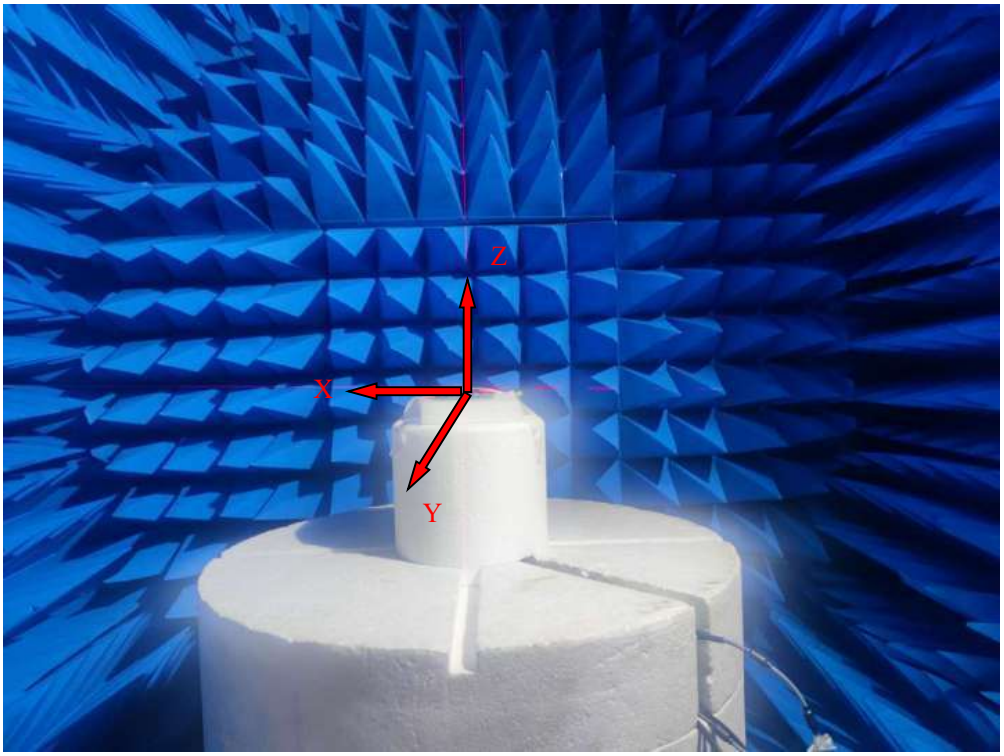
Q9-TX-2.4G-2.48G 频段板载天线测试报告
Q9-TX-2.4G-2.48GTest report for frequency band onboard antenna

SPECIFICATIONS	
Frequency（MHz）	2400-2480
Peak Gain（dBi）	2.499
Average Gain（dBi）	＞-2
VSWR	＜3.2
Impedance（Ω）	50Ω
Antenna Type	Plannar Inverted F Antenna on board
Polarization	Linear

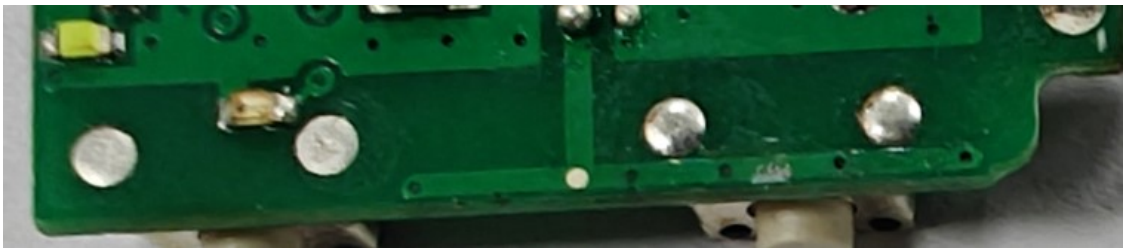
测试环境：中科国技暗室测试系统Testing environment: Zhongke Guoji darkroom testing system

