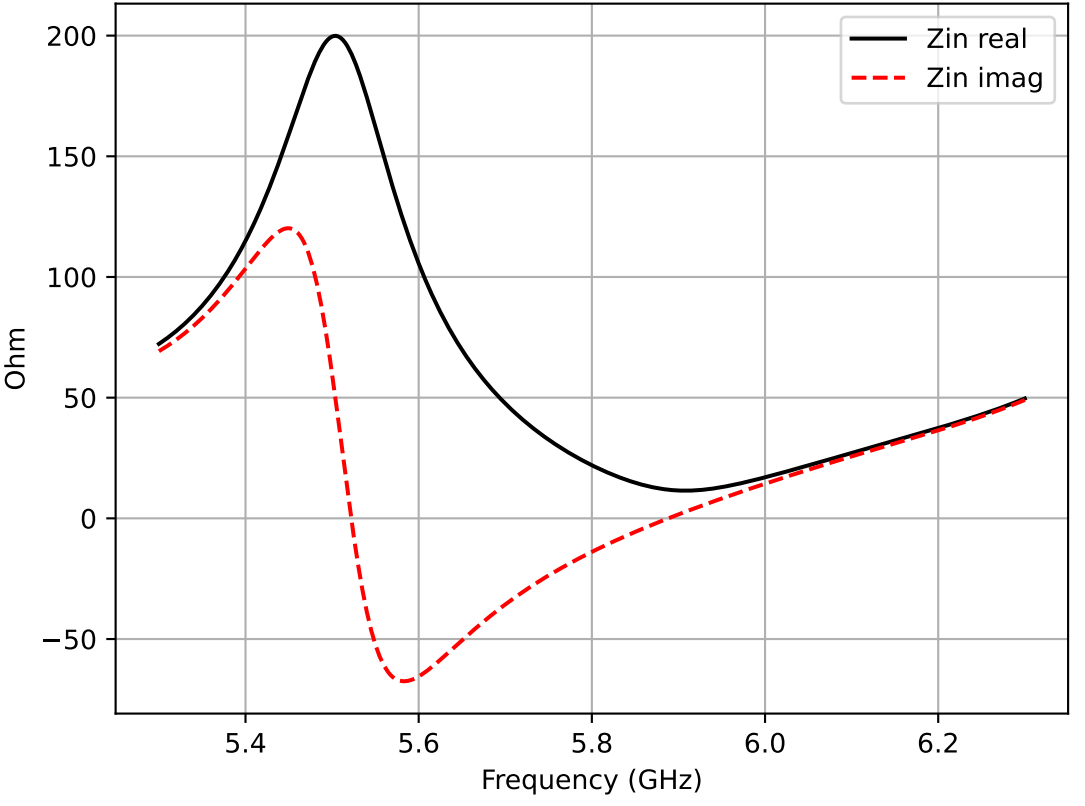
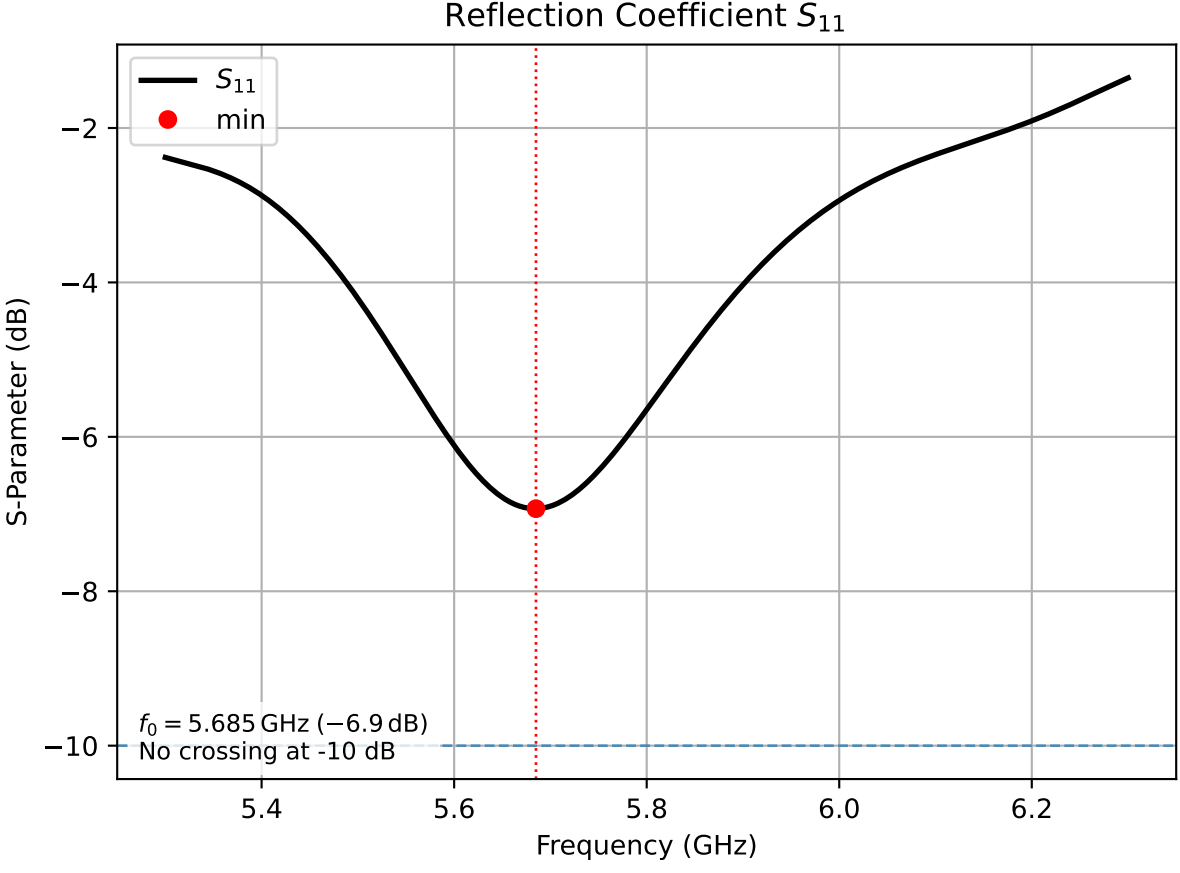
