

Antenna Regulatory Information

• Product type	• WLAN antenna
• Model number	• A10127-V1-1L/R
• Revision	• 1
• Manufacturer Part No. : Main / Aux	• A10127-V1-1L/A10127-V1-1R
• Dell Part No. : Main / Aux	•

Antenova Ltd.

Far Field House

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CB5 9AR

1. Specifications

Antenna Specifications

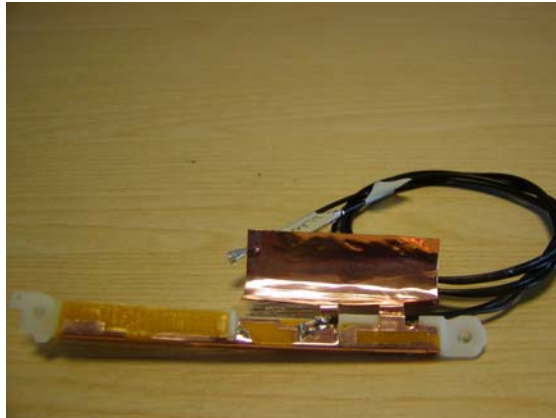
Antenna Type (Material, Technology)	Flexi-film inverted F antenna over ABS carrier
Antenna Model Number	A10127-V1-1L/R
Operating Frequency Range(s)	2.4GHz ~ 2.5GHz and 4.9GHz ~ 5.9GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	3.8 dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	2.0 dBi
Radio Connector Type	Hirose U.FL-LP-88
Mid-Line Connector Type (If Applicable)	N/A

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

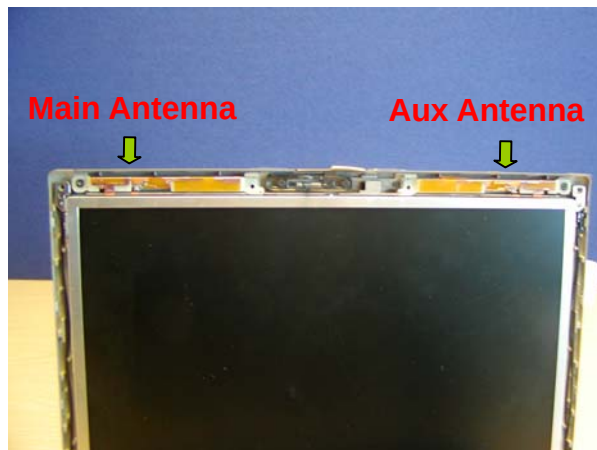
Cable Specifications

Cable Parameters	Main			Aux		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	180	280	479.25	180	341	540.25
Loss (Including Connectors) (dB, 2.4GHz / 5GHz)			1.10/1.78			1.24/2.01
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.37 mm Vendor: Grand-Tek-Technology			Color: Black OD: 1.37 mm Vendor: Grand-Tek-Technology		

