Regulatory WLAN Antenna Information for ZRS

Hitachi Cable, Ltd

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

Antenna Specifications

Antenna Type (Material, Technology)	Main ; Monopole Type Aux ; PIFA Type
Antenna Model Number	HMT05/HFT17-DL07
Operating Frequency Range(s)	2.40 – 2.4835 GHz / 4.90 – 5.875 GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main 1.5 / Aux 3.9
Peak Gain (802.11a / 5GHz Band) (dBi)	Main 5.1 / Aux 5.4
Radio Connector Type	Micro Coaxial Connector
Mid-Line Connector Type (If Applicable)	NA

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)	NA	NA	385	NA	NA	478
Loss (Including Connectors) (dB) 2.4 GHz / 5 GHz			1.0/1.6			1.3/2.2
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

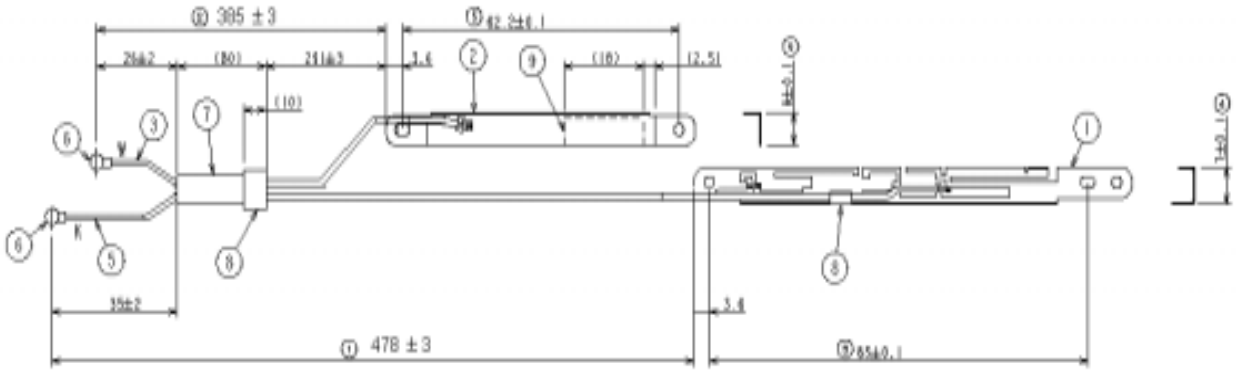
(b) Aux Antenna

Picture of Antenna installed in the notebook

Picture of Antenna

EH3854751

MARK	REVISION	DATE	NAME	CHKD



No.	Description
①	Antenna (HTM05)
②	Antenna (HFTI7)
③	Coaxial Cable (Ø1.37,White)

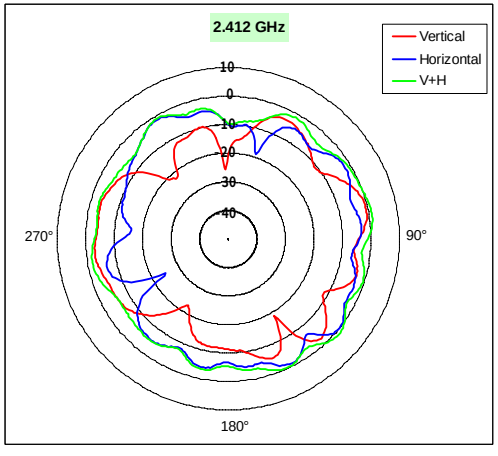
⑤	Coaxial Cable (Ø1.37,Black)
⑥	Connector HRS
⑦	NANO TAPE
⑧	KAPTON TAPE
⑨	Label

