

Regulatory WLAN Antenna Information for Tahiti

Hitachi Cable, Ltd

1-6-1, Otemachi, Chiyoda-ku, Tokyo, Japan

Antenna Specifications

Antenna Type (Material, Technology)	Monopole Type
Antenna Model Number	HMT01-DL01
Operating Frequency Range(s)	2.40 – 2.4835 GHz / 4.90 – 5.875 GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main 0.3 / Aux 0.2
Peak Gain (802.11a / 5GHz Band) (dBi)	Main 3.9 / Aux 4.6
Radio Connector Type	Micro Coaxial Connector
Mid-Line Connector Type (If Applicable)	Molex SSMCX Connector

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)	344	175	519	450	190	640
Loss (Including Connectors) (dB) 2.4 GHz / 5 GHz	0.9/1.5	0.5/0.8	1.4/2.3	1.2/1.9	0.5/0.8	1.7/2.7
Description (Color, Diameter, Manufacturer)	White ϕ 1.37 mm Hitachi Cable			Black ϕ 1.37 mm Hitachi 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)

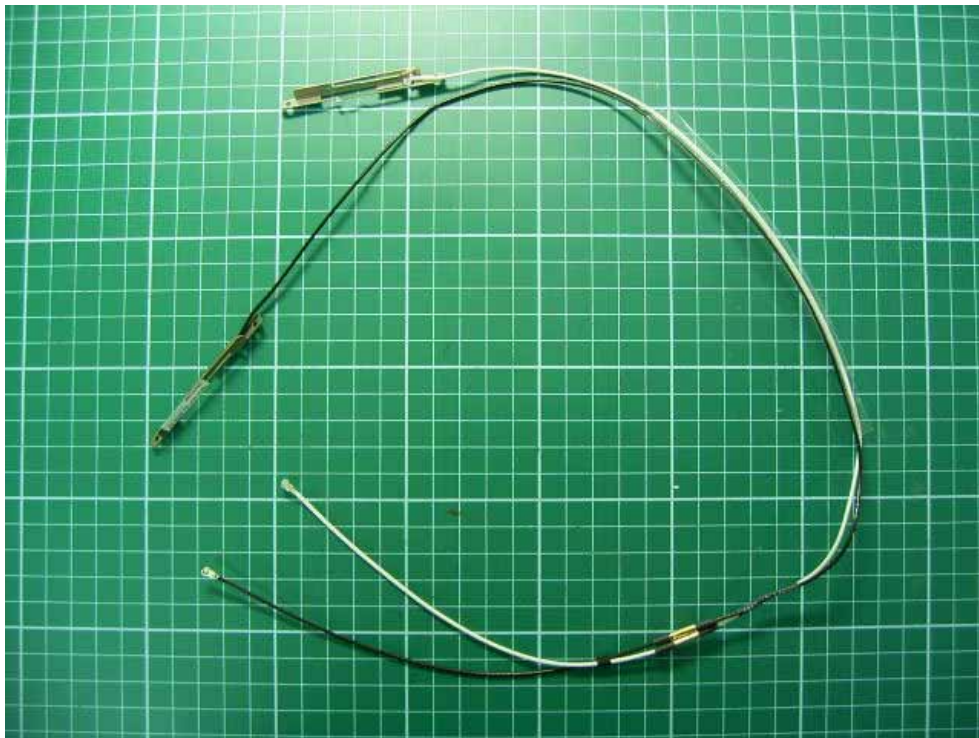


(a) Main Antenna



(b) Aux Antenna

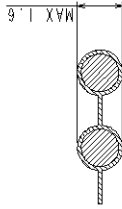
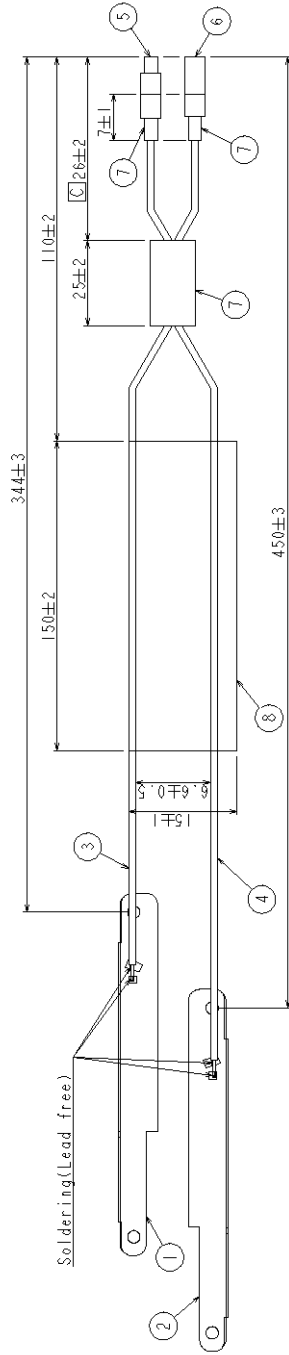
Picture of Antenna installed in the notebook



