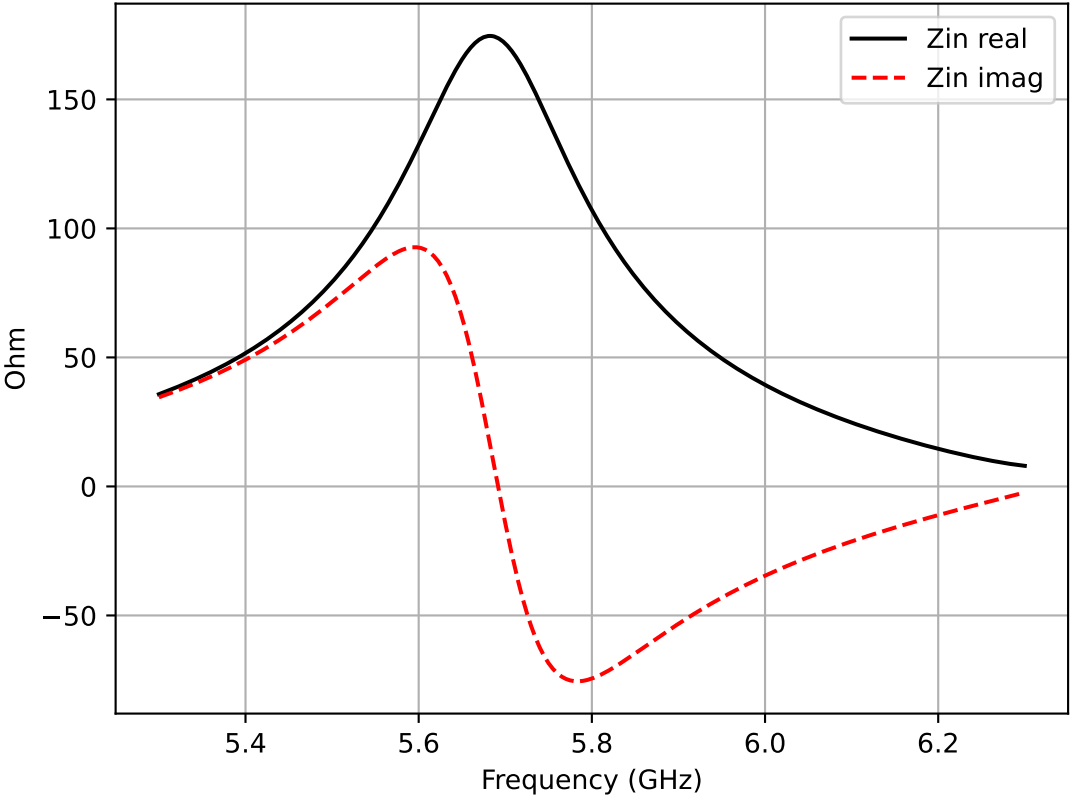
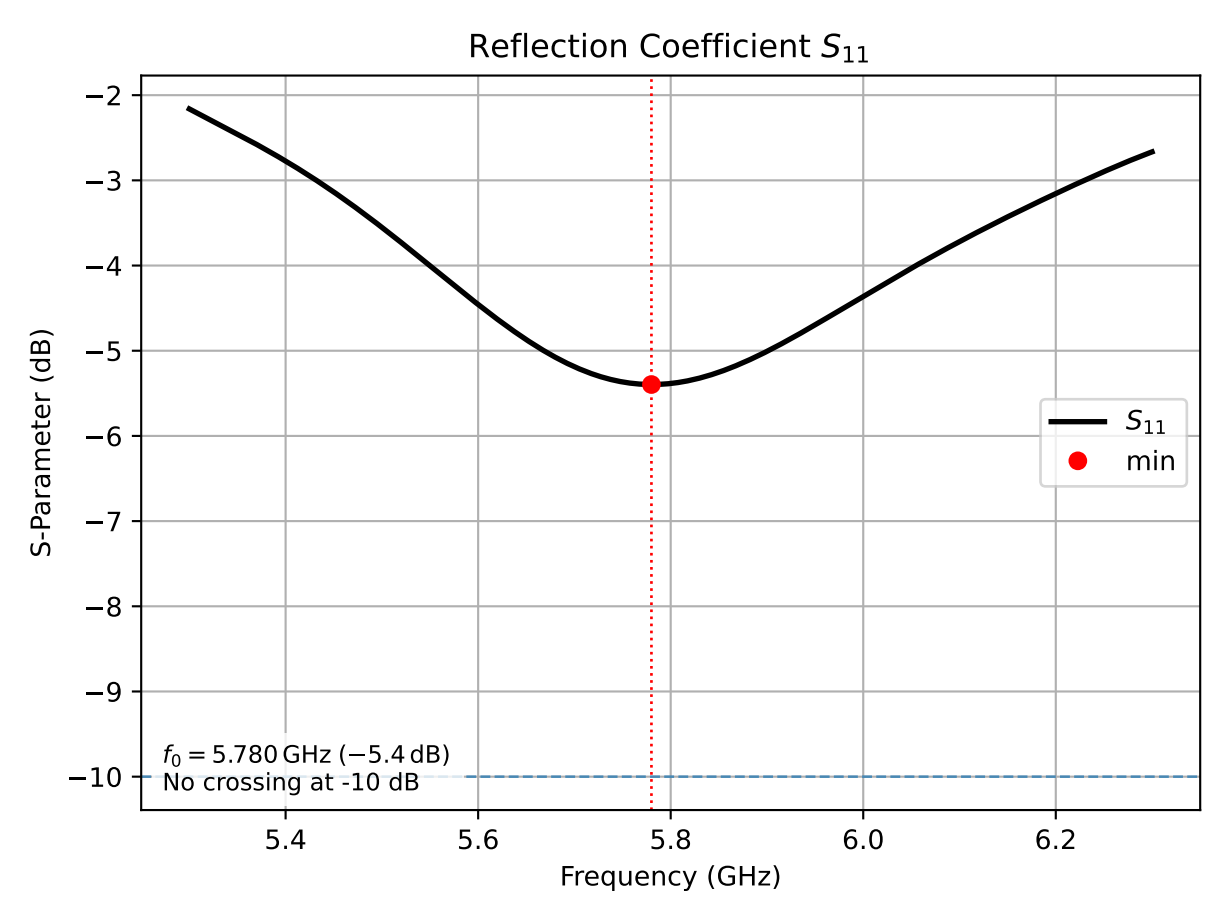
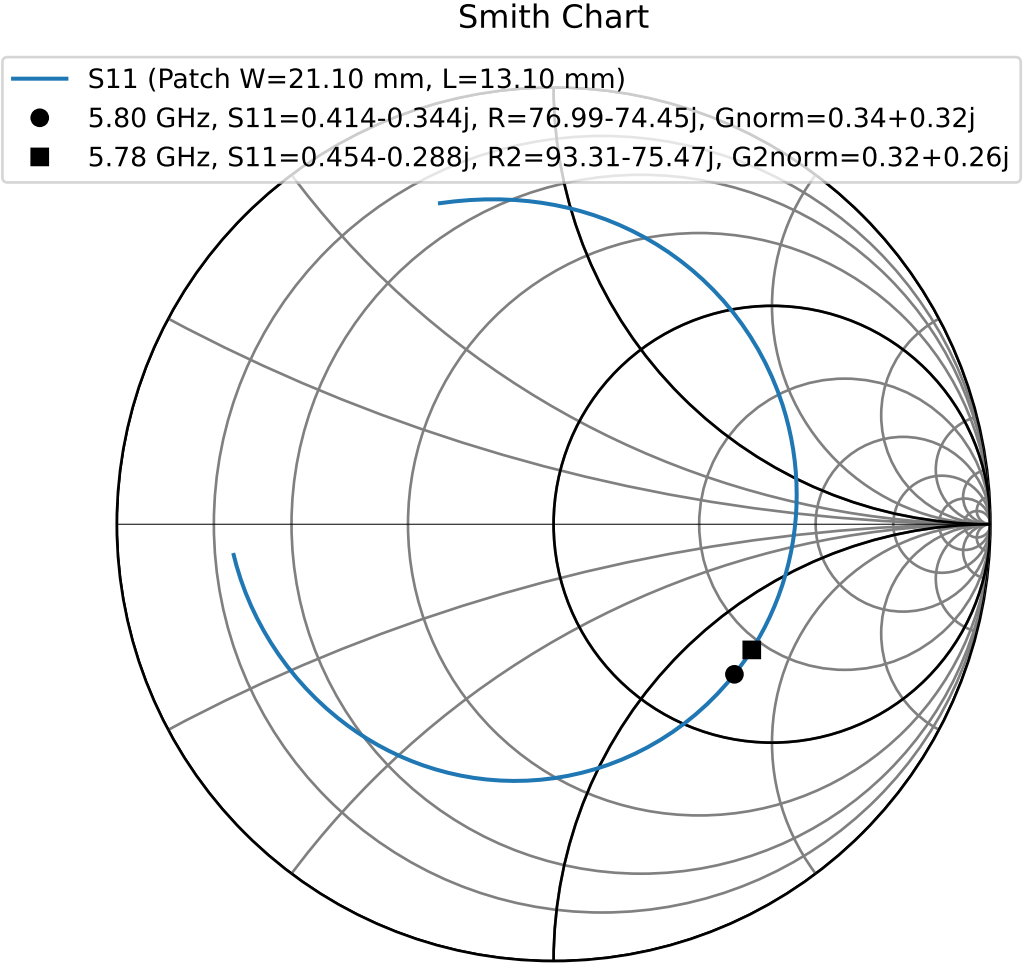
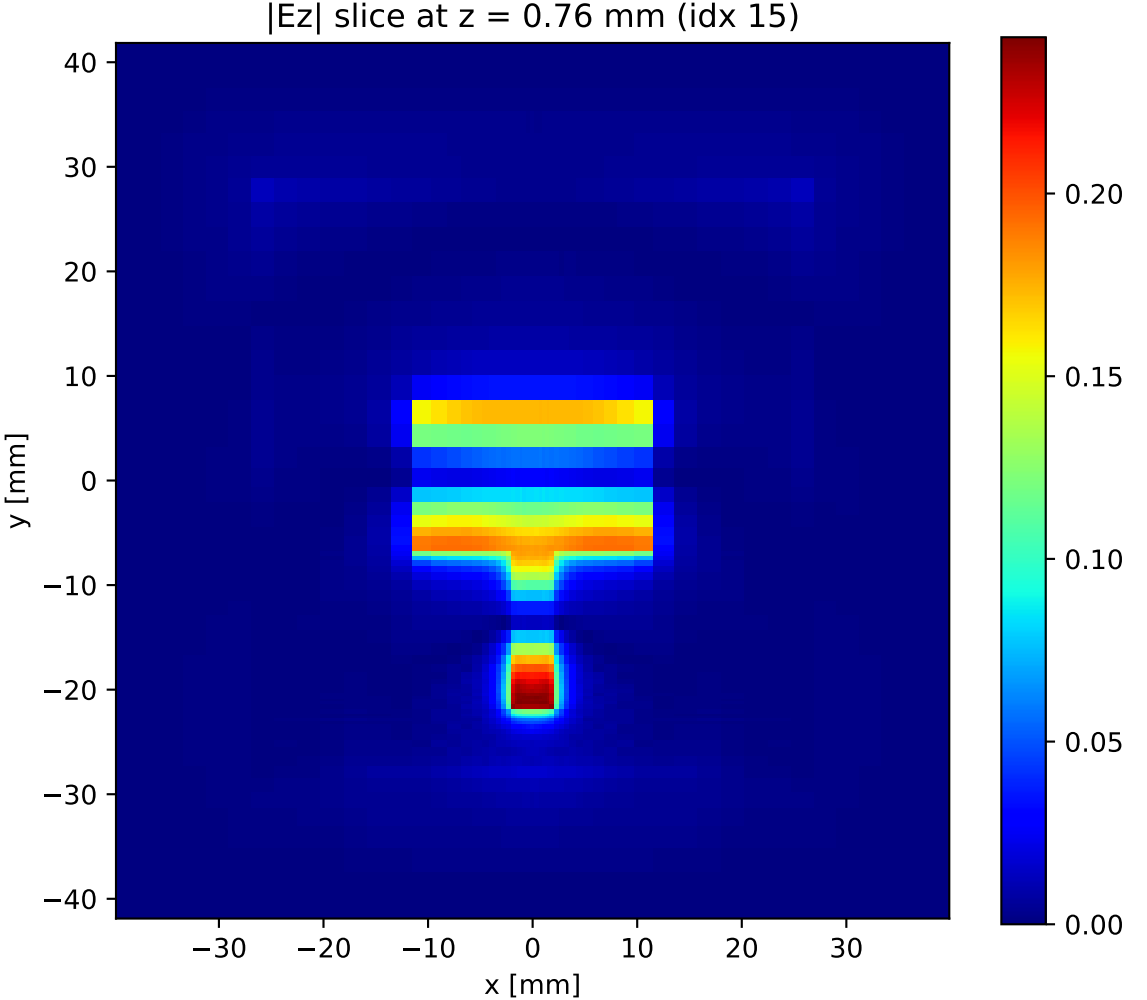
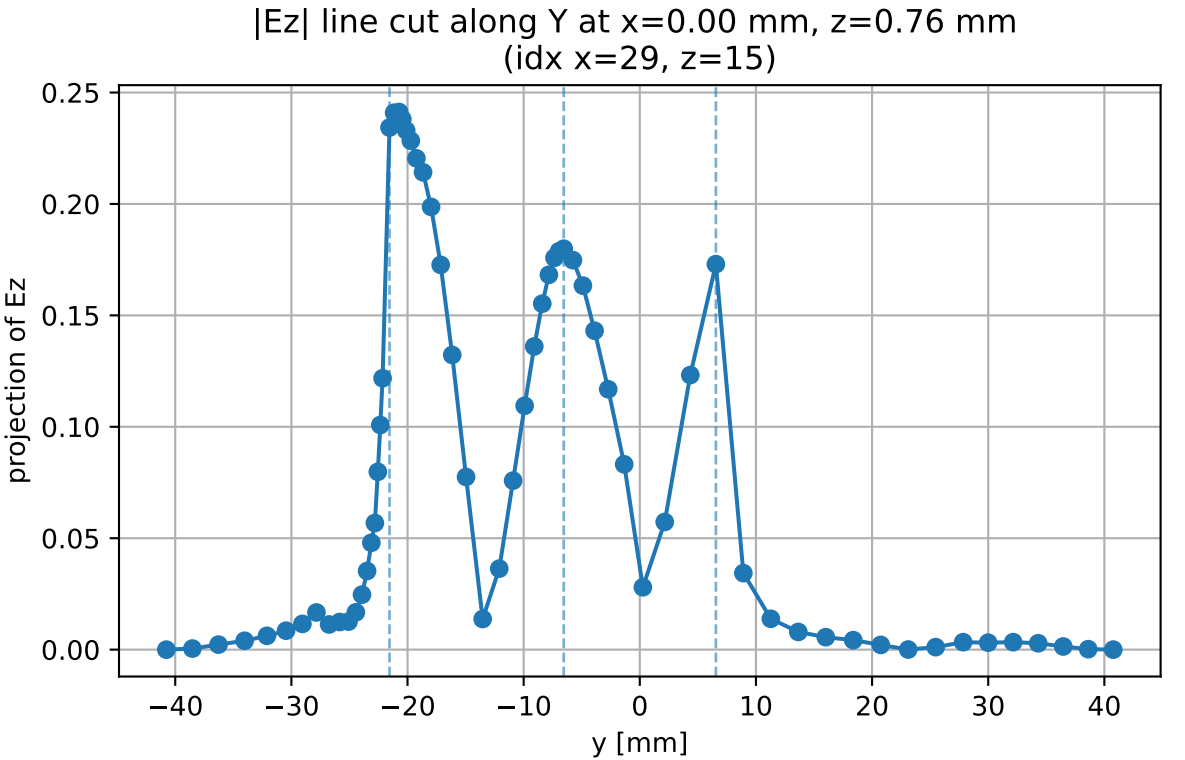
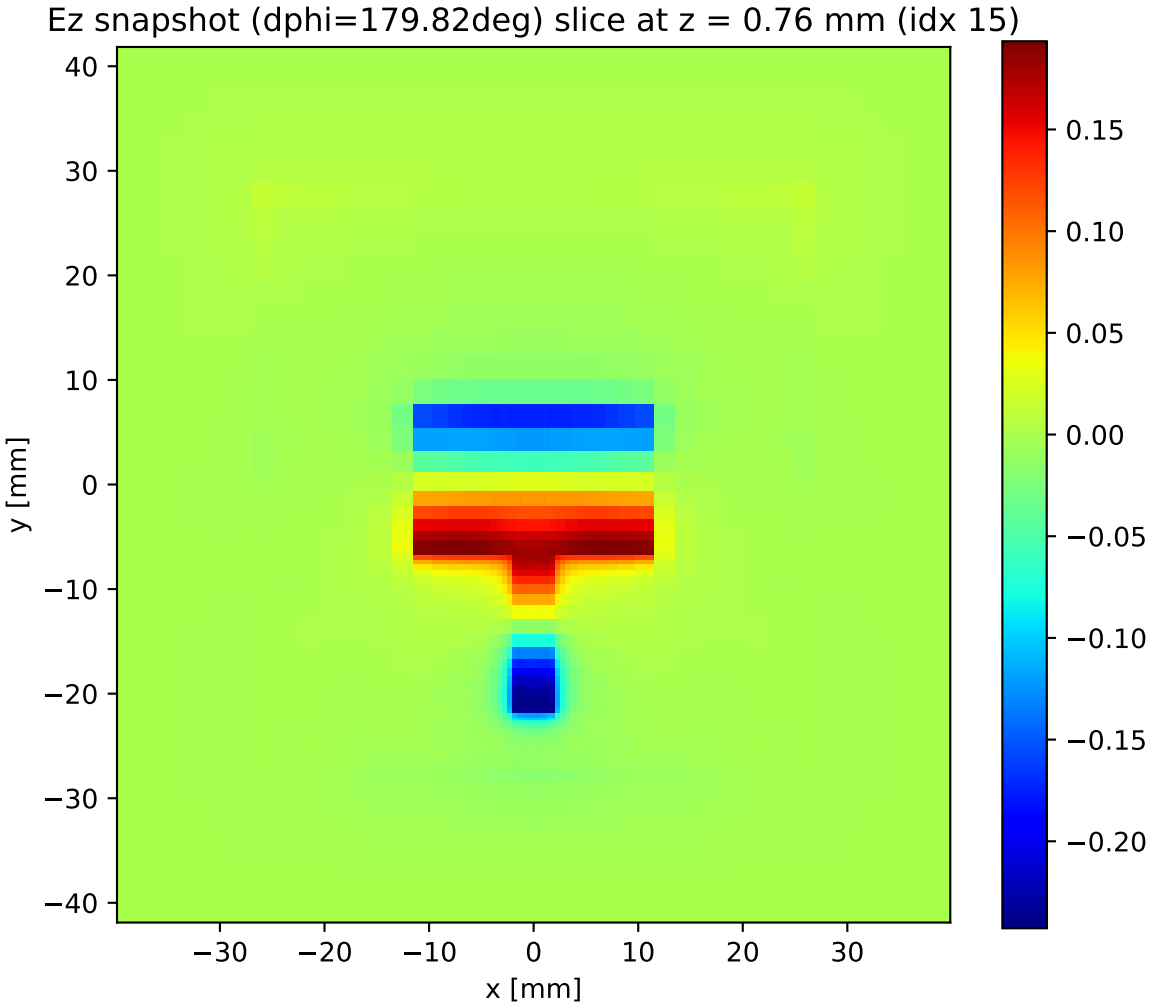

