REPORT No. : SZ18090155E01

TEST REPORT

Applicant	:	Shenzhen Lenodell Technology Co., Ltd
PRODUCT NAME	:	pcb antenna
MODEL NAME	:	N/A
TRADE NAME	:	N/A
BRAND NAME	:	N/A
STANDARD(S)	:	IEEE Std 149-1979
TEST DATE	:	2018-09-13
ISSUE DATE	:	2018-09-14

Tested by: Zhao Zetian

Zhao Zetian(Test Engineer)

Approved by: Andy Yeh

Andy Yeh(Technical Director)

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MORLAB

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Change History		
Issue	Date	Reason for change
1.0	2018-09-14	First edition

1. Technical Information

Note: Provide by manufacturer.

1.1. Manufacturer and Factory Information

Applicant:	Shenzhen Lenodell Technology Co., Ltd
Applicant Address:	2/F Building 10, Zhongyuntai Industrial Park, Shiyan Street, Bao'an District, Shenzhen P.R.C
Manufacturer:	Shenzhen Lenodell Technology Co., Ltd
Manufacturer Address:	2/F Building 10, Zhongyuntai Industrial Park, Shiyan Street, Bao'an District, Shenzhen P.R.C

1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Hardware Version	N/A
Software Version	N/A

2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	IEEE Std 149-1979	IEEE Standard Test Procedures for Antennas

2.2. Test Conditions

Test Environment Conditions：

Relative Humidity:	15 ... 75 %
Temperature:	+10 °C to +30 °C

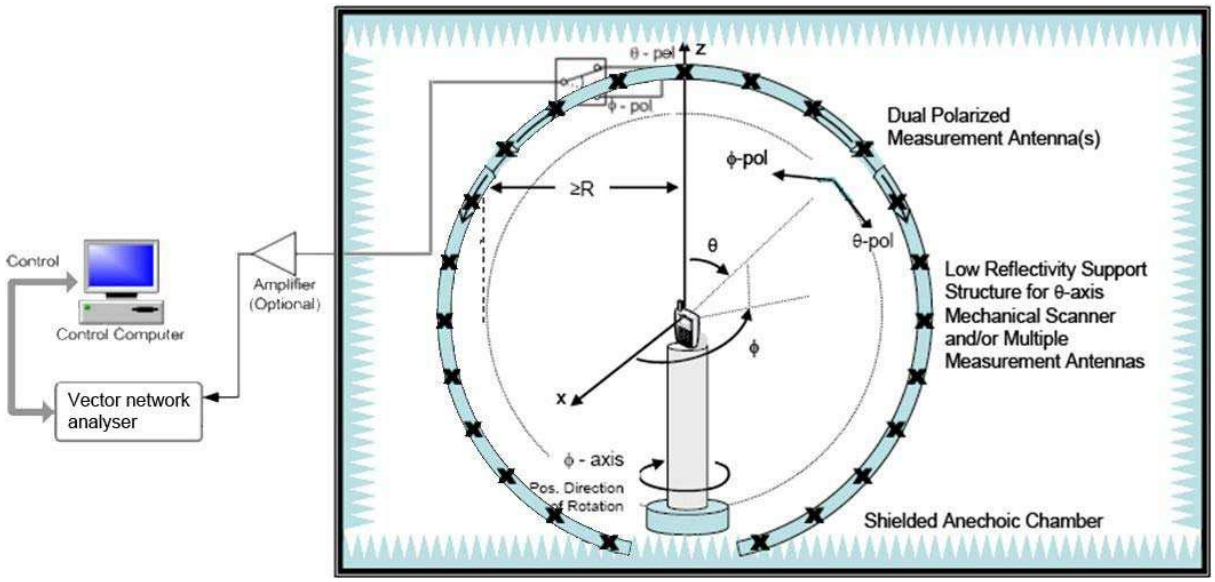
2.3. Test Results lists

2.3.1. Gain

Frequency	Gain(dBi)
2400MHz	-3.36
2410MHz	-2.41
2420MHz	-2.98
2430MHz	-1.89
2440MHz	-3.72
2450MHz	-3.75
2460MHz	-2.25
2470MHz	-3.50
2480MHz	-2.30
2490MHz	-3.09
2500MHz	-3.04

