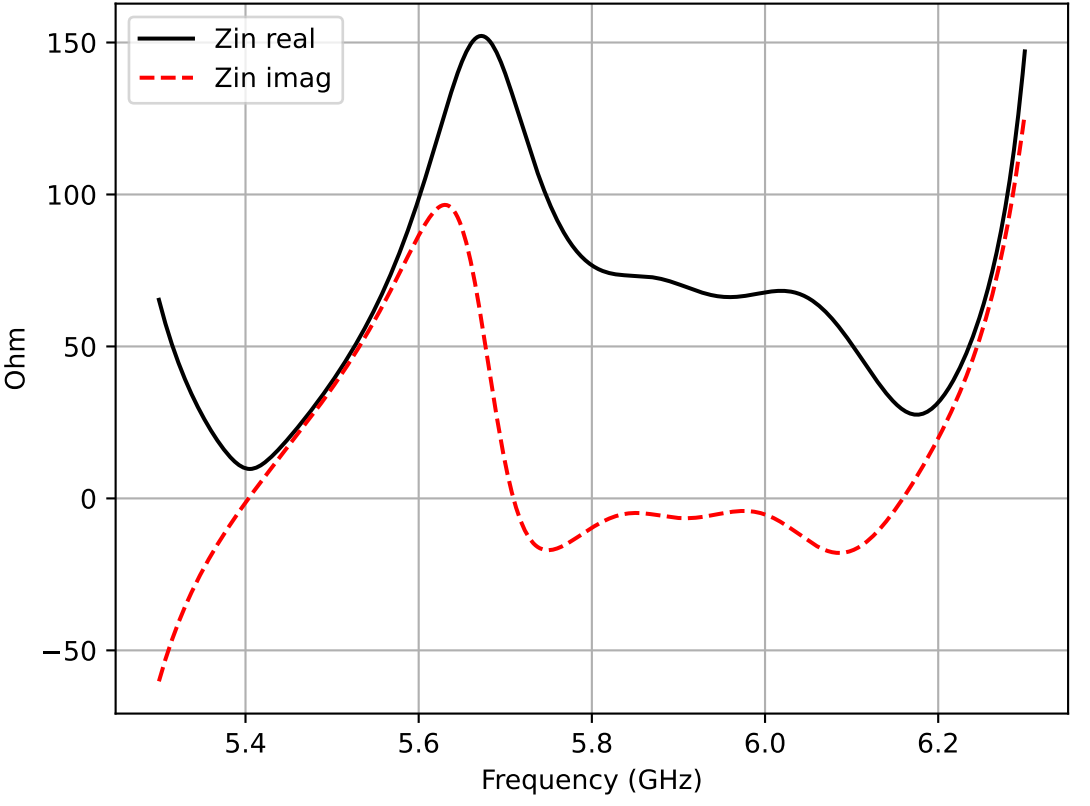
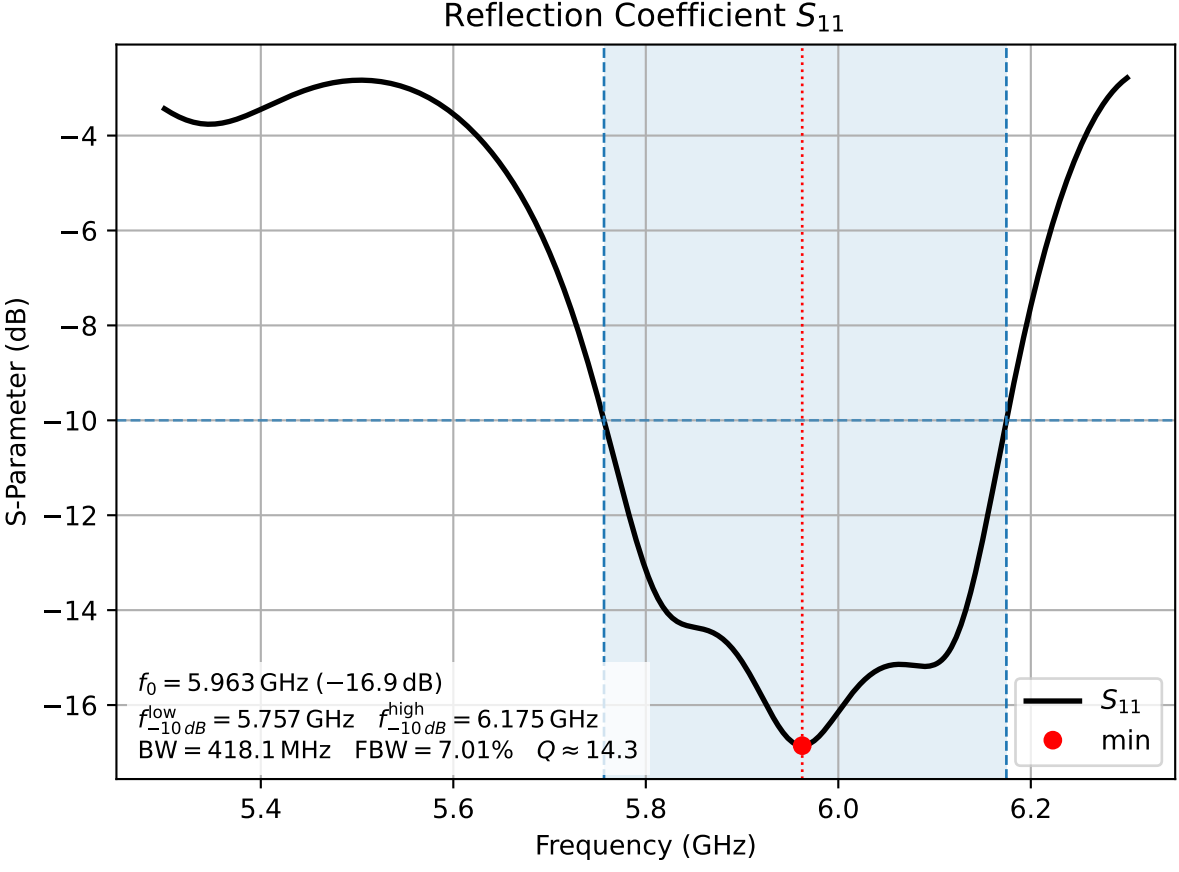
