Regulatory WLAN Antenna Information

(English Language Required for Intel Regulatory Review / Approval)

Brand Name	***Gateway***
Model Name	***TA6***
Antenna Vendor	***Foxconn***
Antenna Part Number	□ Main Antenna: ***WDAN-GQTA1001***
	□ Aux Antenna: ***WDAN-GQTA1001***
With WLAN Module	□ WM3B2100
(Check Box)	□ WM3B2200BG
	□ WM3B2915ABG
	☒ WM3945ABG

Antenna Sample / Antenna Data
Requirements for worldwide regulatory approval

Section	Description of Required OEM / ODM Antenna Information	US / IC	EU	Japan	Taiwan	S.Korea
1A	Part Number for Antenna only	Required	Required	Required	Required	Required
1B	Antenna Manufacturer Name	Required	Required	Required	Required	Required
1C	Description of Antenna Type	Required	N/A	N/A	N/A	N/A
1D	Part number of Antenna Assembly / cable impedance, length & diameter.	Required	Desired	Desired	Desired	Desired
1E	Main & Aux antenna (Peak Gain W/ cable loss)	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Main & Aux antenna (Peak Gain only)	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Main & Aux antenna (Cable loss W/ connector)	Required	Required	Required	Required	Required
2	Dimensioned Photographs and Drawings of main & auxiliary antennas	Required	Required	Required	Required	Required
3	Radiation patterns of antennas loaded in the host platform.	Required	Desired	Required	N/A	Required
4	Platform model name / number - correlated to antenna manufacturer and antenna part number	Required	Required	Desired	Required	Desired
5	Photograph(s) or Drawings showing location of antennas in platform. (S. Korea requires photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.	Required	Required	Desired	Required (Photos)	Required (Photos)
6	Mech. drawings / photos with dimensions of antenna locations and distance from end-user (For evaluation of SAR testing requirement).	Required	N/A	N/A	N/A	N/A
7	Photograph(s) or Drawings showing the location of all antennas (WLAN, BT, other) and distance between those transmitting antennas. Information will be used to evaluate whether co-location testing is required.	Required	N/A	N/A	N/A	N/A
8	Local representative contact information for LMA/ PARS process.	Required	N/A	N/A	N/A	N/A

Antenna Information

Section 1. Antenna Assembly Specifications

Antenna Assembly Summary:

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
(P/N:WDAN-GQTA1001) Main antenna	HON HAI PRECISION IND. CO.,LTD.	PIFA	(P/N: SGX0001) 50 ohm Coaxial. length: 610 mm diameter: 1.13mm Connector: SGX	2400-2500MHz 2.15 dBi (peak)	2400-2500MHz 3.806 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz -1.656dBi (peak)
				4900-5350MHz 1.90 dBi (peak)	4900-5350MHz 4.369 dBi (peak)	4900-5350MHz 2.0 max	4900-5350MHz -2.496 dBi (peak)
				5470-5875MHz 1.26 dBi (peak)	5470-5875MHz 3.879 dBi (peak)	5470-5875MHz 2.0 max	5470-5875MHz -2.619 dBi (peak)
(P/N:WDAN-GQTA1001) Auxiliary antenna	HON HAI PRECISION IND. CO.,LTD.	PIFA	(P/N: SGX0001) 50 ohm Coaxial. length: 840 mm diameter: 1.13mm Connector: SGX	2400-2500MHz 1.95 dBi (peak)	2400-2500MHz 4.230 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz -2.280 dBi (peak)
				4900-5350MHz 0.65 dBi (peak)	4900-5350MHz 4.087 dBi (peak)	4900-5350MHz 2.0 max	4900-5350MHz -3.437 dBi (peak)
				5470-5875MHz 1.09 dBi (peak)	5470-5875MHz 4.696 dBi (peak)	5470-5875MHz 2.0 max	5470-5875MHz -3.606 dBi (peak)

Antenna Peak Gain Table:

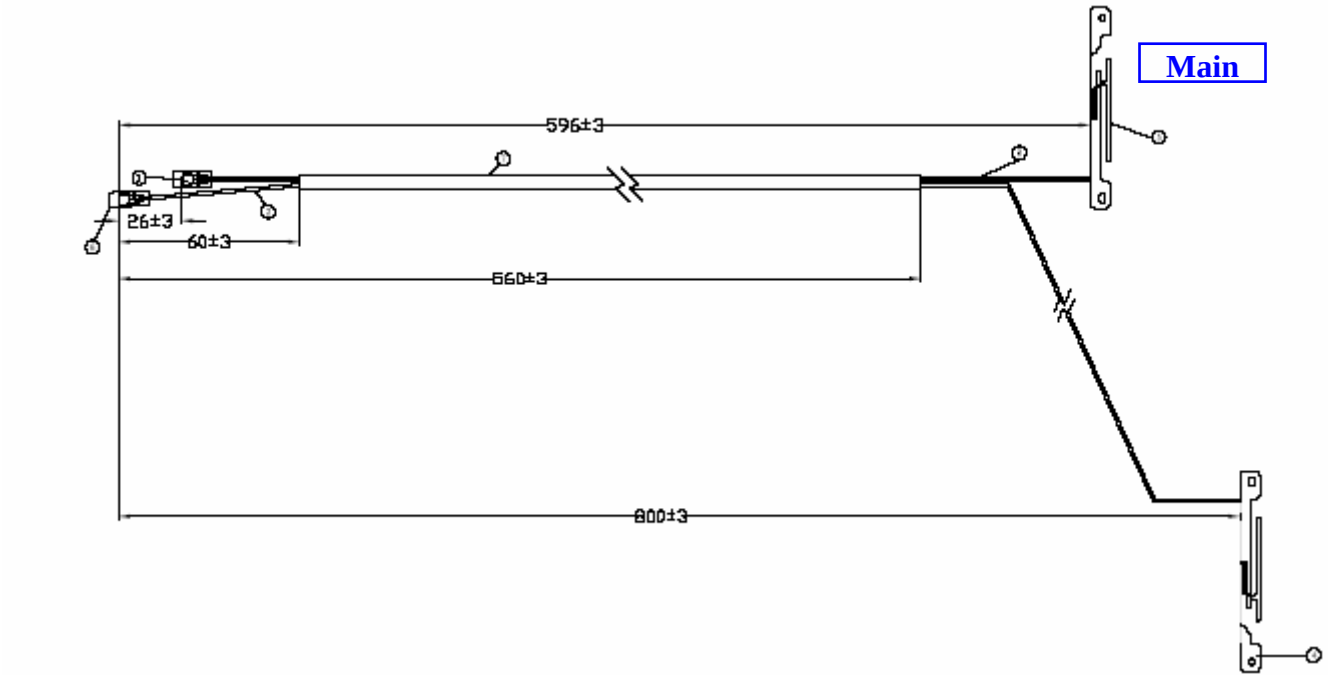
	Main antenna			Aux Antenna		
Frequency (MHz)	Horizontal (dBi)	Vertical (dBi)	Hori+Ver (dBi)	Horizontal (dBi)	Vertical (dBi)	Hori+Ver (dBi)
2400	0.69	1.40	2.15	0.34	0.69	1.63
2450	0.36	1.30	1.64	0.49	1.19	1.95
2500	-0.39	-0.90	0.70	-0.46	-0.17	0.82
4900	0.92	-2.50	1.08	0.03	-3.44	0.13
5125	-1.34	-1.67	0.23	-0.04	-3.49	0.65
5350	1.17	-1.19	1.90	-0.46	-2.50	0.21
5470	0.49	-0.42	1.26	0.53	-3.32	1.05
5725	0.09	-2.24	0.79	0.78	-3.33	1.09
5875	0.86	-0.54	1.14	-0.76	-3.61	-0.20

- **Antenna Peak Gain required being test in system basis.**
- **1E frame contend absolutely peak antenna gain include H/ V/ H+V.**

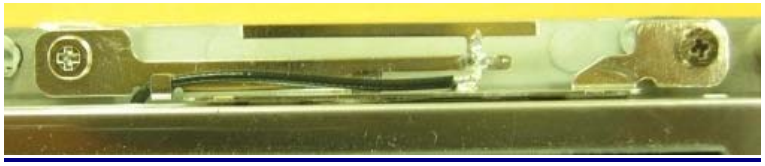
Section 2. Dimensioned Photos or Drawings of Antennas

Include a dimensioned photo and dimensioned drawing of main antenna here.

