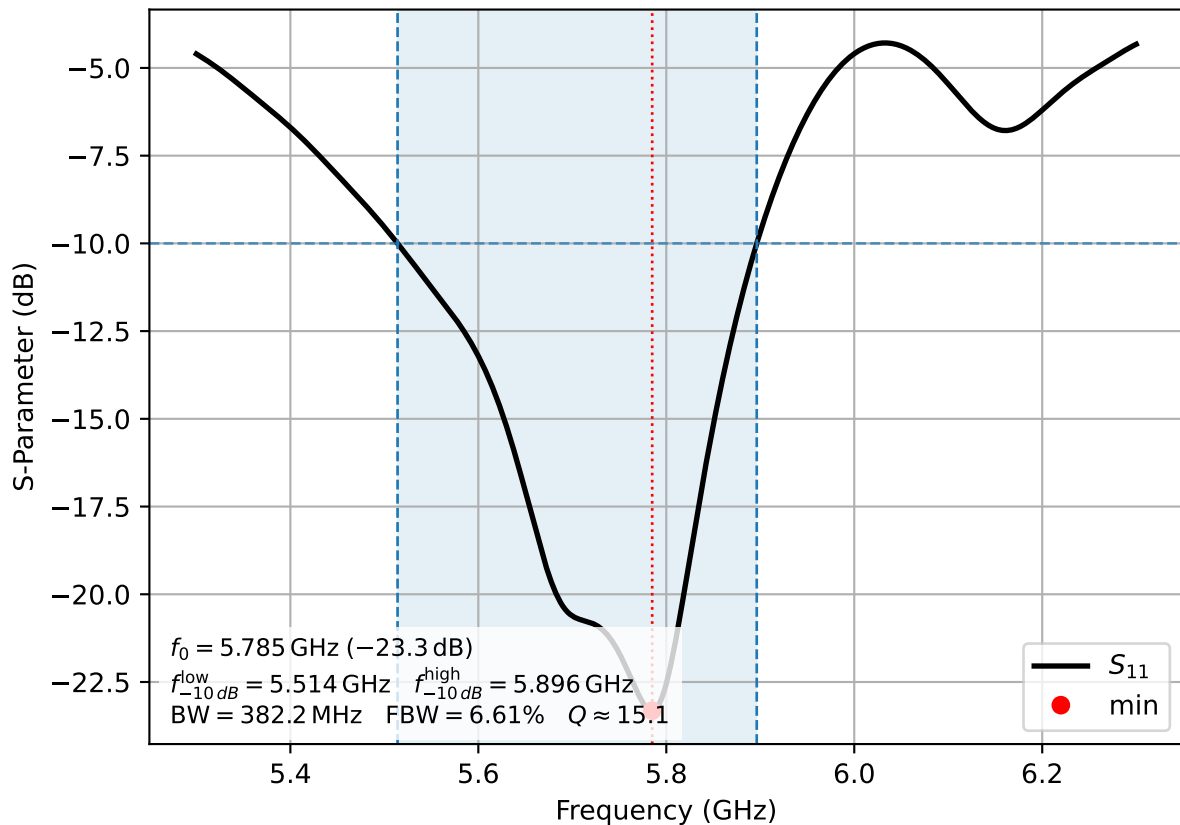


# Reflection Coefficient $S_{11}$

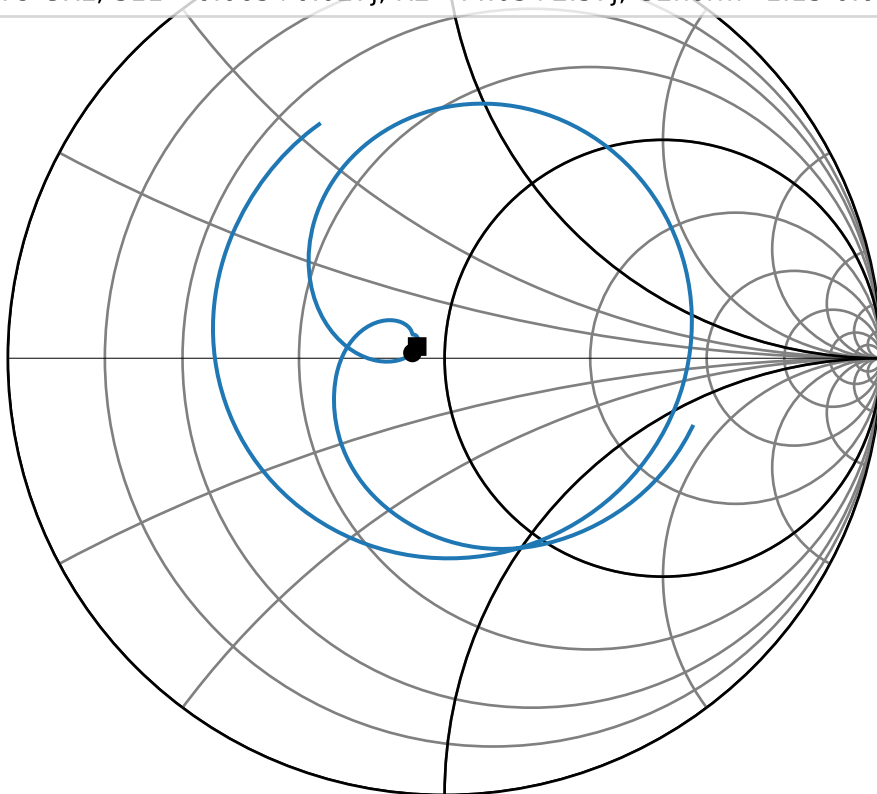


# Smith Chart

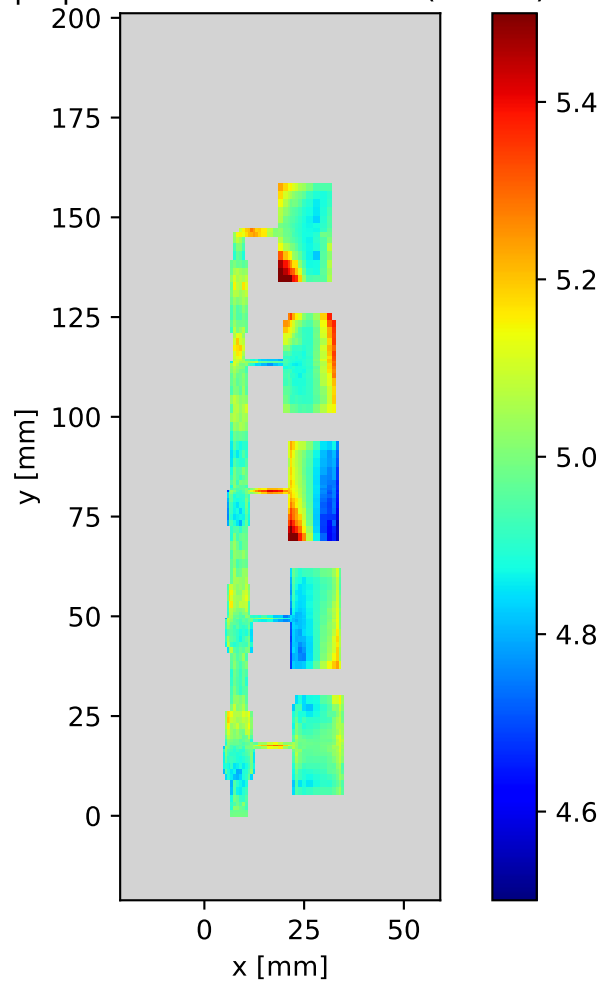
— S11 (Patch W=20.10 mm, L=10.70 mm)

● 5.80 GHz,  $S_{11} = -0.074 + 0.012j$ ,  $R = 43.14 + 1.05j$ ,  $G_{\text{norm}} = 1.16 - 0.03j$

