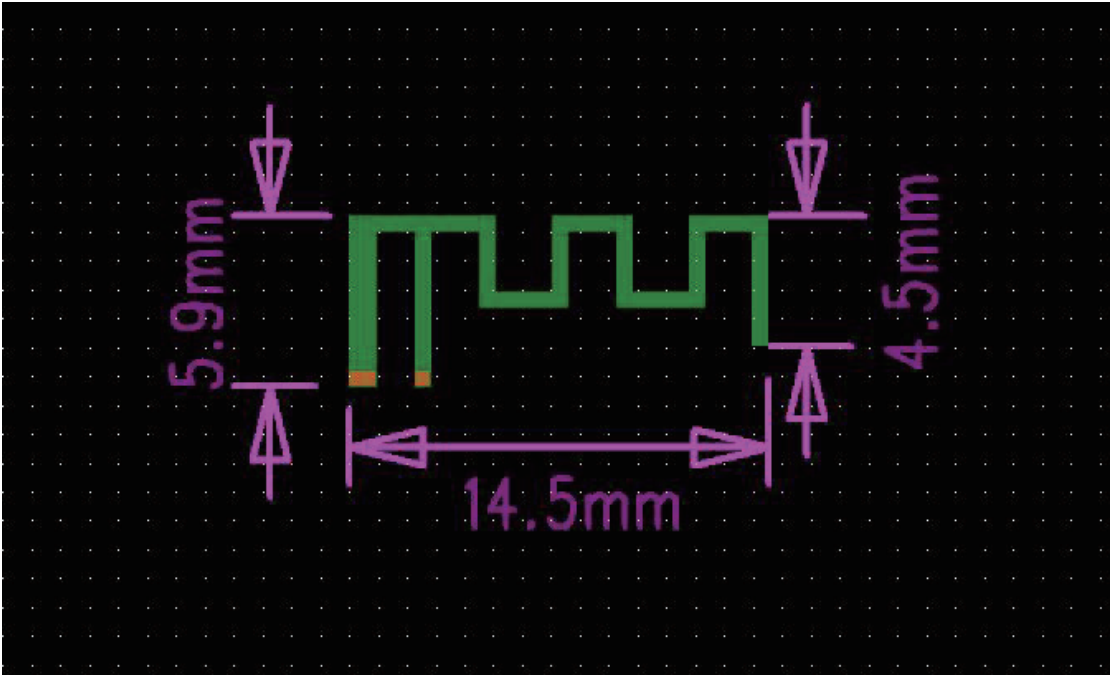


. Antenna Specification

一、Dimensions



二、General Specifications

Part Number	PCB_ANTENNA
Frequency Range	2400 - 2500 Mhz
Band Width	100MHz
Peak Gain	-0.5 dBi
Return Loss	-10dB (MAX)
VSWR	≤2.0(MAX)
Antenna type	FR4_ PCB _Antenna
Antenna size	14.5 x 5.9mm

三、TEST

ANTENNA INFORMATION

The radiation pattern for the antenna implemented on the B500 reference design has been measured in an anechoic chamber. Figure 2 through Figure 7 shows radiation patterns for three planes, XY, XZ and YZ, measured with vertical and horizontal polarization. All these measurement were performed without connecting the PCBA to a computer. Figure 8 and Figure 9 shows the radiation pattern when the PCBA is connected to a laptop. All measurements were performed with 0 dBm output power. Figure 1 shows how the different radiation patters are related to the positioning of the antenna.

