

## Regulatory WWAN + WiFi, Main + Aux Antenna Information

|                    |   |
|--------------------|---|
| <b>Platform</b>    |   |
| Platform Owner     | Acer Incorporated                                       |
| Brand Name         | Acer Incorporated                                       |
| Model Name         | ZA3-3G(WWAN Main + WiFi Main)                           |
| ODM                | Quanta computer Inc.                                    |
| Target Launch Date |   |
|                    |   |
| <b>Antenna</b>     |   |
| Brand Name         | Wistron Neweb Corp.                                     |
| Part Number        | <input type="checkbox"/> WWAN Main Antenna: DQ6T15GAD00 |
|                    | <input type="checkbox"/> WWAN Aux Antenna: DQ6T15GAD00  |
|                    | <input type="checkbox"/> WiFi Main Antenna: DQ6T15GAD00 |
|                    | <input type="checkbox"/> WiFi Aux Antenna: DQ6T15GAD00  |
| <b>Module</b>      |   |
| With WLAN Module   |   |
| (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 <b>and</b> 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. <b>(S. Korea requires photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.</b> | 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, 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:

#### WWAN

| 1A<br>Antenna Part Number  | 1B<br>Manufacture         | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information  | 1E<br>Peak Gain W/<br>Cable loss (dBi) | 1F<br>Peak Gain w/o<br>Cable Loss (dBi) | 1G<br>VSWR   | 1H<br>Cable Loss (dBi) |
|--|---------------------------|--------------------|---|--|---|--------------|------------------------|
| <b>WWAN Main Antenna</b><br>(WNC P/N:<br>81.EJT15.GAD)<br><br>(customer P/N:<br>DQ6T15GAD00) | Wistron Neweb Corporation | PIFA               | <b>P/N: 60.EJT04.014</b><br><br><b>50 ohm Coaxial.</b><br><b>length: 577 mm</b><br><b>diameter: 1.13 mm</b><br><b>Connector: IPEX</b> | 824-894MHz                             | 824-894MHz                              | 824-894MHz   | 824-894MHz             |
|  |                           |                    |   | -3.12 dBi (peak)                       | -2.17 dBi (peak)                        | 3.0 max      | -0.95 dBi (peak)       |
|  |                           |                    |   | 869-894MHz                             | 869-894MHz                              | 869-894MHz   | 869-894MHz             |
|  |                           |                    |   | -3.12 dBi (peak)                       | -2.17 dBi (peak)                        | 3.0 max      | -0.95 dBi (peak)       |
|  |                           |                    |   | 900-925MHz                             | 900-925MHz                              | 900-925MHz   | 900-925MHz             |
|  |                           |                    |   | -3.15 dBi (peak)                       | -2.20 dBi (peak)                        | 3.0 max      | -0.95 dBi (peak)       |
|  |                           |                    |   | 940-960MHz                             | 940-960MHz                              | 940-960MHz   | 940-960MHz             |
|  |                           |                    |   | -3.93 dBi (peak)                       | -2.98 dBi (peak)                        | 3.0 max      | -0.95 dBi (peak)       |
|  |                           |                    |   | 1710~1805MHz                           | 1710~1805MHz                            | 1710~1805MHz | 1710~1805MHz           |
|  |                           |                    |   | 2.25 dBi (peak)                        | 3.55 dBi (peak)                         | 4.0 max      | -1.30 dBi (peak)       |
| 1840~1910MHz   | 1840~1910MHz              | 1840~1910MHz       | 1840~1910MHz  |  |   |              |                        |
| 2.95 dBi (peak)  | 4.25 dBi (peak)           | 4.0 max            | -1.30 dBi (peak)  |  |   |              |                        |
| 1920~1950MHz   | 1920~1950MHz              | 1920~1950MHz       | 1920~1950MHz  |  |   |              |                        |
| 3.02 dBi (peak)  | 4.32 dBi (peak)           | 3.0 max            | -1.30 dBi (peak)  |  |   |              |                        |
| 1960~1990MHz   | 1960~1990MHz              | 1960~1990MHz       | 1960~1990MHz  |  |   |              |                        |
| 1.97 dBi (peak)  | 3.27 dBi (peak)           | 3.0 max            | -1.30 dBi (peak)  |  |   |              |                        |
| 2110~2170MHz   | 2110~2170MHz              | 2110~2170MHz       | 2110~2170MHz  |  |   |              |                        |
| 1.85 dBi (peak)  | 3.15 dBi (peak)           | 3.0 max            | -1.30 dBi (peak)  |  |   |              |                        |
| <b>WWAN Aux Antenna</b><br>(WNC P/N:<br>81.EJT15.GAD)<br><br>(customer P/N:<br>DQ6T15GAD00)  | Wistron Neweb Corporation | PIFA               | <b>P/N: 60.EJT04.011</b><br><br><b>50 ohm Coaxial.</b><br><b>length: 793 mm</b><br><b>diameter: 1.13 mm</b><br><b>Connector: IPEX</b> | 869~894MHz                             | 869~894MHz                              | 869~894MHz   | 869~894MHz             |
|  |                           |                    |   | -2.50 dBi (peak)                       | -3.91 dBi (peak)                        | 3.0 max      | -1.41 dBi (peak)       |
|  |                           |                    |   | 1930-2170MHz                           | 1930-2170MHz                            | 1930-2170MHz | 1930-2170MHz           |
| -1.03 dBi (peak)   | -3.12 dBi (peak)          | 3.0 max            | -2.09 dBi (peak)  |  |   |              |                        |

#### WLAN

| 1A<br>Antenna Part Number  | 1B<br>Manufacture         | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information   | 1E<br>Peak Gain W/<br>Cable loss (dBi) | 1F<br>Peak Gain w/o<br>Cable Loss (dBi) | 1G<br>VSWR   | 1H<br>Cable Loss (dBi) |
|--|---------------------------|--------------------|--|--|---|--------------|------------------------|
| <b>WLAN Main Antenna</b><br>(WNC P/N:<br>81.EJT15.GAD)<br><br>(customer P/N:<br>DQ6T15GAD00) | Wistron Neweb Corporation | PIFA               | <b>60.EJT04.013</b><br><br><b>50 ohm Coaxial.</b><br><b>length: 604 mm</b><br><b>diameter: 1.13 mm</b><br><b>Connector: IPEX</b> | 2400-2500MHz                           | 2400-2500MHz                            | 2400-2500MHz | 2400-2500MHz           |
|  |                           |                    |  | -1.23 dBi (peak)                       | 0.26 dBi (peak)                         | 2.0 max      | 1.49 dBi (peak)        |
|  |                           |                    |  | 5150~5350MHz                           | 5150~5350MHz                            | 5150~5350MHz | 5150~5350MHz           |
| 1.12 dBi (peak)  | 3.46 dBi (peak)           | 2.0 max            | 2.34 dBi (peak)  |  |   |              |                        |
| 5470~5850MHz   | 5470~5850MHz              | 5470~5850MHz       | 5470~5850MHz   |  |   |              |                        |
| -1.25 dBi (peak)   | 0.06 dBi (peak)           | 2.0 max            | 2.48 dBi (peak)  |  |   |              |                        |
| <b>WLAN Aux Antenna</b><br>(WNC P/N:<br>81.EJT15.GAD)<br><br>(customer P/N:<br>DQ6T15GAD00)  | Wistron Neweb Corporation | Couple             | <b>60.EJT04.012</b><br><br><b>50 ohm Coaxial.</b><br><b>length: 882 mm</b><br><b>diameter: 1.13 mm</b><br><b>Connector: IPEX</b> | 2400-2500MHz                           | 2400-2500MHz                            | 2400-2500MHz | 2400-2500MHz           |
|  |                           |                    |  | -1.70 dBi (peak)                       | 0.39 dBi (peak)                         | 2.0 max      | 2.09 dBi (peak)        |
|  |                           |                    |  | 5150~5350MHz                           | 5150~5350MHz                            | 5150~5350MHz | 5150~5350MHz           |
| 0.71 dBi (peak)  | 4.03 dBi (peak)           | 2.0 max            | 3.32 dBi (peak)  |  |   |              |                        |
| 5470~5850MHz   | 5470~5850MHz              | 5470~5850MHz       | 5470~5850MHz   |  |   |              |                        |
| -0.34 dBi (peak)   | 3.17 dBi (peak)           | 2.0 max            | 3.51 dBi (peak)  |  |   |              |                        |

**Antenna Peak Gain Table:**

|                 | WWAN Main Antenna |          |
|-----------------|-------------------|----------|
| Frequency (MHz) | Horizontal        | Vertical |
|                 | (dBi)             | (dBi)    |
| 824             | -1.61             | -1.61    |
| 836             | -1.86             | -1.44    |
| 849             | -2.13             | -1.08    |
| 869             | -2.33             | -1.49    |
| 880             | -2.24             | -1.41    |
| 894             | -2.69             | -1.62    |
| 900             | -3.03             | -1.81    |
| 915             | -2.43             | -2.68    |
| 925             | -2.47             | -2.97    |
| 940             | -2.16             | -3.43    |
| 960             | -2.03             | -4.56    |
| 1710            | -2.05             | -3.86    |
| 1750            | -1.98             | -3.75    |
| 1785            | -1.30             | -3.20    |
| 1805            | -0.83             | -2.90    |
| 1840            | -0.26             | -1.89    |
| 1850            | -0.15             | -1.57    |
| 1880            | -0.22             | -1.37    |
| 1910            | -0.85             | -1.06    |
| 1920            | -0.78             | -0.90    |
| 1930            | -0.69             | -0.76    |
| 1950            | -0.48             | -0.73    |
| 1960            | -0.41             | -0.72    |
| 1980            | -0.84             | -1.61    |
| 1990            | 0.00              | 0.00     |
| 2110            | 0.86              | -2.38    |
| 2140            | 0.65              | -2.25    |
| 2170            | 0.74              | -2.02    |

|                 | WWAN Aux Antenna |          |
|-----------------|------------------|----------|
| Frequency (MHz) | Horizontal       | Vertical |
|                 | (dBi)            | (dBi)    |
| 869             | -4.48            | -3.94    |
| 880             | -3.53            | -4.21    |
| 894             | -2.50            | -3.99    |
| 1930            | -3.81            | -5.80    |
| 1950            | -1.86            | -4.27    |
| 1960            | -1.23            | -4.02    |
| 1980            | -1.06            | -3.58    |
| 1990            | -1.03            | -3.15    |
| 2110            | -1.61            | -1.95    |
| 2140            | -1.24            | -0.21    |
| 2170            | -2.58            | -0.22    |

|                 | WLAN Main Antenna |          | WLAN Aux Antenna |          |
|-----------------|-------------------|----------|------------------|----------|
| Frequency (MHz) | Horizontal        | Vertical | Horizontal       | Vertical |
|                 | (dBi)             | (dBi)    | (dBi)            | (dBi)    |
| 2400            | -2.03             | -1.31    | -2.72            | -3.49    |
| 2450            | -1.23             | -2.05    | -2.13            | -3.34    |
| 2500            | -1.64             | -2.11    | -1.70            | -3.58    |
| 5150            | -1.45             | -1.75    | -0.49            | -2.70    |
| 5250            | -1.17             | -3.04    | -0.76            | -2.08    |
| 5350            | 1.12              | -2.77    | 0.71             | -0.63    |
| 5470            | -1.58             | -3.39    | -0.84            | -0.61    |
| 5600            | -1.56             | -1.25    | -0.81            | -0.37    |
| 5725            | -2.72             | -2.13    | -0.83            | -1.52    |
| 5785            | -2.38             | -2.34    | -0.59            | -1.75    |
| 5850            | -2.10             | -1.67    | -0.34            | -3.14    |

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/ V/ H+V.
-

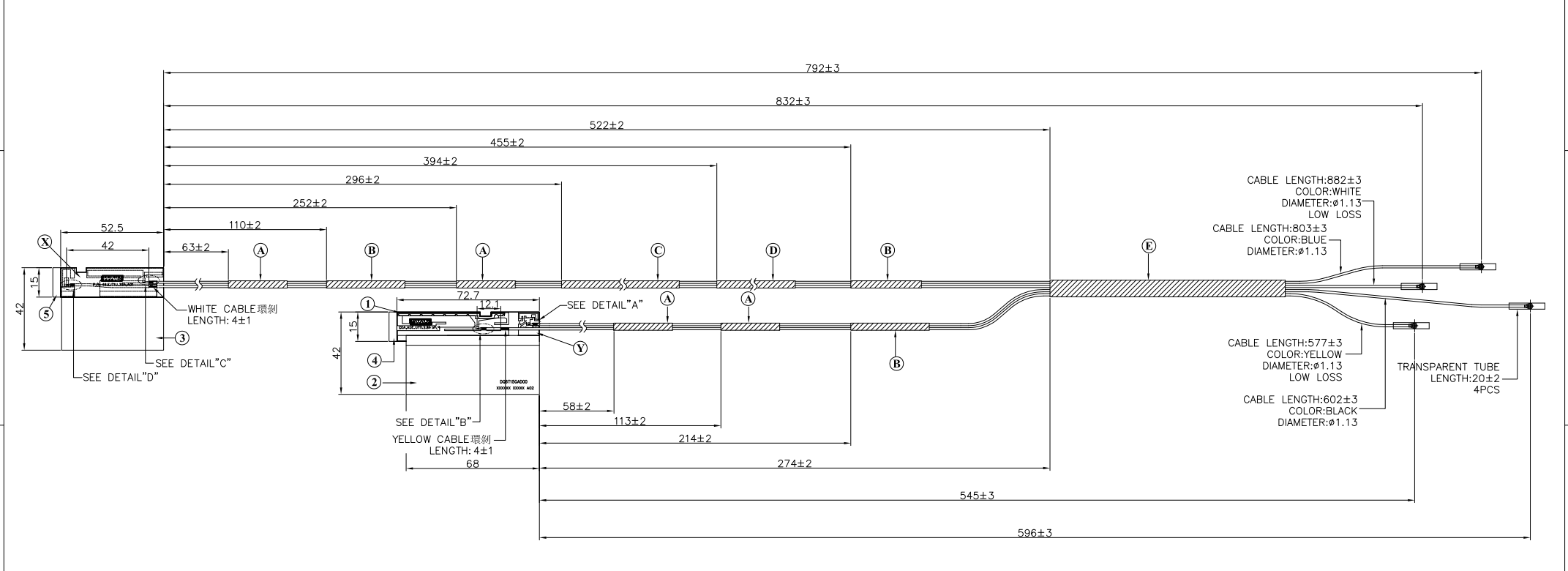
## Section 2. Dimensioned Photos or Drawings of Antennas

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

**WWAN + WiFi , Main + Aux Antenna Dimensioned Drawing:**

| PART NUMBER BLOCK |     | CUSTOMER P/N BLOCK |     |
|-------------------|-----|--------------------|-----|
| PART NUMBER       | REV | PART NUMBER        | REV |
| 57.EJT15.0AD      | 2   | DQ6T15GAD00        | A02 |

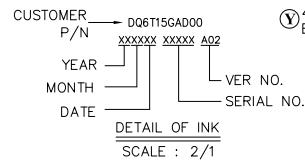
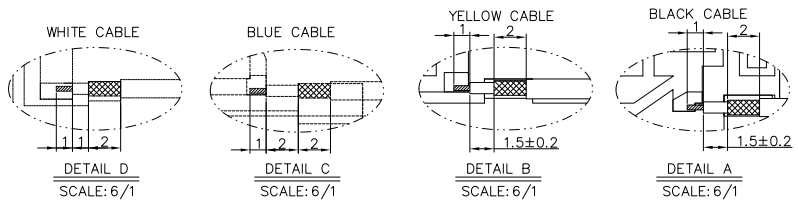
| WNC PROPRIETARY |     |                 |          |          |
|-----------------|-----|-----------------|----------|----------|
| REVISIONS       |     |                 |          |          |
| ZONE            | REV | DESCRIPTION     | DATE     | APPROVED |
|                 | 1   | RELEASE TO FILE | 04/02/09 | QUECK LO |
|                 | 2   | MODIFY PCB TYPE | 05/06/09 | QUECK LO |



- NOTES:
- Ⓐ BLACK SHRINK TUBE  
D=Ø2.0, L=30±2, 超薄, 4PCS
  - Ⓑ BLACK SHRINK TUBE  
D=Ø2.0, L=40±2, 超薄, 3PCS
  - Ⓒ BLACK SHRINK TUBE  
D=Ø2.0, L=82±3, 超薄
  - Ⓓ BLACK SHRINK TUBE  
D=Ø2.0, L=49±2, 超薄
  - Ⓔ BLACK SHRINK TUBE  
D=Ø3.5, L=190±5, 超薄

NOTES: PCB ANTENNA SHOULD BE USED HEREUNDER.

