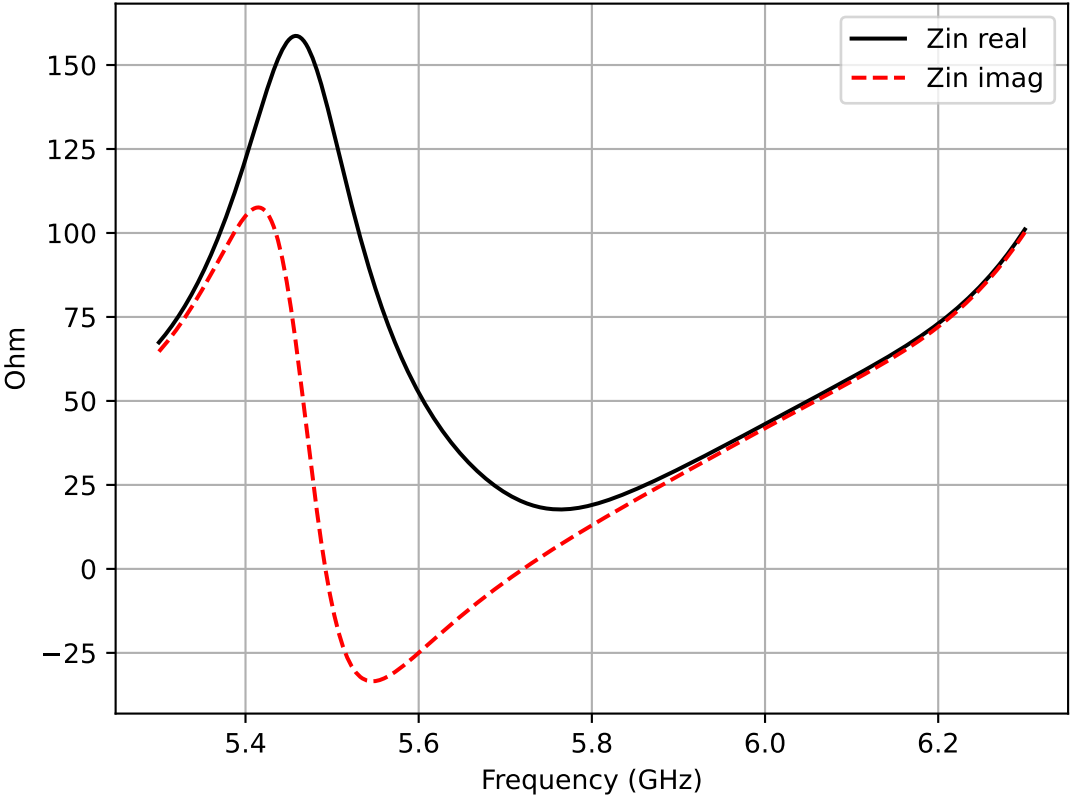
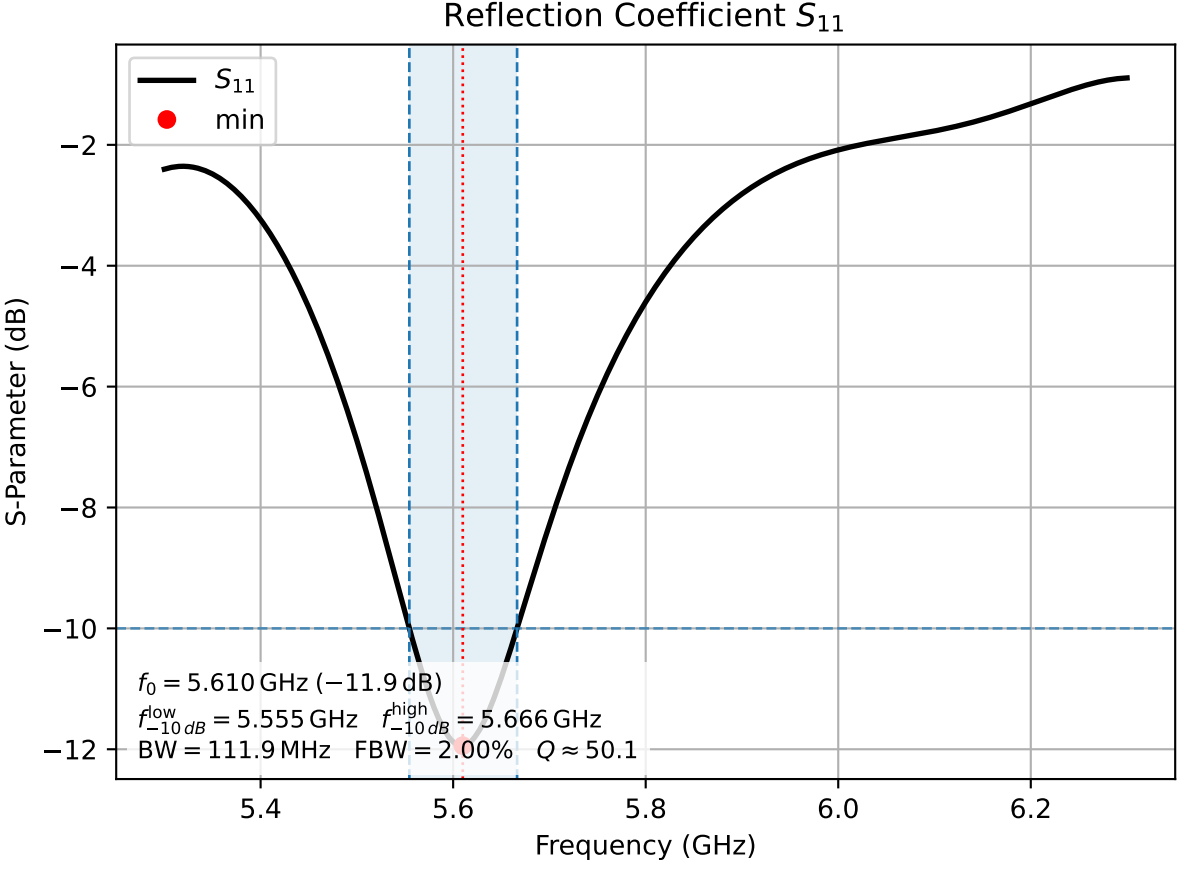