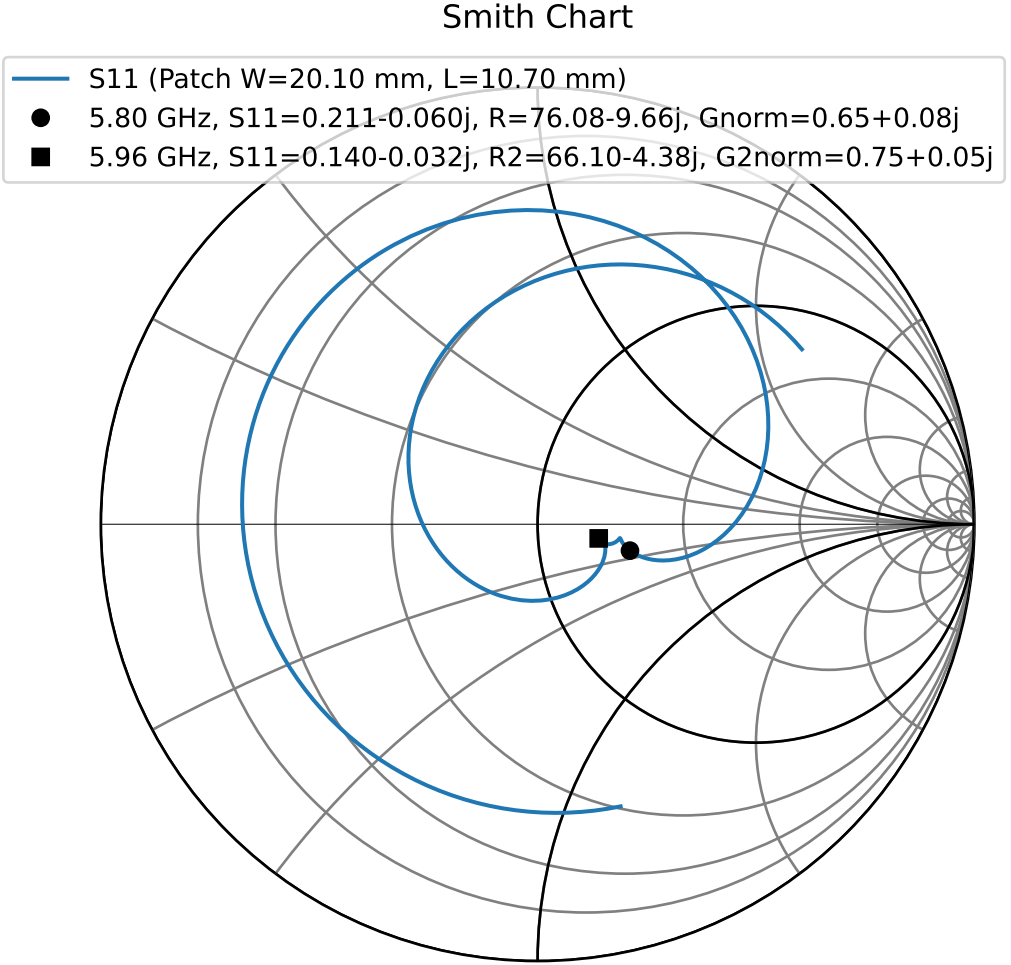
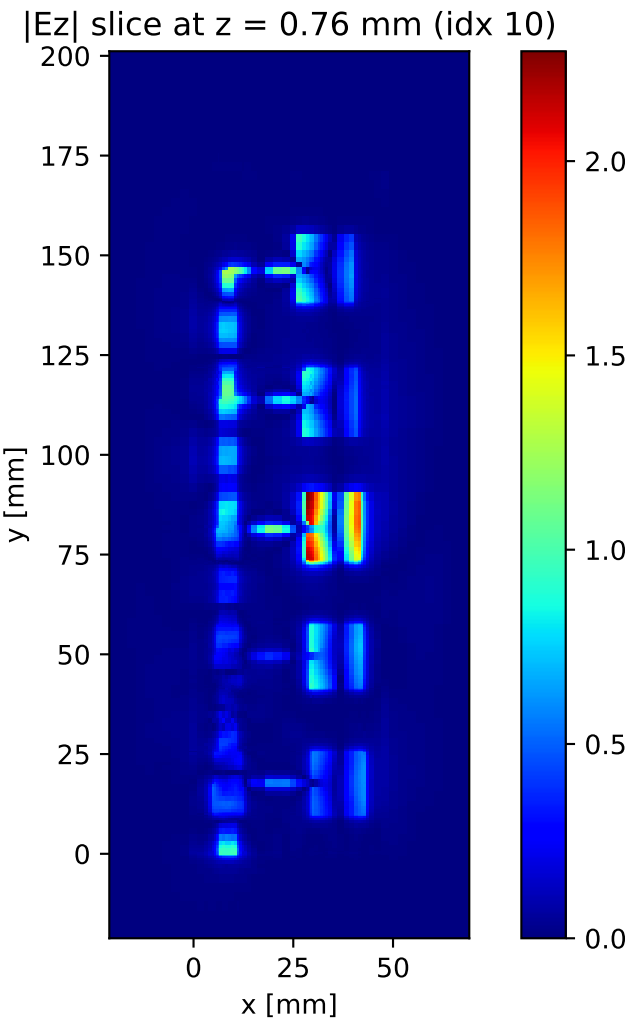
