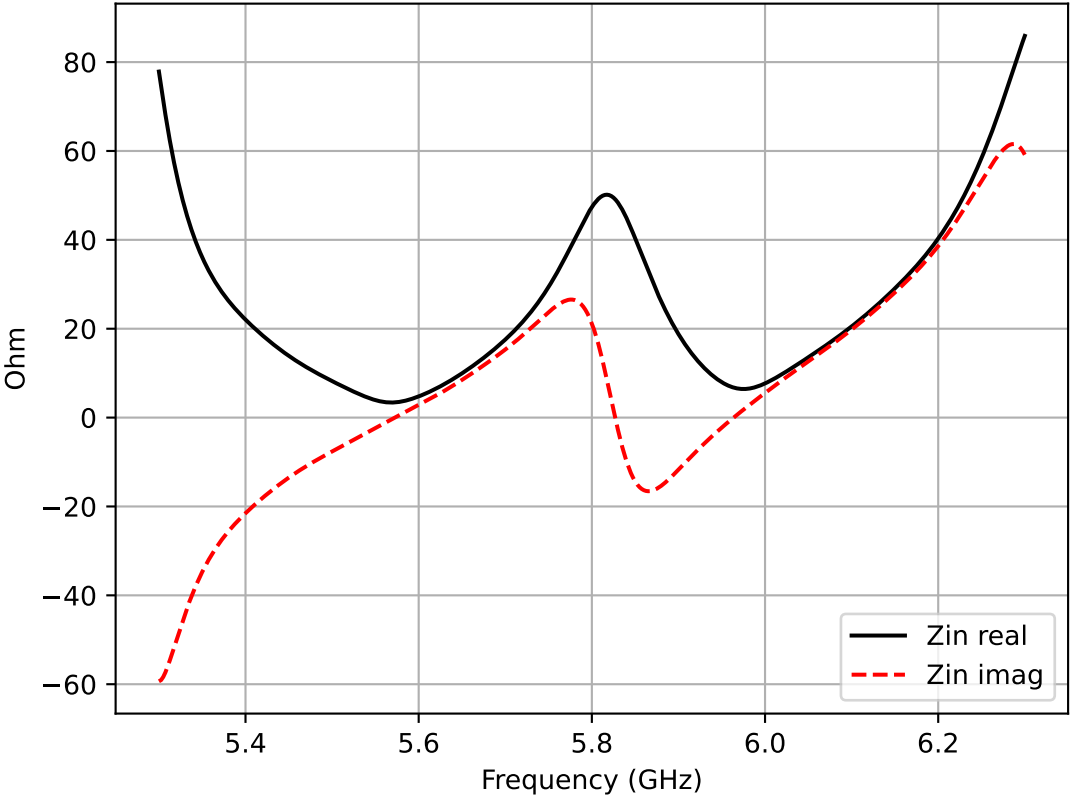
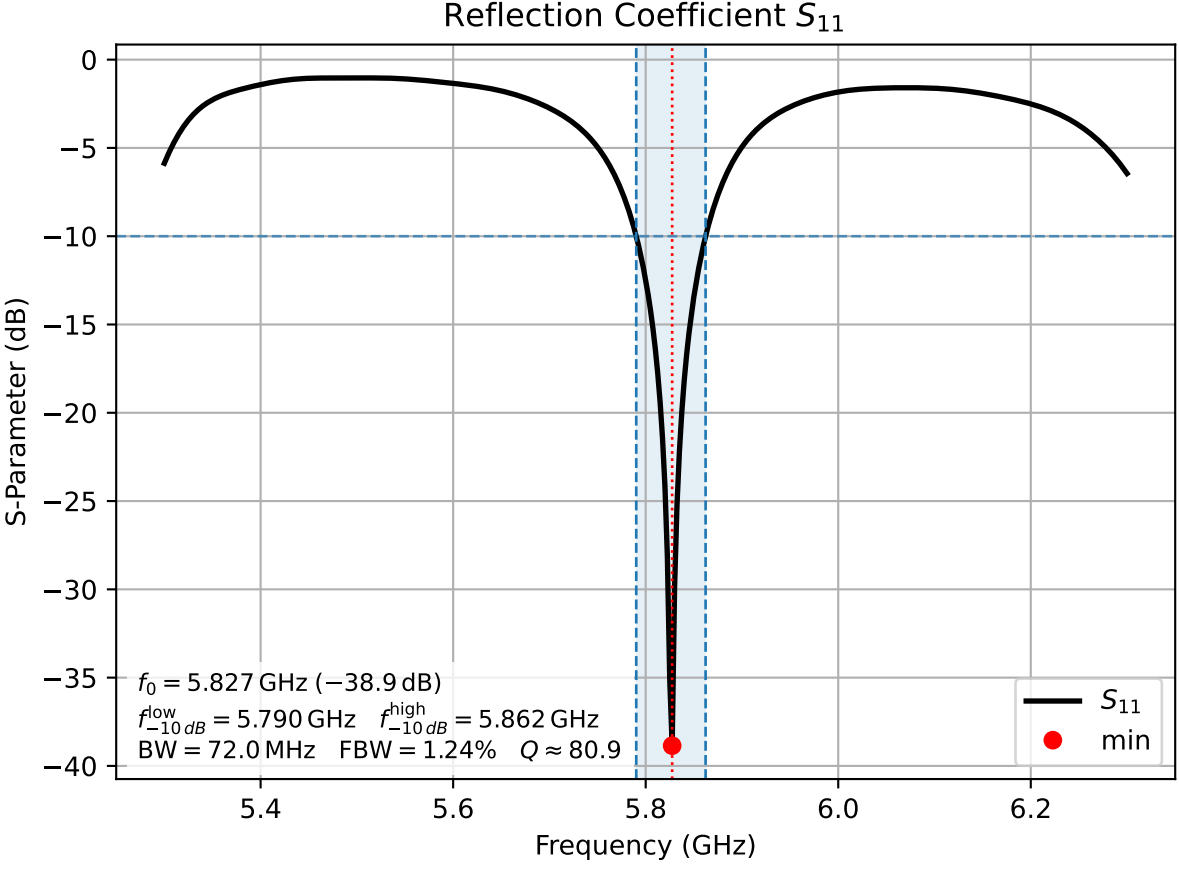
