



Dongguan YiJia Electronics Communication Technology Co., Ltd.

SPECIFICATION FOR APPROVAL

Date 2024/03/19
File No 24031902
Revision 1.0

CUSTOMER: Dongguan Fyrnetics Co., Ltd.

CUSTOMER NO: E04-000014


PART NAME: 915MHz Antenna L=165mm MHF

SUPPLIER NO: YJL01.156.009.302A

Date:

Q'TY:

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A



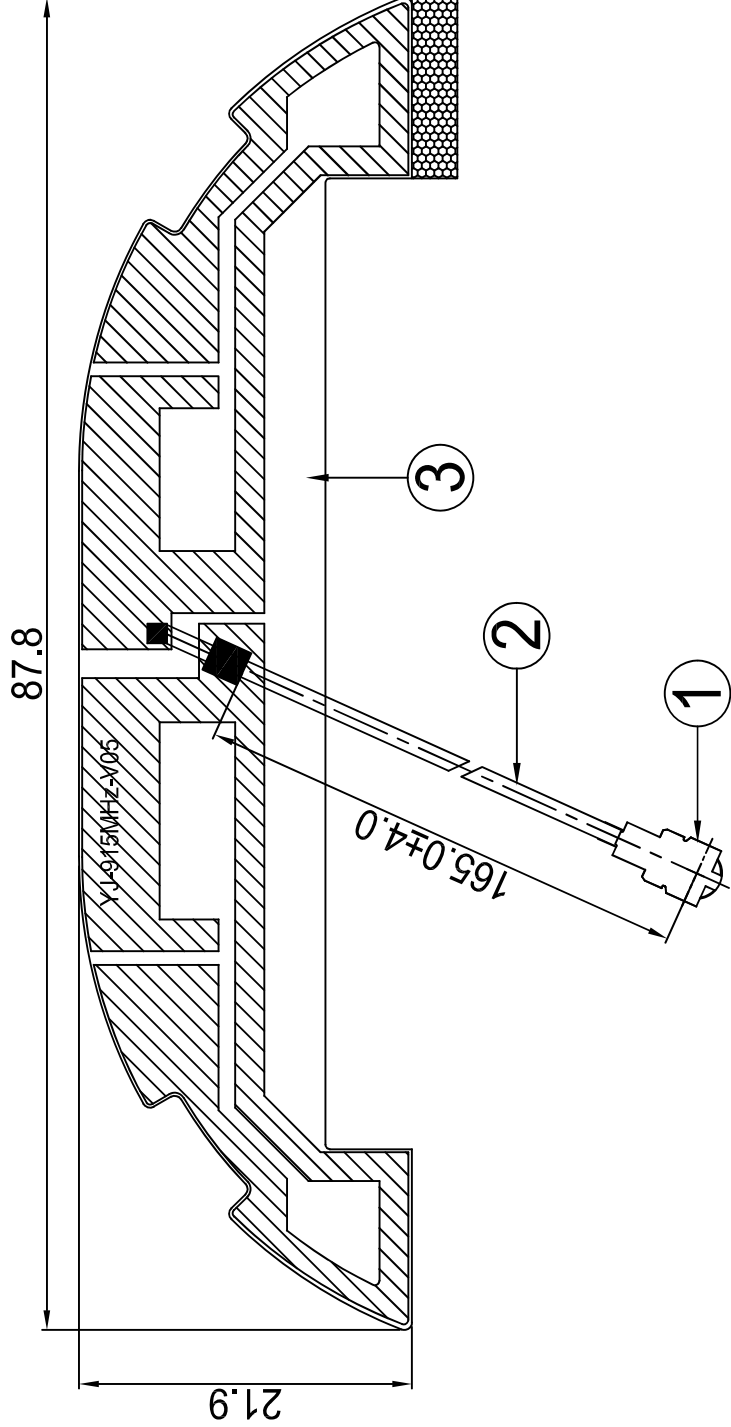
Spec Item

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11	N/A	N/A	N/A
12	-	-	-
13	-	-	-