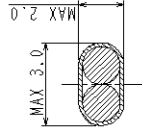
Picture of Antenna

EH3853124

MARK	REVISION	DATE NAME CHKD
A	Direction of the Antenna changed.	04.12.05 K. ENDO T. NAMIO
B	Direction of Laminata Tape changed.	05.11.05 K. ENDO T. NAMIO
C	Position of tube changed.	05.11.07 K. ENDO T. NAMIO



Cross-section of Laminata Tape bundled part.



Cross-section of tube bundled part.

No.	Description
1	Main Antenna
2	Aux Antenna
3	Coaxial Cable(white)
4	Coaxial Cable(Black)
5	SSMCX PLUG
6	SSMCX JACK
7	Tube
8	Laminata Tape

TOLERANCES OF DIMENSIONS	
Dimension	Tolerance
- 6	±0.1
6 - 30	±0.2
30 -	±0.3

DWN.	K. ENDO	05.01.17	TITLE
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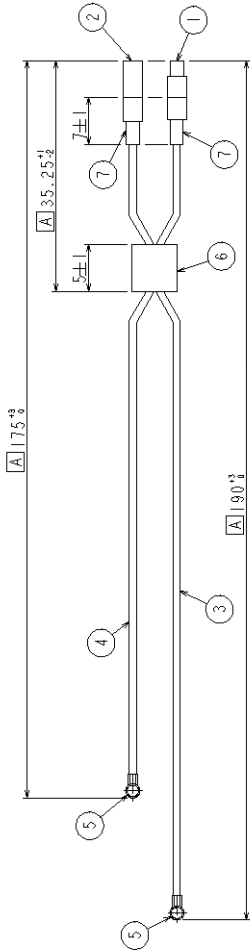
CHKD.	Y. YAMAMOTO	REGD.	PROJ.
APPD.	K. TSUKAMOTO		
SCALE	N.T.S		

HMT01-DL01-AS

Hitachi Cable, Ltd.
Hitaka Works

EH3853124

EH3853125	MARK		REVISION	DATE NAME CHKD
	[A]		Portion of tube changed and Cable length changed.	(6.8.11) K. ENDO T. YAMOTO



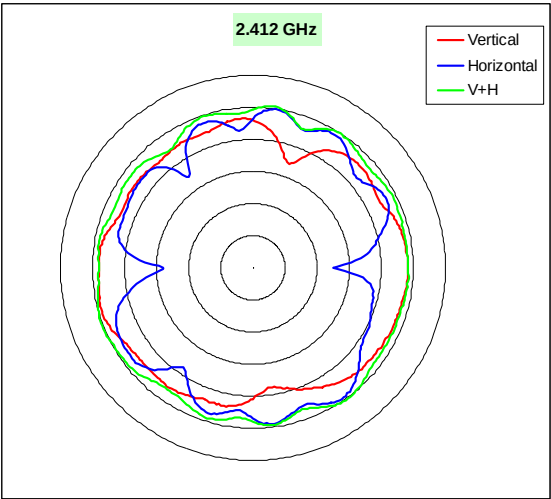
No.	Description
1	SSMCX PLUG
2	SSMCX JACK
3	Coaxial Cable(Black)
4	Coaxial Cable(white)
5	Connector
6	Acetate Tape
7	Tube

