Regulatory WLAN Antenna Information

	Vendor Name	Project Code
OEM	Hewleet-Packard Company	Caymus
ODM	Compal Electronics,INC.	Caymus
Antenna	Wistron Neweb Corporation	EBC-C6

Antenna Sample / Antenna Data Requirements for worldwide regulatory approval

Se cti	Description of Required OEM / ODM					
on	Antenna Information	US/IC	EU	Japan	Taiwan	S.Korea
1A	Part Number for Antenna only	Required	Required	Required	Required	Required
1B	Antenna Manufacturer Name	Required	Required	Required	Required	Required
1C	Description of Antenna Type	Required	N/A	N/A	N/A	N/A
1D	Part number of Antenna Assembly / cable impedance, length & diameter.	Required	Desired	Desired	Desired	Desired
1E	Main & Aux antenna (Peak Gain W/ cable loss)	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Main & Aux antenna (Peak Gain only)	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Main & Aux antenna (Cable loss W/ connector)	Required	Required	Required	Required	Required
2	Dimensioned Photographs and Drawings of main & auxiliary antennas	Required	Required	Required	Required	Required
3	Radiation patterns of antennas loaded in the host platform.	Required	Desired	Required	N/A	Required
4	Platform model name / number - correlated to antenna manufacturer and antenna part number	Required	Required	Desired	Required	Desired
5	Photograph(s) or Drawings showing location of antennas in platform. (S. Korea requires photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.	Required	Required	Desired	Required (Photos)	Required (Photos)
6	Mech. drawings / photos with dimensions of antenna locations and distance from end-user (For evaluation of SAR testing requirement).	Required	N/A	N/A	N/A	N/A
7	Photograph(s) or Drawings showing the location of all antennas (WLAN, BT, other) and distance between those transmitting antennas. Information will be used to evaluate whether co-location testing is required.	Required	N/A	N/A	N/A	N/A

Antenna Information

Section 1. Antenna Assembly Specifications

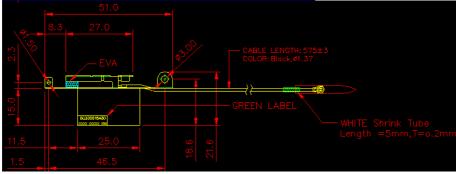
Antenna Assembly Summary:

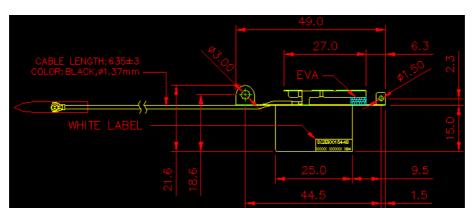
1A	1B	1C	1D	1E	1F	1G	1H
Antenna Part	Manufacture	Antenna	Cable Assembly Part	Peak Gain W/	Peak Gain w/o	VSWR	Cable Loss (dBi)
Number		Туре	Number and Information	Cable loss (dBi)	Cable Loss (dBi)		
Main Antenna	Wistron Neweb	PIFA	P/H: WH-S-1.13B-575MM-	2400-2500MHz	2400-2500MHz	2400-2500MHz	2400-2500MHz
(WHC P/H:	Corporation		(2-2-1)	1.24 dBi(peak)	2.90 dBi(peak)	2.0 max	1.66 dBi(peak)
81.EBC15.005)			50 ohm Coaxial.	5150-5350MHz	5150-5350MHz	5150-5350MHz	5150-5350MHz
(customer P/N:			length: 575 mm	0.84 dBi(peak)	3.09 dBi(peak)	2.5 max	2.25 dBi (peak)
DC330015430)			diameter: 1.37 mm	5470-5725MHz	5470-5725MHz	5470-5725MHz	5470-5725MHz
			Connector: IPEX	0.78 dBi(peak)	3.16 dBi (peak)	2.5 max	2.38 dBi(peak)
				5725-5825MHz	5725-5825MHz	5725-5825MHz	5725-5825MHz
				0.29 dBi(peak)	2.70 dBi (peak)	2.5 max	2.41 dBi (peak)
AUX Antenna	Wistron Neweb	PIFA	P/H: WH-S-1.13W-635MM-	2400-2500MHz	2400-2500MHz	2400-2500MHz	2400-2500MHz
(WHC P/H:	Corporation		(2-2-1)	1.68 dBi(peak)	3.49 dBi (peak)	2.0 max	1.81 dBi(peak)
81.EBC15.006)			50 ohm Coaxial.	5150-5350MHz	5150-5350MHz	5150-5350MHz	5150-5350MHz
(customer P/N:			length: 635 mm	0.05 dBi(peak)	2.51 dBi (peak)	2.5 max	2.46 dBi(peak)
DC330015440)			diameter: 1.37 mm	5470-5725MHz	5470-5725MHz	5470-5725MHz	5470-5725MHz
			Connector: IPEX	1.33 dBi(peak)	3.93 dBi (peak)	2.5 max	2.60 dBi (peak)
				5725-5825MHz	5725-5825MHz	5725-5825MHz	5725-5825MHz
				1.33 dBi (peak)	3.96 dBi (peak)	2.5 max	2.64 dBi (peak)

