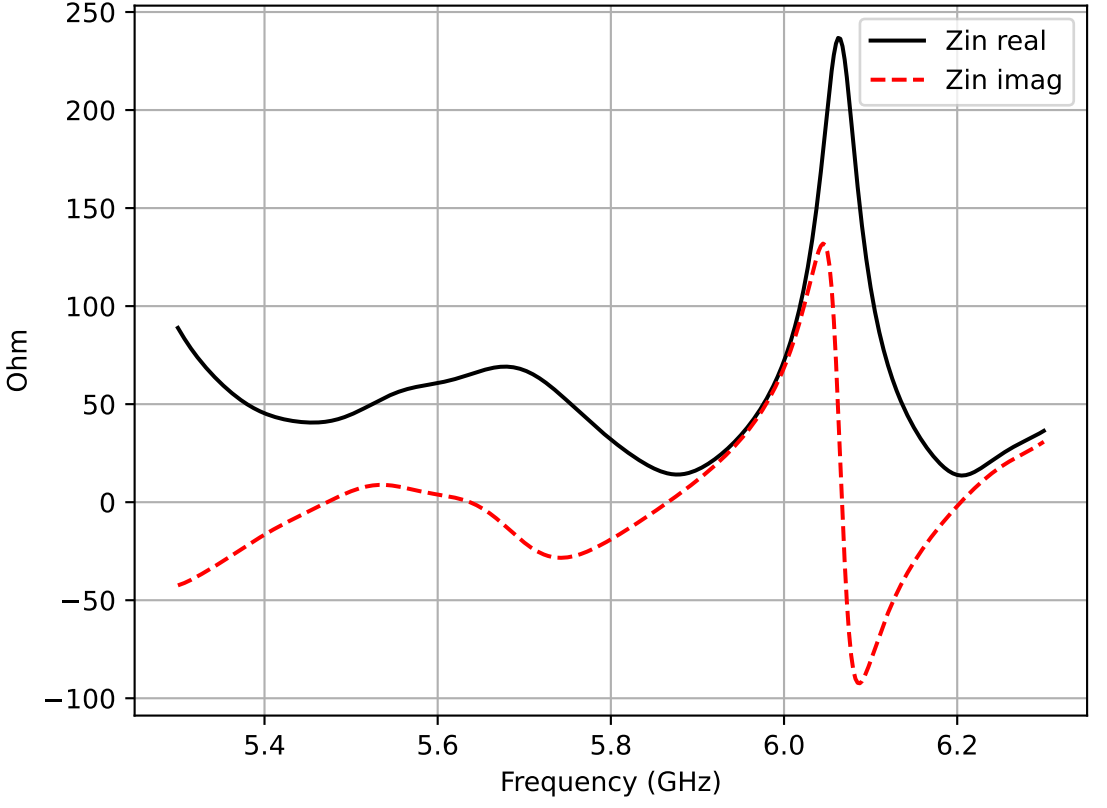
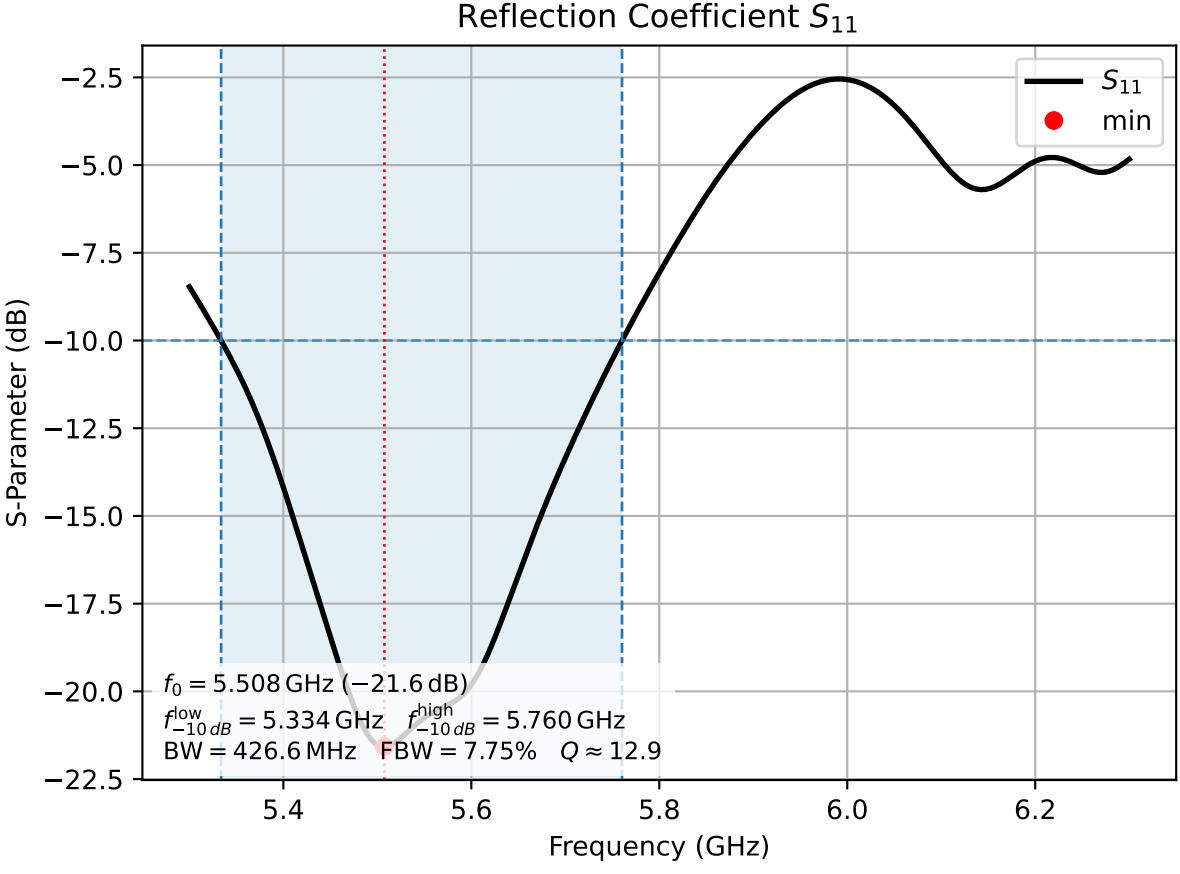
