



深圳市锦鸿无线科技有限公司

Shenzhen Jinhong Wireless Technology Co., Ltd.

Antenna Specification Document

产品规格书Product Specification

产品描述 Part Description	客户: 蓝硕 Vendor: 产品名称: FPC天线 Product Name: 物料代码: Part NO:	规格型号: JHLS2601-036-A/B/C Description: 所承认项目: F600-1 Project: 版本: A1 Version:		
附件 Attachments	☒ 规格书 Spec ☐ CPK 报告 Cpk Report ☐ 制造流程图 QC Flow Chart ☒ 包装方式 Packing Content	☒ 工程图面 Drawing ☐ 关键尺寸报告 FAI Report ☐ 成型条件 Molding conditions C3C 证书 3C Certificate	☐ 样品 Sample ☒ 可靠性测试报告 Reliability Report ☒ 材质证明书 Material Verification Sheet ☐ 物料检验标准 Material inspection standard	☒ ROHS 报告 ROHS Repot ☐ 安规报告 Safety Report
供应商签核 Vendor	拟制: 彭彪 Design:	审核: 郑翠兰 Check:	批准: 彭发辉 Approval:	
公司地址 Company Address	深圳市宝安区西乡街道伟业创新一八工业园B栋3楼 3rd Floor, Building B, Weiye Innovation 18 Industrial Park, Xixiang Street, Bao'an District, Shenzhen City			
技术确认 Technology check	结构意见/签名: Mechanical 工业/包材设计意见/签名: ID 品质意见/签名: DQE/SQE	硬件意见/签名: Hardware 项目意见/签名: Market		
最终确认 Final check	质量策划: Quality planning	ROHS: ☐ Rohs 物料 ☐ 非 Rohs 物料		
承认条件 Approval condition	☐ 承认 Approved ☐ 条件承认 Condition approved ☐ 临时承认 Temporary approved	☐ 拒绝承认 Reject 需满足条件: _____ 限量 _____ PCS 采购		
审批 Approval by	研发总工 (技术总监): RD Leader(Technology Director)	质量总监: Quality Director		
分发部门 Distribute	☐ IQC ☐ 采购 (供应商) ☐ 样品管理/文控 ☐ 外协厂 ☐ 其它			

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1说明instructions

这份报告包含天线电性能测试的若干设备、测试环境和测试结果，以及天线的结构图纸和检验报告

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.

2 产品技术指标 Product specifications

电气参数	
频率范围 Frequency Range（MHz）	700~960/1710~2650
增益 Gain（dBi）	见下方表格
电压驻波比 VSWR	≤3.0
输入阻抗 Input Impedance（Ω）	50
极化方式 Polarization	水平
最大功率 Maximum input power（W）	10
机械参数	
天线尺寸 Dimensions（mm）	见下方图纸
天线颜色 Antenna color	黑色

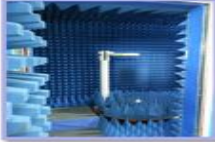
3 电气性能测试 Electrical performance test

3.1 测试设备 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

SATIMO—24

ETS

测试环境

温度：22℃ ± 3℃

湿度：50% ± 15%

有源测试

支持2G/3G/4G

BT/WIFI/GPS

无源测试

400MHZ——6G

3.2 OTA数据 OTA data

LTE OTA测试报告			
频段	信道	TRP	TIS
Band 1	18050	17.7	
	18300	18.1	
	18550	18.2	-92.6
Band 2	18700	17.4	
	18900	17.8	
	19100	18.2	-93.5
Band 3	19250	18.1	
	19525	18.6	
	19900	18.2	-94.2
Band 4	20050	17.8	
	20175	19.0	
	20300	18.4	-92.9
Band 5	20450	16.9	
	20525	16.7	
	20600	17.0	-92.2
Band 7	20800	17.2	
	21100	17.4	
	21400	17.2	-92.5
Band 8	21500	16.5	
	21625	16.2	
	21750	16.7	-91.7
Band 12	23060	15.6	
	23095	15.9	
	23130	16.1	-88.9
Band 13	23230		
	23202	16.2	-89.2
	23255		
Band 17	23780	15.9	
	23790	16.2	
	23800	16.2	-87.9
Band 20	24200	17.2	
	24300	16.9	
	24300	17.7	-89.9
Band 28	27260	15.0	
	27430	15.2	
	27610	15.2	-90.2
Band 66 (10M)	132022	18.1	
	132622	17.8	
	132297	17.5	-93.8
Band 71 (10M)	133172	15.1	
	133297	15.2	
	132422	15.6	-88.0
2.4G	1	8.9	
	7	9.6	
	13	9.7	-79.8

