



# Antenna Specification

**For**

<b>Manufactory:</b>	Shenzhen SEI Robotics Co., Ltd
<b>Frequency range:</b>	2.4GHz+5GHz Band
<b>Antenna Type:</b>	Internal Antenna
<b>Model:</b>	HTS-G01
<b>Antenna gain(MAX):</b>	Antenna-a: 2.4GHz: 2.65dBi 5GHz: 4.1dBi Antenna-b: 2.4GHz: 2.29dBi 5GHz: 4.19dBi
<b>Approver</b>	



# Antenna shape

**Type of Antenna:** Internal Antenna

Antenna-a



Antenna-b





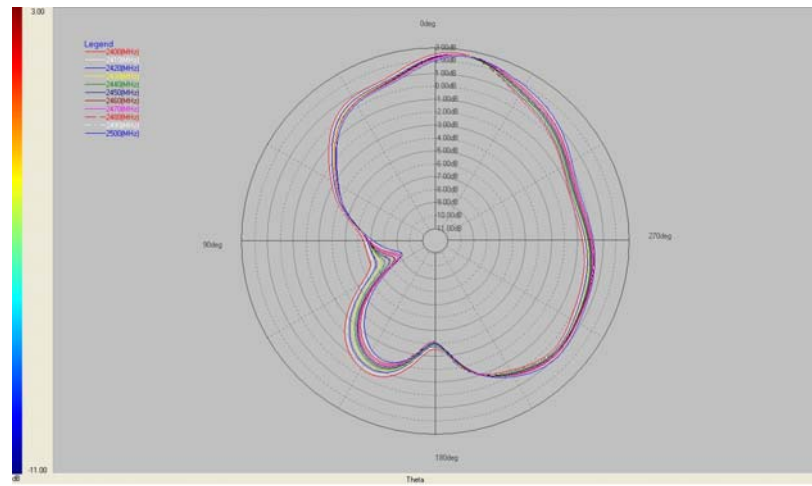
**Antenna-a frequency and Gain:**

Freq_MHz	Efficiency_%	Gain_dBi
2400	58%	2.65
2410	57%	2.58
2420	57%	2.51
2430	56%	2.49
2440	56%	2.51
2450	56%	2.53
2460	56%	2.54
2470	57%	2.55
2480	58%	2.54
2490	58%	2.52
2500	59%	2.48
5100	59%	3.90
5200	59%	4.10
5300	55%	4.03
5400	58%	4.30
5500	56%	4.19
5600	53%	3.84
5700	55%	3.80
5800	54%	3.70

