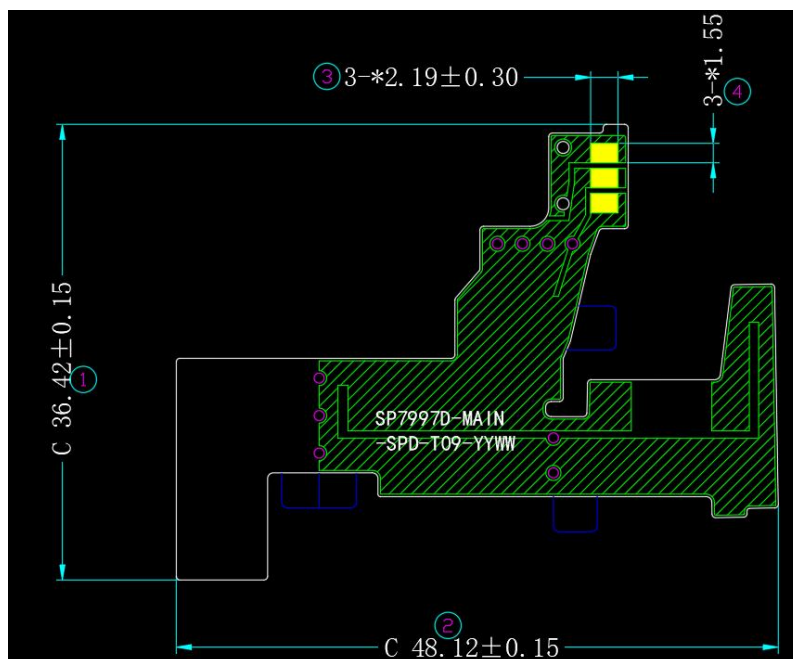


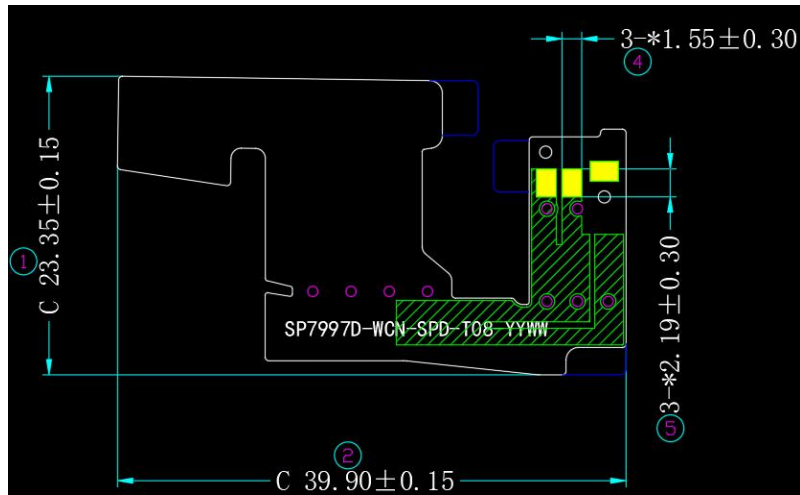
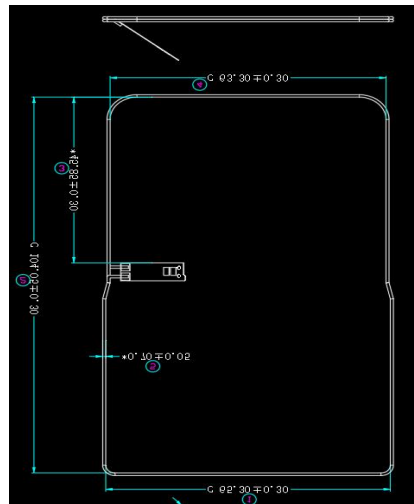
Antenna Product Specification

Entry Name	SP7997D
Frequency Channel	GSM:850/900/1800/1900 WCDMA:W1/2/5/8 FDD-LTE: B1/3/5/7/8/28 TDD-LTE:B40 WCN: GPS/BT/2.4G/5G NFC:13.56Mhz
Supplier Name	Speed Wireless Technology Co., Ltd
Supplier Address	No.99 WeiXin Road, SIP, Suzhou,Jiangsu
Test Personnel Name	Rock

