


## 2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	902-930 MHz
S.W.R.	$\leq 2.0$
Antenna Gain	$8.5 \pm 0.5 \text{dBi}$
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	GFRP
Cable Type	RG141
Connecter Type	N Male
Pull Test	$\geq 5 \text{ Kg}$
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

### 3. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2011/65/EU
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

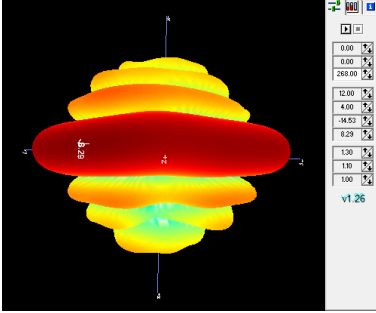
## 4. Antenna - S Parameter Test Data



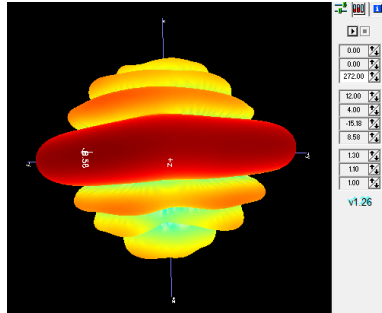
频率	增益 (dBi)	效率	不圆度
900MHz	8.29	73.66%	1.54
901MHz	8.45	76.08%	1.54
902MHz	8.58	78.03%	1.55
903MHz	8.66	79.09%	1.56
904MHz	8.69	79.21%	1.57
905MHz	8.67	78.51%	1.59
906MHz	8.55	77.30%	1.58
907MHz	8.49	76.03%	1.59
908MHz	8.43	74.56%	1.60
909MHz	8.39	73.58%	1.61
910MHz	8.39	73.35%	1.61
911MHz	8.42	73.54%	1.60
912MHz	8.49	74.47%	1.60
913MHz	8.58	75.79%	1.60
914MHz	8.69	77.52%	1.59
915MHz	8.81	79.38%	1.60
916MHz	8.80	80.39%	1.59
917MHz	8.83	80.48%	1.57
918MHz	8.80	79.56%	1.56
919MHz	8.74	78.14%	1.57
920MHz	8.64	76.02%	1.58
921MHz	8.53	73.80%	1.61
922MHz	8.42	71.65%	1.62
923MHz	8.34	70.24%	1.63
924MHz	8.33	69.81%	1.64
925MHz	8.36	70.23%	1.64
926MHz	8.30	70.76%	1.53
927MHz	8.38	72.04%	1.54
928MHz	8.49	73.67%	1.55
929MHz	8.56	74.83%	1.55
930MHz	8.57	74.96%	1.57