- ⓧ 48.EJT1U.3GA  
EJT-Q5, PCB, FR4 0.2MM HF, WWAN+WIFI, AUX\_A, HY
- Ⓨ 48.EJT1T.3GA  
EJT-Q5, PCB, FR4 0.2MM HF, WWAN+WIFI, MAIN\_A, HY

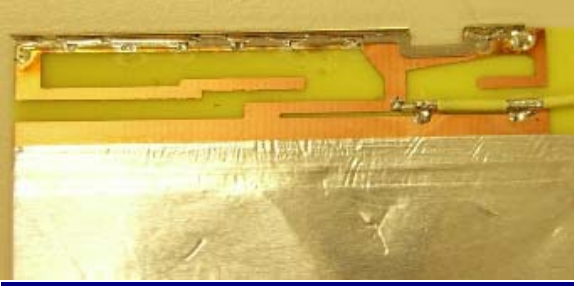


| ITEM | PART NO.       | DESCRIPTION                    | QTY |
|------|----------------|--------------------------------|-----|
| 5    | 3T-EJTQ5T2-011 | TAPE, ADHESIVE, WWAN-2, EJT-Q5 | 1   |
| 4    | 3T-EJTQ5T3-011 | TAPE, ADHESIVE, WWAN-3, EJT-Q5 | 1   |
| 3    | 3P-EJTQ5A1-011 | PLATE, AL FOIL, WWAN-1, EJT-Q5 | 1   |
| 2    | 3P-EJT7A1-011  | PLATE, AL, WWAN_1, EJT-A7      | 1   |
| 1    | 3A-EJTQ5S1-011 | ANTENNA, WWAN, EJT-Q5          | 1   |

| UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE: |  |         |  |                        |  |             |  |              |  |
|---|--|---------|--|------------------------|--|-------------|--|--------------|--|
| INTEGRAL DIMENSIONS   |  | ± 0.2   |  | ANGULAR DIMENSIONS     |  | ± 1°        |  |              |  |
| 1 PLACE DECIMALS  |  | ± 0.1   |  | HOLES UNDER Ø5.00      |  | ± 0.05      |  |              |  |
| 2 PLACE DECIMALS  |  | ± 0.05  |  |                        |  |             |  |              |  |
| MATERIAL: NA  |  |         |  |                        |  |             |  |              |  |
| FINISH: NA  |  |         |  |                        |  |             |  |              |  |
| DWG TITLE   |  |         |  |                        |  |             |  |              |  |
| Z3A, ANYENNA, WWAN+WIFI, MAIN+AUX, EJT-Q5                               |  |         |  |                        |  |             |  |              |  |
| 81.EJT15.GAD  |  | EJT-Q5  |  | DRAWN                  |  | AMY PENG    |  | 05/06/09     |  |
| NEXT ASSY   |  | USED ON |  | ENGR                   |  | DEREK TSENG |  | 05/06/09     |  |
| APPLICATION   |  |         |  | APVD                   |  | QUECK LO    |  | 05/06/09     |  |
|   |  |         |  | THIRD ANGLE PROJECTION |  | SIZE        |  | DWG NO.      |  |
|   |  |         |  |                        |  | A1          |  | 57.EJT15.0AD |  |
|   |  |         |  |                        |  | SCALE       |  | 1/1          |  |
|   |  |         |  |                        |  | SHEET       |  | 1 OF 1       |  |

**WNC** 歐華科技股份有限公司  
Wuhan MeWeb Corp.  
No. 10-1, Li-tai Road 1, Hsinchu Science Park, Hsinchu 300, Taiwan, R.O.C.  
Tel: 886-3-6667329 Fax: 886-3-6667322

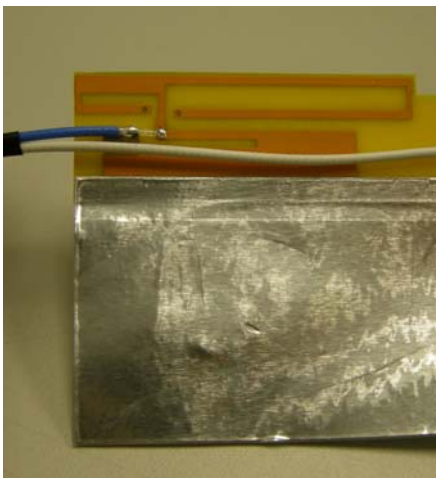
**WWAN Main Antenna Photo:**



**WiFi Main Antenna Photo:**



**WWAN Aux + WiFi Main Antenna Photo:**



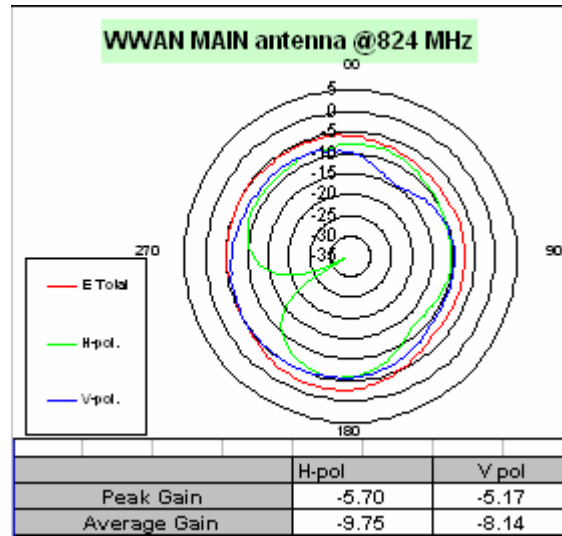
**WiFi Aux Antenna Photo:**



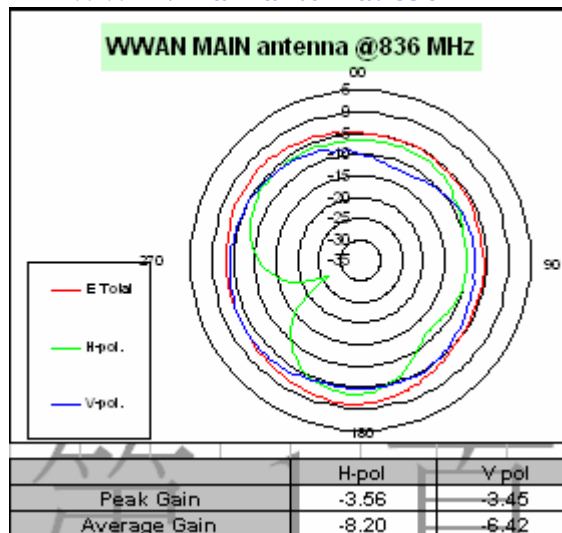
## Section 3. Radiation characteristics of antennae Loaded in Host Platform

