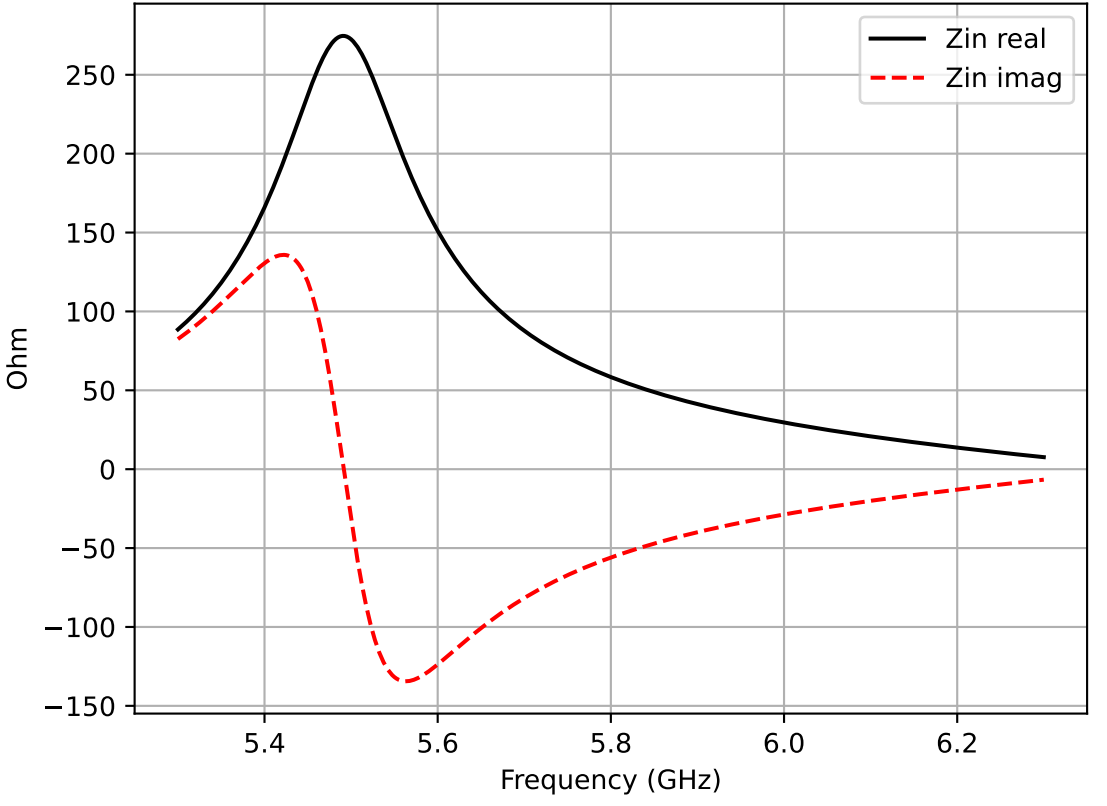
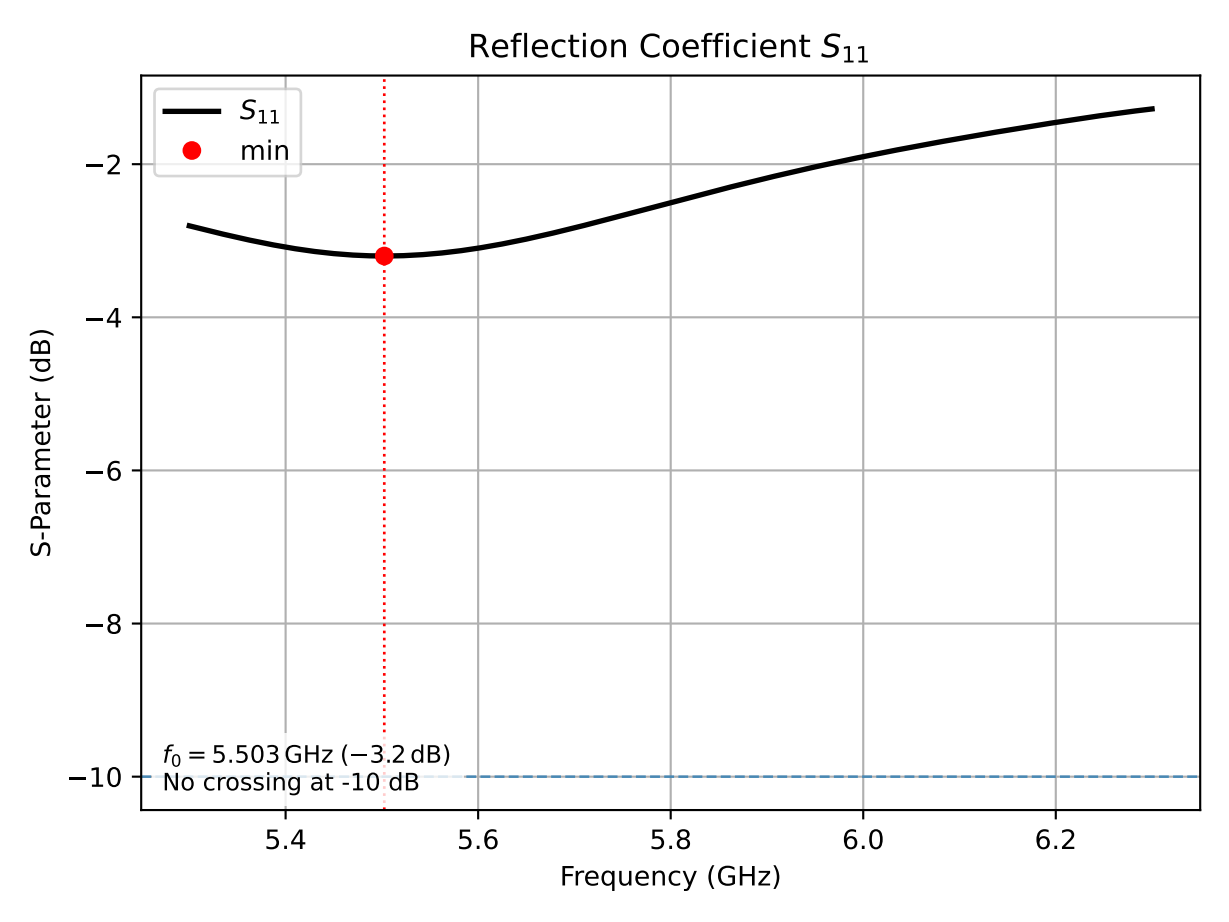
