

1 GENERAL INFORMATION

1.1 Test Environment Condition

Ambient Temperature	19 to 25 °C
Ambient Relative Humidity	45 to 55 %
Ambient Pressure	N/A (Not applicable)

1.2 Announce

- (1) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
 - (2) The test report is invalid if there is any evidence and/or falsification.
 - (3) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
 - (4) This document may not be altered or revised in any way unless done so and all revisions are duly noted in the revisions section.
 - (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
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2 PRODUCT INFORMATION

2.1 Applicant

Applicant	shenzhenshiaruiweichuangkejiyouxianzerengongsi
Address	Baoan xixiang liutang lu fuyingmen D1 402 shenzhen guang dong 518000
Contact Person	Tony
Telephone Number	
Fax Number	
E-mail Address	

2.2 Manufacturer

Manufacturer	shenzhenshiaruiweichuangkejiyouxianzerengongsi
Address	Baoan xixiang liutang lu fuyingmen D1 402 shenzhen guang dong 518000
Contact Person	N/A
Telephone Number	N/A
Fax Number	N/A
E-mail Address	N/A

2.3 General Description for Equipment under Test (EUT)

EUT Type	Bluetooth Antenna
Model Name	TKL-ZJ
Antenna Type	External Antenna
Hardware Version	N/A
Serial Number	N/A
Dimensions	N/A

2.4 Technical Information

Frequency Range	2400MHz~ 2500MHz
Test Frequencies	2402MHz, 2441MHz, 2480MHz

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	IEEE149-1979	IEEE Standard Test Procedures for Antennas

3.2 Test Verdict

Report Section	Description	Remark
ANNEX A.1	Gain And Efficiency	--
ANNEX B	Radiation Pattern	--

3.3 Test Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Item	Uncertainty
VSWR(S11)	0.4dB
Gain	-2.5dB

4 GENERAL TEST CONFIGURATIONS

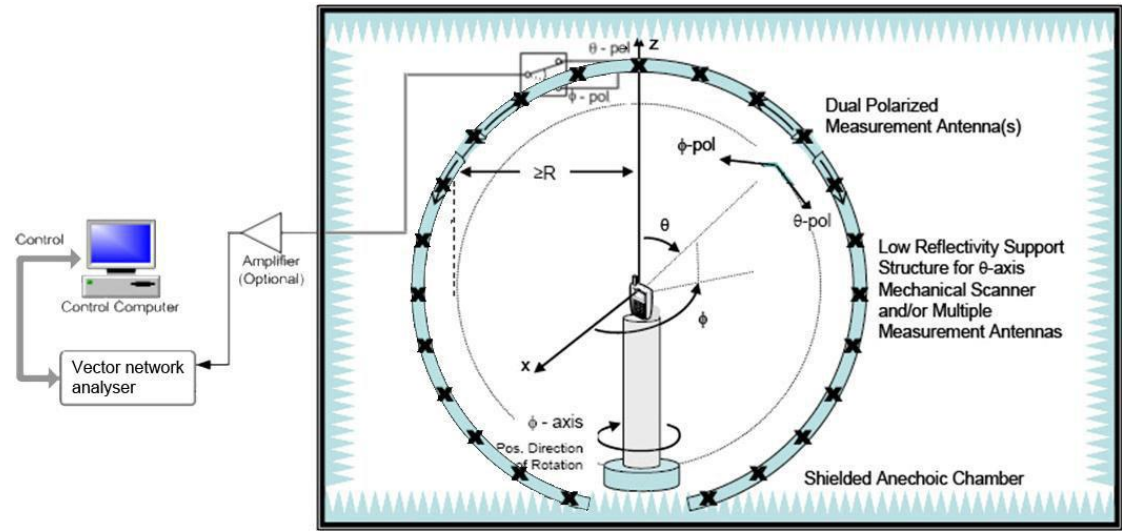
4.1 Test Condition

Environment Parameter	Selected Values During Tests		
	Temperature	Voltage	Relative Humidity
Normal Temperature, Normal Voltage (NTNV)	25°C	N/A	51%

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.		
Vector Network Analyzer	Agilent	E5071C	MY46103472		
5*5*5 Full Anechoic Chamber	SATIMO	5*5*5	N/A		
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001		

