

ANTENNA TEST REPORT

Applicant	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China

Manufacturer or Supplier	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China
Product	Antenna
Brand Name	N/A
Model	Z4W
Max. Peak Gain	-0.76 dBi
Date of tests	Sep. 18, 2023

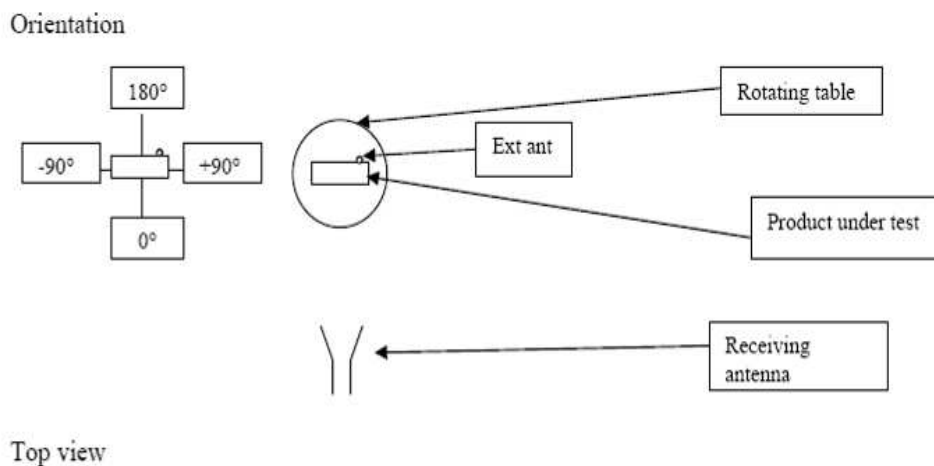
Tested by Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Sep. 20, 2023

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

1. MEASUREMENTS SETUP	3
1.1 TEST PROCEDURE.....	3
2. MEASUREMENT UNCERTAINTY.....	4
3. SIZE OF THE ANTENNA	4
4. TEST INSTRUMENTS.....	5
5. TEST RESULTS.....	6
6. PHOTOGRAPHS OF THE TEST CONFIGURATION	13

1. MEASUREMENTS SETUP



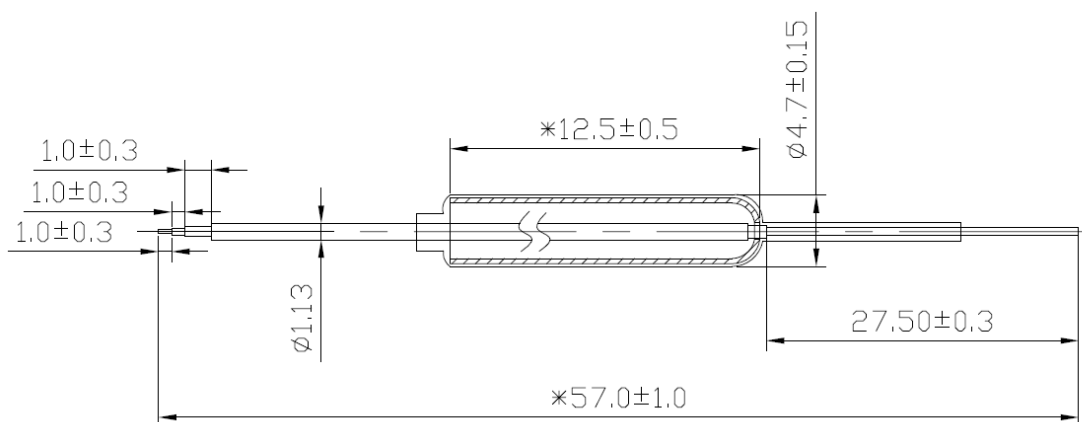
1.1 TEST PROCEDURE

- The EUT was placed on the rotating table 1.5 meters above the ground at a Fully Anechoic Room, the table was rotated 360 degrees.
- The EUT was set 3 meters away from the receiving antenna, which was mounted on the top of a antenna tower.
- The antenna is 1.5 meters above the ground. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position.

