

# Regulatory WLAN Antenna Information

(English Language Required for Intel Regulatory Review / Approval)

<b>Platform</b>	
Platform Owner	
Brand Name	Quanta
Model Name	QW6
ODM	Quanta Computer Inc.
Target Launch Date	(YYYY/ MM/ DD)
<b>Antenna</b>	
Brand Name	Quanta Computer Inc.
Part Number	<input checked="" type="checkbox"/> Tx1 Antenna: DQ6QW600200
	<input checked="" type="checkbox"/> Tx2 Antenna: DQ6QW600200
	<input type="checkbox"/> Tx3 (or Rx3) Antenna:
<b>Module</b>	
With WLAN Module	<input checked="" type="checkbox"/> Realtek RTL8191SE
(Check Box)	

## Antenna Sample / Antenna Data

### Requirements for worldwide regulatory approval

Section	Description of Required OEM / ODM 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	Tx1, Tx2 & Tx3 antenna (Peak Gain W/ cable loss) *	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Tx1, Tx2 & Tx3 antenna (Peak Gain only) *	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Tx1, Tx2 & Tx3 antenna (Cable loss W/ connector) *	Required	Required	Required	Required	Required
2	Dimensioned Photographs <u>and</u> Drawings of Tx1, Tx2, and Tx3 (or Rx3) 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. <u>(S. Korea requires photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.</u>	Required	Required	Desired	<u>Required (Photos)</u>	<u>Required (Photos)</u>
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, 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
8	Local representative contact information for LMA/ PARS process.	Required	N/A	N/A	N/A	N/A

**NOTE:**

(\*) if 3<sup>rd</sup> antenna is Rx only (e.g. receive only for 4965AGN) then peak gain and cable loss not required

# Antenna Information

## Section 1. Antenna Assembly Specifications

### Antenna Assembly Summary:

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E *Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
(P/N: DQ6QW600200) Tx1 antenna	Quanta Computer Inc	PIFA	(P/N: SGX0003) 50 ohm Coaxial. length: 547 mm diameter: 1.13 mm Connector: SGX	2400-2500MHz 0.9 dBi (peak)	2400-2500MHz 2.79 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz -1.89 dBi (peak)
(P/N: DQ6QW600200) Tx2 antenna	Quanta Computer Inc	PIFA	(P/N: SGX0003) 50 ohm Coaxial. length: 760 mm diameter: 1.13 mm Connector: SGX	2400-2500MHz -2.3 dBi (peak)	2400-2500MHz 1.13 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz -3.43 dBi (peak)

NOTE:  
(\*) If **Rx2/Rx3** only (2<sup>nd</sup> or 3<sup>rd</sup> antenna receives only, e.g. for **512 family** & 4965AGN) then the information marked with \* is not required

### Antenna Peak Gain Table:

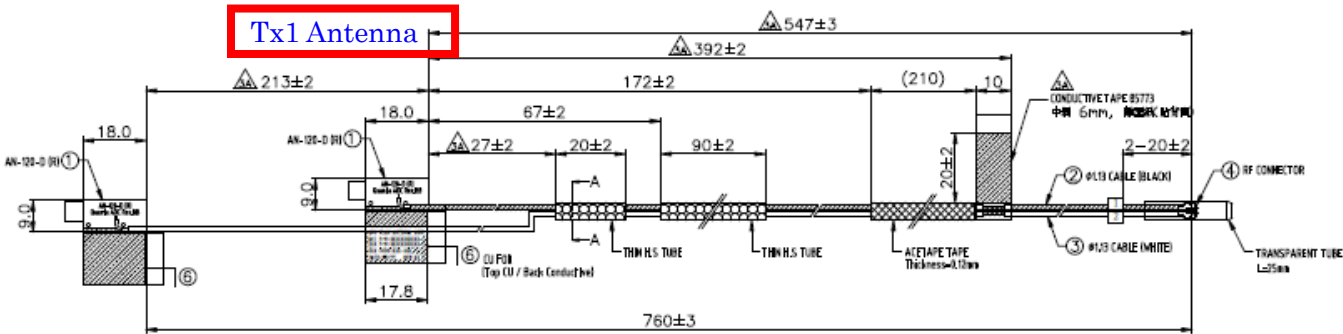
Frequency (MHz)	Tx1 antenna		Tx2 (or Rx2) Antenna	
	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
2400	-1.5	-0.6	-6.3	-4.9
2450	0.5	0.9	-2.6	-2.8
2500	-0.9	-0.4	-2.3	-2.6

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V
- If Rx2 only (2<sup>nd</sup> antenna receives only, e.g. for 512 family) then the information is not required for Rx2.
- If Rx3 only (3<sup>rd</sup> antenna receives only, e.g. for 4965AGN) then the information is not required for Rx3.

