

# W3811C 2.4GHz and 5.xGHz Antenna Panel

## 2.4GHz Antenna Array

Operating bandwidth	2400 - 2485 MHz
Impedance at the connector	50 Ohms
VSWR	1,85 : 1 MAX
Dual Polarized Directional Antenna Array	
Beam Steering Down Tilt	

## 5.xGHz Antenna Array

Operating bandwidth	5470 - 5850 MHz
Impedance at the connector	50 Ohms
VSWR	1,85 : 1 MAX
Dual Polarized Directional Antenna Array	

## Cables and connectors

Cable semi rigid hand formable or flexible. Plastic protective jacket.

(For example Sucoform 141FEB or equivalent electrical and mechanical properties)

Connector Huber+Suhner IP67 rated QMA right angle plug or equivalent

### Pulse Finland Oy

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## Mechanical specification

Radome material	PC
Surface texture	VDI 3400 Class 30
Colour	Colour white RAL 9016
Height	386 mm
Width	261 mm
Depth	68 mm
Mounting	M6x12 BN 5653 (INOX A2)
Packing	cardboard size TBD. plastic bag
Marking	TBD

## Environmental conditions

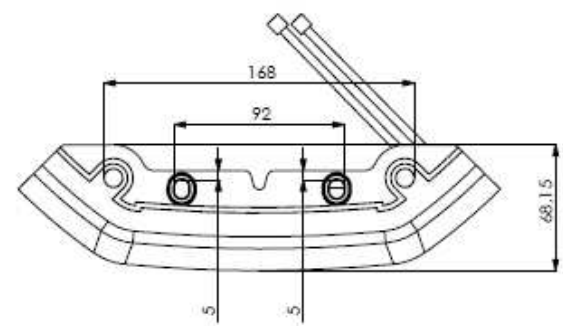
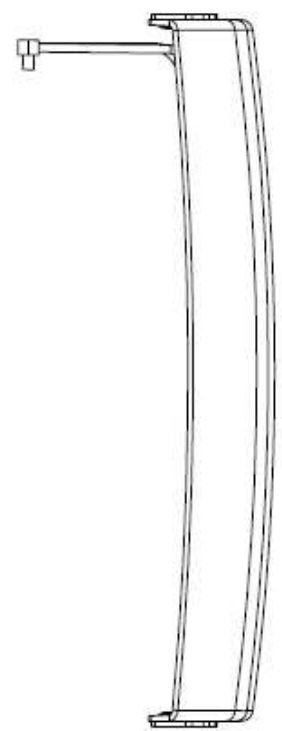
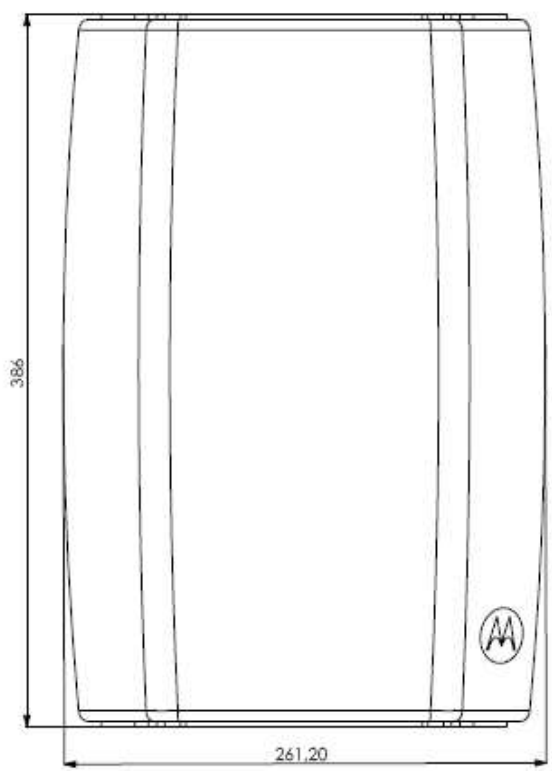
Operating temperature	-40 °C to +60 °C
Operating humidity	5% to 95%RH non-condensing
Ingress protection	IP67 Water-tight according to IEC 529, NEMA 4X
Vibration and Shock	Packaged: Based on ISTA 2A 2004 Unpackaged: Mil-Std-810 Procedure VI - 4" drop Unpackaged: Based on ETSI EN 300 019-2-4 V2.2.2(2003-04) Class 4M3 [4]
Salt fog	ASTM B117 rust resistance
Flammability Rating	UL94-HB

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- Notes:
1. Radome color RAL 9016 (Traffic white)
  2. Logo color RAL 9018 (Papyrus white)
  3. Surface texture VDI 3400 Class 30

Polymers must be free of Br, Cl, Se2003 (1 < 100 ppm in homogeneous material)

Functional Characteristic key:  
Process capability studies required, total x pcs.  
Process capability studies required and ongoing statistical process control required, total y pcs.

No recycling plastics allowed to use.

Mod	Expiration
P06	Version updated
P07	Radome, PCB assembly, Reflector ball 2, Cable clamp updated

Customer RoHS Request							
According to EU RoHS directive requirements (2002/95/EC and decision 2005/618/EC) if no other values specified.							
Item	Cd	Hg	Pb	Cr6+	PBB	PBDE	Other
DPPMS	100	1000	1000	1000	1000	1000	Other substances not covered by RoHS (EU Directive 2002/95/EC)

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TECHNICAL COMPANY

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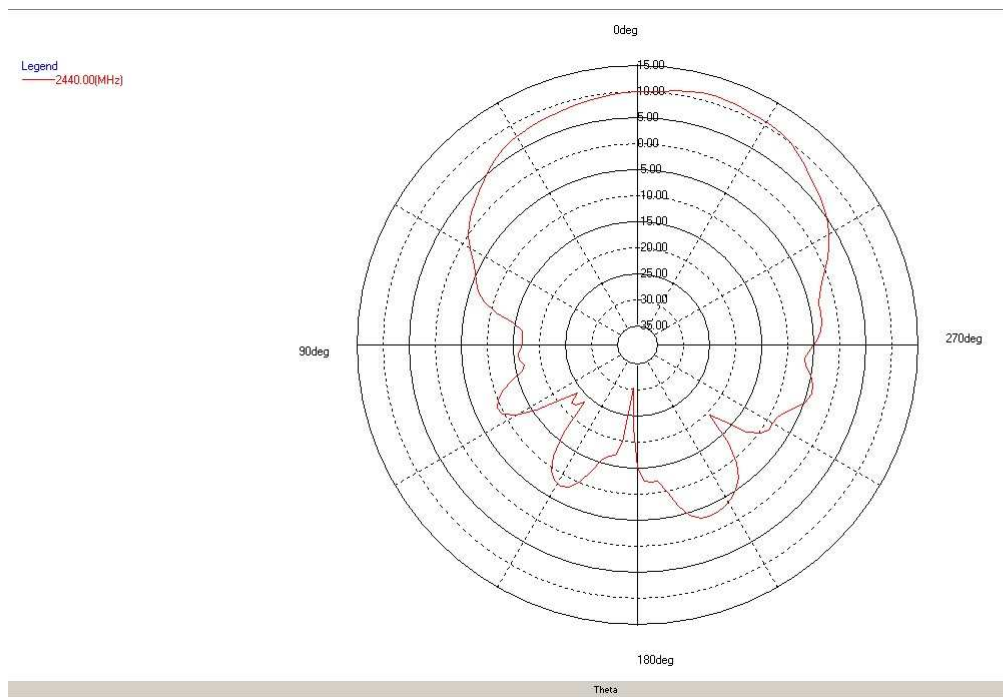
Product Id: H94-OY922 (W3811C) Motomesh  
Item Name: Motomesh Antenna Module assembly

