

# SPECIFICATION

## SHEET FOR APPROVAL

(Revision: R: A2)

CUSTOMER(客户名称)	Newland
CS P/N(客户机种)	P180
PART NAME(品名)	WIFI
FREQUENCY(频率)	2400-2500MHz, 5150-5850MHz。
ZTX NO.(物料编号)	E.03.00989
DATE(日期)	2024-1-4

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED



福州中天迅通信技术有限公司  
ZHONGTIAN XUN Communication Technology Co.,Ltd.

# ANTENNA SPECIFICATION

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ApplicationDate:Jan,4,2024

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## Revision history

版本 version	日期 date	状态 status
A1	2023-12-25	初版。 First issue.
A2	2024-1-3	FPC 外形更新。 FPC form factor update



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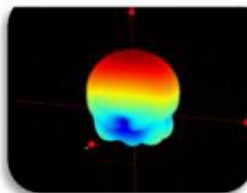
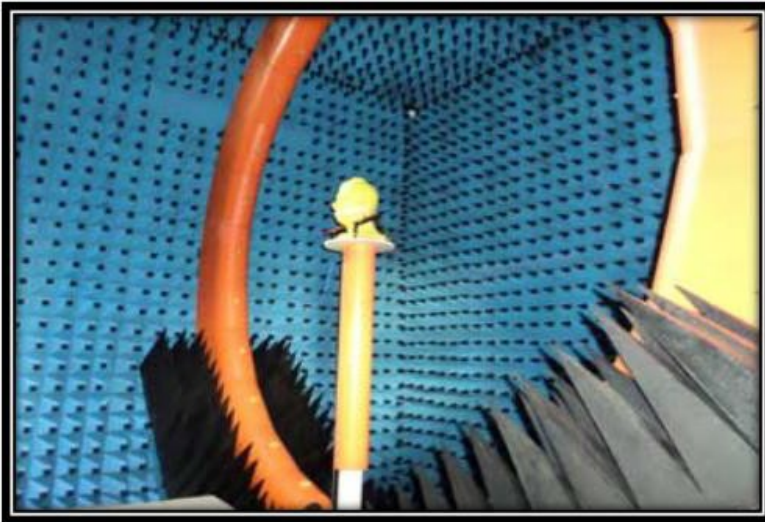
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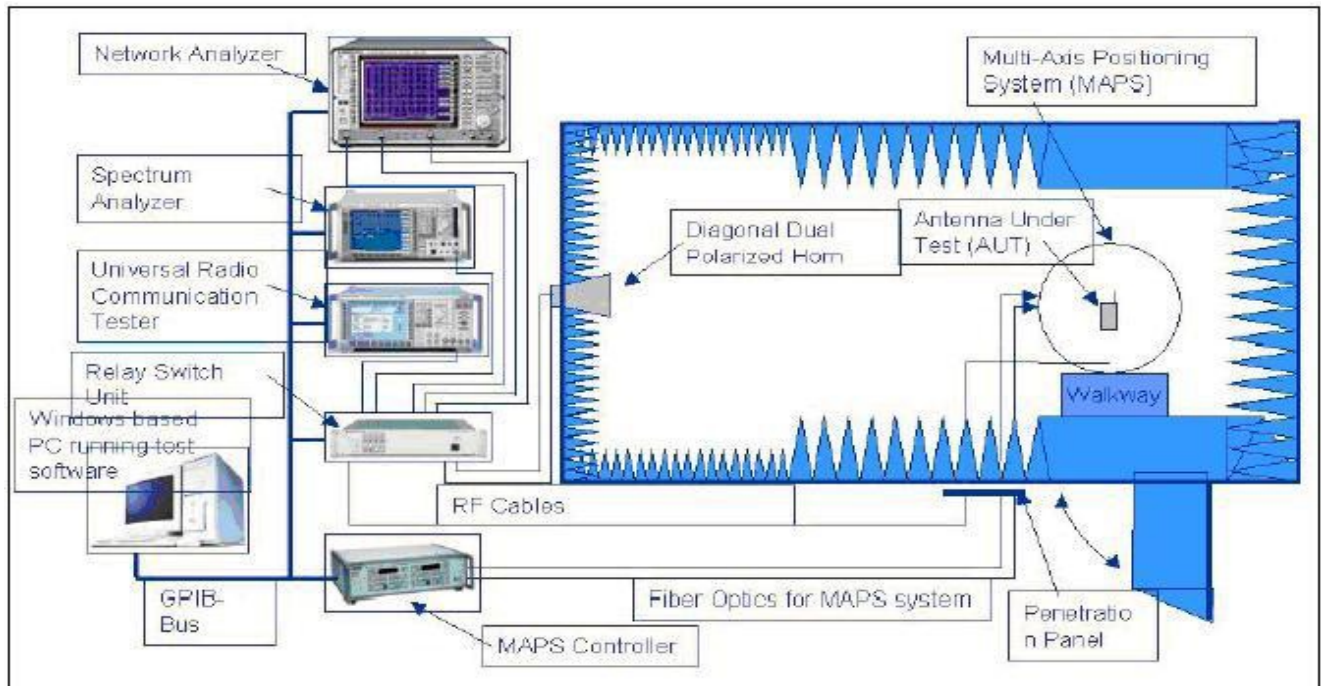
## 1. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CITA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT/GPS/MIMO/UWB within 0.4-6G.



