Regulatory WLAN Antenna Information Example

(English Language Required for Quanta Regulatory Review / Approval)

Quanta Inc

Antenna Sample / Antenna Data
Requirements for worldwide regulatory approval

Section	Description of Required OEM / ODM Antenna Information	US / IC	EU	Japan	Taiwan	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	N/A	N/A	N/A	N/A
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 or Drawings of main & auxiliary antennas	Required	Desired	Required	Required	Required
3	Radiation patterns of antennas loaded in the host platform.	Required	Desired	Required	Required	Required
4	Platform model name / number - correlated to antenna manufacturer and antenna part number	Required	Required	Required	Required	Required
5	Photograph(s) or Drawings showing location of antennas in platform.	Required	Required	Required	Required	Desired
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 and distance those antennas. Information will be used to evaluate whether co-location testing is required.	Required	N/A	N/A	N/A	N/A

Antenna Information

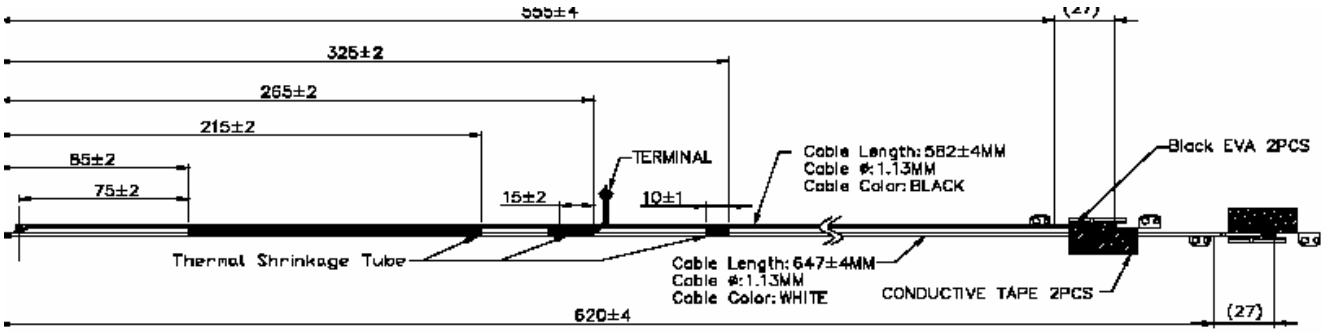
Section 1. Antenna Assembly Specifications

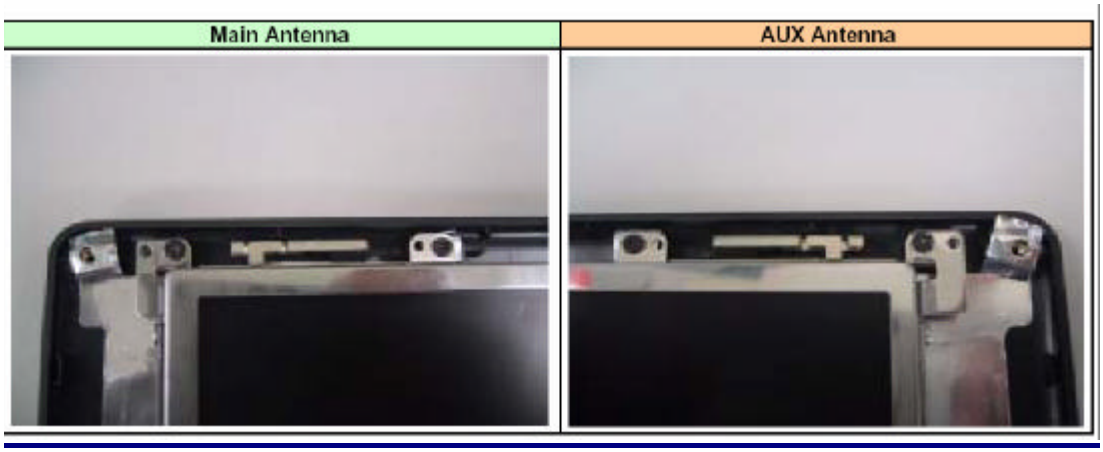
Antenna Assembly Summary:

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 (dBi)
Main Antenna (WNC P/N: 81.EBQ15.006) (customer P/N: DQ6ZL100100)	Wistron Neweb Corporation	PIFA	P/N: WN-S-1.13-647W-(2-2-1)&582B-(2-2-1) 50 ohm Coaxial. length: 647 mm diameter: 1.13 mm Connector: IPEX	2400-2500MHz 2.00 dBi (peak)	2400-2500MHz 4.26 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 2.26 dBi (peak)
				5150-5350MHz 3.81 dBi (peak)	5150-5350MHz 7.19 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 3.38 dBi (peak)
				5470-5725MHz 3.73 dBi (peak)	5470-5725MHz 7.19 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 3.46 dBi (peak)
				5725-5825MHz 3.73 dBi (peak)	5725-5825MHz 7.30 dBi (peak)	5725-5825MHz 2.5 max	5725-5825MHz 3.58 dBi (peak)
AUX Antenna (WNC P/N: 81.EBQ15.006) (customer P/N: DQ6ZL100100)	Wistron Neweb Corporation	PIFA	P/N: WN-S-1.13-647W-(2-2-1)&582B-(2-2-1) 50 ohm Coaxial. length: 582 mm diameter: 1.13 mm Connector: IPEX	2400-2500MHz 1.64 dBi (peak)	2400-2500MHz 3.69 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 2.05 dBi (peak)
				5150-5350MHz 4.09 dBi (peak)	5150-5350MHz 7.16 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 3.07 dBi (peak)
				5470-5725MHz 3.27 dBi (peak)	5470-5725MHz 6.41 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 3.14 dBi (peak)
				5725-5825MHz 2.80 dBi (peak)	5725-5825MHz 6.04 dBi (peak)	5725-5825MHz 2.5 max	5725-5825MHz 3.24 dBi (peak)

