



## PRODUCT SPECIFICATIONS

### 1. Description

The A028-024F Antenna is a all band Antenna which is intended for use with eMTC wireless communications applications and the product specifications show the performance of the antenna were done on CatM1 .

### 2. Part Number

A028-024F

### 3. Antenna picture



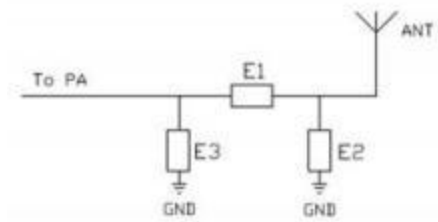


## 4. Antenna Structure And Change Matching Circuit

Antenna structure:



Matching circuit:



E1	0Ω
E2	7.5nH
E3	NC

## 5. General Specifications

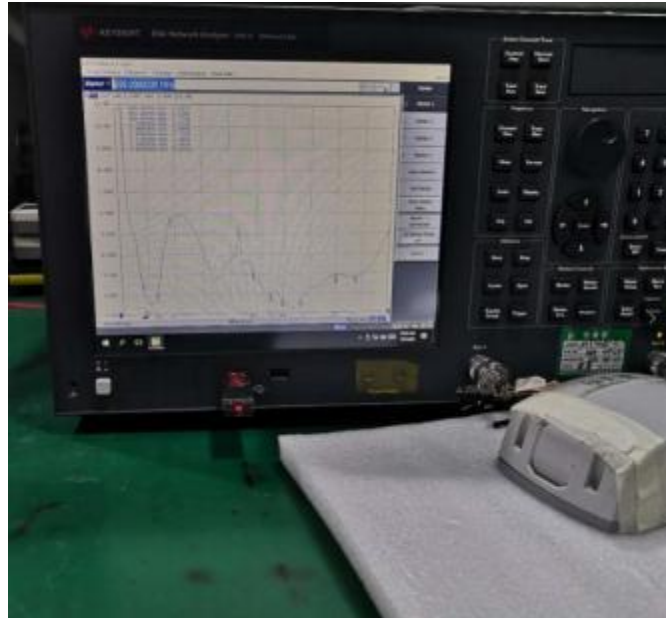
Electrical			
Frequency(MHz)	699-960MHz,1710-2690MHz		
	Min	Mean	Max
Antenna Efficiency(%) (699-960MHz)	25%	33.5%	42%
Antenna Efficiency(%) (1710-2690MHz)	39%	46.5%	54%
Peak gain(dbi)	0.95dBi@699-960MHz;2.9dBi@1710-2690MHz		
Return loss(db)	<-5		
Polarization	linear		
Impedance	50ohm		
Input power	5w		
Mechanical			
Antenna dimensions	46*12.6*10.6mm		
Material	FPC		
Environmental			
Operation temperature	-40-85°C		
Storage temperature	-40-85°C		

Note: 1. All measurements were done a fully assembled device (including battery, PCB, etc)

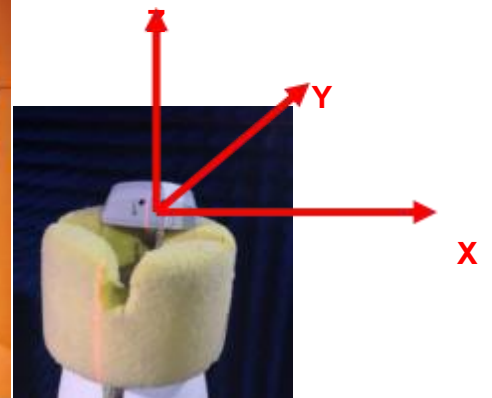
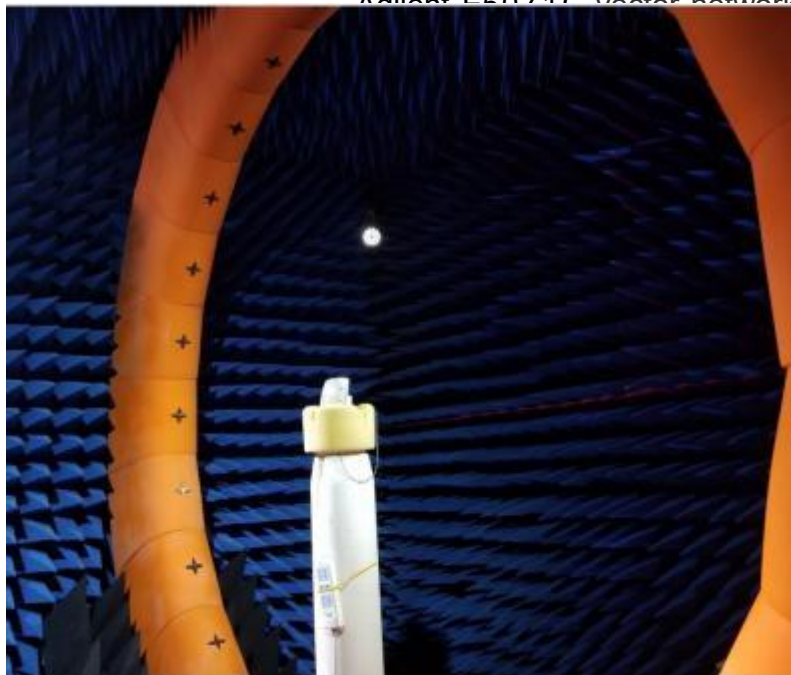


