



Antenna Test Report

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1: chamber room introduction and testing scope



Our company has a number of OTA test darkrooms, ranging from 400MHz to 8.5GHz, which can provide passive test and active test (including OTA overall 2G, 3G, 4G, 5G FR test, WiFi multi-mode test, GPS active test, Bluetooth active test, which can provide antenna gain and efficiency, 2D orientation and angle chart analysis and upper and lower hemisphere efficiency values, mutual disturbance correlation coefficient test items)

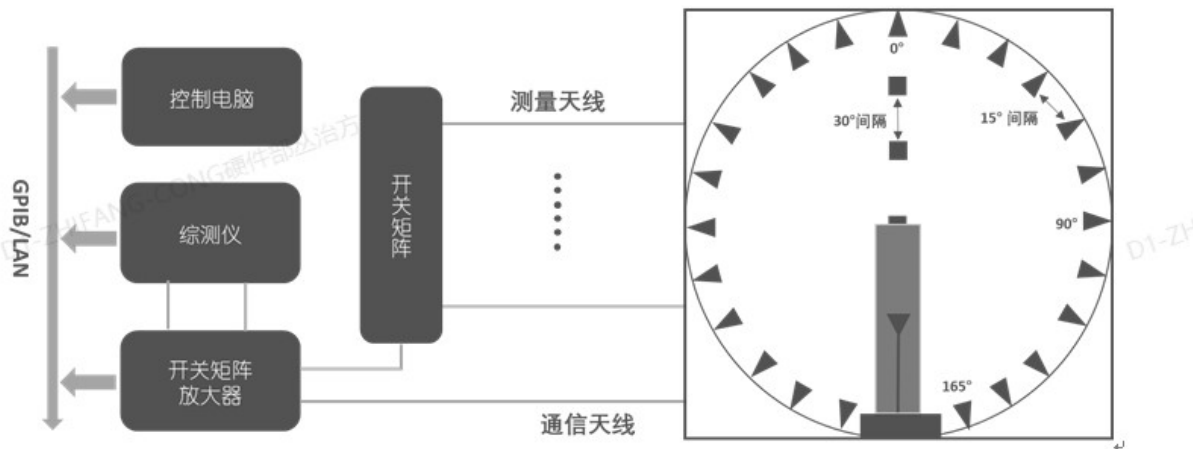
WiFi a/b/g/n/ac/ax

2: test system introduction:

Wireless communications test set: CMW500

Network Analyzer: Agilent 5071B

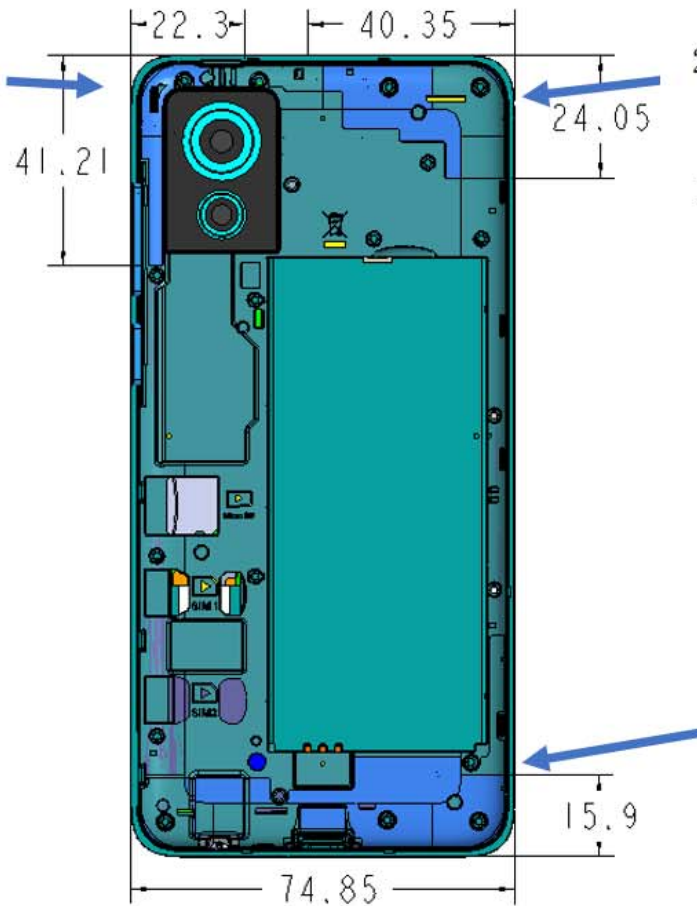
Anechoic Chamber : SATIMO SG24



3: Test result

Antenna placement:

GPS/WIFI/BT antenna
WiFi/BT
2.4~2.5G/5.15.8G/2412
MHz~2472MHz&/5100
MHz~5800MHzGPS:
1575.42 MHz



Diversity antenna
2G:G850-TX/G900/1800/1900 (TRX)
3G:B1/2/4/8 (TRX)
4G:LTE-
B1/2/3/4/7/8/38/40/41/66 (TRX)

Main antenna
2G:G850-RX
3G:W-B5 (TRX)
4G: LTE-B5/12/13/17/26/28AB (TRX)

DIV ANT_800M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
800	-4.59	33.61%	-1.76
810	-4.58	32.62%	-1.83
820	-4.72	32.67%	-1.83
830	-4.84	31.97%	-1.87
840	-5.04	33.22%	-1.79
850	-5.23	34.60%	-1.70
860	-5.17	32.96%	-1.81
870	-5.18	32.02%	-1.87
880	-5.31	33.75%	-1.76
890	-5.41	34.34%	-1.72
900	-5.36	33.10%	-1.80
AVG	-5.03	33.16%	-1.79

DIV ANT_1800M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
1710	-3.67	43.58%	-1.77
1730	-3.70	43.49%	-1.65
1750	-3.74	43.37%	-1.64
1770	-3.81	43.17%	-1.65
1790	-3.74	43.38%	-1.45
1810	-3.97	42.69%	-1.60
1830	-4.17	42.11%	-1.72
1850	-4.04	42.46%	-1.53
1870	-4.02	42.54%	-1.41
1890	-4.22	41.97%	-1.61
AVG	-3.90	42.87%	-1.60

DIV ANT_900M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
880	-4.28	27.16%	-2.19
890	-4.51	26.66%	-2.17
900	-4.62	27.55%	-2.14
910	-4.67	28.61%	-2.12
920	-4.93	30.37%	-2.02
930	-5.00	30.59%	-2.03
940	-5.04	31.07%	-2.07
950	-5.18	31.76%	-2.00
960	-5.44	32.96%	-1.91
970	-5.47	33.34%	-1.89
980	-5.45	33.37%	-1.87
AVG	-4.96	30.31%	-2.03

DIV ANT_1900M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
1830	-3.76	42.06%	-0.97
1850	-3.78	41.85%	-1.14
1870	-3.74	42.29%	-1.36
1990	-3.84	41.28%	-1.41
1910	-3.87	41.06%	-1.49
1930	-3.83	41.37%	-1.59
1950	-3.86	41.11%	-1.57
1970	-3.99	39.92%	-1.52
1990	-4.05	39.33%	-1.55
AVG	-3.85	41.11%	-1.40

DIV ANT_2100M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
1920	-3.59	36.61%	-1.76
1940	-3.58	35.62%	-1.83
1950	-3.72	35.67%	-1.83
1970	-3.84	34.97%	-1.87
1990	-4.04	36.22%	-1.79
2110	-4.23	37.60%	-1.70
2130	-4.17	35.96%	-1.81
2150	-4.18	35.02%	-1.87
2170	-4.31	36.75%	-1.76
AVG	-3.96	36.04%	-1.80

DIV ANT_2300M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
2300	-3.67	37.16%	-1.77
2320	-3.70	36.66%	-1.65
2340	-3.74	37.55%	-1.64
2360	-3.81	38.61%	-1.65
2380	-3.74	40.37%	-1.45
2400	-3.97	40.59%	-1.60
AVG	-3.77	38.49%	-1.62

DIV ANT_2500			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
2490	-3.74	42.28%	-0.73
2510	-3.75	42.19%	-0.83
2530	-3.76	42.06%	-0.97
2550	-3.78	41.85%	-1.14
2570	-3.74	42.29%	-1.36
2590	-3.84	41.28%	-1.41
2610	-3.87	41.06%	-1.49
2630	-3.83	41.37%	-1.59
2650	-3.86	41.11%	-1.57
2670	-3.99	39.92%	-1.52
2690	-4.05	39.33%	-1.55
AVG	-3.83	41.34%	-1.28

