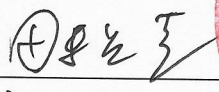
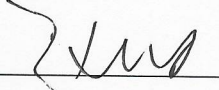


样品承认书

Confirmation of products

客户名称 Customer	深圳市睿联技术股份有限公司				
项目名称 Project Name	B23	版本 Version	A. 1	日期 Date	2023-10-30
项目料号 Project NO.	03. 09. 03. 001	客户料号 Customer NO.	54. 07. 001. 0109A		
频段 Frequency Range	2400~2500MHz 5100~5800MHz	备注 Notes	WIFI		
设计 Designed By					
审核 Approved By					
客户确认 Clients' Approval					

公司名称：深圳市林荣科技有限公司

Designer: SHENZHEN LINRONG TECHNOLOGY CO.,LTD

地址：深圳市龙华区大浪街道华荣路联建工业园 1 栋 3 楼

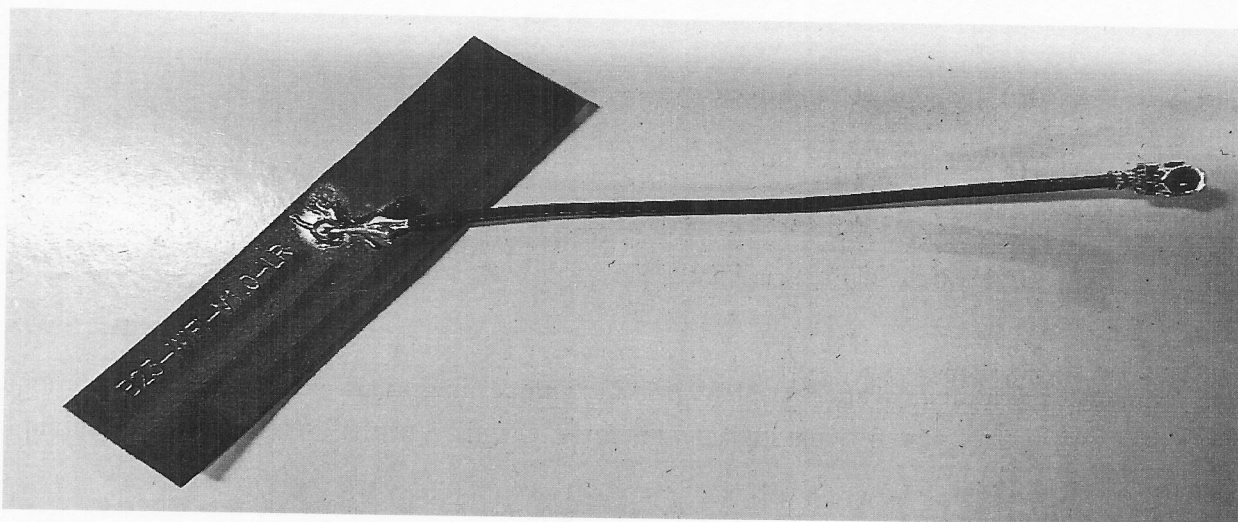
ADD: Floor 3, building 1, LianJian Industrial Park, Huarong Road, Dalang street, Longhua District, Shenzhen

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1、Specification

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ----B23 Picture 1 shows the antenna designed by LR.



2、VSWR Testing

2.1 Testing connection

The **Return Loss** testing devices are connected in sequence: Agilent5071C Network Analyzer → Testing Cable → Customer-providing Devices.

