

# Regulatory WLAN Antenna Information

Platform information			
Brand	ODM	End product model name	Platform type <small>(ex: regular NB, convertible PC, AIO...etc)</small>
ASUS	Inventec	主型號: FA401 系列型號: FA401U、FA401W	Regular NB

Antenna information			
Vendor	Type	Antenna Part number (Main)	Antenna Part number (Aux)
AWAN	PIFA	AYP6Y-100509	AYP6Y-100510

**Antenna Manufacturer Information**

AWAN  
 B2F., No. 207-1, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)  
 Tel : +886-2-8913-1939 #2814  
<http://www.awan-ant.com>

Peak gain w/ cable loss (dBi)*										
	2.4GHz <small>2400-2483.5 MHz</small>	5.2GHz <small>5150-5250MHz</small>	5.3GHz <small>5250-5350MHz</small>	5.6GHz <small>5470-5725MHz</small>	5.8GHz <small>5725-5850MHz</small>	5.9GHz <small>5850-5895MHz</small>	6.2GHz <small>5925-6425MHz</small>	6.5GHz <small>6425-6525MHz</small>	6.7GHz <small>6525-6875MHz</small>	7.0 GHz <small>6875-7125MHz</small>
<b>Main</b>	1.71	3.36	3.20	3.64	3.89	3.72	3.98	3.06	3.41	2.80
<b>Aux</b>	1.19	2.98	2.98	3.46	3.18	4.06	3.77	2.43	3.18	0.42

All Antenna peak gain should be less the Antenna Net Gain spec as below: (MT7922A22M)

2. The antennas provided to the EUT, please refer to the following table:

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Chain0	PSA	RFMTA340718EML B302	3.18	2.4~2.4835	PIFA	i-pex(MHF)	200
				4.92	5.15~5.85			
2	Chain1	PSA	RFMTA340718EML B302	3.18	2.4~2.4835	PIFA	i-pex(MHF)	200
				4.92	5.15~5.85			
3	Chain0	PSA	RFMTA311020EM MB301	1.71	2.4~2.4835	PIFA	i-pex(MHF)	200
				4.82	5.15~5.85			
				4.76	5.925~6.425			
				4.29	6.425~6.525			
				4.61	6.525~6.875			
4.09	6.875~7.125							
4	Chain1	PSA	RFMTA311020EM MB301	1.71	2.4~2.4835	PIFA	i-pex(MHF)	200
				4.82	5.15~5.85			
				4.76	5.925~6.425			
				4.29	6.425~6.525			
				4.61	6.525~6.875			
4.09	6.875~7.125							

Note: For PIFA Antenna, max. gain was selected for the final test.

# Antenna Information

## Section 1. Antenna Assembly Specifications

1A Antenna Part Number	1B Manufacturer	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E *Total Peak Gain W/ Cable loss (dBi)	1F Total Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)
P/N: AYP6Y-100509 Main Antenna	AWAN	PIFA	50 ohm Coaxial length: 126 mm diameter: 1.13 mm Normal Cable Connector : I-PEX IV	2400-2483.5	1.71	2.02	5.0	0.31
				5150-5250	3.36	3.80	5.0	0.44
				5250-5350	3.20	3.66	5.0	0.46
				5470-5725	3.64	4.11	5.0	0.47
				5725-5850	3.89	4.37	5.0	0.48
				5850-5895	3.72	4.24	5.0	0.52
				5925-6425	3.98	4.51	5.0	0.53
				6425-6525	3.06	3.60	5.0	0.54
				6525-6875	3.41	3.96	5.0	0.55
				6875-7125	2.80	3.36	5.0	0.56
P/N: AYP6Y-100510 Aux Antenna	AWAN	PIFA	50 ohm Coaxial length: 329 mm diameter: 1.13 mm Normal Cable Connector : I-PEX IV	2400-2483.5	1.19	1.97	5.0	0.78
				5150-5250	2.98	4.09	5.0	1.11
				5250-5350	2.98	4.14	5.0	1.16
				5470-5725	3.46	4.64	5.0	1.18
				5725-5850	3.18	4.38	5.0	1.20
				5850-5895	4.06	5.31	5.0	1.25
				5925-6425	3.77	5.02	5.0	1.25
				6425-6525	2.43	3.73	5.0	1.30
				6525-6875	3.18	4.49	5.0	1.31
				6875-7125	0.42	1.74	5.0	1.32