TOLERANCES OF DIMENSIONS	
Dimension	Tolerance
6	±0.1
7	±0.2
30	±0.3

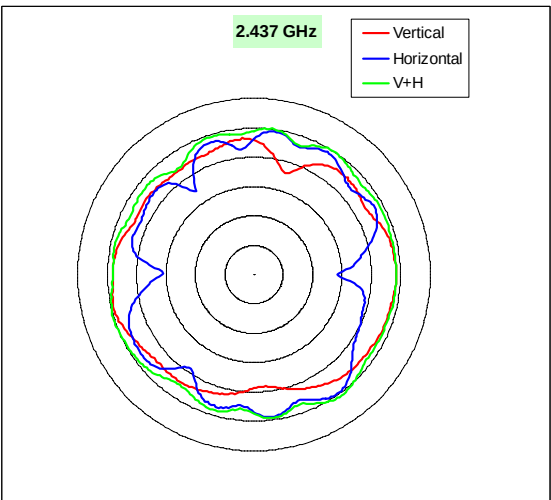
DWN.	K. ENDO	05.01.17	TITLE
CHMD.	Y. YAMAMOTO	REGD.	PROJ.
APPD.	K. TSUKAMOTO		
SCALE	N. T. S		
Hitachi Cable, Ltd. Hitaka Works			
EH3853125			

Main Antenna (1)

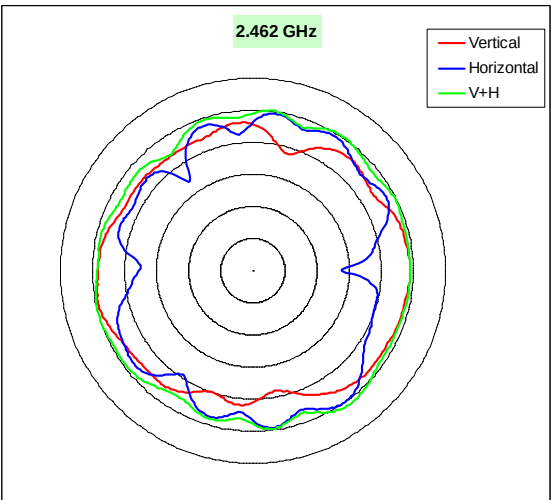
Frequency (MHz)	2412
Vertial Peak Gain (dBi)	0.3
Horizontal Peak Gain (dBi)	0.1
V + H Peak Gain (dBi)	1.3



Frequency (MHz)	2437
Vertial Peak Gain (dBi)	0
Horizontal Peak Gain (dBi)	0
V + H Peak Gain (dBi)	1.3

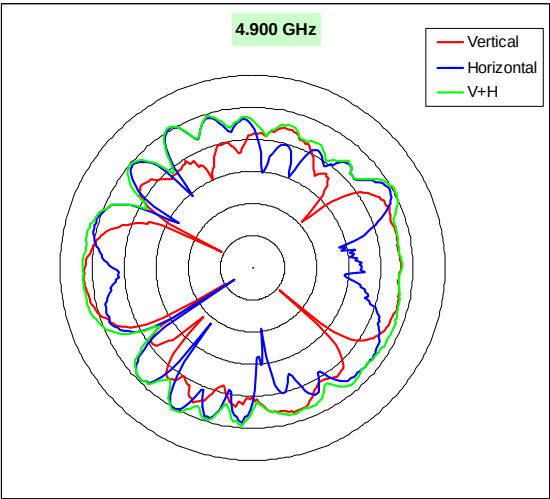


Frequency (MHz)	2462
Vertial Peak Gain (dBi)	-0.1
Horizontal Peak Gain (dBi)	0.2
V + H Peak Gain (dBi)	1.7

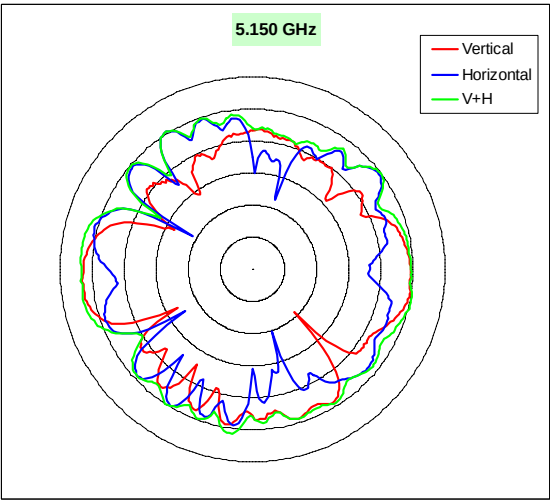


Main Antenna (2)

