

# AX7580F Antenna Product Specification

Entry Name	AX7580
Frequency Channel	W1/5 LTE B1/3/5/19/21/28 + B38/39/41/42 NR N1/28/78/79, BT/Wlan
Supplier Name	INNOWAVE
Address	No. 55 Shengchuang Road, Yunshan Town
Test equipment	RayZone 2800
Test software	GTS
Cal. Date	February 10, 2025
Due Date	February 10, 2026

## 1. Type of Antenna:

**ANT1 WIFI : PIFA (FPC)**

**ANT2 GPS: PIFA (FPC)**

**ANT3 UB TRX: PIFA (Borad of cavity antenna)**

**ANT4 LMH TRX: PIFA (metal Ring)**

**ANT5 LMH DRX: PIFA (metal Ring)**

**ANT6 B21TRX+UH DRX: PIFA (metal Ring)**

**ANT7 B21DRX+MHB+UB PM LTE NSA TRX (metal Ring)**

**ANT8 MHB DM/UH DM (metal Ring)**

**Model No:****RX-AX7580-WIFI****Antenna attachment type: Fixed/Internal mounted****2. Efficiency and Gain****MAIN- Efficiency and Gain (ANT4)**

BAND	Peak Gain(dBi)	Average Gain(dB)
WB1/LTE B1 NR N1	-2.5	-4.8
WB5/LTE B5/19	-3.5	-4.5
LTE B38/41	-2.9	-4.1
LTE B39	-3	-4.9
LTE B28/NR N28	-4	-6.7
LTE B3	-2.2	-4.8

**DIV- Efficiency and Gain (ANT5)**

BAND	Peak Gain(dBi)	Average Gain(dB)
WB1/LTE B1 NR N1	-5	-8.6
LTE B19	-3.4	-6.2
LTE B3/NR N3	-5.3	-8.8

**NR Main- Efficiency and Gain (ANT3)**

BAND	Peak Gain(dBi)	Average Gain(dB)
NR N79	-3.2	-4.3
NR N78/LTE B42	-3.3	-4.8

### B21 Main&NR DRX- Efficiency and Gain (ANT6)

BAND	Peak Gain(dBi)	Average Gain(dB)
NR N78	-5.2	-9.3
NR N79	-5.1	-7.2
LTE B21	-4	-7.6

### B21 +MHB+UB DRX- Efficiency and Gain (ANT7)

BAND	Peak Gain(dBi)	Average Gain(dB)
LTE B1	-5	-9.1
LTE B3	-4	-7.2
NR N78	-3.5	-6.6
NR N79	-3.3	-6

**UH DM - Efficiency and Gain (ANT8)**

BAND	Peak Gain(dBi)	Average Gain(dB)
N78	-6.4	-10.1
N79	-5.8	-10.2

**GPS/WIFI Efficiency and Gain**

WiFi: [-2dBi@2.4G](#);

[5G](#):

Fre (MHZ)	Max Gain	Average gain
Band1	-2.5	-5.8
Band2	-3	-5.4
Band3	-2.2	-5.6
Band4	-2.3	-6