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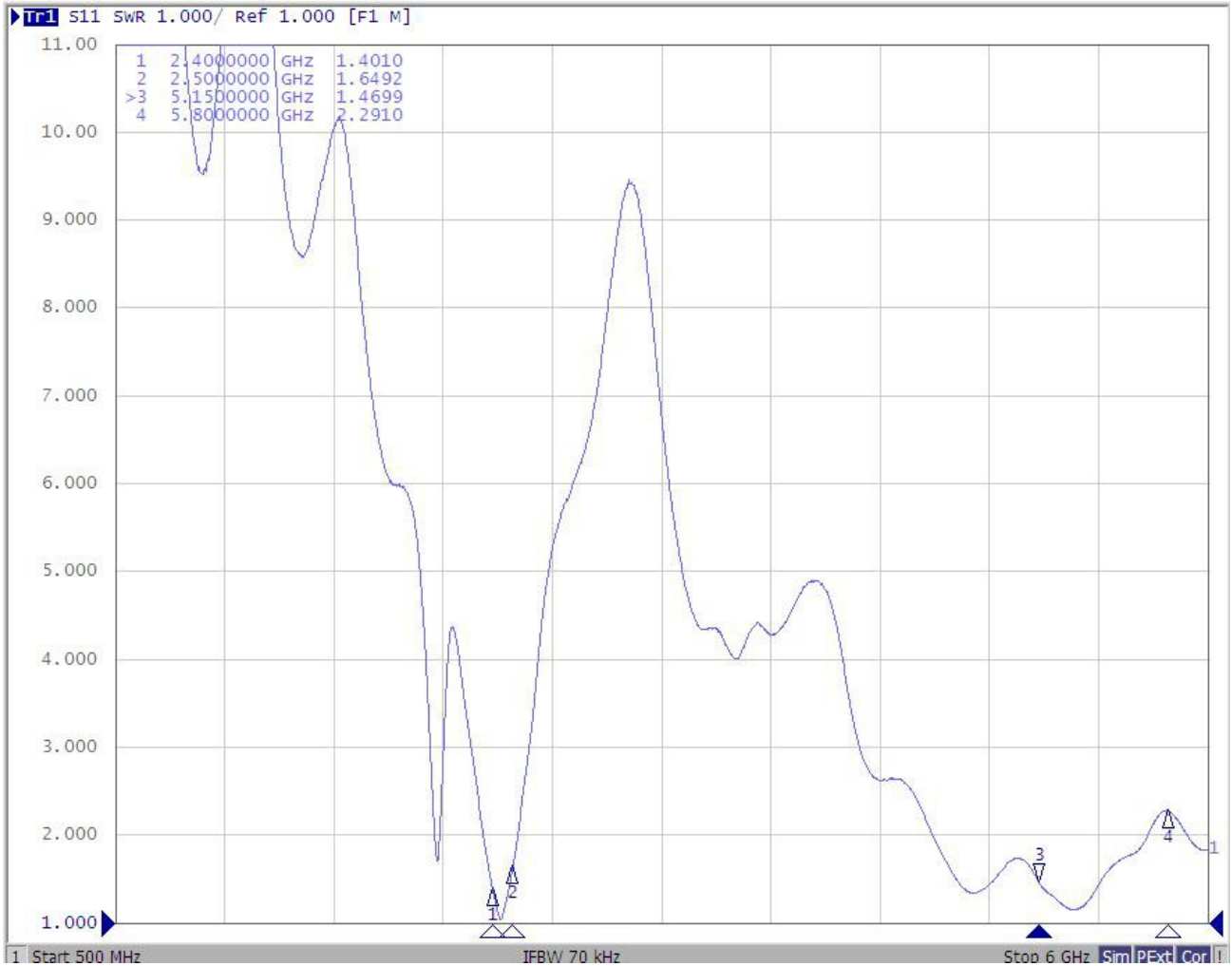
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## 2. Antenna test data

