样品承认书

Confirmation of products

客户名称 Customer	Shenzhen Reolink Technology Co., Ltd.				
项目名称 Project Name	SD8-N	版本 Version	A.2	日期 Date	2023-11-24
项目料号 Project NO.	03.05.01.006	客户料号 Customer NO.	54.07.001.0111A		
频段 Frequency Range	2400~2500MHz 5100~5800MHz	备注 Notes	WIFI-2		
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

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1、Specification

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ----SD8-N Picture 1 shows the antenna designed by LR.

2、 VSWR Testing

2.1 Testing connection

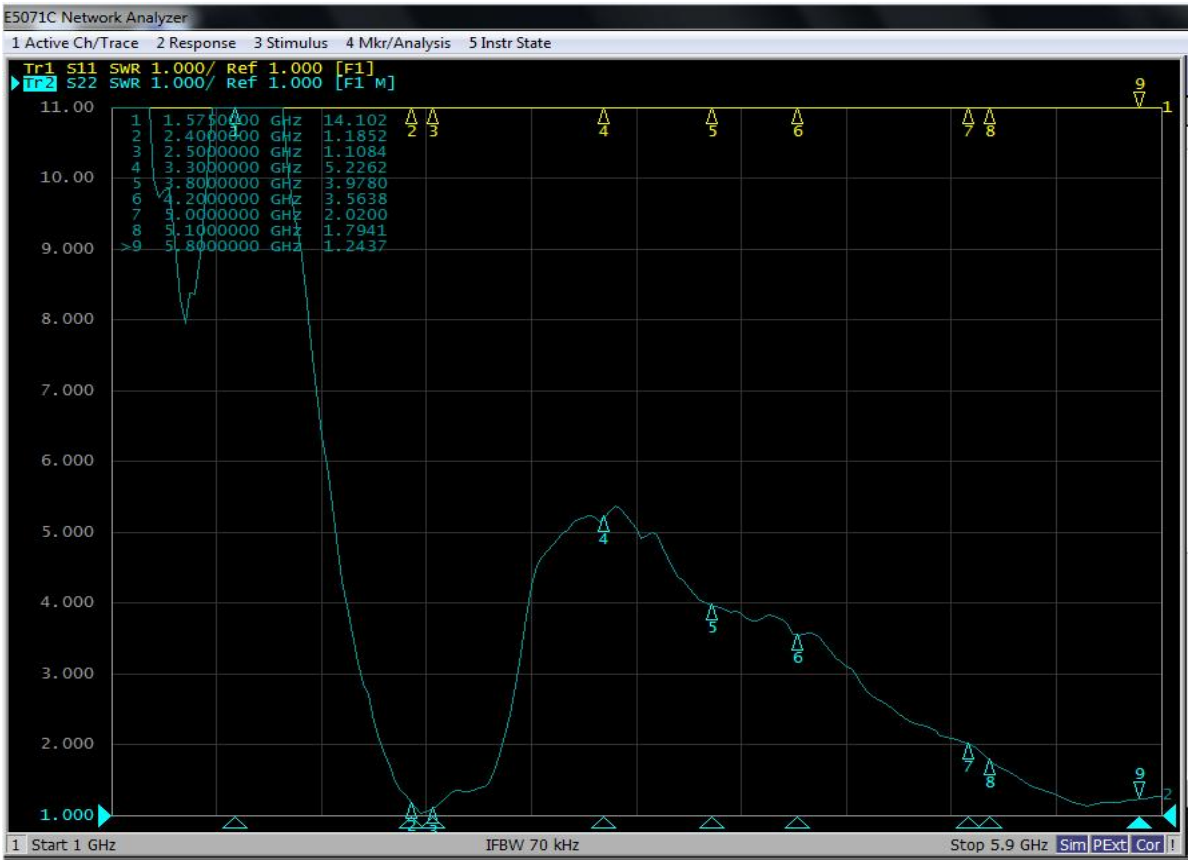
The **Return Loss** testing devices are connected in sequence: Agilent5071C Network Analyzer →Testing Cable → Customer-providing Devices.

