

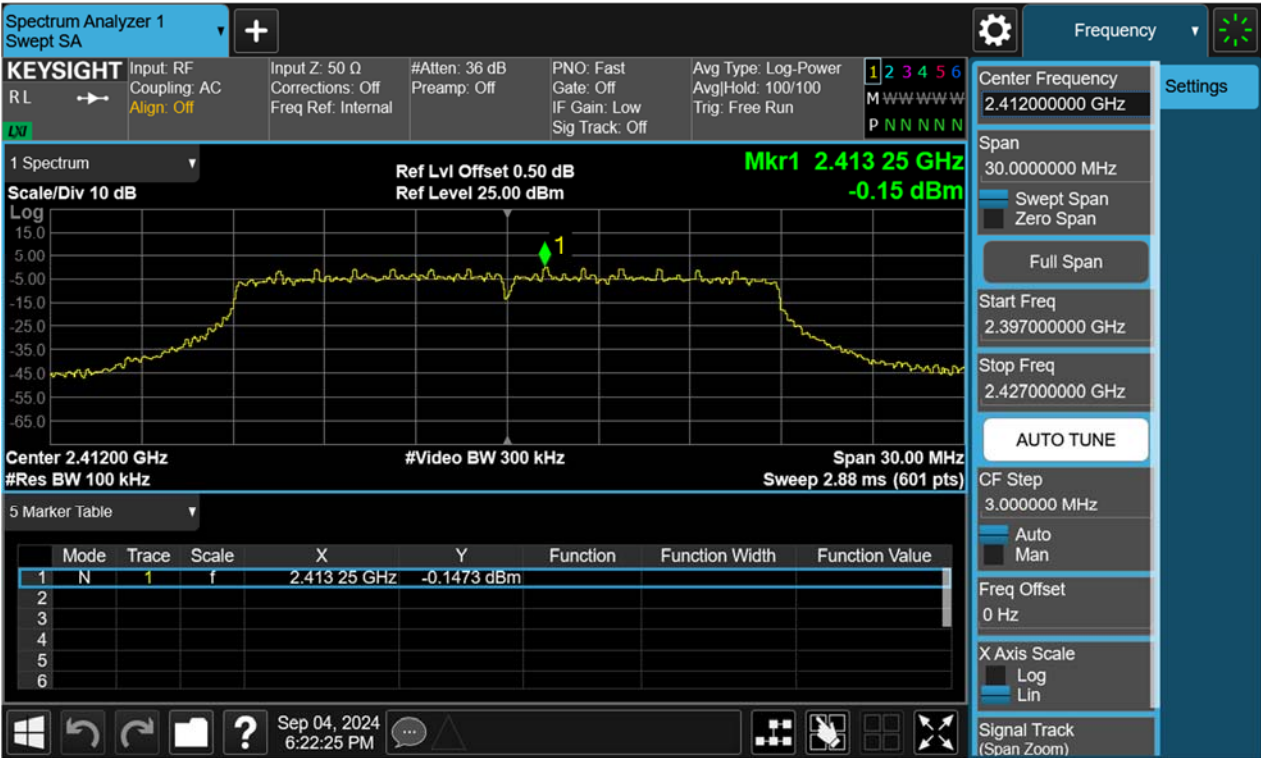
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Figure 25: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2412MHz Carrier Level



Band Edge



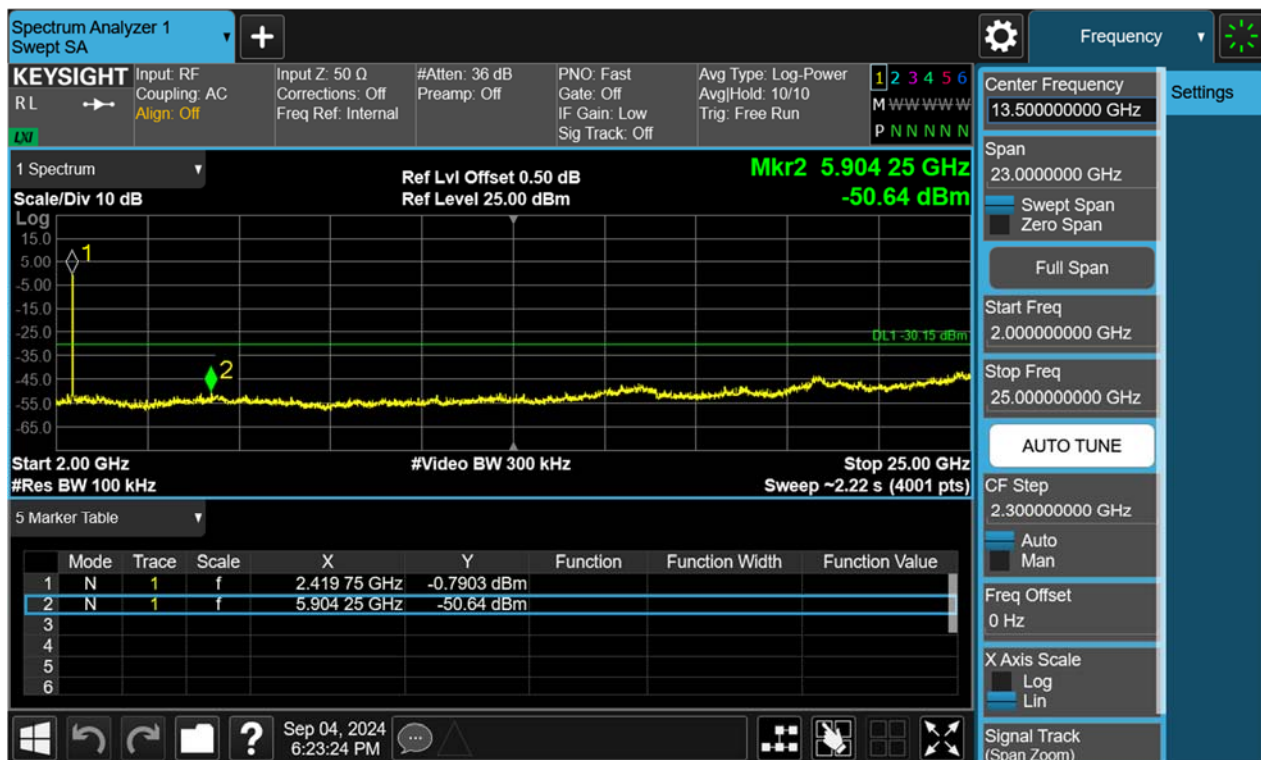
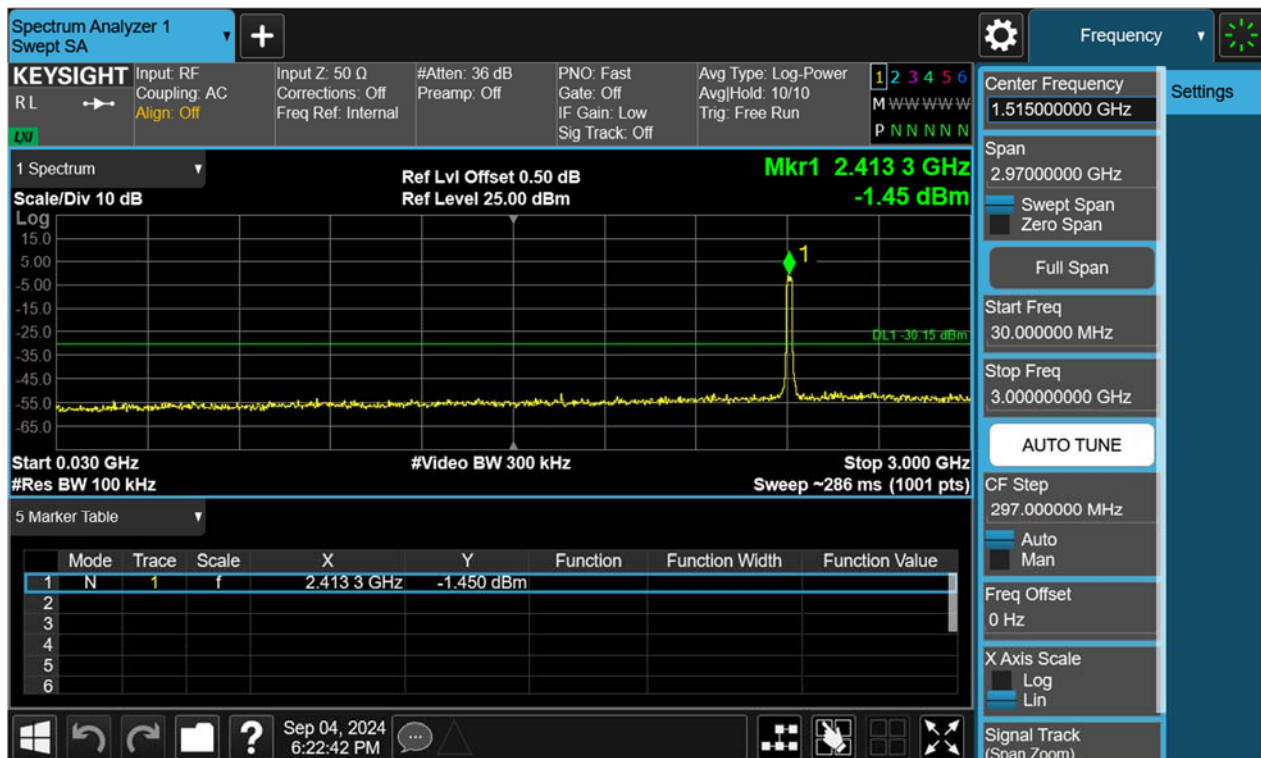
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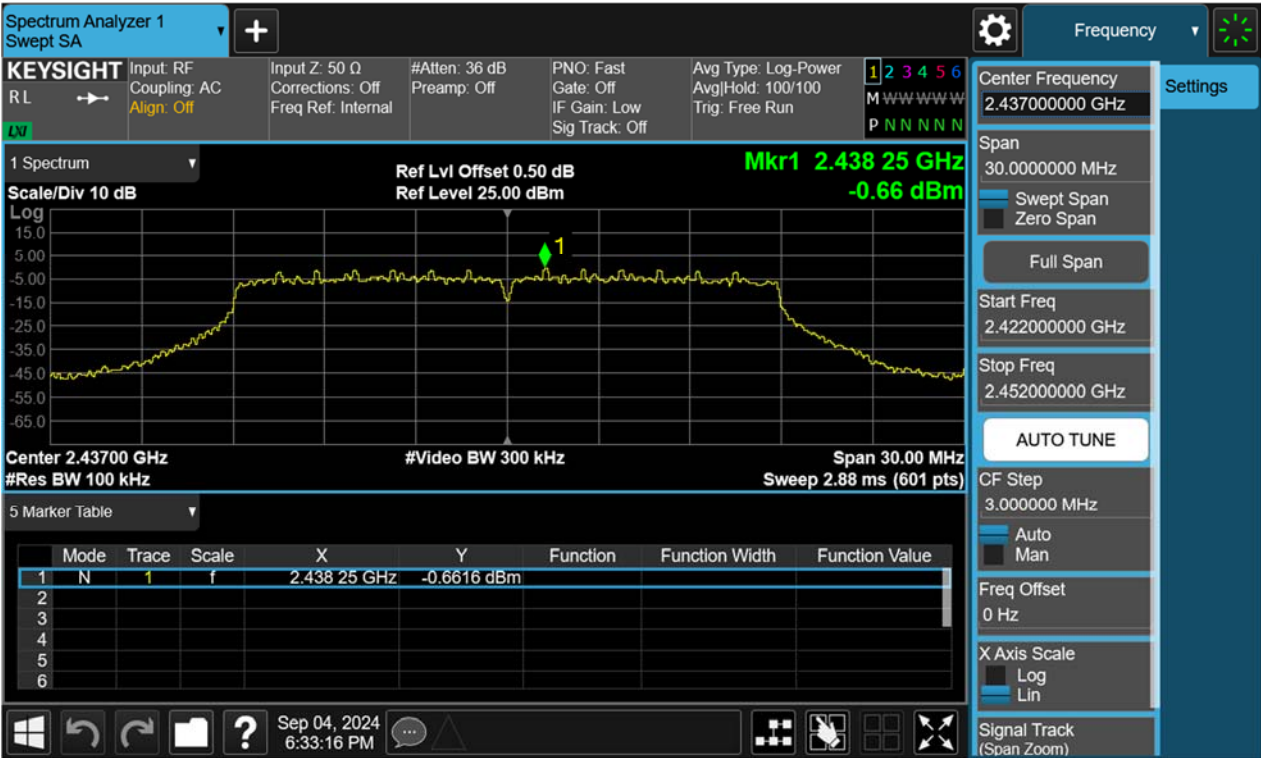
Conducted spurious emissions 30MHz-25GHz