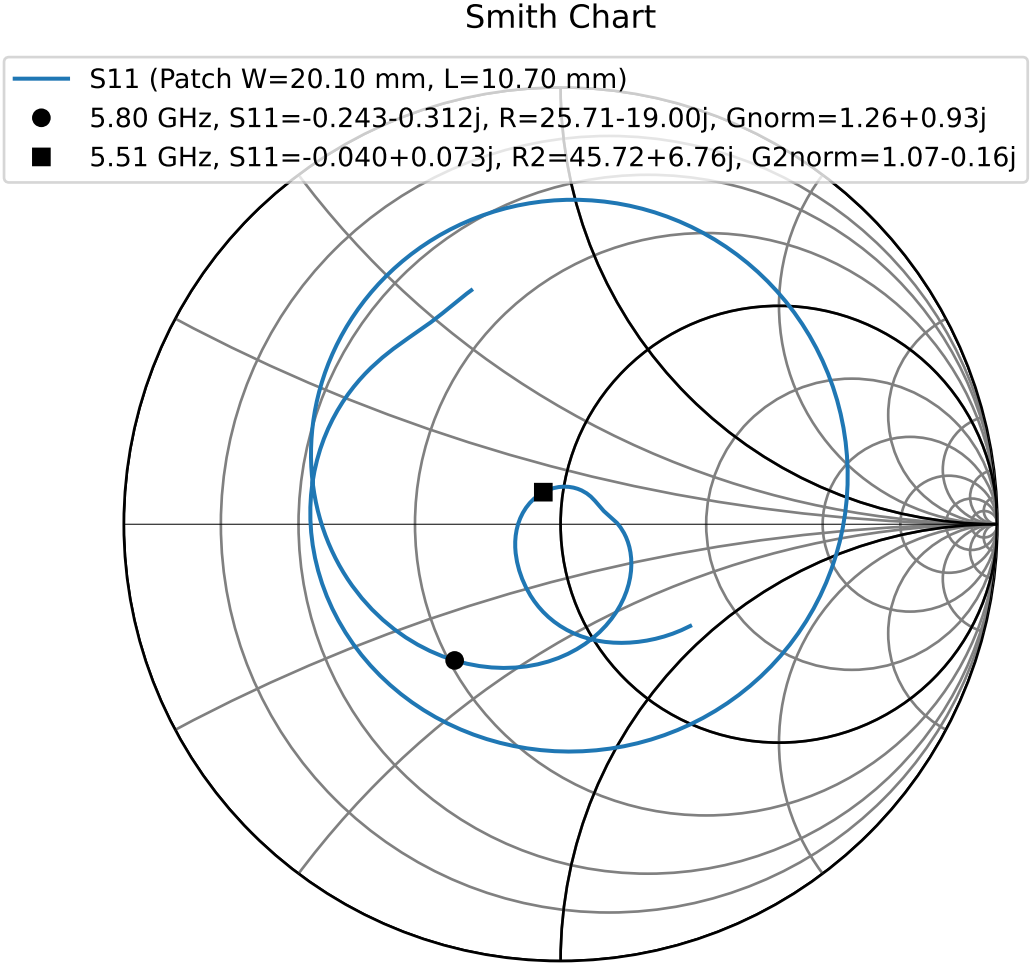
