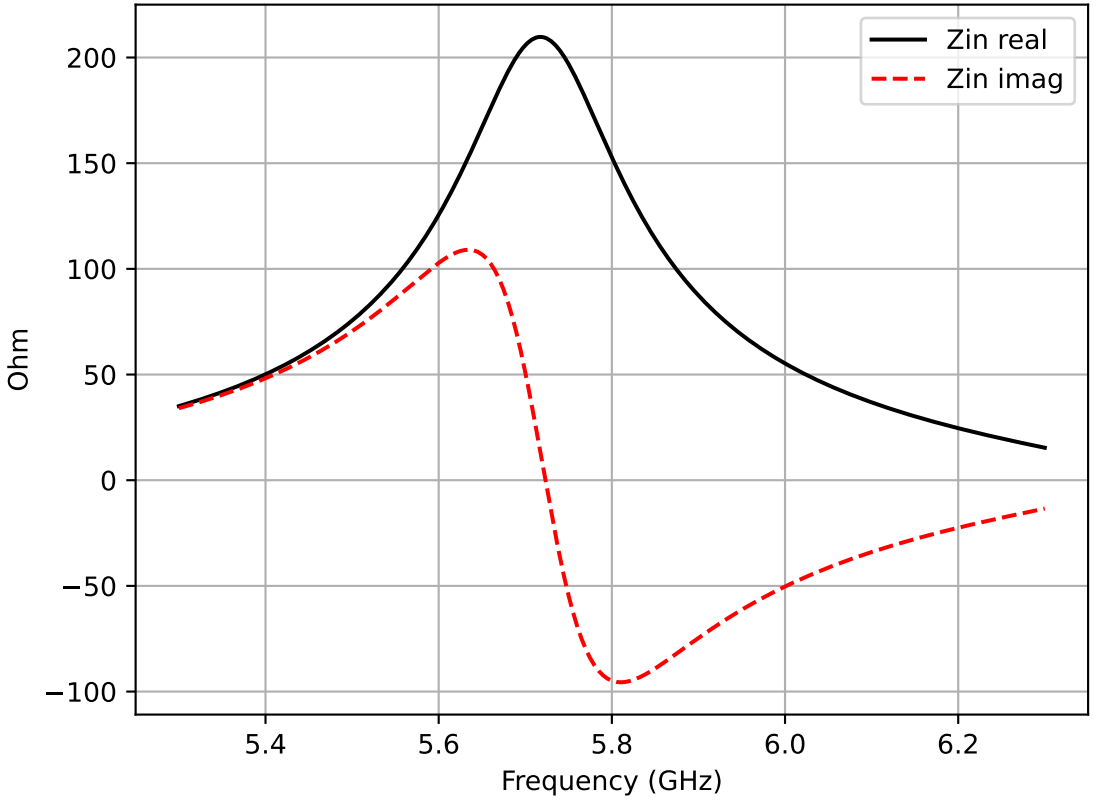
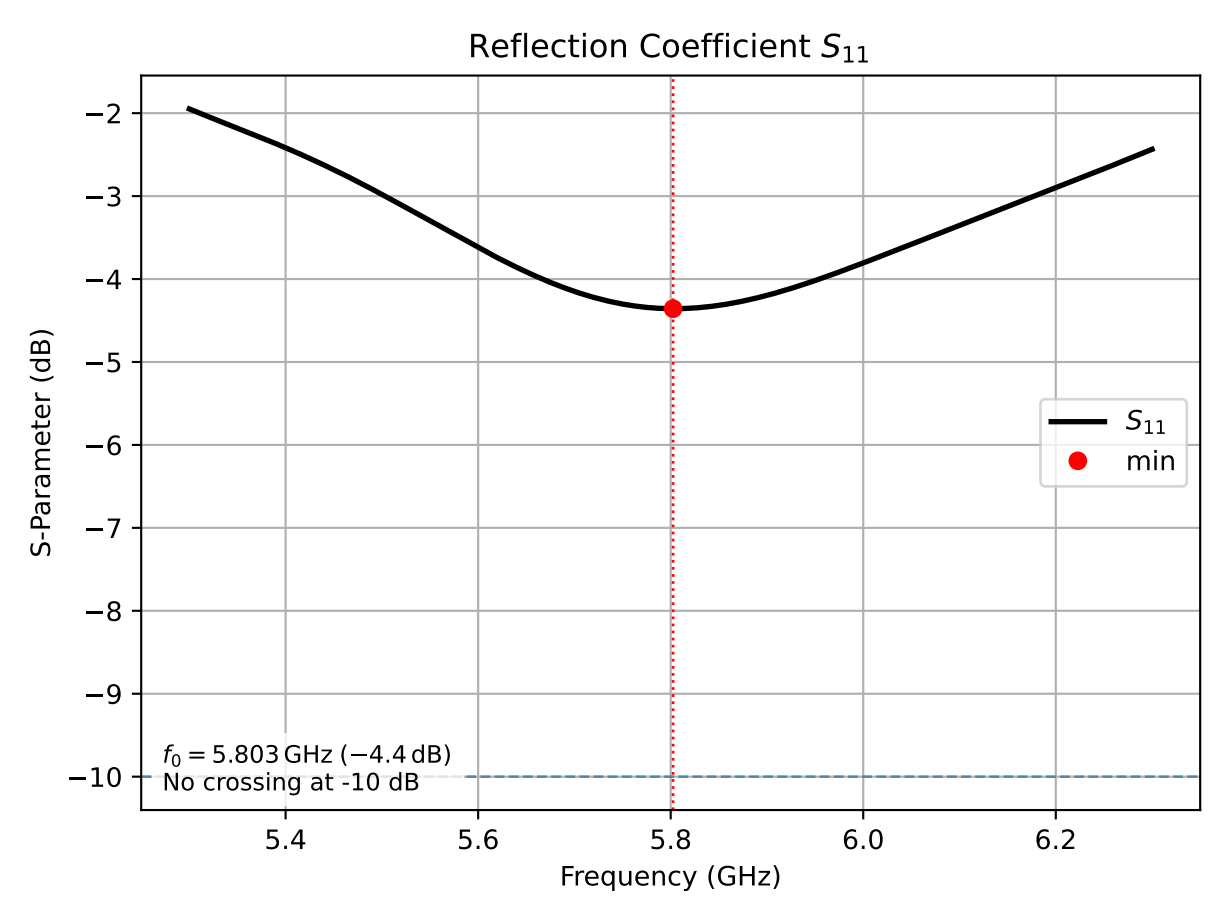