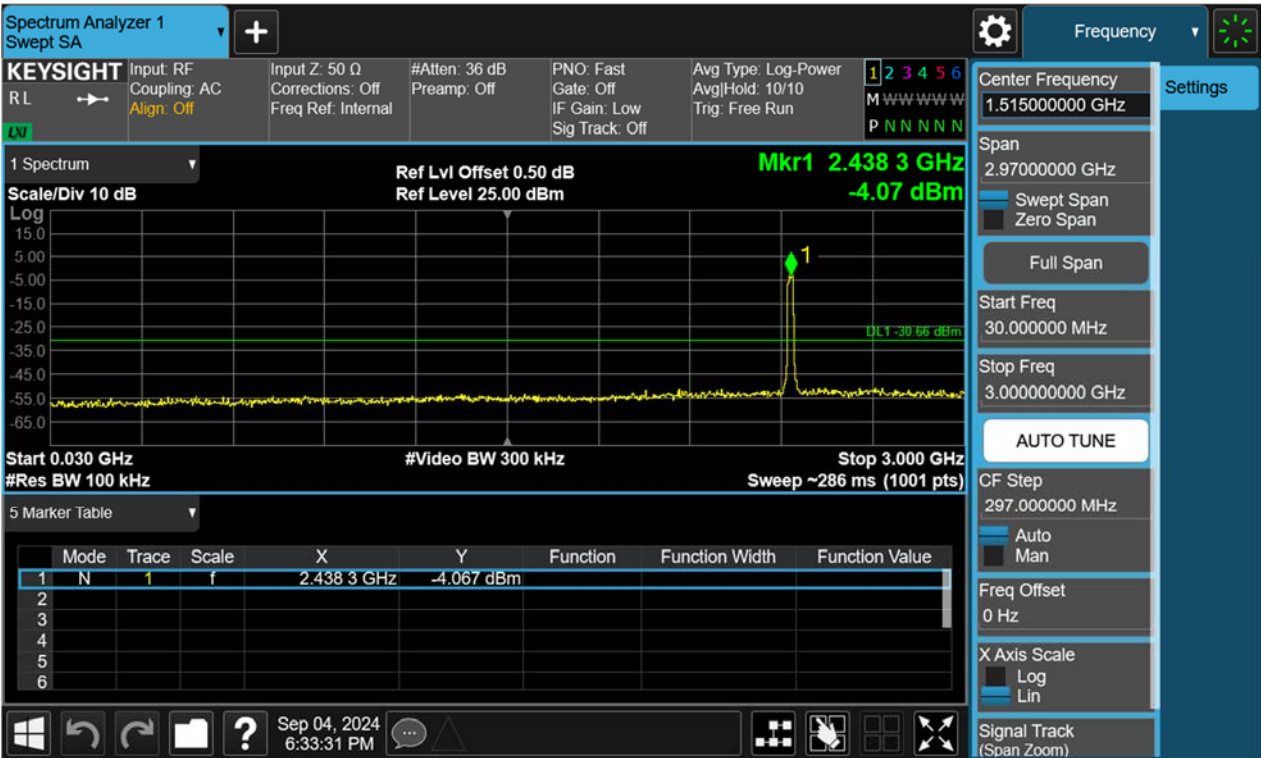
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Figure 26: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2437MHz Carrier Level



Conducted spurious emissions 30MHz-25GHz



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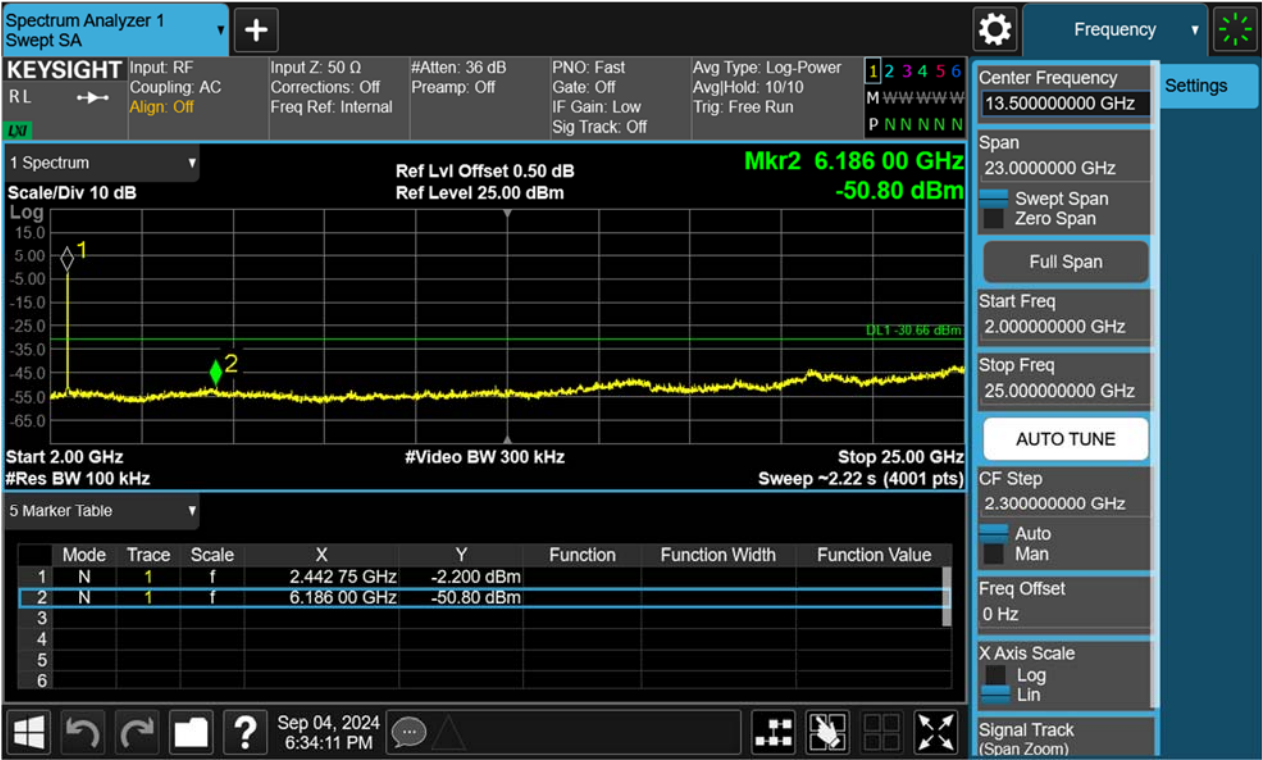
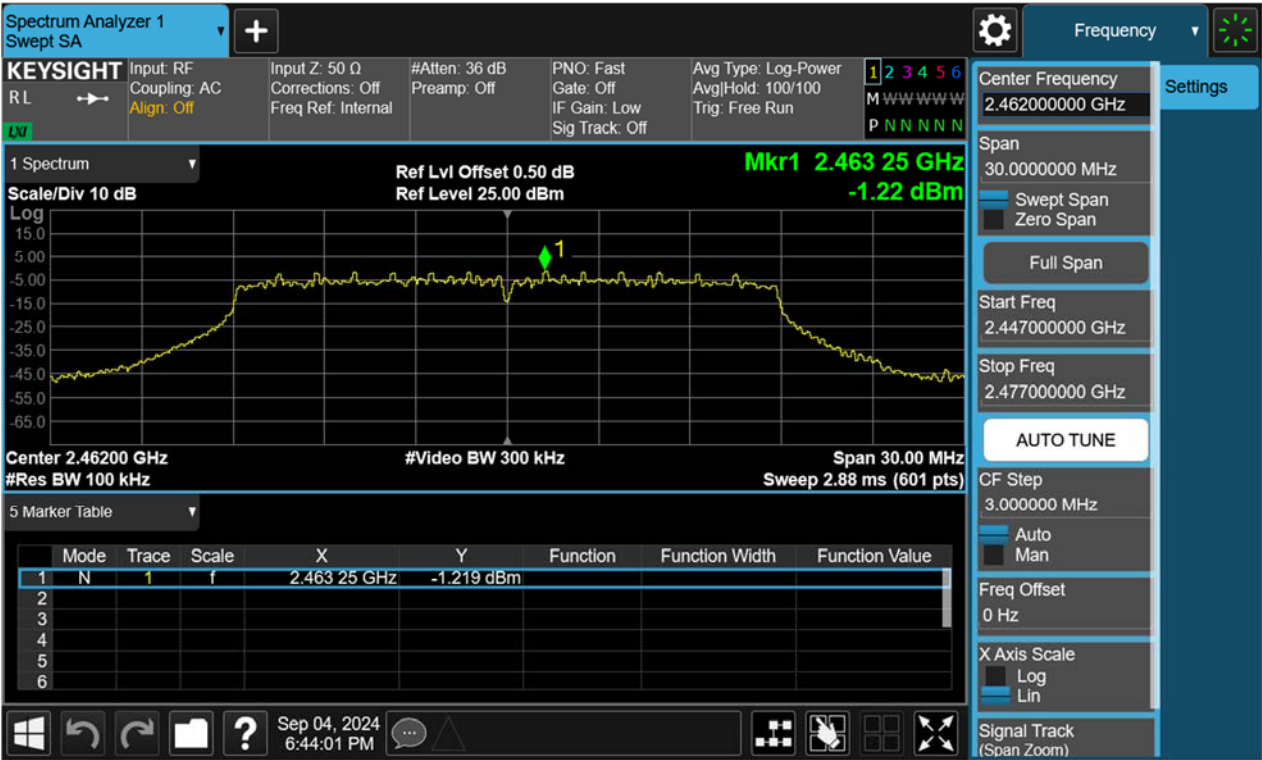


Figure 27: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2462MHz Carrier Level



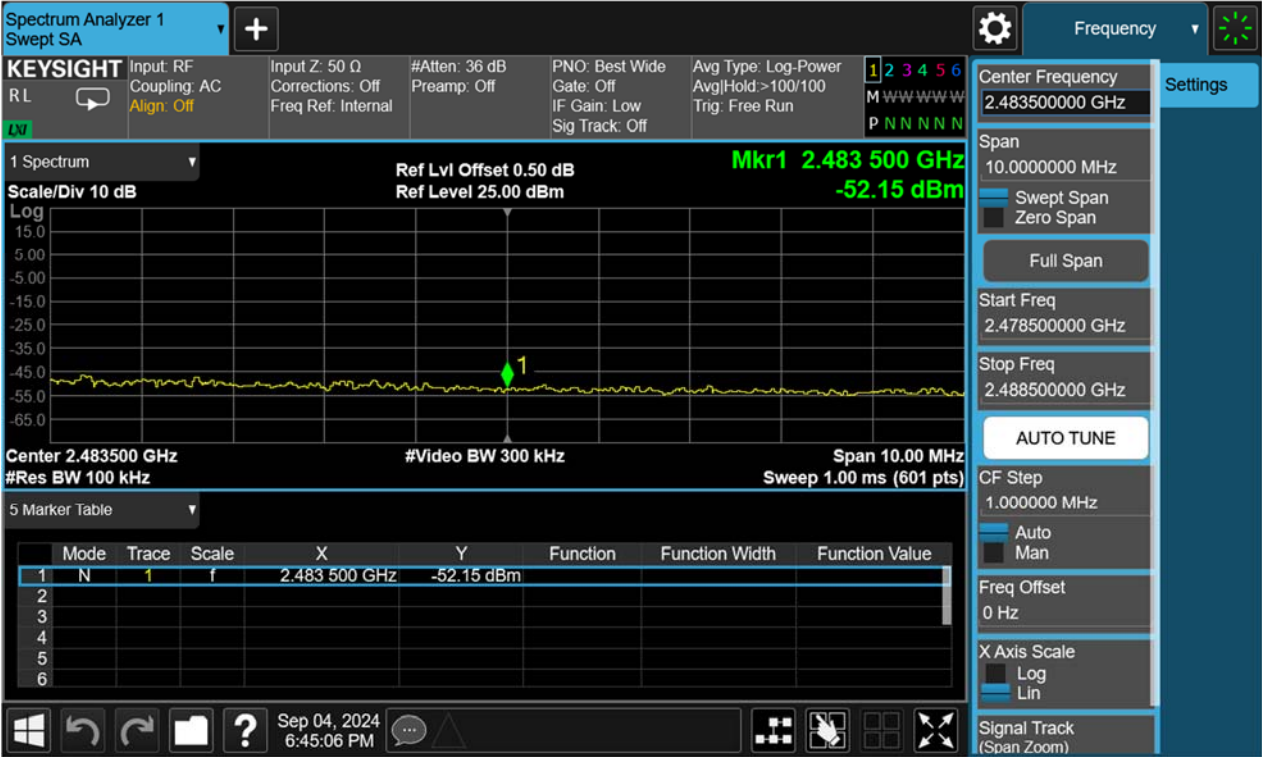
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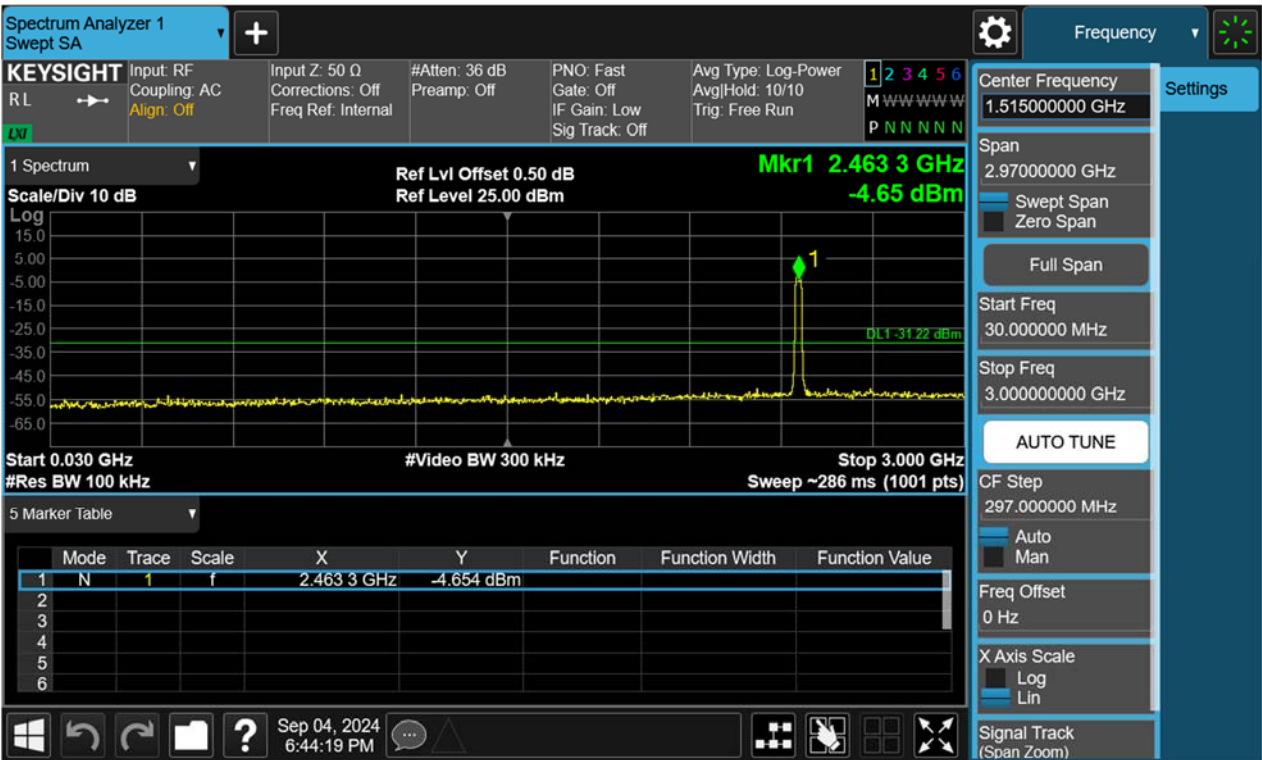
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Band Edge



