

# Drongo Antenna Information

**Wistron NeWeb Corporation**

# Drongo Antenna Information

## I. Antenna Assembly Specifications

Antenna assembly overview: Peak Gain including cable loss.

Designator	Manufacture	Antenna type	Cable Assembly Info.	Peak Gain W/ Cable loss (dBi)
Main antenna (P/N:81.EBF15.001)	WNC	Metal PIFA	1.(1)Cable P/N:J12B1394-2,50ohm cable,length:323mm,diameter 1.13mm. (2)connector P/N:20278-101R-13, I-PEX or WNC connector .	2400-2500MHz <u>-0.2 dBi (peak)</u>
				5150-5350MHz <u>2.81dBi (peak)</u>
				5470-5825MHz <u>1.93 dBi (peak)</u>
Auxiliary antenna (P/N:81.EBF15.002)	WNC	Metal PIFA	1.(1)Cable P/N:J12B1394-1,50ohm cable,length:460mm,diameter 1.13mm. (2)connector P/N:20278-101R-13 ,I-PEX or WNC connector.	2400-2500MHz <u>2.48 dBi (peak)</u>
				5150-5350MHz <u>2.25 dBi (peak)</u>
				5470-5825MHz <u>2.88 dBi (peak)</u>

Antenna overview: Peak Gain not including cable loss.

Antenna Designator	Manufacture	Antenna type	Peak Gain w/o Cable Loss (dBi)
Main antenna (P/N:81.EBF15.001)	WNC	Metal PIFA	2400-2500MHz <u>0.8 dBi (peak)</u>
			5150-5350MHz <u>4.31dBi (peak)</u>
			5470-5825MHz <u>3.53dBi (peak)</u>
Auxiliary antenna (P/N:81.EBF15.002)	WNC	Metal PIFA	2400-2500MHz <u>3.88 dBi (peak)</u>
			5150-5350MHz <u>4.45 dBi (peak)</u>
			5470-5825MHz <u>5.18 dBi (peak)</u>

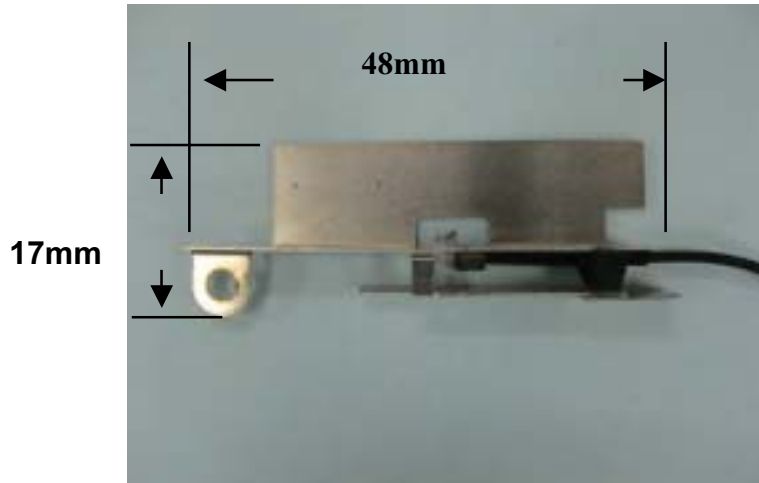
**Cable assembly overview: Cable loss (including connector).**

