

*Dell Tobago Antenna
Specification for FCC
(Rev. A00)*

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Antenna Specifications

Antenna Type (Material, Technology)	Phosphor Bronze, PIFA type
Antenna Model Number	WDAN-DCDAL301 (Dell p/n: D5930)
Operating Frequency Range(s)	2.4 ~ 2.5GHz, 4.9 ~ 5.875GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	2.65dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	0.92dBi
Radio Connector Type	IPEX 20351-111R-37, Foxconn SGX0003-2, HRS U-FL-088
Mid-Line Connector Type (If Applicable)	N/A

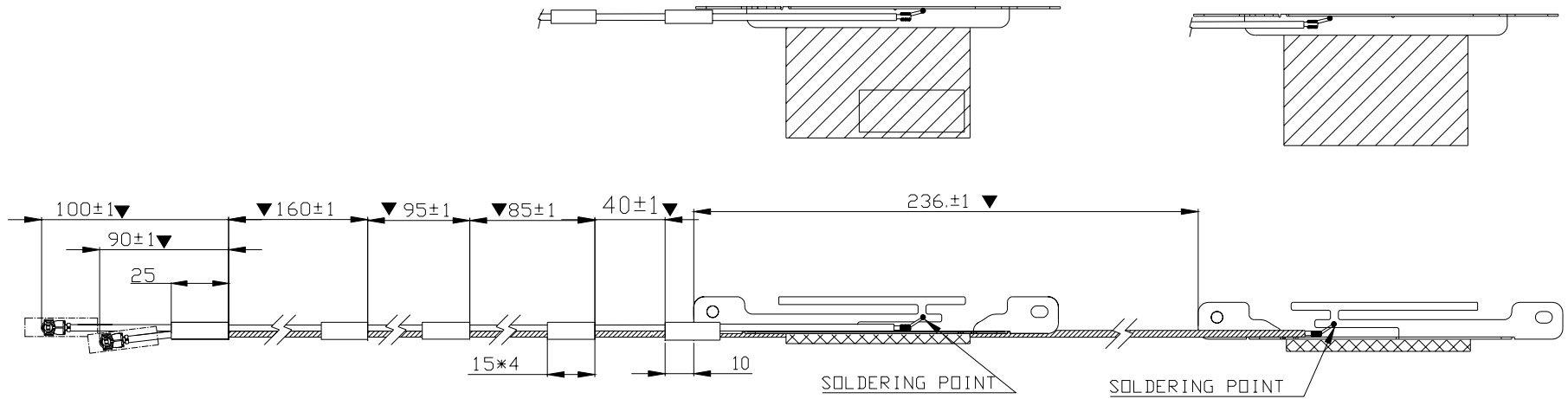
Note: Peak Gain should include all system losses (connector, cable, etc)

Cable Specifications

Cable Parameters	Main			Aux		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	N/A	N/A	490	N/A	N/A	715
Loss (Including Connectors) (dB)			1.347dB => 2.4GHz 2.017dB => 5.15GHz 2.171dB => 5.8GHz			1.803dB => 2.4GHz 2.700dB => 5.15GHz 2.906dB => 5.8GHz
Description (Color, Diameter, Manufacturer)	Color => White, O.D. 1.37mm, Foxconn, Kurabe, Junkosha, or Nissei Coaxial cable			Color => Black, O.D. 1.37mm, Foxconn, Kurabe, Junkosha, or Nissei Coaxial cable		

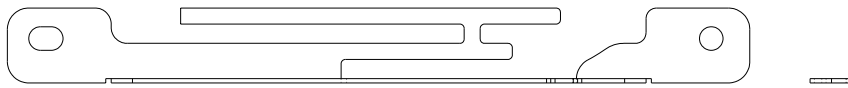
Note: For single cable assembly (no mid-line connector), use the 'Total' column for each cable length and list N/A in the 'LCD' and 'Base' fields
Cable Loss should be reported for the total cable assembly (for both Main and Aux antennas)

Antenna Assembly Drawing

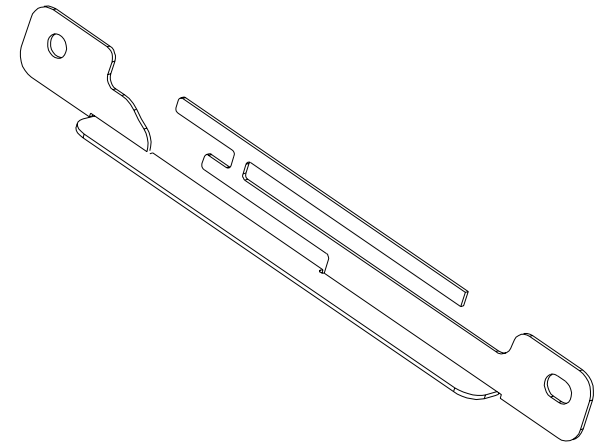
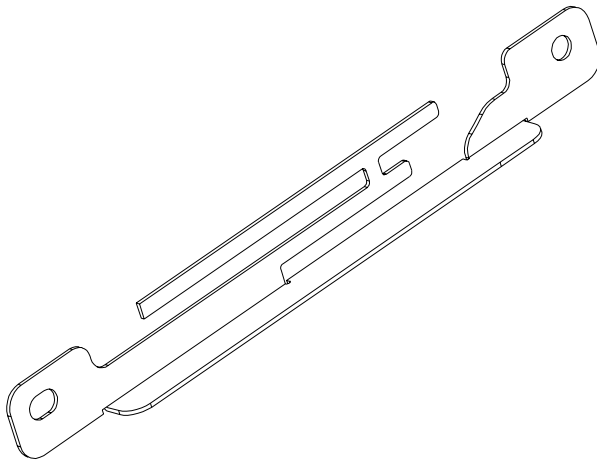
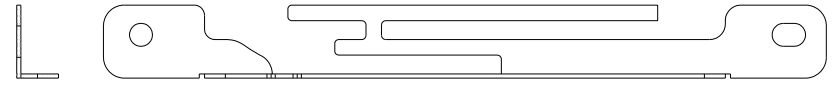


