

Venice Antenna Regulatory Information

Description : Dual-band Antenna(Main+Aux)
Quanta Computer Inc. P/N: BA42-00121A

Wistron NeWeb P/N: BA42-00121A

Wistron NeWeb Corporation

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Provided by Wistron NeWeb Corp.	Reviewed by Wistron NeWeb Corp.
<i>Kai Liu</i>	<i>Patrick Lee</i>

Antenna Specifications

Antenna Type (Material, Technology)	Technology => PIFA, Material =>Metal sheet (For both main and aux antenna)
Antenna Model Number	Venice / EBU-S / BA42-00121A
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: 1.77dBi , Aux antenna: 1.70dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	Main antenna: 1.43dBi , Aux antenna: 0.98dBi
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	452	NA	NA	594
Loss (Including Connectors) (dB) (2.4GHz / 5GHz)	NA	NA	1.25/2.2	NA	NA	1.91/3.2
Description (Color, Diameter, Manufacturer)	Color: white Diameter: Φ1.37mm Manufacturer: Junkosha, Kurabe or equivalent cable			Color: black Diameter: Φ1.37mm Manufacturer: Junkosha, Kurabe or equivalent 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**

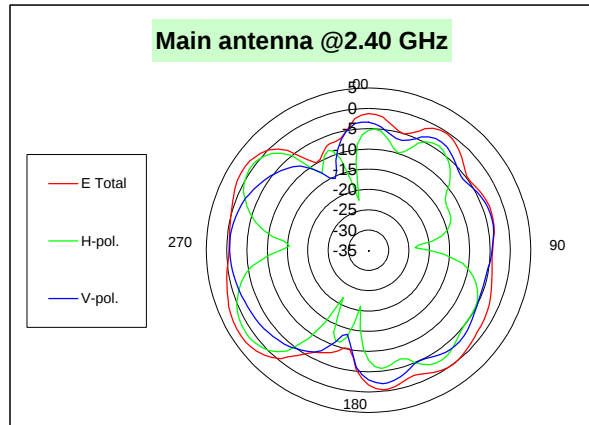
Frequency	Main antenna Max value (dBi)			Aux antenna Max value (dBi)			Pass/ NG
	H-pol	V pol	Total	H-pol	V pol	Total	
2400(MHz)	1.73	0.72	2.64	1.50	0.95	2.04	PASS
2450(MHz)	1.27	1.49	2.55	1.70	0.42	2.80	PASS
2500(MHz)	1.68	1.77	2.75	1.22	-0.28	2.26	PASS
4900(MHz)	1.06	-2.30	2.41	-0.07	-2.20	0.42	PASS
5125(MHz)	0.37	0.93	2.12	-0.28	0.51	2.43	PASS
5350(MHz)	0.01	-0.27	1.38	0.38	-0.31	1.35	PASS
5470(MHz)	0.69	0.70	0.73	0.67	-0.45	1.45	PASS
5672.5(MHz)	1.30	1.43	1.66	-0.38	0.36	0.40	PASS
5875(MHz)	0.84	0.20	1.41	-0.93	0.98	0.63	PASS

