

Mobile Station Over-The-Air Summation Test Report.

On the 2G/3G/4G/WiFi/Bluetooth/GPS Mode

Report No.:

HW Version:

Testing Performed at Guangping OTA Lab

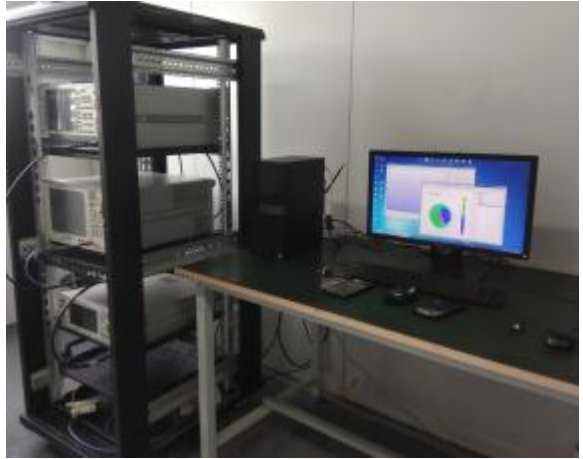
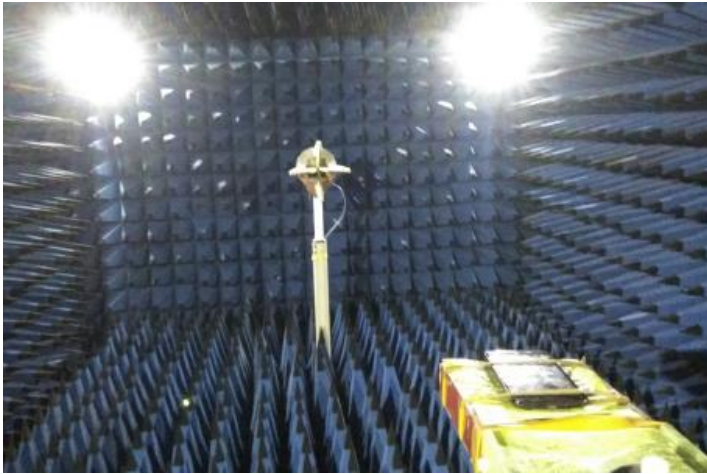
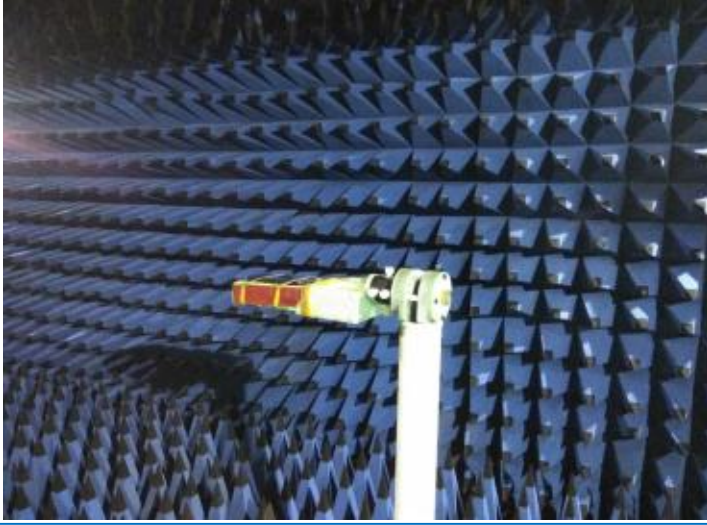
[CoolRuijie R & D Center]

[Date] 12/07/2023

[Shenzhen Guangming District Huaqiang Creative Industrial Park]

	Name	Function	Date	Signature
<i>Test performed by:</i>	[宋祖义]	Antenna RF engineer	[12/07/2023]	
<i>Report created by:</i>	[安增侠]	RF Leader ODM China or PM	[12/07/2023]	

1. Test System General Information.





2. Antenna types and locations

GPS/WIFI/BT(PIFA)