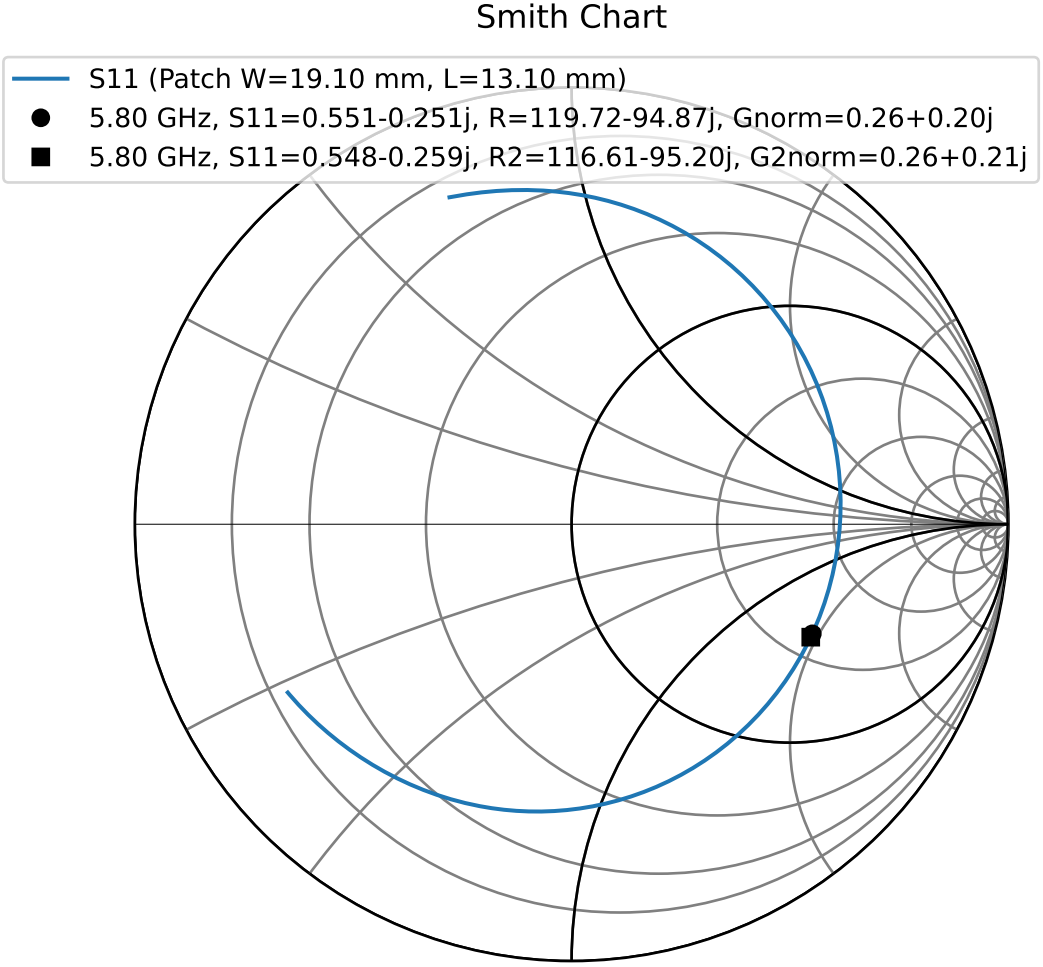