2.2 VSWR

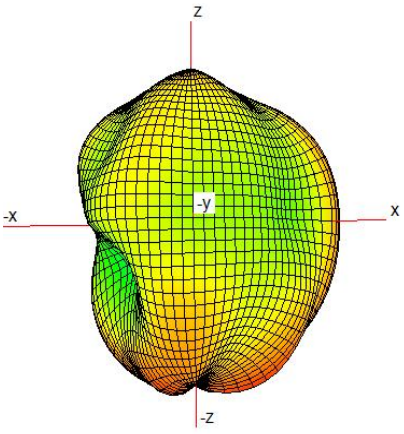
The following table expresses the VSWR value of antenna's two edges of its frequency range. With regard to the relevant diagram of VSWR

SD8-N WIFI VSWR				
Frequency (MHz)	2400	2500	5100	5800
VSWR	1.18	1.10	1.79	1.24

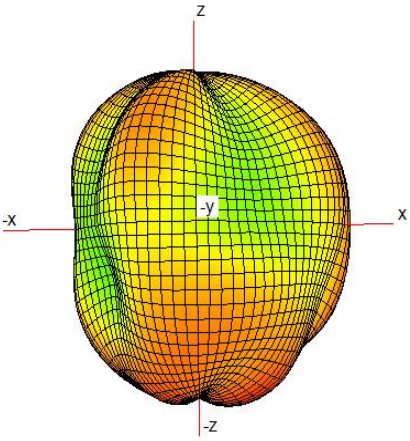
2.3 Testing data



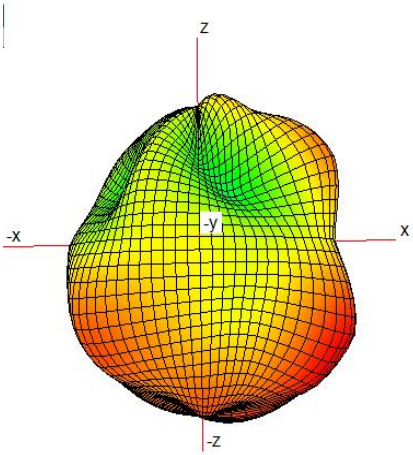
2.4+5.8G WIFI antenna VSWR



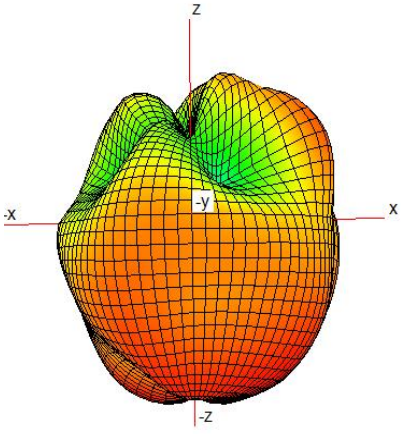
2400MHz



2500MHz

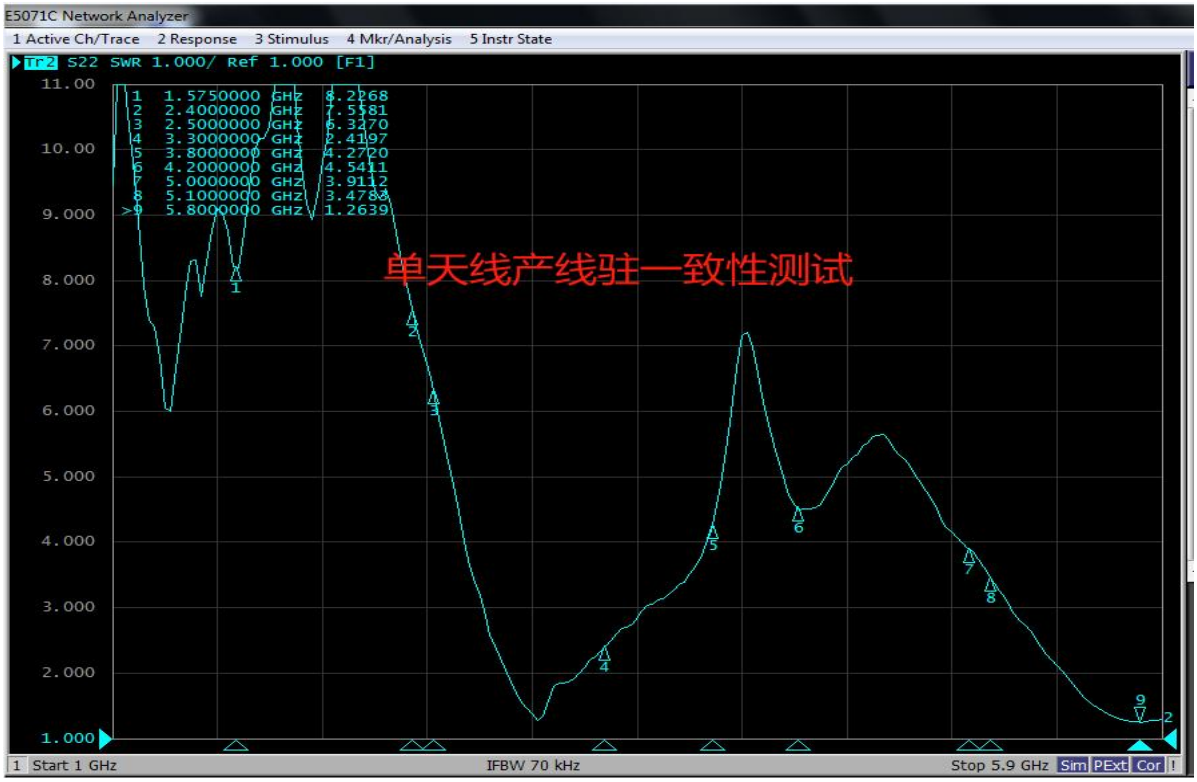


5100MHz



5800MHz

2.4 Single antenna test VSWR



3、 Power、Sensiticity Testing

3.1 Testing field

LR Microwave Anechoic Chamber ： testing frequency ranges from 400MHz to 6GHz and the 40cm diameter spherical quite 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.