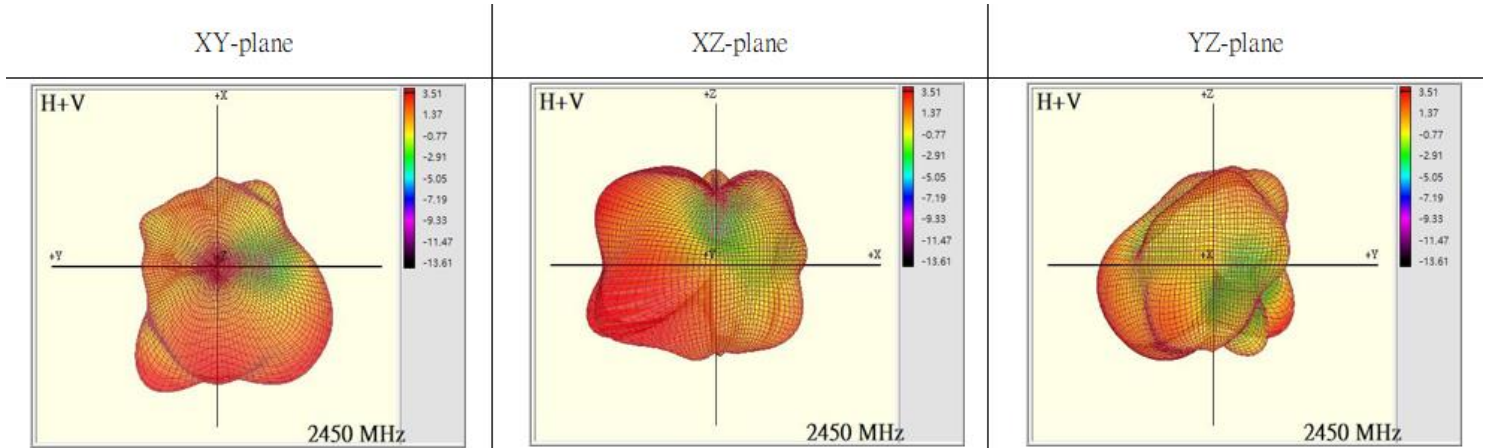
- 3D Antenna Peak Gain required being test in system basis.

## Section 2. Radiation characteristics of antenna loaded in Host Platform

### Main Antenna

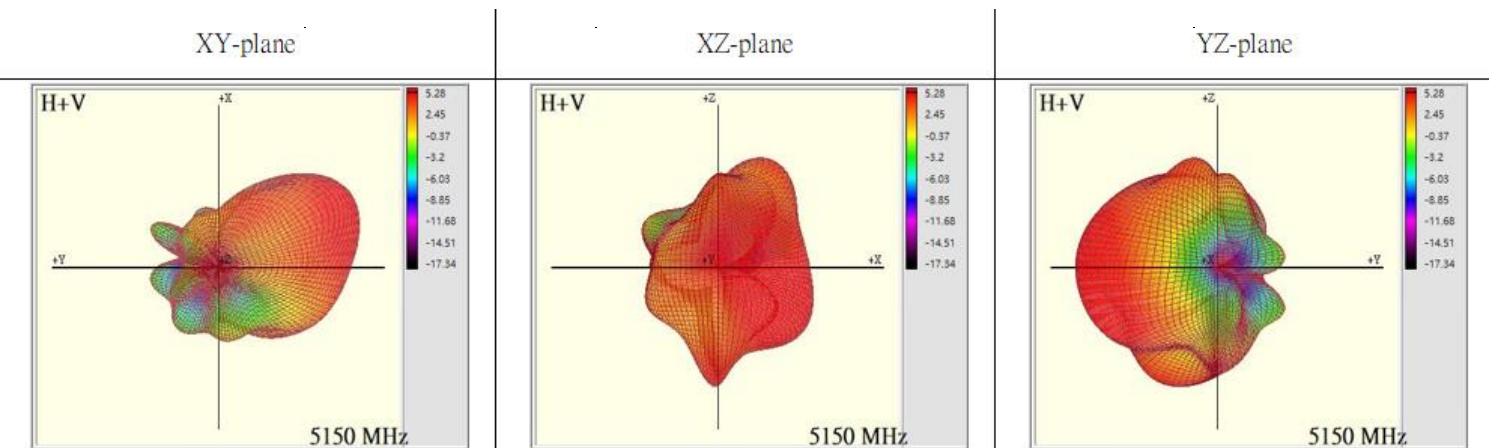
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.71



Max Antenna 3D Radiation Pattern 5150 – 5250 MHz

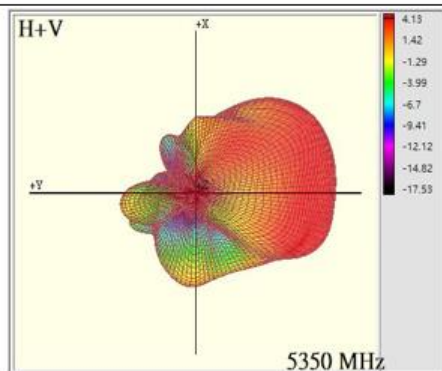
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	3.36



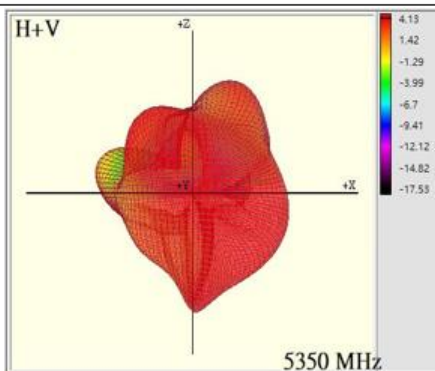
## Max Antenna 3D Radiation Pattern 5250 – 5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	3.20