### WWAN MAIN

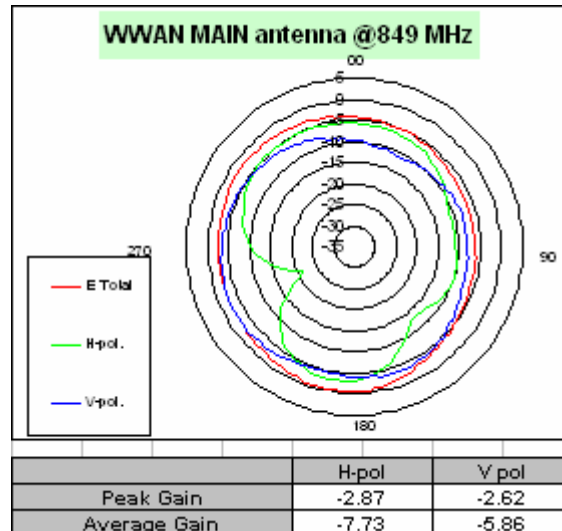
WWAN Main antenna: 824 MHz



WWAN Main antenna: 836 MHz

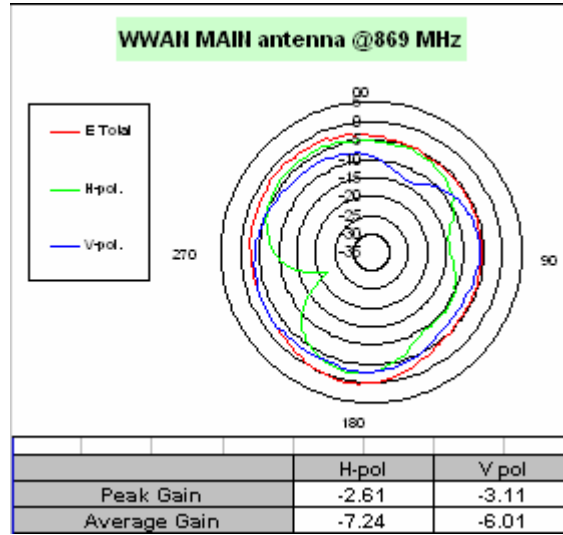


WWAN Main antenna: 849 MHz

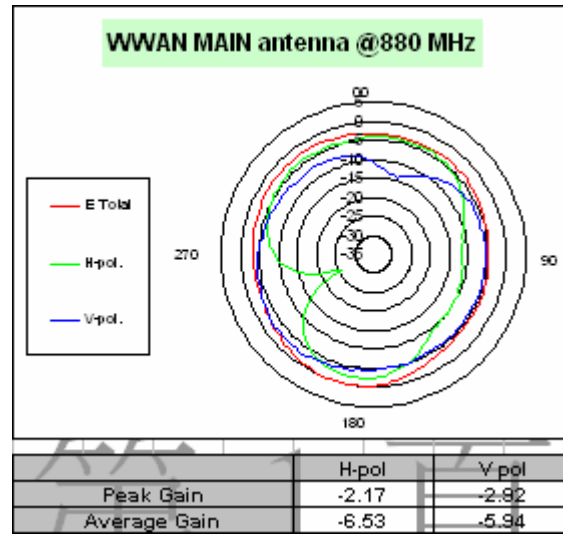




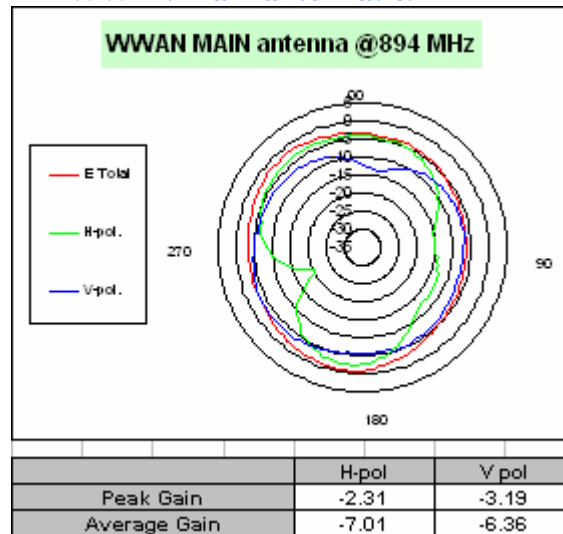
**WWAN Main antenna: 869 MHz**



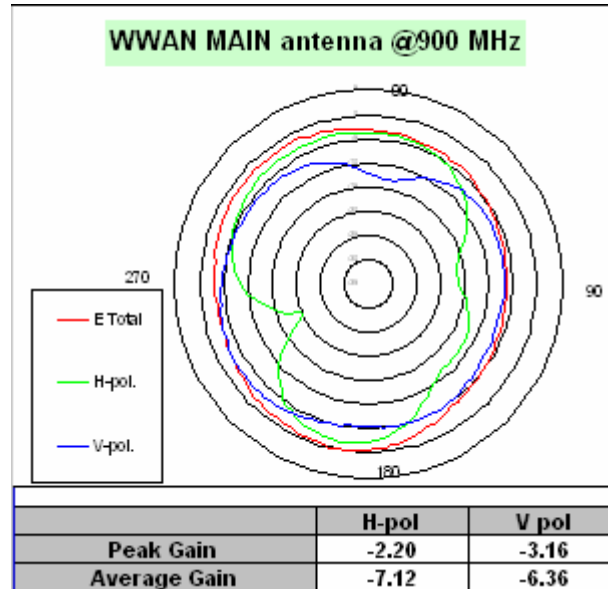
**WWAN Main antenna: 880 MHz**



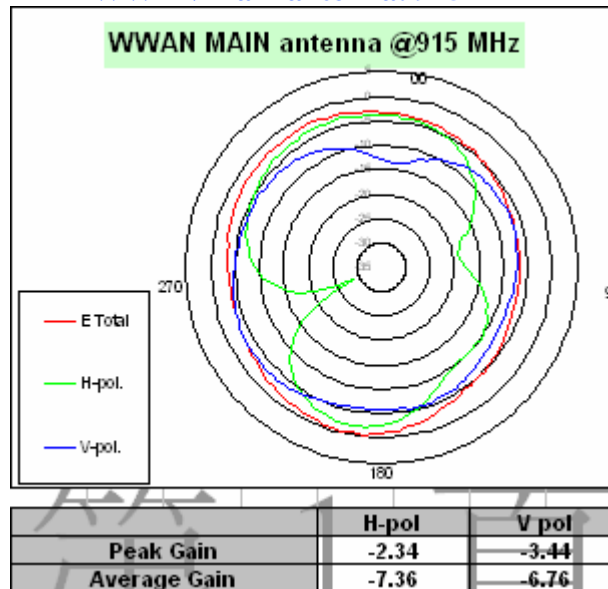
**WWAN Main antenna: 894 MHz**



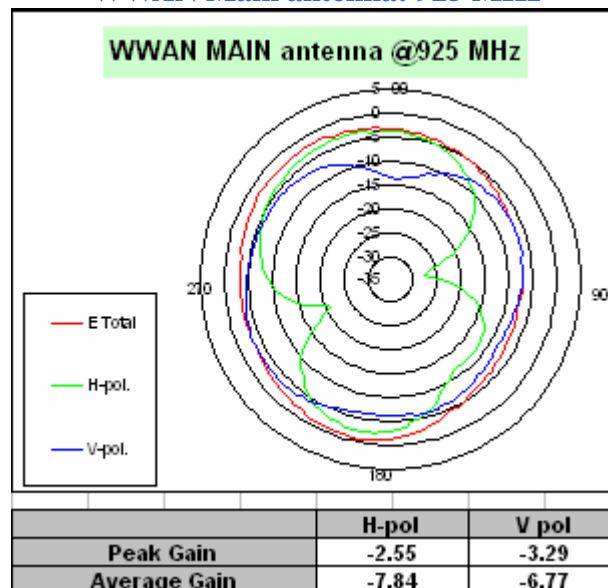
### WWAN Main antenna: 900 MHz



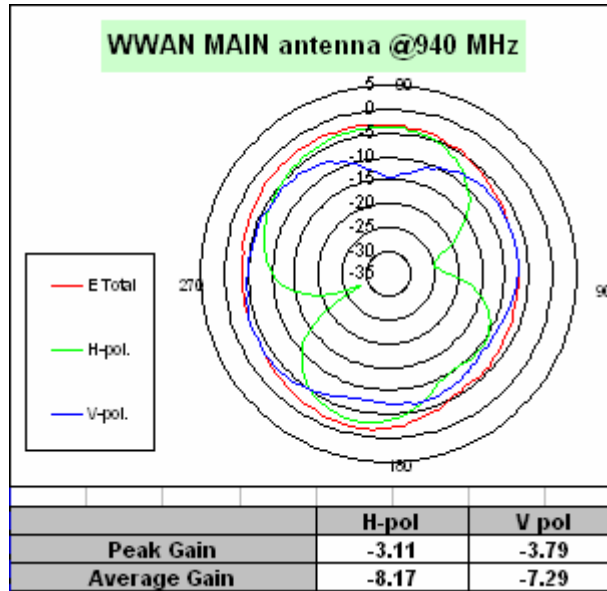
### WWAN Main antenna: 915 MHz



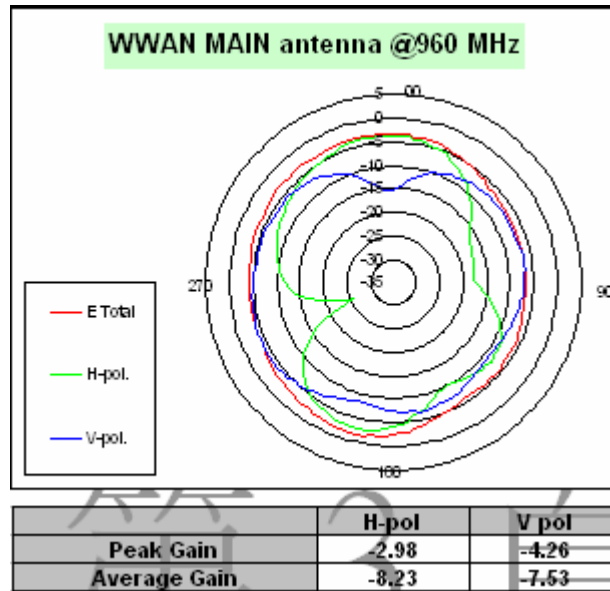
### WWAN Main antenna: 925 MHz



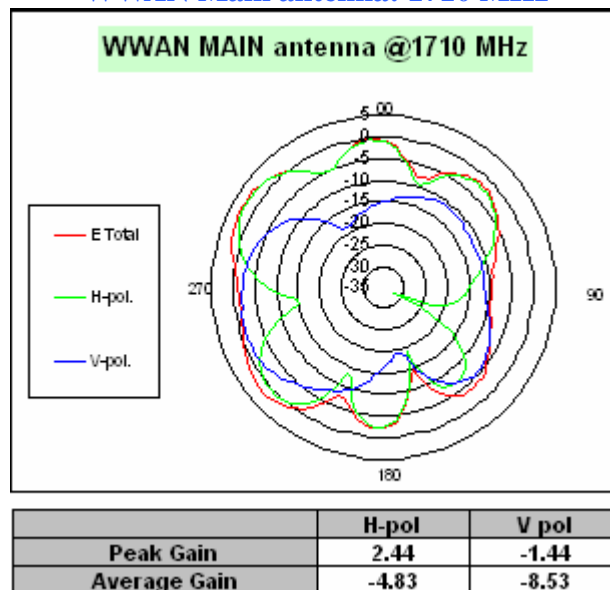
**WWAN Main antenna: 940 MHz**



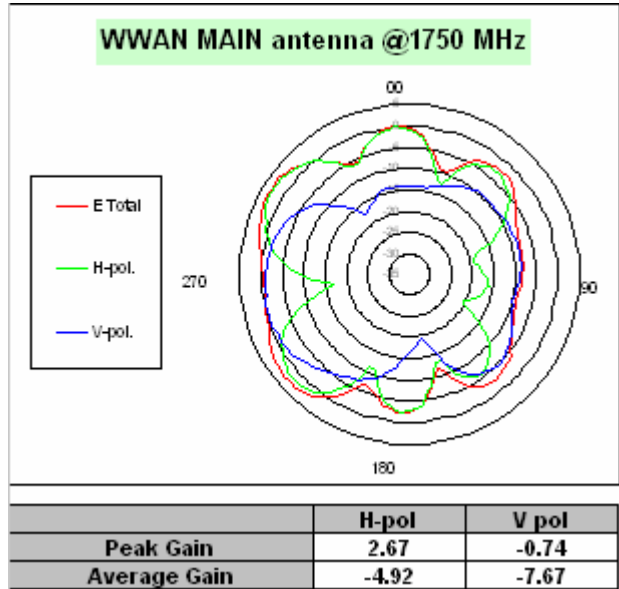
**WWAN Main antenna: 960 MHz**



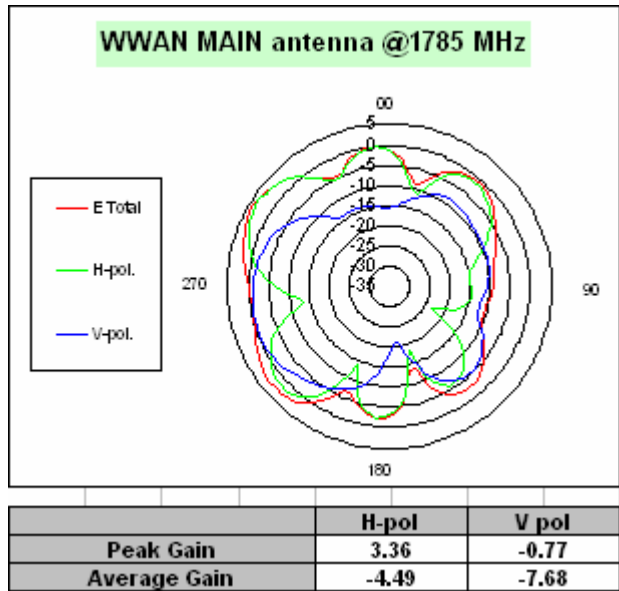
**WWAN Main antenna: 1710 MHz**



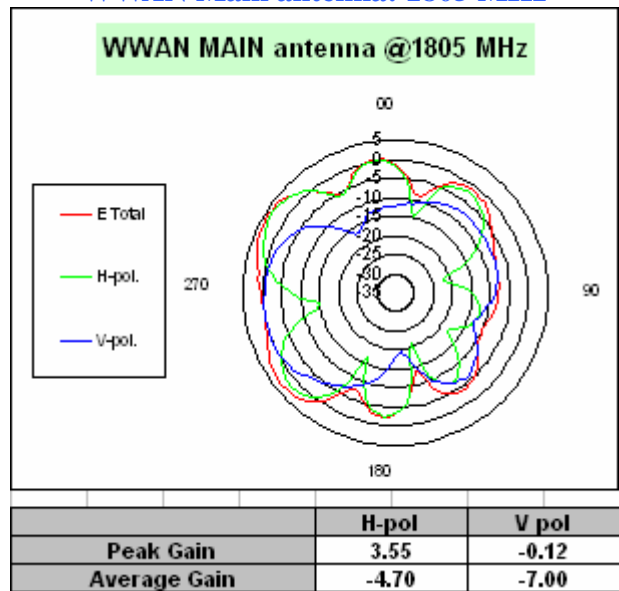
**WWAN Main antenna: 1750 MHz**



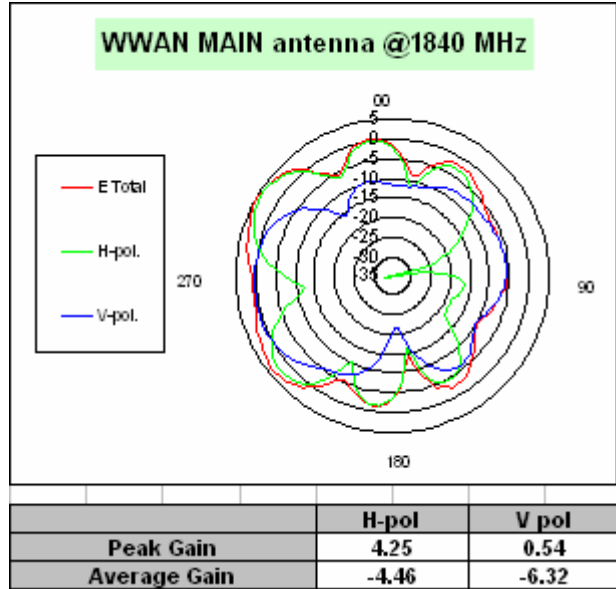
**WWAN Main antenna: 1785 MHz**



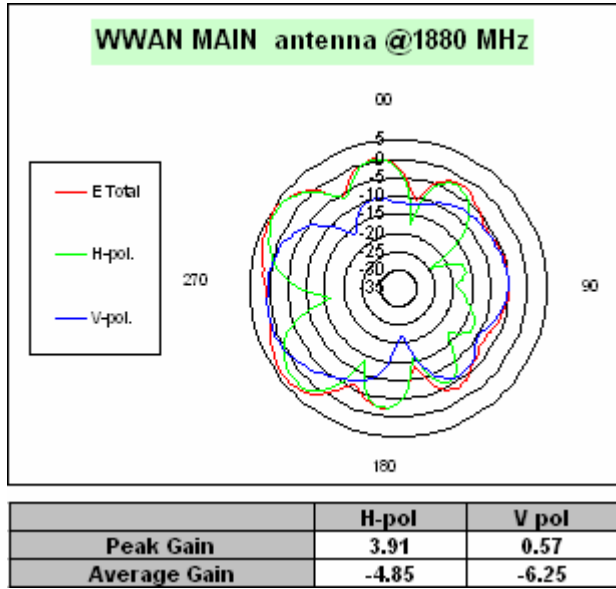
**WWAN Main antenna: 1805 MHz**



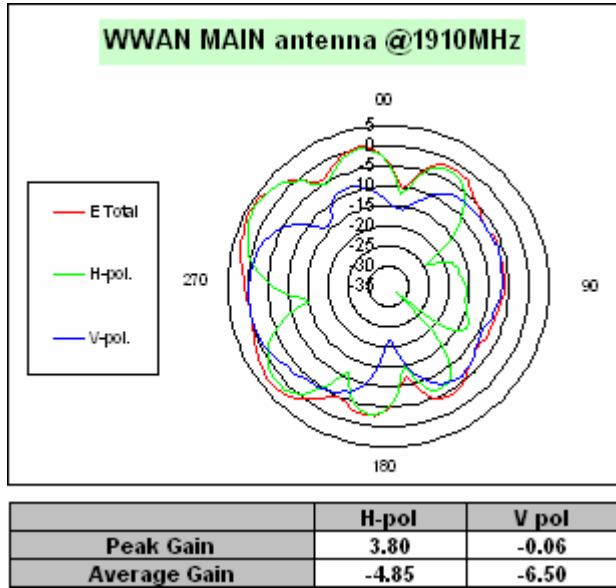
**WWAN Main antenna: 1840 MHz**



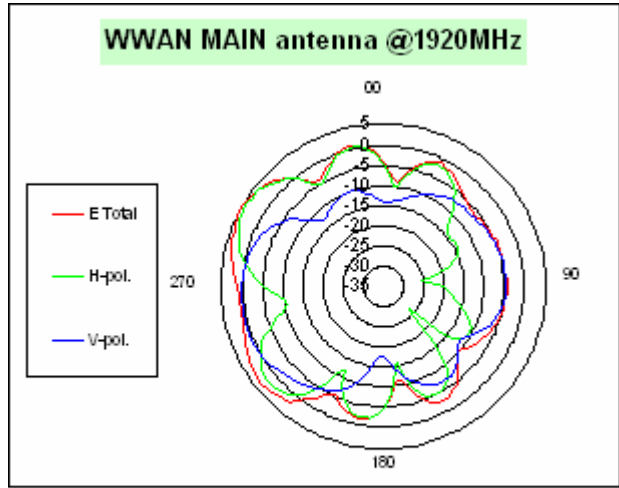
**WWAN Main antenna: 1880 MHz**



**WWAN Main antenna: 1910 MHz**

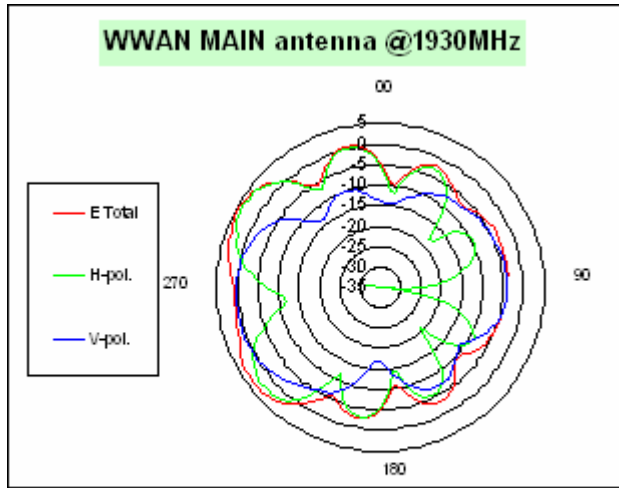


**WWAN Main antenna: 1920 MHz**



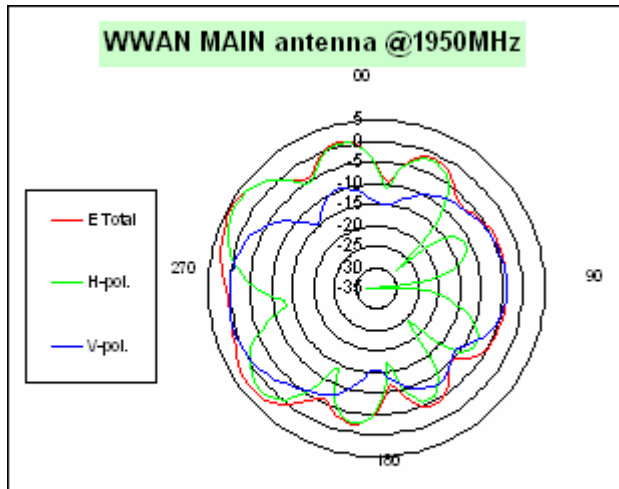
|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>4.32</b>  | <b>0.13</b>  |
| <b>Average Gain</b> | <b>-4.61</b> | <b>-6.31</b> |

**WWAN Main antenna: 1930 MHz**



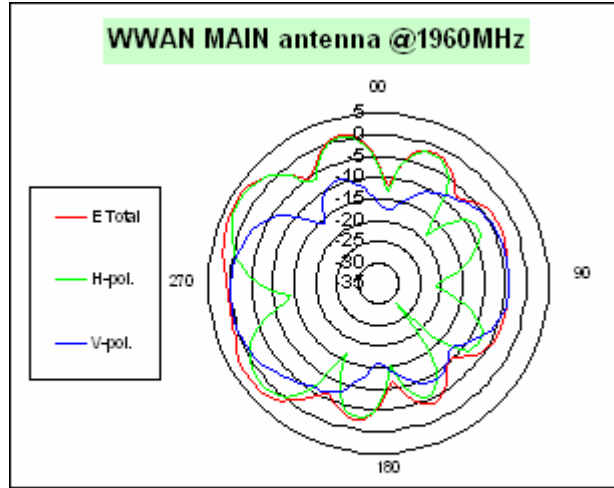
|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>3.84</b>  | <b>0.35</b>  |
| <b>Average Gain</b> | <b>-4.86</b> | <b>-6.09</b> |

**WWAN Main antenna: 1950 MHz**



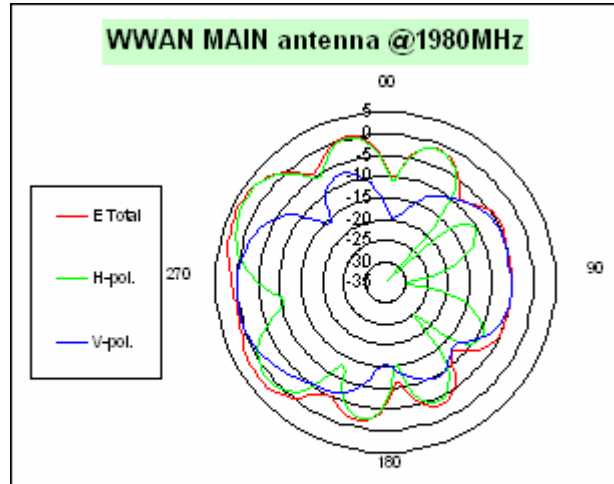
|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>3.85</b>  | <b>0.07</b>  |
| <b>Average Gain</b> | <b>-4.87</b> | <b>-6.31</b> |

