



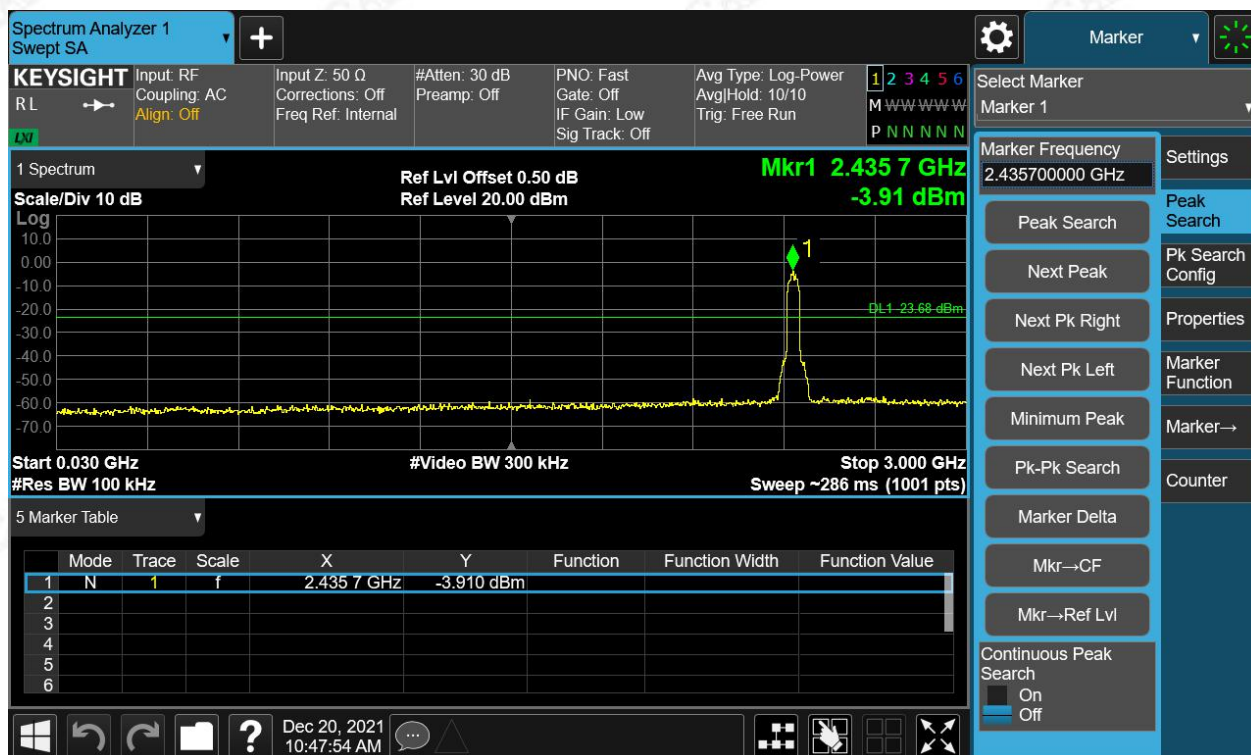
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Conducted spurious emissions 30MHz-25GHz





