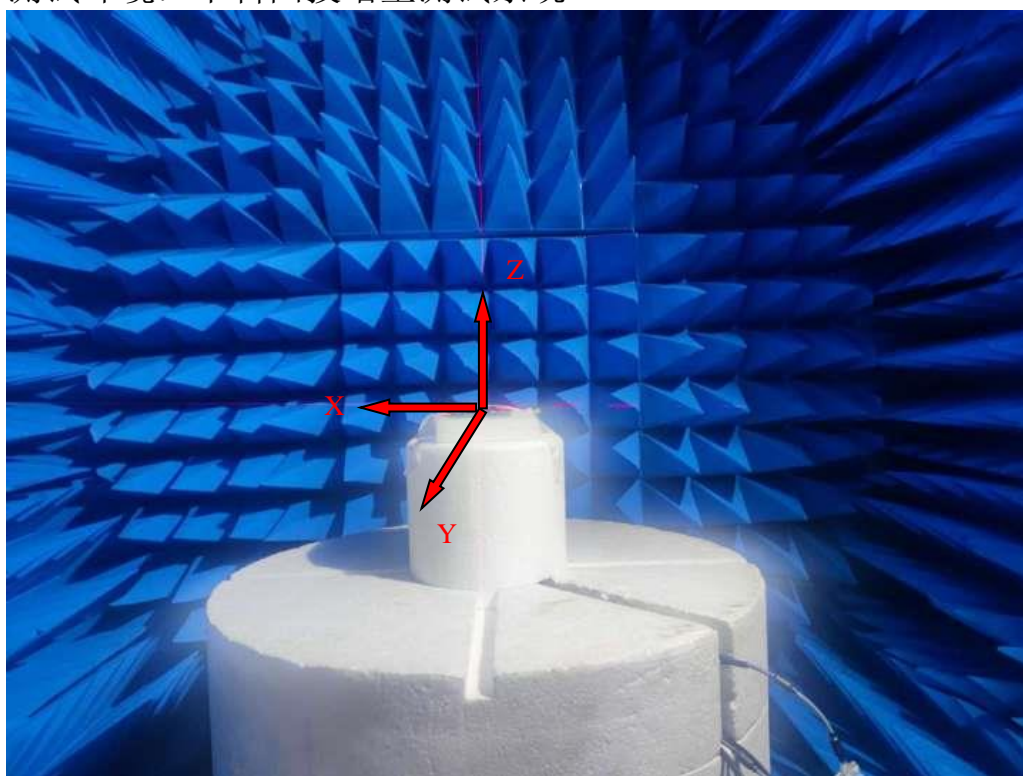


# Test report of onboard PIFA antenna in 2.4G-2.48G band

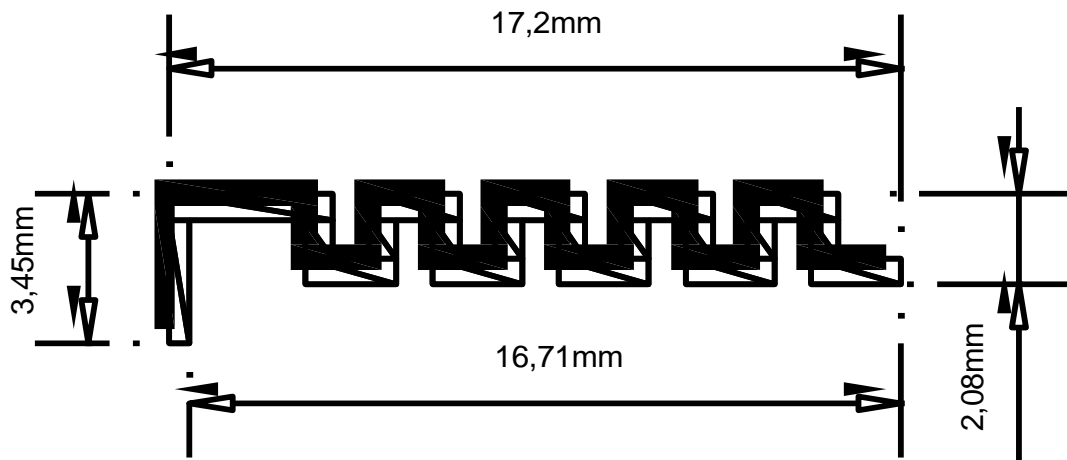
## 2.4G-2.48G 频段板载 PIFA 天线测试报告

SPECIFICATIONS	
Frequency (MHz)	2400-2480
Peak Gain (dBi)	2.499
Average Gain (dBi)	>-4
VSWR	<3.2
Impedance ( $\Omega$ )	50 $\Omega$
Antenna Type	Plannar Inverted F Antenna on board
