



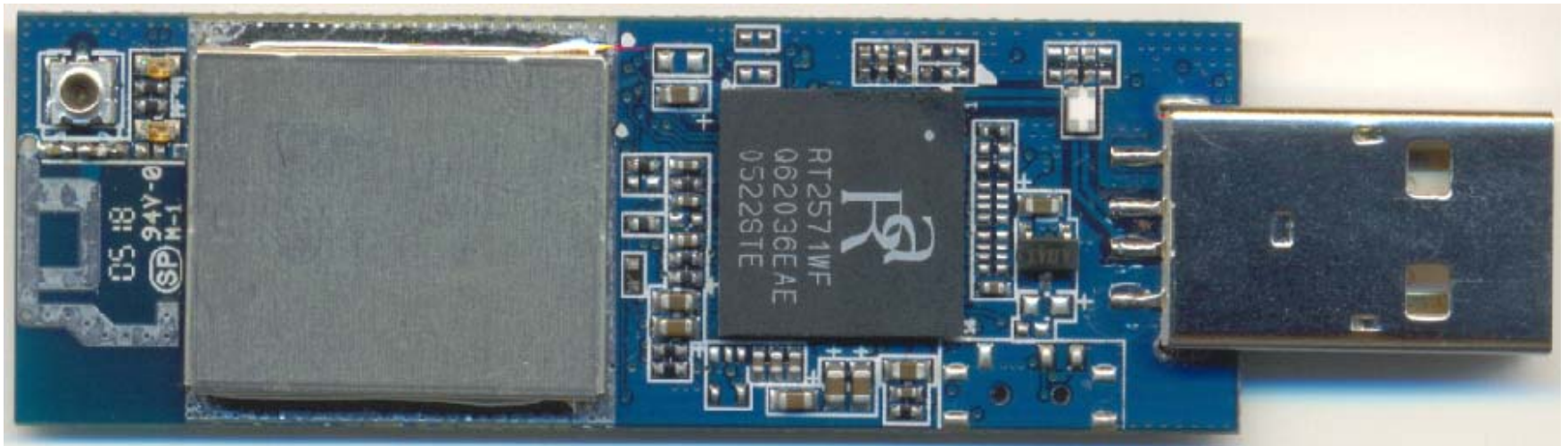
# Ralink's Printed Antenna Report for USB New-Type PIFA Antenna

## 2.4GHz ISM Band Working Frequency

Editor: *Jin Luo*  
Data: 30/06/2005

- The Construction of New –Type PIFA Antenna on Ralink’s USB Board

(TOP View)

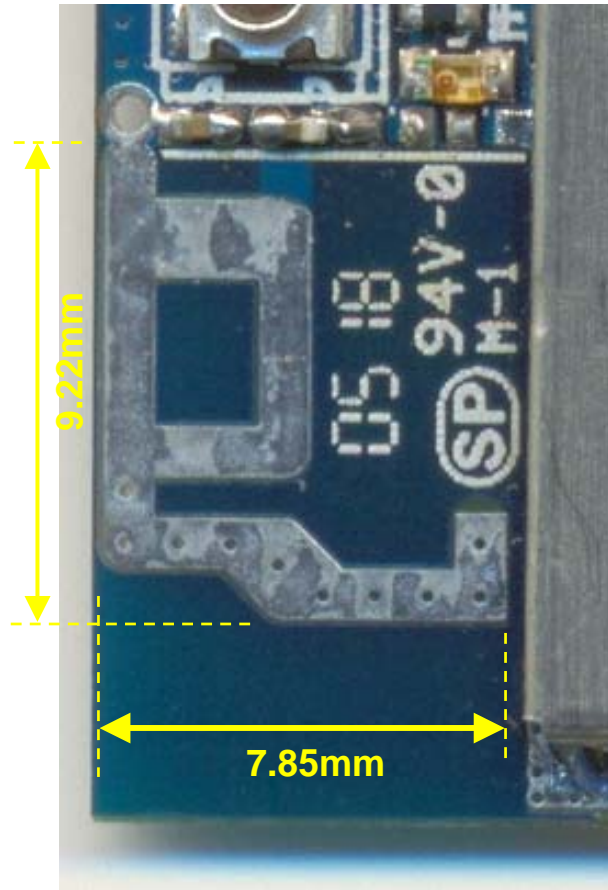


- The Construction of New –Type PIFA Antenna on Ralink’s USB Board

(Bottom View)

