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DJI Antenna Datasheet

WM162 UAV antenna

2022-01-07



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### Revision history

Version	Change notes	Modifier	Date
V1.0	First draft.	Hunter.yin	2022.01.07

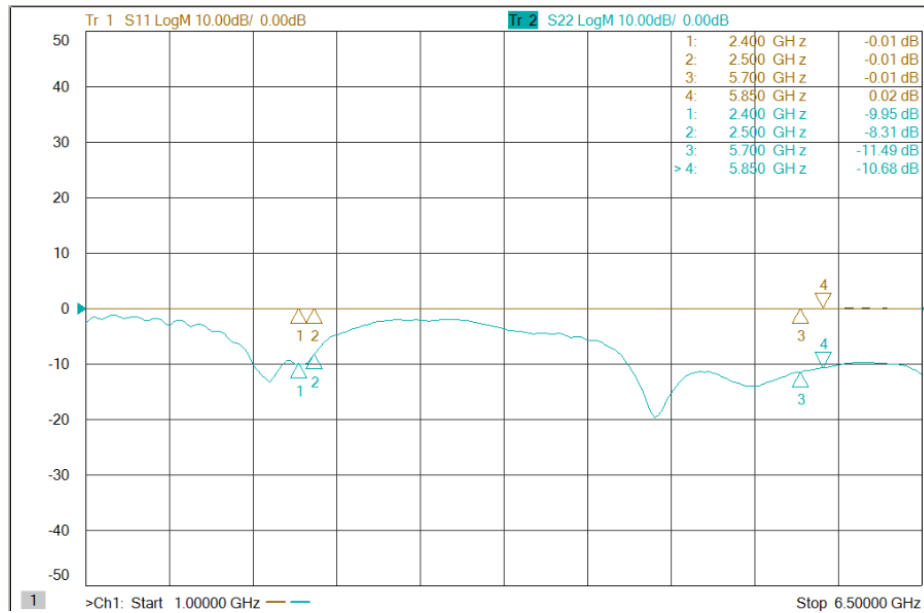
# DJI Antenna Datasheet

## 1、 Basic Specifications

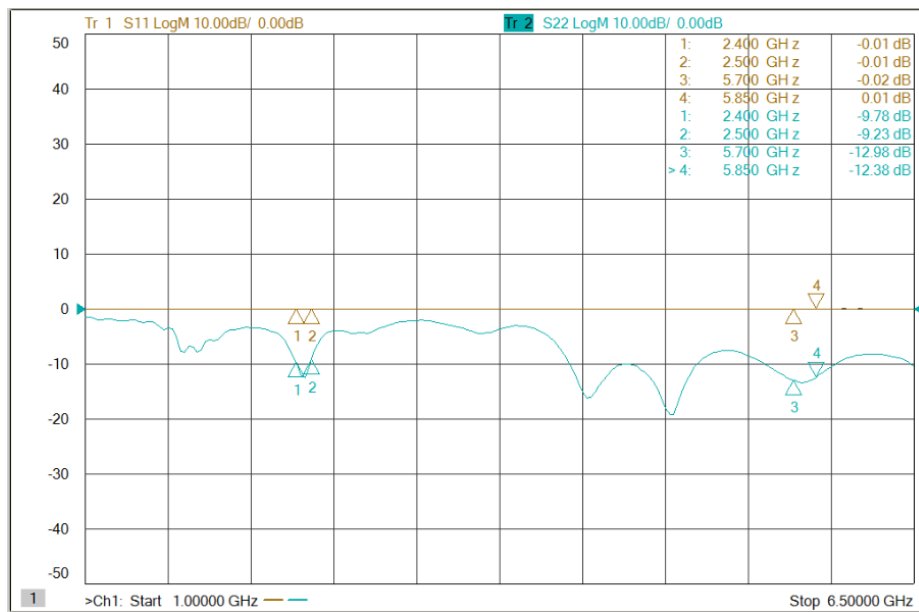
No.	Specification	Descriptions	Note
1	Antenna Name	WM162 UAV Ant	
2	Brand	DJI	
3	Operation Frequency	2.4~2.483GHz; 5.725~5.875GHz	
4	Connector Type	Ipex-4	
5	Impedance	50ohm	
6	Gain	1.5dBi@2.4~2.483GHz ANT 0 3.5dBi@5.725~5.875GHz ANT 0 1.5dBi@2.4~2.483GHz ANT 1 2.5dBi@5.725~5.875GHz ANT 1 2.5dBi@2.4~2.483GHz ANT 2 3.5dBi@5.725~5.875GHz ANT 2 2.0dBi@2.4~2.483GHz ANT 3 3.5dBi@5.725~5.875GHz ANT 3	
7	Efficiency	$\geq 40\%$	
8	VSWR	$\leq 2.5$	
9	Polarization type	Linear	
10	3dB Beamwidth	/	
11	Weight	About 1g	
12	Antenna type	Dipole	

## 2、 Antenna Return Loss/VSWR

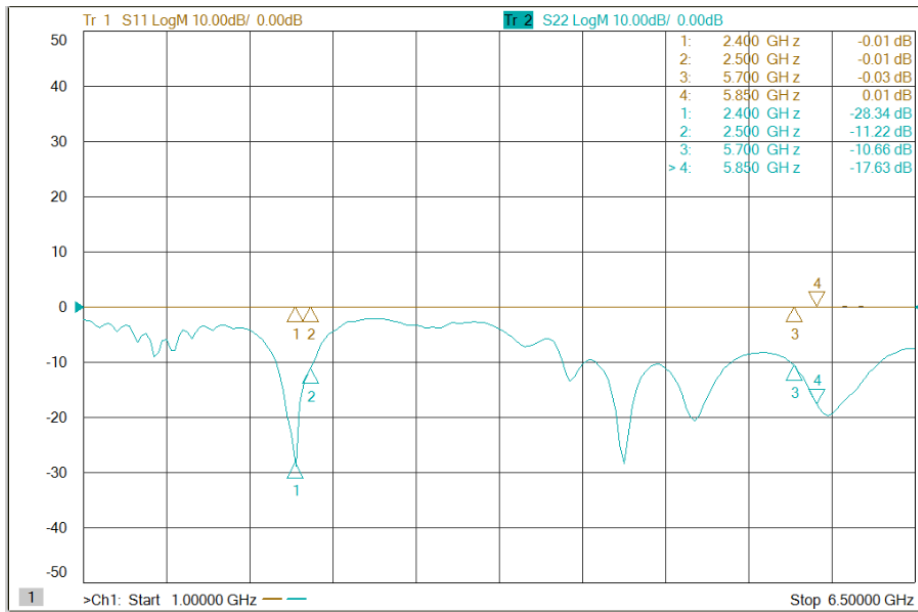
### 2.1 ANT 0-antenna VSWR



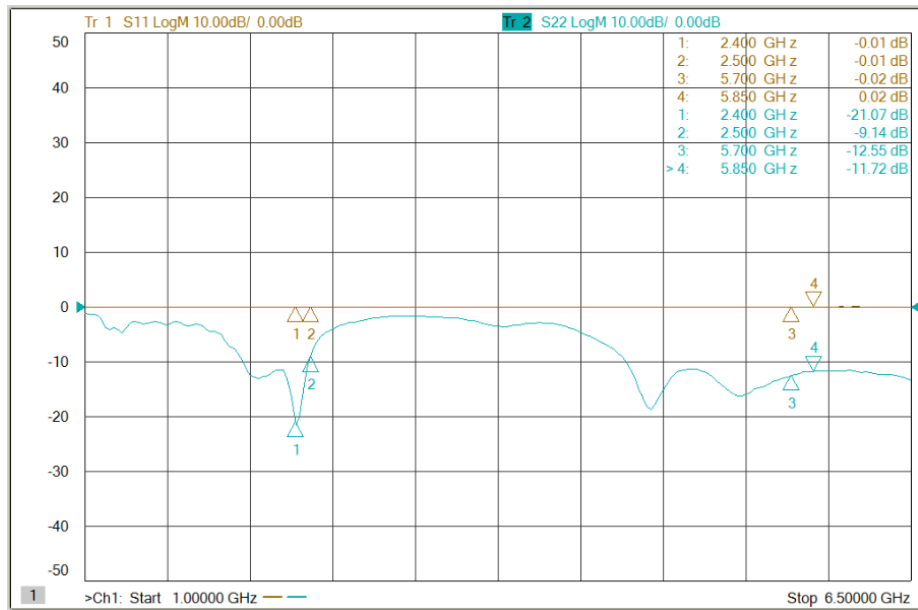
### 2.2 ANT 2-antenna VSWR



### 2.3 ANT 1-antenna VSWR



## 2.4 ANT 3-antenna VSWR



## 3、 Antenna Gain

### 3.1 ANT 2 antenna

Frequency	E Total. dB (dB)
2.4GHz ANTENNA GAIN	
2400	2.26
2420	2.31
2440	2.42



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2450	2.50
2460	2.43
2480	2.42
5.8GHz ANTENNA GAIN	
5700	3.40
5750	3.50
5850	3.37