2. MEASUREMENT UNCERTAINTY

Expanded Uncertainty for Measurement (k=2 or 95% confidence level) at Passive antenna test over frequency range 1000MHz-6000MHz is +/- 1.49dB.

3. SIZE OF THE ANTENNA



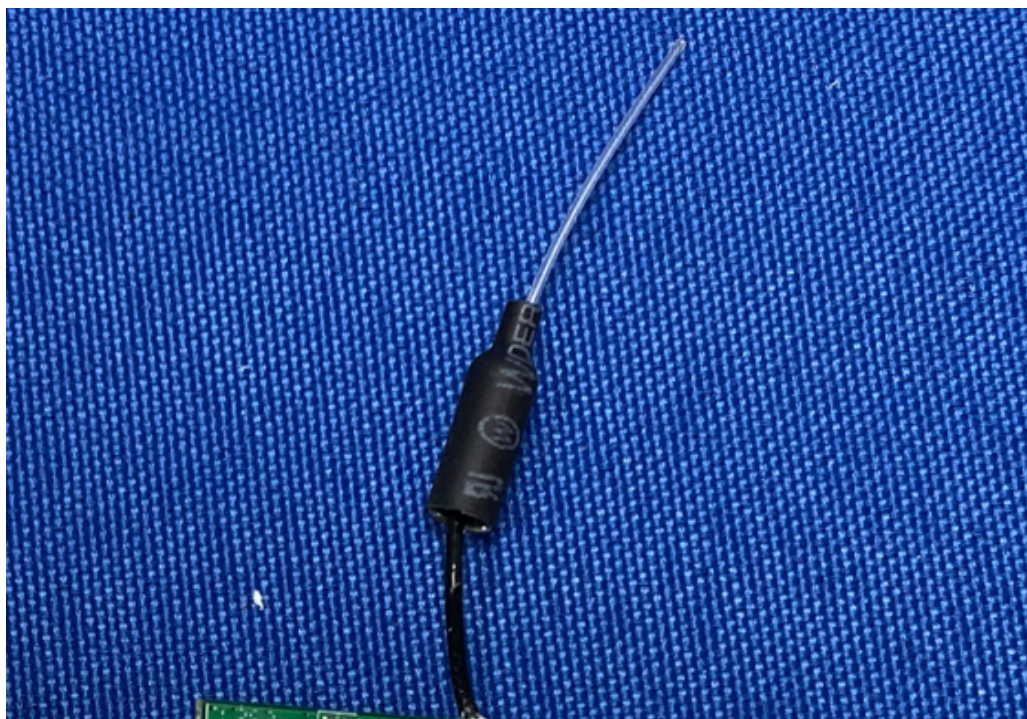
4. TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Signal Generator	Agilent	N5183A	MY50140980	Jul. 11, 24
Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Jan. 11, 24
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1247	Apr. 01, 24
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120 B	00740	Jul. 20, 24
Turn Table	MF	MF-7802	MF780208191	N/A
Controller	MF	MF-7802	MF780208243	N/A
Test Software	BV ADT	BV ADT Antenna Pattern	V6.2	N/A

