



成者科技 STARRY WIFI2.4G/5.8G 天线规格承认书

Product Specifications for Approval

物料编号: WF2169B-1131R-110

客户名称: 成者科技

机型: STARRY

天线频段: WIFI2.4G/5.8G

版本: R-A

制作日期: 2021-9-16

顺达成科技有限公司研发			
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客户确认			
客户审核:		客户批准:	

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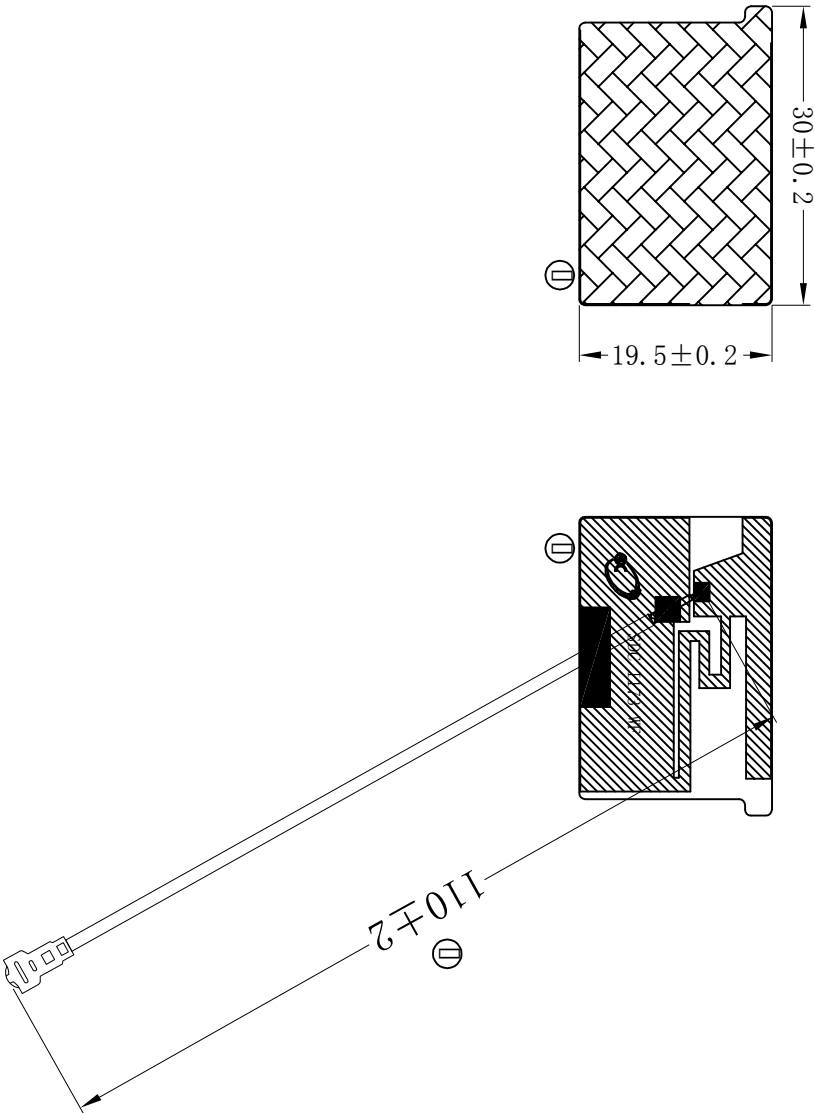
RoHS Compliant

独家研发 仿冒必究

REV	DATE	DESCRIPTION	ECN NO.	NAME
A	2021.9.16	NEW RELEASE		MISS LIO

Customer Drawing

STARRY SERIES 2.4G FPCB Antenna(Up side)



□			SHEN DA CHENG ELECTRONICS CO., LTD	WF2169B-1131R-110			
5.			TITLE: 2.4G FPCB Antenna(Up side)				
4.	Conductive cloth						
3.	CAF-Y196008	3M Size:30mm * 19.5mm	1	DRAWN BY	SHINEY HEO	DRAWING NO. WF2169B-1131R-110	
2.	GM0160-01000011-01	FR,T:0.18mm, Size:30mm * 19.5mm	1	CHECKED BY		DRAWING SIZE A4	
1.	GMINI-178B01D11SX	OD:1.13mm Coaxial Cable, FEP Gray Jacket L=110mm IPEX1	1	APPROVED BY		UNIT mm	
NO.	ITEM	DESCRIPTION	QTY	SORTING NO.	SDC	PAGE 1 OF 1	

1. Project information and Electrical Specification

Those specifications were specially defined for 成者科技 STARRY, WiFi2.4G/5.8G, and all characteristics were measured under the model's handset testing jig .

