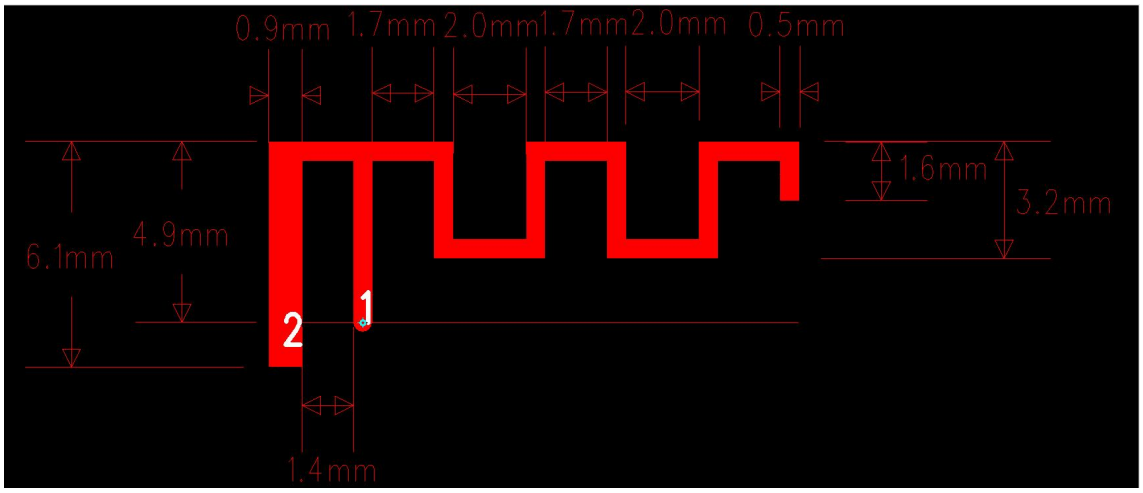
2.4G-2.48G 频段板载 PIFA 天线测试报告

2.4G-2.48G **Inverted F Antenna Specification**

SPECIFICATIONS	
Frequency（MHz）	2400-2480
Peak Gain（dBi）	2.338
Average Gain（dBi）	＞-5.5
VSWR	＜3.2
Impedance（Ω）	50Ω
Antenna Type	Plannar Inverted F Antenna on board
Polarization	Linear
Manufacture	ZHUHAI JIELI TECHNOLOGY CO.,LTD
Address:	No.333 Kexing Road, Nanping Science Park, Xiangzhou District, Zhuhai
Test equipment	HWA-TECH

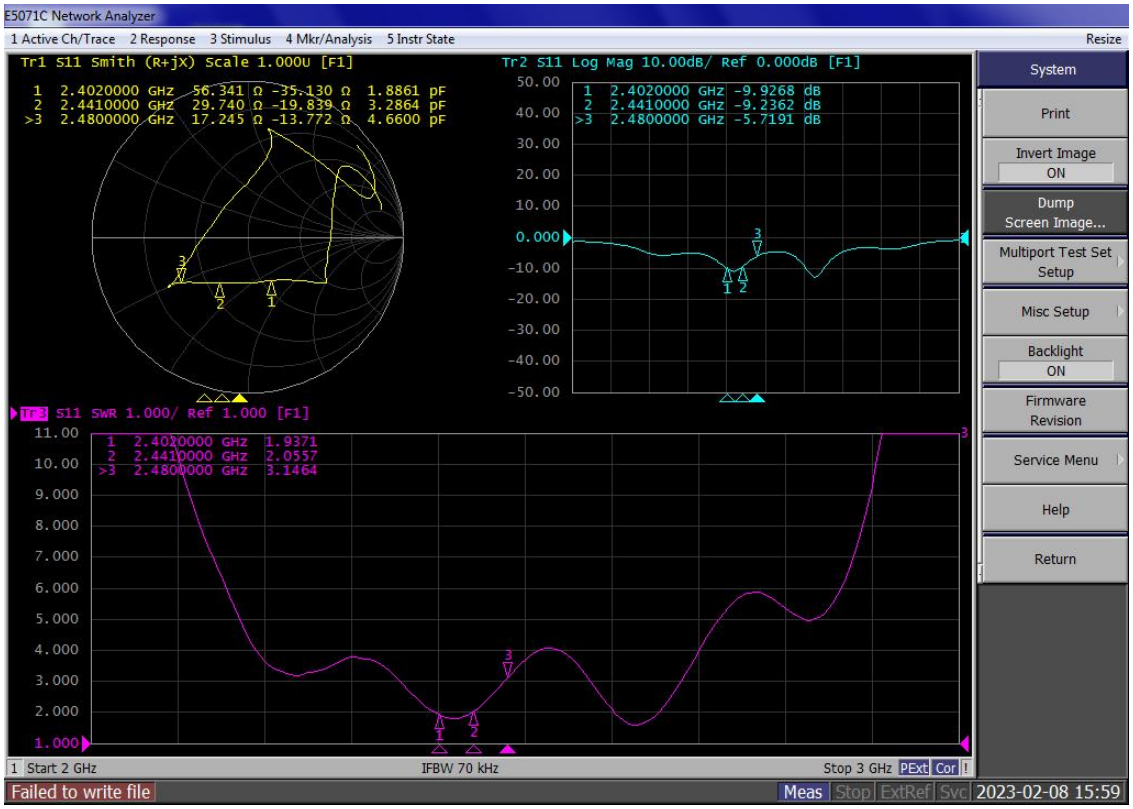
Antenna Photo & Length (mm)



天线无源 S 参数：

Antenna passive S-parameters:

驻波比（VSWR）、回波损耗（Return Loss）及史密斯圆图（Smith）

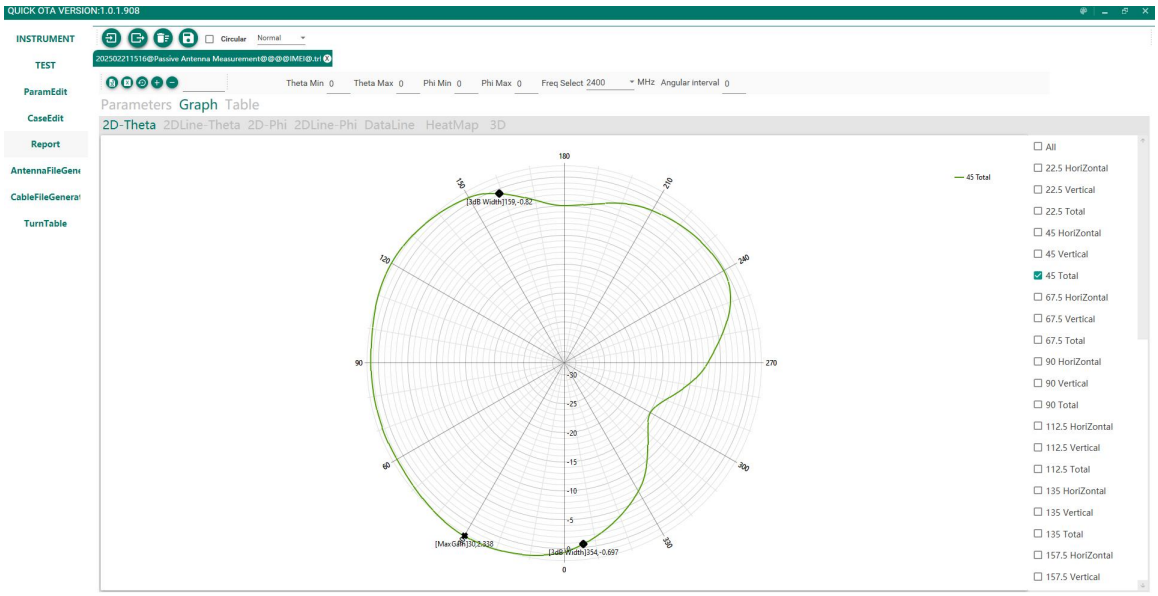


天线效率及增益：

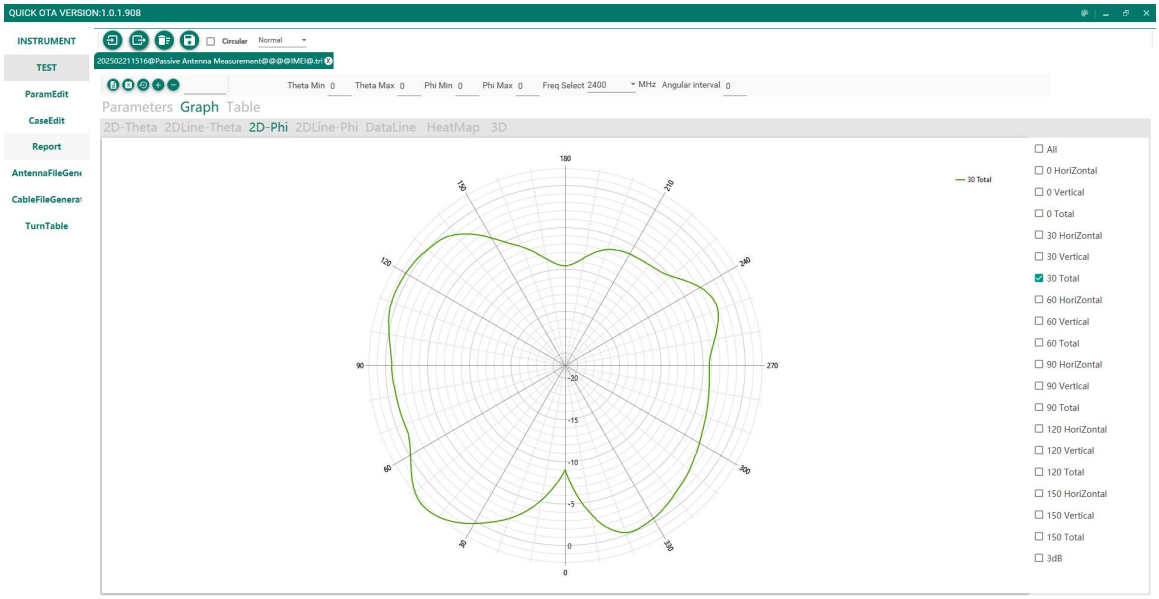
Antenna efficiency and gain：

Frequency（MHz）	Gain（dBi）	Effciency（%）	AverageGain（dBi）	Efficiency（dB）
2400	2.338	59.39%	-2.915	-2.263
2410	1.603	49.11%	-3.883	-3.088
2420	1.295	46.04%	-4.014	-3.369
2430	0.388	36.89%	-4.91	-4.331
2440	0.187	34.00%	-5.276	-4.685
2450	-0.823	30.28%	-5.431	-5.189
2460	0.507	34.88%	-5.02	-4.575
2470	0.291	31.89%	-5.323	-4.963
2480	-0.23	33.20%	-5.195	-4.789
Average	0.78	39.64%	-4.66	-4.12
Peak	2.338	59.39%	-2.915	-2.263

