ShenZhen Huaxinwei communication technology Co.,Ltd.

Antenna test report

Customer Name: TianRuiXiang

Project Name: S6807-06F

Designer: Zhang Jun

Date: 2024/07/03

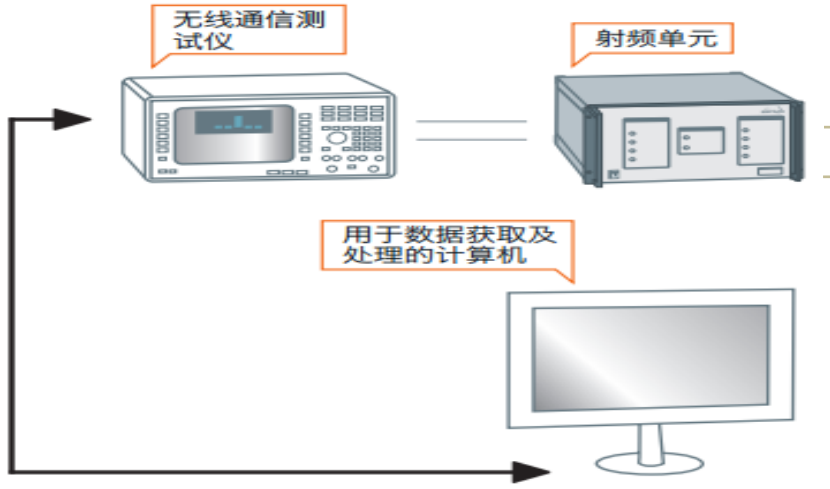
The customer name	TianRuiXiang	Project Name	**S6807-06F**

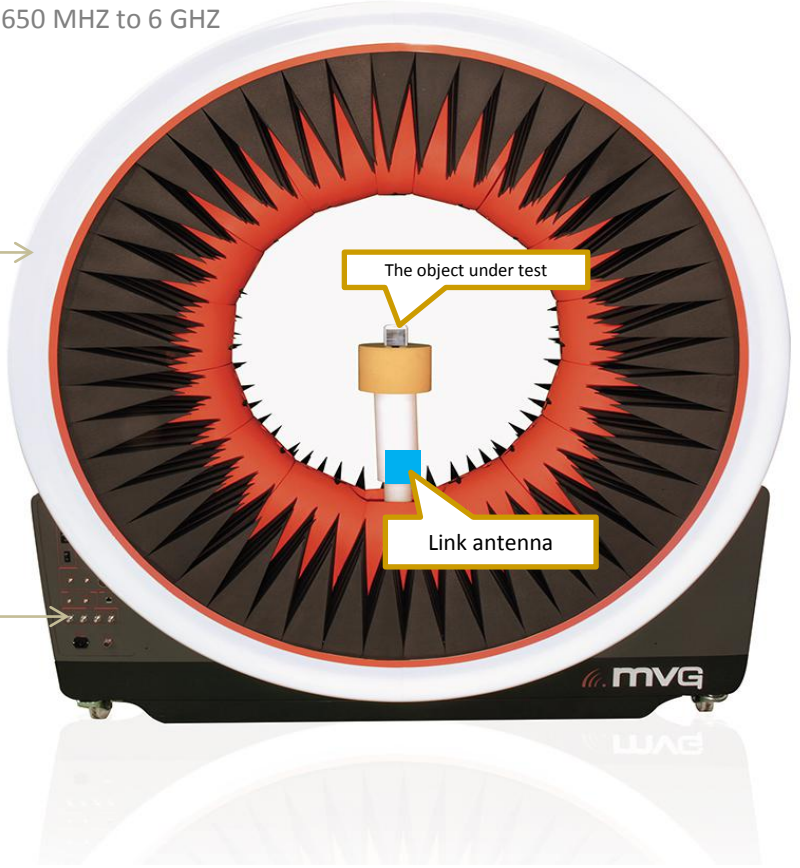
NO.	project	Detailed above
1	spectrum	GSM850/900/1800/1900+WCDMA-B1/2/4/5/8+LTE-B1/2/3/4/5/7/8/12/17/19/20/25/26/28/66+GPS/WIFI/BT
2	Project type	The mobile phone
3	Antenna space area	
4	Feed point type	
5	The sensitivity	
6	Type of antenna	
7	The length of the PCB board	
8	note	Debugging prototype

RF	Zhang Jun	13430515055	hxw_xiaozhang@126.com

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



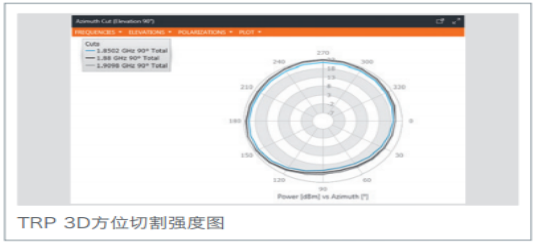


TIS预计测量时间（一个信道每隔30° 取样）

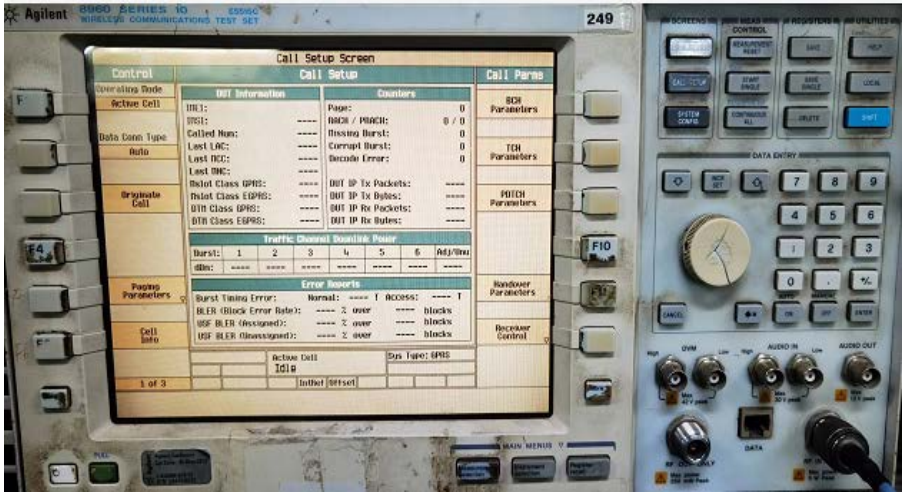
灵敏度算法 \ 标准	GSM GPRS EDGE	CDMA 1 x RTT 1 x EvDO	WCDMA HSDPA LTE FDD/TDD	Wi-Fi 802.11 a/b/g/n	CTIA 批准方法
RSSI模式+线性化+TIS补偿	8 min		10 min		是
EIS模式+TIS补偿		5 min		5 min	是[2]
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

1、根据RTC
2、根据协议


TIS 3D方位切割强度图

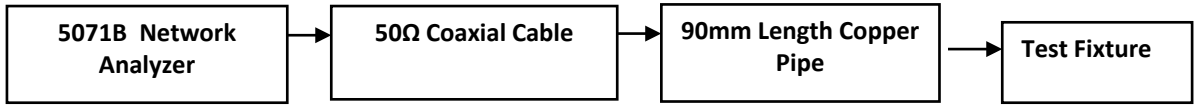

TRP 3D方位切割强度图

Test Equipment

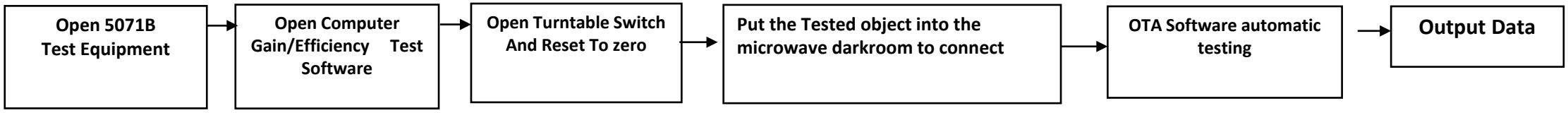


Test Steps

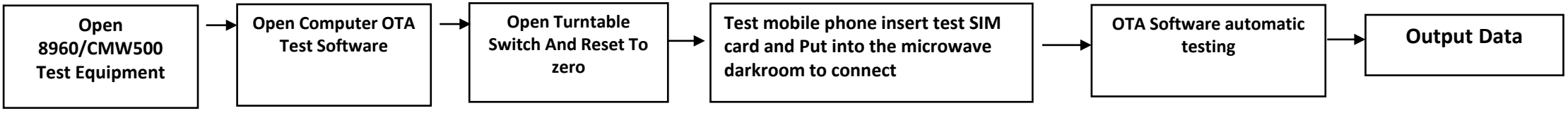
Passive VSWR/RL Test Steps:



Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps：

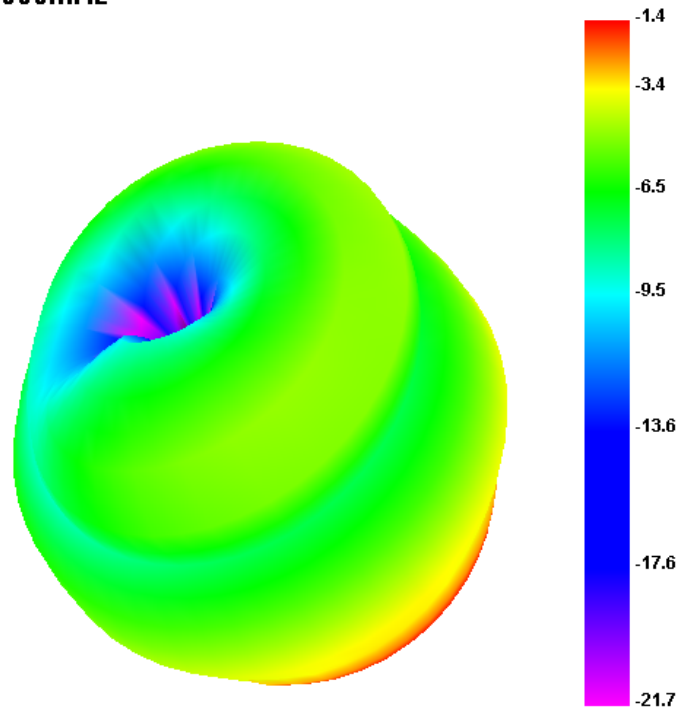


Efficient（ 2G+3G+4G+2.4G-WiFi /BT） Antenna Effi Gain

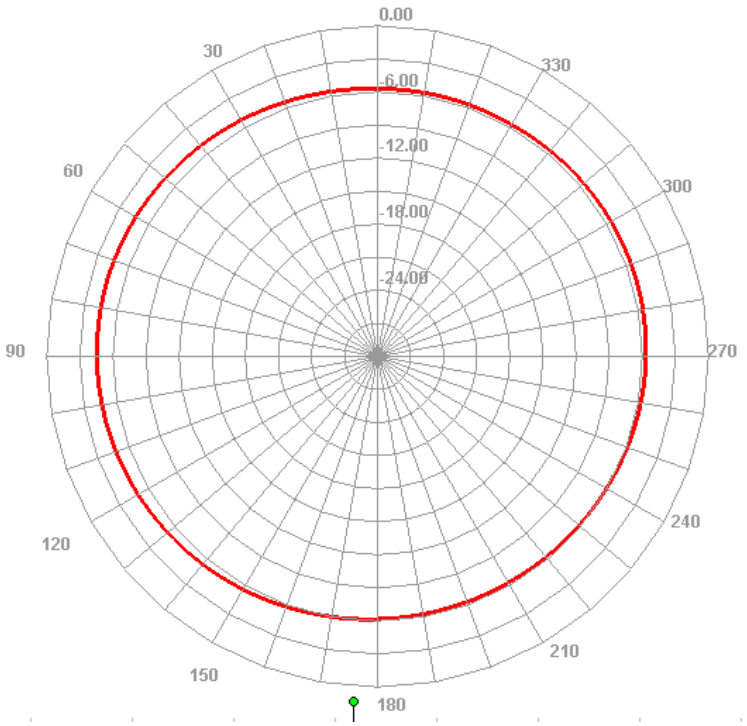
PEAK GAIN			
2G:	Frequency range	Effi %	Gaim dBi
GSM850	824~894Mhz	21.52	-2.63
GSM900	880~960Mhz	20.37	-2.18
DCS1800	1710~1880Mhz	28.35	0.63
PCS1900	1850~1990Mhz	30.62	0.81
3G:			
W1	1920~2170Mhz	37.45	0.91
W2	1850~1990Mhz	30.81	0.81
W4	1710~2155Mhz	30.57	0.92
W5	824~894Mhz	21.52	-2.63
W8	880~960Mhz	20.37	-2.18
4G:			
LTE-B1	1920~2170Mhz	37.45	0.91
LTE-B2	1850~1990Mhz	30.81	0.81
LTE-B3	1710~1880Mhz	28.62	0.63
LTE-B4	1710~2155Mhz	30.57	0.92
LTE-B5	824~894Mhz	21.52	-2.63
LTE-B7	2500~2690Mhz	28.01	1.12
LTE-B8	880~960Mhz	20.37	-2.18
LTE-B12	698~746Mhz	19.03	-1.42
LTE-B17	704~746Mhz	19.03	-1.42
LTE-B19	830~890Mhz	21.52	-2.63
LTE-B20	791~845Mhz	21.52	-2.63
LTE-B25	1855~19900Mhz	30.62	0.81
LTE-B26	819~889Mhz	21.52	-2.63
LTE-B28	708~798Mhz	19.03	-1.42
LTE-B66	1710~2170Mhz	30.62	0.92
5G-WIFI	5150~5250Mhz	37.81	1.81
	5725~5850Mhz	37.16	1.91
2.4G-WIFI	2400~2500Mhz	42.70	1.87
BT	2400~2500Mhz	42.70	1.87
GPS	1575Mhz	38.73	1.19

