

2.4G-2.48G Band On-Board PIFA Antenna Test Report

Manufacture : ZhuHai JieLi Technology Co.,Ltd

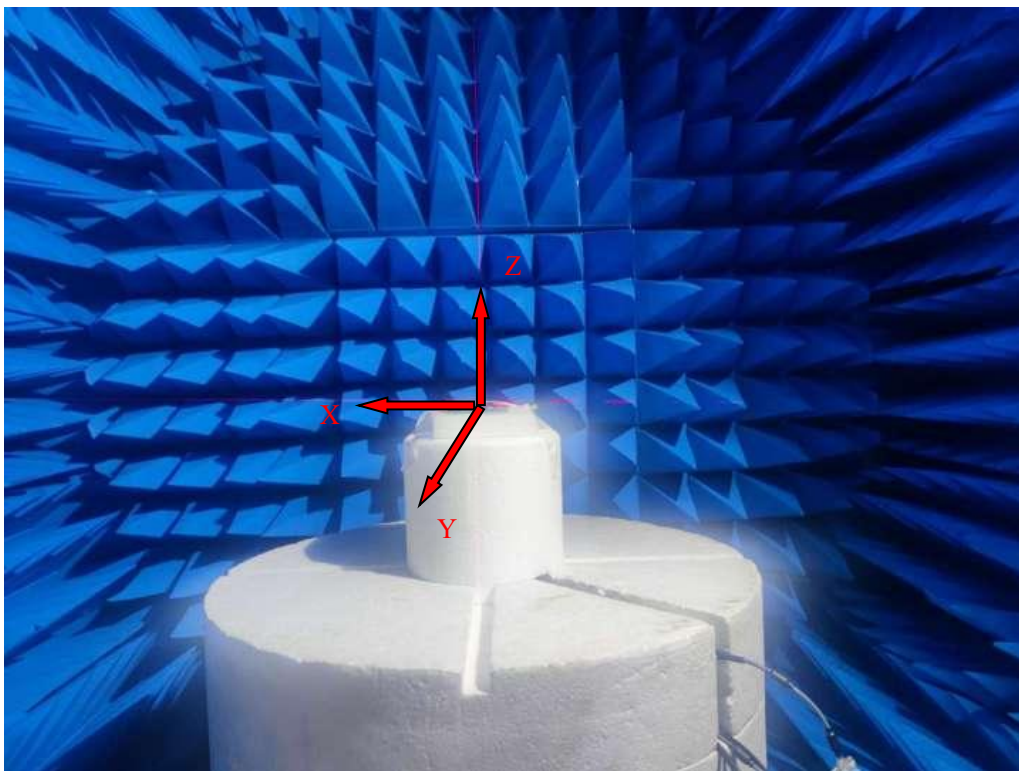
Adress : No.333 Kexing Road, Xiangzhou

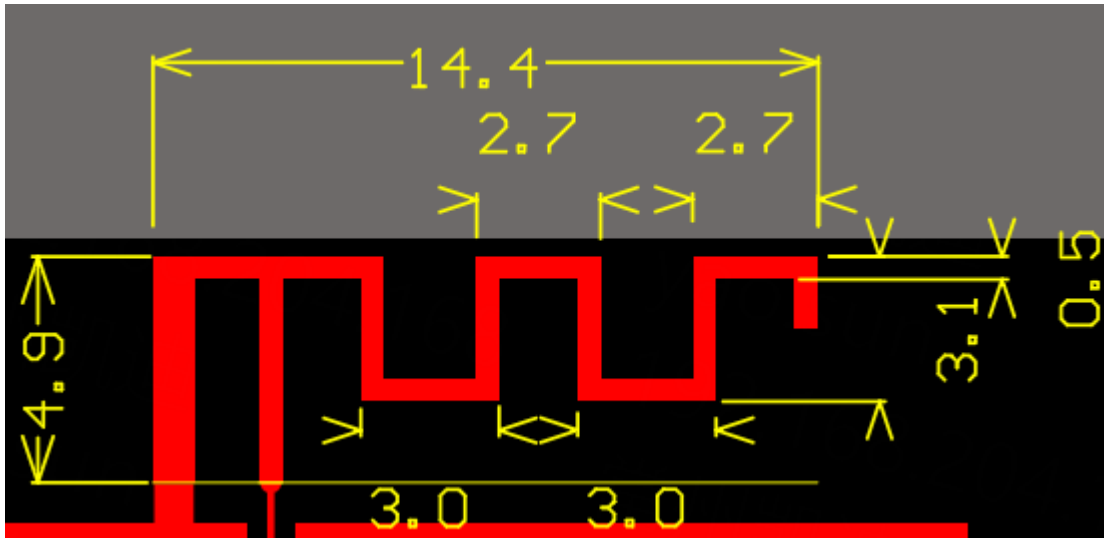
District, Zhuhai City

SPECIFICATIONS

