

Part Description	Manufacturer: SmartLabs Holding Ltd		
	Vendor: changhongwangluo		Description: JHCWL1809-299-B
Project: SML-5041W			
Part NO:		Version: A1	
Attachments	<input checked="" type="checkbox"/> Spec	<input checked="" type="checkbox"/> Drawing	<input type="checkbox"/> Sample
	<input type="checkbox"/> Cpk Report	<input type="checkbox"/> FAI Report	<input checked="" type="checkbox"/> Reliability Report
	<input type="checkbox"/> QC Flow Chart	<input type="checkbox"/> Molding conditions	<input checked="" type="checkbox"/> Material Verification Sheet
	<input checked="" type="checkbox"/> Packing Content	<input type="checkbox"/> 3C Certificate	<input type="checkbox"/> <i>Material inspection standard</i>
ROHS Repot <input checked="" type="checkbox"/>			
Safety Report <input type="checkbox"/>			
Vendor	Design: 胥万芳 Check: 郑翠兰 Approval: 彭发辉		
Technology check	Mechanical: _____ Hardware: _____ ID: _____ Market: _____ DQE/SQE: _____		
Final check	ROHS: Quality plannin		
Approval condition	<input type="checkbox"/> Approved <input type="checkbox"/> Reject <input type="checkbox"/> Condition approved <input type="checkbox"/> Temporary approved		
Approval by	RD Leader(Technology Director)	Quality Director	

Content

1	Content.....	2
2	Instructions.....	3
3	Product specifications.....	3
4	Reliability test.....	4
5	Electrical performance test.....	5
6.1	Test equipment and environment.....	5
6.2	Antenna Return Loss (RL) and SWR.....	5
6.3	Antenna passive test data.....	6
6	Engineering drawings.....	7
7	Installation instructions.....	7
9	Packing method.....	7

2 instructions

This report includes several equipment, test environment and test results for the electrical performance of the antenna, as well as structural drawings and inspection reports of the antenna. Below is a picture of the antenna.



3 Product specifications

Electrical Specifications	
Frequency Range (MHz)	2400-2500&5.1-5.85
Gain (dBi)	See test data
VSWR	≤2
Input Impedance (Ω)	50
Polarization	Vertical
Maximum input power (W)	2
Input connector type	
Dimensions (mm)	18.1*5.8*5.7
Antenna weight (kg)	1.2g
Antenna color	

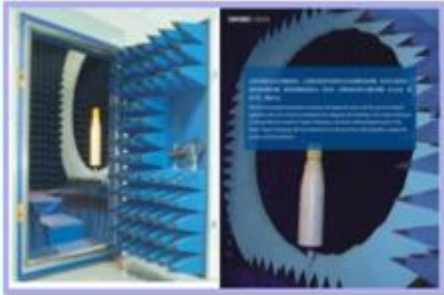
4 Reliability test

1	SAIT SPRAY TEST	<p>Brine spray test: distilled water according to GB1266-86 standard: single distillationPH6.5~7 Spray volume: 1.4me80cm ²/ H compressed air pressure: 1kgf / cm² Test Relativity: 98 ° Temperature: 45 ° ~ 47 ° Pressure temperature: 35 ° Test time: 24hr</p>	<p>All characteristic range is 30% of the initial value</p>
2	HEAT TEST	<p>85+2°C for 96 hours, after keep in normal condition for 30mim the to test.</p>	
3	HUMIDITY TEST	<p>40+2°C 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.</p>	
4	COLD TEST	<p>-40+2°C for 96hours, after keep in normal condition for 30mim the to test.</p>	

