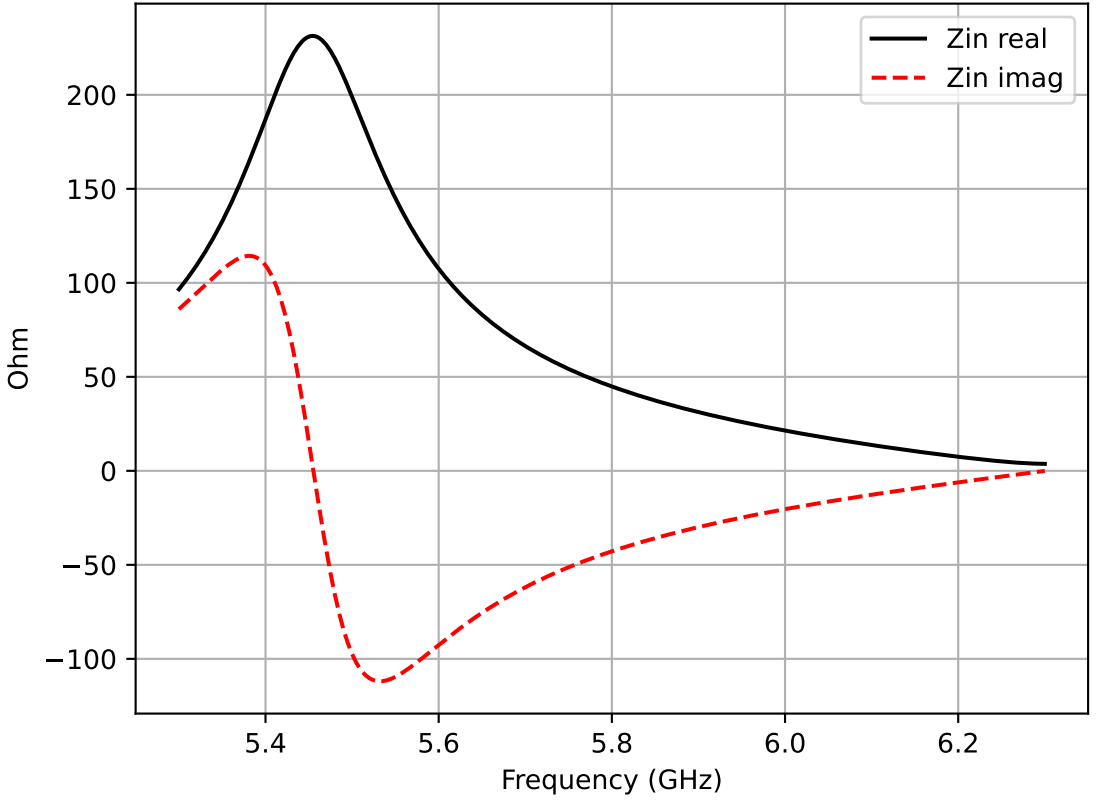
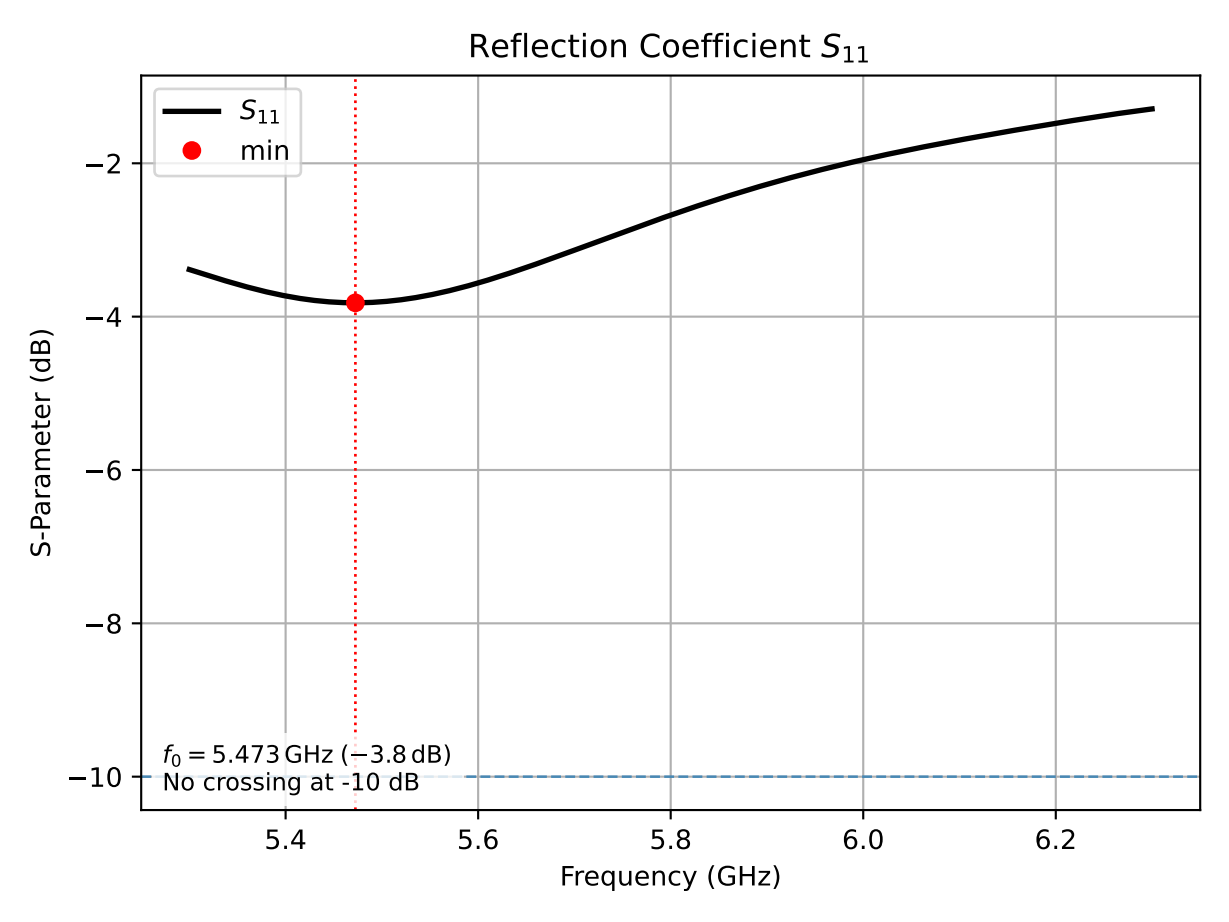
