4.1.6 Radiated Emission

RESULT: **PASS**

Test standard	:	FCC Part 15.247(d), 15.205, 15.209, RSS-GEN 8.9
Requirement	:	ANSI C63.10-2013, Clause 11.12 KDB 558074 D01 v05r02, Clause 8.6
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/Middle/High
Operation Mode	:	A.1.a
Ambient temperature	:	22.3-25.1°C
Relative humidity	:	42-47%

Notes

Test plots please refer to the annex document "SHE24120036-02DE DATA WIFI 2.4GHz-TX EXHIBIT A".

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.

2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.

3. All test modes had been pre-tested, but only the 802.11b at low channel of below 1 GHz is the worst case and recorded in the report.

4. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

4.1.7 Band Edge (Restricted-band band-edge)

RESULT: **PASS**

Test standard	:	FCC Part 15.247(d), 15.205, 15.209, RSS-GEN 8.10
Requirement	:	ANSI C63.10-2013, Clause 11.13 KDB 558074 D01 v05r02, Clause 8.7
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/Middle/High
Operation Mode	:	A.1.a
Ambient temperature	:	25.1°C
Relative humidity	:	47%

Notes:

1. Test plots please refer to the annex document "SHE24120036-02DE DATA WIFI 2.4GHz-TX EXHIBIT A".

2. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT: **PASS**

Test standard	:	FCC Part 15.207(a), RSS-Gen 8.8
Requirement	:	ANSI C63.10-2013, Clause 6.2
Kind of test site	:	Shielded room

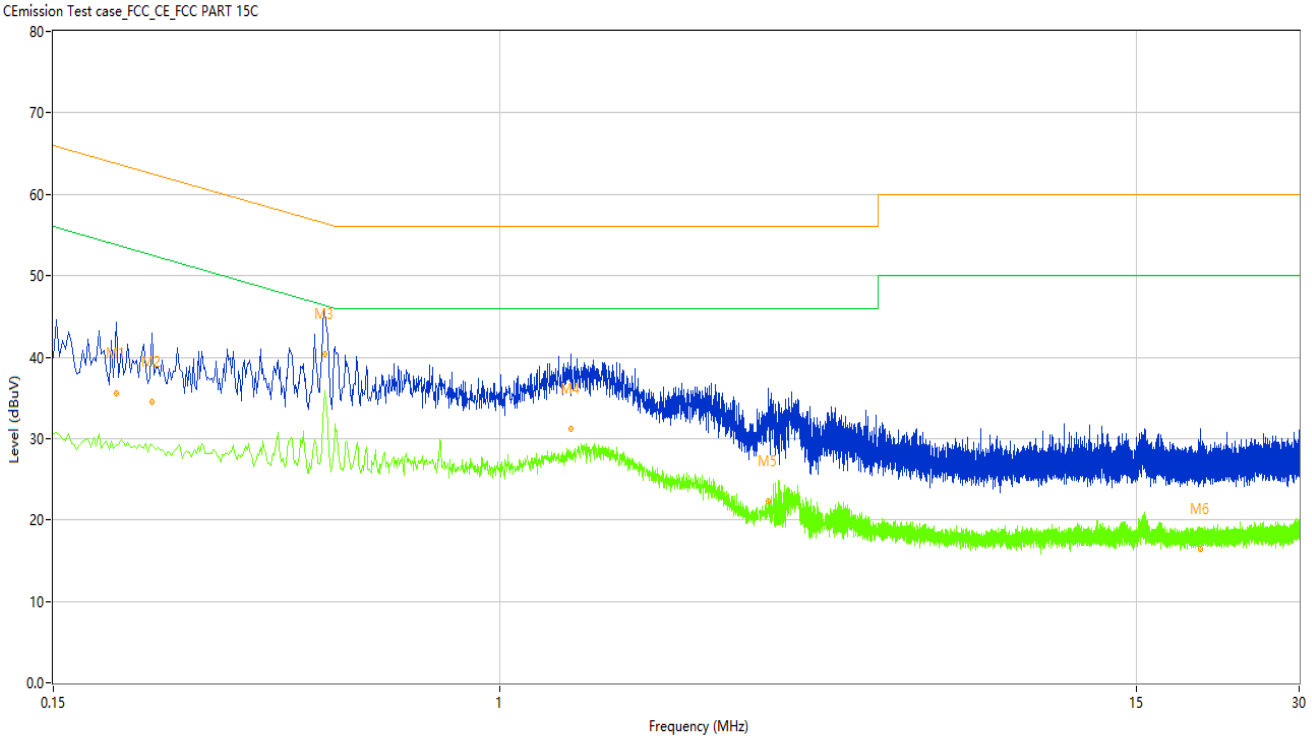
Test setup

Input Voltage	:	which received AC 120V, 60Hz Power
Operation Mode	:	A.1.a
Earthing	:	Disconnected to GND
Ambient temperature	:	23.7°C
Relative humidity	:	52%

For details refer to following test plot.

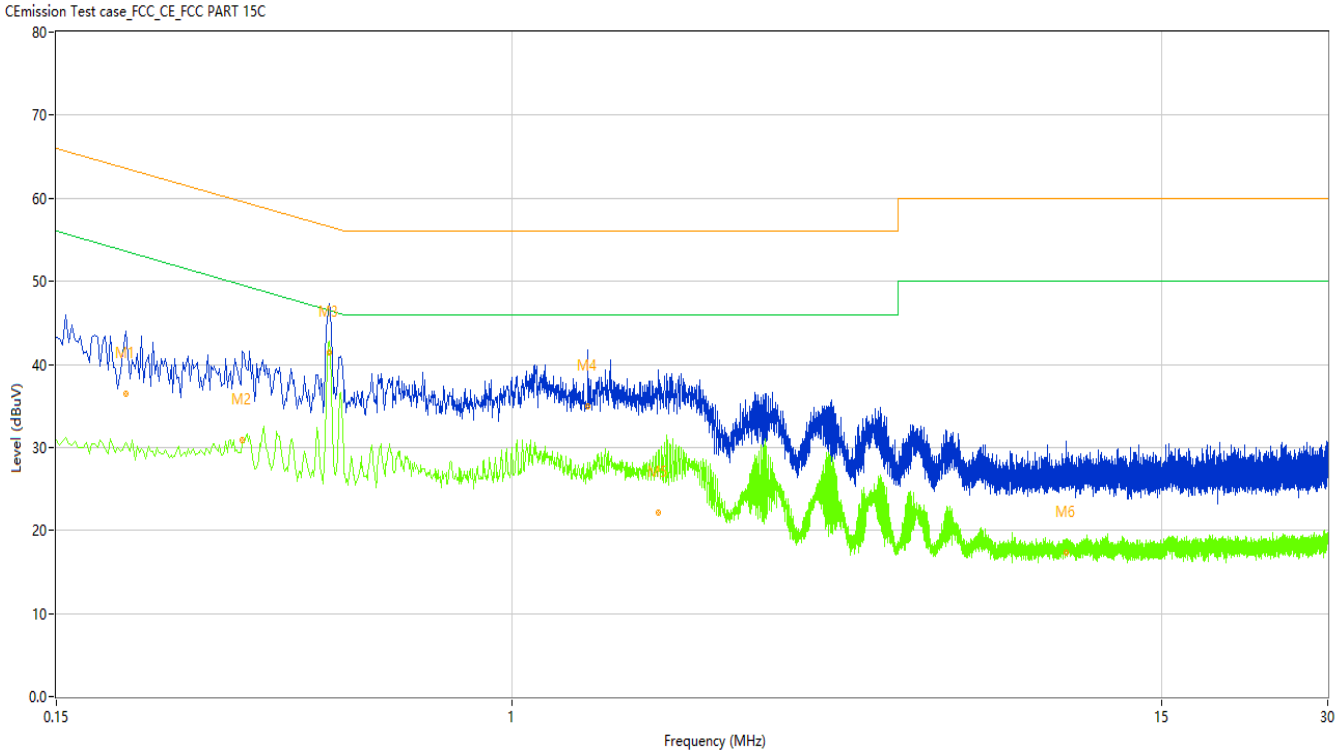
Note：All test modes had been pre-tested, but only the 802.11b at low channel is the worst case and recorded in the report.

