

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: 九安

产 品 名 称

PRODUCT NAME: 2.4G W70 白色天线 L=140mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C140W3D2393A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Yongxin. Lu 	
APPROVED BY:	Changxing. Liu	
DATE:	2021/10/11	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongxin. Lu	2021-10-11

Content

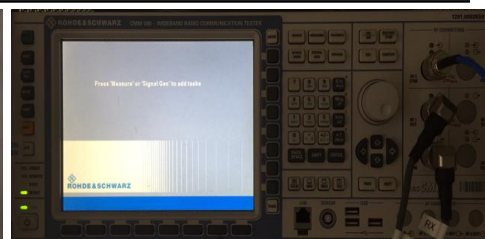
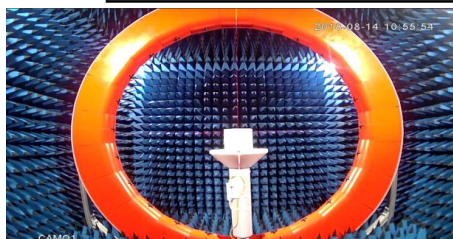
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification
7.-----	Packaging

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	13x105,L140	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	≤ 1.92	
Polarization	Linear Polarization	
Gain	3.34	dBi
Efficiency	>50	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+50℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

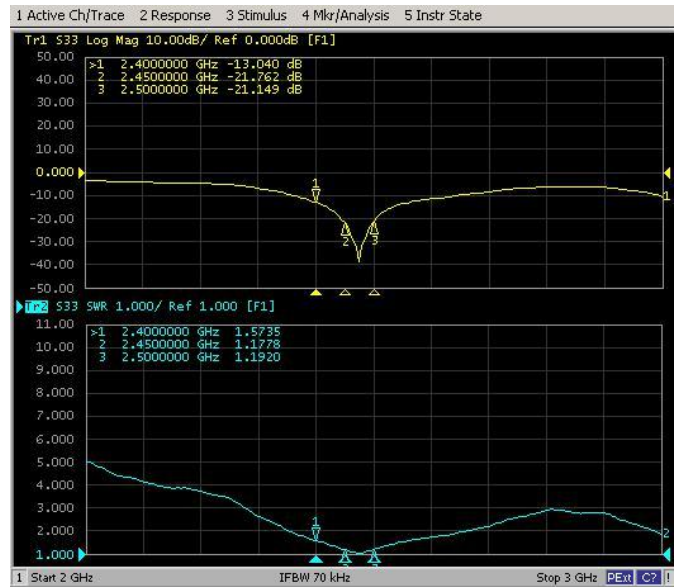
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

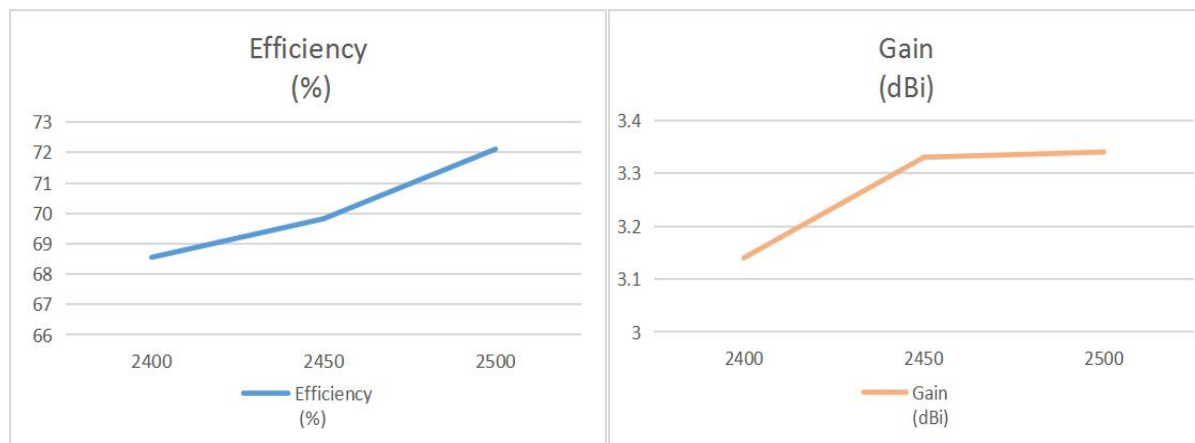
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-13.04	1.57
2450	-21.76	1.17
2500	-21.14	1.19

