

Antenna Regulatory Information

• Product type	• WLAN antenna
• Model number	• Spears
• Revision	• Rev. 1
• Manufacturer Part No. : Main / Aux	• AMP8P-700036 (Main) • APP8P-700002 (Aux)
• Dell Part No. : Main / Aux / MIMO	•

ADVANCED-CONNECTEK INC.

B1, No. 205, Sec.3, Bei-Hsin Rd., Hsin-Tien

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TEL : 886-2-8913-1939

FAX : 886-2-8913-2538

Http : //www.acon.com

Template Revision 062007

1. Specifications

Antenna Specifications

Antenna Type (Material, Technology)	PIFA
Antenna Model Number	Spears
Operating Frequency Range(s)	2.4GHz ~ 2.5GHz and 4.9GHz ~ 5.9GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main / Aux -0.31 / 3.12
Peak Gain (802.11a / 5GHz Band) (dBi)	Main / Aux 0.82 / -0.35
Radio Connector Type	20531-111R-37
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	726	N/A	N/A	398
Loss (Including Connectors) (dB, 2.4GHz / 5GHz)			1.3 / 2.3			1.2 / 2.0
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.37mm Vendor: Kurabe/Hitachi/Sumitomo			Color: Black OD: 1.37mm Vendor: Kurabe/Hitachi/Sumitomo		