Zin real
Zin imag
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

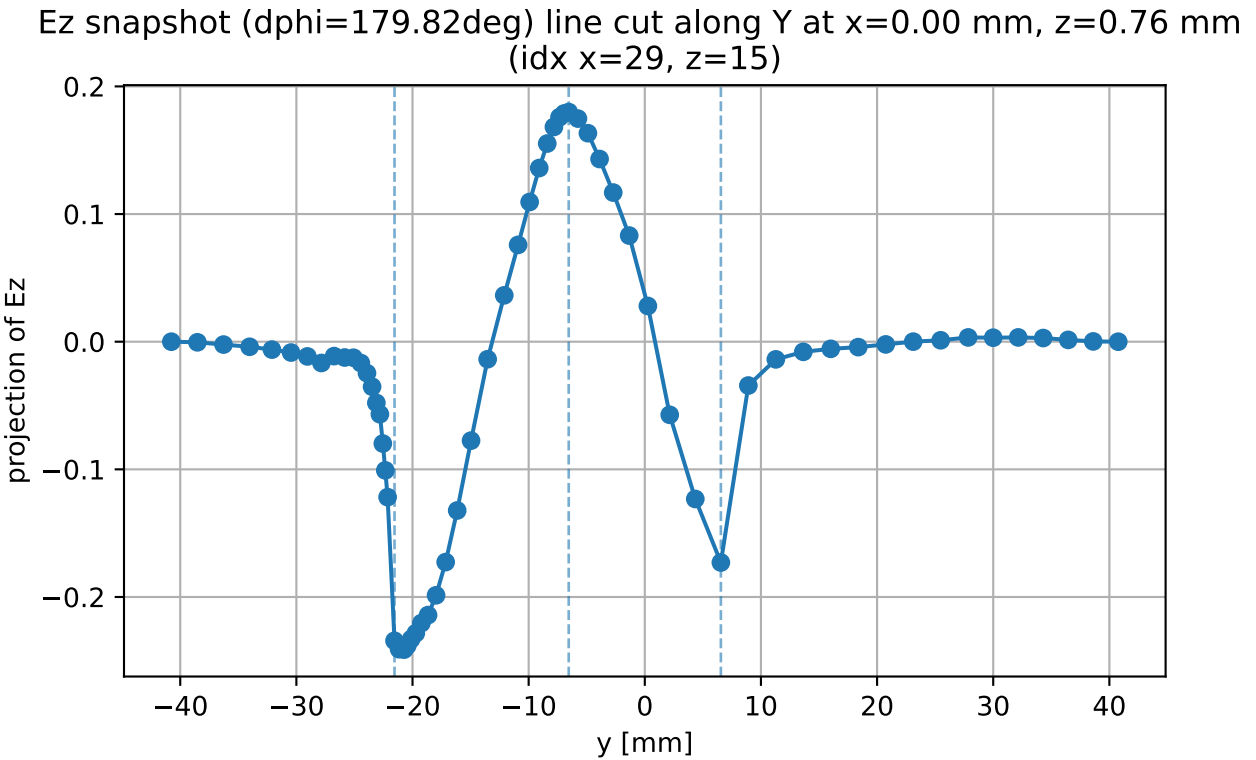

Reflection Coefficient S_{11}
S-Parameter (dB)
−2
−3
−4
−5
−6
−7
−8
−9
−10
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
S_{11}
min
