

Regulatory WLAN Antenna Information for Laguna

Hitachi Cable, Ltd

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

Antenna Specifications

Antenna Type (Material, Technology)	Monopole Type
Antenna Model Number	HFT17-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 1.9 / Aux 1.5
Peak Gain (802.11a / 5GHz Band) (dBi)	Main 3.1 / Aux 3.4
Radio Connector Type	Micro Coaxial Connector
Mid-Line Connector Type (If Applicable)	Micro Coaxial 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)	276	207	483	360	198	558
Loss (Including Connectors) (dB) 2.4 GHz / 5 GHz			1.3/2.1			1.4/2.4
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)



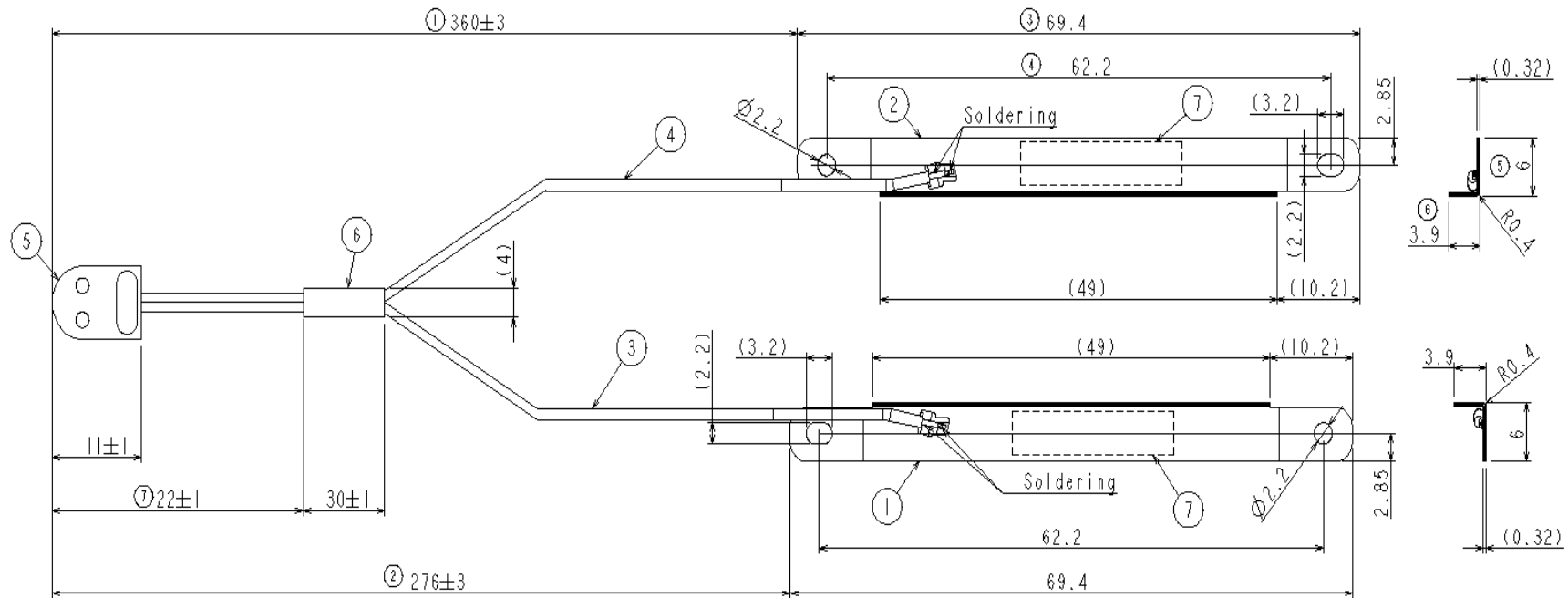
Picture of Antenna installed in the notebook



Picture of Antenna

EH3850818

MARK	REVISION	DATE	NAME	CHKD.
A	Title and Radiator changed.	04.05.18	K.ENDO	R.SATO
B	Cable length changed.	04.05.20	K.ENDO	R.SATO
C	Cable length changed.	04.06.01	K.ENDO	R.SATO
D	Cable length changed.	04.06.03	K.ENDO	R.SATO



