P/N:81EBC15COMM3, P/N:81EBC15COMA3
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:81EBC15COMM3)	**WNC**	**Metal PIFA**	**(1) Cable P/N: J12B1500-3 50 ohm Coaxial. length: 550mm diameter: 1.37mm or its performance equivalent** **(2) I-pex connector P/N:730104-101R -37 or its performance equivalent.**	**2400-2500MHz 1.26 dBi(peak)** **5150-5350MHz 0.69 dBi(peak)** **5470-5825MHz 0.59 dBi(peak)**
Auxiliary antenna (P/N:81EBC15COMA3)	**WNC**	**Metal PIFA**	**(1) Cable P/N: J12B1558-2 50 ohm Coaxial. length: 450mm diameter: 1.13mm or its performance equivalent** **(2) I-pex connector P/N:20278-101R-13 or its performance equivalent.**	**2400-2500MHz 1.04dBi (peak)** **5150-5350MHz 1.67 dBi (peak)** **5470-5825MHz 1.35 dBi (peak)**

Antenna overview: Peak Gain not including cable loss.

Antenna Designator	Manufacture	Antenna type	Peak Gain w/o Cable Loss (dBi)
Main antenna (P/N: 81EBC15COMM3)	**WNC**	**Metal PIFA**	**2400-2500MHz 2.64 dBi(peak)** **5150-5350MHz 2.85 dBi(peak)** **5470-5825MHz 2.91 dBi(peak)**

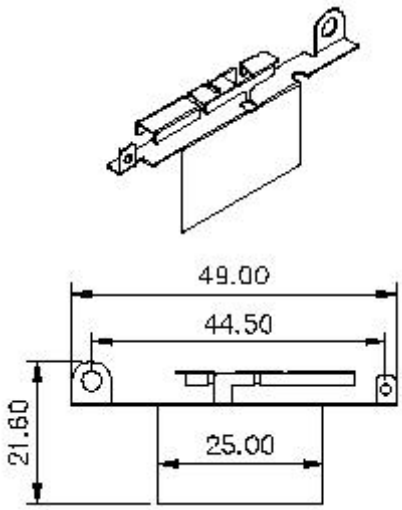
Antenna Designator	Manufacture	Antenna type	Peak Gain w/o Cable Loss (dBi)
Auxiliary antenna (P/N: 81EBC15COMA3)	**WNC**	**Metal PIFA**	**2400-2500MHz 2.73dBi (peak)**
			5150-5350MHz 4.42 dBi (peak)
			5470-5825MHz 3.99 dBi (peak)

Cable assembly overview: Cable loss (including connector).

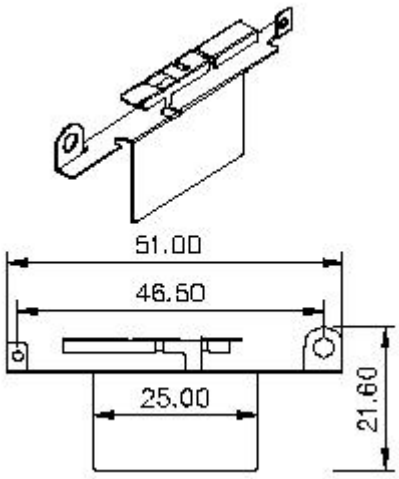
Designator	Manufacture	Cable type and length	VSWR	Cable Loss (dBi)
P/N: 50.EBC22.001 For use with the Main antenna	**WNC**	**P/N: 50.EBC22.001 50 ohm Coaxial. length: 550mm diameter: 1.37mm Connector: I-PEX**	**2400-2500MHz 1.51 max**	**2400-2500MHz 1.38 dBi (peak)**
			5150-5350MHz 1.56max	**5150-5350MHz 2.16 dBi (peak)**
			5470-5825MHz 1.42 max	**5470-5825MHz 2.32dBi(peak)**
P/N: 50.EBC21.001 For use with the Auxiliary antenna	**WNC**	**P/N: 50.EBC21.001 50 ohm Coaxial. length: 450mm diameter: 1.13mm Connector: I-PEX**	**2400-2500MHz 1.49 max**	**2400-2500MHz 1.69 dBi (peak)**
			5150-5350MHz 1.48 max	**5150-5350MHz 2.55 dBi (peak)**
			5470-5825MHz 1.60 max	**5470-5825MHz 2.64 dBi(peak)**

Antenna mechanical drawings.