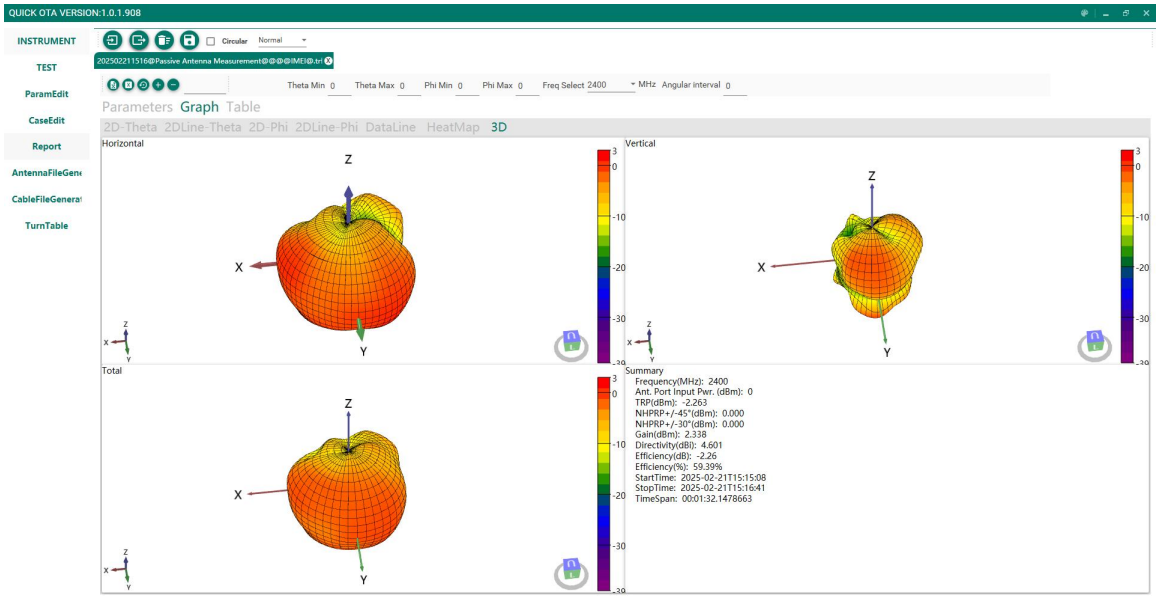
天线 2400MHz 2D-Theta Pattern



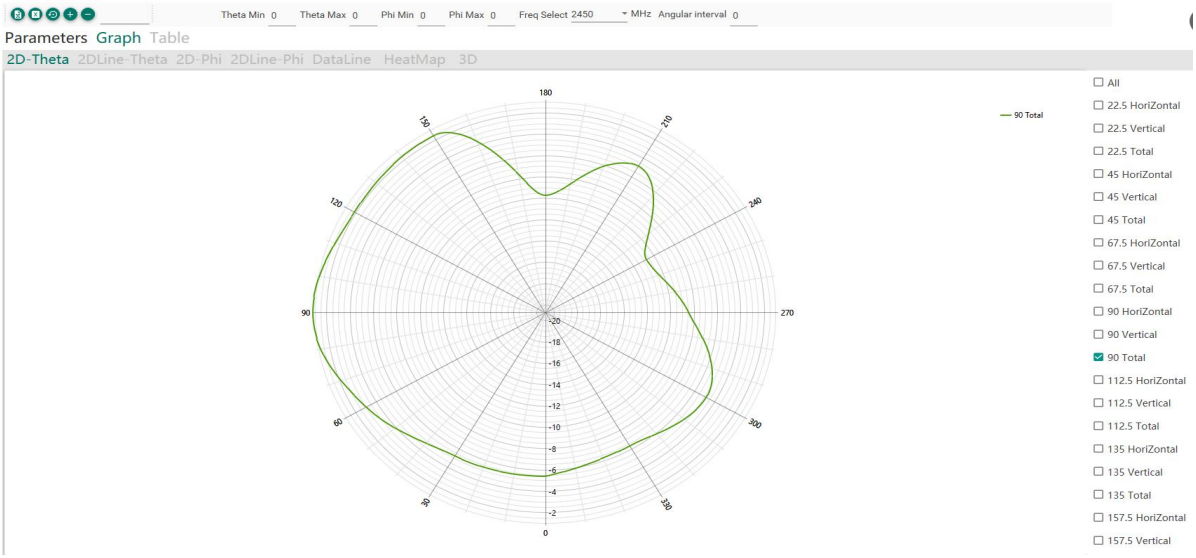
天线 2400MHz 2D-Phi Pattern



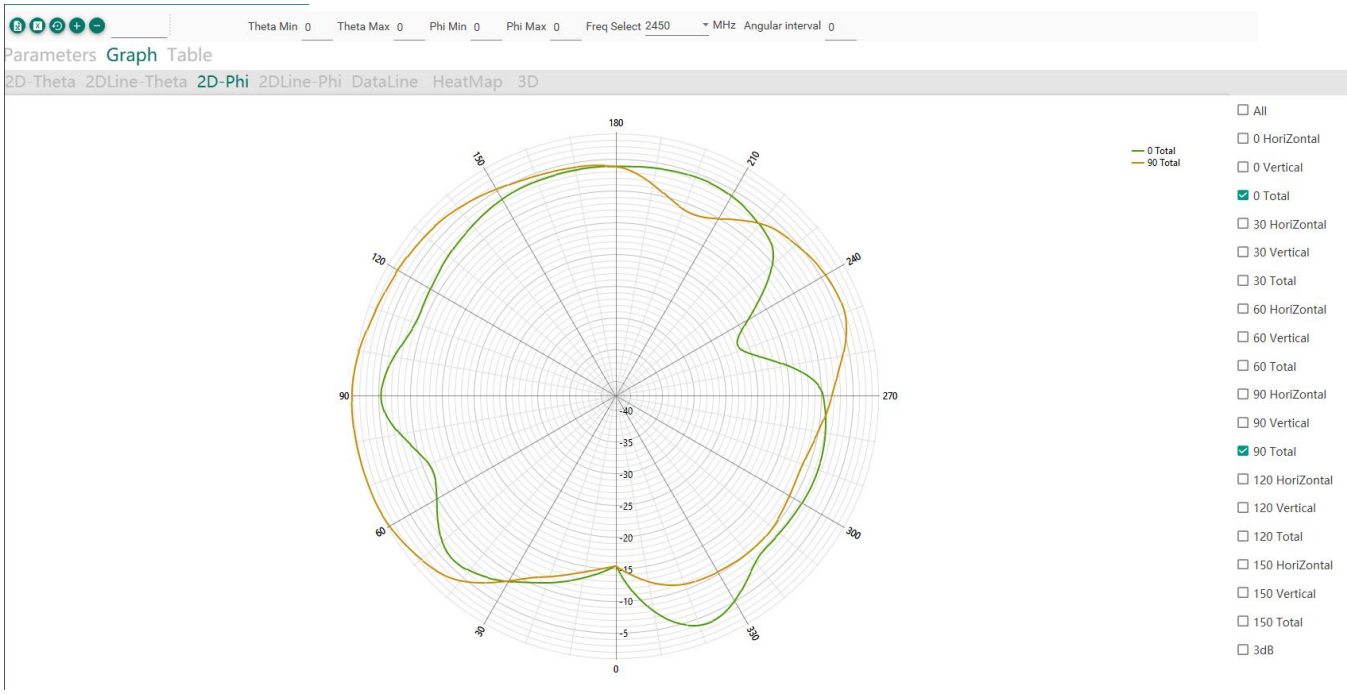
