

SPECIFICATION FOR APPROVAL

CUSTOMER (客户名称)								
CS P/N (客户机种)								
PART NAME (品名)	FPC Antenna L32.2*W11.7mm 2.4~2.5GHz&5.15~5.85GHz White1.13 Cable150MM withIPEX ROHS							
FREQUENCY (频率)	2.4~2.5GHz&5.15~5.85GHz							
RTANT NO. (物料编号)	K220-10025-A							
DATE (日期)	2019.08.08							
Manufacturer Signature 出样签章 <table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">APPROVED BY 核准</td> <td style="text-align: center;">CHECKED BY 确认</td> <td style="text-align: center;">DRAWED BY 制作</td> </tr> <tr> <td style="text-align: center;">HLB黄龙保</td> <td style="text-align: center;">SYF宋逸锋</td> <td style="text-align: center;">LYH刘云海</td> </tr> </table>			APPROVED BY 核准	CHECKED BY 确认	DRAWED BY 制作	HLB黄龙保	SYF宋逸锋	LYH刘云海
APPROVED BY 核准	CHECKED BY 确认	DRAWED BY 制作						
HLB黄龙保	SYF宋逸锋	LYH刘云海						
Remark (备注):								
Customer Signature 客户承认签章 <table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">APPROVED BY 核准</td> <td style="text-align: center;">CHECKED BY 确认</td> <td style="text-align: center;">TESTED BY 检测</td> </tr> <tr> <td style="height: 50px;"></td> <td></td> <td></td> </tr> </table>			APPROVED BY 核准	CHECKED BY 确认	TESTED BY 检测			
APPROVED BY 核准	CHECKED BY 确认	TESTED BY 检测						
Sign (客户确认签字盖章): _____								

电话: 0769-85833836

传真: 0769-82582573

Http://www.rtant.com

地址: Building E, Delang Industrial Innovation Park, Shalong Road,
Shatang Industrial Zone, Houjie Town, Dongguan City

