



1. Specification

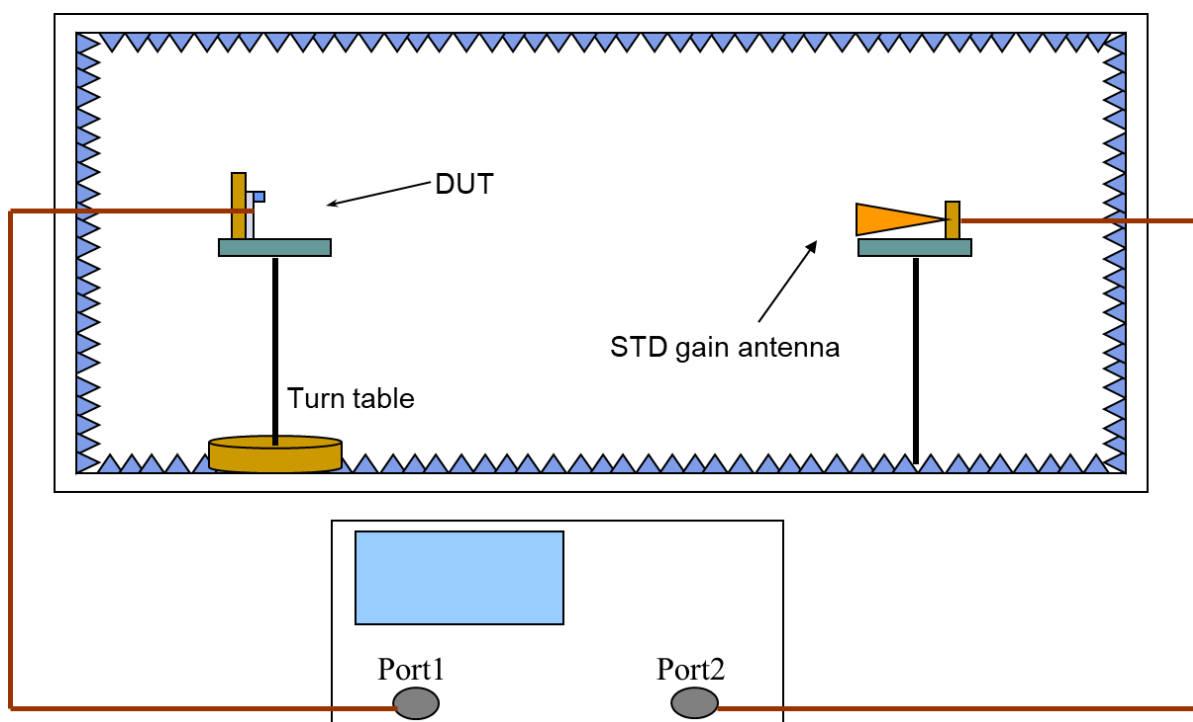
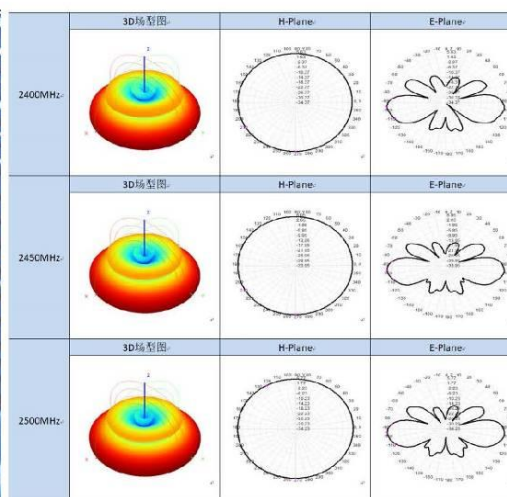
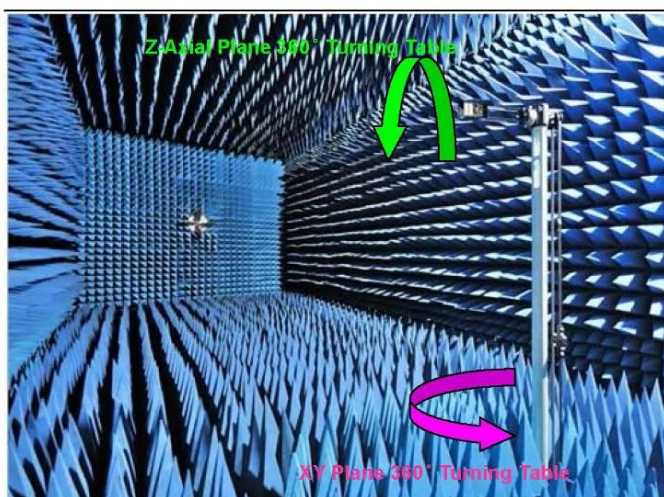
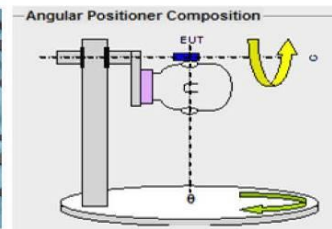
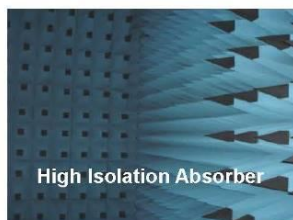
Sample Photo	
	