Section 2. Dimensioned Photos and Drawings of Antennas

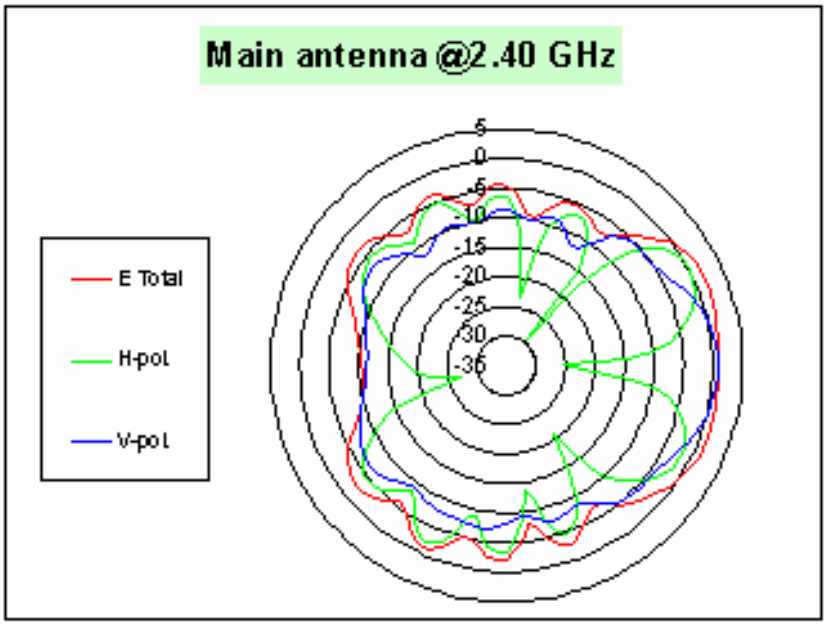
Include a dimensioned photo or dimensioned drawing of Main and Aux. Antenna.



