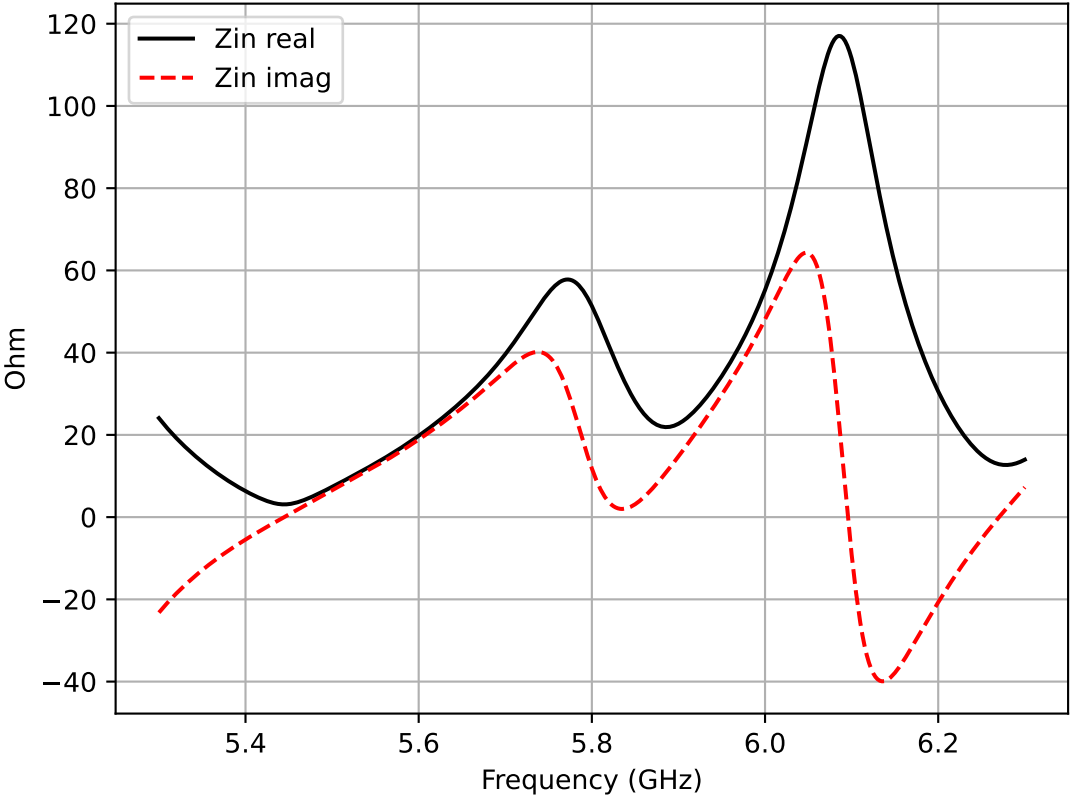
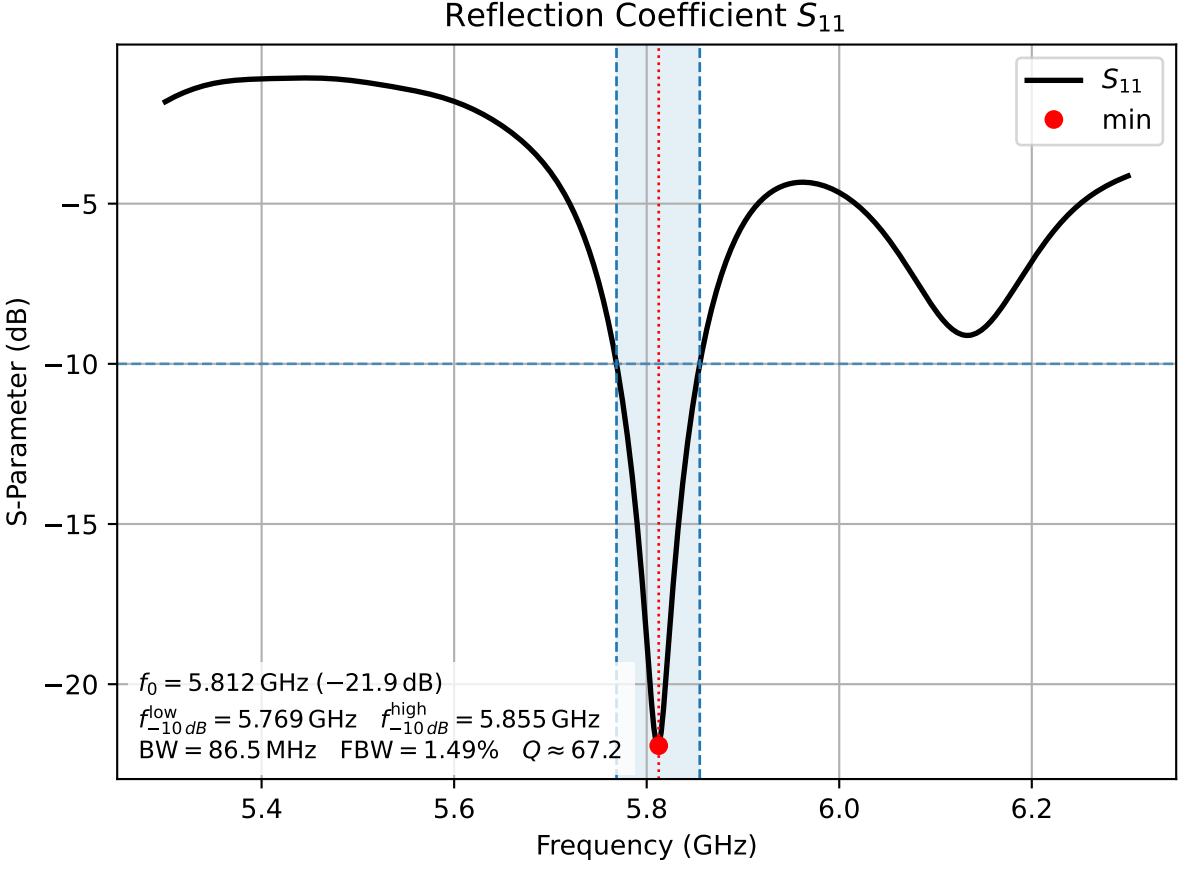
