

## ***Barbados Antenna Regulatory Information***

**Description :** Triple-band Antenna(Main+Aux)

**Wistron Corporation Main Antenna P/N : 25.90220.001**  
**Main base Cable P/N :50.4C408.001**  
**AUX Antenna P/N: 25.90221.001**  
**AUX base Cable P/N :50.4C407.001**

### **Wistron NeWeb Corporation**

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<b>Provided by Wistron NeWeb Corp.</b>	<b>Reviewed by Wistron NeWeb Corp.</b>
<b><i>Stanly Wang</i></b>	<b><i>Weili Cheng</i></b>

## Antenna Specifications

Antenna Type (Material, Technology)	Technology => PIFA, Material =>Metal sheet (For both main and aux antenna)
Antenna Model Number	Barbados / EDM-A / 25.90220.001/50.4C408.001 25.90221.001/50.47407.001
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: <a href="#">1.3dBi</a> , Aux antenna: <a href="#">1.38dBi</a>
Peak Gain (802.11a / 5GHz Band) (dBi)	Main antenna: <a href="#">1.49dBi</a> , Aux antenna: <a href="#">1.05dBi</a>
Radio Connector Type	IPEX MHF 37 type connector
Mid-Line Connector Type (If Applicable)	SSMCX connector

**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)	382	320	702	640	330	970
Loss (Including Connectors) (dB) (2.4GHz / 5GHz)	NA	NA	1.98/2.89	NA	NA	2.66/3.9
Description (Color, Diameter, Manufacturer)	Color: white Diameter: Φ1.37mm Manufacturer: Nissei,Hitachi, Junkosha,GBE, Kurabe ,Axon or equivlent cable			Color: black Diameter: Φ1.37mm Manufacturer: Nissei,Hitachi, Junkosha,GBE, Kurabe ,Axon or equivlent cable		

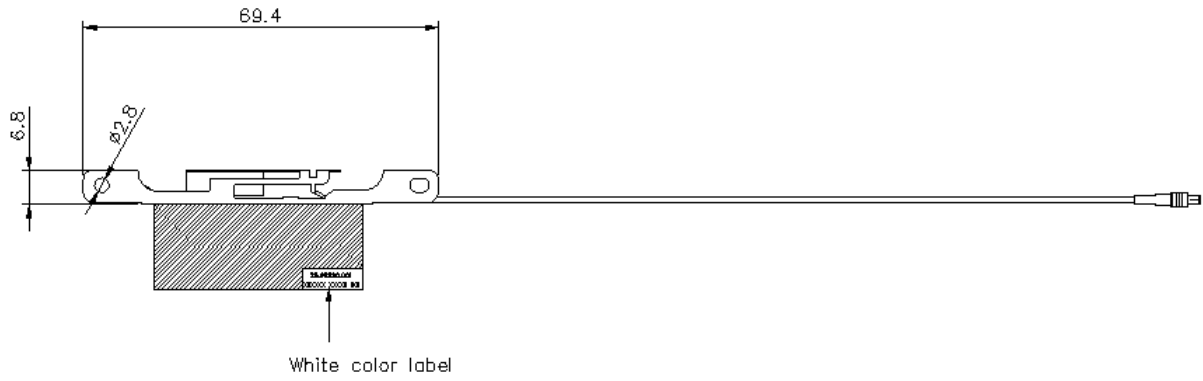
**Note:** For single cable assembly (no mid-line connector), use the 'Total' column for each cable length and list N/A in the 'LCD' and 'Base' fields  
Cable Loss should be reported for the total cable assembly (for both Main and Aux antennas)

