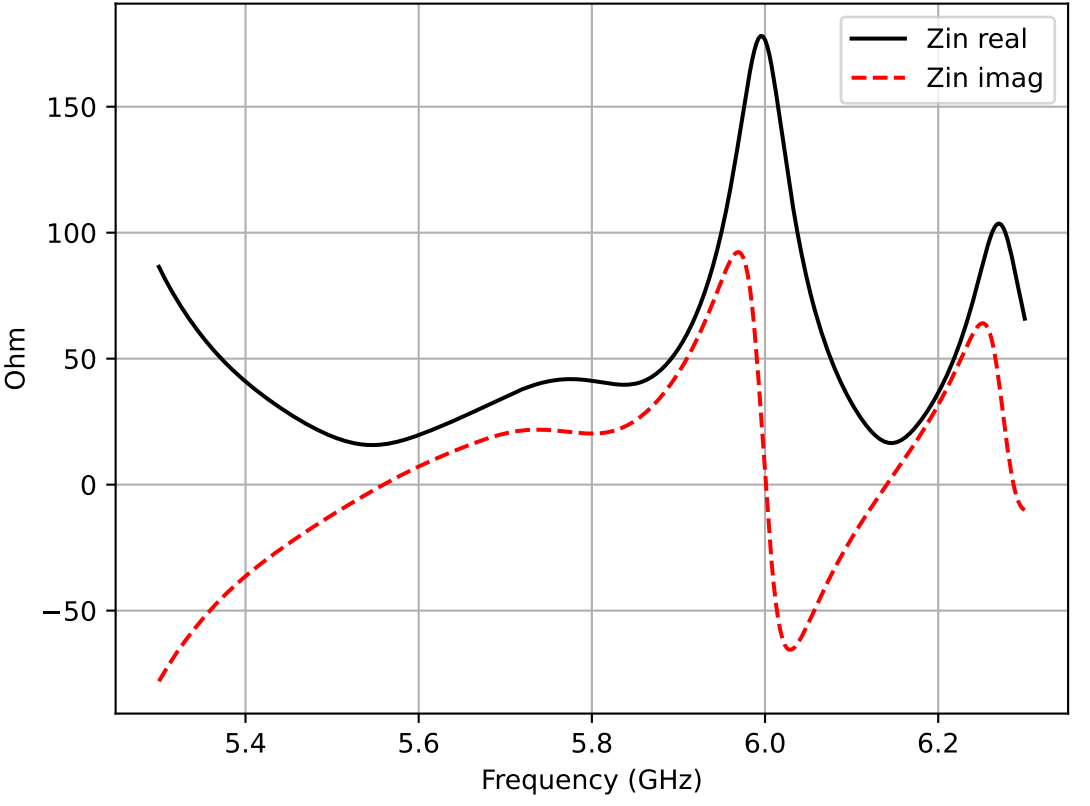
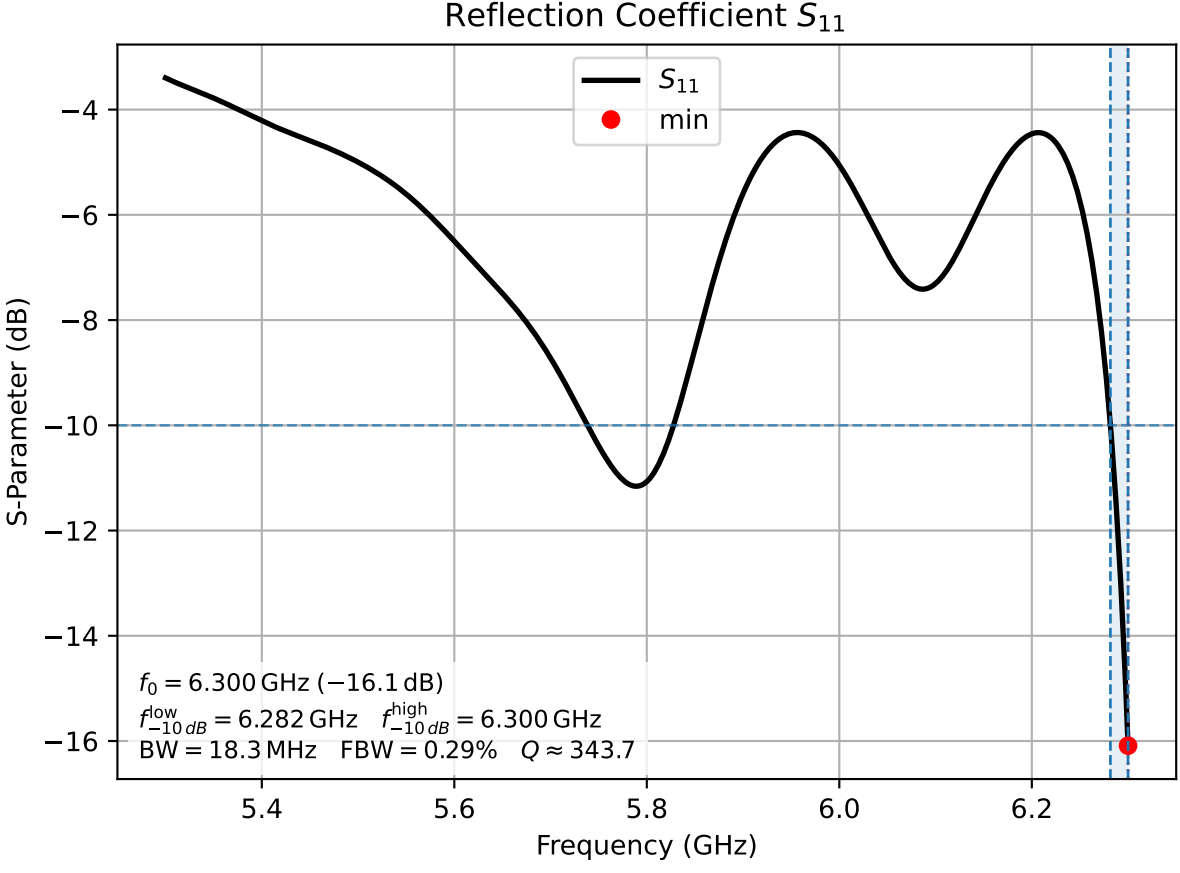