**WWAN Main antenna: 1960 MHz**



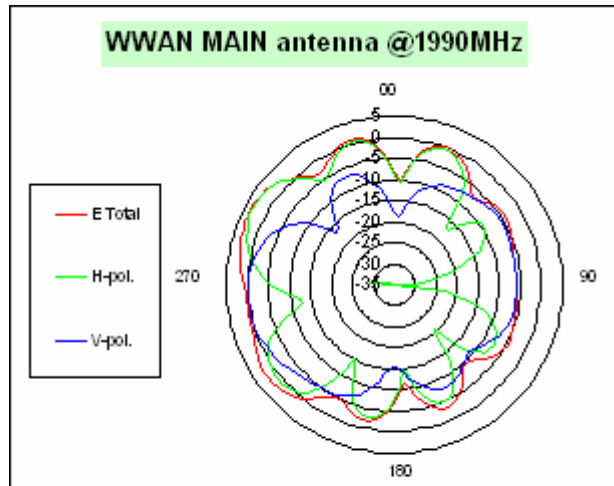
|                     | H-pol | V pol |
|---------------------|-------|-------|
| <b>Peak Gain</b>    | 2.95  | -0.10 |
| <b>Average Gain</b> | -5.02 | -6.59 |

**WWAN Main antenna: 1980 MHz**



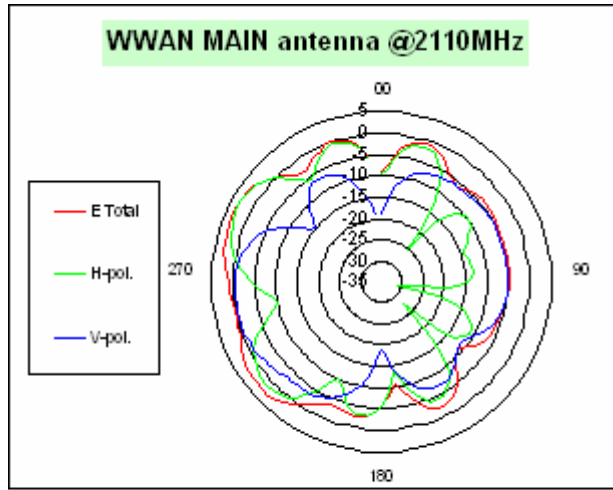
|                     | H-pol | V pol |
|---------------------|-------|-------|
| <b>Peak Gain</b>    | 3.27  | -0.01 |
| <b>Average Gain</b> | -5.02 | -6.82 |

**WWAN Main antenna: 1990 MHz**



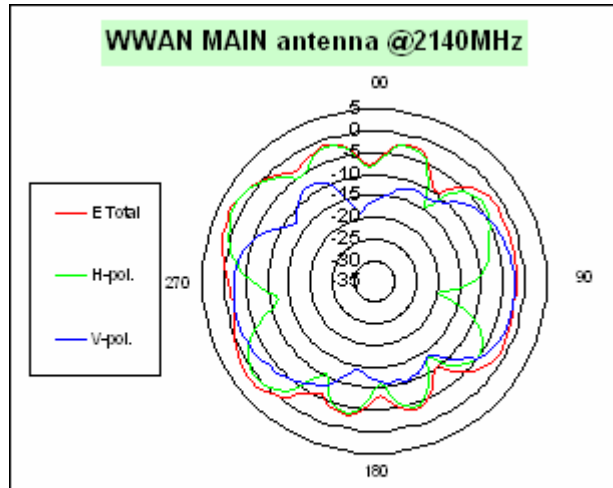
|                     | H-pol | V pol |
|---------------------|-------|-------|
| <b>Peak Gain</b>    | 3.12  | -0.19 |
| <b>Average Gain</b> | -4.98 | -6.51 |

**WWAN Main antenna: 2110 MHz**



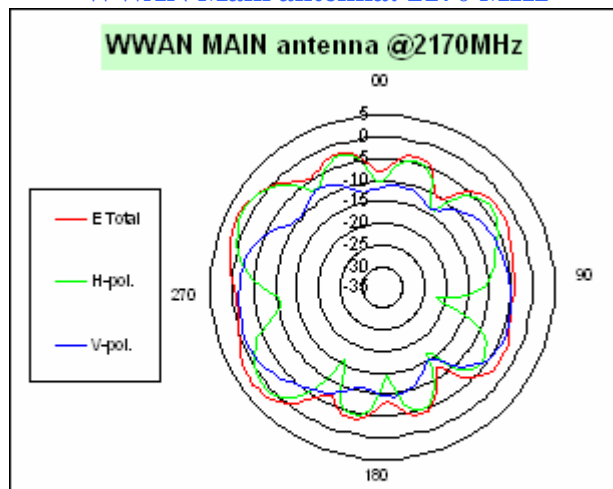
|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>3.15</b>  | <b>0.00</b>  |
| <b>Average Gain</b> | <b>-4.96</b> | <b>-6.28</b> |

**WWAN Main antenna: 2140 MHz**



|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>1.68</b>  | <b>-2.15</b> |
| <b>Average Gain</b> | <b>-4.96</b> | <b>-6.93</b> |

**WWAN Main antenna: 2170 MHz**

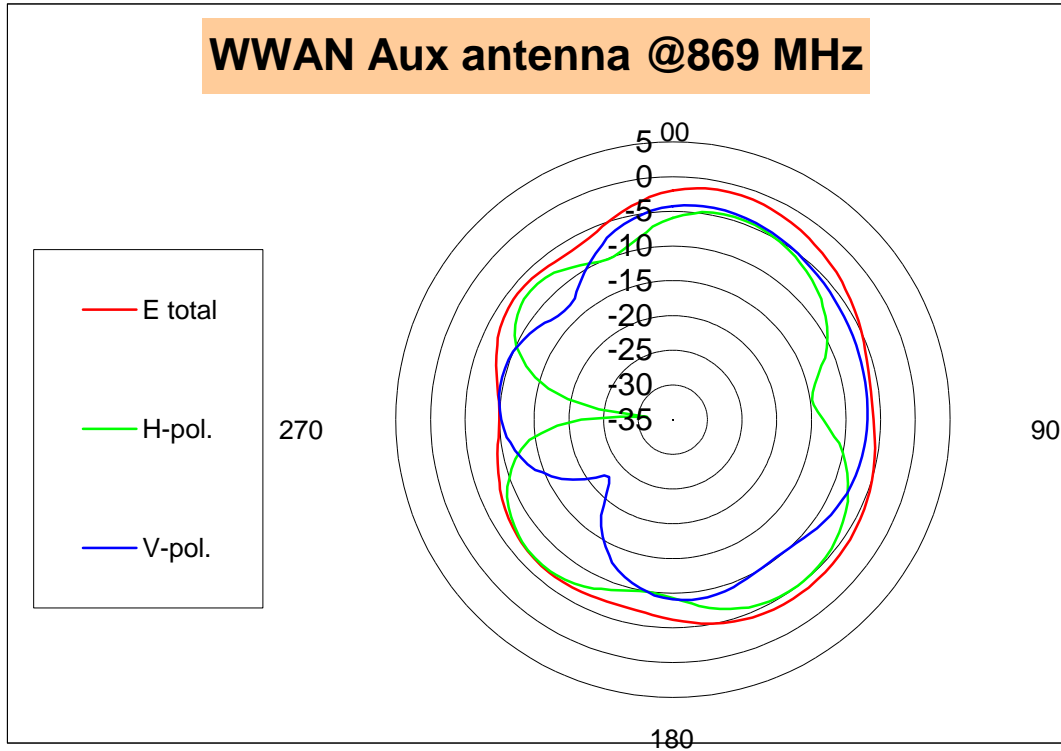


|                     | H-pol        | V pol        |
|---------------------|--------------|--------------|
| <b>Peak Gain</b>    | <b>1.70</b>  | <b>-1.21</b> |
| <b>Average Gain</b> | <b>-5.45</b> | <b>-6.90</b> |



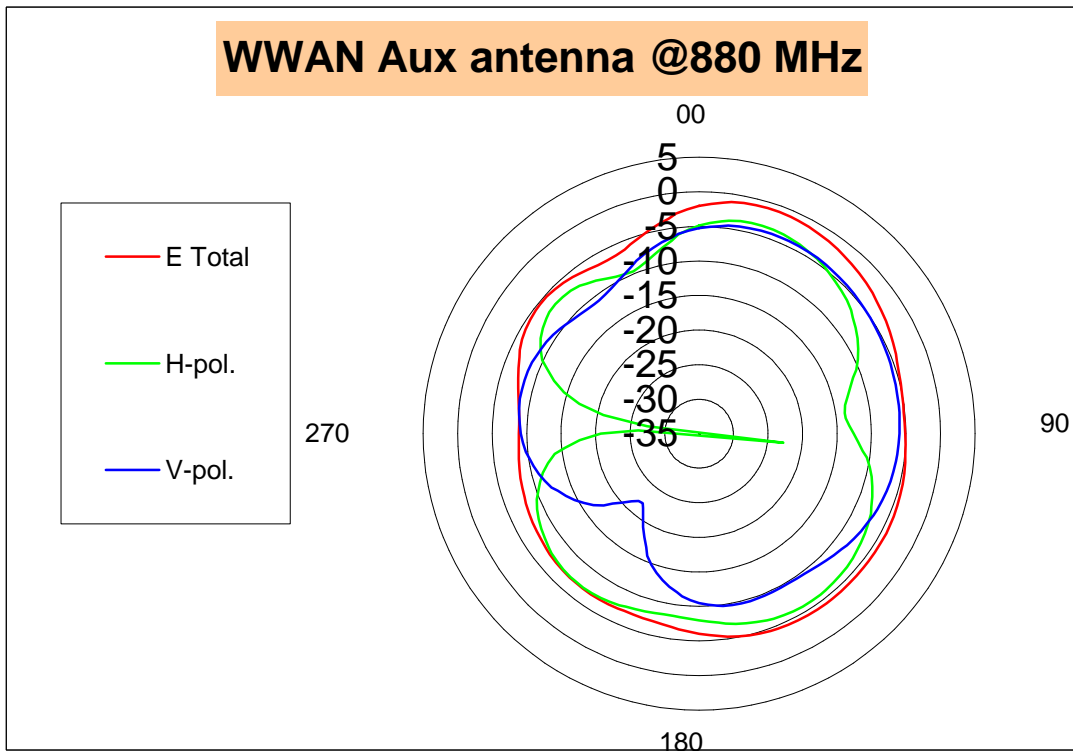
WWAN AUX

WWAN Aux antenna: 869 MHz



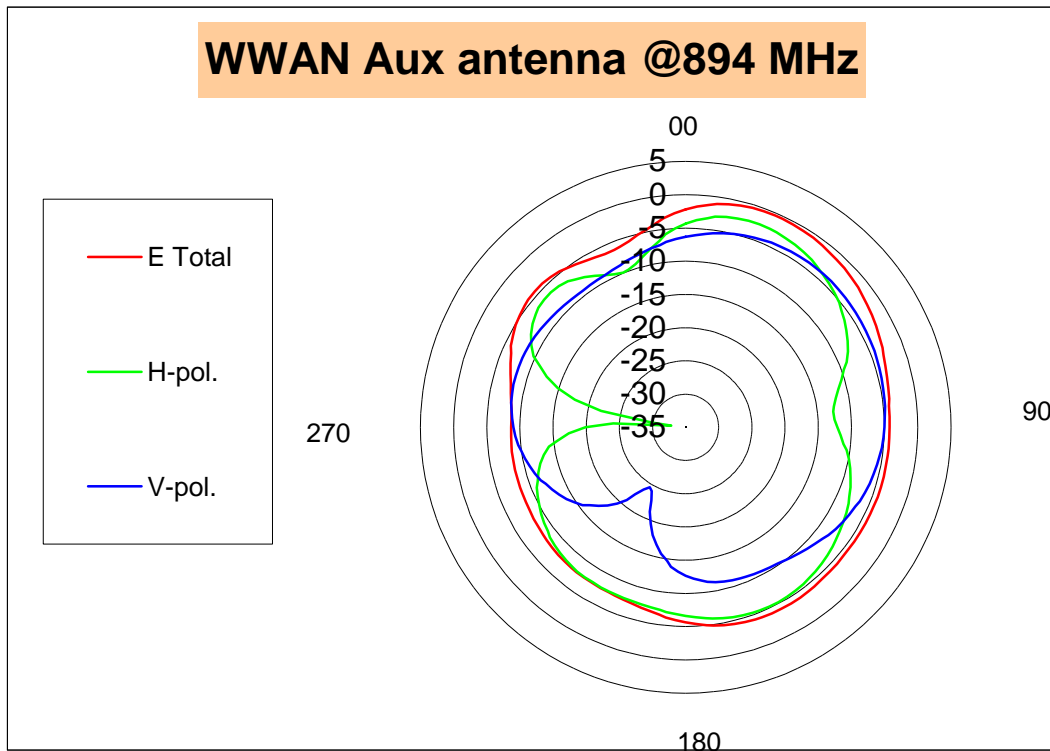
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-4.48</b> | <b>-3.94</b> |

WWAN Aux antenna: 880 MHz



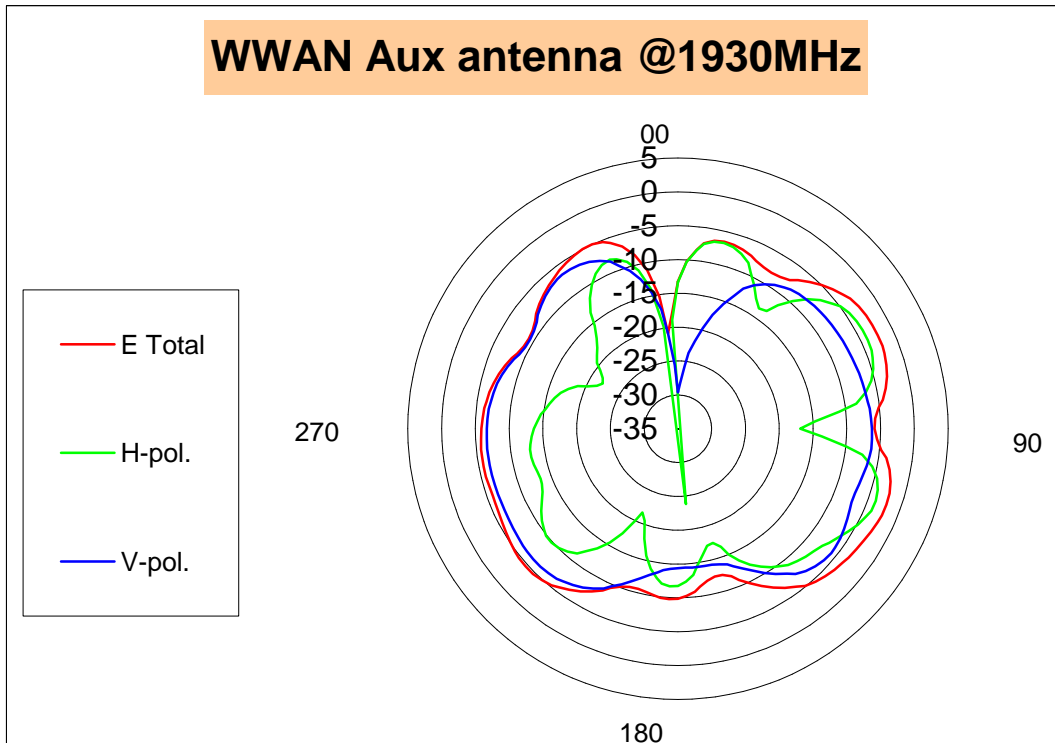
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-3.53</b> | <b>-4.21</b> |