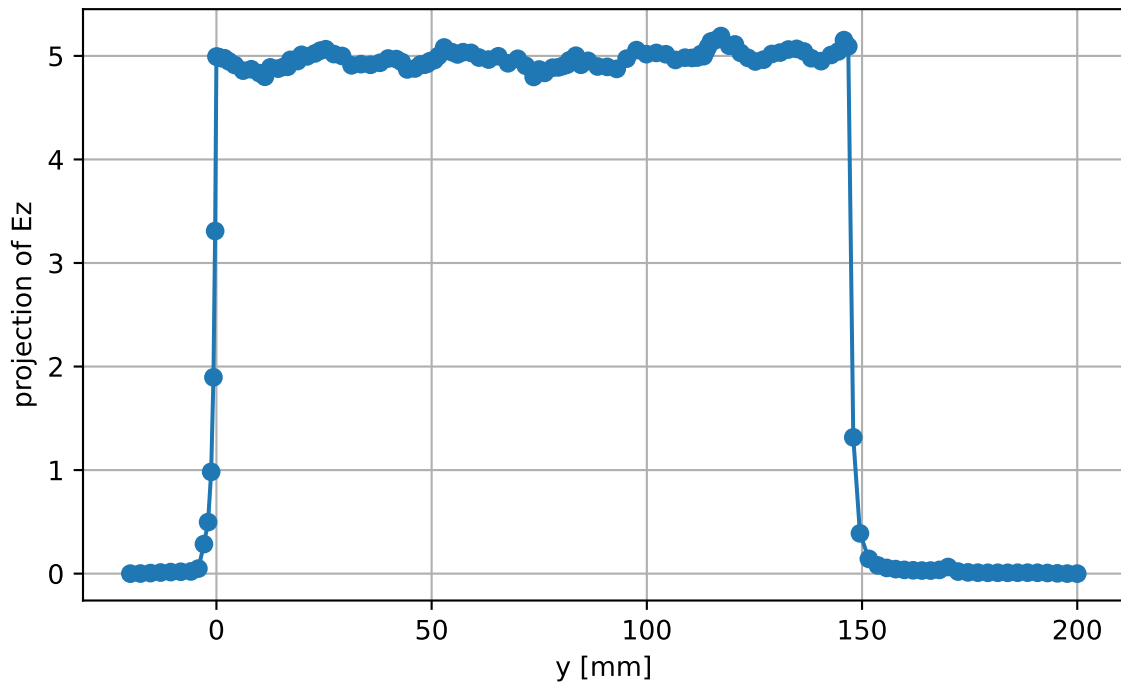
■ 5.79 GHz,  $S_{11} = -0.063 + 0.027j$ ,  $R_2 = 44.03 + 2.37j$ ,  $G_{2\text{norm}} = 1.13 - 0.06j$



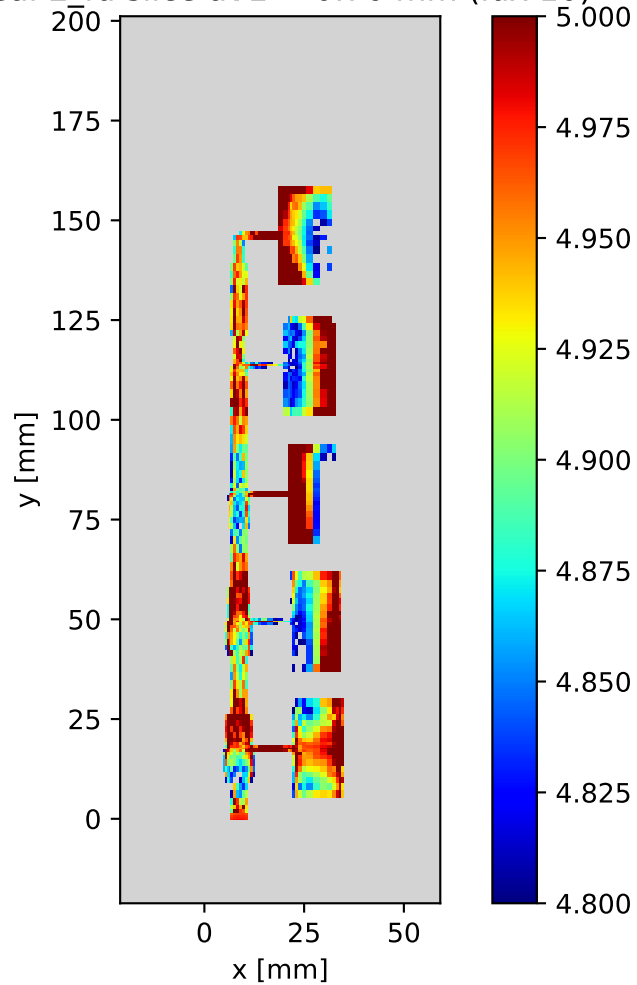
$|E_z|$  slice at  $z = 0.76$  mm (idx 10)



