



ShenZhen Huaxinwei communication technology  
Co.,Ltd.

## Antenna test report

Customer Name: FreeYond

Project Name: F9

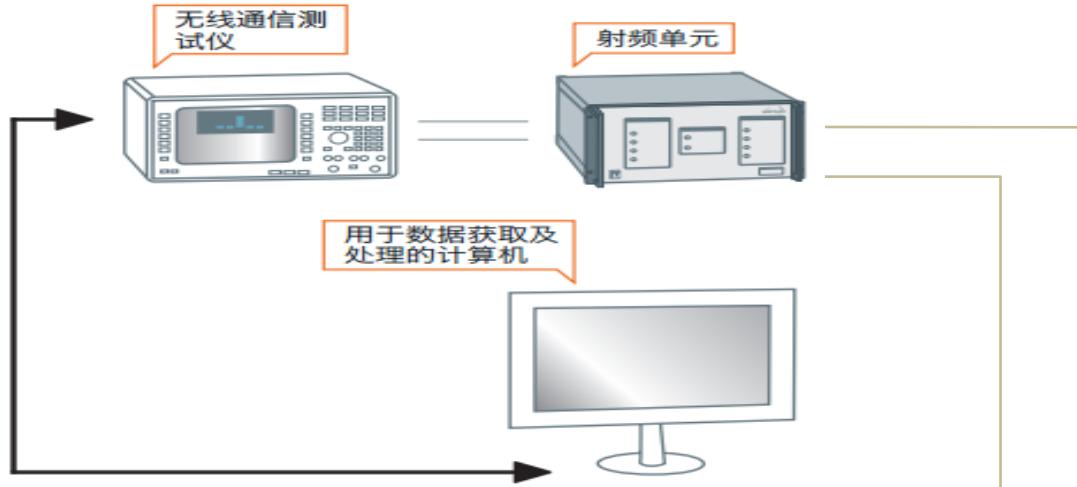
Designer: Zhang Jun

Date: 2022/09/02

The customer name		FreeYond	Project Name	F9
NO.	project	<b>Detailed above</b>		
1	spectrum	GSM850/900/1800/1900+WCDMA-B1/2/4/5/8+LTE-B2/4/5/7/66+GPS/WIFI/BT		
2	Project type	The mobile phone		
3	Antenna space area			
4	Feed point type			
5	The sensitivity			
6	Type of antenna			
7	The length of the PCB board			
8	note	Debugging prototype		
RF		Zhang Jun		hxw_xiaozhang@126.com