GPS测试

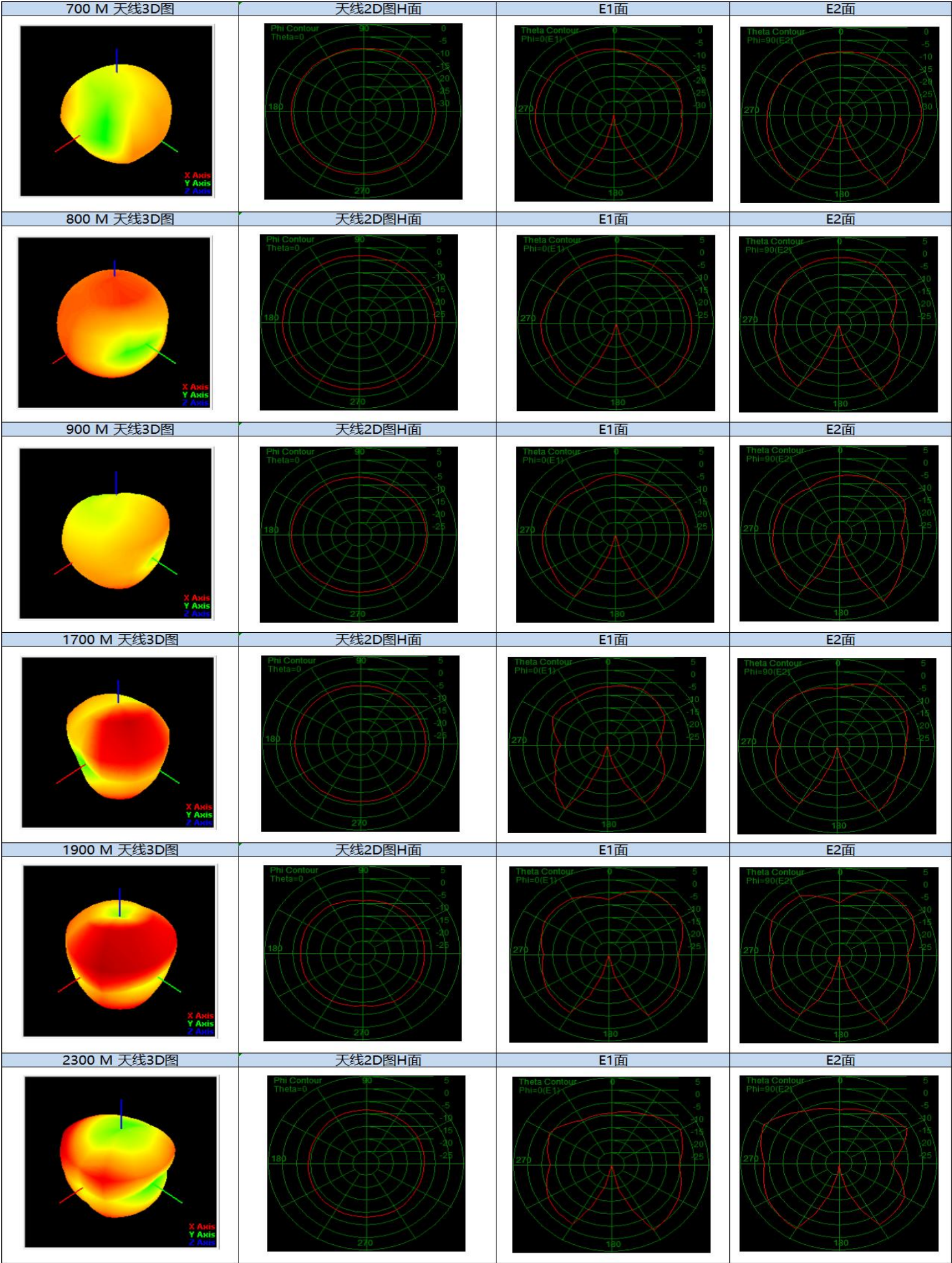


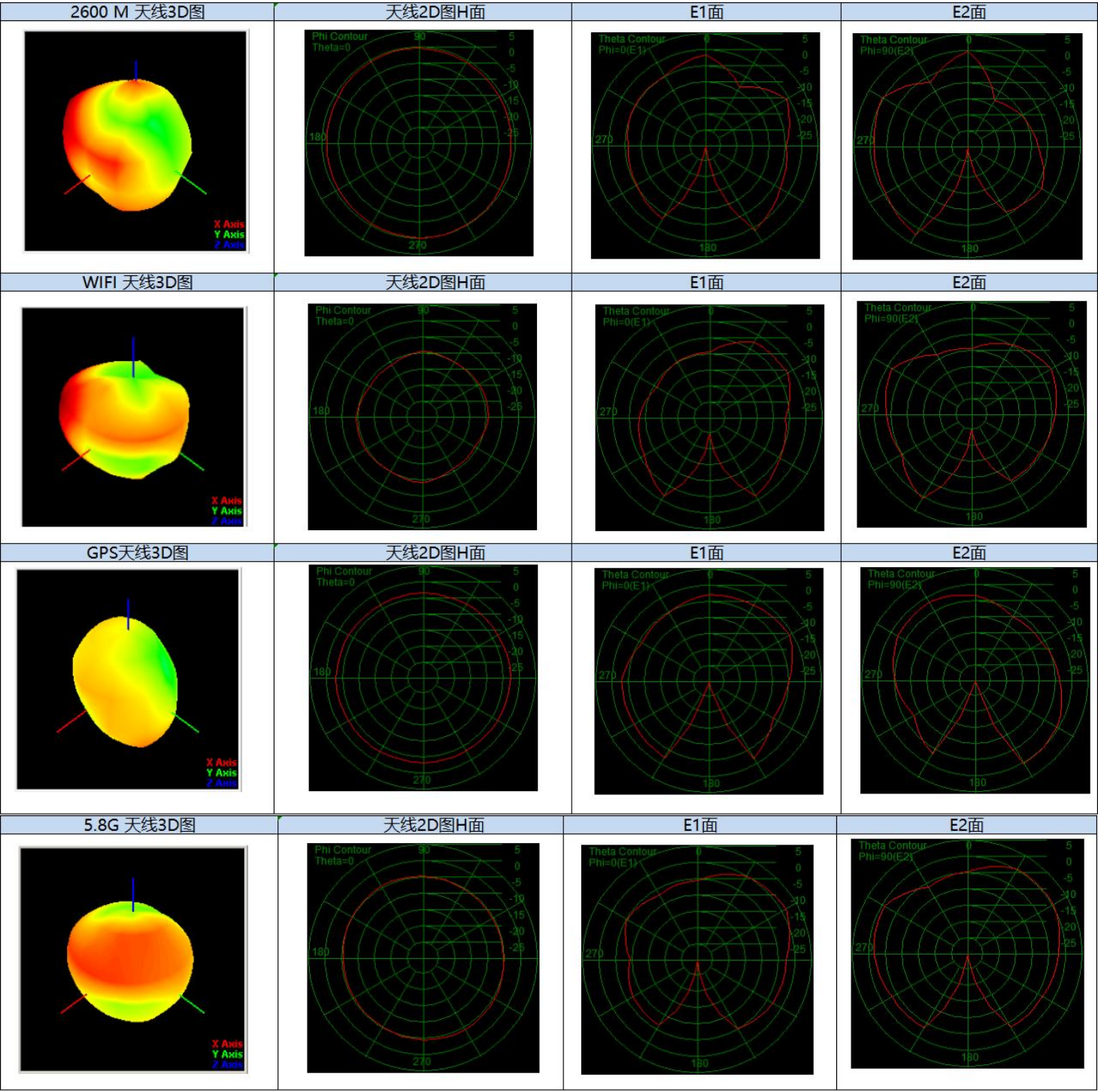
3.3 效率与增益 Efficiency and Gain

LTE天线					
Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率 (%)	Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率 (%)
700.00	-1.12	19.5%	1850.00	2.97	67.5%
720.00	-1.32	20.1%	1900.00	2.22	61.9%
740.00	-1.68	21.8%	1950.00	2.08	54.6%
760.00	-1.03	28.1%	2000.00	1.99	56.0%
780.00	-0.79	30.1%	2050.00	2.09	57.8%
800.00	0.53	41.7%	2100.00	1.25	45.5%
820.00	1.39	49.4%	2150.00	1.57	51.2%
840.00	2.24	51.1%	2200.00	1.72	43.4%
860.00	2.33	51.5%	2250.00	2.46	43.6%
880.00	2.17	51.2%	2300.00	2.92	57.0%
900.00	1.51	38.1%	2350.00	2.37	51.0%
920.00	2.95	50.5%	2400.00	2.00	54.0%
940.00	2.25	49.0%	2450.00	2.98	62.1%
960.00	2.30	38.3%	2500.00	2.32	53.3%
