

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

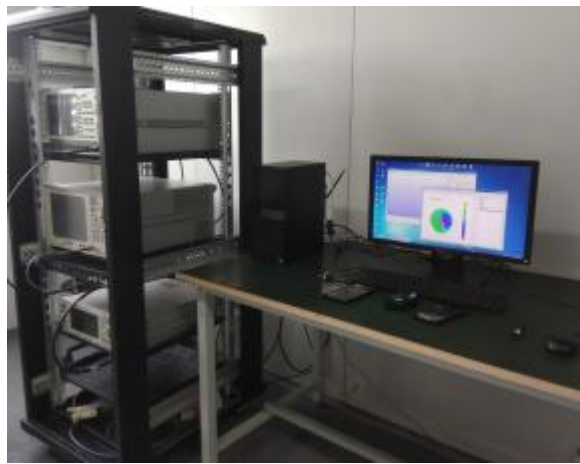
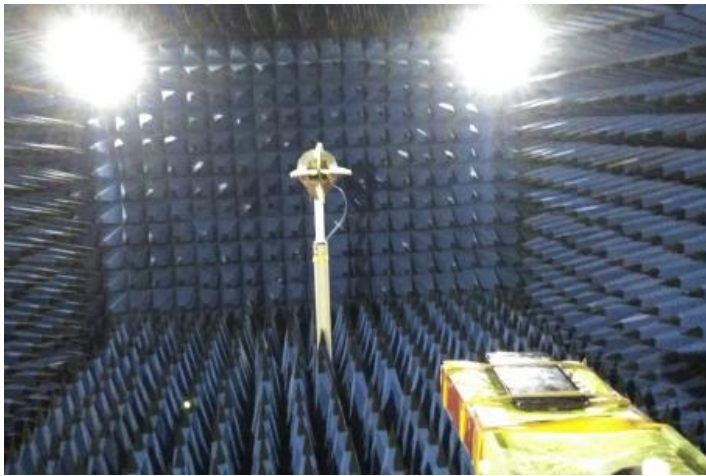
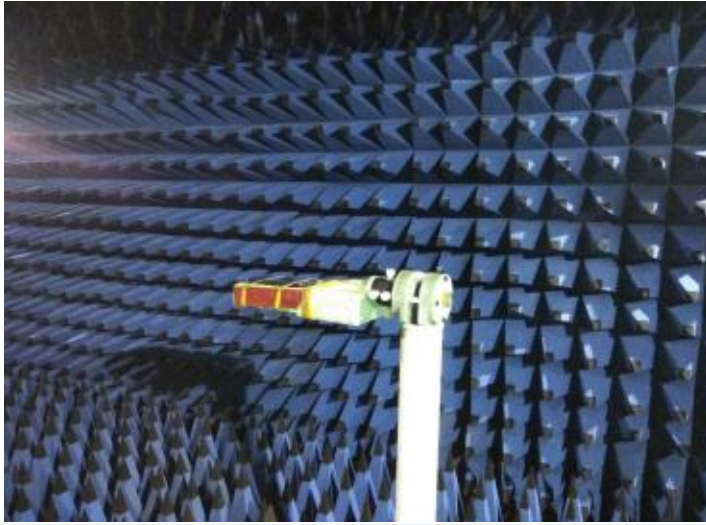
[CoolRuijie R & D Center]

[Date] 12/07/2023

[Shenzhen Guangming District Huaqiang Creative Industrial Park]