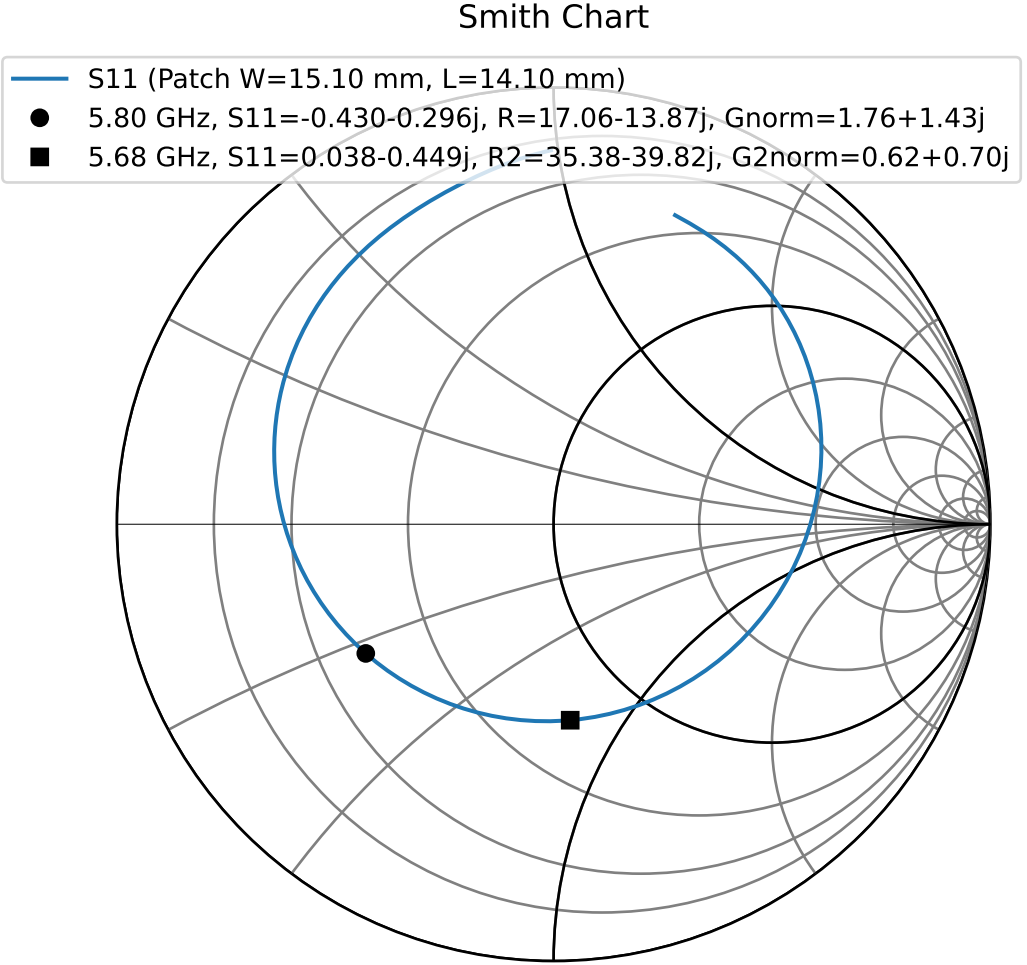
