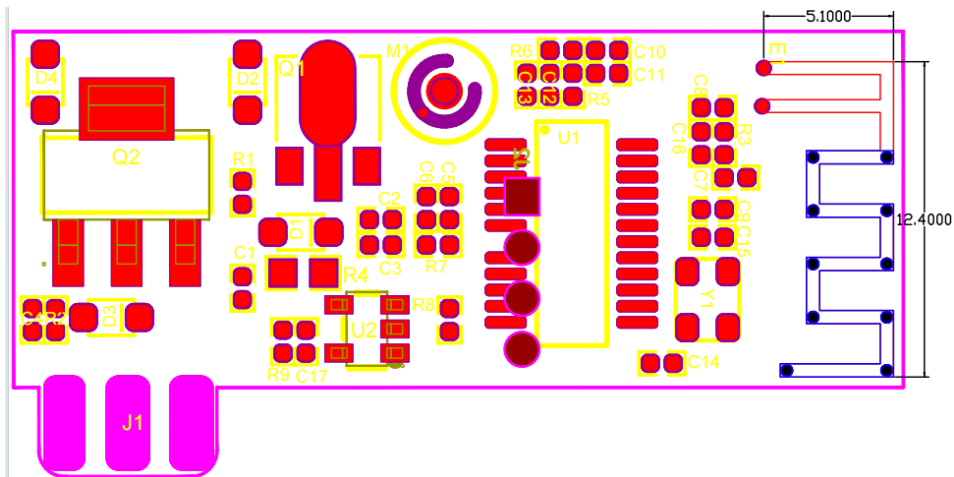


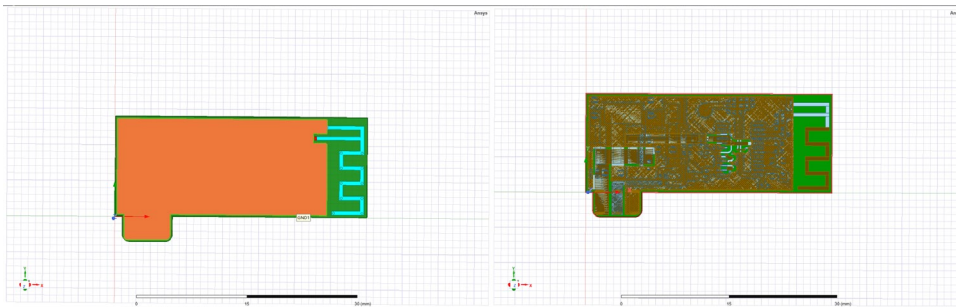
SP668E_QL Antenna Specifications

1. Antenna location and size (mm) :