4G Diversity(PIFA)



2G/3G/4G Main Antenna(PIFA)

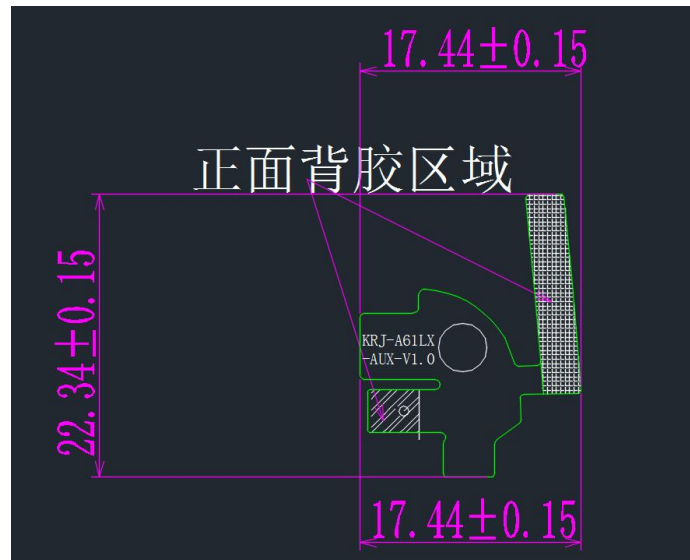


3. Design and printed pattern

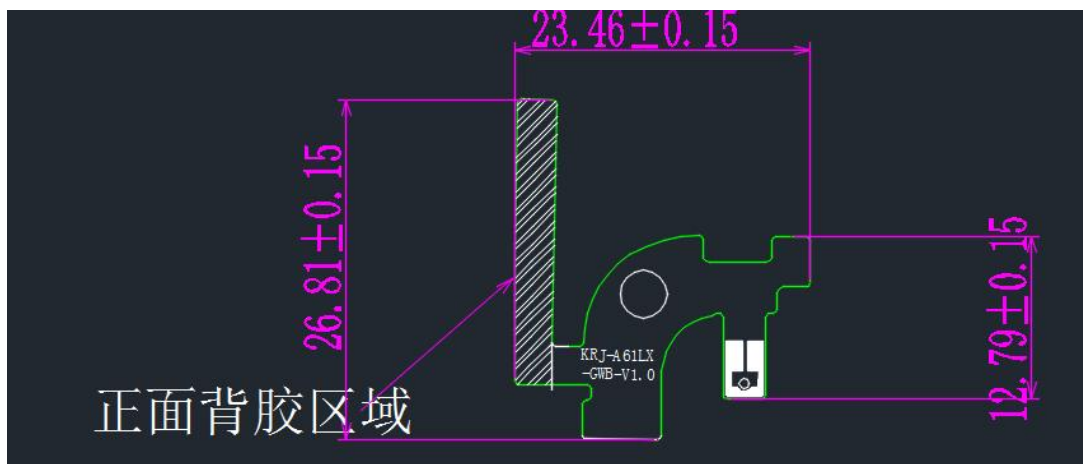
main antenna



Diversity antenna



GPS / WIFI / BT antenna

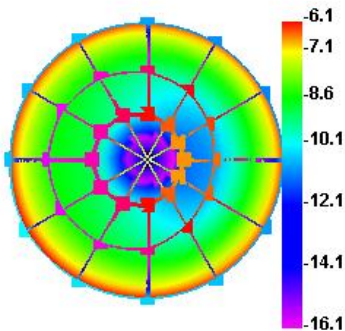


3. Antenna gain, direction diagram:

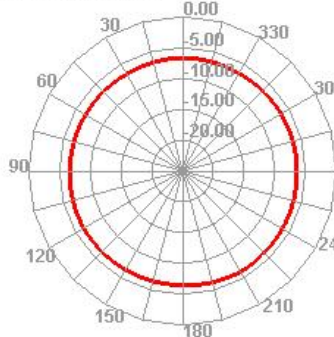
main antenna

Passive Test For 824-2700		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
710	24.1	-0.3
780	28.3	-0.3
870	32.5	0.3
1740	40.6	0.6
1930	45.3	0.8
2100	46.1	1.0
2660	45.2	1.2