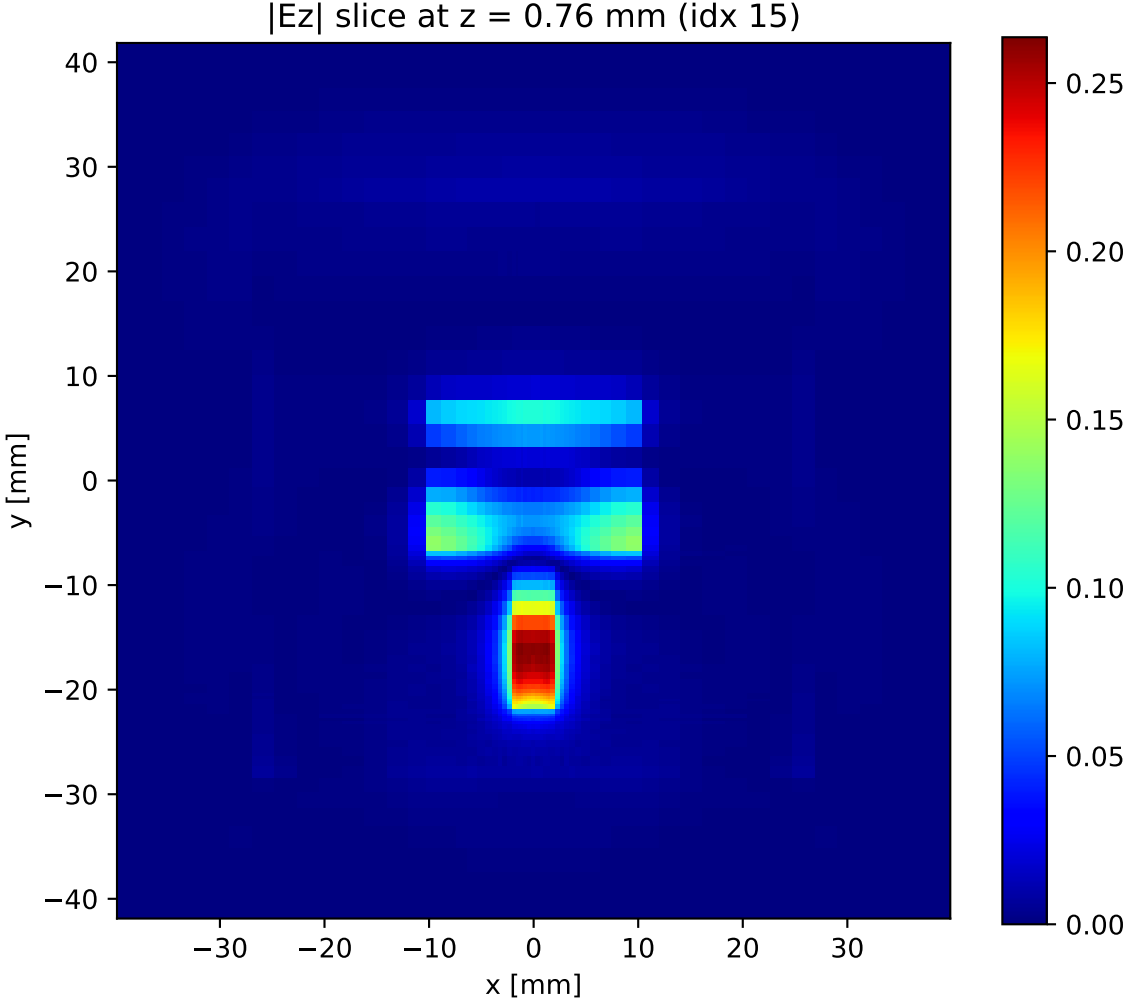
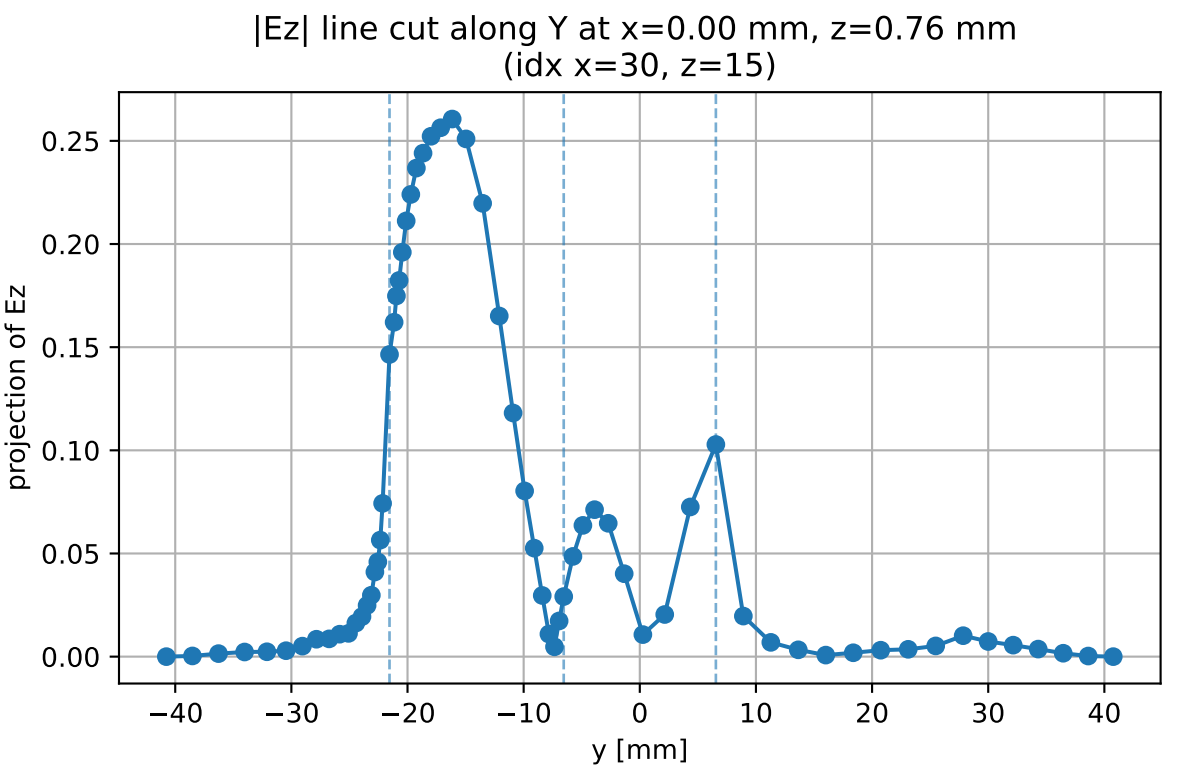