Scale	1:2 (A2)	Sheet number	1/1
Document number	H94-00561	General tolerance	ISO 2768-m
Part Number	07	Customer number	
Document Version	P07	Drawn	Riko
		Checked	
		Appet	
		Date	27.04.2009
		File	
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		Date	
		Name	

# Radiation patterns

## 2.4GHz Horizontal polarization (HP), no beam tilt

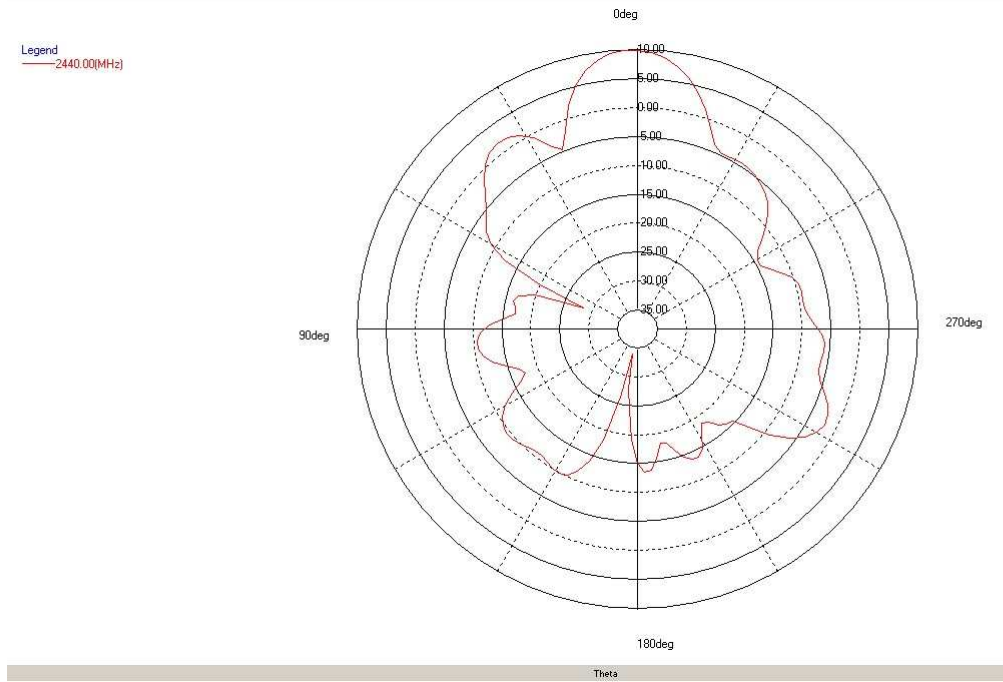
Gain Theta, Phi 0



Gain Phi, Phi 0



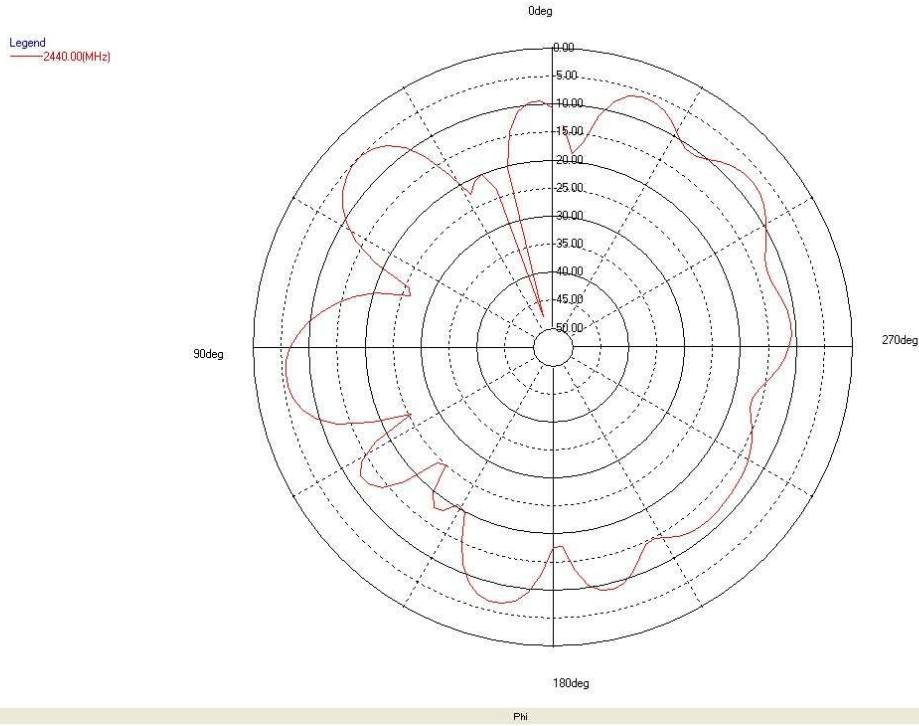
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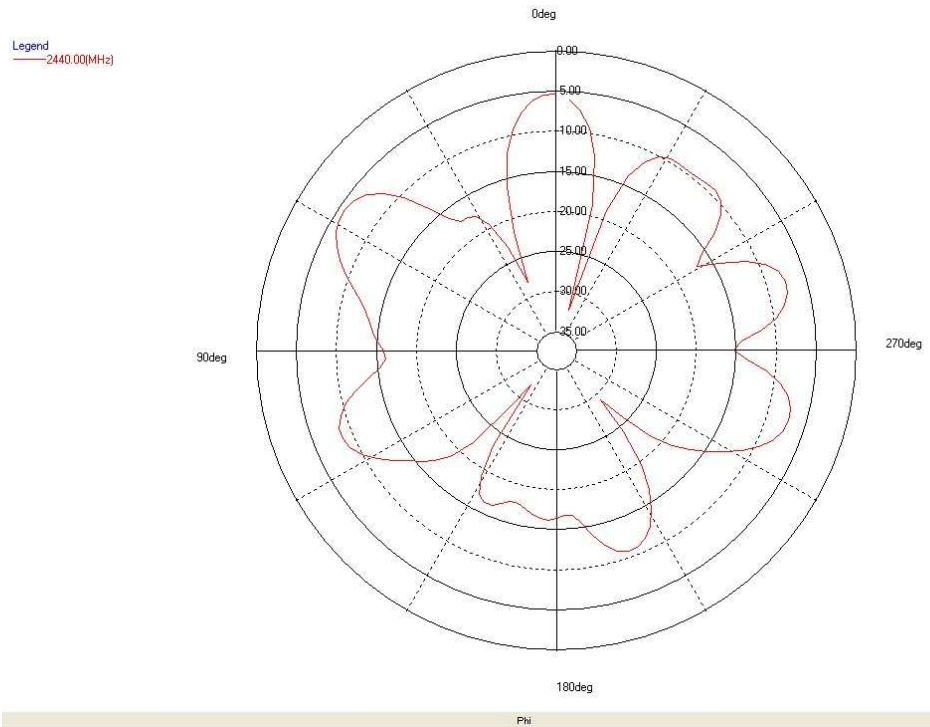
### Gain Theta, Phi 90



