

Antenna Regulatory Information

• Product type	• WLAN antenna
• Model number	• AN10087-V3-1L/R
• Revision	• A00
• Manufacturer Part No. : Main / Aux	• AN10087-V3-1L/AN10087-V3-1R
• Dell Part No. : Main / Aux	• DC330007L0L/DC330007M0L

Antenova Ltd.

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1. Specifications

Antenna Specifications

Antenna Type (Material, Technology)	Flexi-film inverted F antenna over ABS carrier
Antenna Model Number	AN10087-V3-1L/R
Operating Frequency Range(s)	2.4GHz ~ 2.5GHz and 4.9GHz ~ 5.9GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	2.7 dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	2.5 dBi
Radio Connector Type	Hirose U.FL-LP-88 or IPEX 20278-111R-13
Mid-Line Connector Type (If Applicable)	N/A

Remark: Peak Gains include all system losses (connector, cable, etc)

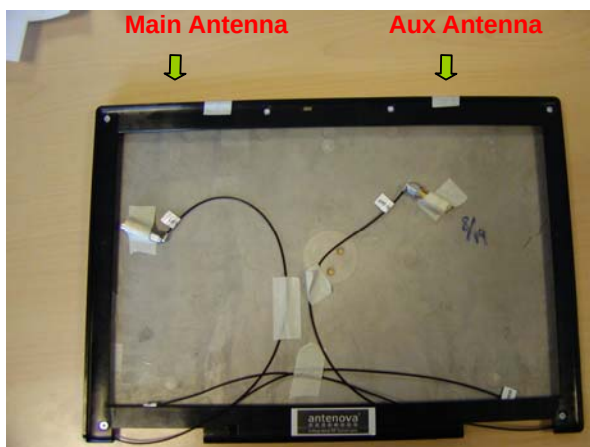
Cable Specifications

Cable Parameters	Main			Aux		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	N/A	N/A	485	N/A	N/A	655
Loss (Including Connectors) (dB, 2.4GHz / 5GHz)			1.16 / 1.79			1.57 / 2.42
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.37 mm Vendor: Grand-Tek-Technology			Color: White OD: 1.37 mm Vendor: Grand-Tek-Technology		