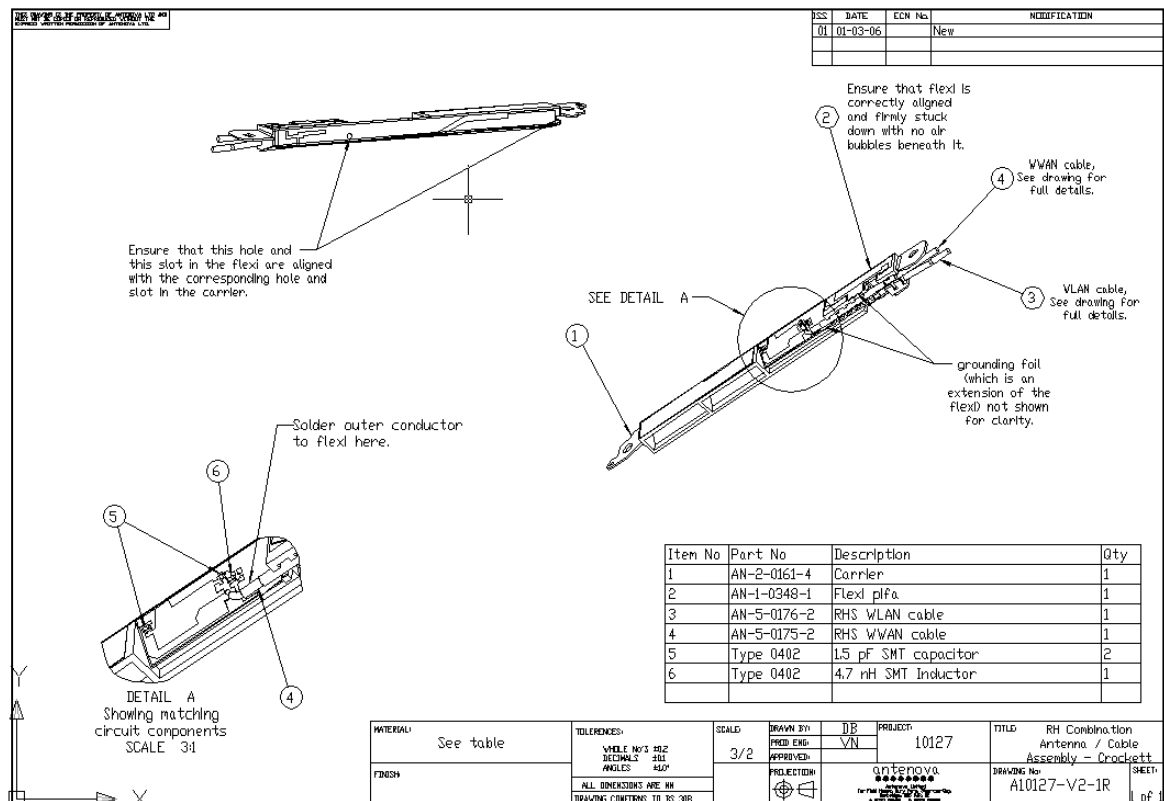
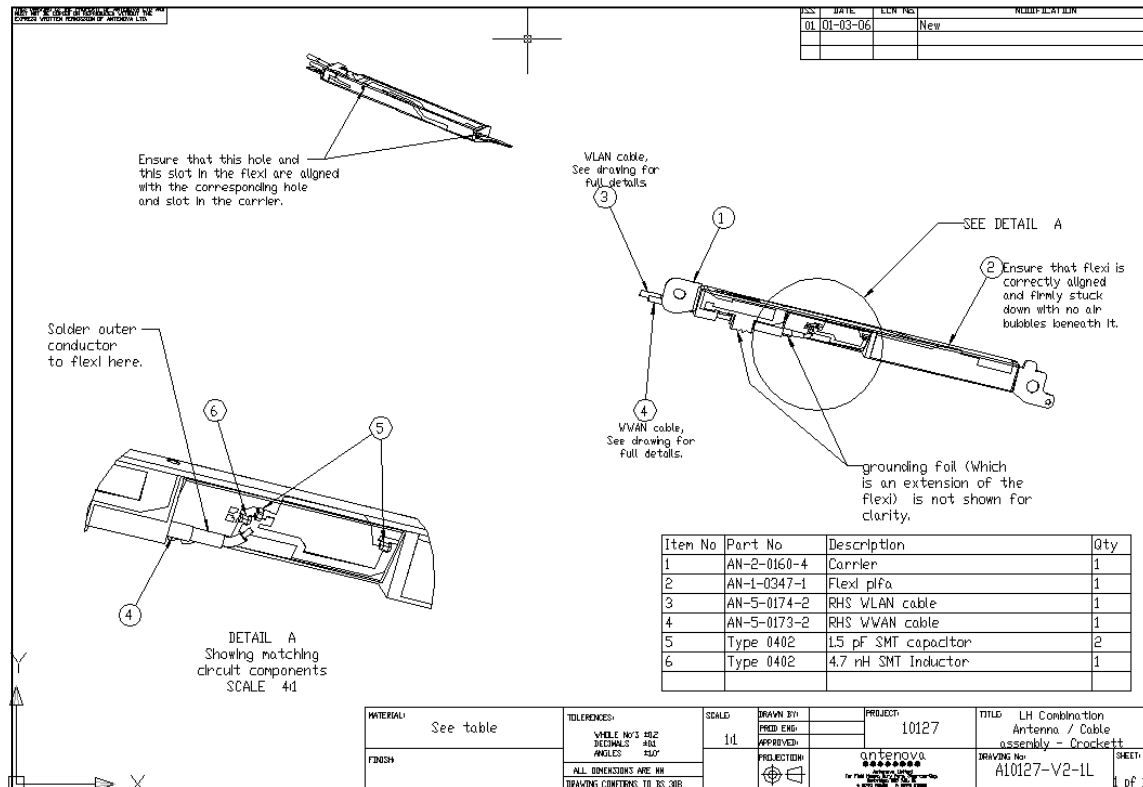
2. Antenna Assembly