Conducted spurious emissions 30MHz-25GHz

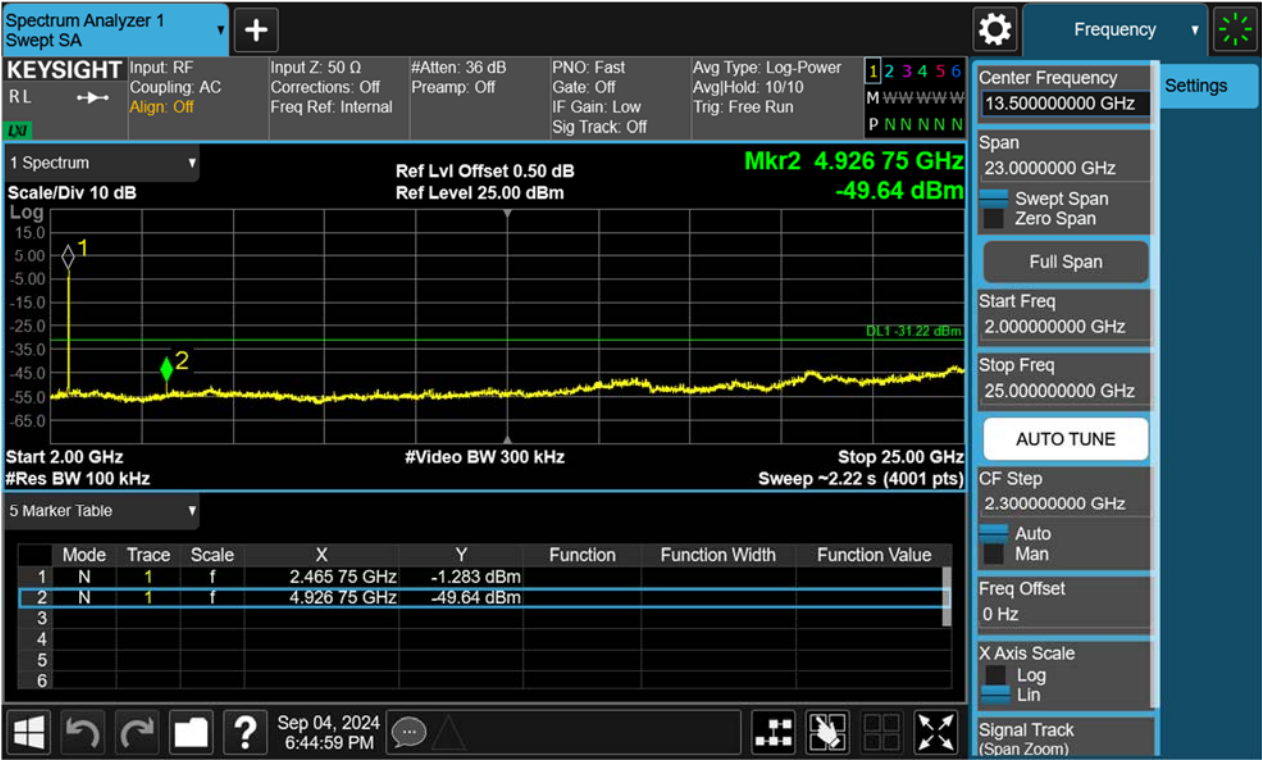


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4.1.6 Radiated Emission

RESULT: PASS

Test standard : FCC Part 15.247(d), 15.205, 15.209
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 : 24.5°C
Relative humidity : 49%

Notes

Test plots please refer to the annex document “SHE24080036-02CE 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.

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4.1.7 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209
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	: 23.6°C
Relative humidity	: 44%

Notes:

1. Test plots please refer to the annex document “SHE24080036-02CE 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.

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4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

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

Test setup

Input Voltage	: DC 12V supply by AC adapter (which received AC 120V, 60Hz)
Operation Mode	: A.1.a
Earthing	: Disconnected to GND
Ambient temperature	: 22.9°C
Relative humidity	: 53%

For details refer to following test plot.

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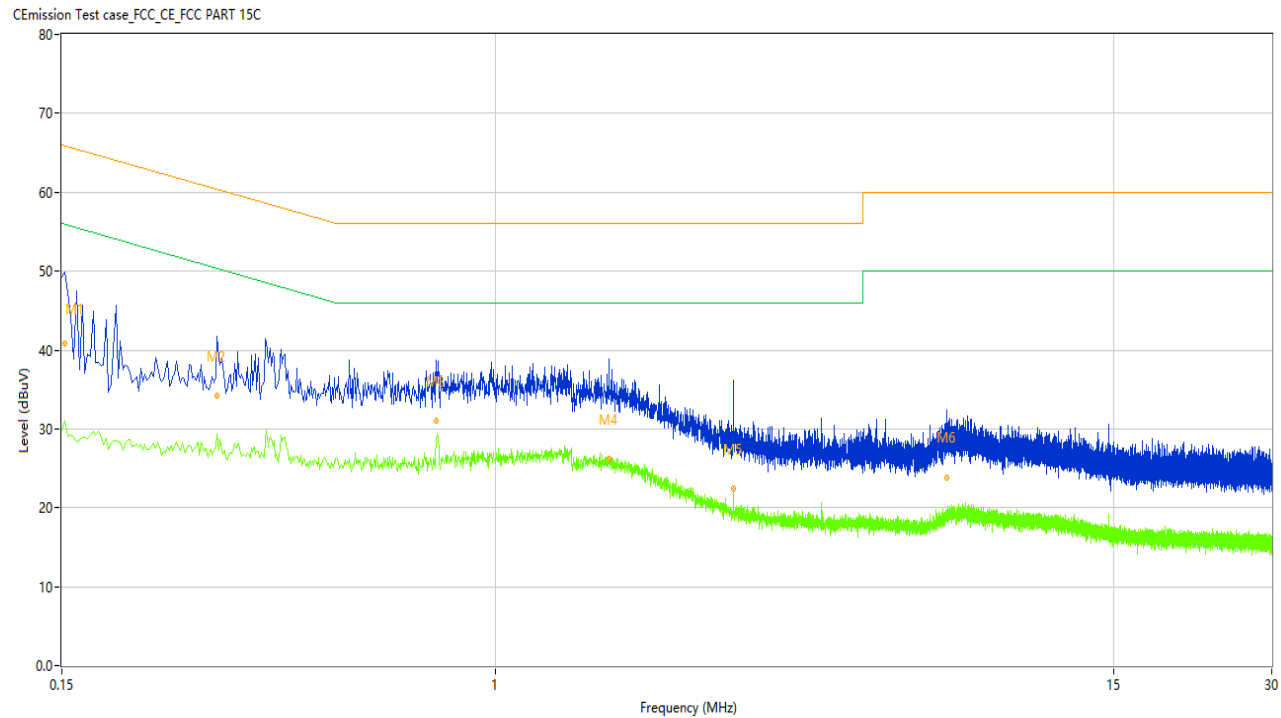
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Note: All test modes had been pre-tested, but only the 802.11b at low channel is the worst case and recorded in the report.

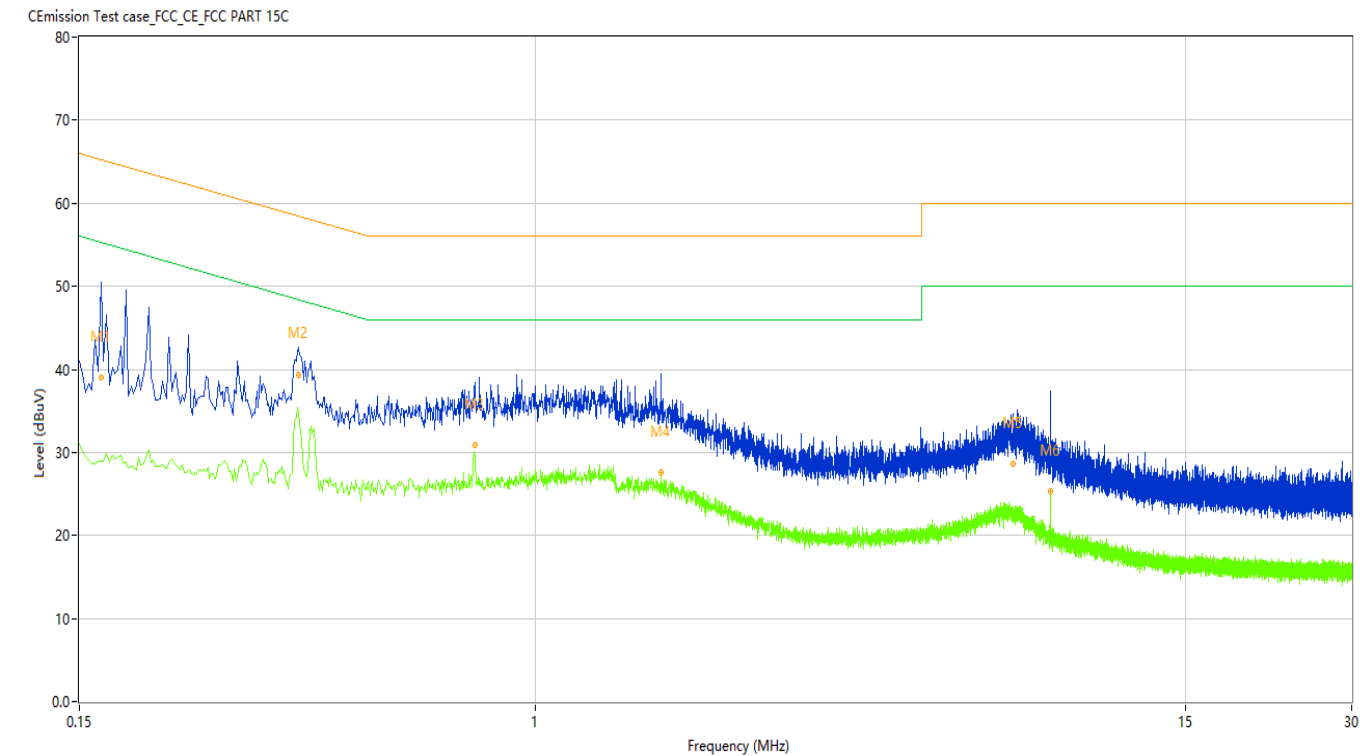
Figure 28: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	54.20	9.85	65.89	11.69	Peak	L	Pass
1*	0.152	40.85	9.85	65.89	25.04	QP	L	Pass
1**	0.152	31.00	9.85	55.89	24.89	AV	L	Pass
2	0.296	42.46	9.93	60.35	17.89	Peak	L	Pass
2*	0.296	34.26	9.93	60.35	26.09	QP	L	Pass
2**	0.296	29.38	9.93	50.35	20.97	AV	L	Pass
3	0.772	40.87	9.92	56.00	15.13	Peak	L	Pass
3*	0.772	31.09	9.92	56.00	24.91	QP	L	Pass
3**	0.772	27.81	9.92	46.00	18.19	AV	L	Pass
4	1.648	40.65	9.76	56.00	15.35	Peak	L	Pass
4*	1.648	26.20	9.76	56.00	29.80	QP	L	Pass
4**	1.648	26.25	9.76	46.00	19.75	AV	L	Pass
5	2.838	36.74	9.81	56.00	19.26	Peak	L	Pass
5*	2.838	22.37	9.81	56.00	33.63	QP	L	Pass
5**	2.838	22.22	9.81	46.00	23.78	AV	L	Pass
6	7.242	31.05	9.71	60.00	28.95	Peak	L	Pass
6*	7.242	23.83	9.71	60.00	36.17	QP	L	Pass
6**	7.242	18.26	9.71	50.00	31.74	AV	L	Pass