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

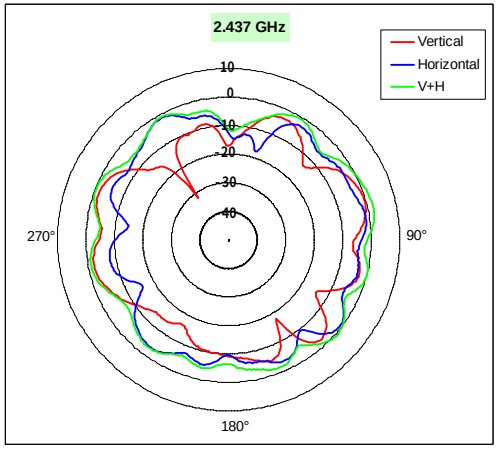
	Customer P/N		
DWN.	K.ENDO	05.09.12	TITLE
CHKD.	Y.YAMAMOTO	REGD. PROJ.	HMT05/HFTI7-DL07
APPD.	K.TSUKAMOTO		
SCALE.	N.T.S		
Hitachi Cable, Ltd. Hitaka Works			EH3854751

CADﾌｧｲﾙ:EH3854751 CADﾌｧｲﾙ:HTM05(LA) ﾃﾞｰﾀｼｰﾄ:ASSEM

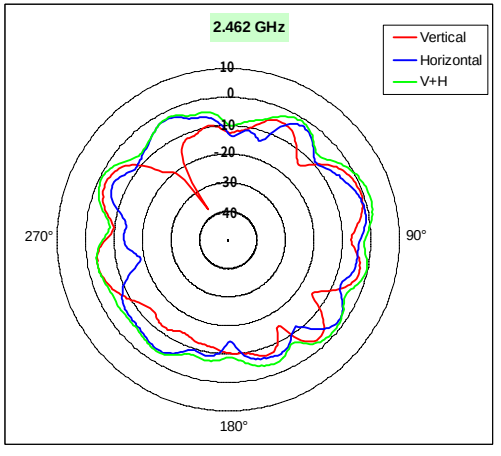
Main Antenna (1)



Frequency (MHz)	2412
Vertical Peak Gain (dBi)	-0.8
Horizontal Peak Gain (dBi)	-0.2
V + H Peak Gain (dBi)	1.0

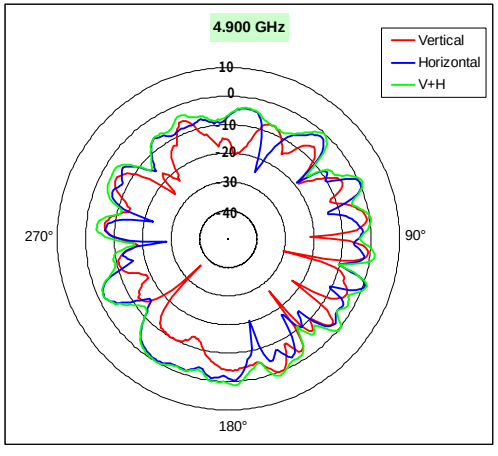


Frequency (MHz)	2437
Vertical Peak Gain (dBi)	-0.7
Horizontal Peak Gain (dBi)	-0.8
V + H Peak Gain (dBi)	1.7

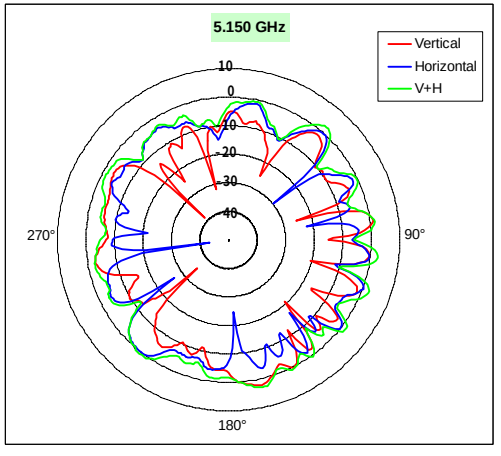


Frequency (MHz)	2462
Vertical Peak Gain (dBi)	-1.1
Horizontal Peak Gain (dBi)	-1.1
V + H Peak Gain (dBi)	1.6

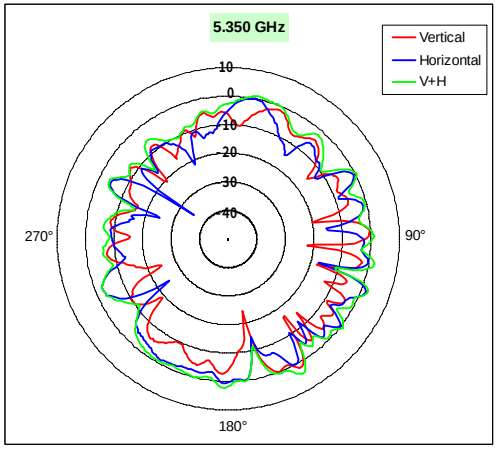
Main Antenna (2)