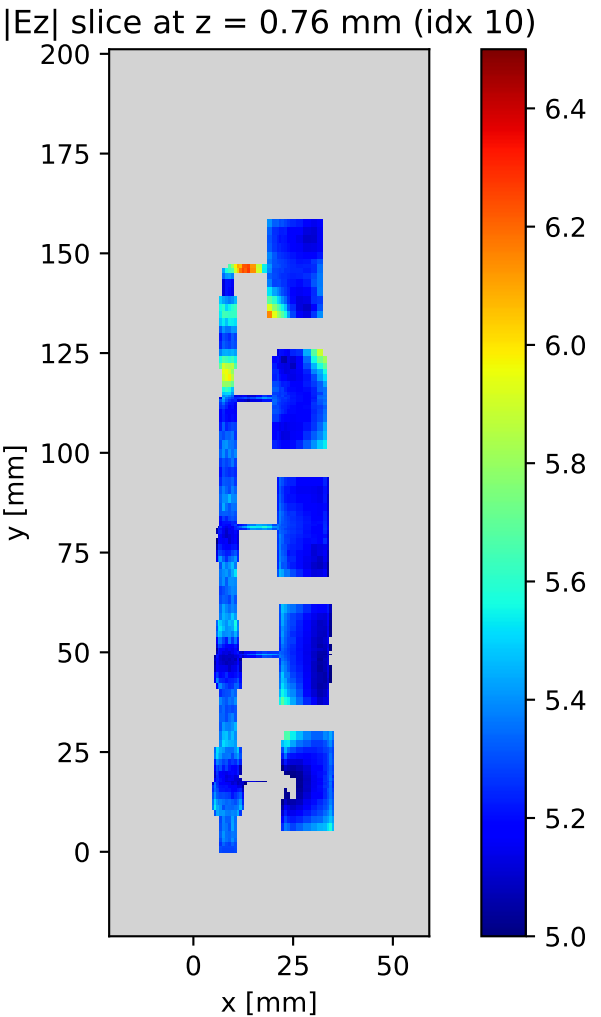
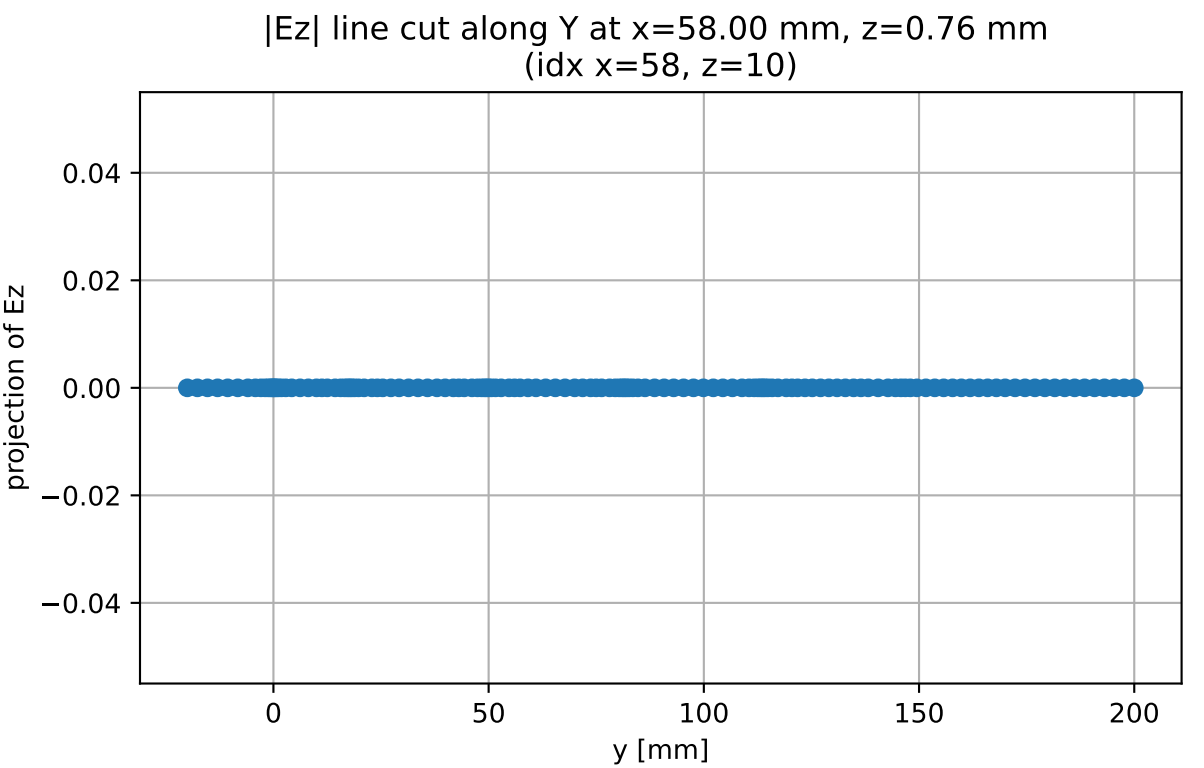