Efficient（ 698-746MHz ）

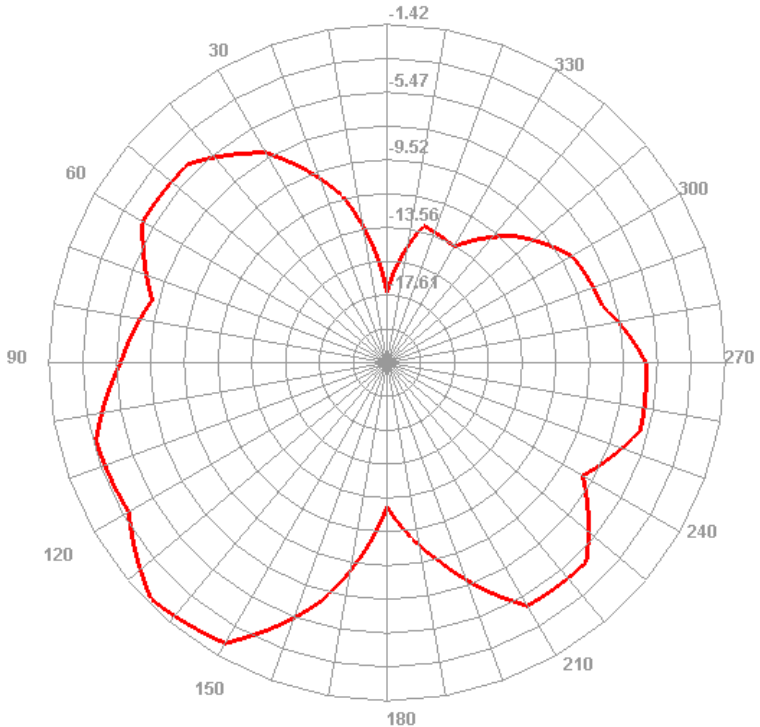
710.000MHz



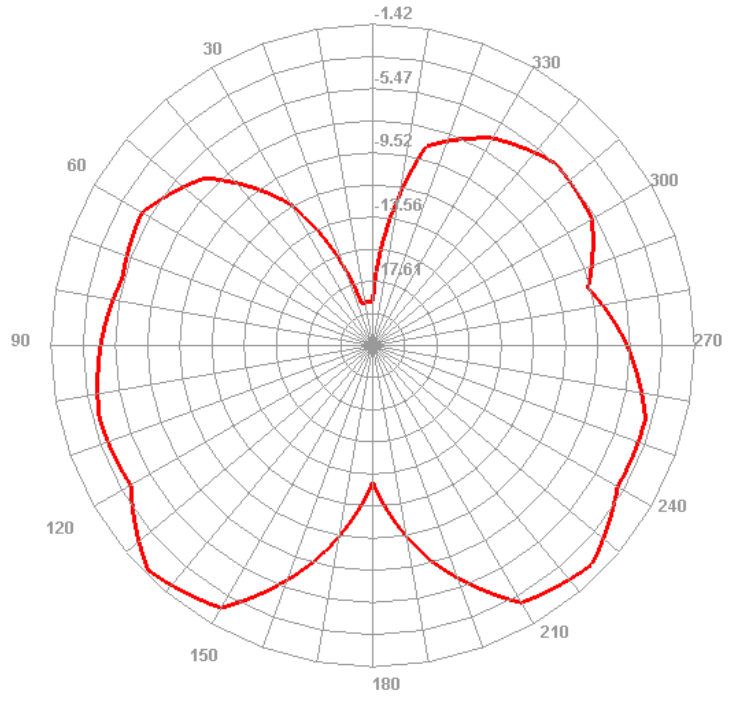
710.000MHz H



710.000MHz E1

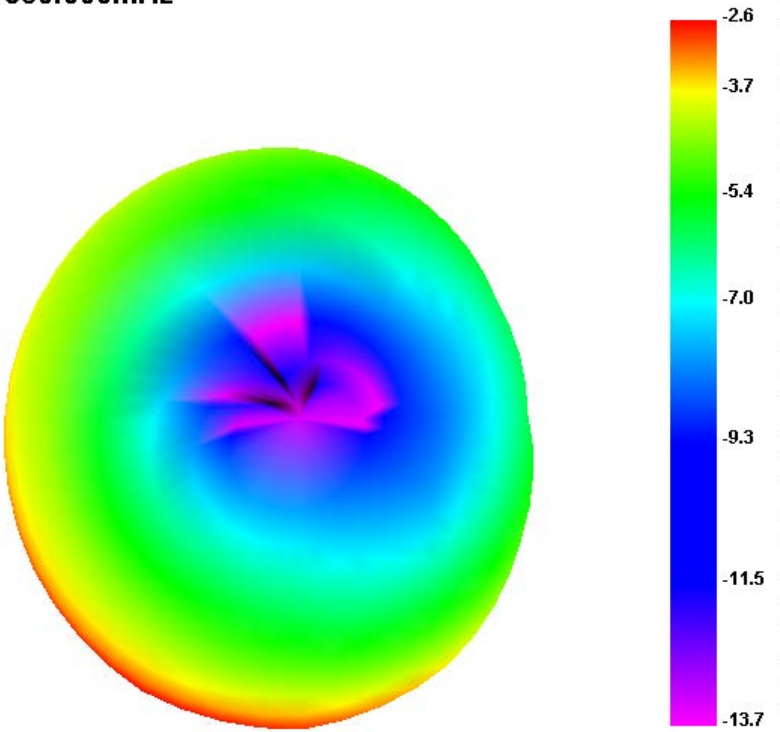


710.000MHz E2

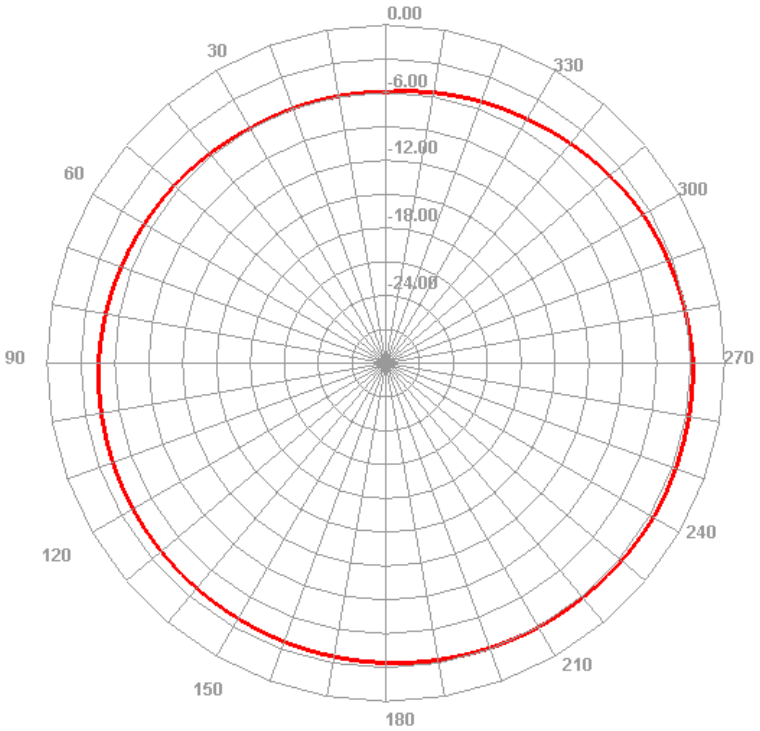


Efficient（ 791-894MHz ）

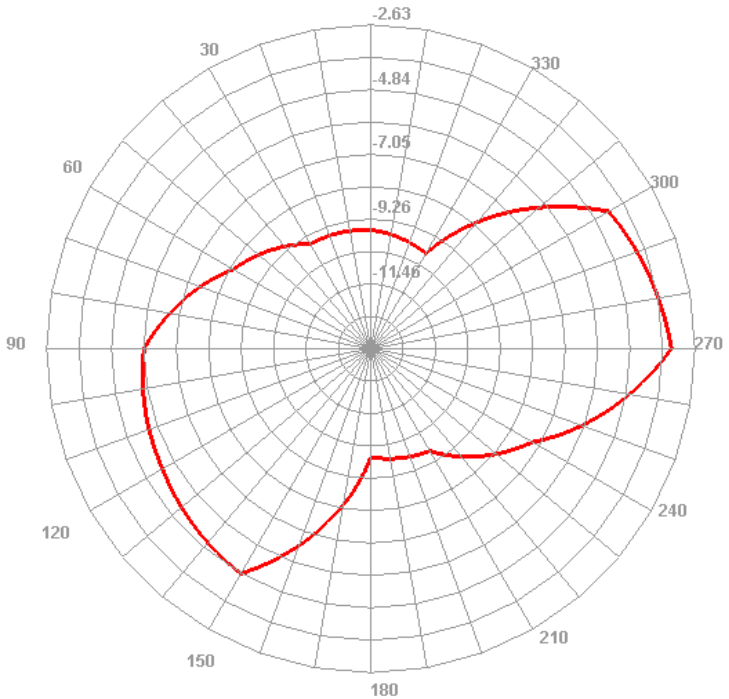
830.000MHz



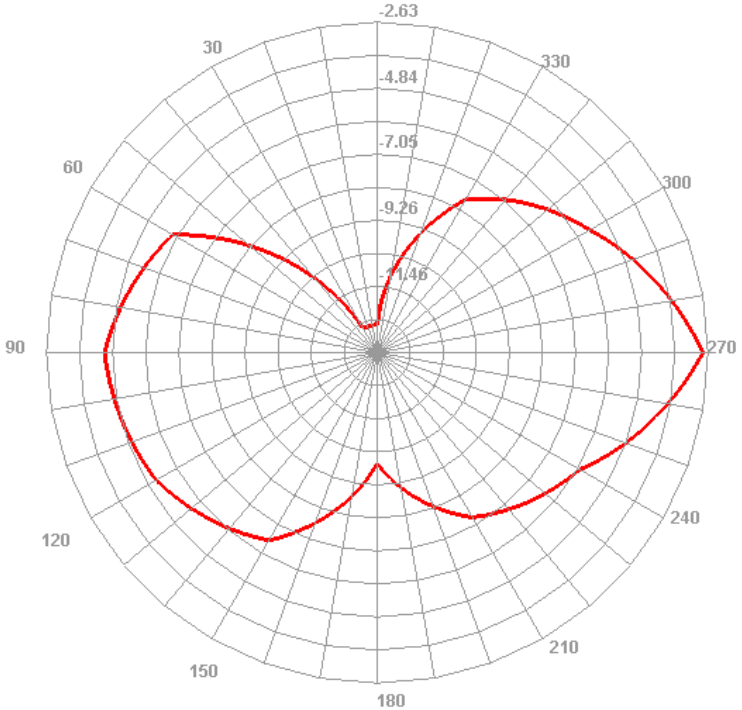
830.000MHz H



830.000MHz E1

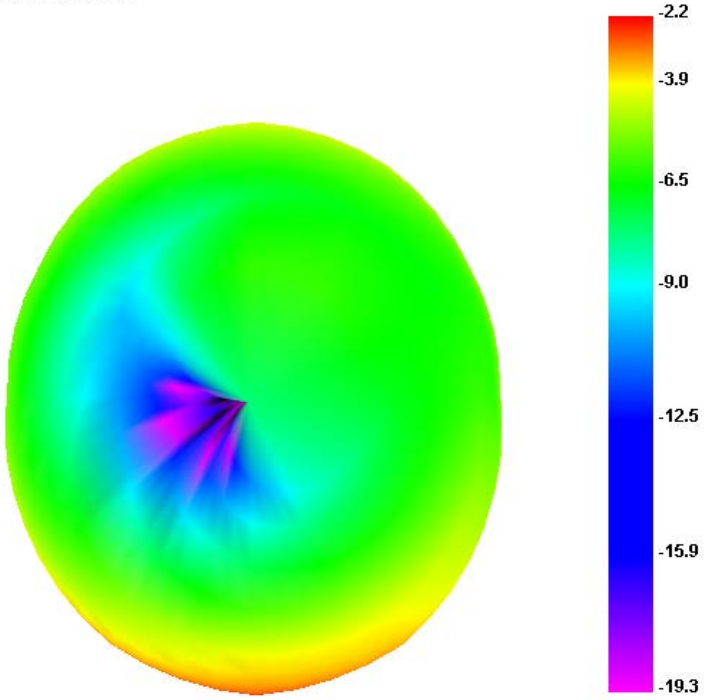


830.000MHz E2

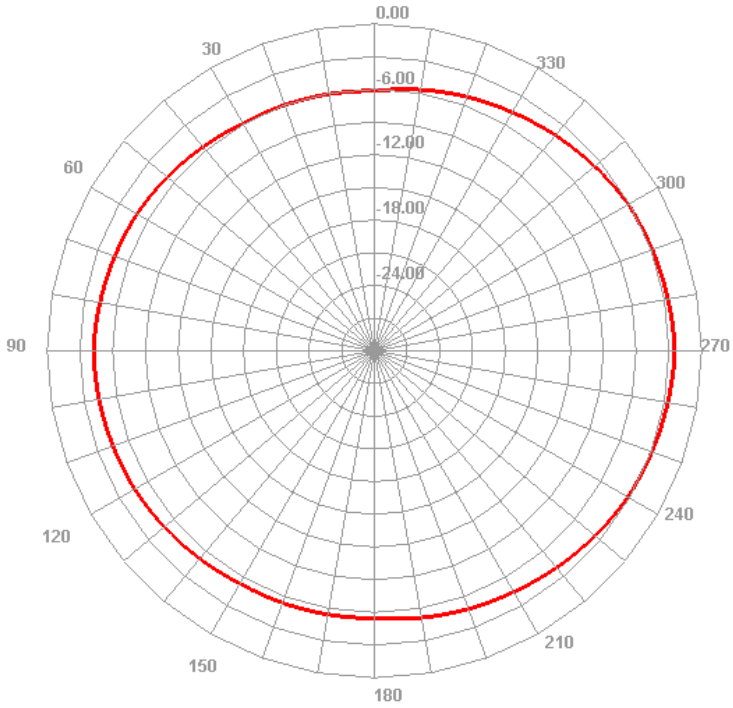


Efficient（ 880-960MHz ）