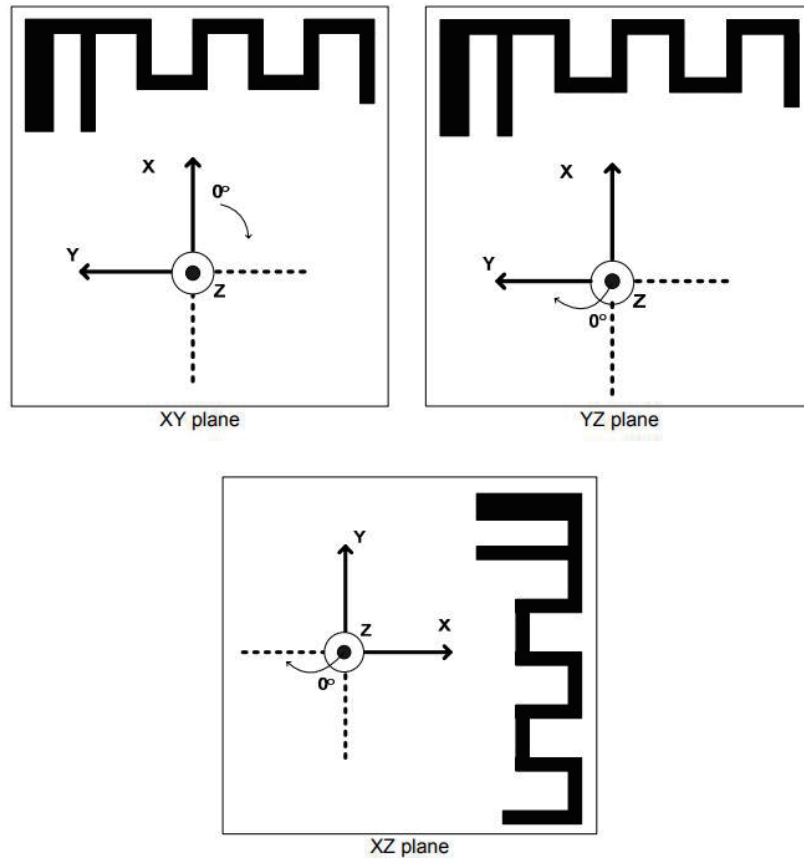
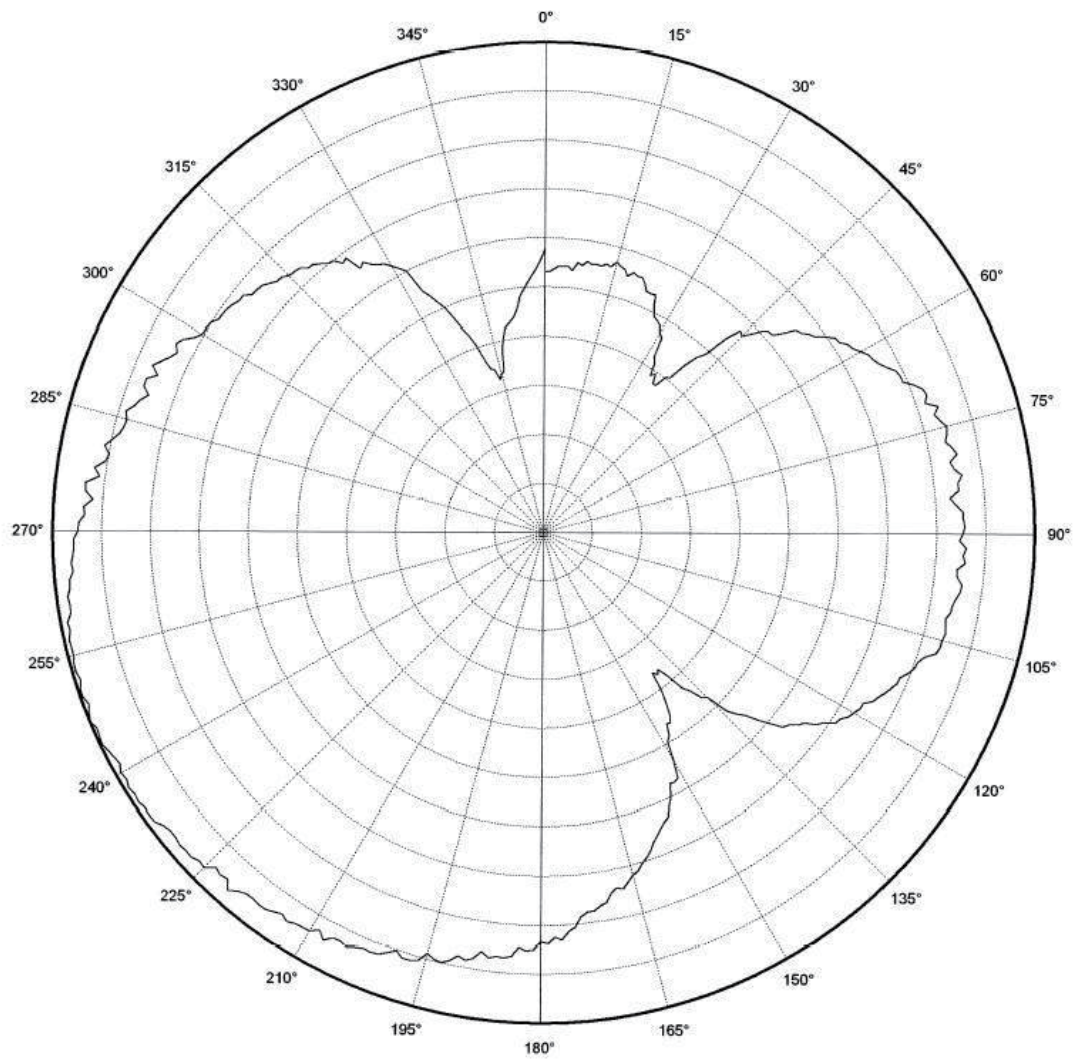