1. Type of Antenna: **PIFA**

Antenna attachment type:



WCN ANT pattern: PIFA**NFC ANT pattern: (LOOP)****2. Efficiency and Gain****Main Antenna - Efficiency and Gain:**

BAND	Peak Gain(dBi)	Average Gain(dBi)
LTE B1 WCDMA B1	-0.24	-4.47
WCDMA B2 GSM1900	-0.16	-4.22
LTE B3 G1800	1.18	-3.99

LTE B5 WCDMA B5 GSM850	-4.1	-7.86
LTE B7	2.74	-3.60
LTE B8 WCDMA B8 GSM900	-3.86	-7.82
LTE B28	-3.7	-7.54
LTE B40	2.66	-4.76

WCN - Gain

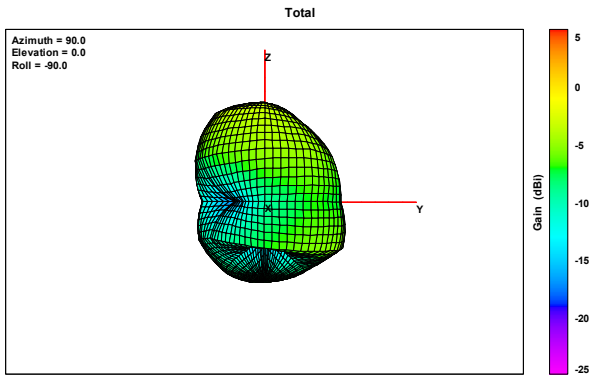
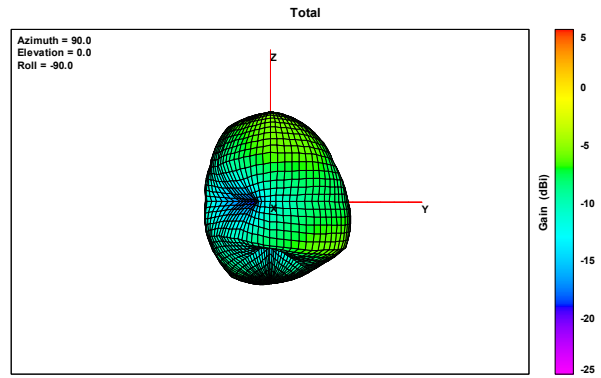
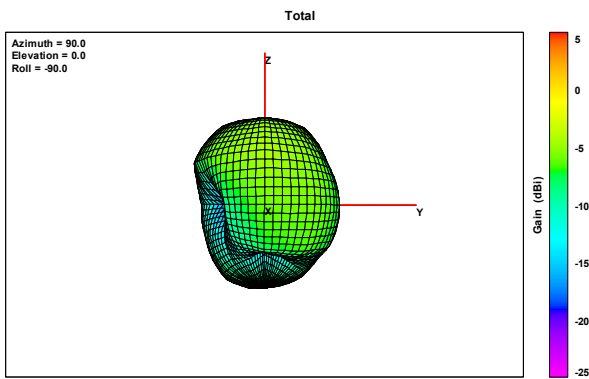
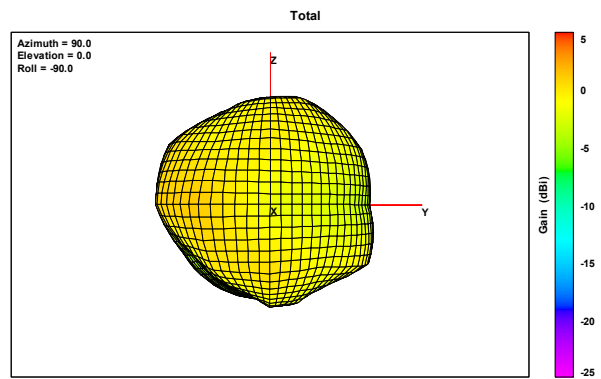
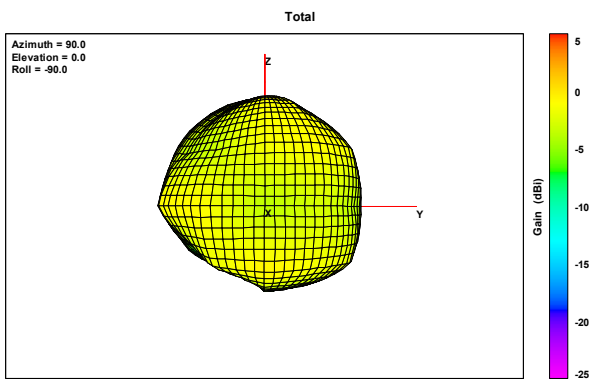
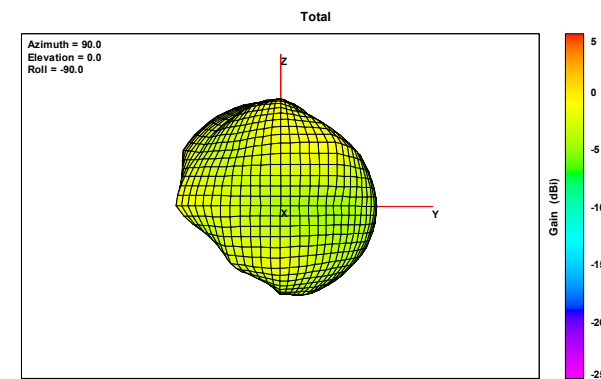
Freq (MHz)	Peak Gain(dBi)	Average Gain(dBi)
2400~2483.5MHz	-3.20	-4.66
5150~5250MHz	-3.21	-4.31
5250~5350MHz	-3.42	-4.31
5470~5725MHz	-3.36	-4.15
5725~5850MHz	-3.35	-4.60
1575MHz	-2.97	-6.42

