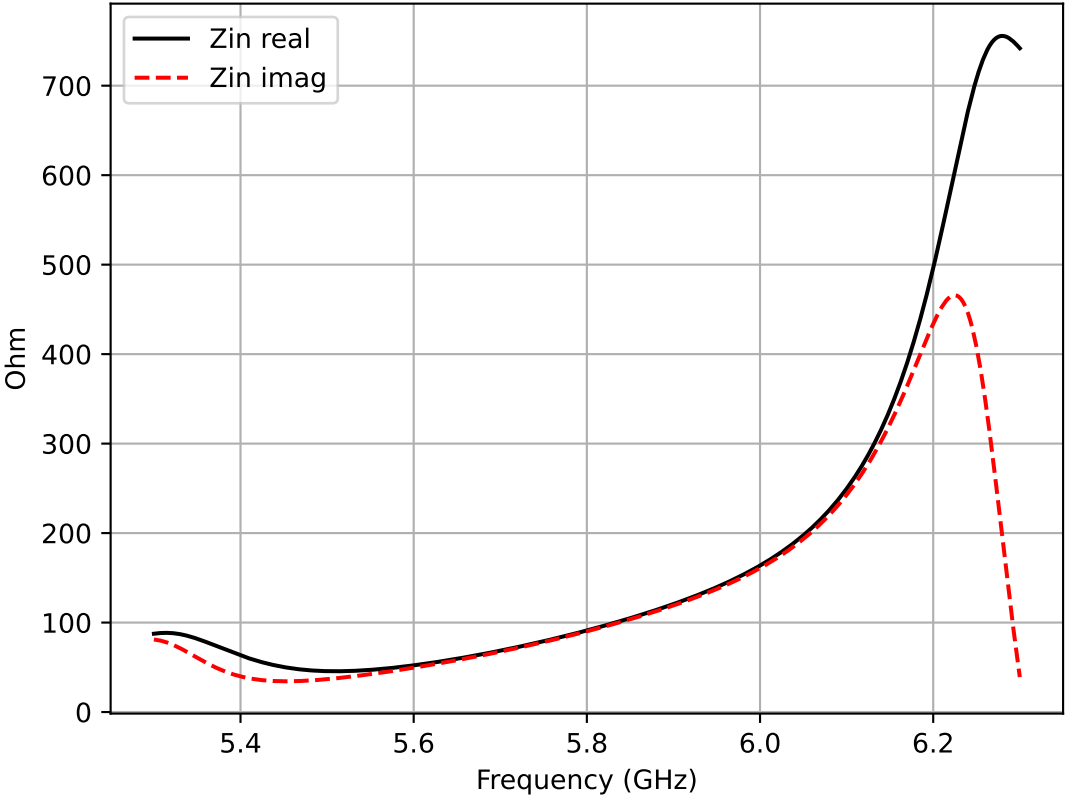
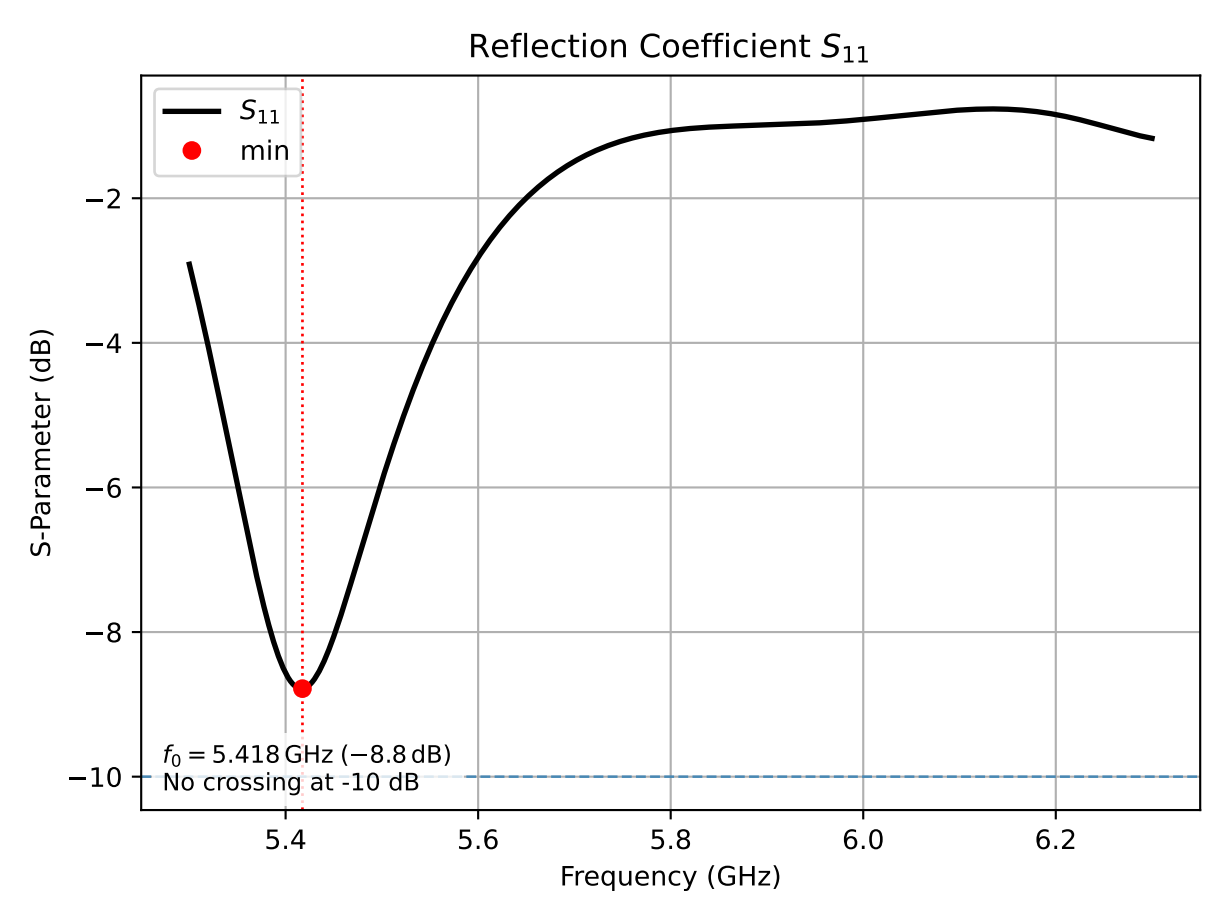