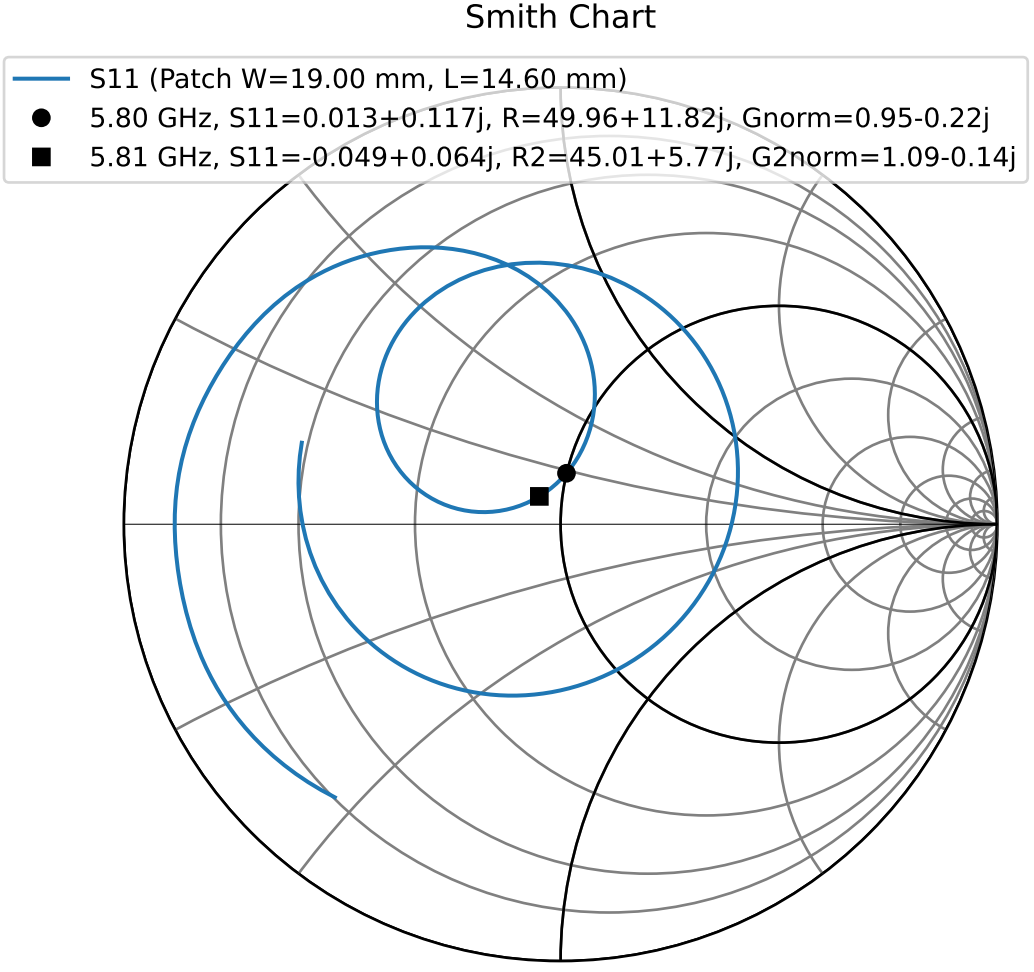
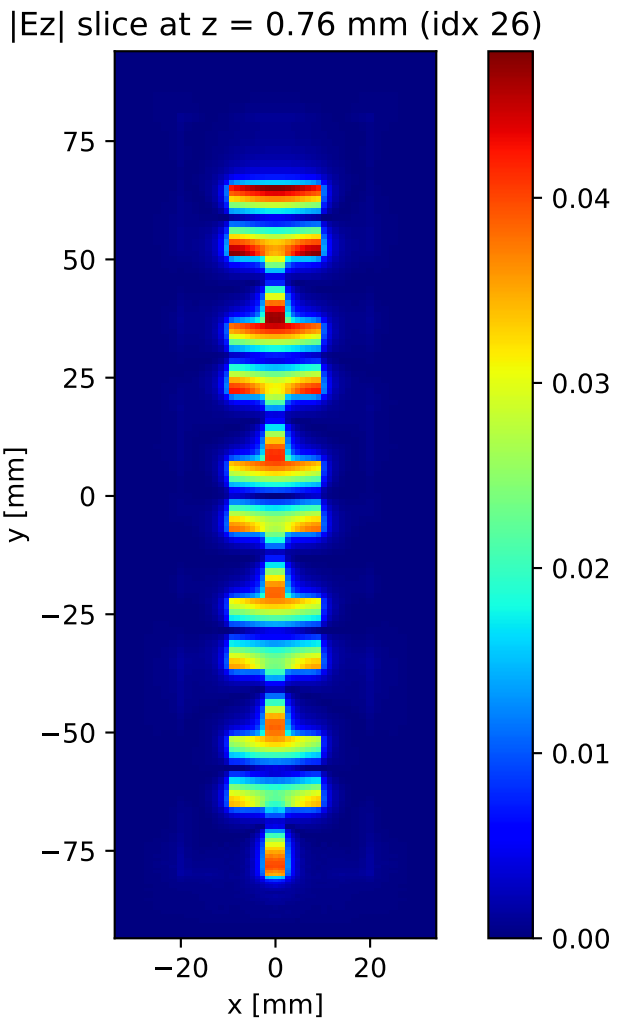
