



Shenzhen Shuodian Electronic Technology Co.,Ltd
Page number 1-11

SPECIFICATION

for

K34 2.4-5.8G WiFi antenna

Customer No.

1.17.01.00044

Product No.

K34-DBWiFi_SD-0-FPC-80MM

Author: XiaofengZeng Review: Liming

Release Date: 2025.01.04

ShenZhen Shuodian Electronic Technology Co., Ltd

Room 201, Building 2, Nantaiyun Chuanggu Park, Tangwei Community, Fenghuang Street,
Guangming District, Shenzhen City, Guangdong Province

E-mail: sz_shuodian@163.com

Tel: 0755-86006322

Fax: 0755-86006323

Shenzhen Shuodian Electronic Technology Co.,Ltd



Contents

SPECIFICATION	1
SHENZHEN SHUODIAN ELECTRONIC TECHNOLOGY CO., LTD	1
CONTENTS	2
1. BILATERAL CONFIRMATION PAGE	3
2. GENERAL	4
3. GENERAL PRODUCT SPECIFICATIONS	4
4. SPECIFICATION DETIALS	5
4.1 MECHANICAL PROPERTIES	5
4.2 ELECTRIC PERFORMANCE	7
5. PRODUCT PACKAGING	9
6. DOCUMENT RESUME	11



1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

This specification is only applicable to K34 2.4G-5.8G WIFI antenna

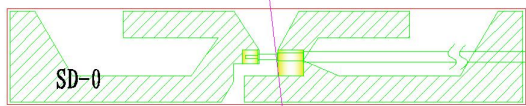
2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	K34
2	Operating Frequency Band	2400-2500MHZ 5100-5900MHZ
3	VSWR	≤ 2.0
4	Impedance	50 Ω
5	Antenna Type	Monopole
6	Antenna composition	FPC+Cable
7	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	FPC	40. 25*7. 38 Black
2	CABLE	IPEX-1 ϕ 1.13 L=80 black

4.12 Apperance

Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Productdrawings:

Shenzhen Shuodian Electronic Technology Co.,Ltd



REV	DESCRIPTION	DATE	BY

Technical requirements:

1. All unit sizes are mm.
2. Material: Backing glue: 3M 300LSE(9471); Base material: one to half, electrolytic copper. Matte black surface, white silkscreen. Generation terminals, black wire.
3. The pads are oxidized.
4. All dimensions with * symbols before the dimensions are controlled.

