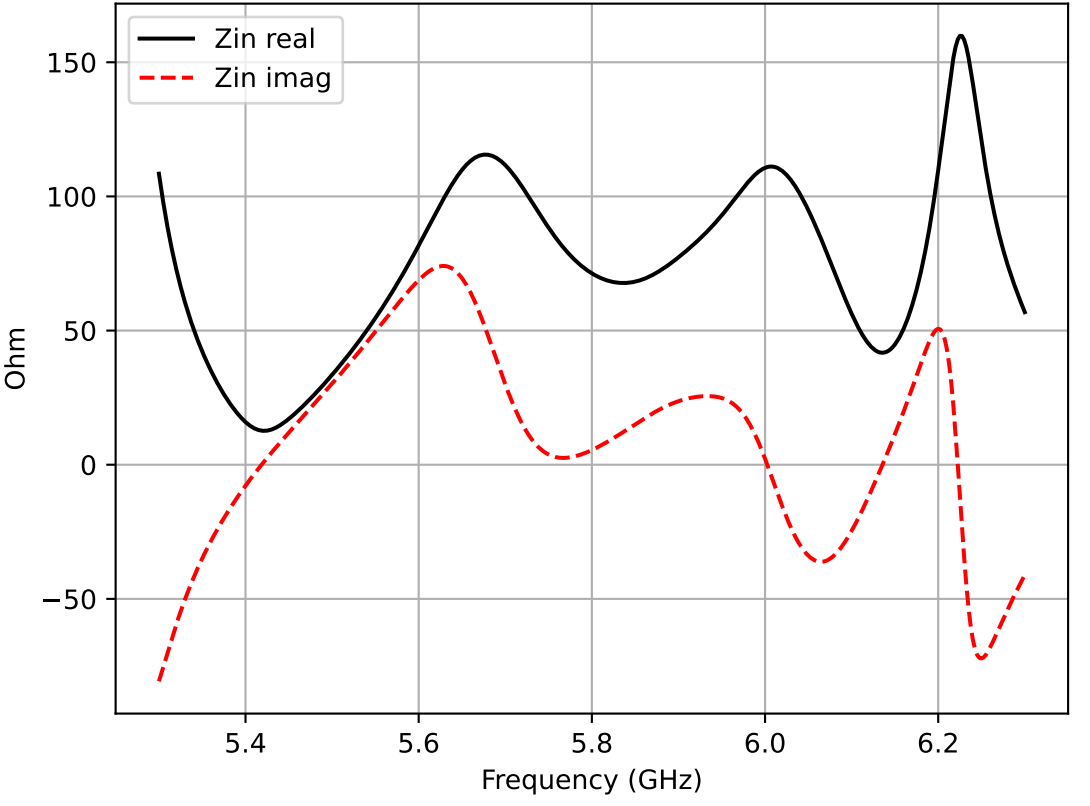
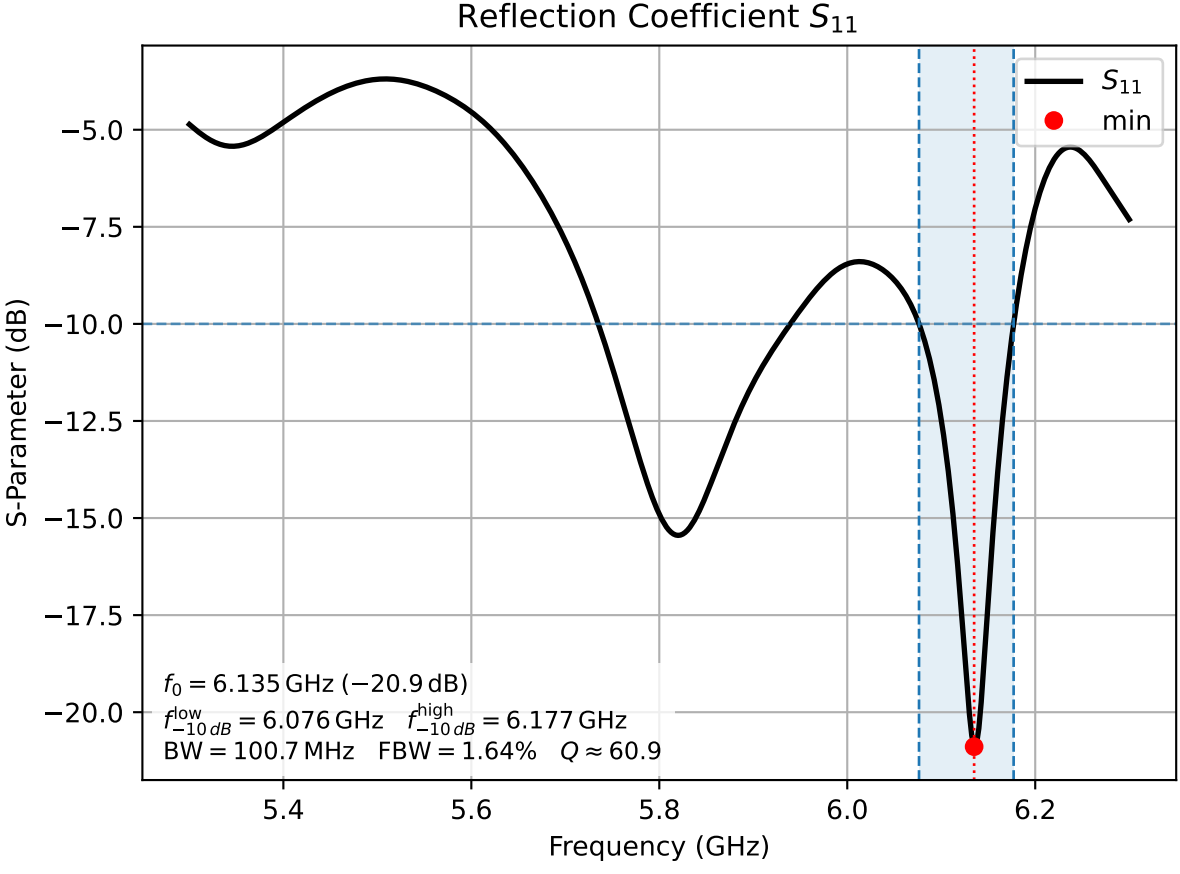
