

Regulatory WLAN Antenna Information

	Vendor Name	Project Code
OEM	Hewlett-Packard Company	Altima PA
ODM	Compal Corporation	HBL20
Antenna	Wistron Neweb Corporation	EBC-C4

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	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:

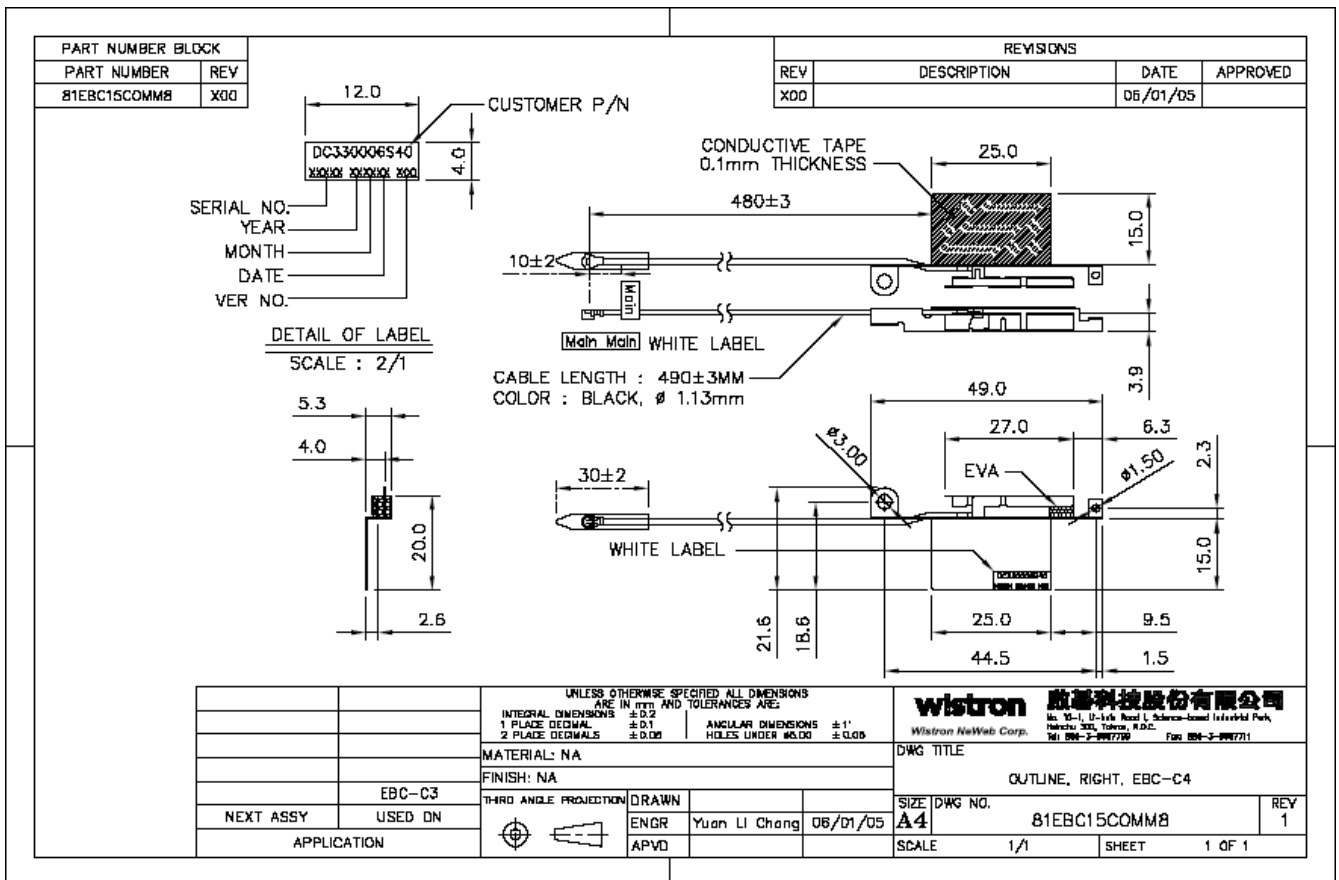
1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain w/ Cable Loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dB)
Main Antenna (ANC PIN: 81EBC15COMM8) (Customer PIN: DC330006S40)	Wistron NewWeb Corporation	PIFA	P/N:113490B(221) 50 ohm Coaxial. length: 490 mm diameter: 1.13 mm Connector: IPEX	2400-2500 MHz	2400-2500 MHz	2400-2500 MHz	2400-2500 MHz
				2.93 dBi (peak)	4.90 dBi (peak)	2.0 max	1.97 dBi (peak)
				5150-5350 MHz	5150-5350 MHz	5150-5350 MHz	5150-5350 MHz
				1.61 dBi (peak)	4.48 dBi (peak)	2.5 max	2.87 dBi (peak)
				5470-5725 MHz	5470-5725 MHz	5470-5725 MHz	5470-5725 MHz
2.84 dBi (peak)	5.77 dBi (peak)	2.5 max	2.93 dBi (peak)				
AUX Antenna (ANC PIN: 81EBC15COMM8) (Customer PIN: DC330006S50)	Wistron NewWeb Corporation	PIFA	P/N:113490A(221) 50 ohm Coaxial. length: 490 mm diameter: 1.13 mm Connector: IPEX	2400-2500 MHz	2400-2500 MHz	2400-2500 MHz	2400-2500 MHz
				2.06 dBi (peak)	4.57 dBi (peak)	2.0 max	2.51 dBi (peak)
				5150-5350 MHz	5150-5350 MHz	5150-5350 MHz	5150-5350 MHz
				1.45 dBi (peak)	5.15 dBi (peak)	2.5 max	3.70 dBi (peak)
				5470-5725 MHz	5470-5725 MHz	5470-5725 MHz	5470-5725 MHz
1.87 dBi (peak)	5.64 dBi (peak)	2.5 max	3.77 dBi (peak)				
			5725-5825 MHz	5725-5825 MHz	5725-5825 MHz	5725-5825 MHz	
			0.73 dBi (peak)	4.62 dBi (peak)	2.5 max	3.89 dBi (peak)	

