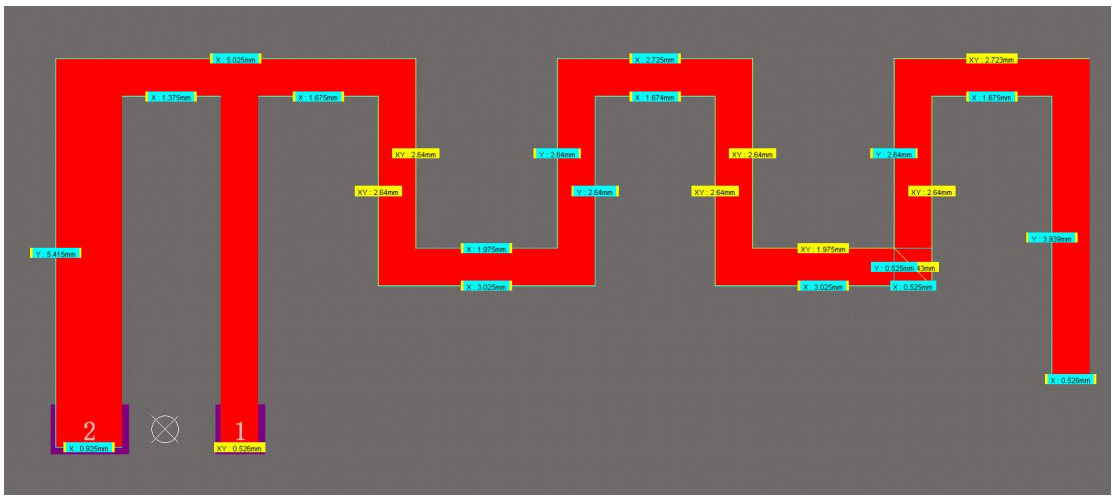
On-board PCB antenna in the 2.4G-2.48G frequency band

1.Electrical Performance:

Electrical performance index	
Frequency Range（MHz）	2400-2480
Frequency BW（MHz）	100
Peak Gain（dBi）	2.499
Average Gain（dBi）	＞-4
VSWR	＜3.2
Impedance（Ω）	50
Antenna type	PCB board
Polarization mode	Linear polarization
Working temperature（℃）	-20-60
Storage temperature（℃）	-20-60

