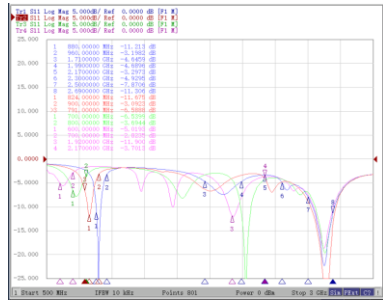




Antenna Passive Test Report

Project Name	T8F1C	Engineer	zhengxu	Checker	
HW Version	V00B	Prototype(S/N)	L309D4CR00007	Software Version	1.00.0020241101
Temperature/Humidity	25°C/50%	Test Equipment	OTA chamber	Test Date	2025/1/17
Conclusion		Remarks			
Standard	Fre(Mhz)	Effi(%) (Min~Max)	Probiem Description and Next Step Plan		
Main Antenna	600~700	19%-22%			
	700~800	20%-36%			
	800~960	19%-40%			
	1700~2170	23%-43%			
	2300~2400	26%			
	2500~2700	30%-36%			
Div Antenna	600~700				
	700~800				
	800~960				
	1700~2170	10%-19%			
	2300~2400	30%-40%			
	2500~2700	15%-27%			
WiFi	2.4G	37%-40%			
	5G	40%-47%			
RFID	902~928	19.5%-32%			
GPS	L5	36%			

Main antenna

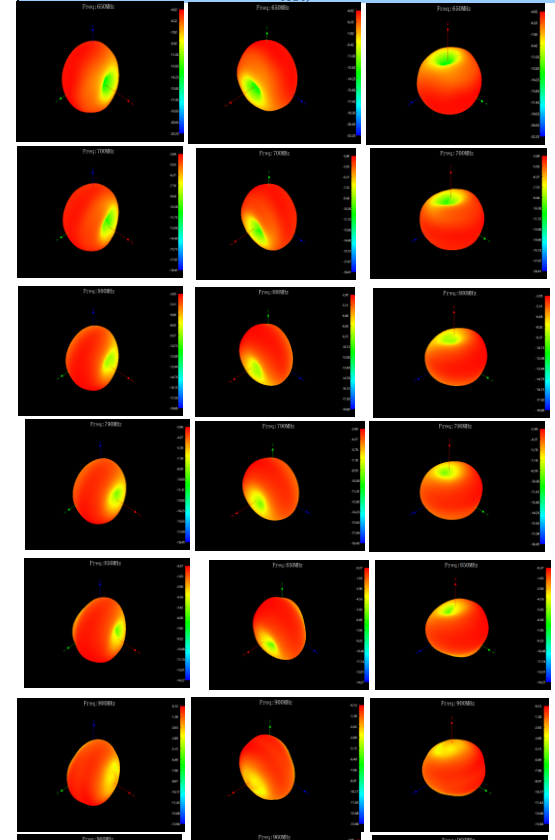


	Band
RF1	GSM900/1800/1900/WCDMA B2/4/8/ LTE B2/3/4/66/7/8/B25/38/39/4
RF2	GSM850/ WCDMA B5/B6/B19/ LTE B5/18/19/20/26/30/40
RF3	LTE B12/13/14/17/28
RF4	WCDMA B1/LTE B71/1/34

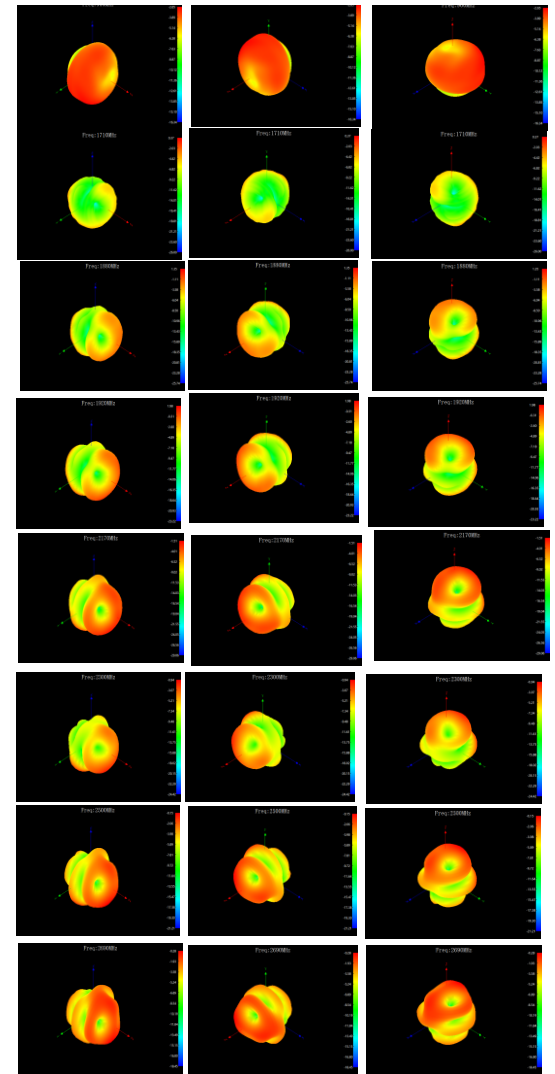
Passive (Gain, Efficiency, 3D field pattern)