3. Antenna Assembly Installed in The Notebook



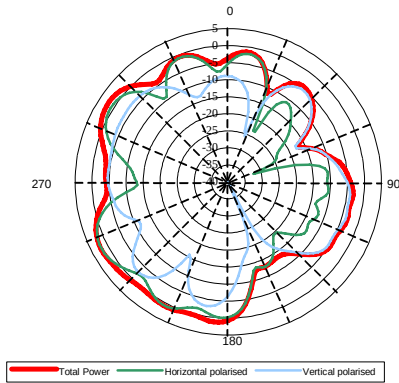
4. Mechanical Drawing of Antennas



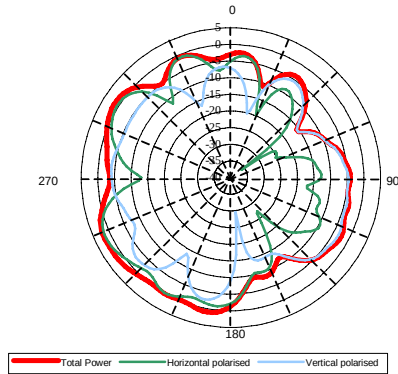
5. Gain Patternms

- Main Antenna

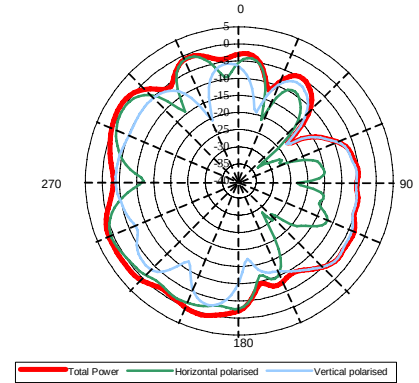
Azimuth Gain at 2400MHz



Azimuth Gain at 2450MHz



Azimuth Gain at 2480MHz

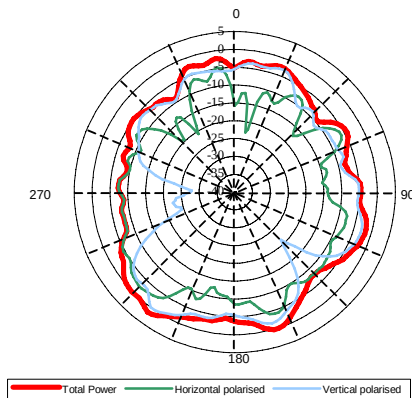


Frequency	2400MHz
Horizontal Peak Gain (dBi)	2.0
Vertical Peak Gain (dBi)	-2.7
Hori + Verti Peak Gain (dBi)	2.2
Hori + Vert Average Gain (dBi)	-2.1

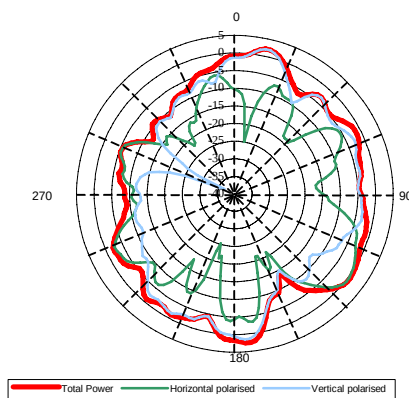
Frequency	2450MHz
Horizontal Peak Gain (dBi)	1.7
Vertical Peak Gain (dBi)	-2.5
Hori + Verti Peak Gain (dBi)	2.2
Hori + Vert Average Gain (dBi)	-2.2