# 1、Test system and test equipment

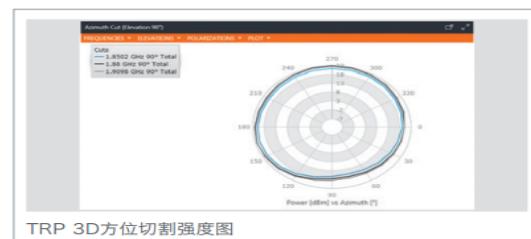
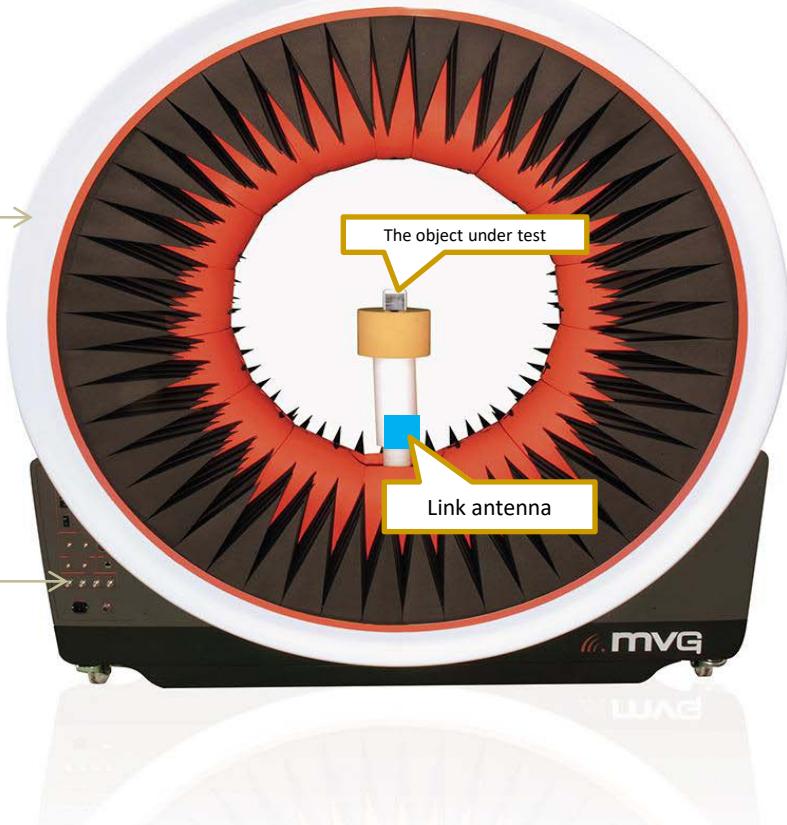
System Brand: MVG(SATIMO) measurement features: gain • pattern beamwidth cross polarization resolution sidelobe level 3D cavity reflectance at any polarization cavity reflectance (line or arc) antenna efficiency TRP, TIS, EIRP and EIS. Frequency band: StarLab 6 GHZ - 650 MHZ to 6 GHZ



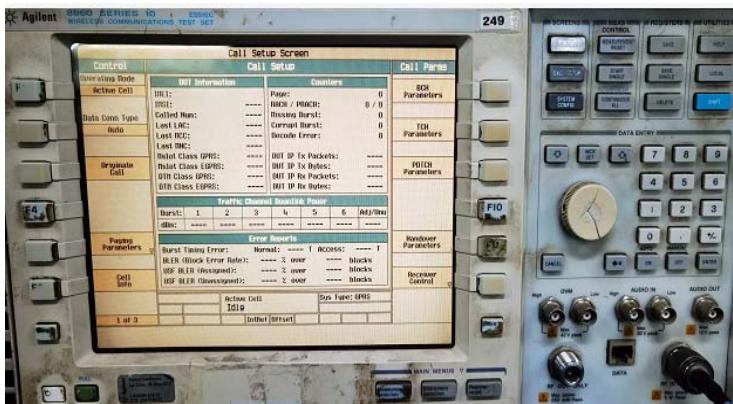
TIS预计测量时间 (一个信道每隔30° 取样)

灵敏度算法 \ 标准	GSM GPRS EDGE	CDMA 1 x RTT 1 x EvDO	WCDMA HSDPA LTE FDD/TDD	Wi-Fi 802.11 a/b/g/n	CTIA 批准方法
RSSI模式+线性化+TIS补偿	8 min		10 min		是
EIS模式+TIS补偿		5 min		5 min	是 <sup>2</sup>
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

