

# Bluetooth and WIFI antenna specification

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Document Type: 2.4GHZ & 5.8GHZ PCB antenna  
Document Version: V1.0  
Release Date: 2019-12-11

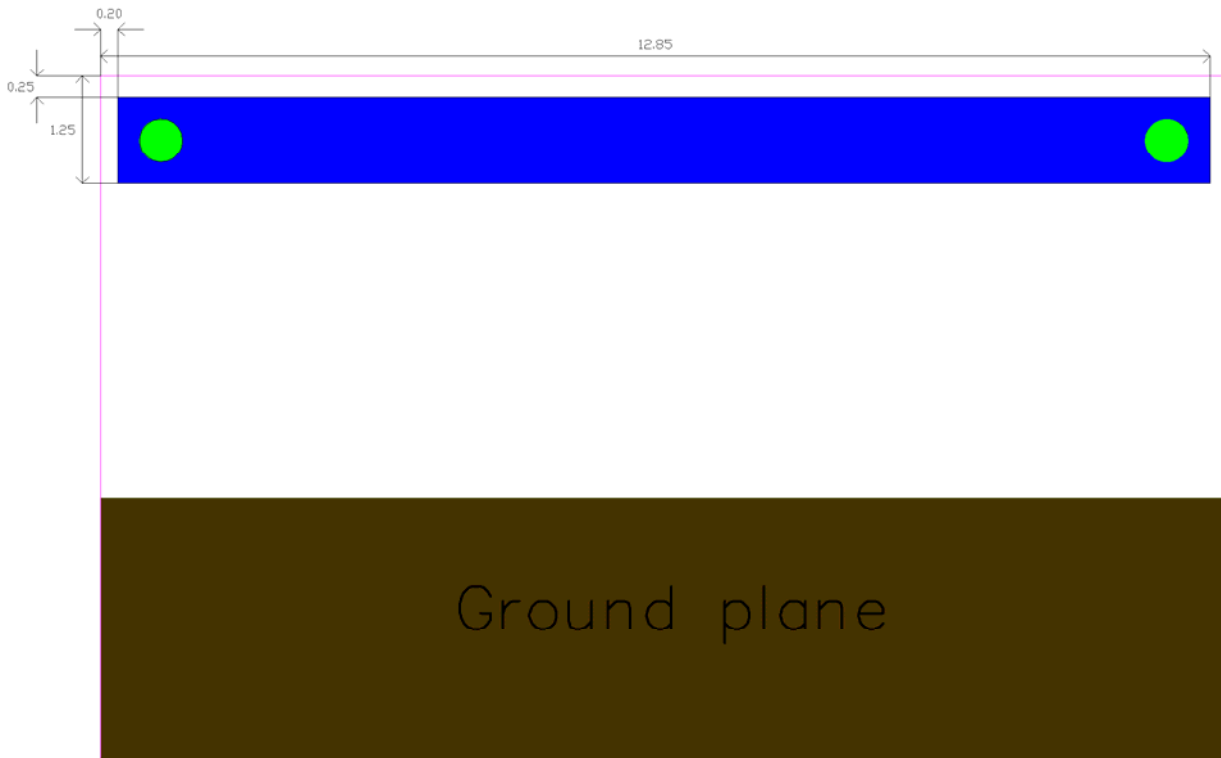
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Bottom view



5G Gain (dBi) : -1.81dBi

### 3, Specification

Product Number: 2.4GHZ PCB antenna

Sample Photo:



#### A. Electrical Characteristics

Bluetooth Frequency	2400 ~ 2500 MHz
WIFI Frequency (2.4GHZ)	2400 ~ 2500 MHz
WIFI Frequency (5GHZ)	5180 ~ 5850 MHz
S.W.R.	<=3.0
Gain	-1.56 dBi
Efficiency	~ 30%
Polarization	Linear
Impedance	50 Ohm