A.Main antenna (Right_side antenna)

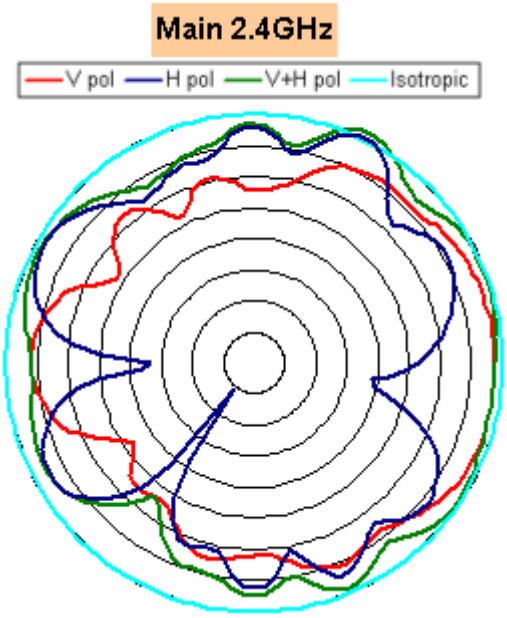


B.AUXiliary antenna(Left_side antenna)

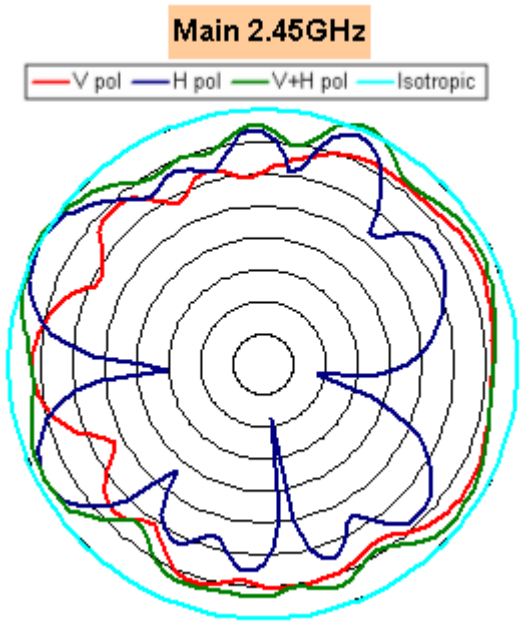


Radiation characteristic of antennae Loaded (In Host System)