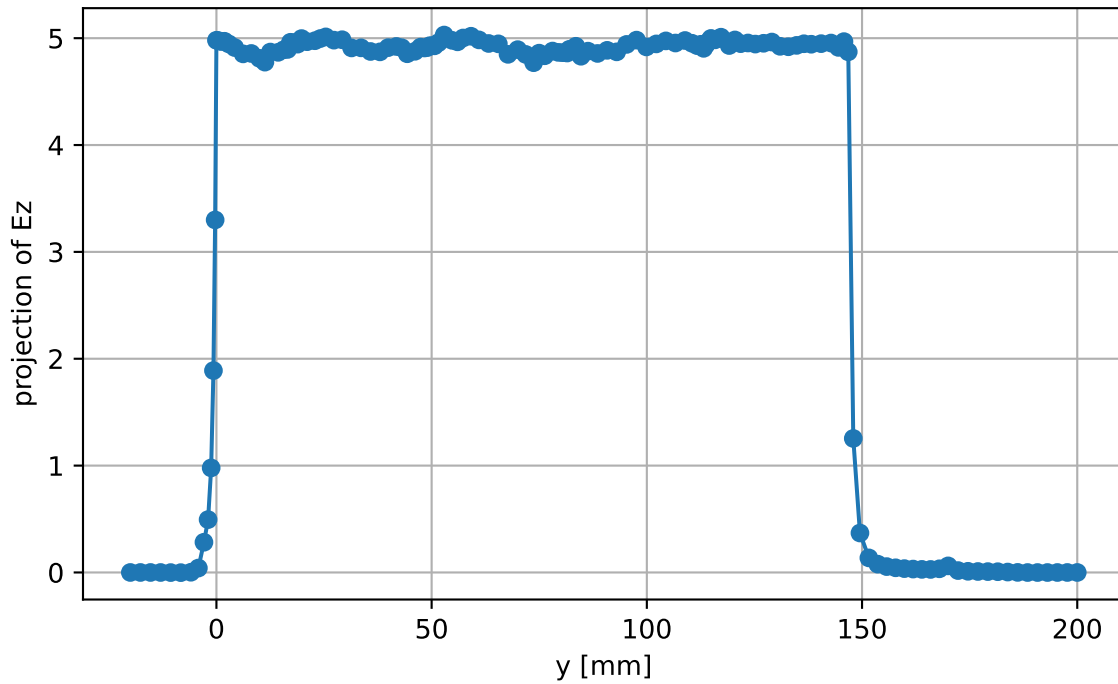
$|E_z|$  line cut along Y at  $x=9.20$  mm,  $z=0.76$  mm  
(idx  $x=20$ ,  $z=10$ )



