



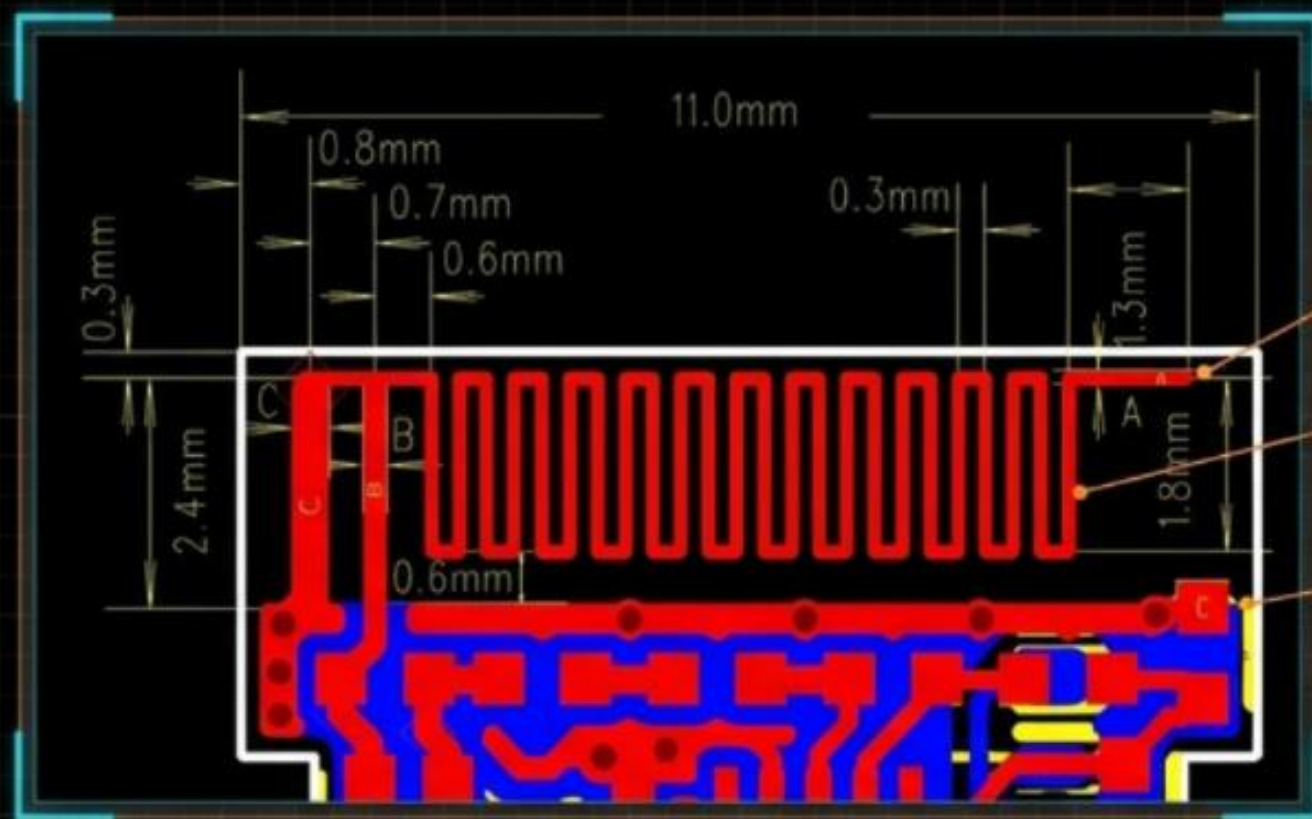
2.4GHz Remote Control PCB Antenna Specification

SHENZHEN SHINETEK TECHNOLOGY

深圳芯耀科技

High-Efficiency, Compact On-Board Antenna Solutions.

