



ANTENNA TEST REPORT

Applicant	C&A Marketing, Inc.
Address	114 Tived Lane East, Edison NJ 08837

Manufacturer or Supplier	C&A Marketing, Inc.
Address	114 Tived Lane East, Edison NJ 08837
Product	Antenna
Brand Name	HP
Model	HPISPS4X6
Max. Peak Gain	PCB Antenna, 0.28 dBi;
Date of tests	Jul. 15, 2024 ~ Jul. 16, 2024

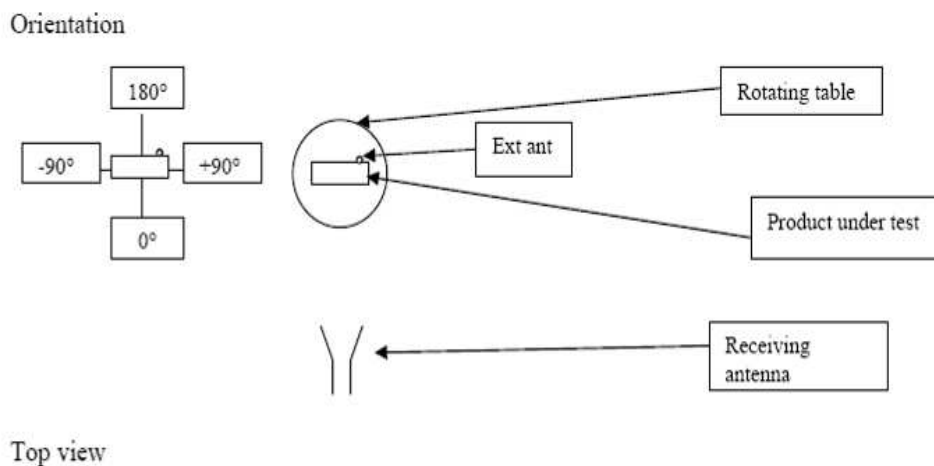
Tested by Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Sep. 20, 2024

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1. MEASUREMENTS SETUP



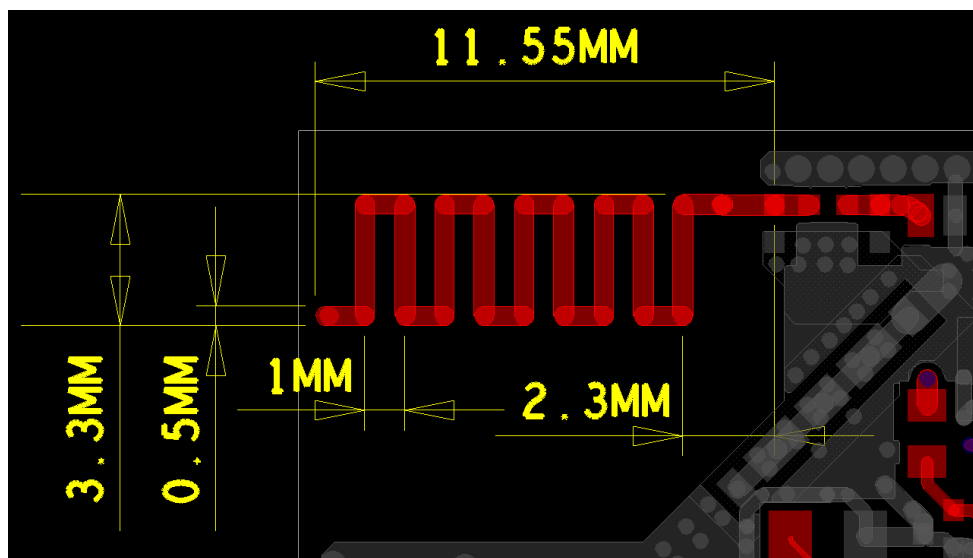
1.1 TEST PROCEDURE

- 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 $\pm 1.86\text{dB}$.