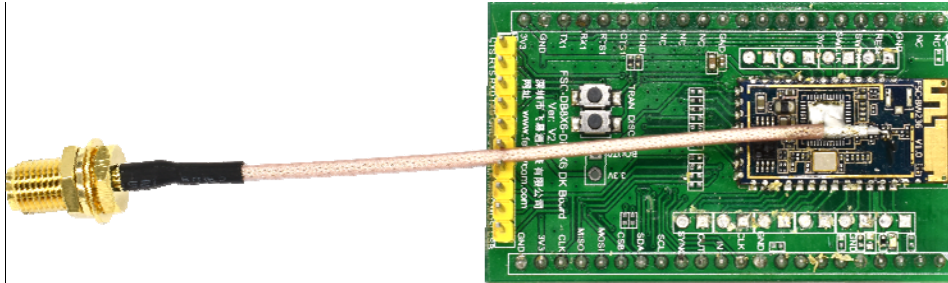
#### B. Material & Mechanical Characteristics

Material of Radiator	copper
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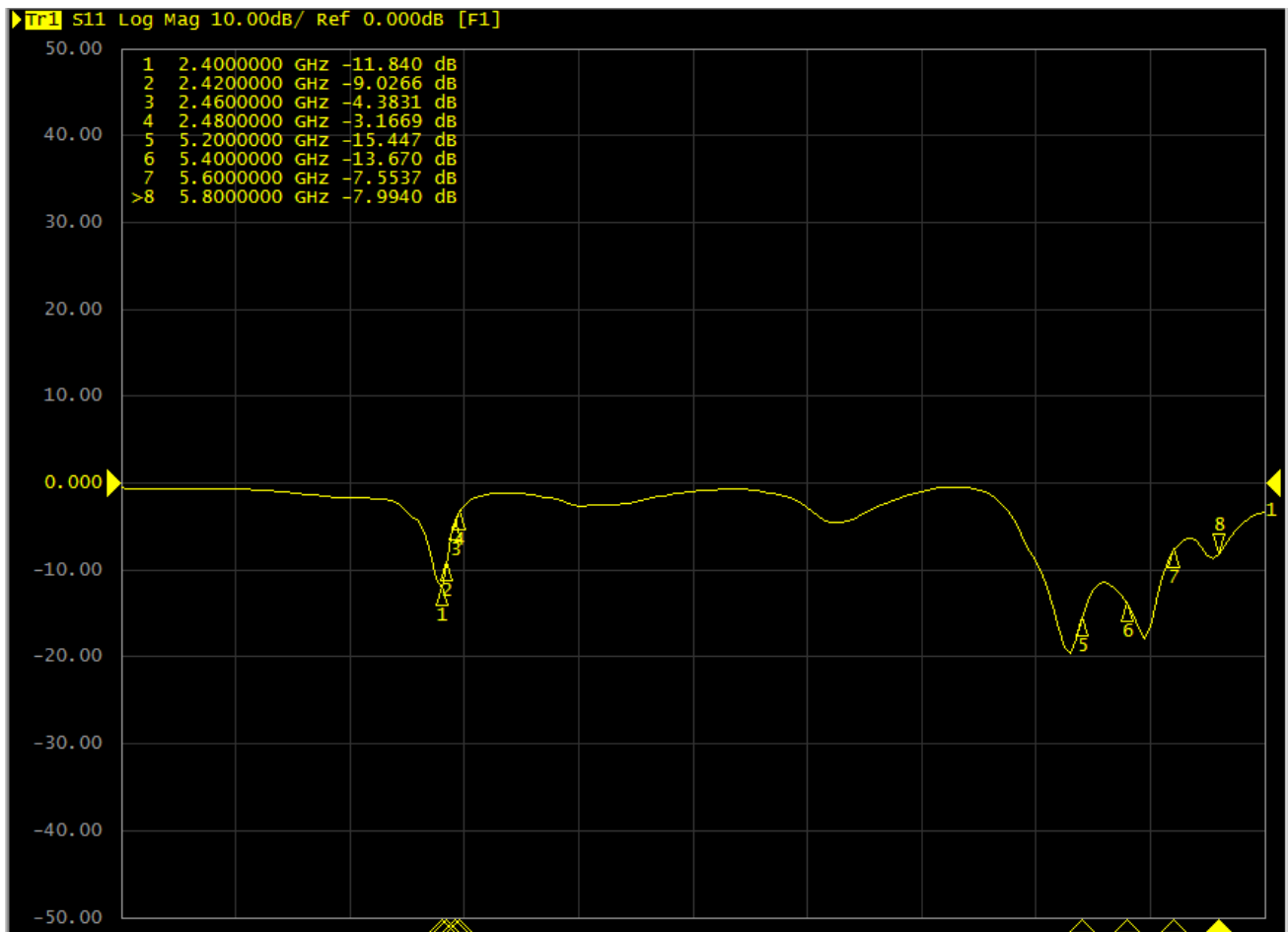
#### C. Environmental