No.	Description
①	Main Antenna
②	Aux Antenna
③	Coaxial Cable(White)
④	Coaxial Cable(Black)
⑤	Connector HRS CONN LP/LJ OVERMOLD
⑥	Acetate Tape
⑦	Product Label

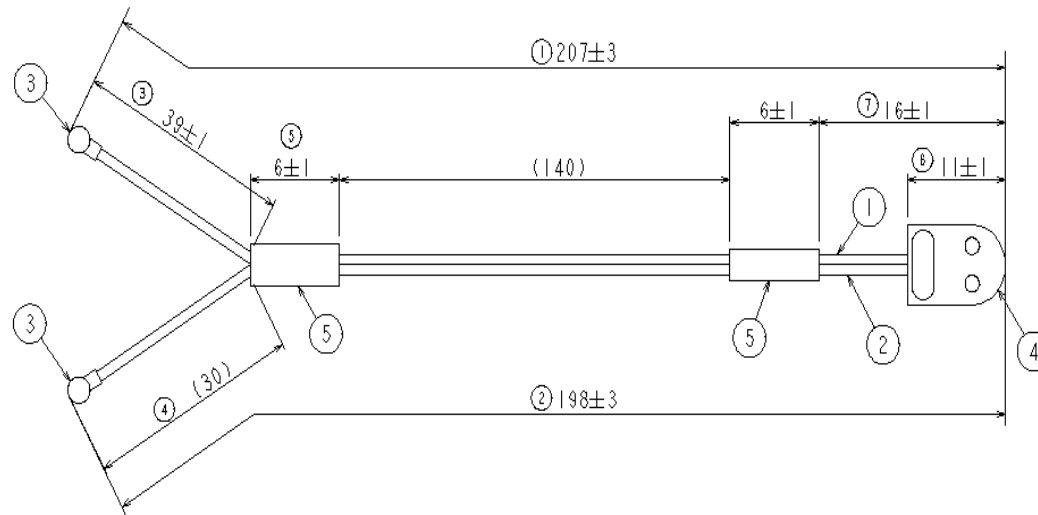
Note
1. The dimensions on this drawing are numbered 1-7.

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

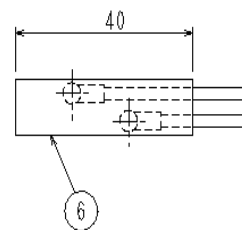
Customer P/N				TITLE
DWN.	K.ENDO	04.06.03	REGD.	
CHKD.	R.SATO	PROJ.		
APPD.	H.TATE			
SCALE	N.T.S			
Hitachi Cable, Ltd. Hitaka Works				EH3850818

EH3850819

MARK	REVISION	DATE	NAME	CHKD.
A	Title changed.	04.05.18	K.ENDO	R.SATO
B	Cable length changed.	04.05.20	K.ENDO	R.SATO
C	Cable length changed.	04.05.27	K.ENDO	R.SATO



No.	Description
①	Coaxial Cable(White)
②	Coaxial Cable(Black)
③	Connector HRS U.FL-LP-088
④	Connector HRS CONN LP/LJ OVERMOLD
⑤	Acetate Tape
⑥	Protection Tube