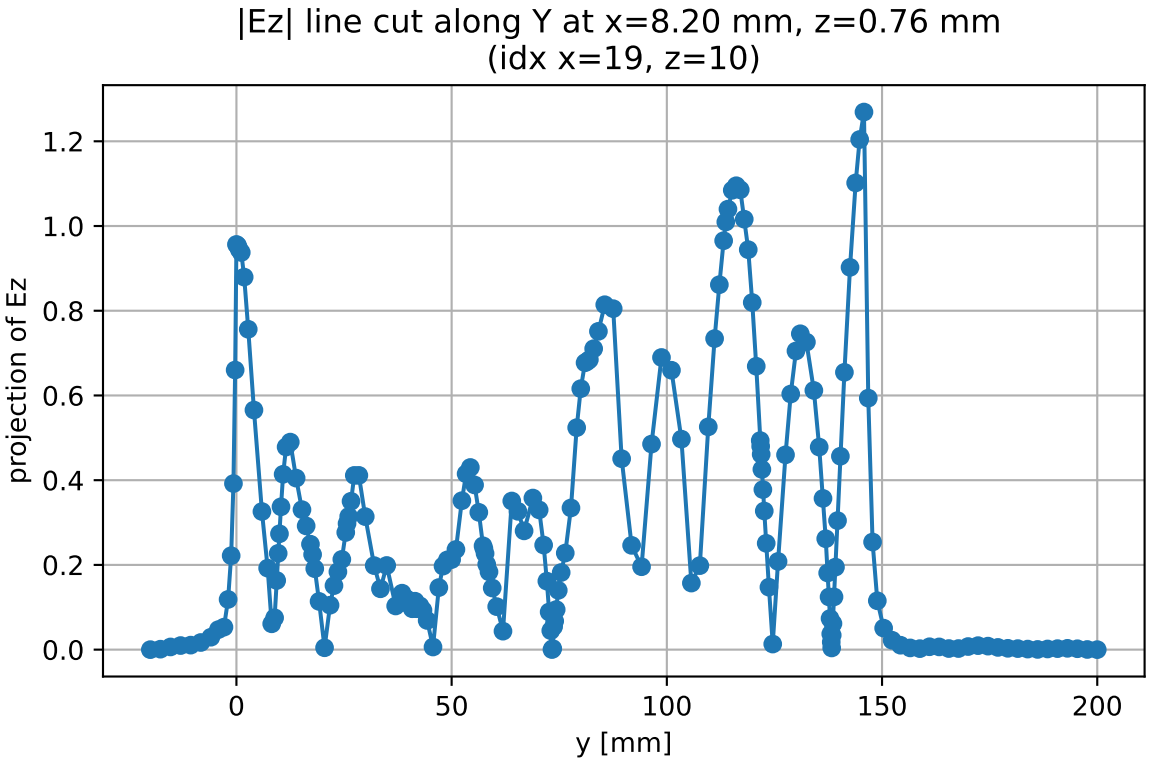
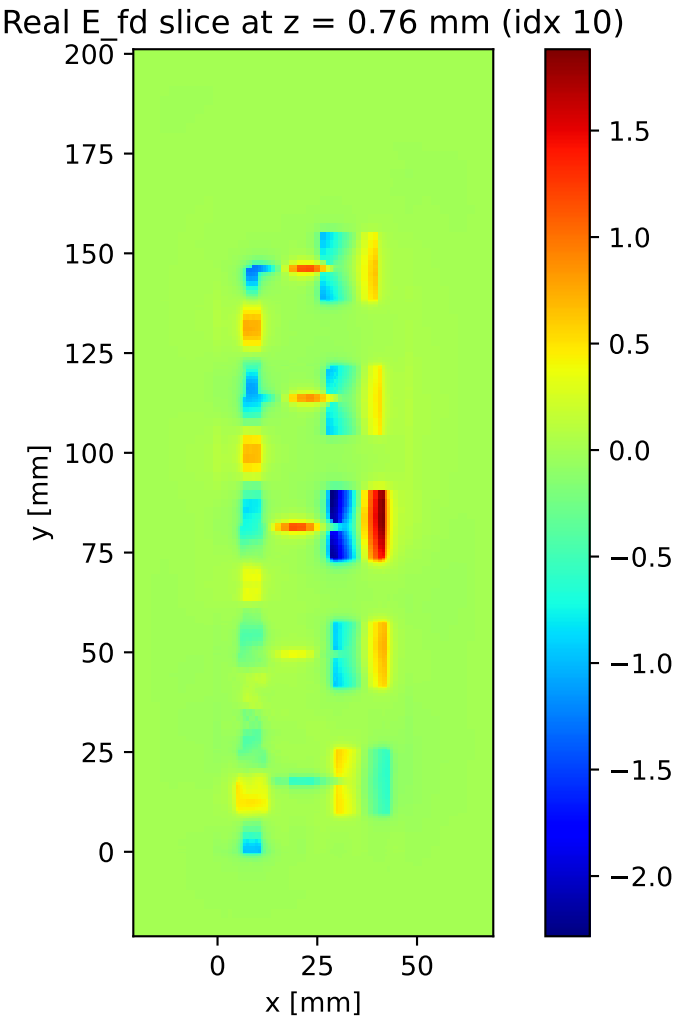

