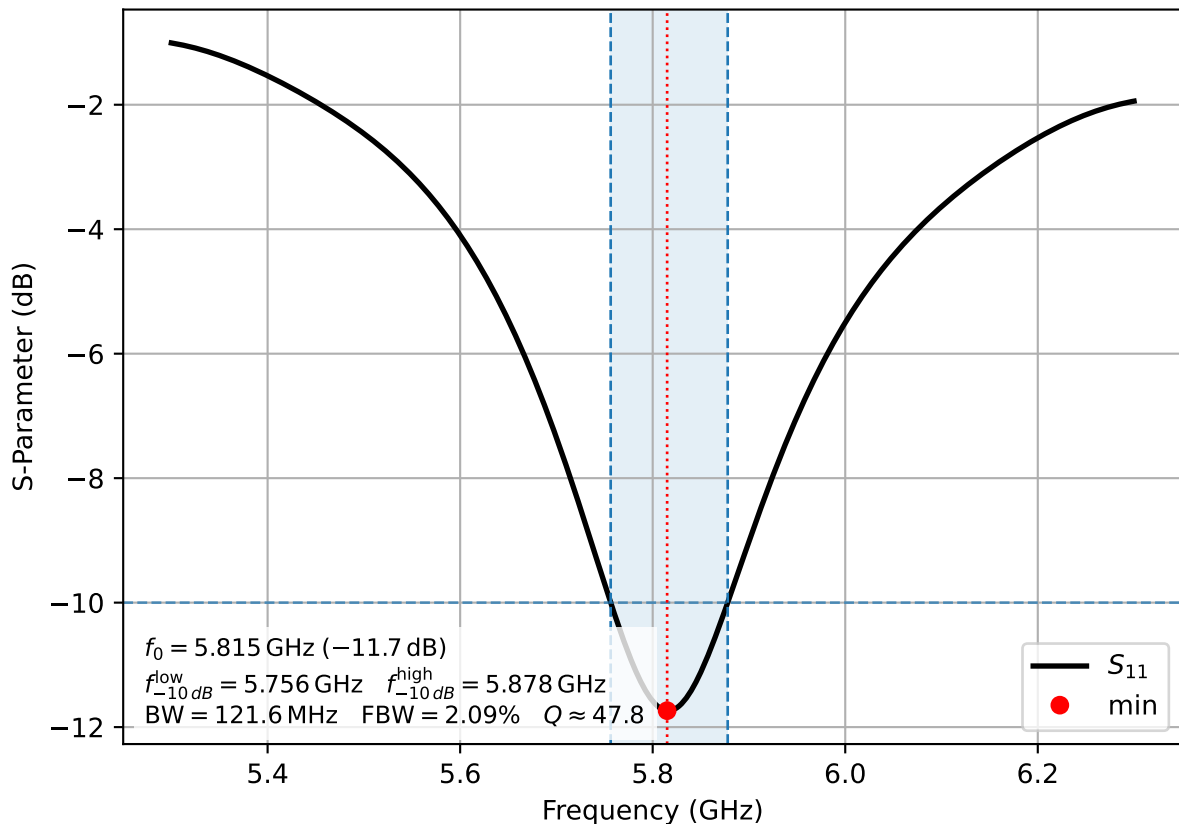


Reflection Coefficient S_{11}

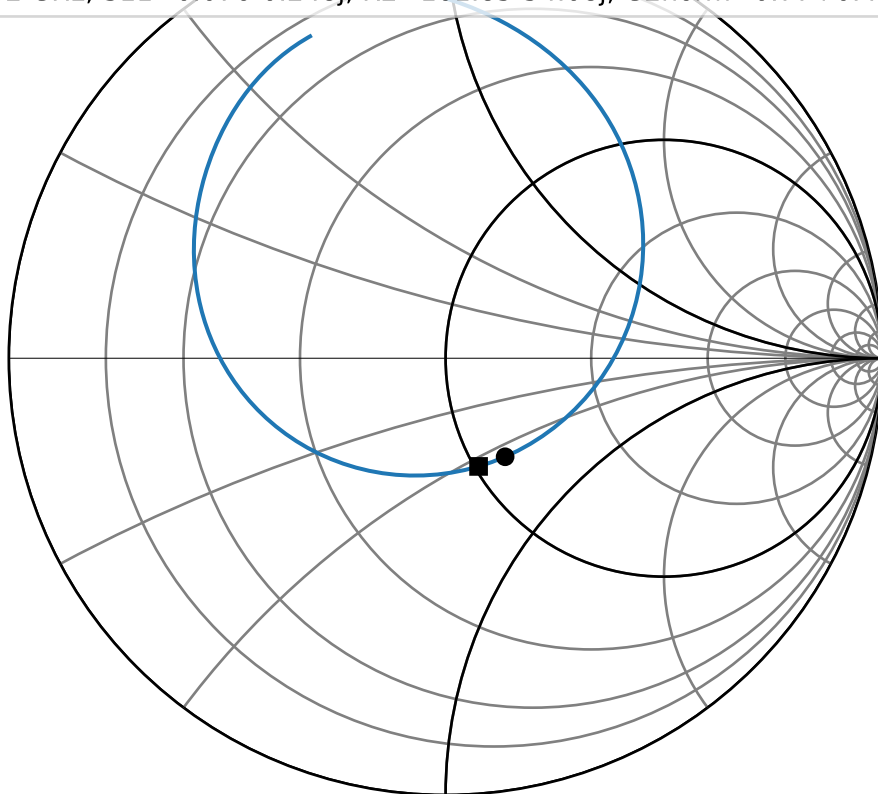


