

Client Name: Voyetra Turtle Beach, Inc.

Project Name: VelocityOne Flightdeck

Antenna Type: PCB Ant (T001RS)

Debugging frequency: GFSK

band: 2400-2500MHz

Gain: 2.32dBi

Antenna manufacturer Name: SHENZHENFUXIANGTECHNOLOGYCOLTD

Antenna manufacturer Address: 11 BLDG, PIONEER INDUSTRY ZONE SHAPUWEI SONGGANG

SHENZHEN, GUANGDONG 518105 CHINA

Purpose

This report is to measure the performance of antenna for VelocityOne FlightdeckThe antenna operating frequency at 2400-2500MHz, All test data

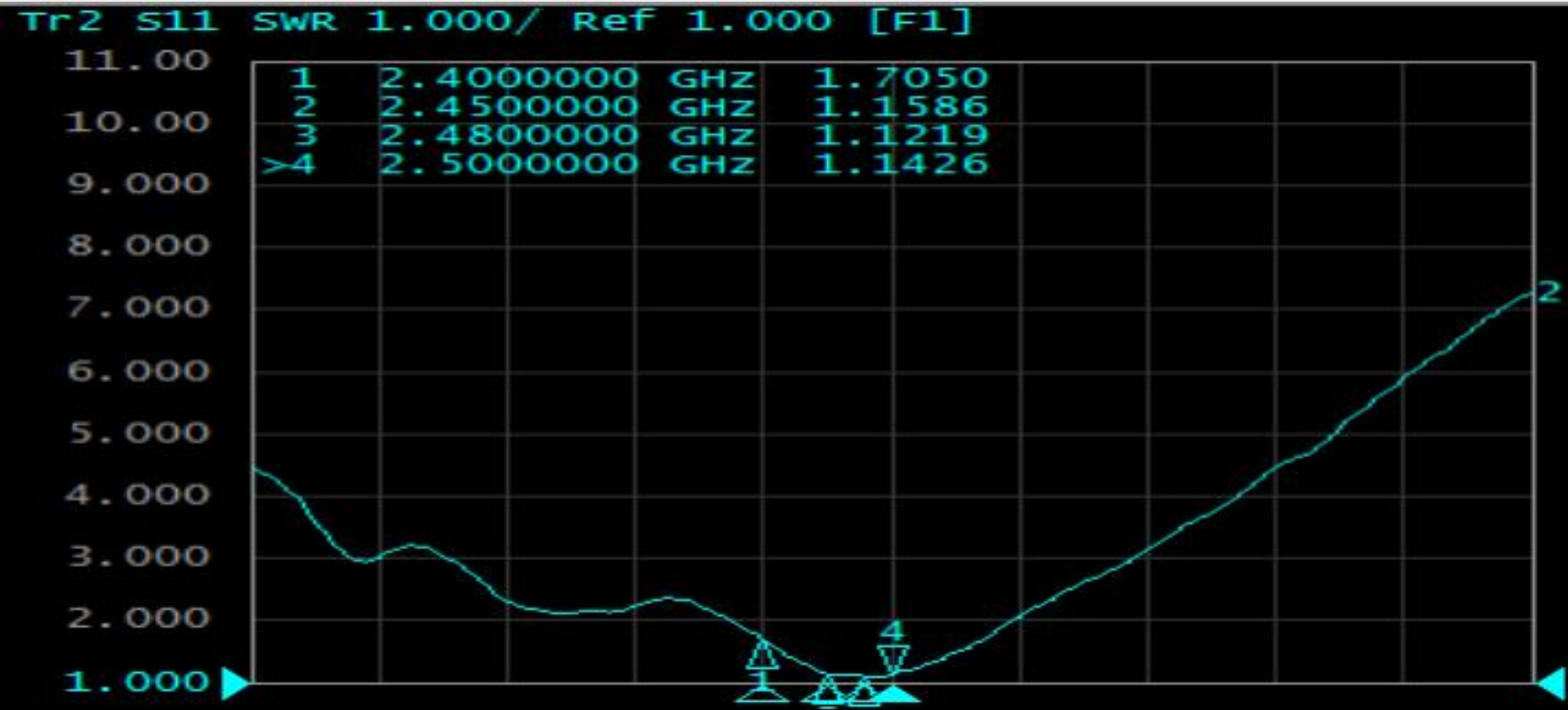
are showed as below

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3.Test Result

3.1 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	1.70	1.15	1.12	1.14

3. Test Result

3.1 S11 Parameter-Log Mag

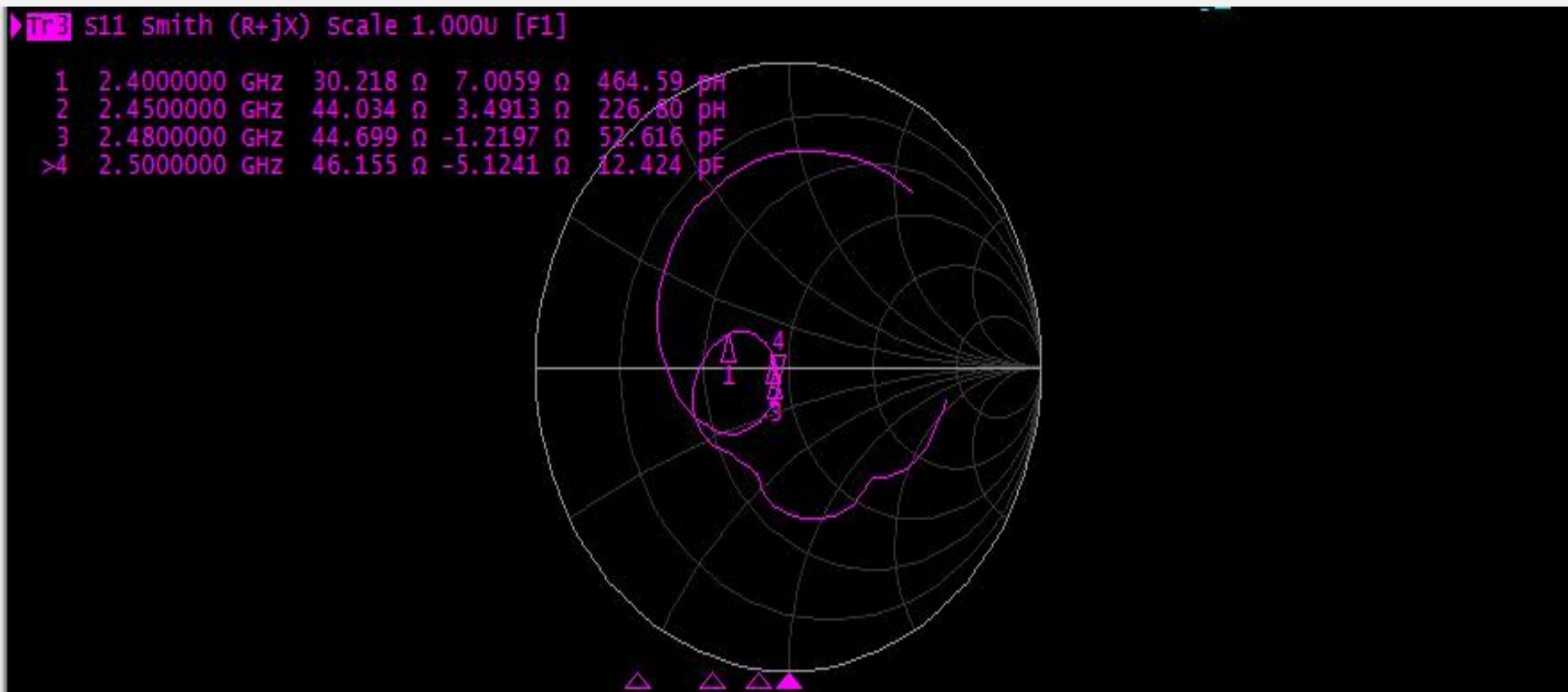
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-11.68	-22.67	-24.81	-23.53

3.Test Result

3.1 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
Smith(Ω)	30.21	44.03	44.69	46.15