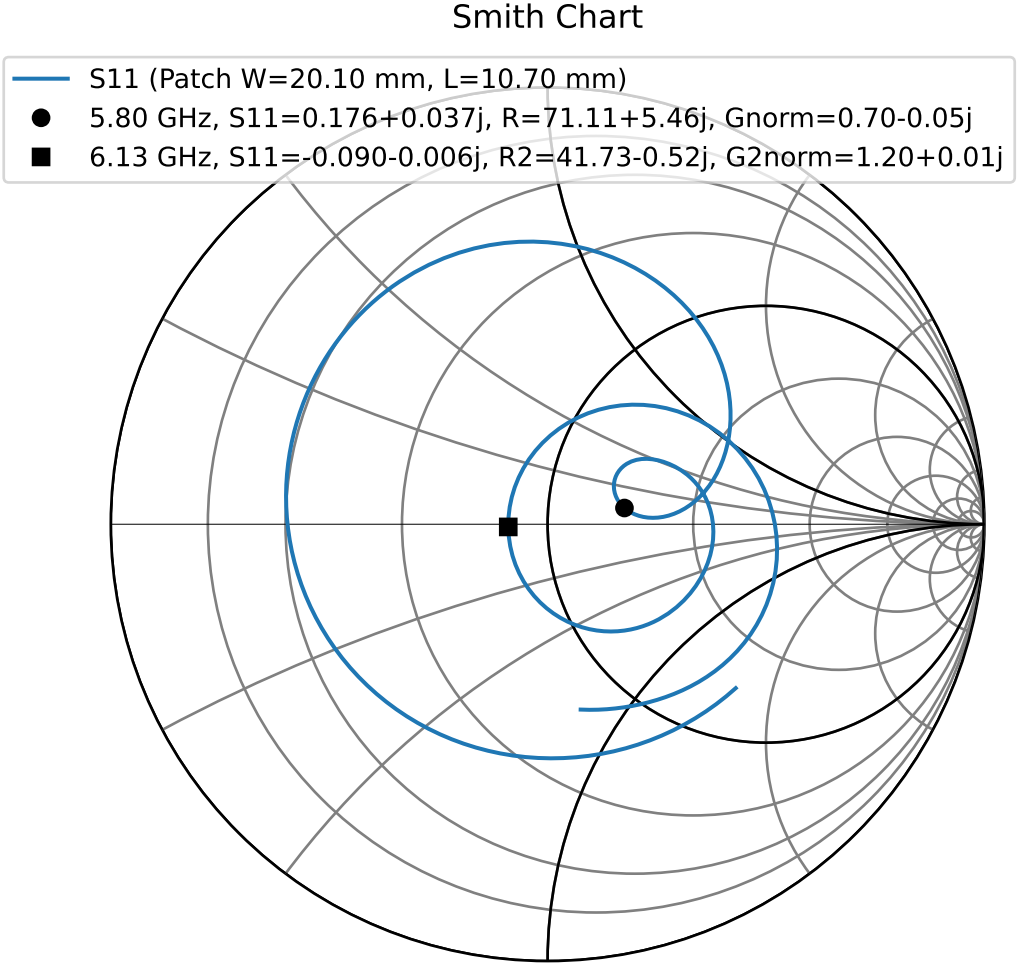
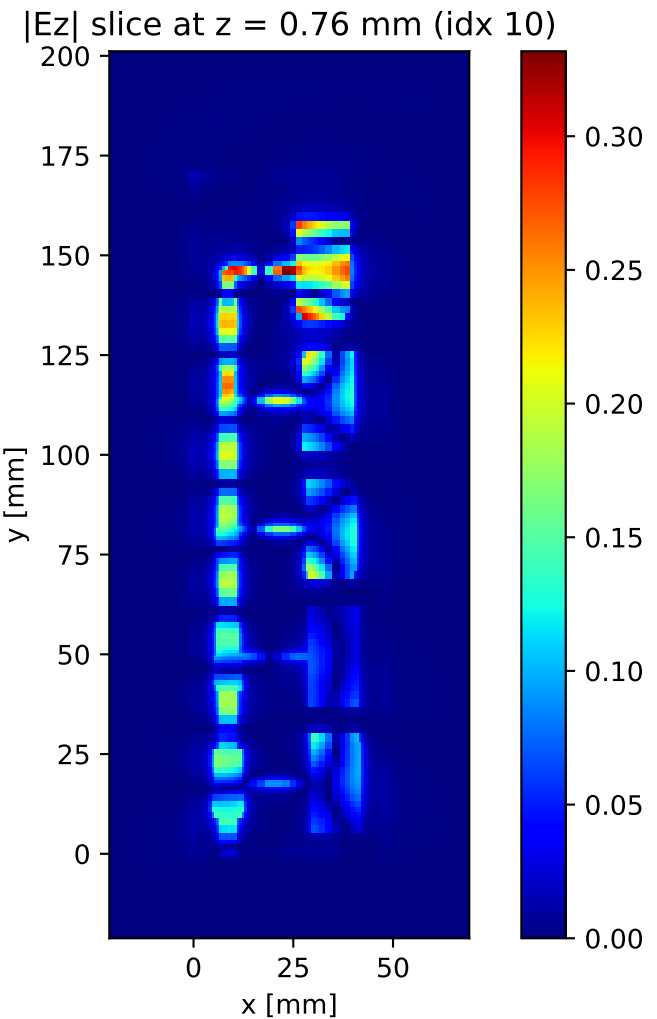