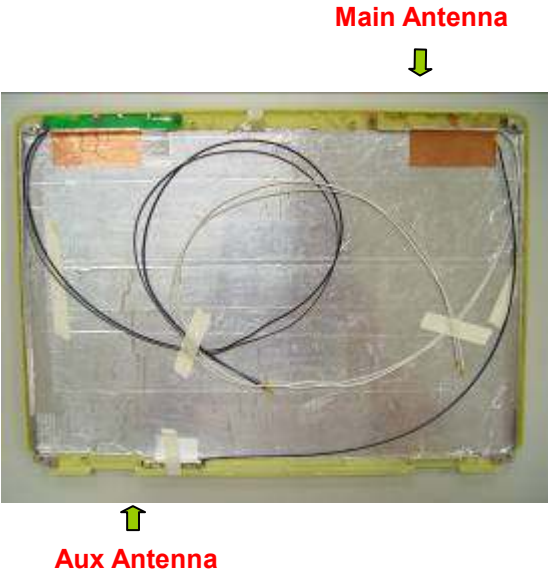
2. Antenna Assembly



Main Antenna

Aux Antenna

3. Antenna Assembly Installed in The Notebook

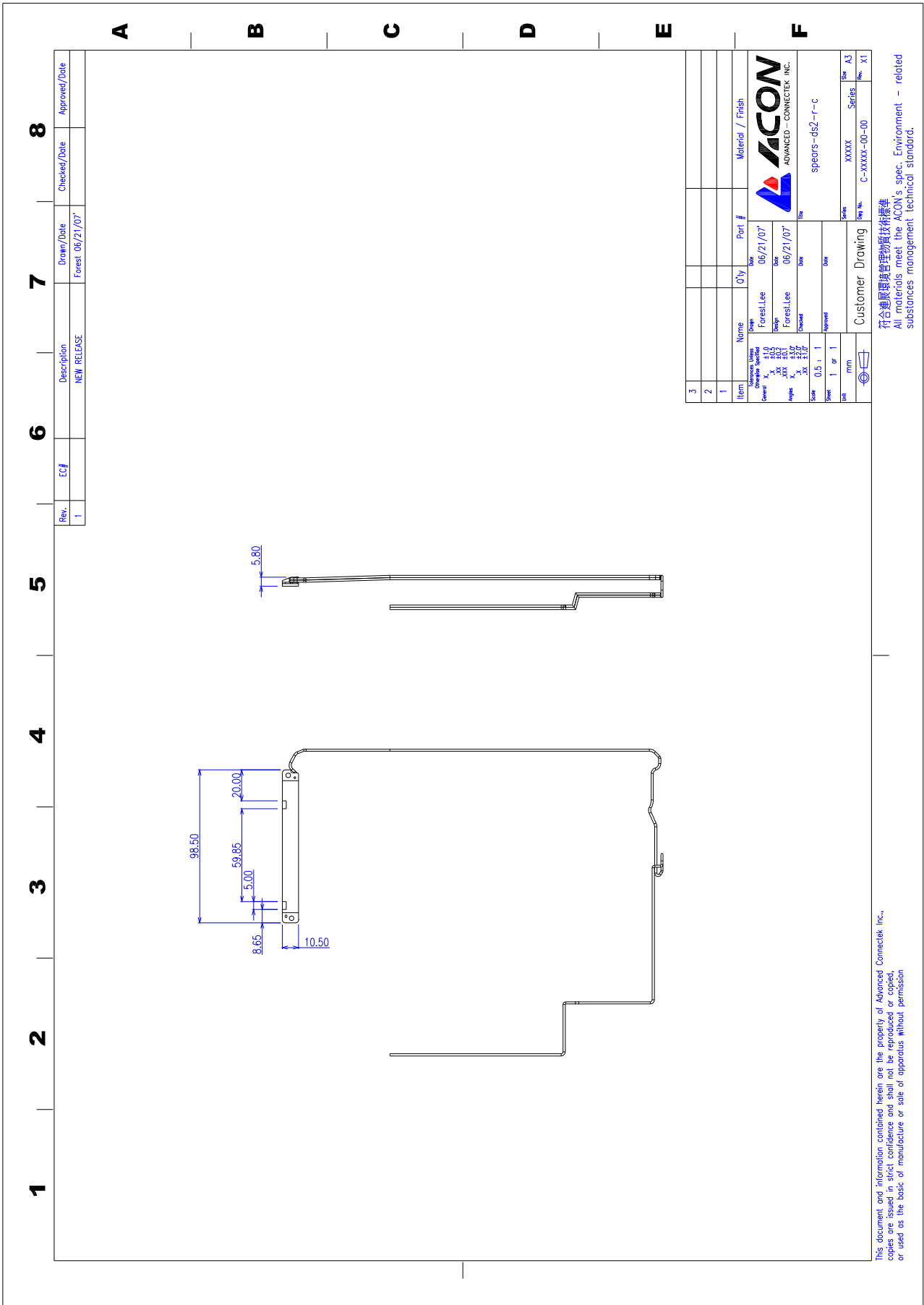


Main Antenna



Aux Antenna

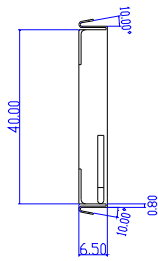
4. Mechanical Drawing of Antennas



1 2 3 4 5 6 7 8

A B C D E F

Rev.	ECJ	Description	Drawn/Date	Checked/Date	Approved/Date
1		NEW RELEASE	Forest 06/21/07		



3	Item	Name	Qty	Part #	Material / Finish
2					
1					

<table border="0"> <tr><td>UTER</td><td>Date</td></tr> <tr><td>06/21/07</td><td></td></tr> </table>	UTER	Date	06/21/07		<table border="0"> <tr><td>Forest,Leb</td><td>Date</td></tr> <tr><td>06/21/07</td><td></td></tr> </table>	Forest,Leb	Date	06/21/07																							
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Scale	1 : 1	Approved	Date
Sheet	1 of 1		
UNIT	mm		