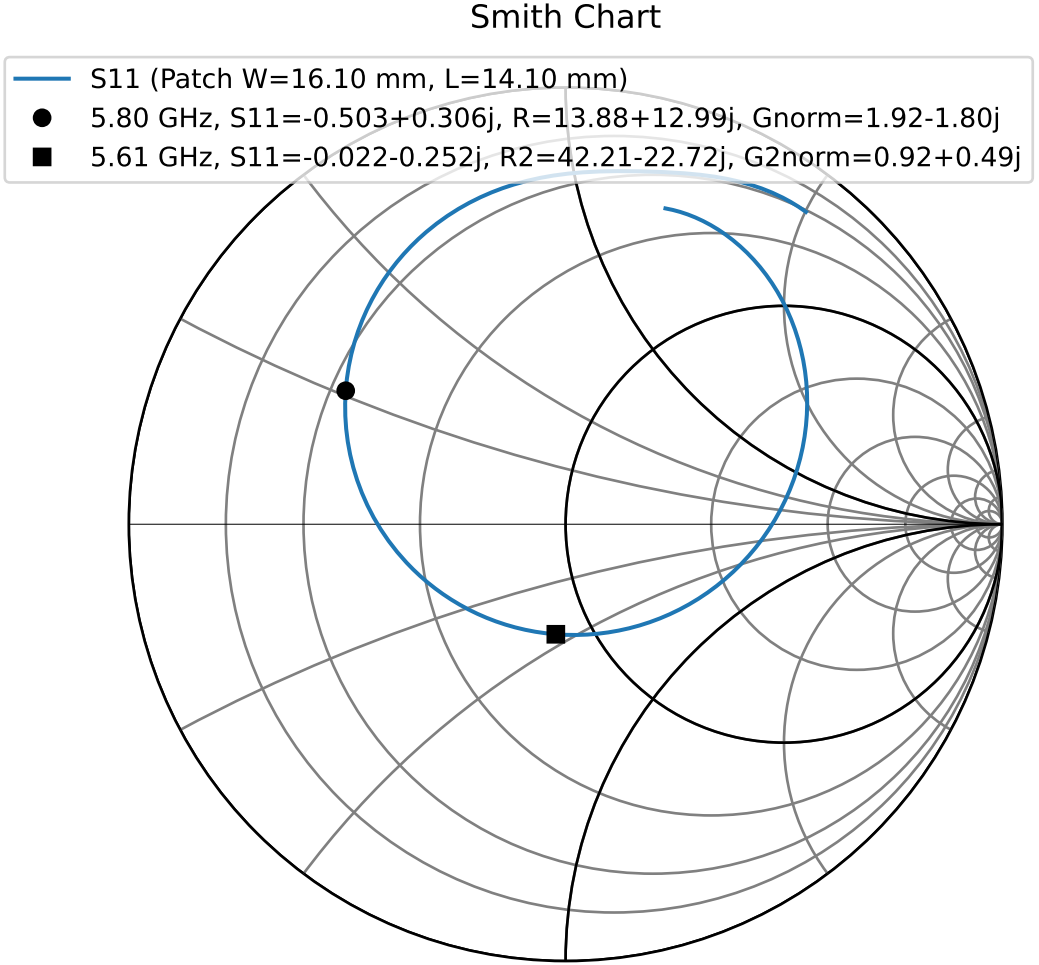