紧凑的物理尺寸确保高密度电路板的灵活布线



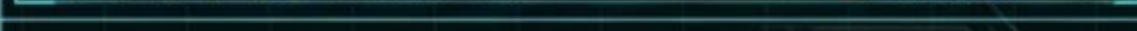
核心线宽规范 (Core Trace Specs)

线宽 A (Trace A): 0.15mm

线宽 B (Trace B): 0.25mm

线宽 C (Trace C): 0.4mm

空间占用评估: 天线区域总跨度为 11.0mm x 2.4mm, 极小的净空区需求 (Clearance Area), 为高密度元器件排布预留最大空间。



Instrumentation

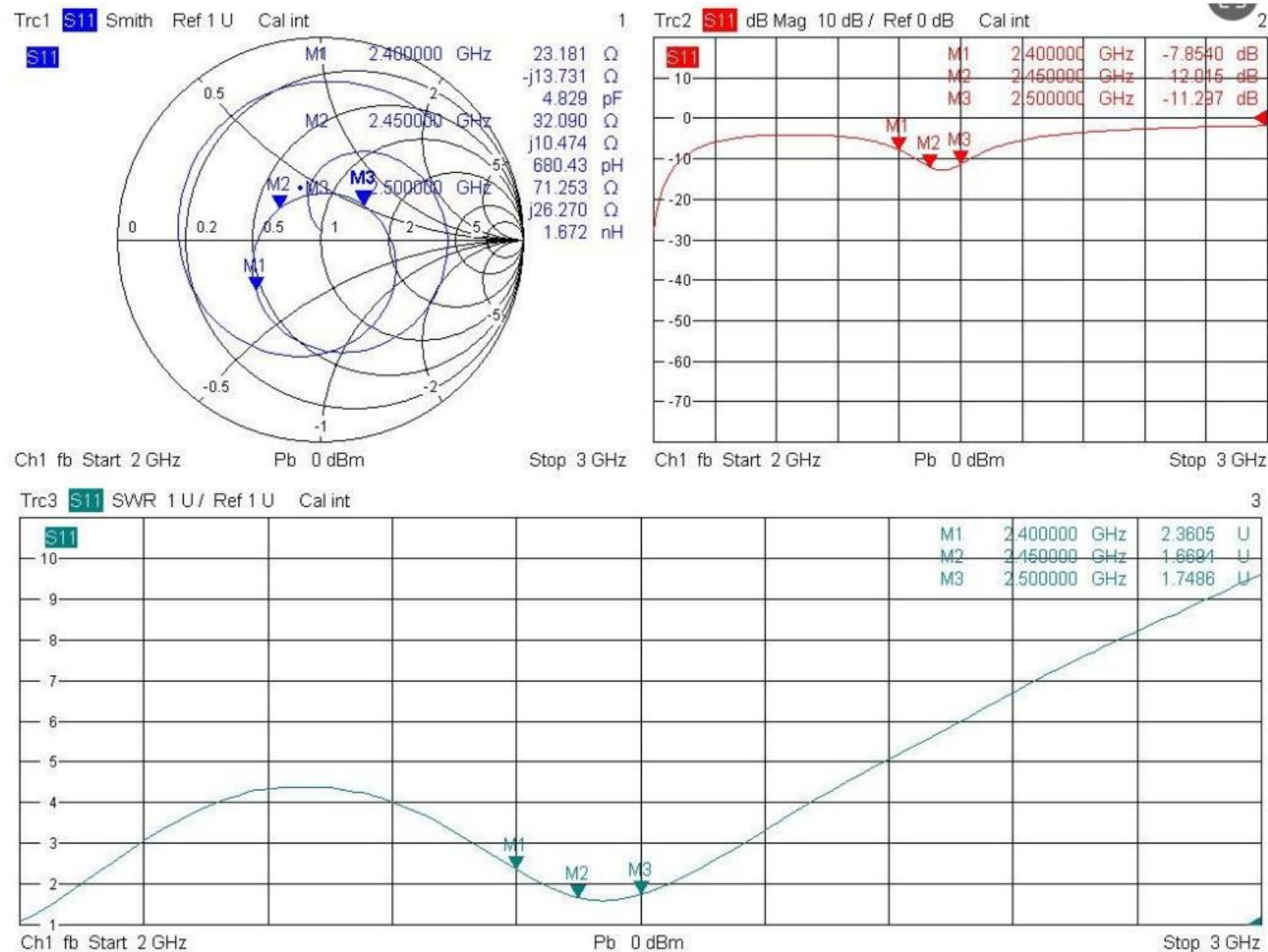
Environment:

Agilent E5071B Network Analyzer / P&S CMU500

Fully Anechoic Chamber ensuring zero RF into

spatial mapping

无源测试：驻波比 (Passive test: VSWR)



FinalData

RawData

Frequency(MHz)	Gain(dBi)	Efficiency(%)	AverageGain(dBi)	Efficiency(dB)
2400	1.243	32.720%	-5.629	-4.852
2410	1.344	33.143%	-5.630	-4.796
2420	0.826	31.477%	-5.563	-5.020
2430	0.500	29.408%	-5.674	-5.315
2440	0.411	28.536%	-5.690	-5.446
2450	0.672	31.484%	-4.911	-5.019
2460	0.751	32.588%	-4.609	-4.869
2470	0.636	32.193%	-4.434	-4.922
2480	0.584	34.624%	-3.949	-4.606

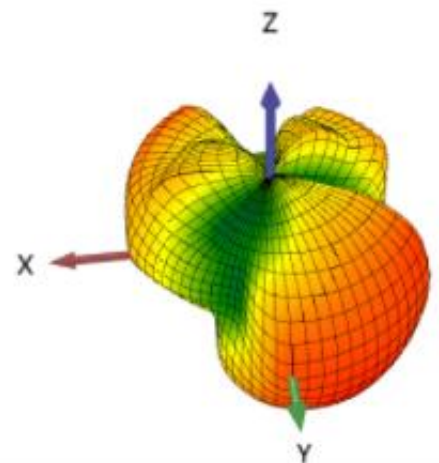


Theta Min 0 Theta Max 0 Phi Min 0 Phi Max 0 Freq Select 2400 MHz Angular interval 0

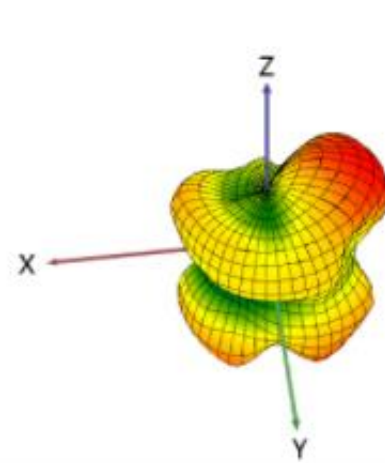
Parameters Graph Table

2D-Theta 2D-Line-Theta 2D-Phi 2D-Line-Phi DataLine HeatMap 3D

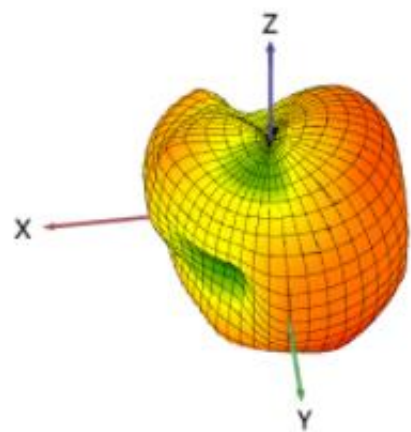
Horizontal



Vertical



Total



Summary

Frequency(MHz): 2400
Ant. Port Input Pwr. (dBm): 0
TRP(dBm): -4.852
NHPRP+/-45°(dBm): 0.000
NHPRP+/-30°(dBm): 0.000
Gain(dBm): 1.243
Directivity(dBi): 6.094
Efficiency(dB): -4.85
Efficiency(%): 32.72%
StartTime: 2026-06-24T15:23:48
StopTime: 2026-06-24T15:24:58
TimeSpan: 00:01:10.2235467



