ShenZhen Huaxinwei communication technology Co.,Ltd.

Antenna test report

Customer Name: Xun Rui

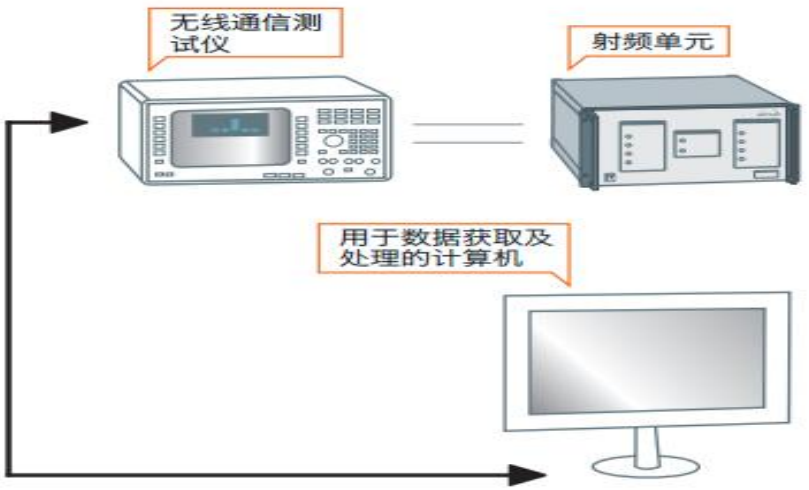
Project Name: M9903A

Designer: Li xiongji
Date: 2023/07/07

The customer name		Xun Rui	Project Name	M9903A
NO.	project	Detailed above		
1	spectrum	GSM850/900/1800/1900+WCDMA:W1/2/5/8+ LTE:B2/B3/B4/B5/B7/B8/B12/B17/B28AB/B38/B39/B40/B41/B66+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		LI xiongji	15347862886	

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

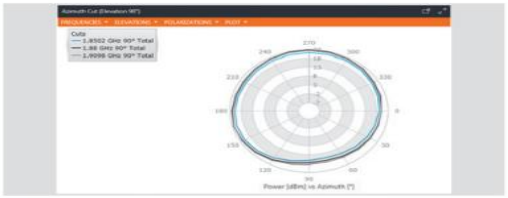


TIS预计测量时间（一个信道每隔30° 取样）

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[2]
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

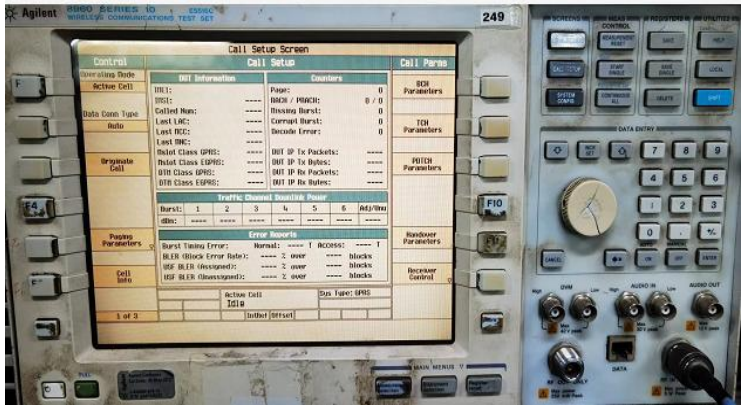
1、根据RTC
2、根据协议

TIS 3D方位切割强度图



TRP 3D方位切割强度图

Test Equipment



Antenna position

GPS/WIFI/BT antenna

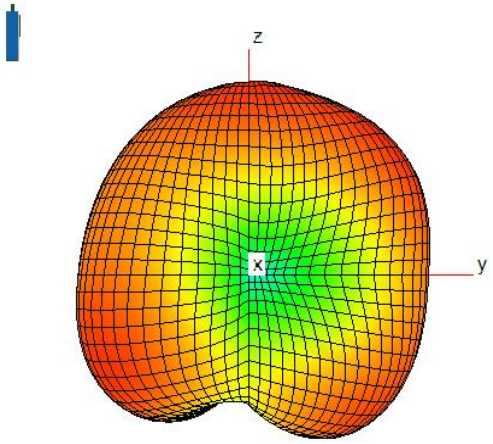
WWAN T X antenna

Efficient（ 2G+3G+4G+WiFi /BT+GPS）

PEAK GAIN			
	Frequency range	Efficiency(%)	Gain(dBi)
GSM850/W850/LTEB 5	824~894Mhz	11%	-5
GSM 900/WCDMA 900/LTE B8	880~960Mhz	13.5%	-3.6
GSM B2/3 W B2/4 LTE B2/3/4/39	1710~2170Mhz	23.7%	-0.8
LTE B12/17/28AB	880~960Mhz	14.8%	-4.8
LTE B7/38/41	2480~2690Mhz	28.1%	-0.7
W2100/LTE B1	1890~2170Mhz	23.8%	-1.0
LTE B40	2300~2400Mhz	23.4%	-0.3
5G-WIFI	5000~5800Mhz	29.6%	-2.8
2.4G-WIFI	2400~2500Mhz	28.1%	-0.7
BT	2400~2500Mhz	28.1%	-0.7
GPS	1575Mhz	30.2%	0.2

Efficient (GSM 850/W 850/LTE B5)