2. Physical dimensions（mm）

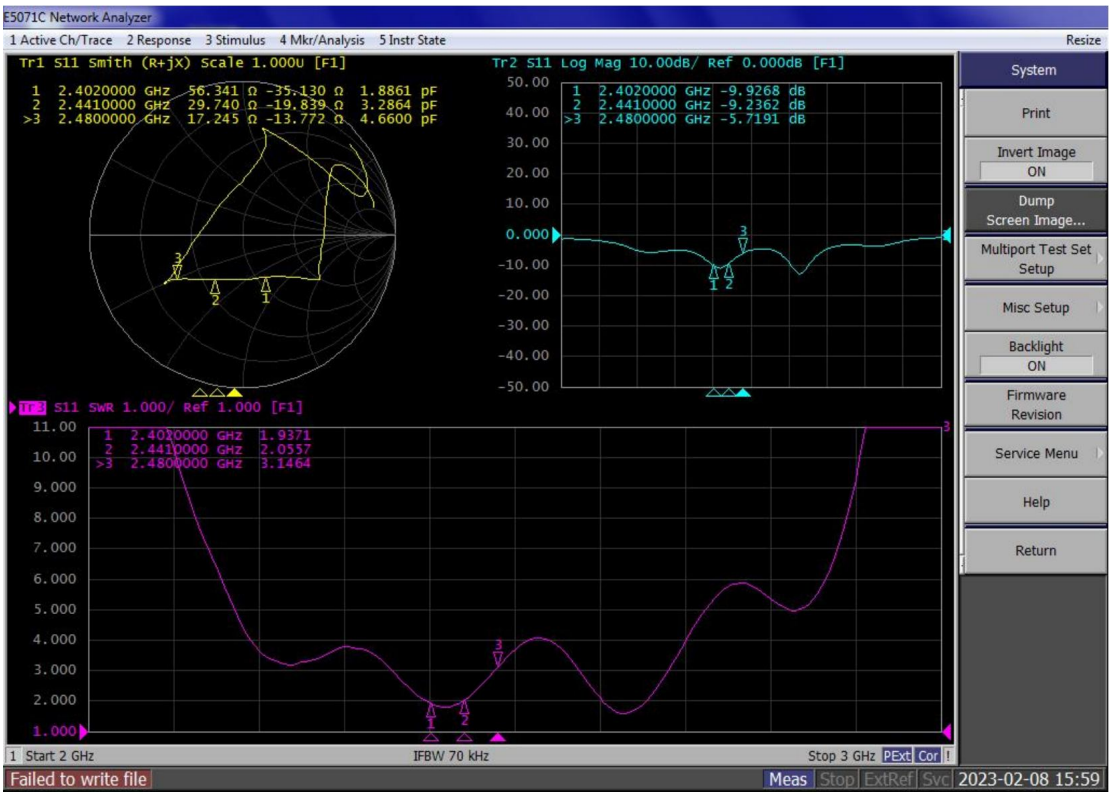


Copper thickness: 1 ounce

Manufacturer:Shandong ICreate Education Technology Co., Ltd.
Manufacturer add.:3201, Building 2, Third District, Weidong Xindu, Shizhong District, Jinan City, Shandong Province, China

3. Passive S parameters of the antenna:

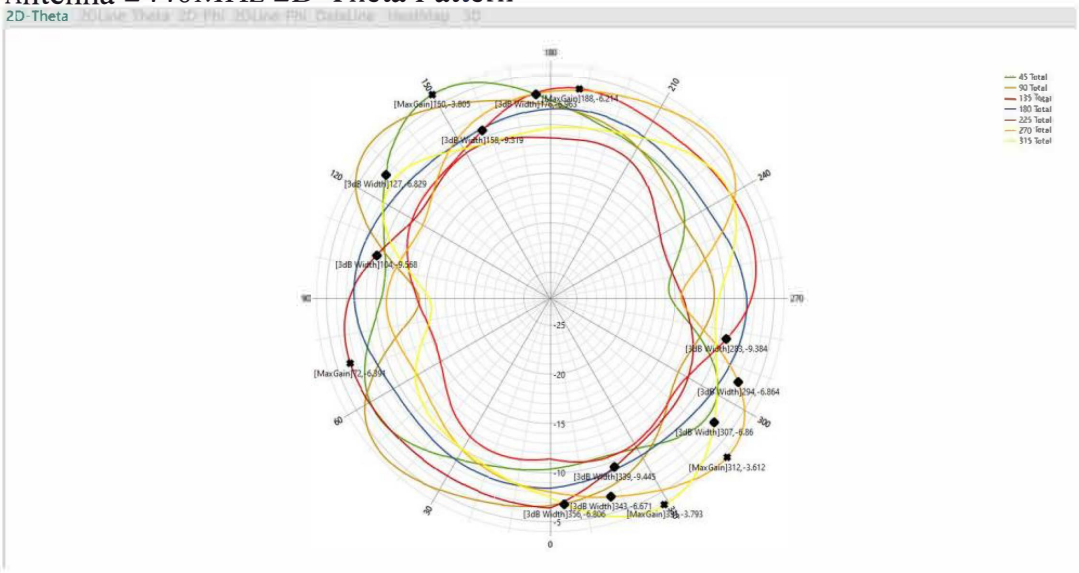
Standing wave ratio, return loss and Smith's circle diagram