WWAN Aux antenna: 894 MHz



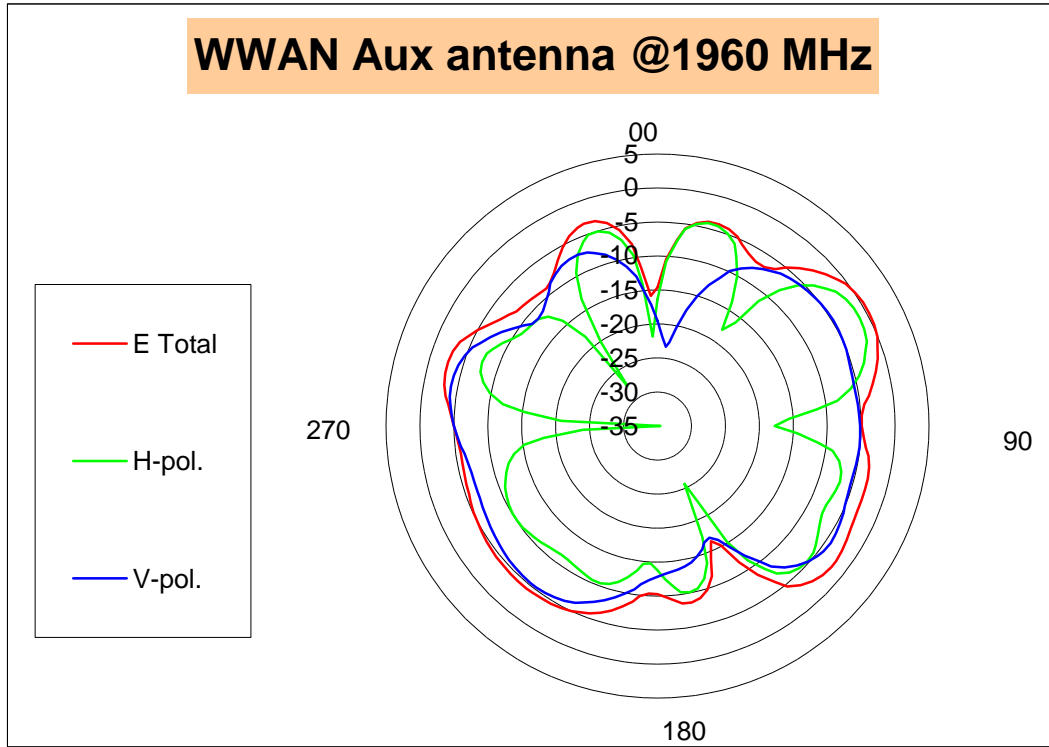
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-2.50</b> | <b>-3.99</b> |

WWAN Aux antenna: 1930 MHz



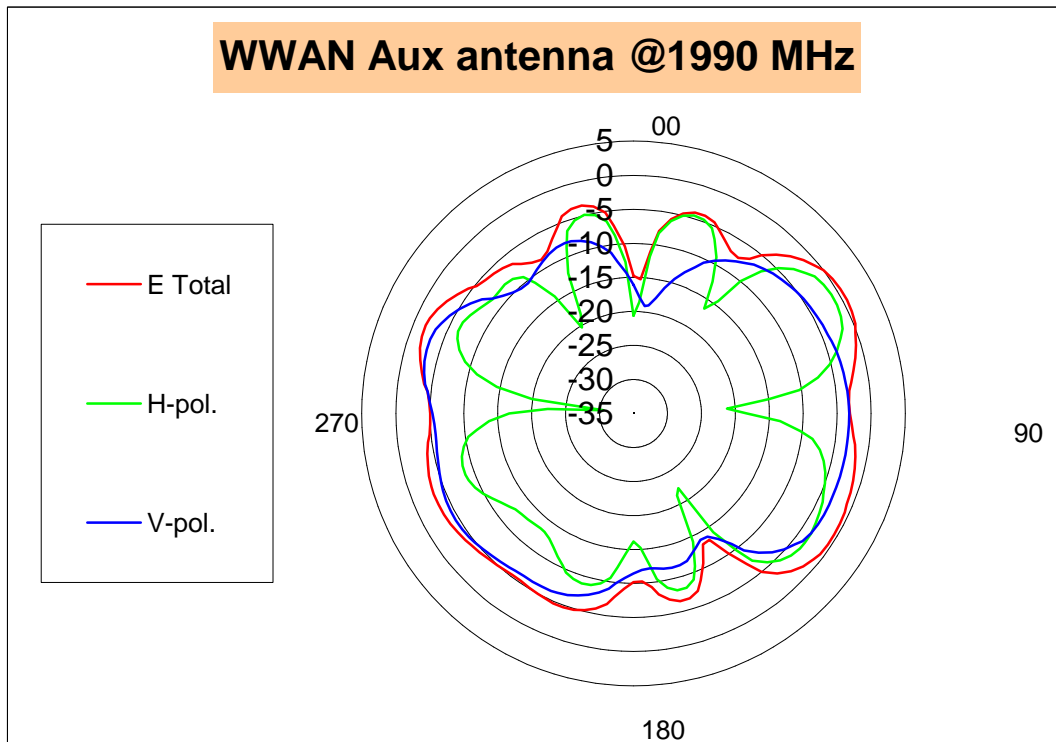
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-3.81</b> | <b>-5.80</b> |

**WWAN Aux antenna: 1960 MHz**



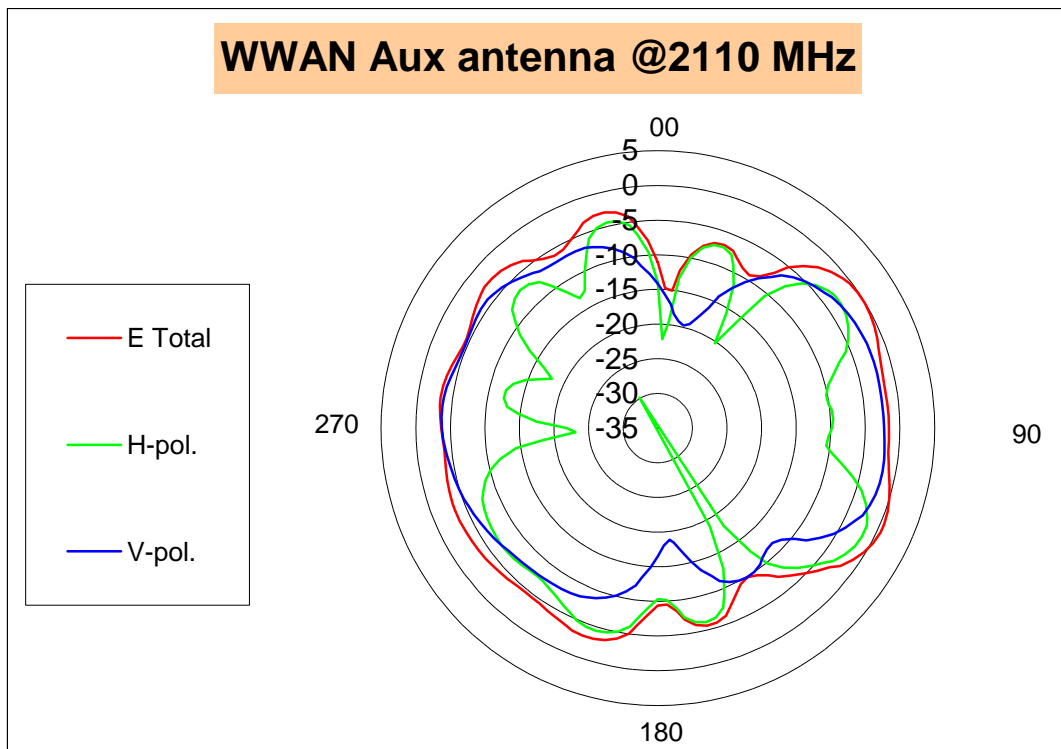
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-1.23</b> | <b>-4.02</b> |

**WWAN Aux antenna: 1990 MHz**



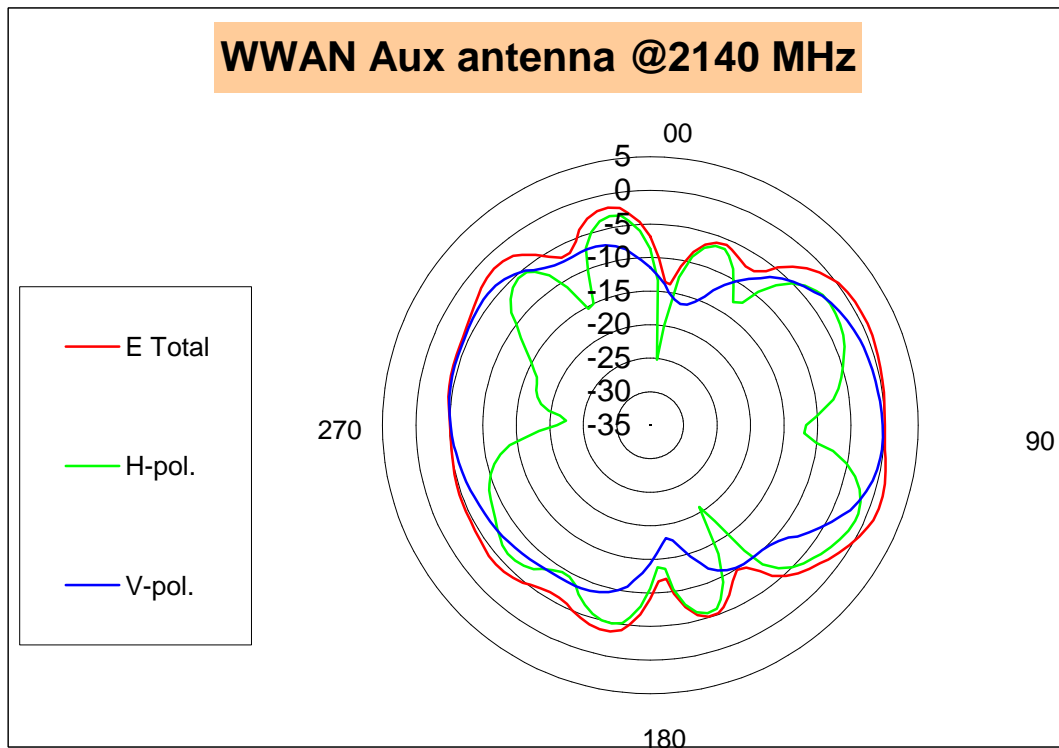
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-1.03</b> | <b>-3.15</b> |

WWAN Aux antenna: 2110 MHz



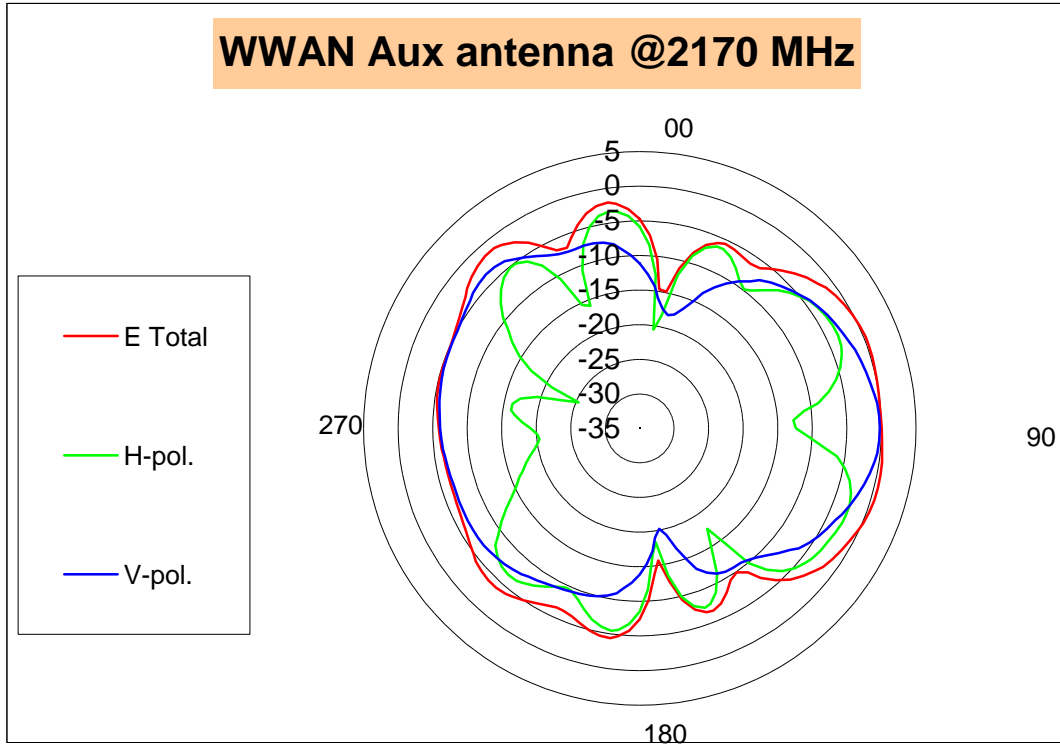
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-1.61</b> | <b>-1.95</b> |

WWAN Aux antenna: 2140 MHz



|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-1.24</b> | <b>-0.21</b> |

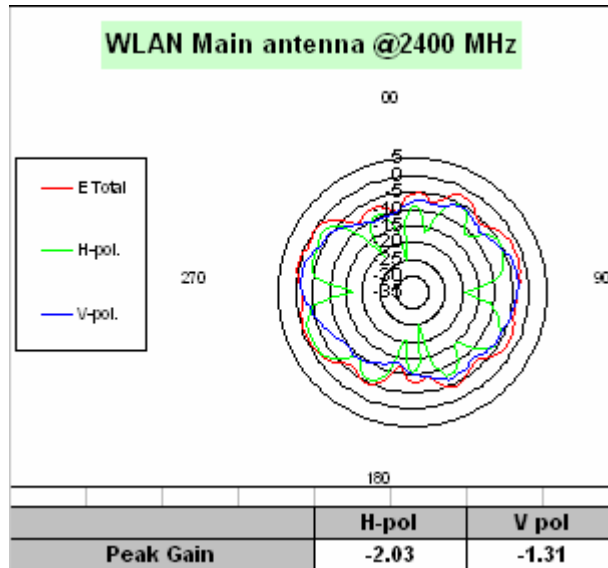
WWAN Aux antenna: 2170 MHz



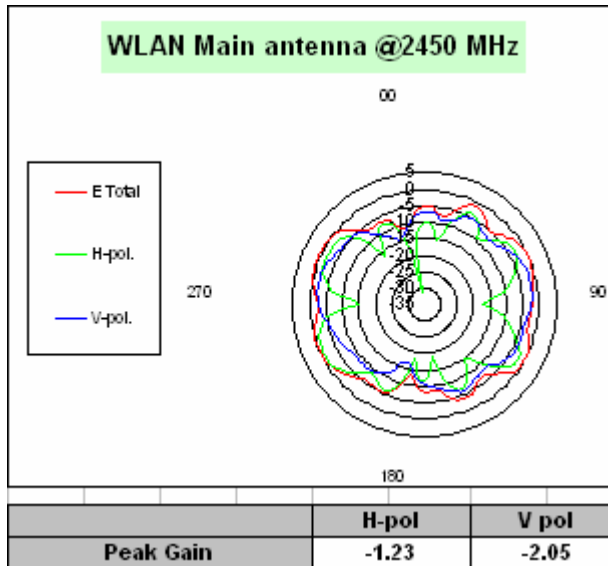
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-2.58</b> | <b>-0.22</b> |