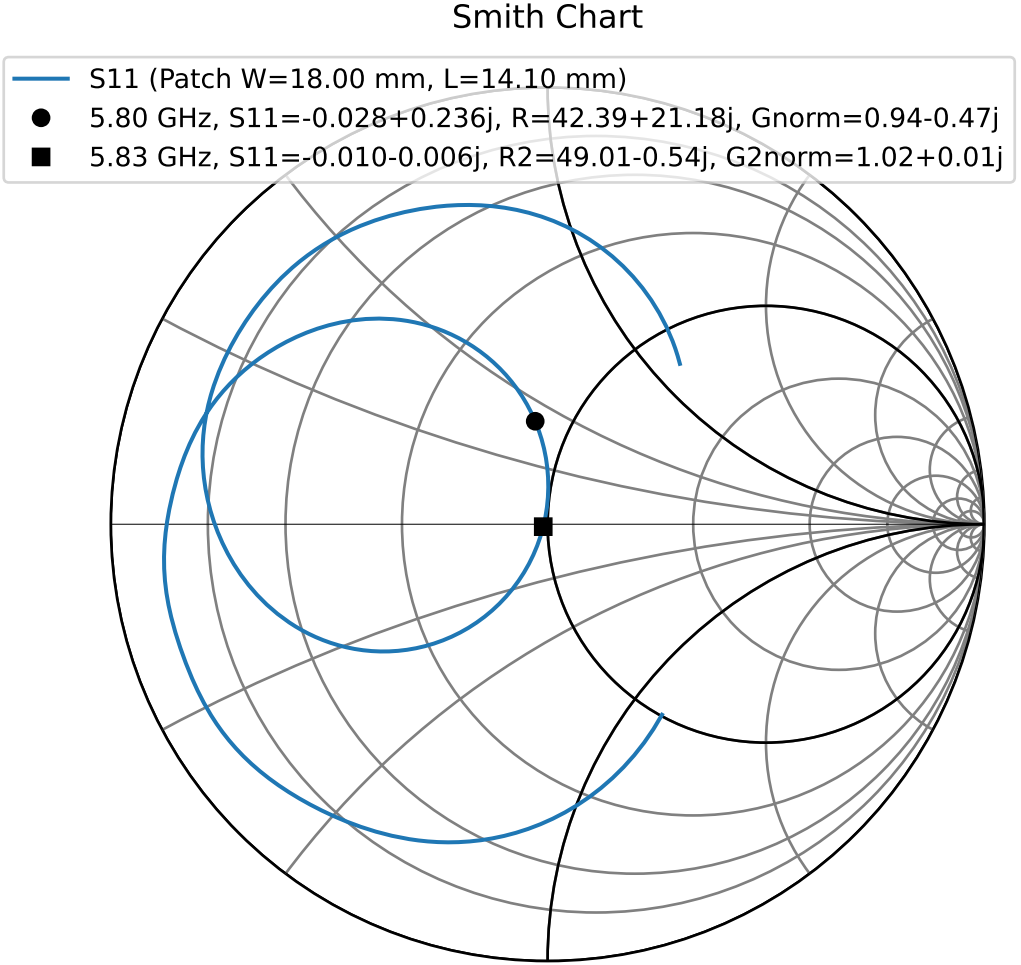
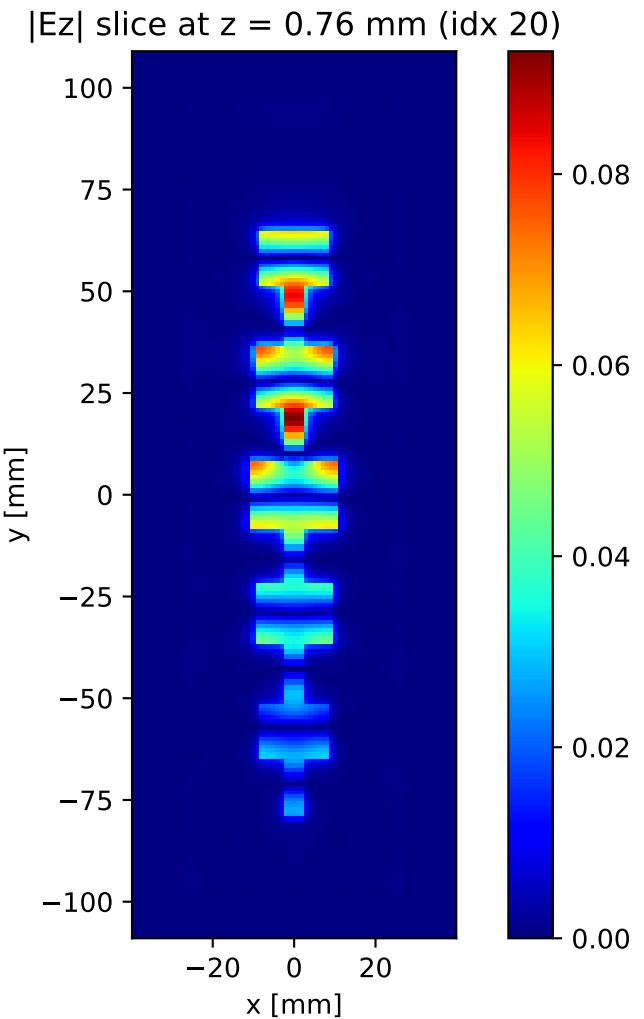