Main Antenna Dimensioned Drawing:

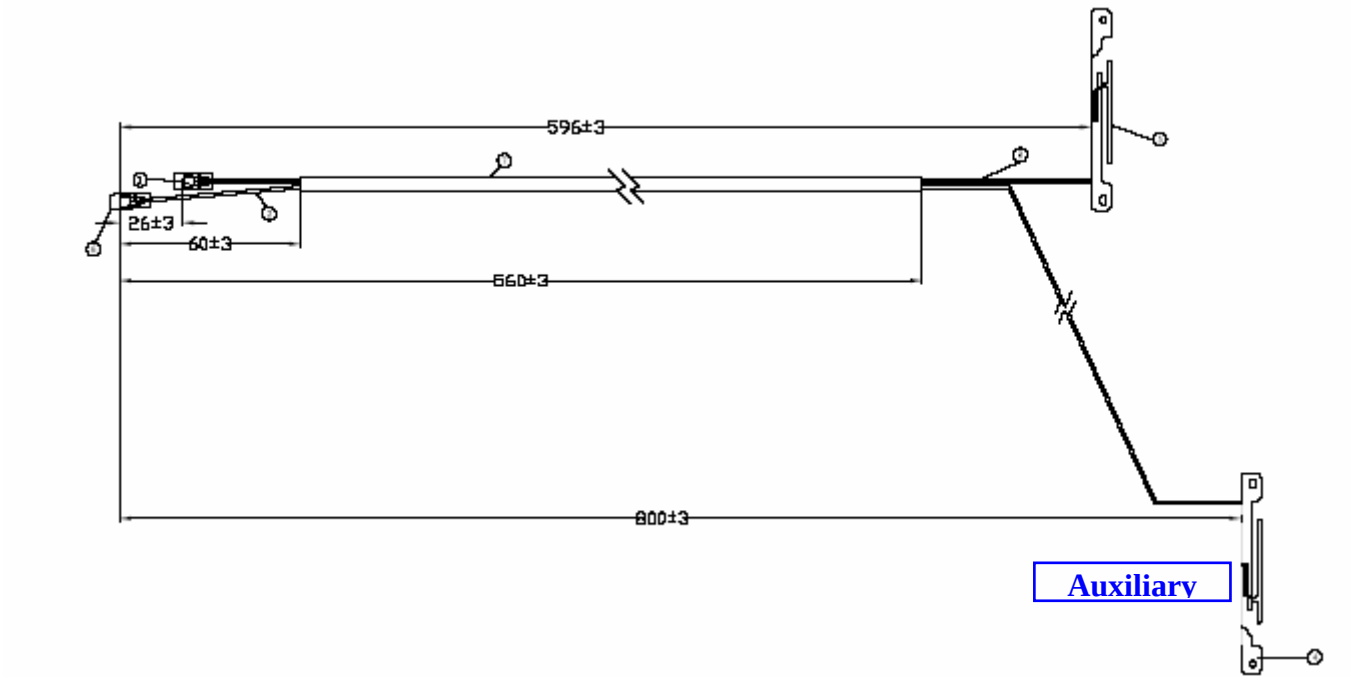


Main Antenna Photo:



Include a dimensioned photo and dimensioned drawing of aux antenna here.

Aux Antenna Dimensioned Drawing:

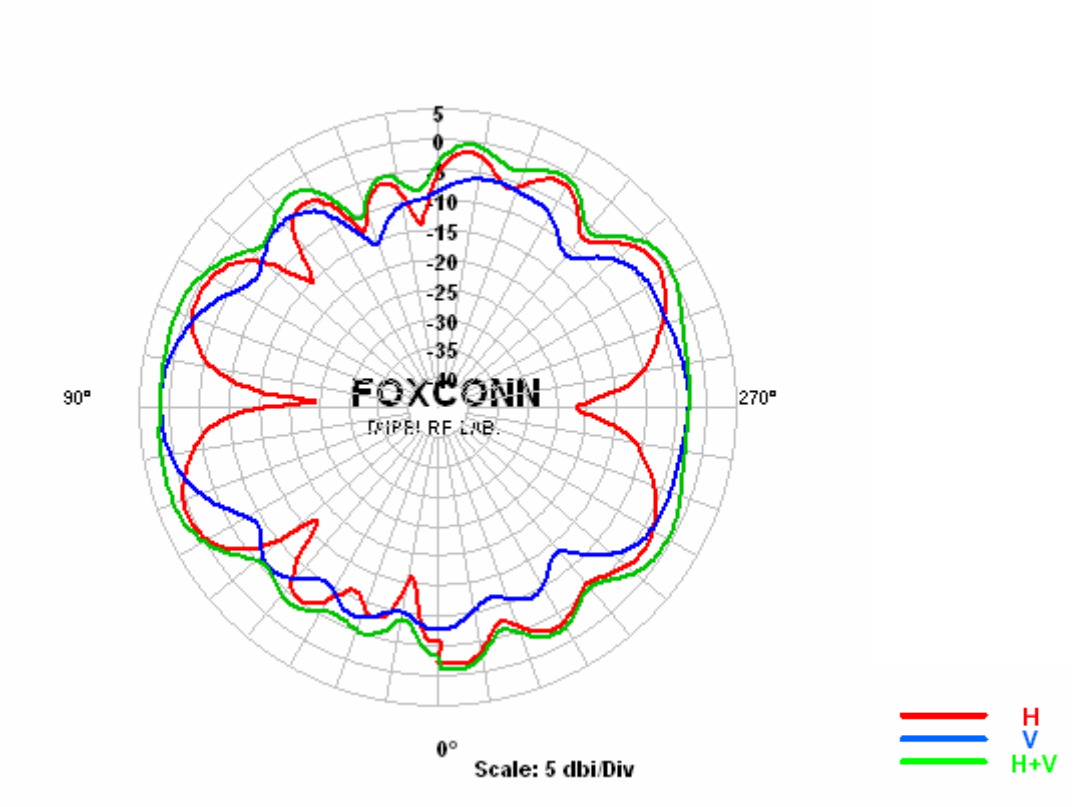


Aux Antenna Photo:

Section 3. Radiation characteristics of antenna Loaded in Host Platform

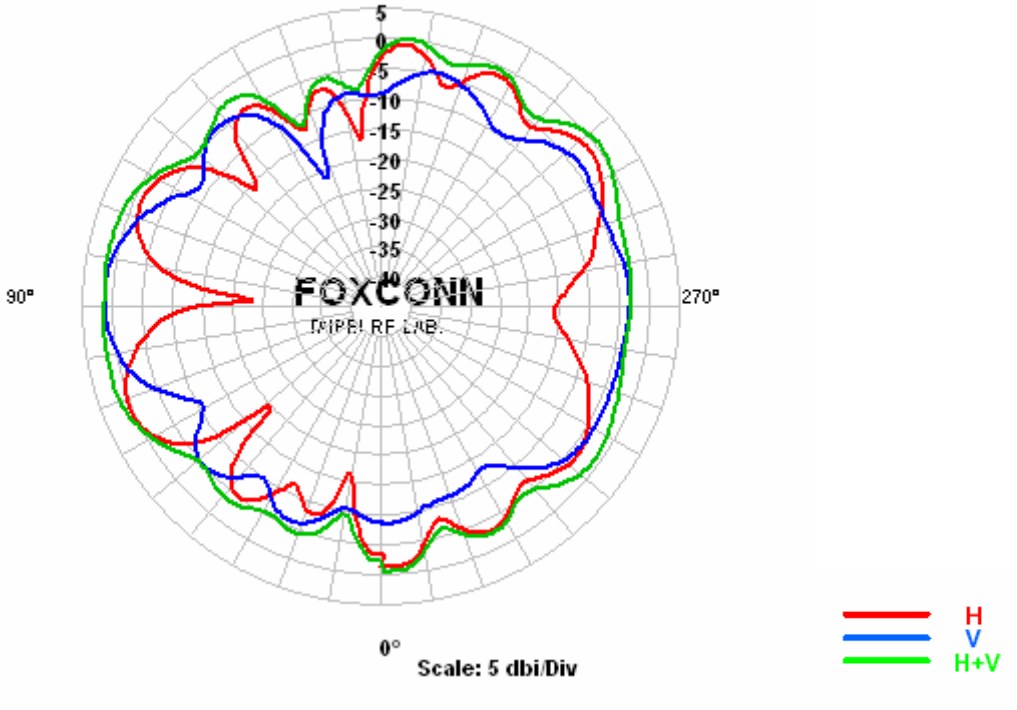
2400-2500MHz radiation characteristic

Main antenna: 2400 MHz



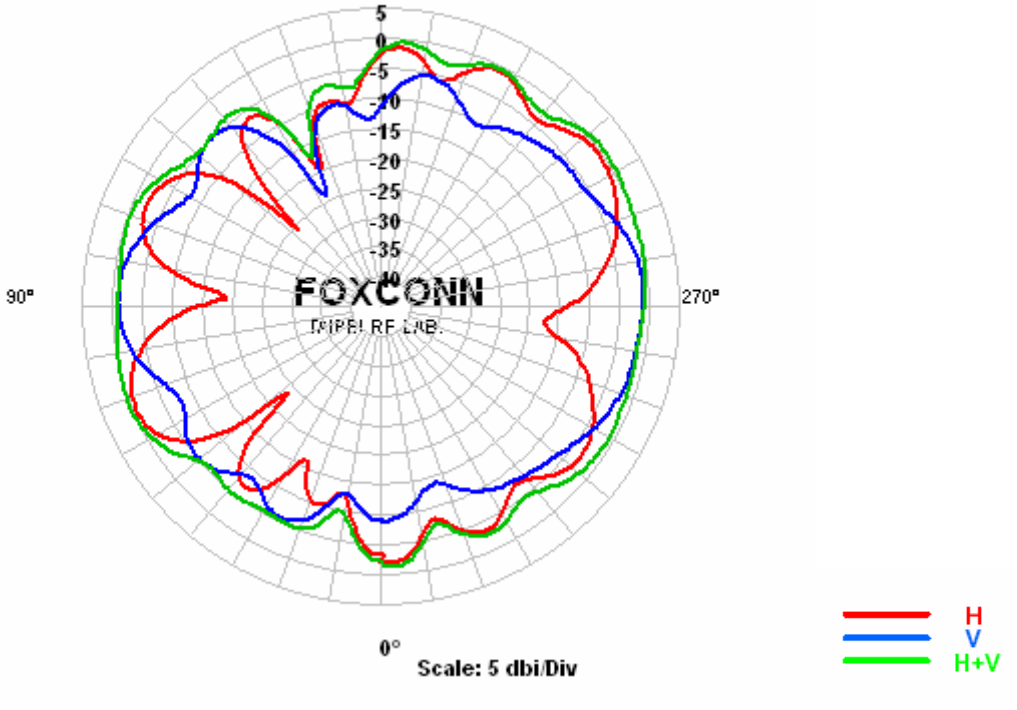
Center Frequency	**2400 MHz**
Horizontal (dBi) peak	**0.69**
Vertical (dBi) peak	**1.40**
Horz+Vert (dBi) peak	**2.15**

Main antenna: 2450 MHz



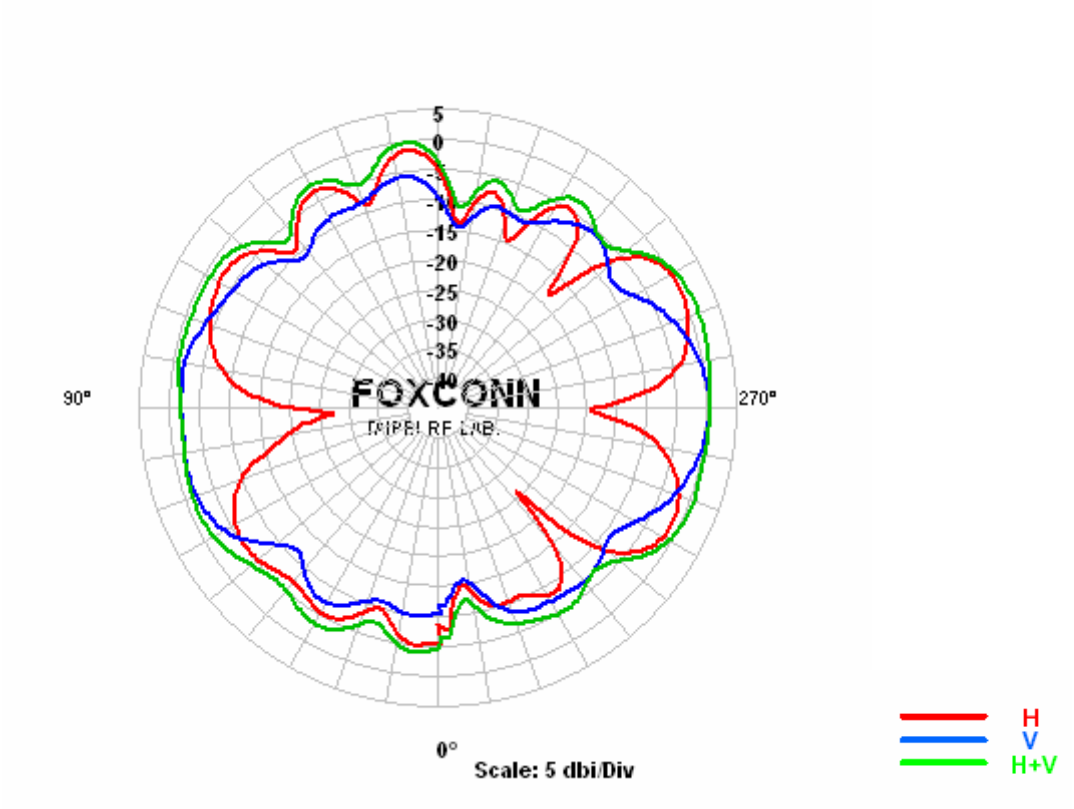
Center Frequency	**2450 MHz**
Horizontal (dBi) peak	**0.36**
Vertical (dBi) peak	**1.30**
Horz+Vert (dBi) peak	**1.64**