Annex A Photographs

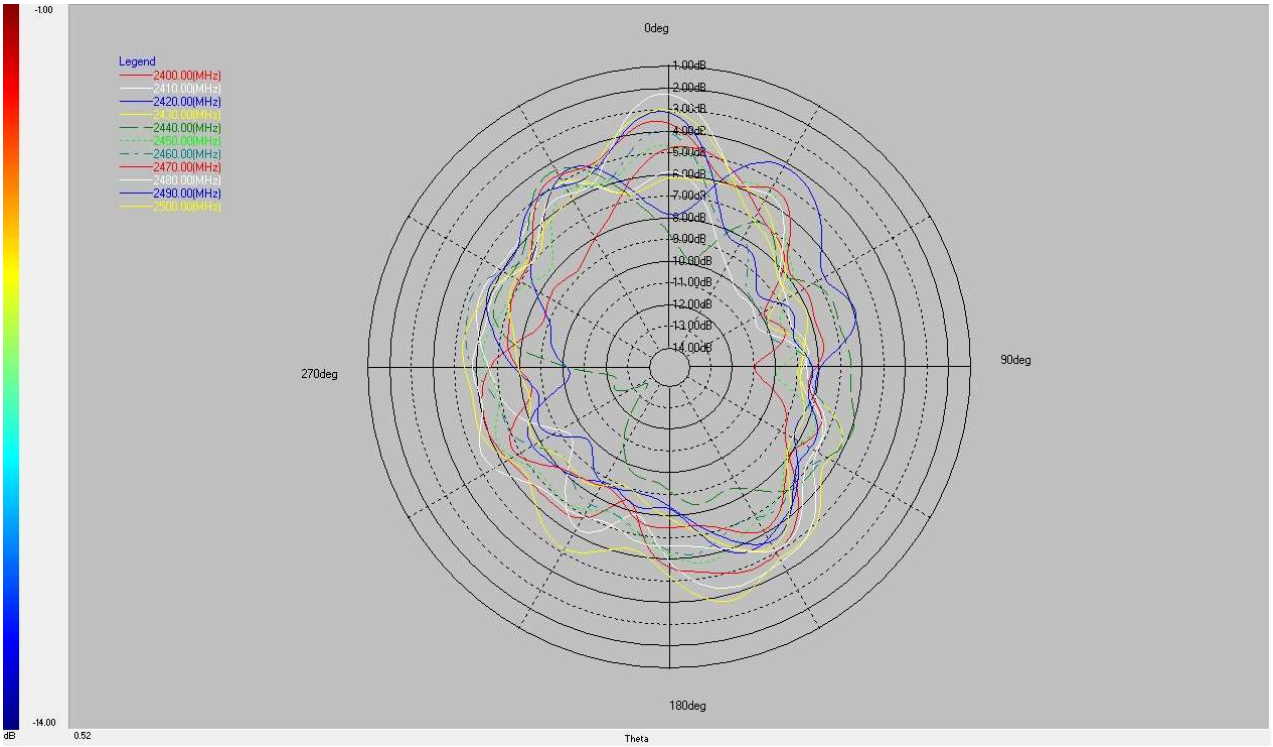
1. Test Setup



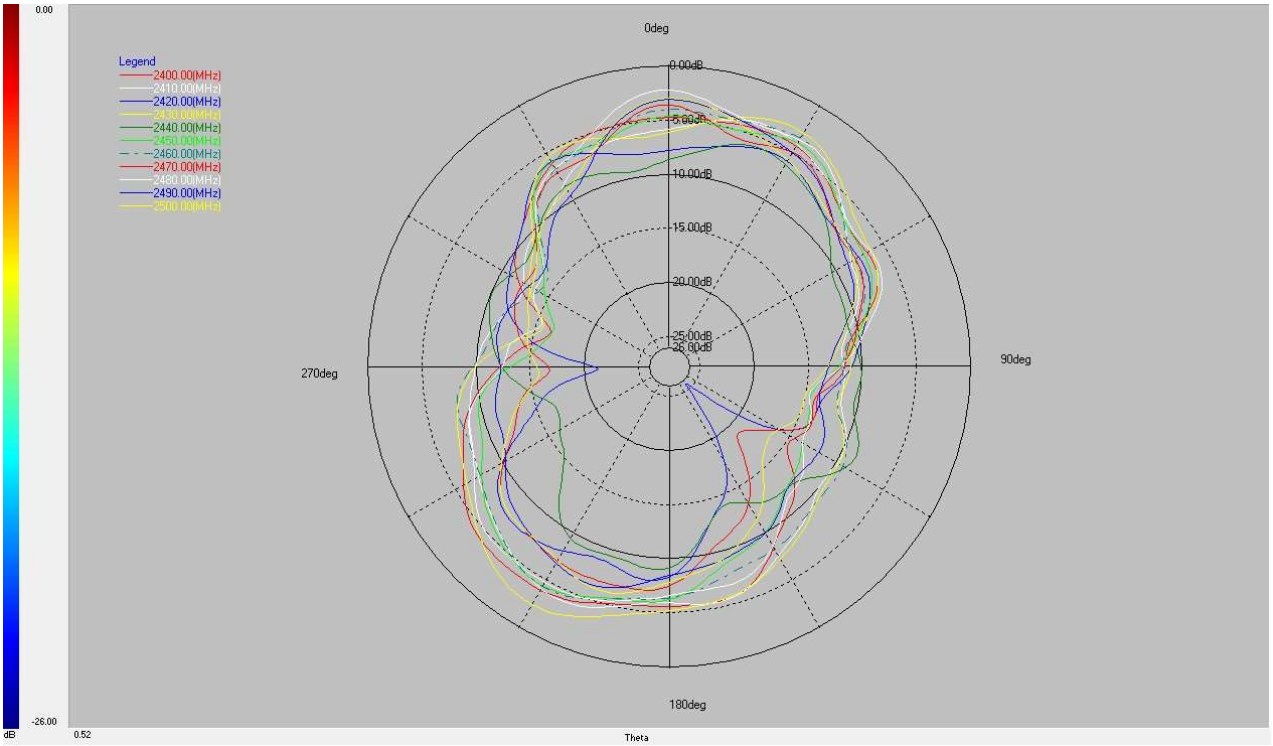
Annex B Figures

1. 2D Radiation Pattern

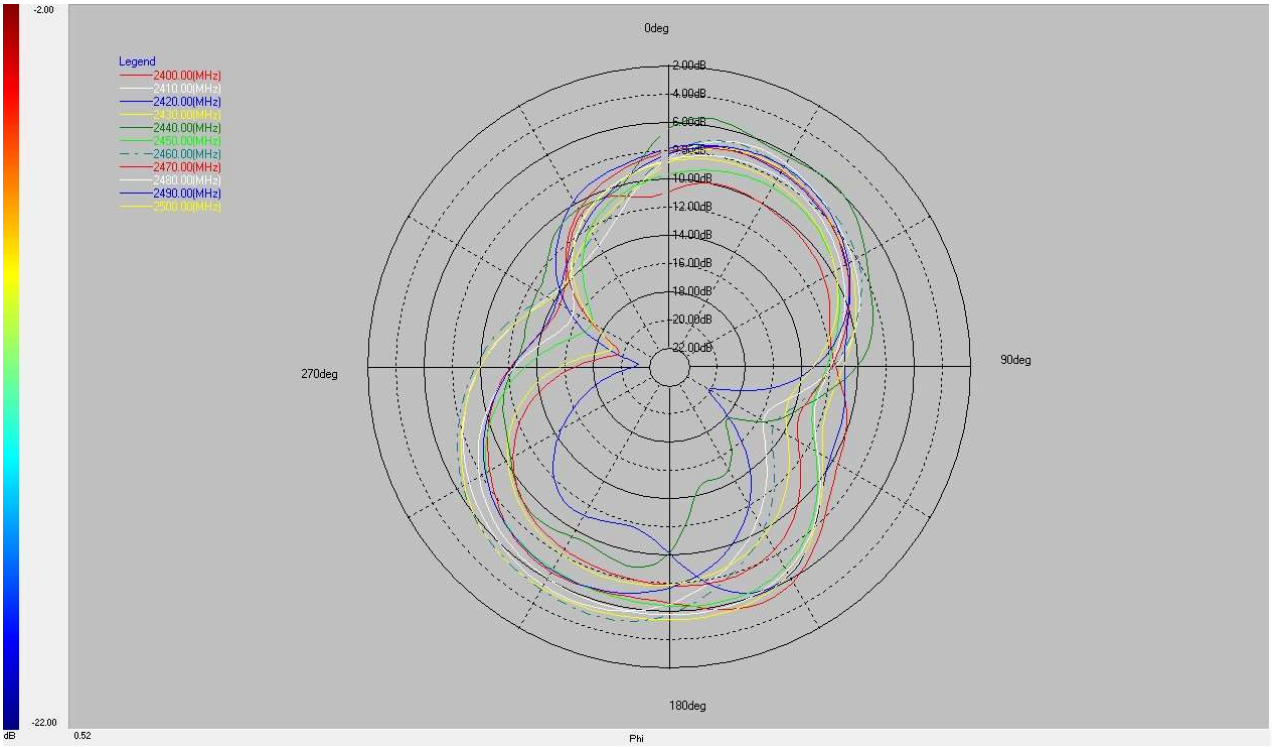
Phi=0°