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## 6. Test environmental



Agilent E5071C vector network analyzer

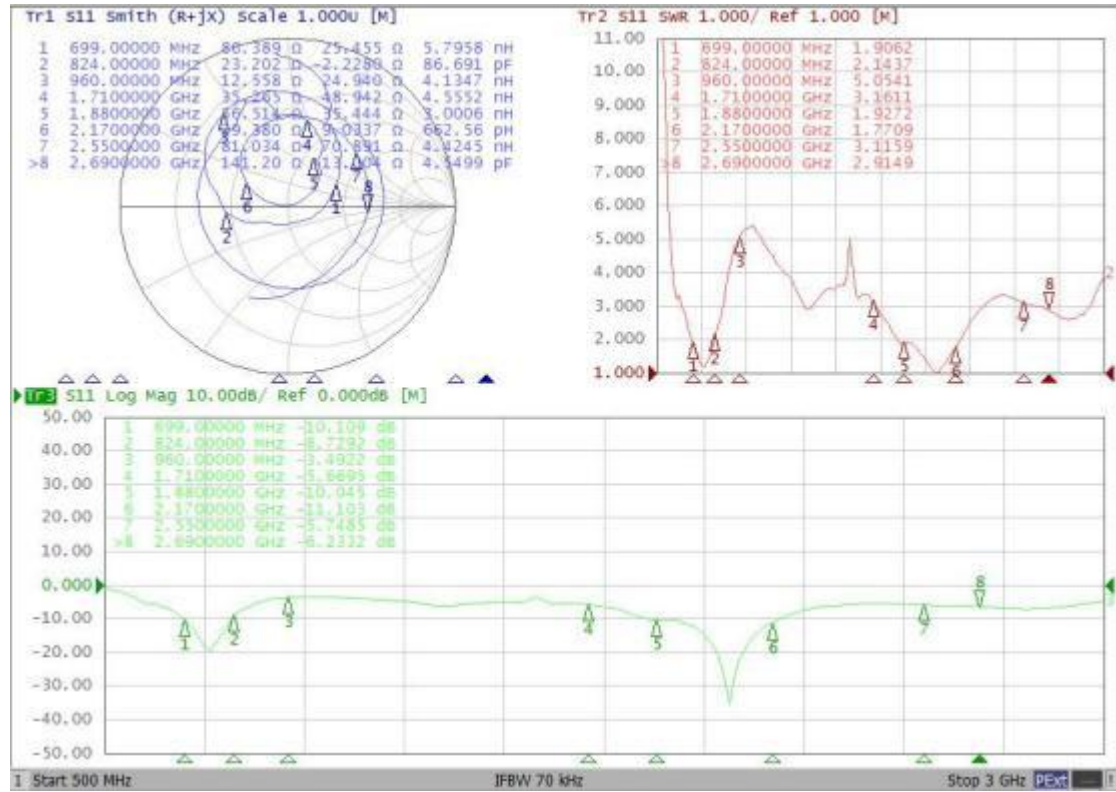


Satimo SG24 OTA test system

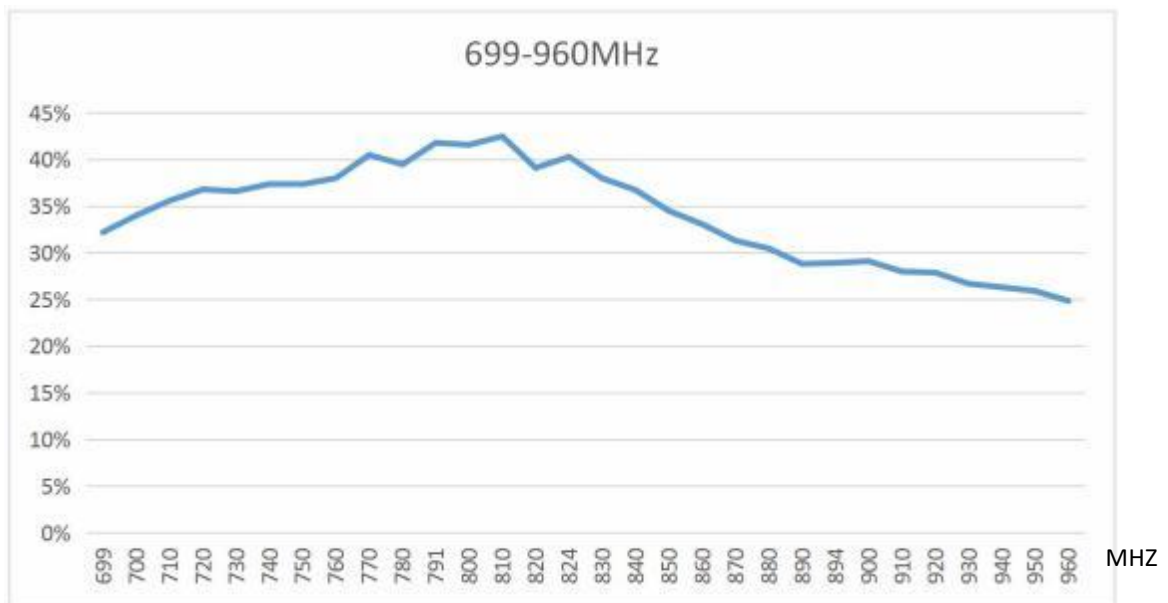


