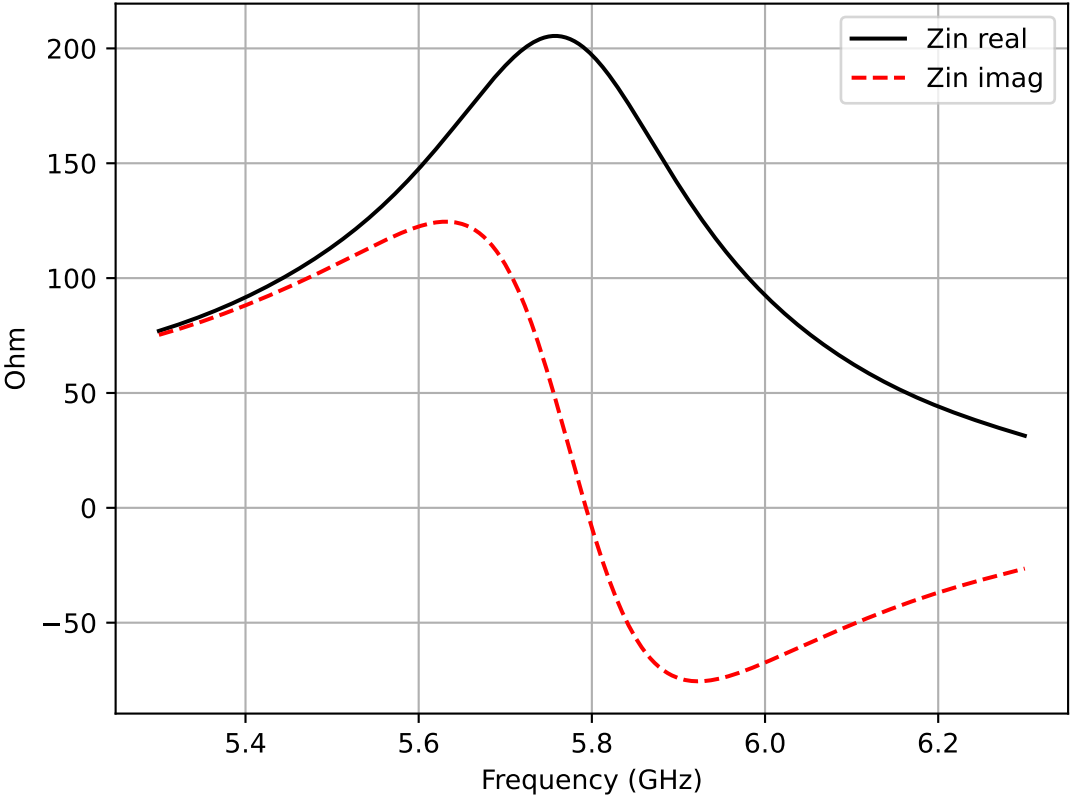
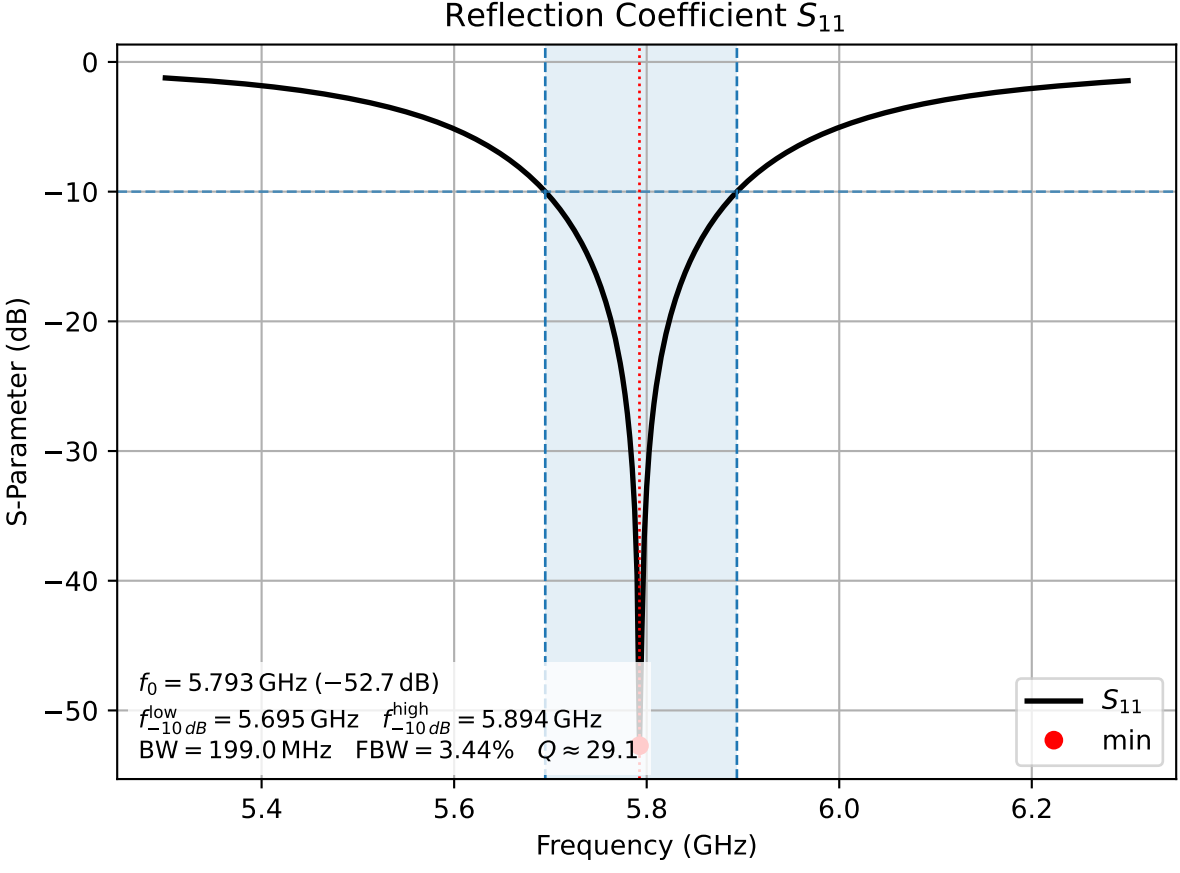
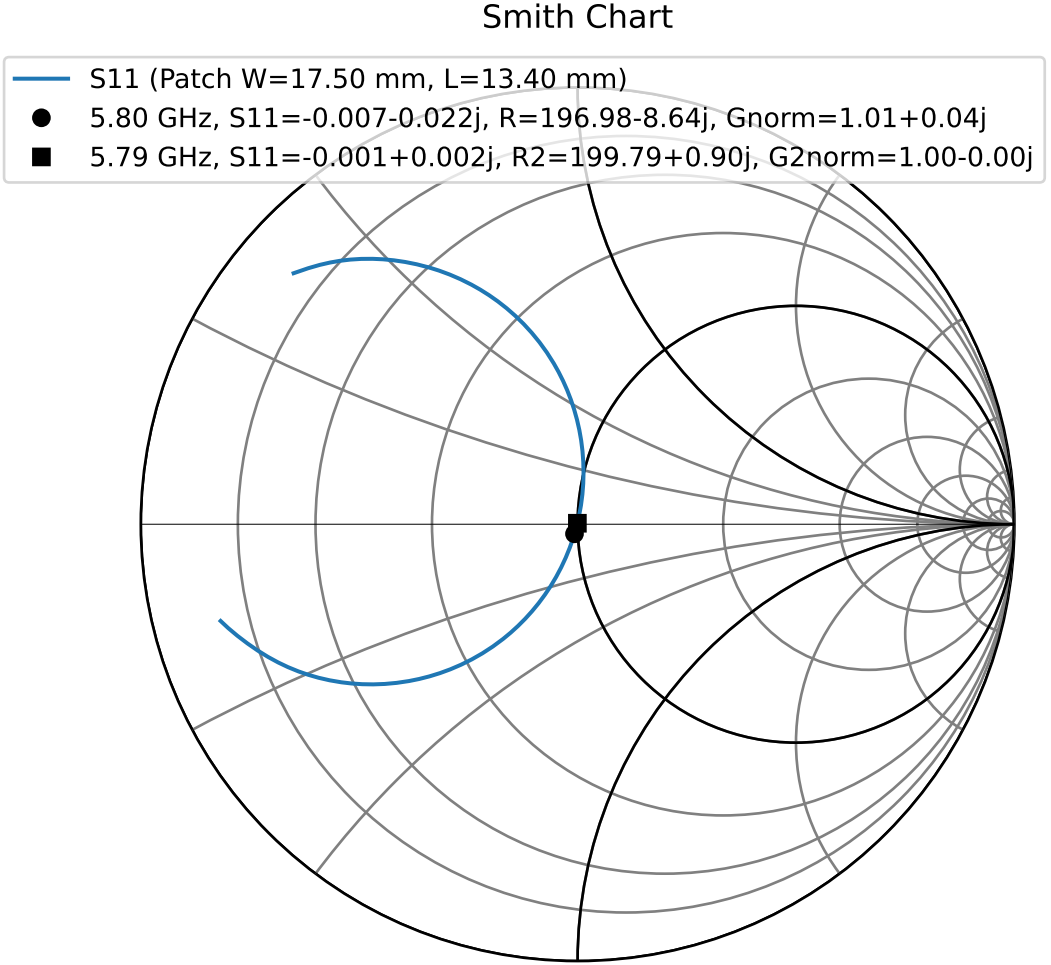
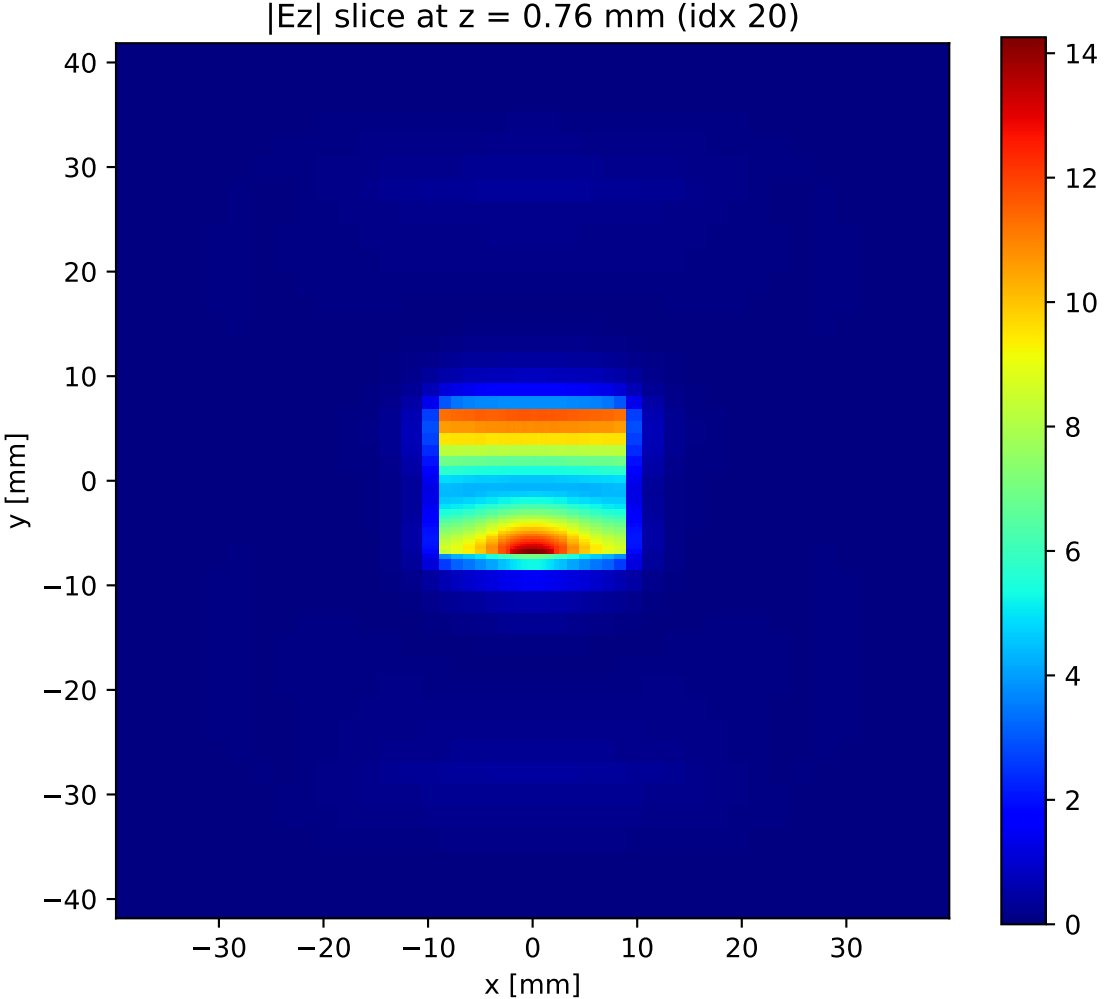
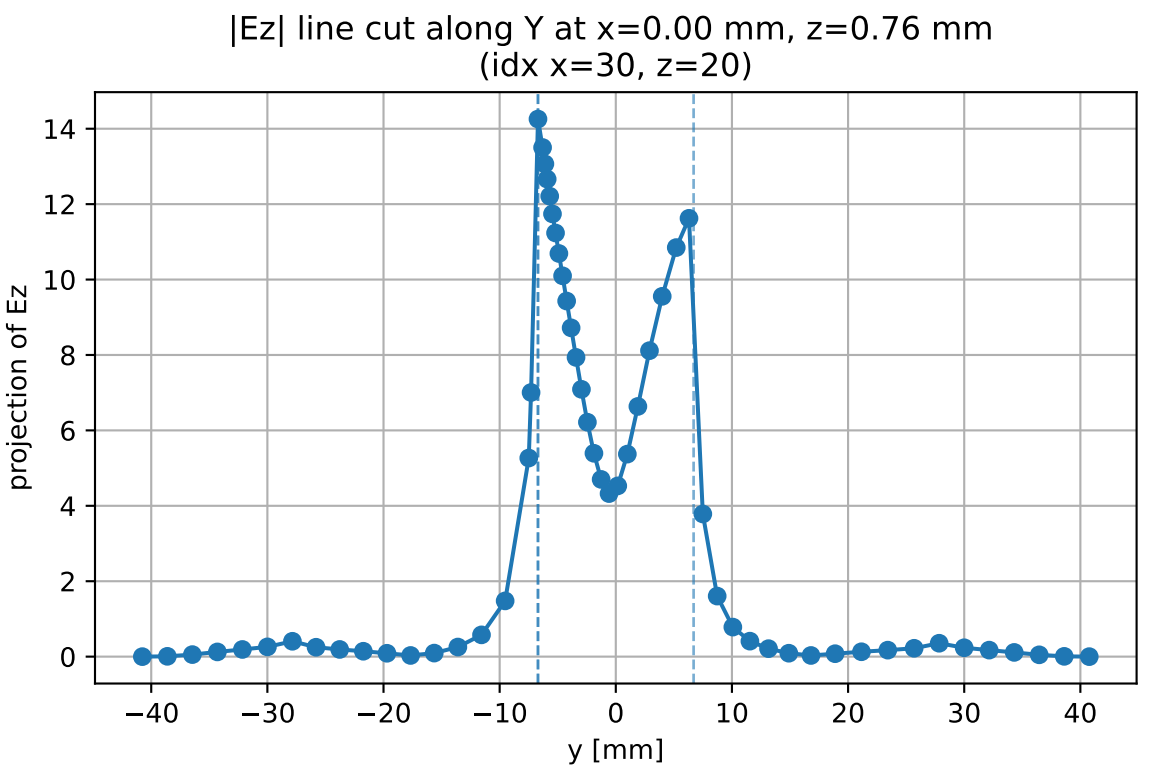
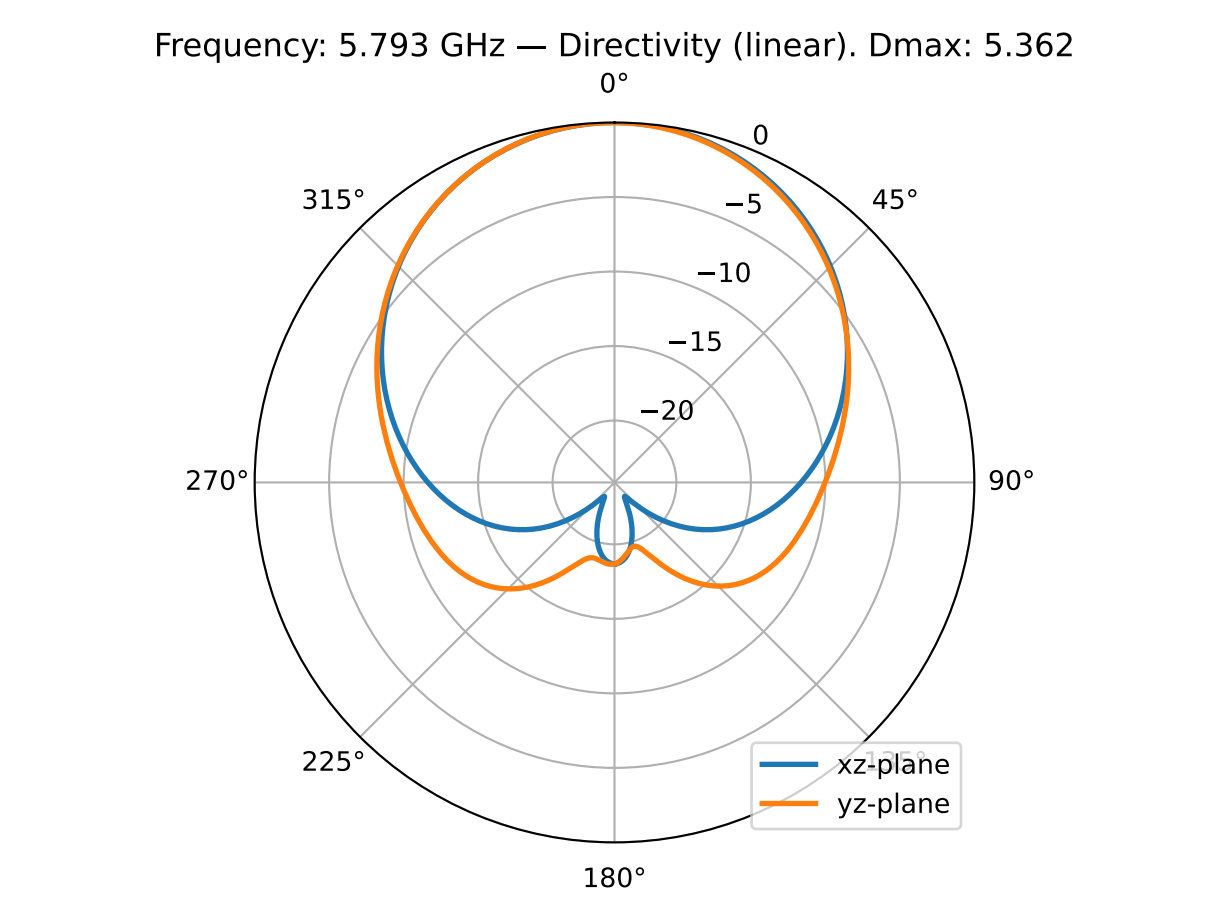