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

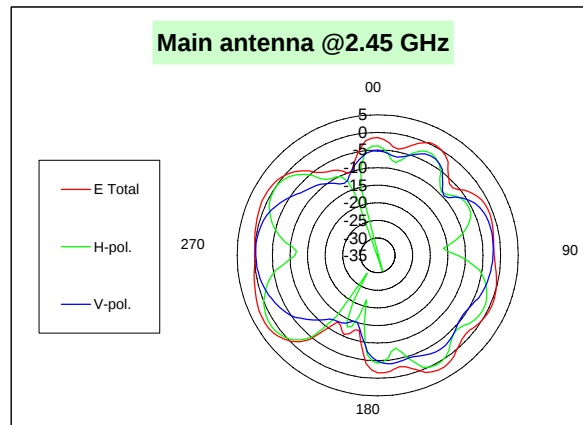
- Pictures of Antennas



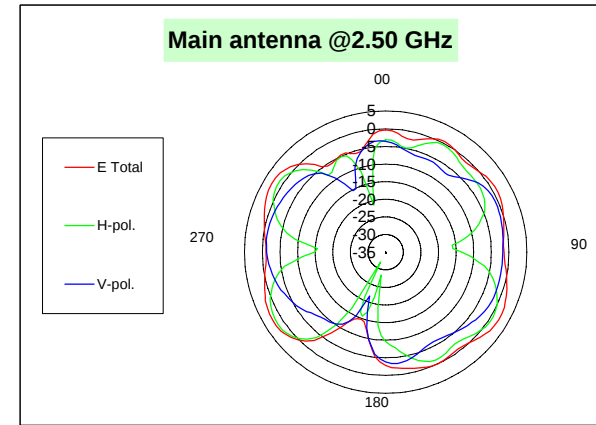
2G4 ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns



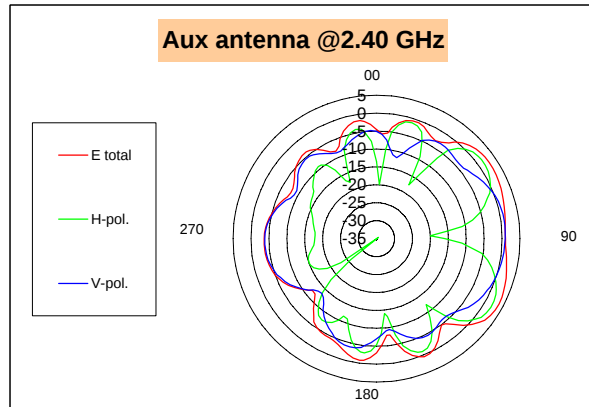
	Total	H-pol	V pol
Peak Gain	2.64	1.73	0.72
Average Gain	-1.49	-3.61	-3.91



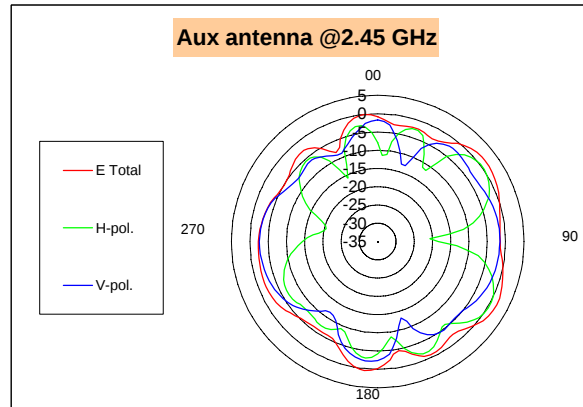
	Total	H-pol	V pol
Peak Gain	2.55	1.27	1.49
Average Gain	-1.43	-3.76	-3.11



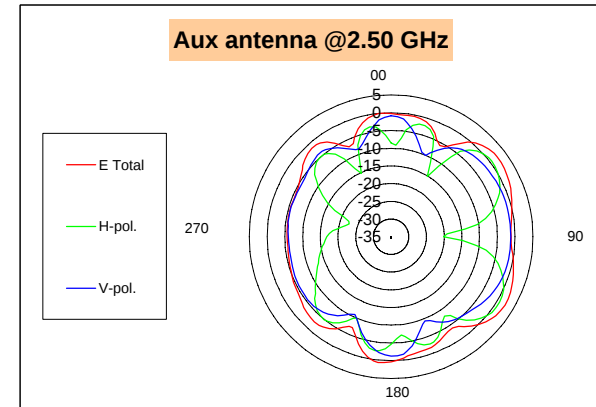
	Total	H-pol	V pol
Peak Gain	2.75	1.68	1.77
Average Gain	-1.48	-3.94	-3.13