Frequency (MHz)	4900
Vertical Peak Gain (dBi)	-0.1
Horizontal Peak Gain (dBi)	0.3
V + H Peak Gain (dBi)	1.3

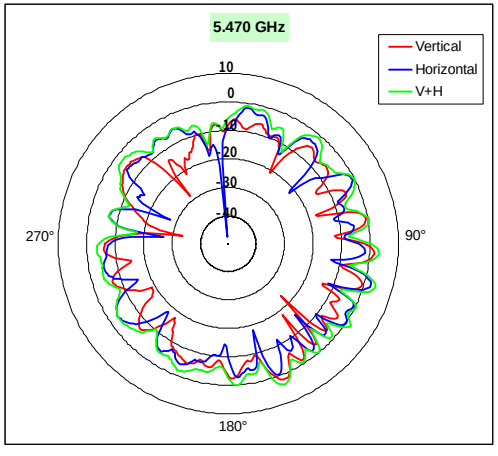


Frequency (MHz)	5150
Vertical Peak Gain (dBi)	1.9
Horizontal Peak Gain (dBi)	-0.1
V + H Peak Gain (dBi)	2.9

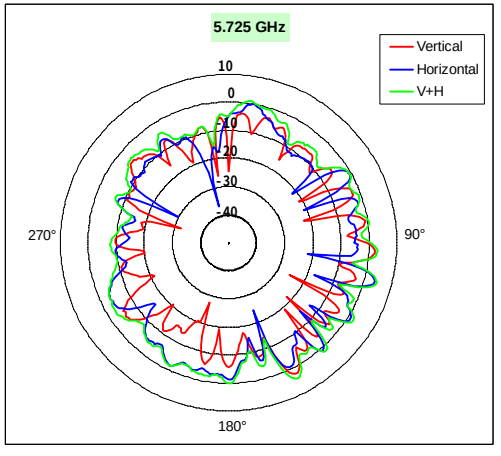


Frequency (MHz)	5350
Vertical Peak Gain (dBi)	1.4
Horizontal Peak Gain (dBi)	1.3
V + H Peak Gain (dBi)	3.5

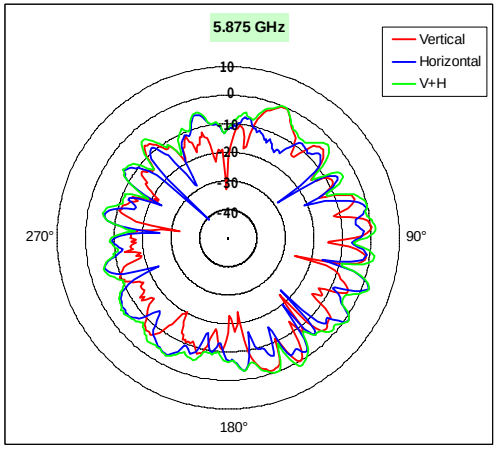
Main Antenna (3)



Frequency (MHz)	5.47
Vertical Peak Gain (dBi)	1.7
Horizontal Peak Gain (dBi)	2.5
V + H Peak Gain (dBi)	4.0

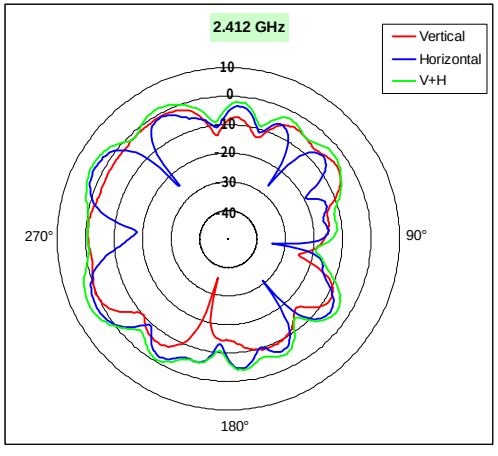


Frequency (MHz)	5725
Vertical Peak Gain (dBi)	2.3
Horizontal Peak Gain (dBi)	3.4
V + H Peak Gain (dBi)	4.2