Zin real
Zin imag
200
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

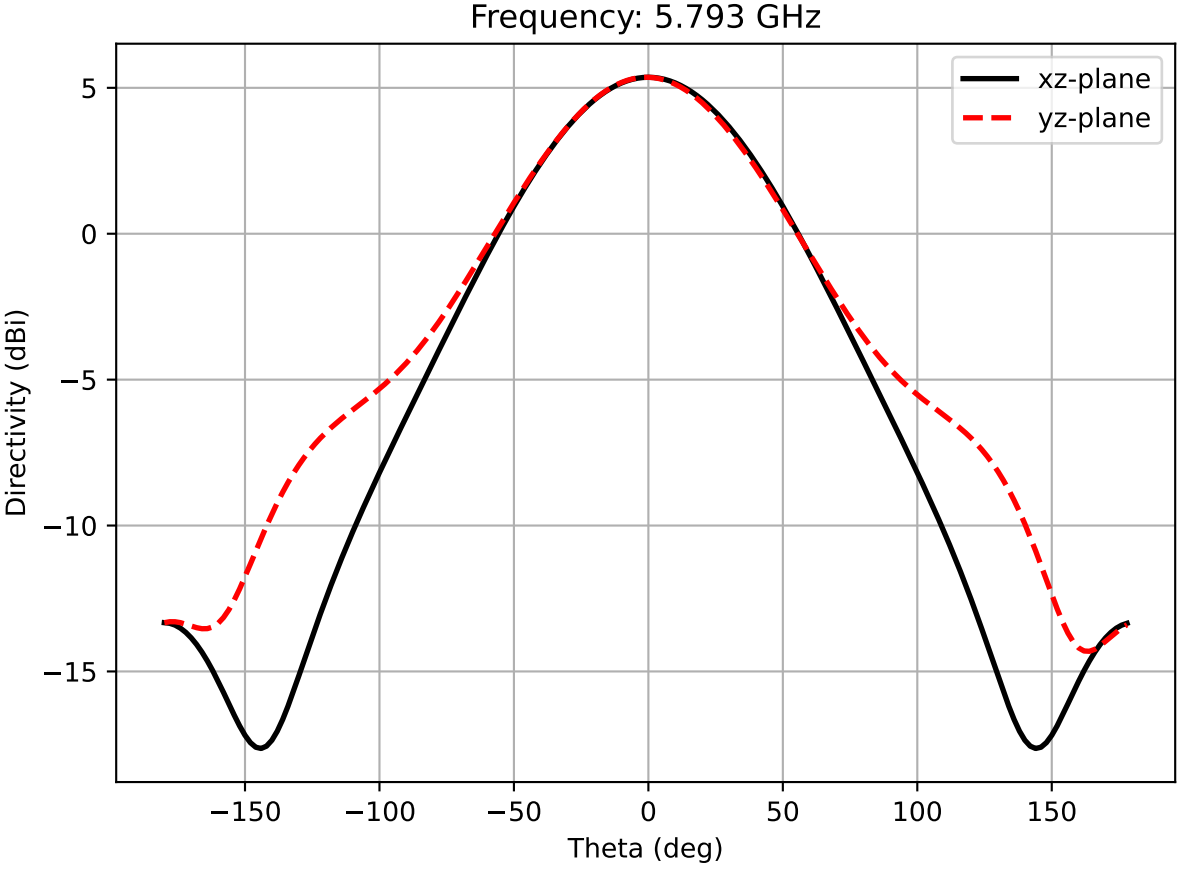

Reflection Coefficient S_{11}
S-Parameter (dB)
Frequency (GHz)
0
−10
−20
−30
−40
−50
5.4
5.6