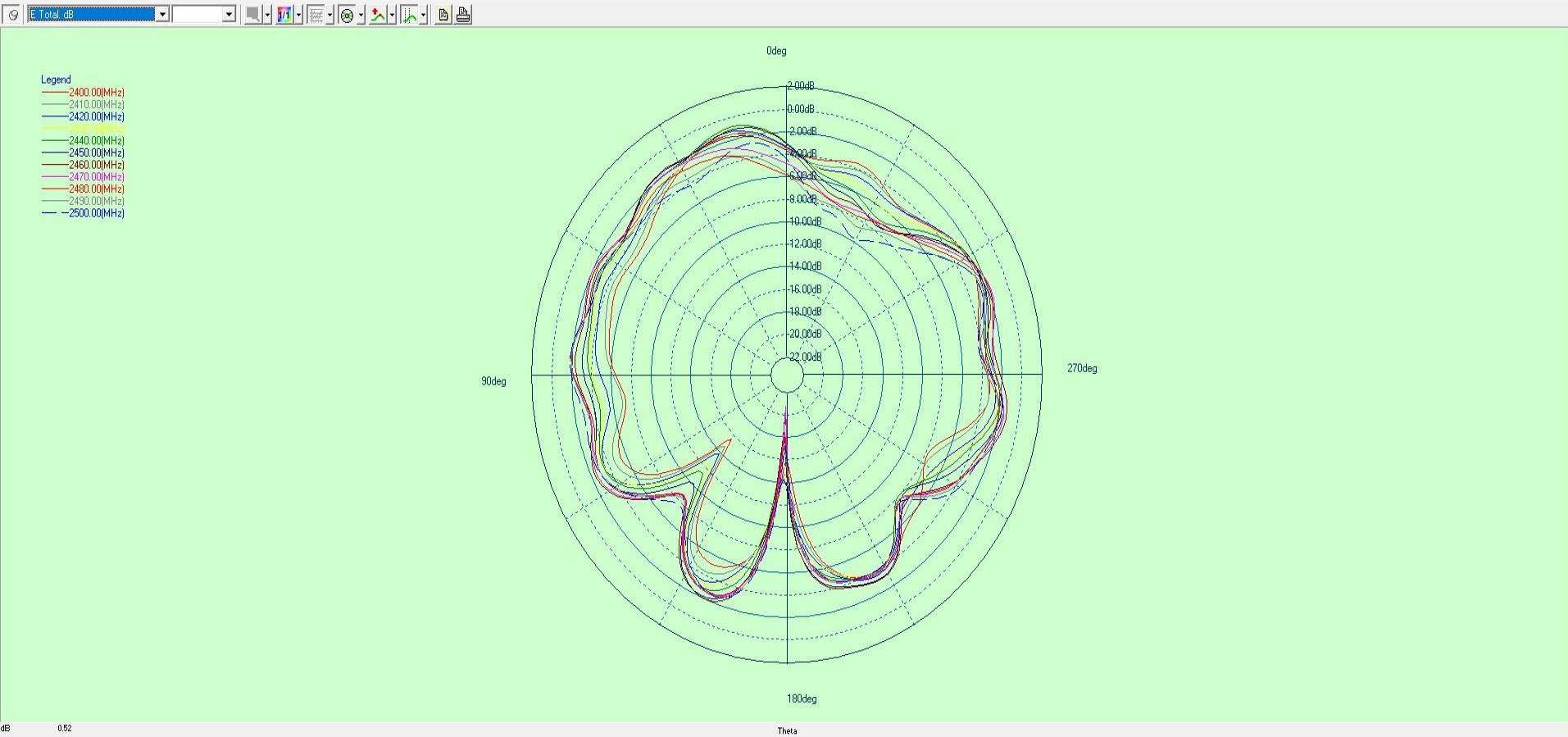
3. Test Result

3.2 Gain & Efficiency—ANT

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	52.01%	1.47
2410	52.90%	1.51
2420	52.60%	2.16
2430	51.30%	2.16
2440	50.40%	2.32
2450	50.90%	2.27
2460	51.20%	2.15
2470	52.20%	2.29
2480	53.01%	2.20
2490	54.70%	2.20
2500	55.20%	2.23