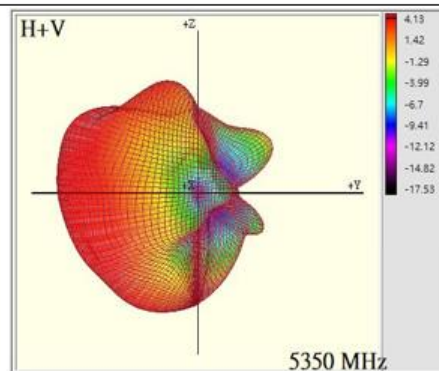
XY-plane



XZ-plane



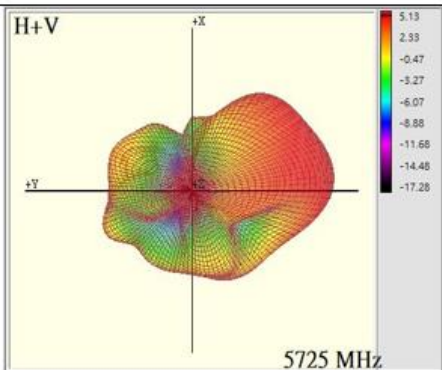
YZ-plane



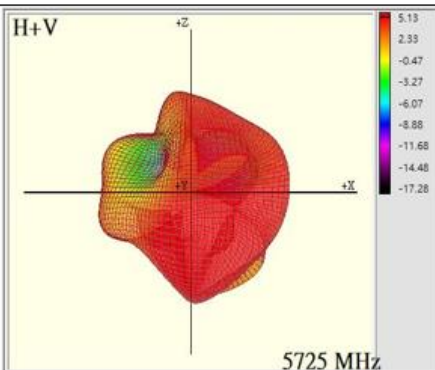
## Max Antenna 3D Radiation Pattern 5470 – 5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	3.64

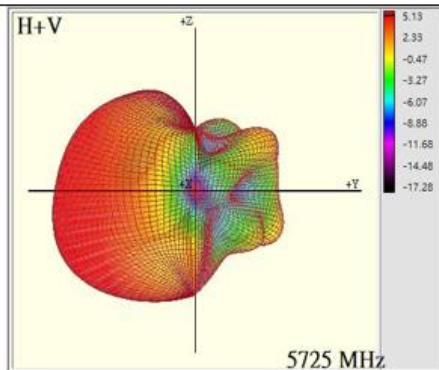
XY-plane



XZ-plane



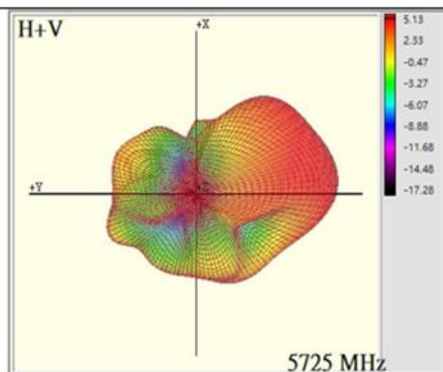
YZ-plane



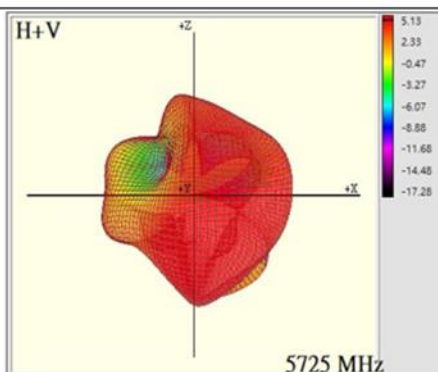
## Max Antenna 3D Radiation Pattern 5725 – 5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	3.89

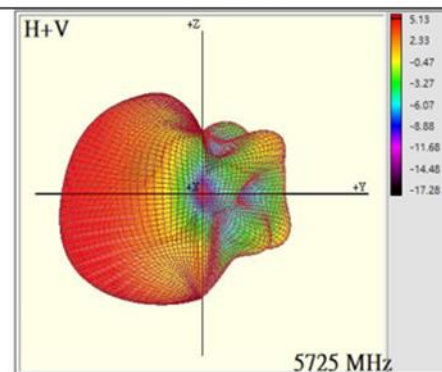
XY-plane



XZ-plane



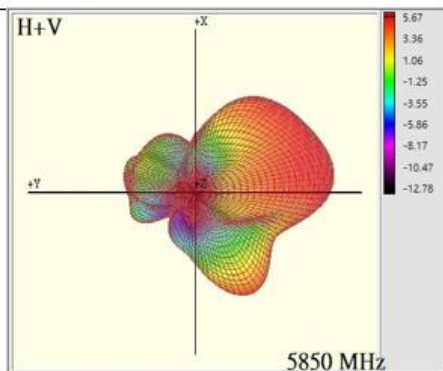
YZ-plane



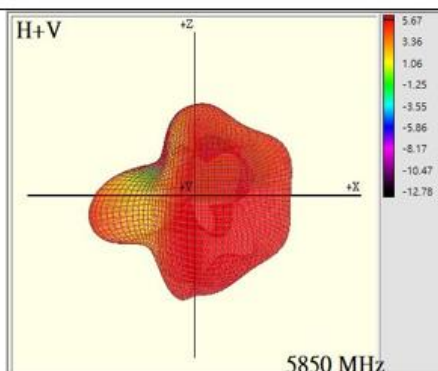
## Max Antenna 3D Radiation Pattern 5850 – 5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	3.72