### 3.2 ANT 0 antenna

Frequency	E Total. dB (dB)
2.4GHz ANTENNA GAIN	
2400	1.21
2420	1.35
2440	1.39
2450	1.50
2460	1.41
2480	1.24
5.8GHz ANTENNA GAIN	
5700	3.45
5750	3.50
5850	3.40

### 3.3 ANT 3 antenna

Frequency	E Total. dB (dB)
2.4GHz ANTENNA GAIN	
2400	1.83
2420	1.84
2440	2.00
2450	2.00
2460	1.89
2480	1.82
5.8GHz ANTENNA GAIN	
5700	3.18
5750	3.50
5850	3.01



### 3.4 ANT 1 antenna

Frequency	E Total. dB (dB)
2.4GHz ANTENNA GAIN	
2400	1.32
2420	1.33
2440	1.19
2450	1.46
2460	1.50
2480	1.46
5.8GHz ANTENNA GAIN	
5700	2.42
5750	2.47
5850	2.50

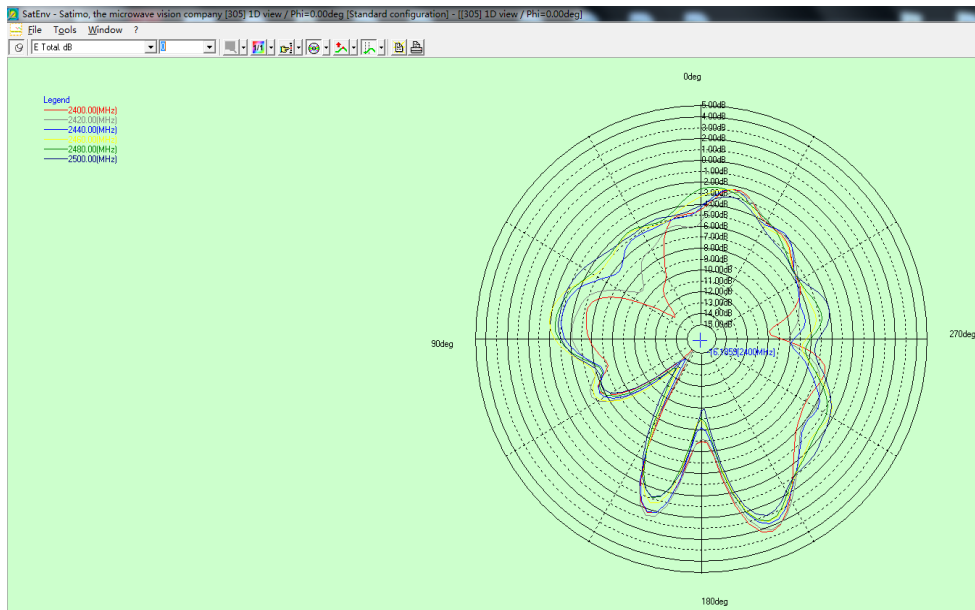
## 4、 Radiation Pattern

Test lab: Satimo SG24

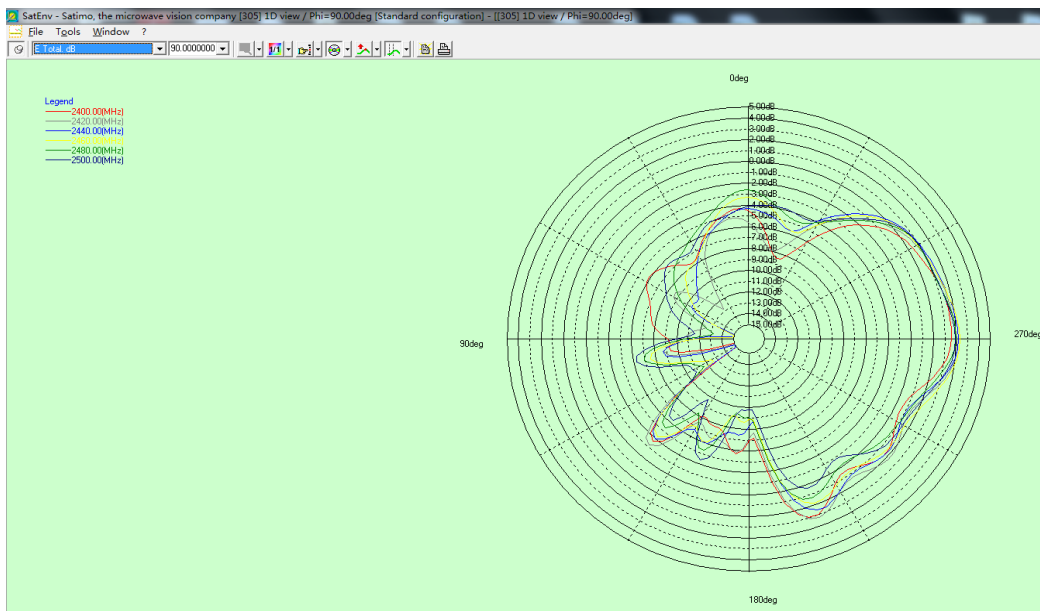
Test date: 2020/10/15

### 4.1 ANT 2 antenna 2.4G radiation pattern

Phi=0

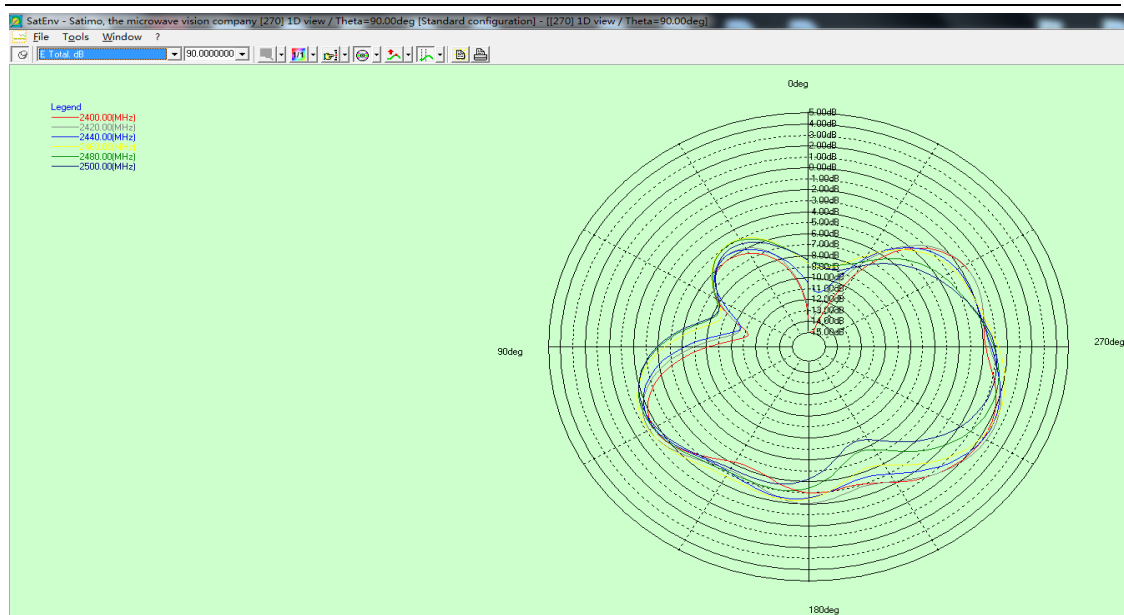


Phi=90



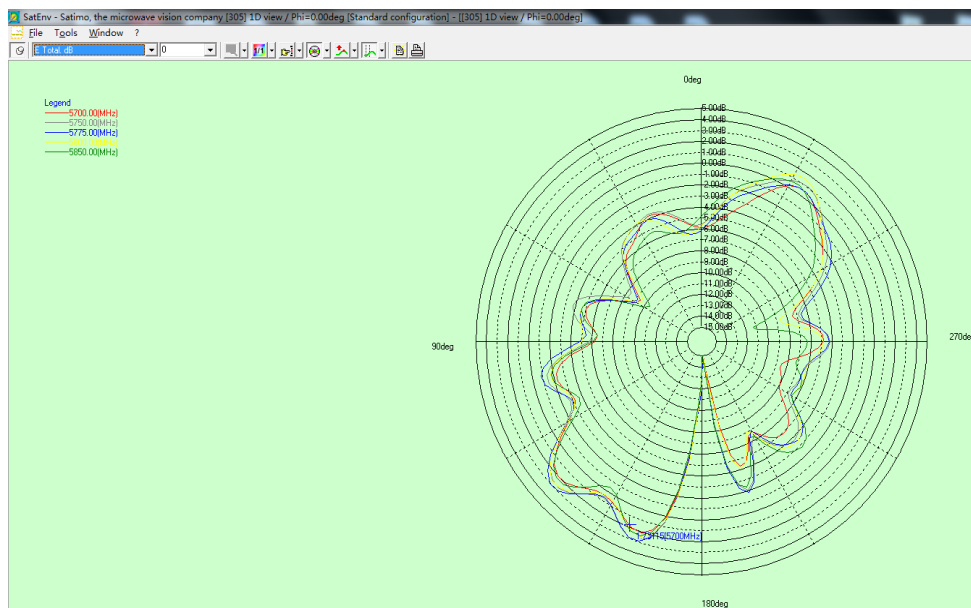
Theta=90





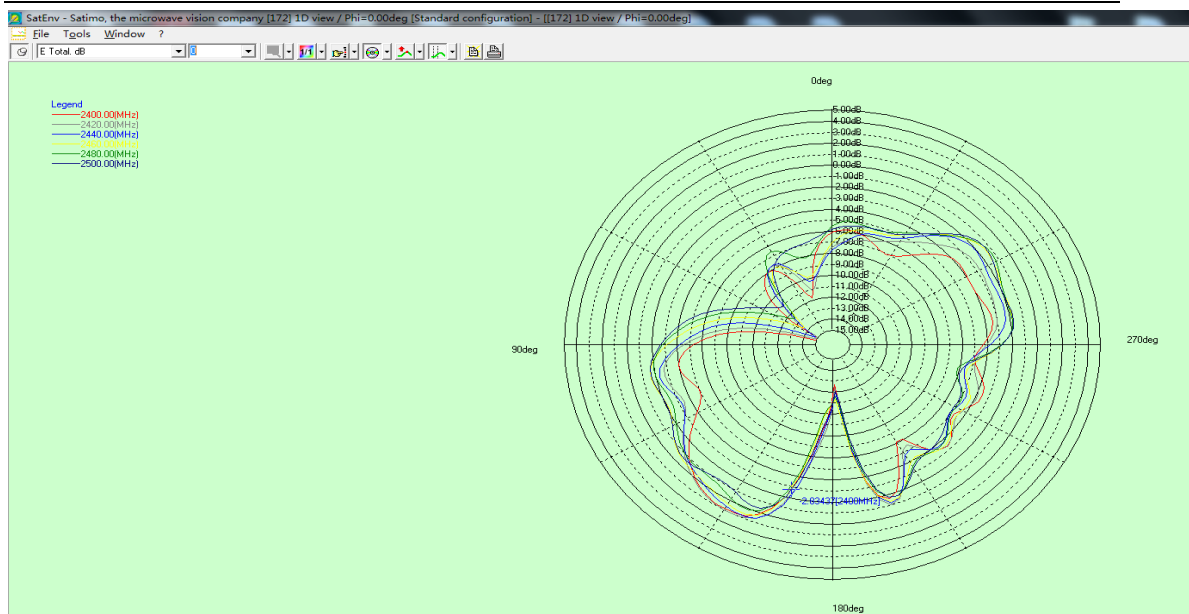
## 4.2 ANT 2 antenna 5.8G radiation pattern