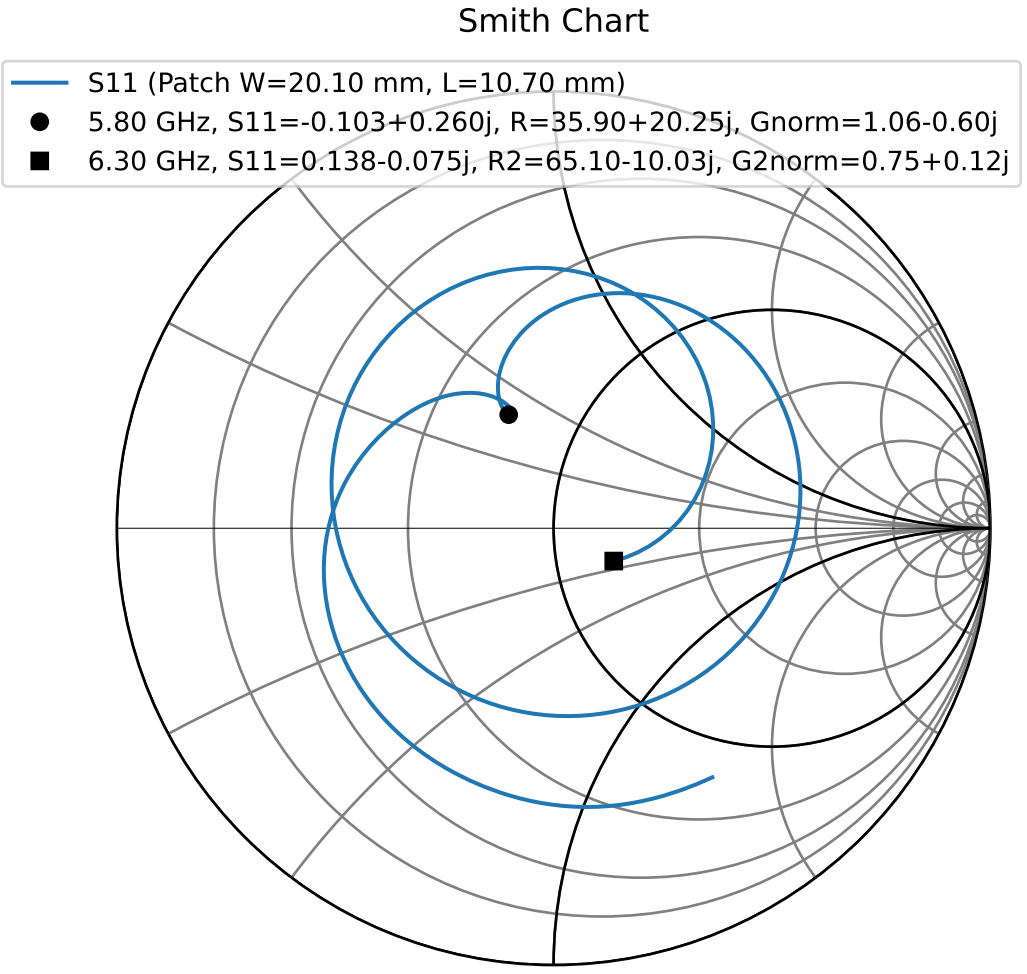
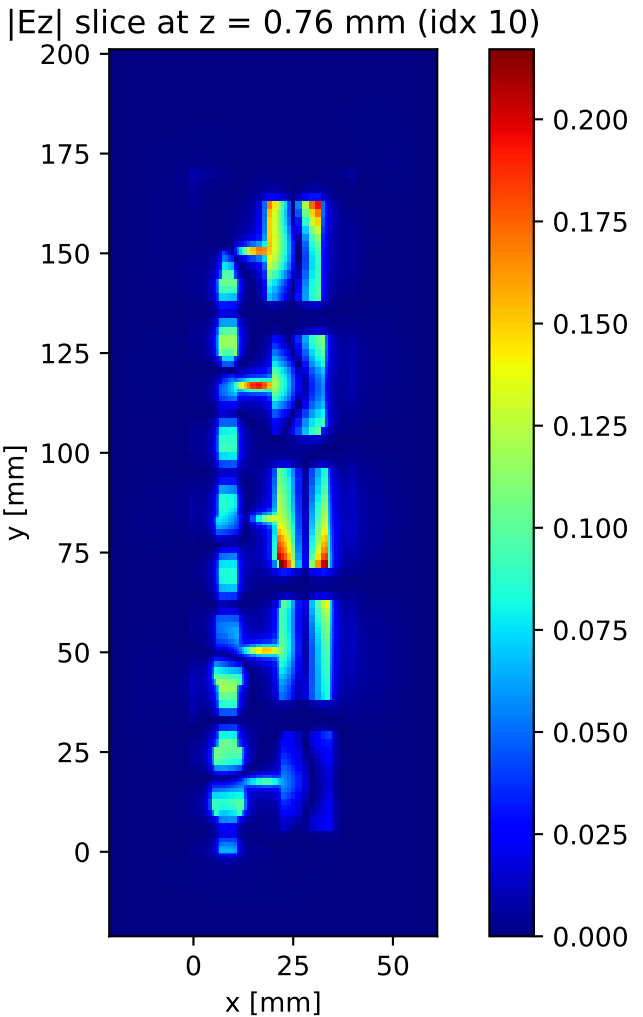