3. Test Result

3.3 2D Pattern — BT ANT



X-Z Plane

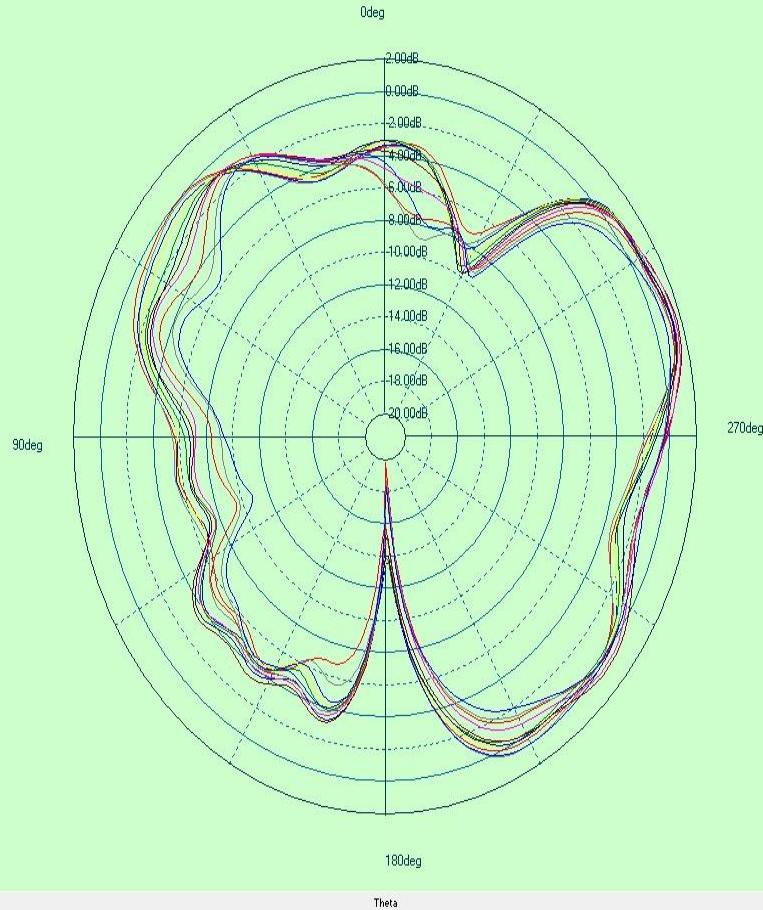
3. Test Result

3.3 2D Pattern — BT ANT

E: Total dB

Legend

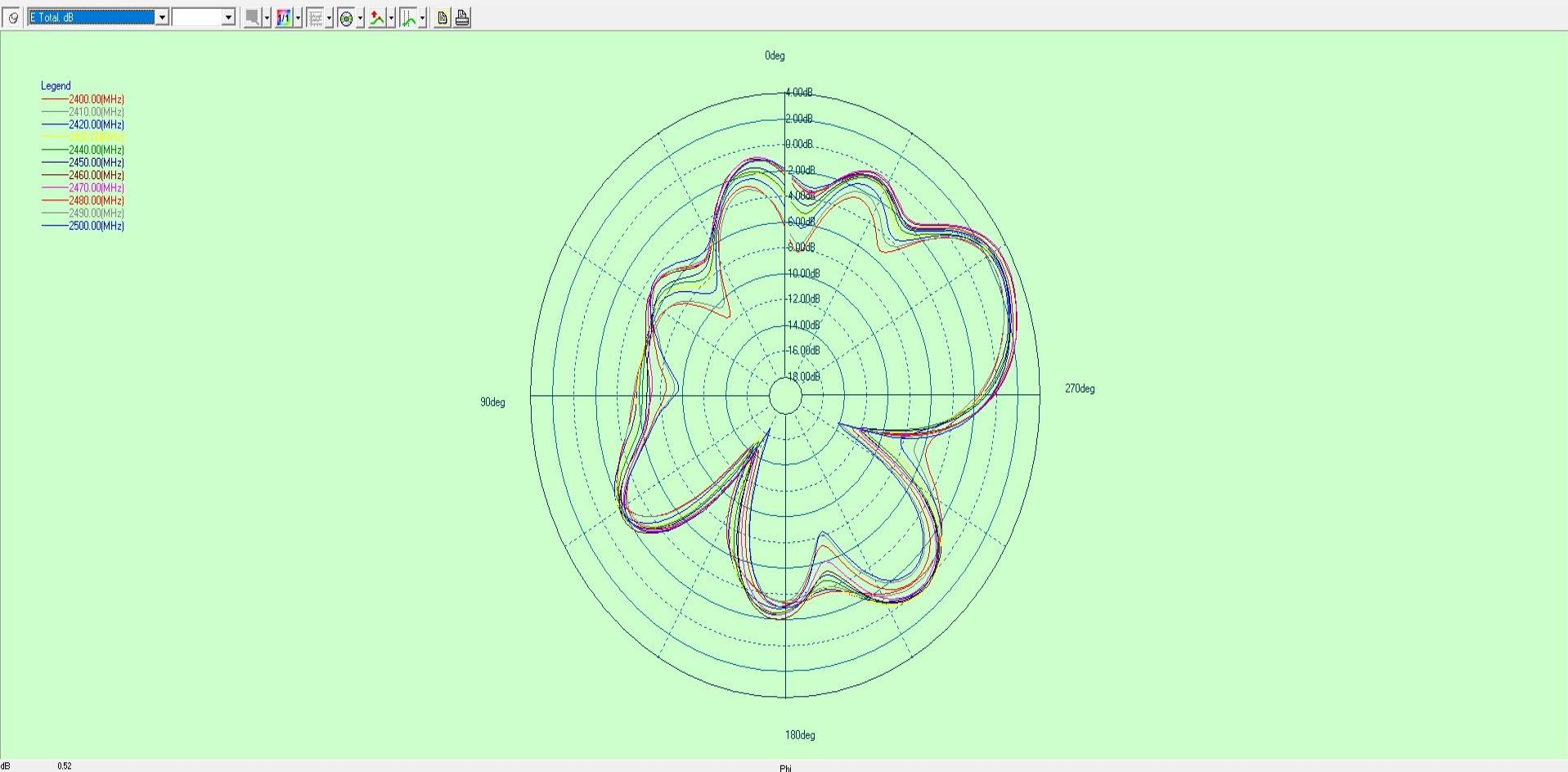
- 2400.00(MHz)
- 2410.00(MHz)
- 2420.00(MHz)
- 2430.00(MHz)
- 2440.00(MHz)
- 2450.00(MHz)
- 2460.00(MHz)
- 2470.00(MHz)
- 2480.00(MHz)
- 2490.00(MHz)
- 2500.00(MHz)



Y-Z Plane

3. Test Result

3.3 2D Pattern — BT ANT



Y-Z Plane



Thank you!