Customer Drawing			
Series	XXX	Series	A3
Doc No.	C-XXXX-00-00	Series	X1

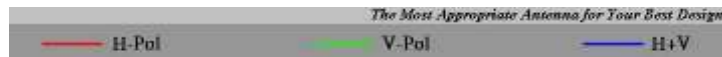


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5. Gain Patterns

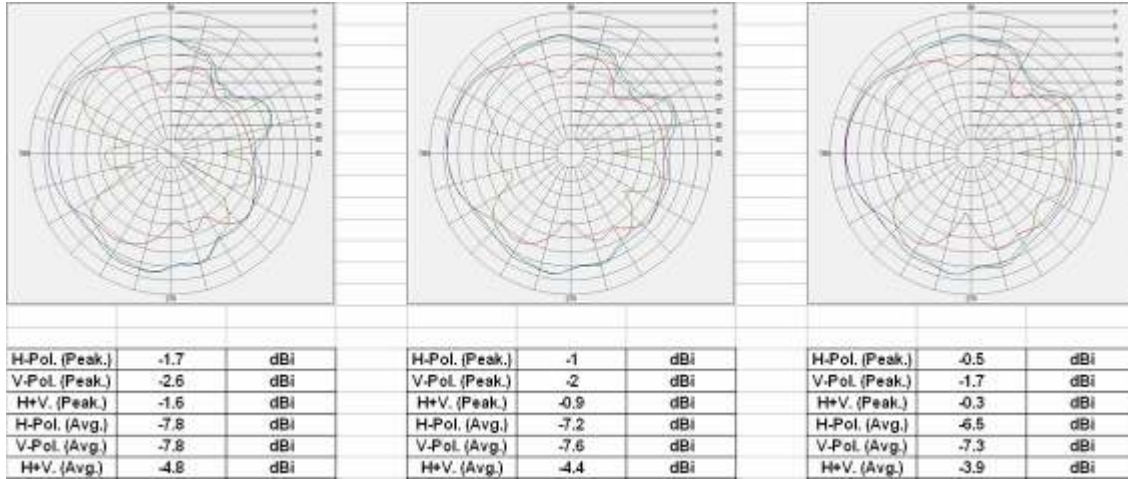
- Main Antenna



Fre. = 2412 MHz

Fre. = 2437 MHz

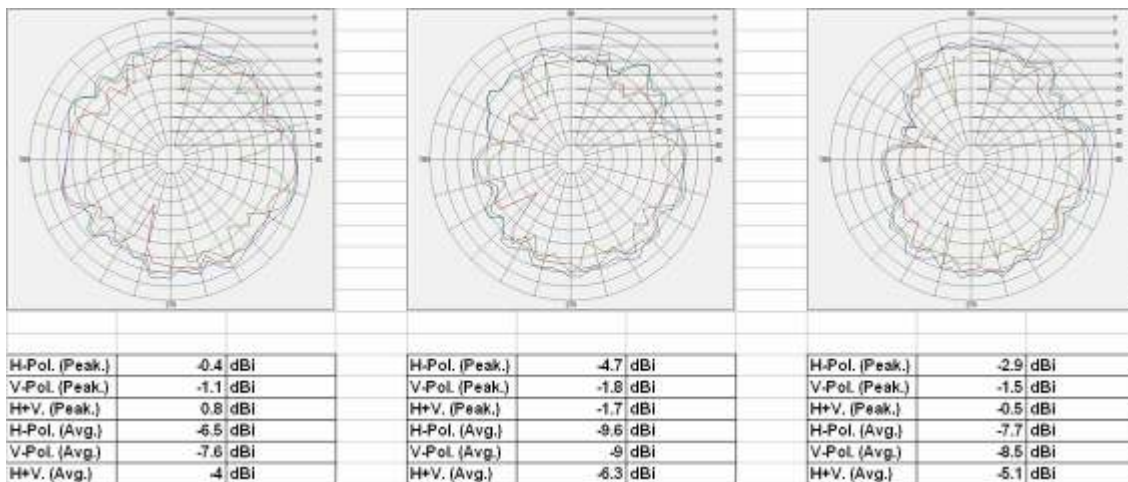
Fre. = 2462 MHz



Fre. = 4900 MHz

Fre. = 5150 MHz

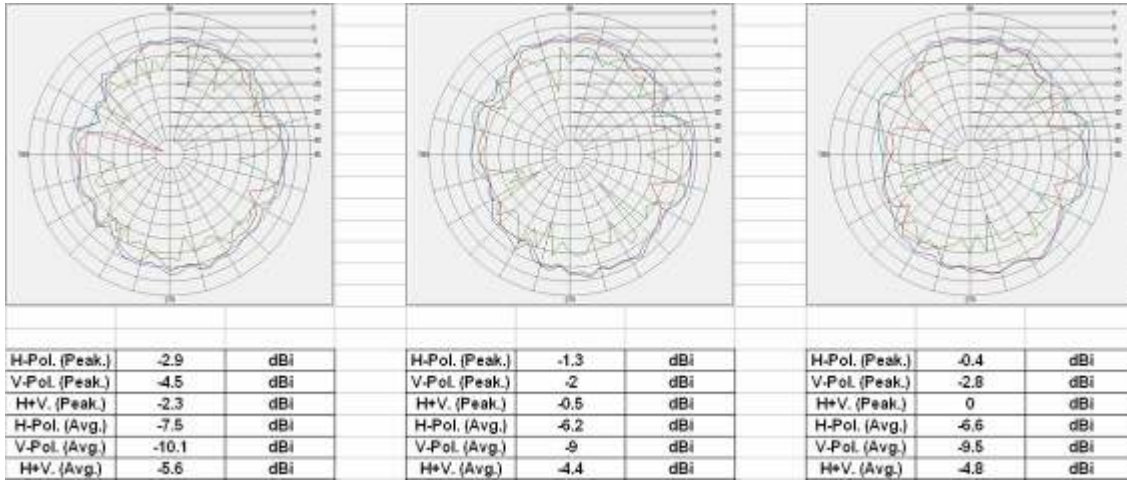
Fre. = 5350 MHz



Fre. = 5470 MHz

Fre. = 5725 MHz

Fre. = 5875 MHz



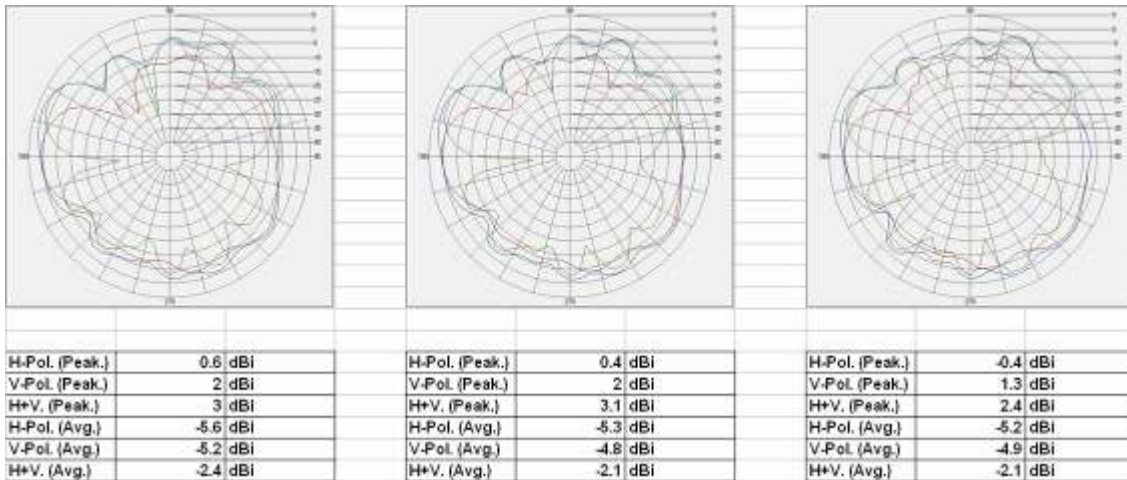
- Aux Antenna



Fre. = 2412 MHz

Fre. = 2437 MHz

