

Regulatory WLAN Antenna Information

Brand Name	Samsung
Model Name	Winchester
Antenna Vendor	Wistron NeWeb Corporation
Vendor Part Number	<input type="checkbox"/> WLAN MAIN Antenna: 81.EHD15.005
Samsung Part Number	<input type="checkbox"/> WLAN MAIN Antenna: BA42-00217A
Vendor Part Number	<input type="checkbox"/> WLAN AUX Antenna: 81.EHD15.004
Samsung Part Number	<input type="checkbox"/> WLAN AUX Antenna: BA42-00216A
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	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, 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

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.EHD15.005 (customer P/N:BA42-00217A)	Wistron Neweb Corporation	PIFA	P/N: 137I406W(221) 50 ohm Coaxial. length: 406 mm diameter: 1.37 mm Connector: IPEX	2400-2484MHz 0.95 dBi (peak)	2400-2484MHz 2.02 dBi (peak)	2400-2484MHz 2.0 max	2400-2484MHz 1.07 dBi (peak)
				5150-5350MHz -0.79 dBi (peak)	5150-5350MHz 0.87 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 1.66 dBi (peak)
				5470-5725MHz 1.22 dBi (peak)	5470-5725MHz 2.97 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 1.75 dBi (peak)
				5725-5850MHz 0.17 dBi (peak)	5725-5850MHz 1.95 dBi (peak)	5725-5850MHz 2.5 max	5725-5850MHz 1.78 dBi (peak)
AUX Antenna (WNC P/N:81.EHD15.004 (customer P/N:BA42-00216A)	Wistron Neweb Corporation	PIFA	P/N: 137I658B(221) 50 ohm Coaxial. length: 658 mm diameter: 1.37 mm Connector: IPEX	2400-2484MHz -1.51 dBi (peak)	2400-2484MHz 0.10 dBi (peak)	2400-2484MHz 2.0 max	2400-2484MHz 1.61 dBi (peak)
				5150-5350MHz -1.65 dBi (peak)	5150-5350MHz 0.89 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 2.54 dBi (peak)
				5470-5725MHz -1.33 dBi (peak)	5470-5725MHz 1.35 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 2.68 dBi (peak)
				5725-5850MHz -4.02 dBi (peak)	5725-5850MHz -1.30 dBi (peak)	5725-5850MHz 2.5 max	5725-5850MHz 2.72 dBi (peak)

Antenna Peak Gain Table:

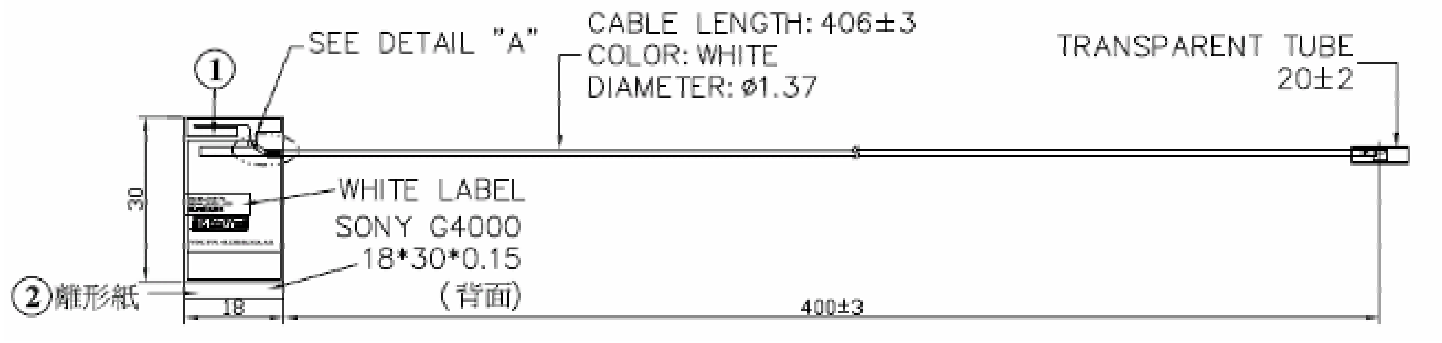
Frequency (MHz)	Main Antenna			Aux Antenna		
	Horizontal (dBi)	Vertical (dBi)	Total (dBi)	Horizontal (dBi)	Vertical (dBi)	Total (dBi)
2400	-1.07	0.95	2.37	-3.16	-1.51	-0.77
2412	-0.80	-0.30	1.82	-3.37	-2.56	-1.32
2442	-0.81	-0.97	1.23	-3.52	-3.31	-1.46
2484	-2.08	-0.82	0.20	-2.65	-2.87	-2.07
5150	-1.84	-1.20	0.05	-3.77	-1.65	-0.57
5250	-1.18	-0.79	0.60	-3.32	-2.49	-0.63
5350	-1.25	-1.57	0.27	-1.75	-3.14	0.06
5470	-0.70	-2.24	0.34	-1.33	-2.59	-0.81
5600	-0.34	0.35	1.44	-2.19	-2.50	-1.75
5725	-0.22	1.22	2.36	-2.58	-5.68	-2.39
5850	-2.18	0.17	1.10	-4.02	-4.73	-2.26

- 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 WLAN MAIN and AUX antenna here.

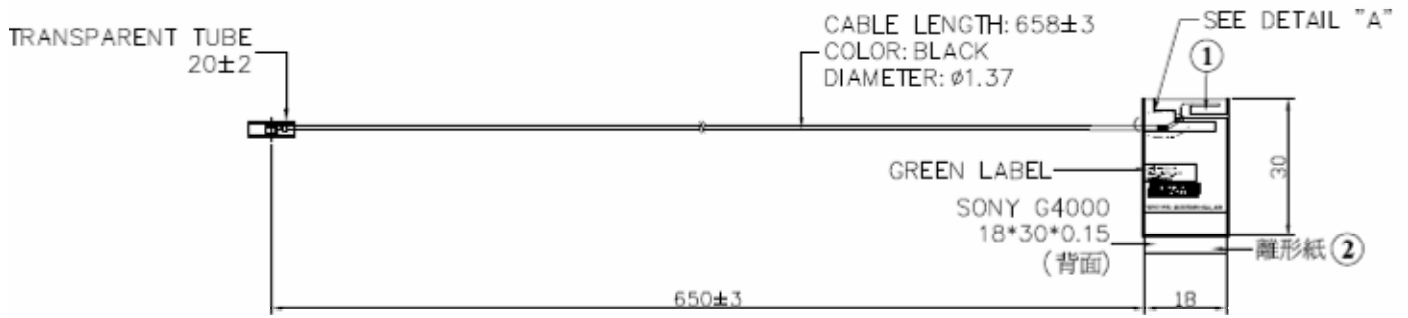
WLAN MAIN Antenna Dimensioned Drawing:



WLAN MAIN Antenna Photo:



WLAN AUX Antenna Dimensioned Drawing:



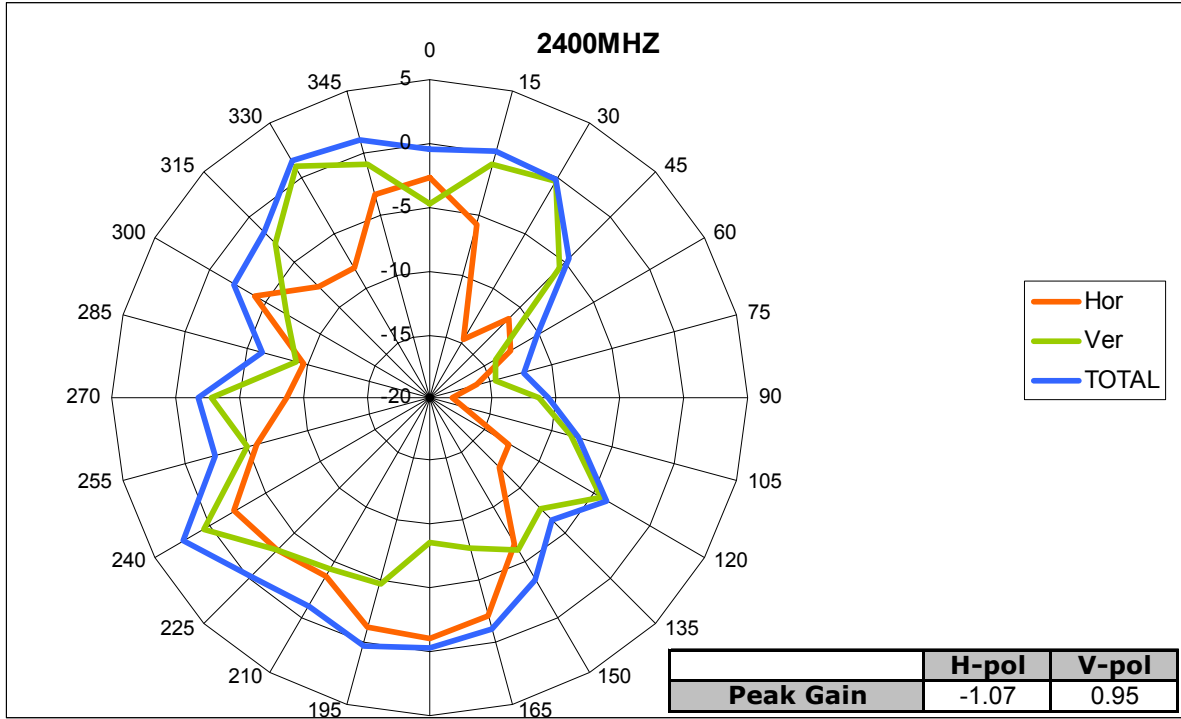
WLAN AUX Antenna Photo:



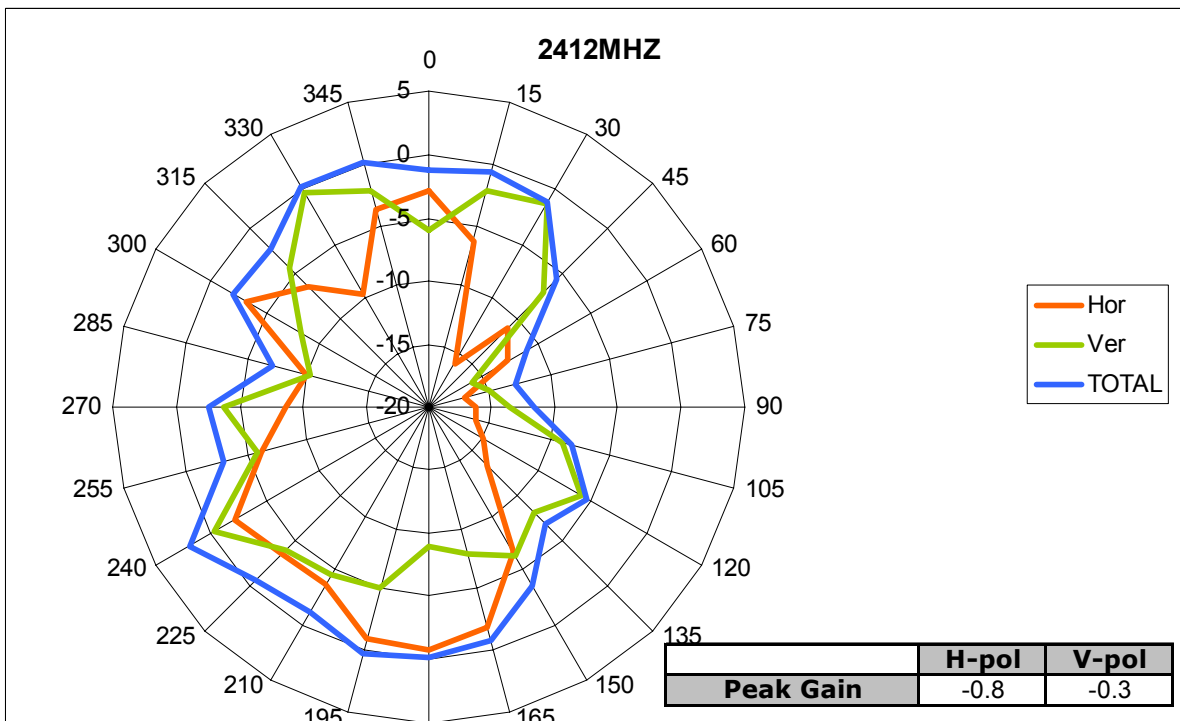
Section 3. Radiation characteristics of antennae Loaded in Host Platform