TOTAL



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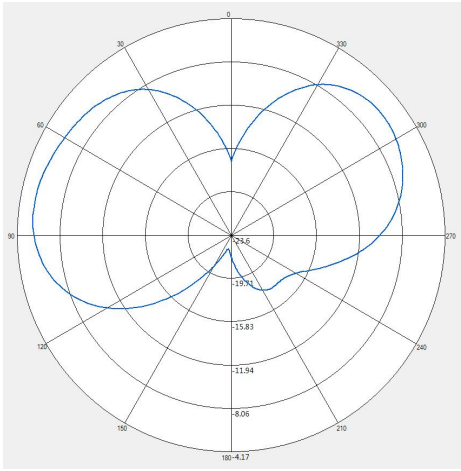

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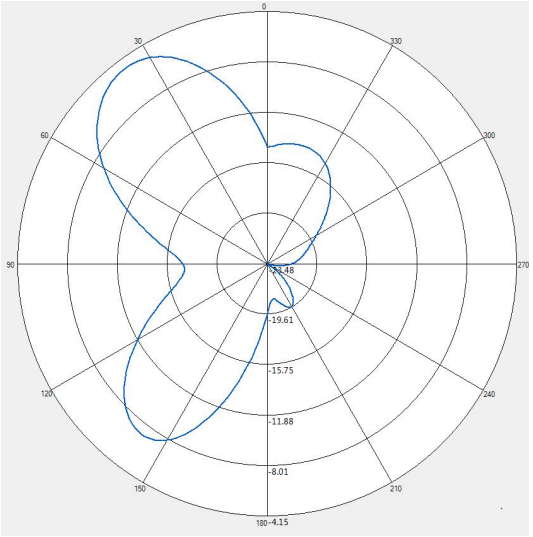

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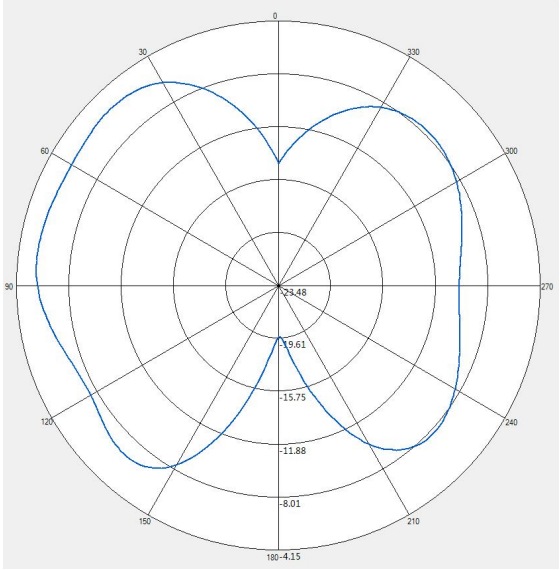
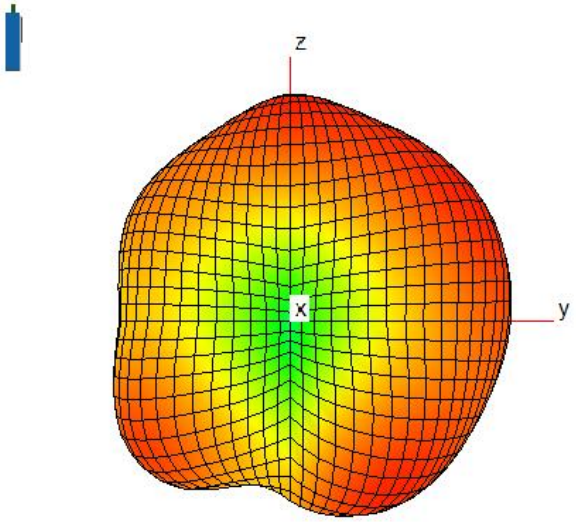


Efficient (GSM 900/W 900/LTE B8)

TOTAL



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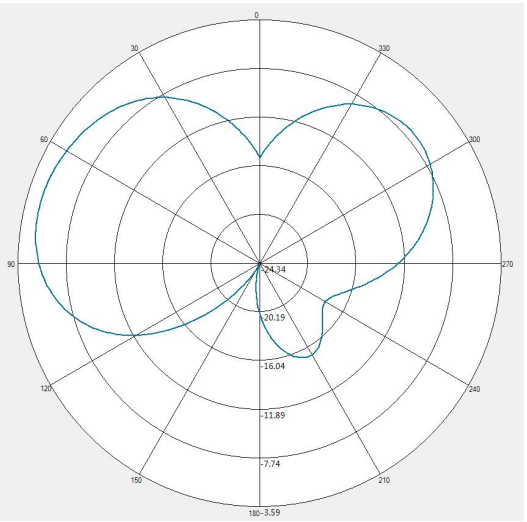

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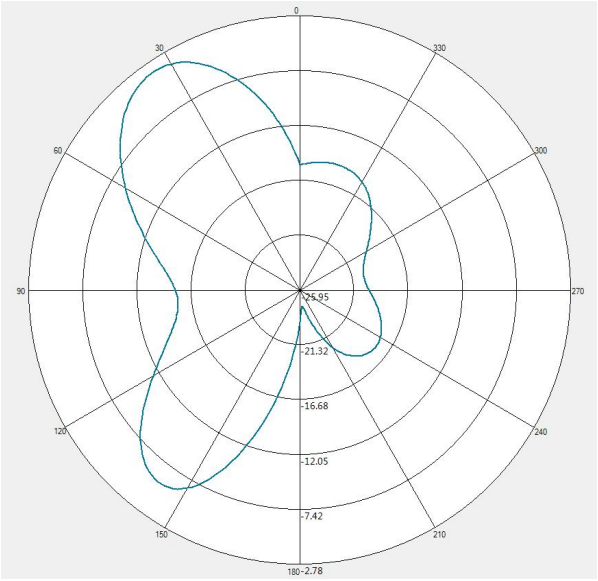

