Gilbert Antenna Regulatory Information

Description : Triple-band Antenna(Main+Aux)
Compal Computer Inc. P/N: DC330014500

Wistron NeWeb P/N: DC330014500

Wistron NeWeb Corporation

No. 10-1,Li-hsin Road I,
Science-base Industrial Park,
Hsinchu 300,Taiwan, R.O.C.
Tel: 886-3-6667799#6568
Fax: 886-3-6667323

Provided by **Wistron NeWeb Corp.**	Reviewed by **Wistron NeWeb Corp.**
Yuan Li Chang	***Weili Cheng***

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Wistron NeWeb Corp.

2004/9/13

Antenna Specifications

Antenna Type (Material, Technology)	Technology => PIFA, Material =>Metal sheet (For both main and aux antenna)
Antenna Model Number	Tobago / EBY-C / DC330014500
Operating Frequency Range(s)	2.4 ~ 2.4835GHz / 4.9 ~ 5.35GHz / 5.47 ~ 5.875GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main antenna: 2.61dBi, Aux antenna: 2.02dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	Main antenna: 2.37dBi, Aux antenna: 1.14dBi
Radio Connector Type	IPEX MHF 37type connector, HRS U.FL-LP
Mid-Line Connector Type (If Applicable)	NA

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)	NA	NA	375	NA	NA	490
Loss (Including Connectors) (dB) (2.4GHz / 5GHz)	NA	NA	1.27/1.80	NA	NA	1.56/2.23
Description (Color, Diameter, Manufacturer)	Color: white Diameter: F 1.37mm Manufacturer: Junkosha, Kurabe or equivlent cable			Color: black Diameter: F 1.37mm Manufacturer: Junkosha, Kurabe or equivlent 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)

- **Peak Gain**

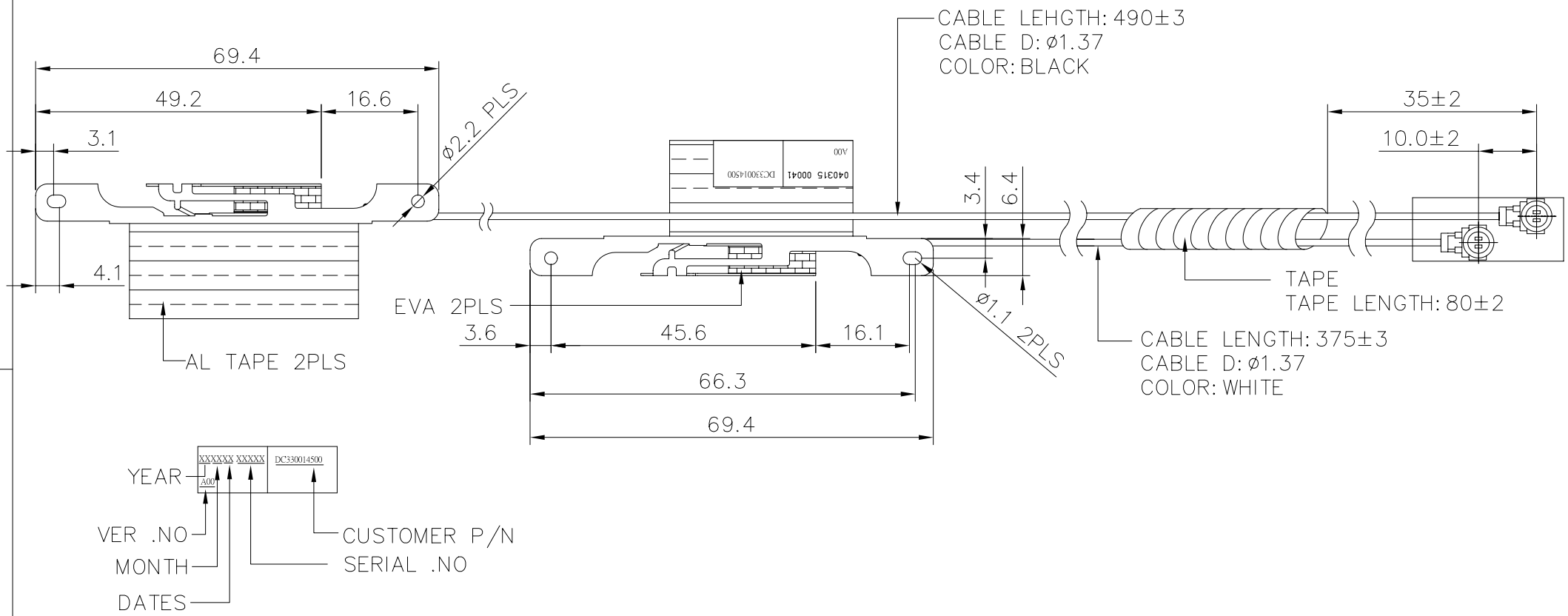
Frequency	Main antenna Max value (dBi)			Aux antenna Max value (dBi)			Pass/ NG
	H-pol	V pol	Max. of either pol.	H-pol	V pol	Max. of either pol.	
2400(MHz)	2.61	0.60	2.61	0.92	0.37	0.92	PASS
2450(MHz)	1.25	-0.53	1.25	1.22	-0.49	1.22	PASS
2500(MHz)	1.32	-1.11	1.32	2.02	0.31	2.02	PASS
4900(MHz)	1.03	0.22	1.03	0.27	0.91	0.91	PASS
5125(MHz)	2.05	0.32	2.05	0.36	1.14	1.14	PASS
5350(MHz)	0.78	0.34	0.78	0.73	0.66	0.73	PASS
5470(MHz)	2.13	-0.13	2.13	0.74	0.27	0.74	PASS
5672.5(MHz)	2.37	-0.62	2.37	-1.21	-0.70	-0.70	PASS
5875(MHz)	1.15	0.38	1.15	0.38	-0.71	0.38	PASS

