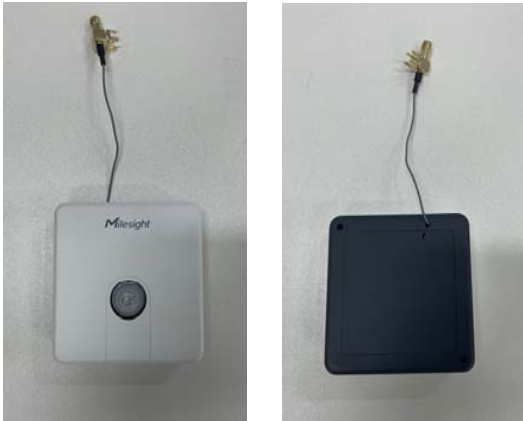


# VS340 principle prototype antenna passive performance test record

Fixture diagram



Antenna size

50.9\*15.5MM

Frequency band

B915

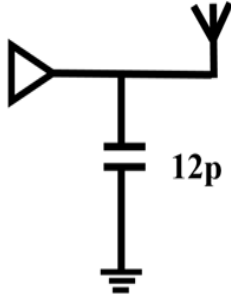
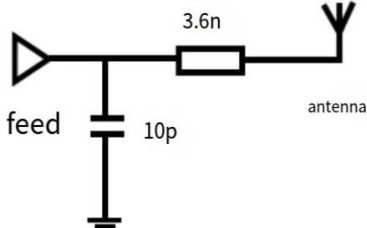
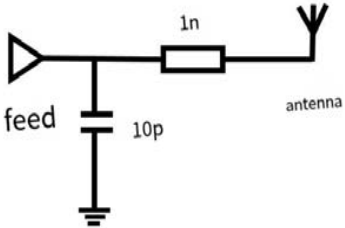
B868