Gain Phi, Theta -90



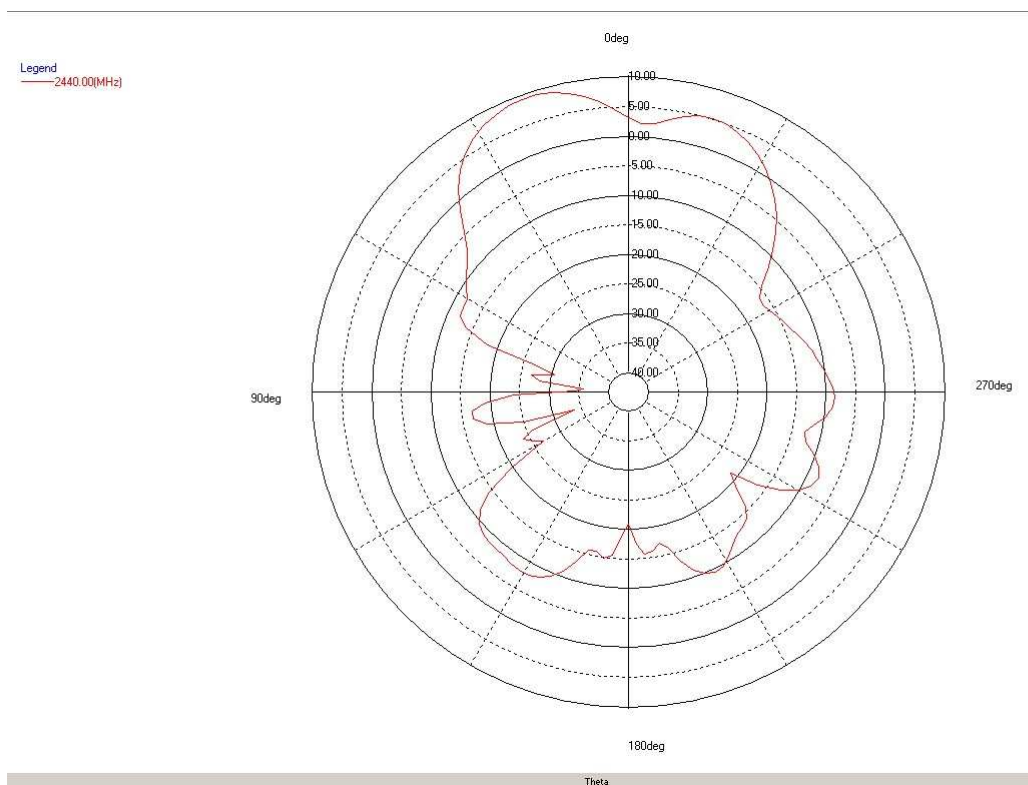
Gain Theta, Theta -90





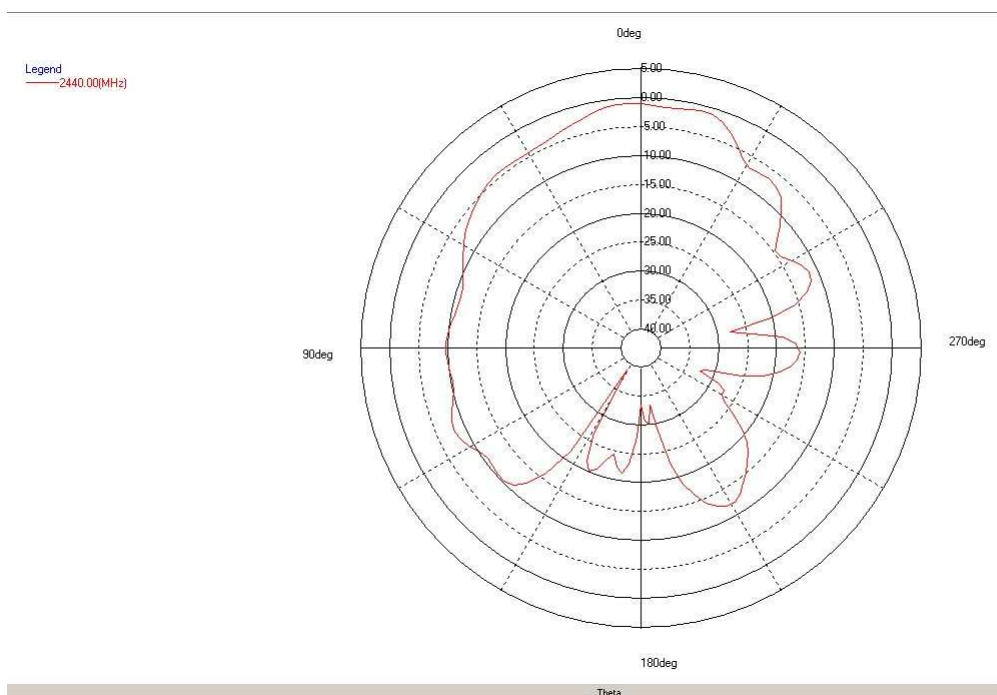
## 2.4GHz Horizontal polarization (HP), beam tilt