审核	设计	材料	比例	单位
			1:1	mm

名称	零件编号	材料	比例	单位
SD-0			1:1	mm

审核: 14



4.2 Electric Performance

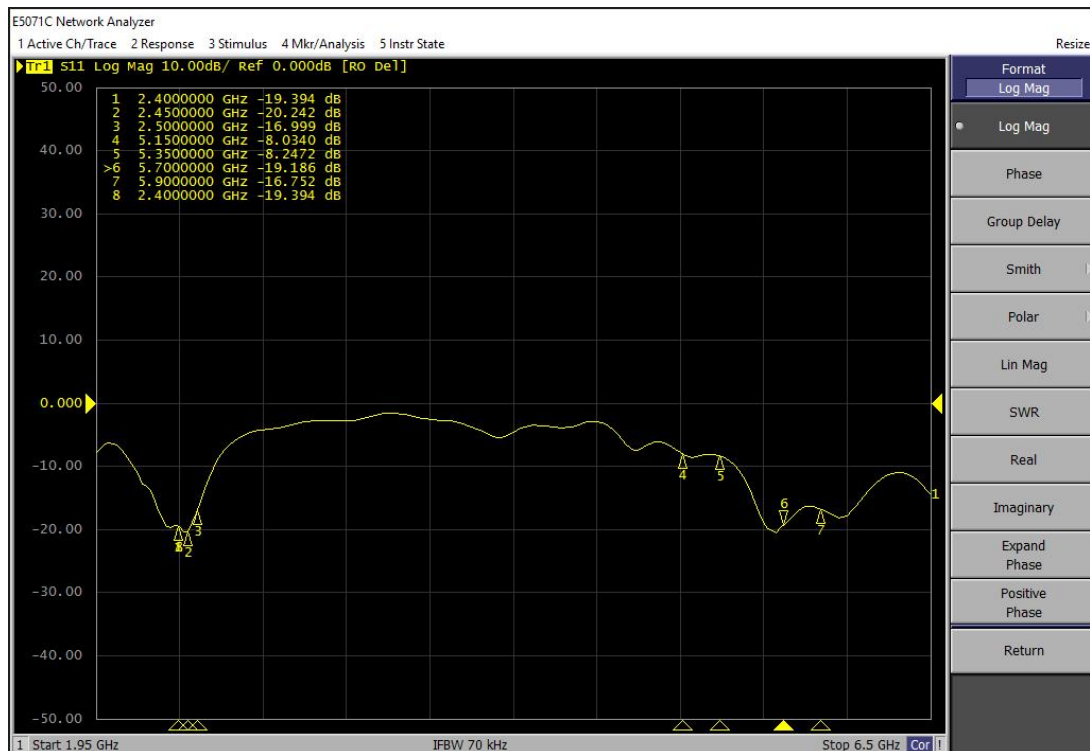
4.21 Test condition

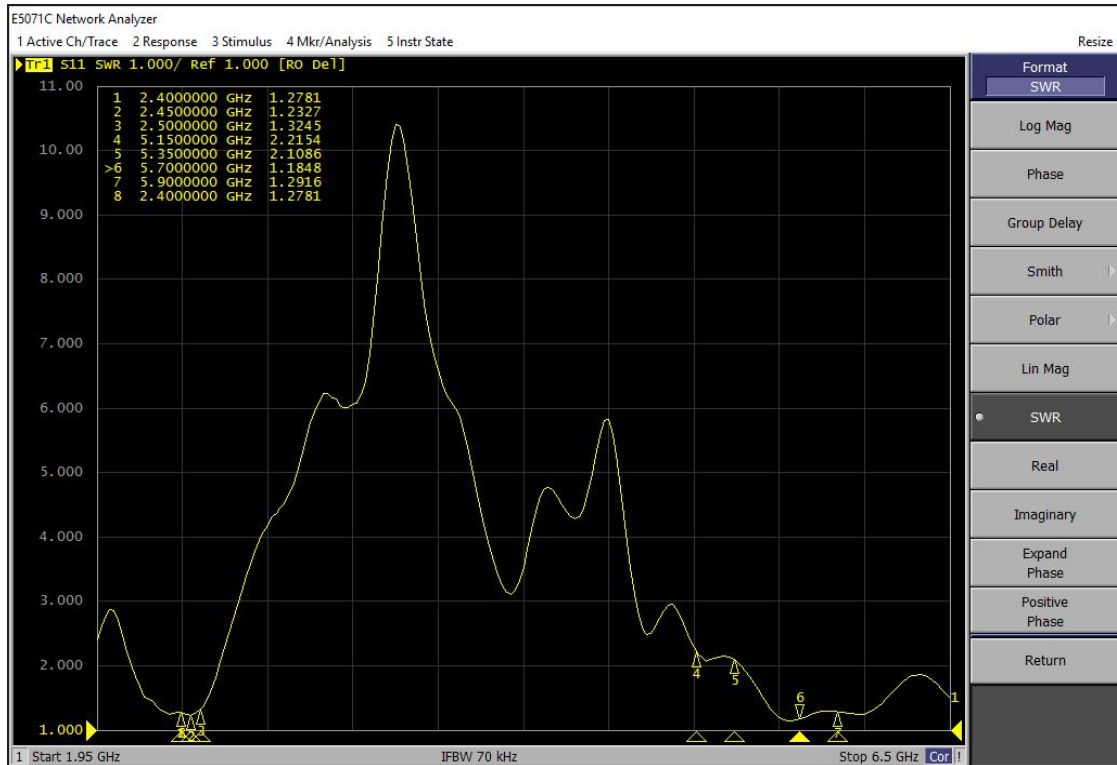
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity: ≤80% (+40℃)	Multi-probe microwave anechoic
Atmospher: 750mmkg±30mmkg	chamber

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker(MHZ)	2400	2450	2500	5150	5350	5700	5900
Returnloss	-19.39	-20.24	-16.99	-8.03	-8.24	-19.18	-16.75
VSWR	1.27	1.23	1.32	2.21	2.10	1.29	1.27



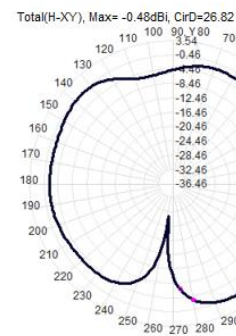
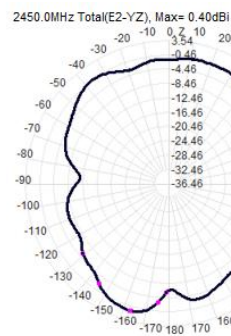
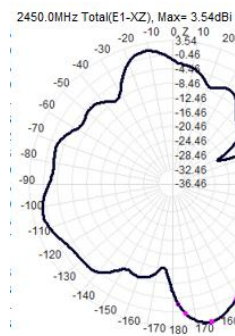
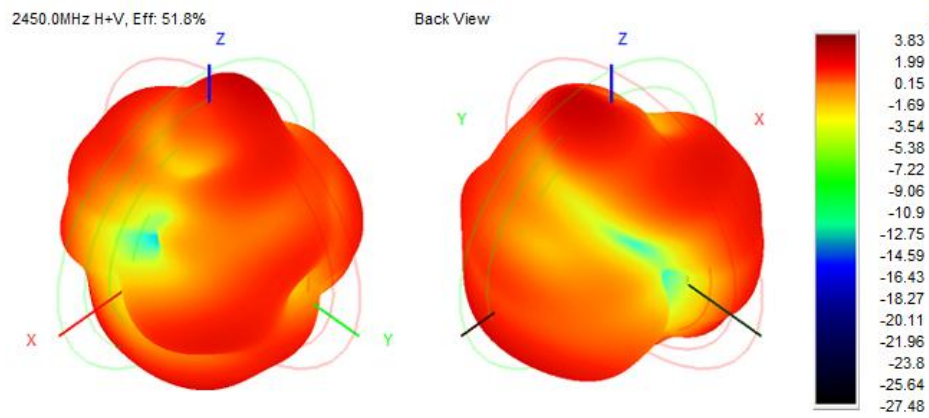