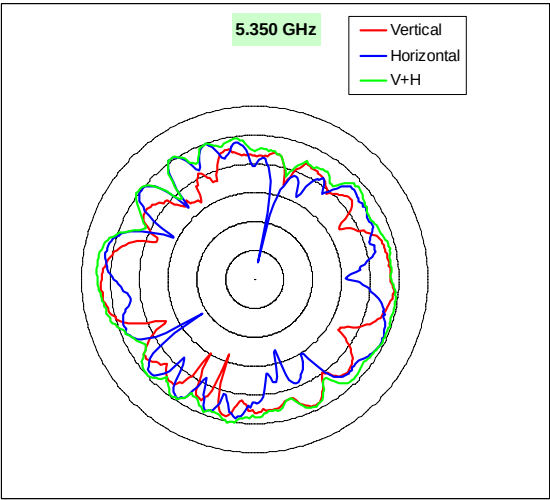
Frequency (MHz)	4900
Vertial Peak Gain (dBi)	2.9
Horizontal Peak Gain (dBi)	1.2
V + H Peak Gain (dBi)	3.2



Frequency (MHz)	5150
Vertial Peak Gain (dBi)	3.4
Horizontal Peak Gain (dBi)	1.2
V + H Peak Gain (dBi)	4

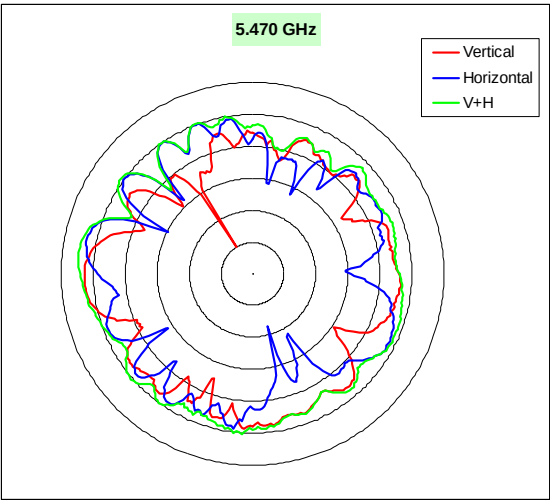


Frequency (MHz)	5350
Vertial Peak Gain (dBi)	3.9
Horizontal Peak Gain (dBi)	3
V + H Peak Gain (dBi)	5.5

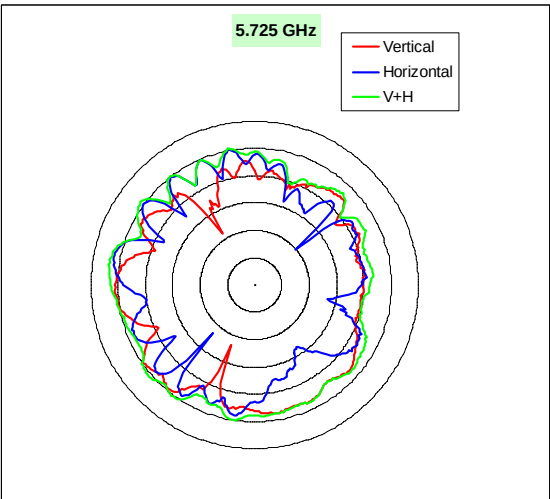


Main Antenna (3)

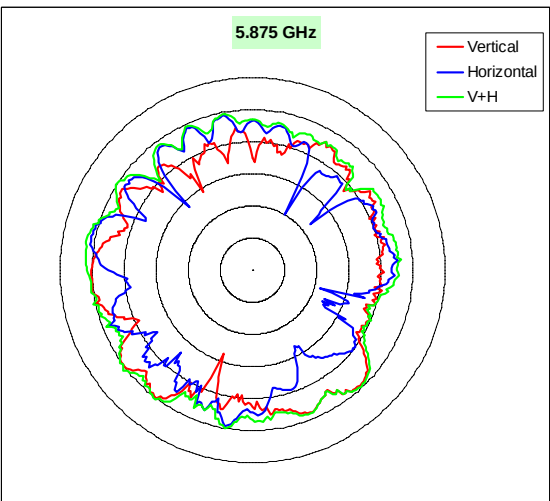
Frequency (MHz)	5470
Vertial Peak Gain (dBi)	3.3
Horizontal Peak Gain (dBi)	3.8
V + H Peak Gain (dBi)	5.5



Frequency (MHz)	5725
Vertial Peak Gain (dBi)	3.4
Horizontal Peak Gain (dBi)	2.7
V + H Peak Gain (dBi)	4.8

