

承 认 书

APPROVAL SHEET

Manufacturer: Shenzhen Zhuochuang Vision Technology Co., Ltd

产 品 名 称

PRODUCT NAME: W83 ANT

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C250W3D2518A REV: B

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Yongxin. Lu 	
APPROVED BY:	工程专用章 Changxing. Liu	
DATE:	2022/03/31	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongxin. Lu	2021-03-31

Content

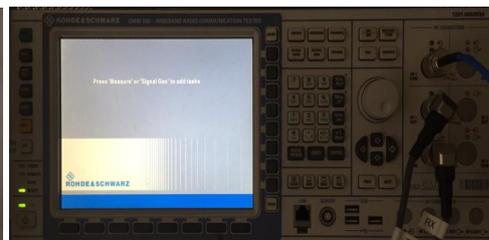
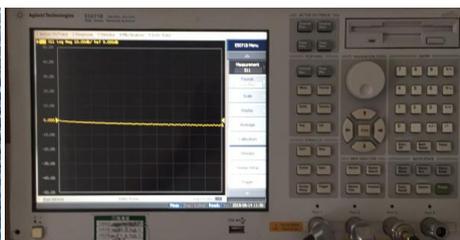
<i>Item</i>	<i>Description</i>
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1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	11.95x105,L250	mm
Frequency	800-960;1710-2170;2300-2700	MHz
Impedance	50	Ω
VSWR	< 4.0	
Polarization	Linear Polarization	
Gain	2.14	dBi
Efficiency	>30	%
Connector Type	1.13 MHF-1-Plug	
Operating temperature	-20 $^{\circ}$ C~+70 $^{\circ}$ C	
Storage Temp	-20 $^{\circ}$ C~+50 $^{\circ}$ C	

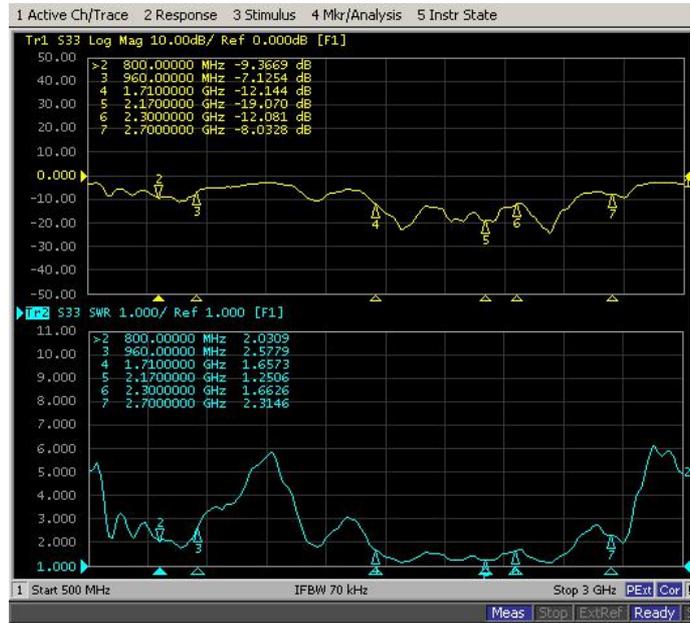
2.Test Items and Equipment

	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



3. S Parameter

Frequency (MHz)	R L	VSWR
800	-9.36	2.03
960	-7.12	2.57
1710	-12.14	1.65
2170	-19.07	1.25
2300	-12.08	1.66
2700	-8.03	2.31



* Voltage Standing Wave Ratio(VSWR)
 Return Loss(RL)
 $RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$

