



**Product Name: Q7M TX**

**2022.06.10**

**Brand:**

**No:**

**Test Item:**

1. Q7M TX antenna S-parameter, Peak Gain and polar plots

**Test Method and condition:**

1. Return Loss
2. Peak Gain
3. Antenna Efficiency

**Judgment:**

Check the antenna performance by Network Analyzers

**Test Equipment & Software:**

1. R&S ZNC
2. Agilent E5071C

**Test units**

1. Q7M TX PCB\*1

**Configuration:**

Antenna Performance

**Test Result:**

REF

**Conclusion:**

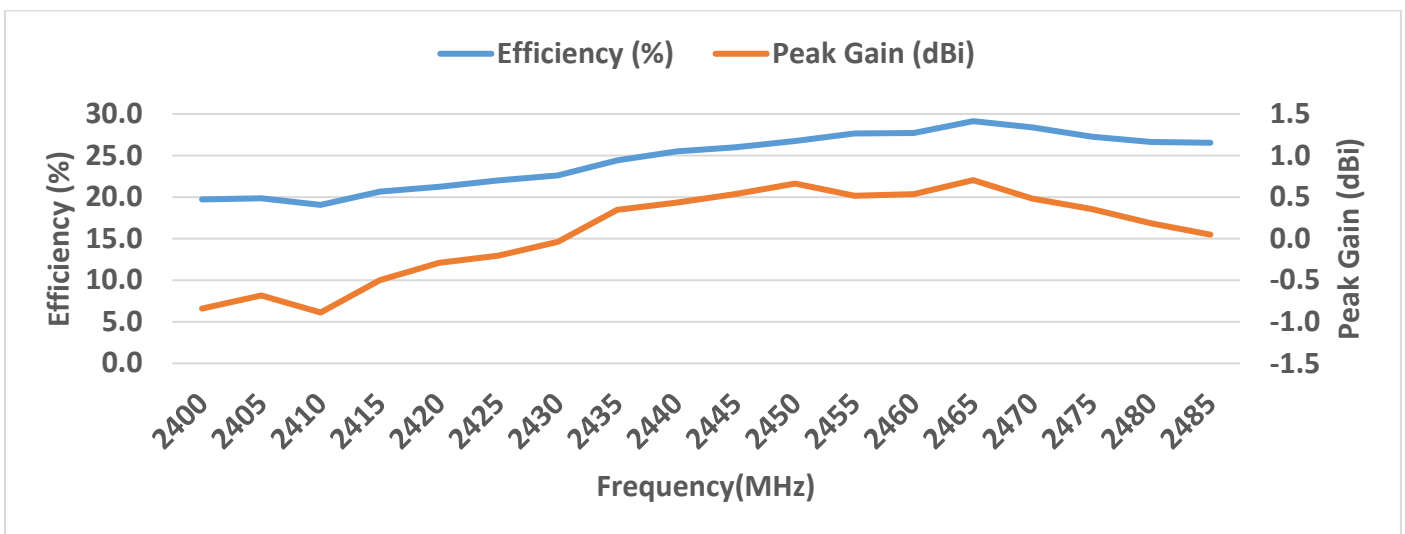
**For R&D Reference**

Approved by	Checked by	Tested by
		Rebb Chiou

## ➤ Placement of Q7M TX PCB antenna



## ➤ Efficiency and Frequency



Frequency (MHz)	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency (dB)	-7.0	-7.2	-6.8	-6.7	-6.6	-6.5	-6.1	-5.9	-5.9	-5.7	-5.6	-5.6	-5.4	-5.5	-5.6	-5.7	-5.8
Efficiency (%)	19.8	19.1	20.7	21.2	22.0	22.6	24.4	25.5	26.0	26.7	27.7	27.7	29.1	28.4	27.3	26.6	26.5
Peak Gain (dBi)	-0.7	-0.9	-0.5	-0.3	-0.2	0.0	0.3	0.4	0.5	0.7	0.5	0.5	0.7	0.5	0.4	0.2	0.0

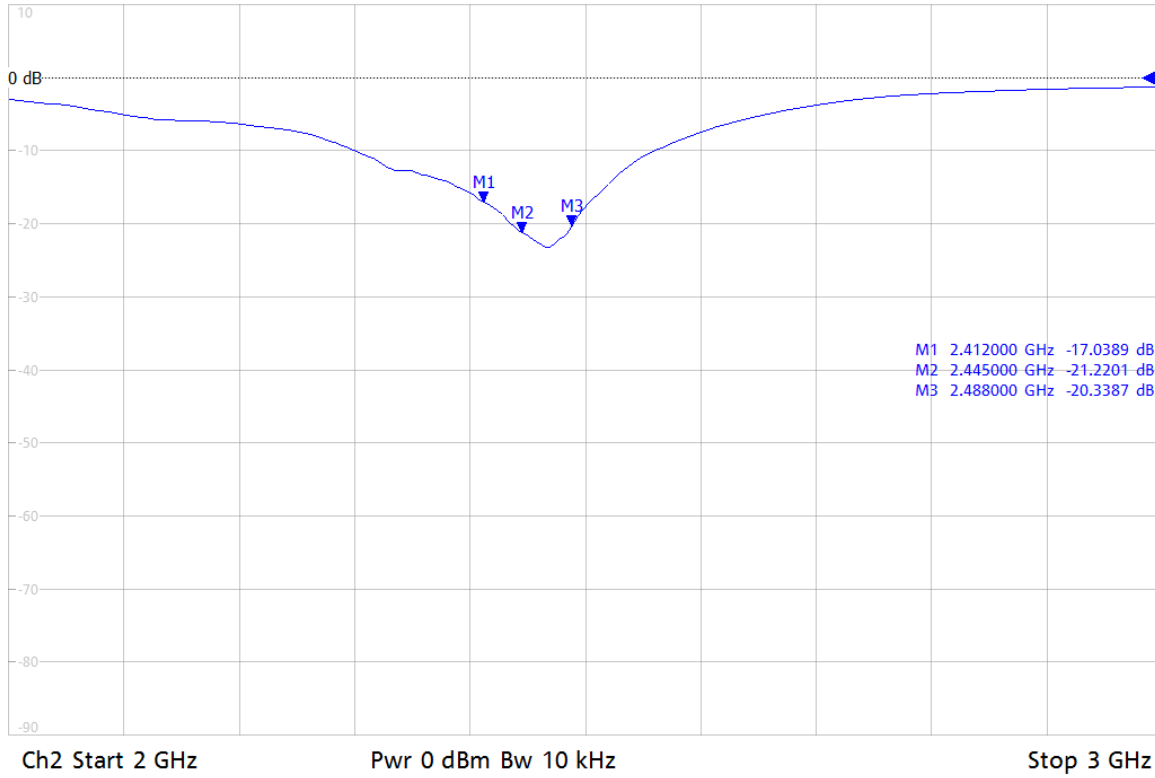
# ➤ S-parameters and 3D Gain Pattern

## a. S-parameters

5/16/2022 3:03:40 PM  
1328.5170K92-102144-j

Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal int Offs

1



## b. 3D Gain Pattern