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Figure 29: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.164	53.36	9.97	65.26	11.90	Peak	N	Pass
1*	0.164	38.96	9.97	65.26	26.30	QP	N	Pass
1**	0.164	28.96	9.97	55.26	26.30	AV	N	Pass
2	0.374	42.89	9.99	58.41	15.52	Peak	N	Pass
2*	0.374	39.39	9.99	58.41	19.02	QP	N	Pass
2**	0.374	34.82	9.99	48.41	13.59	AV	N	Pass
3	0.778	40.15	9.94	56.00	15.85	Peak	N	Pass
3*	0.778	30.83	9.94	56.00	25.17	QP	N	Pass
3**	0.778	29.35	9.94	46.00	16.65	AV	N	Pass
4	1.692	37.96	9.88	56.00	18.04	Peak	N	Pass
4*	1.692	27.63	9.88	56.00	28.37	QP	N	Pass
4**	1.692	28.10	9.88	46.00	17.90	AV	N	Pass
5	7.334	37.54	9.80	60.00	22.46	Peak	N	Pass
5*	7.334	28.69	9.80	60.00	31.31	QP	N	Pass
5**	7.334	22.39	9.80	50.00	27.61	AV	N	Pass
6	8.544	33.95	9.78	60.00	26.05	Peak	N	Pass
6*	8.544	25.32	9.78	60.00	34.68	QP	N	Pass
6**	8.544	25.61	9.78	50.00	24.39	AV	N	Pass

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5 Appendixes

5.1 Photographs of the Sample



All of the sample



Front of the sample

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Rear of the sample



Left of the sample

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Right of the sample



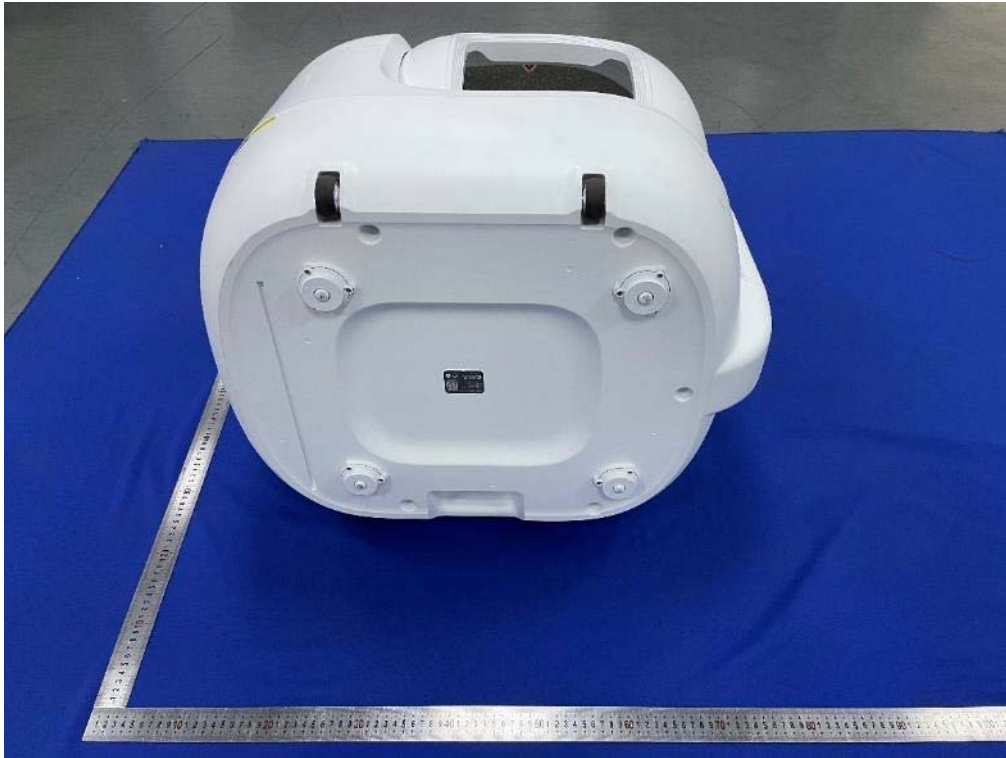
Top of the sample

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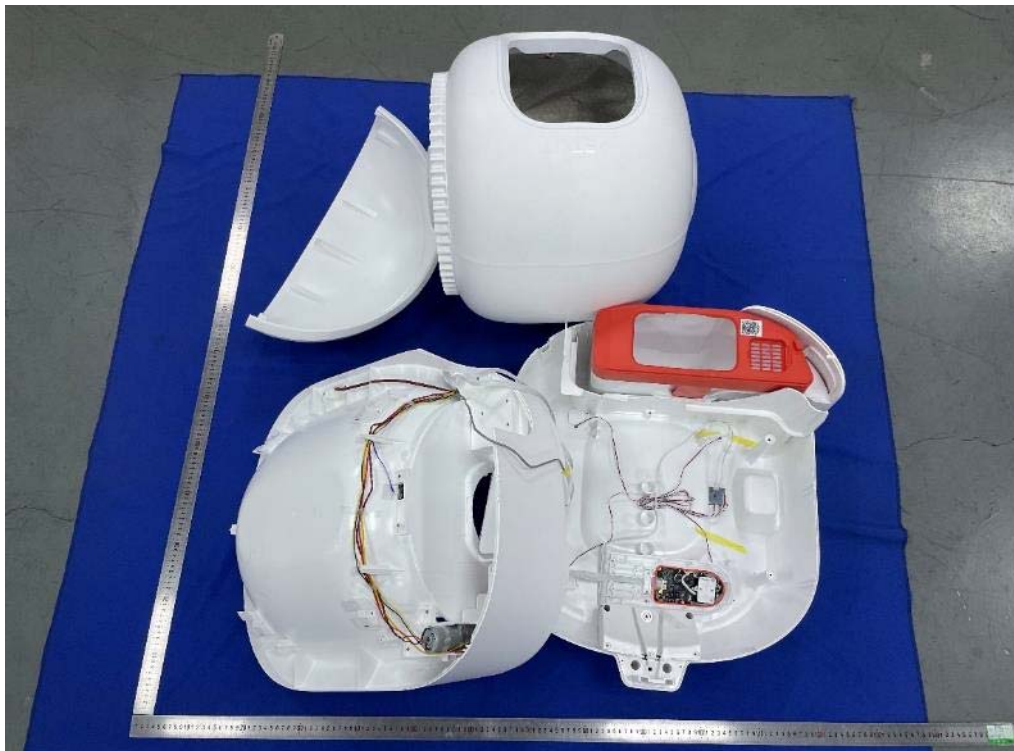
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Bottom of the sample



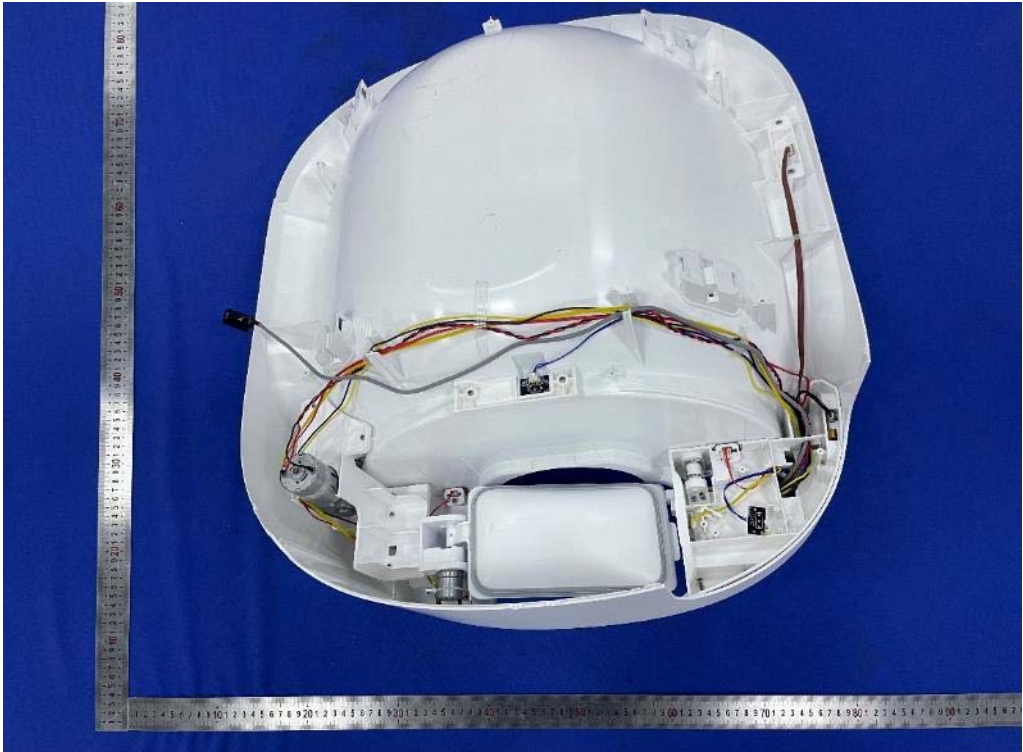
Open-1 of the sample

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Open-2 of the sample



Open-3 of the sample

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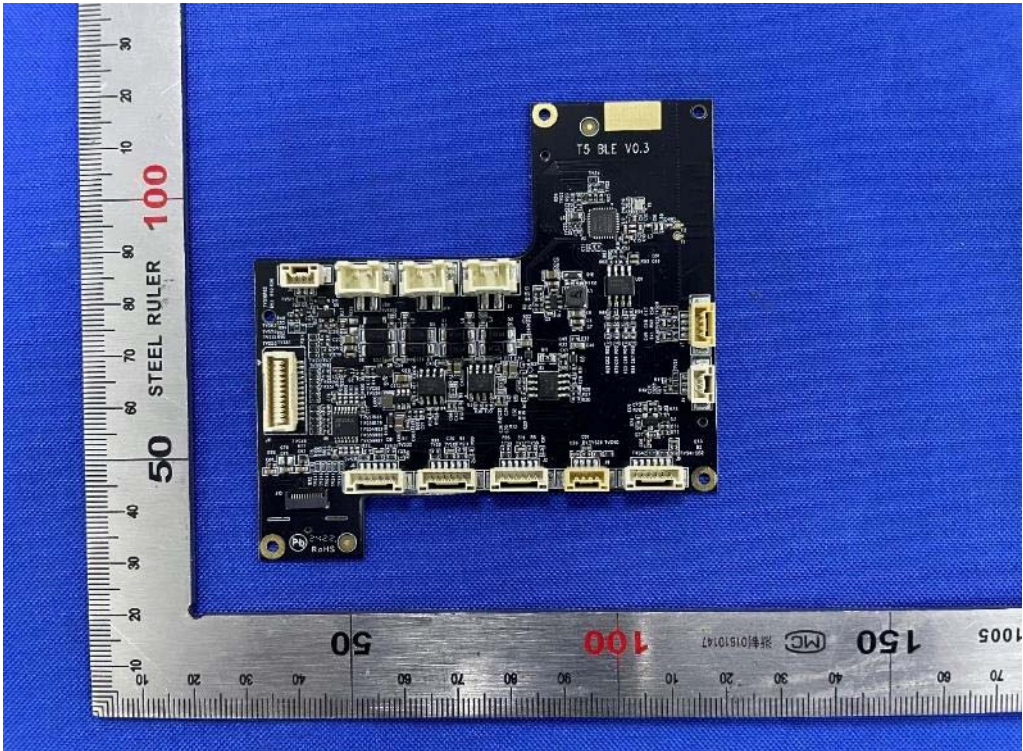
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Open-4 of the sample



