Shenzhen CTL Testing Technology Co., Ltd.
Tel: +86-755-89486194 E-mail: ctl@ctl-lab.com

OTA TEST REPORT

Report Reference No. ..... :	**CTL1904108091-O02**	
Compiled by: (position+printed name+signature)	Happy Guo (File administrators)	Happy Guo
Tested by: (position+printed name+signature)	Nice Nong (Test Engineer)	Nice Nong
Approved by: (position+printed name+signature)	Ivan Xie (Manager)	Ivan Xie

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**

TEST REPORT

Test Report No. :	CTL1904108091-O02	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 *

* 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.
This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.

** Modified History **

Revision	Description	Issued Data	Report No.	Remark
Version 1.0	Initial Test Report Release	2019-04-10	CTL1904108091-O02	Tracy Qi

Contents

1 SUMMAR OF TEST RESULTS

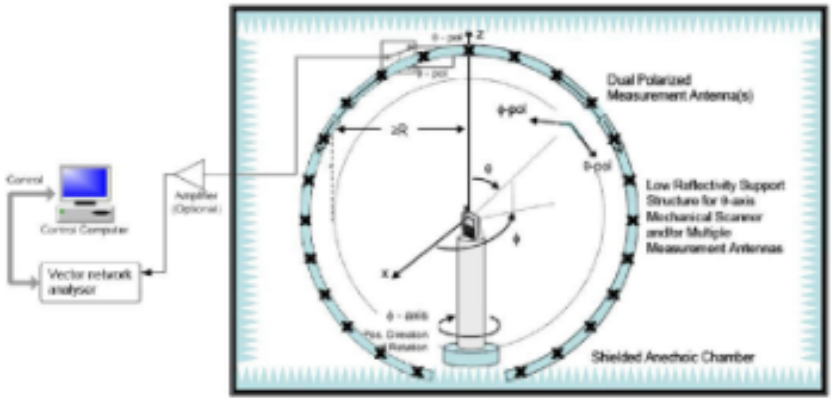
1.1 Equipment under Test

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(℃)	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

