



# CHINMORE INDUSTRY CO.,LTD

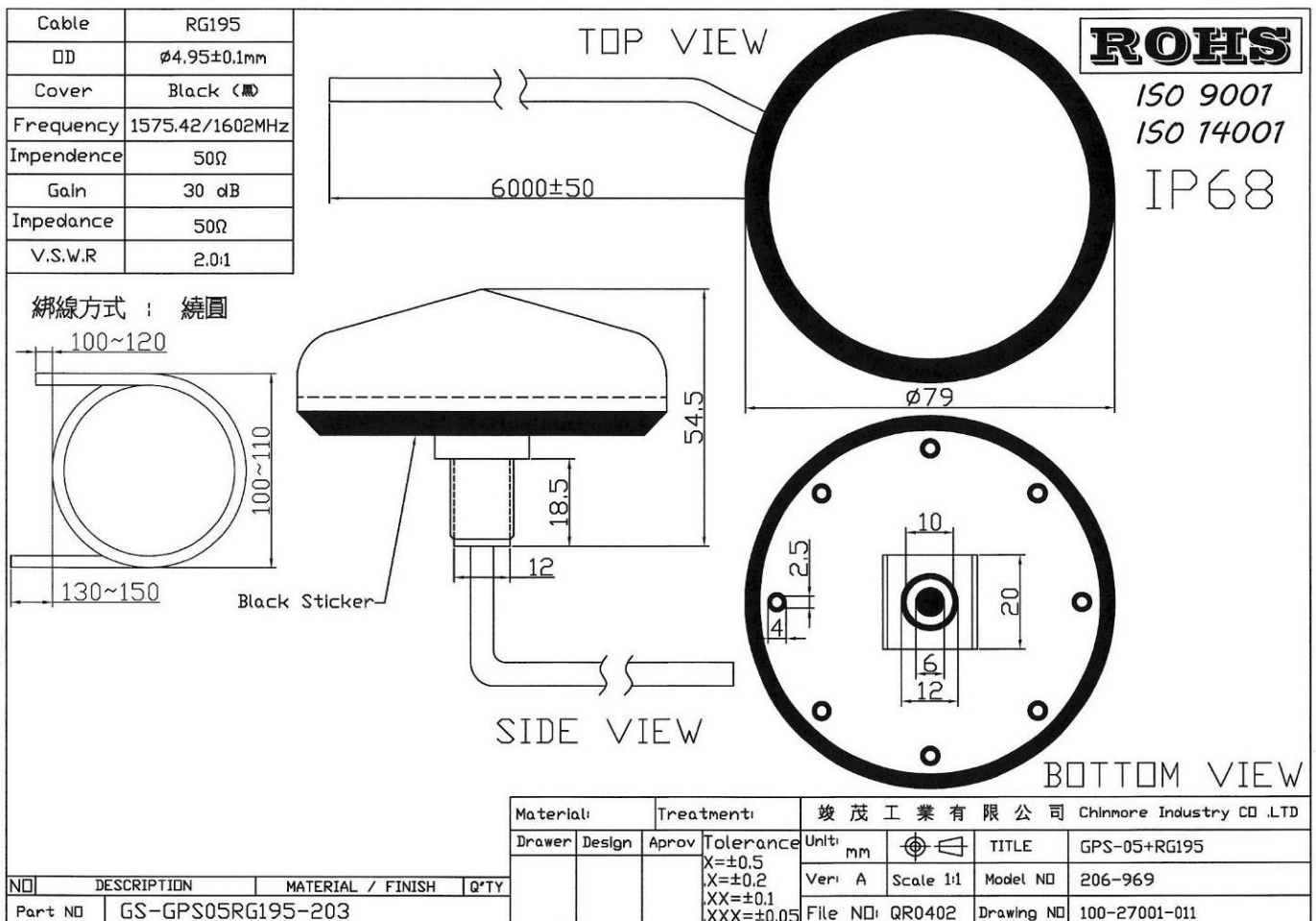
## Specification

1. Product Type: Marine Antenna for GNSS
2. Chinmore's No: GS-GPS05RG195-203
3. Frequency: 1575.42 MHz /1602 MHz
4. Cable: RG-195 6M
5. Gain: 30dBi

✧Waterproof IP68 Rated

✧RoHS Compliant

✧ISO 9001 & ISO 14001



## ENVIRONMENTAL CONDITIONS

Operation Temperature	- 20°C to + 65°C
Storage Temperature	- 30°C to + 75°C
Relative Humidity	40% to 95%

