

Regulatory WLAN antenna Information for Siberia (option1)

Hitachi Cable, Ltd

4-14-1, Sotokanda, Chiyoda-ku, Tokyo, Japan

Antenna Specifications

Antenna Type (Material, Technology)	PIFA Type
Antenna Model Number	HMGTO2-DL12
Operating Frequency Range(s)	2.40 - 2.4835 GHz / 4.90 - 5.875 GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main 2.1 / Aux 1.5 / MIMO 0
Peak Gain (802.11a / 5GHz Band) (dBi)	Main 1.9 / Aux 2.0 / MIMO 1.6
Radio Connector Type	Micro Coaxial Connector
Mid-Line Connector Type (If Applicable)	N/A

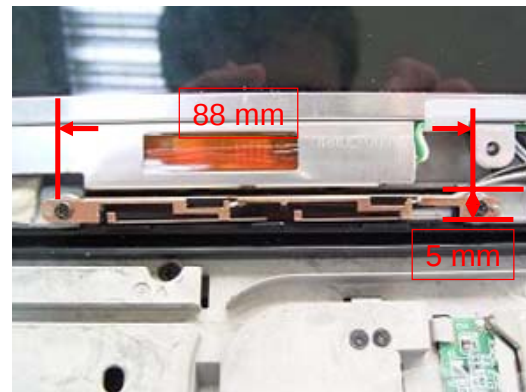
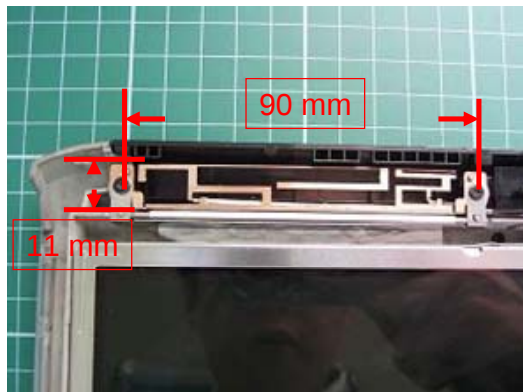
Note: Peak Gain should include all system losses (connector, cable, etc)

Cable Specifications

Cable Parameters	Main			Aux			MIMO		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	N/A	N/A	689	N/A	N/A	347	N/A	N/A	309
Loss (Including Connectors) (dB) 2.4 GHz / 5 GHz			1.7/2.8			0.9/1.4			0.7/1.2
Description (Color, Diameter, Manufacturer)	White ϕ 1.37 mm Hitachi Cable			Black ϕ 1.37 mm Hitachi Cable			Gray 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)