Figure 37: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.196	42.69	10.21	63.78	21.09	Peak	L	Pass
1*	0.196	35.61	10.21	63.78	28.17	QP	L	Pass
1**	0.196	29.20	10.21	53.78	24.58	AV	L	Pass
2	0.228	41.77	10.16	62.52	20.75	Peak	L	Pass
2*	0.228	34.45	10.16	62.52	28.07	QP	L	Pass
2**	0.228	29.18	10.16	52.52	23.34	AV	L	Pass
3	0.476	45.29	10.10	56.41	11.12	Peak	L	Pass
3*	0.476	40.40	10.10	56.41	16.01	QP	L	Pass
3**	0.476	35.87	10.10	46.41	10.54	AV	L	Pass
4	1.354	36.59	9.93	56.00	19.41	Peak	L	Pass
4*	1.354	31.25	9.93	56.00	24.75	QP	L	Pass
4**	1.354	28.43	9.93	46.00	17.57	AV	L	Pass
5	3.136	27.36	10.11	56.00	28.64	Peak	L	Pass
5*	3.136	22.30	10.11	56.00	33.70	QP	L	Pass
5**	3.136	22.42	10.11	46.00	23.58	AV	L	Pass
6	19.744	24.53	11.01	60.00	35.47	Peak	L	Pass
6*	19.744	16.47	11.01	60.00	43.53	QP	L	Pass
6**	19.744	18.61	11.01	50.00	31.39	AV	L	Pass

Figure 38: Conducted Emission on AC Mains, N Phase

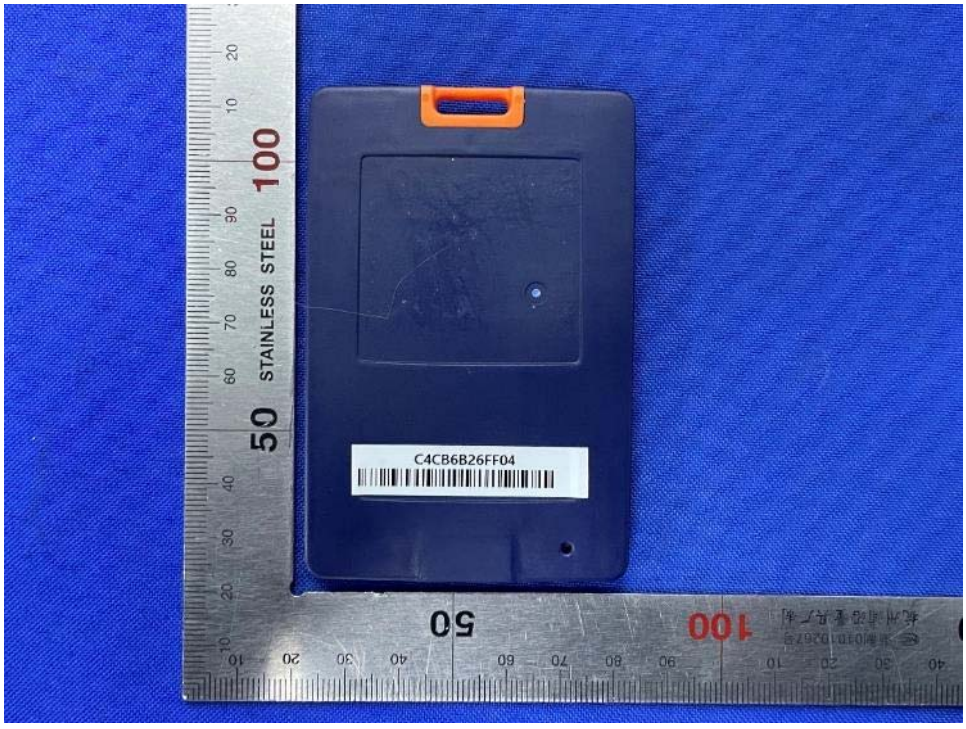


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.200	42.58	10.21	63.61	21.03	Peak	N	Pass
1*	0.200	36.50	10.21	63.61	27.11	QP	N	Pass
1**	0.200	30.55	10.21	53.61	23.06	AV	N	Pass
2	0.326	38.70	10.09	59.55	20.85	Peak	N	Pass
2*	0.326	30.82	10.09	59.55	28.73	QP	N	Pass
2**	0.326	30.42	10.09	49.55	19.13	AV	N	Pass
3	0.468	44.83	10.13	56.55	11.72	Peak	N	Pass
3*	0.468	41.47	10.13	56.55	15.08	QP	N	Pass
3**	0.468	42.85	10.13	46.55	3.70	AV	N	Pass
4	1.376	38.88	9.96	56.00	17.12	Peak	N	Pass
4*	1.376	34.94	9.96	56.00	21.06	QP	N	Pass
4**	1.376	28.14	9.96	46.00	17.86	AV	N	Pass
5	1.844	31.39	10.03	56.00	24.61	Peak	N	Pass
5*	1.844	22.15	10.03	56.00	33.85	QP	N	Pass
5**	1.844	29.61	10.03	46.00	16.39	AV	N	Pass
6	10.096	23.67	10.48	60.00	36.33	Peak	N	Pass
6*	10.096	17.31	10.48	60.00	42.69	QP	N	Pass
6**	10.096	18.76	10.48	50.00	31.24	AV	N	Pass