B470

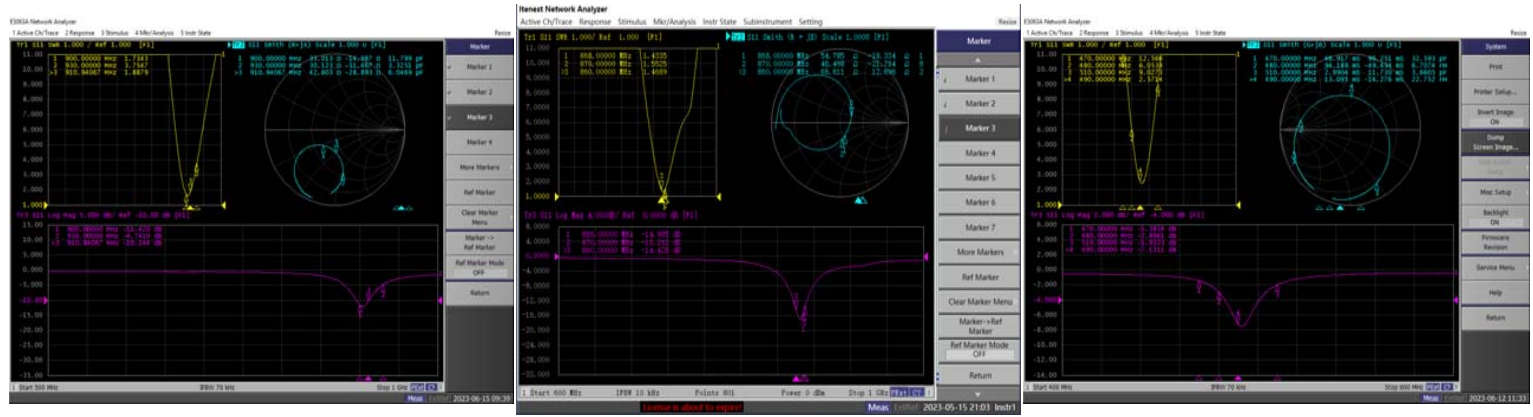
Antenna riser



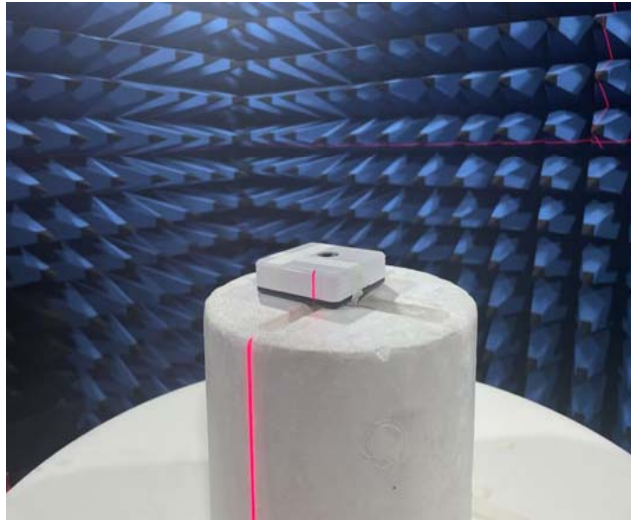
Matching circuit



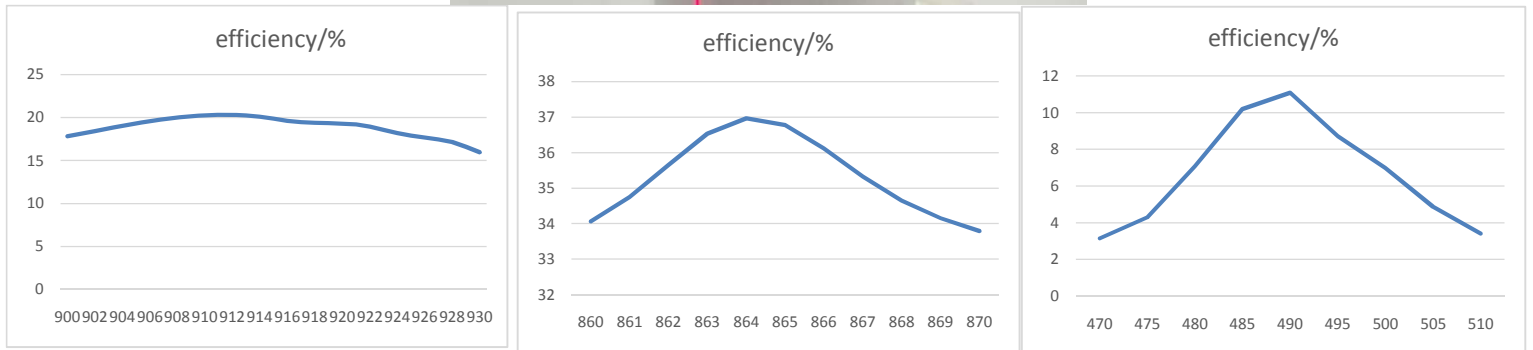
Impedance characteristic



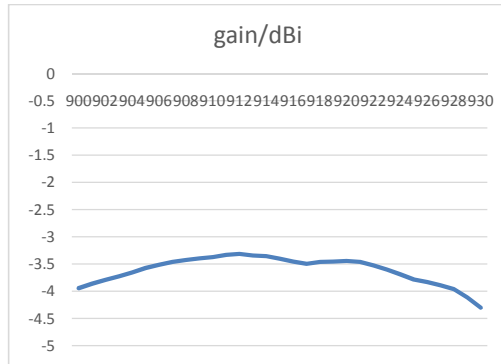
channel time-derived



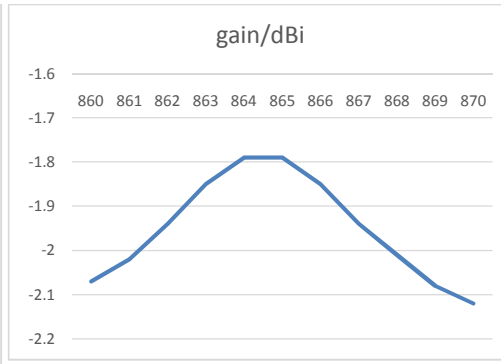
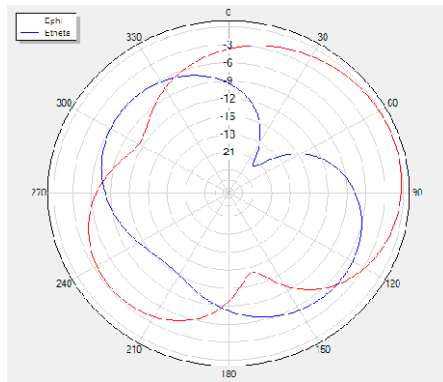
efficiency



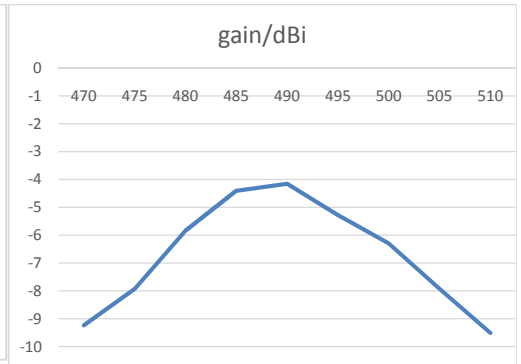
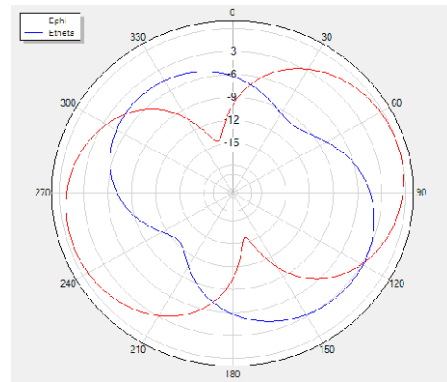
gain