**WLAN MAIN**

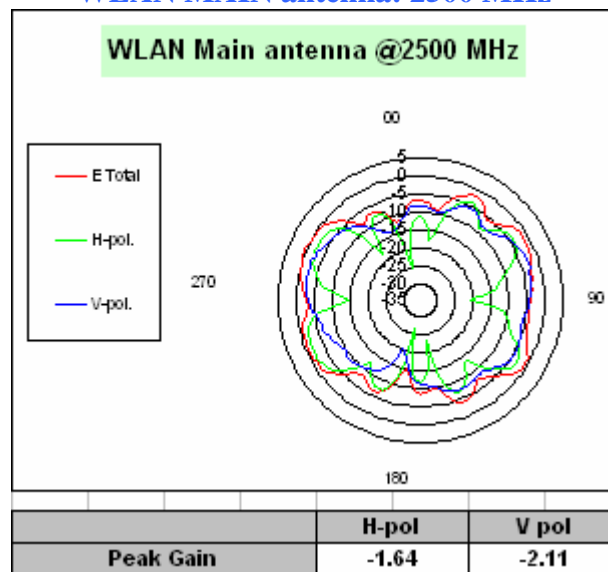
**WLAN MAIN antenna: 2400 MHz**



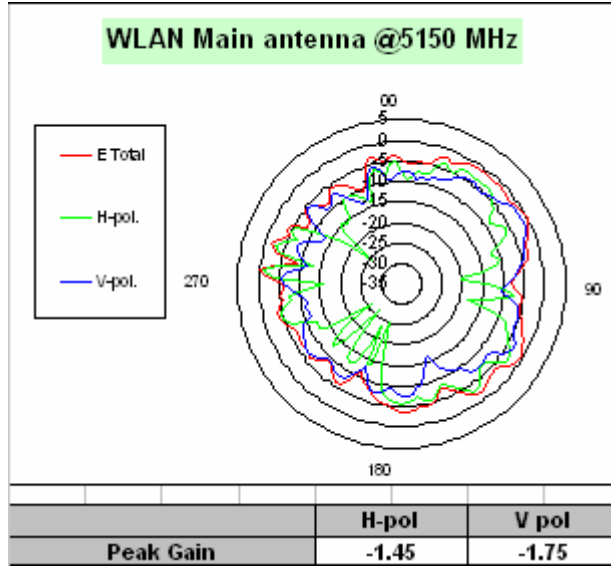
**WLAN MAIN antenna: 2450 MHz**



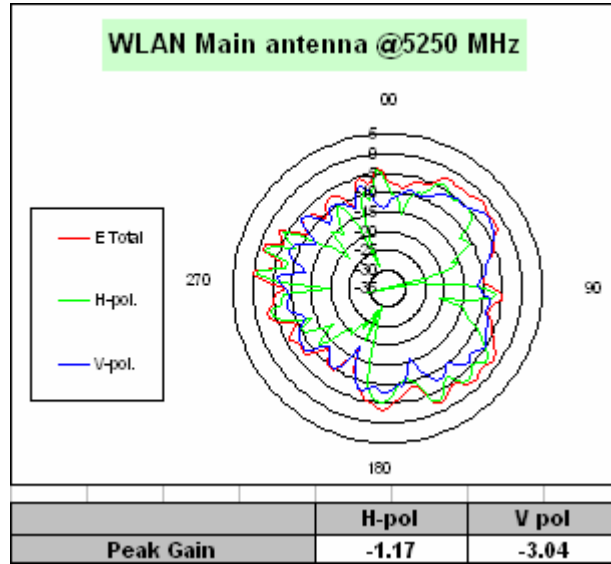
**WLAN MAIN antenna: 2500 MHz**



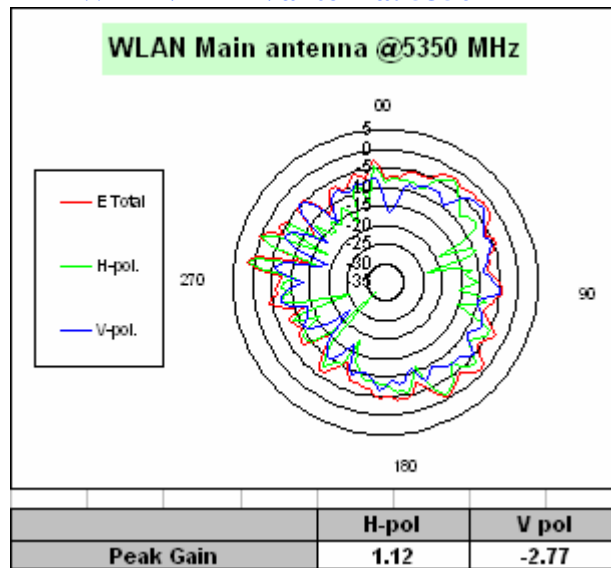
**WLAN MAIN antenna: 5150 MHz**



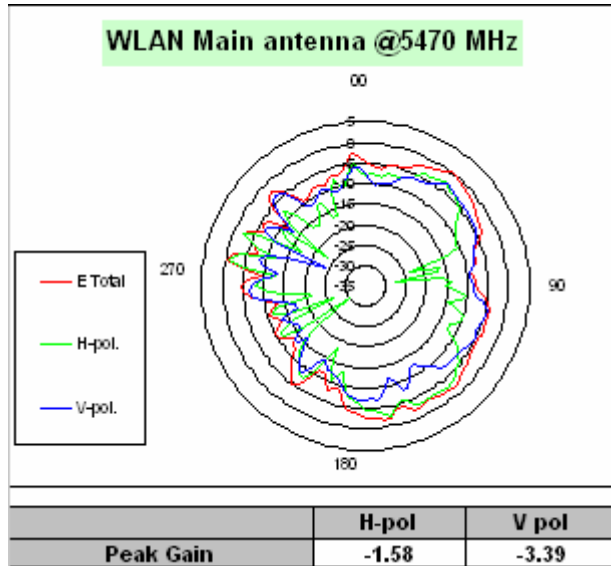
**WLAN MAIN antenna: 5250 MHz**



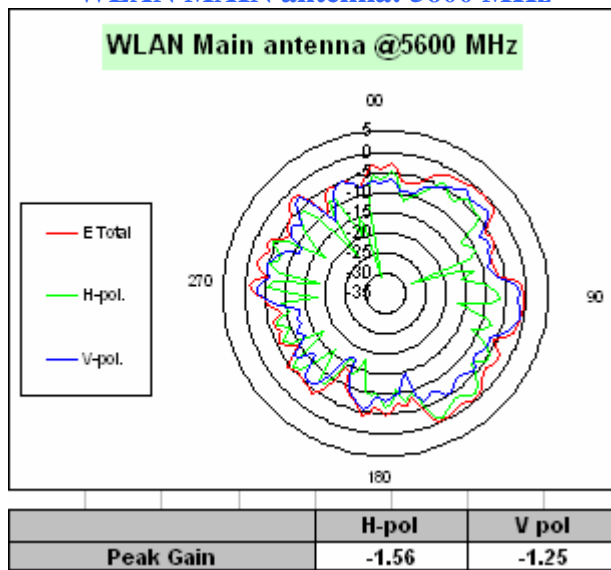
**WLAN MAIN antenna: 5350 MHz**



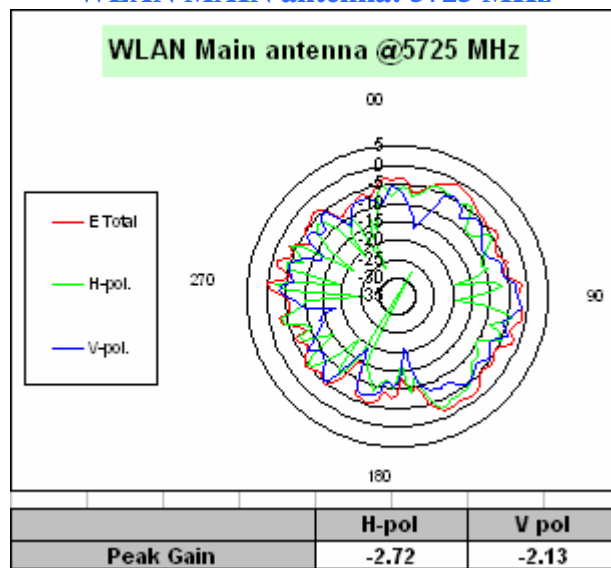
**WLAN MAIN antenna: 5470 MHz**



**WLAN MAIN antenna: 5600 MHz**

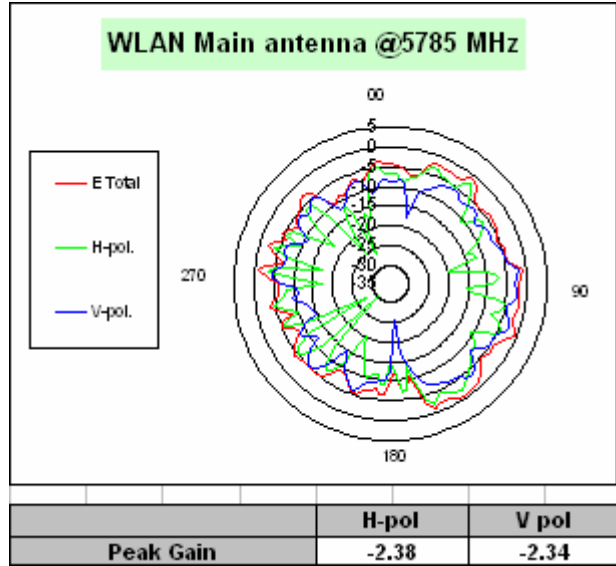


**WLAN MAIN antenna: 5725 MHz**

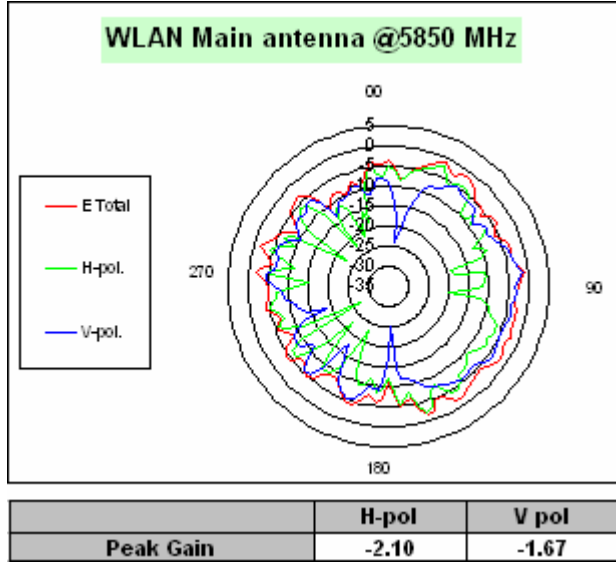




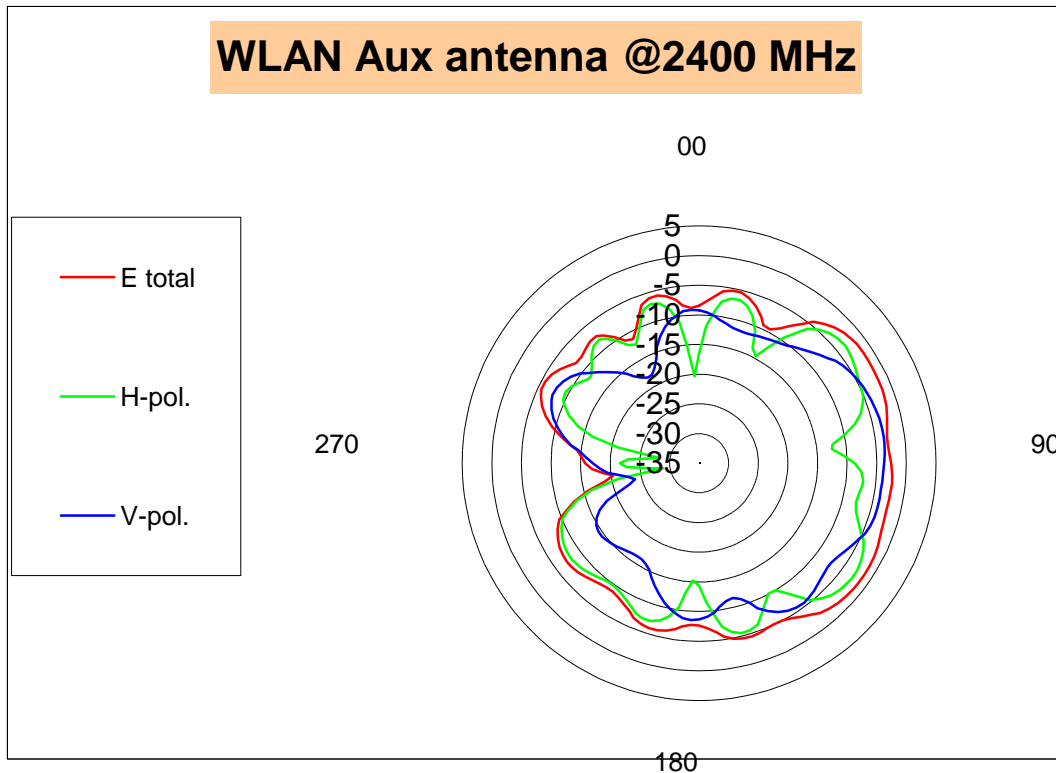
**WLAN MAIN antenna: 5785 MHz**



**WLAN MAIN antenna: 5850 MHz**

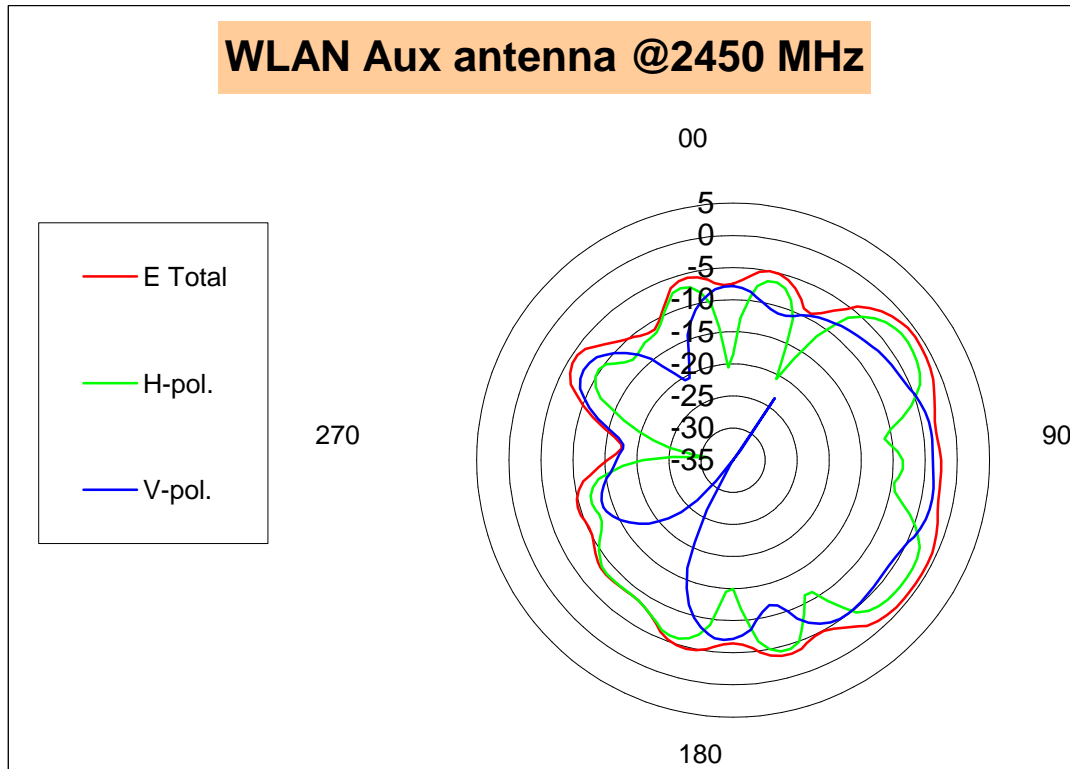


**WLAN AUX antenna: 2400 MHz**



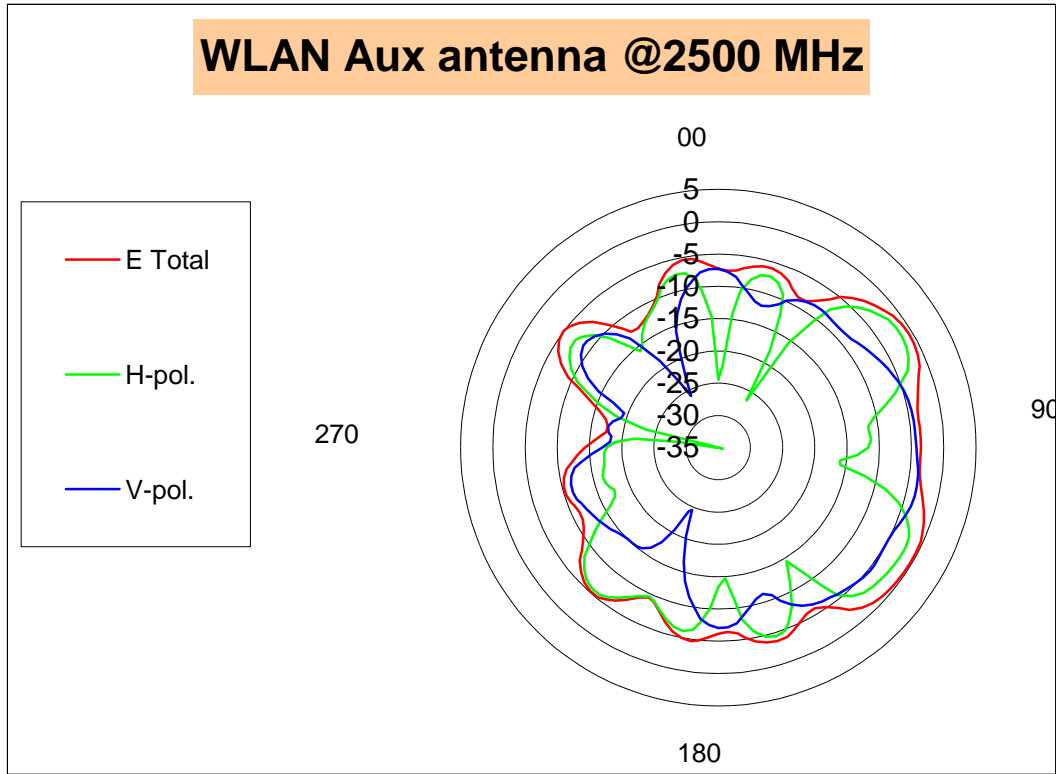
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-2.72</b> | <b>-3.49</b> |