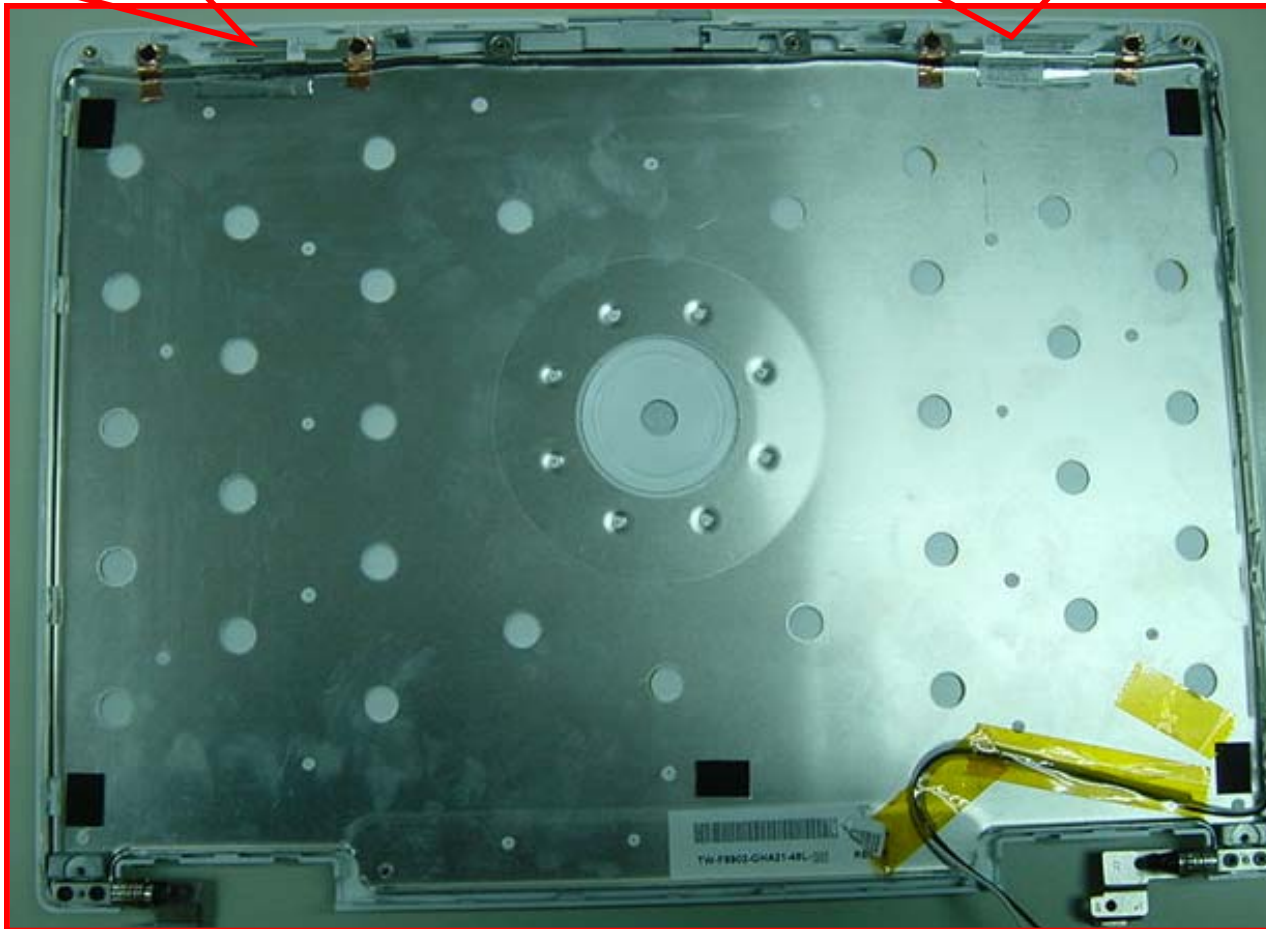
Antenna Body Drawing / Photo

(Left Antenna)

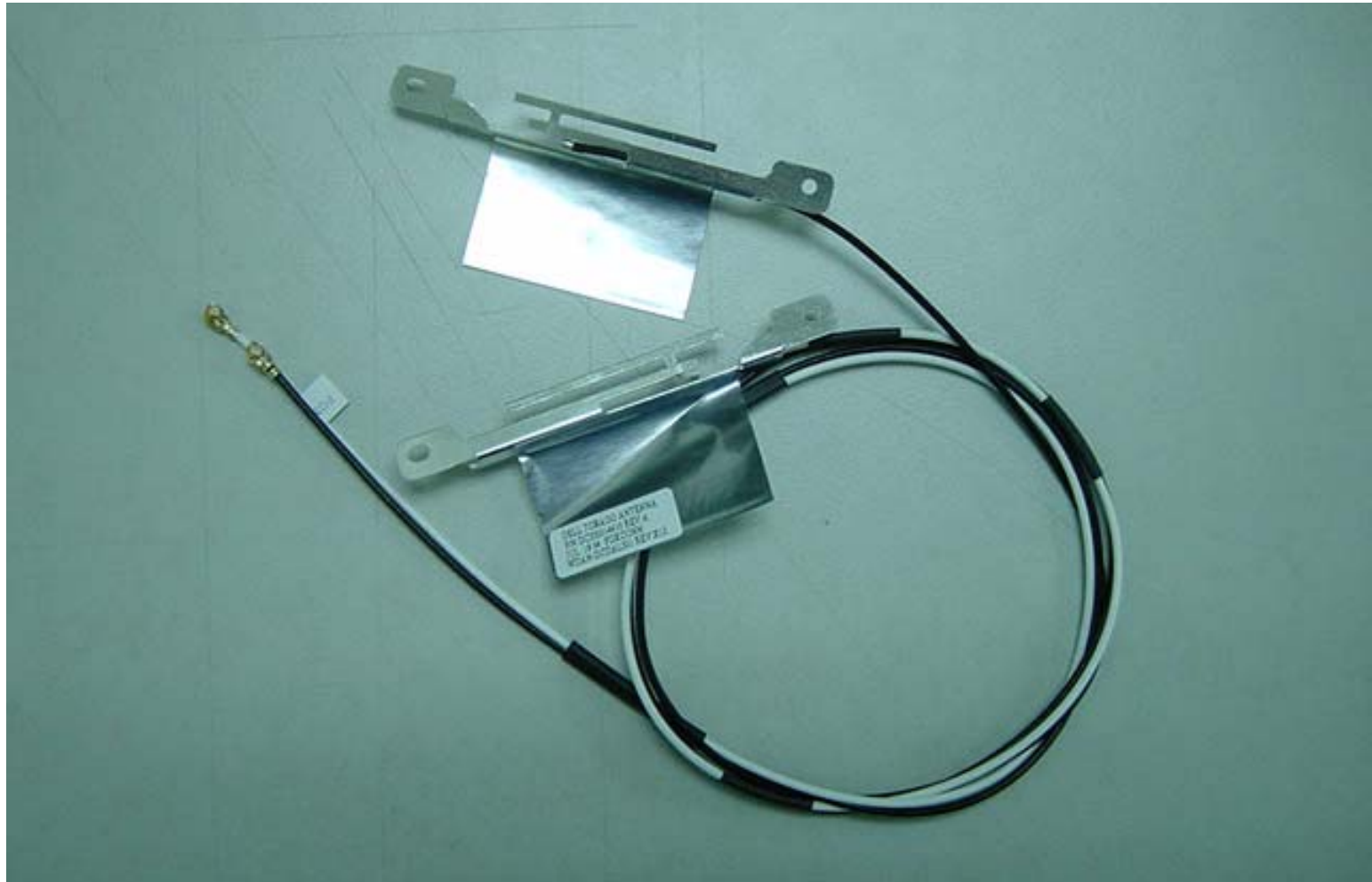


(Right Antenna)