2.2 VSWR

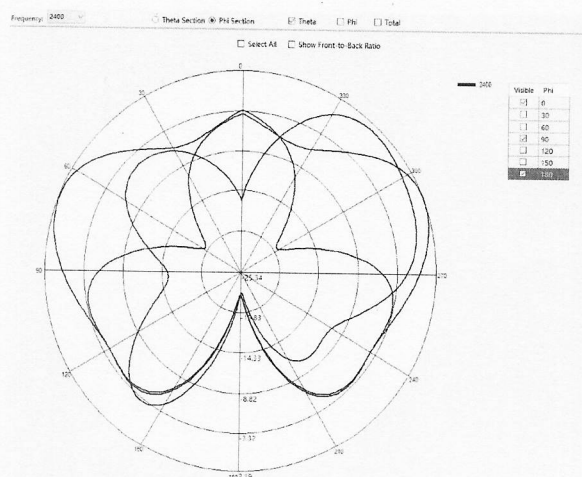
The following table expresses the VSWR value of antenna's two edges of its frequency range. With regard to the relevant diagram of VSWR

B23 WIFI VSWR					
Frequency (MHz)	2400	2450	2500	5100	5800
VSWR	1.21	1.13	1.24	1.32	1.11

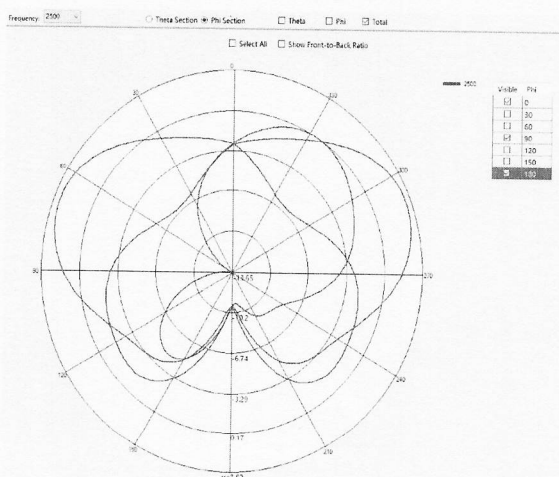
2.3 Testing data



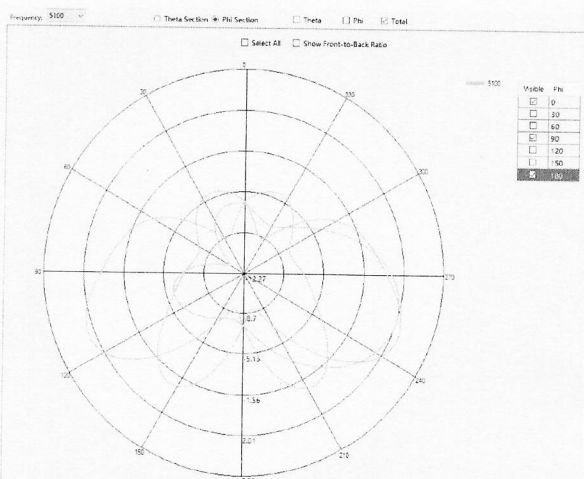
2.4+5.8G WIFI antenna VSWR



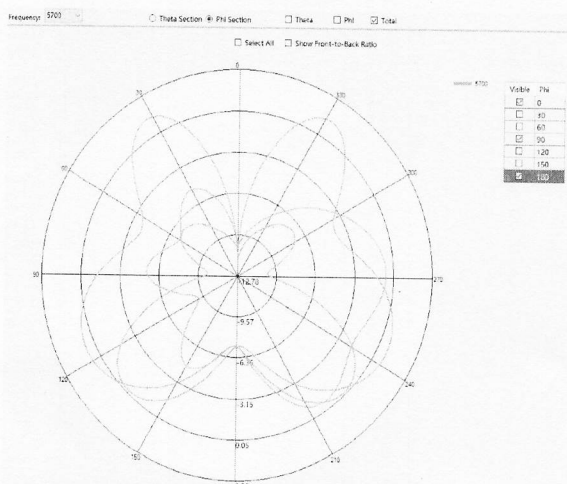
2400MHz



2500MHz