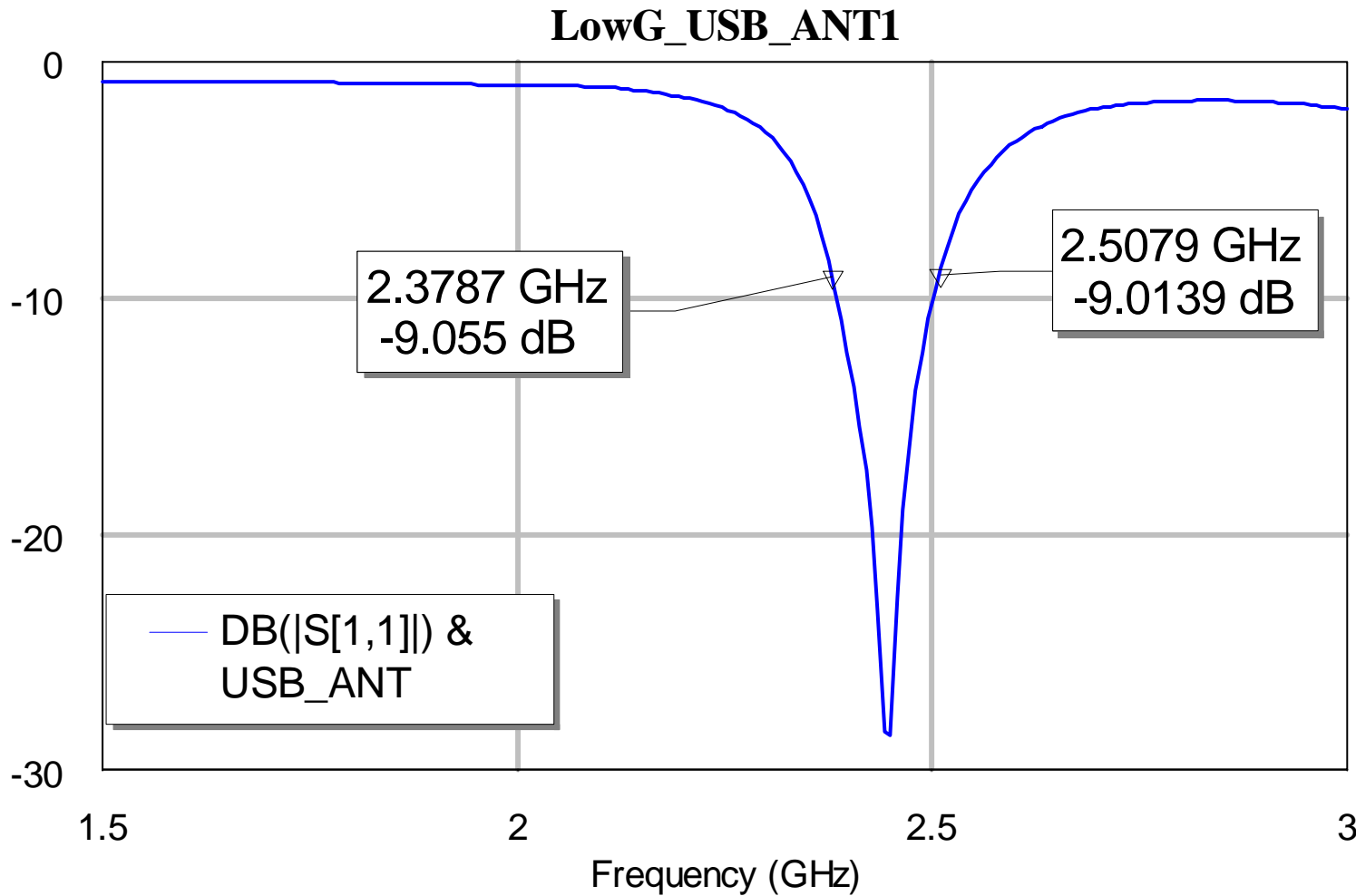


- The Construction of New –Type PIFA Antenna on Ralink’s USB Board

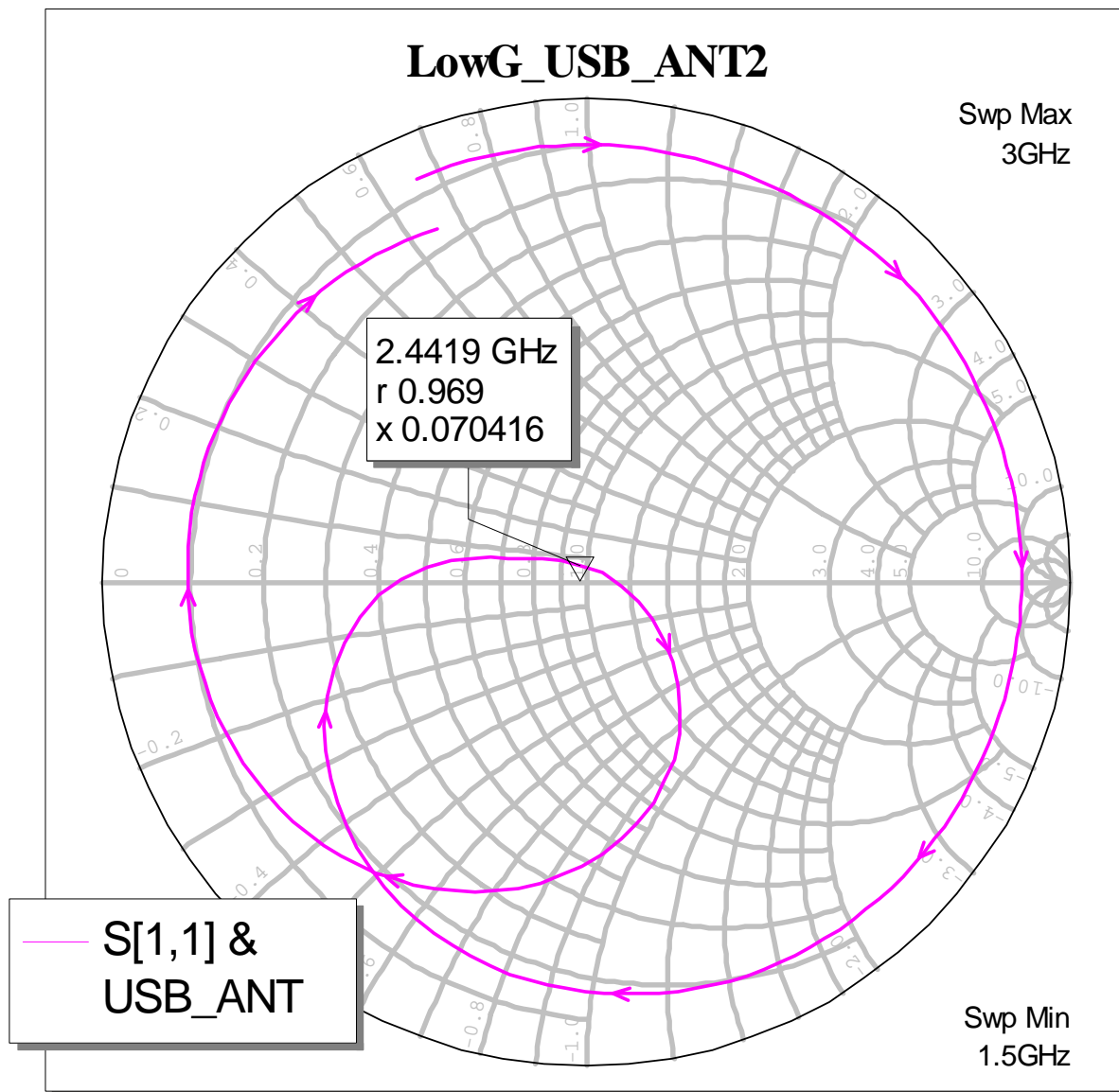