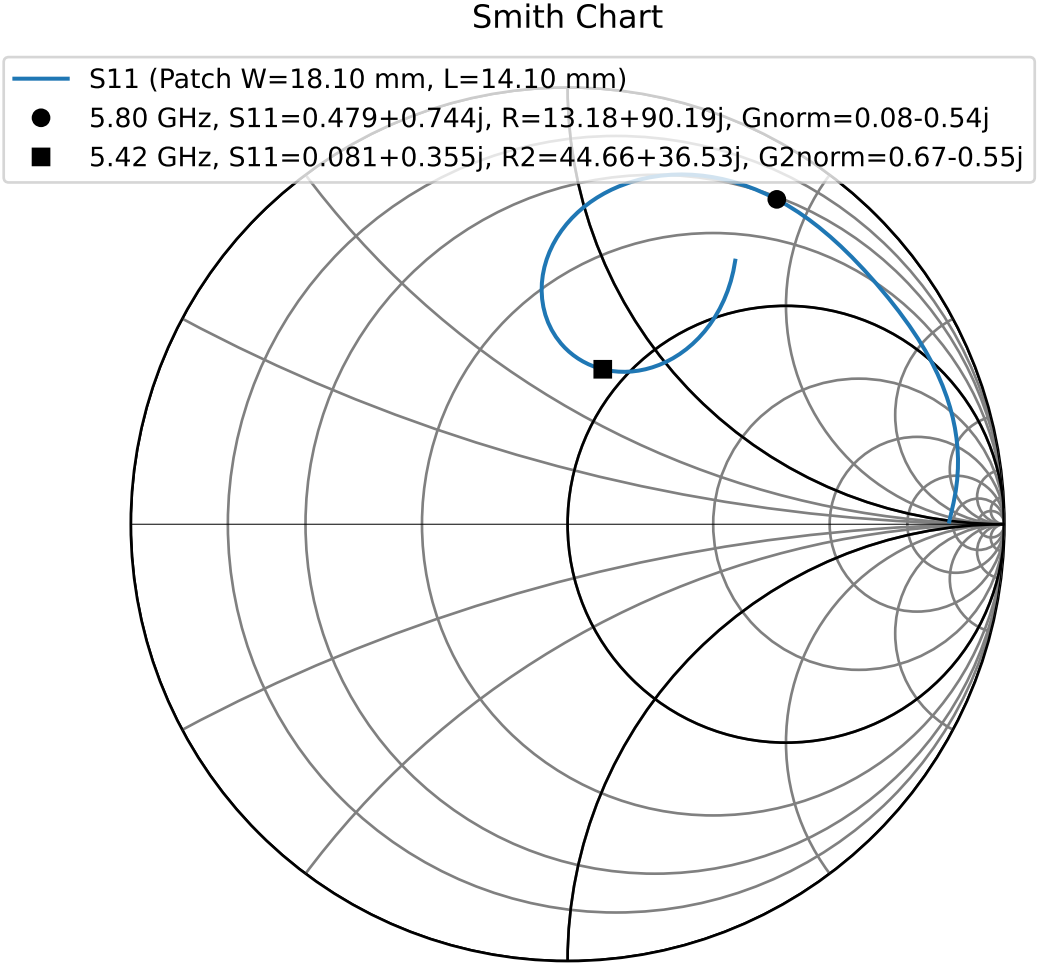