MAIN ANT_800M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
790	-4.86	25.95%	-1.32
810	-5.04	24.90%	-1.15
830	-5.00	25.10%	-1.18
850	-5.05	24.86%	-1.15
870	-4.91	25.64%	-1.29
890	-4.58	27.70%	-1.62
AVG	-4.91	25.69%	-1.28

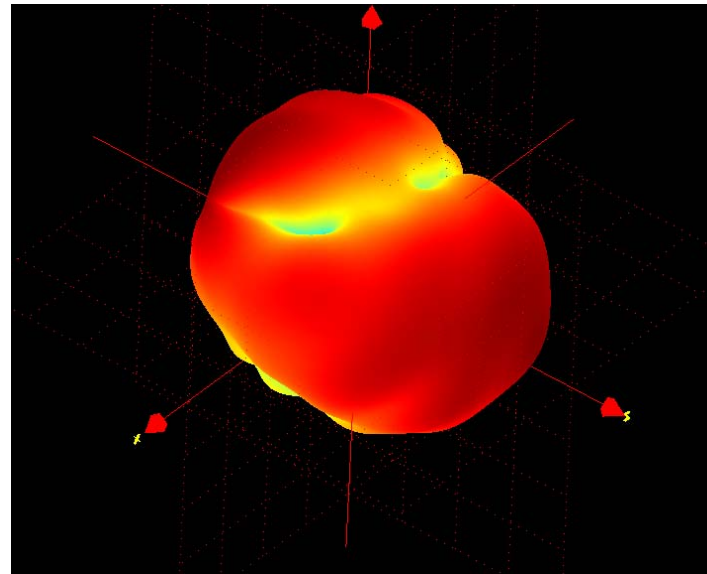
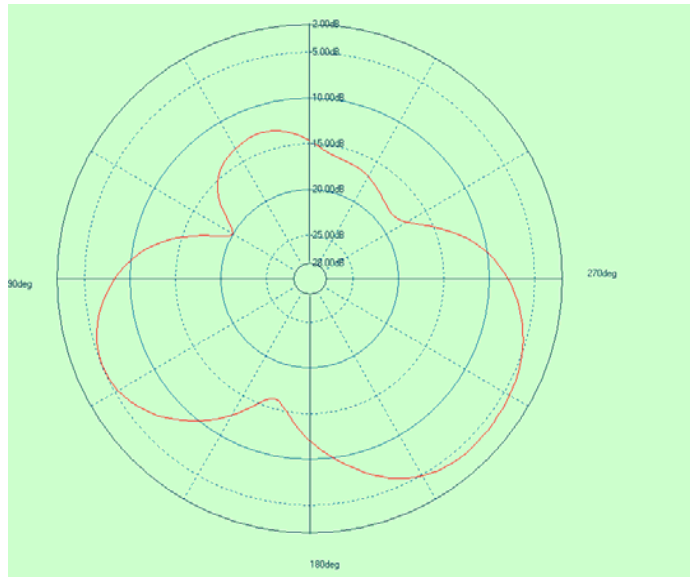
MAIN ANT_700M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
700	-3.58	25.32%	-1.33
720	-3.41	27.51%	-1.59
740	-3.48	26.07%	-1.78
760	-3.53	26.19%	-1.82
780	-3.60	25.63%	-1.77
800	-3.70	24.39%	-1.52
AVG	-3.55	25.85%	-1.63

3in1 ANT_2400M			
Frequency (MHz)	AVG	efficiency (%)	Peak Gain
2400	-3.70	33.06%	-0.83
2410	-3.57	34.33%	-0.92
2420	-3.47	35.63%	-0.91
2430	-3.23	37.47%	-1.04
2440	-3.06	39.05%	-1.26
2450	-2.58	45.41%	-1.33
2460	-2.41	47.39%	-1.59
2470	-2.48	46.57%	-1.78
2480	-2.53	46.15%	-1.82
2490	-2.60	45.68%	-1.77
2500	-2.75	44.31%	-1.52
AVG	-2.94	41.36%	-1.34