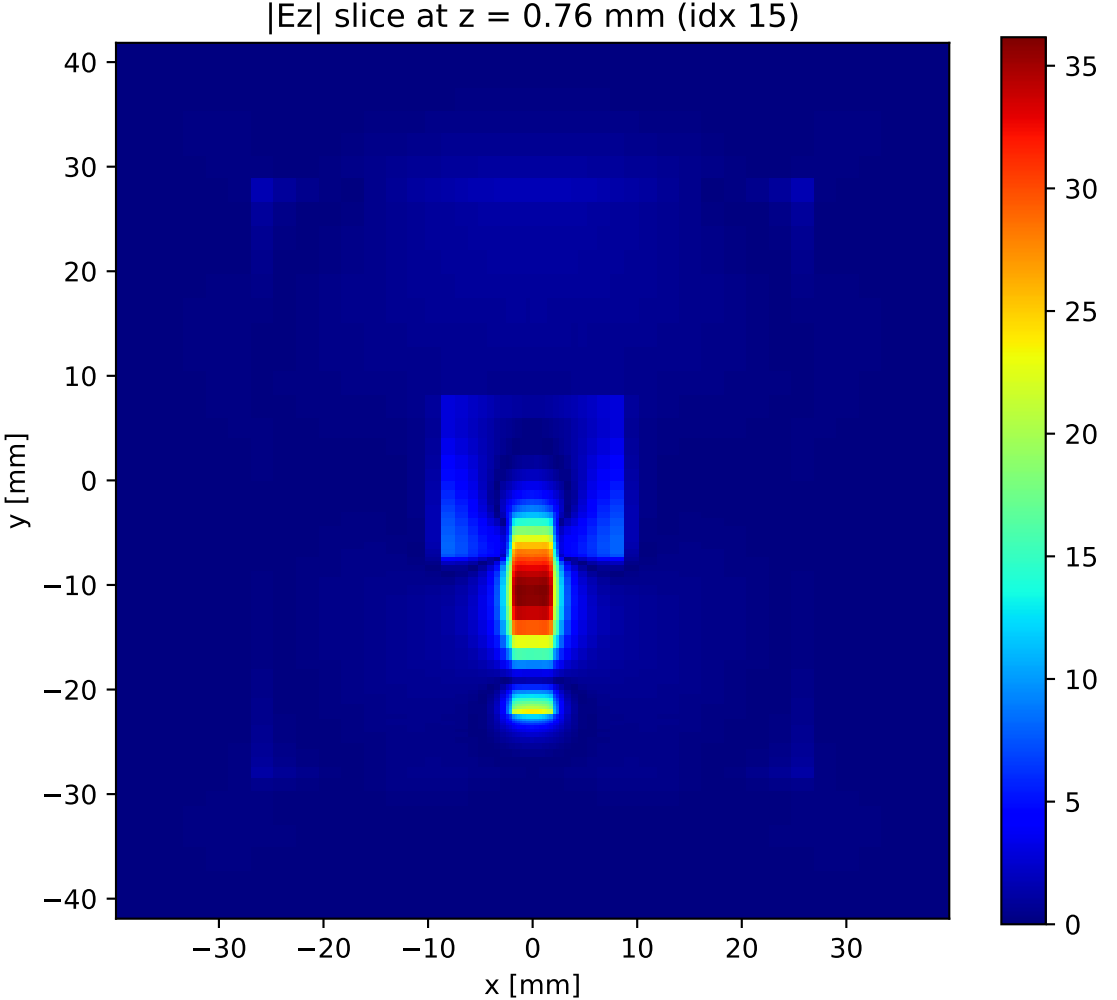
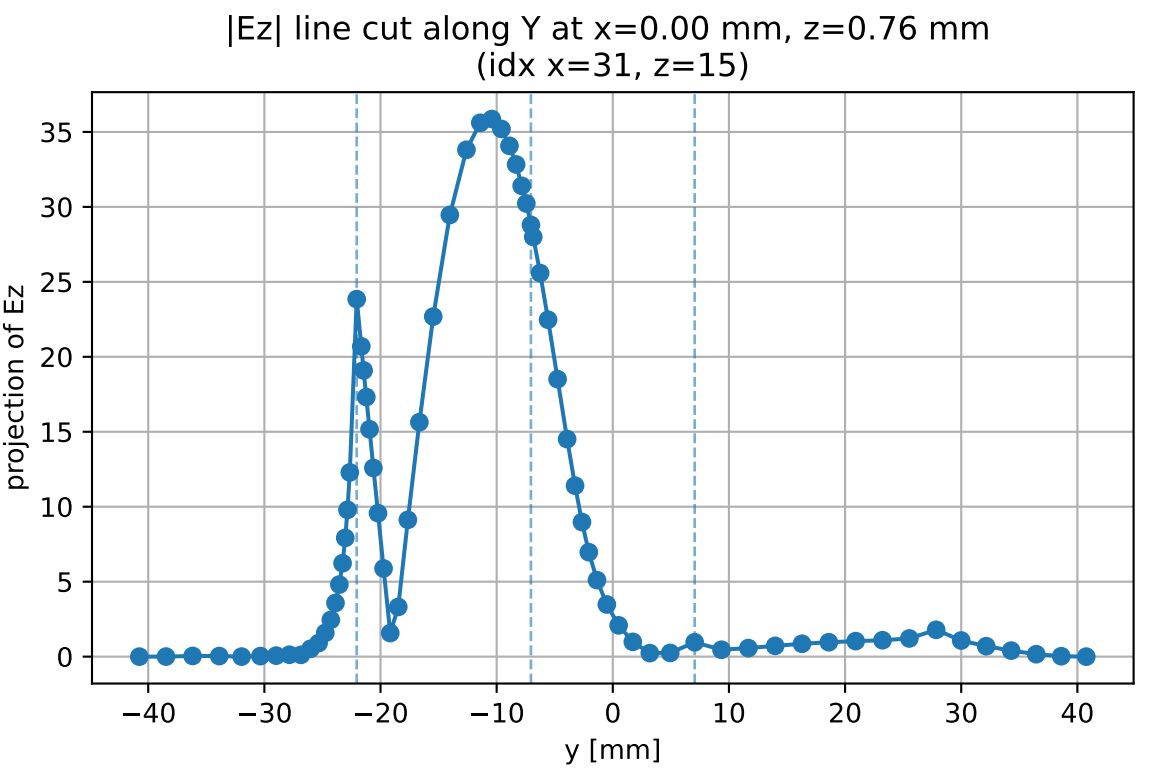
