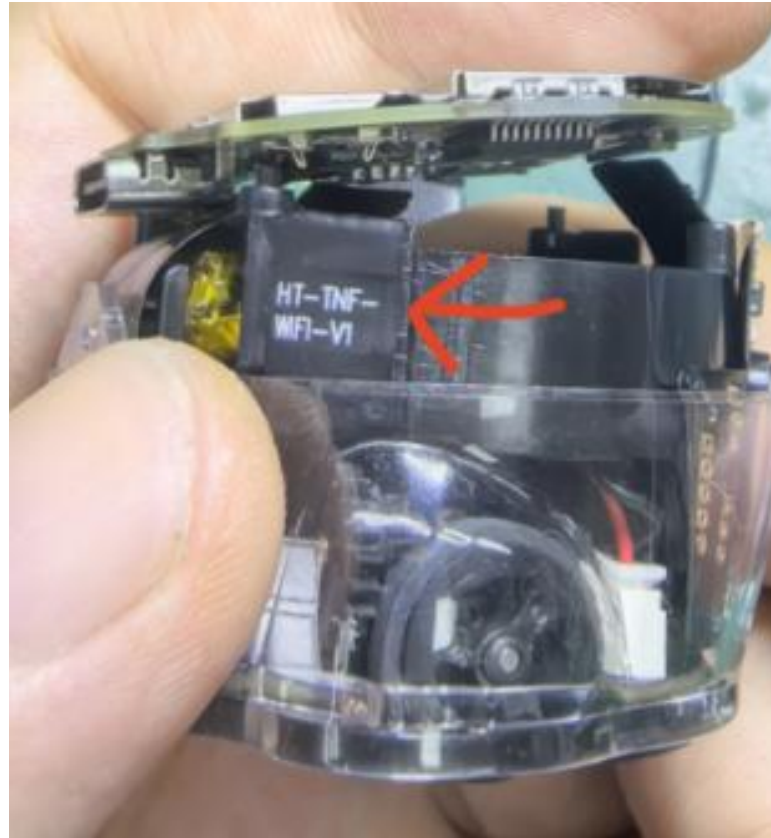


Anvil Robot Antenna Test Report

Customer	T&F Manufacturing Co.,Ltd
Project	Anvil Robot
Antenna BAND	BR + EDR: GFSK, $\pi/4$ -DQPSK, 8DPSK BLE:GFSK 2.4G WIFI: IEEE 802.11b, IEEE 802.11g, IEEE 802.11n-HT20, IEEE 802.11n-HT40
Product Description	FPC
Product No	V1.0

Product Overview & Dimension

Front-ANT



This report is to measure the performance of BT antenna for **Anvil Robot**.
The antenna operating frequency at **(2400~2500 MHz)**, All test data are showed as below.

Content

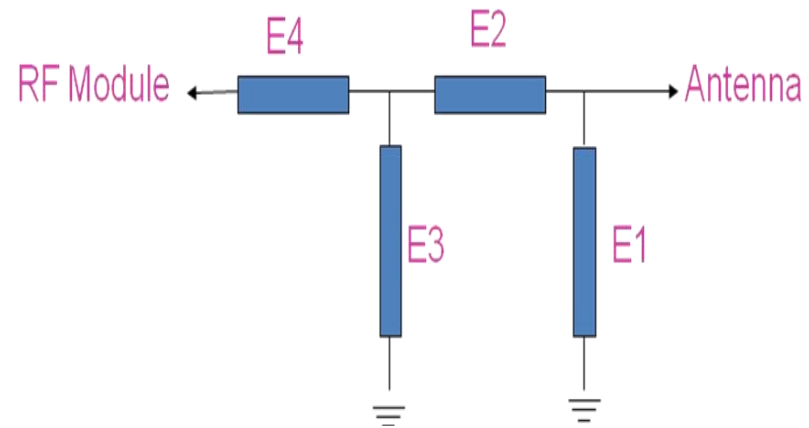
1. Product Overview & Dimension
2. Test system
3. Antenna Matching Network
4. Test Result
 - 4.1 S11 Parameter
 - 4.2 Gain & Efficiency
 - 4.3 Test coordinate
 - 4.4 2D Pattern
 - 4.5 OTA Data
 - 4.6 BT Boot measured
5. Antenna Assembly & environmental processing

2. Test System

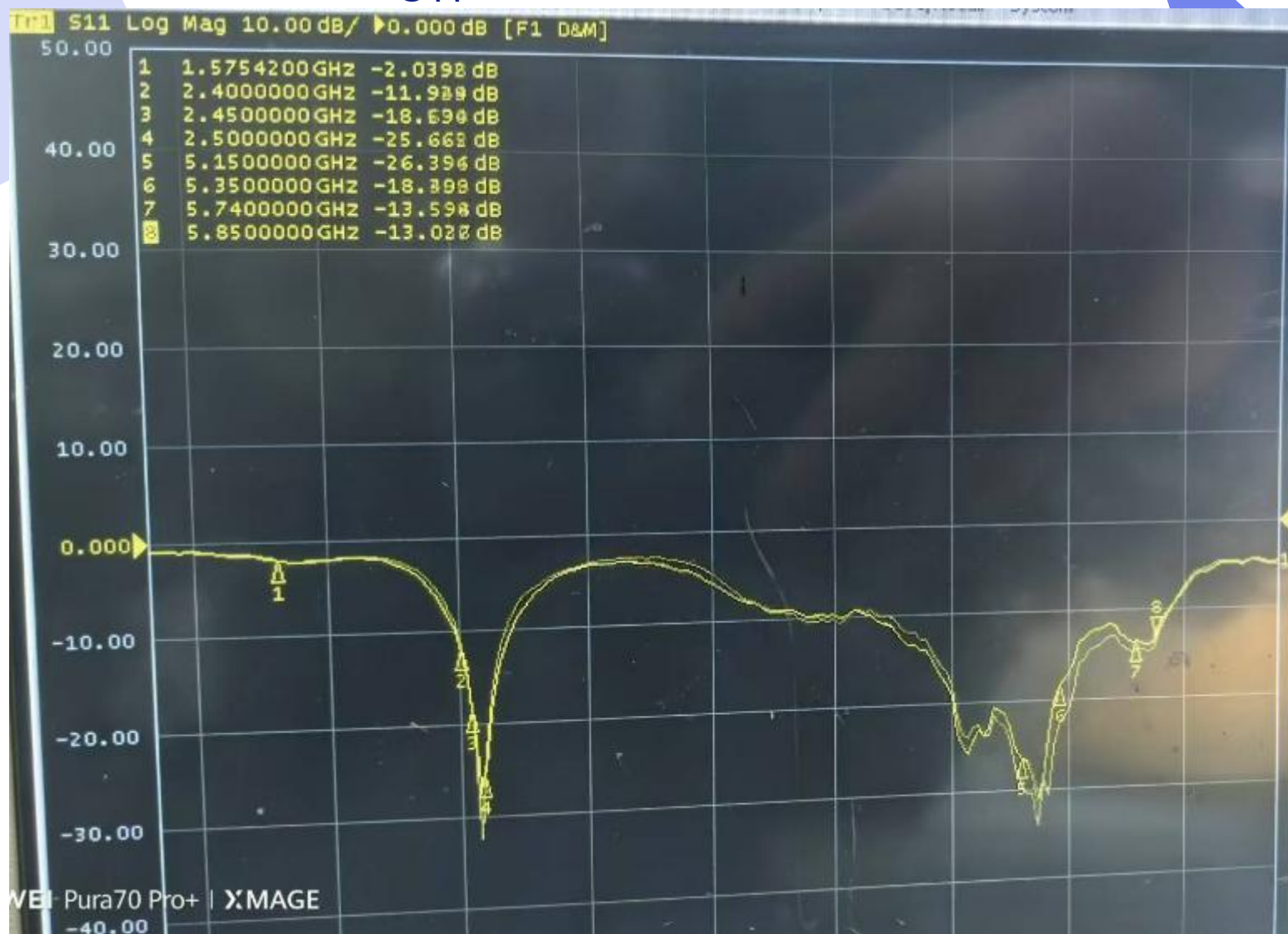
Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & HP 8753
OTA Test	TRP&TIS	CMW500 & CMW270 ETS& FT SG24
Gain & Efficiency	Gain & Efficiency	ETS&FT SG24 Agilent 5071C

