
EA220 SDR & Bluetooth Antenna
Datasheet

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Revision history

Version	Change notes	Modifier	Date
V1.0		Weaver.peng	2023.06.05

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1.UAV SDR Antenna0

1.1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	左前机臂 SDR Antenna	Ant0
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	2.8dBi@2.4~2.483GHz 3.2dBi@5.15~5.25GHz 3.8dBi@5.725~5.875GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight	2g	

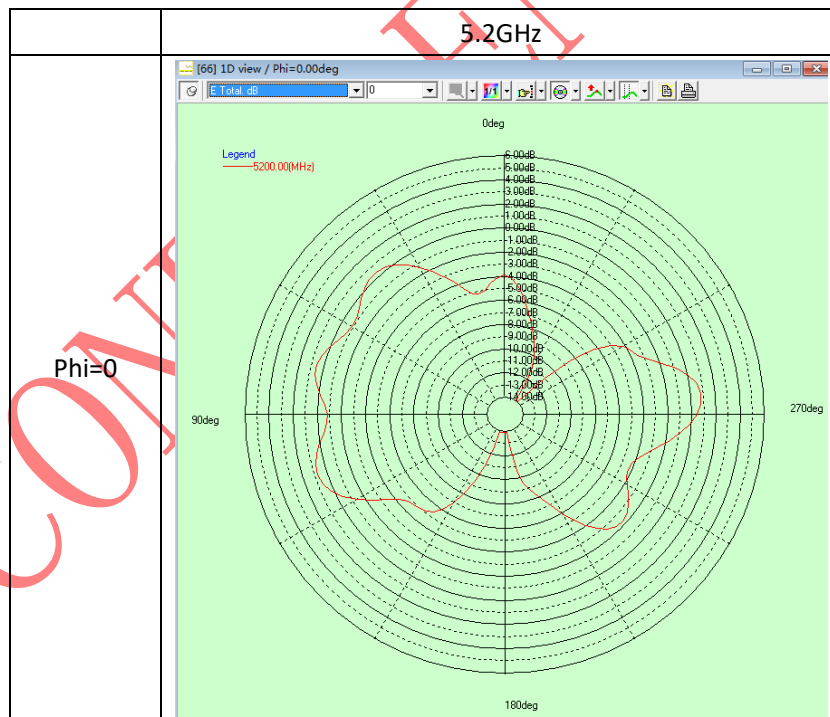


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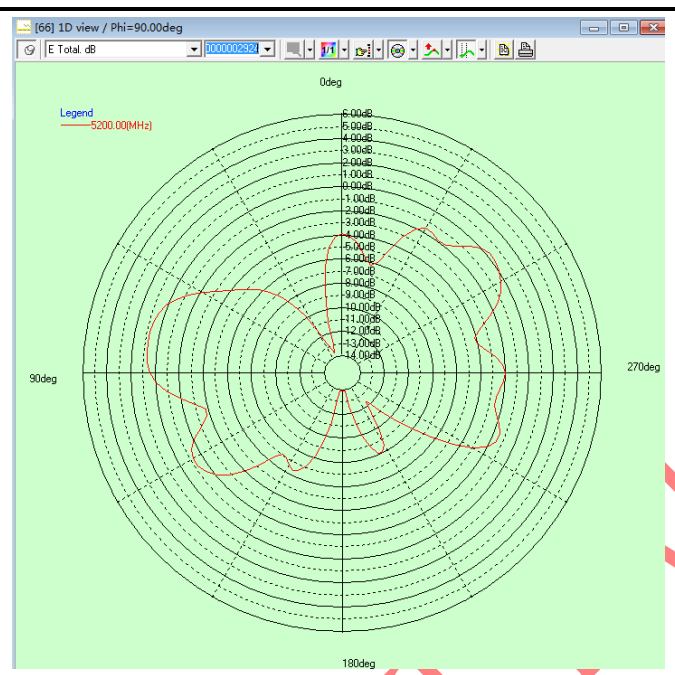
1.2 Gain

Frequency	E Total. dB (dB)- Ant0
2400MHz	2.6
2440MHz	2.7
2480MHz	2.7
2500MHz	2.8
5150MHz	2.9
5200MHz	3
5250MHz	3.2
5700MHz	3.5
5750MHz	3.3
5800MHz	3.5
5850MHz	3.6

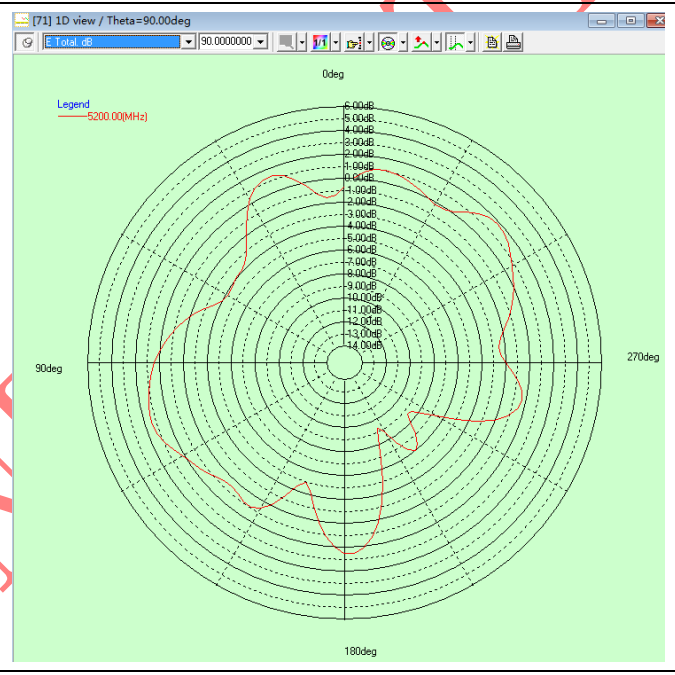
1.3 radiation pattern



Phi=90



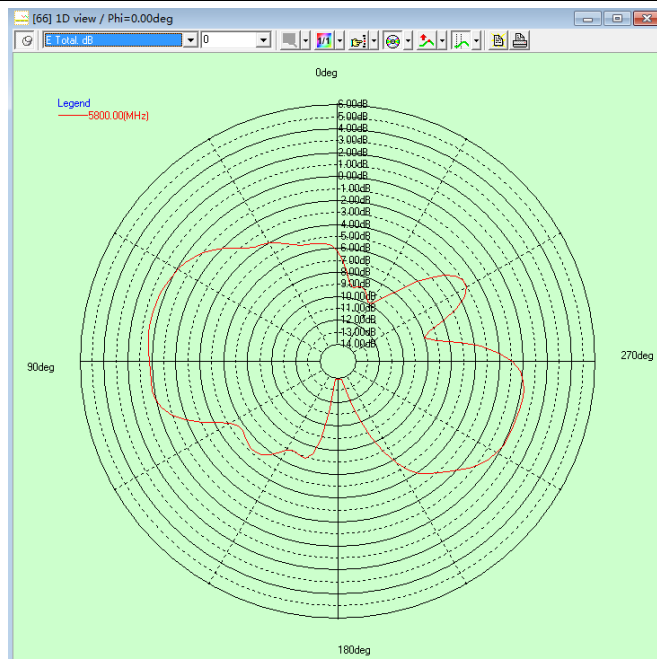
Theta90



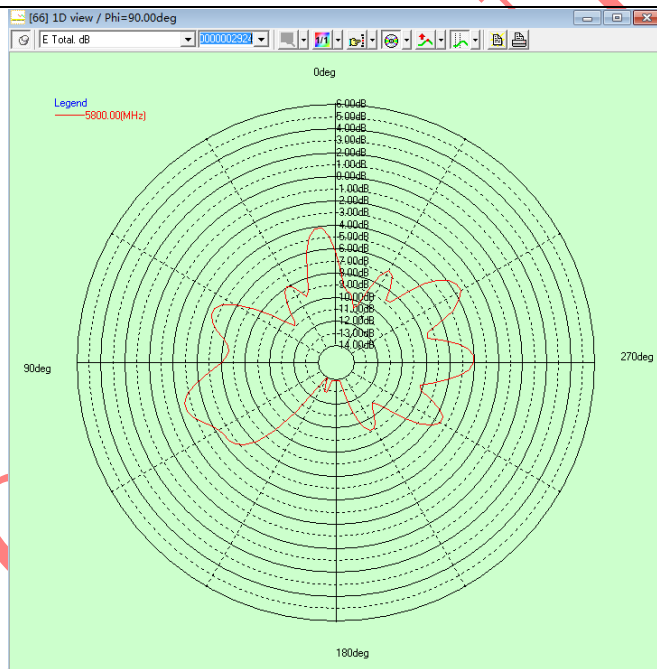
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5.8Hz