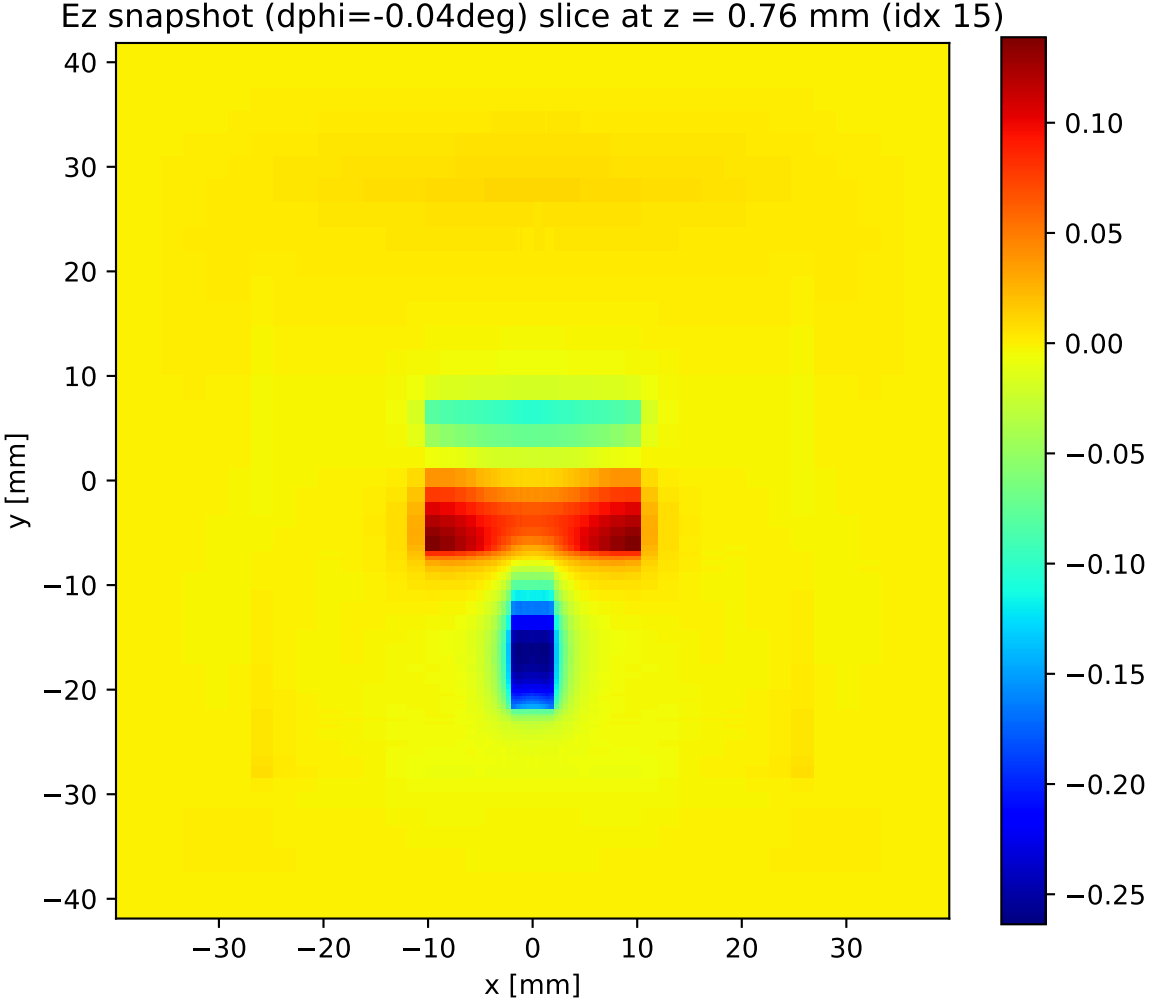