Zin real
Zin imag
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

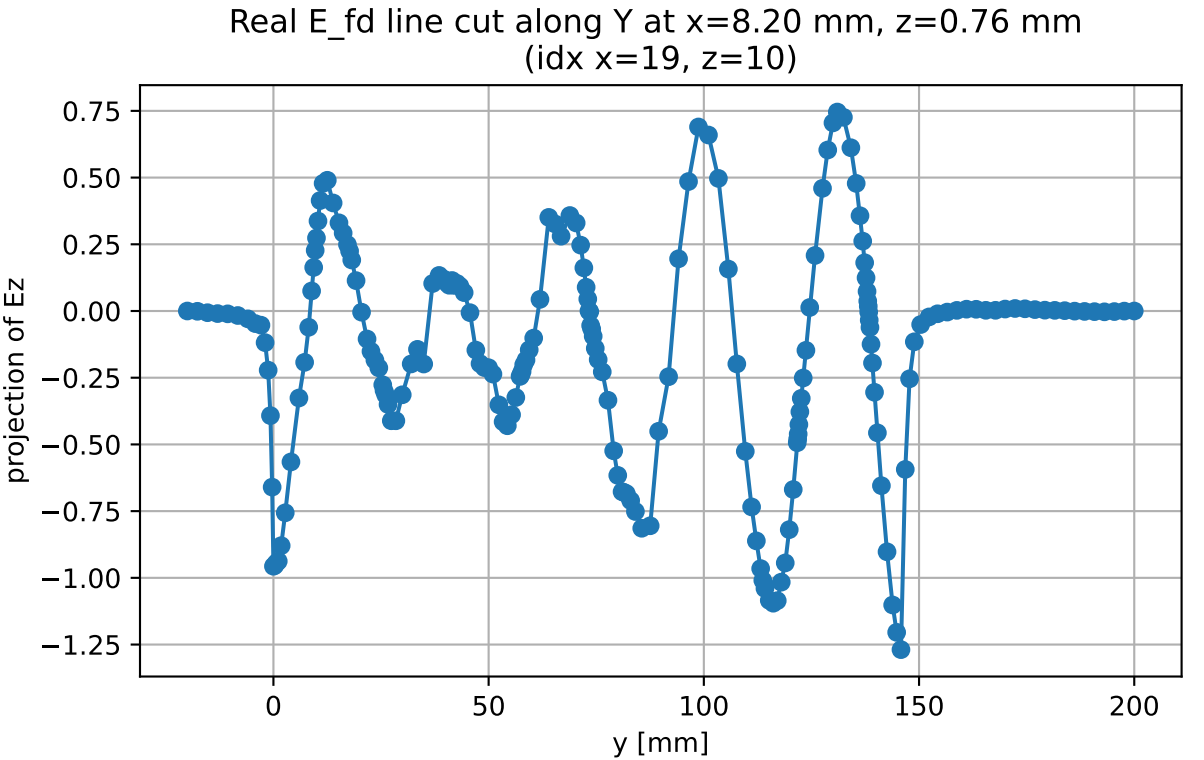

Reflection Coefficient S_{11}
S-Parameter (dB)
−4
−6
−8
−10
−12
−14
−16
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 5.963\,\text{GHz}\ (-16.9\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 5.757\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 6.175\,\text{GHz}$
$\text{BW} = 418.1\,\text{MHz}$ $\text{FBW} = 7.01\%$ $Q \approx 14.3$
S_{11}
min