2400-2484MHz radiation characteristic

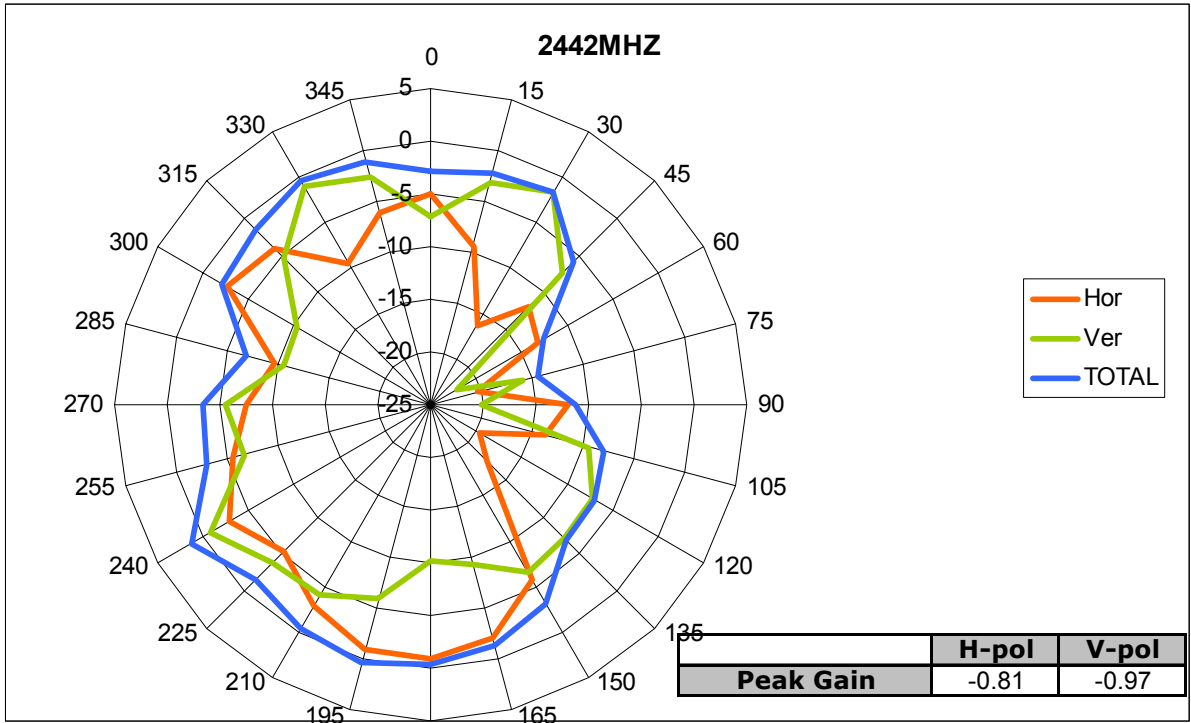
Main antenna: 2400 MHz



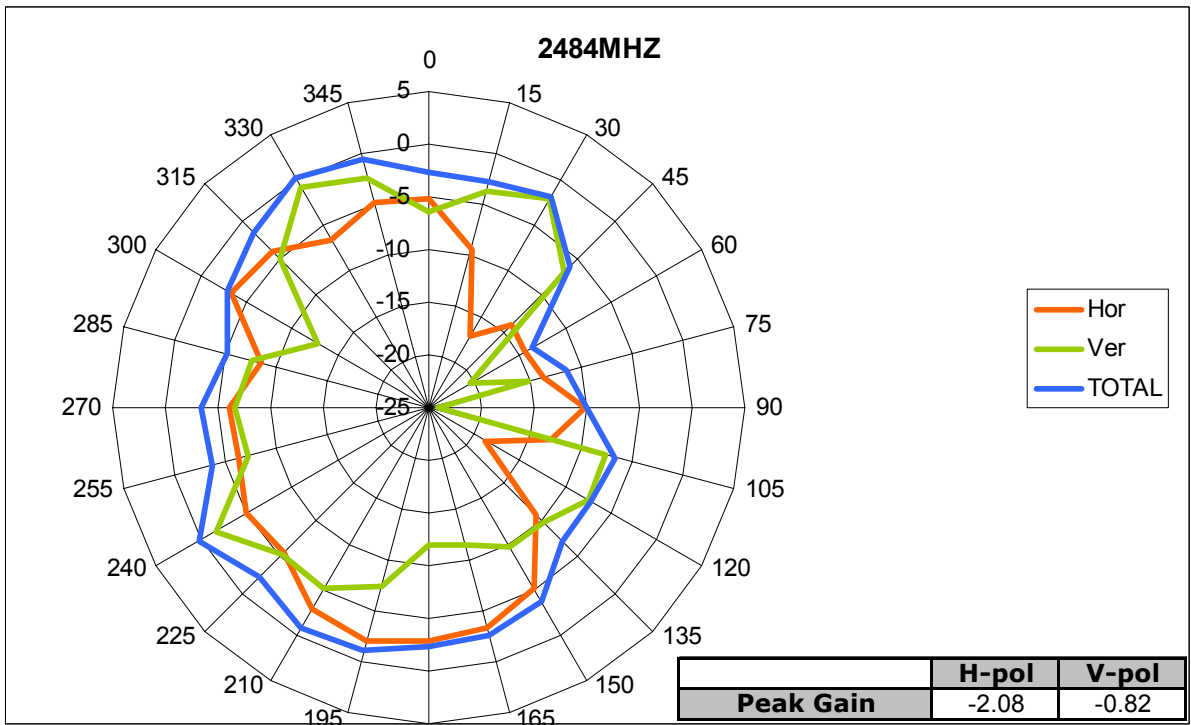
Main antenna: 2412 MHz



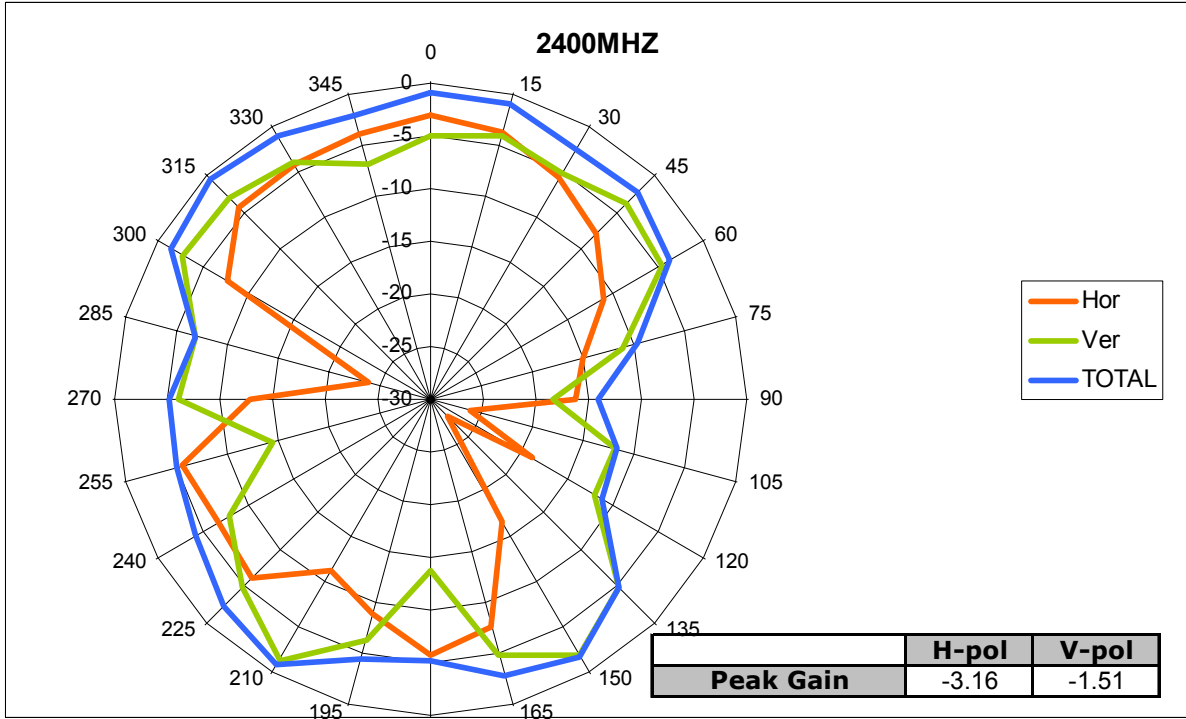
Main antenna: 2442 MHz



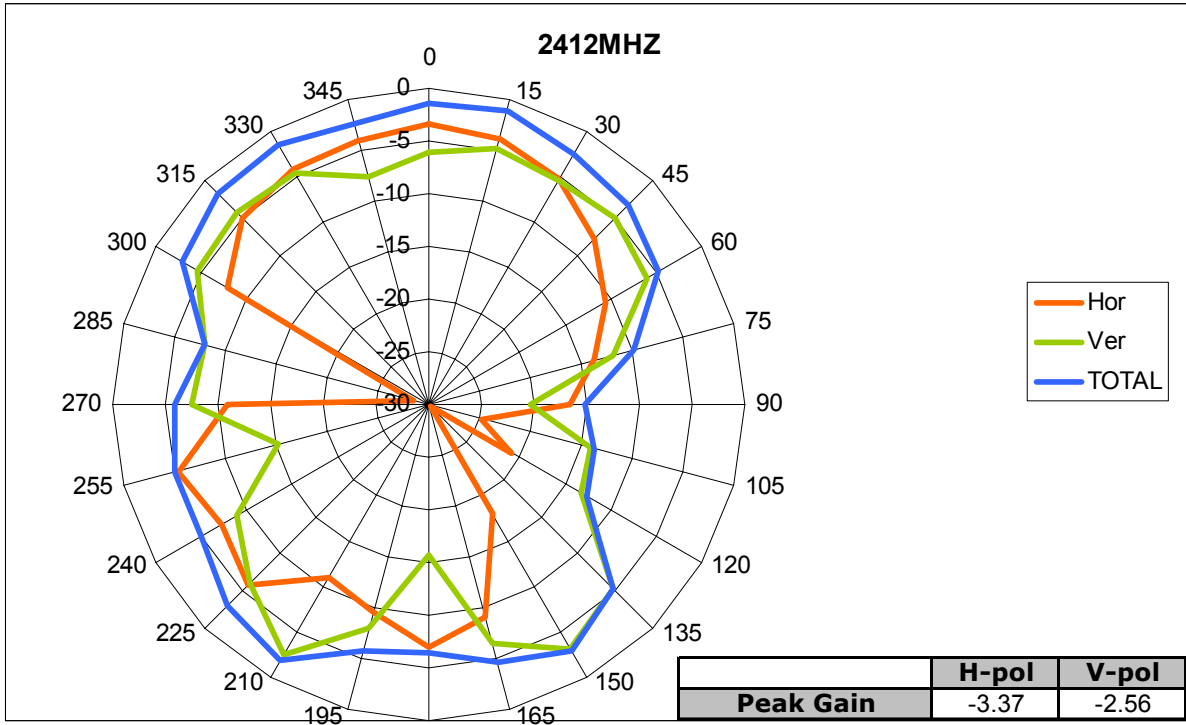
Main antenna: 2484 MHz



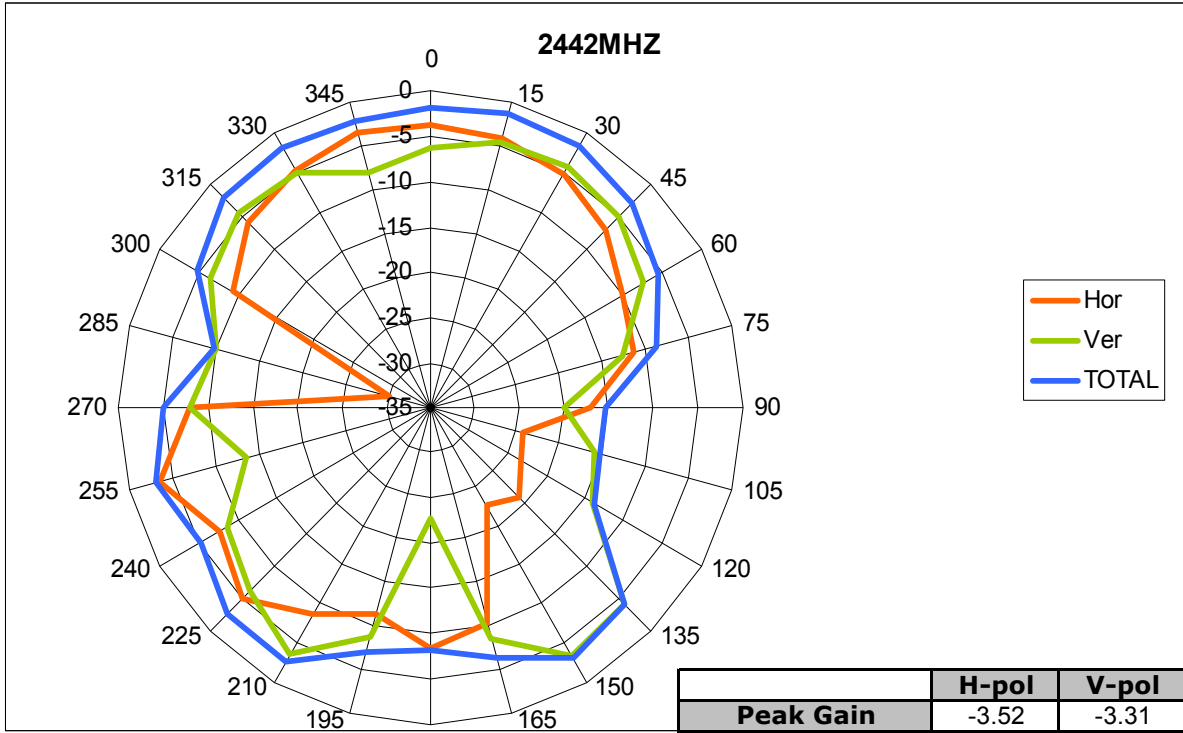