$f_0 = 5.780\,\mathrm{GHz}\ (-5.4\,\mathrm{dB})$
No crossing at -10 dB

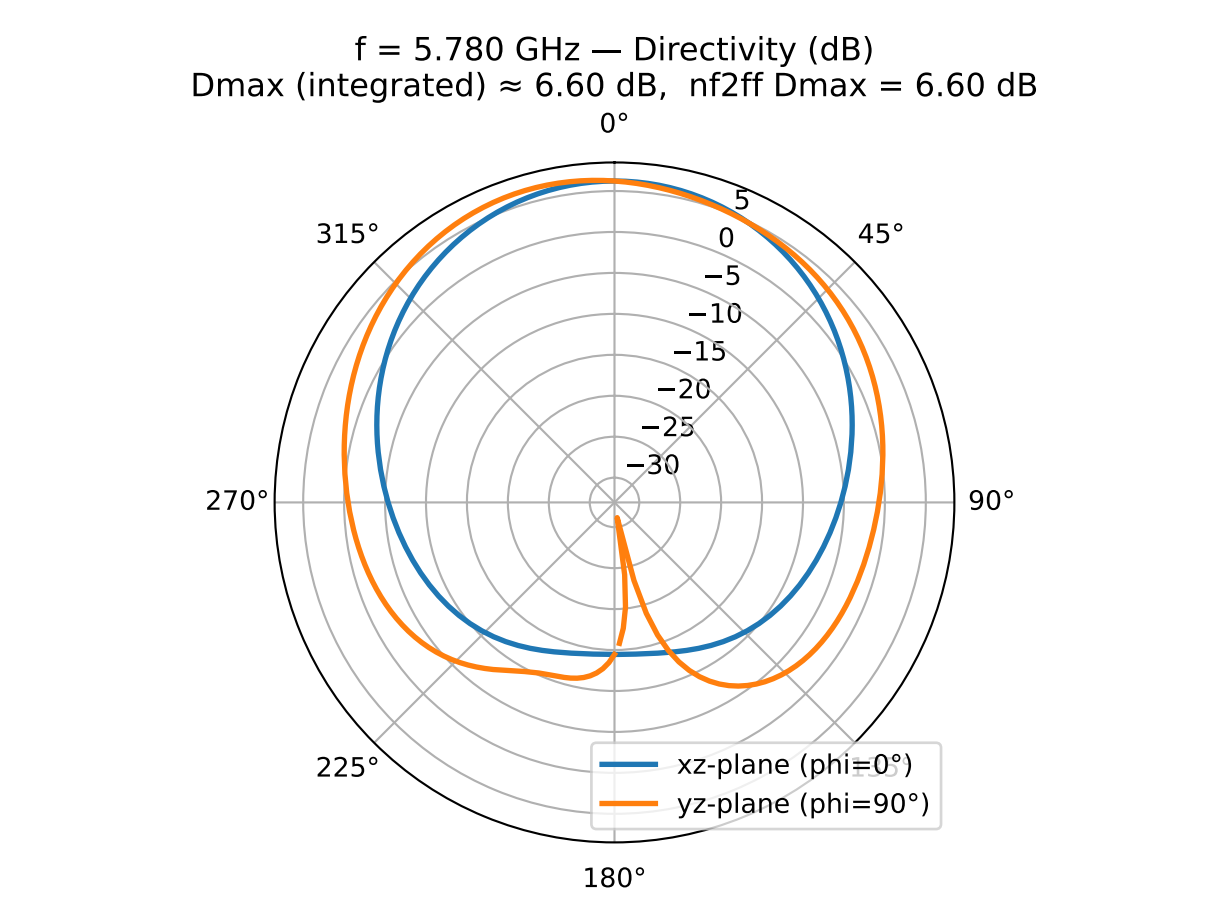

Smith Chart
S11 (Patch W=21.10 mm, L=13.10 mm)
5.80 GHz, S11=0.414-0.344j, R=76.99-74.45j, Gnorm=0.34+0.32j