5 Electrical performance test

5.1 Test equipment and environment

测试设备



SATIMO-24



ETS



模拟人头手



安捷伦8960



安利MT8820C



CMW500



安捷伦E5071C

测试系统

测试环境

有源测试

无源测试

SATIMO—24

温度：22°C ± 3°C

支持2G/3G/4G

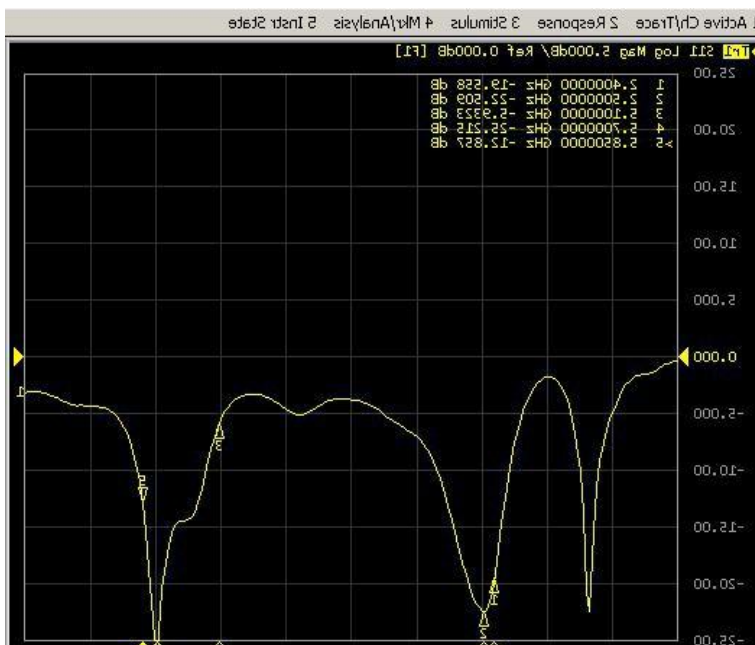
400MHZ—6G

ETS

湿度：50% ± 15%

BT/WIFI/GPS

5.2 Antenna Return Loss(RL) and SWR

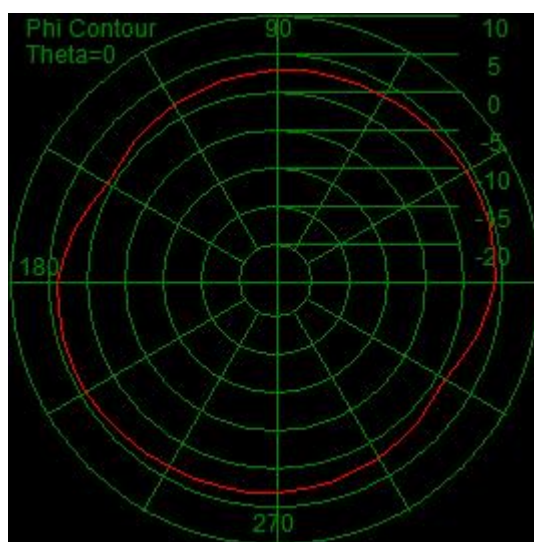
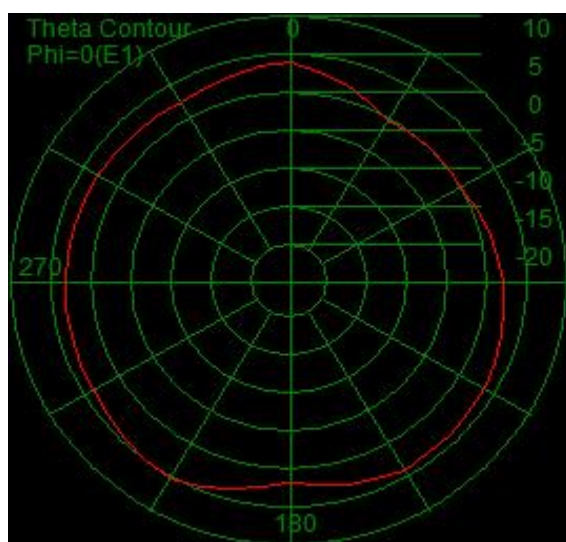
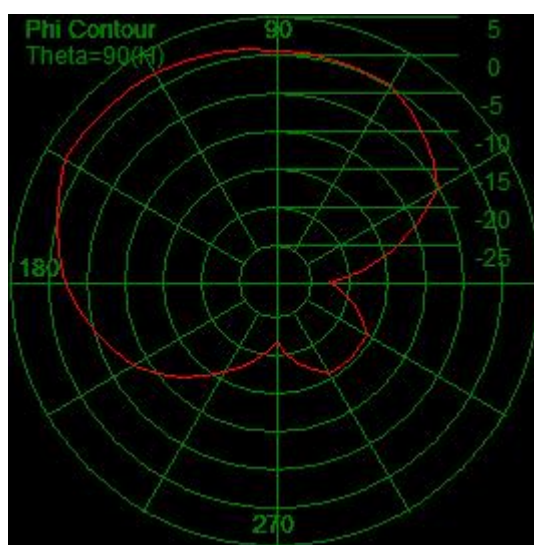
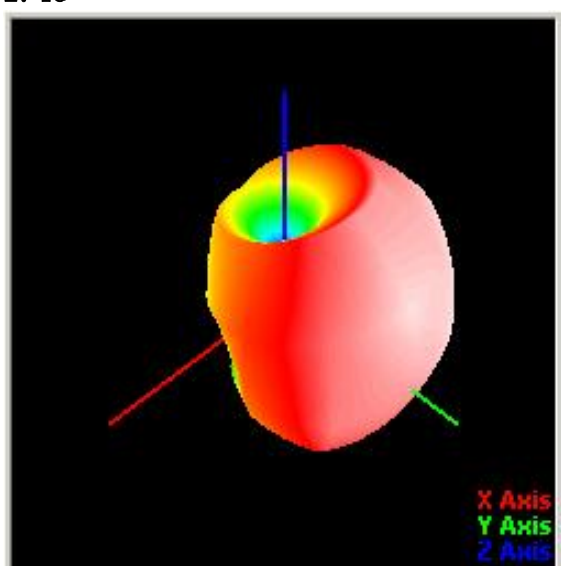