Aux antenna: 2400 MHz



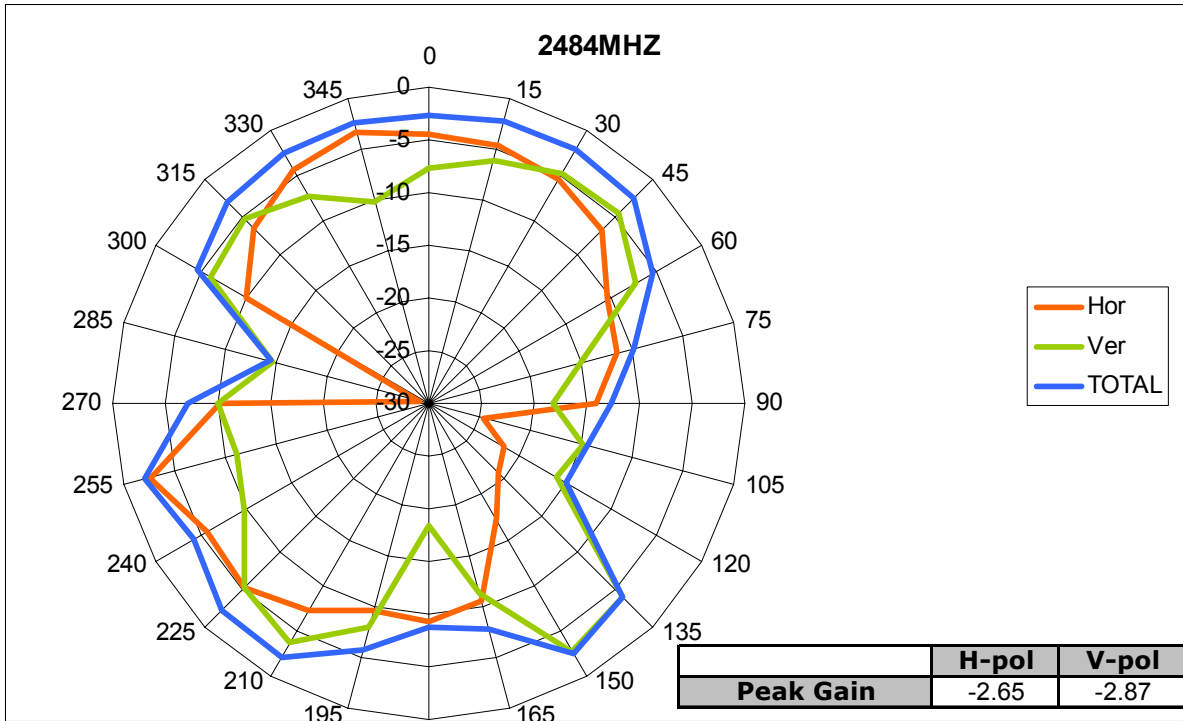
Aux antenna: 2412 MHz



Aux antenna: 2442 MHz

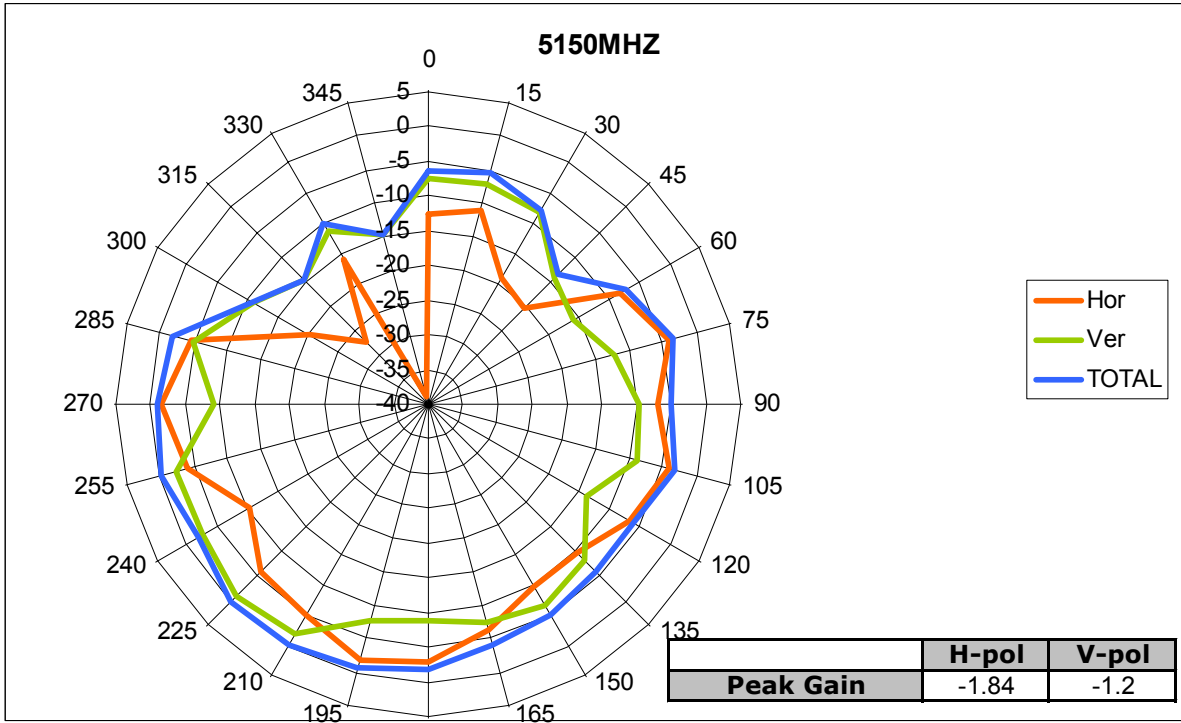


Aux antenna: 2484 MHz

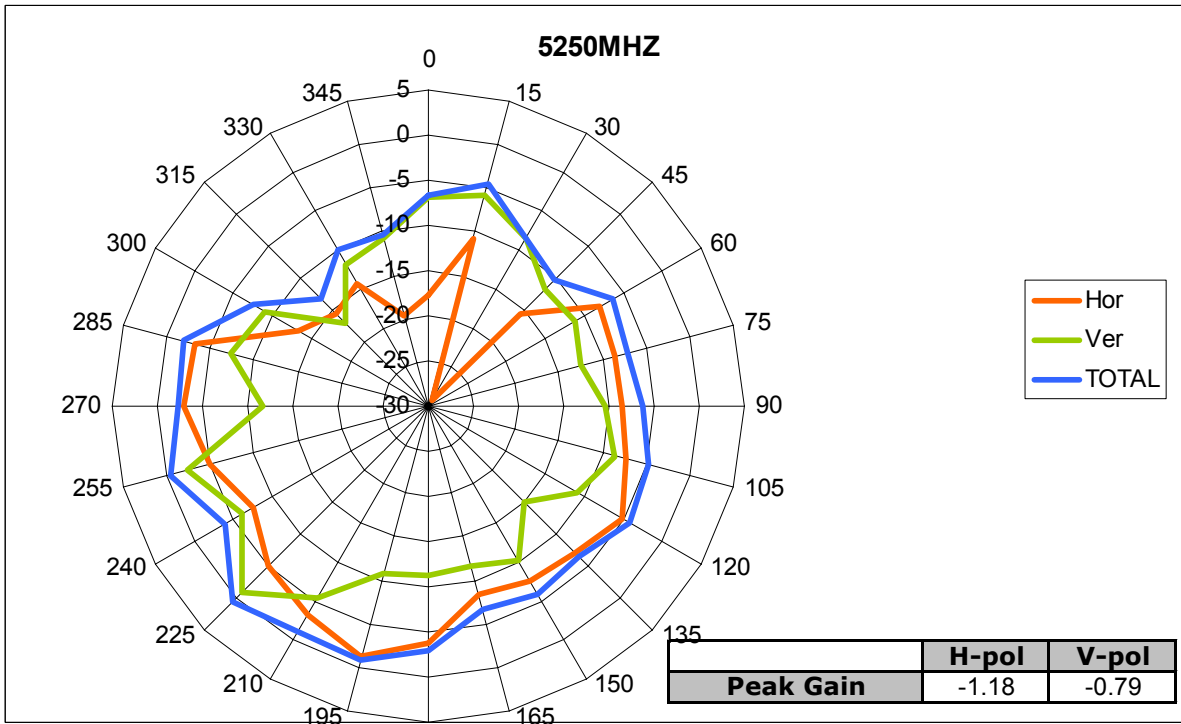


5150-5350 MHz radiation characteristic

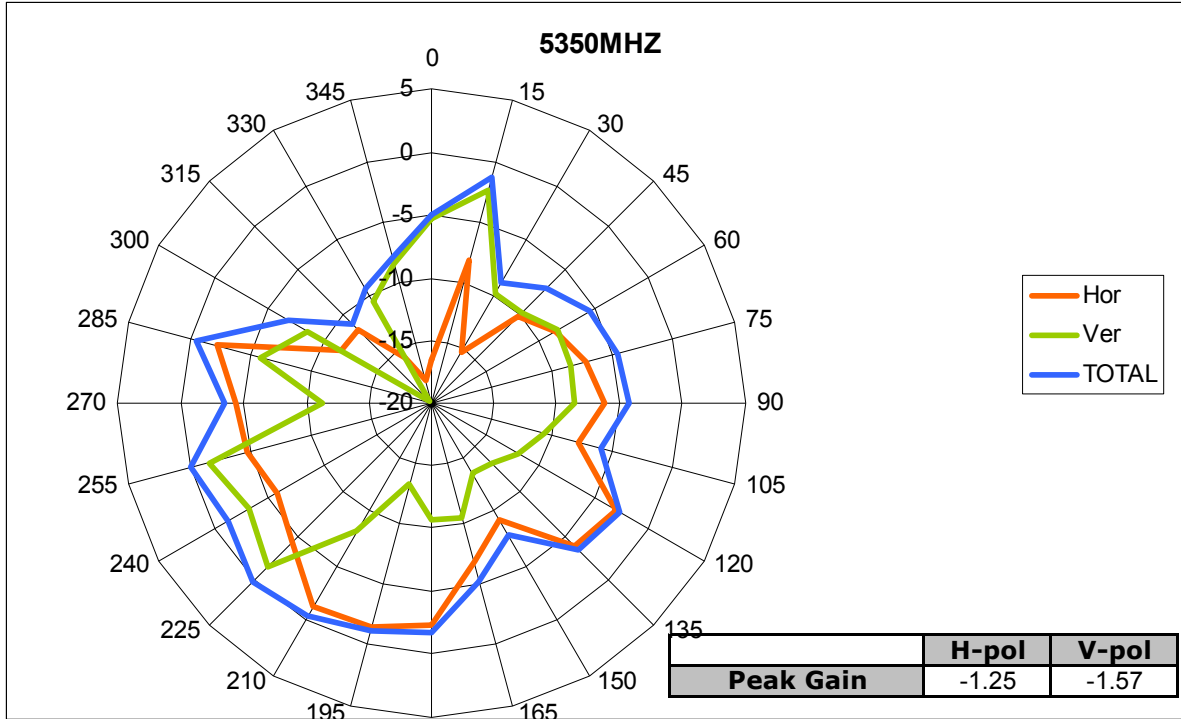
Main antenna: 5150 MHz