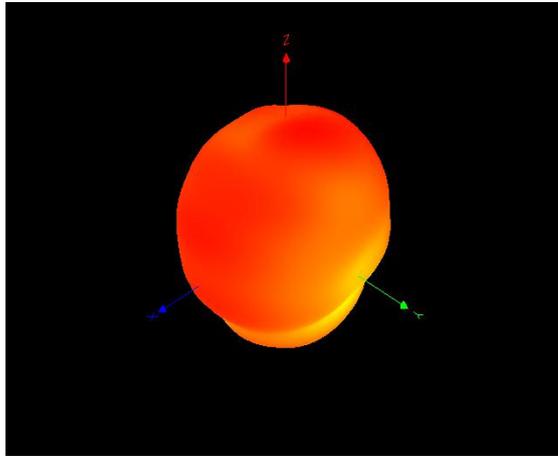
4. Efficiency and Gain

Frequency (MHz)	800	960	1710	2170	2300	2700
Efficiency (%)	32.96	60.54	41.78	46.67	46.03	35.73
Gain (dBi)	-1.19	-0.3	-1.41	2.14	1.97	-2.22

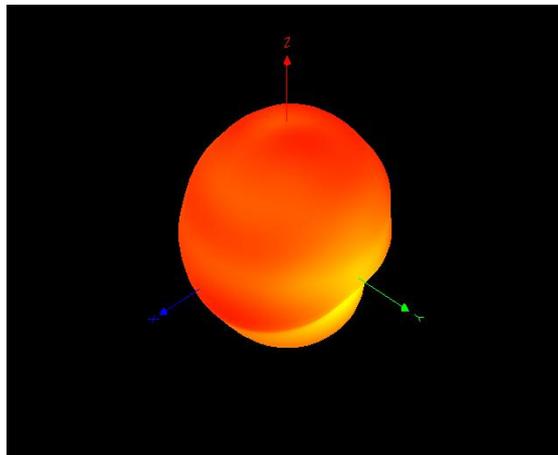


5. Radiation Pattern

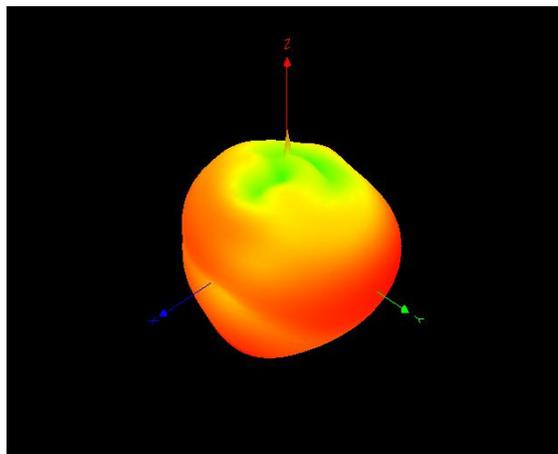
5-1 Antenna 3D Radiation Pattern



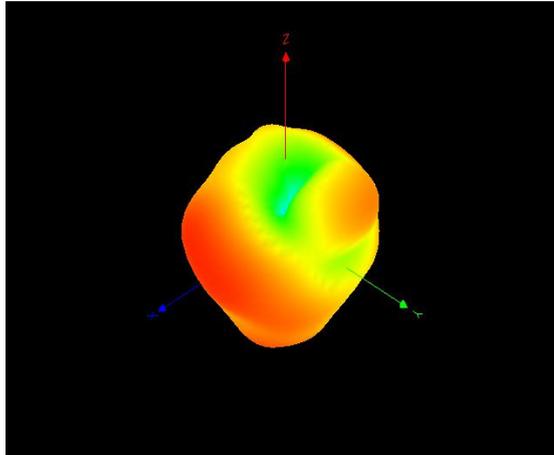