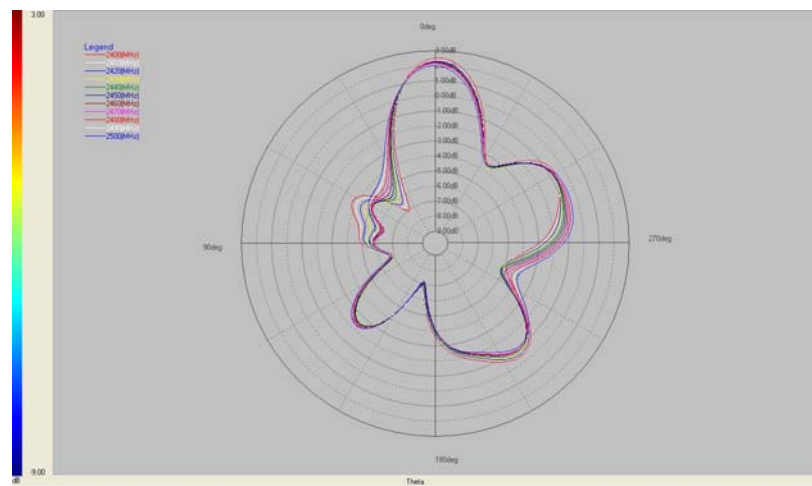


### Radiation Pattern: 2.4GHz

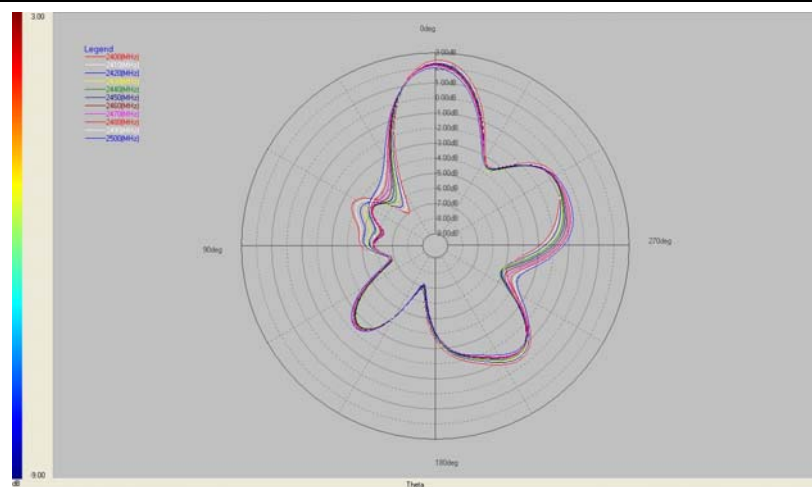
Phi=0



Phi=90



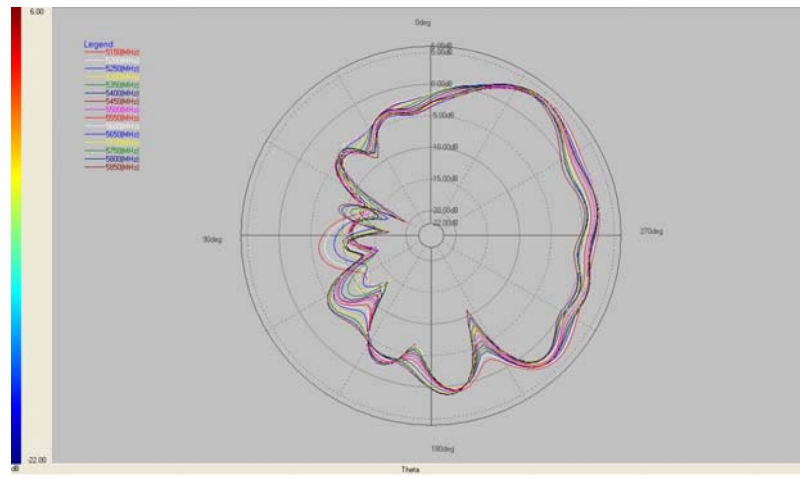
Theta=90



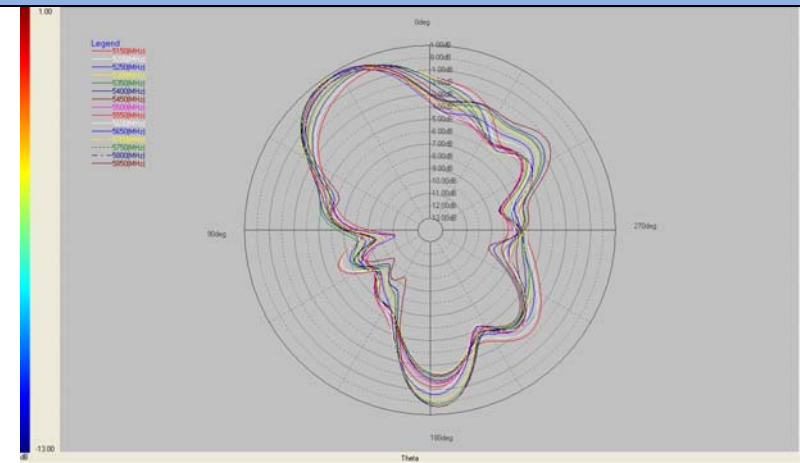


### Radiation Pattern: 5GHz

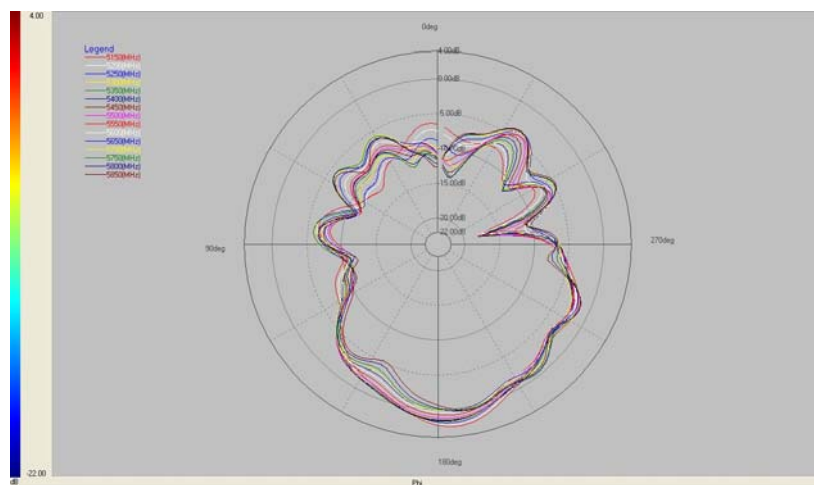
Phi=0



Phi=90



Theta=90





**Antenna-b frequency and Gain:**

Freq_MHz	Efficiency_%	Gain_dBi
2400	59%	2.29
2410	58%	2.16
2420	56%	2.00
2430	56%	1.91
2440	55%	1.83
2450	55%	1.76
2460	56%	1.72
2470	56%	1.72
2480	57%	1.69
2490	58%	1.69
2500	58%	1.68
5100	59%	3.90
5200	62%	4.19
5300	60%	4.02
5400	59%	4.04
5500	59%	3.85
5600	57%	3.77
5700	54%	3.79
5800	53%	3.83