- **Antenna Dimensions (Mechanical drawings)**
  (See Next Page)

WNC PROPRIETARY

PART NUMBER BLOCK	
PART NUMBER	REV
57.EBY15.001	0

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	RELEASE TO FILE	09/13/04	WEILI CHENG



DC330014500	EBY-C
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:

INTEGRAL DIMENSIONS	± 0.3	ANGULAR DIMENSIONS	± 2°
1 PLACE DECIMAL	± 0.2	HOLES UNDER ø5.00	± 0.05
2 PLACE DECIMALS	± 0.1		

MATERIAL: SEE NOTES

FINISH: SEE NOTES

THIRD ANGLE PROJECTION

DRAWN	GUO CHANG	09/13/04
ENGR	YUAN LI	09/13/04
APVD	WEILI CHENG	09/13/04

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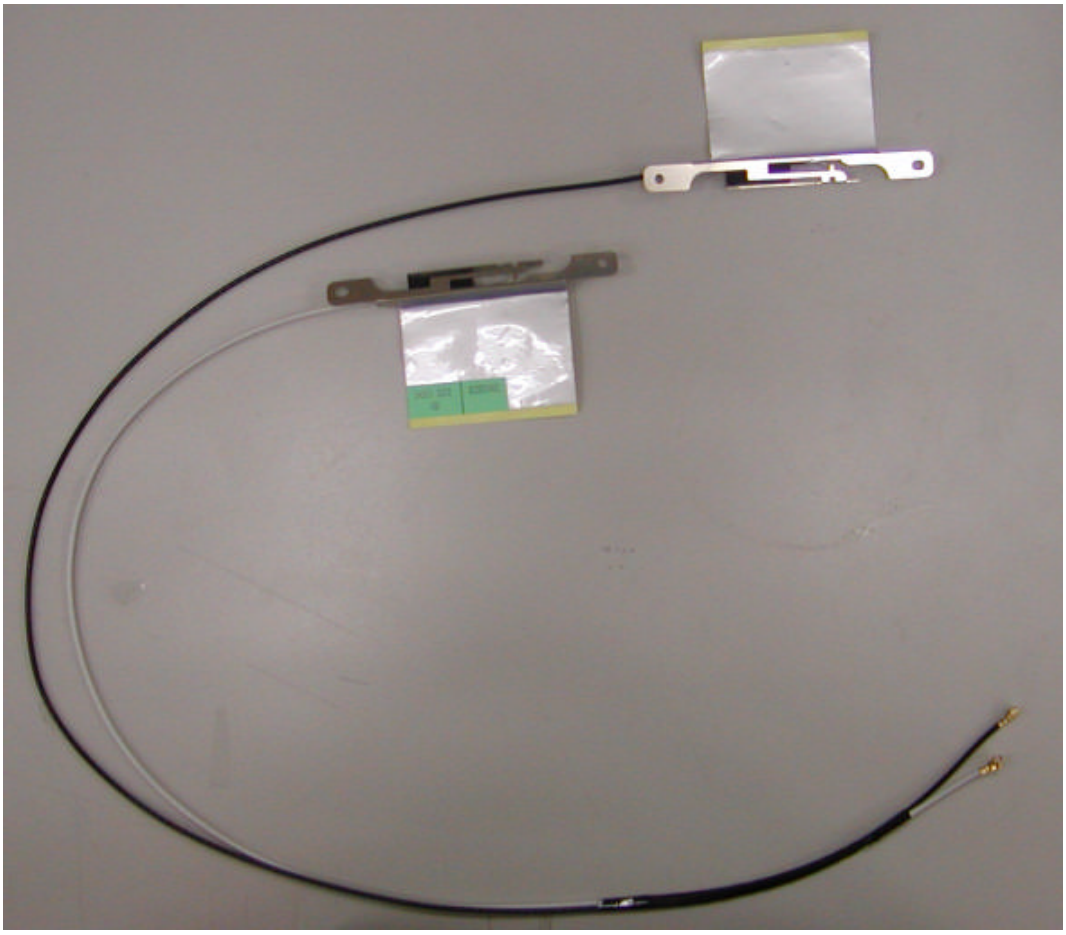
Tel: 886-3-6667799 Fax: 886-3-6667711

DWG TITLE: OUTLINE DRAWING, EBY-C

SIZE	DWG NO.	REV
A4	E2414-57.EBY15.001	0

SCALE 1/1 SHEET 1 OF 1

- **Pictures of Antennas**

Main Antenna	Aux Antenna
	

- **Antenna Pattern**

Wistron NeWeb Corp. 2G4 ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns

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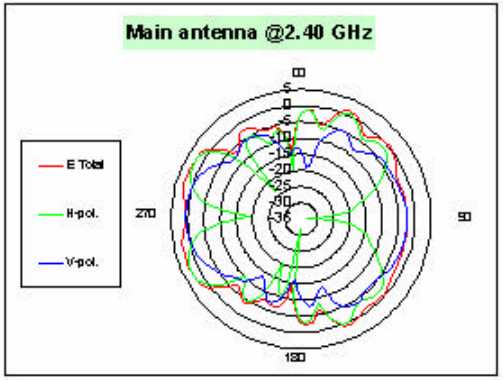
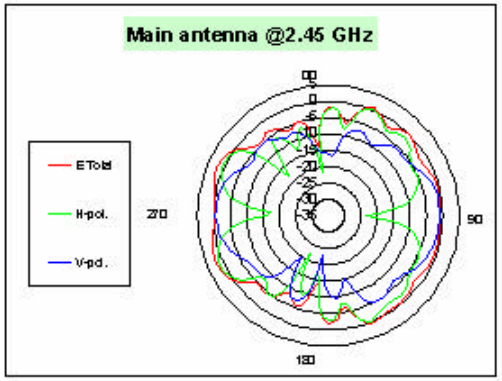
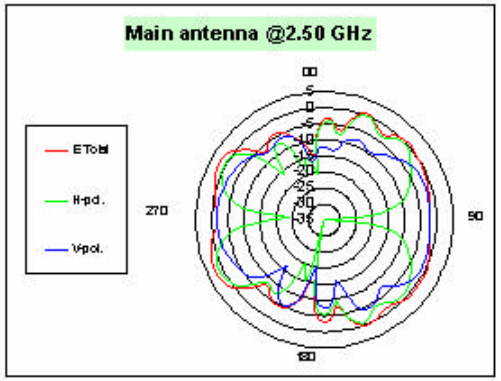