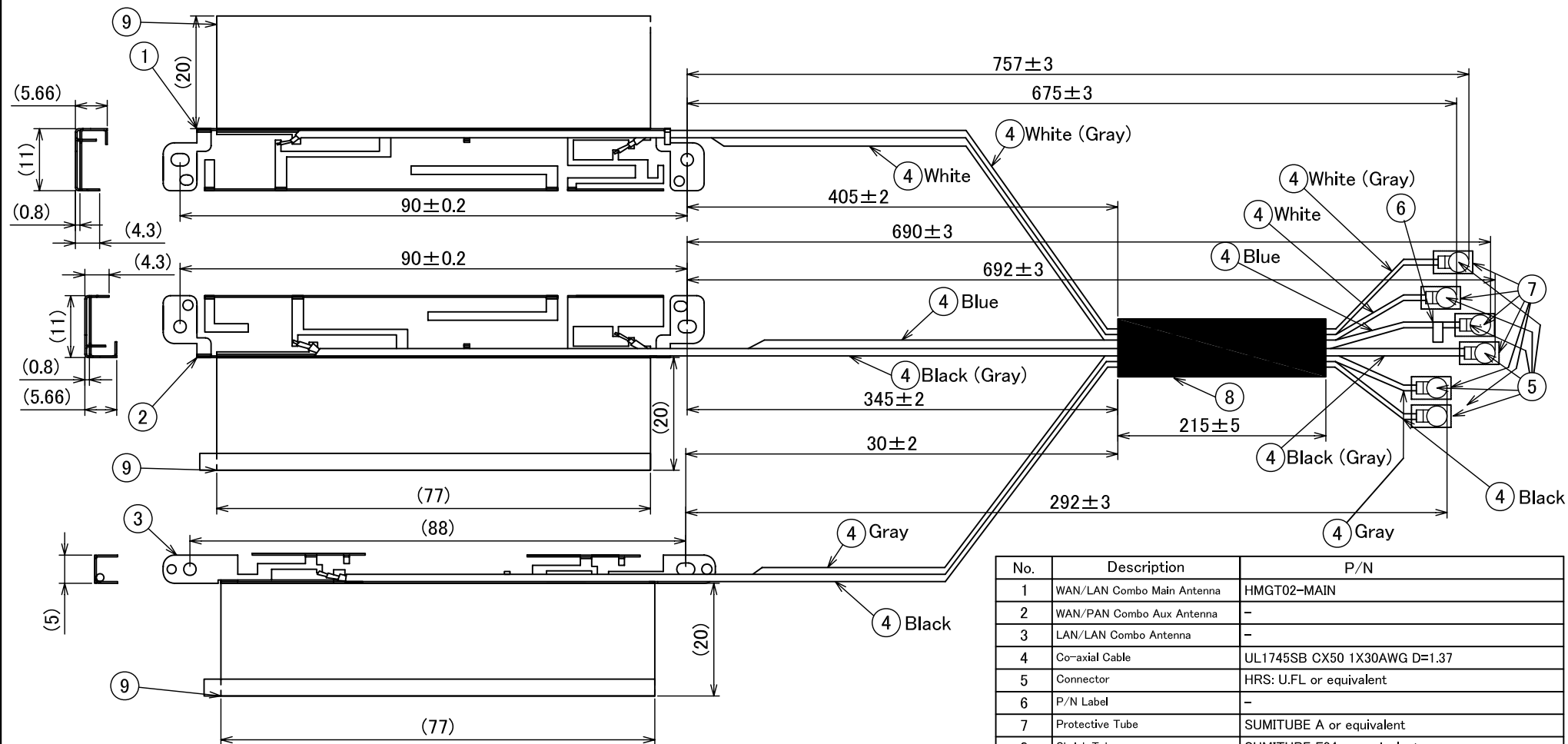
Picture of Antenna installed in the notebook



Picture of Antenna

TP70000002

MARK	REVISION	DATE	NAME	CHKD.
-	First Edition	'07.4.27	T.Terry	Yamamoto

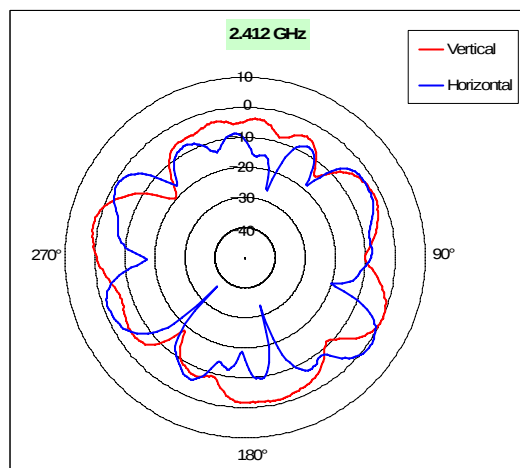


No.	Description	P/N
1	WAN/LAN Combo Main Antenna	HMGTO2-MAIN
2	WAN/PAN Combo Aux Antenna	-
3	LAN/LAN Combo Antenna	-
4	Co-axial Cable	UL1745SB CX50 1X30AWG D=1.37
5	Connector	HRS: U.FL or equivalent
6	P/N Label	-
7	Protective Tube	SUMITUBE A or equivalent
8	Shrink Tube	SUMITUBE F34 or equivalent
9	AL/PET Foil	-