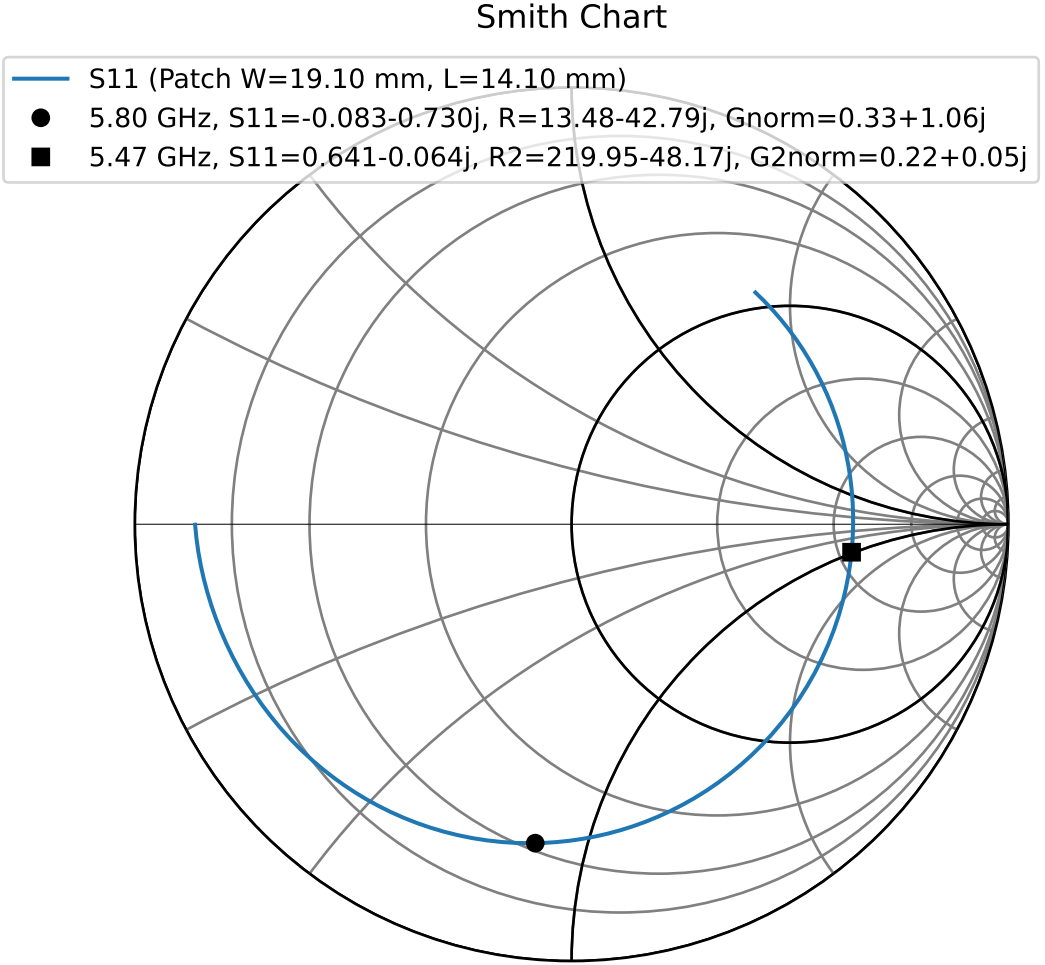