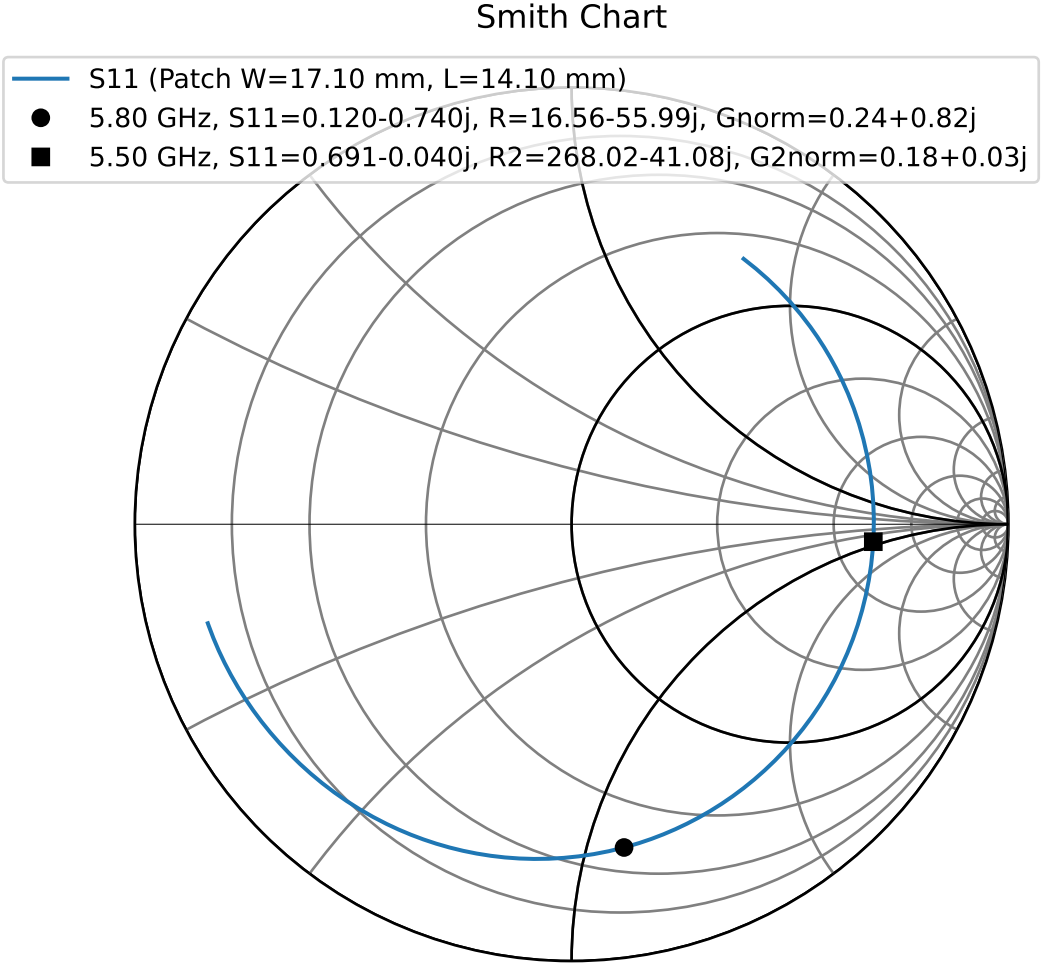