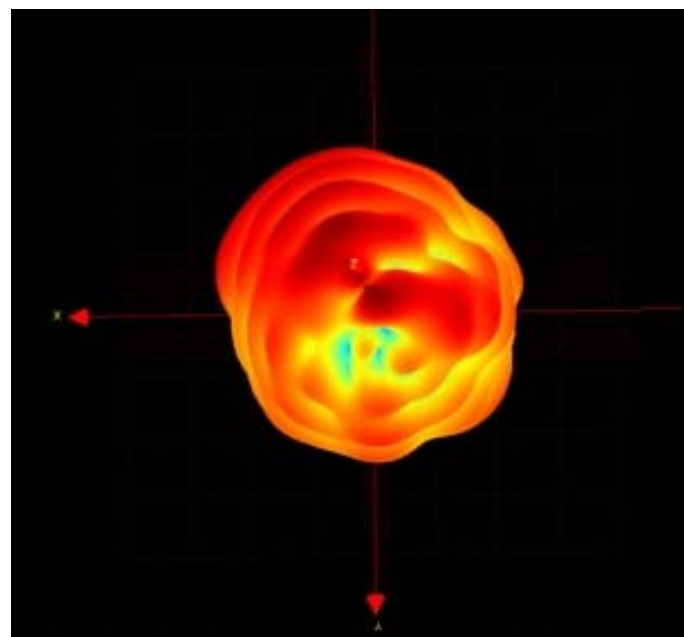
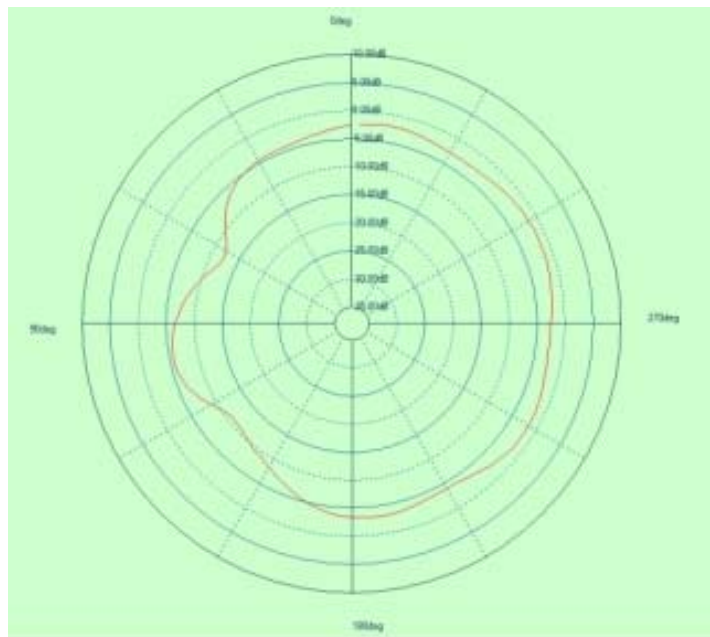
3in1 ANT_1500M			
Frequency (MHz)	AVG Gain	efficiency (%)	Peak Gain
1550	-3.49	40.11%	-1.14
1560	-3.72	40.46%	-1.29
1570	-3.55	40.54%	-1.21
1580	-3.23	39.97%	-1.70
1590	-3.12	39.53%	-1.65
AVG	-3.42	40.01%	-1.39

3in1 ANT_5000M			
Frequency (MHz)	AVG	efficiency (%)	Peak Gain
5000	-4.86	25.95%	-1.32
5100	-5.04	24.90%	-1.15
5200	-5.00	25.10%	-1.18
5300	-5.05	24.86%	-1.15
5400	-4.91	25.64%	-1.29
5500	-4.58	27.70%	-1.62
5600	-4.73	26.71%	-1.45
5700	-4.91	25.63%	-1.26
5800	-4.67	27.08%	-1.44
5900	-4.39	28.91%	-1.66
AVG	-4.81	26.24%	-1.35