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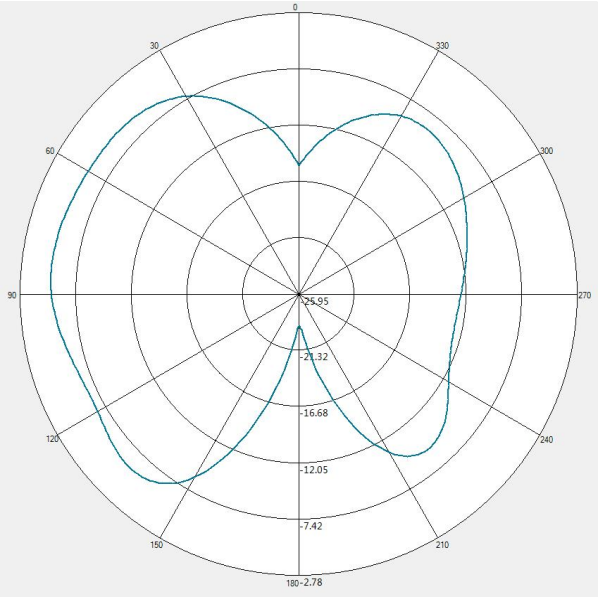
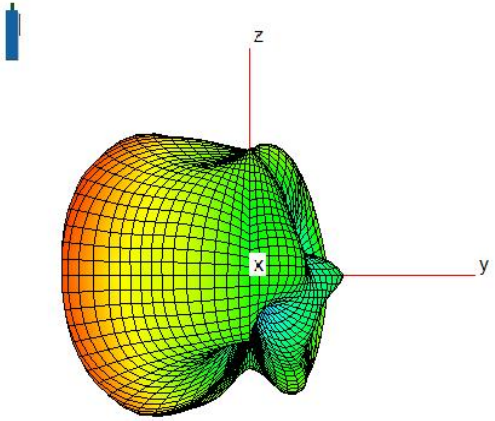


Efficient（GSM B2/3 W B2/4 LTE B2/3/4/39 ）

TOTAL



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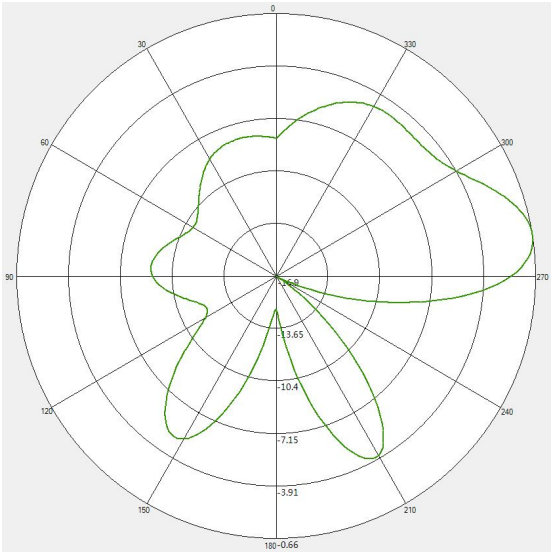

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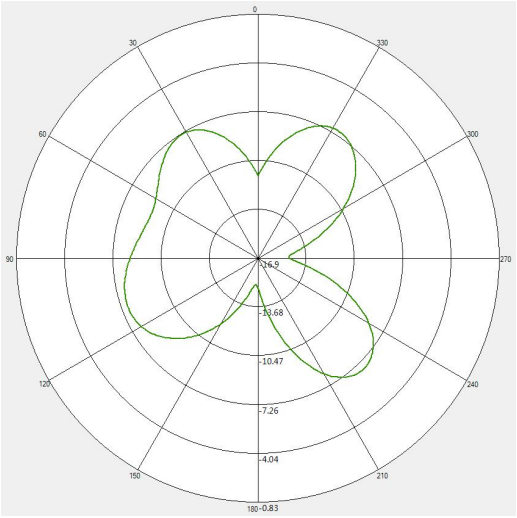

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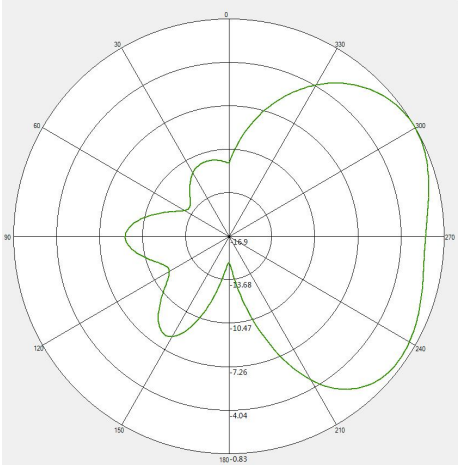
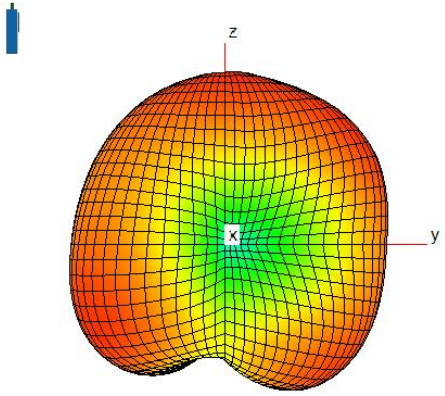