### 2-1 VSWR



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## 2-2 Antenna passive test

chNo	Freq (MHz)	Gain (dBi)	Efficiency (%)	chNo	Freq (MHz)	Gain (dBi)	Efficiency (%)
1	2400	0.915206	37.23094	14	5250	0.264011	38.92971
2	2410	0.884162	39.8482	15	5300	0.306463	39.37506
3	2420	1.027947	43.13168	16	5350	0.208407	37.97963
4	2430	0.814054	43.88085	17	5400	1.597212	43.34311
5	2440	0.420835	43.36142	18	5450	1.545347	37.62169
6	2450	0.299824	45.5828	19	5500	1.061728	37.13668
7	2460	0.12307	46.10727	20	5550	1.932133	39.46462
8	2470	-0.01128	46.89955	21	5600	1.693994	34.64707
9	2480	-0.21037	45.4388	22	5650	1.010298	35.95622
10	2490	-0.16444	44.86651	23	5700	0.247231	36.69941
11	2500	-0.08576	45.55115	24	5750	0.166704	36.20161
12	5150	0.341272	36.67021	25	5800	0.129381	36.97768
13	5200	0.160192	35.94942	26	5850	0.288588	41.13686





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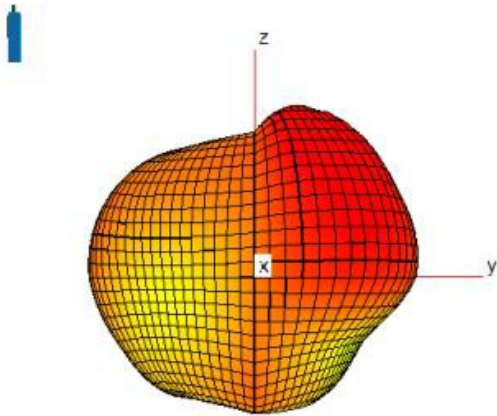
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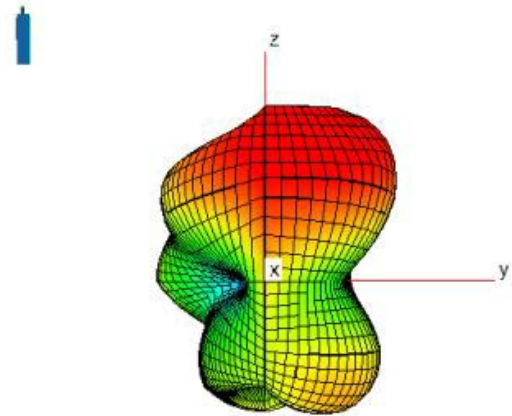
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## 2-3 3D radiation drawing



2450MHz



5500MHz



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## 2-4 Active test data

无铅板 Aluminum-free plate

频段 Frequency	参数\信道 Parameter/channel	1	7	13
11G	TRP (dBm)	17.26	16.47	14.97
	TIS (dBm)	-73.67	-73.54	-73.76
频段 Frequency	参数\信道 Parameter/channel	36	64	165
11A	TRP (dBm)	13.36	11.94	11.61
	TIS (dBm)	-73.67	-72.88	-71.05





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加铝板 Aluminized plate

频段 Frequency	参数\信道 Parameter/channel	1	7	13
11G	TRP (dBm)	13.87	15.20	14.65
	TIS (dBm)	-70.15	-71.13	-72.11
频段 Frequency	参数\信道 Parameter/channel	36	64	165
11A	TRP (dBm)	11.17	10.23	10.18
	TIS (dBm)	-71.25	-70.24	-69.75