3. SIZE OF THE ANTENNA



4. TEST INSTRUMENTS

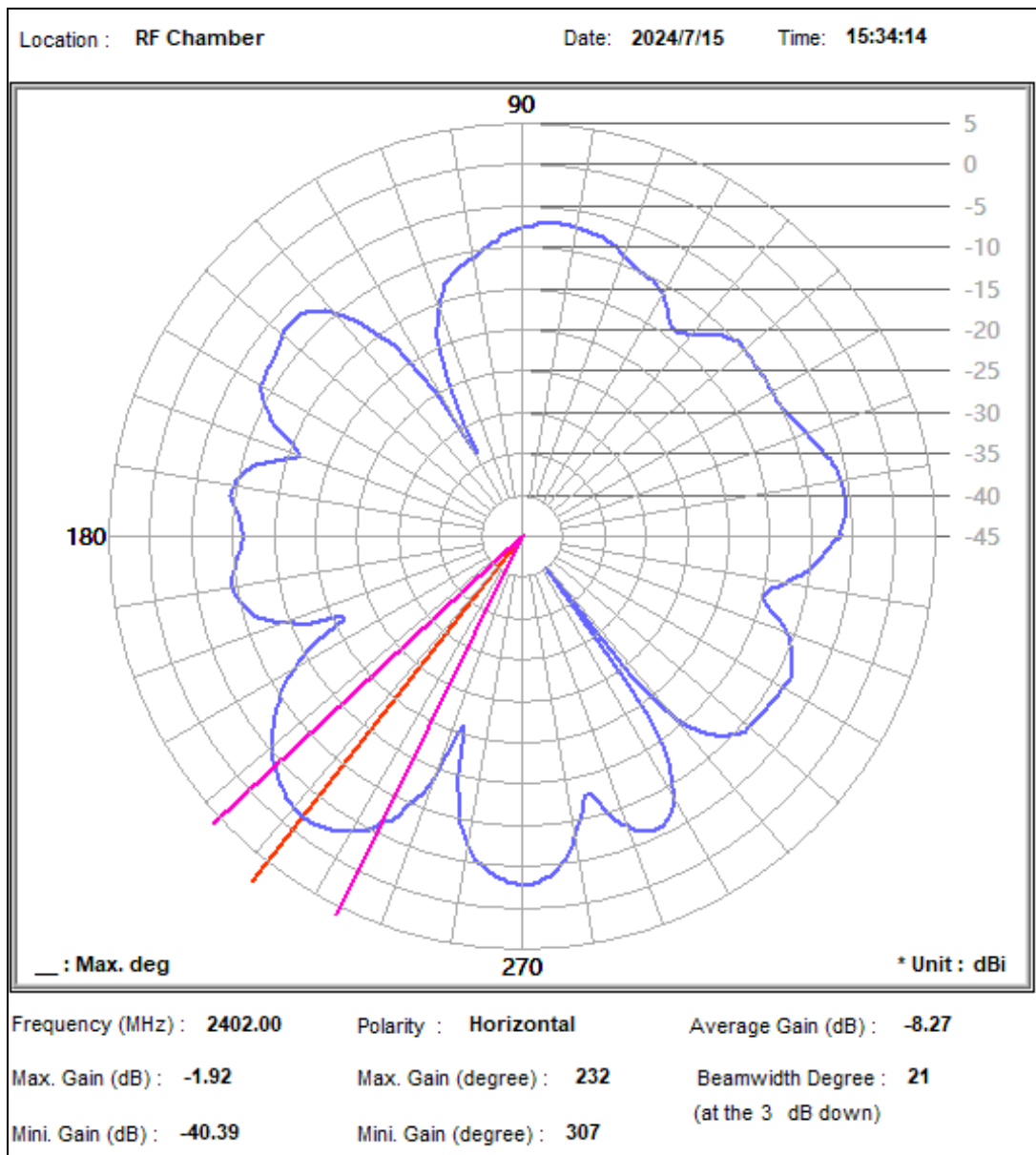
Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Signal Generator	Agilent	N5183A	MY50140980	Jul. 08, 25
Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Jan. 01, 25
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1247	Apr. 13, 25
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120 B	00740	Jul. 20, 24
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. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation.
 3. Test Site: No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.