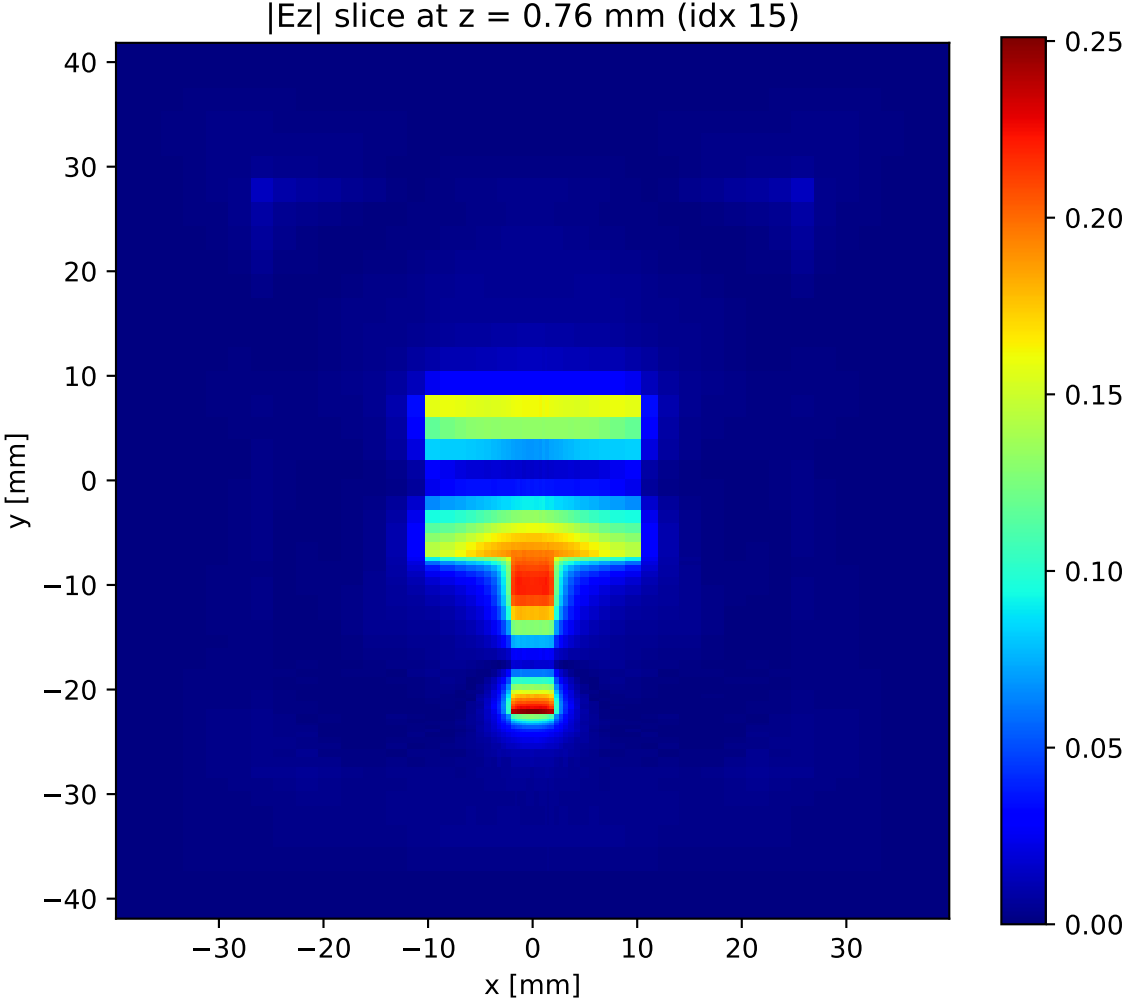
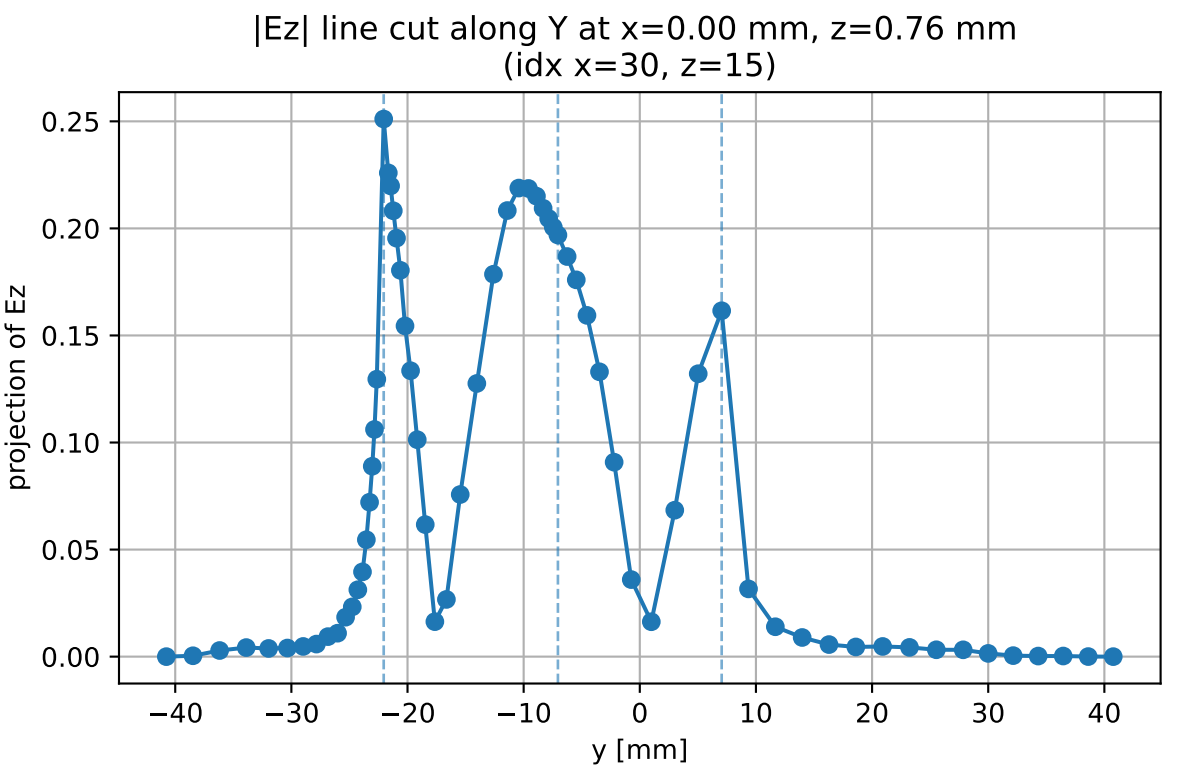
