

承認書

SPECIFICATION FOR APPROVAL

☒樣品承認 ☐新品承認 ☐規格/材質變更承認

客戶名稱(Customer):	正文科技股份有限公司		
客戶料號(Customer P/N):			
產品料號(Product No.):	A8-A003-00106		
產品品名(Product Name):	DIP 915MHz 0dBi d13 BLACK SMA MALE		
文件編號(Approved No):			
日期(Issued Date):	2017 年 04 月 12 日		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

TSKY 天凱科技股份有限公司 TSKY CO., LTD.

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業務	核准	審核	主辦員

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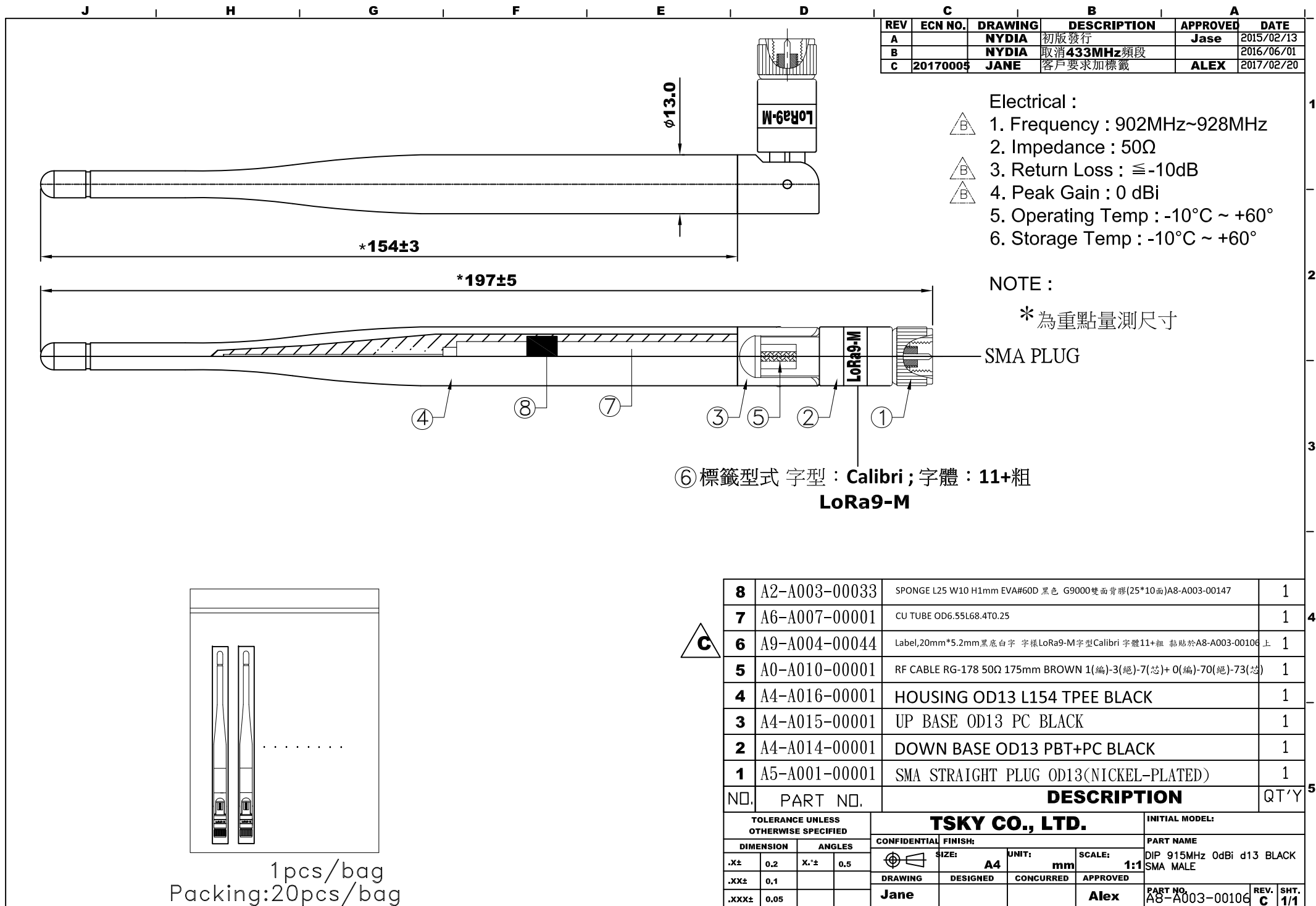
Specification