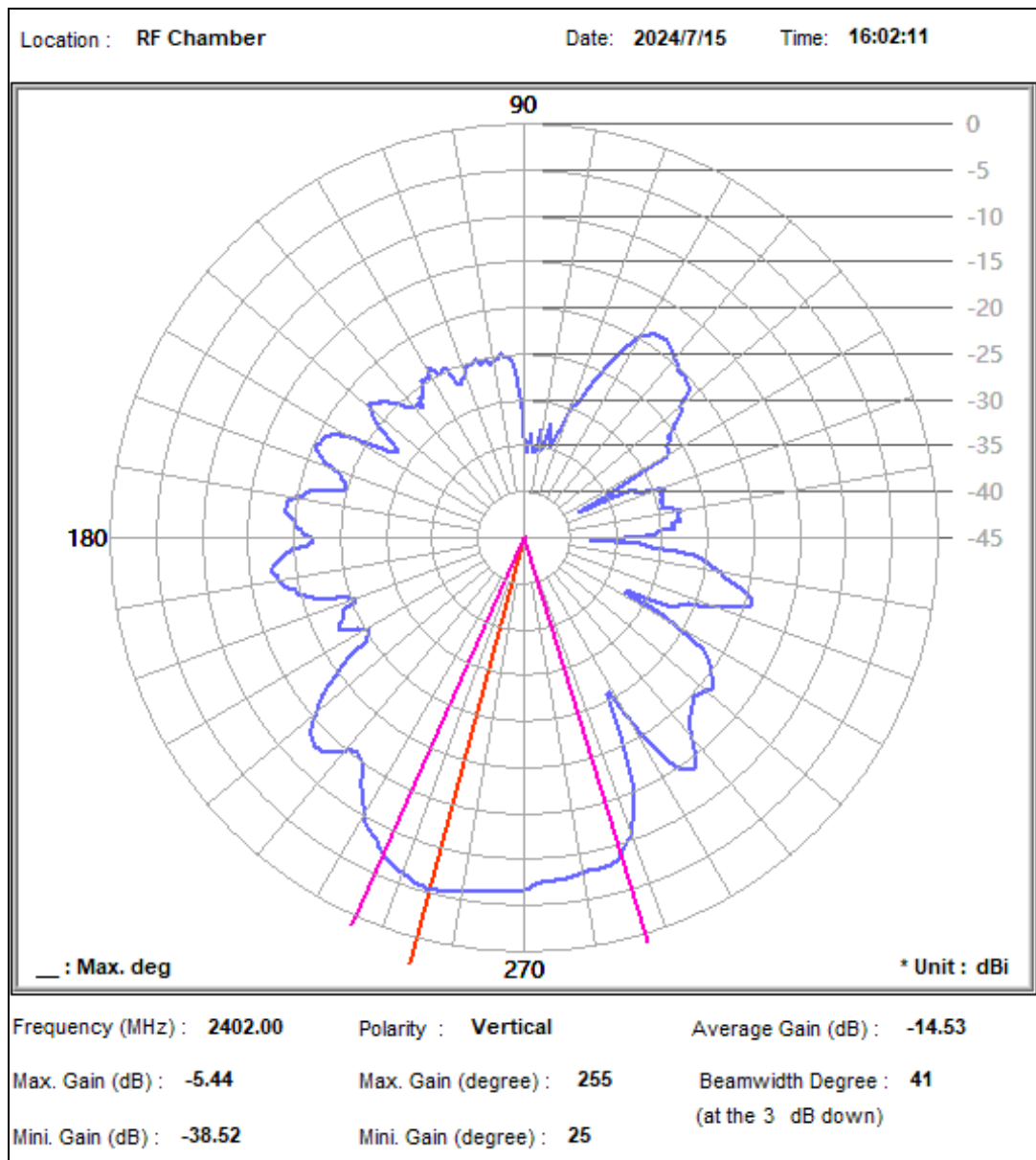
5. TEST RESULTS

ANTENNA	FREQUENCY (MHz)	ANTENNA POLARITY	MAX. PEAK GAIN (dBi)
PCB	2402	Horizontal	-1.92
		Vertical	-5.44
	2412	Horizontal	-0.10
		Vertical	-3.64
	2440	Horizontal	0.28
		Vertical	-4.70
	2472	Horizontal	-2.57
		Vertical	-6.02
	2480	Horizontal	-1.99
		Vertical	-7.24

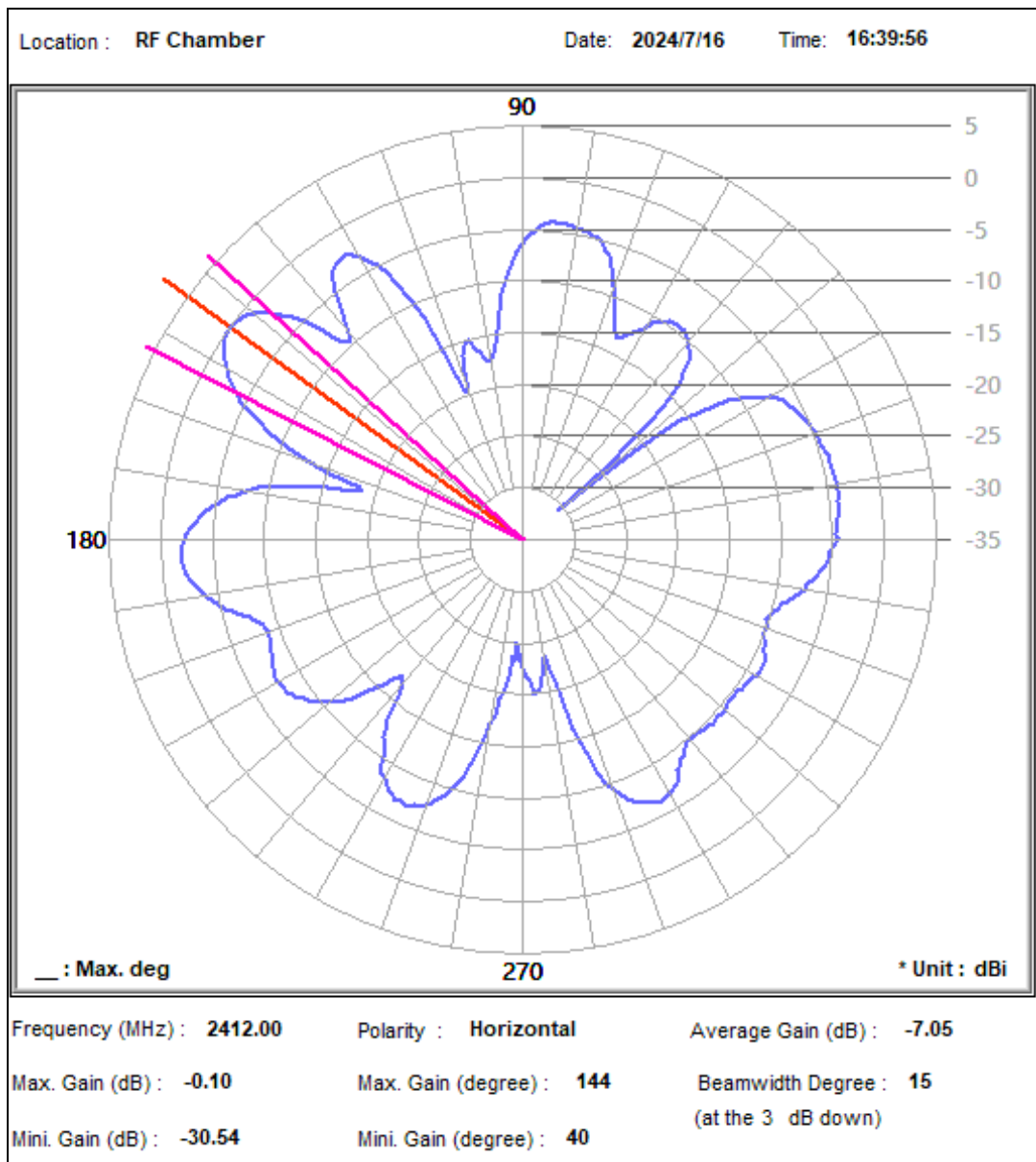
Frequency: 2402 MHz (Horizontal)



