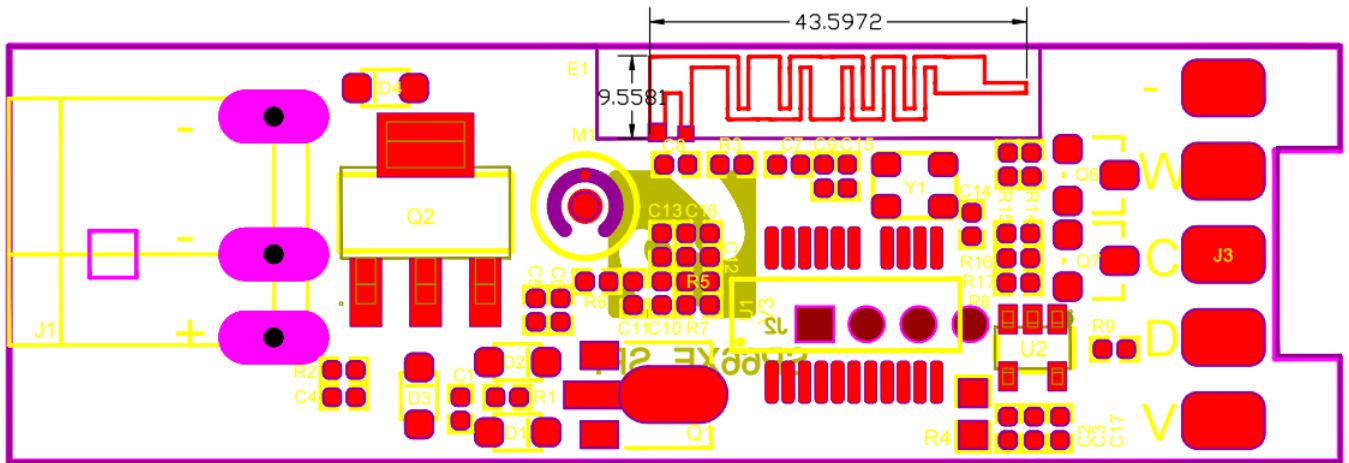


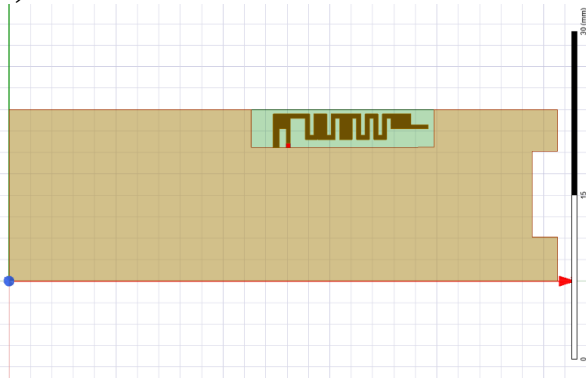
SP668E Antenna Specifications

1. Antenna location and size (mm) :

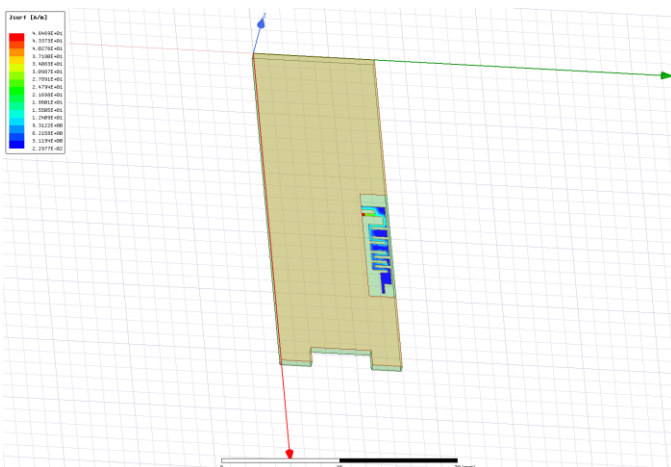


2. Antenna simulation Report:

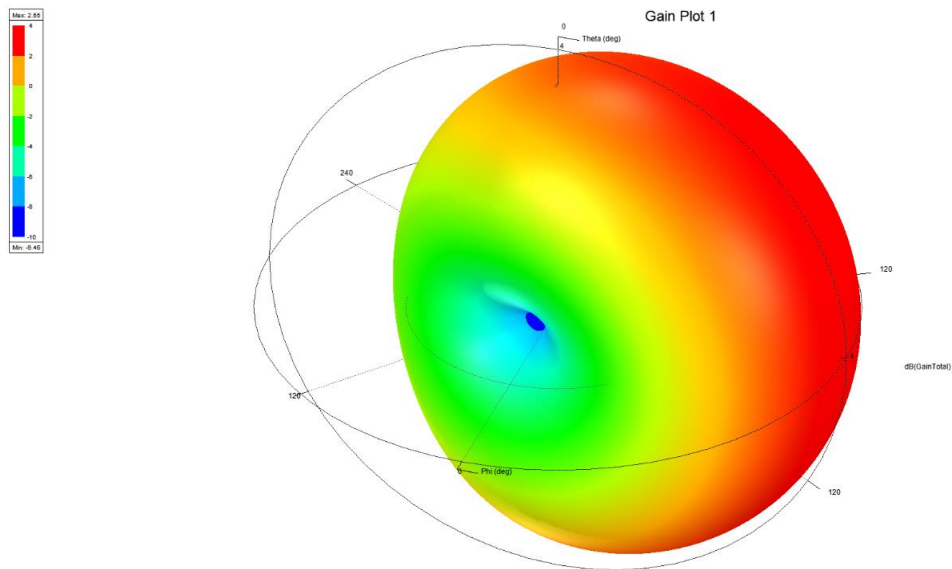
1) Antenna surface current distribution :



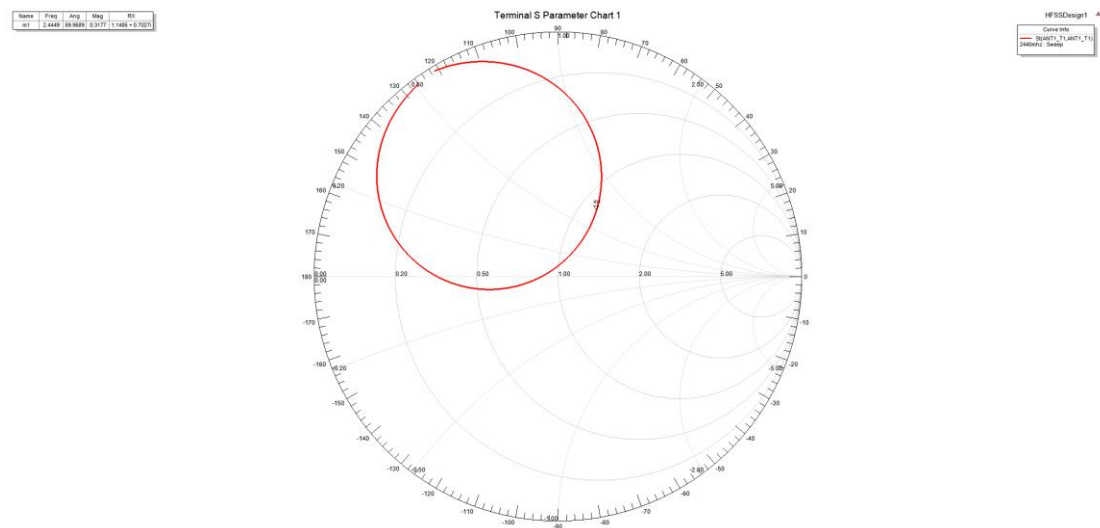
2) Antenna and antenna radiation pattern:



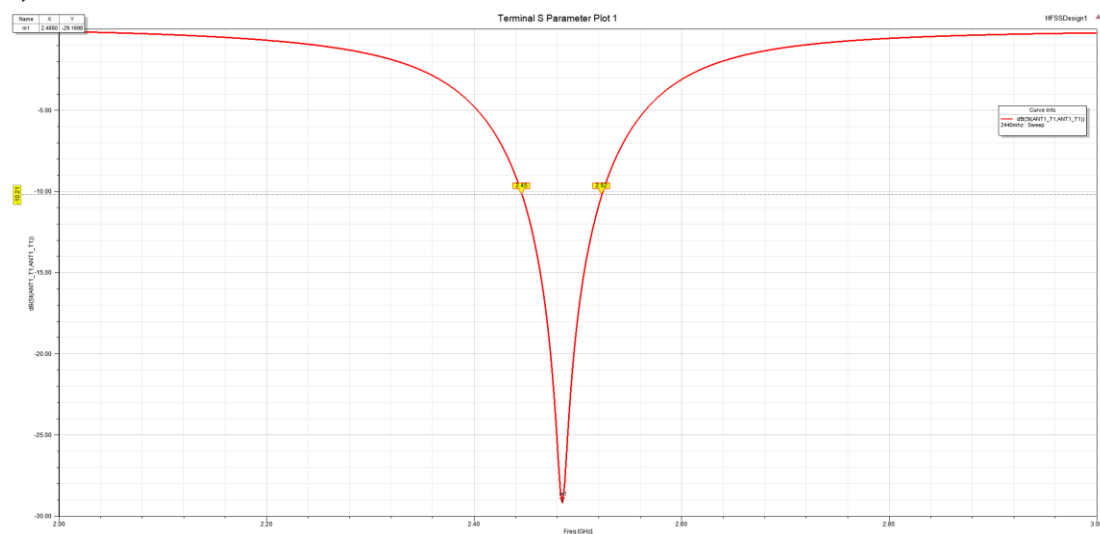
3) Antenna radiation pattern and gain pattern::