5.78 GHz, S11=0.454-0.288j, R2=93.31-75.47j, G2norm=0.32+0.26j

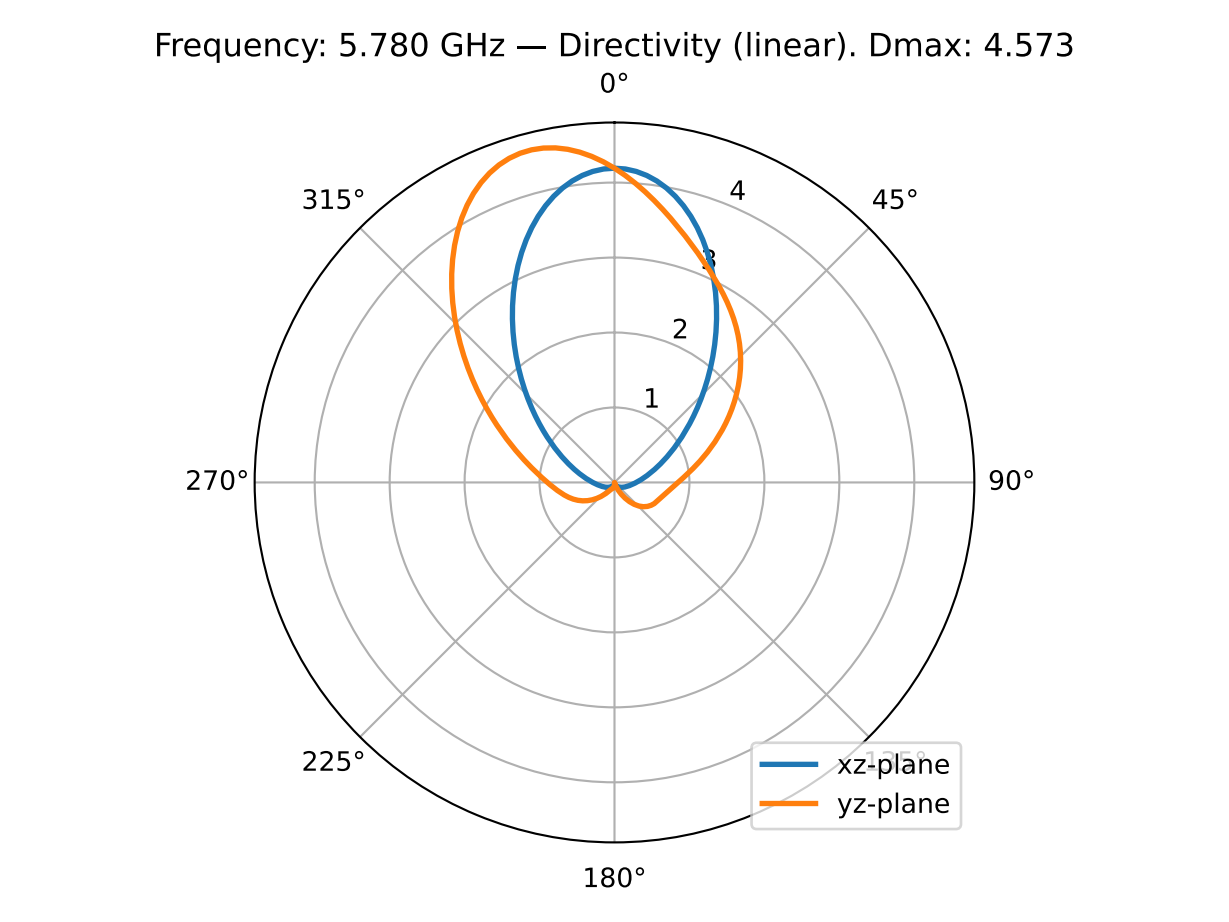

|Ez| slice at z = 0.76 mm (idx 15)
40
30
20
10
0
−10
−20
−30
−40
y [mm]
−30
−20
−10
0
10
20
30
x [mm]
0.20
0.15
0.10
0.05
0.00

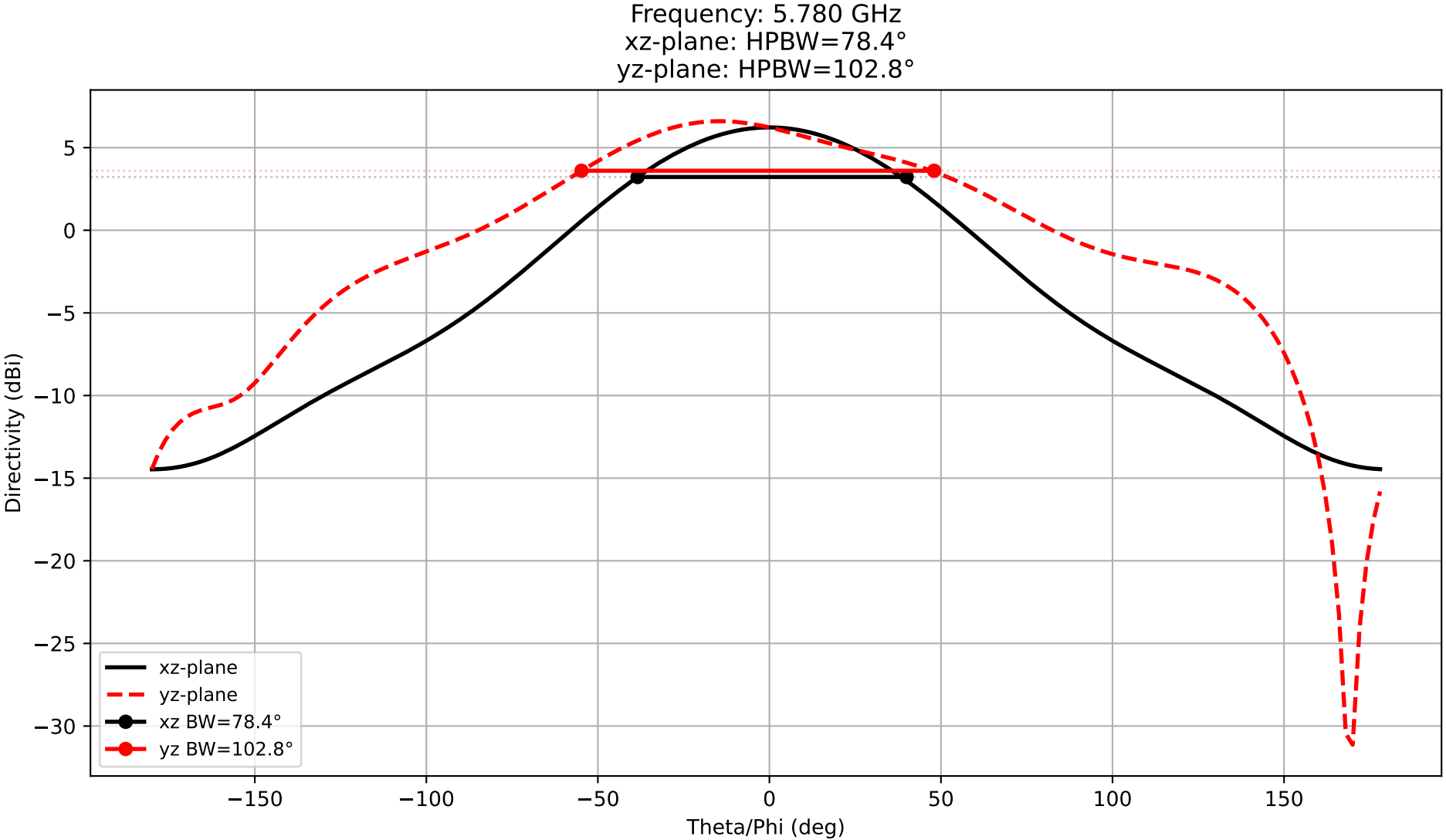

