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# 電 氣 規 格 書

機種: AP3000X

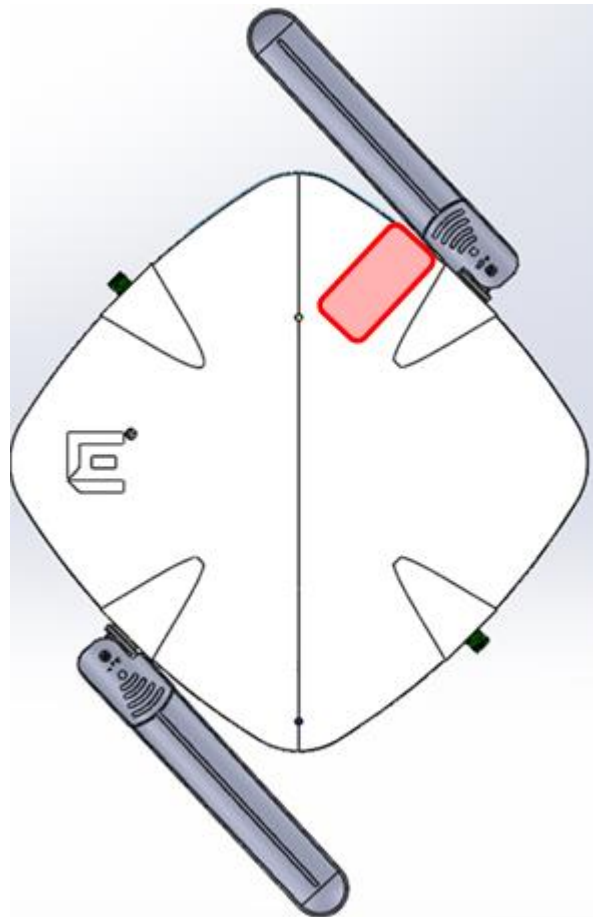
5718A0694300	ANT AP3000 BLE MET 33.5*5.3*9.9_1.37LL 167 BLUE ASSEM
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日期: 2022/05/23

版次: 1.00

# Indoor Single-Band Antenna

5718A0694300	ANT AP3000 BLE MET 33.5*5.3*9.9_1.37LL 167 BLUE ASSEM
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## 1. Summary :

Ant No.	Operating Band	Gain (dBi)	Efficiency (%)	Ant Type	Material	Feeding
Ant5 BLE	2400MHz ~ 2500 MHz	4.02	60.68	PIFA	Metal	Cable

## 2. Mechanical Specification:

### 2-1. Mechanical Configuration:

The appearance of the Ant1 is according to drawing Figure 2-1.