Phi=0

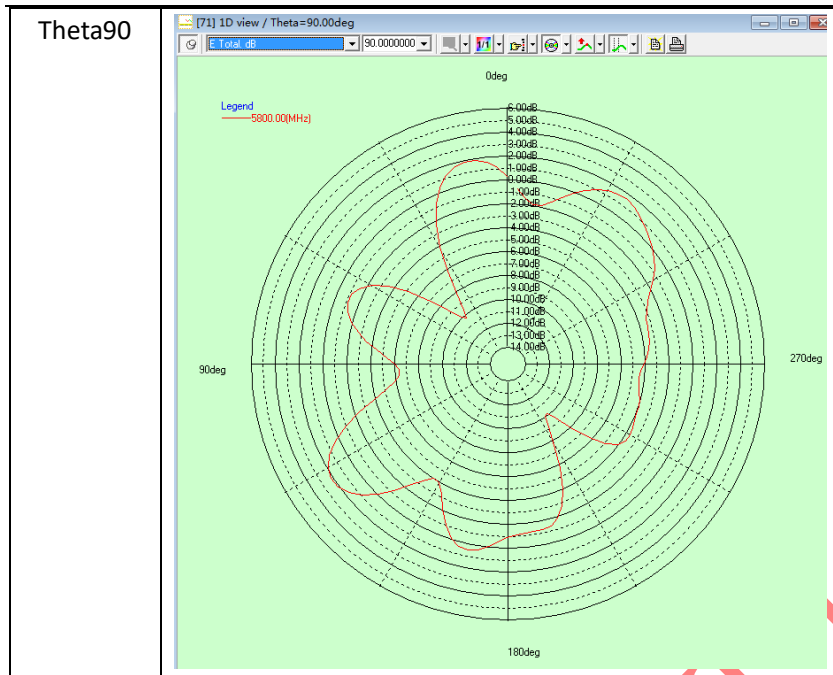


Phi=90



REAL

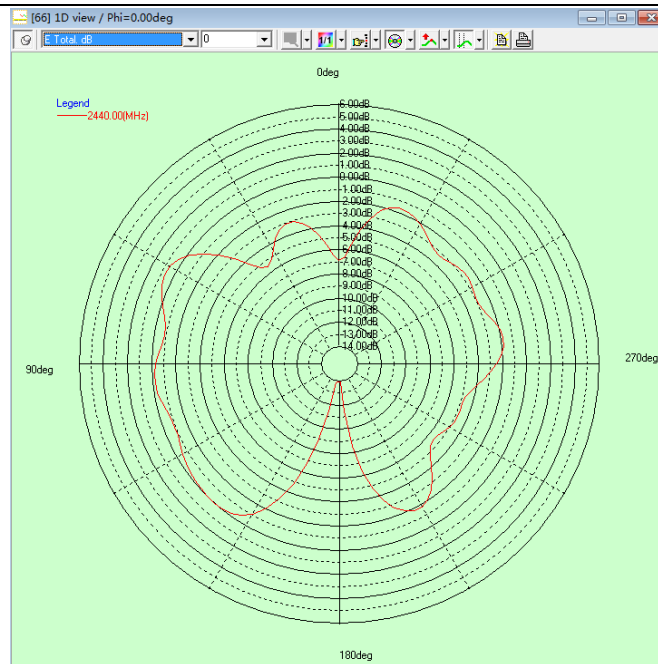
CS



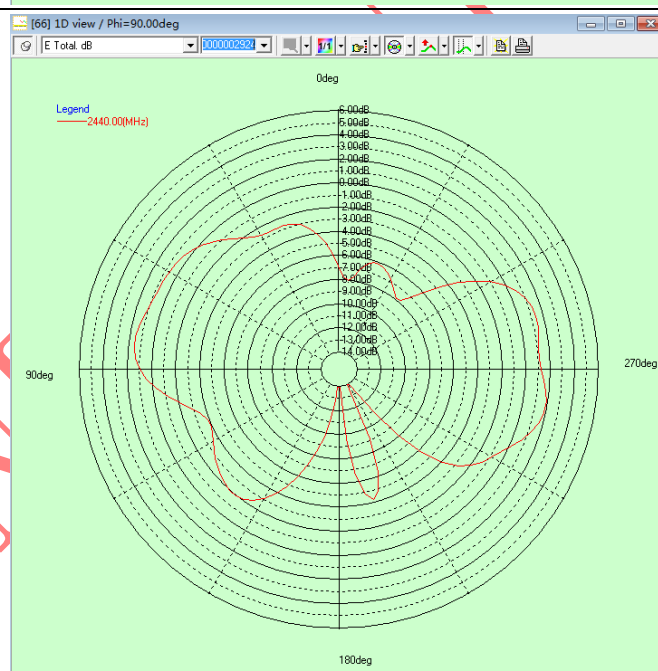
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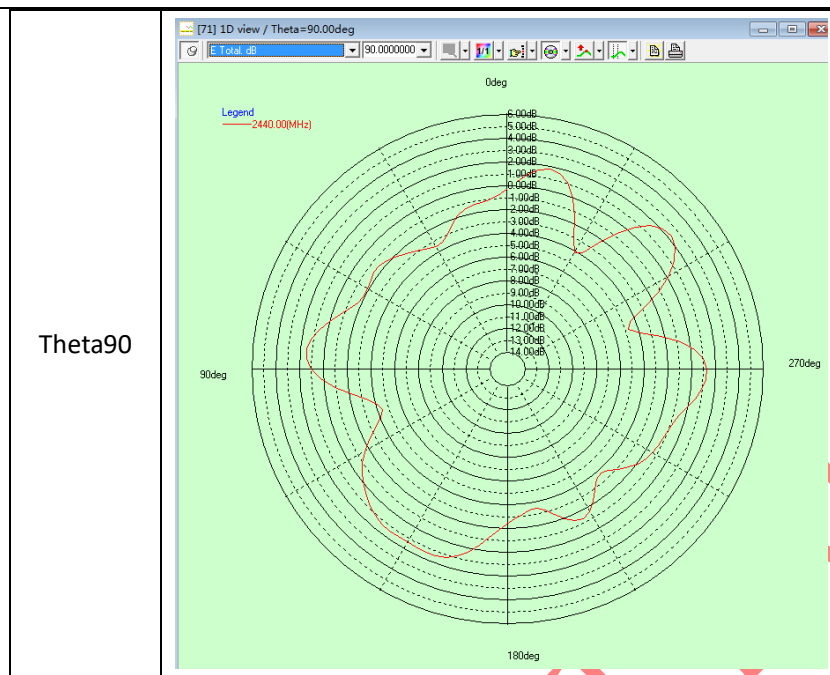
2.44GHz

Phi=0



Phi=90





1.4 Structure drawing

Ant0:

2.UAV SDR Antenna1

2.1 Basic Specifications

No.	Specification	Descriptions	Notes

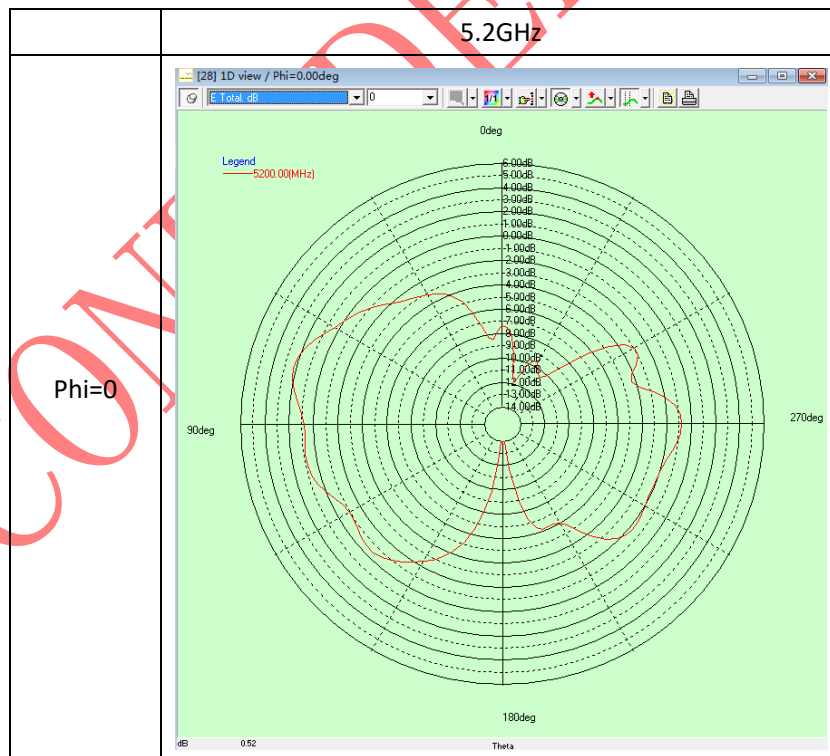


1	Antenna Name	右前机臂 SDR Antenna	Ant1
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	3.3dBi@2.4~2.483GHz 4.0dBi@5.15~5.25GHz 4.4dBi@5.725~5.875GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight	2g	

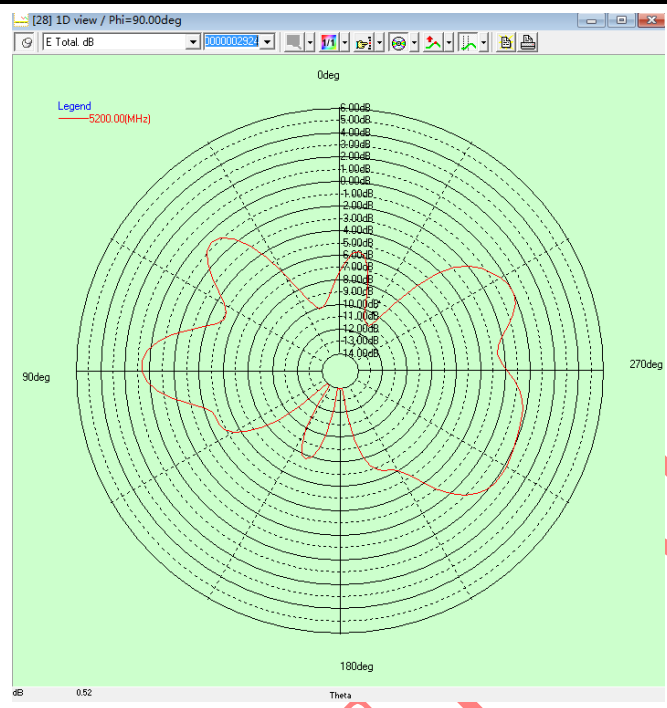
2.2 Gain

Frequency	E Total. dB(dB)- Ant1
2400MHz	3.0
2440MHz	2.8
2480MHz	3.1
2500MHz	2.9
5150MHz	3.3
5200MHz	3.5
5250MHz	3.8
5700MHz	3.8
5750MHz	3.8
5800MHz	4.0
5850MHz	4.1

