

			document number:
SpecificationFor App roval			
Customer Name: Customer:			
Supplier Name: Customer:	Shenzhen Honghui Electronics Co., Ltd		
Customer No.:		Supplier No.:	
product descripti on:	P009-2.4G L=160MM + 1 generation terminal	Equipped with models:	
Supplier recognition (seal):		Customer recognition (seal):	
Production: Zhou Jingfeng	Structure: Zhou Jingfeng		
examine and verify:	Date: 2024, 12		

catalogue

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1. product picture

2. Product Parameter

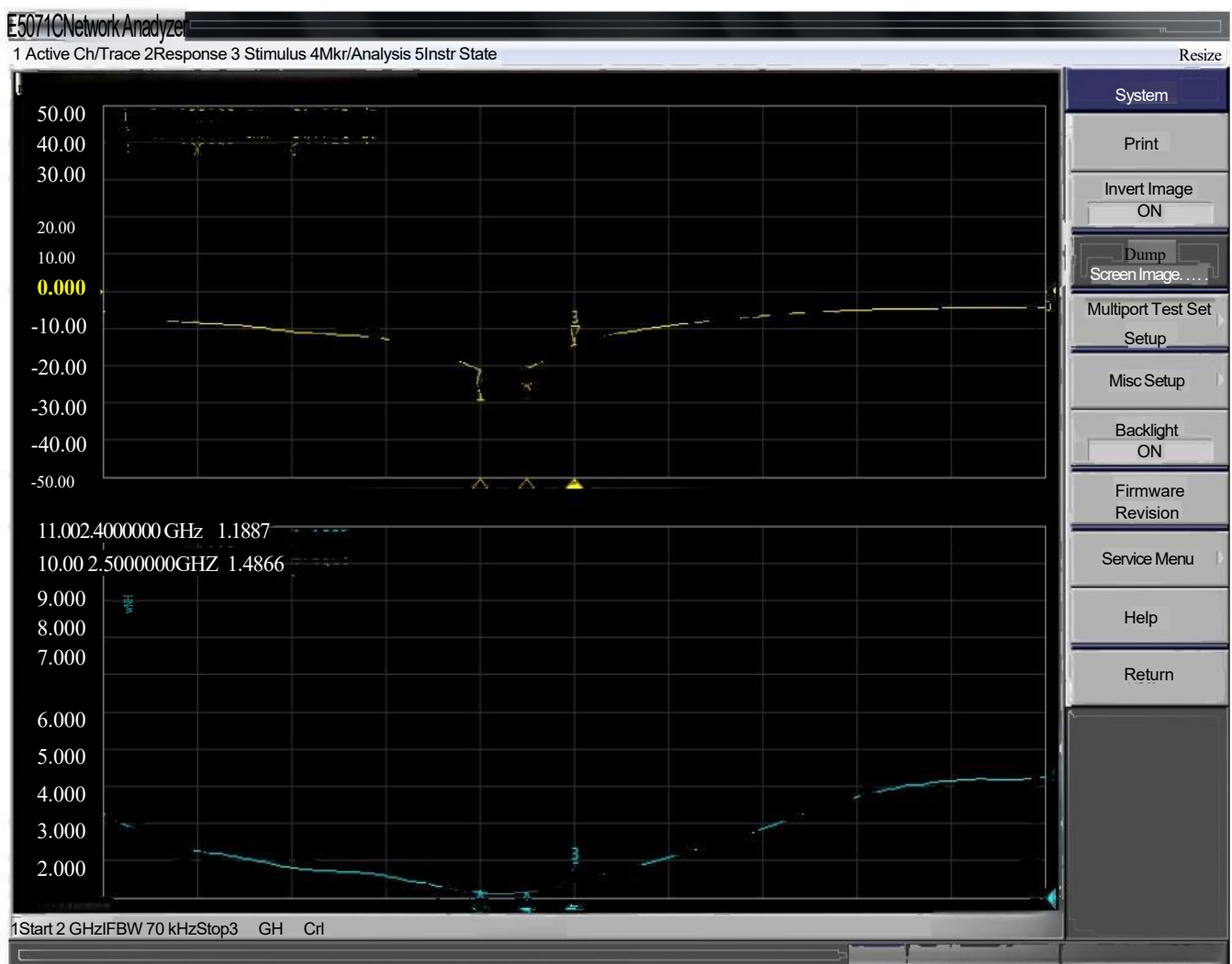
Product test parameters			
Product Name (Name)	Built-in WIFI antenna	Product Model Number (Model Type)	P009-2.4G L=160MM + 1 generation terminal
Electrical performance index (Electrical Specifications)			
Frequency Range (Frequency Range)	2400-2500Mhz	Polarization mode (Polarization)	perpendicular
Human impedance (Impedance)	50 Ω	radiation direction	omnidirectional

Standing Bobby (VSWR)	≤ 2	Power capacity (Power)	50W
Gain (Gain)	2dBi	Bandwidth (Bandwidth	100MHz

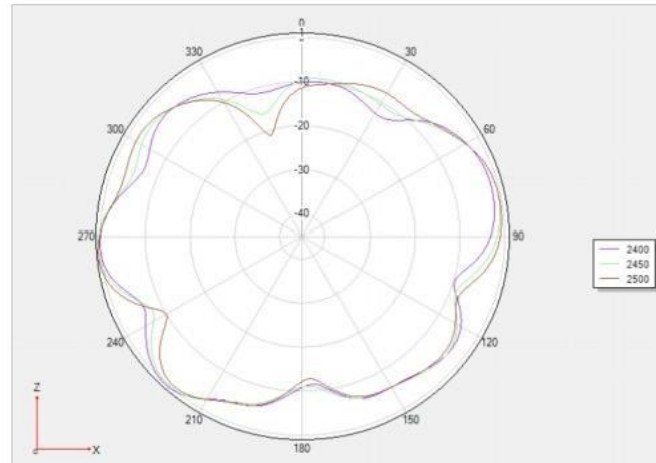
Mechanical index (Mechanical Specifications)			
Dimensions (Dimensions)	47.4±2MM	Antenna Color (Chassis Color)	black
Connector model (Connector)	1 Generation terminal	Lead length (Cable Length)	160±3MM
Antenna material (Chassis Material)	PCB		
working temperature (Working Temperature)	-40°C ±85°C	Storage temperature (Limit Temperature)	-40°C ±85°C

3. 2D-3D orientation diagram of the S11 (VSWR, Return loss, Smith) data

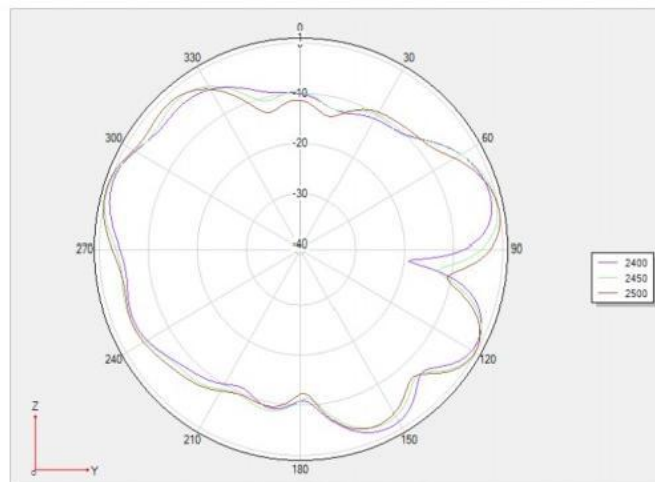
3.1 Network Analyzer Report



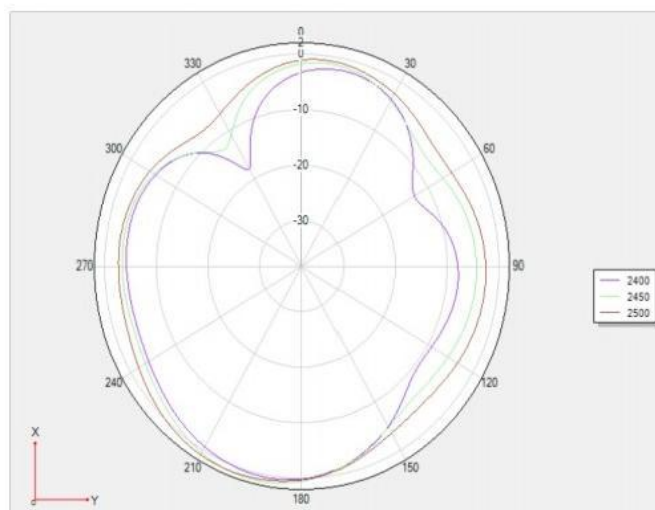
3. 2D direction diagram



Phi 0°C 2D

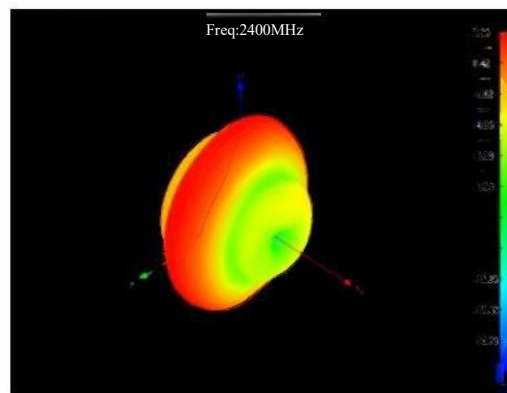


Phi 90°C 2D

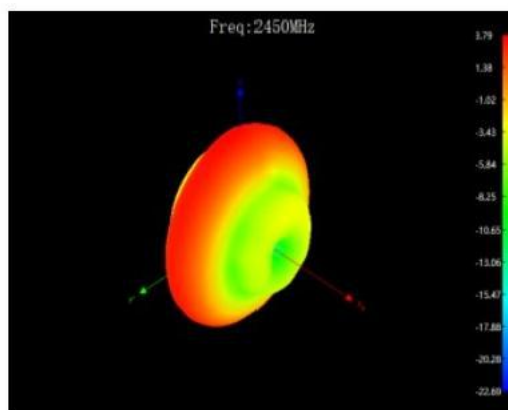


Theta 90°C 2D

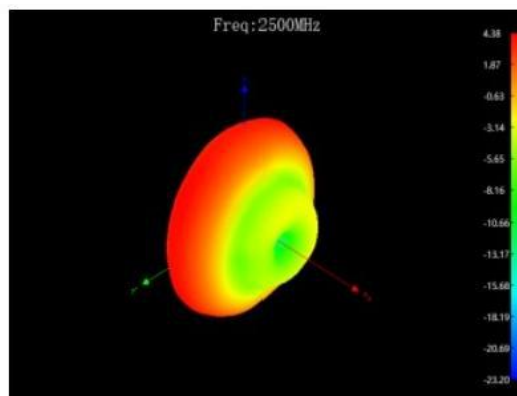
3. 3D orientation diagram



2400MHZ



2450MHZ

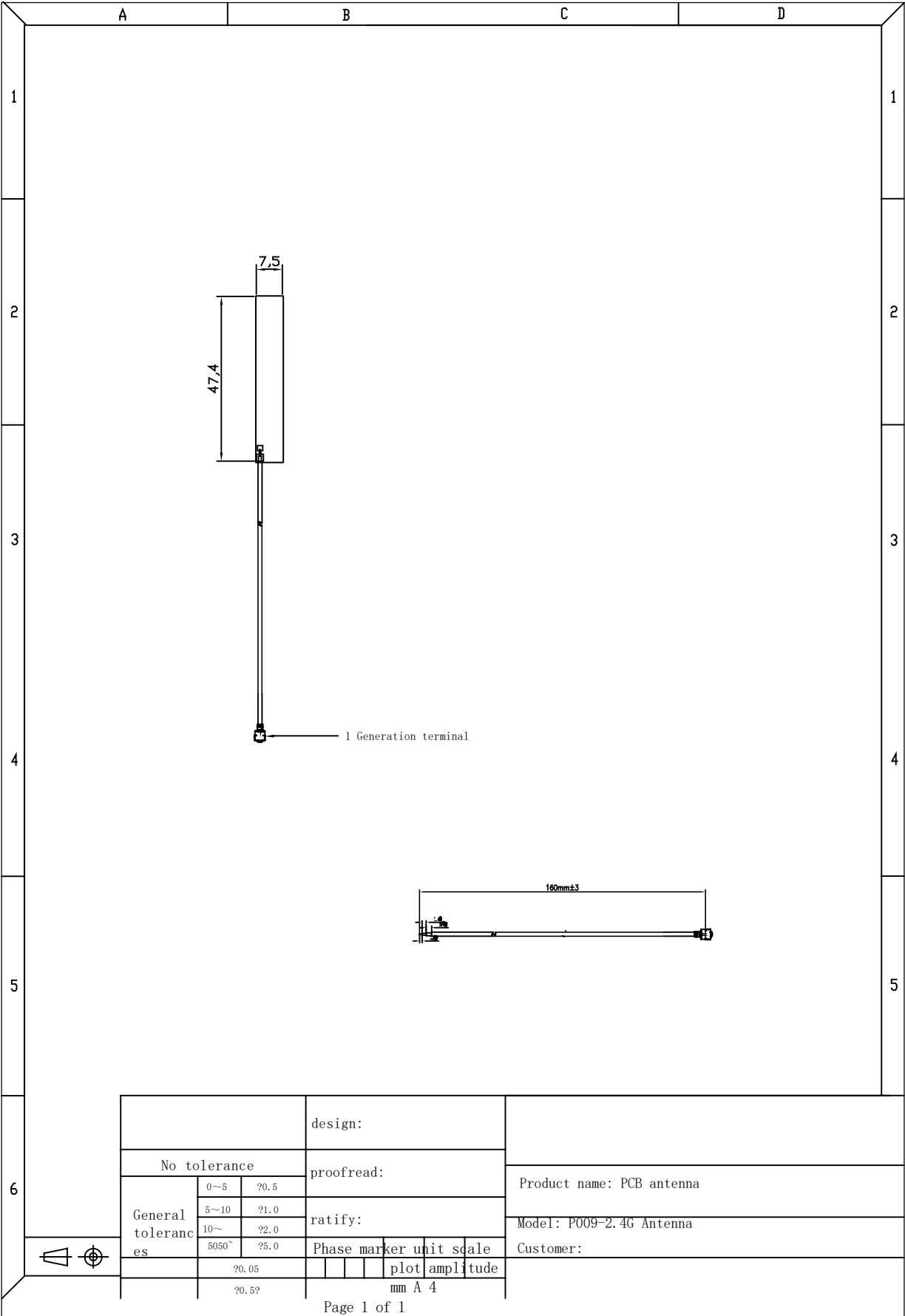


25 00 MHZ

4. Antenna efficiency and gain value

Frequency	Efficiency	Efficiency/%	Frequency	MaxGain/AvgGain/dBi
2400	-3.69	42.76	2400	2.01
2450	-3.23	47.53	2450	2.47
2500	-3.05	49.55	2500	2.66

5. Product size drawings



VI. Environmental performance test

Storage environment	Test temperature, humidity, air pressure without specified: 1. Temperature is- 30℃ ~ + 80℃ 2. Relative humidity is 45% -85%3. Air pressure is 86 kpa -106 kpa	Electrical and mechanical properties are normal
thermocycling	Five cycles were performed between 70℃ and 40℃ and then 1-2H under normal conditions.	Dimensions shall meet the requirements and shall be Meet the satisfaction In the mechanical and electrical performance
Resistance to constant damp and heat test	Relative humidity: $95 \pm 3\%$, test temperature: 40℃. After a sustained 2H action, Measure the electrical performance of the test article within 5 min after its removal. The test article is 1-2H under normal conditions to check the appearance quality	Dimensions shall meet the requirements and shall be Meet the satisfaction In the mechanical and electrical performance
vibration test	Dynamic frequency range: 10-55 HZ, displacement amplitude: 0.35 MM, acceleration amplitude: 50.0M/S, sweep cycle times: 30 times	Electrical and mechanical properties are normal
fall-down test	1M falls 3 times in the axis direction vertical to each other	Electrical and mechanical properties are normal