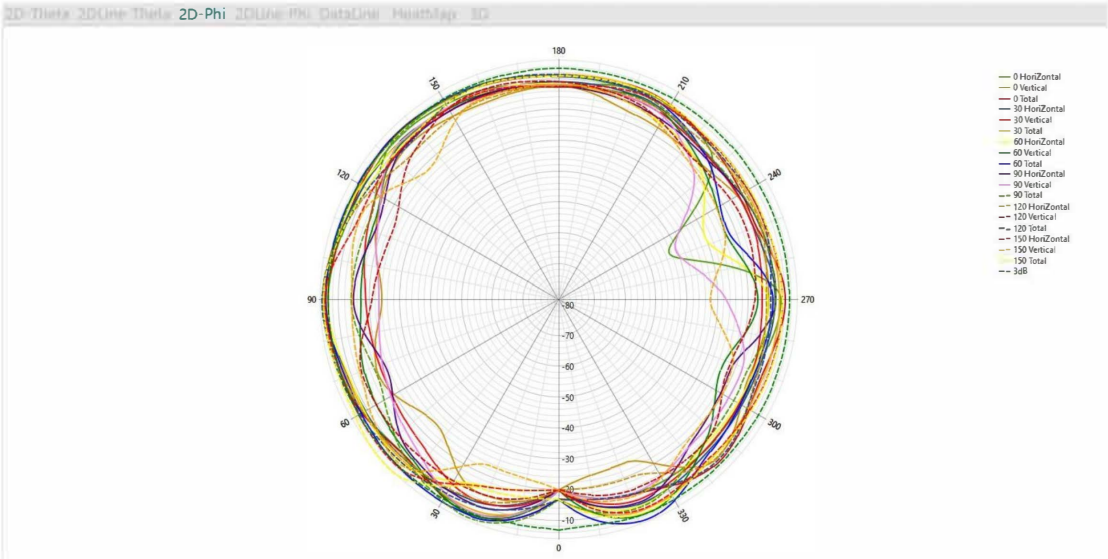
Antenna efficiency and gain

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Average Gain (dBi)	Efficiency (%)
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	56.690%	-2.438	-2.466
2480	2.499	61.737	-2.112	-2.095
Average value	1.529	54.908%	-2.806	-2.616
Peak value	2.499	61.727%	-2.112	-2.095