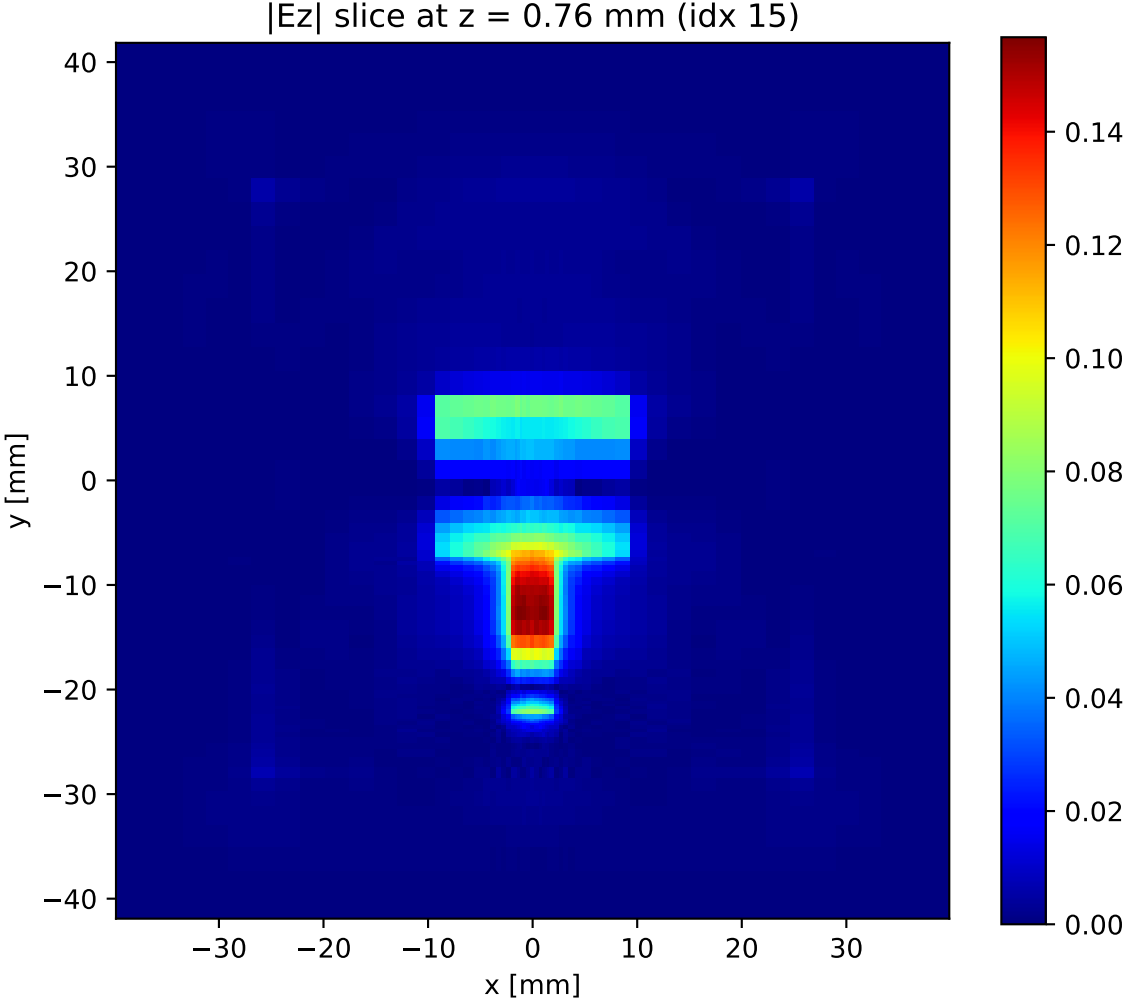
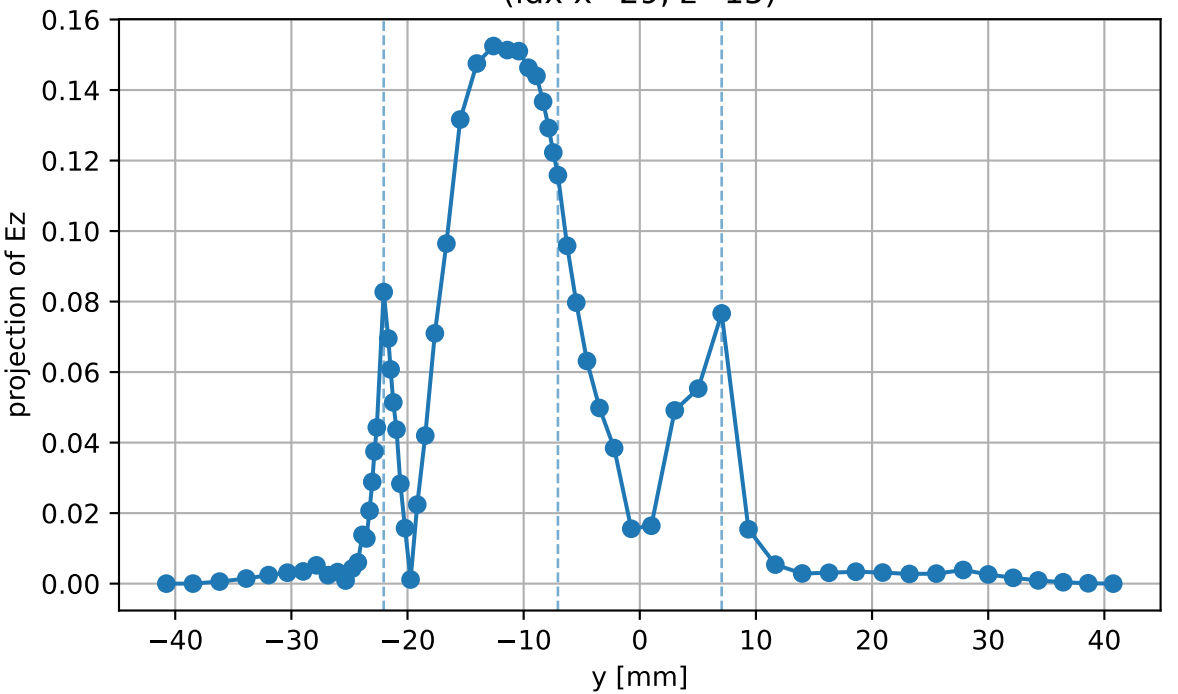
