

Model : MR6550

FCC ID : PY322300575

ANTENNA DATASHEET

2022

*PEGATRON*

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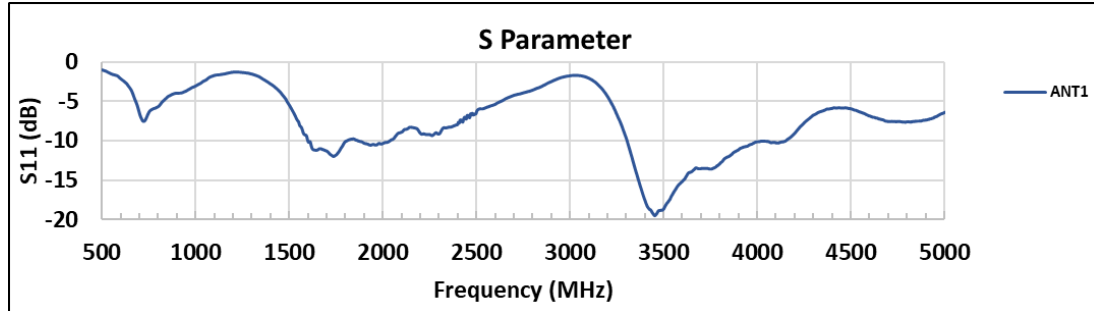
# 1. Specifications

Description	
Antenna Part Number ANT1 LTE L/M/H/UH band Antenna	
Antenna Part Number ANT2 LTE L/M/H/UH band Antenna	
Antenna Part Number ANT3 WIFI Antenna	
Antenna Part Number ANT4 WIFI Antenna	
Antenna Part Number ANT5 UH Antenna	
Antenna Part Number ANT6 GPS Antenna	
Antenna type ANT1 LTE L/M/H/UH band Antenna	Monopole
Antenna type ANT2 LTE L/M/H/UH band Antenna	Monopole
Antenna type ANT3 WIFI Antenna	Monopole
Antenna type ANT4 WIFI Antenna	Monopole
Antenna type ANT5 UH Antenna	Monopole
Antenna type ANT6 GPS Antenna	PIFA
Peak Gain ANT1 LTE L/M/H/UH band Antenna	See the table 3.2.1
Peak Gain ANT2 LTE L/M/H/UH band Antenna	See the table 3.2.2
Peak Gain ANT3 WIFI Antenna	See the table 3.2.3
Peak Gain ANT4 WIFI Antenna	See the table 3.2.4
Peak Gain ANT5 GPS Antenna	See the table 3.2.5
Peak Gain ANT6 GPS Antenna	See the table 3.2.6