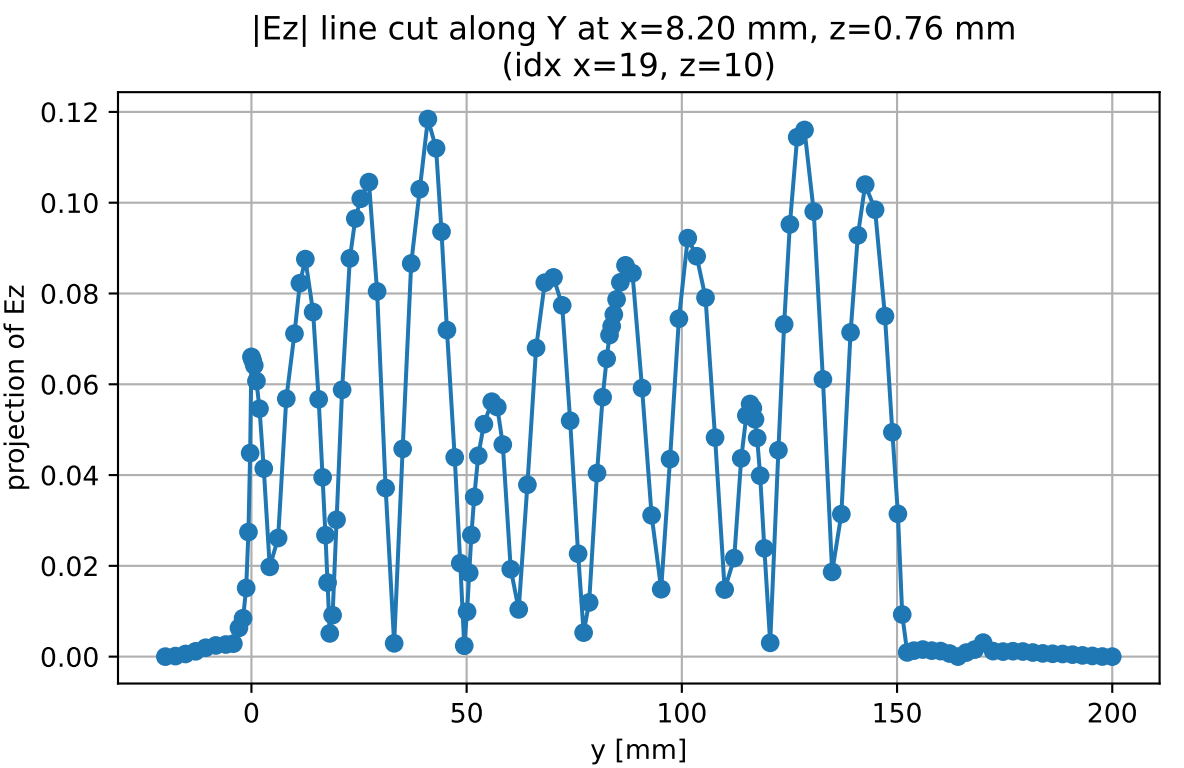
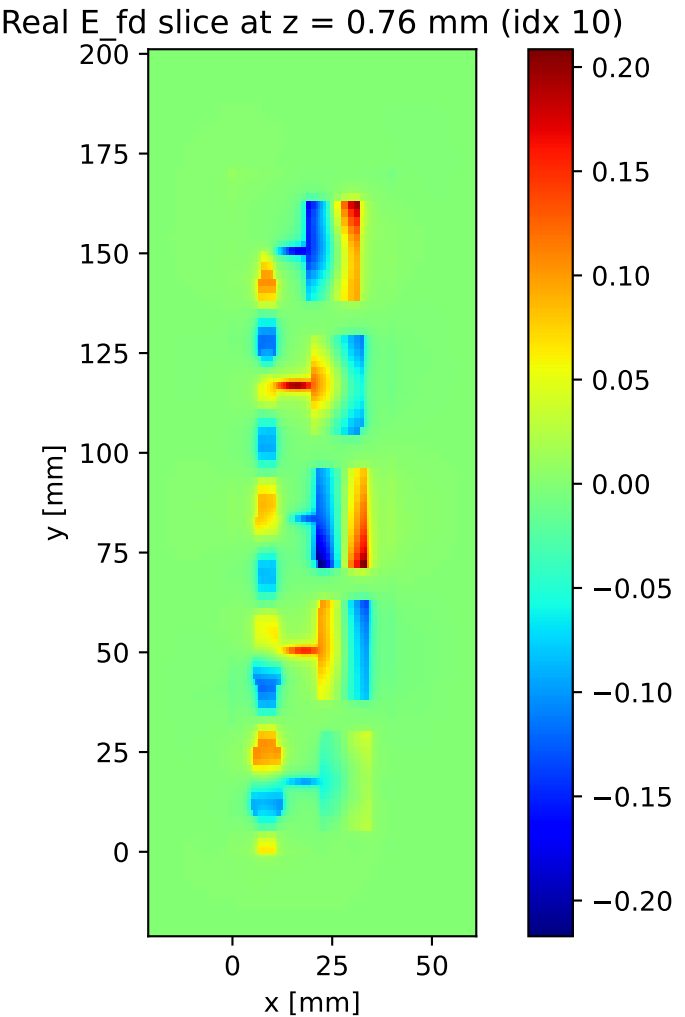