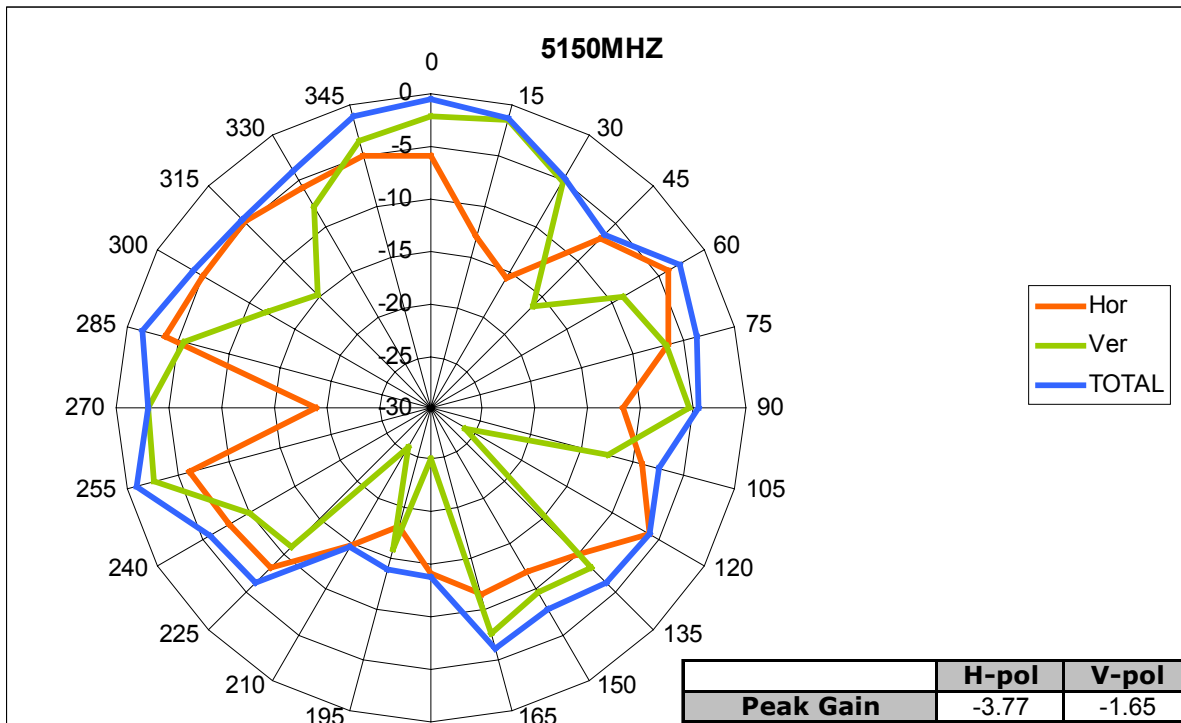
Main antenna: 5250 MHz



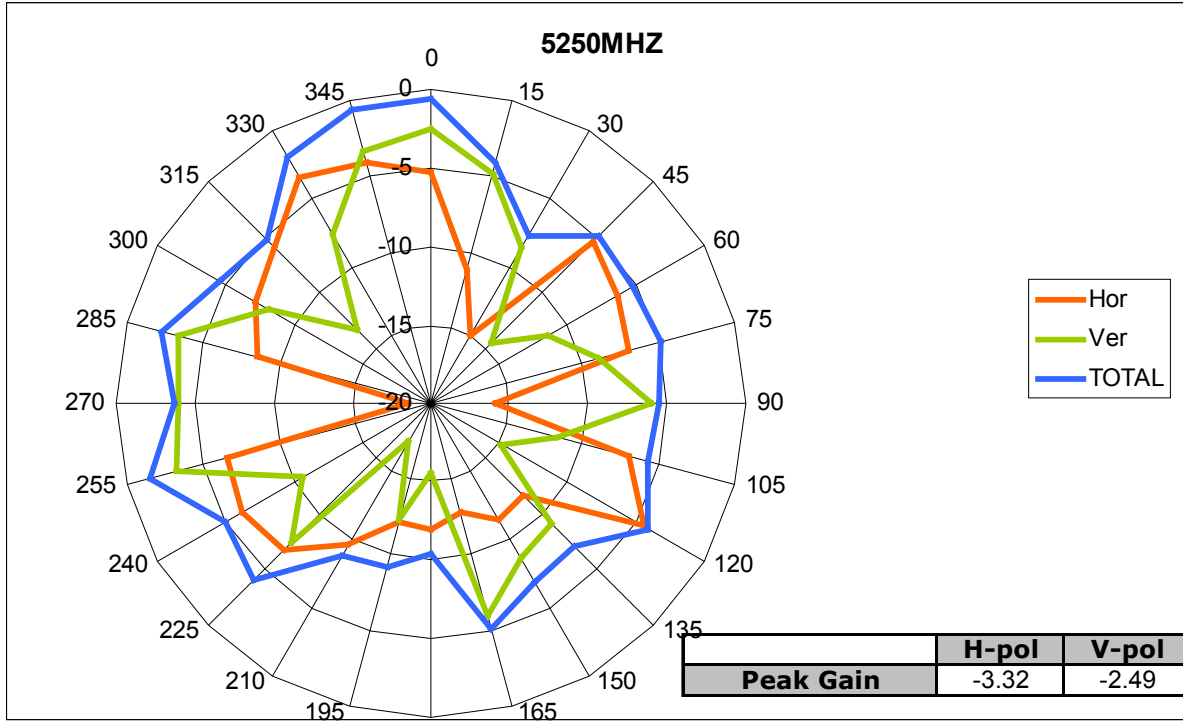
Main antenna: 5350 MHz



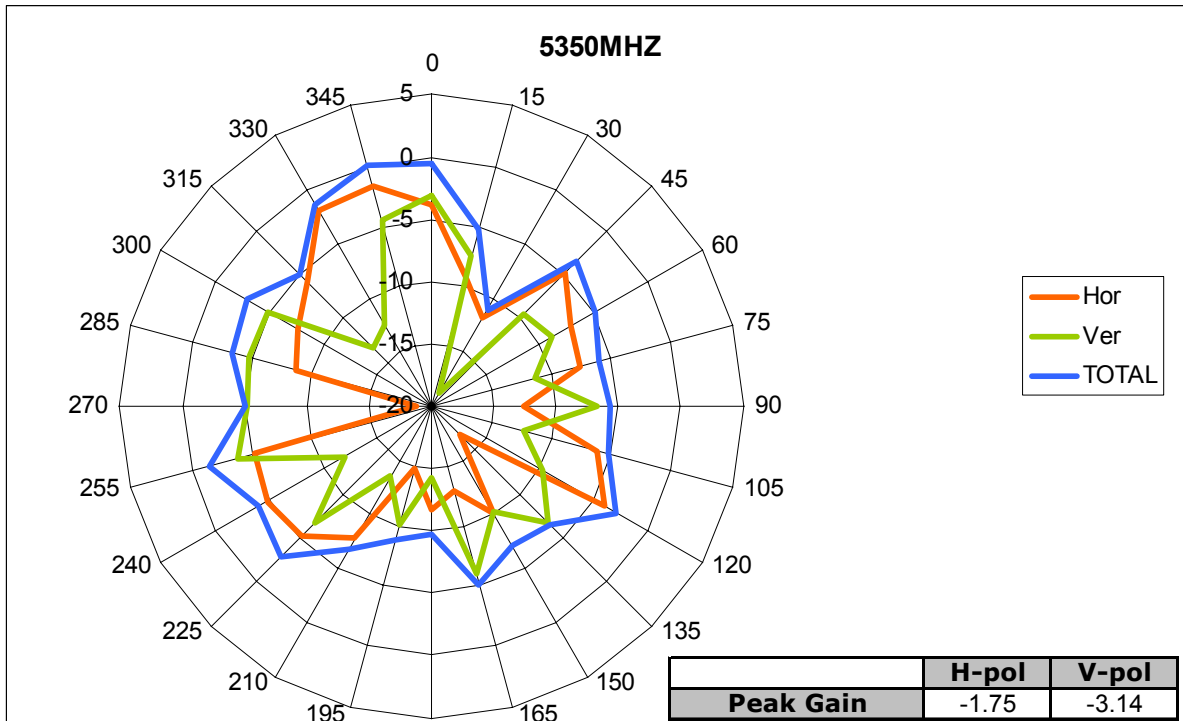
Aux antenna: 5150 MHz



Aux antenna: 5250 MHz

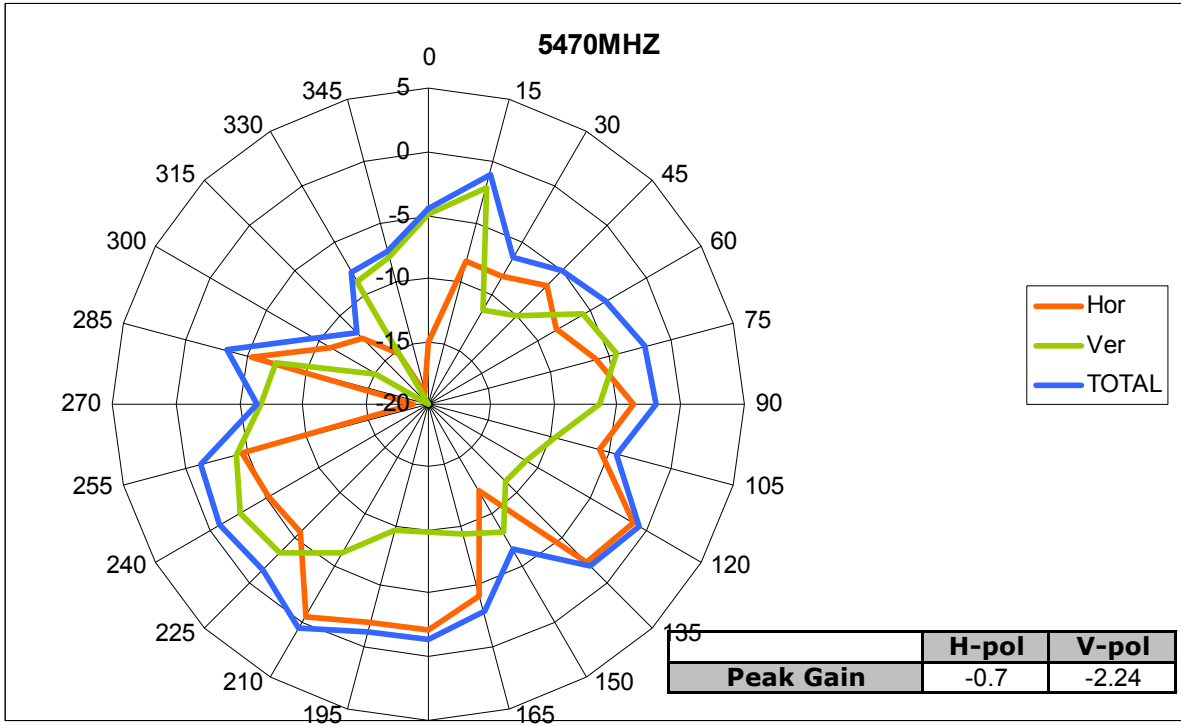


Aux antenna: 5350 MHz

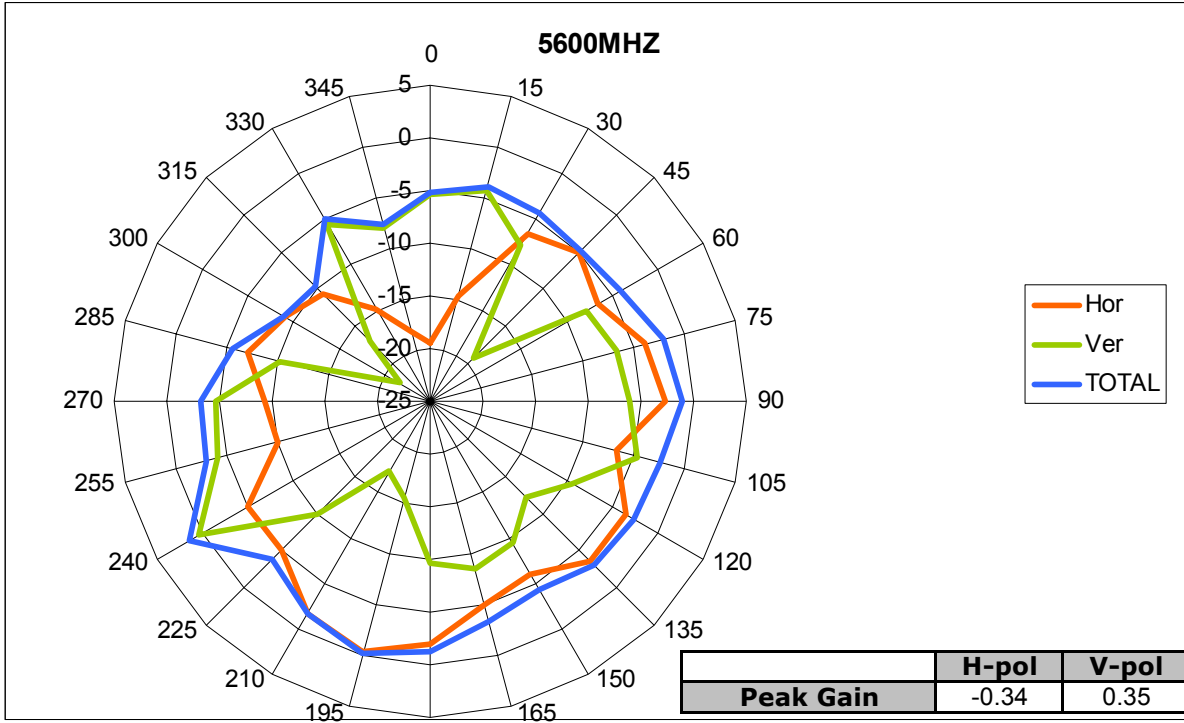