## ELECTRICAL SPECIFICATIONS

Input Voltage	Min: 2.5 V	Typ.: 3.0 V	Max: 5.5V
Current Consumption	Typ.: 11 mA	Max: 15mA	@ 3.0V

## ANTENNA

Antenna Dimensions	25mm*25mm*4mm
Frequency Range	1575.42 ± 1.023 MHz 1602± 6.5 MHz
Gain	1575MHz @ +2dBi at Zenith Typ. 1602MHz @ +3.5dBi at Zenith Typ.
Output VSWR	2.0 Max

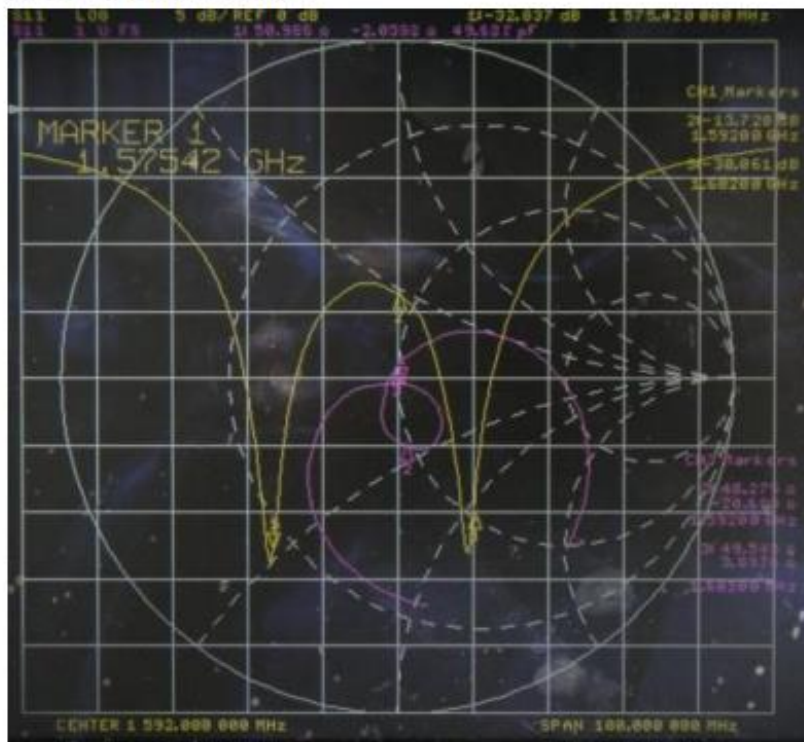
## LNA

Frequency Range	1575.42 ± 1.023 MHz 1602 ± 6.5MHz.
Gain	28 dB Min. 30 dB Typ.@ 3.0V
Noise Figure	1.6 dB Max. ( + 25 °C ± 5°C)@ 3.0V
Output Impedance	50 Ω
Output VSWR	2.0 Max

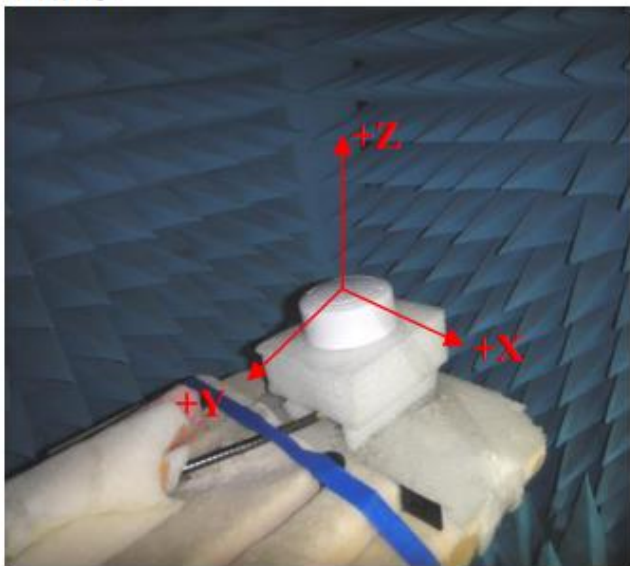
## TOTAL SPECIFICATIONS (Through Antenna, LNA, Cable and Connector)