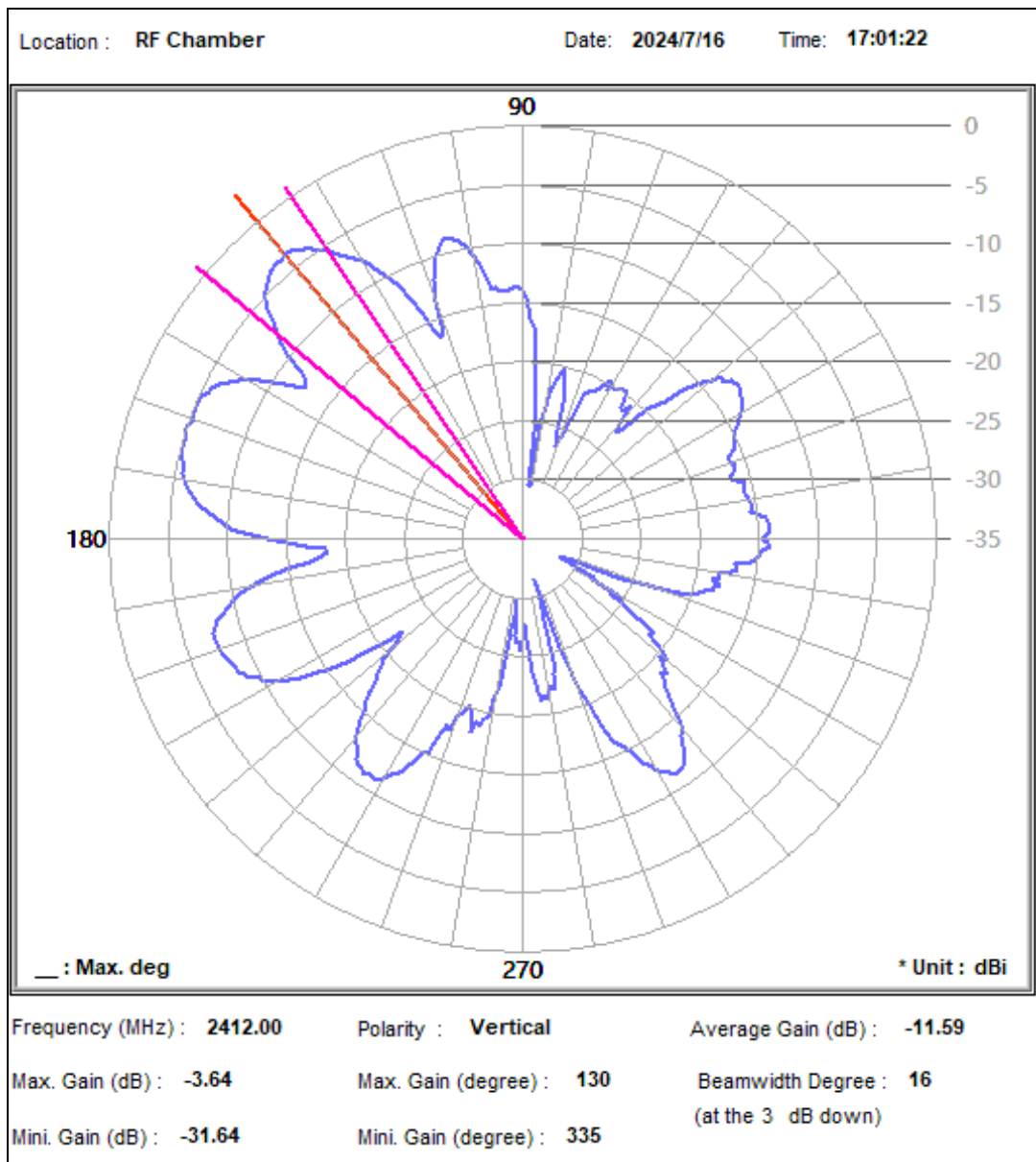
Frequency: 2402 MHz (Vertical)