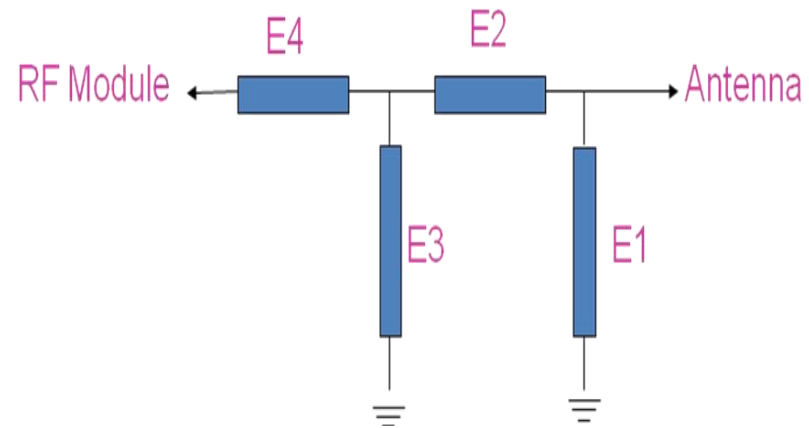


The diagram illustrates a circular environment with a central robot (yellow circle) and a ring of 24 sensors (triangles) around the perimeter. The sensors are labeled with their angular position θ in degrees, ranging from 0° to 165° in increments of 15° . The robot is positioned at the center, and its orientation is indicated by a red arrow labeled ϕ . The robot's heading is 90° , and its position is marked with a red $+X$ and $+Y$ coordinate system. The angle θ is shown as a red arc from the positive X -axis to the sensor's line of sight. The angle ϕ is shown as a red arc from the positive Y -axis to the robot's heading. The robot's heading is 90° , and its position is marked with a red $+X$ and $+Y$ coordinate system. The angle θ is shown as a red arc from the positive X -axis to the sensor's line of sight. The angle ϕ is shown as a red arc from the positive Y -axis to the robot's heading.



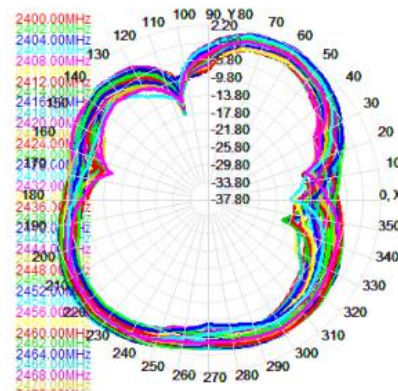
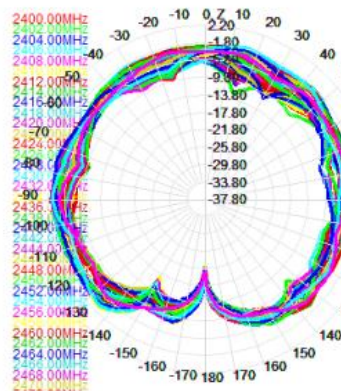
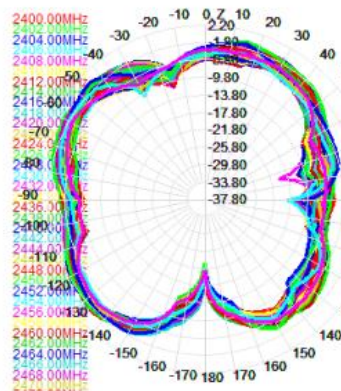
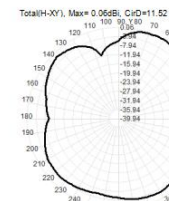
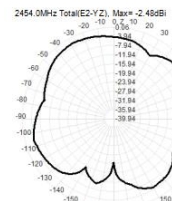
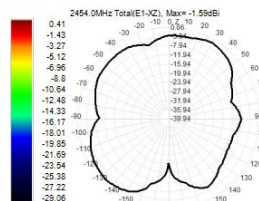
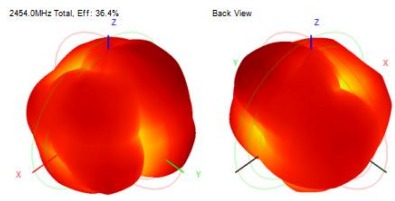
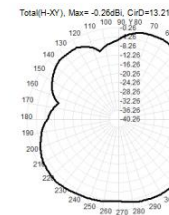
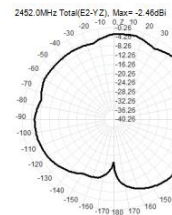
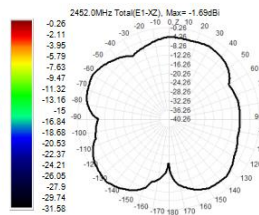
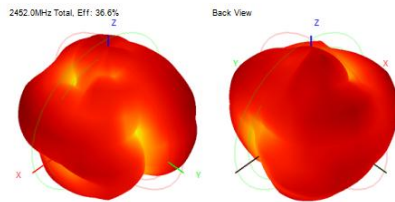
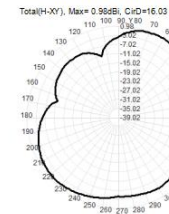
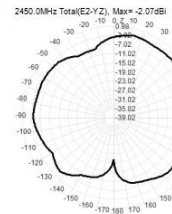
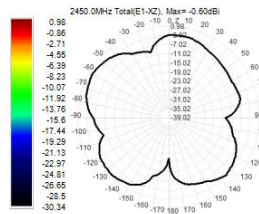
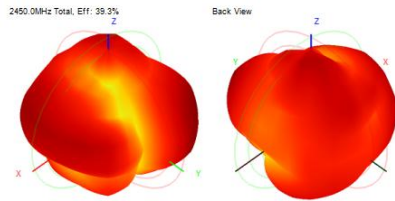
S11