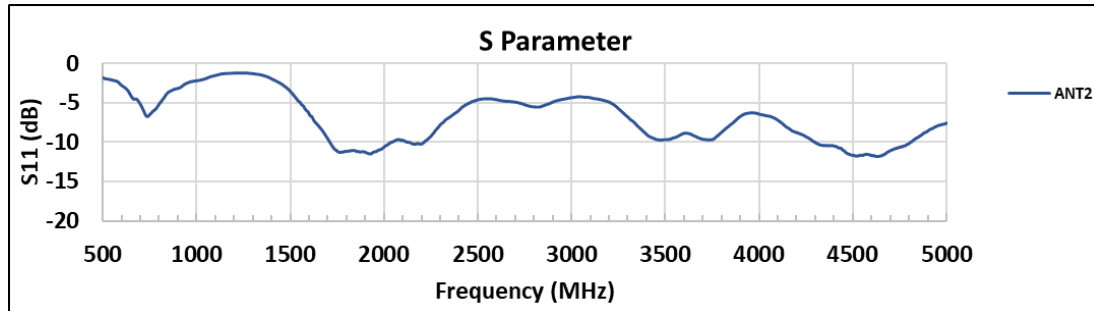
## 2. Performance Data

### 3.1 Return Loss

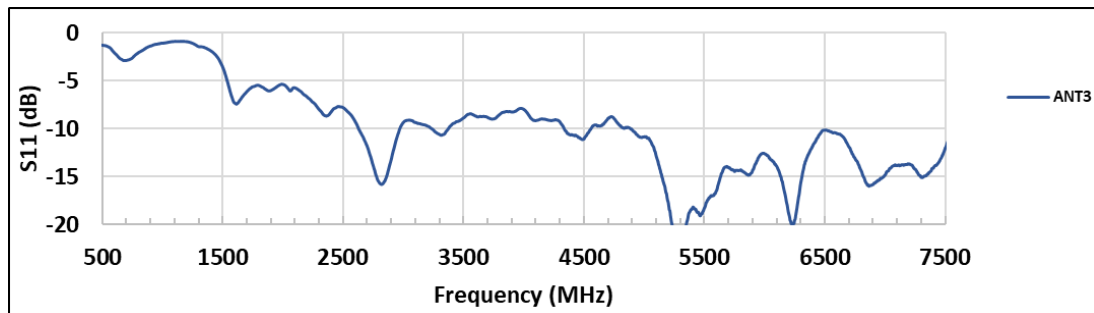
#### 3.1.1 ANT1 LTE LMH band Antenna



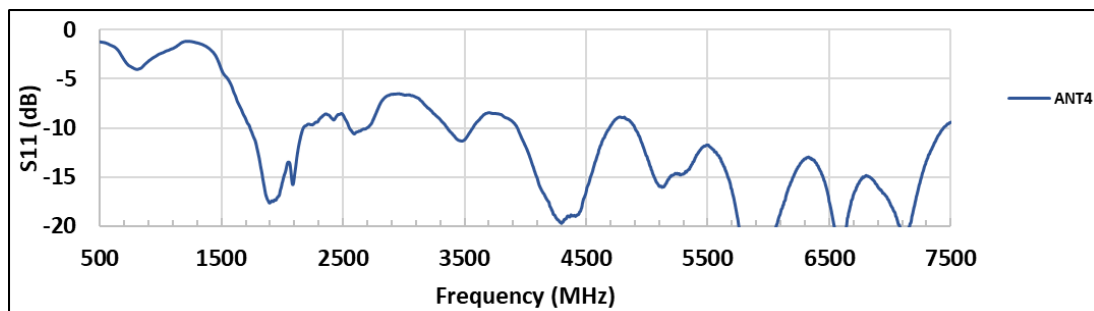
#### 3.1.2 ANT2 LTE LMH band Antenna



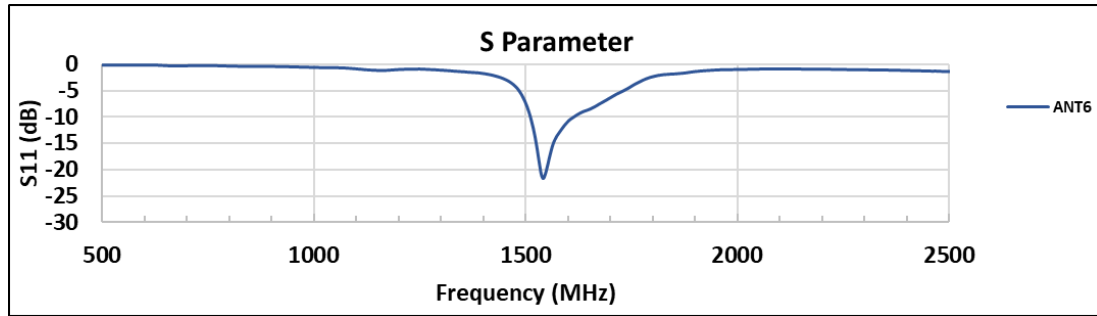
#### 3.1.3 ANT3 WIFI Antenna



#### 3.1.4 ANT4 WIFI Antenna



### 3.1.5 ANT6 GPS Antenna



### 3.2 Peak Gain summary

L/M/H/UH band	
ANT 1	Gain (dBi)
Frequency (MHz)	
663 - 698	-0.83
698 - 716	-0.83
717 - 728	-0.83
777 - 787	-0.83
788 - 798	-0.83
814 - 849	-0.88
824 - 849	-0.88
1710 - 1755	0.67
1710 - 1780	0.67
1850 - 1915	0.67
1850 - 1919	0.67
2305 - 2315	1.03
2496 - 2690	0.39
2500 - 2570	0.39
3300 - 4200	0.17
3550 - 3700	0.17