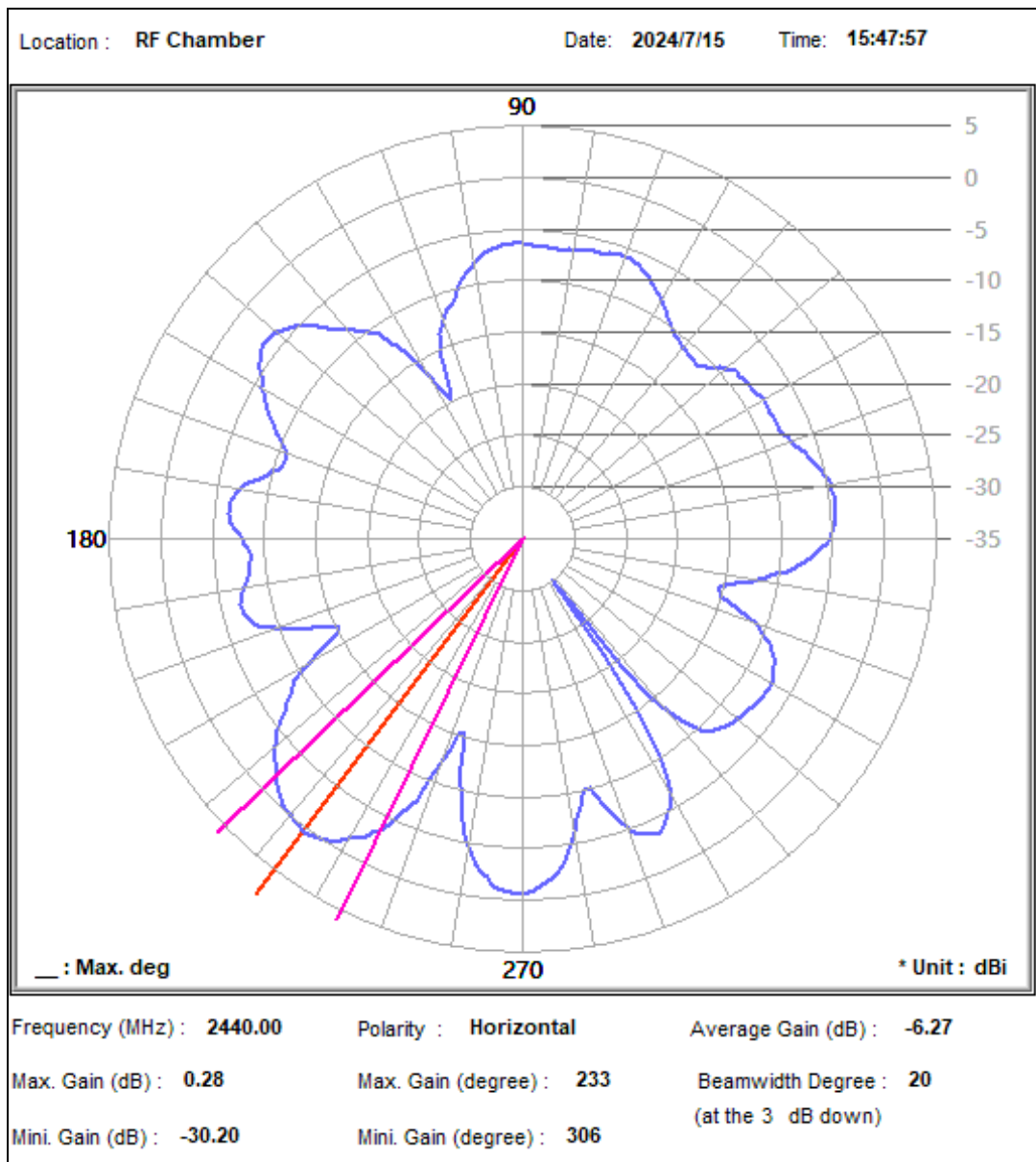
Frequency: 2412 MHz (Horizontal)



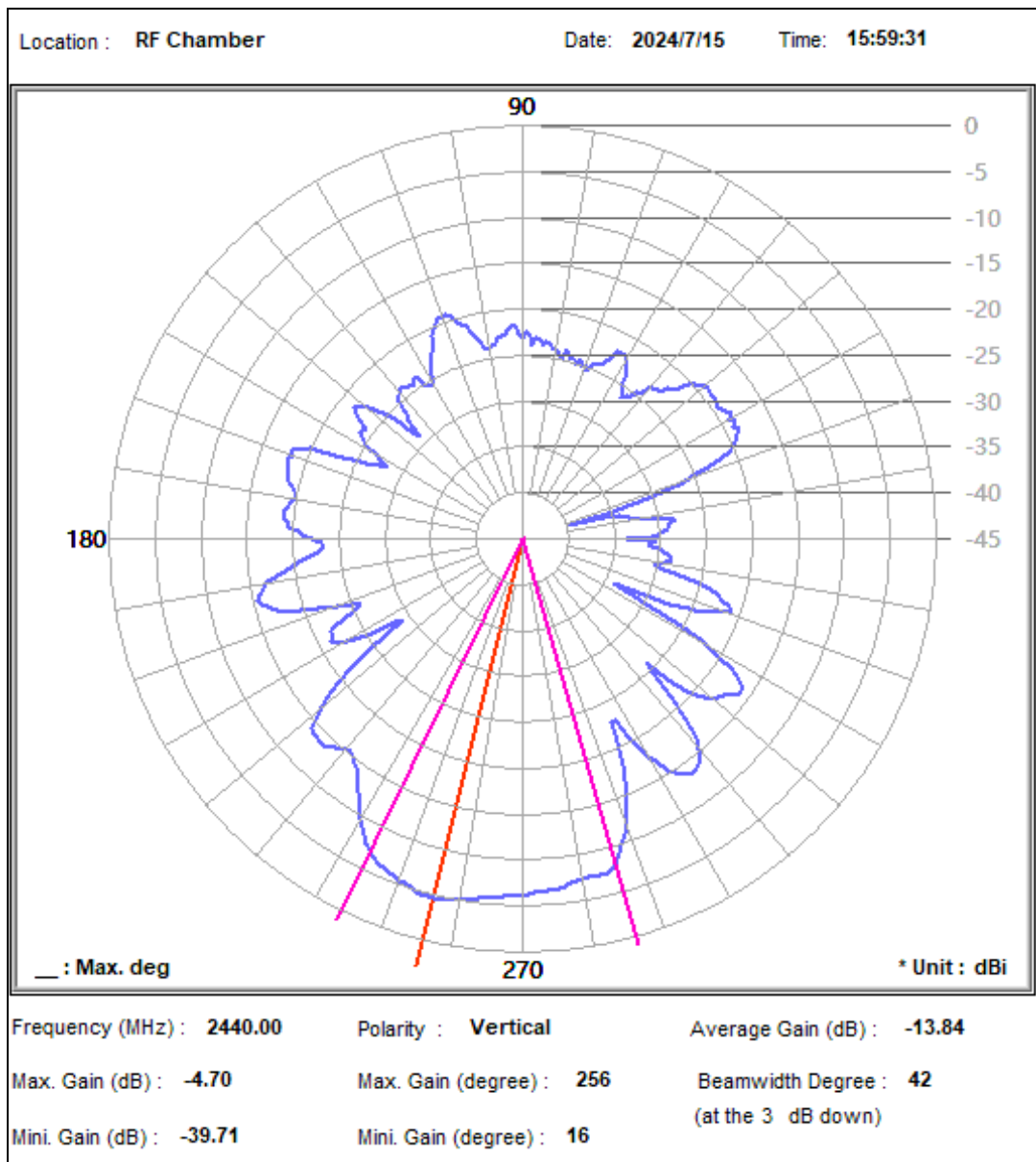
Frequency: 2412 MHz (Vertical)