A. Electrical Characteristics	
Frequency	700-960MHz; 1710-2700MHz
S.W.R.	<= 3.0
Antenna Gain	-2~3dBi
Polarization	Linear
Horizontal Beamwidth	360°
Vertical Beamwidth	20-90°
Impedance	50 Ohm
Max Power	50W
B. Material & Mechanical Characteristics	
Cable Type	RF1.13 Cable
Connector Type	MHF1 Plug
Dimension	81*21mm
Weight	0.001Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Test Equipment & Conditions

1. Network Analyzer: Keysight E5071C

2. 3D Chamber Test System

- .Chamber Size: 9 x 5 x 4 m³
- .Freq. Range: 0.4 ~ 18.0 GHz
- .Double Ridge Horn Antenna
- .VNA: Agilent E5071C
- .3D Turning Table and Positioner
- .ADT Solution 3D Testing Software





Product Number: BGS-AN4000-8121B-0150
Product Name: 4G LTE Embedded Antenna

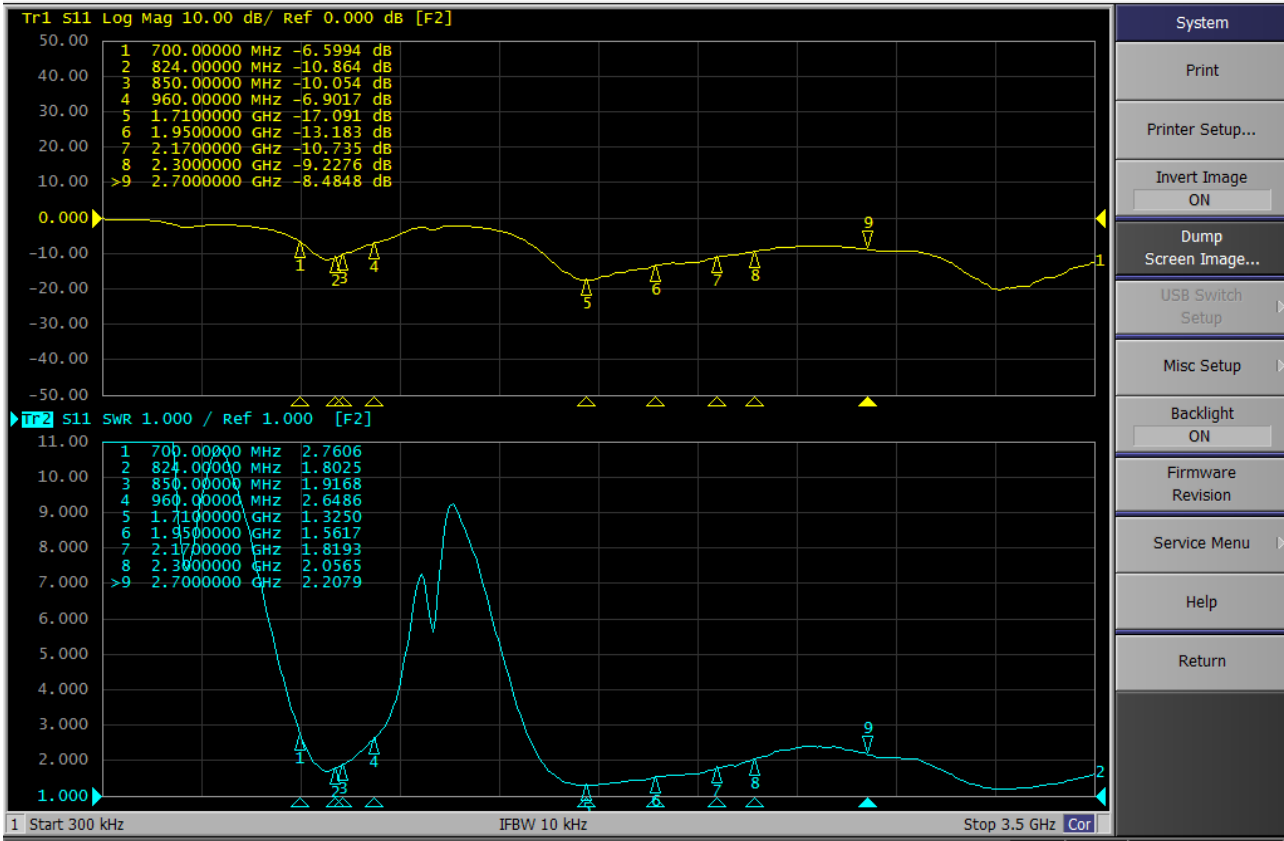
2. Antenna - S Parameter Test Data

2.1. VSWR

E5063A Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

Resize





2.2. Total Efficiency & Gain:

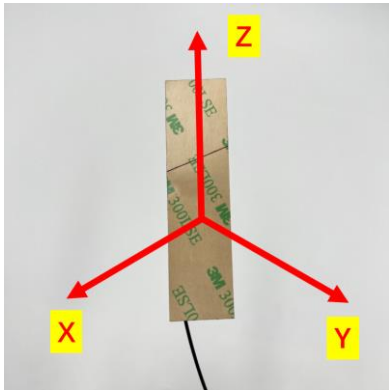
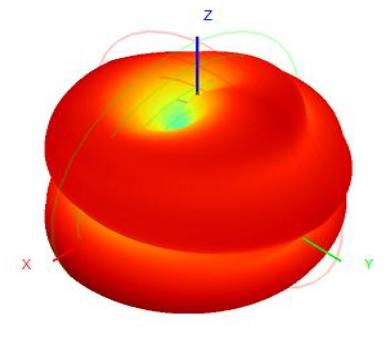
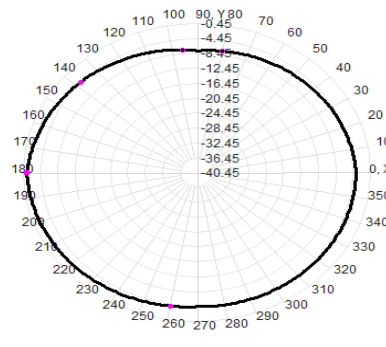
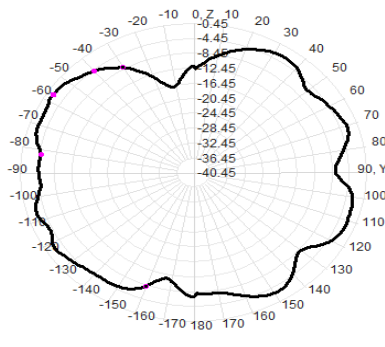
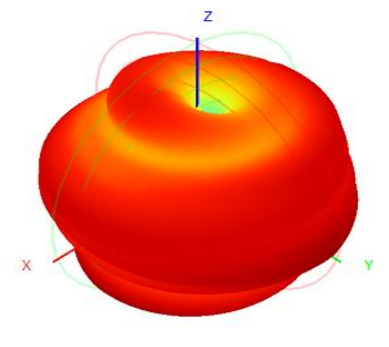