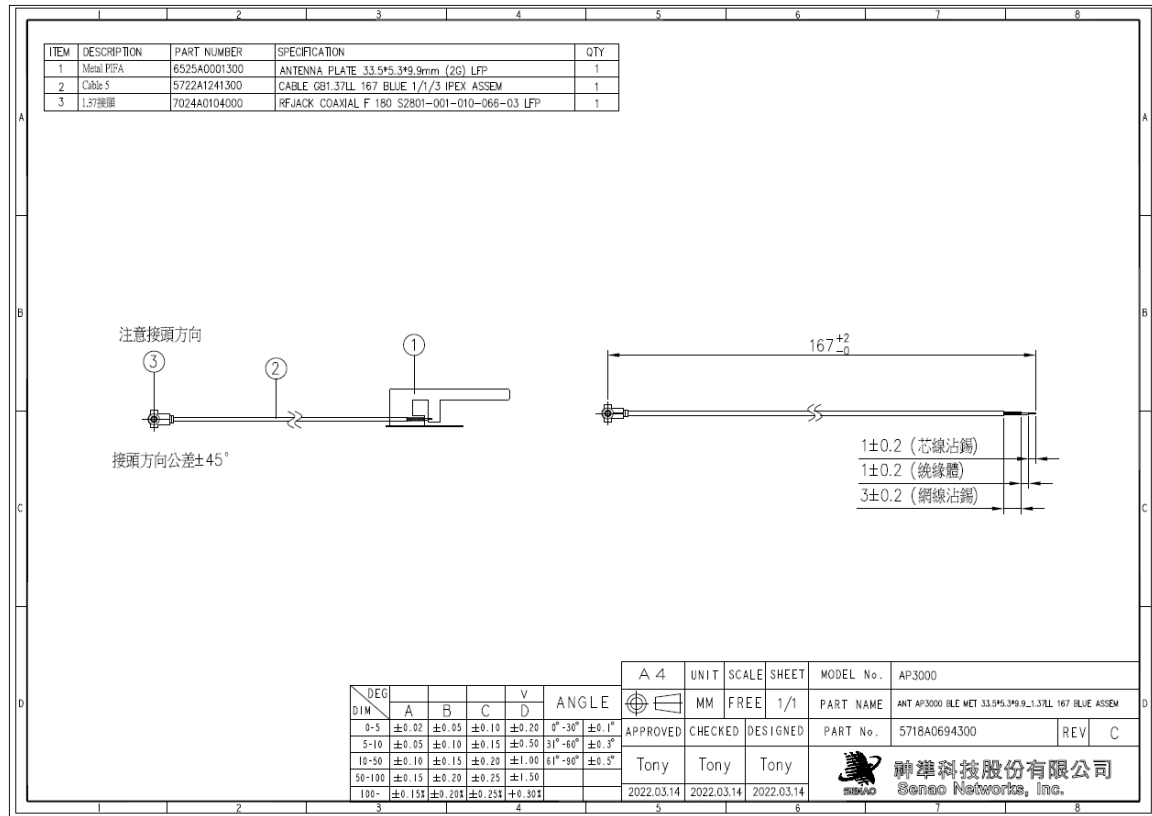


Figure 2-1 The antenna drawing

## 3. Electrical Specification :

Those specifications were specially defined for **AP3000X** model, and all characteristics were measured under the model's handset testing jig .