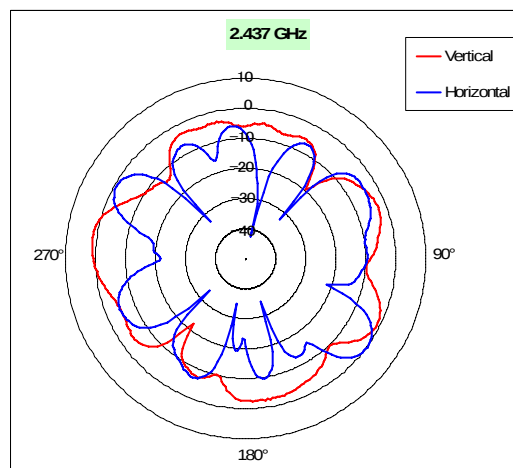
Customer P/N				HMGT02-DL02	
DWN.	T.Terry	'07.4.27			
CHKD.	Yamamoto	REGD.	PROJ.		
APPD.	M.Usui				
SCALE	N, T, S				
Hitachi Cable Asia, Ltd. Taipei Branch				TP70000002	
				訂正	

(NOTE) SOLDER : LEAD FREE

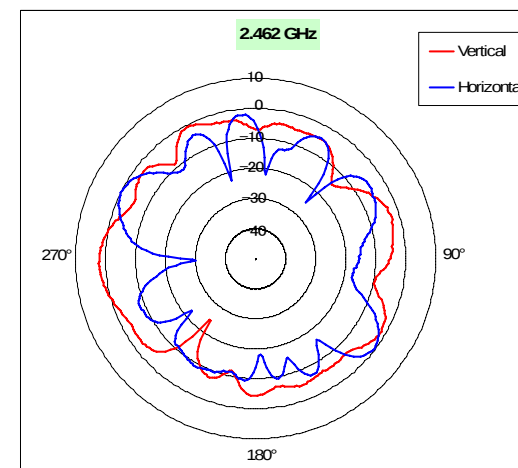
Main Antenna (1)