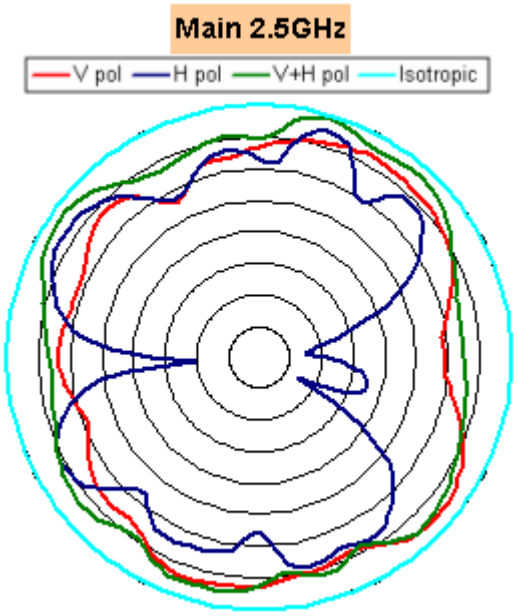
2400-2500MHz radiation characteristic



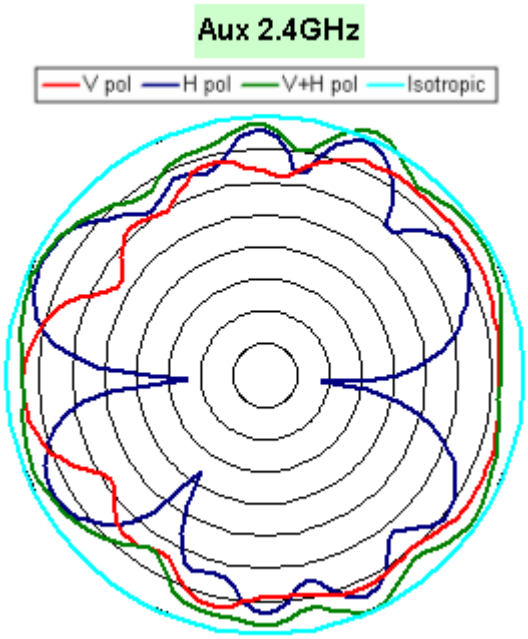
Center Frequency	**2400 MHz**
Horizontal (dBi) peak	**0.11**
Vertical (dBi) peak	**-1.33**
Horz+Vert (dBi) peak	**1.26**



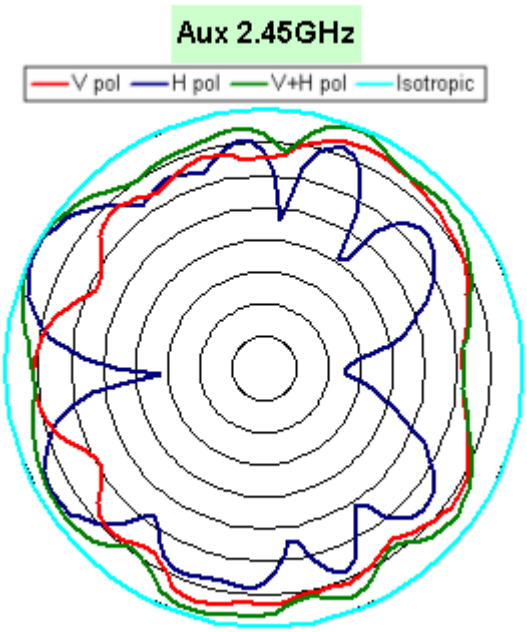
Center Frequency	**2450 MHz**
Horizontal (dBi) peak	**-0.21**
Vertical (dBi) peak	**-2.49**
Horz+Vert (dBi) peak	**0.50**



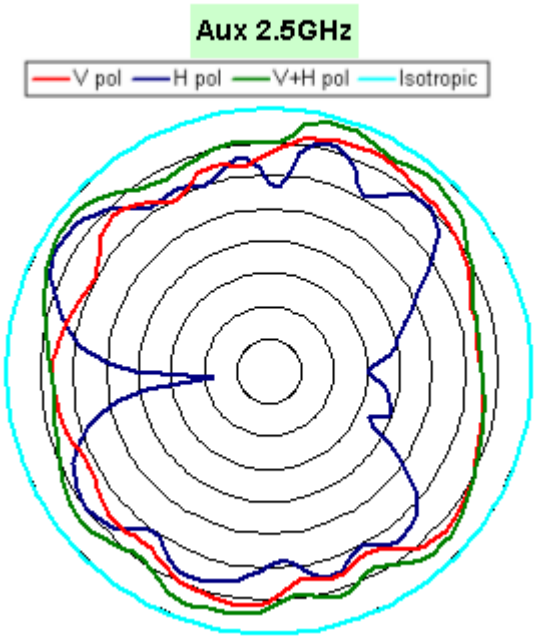
Center Frequency	**2500 MHz**
Horizontal (dBi) peak	**-2.70**
Vertical (dBi) peak	**-2.16**
Horz+Vert (dBi) peak	**-0.45**