RoHS
Compatible

CUSTOMER
PART NO

REV.	DESCRIPTION	DATE
A	首次发行	2023-09-16
B	修改FPC及线长	2023-11-03
C	修改离型纸	2023-11-08
D	修改FPC	2024-01-08



东莞市一佳电子通讯科技有限公司
Dongguan Yijia Electronics Communication Technology Co., Ltd. Tel: 0769-82586086 Fax: 0769-82586086

PART NAME: 915MHz Antenna L=165mm MHF

PART NO.: YJL01.156.009.302A

DATE: 2024-01-08

NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY
3	FPC	87.8*21.9mm	FPC	FPC11XXXXA,P01	1
2	Coaxial Cable	O.D.1.13 Gray	O.D.1.13	COA100XXXXA,P01	1
1	Mini Connector	Au Plated 1代 (原厂)	Cu	TER100XXXXA,P01	1

APPROVED BY: 何清军

CHECKED BY: 周棋

DESIGNED BY: 廖光喜

Tolerance	UNITS: mm	SCALE: 1/1	REVISION: D
X.X ±0.50			
X.XX ±0.15			
X° ±3°			



Antenna Specification

Electrical Properties

Frequency	915MHz
Impedance	50 Ohm Nominal
V.S.W.R	2.5 Max
Gain	0.3 dBi
Radiation	Omni-directional
Polarization	Linear

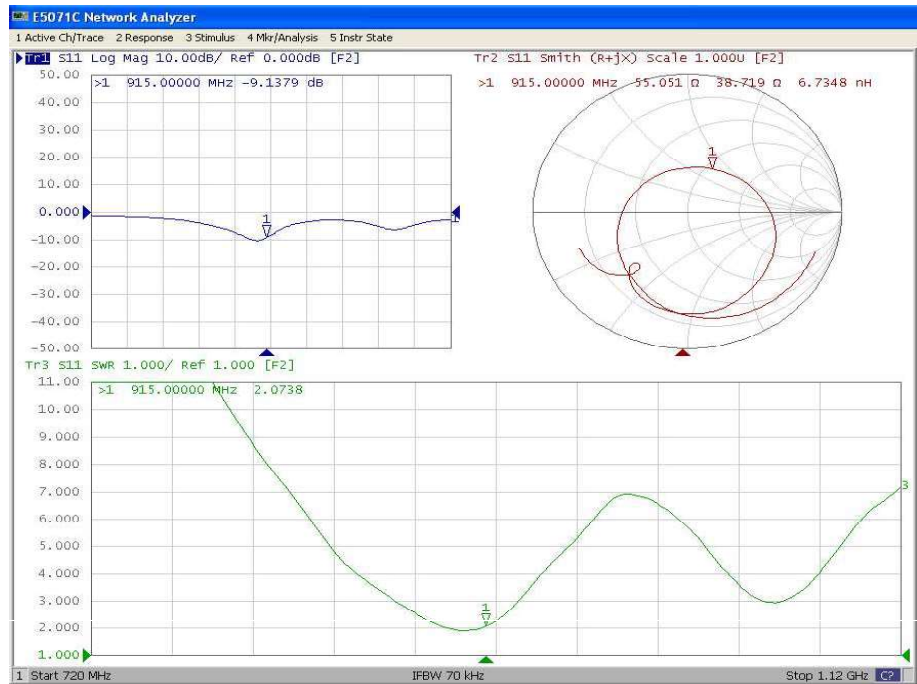
Test Conditions

DUT SN/PN	ES7-RW-131200#
Equipment Used	XH-IOE MPS2450 5*5*5m
Active Tester	Rohde&Schwarz CMW500
Passive Tester	Rohde&Schwarz ZVB8
Notes	Battery installed