SD8-N Antenna efficiency

Freq(MHz)	Gain	Efficiency(%)	Freq(MHz)	Gain	Efficiency(%)
2400	3.7	63.44	5360	4.0	61.23
2410	3.7	62.40	5380	3.3	59.23
2420	3.6	61.91	5400	3.5	60.05
2430	3.7	62.35	5420	3.1	59.54
2440	3.8	61.73	5440	2.8	60.66
2450	3.9	63.94	5460	2.8	60.16
2460	3.9	63.88	5480	2.6	59.25
2470	3.9	63.43	5500	2.6	56.65
2480	3.8	63.14	5520	2.4	54.12
2490	3.8	64.01	5540	2.5	56.58
2500	3.7	62.91	5560	2.7	58.01
5100	2.8	50.95	5580	2.5	56.77

5120	3.6	56.55	5600	2.8	56.96
5140	3.1	53.50	5620	2.6	56.04
5160	4.0	59.44	5640	2.8	56.96
5180	4.2	57.69	5660	2.0	53.41
5200	4.2	57.93	5680	2.8	57.91
5220	4.3	60.09	5700	2.2	55.41
5240	5.0	64.17	5720	2.8	58.69
5260	3.8	58.06	5740	2.5	52.60
5280	4.3	61.68	5760	2.9	56.49
5300	4.1	60.78	5780	3.0	57.46
5320	3.5	55.99	5800	2.9	57.57
5340	3.6	60.69			