Center Frequency	**2400 MHz**
Horizontal (dBi) peak	**-0.70**
Vertical (dBi) peak	**-2.56**
Horz+Vert (dBi) peak	**1.04**

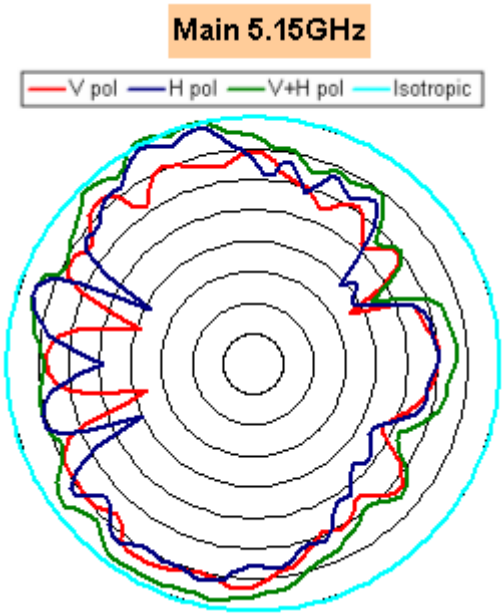


Center Frequency	**2450 MHz**
Horizontal (dBi) peak	**-0.32**
Vertical (dBi) peak	**-2.45**
Horz+Vert (dBi) peak	**0.01**

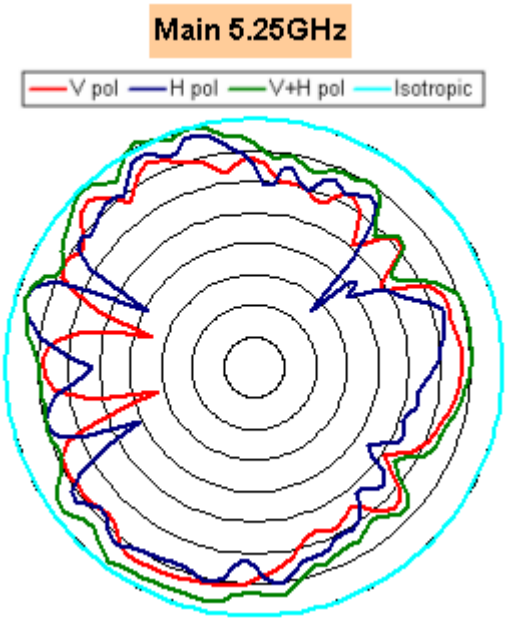


Center Frequency	**2500 MHz**
Horizontal (dBi) peak	**-0.92**
Vertical (dBi) peak	**-3.11**
Horz+Vert (dBi) peak	**-2.70**