Frequency (MHz)	2412
Peak Gain (dBi)	1.48

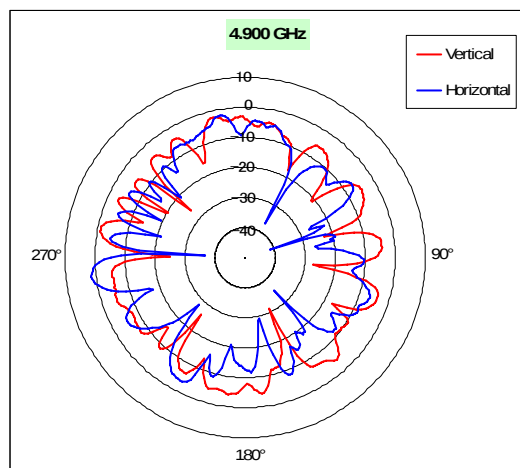


Frequency (MHz)	2437
Peak Gain (dBi)	1.06

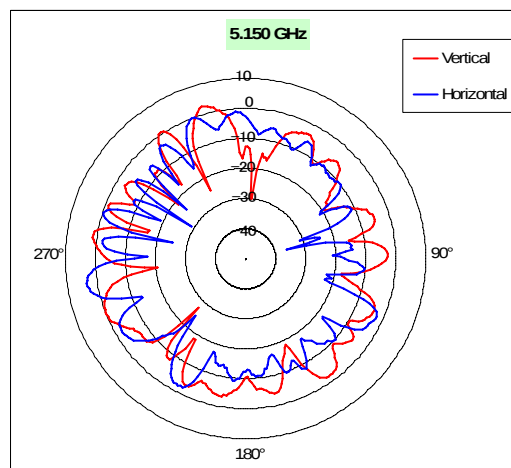


Frequency (MHz)	2462
Peak Gain (dBi)	1.89

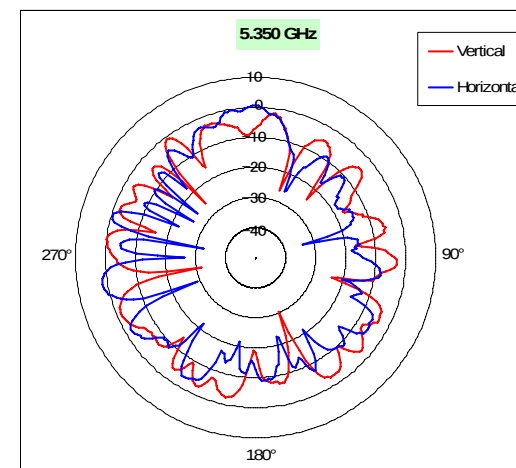
Main Antenna (2)



Frequency (MHz)	4900
Peak Gain (dBi)	1.22

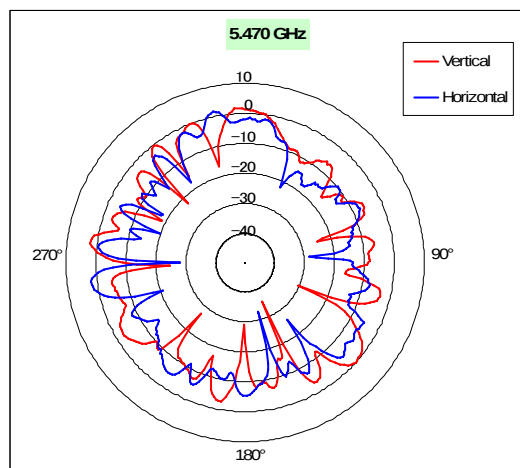


Frequency (MHz)	5150
Peak Gain (dBi)	3.25

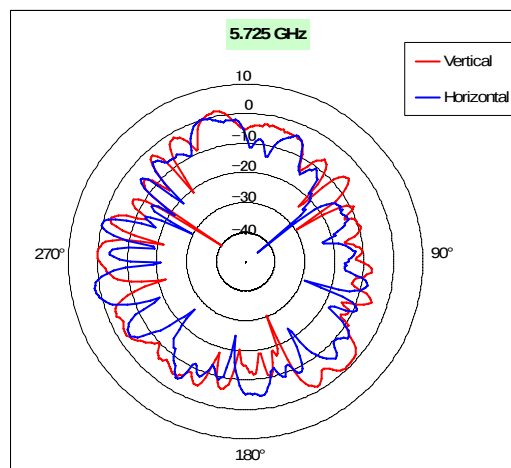


Frequency (MHz)	5350
Peak Gain (dBi)	1.37

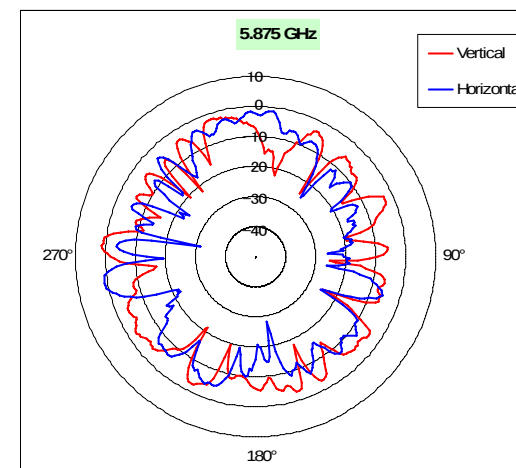
Main Antenna (3)



