

WIFI PCB Antenna Specification

Customer Name:

Customer PN:

LB-LINK PN:

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Date: 2018/05/09

Customer Check By:

Date:

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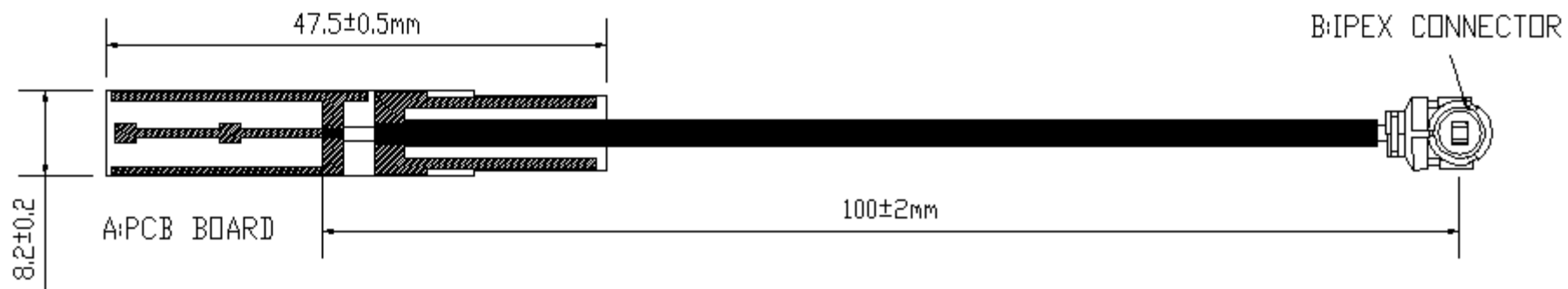
Antenna introducing

- ◆ Made by copper pipe material, work in 2.4~2.5&4.9~5.825GHz .
- ◆ Design by dipole antenna theory.
- ◆ High gain, High efficiency, Good port matching.
- ◆ Make wireless equipments better communication.

Antenna useful area

- ◆ Pads, note-book, reader and so on.
- ◆ IP camera, set top box and so on.
- ◆ DVD player, TV and consumer electronics.

Antenna size
120.5mm*8.2mm*0.75mm

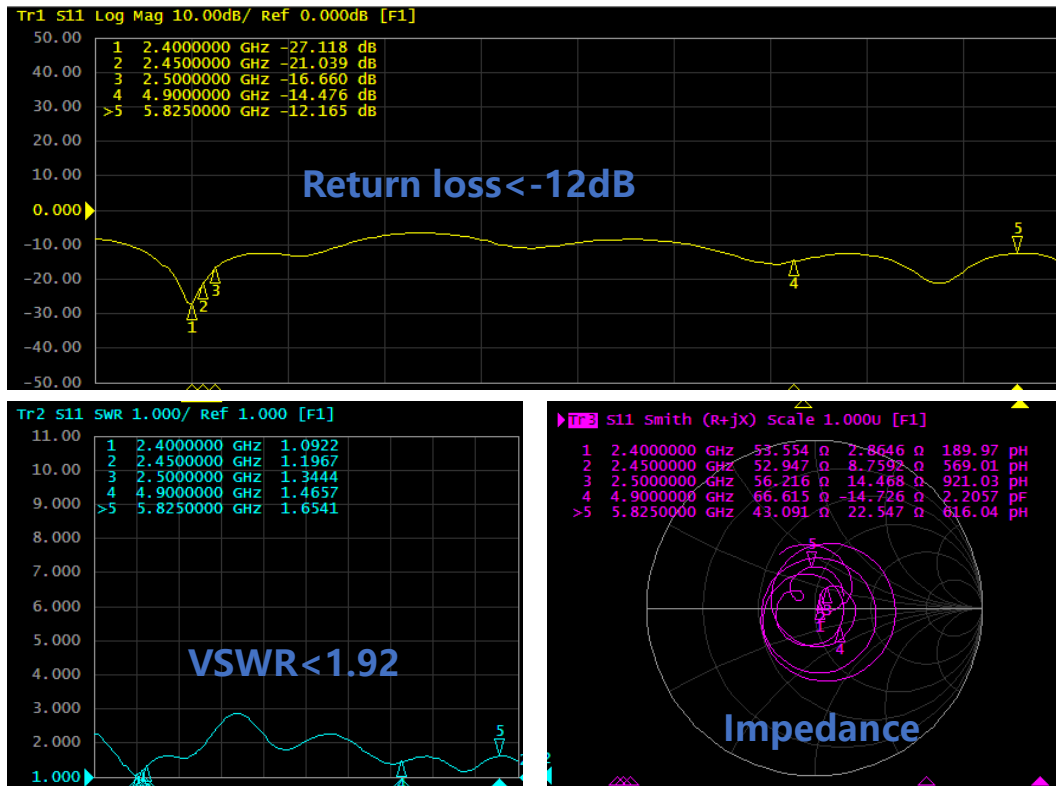


The cable is RF- Φ 1.13 cable with IPEX and length is 100mm

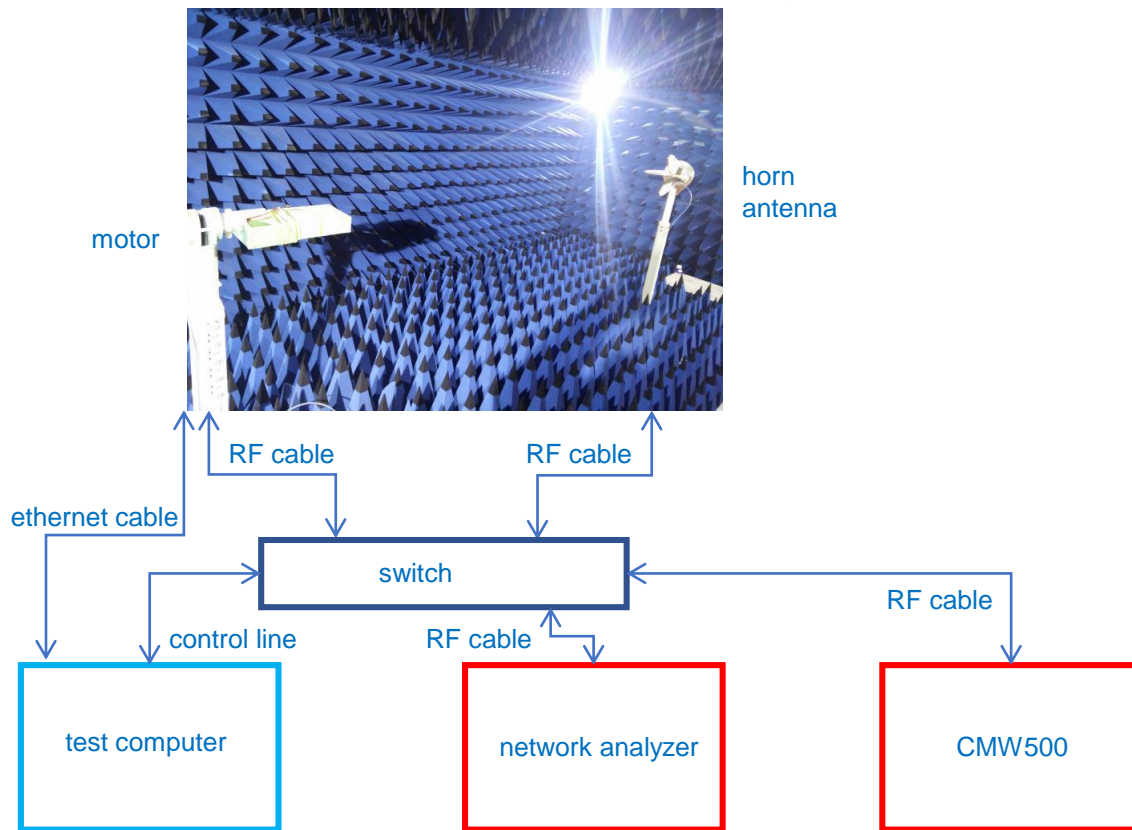
Antenna electrical properties

Frequency	2.4~2.5&4.9~5.825GHz
Impedance	50ohm nominal
V.S.W.R	≤2.0
Return loss	≤-10dB
Radiation	Omni-directional
Gain(Peak)	2G:2.0dBi/ 5G:2.0dBi
Polarization	Linear
Admitted Power	2W
Connector	IPEX
Efficiency	2G:68%/ 5G:63%
Cable	RF Φ1.13 cable and length is 100mm

Antenna S-parameter



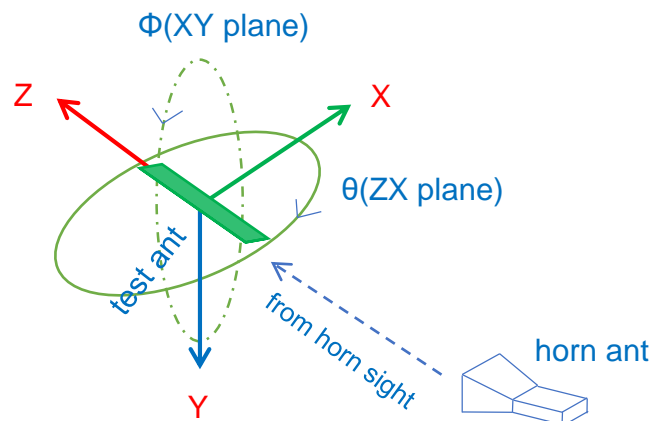
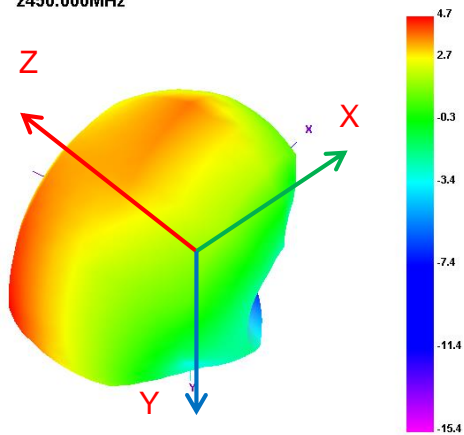
Antenna chamber structure



Antenna total gain and efficiency

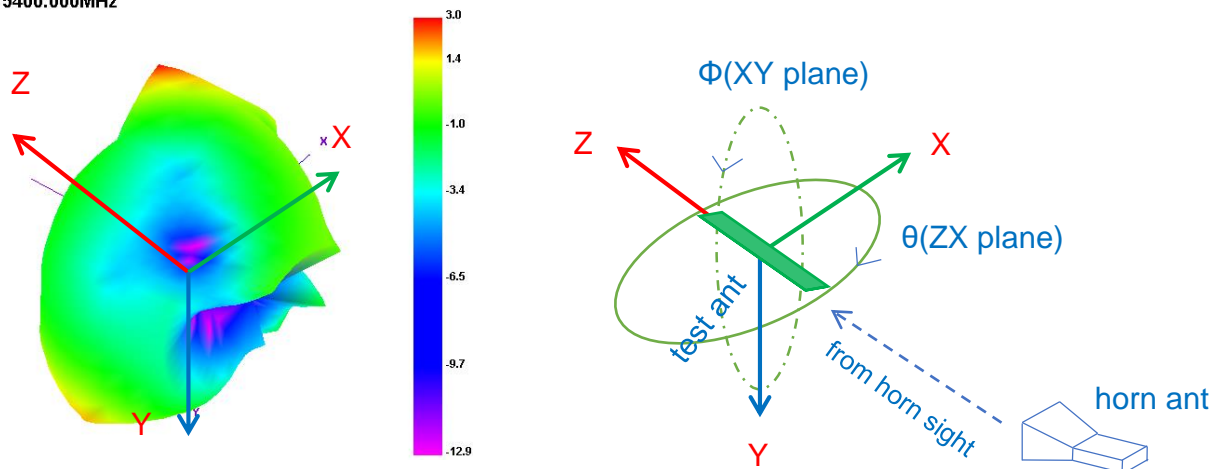
	Freq. (MHz)	Gain (dBi)	Efficiency (%)
COPPER_PIPE_ANT	2400	1.96	65%
	2450	2.0	68%
	2500	1.8	67%

2450.000MHz



	Freq. (MHz)	Gain (dBi)	Efficiency (%)
PCB_ANT	5100	2.75	62%
	5400	2.0	65%
	5820	2.4	62%

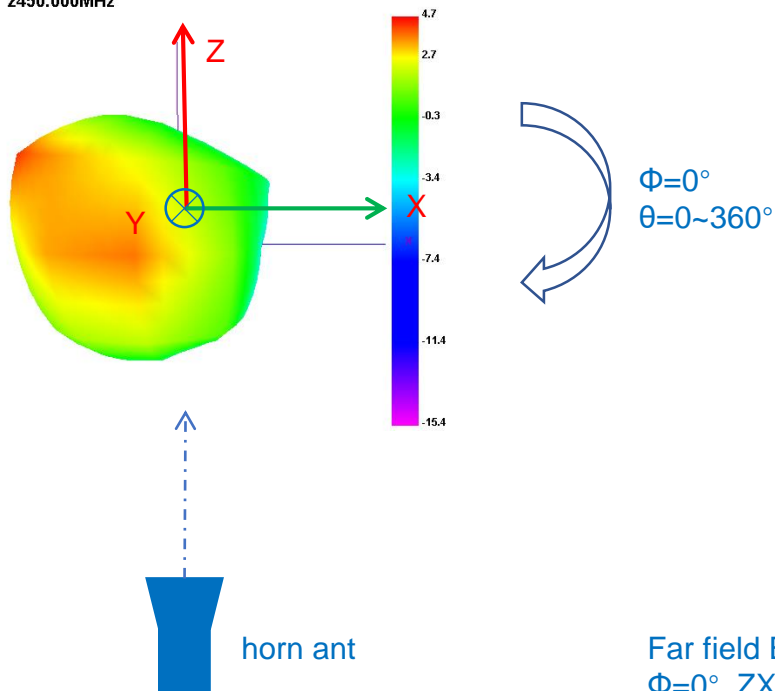
5400.000MHz



Radiation Pattern E_PLANE

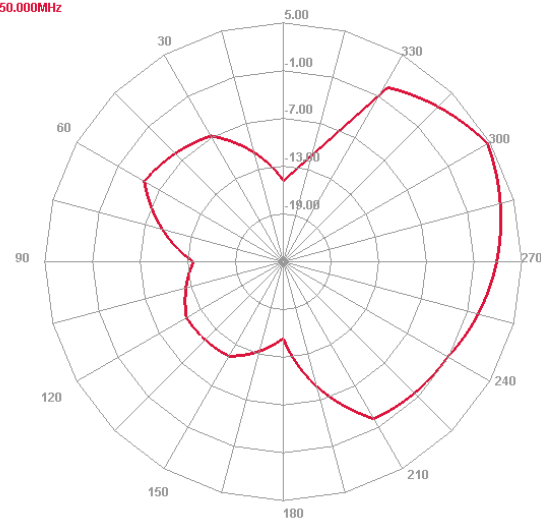
	Freq. (MHz)	Gain (dB)
PCB_ANT	2450	2.0

2450.000MHz



E1 Face

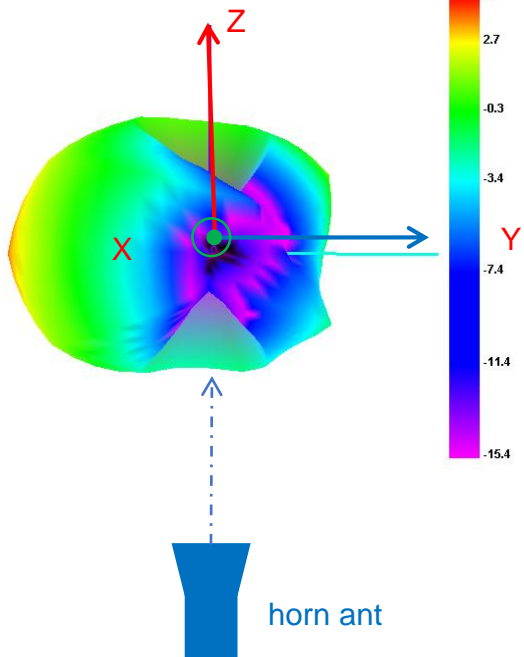
2450.000MHz



Far field E1_PLANE
 $\Phi=0^\circ$, ZX plane

	Freq. (MHz)	Gain (dB)
PCB_ANT	2450	2.0

2450.000MHz