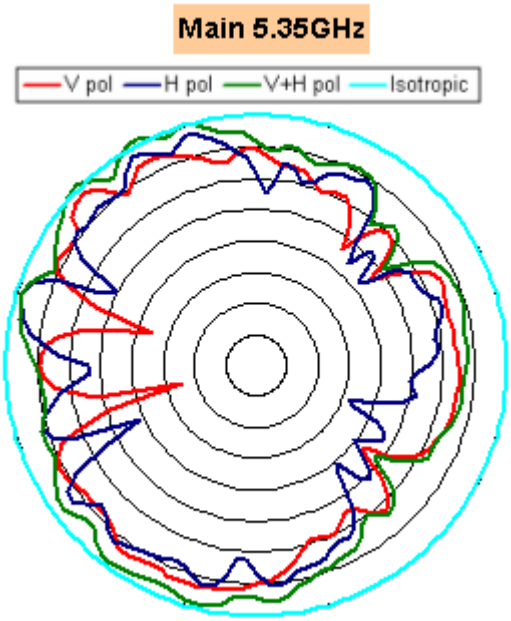
5150-5135 MHz radiation characteristic



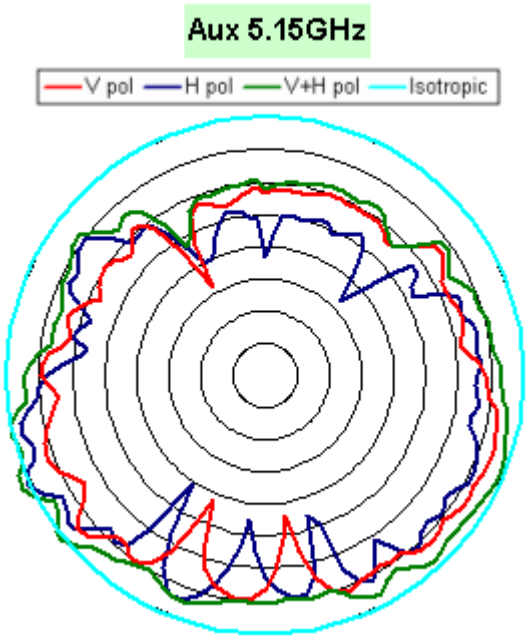
Center Frequency	**5150 MHz**
Horizontal (dBi) peak	**-0.84**
Vertical (dBi) peak	**-3.61**
Horz+Vert (dBi) peak	**0.50**



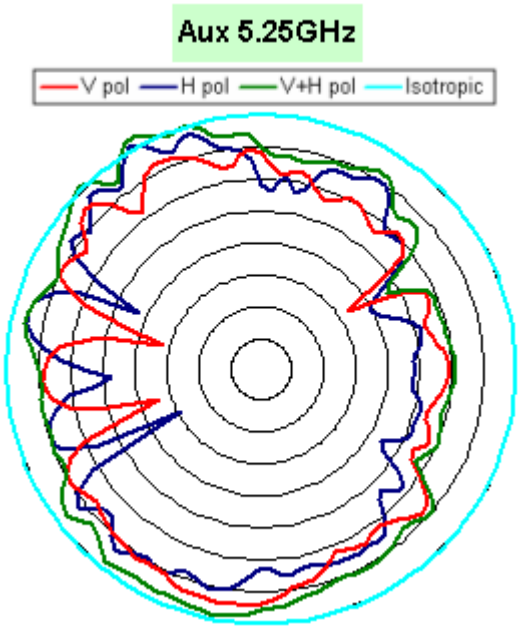
Center Frequency	**5250 MHz**
Horizontal (dBi) peak	**-1.59**
Vertical (dBi) peak	**-2.33**
Horz+Vert (dBi) peak	**0.6**



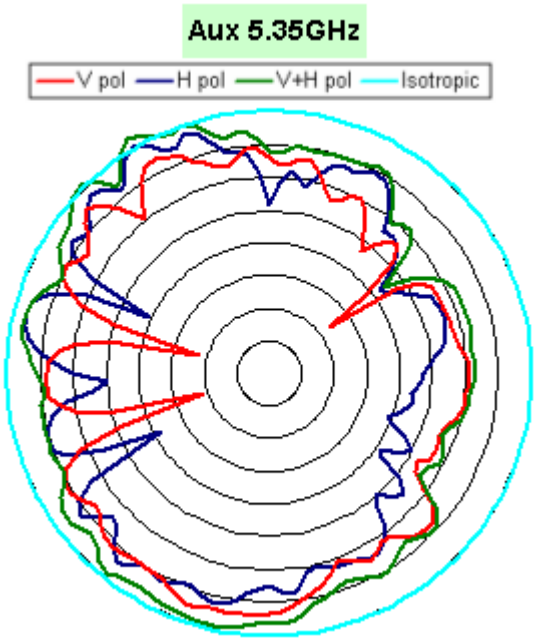
Center Frequency	**5350 MHz**
Horizontal (dBi) peak	**-1.35**
Vertical (dBi) peak	**-1.18**
Horz+Vert (dBi) peak	**0.69**