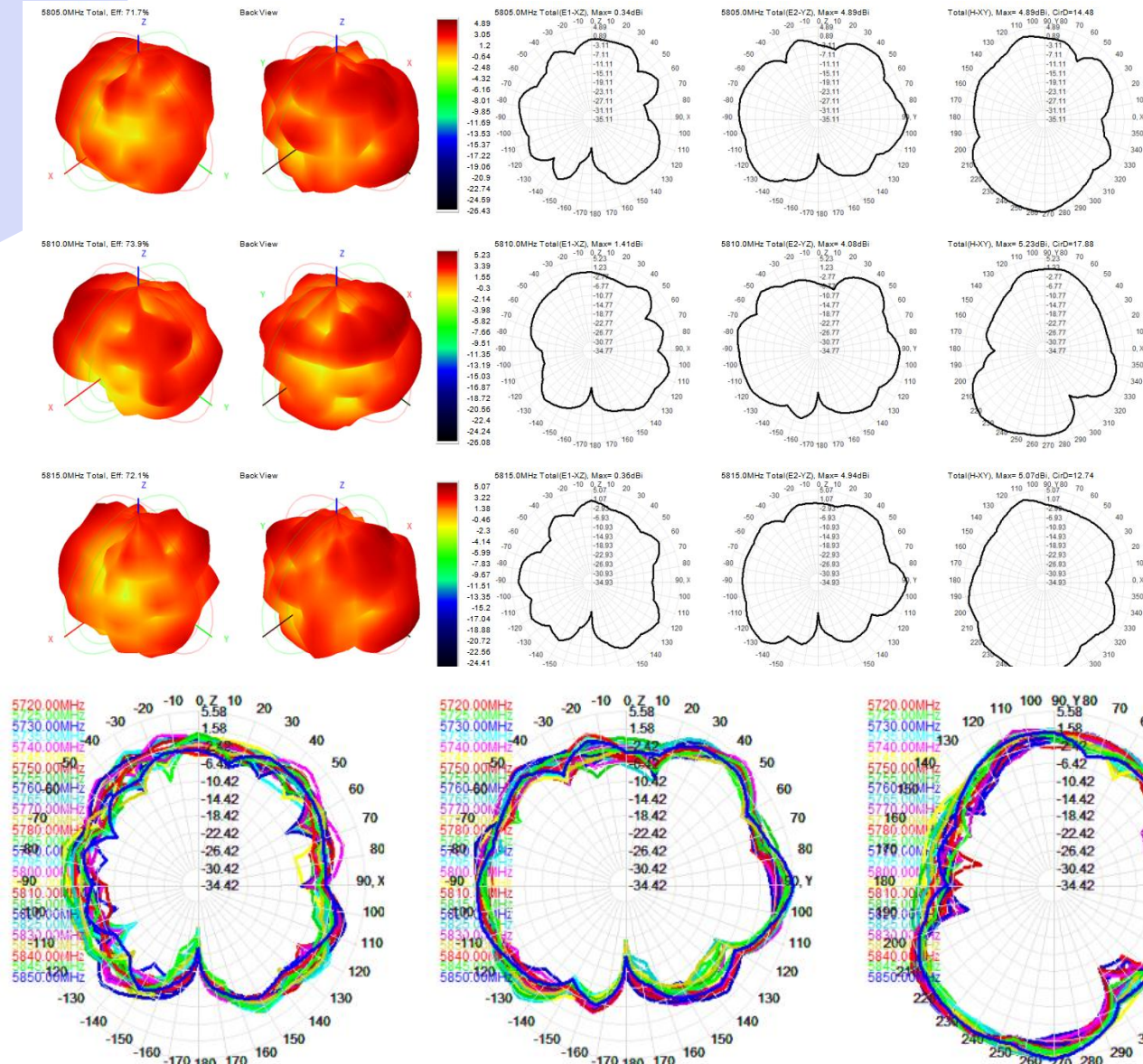


Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	48.9	1.7
2450	51.3	1.9
2500	49.6	1.8

3D Pattern



3D Pattern



Thanks for your comment!

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