### 3-1. Frequency Band:

Frequency Band	MHz
BLE	2400~2500

### 3-2. Impedance

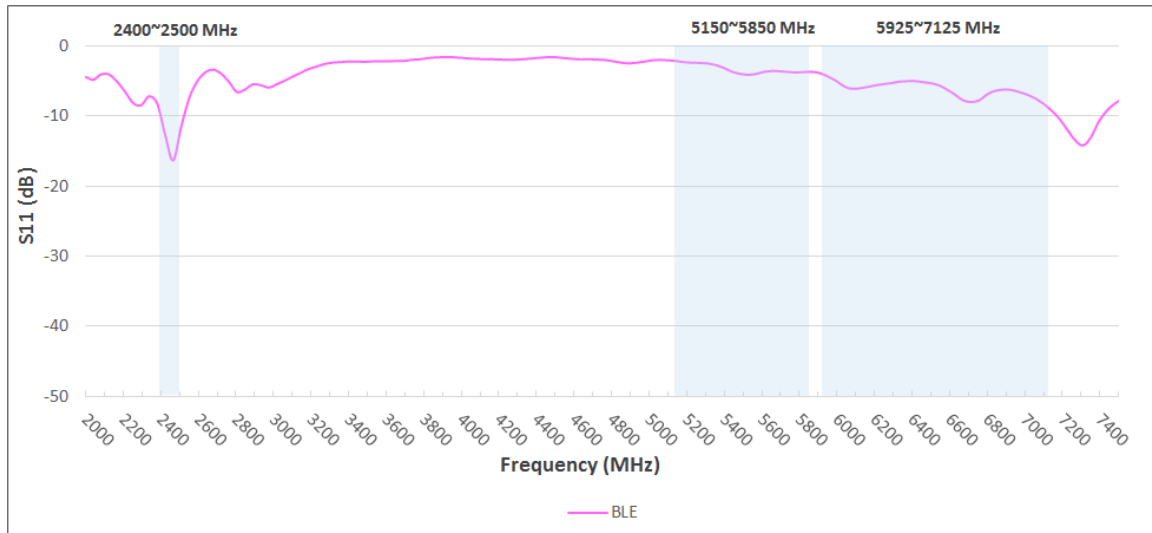
50 ohm nominal

### 3-3. Matching circuit:

None

### 3-4. VSWR & Isolation :

#### VSWR

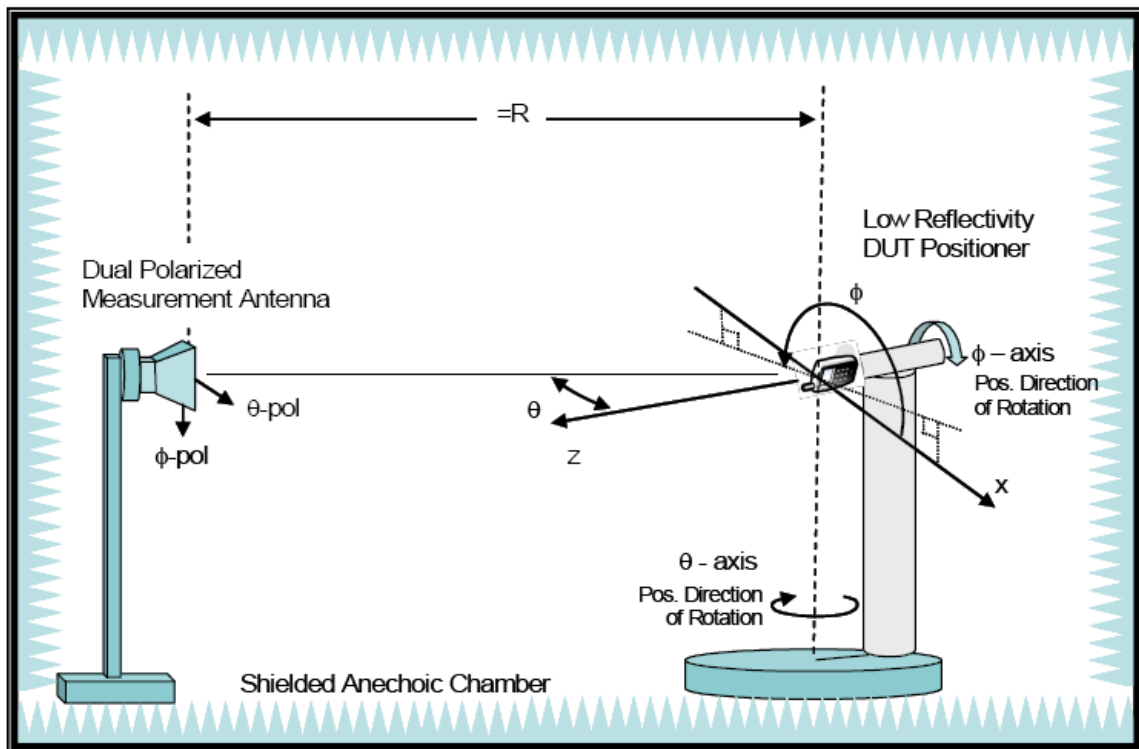


### 3-5. Gain and Radiation Pattern

#### 3-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

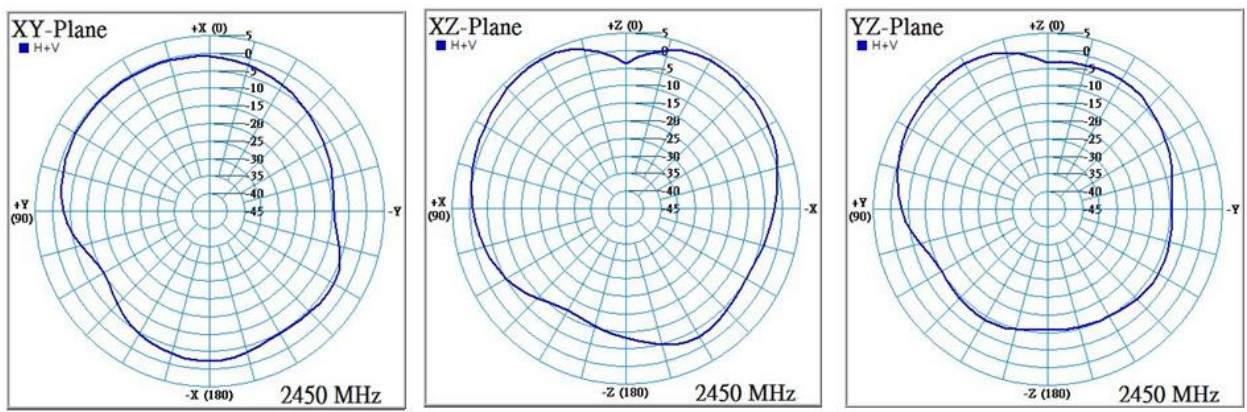
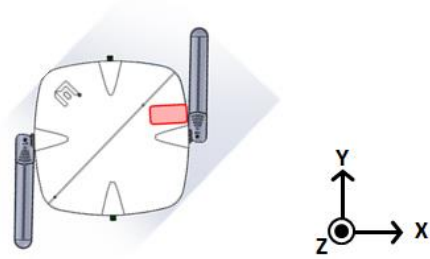
### 3-5.2 Chamber definition



1. An anechoic chamber (8m x4m x4m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet zone region is 40cm x40cm x40cm at the center of rotator
3. The distance between DUT and standard antenna is 5 m
4. Standard gain horn antenna (700MHz ~6GHz)

### 3-5.3 Gain data and radiation pattern

Antenna gain is marked [dBi] and is based on STANDARD HORN antenna.  
 The data shows Peak-Gain and Average-Gain.



Antenna efficiency and gain

BLE Antenna Performance		
Freq. (MHz)	ANT 5	
	Efficiency (%)	Peak Gain (dBi)
2400	59.95	4.02
2450	60.68	3.98
2500	57.52	2.94

## Change history

Change history			
Date	Subject/Comment	Old	New
2022/05/23	Initial Release	N/A	1.00