Smith Chart

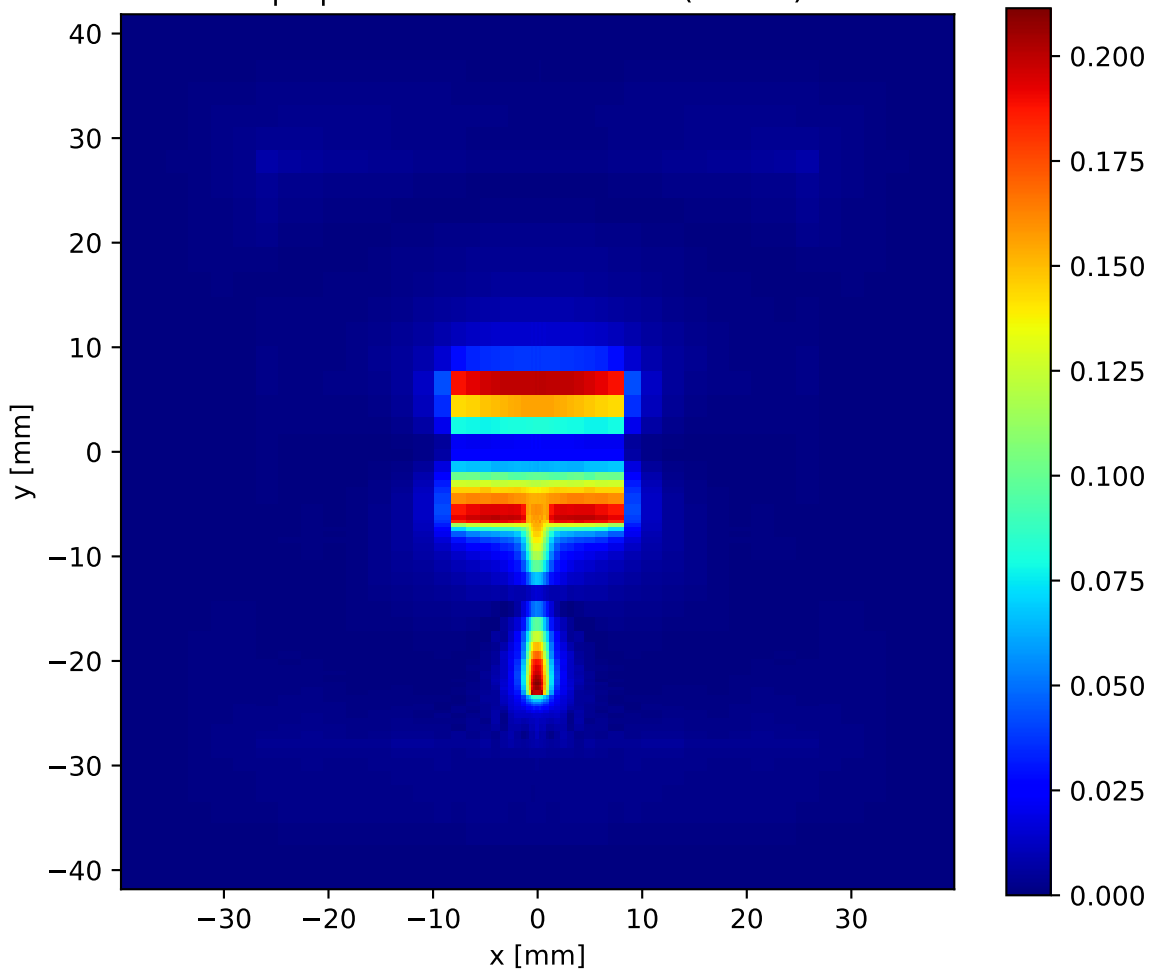
— S11 (Patch W=15.00 mm, L=13.10 mm)