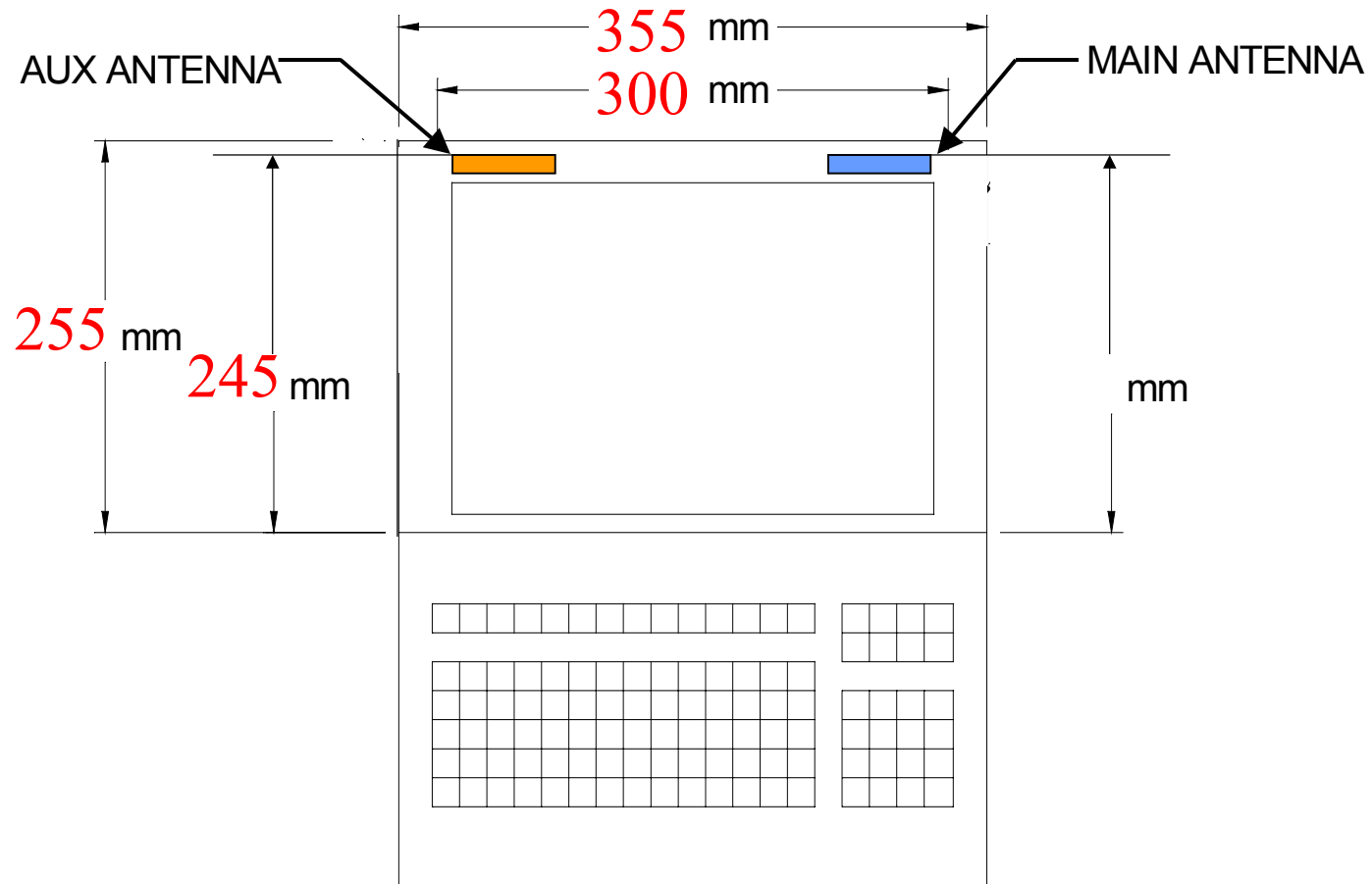




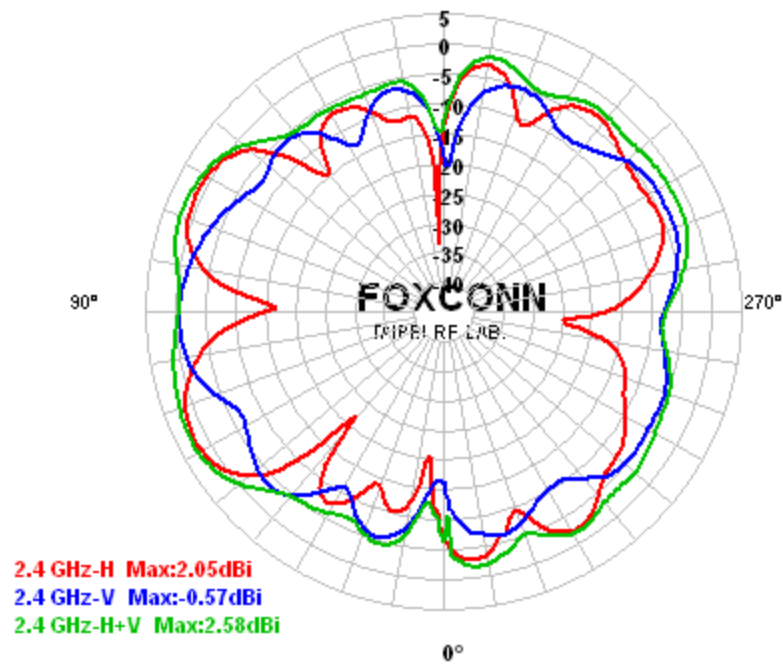
Antenna Assembly Photo



Antenna Location in NB

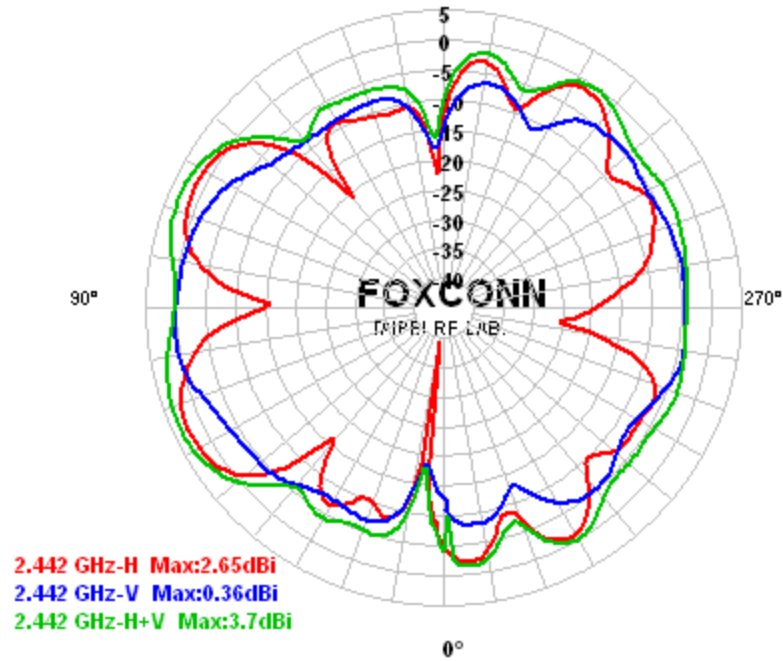


Main antenna: 2400 MHz



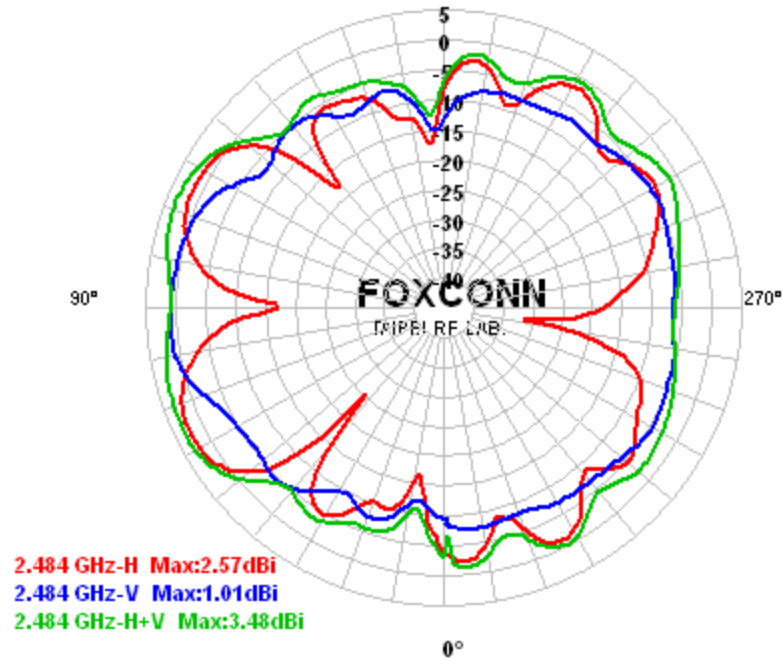
Center Frequency	2400 MHz
Horizontal peak gain (dBi)	2.05
Vertical peak gain (dBi)	-0.57
Horz +Vert peak gain(dBi)	2.58