4.3 Test Setup



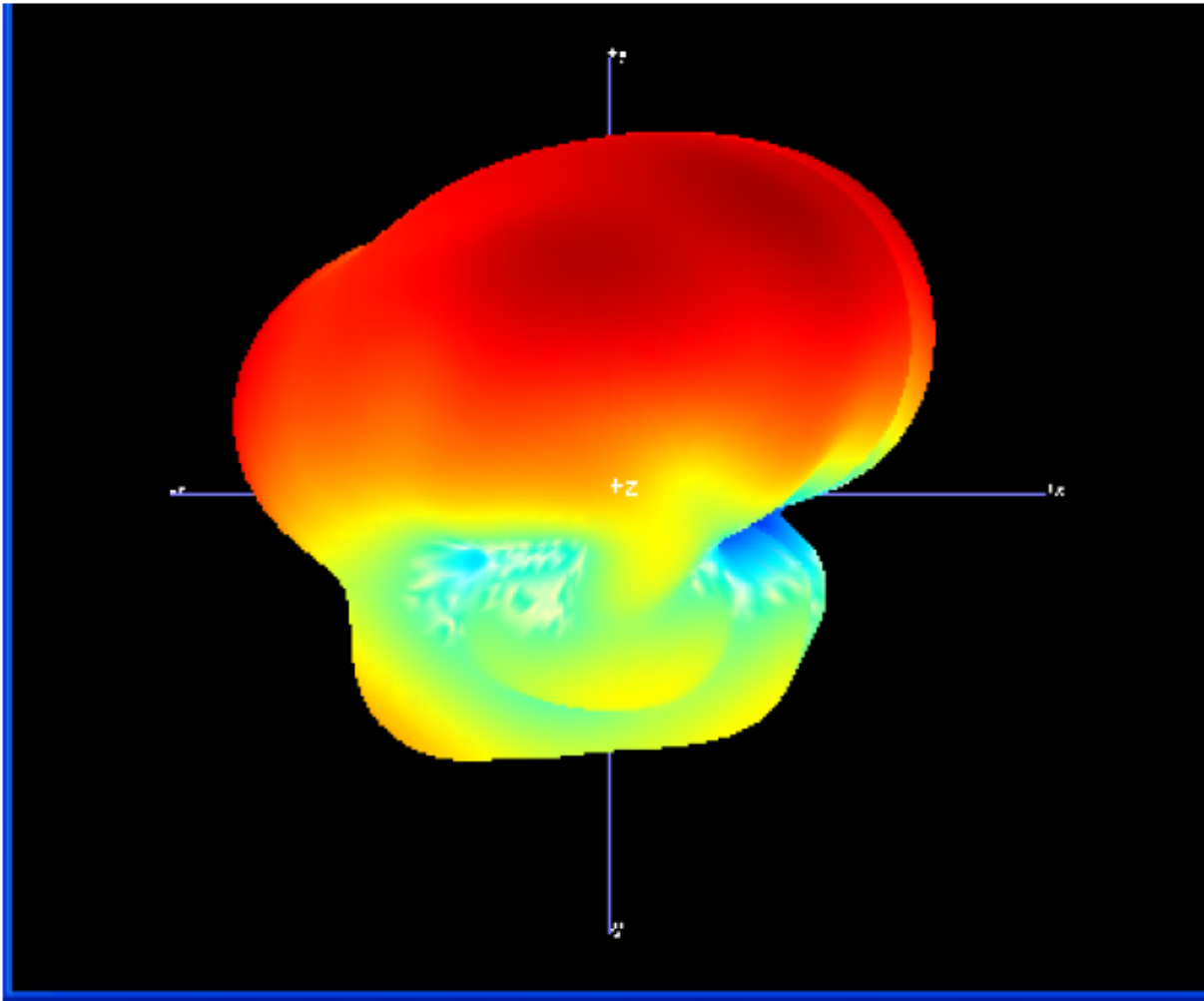
ANNEX A TEST RESULTS

A.1 Gain and Efficiency