**Square Measure: 9.22mm \* 7.85mm**

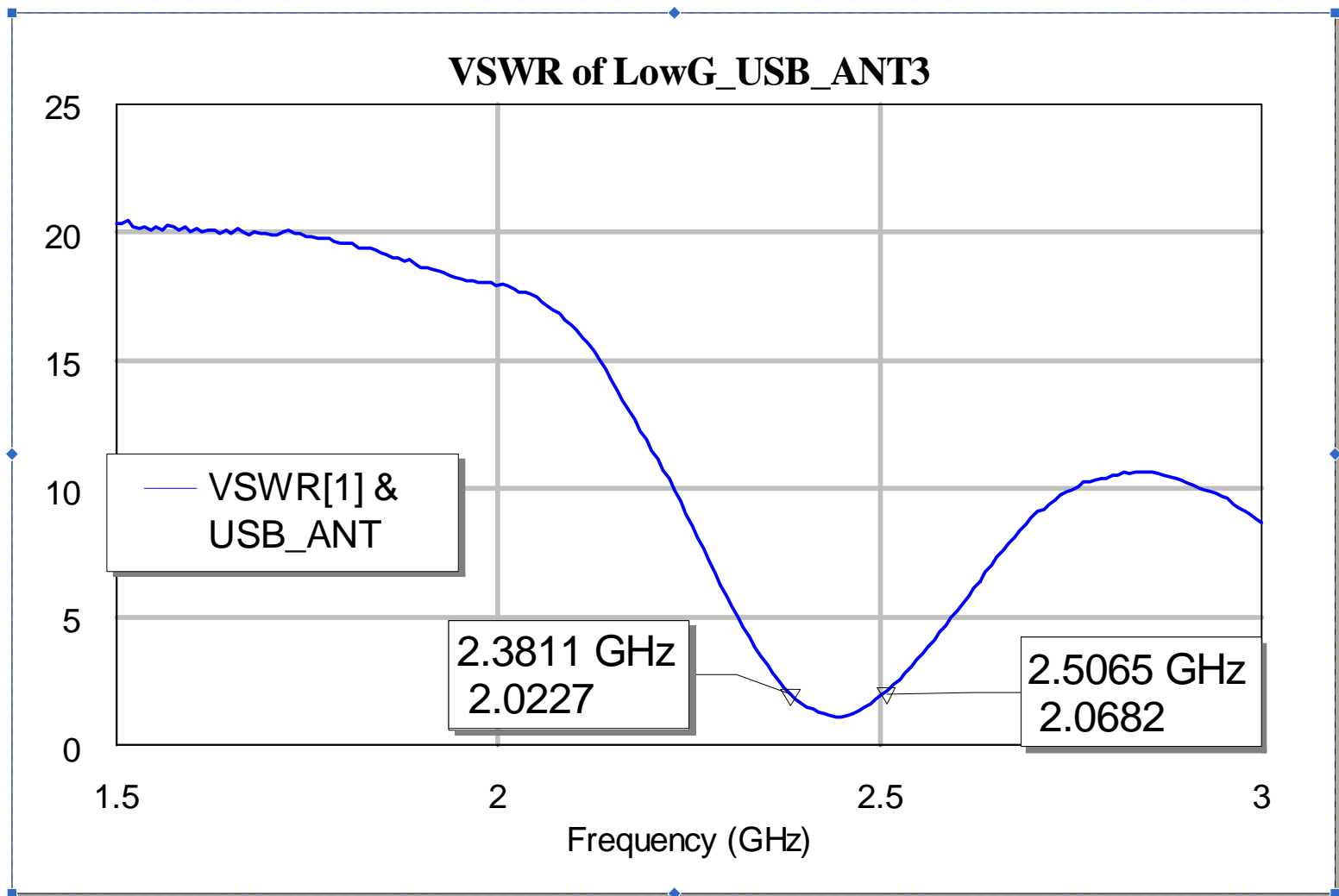
• New-Type PIFA Antenna S11 on Ralink's USB Board