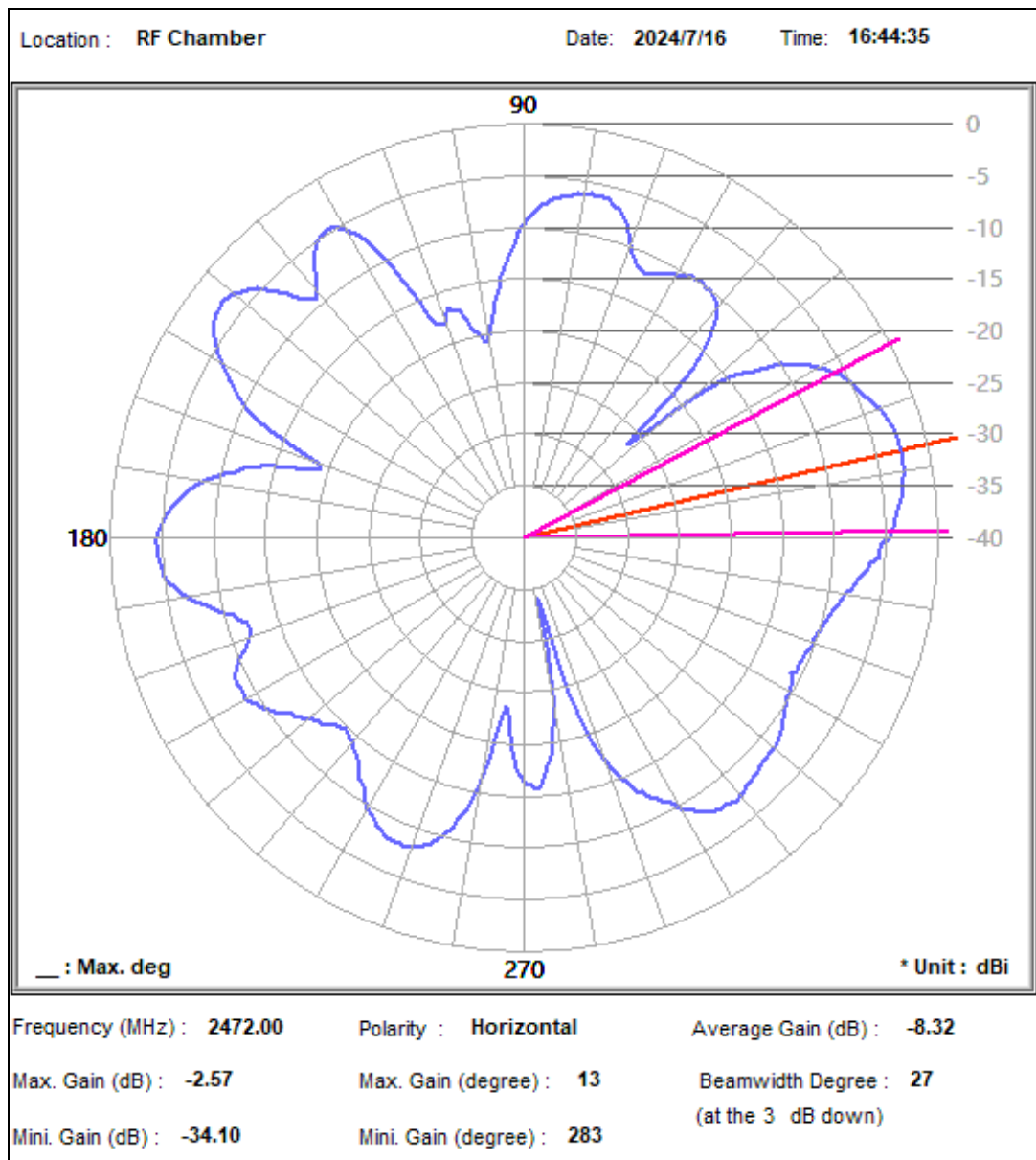
Frequency: 2440 MHz (Horizontal)