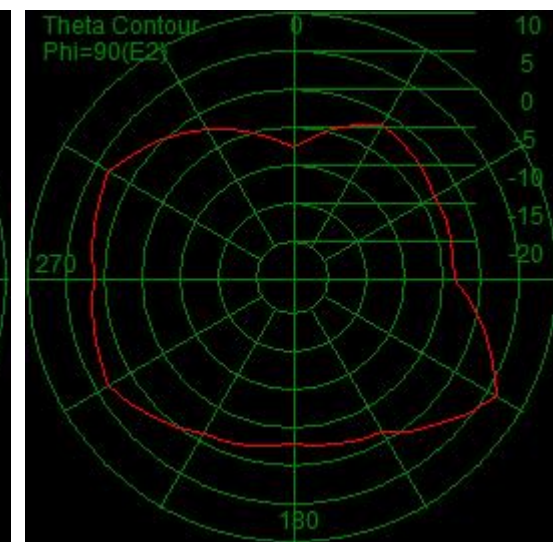
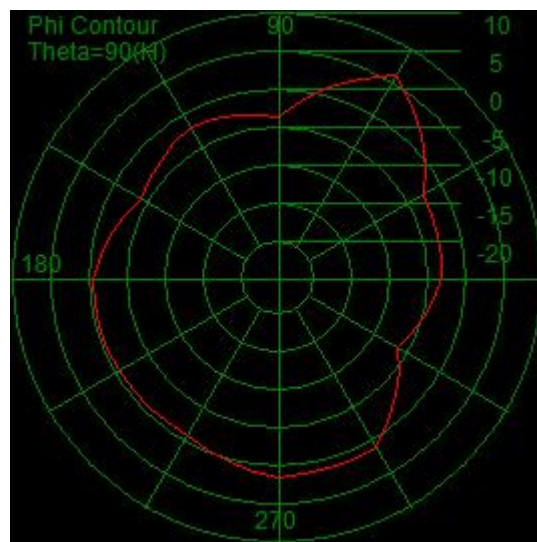
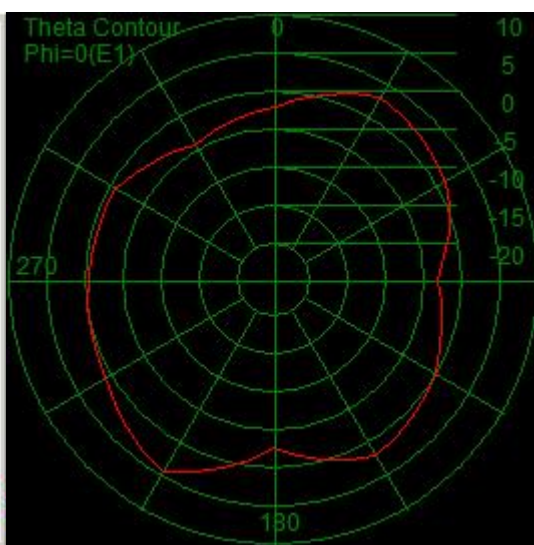
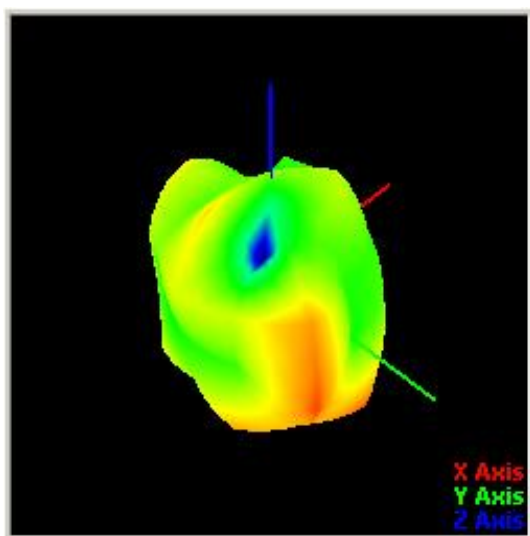
6.3 Antenna passive test data