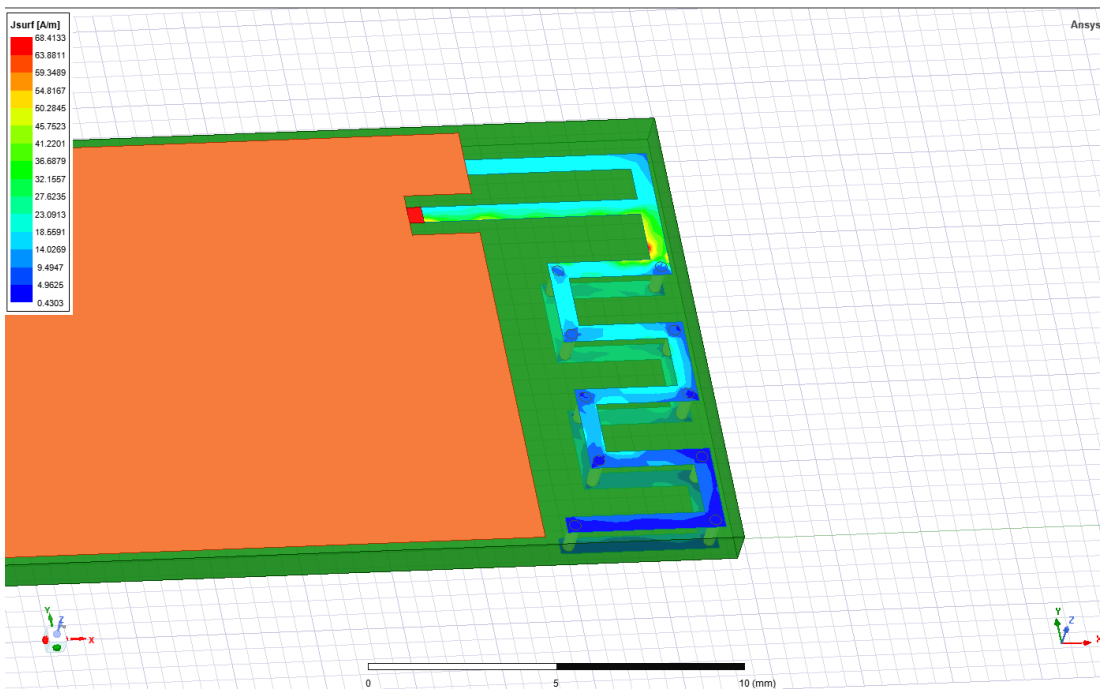


2. Antenna simulation Report:

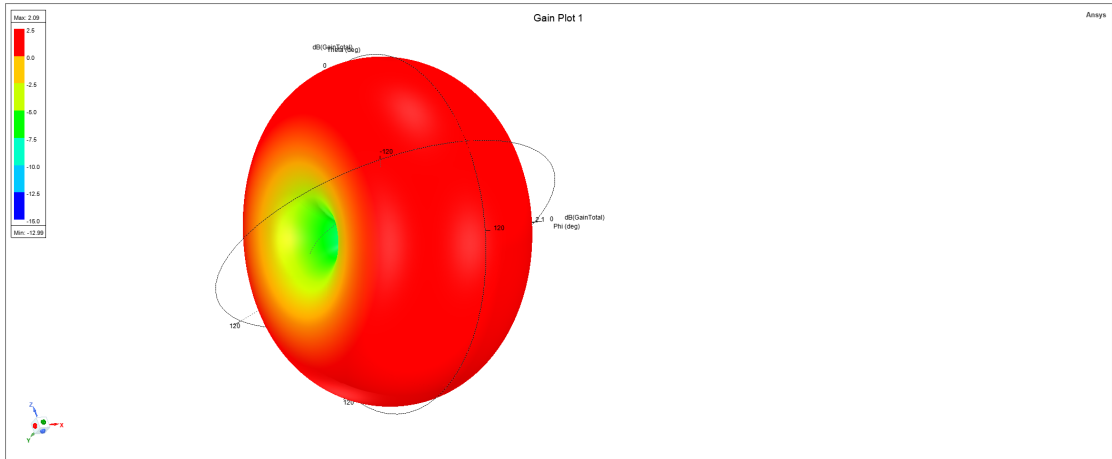
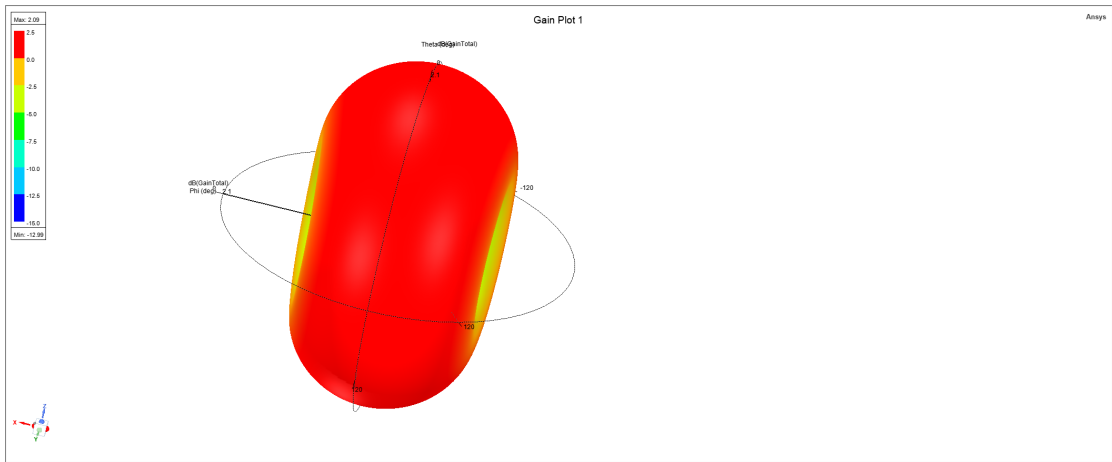
1)Antenna Simulation Model :