2400MHz 3D-Total Pattern



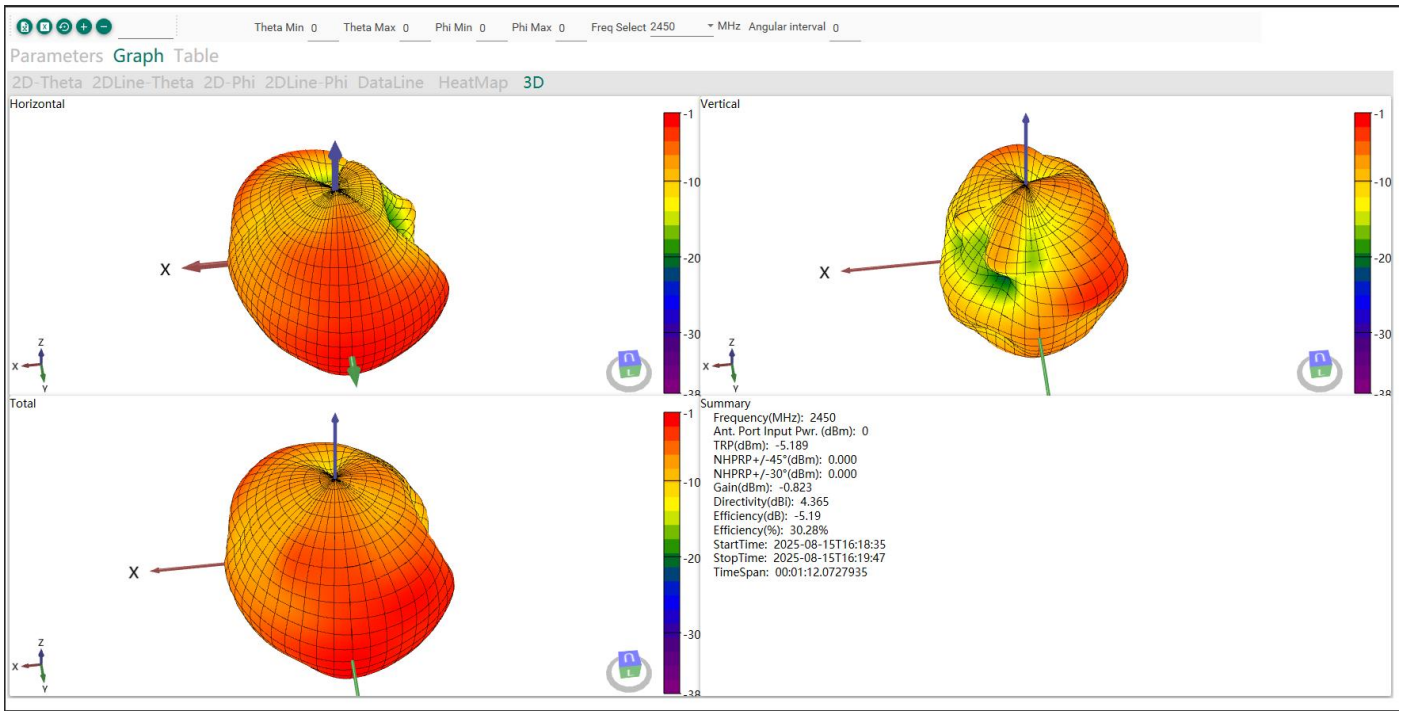
天线 2450MHz 2D-Theta Pattern



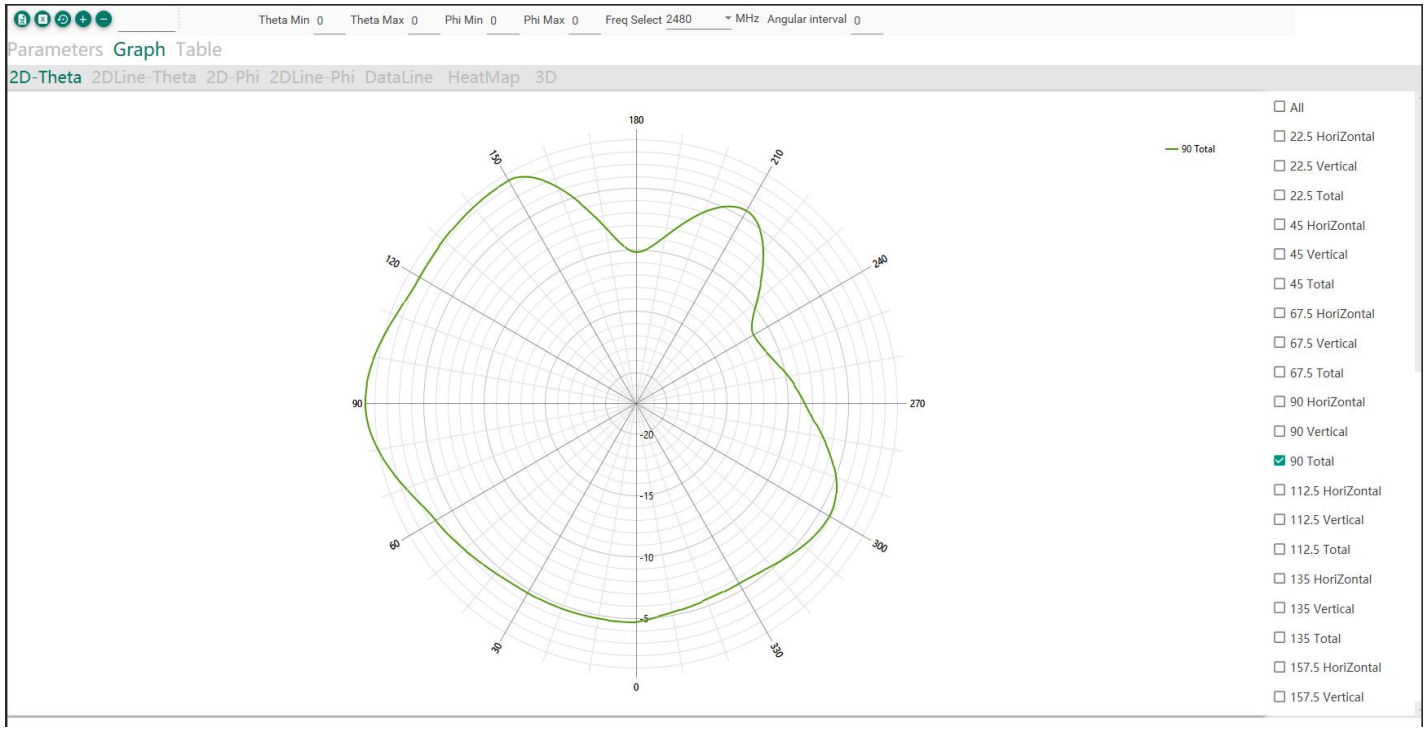
天线 2450MHz 2D-Phi Pattern