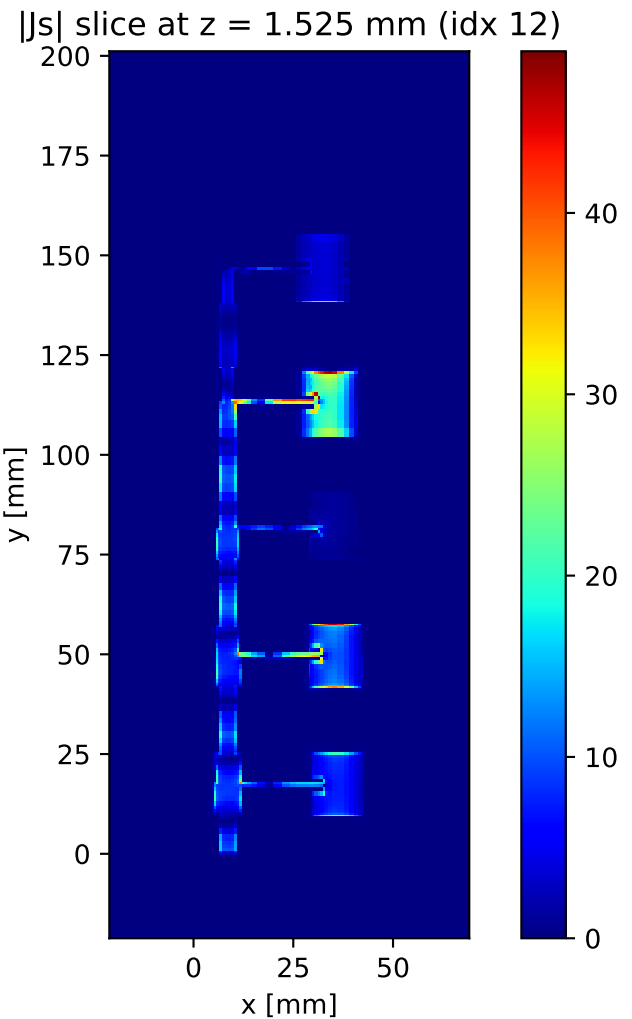

Smith Chart
S11 (Patch W=20.10 mm, L=10.70 mm)
5.80 GHz, S11=0.211-0.060j, R=76.08-9.66j, Gnorm=0.65+0.08j
5.96 GHz, S11=0.140-0.032j, R2=66.10-4.38j, G2norm=0.75+0.05j

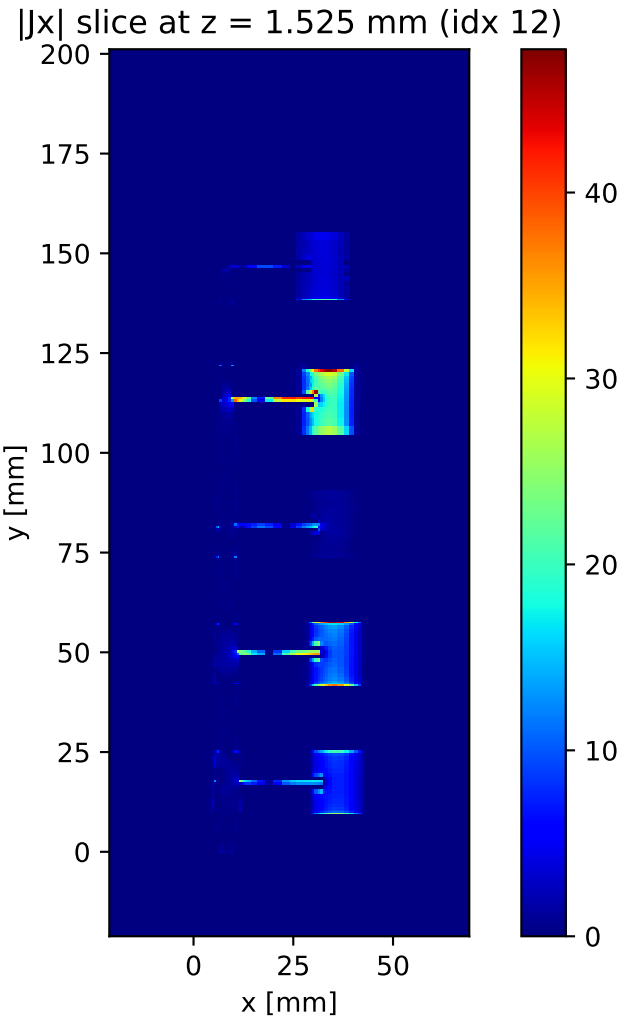

|Ez| slice at z = 0.76 mm (idx 10)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
2.0
1.5
1.0
0.5
0.0

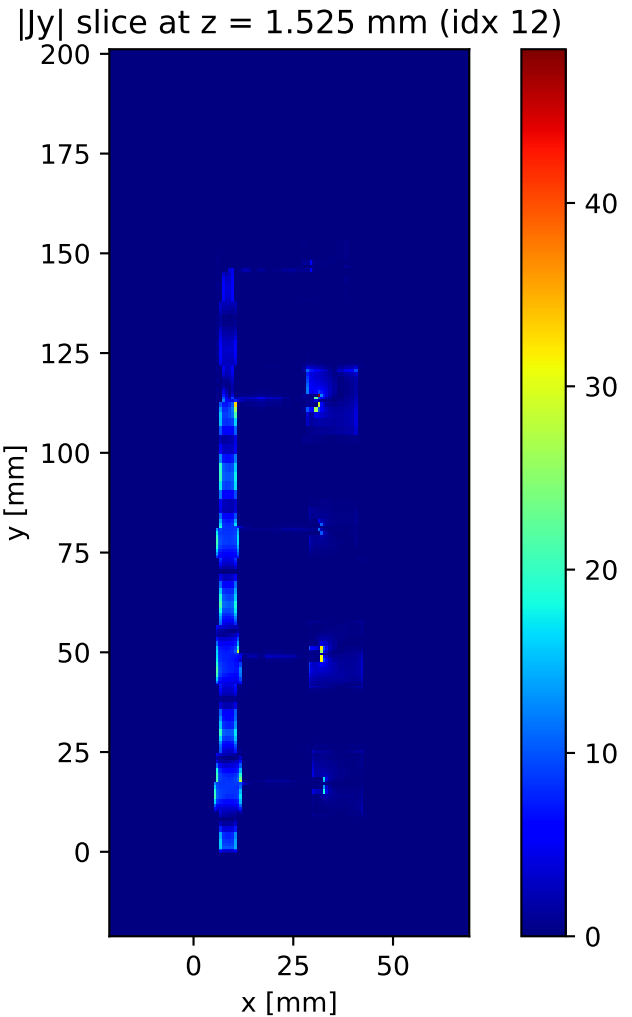

|Ez| line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
y [mm]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
200

