

Antenna Regulatory Information

• Product type	• WLAN antenna
• Model number	• DELL Travis (HAL00)
• Revision	• A01
• Manufacturer Part No. : Main / Aux	• S03011-L-1-FPCB • S03011-R-FPCB
• Dell Part No. : Main / Aux	• DC330007L0L/DC330007M0L

Amphenol

Shanghai Amphenol Airwave Communication Electronics Co., LTD
No. 88 Lai Ting S. Rd, Jiu Ting, Song Jiang,
Shanghai, China (201615)

1. Specifications

Antenna Specifications

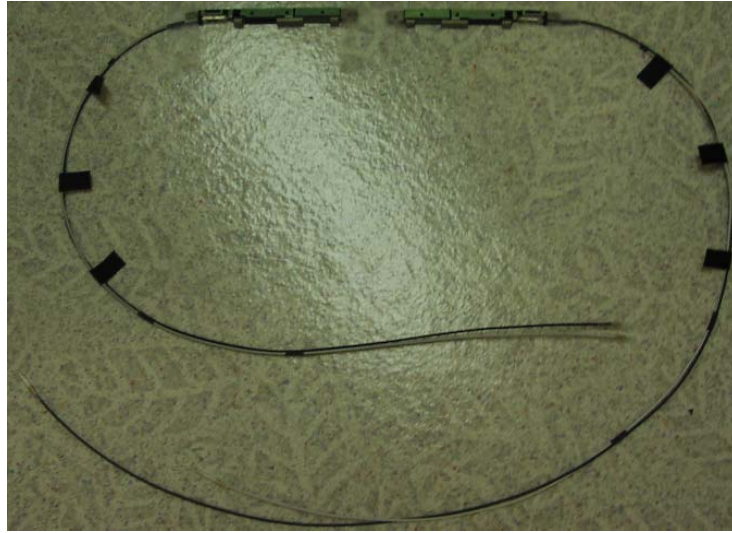
Antenna Type (Material, Technology)	Flex, Inverted-F Antenna (IFA)
Antenna Model Number	DELL Travis (HAL00)
Operating Frequency Range(s)	2.4GHz ~ 2.5GHz and 4.9GHz ~ 5.9GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	-0.26 dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	2.66 dBi
Radio Connector Type	IPEX 20308-111R-32/ 20363-111R-37 or equivalent connector
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	493	N/A	N/A	543
Loss (Including Connectors) (dB, 2.4GHz / 5GHz)			1.27/ 2.10			1.39 / 2.23
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.32~1.37 mm Vendor: GBE or equivalent			Color: Black OD: 1.32~1.37 mm Vendor: GBE or equivalent		

2. Antenna Assembly

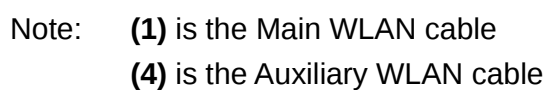


3. Antenna Assembly Installed in The Notebook

Aux Antenna

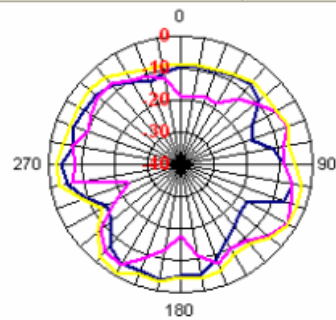
Main Antenna





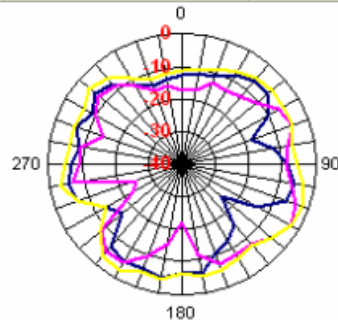
5. Gain Patterns

- Main Antenna



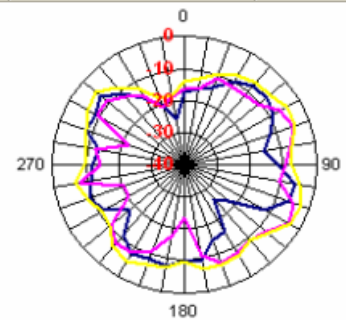
— Vertical — Horizontal — Total

Centre Frequency	2412 MHz
Horizontal peak gain (dBi)	-2.64
Vertical peak gain (dBi)	-3.34
Hori + Vert peak gain (dBi)	-1.06
Hori + Vert ave gain (dBi)	-5.07



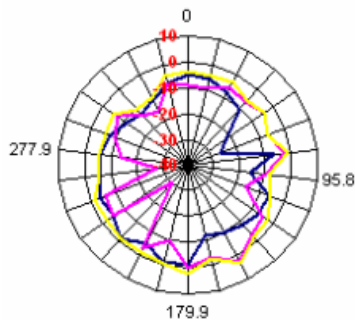
— Vertical — Horizontal — Total

Centre Frequency	2437 MHz
Horizontal peak gain (dBi)	-2.46
Vertical peak gain (dBi)	-4.75
Hori + Vert peak gain (dBi)	-2.12
Hori + Vert ave gain (dBi)	-5.76