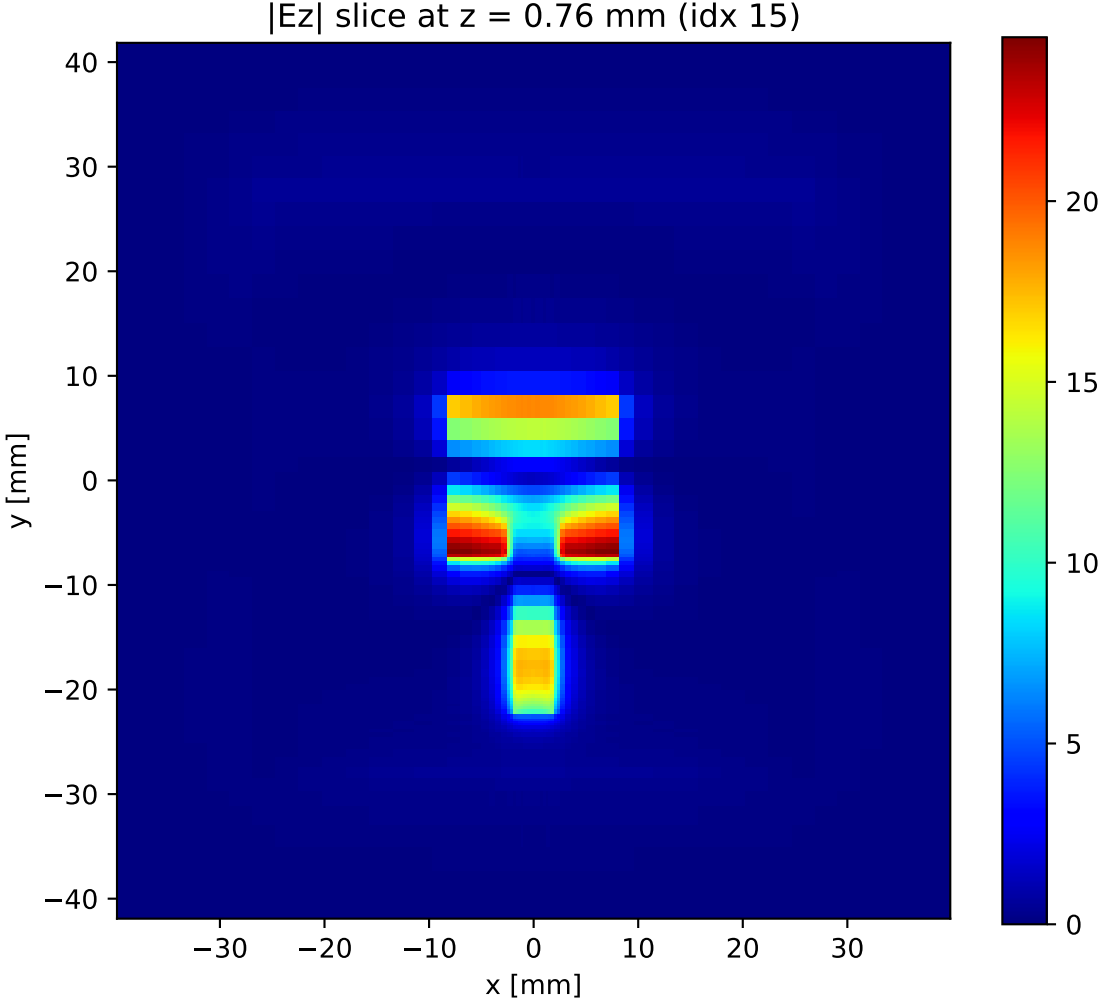
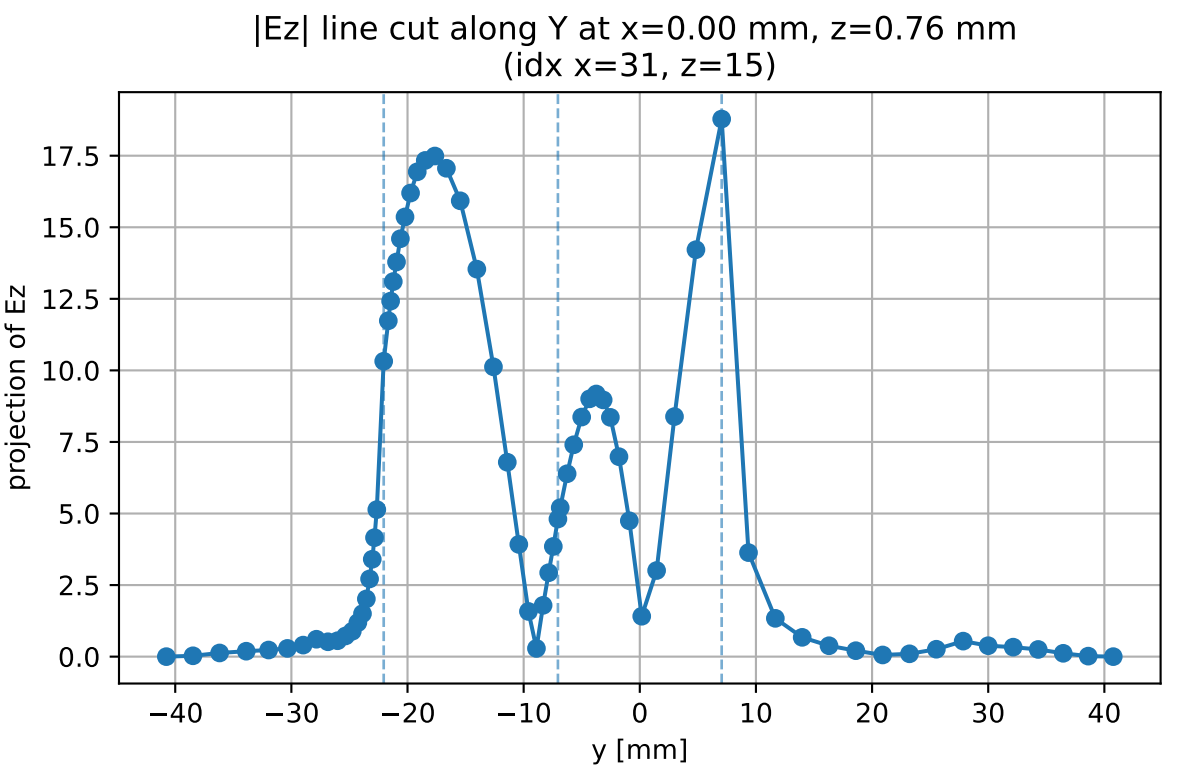