- **Electrical Properties :**

1. Frequency : 902MHz~928MHz
2. Impedance : 50Ω
3. Return Loss : $\leq$ -10dB
4. Peak Gain : 0dBi

- **Physical Properties :**

1. Material :
HOUSING :TPEE(BLACK)
UP BASE : PC(BLACK)
DOWN BASE: PBT+PC(BLACK)
2. Connector : SMA PLUG
3. Operation temperature : -10°C ~ +60°C
4. Storage temperature : -10°C ~ +60°C



WSMS-116 902~928MHz External Dipole Test Report

Gemtek Antenna Team

Wireless Broadband Anywhere
<http://www.gemtek.com.tw>

2015/06/16

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■ Product / Antenna Overview

■ Test Results

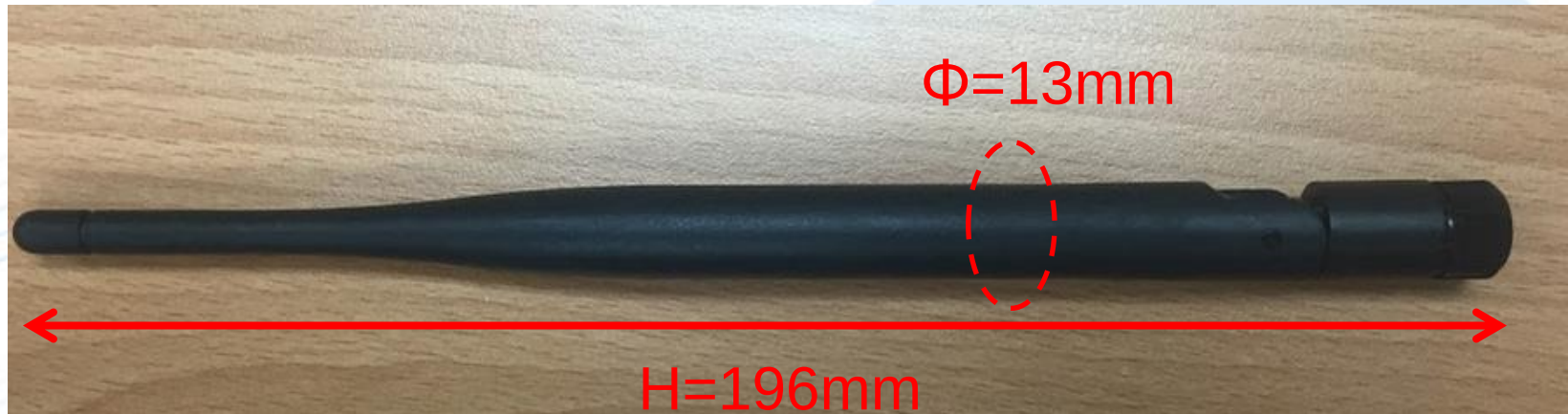
- ❖ Antenna Return Loss
- ❖ Antenna Radiation Pattern
- ❖ Antenna Gain Data & Efficiency