Table 3.2.1

<b>L/M/H/UH band</b>	
<b>ANT 2</b>	<b>Gain (dBi)</b>
<b>Frequency (MHz)</b>	
663 - 698	-1.6
698 - 716	-1.6
717 - 728	-1.6
777 - 787	-1.6
788 - 798	-1.6
814 - 849	-1.6
824 - 849	-1.6
1710 - 1755	0.54
1710 - 1780	0.54
1850 - 1915	0.45
1850 - 1919	0.45
2305 - 2315	1.05
2496 - 2690	-0.53
2500 - 2570	-0.53
3300 - 4200	1.66
3550 - 3700	0.47

Table 3.2.2

<b>WIFI band</b>	
<b>ANT 3</b>	<b>Gain (dBi)</b>
<b>Frequency (MHz)</b>	
2402	2.57
2440	2.36
2478	2.63
5250	3.29
5550	2.90
5800	2.47
6200	2.53
6700	3.40
7125	2.85

Table 3.2.3

<b>WIFI band</b>	
<b>ANT 4</b>	<b>Gain (dBi)</b>
<b>Frequency (MHz)</b>	
2402	2.15
2440	2.00
2478	1.46
5250	2.59
5550	1.95
5800	0.84
6200	1.12
6700	1.54
7125	0.76

Table 3.2.4

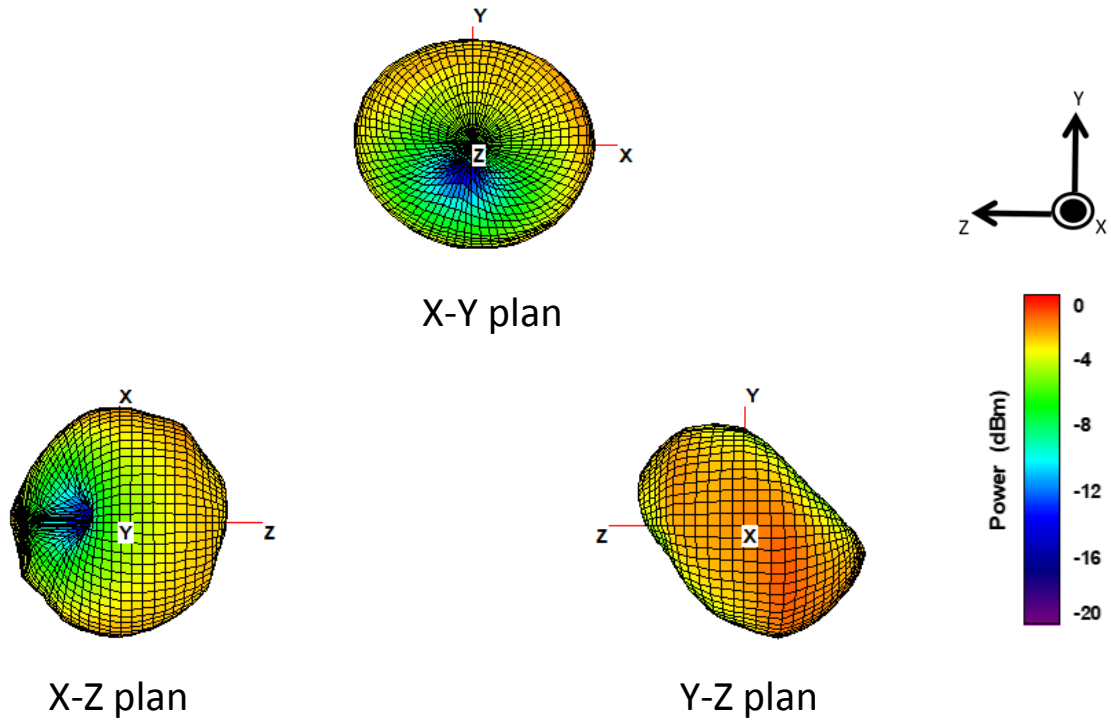
<b>UH band</b>	
<b>ANT 5</b>	<b>Gain (dBi)</b>
<b>Frequency (MHz)</b>	
3300 - 4200	0.98