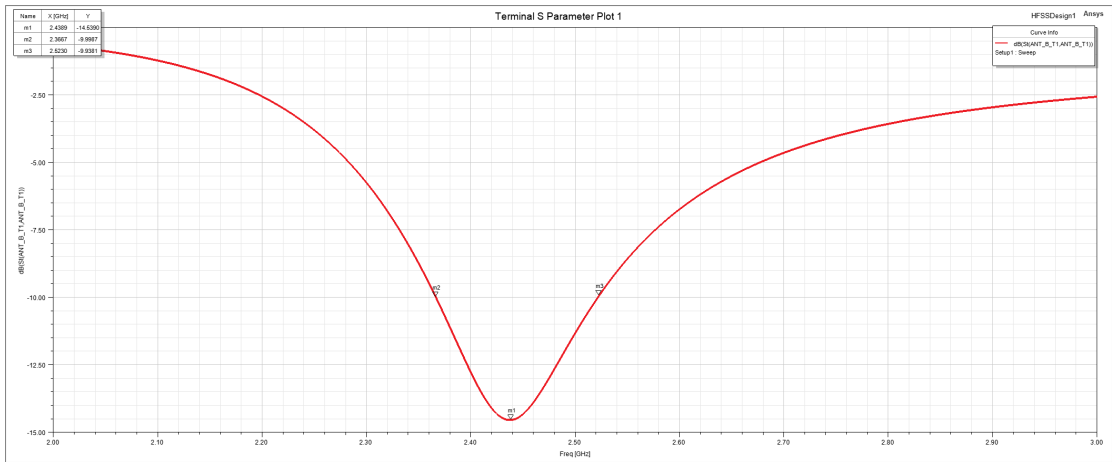
2)Antenna Surface Current Distribution :