1、根据RTC  
2、根据协议



# Test Equipment



## Antenna position

main antenna



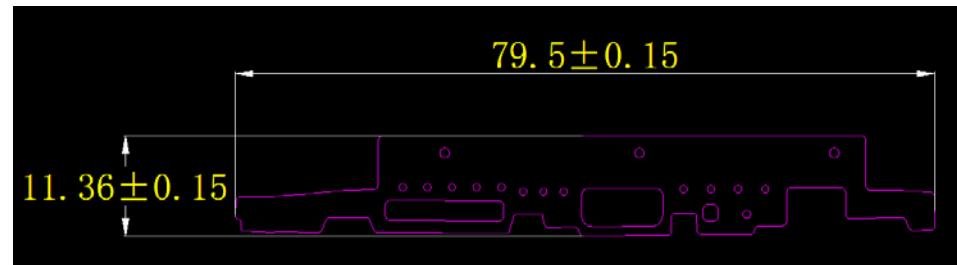
diversity antenna

GPS/WIFI/BT antenna

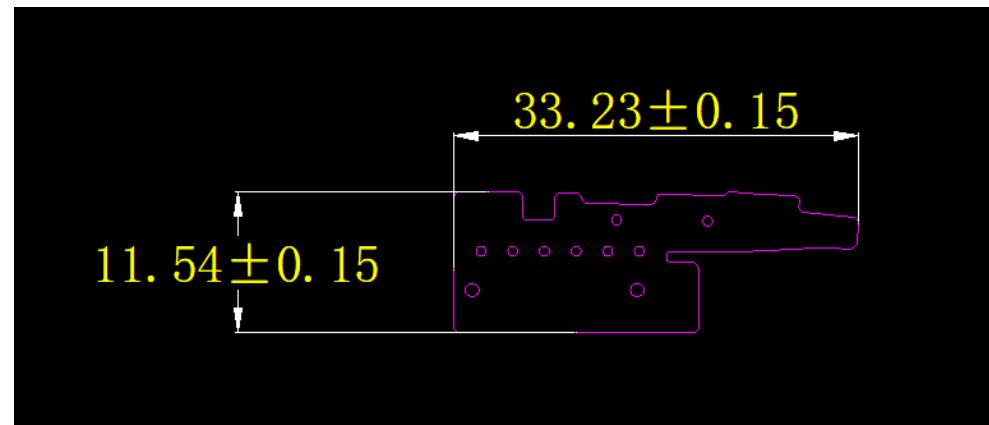


## Antenna size

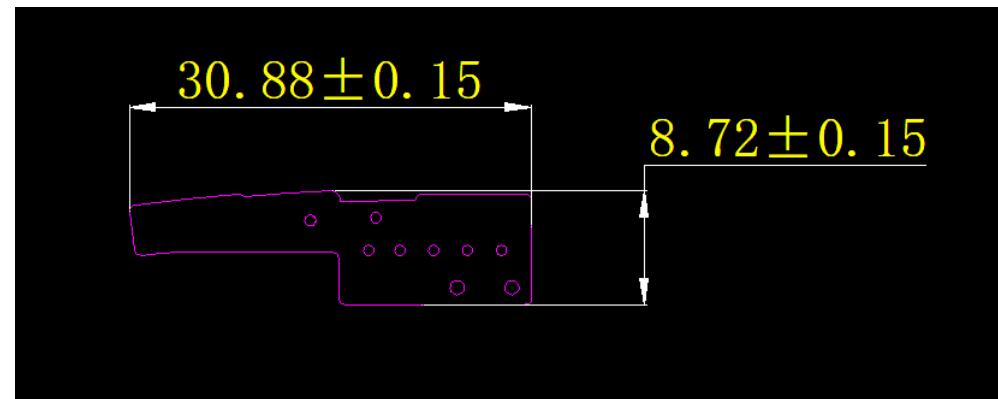
main antenna



diversity antenna



GPS/WIFI/BT antenna



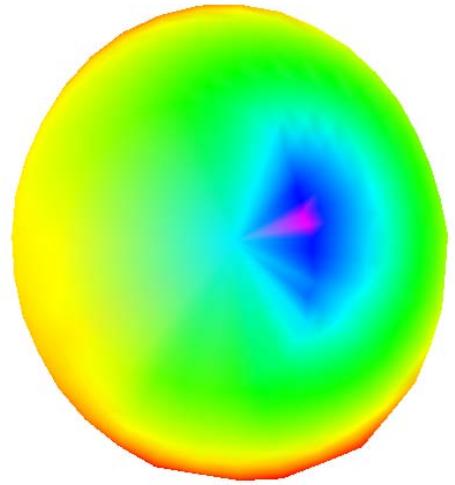
## Antenna Gain

band	gain