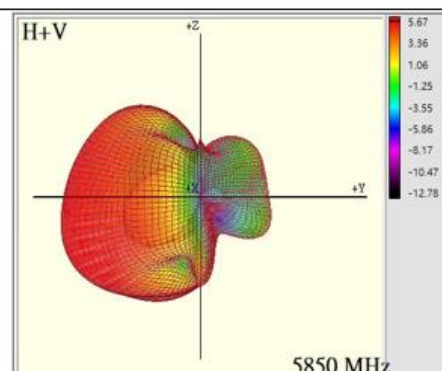
XY-plane



XZ-plane



YZ-plane

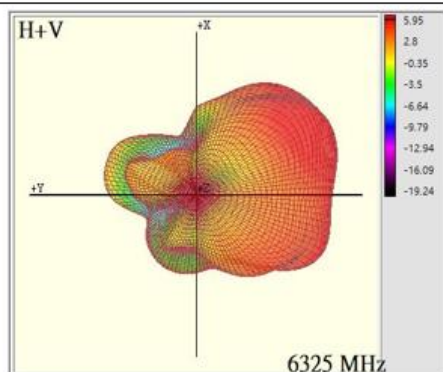




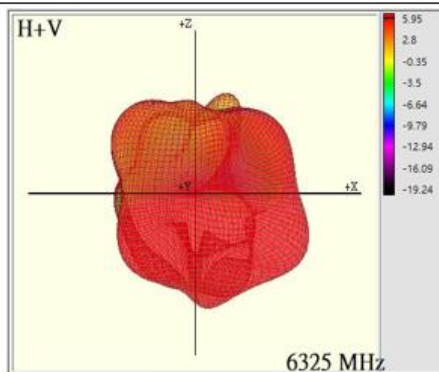
## Max Antenna 3D Radiation Pattern 5925 – 6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.98

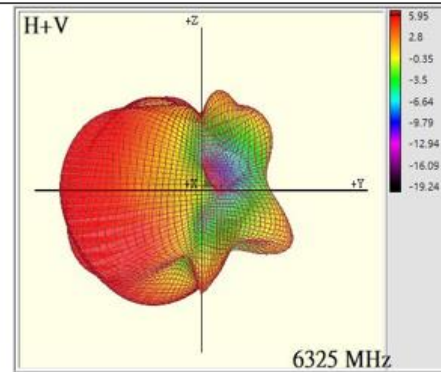
XY-plane



XZ-plane



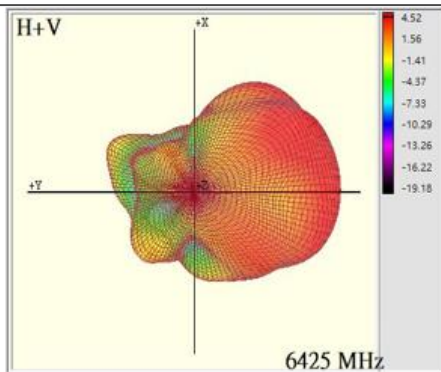
YZ-plane



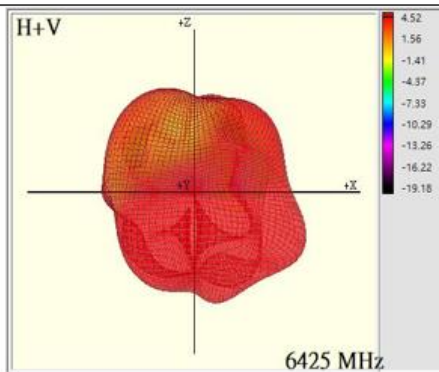
## Max Antenna 3D Radiation Pattern 6425 – 6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.06

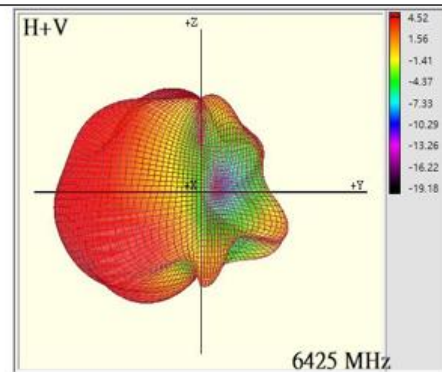
XY-plane



XZ-plane



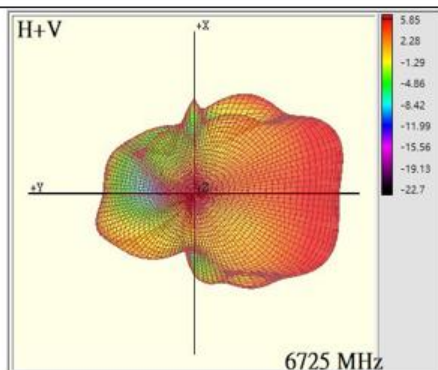
YZ-plane



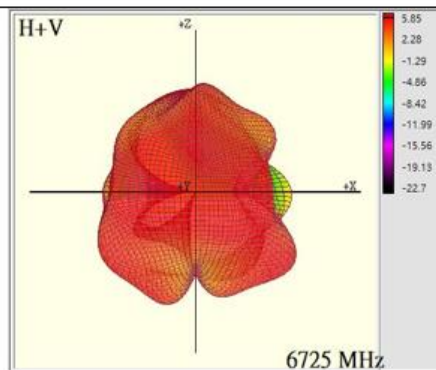
## Max Antenna 3D Radiation Pattern 6525 – 6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.41