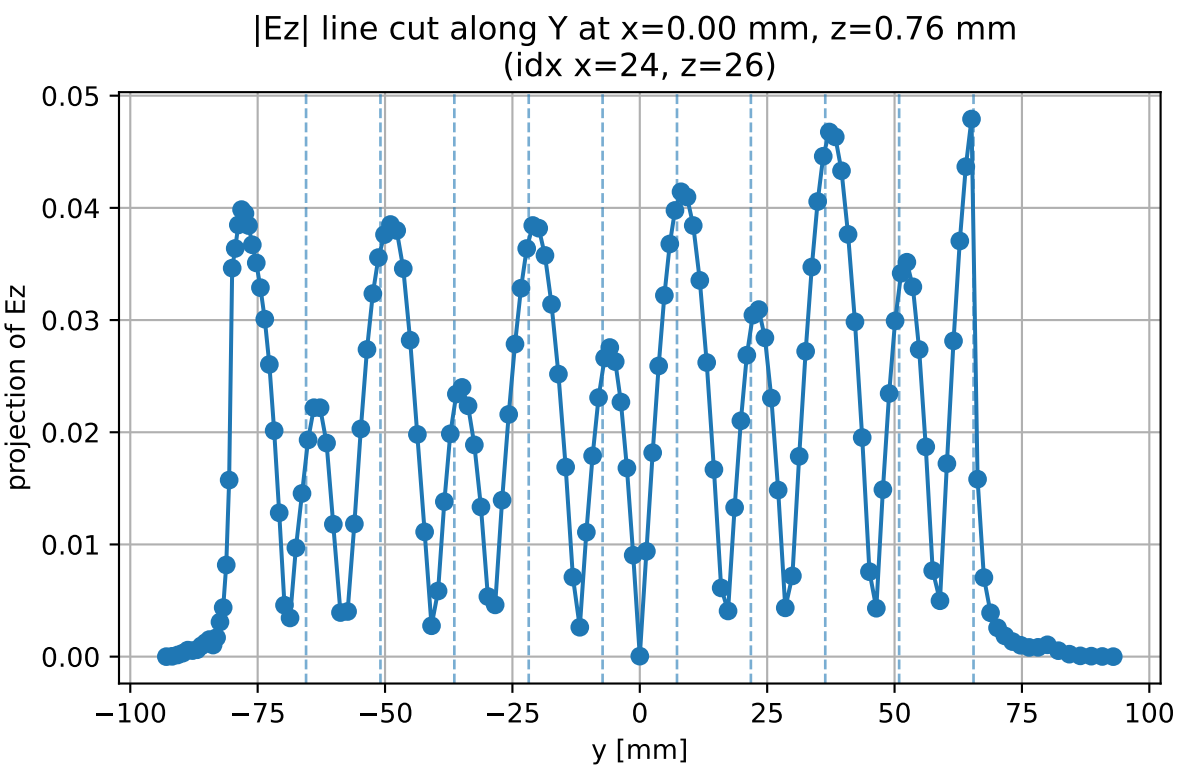
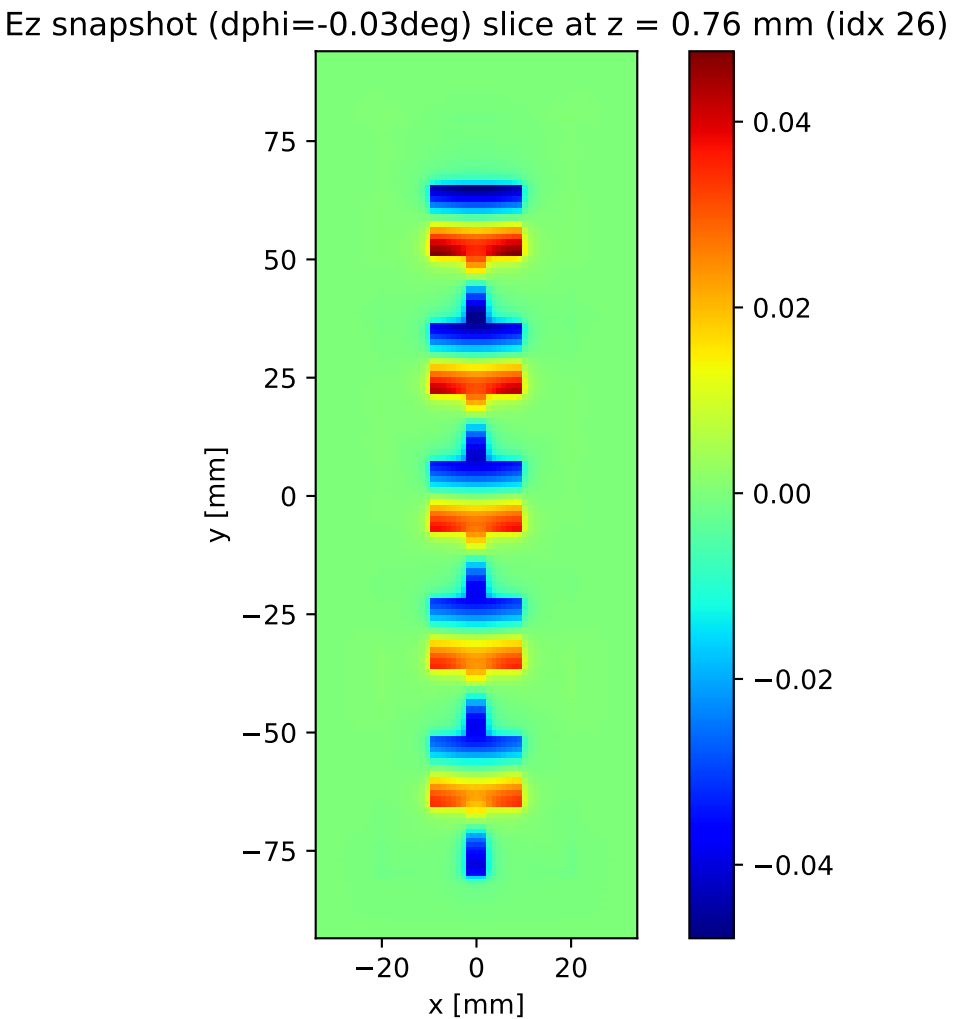