Note2:Protection Tube

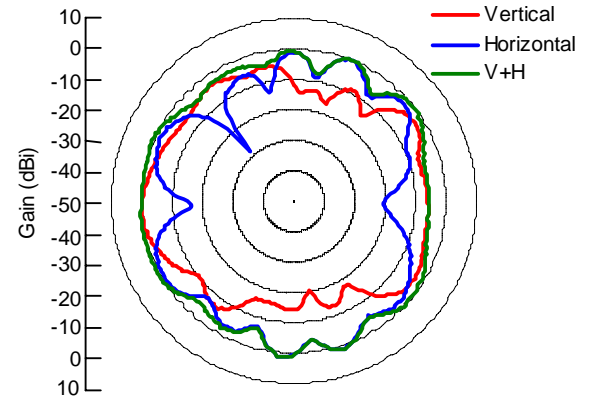
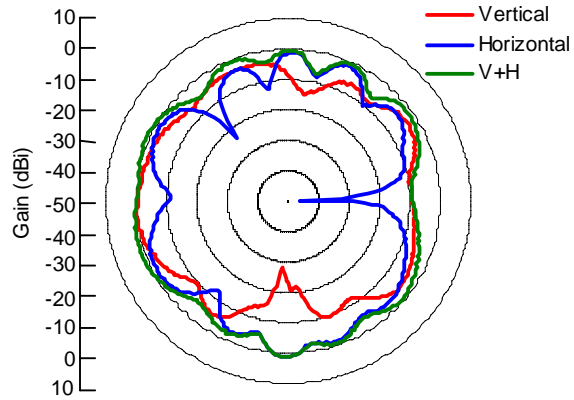
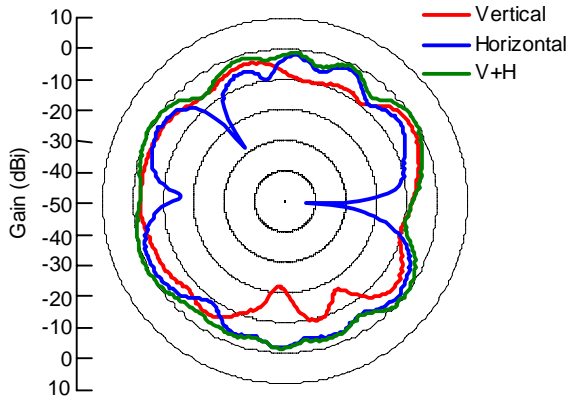
Note

- 1.The dimensions on this drawing are numbered 1-7.
- 2.The connector shall be covered with protection tube.

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

Customer P/N			TITLE
DWN.	K.ENDO	04.05.27	HFT17-DL01-MS
CHKD.	R.SATO	REGD. PROJ.	
APPD.	H.TATE		
SCALE	N.T.S		
Hitachi Cable, Ltd. Hitaka Works			EH3850819

Main Antenna (1)

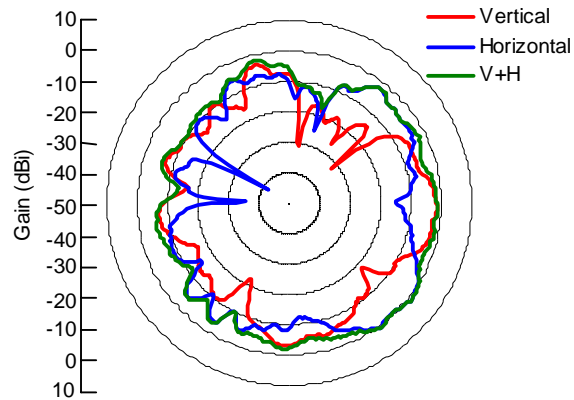


Frequency (MHz)	2400
Vertical Peak Gain (dBi)	-1.5
Horizontal Peak Gain (dBi)	-0.8
V + H Peak Gain (dBi)	0.8

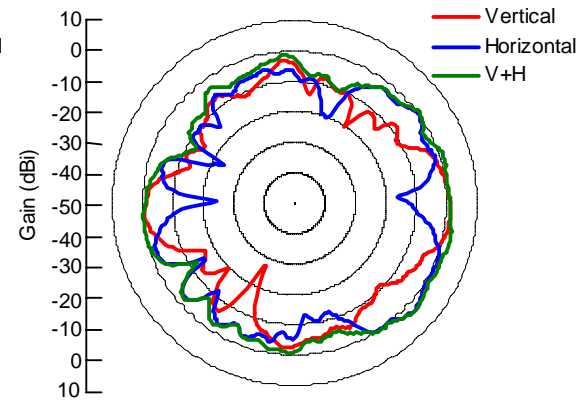
Frequency (MHz)	2442
Vertical Peak Gain (dBi)	-3.2
Horizontal Peak Gain (dBi)	1.6
V + H Peak Gain (dBi)	1.7

Frequency (MHz)	2484
Vertical Peak Gain (dBi)	-3.3
Horizontal Peak Gain (dBi)	1.9
V + H Peak Gain (dBi)	1.7

Main Antenna (2)