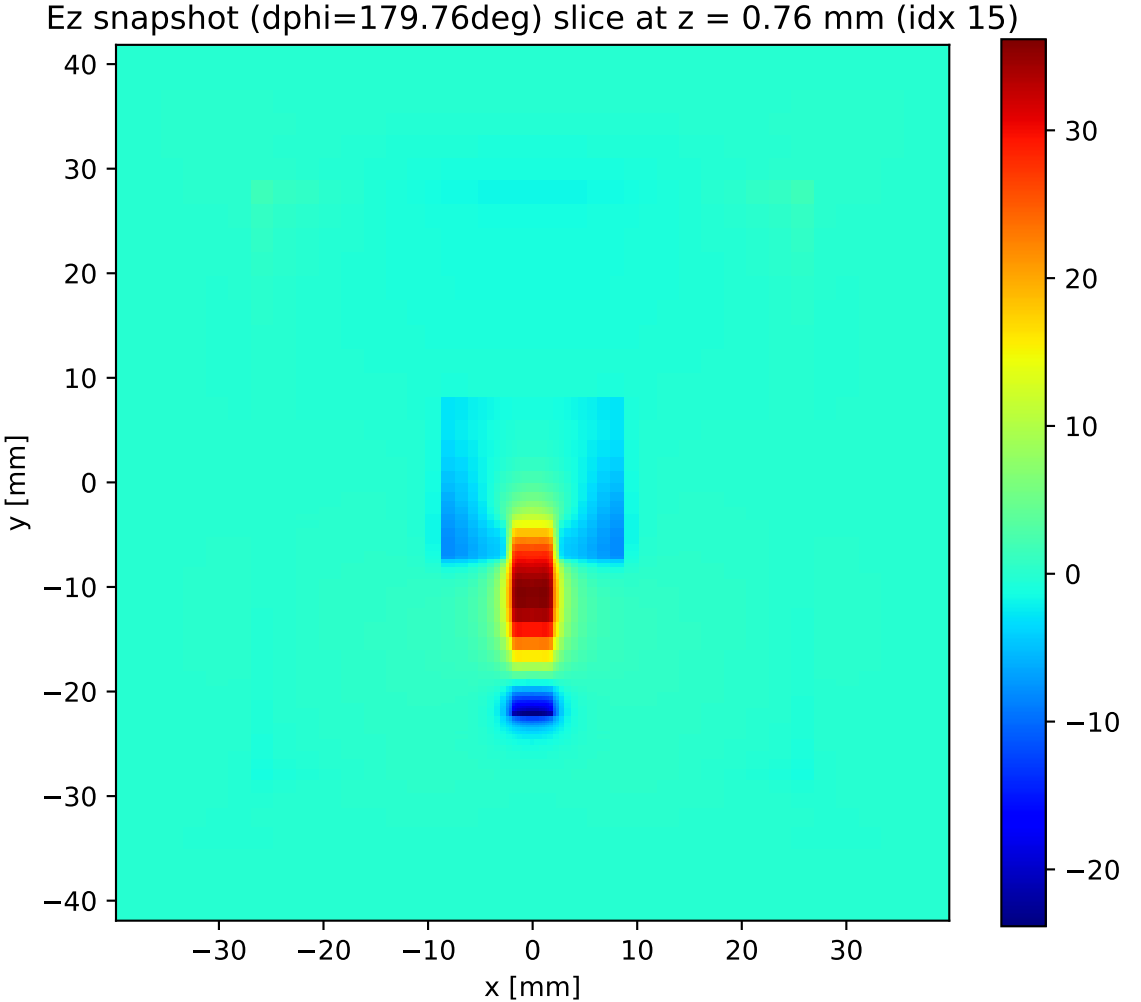