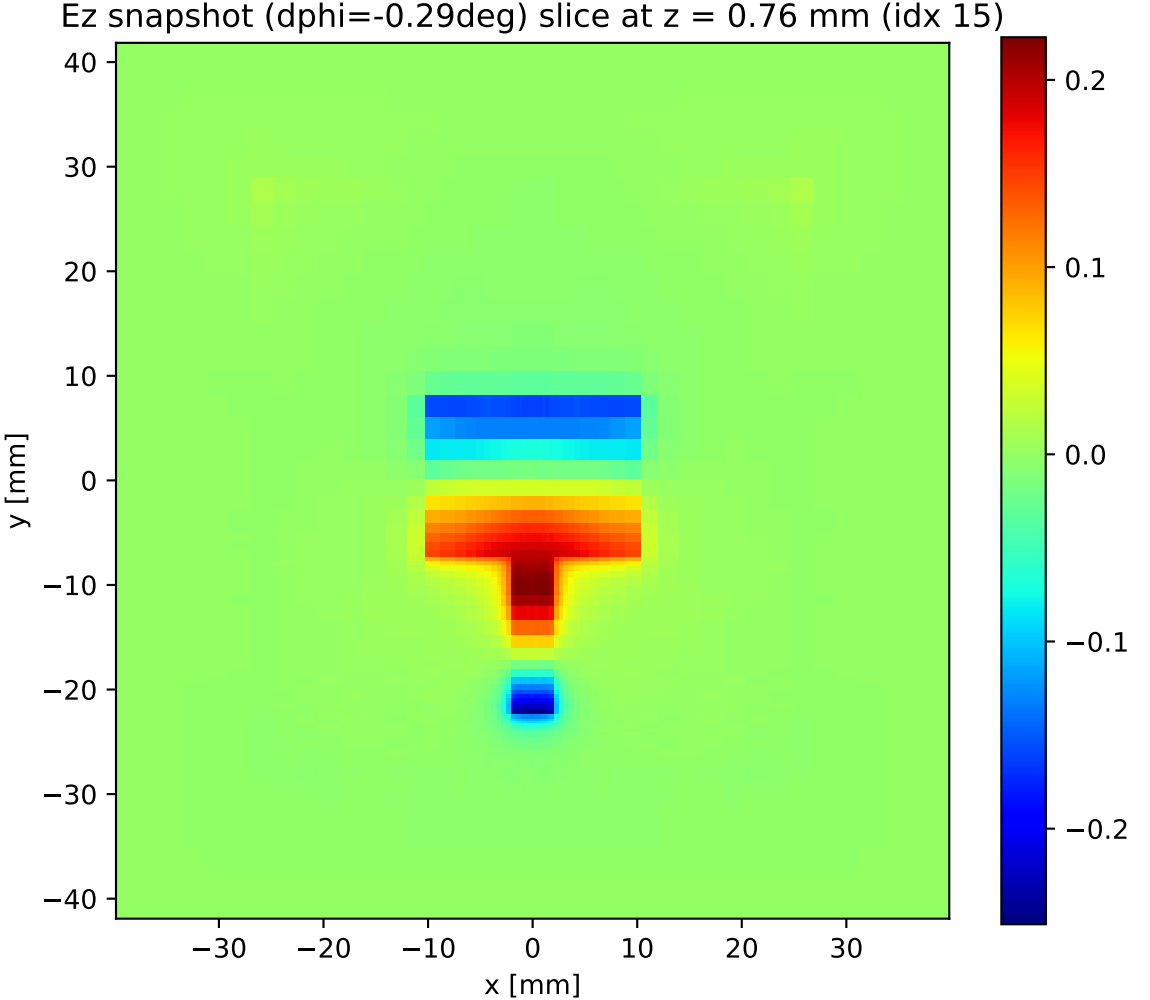