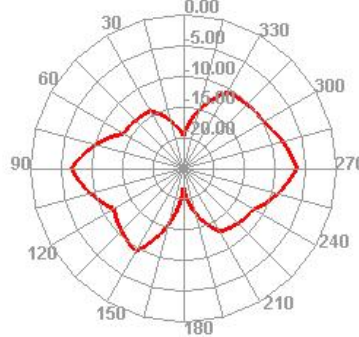
710.000MHz



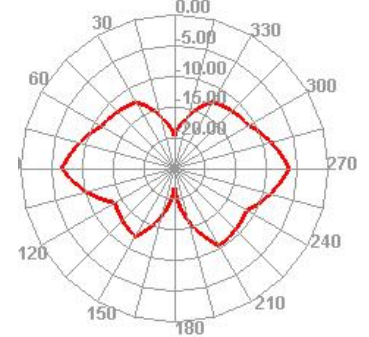
710.000MHz H



710.000MHz E1

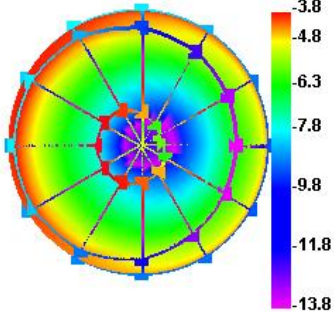


710.000MHz E2

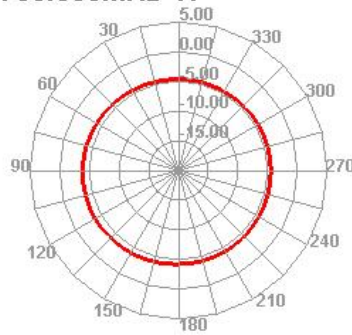




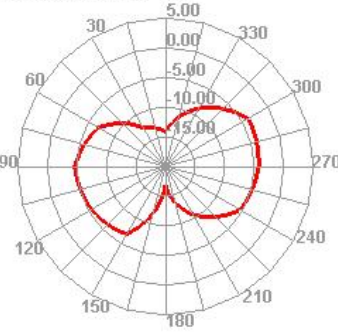
780.000MHz



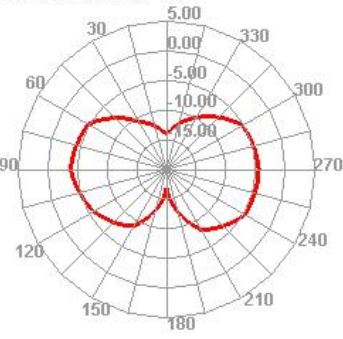
780.000MHz H



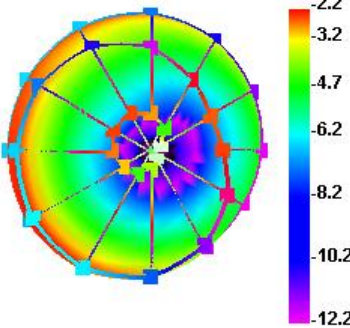
780.000MHz E1



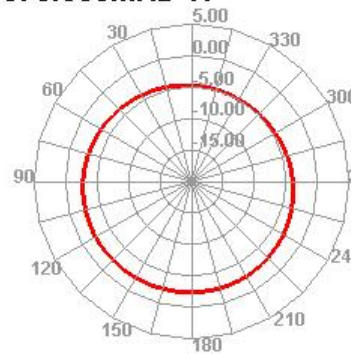
780.000MHz E2



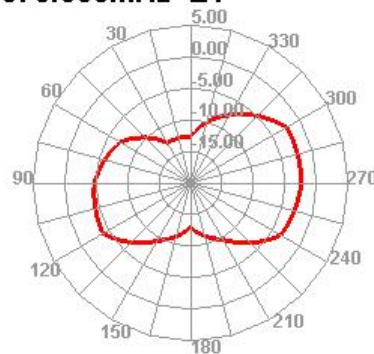
870.000MHz



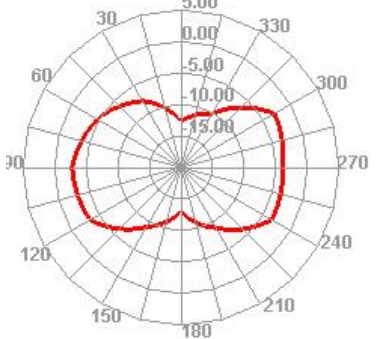