Zin real
Zin imag
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

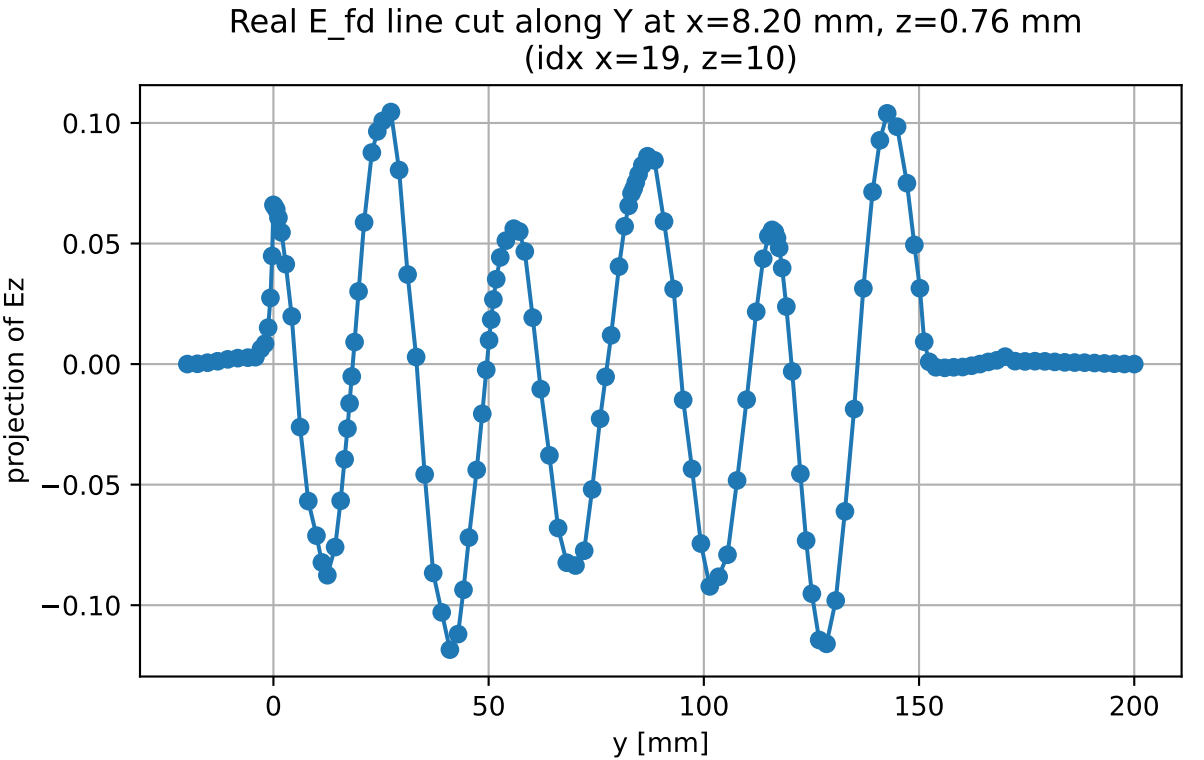

Reflection Coefficient S_{11}
S_{11}
min
S-Parameter (dB)
−4
−6
−8
−10
−12
−14
−16
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 6.300\,\text{GHz}\ (-16.1\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 6.282\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 6.300\,\text{GHz}$
$\text{BW} = 18.3\,\text{MHz}$ $\text{FBW} = 0.29\%$ $Q \approx 343.7$