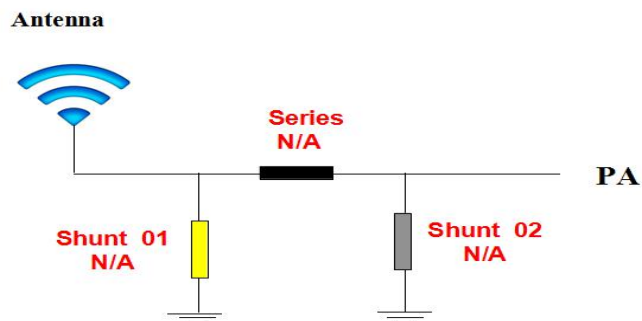
1-1 Antenna picture



1-2 Frequency Band:

Frequency Band	MHz
WiFi2.4G/5.8G	2400-5800 (MHz)

1-3 Impedance matching



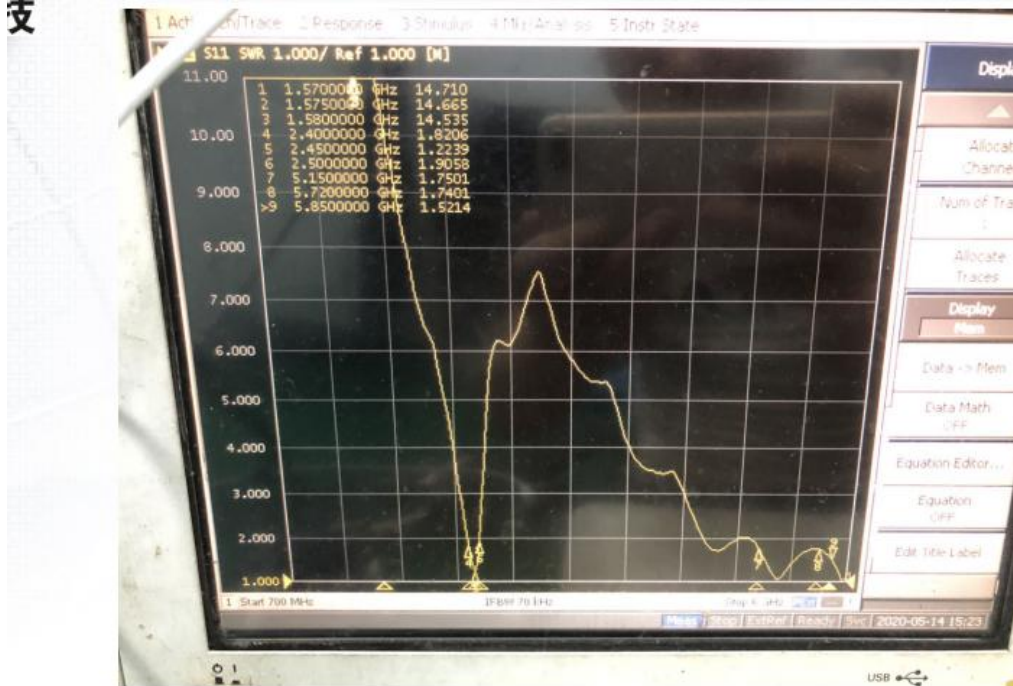
天线原匹配无更改

2.VSWR

Measuring Method:

1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

VSWR parameter values



Frequency(M Hz)	2400	2450	2500	5150	5720	5850
VSWR	1.82	1.22	1.90	1.75	1.74	1.52

3. Efficiency and Gain

*measuring and test instruments:

微波暗室, Agilent 网络分析仪, Agilent 频谱分析仪, 8960 综合测试仪, 标准天线

*test method:

equipment 以 H 面放于转台中心位置固定, 与喇叭天线中心位置在同一个水平线上。

Efficiency/Gain-WIFI

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	42.33	1.55
2450	43.72	1.61

2500	43.65	1.58
5150	40.29	1.32
5700	41.38	1.33
5850	41.72	1.39

4.1WIFI OTA Data-单模块

2.4G	802.11b, (2.4G) 11M		
信道	CH1	CH6	CH11
TRP	14.4	15.25	15.3
TIS	-79.23	-79.42	-81.22
5.8G	802.11A, (5.8G) 54M		
信道	CH36	CH60	CH161
TRP	11.58	12.98	15.6
TIS	-68.69	-69.32	-70.88

4.2WIFI OTA Data-双模块

2.4G	802.11b, (2.4G) 11M		
信道	CH1	CH6	CH11
TRP	11.6	12.85	12.69
TIS	-80.12	-83.42	-85.4
5.8G	802.11A, (5.8G) 54M		
信道	CH36	CH60	CH161
TRP	11.36	11.57	14.84
TIS	-69.22	-68.67	-70.62

2.4G	802.11b, (2.4G) 11M		
信道	CH1	CH6	CH11
TRP	11.76	12.63	12.7
TIS	-80.10	-83.25	-85.52
5.8G	802.11A, (5.8G) 54M		
信道	CH36	CH60	CH161
TRP	11.06	11.07	11.94
TIS	-69.16	-68.32	-71.34

5. The production index

天线量产时，以驻波比作为量产测试标准。

根据项目本身的差异,给出如下标准:

频率	量产标准
WIFI2.4G/5.8G	VSWR (量产产品) < VSWR(设计样品) +/- 0.5

6. Antenna Assembly & environmental processing

天线安装位置

单模块WiFi

双模块WiFi