Section 2. Dimensioned Photos or Drawings of Antennas

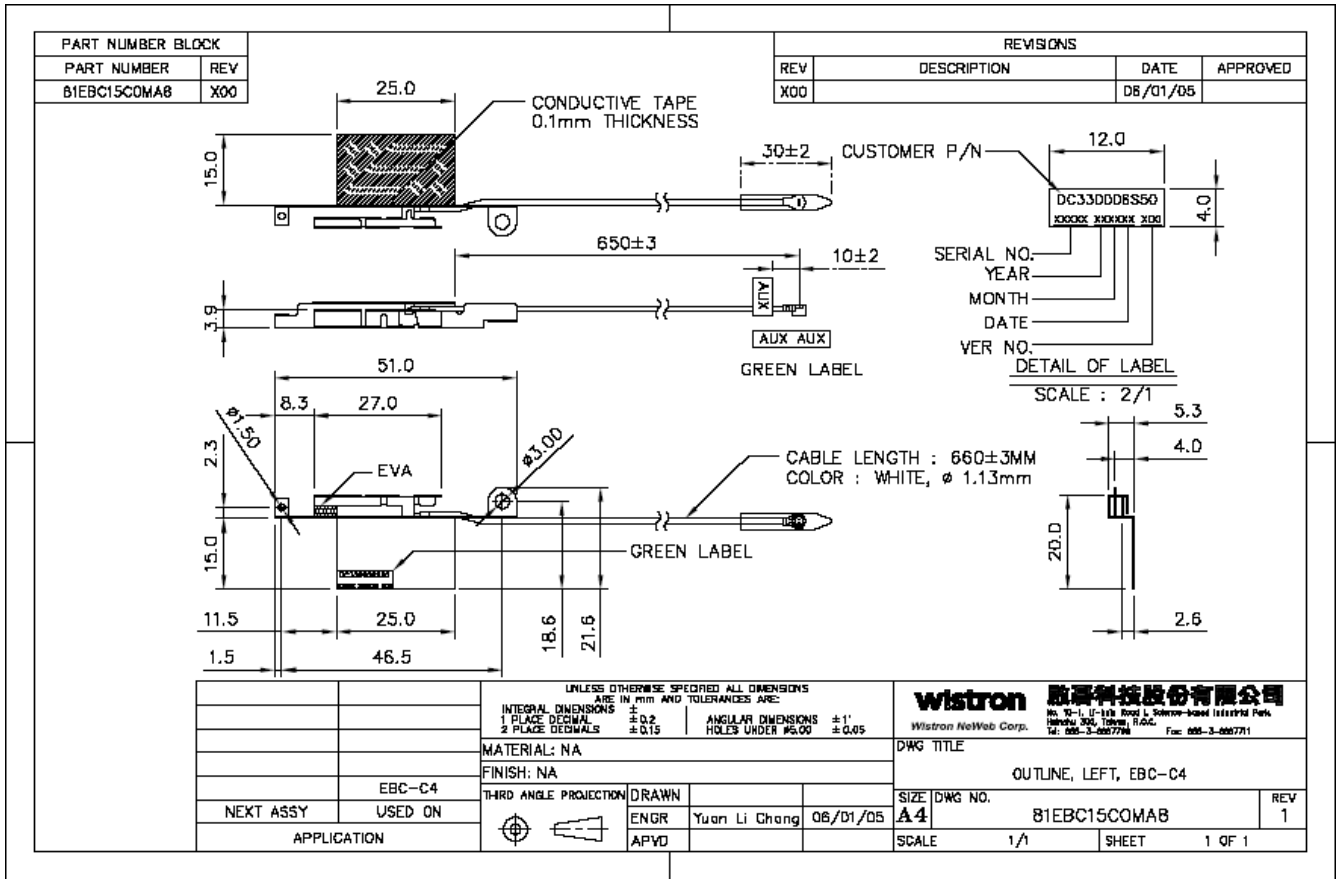
Include a dimensioned photo and dimensioned drawing of main antenna here.