Zin real
Zin imag
150
125
100
75
50
25
0
−25
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

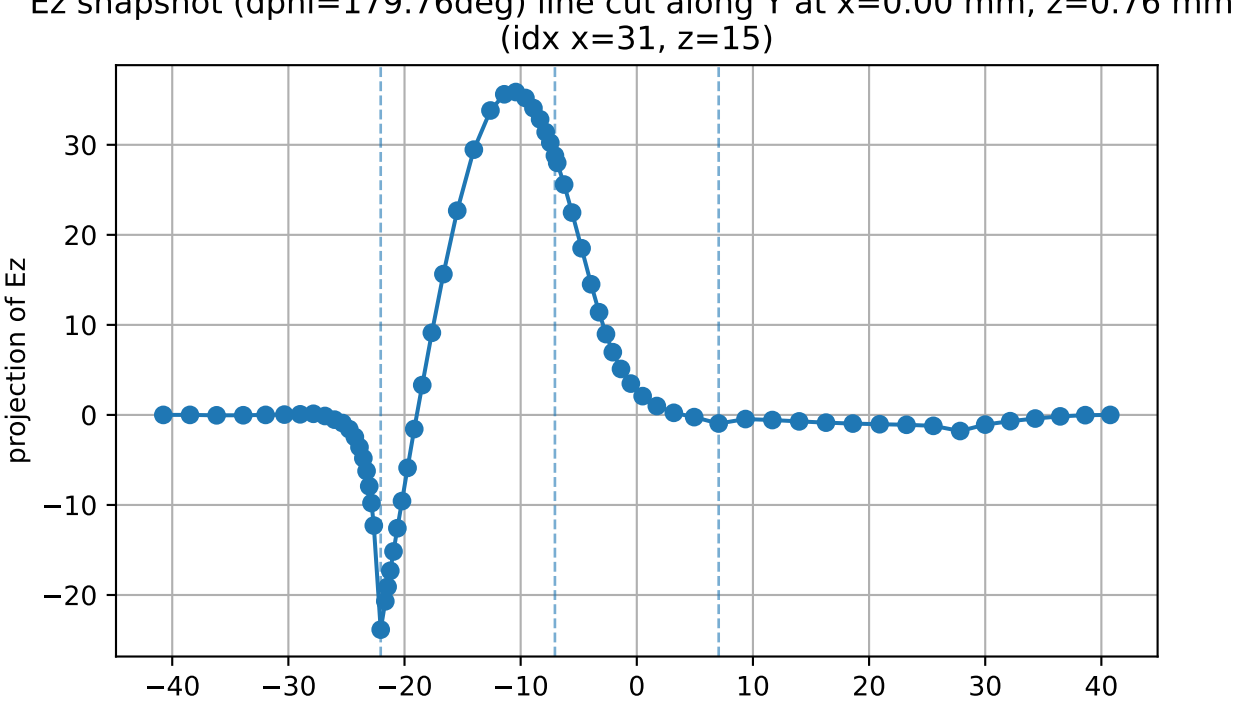

Reflection Coefficient S_{11}
S_{11}
min
S-Parameter (dB)
−2
−4
−6
−8
−10
−12
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 5.610\,\text{GHz}\ (-11.9\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 5.555\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 5.666\,\text{GHz}$
$\text{BW} = 111.9\,\text{MHz}$ $\text{FBW} = 2.00\%$ $Q \approx 50.1$