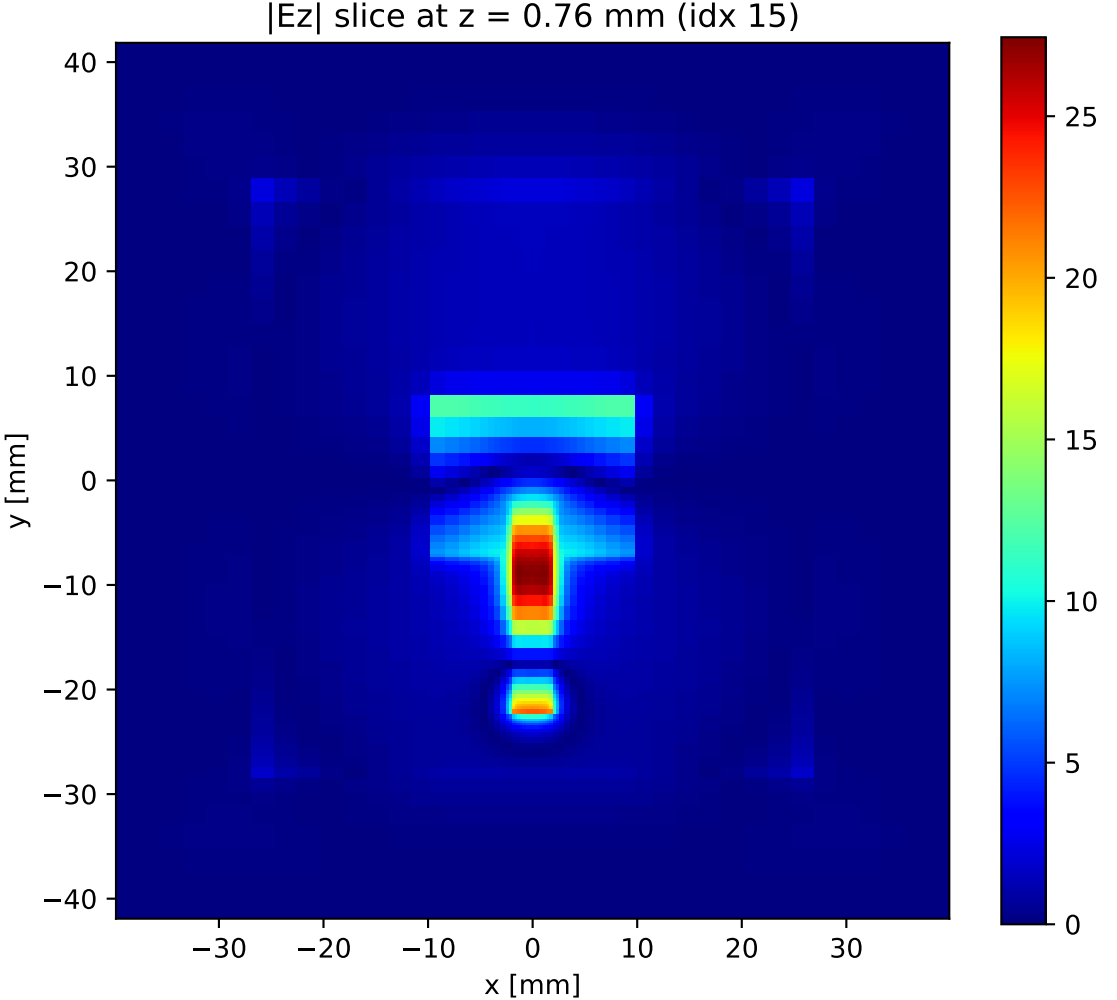
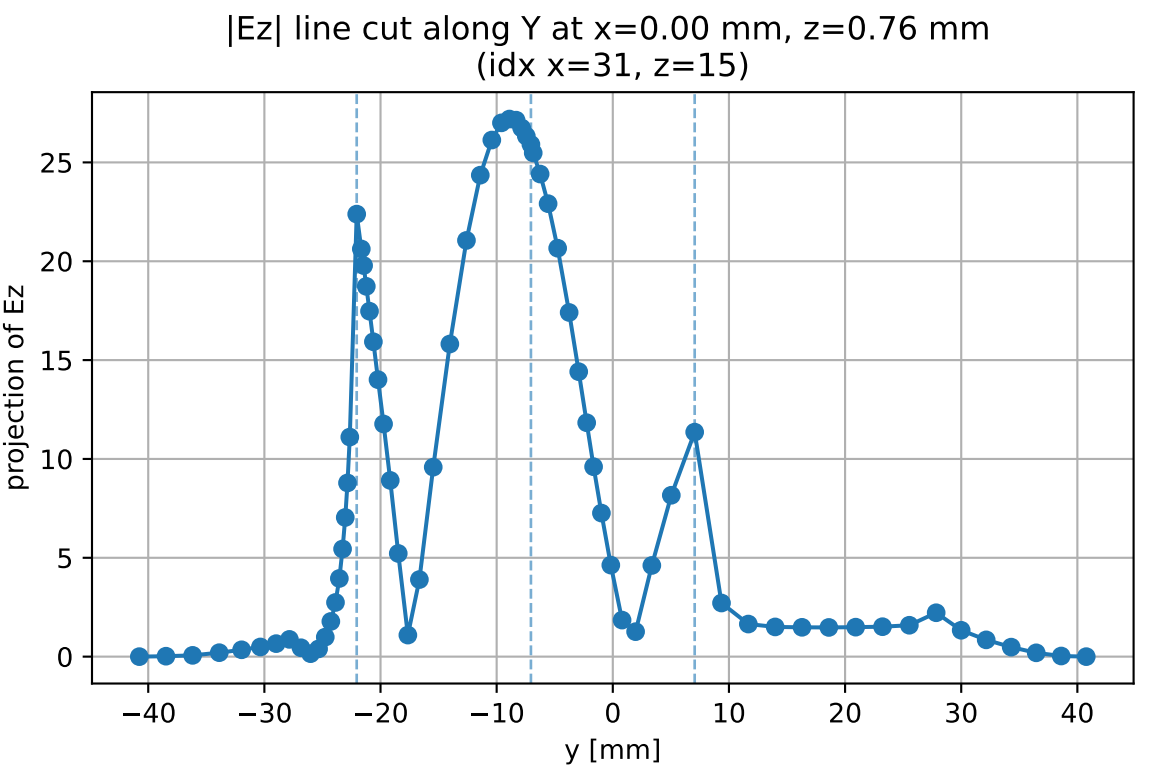