Table 3.2.5

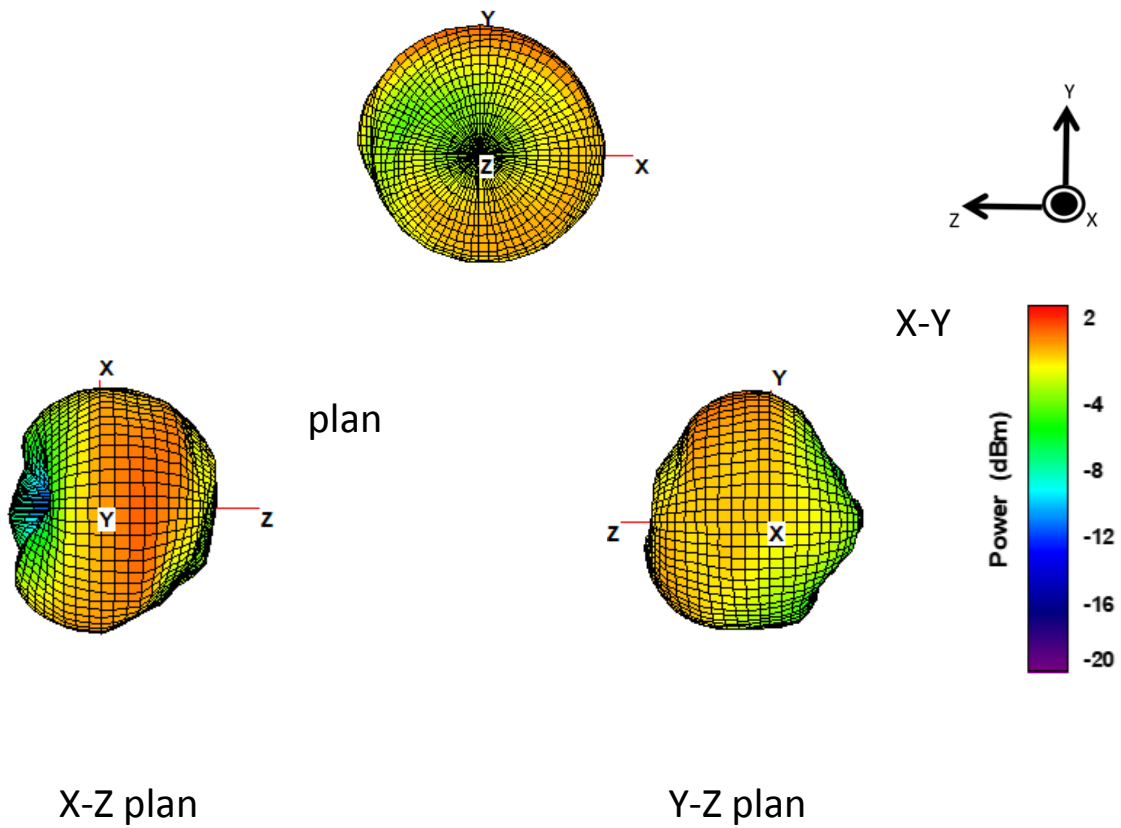
<b>GPS / UH band</b>	
<b>ANT 6</b>	<b>Gain (dBi)</b>
<b>Frequency (MHz)</b>	
1565 - 1585	1.33
3300 - 4200	3.31

Table 3.2.6

### 3.3 Radiation Pattern for 3D Data

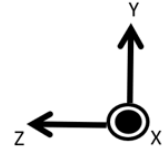
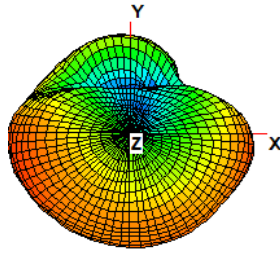


#### ANT1 820MHz

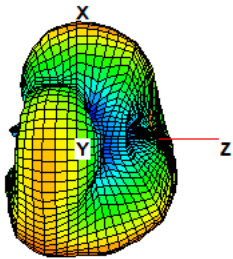




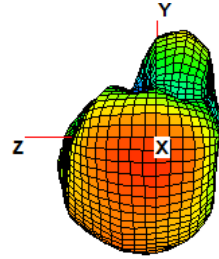
**ANT1 1850MHz**



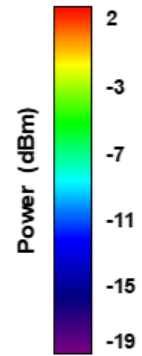
X-Y plan



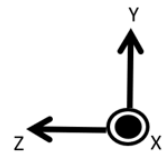
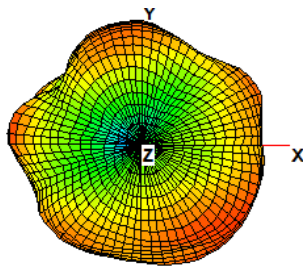
X-Z plan