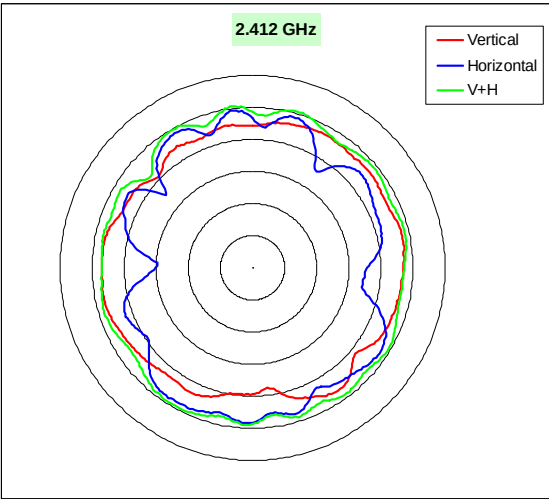


Frequency (MHz)	5875
Vertial Peak Gain (dBi)	2.4
Horizontal Peak Gain (dBi)	1.6
V + H Peak Gain (dBi)	4

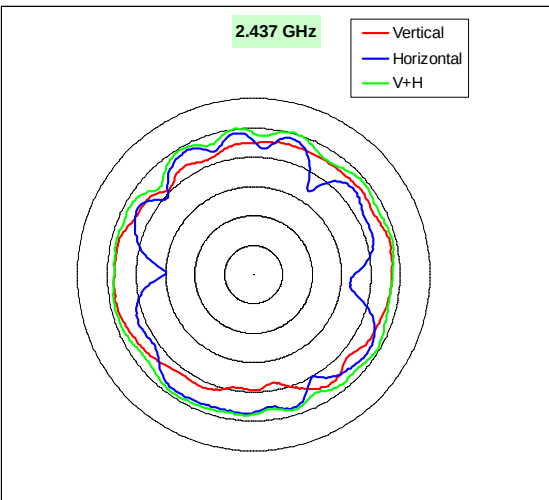


Aux Antenna (1)

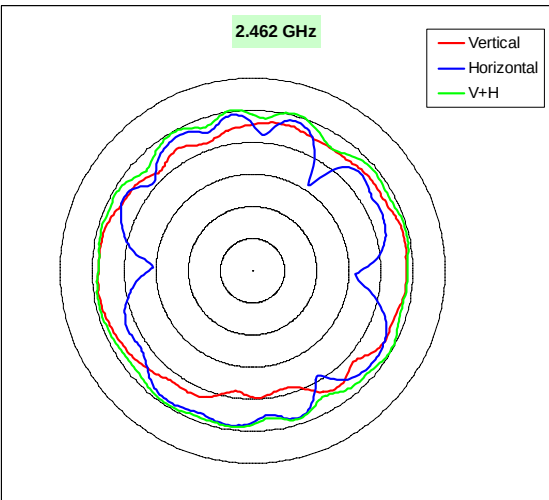
Frequency (MHz)	2412
Vertial Peak Gain (dBi)	-1
Horizontal Peak Gain (dBi)	0.2
V + H Peak Gain (dBi)	1.2



Frequency (MHz)	2437
Vertial Peak Gain (dBi)	-0.7
Horizontal Peak Gain (dBi)	-0.3
V + H Peak Gain (dBi)	0.6

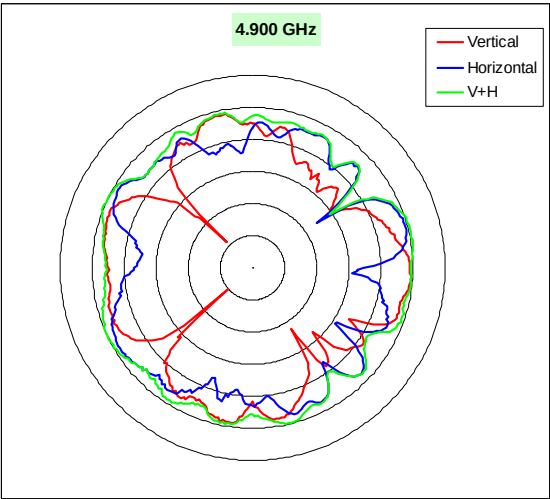


Frequency (MHz)	2462
Vertial Peak Gain (dBi)	-0.3
Horizontal Peak Gain (dBi)	-0.3
V + H Peak Gain (dBi)	1.4