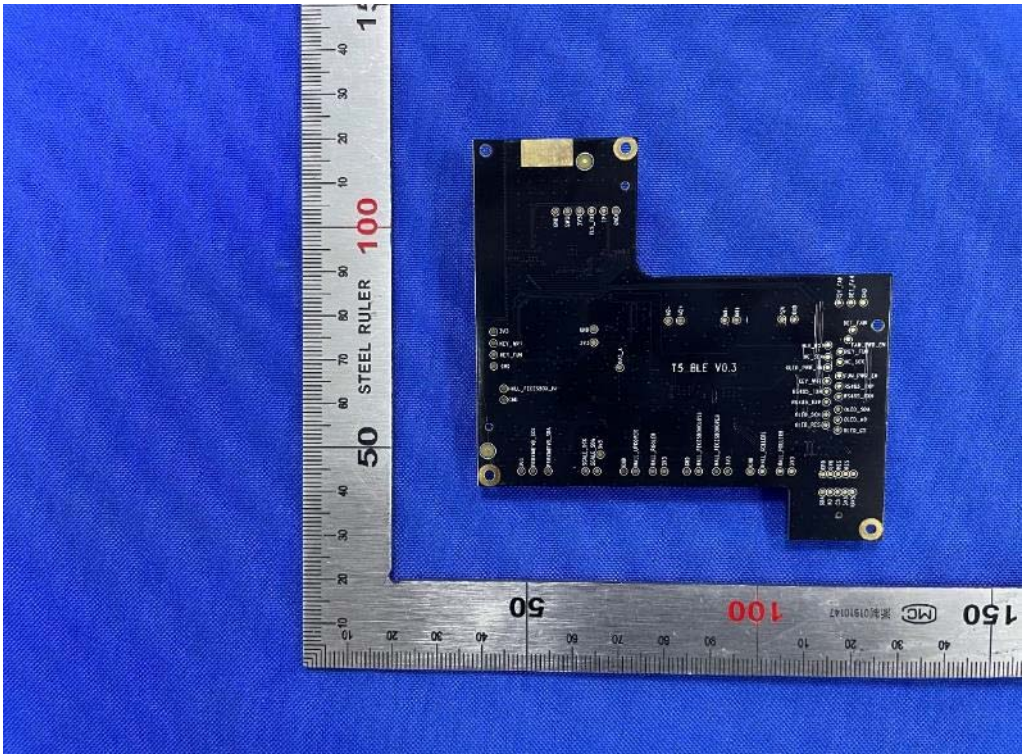
Internal-1 of the sample

TEST REPORT

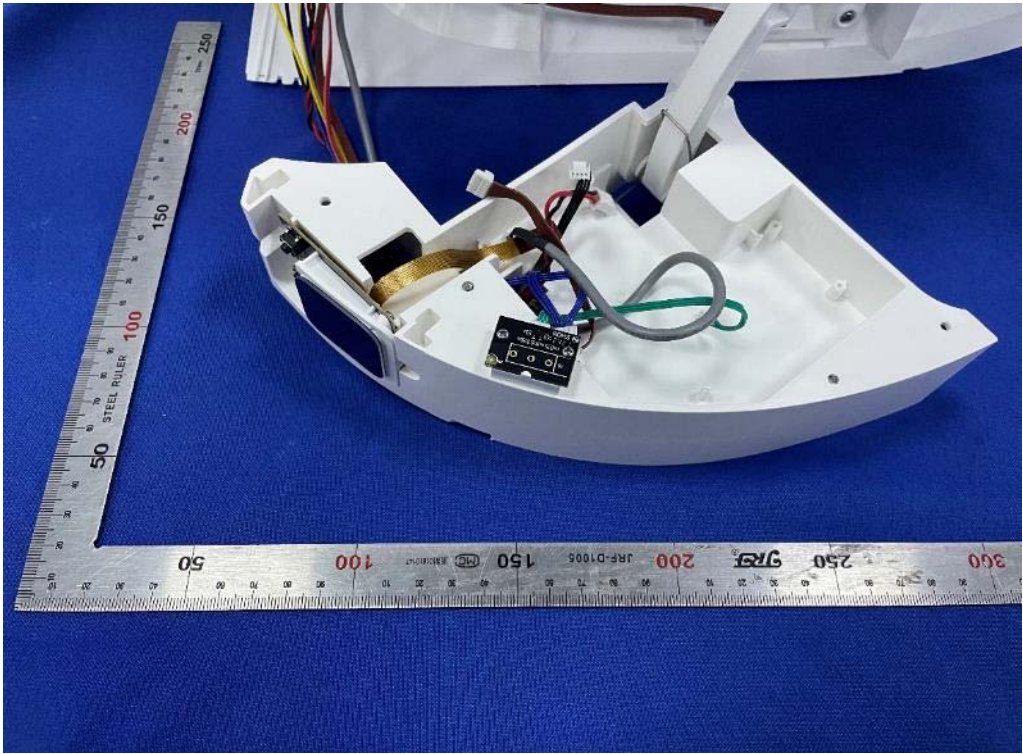
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Internal-2 of the sample



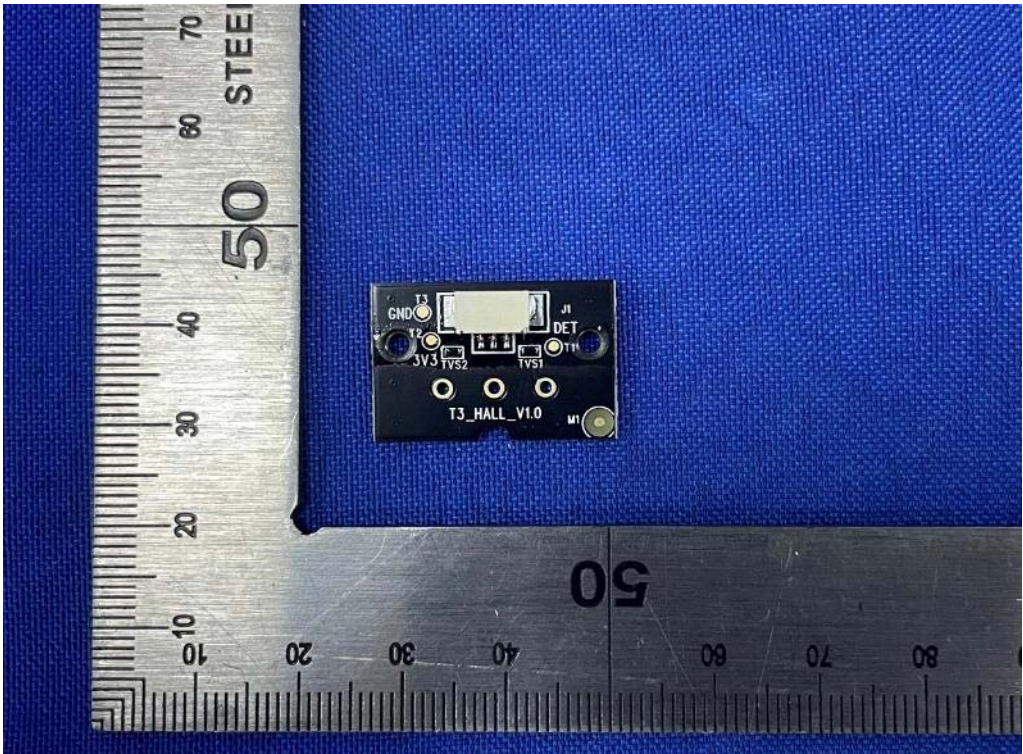
Internal-3 of the sample

TEST REPORT

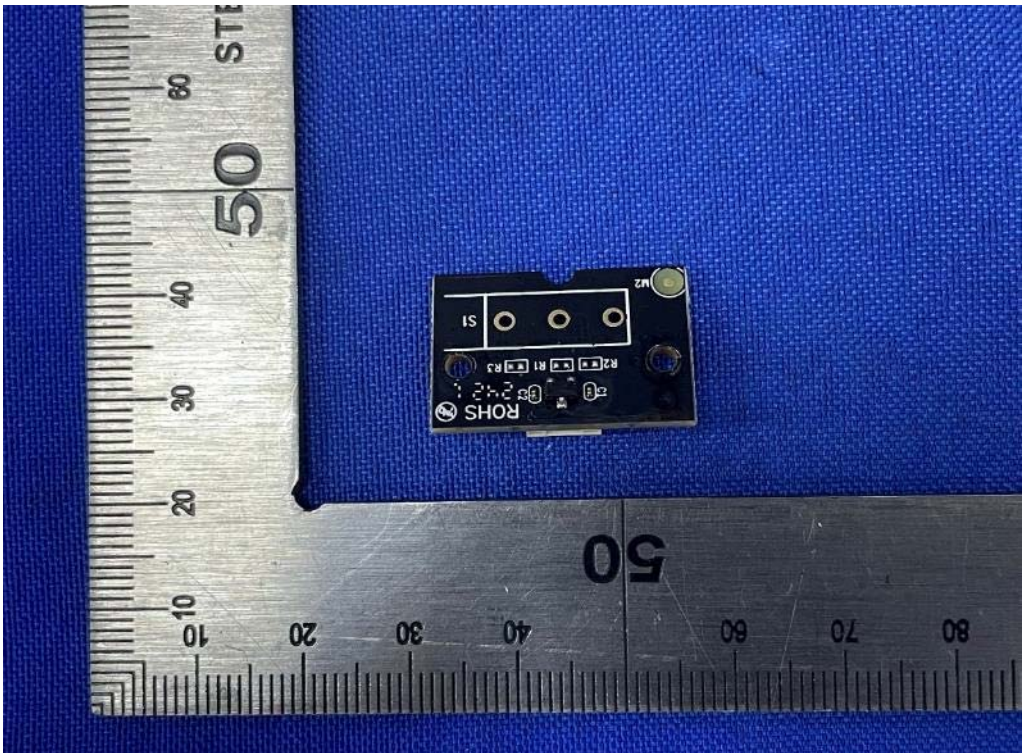
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Internal-4 of the sample



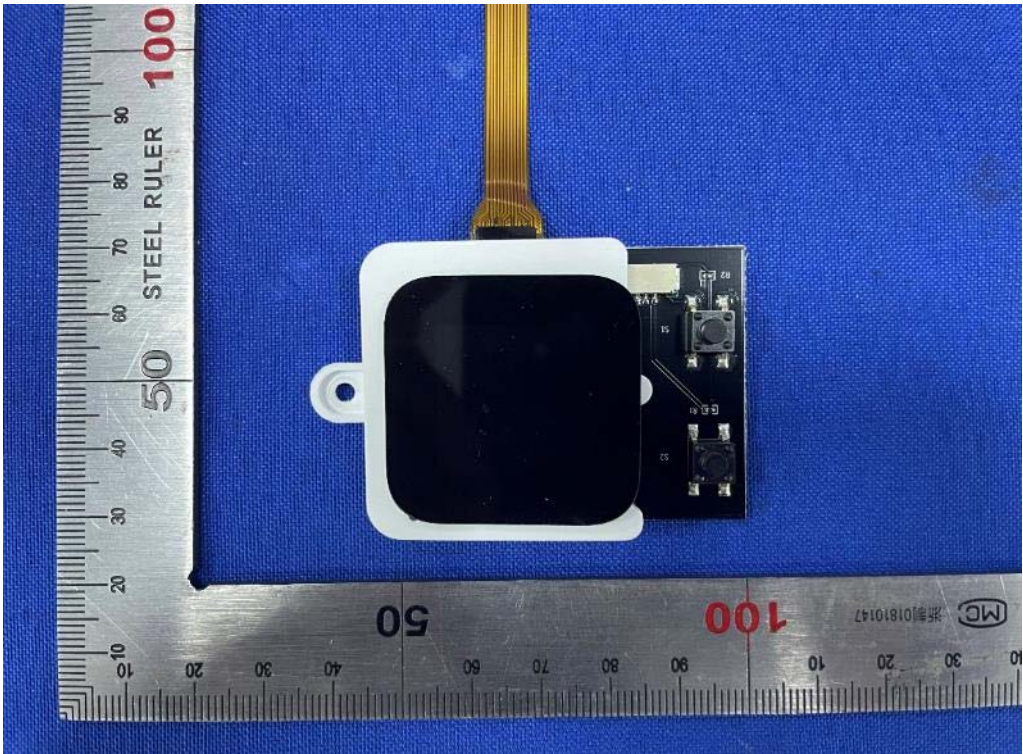
Internal-5 of the sample

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Internal-6 of the sample



Internal-7 of the sample

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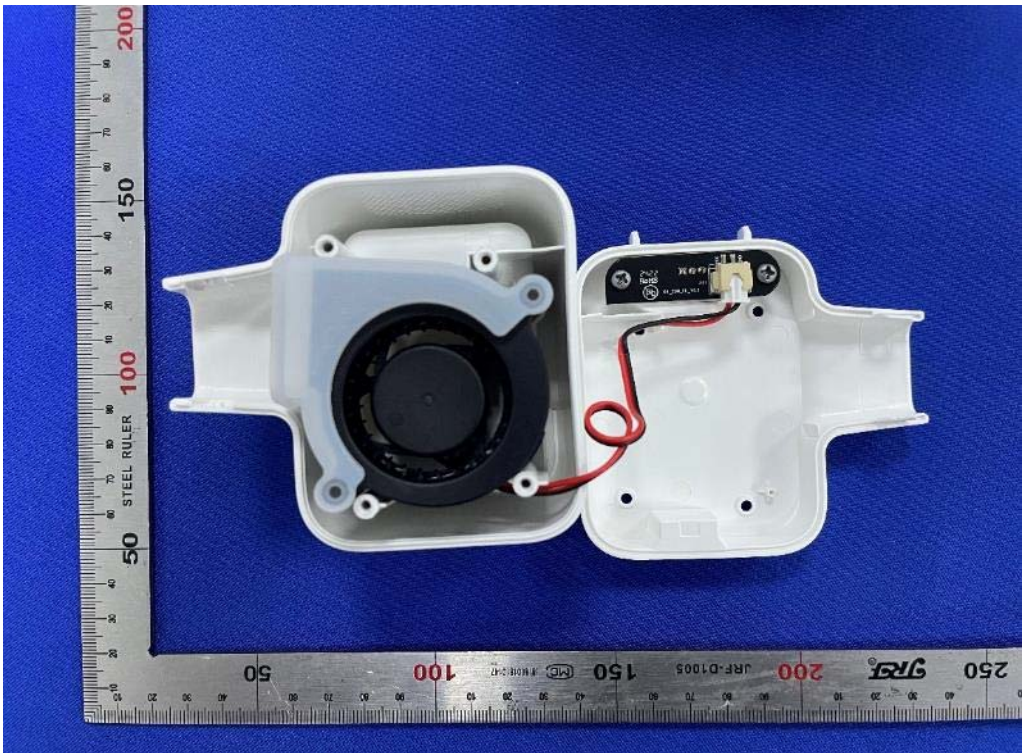
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Internal-8 of the sample



Internal-9 of the sample

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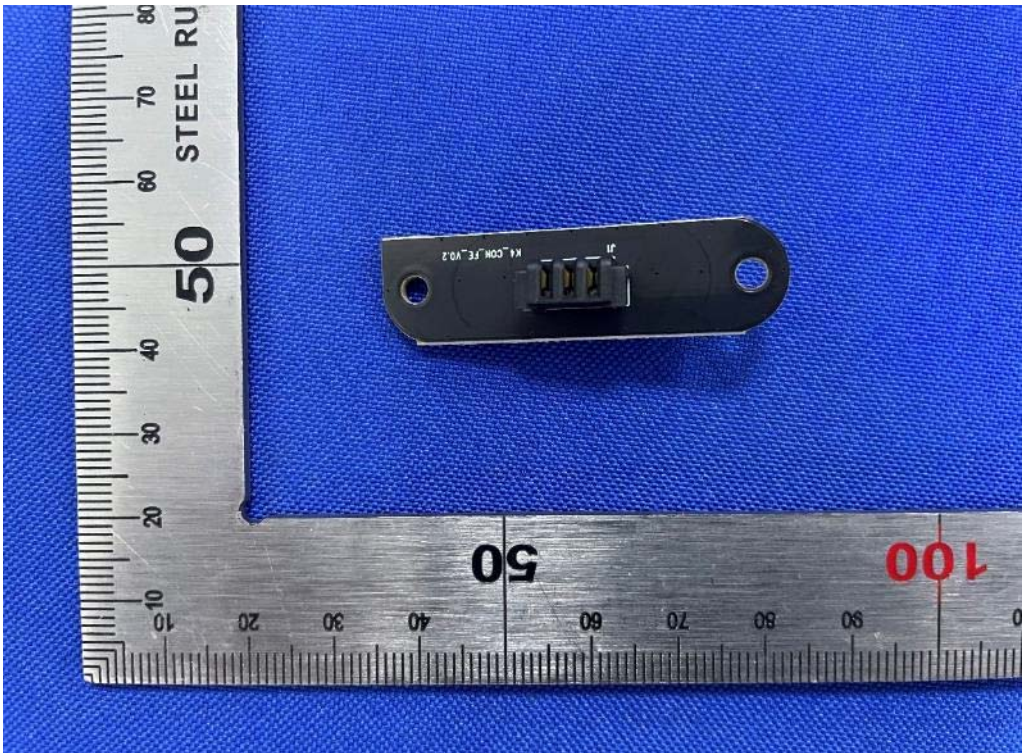
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Internal-10 of the sample