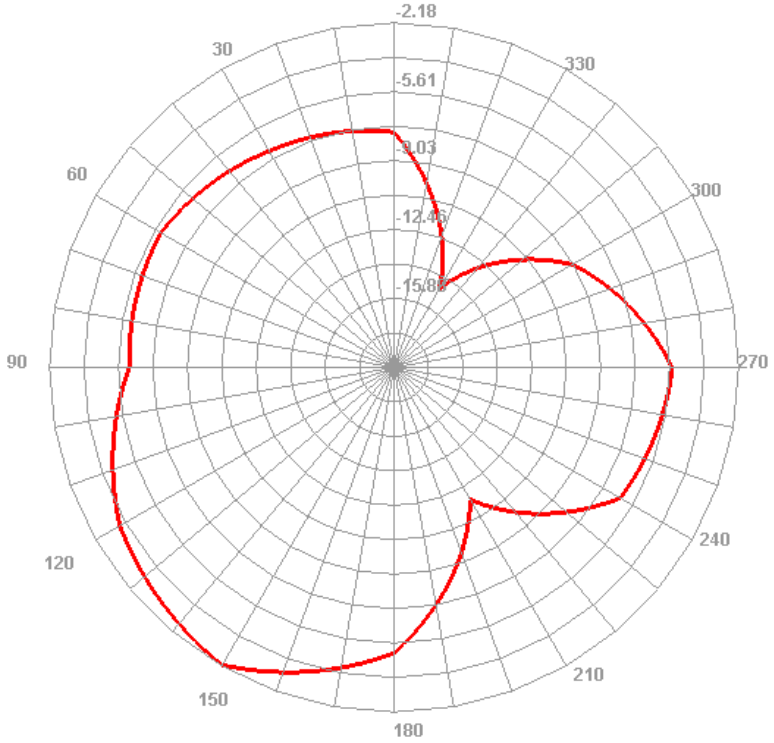
930.000MHz



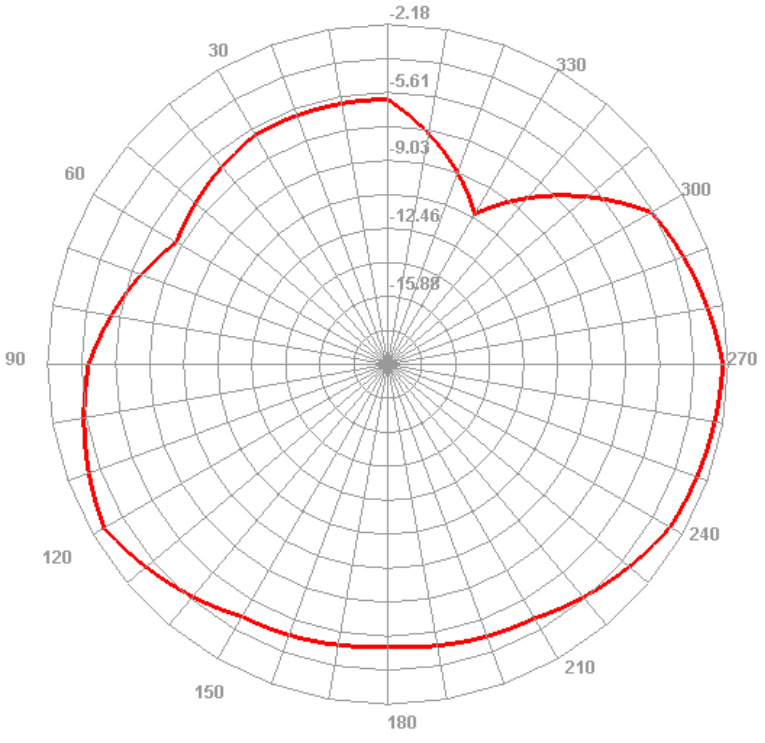
930.000MHz H



930.000MHz E1

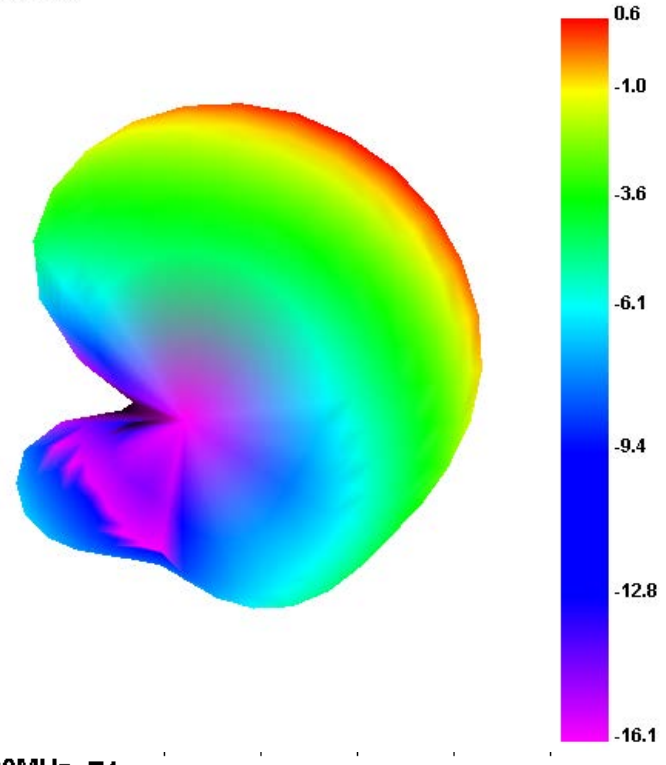


930.000MHz E2

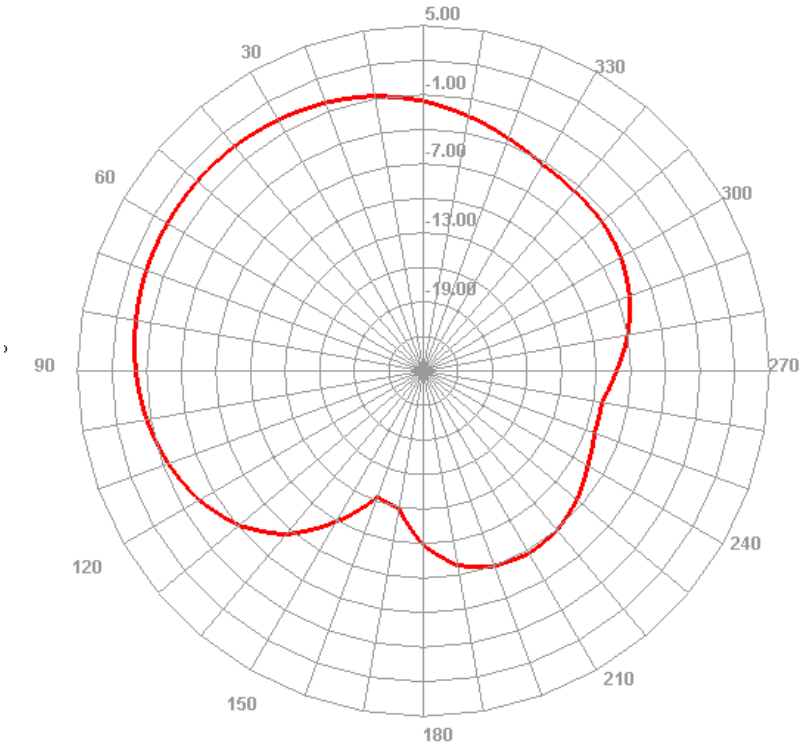


Efficient（1710-1880MHz ）

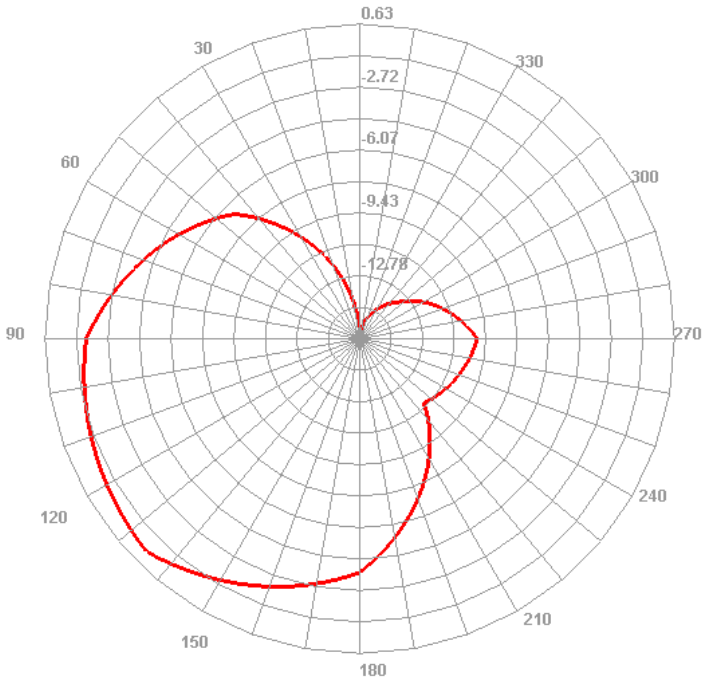
1820.000MHz



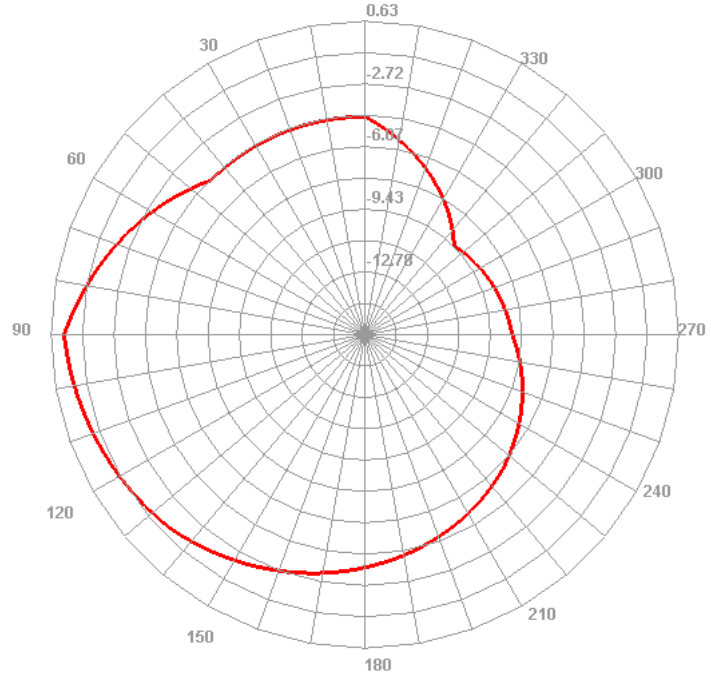
1820.000MHz H



1820.000MHz E1

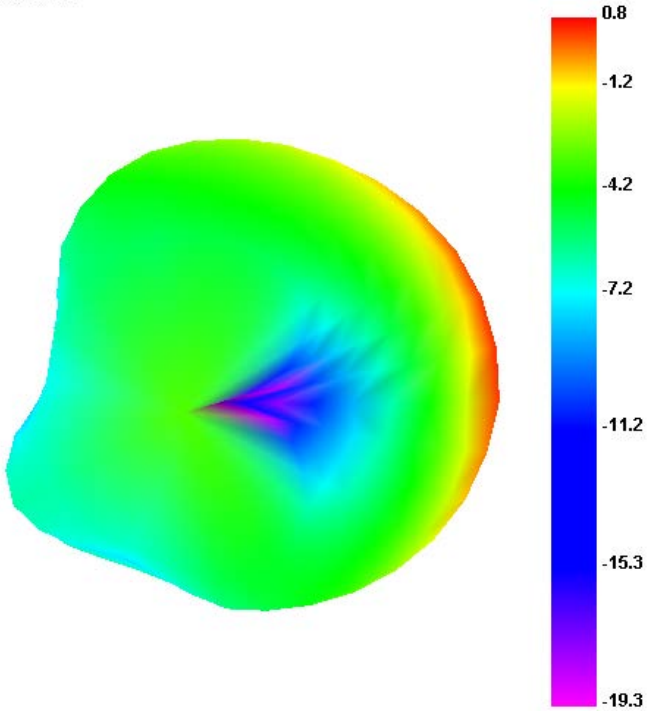


1820.000MHz E2

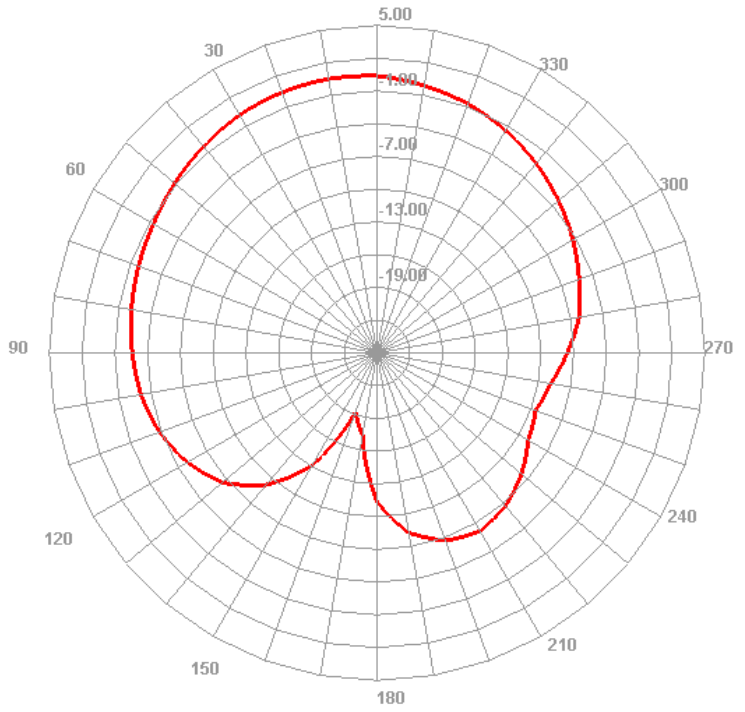


Efficient（ 1710-1990MHz ）