## 7. Antenna performance

### 7.1 Return loss/VSWR/Smith chart

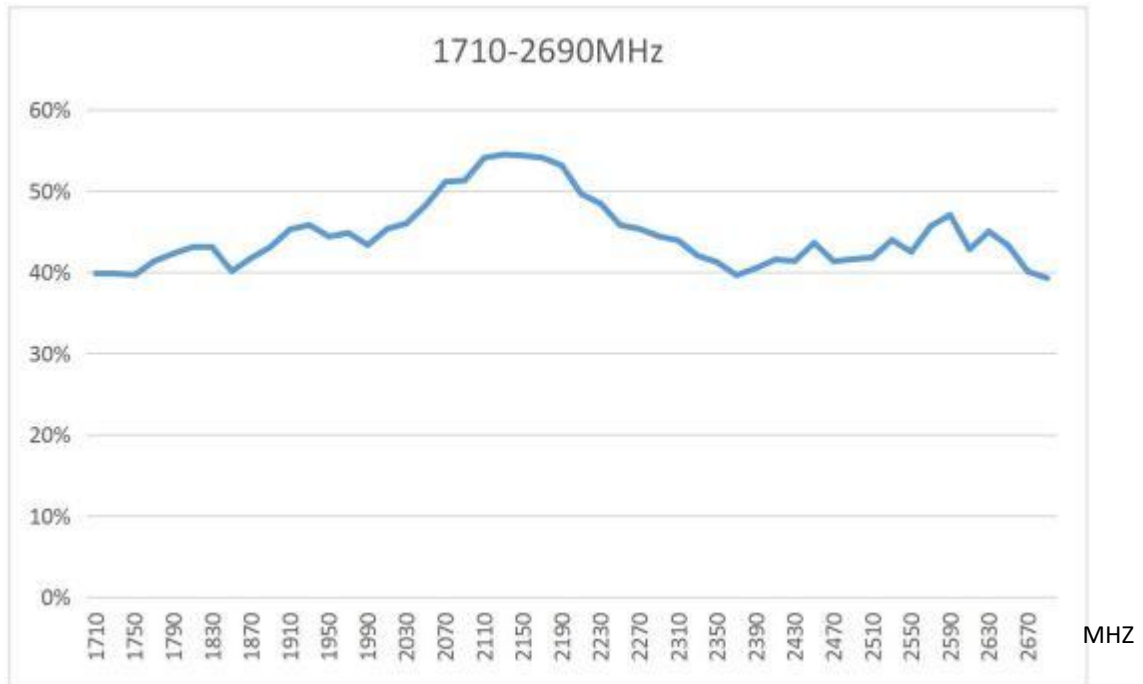


### 7.2 Antenna efficiency

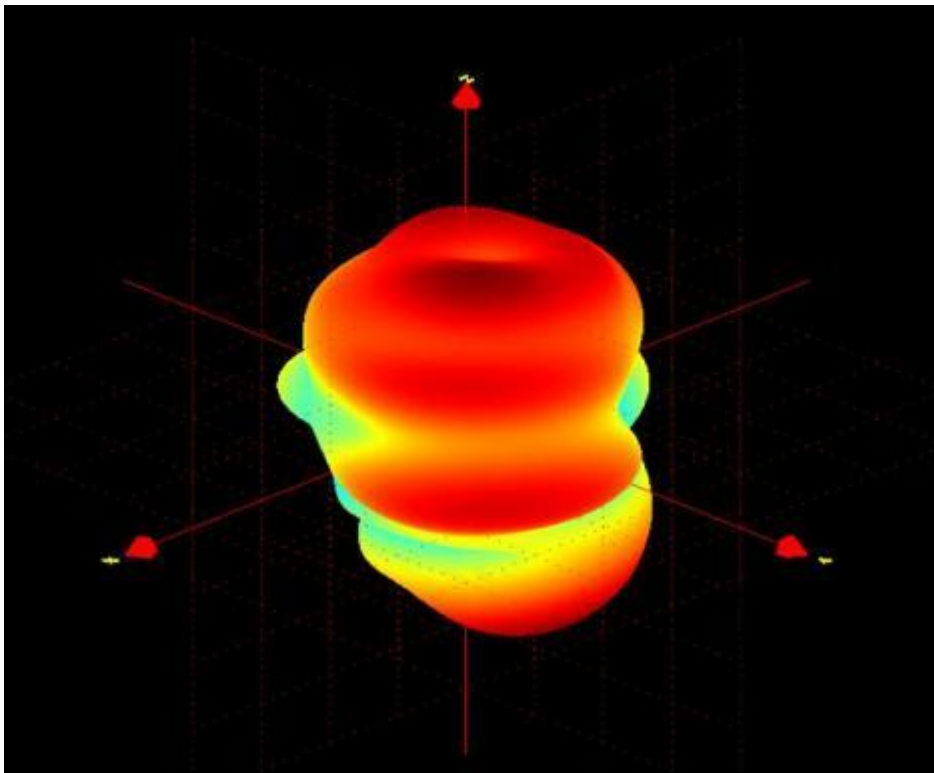




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