Frequency Range	1575.42 ± 1.023 MHz 1602 ± 6.5MHz
Gain	1575MHz @ 32dBi at Zenith Typ. 1602MHz @ 33.5dBi at Zenith Typ.
Output Impedance	50 Ω

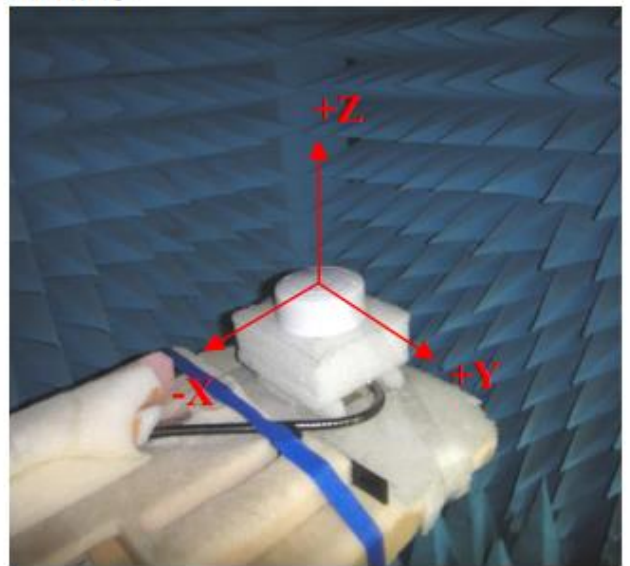
## S11 Return Loss



XZ-Plane