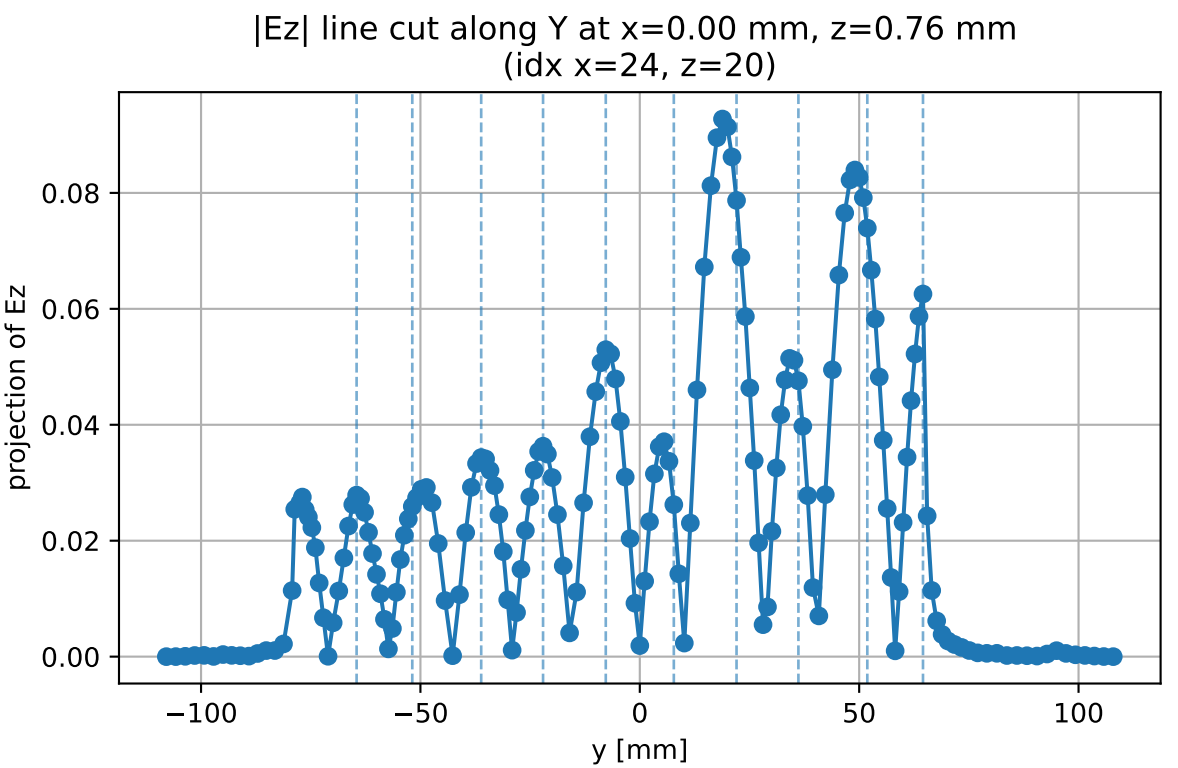
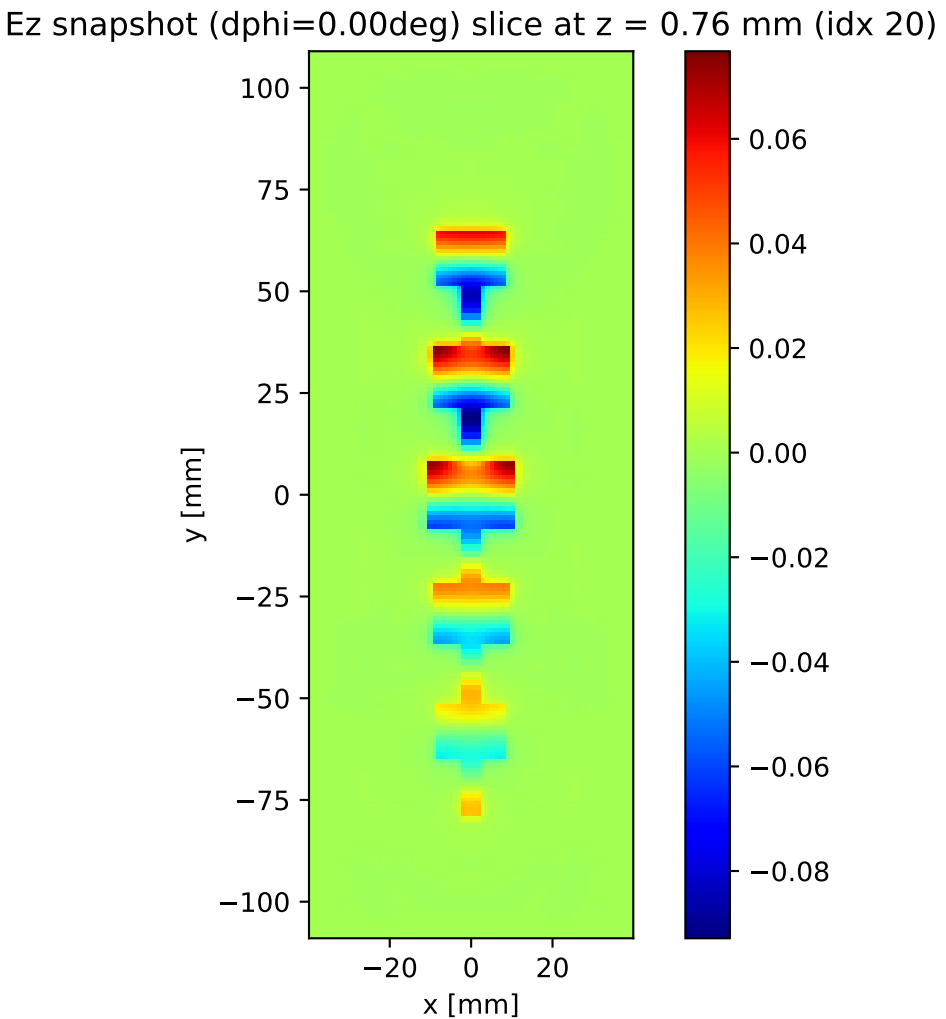