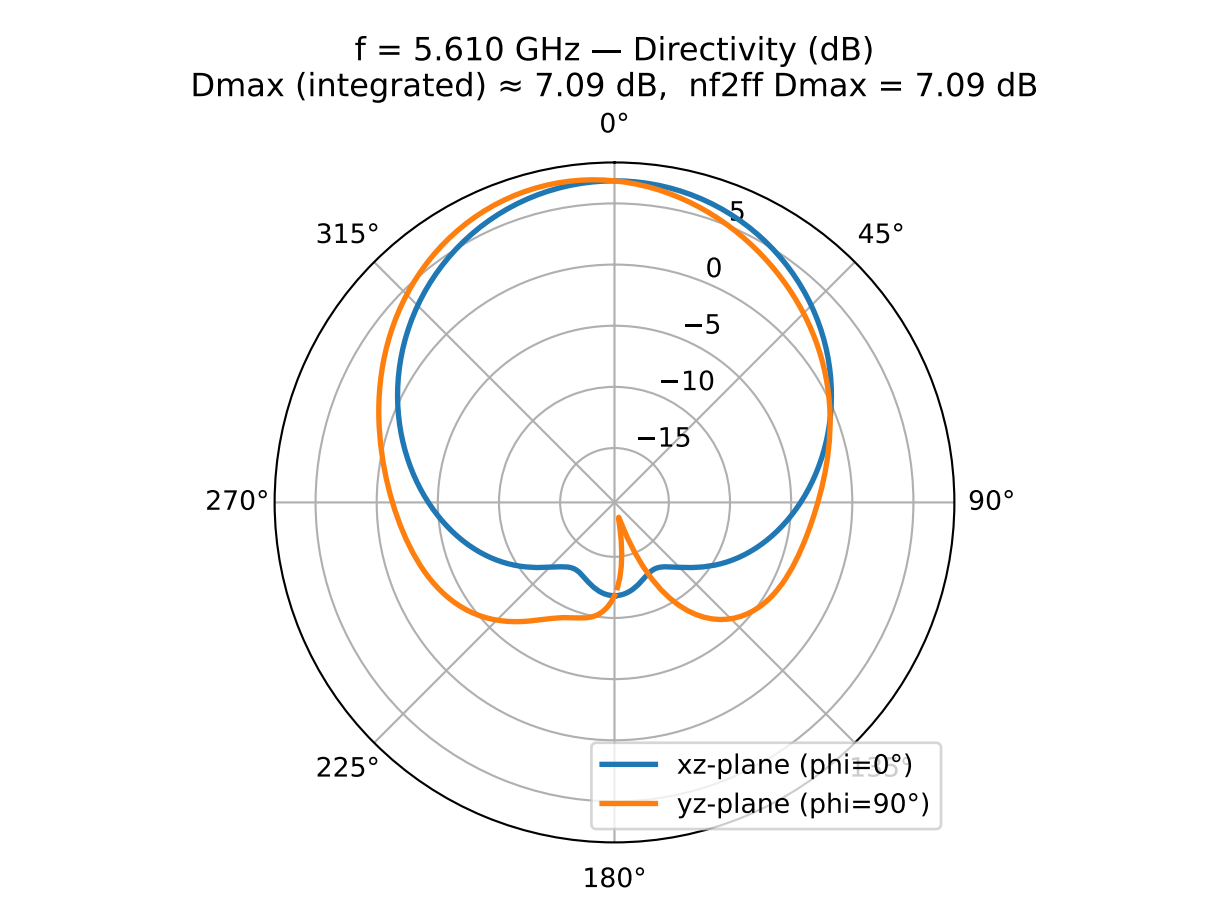

Smith Chart
S11 (Patch W=16.10 mm, L=14.10 mm)
5.80 GHz, S11=-0.503+0.306j, R=13.88+12.99j, Gnorm=1.92-1.80j
5.61 GHz, S11=-0.022-0.252j, R2=42.21-22.72j, G2norm=0.92+0.49j