1. Contents项目表

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2. Revision history变更履历

Revision版本	Date日期	Change the content变更内容
X0	19.08.08	新版Initial Version

3. 产品实物图片Product picture



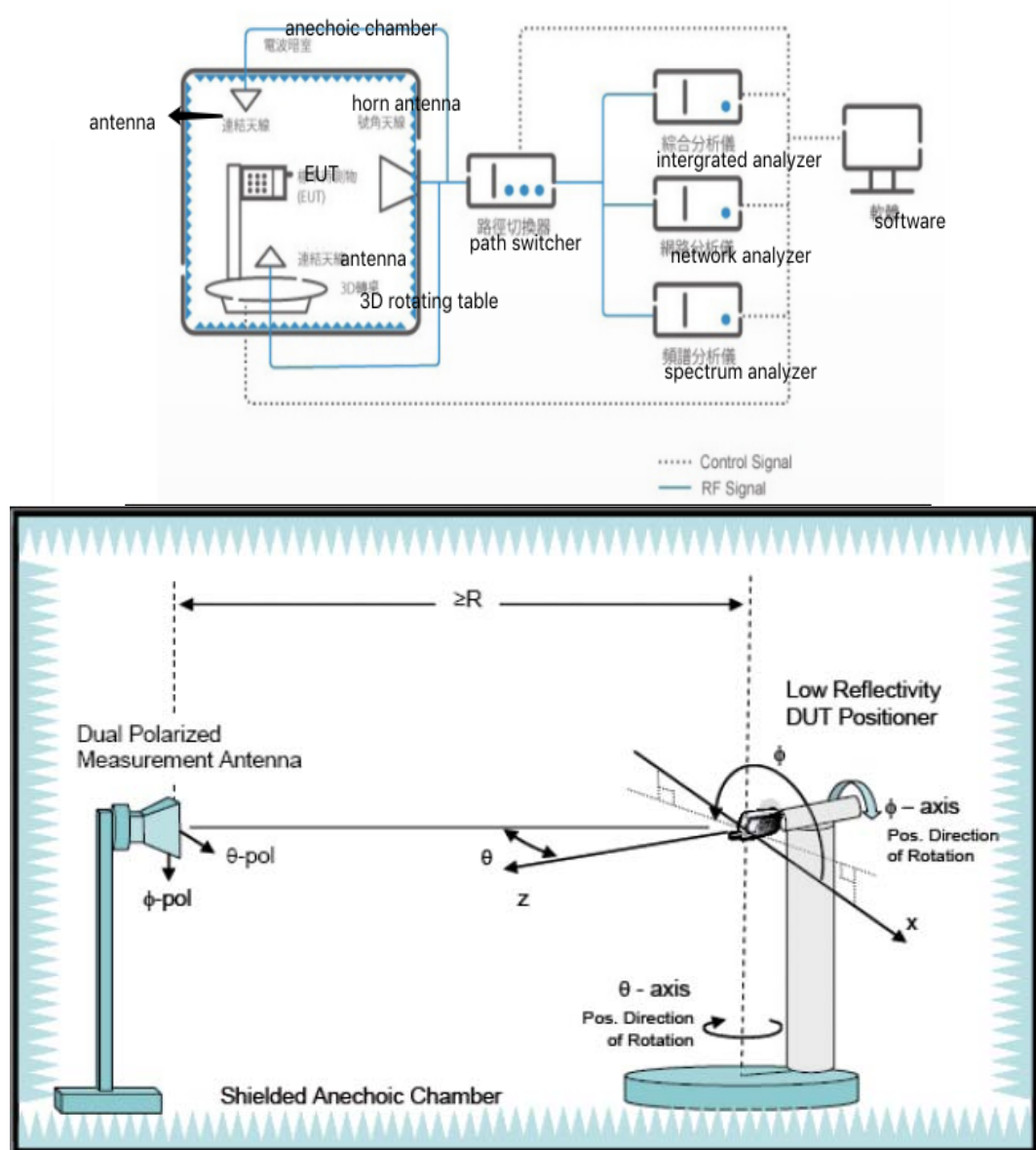
4. 规格表Specification

A. Electrical Properties	
Frequency Rang频段范围	2.4-2.5GHz&5.15-5.85GHz
Impedance特性阻抗	50 Ω Nominal
VSWR电压驻波比	2.0Max. (带机壳)
Gain(peak)增益 (峰值)	2.06dBi
Efficiency效率	>40%
Out of roundness不圆度	3.0 dBi (Max.)
Radiation辐射方式	Omni-Directional/全向
Polarization极化方式	Linear Vertical/垂直
B. Physical Properties	
Connector Type连接方式	First IPEX
Cable线材	$\Phi 1.13\text{mm}$
Antenna Radiator天线振子体	FPC
C. Environmental	
Storage Temp存储环境范围	-10 $^{\circ}\text{C}$ ~+60 $^{\circ}\text{C}$
Operating Temp工作环境	-40 $^{\circ}\text{C}$ ~+65 $^{\circ}\text{C}$
Storage humidity存储湿度	95%
Working humidity工作湿度	5%~95%

