

			Document number:
Antenna data sheet			
Manufacturer	Shenzhen Bochuang Xinda Communication Technology Co., LTD		
Address	304,Building3,No.175,HuashengRoad,ShuiweiCommunity,DalangStreet,LonghuaDistrict,Shenzhen		
Customer Part Number:		Supplier Part Number:	
Product description:	5DB-Dual-band black round rod antenna, female pin	Peak Gain	4.89 dBi (2.4G band)
Supplier approval (stamp):		Customer approval (stamp):	
Production: Zhang Denggang	Structure: Zhang Denggang		
Review :	Date : 2024.12.9		

CONTENTS

Cover	1
Contents	2
一、Product image	3
二、Product Parameters	3
三、S11 (VSWR 、Return loss 、Smith)data	4--7
四、Antenna efficiency, gain value.....	8
五、Product size drawing.....	9
六、Environmental reliability test report	10

一、Product image



二、Product Parameters

Product test parameters			
Product Name	External antenna	Model Type	5DB-dual-band black round rod antenna rubber head female pin
Electrical Specifications			
Frenquency Range	2400-5800MHZ	Polarization	Vertical
Impedance	50 Ω	Radiation direction	Omnidirectional
VSWR	≤ 2	Power	50W
Gain	--	Bandwidth	100MHz

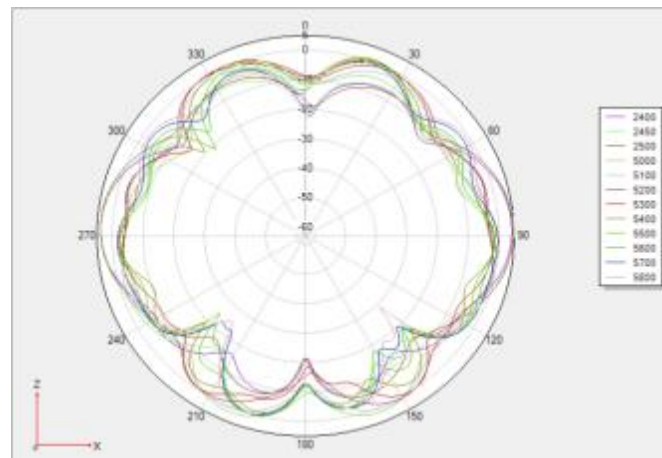
Mechanical Specifications			
Dimensions	195MM±2MM	Chassis Color	Black
Connector model	RT-SMA	Cable Length	
Chassis Material	PC		
Working Temperature	-40°C±85°C	Limit Temperature	-40°C±85°C