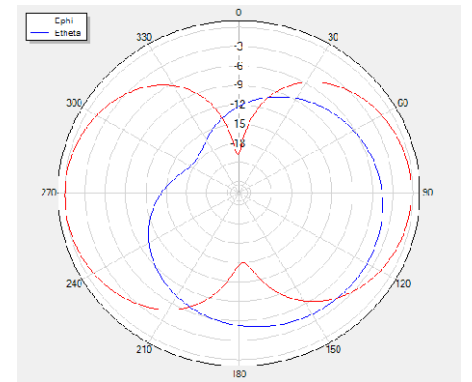
Theta=90 freq=915MHz



Theta=90 freq=868MHz

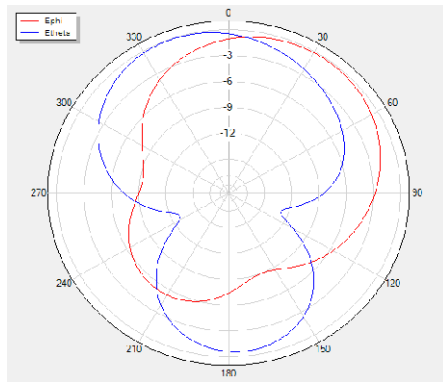


Theta=90 freq=485MHz

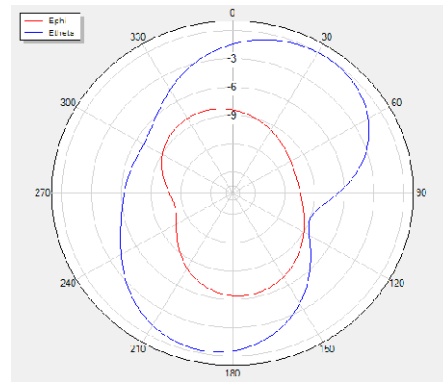


directional characteris

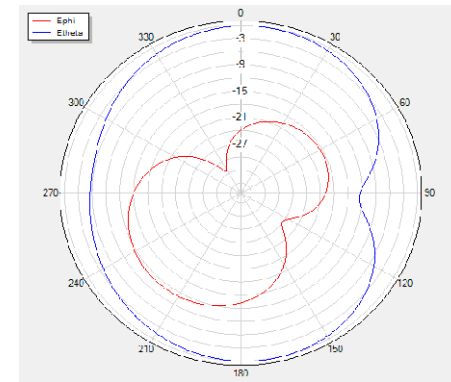
**Phi=0 freq=915MHz**



**Phi=0 freq=868MHz**



**Phi=0 freq=485MHz**



channel time-derived: 2023/6/2

B915	Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Frequency (MHz)	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918
	Gain (dBi)	-3.94	-3.86	-3.79	-3.72	-3.65	-3.57	-3.51	-3.46	-3.42	-3.39	-3.37	-3.33	-3.31	-3.34	-3.35	-3.4	-3.45	-3.49	-3.46
	Efficiency (dB)	-7.49	-7.41	-7.35	-7.28	-7.21	-7.14	-7.08	-7.03	-6.99	-6.96	-6.93	-6.92	-6.92	-6.94	-6.97	-7.02	-7.07	-7.11	-7.12
	Efficiency (%)	17.82	18.14	18.41	18.72	19.02	19.32	19.61	19.83	19.99	20.13	20.27	20.32	20.33	20.24	20.1	19.88	19.63	19.47	19.39
	Frequency ID	20	21	22	23	24	25	26	27	28	29	30	31							
	Frequency (MHz)	919	920	921	922	923	924	925	926	927	928	929	930							
	Gain (dBi)	-3.45	-3.44	-3.46	-3.52	-3.6	-3.69	-3.78	-3.83	-3.89	-3.96	-4.11	-4.3							
	Efficiency (dB)	-7.13	-7.14	-7.16	-7.22	-7.31	-7.4	-7.47	-7.53	-7.58	-7.66	-7.8	-7.97							
	Efficiency (%)	19.36	19.3	19.21	18.95	18.59	18.21	17.89	17.67	17.44	17.14	16.61	15.96							

channel time-derived: 2023/5/16

B868	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
	Frequency (MHz)	860	861	862	863	864	865	866	867	868	869	870
	Gain (dBi)	-2.07	-2.02	-1.94	-1.85	-1.79	-1.79	-1.85	-1.94	-2.01	-2.08	-2.12
	Efficiency (dB)	-4.68	-4.59	-4.48	-4.37	-4.32	-4.34	-4.42	-4.52	-4.6	-4.67	-4.71
	Efficiency (%)	34.06	34.75	35.65	36.54	36.97	36.78	36.12	35.33	34.65	34.15	33.79

channel time-derived: 2023/6/12

B470	Frequency ID	1	2	3	4	5	6	7	8	9
	Frequency (MHz)	470	475	480	485	490	495	500	505	510
	Gain (dBi)	-9.24	-7.92	-5.85	-4.41	-4.16	-5.29	-6.3	-7.92	-9.51
	Efficiency (dB)	-15.03	-13.67	-11.51	-9.92	-9.55	-10.61	-11.56	-13.14	-14.68
	Efficiency (%)	3.14	4.29	7.06	10.19	11.08	8.7	6.98	4.86	3.4

Lora ANT