- **Peak Gain**

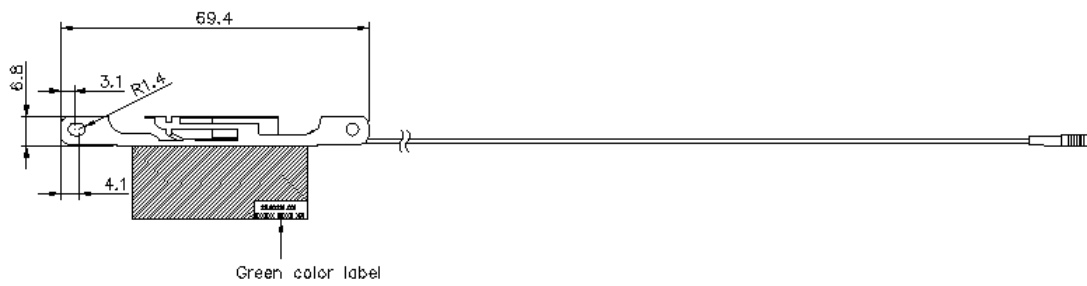
Frequency	Main antenna Max value (dBi)			Aux antenna Max value (dBi)			Pass/ NG
	H-pol	V pol	Total	H-pol	V pol	Total	
2412(MHz)	1.30	-1.62	2.39	1.28	-0.24	2.34	PASS
2437(MHz)	1.05	-0.08	2.40	1.11	-0.16	2.16	PASS
2462(MHz)	1.27	-1.14	2.70	1.38	0.15	2.21	PASS
4900(MHz)	0.31	-0.27	1.17	-1.41	-3.42	0.38	PASS
5125(MHz)	-0.73	-1.68	0.78	-0.59	-1.83	0.81	PASS
5350(MHz)	-0.31	-0.97	0.91	-0.81	-3.06	-0.03	PASS
5470(MHz)	-0.83	-1.71	0.35	-3.08	-3.02	-0.20	PASS
5672.5(MHz)	1.31	1.49	2.51	1.05	-0.03	2.24	PASS
5875(MHz)	1.33	1.30	2.65	-0.14	-0.46	1.75	PASS