80
60
40
20
0
−20
−40
−60
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
Zin real
Zin imag

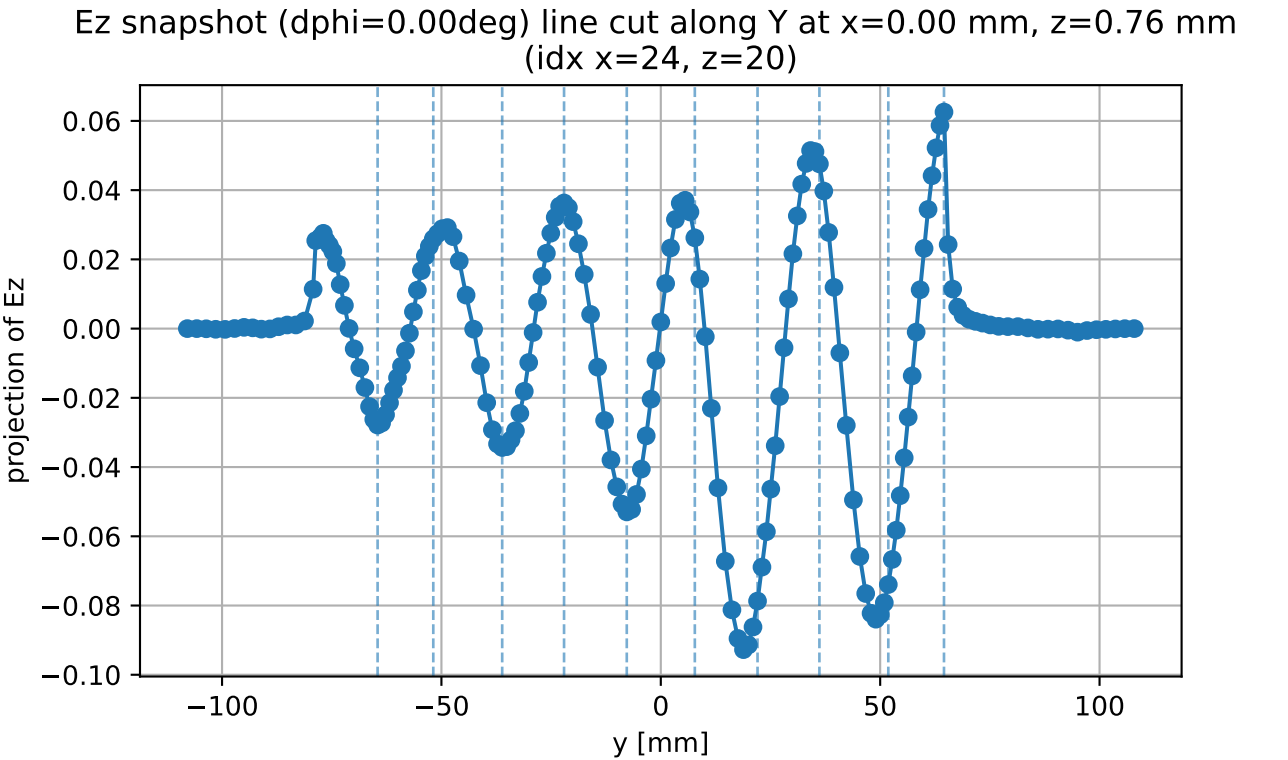

Reflection Coefficient S_{11}
S-Parameter (dB)
Frequency (GHz)
0
−5
−10
−15
−20
−25
−30
−35
−40
5.4
5.6
5.8
6.0
6.2
$f_0 = 5.827\,\text{GHz}\ (-38.9\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 5.790\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 5.862\,\text{GHz}$
$\text{BW} = 72.0\,\text{MHz}$ $\text{FBW} = 1.24\%$ $Q \approx 80.9$
S_{11}
min