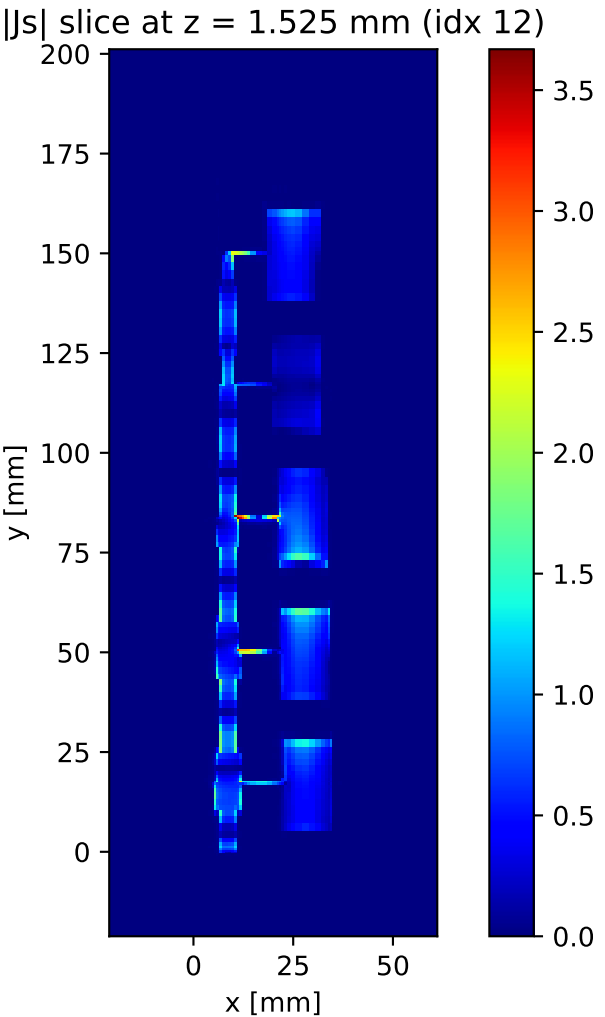

Smith Chart
S11 (Patch W=20.10 mm, L=10.70 mm)
5.80 GHz, S11=-0.103+0.260j, R=35.90+20.25j, Gnorm=1.06-0.60j
6.30 GHz, S11=0.138-0.075j, R2=65.10-10.03j, G2norm=0.75+0.12j

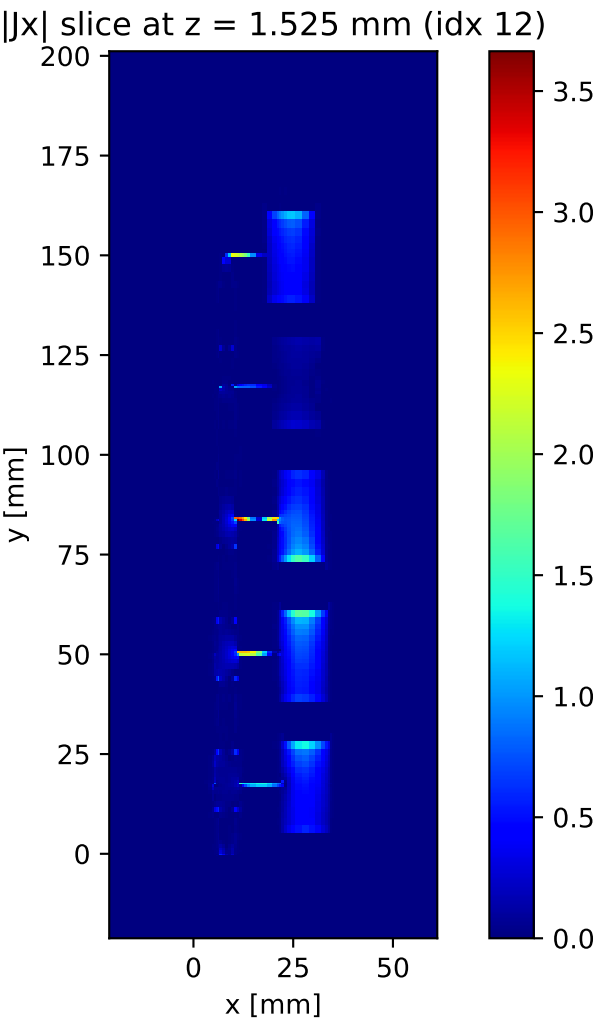

|Ez| slice at z = 0.76 mm (idx 10)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000

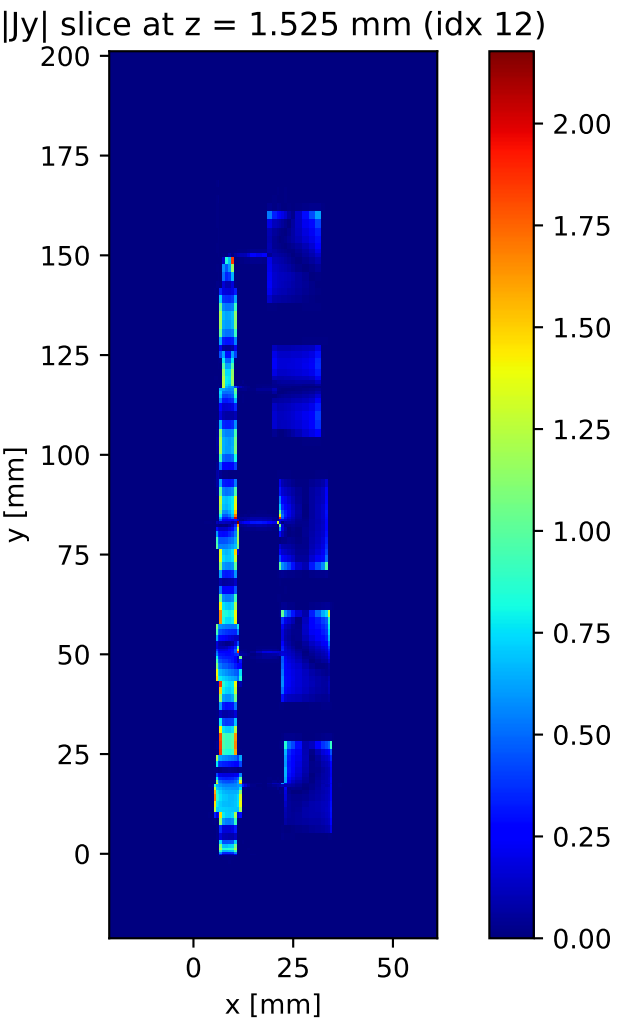

|Ez| line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
y [mm]
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0
50
100
150
200