5. 电性测试报告Electrical Test Report

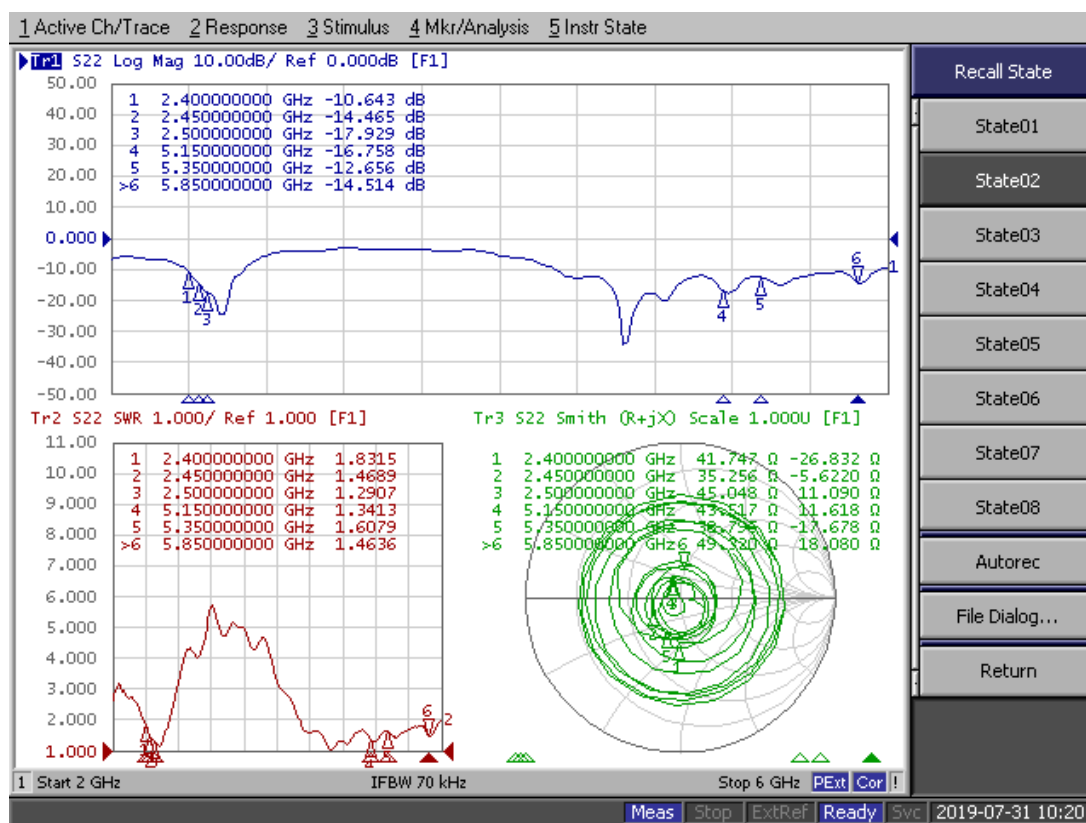
5.1 Test equipment

OTA 系統架構圖 OTA system architecture diagram

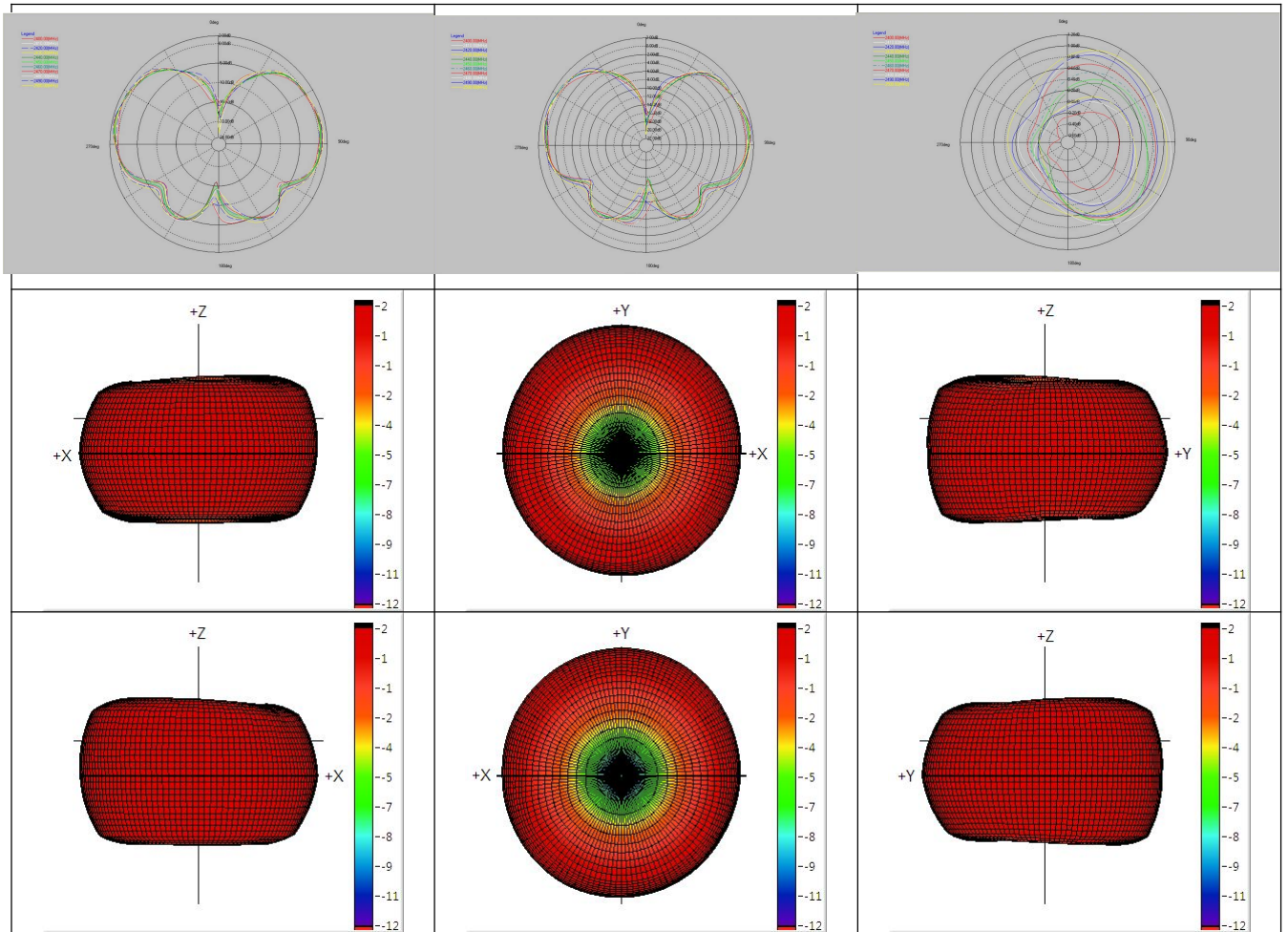


antenna

5.2 网络分析仪测试报告Network Analyzer Test Report



5.3 暗室2D、3DRaditation Pattern



5.4 暗室无源测试数据Darkroom Passive Test Data

Frequency	频率 (Mhz)	2400	2410	2420	2430	2440	2450	2460	2470	2480
Efficiency	效率 (%)	70.54	75.31	74.92	72.6	68.52	67.09	67.62	64.99	59.18
Gain	增益 (dBi)	1.78	1.93	2.06	1.93	1.64	1.28	1.12	0.83	0.32

Frequency	频率 (Mhz)	5100	5200	5300	5400	5500	5600	5700	5800	5900