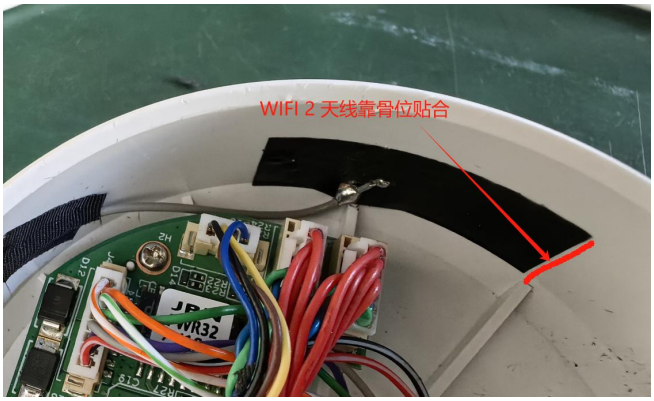
SD8 Active data

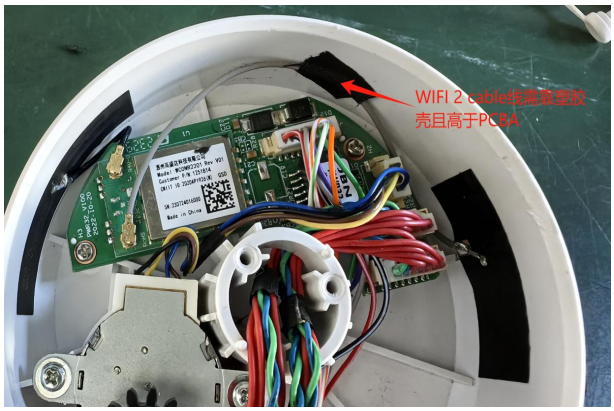
WIFI 1+WIFI 2			
	chNO	TRP	TIS
11B-11M	1	18.62	
	6	19.05	
	11	20.1	-82.01
11A-54M	36	18.35	
	56	18.2	
	165	18.4	-73.05
11g-54M	1	17.52	
	6	17.64	
	11	17.78	-68.57

WIFI 2			
	chNO	TRP	TIS
11B-11M	1	17.52	
	6	17.43	
	11	17.85	-81.15
11A-54M	36	17.46	
	56	16.78	
	165	17.82	-75.74
11g-54M	1	16.43	
	6	16.65	
	11	17.83	-68.12