**WLAN AUX antenna: 2450 MHz**



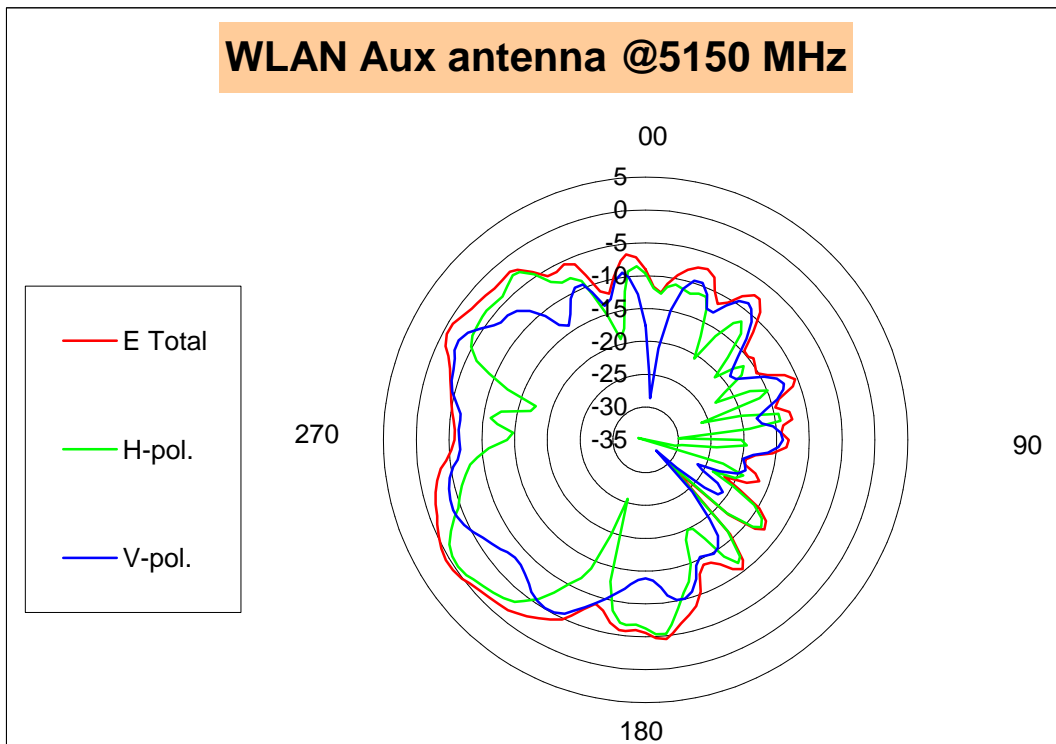
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-2.13</b> | <b>-3.34</b> |

**WLAN AUX antenna: 2500 MHz**



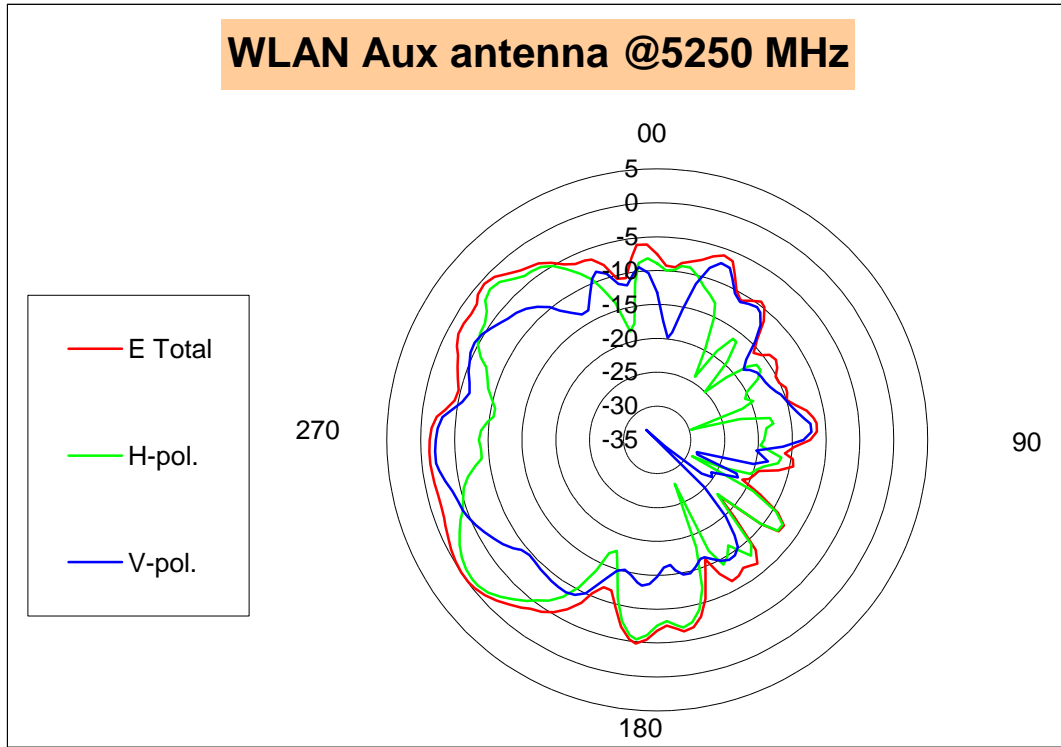
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-1.70</b> | <b>-3.58</b> |

**WLAN AUX antenna: 5150 MHz**



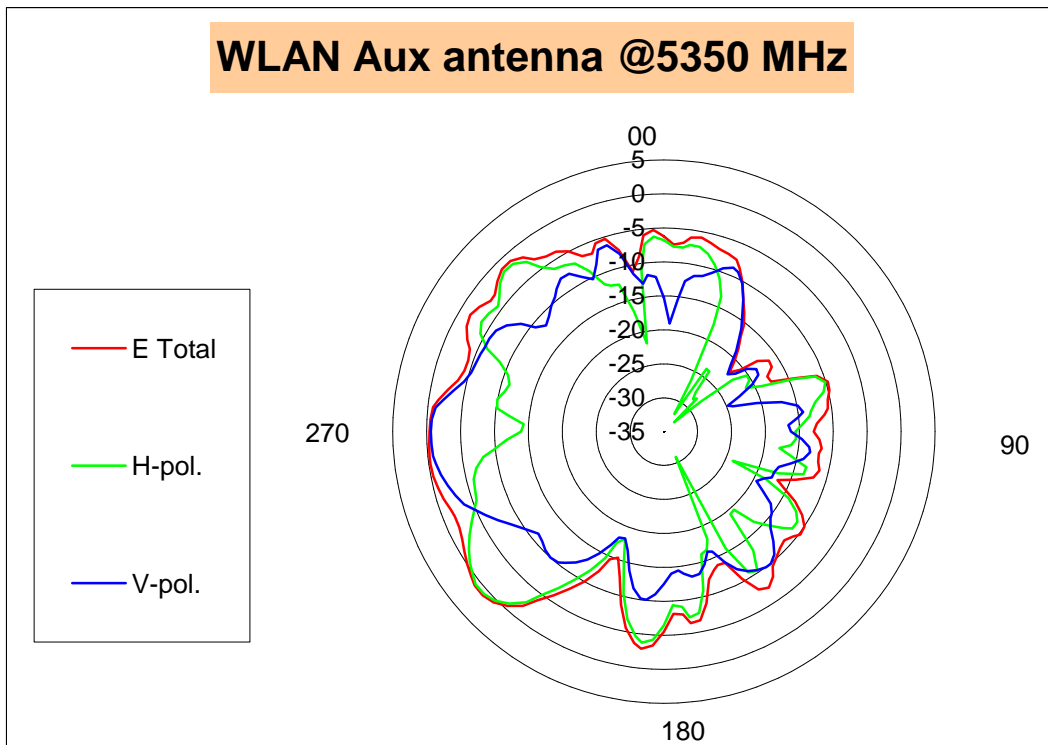
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-0.49</b> | <b>-2.70</b> |

**WLAN AUX antenna: 5250 MHz**



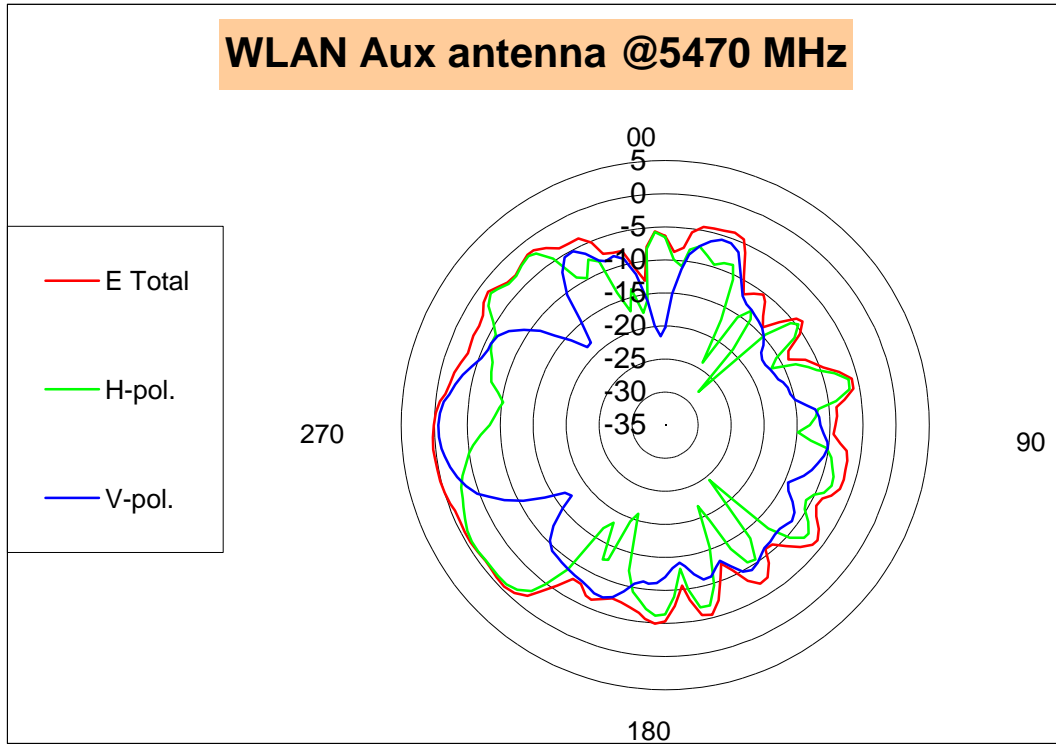
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-0.76</b> | <b>-2.08</b> |

**WLAN AUX antenna: 5350 MHz**



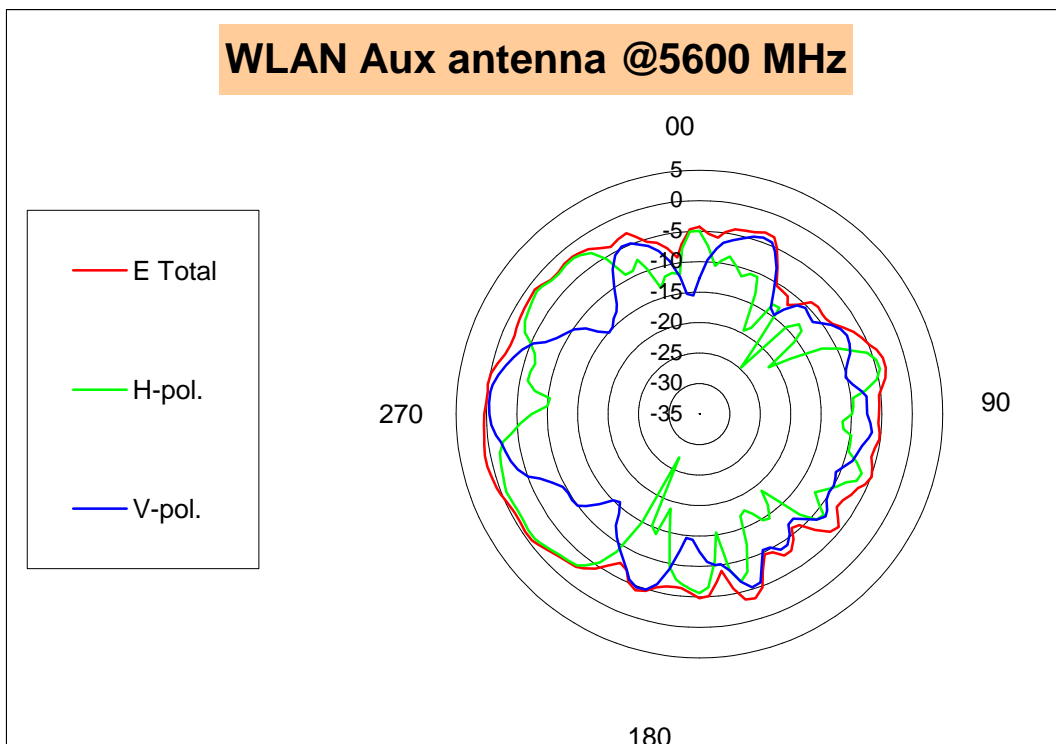
|                  | H-pol       | V pol        |
|------------------|-------------|--------------|
| <b>Peak Gain</b> | <b>0.71</b> | <b>-0.63</b> |