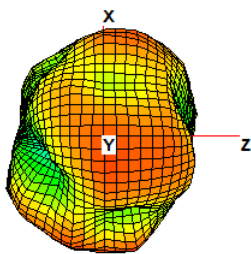
Y-Z plan



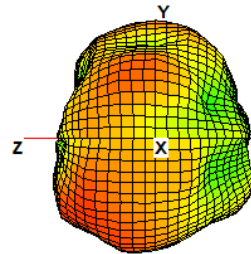
**ANT1 2500MHz**



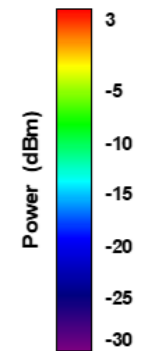
X-Y plan



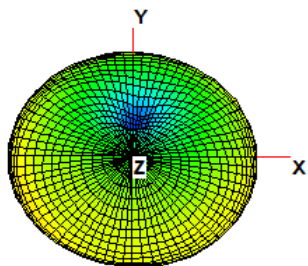
X-Z plan



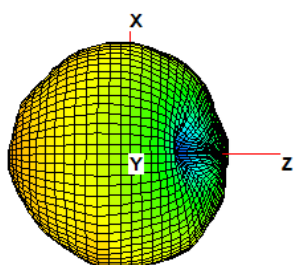
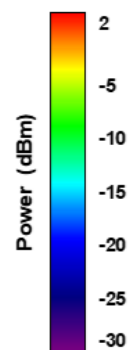
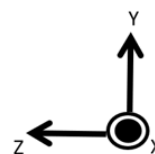
Y-Z plan



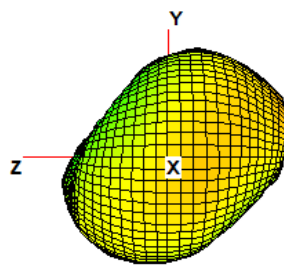
**ANT1 4400MHz**



X-Y plan

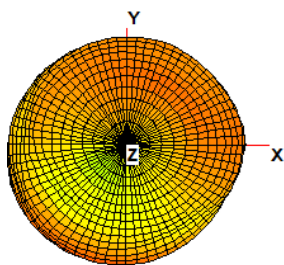


X-Z plan

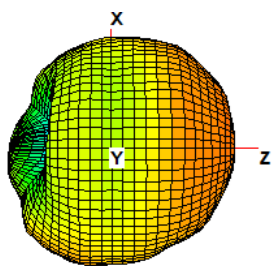
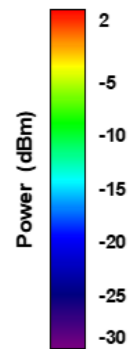
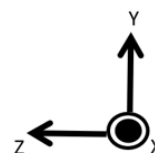


Y-Z plan

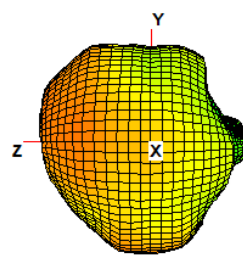
**ANT2 820MHz**



X-Y plan

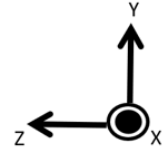
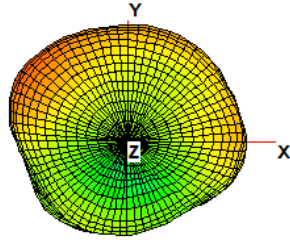