Center Frequency	**5150 MHz**
Horizontal (dBi) peak	**0.78**
Vertical (dBi) peak	**-2.67**
Horz+Vert (dBi) peak	**1.52**

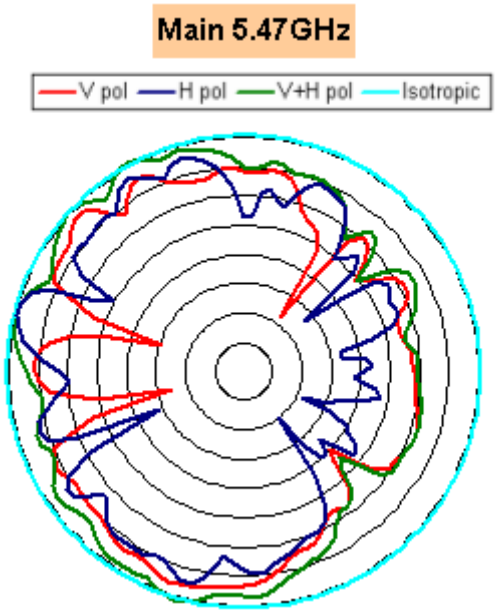


Center Frequency	**5250 MHz**
Horizontal (dBi) peak	**0.25**
Vertical (dBi) peak	**-2.85**
Horz+Vert (dBi) peak	**1.54**

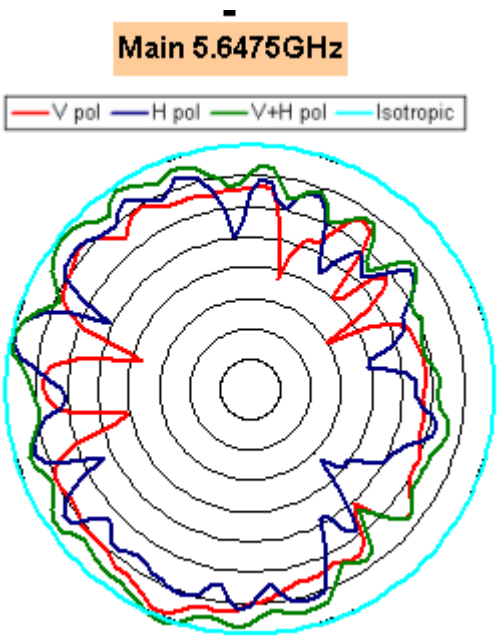


Center Frequency	**5350 MHz**
Horizontal (dBi) peak	**0.07**
Vertical (dBi) peak	**-2.95**
Horz+Vert (dBi) peak	**1.67**

5470-5825MHz radiation characteristic

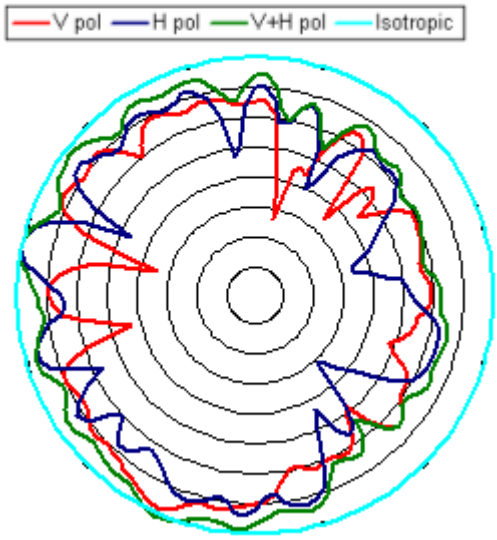


Center Frequency	**5470 MHz**
Horizontal (dBi) peak	**-0.54**
Vertical (dBi) peak	**-1.46**
Horz+Vert (dBi) peak	**0.54**