Frequency (MHz)	5470
Peak Gain (dBi)	2.32

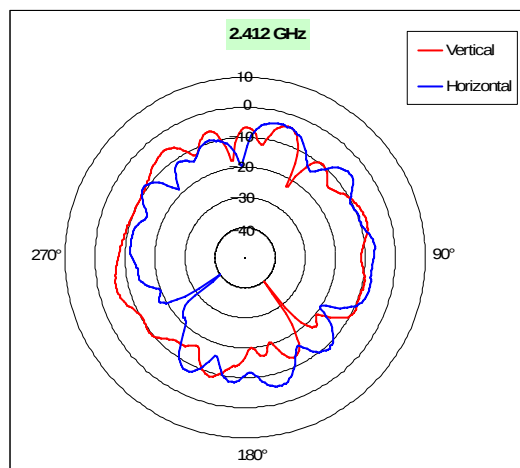


Frequency (MHz)	5725
Peak Gain (dBi)	1.57

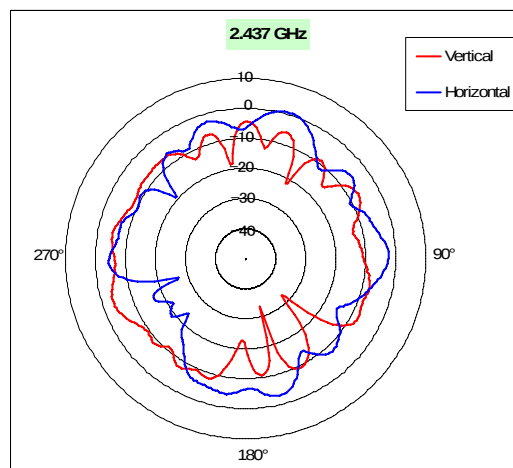


Frequency (MHz)	5875
Peak Gain (dBi)	1.11

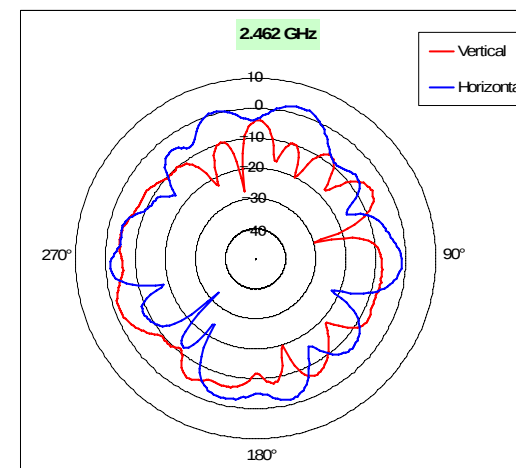
Aux Antenna (1)