5470-5725MHz radiation characteristic

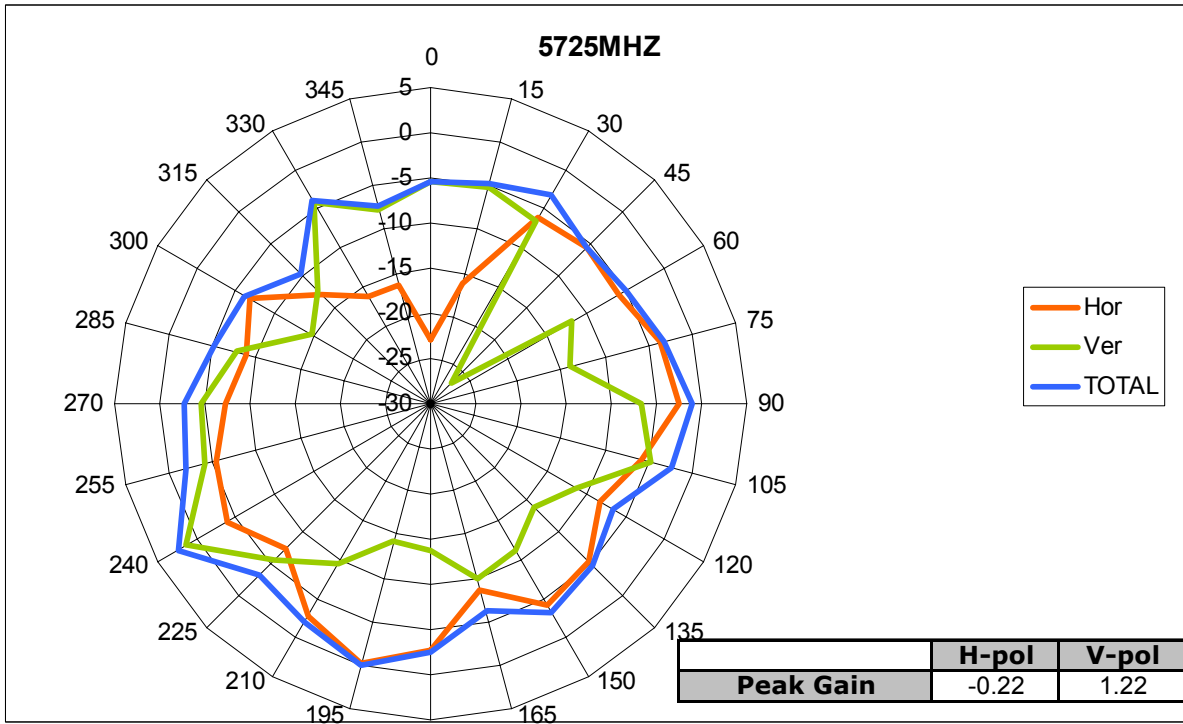
Main antenna: 5470 MHz



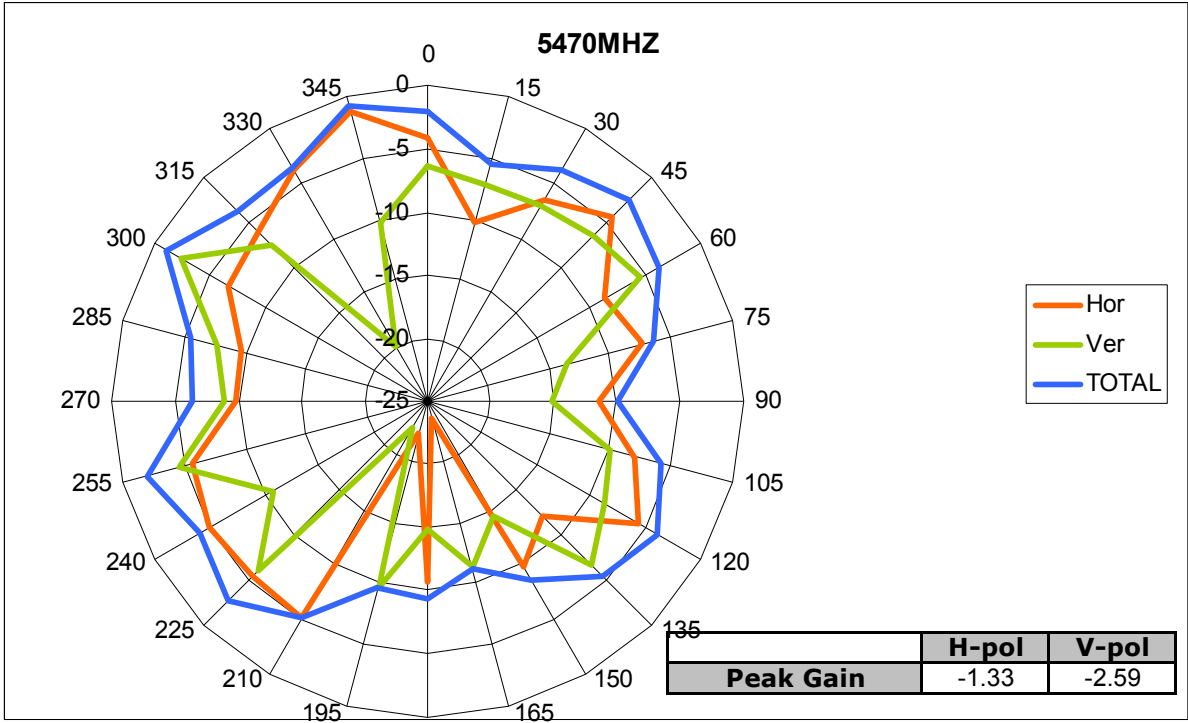
Main antenna: 5600 MHz



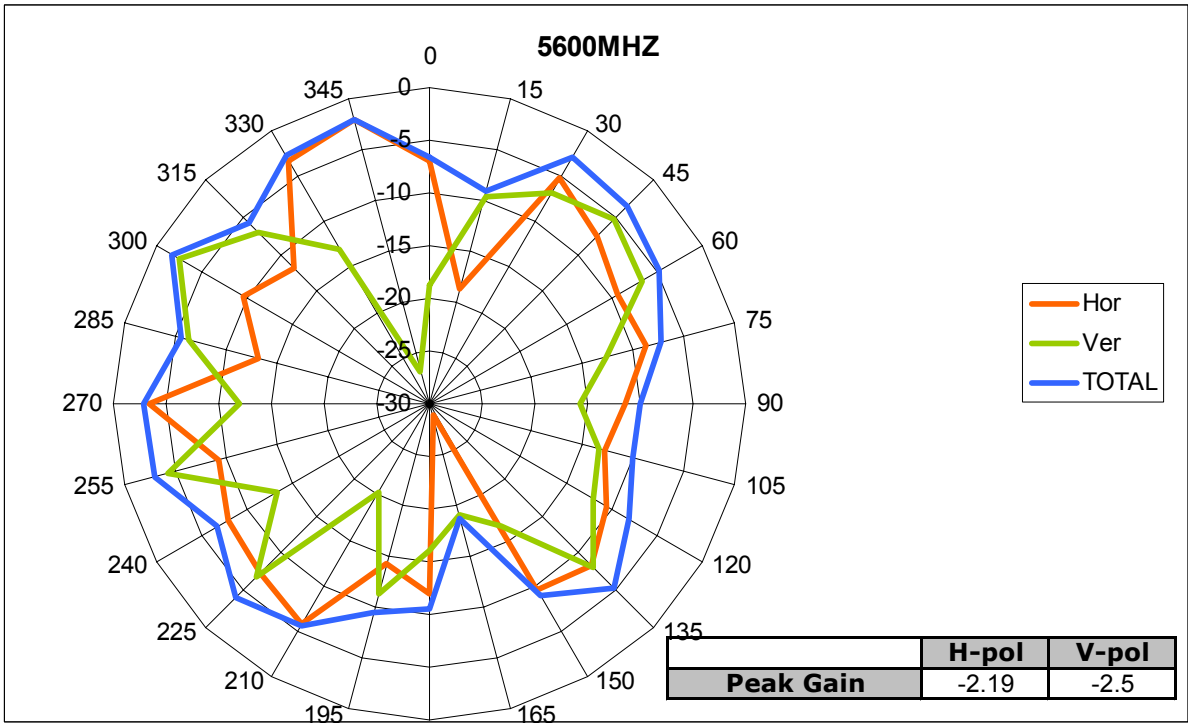
Main antenna: 5725 MHz



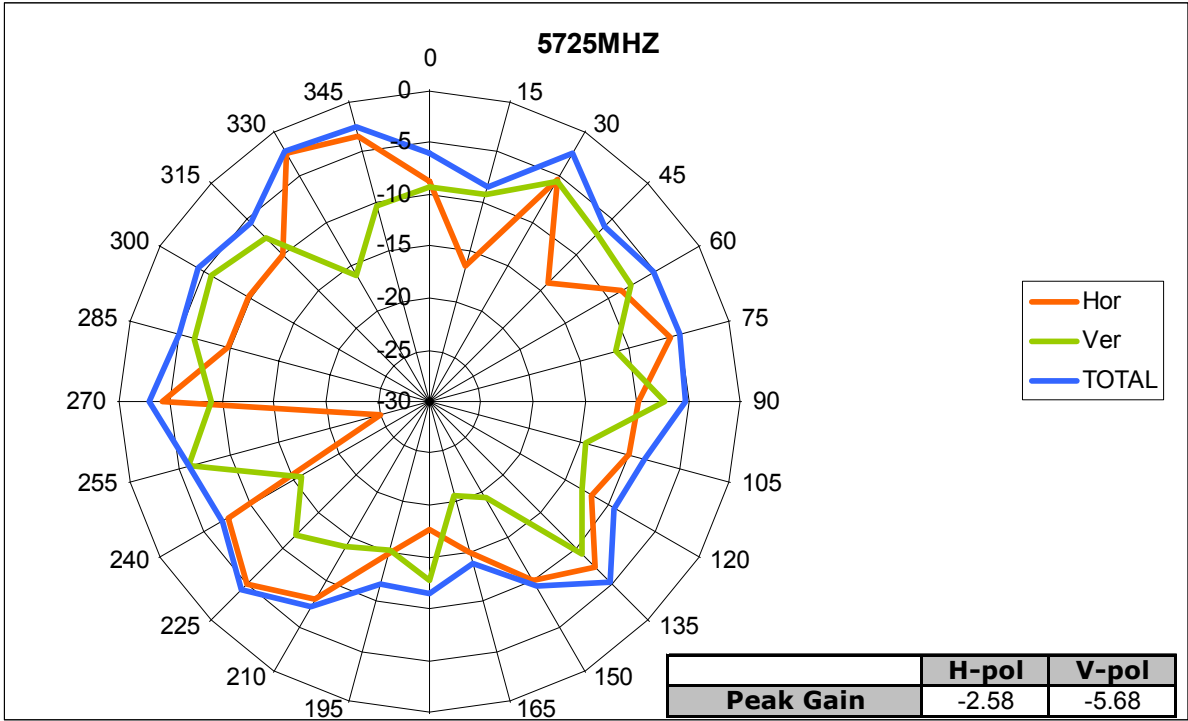
Aux antenna: 5470 MHz



Aux antenna: 5600 MHz