Phi=0

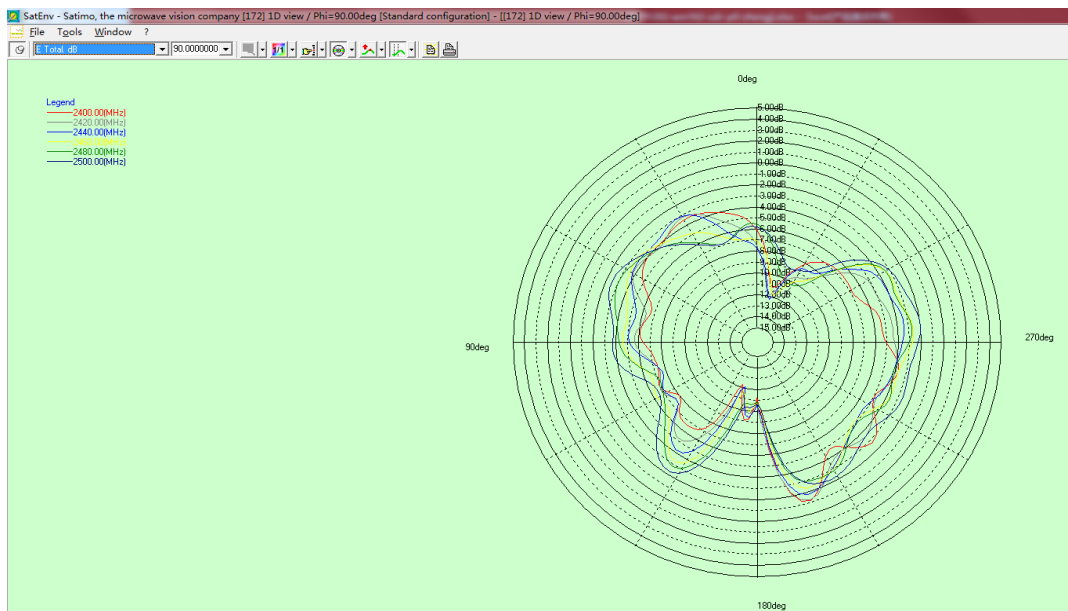


Phi=90

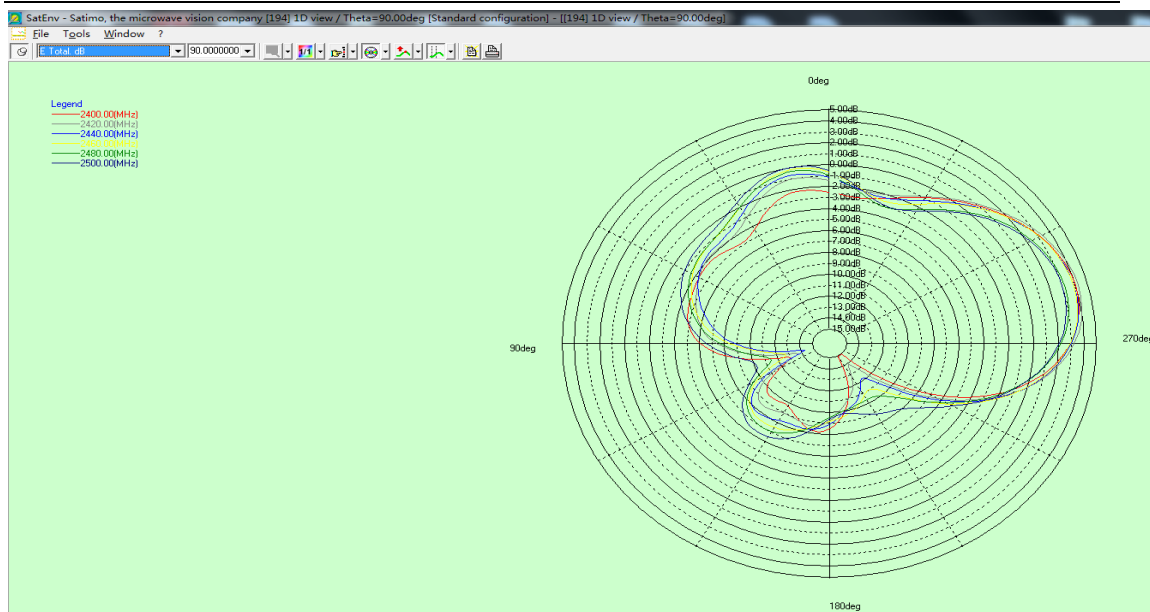




Phi=90

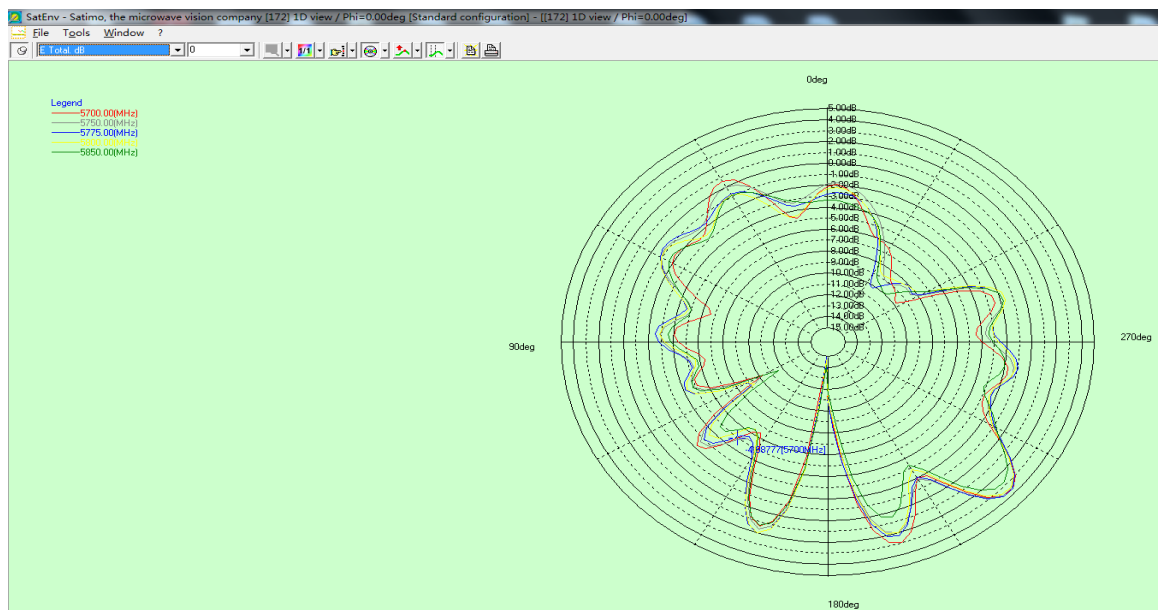


Theta=90

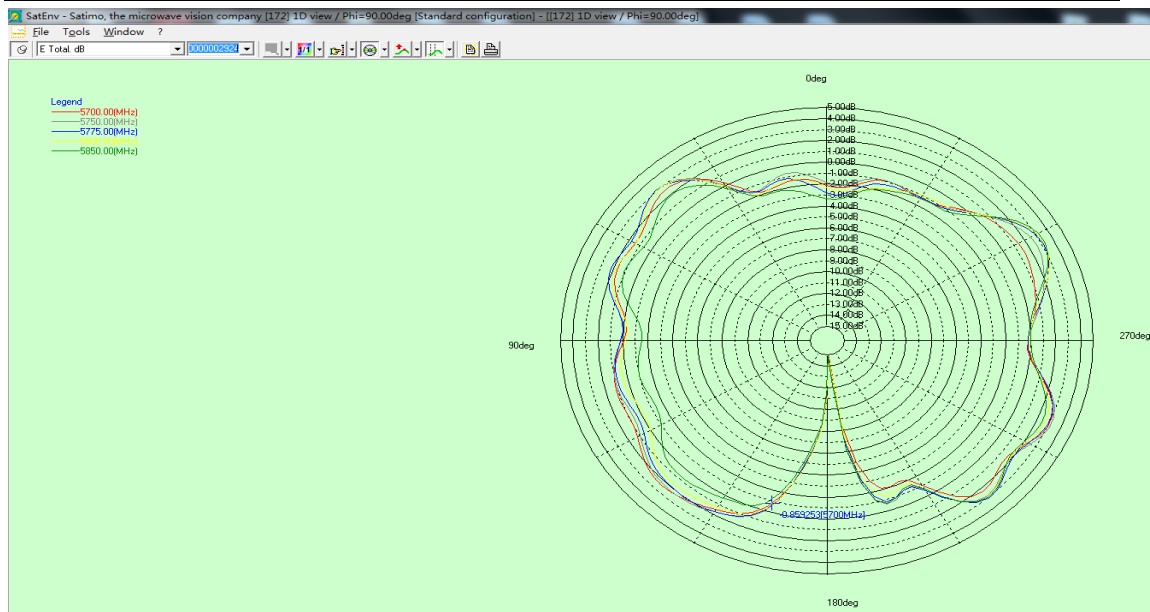


