



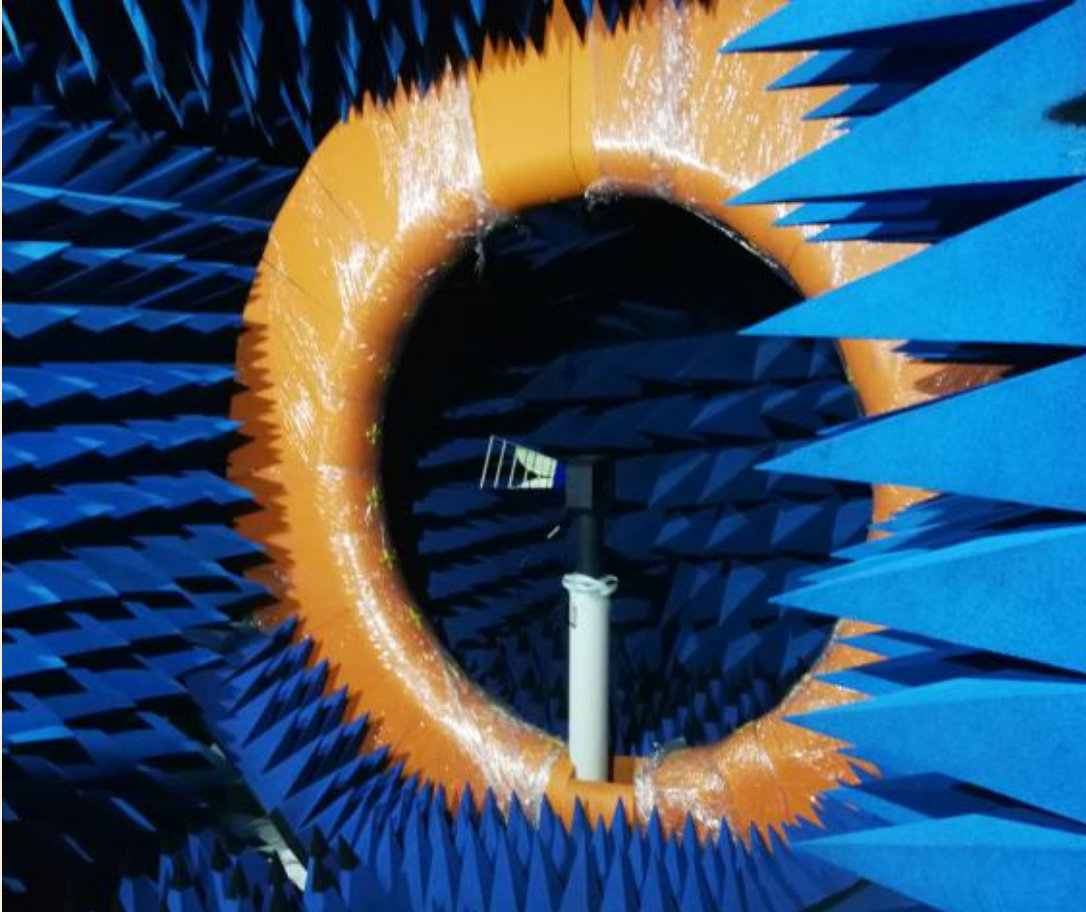
DWM Communication Equipment Co., Ltd.