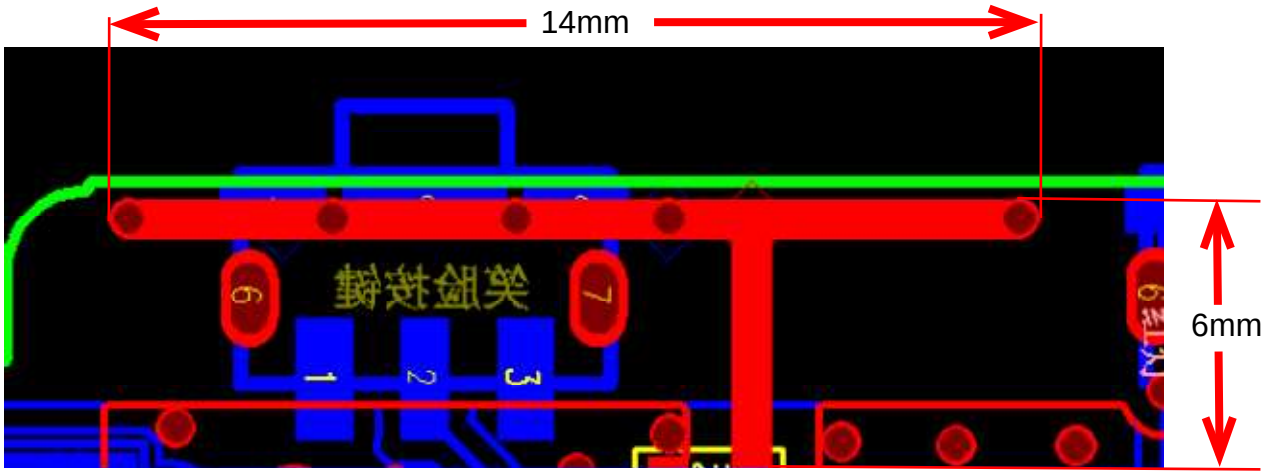


Manufacturer: Dongguan Lishun Communication Technology Co., Ltd.
Address:No.12, Fengming Road, Fengdeling Village, Fenggang Town, Dongguan City, Guangdong

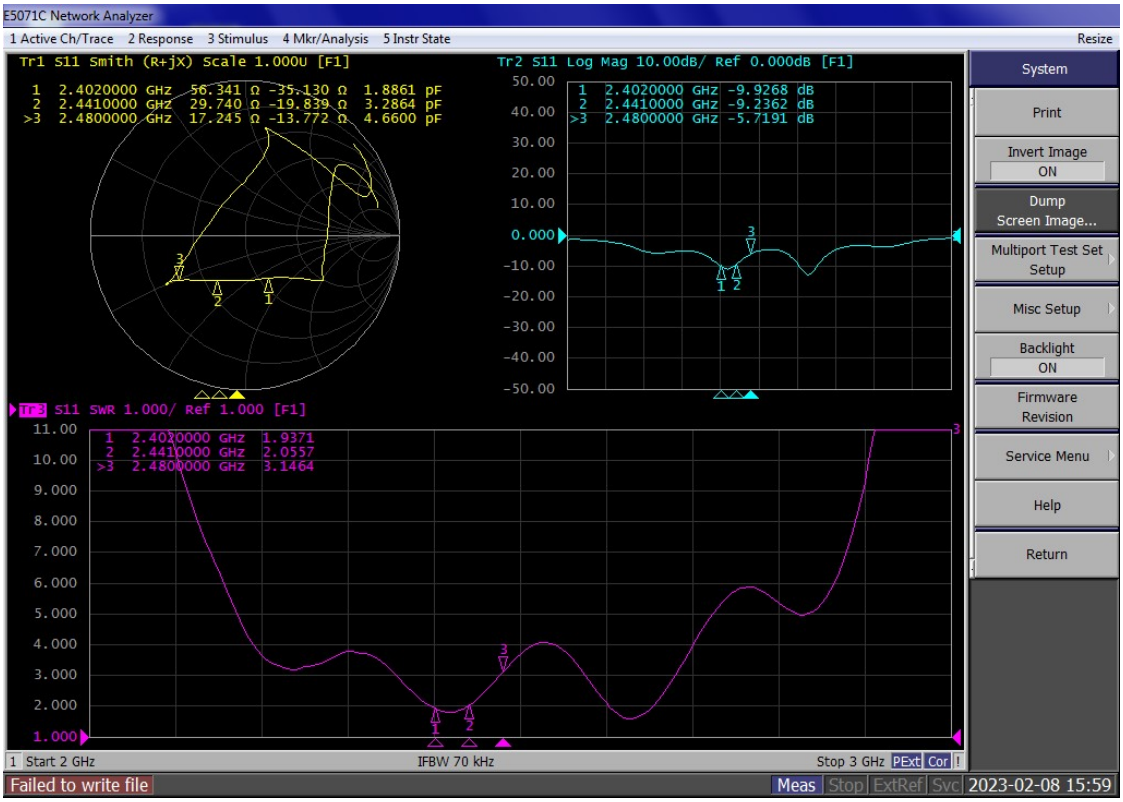
天线实物及物理尺寸Physical antenna and dimensions