Frequency (MHz)	2400-2480
Peak Gain (dBi)	2.27
Average Gain (dBi)	>0
VSWR	<1.9
Impedance (Ω)	50 Ω
Antenna Type	Plannar Inverted F on board
Polarization	Linear

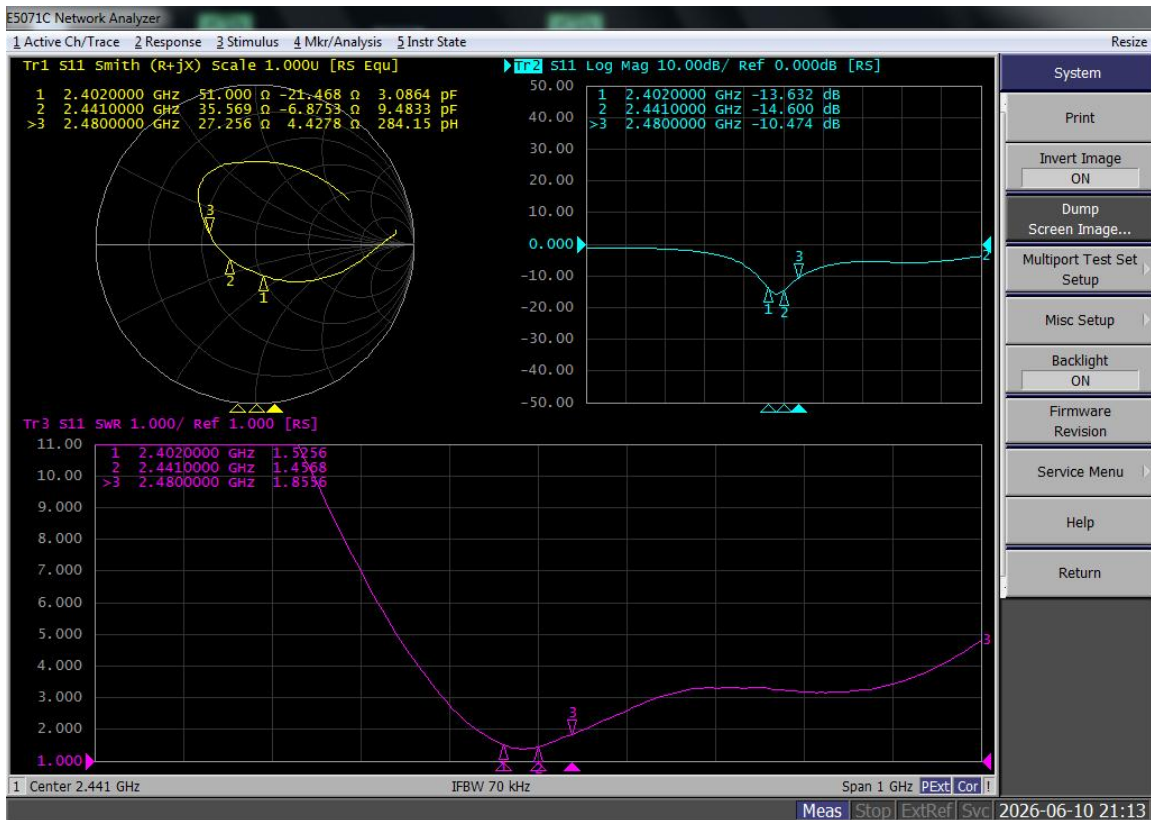
Test Environment: Zhongke Guoji Darkroom Testing System