Gain Phi, Phi 90



## 2.4GHz Vertical polarization (VP), no beam tilt

Gain Theta, Phi 0



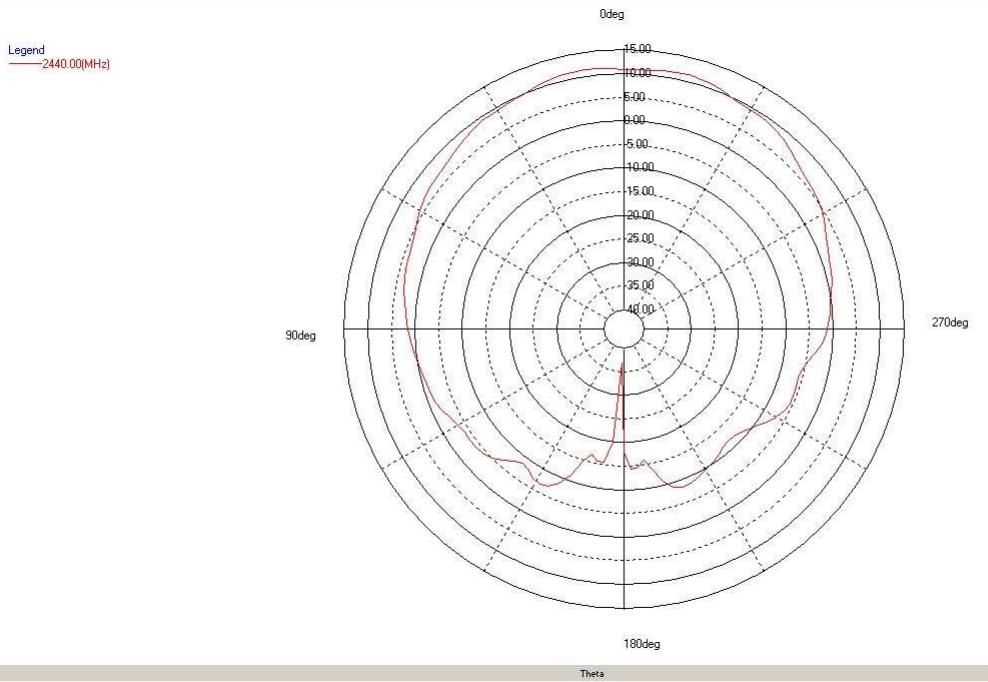
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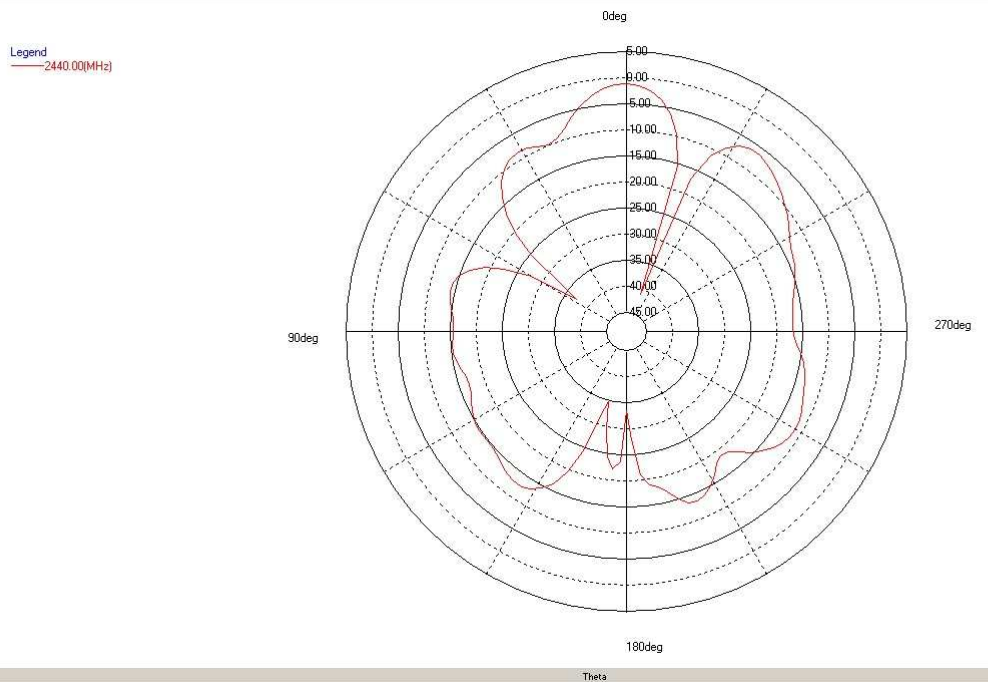
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### Gain Phi, Phi 0



### Gain Phi, Phi 90



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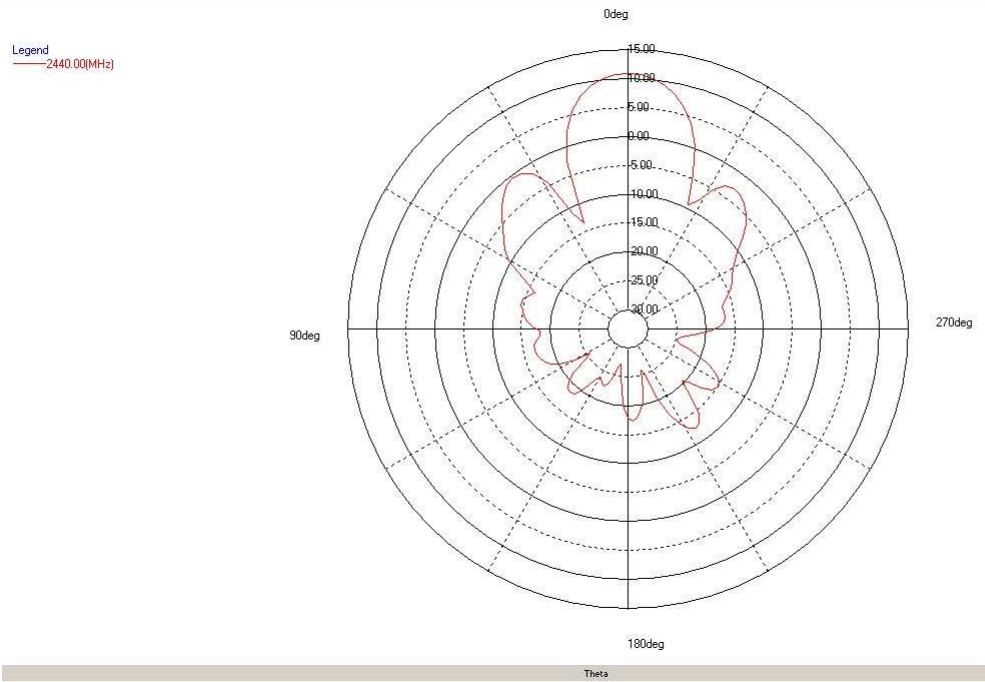
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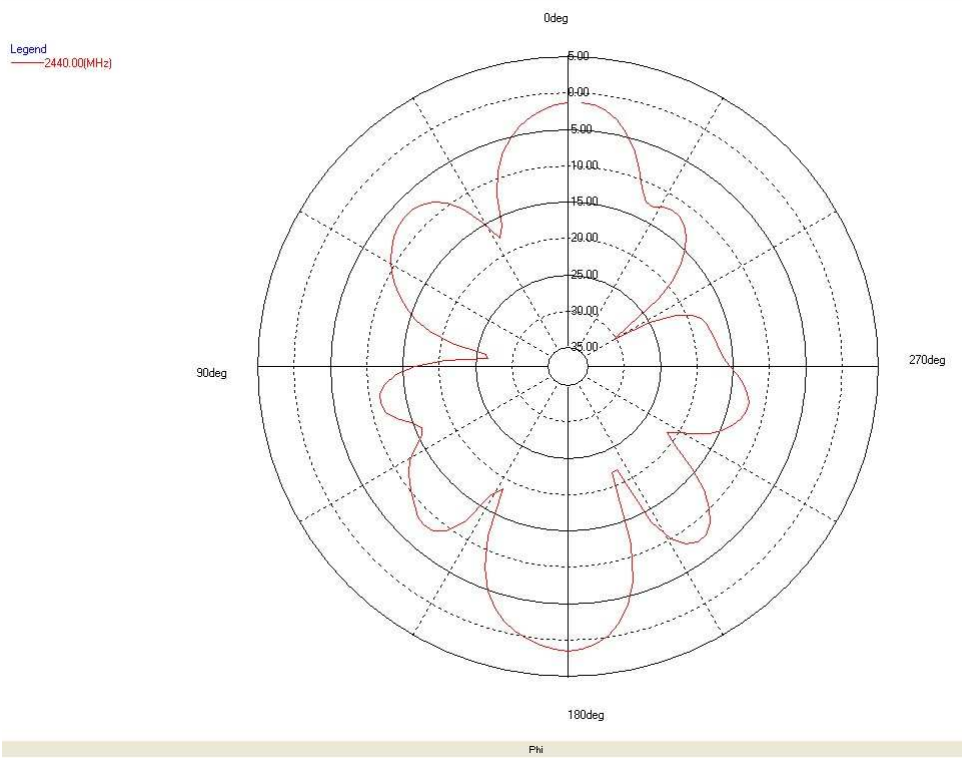




