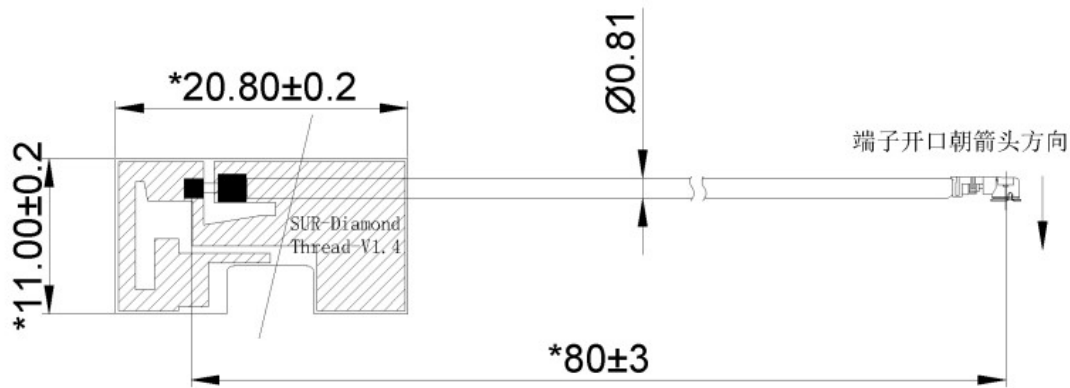


1、Antenna Information



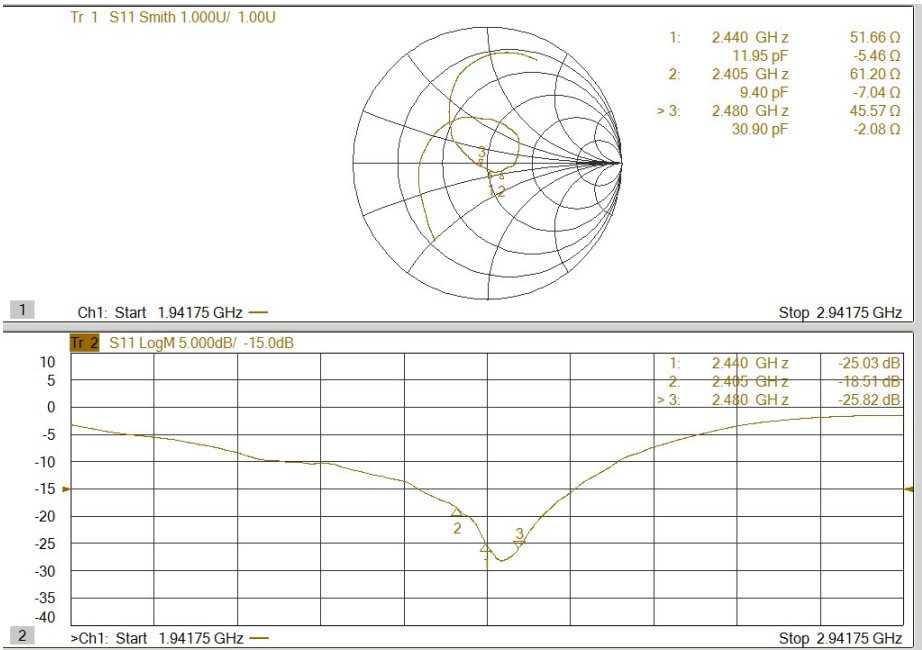
BLE& Thread Antenna

Product Model	FP400
Antenna Model	FP400-Thread&BLE
Antenna Type	Internal Antenna
Manufacturer	Shenzhen Surbaner Technology CO.,LTD. Address: 2/F, Building B25, Hengfeng industrial city, Hezhou community, Xixiang Street, Baoan District, Shenzhen City.

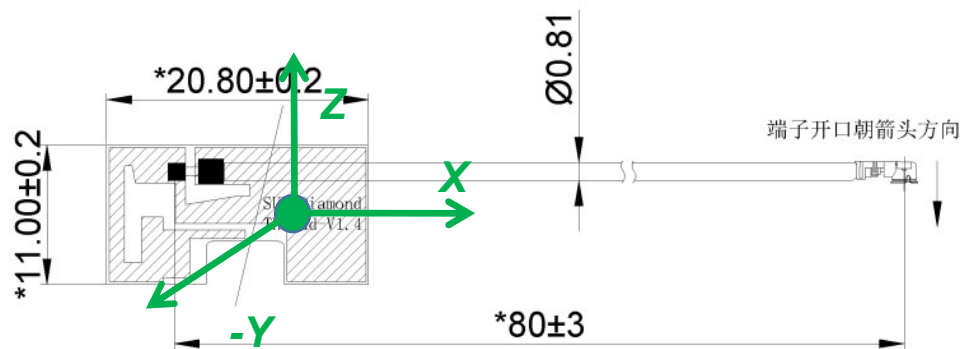
2、Electrical Specifications

Frequency Range	2400~2500MHz
Bandwidth	100 MHz
Input Impendence	50Ω
S11	≤ -10 dB
Gain	Peak Gain 1 dBi