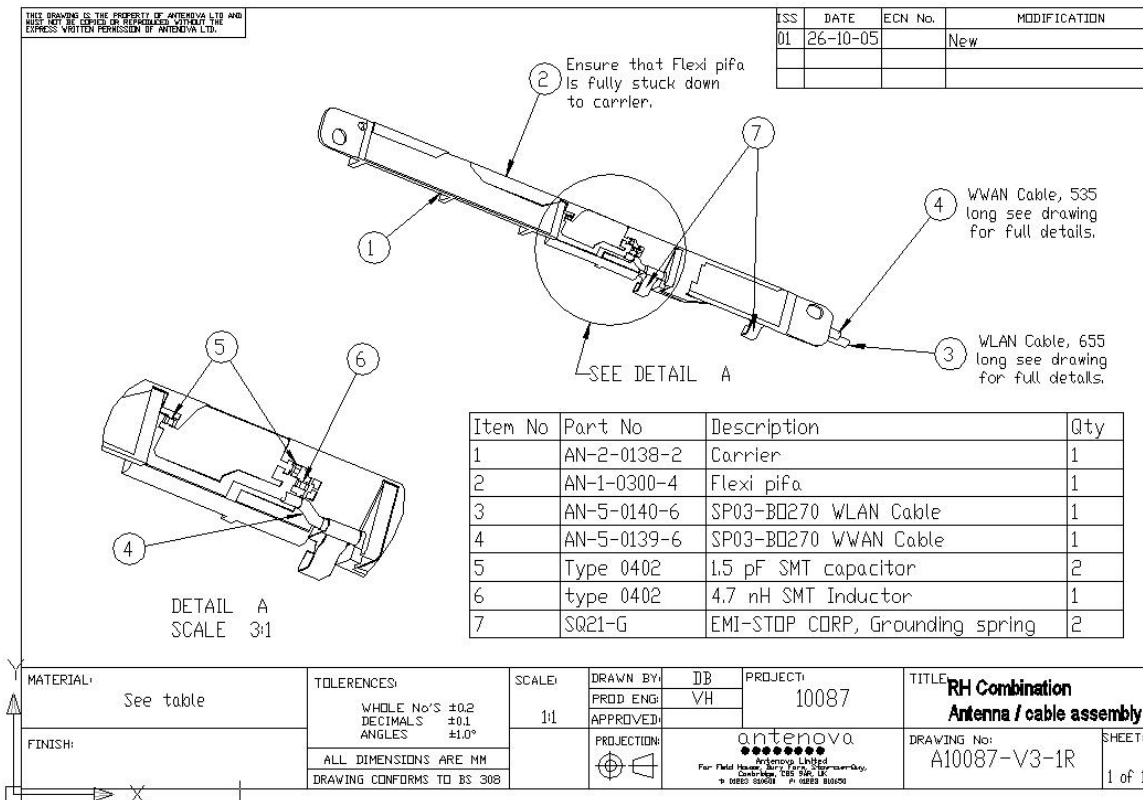
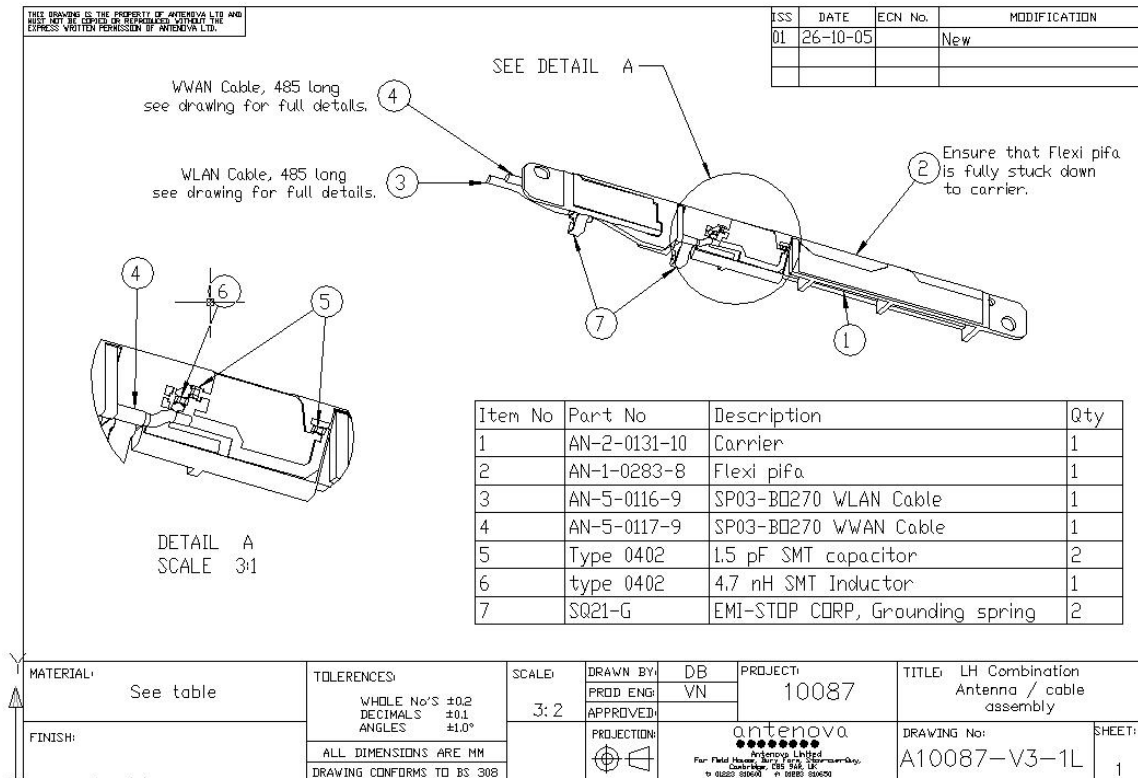
2. Antenna Assembly