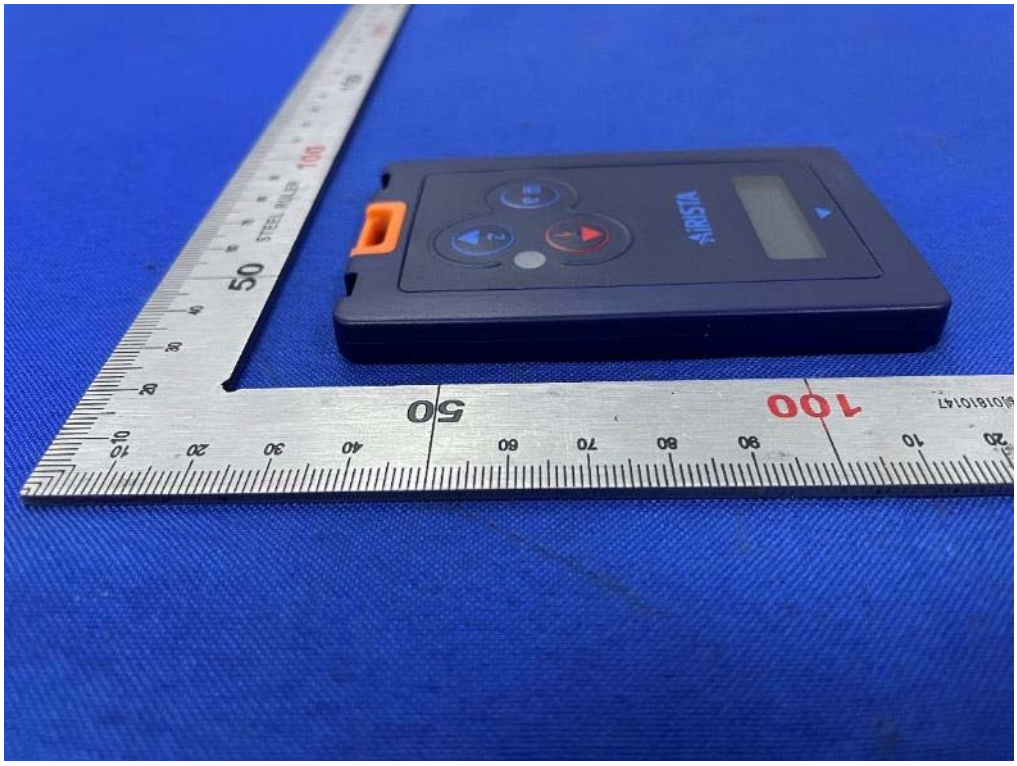
5 Appendixes

5.1 Photographs of the Sample

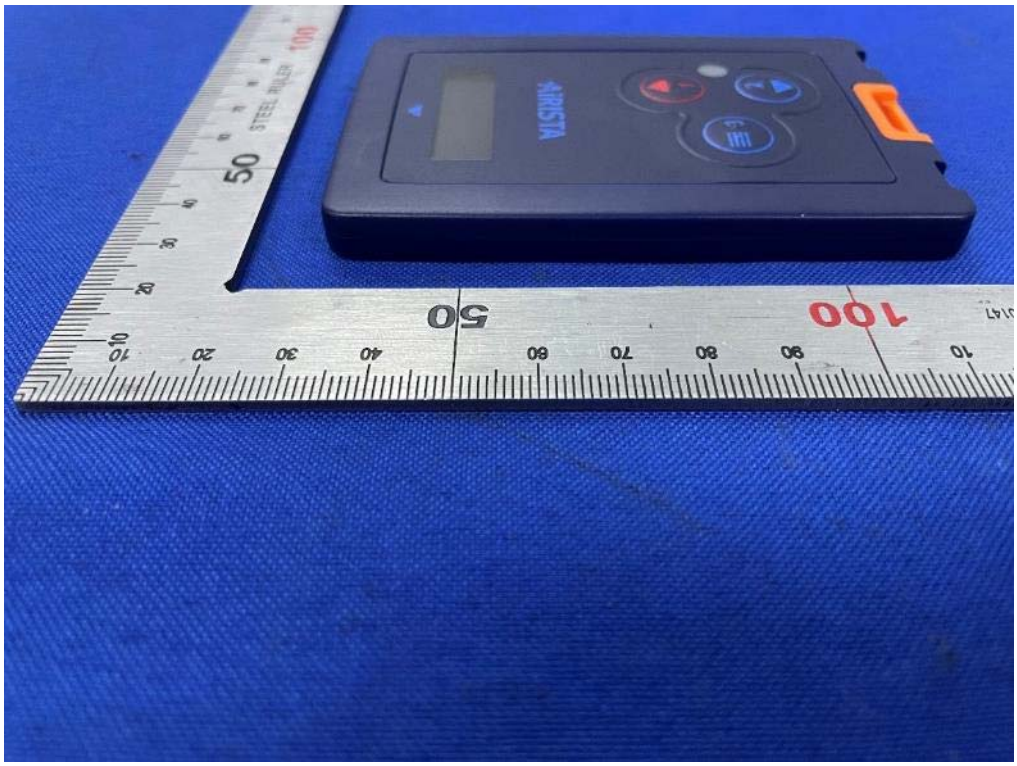
Front of the sample



Rear of the sample

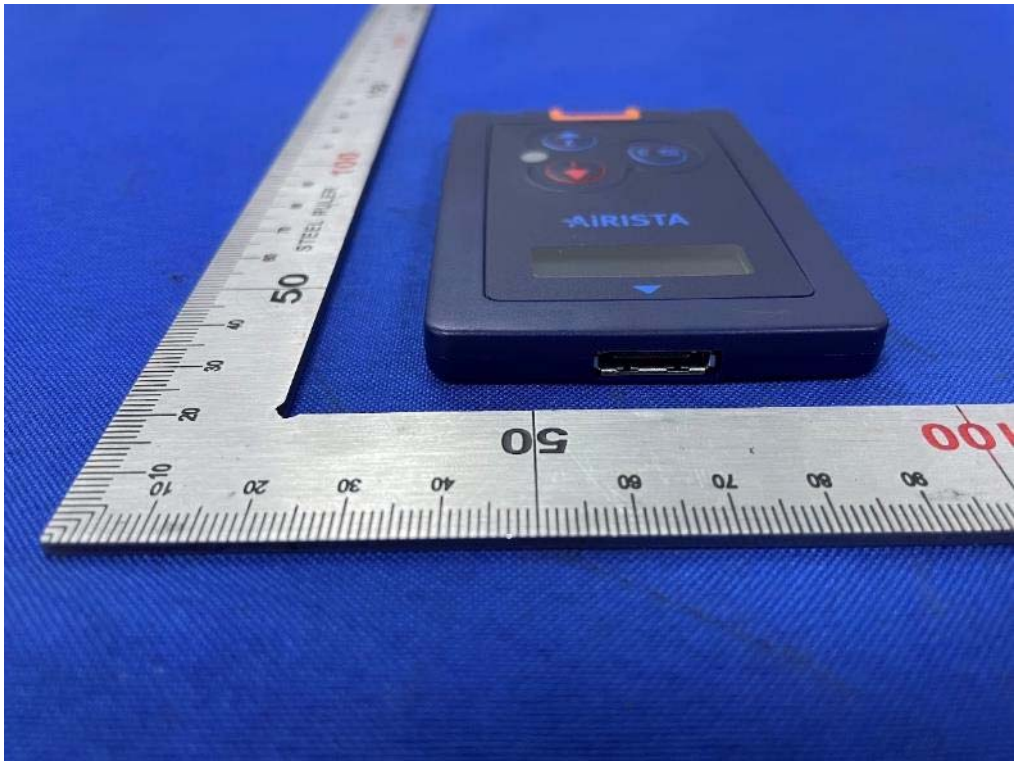


Left of the sample



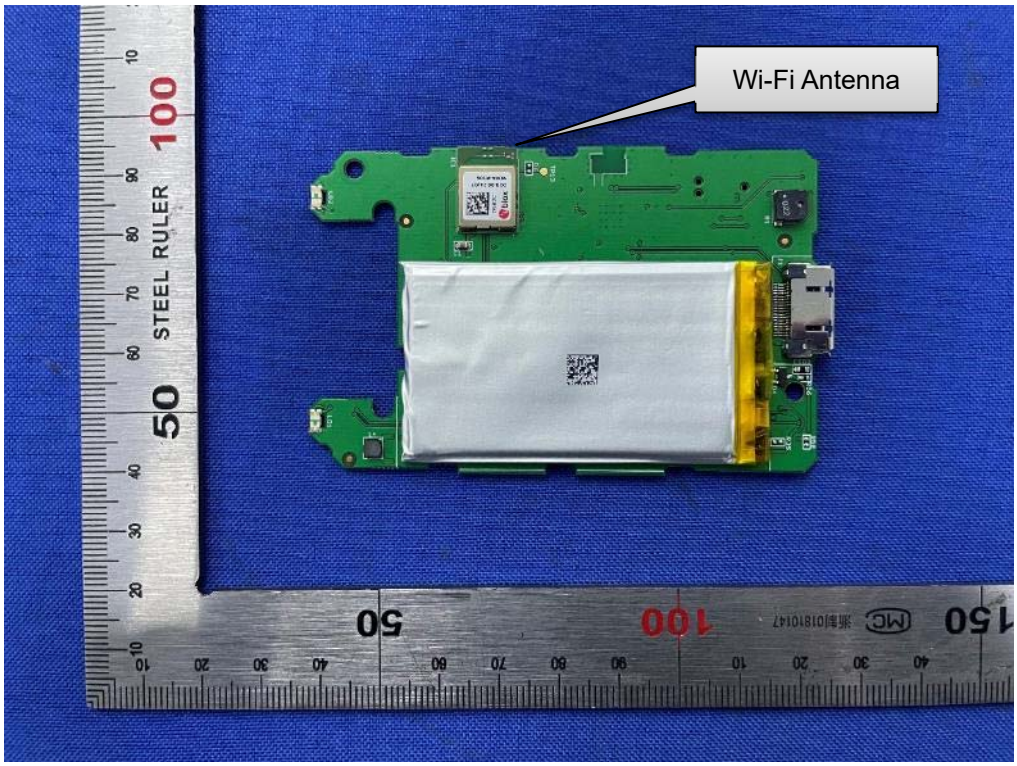