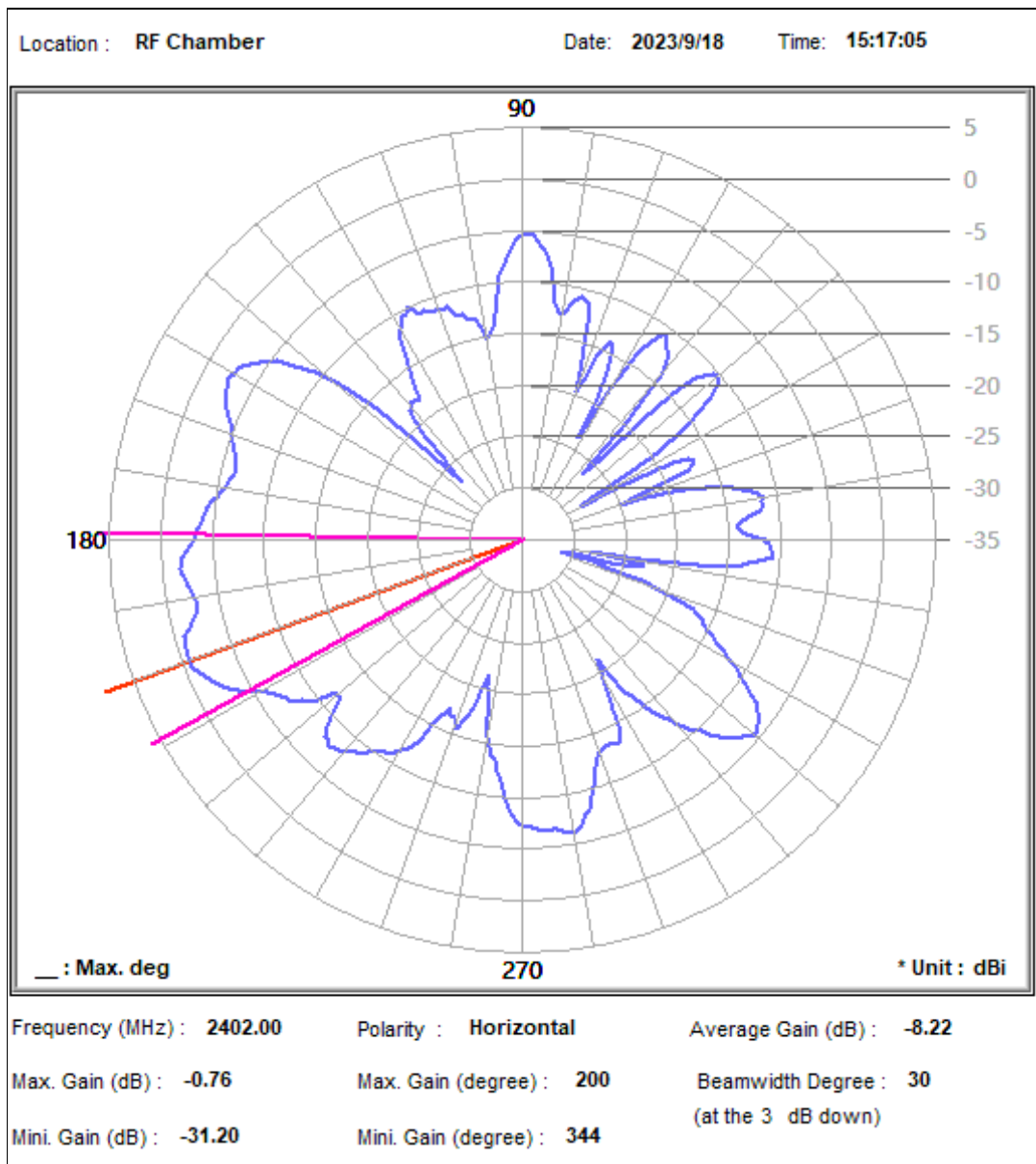
NOTE: 1. The test was performed in Fully Anechoic Room.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