● 5.80 GHz, $S_{11}=0.136-0.226j$, $R=116.77-56.61j$, $G_{\text{norm}}=0.69+0.34j$

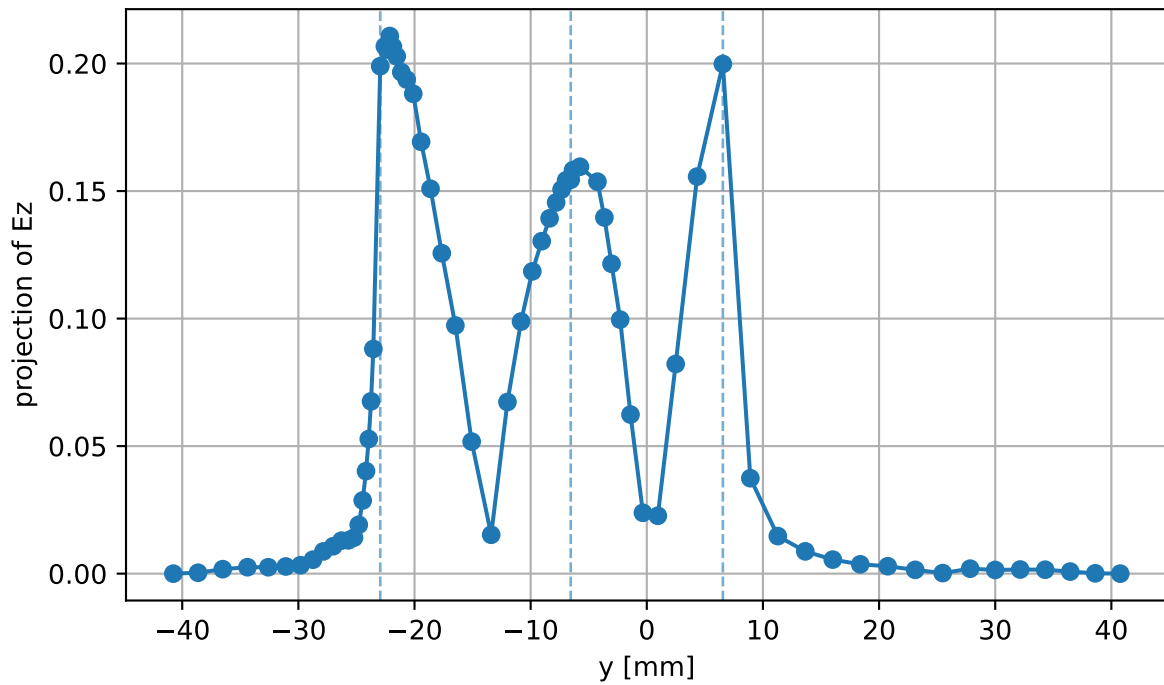
■ 5.82 GHz, $S_{11}=0.076-0.248j$, $R_2=101.85-54.08j$, $G_{2\text{norm}}=0.77+0.41j$