#### 4.4 ANT 0 antenna 5.8G radiation pattern

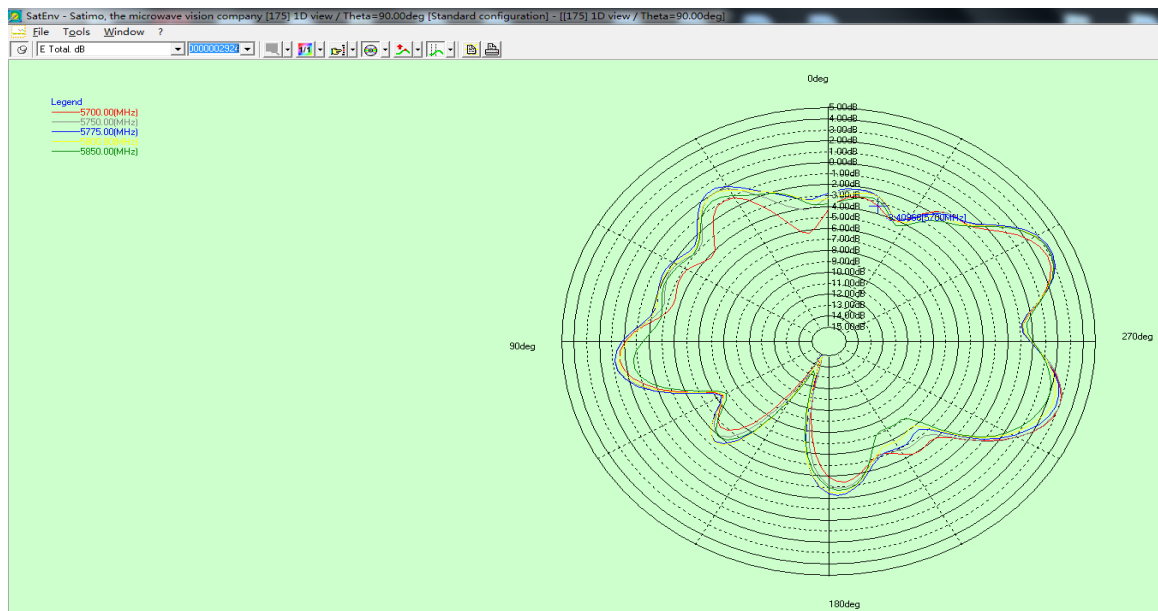
Phi=0



Phi=90

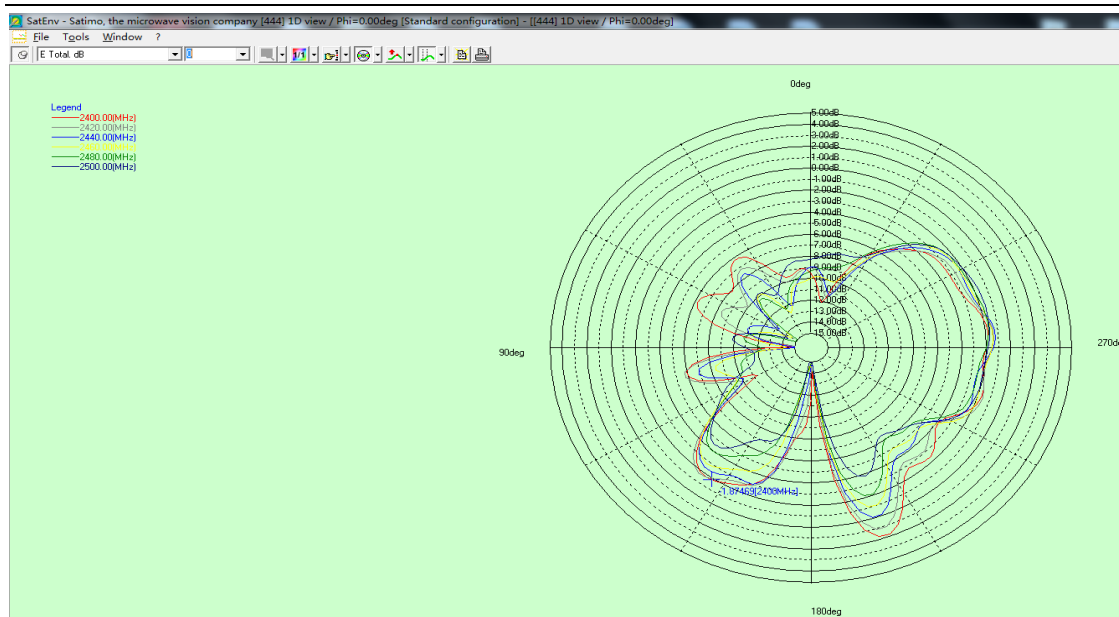


Theta=90

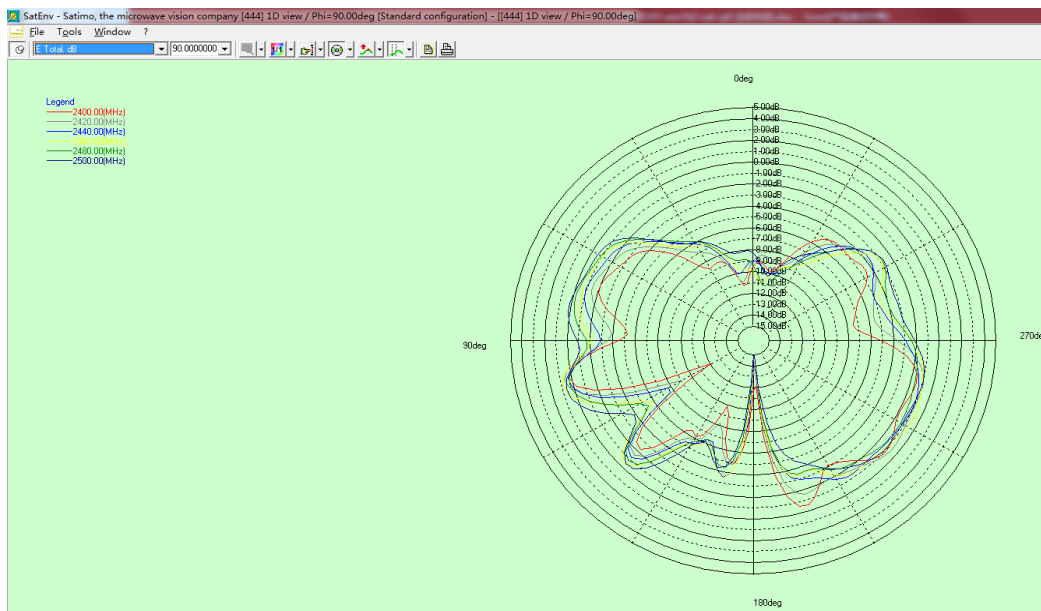