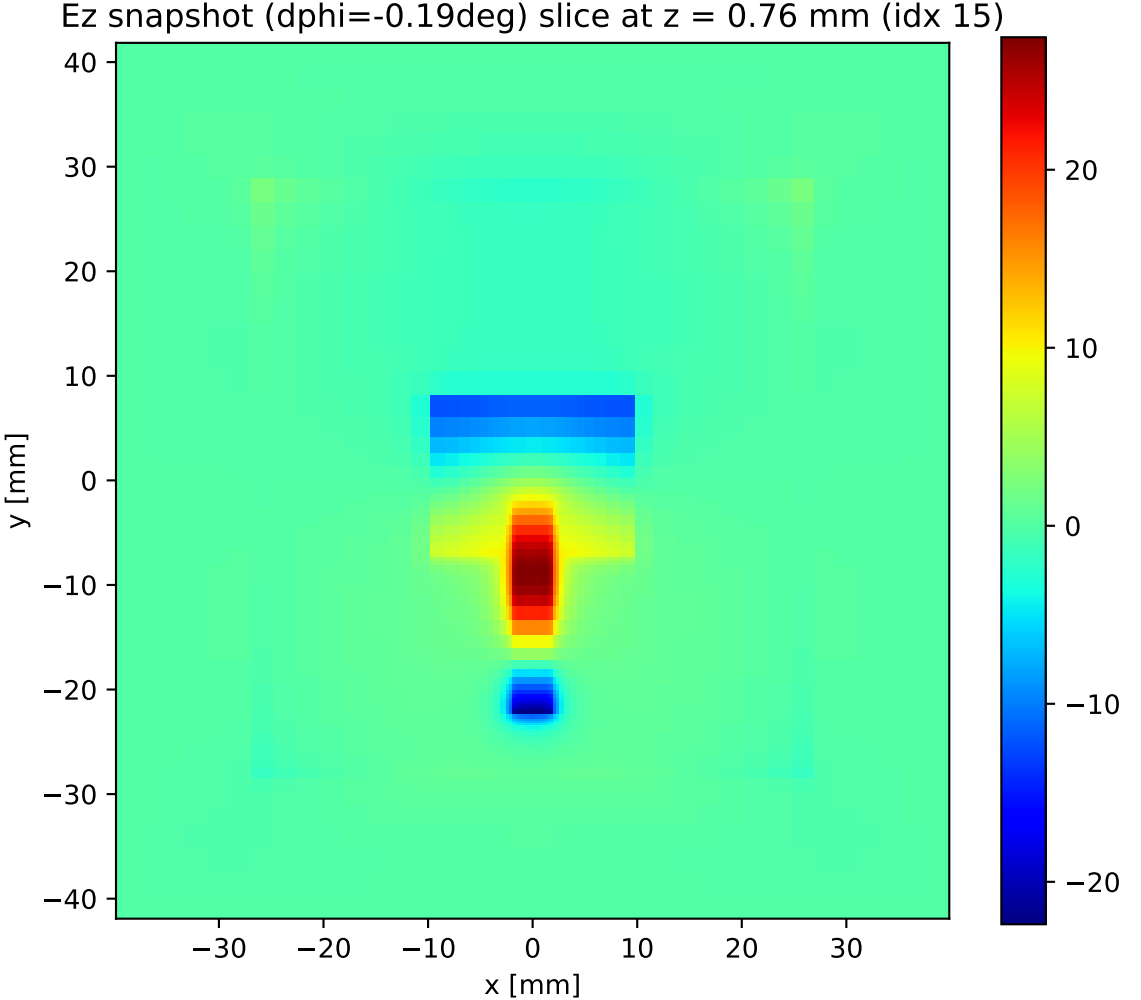