5. TEST RESULTS

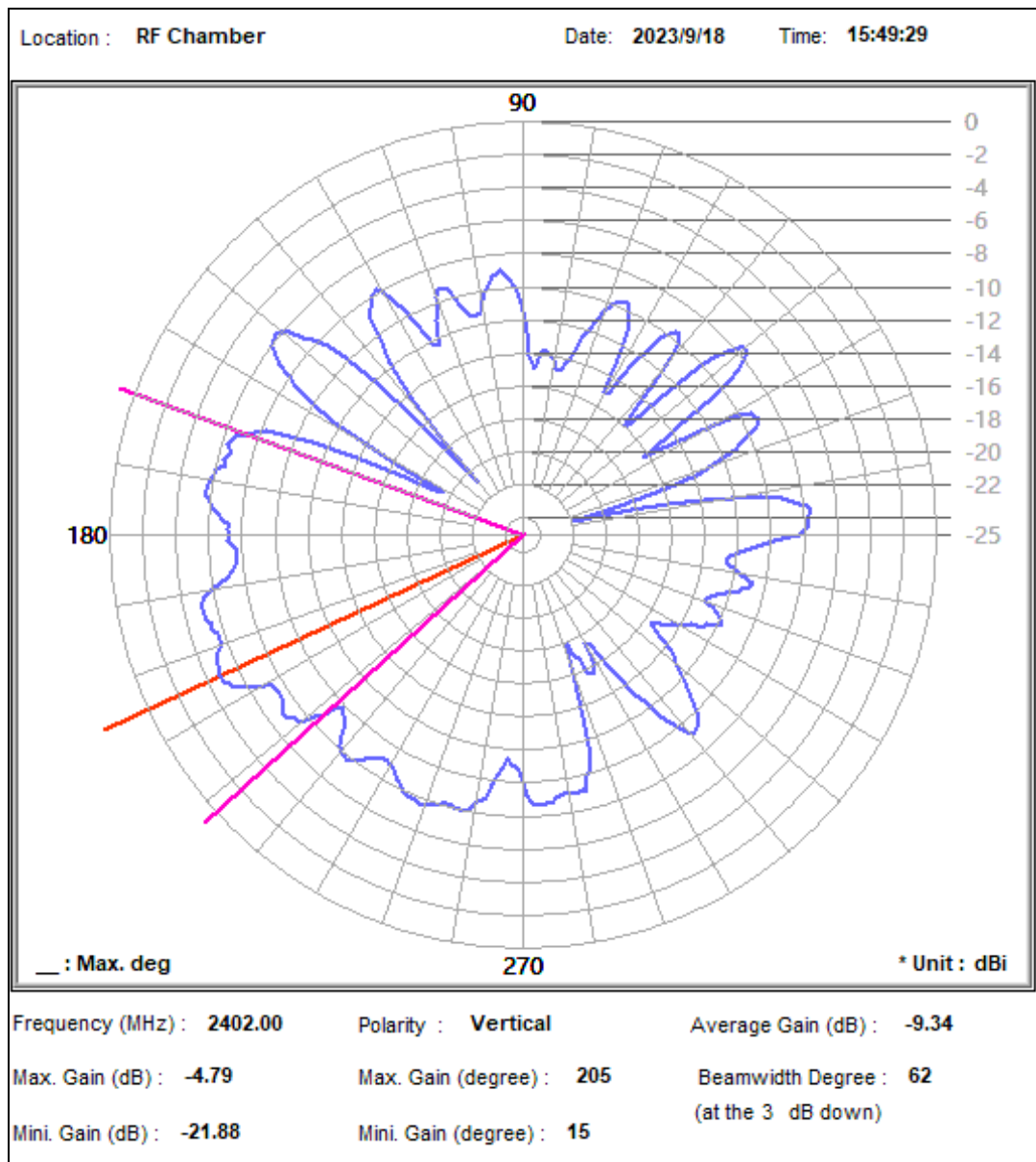
ANTENNA	FREQUENCY (MHz)	ANTENNA POLARITY	MAX. PEAK GAIN (dBi)
PCB	2402	Horizontal	-0.76
		Vertical	-4.79
	2441	Horizontal	-1.14
		Vertical	-3.26
	2480	Horizontal	-0.92
		Vertical	-3.78