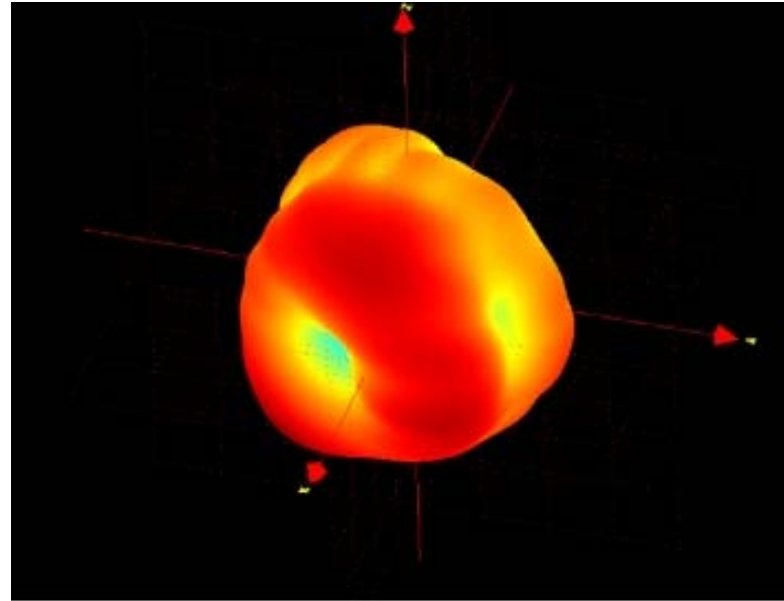
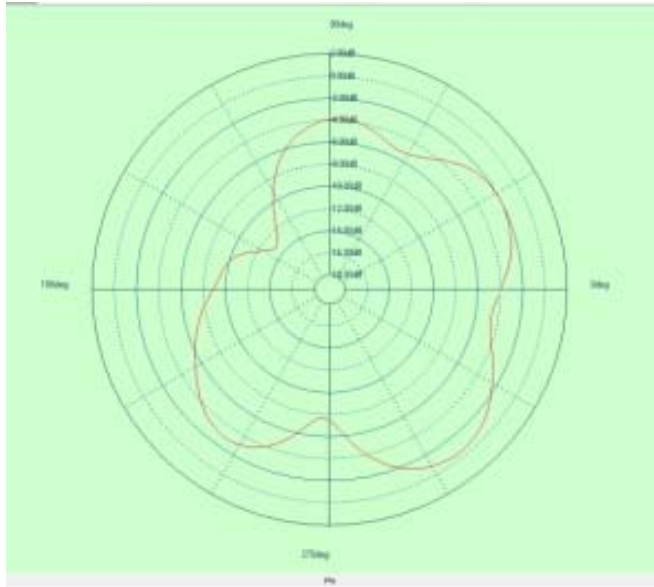
Passive antenna 3D pattern and directional pattern(700~800Mhz)



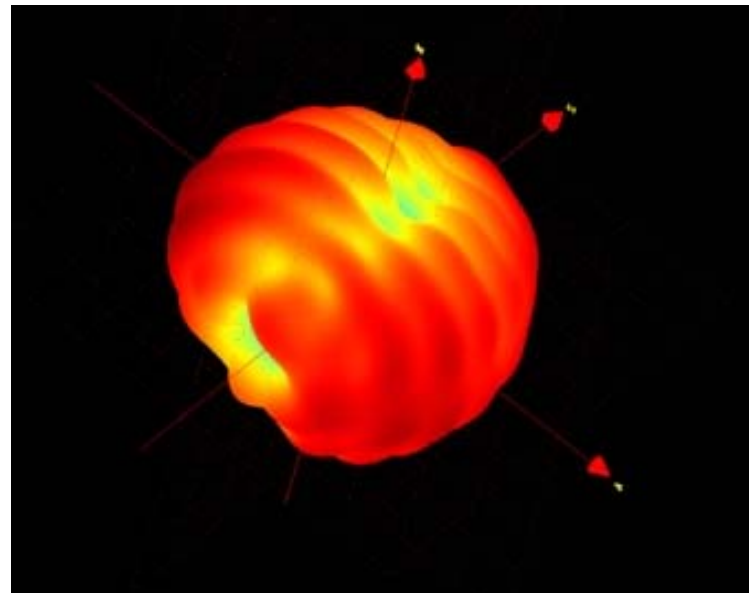
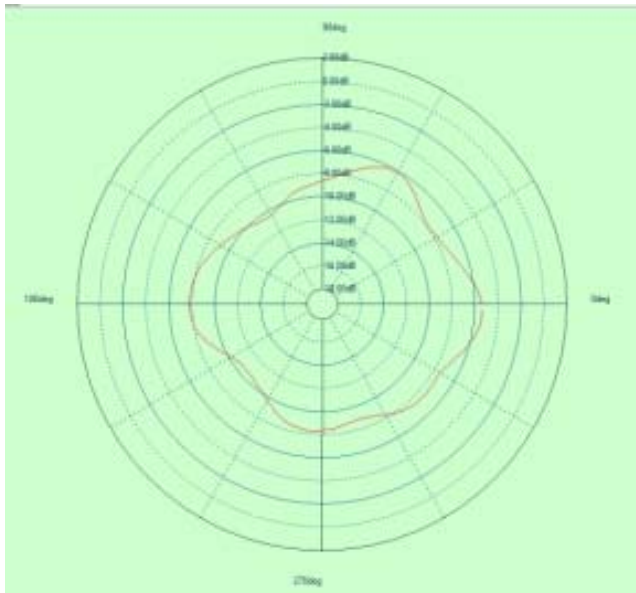
Passive antenna 3D pattern and directional pattern(800~960Mhz)