870.000MHz H



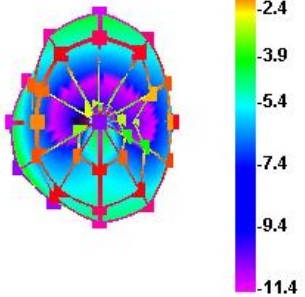
870.000MHz E1



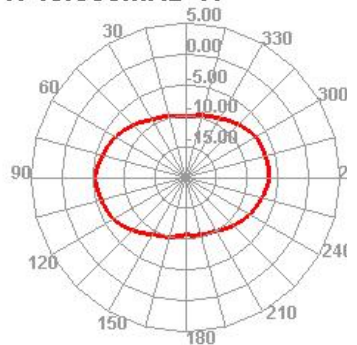
870.000MHz E2



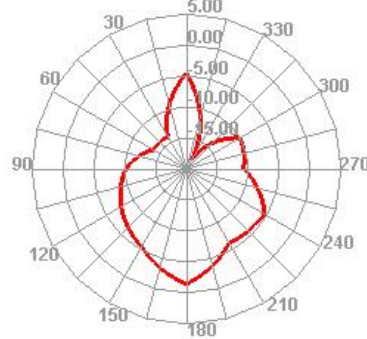
1740.000MHz



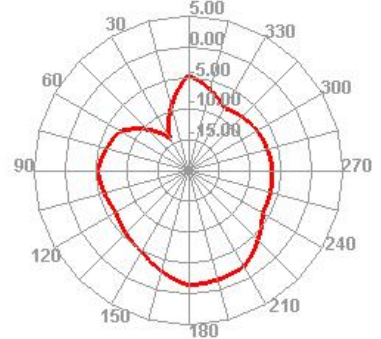
1740.000MHz H



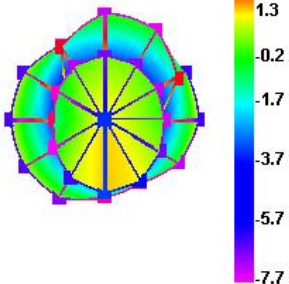
1740.000MHz E1



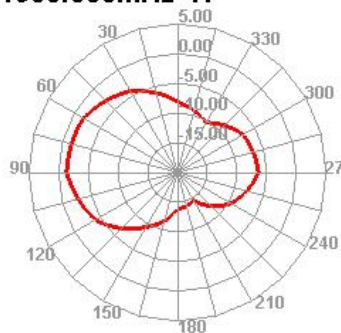
1740.000MHz E2



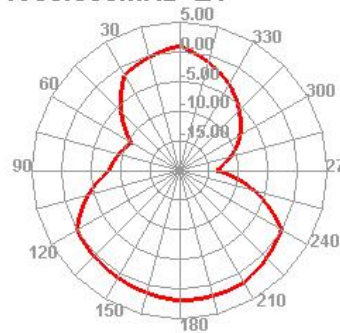
1930.000MHz



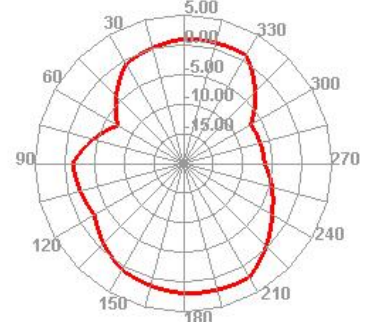
1930.000MHz H



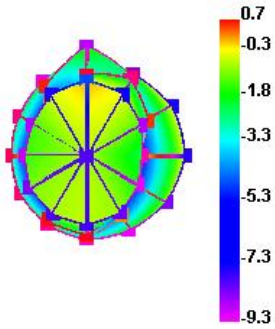