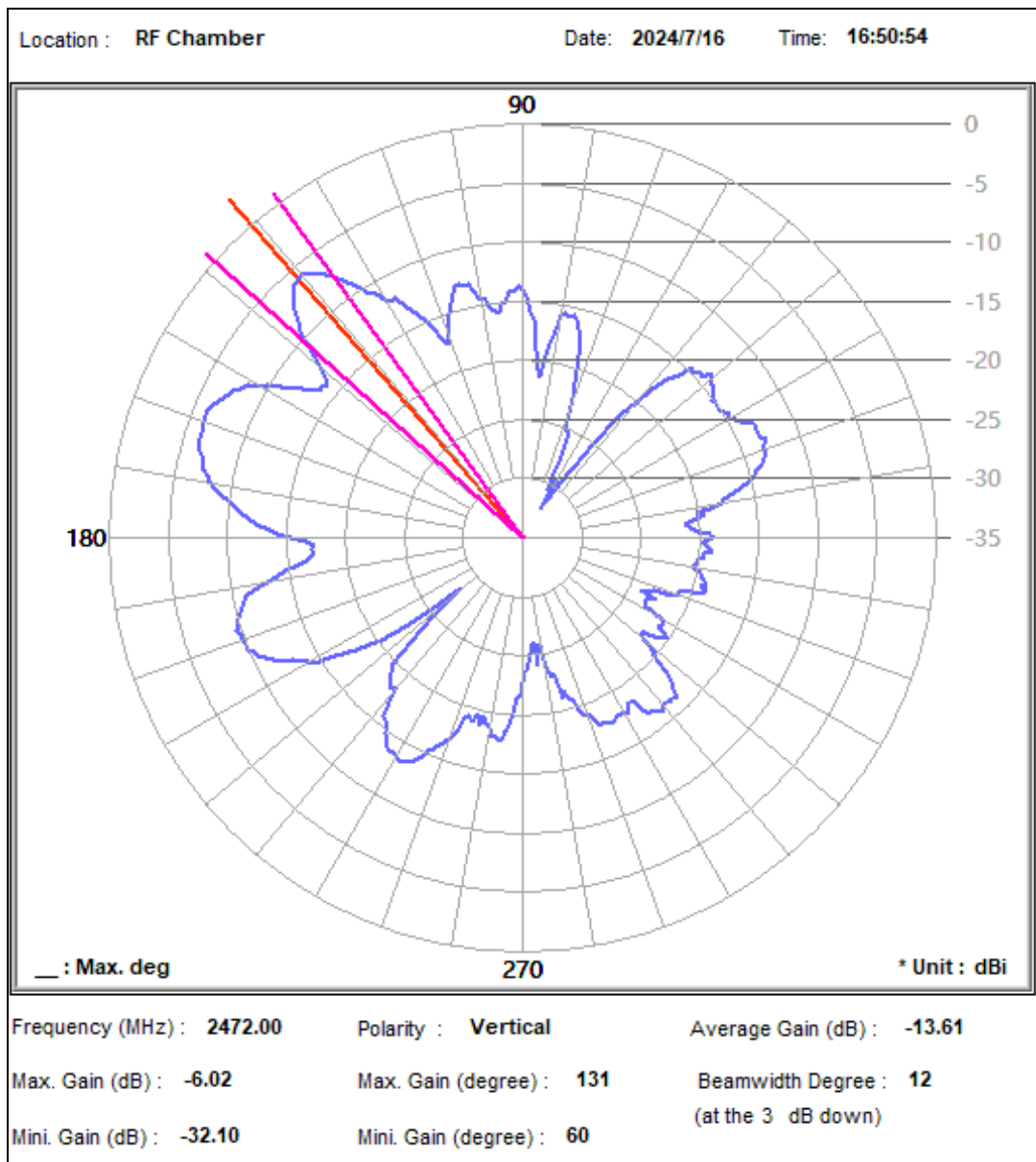
Frequency: 2441 MHz (Vertical)



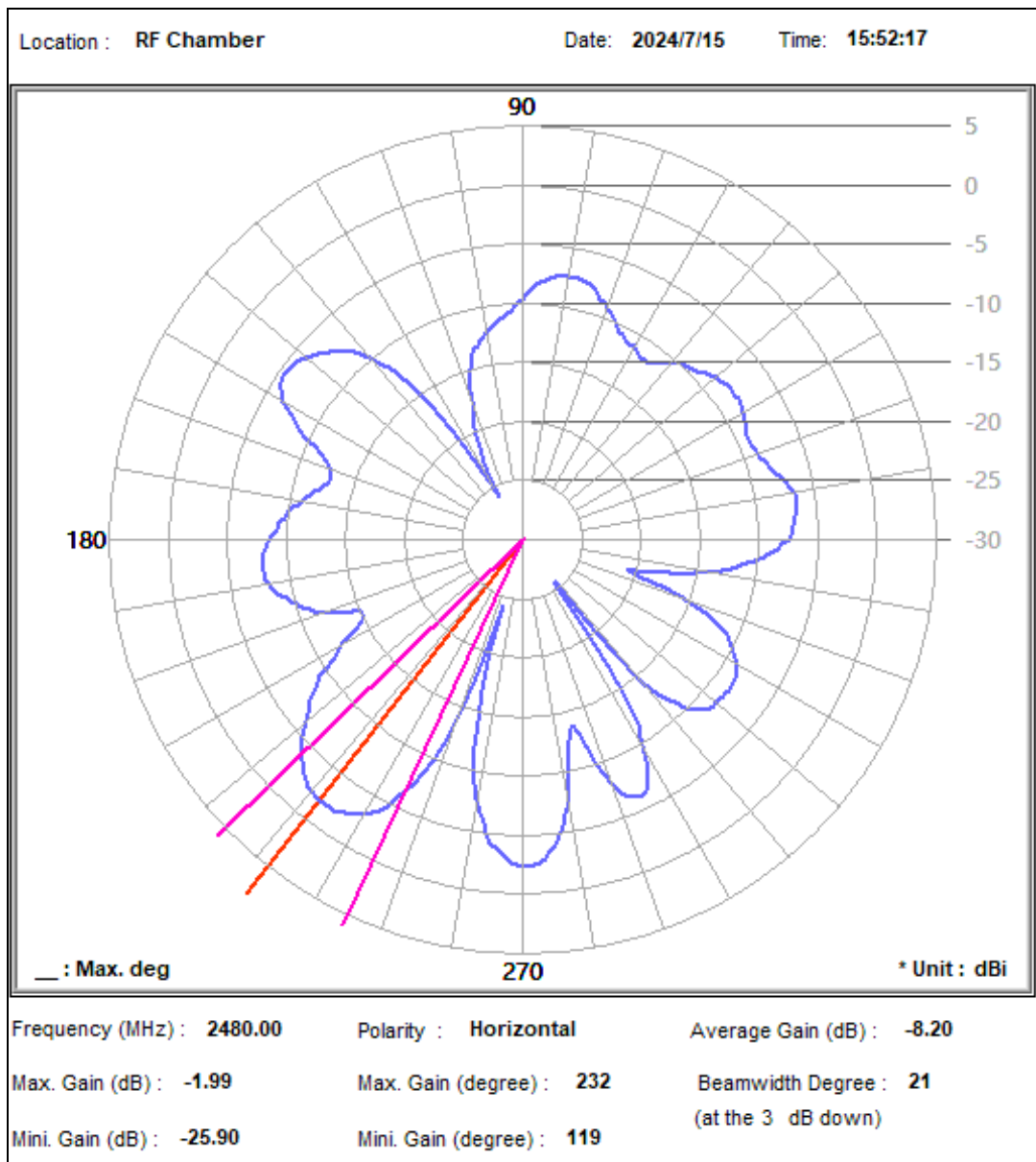
Frequency: 2472 MHz (Horizontal)