A n t e n n a T e s t R e p o r t

❖ DATE: 2024-08-13



Test Equipment



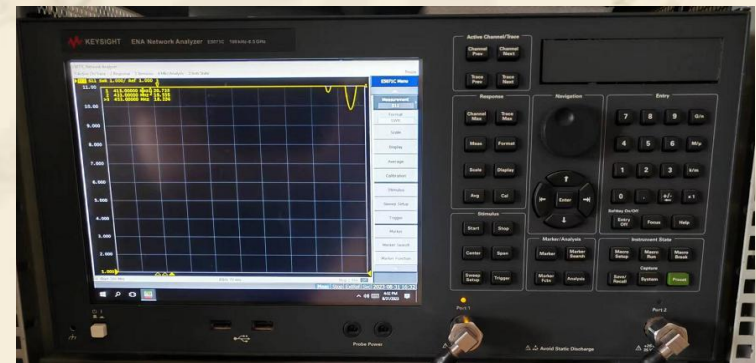
A 24-probe microwave chamber



5G StarPoint SP9500



R&S CMW500



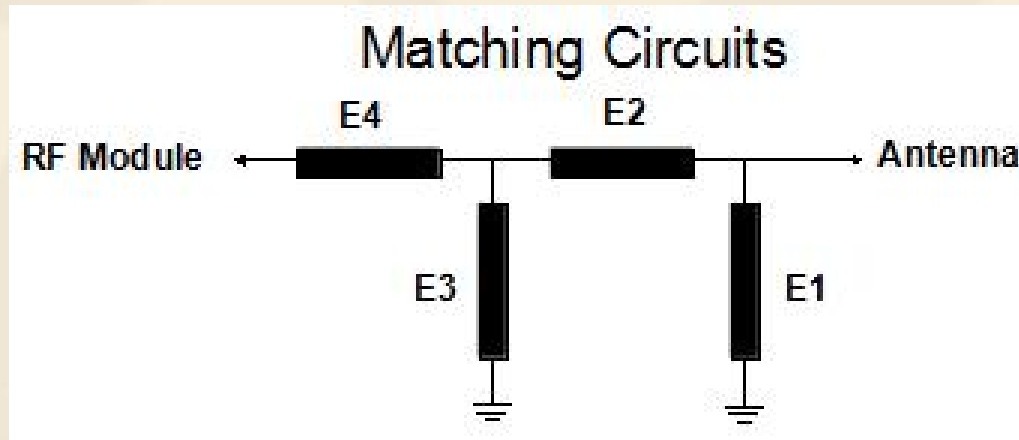
Agilent Technologies E5071C

Customer	Anlinx	Customer Number	PT7010
Antenna Band	LTE: 824~960MHz&1710~2690MHz WIFI+BT:2400-2500MHz,5150-5850MHz,GPS:1575.42MHz	DWM Number	
Date	2024/08/13	Author	

Specification

Technology Parameters	
Frequency (MHz)	824-960MHz 1710-2690MHz 2400-2500MHz 5150-5850MHz 1575.42MHz
Peak Gain(dBi)	824-960 MHz:0.99dBi 1710-2690MHZ:2.63dBi 2400-2500MHz:2.69dBi 5150-5850MHz:1.83dBi 1575.42MHZ:4.19dBi
Efficiency(%)	824-960 MHz>15% 1710-2690MHZ>20% 2400-2500MHz>25% 5150-5850MHz>25% 1575.42MHZ>30%
Impedance (Ω)	50 Ω
Antenna Type	LTE:Monopole LTE diversity :Monopole WIFI+BT:PIFA GPS:PIFA

The matching test value



Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4(0201)	NC

LTE Antenna

	FDD-LTE B1			FDD-LTE B3			FDD-LTE B5			FDD-LTE B8		
Channel	18050	18300	18550	19250	19575	19900	20450	20525	20600	21500	21625	21750
TRP	20.79	21.06	21.17	19.58	19.27	18.84	17.18	17.04	16.62	16.42	16.22	15.52
TIS			-93.7			-88.74			-88.17			-88.12

LTE Antenna

	TDD-LTE B34			TDD-LTE B38			TDD-LTE B39			TDD-LTE B40			TDD-LTE B41		
Channel	36250	36275	36300	37850	38000	38150	37350	38450	38550	38750	39150	39550	40340	40740	41190
TRP	20.96	20.91	20.82	21.94	22.2	22.06	21.33	21.45	21.55	22.71	22.55	22.02	21.56	22.21	20.52
TIS			-89.84			-89.83			-90.7			-88.36			-87.88

WIFI Antenna

WiFi	2.4G			5.8G		
Channel	L	M	H	L	M	H
TRP	11.04	11.61	11.55	10.05	10.34	10.59
TIS			-79.65			-72.06