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

## 4, Antenna On Test Board

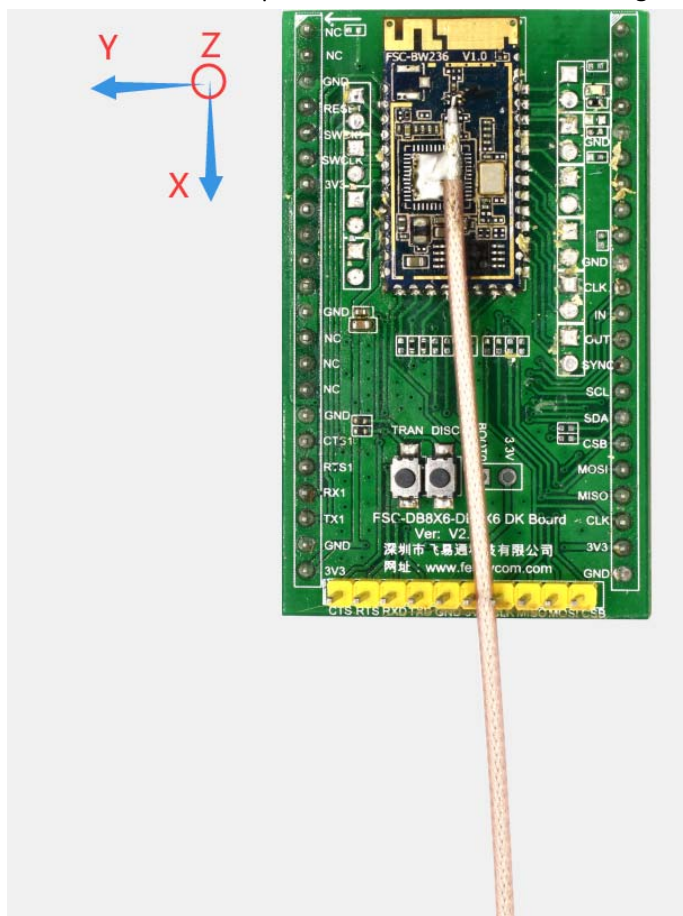


## 5, Return Loss



## 6, Radiation Pattern

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



### 6.1, Gain and Efficiency

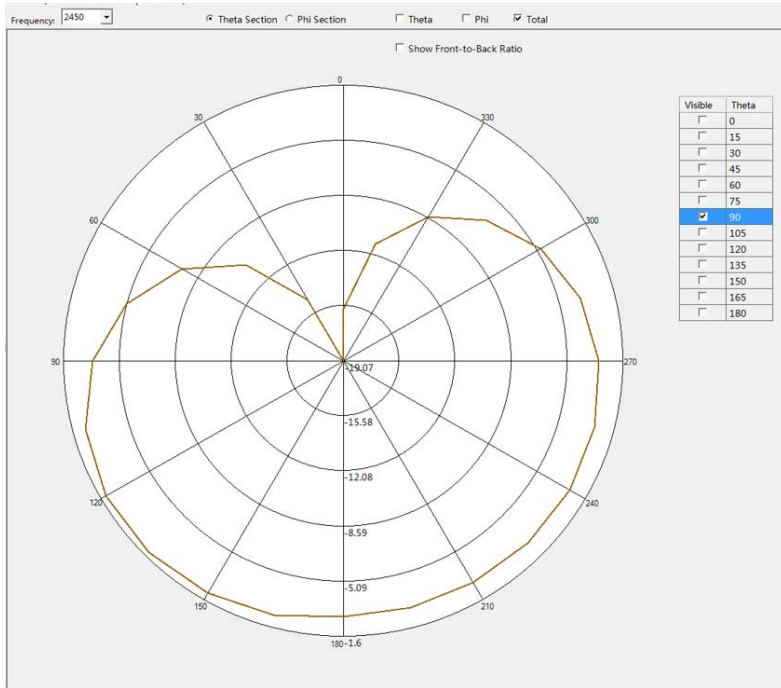
Frequency	Gain(dBi)	Efficiency	Frequency	Gain(dBi)	Efficiency
2400	-2.49	26.54	5100	-2.68	17.21
2410	-1.9	29.34	5200	-2.01	20.24
2420	-1.83	29.58	5300	-2.42	20.42
2430	-1.73	30.29	5400	-1.81	22.4
2440	-1.56	30.65	5500	-2.83	17.93
2450	-1.59	30.32	5600	-5.65	12.01
2460	-1.67	30.05	5700	-2.23	19.69
2470	-1.79	29.19	5800	-2.35	22.95
2480	-1.93	26.84	5900	-2.78	22.07