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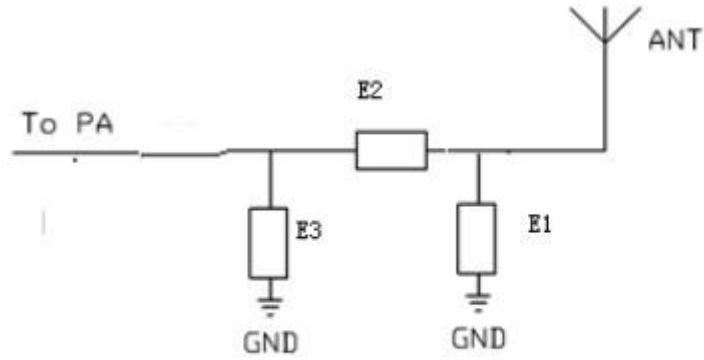
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## 2-5 Matching circuit



匹配说明 Matching specification	
E1	NC
E2	1.8nH
E3	0.5pF



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## 2-6 Environment treatment



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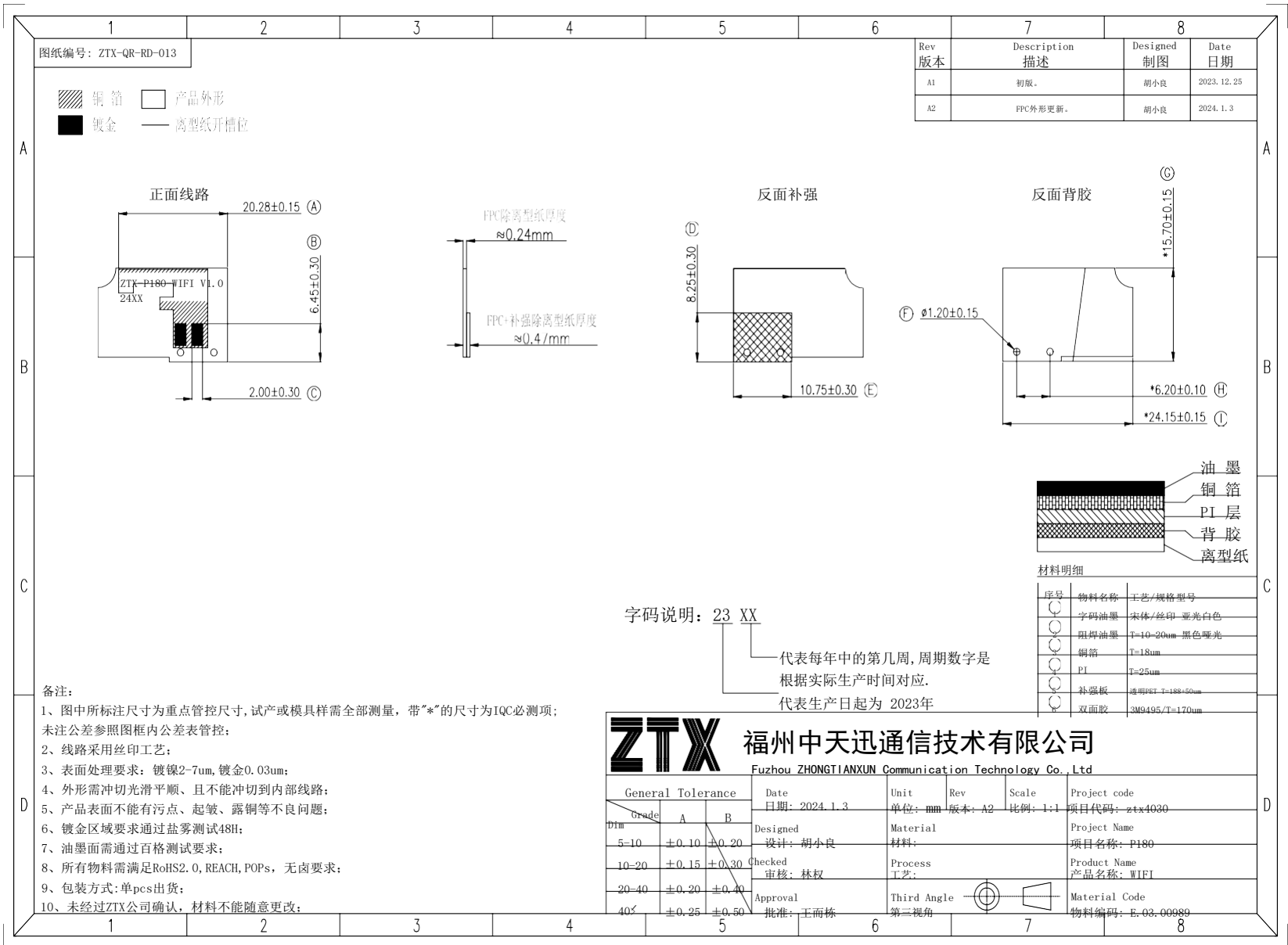
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## 3. Mechanical Specification