Main antenna: 2500 MHz



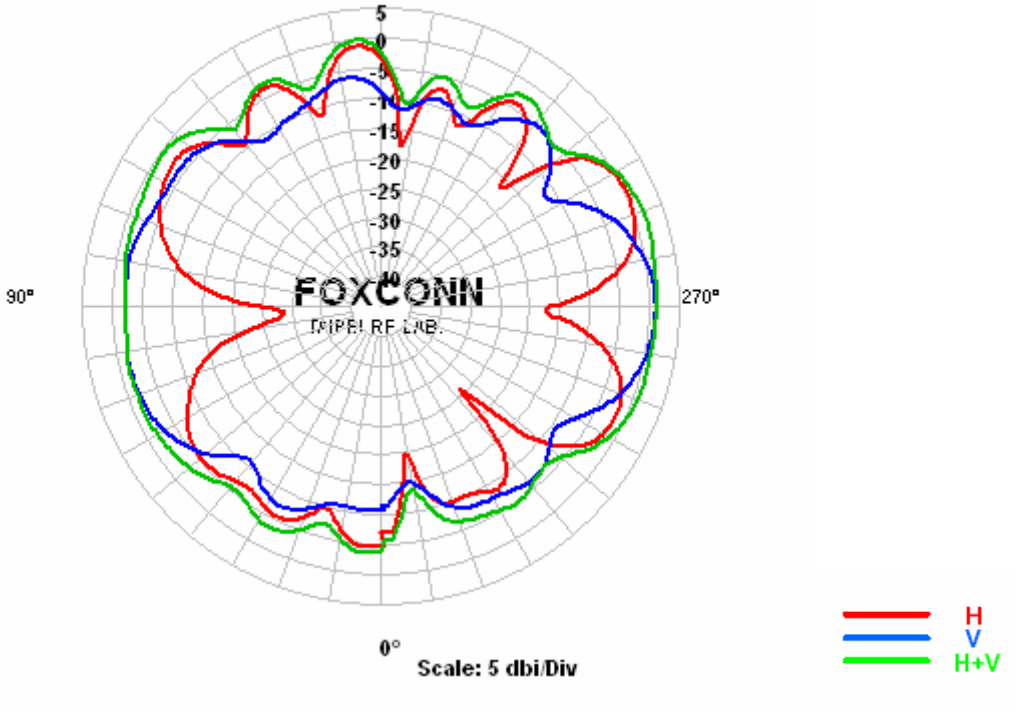
Center Frequency	**2500 MHz**
Horizontal (dBi) peak	**-0.39**
Vertical (dBi) peak	**-0.90**
Horz+Vert (dBi) peak	**0.70**

Auxiliary antenna: 2400 MHz



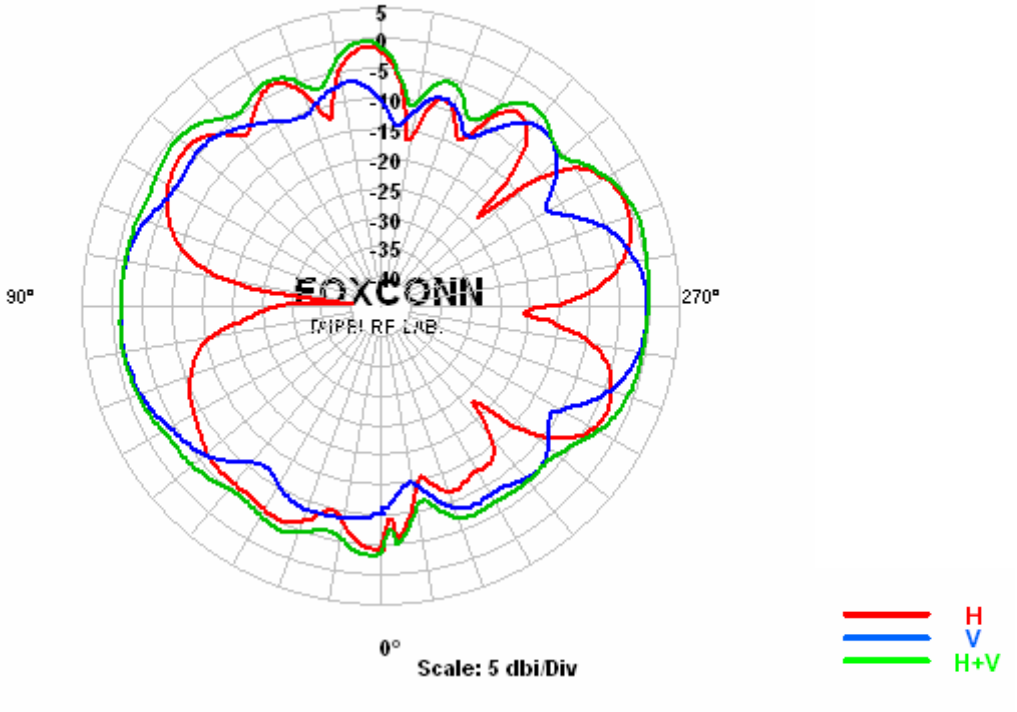
Center Frequency	**2400 MHz**
Horizontal (dBi) peak	**0.34**
Vertical (dBi) peak	**0.69**
Horz+Vert (dBi) peak	**1.63**

Auxiliary antenna: 2450 MHz



Center Frequency	**2450 MHz**
Horizontal (dBi) peak	**0.49**
Vertical (dBi) peak	**1.19**
Horz+Vert (dBi) peak	**1.95**

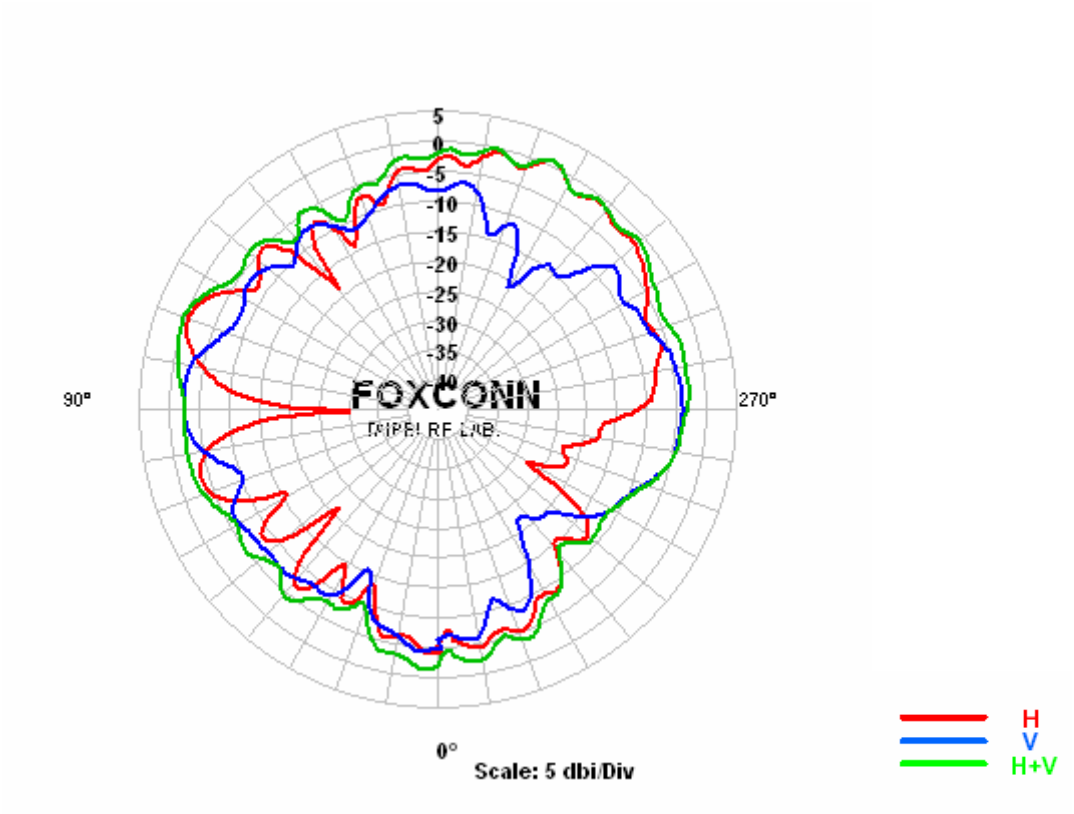
Auxiliary antenna: 2500 MHz



Center Frequency	**2500 MHz**
Horizontal (dBi) peak	**-0.46**
Vertical (dBi) peak	**-0.17**
Horz+Vert (dBi) peak	**0.82**