■ Conclusions

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Antenna Overview

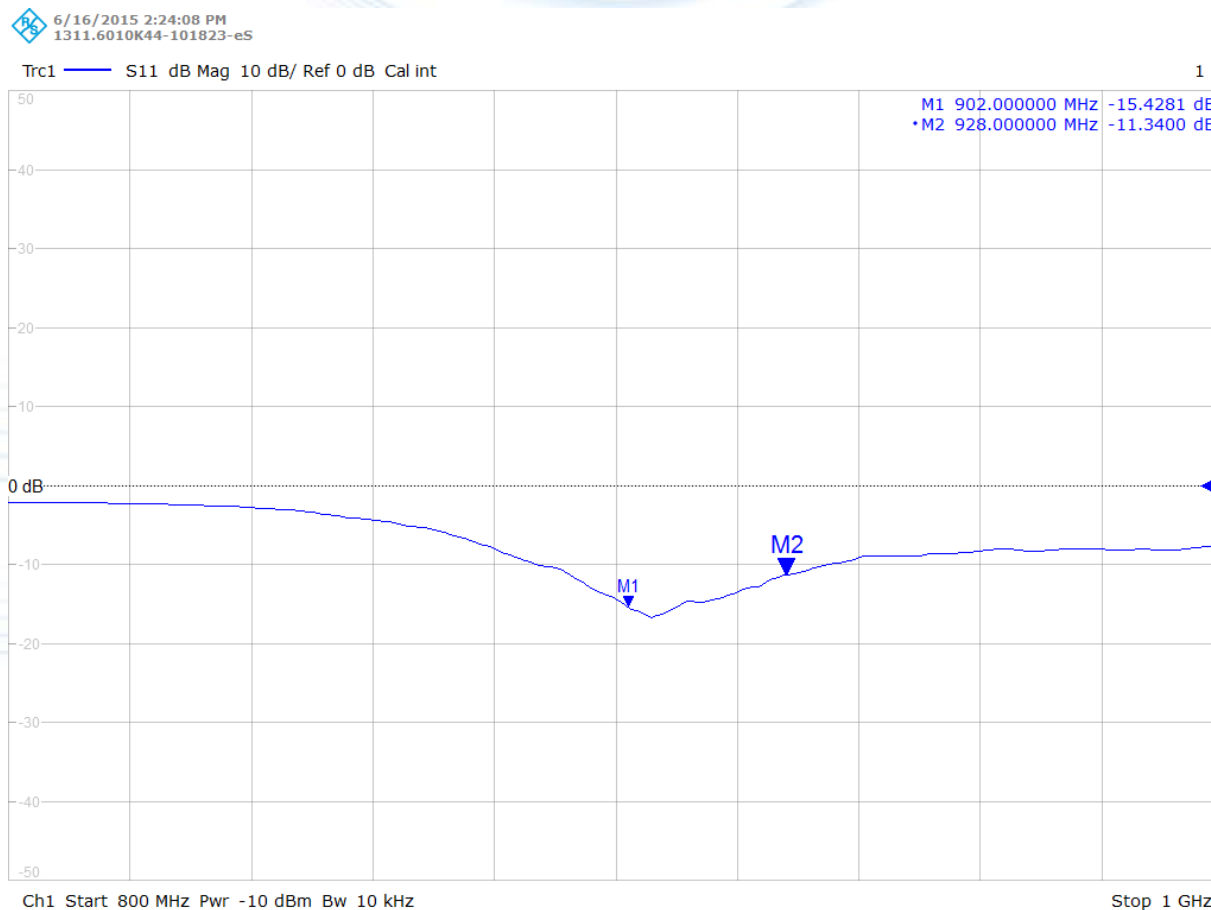
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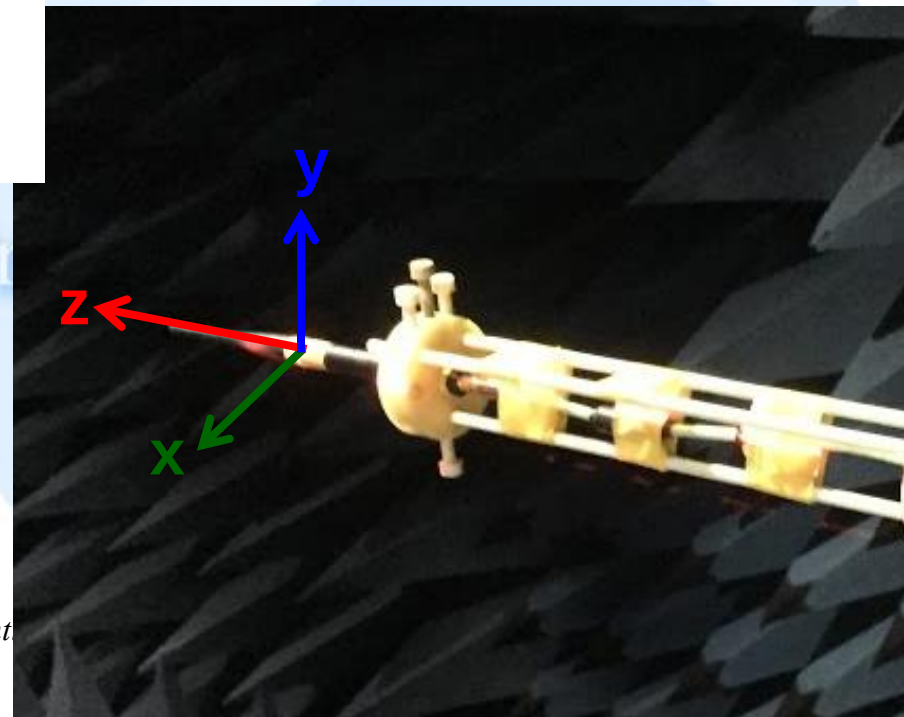
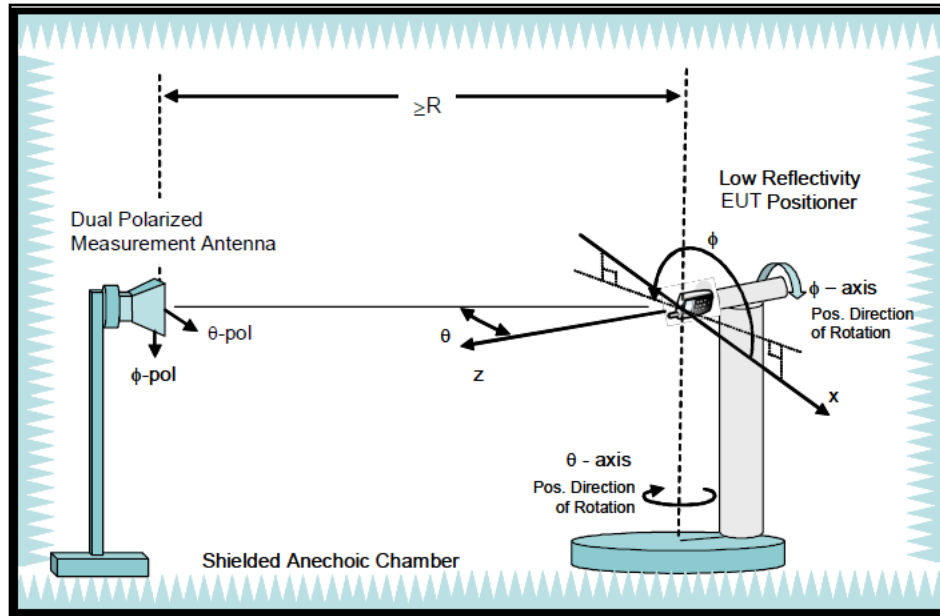
Antenna Return Loss