Section 2. Dimensioned Photos or Drawings of Antennas

Include a dimensioned photo and dimensioned drawing of main antenna here.

Main and Aux Antenna Dimensioned Drawing:





Main and Aux Antenna Photo:





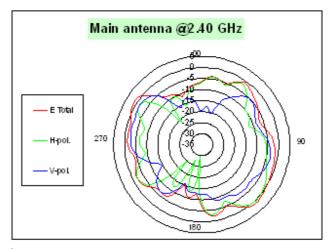


Aux

Section 3. Radiation characteristics of antennae Loaded in Host Platform

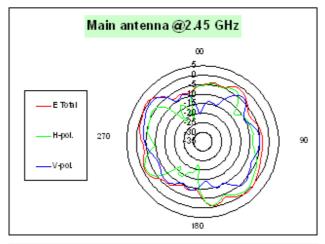
2400-2500MHz radiation characteristic

Main antenna: 2400 MHz



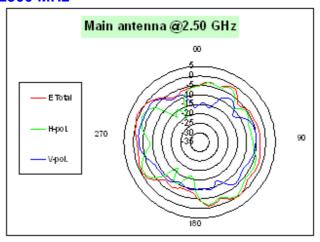
	Total	H-pol	V pol
Peak Gain	1.24	0.30	-1.70
Average Gain	-3.49	-6.23	-7.64

Main antenna: 2450 MHz



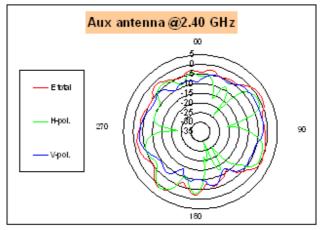
	Total	H-pol	V pol
Peak Gain	0.83	-0.86	-0.72
Average Gain	-3.27	-6.37	-7.03

Main antenna: 2500 MHz



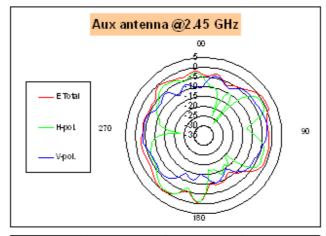
	Total	H-pol	V pol
Peak Gain	0.74	-0.54	-2.27
Average Gain	-3.05	-5.59	-7.35

Auxiliary antenna: 2400 MHz



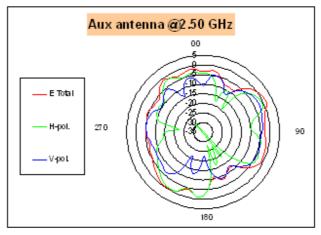
	Total	H-pol	V pol
Peak Gain	1.50	0.76	-2.05
Average Gain	-2.81	-6.50	-5.96

