

Bluetooth antenna of PCB on-board specification

1, Index

Item	Content	Page	Remark
1	Index	1	
2	Spec Drawing	2	
3	Specification	2	
4	Antenna On Test Board	3	
5	Return Loss	3	
6	Radiation Pattern	3	

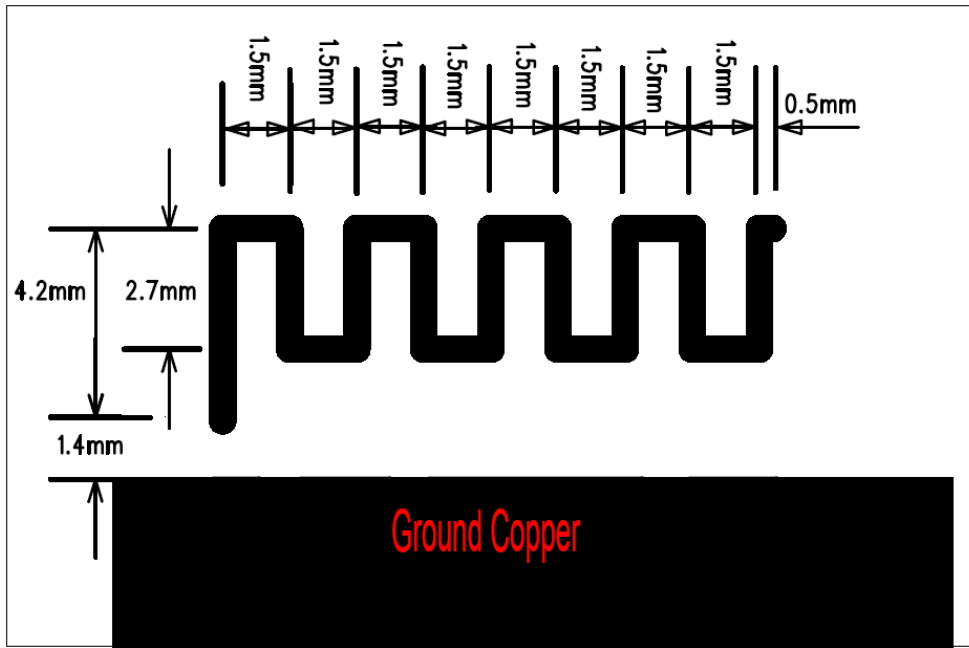
Document Type: 2.4GHZ PCB antenna
Document Version: V1.0
Release Date: July 10, 2017

Shenzhen Feasycom Co., LTD

Telephone: 86-755-27924639

www.feasycom.com

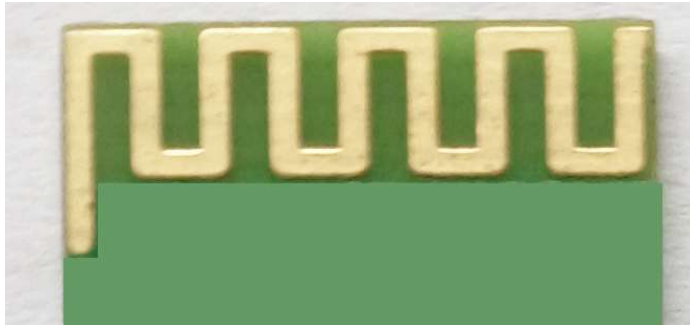
2, Spec Drawing



3, Specification

Product Number: 2.4GHZ PCB antenna

Sample Photo:



A. Electrical Characteristics

Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Gain	-1.36 dBi
Efficiency	~ 50%
Polarization	Linear
Impedance	50 Ohm