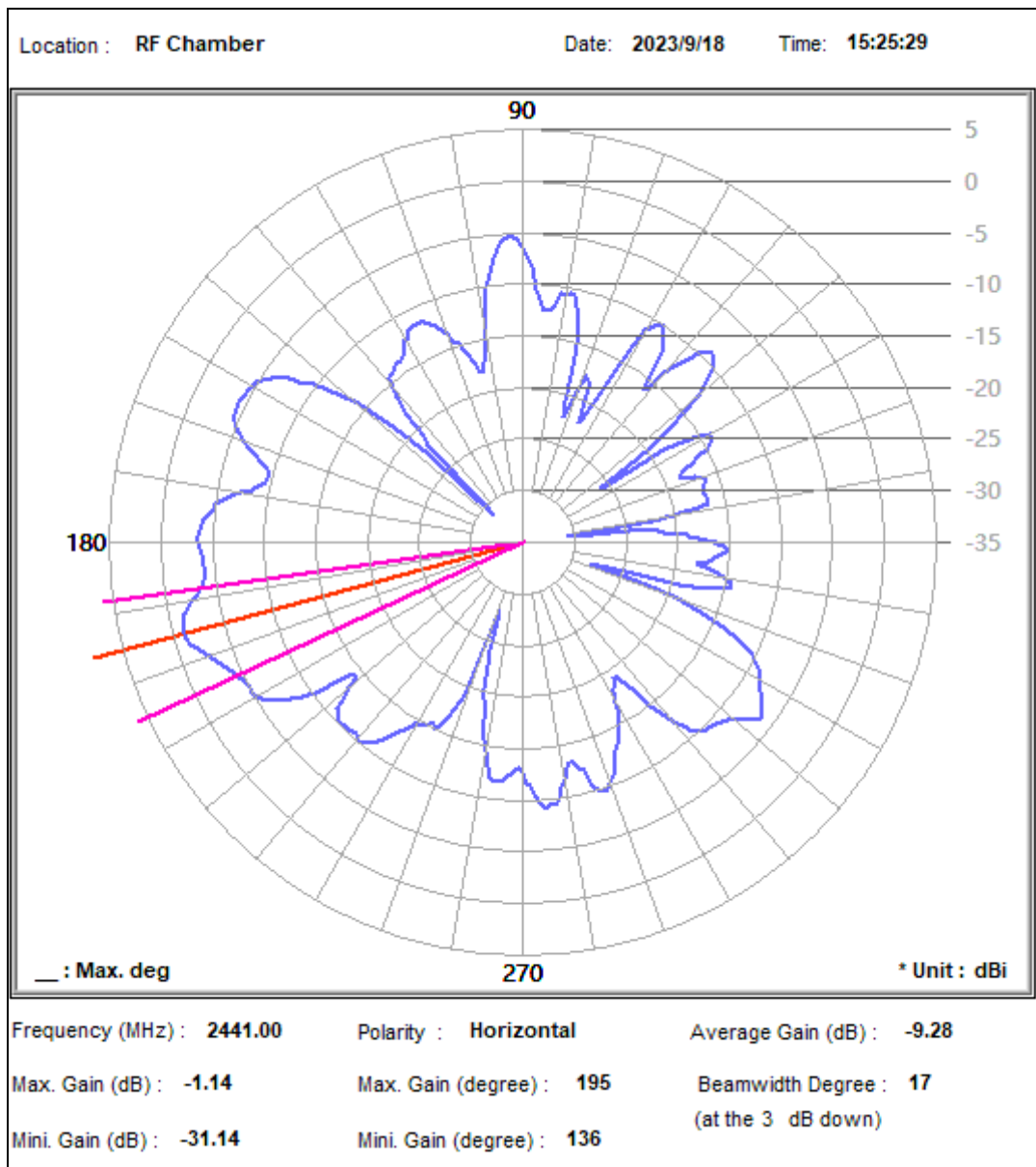
Frequency: 2402 MHz (Horizontal)



