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OTA TEST REPORT

Report Reference No.: CTL1904108091-001

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(Manager)



Product Name.....: 2.4GHz PCB Antenna

Model/Type reference: BL2.4GPCBAntenna-A

Trade Mark.....: BELON

Applicant's name: Shenzhen BELON SOLUTIONS Co., Ltd.

Address of applicant: Langshan Road, North District, High-tech Park, Nanshan District,
Shenzhen Room 1206-07, Scientific Research Building, Tsinghua
Information Harbor, China

Test Firm: Shenzhen CTL Testing Technology Co., Ltd.

Address of Test Firm: Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road,
Nanshan District, Shenzhen, China 518055

Test specification.....:

Reference Standard: IEEE149-1979

TRF Originator: Shenzhen CTL Testing Technology Co., Ltd.

Master TRF: Dated 2011-01

Date of receipt of test item.....: Apr. 10, 2019

Date of sampling: Apr. 10, 2019

Date of Test Date.....: Apr. 10, 2019-Apr. 12, 2019

Data of Issue.....: Apr. 12, 2019

Result.....: Pass

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TEST REPORT

Test Report No. :	CTL1904108091-001	Apr. 12, 2019
		Date of issue

Equipment under Test : 2.4GHz PCB Antenna

Model /Type : BL2.4GPCBAntenna-A

Applicant : **Shenzhen BELON SOLUTIONS Co., Ltd.**

Address : Langshan Road, North District, High-tech Park,
Nanshan District, Shenzhen Room 1206-07, Scientific
Research Building, Tsinghua Information Harbor,
China

Manufacturer : **Shenzhen BELON SOLUTIONS Co., Ltd.**

Address : Langshan Road, North District, High-tech Park,
Nanshan District, Shenzhen Room 1206-07, Scientific
Research Building, Tsinghua Information Harbor,
China

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified page 5.

The test results presented in this report relate only to the object tested.

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1 SUMMAR OF TEST RESULTS

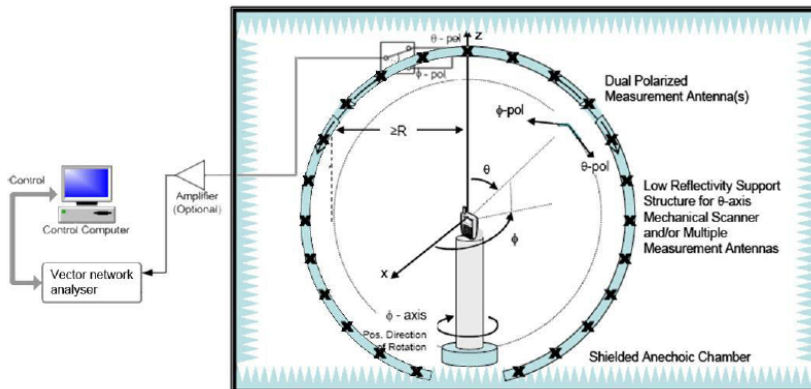
1.1 Equipment under Test

No.	EUT status
1#	intact

1.2 Test method

1. Test 5 antennas under Standard IEEE149-1979 and record the test results(first test results).

1.3 Test Setup



1.4 Test Conditions

For twice test conditions, please see the table below:

Test No.	Test date	Ambient Pressure(KPa)	Temperature(°C)	Relative Humidity(%)
1	2019.04.10	100-102	19-25	45-60

1.5 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Vector Network Analyzer	Agilent	E5071C	MY46103472	2018.1.25	2019.1.25
5*5*5 Full Anechoic Chamber	SATIMO	5*5*5	CN-1307-555	2018.09.28	2019.09.28
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2018.12.4	2019.12.4

1.6 Test Uncertainty

Item	Uncertainty
Gain	±0.5dB

2 TEST ITEM AND RESULTS

2.1 1#

First Test results:

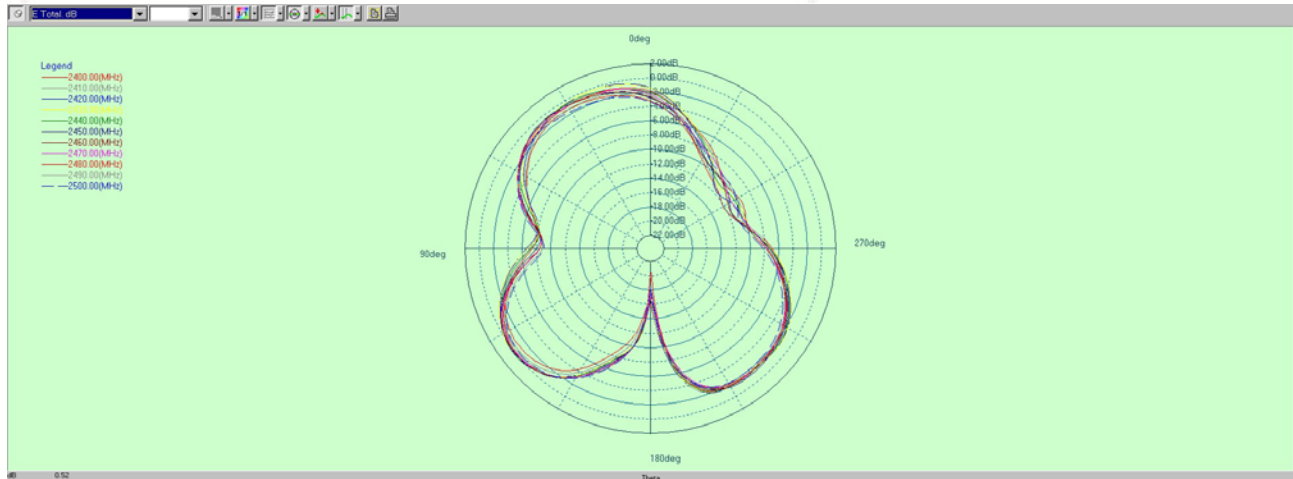
2.4GHz

Gain and Efficiency

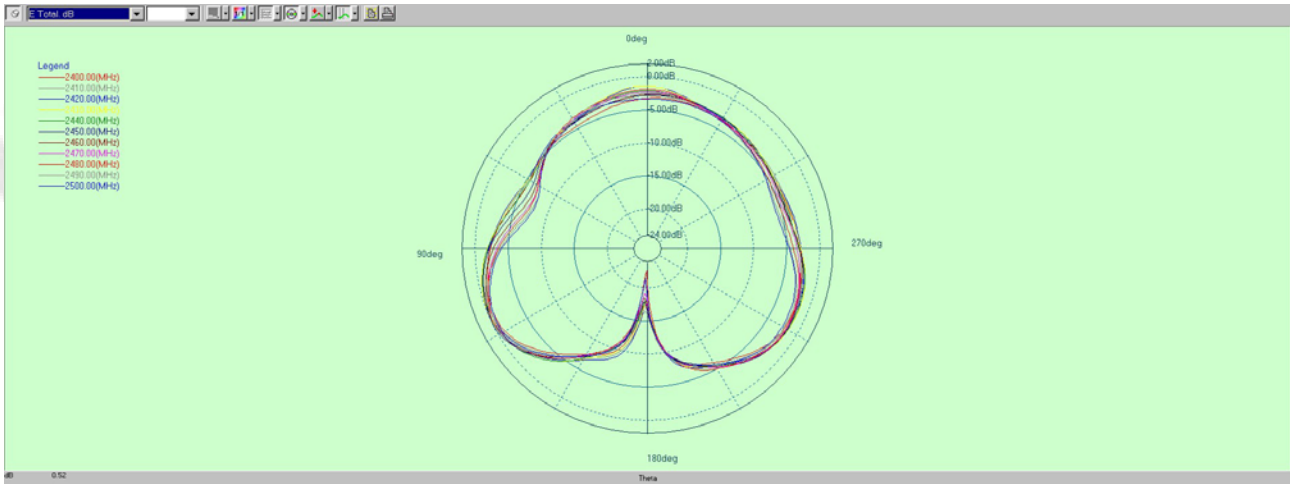
EUT NO	1#	
Frequency	E Total. dB(dBi)	Efficiency()
2400MHz	-0.05	43%
2410MHz	0.22	45%
2420MHz	0.67	49%
2430MHz	0.92	50%
2440MHz	0.86	49%
2450MHz	1.08	48%
2460MHz	0.88	46%
2470MHz	0.63	45%
2480MHz	0.55	45%
2490MHz	0.59	43%
2500MHz	0.41	41%