Designator	Manufacture	Cable type and length	VSWR	Cable Loss (dBi)
1. P/N: 50.CAB02.011 2. P/N:50.EBF03.001 For use with the Main antenna	WNC	1.(1)Cable P/N:J12B1394-coaxil cable,length:323mm,dia 1.13mm. (2)connector P/N:20278-1 I-PEX. 2.(1)Cable P/N:	2400-2500MHz <u>1.59 max</u>	2400-2500MHz <u>1 dBi (peak)</u>
			5150-5350MHz <u>1.53 max</u>	5150-5350MHz <u>1.5dBi (peak)</u>
			5470-5825MHz <u>1.84 max</u>	5470-5825MHz <u>1.6 dBi (peak)</u>
1. P/N: 50.EBF01.001 2. P/N:50.EBF02.001 For use with the Auxiliary antenna	WNC	1.(1)Cable P/N:J12B1394-coaxil cable,length:460mm,dia 1.13mm. (2)connector P/N:20278-1 I-PEX. 2.	2400-2500MHz <u>1.46 max</u>	2400-2500MHz <u>1.4 dBi (peak)</u>
			5150-5350MHz <u>1.95 max</u>	5150-5350MHz <u>2.2 dBi (peak)</u>
			5470-5825MHz <u>2.05 max</u>	5470-5825MHz <u>2.3 dBi (peak)</u>

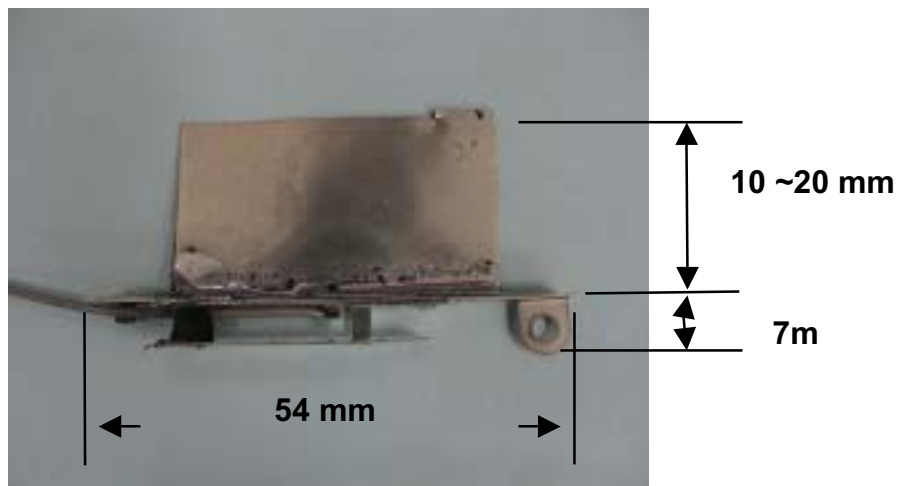
**NOTE:**

For Japan, Korea, and China the antenna data is the same as what this document requests:

• **Main antenna dimensioned drawing**



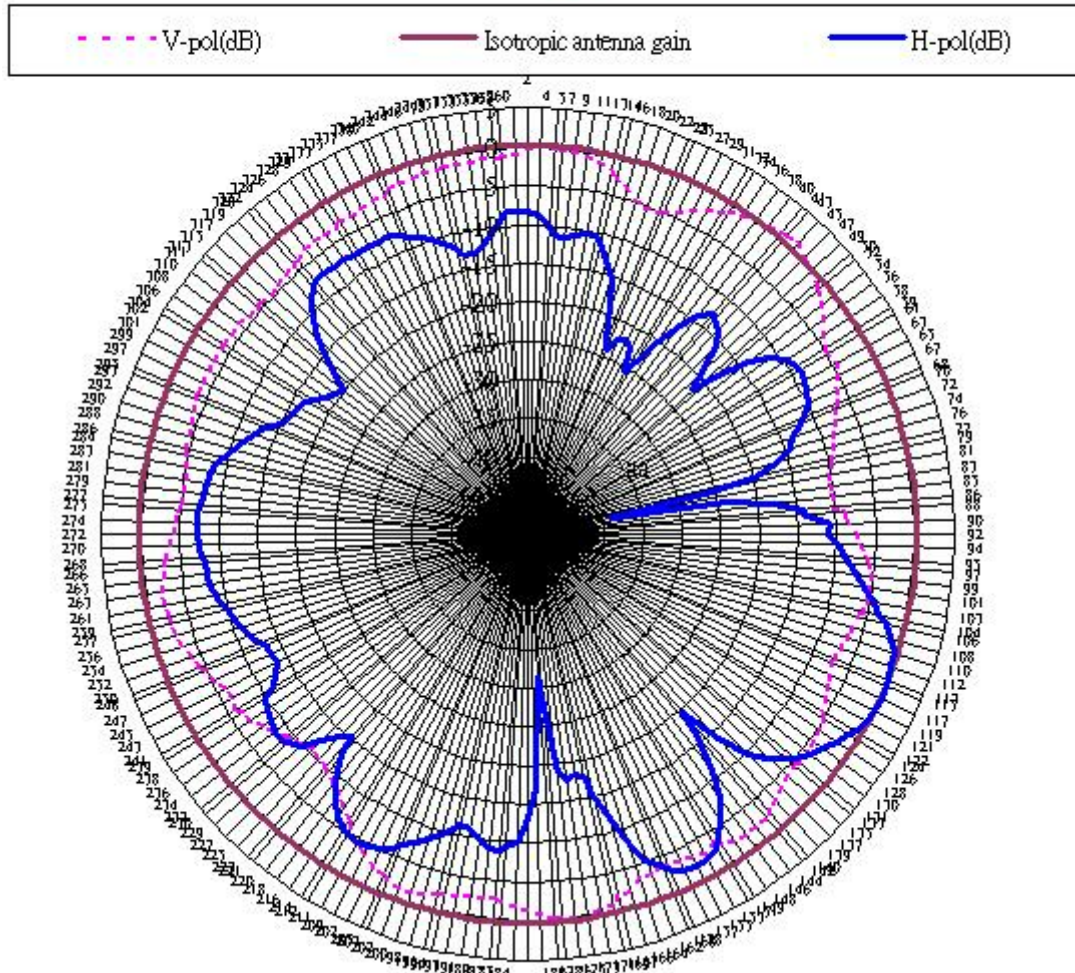
**AUX antenna dimensioned drawing**



## Radiation characteristic of antennae Loaded (In Host System)

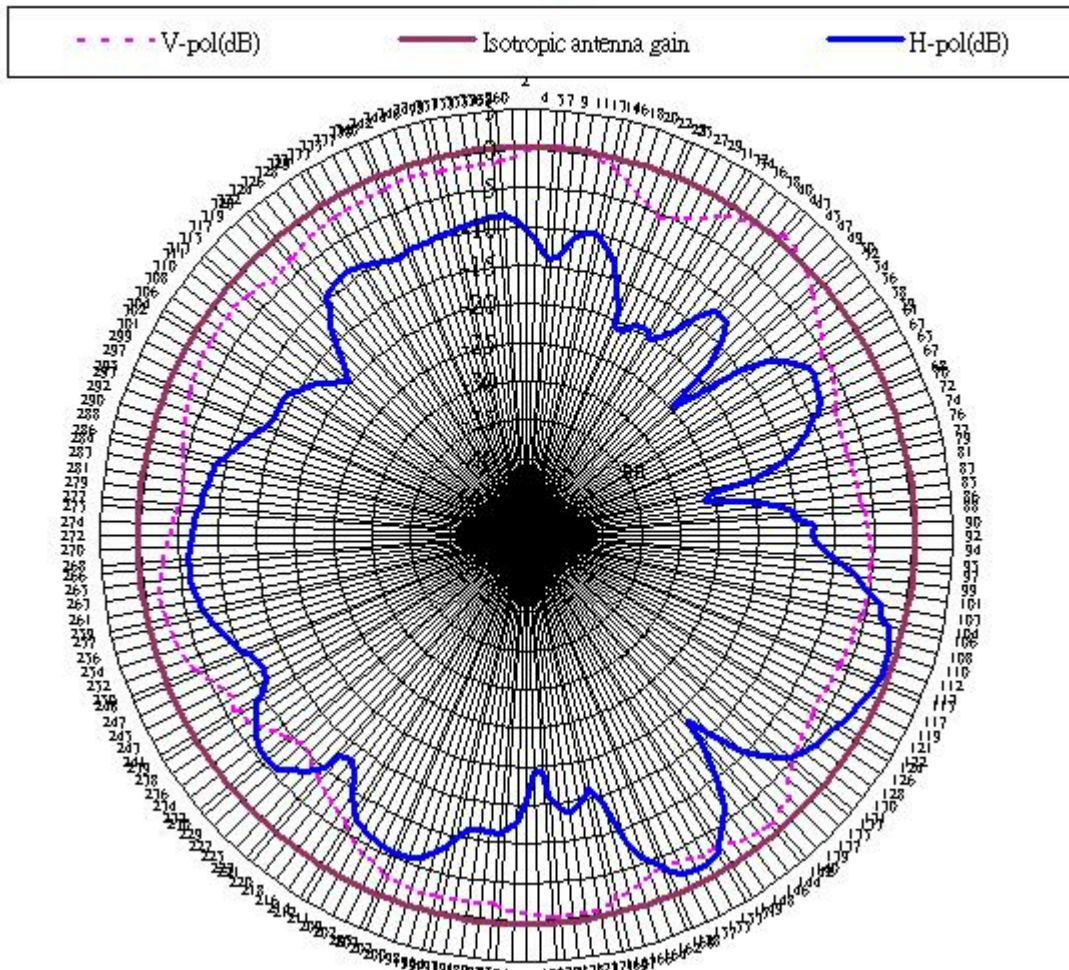
### 2400-2500MHz radiation characteristic