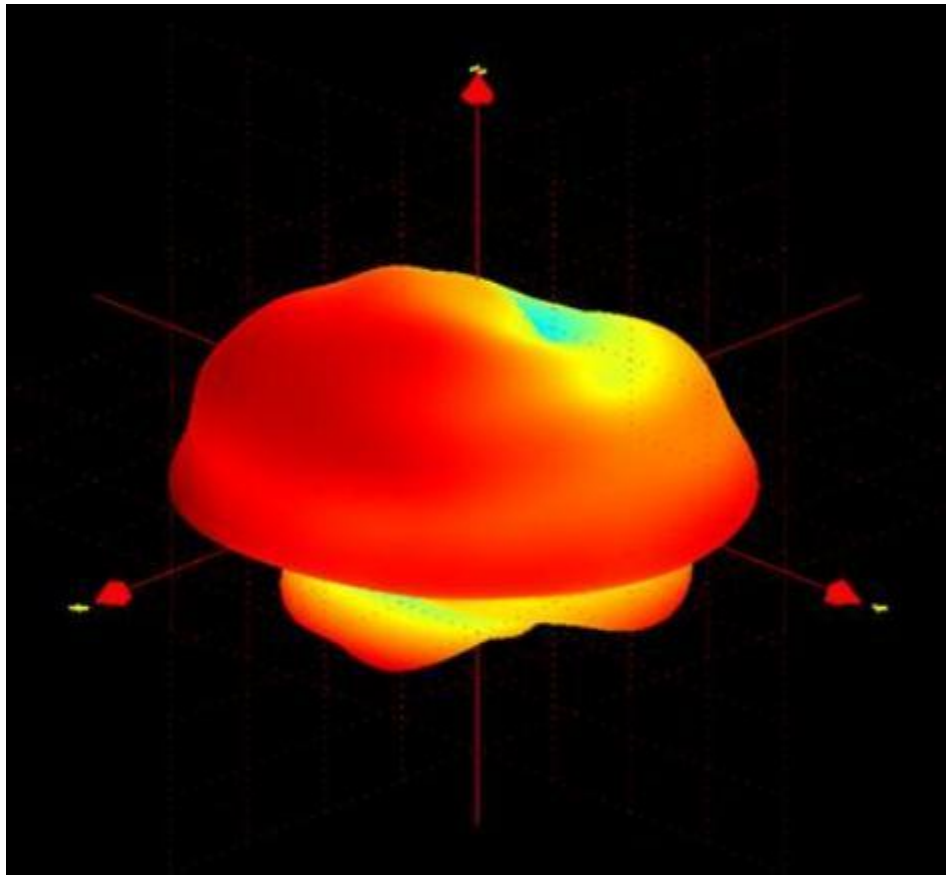
7.4 Radiation patterns



800MHZ



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2150MHZ

## 8. Antenna Dimensions



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