Polarization	Linear
Manufacturer	Zhongshan Shangdong Lighting Technology Co., Ltd
Address of Manufacturer	5th Floor, No.16 Le Lin Street, Guzhen, Zhongshan, China

测试环境：中科国技暗室测试系统 Test environment: China Science and technology darkroom test system



天线实物及物理尺寸 Antenna physical and physical dimensions

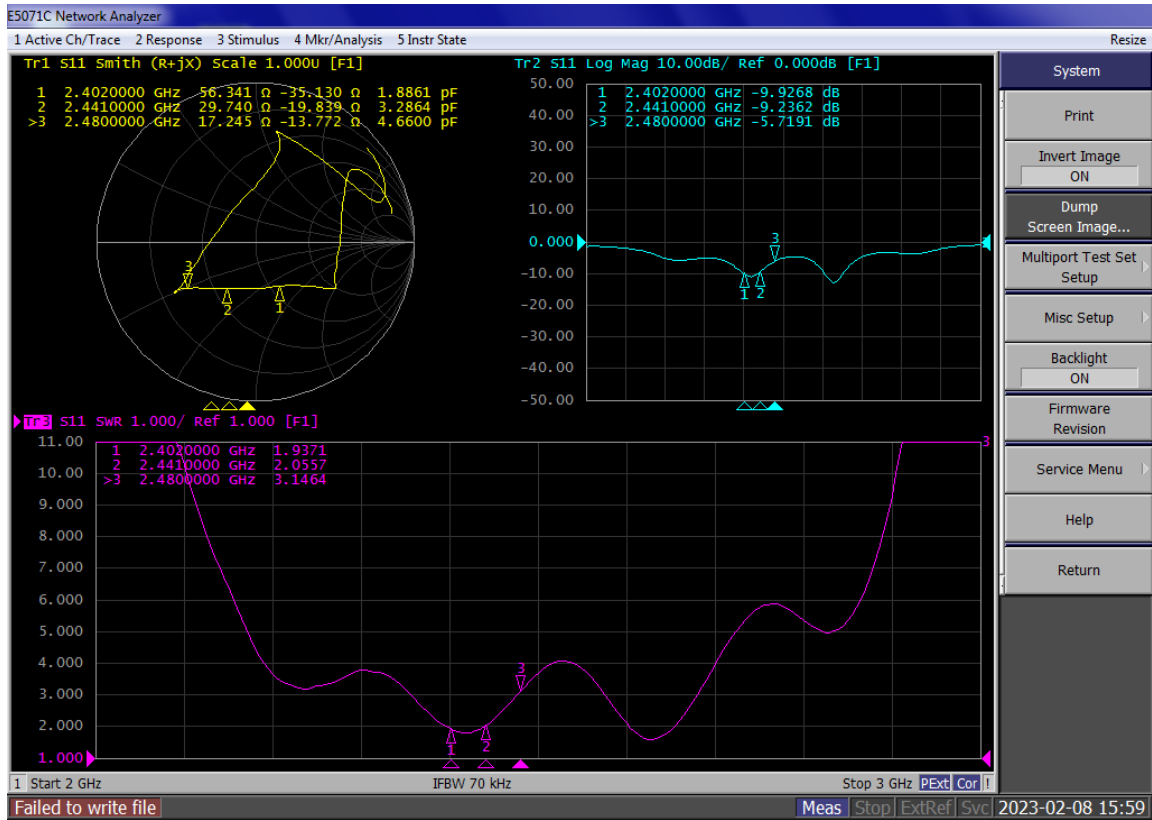


天线无源 S 参数:

驻波比 (VSWR)、回波损耗 (Return Loss) 及史密斯圆图

Antenna passive S-parameters:

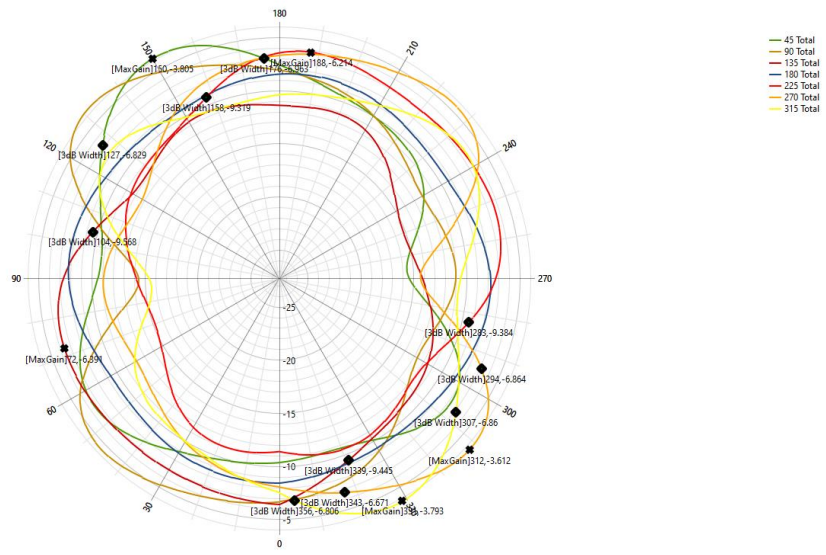
Standing wave ratio (VSWR), Return Loss (Return Loss) and Smith's circle chart



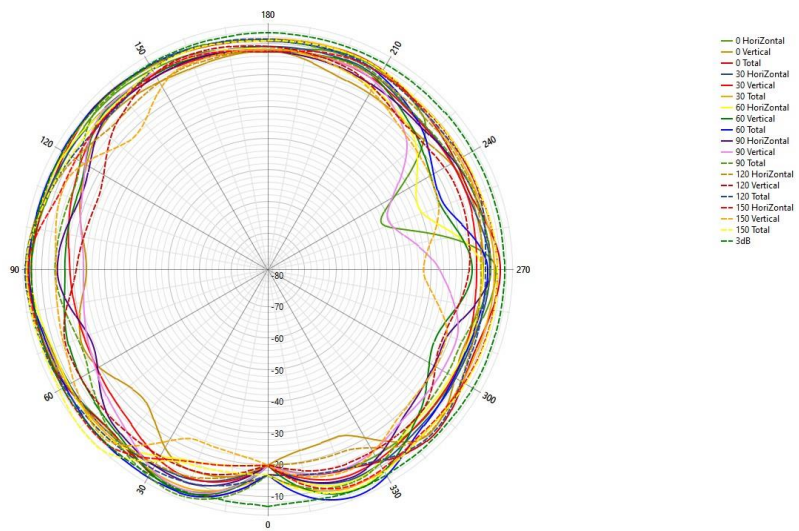
## 天线效率及增益 Antenna efficiency and gain

Frequency (MHz)	Gain (dBi)	Efficiency (%)	AverageGain (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