Zin real
Zin imag
200
150
100
50
0
−50
−100
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

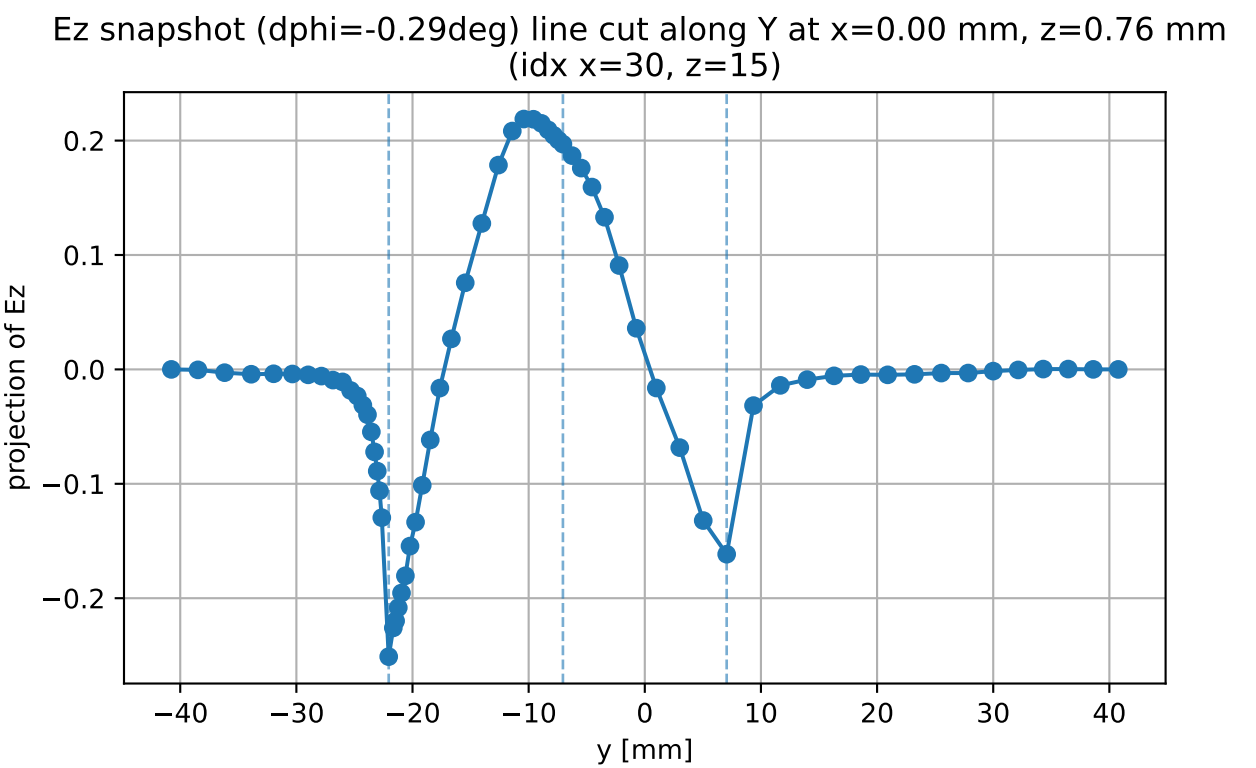

Reflection Coefficient S_{11}
S_{11}
min
−2
−4
−6
−8
−10
S-Parameter (dB)
$f_0 = 5.473\,\text{GHz}\ (-3.8\,\text{dB})$
No crossing at -10 dB
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