Passive S-parameters of antenna:

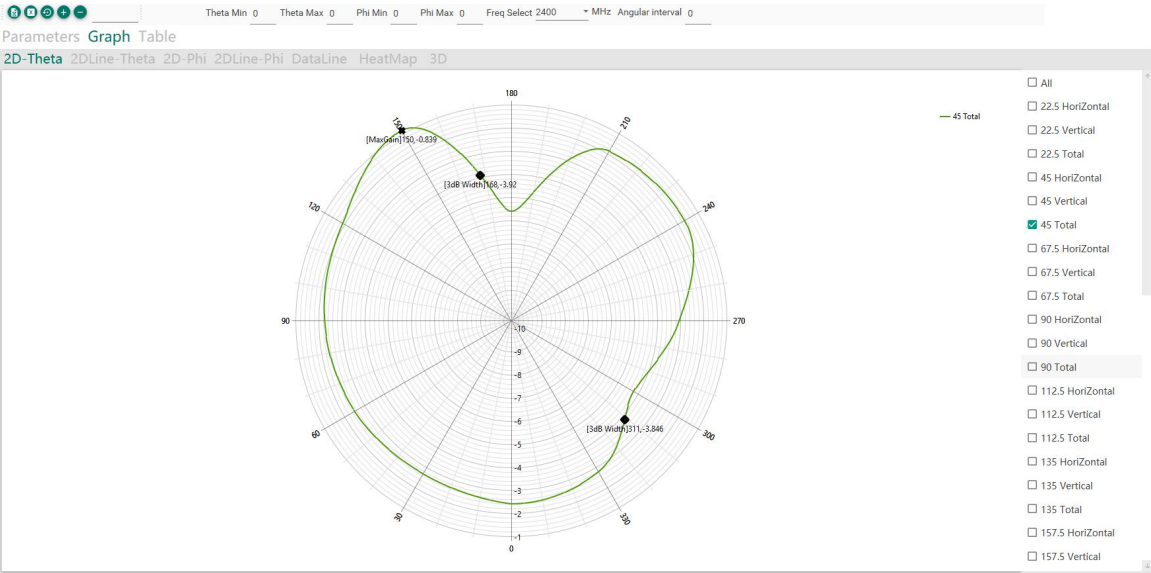
Standing Wave Ratio (VSWR), Return Loss, and Smith Chart



Antenna efficiency and gain

Frequency (MHz)	Gain (dBi)	Efficiency (%)	AverageGain (dBi)	Efficiency (dB)
2400	1.48	63.36%	-2.73	-1.98
2410	1.25	57.22%	-3.40	-2.43
2420	0.60	54.48%	-3.43	-2.64
2430	-0.06	48.04%	-3.91	-3.18
2440	-0.09	45.16%	-4.20	-3.45
2450	0.36	49.24%	-3.56	-3.08
2460	1.08	54.75%	-3.10	-2.62
2470	1.55	54.67%	-2.97	-2.62
2480	2.27	64.19%	-2.25	-1.93
Average	0.94	54.57%	-3.28	-2.66
Peak	2.27	64.19%	-2.25	-1.93

Antenna 2400MHz 2D-Theta Pattern



Parameters **Graph** Table

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

Theta Min 0 Theta Max 0 Phi Min 0 Phi Max 0 Freq Select 2440 MHz Angular interval 0

Legend: — 45 Total

- ☐ All
- ☐ 22.5 Horizontal
- ☐ 22.5 Vertical
- ☐ 22.5 Total
- ☐ 45 Horizontal
- ☐ 45 Vertical
- ☒ 45 Total
- ☐ 67.5 Horizontal
- ☐ 67.5 Vertical
- ☐ 67.5 Total
- ☐ 90 Horizontal
- ☐ 90 Vertical
- ☐ 90 Total
- ☐ 112.5 Horizontal
- ☐ 112.5 Vertical
- ☐ 112.5 Total
- ☐ 135 Horizontal
- ☐ 135 Vertical
- ☐ 135 Total
- ☐ 157.5 Horizontal
- ☐ 157.5 Vertical