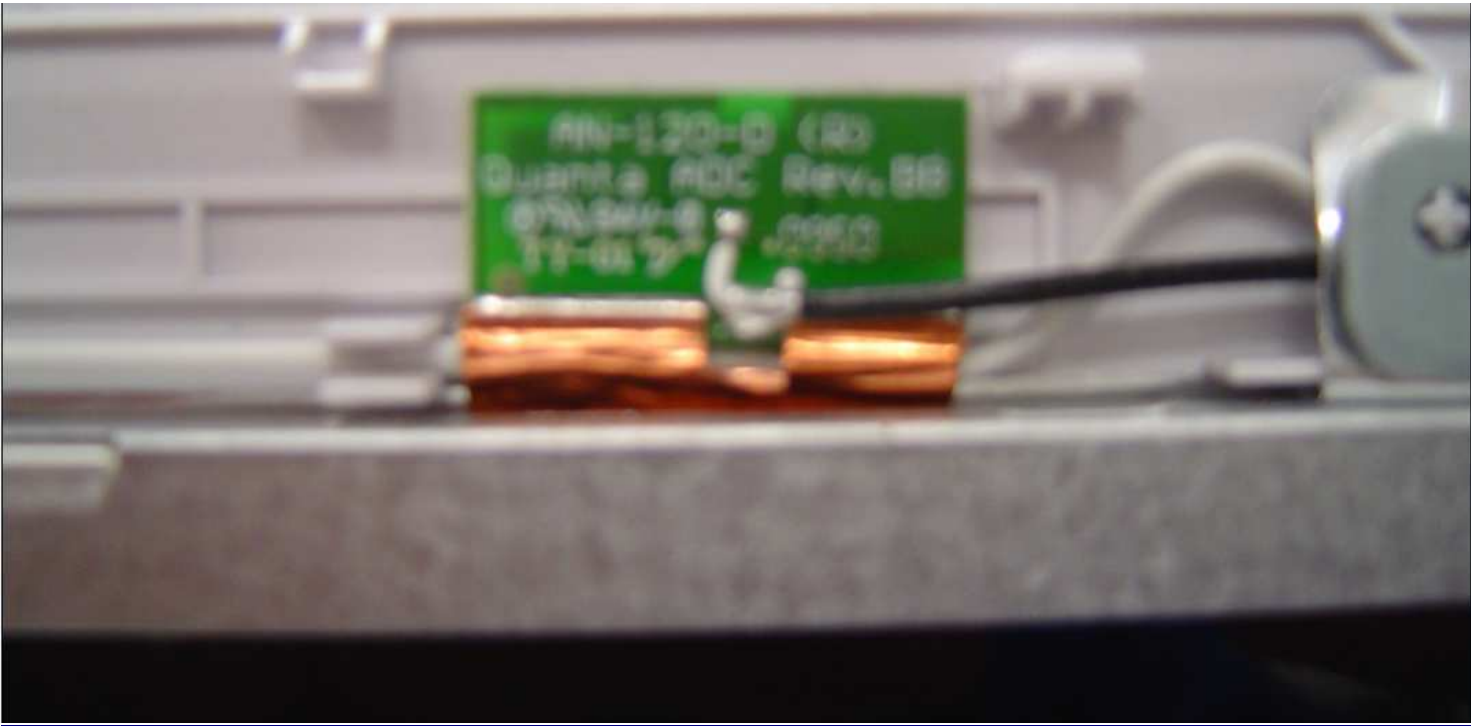
Section 2. Dimensioned Photos or Drawings of Antennas

Include a dimensioned photo and dimensioned drawing of Tx1 antenna here.

Tx1 Antenna Dimensioned Drawing:



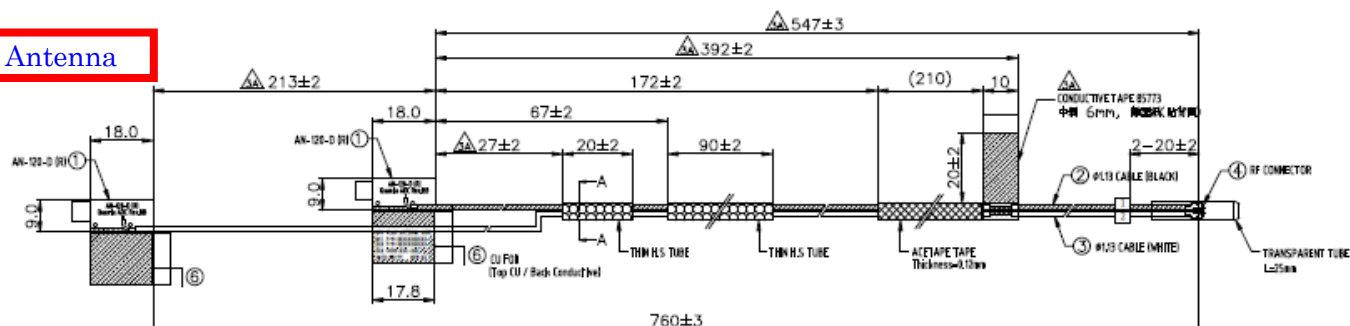
Tx1 Antenna Photo:



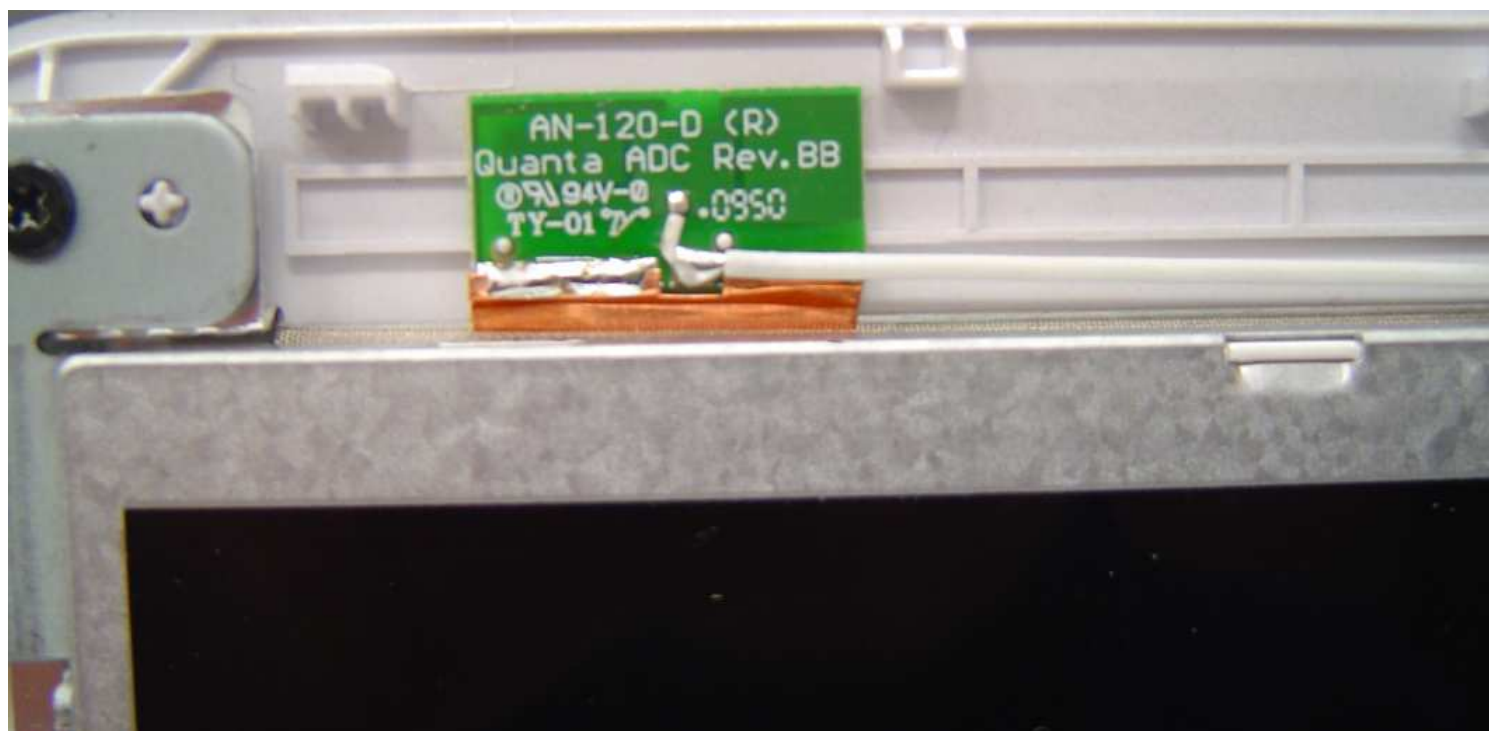
**Include a dimensioned photo and dimensioned drawing of Tx2 (or Rx2) antenna here.**

### **Tx2 (or Rx2) Antenna Dimensioned Drawing:**

Tx2 Antenna



**Tx2 (or Rx2) Antenna Photo:**

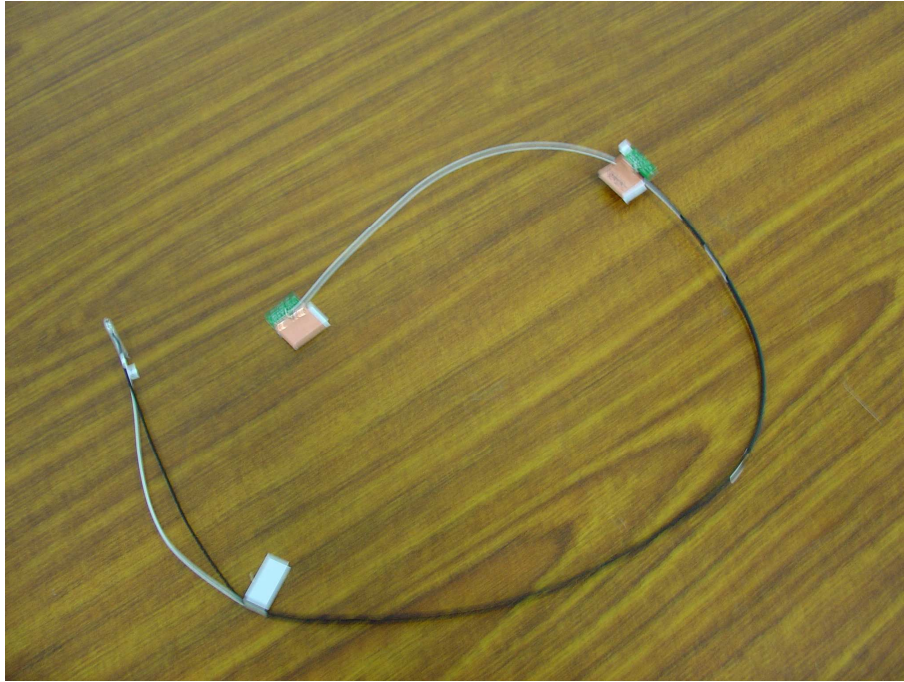




**Include front view photo of all 2 antennas here.**

Antenna Manufacturer: Quanta Computer Inc.