Zin real
Zin imag
200
150
100
50
0
−50
−100
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

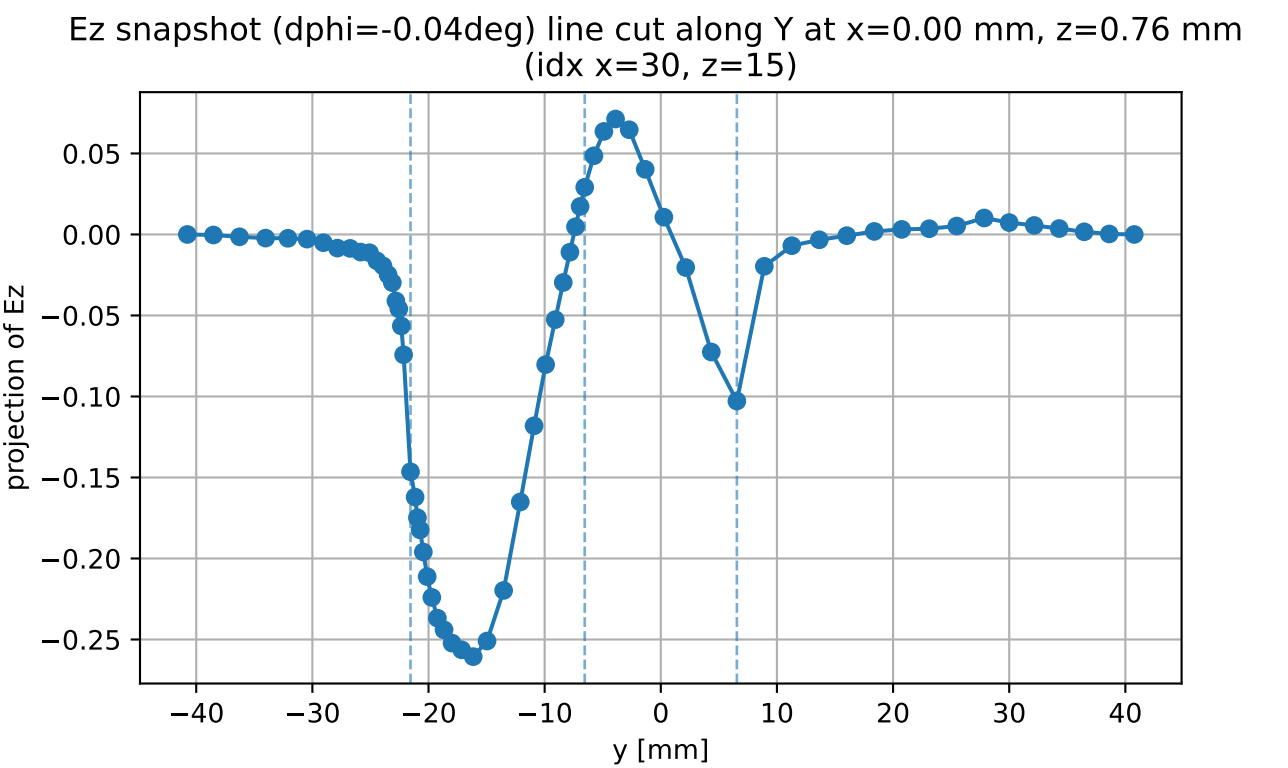

Reflection Coefficient S_{11}
S-Parameter (dB)
−2
−3
−4
−5
−6
−7
−8
−9
−10
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
S_{11}
min
$f_0 = 5.803\,\text{GHz}\ (-4.4\,\text{dB})$
No crossing at -10 dB

