

Antenna Regulatory Information

• Product type	• WLAN_ Main /Aux / MIMO Antenna
• Model number	• Hepburn
• Revision	• A00
• Manufacturer Part No. :	PE-08000A/ PE-08000C/PE-11000C
• Quanta Part No. WLAN_ Main /Aux/MIMO	DQ608000000 & DQ611000000
• Dell Part No. :	•

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Template Revision 0 March 2008

1. Specifications

Antenna Specifications

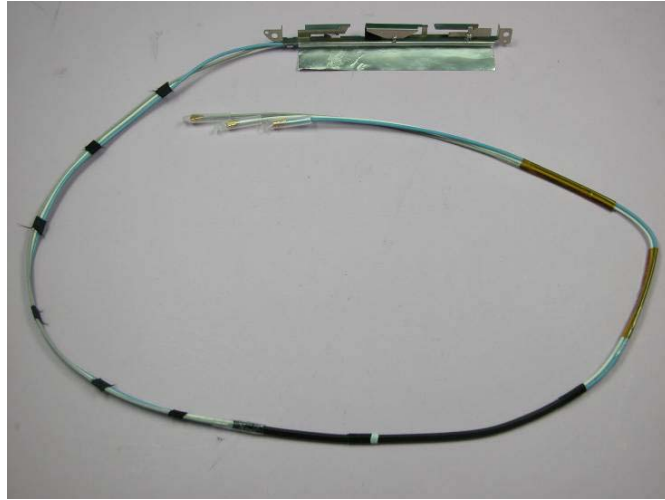
Antenna Type	Metal, Modified PIFA
Antenna Model Number	Hepburn
Operating Frequency Range(s)	WLAN_ Main / WLAN_ AUX: 2400~2700 MHz and 5150~5875 MHz WLAN_ MIMO: 2400~2500 MHz and 5150~5875 MHz
Peak Gain (dBi)	WLAN_ Main : 2400~2700 MHz:1.51dBi 5150~5875 MHz:1.33 dBi WLAN_ AUX: 2400~2700 MHz:1.15 dBi 5150~5875 MHz:2.09dBi WLAN_ MIMO: 2400~2500 MHz: 1.02 5150~5875 MHz: -0.31
Radio Connector Type	Hirose U.FL-LP-88
Mid-Line Connector Type (If Applicable)	N/A

Remark: Peak Gains include all system losses (connector, cable, etc)

Cable Specifications

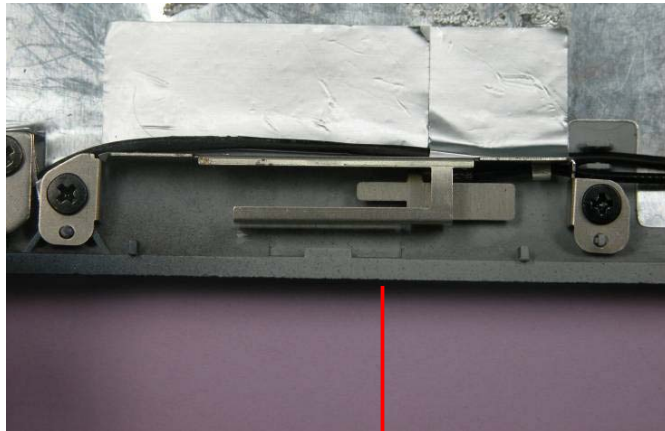
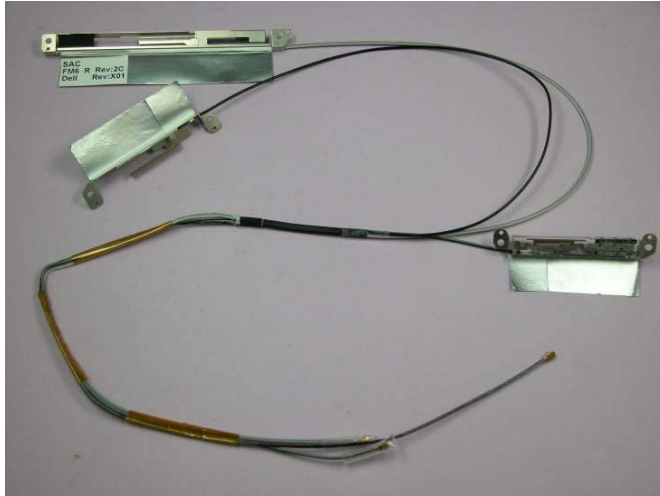
Cable Parameters	WLAN_ Main			WLAN_ Aux			WLAN MIMO		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	N/A	N/A	722	N/A	N/A	647	N/A	N/A	680
Loss (Including Connectors) (dB)			2.0(2.5GHz) / 3.0(5.5GHz) /			1.9(2.5GHz) / 3.0(5.5GHz) /			1.9(2.5GHz) / 3.0(5.5GHz) /
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.13 mm GBE/Sumitomo			Color: Black OD: 1.13 mm GBE/Sumitomo			Color: Gray OD: 1.13 mm GBE/Sumitomo		