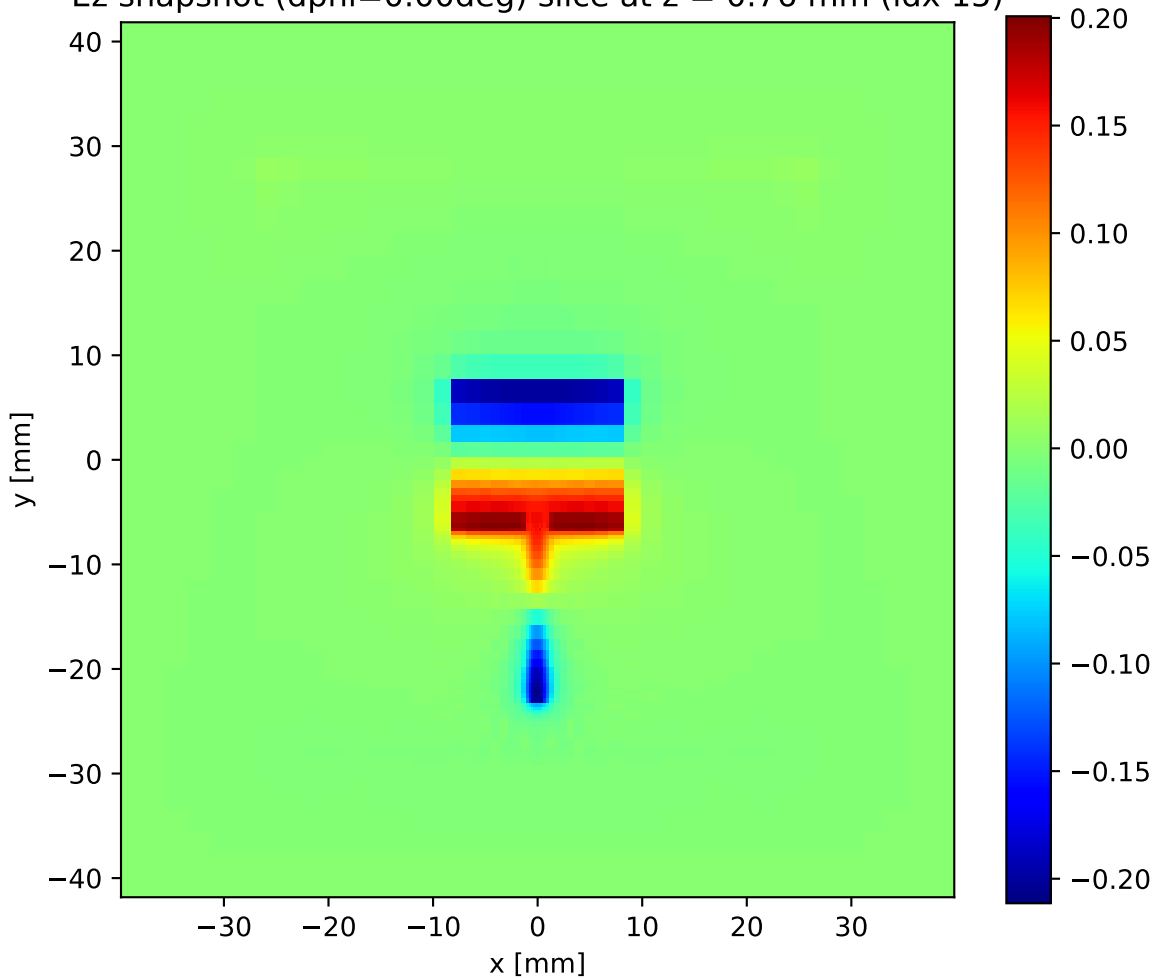
$|E_z|$ slice at $z = 0.76$ mm (idx 15)



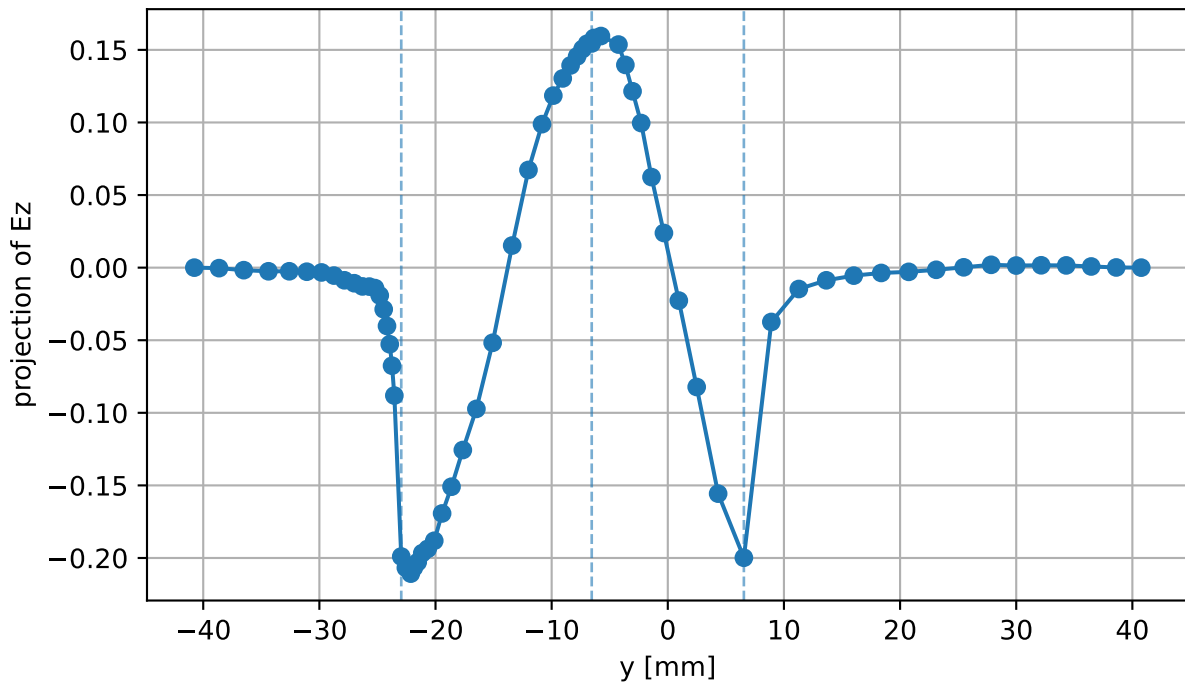
$|E_z|$ line cut along Y at $x=0.10$ mm, $z=0.76$ mm
(idx $x=28$, $z=15$)



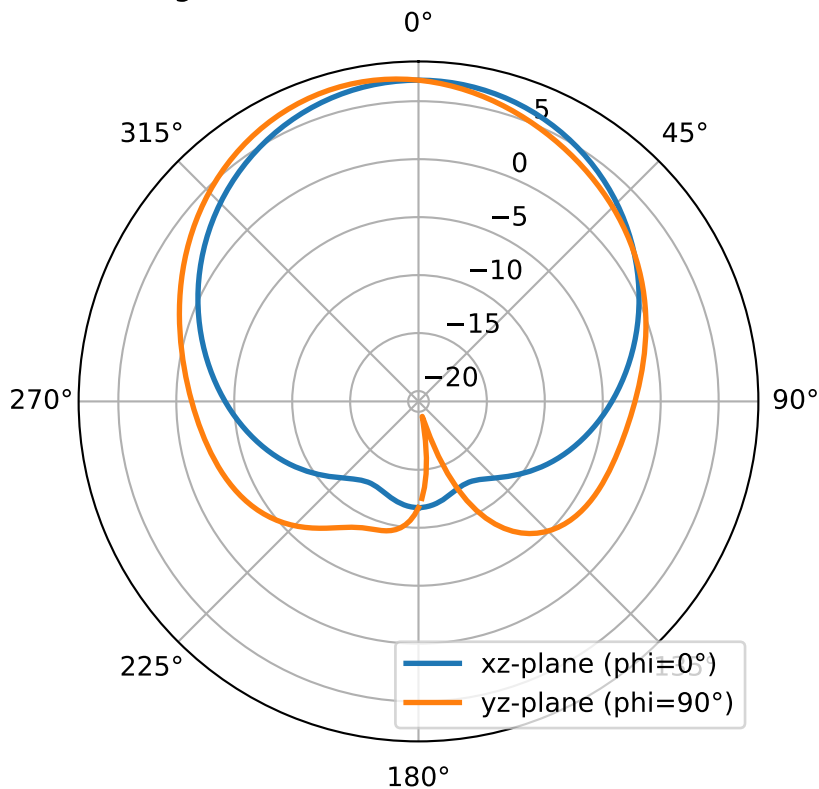
Ez snapshot (dphi=0.00deg) slice at $z = 0.76$ mm (idx 15)



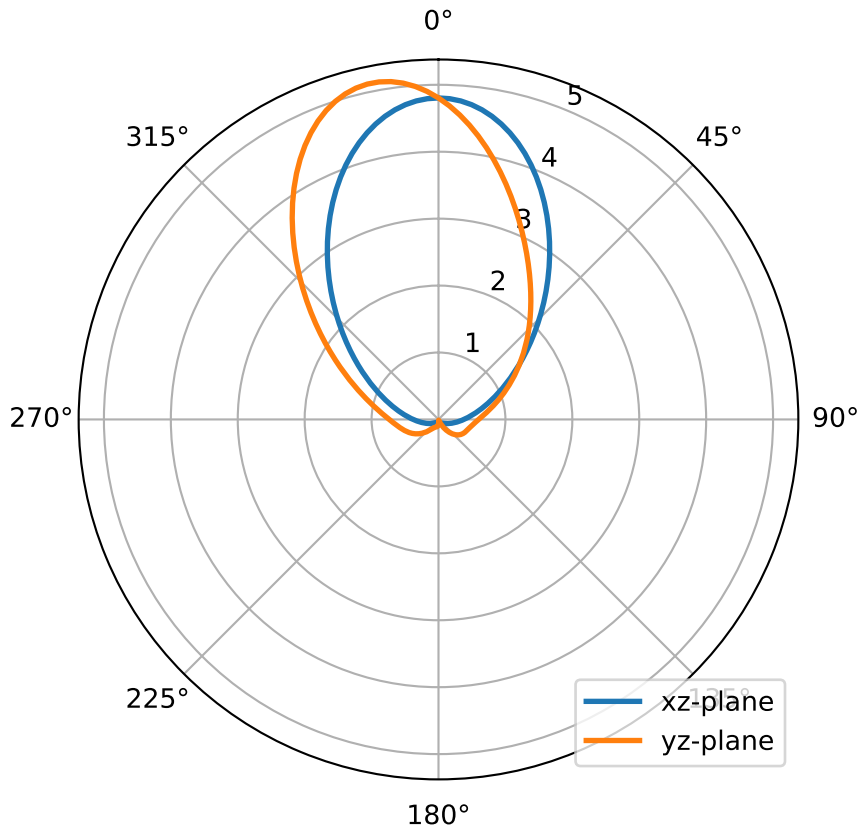
Ez snapshot (dphi=0.00deg) line cut along Y at x=0.10 mm, z=0.76 mm
(idx x=28, z=15)