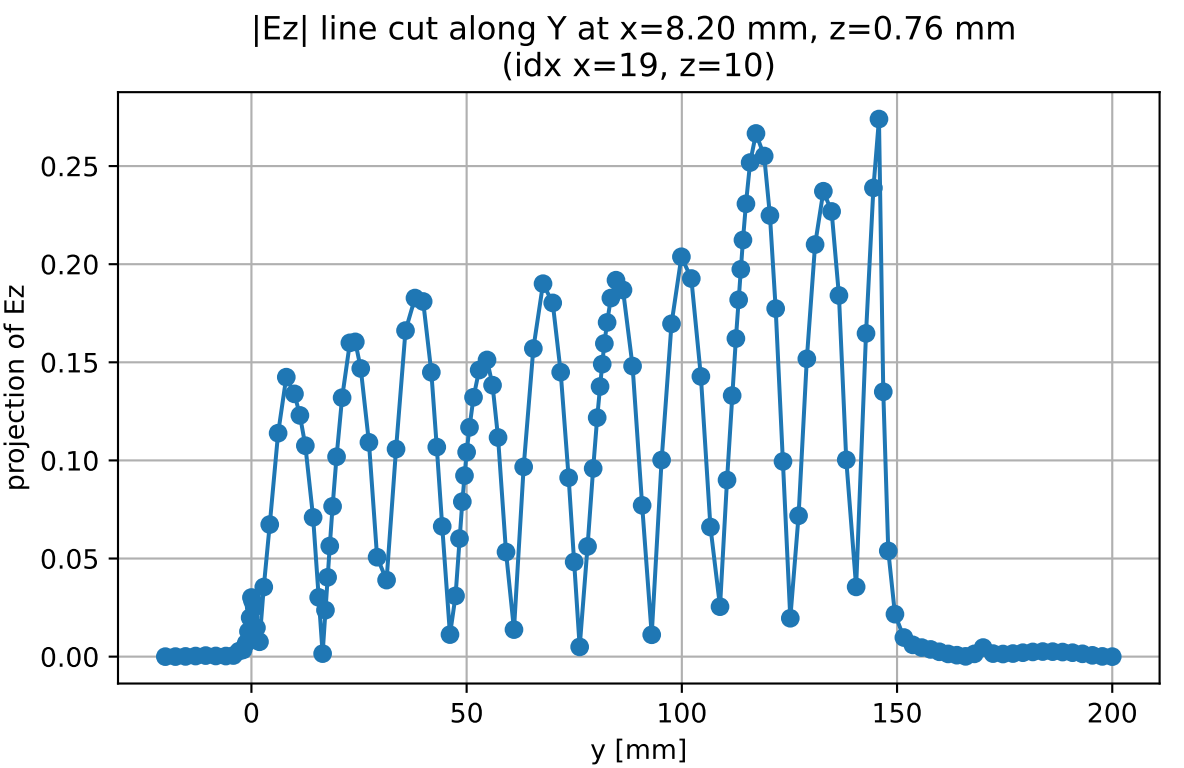
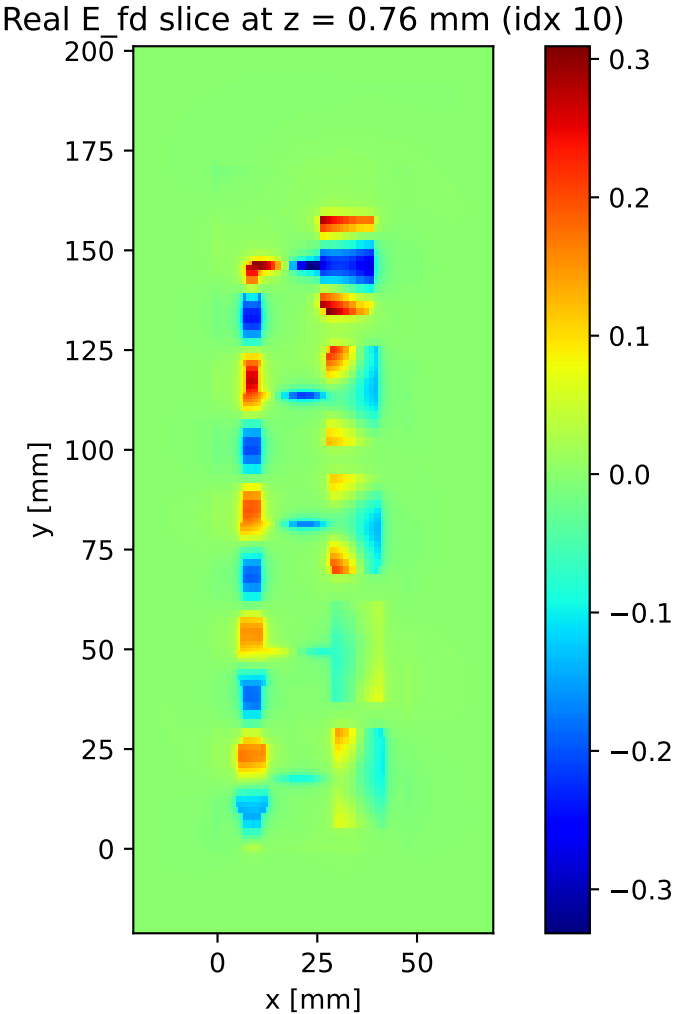