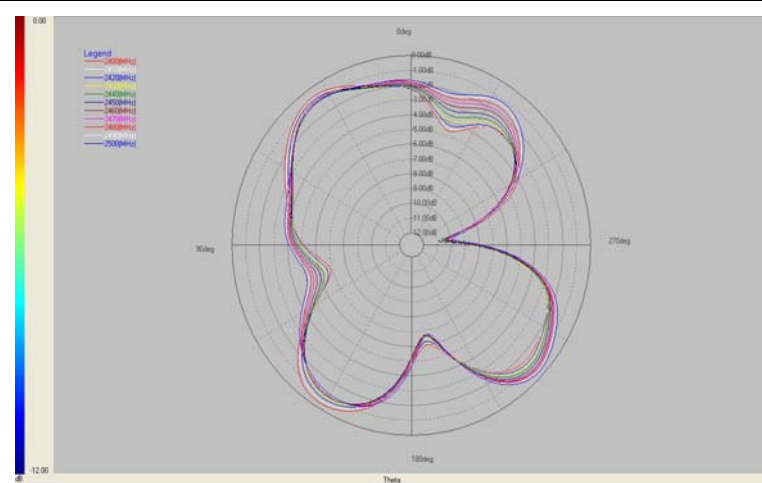


### Radiation Pattern: 2.4GHz

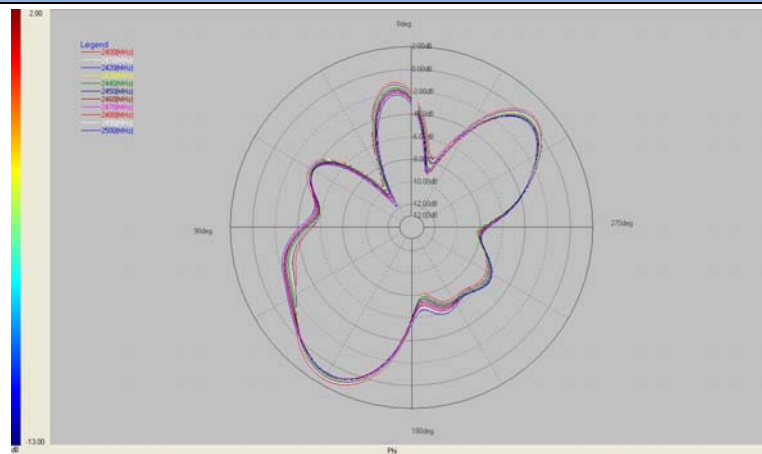
Phi=0



Phi=90



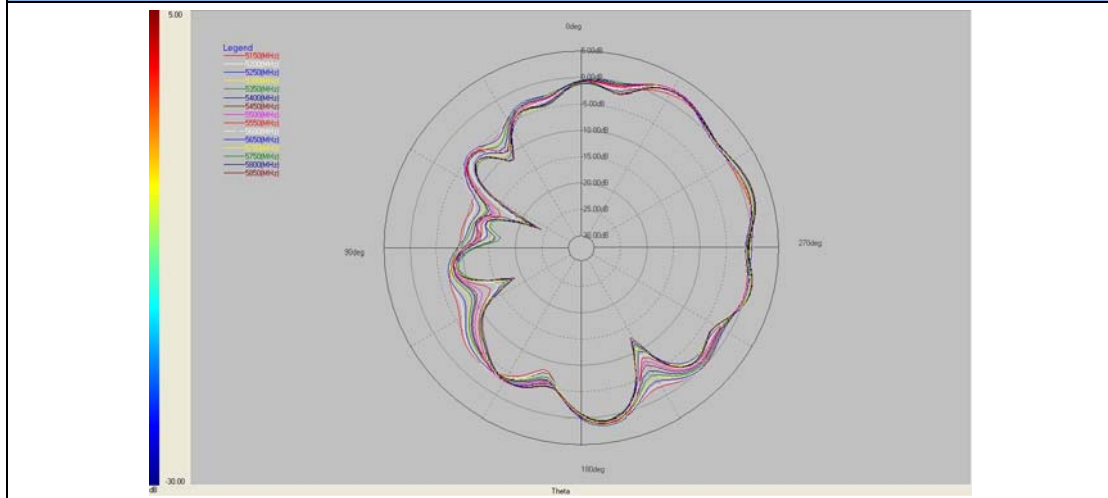
Theta=90



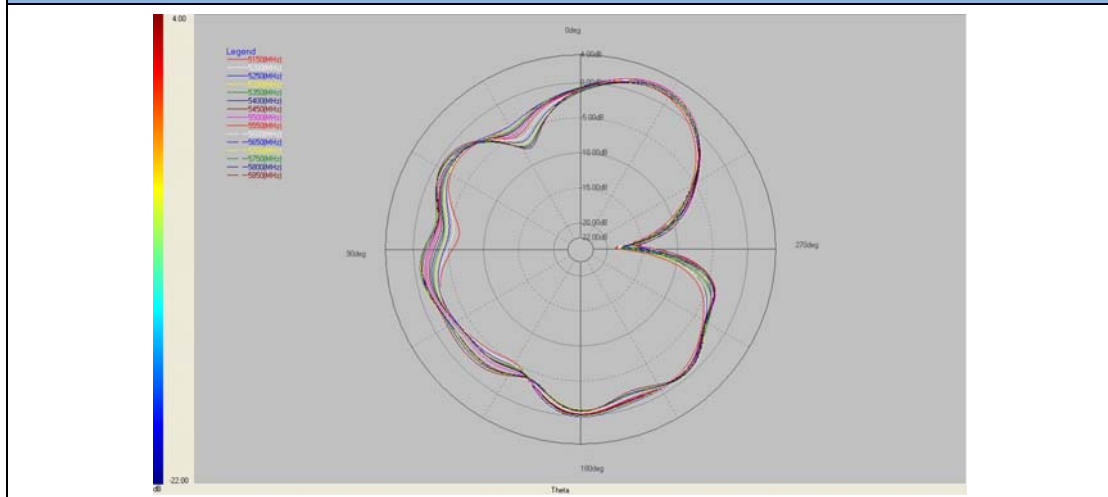