三、S11 (VSWR 、 Return loss 、 Smith) data

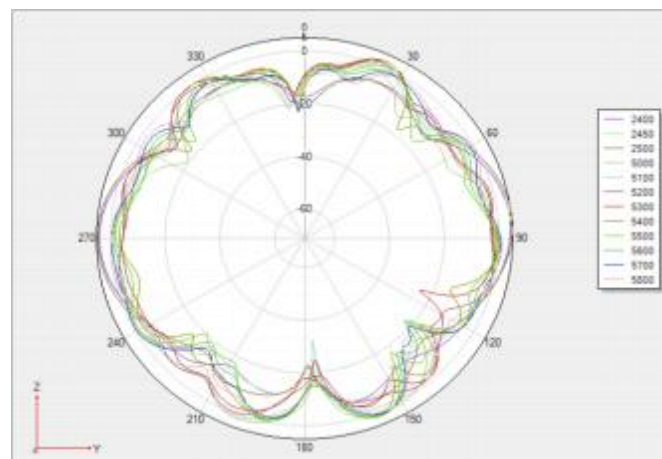
3.1 Network Analyzer Report



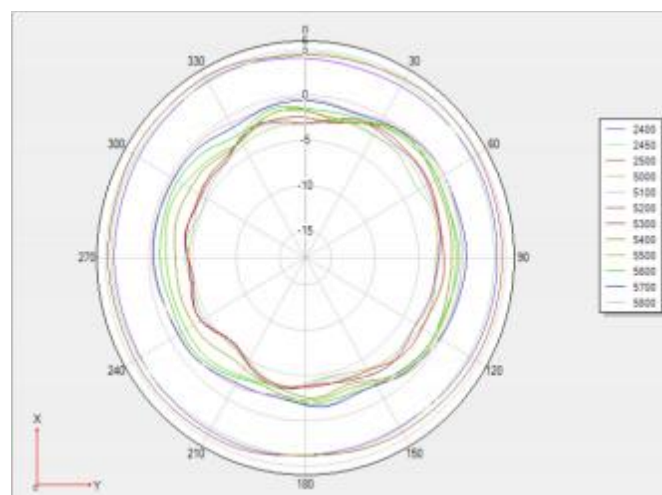
3.2 2D Directional Pattern



Phi 0 2D

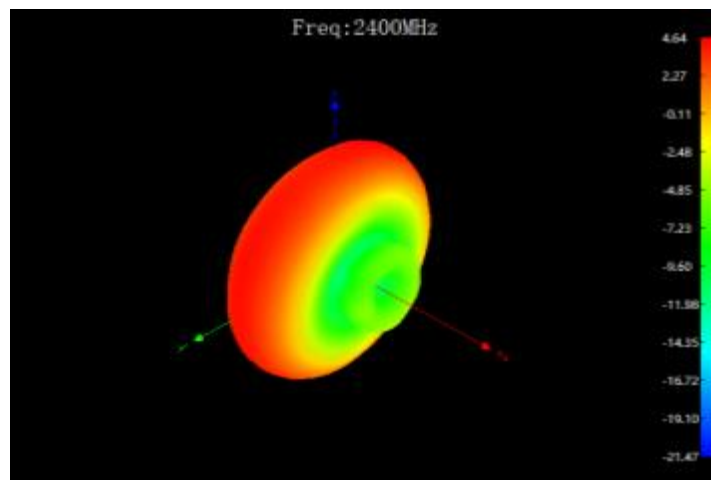


Phi 90 2D

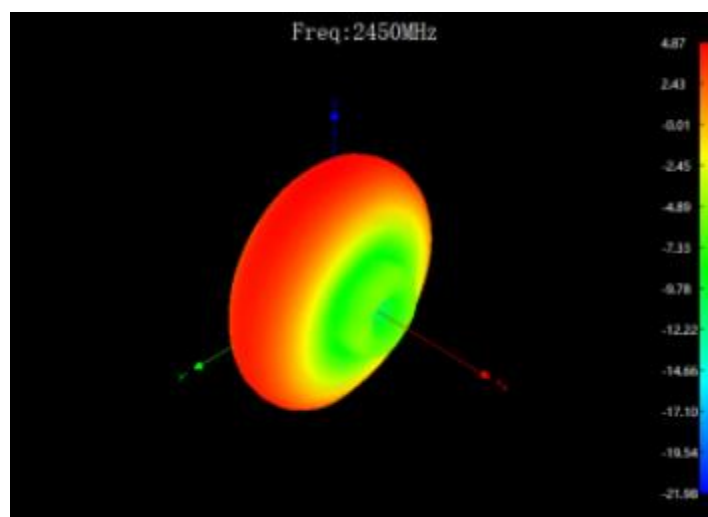


Theta 90 2D

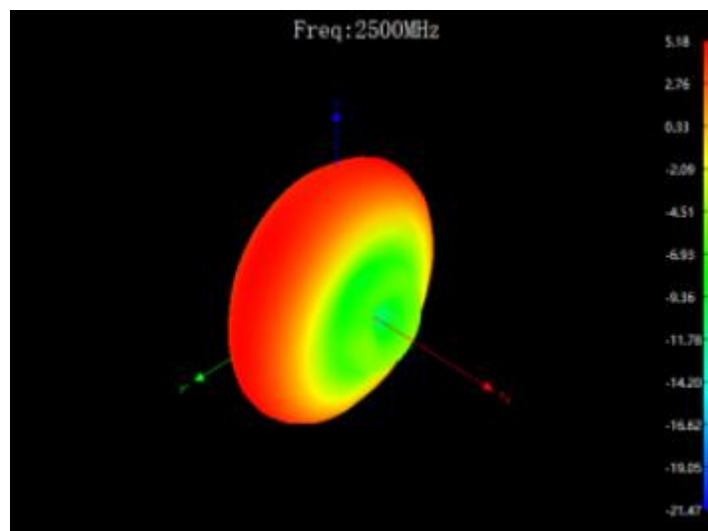
3.3 3D Directional Pattern



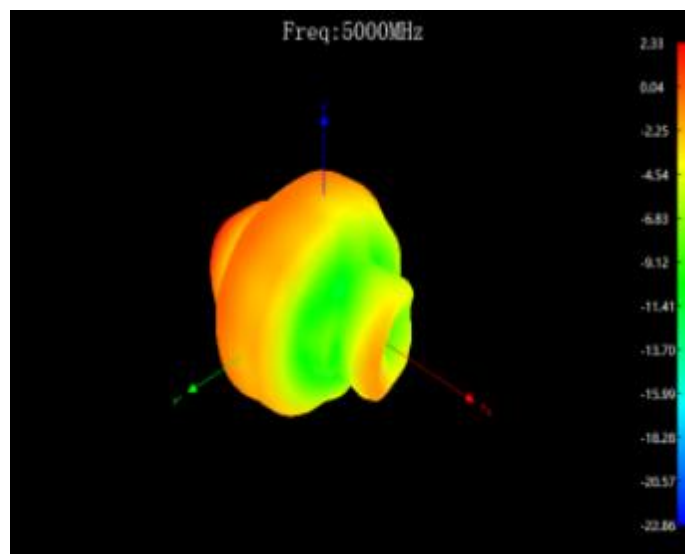
2400MHZ



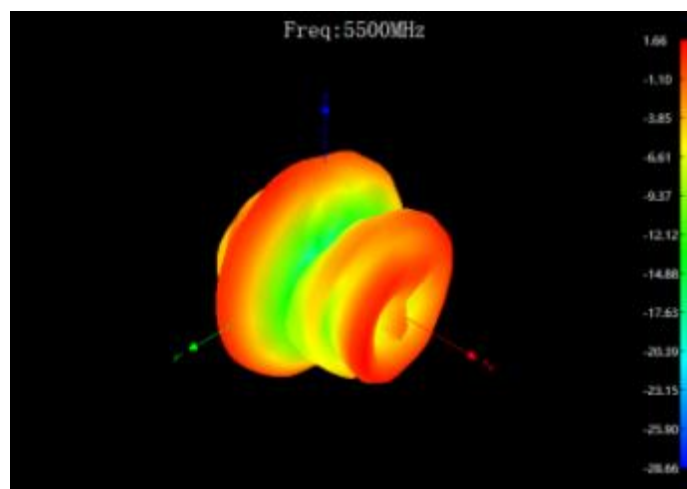
2450MHZ



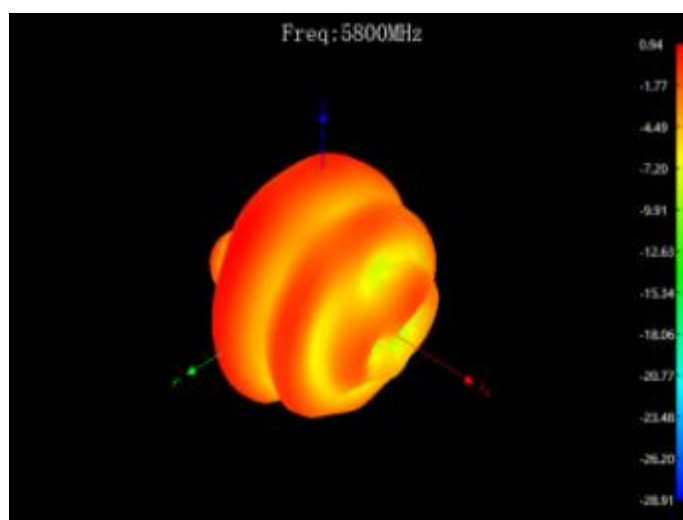
2500MHZ



5000MHZ



5400MHZ

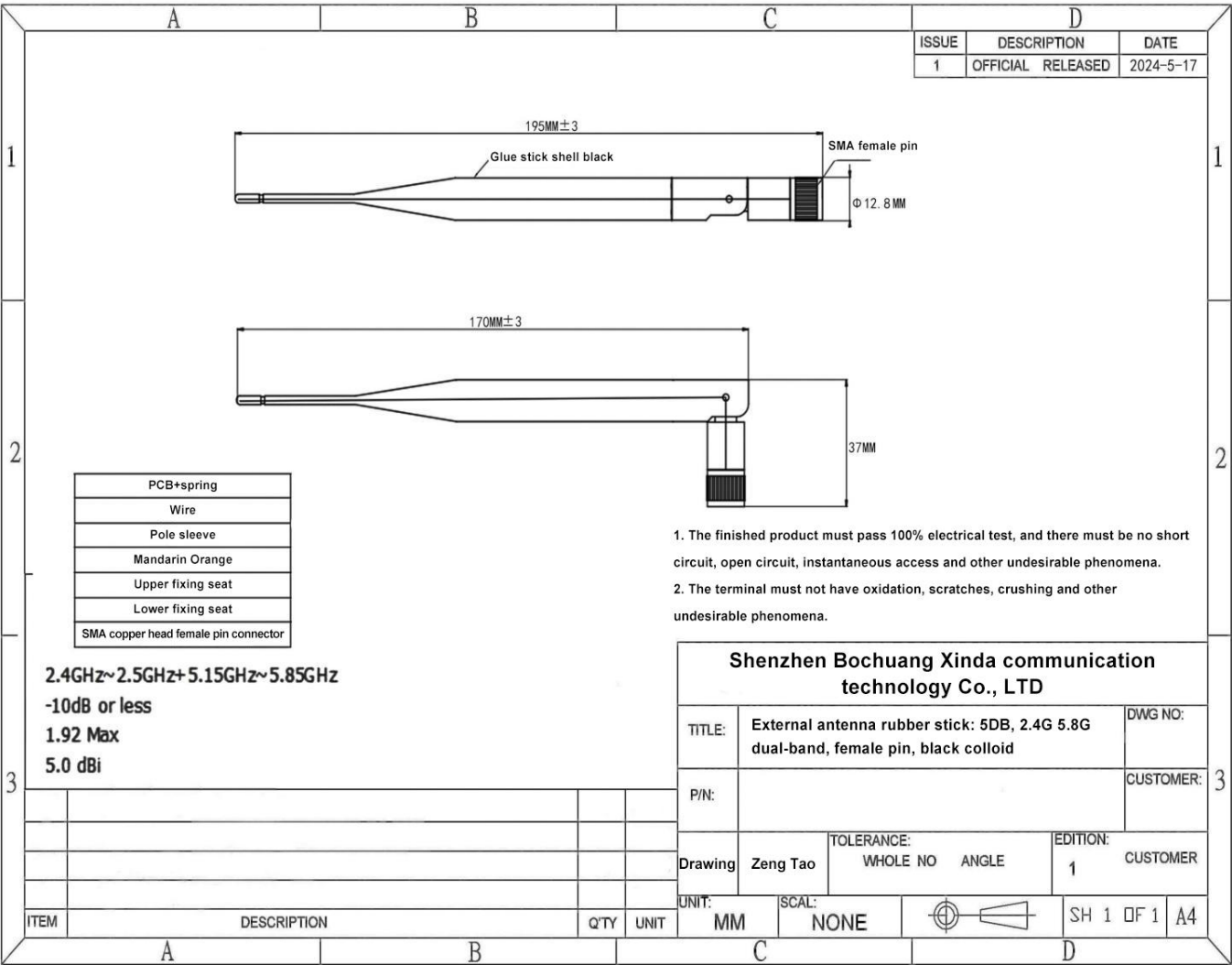


5800MHZ

四、Antenna efficiency, gain value

<i>Wifi antenna efficiency&gain</i>		
Frequency	Efficiency	Peak_Gain
2400	64.62%	4.38
2420	65.65%	4.46