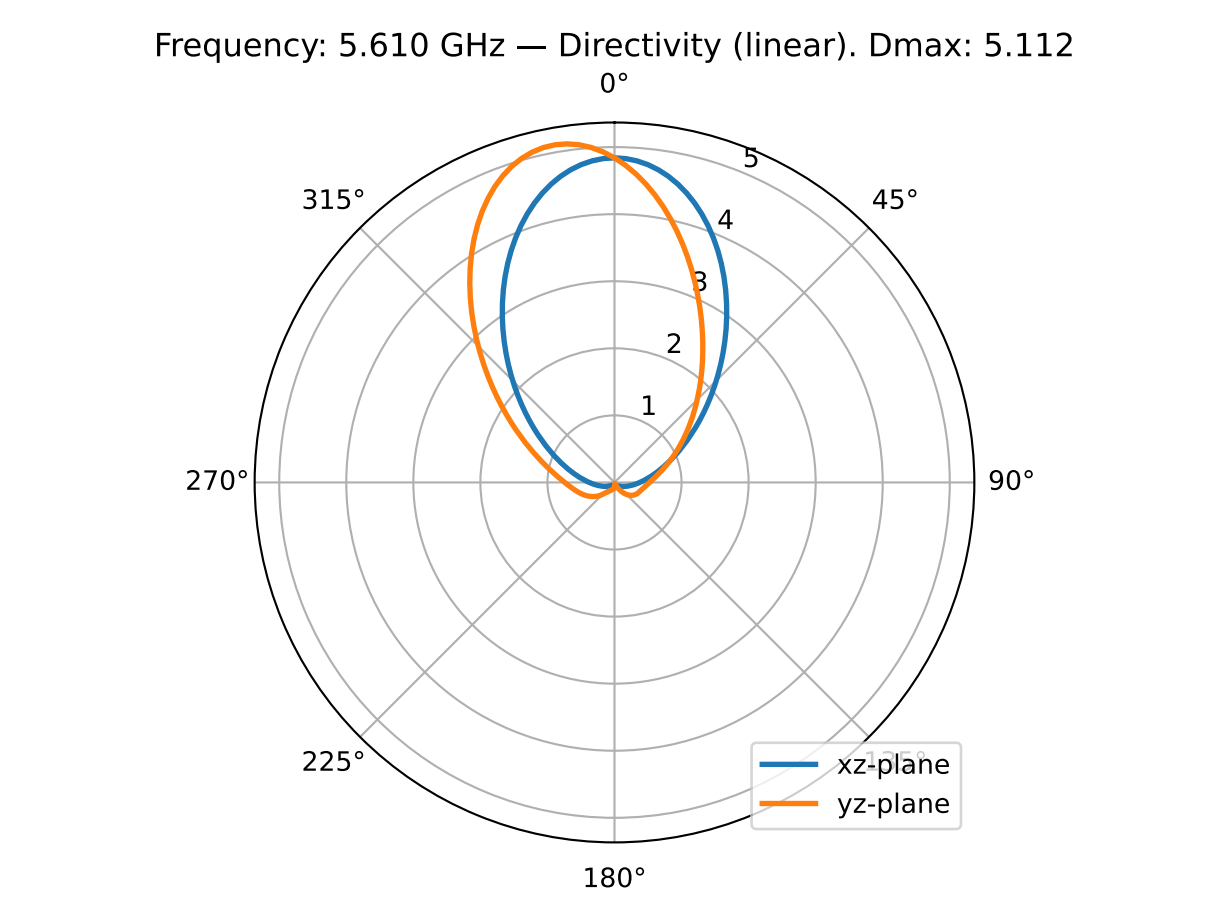

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
35
30
25
20
15
10
5
0

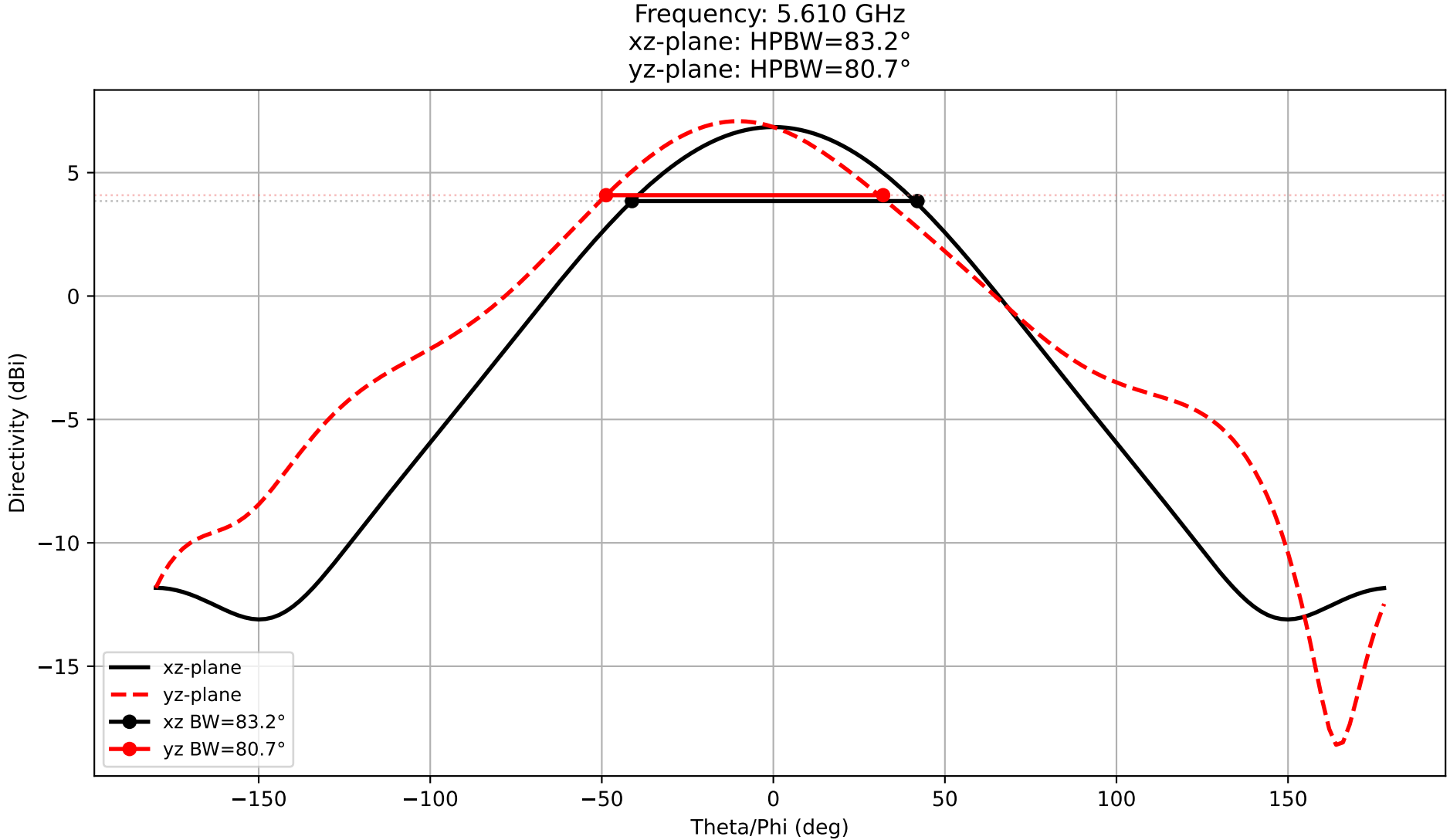

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
35
30
25
20
15
10
5
0
−40
−30
−20
−10
0
10
20
30
40