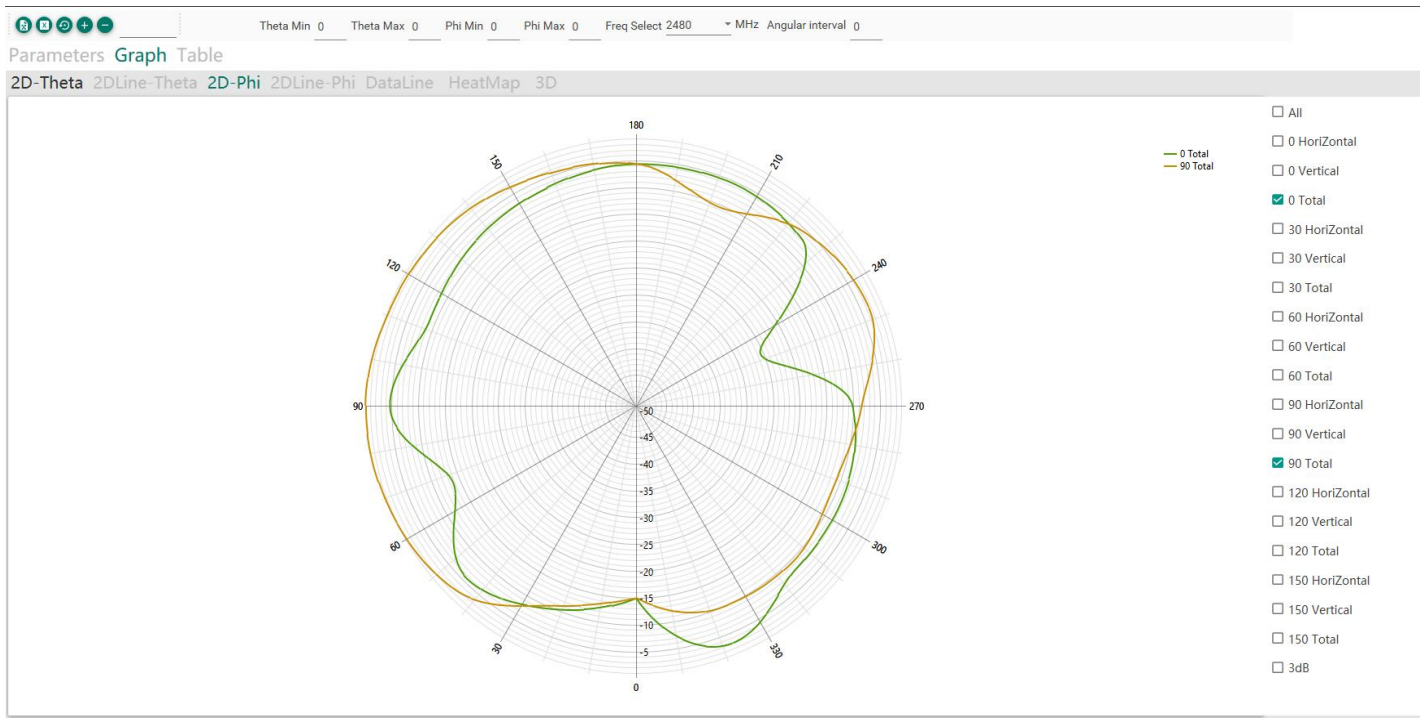
2450MHz 3D-Total Pattern



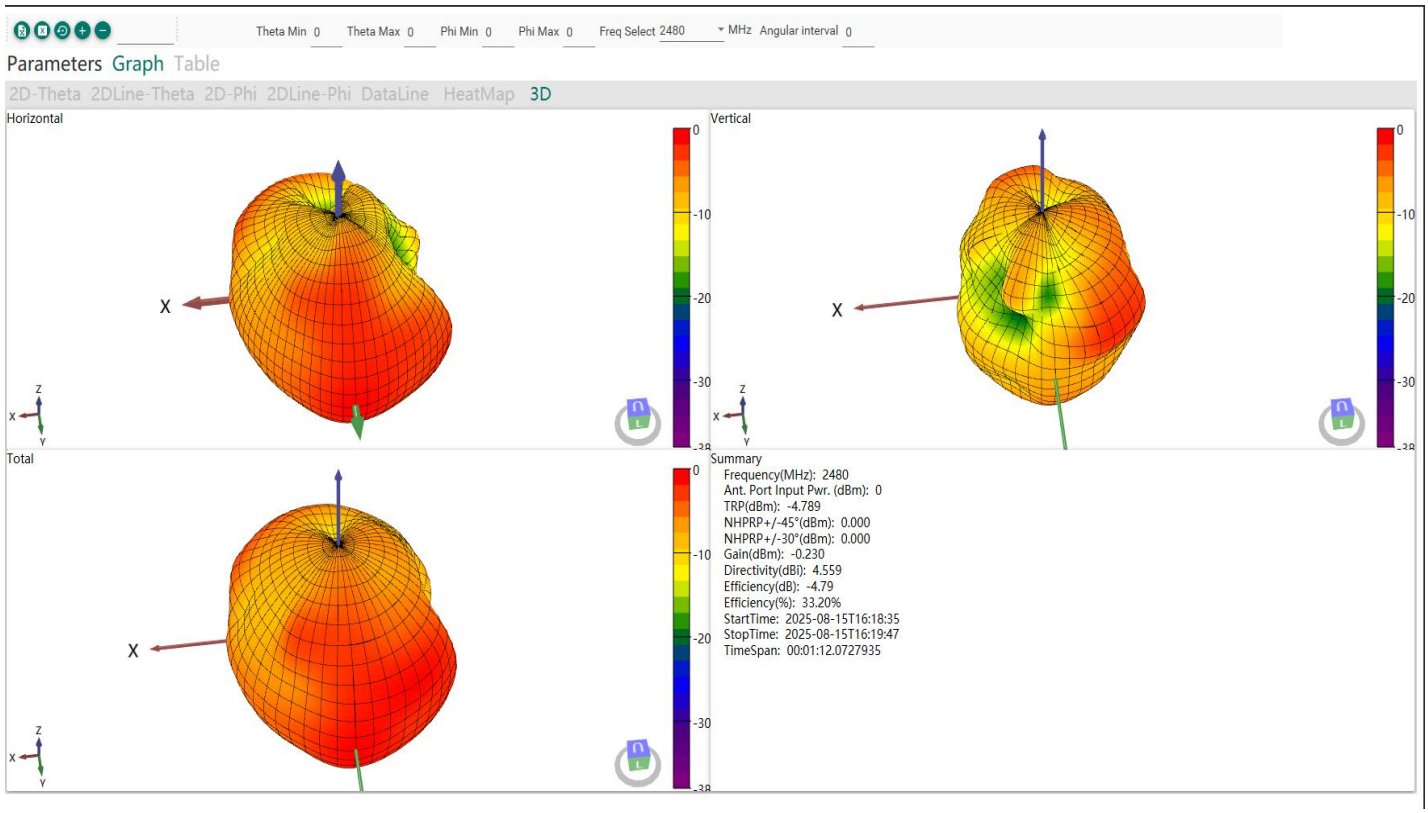
天线 2480MHz 2D-Theta Pattern



天线 2480MHz 2D-Phi Pattern



2480MHz 3D-Total Pattern


Theta Min 0
Theta Max 0
Phi Min 0
Phi Max 0
Freq Select 2480 MHz
Angular interval 0
Parameters Graph Table
2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D
Horizontal
Vertical
Total
Summary
Frequency(MHz): 2480
Ant. Port Input Pwr. (dBm): 0
TRP(dBm): -4.789
NHPRP+/-45°(dBm): 0.000
NHPRP+/-30°(dBm): 0.000
Gain(dBm): -0.230
Directivity(dBi): 4.559
Efficiency(dB): -4.79
Efficiency(%): 33.20%
StartTime: 2025-08-15T16:18:35
StopTime: 2025-08-15T16:19:47
TimeSpan: 00:01:12.0727935