2440	69.88%	4.86
2460	69.85%	4.89
2480	69.89%	4.88
2500	68.58%	4.58
5150	68.28%	4.96
5250	68.58%	4.86
5350	69.29%	4.99
5450	70.68%	5.06
5550	70.26%	5.12
5650	70.28%	5.13
5750	69.26%	4.99
5850	69.28%	4.98

五、Product size drawing



六、Environmental reliability test report

Storage environment	<p>Under the unspecified conditions, the test temperature, humidity and air pressure are as follows:</p> <ol style="list-style-type: none">1. Temperature is -30℃~+80℃2. Relative humidity is 45%-85%3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Perform 5 cycles between 70℃ and 40℃, and then check the appearance quality under normal conditions for 1-2H.	Dimensions should meet the requirements and should meet mechanical and electrical performance
Stationary humidity and heat resistance test	<p>Relative humidity $95\pm 3\%$, test temperature: 40℃. After 2H of action,</p> <p>Measure the electrical performance within 5min after the sample is taken out, and check the appearance quality of the sample under normal conditions for 1-2H.</p>	Dimensions should meet the requirements and should meet mechanical and electrical performance
Vibration test	<p>Frequency range is 10-55HZ</p> <p>displacement amplitude: 0.35MM</p> <p>acceleration amplitude: 50.0M/S</p> <p>sweep frequency cycle number: 30 times</p>	Electrical and mechanical performance is normal
Drop test	Freely fall 3 times at 1M altitude in mutually perpendicular axial directions	Electrical and mechanical performance is normal