B2	+1.45dBi
B4/B66	+1.19dBi
B5	-1dBi
B7	+0.95dBi
WIFI 2.4G/BT	+1.04dBi

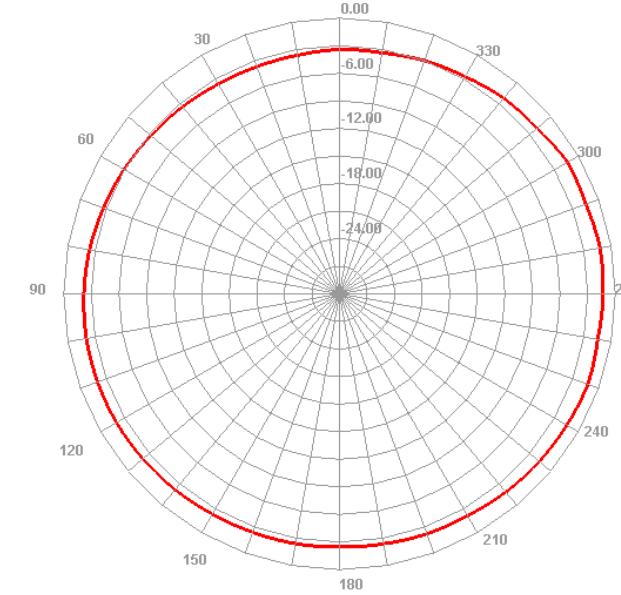
# Efficient (main antenna

B5

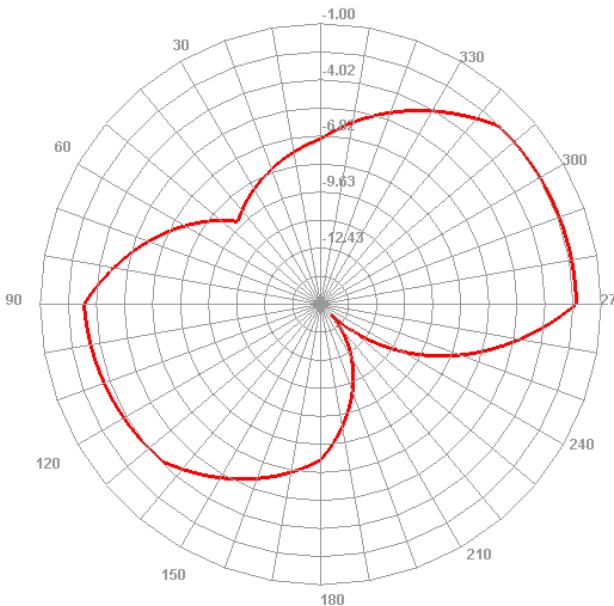
840.000MHz



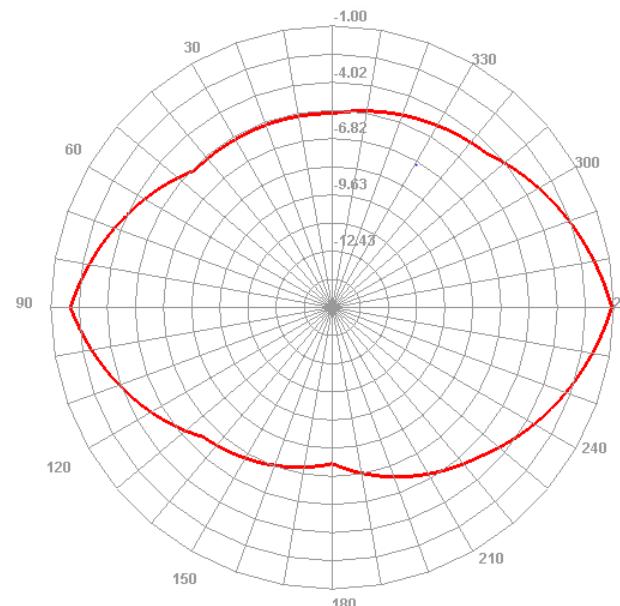
840.000MHz H



840.000MHz E1



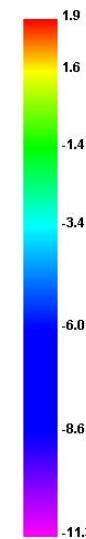
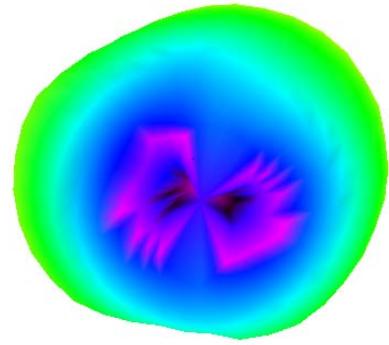
840.000MHz E2