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

1. Test System General Information.



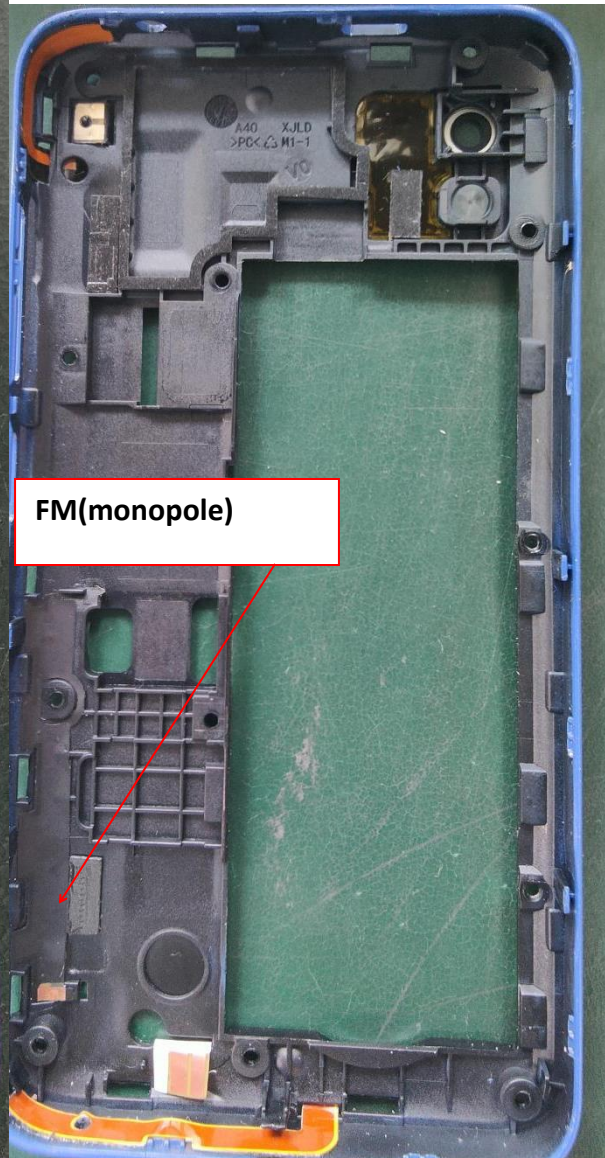
2. Antenna types and locations

GPS/WIFI/BT(PIFA)



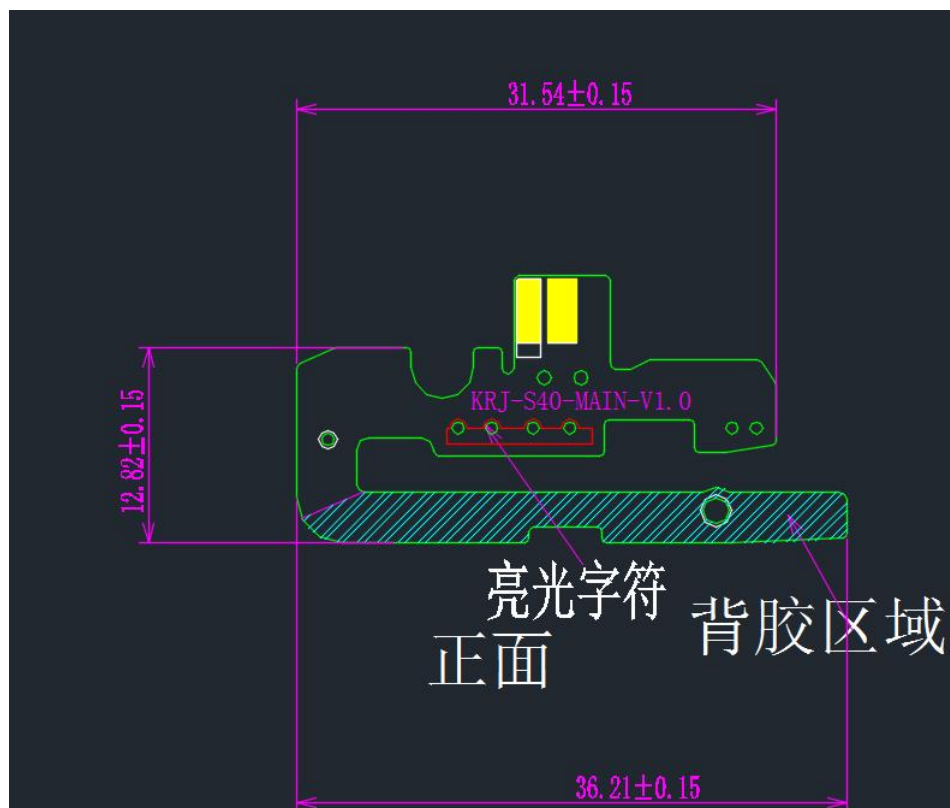
2G/3G Main Antenna(PIFA)

FM(monopole)