Right of the sample

Top of the sample

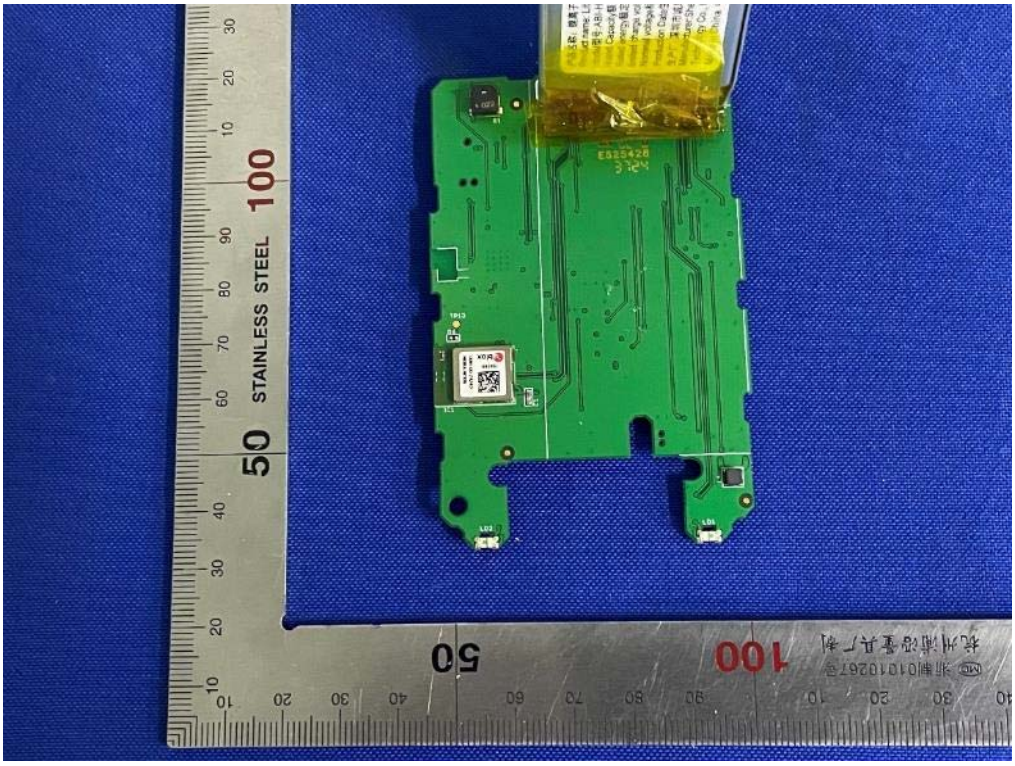


Bottom of the sample

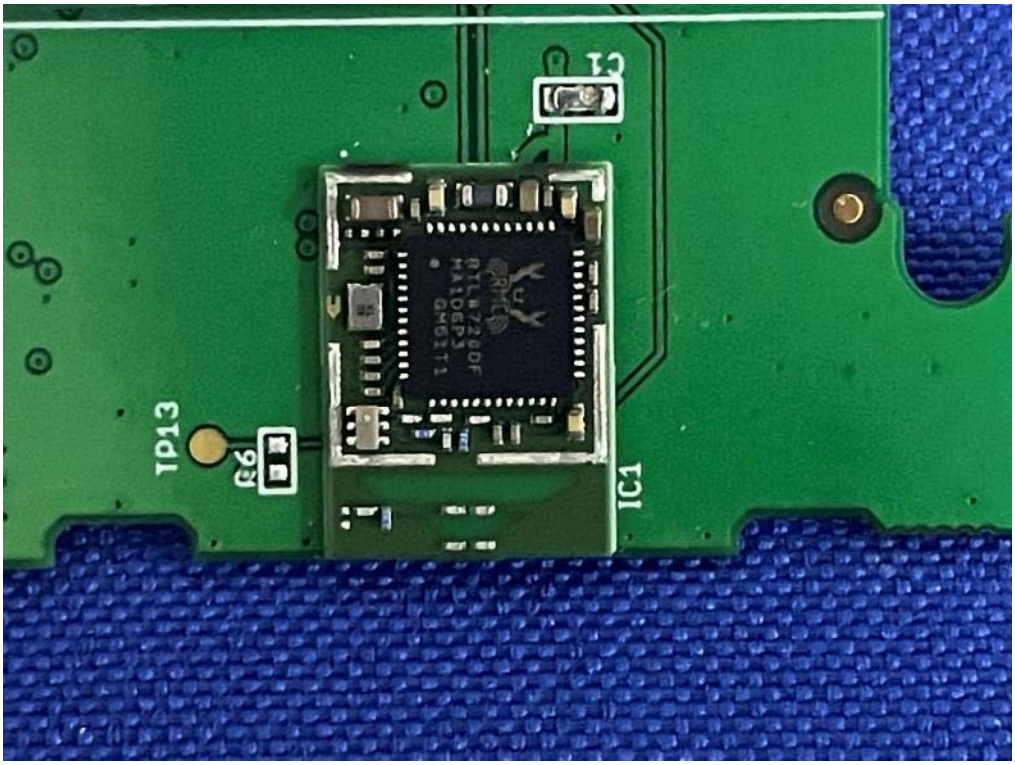
Open of the sample



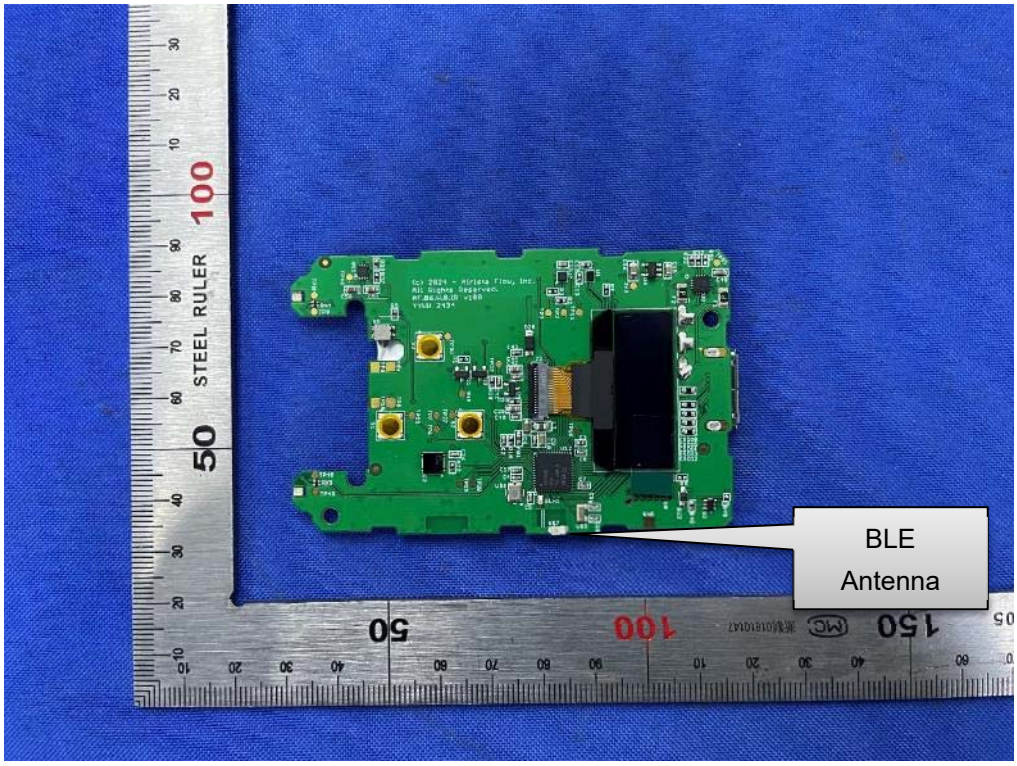
Internal-1 of the sample



Internal-2 of the sample