2. Antenna Assembly



WLAN_MIMO Antenna

WLAN_ Main Antenna



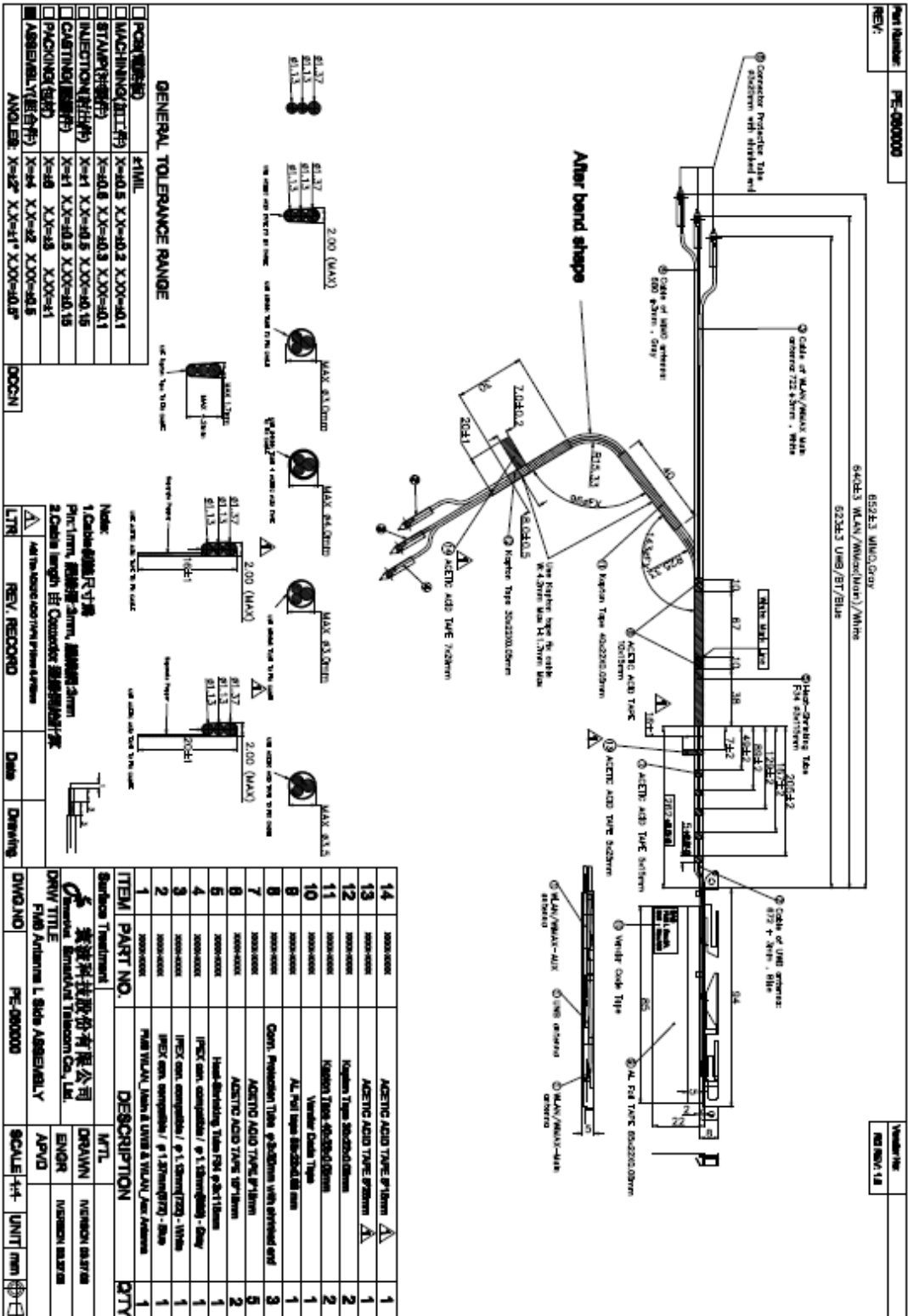
WLAN_AUX Antenna

3. Antenna Assembly Installed in The Notebook



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4. Mechanical Drawing of Antennas



