

# D1404 Antenna Report

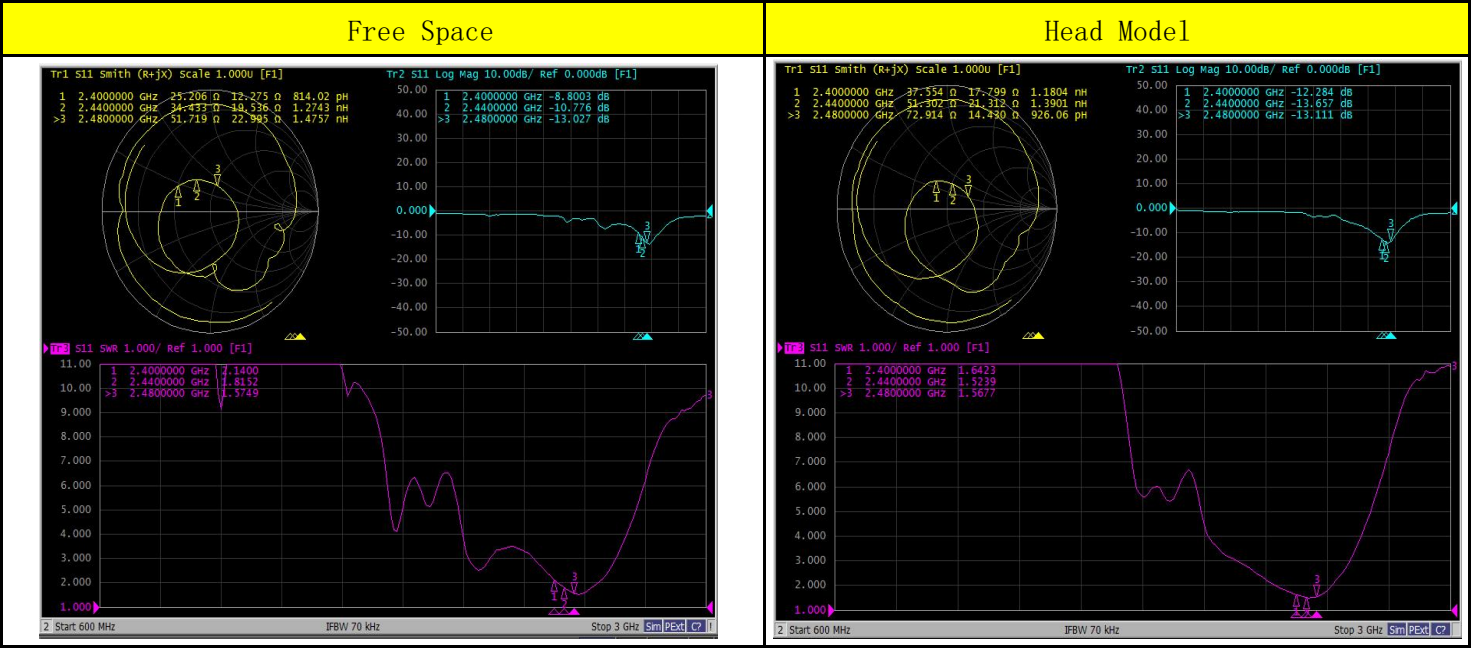
**Brand:** Wei Ken Technology ( Huizhou ) Co.,Ltd.  
**Manufacturer CN :** Wei Ken Technology ( Huizhou ) Co.,Ltd.  
**Address:** 18 Shihua Road West,Xiangshui River Ind Park,Daya Bay District, Huizhou City, Guangdong  
**Model No.** BTL25089\_MAIN\_V05\_20260123  
**Antenna type:** PCB Antenna  
**Antenna size:** 5.4\*20.5mm  
**Frequency (MHz):** 2402-2480

**Conclusion:** Normal

## Passive parameter test data

| Passive data |         | Free Space |           | Head Model |           |
|--------------|---------|------------|-----------|------------|-----------|
| 4#           | Channel | TRP (dBm)  | TIS (dBm) | TRP (dBm)  | TIS (dBm) |
|              | CH 0    | 7.0        | -93.3     | 6.1        | -92.1     |
|              | CH 39   | 7.5        | -93.4     | 6.6        | -92.2     |
|              | CH 78   | 6.9        | -93.0     | 6.0        | -92.1     |