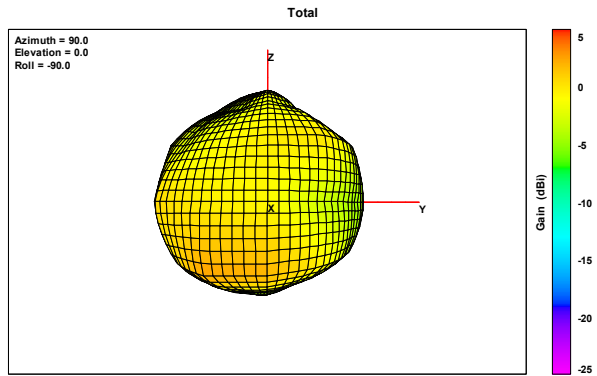
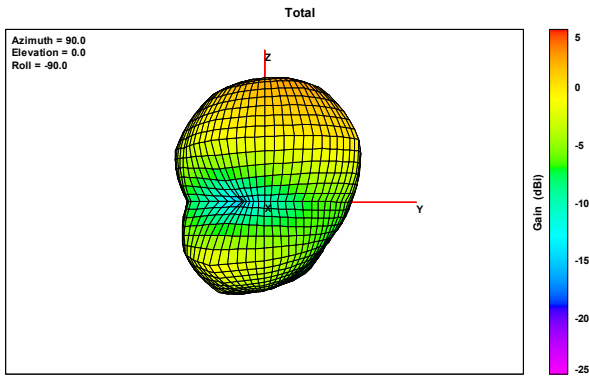
3. 3D Directional Pattern

Main Antenna:

LTE B28

GSM850/WB5/LTEB5

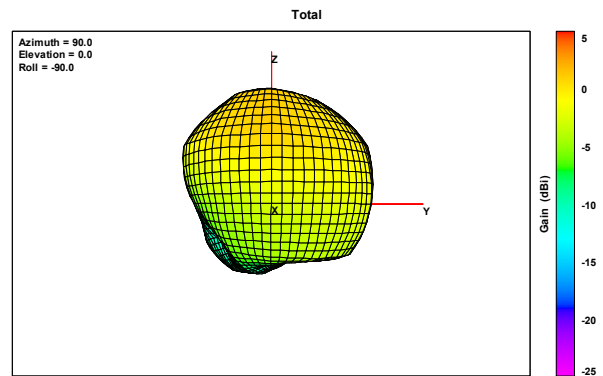
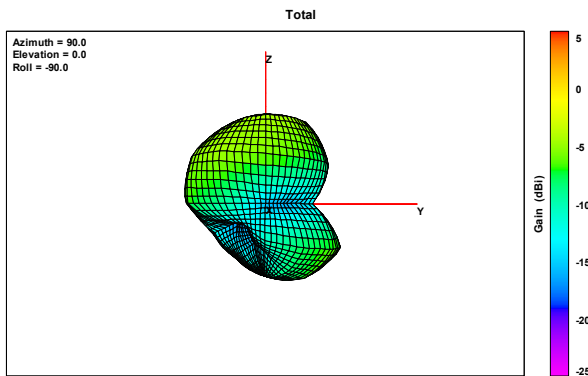
**GSM900/WB8/LTEB8****GSM1800/LTEB3****GSM1900/WB2/LTEB2****WB1/LTEB1****LTEB7****LTEB40**



WCN Antenna:

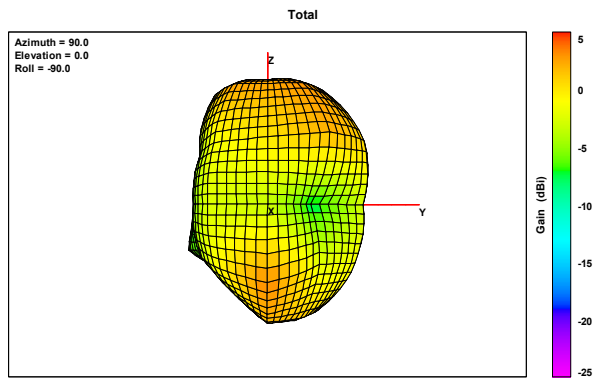
1575MHZ

2400~2483.5MHz

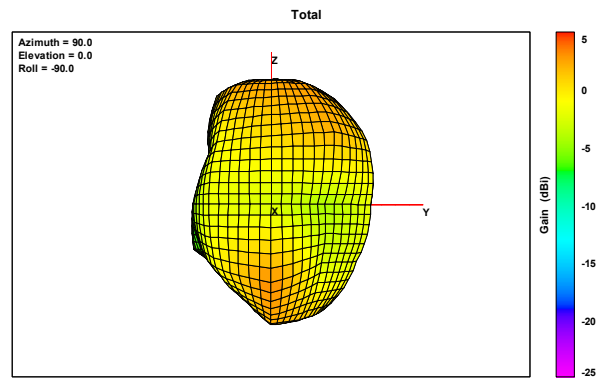


5150~5250MHz

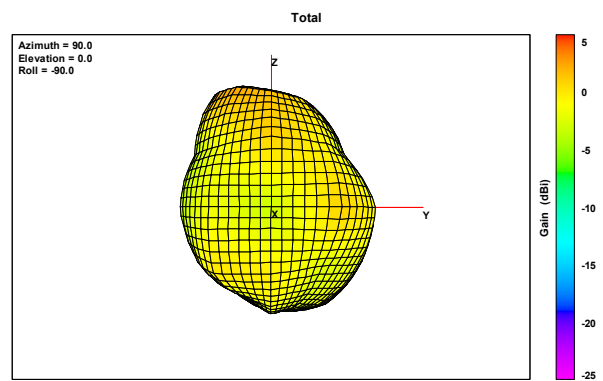
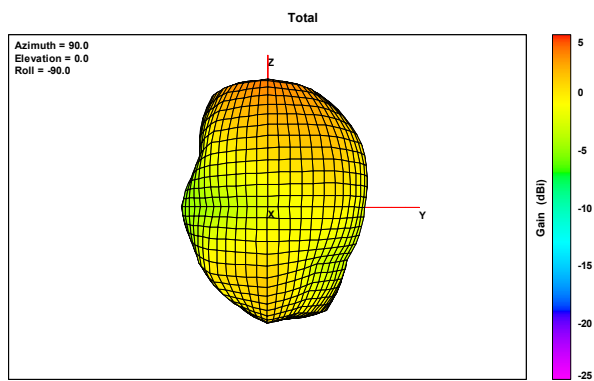
5250~5350MHz