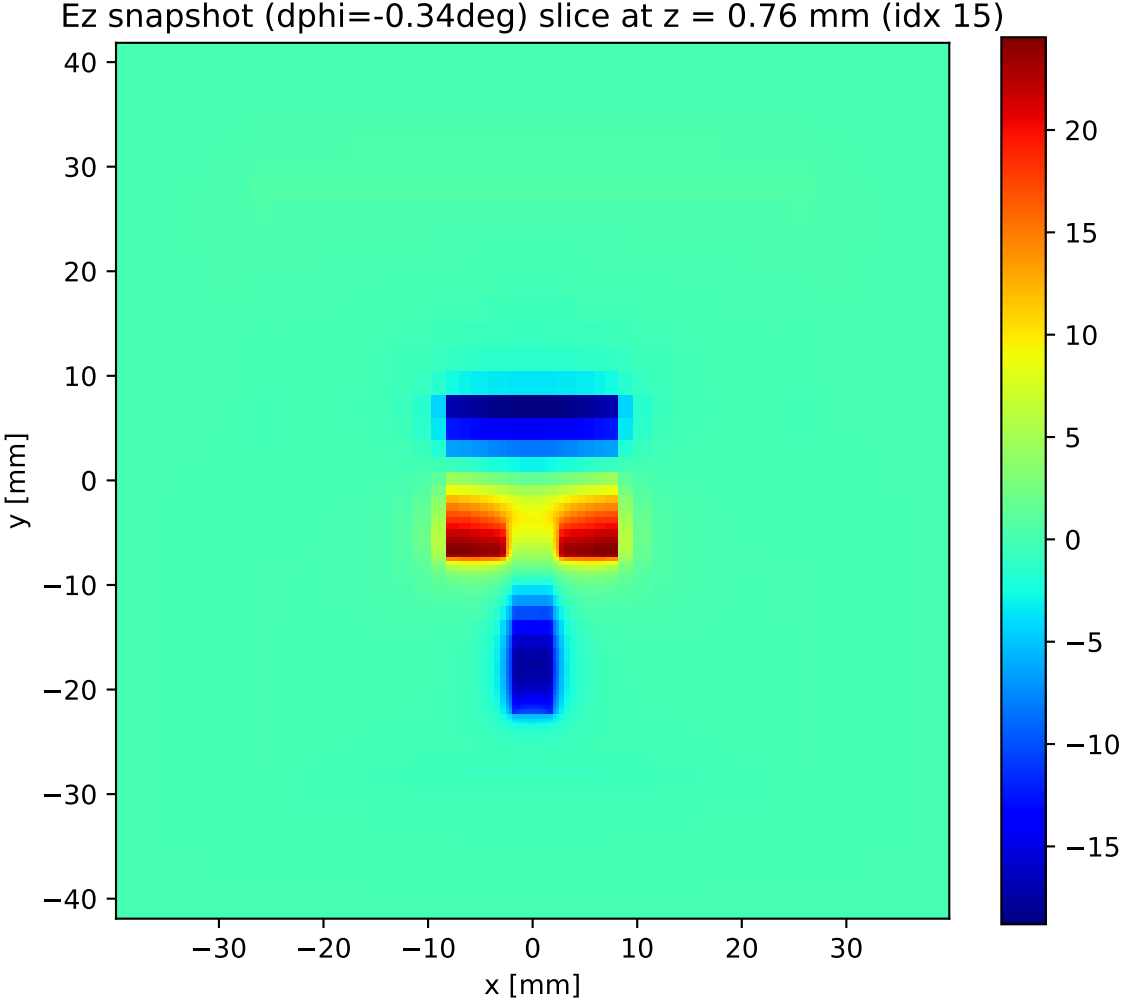