Zin real
Zin imag
120
100
80
60
40
20
0
−20
−40
Ohm
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)

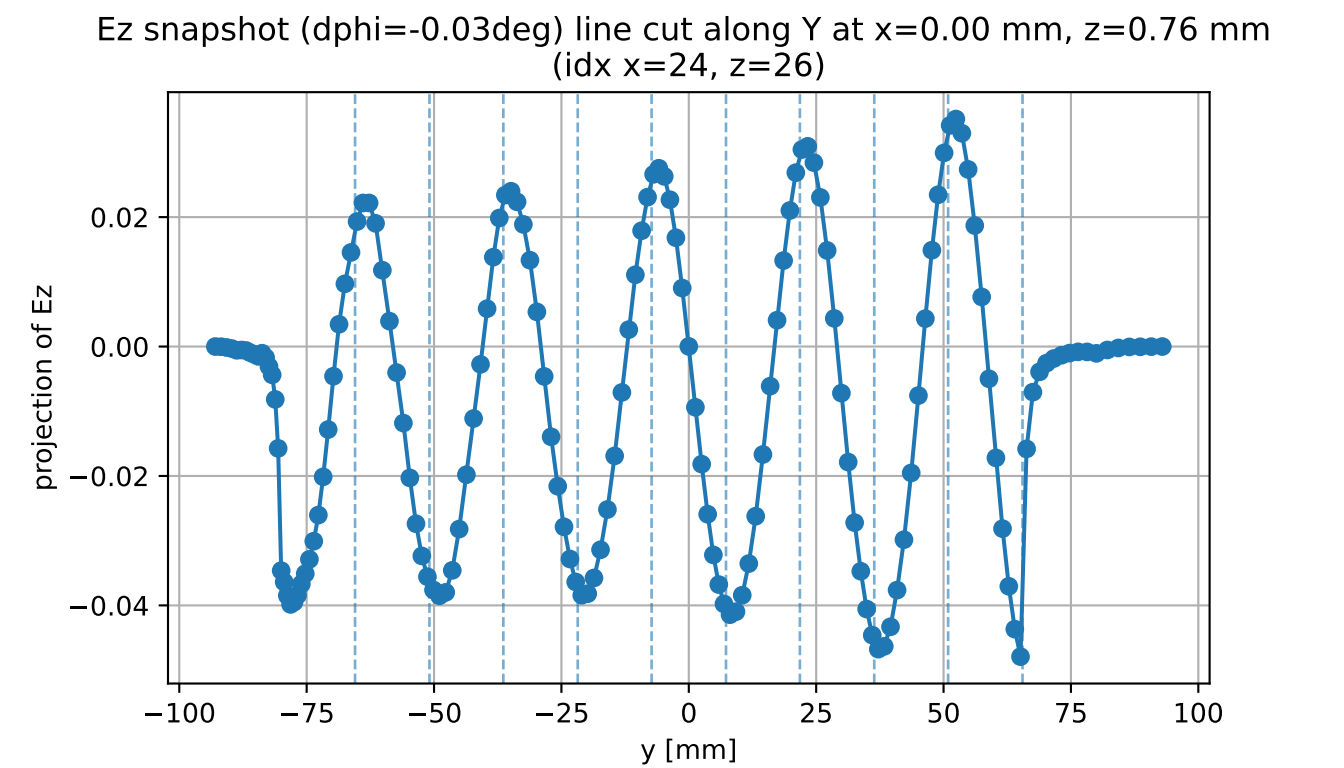

Reflection Coefficient S_{11}
S_{11}
min
S-Parameter (dB)
−5
−10
−15
−20
5.4
5.6
5.8
6.0
6.2
Frequency (GHz)
$f_0 = 5.812\,\text{GHz}\ (-21.9\,\text{dB})$
$f^{\text{low}}_{-10\,dB} = 5.769\,\text{GHz}$ $f^{\text{high}}_{-10\,dB} = 5.855\,\text{GHz}$