Figure 1: How to Relate the Antenna to the Radiation Patterns



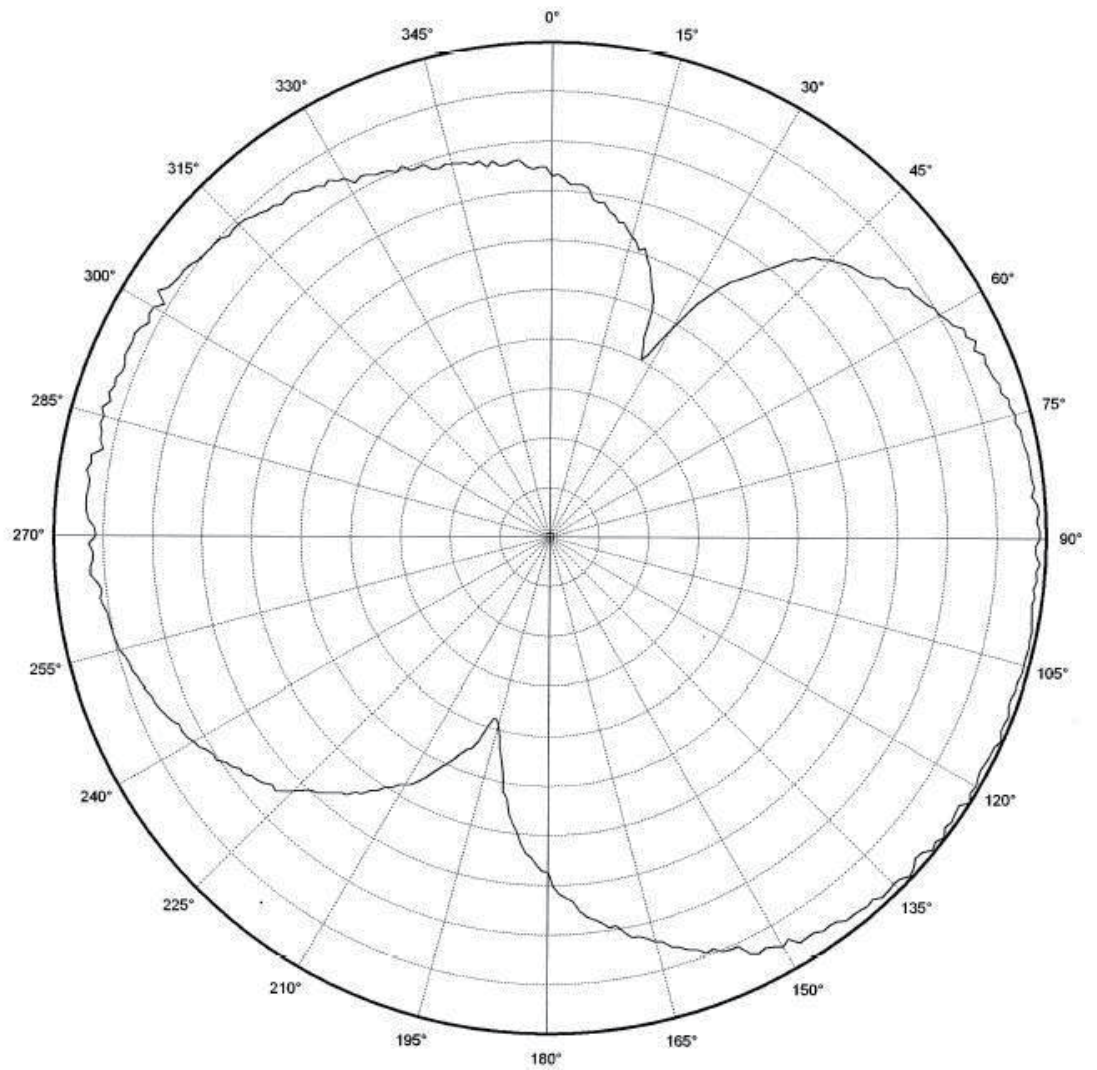
Vertical Polarization

XY

CF 2450.000 MHz
4 dB/ div

Ref Lev: *-2.5* dBm

Figure 2: B500 XY Plane



