

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4/5.8G 小 SMA 公头母针菱形黑色天线

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02S50B2D95aA REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Yongxin. Lu 	
APPROVED BY:	Changxing. Liu	
DATE:	2021/09/10	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongxin. Lu	2021-09-10

Content

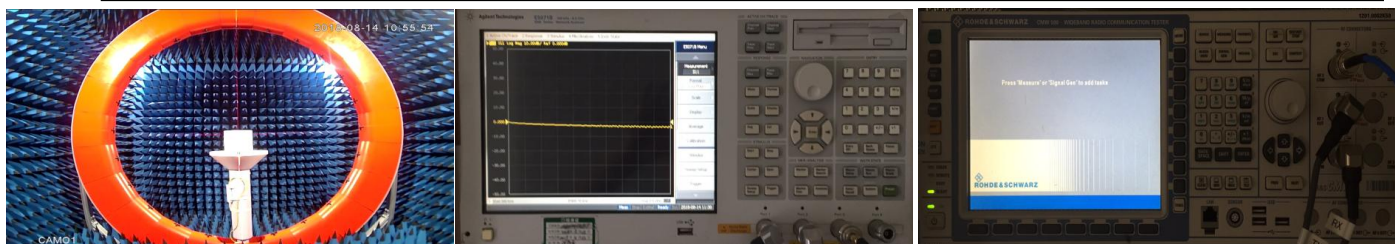
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification
7.-----	Packaging

1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	137.8x9.35	mm
Frequency	2400-2500;5150-5850	MHz
Impedance	50	Ω
Return Loss	-10 MAX	dB
Polarization	Linear Polarization	
Gain	2.0 ± 0.5	dBi
Efficiency	>50@2.4G; >40@5.8G	%
Connector Type	RP-SMA Male	
Operating temperature	-20℃~+50℃	
Storage Temp	-20℃~+50℃	

2.Test Items and Equipment

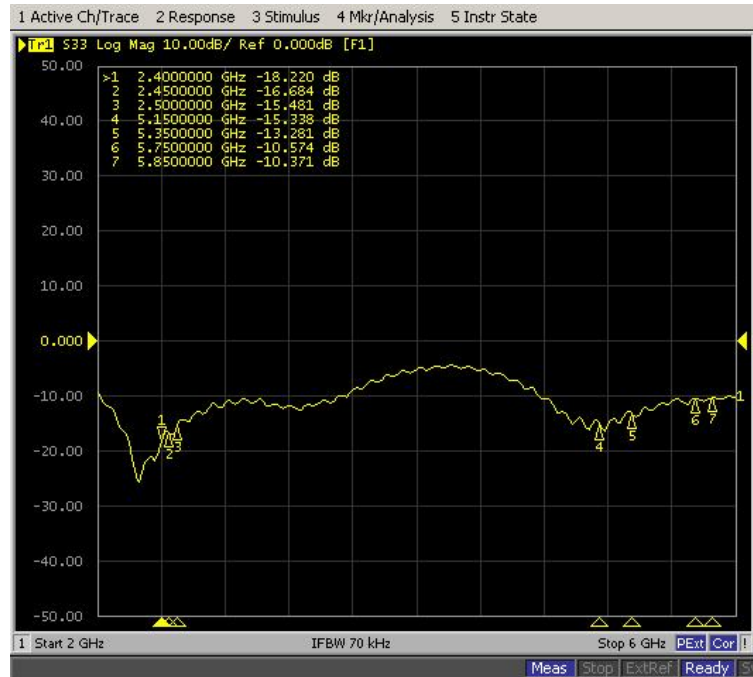
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