Radiation Pattern

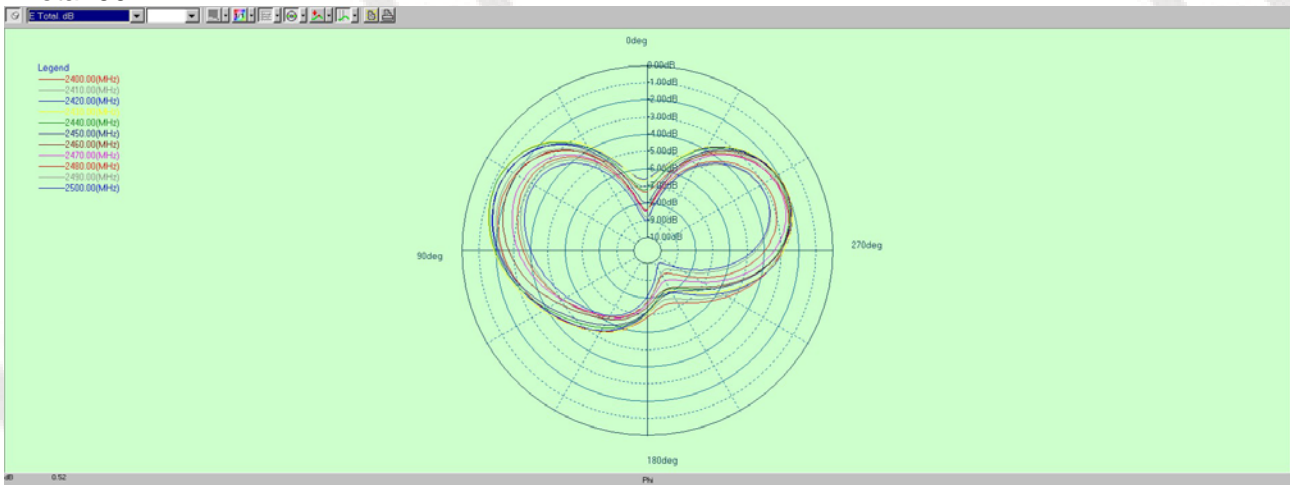
Phi=0



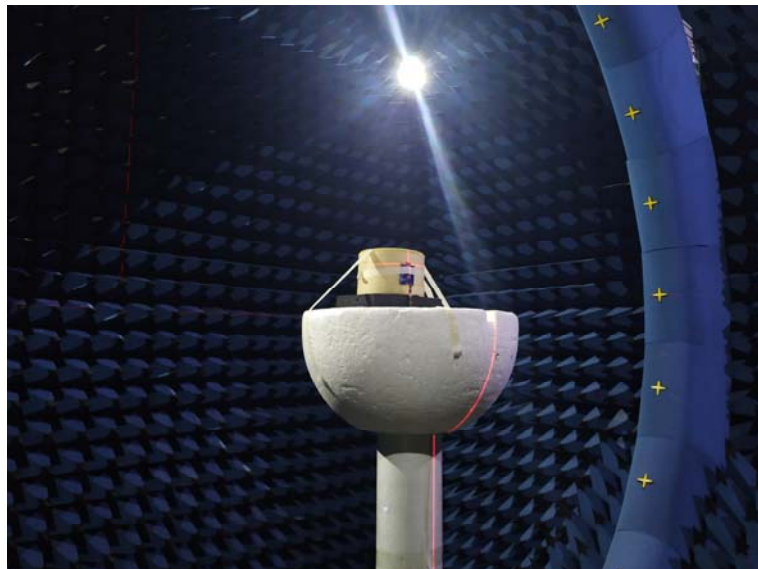
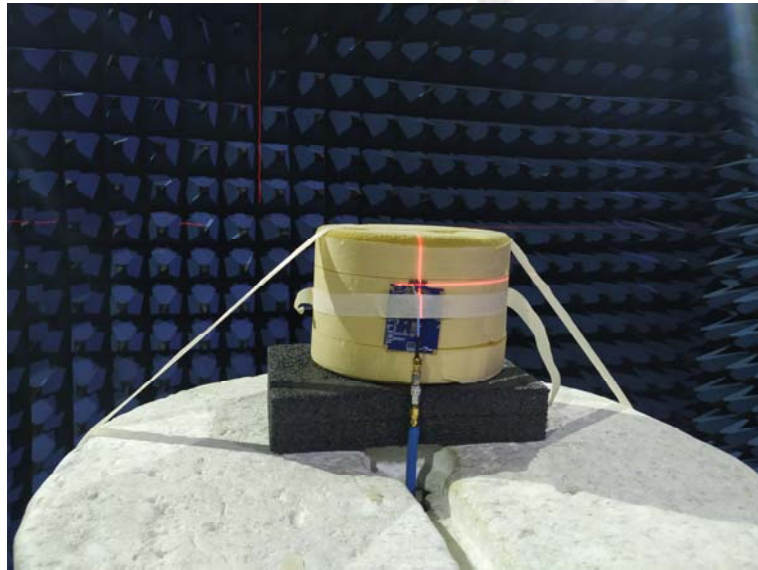
Phi=90



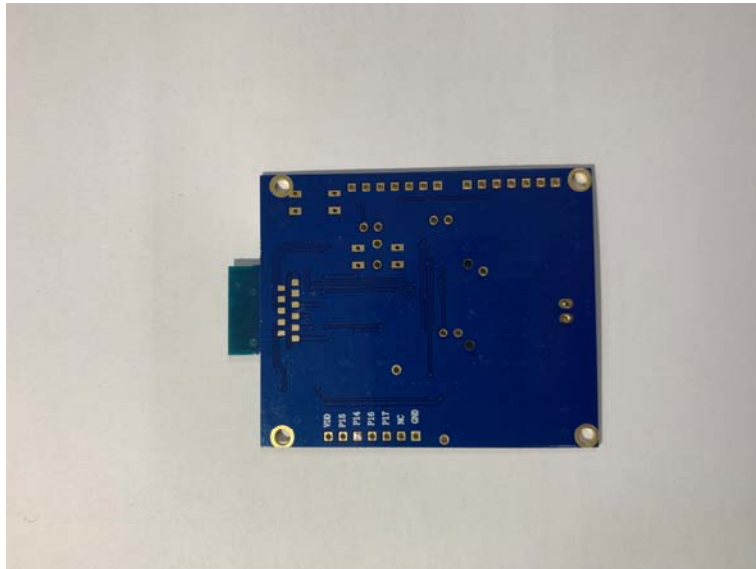
Theta=90



3 Test Setup Photos of the EUT



4 Photos of the EUT



***** End of Report *****