Zin real
Zin imag
150
100
50
0
−50
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

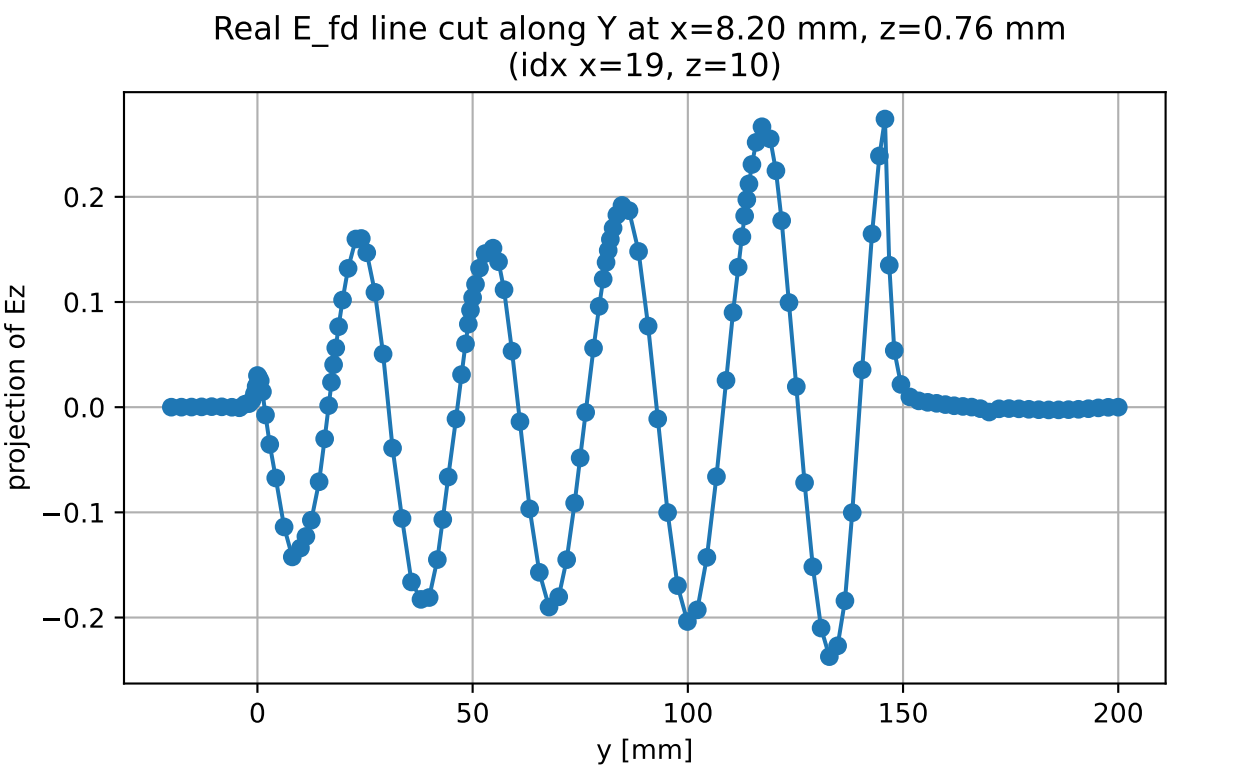

Reflection Coefficient S_{11}
S_{11}
min
−5.0
−7.5
−10.0
−12.5
−15.0
−17.5
−20.0
S-Parameter (dB)
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 6.135\,\text{GHz}\ (-20.9\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 6.076\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 6.177\,\text{GHz}$
$\text{BW} = 100.7\,\text{MHz}$ $\text{FBW} = 1.64\%$ $Q \approx 60.9$