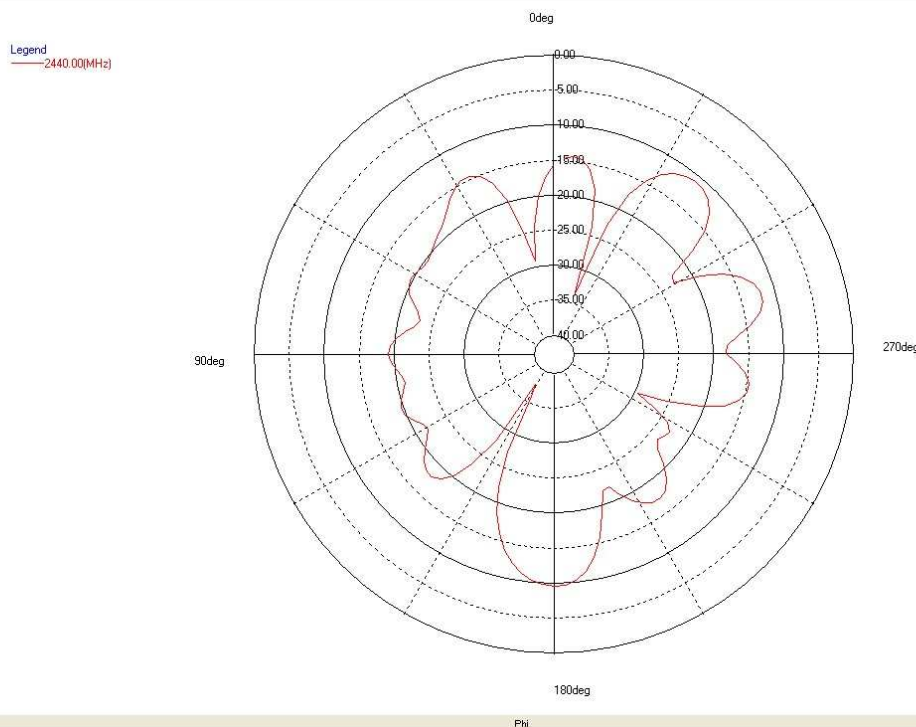
Gain Theta, Phi 90



Gain Phi, Theta -90

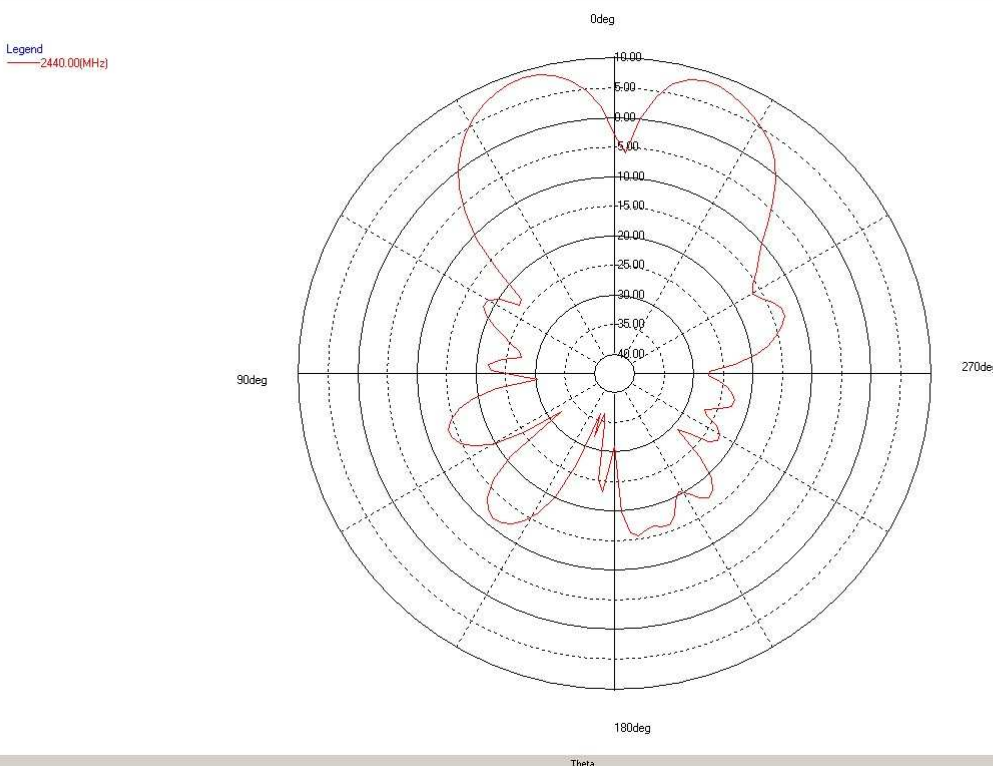


Gain Theta, Theta -90



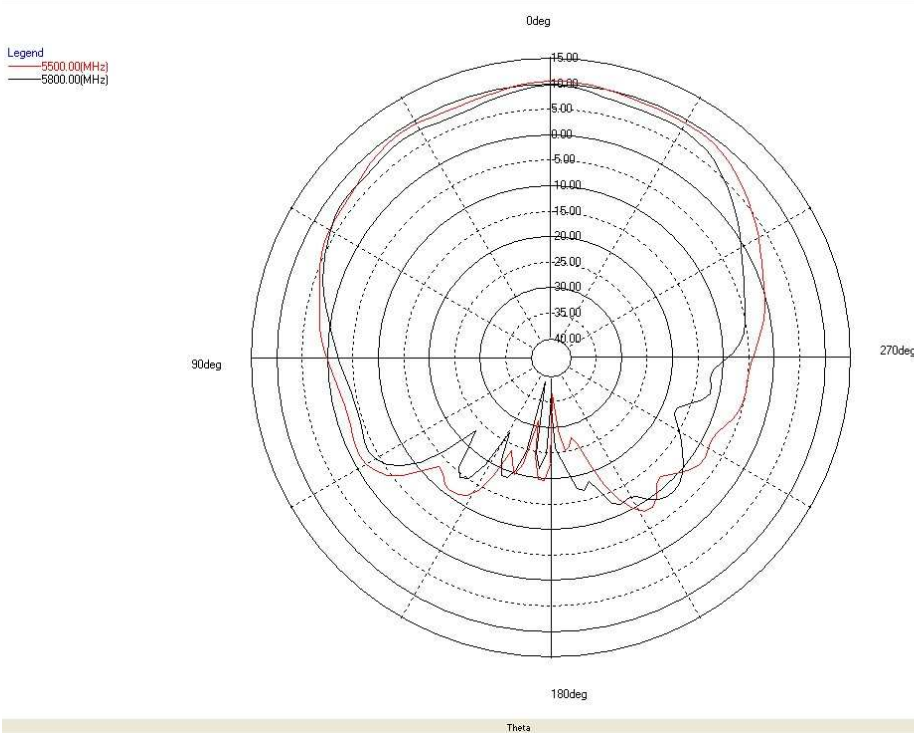
2.4GHz Vertical polarization (VP), beam tilt