### Main antenna - @2.4GHz



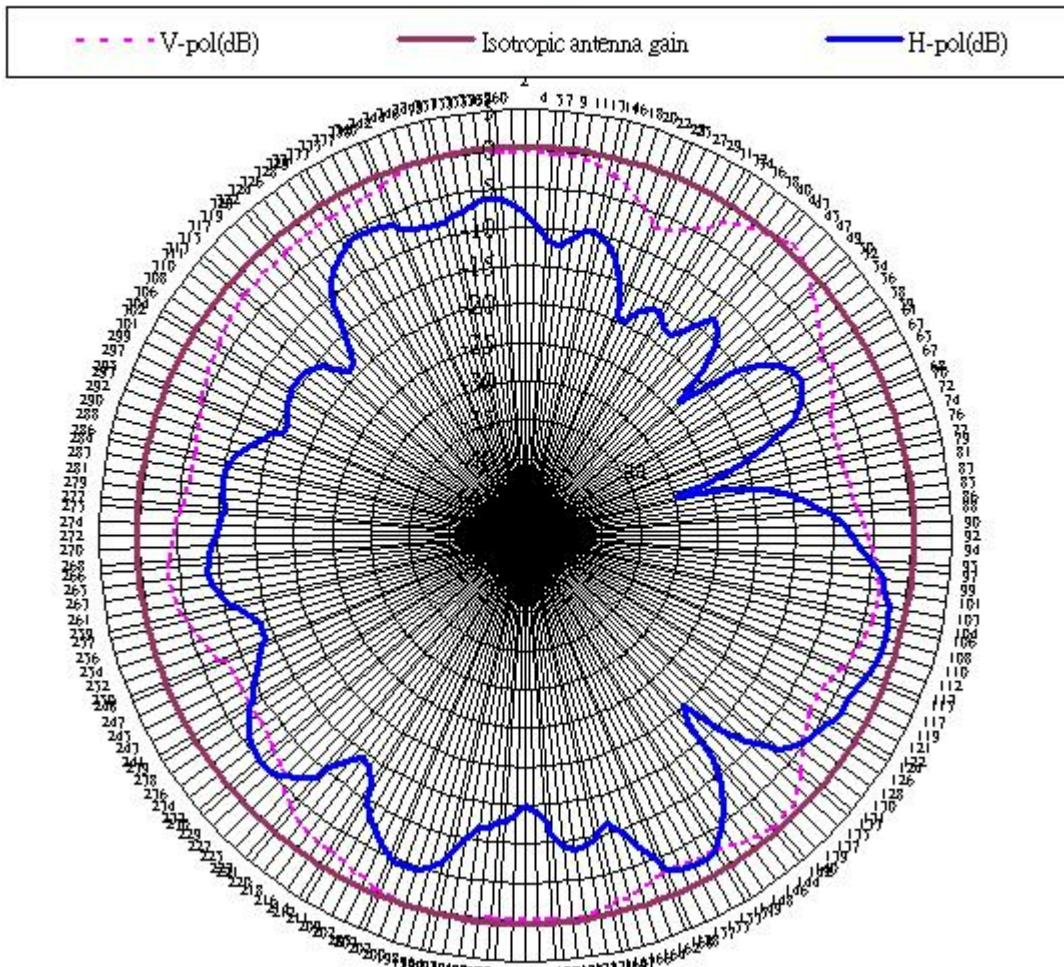
<b>Center Frquency</b>	<b>2400MHz</b>
<b>Horizontal (dBi) Peak</b>	<b>-0.35</b>
<b>Vertical (dBi) Peak</b>	<b>-1.05</b>
<b>Horz + Vert (dBi) Peak</b>	<b>-0.34</b>