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

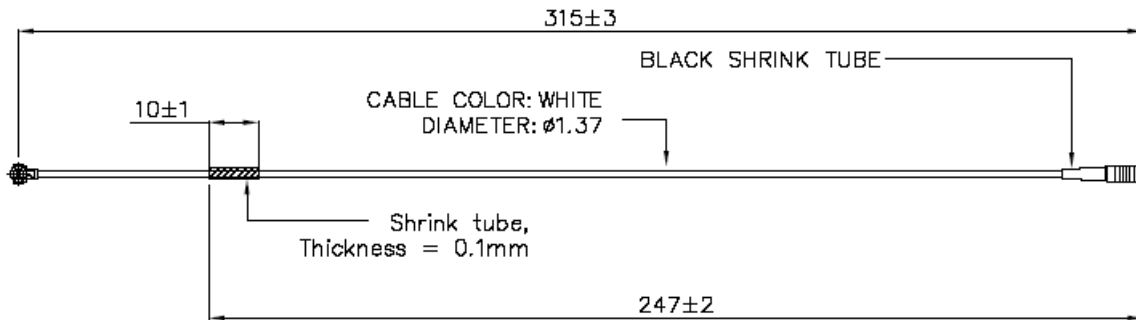
## Main Antenna



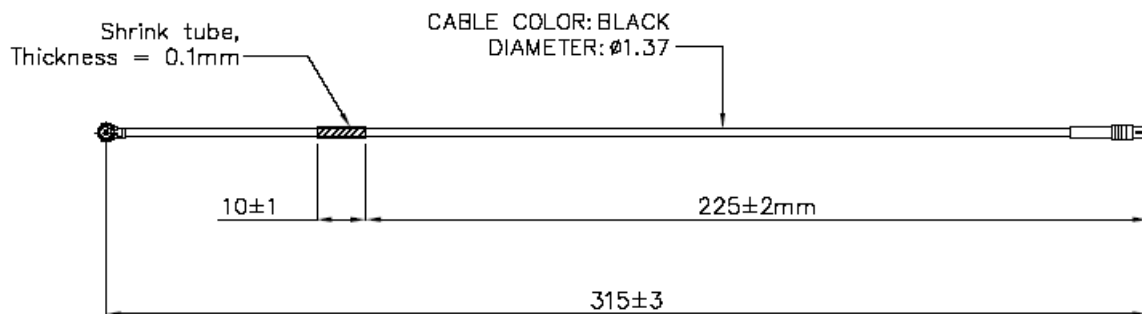
## AUX Antenna





## Main Base cable



## AUX Base Cable



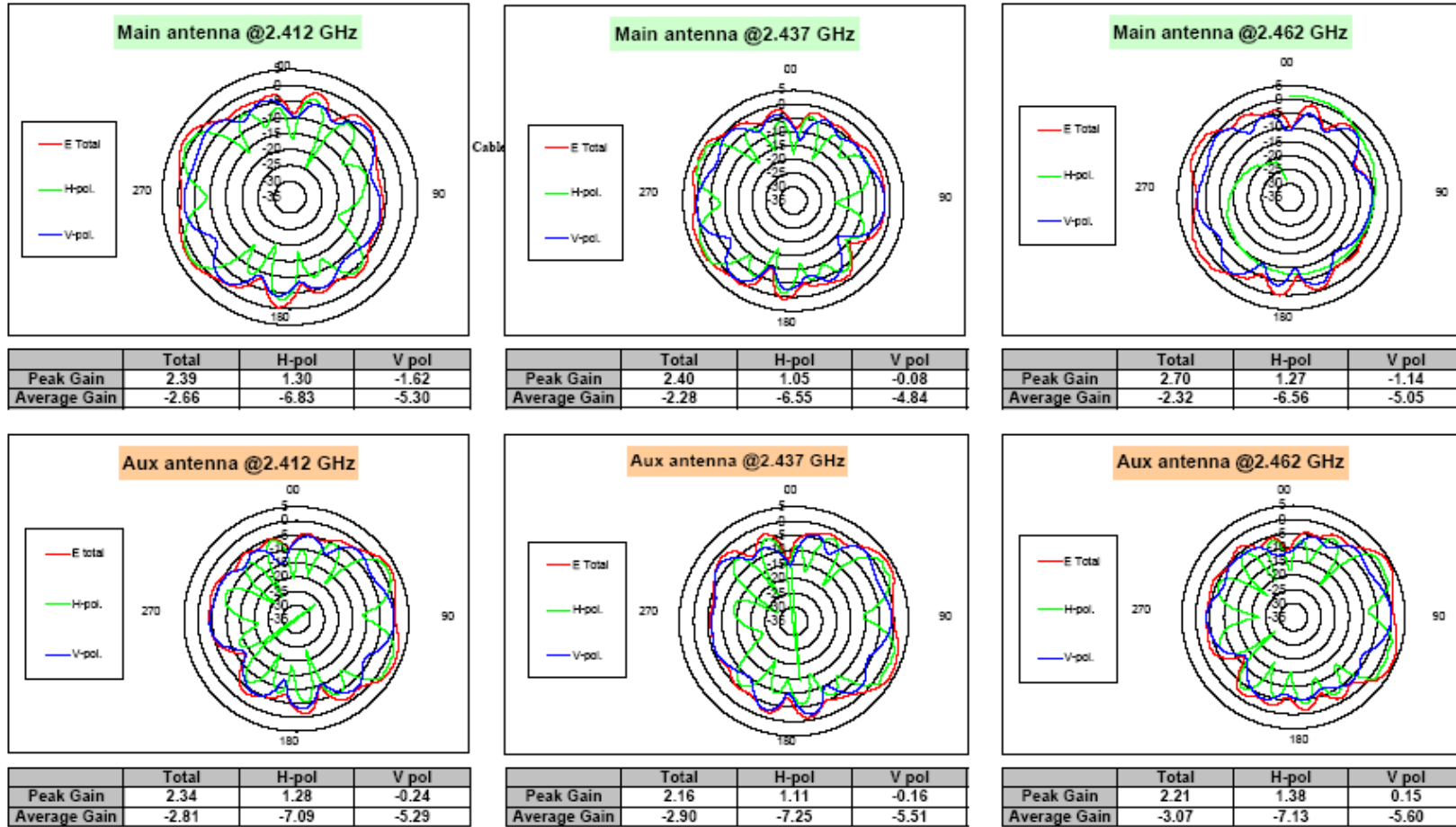
- Pictures of Antennas

Main Antenna	Aux Antenna
	



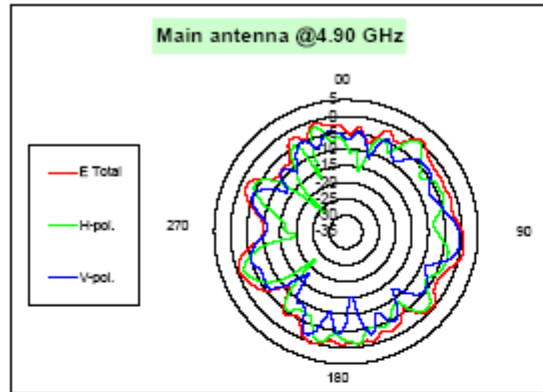
- Antenna Pattern

## 2G4 ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns

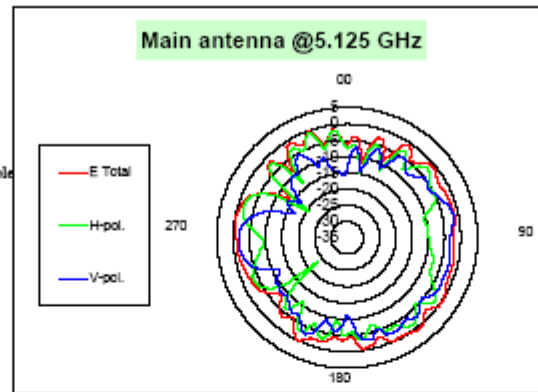


Note: The outer circle approximately represents the 5 dBi gain circle. Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)