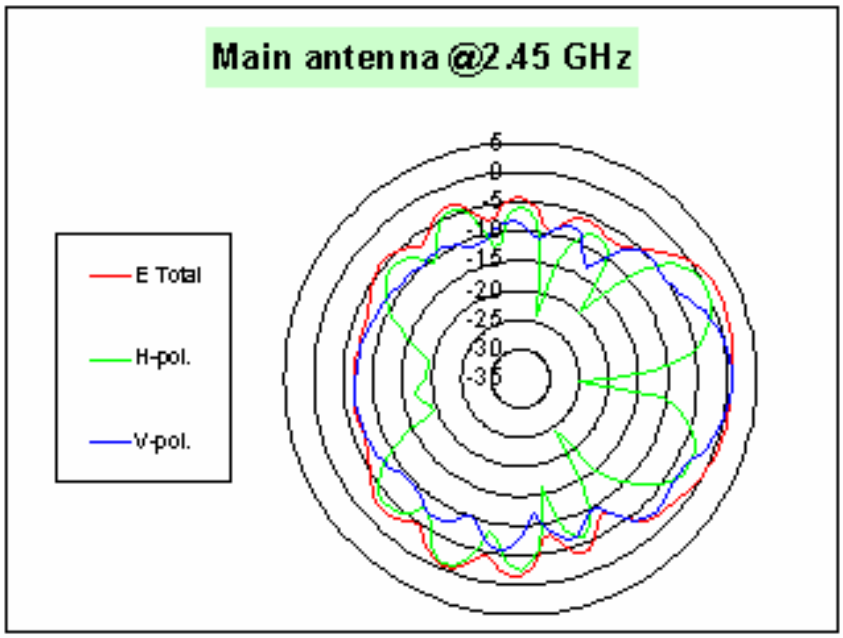


Section 3. Radiation characteristics of antenna Loaded in Host Platform

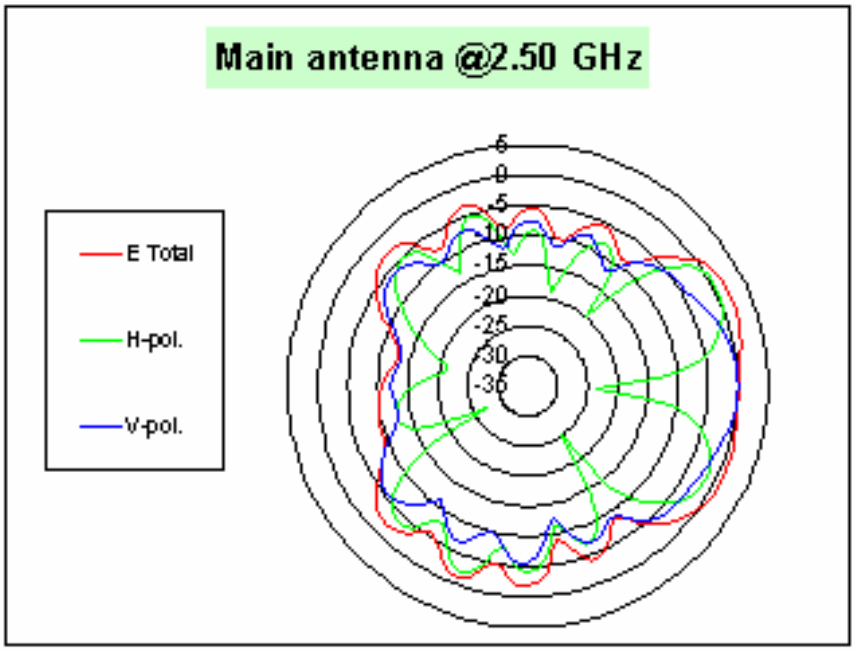
400-2500MHz radiation characteristic



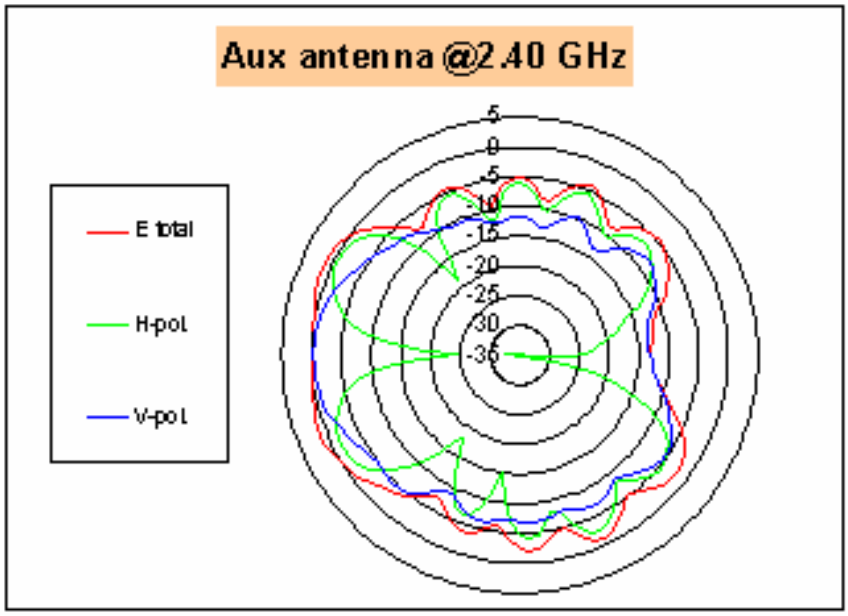
	Total	H-pol	V pol
Peak Gain	1.81	0.03	0.79



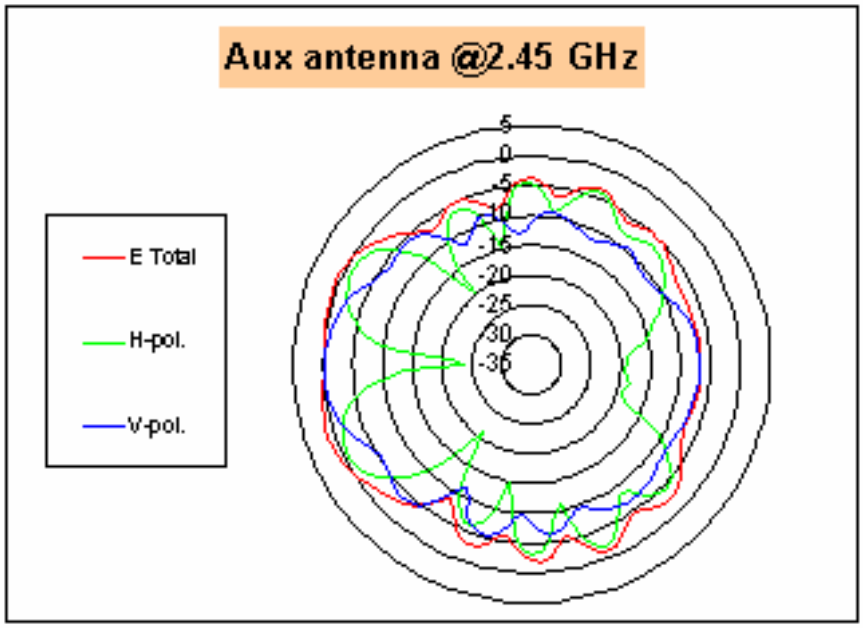
	Total	H-pol	V pol
Peak Gain	1.87	0.10	0.83



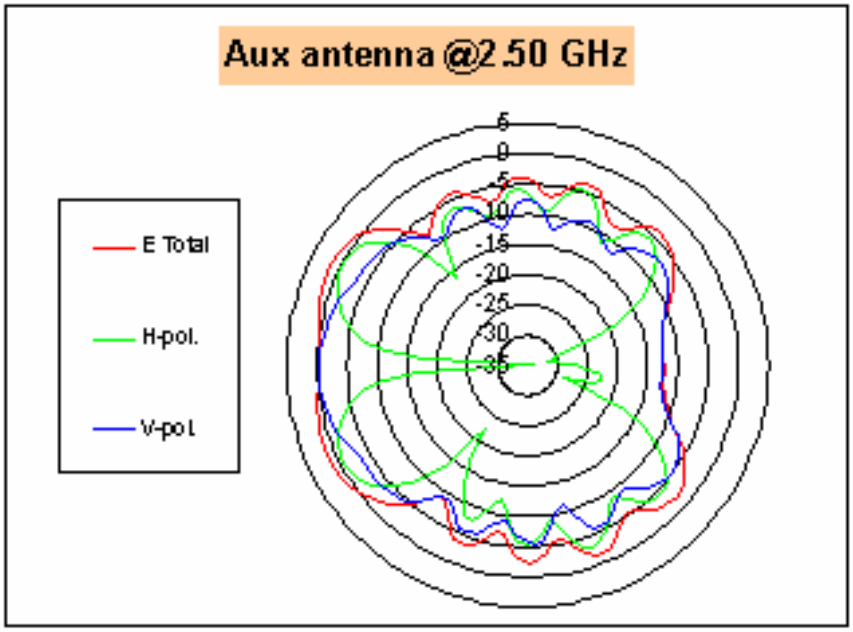
	Total	H-pol	V pol
Peak Gain	2.00	0.44	0.05