### Main antenna -@2.45GHz



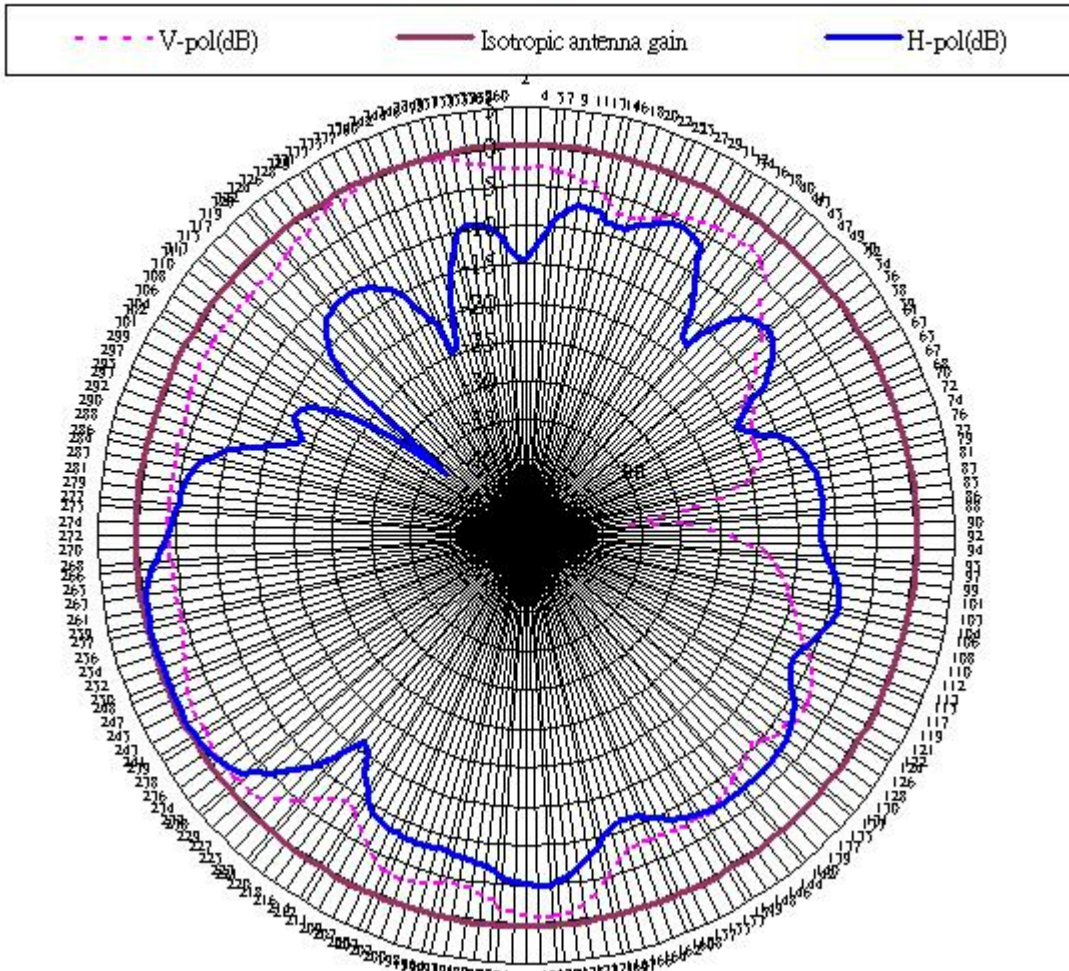
Center Frquency	2450MHz
Horizontal (dBi) Peak	-0.561
Vertical (dBi) Peak	-0.21
Horz + Vert (dBi) Peak	-0.31