	Total	H-pol	V pol
Peak Gain	2.04	0.66	0.95
Average Gain	-1.89	-3.50	-4.65



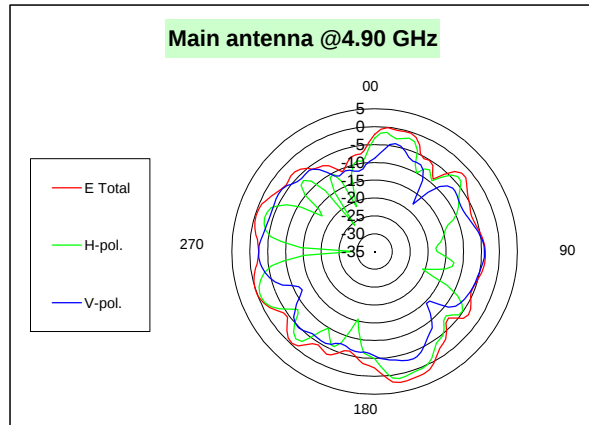
	Total	H-pol	V pol
Peak Gain	2.80	1.70	0.42
Average Gain	-1.76	-3.55	-4.26



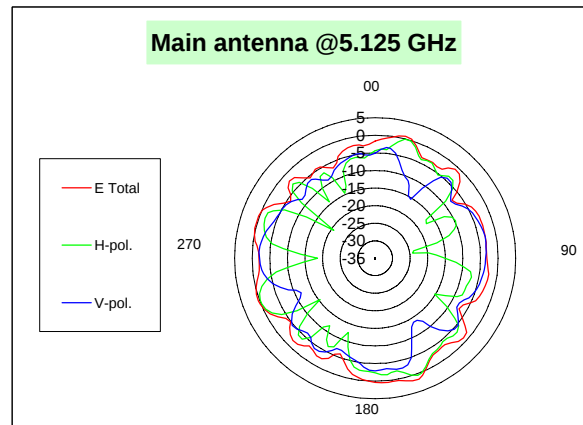
	Total	H-pol	V pol
Peak Gain	2.26	1.22	-0.28
Average Gain	-1.59	-3.87	-4.29

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

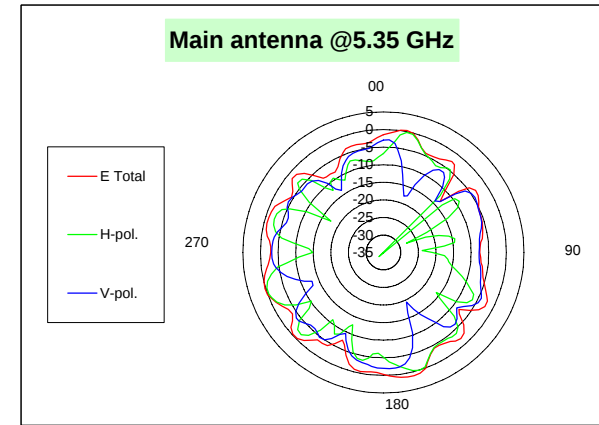
U-NII Band (4.90 GHz - 5.350 GHz) Antenna Radiation Patterns



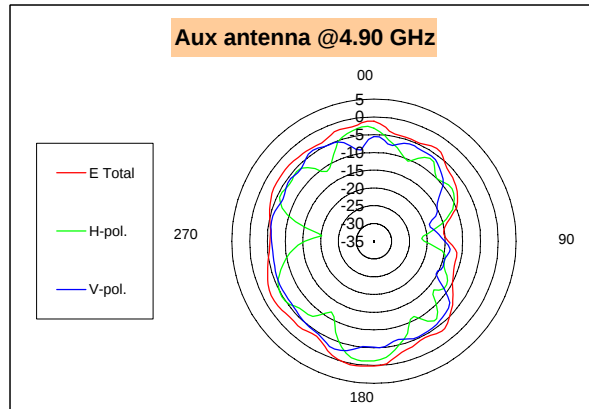
	Total	H-pol	V pol
Peak Gain	2.41	1.06	-2.30
Average Gain	-2.96	-4.51	-6.37