Efficient（LTE B12/17/28AB）

TOTAL



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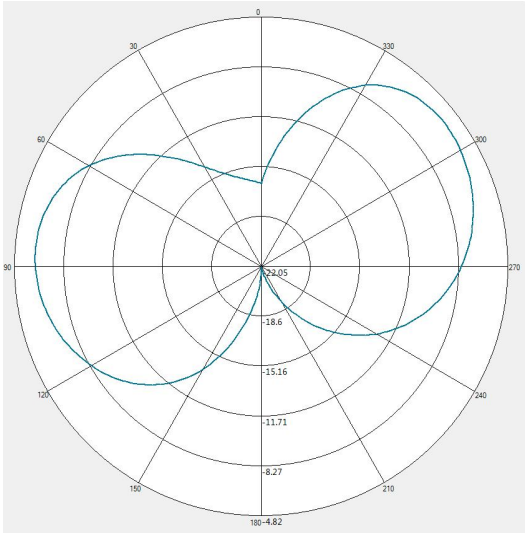

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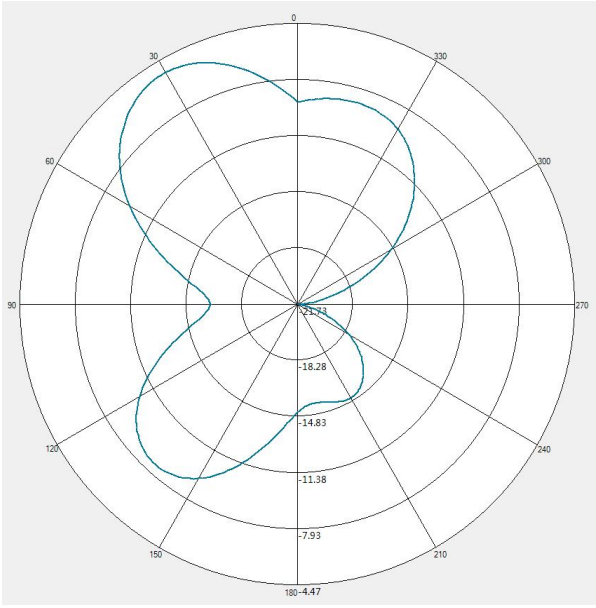

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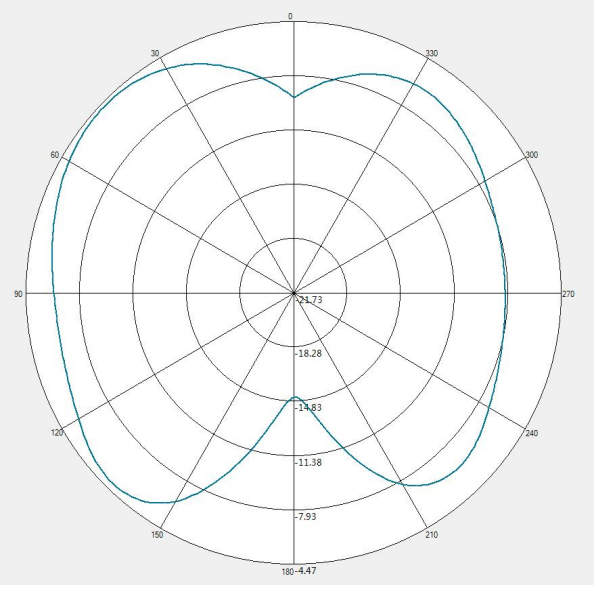
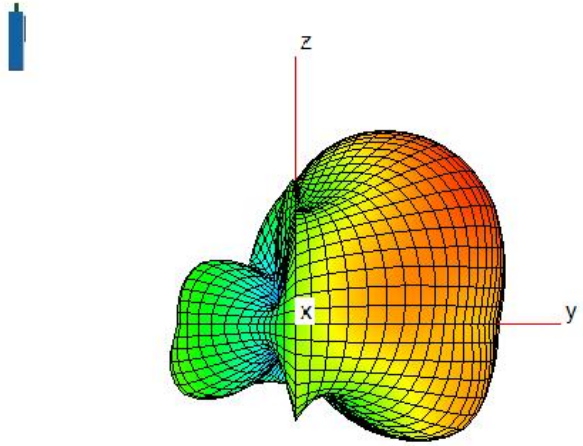


Efficient（LTE B7/38/41 ）

TOTAL



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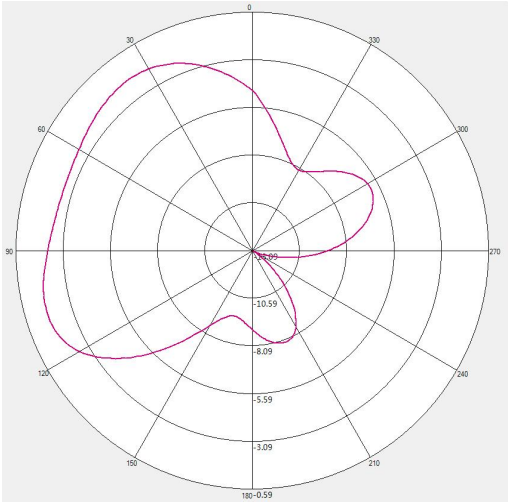

