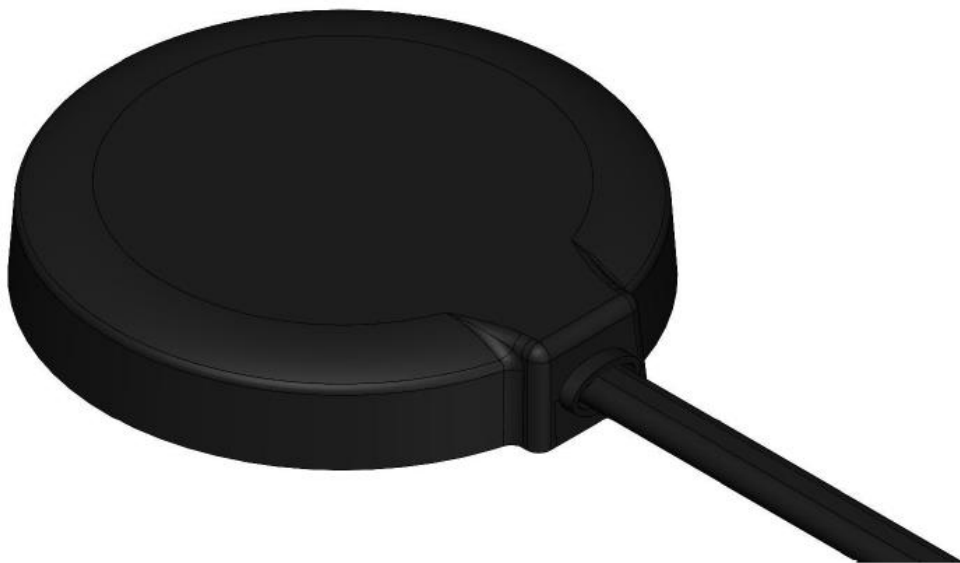




-7RF Antenna-

7RF-MX3-0001-GDLJ1-01



Author: Sam Yang(7RF TW)

Revision: A

Date: 2019/11/12

*ISO-SPEC-19-25_A



I. Introduction.

7RF provides external Adhesive/Magnetic Mounted GPS with dual LTE antenna solution. P/N: MX3-0001-GDLJ1-01 antenna supports GPS and LTE MIMO application. The antenna has solid enclosure with Magnet, which assist end user easy to stick antenna on metal surface, also it can choose double sided adhesive foam as option, different mounting options for customer's flavor. The antenna has 3 meters RG174 coaxial cable with SMA male connector as standard configuration. Cable length & Connector are customizable. Contact your local sales to get more product information.

II. Antenna Specification Table

MX3-0001-GDLJ1-01	
Electrical Characteristics	
	LTE MAIN
Frequency (MHz)	698-960, 1710-2690
Return Loss (dB)	<-6
Peak Gain (dBi)	2.50 Typ.
Polarization	Linear
	LTE AUX
Frequency (MHz)	698-960, 1710-2690
Return Loss (dB)	<-6
Peak Gain (dBi)	2.00 Typ.
Polarization	Linear
	GPS Patch Antenna
Frequency (MHz)	1575.42 +/- 3
Return Loss (dB)	<-10
Peak Gain (dBi)	2.00 Typ.
Polarization	RHCP
	GPS LNA Circuit
Gain(dB)	28 +/- 2
Noise Figure (dB)	<-1.5
VSWR	<2
Operation Voltage (V)	3~5
Power Consumption (mA)	< 15



Mechanical Characteristics	
Dimension (mm)	φ84.6 * 14.5
Cable & Length	RG174, 3 meters
Connector	SMA Male
Housing Material	ABS
Mounting Method	Adhesive/Magnetic
Waterproof	IP67
Storage Temperature (°C)	-40~+85
Operate Temperature (°C)	-40~+85