frequency (MHz)	RF1			RF2			RF3			RF4		
	Gain(dBi)	Efficiency(dB)	Efficiency(%)	Gain(dBi)	Efficiency(dB)	Efficiency(%)	Gain(dBi)	Efficiency(dB)	Efficiency(%)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
600												
610												
620												
630										-4.77	-6.93	20.28
640										-4.55	-6.67	21.53
650										-4.10	-6.56	22.08
660										-4.08	-6.14	24.32
670										-4.40	-6.18	24.10
680										-4.40	-6.45	22.65
690										-4.62	-6.73	21.23
700										-4.76	-6.82	20.80
710							-3.69	-6.33	23.28	-4.72	-6.96	20.14
720							-3.70	-6.08	24.66			
730							-3.46	-6.03	24.95			
740							-3.21	-6.06	24.77			
750							-3.53	-6.09	24.60			
760							-3.56	-6.09	24.60			
770							-3.87	-6.36	23.12			
780							-3.53	-6.41	22.86			
790							-3.53	-6.55	22.13			
800				-2.96	-6.29	23.50	-3.62	-6.85	20.65			
810				-2.33	-5.47	28.38	-3.95	-7.12	19.41			
820				-1.39	-4.90	32.36						
830				-0.96	-4.55	35.08						
840				-0.37	-4.37	36.56						
850				-0.96	-4.43	36.06						
860				-0.97	-4.72	33.73						
870				-1.03	-5.00	31.62						
880				-1.09	-5.41	28.77						
890	0.08	-4.30	37.15	-1.52	-5.86	25.94						
900	0.05	-3.98	39.99	-2.53	-6.62	21.78						
910	-0.12	-4.02	39.63									
920	-0.87	-4.50	35.48									
930	-1.16	-4.98	31.77									
940	-1.37	-5.53	27.99									
950	-1.29	-6.00	25.12									
960	-1.90	-6.64	21.68									
970	-2.65	-7.23	18.92									
1000												
1100												
1200												
1300												
1400												
1500												
1600												
1700	0.37	-6.30	23.44									
1710	0.59	-5.89	25.76									
1720	1.11	-5.47	28.38									
1730	1.57	-5.08	31.05									
1740	1.85	-4.77	33.34									
1750	1.83	-4.60	34.67									
1760	1.77	-4.53	35.24									
1770	1.89	-4.28	37.33									
1780												

3D field pattern (xyz directions, marking the direction of the device under test)