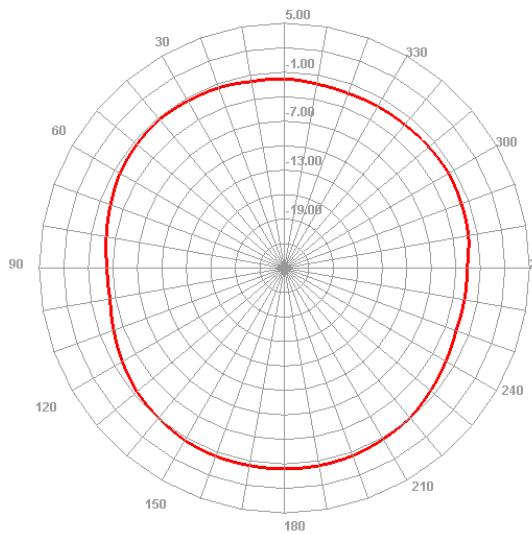
# Efficient (main antenna

B2

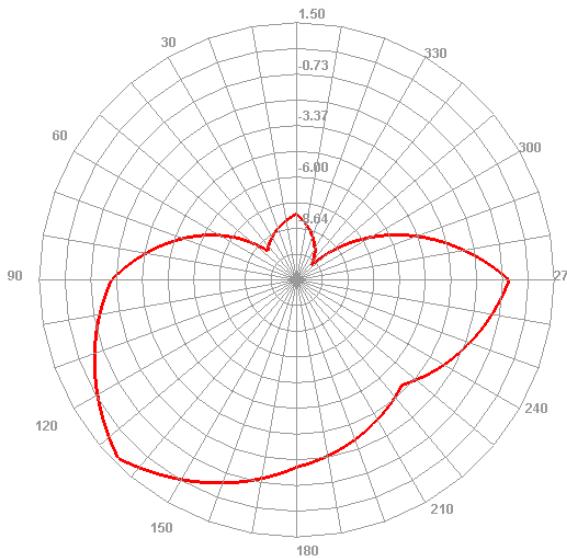
1880. 000MHz



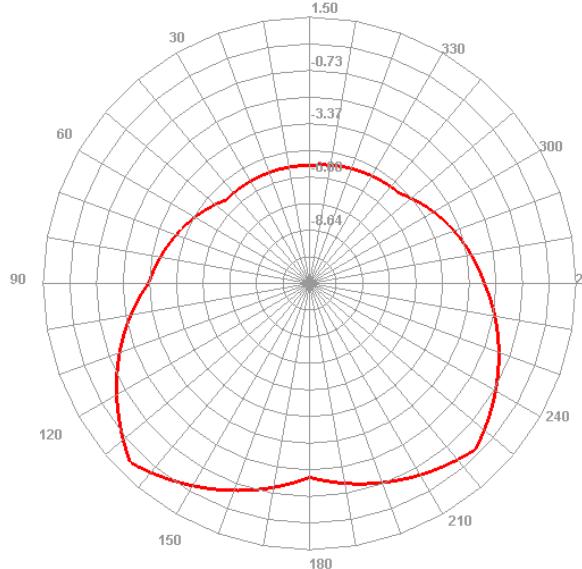
1880. 000MHz H



1880. 000MHz E1



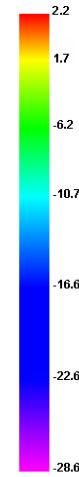
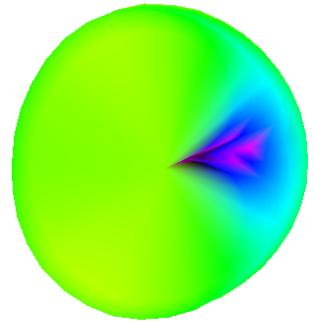
1880. 000MHz E2