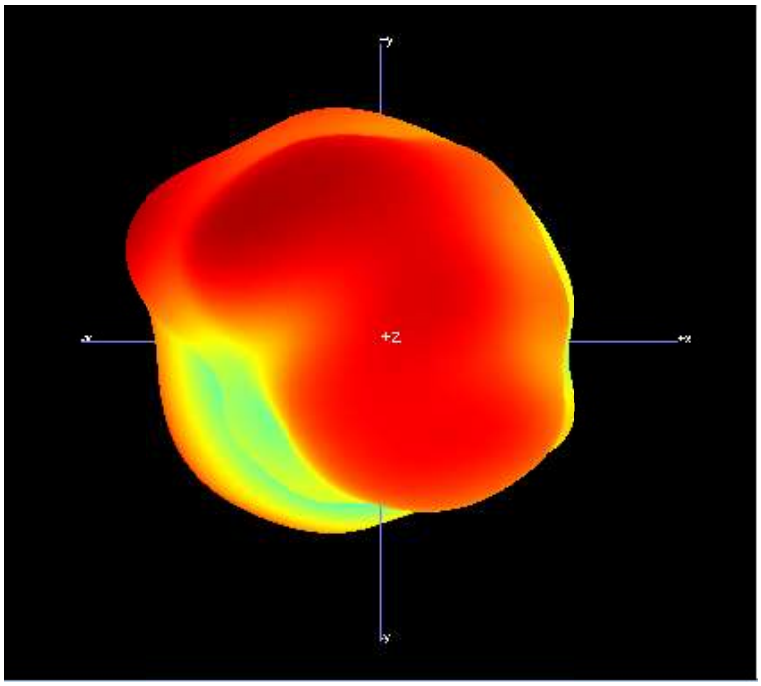
Phi=90°



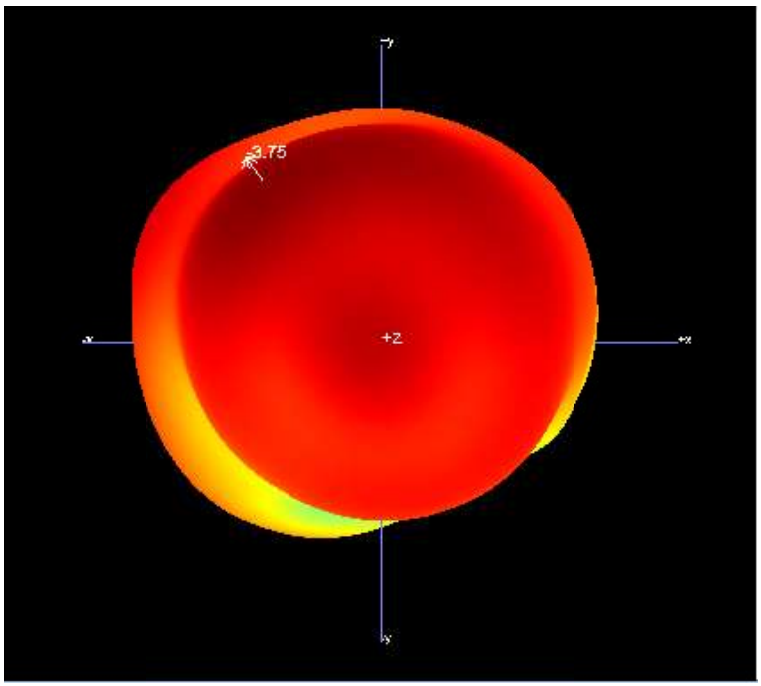
Theta=90°



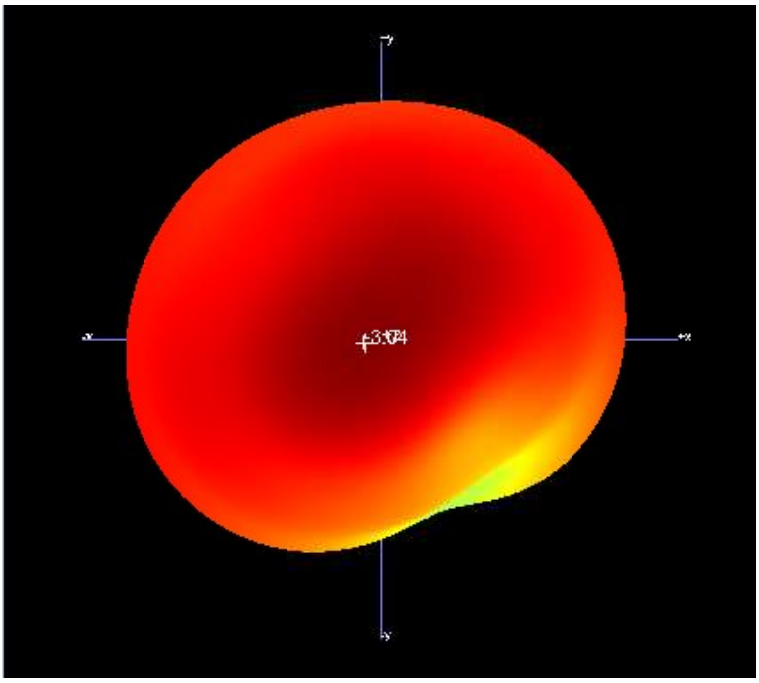
2. 3D Radiation Pattern



2400MHz



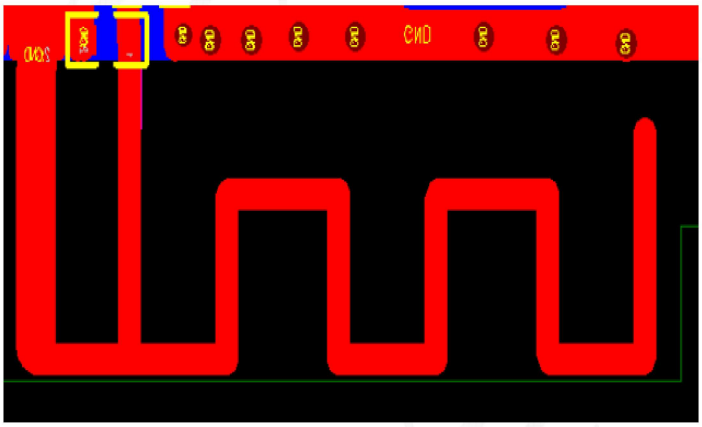
