

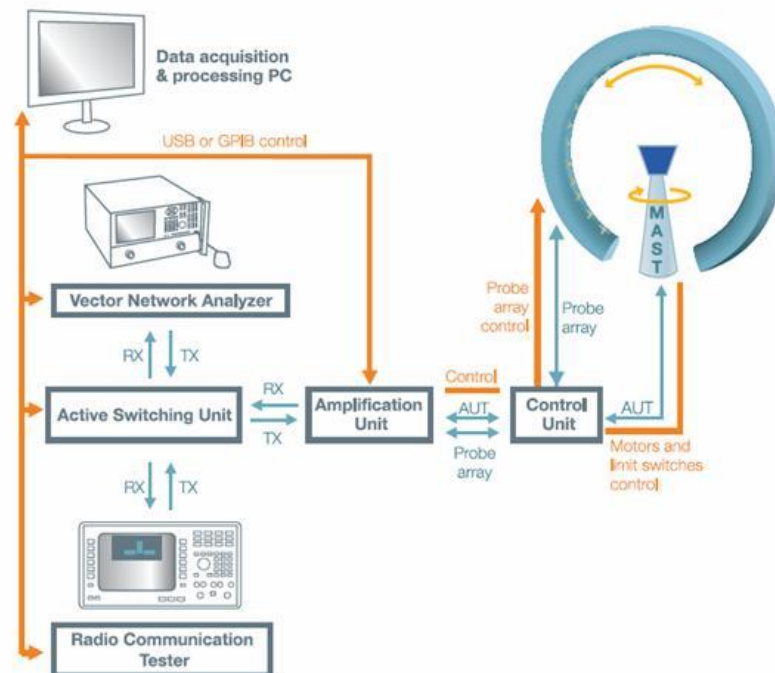
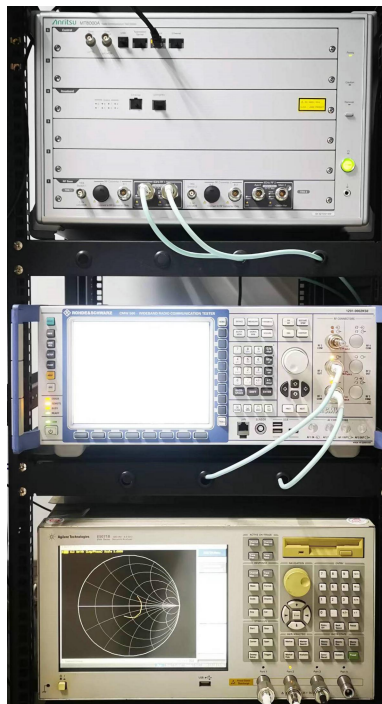
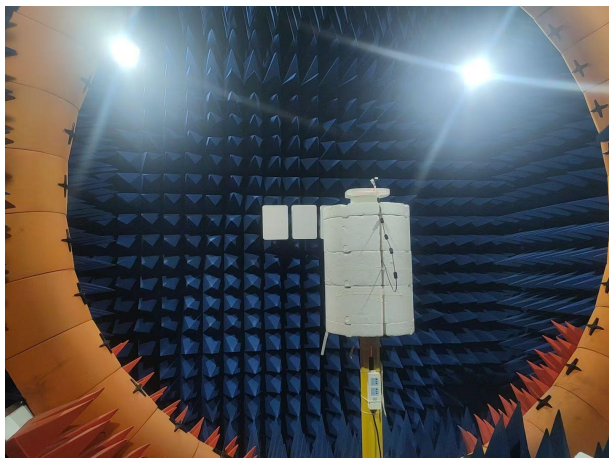
Antenna Measurement Report

Project name:	MAX30
Type of antenna:	WIFI2.4/5G
Redact:	
Approver:	
Version number:	V1.1
Date:	20240523