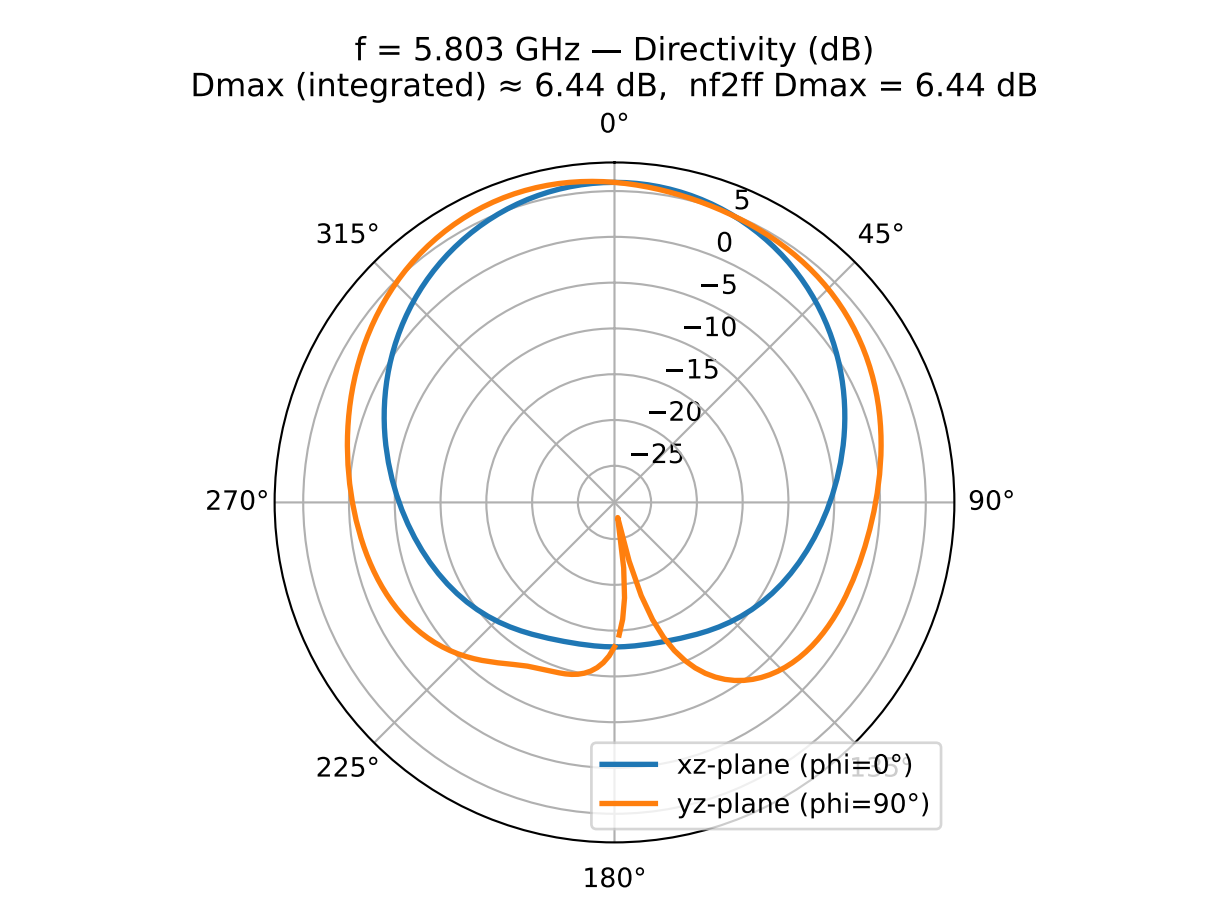

Smith Chart
S11 (Patch W=19.10 mm, L=13.10 mm)
5.80 GHz, S11=0.551-0.251j, R=119.72-94.87j, Gnorm=0.26+0.20j
5.80 GHz, S11=0.548-0.259j, R2=116.61-95.20j, G2norm=0.26+0.21j