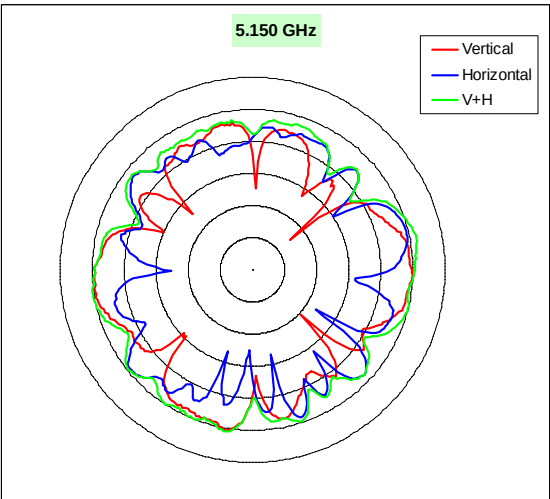


Aux Antenna (2)

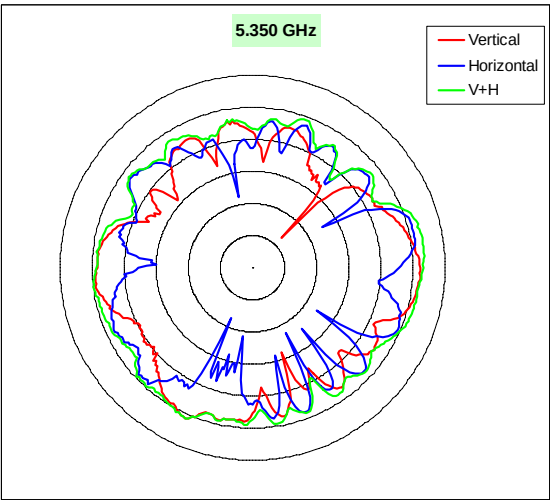
Frequency (MHz)	4900
Vertial Peak Gain (dBi)	-0.3
Horizontal Peak Gain (dBi)	-0.4
V + H Peak Gain (dBi)	1



Frequency (MHz)	5150
Vertial Peak Gain (dBi)	0.8
Horizontal Peak Gain (dBi)	0.4
V + H Peak Gain (dBi)	2.2

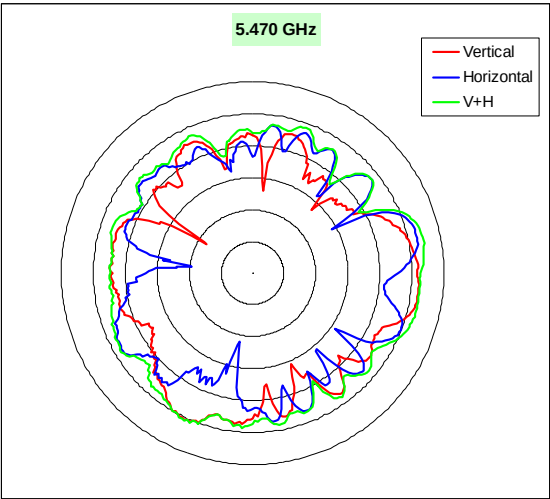


Frequency (MHz)	5350
Vertial Peak Gain (dBi)	2.5
Horizontal Peak Gain (dBi)	1.7
V + H Peak Gain (dBi)	4

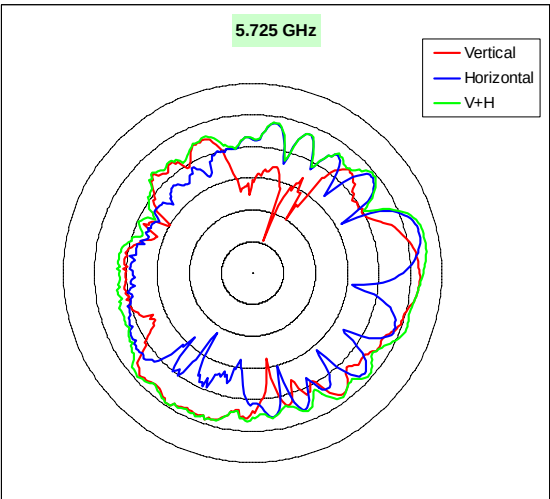


Aux Antenna (3)

Frequency (MHz)	5470
Vertial Peak Gain (dBi)	2.9
Horizontal Peak Gain (dBi)	3.3
V + H Peak Gain (dBi)	5.1



Frequency (MHz)	5725
Vertial Peak Gain (dBi)	3.3
Horizontal Peak Gain (dBi)	4.6
V + H Peak Gain (dBi)	5.9



Frequency (MHz)	5875
Vertial Peak Gain (dBi)	3.1
Horizontal Peak Gain (dBi)	3.7
V + H Peak Gain (dBi)	5.2