X-Z plan

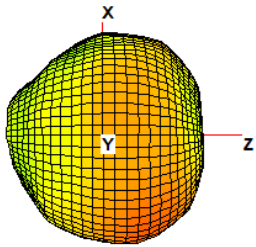


Y-Z plan

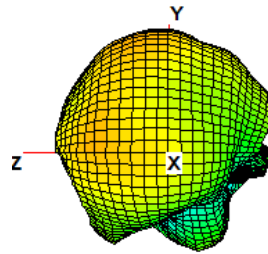
### ANT2 1850MHz



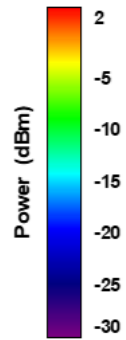
X-Y plan



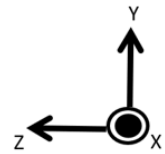
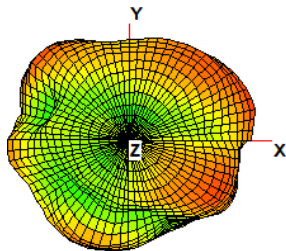
X-Z plan



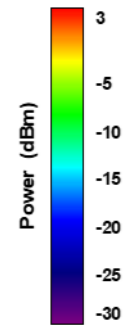
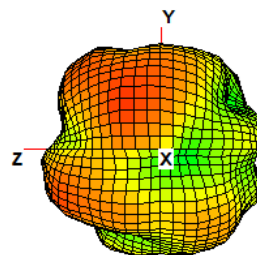
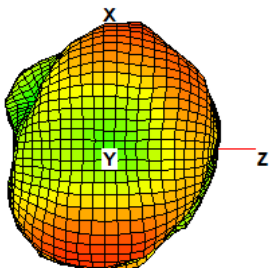
Y-Z plan



### ANT2 2500MHz



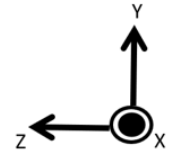
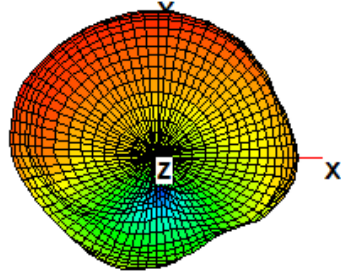
X-Y plan



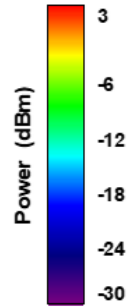
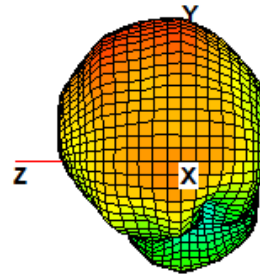
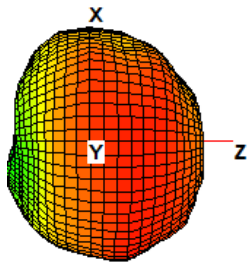
X-Z plan

Y-Z plan

**ANT2 4400MHz**



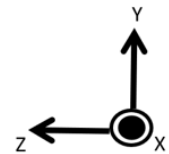
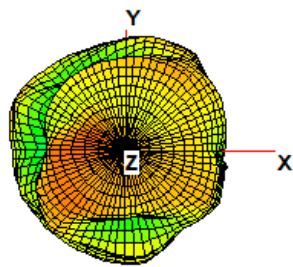
X-Y plan



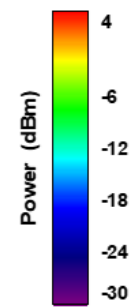
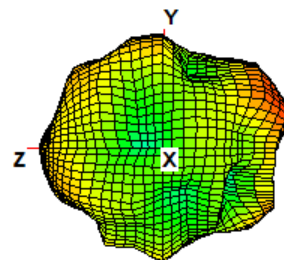
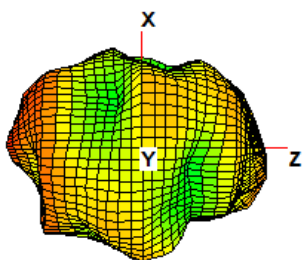
X-Z plan

Y-Z plan

**ANT3 2440MHz**



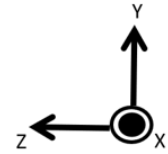
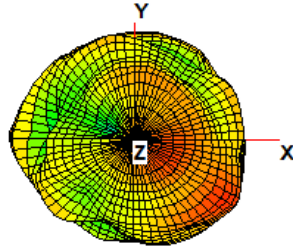
X-Y plan