4.5 ANT 3 antenna 2.4G radiation pattern

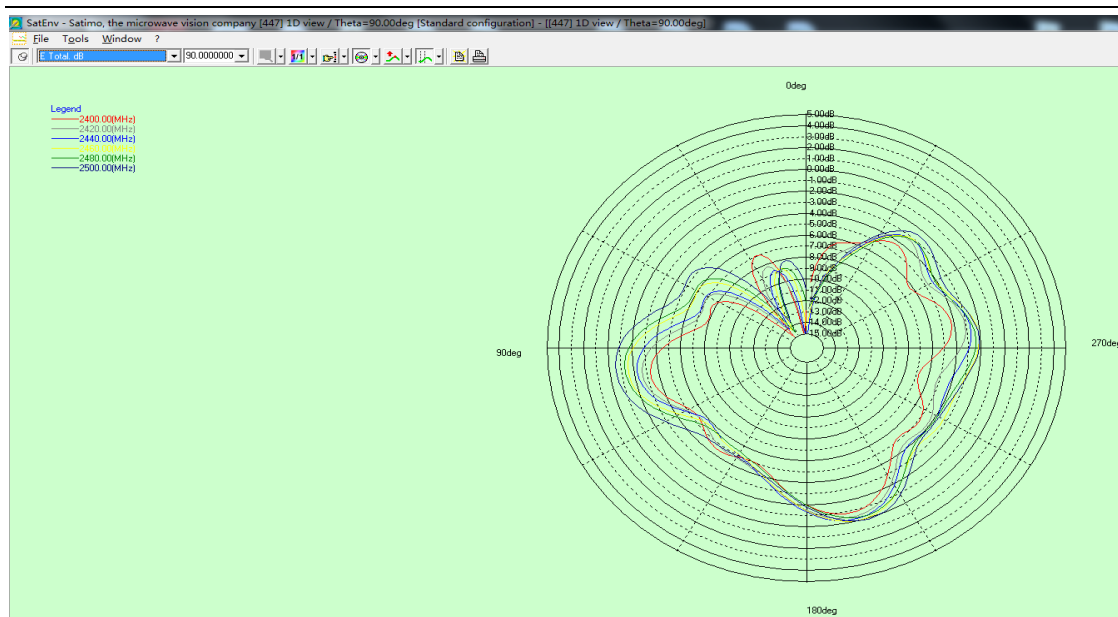
Phi=0



Phi=90

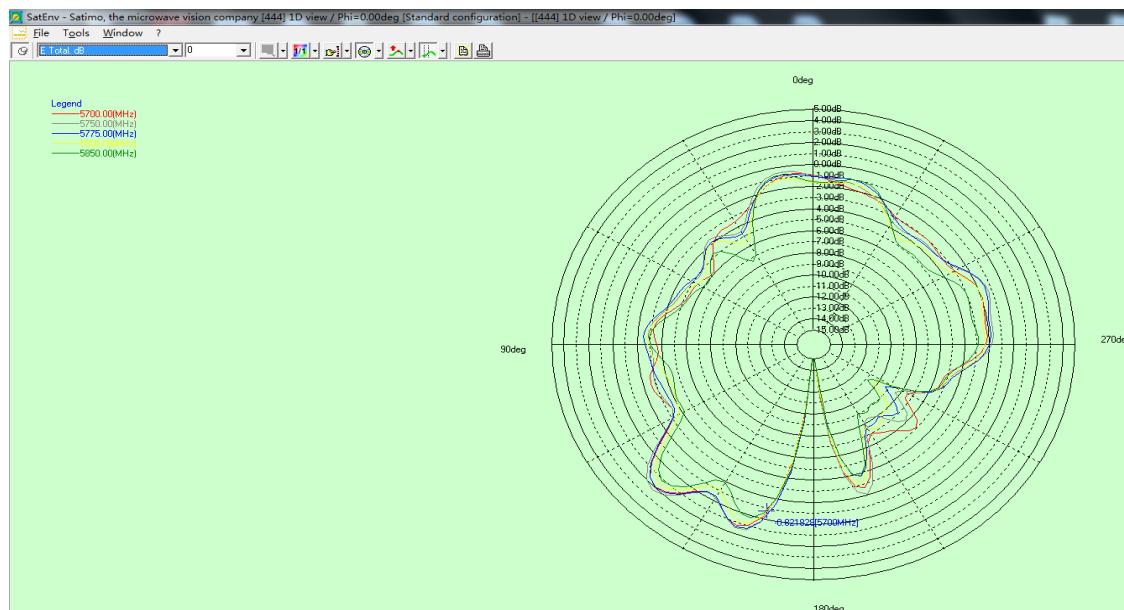


Theta=90

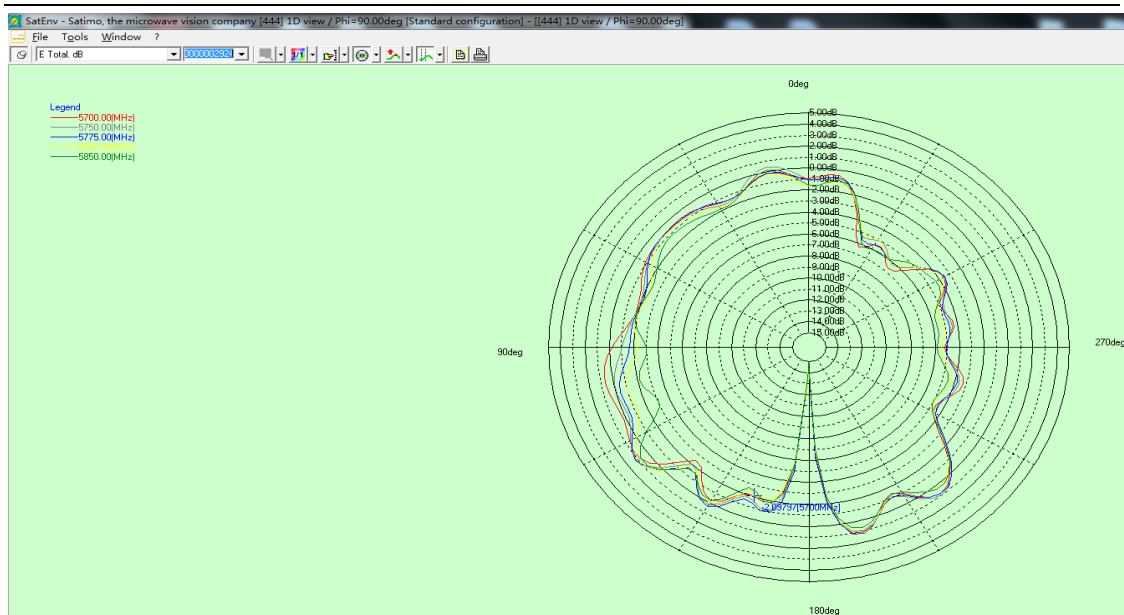


## 4.6 ANT 3 antenna 5.8G radiation