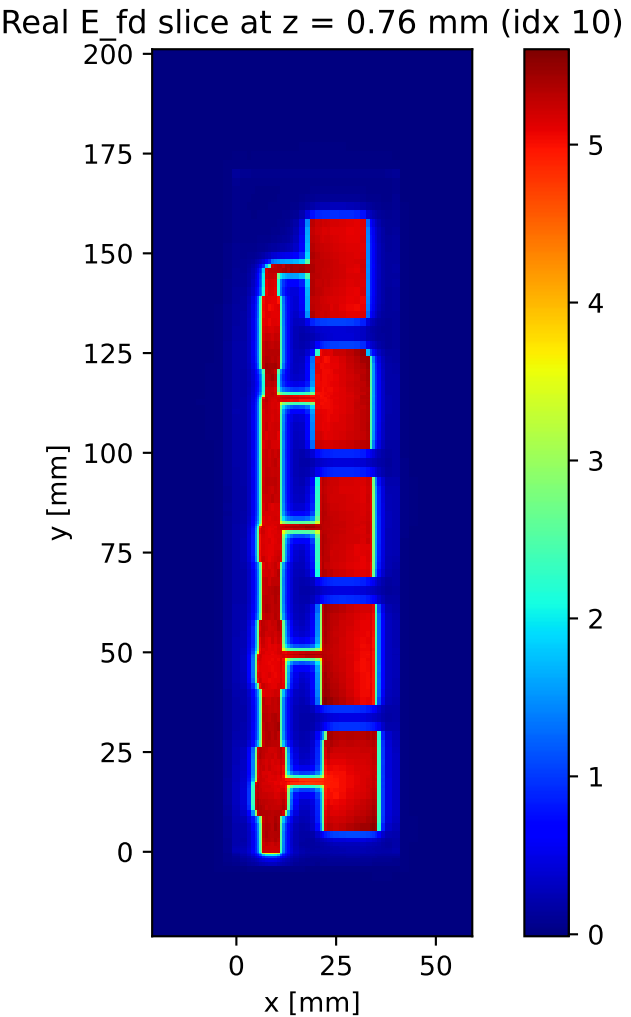