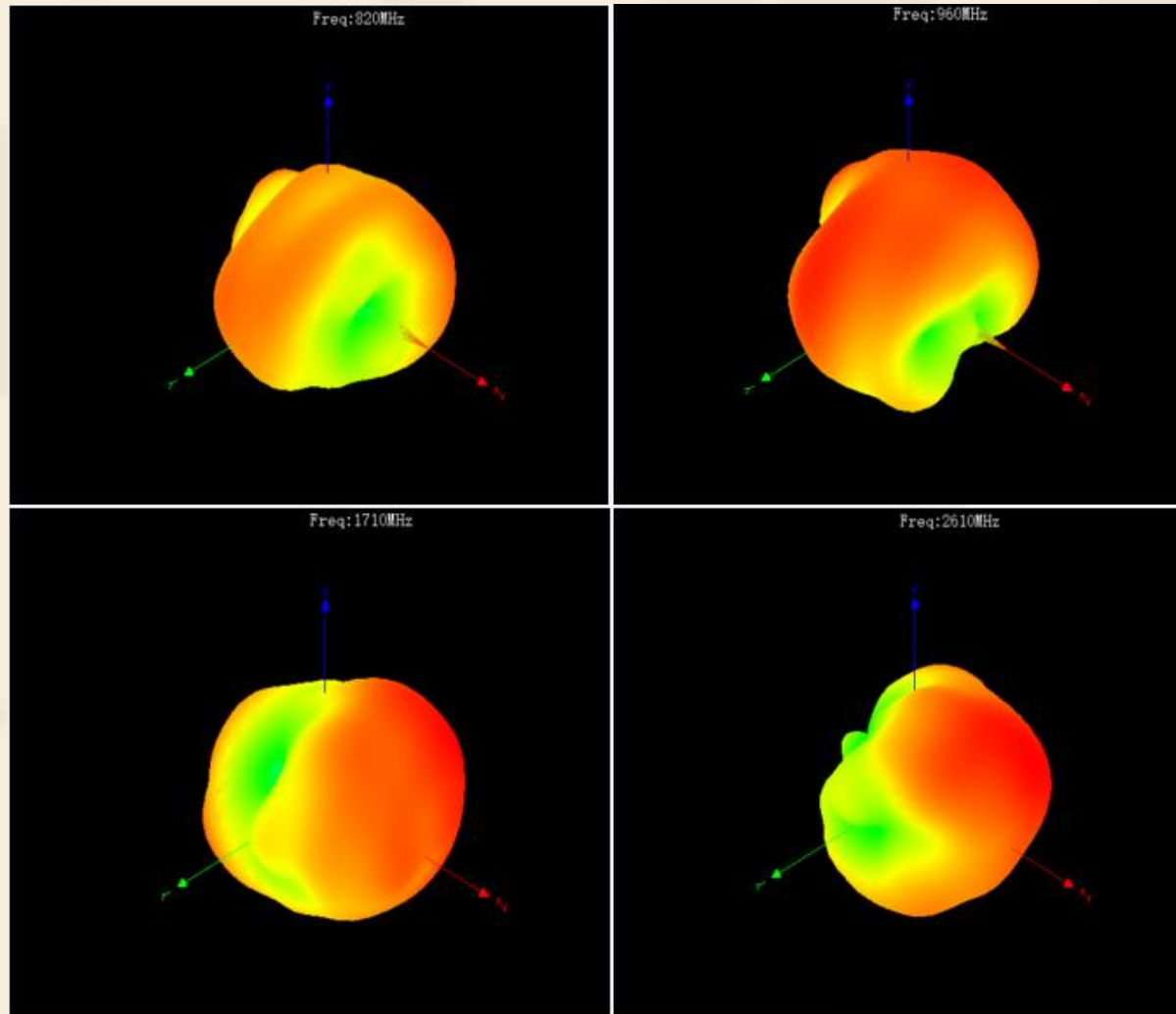
BT Antenna

BT			
Channel	L	M	H
TRP	2.96	2.75	2.92
TIS			-86.58

LTE Antenna Gain And Efficiency;