pattern

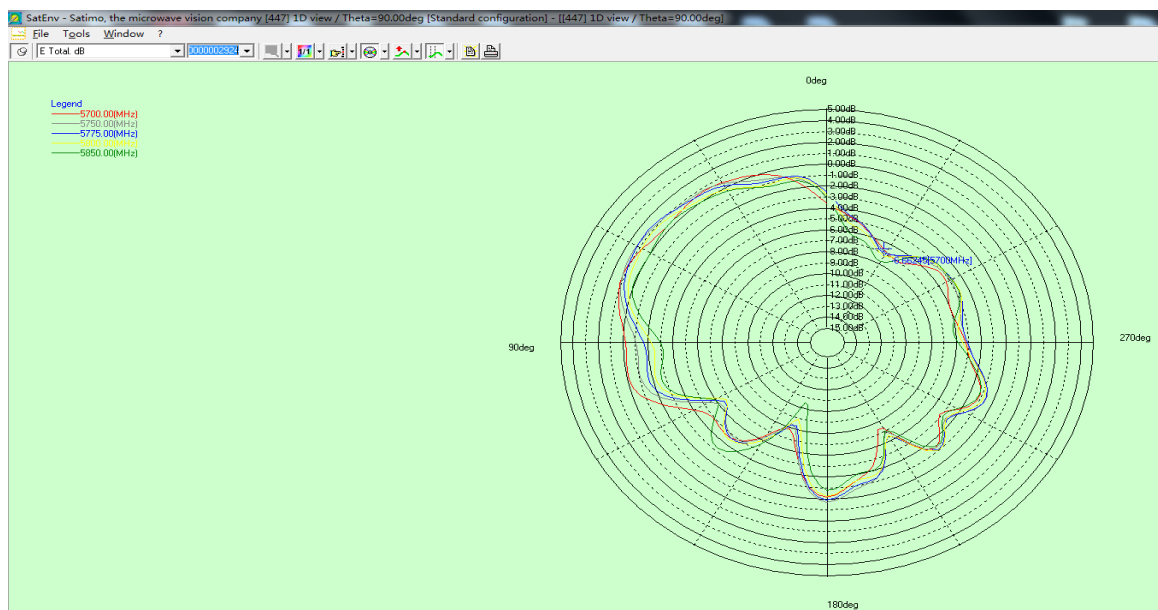
Phi=0



Phi=90



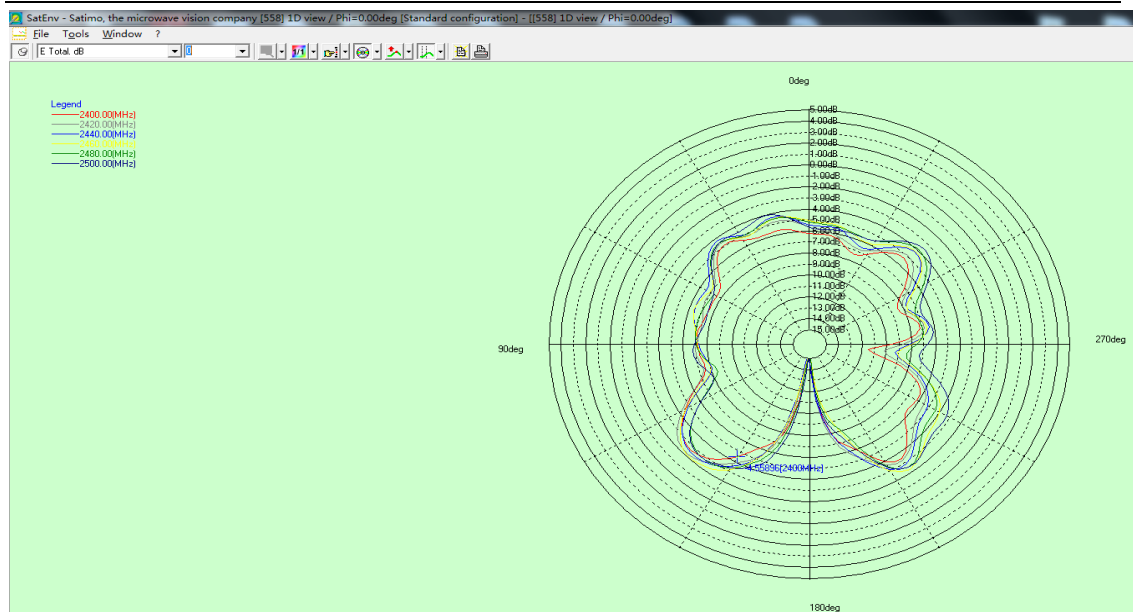
Theta=90



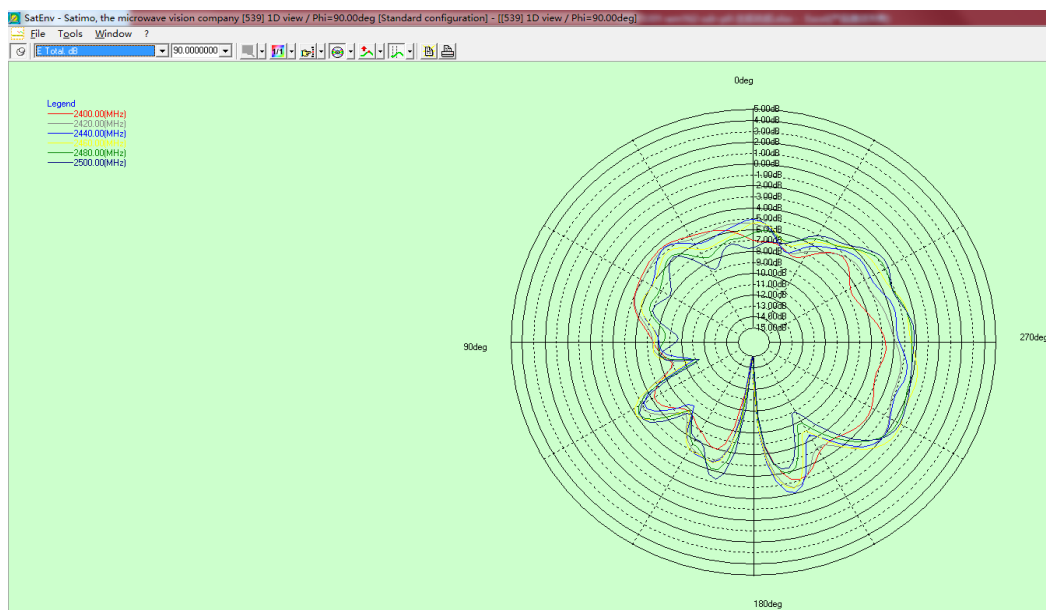
#### 4.7 ANT 1 antenna 2.4G radiation pattern