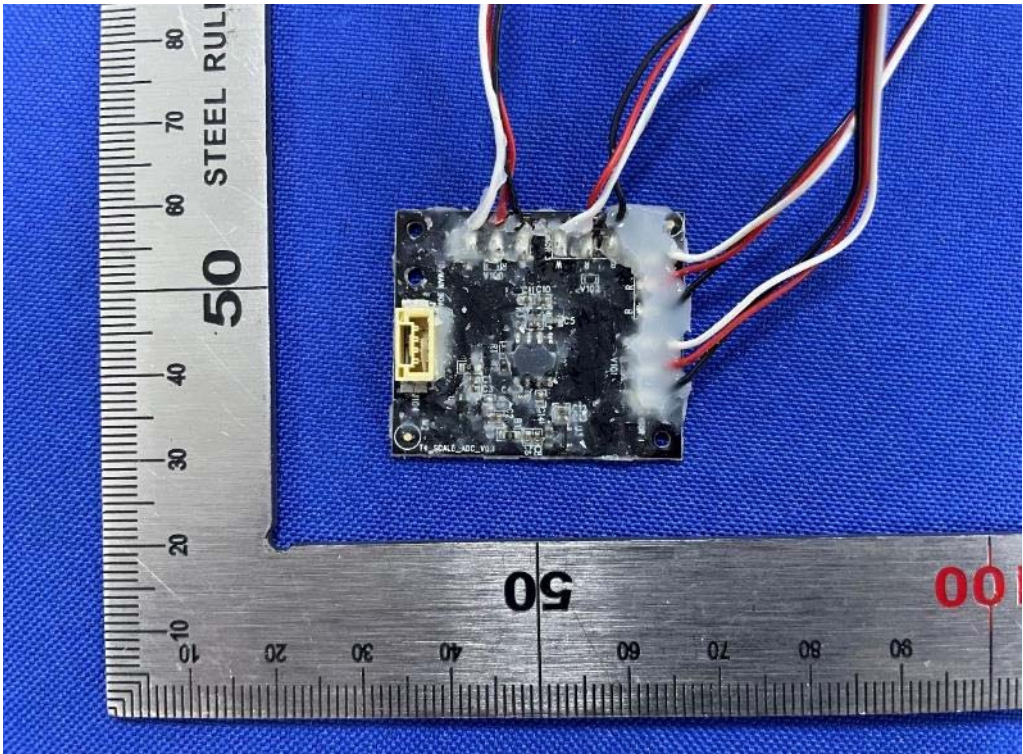
Internal-11 of the sample

TEST REPORT

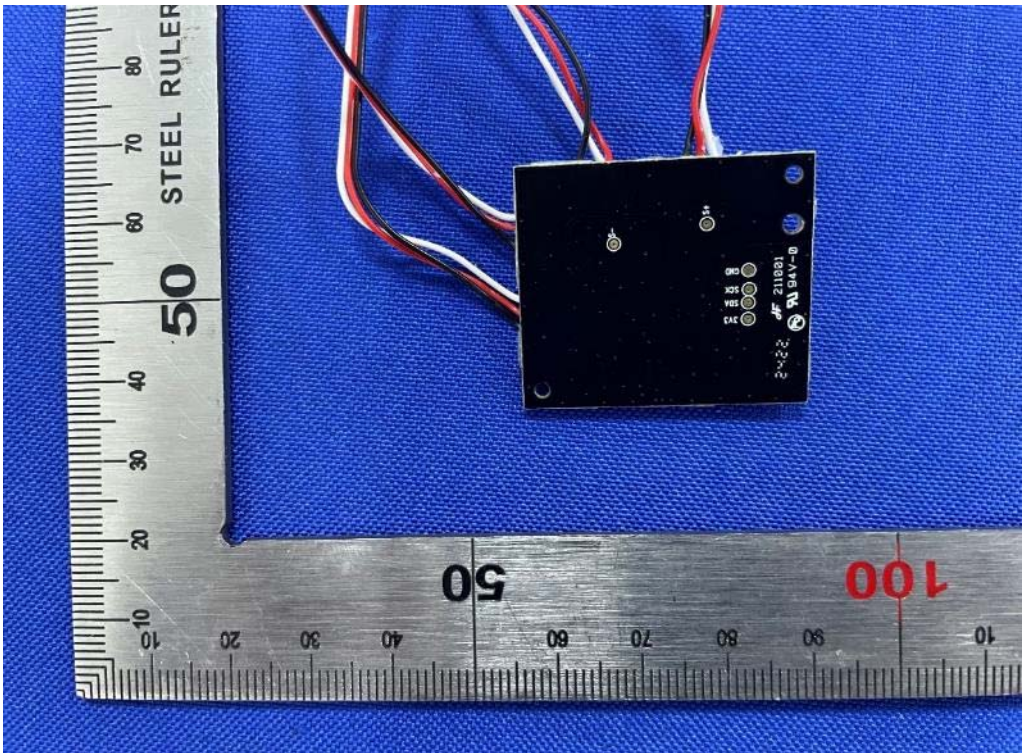
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Internal-12 of the sample



Internal-13 of the sample

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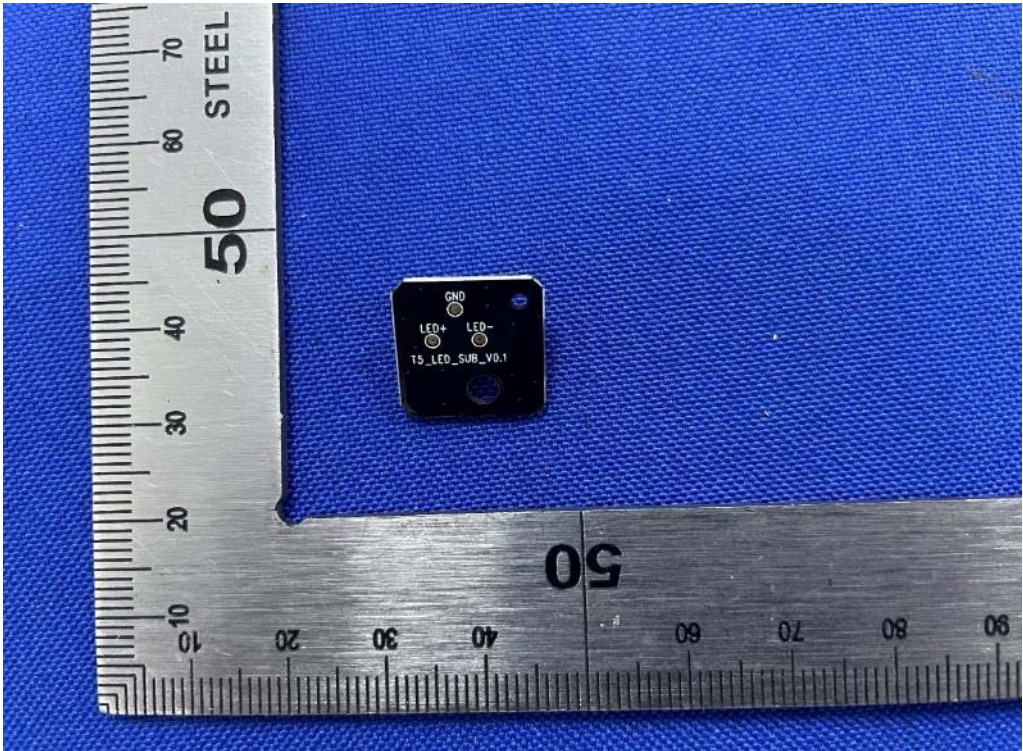
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Internal-14 of the sample



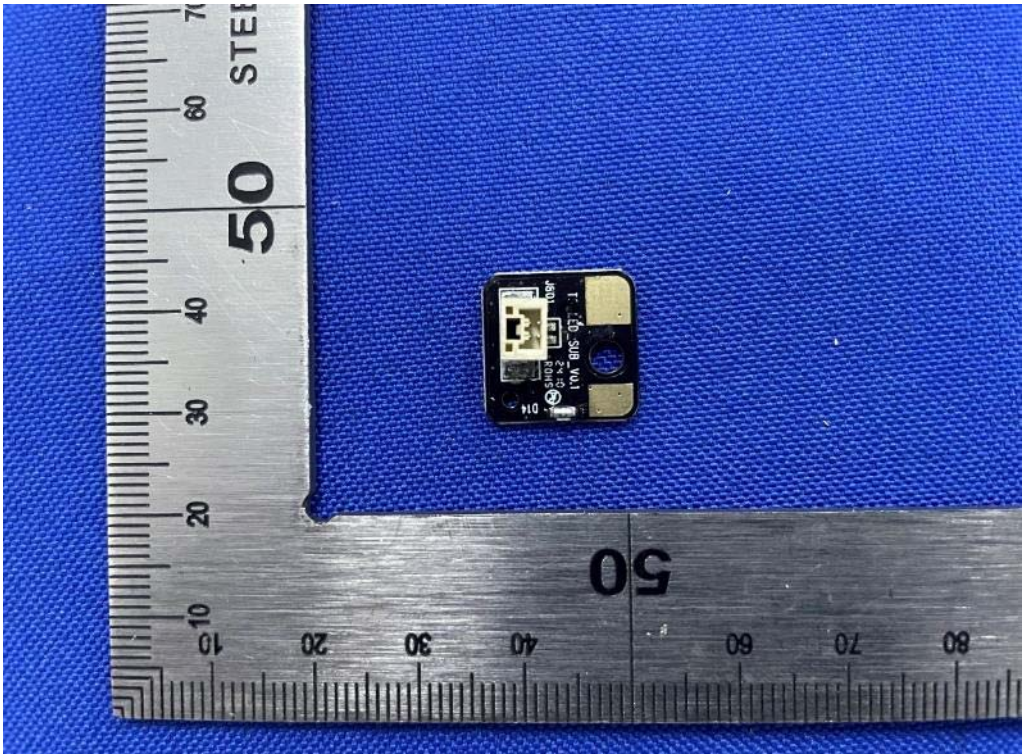
Internal-15 of the sample

TEST REPORT

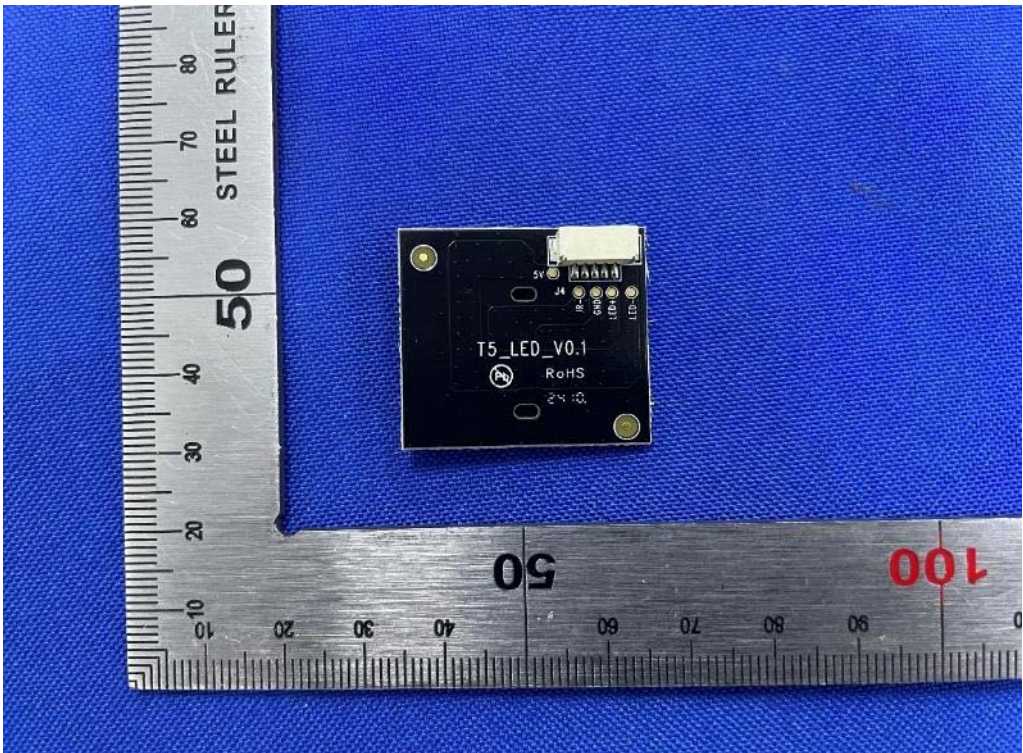
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Internal-16 of the sample



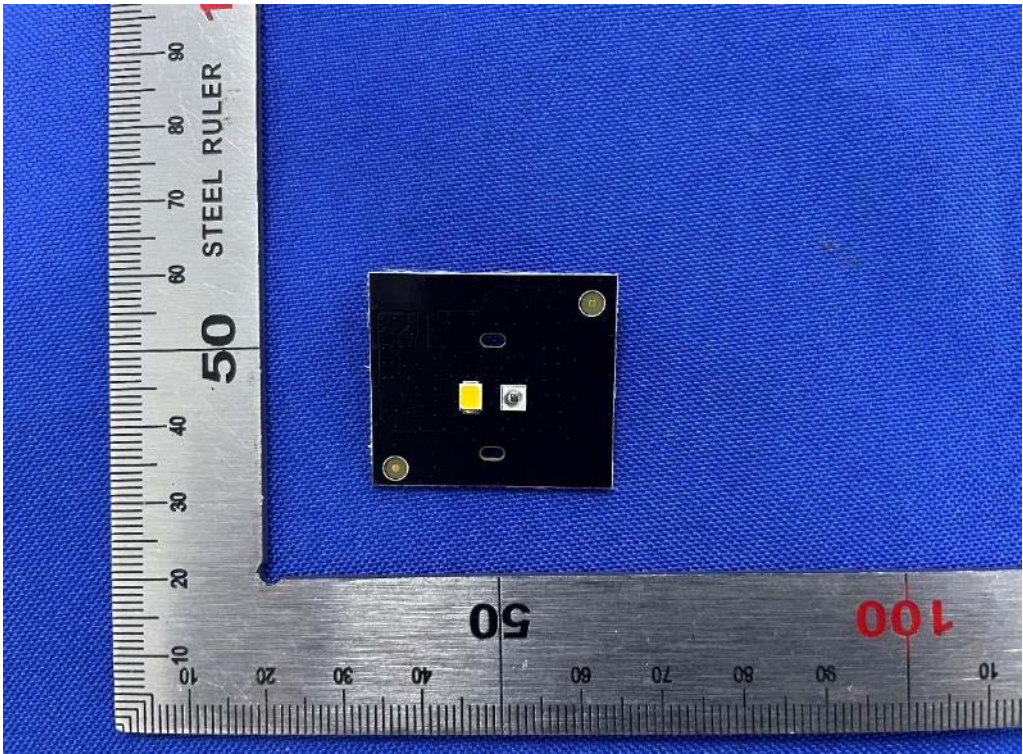
Internal-17 of the sample

TEST REPORT

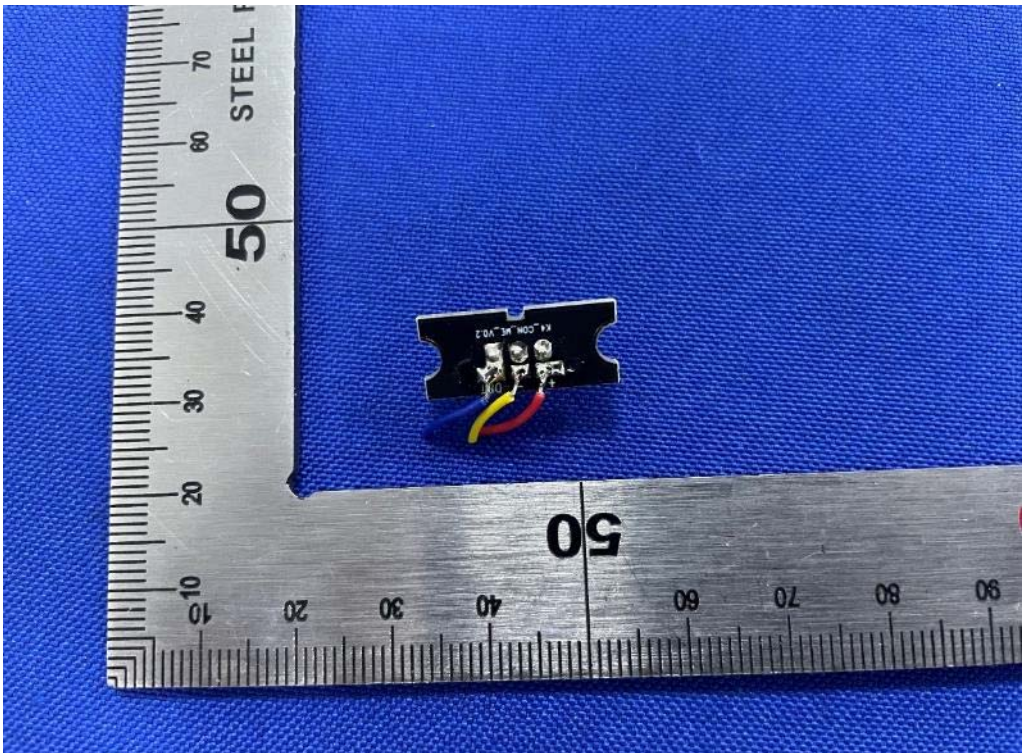
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Internal-18 of the sample



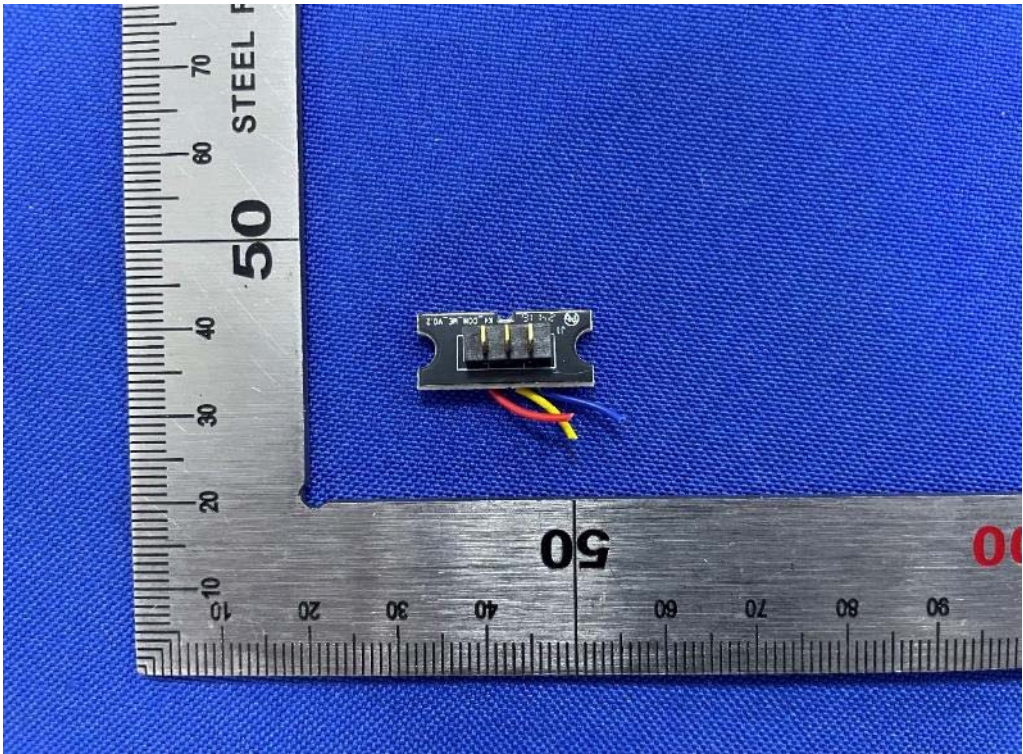
Internal-19 of the sample

TEST REPORT

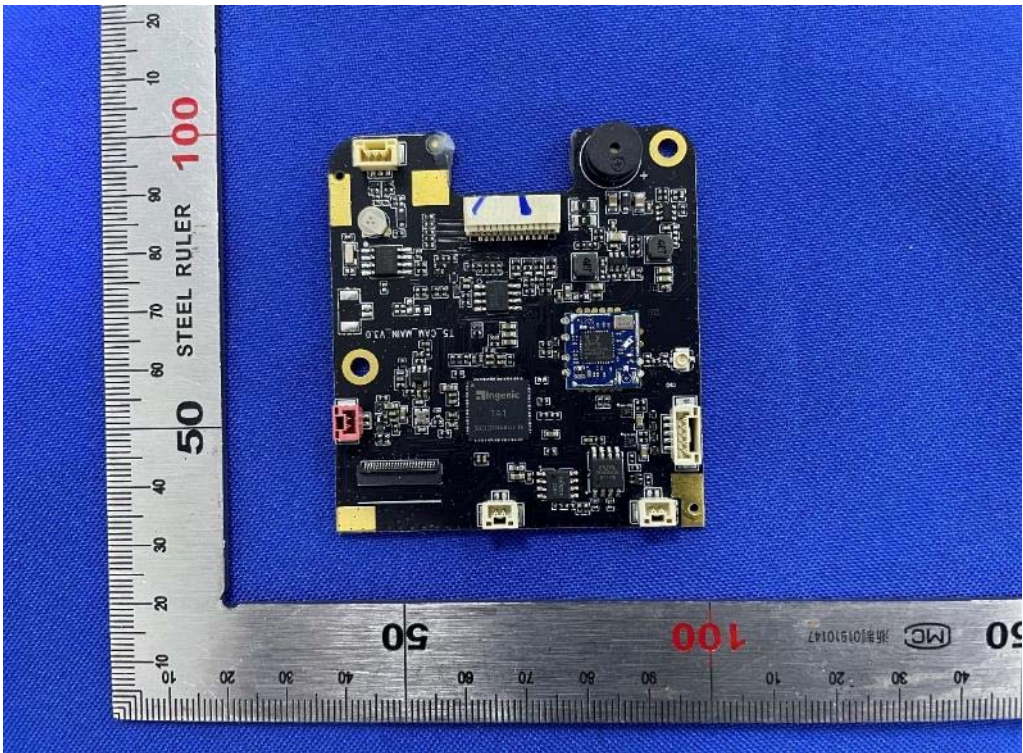
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Internal-20 of the sample



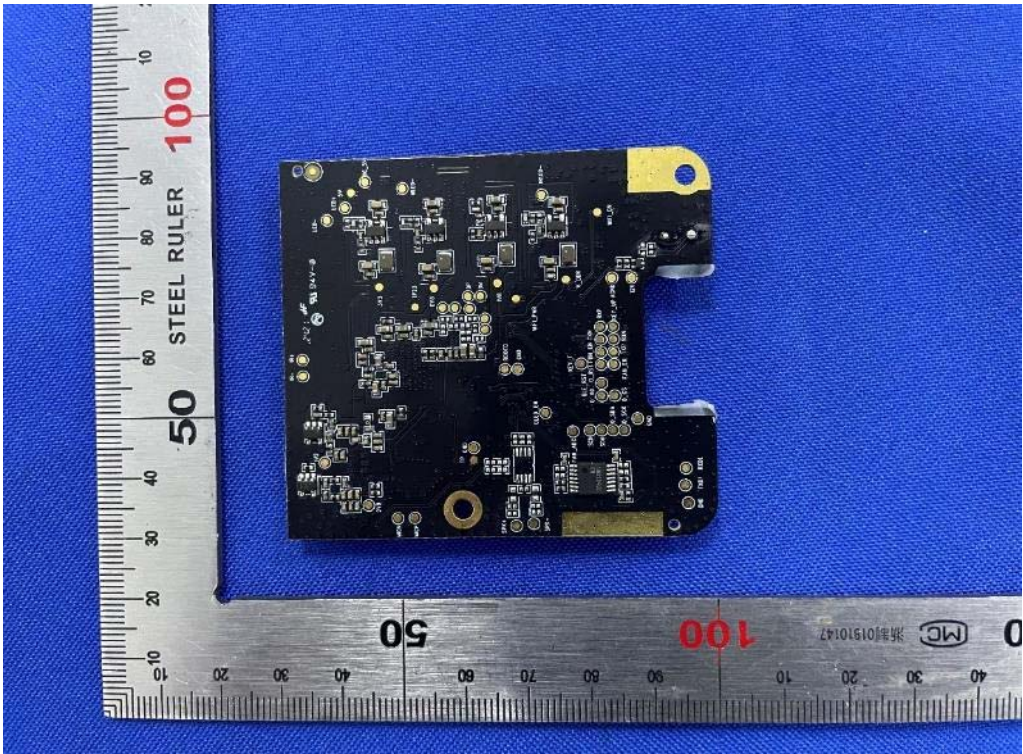
Internal-21 of the sample

TEST REPORT

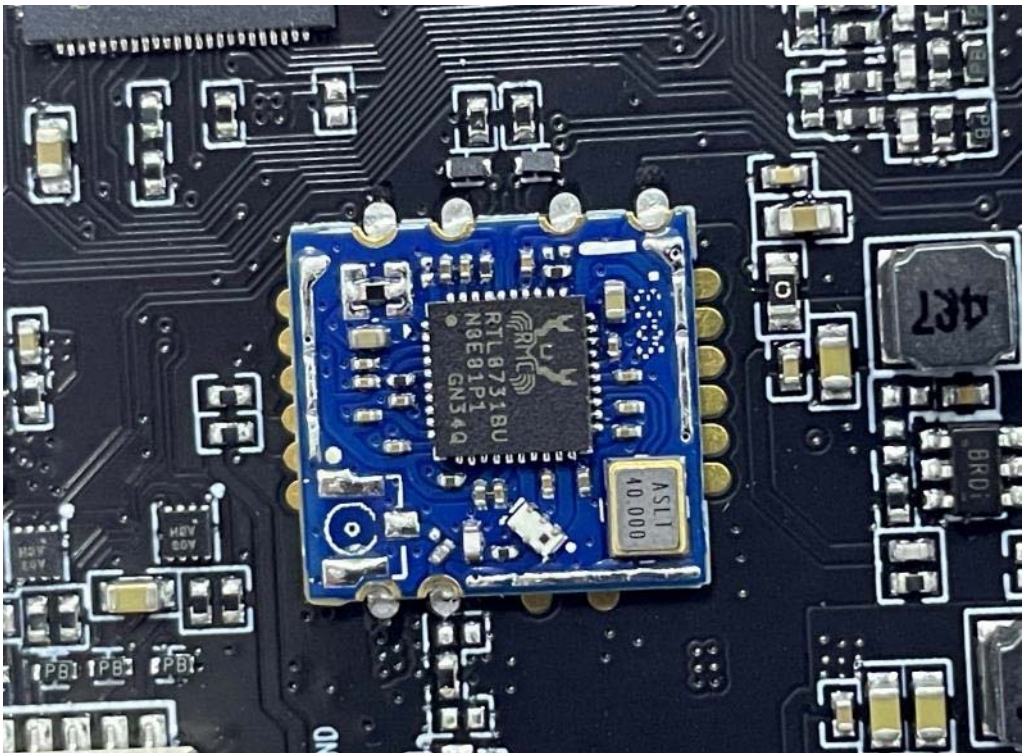
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Internal-22 of the sample