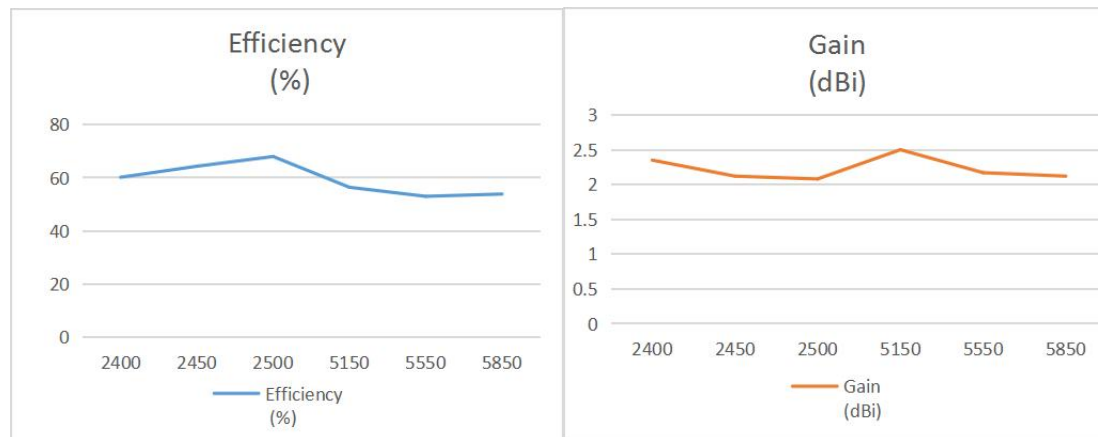
Frequency (MHz)	Return Loss (dB)
2400	-18.22
2450	-16.68
2500	-15.48
5150	-15.33
5350	-13.28
5750	-10.57
5850	-10.37

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



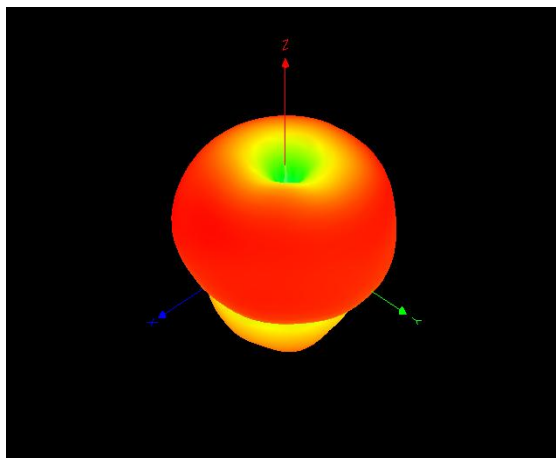
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	60.12	64.27	67.92	56.36	52.97	53.83
Gain (dBi)	2.35	2.12	2.08	2.5	2.17	2.12