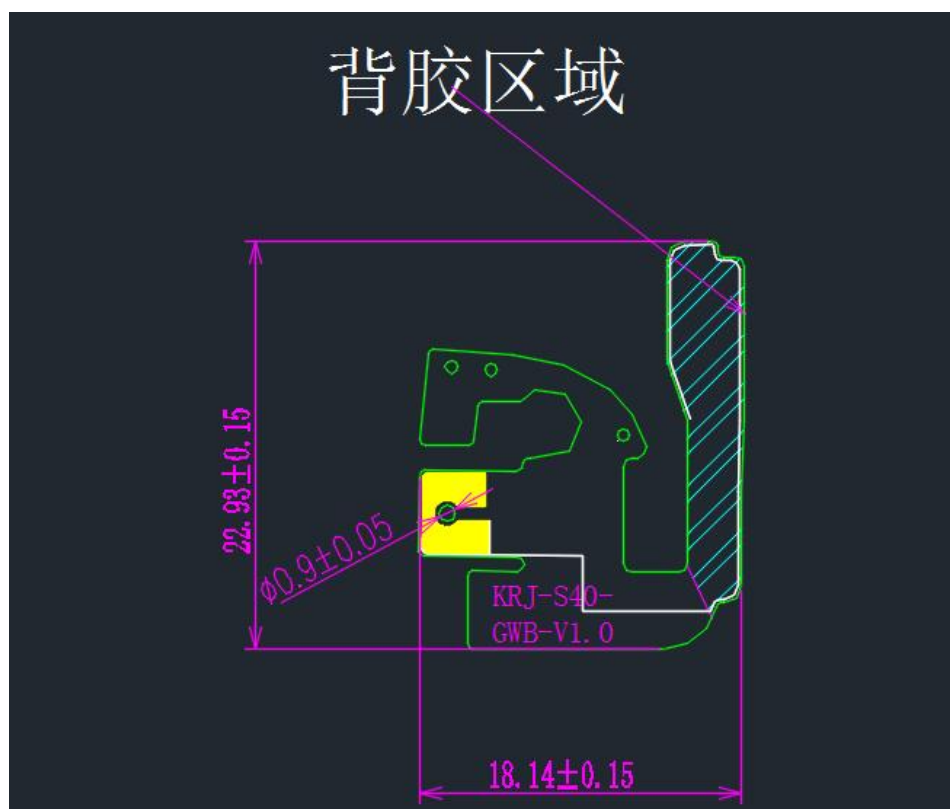


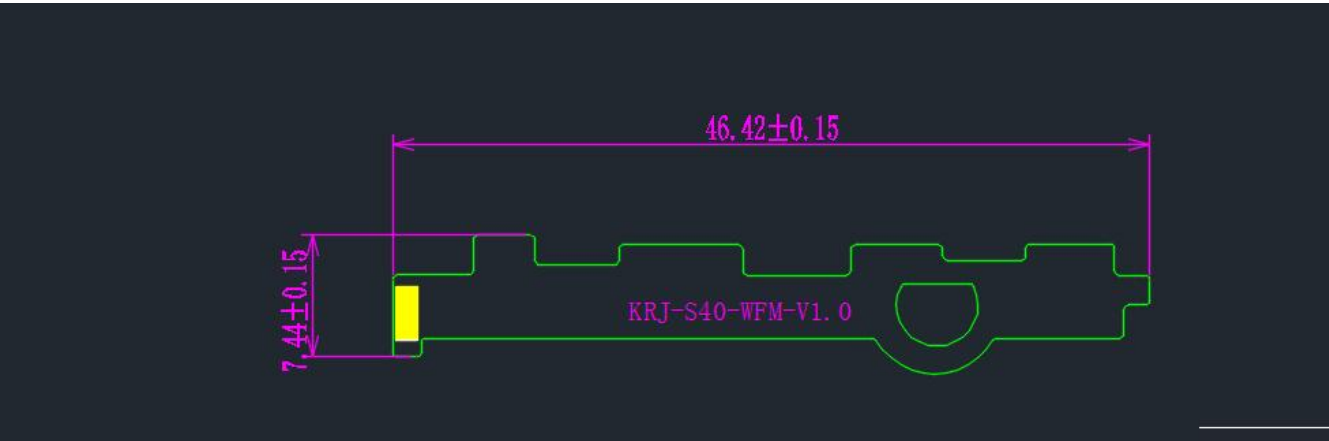
3. Design and printed pattern

main antenna



GPS / WIFI / BT antenna



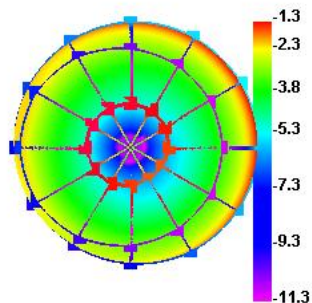


3. Antenna gain, direction diagram:

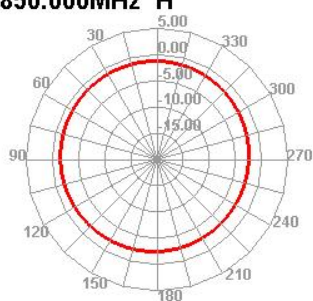
main antenna

Passive Test For 824-2170		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
850	34.1	0.6
1750	41.3	1.5
1950	45.5	1.5
2160	43.9	1.5