1. Test items and equipment

Passive test item

1. Overall radiated power	Microwave chamber
2. Complete machine data	Net division E5071B CMW500



2. Product Information

Name:	MAX30
Test antenna:	WIFI2.4/5G

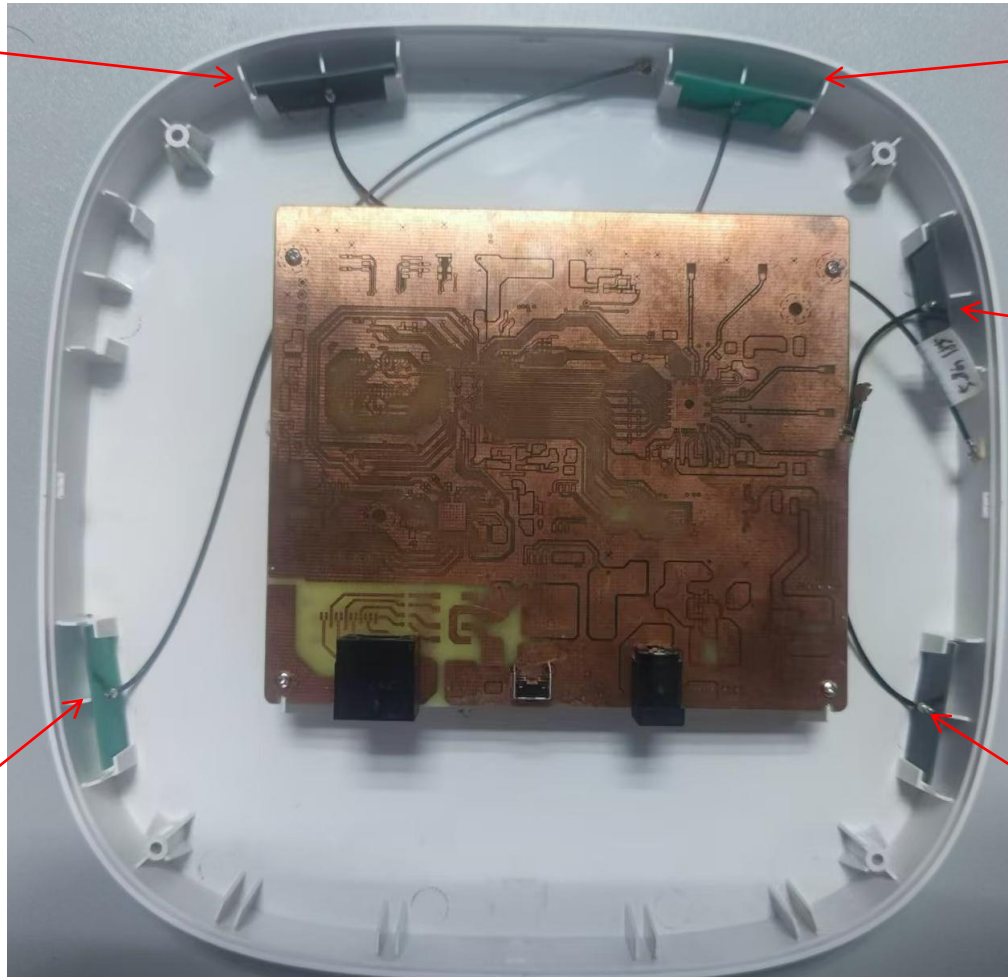


- Coaxial Cable:
- WiFi 2.4G antenna: 1.13 dark gray line
Socket head: first generation head
Line length: 60mm
Material number: SLEingB104340060-C01
- WiFi 2.4G antenna: 1.13 dark gray line
Socket head: first generation head
Line length: 200mm
Material number: SLEingB104340200-C01
- WiFi 5G antenna: 1.13 black line
Socket head: first generation head
Line length: 85mm
Material number: SLEingB104350085-C01
- WiFi 5G antenna: 1.13 black line
Socket head: first generation head
Line length: 60mm
Material number: SLEingB104350060-C01
- WiFi 5G antenna: 1.13 black line
Head: Generation 1 Head
Cable Length: 185mm
Material Number: SLEingB104350185-C01