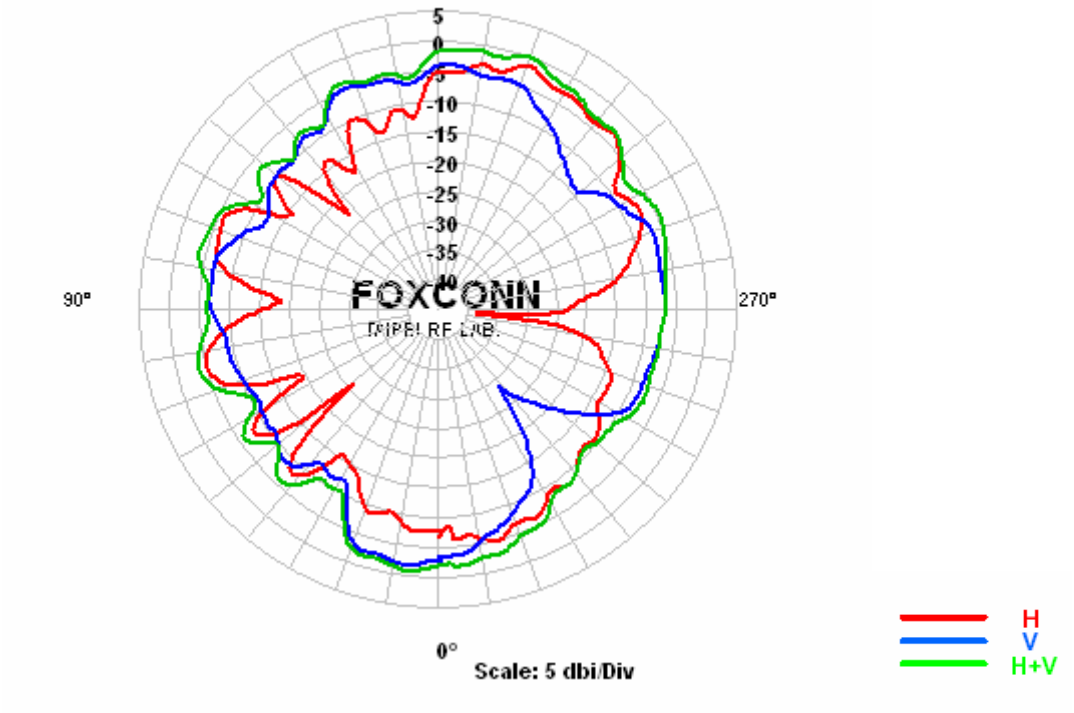
4900-5350 MHz radiation characteristic

Main antenna: 4900 MHz



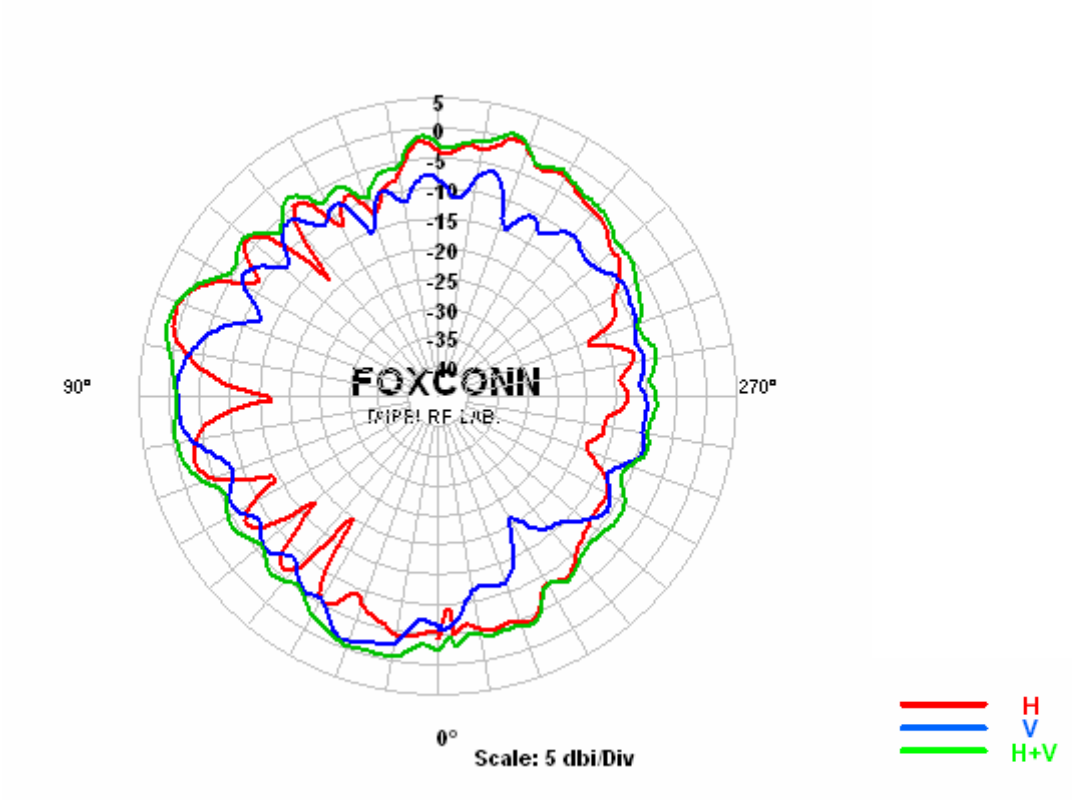
Center Frequency	**4900 MHz**
Horizontal (dBi) peak	**0.92**
Vertical (dBi) peak	**-2.50**
Horz+Vert (dBi) peak	**1.08**

Main antenna: 5125 MHz



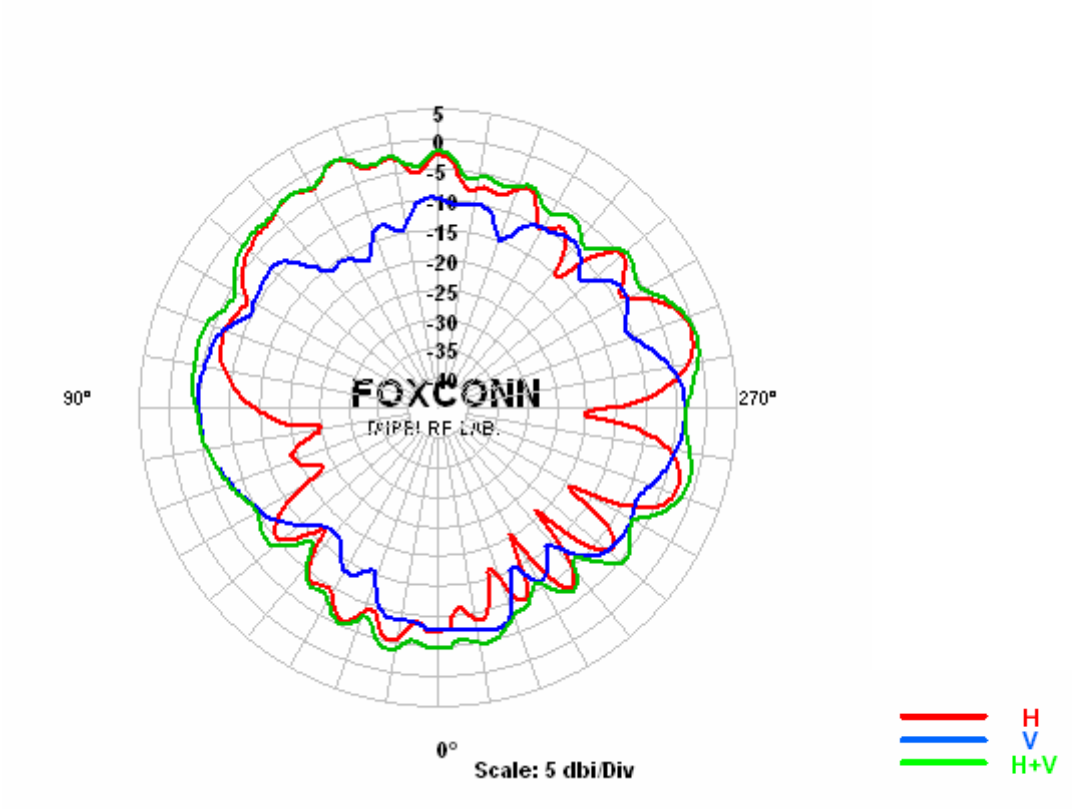
Center Frequency	**5125 MHz**
Horizontal (dBi) peak	**-1.34**
Vertical (dBi) peak	**-1.67**
Horz+Vert (dBi) peak	**0.23**