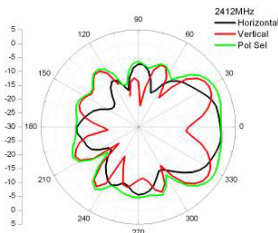
5. Gain Patterns

- WLAN Main Antenna:

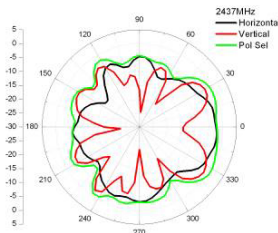
Gain Test : WLAN Main Antenna

Frequency (MHz)	Peak Gain (dBi)			Average Gain (dBi)
	H	V	H+V	
2412	-0.01	0.61	2.17	-3.22
2437	-1.95	-1.67	0.32	-3.30
2462	0.18	0.26	2.20	-1.83
2500	-0.18	1.51	2.86	-2.11
2600	0.41	-0.23	1.79	-2.53
2700	0.65	0.99	2.43	-3.02
5150	-3.93	-1.22	-1.04	-4.01
5350	-3.29	-0.90	-0.14	-3.87
5470	-1.77	0.43	-1.64	-3.53
5725	-0.12	0.44	2.36	-3.10
5875	0.29	1.33	2.80	-2.74

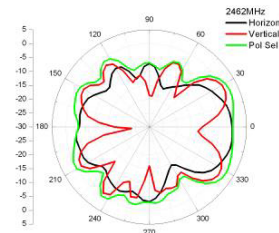
2412MHz



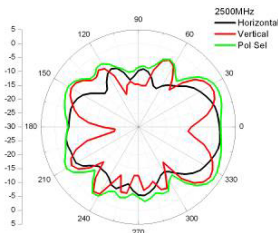
2437MHz



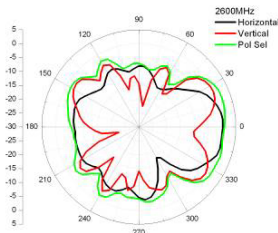
2462MHz



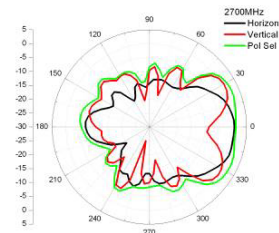
2500MHz



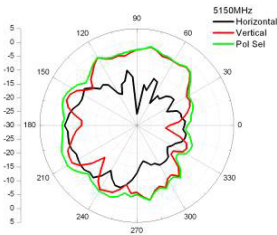
2600MHz



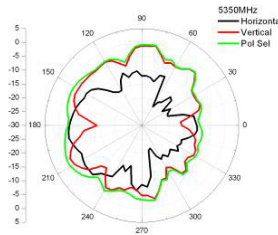
2700MHz



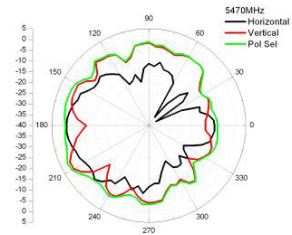
5150MHz



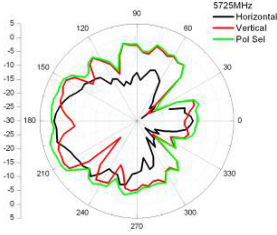
5350MHz



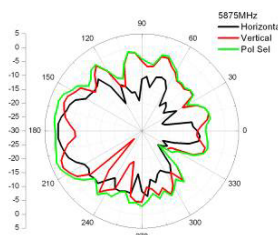
5470MHz



5725MHz



5875MHz

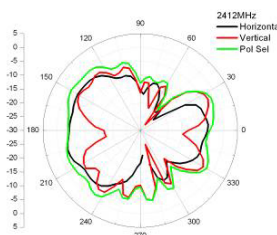


- WLAN Aux Antenna:

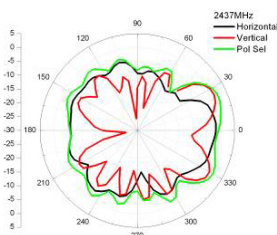
Gain Test : WLAN AUX Antenna

Frequency (MHz)	Peak Gain (dBi)			Average Gain (dBi)
	H	V	H+V	
2412	0.97	-1.02	1.26	-2.98
2437	1.15	-1.13	1.61	-2.32
2462	0.44	-0.56	1.02	-2.46
2500	0.25	-1.29	0.78	-2.94
2600	-3.12	-3.69	-1.60	-5.22
2700	-2.21	-2.65	-0.88	-4.98
5150	-2.76	2.09	2.77	-4.13
5350	-3.39	0.28	0.39	-5.26
5470	-2.88	-0.49	-0.24	-5.19
5725	-3.62	1.27	1.43	-4.85
5875	-1.43	1.50	1.98	-4.64

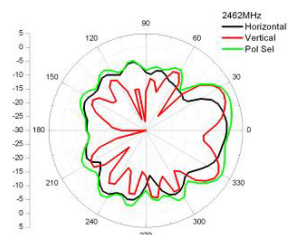
2412MHz



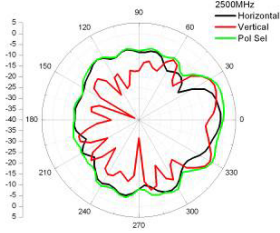
2437MHz



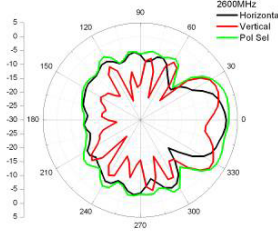
2462MHz



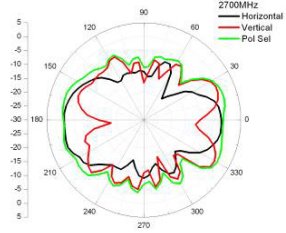
2500MHz



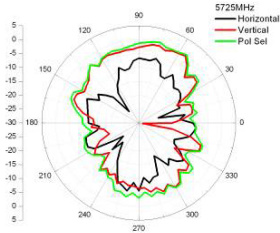
2600MHz



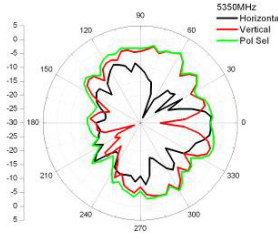
2700MHz



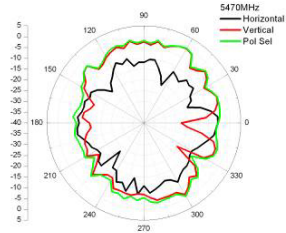
5150MHz



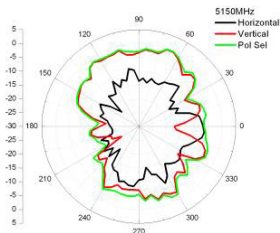
5350MHz



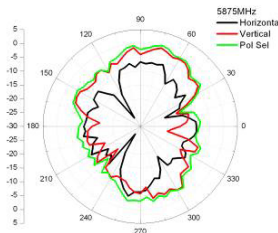
5470MHz



5725MHz



5875MHz



- WLAN MIMO Antenna:

Gain Test : WLAN MIMO Antenna

Frequency (MHz)	Peak Gain (dBi)			Average Gain (dBi)
	H	V	H+V	
2412	-2.98	-3.15	-1.15	-4.46
2437	-1.59	0.52	1.63	-2.83
2462	-0.68	1.02	2.39	-2.91
2500	-1.98	-1.35	0.36	-4.97
2600	-0.91	0.30	2.17	-2.92
2700	-0.86	-0.49	0.46	-3.00
5150	-6.29	-0.41	-0.19	-4.53
5350	-4.41	-1.07	-1.02	-4.92
5470	-5.56	-0.31	-0.06	-4.48
5725	-5.20	-0.58	0.02	-4.61
5875	-4.53	-0.60	0.31	-4.74