Horizontal Polarization

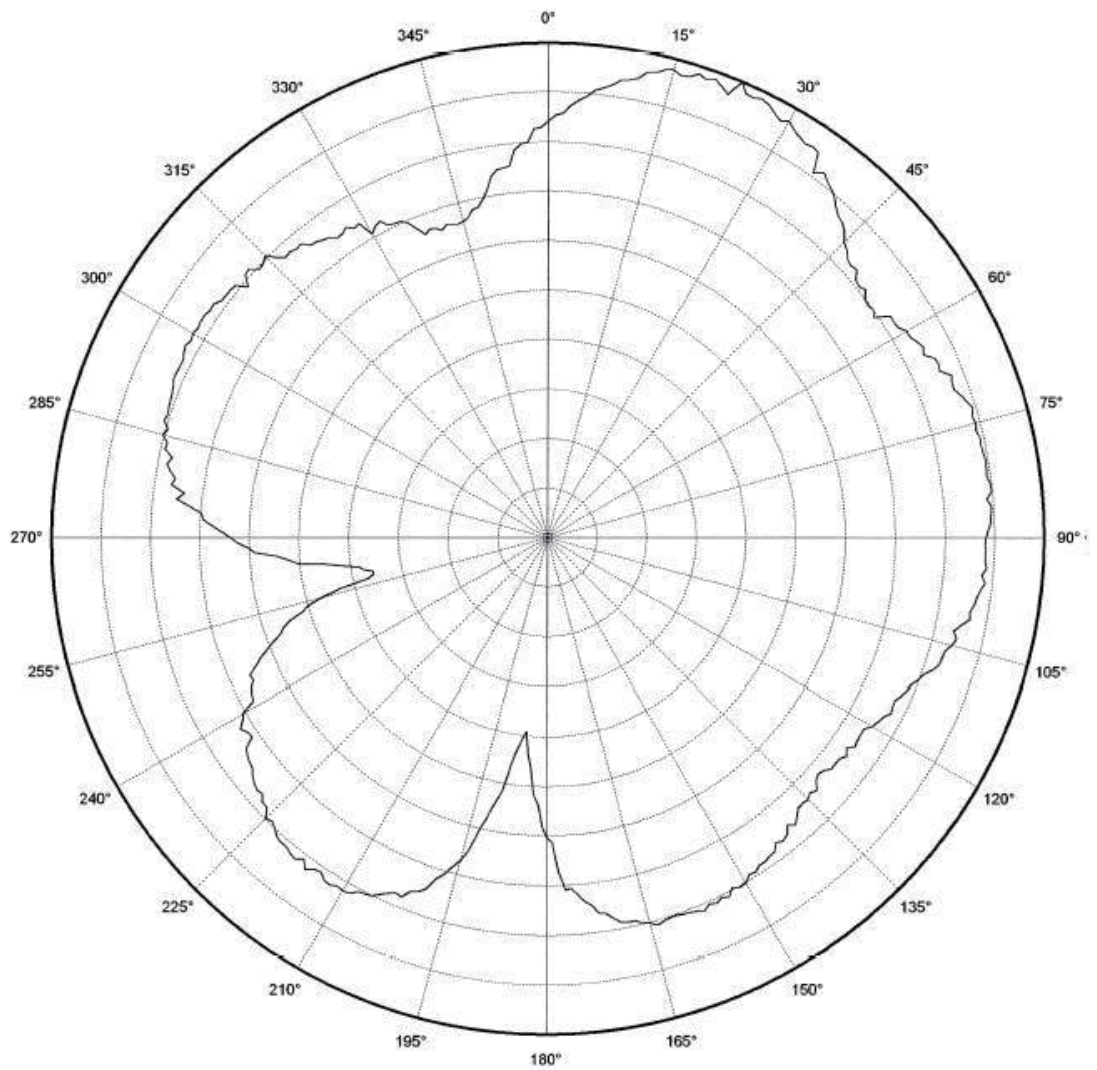
XY

CF 2450.000 MHz

5 dB/ div

Ref Lev: 45 dBm

Figure 3: B500 XY Plane



Vertical Polarization

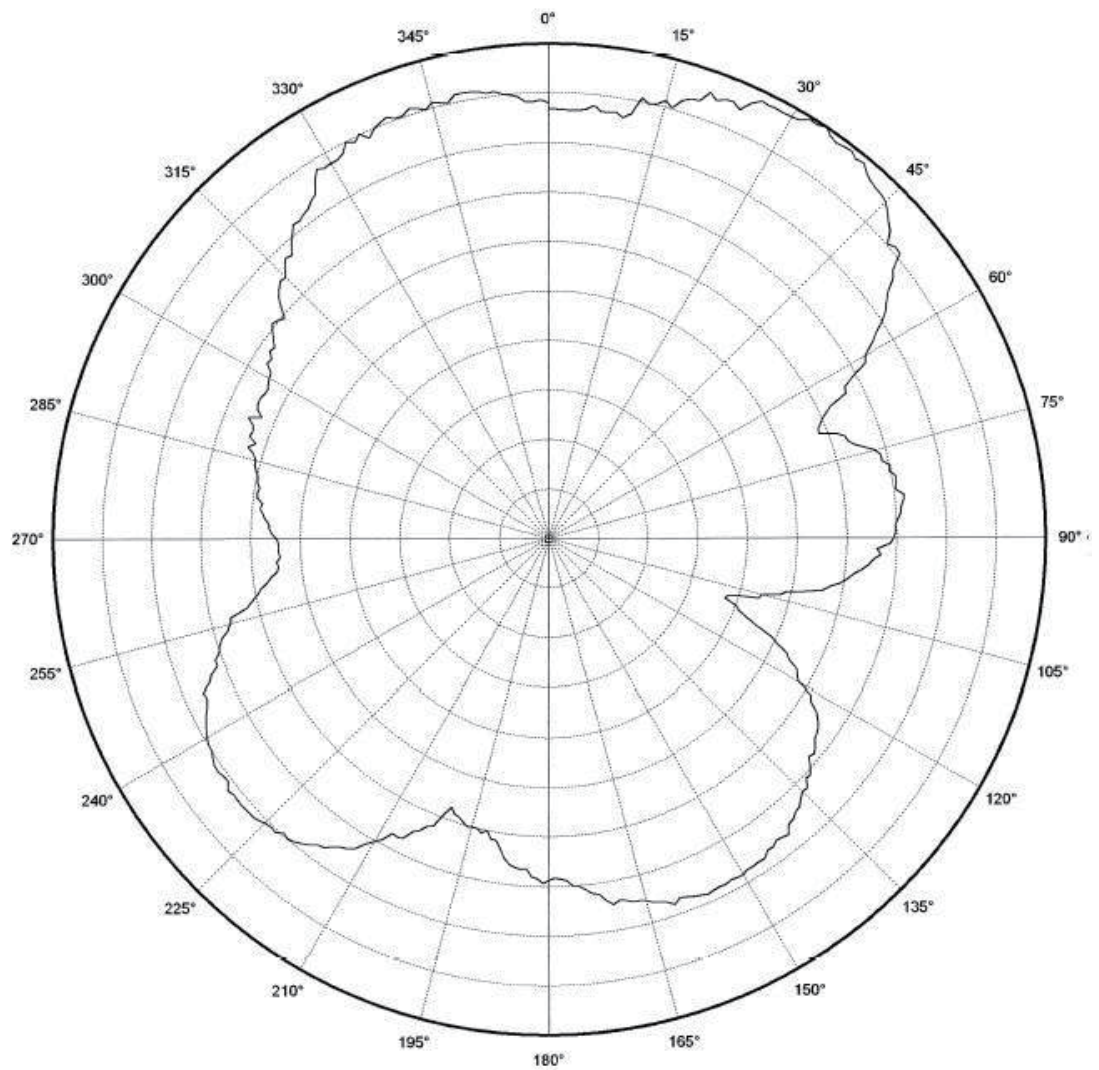