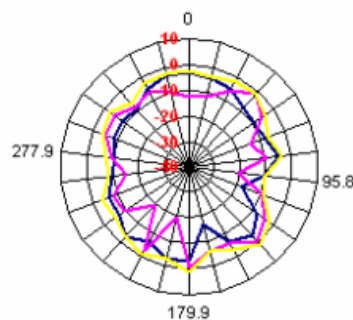
— Vertical — Horizontal — Total

Centre Frequency	2462 MHz
Horizontal peak gain (dBi)	-3.83
Vertical peak gain (dBi)	-6.25
Hori + Vert peak gain (dBi)	-2.53
Hori + Vert ave gain (dBi)	-7.38



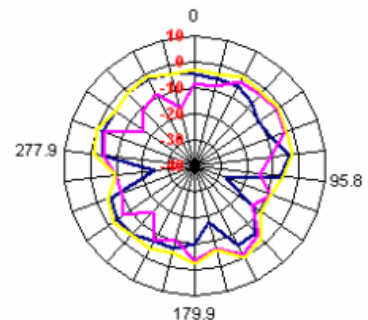
— Vertical — Horizontal — Total

Centre Frequency	4900 MHz
Horizontal peak gain (dBi)	2.36
Vertical peak gain (dBi)	-1.16
Hori + Vert peak gain (dBi)	2.59
Hori + Vert ave gain (dBi)	-2.98



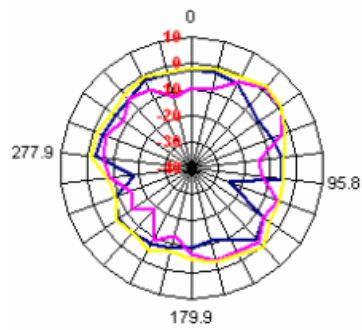
— Vertical — Horizontal — Total

Centre Frequency	5150 MHz
Horizontal peak gain (dBi)	-0.87
Vertical peak gain (dBi)	-3.05
Hori + Vert peak gain (dBi)	1.11
Hori + Vert ave gain (dBi)	-3.38



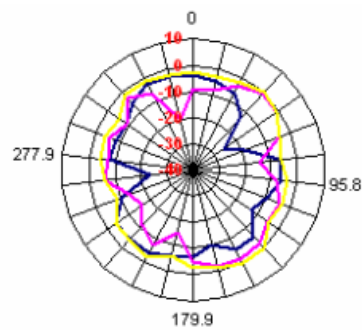
— Vertical — Horizontal — Total

Centre Frequency	5350 MHz
Horizontal peak gain (dBi)	-1.26
Vertical peak gain (dBi)	-2.24
Hori + Vert peak gain (dBi)	0.25
Hori + Vert ave gain (dBi)	-3.01



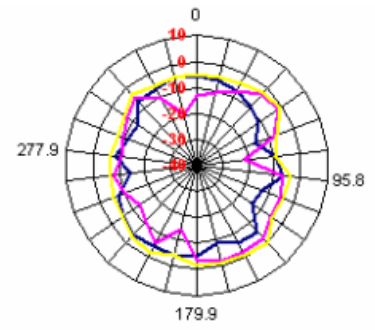
Vertical Horizontal Total

Centre Frequency	5470 MHz
Horizontal peak gain (dBi)	1.03
Vertical peak gain (dBi)	-2.18
Hori + Vert peak gain (dBi)	1.51
Hori + Vert ave gain (dBi)	-2.47



Vertical Horizontal Total

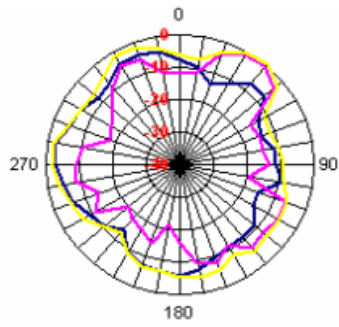
Centre Frequency	5725 MHz
Horizontal peak gain (dBi)	-0.80
Vertical peak gain (dBi)	-3.15
Hori + Vert peak gain (dBi)	-0.15
Hori + Vert ave gain (dBi)	-3.16



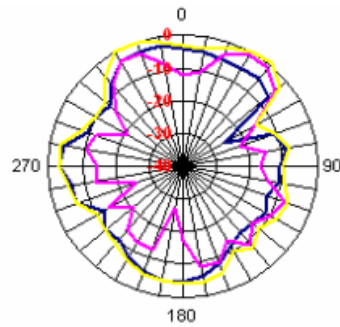
Vertical Horizontal Total

Centre Frequency	5875 MHz
Horizontal peak gain (dBi)	-2.20
Vertical peak gain (dBi)	-4.14
Hori + Vert peak gain (dBi)	-0.54
Hori + Vert ave gain (dBi)	-4.21