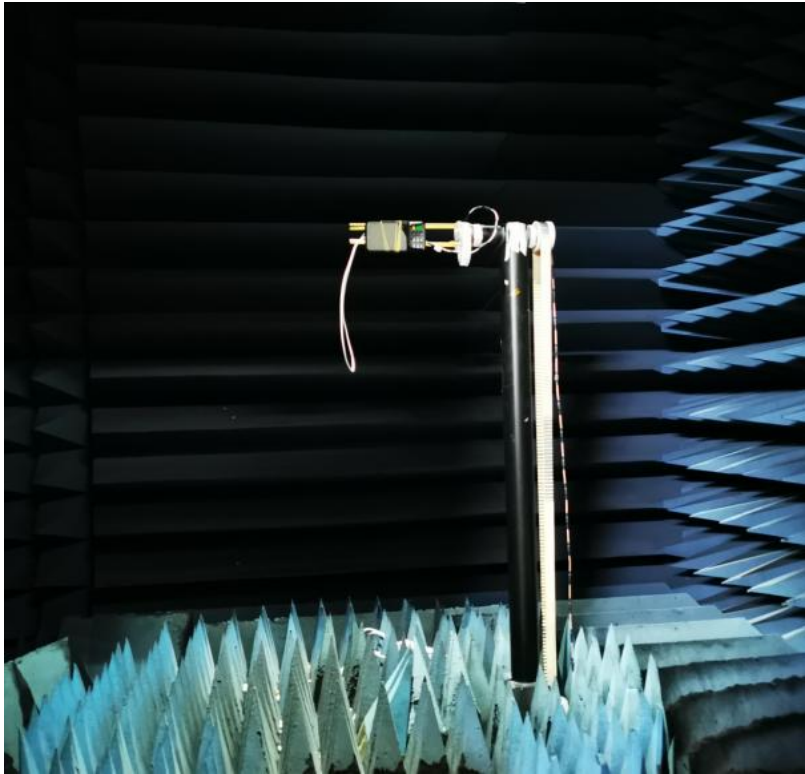
5470~5725MHz



5725~5850MHz



4. Test setup



5. Equipment list

Number	Device	Type/Model	Serial	Manufacturer	Cal. Date	Cal. due. Date
1	Chamber	FATC3	5720	ETS-Lindgren	2024/12/25	2025/12/24
2	Turn table control box	ETS	-	ETS-Lindgren	N/A	N/A
3	Turn table control computer	Desktop	LPTPTOP-JQTTOKRA	LENOVO	N/A	N/A
4	Network Analyzer	5071C	5071C	Keysight	2024/12/25	2025/12/24
5	Hron Antenna	3117	E00157734	Bwant	2024/12/23	2025/12/22
6	Test system host	EMC Center	159757	ETS-Lindgren	N/A	N/A
7	RF Line TX	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
8	RF Line RX	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
9	Cable 2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
10	Optical fiber line	RXY-00727-1603	-	Jmtt	N/A	N/A
11	Cable 2.5m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
12	Cable 1.2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
13	Cable 1m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
14	Cable 2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
15	Cable 1m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/13	2025/12/12
16	Temp&Humidity Logger	RA12E-TH1-RAS	RA12-D0EB1A	Avtech	2024/12/20	2025/12/19

注意:

除了常规的天线 gain 与图纸之外，需加入測試環境，測試儀器，測試資料， 測試軟體名稱，測試儀器校驗日期，天線測試照，報告不能有浮水印且要有簽名。