Efficiency	效率 (%)	43.57	40.18	46.56	48.55	49.81	46.99	43.95	41.88	36.64
Gain	增益 (dBi)	0.94	2.49	3.19	1.34	2.55	4.27	2.57	1.6	2.63

6. 样品检验报告 Sample inspection report

日期: 2019.08.08

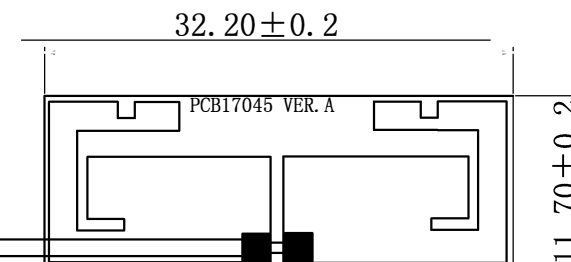
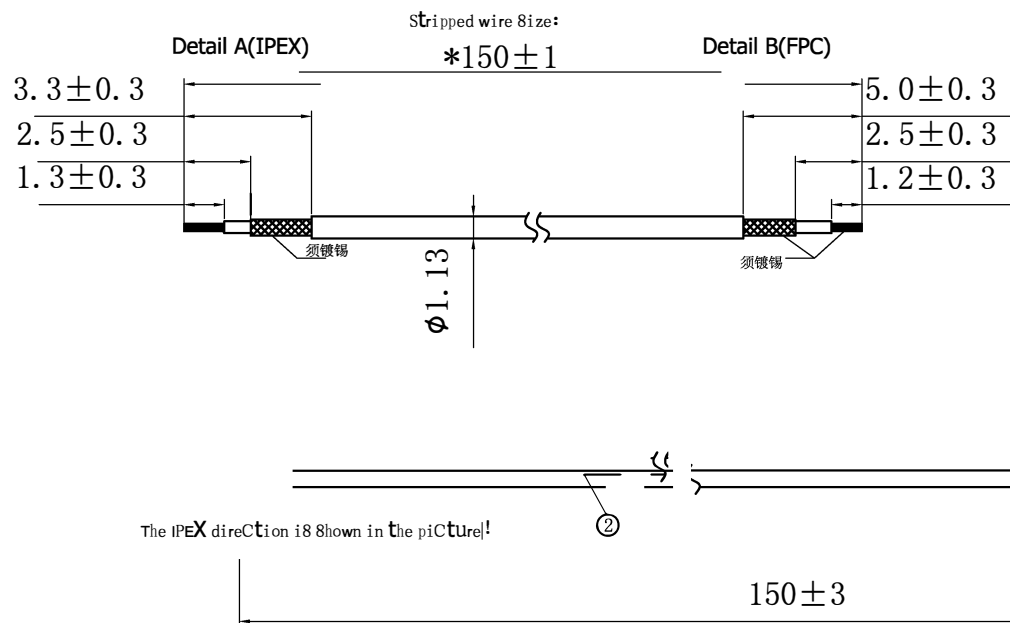
Inspection quantity		5PCS	qualified quantity		5PCS			
Item		Inspection Standards and Instructions	Test result					Determine
			No. 1	No. 2	No. 3	No. 4	No. 5	
E x t e r i o r	Wire	Φ1.13mm No color difference,no dirt, no damage, no scratches	pass	pass	pass	pass	pass	■OK □NG
	Connector	No color difference, no dirt, no damage, no scratches	pass	pass	pass	pass	pass	■OK □NG
	PCB/FPC	No color difference, no dirt, no damage, no scratches	pass	pass	pass	pass	pass	■OK □NG
	Solder	After welding, no cold welding, false	pass	pass	pass	pass	pass	■OK □NG
	Immersion tin	welding, tin tip, tin bead, and missing welding are allowed						□OK □NG
	Other							□OK □NG
S I Z E	1	150±5mm	150	150	150	150	150	■OK □NG
E L E C T R I C A L T E S T R E P O R T	Frequency Rang	2.4-2.5G 5.15-5.85G						
	VSWR	COMPARITONM	pass	pass	pass	pass	pass	■OK □NG
C H R A C T E R	cable and assembly tension	>1.0kg	1.73	1.63	1.80	1.77	1.58	■OK □NG
Final judgment		■ qualified						