1930.000MHz E1



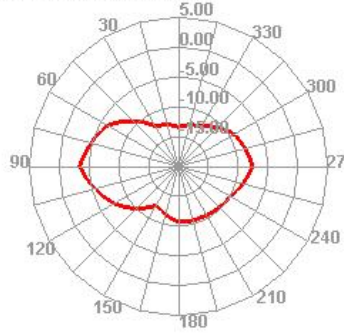
1930.000MHz E2



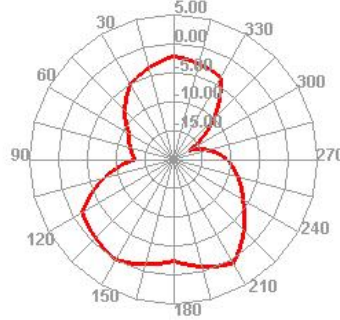
2100.000MHz



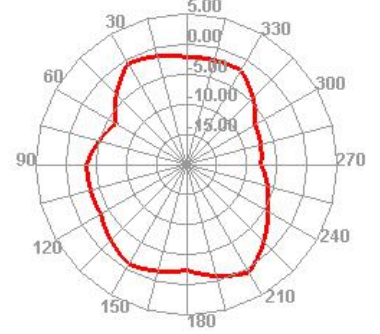
2100.000MHz H



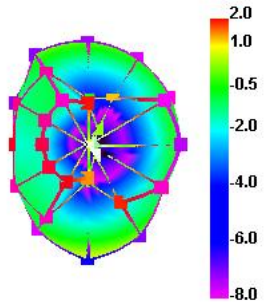
2100.000MHz E1



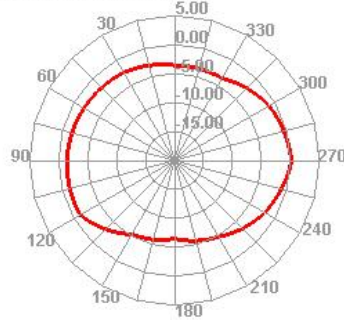
2100.000MHz E2



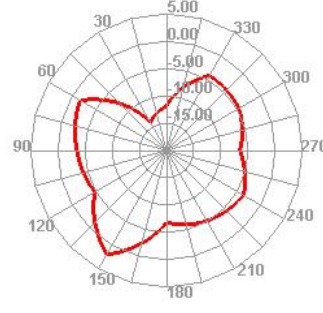
2660.000MHz



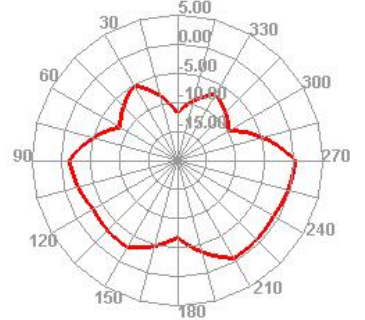
2660.000MHz H



2660.000MHz E1



2660.000MHz E2

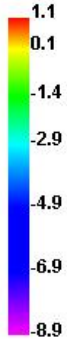
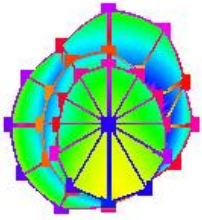