### Main antenna -@2.5GHz



<b>Center Frquency</b>	<b>2500MHz</b>
<b>Horizontal (dBi) Peak</b>	<b>0.86</b>
<b>Vertical (dBi) Peak</b>	<b>-1.67</b>
<b>Horz + Vert (dBi) Peak</b>	<b>-0.2</b>

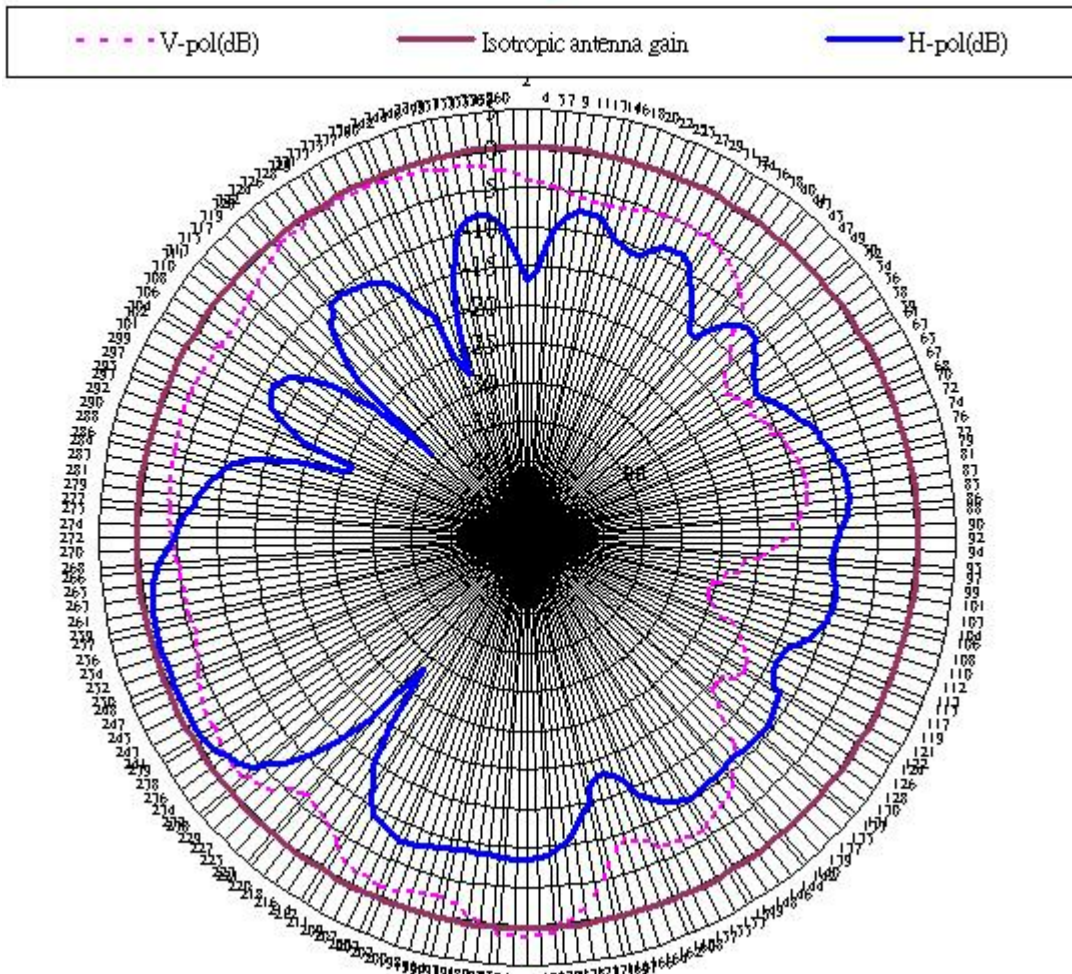
### AUX antenna - @2.4GHz



<b>Center Frquency</b>	<b>2400MHz</b>
<b>Horizontal (dBi) Peak</b>	<b>-0.23</b>
<b>Vertical (dBi) Peak</b>	<b>0.12</b>
<b>Horz + Vert (dBi) Peak</b>	<b>2.01</b>