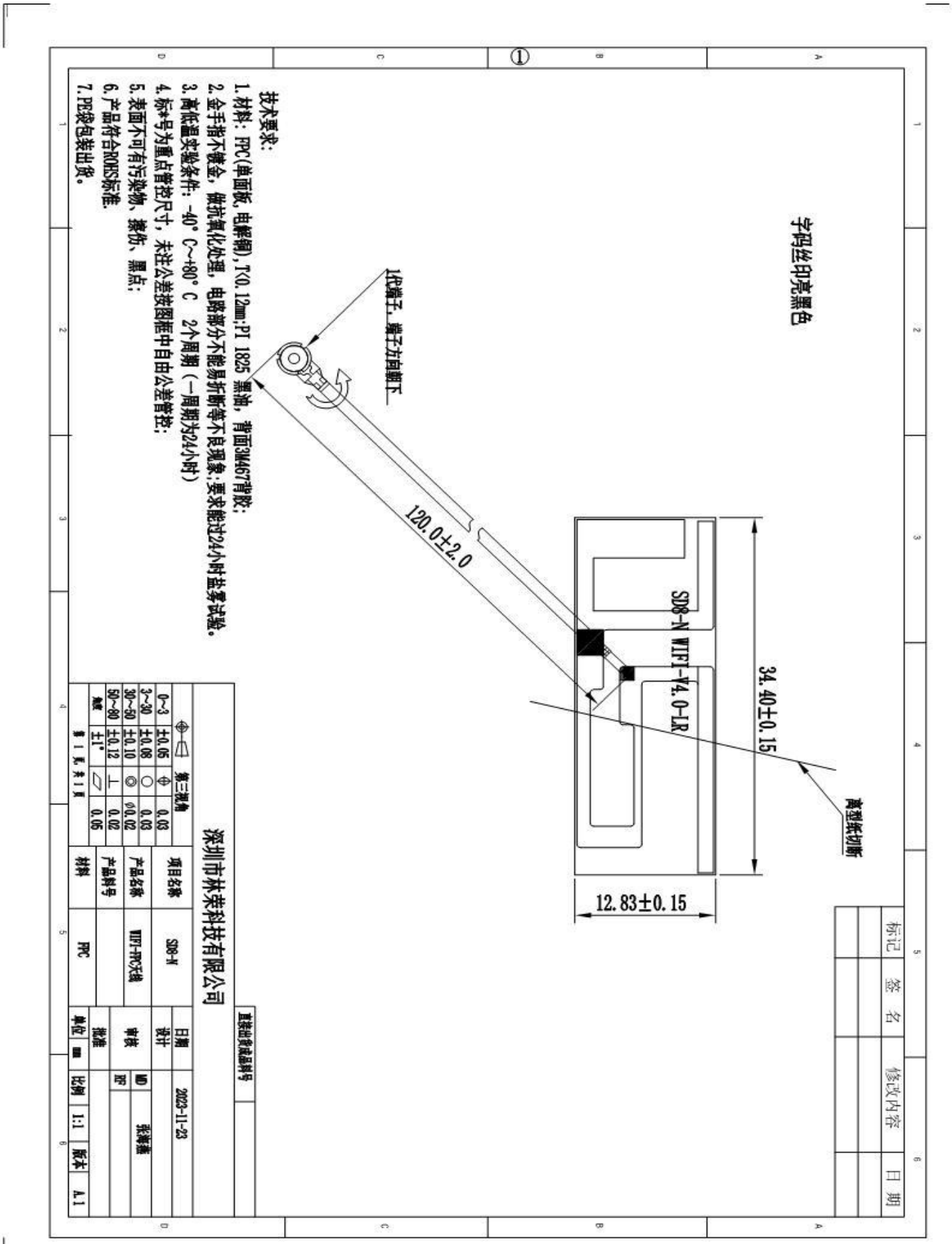
4、Environmental treatment

Antenna mounting diagram





5、Mechanical Dimension Drawing



6. Mechanical Dimension Testing report

全尺寸测量报告

Vendor(供应商)	材质名称	FPC	Part NO(料号)	03.05.01.006	Tool Number (模号)	Cav. Number(穴数)	Unit(单位)	Quality(品质签字)
林荣科技	材质牌号	/	Part Name (零件名称)	WIFI天线	/	Rev(版本) / A.1	✓ MILLIMETERS ☐ INCHES	
日期	2023-11-24		MEASURED DIMENSION(实测尺寸)		% TOLERANCE USED (公差使用百分比)	DISPOSITION		ACCEPTABLE VARIANCE

DIM. #	DIMENSION	DRAWING ZONE +TOL.	DRAWING ZONE -TOL.	NOTE	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	UPPER	LOWER	0%-25%	25%-50%	50%-75%	75%-100%	100%+	Re-Measure	Accept	Fix Tool	Accept With Variance	DIMENSION +TOL.	DIMENSION -TOL.
1	120.00	2.00	(2.00)		121.00	120.00	119.00	121.00	120.00	50%	-50%	x		x							120.00	119.00
2	34.40	0.15	(0.15)		34.47	34.45	34.40	34.42	34.44	47%	0%	x	x								34.40	34.40
3	12.83	0.15	(0.15)		12.86	12.90	12.87	12.85	12.83	47%	0%	x	x								12.83	12.83
4	1.13	0.05	(0.05)		1.12	1.12	1.13	1.12	1.13	0%	-20%	x									1.13	1.12
6	以下空白																					
7																						
8																						
9																						
10																						
11																						
12																						
13																						

备注：除了上述标注的填写内容外，须输入的内容：

1. DIMENSION, +TOL, -TOL, SAMPLE1, SAMPLE2, SAMPLE3

2. 注意1中描述的内容输入时，请：

a. 在%TOLERANCEUSED(公差使用百分比)中无论是UPPER还是LOWER>100%，须：

(1)检查输入数据是否输入错误；(2)测量数据是否操作有误或是仪器测量不准确；(3)测量时间是否不适宜；(4)排除了(1)(2)(3)外，仍然>100%，请设计师对每个尺寸的后面作出选择即从"Re-measure, Accept, Re Tool, Accept Virance"中选一，若是选Accept with virance，必须完成后面的Dimension, +TOL, -TOL;

b. DIMENSION栏中的即尺寸前一栏中的DIM.#必须与图面上的一致；同时注意，在作Cpk的尺寸的尺寸编号与FAI全尺寸测量报告中的尺寸的编号必须是相同的，且Cpk尺寸必须被用符号标注，此标注号必须表示的意思是指该尺寸为重点管控尺寸，要做Cpk!

c. 测量工具代号Measure No.: A=calipers(0.00) B=micrometer(0.000) C=Pin Guage(0.000) D=High Guage(0.000) E=CMM(0.000) F=Plug Guage(0.00) G=R Guage (0.0) I=Deep Guage (0.000)

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