# • New-Type PIFA Antenna S11 on Ralink's USB Board

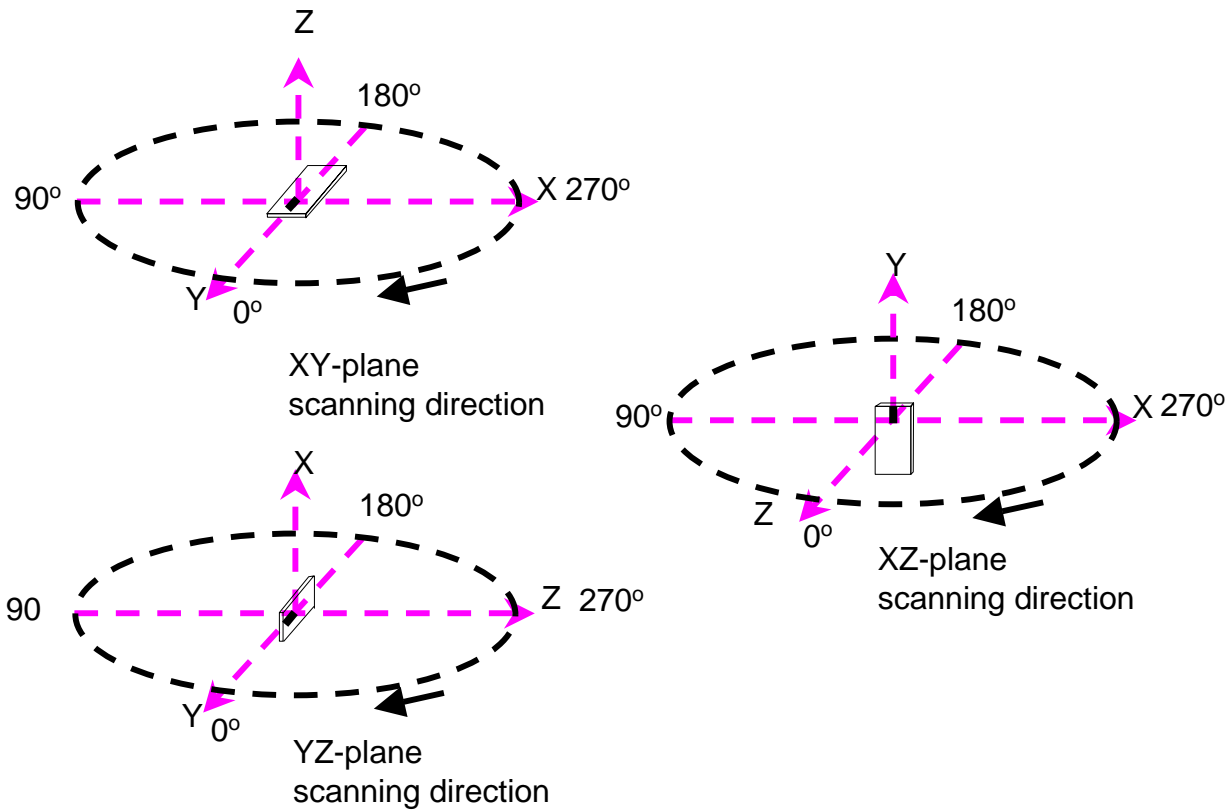


# • New-Type PIFA Antenna S11 on Ralink's USB Board



**BW: 122.4MHz @VSWR<=2 (2381.1MHz~2506.5MHz)  
(5.0%BW @Center Frequency:2450MHz)**

# • New-Type PIFA Antenna Scanning Direction



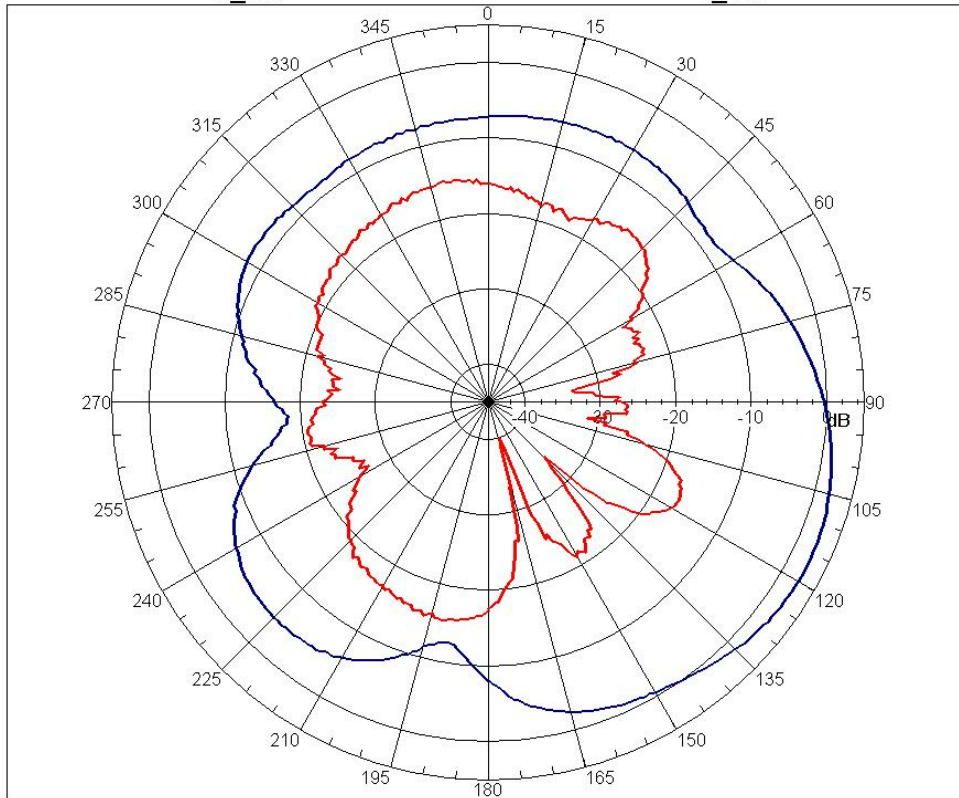


# • New-Type PIFA Antenna Radiation Pattern at 2400MHz

## 1. XY-Plane

Far-field amplitude of XY\_plane.nsi

V\_cut H\_cut



	Peak	Average
Vertical	-15.22	-18.95
Horizontal	2.45	-3.75

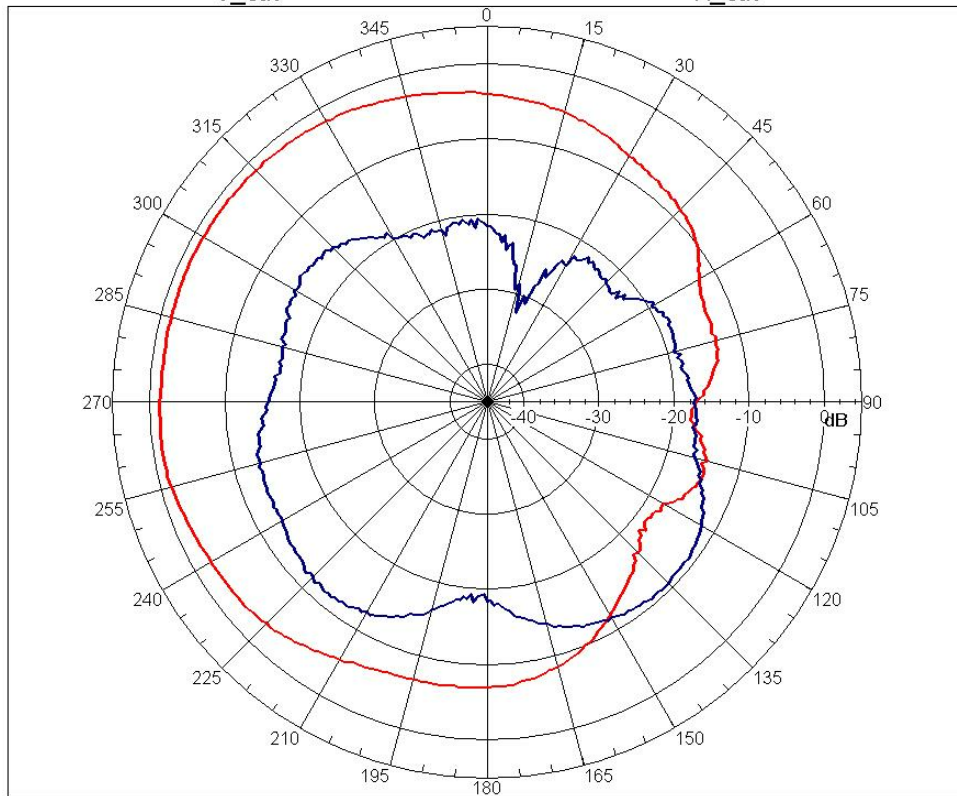
# • New-Type PIFA Antenna Radiation Pattern at 2400MHz