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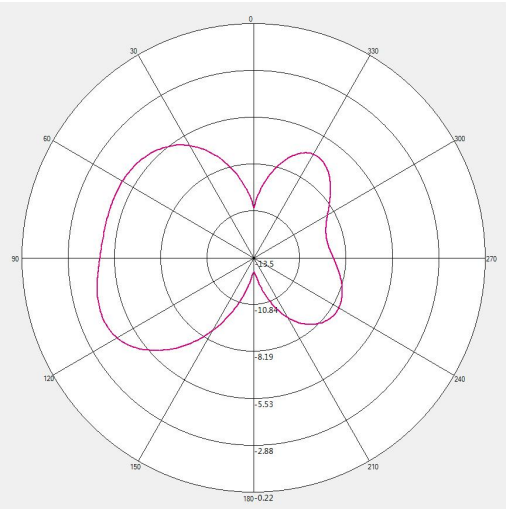

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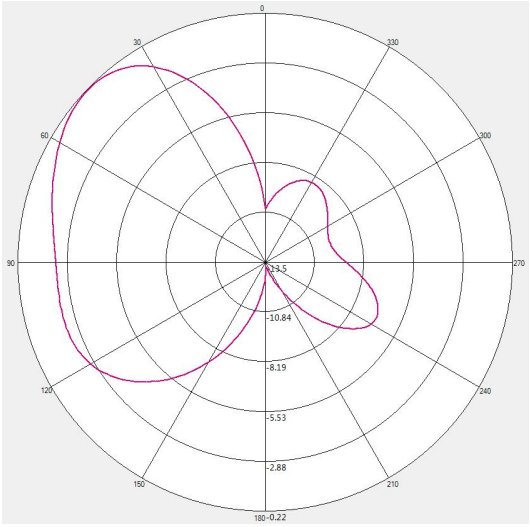
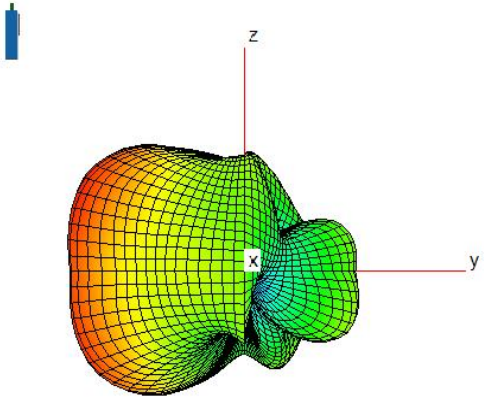


Efficient（W2100/LTE B1）

TOTAL



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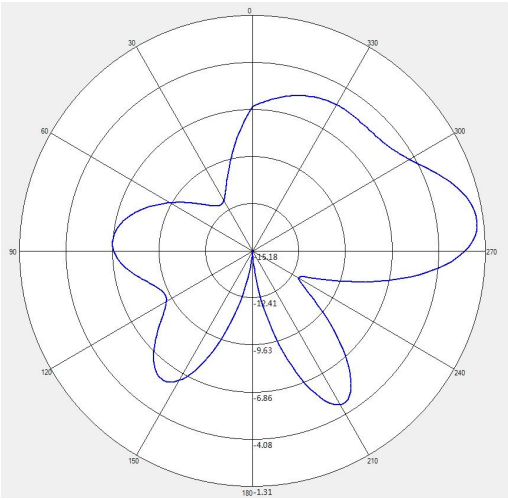

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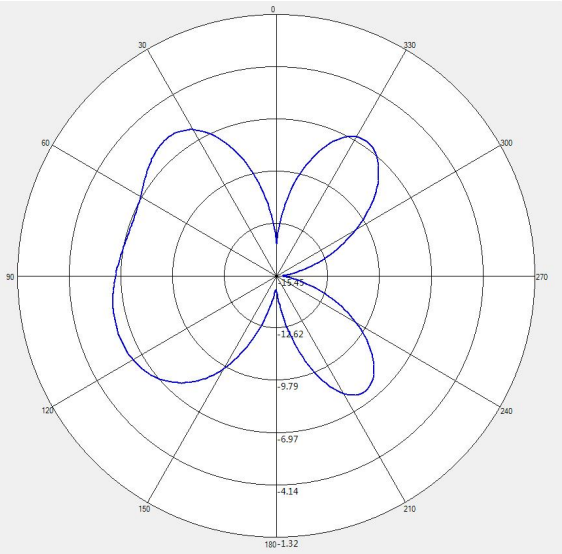

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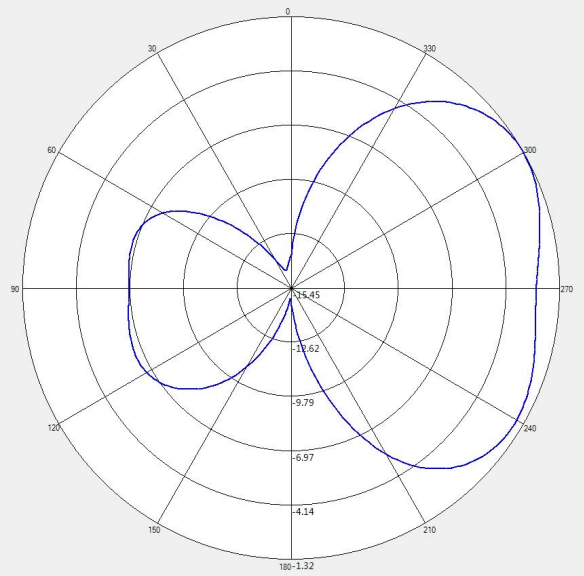
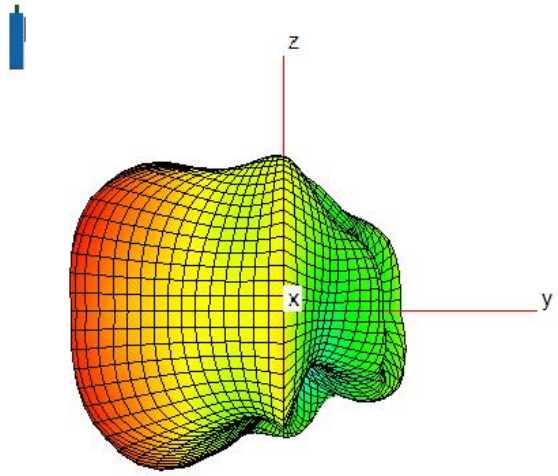