Zin real
Zin imag
Ohm
Frequency (GHz)
250
200
150
100
50
0
−50
−100
5.4
5.6
5.8
6.0
6.2

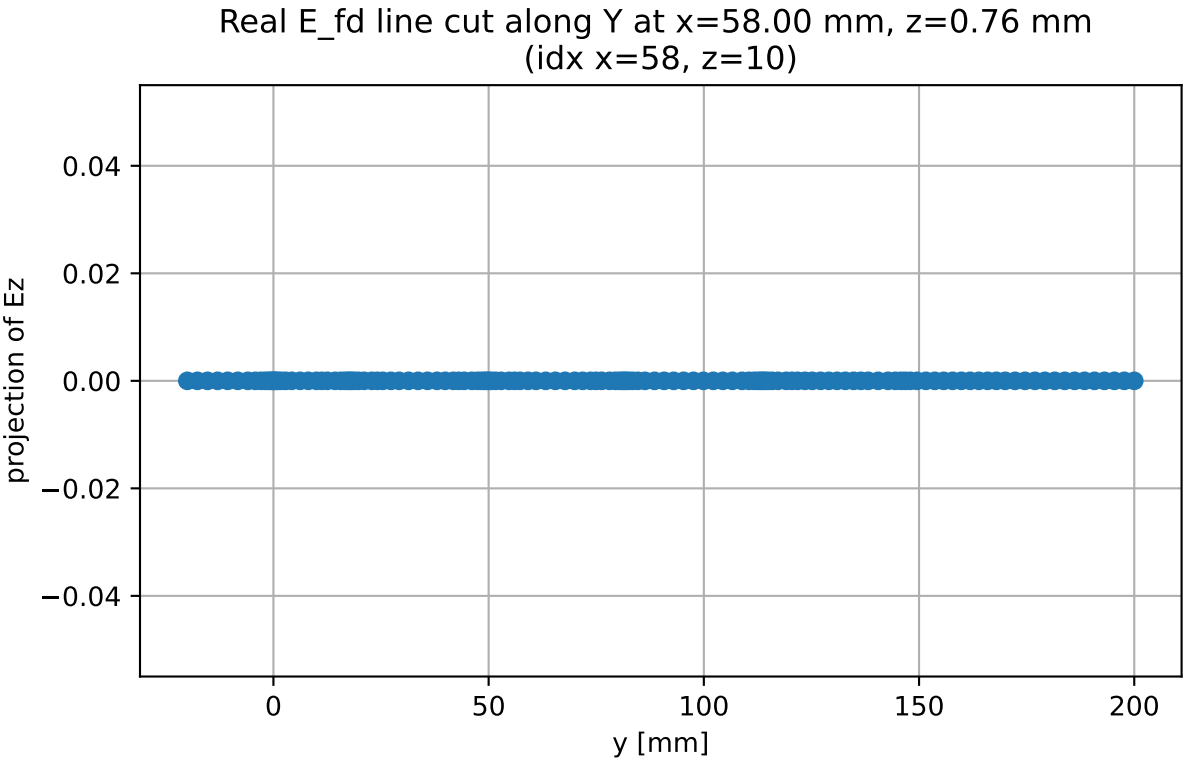

Reflection Coefficient S_{11}
S_{11}
min
S-Parameter (dB)
−2.5
−5.0
−7.5
−10.0
−12.5
−15.0
−17.5
−20.0
−22.5
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 5.508\,\text{GHz}\ (-21.6\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 5.334\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 5.760\,\text{GHz}$
$\text{BW} = 426.6\,\text{MHz}$ $\text{FBW} = 7.75\%$ $Q \approx 12.9$