Main antenna: 5350 MHz



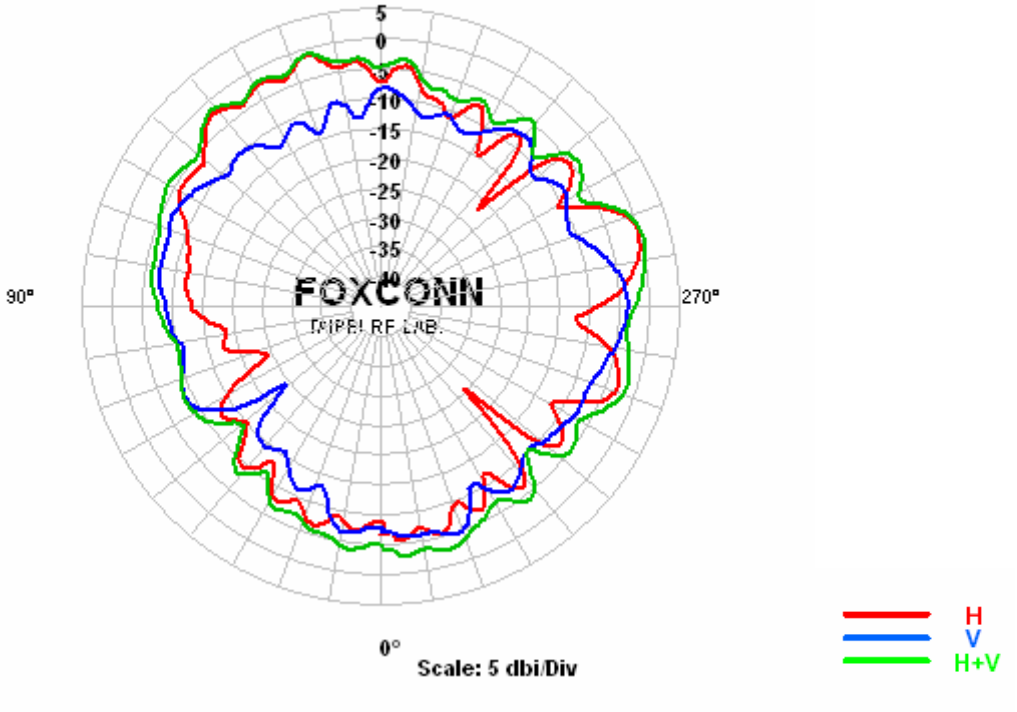
Center Frequency	**5350 MHz**
Horizontal (dBi) peak	**1.17**
Vertical (dBi) peak	**-1.19**
Horz+Vert (dBi) peak	**1.90**

Auxiliary antenna: 4900 MHz



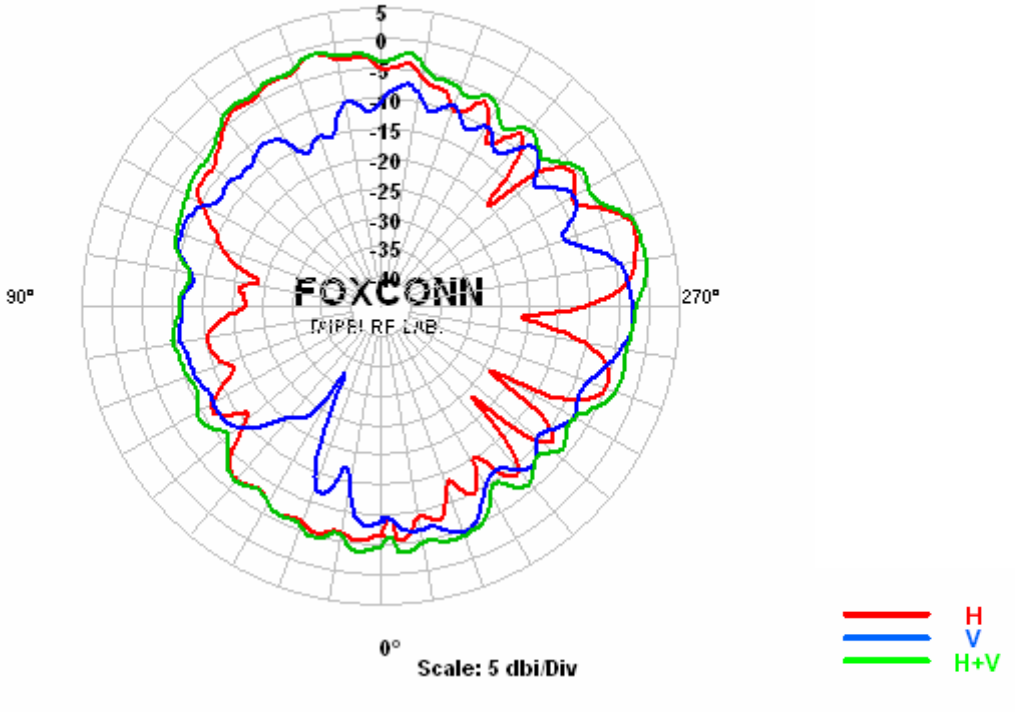
Center Frequency	**4900 MHz**
Horizontal (dBi) peak	**0.03**
Vertical (dBi) peak	**-3.44**
Horz+Vert (dBi) peak	**0.13**

Auxiliary antenna: 5125 MHz



Center Frequency	**5125 MHz**
Horizontal (dBi) peak	**-0.04**
Vertical (dBi) peak	**-3.49**
Horz+Vert (dBi) peak	**0.65**