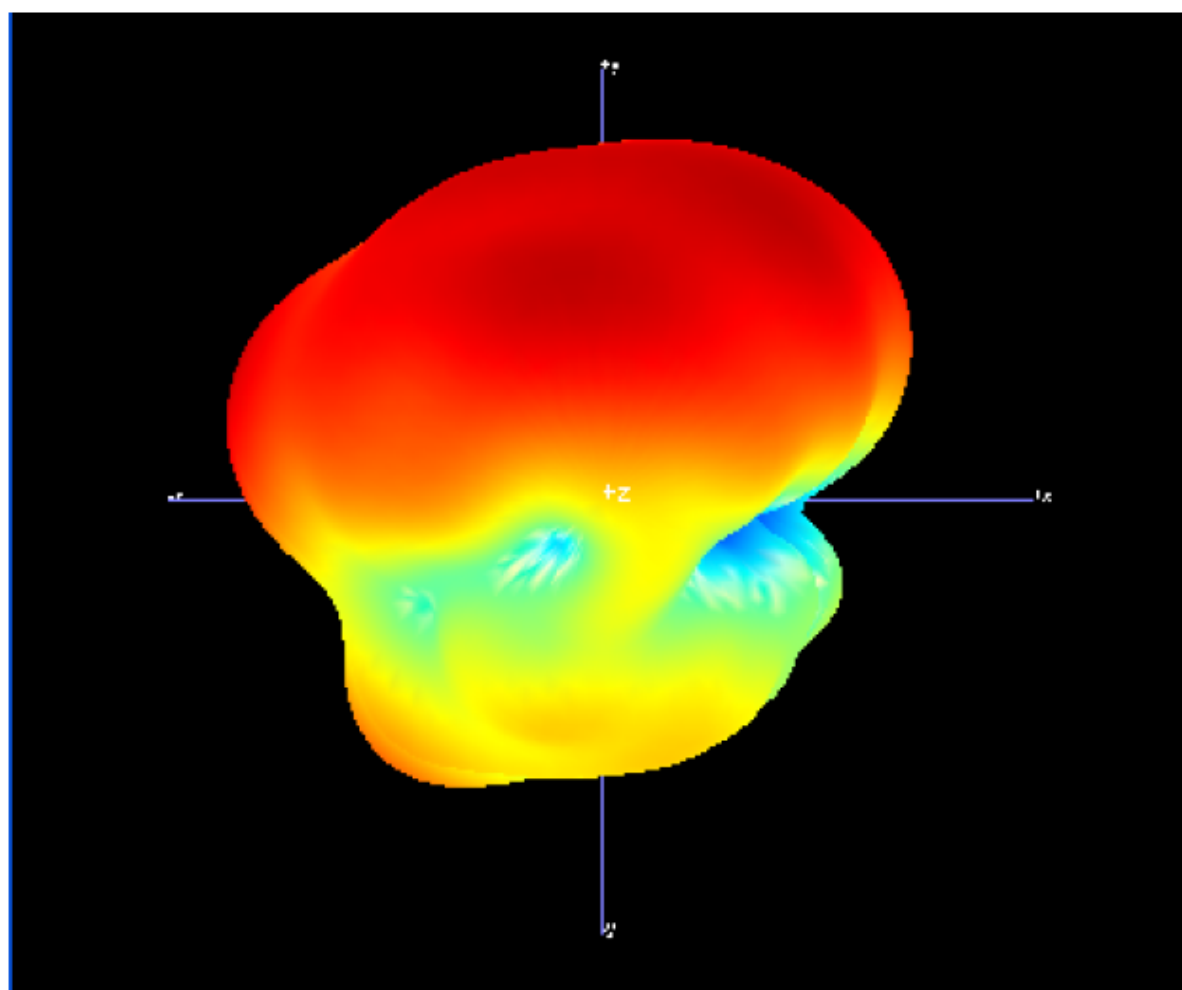
Frequency	Gain (dBi)	Efficiency (%)
2402MHz	-4.57	14
2441MHz	-2.50	14
2480MHz	-3.12	16