	Total	H-pol	V pol
Peak Gain	1.22	-0.52	-0.35

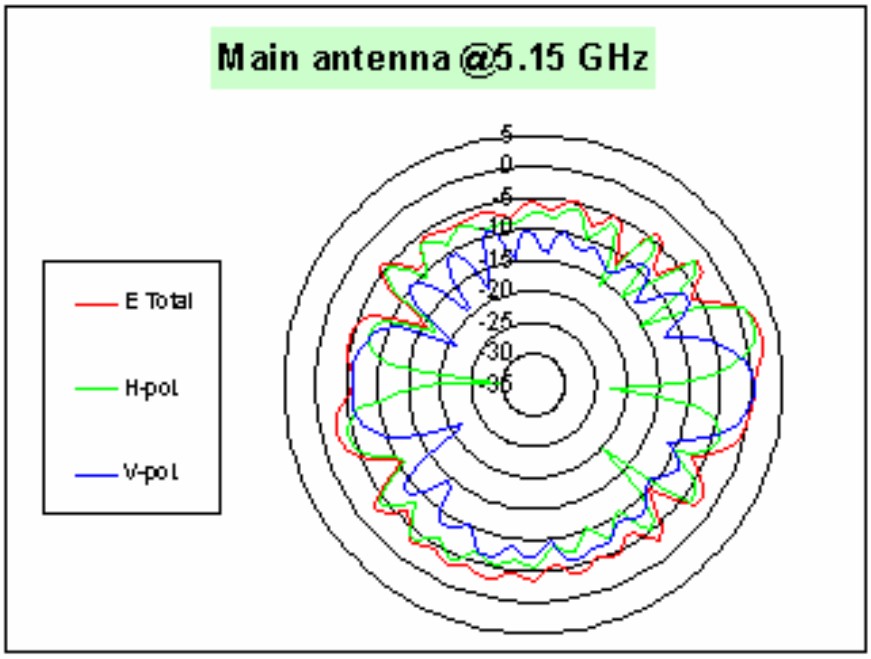


	Total	H-pol	V pol
Peak Gain	1.19	-0.82	-0.21

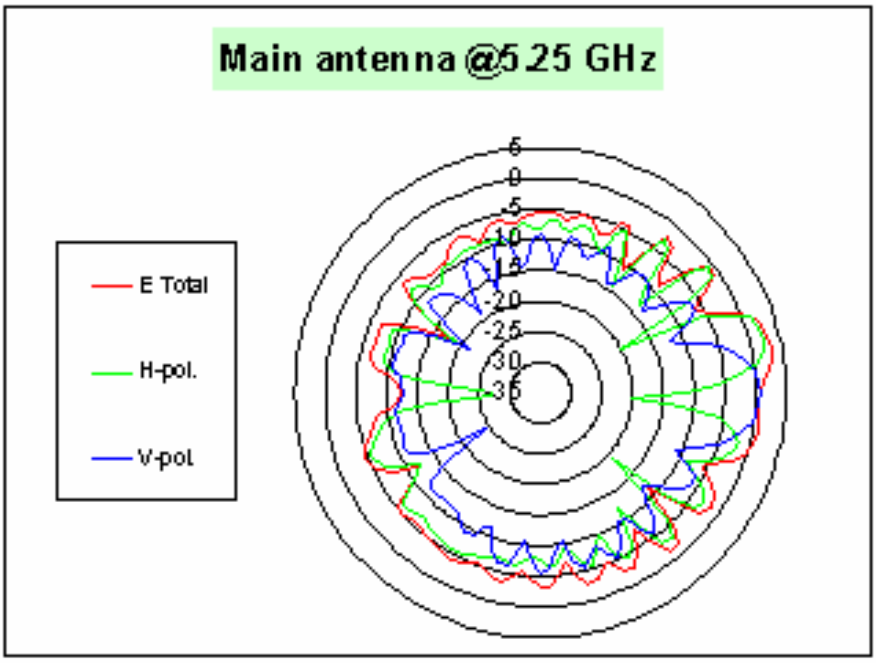


	Total	H-pol	V pol
Peak Gain	1.64	-0.01	-0.29