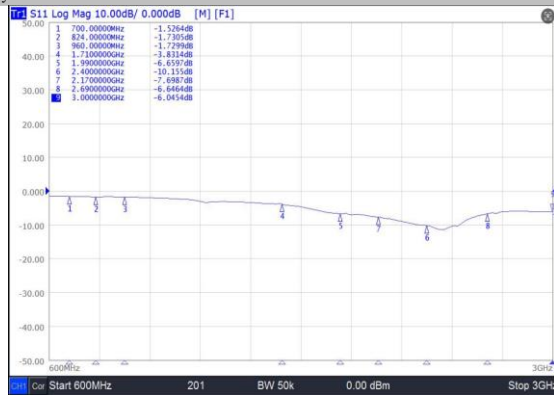


1790	1.93	-4.03	39.54										
1800	2.41	-3.89	40.83										
1810	2.67	-3.75	42.17										
1820	2.83	-3.72	42.46										
1830	2.62	-3.71	42.56										
1840	2.41	-3.82	41.50										
1850	2.19	-3.97	40.09										
1860	2.03	-4.08	39.08										
1870	1.79	-4.29	37.24										
1880	1.35	-4.33	36.90										
1890	1.32	-4.48	35.65										
1900	1.17	-4.42	36.14										
1910	1.18	-4.54	35.16										
1920	0.94	-4.56	34.99										
1930	0.88	-4.51	35.40							2.08	-3.20	47.86	
1940	0.95	-4.55	35.08							2.26	-3.16	48.31	
1950	0.86	-4.53	35.24							2.26	-3.05	49.55	
1960	0.67	-4.68	34.04							2.07	-3.12	48.75	
1970	0.47	-4.71	33.81							1.91	-3.09	49.09	
1980	0.15	-4.74	33.57							1.63	-3.11	48.87	
1990	-0.16	-4.91	32.28							1.45	-3.27	47.10	
2000	-0.76	-5.14	30.62							1.17	-3.47	44.98	
2010	-1.37	-5.42	28.71							0.78	-3.72	42.46	
2020	-1.60	-5.63	27.35							0.65	-3.92	40.55	
2030	-1.85	-5.86	25.94							0.65	-4.17	38.28	
2040	-1.94	-6.04	24.89							0.53	-4.38	36.48	
2050	-2.19	-6.31	23.39							0.27	-4.66	34.20	
2060	-2.54	-6.54	22.18							-0.18	-4.93	32.14	
2070	-2.87	-6.77	21.04							-0.59	-5.23	29.99	
2080	-3.05	-6.95	20.18							-0.86	-5.47	28.38	
2090	-3.01	-7.05	19.72							-0.87	-5.62	27.42	
2100	-3.00	-7.07	19.63							-0.88	-5.67	27.10	
2110	-2.90	-7.22	18.97							-0.86	-5.87	25.88	
2120	-2.98	-7.36	18.37							-0.97	-6.03	24.95	
2130	-2.96	-7.45	17.99							-0.96	-6.13	24.38	
2140	-2.80	-7.47	17.91							-1.12	-6.18	24.10	
2150	-2.70	-7.38	18.28							-0.99	-6.14	24.32	
2160	-2.88	-7.39	18.24							-1.41	-6.18	24.10	
2170	-3.16	-7.52	17.70							-1.51	-6.34	23.23	
2180	-3.31	-7.73	16.87							-1.83	-6.58	21.98	
2190	-3.58	-7.84	16.44										
2200	-3.54	-8.01	15.81										
2210													
2220													
2230													
2240													
2250													
2260													
2270													
2280													
2290													
2300				-0.94	-5.92	25.59							
2310				-0.88	-5.88	25.82							
2320				-0.89	-5.75	26.61							
2330				-0.85	-5.73	26.73							
2340				-1.04	-5.85	26.00							
2350				-1.05	-5.88	25.82							
2360				-1.05	-5.83	26.12							
2370				-1.00	-5.81	26.24							
2380				-0.91	-5.66	27.16							
2390				-0.78	-5.54	27.93							
2400				-0.72	-5.85	26.00							
2410													
2420													
2430													
2440													
2450													
2460													
2470													
2480													
2490	-0.10	-5.10	30.90										
2500	-0.15	-5.15	30.55										
2510	-0.17	-5.17	30.41										



[illegible]