Antenna Performance Test

**Agilent
E5071B
S11
Parameter
Test //
Lora
Antenna**



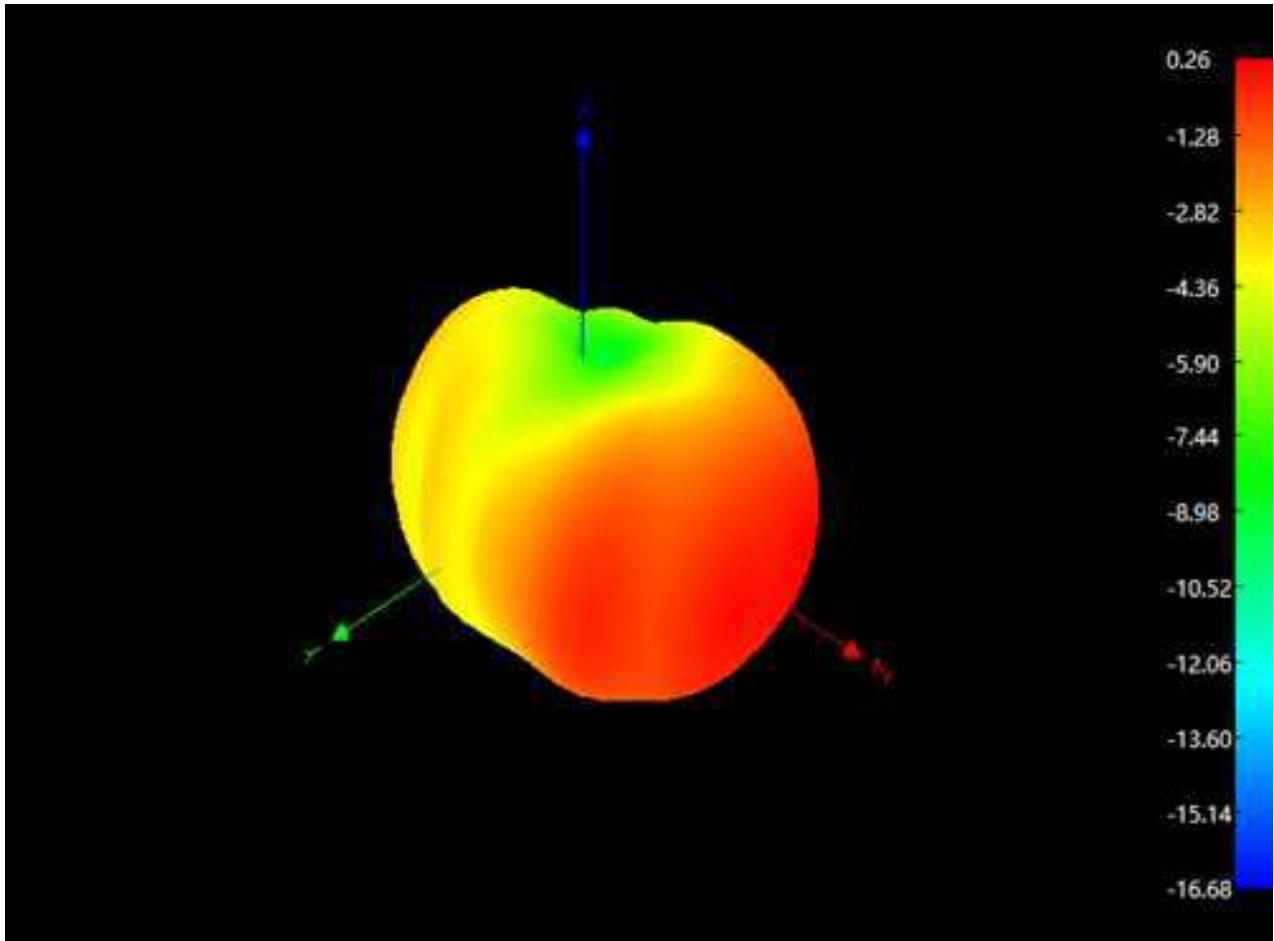


Passive Test For Lora Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
900	28.3	-5.5	0.4
903	29.4	-5.3	0.5
906	28.6	-5.4	0.3
909	28.4	-5.5	0.2
912	28.8	-5.4	0.1
915	28.7	-5.4	0.3
918	27.5	-5.6	0.4
921	26.3	-5.8	0.3