XZ

CF 2450.000 MHz

4 dB/ div

Ref Lev: 2, 2 dBm

Figure 4: B500 XZ Plane



Horizontal Polarization

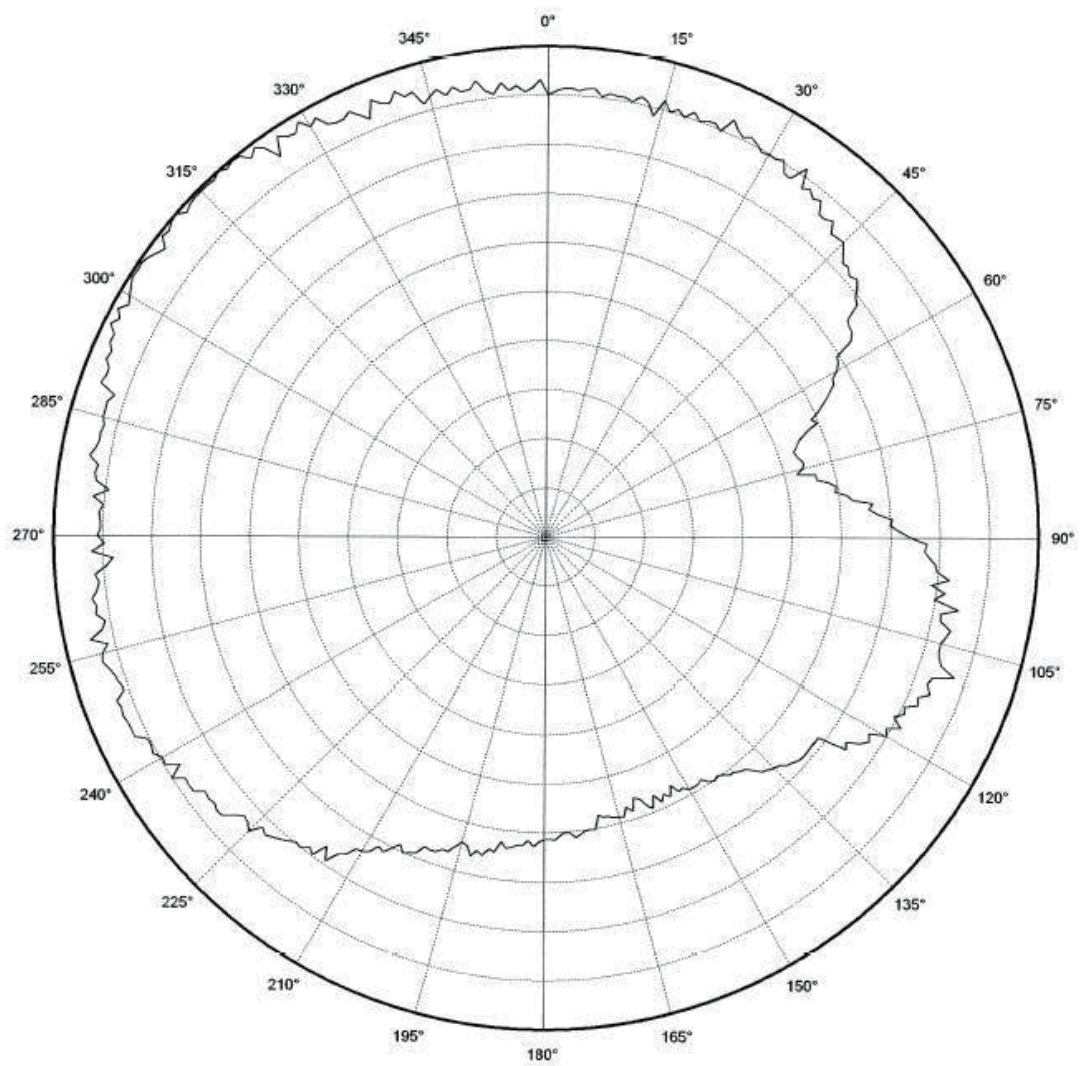
XZ

CF 2450.000 MHz

4 dB/ div

Ref Lev: 5.3 dBm