4)Smithchart:

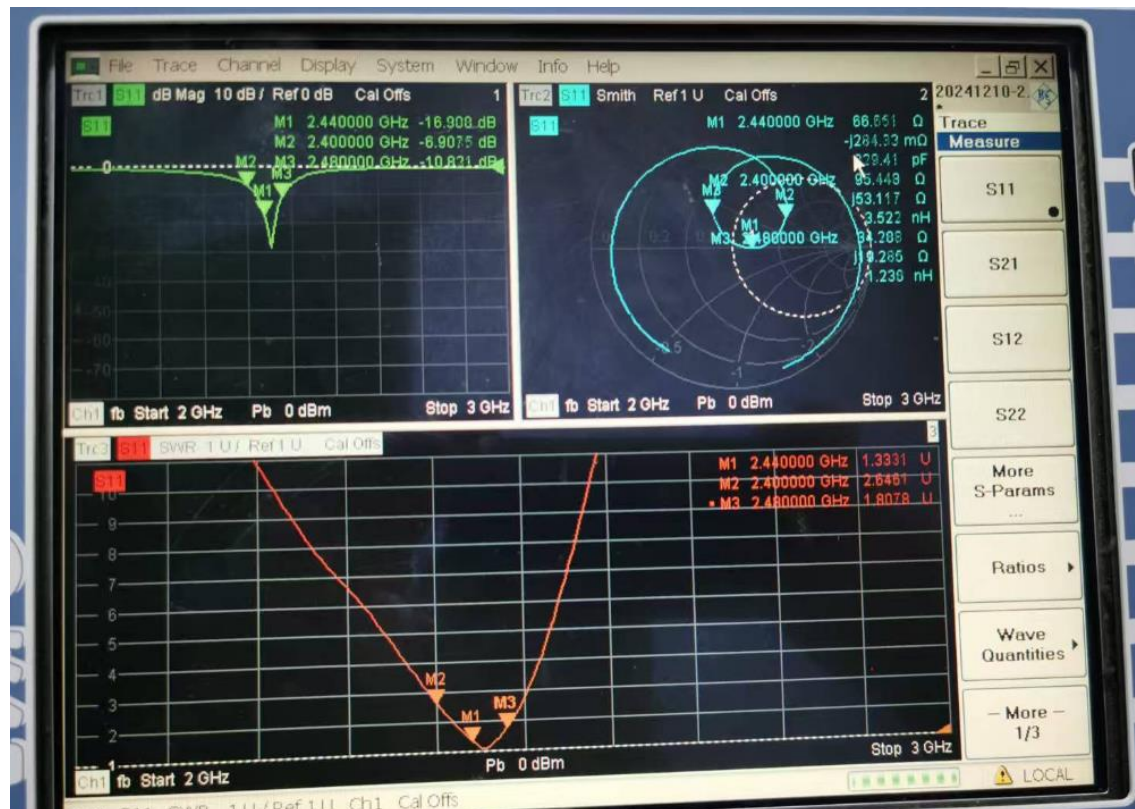


5)S Parameter Plot:



3.Test Report:

Antenna Smithchart ,VSWR and Return Loss:



4.Basic Characteristics:

A.Electrical Characteristics:	
Frequency	2400~2500 MHz
S.W.R.	≤ 2.55 @2400~2500 MHz
Max.Gain	2.55 dBi @2400~2500 MHz
Efficiency	77~79%@2400~2500 MHz
Polarization	Linear
Impedance	50 Ohm
B.Material & Mechanical Characteristics:	
Material of Radiator	PCB
Cable Type	0.D.1.13 mm//112mm (gray)
Connector Type	NONE
Pull Test	/
C.Environmental:	
Operation Temperature	-40℃~+65℃
Storage Temperature	-40℃~+80℃

5.Gain and Efficiency:

frequency (GHz)	2.4	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.5
efficiency (%)	78.81	78.69	78.56	78.43	78.29	78.16	78.02	77.88	77.74	77.60	77.46
Gain (dBi)	2.55	2.55	2.55	2.549	2.548	2.547	2.545	2.544	2.543	2.541	2.540