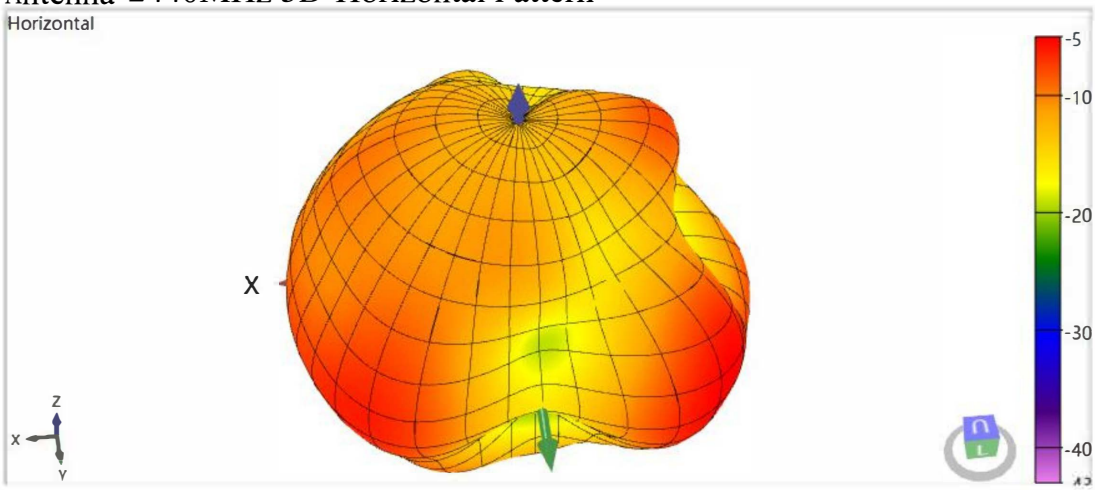
Antenna 2440MHz 2D-Theta Pattern



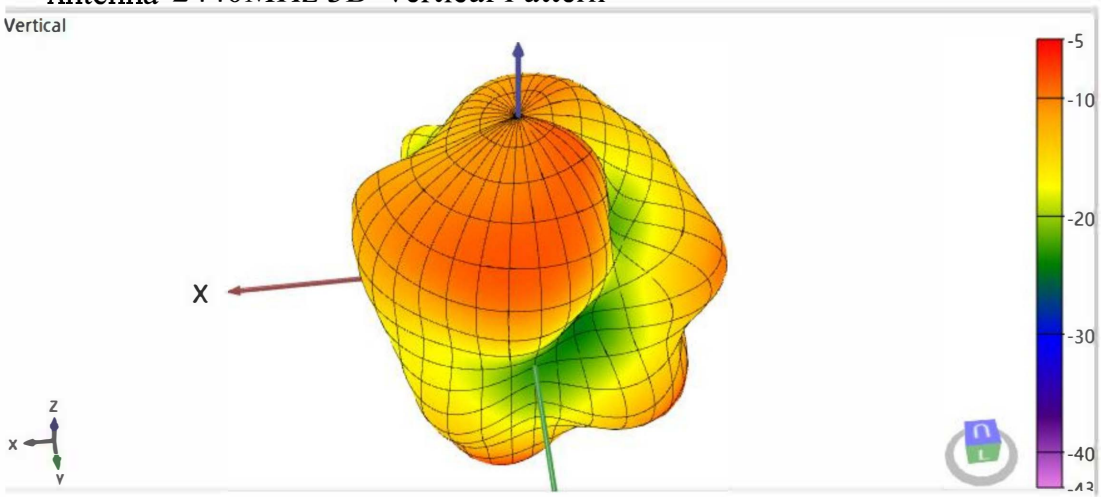
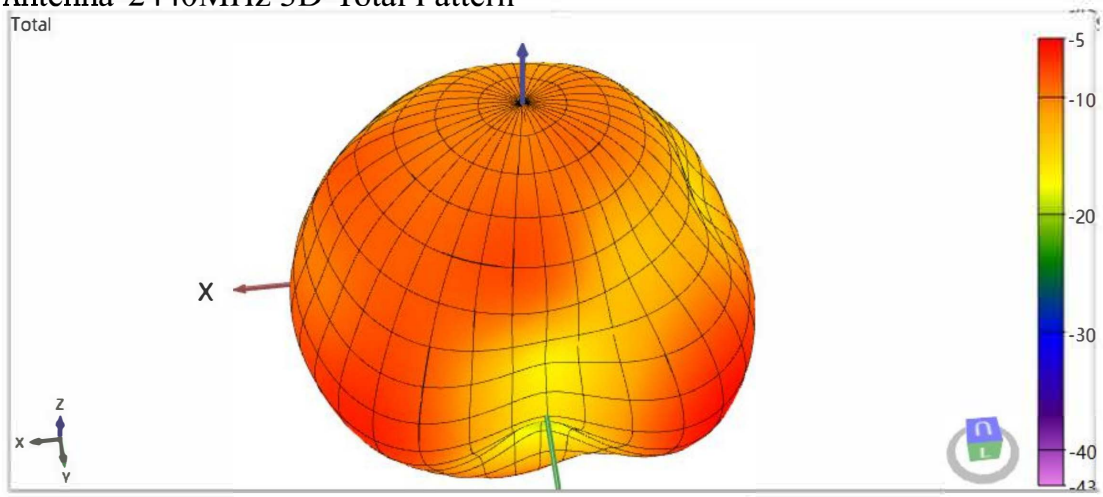
Antenna 2440MHz 2D-Phi Pattern



Antenna 2440MHz 3D-Horizontal Pattern



Antenna 2440MHz 3D-Vertical Pattern



Antenna 2440MHz 3D-Total Pattern