Frequency	2480MHz
Horizontal Peak Gain (dBi)	-0.2
Vertical Peak Gain (dBi)	-2.7
Hori + Verti Peak Gain (dBi)	1.0
Hori + Vert Average Gain (dBi)	-3.1

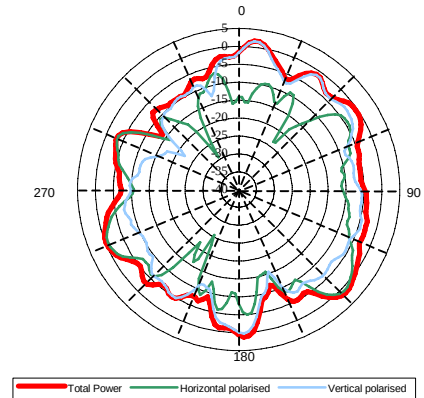
Azimuth Gain at 4900MHz



Azimuth Gain at 5125MHz



Azimuth Gain at 5350MHz

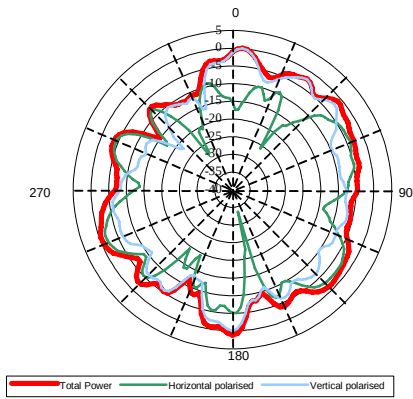


Frequency	4900MHz
Horizontal Peak Gain (dBi)	-2.4
Vertical Peak Gain (dBi)	0.0
Hori + Verti Peak Gain (dBi)	1.6
Hori + Vert Average Gain (dBi)	-3.8

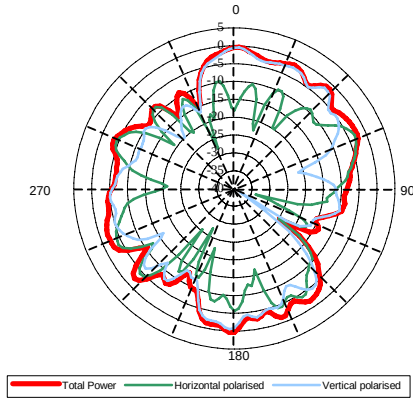
Frequency	5125MHz
Horizontal Peak Gain (dBi)	0.3
Vertical Peak Gain (dBi)	2.0
Hori + Verti Peak Gain (dBi)	2.6
Hori + Vert Average Gain (dBi)	-2.8

Frequency	5350MHz
Horizontal Peak Gain (dBi)	0.9
Vertical Peak Gain (dBi)	1.7
Hori + Verti Peak Gain (dBi)	1.8
Hori + Vert Average Gain (dBi)	-3.1

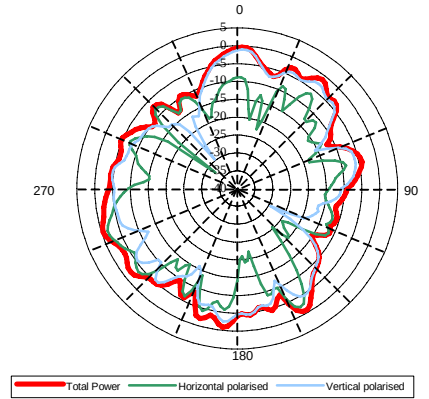
Azimuth Gain at 5470MHz



Azimuth Gain at 5672MHz



Azimuth Gain at 5875MHz



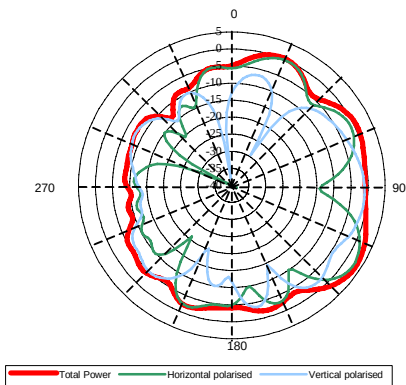
Frequency	5470MHz
Horizontal Peak Gain (dBi)	-1.7
Vertical Peak Gain (dBi)	0.0
Hori + Verti Peak Gain (dBi)	1.1
Hori + Vert Average Gain (dBi)	-3.9