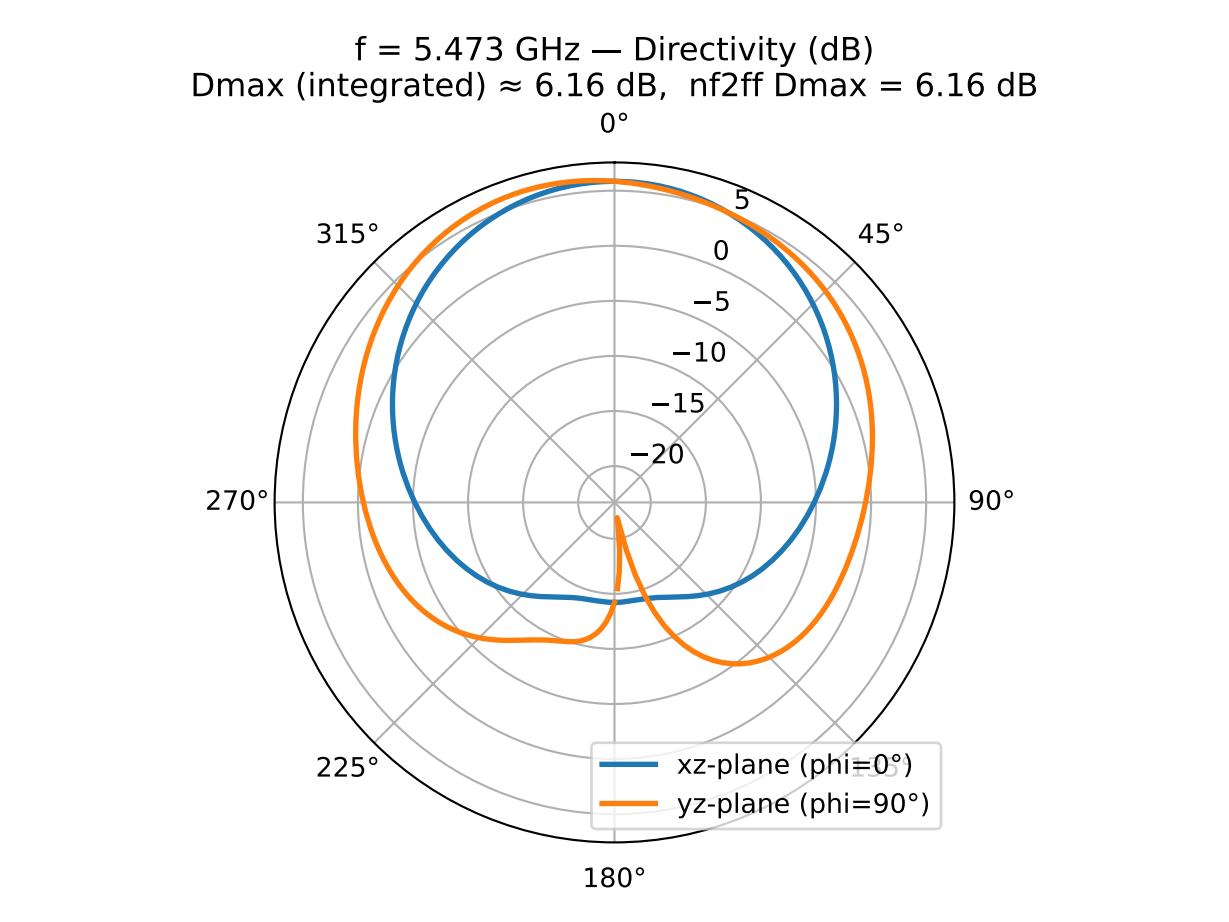

Smith Chart
S11 (Patch W=19.10 mm, L=14.10 mm)
5.80 GHz, S11=-0.083-0.730j, R=13.48-42.79j, Gnorm=0.33+1.06j
5.47 GHz, S11=0.641-0.064j, R2=219.95-48.17j, G2norm=0.22+0.05j

