

## Product specification

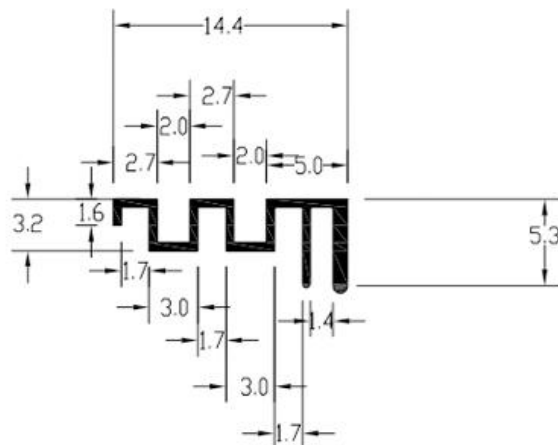
### Quick Reference Date

	Antenna module on the system board	
Antenna type	PCB	
Frequency	2.45GHz <sup>+1</sup>	
Ant. Port Input Pwr. (dBm)	0 (Typ. BT class 2 output power)	
Tot. Rad. Pwr. (dBm)	-2.3 (Input pwr ?loss pwr)	
Peak EIRP(dBm)	1.3	
Directivity (dBi)	1 (all direction antenna)	
Efficiency (dB)	-2.3 (58.5%)	
Gain (dBi)	1.7 (Peak Gain X Z-plane)	
Maximum Power (dBm)	1.3 (XY-plane)	
Minimum Power (dBm)	-4(XY-plane)	
Avg. Power (dBm)	-0.5(XY-plane)	
Max/Min Ratio (dB)	5.3(XY-plane)	
Max/Avg Ratio (dB)	1.8(XY-plane)	
Min/Avg Ratio (dB)	-3.5(XY-plane)	
Average Gain (dB)	-0.5 (Avg Gain XY-plane)	

All the technical data and information contained herein are subject to change without prior notice

Shenzhen Form Electronics Co., Ltd.

### Antenna Layout & module on the system board



### Antenna Gain

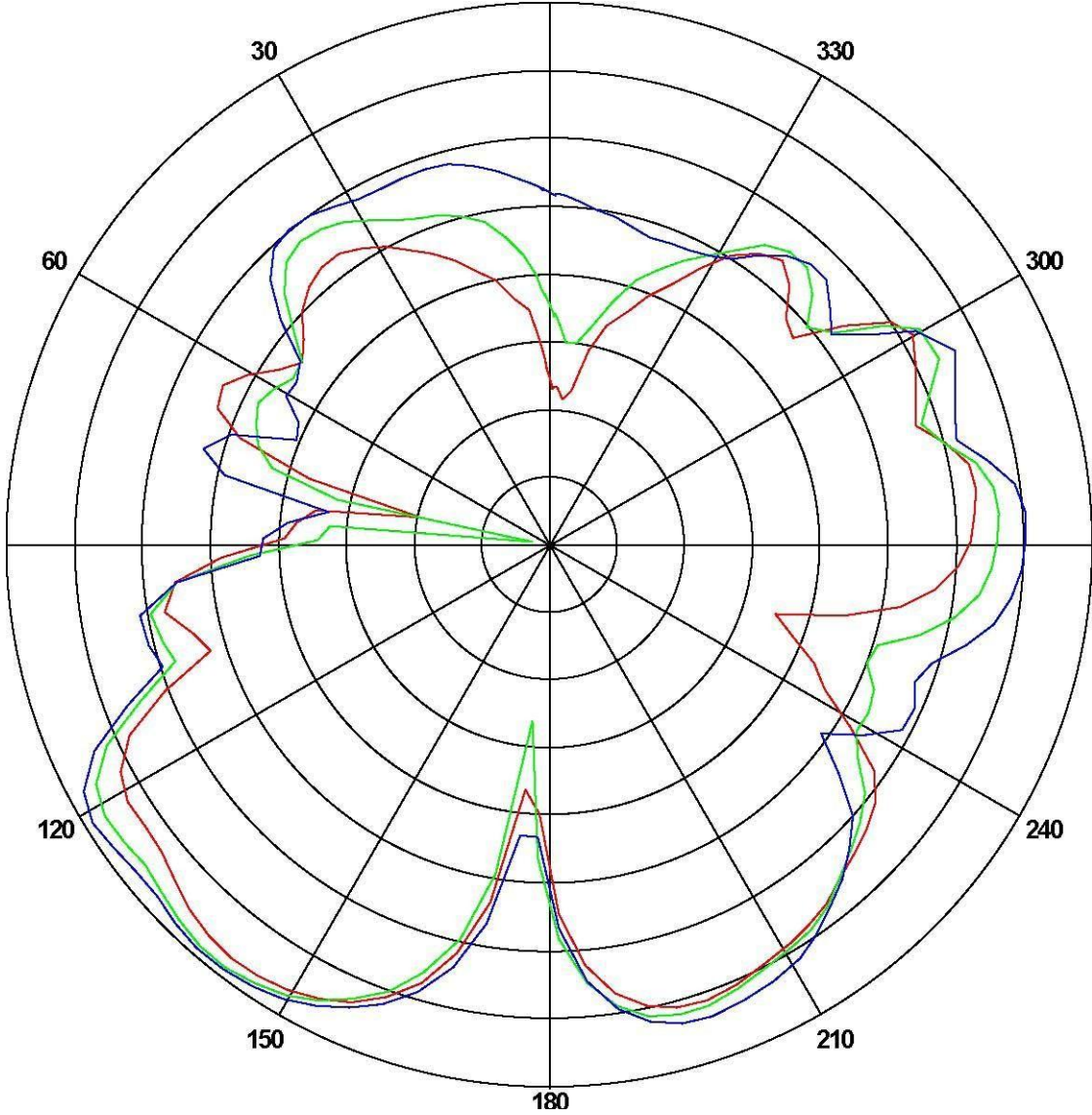
Gain Table

Unit in dBi @2.44GHz	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	1.3	-0.5	1.7	-3.8	1.1	-3.0	58.5%