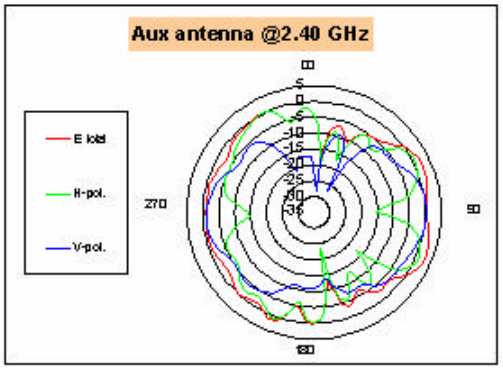
	E Total	H-pol	V pol
Peak Gain	2.94	2.61	0.60



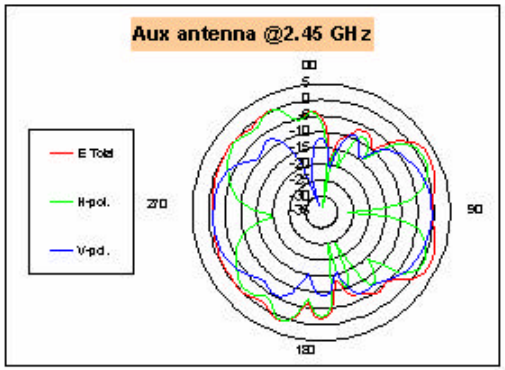
	E Total	H-pol	V pol
Peak Gain	2.27	1.25	-0.53



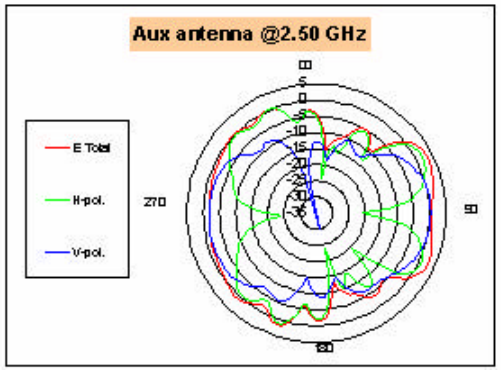
	E Total	H-pol	V pol
Peak Gain	2.54	1.32	-1.11



	E Total	H-pol	V pol
Peak Gain	2.72	0.92	0.37



	E Total	H-pol	V pol
Peak Gain	2.63	1.22	-0.49



	E Total	H-pol	V pol
Peak Gain	3.38	2.02	0.31

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Wistron NeWeb Corp. UII Band (4.90 GHz - 5.350 GHz) Antenna Radiation Patterns

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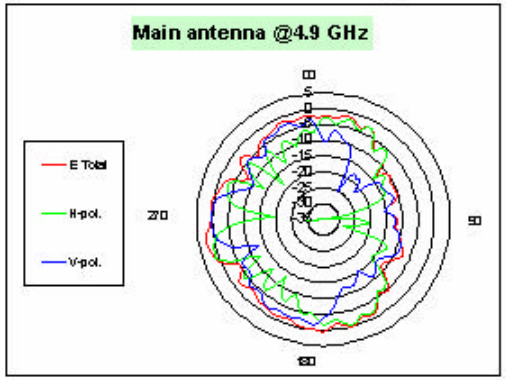
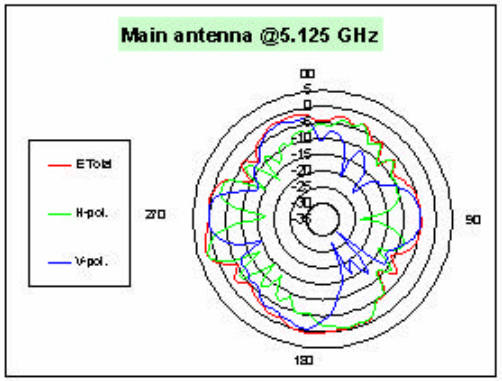
Main antenna @4.9 GHz