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Antenna Coordinate System Definition

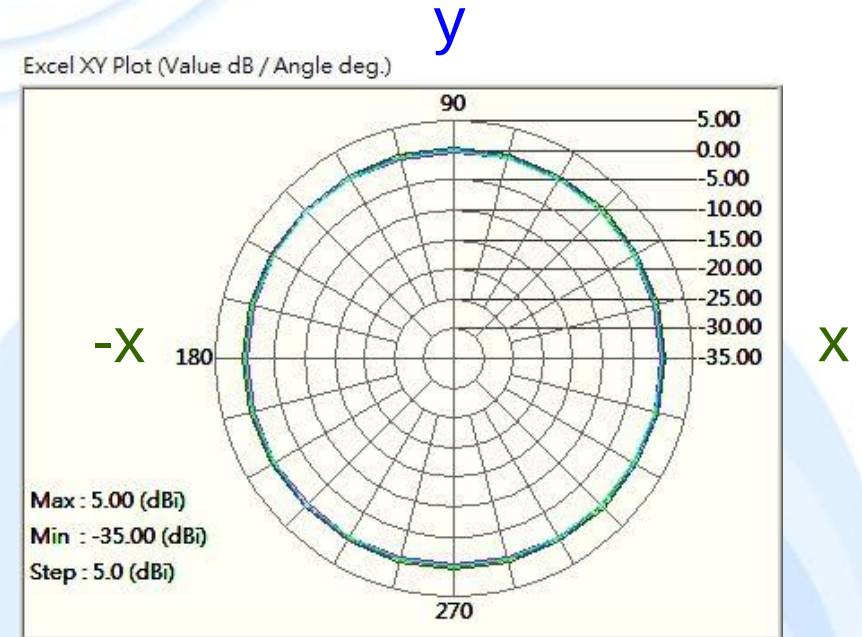
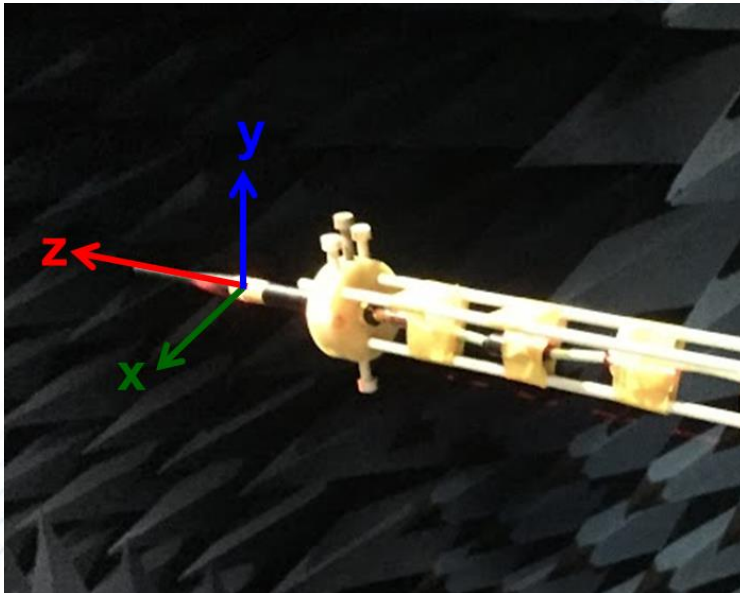
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Ant Gain_Total at XY-Plane