5.8
6.0
6.2
$f_0 = 5.793\,\text{GHz}\ (-52.7\,\text{dB})$
$f_{-10\,dB}^{\text{low}} = 5.695\,\text{GHz}$ $f_{-10\,dB}^{\text{high}} = 5.894\,\text{GHz}$
$\text{BW} = 199.0\,\text{MHz}$ $\text{FBW} = 3.44\%$ $Q \approx 29.1$
S_{11}
min


Smith Chart
S11 (Patch W=17.50 mm, L=13.40 mm)
5.80 GHz, S11=-0.007-0.022j, R=196.98-8.64j, Gnorm=1.01+0.04j
5.79 GHz, S11=-0.001+0.002j, R2=199.79+0.90j, G2norm=1.00-0.00j


|Ez| slice at z = 0.76 mm (idx 20)
y [mm]
x [mm]
40
30
20
10
0
−10
−20
−30
−40
−30
−20
−10
0
10
20
30
14
12
10
8
6
4
2
0


|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=30, z=20)
projection of Ez
y [mm]
14
12
10
8
6
4
2
0
−40
−30
−20
−10
0
10
20
30
40


Frequency: 5.793 GHz — Directivity (linear). Dmax: 5.362
0°
45°
90°
135°
180°
225°
270°
315°
0
−5
−10
−15
−20
xz-plane
yz-plane


Frequency: 5.793 GHz
xz-plane
yz-plane
Directivity (dBi)
5
0
−5
−10
−15
−150
−100
−50
0
50
100
150
Theta (deg)