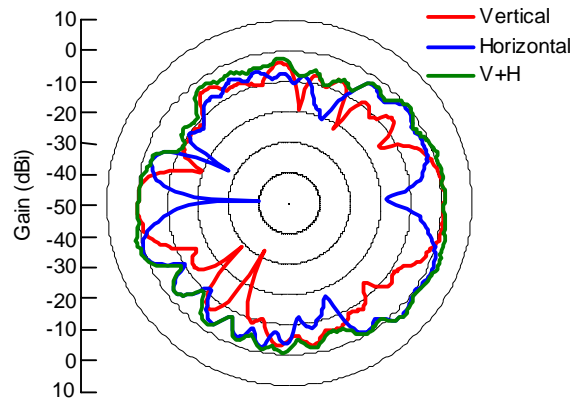


Frequency (MHz)	4900
Vertical Peak Gain (dBi)	-1.2
Horizontal Peak Gain (dBi)	1.3
V + H Peak Gain (dBi)	1.5

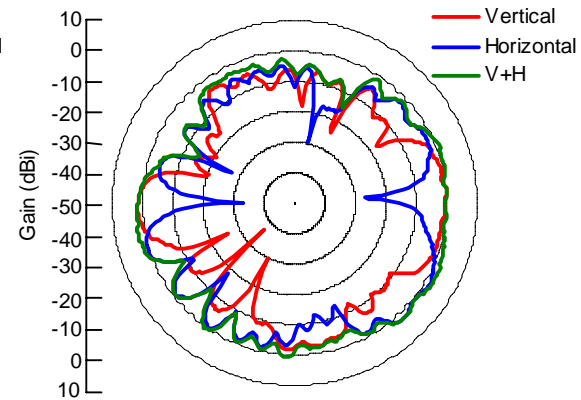


Frequency (MHz)	5150
Vertical Peak Gain (dBi)	1.4
Horizontal Peak Gain (dBi)	3.1
V + H Peak Gain (dBi)	3.4

Main Antenna (3)

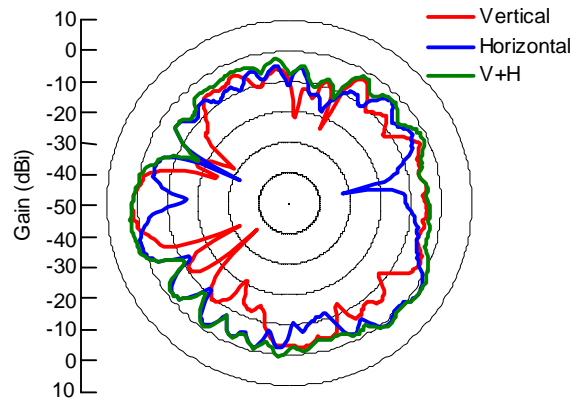


Frequency (MHz)	5250
Vertical Peak Gain (dBi)	1.4
Horizontal Peak Gain (dBi)	3.0
V + H Peak Gain (dBi)	3.3

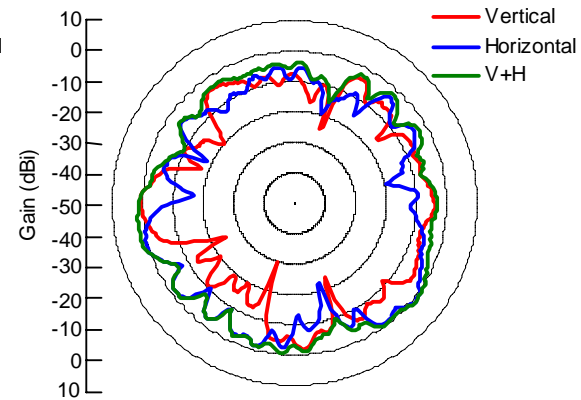


Frequency (MHz)	5350
Vertical Peak Gain (dBi)	1.8
Horizontal Peak Gain (dBi)	2.4
V + H Peak Gain (dBi)	2.8

Main Antenna (4)

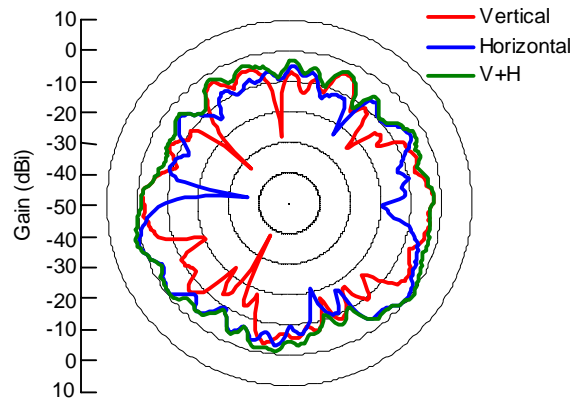


Frequency (MHz)	5470
Vertical Peak Gain (dBi)	1.9
Horizontal Peak Gain (dBi)	1.9
V + H Peak Gain (dBi)	2.7

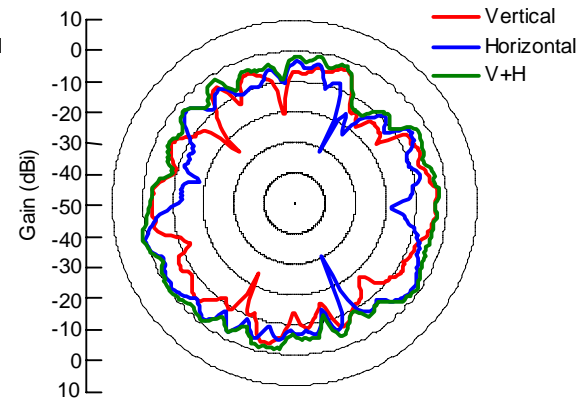


Frequency (MHz)	5598
Vertical Peak Gain (dBi)	1.0
Horizontal Peak Gain (dBi)	1.2
V + H Peak Gain (dBi)	2.1

Main Antenna (5)

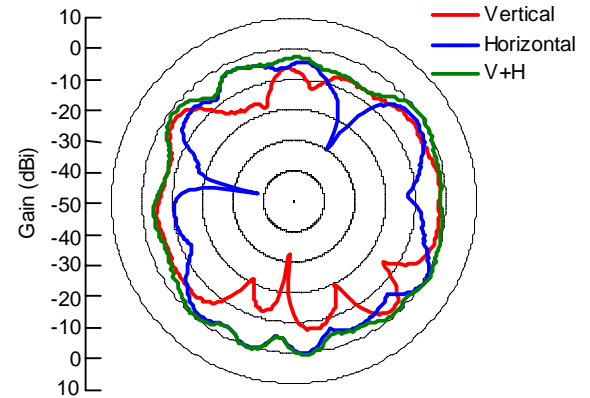
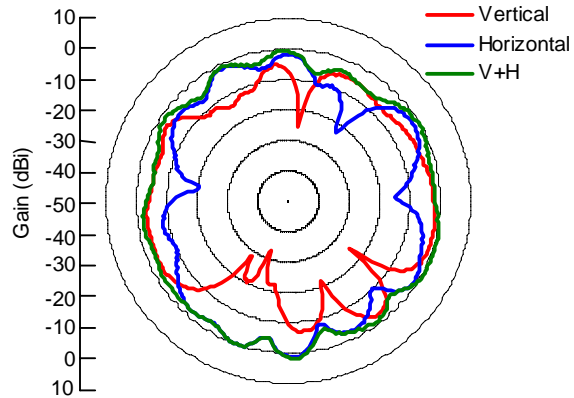
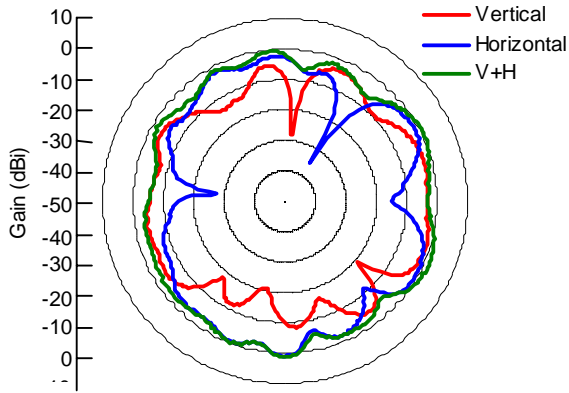


Frequency (MHz)	5725
Vertical Peak Gain (dBi)	-1.3
Horizontal Peak Gain (dBi)	1.3
V + H Peak Gain (dBi)	2.0



Frequency (MHz)	5850
Vertical Peak Gain (dBi)	-2.6
Horizontal Peak Gain (dBi)	0.7
V + H Peak Gain (dBi)	1.5

Aux Antenna (1)

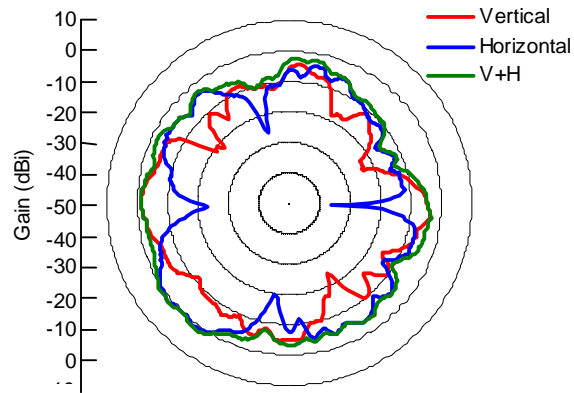


Frequency (MHz)	2400
Vertical Peak Gain (dBi)	-1.1
Horizontal Peak Gain (dBi)	1.2
V + H Peak Gain (dBi)	1.9

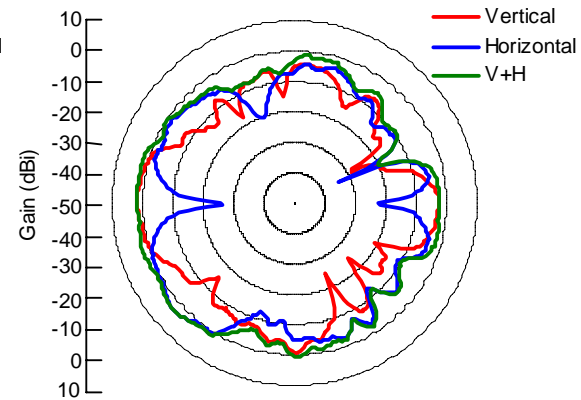
Frequency (MHz)	2442
Vertical Peak Gain (dBi)	-0.8
Horizontal Peak Gain (dBi)	1.5
V + H Peak Gain (dBi)	2.0

Frequency (MHz)	2484
Vertical Peak Gain (dBi)	-1.4
Horizontal Peak Gain (dBi)	0.7
V + H Peak Gain (dBi)	1.2

Aux Antenna (2)

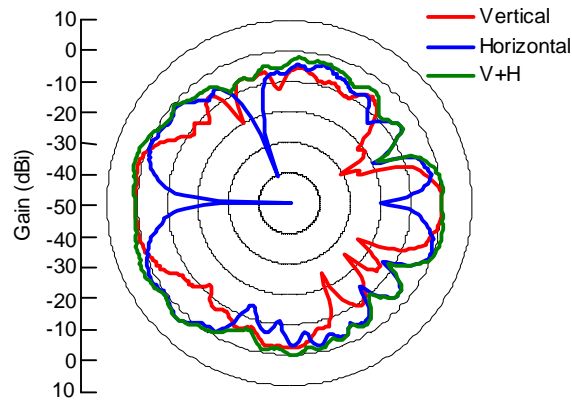


Frequency (MHz)	4900
Vertical Peak Gain (dBi)	-1.1
Horizontal Peak Gain (dBi)	1.5
V + H Peak Gain (dBi)	1.9

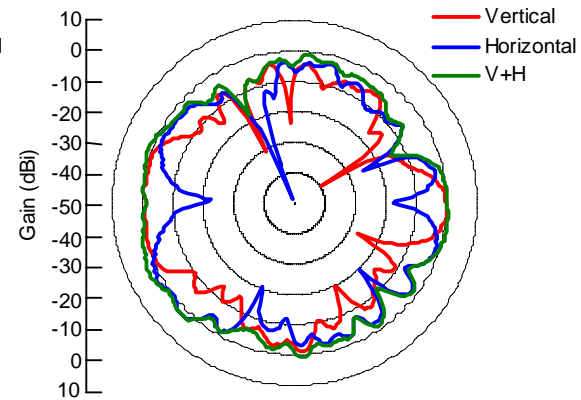


Frequency (MHz)	5150
Vertical Peak Gain (dBi)	2.1
Horizontal Peak Gain (dBi)	3.4
V + H Peak Gain (dBi)	3.5

Aux Antenna (3)