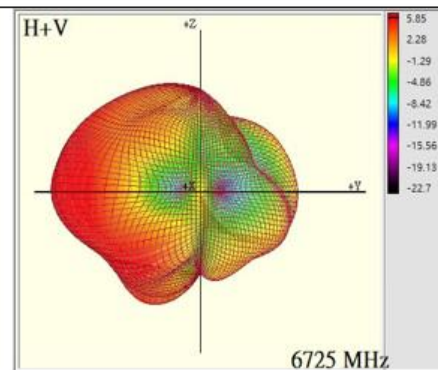
XY-plane



XZ-plane



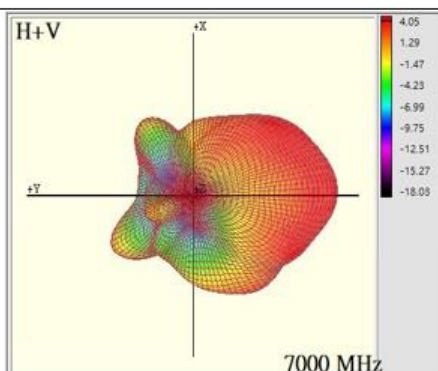
YZ-plane



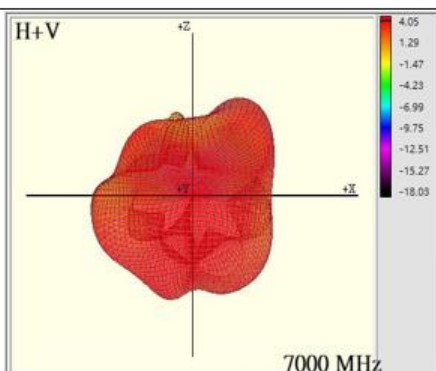
## Max Antenna 3D Radiation Pattern 6575 – 7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.80

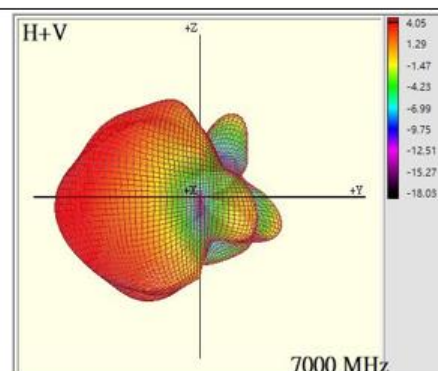
XY-plane



XZ-plane



YZ-plane

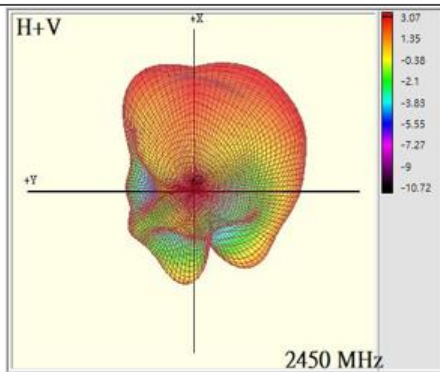


## Auxiliary Antenna

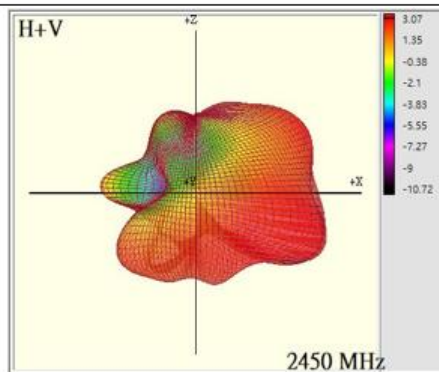
### Aux Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.19

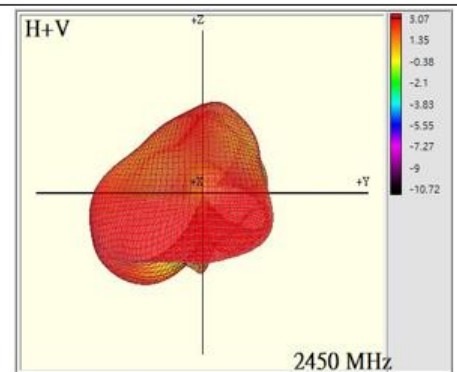
XY-plane



XZ-plane



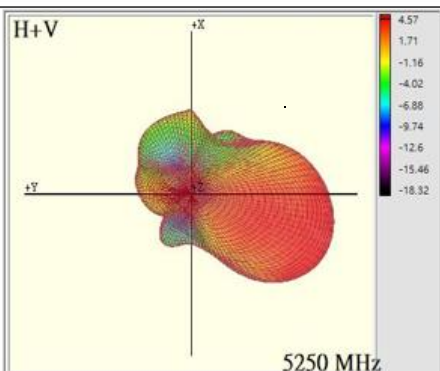
YZ-plane



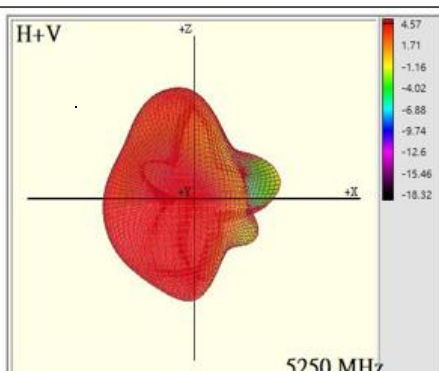
### Aux Antenna 3D Radiation Pattern 5150 – 5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.98