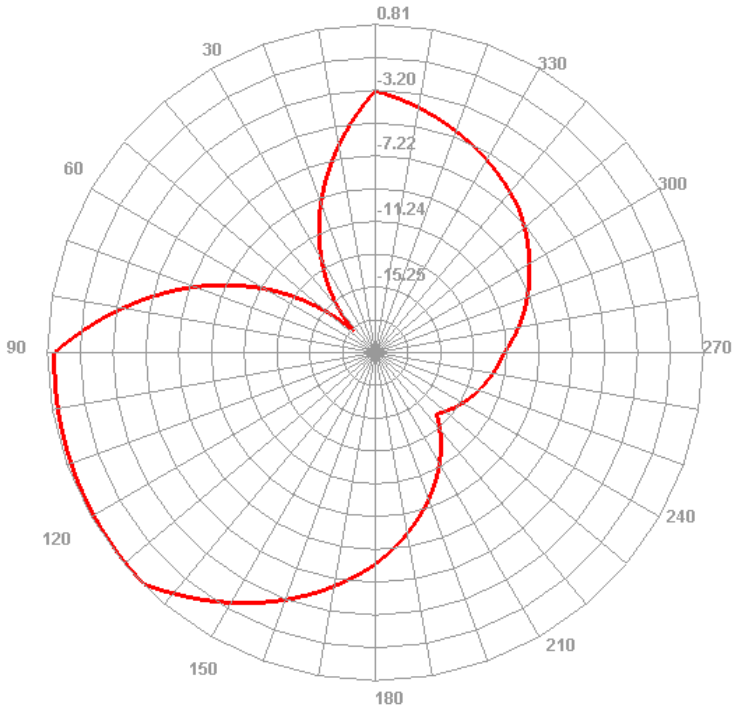
1920.000MHz

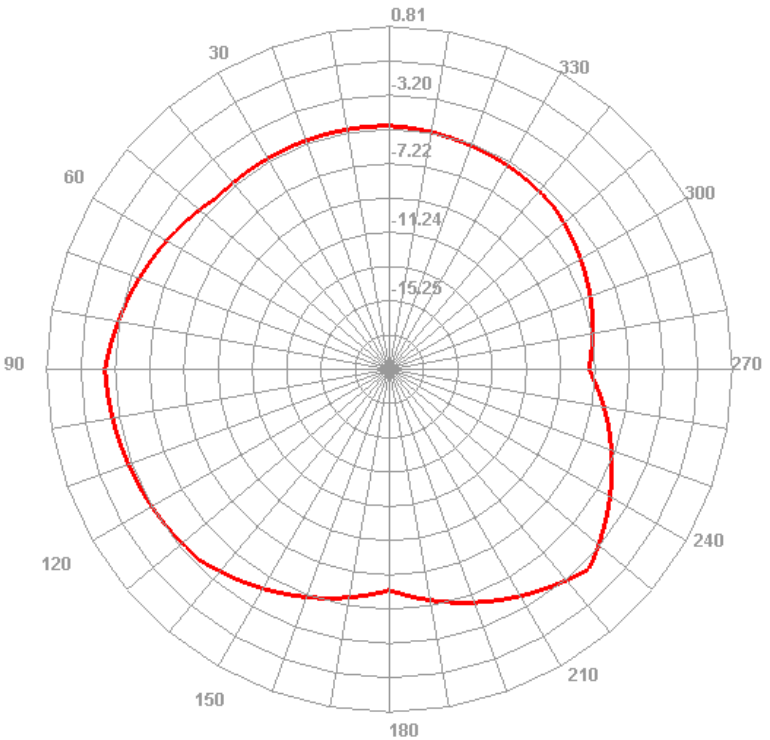


1920.000MHz H



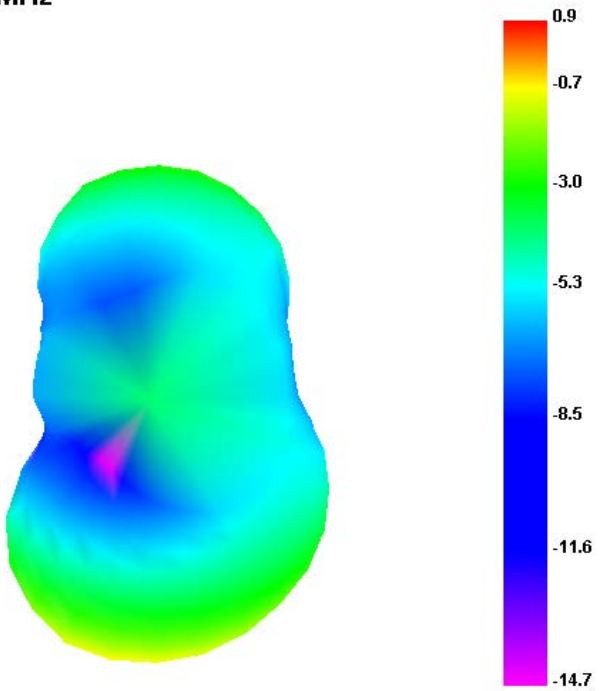
1920.000MHz E1



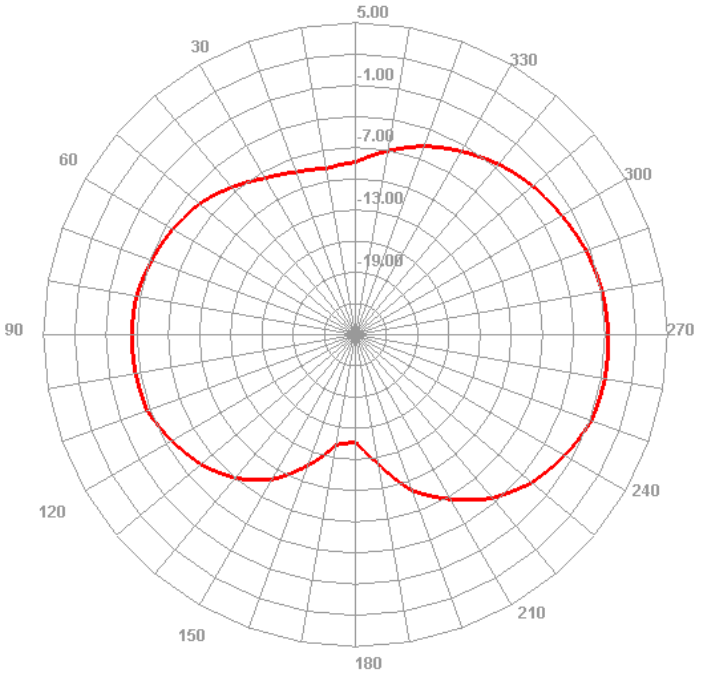


Efficient（ 1920-2170MHz ）

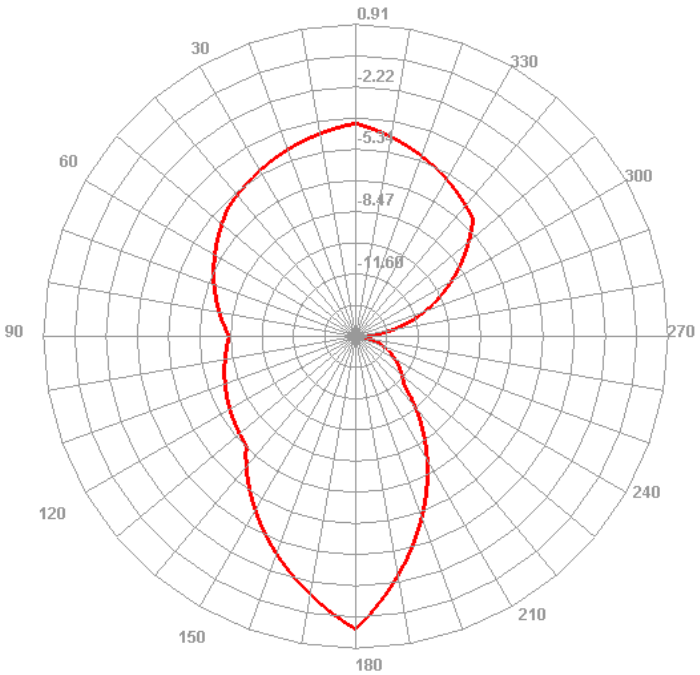
2010.000MHz



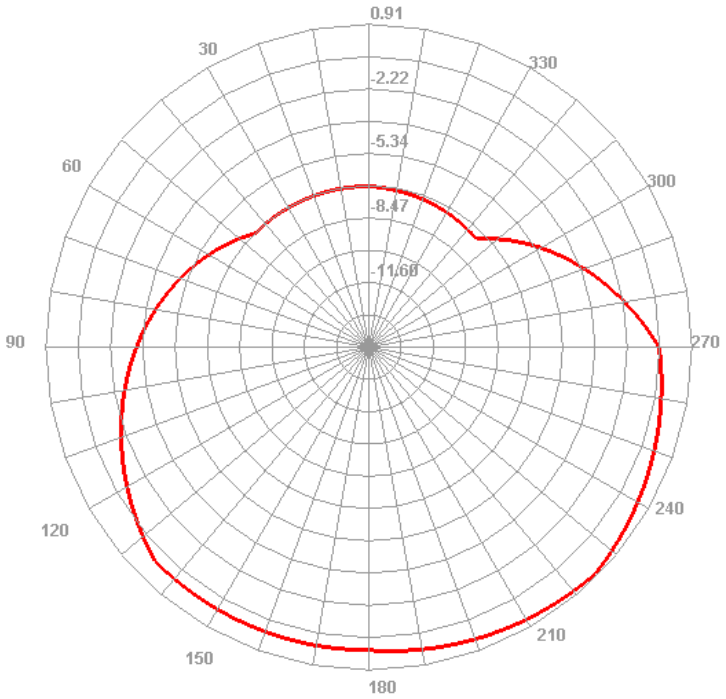
2010.000MHz H



2010.000MHz E1

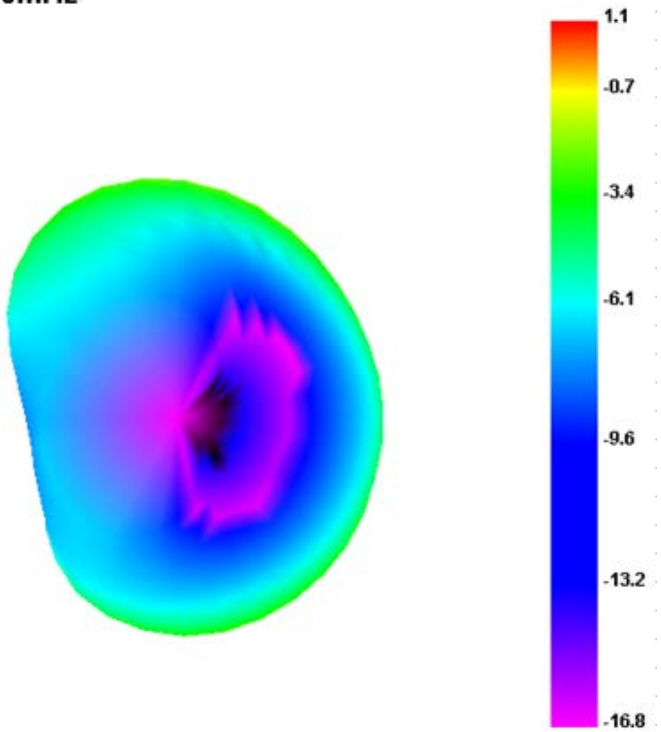


2010.000MHz E2

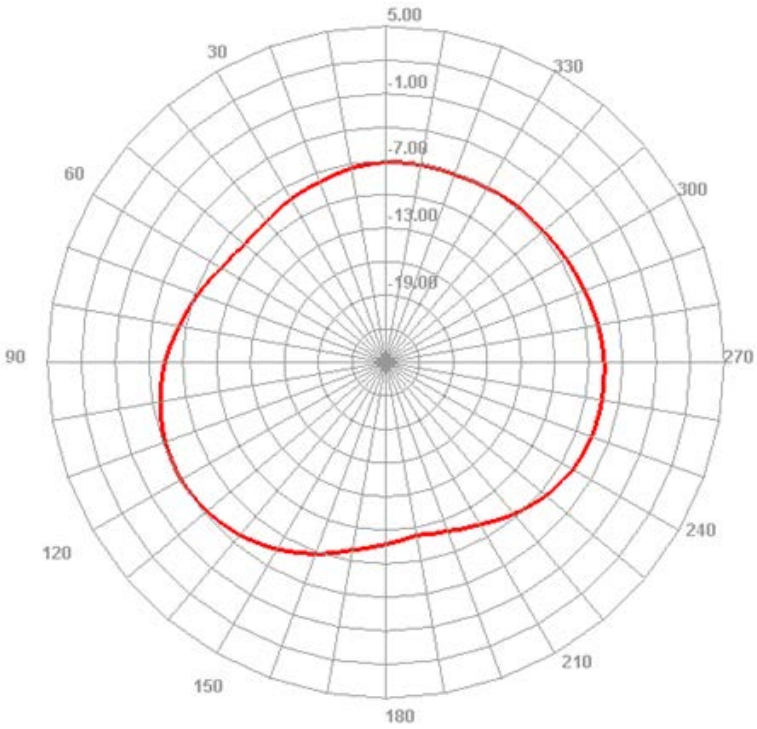


Efficient（ 2500-2690MHz ）