Efficient（LTE B40 ）

TOTAL



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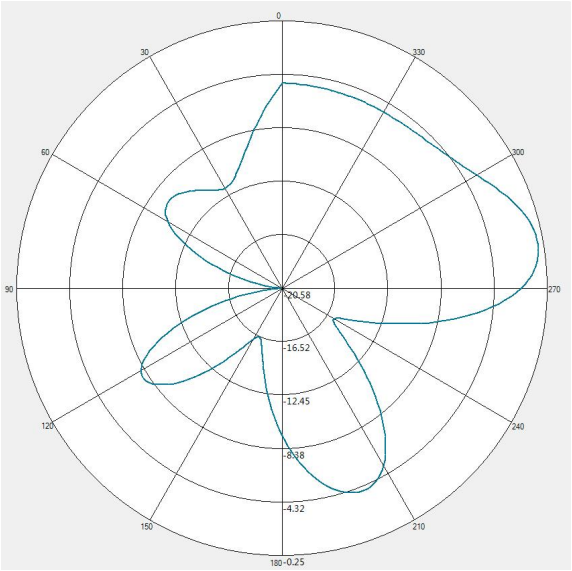

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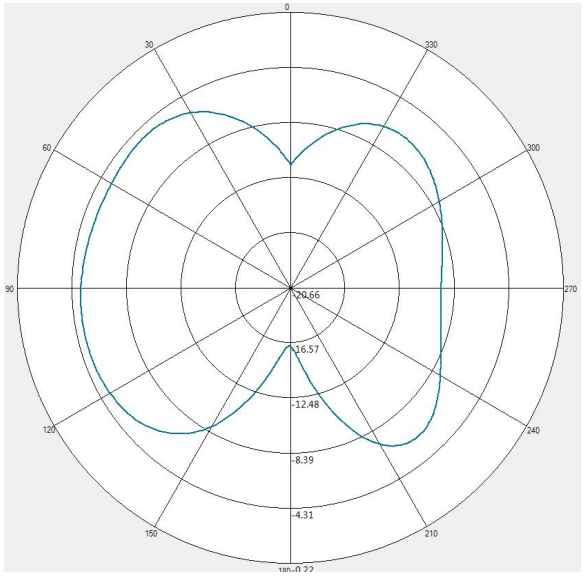

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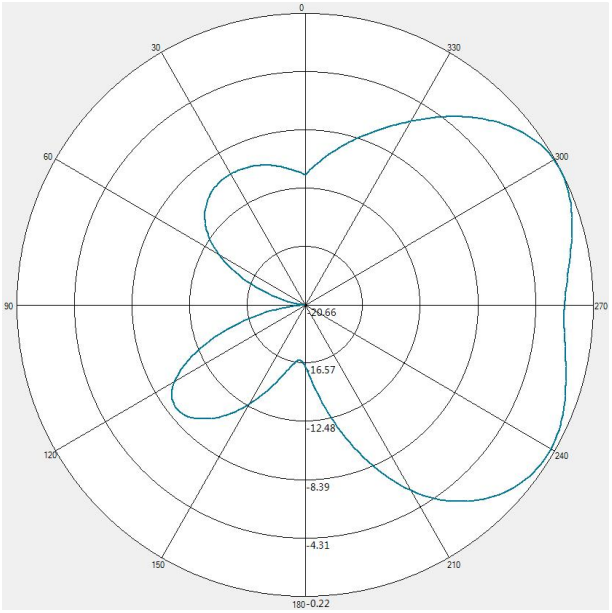
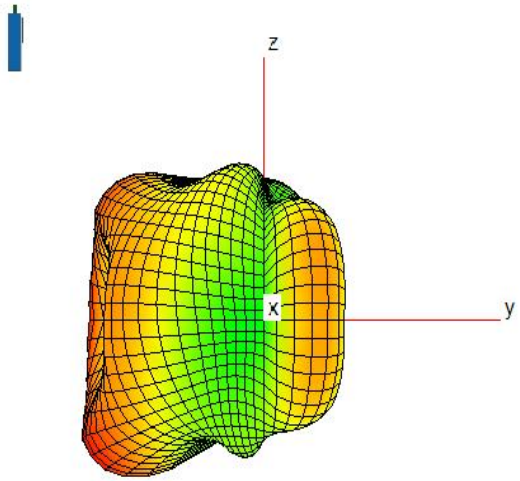
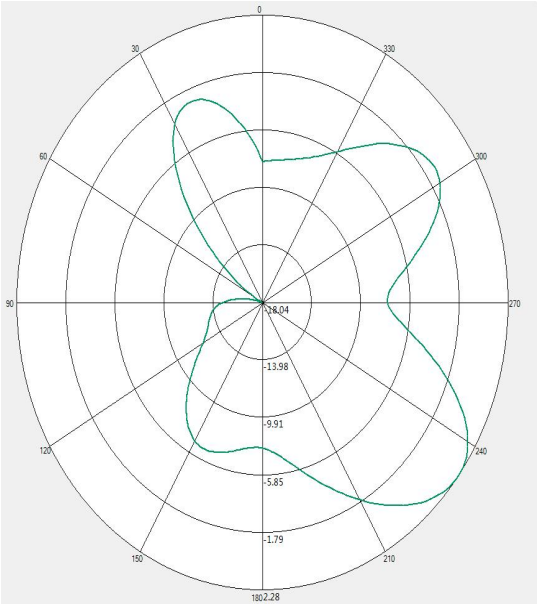
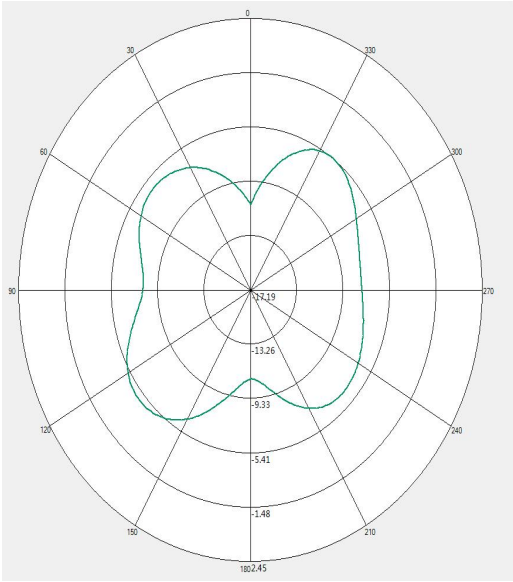
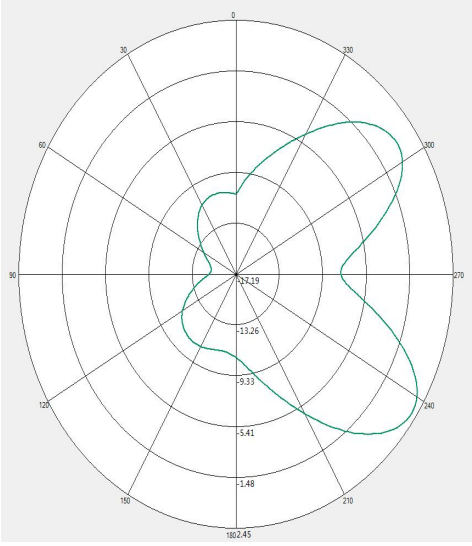