Theta Min 0

Theta Max 0

Phi Min 0

Phi Max 0

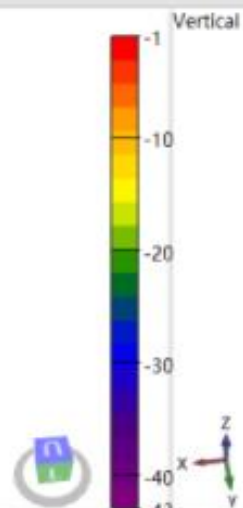
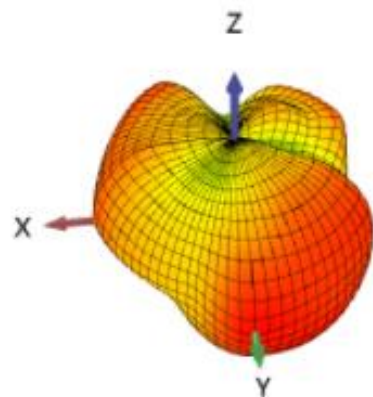
Freq Select 2440

MHz Angular interval 0

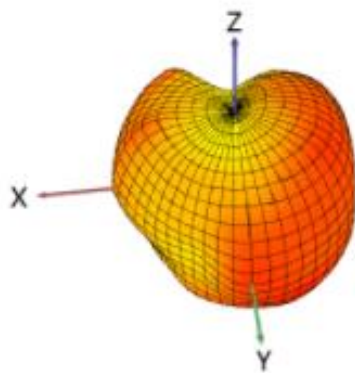
Parameters Graph Table

2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D

Horizontal



Total



Summary

Frequency(MHz): 2440
Ant. Port Input Pwr. (dBm): 0
TRP(dBm): -5.446
NHPRP+/-45°(dBm): 0.000
NHPRP+/-30°(dBm): 0.000
Gain(dBm): 0.411
Directivity(dBi): 5.857
Efficiency(dB): -5.45
Efficiency(%): 28.54%
StartTime: 2026-06-24T15:23:48
StopTime: 2026-06-24T15:24:58
TimeSpan: 00:01:10.2235467

2D Directional Diagram Matrix

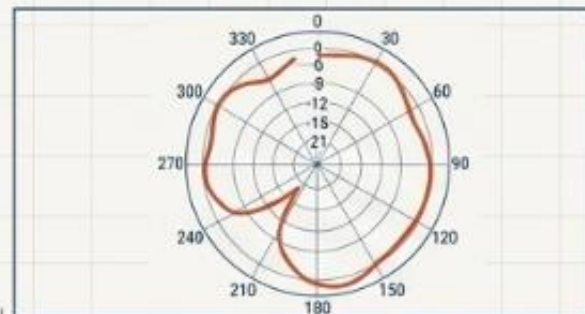
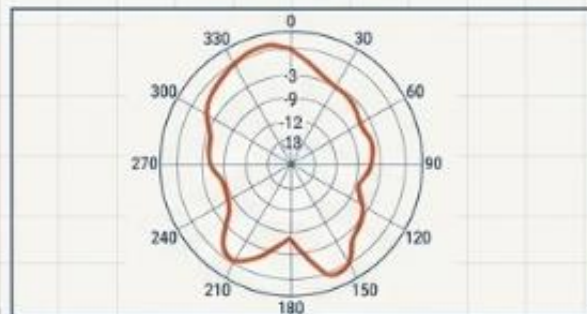
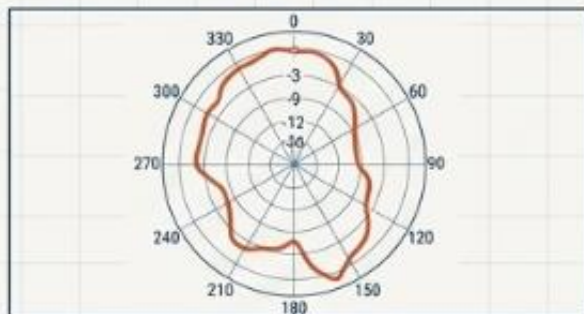
2D 方向性矩阵