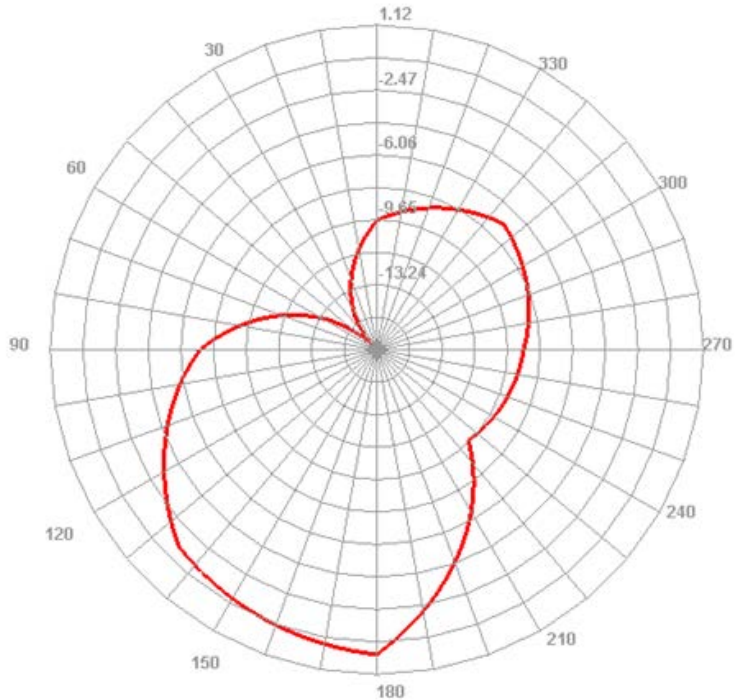
2660.000MHz



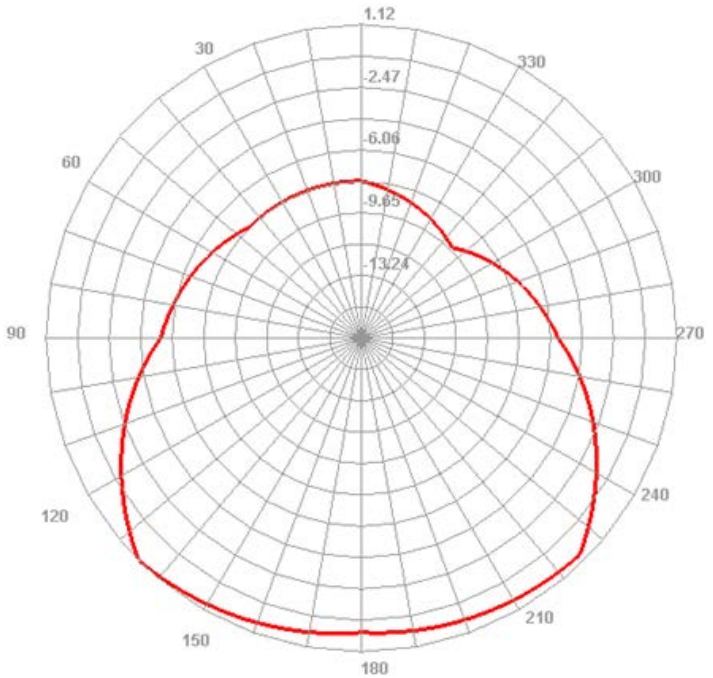
2660.000MHz H



2660.000MHz E1

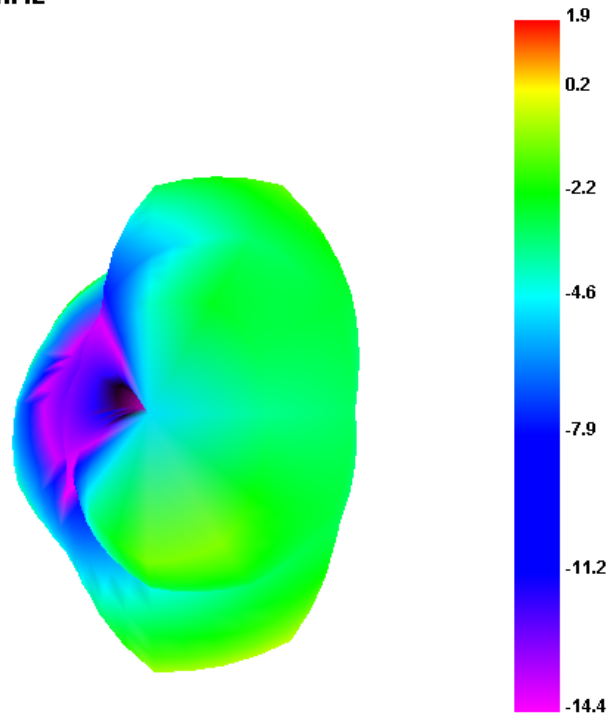


2660.000MHz E2

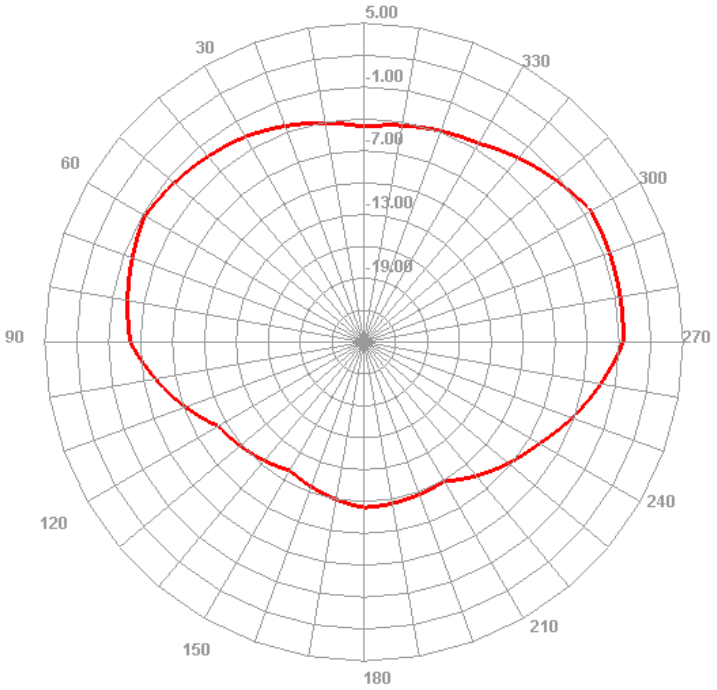


Efficient (2.4G-WIFI/BT 2400-2500MHz)

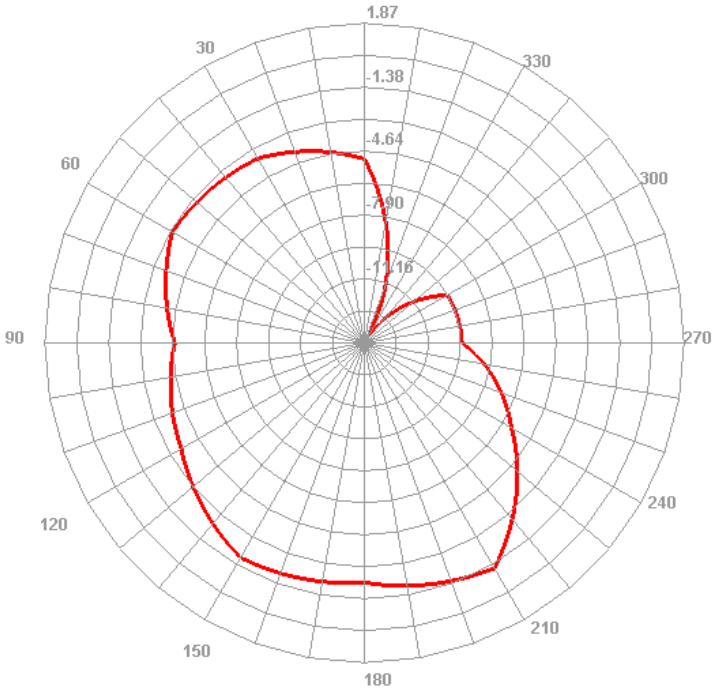
2450.000MHz



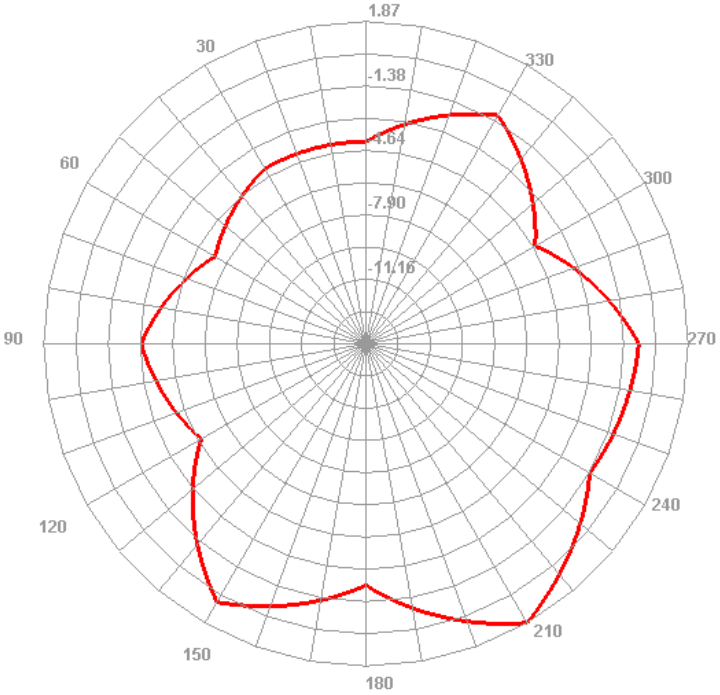
2450.000MHz H



2450.000MHz E1

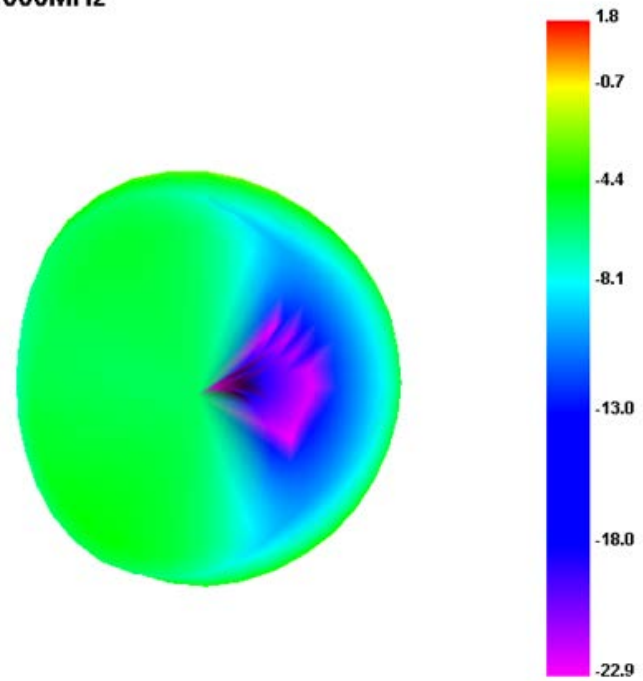


2450.000MHz E2

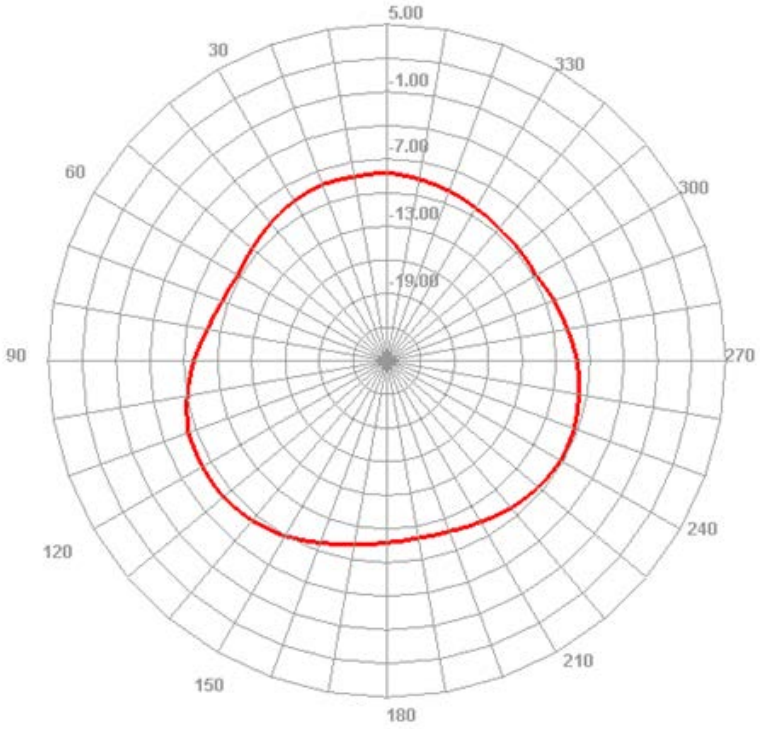


Efficient (5G-WIFI 5000-5250MHz)