Efficient（2.4GWIFI/BT)

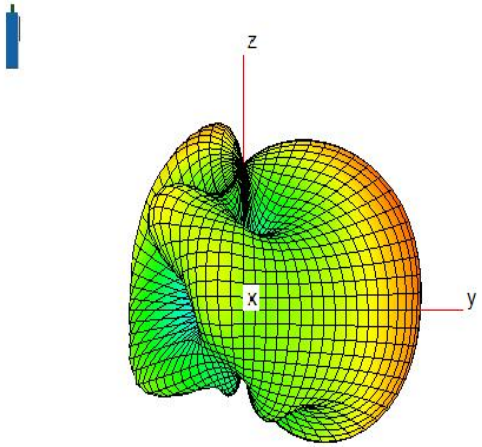


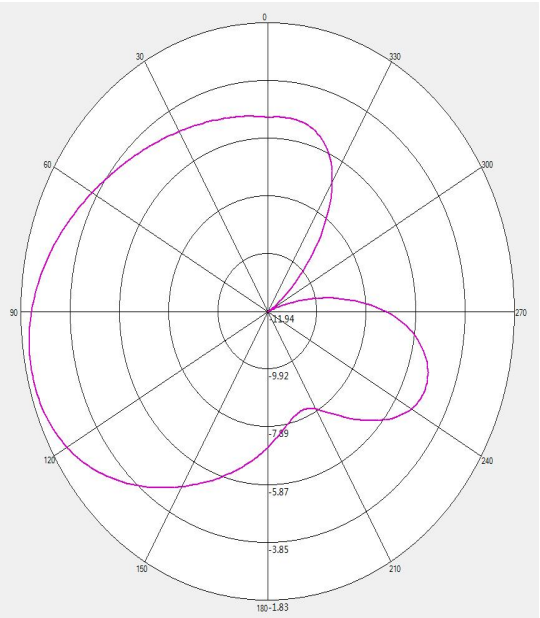


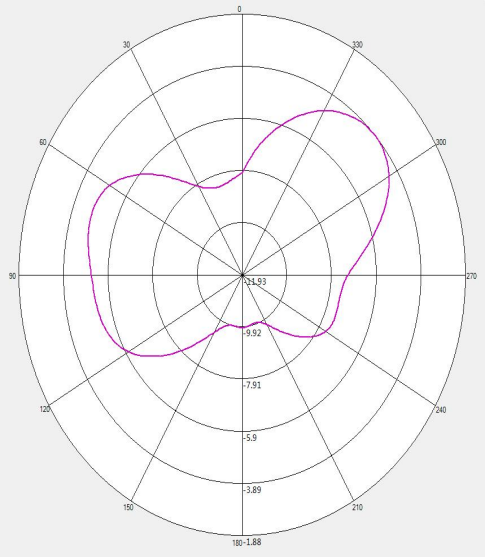


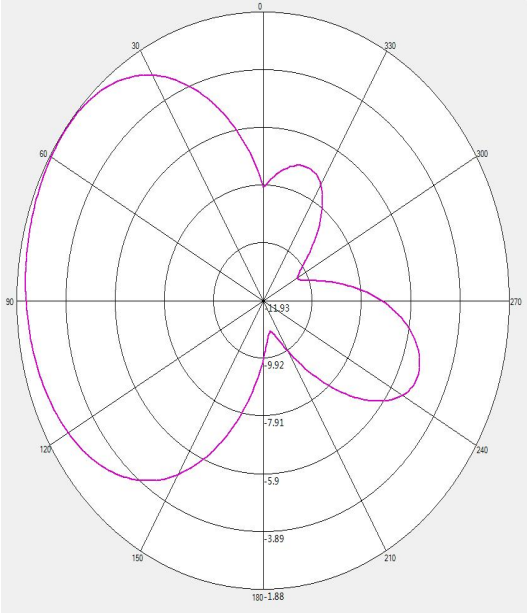