Main and Aux Antenna Dimensioned Drawing:

Main antenna



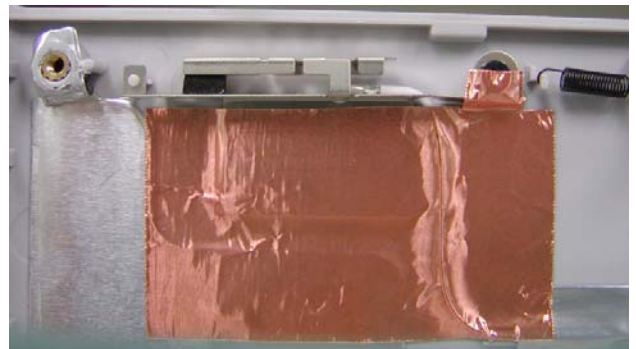
Aux antenna



Main and Aux Antenna Photo:
Main antenna



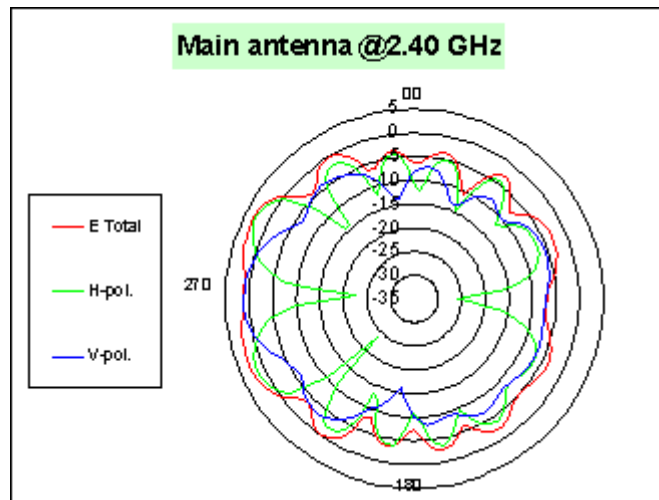
Aux antenna



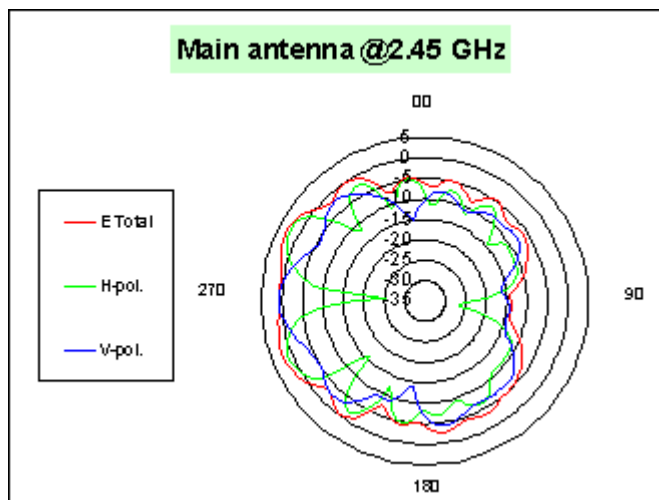
Section 3. Radiation characteristics of antennae Loaded in Host Platform