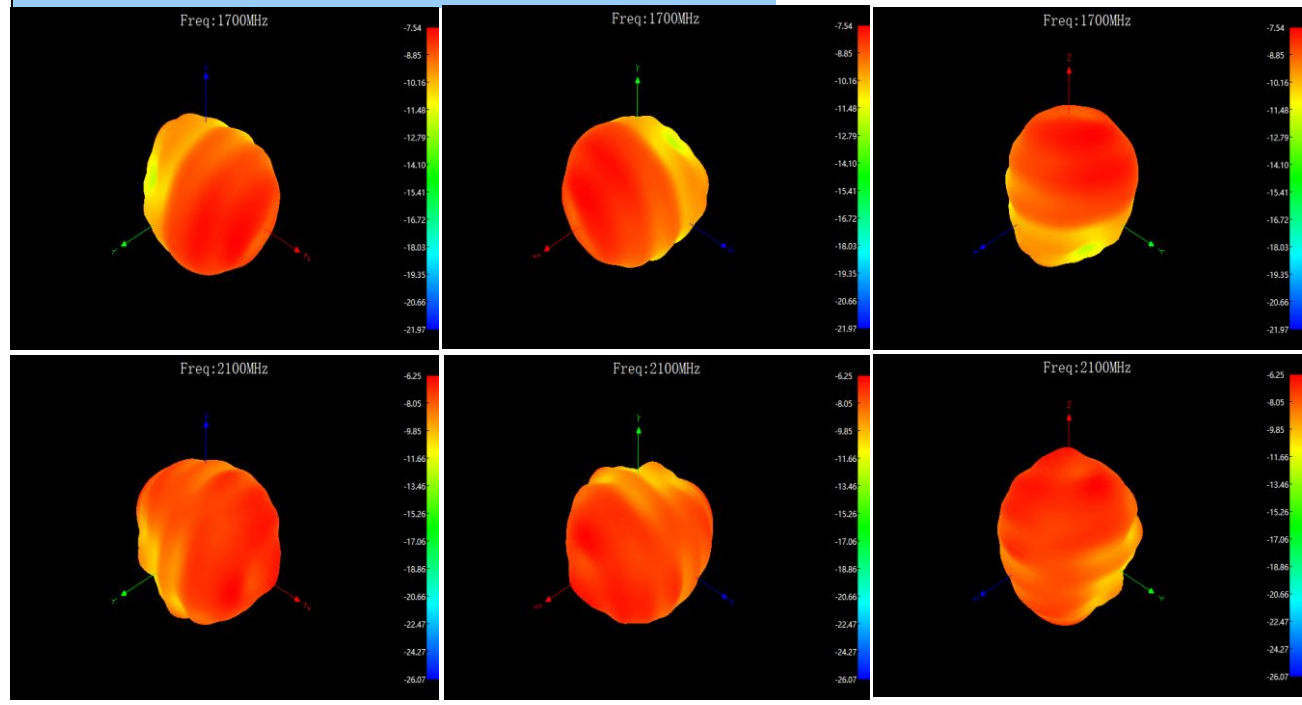
Diversity Antenna



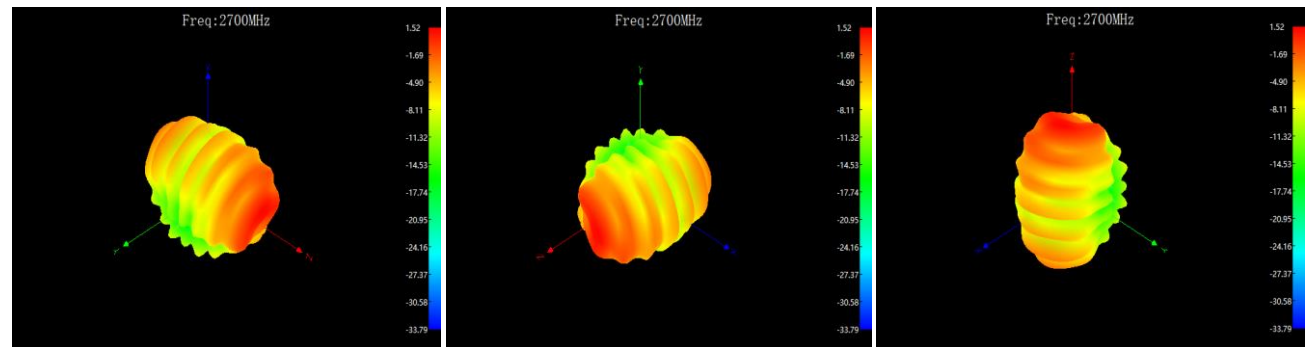
Passive (Gain, Efficiency, 3D field pattern)

frequency (MHz)	Gain (dB)	Efficiency (dB)	Efficiency (%)
1700	-7.54	-10.95	8.04
1710	-7.87	-10.98	7.98
1720	-7.67	-10.63	8.65
1730	-6.97	-10.74	8.43
1740	-6.68	-10.72	8.47
1750	-6.04	-10.12	9.73
1760	-5.76	-10.24	9.46
1770	-5.96	-10.16	9.64
1780	-5.57	-9.86	10.33
1790	-5.78	-10.05	9.89
1800	-6.12	-10.22	9.51
1810	-5.85	-9.89	10.26
1820	-5.64	-9.97	10.07
1830	-5.76	-9.89	10.26
1840	-5.43	-9.66	10.81
1850	-5.34	-9.68	10.76
1860	-5.53	-9.96	10.09
1870	-5.12	-9.81	10.45
1880	-4.88	-9.9	10.23
1890	-5.09	-10.05	9.89
1900	-5.26	-9.89	10.26
1910	-5.44	-9.88	10.28
1920	-5.5	-9.92	10.19
1930	-5.93	-9.8	10.47
1940	-5.87	-9.92	10.19
1950	-6.52	-10.06	9.86
1960	-6.15	-9.96	10.09

3D field pattern (xyz3 directions, marking the direction of the device under t

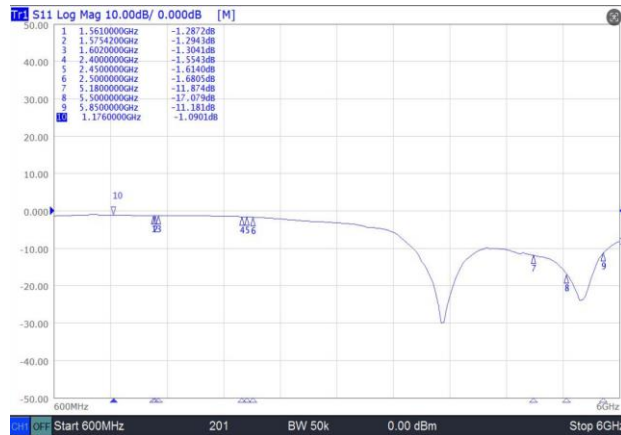


1970	-6.42	-10.13	9.71
1980	-6.5	-10.37	9.18
1990	-6.93	-9.92	10.19
2000	-7.21	-10.33	9.27
2010	-8.08	-10.51	8.89
2020	-8.09	-10.25	9.44
2030	-7.97	-10.11	9.75
2040	-8.05	-10.3	9.33
2050	-7.54	-8.27	14.89
2060	-6.54	-8.2	15.14
2070	-6.61	-8.17	15.24
2080	-6.42	-8.06	15.63
2090	-5.99	-7.88	16.29
2100	-6.25	-7.88	16.29
2110	-5.8	-7.71	16.94
2120	-4.92	-7.51	17.74
2130	-4.17	-7.5	17.78
2140	-4.13	-7.51	17.74
2150	-2.99	-7.4	18.2
2160	-2.87	-7.27	18.75
2170	-2.43	-7.06	19.68
2180	-3.08	-6.92	20.32
2190	-3.15	-6.5	22.39
2200	-2.6	-6.51	22.34
2210	-2.14	-6.21	23.93
2220	-2.57	-6.16	24.21
2230	-2.46	-5.89	25.76
2240	-2.35	-5.69	26.98
2250	-2.24	-5.38	28.97
2260	-1.72	-5.14	30.62
2270	-1.48	-4.82	32.96
2280	-1.51	-4.39	36.39
2290	-1.36	-4.38	36.48
2300	-0.89	-4.27	37.41
2310	-1.55	-4.14	38.55
2320	-1.45	-4.01	39.72
2330	-1.21	-3.82	41.5
2340	-1.45	-3.95	40.27
2350	-1.12	-4.2	38.02
2360	-0.97	-4.61	34.59
2370	-1.22	-4.69	33.96
2380	-1.57	-4.94	32.06
2390	-1.14	-4.66	34.2
2400	-1.82	-5.09	30.97
2410	-1.82	-5.21	30.13
2420	-2.46	-5.57	27.73
2430	-1.85	-5.88	25.82
2440	-1.81	-6.02	25
2450	-0.7	-5.78	26.42
2460	-1.19	-5.66	27.16