Zin real
Zin imag
Ohm
0
100
200
300
400
500
600
700
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

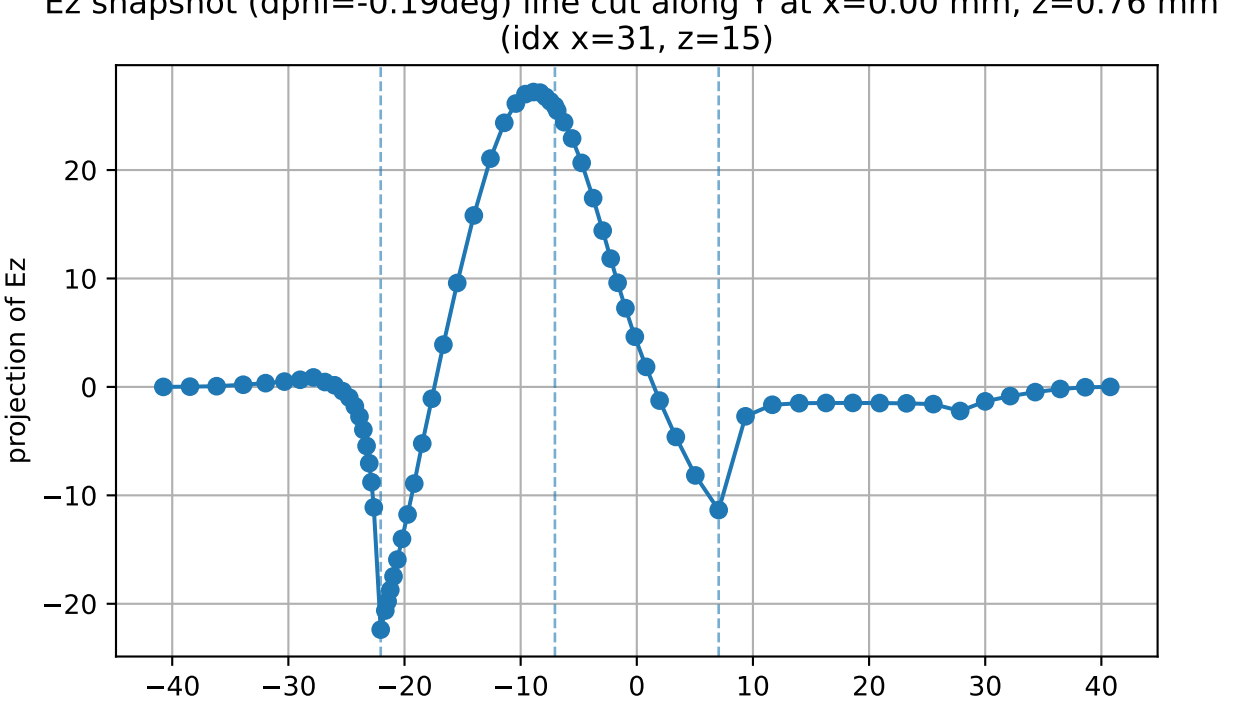

Reflection Coefficient S_{11}
S_{11}
min
−2
−4
−6
−8
−10
S-Parameter (dB)
$f_0 = 5.418\,\text{GHz}\ (-8.8\,\text{dB})$
No crossing at -10 dB
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