ANNEX B RADIATION PATTERN

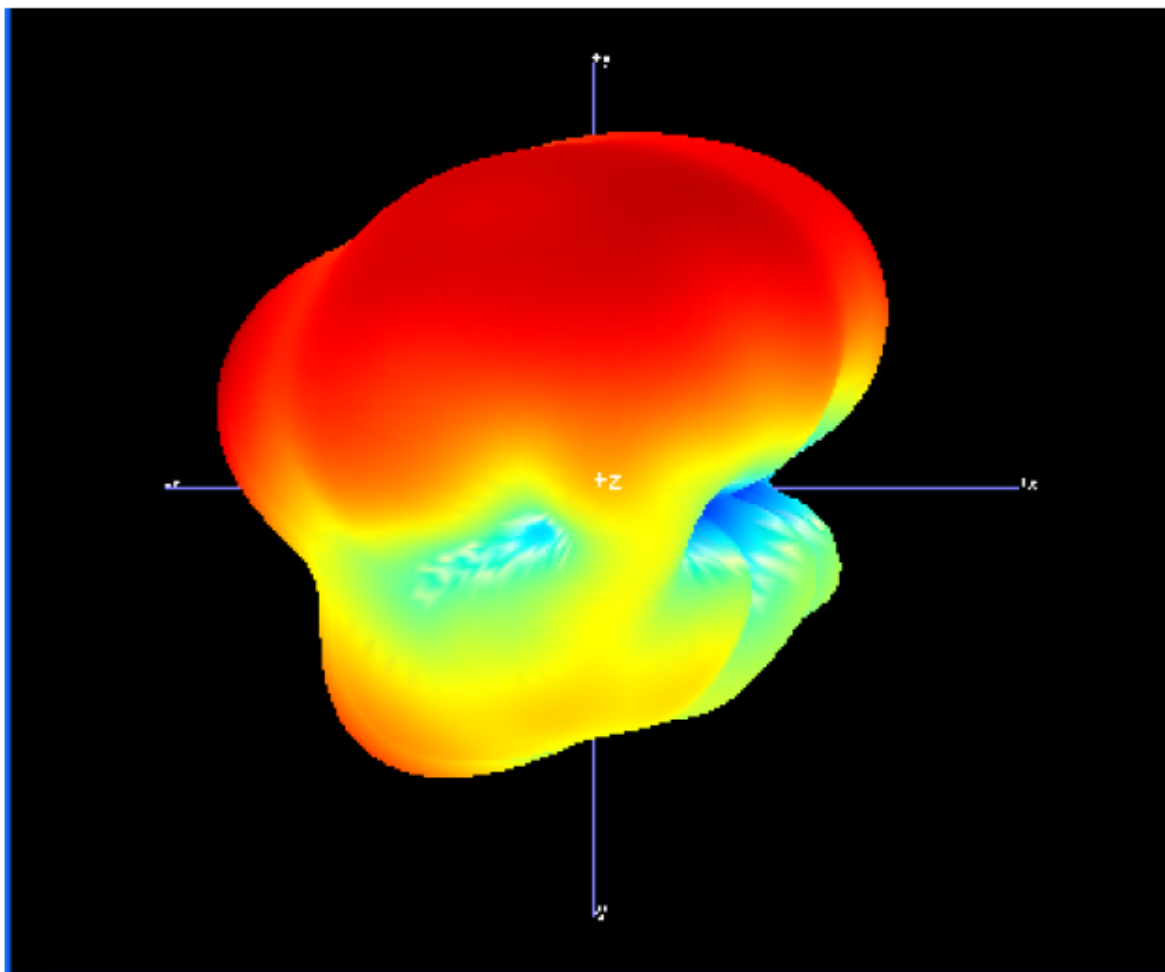
3D Pattern



2402MHZ