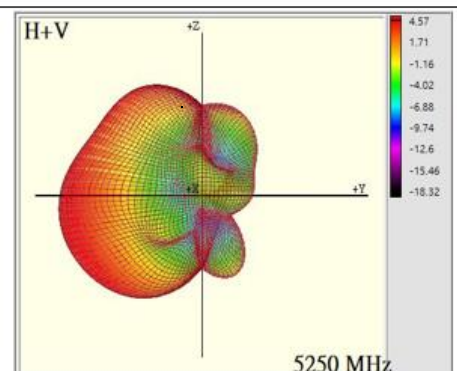
XY-plane



XZ-plane



YZ-plane

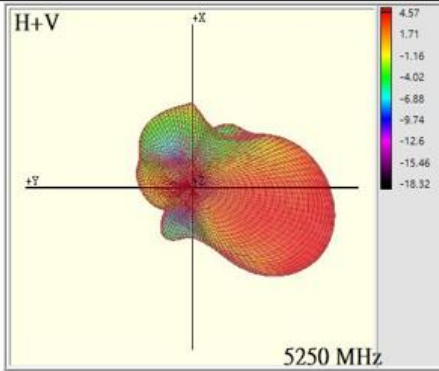




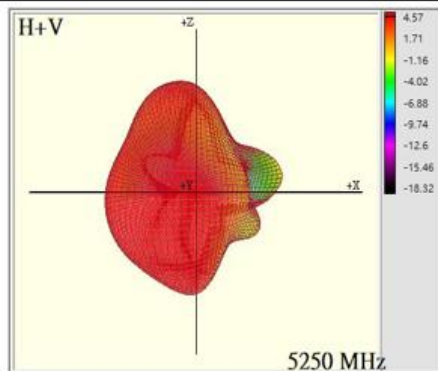
## Aux Antenna 3D Radiation Pattern 5250 – 5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.98

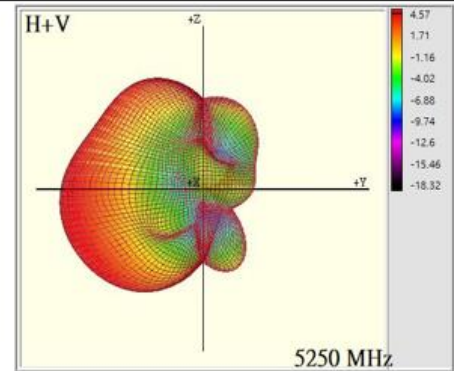
XY-plane



XZ-plane



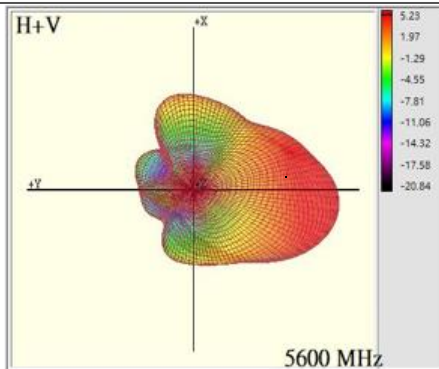
YZ-plane



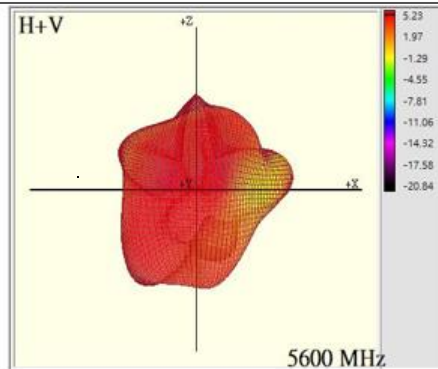
## Aux Antenna 3D Radiation Pattern 5470 – 5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	3.46