Phi=0°

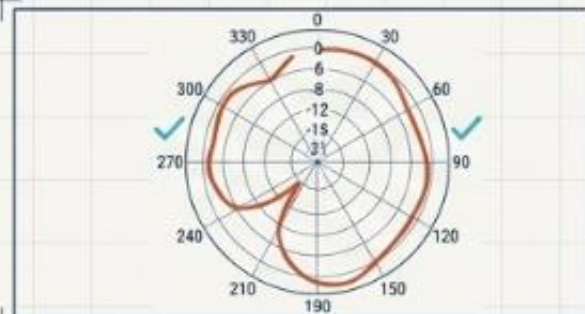
Phi=90°

Theta=90°

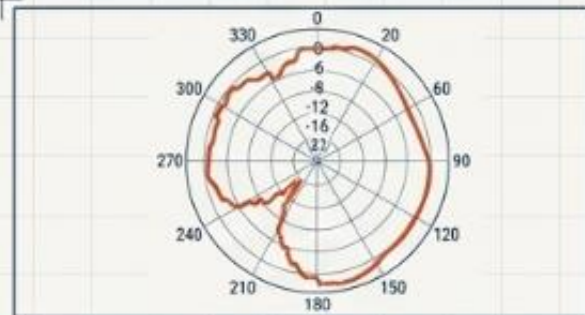
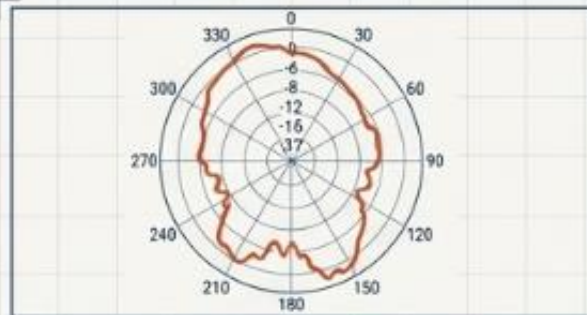
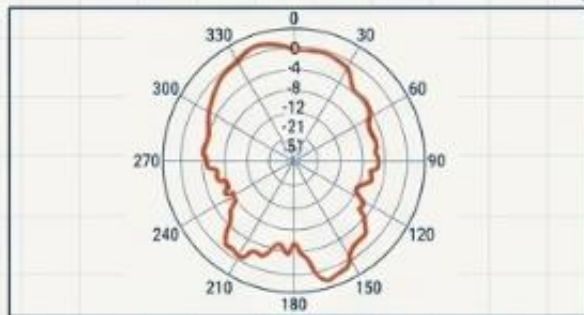
2400 MHz



2450 MHz



2500 MHz



2D 空间覆盖矩阵系统性验证主要轴线上的均匀分布。精确证实工作频段内“零严重信号盲区”，确保遥控指令的绝对送达率。

Uniform spatial coverage validated systematically across all primary axes, confirming zero severe nulls in the operating band for absolute comm

SHENZHEN SHINETEK TECHNOLOGY

深圳芯耀科技

Delivering complete RF integration and hardware prototyping support.

Headquarters: Room 401, Zone A, Building 6, Evergrande Fashion Smart Valley, Dalang Street, Longhua District, Shenzhen.
总部地址：深圳市龙华区大浪街道恒大时尚慧谷6栋A区401

Contact us for complete engineering Gerber files and technical integration guidance.