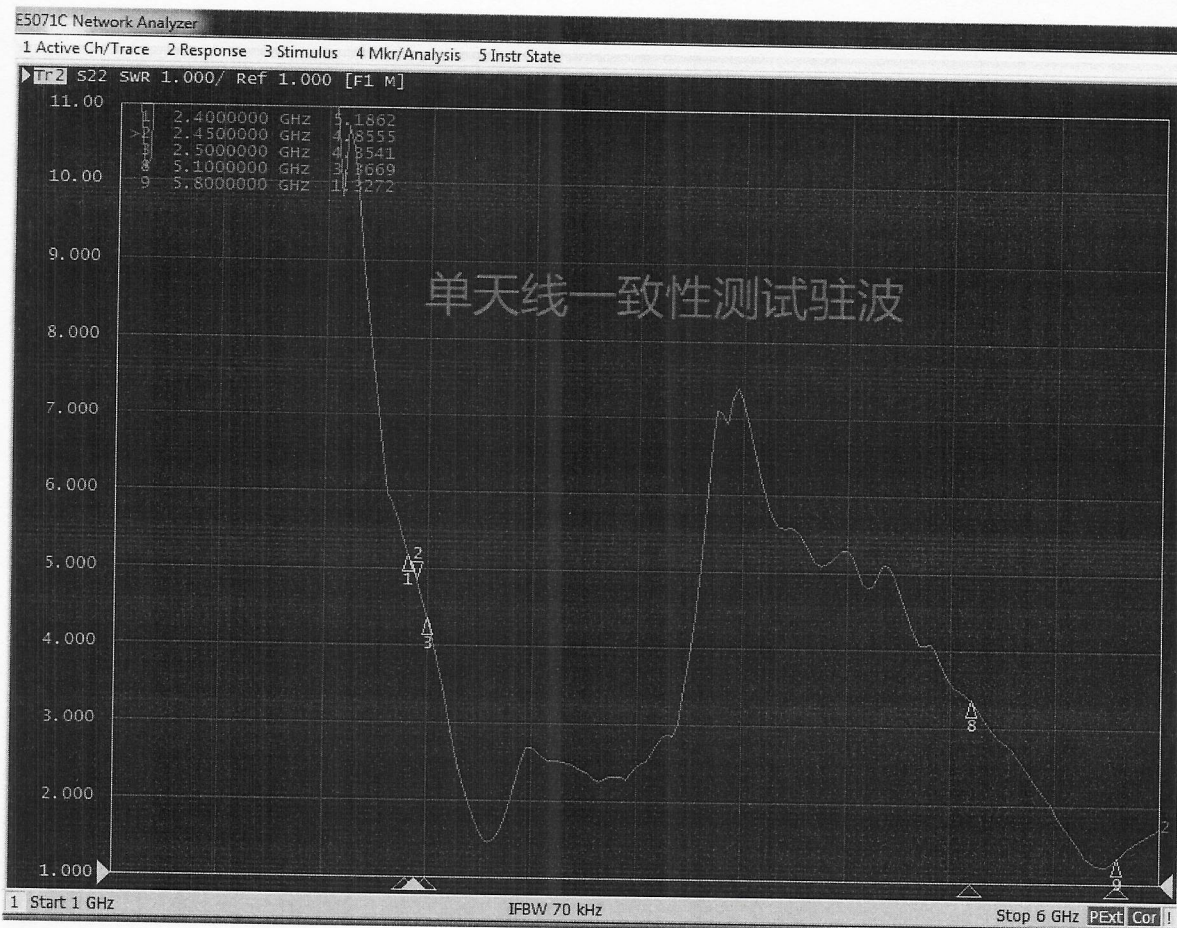


5100MHz



5700MHz

2.4 Single antenna test VSWR



3、Power、Sensitivity Testing

3.1 Testing field

LR Microwave Anechoic Chamber : testing frequency ranges from 400MHz to 6GHz and the 40cm diameter spherical quiet zone, the chamber provides less than -90dB reflectivity from 400MHz—6GHz.

3.2 Testing results

The following table indicates the testing results related to Power and Sensitivity in Microwave Anechoic Chamber, concerning the relative diagram.