Gain Theta, Phi 90

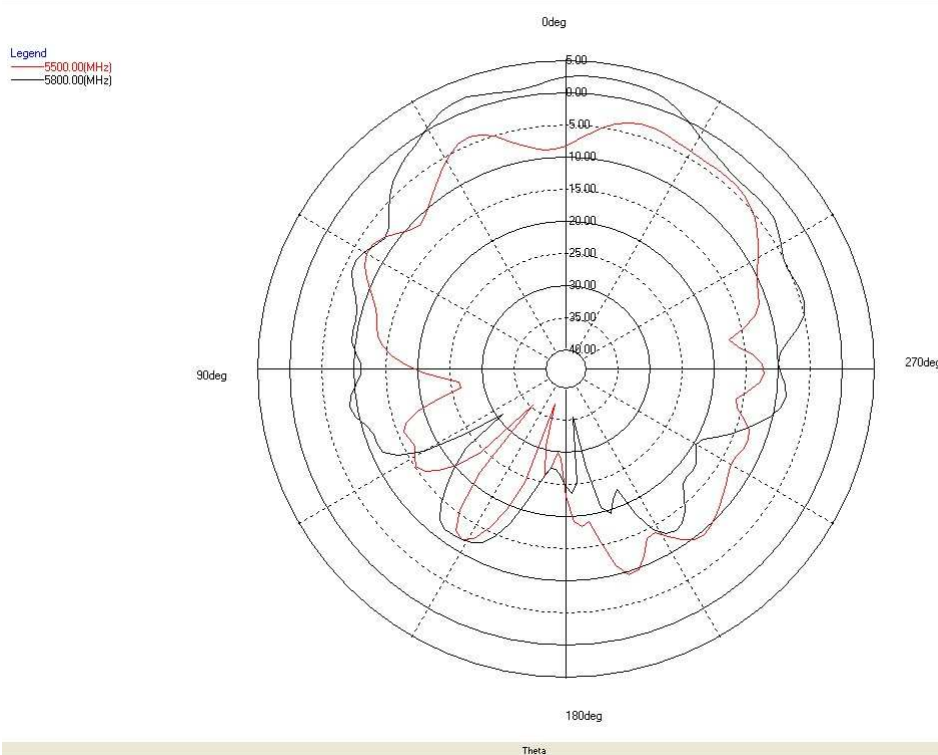


# 5.xGHz Horizontal polarization (HP)

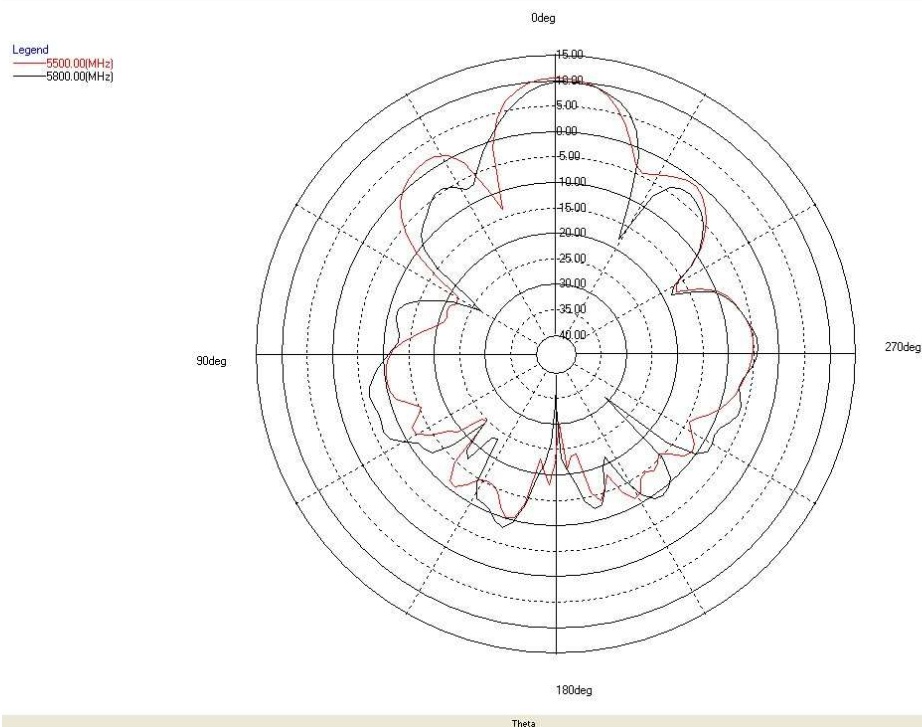
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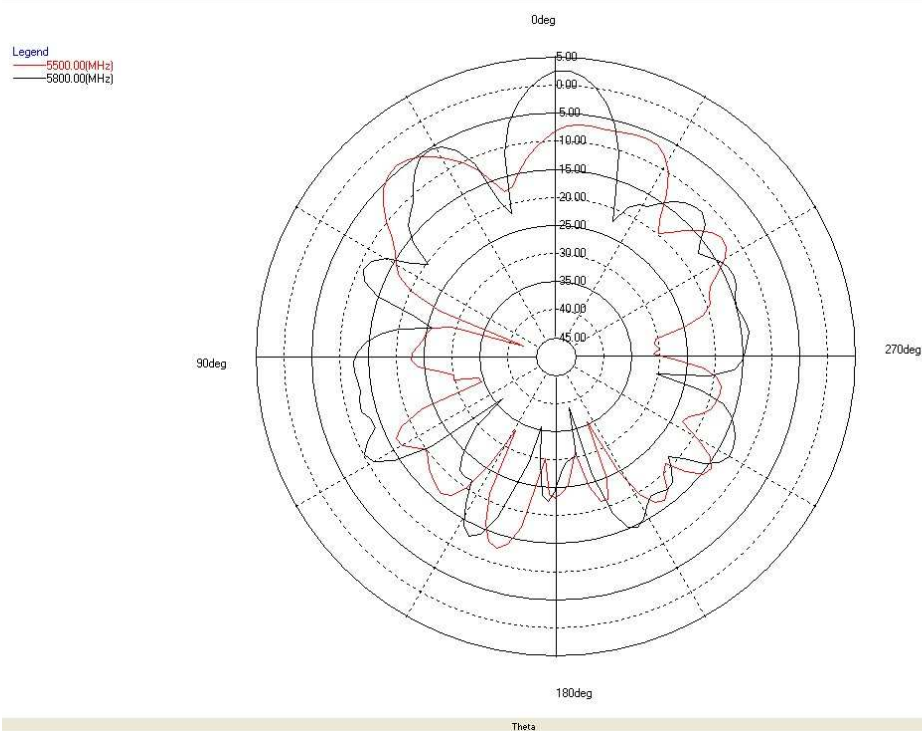
Gain Phi, Phi 0