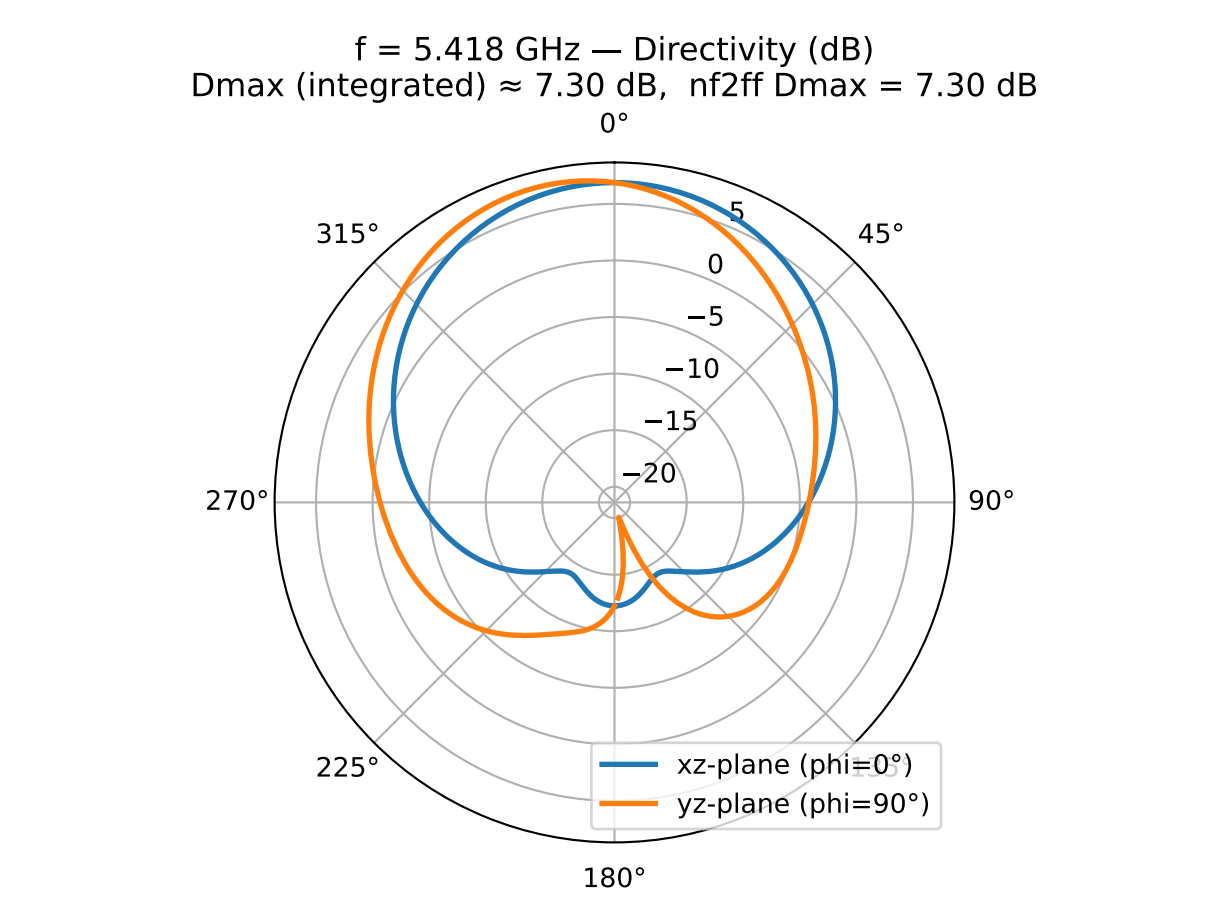

Smith Chart
S11 (Patch W=18.10 mm, L=14.10 mm)
5.80 GHz, S11=0.479+0.744j, R=13.18+90.19j, Gnorm=0.08-0.54j
5.42 GHz, S11=0.081+0.355j, R2=44.66+36.53j, G2norm=0.67-0.55j