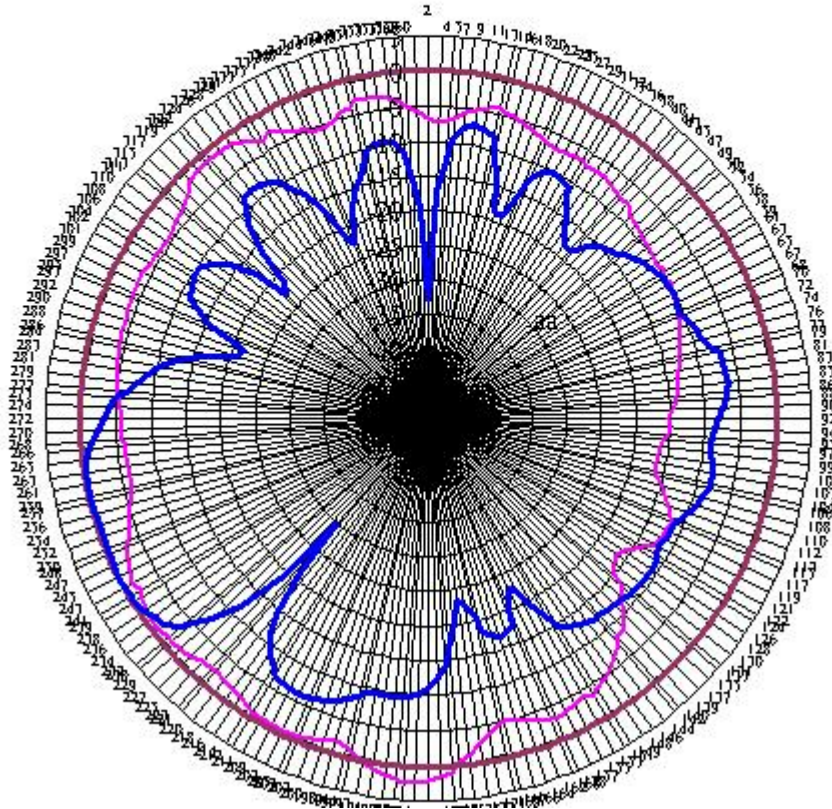
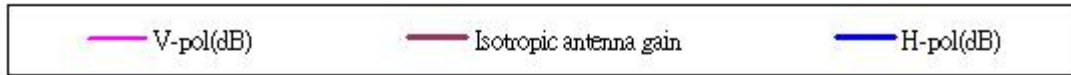


### AUX antenna -@2.45GHz



<b>Center Frquency</b>	<b>2450MHz</b>
<b>Horizontal (dBi) Peak</b>	<b>-0.83</b>
<b>Vertical (dBi) Peak</b>	<b>1.31</b>
<b>Horz + Vert (dBi) Peak</b>	<b>1.52</b>

### AUX antenna -@2.5GHz



<b>Center Frquency</b>	<b>2500MHz</b>
<b>Horizontal (dBi) Peak</b>	<b>0.01</b>
<b>Vertical (dBi) Peak</b>	<b>2.43</b>
<b>Horz + Vert (dBi) Peak</b>	<b>2.48</b>