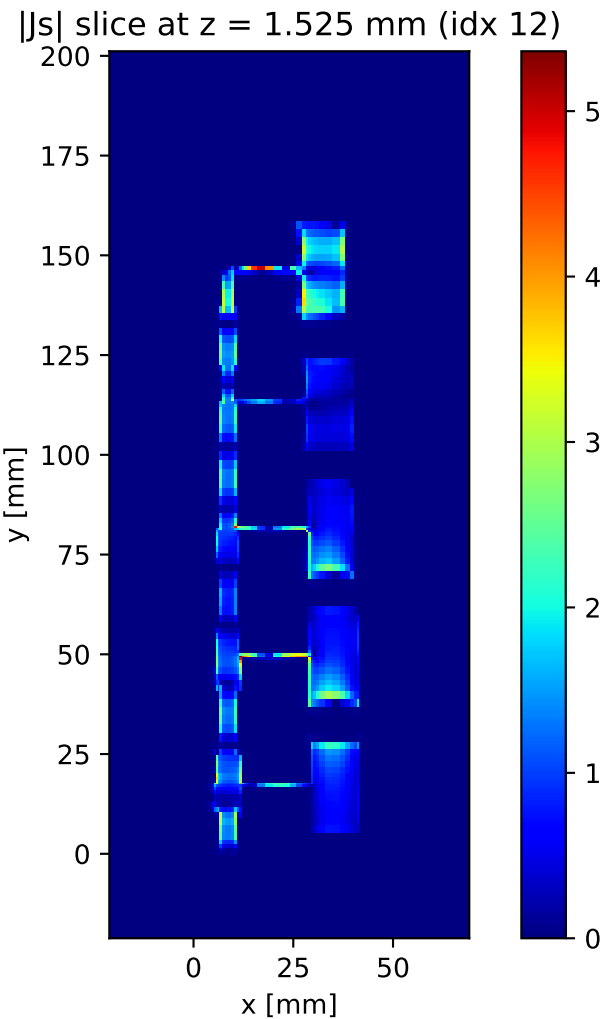

Smith Chart
S11 (Patch W=20.10 mm, L=10.70 mm)
5.80 GHz, S11=0.176+0.037j, R=71.11+5.46j, Gnorm=0.70-0.05j
6.13 GHz, S11=-0.090-0.006j, R2=41.73-0.52j, G2norm=1.20+0.01j

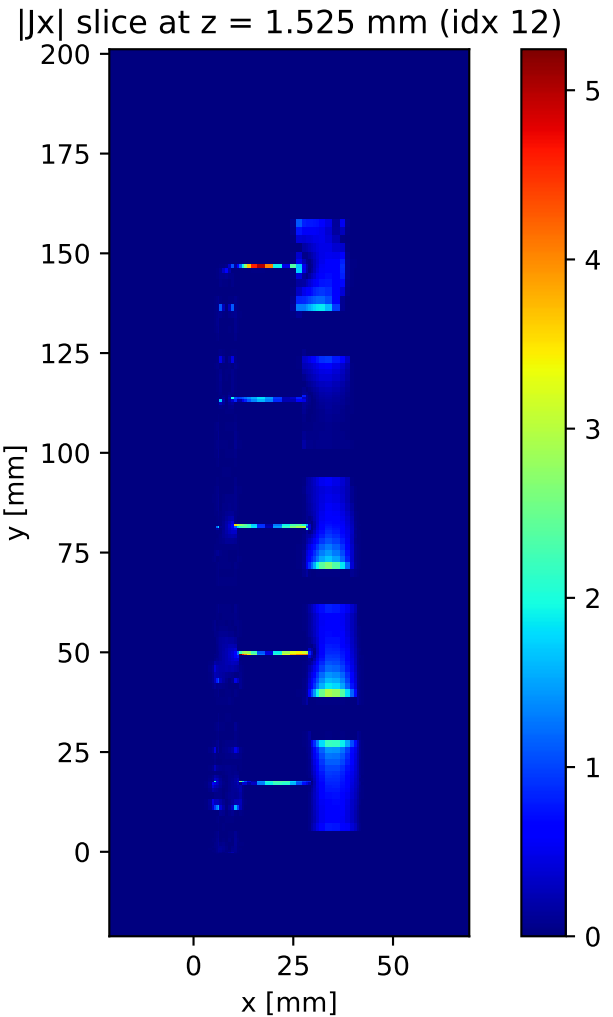

|Ez| slice at z = 0.76 mm (idx 10)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
0.30
0.25
0.20
0.15
0.10
0.05
0.00

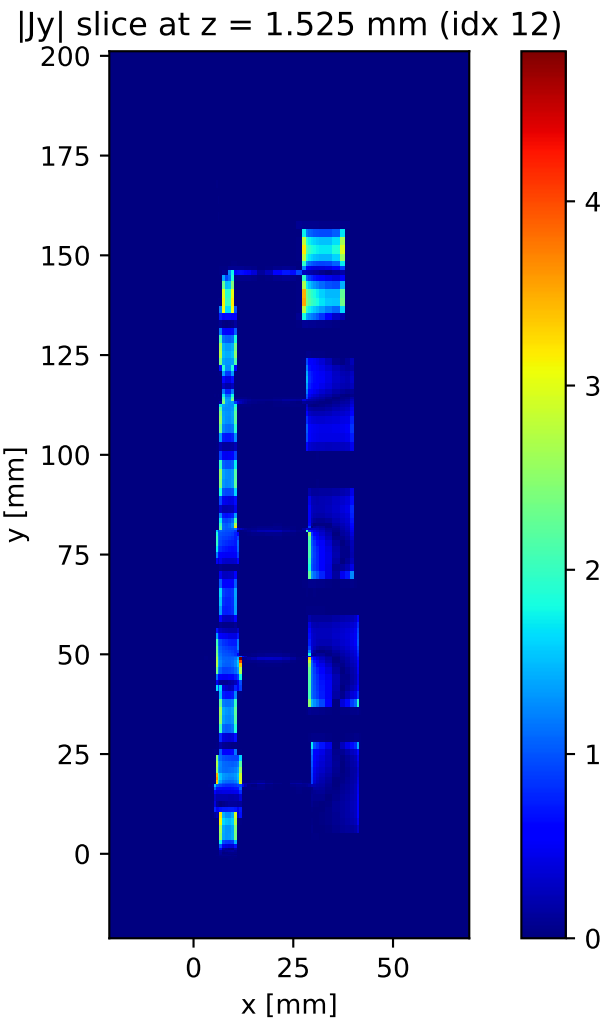

|Ez| line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
0.00
0.05
0.10
0.15
0.20
0.25
0
50
100
150
200
y [mm]