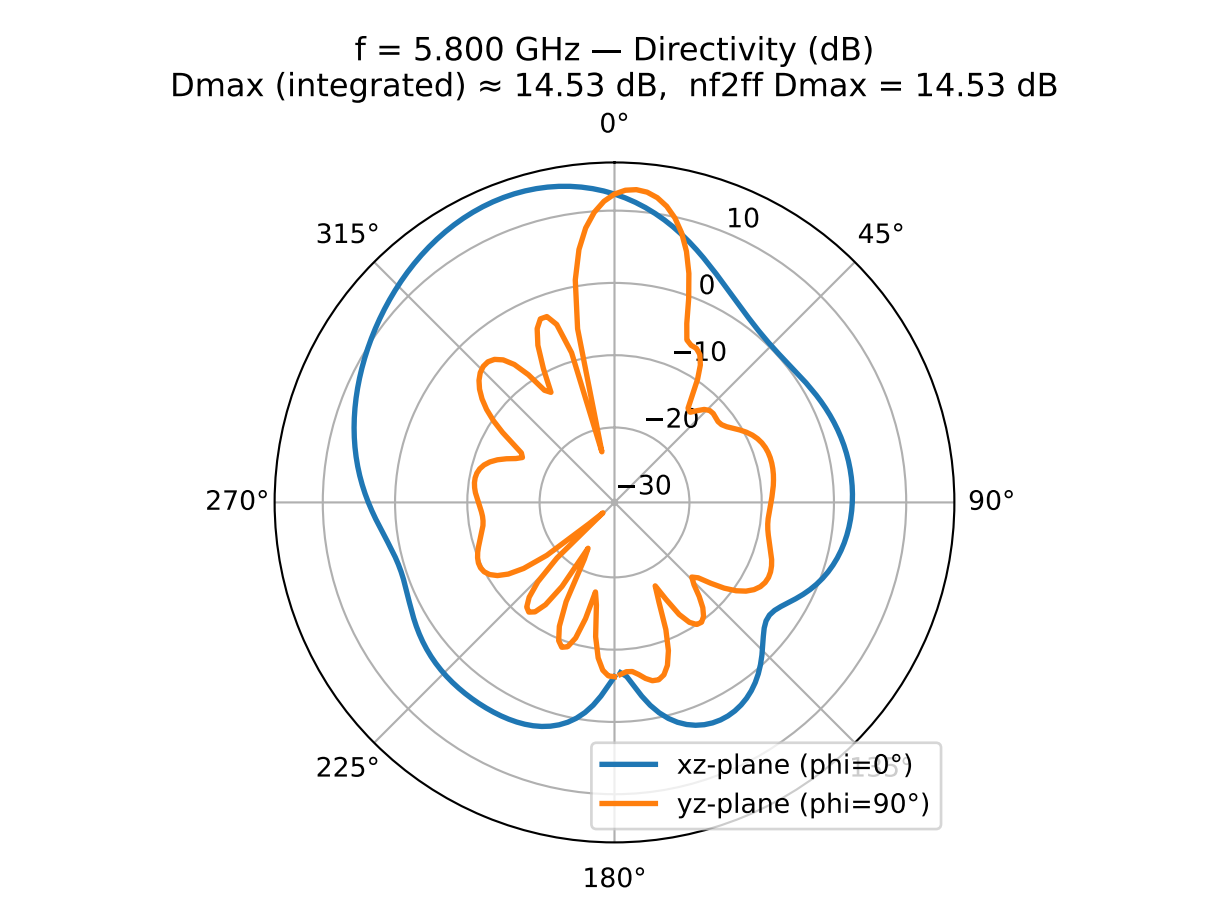

Real E_fd slice at z = 0.76 mm (idx 10)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20