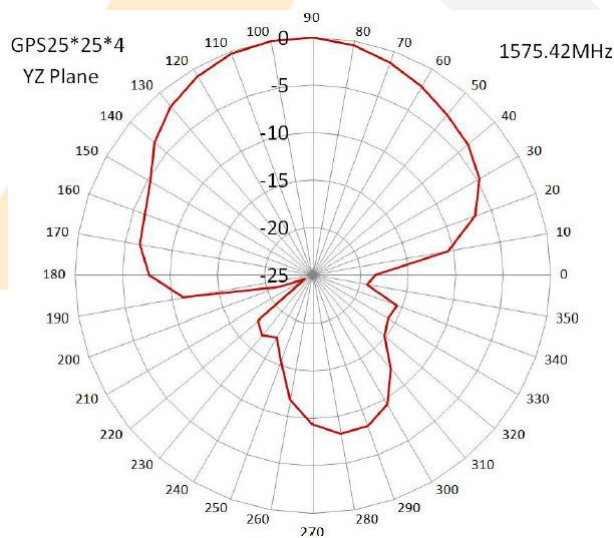
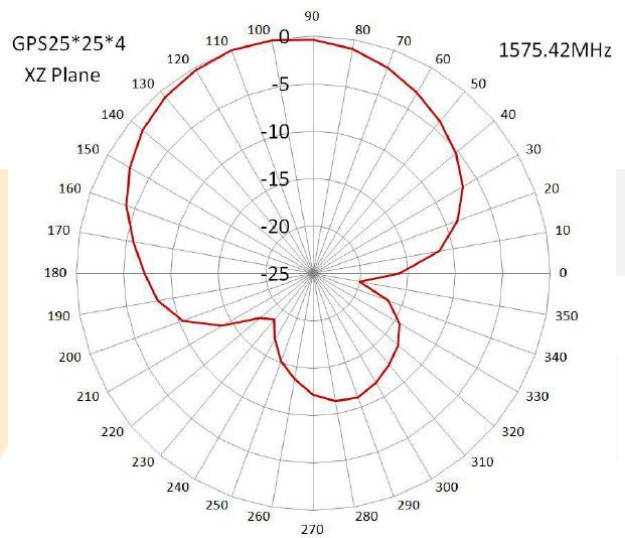
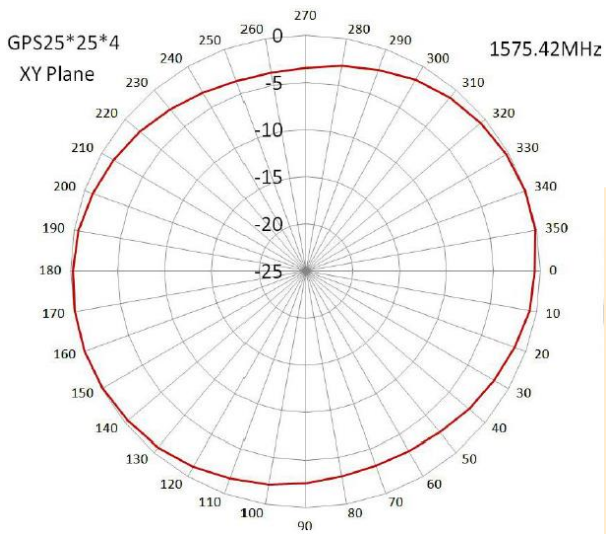