Figure 5: B500 XZ Plane



Vertical Polarization

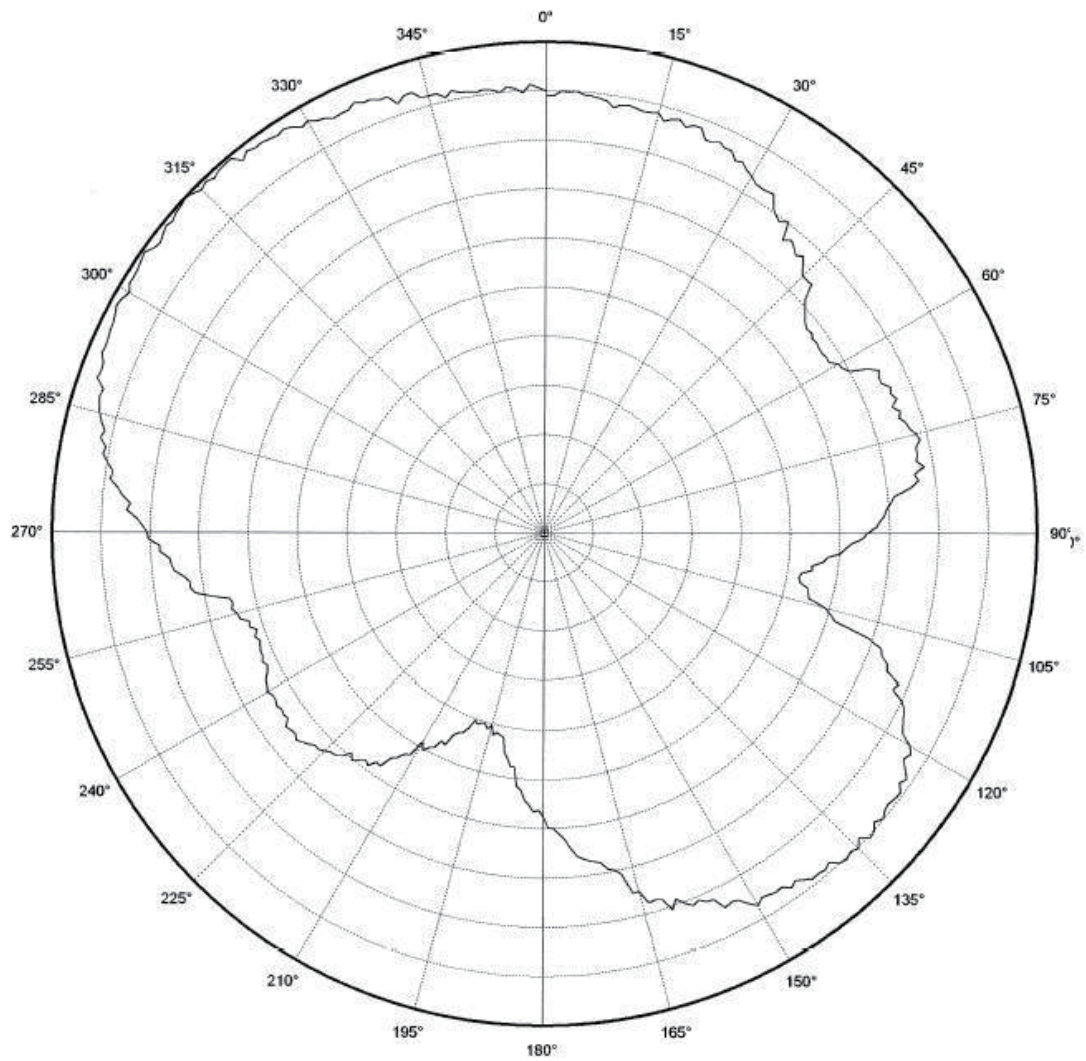
YZ

CF 2450.000 MHz

2 dB/ div

Ref Lev: +5.3 dBm

Figure 6: B500 YZ Plane



Horizontal Polarization