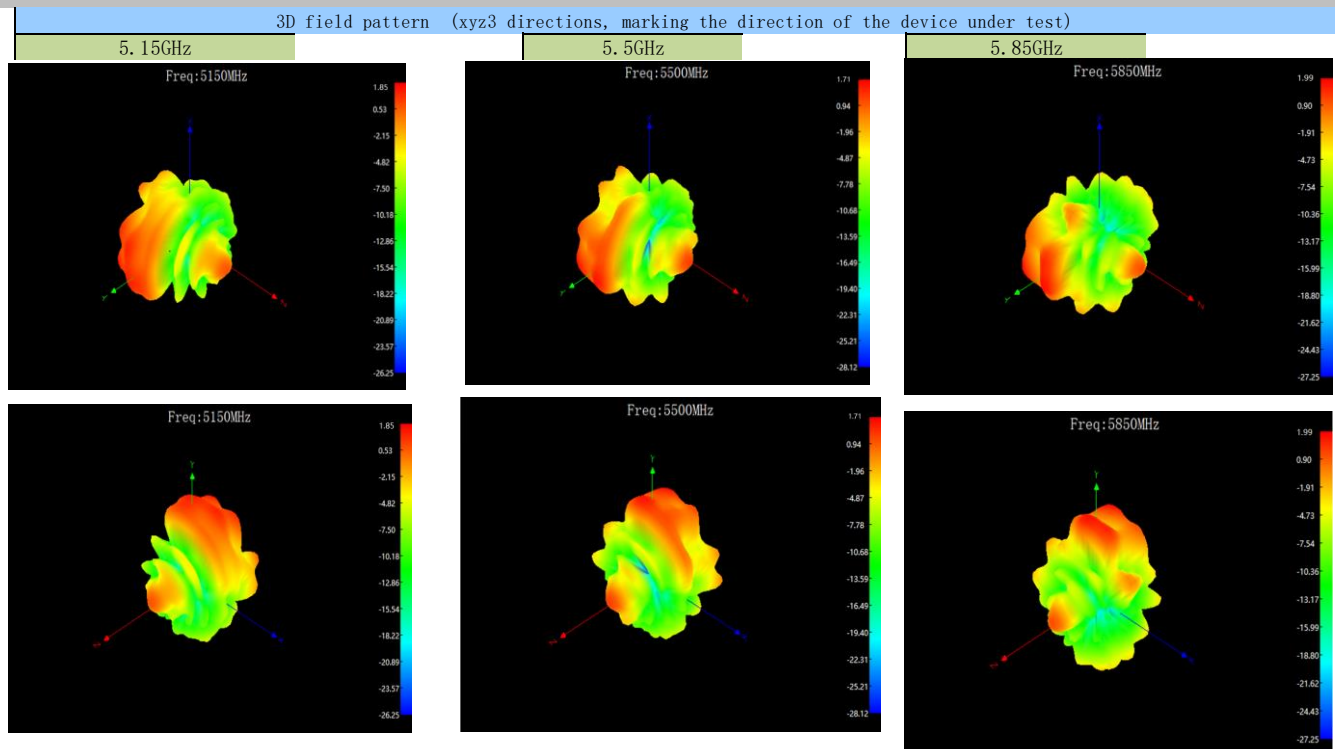
2470	-0.2	-5.5	28.18
2480	-0.2	-5.55	27.86
2490	0.09	-5.45	28.51
2500	0.21	-5.64	27.29
2510	1.24	-5.56	27.8
2520	1.44	-6.02	25
2530	1.44	-5.78	26.42
2540	1.01	-6.1	24.55
2550	0.4	-6.29	23.5
2560	0.39	-6.76	21.09
2570	0.31	-6.61	21.83
2580	0.33	-6.9	20.42
2590	-0.11	-6.61	21.83
2600	-0.12	-6.84	20.7
2610	-0.66	-7.06	19.68
2620	-0.08	-7.03	19.82
2630	-0.58	-6.75	21.13
2640	-0.51	-6.82	20.8
2650	-0.72	-6.73	21.23
2660	-0.13	-7.06	19.68
2670	-0.41	-7.17	19.19
2680	0.5	-7.53	17.66
2690	0.88	-7.47	17.91
2700	1.52	-8.07	15.6