NORA-W306 Module



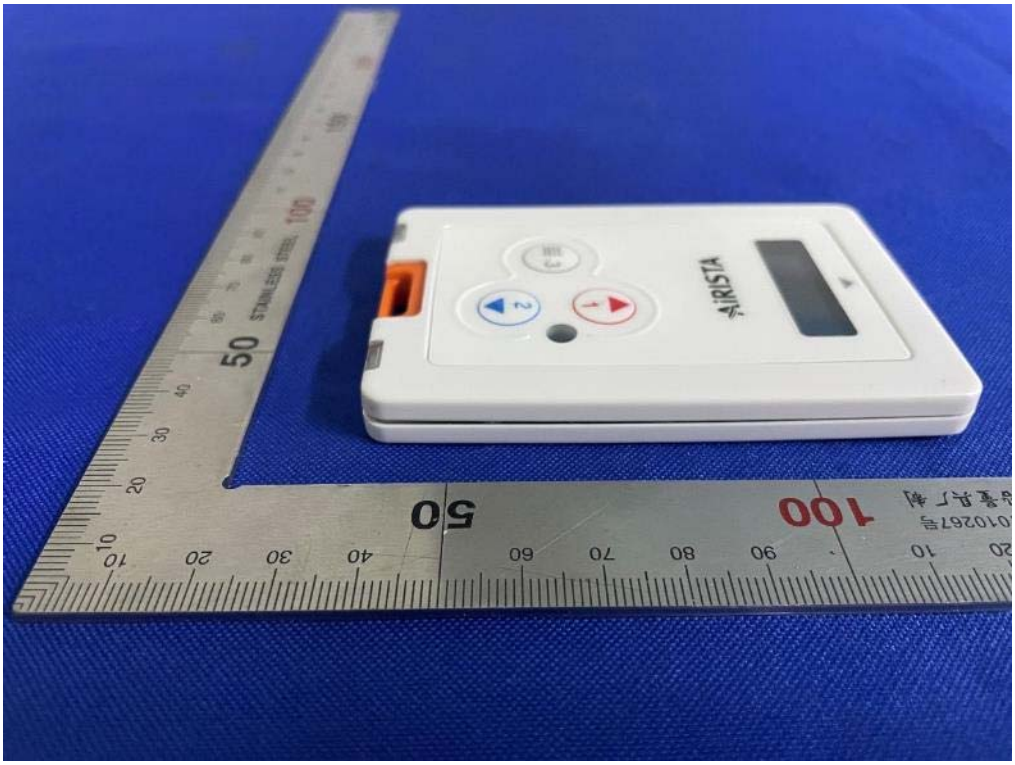
Internal-3 of the sample

Add a B6 model with a white shell

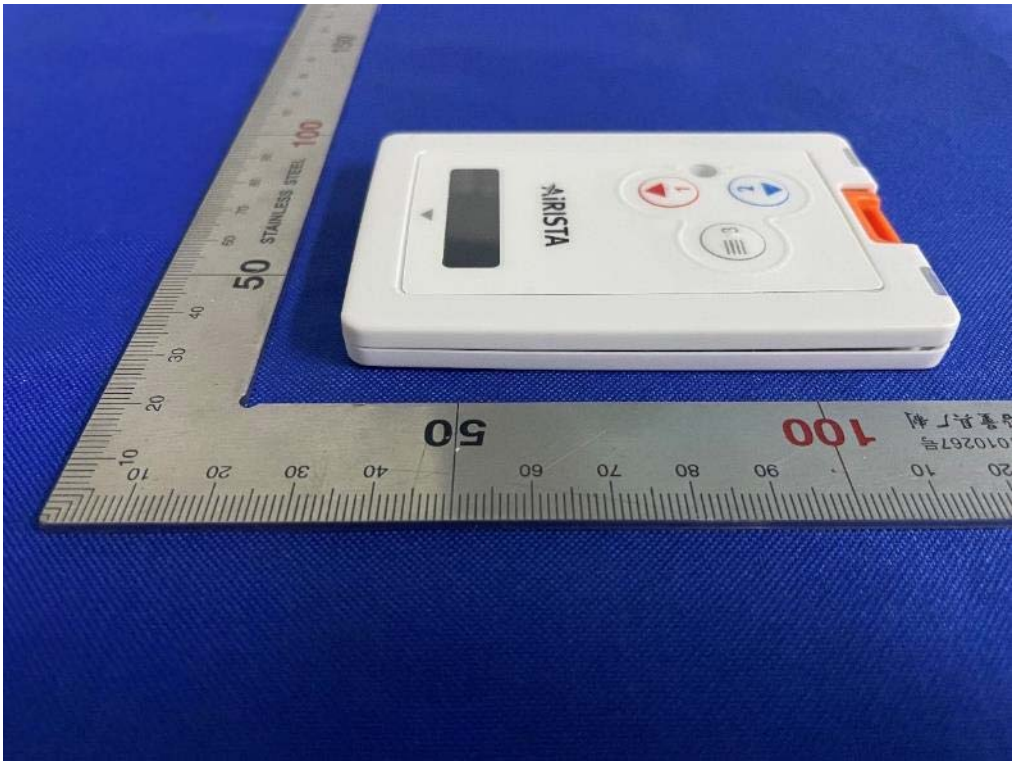
(Note: The difference is that only the shell color is different, everything else is the same)

Front of the sample

Rear of the sample



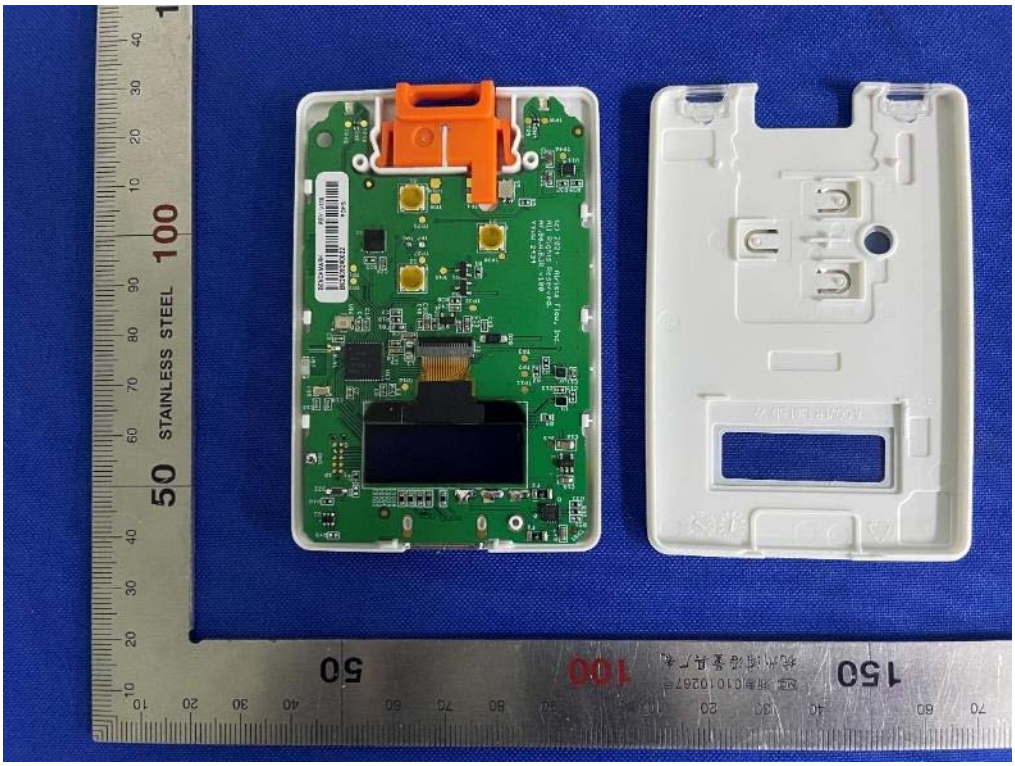
Left of the sample



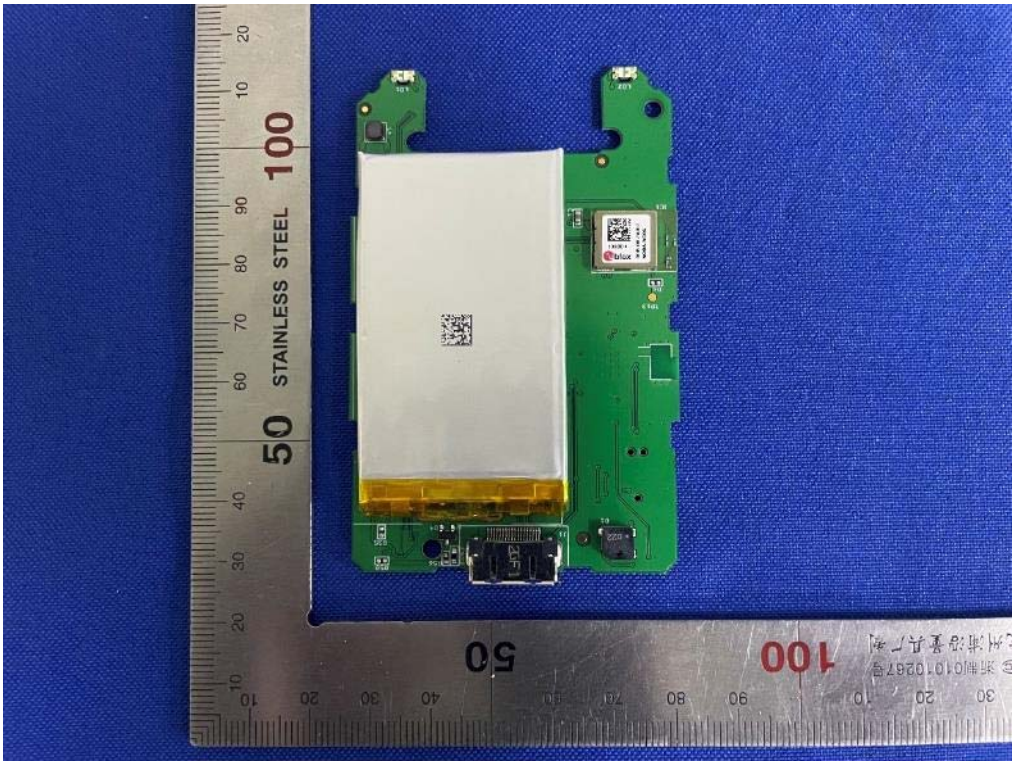
Right of the sample

Top of the sample

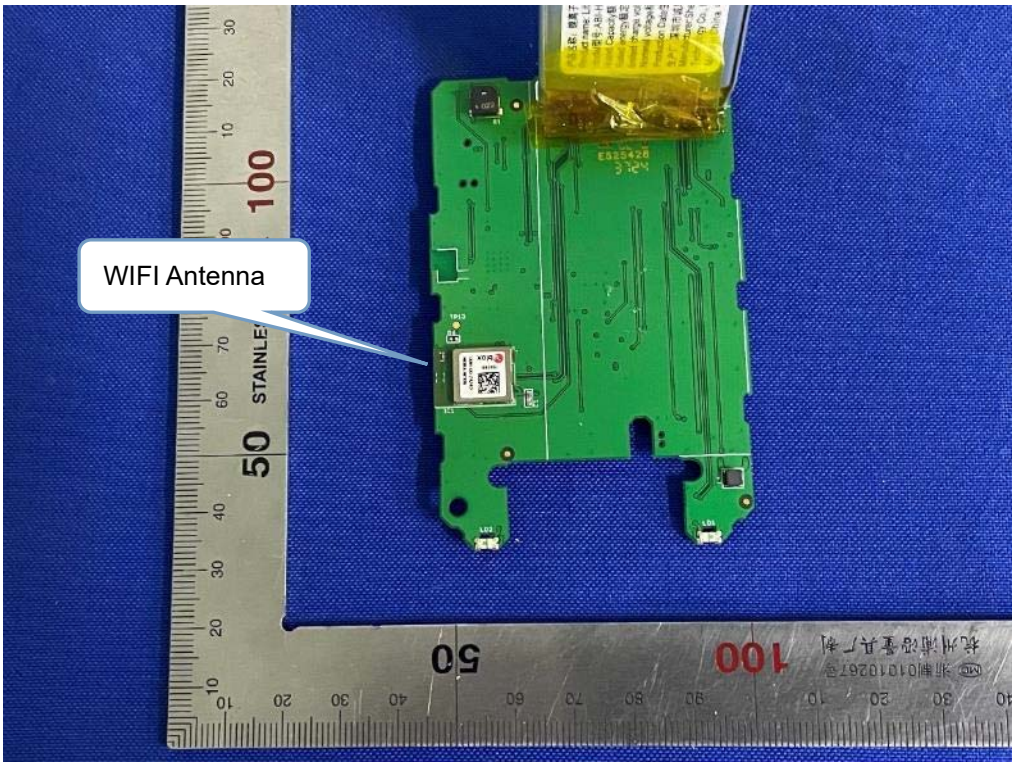
Bottom of the sample