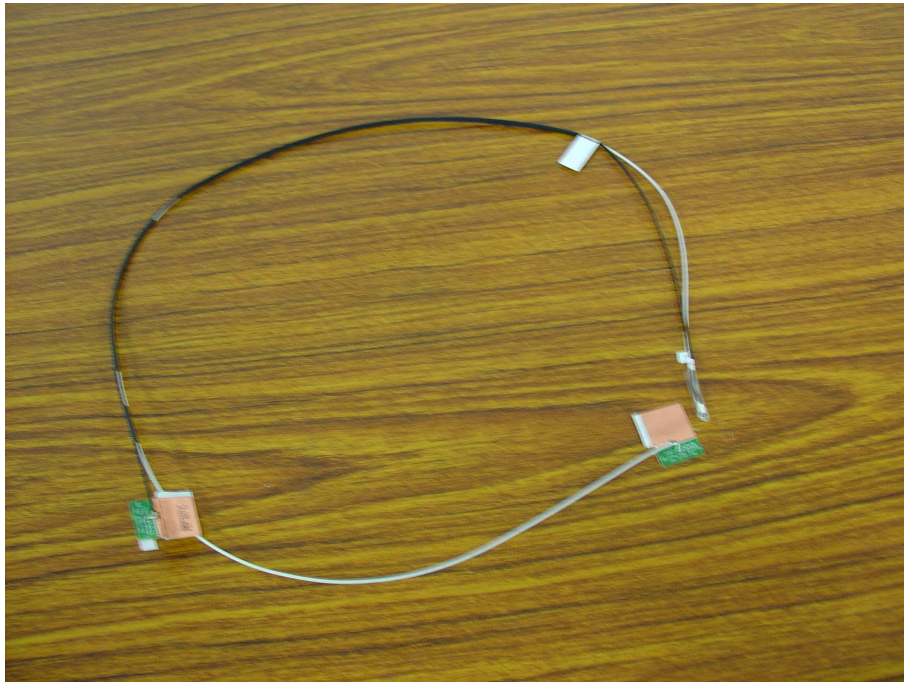
Antenna Part Number: DQ6QW600200 (Tx1), DQ6QW600200 (Tx2 or Rx2)



**Include back view photo of all 2 antennas here.**

Antenna Manufacturer: Quanta Computer Inc.

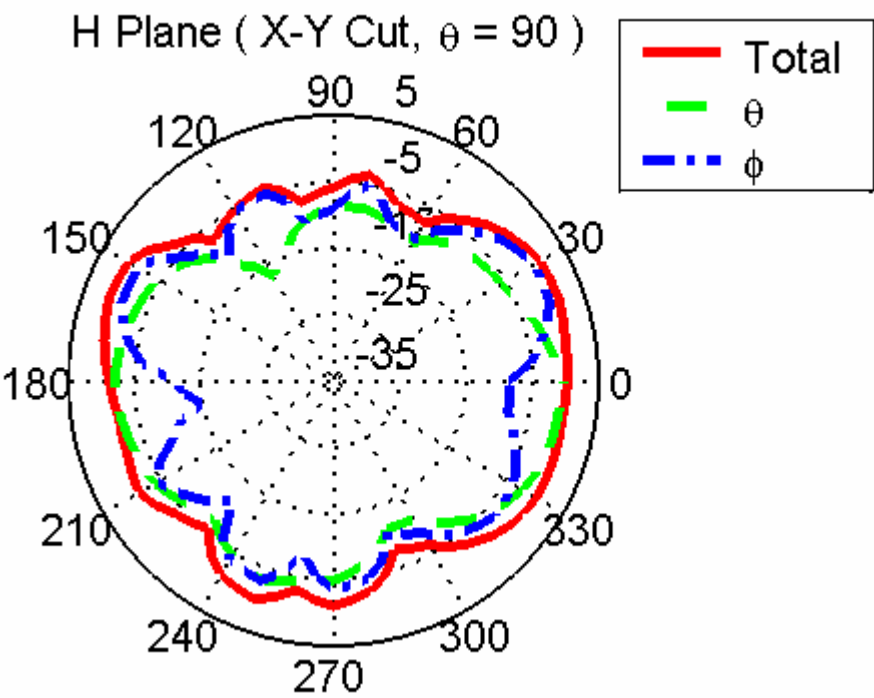
Antenna Part Number: DQ6QW600200 (Tx1), DQ6QW600200 (Tx2 or Rx2)