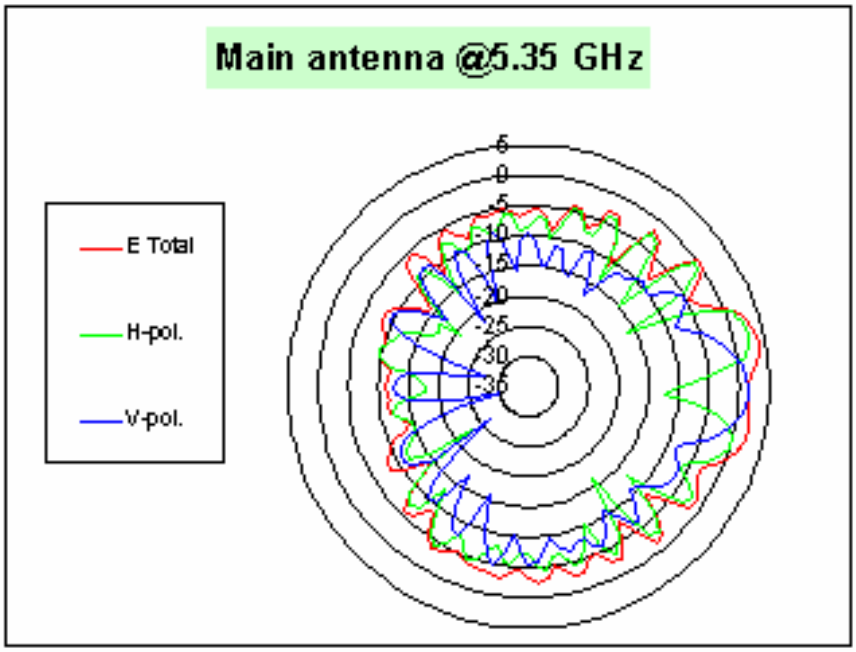
150-5135 MHz radiation characteristic



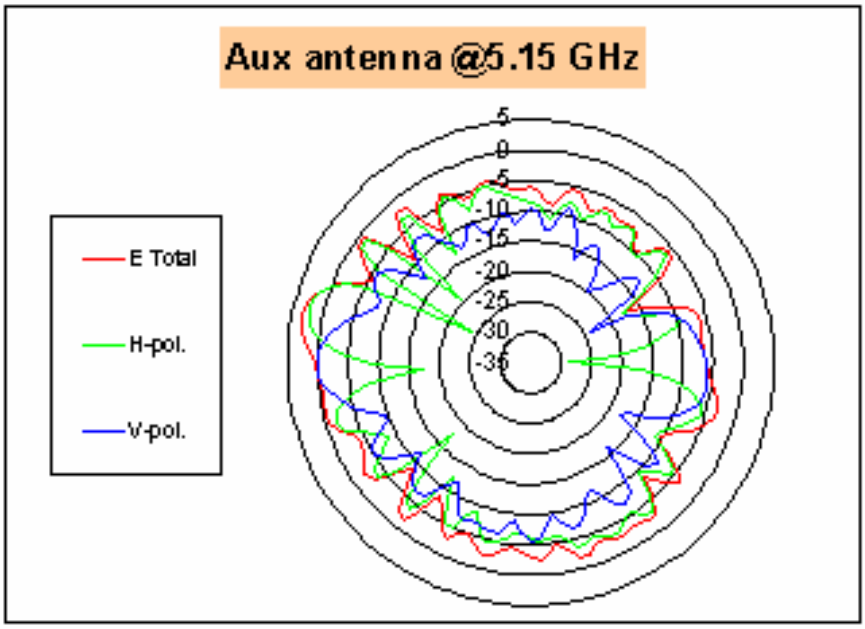
	Total	H-pol	V pol
Peak Gain	2.25	1.59	0.33



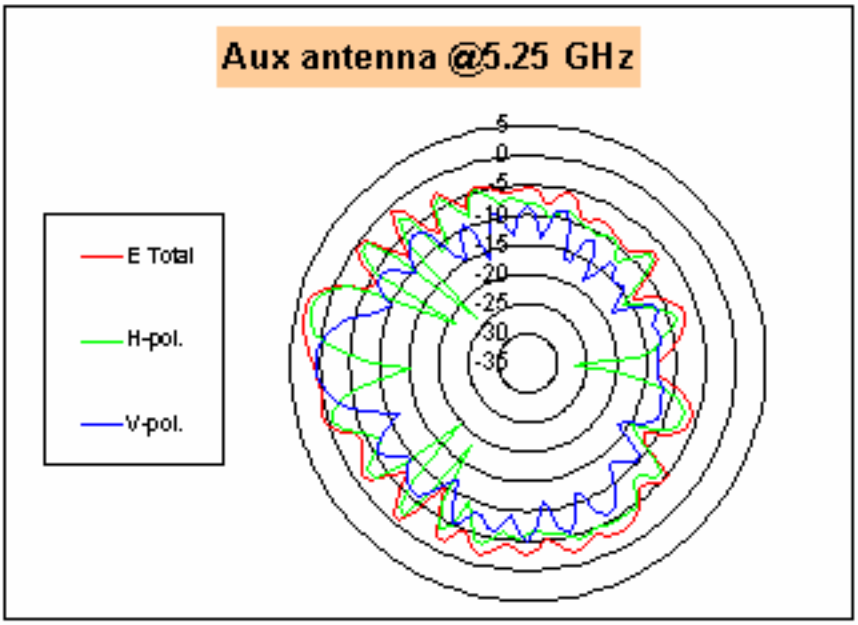
	Total	H-pol	V pol
Peak Gain	3.26	2.30	0.67