Auxiliary antenna: 2450 MHz



	Total	H-pol	V pol
Peak Gain	1.26	-0.51	-2.27
Average Gain	-3.02	-6.31	-6.58

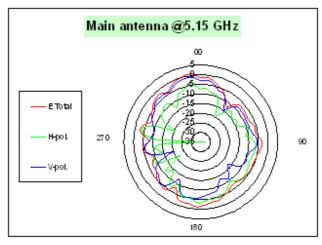
Auxiliary antenna: 2500 MHz



	Total	H-pol	V pol
Peak Gain	1.68	-0.54	-2.30
Average Gain	-3.43	-6.49	-7.31

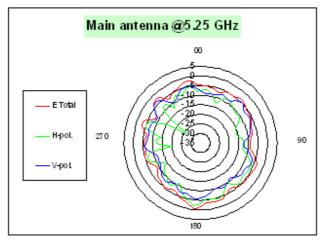
5150-5350 MHz radiation characteristic

Main antenna: 5150 MHz



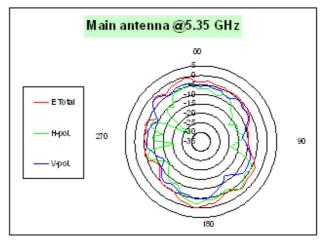
	Total	H-pol	V pol
Peak Gain	0.84	-3.14	-0.98
Average Gain	-4.43	-8.55	-7.02

Main antenna: 5250 MHz



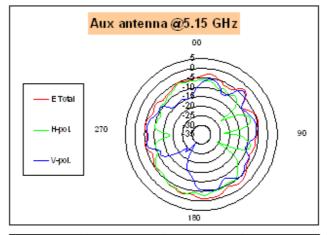
	Total	H-pol	V pol
Peak Gain	-0.67	-2.31	-3.34
Average Gain	-4.99	-8.68	-7.74

Main antenna: 5350 MHz



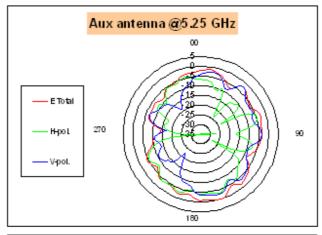
	Total	H-pol	V pol
Peak Gain	-0.09	-1.97	-1.84
Average Gain	4.31	-8.28	-6.98

Auxiliary antenna: 5150 MHz



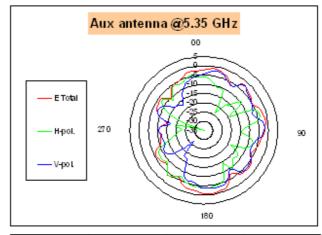
	Total	H-pol	V pol
Peak Gain	-0.98	-2.69	-3.26
Average Gain	-4.51	-7.83	-8.77

Auxiliary antenna: 5250 MHz



	Total	H-pol	V pol
Peak Gain	0.05	-3.23	-2.19
Average Gain	-4.29	-8.13	-7.36

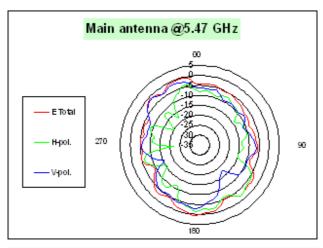
Auxiliary antenna: 5350 MHz



	Total	H-pol	V pol
Peak Gain	-0.48	-3.51	-1.95
Average Gain	4.36	-8.90	-6.95

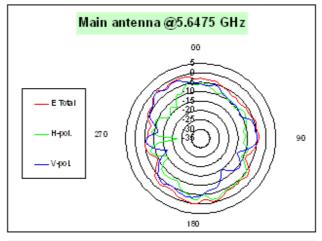
5470-5725MHz radiation characteristic

Main antenna: 5470 MHz



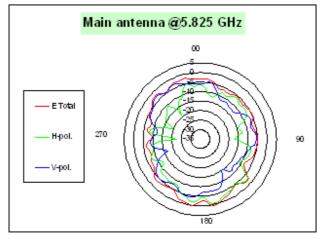
	Total	H-pol	V pol
Peak Gain	0.78	-1.54	-1.49
Average Gain	-4.04	-8.08	-6.83

Main antenna: 5647.5 MHz



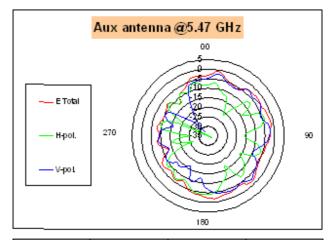
	Total	H-pol	V pol
Peak Gain	0.27	-1.68	-1.12
Average Gain	-3.84	-7.83	-6.57