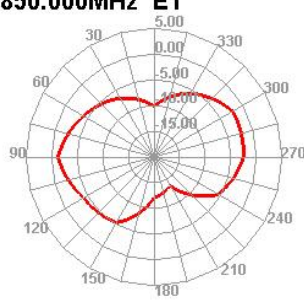
850.000MHz



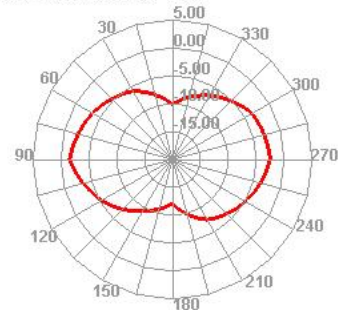
850.000MHz H



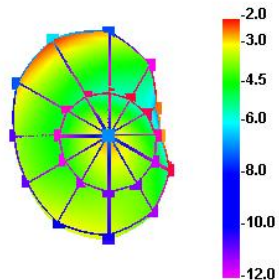
850.000MHz E1



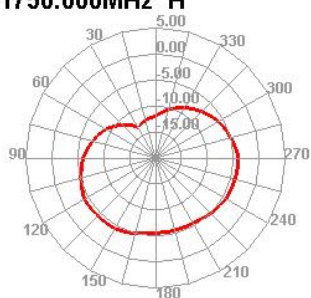
850.000MHz E2



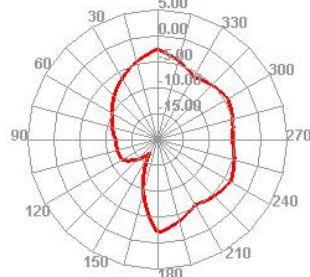
1750.000MHz



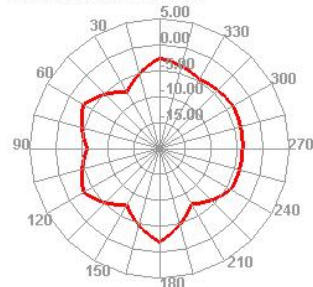
1750.000MHz H



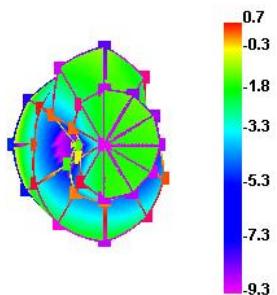
1750.000MHz E1



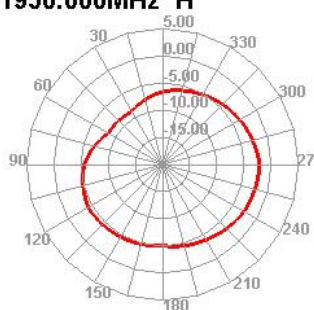
1750.000MHz E2



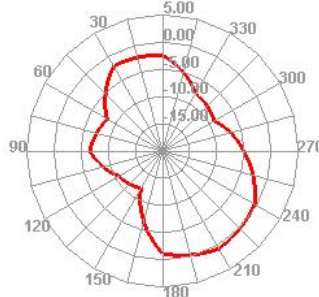
1950.000MHz



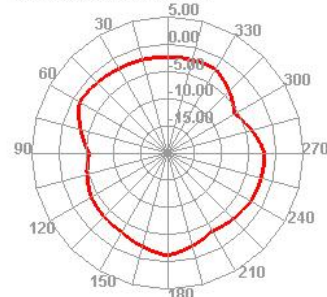
1950.000MHz H



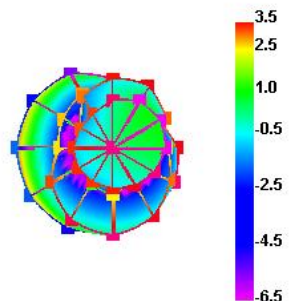
1950.000MHz E1



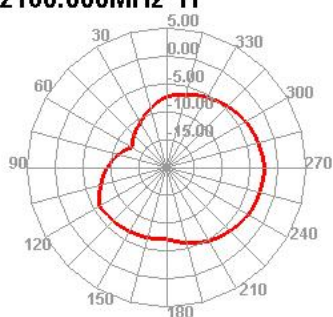
1950.000MHz E2