(Operation Frequency = 900MHz ~ 930MHz)

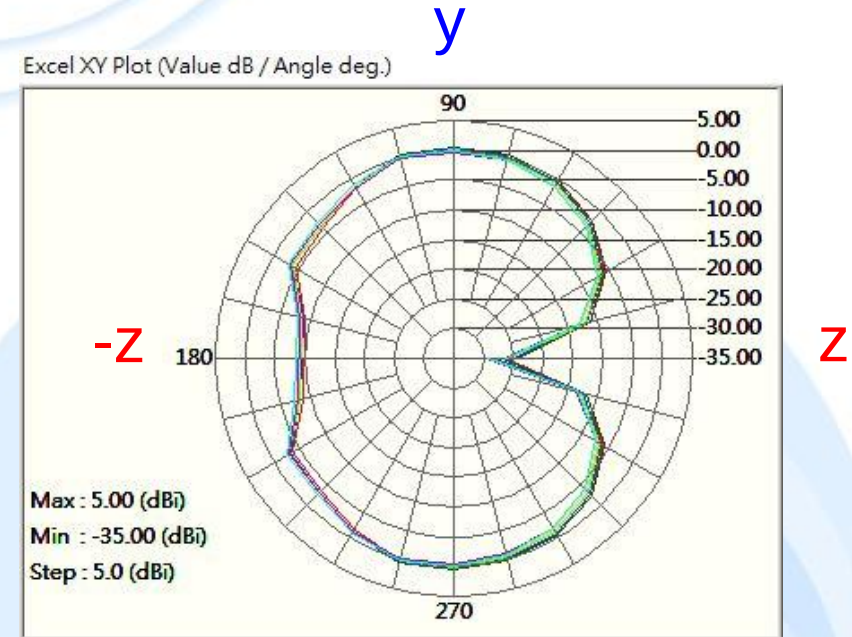
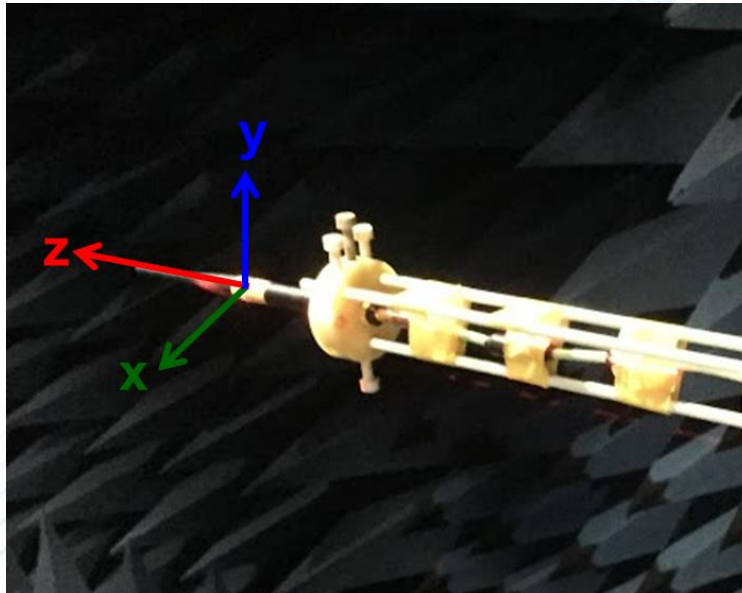
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Frequency (MHz)	900	905	910	915	920	925	930
Trace Color							
Peak Gain (dBi)	0.35	0.57	0.39	0.14	-0.1	-0.27	-0.11

Ant Gain_Total at YZ-Plane (Operation Frequency = 900MHz ~ 930MHz)