Phi=0

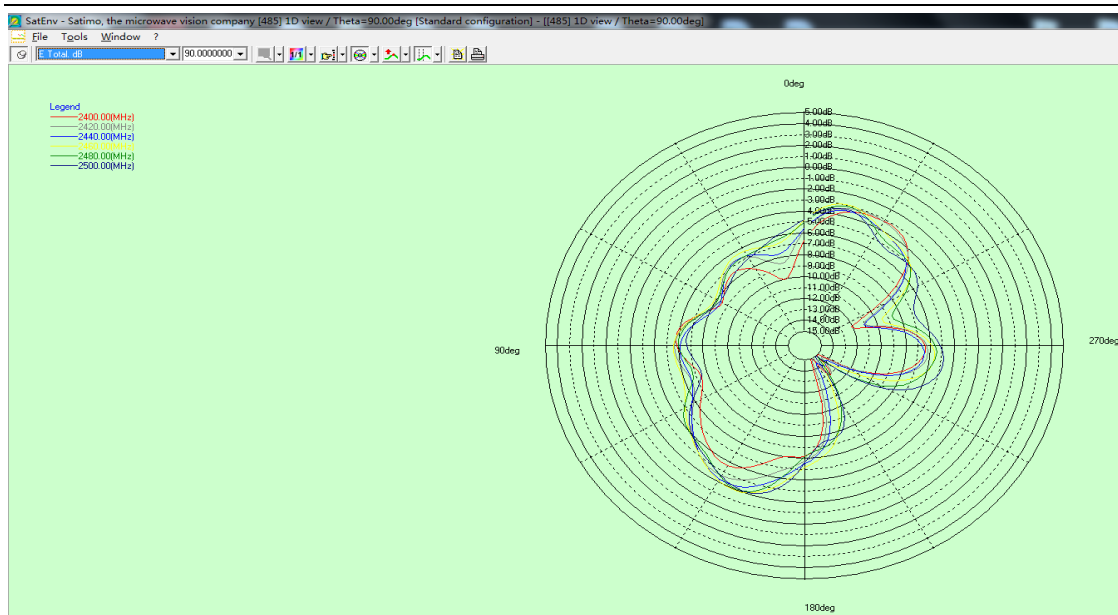




Phi=90

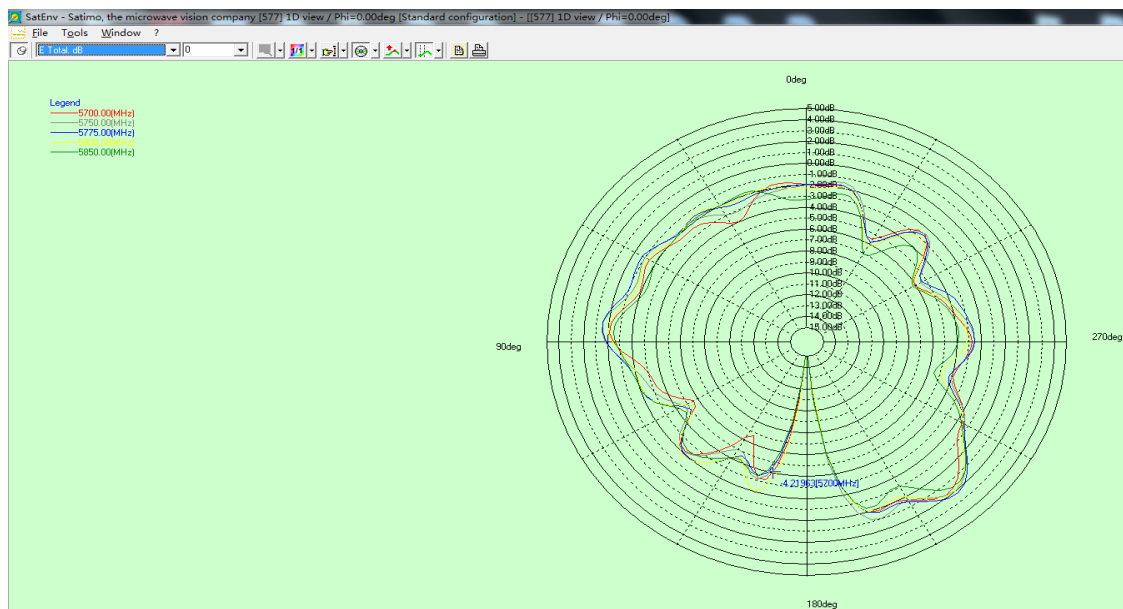


Theta=90

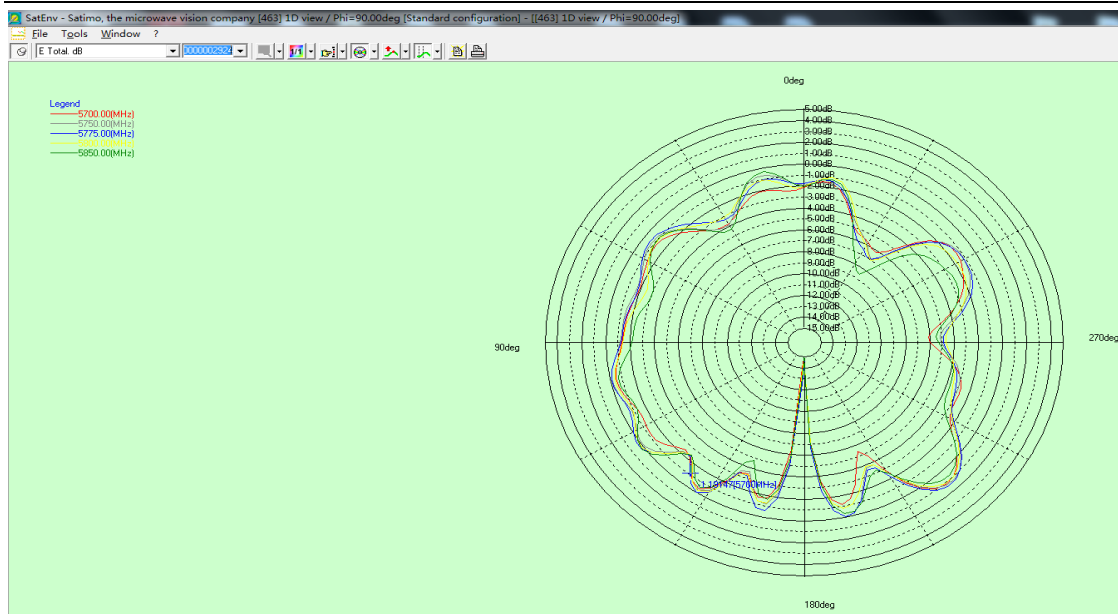


## 4.8 ANT 1 antenna 5.8G radiation pattern

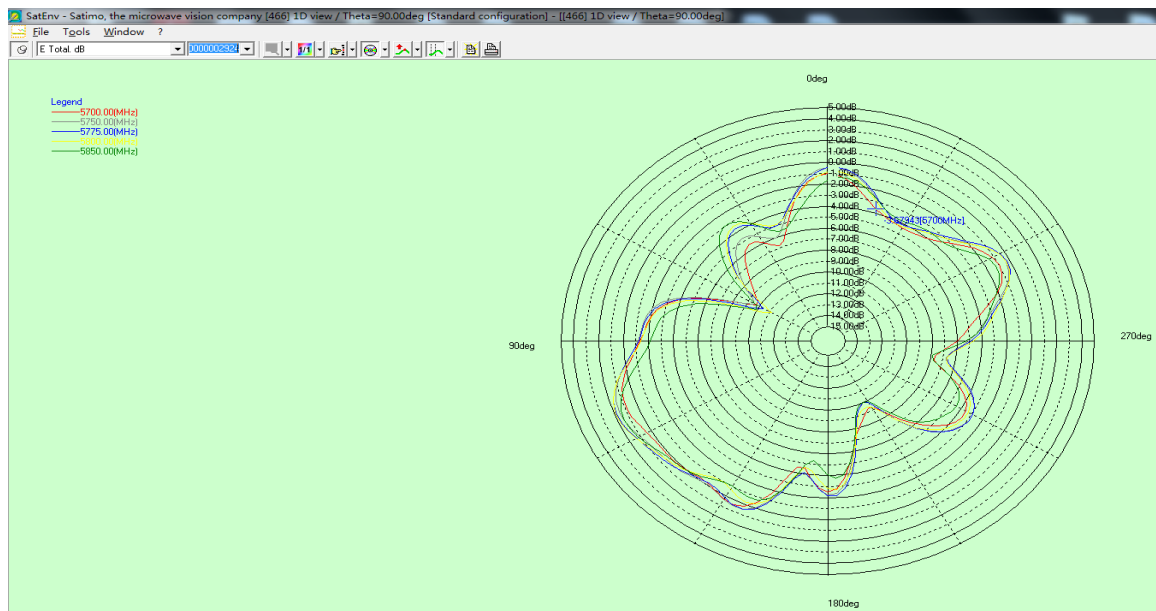
Phi=0



Phi=90

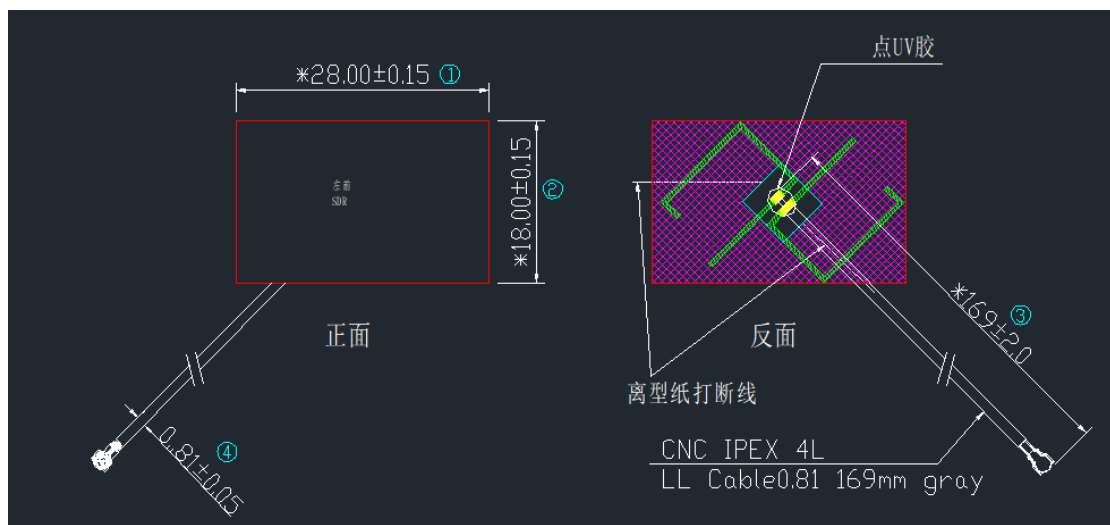


Theta=90



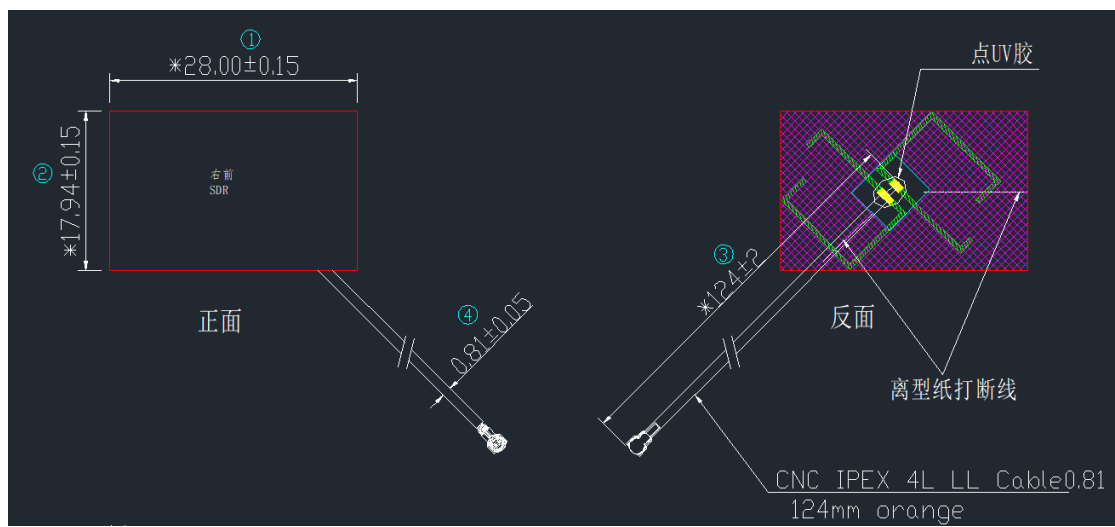
## 5、 Structure drawing

### 5.1 ANT 0 antenna 2D

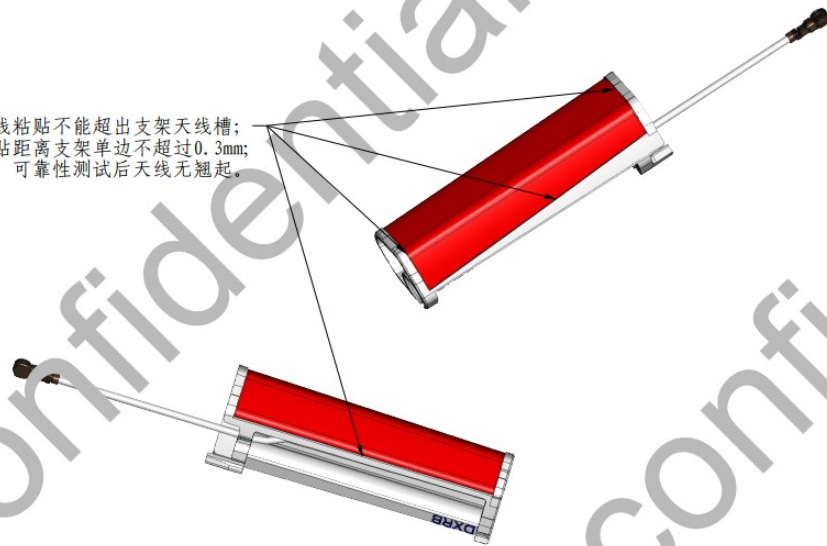