$\text{BW} = 86.5\,\text{MHz}$ $\text{FBW} = 1.49\%$ $Q \approx 67.2$

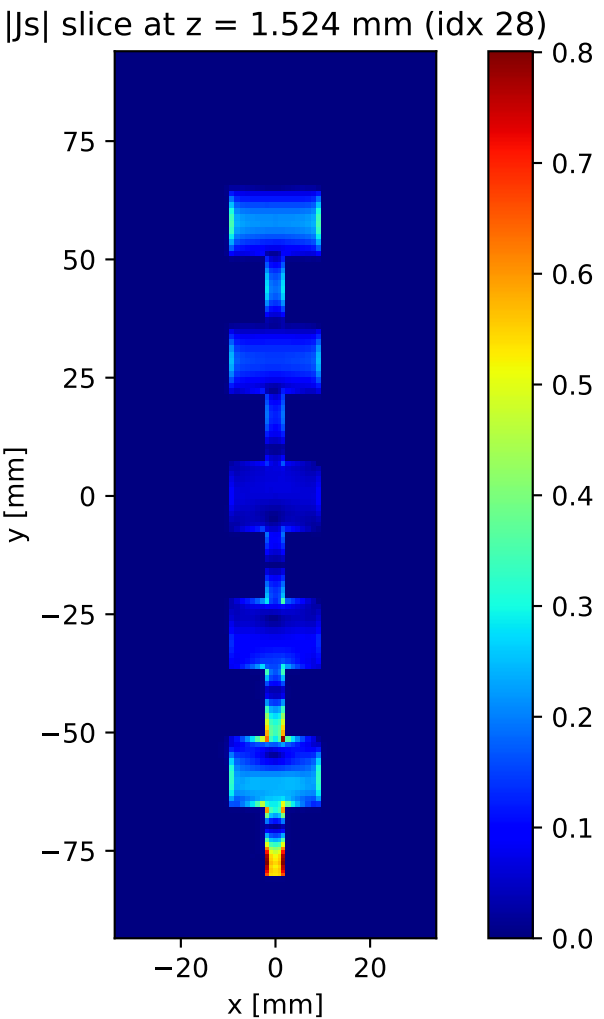

Smith Chart
S11 (Patch W=19.00 mm, L=14.60 mm)
5.80 GHz, S11=0.013+0.117j, R=49.96+11.82j, Gnorm=0.95-0.22j
5.81 GHz, S11=-0.049+0.064j, R2=45.01+5.77j, G2norm=1.09-0.14j

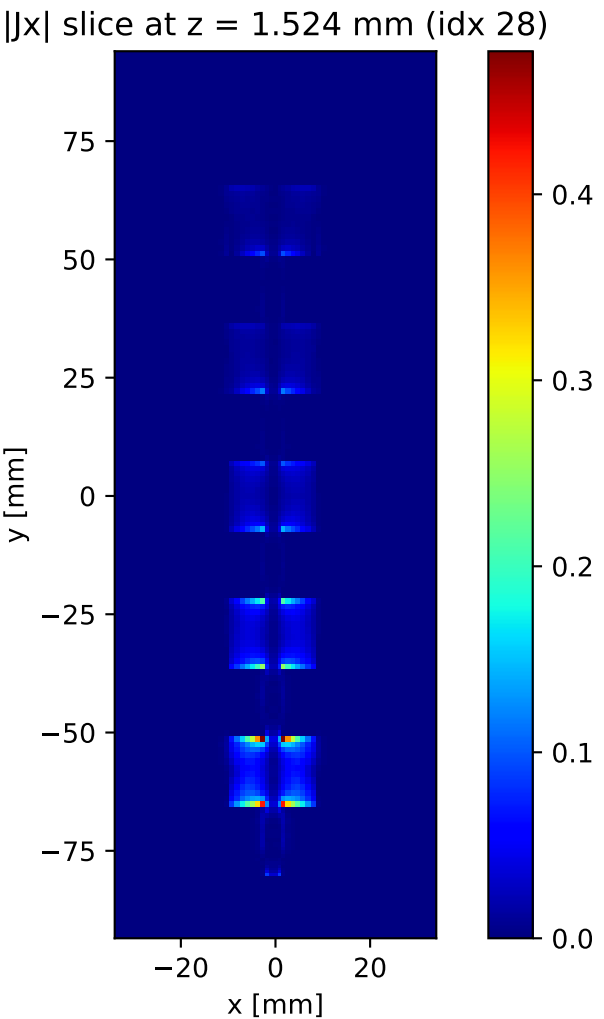

|Ez| slice at z = 0.76 mm (idx 26)
75
50
25
0
−25
−50
−75
y [mm]
−20
0
20
x [mm]
0.04
0.03
0.02
0.01
0.00