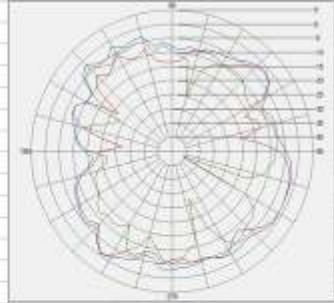
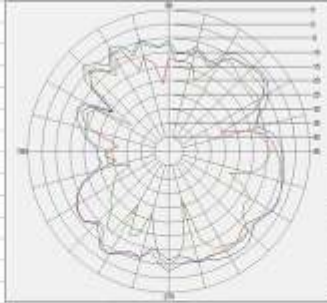
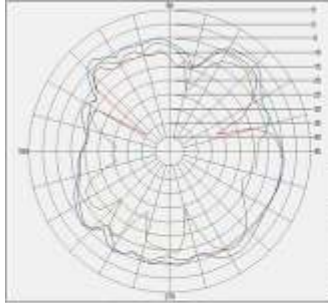
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H-Pol. (Peak.)	-3.4	dBi
V-Pol. (Peak.)	-3.8	dBi
H+V. (Peak.)	-1.3	dBi
H-Pol. (Avg.)	-7.4	dBi
V-Pol. (Avg.)	-10	dBi
H+V. (Avg.)	-5.5	dBi

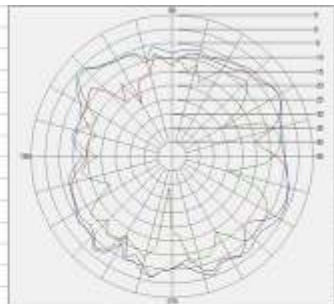
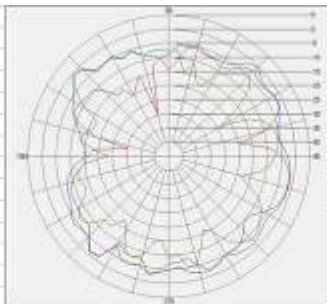
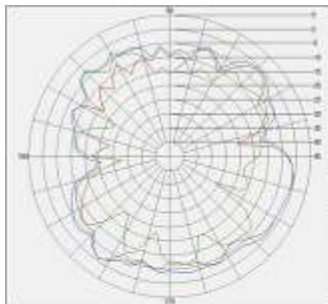
H-Pol. (Peak.)	-2.5	dBi
V-Pol. (Peak.)	-3.7	dBi
H+V. (Peak.)	-1.6	dBi
H-Pol. (Avg.)	-7	dBi
V-Pol. (Avg.)	-10	dBi
H+V. (Avg.)	-5.3	dBi

H-Pol. (Peak.)	-1	dBi