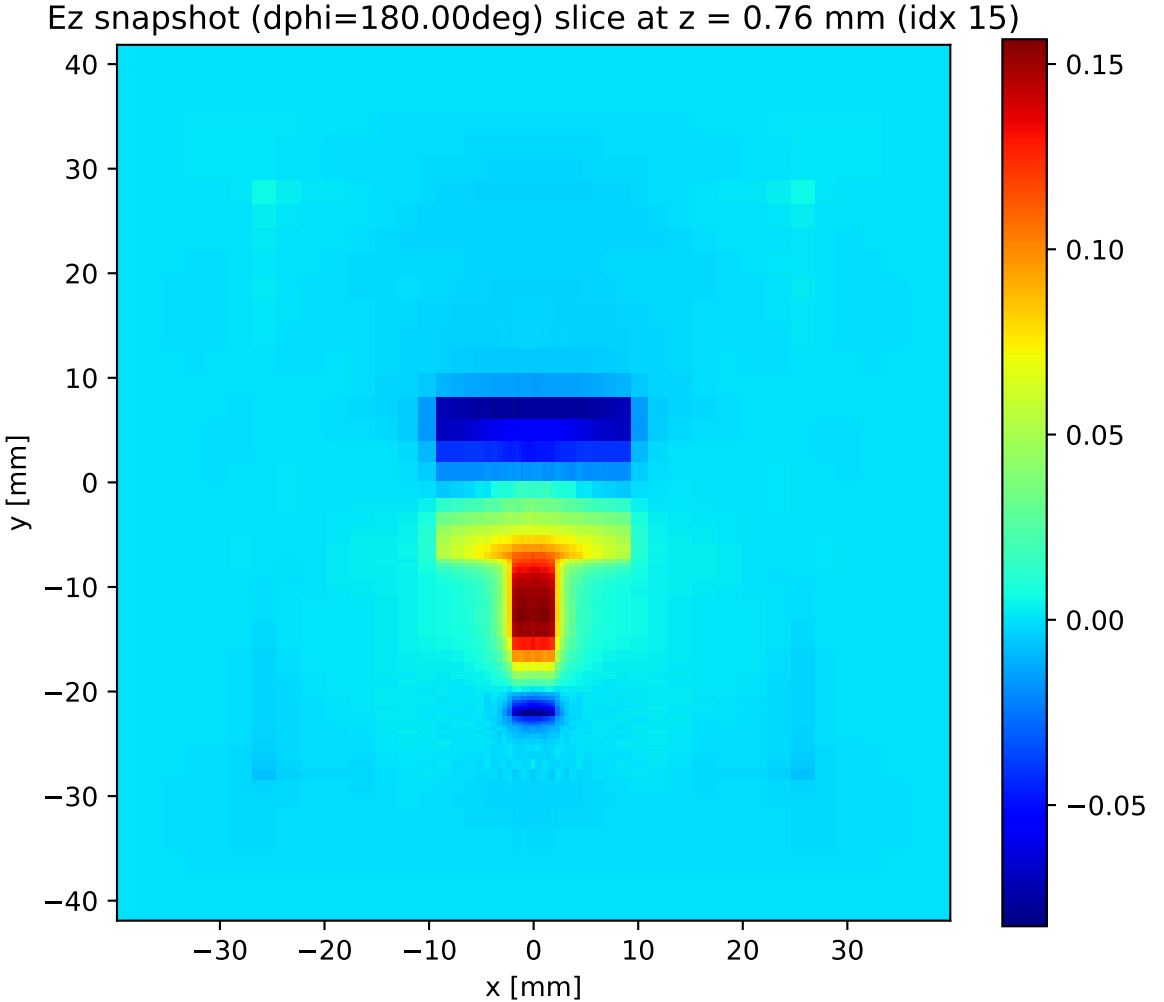