## 5. Antenna - Radiation Pattern Test Data

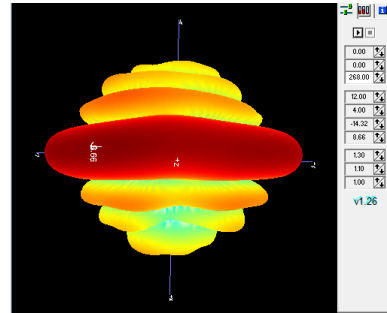
PIN=0



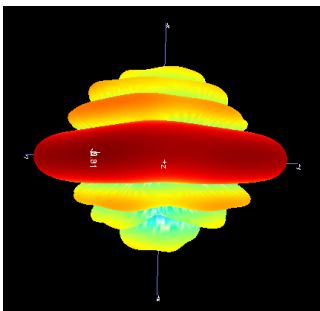
900



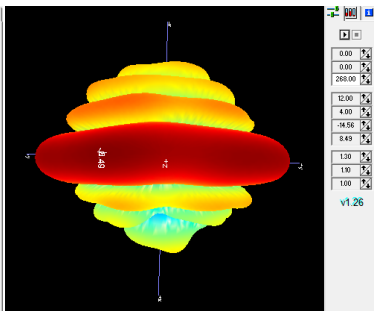
902



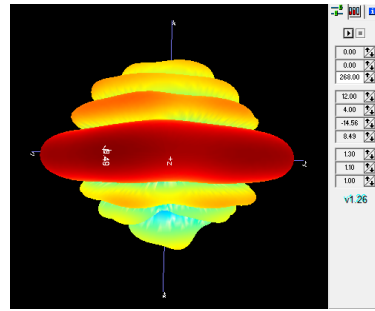
903



915



928

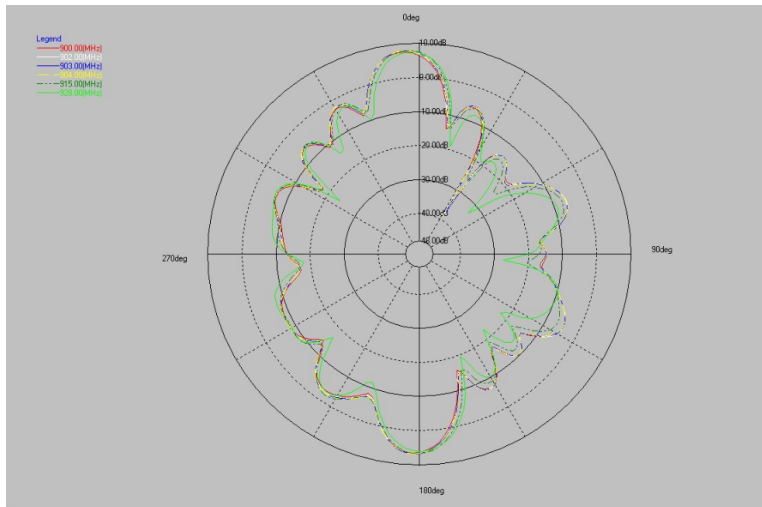


928

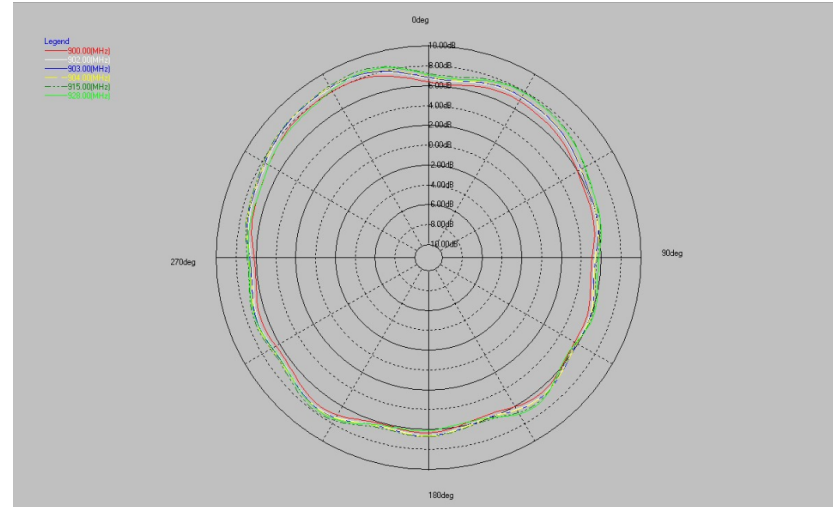
## 6. Mechanical Drawing See attached files

See attached files

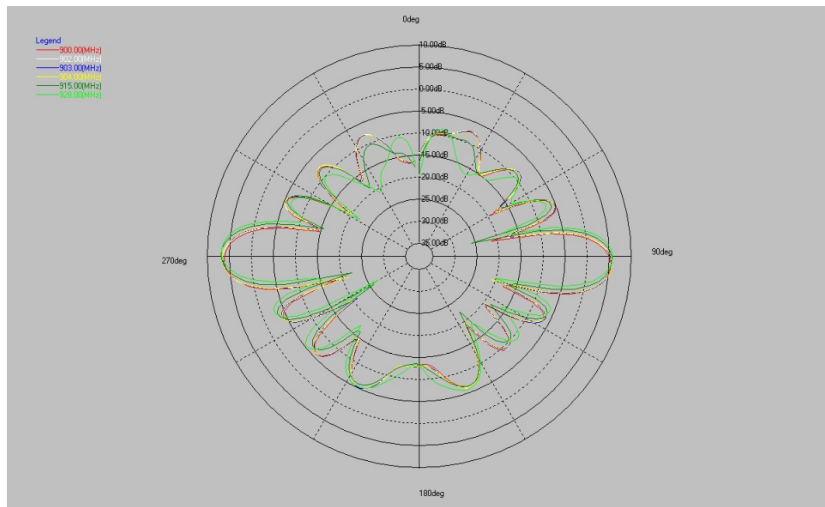
# 7. Material Description and RoHS Test Report