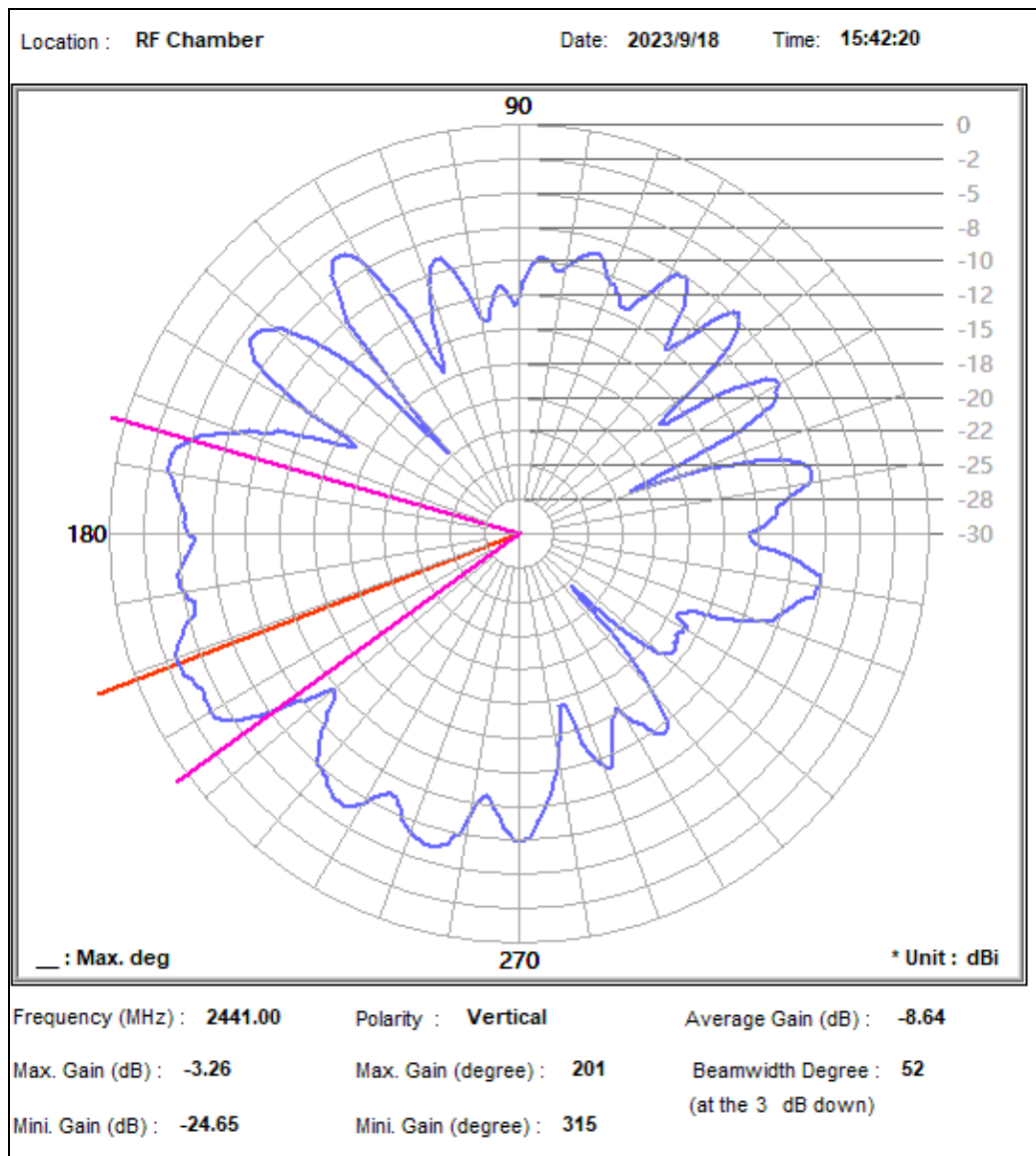
Frequency: 2402 MHz (Vertical)