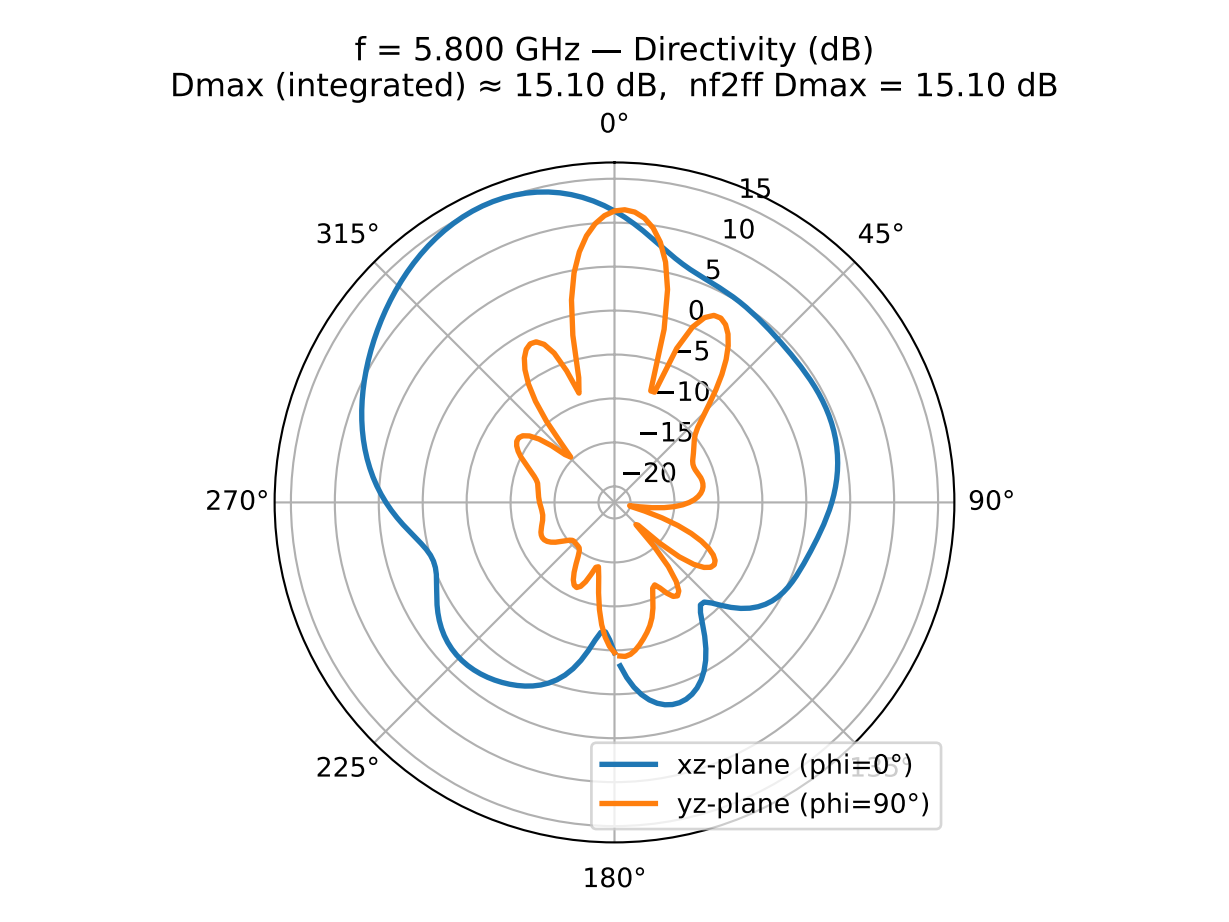

Real E_fd slice at z = 0.76 mm (idx 10)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3