### Radiation Pattern: 5GHz

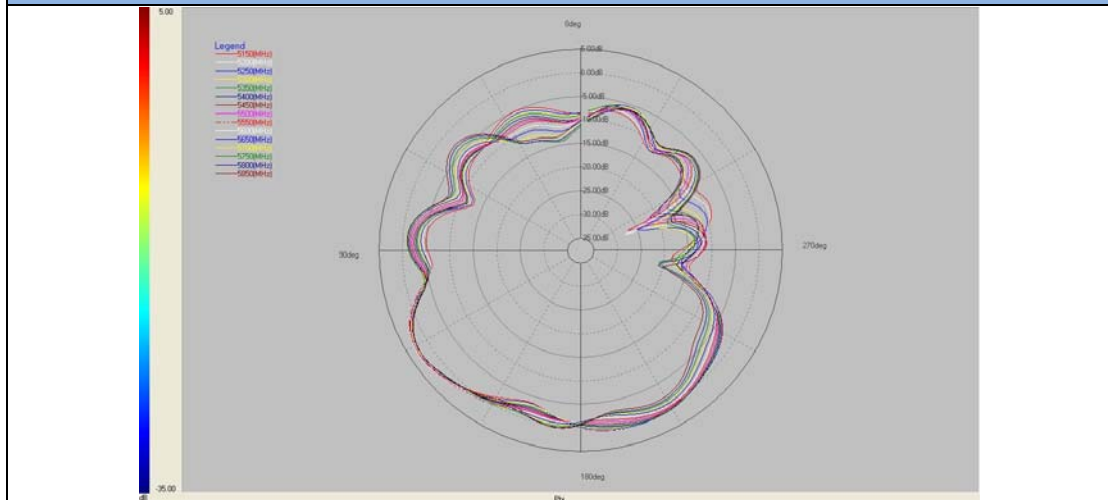
Phi=0



Phi=90



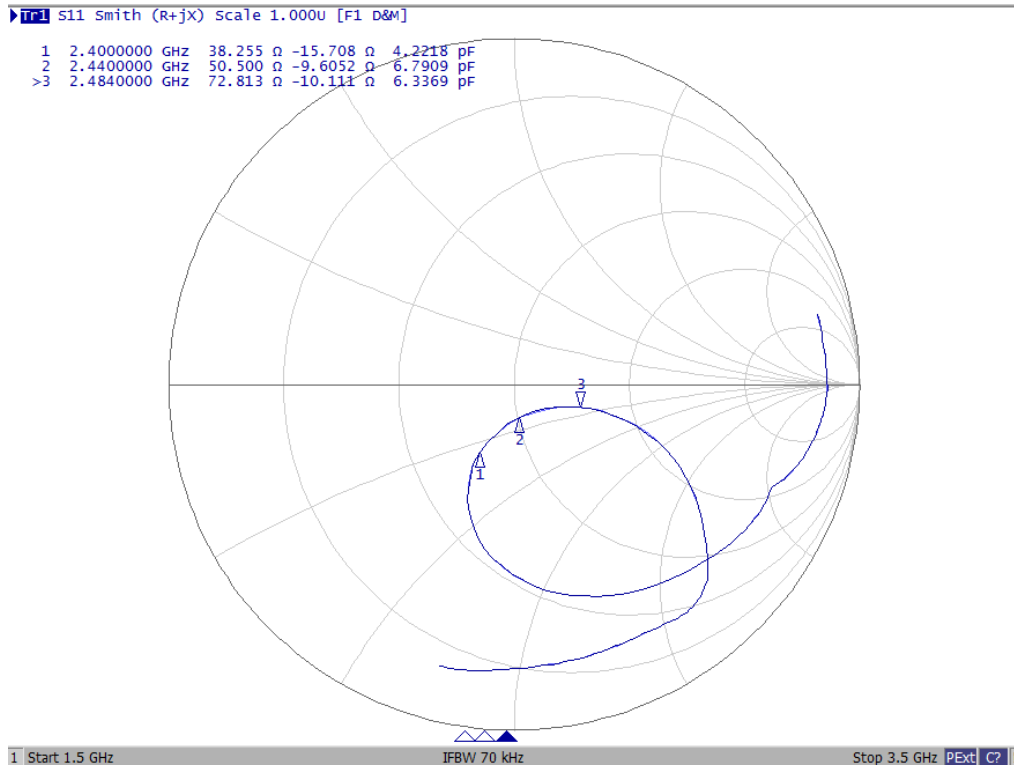
Theta=90







Antenna impedance:  $50.5 \Omega -j9.6 \Omega$



Antenna voltage standing wave ratio: 1.2172