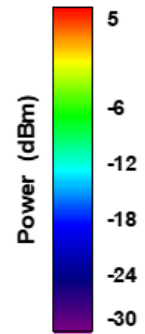
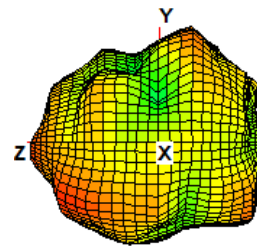
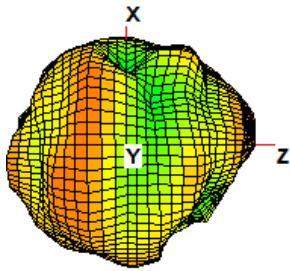
X-Z plan

Y-Z plan

### ANT3 5500MHz



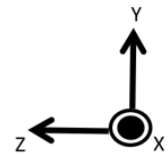
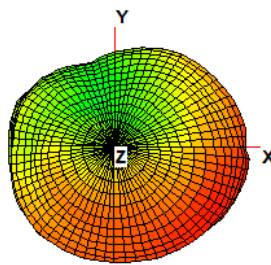
X-Y plan



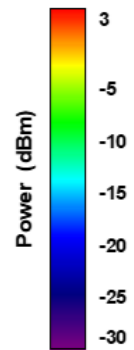
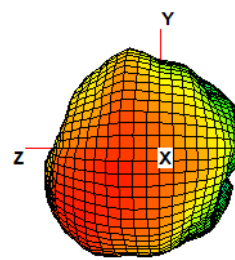
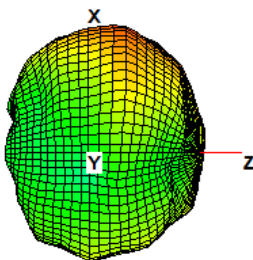
X-Z plan

Y-Z plan

### ANT3 6400MHz



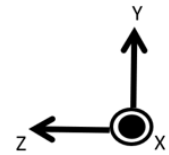
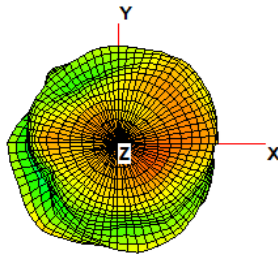
X-Y plan



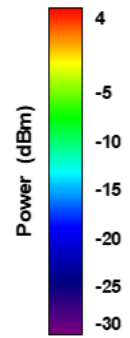
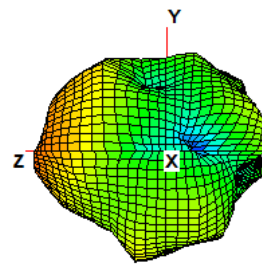
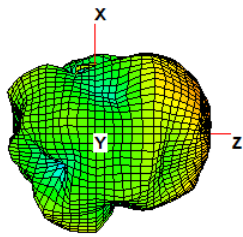
X-Z plan

Y-Z plan

**ANT4 2440MHz**



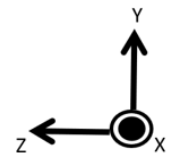
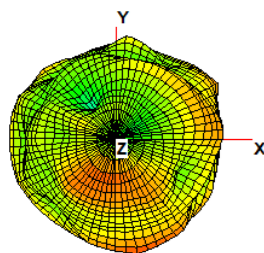
X-Y plan



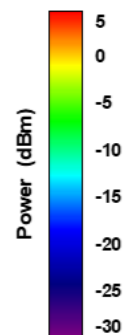
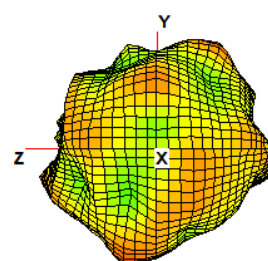
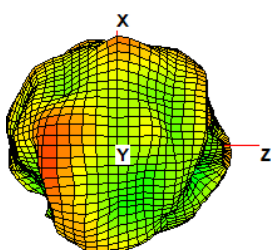
X-Z plan