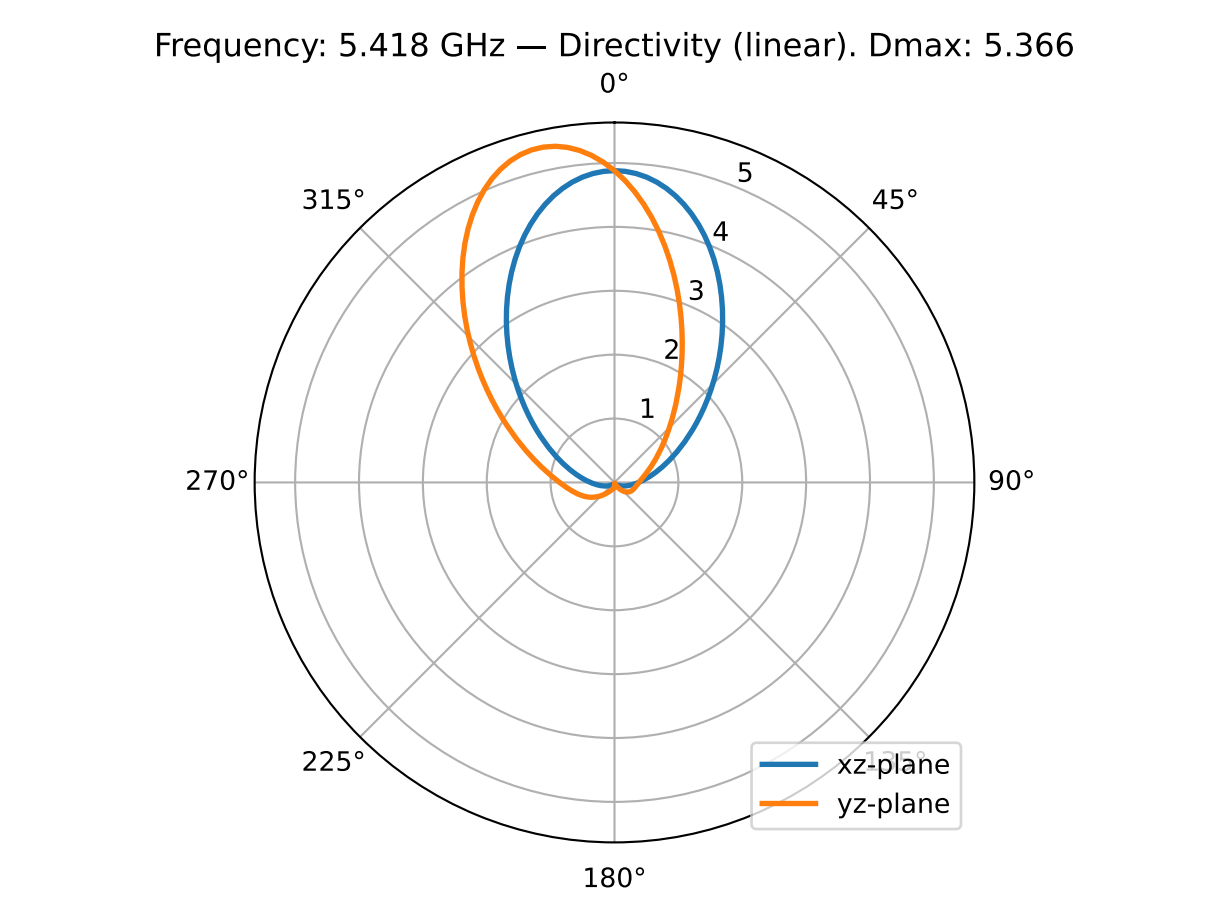

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
25
20
15
10
5
0

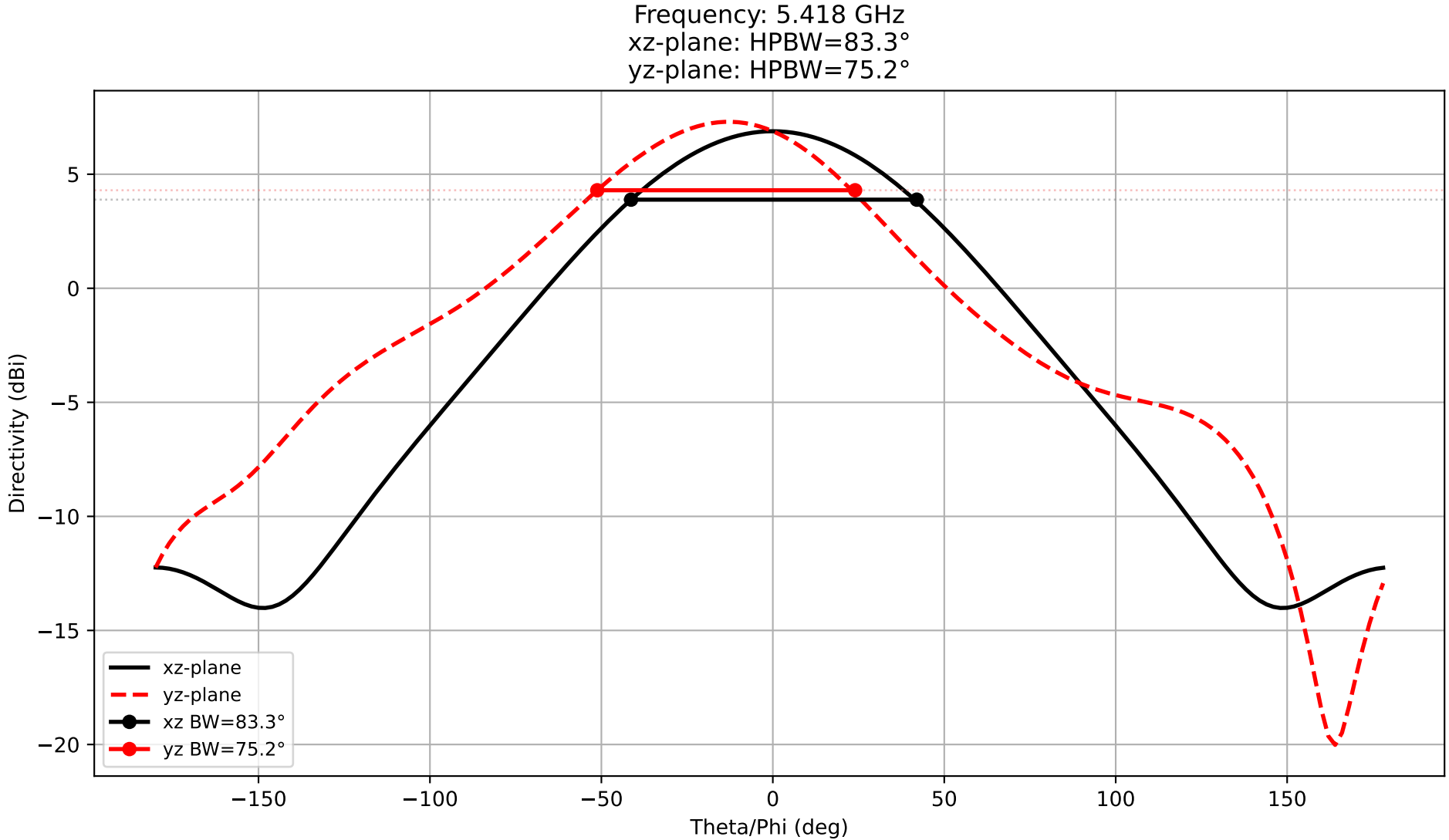

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
25
20
15
10
5
0
−40
−30
−20
−10
0
10
20
30
40