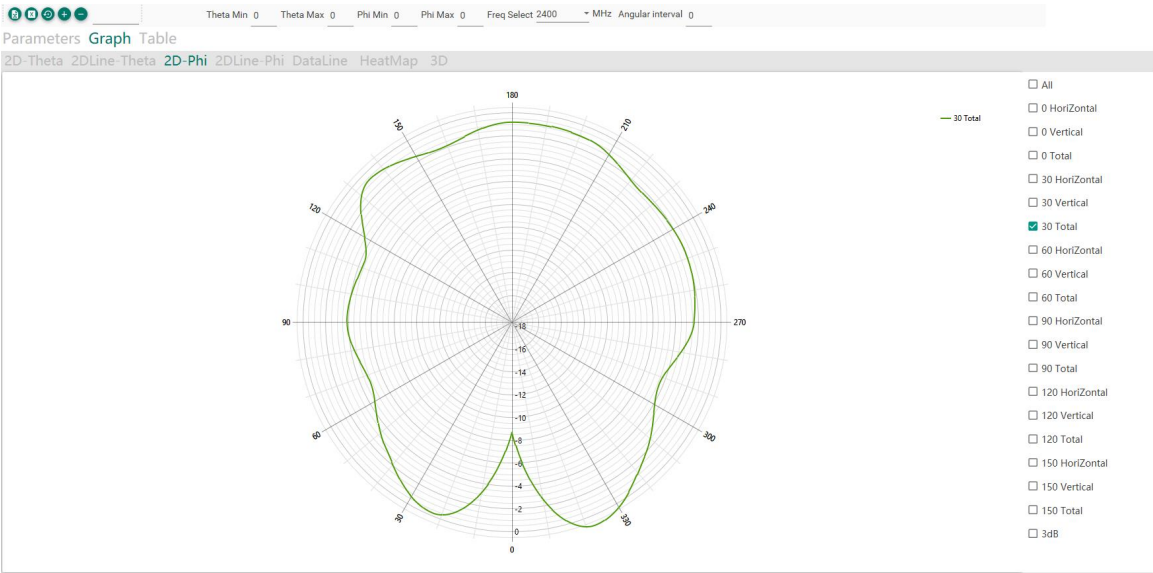
Parameters **Graph** Table

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

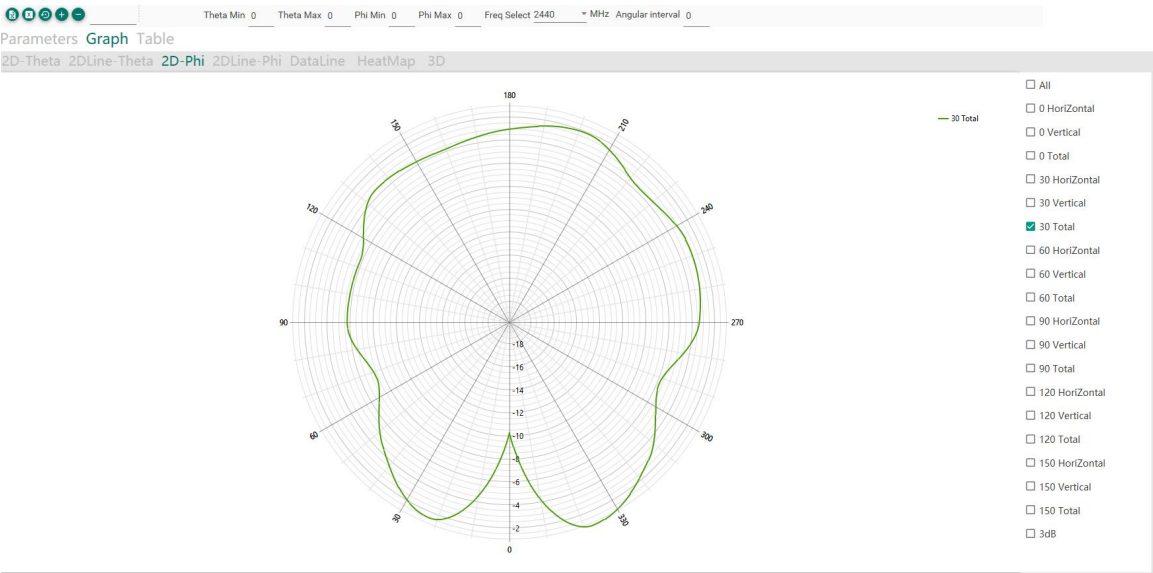
Legend:

- ☒ 45 Total
- ☐ All
- ☐ 22.5 Horizontal
- ☐ 22.5 Vertical
- ☐ 22.5 Total
- ☐ 45 Horizontal
- ☐ 45 Vertical
- ☐ 45 Total
- ☐ 67.5 Horizontal
- ☐ 67.5 Vertical
- ☐ 67.5 Total
- ☐ 90 Horizontal
- ☐ 90 Vertical
- ☐ 90 Total
- ☐ 112.5 Horizontal
- ☐ 112.5 Vertical
- ☐ 112.5 Total
- ☐ 135 Horizontal
- ☐ 135 Vertical
- ☐ 135 Total
- ☐ 157.5 Horizontal
- ☐ 157.5 Vertical
- ☐ 157.5 Total

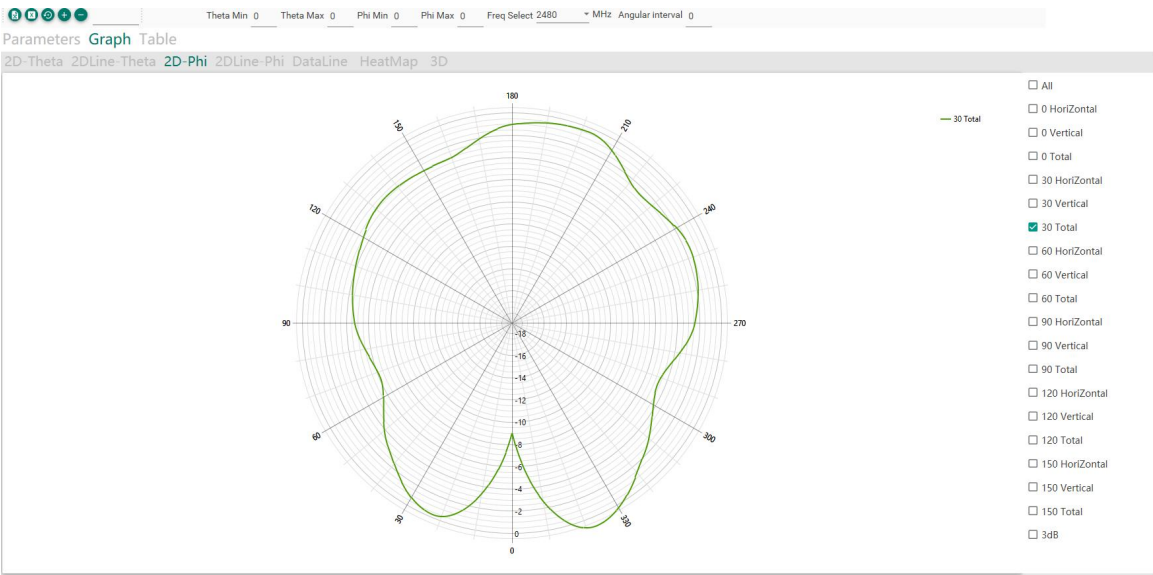
Antenna 2400MHz 2D-Phi Pattern



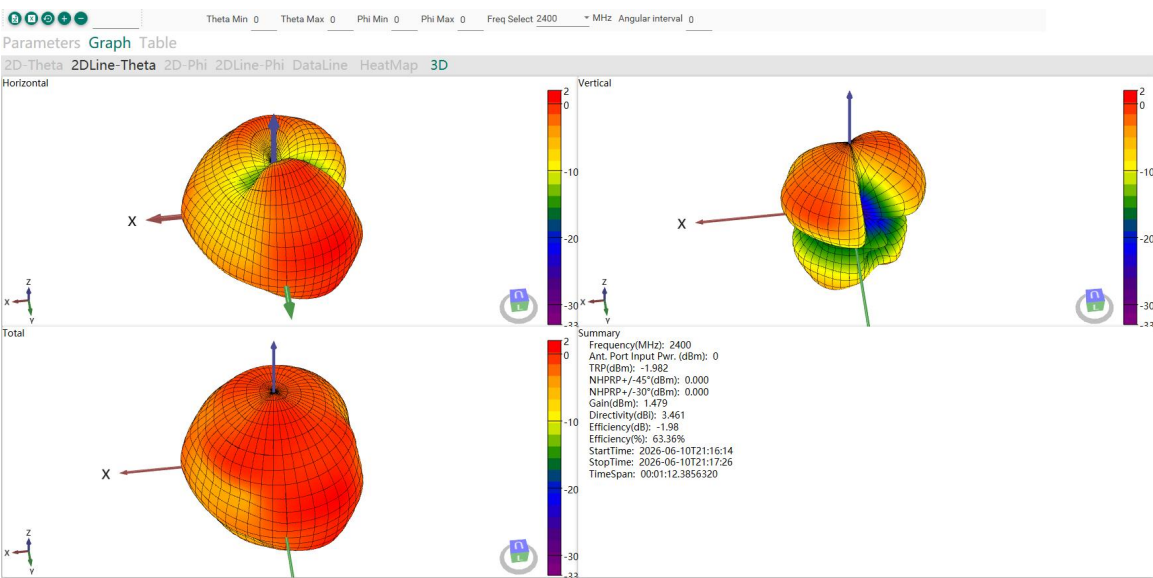
Antenna 2440MHz 2D-Phi Pattern



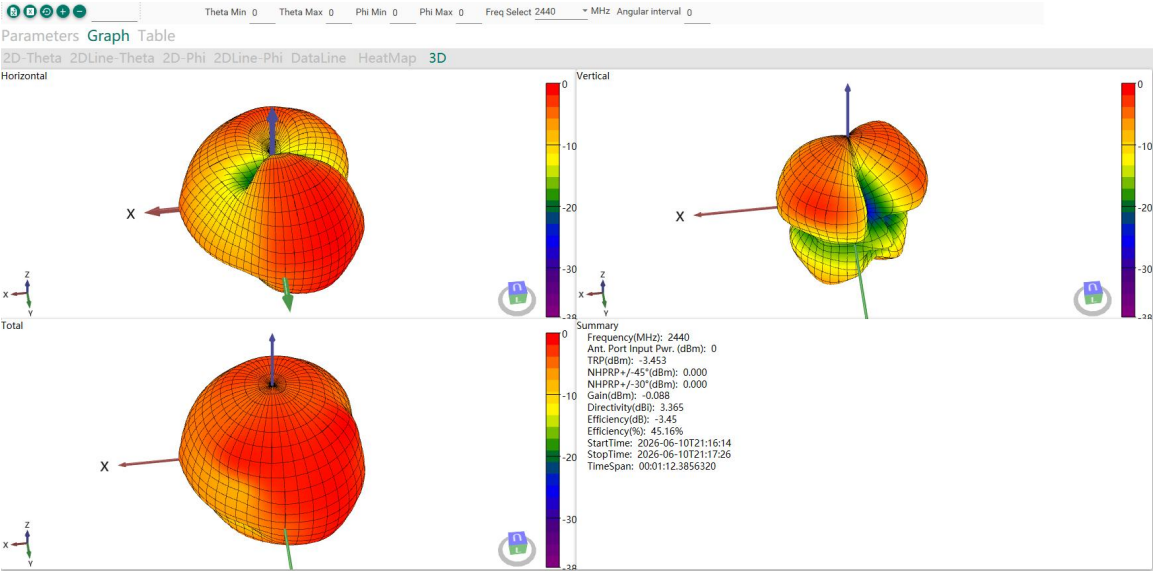
Antenna 2480MHz 2D-Phi Pattern



Antenna 2400MHz 3D-Total Pattern



Antenna 2440MHz 3D-Total Pattern



Antenna 2480MHz 3D-Total Pattern