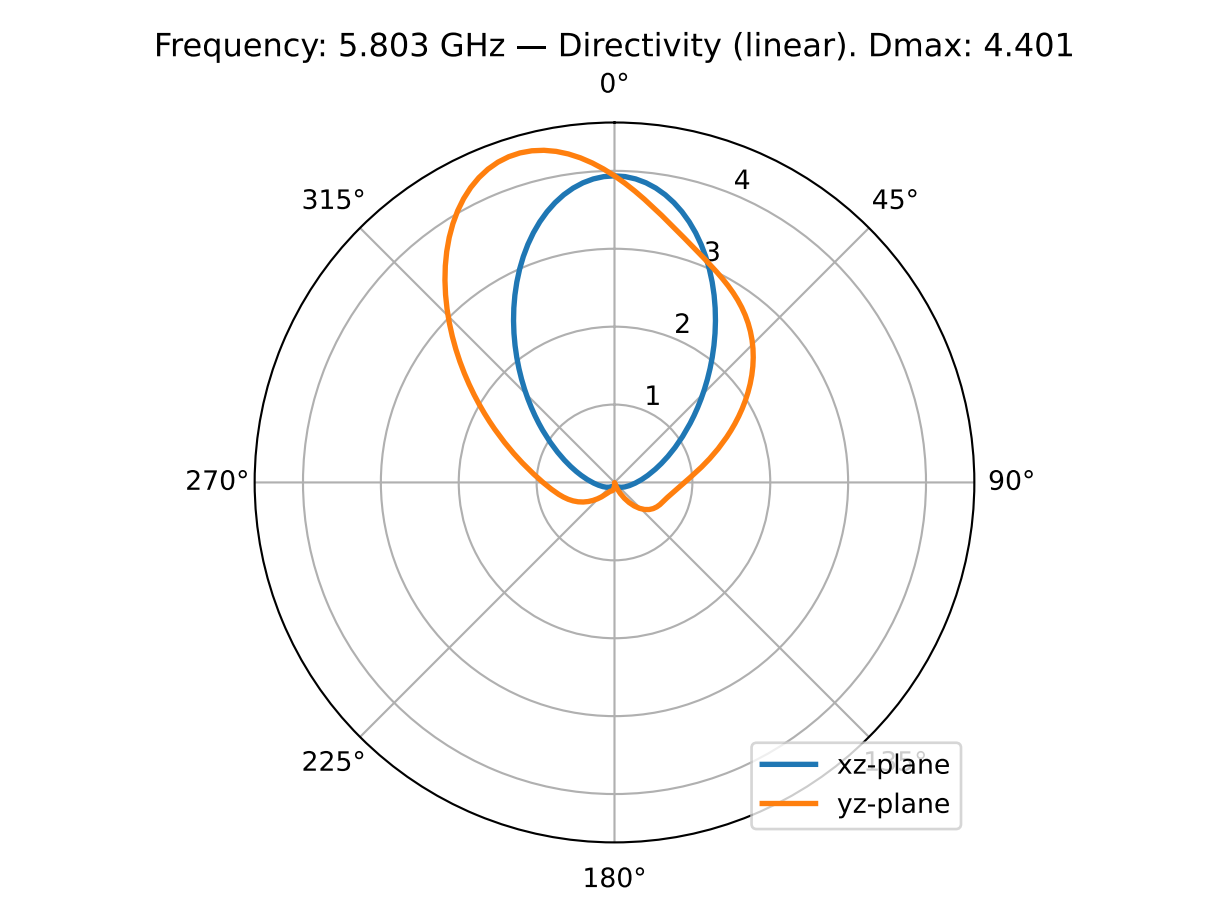

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.25
0.20
0.15
0.10
0.05
0.00

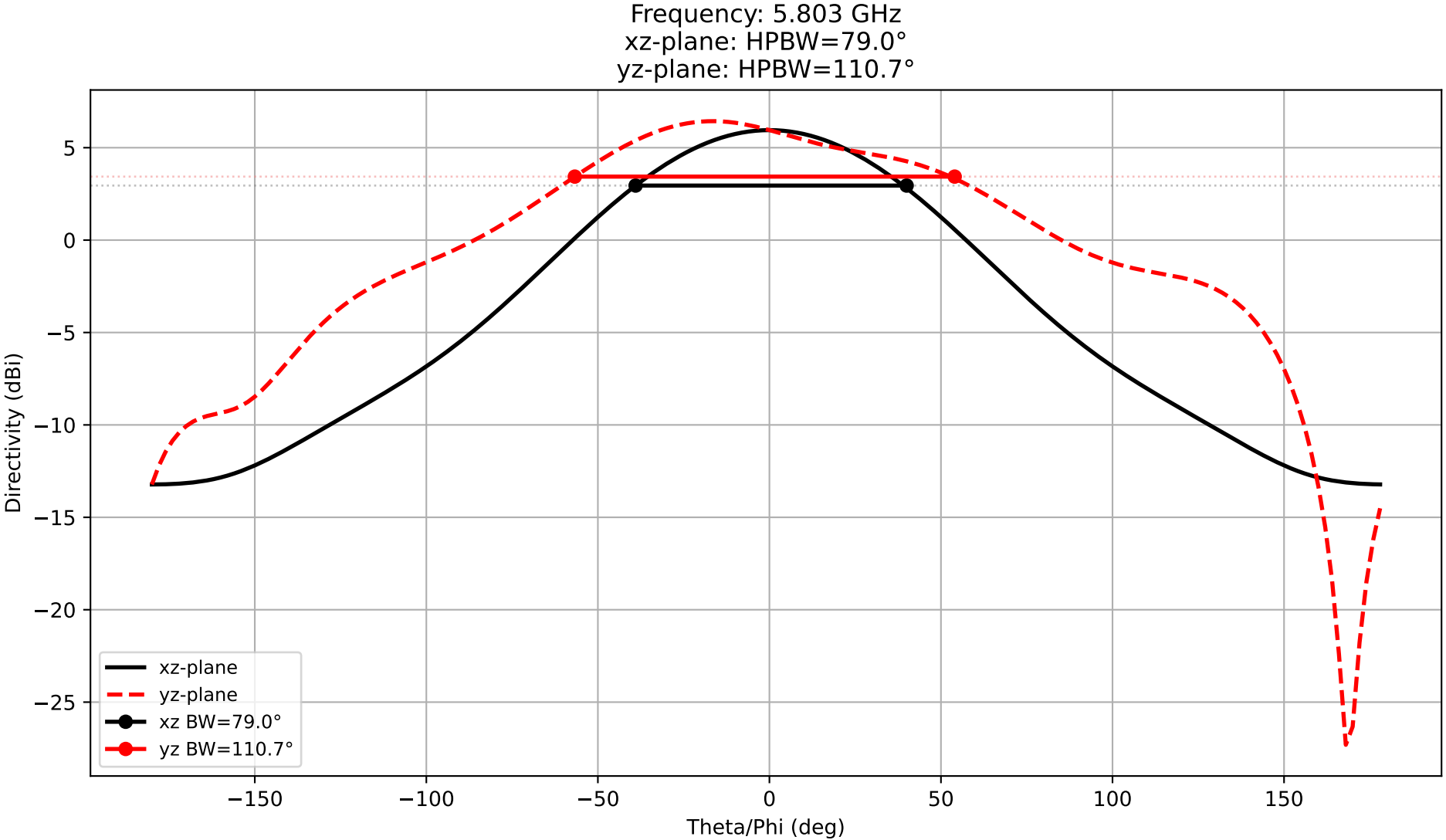

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=30, z=15)
projection of Ez
0.25
0.20
0.15
0.10
0.05
0.00
−40
−30
−20
−10
0
10
20
30
40
y [mm]