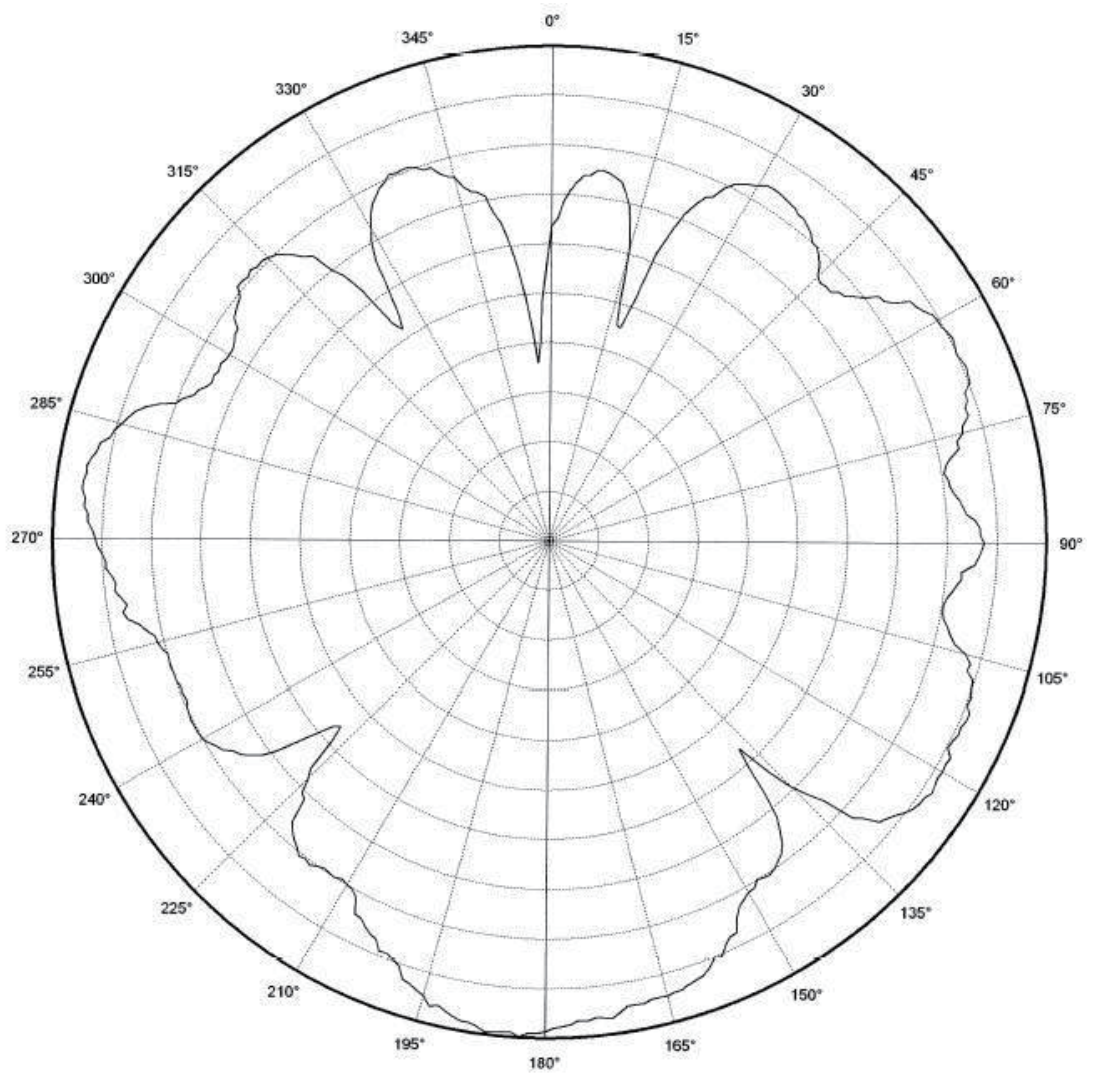
YZ

CF 2450.000 MHz

3 dB/ div

Ref Lev: ^{-1,2} dBm_i

Figure 7: B500 YZ Plane



Vertical Polarization

XY

CF 2450.000 MHz

5 dB/ div

Ref Lev: ⁻²⁰ dBm

Figure 8: B500 in Laptop XY Plane