Main antenna: 2442 MHz



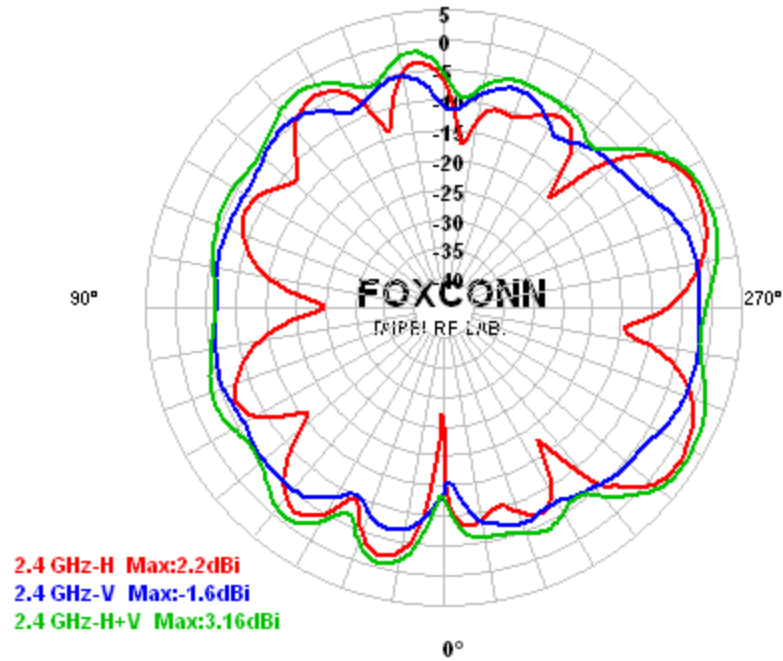
Center Frequency	2442 MHz
Horizontal peak gain (dBi)	2.65
Vertical peak gain (dBi)	0.36
Horz +Vert peak gain(dBi)	3.70

Main antenna: 2484 MHz



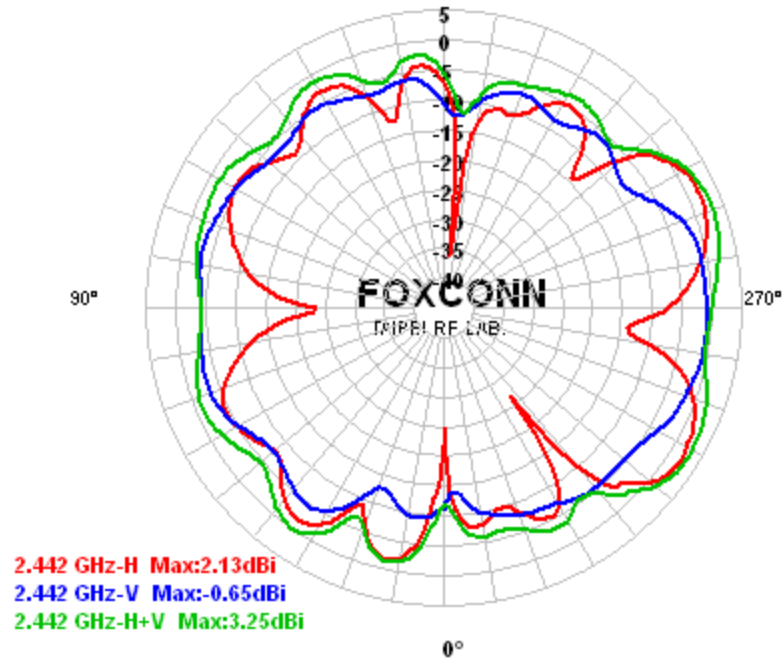
Center Frequency	2484 MHz
Horizontal peak gain (dBi)	2.57
Vertical peak gain (dBi)	1.01
Horz +Vert peak gain(dBi)	3.48