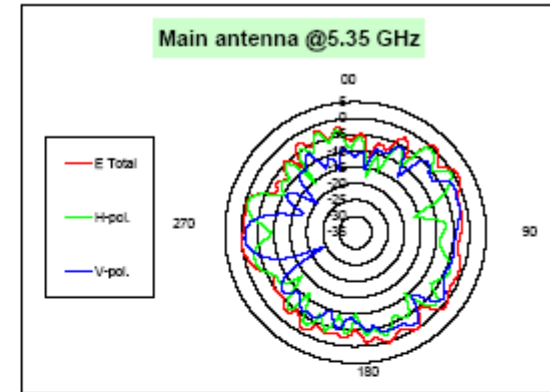
## U-NII Band (4.90 GHz - 5.350 GHz) Antenna Radiation Patterns



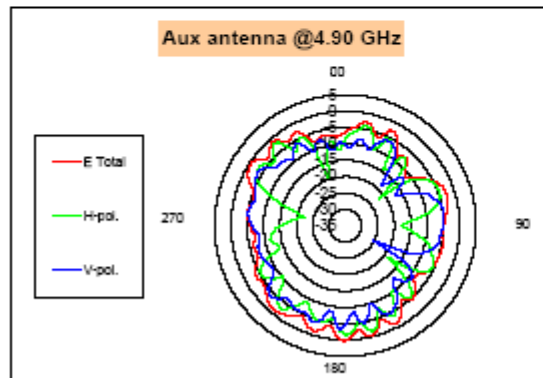
	Total	H-pol	V pol
Peak Gain	1.17	0.31	-0.27
Average Gain	-3.04	-5.80	-6.25



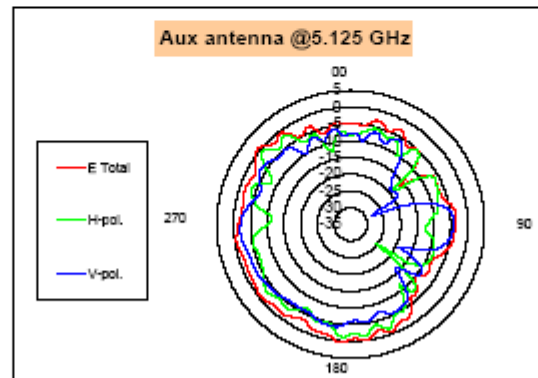
	Total	H-pol	V pol
Peak Gain	0.78	-0.73	-1.68
Average Gain	-2.86	-5.59	-6.25



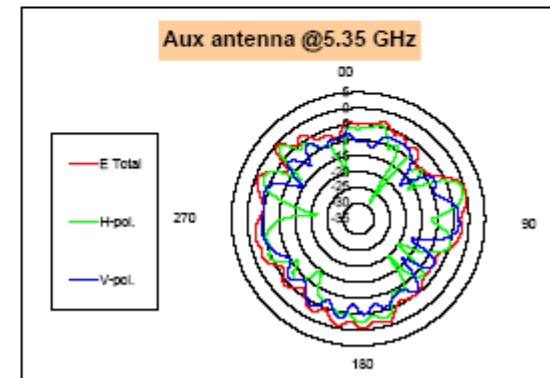
	Total	H-pol	V pol
Peak Gain	0.91	-0.31	-0.97
Average Gain	-3.00	-5.69	-6.67