## 2. XZ-Plane

Far-field amplitude of XZ\_plane.nsi

V\_cut

H\_cut

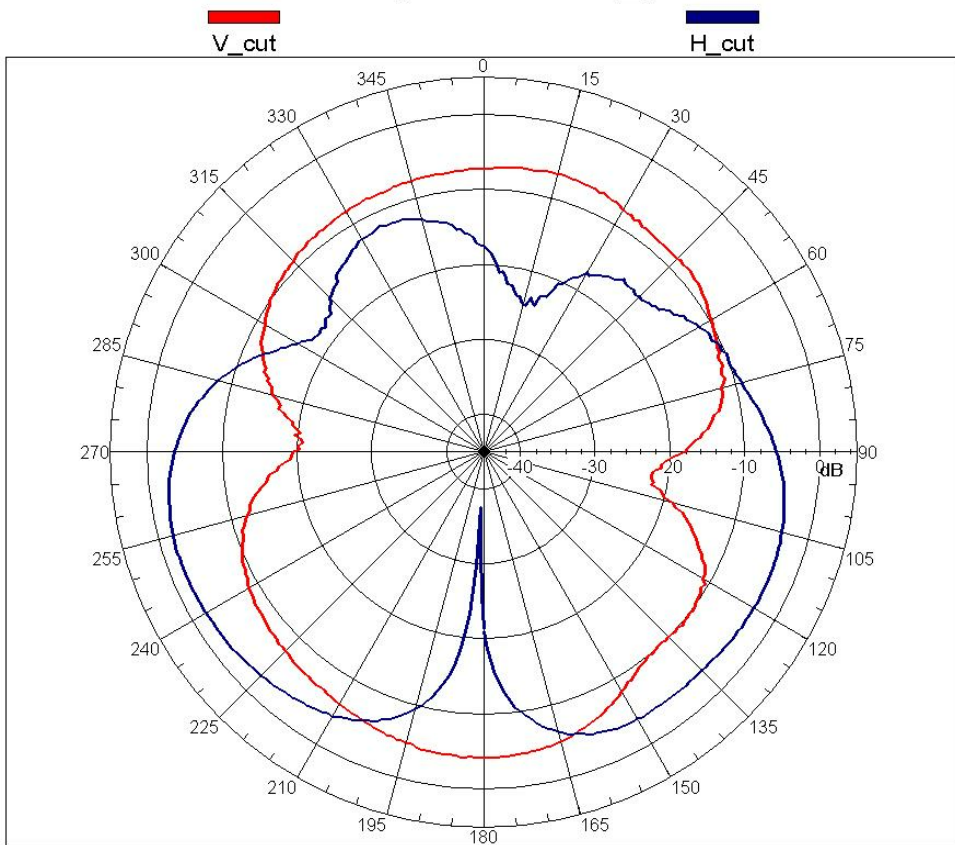


	Peak	Average
Vertical	-1.19	-4.85
Horizontal	-10.94	-15.43

# • New-Type PIFA Antenna Radiation Pattern at 2400MHz

## 3. YZ-Plane

Far-field amplitude of YZ\_plane.nsi

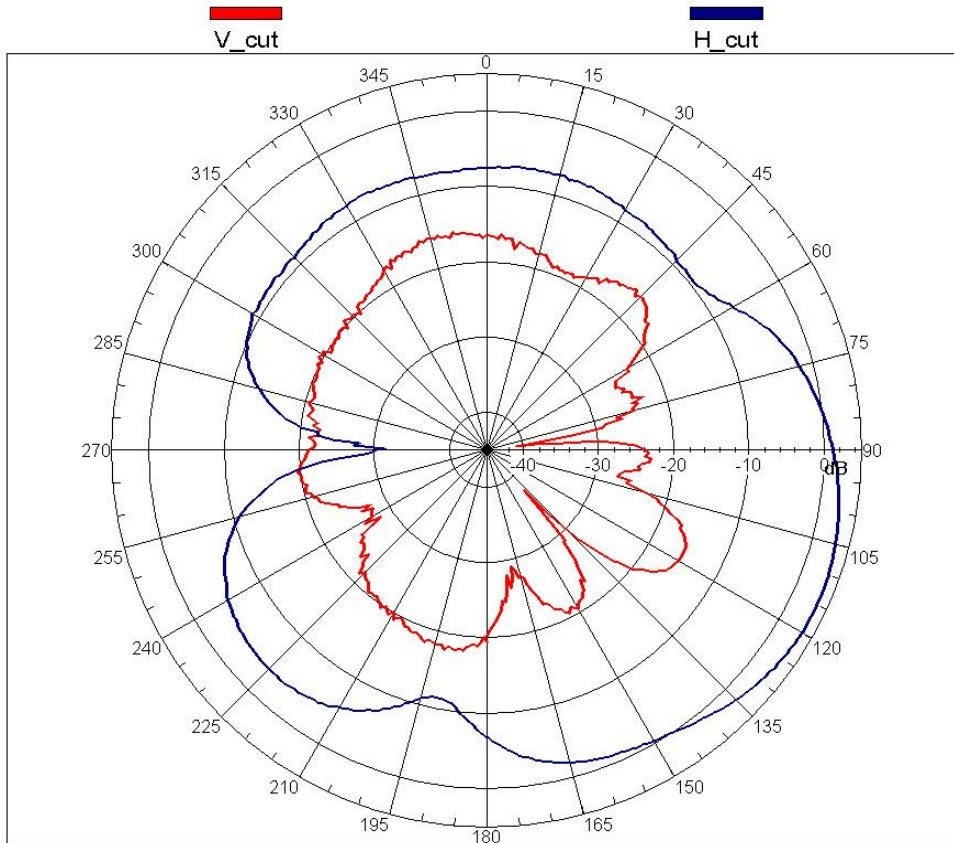


	Peak	Average