Frequency (MHz)	2412
Peak Gain (dBi)	-4.31

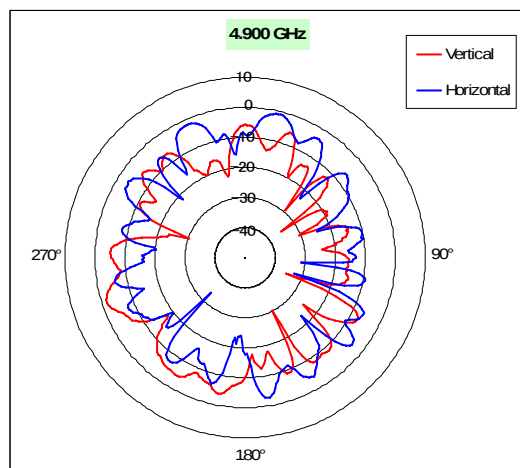


Frequency (MHz)	2437
Peak Gain (dBi)	0.36

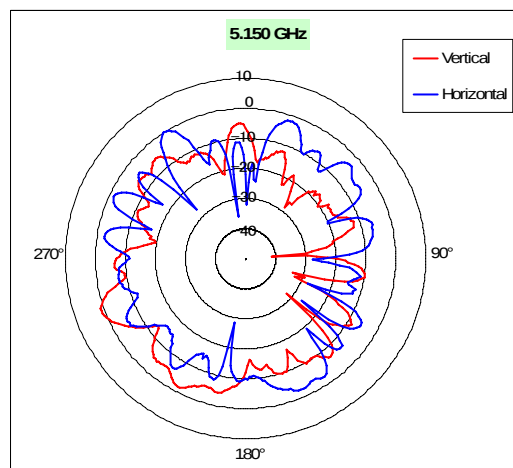


Frequency (MHz)	2462
Peak Gain (dBi)	2.17

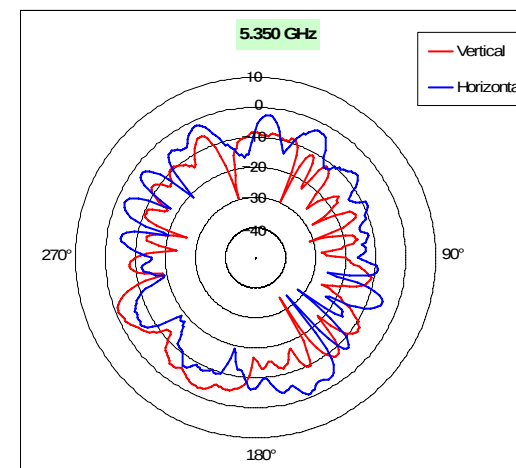
Aux Antenna (2)



Frequency (MHz)	4900
Peak Gain (dBi)	-1.16

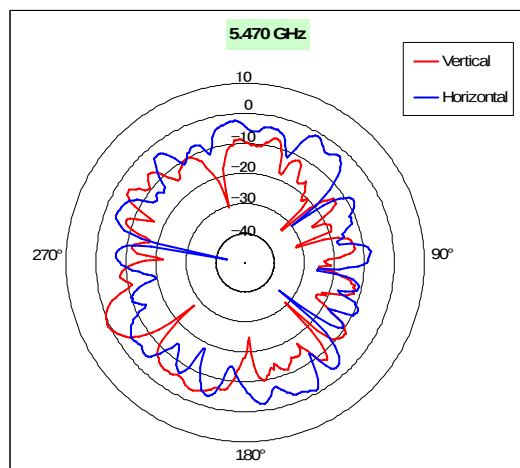


Frequency (MHz)	5150
Peak Gain (dBi)	0.64

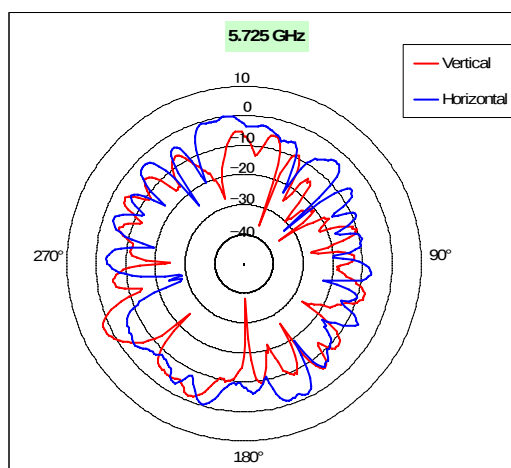


Frequency (MHz)	5350
Peak Gain (dBi)	-1.08

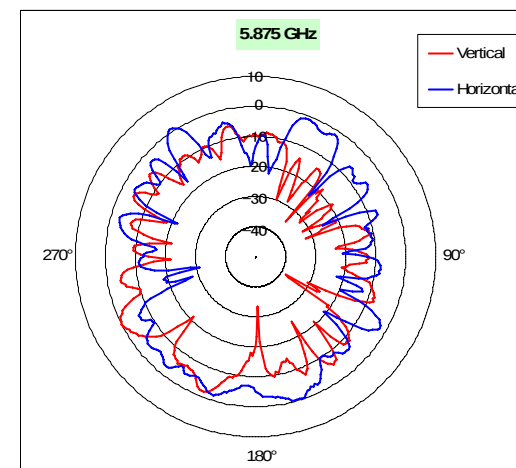
Aux Antenna (3)