3.3 Active testing.

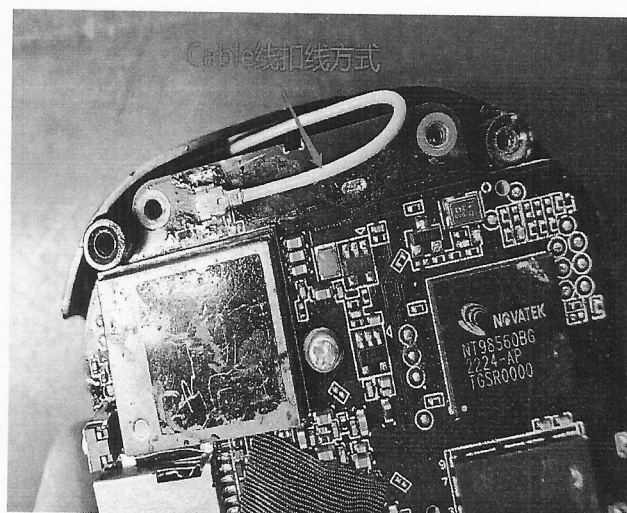
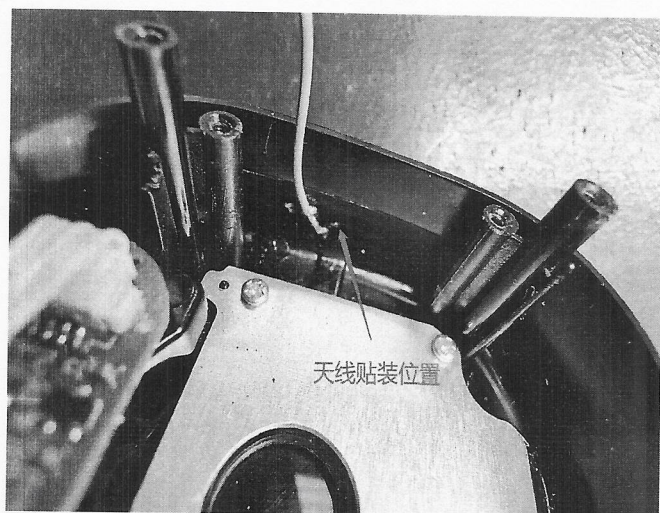
B23 Antenna efficiency

Freq	Gain	Efficiency	Freq	Gain	Efficiency
2400	2.8	59	5360	4.0	61
2410	2.8	60	5380	4.0	62
2420	2.9	61	5400	3.8	61
2430	2.9	61	5420	3.7	61
2440	3.0	62	5440	3.5	59
2450	3.0	63	5460	3.3	59