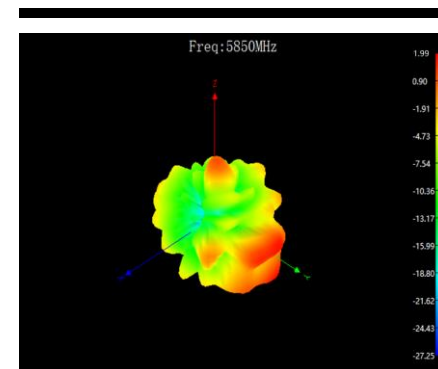
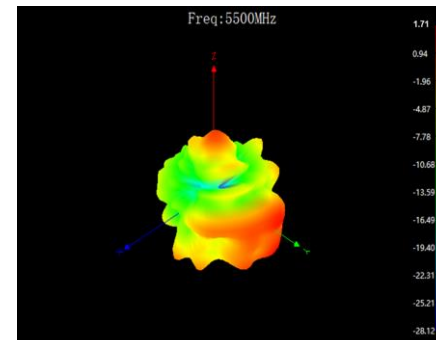
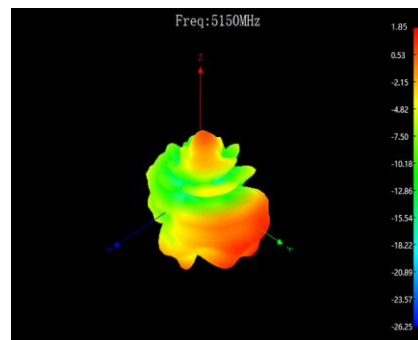
WIFI5G



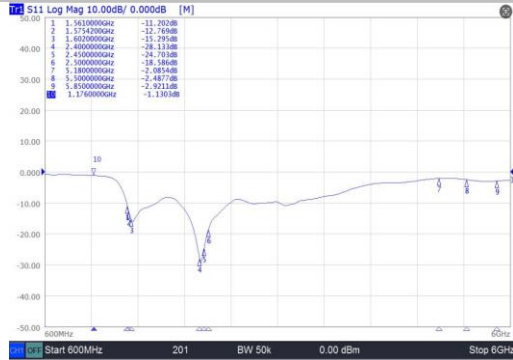
Passive (Gain, Efficiency, 3D field pattern)

frequency (MHz)	Gain (dB)	Efficiency (dB)	Efficiency (%)
5150	1.85	-3.8	40.9
5200	2.2	-3.72	41.63
5250	2.51	-3.65	42.27
5300	2.55	-3.61	42.64
5350	2.5	-3.65	42.27
5400	2.38	-3.71	42.56
5450	1.93	-3.18	46.87
5500	1.71	-3.25	46.16
5550	1.75	-3.13	47.39
5600	1.49	-3.37	44.95
5650	1.94	-3.25	46.16
5700	1.93	-3.18	46.87
5750	1.81	-3.37	44.95
5800	1.58	-3.61	42.64
5850	1.99	-3.54	43.3