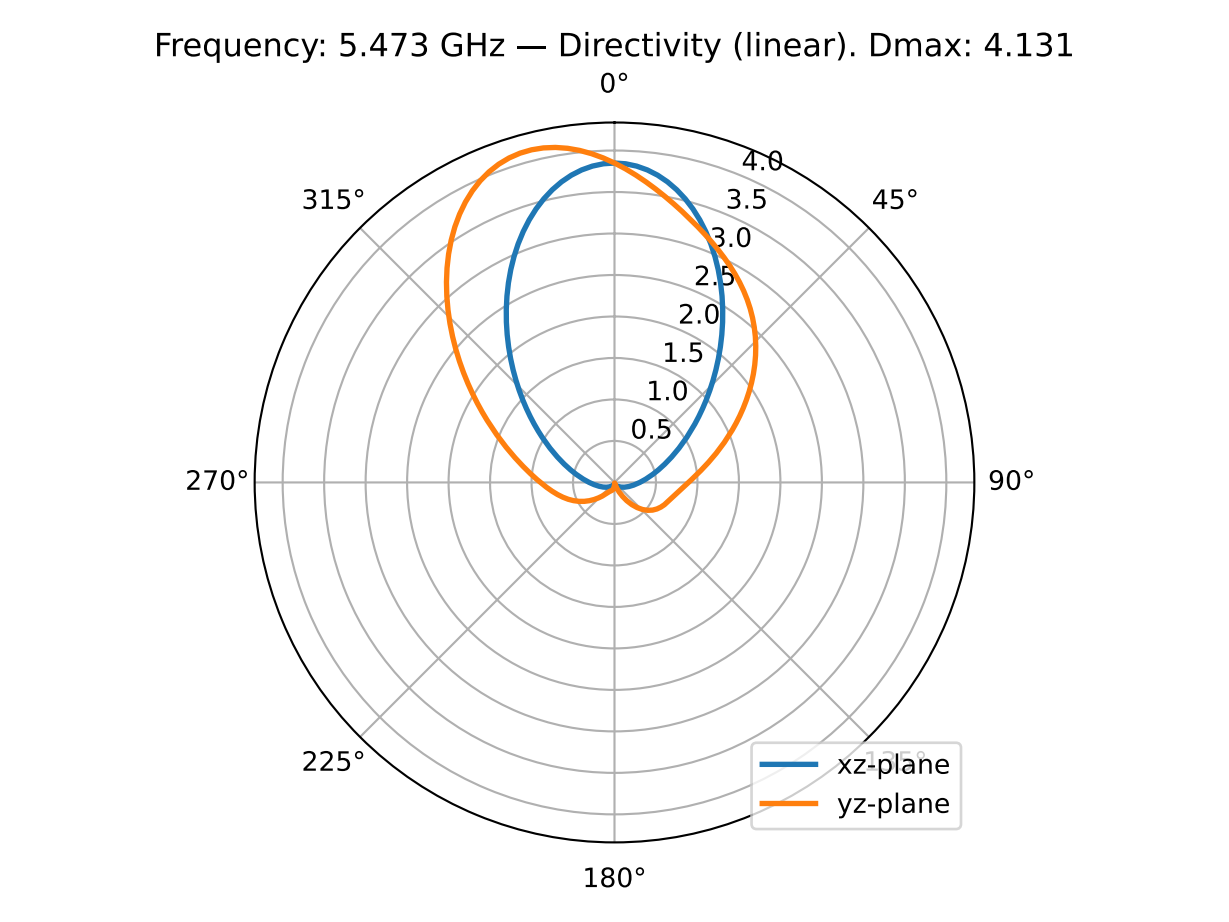

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.25
0.20
0.15
0.10
0.05
0.00

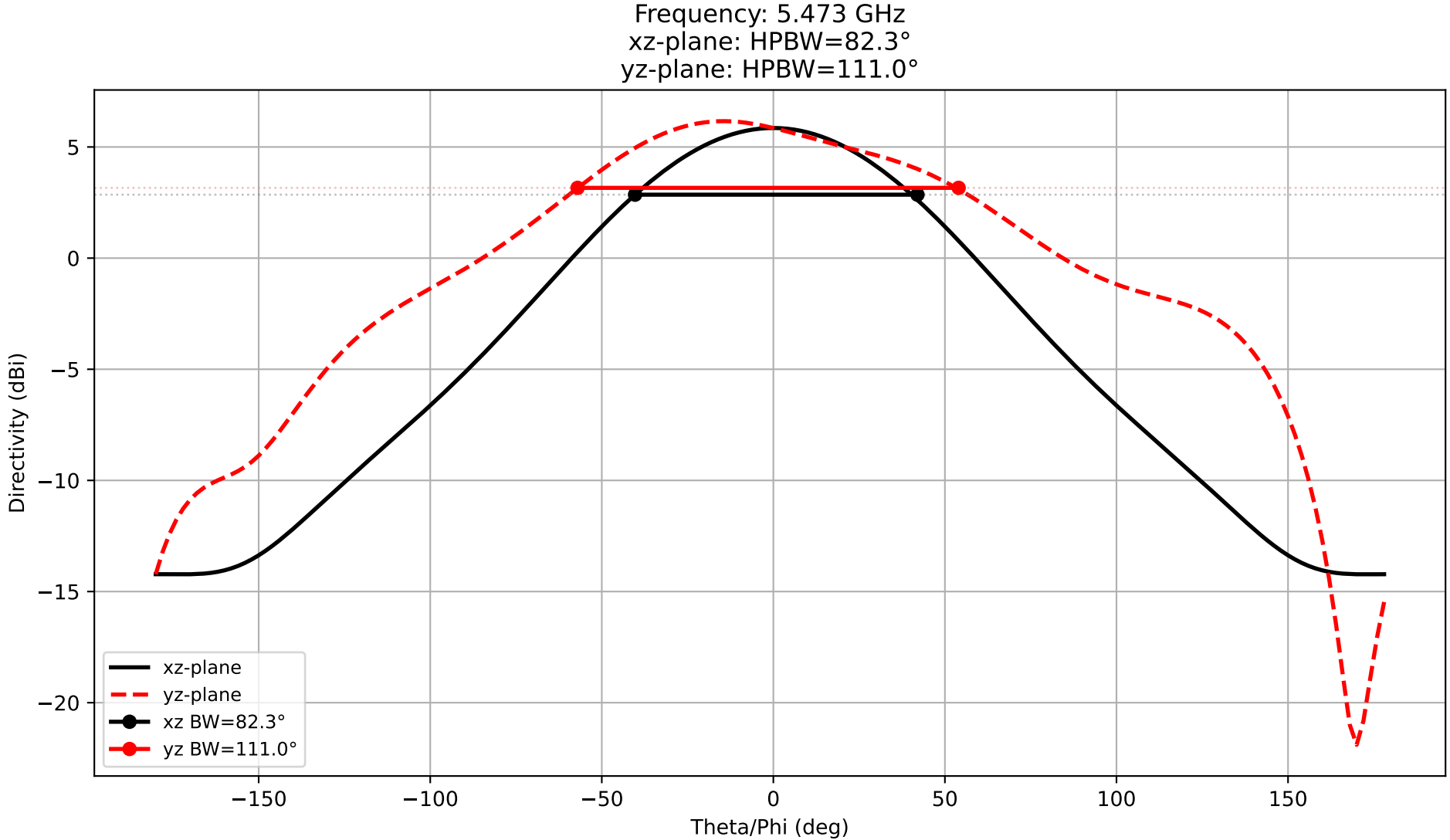

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=30, z=15)
projection of Ez
y [mm]
0.25
0.20
0.15
0.10
0.05
0.00
−40
−30
−20
−10
0
10
20
30
40