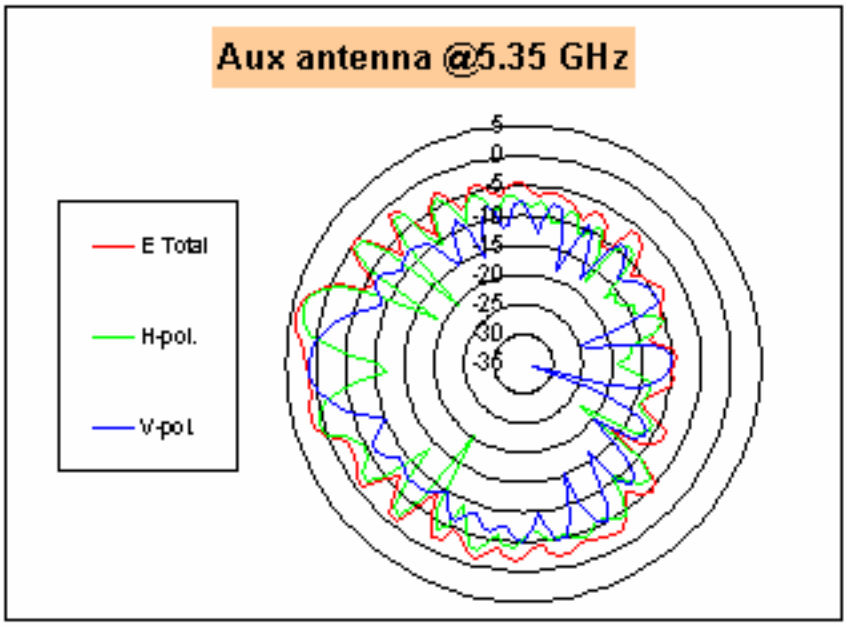
	Total	H-pol	V pol
Peak Gain	3.81	2.34	1.34