Diversity antenna

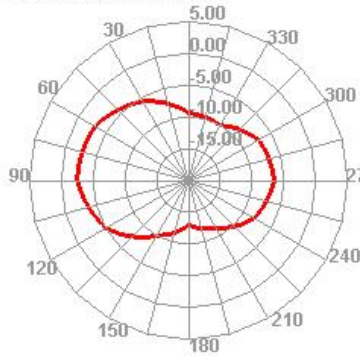
Passive Test For 1800-2700		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
1880	32.5	0.4
2090	33.1	0.6
2690	30.2	0.5



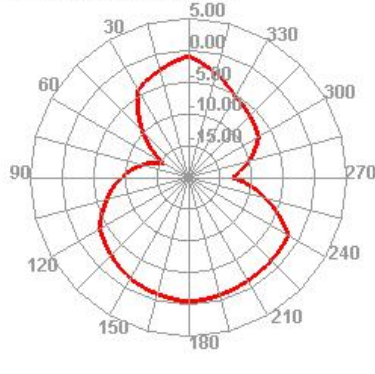
1880.000MHz



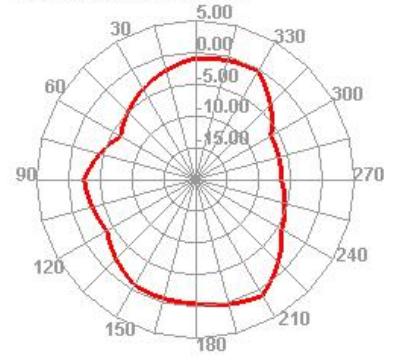
1880.000MHz H



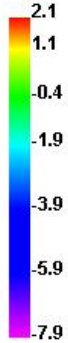
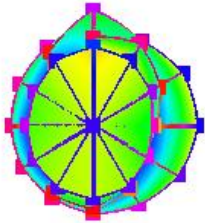
1880.000MHz E1



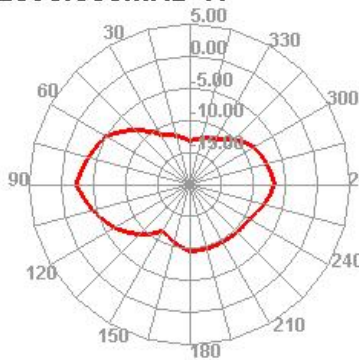
1880.000MHz E2



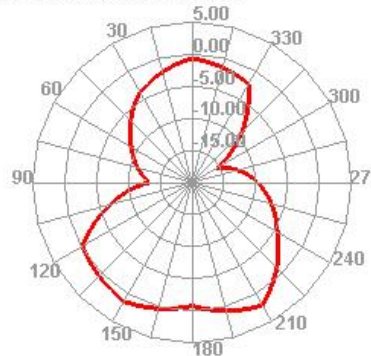
2090.000MHz



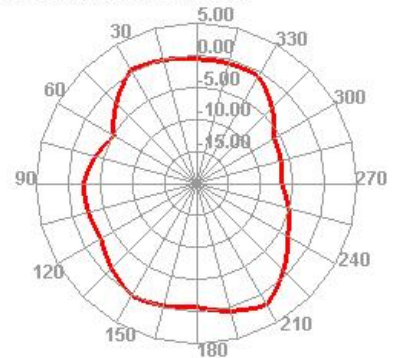
2090.000MHz H



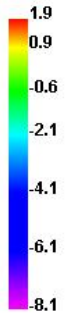
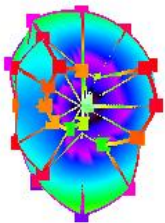
2090.000MHz E1