Main antenna: 5825 MHz



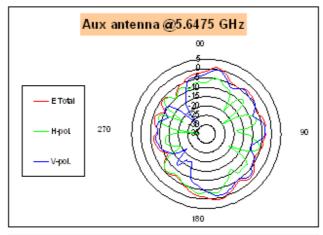
	Total	H-pol	V pol
Peak Gain	0.29	-0.59	-2.74
Average Gain	4.31	-7.89	-7.50

Auxiliary antenna: 5470 MHz



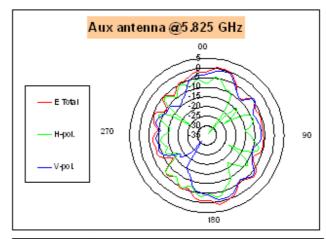
	Total	H-pol	V pol
Peak Gain	-0.92	-4.01	-2.10
Average Gain	-4.80	-9.70	-7.16

Auxiliary antenna: 5647.5 MHz



	Total	H-pol	V pol
Peak Gain	1.08	-2.80	-0.23
Average Gain	-4.04	-8.51	-6.58

Auxiliary antenna: 5825 MHz



	Total	H-pol	V pol
Peak Gain	1.33	-2.43	-0.77
Average Gain	4.59	-9.18	-6.97

Section 4. Host Platform Information

OEM / ODM Host platform: (HSTNN-C18C) platform correlated to antenna data

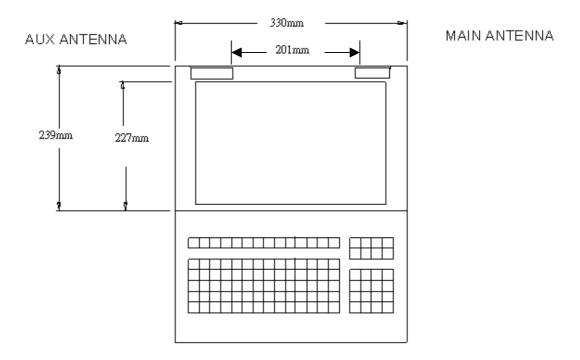
Rating Label Photo:

Module Location Photo: (if Singapore required)



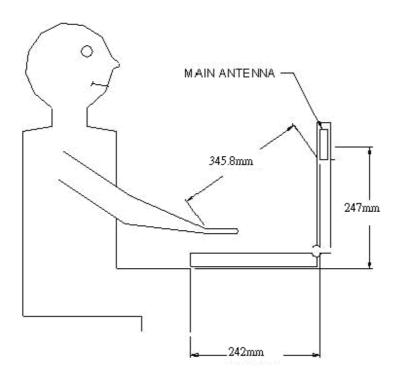
Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo or dimensioned drawing** of main and auxiliary antenna placements.



Section 6. Antenna dimensional information for SAR evaluation

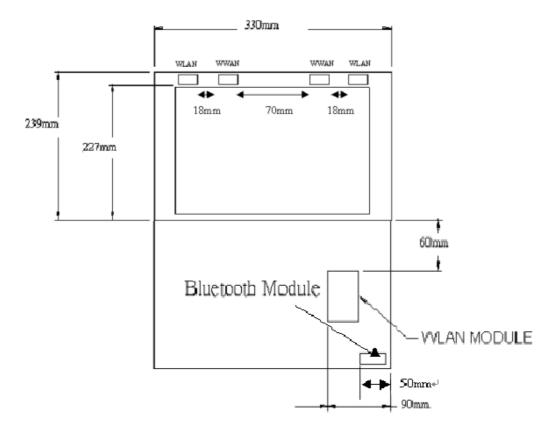
Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit (main) antenna and the user (excluding hands, wrist, feet, and ankle)



Section 7. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between WLAN antenna and 2nd radiator transmit antenna.

(Note: Due to the evolving rules regarding co-location, each platform will need to be reviewed on a case by case basis)



Section 8. Local representative contact information

Local representative contact information is required for regulatory support for target countries below.

	Local company name	Contact name	Phone number	FAX Number	e-Mail Address	Notes
Argentina						
Brazil						
Indonesia						
Israel						
Malaysia						
Mexico						
Singapore						Telecommunication Equipment Dealer License Required
South Africa						
USA, Canada						