2400-2500MHz radiation characteristic

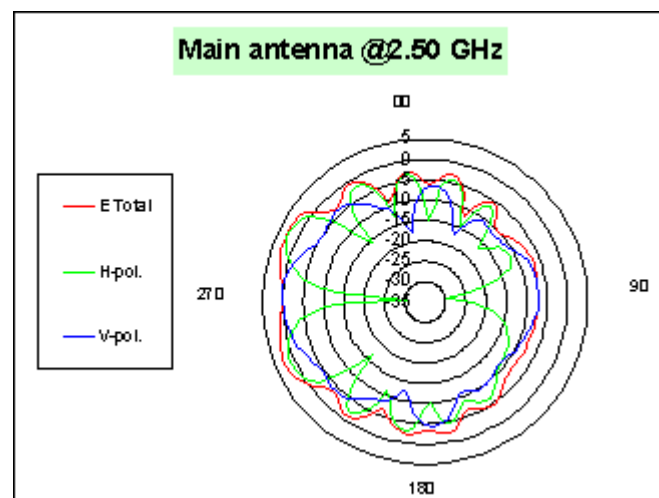
Main antenna: 2400 MHz



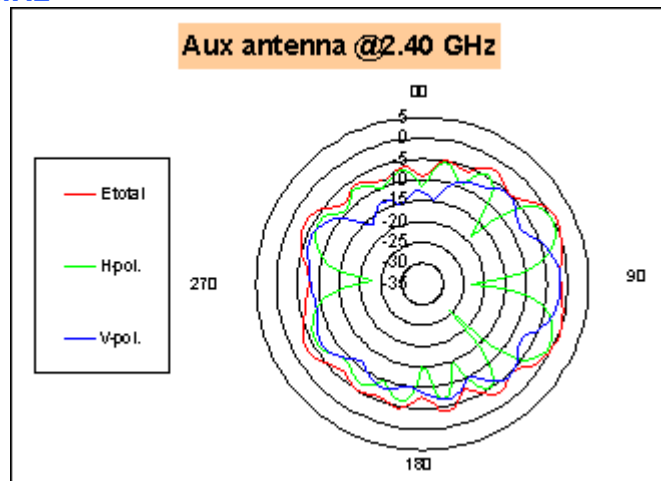
Main antenna: 2450 MHz



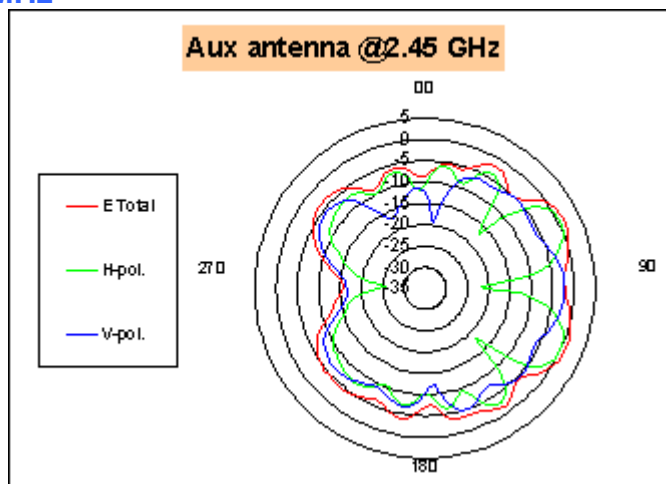
Main antenna: 2500 MHz



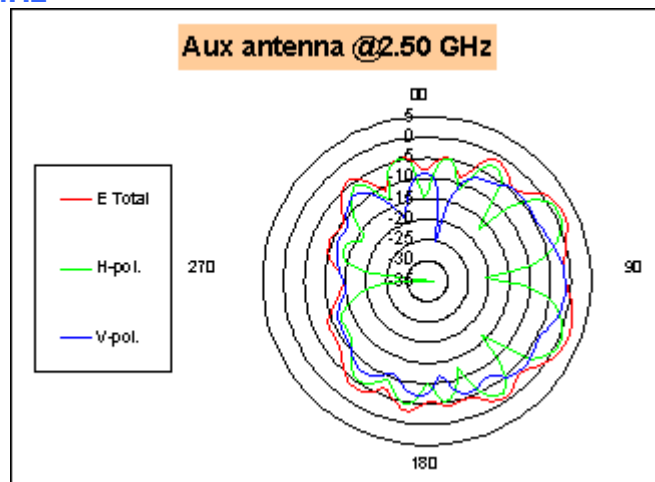
Auxiliary antenna: 2400 MHz



Auxiliary antenna: 2450 MHz

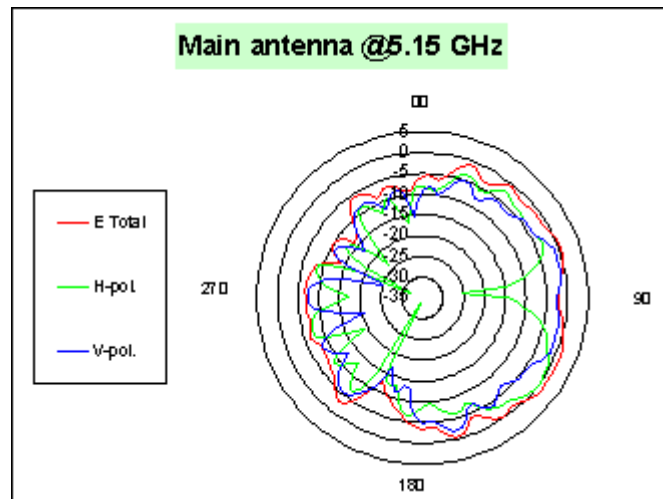


Auxiliary antenna: 2500 MHz