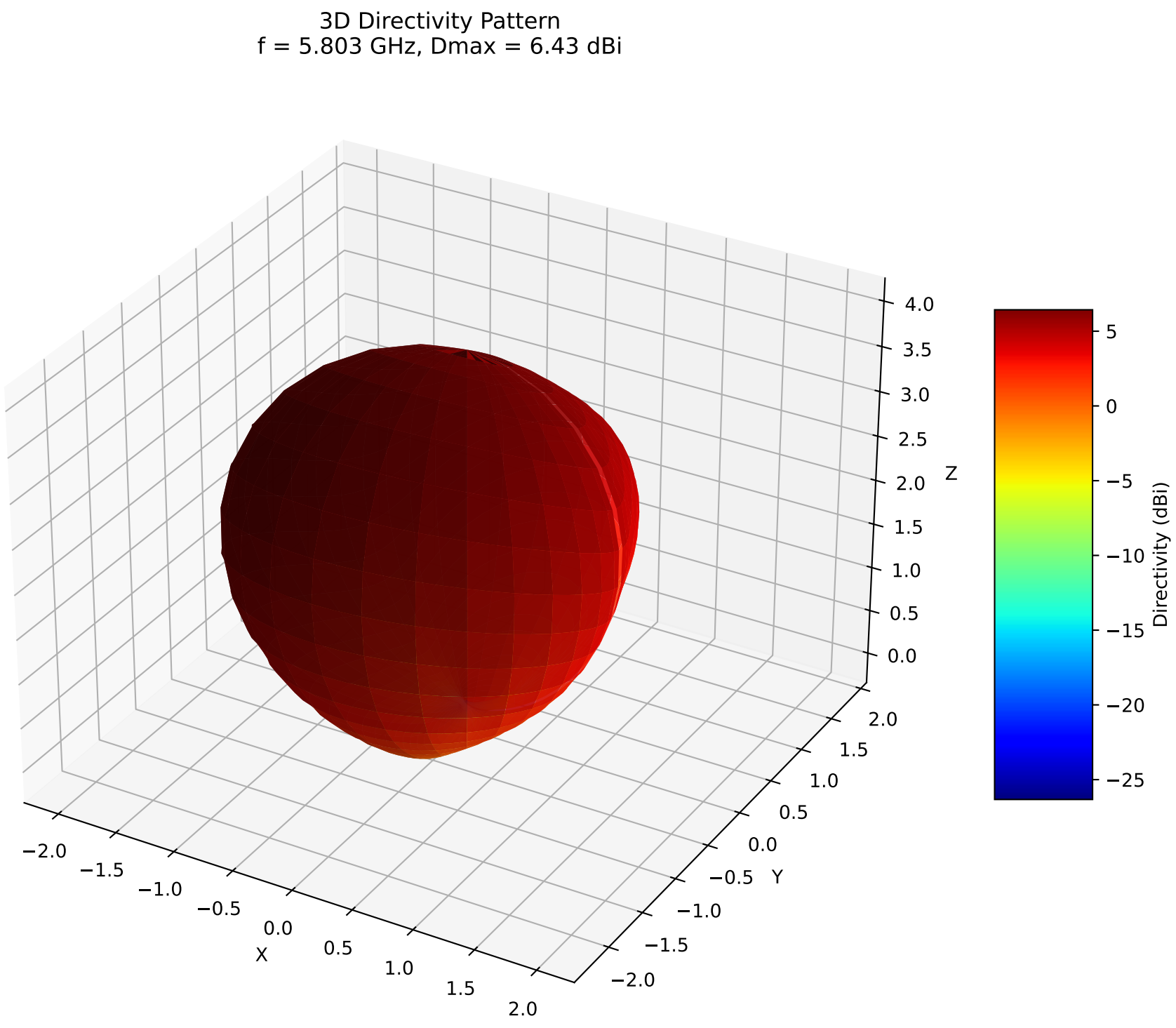

Ez snapshot (dphi=-0.04deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25


Ez snapshot (dphi=-0.04deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=30, z=15)
projection of Ez
y [mm]
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−40
−30
−20
−10
0
10
20
30
40


f = 5.803 GHz — Directivity (dB)
Dmax (integrated) ≈ 6.44 dB, nf2ff Dmax = 6.44 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
−25
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.803 GHz — Directivity (linear). Dmax: 4.401
0°
45°
90°
135°
180°
225°
270°
315°
1
2
3
4
xz-plane
yz-plane


Frequency: 5.803 GHz
xz-plane: HPBW=79.0°
yz-plane: HPBW=110.7°
Directivity (dBi)
5
0
−5
−10
−15
−20
−25
−150
−100
−50
0
50
100
150
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=79.0°
yz BW=110.7°


3D Directivity Pattern
f = 5.803 GHz, Dmax = 6.43 dBi
X
Y
Z
Directivity (dBi)