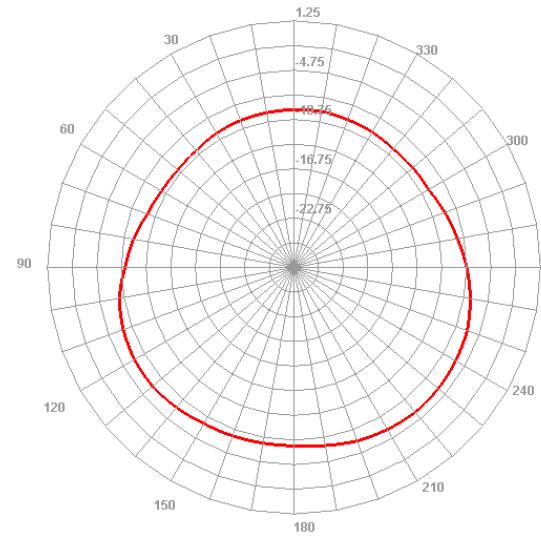
# Efficient (main antenna

B4/B66

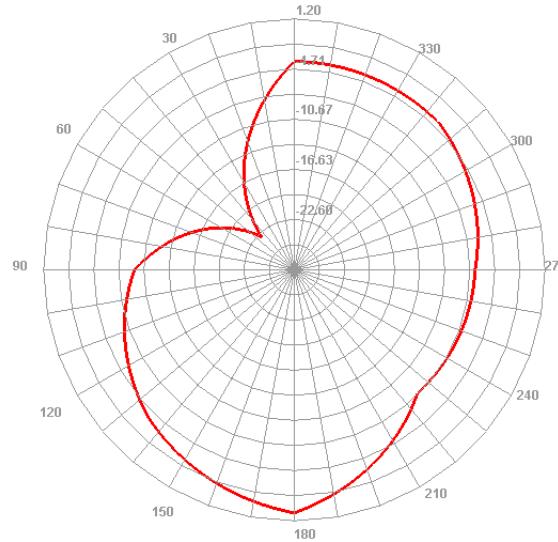
1730.000MHz



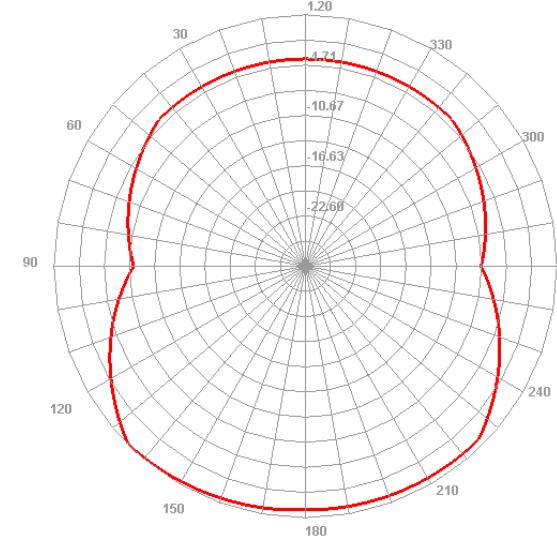
1730.000MHz H