III. Antenna 2D Radiation Pattern

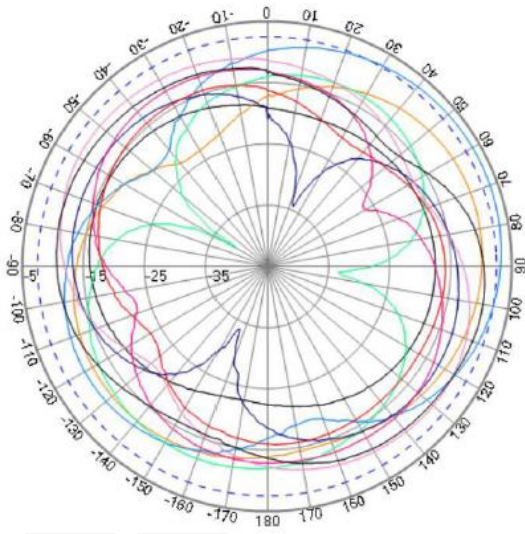


GPS



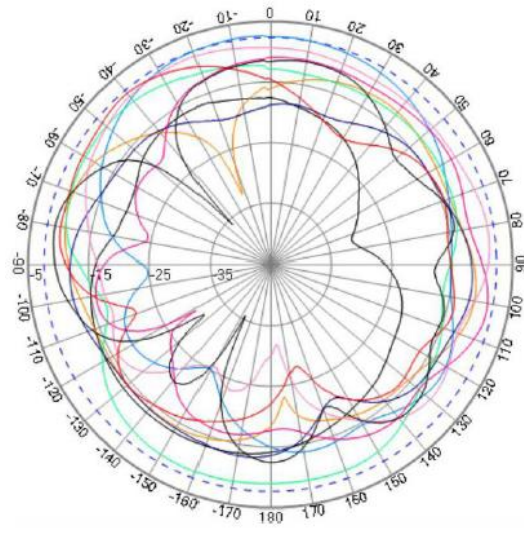


LTE MAIN



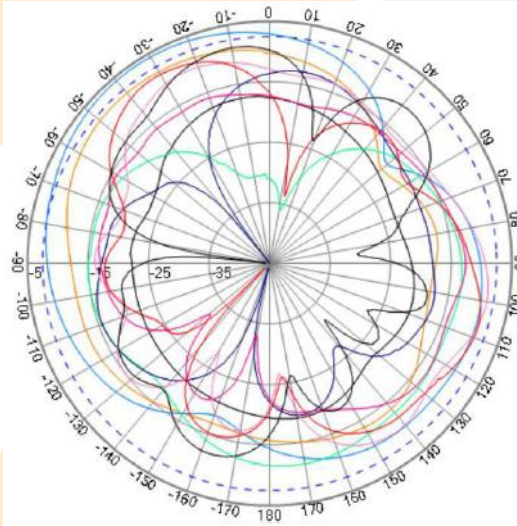
XY PLANE

- 测试频率: 700
- 测试频率: 824
- 测试频率: 868
- 测试频率: 960
- 测试频率: 1710
- 测试频率: 1850
- 测试频率: 1990
- 测试频率: 2170
- 测试频率: 2690



XZ PLANE

- 测试频率: 700
- 测试频率: 824
- 测试频率: 868
- 测试频率: 960
- 测试频率: 1710
- 测试频率: 1850
- 测试频率: 1990
- 测试频率: 2170
- 测试频率: 2690

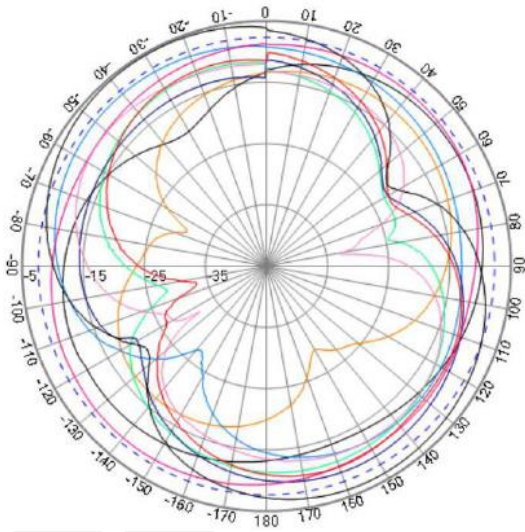


YZ PLANE

- 测试频率: 700
- 测试频率: 824
- 测试频率: 868
- 测试频率: 960
- 测试频率: 1710
- 测试频率: 1850
- 测试频率: 1990
- 测试频率: 2170
- 测试频率: 2690