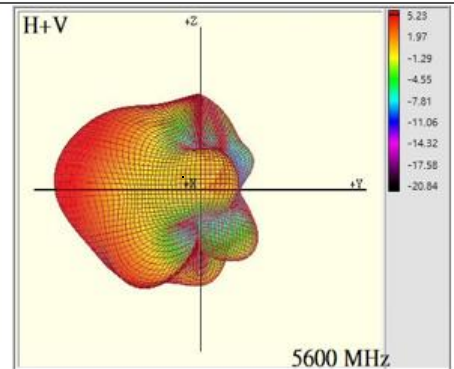
XY-plane



XZ-plane



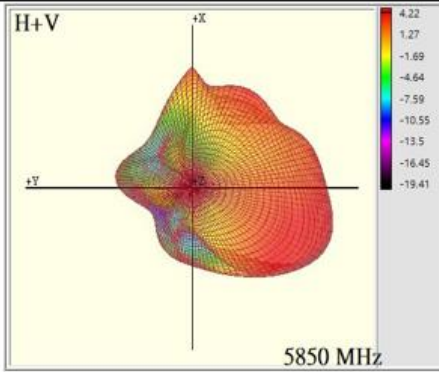
YZ-plane



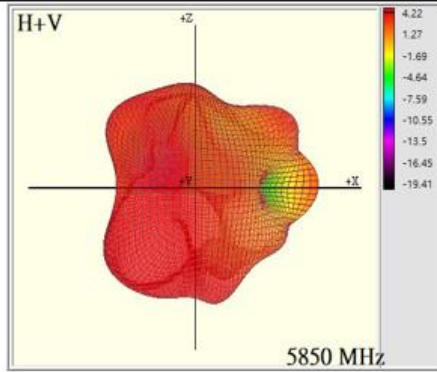
## Aux Antenna 3D Radiation Pattern 5725 – 5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	3.18

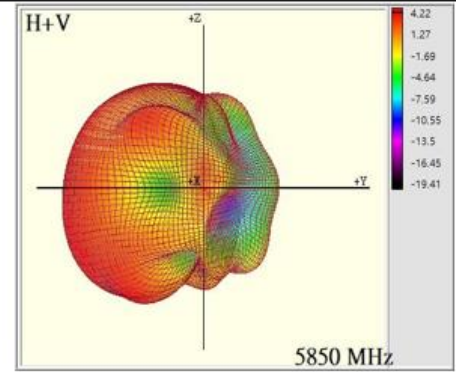
XY-plane



XZ-plane



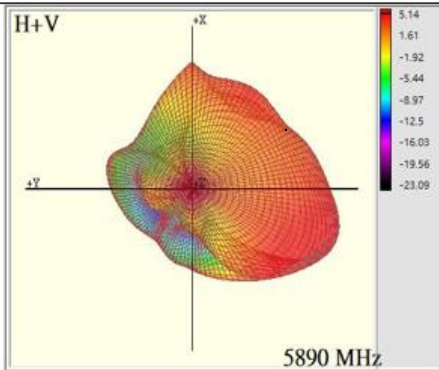
YZ-plane



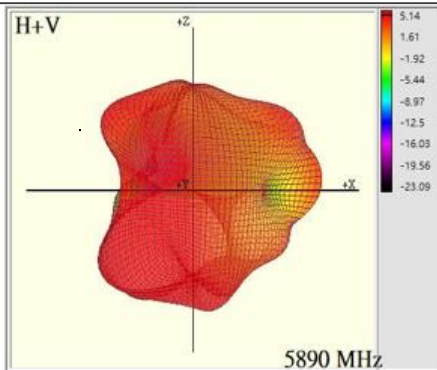
## Aux Antenna 3D Radiation Pattern 5850 – 5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	4.06

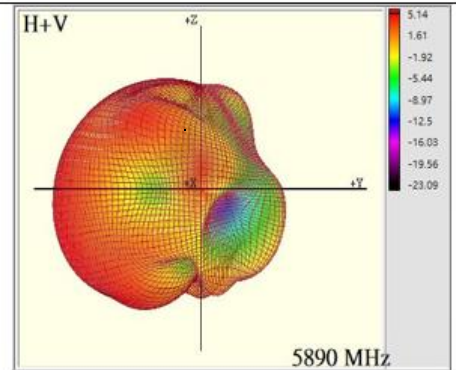
XY-plane



XZ-plane



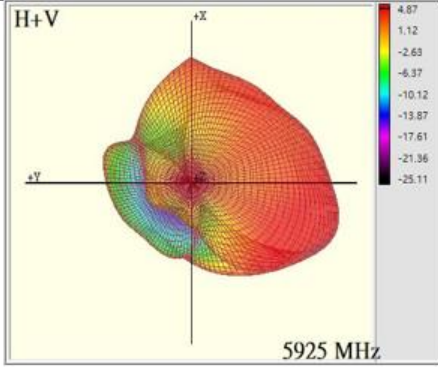
YZ-plane



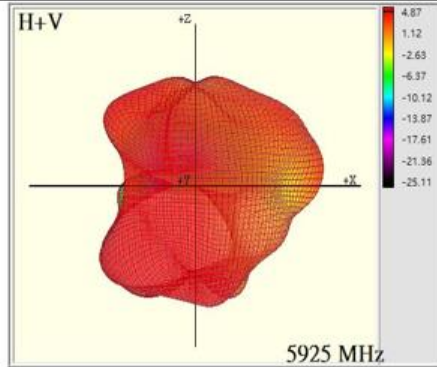
## Aux Antenna 3D Radiation Pattern 5925 – 6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.77