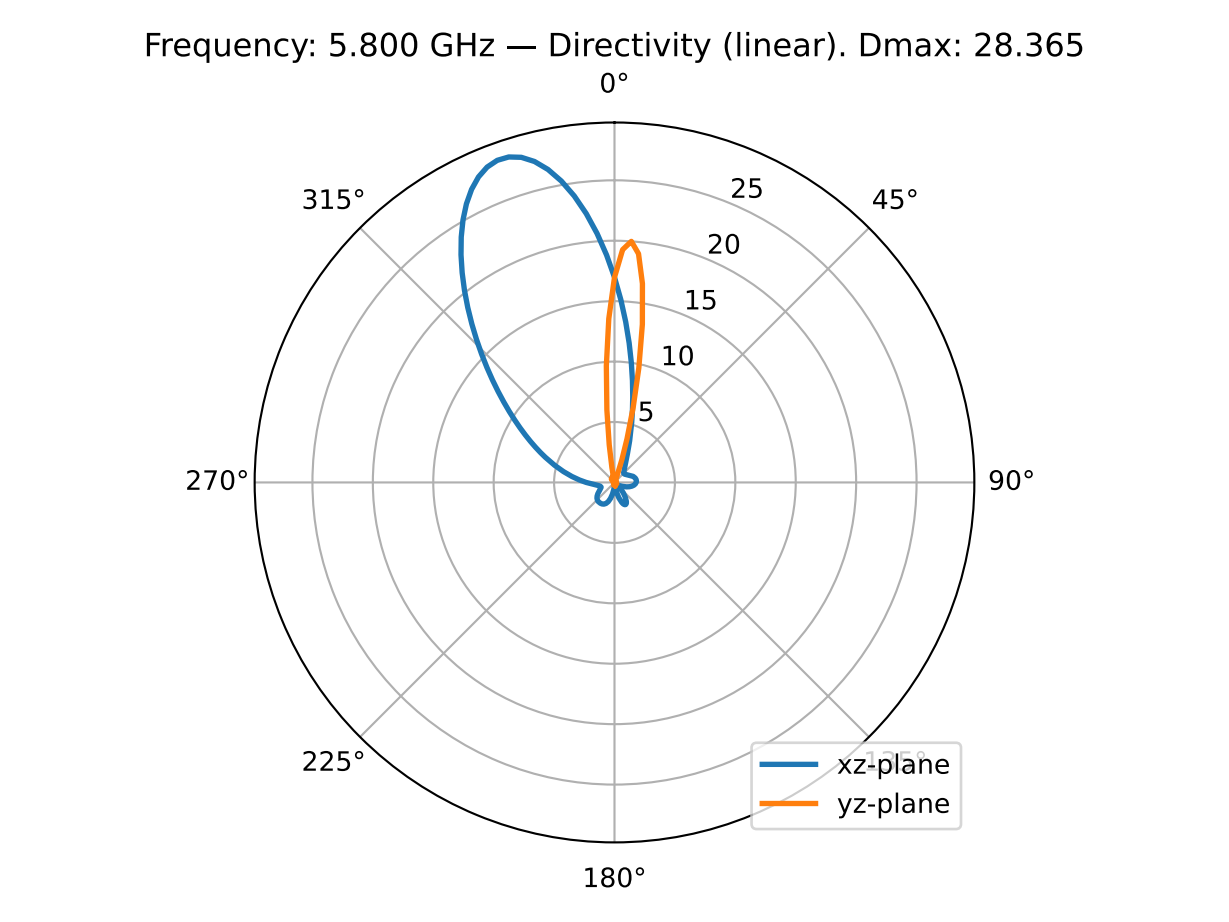

Real E_fd line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
y [mm]
0.10
0.05
0.00
−0.05
−0.10
0
50
100
150
200

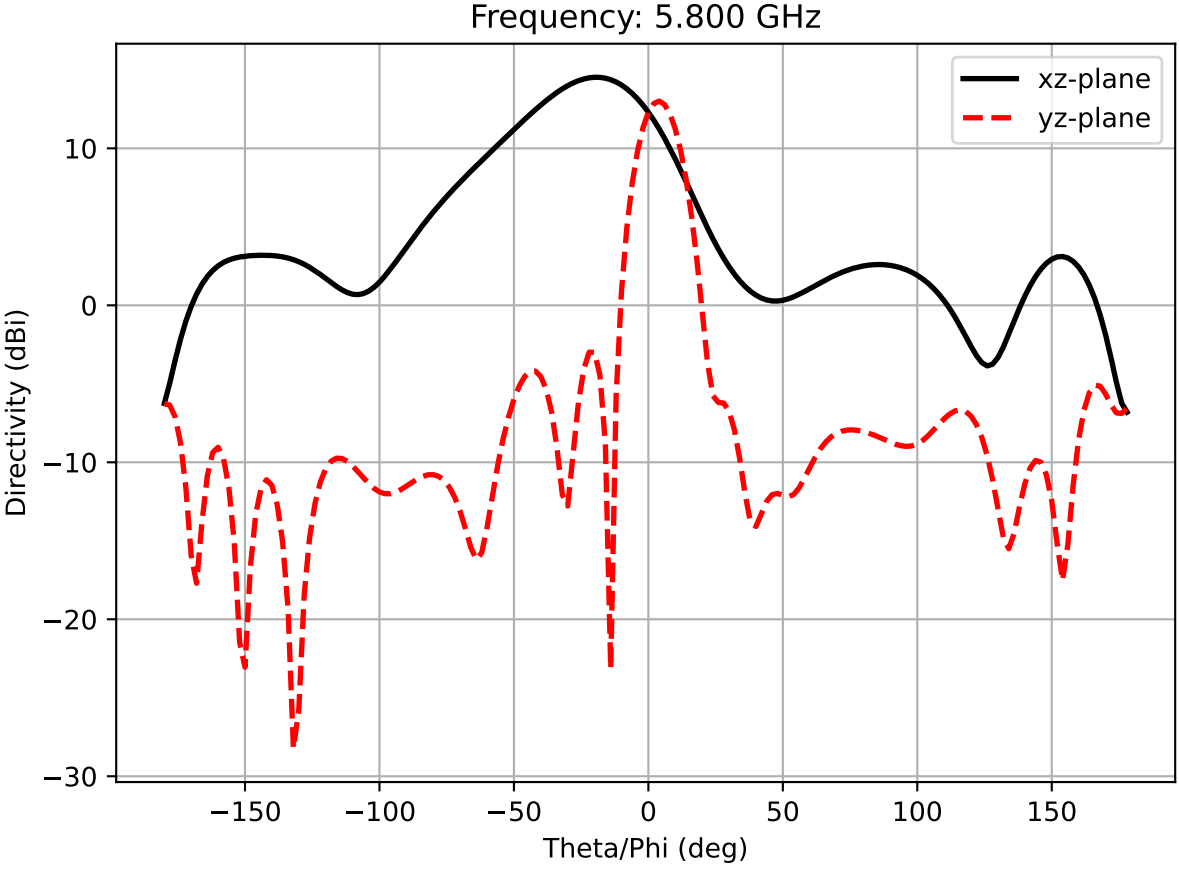

|Js| slice at z = 1.525 mm (idx 12)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0