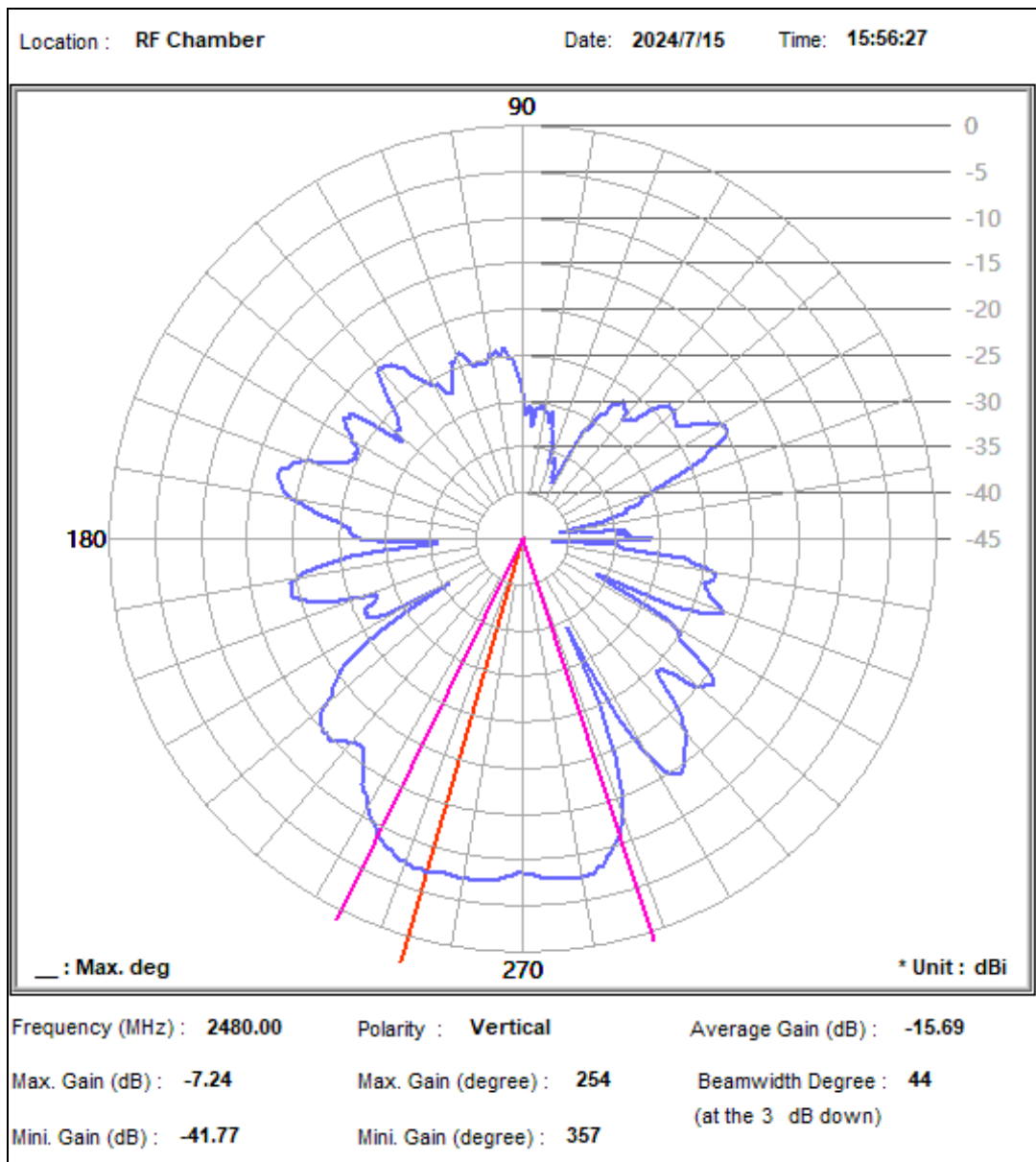
Frequency: 2472MHz (Vertical)



Frequency: 2480 MHz (Horizontal)



Frequency: 2480 MHz (Vertical)



6. PHOTOGRAPHS OF THE TEST CONFIGURATION