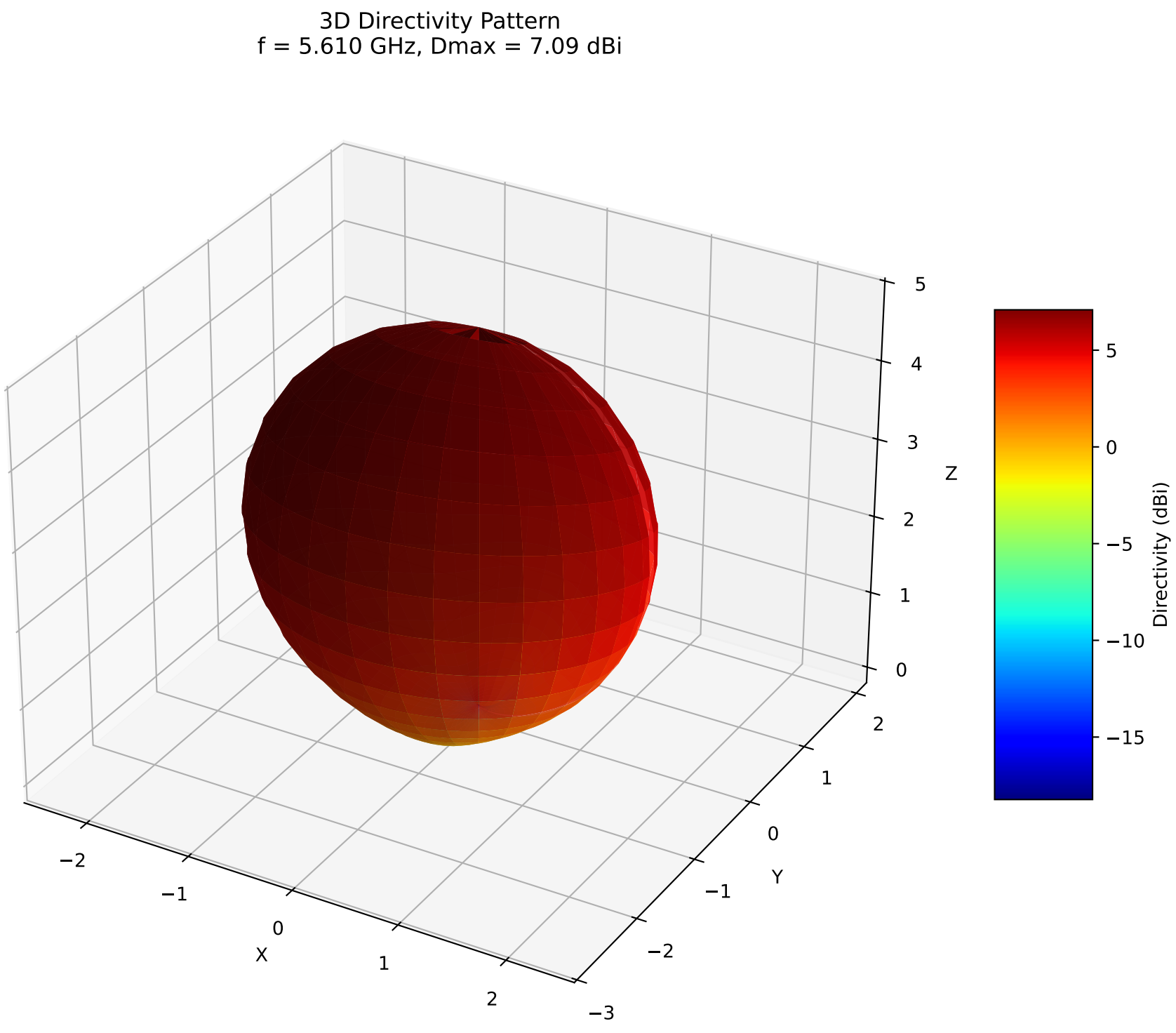

Ez snapshot (dphi=179.76deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30


Ez snapshot (dphi=179.76deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
30
20
10
0
−10
−20
−40
−30
−20
−10
0
10
20
30
40


f = 5.610 GHz — Directivity (dB)
Dmax (integrated) ≈ 7.09 dB, nf2ff Dmax = 7.09 dB
0°
45°
90°
225°
270°
315°
180°
5
0
−5
−10
−15
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.610 GHz — Directivity (linear). Dmax: 5.112
0°
45°
90°
180°
225°
270°
315°
1
2
3
4
5
xz-plane
yz-plane


Frequency: 5.610 GHz
xz-plane: HPBW=83.2°
yz-plane: HPBW=80.7°
Directivity (dBi)
5
0
−5
−10
−15
−150
−100
−50
0
50
100
150
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=83.2°
yz BW=80.7°


3D Directivity Pattern
f = 5.610 GHz, Dmax = 7.09 dBi
X
Y
Z
Directivity (dBi)