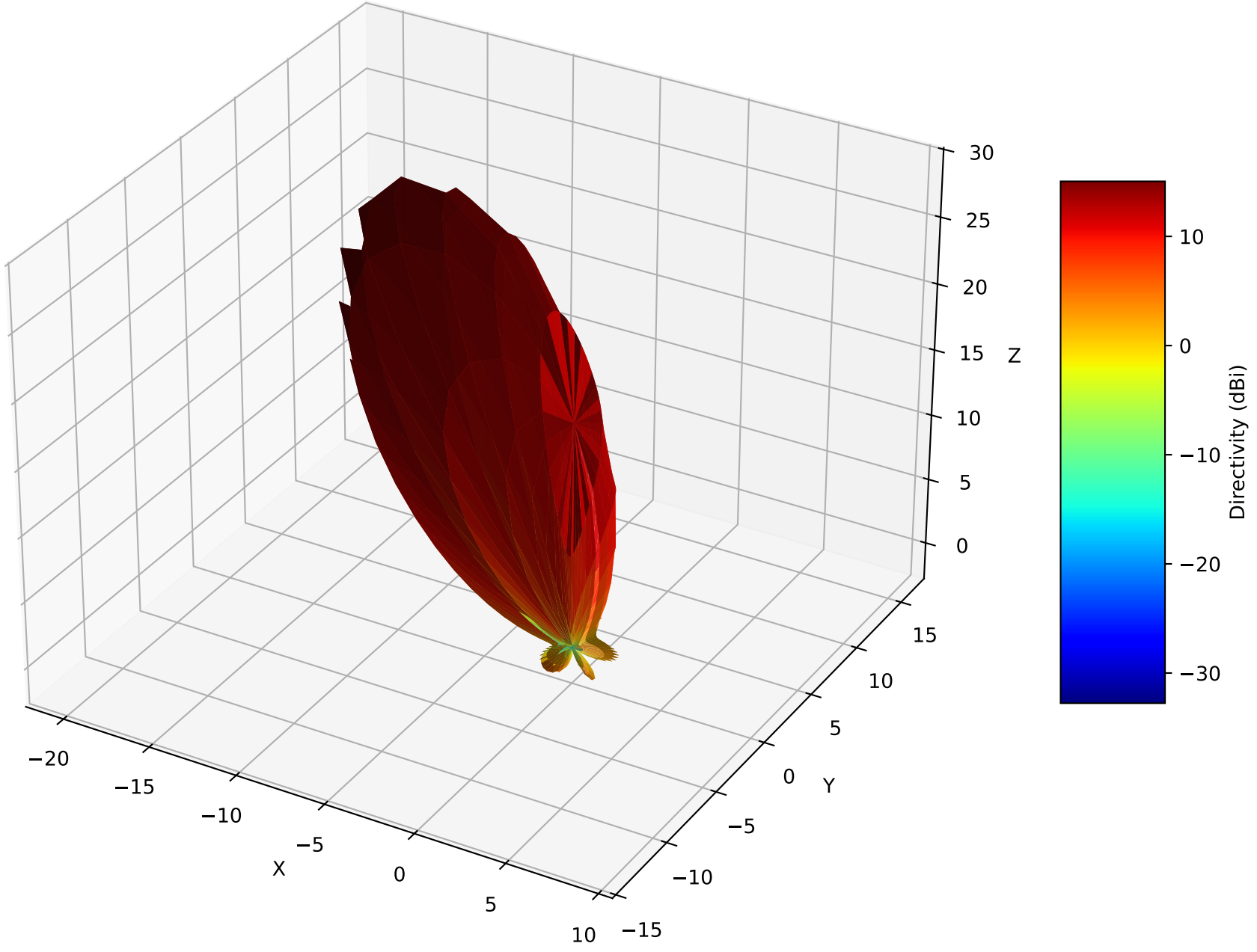

|Jx| slice at z = 1.525 mm (idx 12)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0


|Jy| slice at z = 1.525 mm (idx 12)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00


f = 5.800 GHz — Directivity (dB)
Dmax (integrated) ≈ 14.53 dB, nf2ff Dmax = 14.53 dB
0°
45°
90°
180°
225°
270°
315°
10
0
−10
−20
−30
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.800 GHz — Directivity (linear). Dmax: 28.365
0°
45°
90°
180°
225°
270°
315°
5
10
15
20
25
xz-plane
yz-plane


Frequency: 5.800 GHz
xz-plane
yz-plane
10
0
−10
−20
−30
Directivity (dBi)
−150
−100
−50
0
50
100
150
Theta/Phi (deg)


3D Directivity Pattern
f = 5.800 GHz, Dmax = 15.04 dBi
X
Y
Z
Directivity (dBi)
−20
−15
−10
−5
0
5
10
−15
−10
−5
0
5
10
15
0
5
10
15
20
25
30
−30
−20
−10
0
10