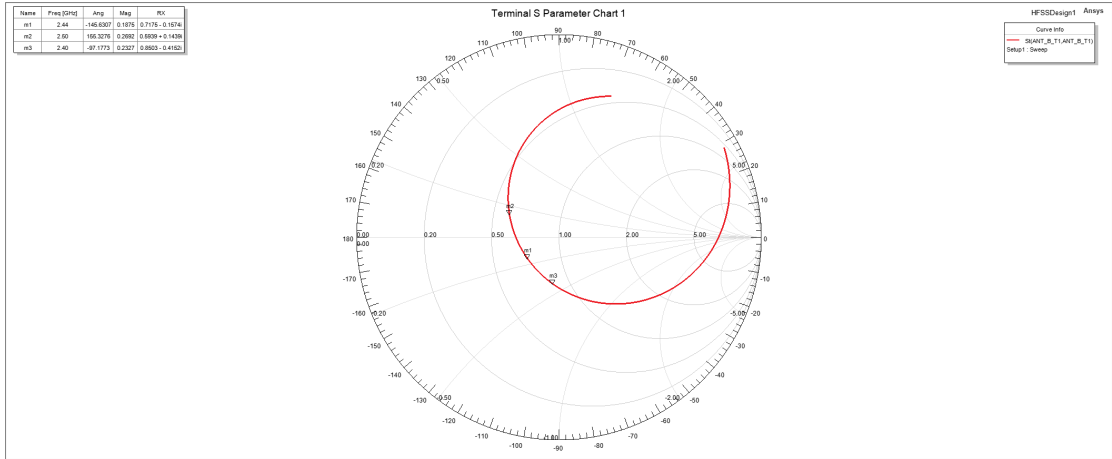
3) Antenna 3D Radiation Pattern



4) Antenna S11 Parameter

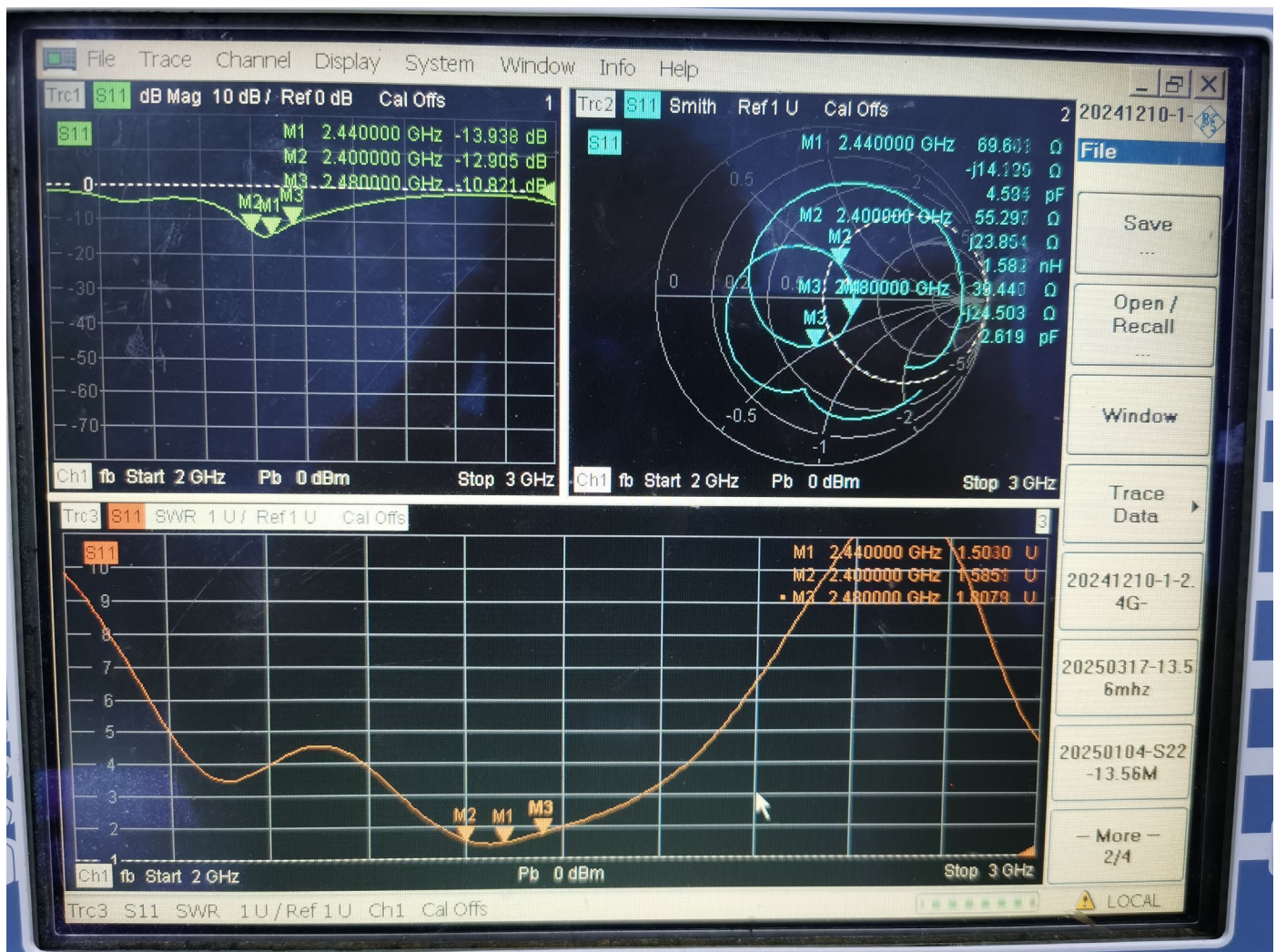


5) Antenna Impedance Plot



3.Test Report:

1) Antenna Smithchart ,VSWR and Return Loss:



4.Basic Characteristics:

A.Electrical Characteristics:	
Frequency	2400~2500 MHz
S.W.R.	<= 2.0
Max.Gain	2.1dBi
Efficiency	93% - 96%
Polarization	Linear
Impedance	50 Ohm
B.Material & Mechanical Characteristics:	
Material of Radiator	PCB
Cable Type	NONE
Connector Type	NONE
Pull Test	/
C.Environmental:	
Operation Temperature	-20°C~+60°C
Storage Temperature	-40°C~+80°C

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 (%)	93.34	93.56	93.77	93.98	94.18	94.38	94.57	94.76	94.94	95.11	95.11
Gain (dBi)	2.027	2.04	2.053	2.065	2.077	2.09	2.1	2.113	2.125	2.136	2.148