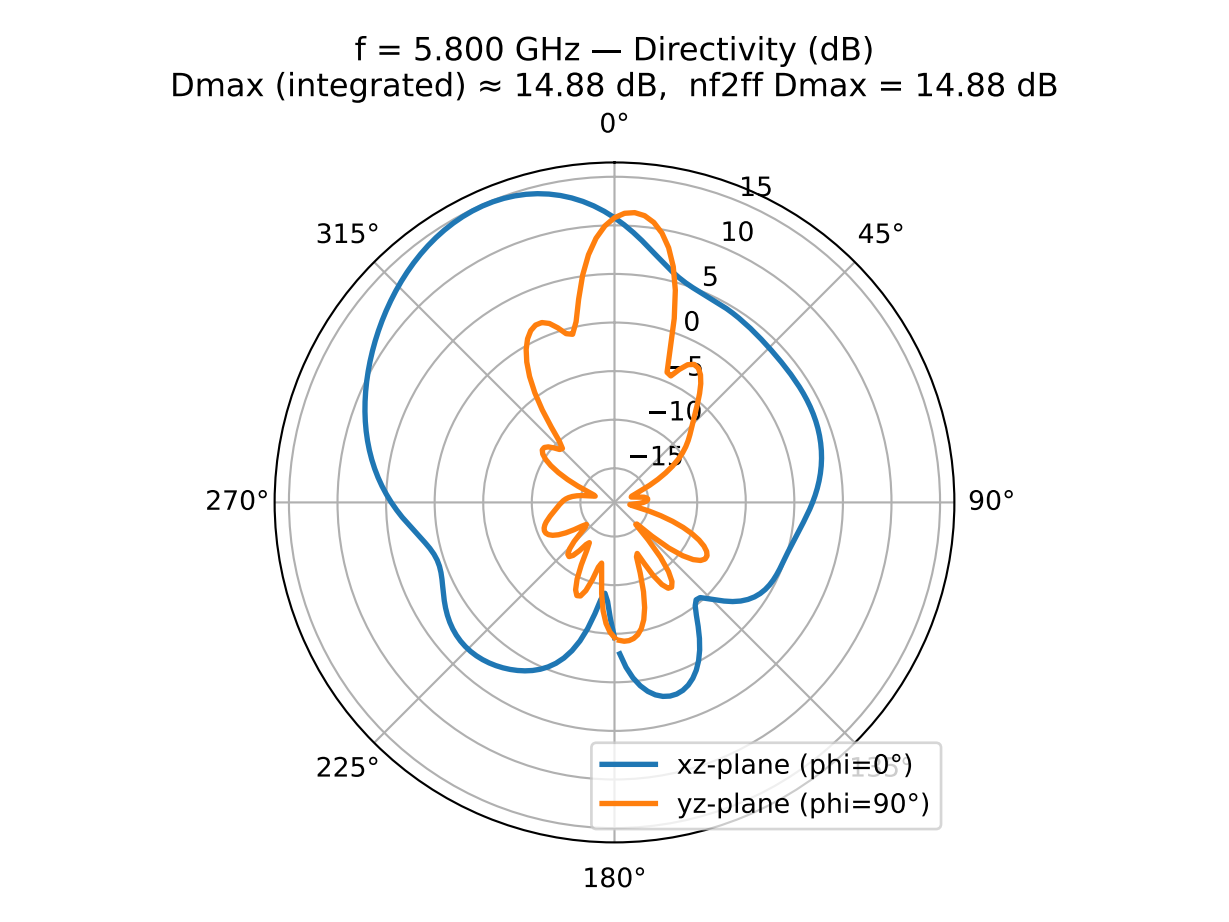

Real E_fd slice at z = 0.76 mm (idx 10)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0