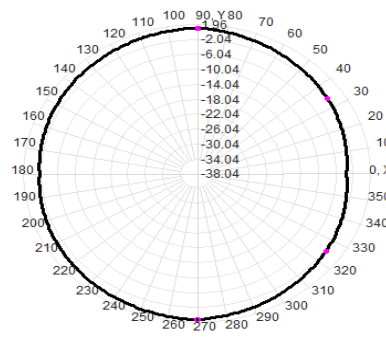
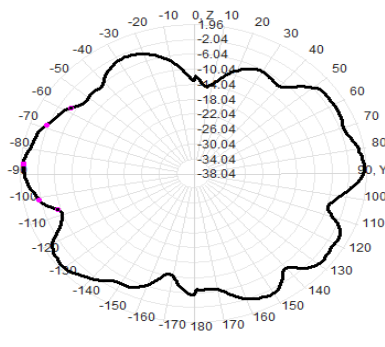
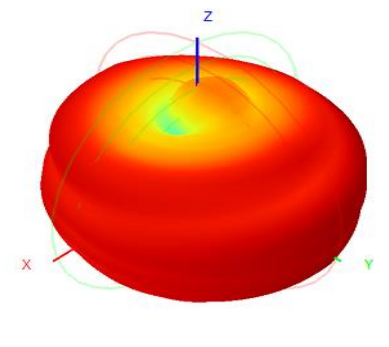
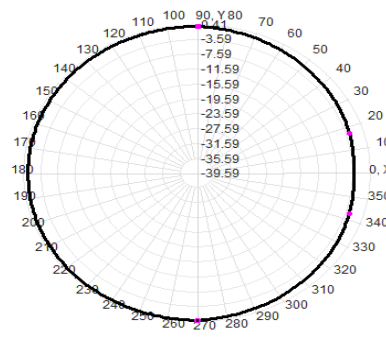
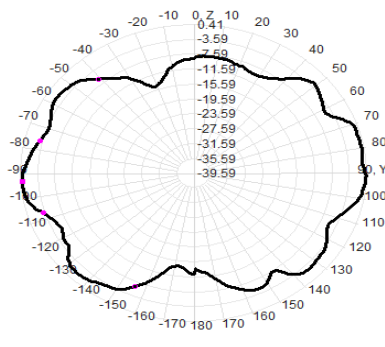
Frequency(MHz)	Gain(dBi)	Efficiency (%)
690	-2.6	15.3
720	-2.2	17.4
750	-2.0	20.6
780	-1.4	25.8
810	-1.8	25.3
840	-1.8	26.5
870	-1.2	31.7
900	-0.1	39.1
930	0.7	44.0
960	1.7	53.3
1700	-0.5	36.5
1800	1.5	51.9
1900	3.1	61.5
2000	3.6	65.1
2100	3.2	66.6
2200	2.0	62.0
2300	0.9	53.7
2400	0.7	52.1
2500	0.6	48.5
2600	0.7	44.1
2700	0.4	45.9