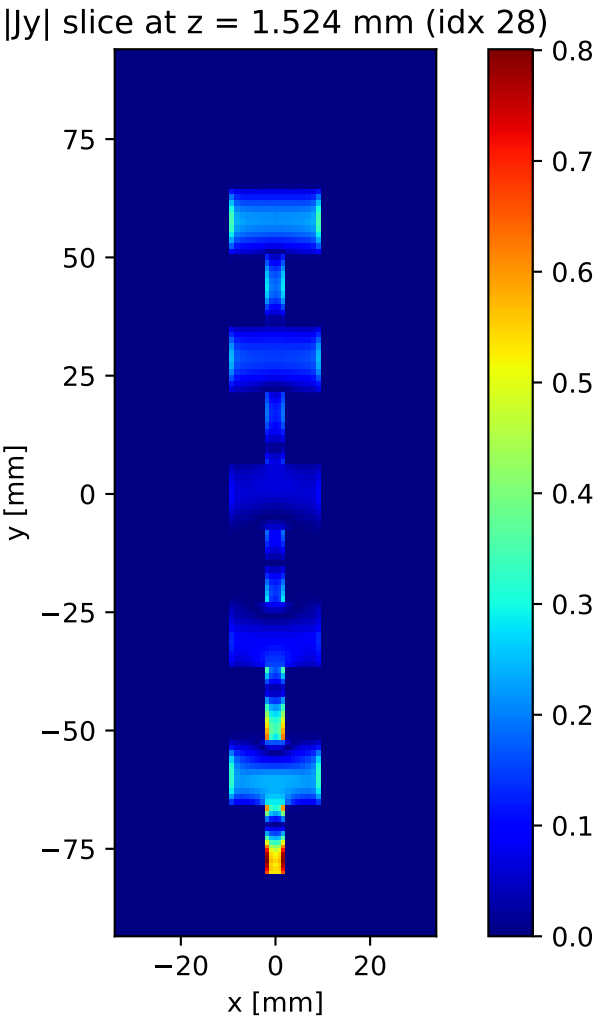

|Ez| line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=24, z=26)
projection of Ez
y [mm]
0.05
0.04
0.03
0.02
0.01
0.00
−100
−75
−50
−25
0
25
50
75
100

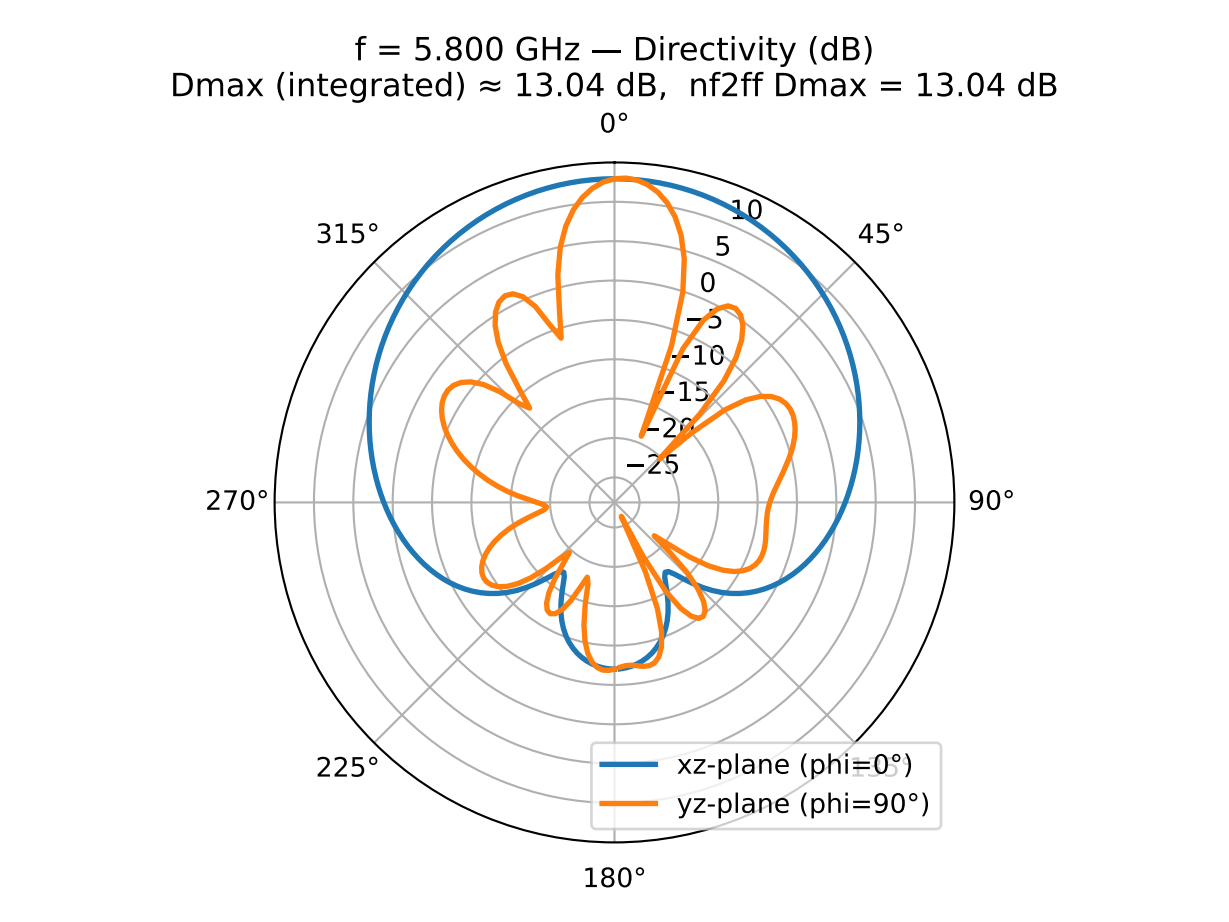

Ez snapshot (dphi=-0.03deg) slice at z = 0.76 mm (idx 26)
y [mm]
x [mm]
75
50
25
0
−25
−50
−75
−20
0
20
0.04
0.02
0.00
−0.02
−0.04

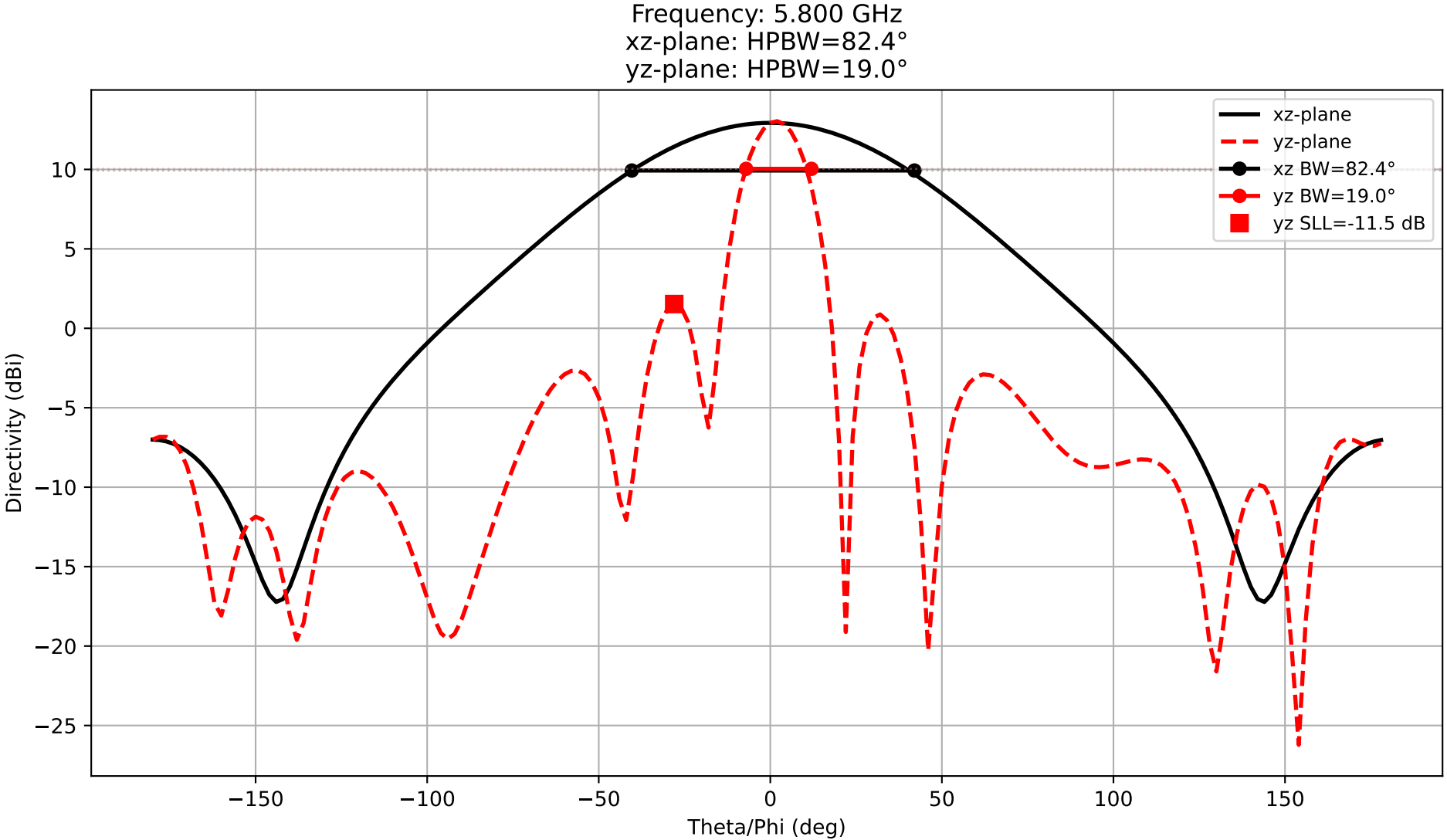

Ez snapshot (dphi=-0.03deg) line cut along Y at x=0.00 mm, z=0.76 mm
(idx x=24, z=26)
projection of Ez
0.02
0.00
−0.02
−0.04
−100
−75
−50
−25
0
25
50
75
100
y [mm]