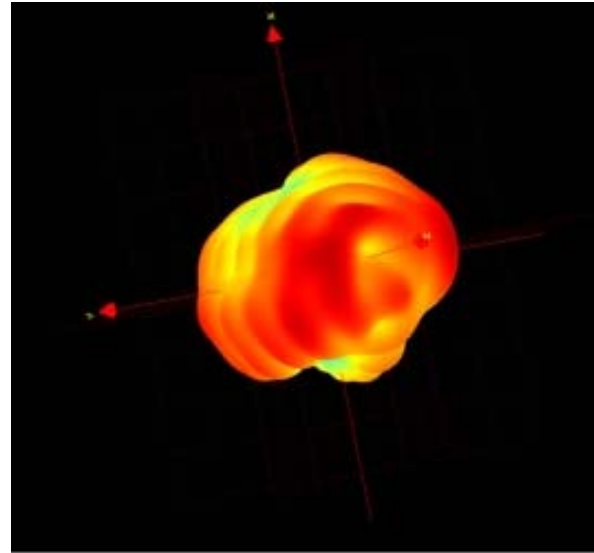
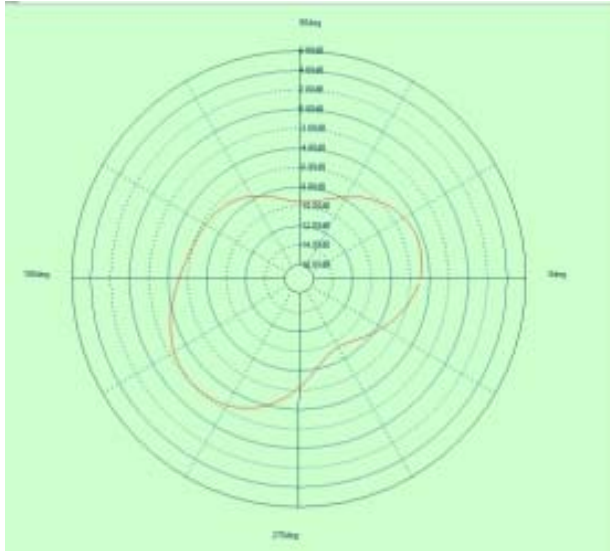
Passive antenna 3D pattern and directional pattern(1710~2170Mhz)