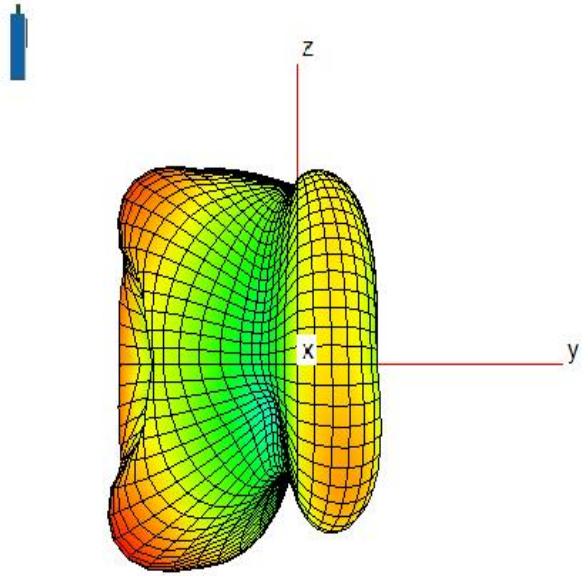
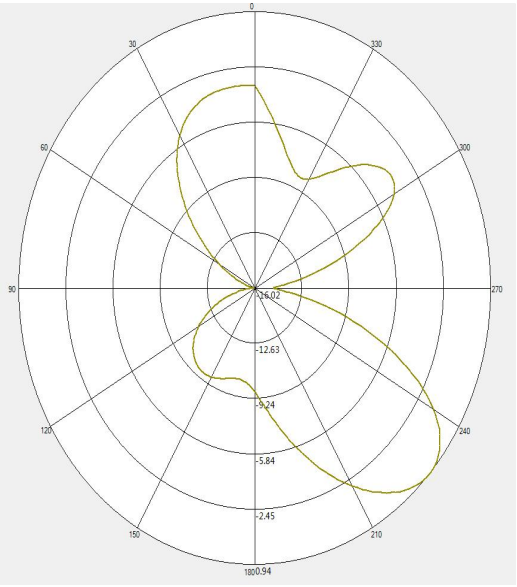
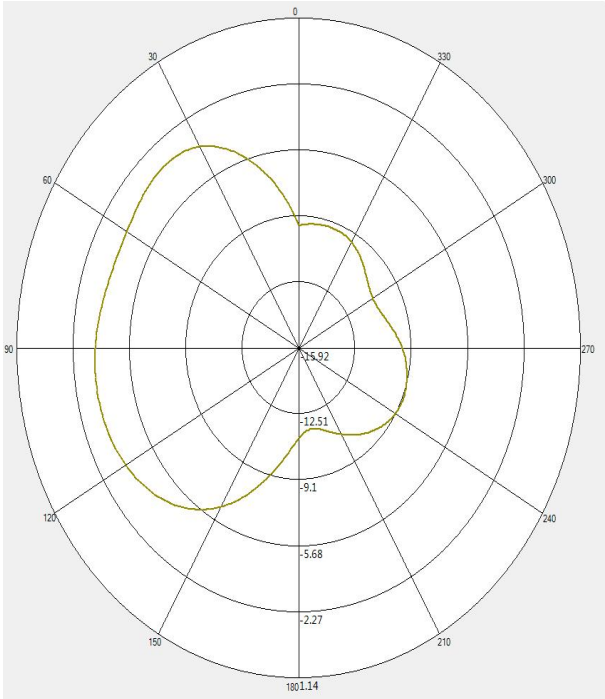
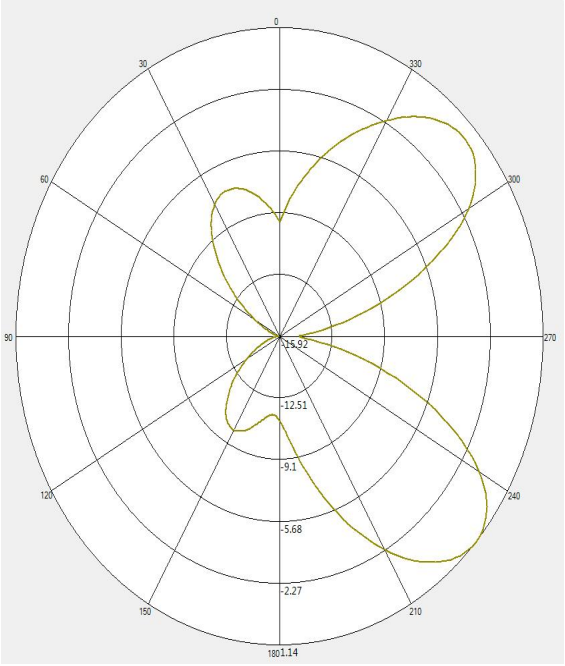


Efficient（5GWIFI 5000~5800MHz）









Efficient（ GPS 1575.42MHz ）