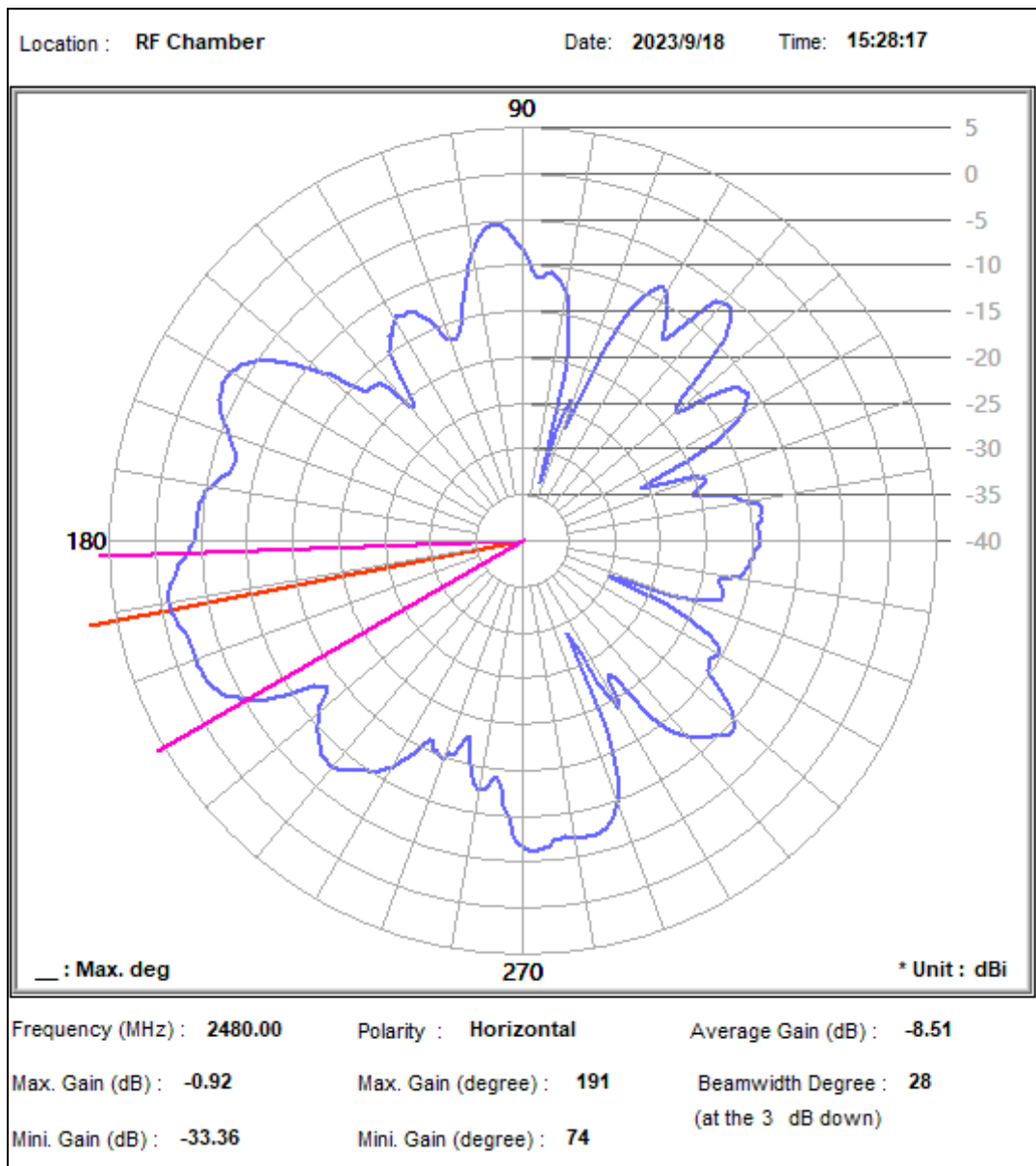
Frequency: 2441 MHz (Horizontal)