	Total	H-pol	V pol
Peak Gain	3.19	2.36	0.06

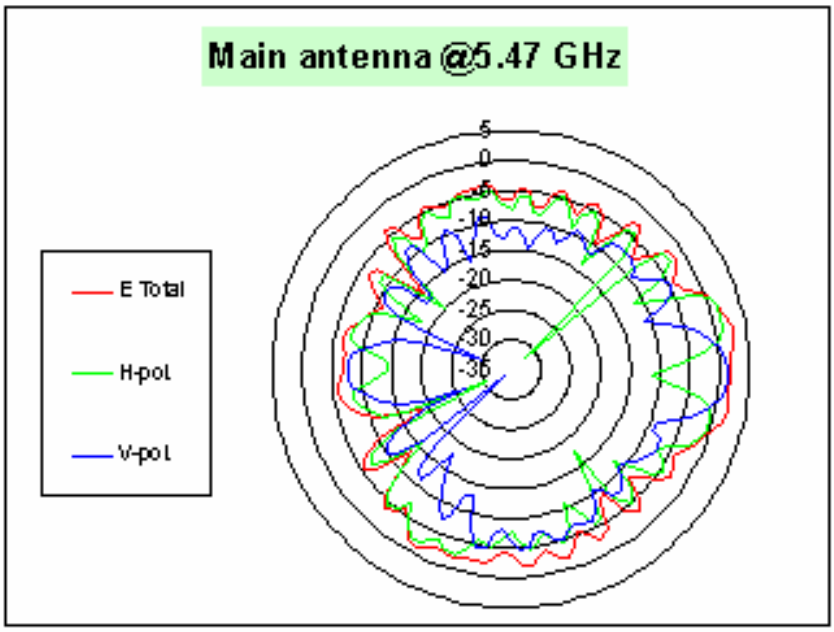


	Total	H-pol	V pol
Peak Gain	3.63	2.81	0.71

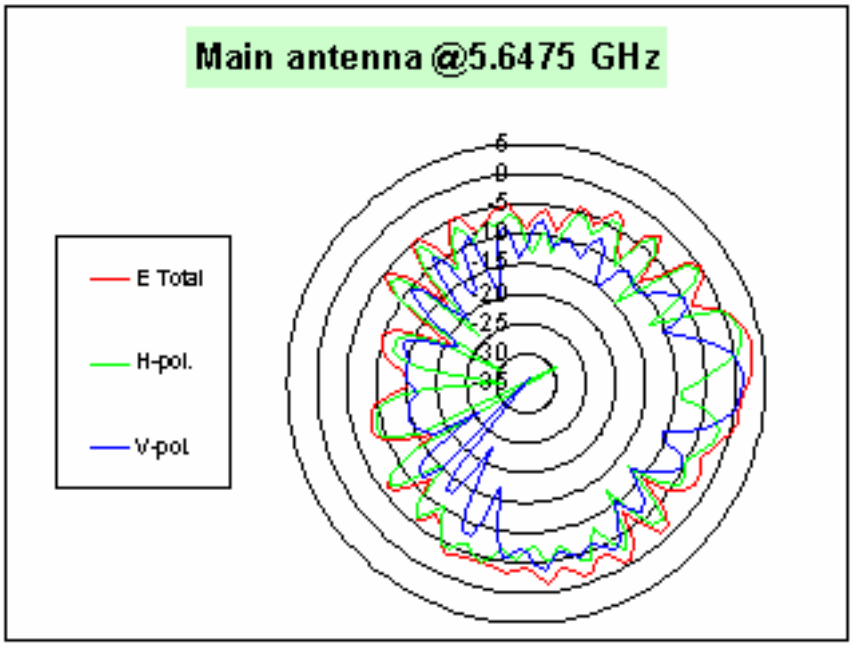


	Total	H-pol	V pol
Peak Gain	4.09	3.11	1.14

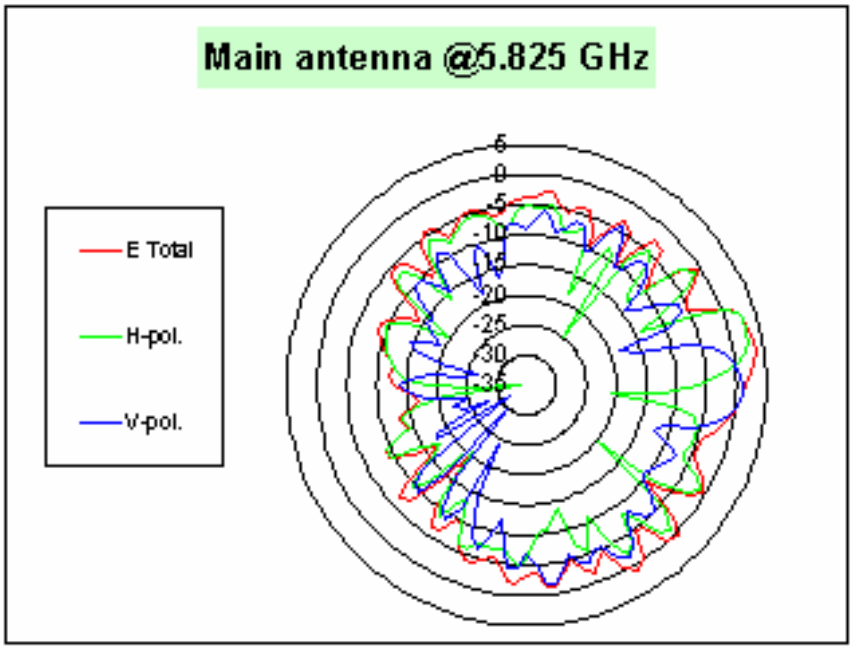
5470-5825 MHz radiation characteristic



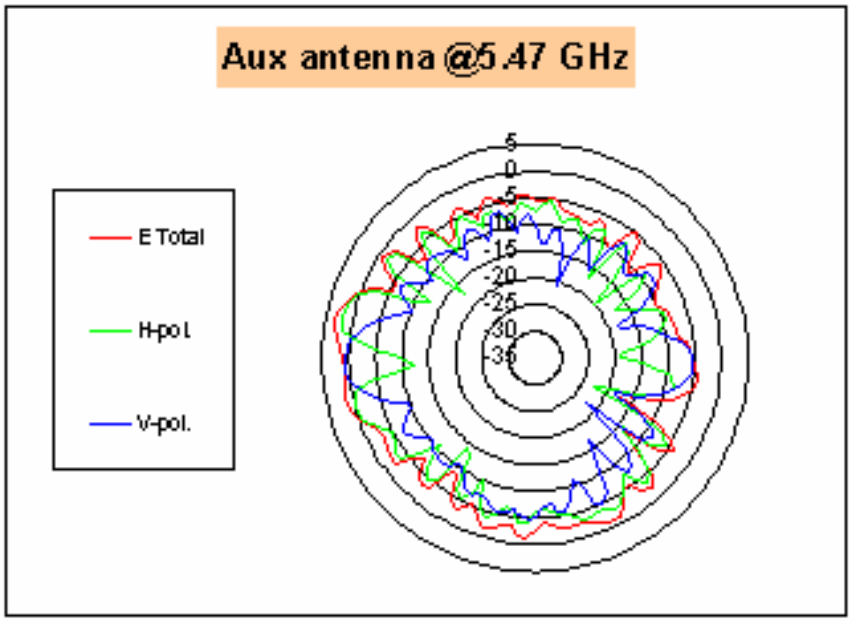
	Total	H-pol	V pol
Peak Gain	2.68	1.25	1.46



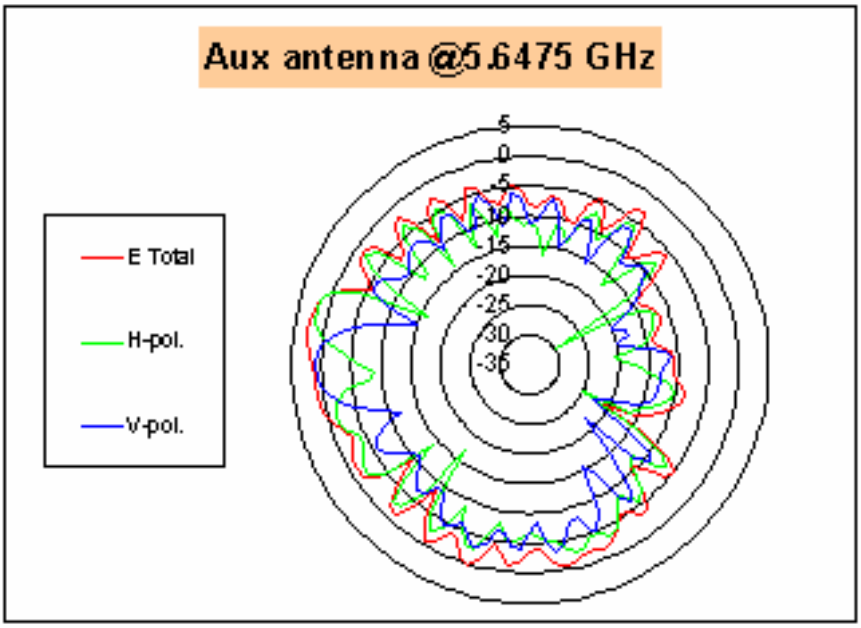
	Total	H-pol	V pol
Peak Gain	3.22	1.82	1.41