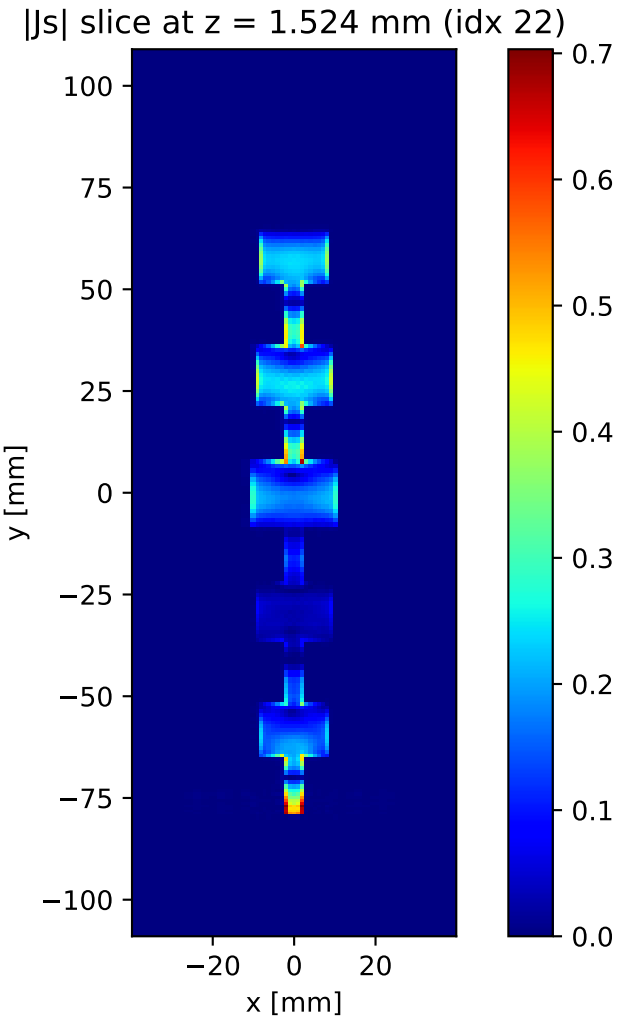

Smith Chart
S11 (Patch W=18.00 mm, L=14.10 mm)
5.80 GHz, S11=-0.028+0.236j, R=42.39+21.18j, Gnorm=0.94-0.47j
5.83 GHz, S11=-0.010-0.006j, R2=49.01-0.54j, G2norm=1.02+0.01j

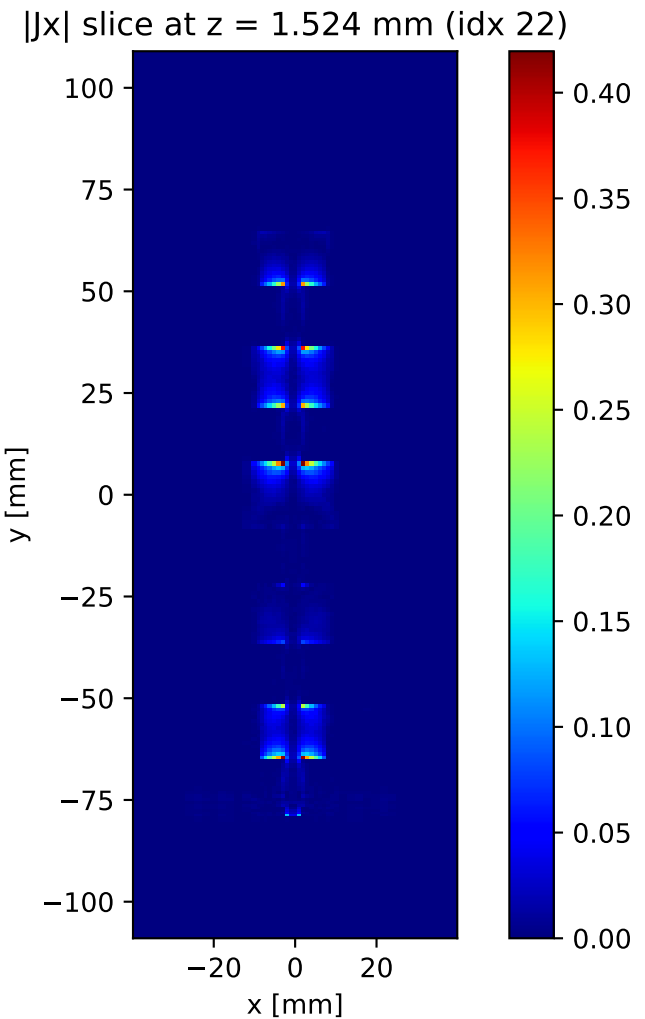

|Ez| slice at z = 0.76 mm (idx 20)
100
75
50
25
0
−25
−50
−75
−100
y [mm]
−20
0
20
x [mm]
0.08
0.06
0.04
0.02
0.00