Section 3. Radiation characteristics of antennae Loaded in Host Platform

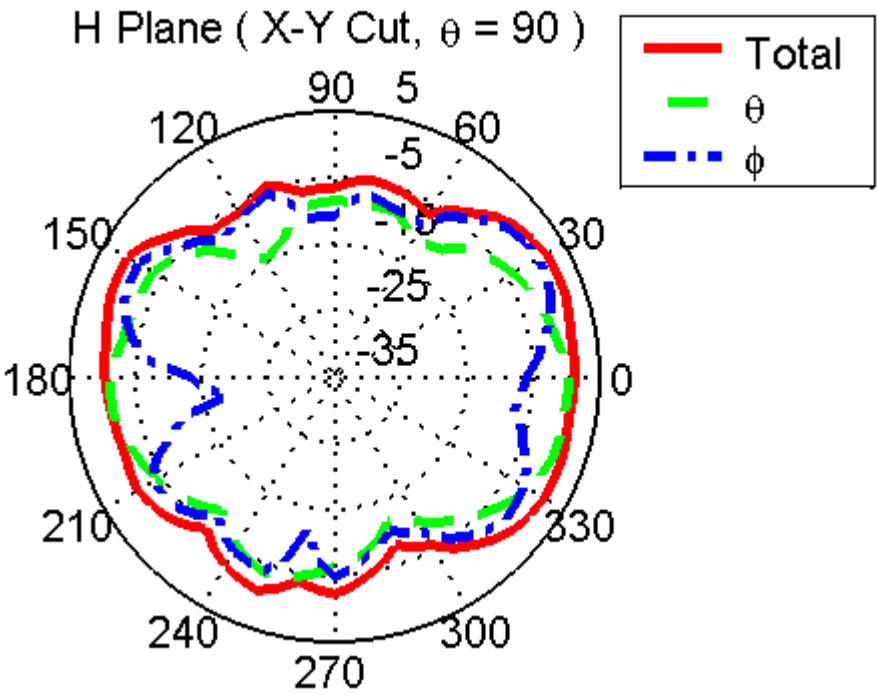
2400-2500MHz radiation characteristic

Tx1 antenna: 2400 MHz



Center Frequency	2400 MHz
Horizontal (dBi) peak	-1.5
Vertical (dBi) peak	-0.6

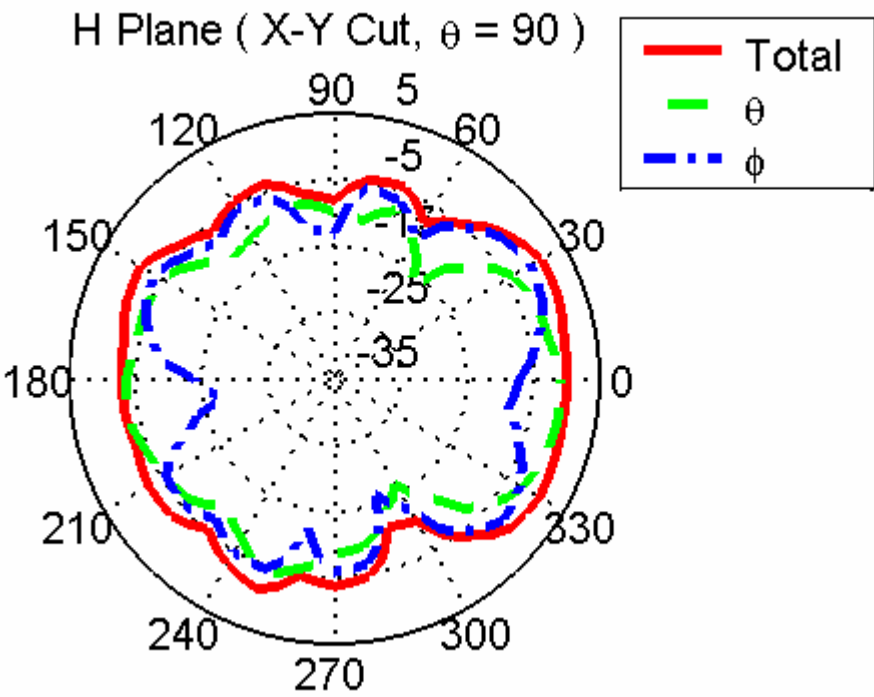
Tx1 antenna: 2450 MHz



Center Frequency	2450 MHz
Horizontal (dBi) peak	0.5
Vertical (dBi) peak	0.9