	Total	H-pol	V pol
Peak Gain	0.38	-1.41	-3.42
Average Gain	-3.84	-6.70	-5.71



	Total	H-pol	V pol
Peak Gain	0.81	-0.59	-1.83
Average Gain	-3.15	-6.13	-5.86

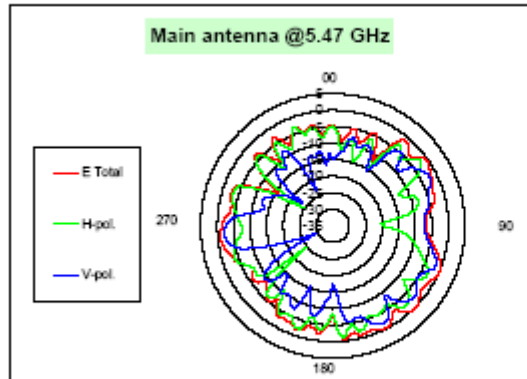


	Total	H-pol	V pol
Peak Gain	-0.03	-0.81	-3.06
Average Gain	-3.98	-7.21	-5.97

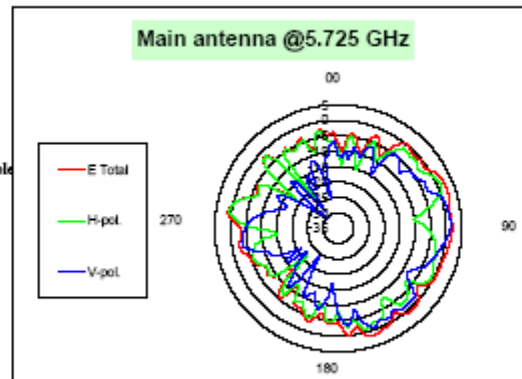
Note: The outer circle approximately represents the 5 dBi gain circle. Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)



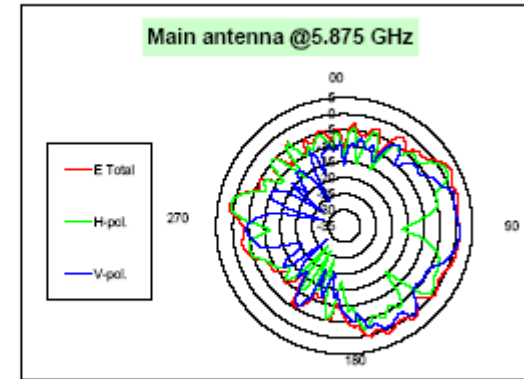
## HyperLAN (5.470 GHz - 5.825 GHz) Antenna Radiation Patterns



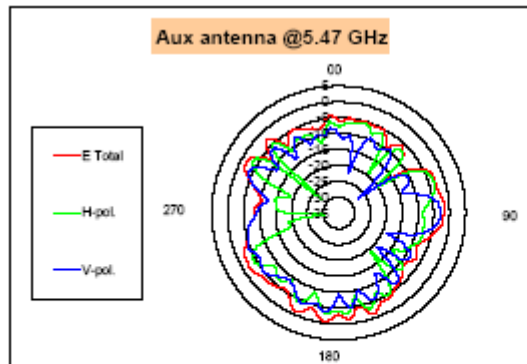
	Total	H-pol	V-pol
Peak Gain	0.35	-0.83	-1.71
Average Gain	-3.60	-5.70	-7.86



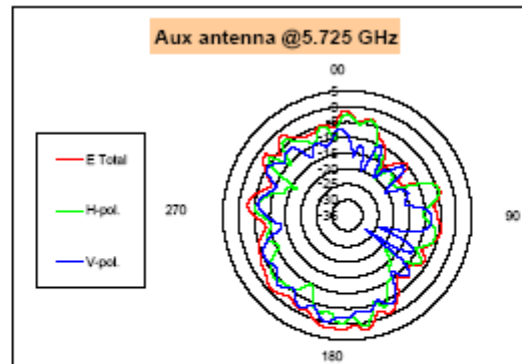
	Total	H-pol	V-pol
Peak Gain	2.51	1.31	1.49
Average Gain	-3.03	-5.40	-6.82



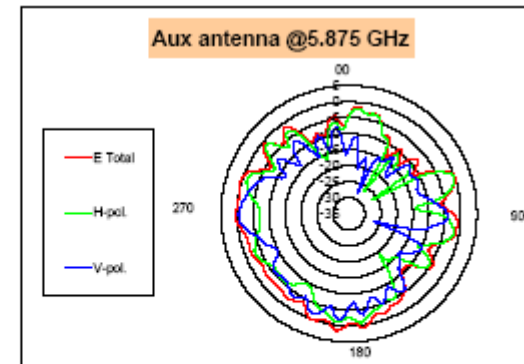
	Total	H-pol	V-pol
Peak Gain	2.65	1.33	1.30
Average Gain	-3.30	-5.75	-6.71



	Total	H-pol	V-pol
Peak Gain	-0.20	-3.08	-3.02
Average Gain	-4.51	-5.94	-7.65



	Total	H-pol	V-pol
Peak Gain	2.24	1.05	-0.03
Average Gain	-4.26	-5.87	-8.15



	Total	H-pol	V-pol
Peak Gain	1.75	-0.14	-0.46
Average Gain	-4.25	-5.79	-7.51

Note: The outer circle approximately represents the 5 dBi gain circle. Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)