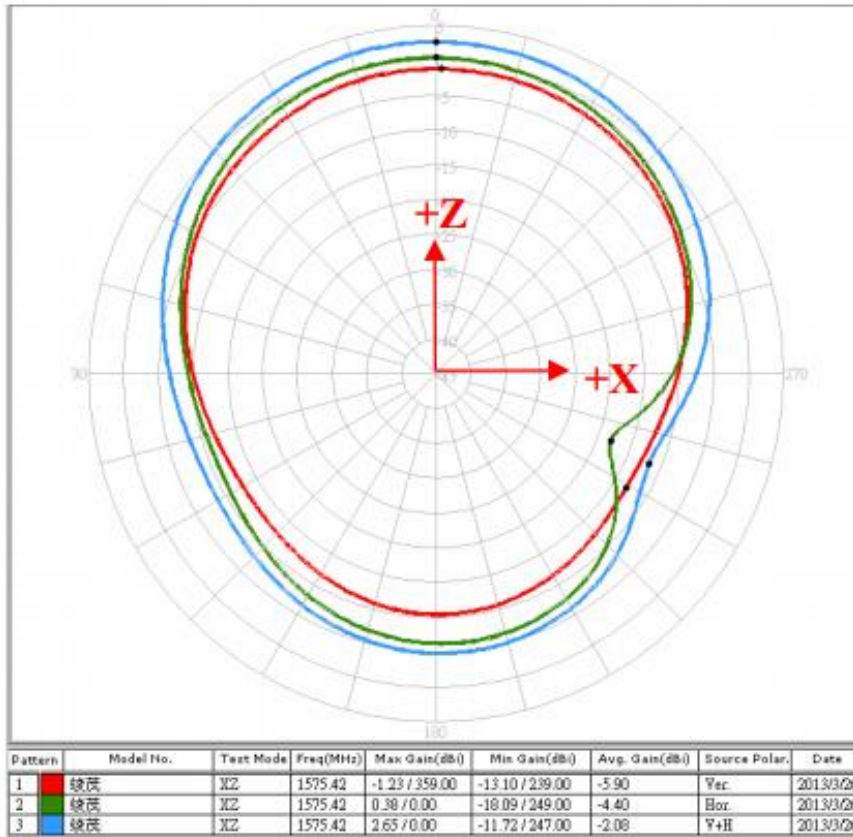


YZ-Plane



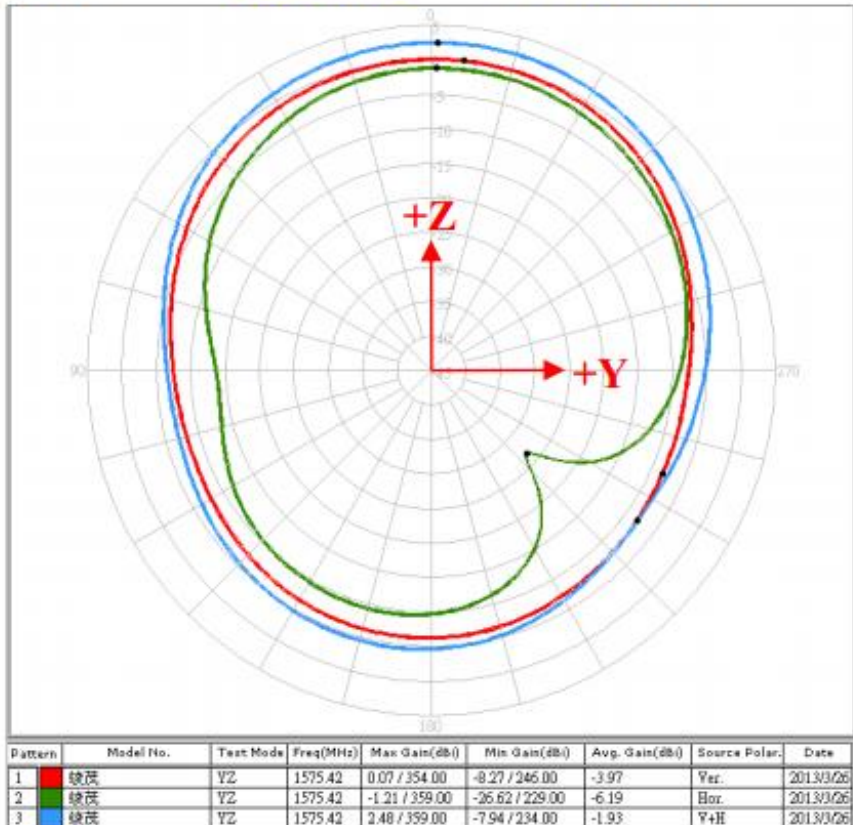
**(GPS Band)**

**DA25 XZ-Plane 1575.42MHz**



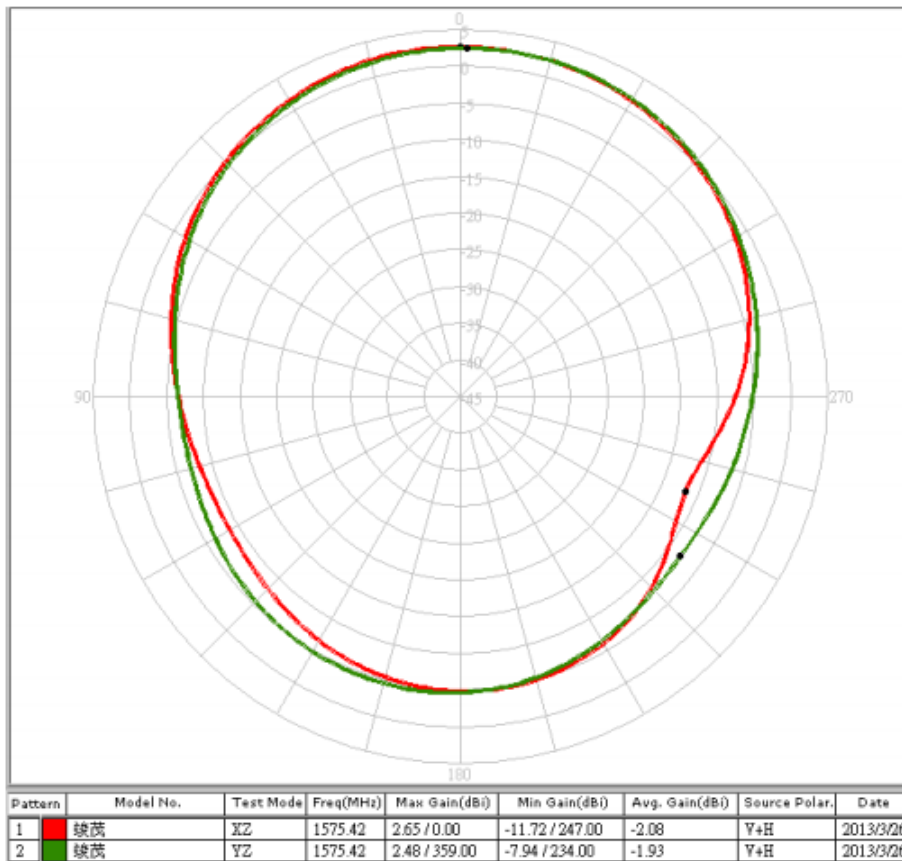
Peak Gain : 2.65 dBi  
At Zenith Gain : 2.65 dBi