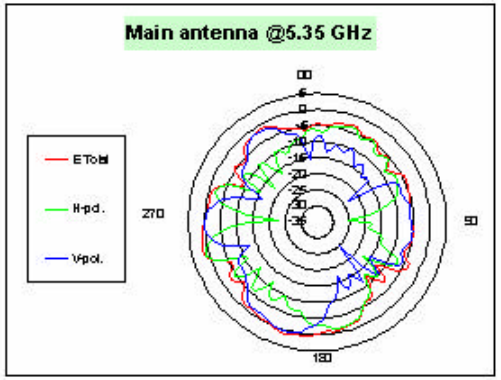
	E Total	H-pol	V pol
Peak Gain	2.40	1.03	0.22

Main antenna @5.125 GHz



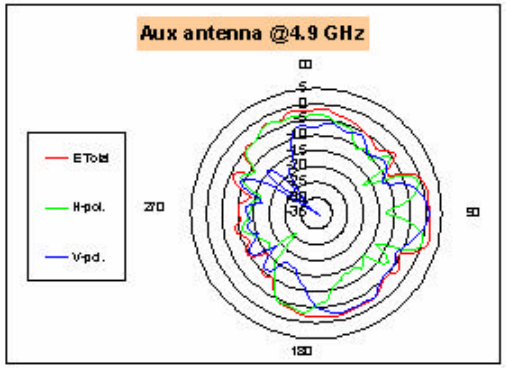
	E Total	H-pol	V pol
Peak Gain	2.42	2.05	0.32

Main antenna @5.35 GHz



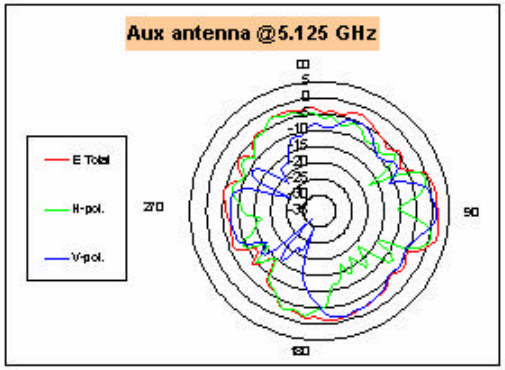
	E Total	H-pol	V pol
Peak Gain	1.39	0.78	0.34

Aux antenna @4.9 GHz



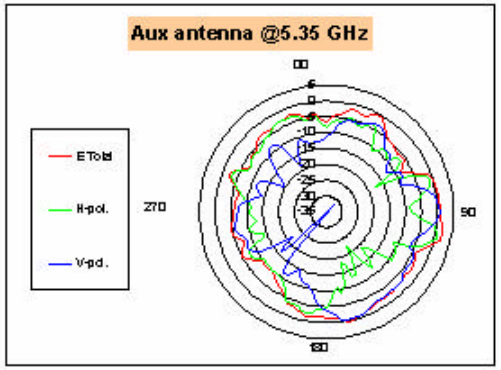
	E Total	H-pol	V pol
Peak Gain	2.05	0.27	0.91