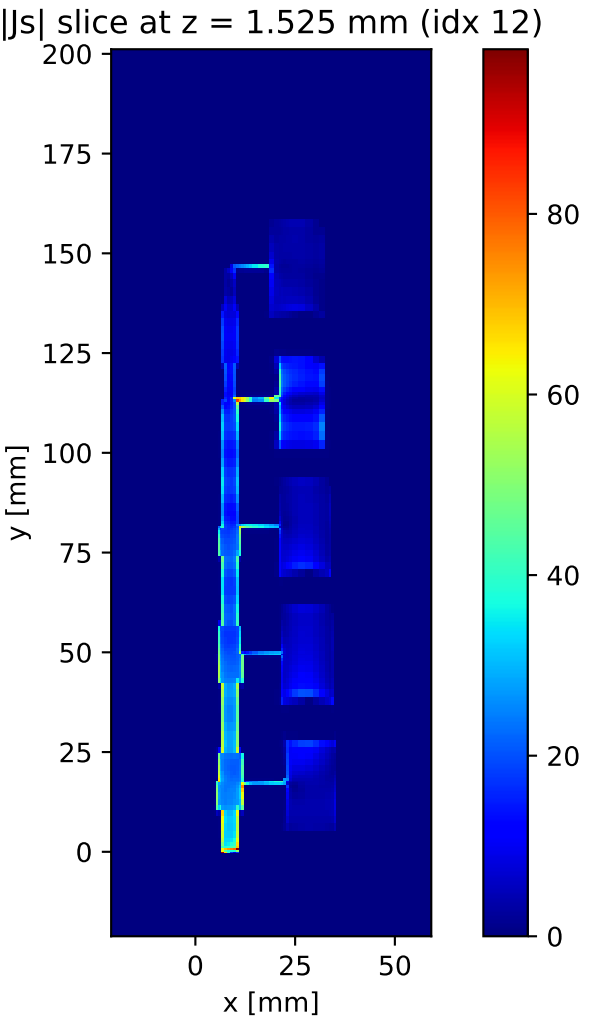

Smith Chart
S11 (Patch W=20.10 mm, L=10.70 mm)
5.80 GHz, S11=-0.243-0.312j, R=25.71-19.00j, Gnorm=1.26+0.93j
5.51 GHz, S11=-0.040+0.073j, R2=45.72+6.76j, G2norm=1.07-0.16j

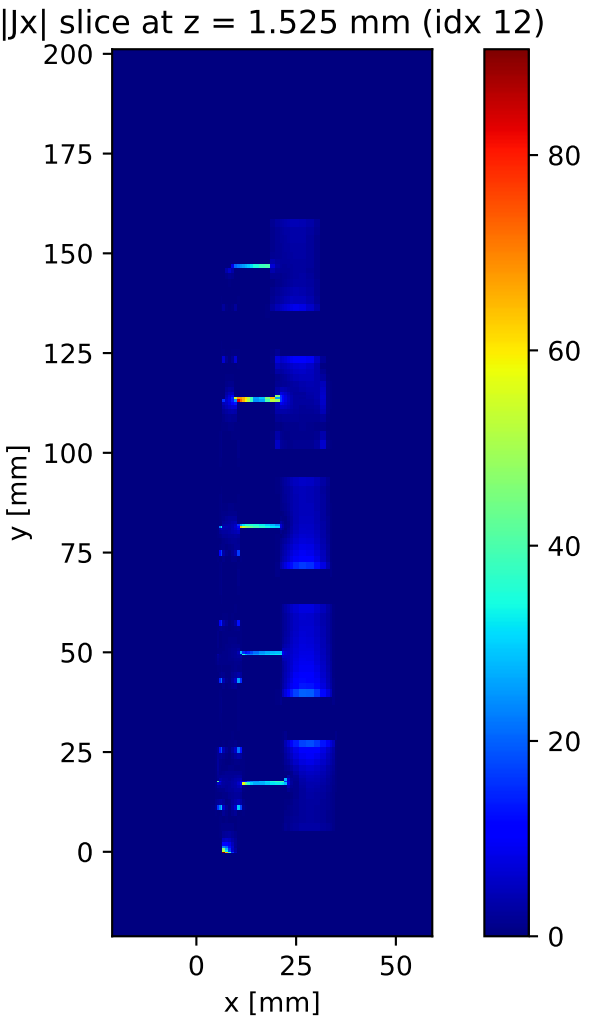

|Ez| slice at z = 0.76 mm (idx 10)
y [mm]
x [mm]
200
175
150
125
100
75
50
25
0
0
25
50
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0

