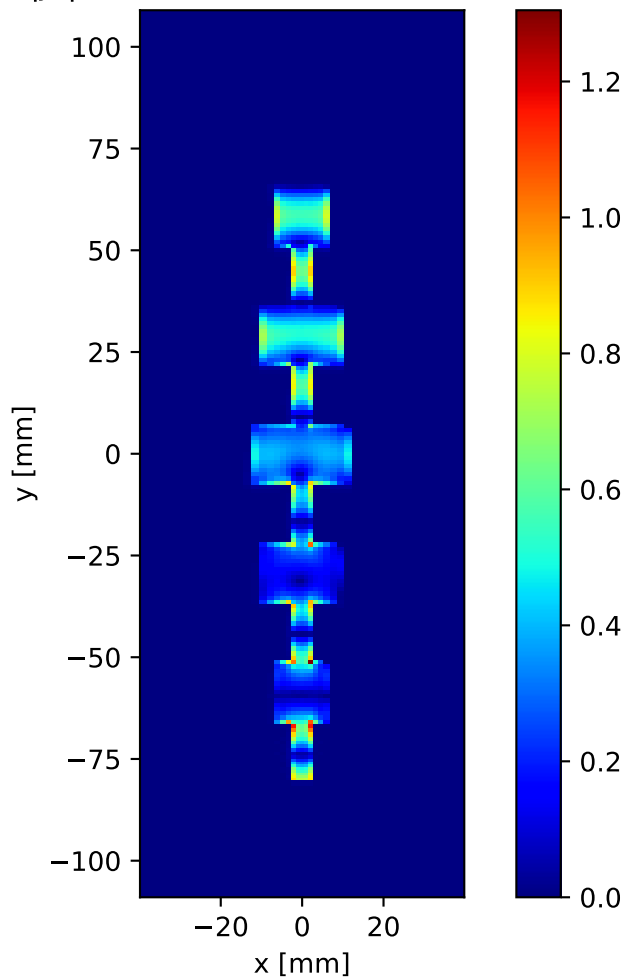
Ez snapshot (dphi=0.00deg) slice at $z = 0.76$ mm (idx 26)



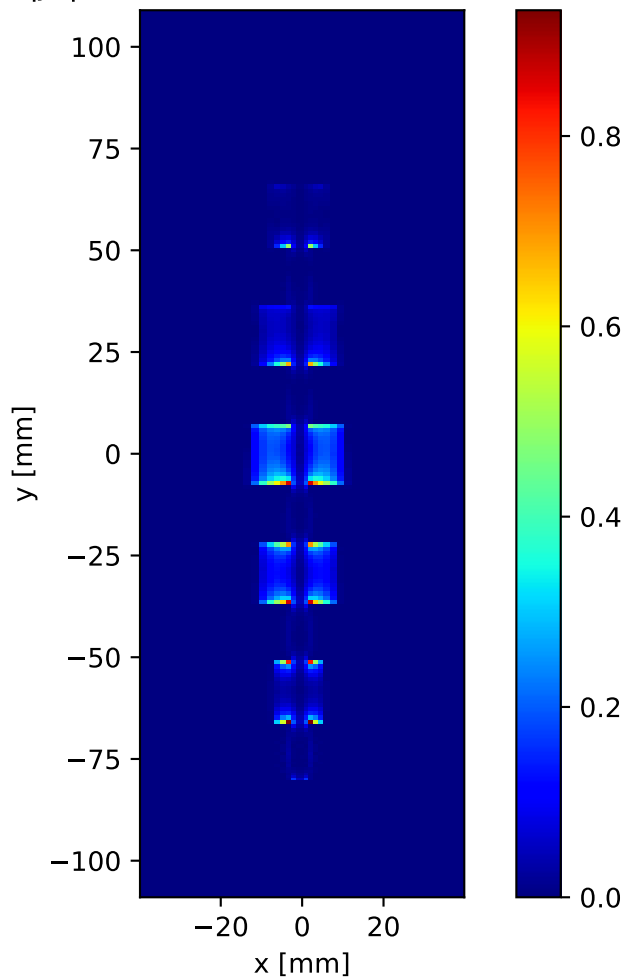
Ez snapshot (dphi=0.00deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=21, z=26)



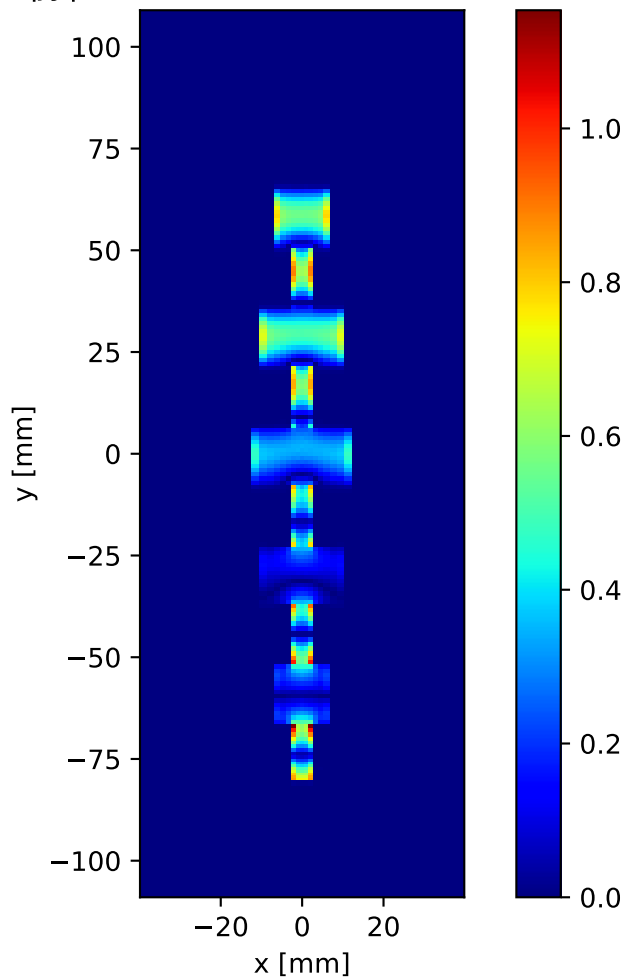
$|J_s|$ slice at $z = 1.524$ mm (idx 28)



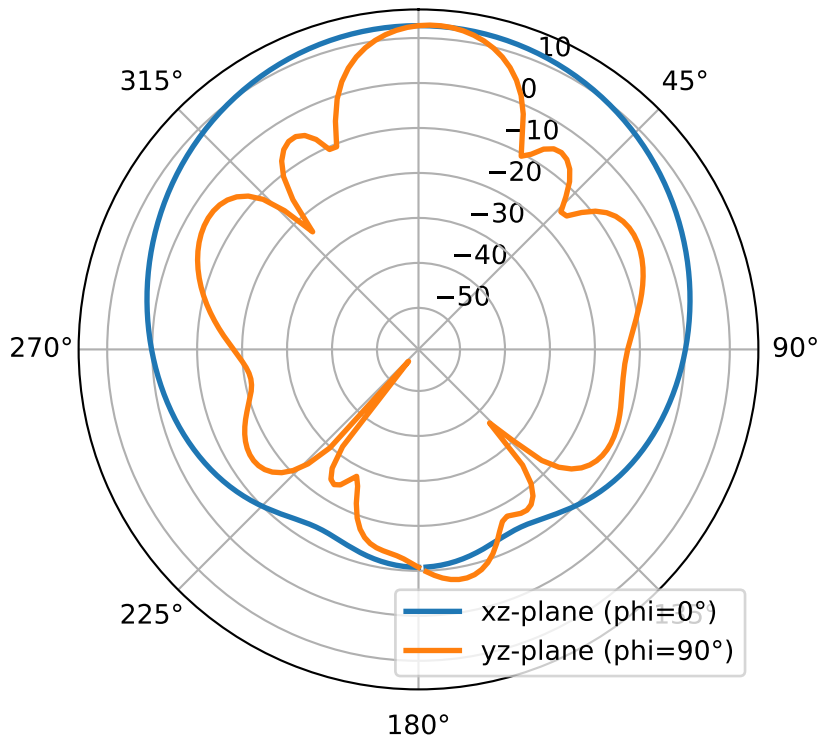
$|J_x|$ slice at $z = 1.524$ mm (idx 28)



