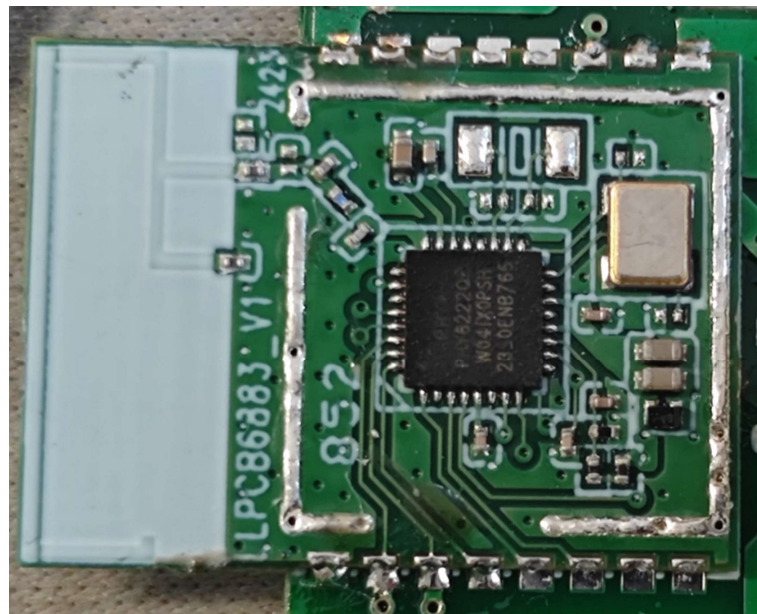


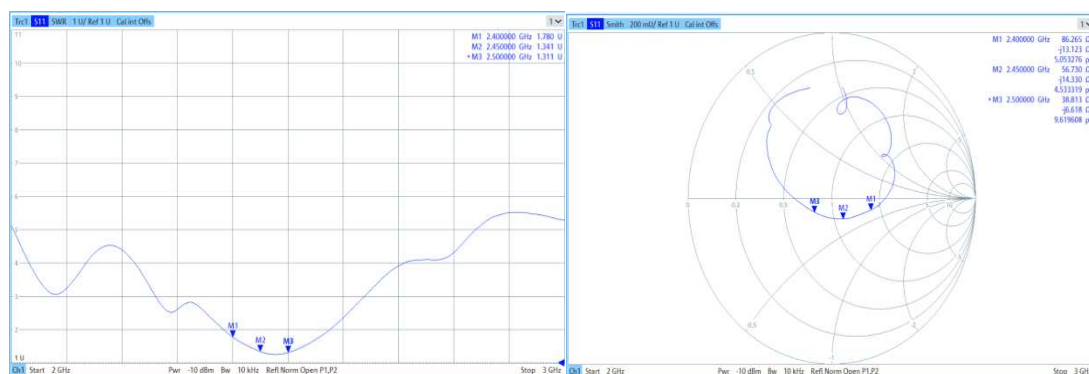
8.5 Antenna Specification

ITEM	UNIT	MIN	TYP	MAX
Frequency	MHz	2400		2500
V.S.W.R			2.0	
Gain(Peak)	dBi		2.0	
Antenna type	PCB antenna			
Radiated Pattern	Omni-directional			
Impedence	50Ω			
Remark: Antenna gain and radiation pattern are highly dependent on the application PCB layout and mechanical design.				

Above parameters are based on the module being mounted on the 50*40mm evaluation board, shown as followed:



8.5.1 VSWR and Smith Chart



8.5.2 Efficiency and Peak Gain

Model	B21-N1E										
Test / Position	Free Space										
Communication System	Gain										
frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain	2.0	2.0	1.6	1.3	1.0	1.0	0.9	0.9	1.2	1.3	1.1
Directivity	4.8	4.7	4.4	4.1	3.7	3.5	3.2	3.0	3.1	3.1	3.0
Efficiency (%)	55.3	54.0	51.9	52.2	53.6	56.8	58.9	60.9	64.6	65.9	63.8

8.5.3 Radiation Pattern