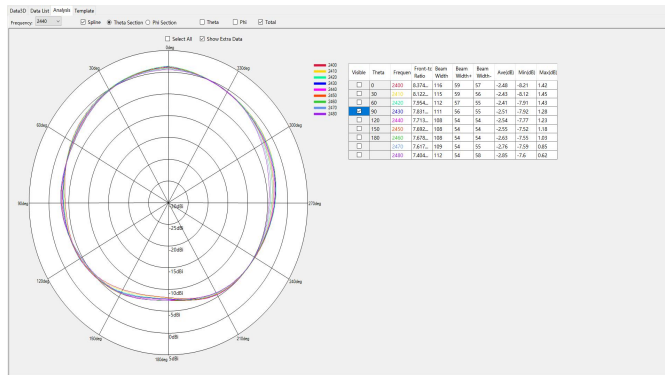
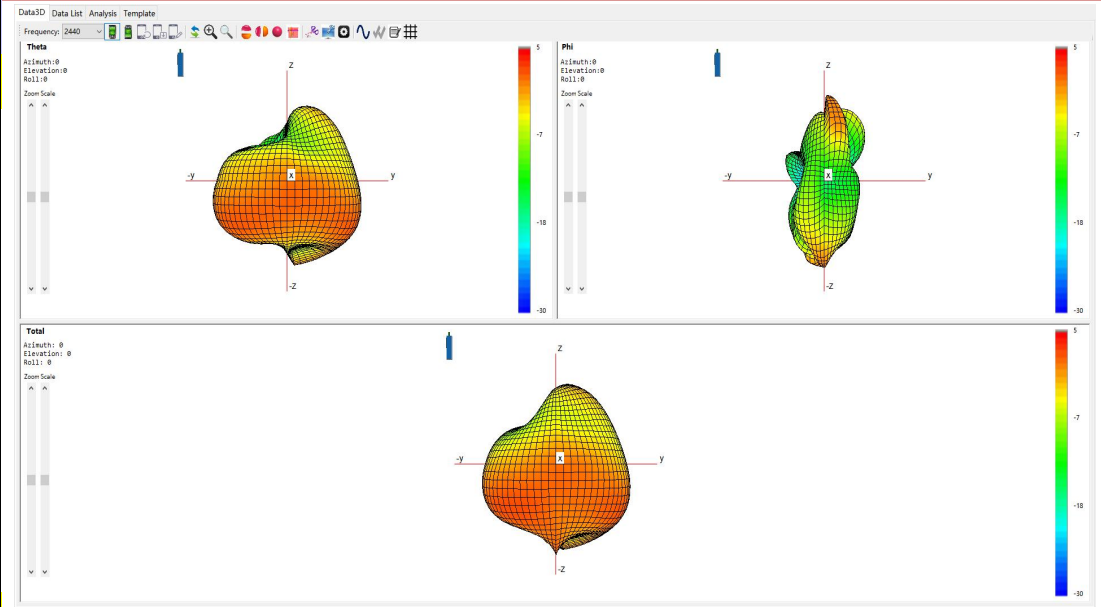
## Antenna impedance parameter test data



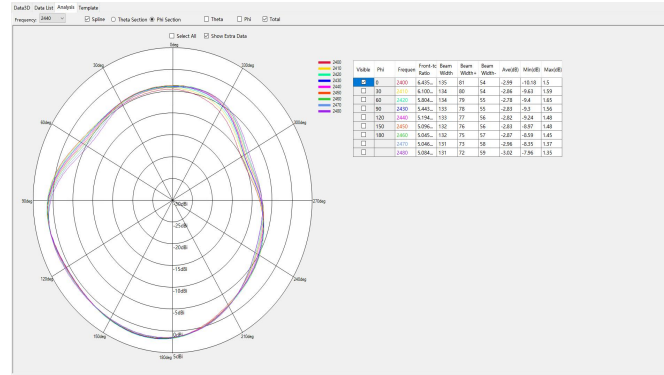
# Antenna efficiency test data

## Free Space

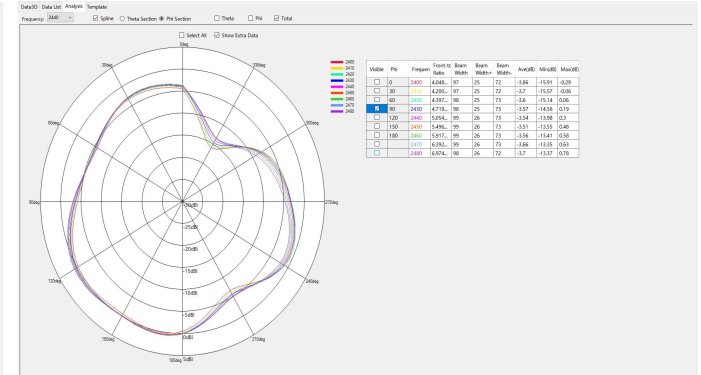
| Frequency band (MHz) | efficiency (dB ) | Gain (dBi) | efficiency% |
|----------------------|------------------|------------|-------------|
| 2400                 | -3.14            | 2.29       | 48.55       |
| 2410                 | -3.03            | 2.39       | 49.81       |
| 2420                 | -2.96            | 2.45       | 50.53       |
| 2430                 | -3.01            | 2.43       | 50.05       |
| 2440                 | -2.97            | 2.44       | 50.42       |
| 2450                 | -2.98            | 2.53       | 50.31       |
| 2460                 | -3.01            | 2.53       | 50.03       |
| 2470                 | -3.07            | 2.51       | 49.29       |
| 2480                 | -3.07            | 2.88       | 49.37       |
| 平均值                  | -3.03            | 2.49       | 49.82       |



Theta=90°



Phi=0°



Phi=90°

| Head Model           |                  |            |             |
|----------------------|------------------|------------|-------------|
| Frequency band (MHz) | efficiency (dB ) | Gain (dBi) | efficiency% |
| 2400                 | -4.16            | 1.84       | 38.35       |
| 2410                 | -4.09            | 2.02       | 38.97       |
| 2420                 | -4.05            | 2.11       | 39.35       |
| 2430                 | -4.08            | 2.15       | 39.04       |
| 2440                 | -3.99            | 2.18       | 39.88       |
| 2450                 | -4.06            | 2.26       | 39.26       |
| 2460                 | -4.08            | 2.25       | 39.04       |
| 2470                 | -4.16            | 2.23       | 38.36       |
| 2480                 | -4.15            | 2.31       | 38.48       |
| 平均值                  | -4.09            | 2.15       | 38.97       |