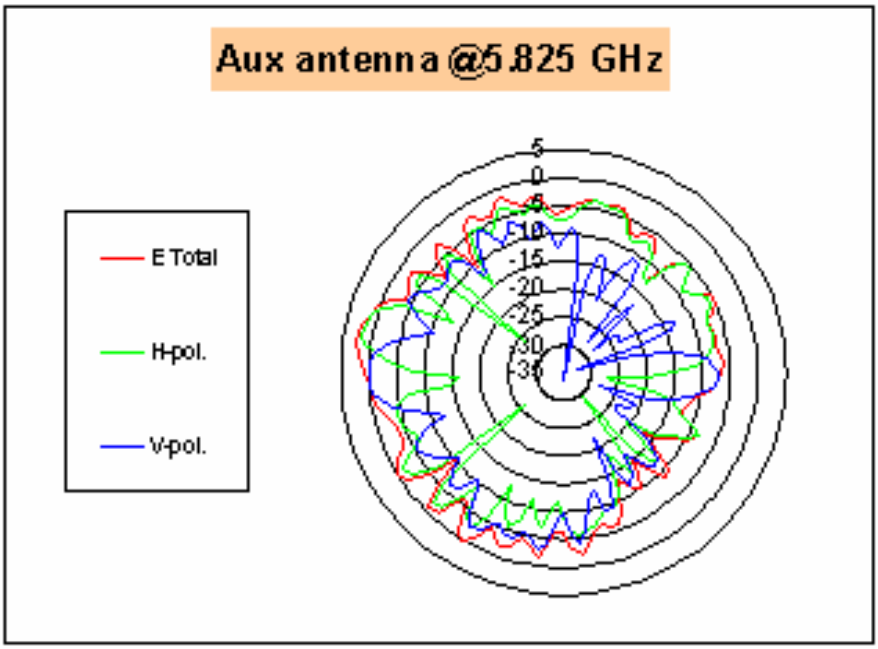
	Total	H-pol	V pol
Peak Gain	3.73	2.84	0.94



	Total	H-pol	V pol
Peak Gain	3.27	2.07	0.75



	Total	H-pol	V pol
Peak Gain	2.86	1.77	0.84



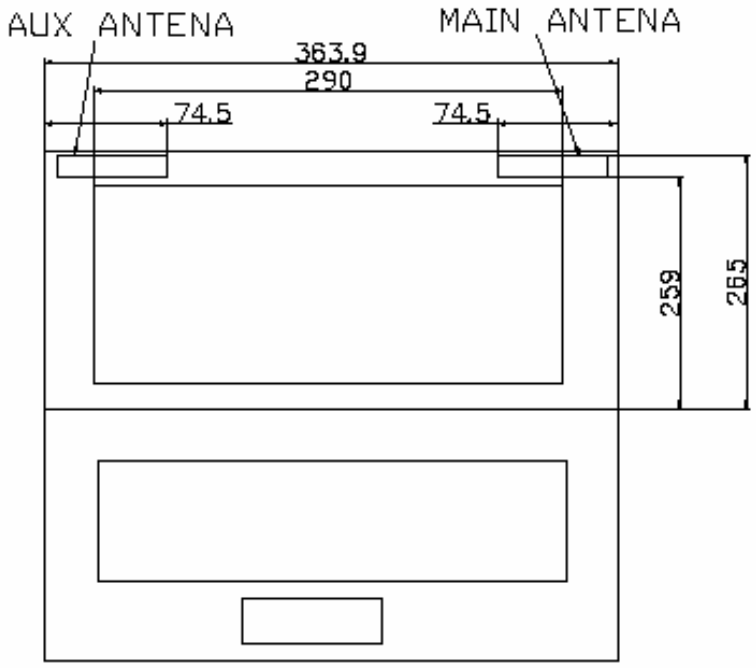
	Total	H-pol	V pol
Peak Gain	2.80	1.83	-0.07

Section 4. Host Platform Information

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

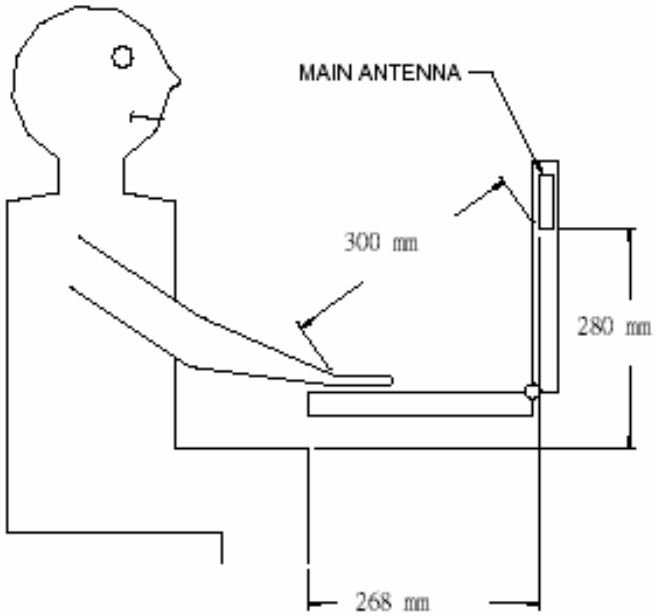
Section 5. Antenna Host Platform Location Information

nclude a dimensioned photos or dimensioned drawings of main and auxiliary antenna
lacements.



Section 6. Antenna dimensional information for SAR evaluation

nclude a dimensioned photos or dimensioned drawings showing the distance (mm) etween the transmit (main) antenna and the user (excluding hands, wrist, feet, and nkle)



Section 7. Diagram Example of Co-Location Antenna Separation

ndicate 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 ase basis)