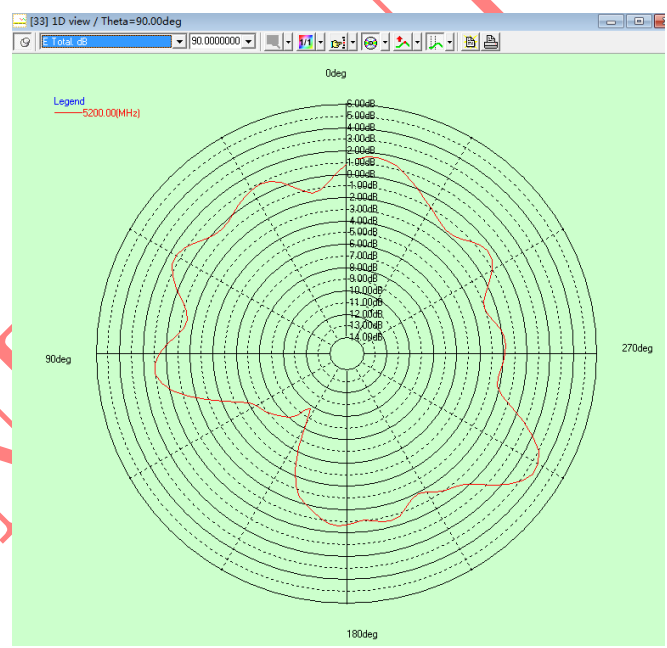
2.3 radiation pattern



Phi=90

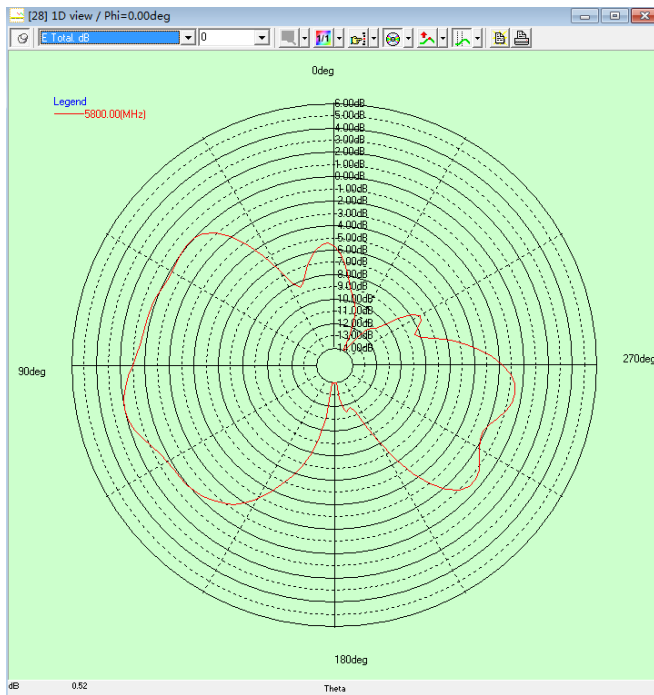


Theta90

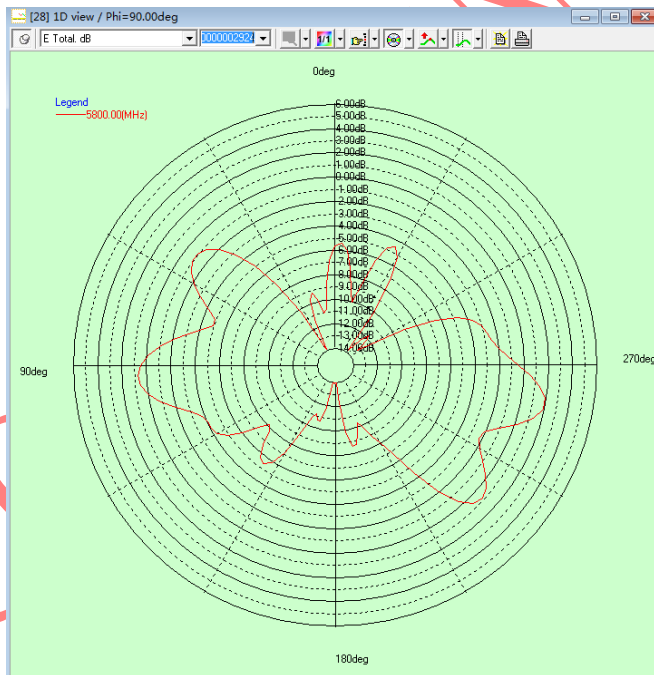


5.8Hz

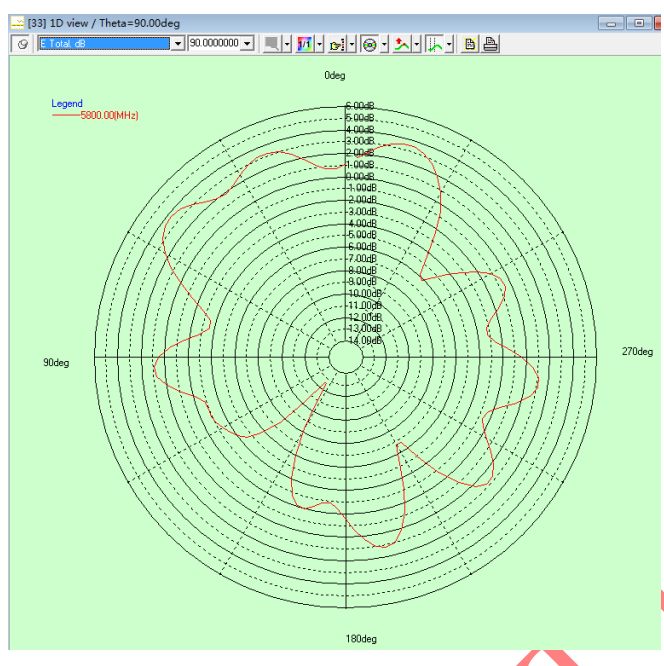
Phi=0



Phi=90



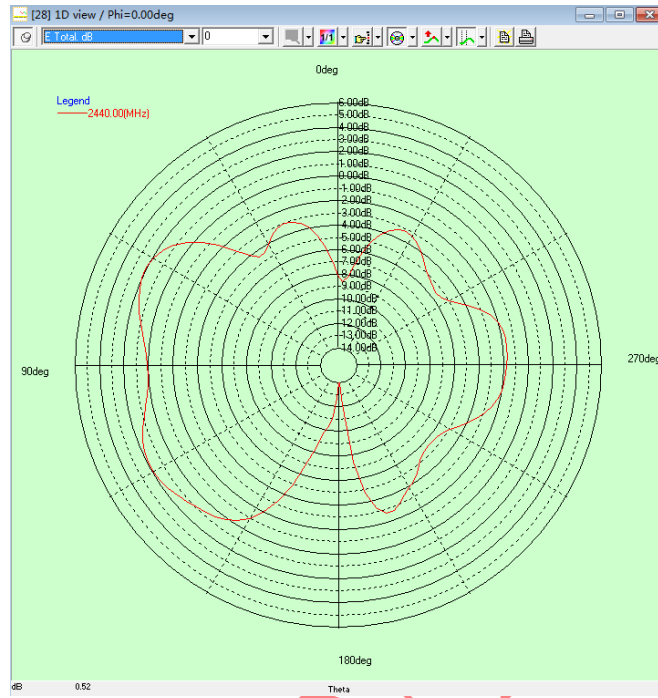
Theta90



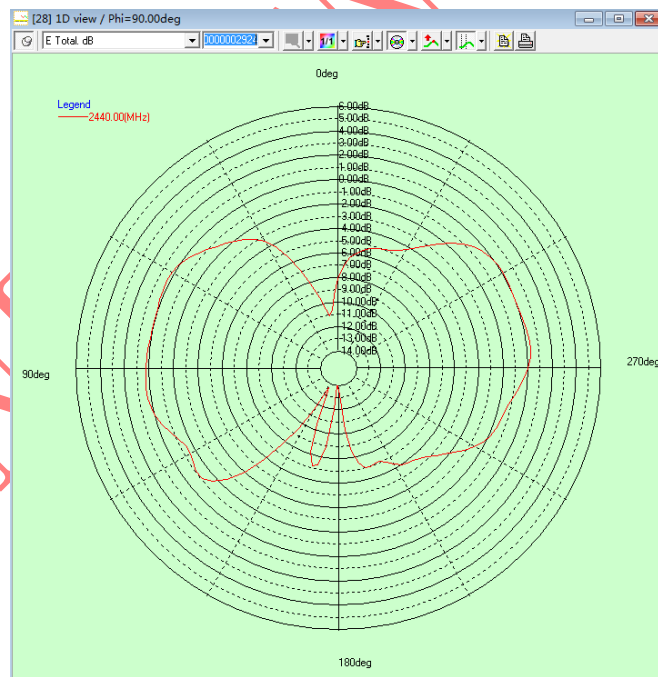
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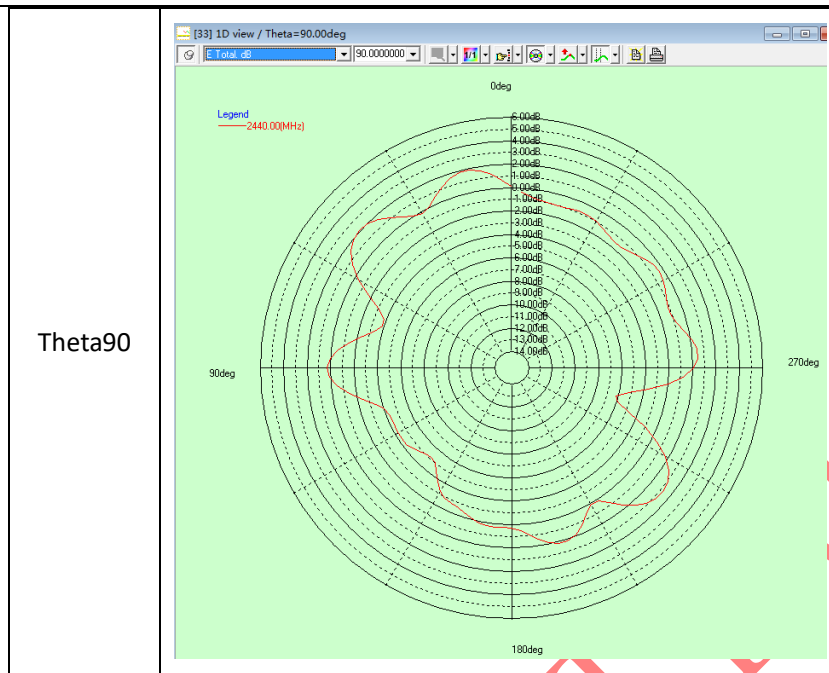
2.44GHz

Phi=0



Phi=90





2.4 Structure drawing

Ant1:

3.UAV SDR Antenna2

3.1 Basic Specifications

No.	Specification	Descriptions	Notes



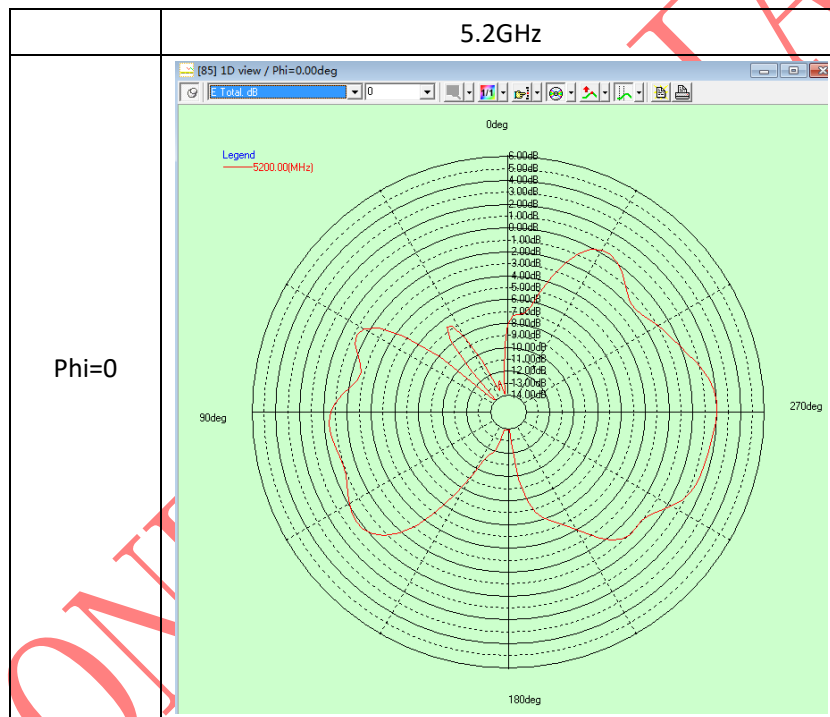
1	Antenna Name	右后机臂 SDR Antenna	Ant 2
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	2.9dBi@2.4~2.483GHz 4.5dBi@5.15~5.25GHz 4.5dBi@5.725~5.875GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	1.8g	