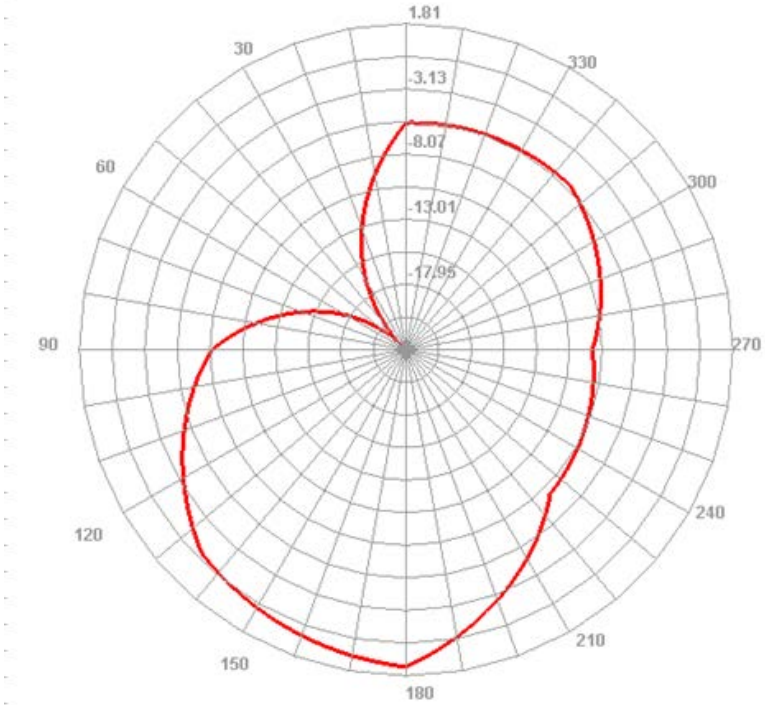
5150.000MHz



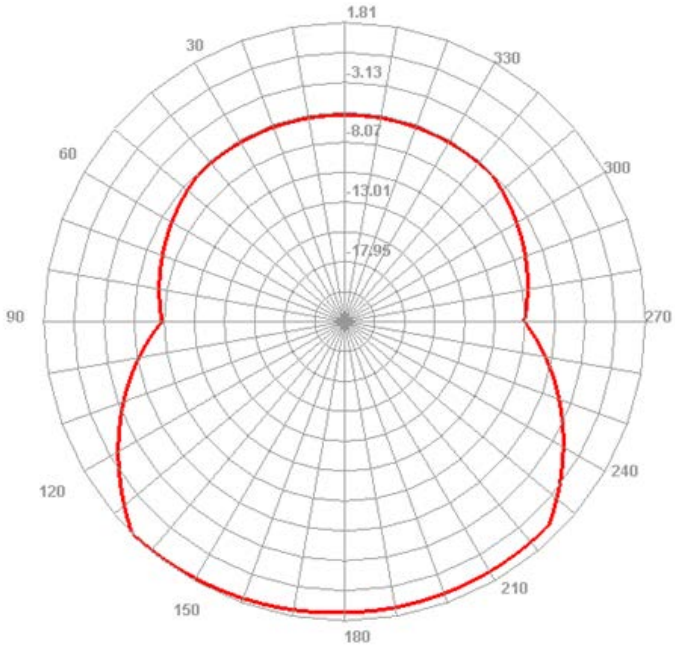
5150.000MHz H



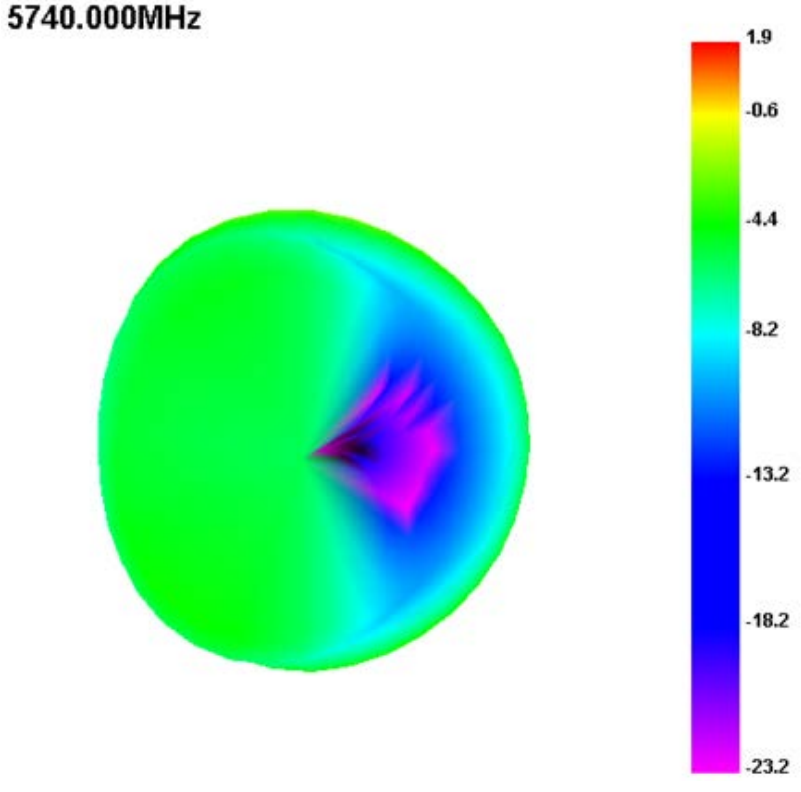
5150.000MHz E1

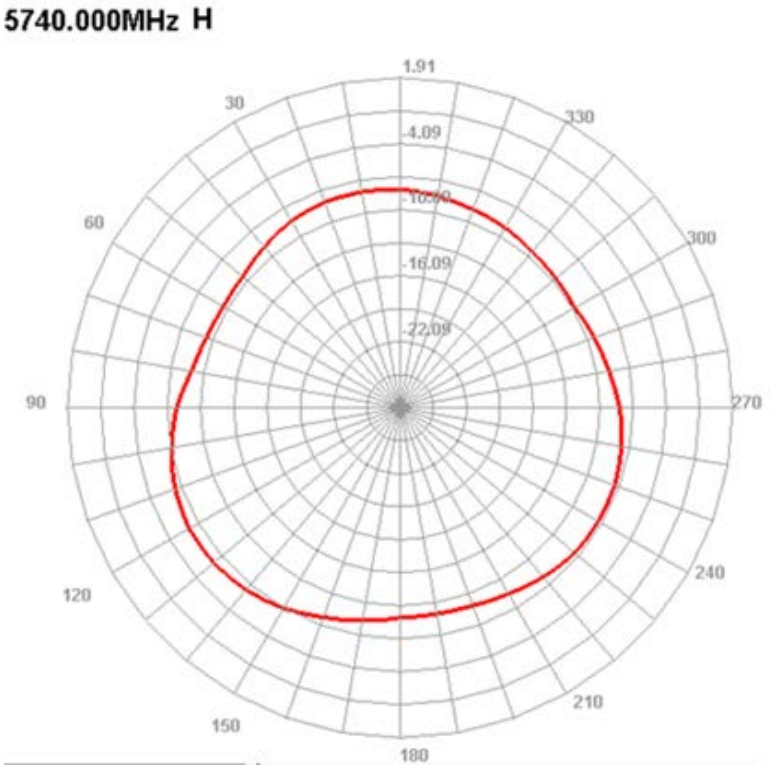


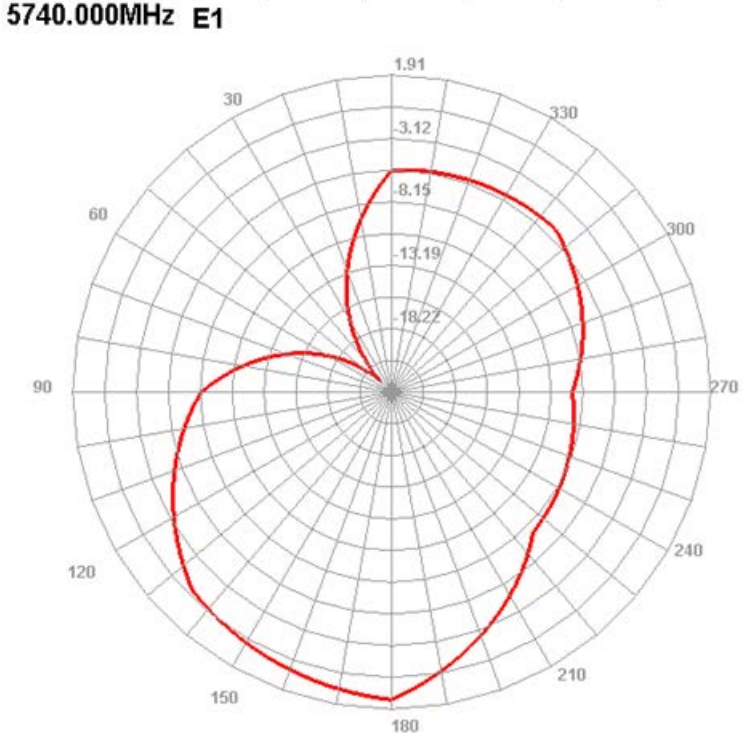
5150.000MHz E2

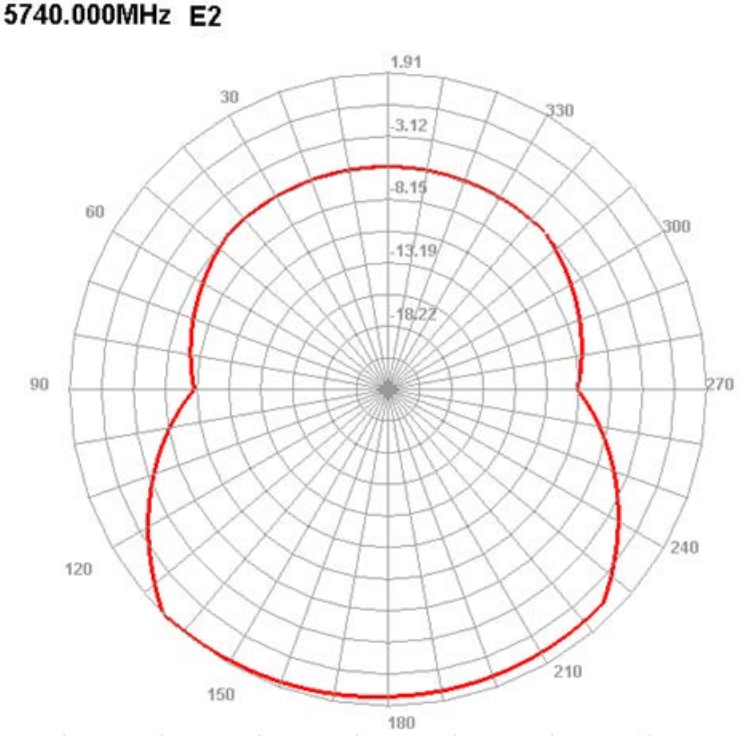


Efficient (5G-WIFI 5725-5850MHz)