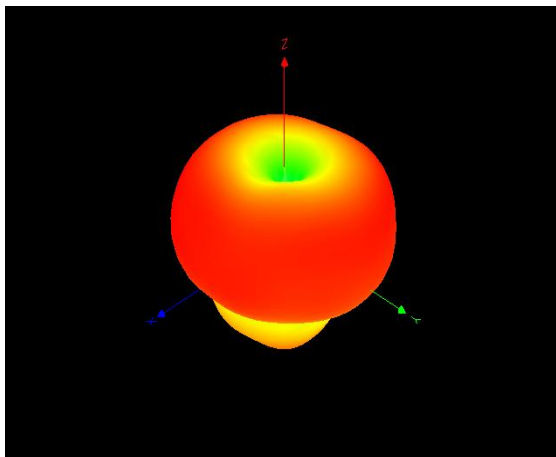


5. Radiation Pattern

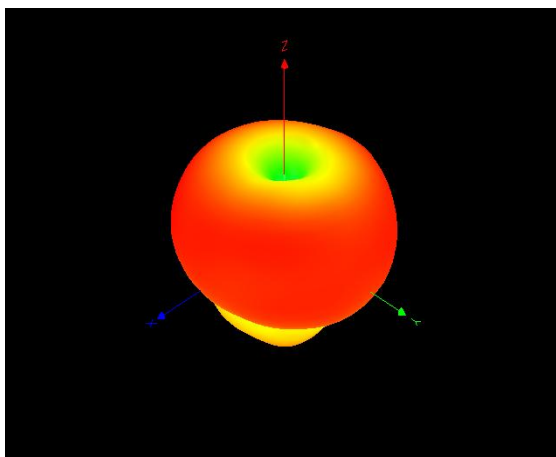
5-1 Antenna 3D Radiation Pattern



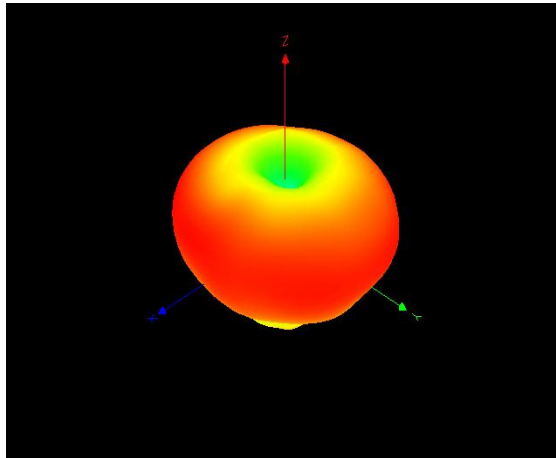
2400MHz



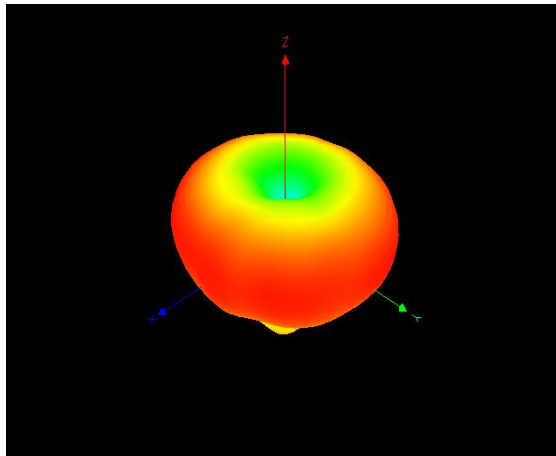
2450MHz



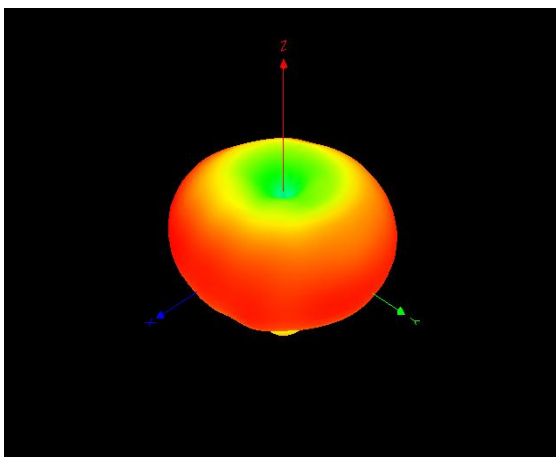
2500MHz



5150MHz

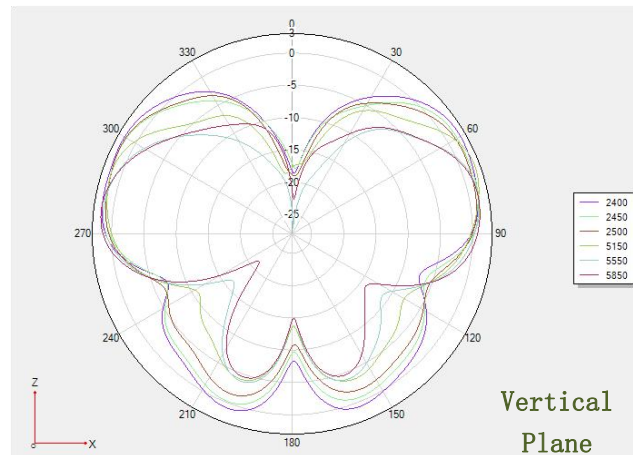


5550MHz

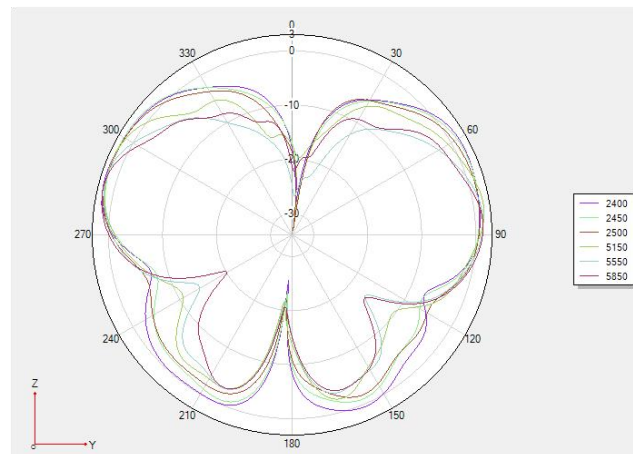


5850MHz

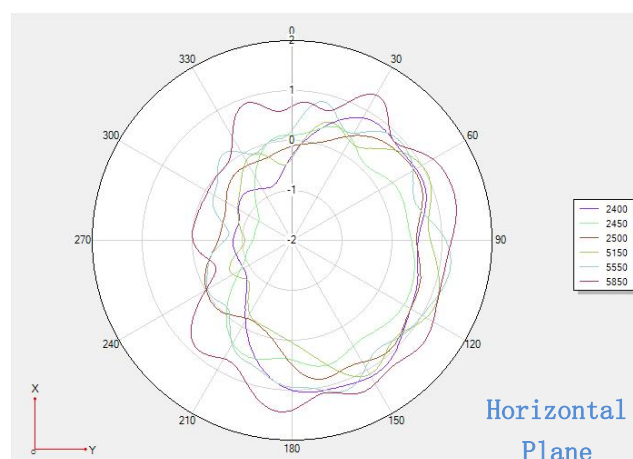
5-2 Antenna 2D Radiation Pattern



Phi 0 2D