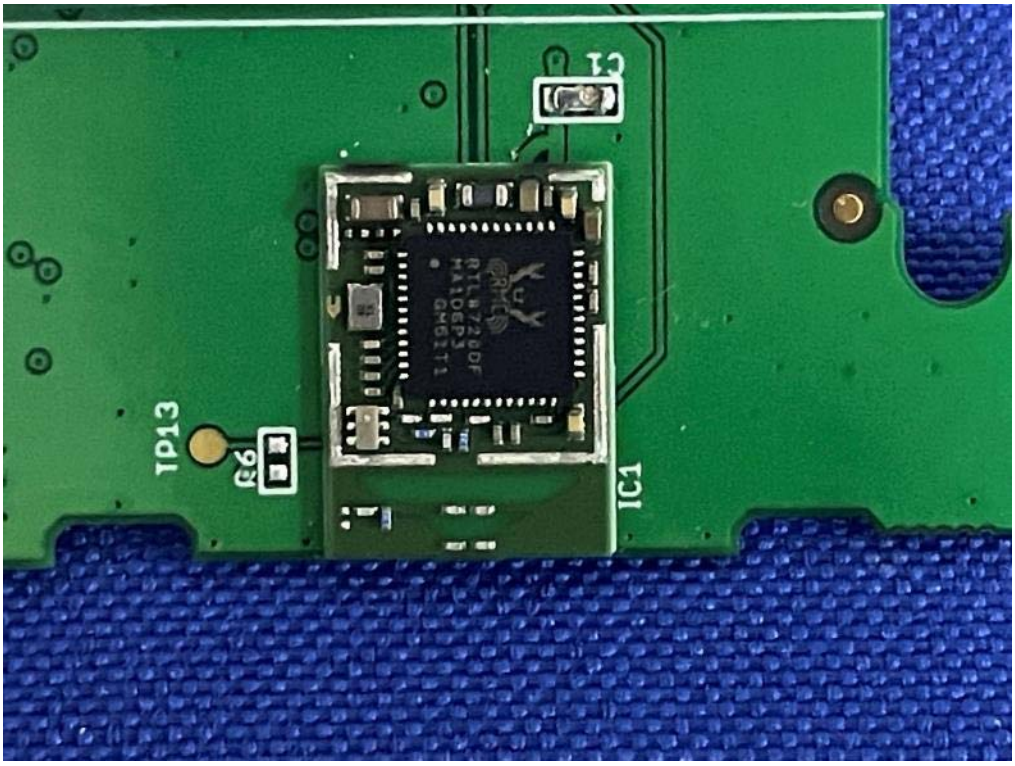
Open of the sample



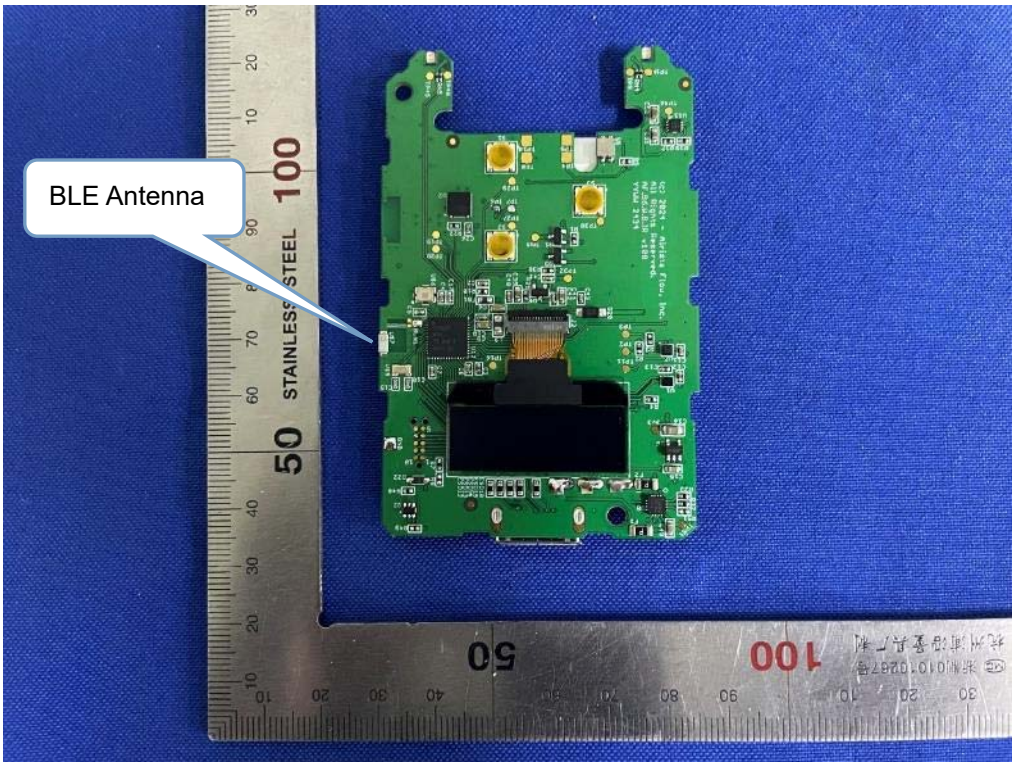
Internal-1 of the sample



Internal-2 of the sample



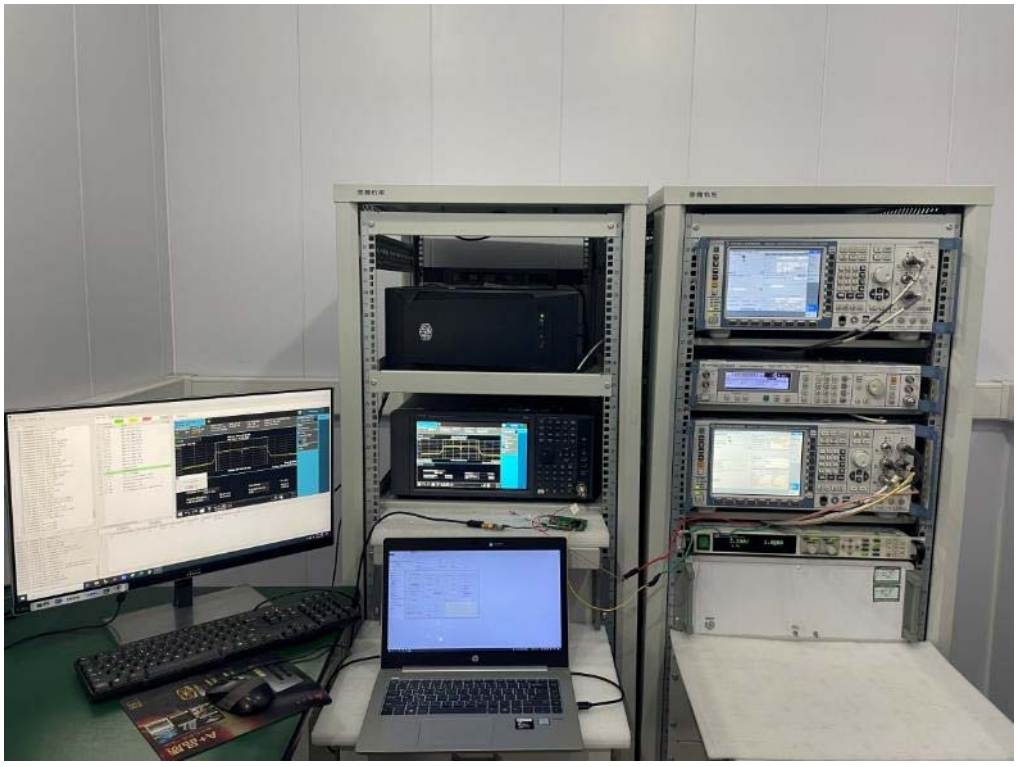
NORA-W306 Module



Internal-3 of the sample