Zin real
Zin imag
250
200
150
100
50
0
−50
−100
−150
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

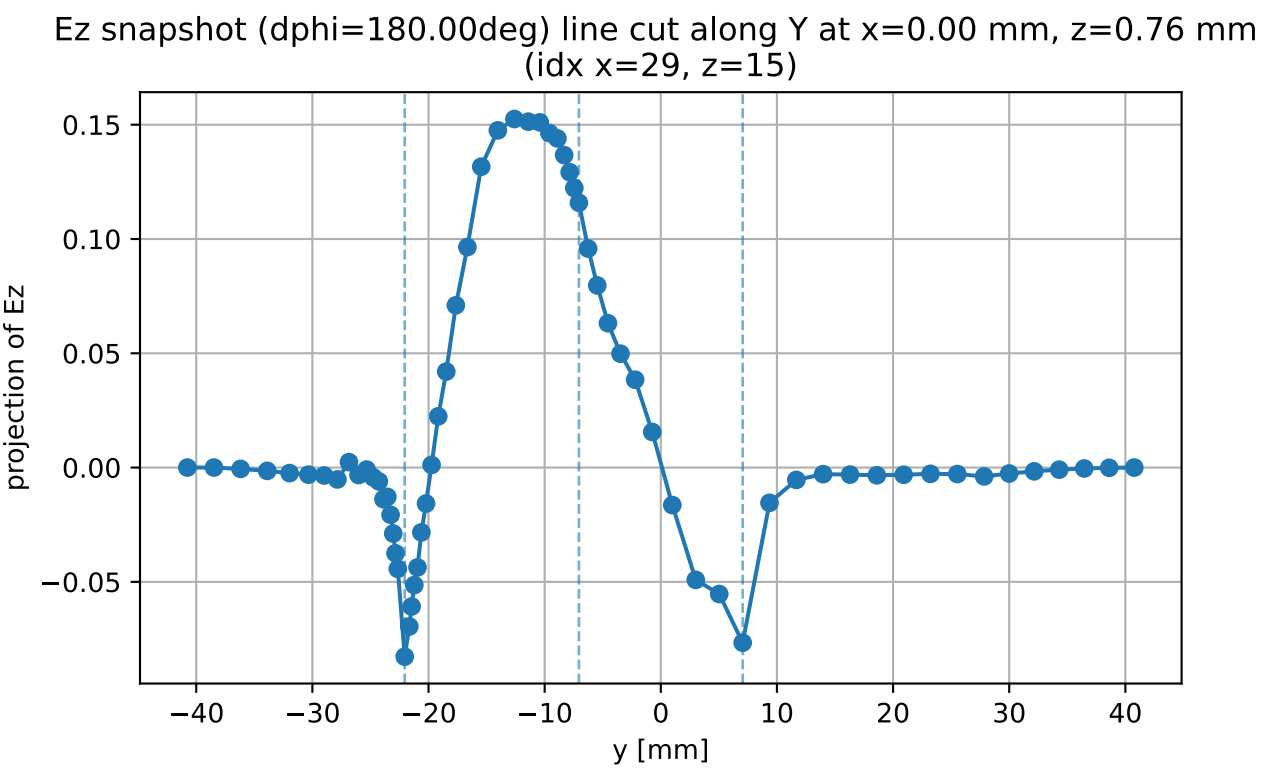

Reflection Coefficient S_{11}
S_{11}
min
−2
−4
−6
−8
−10
S-Parameter (dB)
$f_0 = 5.503\,\text{GHz}\ (-3.2\,\text{dB})$
No crossing at -10 dB
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