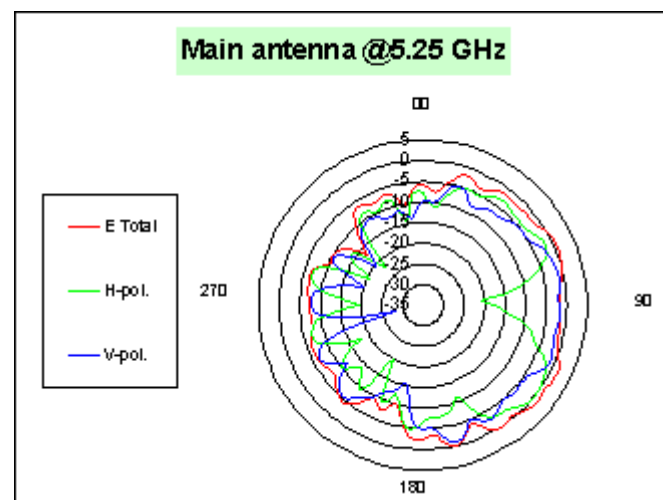


5150-5350 MHz radiation characteristic

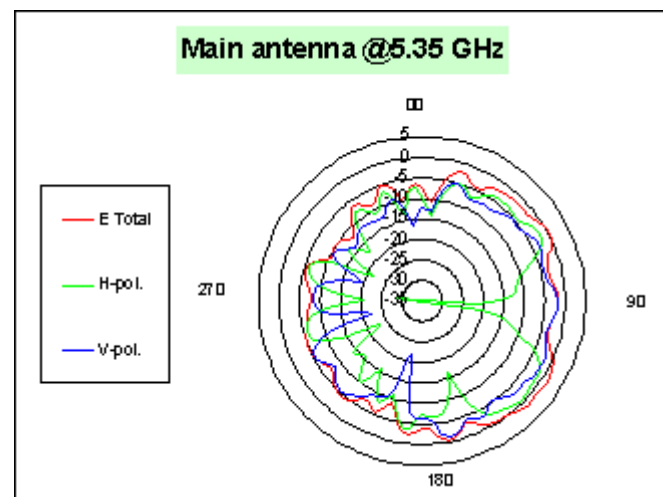
Main antenna: 5150 MHz



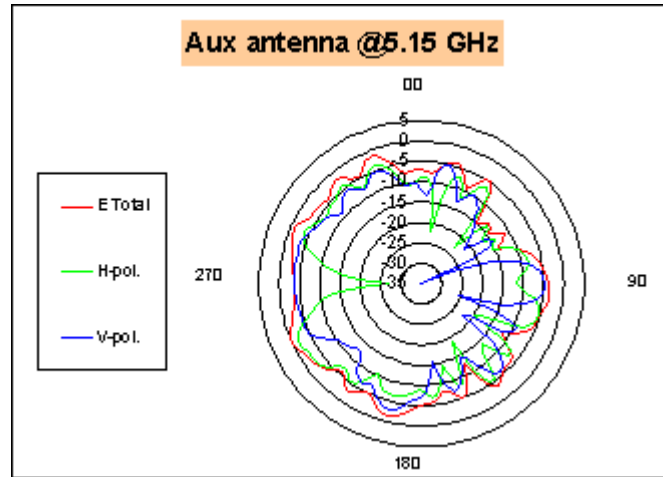
Main antenna: 5250 MHz



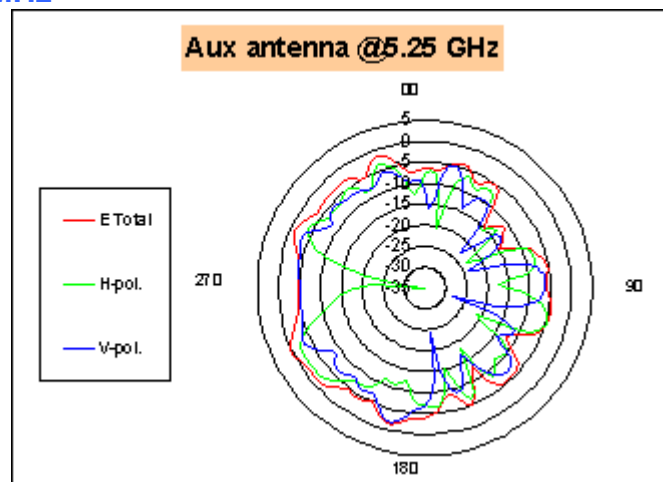
Main antenna: 5350 MHz



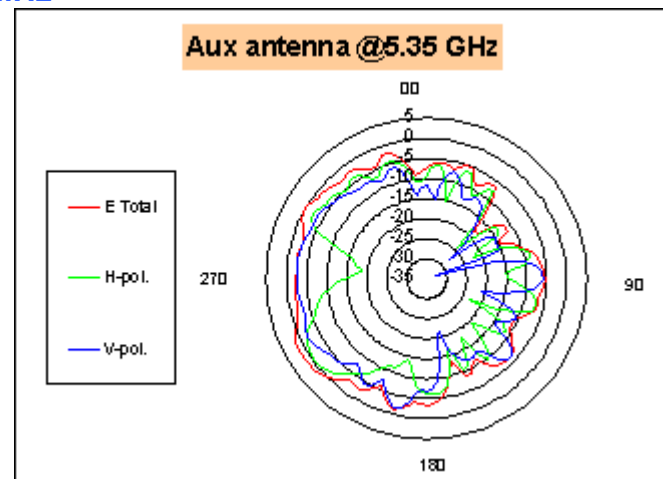
Auxiliary antenna: 5150 MHz



Auxiliary antenna: 5250 MHz