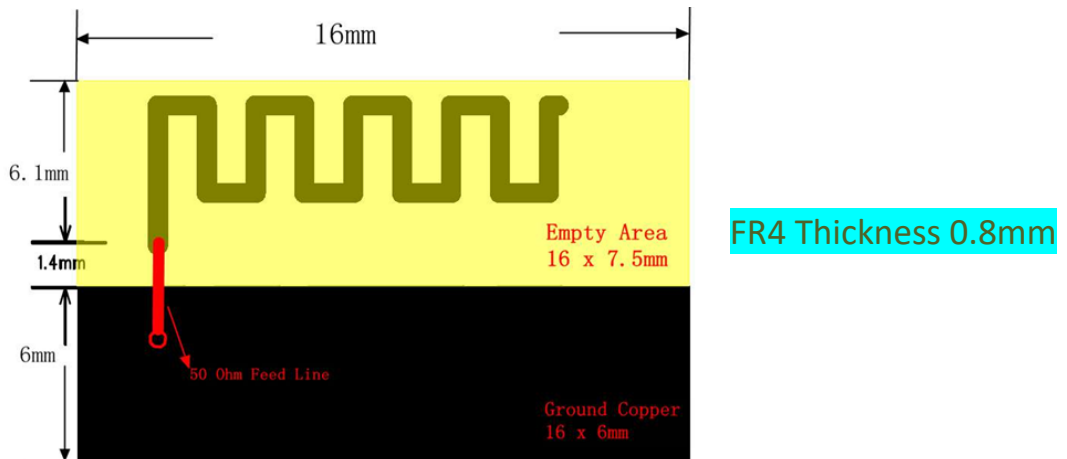
B. Material & Mechanical Characteristics

Material of Radiator	Gold-plated copper
----------------------	--------------------