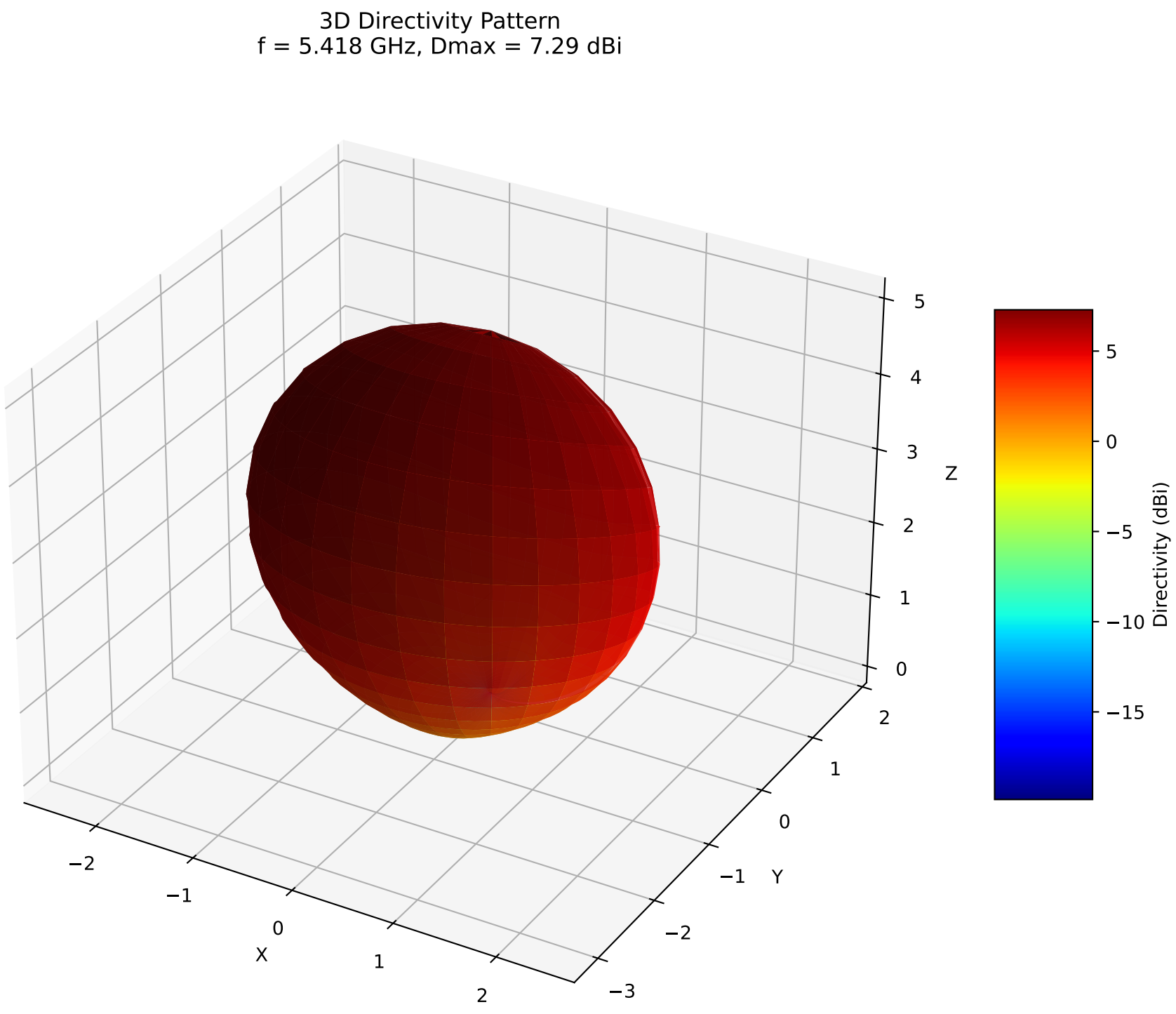

Ez snapshot (dphi=-0.19deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
20
10
0
−10
−20


Ez snapshot (dphi=-0.19deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
20
10
0
−10
−20
−40
−30
−20
−10
0
10
20
30
40


f = 5.418 GHz — Directivity (dB)
Dmax (integrated) ≈ 7.30 dB, nf2ff Dmax = 7.30 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.418 GHz — Directivity (linear). Dmax: 5.366
0°
45°
90°
135°
180°
225°
270°
315°
1
2
3
4
5
xz-plane
yz-plane


Frequency: 5.418 GHz
xz-plane: HPBW=83.3°
yz-plane: HPBW=75.2°
Directivity (dBi)
5
0
−5
−10
−15
−20
−150
−100
−50
0
50
100
150
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=83.3°
yz BW=75.2°


3D Directivity Pattern
f = 5.418 GHz, Dmax = 7.29 dBi
X
Y
Z
Directivity (dBi)