### Gain Phi, Phi 90



### Gain Theta, Phi 90



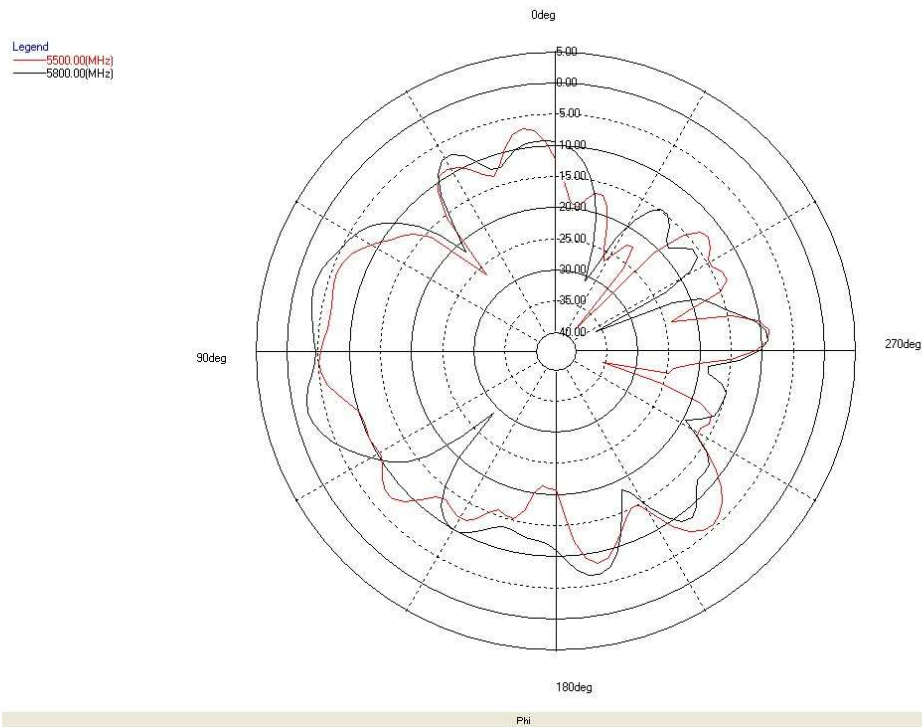
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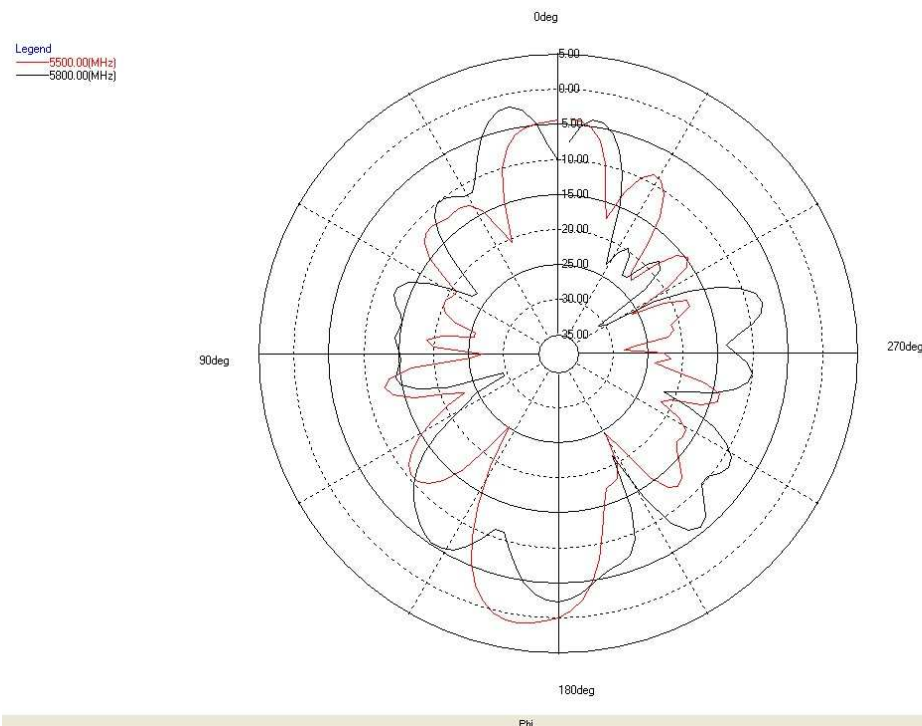
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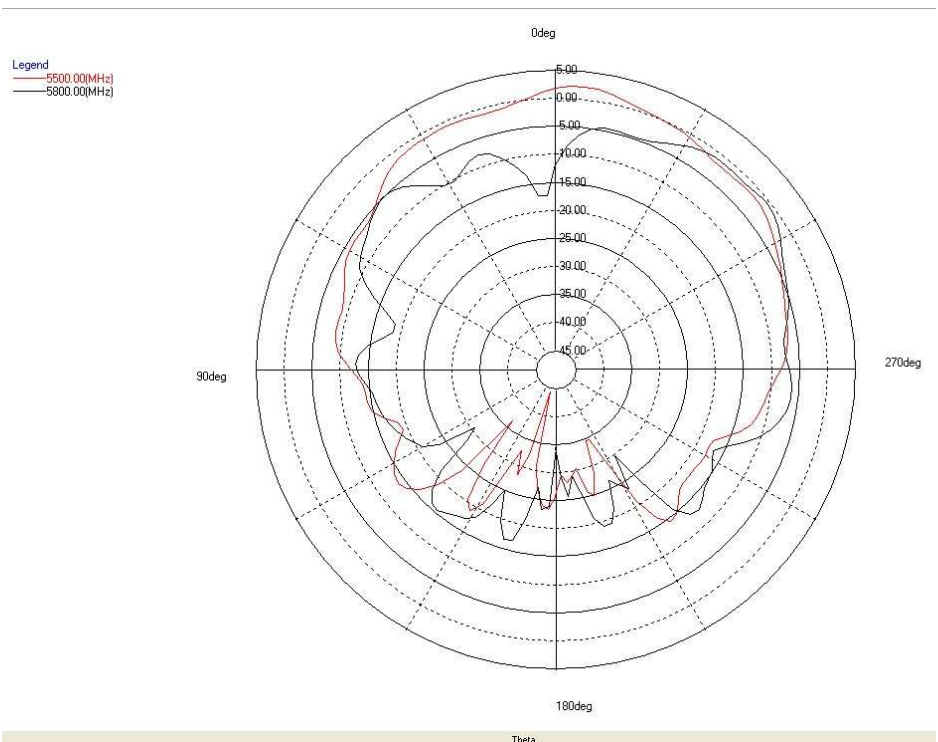
Gain Theta, Theta -90