1730.000MHz E1

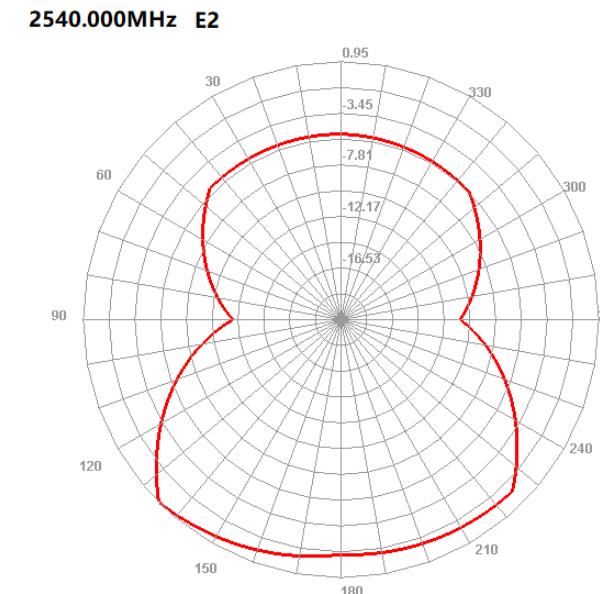
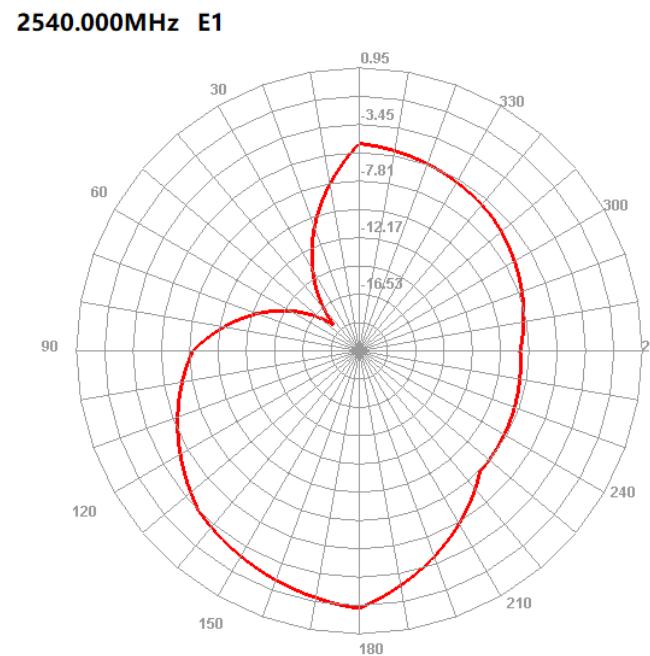
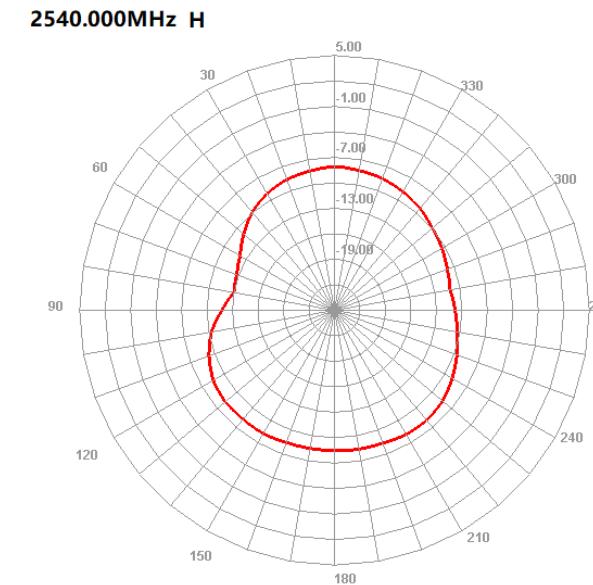
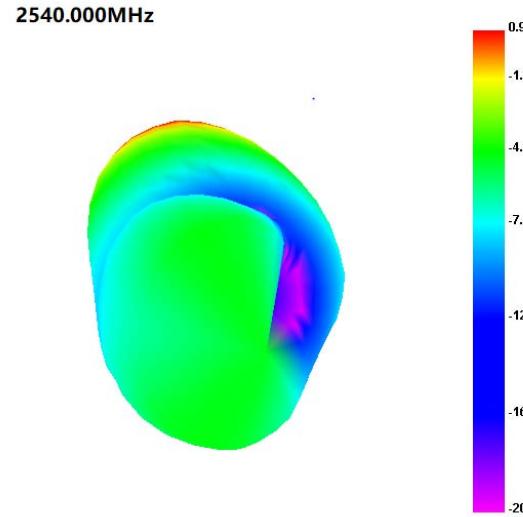