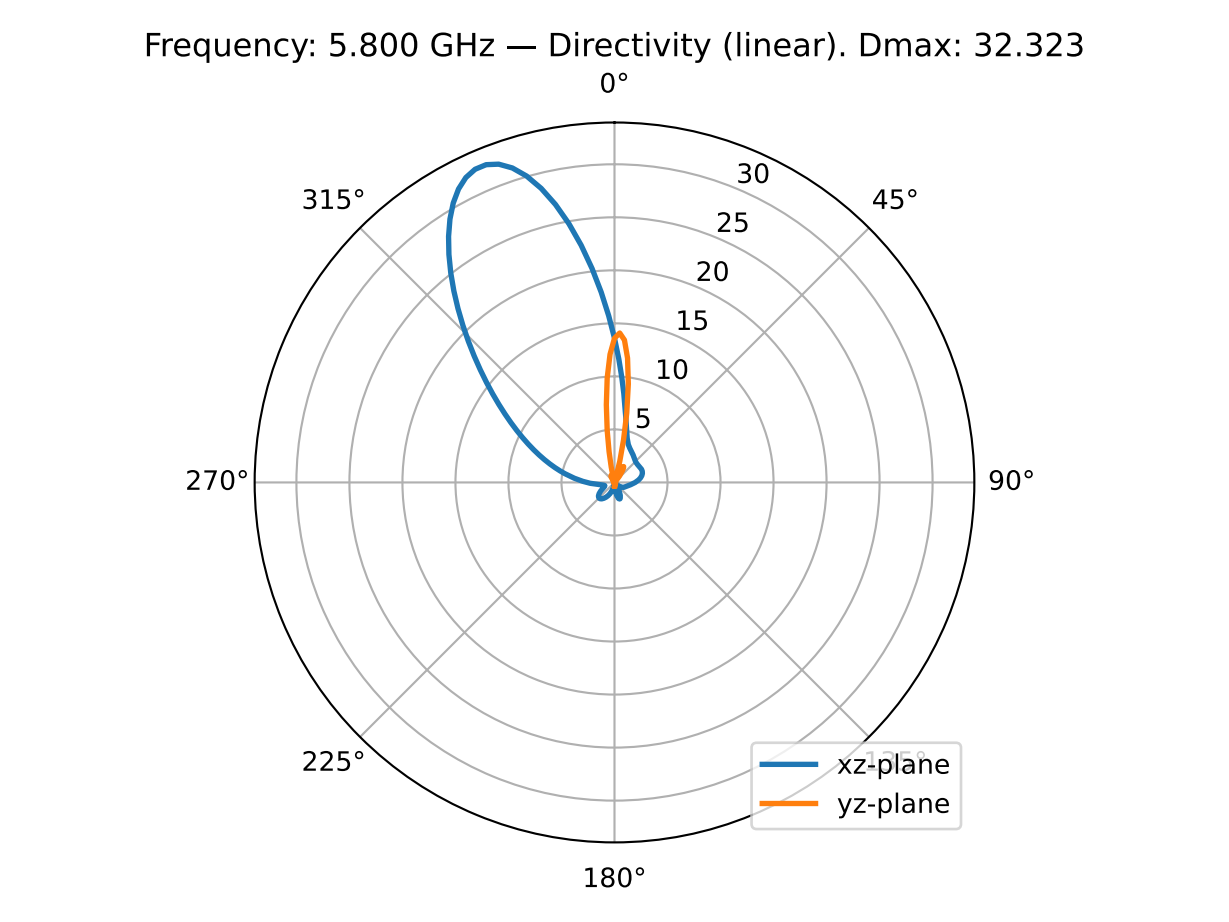

Real E_fd line cut along Y at x=8.20 mm, z=0.76 mm
(idx x=19, z=10)
projection of Ez
0.2
0.1
0.0
−0.1
−0.2
0
50
100
150
200
y [mm]

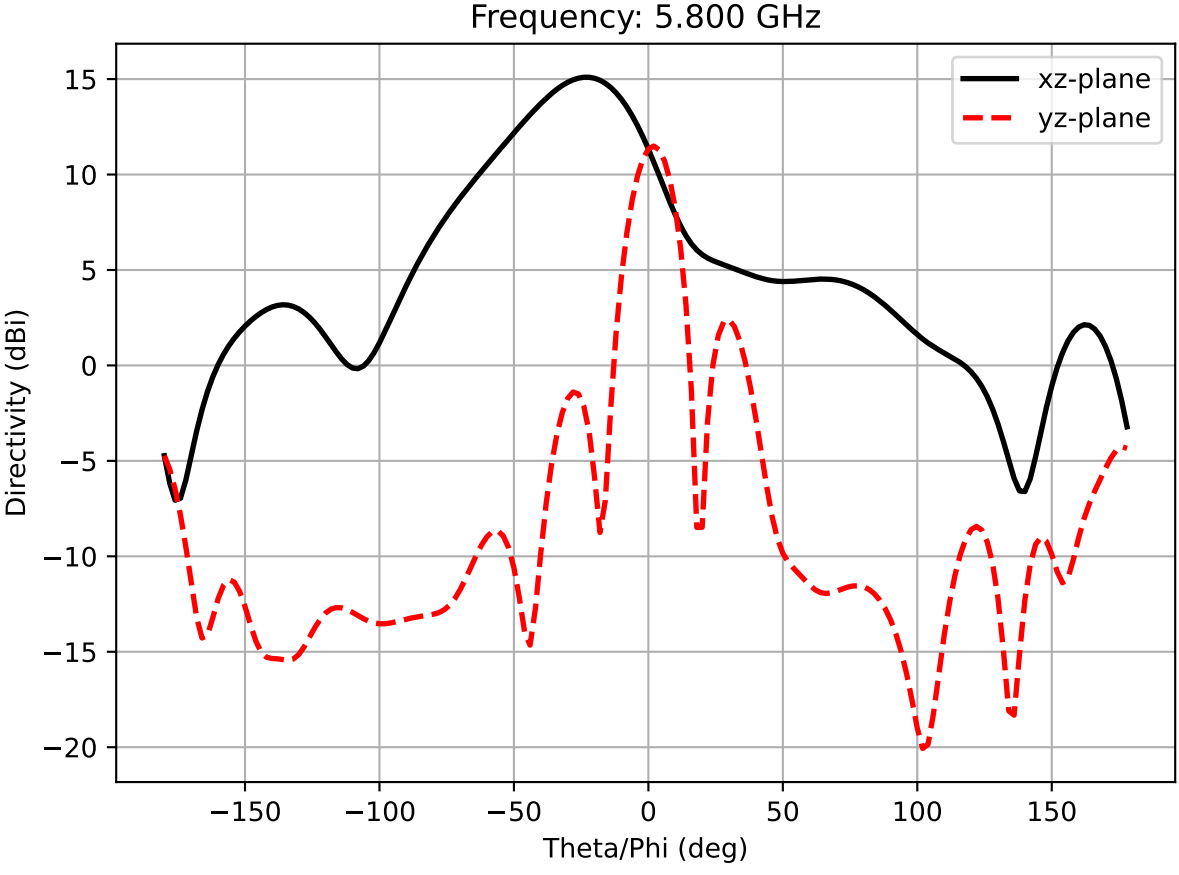

|Js| slice at z = 1.525 mm (idx 12)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
5
4
3
2
1
0