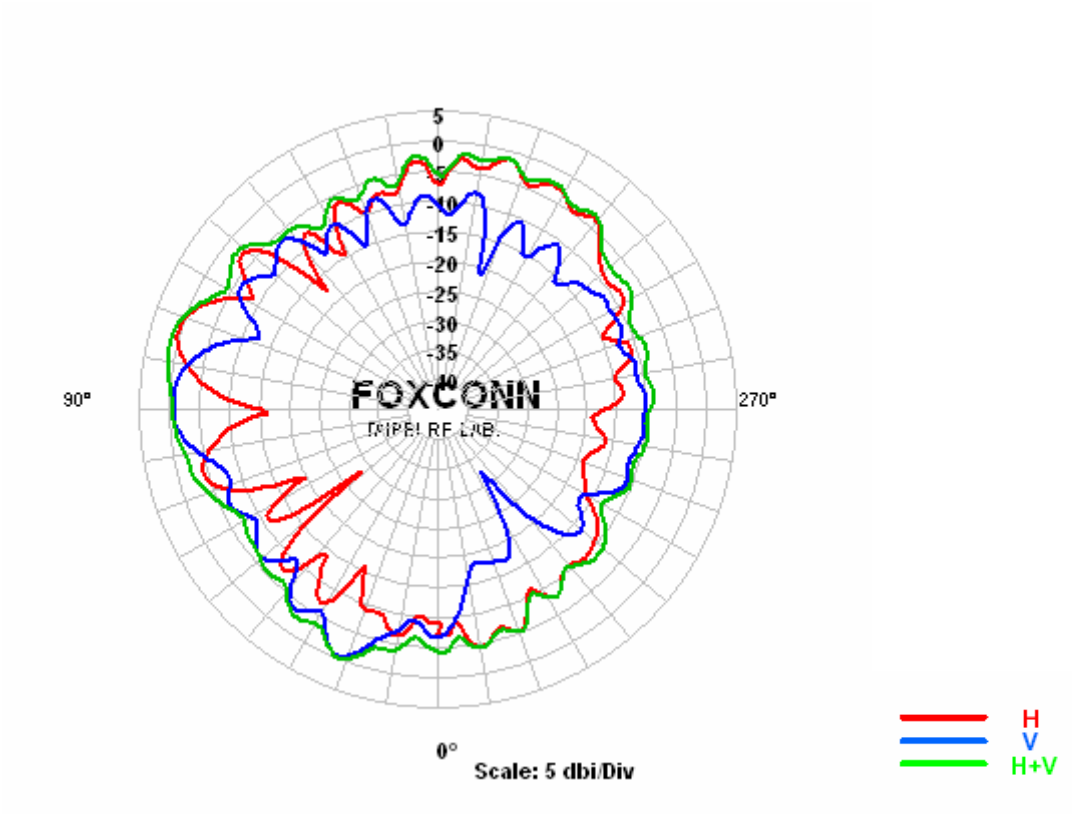
Auxiliary antenna: 5350 MHz



Center Frequency	**5350 MHz**
Horizontal (dBi) peak	**-0.46**
Vertical (dBi) peak	**-2.50**
Horz+Vert (dBi) peak	**0.21**

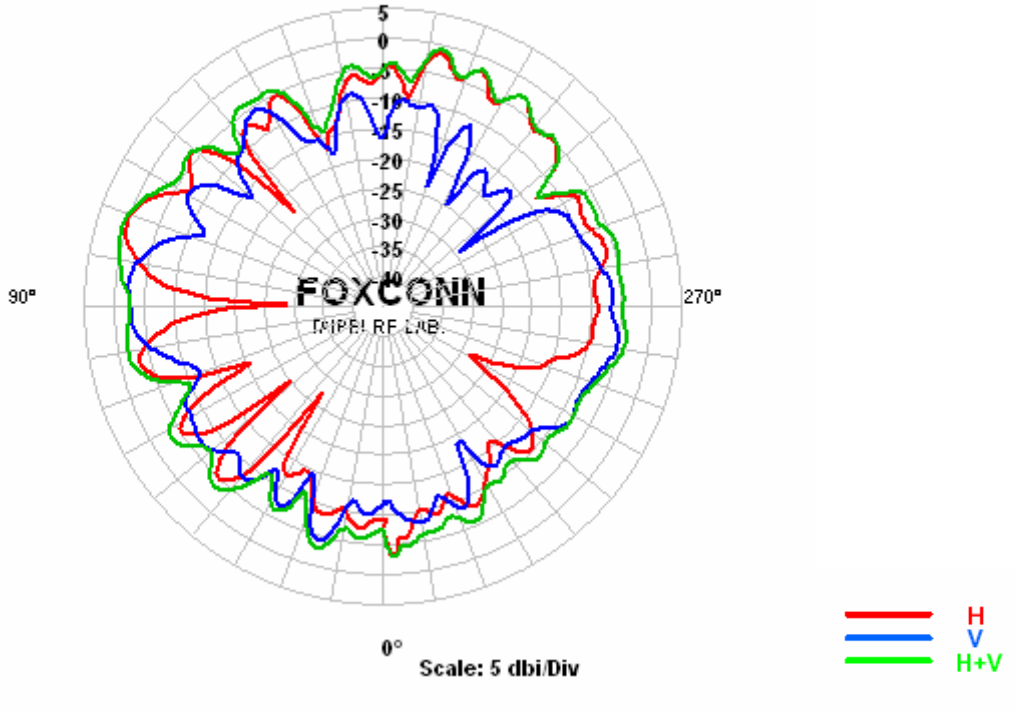
5470-5875MHz radiation characteristic

Main antenna: 5470 MHz



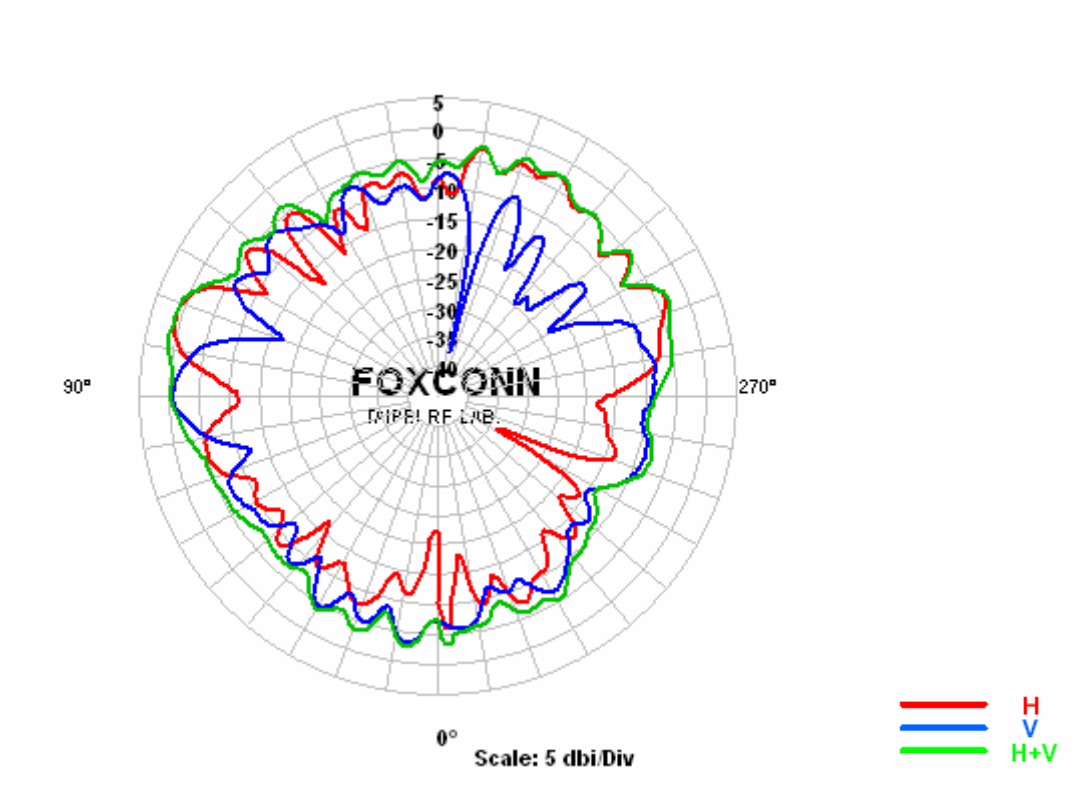
Center Frequency	**5470 MHz**
Horizontal (dBi) peak	**0.49**
Vertical (dBi) peak	**-0.42**
Horz+Vert (dBi) peak	**1.26**