Aux antenna: 2400 MHz



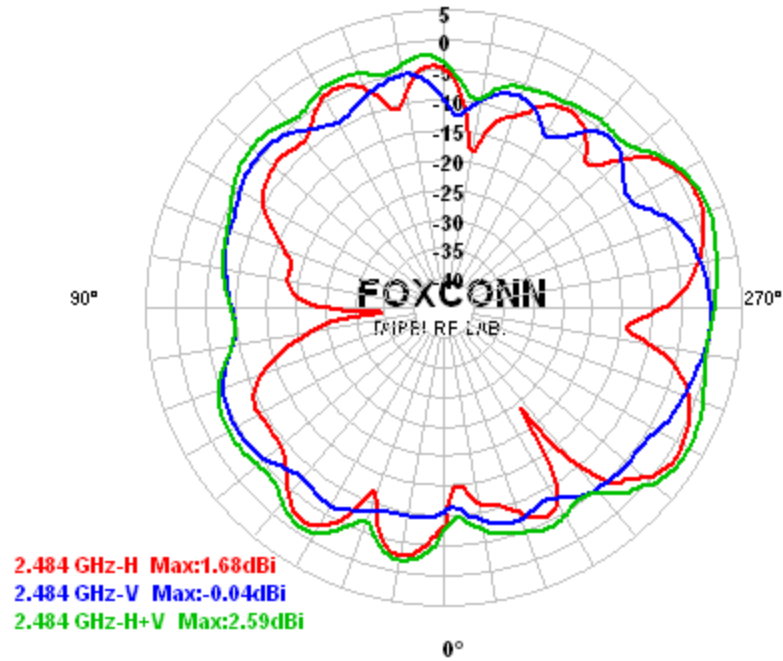
Center Frequency	2400 MHz
Horizontal peak gain (dBi)	2.20
Vertical peak gain (dBi)	-1.60
Horz +Vert peak gain(dBi)	3.16

Aux antenna: 2442 MHz



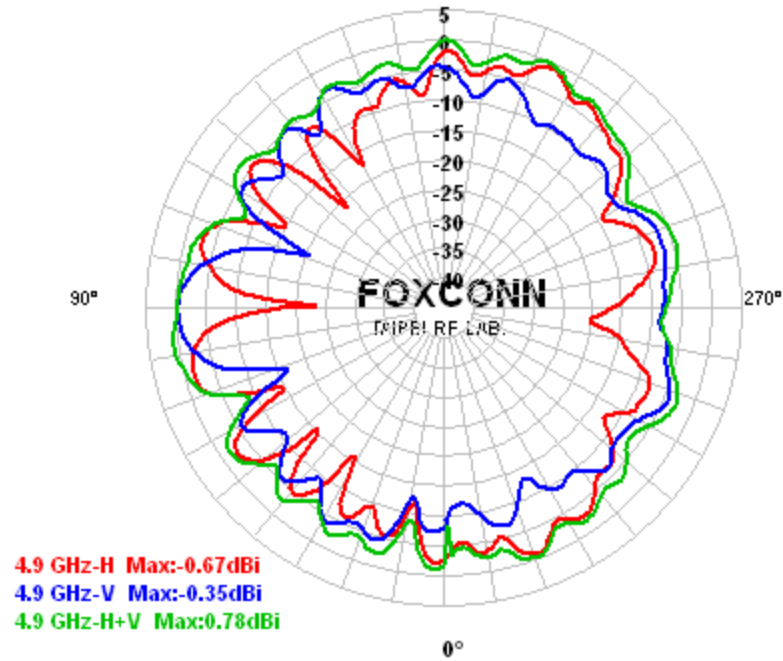
Center Frequency	2442 MHz
Horizontal peak gain (dBi)	2.13
Vertical peak gain (dBi)	-0.65
Horz +Vert peak gain(dBi)	3.25

Aux antenna: 2484 MHz



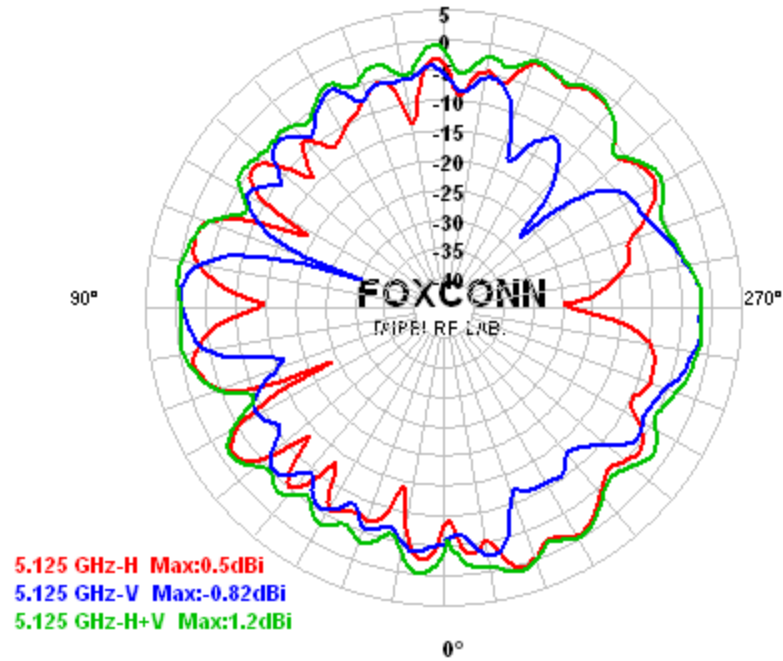
Center Frequency	2484 MHz
Horizontal peak gain (dBi)	1.68
Vertical peak gain (dBi)	-0.04
Horz +Vert peak gain(dBi)	2.59