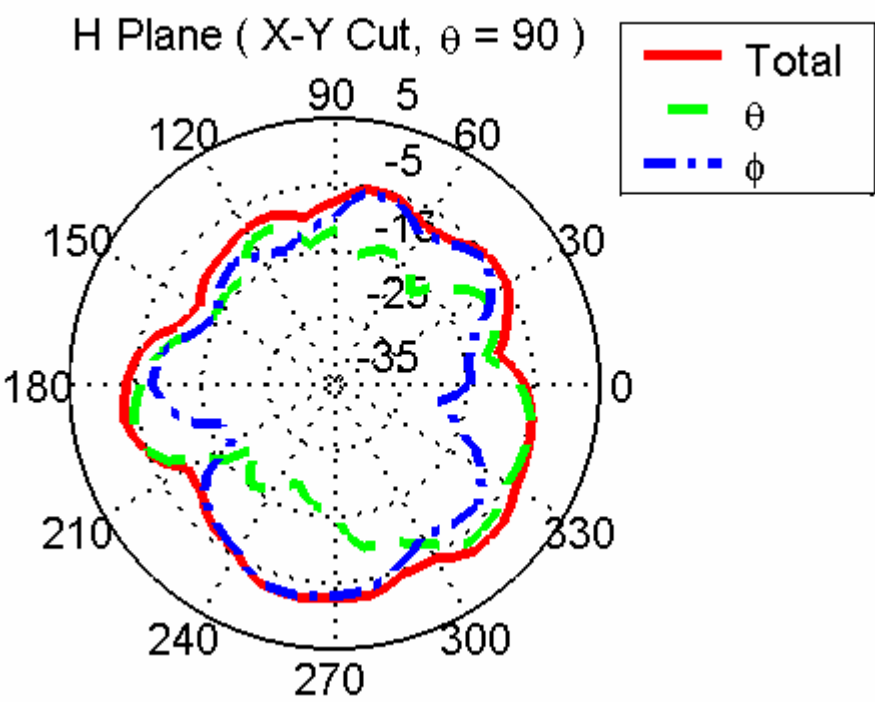


Tx1 antenna: 2500 MHz



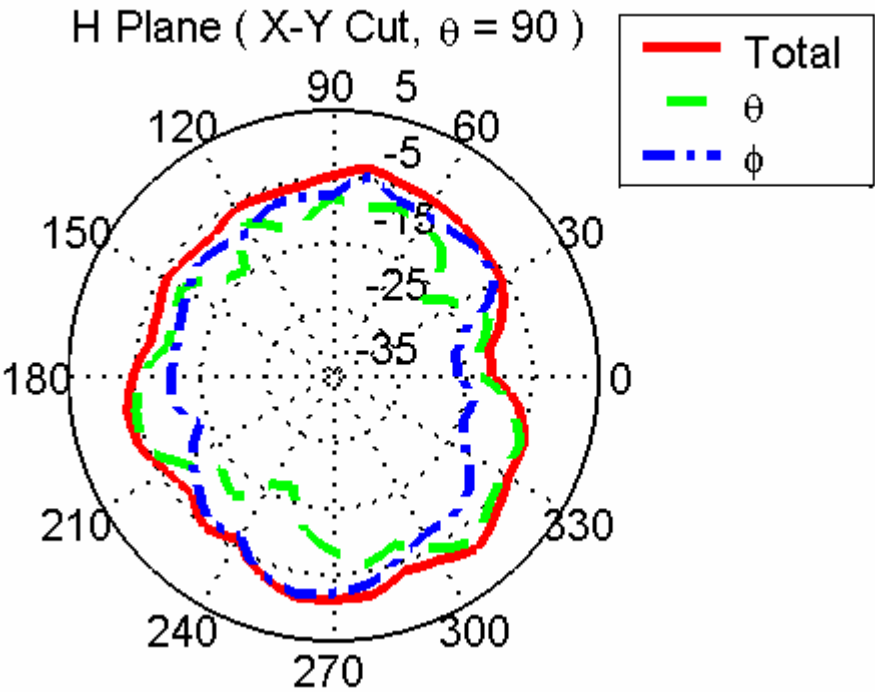
Center Frequency	2500 MHz
Horizontal (dBi) peak	-0.9
Vertical (dBi) peak	-0.4

**Tx2 (or Rx2) antenna: 2400 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



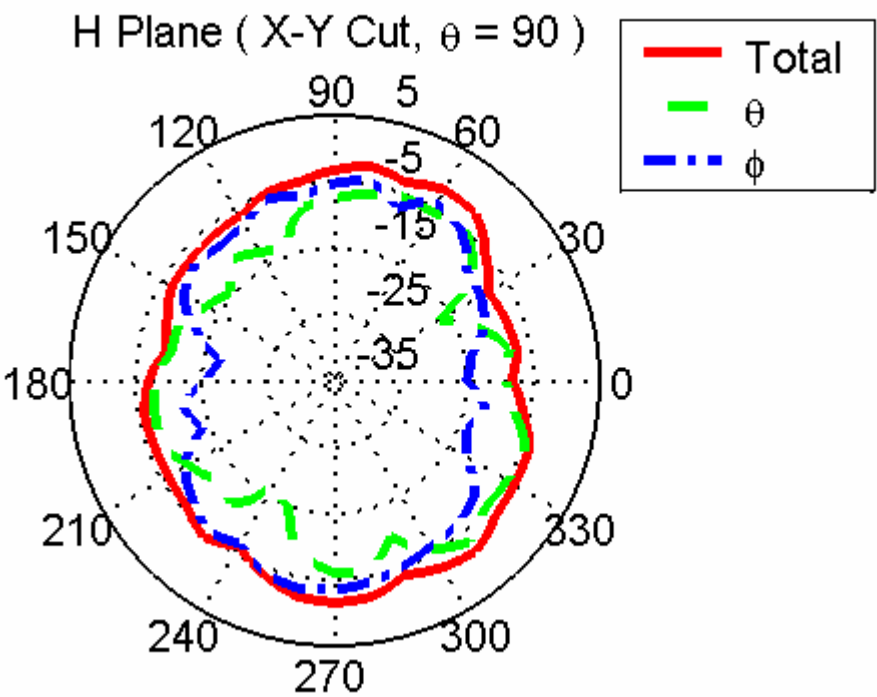
Center Frequency	2400 MHz
Horizontal (dBi) peak	-6.3
Vertical (dBi) peak	-4.9