Frequency (MHz)	5470
Peak Gain (dBi)	0.53

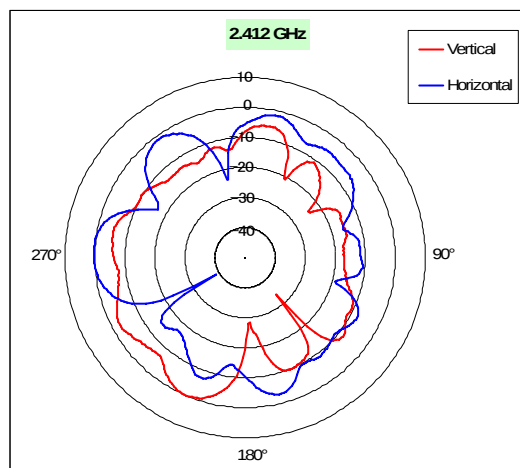


Frequency (MHz)	5725
Peak Gain (dBi)	1.9

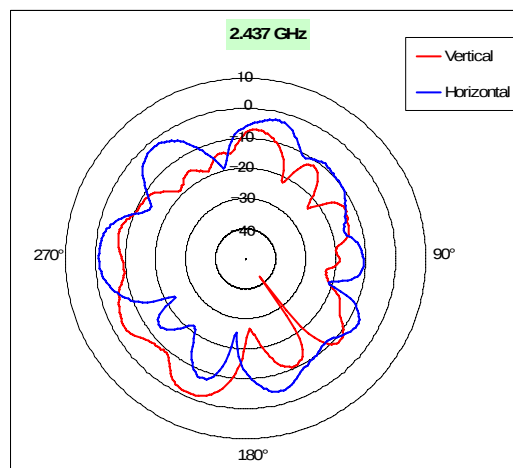


Frequency (MHz)	5875
Peak Gain (dBi)	-0.22

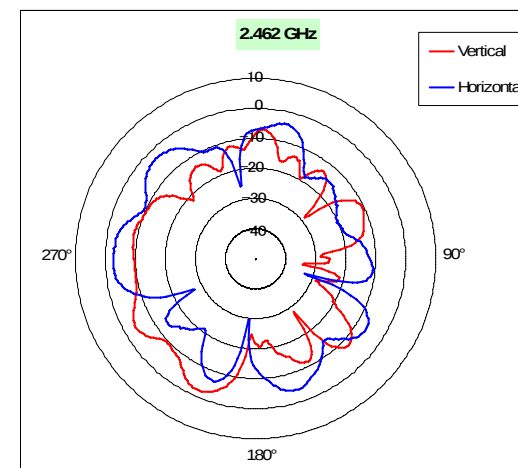
MIMO Antenna (1)