Main antenna: 4900 MHz



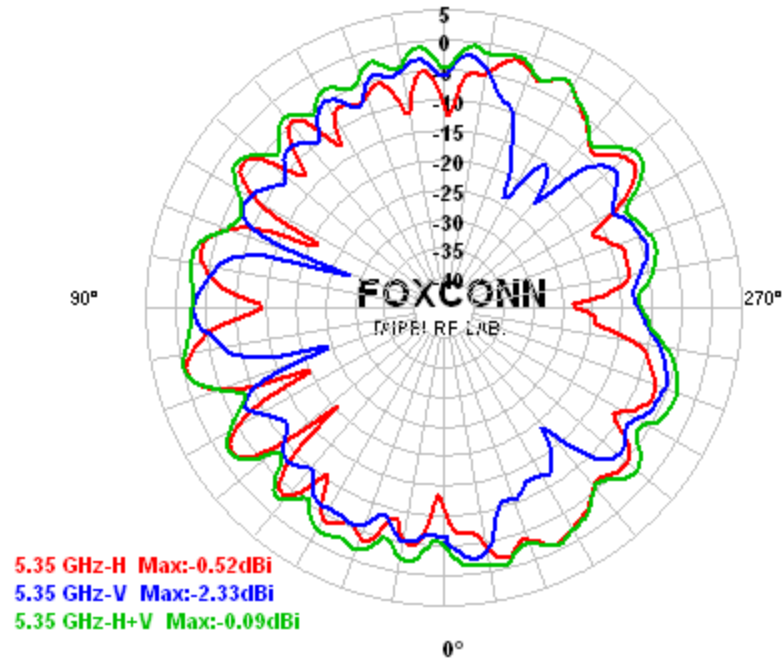
Center Frequency	4900 MHz
Horizontal peak gain (dBi)	-0.67
Vertical peak gain (dBi)	-0.35
Horz +Vert peak gain(dBi)	0.78

Main antenna: 5125 MHz



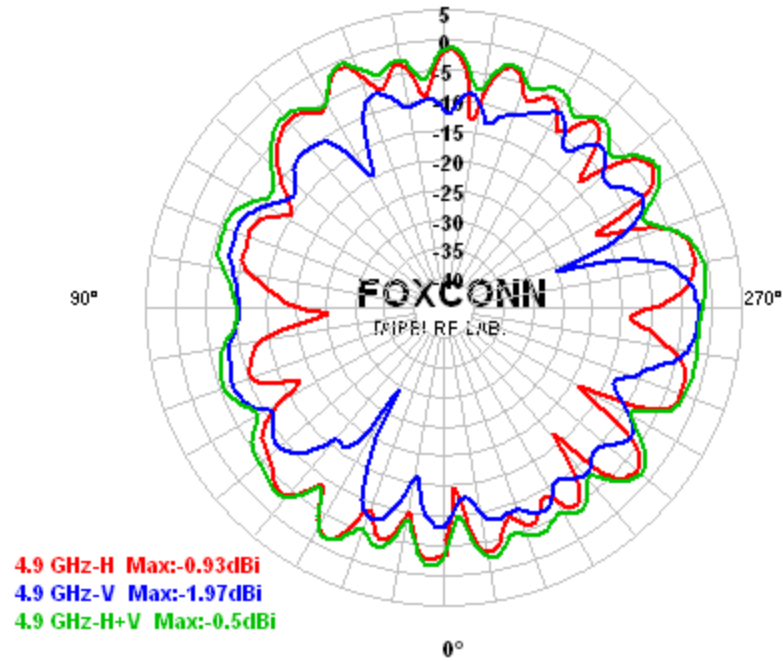
Center Frequency	5125 MHz
Horizontal peak gain (dBi)	0.50
Vertical peak gain (dBi)	-0.82
Horz +Vert peak gain(dBi)	1.20

Main antenna: 5350 MHz



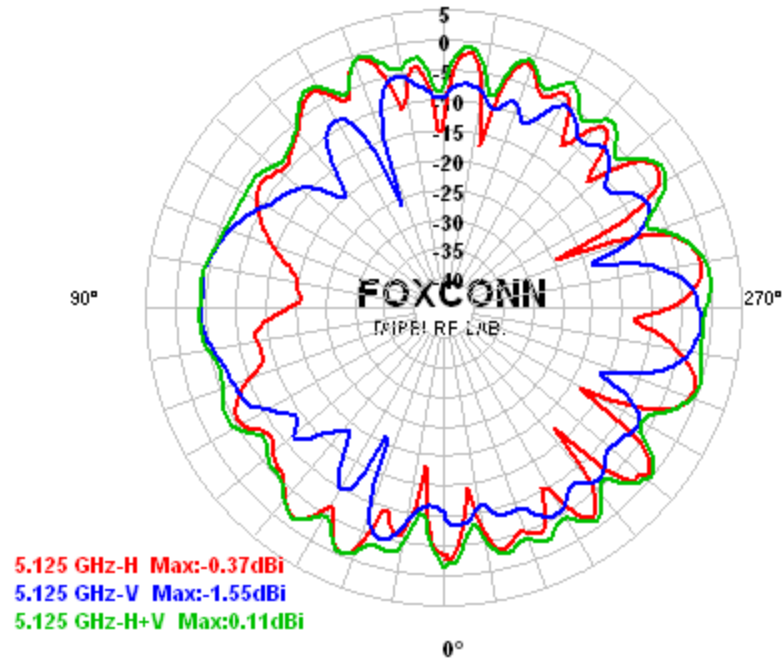
Center Frequency	5350 MHz
Horizontal peak gain (dBi)	-0.52
Vertical peak gain (dBi)	-2.33
Horz +Vert peak gain(dBi)	-0.09