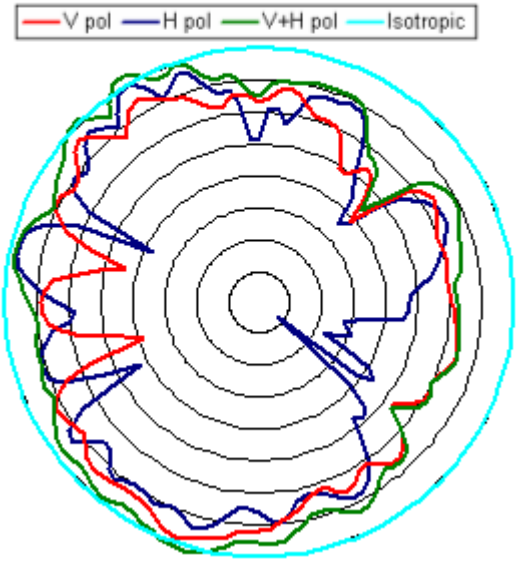
Center Frequency	**5647.5 MHz**
Horizontal (dBi) peak	**-0.76**
Vertical (dBi) peak	**-0.96**
Horz+Vert (dBi) peak	**0.45**

Main 5.825GHz

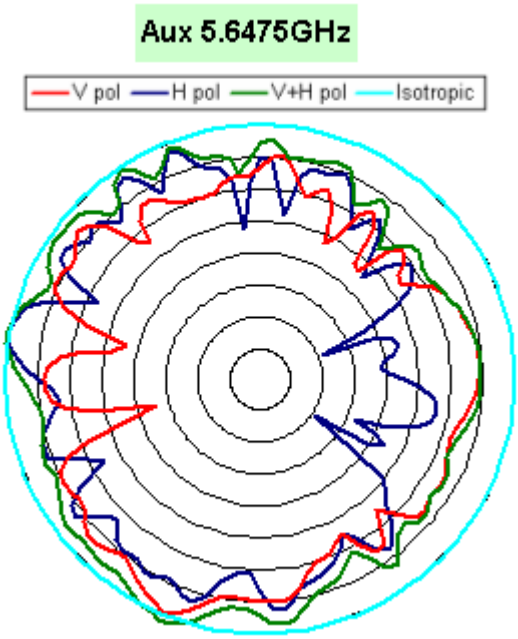


Center Frequency	**5825 MHz**
Horizontal (dBi) peak	**-0.14**
Vertical (dBi) peak	**-0.77**
Horz+Vert (dBi) peak	**0.59**

Aux 5.47GHz

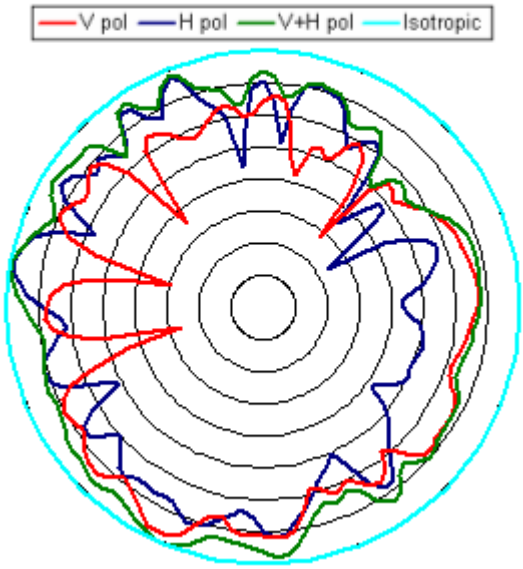


Center Frequency	**5470 MHz**
Horizontal (dBi) peak	**-0.46**
Vertical (dBi) peak	**-1.18**
Horz+Vert (dBi) peak	**1.35**