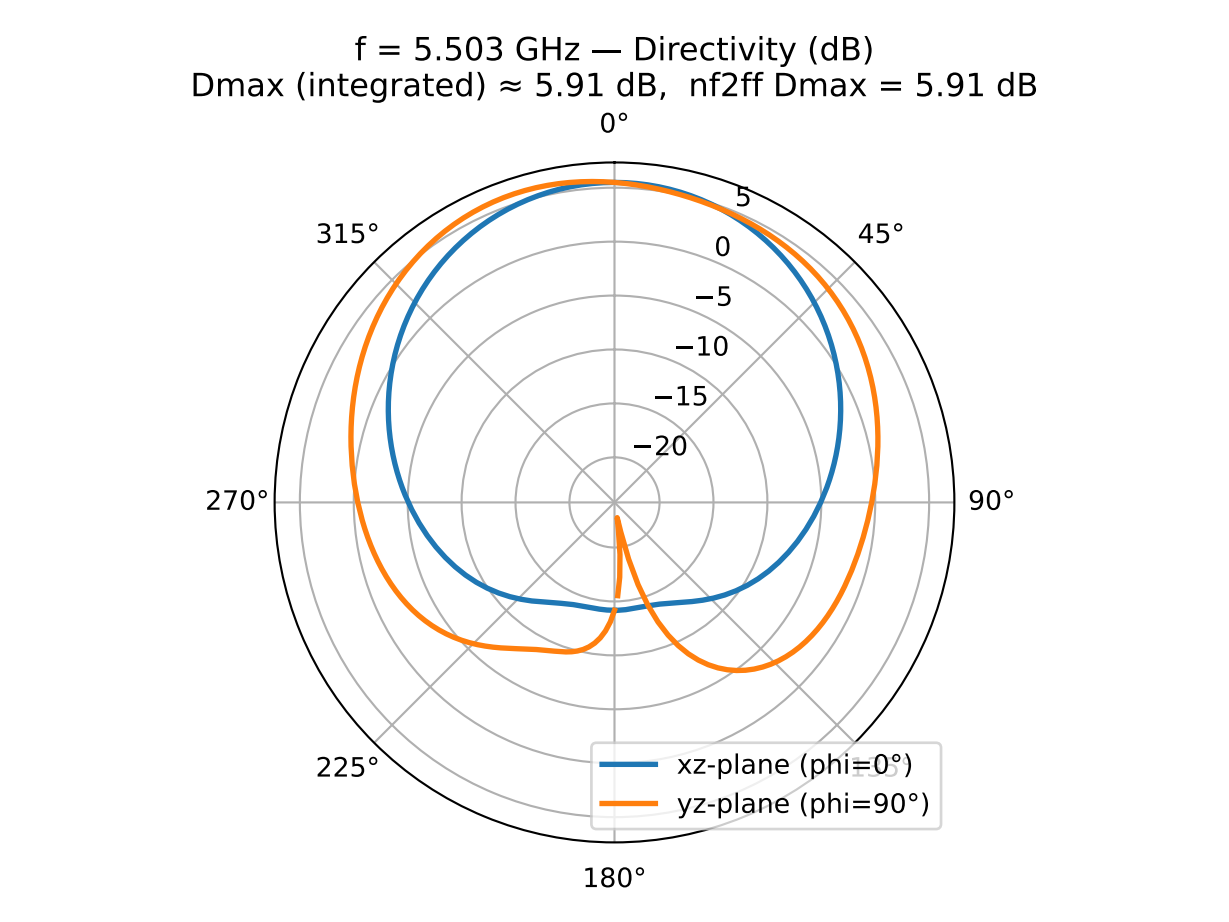

Smith Chart
S11 (Patch W=17.10 mm, L=14.10 mm)
5.80 GHz, S11=0.120-0.740j, R=16.56-55.99j, Gnorm=0.24+0.82j
5.50 GHz, S11=0.691-0.040j, R2=268.02-41.08j, G2norm=0.18+0.03j