5G Gain (dBi) : -1.81dBi

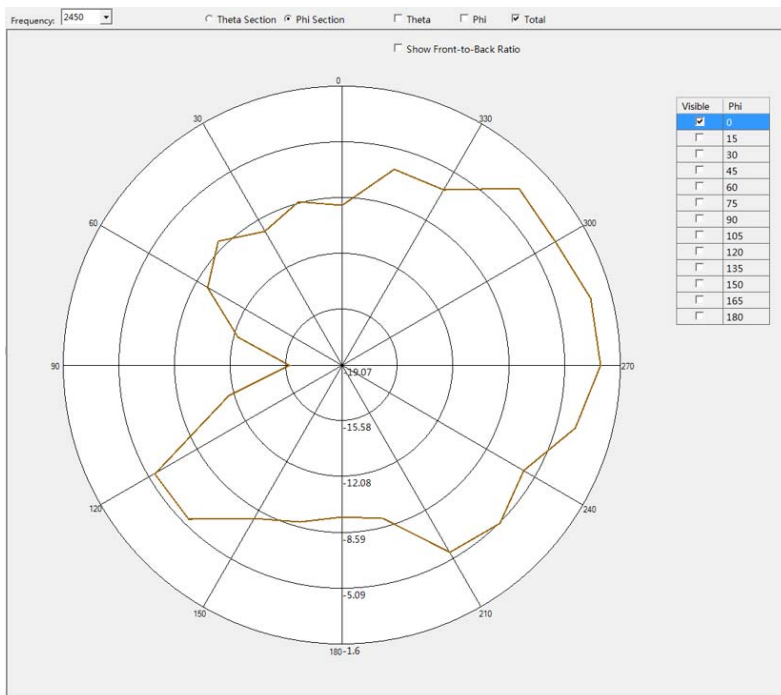
2.4G Gain (dBi) : -1.56dBi

## 6.2, Bluetooth 2D Radiation Pattern

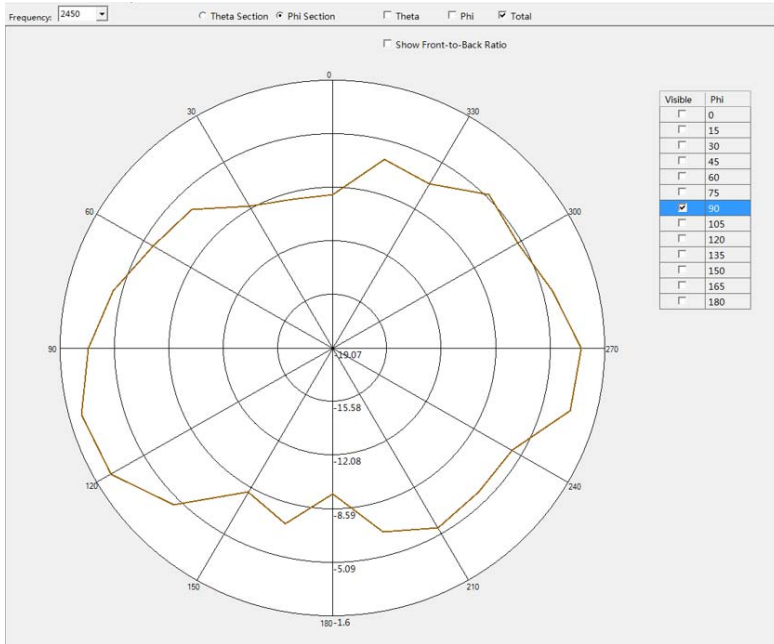
Theta=90°