Frequency (MHz)	2412
Peak Gain (dBi)	0.08

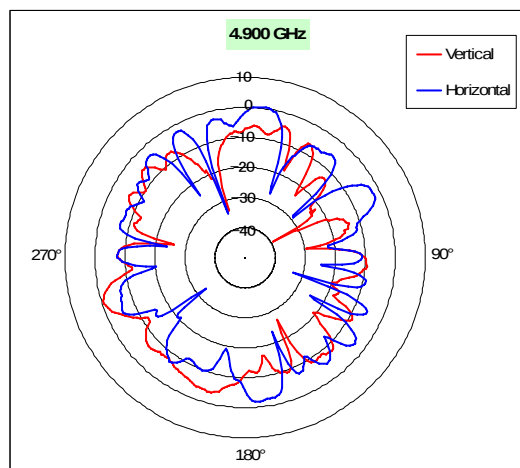


Frequency (MHz)	2437
Peak Gain (dBi)	-1.42

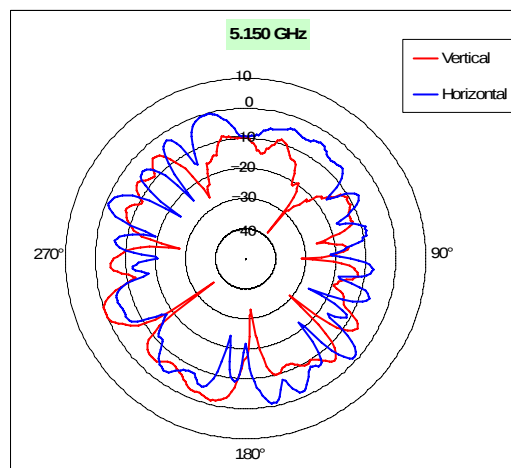


Frequency (MHz)	2462
Peak Gain (dBi)	-2.55

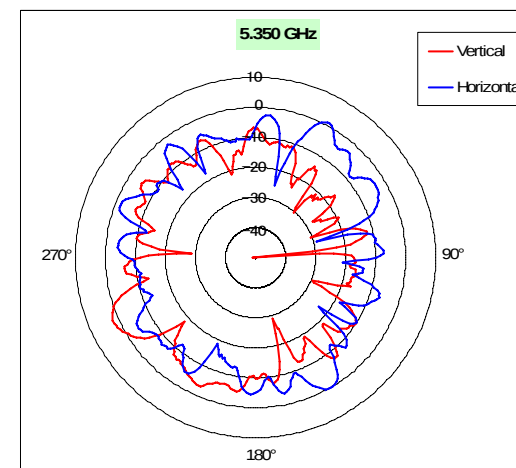
MIMO Antenna (2)



Frequency (MHz)	4900
Peak Gain (dBi)	-0.17

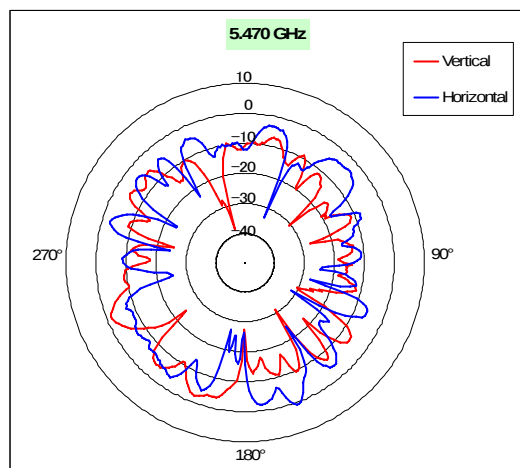


Frequency (MHz)	5150
Peak Gain (dBi)	-0.16

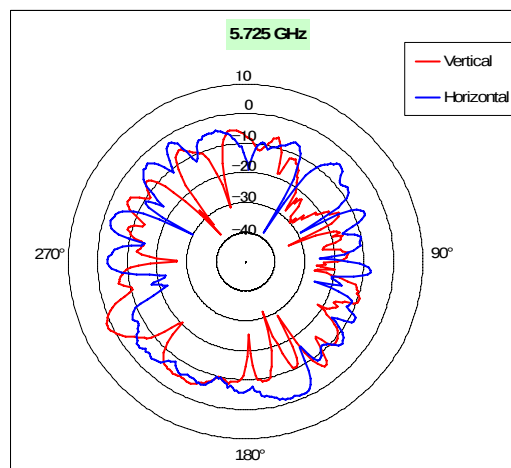


Frequency (MHz)	5350
Peak Gain (dBi)	1.65

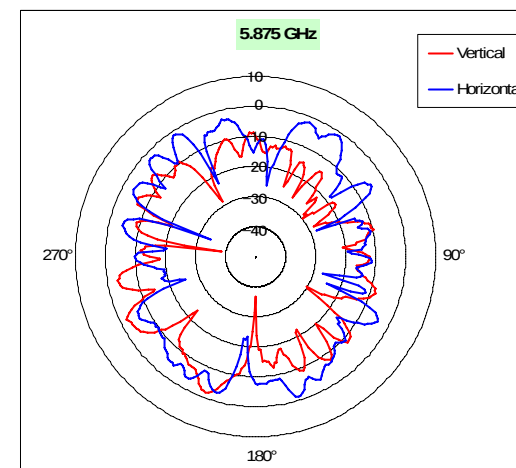
MIMO Antenna (3)



Frequency (MHz)	5470
Peak Gain (dBi)	0.55



Frequency (MHz)	5725
Peak Gain (dBi)	1.32



Frequency (MHz)	5875
Peak Gain (dBi)	-1.45