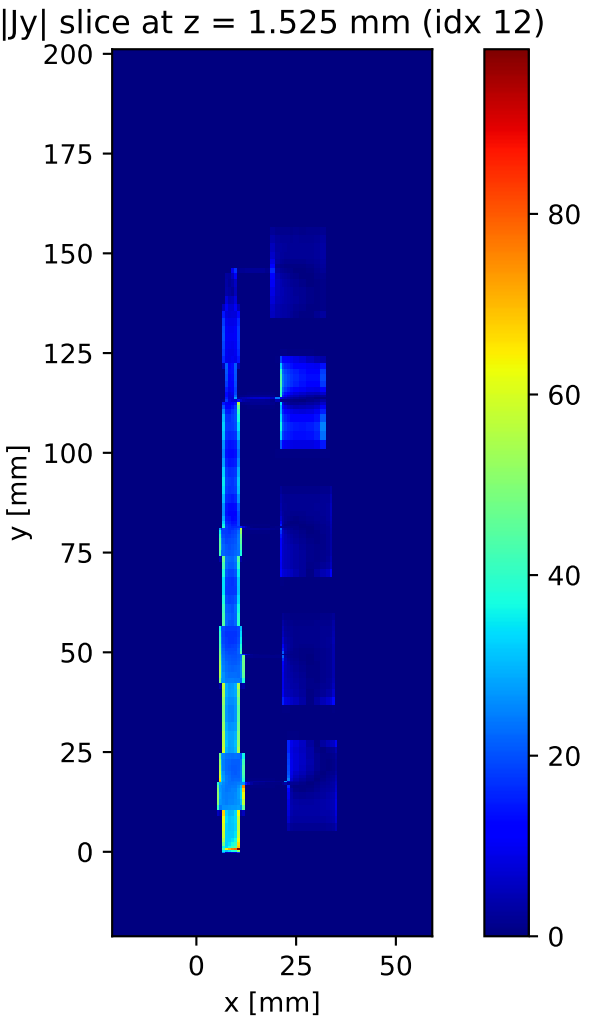

|Ez| line cut along Y at x=58.00 mm, z=0.76 mm
(idx x=58, z=10)
projection of Ez
0.04
0.02
0.00
−0.02
−0.04
0
50
100
150
200
y [mm]

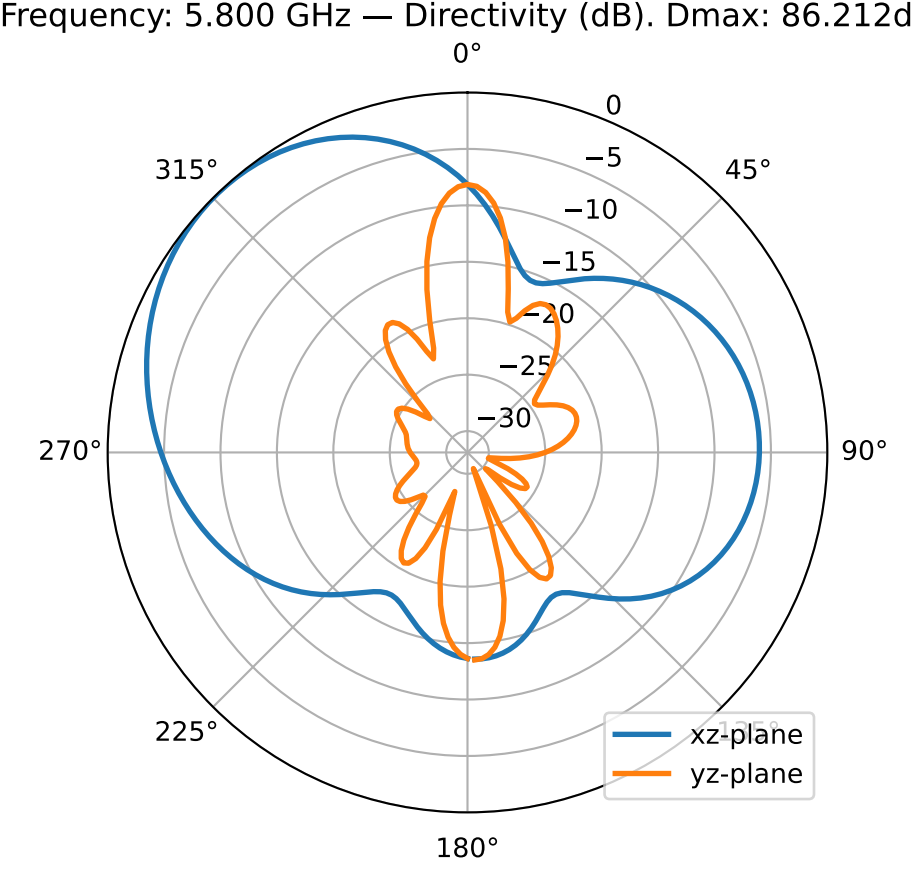

Real E_fd slice at z = 0.76 mm (idx 10)
200
175
150
125
100
75
50
25
0
y [mm]
0
25
50
x [mm]
5
4
3
2
1
0