FRE(MHZ)	2400	2450	2500	5150	5300	5500	5650	5750	5850
EFF(%)	57.1	55.1	51.1	30.4	40	45.3	51.1	53.5	52.2
GAIN(dbi)	2.51	2.43	2.20	0.94	1.40	1.88	2.39	2.58	2.20

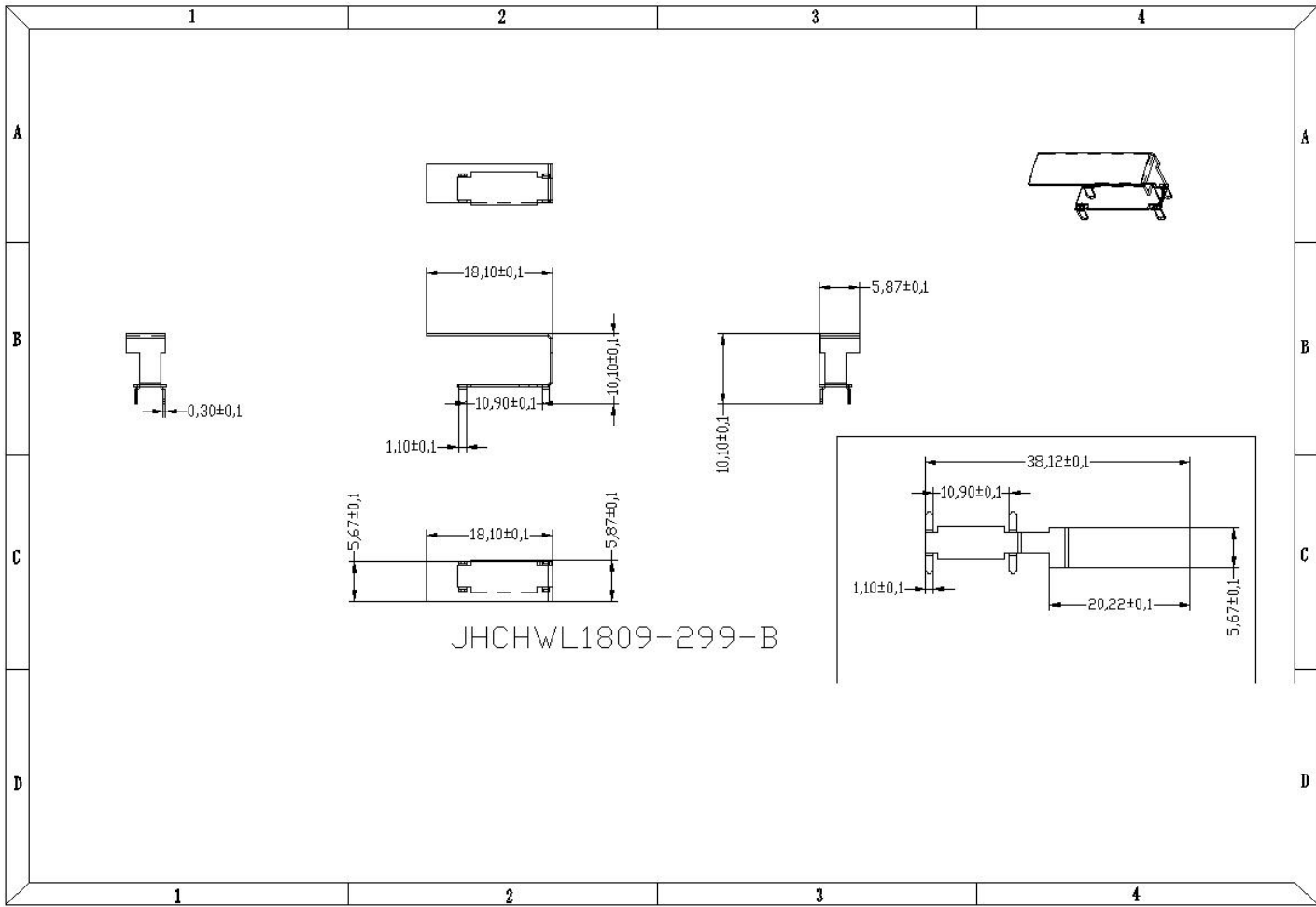
3D CHART

2.4G





7 Engineering drawings



8 Installation instructions



9 Packing method

500pcs/bag