Antenna Type:PCB antenna





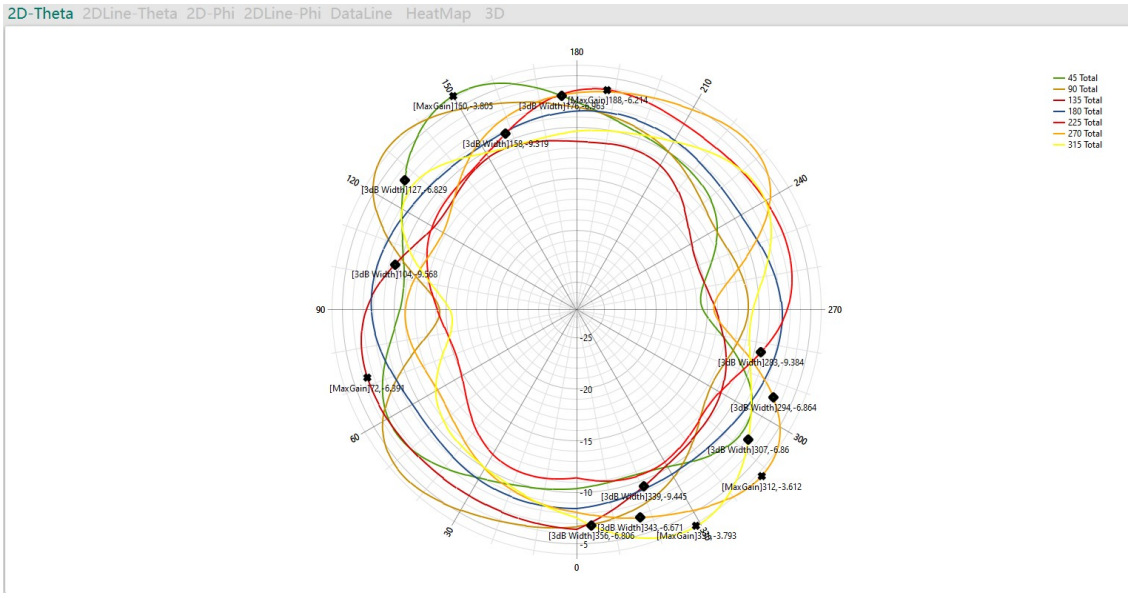
天线无源 S 参数：
驻波比（VSWR）、回波损耗（Return Loss）及史密斯圆图
Passive S-parameters of antenna: Standing Wave Ratio (VSWR), Return Loss, and Smith Chart