3.2 Gain

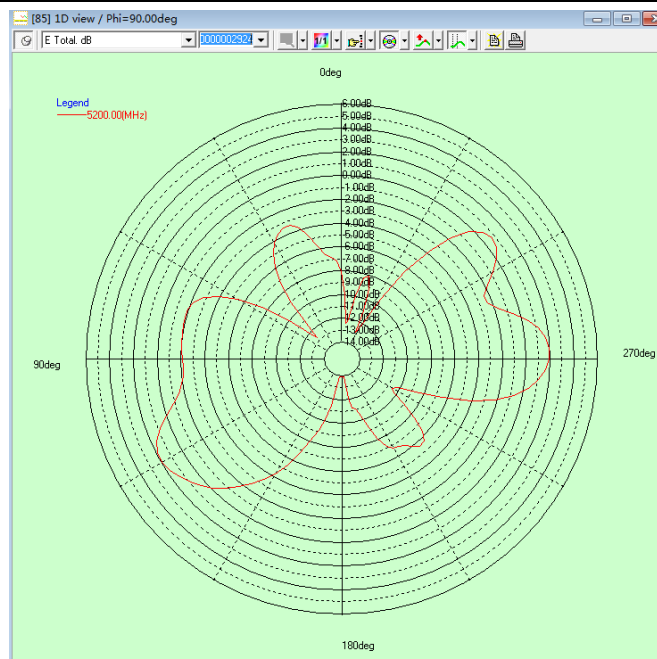
Frequency	E Total. dB(dB)- Ant2
2400MHz	2.5
2440MHz	2.8
2480MHz	2.5

2500MHz	2.7
5150MHz	4.5
5200MHz	4.3
5250MHz	4.4
5700MHz	4.0
5750MHz	4.3
5800MHz	4.5
5850MHz	4.4

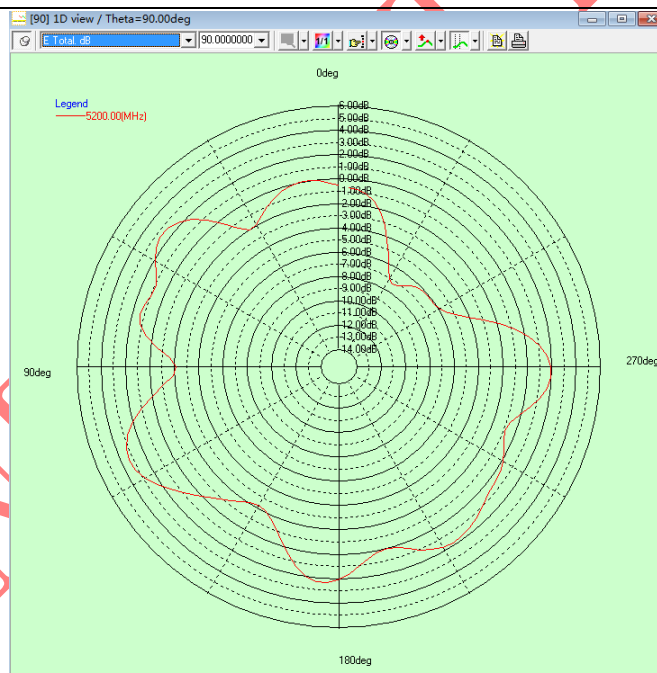
3.3 radiation pattern



Phi=90

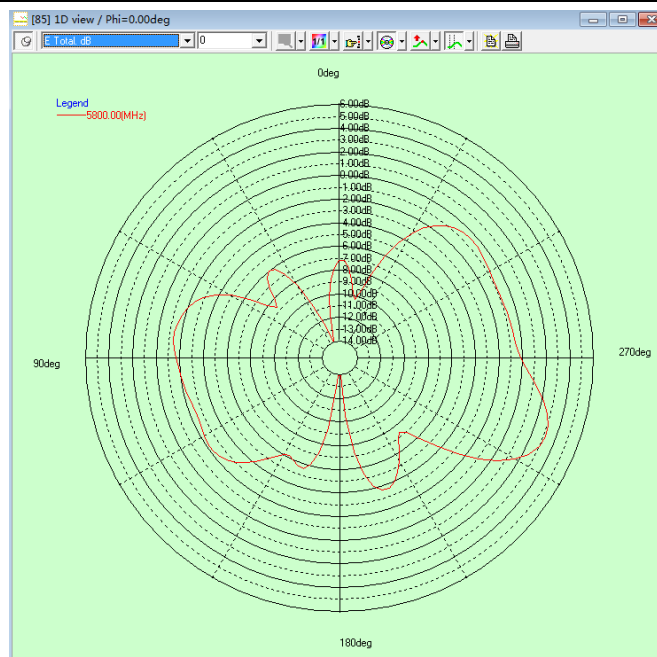


Theta=90

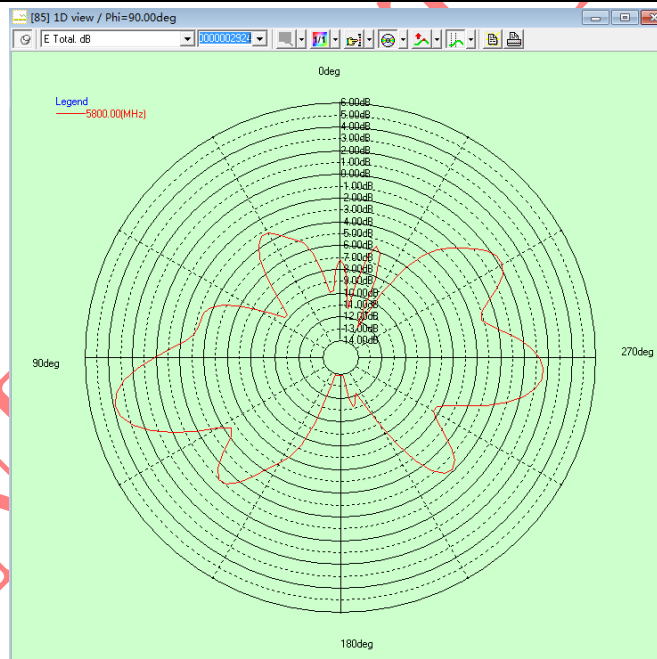


5.8GHz

Phi=0

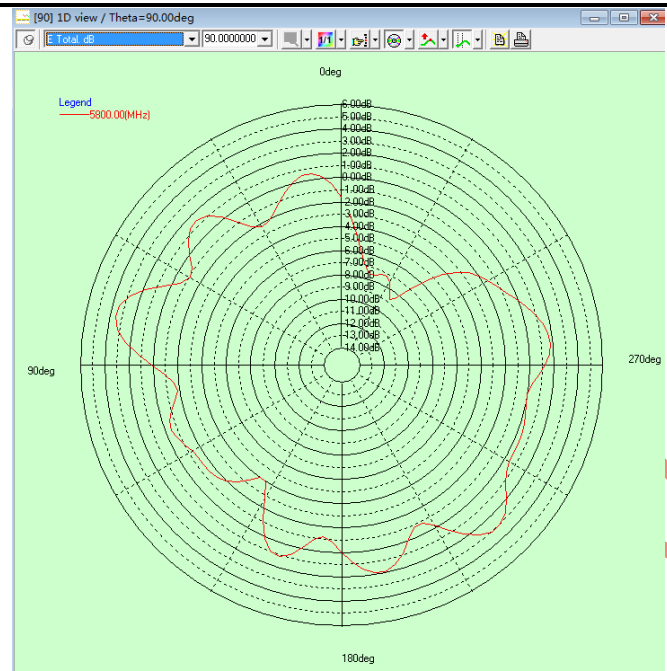


Phi=90



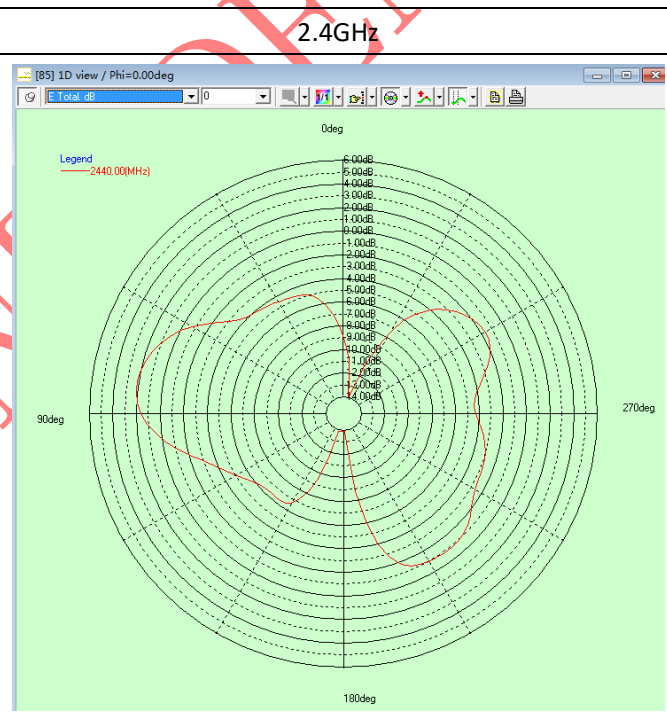
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Theta=90