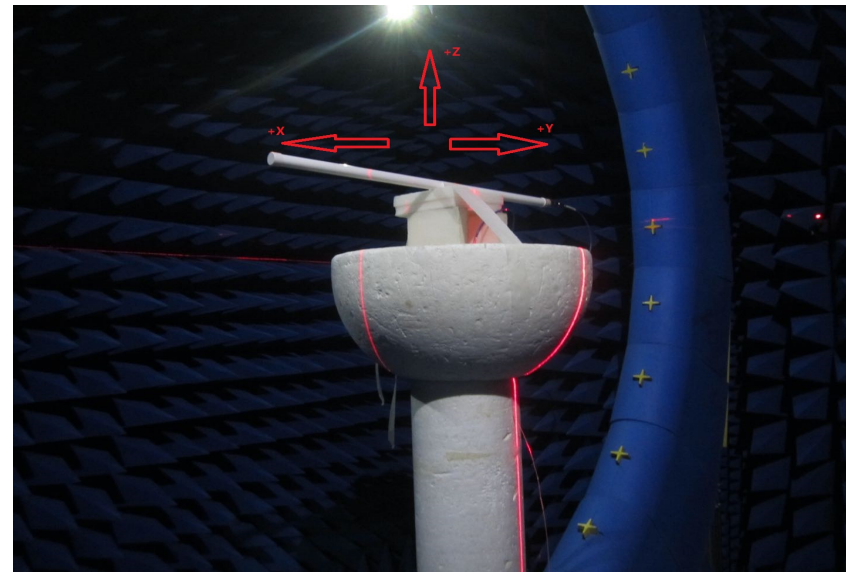
**PIN=0 XZ面**



**PIN=90 YZ面**



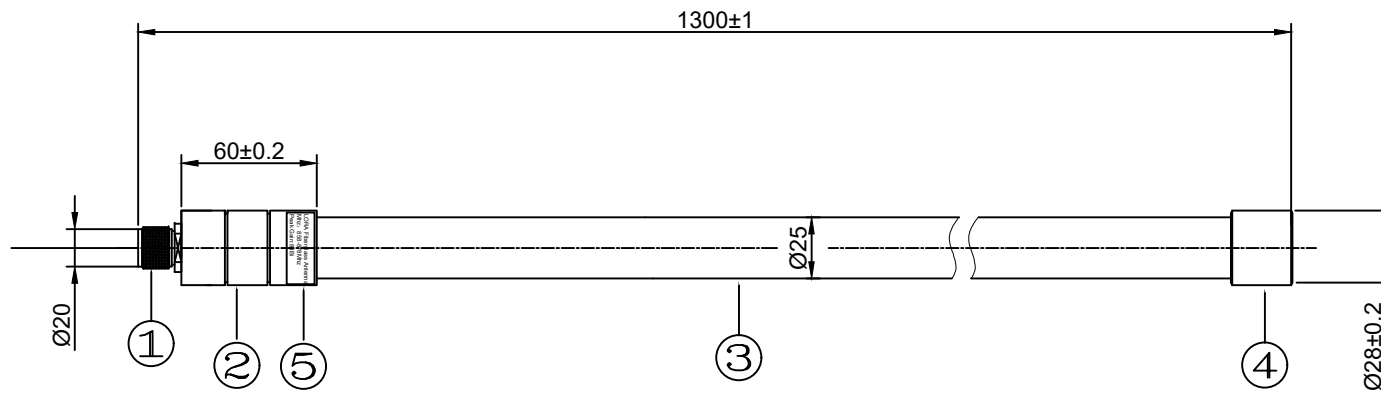
**THETA=90 XY面**



# RoHS

## Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



**Note:**

- 1.Mark \* is important dimension;"CpK "Identify for process control(CpK ≥ 1.33).
- 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.

No.	Part Number	Description	Material	Finish	Q'ty
5		Stickers			
4	R-HG02-02	Cover	Plastic	ABS	1
3	HG02-20308	Glass Fiber Tube	Glass Fiber	L=Ø25*1260mm	1
2	HG02-01B	Al Sleeve	A Alloyl	Ø29*60mm	1
1	R-00N-FN8	N Jack	Cu	Nickel Plated	1

TITLE: 900-930Mhz							
PART NO.:				CUSTOMER P/N: /			
APP BY	CHK BY	RF BY	DES BY	Tolerance			
JANUS		JINF	ZLB	UNITS: mm		X.X ±0.5	
2021/04/13		2021/04/12	2021/04/12	SCALE: 1/1		X.XX ±0.2	
				REVISION: A		X° ±1	