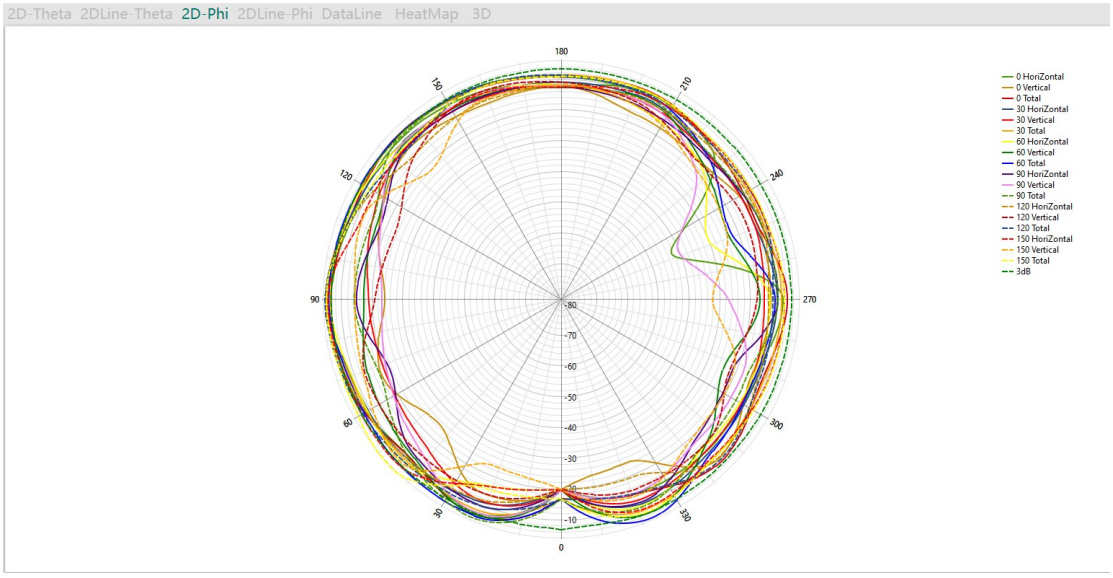
天线效率及增益Antenna efficiency and gain

Frequency（MHz）	Gain（dBi）	Effciency（%）	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

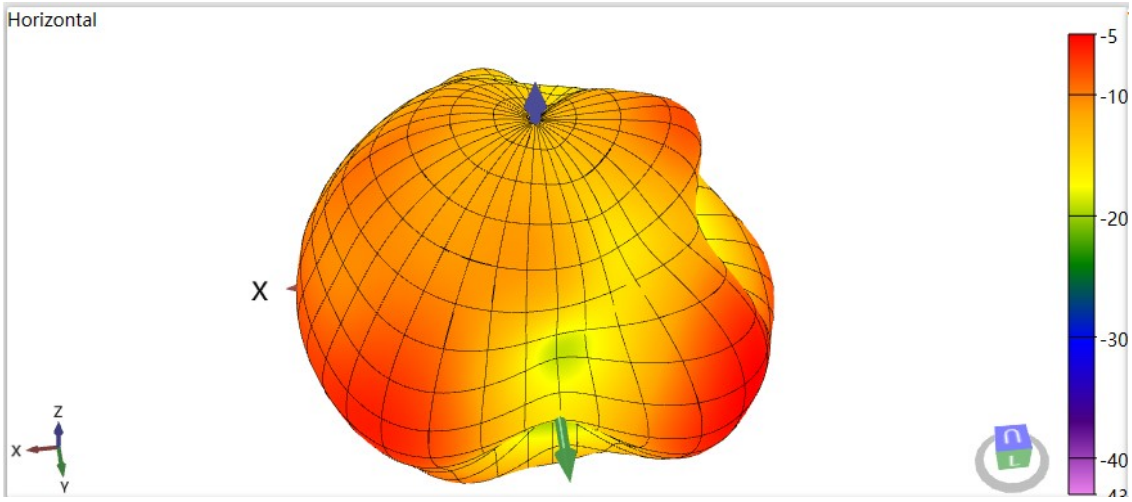
Antenna 2440MHz 2D-Theta Pattern



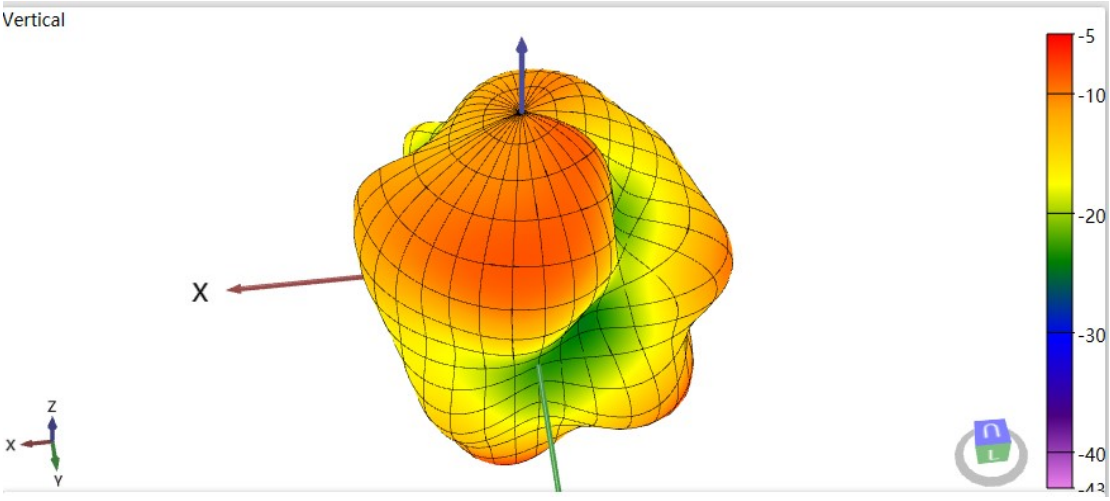
Antenna 2440MHz 2D-Phi Pattern



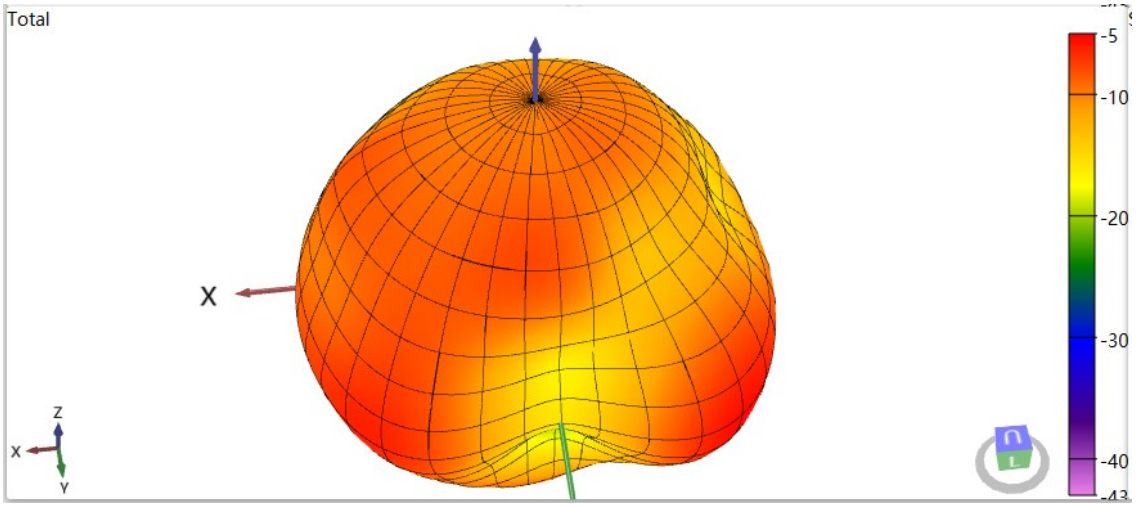
Antenna 2440MHz 3D-Horizontal Pattern



Antenna2440MHz 3D-Vertical Pattern



2440MHz 3D-Total Pattern


Total
X
Z
X
Y
-5
-10
-20
-30
-40