Zin real
Zin imag
200
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

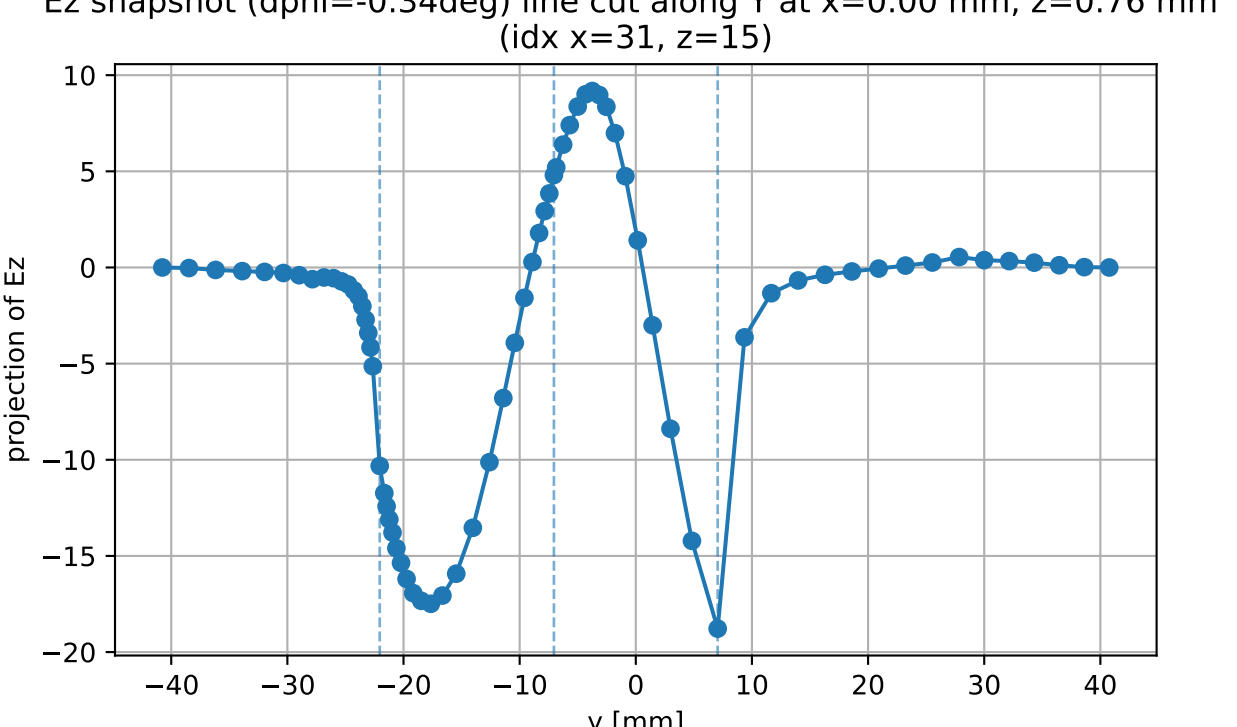

Reflection Coefficient S_{11}
S_{11}
min
−2
−4
−6
−8
−10
S-Parameter (dB)
$f_0 = 5.685\,\text{GHz}\ (-6.9\,\text{dB})$
No crossing at -10 dB
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