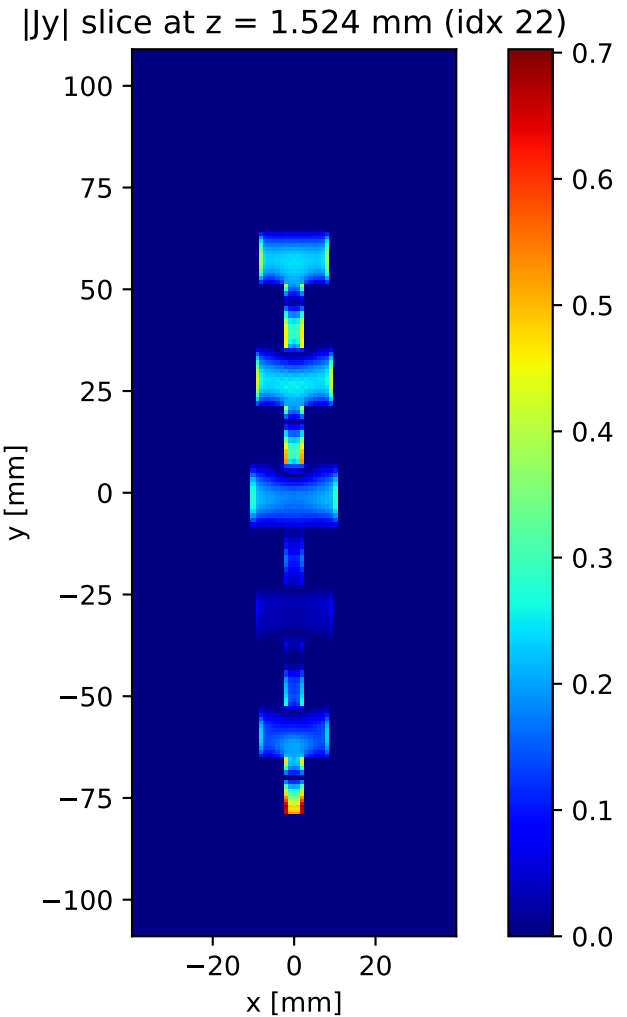

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=24, z=20)
projection of Ez
0.00
0.02
0.04
0.06
0.08
−100
−50
0
50
100
y [mm]