1730.000MHz E2



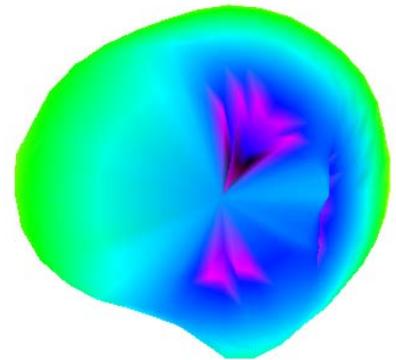
# Efficient (main antenna

B7

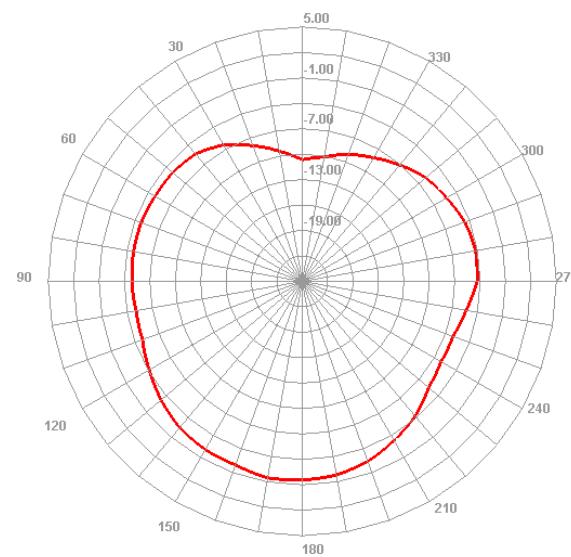


## Efficient ( 2.4G-WiFi /BT

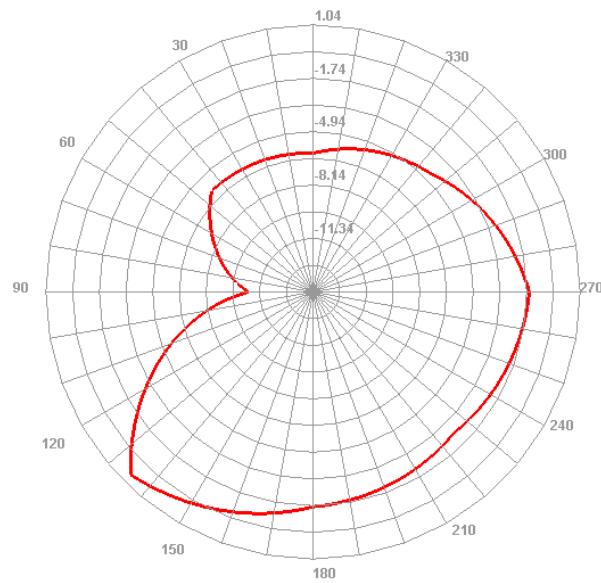
2400.000MHz



2400.000MHz H



2400.000MHz E1



2400.000MHz E2