Vertical	-4.23	-8.46
Horizontal	-1.91	-6.51

# • New-Type PIFA Antenna Radiation Pattern at 2450MHz

## 1. XY-Plane

Far-field amplitude of XY\_plane.nsi

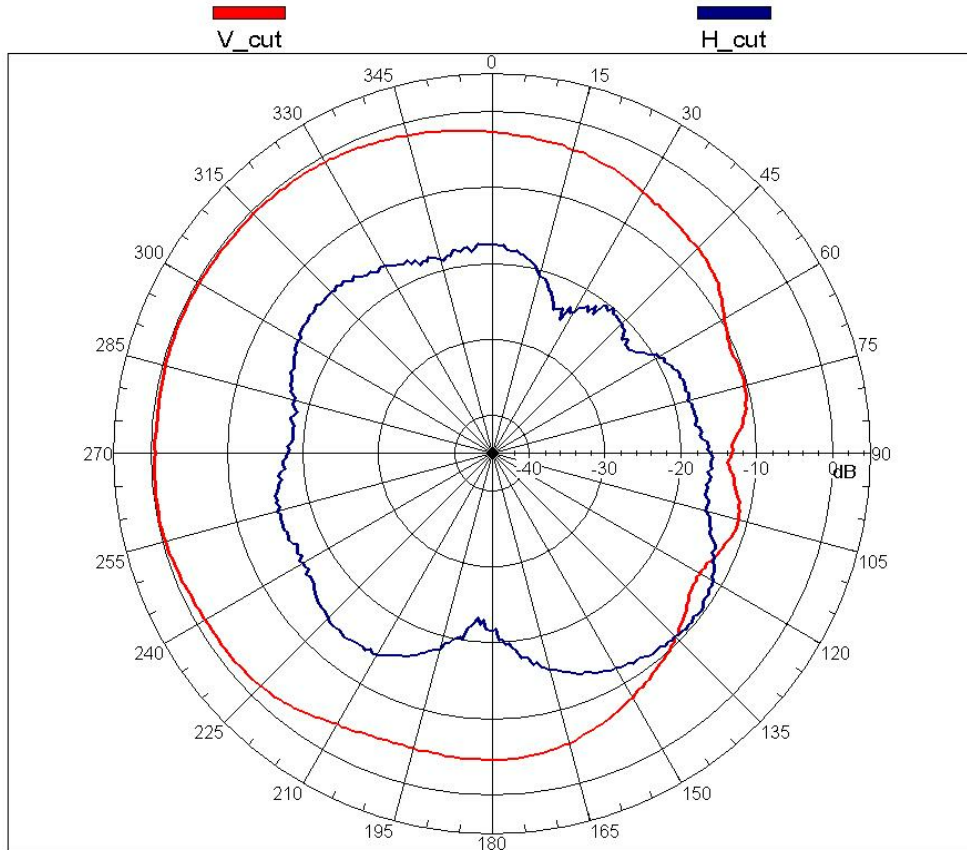


	Peak	Average
Vertical	-15.45	-19.70
Horizontal	3.48	-3.05

# • New-Type PIFA Antenna Radiation Pattern at 2450MHz

## 2. XZ-Plane

Far-field amplitude of XZ\_plane.nsi