GPS: -4.15dBi

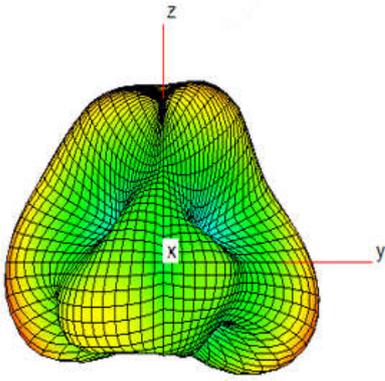
BT: -2dBi

**3. 3D Directional Pattern**

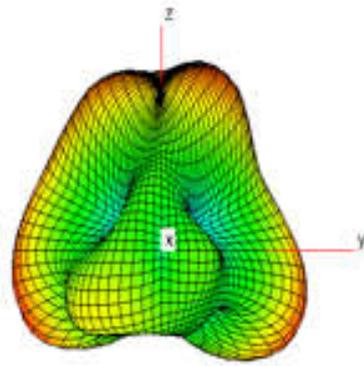
**MAIN ANT4 3D**

**790MHZ**

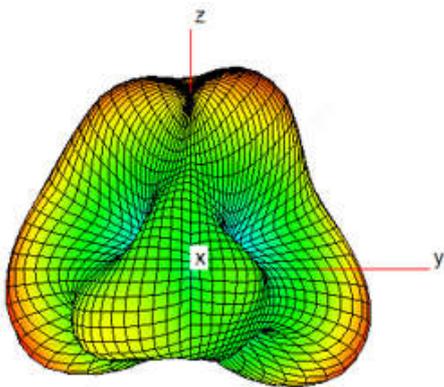
**850MHZ**



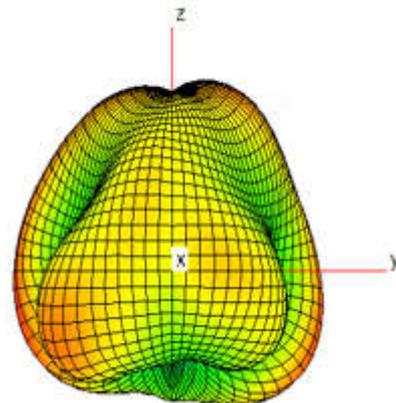
**870MHZ**



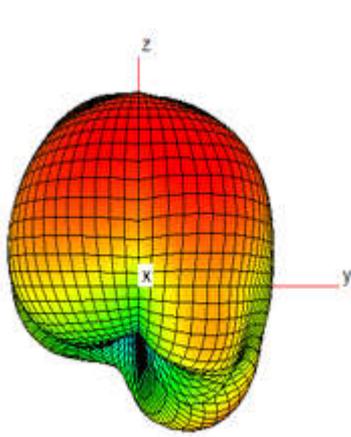
**960MHZ**



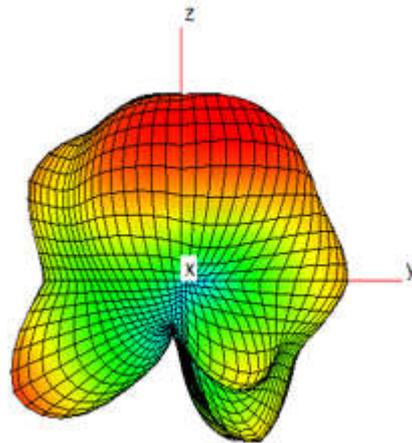
**1710 MHZ**



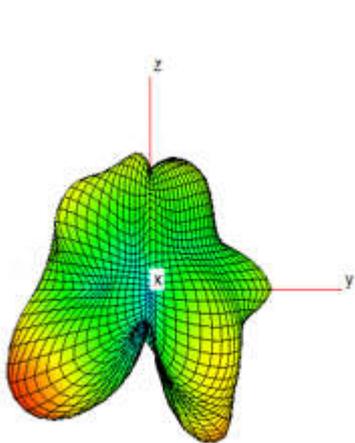
**1980MHZ**



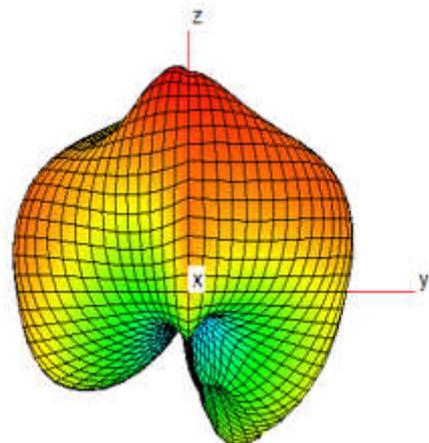
2170 MHZ



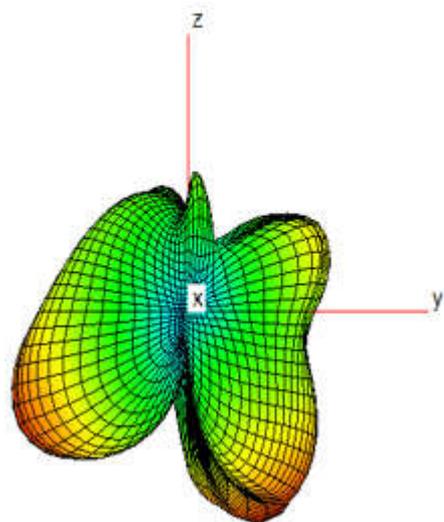
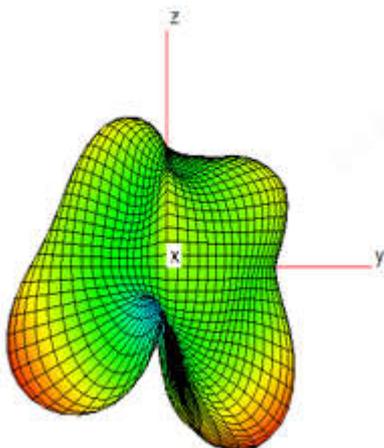
2300MHZ