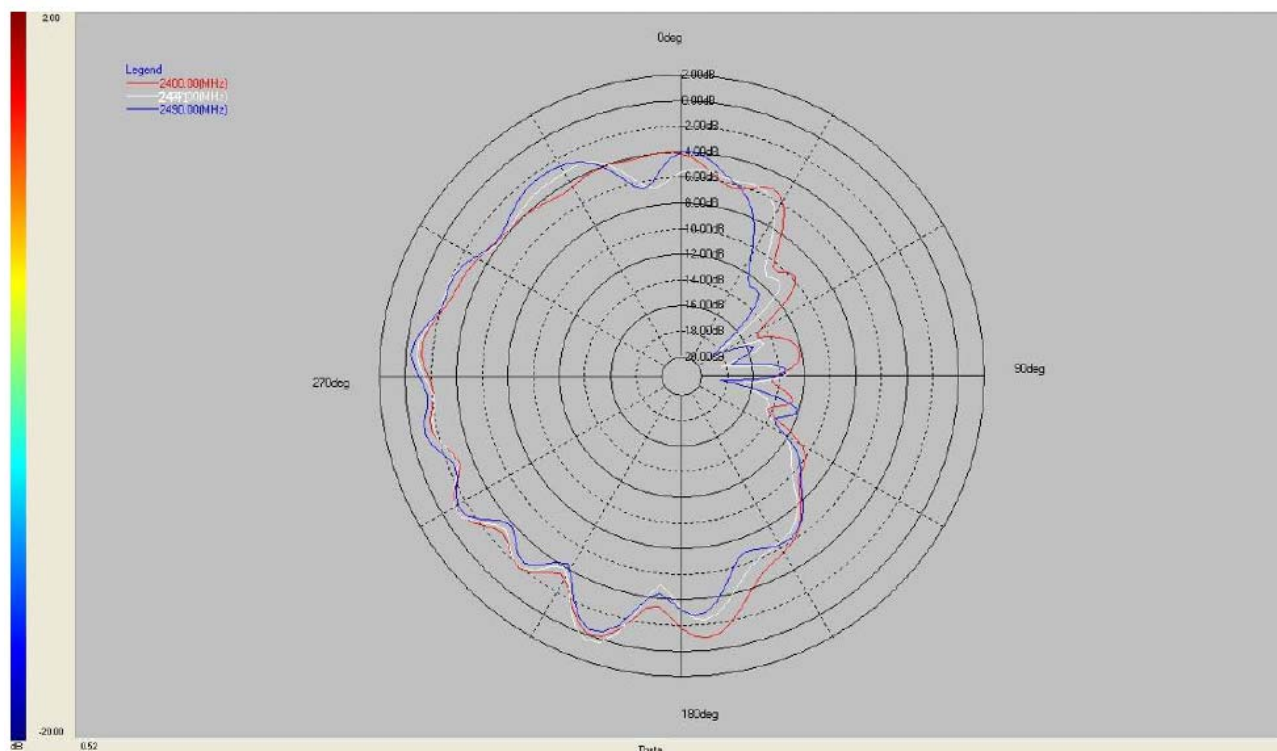


2441MHZ

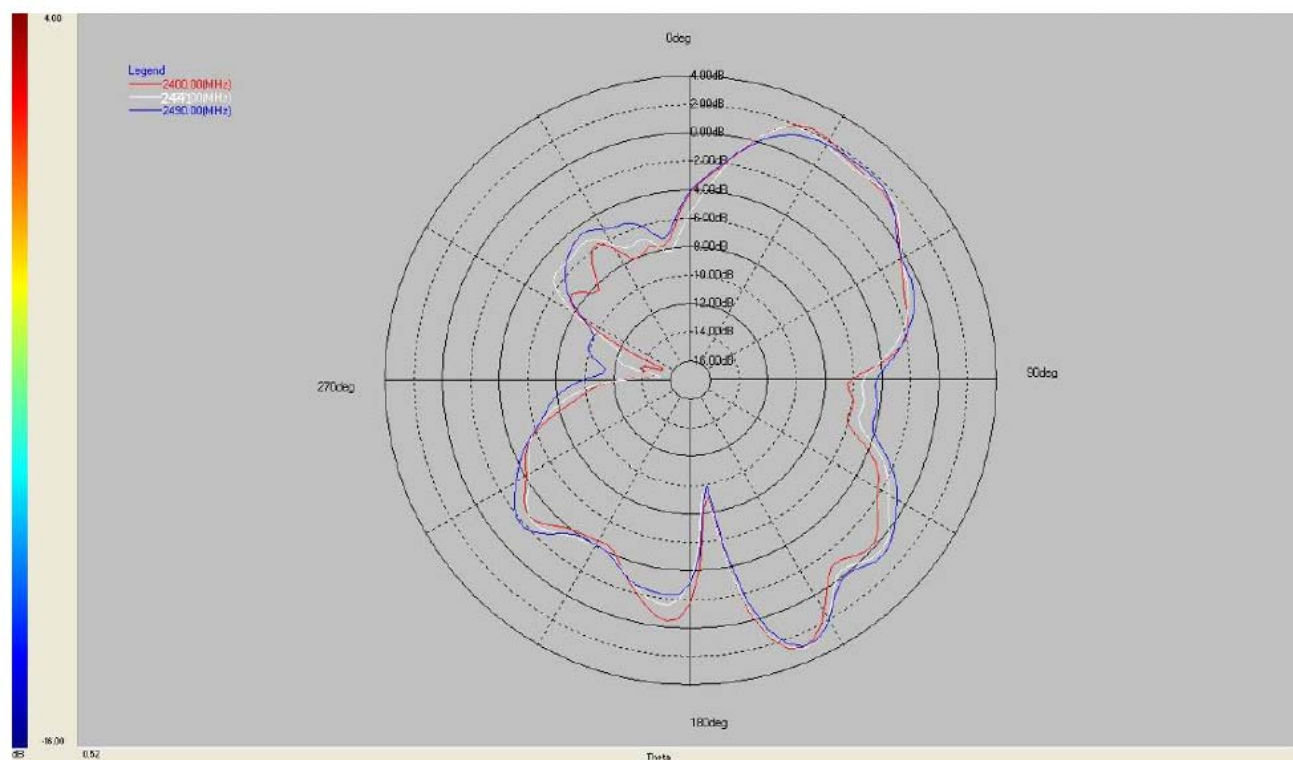


2480MHZ