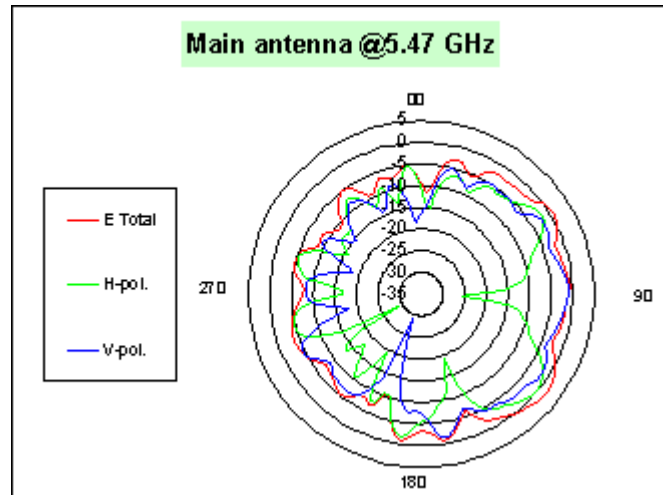


Auxiliary antenna: 5350 MHz

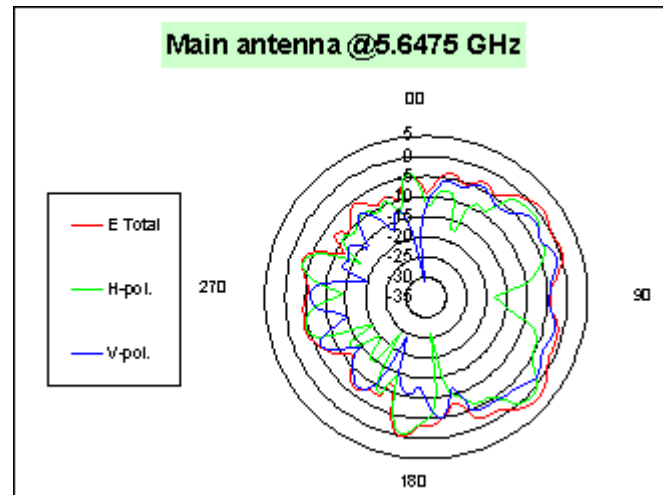


5470-5725MHz radiation characteristic

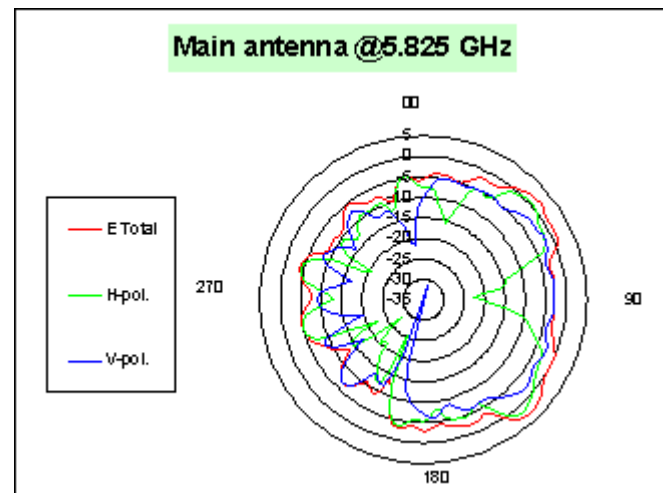
Main antenna: 5470 MHz



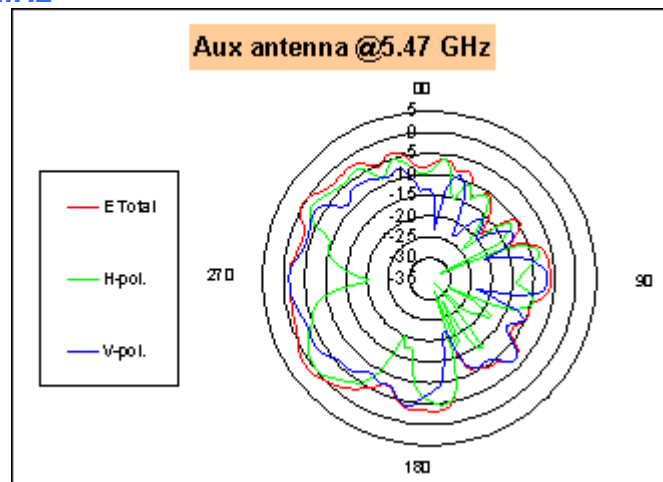
Main antenna: 5647.5 MHz



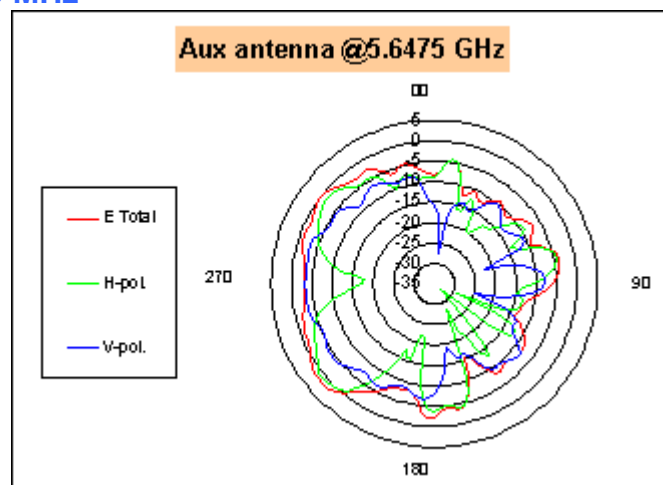
Main antenna: 5825 MHz



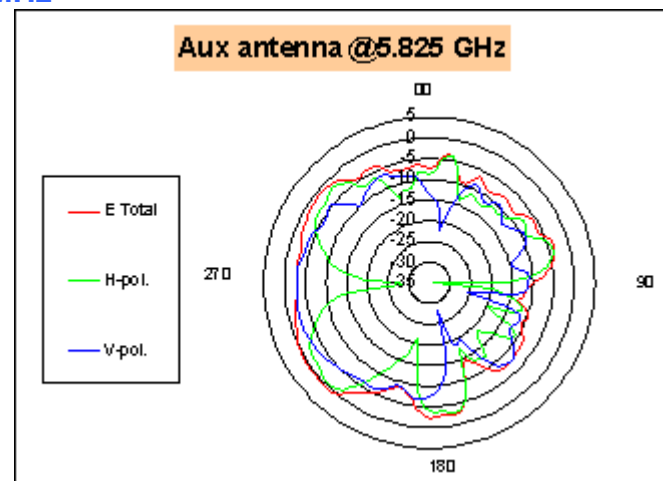
Auxiliary antenna: 5470 MHz