Frequency	5672MHz
Horizontal Peak Gain (dBi)	-3.2
Vertical Peak Gain (dBi)	-0.5
Hori + Verti Peak Gain (dBi)	0.3
Hori + Vert Average Gain (dBi)	-4.4

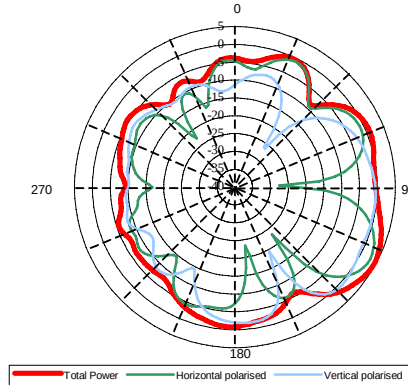
Frequency	5875MHz
Horizontal Peak Gain (dBi)	-1.7
Vertical Peak Gain (dBi)	-1.0
Hori + Verti Peak Gain (dBi)	-0.3
Hori + Vert Average Gain (dBi)	-4.8

- Aux Antenna

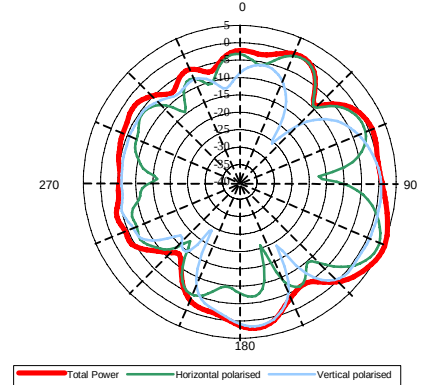
Azimuth Gain at 2400MHz



Azimuth Gain at 2450MHz



Azimuth Gain at 2480MHz

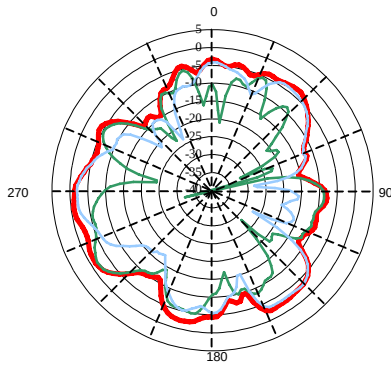


Frequency	2400MHz
Horizontal Peak Gain (dBi)	2.6
Vertical Peak Gain (dBi)	-1.0
Hori + Verti Peak Gain (dBi)	3.4
Hori + Vert Average Gain (dBi)	-2.3

Frequency	2450MHz
Horizontal Peak Gain (dBi)	3.0
Vertical Peak Gain (dBi)	0.8
Hori + Verti Peak Gain (dBi)	4.6
Hori + Vert Average Gain (dBi)	-2.0

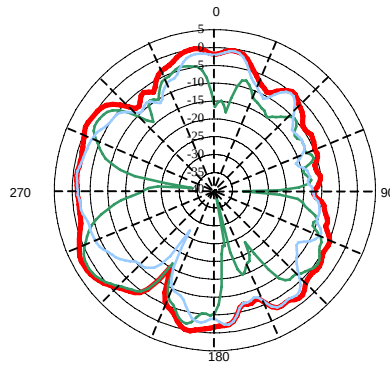
Frequency	2480MHz
Horizontal Peak Gain (dBi)	3.8
Vertical Peak Gain (dBi)	1.7
Hori + Verti Peak Gain (dBi)	5.5
Hori + Vert Average Gain (dBi)	-1.1