Y-Z plan

**ANT4 5500MHz**



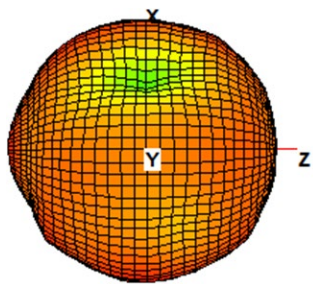
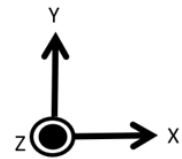
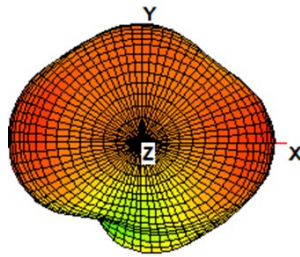
X-Y plan



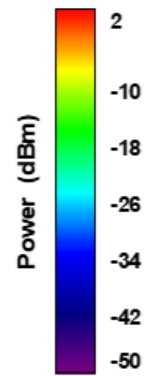
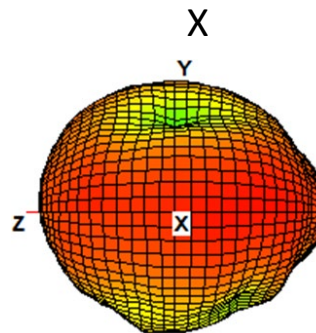
X-Z plan

Y-Z plan

**ANT4 6400MHz**



-Y plan

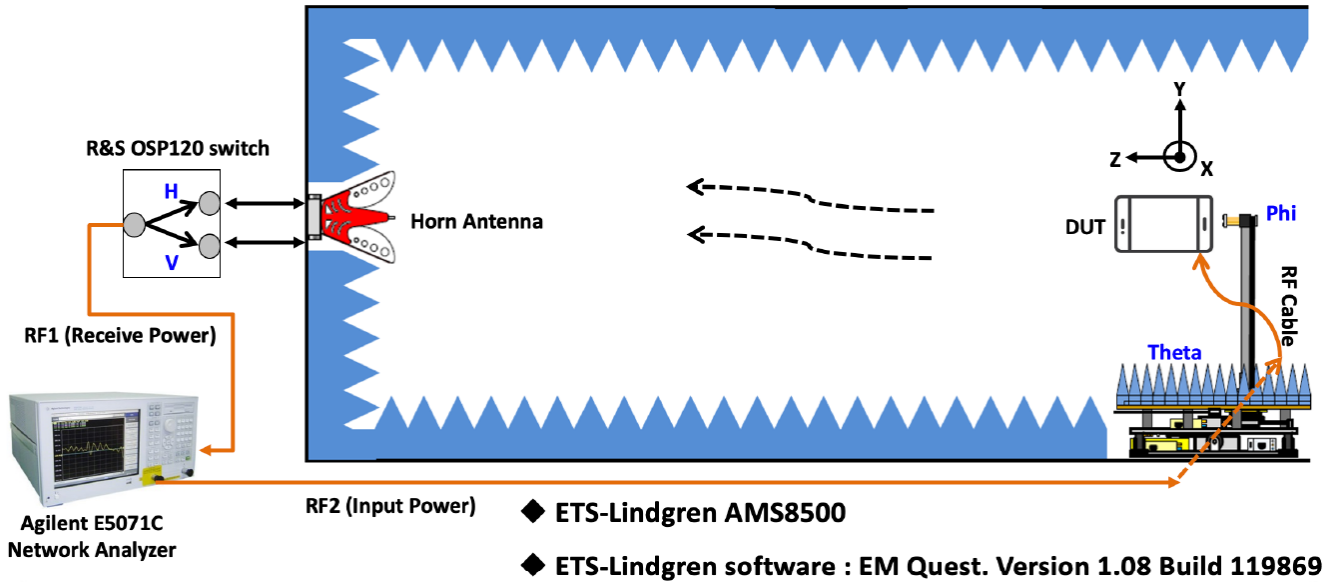


X-Z plan

Y-Z plan

**ANT6 1575MHz**

### 3. Antenna Gain Measurement



The list of test equipment and software used are as follows :

- ETS-Lindgren fully anechoic antenna test chamber
- Agilent E5071C Network analyzer
- ETS-Lindgren software: EM Quest software version 1.08 Build 119869
- Agilent E5071C Network analyzer calibration date : 2020 / 12 / 30
- Agilent E5071C Network analyzer calibration name of personnel : Freddy Hsu