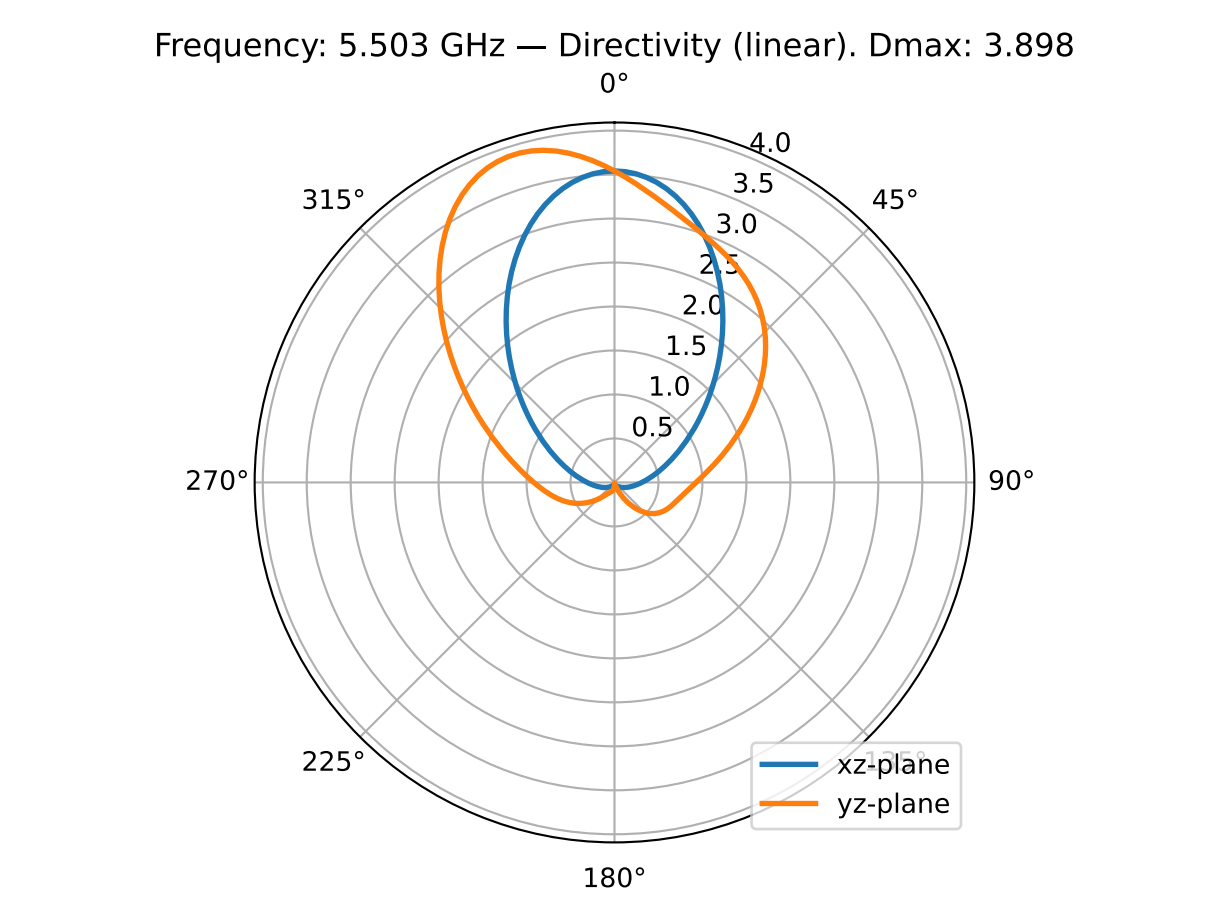

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00

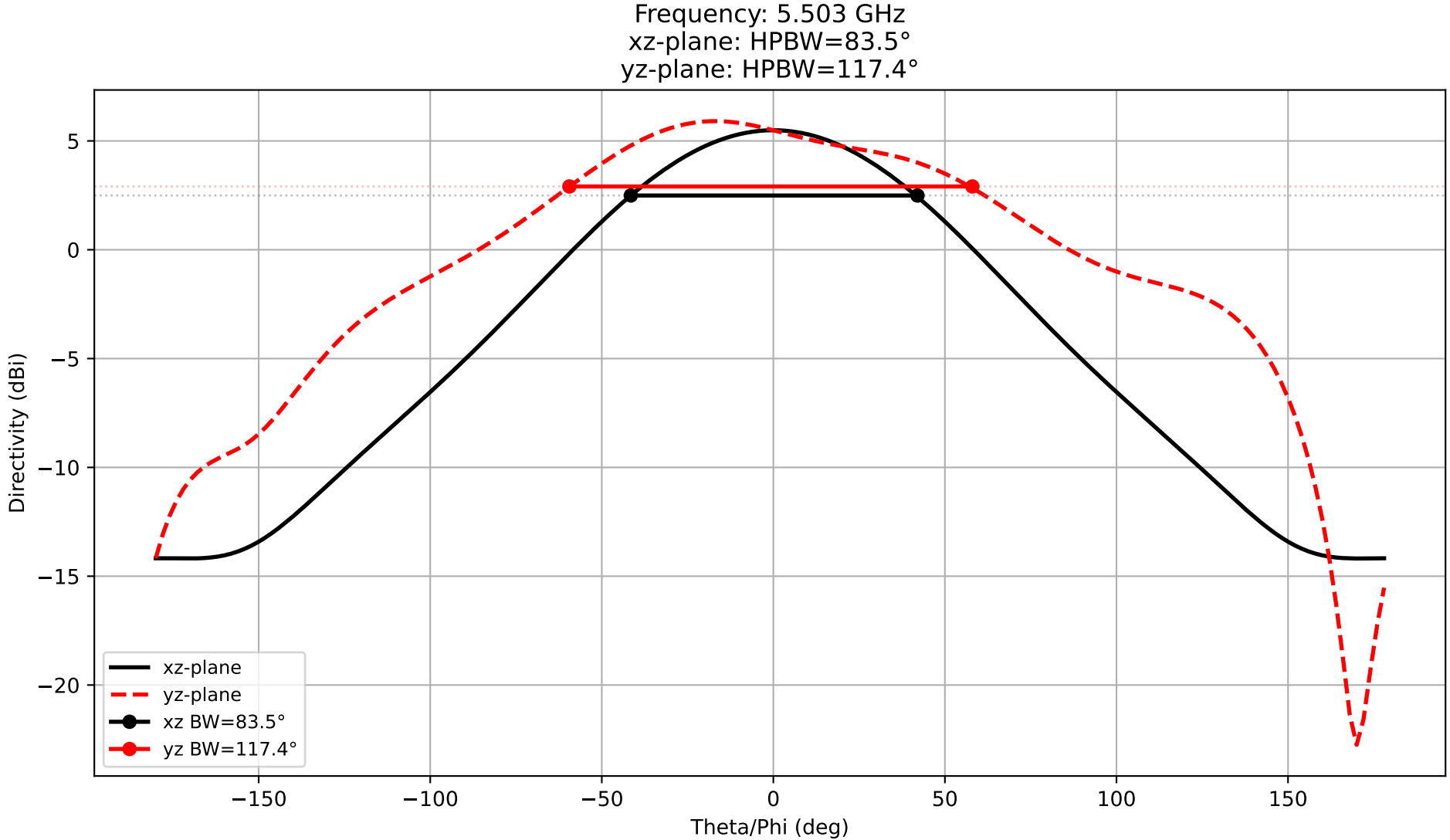

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=29, z=15)
projection of Ez
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
−40
−30
−20
−10
0
10
20
30
40
y [mm]