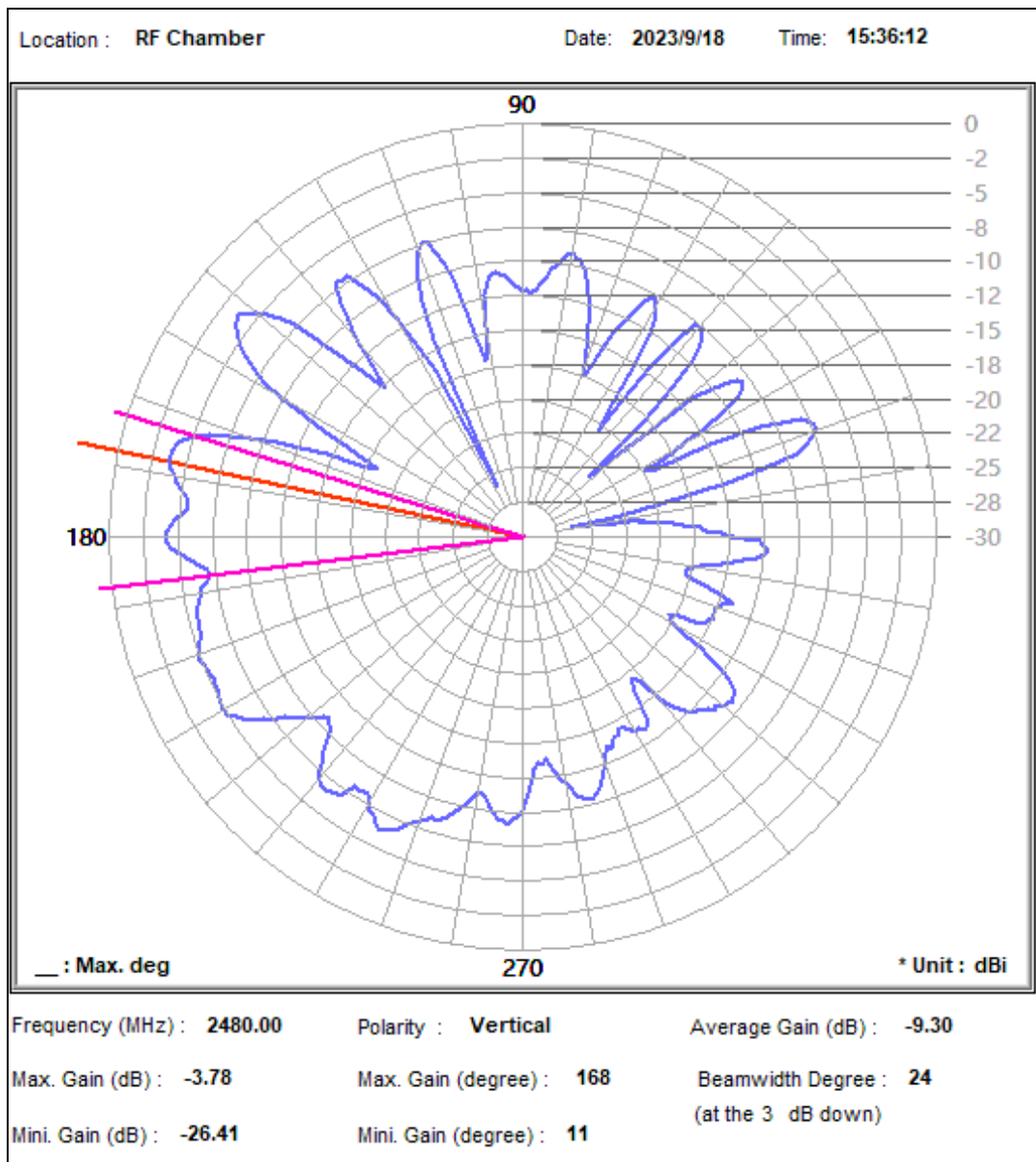
Frequency: 2441 MHz (Vertical)



Frequency: 2480 MHz (Horizontal)



Frequency: 2480 MHz (Vertical)



6. PHOTOGRAPHS OF THE TEST CONFIGURATION