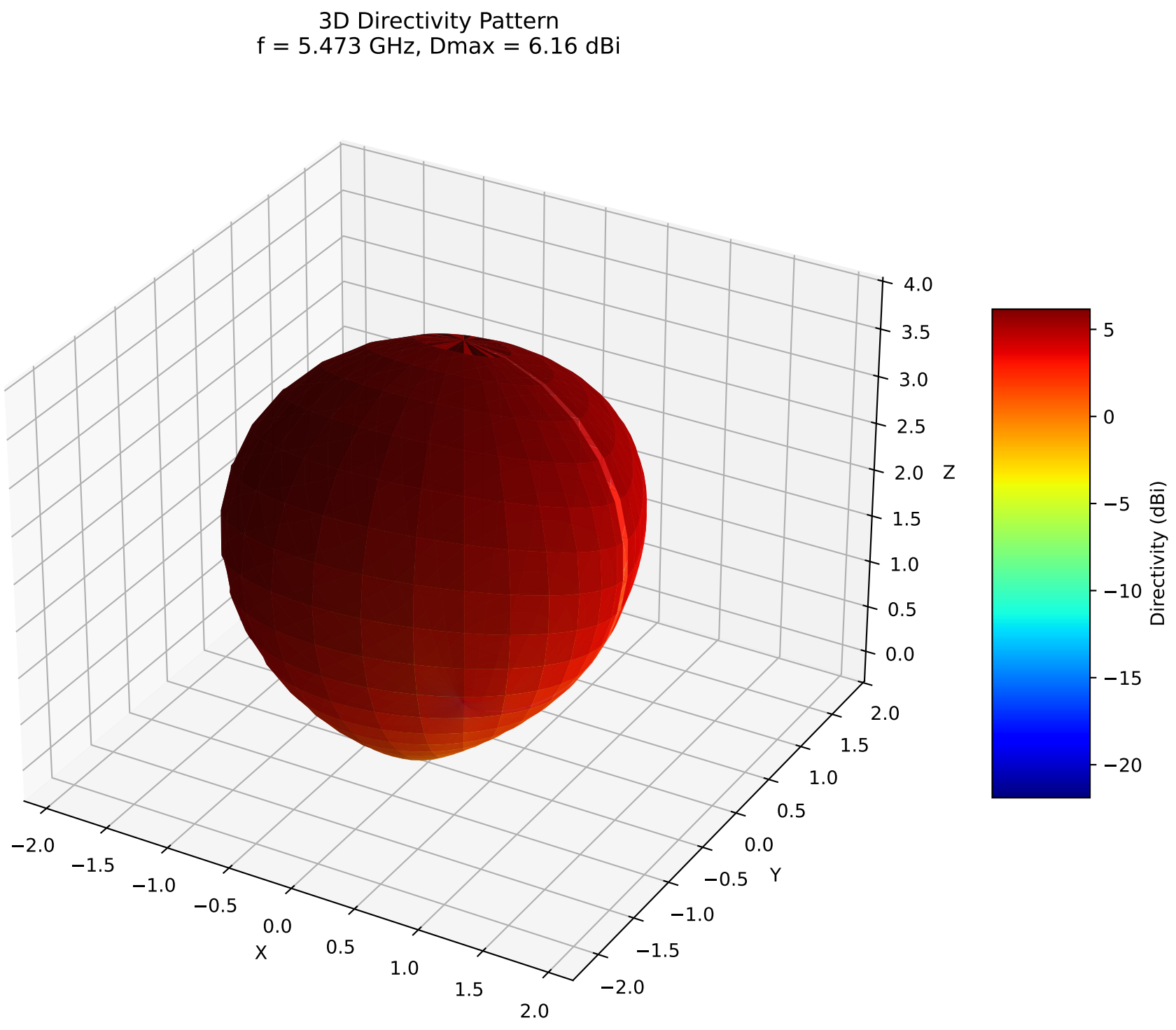

Ez snapshot (dphi=-0.29deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.2
0.1
0.0
−0.1
−0.2


Ez snapshot (dphi=-0.29deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=30, z=15)
projection of Ez
y [mm]
0.2
0.1
0.0
−0.1
−0.2
−40
−30
−20
−10
0
10
20
30
40


f = 5.473 GHz — Directivity (dB)
Dmax (integrated) ≈ 6.16 dB, nf2ff Dmax = 6.16 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.473 GHz — Directivity (linear). Dmax: 4.131
0°
45°
90°
135°
180°
225°
270°
315°
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
xz-plane
yz-plane


Frequency: 5.473 GHz
xz-plane: HPBW=82.3°
yz-plane: HPBW=111.0°
Directivity (dBi)
5
0
−5
−10
−15
−20
−150
−100
−50
0
50
100
150
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=82.3°
yz BW=111.0°


3D Directivity Pattern
f = 5.473 GHz, Dmax = 6.16 dBi
X
Y
Z
Directivity (dBi)