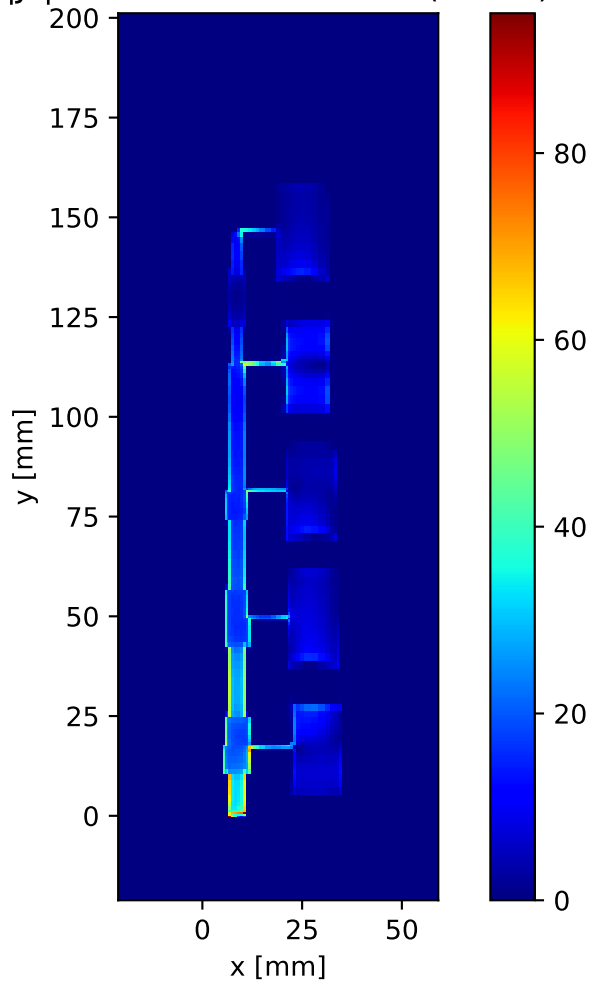
Real E<sub>fd</sub> slice at z = 0.76 mm (idx 10)



Real E<sub>fd</sub> line cut along Y at x=9.20 mm, z=0.76 mm  
(idx x=20, z=10)

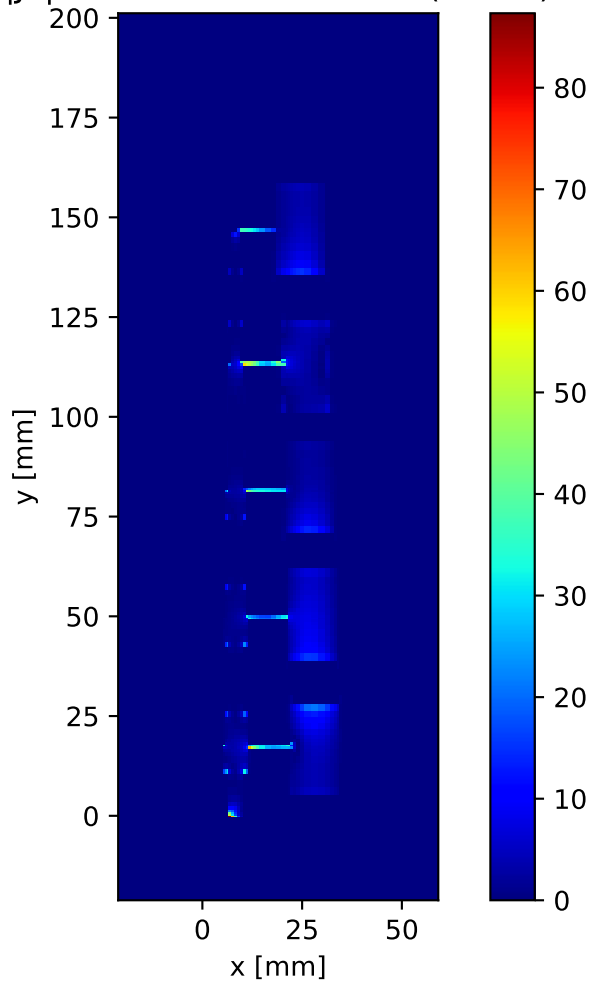


$|J_s|$  slice at  $z = 1.525$  mm (idx 12)