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## 4. Size report

## 5. Salt-Spray test

## 6. Environment Characteristic

NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	High Temperature/Humidity Storage Test(non operating)	1. Temperature: $+70 \pm 2^{\circ}\text{C}$ 2. Humidity: $90\sim 95\%RH$ 3. Time: 48hrs	No material deformation is allowed.
4-2	Low Temperature/Humidity Storage Test(non operating)	1. Temperature: $-30 \pm 2^{\circ}\text{C}$ 2. Humidity: $0\%RH$ 3. Time: 48hrs	The VSWR, Gain, Radiation Pattern must be met specifications after these test.



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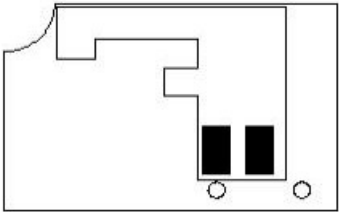


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## 7.The packing way

 <b>福州中天迅通信技术有限公司</b> Fuzhou ZHONGTIANXUN Communication Technology Co.,Ltd				<b>作业指导书</b>																		
产品名称	产品型号	文件编号	版本	工序序号/名称	工序工时	日产量																
WIFI	P180	ZTX-QD-WI-024	A1	包装	/	/																
<p><b>作业方法（自该工序作业合格后，方能流入下一道工序）</b></p> <p><b>注意事项：</b></p> <ol style="list-style-type: none"> <li>1.发现重量有超出公差范围时，须对数里进行清点</li> <li>2.外箱只允许有1个物料标签，其余如有多余标签时必须将其清理干净。</li> <li>3.条码标签在贴于外箱时，应尽量平整，避免应起皱影响客户入库。</li> <li>4.条码需清晰可扫描</li> </ol>																						
<p>1. 产品采用单PCS出货，每（100pcs）产品用90*130mmPE封口膜</p> <p>2. 每个160*240mmPE开口膜袋装10小袋（1000PCS），尾数除外；</p> <p>3. 外箱上除标签贴外，不能有任何丝印（即空白纸箱）出货；</p> <p>4. 将包装好的产品装入纸箱，每箱数里根据订单数里要求进行数量确认，保证每箱装入的数量正确。</p> <p>5. 在装好产品的箱子上将外箱标签及物料追溯码，RoHS贴于外箱的右上角，打印标签内容包括（生产厂家，型号，产品名称，客户编码，数量，订单号，日期，QA检验，）</p>																						
<table border="1"> <thead> <tr> <th>物料编号</th> <th>物料名称及规格</th> <th>用量</th> <th>工/夹装治具</th> </tr> </thead> <tbody> <tr> <td></td> <td>纸箱(45*32.5*21)cm</td> <td>1</td> <td>电子秤</td> </tr> <tr> <td></td> <td>PE封口袋(90*130)mm</td> <td>200</td> <td>封口机</td> </tr> <tr> <td></td> <td>PE开口袋(160*240)mm</td> <td>20</td> <td></td> </tr> </tbody> </table>							物料编号	物料名称及规格	用量	工/夹装治具		纸箱(45*32.5*21)cm	1	电子秤		PE封口袋(90*130)mm	200	封口机		PE开口袋(160*240)mm	20	
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	PE开口袋(160*240)mm	20																				
<p><b>图1：确认数量</b></p>  <p><b>图2：每10小袋用大PE袋包装</b></p>  <p><b>图3：小标签及追溯码</b></p> <table border="1"> <tr><td>IP地址:XXXXXXXXXX</td></tr> <tr><td>产品名称:XXXXXXXX</td></tr> <tr><td>物料:XXXXXXXXXXXX</td></tr> <tr><td>数量:1000pcs</td></tr> <tr><td>重量:XX g</td></tr> <tr><td>周期:XXXX</td></tr> </table>  <p><b>图4：贴外箱标签，封箱</b></p>							IP地址:XXXXXXXXXX	产品名称:XXXXXXXX	物料:XXXXXXXXXXXX	数量:1000pcs	重量:XX g	周期:XXXX										
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<p>修订内容</p>																						
版本	修订日期					修订人																
制订	胡小良	审核	易爱玲	品质确认	胡春梅	批准																
						张武民																