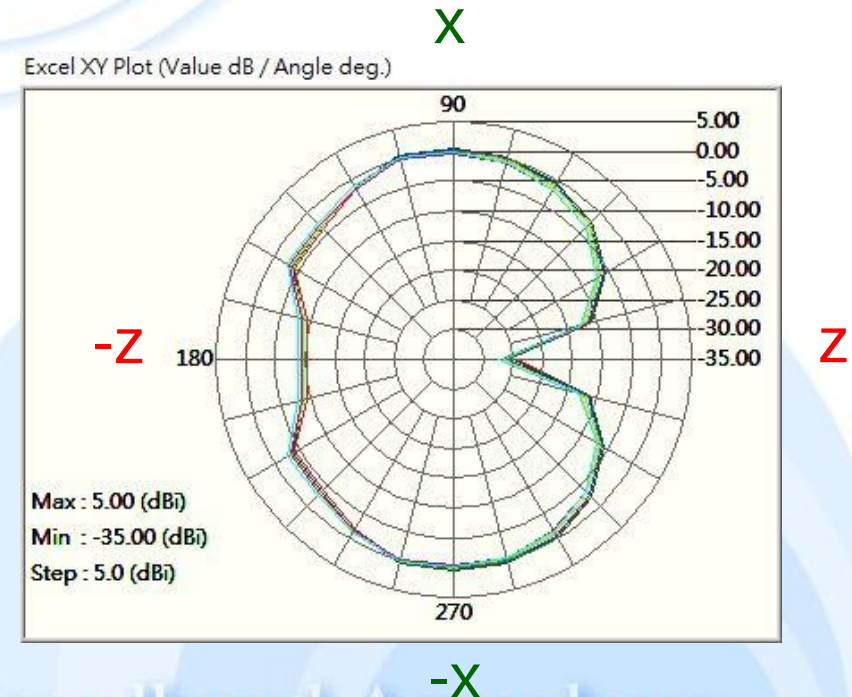
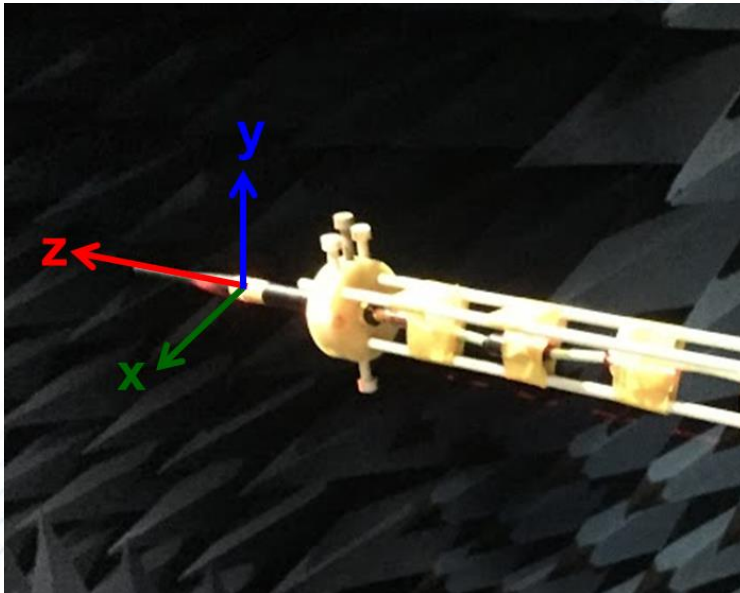
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Frequency (MHz)	900	905	910	915	920	925	930
Trace Color							
Peak Gain (dBi)	0.29	0.56	0.42	0.28	0.14	0	0.24

Ant Gain_Total at ZX-Plane (Operation Frequency = 900MHz ~ 930MHz)

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Frequency (MHz)	900	905	910	915	920	925	930
Trace Color							
Peak Gain (dBi)	0.23	0.48	0.35	0.21	0.08	-0.04	0.21

Ant Gain Data & Efficiency

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902~928MHz Waterproof External Dipole							
Frequency (MHz)	900	905	910	915	920	925	930
Efficiency (dB)	-1.45	-1.23	-1.4	-1.59	-1.78	-1.93	-1.71
Efficiency (%)	71.61	75.34	72.44	69.34	66.37	64.12	67.45
Peak Gain (dBi)	0.35	0.57	0.42	0.28	0.14	0	0.24

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- In 902MHz~928MHz, return loss is more than 10dB.
- In 902MHz~928MHz, efficiency is more than 60%.
- In xy-plane, the radiation pattern is approximate omnidirectional.

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