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2.3 Radiation Pattern

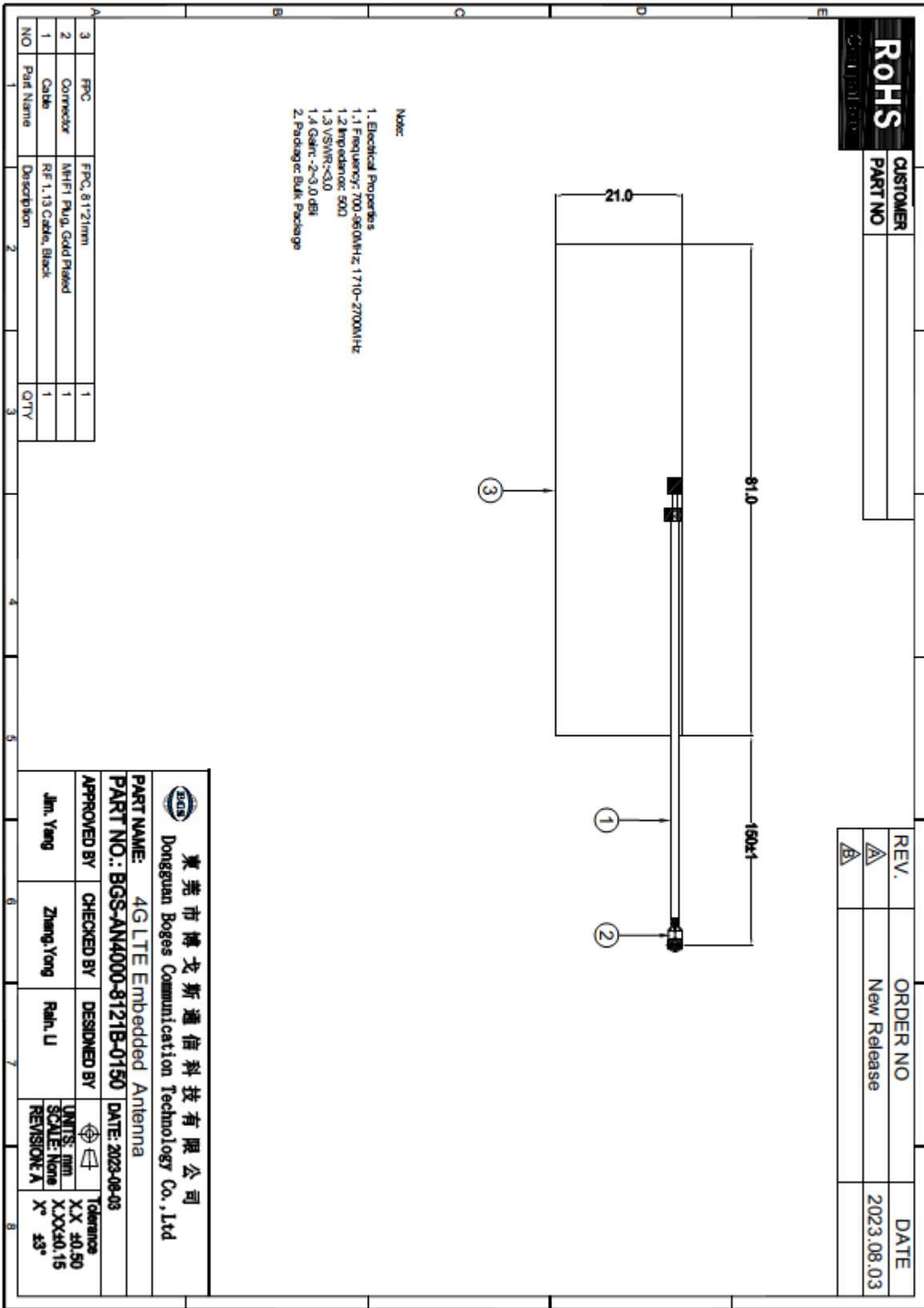
	3D	2D 水平面	2D 垂直面
轴的定义		<p style="text-align: center; font-size: 2em;">XY</p>	<p style="text-align: center; font-size: 2em;">YZ</p>
690MHz			
840MHz			
960MHz			

	3D	2D 水平面	2D 垂直面
轴的 定义		XY	YZ
1700MHz			
2200MHz			
2700MHz			



Product Number: BGS-AN4000-8121B-0150
 Product Name: 4G LTE Embedded Antenna

3. Mechanical Drawing



RoHS
 Compliant

CUSTOMER	
PART NO	

REV.	ORDER NO	DATE
A	New Release	2023.08.03
B		

Note:
 1. Electrical Properties
 1.1 Frequency: 700-860MHz; 1710-2700MHz
 1.2 Impedance: 50Ω
 1.3 VSWR: ≤ 1.0
 1.4 Gain: -2~-3.0 dBi
 2. Package: Bulk Package

NO	Part Name	Description	QTY
3	FPC	FPC, 81*21mm	1
2	Connector	MHFI Plug, Gold Plated	1
1	Cable	RF 1.13 Cable, Black	1

BGS 东莞市博戈斯通信科技有限公司
 Dongguan Boges Communication Technology Co., Ltd

PART NAME: 4G LTE Embedded Antenna
PART NO.: BGS-AN4000-8121B-0150

APPROVED BY	CHECKED BY	DESIGNED BY	DATE: 2023-08-03
Jin, Yang	Zheng, Yong	Rain, Li	

Tolerance	
UNITS: mm	XX ±0.50
SCALE: None	XX ±0.15
REVISION: A	X° ±3°