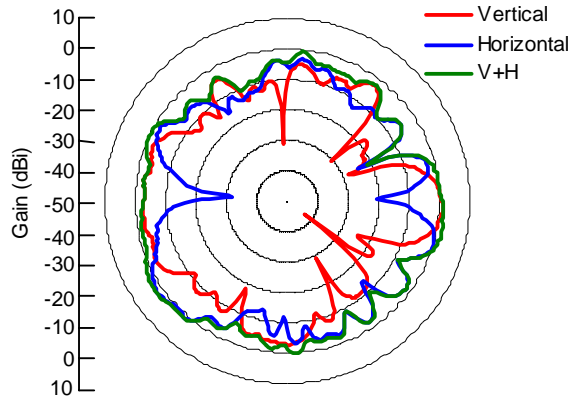


Frequency (MHz)	5250
Vertical Peak Gain (dBi)	1.5
Horizontal Peak Gain (dBi)	3.4
V + H Peak Gain (dBi)	3.5

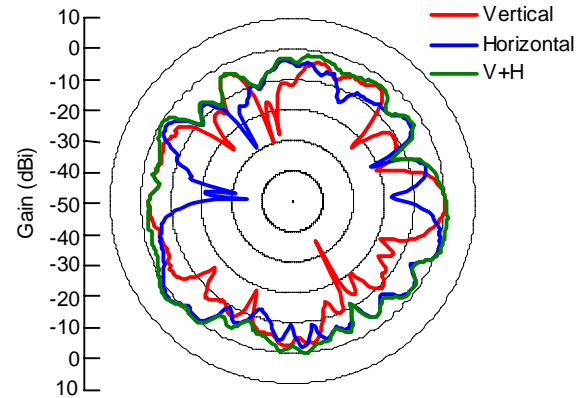


Frequency (MHz)	5350
Vertical Peak Gain (dBi)	0.3
Horizontal Peak Gain (dBi)	2.5
V + H Peak Gain (dBi)	3.2

Aux Antenna (4)

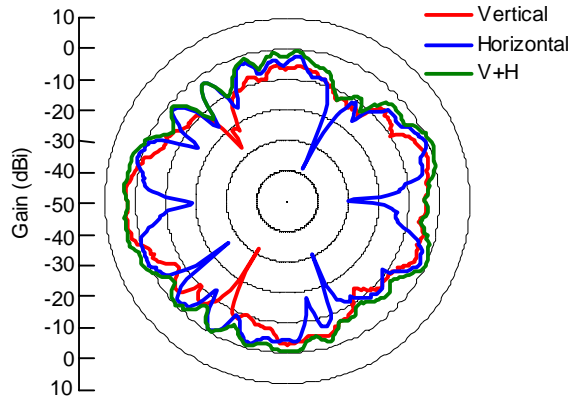


Frequency (MHz)	5470
Vertical Peak Gain (dBi)	1.4
Horizontal Peak Gain (dBi)	2.5
V + H Peak Gain (dBi)	2.8

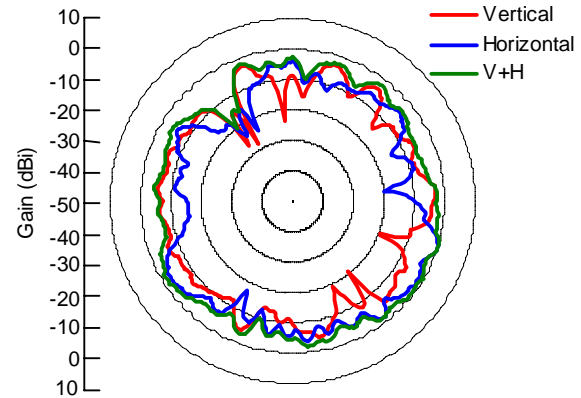


Frequency (MHz)	5598
Vertical Peak Gain (dBi)	0.5
Horizontal Peak Gain (dBi)	2.2
V + H Peak Gain (dBi)	2.6

Aux Antenna (5)



Frequency (MHz)	5725
Vertical Peak Gain (dBi)	-1.4
Horizontal Peak Gain (dBi)	0.8
V + H Peak Gain (dBi)	1.0



Frequency (MHz)	5850
Vertical Peak Gain (dBi)	-2.3
Horizontal Peak Gain (dBi)	0.1
V + H Peak Gain (dBi)	0.4