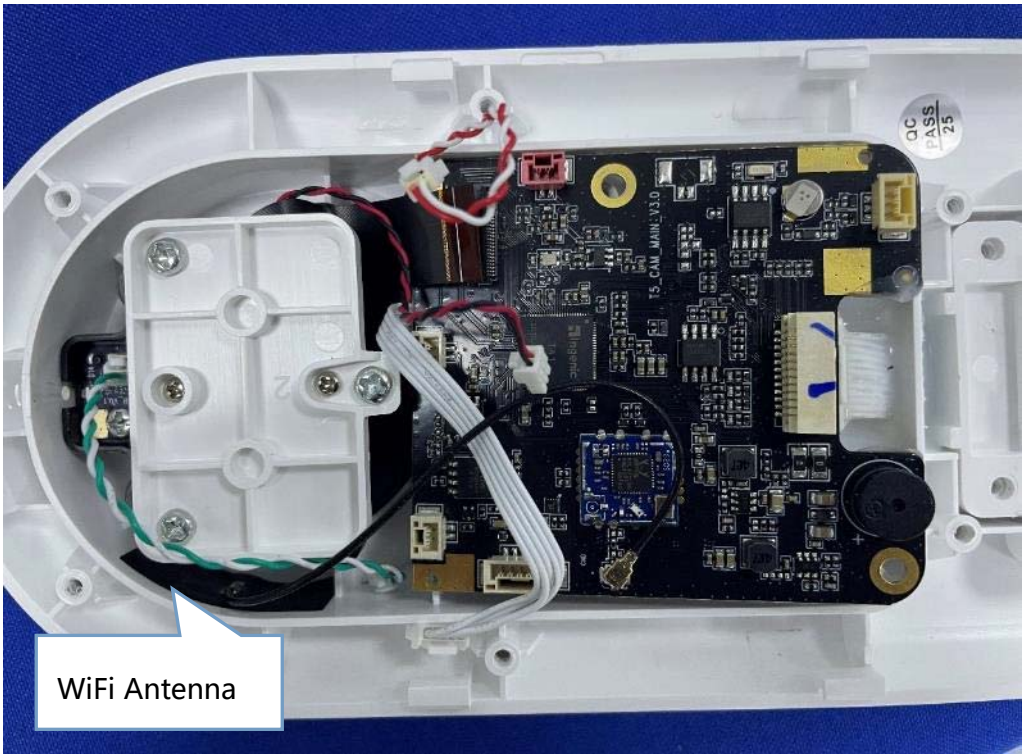
Internal-23 of the sample

TEST REPORT

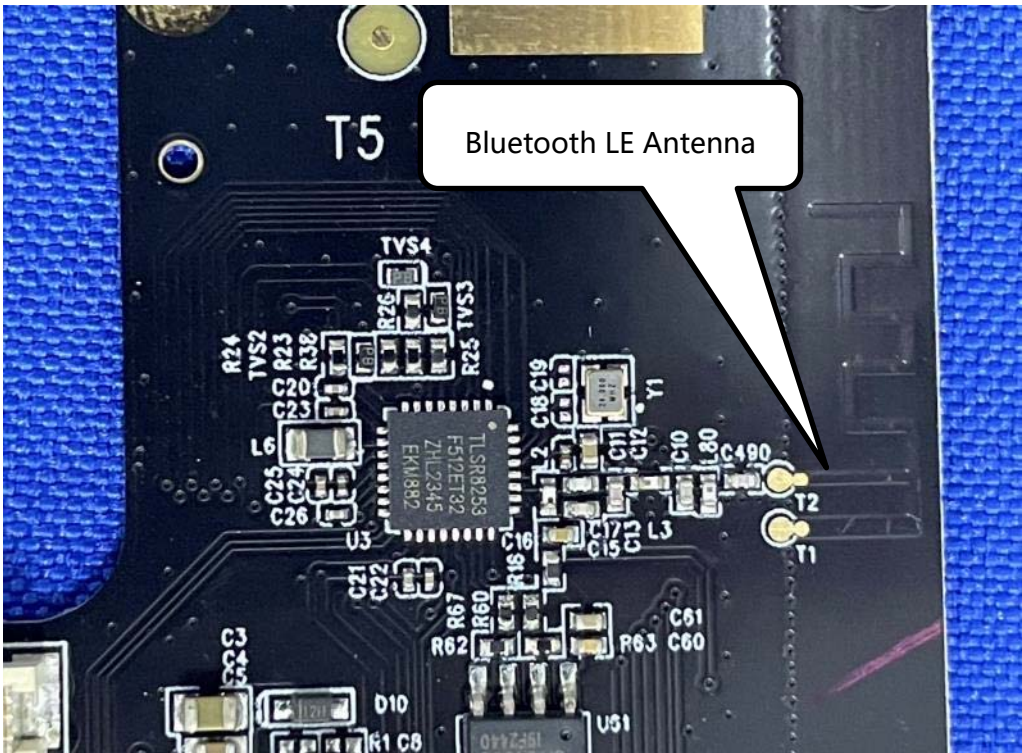
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WiFi Antenna position



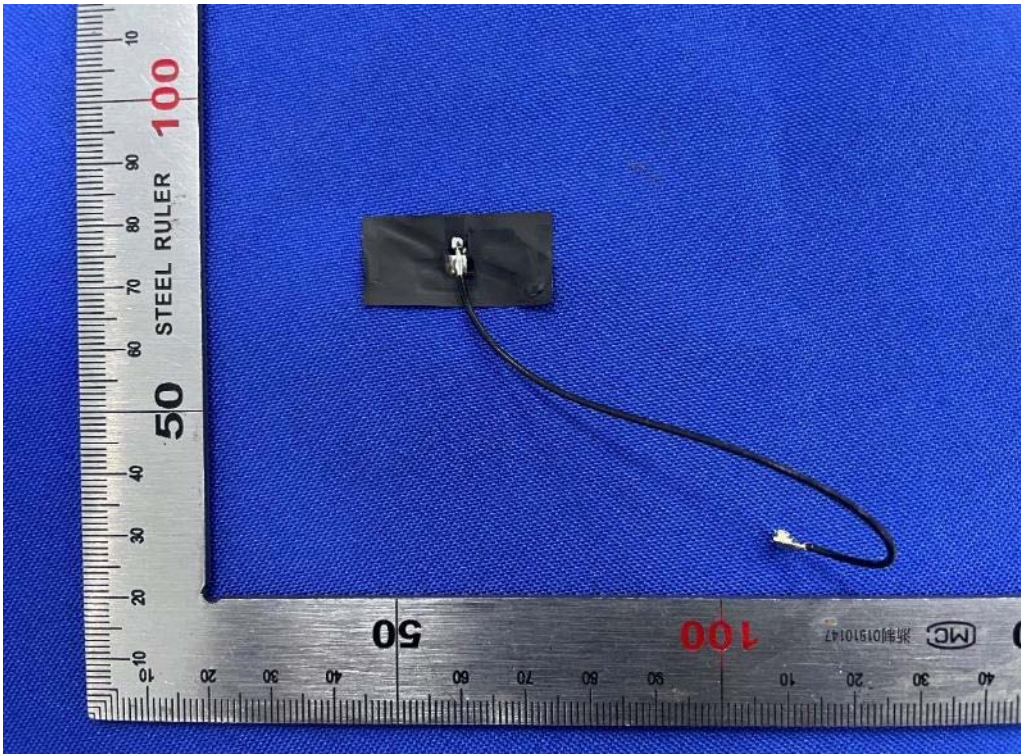
Bluetooth LE Antenna position

TEST REPORT

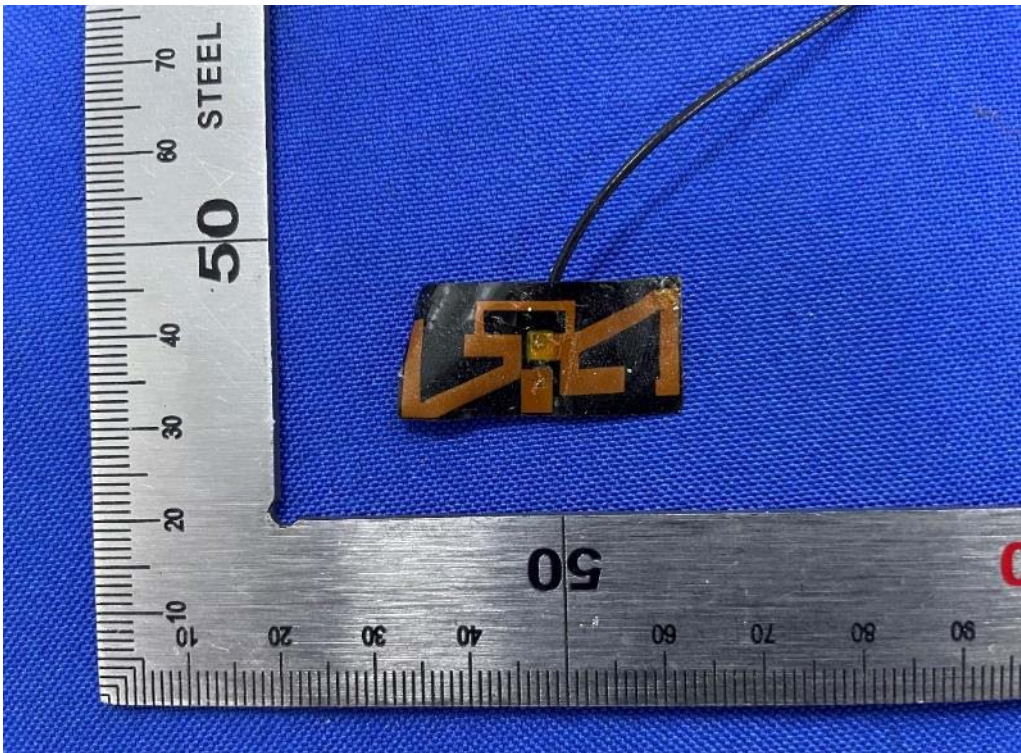
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WiFi Antenna Photo-Front



WiFi Antenna Photo-Back

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Adapter



Input Port of the sample

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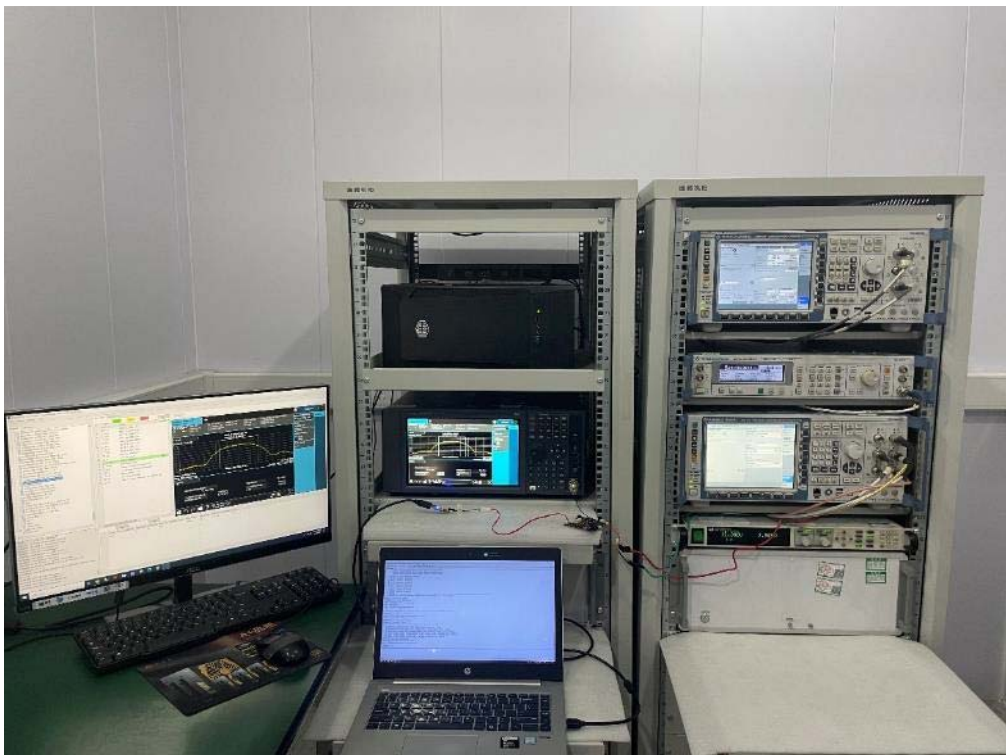
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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report