



HDKing F02SA WIFI2.4G Product Specifications for Approval

Material NO: SF1495A-1R22B-025-A

Customer: HDKing

Model: F02SA

Antenna band: 2.4G

version: R-A

Date: 2021-11-16

Shundacheng Technology Co.,Ltd			
structure:	chen wei	Radio frequency:	<u>yang yong hui</u>
audit:	<u>li na yao</u>	approval:	chen ming
Our client's confirmation			
audit:		approval:	

Address: 4th Floor, Building B5, Xinfu Industrial Park,
Chongqing Road, Fuyong Town, Bao 'an District, Shenzhen

TEL:0755-272—658

FAX:0755-29485750

Customer Drawing

REV	DATE	DESCRIPTION	ECN NO	NAME
A	21.11.16	NEW RELEASE		MISS LUO

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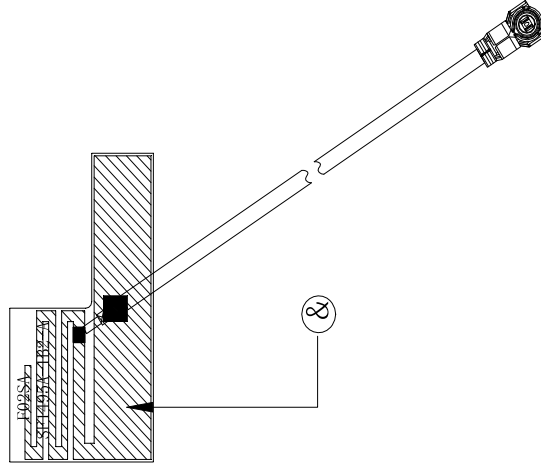
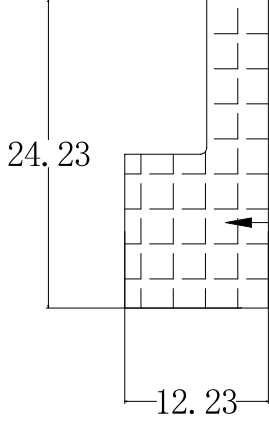
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RoHS Compliant

F02SA SERIES 2.4G FPC Antenna(Up side)

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12.23

24.23

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D

* SHEN DA CHENG ELECTRONICS CO., LTD SF1495A-IR22B-025-A		DRAWING NO. SF1495A-IR22B-025-A	
TITLE: 2.4G FPC Antenna(Up side)		DRAWING SIZE A4	
5.	Conductive cloth	1	mm
4.	GAF-Y196008	1	mm
3.	3M Size:24.23*12.23mm	1	mm
2.	FR, T:0.18mm, Size:24.23*12.23mm	1	mm
1.	GMINI-178801D1SX Jacket L=25mm IPEX2	1	mm
NO.	ITEM	QTY	DESCRIPTION
		1	SDC
		3	ARTICLE: 044032 V4

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1. Project information and Electrical Specification

Those specifications were specially defined for HDKing F02SA, WIFI2.4G, and all characteristics were measured under the model's handset testing jig .

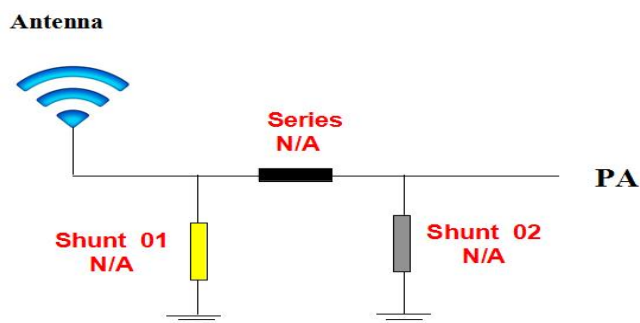
1-1 Antenna picture



1-2 Frequency Band:

Frequency Band-WiFi2.4G	2400-2500 (MHz)
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1-3 Impedance matching



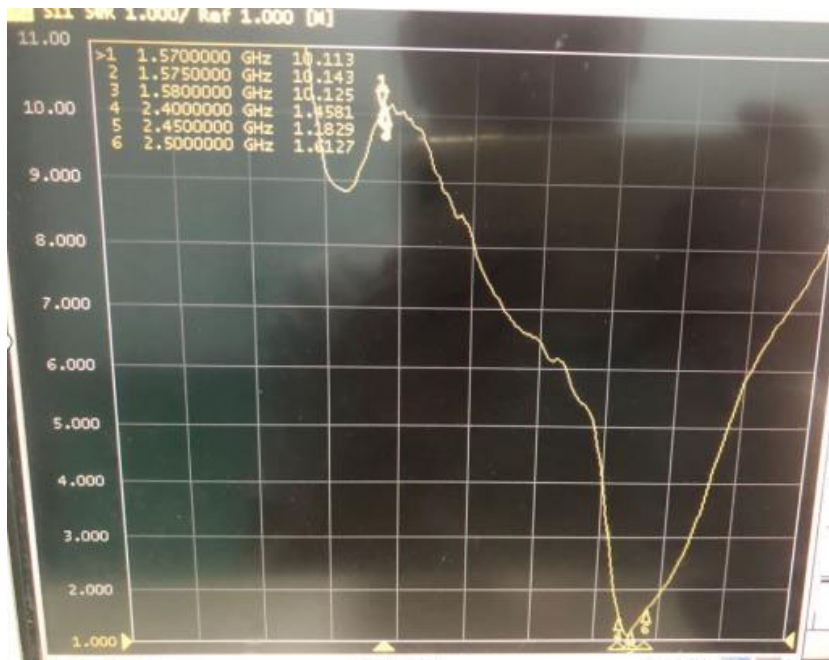
2.VSWR

Measuring Method:

1. A 50Ω 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

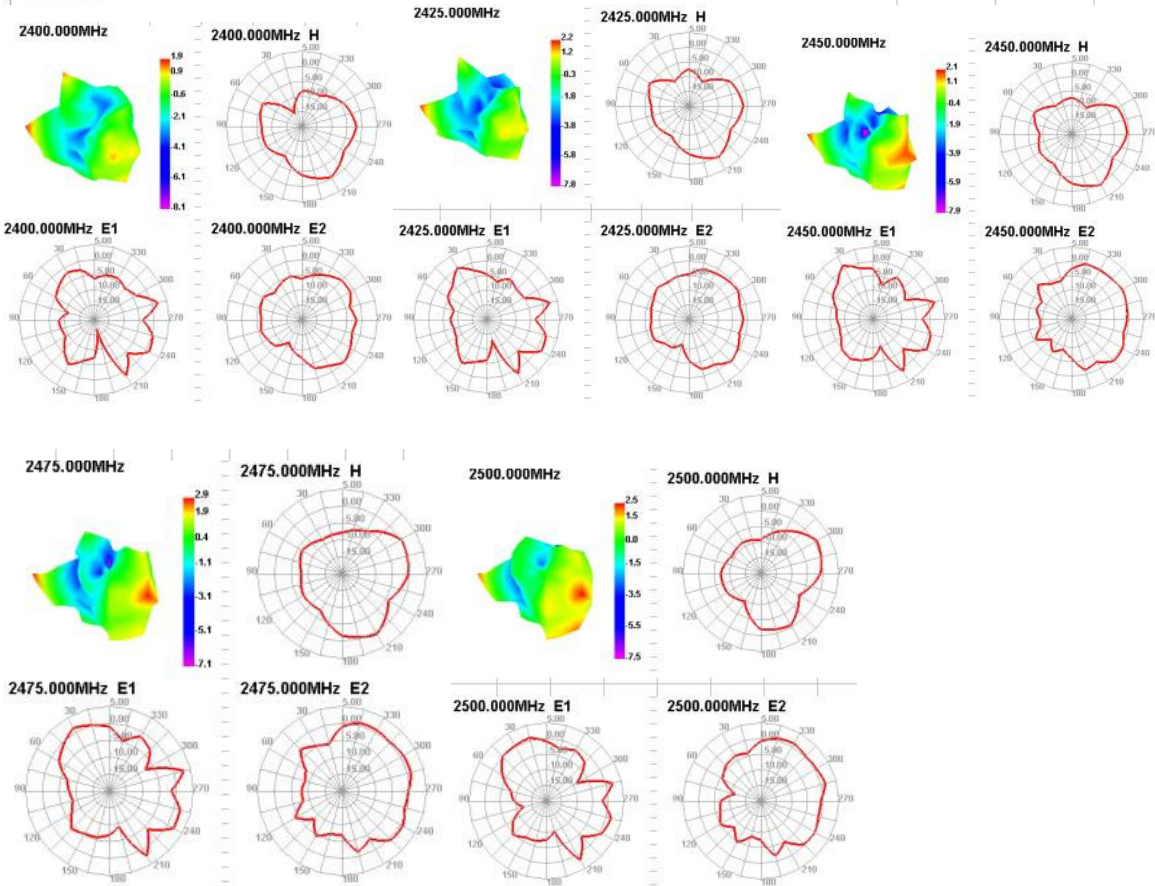
Frequency (MHZ)	2400	2450	2500
wave	1.45	1.15	1.61



3. **Efficiency and Gain***measuring and test instruments: Microwave anechoic chamber, Comprehensive measuring instrument, *test method:equipment It is fixed at the center position of the turntable with plane H, and the center position of the horn antenna is on the same level

Efficiency/Gain-WIFI2.4G

Passive Test For 2.4G												
Freq (MHz)	Effi (%)	Effi (dBi)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	22.25	-6.53	-0.88	-3.03	0	0	-0.88	-27.2	6.53	30	48.23	48.39
2425	25.44	-5.94	0.12	-2.03	0	0	0.12	-25.08	5.94	30	48.32	48.45
2450	27.91	-5.54	0.64	-1.51	0	0	0.64	-18.6	5.54	30	48.74	48.76
2475	32.13	-4.93	1.36	-0.79	0	0	1.36	-18.5	4.93	30	49.07	49
2500	35.3	-4.52	2.35	0.2	0	0	2.35	-16.65	4.52	0	49.2	49.11



4.The production index

When the antenna is in mass production, the standing wave ratio is used as the standard for mass production testing. According to the differences of the project itself, the following criteria are given:

frequency	Production standard
WIFI2.4G	VSWR (product) < VSWR(Design samples) +/-0.5