2450MHz

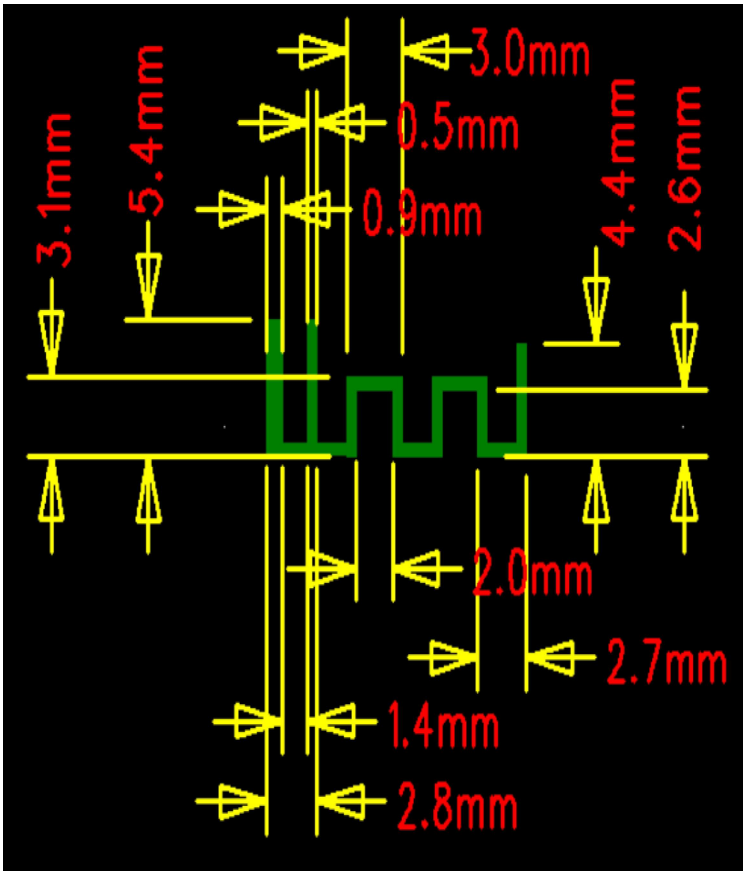


2500MHz

Annex C Photographs

1. EUT





General Information

1.1 Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

1.3 Test Equipments Utilized

1.3.1 List of Test Equipment

No.	Type	Specification
1	E5071C Vector Network Analyzer	Manufacturer: Agilent
2	4*4*4 Full Anechoic Chamber	Manufacturer: Satimo
3	SG24 Multi-probe Antenna Measurement System	Manufacturer: Satimo

END OF REPORT