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



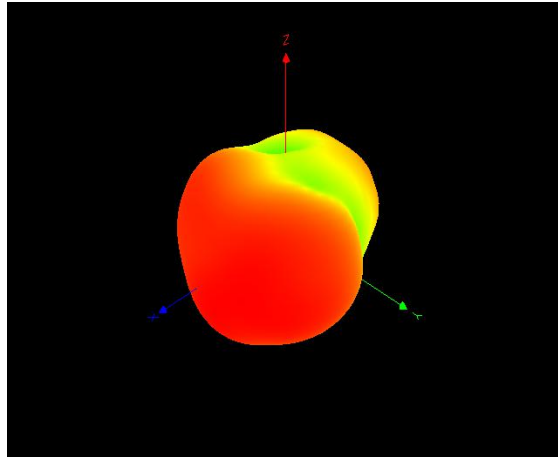
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	68.55	69.82	72.11
Gain (dBi)	3.14	3.33	3.34

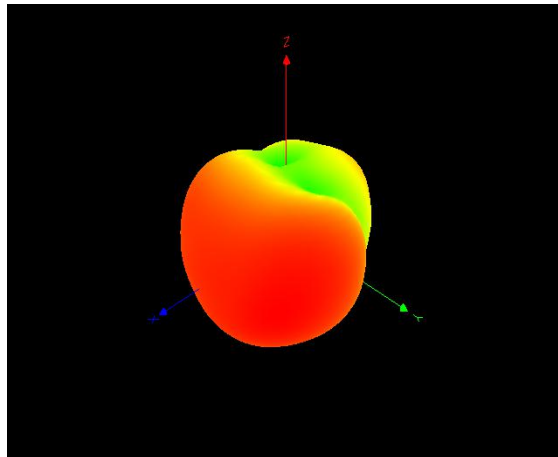


5. Radiation Pattern

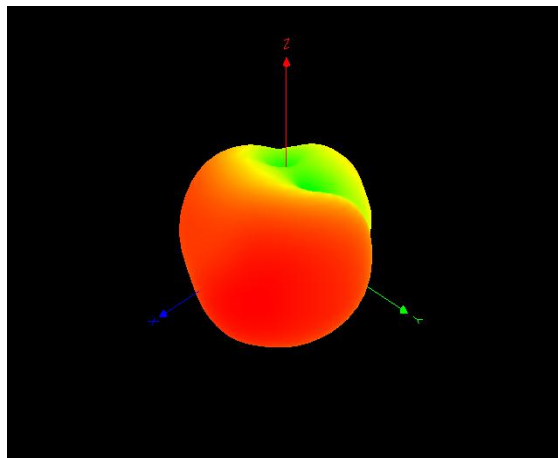
5-1 Antenna 3D Radiation Pattern



2400MHz

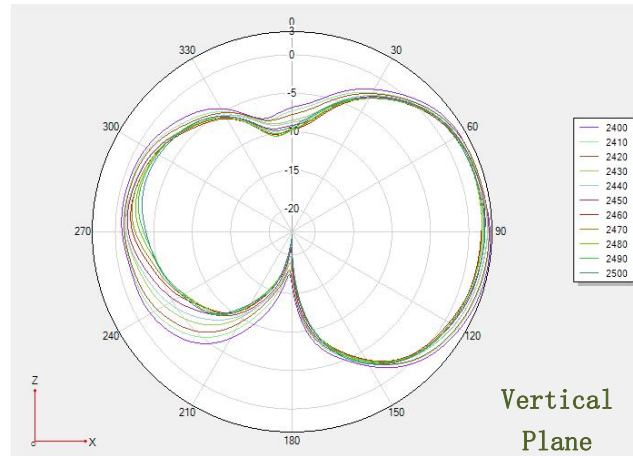


2450MHz

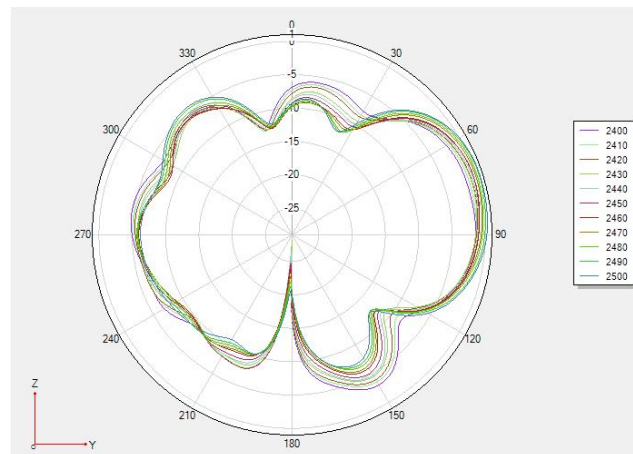


2500MHz

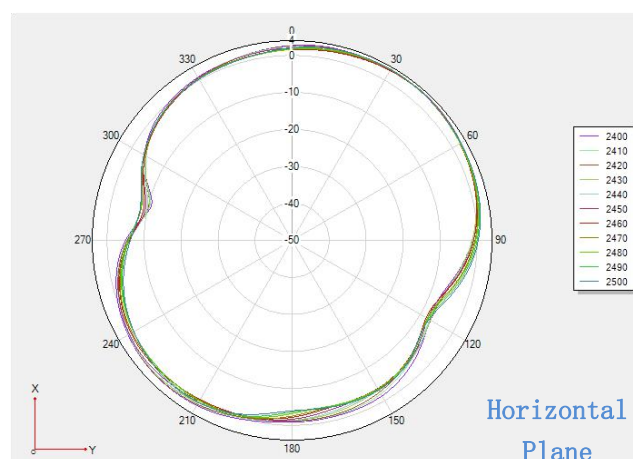
5-2 Antenna 2D Radiation Pattern



Phi 0 2D