3. Antenna placement

185mm cable length
WiFi 5G antenna
position

60mm cable length
WiFi 2.4G antenna
position

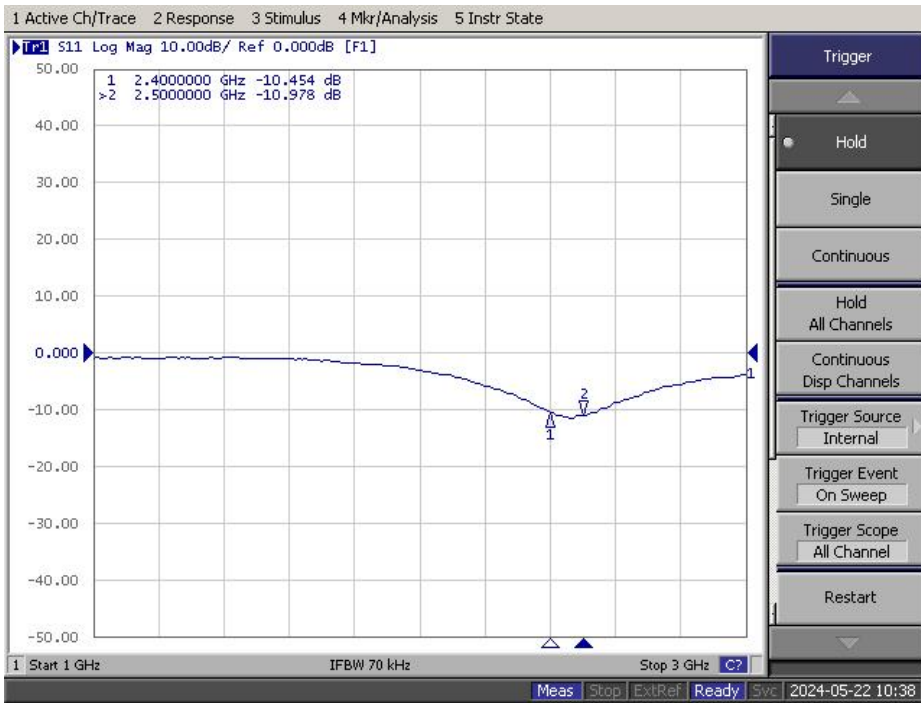


60mm cable length
WiFi 5G antenna
position

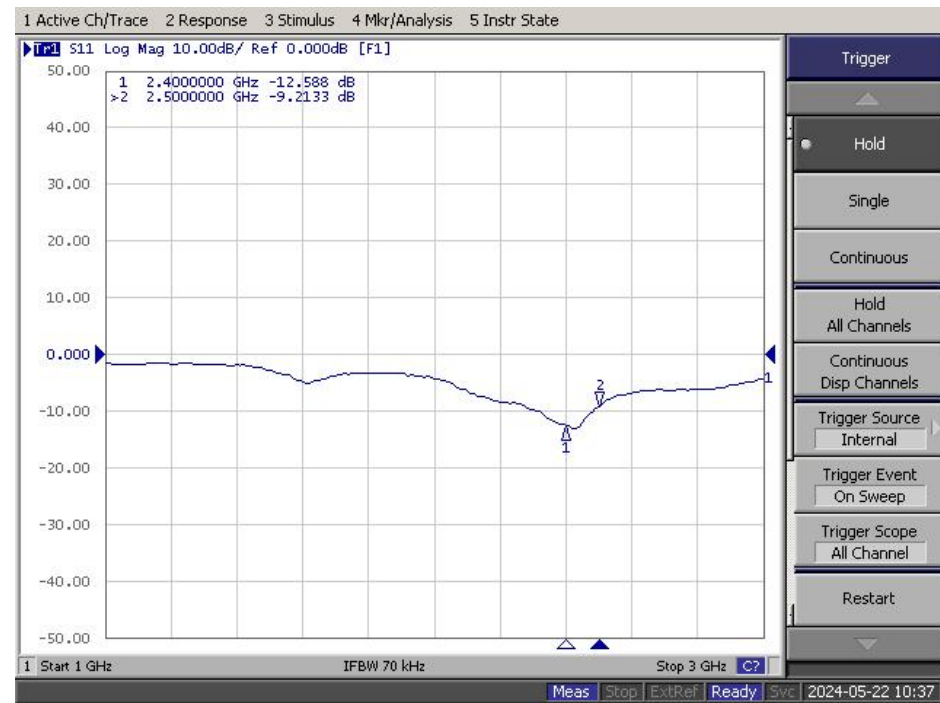
200mm cable length
WiFi 2.4G antenna
position