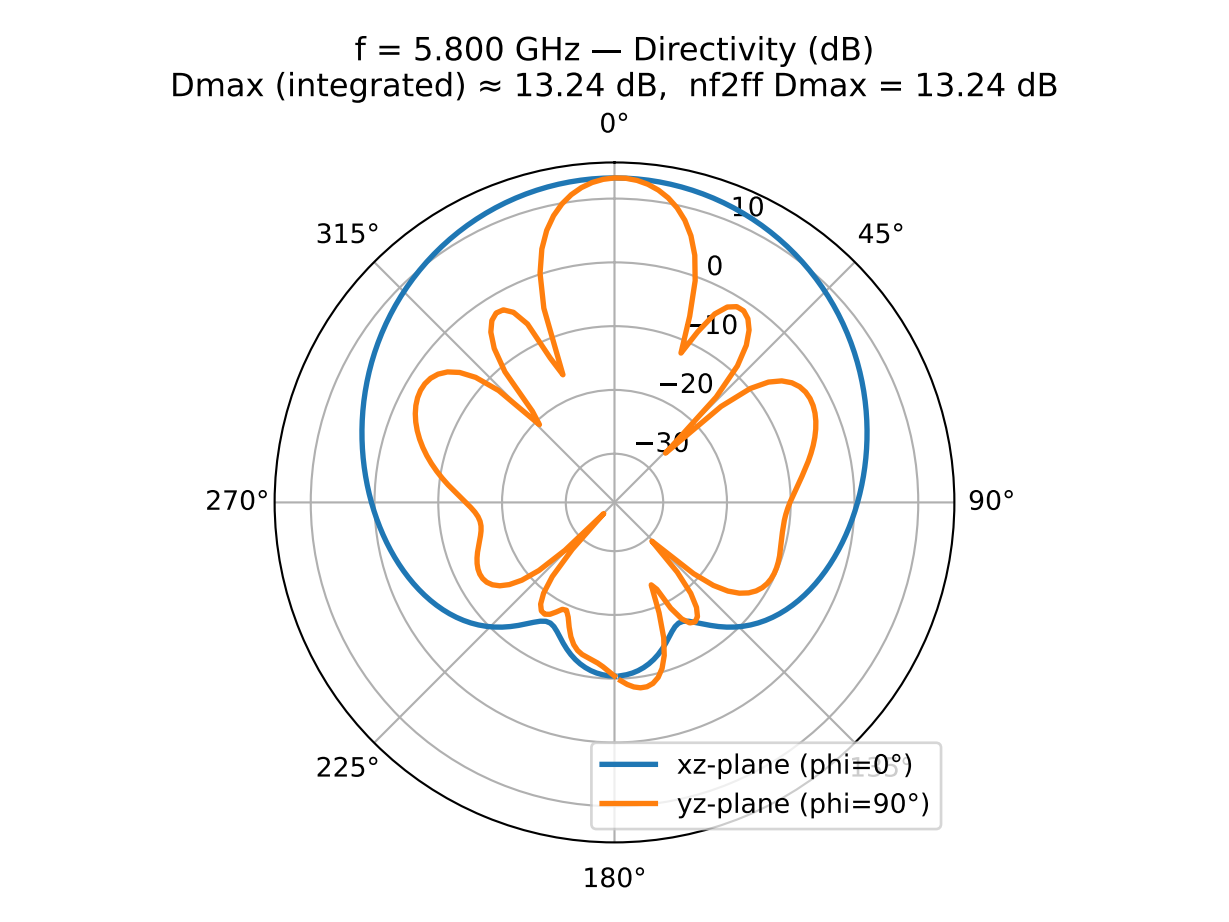

Ez snapshot (dphi=0.00deg) slice at z = 0.76 mm (idx 20)
100
75
50
25
0
−25
−50
−75
−100
y [mm]
−20
0
20
x [mm]
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08

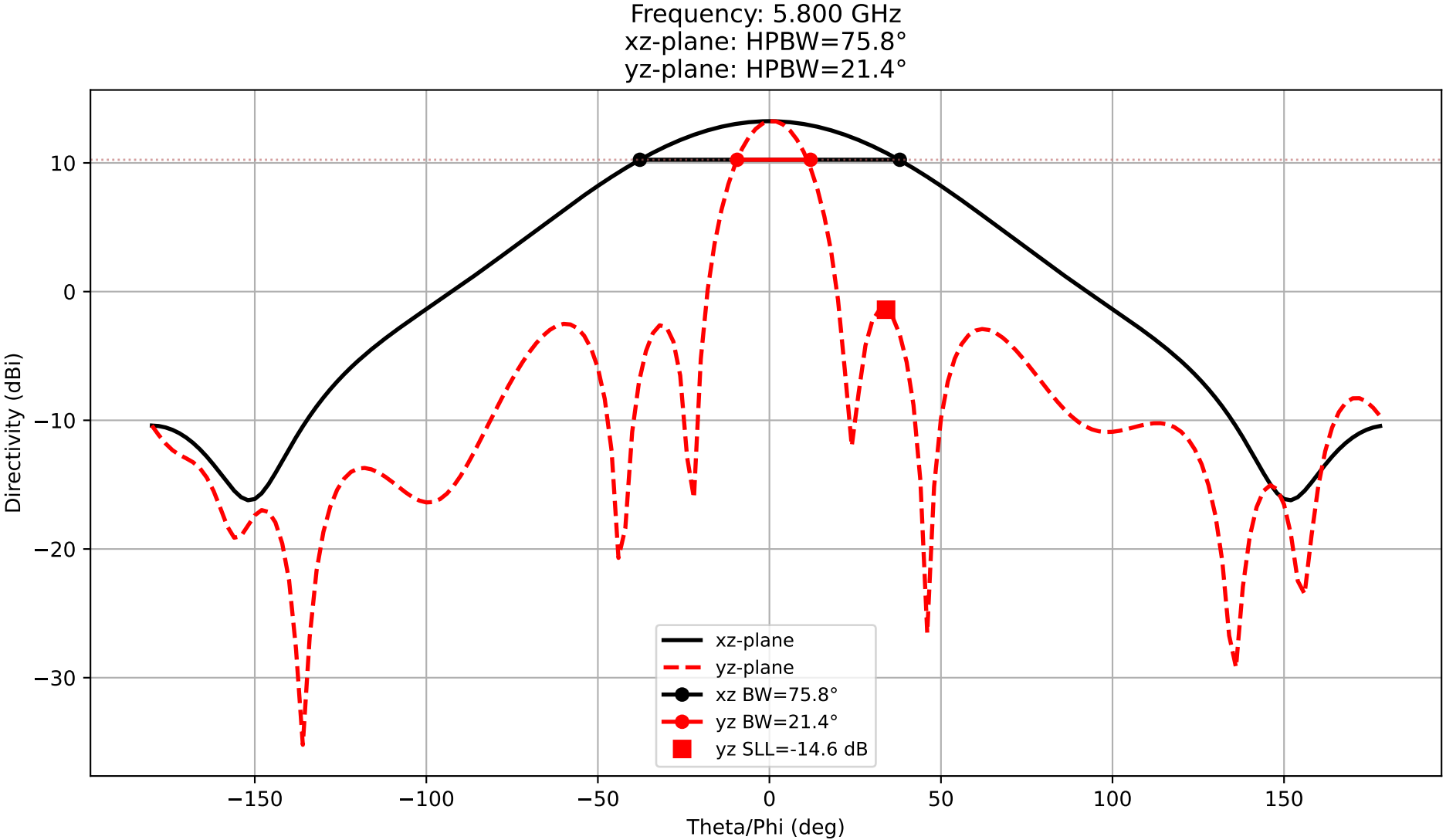

Ez snapshot (dphi=0.00deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=24, z=20)
projection of Ez
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
−100
−50
0
50
100
y [mm]