3. Antenna Assembly Installed in The Notebook

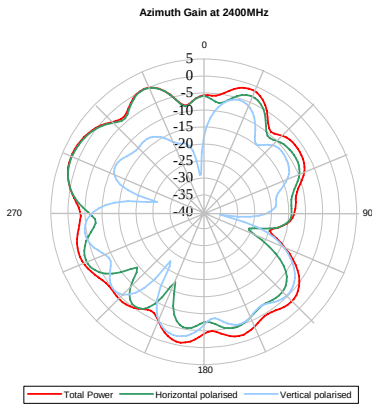


4. Mechanical Drawing of Antennas

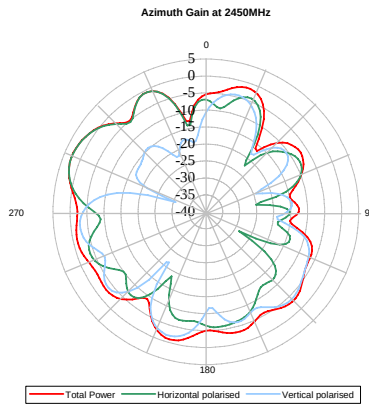


5. Gain Patterns

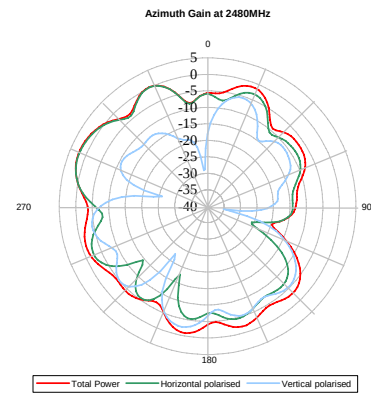
- Main Antenna



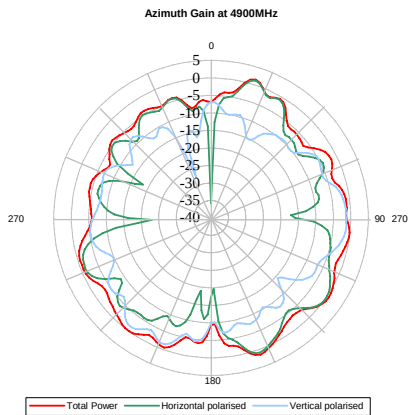
Frequency	2400MHz
Horizontal Peak Gain (dBi)	2.1
Vertical Peak Gain (dBi)	-2.6
Hori + Verti Peak Gain (dBi)	2.3
Hori + Vert Average Gain (dBi)	-3.2



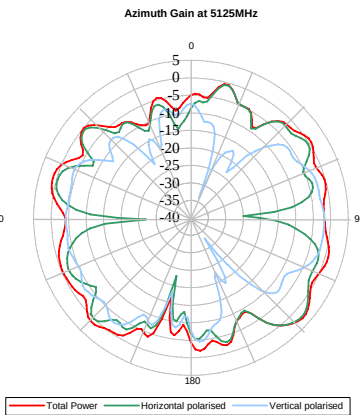
Frequency	2450MHz
Horizontal Peak Gain (dBi)	2.7
Vertical Peak Gain (dBi)	-2.0
Hori + Verti Peak Gain (dBi)	2.7
Hori + Vert Average Gain (dBi)	-3.3



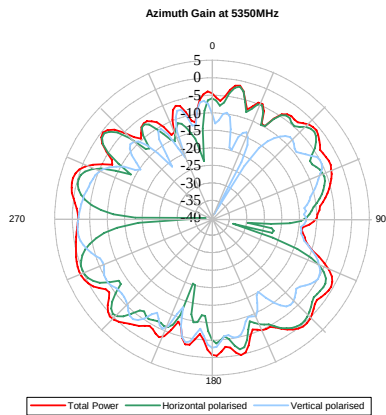
Frequency	2480MHz
Horizontal Peak Gain (dBi)	2.6
Vertical Peak Gain (dBi)	-2.1
Hori + Verti Peak Gain (dBi)	2.6
Hori + Vert Average Gain (dBi)	-3.5



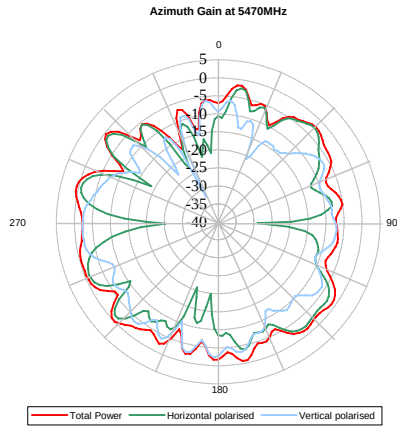
Frequency	4900MHz
Horizontal Peak Gain (dBi)	1.3
Vertical Peak Gain (dBi)	-1.2
Hori + Verti Peak Gain (dBi)	1.5
Hori + Vert Average Gain (dBi)	-2.4



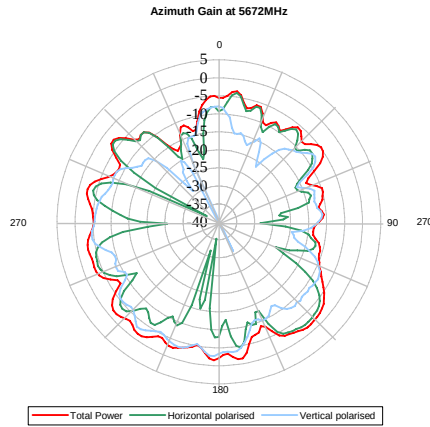
Frequency	5125MHz
Horizontal Peak Gain (dBi)	2.5
Vertical Peak Gain (dBi)	-1.7
Hori + Verti Peak Gain (dBi)	2.9
Hori + Vert Average Gain (dBi)	-1.8