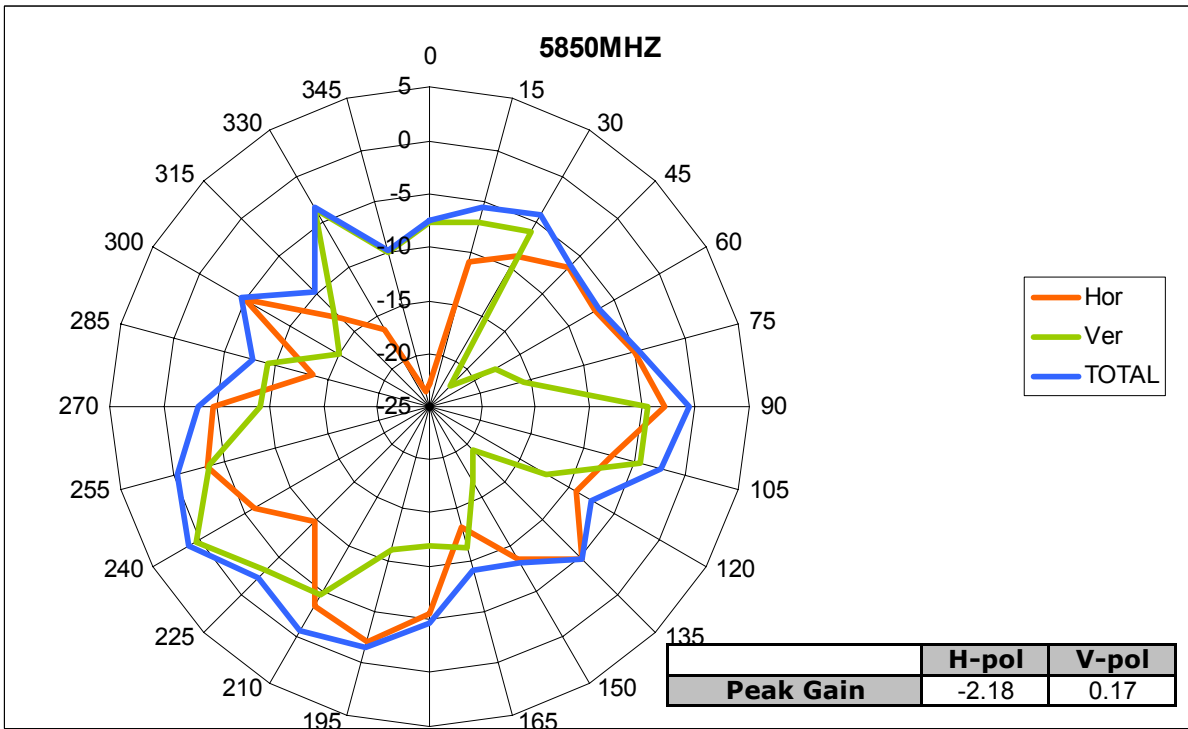


Aux antenna: 5725 MHz

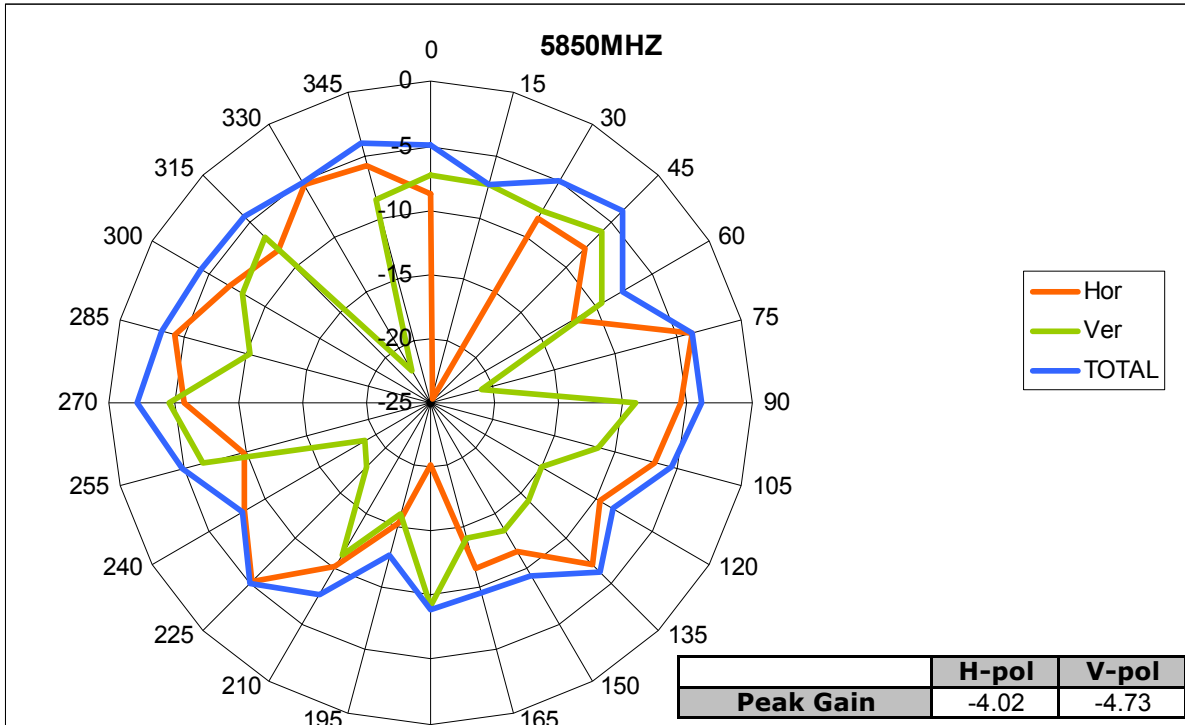


5850 MHz radiation characteristic

Main antenna: 5850 MHz



Aux antenna: 5850 MHz



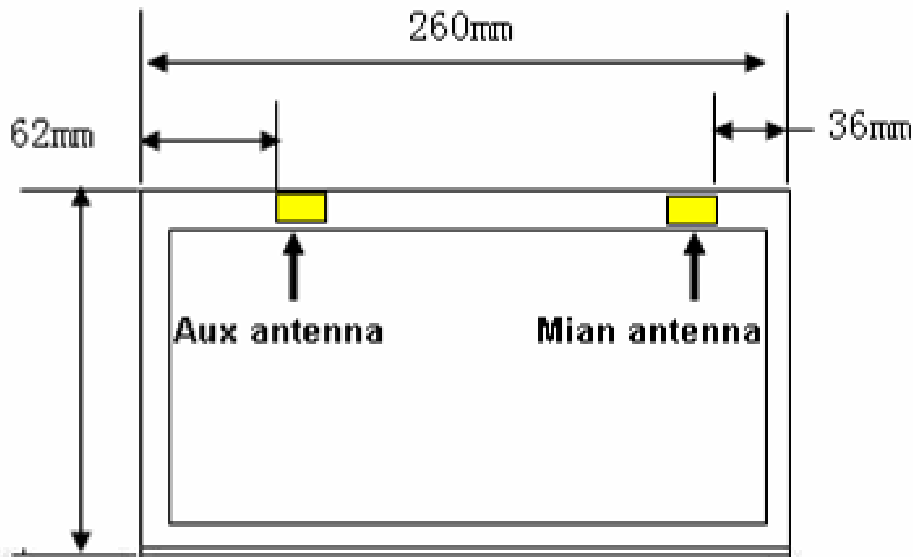
Section 4. Host Platform Information

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