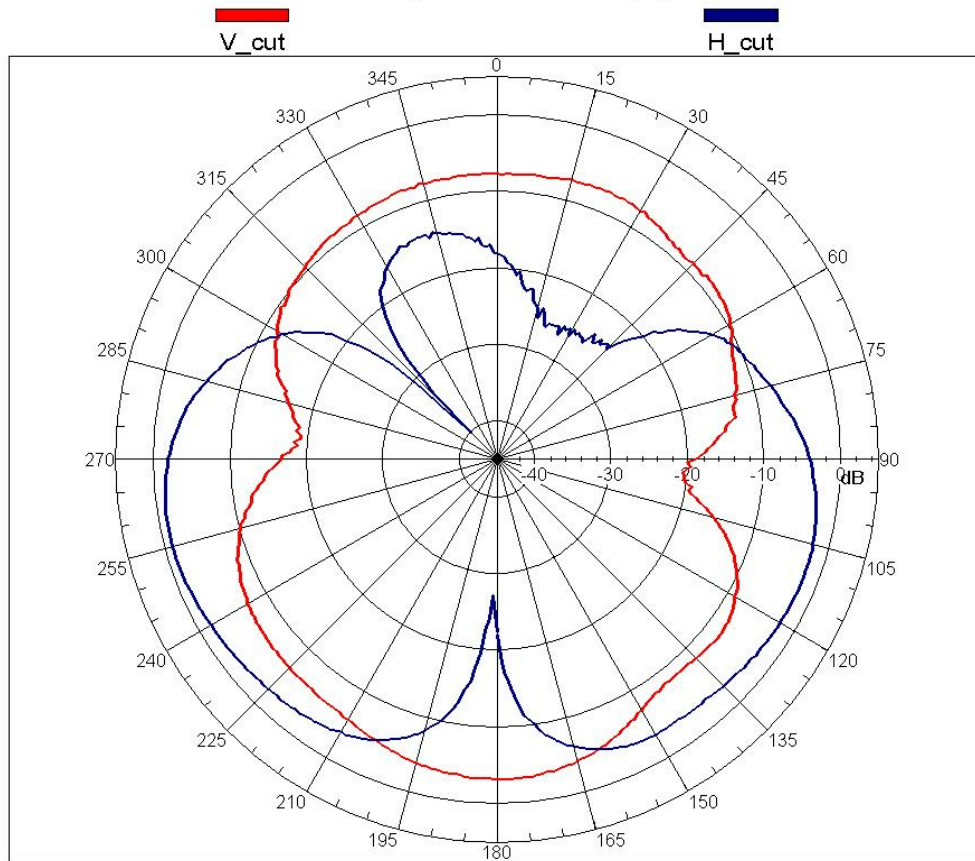


	Peak	Average
Vertical	-0.24	-3.46
Horizontal	-10.59	-15.90

# • New-Type PIFA Antenna Radiation Pattern at 2450MHz

## 3. YZ-Plane

Far-field amplitude of YZ\_plane.nsi



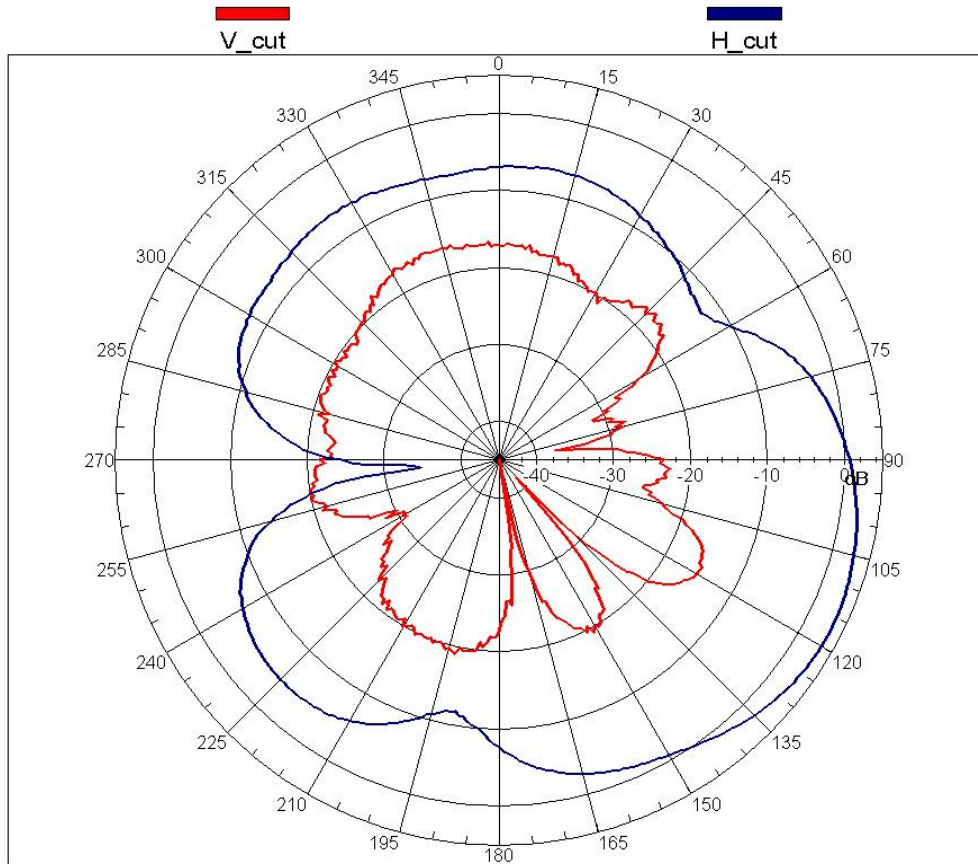
	Peak	Average
Vertical	-3.27	-7.94
Horizontal	-1.03	-5.67