**WLAN AUX antenna: 5470 MHz**



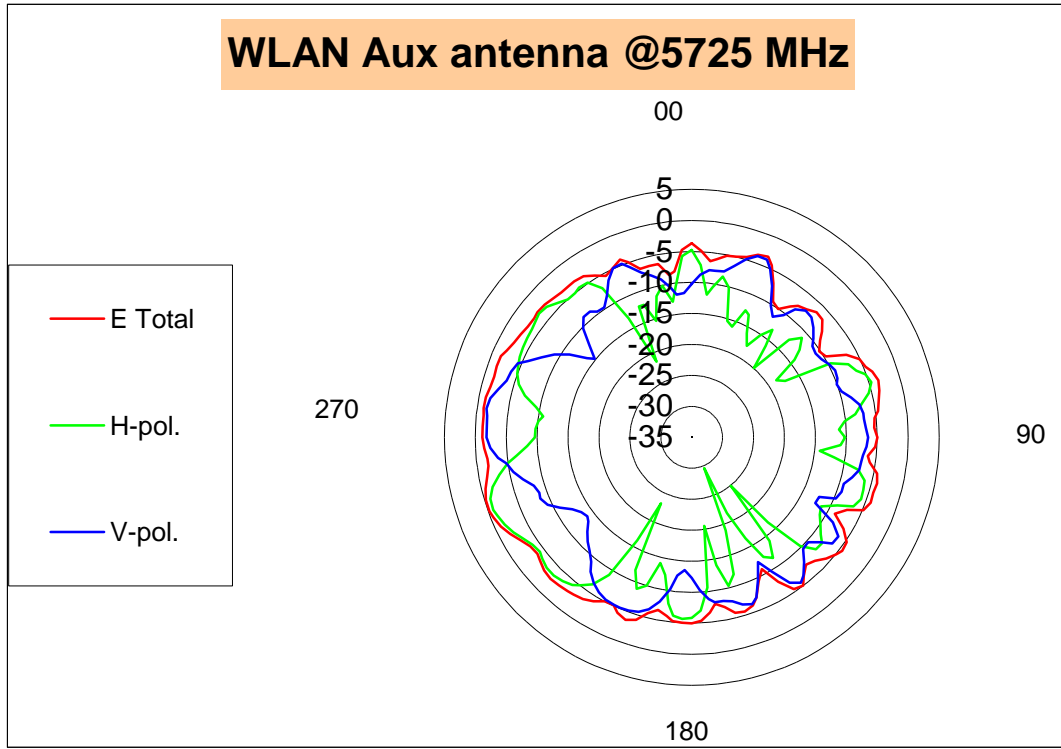
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-0.84</b> | <b>-0.61</b> |

**WLAN AUX antenna: 5600 MHz**



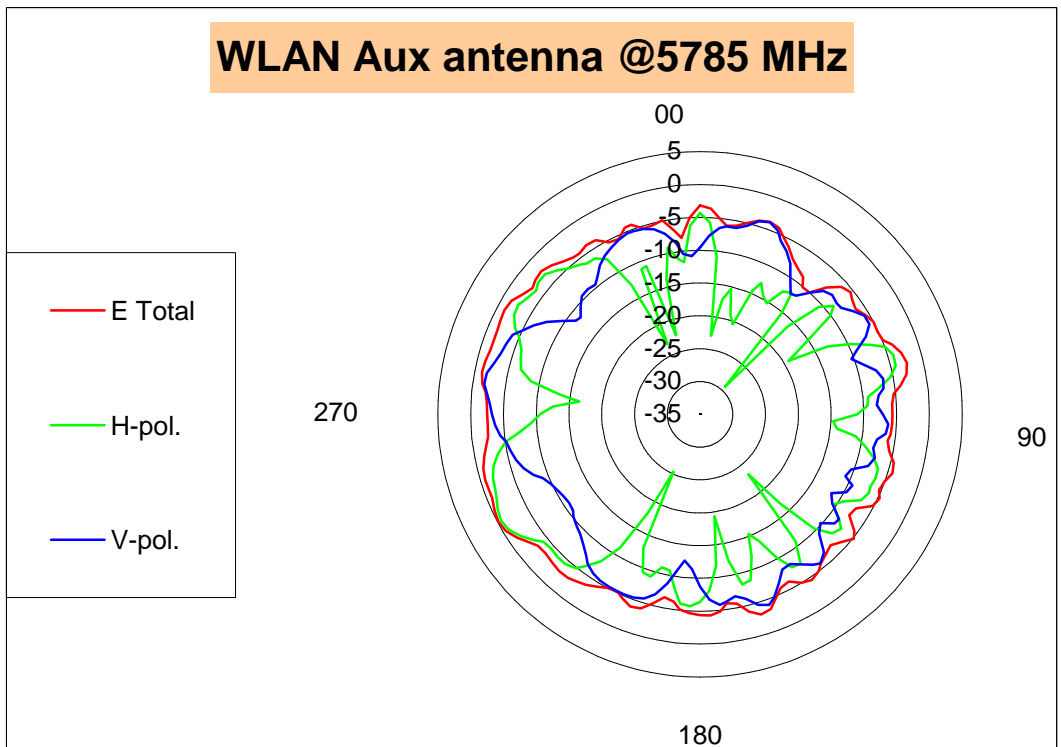
|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-0.81</b> | <b>-0.37</b> |

WLAN AUX antenna: 5725 MHz



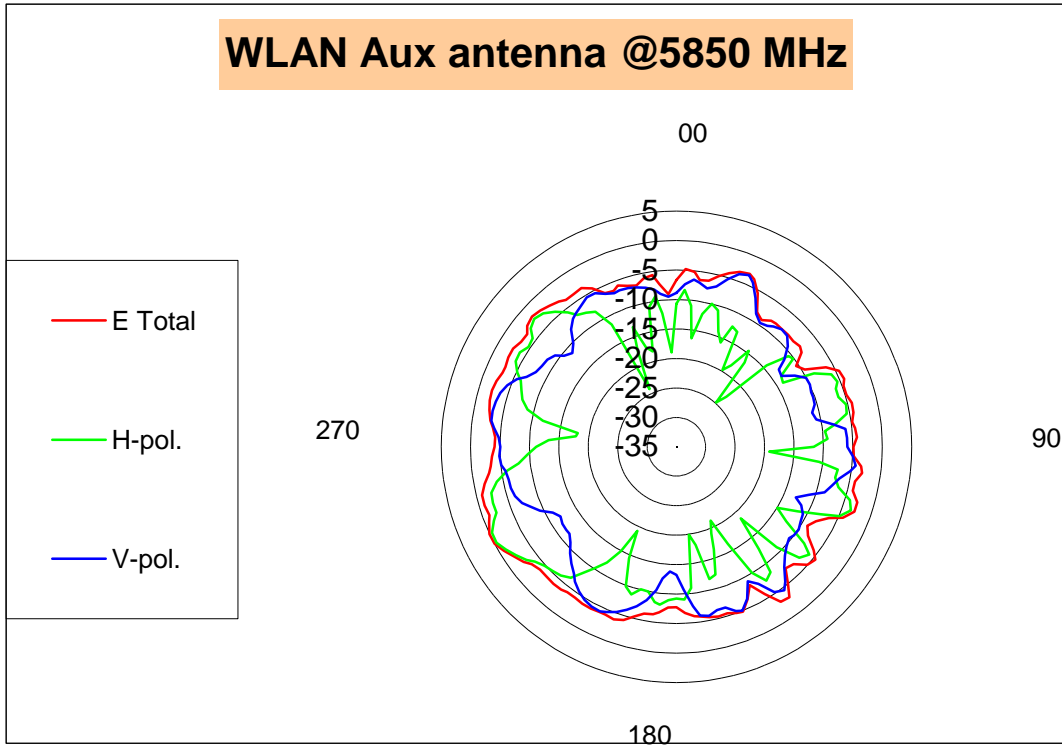
|           | H-pol | V pol |
|-----------|-------|-------|
| Peak Gain | -0.83 | -1.52 |

WLAN AUX antenna: 5785 MHz



|           | H-pol | V pol |
|-----------|-------|-------|
| Peak Gain | -0.59 | -1.75 |

**WLAN AUX antenna: 5850 MHz**



|                  | H-pol        | V pol        |
|------------------|--------------|--------------|
| <b>Peak Gain</b> | <b>-0.34</b> | <b>-3.14</b> |

## Section 4. Host Platform Information

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

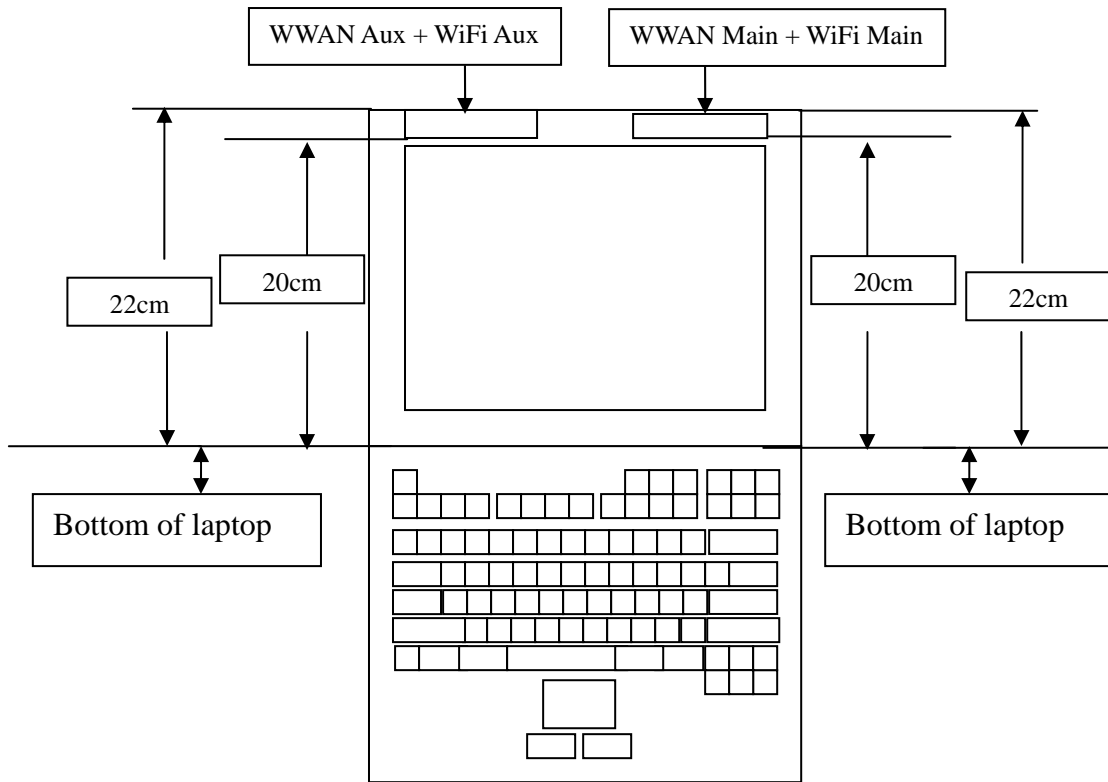
Rating Label Photo:

| Custom     | OEM/ODM    |  | Antenna Vendor          |  |
|------------|------------|--|-------------------------|--|
| Model Name | Model Name | Part No.   | Manufacturer            | Part No.   |
| ZA3        | ZA3        | WWAN Main Antenna:<br>DQ6T15GAD00<br><br>WWAN Aux Antenna:<br>DQ6T15GAD00<br><br>WiFi Main Antenna:<br>DQ6T15GAD00<br><br>WiFi Aux Antenna:<br>DQ6T15GAD00 | Quanta computer<br>Inc. | WWAN Main<br>Antenna:<br>DQ6T15GAD00<br>WWAN Aux<br>Antenna:<br>DQ6T15GAD00<br>WiFi Main Antenna:<br>DQ6T15GAD00<br>WiFi Aux Antenna:<br>DQ6T15GAD00 |



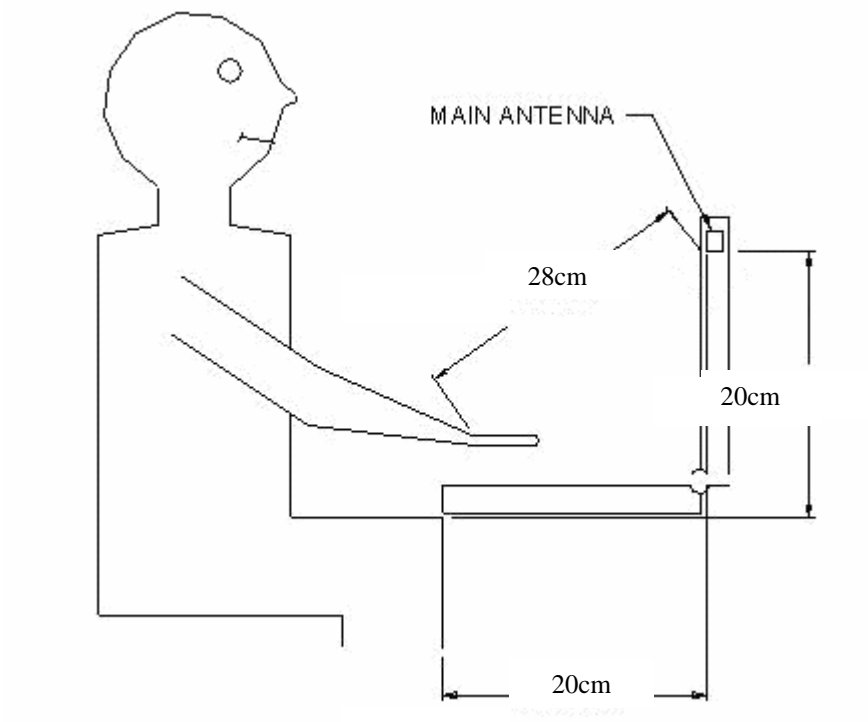
## Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo or dimensioned drawing** of Main and AUX antenna placements. (Not applicable for receive-only antenna)



## Section 6. Antenna dimensional information for SAR evaluation

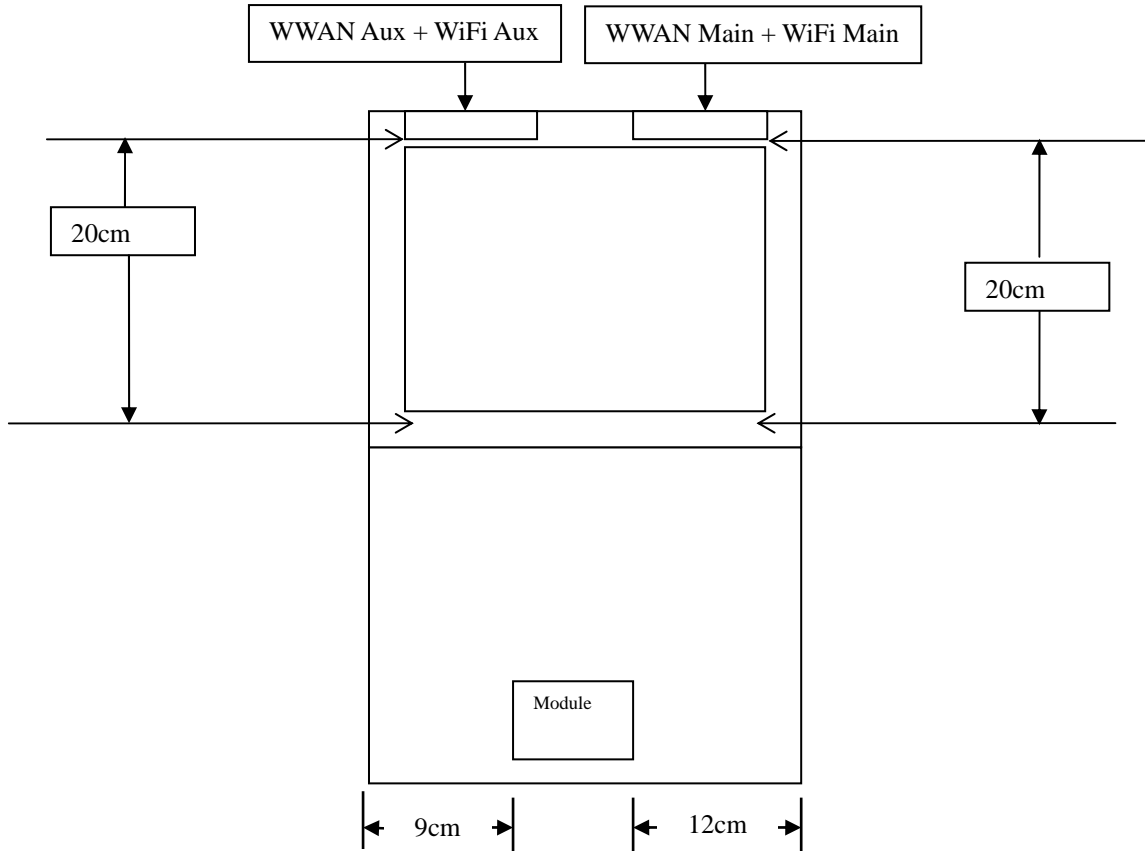
Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, lap/ thigh, and ankle)



## Section 7. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between **all WWAN 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  |                    |              |              |            |                |   |