2500MHZ

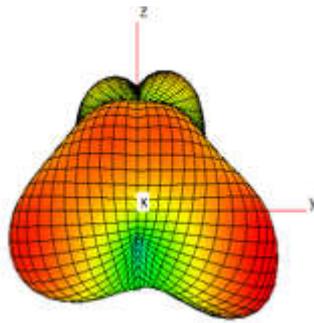


2700MHZ

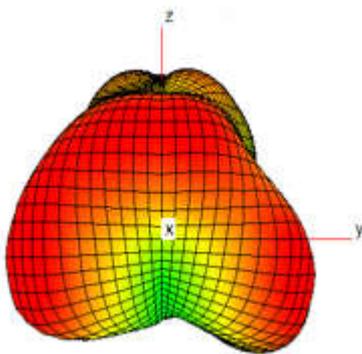


1) DIV ANT5 3D

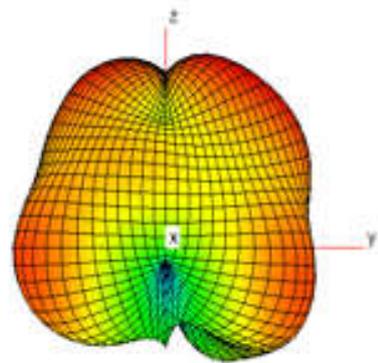
820MHZ



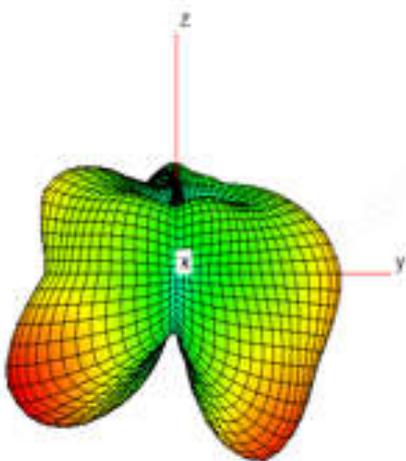
870MHZ



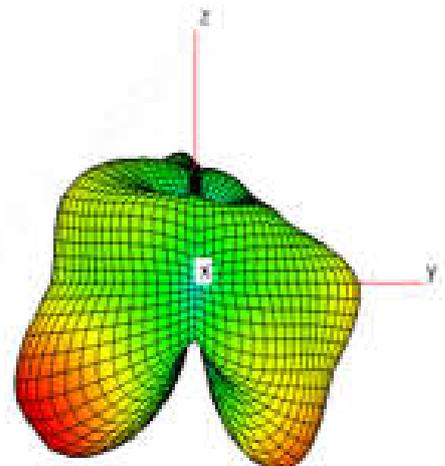
960MHZ



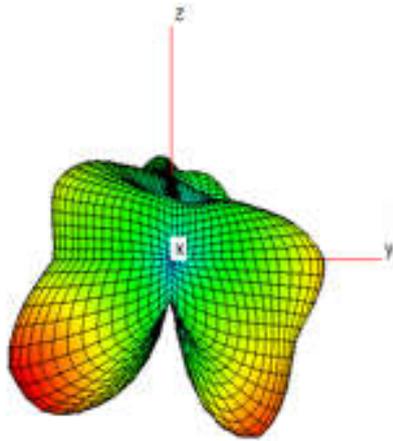
1810MHZ



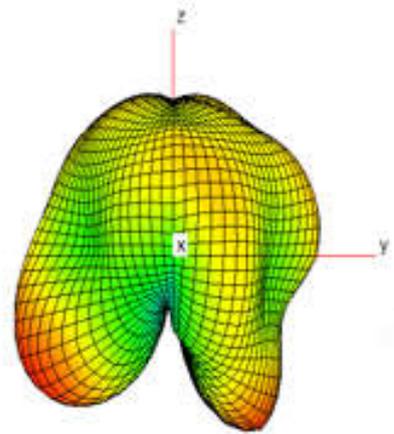
1990MHZ



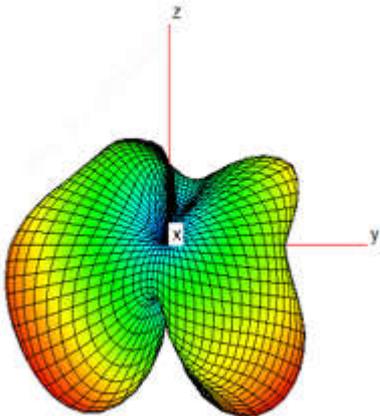
2170MHZ



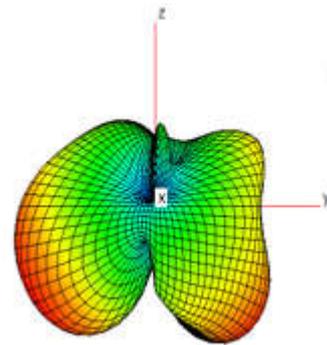
2300MHZ