Main antenna: 5673 MHz



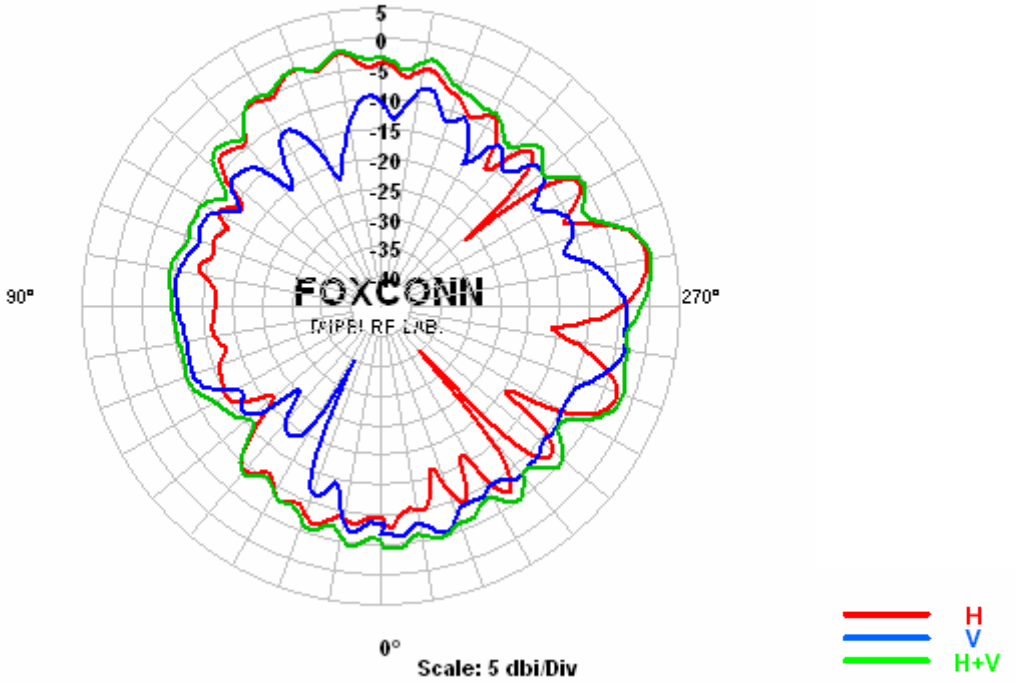
Center Frequency	**5725 MHz**
Horizontal (dBi) peak	**0.09**
Vertical (dBi) peak	**-2.24**
Horz+Vert (dBi) peak	**0.76**

Main antenna: 5875 MHz



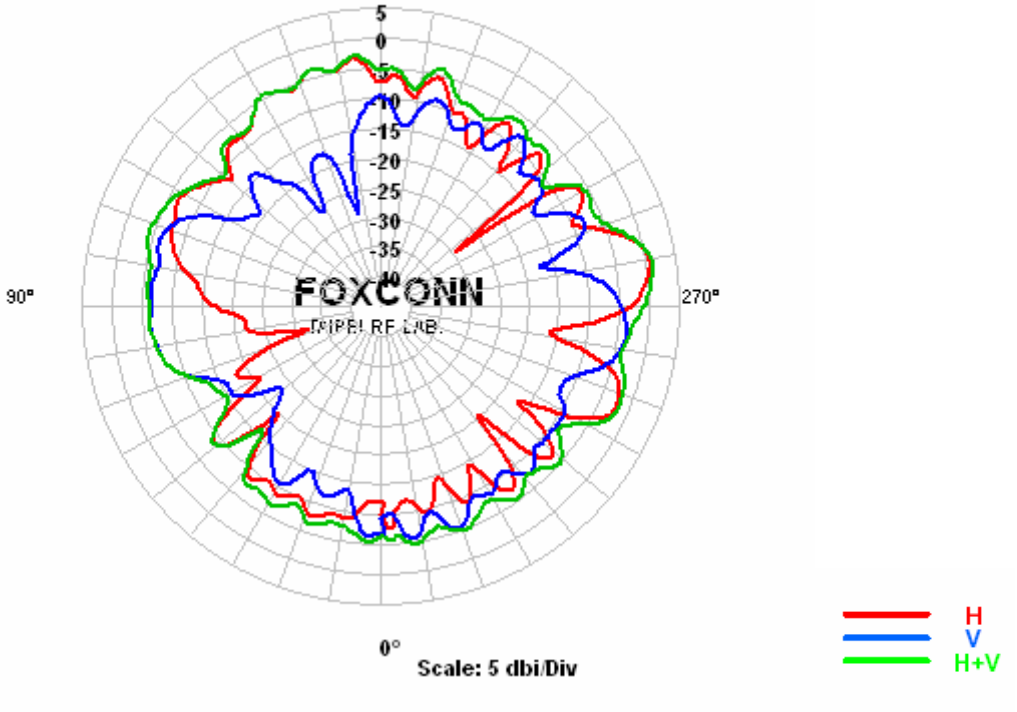
Center Frequency	**5875 MHz**
Horizontal (dBi) peak	**0.86**
Vertical (dBi) peak	**-0.54**
Horz+Vert (dBi) peak	**1.14**

Auxiliary antenna: 5470 MHz



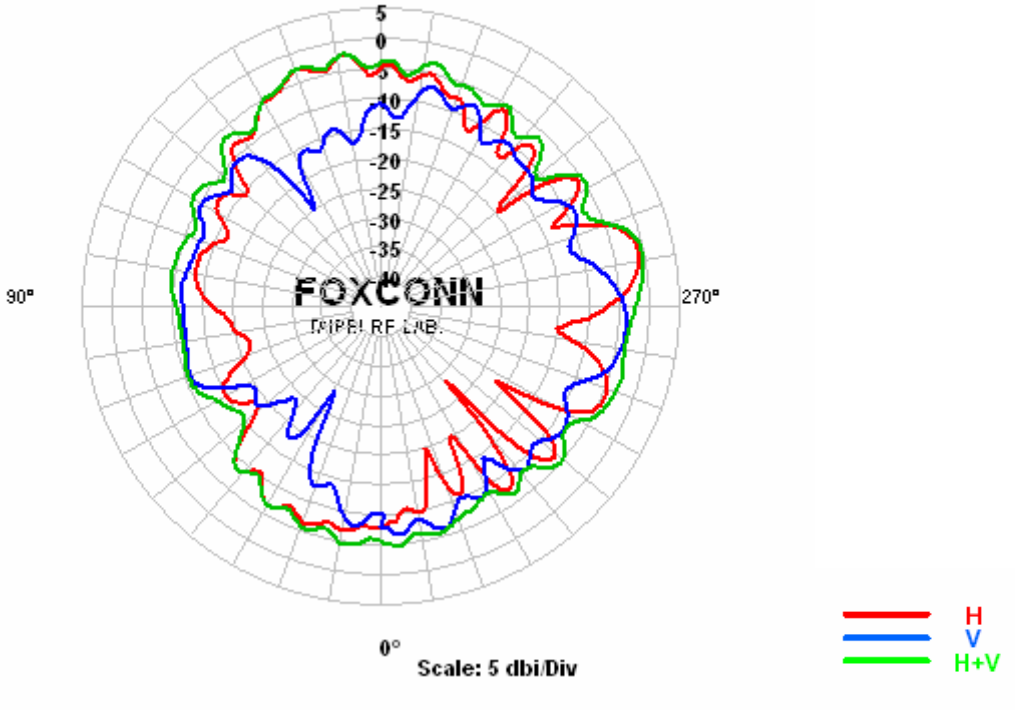
Center Frequency	**5470 MHz**
Horizontal (dBi) peak	**0.53**
Vertical (dBi) peak	**-3.32**
Horz+Vert (dBi) peak	**1.05**

Auxiliary antenna: 5673 MHz



Center Frequency	**5725 MHz**
Horizontal (dBi) peak	**0.78**
Vertical (dBi) peak	**-3.33**
Horz+Vert (dBi) peak	**1.09**

Auxiliary antenna: 5875 MHz



Center Frequency	**5875 MHz**
Horizontal (dBi) peak	**-0.76**
Vertical (dBi) peak	**-3.61**
Horz+Vert (dBi) peak	**-0.20**