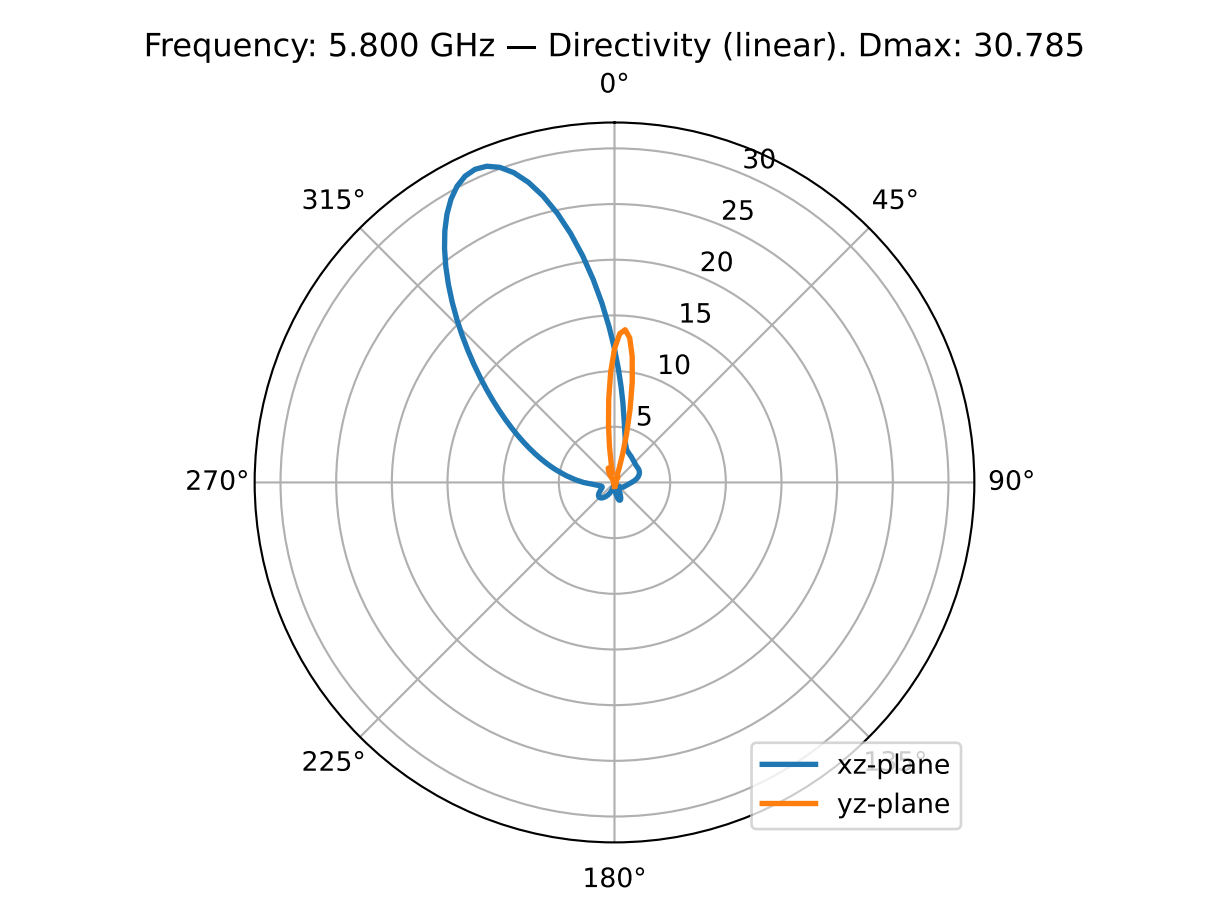

Real E_fd line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
y [mm]
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
0
50
100
150
200

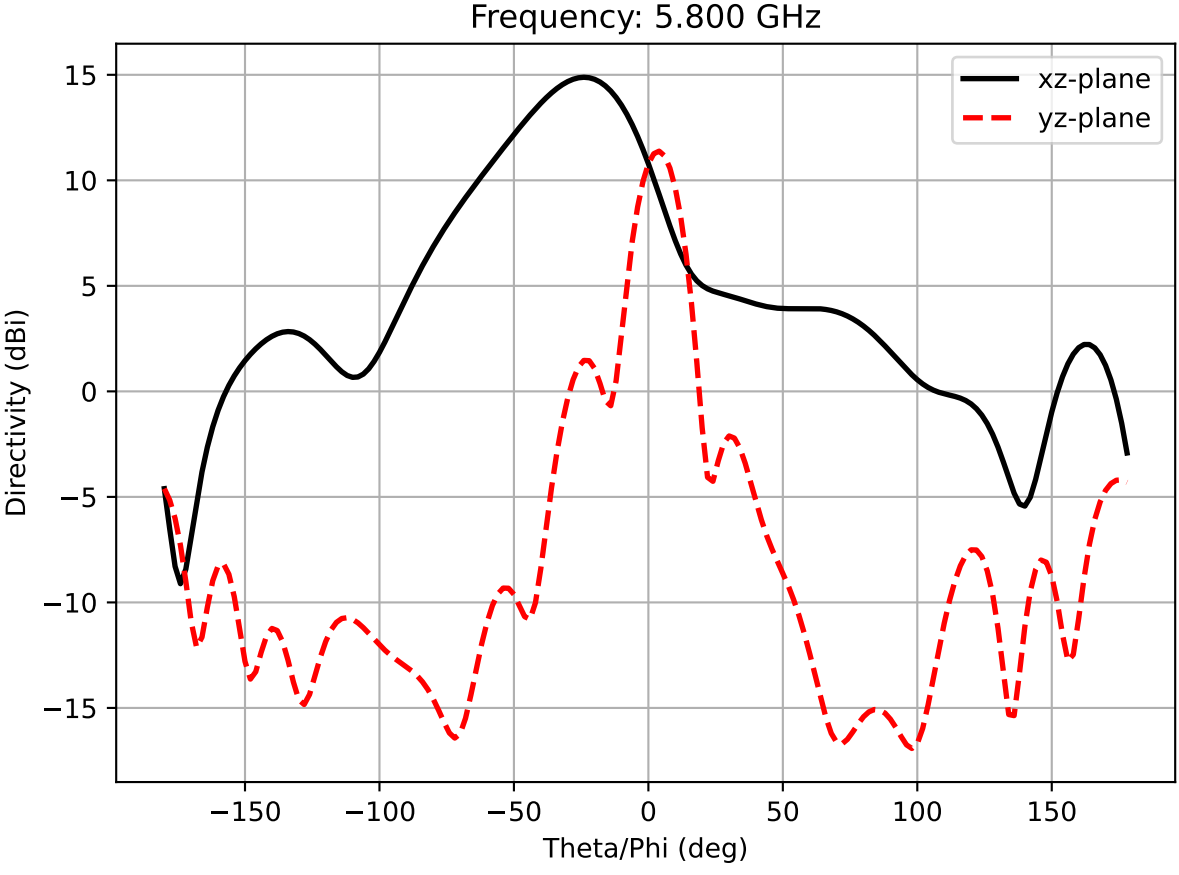

|Js| slice at z = 1.525 mm (idx 12)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
40
30
20
10
0