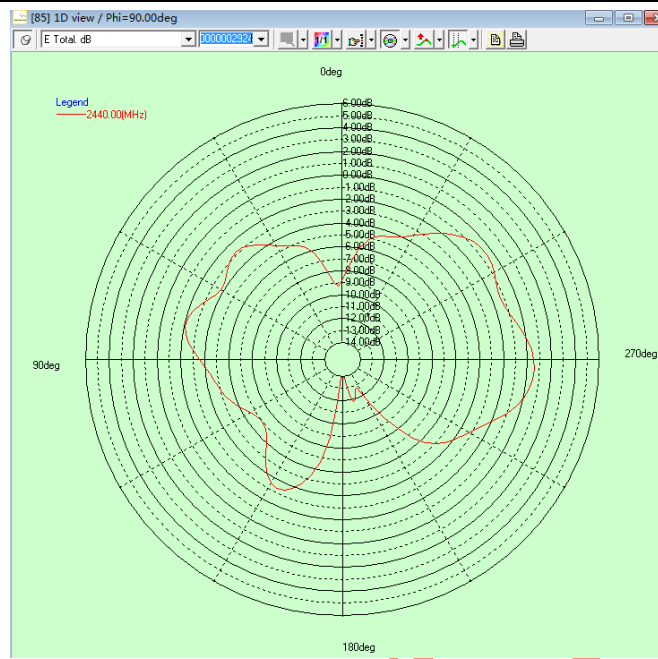


2.4GHz

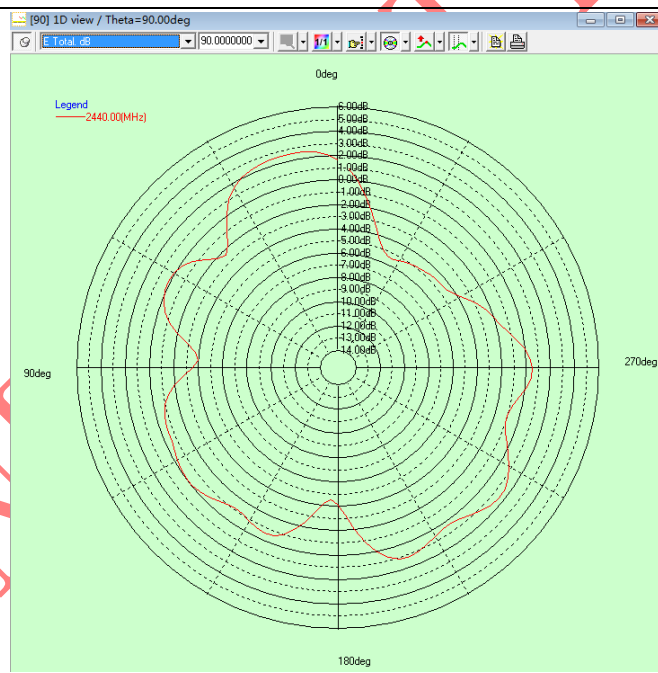
Phi=0



Phi=90



Theta=90



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3.4 Structure drawing

4.UAV SDR Antenna3

4.1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	左后机臂 SDR Antenna	Ant 3
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省昆山市 玉山镇紫竹 路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	



6	Gain (MAX)	3.3dBi@2.4~2.483GHz 4.5dBi@5.15~5.25GHz 4.0dBi@5.725~5.875GHz	
7	Efficiency	$\geq 40\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	1.8g	

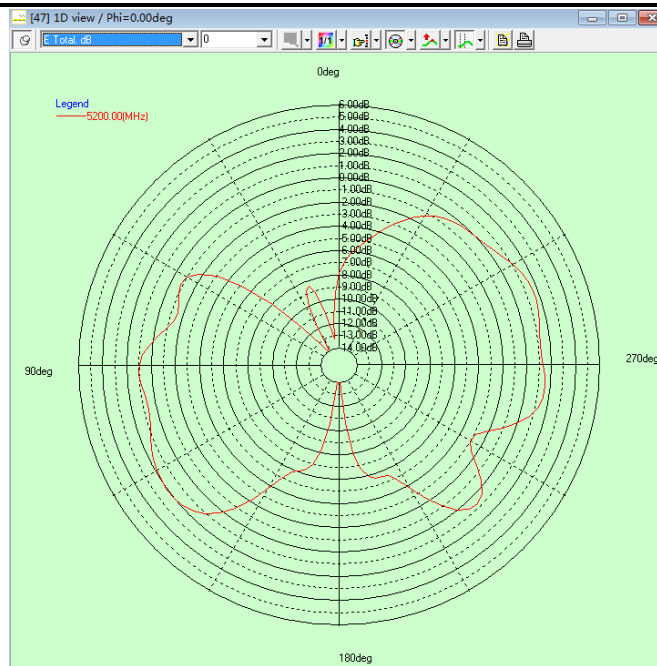
4.2 Gain

Frequency	E Total. dB(dB)- Ant2
2400MHz	3.0
2440MHz	2.8
2480MHz	3.0
2500MHz	2.9
5150MHz	4.5
5200MHz	4.5
5250MHz	4.5
5700MHz	4.0
5750MHz	3.8
5800MHz	3.6
5850MHz	3.6