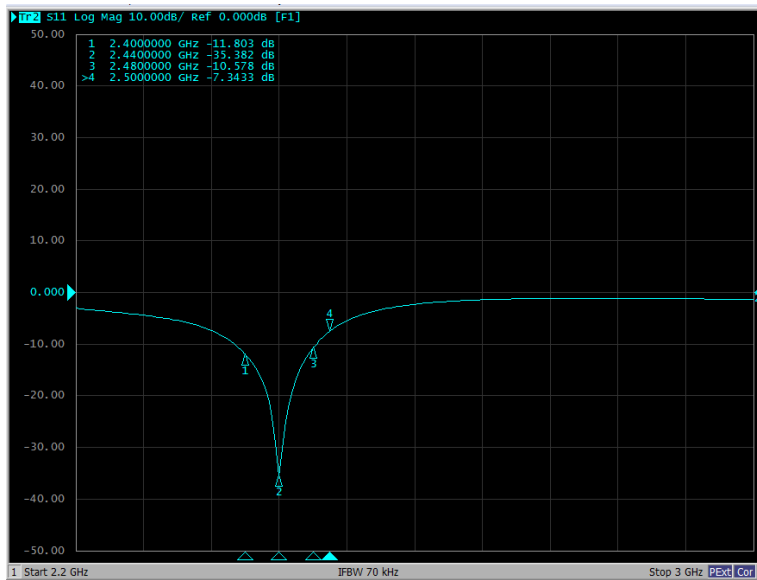
C. Environmental

Operation Temperature	- 40°C ~ + 85°C
Storage Temperature	- 40°C ~ + 105°C

4, Antenna On Test Board

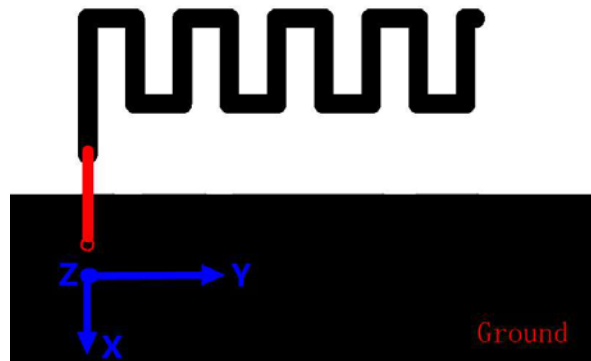


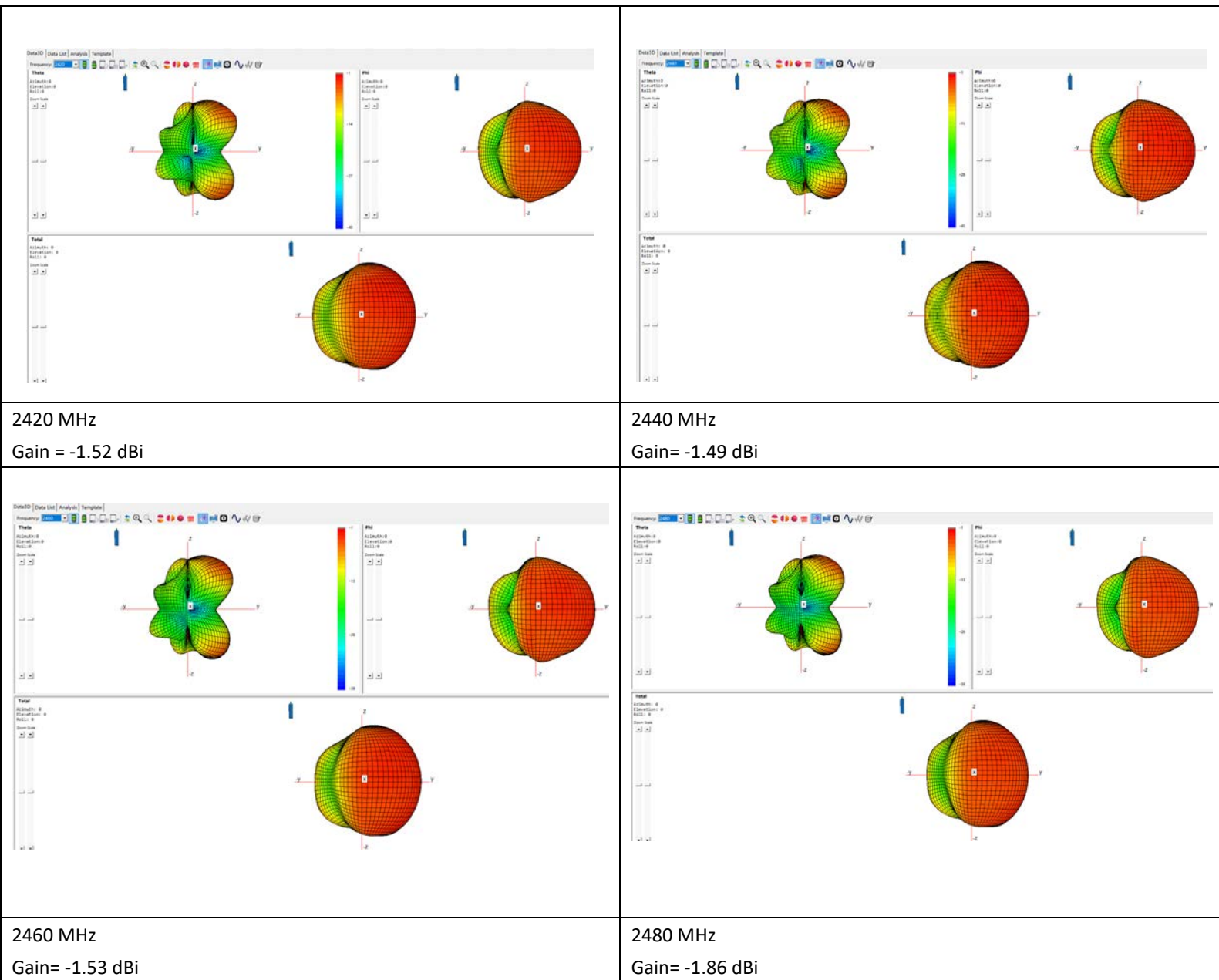
5, Return Loss



6, Radiation Pattern

Radiation Pattern and Gain were dependent on measurement board design. The specification of PCB antenna was measured based on the PCB size and installation position as shown in the below figure Test Board.





Test Result:

Frequency VNA	Gain (dB)	Efficiency_dB	Efficiency_Pcent
2400MHz	-1.45	-5.30	29.46
2410MHz	-1.39	-4.93	32.09
2420MHz	-1.52	-4.94	32.01
2430MHz	-1.57	-5.00	31.60
2440MHz	-1.49	-4.94	32.05
2450MHz	-1.36	-4.87	32.53
2460MHz	-1.53	-5.09	30.95
2470MHz	-1.62	-5.31	29.39
2480MHz	-1.86	-5.66	27.11
2490MHz	-2.01	-6.00	25.11
2500MHz	-2.00	-6.17	24.14