check: zcc

inspect: LJL

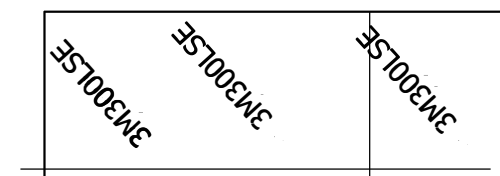
RoHS

SIGN	DATE	DESCRIPTION	APPROVER
X0	19.08.01	New drawing	JOHN.LIU



- NOTE:
1. With "*" is the key control size;
 2. electrical test:
Frequency Rang: 2. 4~2. 5GHz
5. 15~5. 85GHz

VSWR: 2. 0MAX (With case) Gain (Peak): 2. 0dBi
 3. working environment: -40℃~+85℃;
 4. Environmental requirements:
 5. RoHS 2. 0; IPEX direction:
100mm±90degrees;
200mm±135degrees;
No control over 200mm;



Hand tear position (release paper pre-Cut)

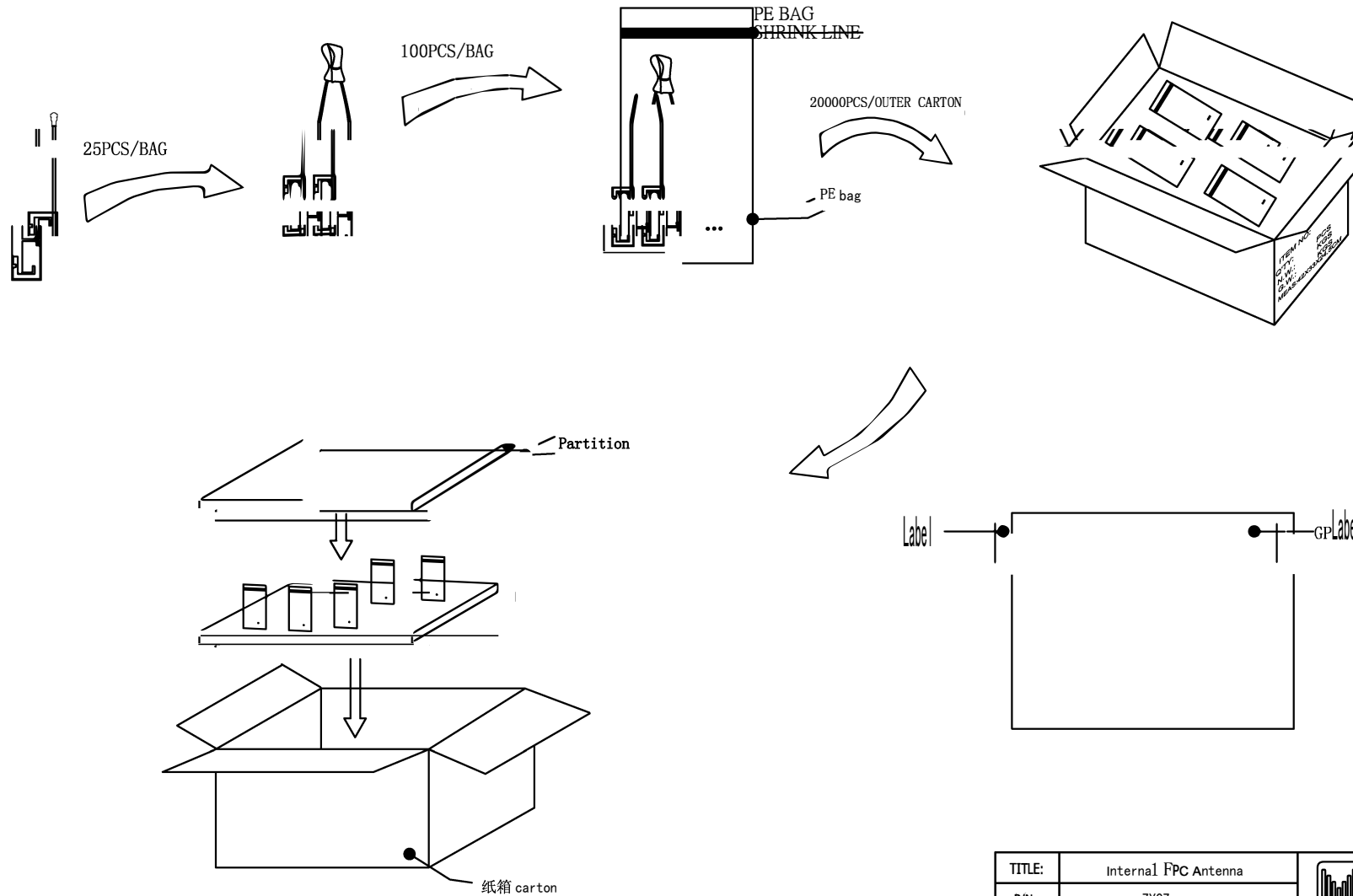
Electrolytic
copper

3	Q20-160003-A	IPEX CONN#	copper	gilded	1
2	---	$\phi 1.13$ mm CABLE	tinned copper	50 ohm white	1
1	Q70-020003-A	FPC	Electrolytic copper	OSP Black PCB17045	1
No.	Part Number	Name	Material	Describe	Q' ty

TITLE:		Internal FPC Antenna			RTANT COMMUNICATIONS CO.,LTD			
P/N:		ZYCZ			东莞市安特通信有限公司			
CUSTOMER:		ofeixin technology			Http://www.rtant.com Tel :0769-85833836 E-mail:dragon@rtant.com Fax:0769-82582573			
DRAW NO:		K220-10025-A			RTANT			
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED					APPROVED		JOHN 19.08.01	
一般公差 TOLERANCE		XXX ±0.1	XX ±5		SHEET: 1/1			CHECKED
		XX ±0.5			SCALE: NONE			
		X ±1.0			UNIT: mm			
		X ±3.0		REV.X0				
				DRAWN				

RoHS

SIGN	DATE	DESCRIPTION	APPROVER
X0	19.08.01	New drawing	JOHN.LIU



TITLE:	Internal FPC Antenna	 RTANT COMMUNICATIONS CO.,LTD 东莞市安特通信有限公司	
P/N:	ZYCZ		
CUSTOMER:	ofeixin technology	 http://www.rtant.com mail:dragon@rtant.com Tel: 0769-85833836 Fax: 0769-87582573	
DRAW NO:	K220-10025-A		
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED		APPROVED	
一般公差 TOLERANCE		XXX ±0.1	XX ±5
		XX ±0.5	
		X ±1.0	
		X ±3.0	
SHEET: 1/1		SCALE: NONE	CHECKED
UNIT: mm		REV.X0	DRAWED