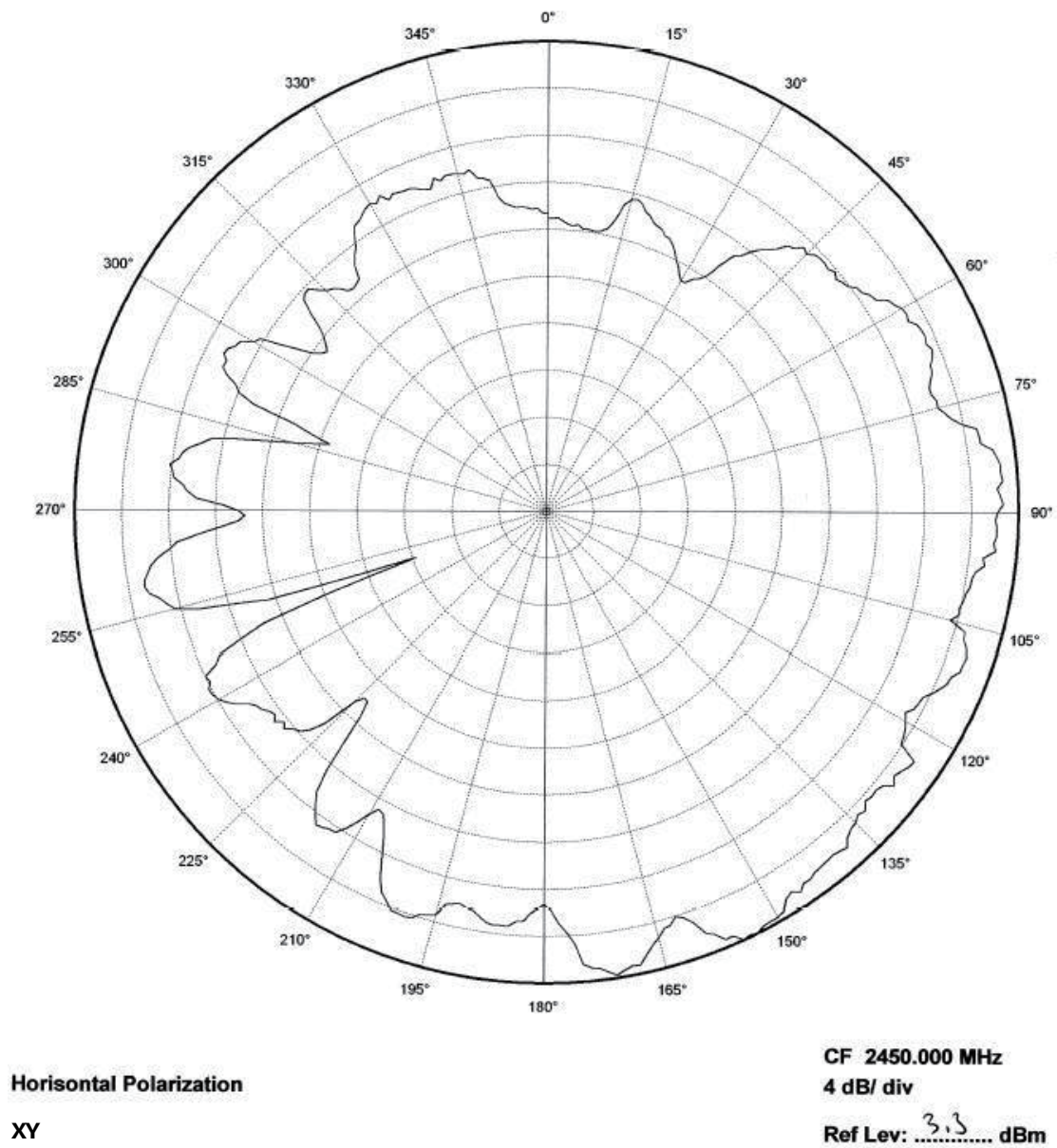


Figure 9: B500 in Laptop XY Plane

Return loss

Frequency [MHz]	Return loss [dB]	VSWR
2400	-11.7 dB	1.75
2450	-31.9 dB	1.02
2500	-12.1 dB	1.65