# • New-Type PIFA Antenna Radiation Pattern at 2500MHz

## 1. XY-Plane

Far-field amplitude of XY\_plane.nsi



	Peak	Average
Vertical	-15.23	-20.26
Horizontal	3.40	-3.31

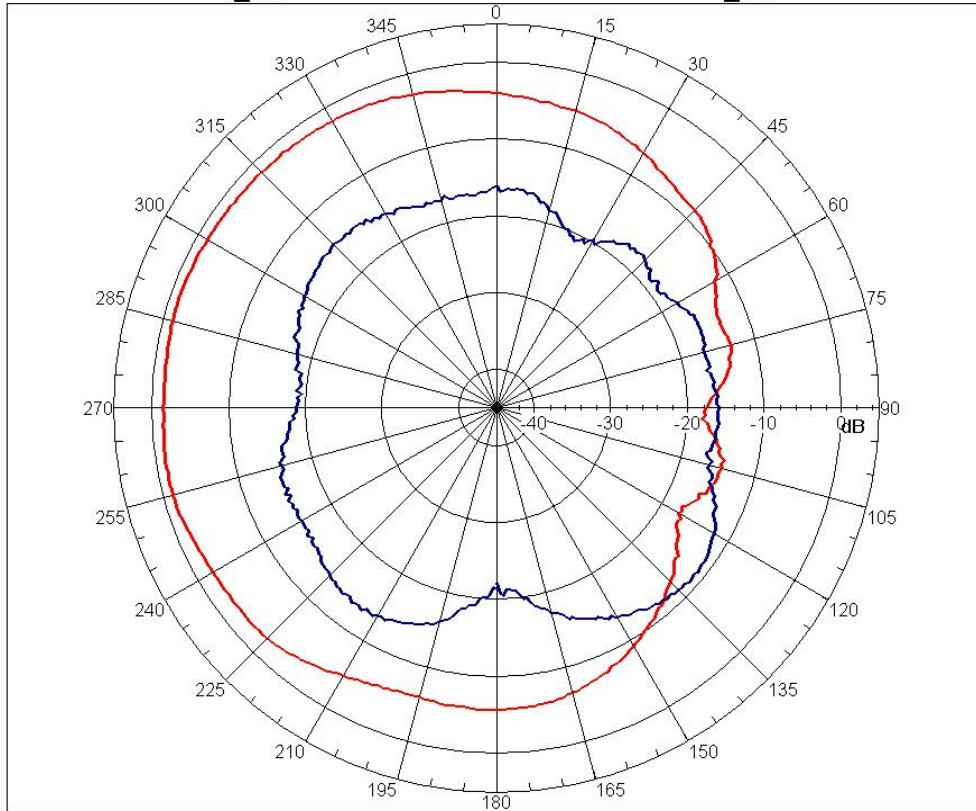
# • New-Type PIFA Antenna Radiation Pattern at 2500MHz

## 2. XZ-Plane

Far-field amplitude of XZ\_plane.nsi

V\_cut

H\_cut



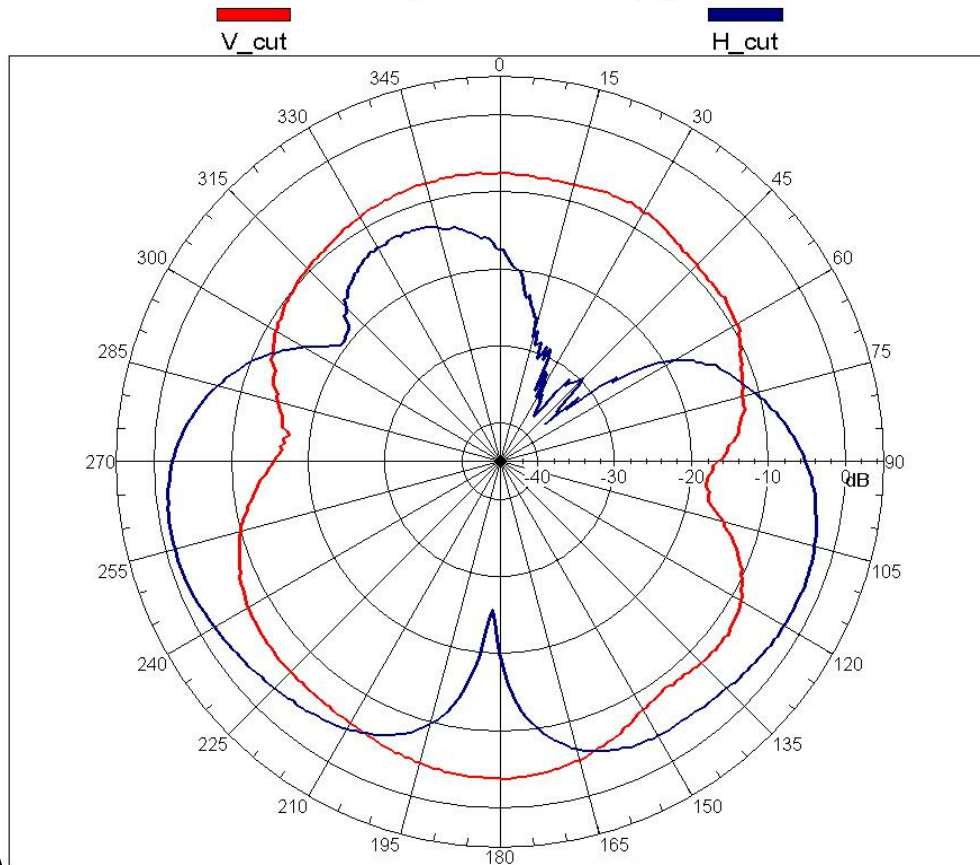
	Peak	Average
Vertical	-1.16	-4.60
Horizontal	-11.19	-15.81



# • New-Type PIFA Antenna Radiation Pattern at 2500MHz

## 3. YZ-Plane

Far-field amplitude of YZ\_plane.nsi



	Peak	Average
Vertical	-3.88	-8.12
Horizontal	-1.17	-6.20