924	26.2	-5.8	0.4
927	25.8	-5.9	0.5
930	25.1	-6.0	0.5



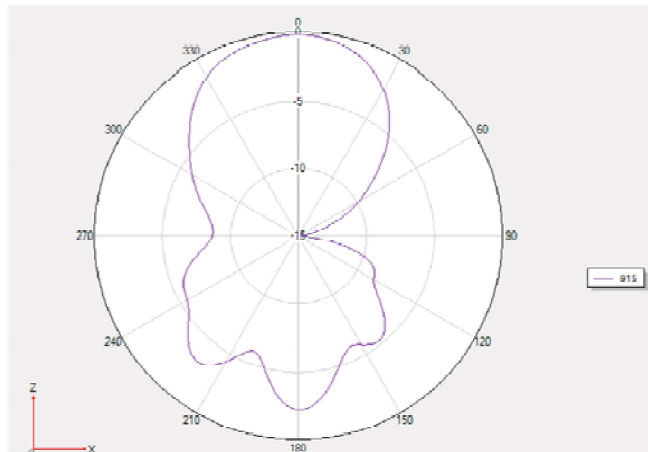
Radiation Pattern For Lora Antenna (915MHz)



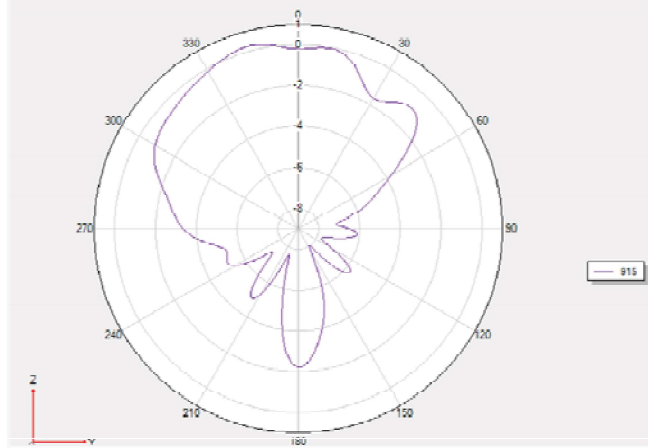


Radiation Pattern For Lora Antenna

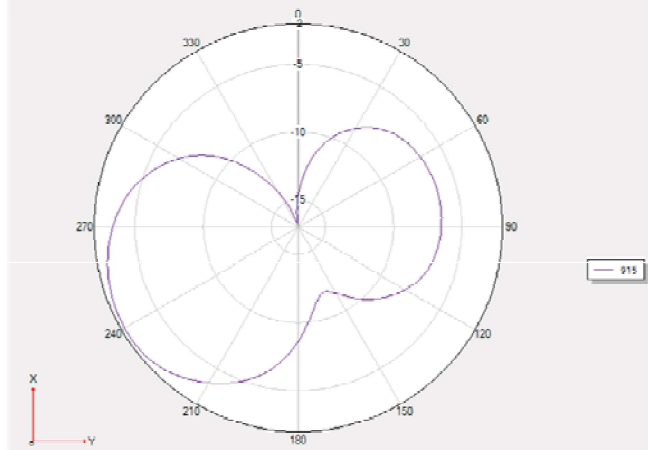
Phi 0°



Phi 90°



Theta 90°





Device





Lora Antenna





Lora Antenna

WiFi Antenna