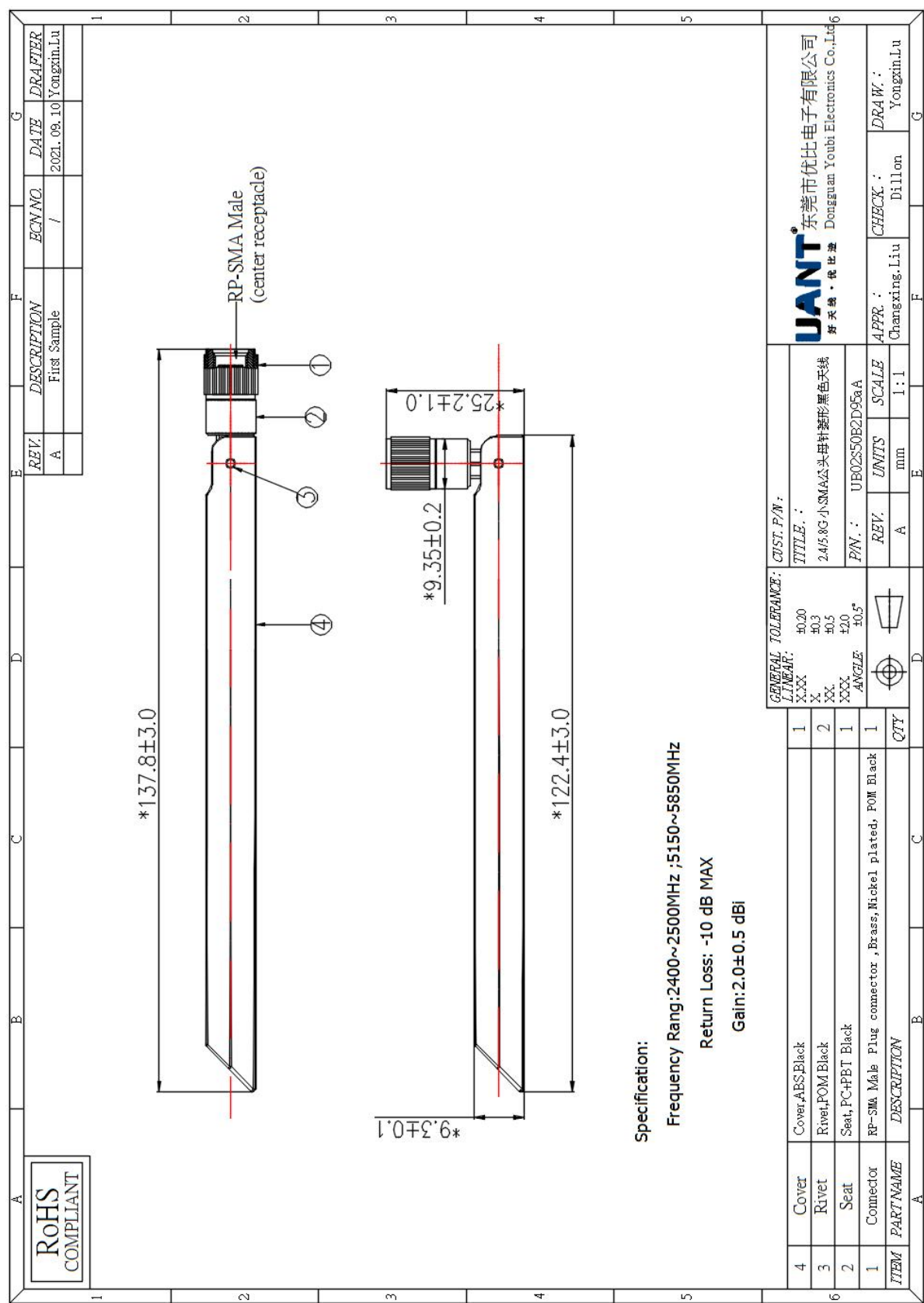


Phi 90 2D



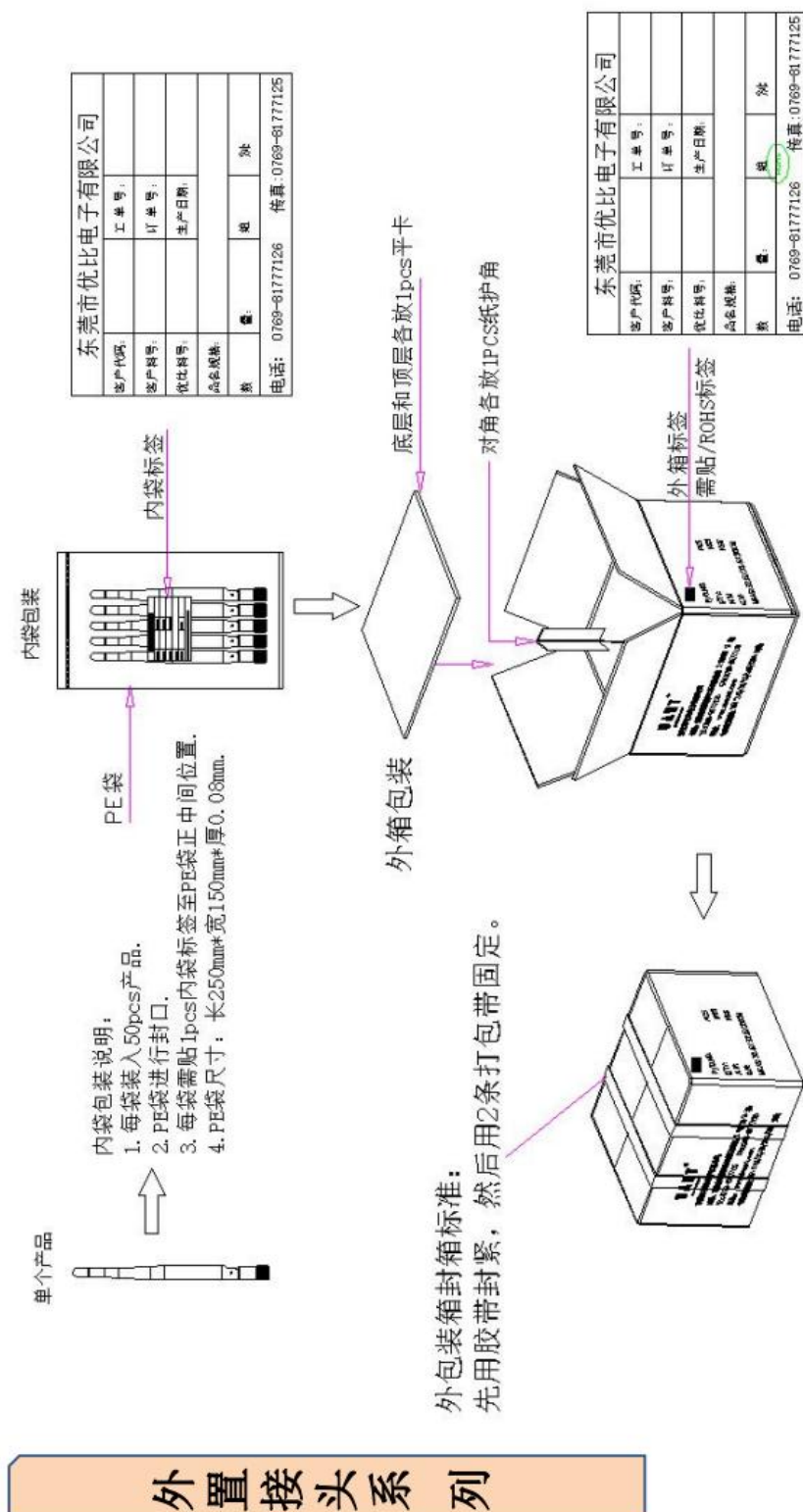
Theta 90

6. Mechanical Specification:



7. Packaging

产品包装规范



注:
此包装规范适用于接头式产品, 属于通用类型, 包括以下产品: **产品直径<11mm**

1. 3dBi小棒球、4dBi
2. **中号纸箱**装1000pcs产品每箱.