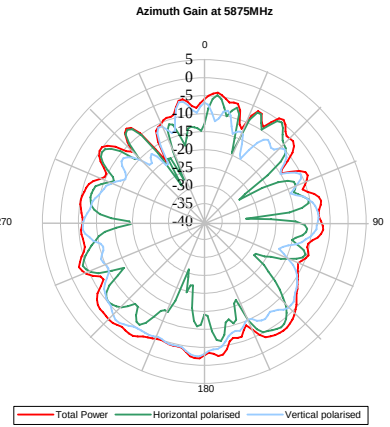
Frequency	5350MHz
Horizontal Peak Gain (dBi)	0.06
Vertical Peak Gain (dBi)	-1.4
Hori + Verti Peak Gain (dBi)	1.36
Hori + Vert Average Gain (dBi)	-2.7



Frequency	5470MHz
Horizontal Peak Gain (dBi)	-0.7
Vertical Peak Gain (dBi)	-2.1
Hori + Verti Peak Gain (dBi)	0.6
Hori + Vert Average Gain (dBi)	-3.5

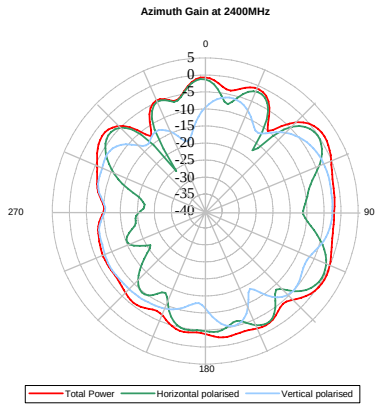


Frequency	5672MHz
Horizontal Peak Gain (dBi)	-2.6
Vertical Peak Gain (dBi)	-2.7
Hori + Verti Peak Gain (dBi)	-1.4
Hori + Vert Average Gain (dBi)	-5.1

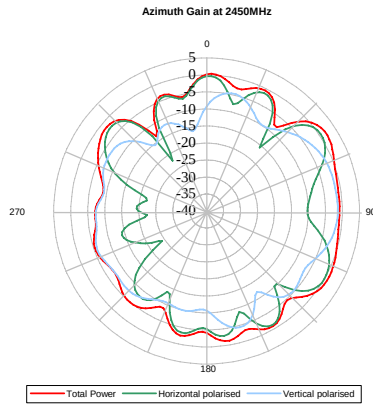


Frequency	5875MHz
Horizontal Peak Gain (dBi)	-3.6
Vertical Peak Gain (dBi)	-2.5
Hori + Verti Peak Gain (dBi)	-1.9
Hori + Vert Average Gain (dBi)	-5.7

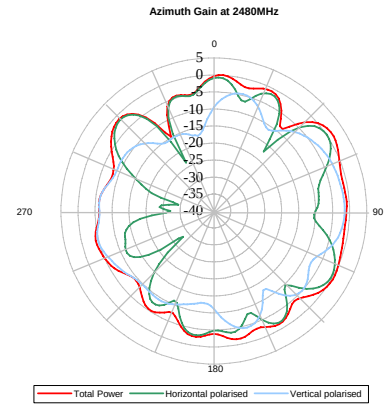
- Aux Antenna



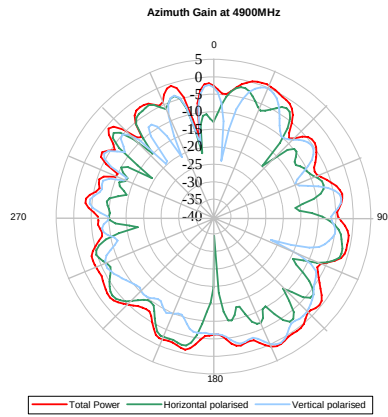
Frequency	2400MHz
Horizontal Peak Gain (dBi)	-0.18
Vertical Peak Gain (dBi)	-2.3
Hori + Verti Peak Gain (dBi)	1.4
Hori + Vert Average Gain (dBi)	-3.1



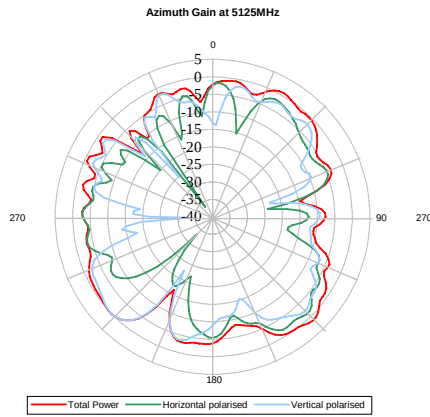
Frequency	2450MHz
Horizontal Peak Gain (dBi)	0.5
Vertical Peak Gain (dBi)	-1.3
Hori + Verti Peak Gain (dBi)	1.9
Hori + Vert Average Gain (dBi)	-2.5



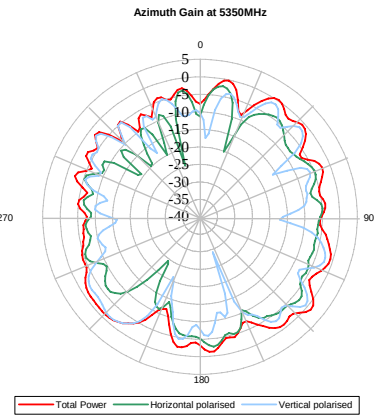
Frequency	2480MHz
Horizontal Peak Gain (dBi)	0.1
Vertical Peak Gain (dBi)	-1.5
Hori + Verti Peak Gain (dBi)	1.5
Hori + Vert Average Gain (dBi)	-2.7



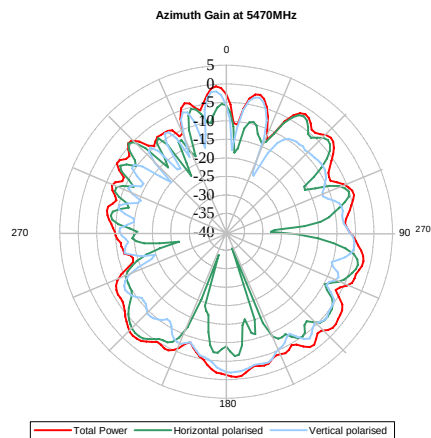
Frequency	4900MHz
Horizontal Peak Gain (dBi)	-1.8
Vertical Peak Gain (dBi)	0.9
Hori + Verti Peak Gain (dBi)	1.3
Hori + Vert Average Gain (dBi)	-2.9



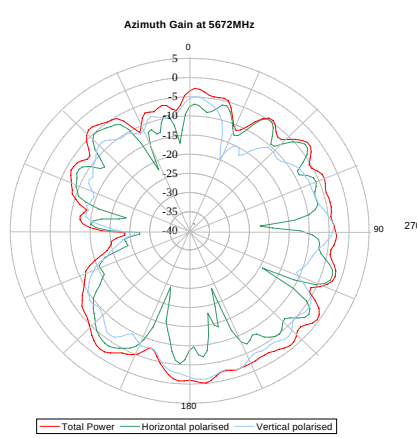
Frequency	5125MHz
Horizontal Peak Gain (dBi)	-1.27
Vertical Peak Gain (dBi)	0.1
Hori + Verti Peak Gain (dBi)	1.3
Hori + Vert Average Gain (dBi)	-2.8



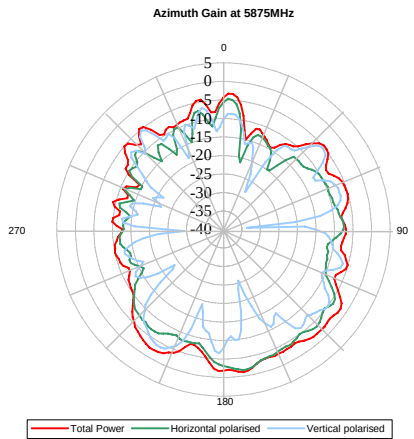
Frequency	5350MHz
Horizontal Peak Gain (dBi)	-2.0
Vertical Peak Gain (dBi)	-0.6
Hori + Verti Peak Gain (dBi)	1.3
Hori + Vert Average Gain (dBi)	-3.3



Frequency	5470MHz
Horizontal Peak Gain (dBi)	-2.3
Vertical Peak Gain (dBi)	-1.9
Hori + Verti Peak Gain (dBi)	-0.6
Hori + Vert Average Gain (dBi)	-4.5



Frequency	5672MHz
Horizontal Peak Gain (dBi)	-2.3
Vertical Peak Gain (dBi)	-1.1
Hori + Verti Peak Gain (dBi)	-0.1
Hori + Vert Average Gain (dBi)	-4.4



Frequency	5875MHz
Horizontal Peak Gain (dBi)	-1.63
Vertical Peak Gain (dBi)	-3.9
Hori + Verti Peak Gain (dBi)	-1.0
Hori + Vert Average Gain (dBi)	-5.7