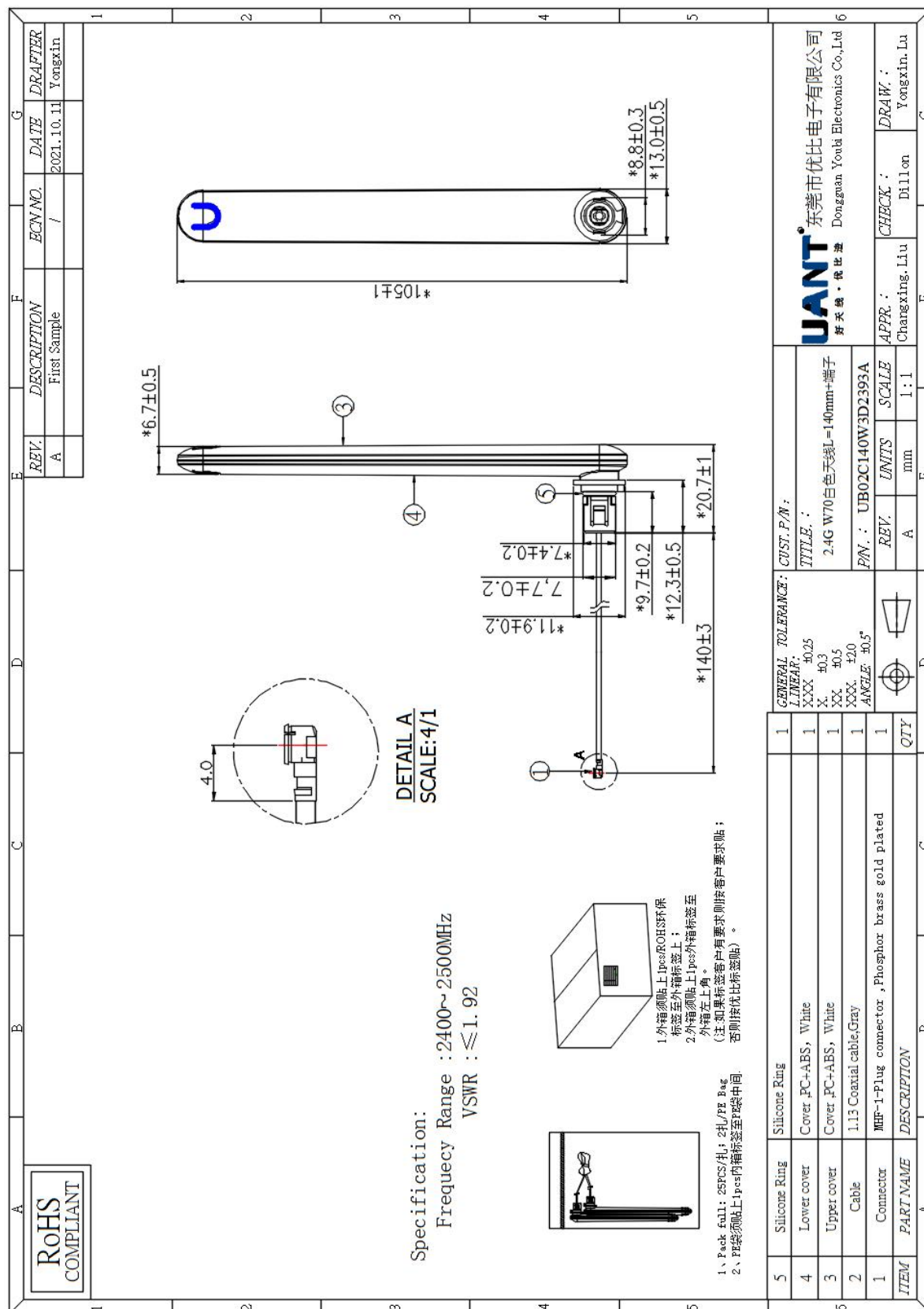


Phi 90 2D

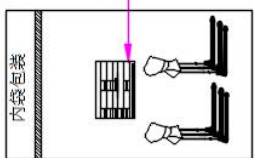
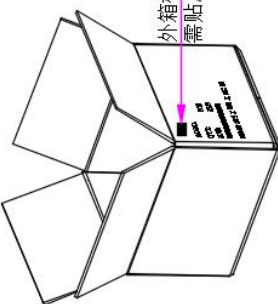
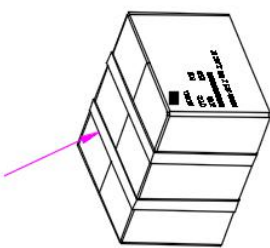


Theta 90 2D

6. Mechanical Specification:



7. Packaging

A		B		C		D		E		F		G	
1		2		3		4		5		6		7	
REV. A		DESCRIPTION First Sample		ECN NO. /		DATE 2021-10-11		DRAFTER Yongxin					
单个产品  内袋包装说明: 1. 25pcs产品包扎成一扎, 每袋装入2扎产品 共计50pcs. 2. PE袋进行封口. 3. 每袋需贴1pcs内袋标签至PE袋正中间位置.		内袋包装  内袋标签		外箱包装  外箱标签		包装箱封箱标准: 先用胶带封紧, 然后用2条打包带固定. 		1. 纸箱尺寸: 长320mm*宽320mm*高200mm. 2. 每箱装16袋产品, 共计装800pcs产品每箱.		客户代码: _____ 产品名称: _____ 订单号: _____ 生产日期: _____ 品名规格: _____ 数量: _____ 电话: 0769-8177126 传真: 0769-8177125		客户代码: _____ 产品名称: _____ 订单号: _____ 生产日期: _____ 品名规格: _____ 数量: _____ 电话: 0769-8177126 传真: 0769-8177125	
RoHS COMPLIANT													
GENERAL TOLERANCE:		CUST. P/N:		TITLE:		UANT [®] 东莞市优比电子有限公司		Dongguan Youbi Electronics Co., Ltd		DRAW: Yongxin.Lu			
LINEAR:		2.4G W70白色天线L=140mm-端子		P/N: UB02C140W3D2393A		APPR: Changxing.Liu		CHECK: Dillon					
X: ±0.10		mm		SCALE 1:1									
Y: ±0.3													
Z: ±0.5													
ANGLE: ±0.5°													