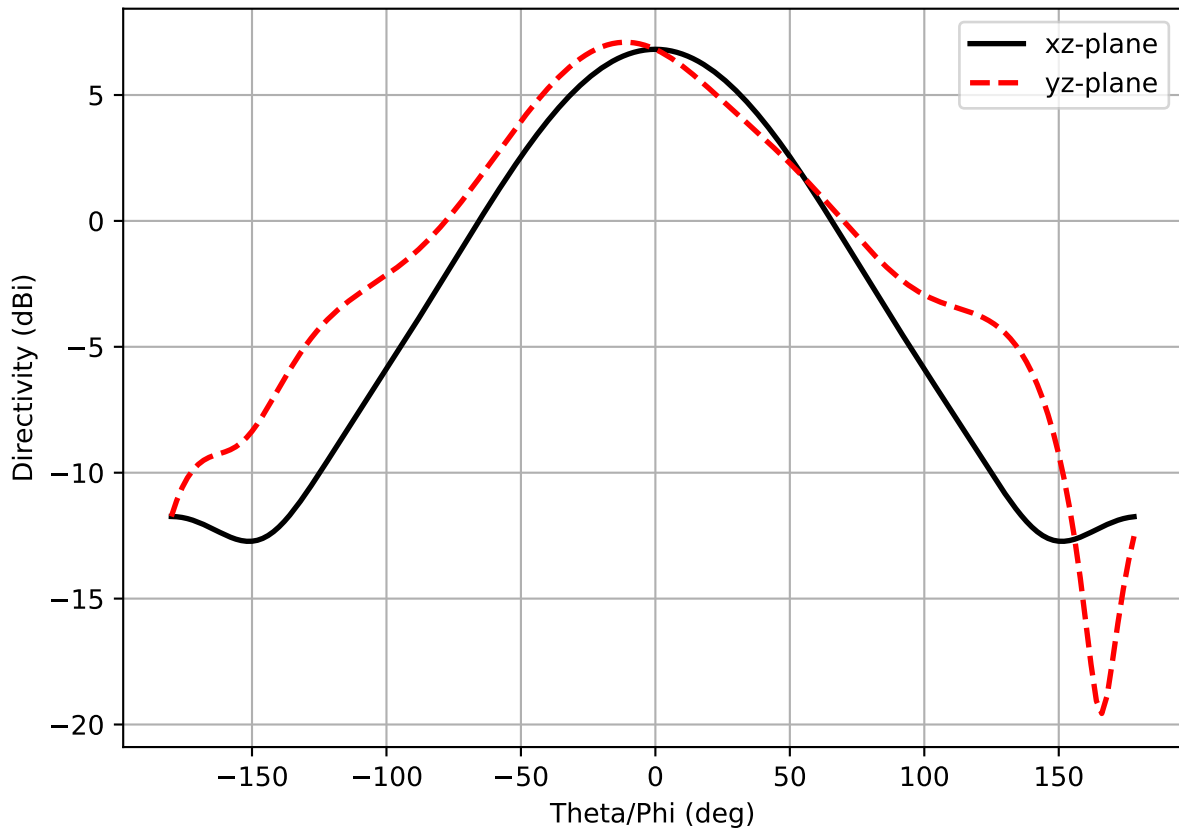
$f = 5.815 \text{ GHz}$ — Directivity (dB)
 $D_{\text{max}} (\text{integrated}) \approx 7.09 \text{ dB}$, $\text{nf2ff } D_{\text{max}} = 7.09 \text{ dB}$



Frequency: 5.815 GHz — Directivity (linear). Dmax: 5.122



Frequency: 5.815 GHz



3D Directivity Pattern
 $f = 5.815 \text{ GHz}$, $D_{\text{max}} = 7.09 \text{ dBi}$