Frequency/Mhz	MaxGain/dBi	Efficiency / %
820	-0.61	23.39
830	-0.7	25.18
840	-0.57	26.85
850	0.53	30.55
860	0.99	33.04
870	0.45	33.81
880	-0.17	32.43
890	0	29.85
900	0.66	28.18
910	0.83	27.04
920	0.69	26.06
930	-0.45	23.23
940	-0.93	21.83
950	-0.32	22.13
960	-0.44	21.73
1710	1.34	35.48
1810	1.46	46.99
1910	2.4	55.85
2010	2.58	55.72
2110	2.3	53.7
2210	2.41	54.2
2310	2.58	58.75
2410	2.63	60.95
2510	2.59	60.39
2610	2.5	58.61

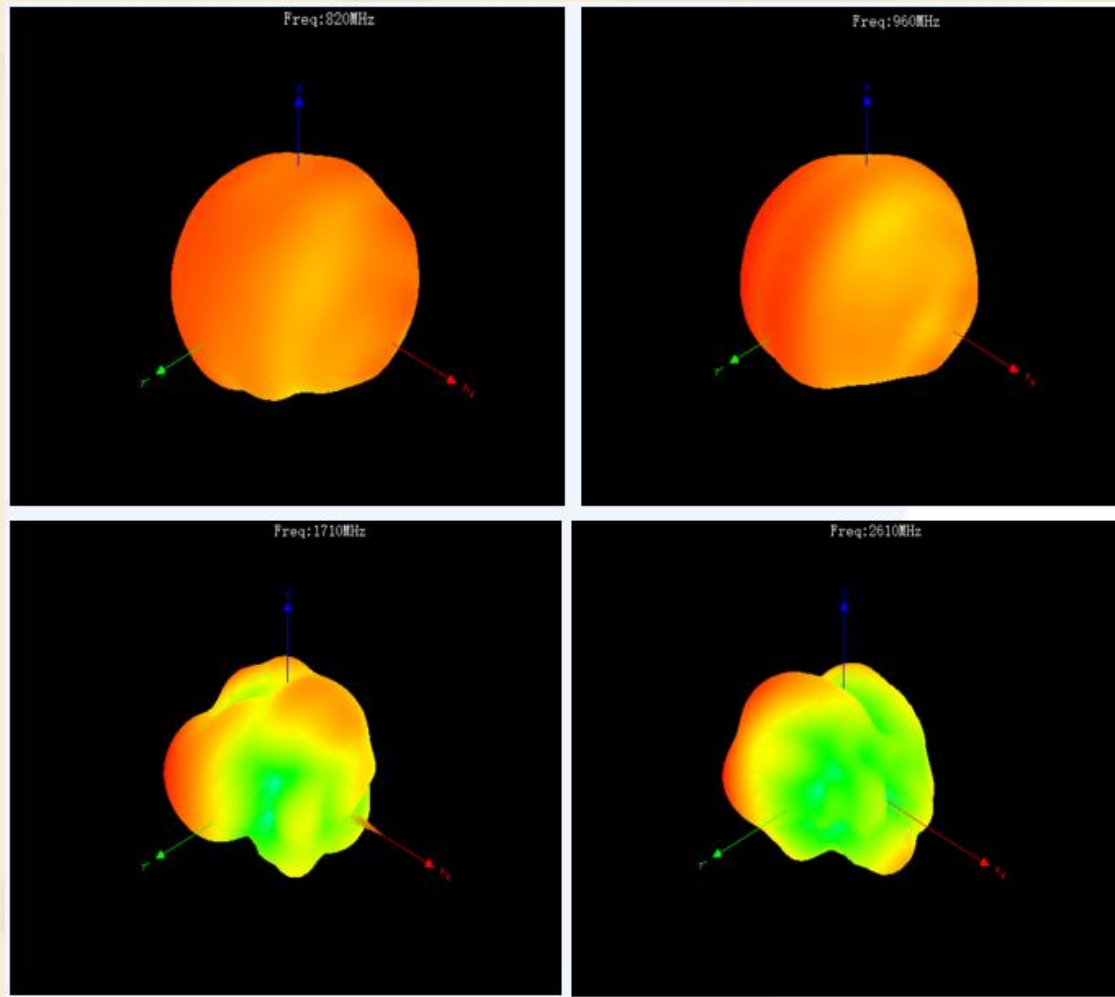
LTE Antenna 3D Pattern:



LTE diversity Antenna Gain And Efficiency;

Frequency/Mhz	MaxGain/dBi	Efficiency / %
820	-2.23	18.09
830	-1.91	19.46
840	-0.43	20.69
850	-0.21	22.65
860	-0.72	23.96
870	-0.18	24.22
880	-0.77	23.4
890	-0.23	21.83
900	-0.84	20.62
910	-0.38	19.53
920	-0.46	18.63
930	-0.26	17.36
940	-0.71	16.75
950	-0.1	16.67
960	-0.9	16.34
1710	1.1	20.65
1810	1.79	30.61
1910	1.97	32.58
2010	1.86	31.73
2110	1.29	32.96
2210	2.04	34.6
2310	2.01	30.04
2410	2.35	34.04
2510	2.06	38.39
2610	2.33	37.81

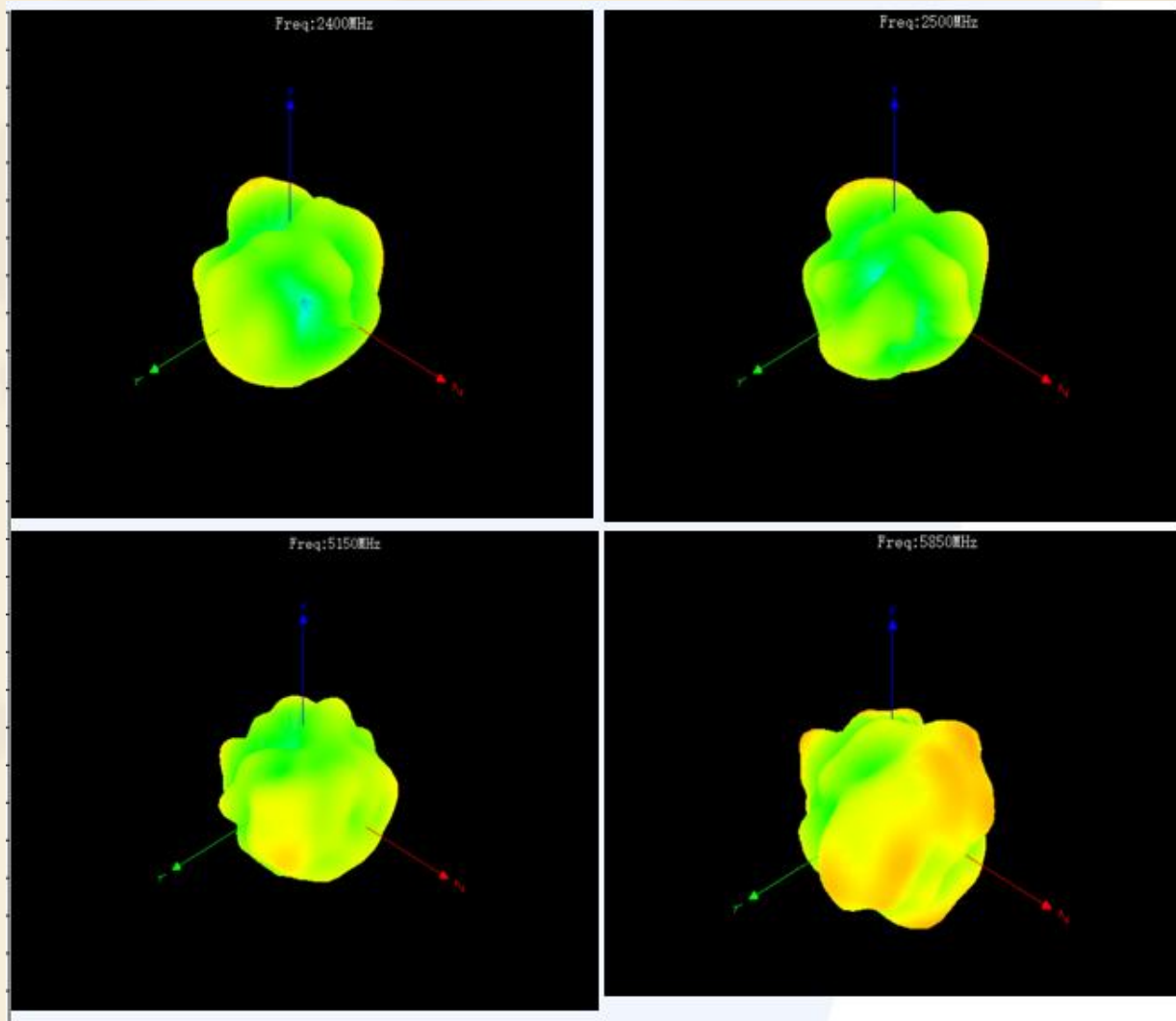
LTE diversity Antenna 3D Pattern:



WiFi +BT Antenna Gain And Efficiency;

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	1.39	31.77
2410	1.16	30.9
2420	1.84	33.65
2430	2.18	35.4
2440	1.85	34.75
2450	2.24	36.48
2460	2.53	37.33
2470	2.08	35.73
2480	2.29	36.81
2490	2.69	38.02
2500	2.08	34.91
5150	0.67	29.51
5200	0.6	29.11
5250	0.24	28.58
5300	0.98	28.31
5350	0.35	29.72
5400	0.42	30.69
5450	0.54	31.92
5500	1.08	36.9
5550	1.38	39.08
5600	1.48	39.81
5650	0.93	40.83
5700	1.54	46.03
5750	1.83	46.77
5800	1.59	45.6
5850	1.16	44.36

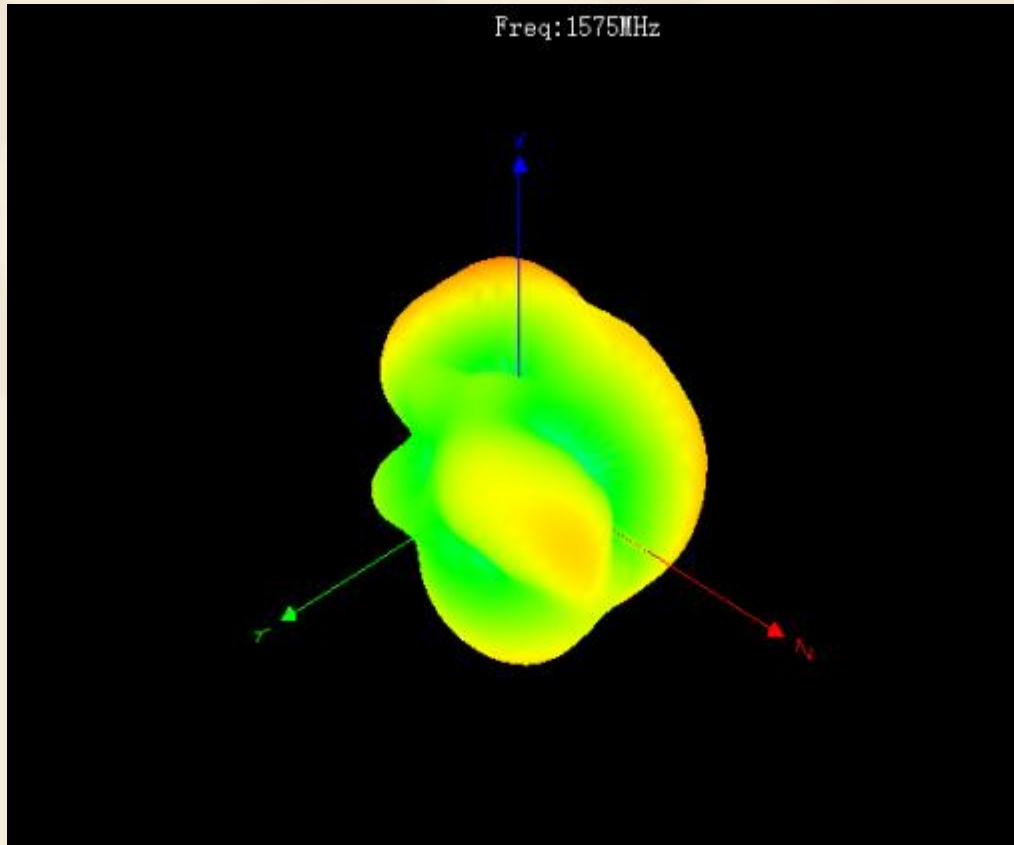
WiFi+BT Antenna 3D Pattern:



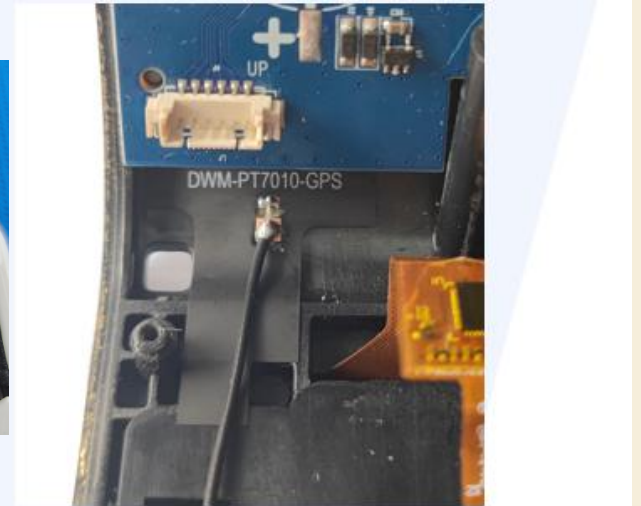
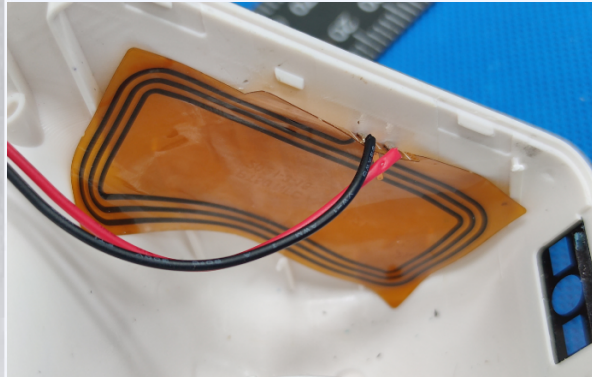
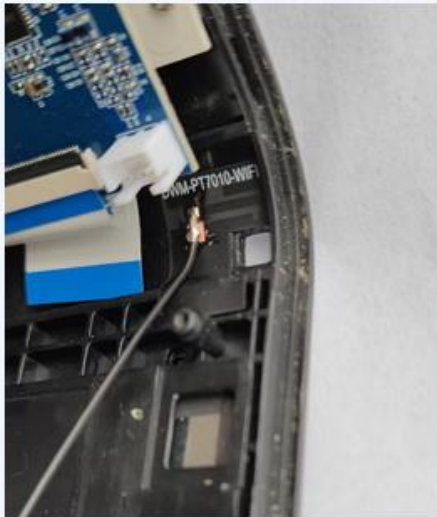
GPS Antenna Gain And Efficiency;

Frequency/Mhz	MaxGain/dBi	Efficiency / %
1570	4.16	38.73
1575	4.19	39.17
1580	3.95	37.76

GPS Antenna 3D Pattern(1575.42MHz):



Antenna location map



NFC Antenna