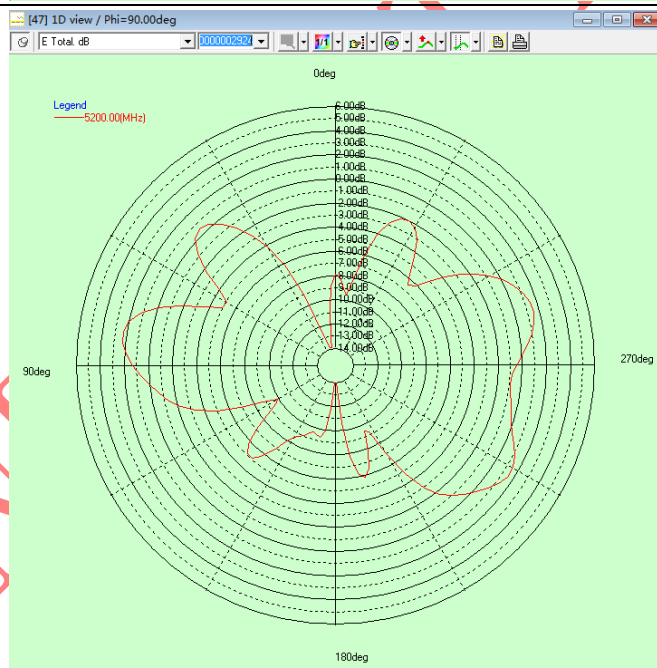
4.3 radiation pattern

	5.2GHz
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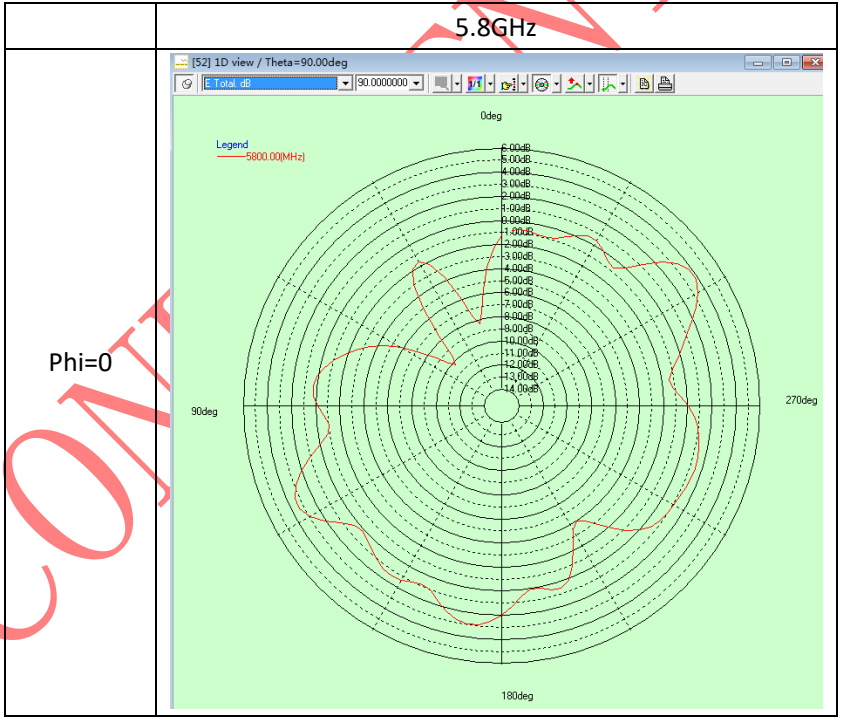
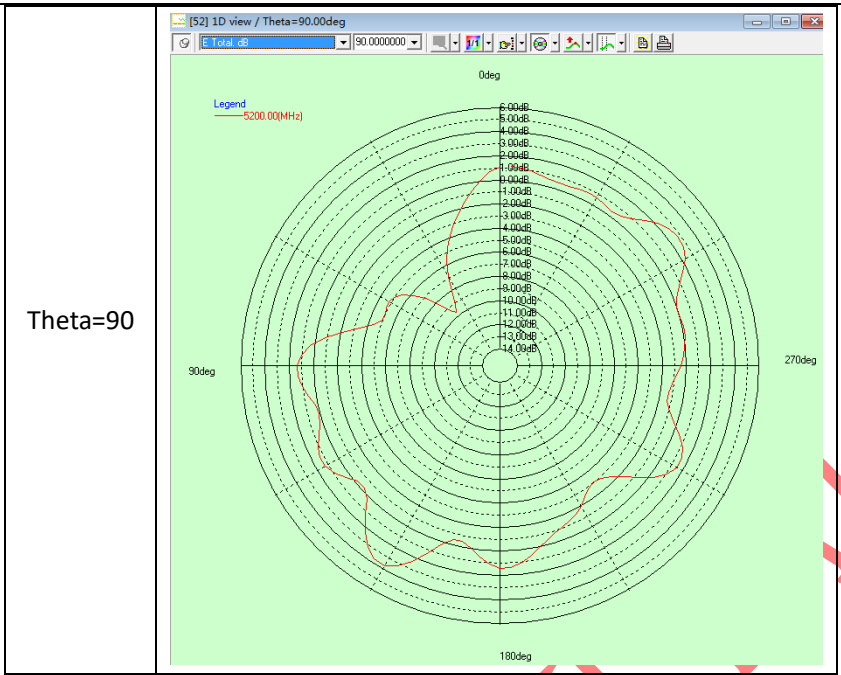
Phi=0



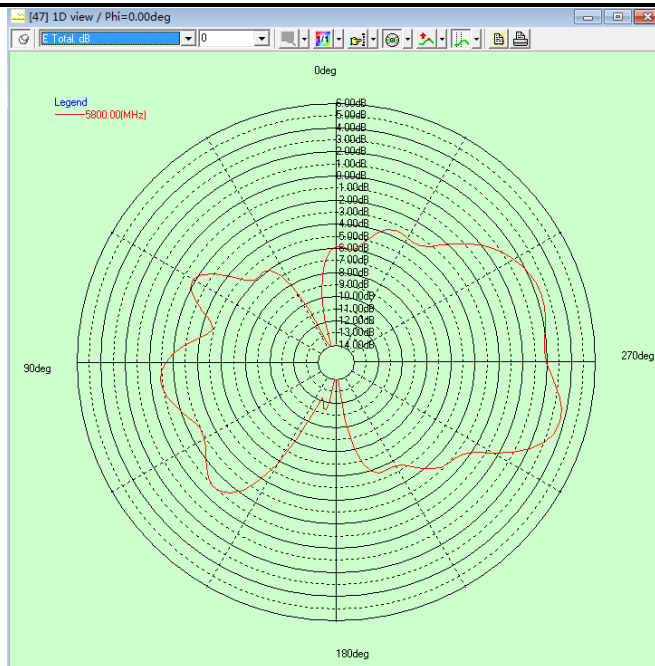
Phi=90



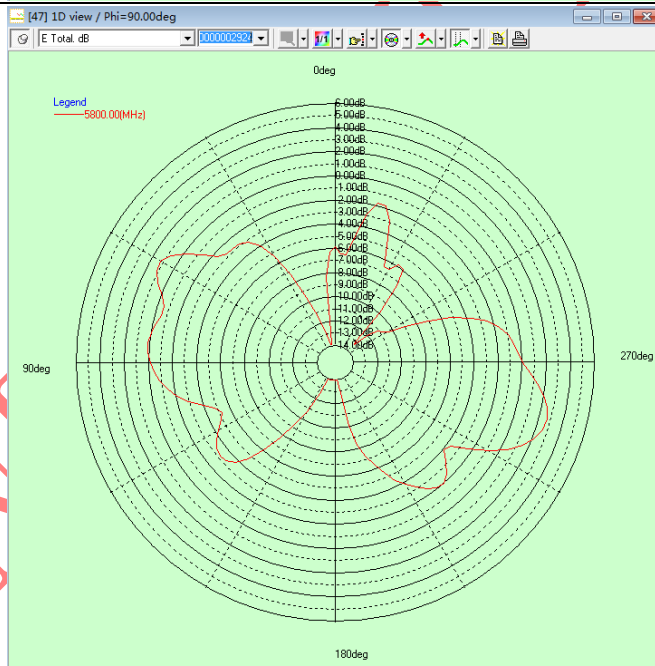
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Phi=90