3、Antenna S11



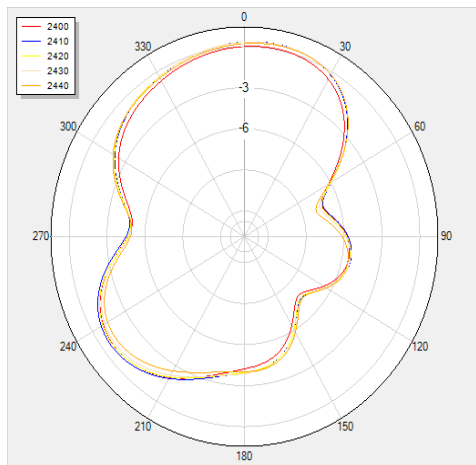
4、Plane Definition Radiation



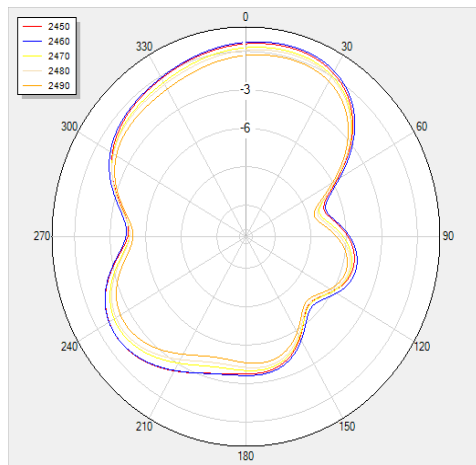
XY Plane	Theta=90°
XZ Plane	Phi=0°
YZ Plane	Phi=90

5、Pattern

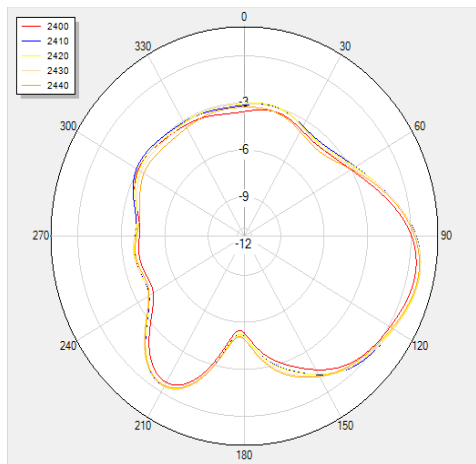
H Theta=90



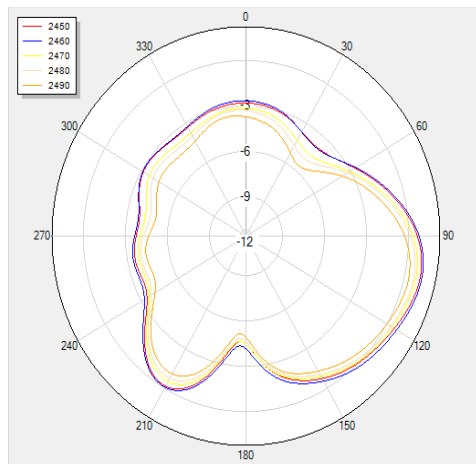
H Theta=90



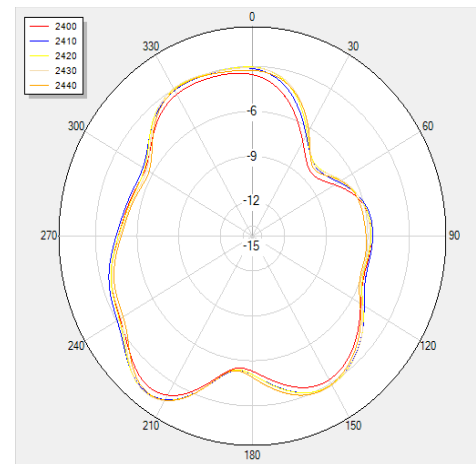
V Phi=0



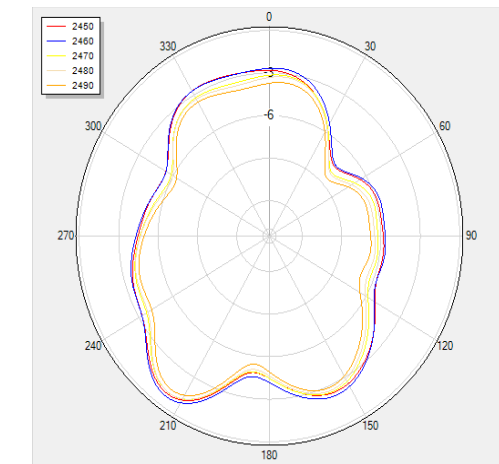
V Phi=0



V Phi=90



V Phi=90



6. Test Results

Frequency ID	Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
1	2400	0.35	-3.45	40.2
2	2410	0.47	-3.32	41.6
3	2420	0.58	-3.20	42.89
4	2430	0.7	-3.16	43.33
5	2440	0.65	-3.17	43.18
6	2450	0.55	-3.08	44.19
7	2460	0.88	-3.01	45.01
8	2470	1	-2.96	45.56
9	2480	0.49	-3.08	44.23
10	2490	0.58	-3.33	41.5
11	2500	0.43	-3.42	40.5