**Tx2 (or Rx2) antenna: 2450 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



Center Frequency	2450 MHz
Horizontal (dBi) peak	-2.6
Vertical (dBi) peak	-2.8

**Tx2 (or Rx2) antenna: 2500 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



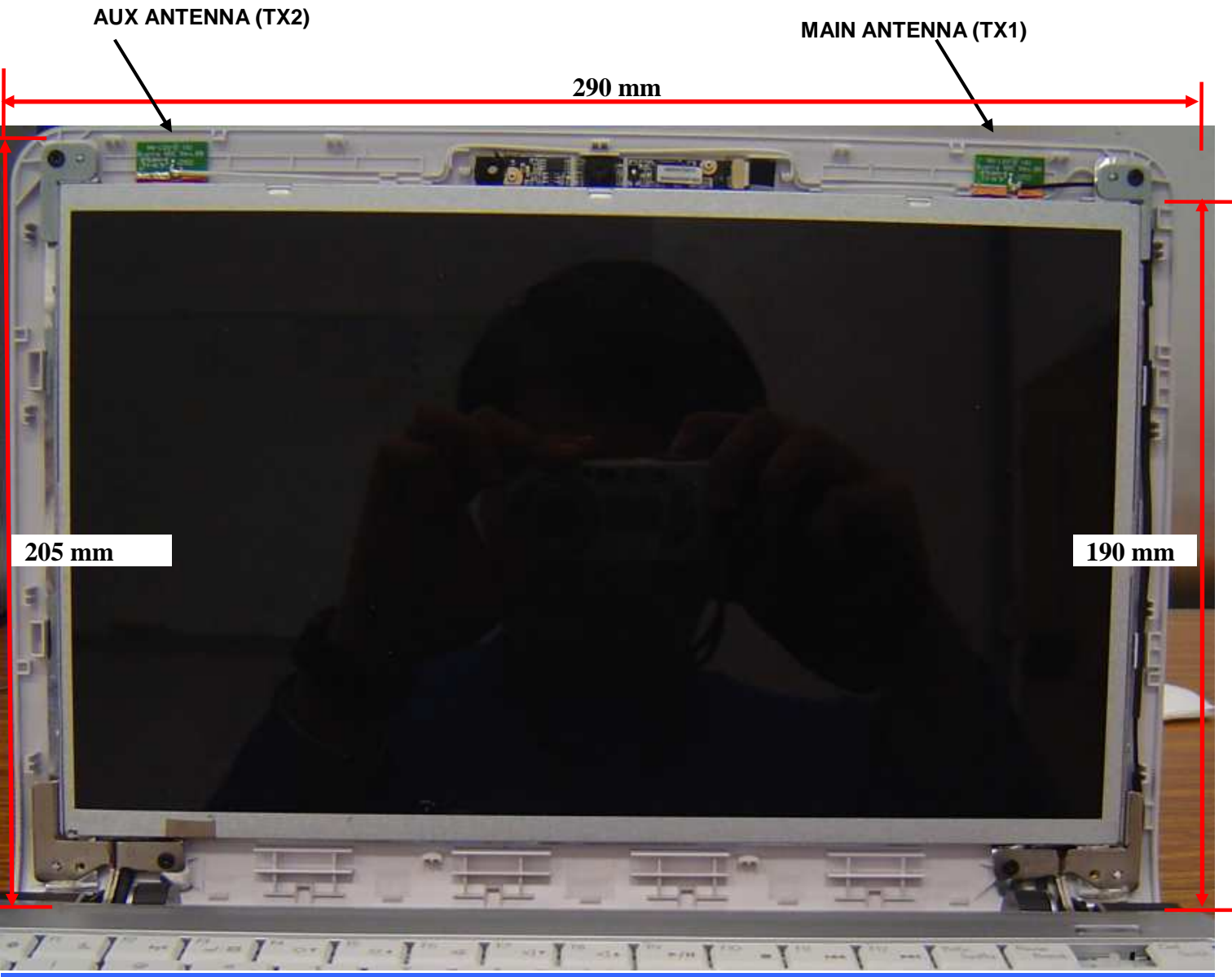
Center Frequency	2500 MHz
Horizontal (dBi) peak	-2.3
Vertical (dBi) peak	-2.6

**Section 4. Host Platform Information**

OEM / ODM Host platform: (XXXXXXX) platform correlated to antenna data  
**Rating Label Photo:**

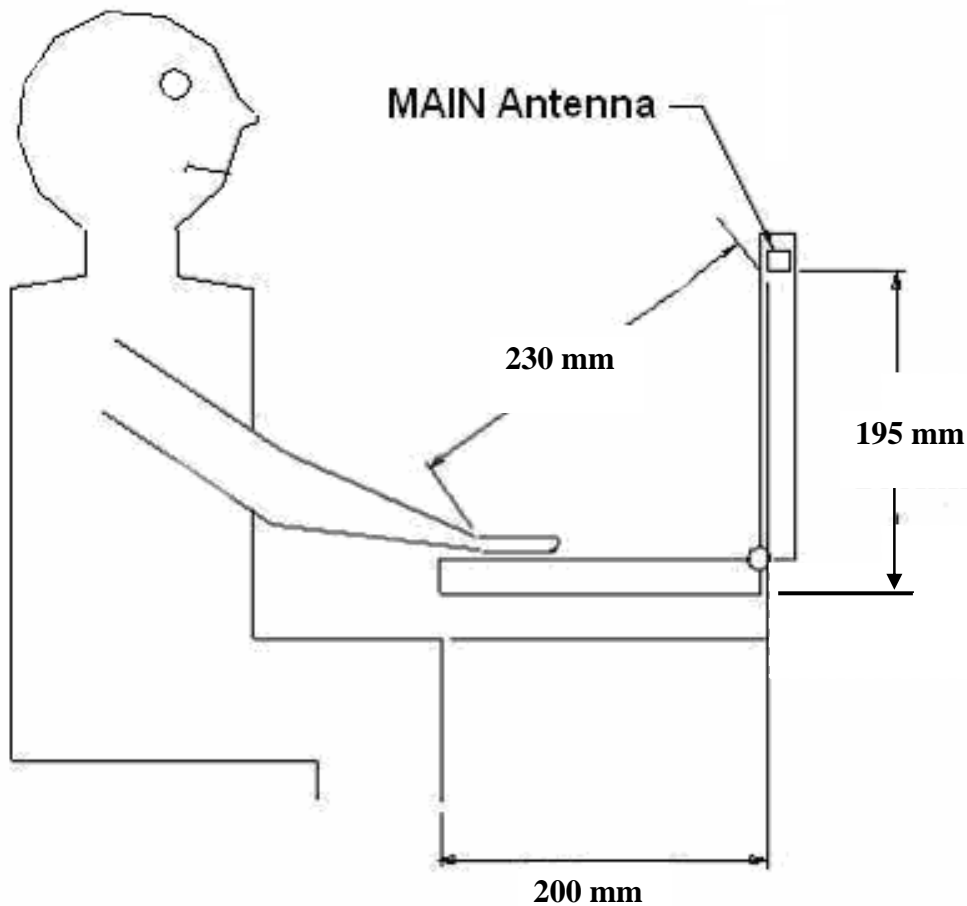
Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo** or **dimensioned drawing** of Tx1, Tx2 and Tx3 antenna placements (measurements are not required for receive-only antenna). Any antenna that transmits must show dimensions to bottom of laptop.