Aux antenna: 4900 MHz



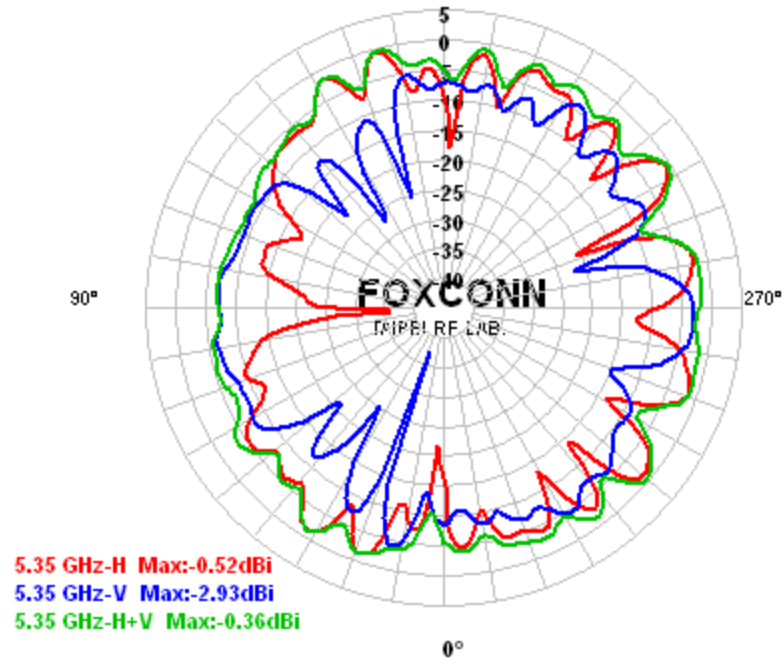
Center Frequency	4900 MHz
Horizontal peak gain (dBi)	-0.93
Vertical peak gain (dBi)	-1.97
Horz +Vert peak gain(dBi)	-0.50

Aux antenna: 5125 MHz



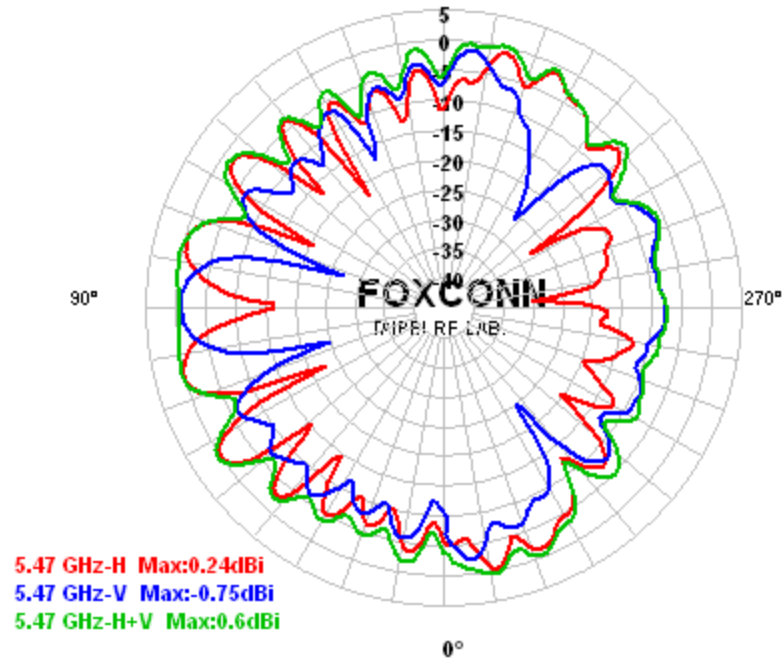
Center Frequency	5125 MHz
Horizontal peak gain (dBi)	-0.37
Vertical peak gain (dBi)	-1.55
Horz +Vert peak gain(dBi)	0.11

Aux antenna: 5350 MHz



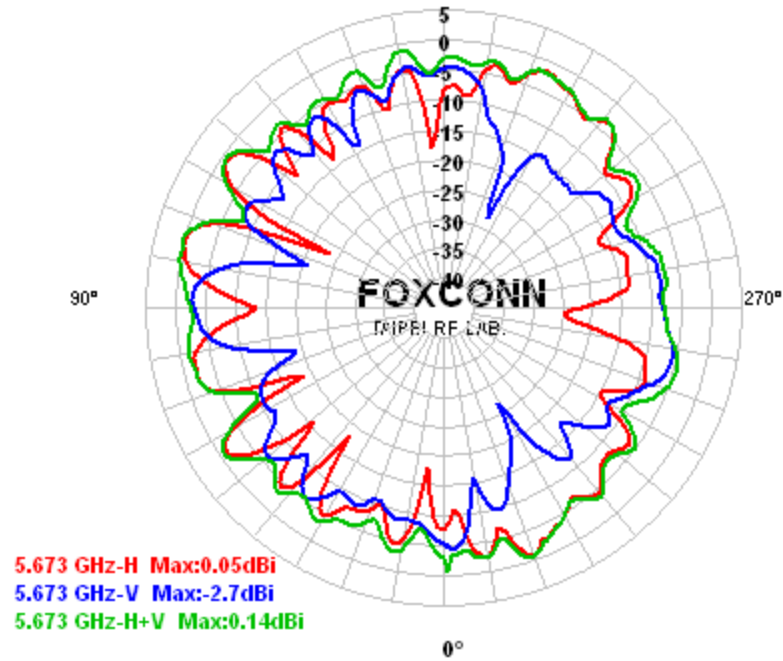
Center Frequency	5350 MHz
Horizontal peak gain (dBi)	-0.52
Vertical peak gain (dBi)	-2.93
Horz +Vert peak gain(dBi)	-0.36

Main antenna: 5470 MHz



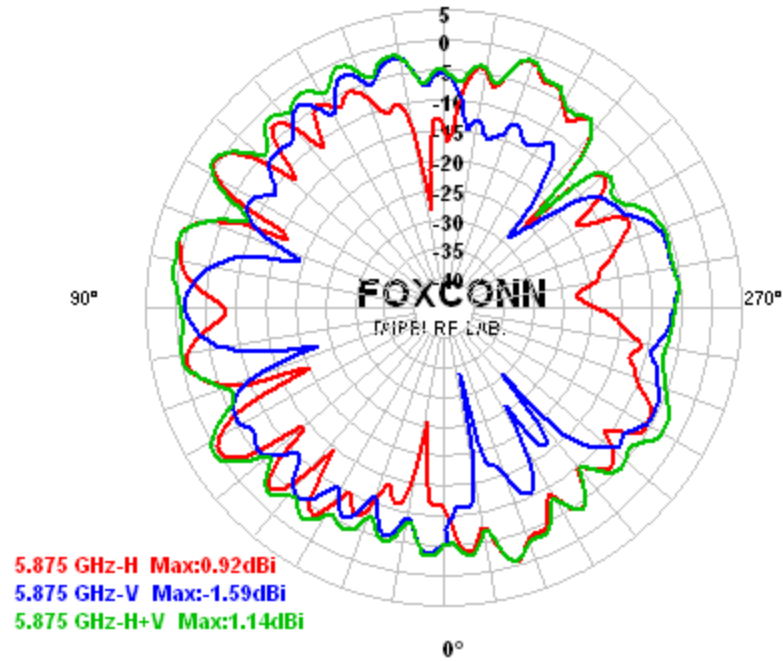
Center Frequency	5470 MHz
Horizontal peak gain (dBi)	0.24
Vertical peak gain (dBi)	-0.75
Horz +Vert peak gain(dBi)	0.60