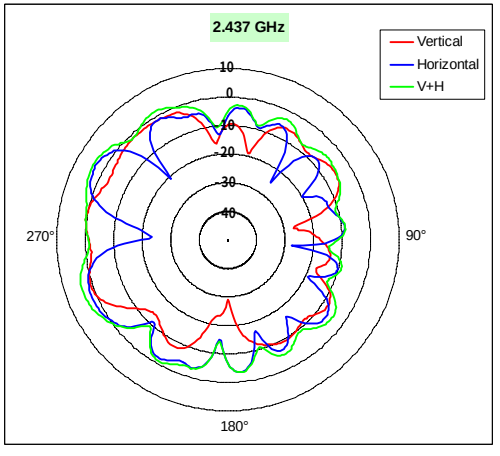


Frequency (MHz)	5875
Vertical Peak Gain (dBi)	0.1
Horizontal Peak Gain (dBi)	2.9
V + H Peak Gain (dBi)	1.3

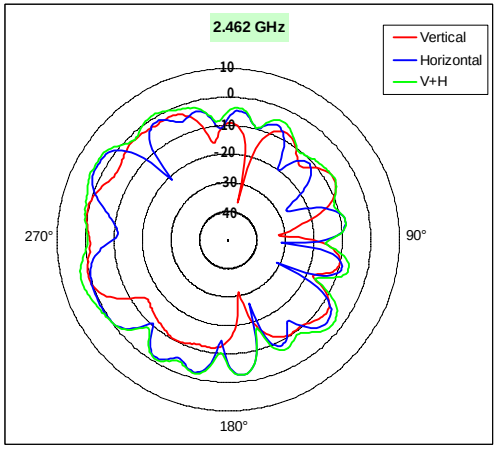
Aux Antenna (1)



Frequency (MHz)	2412
Vertical Peak Gain (dBi)	-0.1
Horizontal Peak Gain (dBi)	2.8
V + H Peak Gain (dBi)	3.9

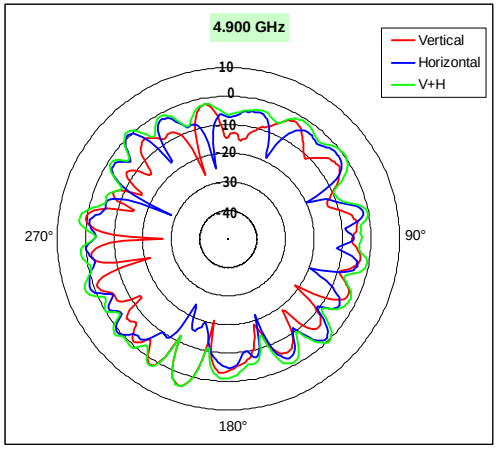


Frequency (MHz)	2437
Vertical Peak Gain (dBi)	0.3
Horizontal Peak Gain (dBi)	2.9
V + H Peak Gain (dBi)	3.8

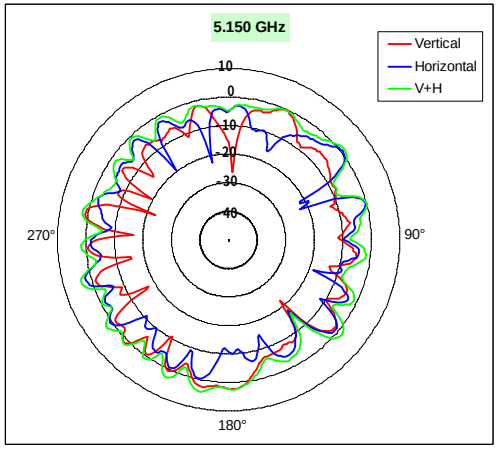


Frequency (MHz)	2462
Vertical Peak Gain (dBi)	0.4
Horizontal Peak Gain (dBi)	2.4
V + H Peak Gain (dBi)	3.3