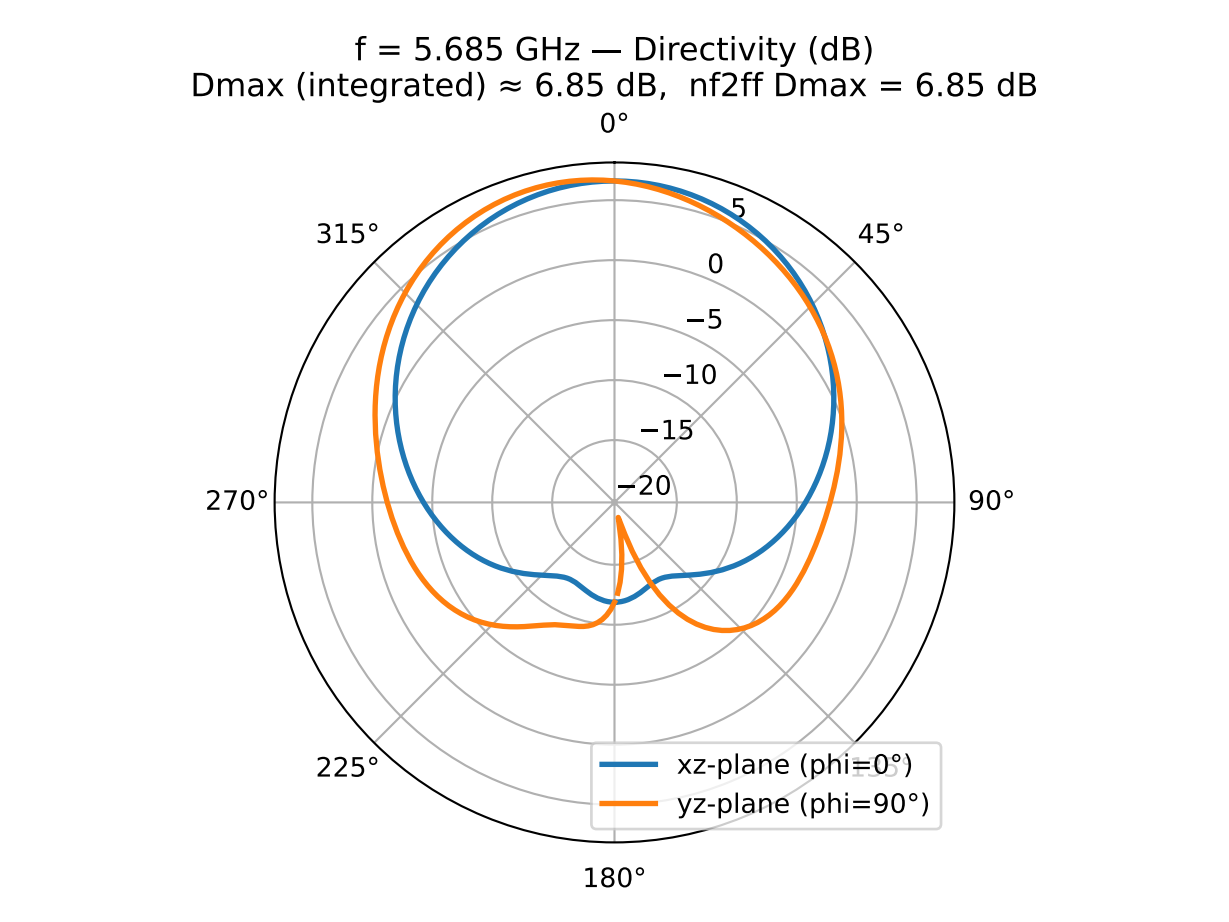

Smith Chart
S11 (Patch W=15.10 mm, L=14.10 mm)
5.80 GHz, S11=-0.430-0.296j, R=17.06-13.87j, Gnorm=1.76+1.43j
5.68 GHz, S11=0.038-0.449j, R2=35.38-39.82j, G2norm=0.62+0.70j

