

Antenna Specifications

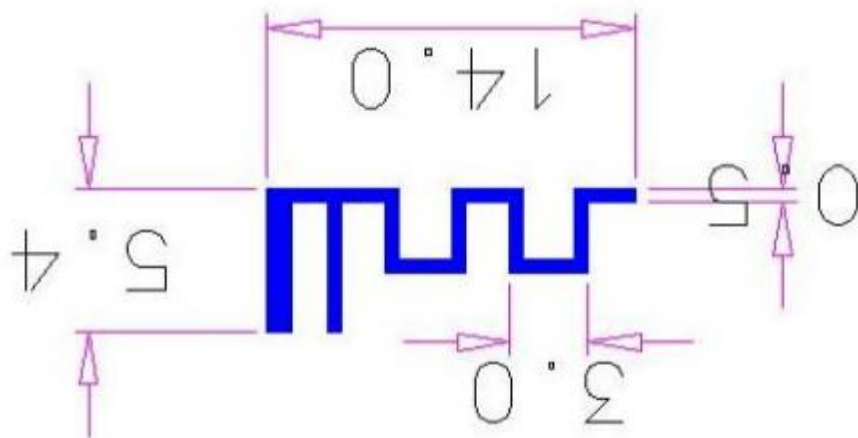
Model name: RDMCTMZT-RF01

Project Type: Keyboard On-Board Antenna

Date: **2024-05-24**

Antenna plan view:

unit:mm



Antenna technical parameters and environmental testing:

Electrical technical parameters			
电 性 能 指 标		Electrical Specifications	
频率范围	2400-2500MHz	Frequency Range	2400-2500MHz
电压驻波比	<1.92	VSWR	<1.92
输入阻抗	50 Ω	Input Impedance	50 Ω
方向	全向	Direction	All
增益	2.0±1dBi	Gain	2.0±1dBi
机 械 指 标		Mechanical Specifications	
接口形式	OPEN	Input connector	OPEN
工作温度	-20℃~+70℃	Working Temperature	-20℃~+70℃
工作湿度	20%~80%	Working Humidity	20%~80%

Environmental performance test:

项目	测试条件	规格
储存环境	在没有指定的情况下测试温度、湿度、气压如下： 1. 温度为-20℃~+70℃ 2. 相对湿度为45%-85% 3. 气压为86kpa-106kpa	电气机械性能正常
高低温试验	在70℃与-20℃之间进行5次循环，然后在正常条件下1-2H，检查外观质量。	尺寸应满足规定并应满足于机械、电气性能
耐恒定湿热试验	相对湿度95±3%，试验温度：40℃.持续2H作用后，试品取出后5min之内测定电气性能，试品在正常条件下1-2H，检查外观质量	尺寸应满足规定并应满足于机械、电气性能
振动试验	振频范围10-55HZ，位移幅值：0.35MM，加速度幅值：50.0M/S，扫频循环次数：30次	电气机械性能正常
跌落试验	1M高空按照互相垂直的轴方向自由跌落3次	电气机械性能正常

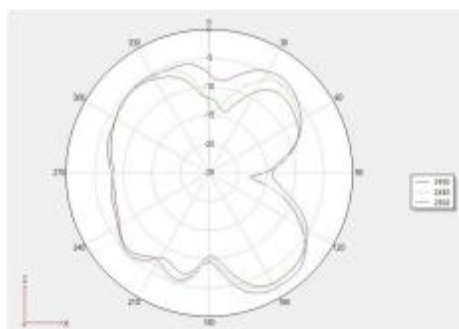
Antenna performance test chart:



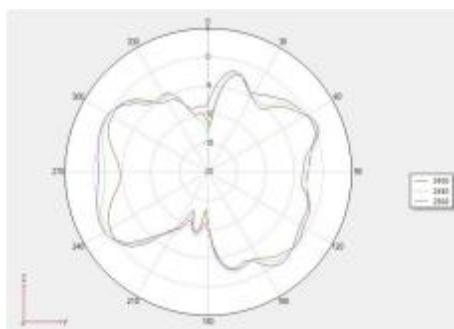
2D.3D test data (2.4G) :