800MHz



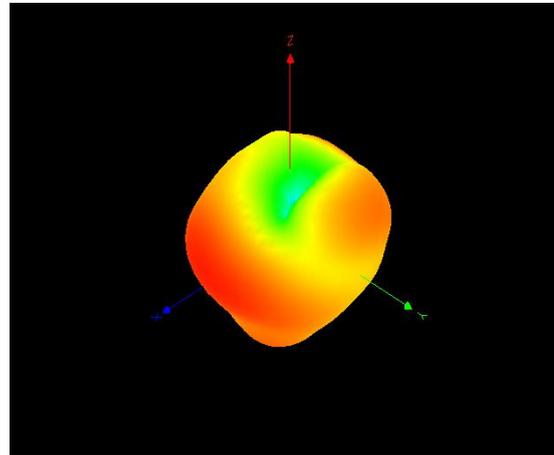
960MHz



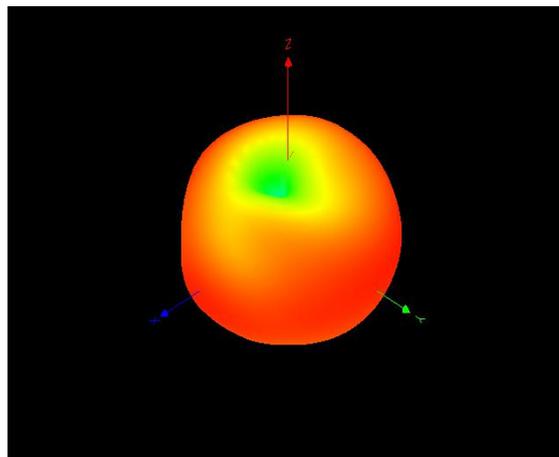
1710MHz



2170MHz

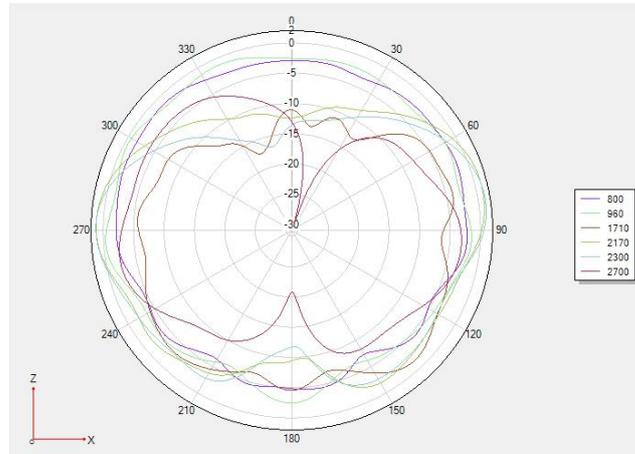


2300MHz

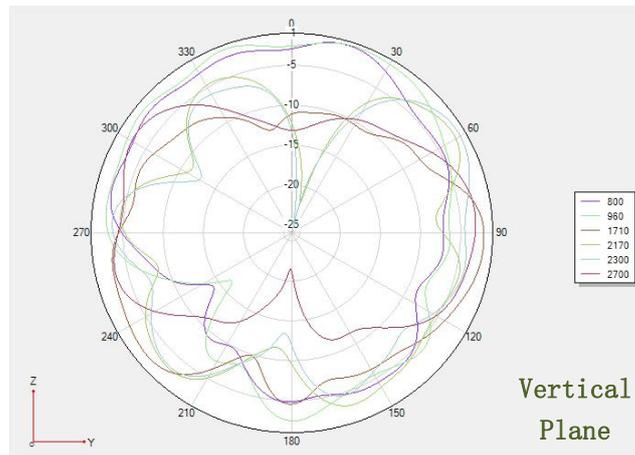


2700MHz

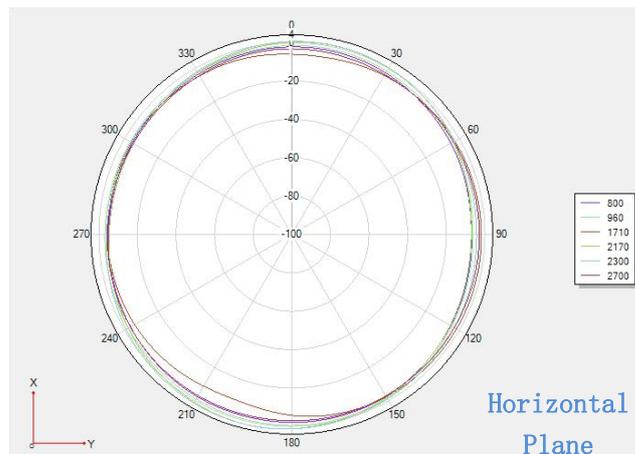
5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90

6. Mechanical Specification:

