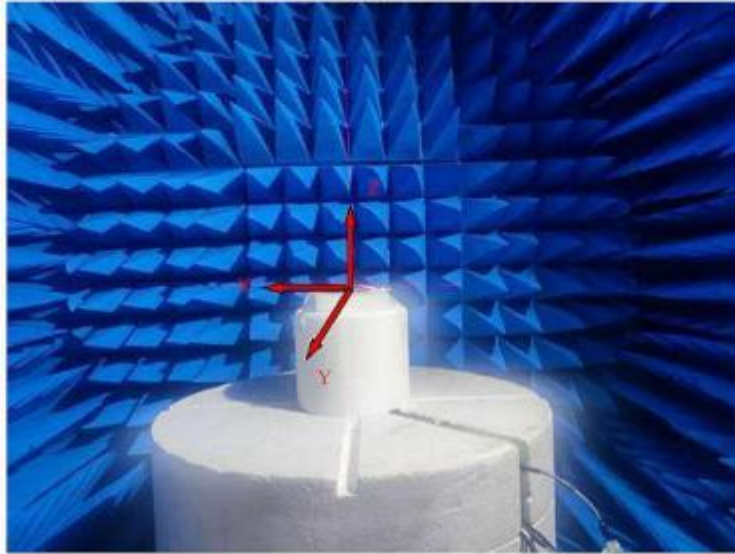


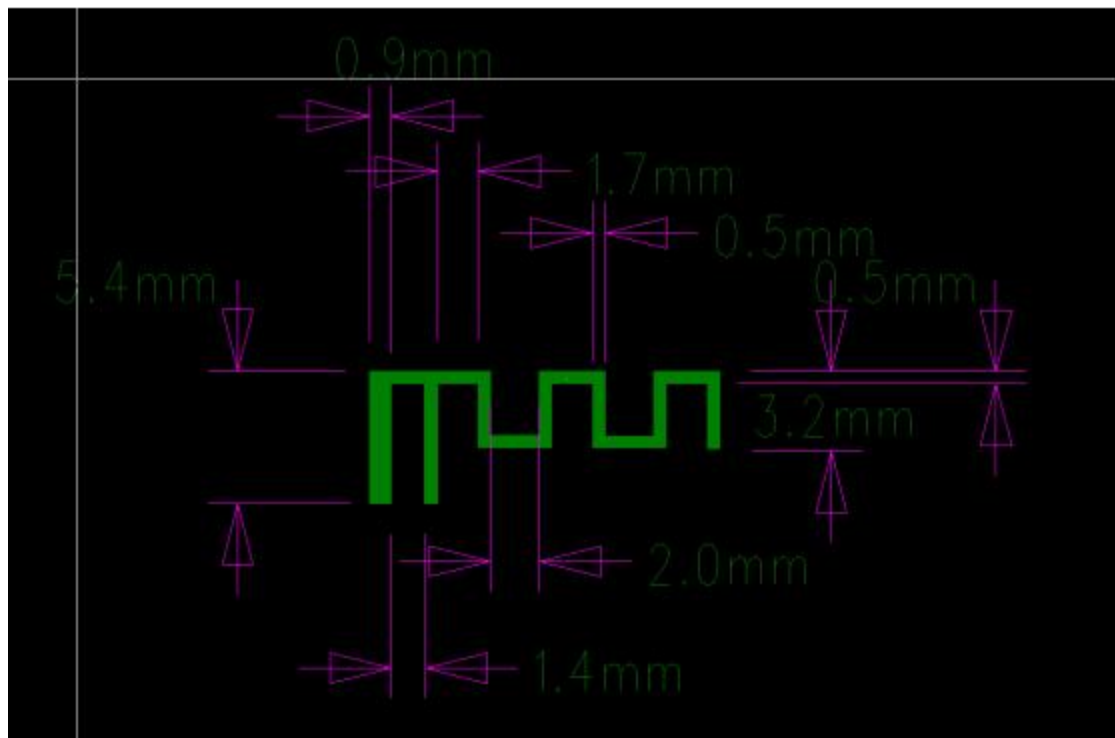
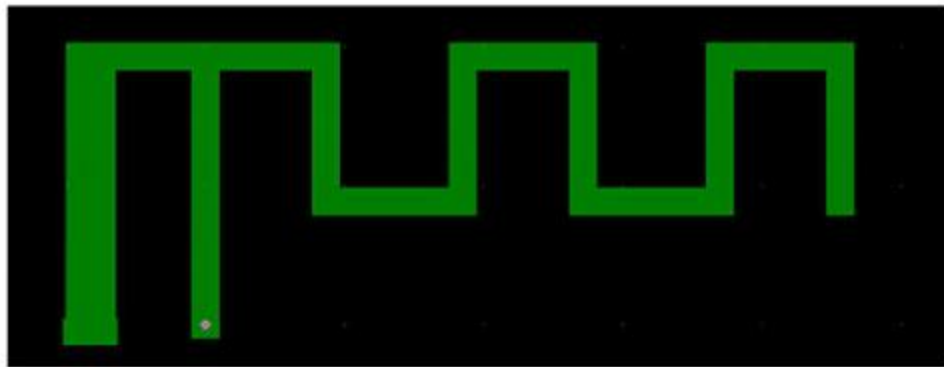
2.4G-2.48GBand on-board PIFA Antenna test report

SPECIFICATIONS	
Frequency (MHz)	2400-2480
Peak Gain (dBi)	2.499
AverageGain(dBi)	>-4
VSWR	<3.2
Impedance (Ω)	50 Ω
AntennaType	Onboard Plannar Inverted F Antenna
Polarization	Linear

Test environment: Zhongke Guoji Darkroom Testing System



Antenna physical object and physical dimensions



Antenna passive S parameters: Voltage Standing Wave Ratio (VSWR), Return Loss (Return Loss), and Smith chart

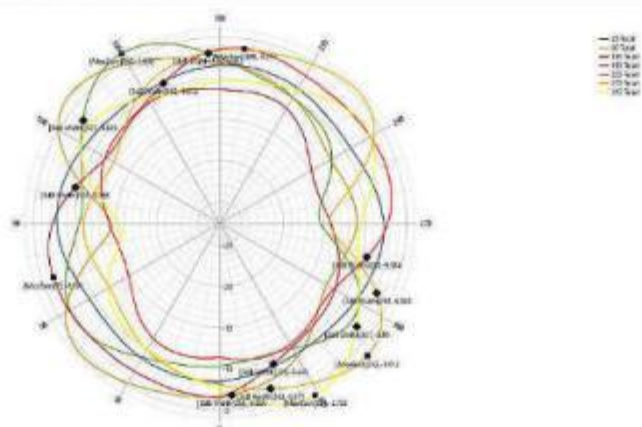


Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Average Gain (dBi)	Efficiency (dB)	2400
	1.433	59.329%	-2.717	-2.267	
2410	0.927	51.861%	-3.416	-2.852	
2420	0.829	52.112%	-3.166	-2.831	
2430	0.881	49.299%	-3.258	-3.072	
2440	1.192	50.672%	-3.144	-2.952	
2450	1.688	53.067%	-2.735	-2.752	
2460	2.194	59.423%	-2.276	-2.260	
2470	2.118	56.680%	-2.438	-2.466	
2480	2.499	61.727%	-2.112	-2.095	
Average	1.529	54.908%	-2.806	-2.616	
Peak	2.499	61.727%	-2.112	-2.095	

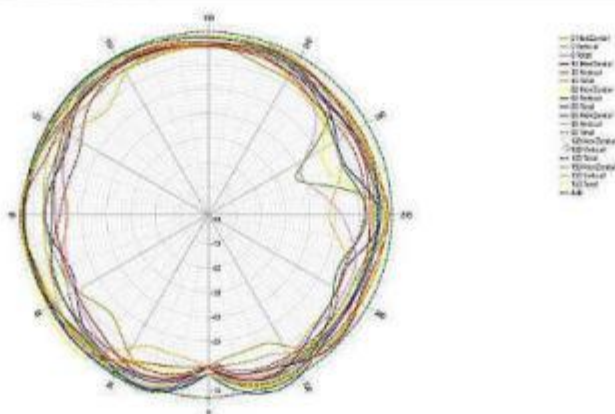
Antenna 2440MHz 2D-Theta Pattern

2D Theta

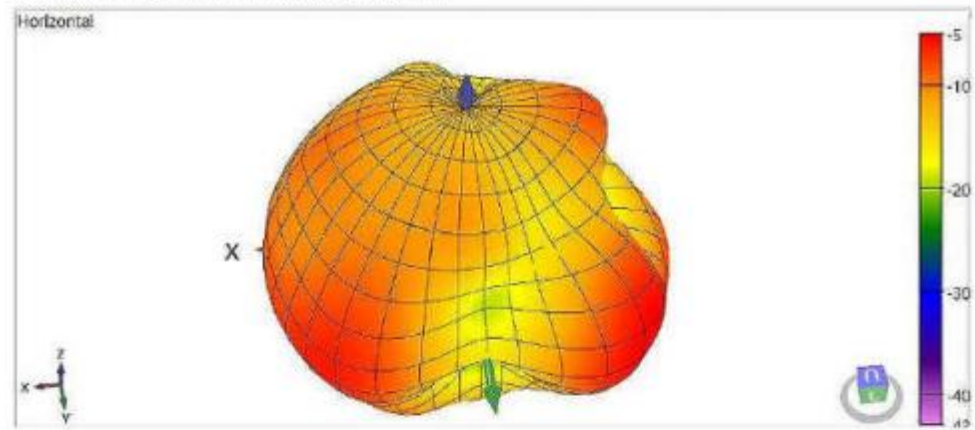


Antenna 2440MHz 2D-Phi Pattern

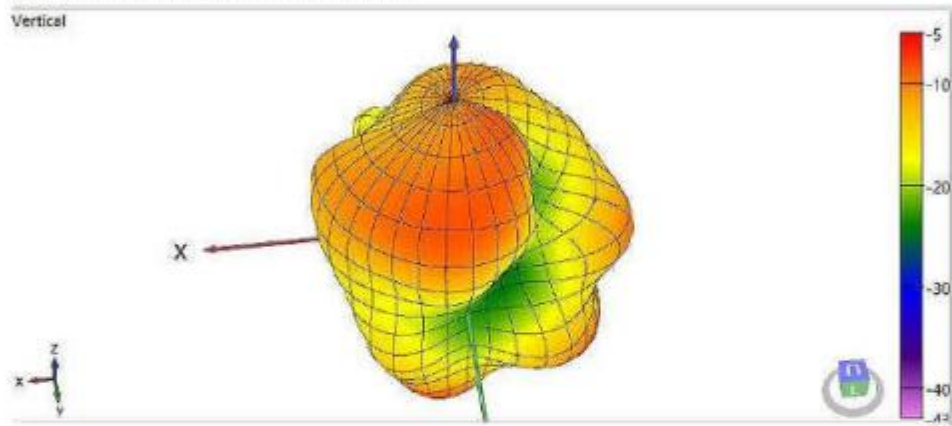
20-PM 20:00 PM Tuesday November 30



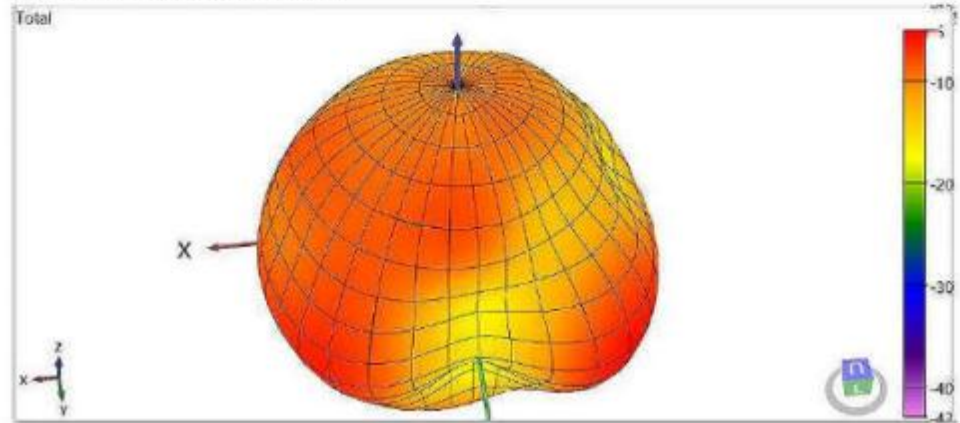
Antenna 2440MHz 3D-Horizontal Pattern



Antenna 2440MHz 3D-Vertical Pattern



2440MHz 3D-Total Pattern

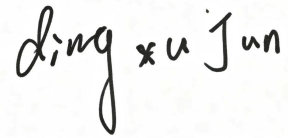


Antenna Type: On-board PIFA antenna

Antenna Manufacture : Shenzhen Cheng
Jie Circuit Technology Co., Ltd.

Address : 2/F, Bldg 14, Shayi Wan'an
Industrial Park, Shajing, Bao'an,
Shenzhen, Guangdong, China

Test Engineer: ding xu jun

A handwritten signature in black ink, reading "ding xu jun", is placed on a small, rectangular, light-colored textured background.