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	43.85	2.46
2410MHz	45.92	2.36
2420MHz	46.13	2.10
2430MHz	46.88	2.13
2440MHz	47.10	2.27
2450MHz	48.19	2.49
2460MHz	47.53	2.44
2470MHz	48.75	2.59
2480MHz	46.77	2.39
2490MHz	47.42	2.36
2500MHz	45.60	2.21

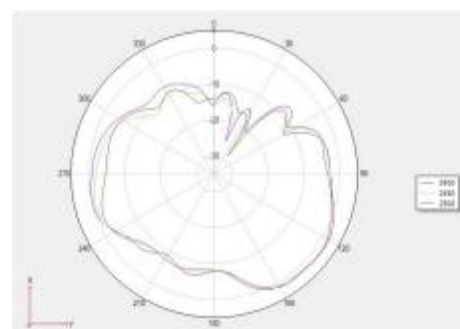
Phi 0 2D



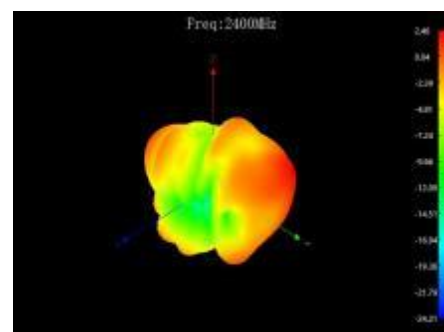
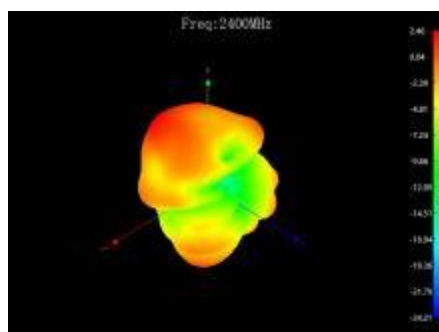
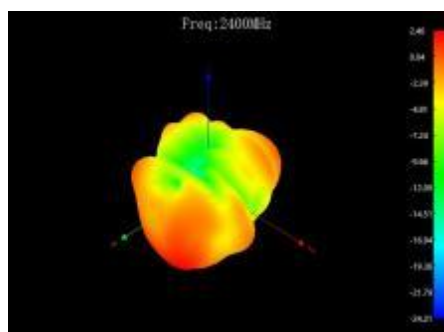
Phi 90 2D



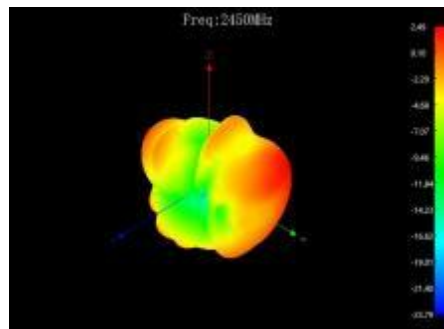
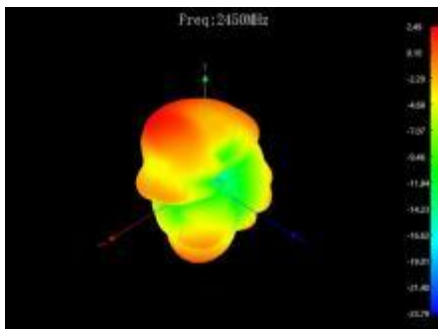
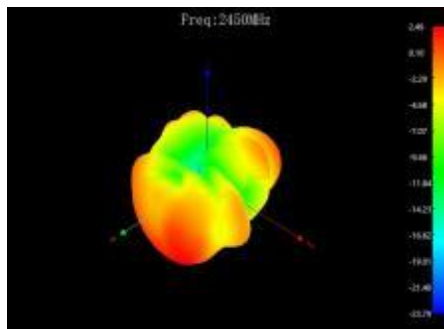
Theta 90 2D



3D 2400:



3D 2450:



3D 2500