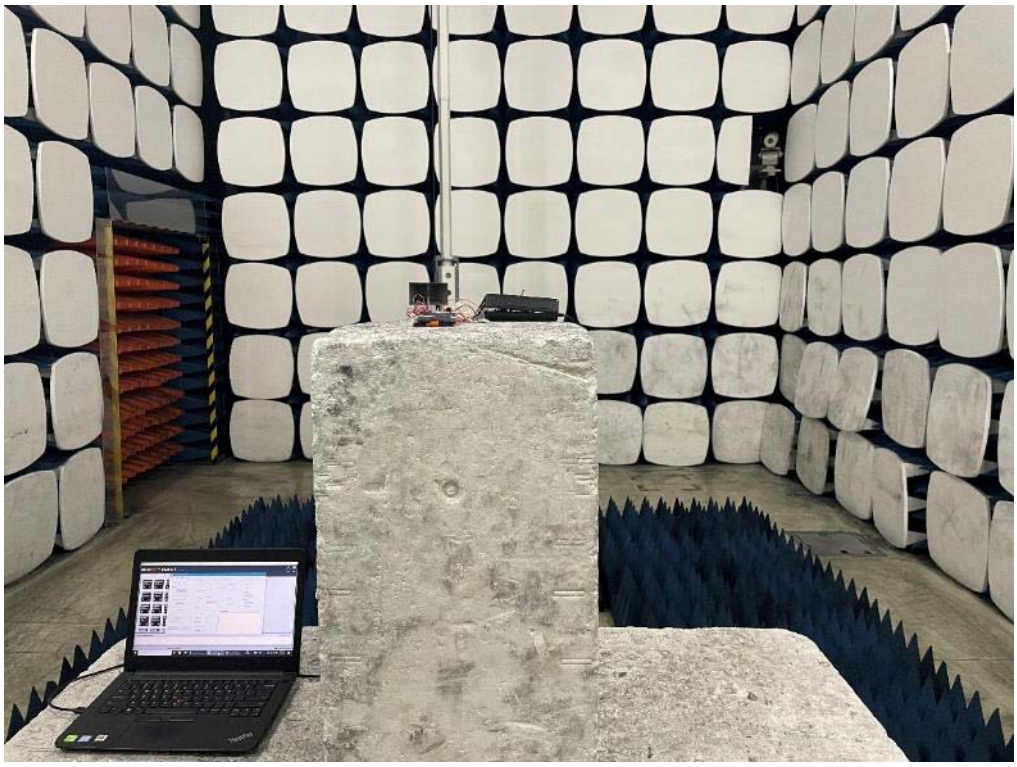
5.2 Set-up for Conducted Emissions

5.3 Set-up for Conducted RF test at Antenna Port



5.4 Set-up for Spurious Emissions below 1GHz

5.5 Set-up for Spurious Emissions above 1GHz



End of the report