GPS-WIFI2.4G

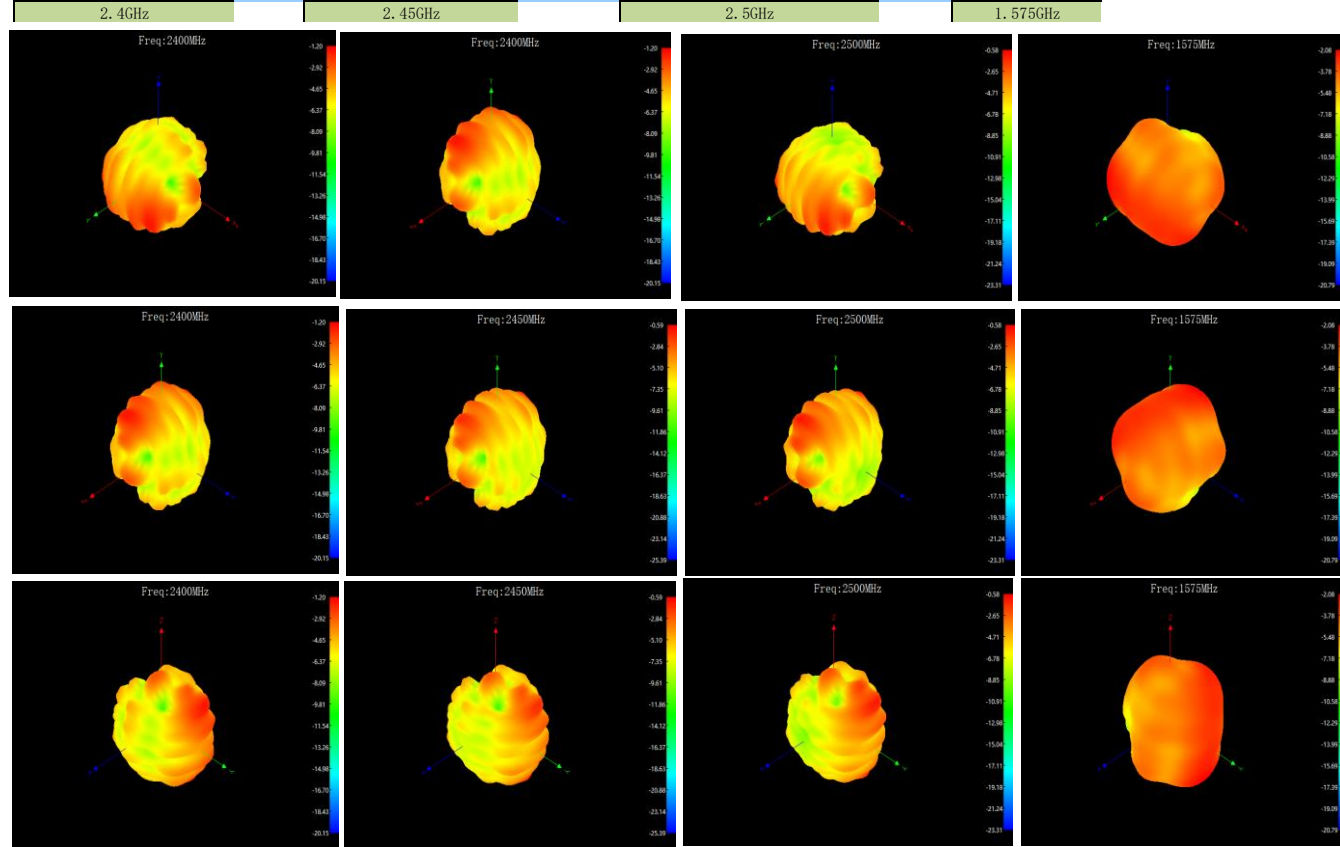


Passive (Gain, Efficiency, 3D field pattern)

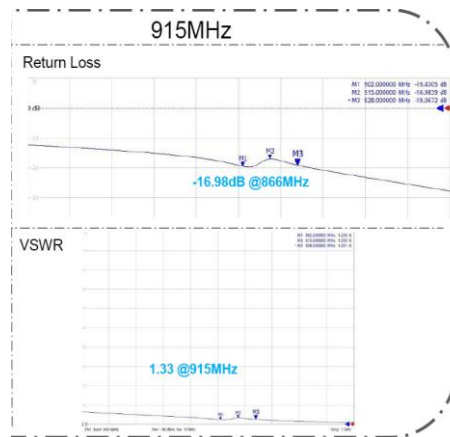
frequency(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
1550	0.47	-4.8	33.11
1555	0.43	-4.61	34.59
1560	0.23	-4.6	34.67
1565	0.3	-4.5	35.48
1570	0.2	-4.42	36.14
1575	-2.08	-4.37	36.56
1580	-0.08	-4.46	35.81
1585	-0.23	-4.55	35.08
1590	-0.41	-4.56	34.99
1595	-0.36	-4.57	34.91

frequency(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	-1.2	-4.12	38.73
2410	-0.76	-4.11	38.82
2420	-1.79	-4.02	39.63
2430	-1.07	-4.03	39.54
2440	-1.38	-3.98	39.99
2450	-0.59	-3.93	40.46
2460	-0.81	-4.04	39.45
2470	-0.42	-4.11	38.82
2480	-0.48	-4.15	38.46
2490	-0.03	-4.28	37.33
2500	-0.58	-4.3	37.15

3D field pattern (xyz3 directions, marking the direction of the device under test)			



RFID



Passive (Gain, Efficiency, 3D field pattern)

frequency(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
900	-1.06	-5.6	27.44
903	-0.76	-5.3	29.64
906	-0.5	-5.1	31.23
909	-0.31	-4.9	32.02
912	-0.21	-5.0	31.93
915	0.24	-5.1	31.03
918	0.72	-5.4	29.16
921	-1.04	-5.7	26.83
924	1.43	-6.1	24.34
927	-1.89	-6.6	21.86
930	-2.39	-7.1	19.48

915Mhz 3D field pattern (xyz3 directions, marking the direction of the device under test)