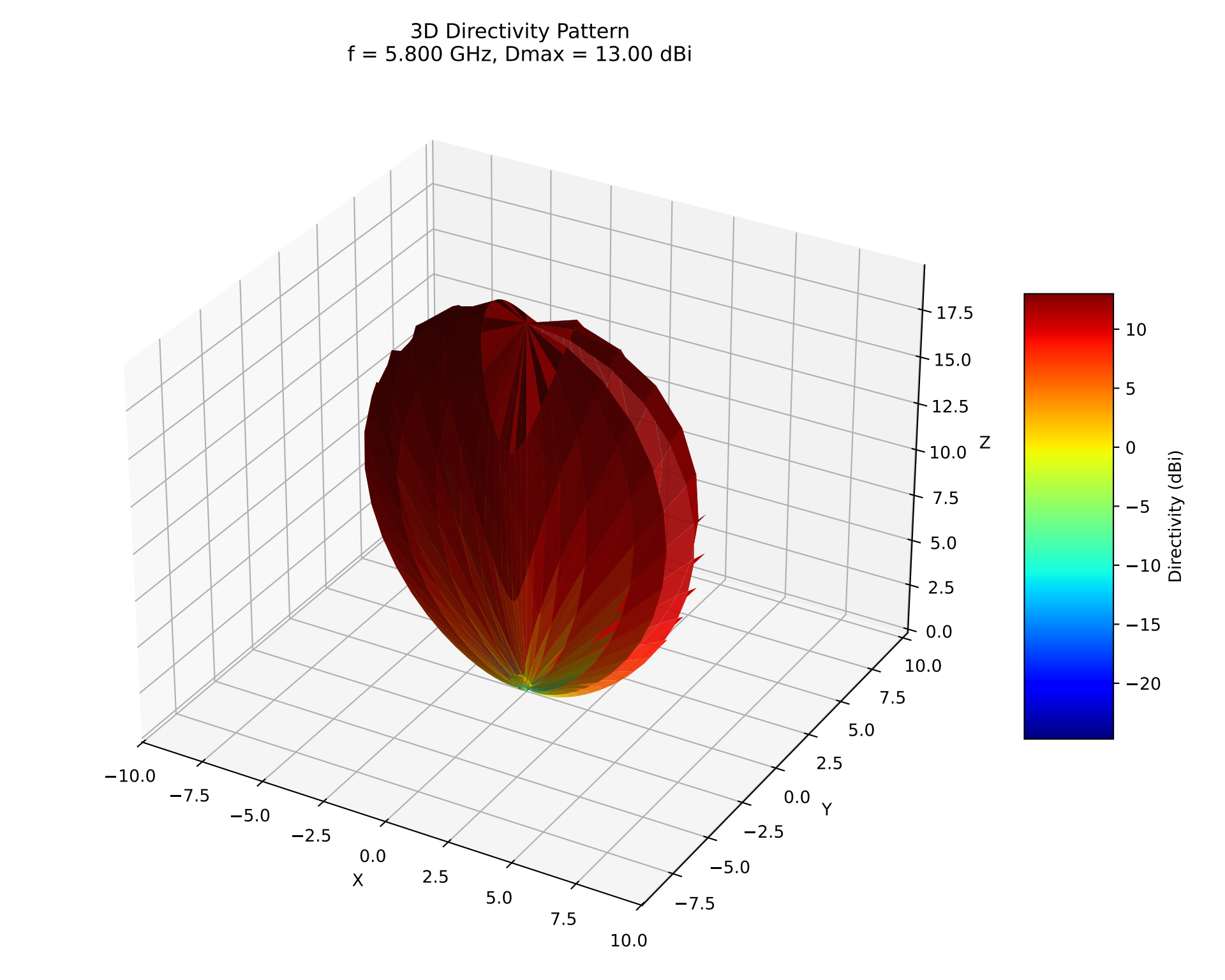

|Js| slice at z = 1.524 mm (idx 28)
y [mm]
x [mm]
75
50
25
0
−25
−50
−75
−20
0
20
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0


|Jx| slice at z = 1.524 mm (idx 28)
75
50
25
0
−25
−50
−75
y [mm]
−20
0
20
x [mm]
0.4
0.3
0.2
0.1
0.0


|Jy| slice at z = 1.524 mm (idx 28)
y [mm]
x [mm]
75
50
25
0
−25
−50
−75
−20
0
20
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0


f = 5.800 GHz — Directivity (dB)
Dmax (integrated) ≈ 13.04 dB, nf2ff Dmax = 13.04 dB
0°
45°
90°
180°
225°
270°
315°
10
5
0
−5
−10
−15
−20
−25
xz-plane (phi=0°)
yz-plane (phi=90°)


Frequency: 5.800 GHz
xz-plane: HPBW=82.4°
yz-plane: HPBW=19.0°
xz-plane
yz-plane
xz BW=82.4°
yz BW=19.0°
yz SLL=-11.5 dB
Directivity (dBi)
10
5
0
−5
−10
−15
−20
−25
−150
−100
−50
0
50
100
150
Theta/Phi (deg)


3D Directivity Pattern
f = 5.800 GHz, Dmax = 13.00 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
10
5
0
−5
−10
−15
−20