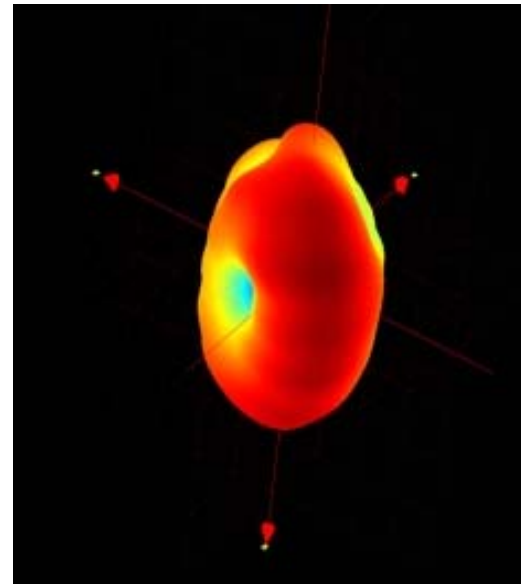
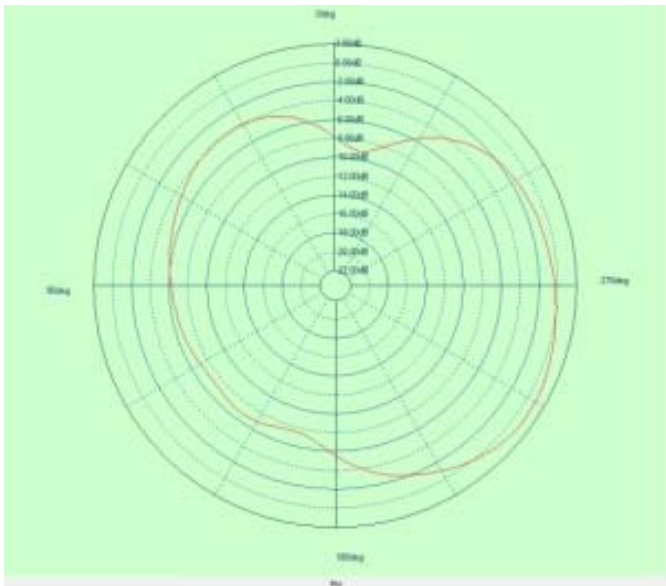
Passive antenna 3D pattern and directional pattern(2300~2400Mhz)



Passive antenna 3D pattern and directional pattern(2490~2690Mhz)

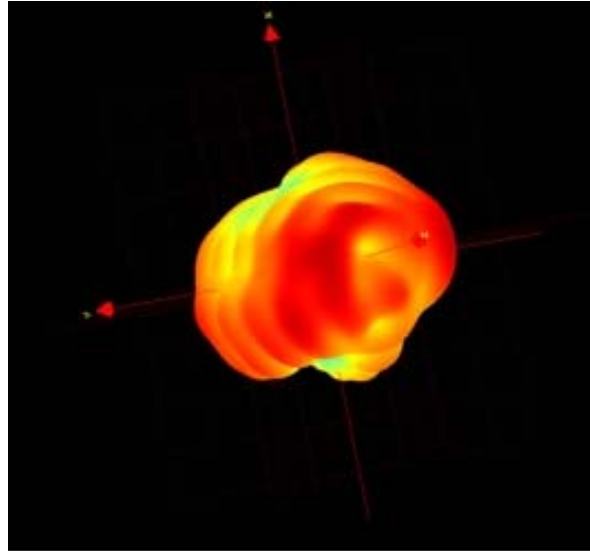
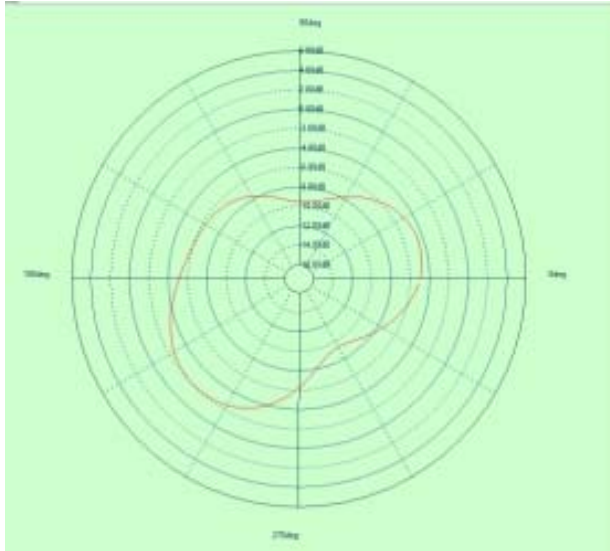


1550MHZ~1600MHZ (GPS)



Passive antenna 3D pattern and directional pattern

2400MHz~2500MHz (BT/WIFI 2.4G)



5100MHz~5800MHz (WIFI 5G)