2500 MHz

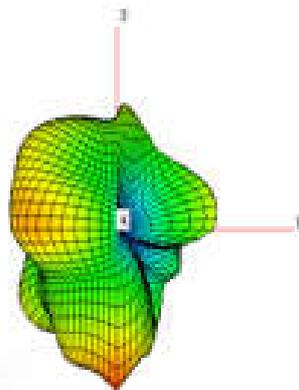


2700 MHz

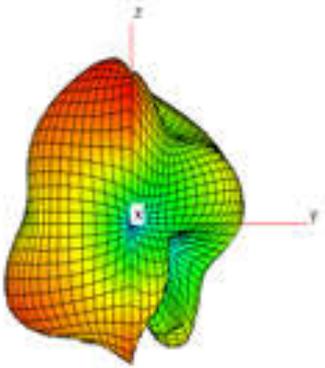


2) GPS/wifi/BT ANT1&2 3D

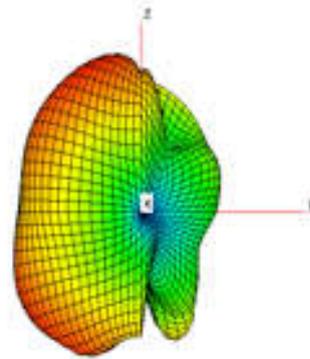
1575MHZ



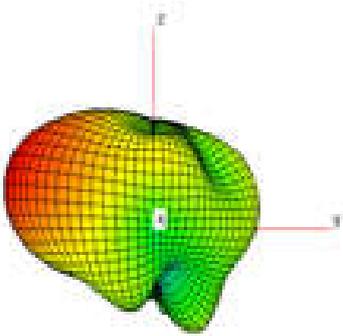
2450MHZ



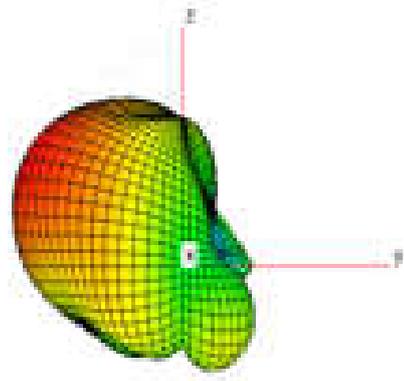
2500MHZ



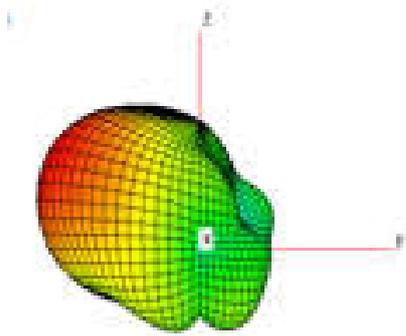
5140MHZ



5460MHZ

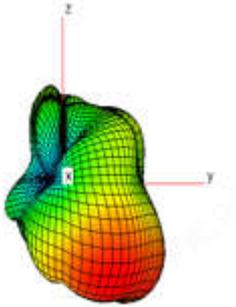


5860MHZ

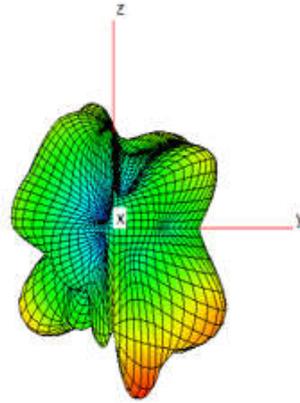


3) ANT3 3D

3550MHZ



3750MHZ



3550MHZ