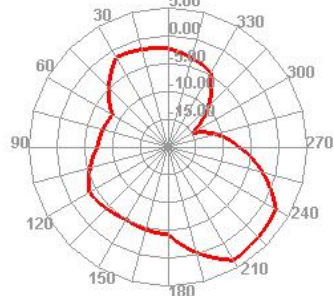
2160.000MHz



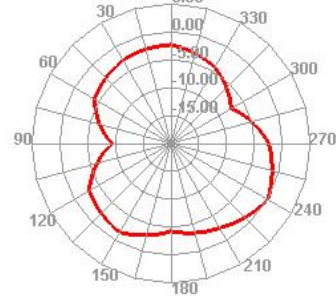
2160.000MHz H



2160.000MHz E1

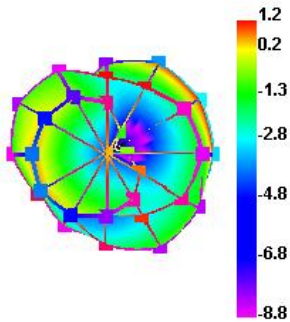


2160.000MHz E2

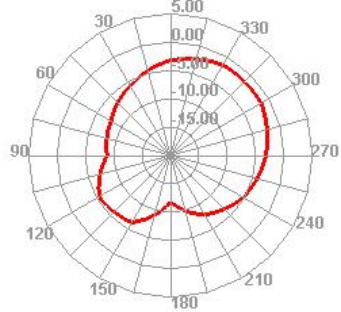


Passive Test For WIFI/BT/GPS		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
1575	31.8	0.8
2450	40.5	1.2

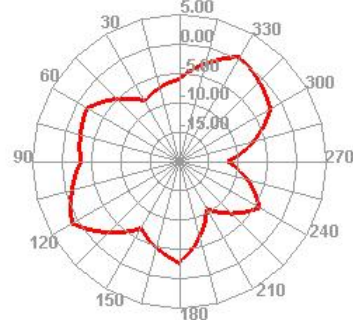
1575.000MHz



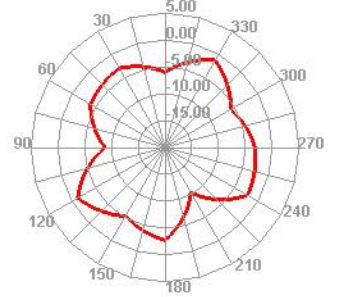
1575.000MHz H



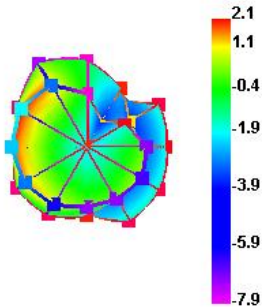
1575.000MHz E1



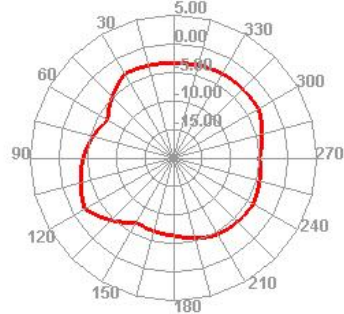
1575.000MHz E2



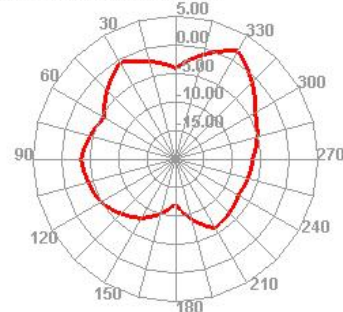
2450.000MHz



2450.000MHz H



2450.000MHz E1



2450.000MHz E2