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=29, z=15)
projection of Ez
y [mm]
0.25
0.20
0.15
0.10
0.05
0.00
−40
−30
−20
−10
0
10
20
30
40

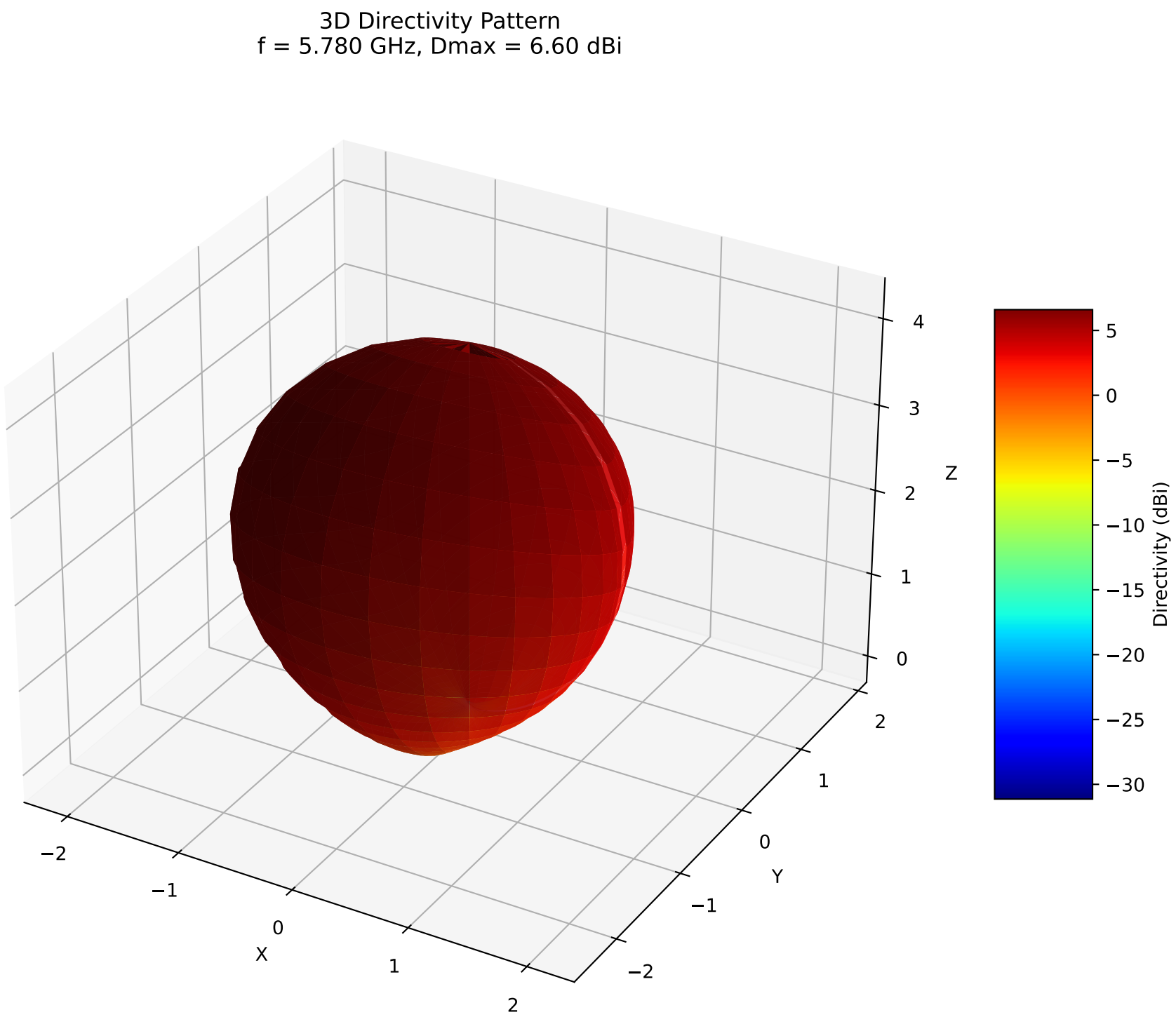

Ez snapshot (dphi=179.82deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20


Ez snapshot (dphi=179.82deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=29, 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 = 5.780 GHz — Directivity (dB)
Dmax (integrated) ≈ 6.60 dB, nf2ff Dmax = 6.60 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
−25
−30
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.780 GHz — Directivity (linear). Dmax: 4.573
0°
45°
90°
135°
180°
225°
270°
315°
1
2
3
4
xz-plane
yz-plane


Frequency: 5.780 GHz
xz-plane: HPBW=78.4°
yz-plane: HPBW=102.8°
Directivity (dBi)
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=78.4°
yz BW=102.8°
5
0
−5
−10
−15
−20
−25
−30
−150
−100
−50
0
50
100
150


3D Directivity Pattern
f = 5.780 GHz, Dmax = 6.60 dBi
X
Y
Z
Directivity (dBi)