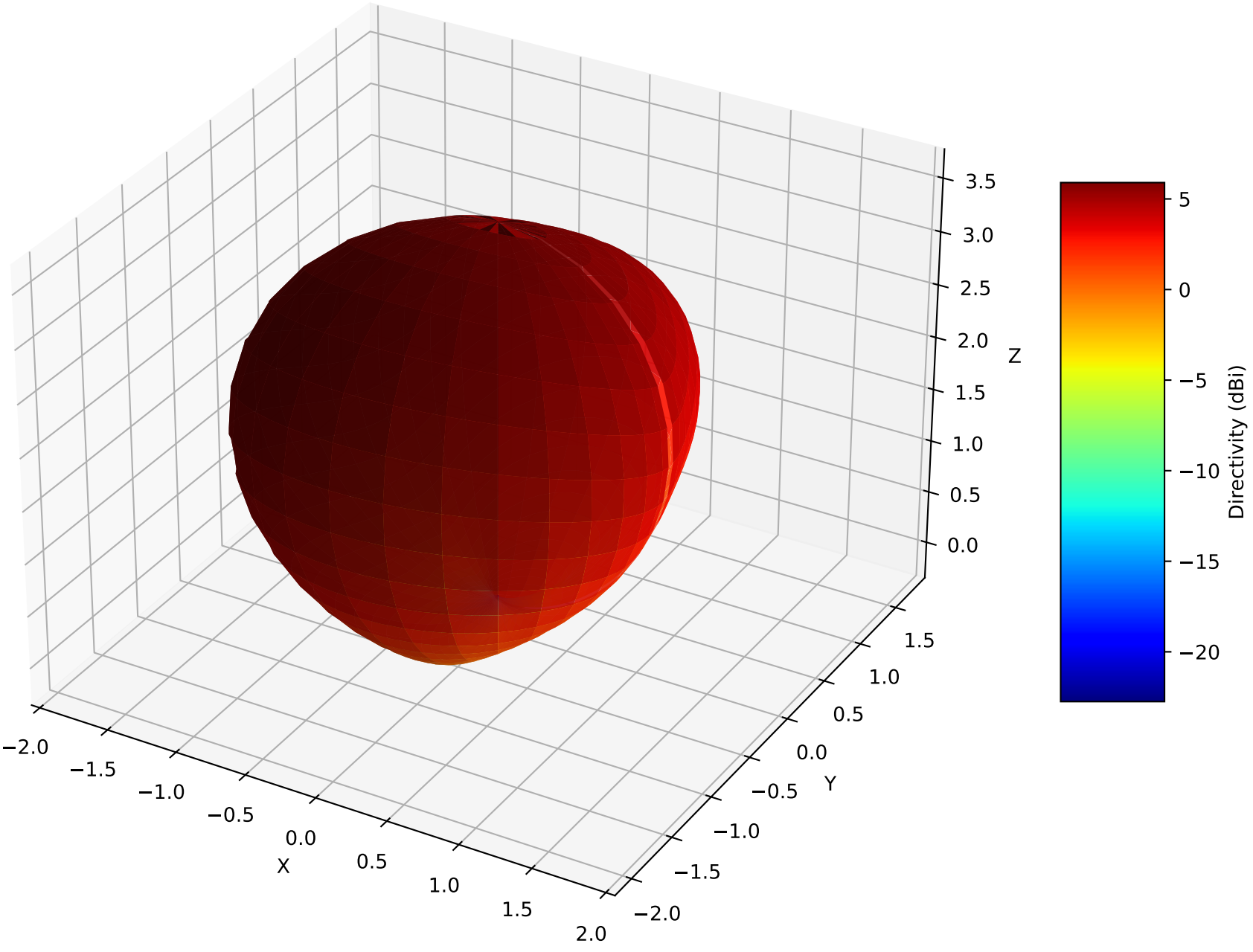

Ez snapshot (dphi=180.00deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.15
0.10
0.05
0.00
−0.05


Ez snapshot (dphi=180.00deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=29, z=15)
projection of Ez
0.15
0.10
0.05
0.00
−0.05
−40
−30
−20
−10
0
10
20
30
40
y [mm]


f = 5.503 GHz — Directivity (dB)
Dmax (integrated) ≈ 5.91 dB, nf2ff Dmax = 5.91 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.503 GHz — Directivity (linear). Dmax: 3.898
0°
45°
90°
225°
180°
315°
270°
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
xz-plane
yz-plane


Frequency: 5.503 GHz
xz-plane: HPBW=83.5°
yz-plane: HPBW=117.4°
Directivity (dBi)
Theta/Phi (deg)
5
0
−5
−10
−15
−20
−150
−100
−50
0
50
100
150
xz-plane
yz-plane
xz BW=83.5°
yz BW=117.4°


3D Directivity Pattern
f = 5.503 GHz, Dmax = 5.90 dBi
X
Y
Z
Directivity (dBi)