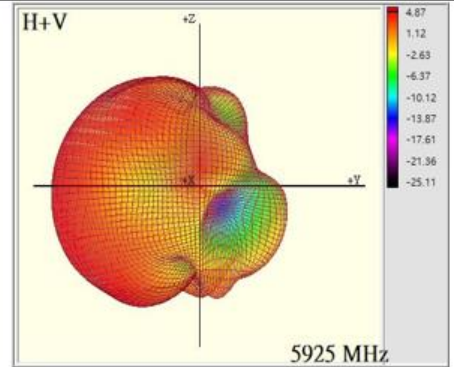
XY-plane



XZ-plane



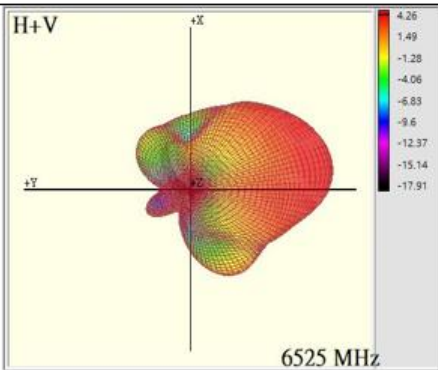
YZ-plane



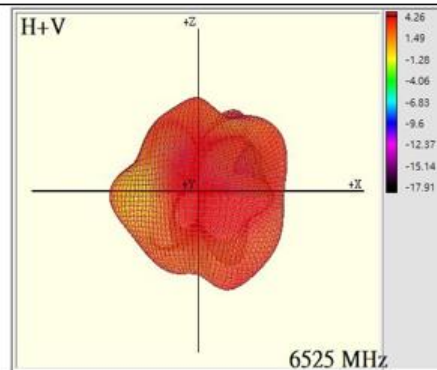
## Aux Antenna 3D Radiation Pattern 6425 – 6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.43

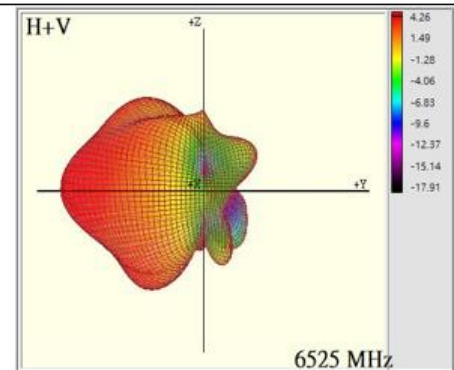
XY-plane



XZ-plane



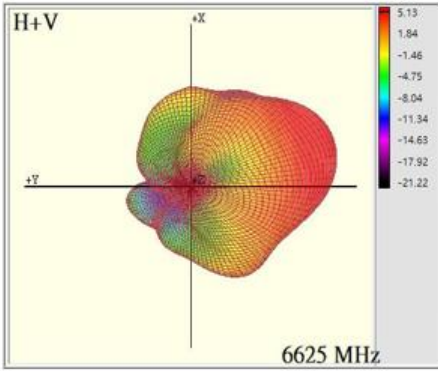
YZ-plane



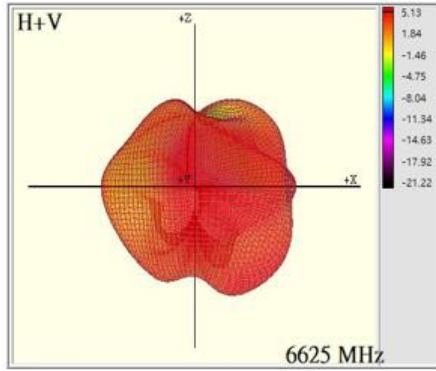
## Aux Antenna 3D Radiation Pattern 6525 – 6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.18

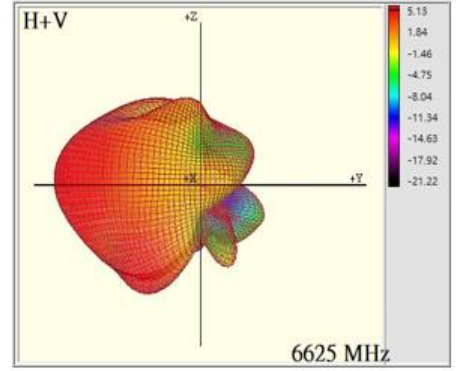
XY-plane



XZ-plane



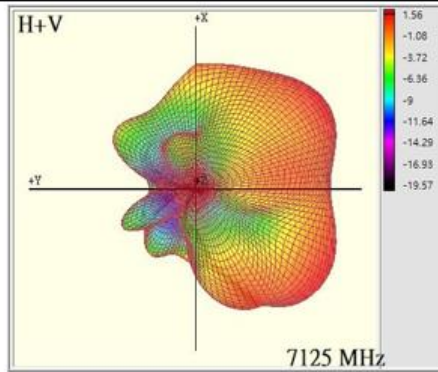
YZ-plane



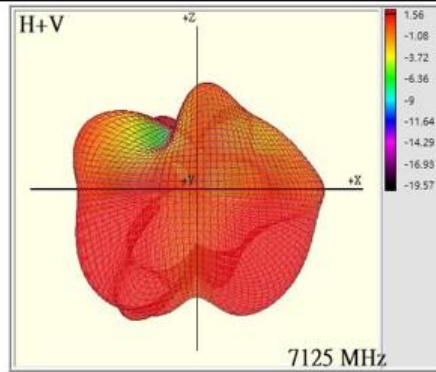
## Aux Antenna 3D Radiation Pattern 6875 – 7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	0.42

XY-plane



XZ-plane



YZ-plane