85mm cable length
WiFi 5G antenna
position

4. 天线S11



60mm length WiFi 2.4G antenna S11



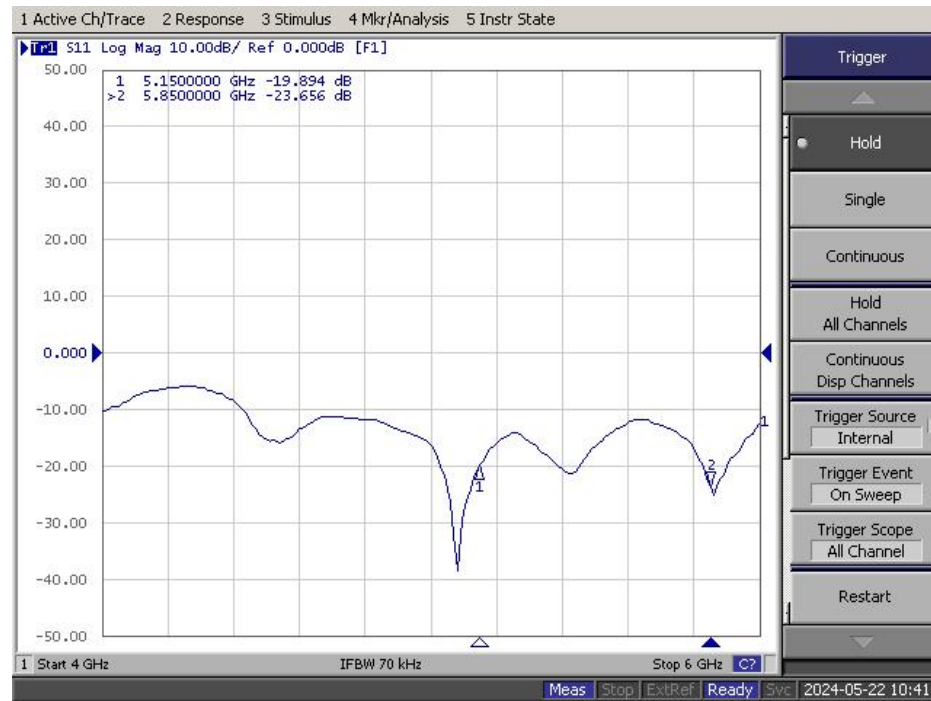
200mm length WiFi2.4G antenna S11



60mm length WiFi 5G antenna S11



85mm length WiFi 5G antenna S11



185mm length WiFi 5G antenna S11

5. Passive Data

60mm length WiFi 2.4G antenna data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dBi)	-3.51	-3.04	-3.04	-3.01	-3.03	-2.99	-2.99	-3.25	-3.29	-3.60	-3.41
Gain (dBi)	2.93	2.15	2.34	3.04	3.01	2.57	2.32	2.35	2.37	2.44	2.57
Efficiency (%)	44.56	49.68	49.70	49.99	49.78	50.27	50.23	47.34	46.91	43.67	45.56

200mm length WiFi 2.4G antenna data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dBi)	-3.98	-3.53	-3.52	-3.57	-3.37	-3.50	-3.62	-3.86	-4.04	-4.03	-4.05
Gain (dBi)	2.92	2.35	2.49	3.33	2.65	2.48	1.80	2.43	3.09	2.89	3.36
Efficiency (%)	40.04	44.36	44.45	43.98	45.99	44.63	43.44	41.07	39.45	39.55	39.32

60mm length WiFi 5G antenna data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency (dBi)	-3.35	-3.69	-3.48	-3.01	-3.90	-3.07	-3.46	-3.28	-3.74	-3.99	-3.35	-3.87	-3.52	-3.64	-3.58
Gain (dBi)	2.88	2.61	3.20	3.38	2.87	3.01	2.89	2.87	2.56	2.61	3.29	2.67	3.01	3.42	3.41
Efficiency (%)	46.21	42.77	44.89	49.99	40.71	49.32	45.06	47.00	42.30	39.87	46.21	40.99	44.49	43.25	43.86

85mm cable length WiFi 5G antenna data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency (dBi)	-3.22	-3.50	-3.61	-3.41	-3.41	-3.54	-3.46	-3.63	-3.66	-3.77	-3.67	-3.75	-3.72	-3.86	-3.73
Gain (dBi)	2.56	3.12	3.50	4.15	3.01	3.49	3.70	3.71	3.14	3.16	3.95	3.02	3.93	3.52	4.07
Efficiency (%)	47.62	44.71	43.58	45.58	45.63	44.22	45.12	43.36	43.01	42.00	43.00	42.16	42.47	41.14	42.35

185mm cable length WiFi 5G antenna data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency (dBi)	-3.59	-3.87	-3.26	-3.58	-3.84	-3.07	-3.52	-3.64	-3.76	-3.41	-3.54	-3.87	-3.47	-3.96	-3.88
Gain (dBi)	2.48	2.63	2.79	3.47	3.00	3.57	3.11	2.96	2.83	2.58	3.06	2.95	3.47	3.15	3.13
Efficiency (%)	43.75	40.97	47.19	43.83	41.28	49.34	44.41	43.25	42.09	45.55	44.24	41.04	45.01	40.22	40.96