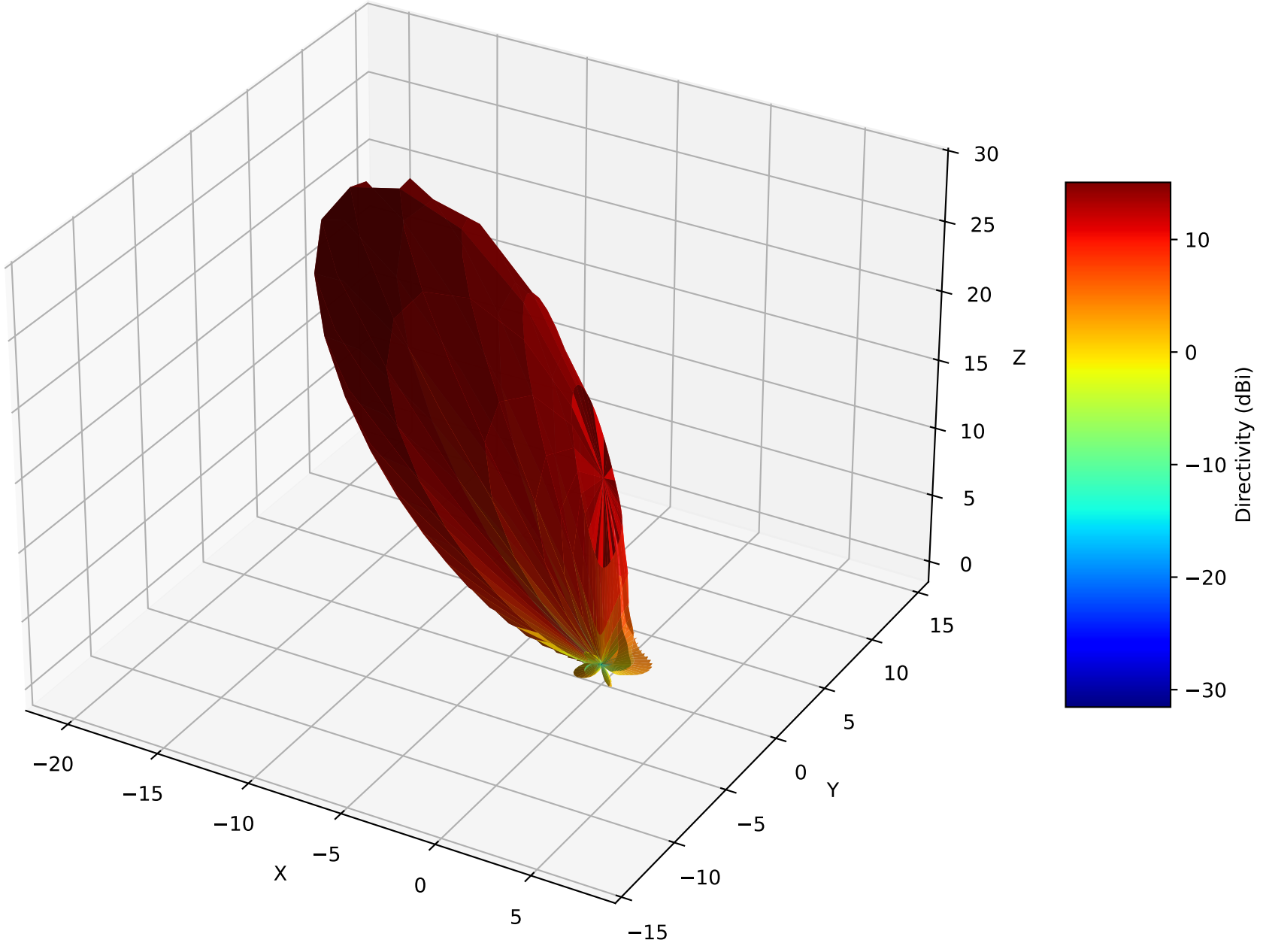

|Jx| slice at z = 1.525 mm (idx 12)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
5
4
3
2
1
0


|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
4
3
2
1
0


f = 5.800 GHz — Directivity (dB)
Dmax (integrated) ≈ 15.10 dB, nf2ff Dmax = 15.10 dB
0°
45°
90°
180°
225°
270°
315°
15
10
5
0
−5
−10
−15
−20
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.800 GHz — Directivity (linear). Dmax: 32.323
0°
45°
90°
135°
180°
225°
270°
315°
5
10
15
20
25
30
xz-plane
yz-plane


Frequency: 5.800 GHz
xz-plane
yz-plane
Directivity (dBi)
15
10
5
0
−5
−10
−15
−20
−150
−100
−50
0
50
100
150
Theta/Phi (deg)


3D Directivity Pattern
f = 5.800 GHz, Dmax = 15.08 dBi
X
Y
Z
Directivity (dBi)
−20
−15
−10
−5
0
5
−15
−10
−5
0
5
10
15
0
5
10
15
20
25
30
10
0
−10
−20
−30