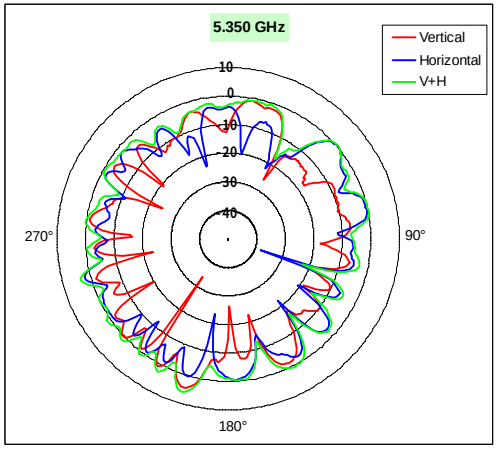
Aux Antenna (2)



Frequency (MHz)	4900
Vertical Peak Gain (dBi)	4.1
Horizontal Peak Gain (dBi)	1.1
V + H Peak Gain (dBi)	4.1

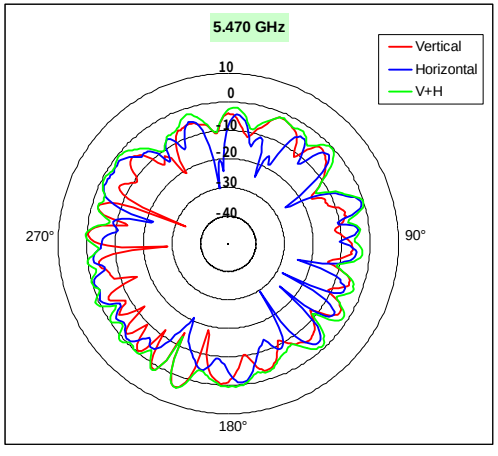


Frequency (MHz)	5150
Vertical Peak Gain (dBi)	2.1
Horizontal Peak Gain (dBi)	1.8
V + H Peak Gain (dBi)	3.9

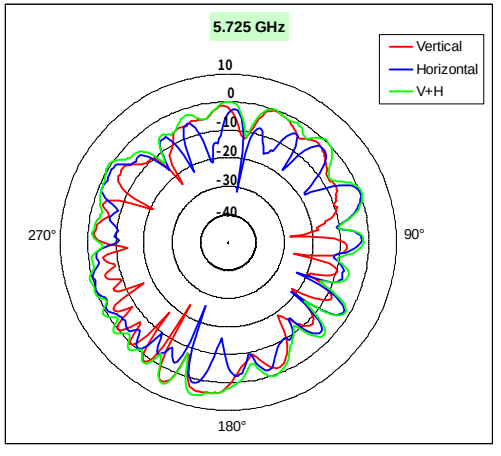


Frequency (MHz)	5350
Vertical Peak Gain (dBi)	4.2
Horizontal Peak Gain (dBi)	1.8
V + H Peak Gain (dBi)	5.6

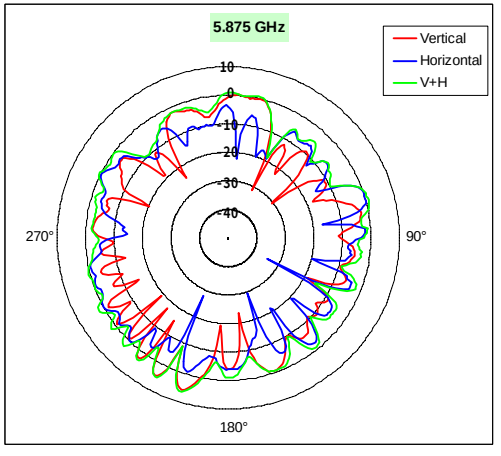
Aux Antenna (3)



Frequency (MHz)	5.47
Vertical Peak Gain (dBi)	4.1
Horizontal Peak Gain (dBi)	-0.5
V + H Peak Gain (dBi)	4.2



Frequency (MHz)	5725
Vertical Peak Gain (dBi)	4.8
Horizontal Peak Gain (dBi)	1.5
V + H Peak Gain (dBi)	5.8



Frequency (MHz)	5875
Vertical Peak Gain (dBi)	5.4
Horizontal Peak Gain (dBi)	-0.1
V + H Peak Gain (dBi)	6.2