Horizontal: 2400 MHz 2450 MHz 2500 MHz

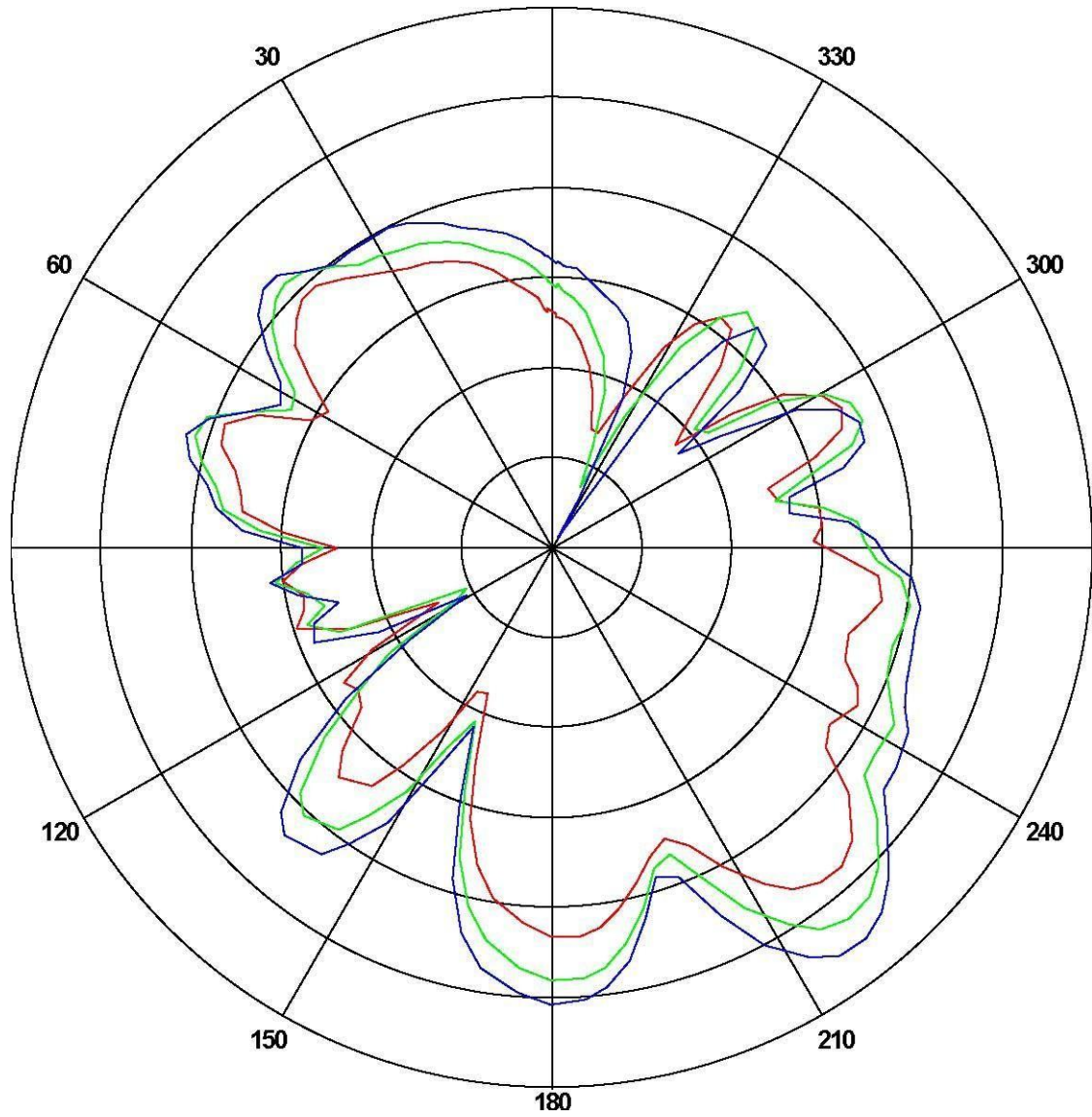
Power (dBm)

Max: 0 Min: -40 Scale: 5/div



Frequency (MHz)	Gain(dBi)		
	Max	Min	Avg
2400	-1.73178	-30.0815	-8.48713
2450	-0.845801	-38.5605	-7.88012
2500	-0.685586	-24.0318	-6.79139

Vertical: 2400 MHz 2450 MHz 2500 MHz Power(dBm)  
 Max: 0 Min: -30 Scale: 5/div



Frequency (MHz)	Gain(dBi)		
	Max	Min	Avg
2400	-6.1530	-24.1420	-13.0295
2450	-3.7054	-26.5836	-10.6700
2500	-2.32122	-30.4301	-9.70536