**DA15 YZ-Plane 1575.42MHz**



Peak Gain : 2.48 dBi  
At Zenith Gain : 2.45 dBi

### Gain Pattern Value :



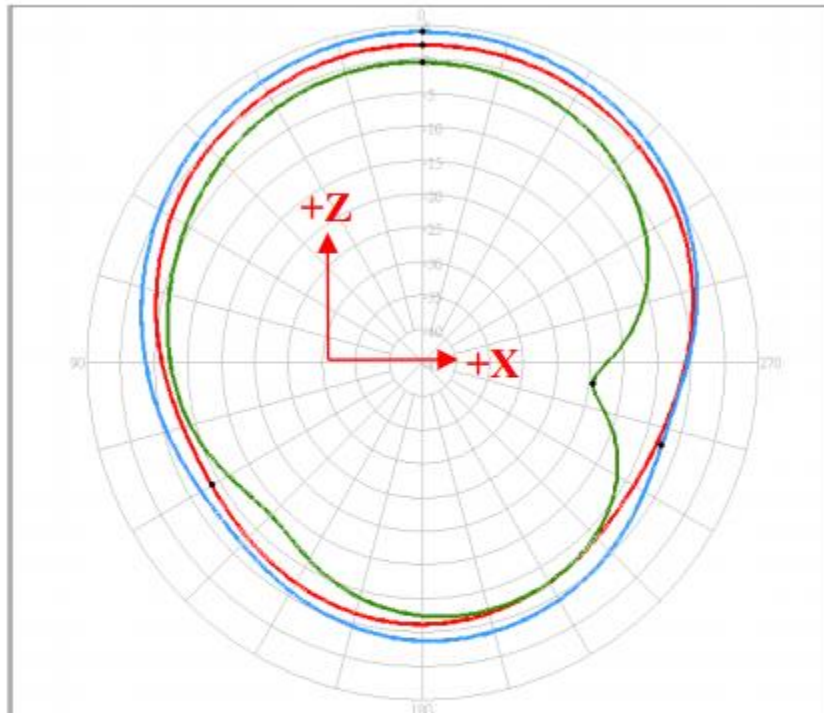
Angle	XZ-Plane	YZ-Plane
90°	-6.61	-6.54
75°	-4.24	-4.74
60°	-1.78	-2.45
45°	0.22	-0.39
30°	1.57	1.13
15°	2.41	2.04
0°	2.65	2.45
345°	2.34	2.39
330°	1.55	1.78
315°	0.21	0.55
300°	-1.72	-1.22
285°	-4.27	-3.25
270°	-7.52	-5.17

(Unit : dBi)

**(GLONASS Band)**

**DA25 XZ-Plane**

**1602MHz**



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	绿芪	XZ	1602.00	2.13 / 0.00	-8.70 / 120.00	-2.25	Yer.	2013/3/26
2	绿芪	XZ	1602.00	-0.42 / 0.00	-19.41 / 263.00	-5.22	Hor.	2013/3/26
3	绿芪	XZ	1602.00	4.05 / 0.00	-7.31 / 251.00	-0.48	Y+H	2013/3/26