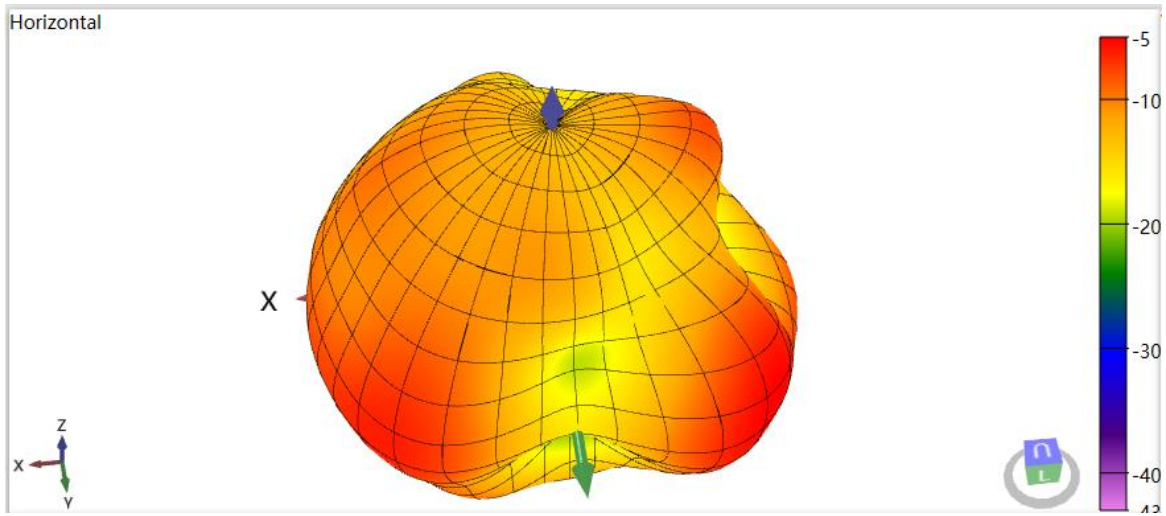
Antenna 2440MHz 2D-Theta Pattern



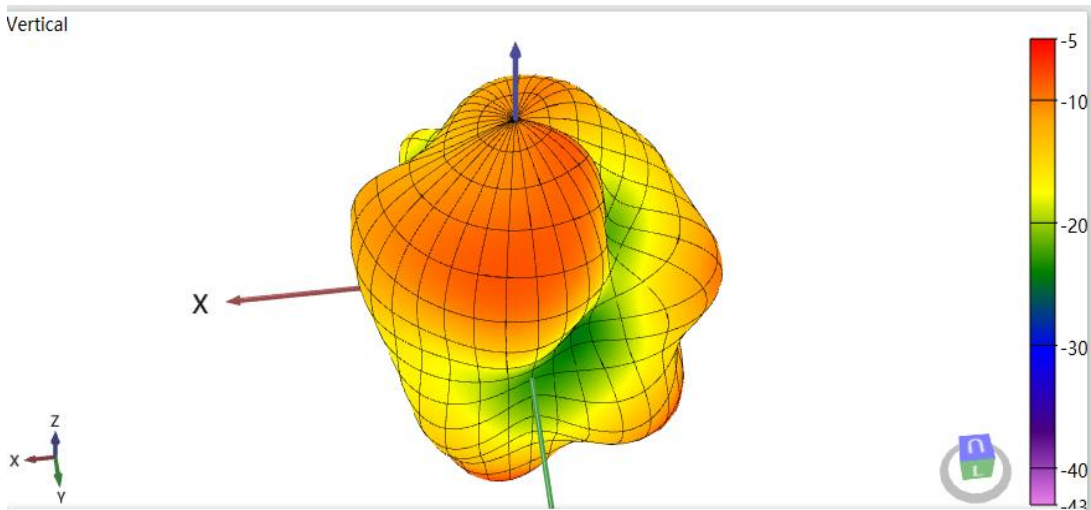
## Antenna 2440MHz 2D-Phi Pattern



### Antenna 2440MHz 3D-Horizontal Pattern



### Antenna 2440MHz 3D-Vertical Pattern



### Antenna 2440MHz 3D-Total Pattern