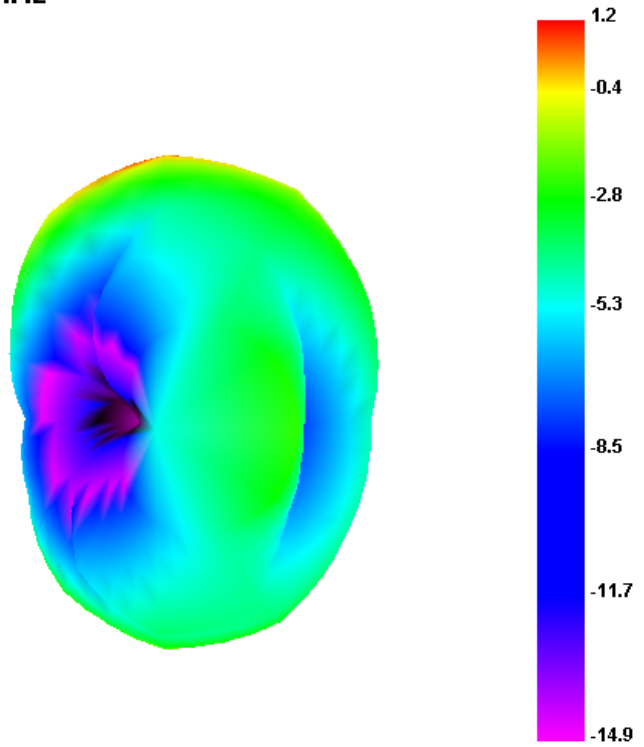




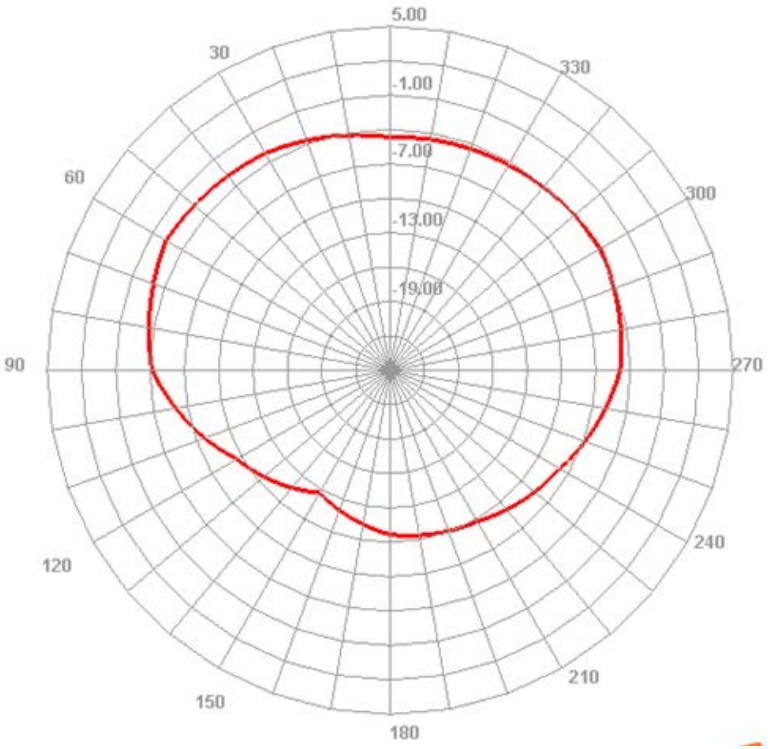


Efficient (GPS 1575.42MHz)

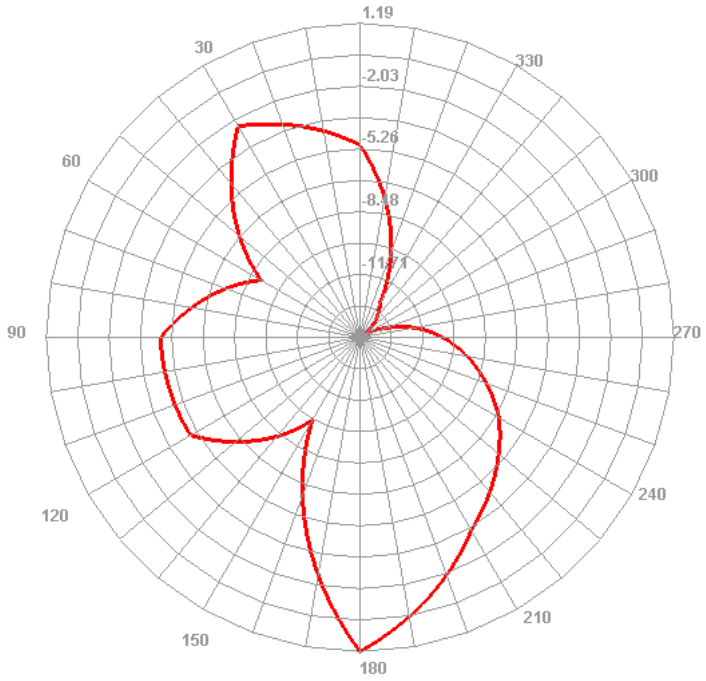
1575.491MHz



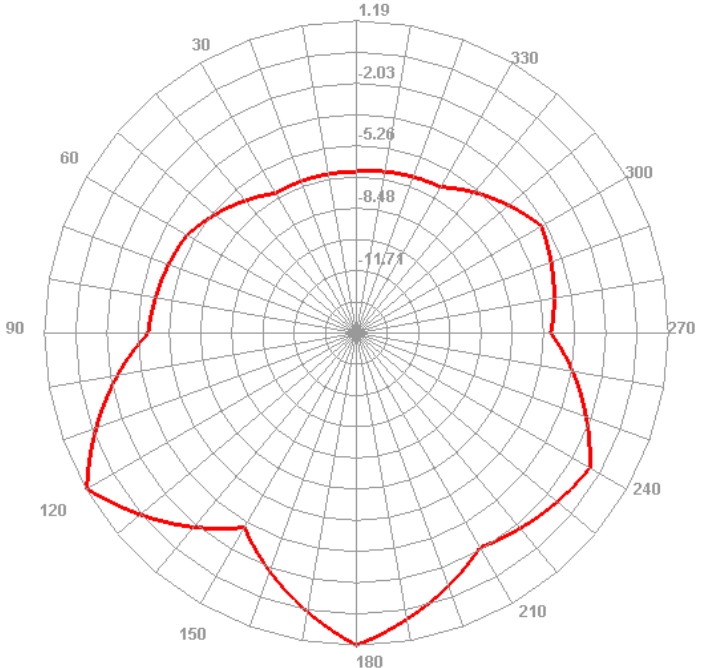
1575.491MHz H



1575.491MHz E1



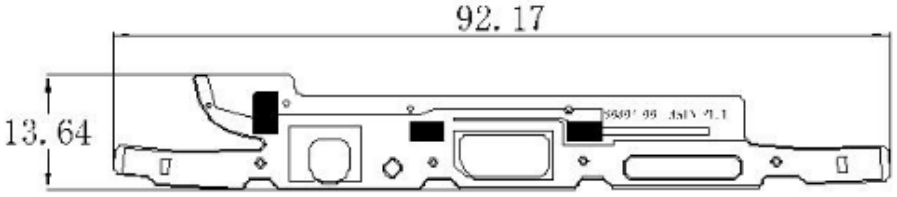
1575.491MHz E2



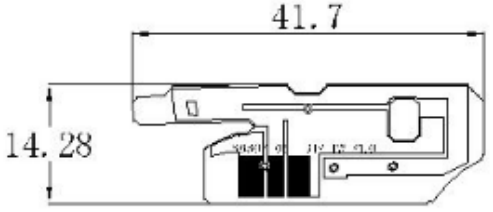
Antenna Dimensions

版本	修改内容	修改者	修改日期

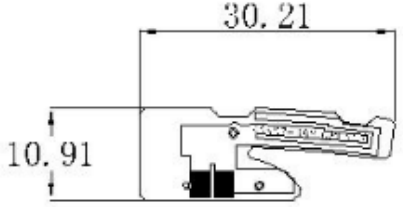
基材		
	半宏1/3	
	半宏半	
	一宏半	√
	一宏一	



主天线



分集天线



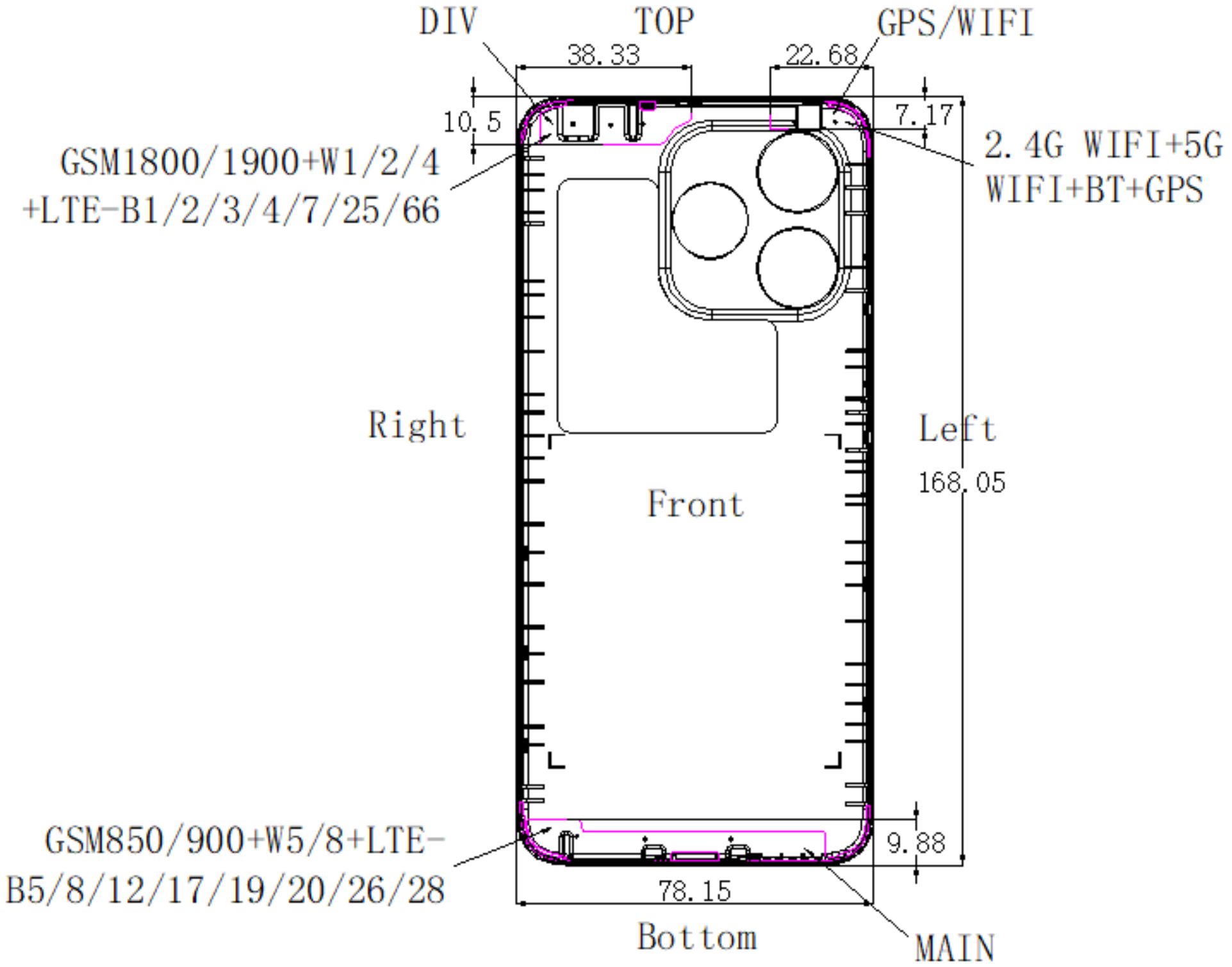
GPS/WIFI天线

V0.1
V0.2
V0.3
V0.4
V0.5
V0.6
V0.7
V0.8
V0.9
V0.10

NOTES:

1. 胶纸为：3M300LSE;
2. 金手指表面镀金0.5~3u";注意用材,此位置不可有氧化现象.
3. 总体厚度应小于或等于0.12mm;
4. 精确公差范围:±0.03mm;
5. 只充许产品图导电;

华信微通信技术有限公司			
	单位：mm	名称： FPC	日期：2024-05-22
一般公差： .X ±0.5 .XX ±0.25 .XXX ±0.05 .XXX ±0.05 ANGULAR ∠ = 0.5°		料号：S6807-06F-GSM	设计：朱顺牙
		材质：FPC13A9171	R F：
		表面处理：沉金	确认：
		颜色：	比例：1:1
			版本：A


DIV
TOP
GPS/WIFI
38.33
22.68
10.5
7.17
GSM1800/1900+W1/2/4
+LTE-B1/2/3/4/7/25/66
2.4G WIFI+5G
WIFI+BT+GPS
Right
Left
168.05
Front
GSM850/900+W5/8+LTE-
B5/8/12/17/19/20/26/28
9.88
78.15
Bottom
MAIN