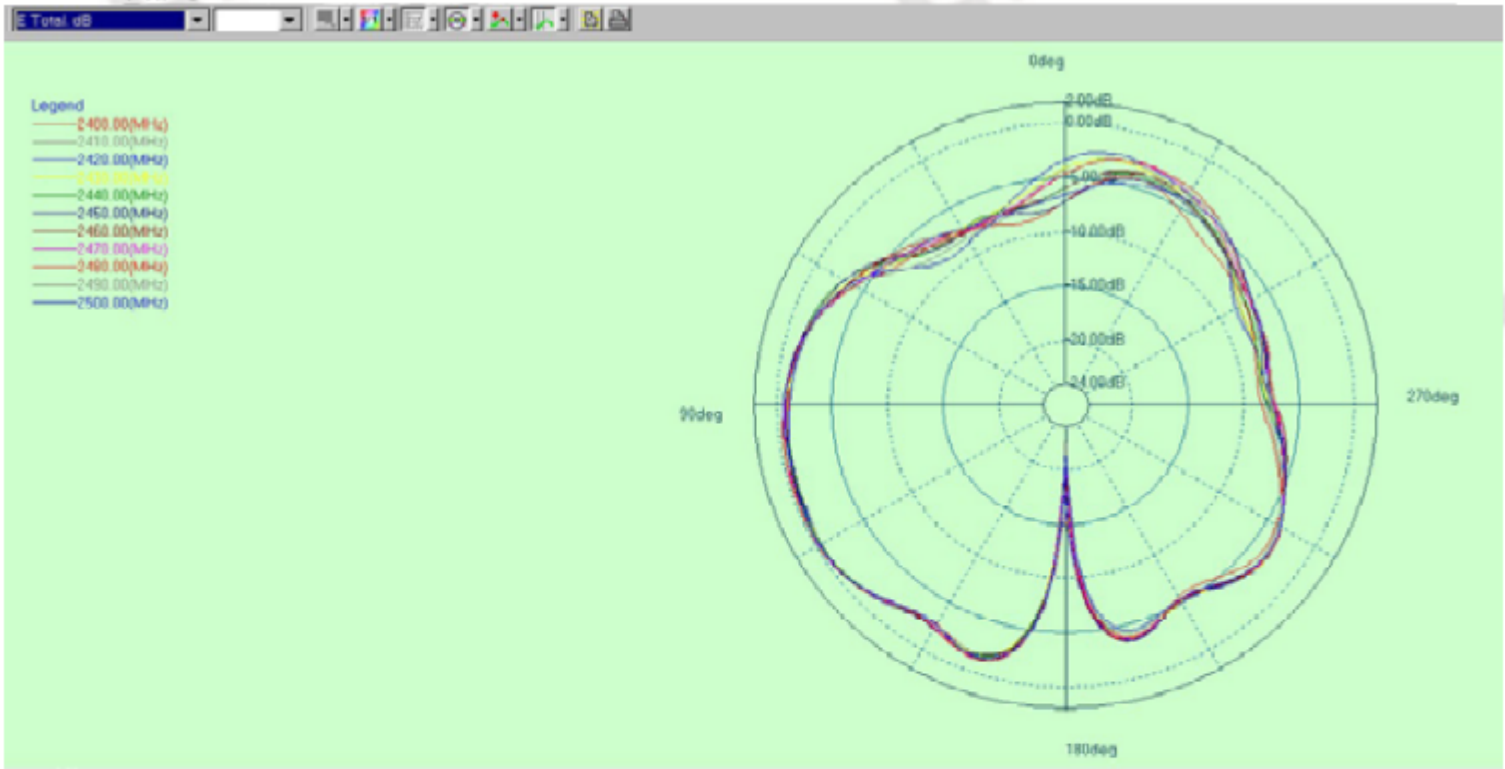
2 TEST ITEM AND RESULTS

2.1 1#

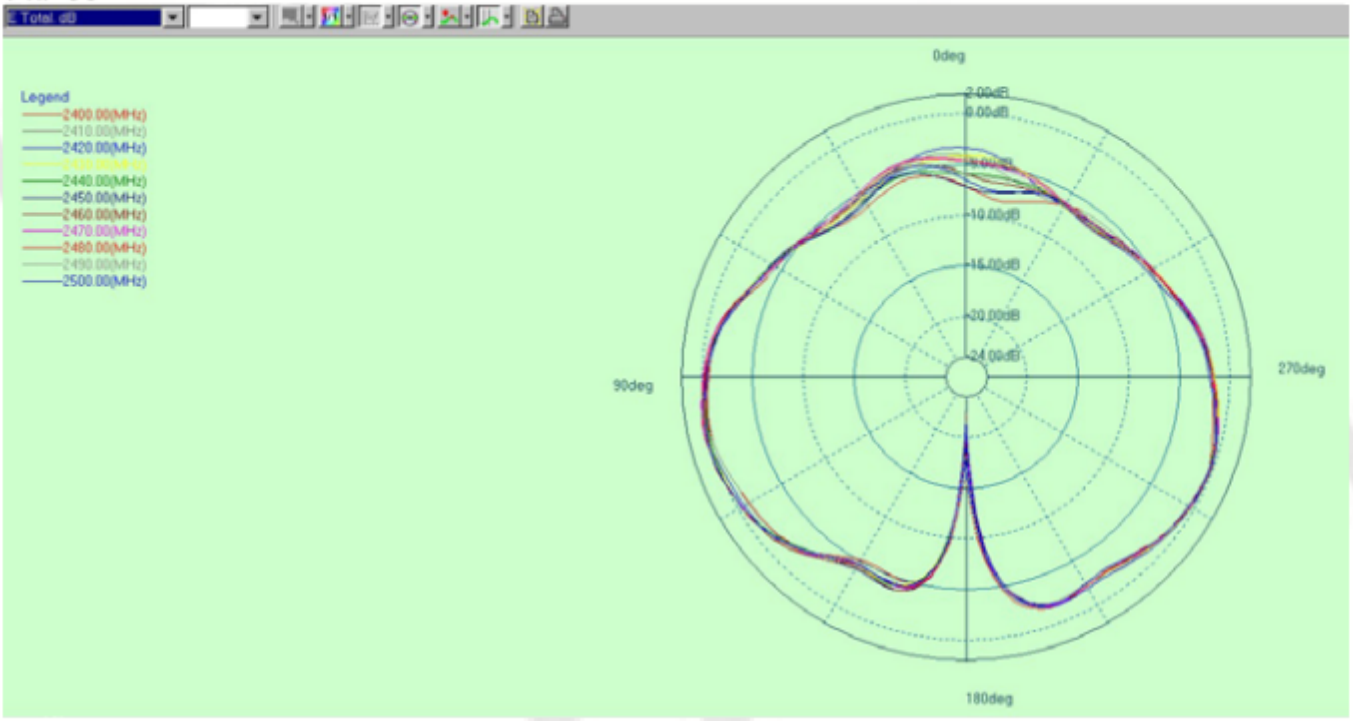
First Test results:
2.4GHz
Gain and Efficiency

EUT NO	2#	
Frequency	E Total. dB(dBi)	Efficiency( )
2400MHz	0.61	49%
2410MHz	0.54	50%
2420MHz	0.59	52%
2430MHz	0.62	52%
2440MHz	0.60	51%
2450MHz	0.66	52%
2460MHz	0.85	53%
2470MHz	0.99	53%
2480MHz	1.03	53%
2490MHz	0.88	51%
2500MHz	0.78	51%

Radiation Pattern
Phi=0



Phi=90



Theta=90