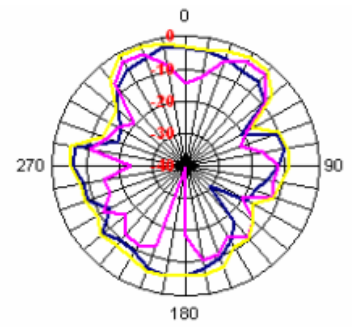
- Aux Antenna



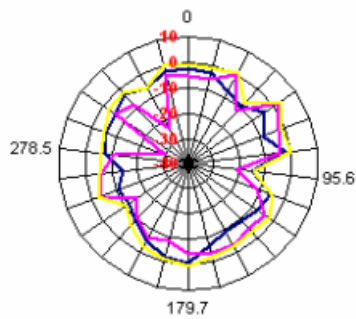
Centre Frequency	
Horizontal peak gain (dBi)	-0.26
Vertical peak gain (dBi)	-2.55
Hori + Vert peak gain (dBi)	0.54
Hori + Vert ave gain (dBi)	-4.77



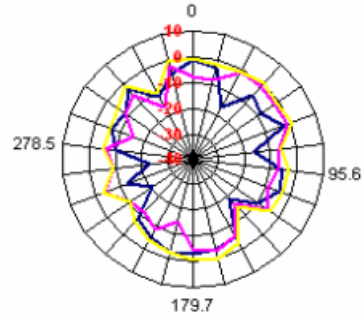
Centre Frequency	
Horizontal peak gain (dBi)	-0.72
Vertical peak gain (dBi)	-2.93
Hori + Vert peak gain (dBi)	0.74
Hori + Vert ave gain (dBi)	-4.48



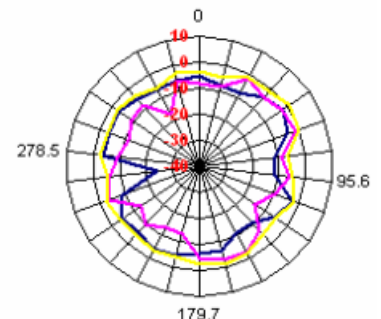
Centre Frequency	
Horizontal peak gain (dBi)	-2.82
Vertical peak gain (dBi)	-3.03
Hori + Vert peak gain (dBi)	-0.90
Hori + Vert ave gain (dBi)	-5.66



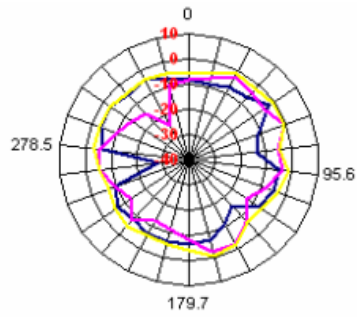
Centre Frequency	
Horizontal peak gain (dBi)	1.66
Vertical peak gain (dBi)	-0.77
Hori + Vert peak gain (dBi)	2.61
Hori + Vert ave gain (dBi)	-2.31



Centre Frequency	
Horizontal peak gain (dBi)	-1.20
Vertical peak gain (dBi)	-1.30
Hori + Vert peak gain (dBi)	0.54
Hori + Vert ave gain (dBi)	-2.76

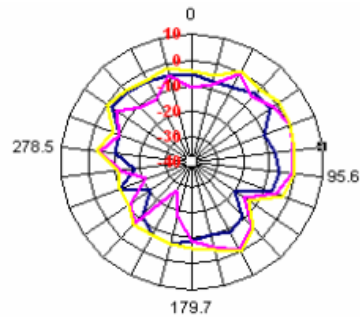


Centre Frequency	
Horizontal peak gain (dBi)	-1.78
Vertical peak gain (dBi)	-1.54
Hori + Vert peak gain (dBi)	1.16
Hori + Vert ave gain (dBi)	-2.98



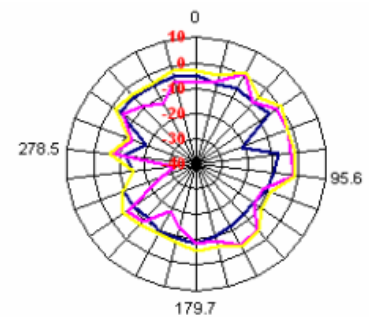
— Vertical — Horizontal — Total

Centre Frequency	5470 MHz
Horizontal peak gain (dBi)	-1.42
Vertical peak gain (dBi)	-2.61
Hori + Vert peak gain (dBi)	-0.63
Hori + Vert ave gain (dBi)	-3.76



— Vertical — Horizontal — Total

Centre Frequency	5725 MHz
Horizontal peak gain (dBi)	0.05
Vertical peak gain (dBi)	-2.78
Hori + Vert peak gain (dBi)	0.41
Hori + Vert ave gain (dBi)	-3.39



— Vertical — Horizontal — Total

Centre Frequency	5875 MHz
Horizontal peak gain (dBi)	0.05
Vertical peak gain (dBi)	-4.32
Hori + Vert peak gain (dBi)	0.92
Hori + Vert ave gain (dBi)	-4.27