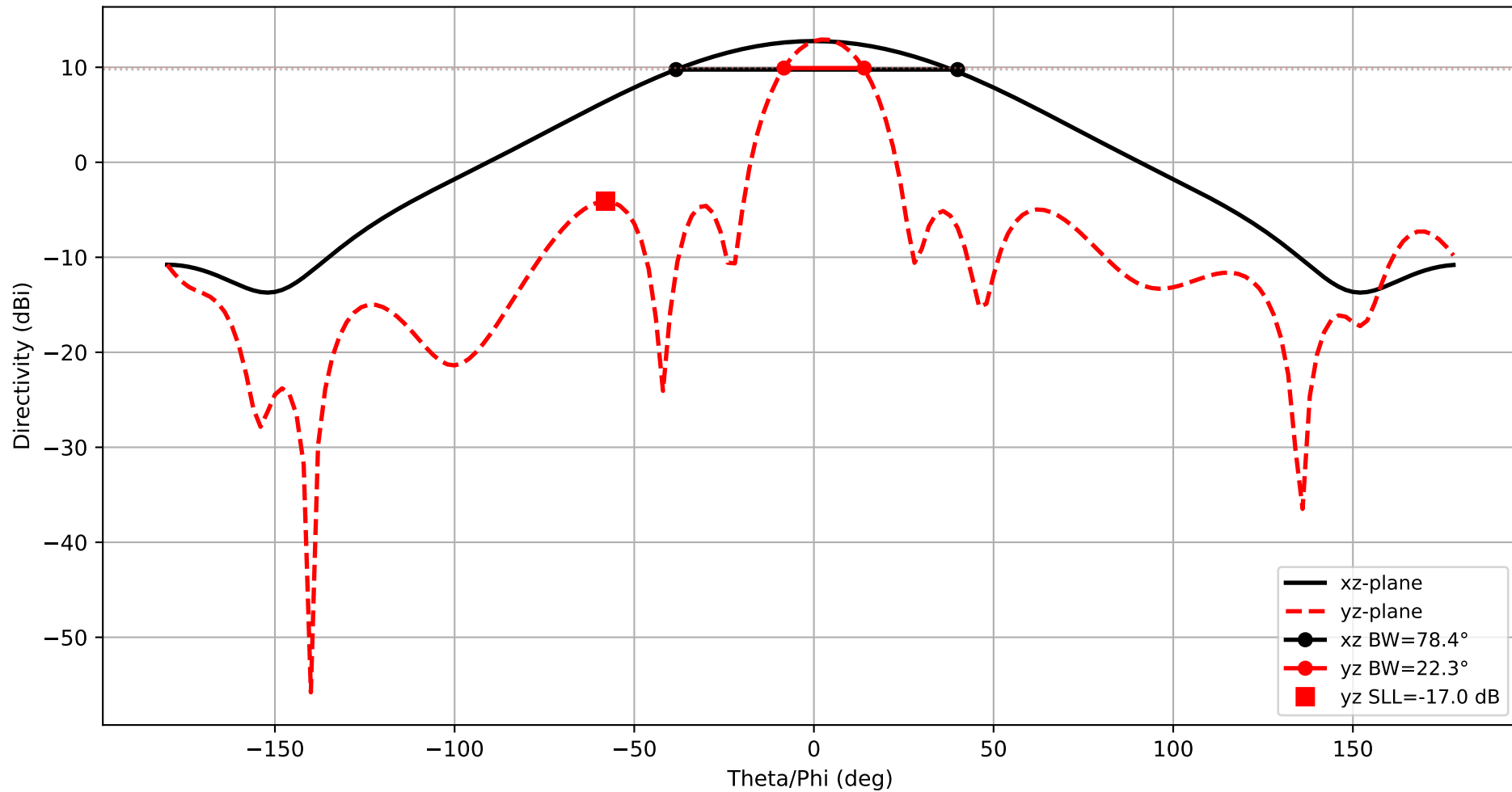
$|j_y|$ slice at $z = 1.524$ mm (idx 28)



$f = 5.800 \text{ GHz}$ — Directivity (dB)
 $D_{\text{max}} (\text{integrated}) \approx 12.92 \text{ dB}$, $\text{nf2ff } D_{\text{max}} = 12.92 \text{ dB}$



Frequency: 5.800 GHz
xz-plane: HPBW=78.4°
yz-plane: HPBW=22.3°



3D Directivity Pattern
 $f = 5.800$ GHz, $D_{\max} = 12.90$ dBi