Center Frequency	**5647.5 MHz**
Horizontal (dBi) peak	**0.08**
Vertical (dBi) peak	**-0.75**
Horz+Vert (dBi) peak	**0.72**

Aux 5.825GHz

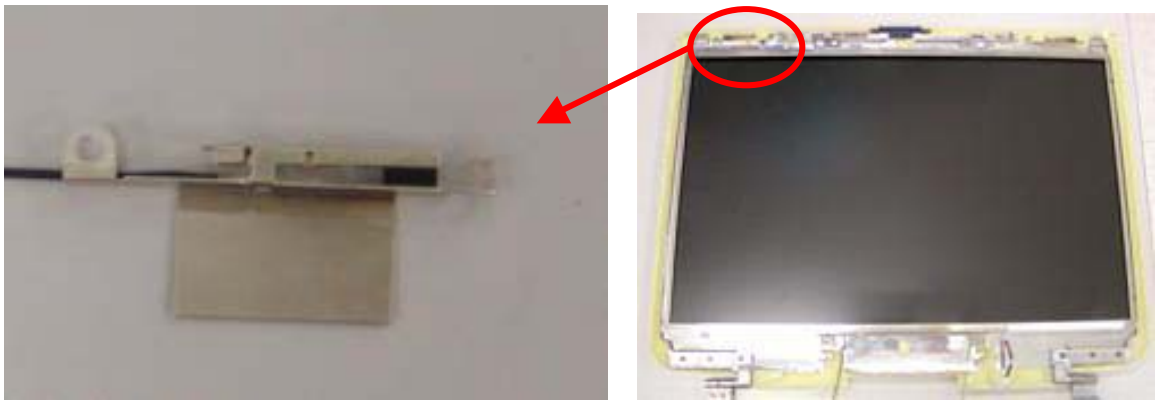


Center Frequency	**5825 MHz**
Horizontal (dBi) peak	**-0.64**
Vertical (dBi) peak	**-1.37**
Horz+Vert (dBi) peak	**-0.18**

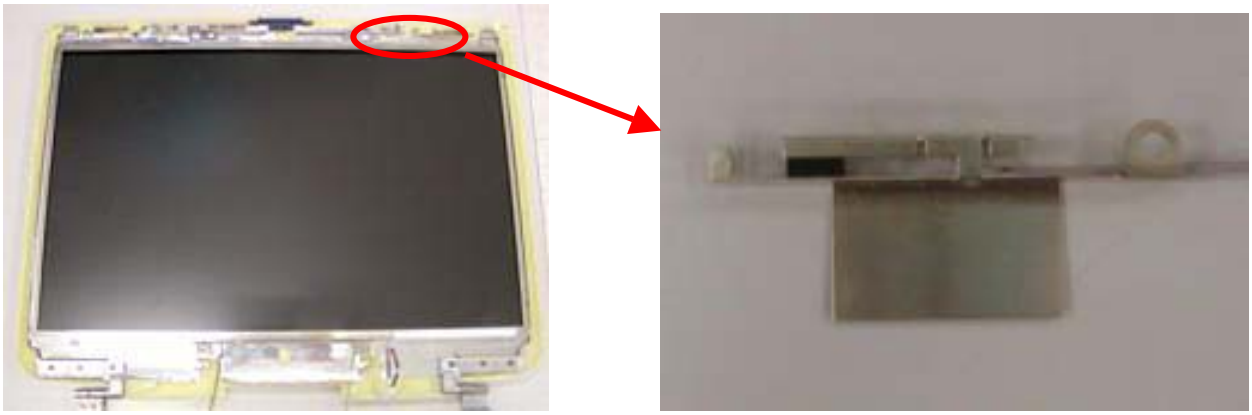
Host PC Information

Host model:

Main Antenna



Auxiliary Antenna



Note: picture above shows the typical antenna placement, still have other options for LCD side mount antenna placement.