Phi=0°

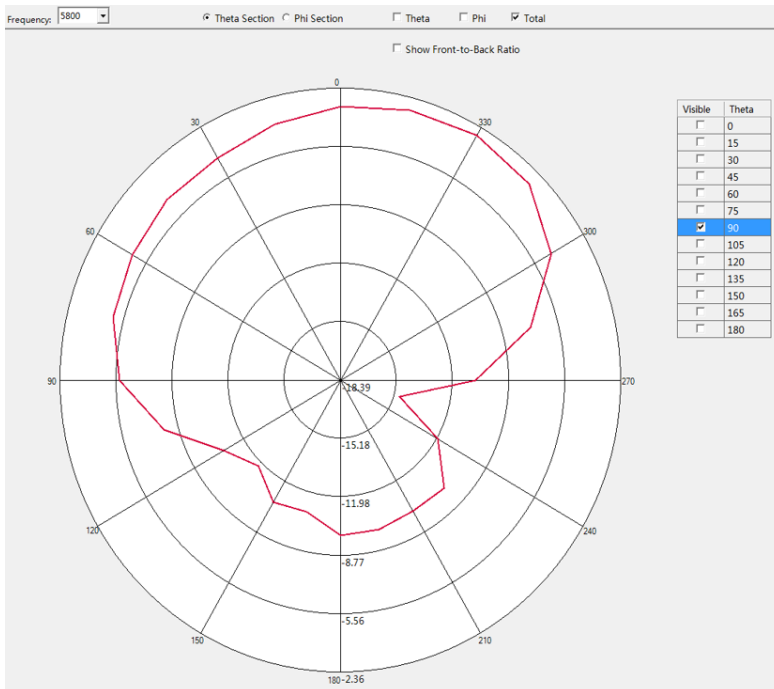


Phi=90°



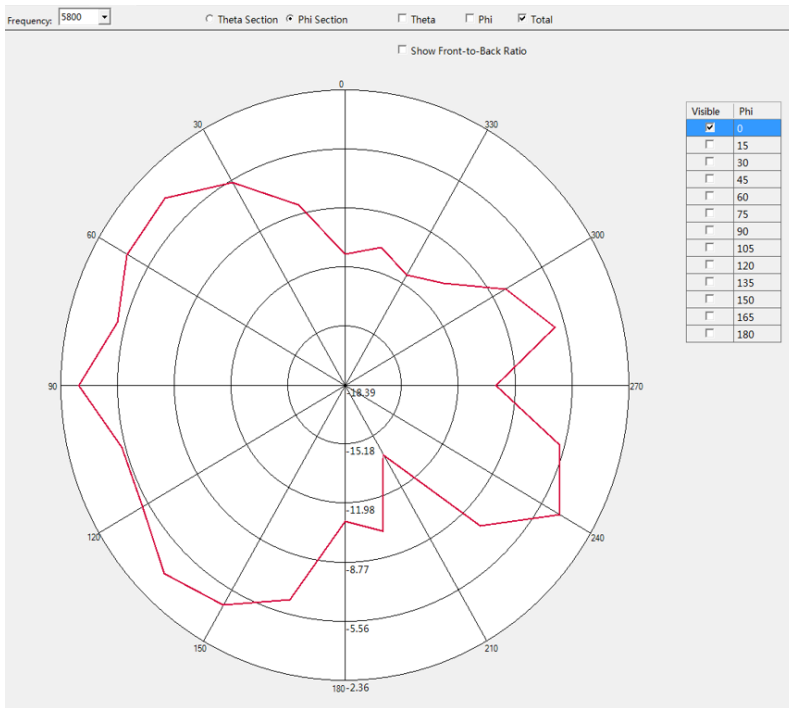
## 6.3, WIFI 2D Radiation Pattern

Theta=90°





## Phi=0°



## Phi=90°