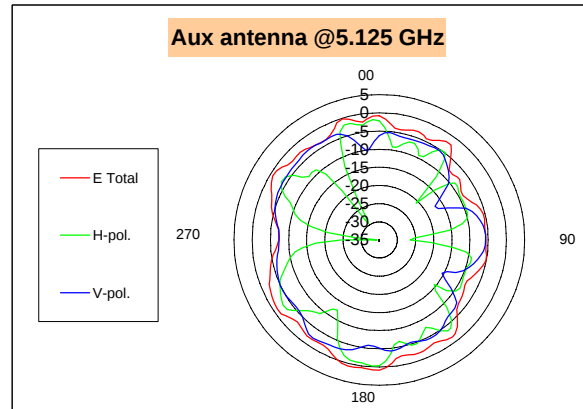
	Total	H-pol	V pol
Peak Gain	2.12	0.37	0.93
Average Gain	-2.98	-4.87	-5.03



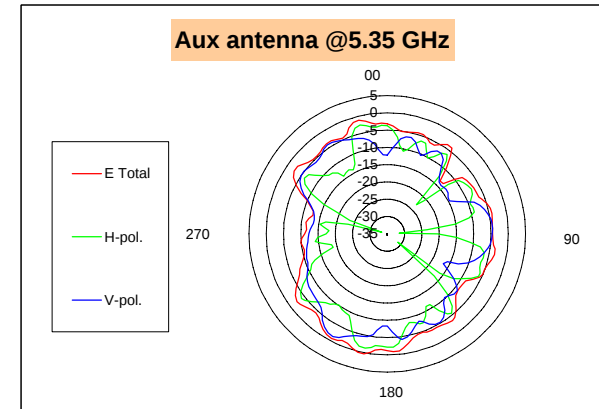
	Total	H-pol	V pol
Peak Gain	1.38	0.01	-0.27
Average Gain	-2.83	-4.89	-5.31



	Total	H-pol	V pol
Peak Gain	0.42	-0.07	-2.20
Average Gain	-3.48	-5.31	-6.67



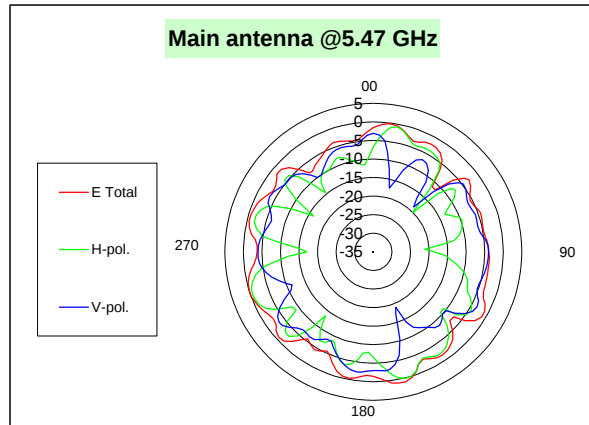
	Total	H-pol	V pol
Peak Gain	2.43	-0.28	0.51
Average Gain	-2.47	-5.53	-5.05



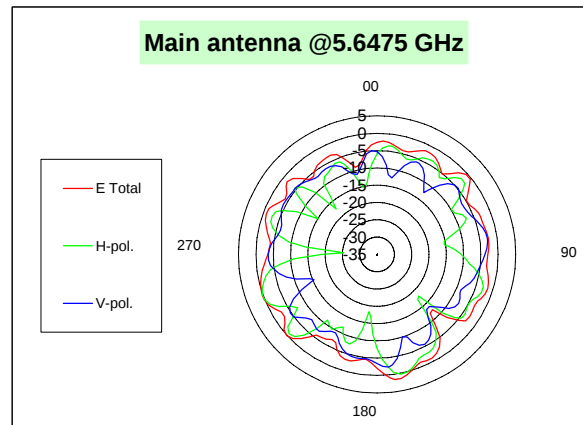
	Total	H-pol	V pol
Peak Gain	1.35	0.38	-0.31
Average Gain	-3.04	-5.32	-5.55