980.00	-3.43	11.9%	2550.00	2.36	54.8%
1000.00	-4.81	11.4%	2600.00	2.79	56.3%
1700.00	0.80	32.8%	2650.00	2.53	56.0%
1750.00	2.47	46.7%	2700.00	2.59	55.4%
1800.00	2.91	67.0%			

三合一天线			5150.0	0.48	31.3%
Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率 (%)	5200.0	0.67	34.7%
			5250.0	0.42	37.0%
1575.00	0.60	30.2%	5300.0	0.64	38.7%
2400.0	1.87	36.3%	5350.0	0.57	39.9%
2410.0	2.15	38.2%	5400.0	0.24	34.3%
2420.0	2.02	35.8%	5450.0	0.52	37.8%
2430.0	1.23	38.2%	5500.0	0.17	32.1%
2440.0	1.02	39.2%	5550.0	0.29	33.2%
2450.0	1.01	40.1%	5600.0	0.87	36.9%
2460.0	0.83	37.9%	5650.0	0.30	36.3%
2470.0	0.13	41.0%	5700.0	0.24	33.4%
2480.0	0.59	36.9%	5750.0	0.30	31.5%
2490.0	0.14	35.5%	5800.0	0.21	35.8%
2500.0	0.83	30.2%	5850.0	0.68	39.8%

3.4 3D方向图 3D Chart





4 工程图纸 Engineering drawings