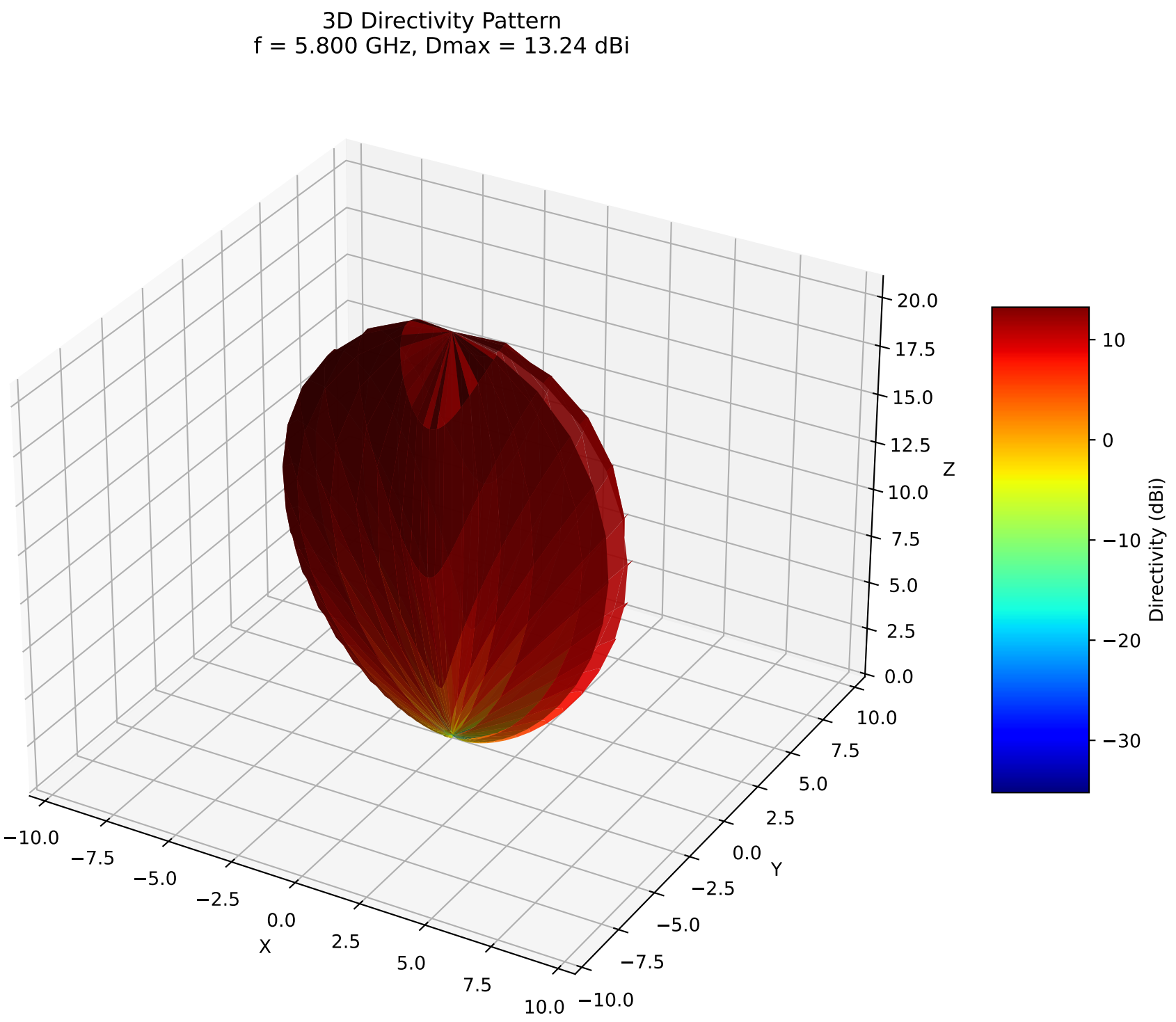

|Js| slice at z = 1.524 mm (idx 22)
y [mm]
x [mm]
100
75
50
25
0
−25
−50
−75
−100
−20
0
20
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0


|Jx| slice at z = 1.524 mm (idx 22)
y [mm]
x [mm]
100
75
50
25
0
−25
−50
−75
−100
−20
0
20
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00


|Jy| slice at z = 1.524 mm (idx 22)
y [mm]
x [mm]
100
75
50
25
0
−25
−50
−75
−100
−20
0
20
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0


f = 5.800 GHz — Directivity (dB)
Dmax (integrated) ≈ 13.24 dB, nf2ff Dmax = 13.24 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
xz-plane: HPBW=75.8°
yz-plane: HPBW=21.4°
Directivity (dBi)
10
0
−10
−20
−30
−150
−100
−50
0
50
100
150
Theta/Phi (deg)
xz-plane
yz-plane
xz BW=75.8°
yz BW=21.4°
yz SLL=-14.6 dB


3D Directivity Pattern
f = 5.800 GHz, Dmax = 13.24 dBi
X
Y
Z
Directivity (dBi)
−10.0
−7.5
−5.0
−2.5
0.0
2.5
5.0
7.5
10.0
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10
0
−10
−20
−30