Auxiliary antenna: 5647.5 MHz



Auxiliary antenna: 5825 MHz



Section 4. Host Platform Information

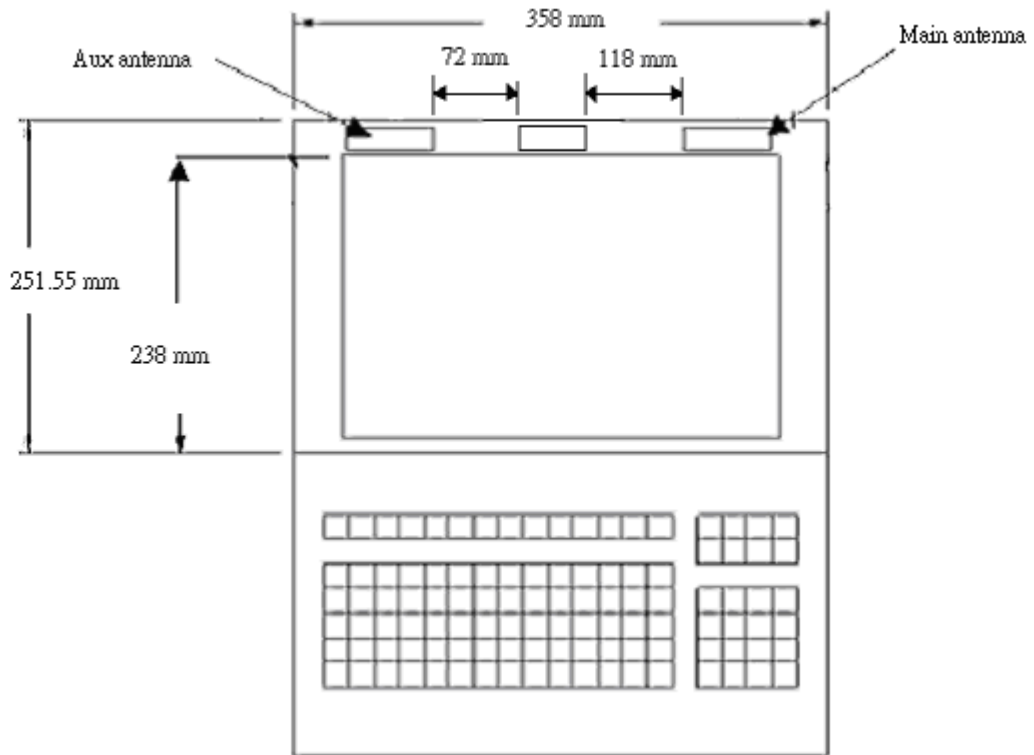
OEM / ODM Host platform: (XXXXXXX) platform correlated to antenna data

Rating Label Photo:

Module Location Photo: (if Singapore required)

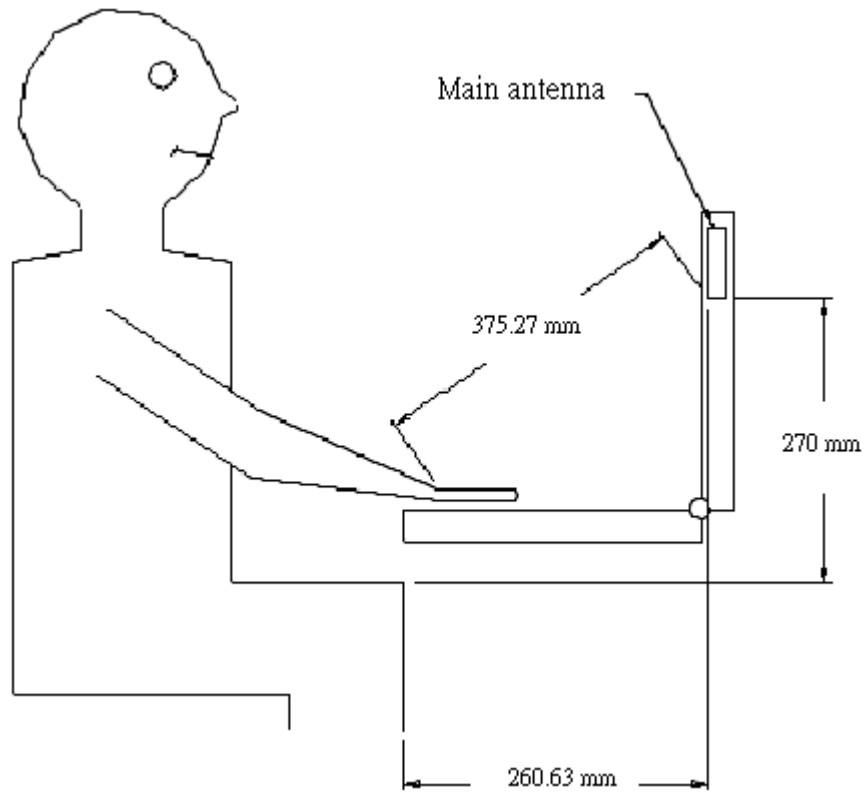
Section 5. Antenna Host Platform Location Information

Include a dimensioned photos or dimensioned drawings of main and auxiliary antenna placements.



Section 6. Antenna dimensional information for SAR evaluation

Include a dimensioned photos or dimensioned drawings 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

Indicate distance between WLAN module antennas and Bluetooth/other radio antenna element.

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