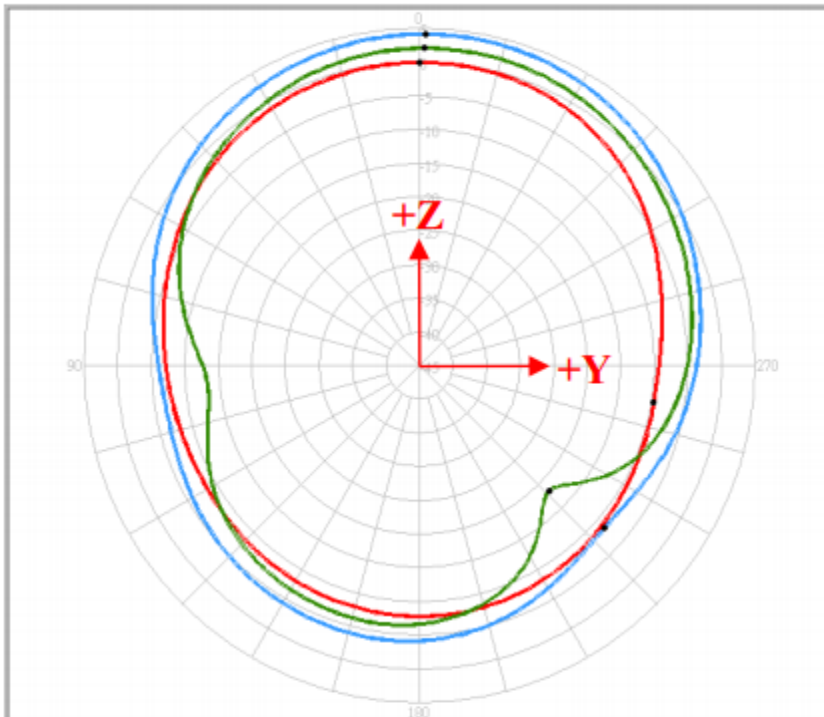
Peak Gain : 4.05 dBi

At Zenith Gain : 4.05 dBi

**DA25**

**YZ-Plane**

**1602MHz**

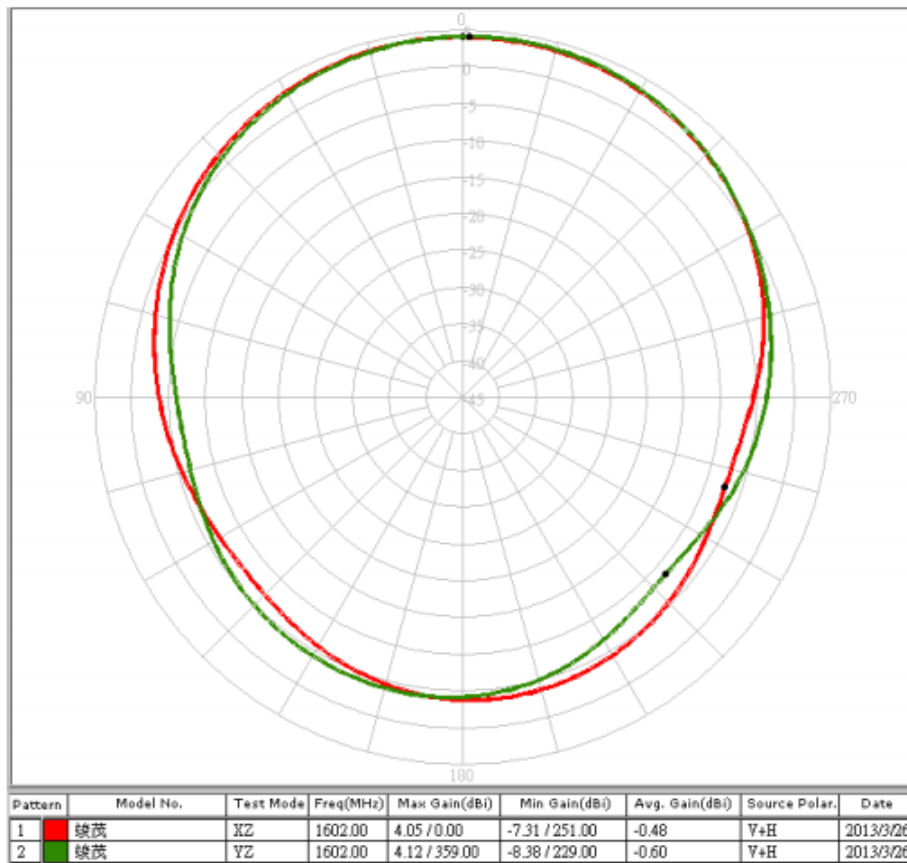


Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	绿芪	YZ	1602.00	-0.08 / 0.00	-9.66 / 261.00	-4.44	Yer.	2013/3/26
2	绿芪	YZ	1602.00	2.04 / 359.00	-18.20 / 226.00	-2.92	Hor.	2013/3/26
3	绿芪	YZ	1602.00	4.12 / 359.00	-8.38 / 229.00	-0.60	Y+H	2013/3/26

Peak Gain : 4.12 dBi

At Zenith Gain : 4.10 dBi

**Gain Pattern Value :**



Angle	XZ-Plane	YZ-Plane
90°	-3.75	-6.09
75°	-1.81	-3.78
60°	0.15	-1.07
45°	1.81	1.15
30°	3.00	2.69
15°	3.80	3.66
0°	4.05	4.10
345°	3.79	4.00
330°	3.08	3.30
315°	1.83	1.95
300°	-0.05	0.12
285°	-2.63	-1.84
270°	-5.48	-3.65

(Unit : dBi)