## Section 6. Antenna dimensional information for SAR evaluation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, lap/ thigh, and ankle)

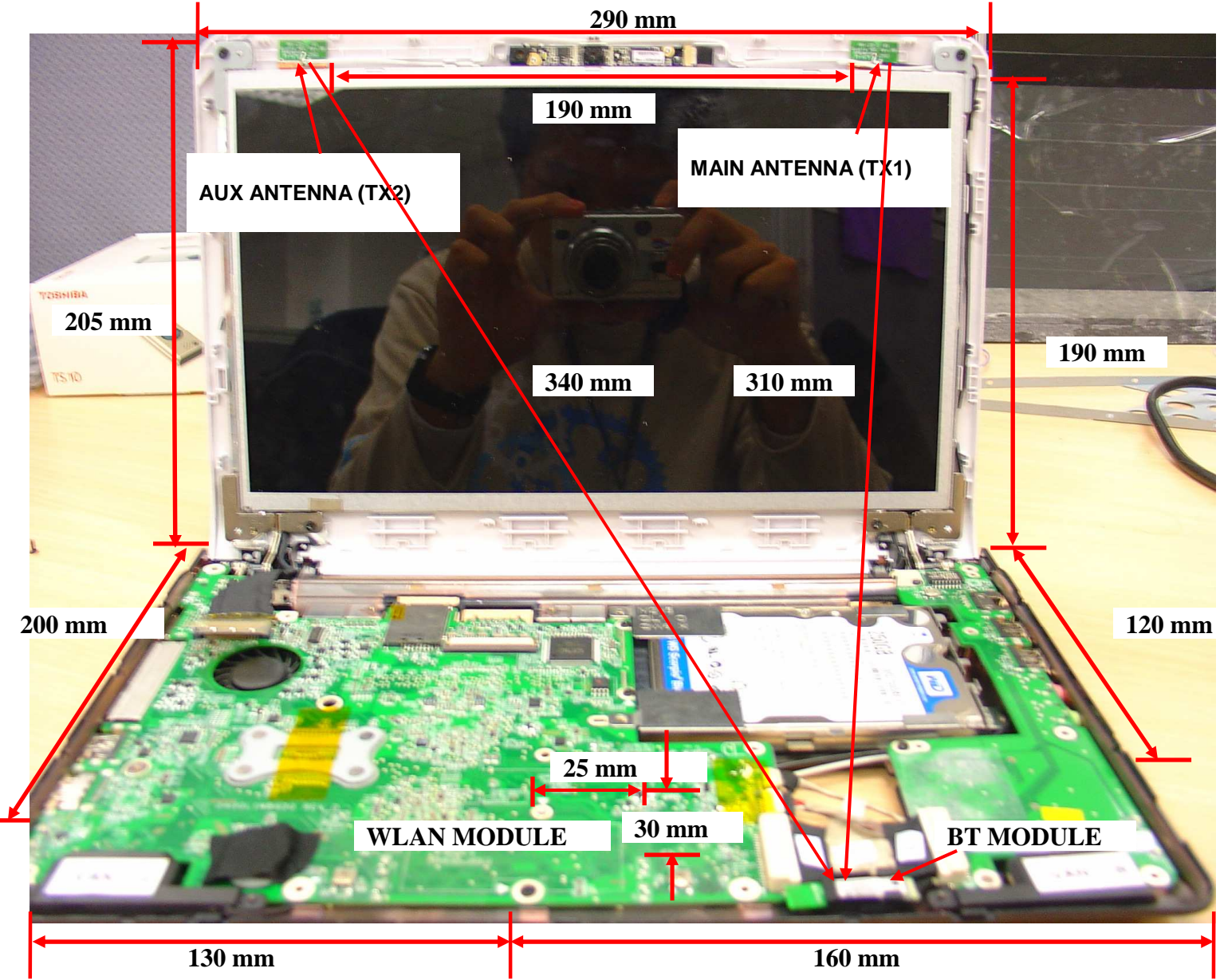




Section 7. Diagram Example of Co-Location Antenna Separation

Include a dimensioned photo or dimensioned drawing showing the distance (mm) between all WLAN transmit antennas and other co-located radiator transmit antenna such as Bluetooth, WWAN,..

(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						