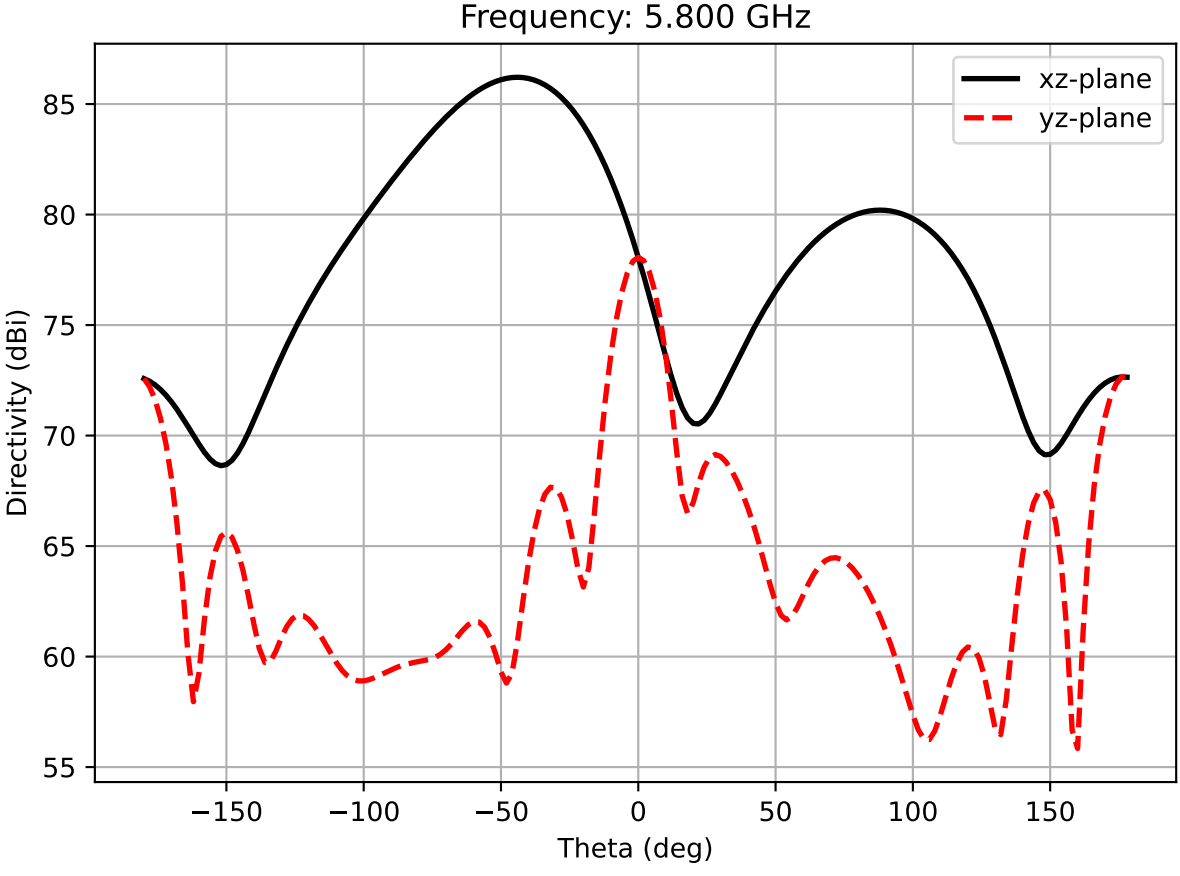

Real E_fd line cut along Y at x=58.00 mm, z=0.76 mm
(idx x=58, z=10)
projection of Ez
0.04
0.02
0.00
−0.02
−0.04
0
50
100
150
200
y [mm]


|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]
80
60
40
20
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]
80
60
40
20
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]
80
60
40
20
0


Frequency: 5.800 GHz — Directivity (dB). Dmax: 86.212dB
0°
45°
90°
180°
225°
270°
315°
0
−5
−10
−15
−20
−25
−30
xz-plane
yz-plane


Frequency: 5.800 GHz
xz-plane
yz-plane
Directivity (dBi)
85
80
75
70
65
60
55
−150
−100
−50
0
50
100
150
Theta (deg)