天线粘贴不能超出支架天线槽；  
 天线粘贴距离支架单边不超过0.3mm；  
 可靠性测试后天线无翘起。

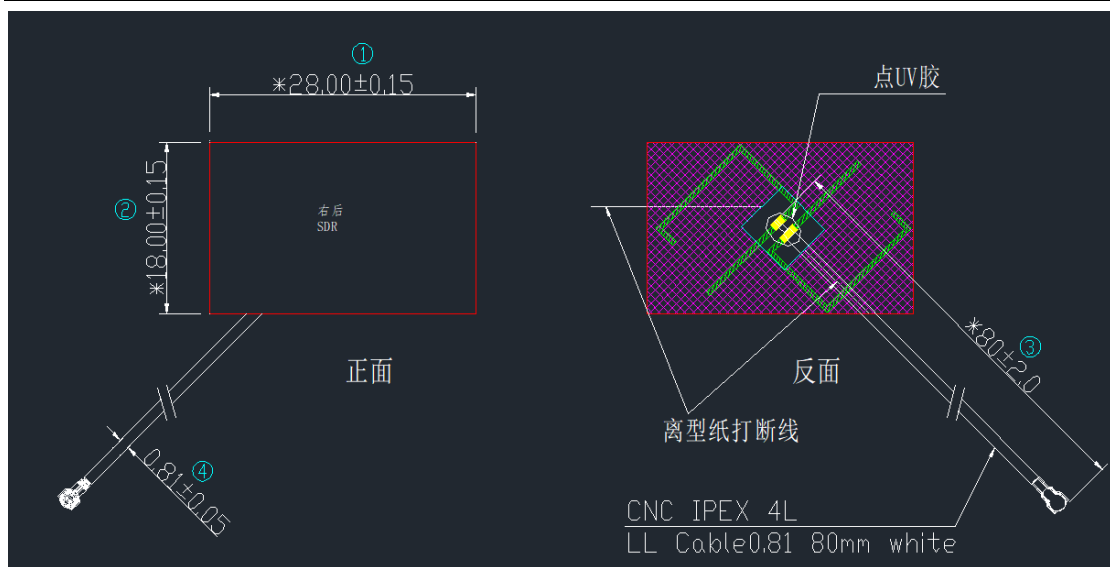
## 5.2 ANT 2 antenna 2D



天线粘贴不能超出支架天线槽；  
 天线粘贴距离支架单边不超过0.3mm；  
 可靠性测试后天线无翘起。

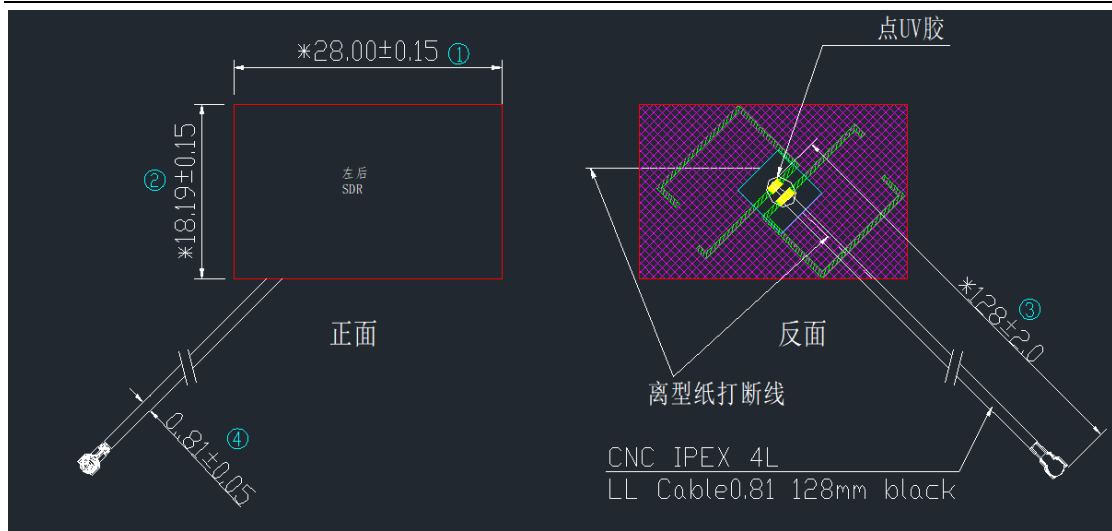


### 5.3 ANT 3 antenna 2D



天线粘贴不能超出支架天线槽；  
 天线粘贴距离支架单边不超过0.3mm；  
 可靠性测试后天线无翘起。

## 5.4 ANT 1 antenna 2D



天线粘贴不能超出支架天线槽；  
天线粘贴距离支架单边不超过0.3mm；  
可靠性测试后天线无翘起。