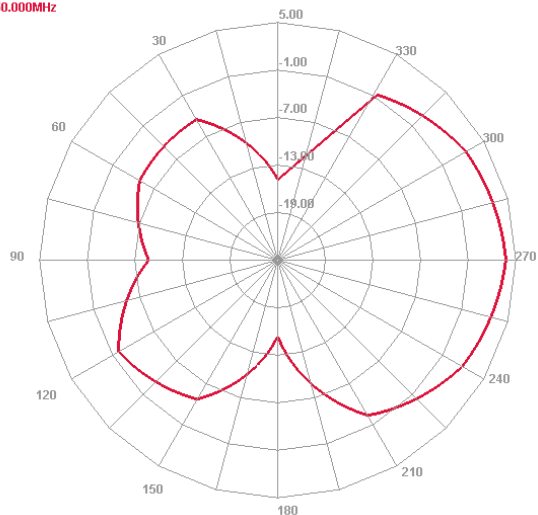


$\Phi=90^\circ$
 $\theta=0\sim 360^\circ$

Far field E2_PLANE
 $\Phi=90^\circ$, ZY plane

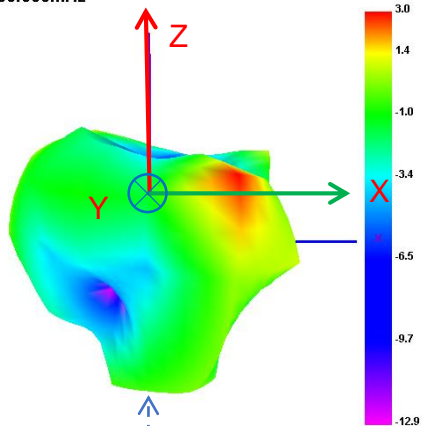
E2 Face

2450.000MHz



	Freq. (MHz)	Gain (dB)
PCB_ANT	5400	2

5400.000MHz



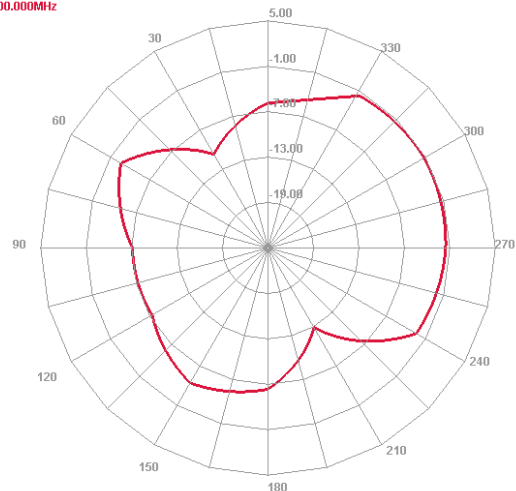
$\Phi=0^\circ$
 $\theta=0\sim 360^\circ$