Azimuth Gain at 4900MHz



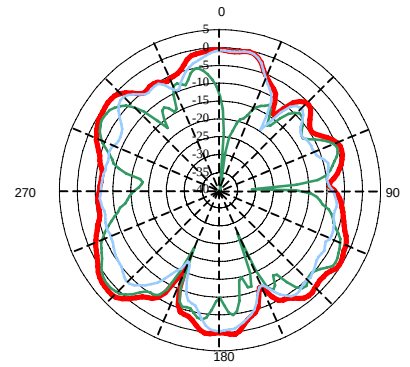
— Total Power — Horizontal polarised — Vertical polarised

Azimuth Gain at 5125MHz



— Total Power — Horizontal polarised — Vertical polarised

Azimuth Gain at 5350MHz



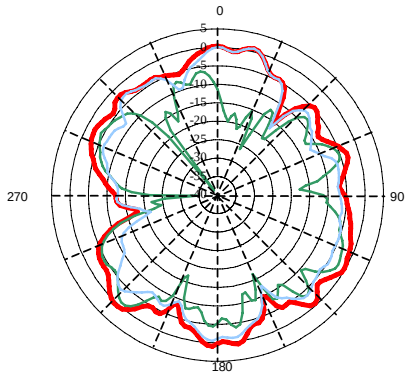
— Total Power — Horizontal polarised — Vertical polarised

Frequency	4900MHz
Horizontal Peak Gain (dBi)	-1.9
Vertical Peak Gain (dBi)	-2.0
Hori + Verti Peak Gain (dBi)	-0.8
Hori + Vert Average Gain (dBi)	-5.1

Frequency	5125MHz
Horizontal Peak Gain (dBi)	1.6
Vertical Peak Gain (dBi)	-0.6
Hori + Verti Peak Gain (dBi)	2.4
Hori + Vert Average Gain (dBi)	-2.8

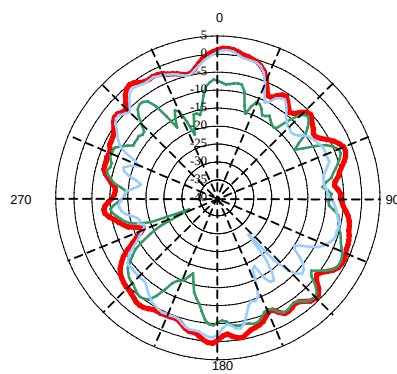
Frequency	5350MHz
Horizontal Peak Gain (dBi)	1.1
Vertical Peak Gain (dBi)	-0.4
Hori + Verti Peak Gain (dBi)	2.2
Hori + Vert Average Gain (dBi)	-2.8

Azimuth Gain at 5470MHz



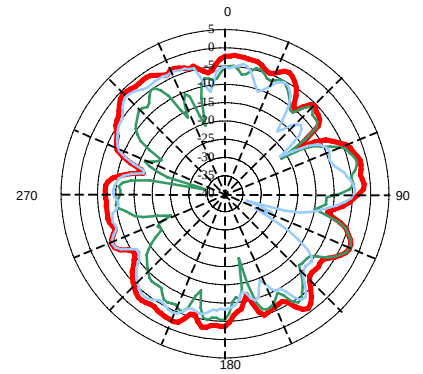
— Total Power — Horizontal polarised — Vertical polarised

Azimuth Gain at 5672MHz



— Total Power — Horizontal polarised — Vertical polarised

Azimuth Gain at 5875MHz



— Total Power — Horizontal polarised — Vertical polarised

Frequency	5470MHz
Horizontal Peak Gain (dBi)	-1.0
Vertical Peak Gain (dBi)	0.8
Hori + Verti Peak Gain (dBi)	0.9
Hori + Vert Average Gain (dBi)	-3.2

Frequency	5672MHz
Horizontal Peak Gain (dBi)	-1.4
Vertical Peak Gain (dBi)	1.2
Hori + Verti Peak Gain (dBi)	1.7
Hori + Vert Average Gain (dBi)	-3.4

Frequency	5875MHz
Horizontal Peak Gain (dBi)	-2.7
Vertical Peak Gain (dBi)	-2.0
Hori + Verti Peak Gain (dBi)	-0.9
Hori + Vert Average Gain (dBi)	-4.6