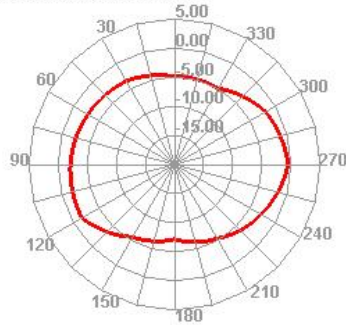
2090.000MHz E2



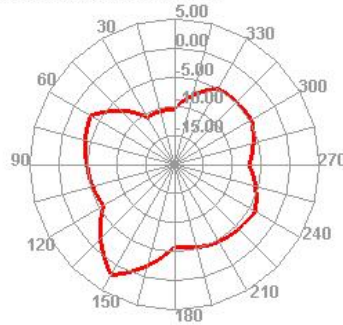
2690.000MHz



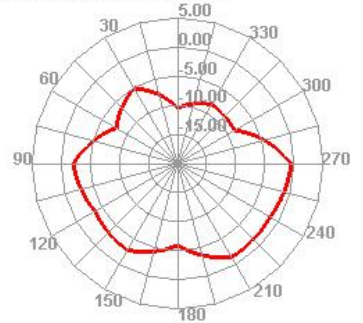
2690.000MHz H



2690.000MHz E1



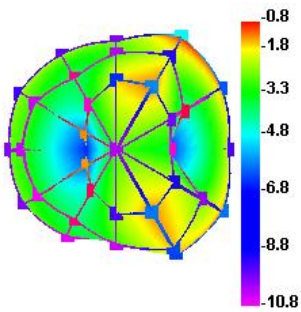
2690.000MHz E2



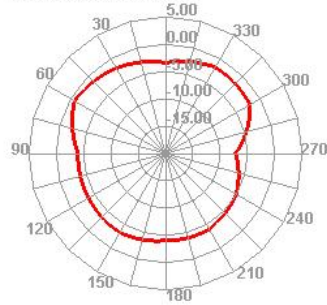
GPS / WIFI / BT antenna

Passive Test For WIFI/BT/GPS		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
1577	32.5	0.6
2450	41.2	0.8

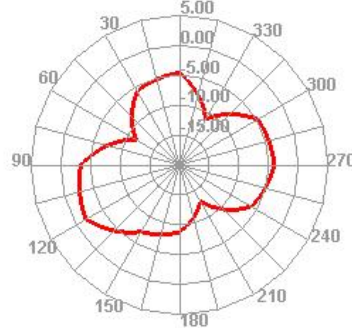
1577.000MHz



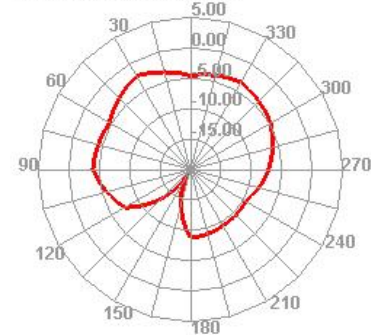
1577.000MHz H



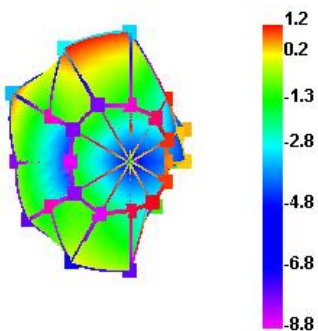
1577.000MHz E1



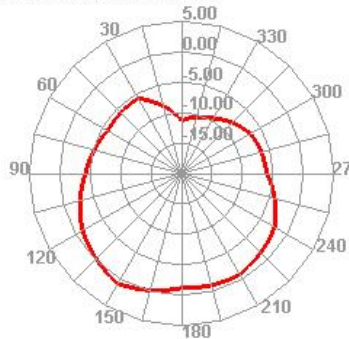
1577.000MHz E2



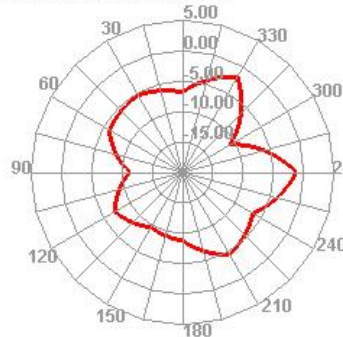
2460.000MHz



2460.000MHz H



2460.000MHz E1



2460.000MHz E2