4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

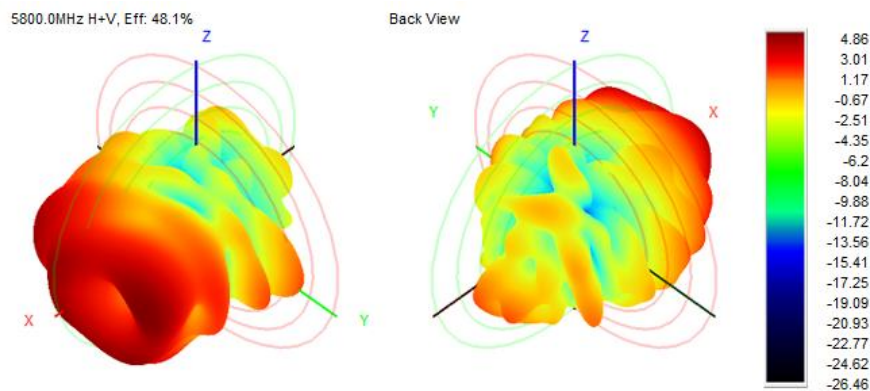
Marker (MHz)	2400	2450	2500	5700	5750	5800	5850
Gain (dBi)	2.49	3.83	3.37	5.33	4.94	4.86	4.92
Efficiency (%)	47.5	51.7	56.0	53.2	51.8	48.1	49.1

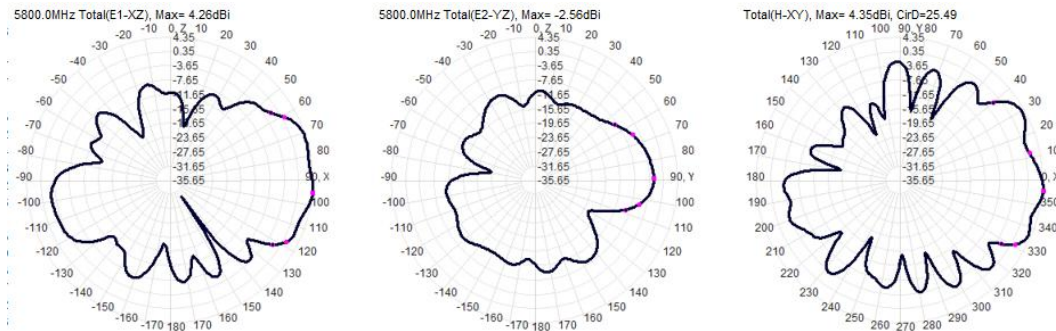
Radiation Pattern 2450MHz

@2450MHz



5800 MHz:

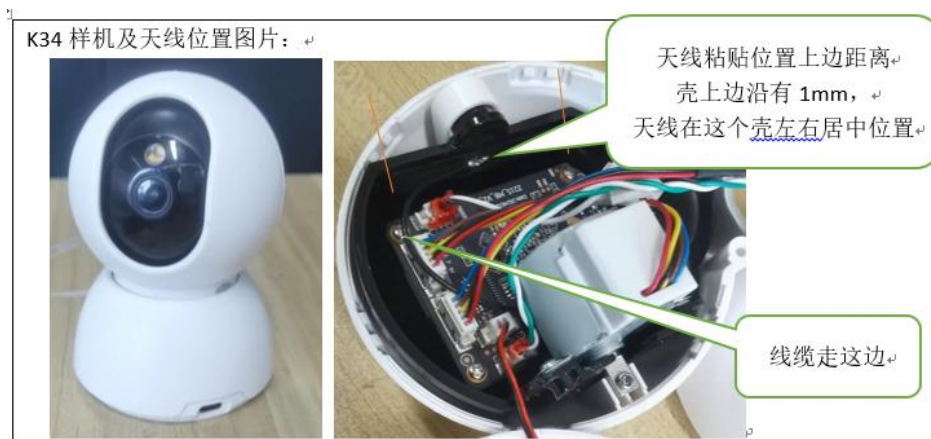




4.22.3 Antenna active data table

协议模式	带宽速率	信道	TRP	TIS	备注
802.11b 2.4G	11M	1	19.43	-76.60	
		6	19.01	-76.85	
		11	18.37	-78.56	
802.11g 2.4G	54M	1	18.63	-80.61	
		6	17.74	-80.36	
		11	17.48	-81.96	
802.11n 2.4G	MSC7	1	15.82	-64.51	
		6	15.22	-62.64	
		11	14.57	-65.25	
802.11a 5.8G	54M	149	15.89	-61.10	
		157	15.06	-61.41	
		165	14.39	-60.81	

4.22.4 Antenna location





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2025/1/4
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/1/4	1.00	New Project