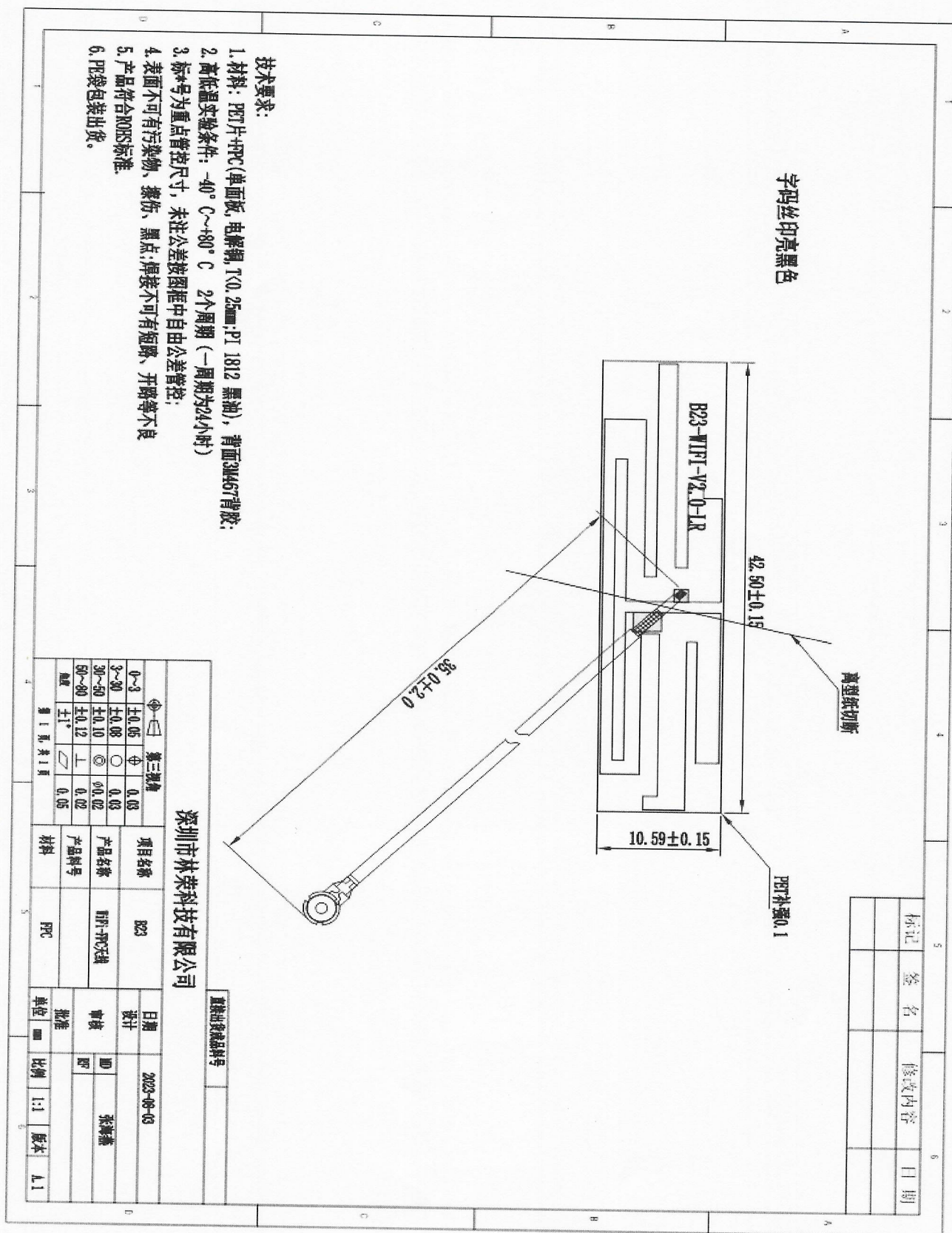
2460	2.9	63	5480	3.2	58
2470	3.0	64	5500	3.0	58
2480	3.2	65	5520	2.7	56
2490	3.4	68	5540	2.6	56
2500	3.5	69	5560	2.6	59
5100	4.4	59	5580	2.4	59
5120	4.5	60	5600	2.4	59
5140	4.6	61	5620	2.2	56
5160	4.6	62	5640	2.2	54
5180	4.4	61	5660	2.1	52
5200	4.5	63	5680	2.3	54
5220	4.5	64	5700	2.2	54
5240	4.4	62	5720	2.1	52
5260	4.4	63	5740	2.1	50
5280	4.4	63	5760	2.2	51
5300	4.3	62	5780	2.2	51
5320	4.1	59	5800	2.2	50
5340	4.2	62			

4、Environmental treatment

Antenna mounting diagram



5、Mechanical Dimension Drawing



6. Mechanical Dimension Testing report

全尺寸測量報告

Vendor(供應商)		材質名稱	PFC	Part NO.(料號)	03.09.03.001	Tool Number (模號)		Cav. Number(穴號)	Unit(單位)	Quality(品質簽字)													
林榮科技		材質牌號	/	Part Name (零件名稱)		/		/	MILLIMETERS INCHES														
日期 2023-8-3						% TOLERANCE USED (公差使用百分比)																	
DWG.	DRAWING ZONE	+TOL.	-TOL.	NOTE	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	UPPER	LOWER	DISPOSITION				ACCEPTABLE VARIANCE							
1	35.00		2.00 (2.00)		34.00	35.00	35.00	36.00	34.00	50%	-50%	☒ 0%-25%	☐ 25%-50%	☒ 50%-75%	☐ 75%-100%	☐ 100%+	Re-Measure	Accept	Fix Tool	Accept With Variance	DIMENSION	+TOL.	-TOL.
2	42.50		0.15 (0.15)		42.55	42.53	42.50	42.52	42.52	33%	0%	☒ X	☒ X								42.50	42.55	42.50
3	10.59		0.15 (0.15)		10.60	10.61	10.60	10.58	10.62	20%	-7%	☒ X									10.59	10.62	10.58
4	以下空白																						
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							