Module Location Photo: (if Singapore required)

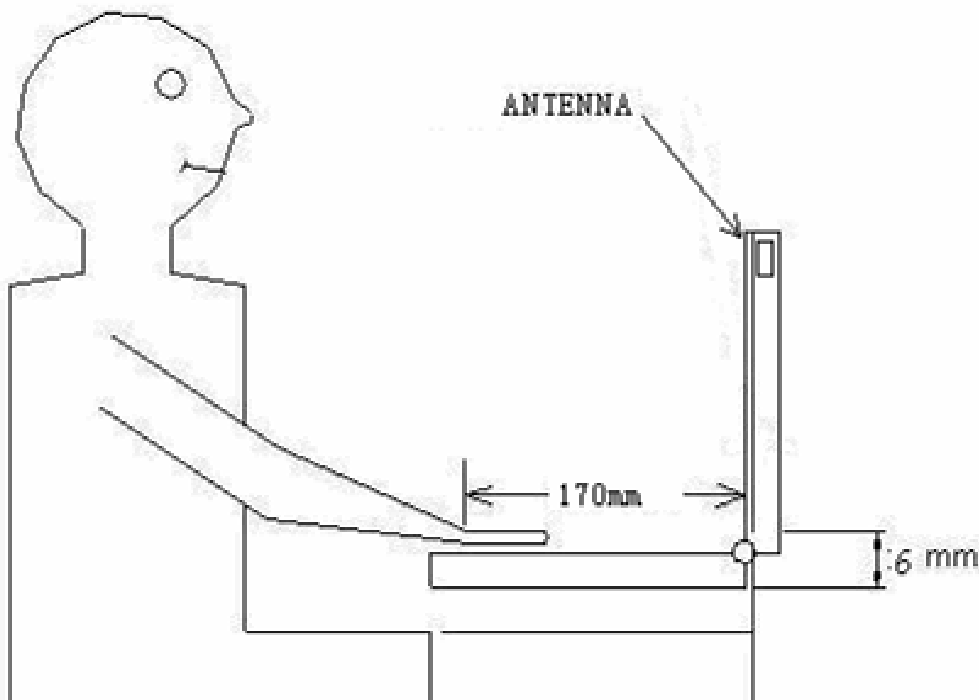
Section 5. Antenna Host Platform Location Information

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 antenna and the user (excluding hands, wrist, feet, and ankle)



Section 7. 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
USA, Canada						