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

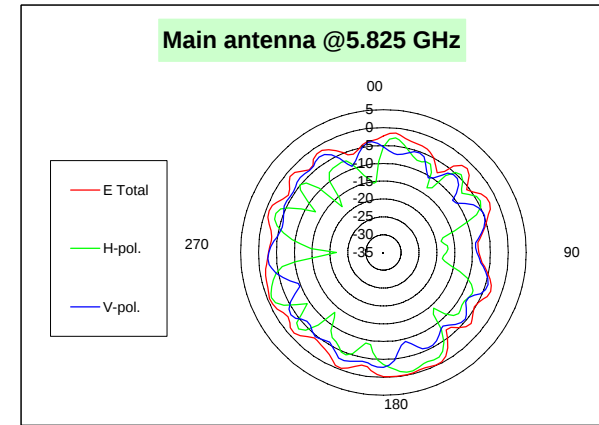
HyperLAN (5.470 GHz - 5.825 GHz) Antenna Radiation Patterns



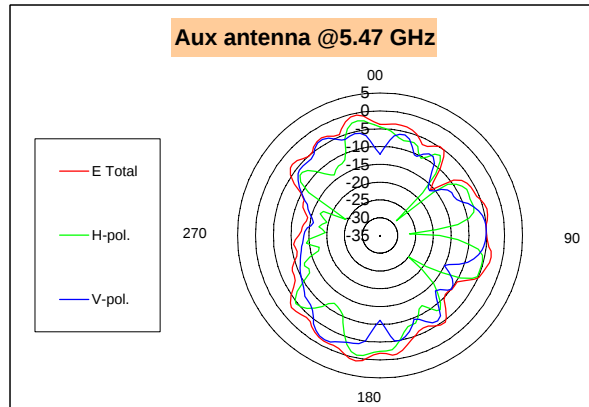
	Total	H-pol	V pol
Peak Gain	0.73	0.69	0.70
Average Gain	-2.91	-5.09	-4.51



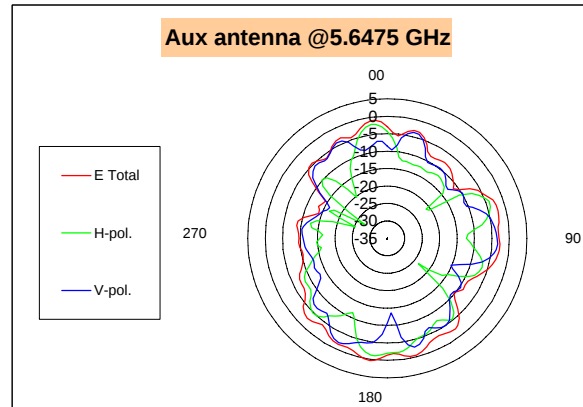
	Total	H-pol	V pol
Peak Gain	1.66	1.30	1.43
Average Gain	-2.82	-4.95	-4.38



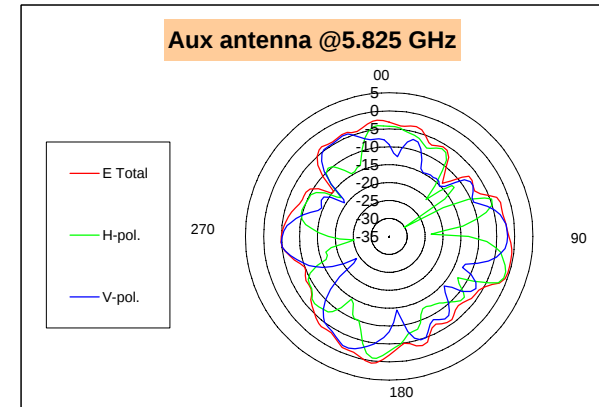
	Total	H-pol	V pol
Peak Gain	1.41	0.84	0.20
Average Gain	-2.84	-5.08	-4.92



	Total	H-pol	V pol
Peak Gain	1.45	0.67	-0.45
Average Gain	-2.83	-5.40	-5.23



	Total	H-pol	V pol
Peak Gain	0.40	-0.38	0.36
Average Gain	-3.30	-5.66	-5.16



	Total	H-pol	V pol
Peak Gain	0.63	-0.93	0.98
Average Gain	-3.42	-6.23	-5.65

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