备注：除了上述所註的填寫表格外，並輸入的內容

备注：除了上述标注的填写内容外，输入的内容：

1. DIMENSION, TOL, TOL, SURF1, SURF2, SURF3

2. 注意：中描述的内容输入时，请：

a. 在STANDARDISED中，无论是TYPED还是USER LOGS，按：

(1) 检查输入数据是否输入错误。(2) 测量数据是否条件有误差或是仪器测量不准。(3) 测量时间是否不合适，即排除了(1)(2)(3)外，仍然100%，请设计师对每个尺寸的背后作出选择即只“Re measure, Accept, Re Tool, Accept Vitrance”中任一，若是选Accept with Vitrance，必须完成后面的Dimension, TOL, TOL；

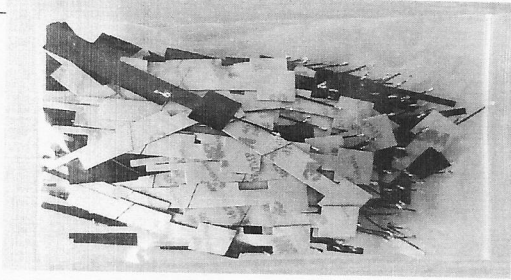
b. DIMENSION栏中的即尺寸前的一些小的ID # 必须与图面上的一致，即标注在尺寸编号与标注全尺寸测量报告中的尺寸的编号必须是相同的，且ID # 尺寸必须按用序号标注，此标注号必须表示的意思是测量尺寸作为重点管控尺寸，要做Cpk！

c. 测量工具代号：Measure No.：A=Callipers(0.00) B=micrometer(0.001) C=Pin Gauge(0.001) D=High Gauge(0.001) E=CMM(0.001) F=Plug Gauge(0.00) G=R Gauge(0.0) I=Depth Gauge(0.001)

7. Packaging standard

包装说明：具体包装数量以实物为准，图片只显示包装的方式，并非此项目实物。

Packaging Description: the specific packaging quantity is subject to the physical object. The picture only shows the way of packaging, not the physical object of the project



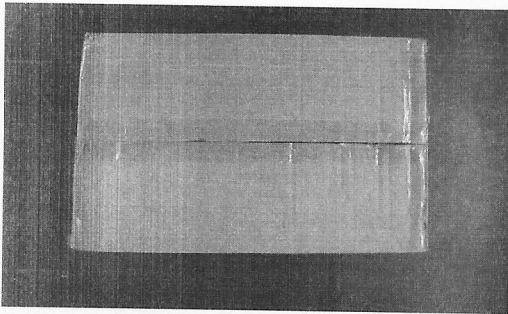
天线用 PE 袋包装

The top cover board, with PE film packaging



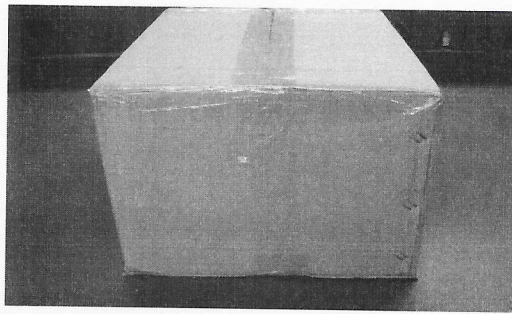
防潮防水 PET 袋封装，放于纸箱或胶筐内

Moistureproof waterproof PET bag packaging,
Put in the cartons



纸箱用胶带封口

Carton sealing with duct tape



包装箱整箱外观 ()

Cases appearance