V-Pol. (Peak.)	-3.4	dBi
H+V. (Peak.)	-0.7	dBi
H-Pol. (Avg.)	-6.3	dBi
V-Pol. (Avg.)	-9.4	dBi
H+V. (Avg.)	-4.5	dBi

Fre. = 5470 MHz

Fre. = 5725 MHz

Fre. = 5875 MHz



H-Pol. (Peak.)	-0.5	dBi
V-Pol. (Peak.)	-3	dBi
H+V. (Peak.)	-0.5	dBi
H-Pol. (Avg.)	-5.7	dBi
V-Pol. (Avg.)	-9.3	dBi
H+V. (Avg.)	-4.1	dBi

H-Pol. (Peak.)	-1.3	dBi
V-Pol. (Peak.)	-1.2	dBi
H+V. (Peak.)	-0.4	dBi
H-Pol. (Avg.)	-6.1	dBi
V-Pol. (Avg.)	-8.2	dBi
H+V. (Avg.)	-4	dBi

H-Pol. (Peak.)	-1.1	dBi
V-Pol. (Peak.)	-1.4	dBi
H+V. (Peak.)	-0.7	dBi
H-Pol. (Avg.)	-6.1	dBi
V-Pol. (Avg.)	-8.8	dBi
H+V. (Avg.)	-4.2	dBi