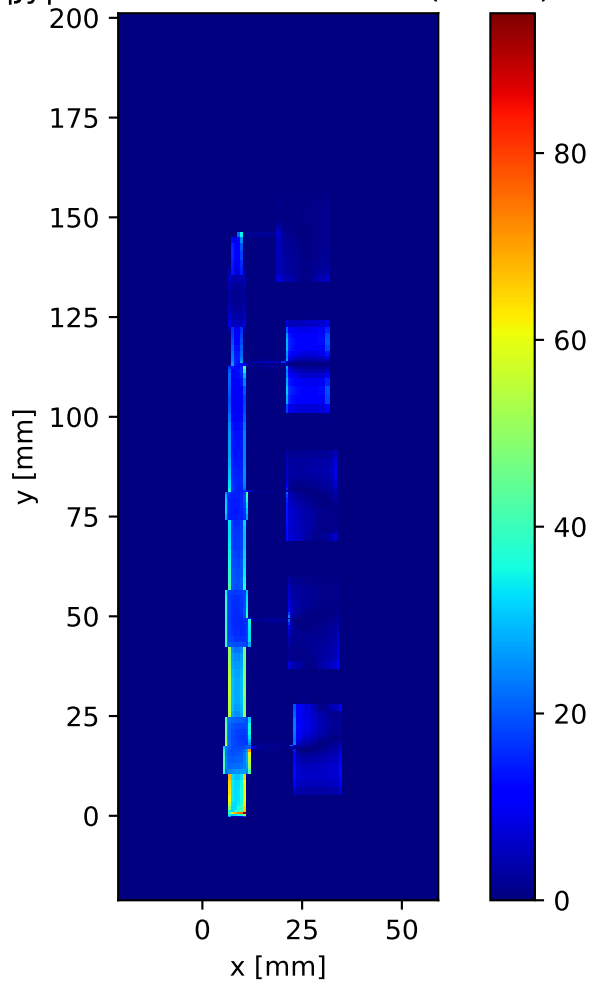




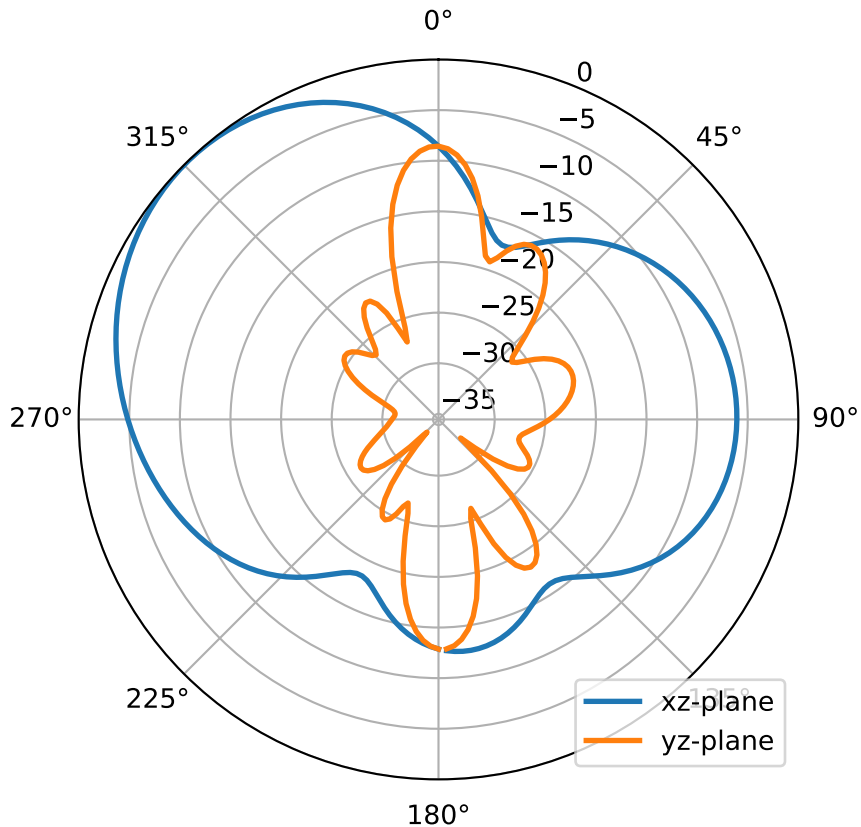
$|J_x|$  slice at  $z = 1.525$  mm (idx 12)



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



Frequency: 5.800 GHz — Directivity (dB). Dmax: 73.742dB



Frequency: 5.800 GHz