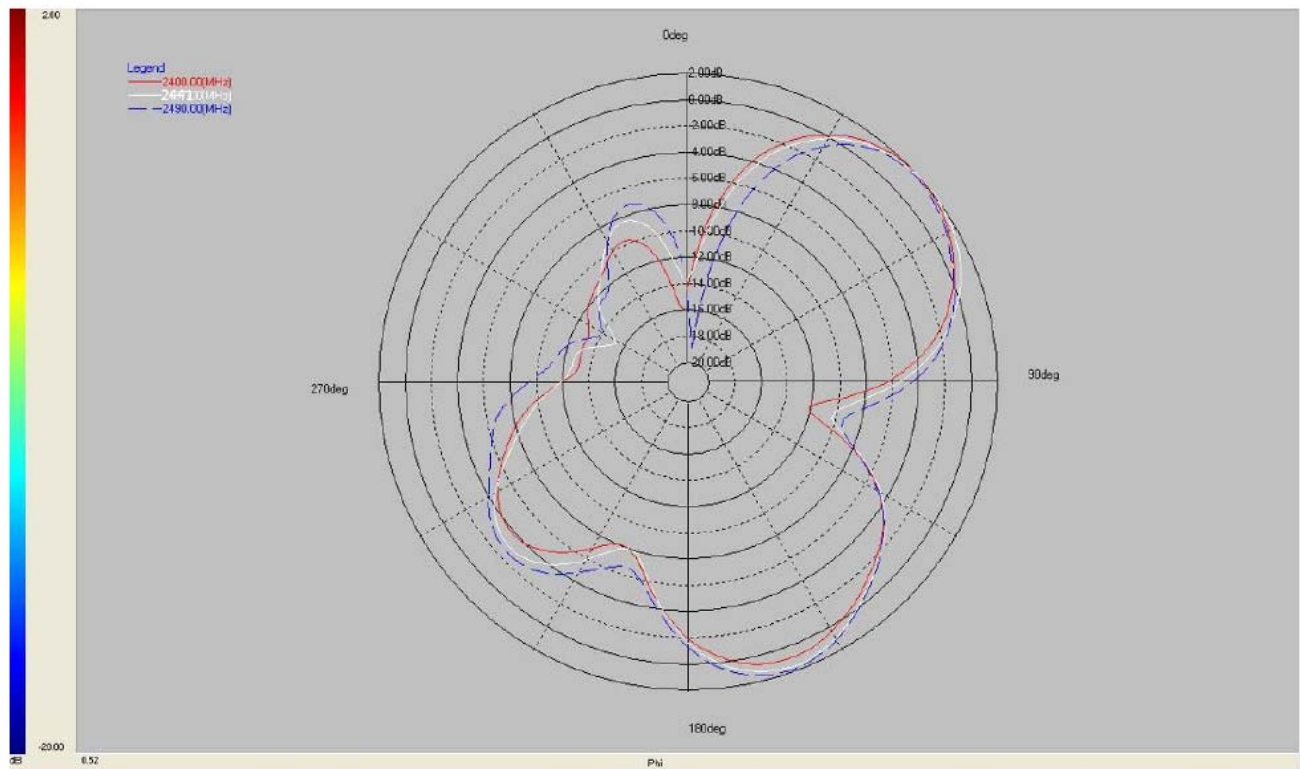
1D Radiation Pattern
PHI =0



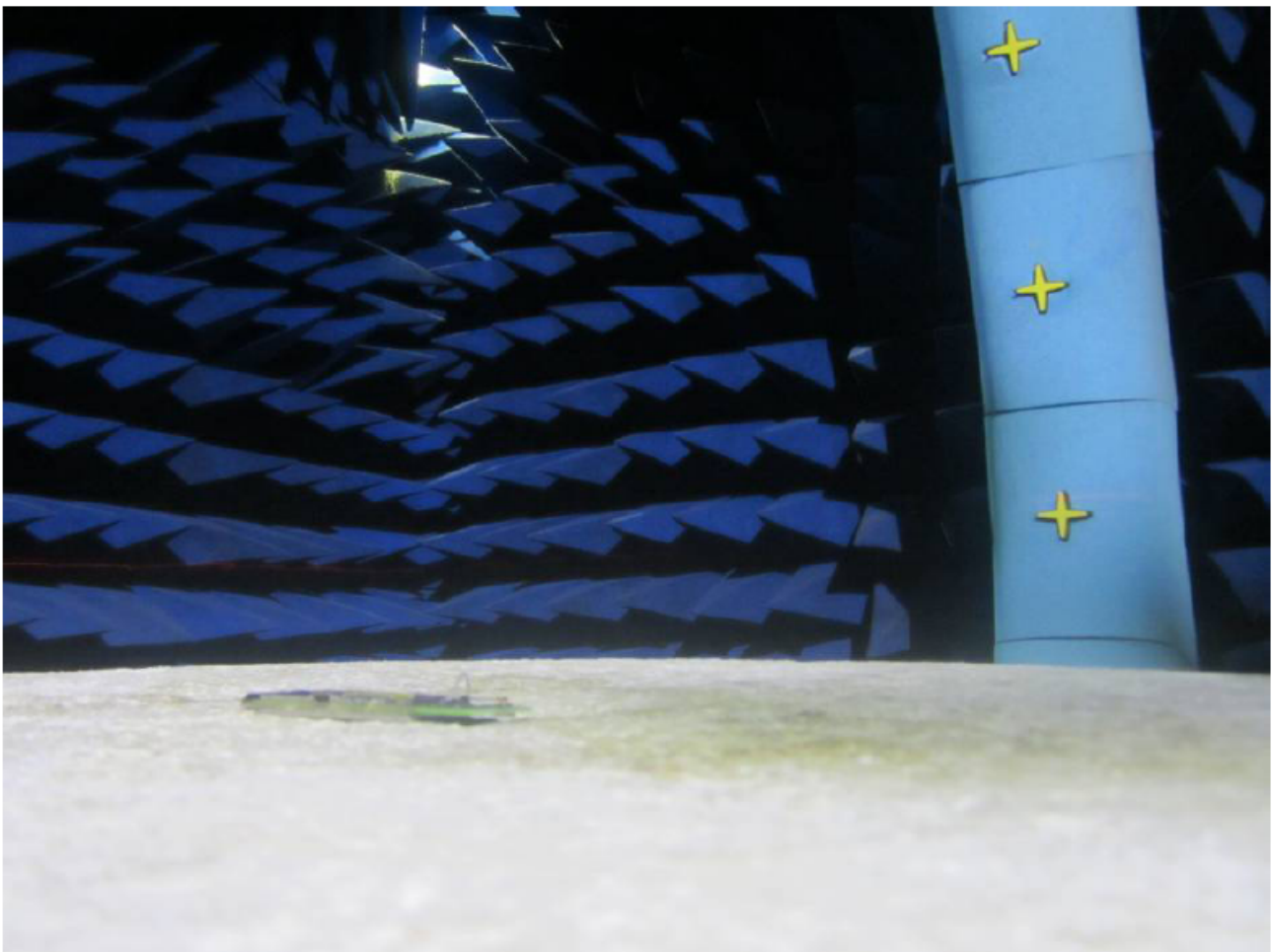
PHI = 90



THETA = 90



ANNEX C TEST SETUP PHOTO



ANNEX D EUT PHOTO

Lenght=50mm