Main antenna: 5673 MHz



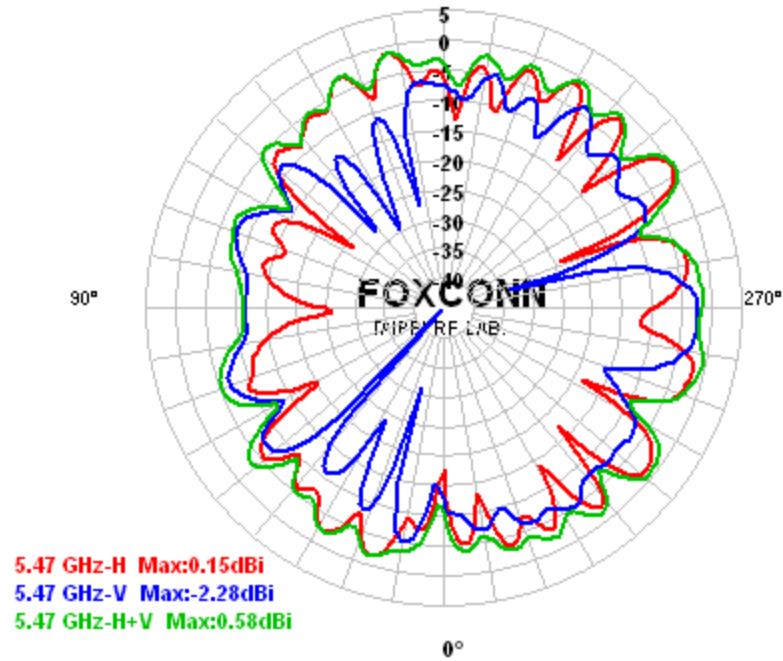
Center Frequency	5673 MHz
Horizontal peak gain (dBi)	0.05
Vertical peak gain (dBi)	-2.70
Horz +Vert peak gain(dBi)	0.14

Main antenna: 5875 MHz



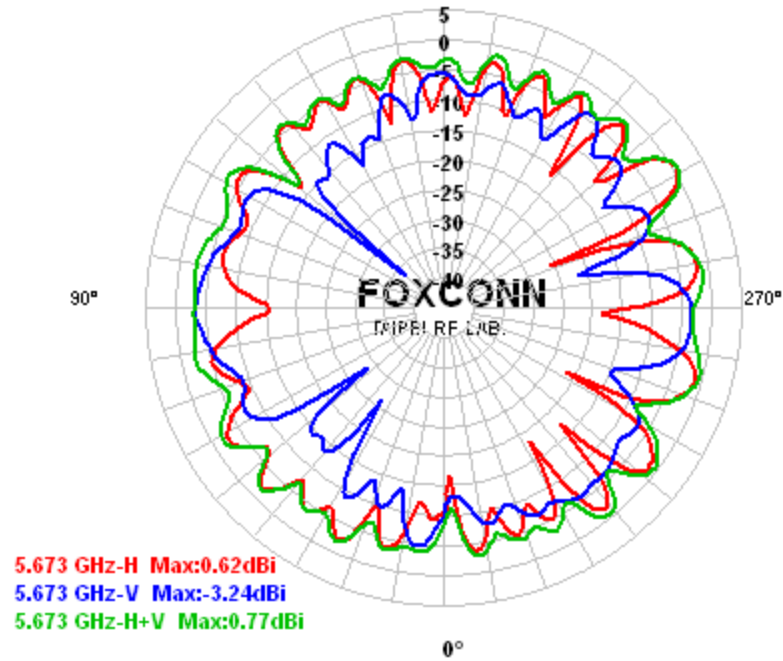
Center Frequency	5875 MHz
Horizontal peak gain (dBi)	0.92
Vertical peak gain (dBi)	-1.59
Horz +Vert peak gain(dBi)	1.14

Aux antenna: 5470 MHz



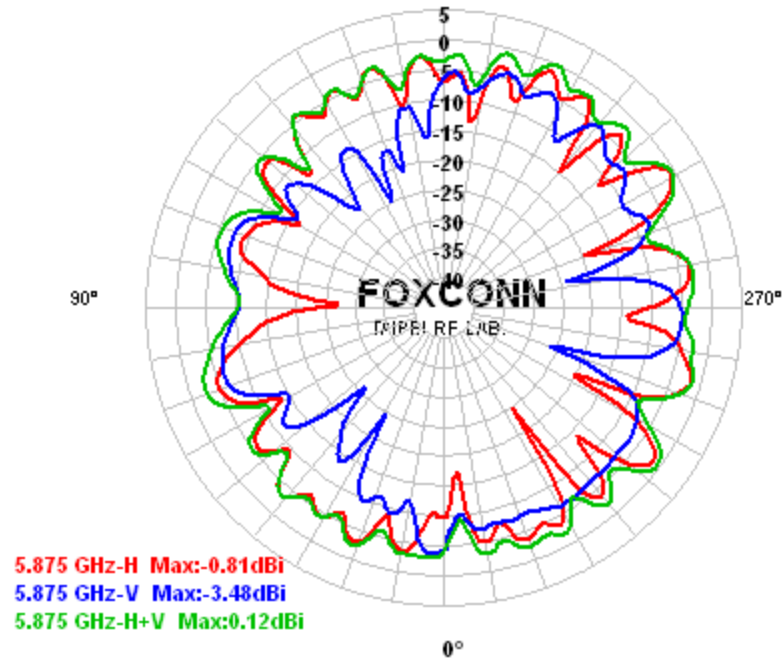
Center Frequency	5470 MHz
Horizontal peak gain (dBi)	0.15
Vertical peak gain (dBi)	-2.28
Horz +Vert peak gain(dBi)	0.58

Aux antenna: 5673 MHz



Center Frequency	5673 MHz
Horizontal peak gain (dBi)	0.62
Vertical peak gain (dBi)	-3.24
Horz +Vert peak gain(dBi)	0.77

Aux antenna: 5875 MHz



Center Frequency	5875 MHz
Horizontal peak gain (dBi)	-0.81
Vertical peak gain (dBi)	-3.48
Horz +Vert peak gain(dBi)	0.12