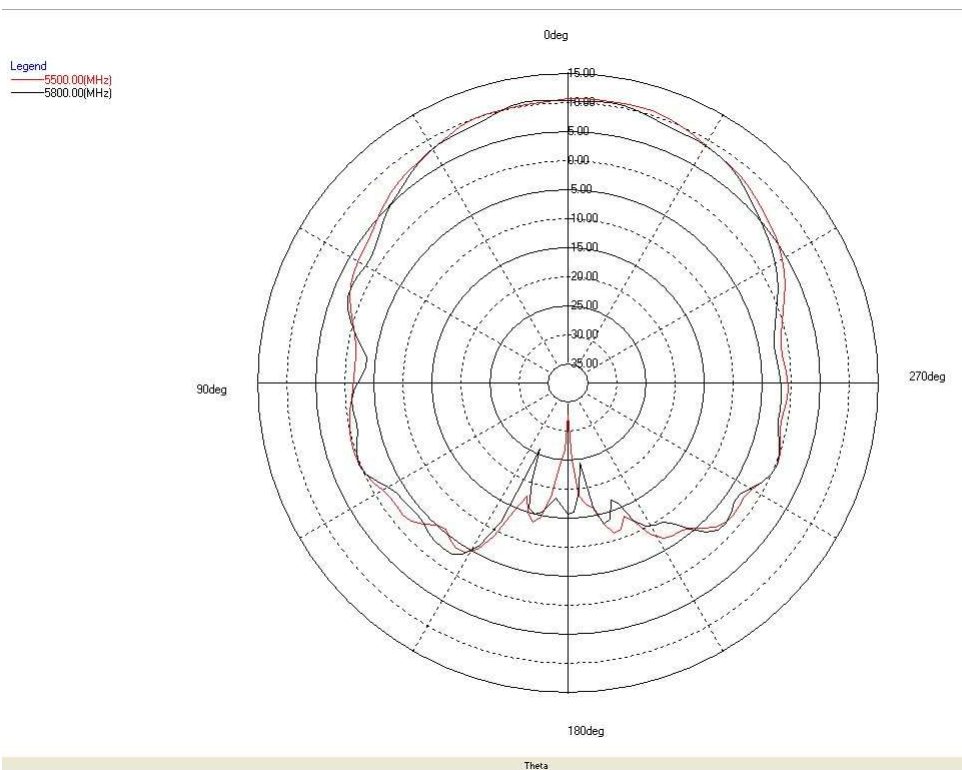


# 5.xGHz Vertical polarization (VP)

Gain Theta, Phi 0

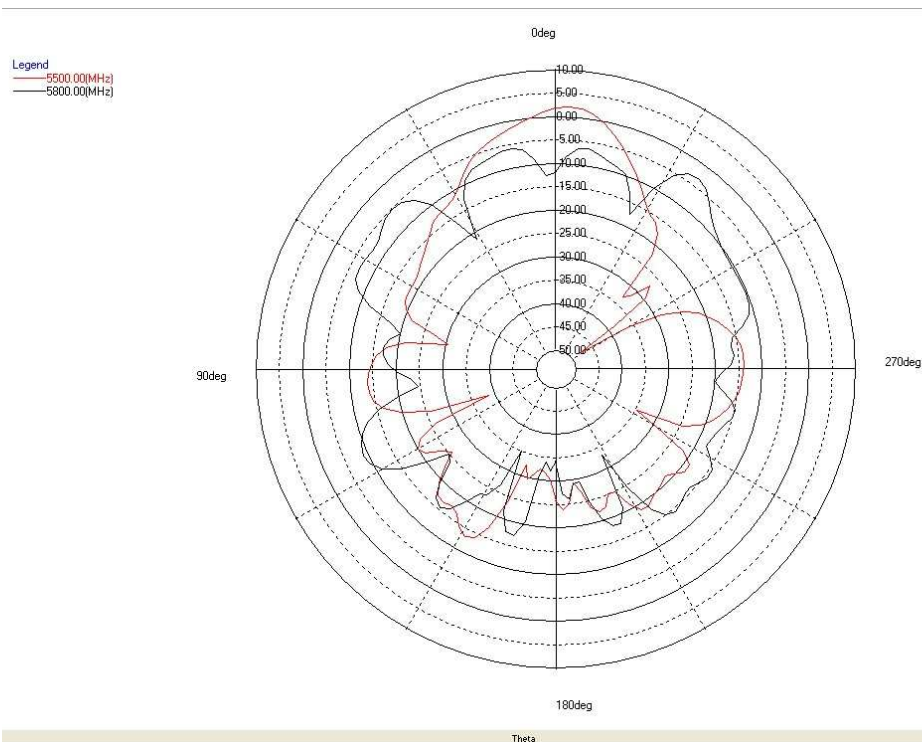


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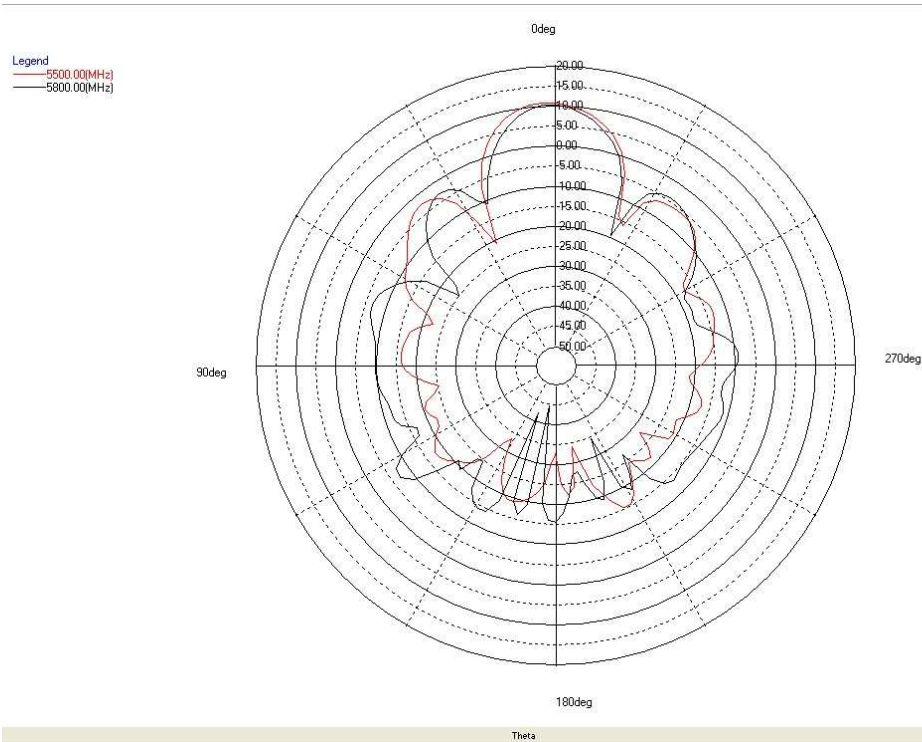




### Gain Phi, Phi 90



### Gain Theta, Phi 90



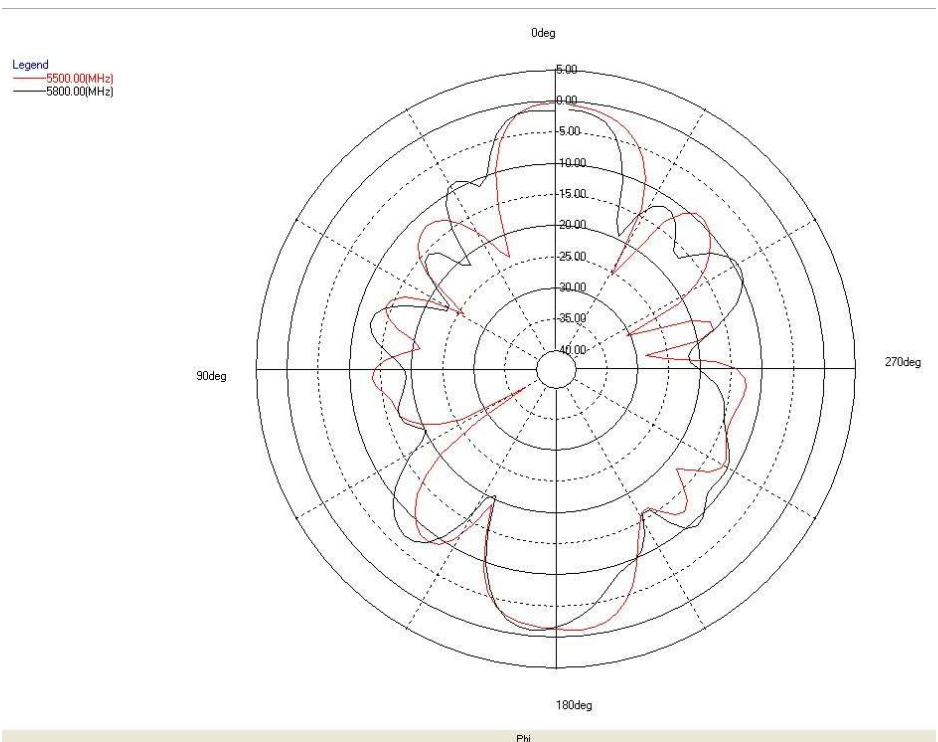
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