horn ant

E1 Face

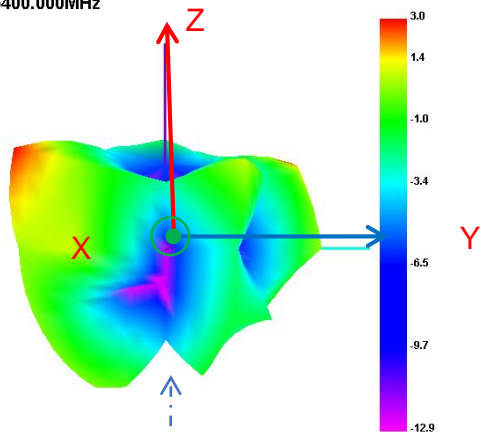
5400.000MHz



Far field E1_PLANE
 $\Phi=0^\circ$, ZX plane

	Freq. (MHz)	Gain (dB)
PCB_ANT	5400	1.94

5400.000MHz



$\Phi=90^\circ$
 $\theta=0\sim 360^\circ$

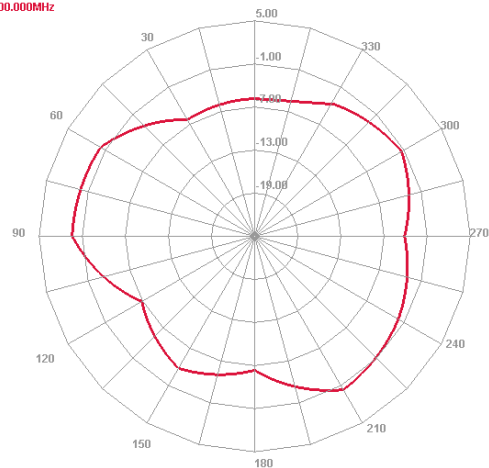


horn ant

Far field E2_PLANE
 $\Phi=90^\circ$, ZY plane

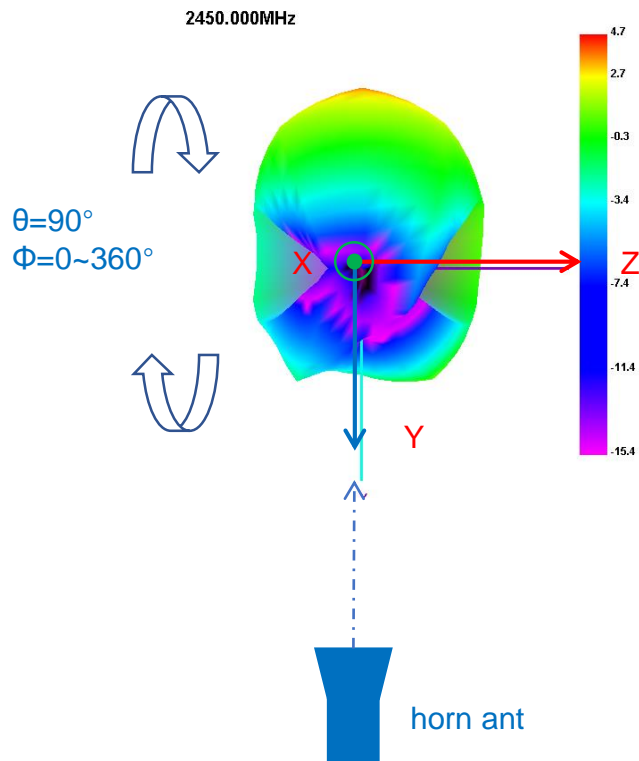
E2 Face

5400.000MHz

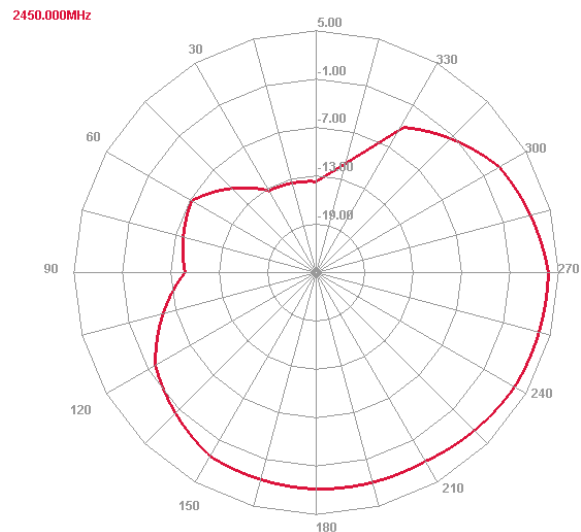


Radiation Pattern H_PLANE

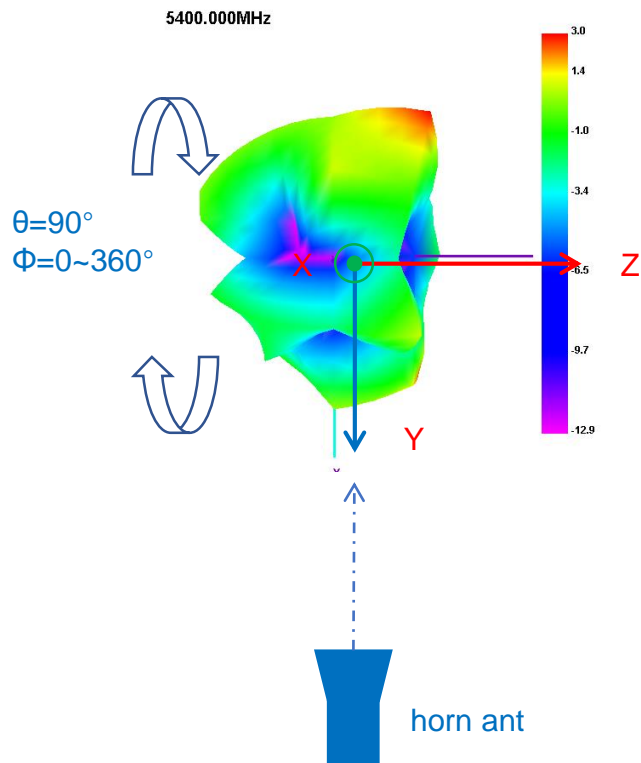
	Freq. (MHz)	Gain (dB)
PCB_ANT	2450	2.0



Horizontal



	Freq. (MHz)	Gain (dB)
PCB_ANT	5400	2



Horizontal