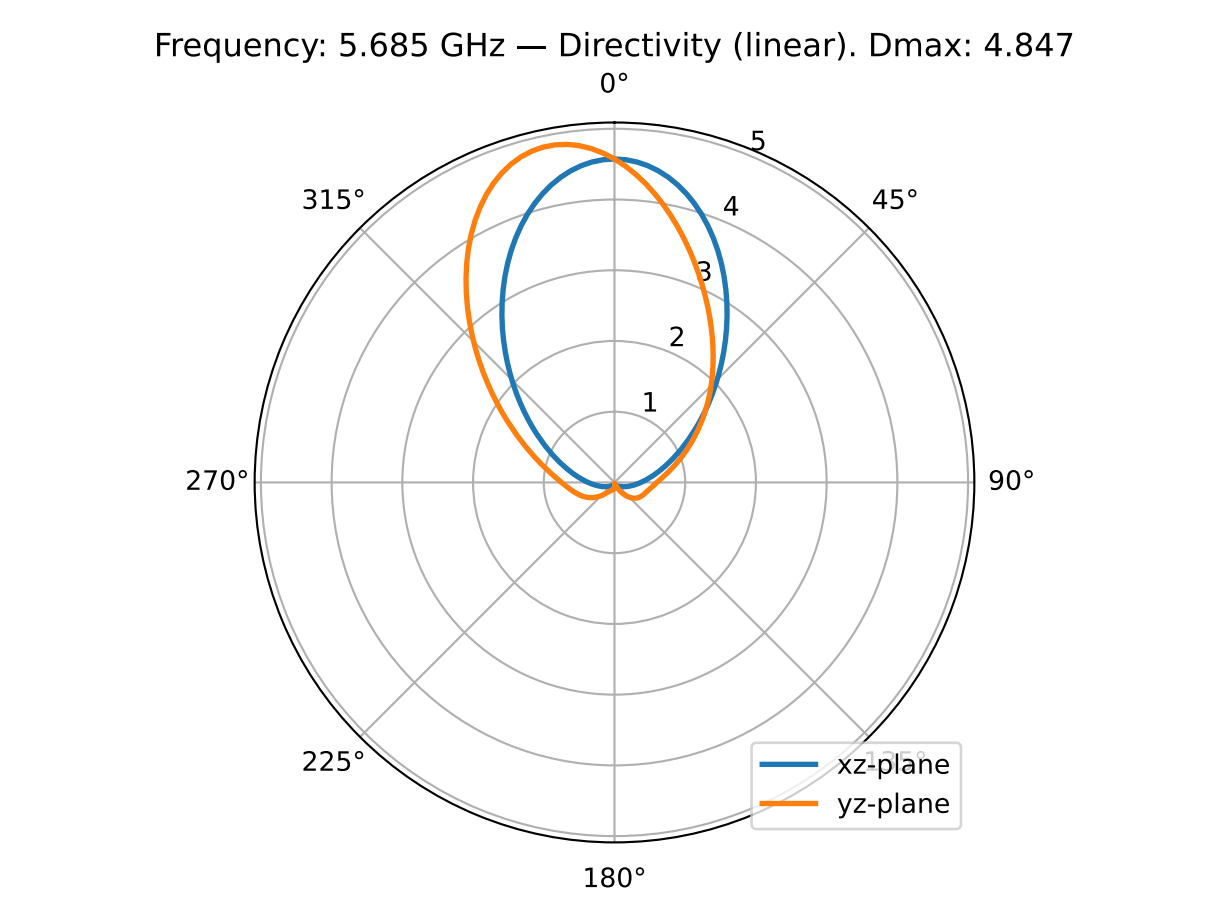

|Ez| slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
20
15
10
5
0

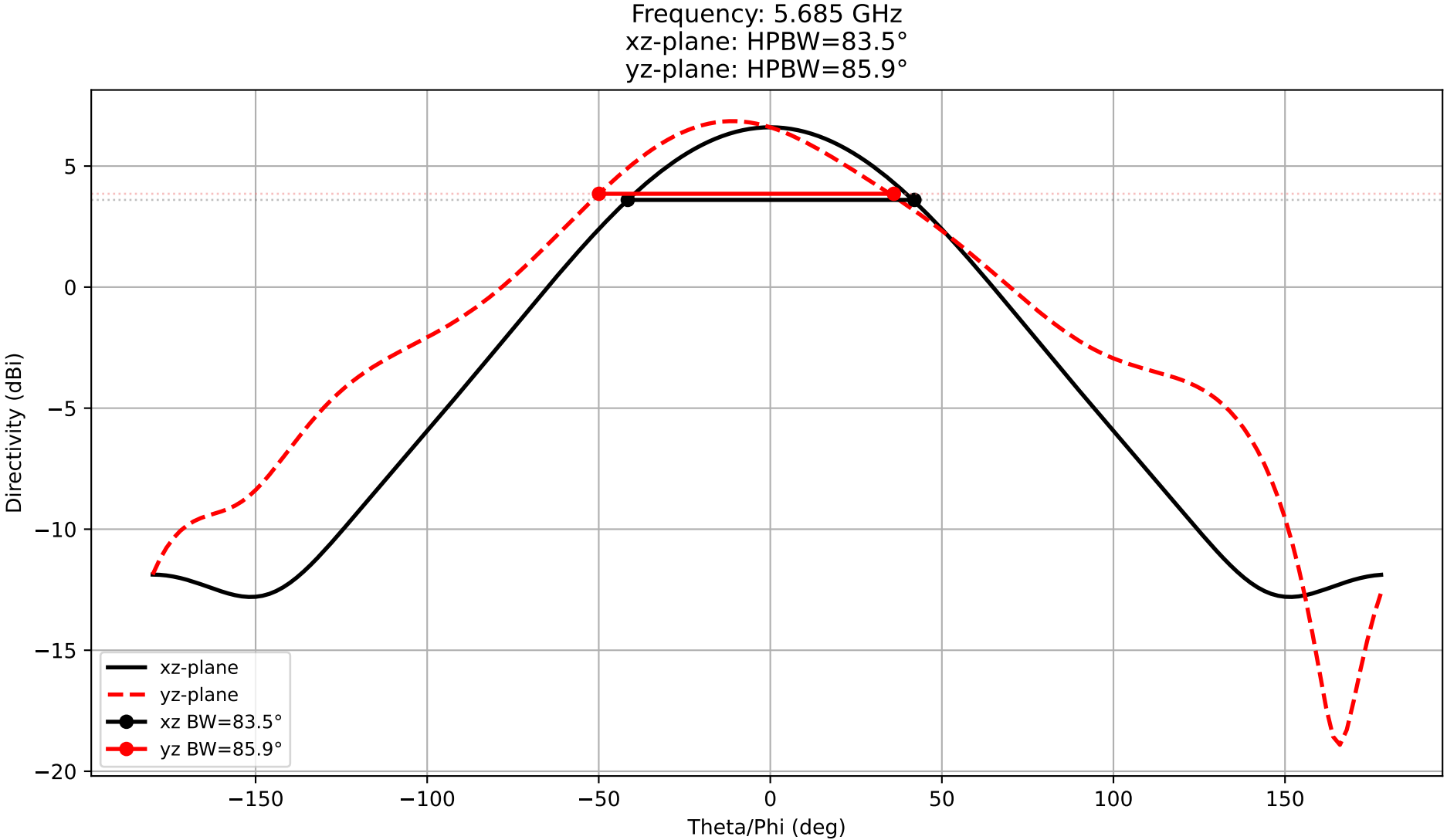

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−40
−30
−20
−10
0
10
20
30
40