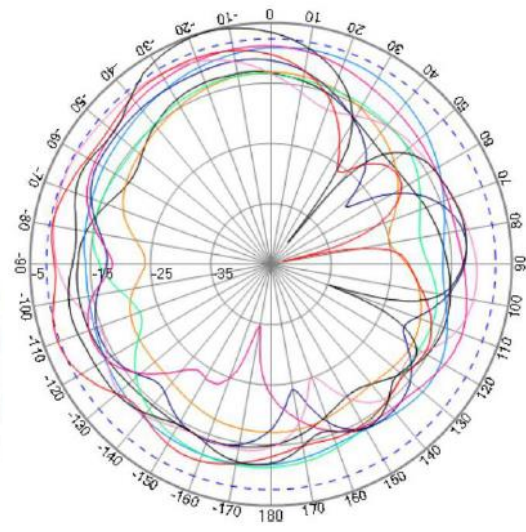


LTE AUX



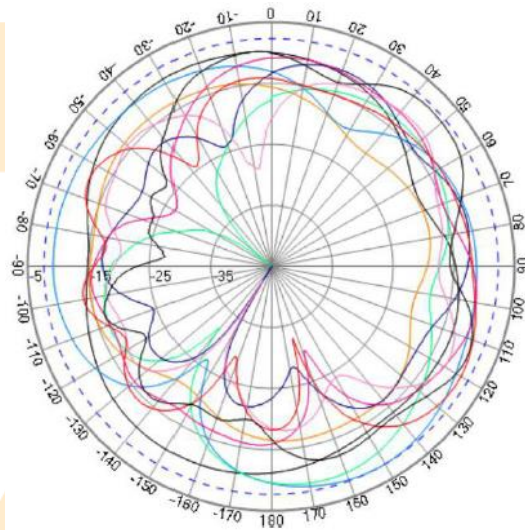
XY PLANE

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XZ PLANE

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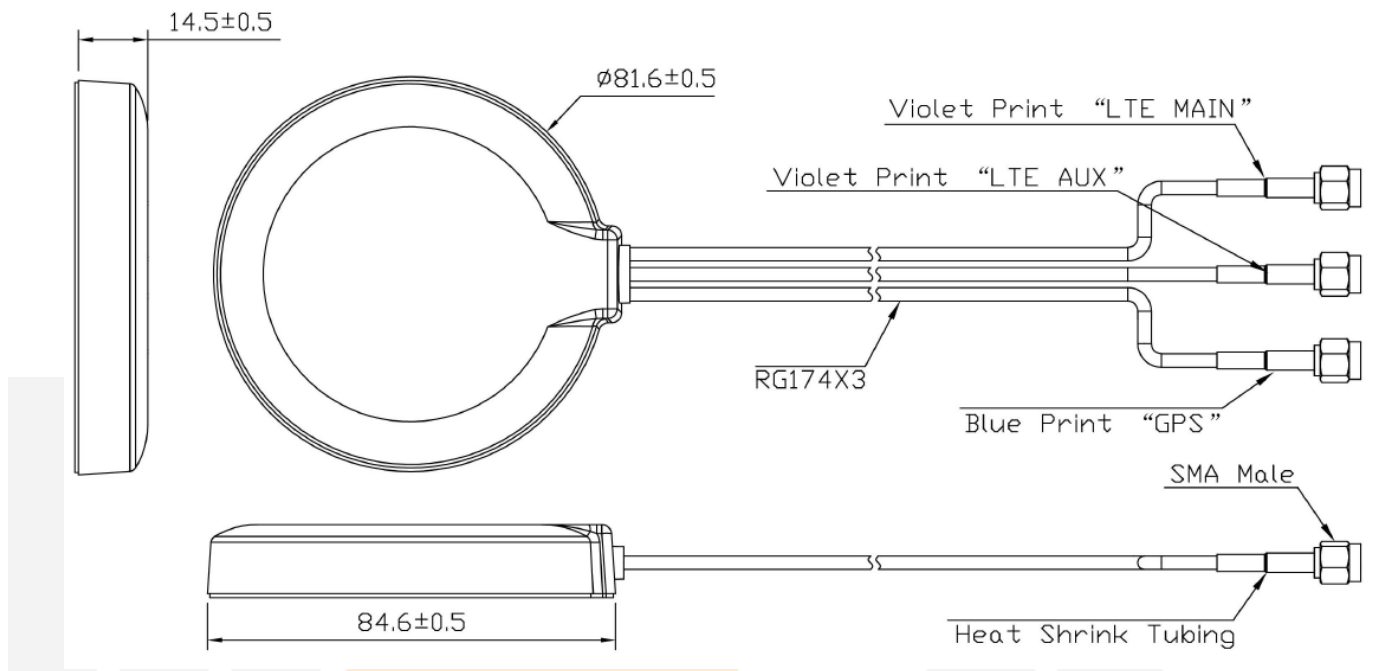


YZ PLANE

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- 测试频率: 2690



IV. Antenna Drawing



Unit:mm

Cable Length: 3000+/-80mm