Aux antenna @5.125 GHz



	E Total	H-pol	V pol
Peak Gain	2.22	0.36	1.14

Aux antenna @5.35 GHz



	E Total	H-pol	V pol
Peak Gain	2.27	0.73	0.66

Wistron NeWeb Corp. HyperLAN (5.470 GHz - 5.875 GHz) Antenna Radiation Patterns

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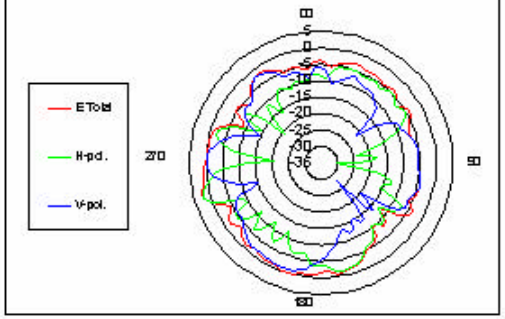
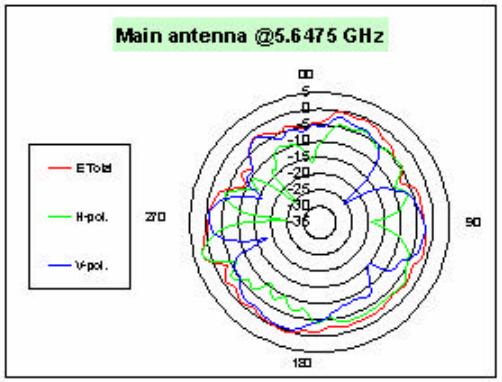
Main antenna @5.47 GHz



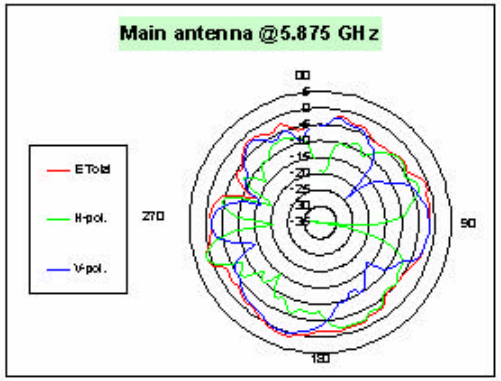
	E Total	H-pol	V pol
Peak Gain	2.13	2.13	-0.13

Main antenna @5.6475 GHz



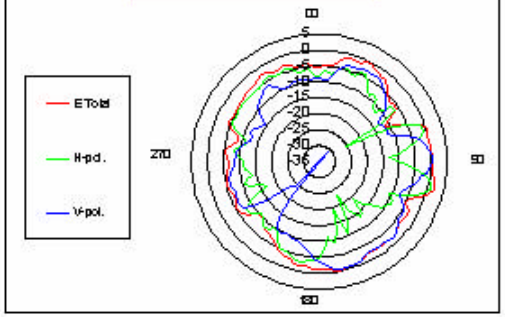
	E Total	H-pol	V pol
Peak Gain	2.38	2.37	-0.62

Main antenna @5.875 GHz



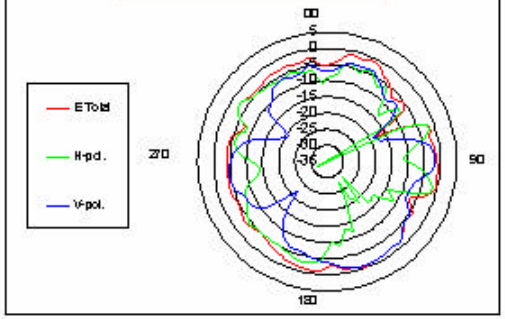
	E Total	H-pol	V pol
Peak Gain	1.20	1.15	0.38

Aux antenna @5.47 GHz



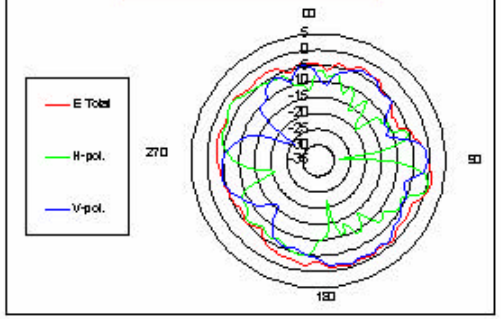
	E Total	H-pol	V pol
Peak Gain	1.81	0.74	0.27

Aux antenna @5.6475 GHz



	E Total	H-pol	V pol
Peak Gain	-0.32	-1.21	-0.70

Aux antenna @5.875 GHz



	E Total	H-pol	V pol
Peak Gain	1.11	0.38	-0.71