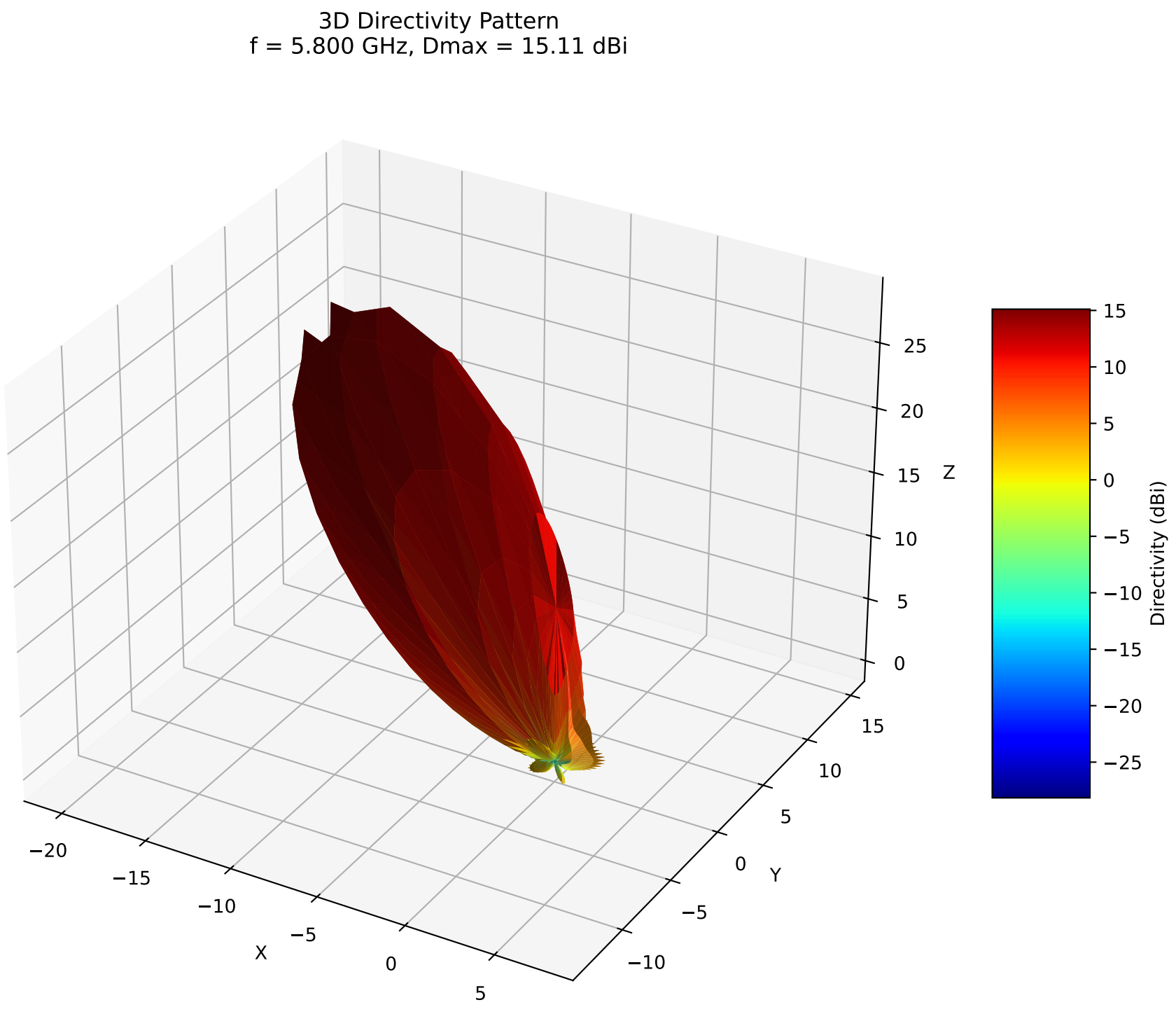

|Jx| slice at z = 1.525 mm (idx 12)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
40
30
20
10
0


|Jy| slice at z = 1.525 mm (idx 12)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
40
30
20
10
0


f = 5.800 GHz — Directivity (dB)
Dmax (integrated) ≈ 14.88 dB, nf2ff Dmax = 14.88 dB
0°
45°
90°
180°
225°
270°
315°
15
10
5
0
−5
−10
−15
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.800 GHz — Directivity (linear). Dmax: 30.785
0°
45°
90°
180°
225°
270°
315°
30
25
20
15
10
5
xz-plane
yz-plane


Frequency: 5.800 GHz
xz-plane
yz-plane
Directivity (dBi)
15
10
5
0
−5
−10
−15
−150
−100
−50
0
50
100
150
Theta/Phi (deg)


3D Directivity Pattern
f = 5.800 GHz, Dmax = 15.11 dBi
X
Y
Z
Directivity (dBi)