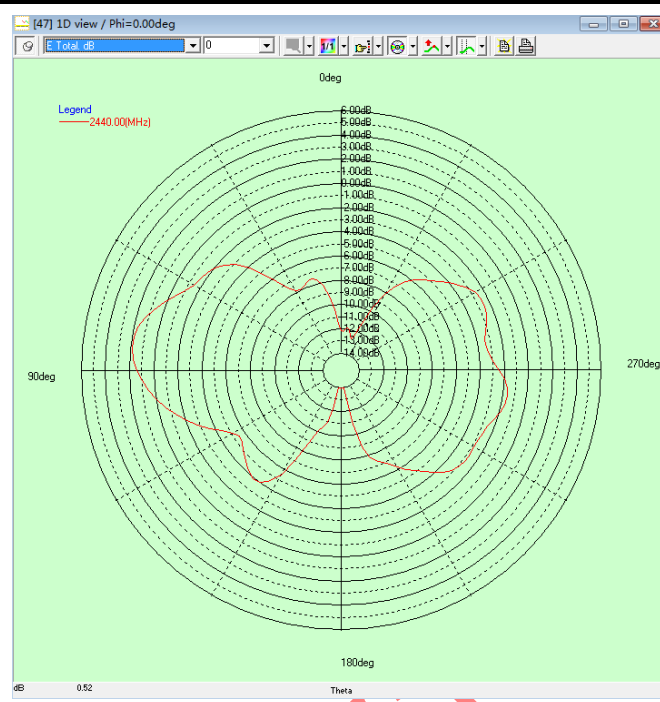


Theta=90

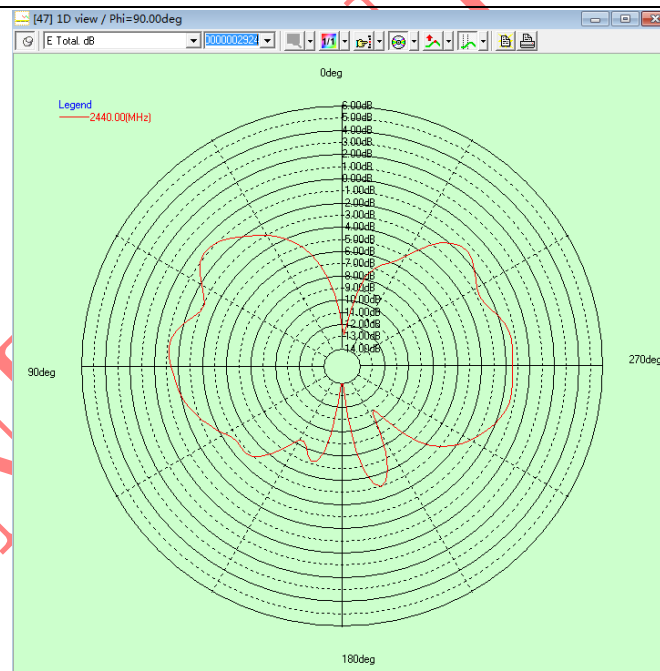


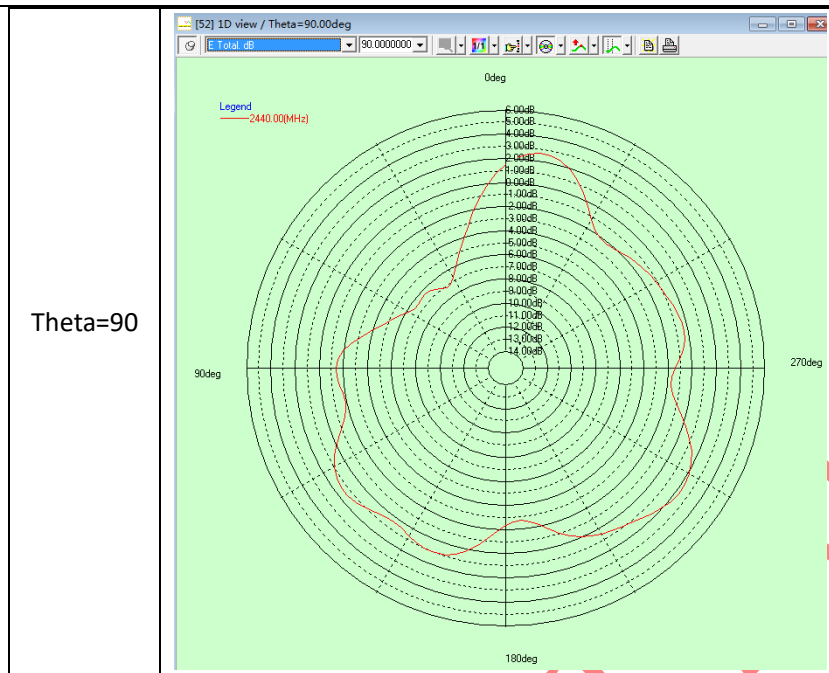
2.4GHz

Phi=0



Phi=90





4.4 Structure drawing

5.UAV Bluetooth Antenna

5.1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	飞机蓝牙天线	蓝牙



2	Manufacturer	禾邦电子（苏州）有限公司	Address: 中国江苏省苏州市相城区春秋路5号
3	Operation Frequency	2.4~2.483GHz;	
4	Connector Type	IpeXI	
5	Impedance	50ohm	
6	Gain (MAX)	3.3dBi@2.4~2.483GHz	
7	Efficiency	$\geq 40\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	0.6g	

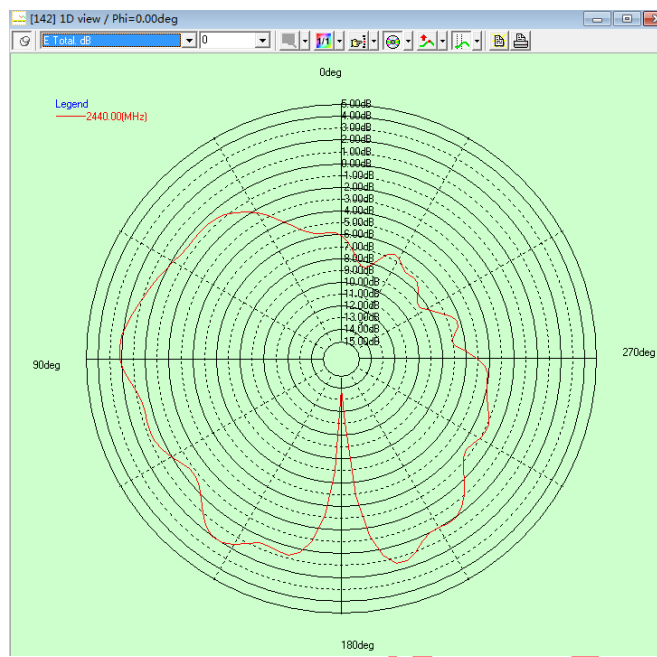
5.2 Gain

Frequency	E Total. dB(dBm)
2400MHz	2.6
2440MHz	2.8
2480MHz	3.0
2500MHz	2.8

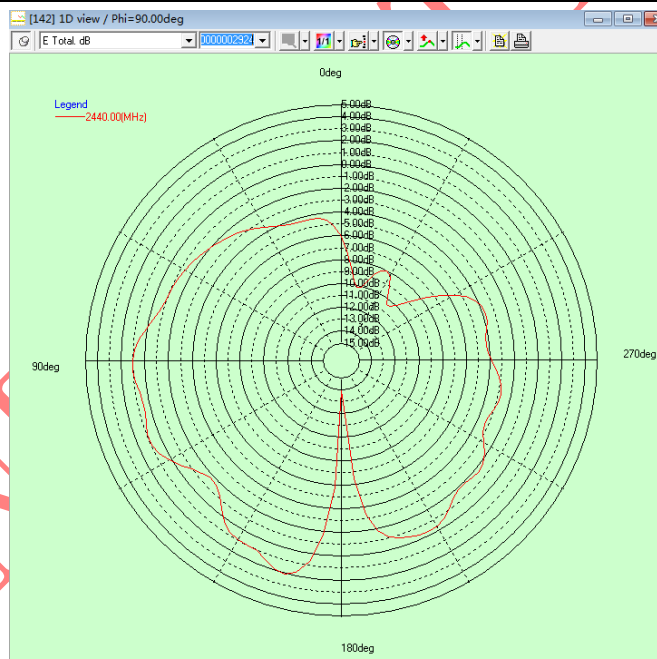
5.3 radiation pattern

	2.4GHz
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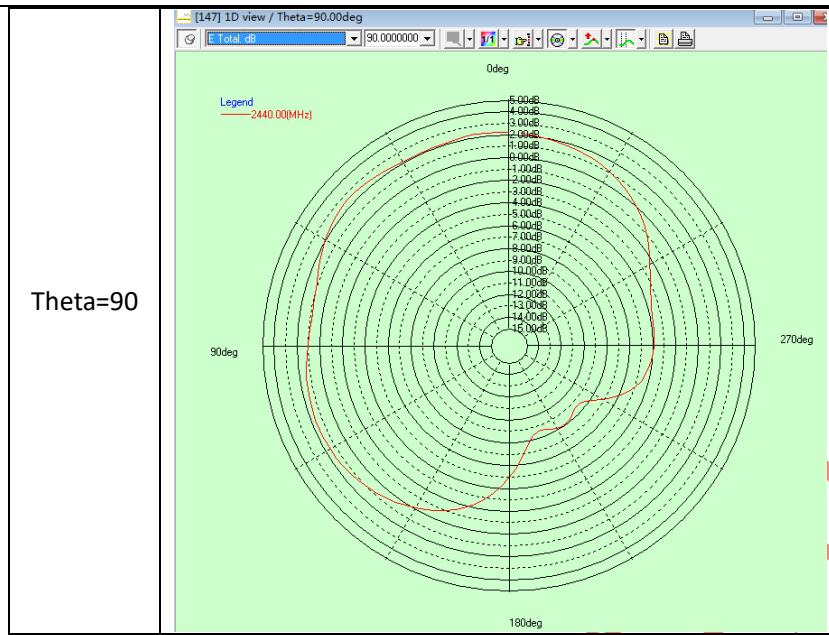
Phi=0



Phi=90



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5.4 Structure drawing

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