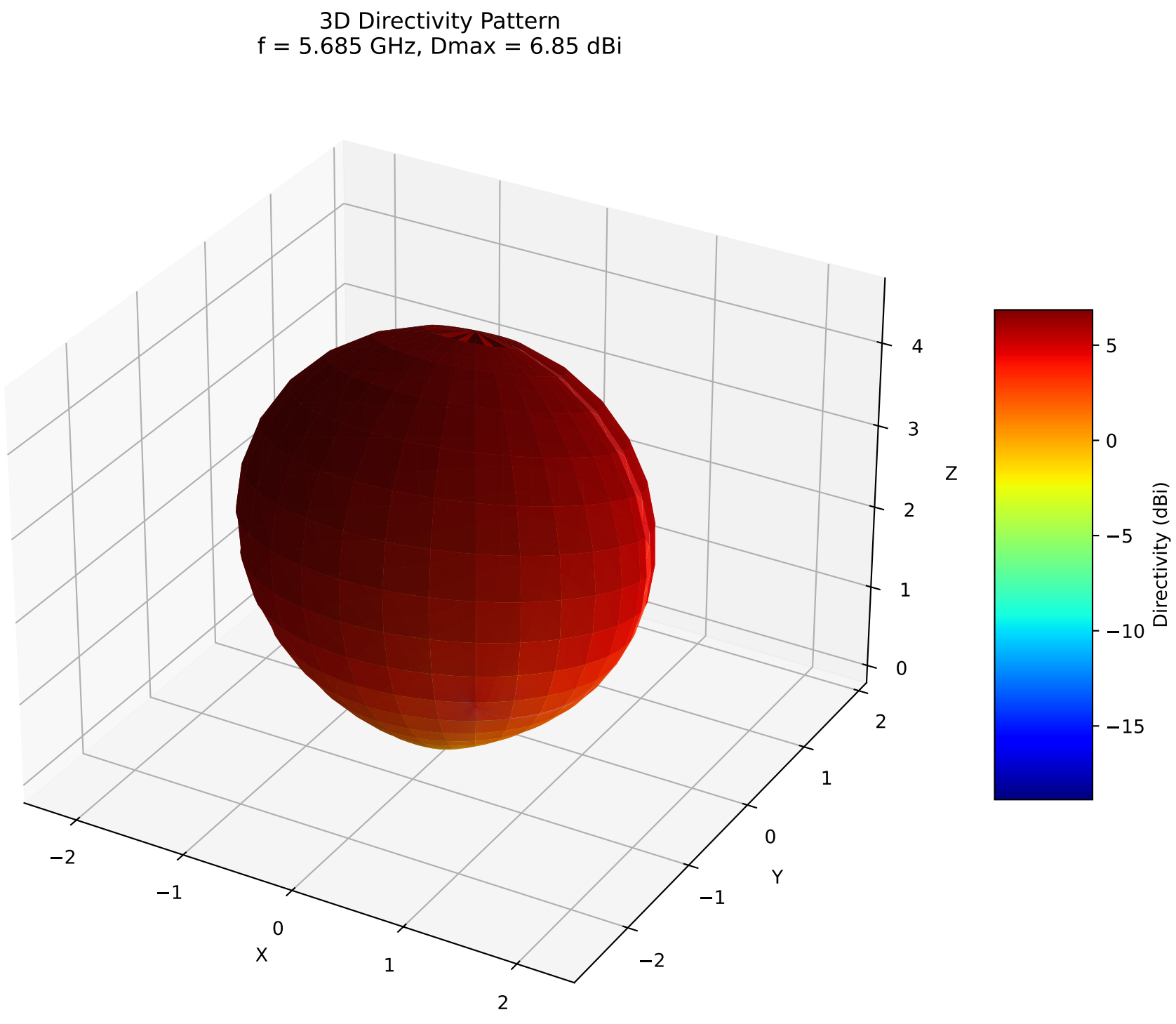

Ez snapshot (dphi=-0.34deg) slice at z = 0.76 mm (idx 15)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
20
15
10
5
0
−5
−10
−15


Ez snapshot (dphi=-0.34deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=31, z=15)
projection of Ez
y [mm]
10
5
0
−5
−10
−15
−20
−40
−30
−20
−10
0
10
20
30
40


f = 5.685 GHz — Directivity (dB)
Dmax (integrated) ≈ 6.85 dB, nf2ff Dmax = 6.85 dB
0°
45°
90°
225°
180°
270°
315°
5
0
−5
−10
−15
−20
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.685 GHz — Directivity (linear). Dmax: 4.847
0°
45°
90°
135°
180°
225°
270°
315°
1
2
3
4
5
xz-plane
yz-plane


Frequency: 5.685 GHz
xz-plane: HPBW=83.5°
yz-plane: HPBW=85.9°
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=85.9°


3D Directivity Pattern
f = 5.685 GHz, Dmax = 6.85 dBi
X
Y
Z
Directivity (dBi)
−2
−1
0
1
2
3
4
5
−5
−10
−15