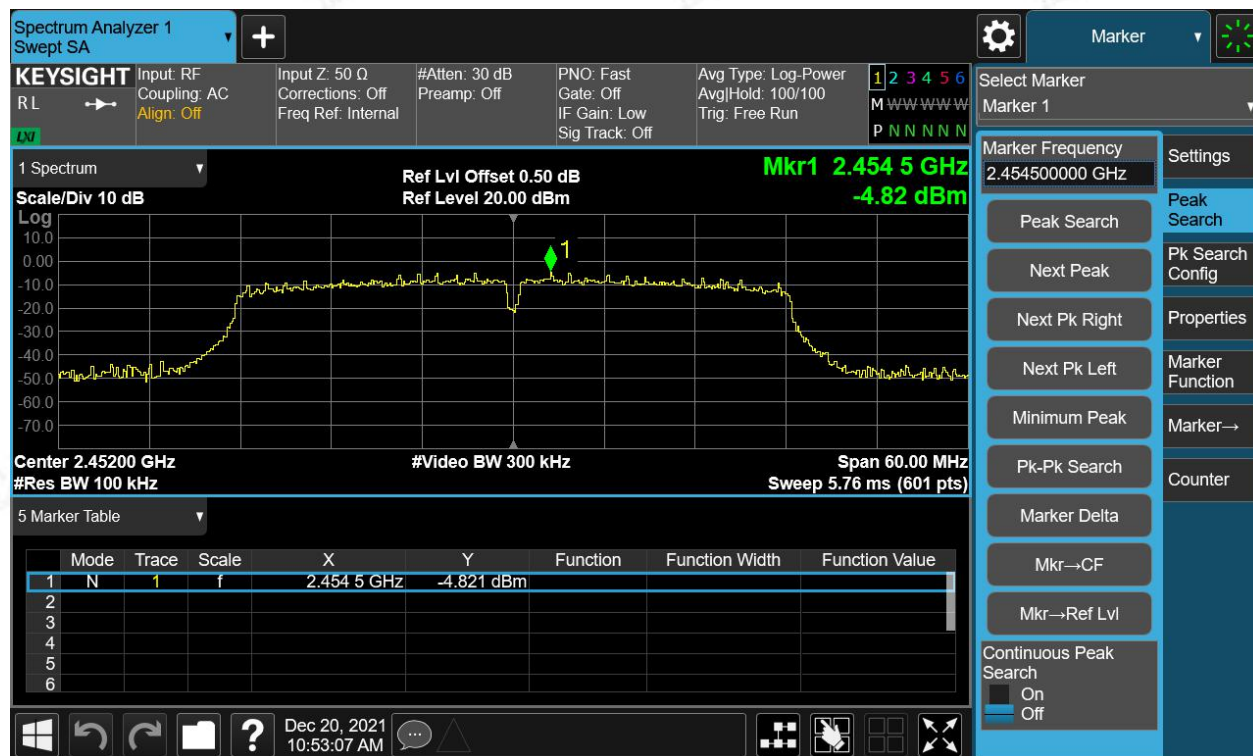
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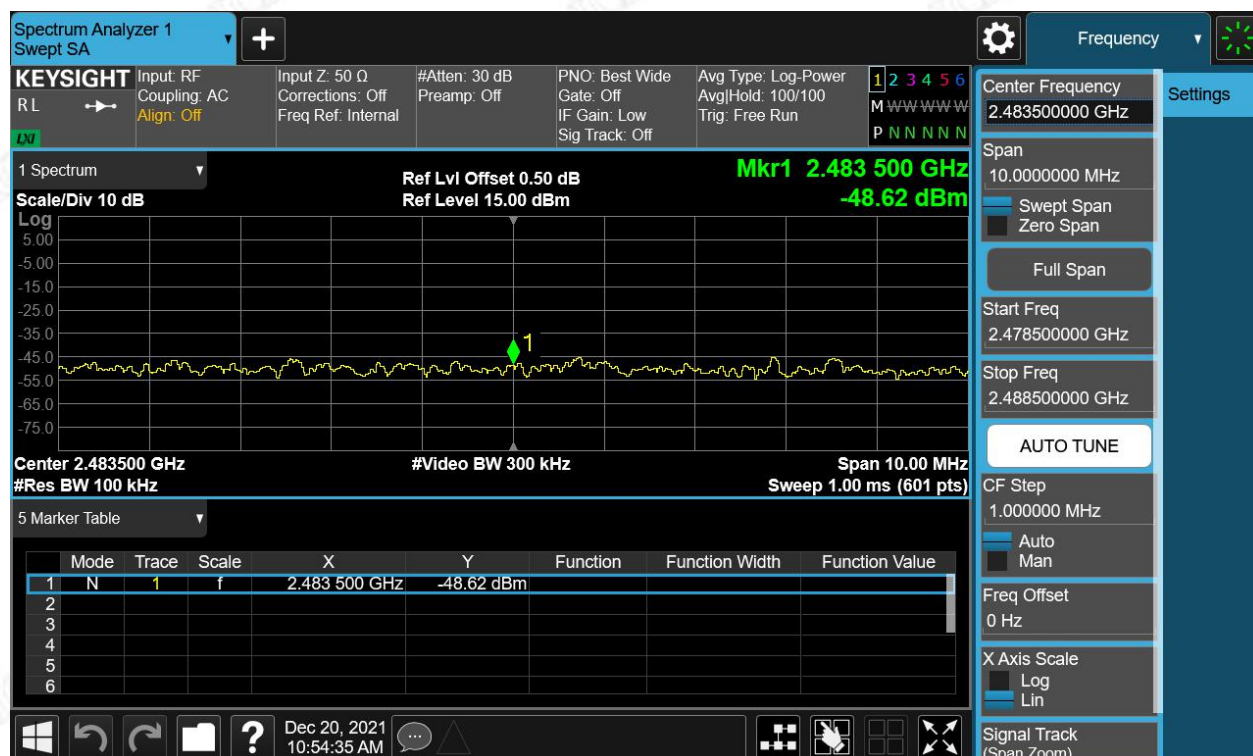
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Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2452MHz Carrier Level



Band Edge





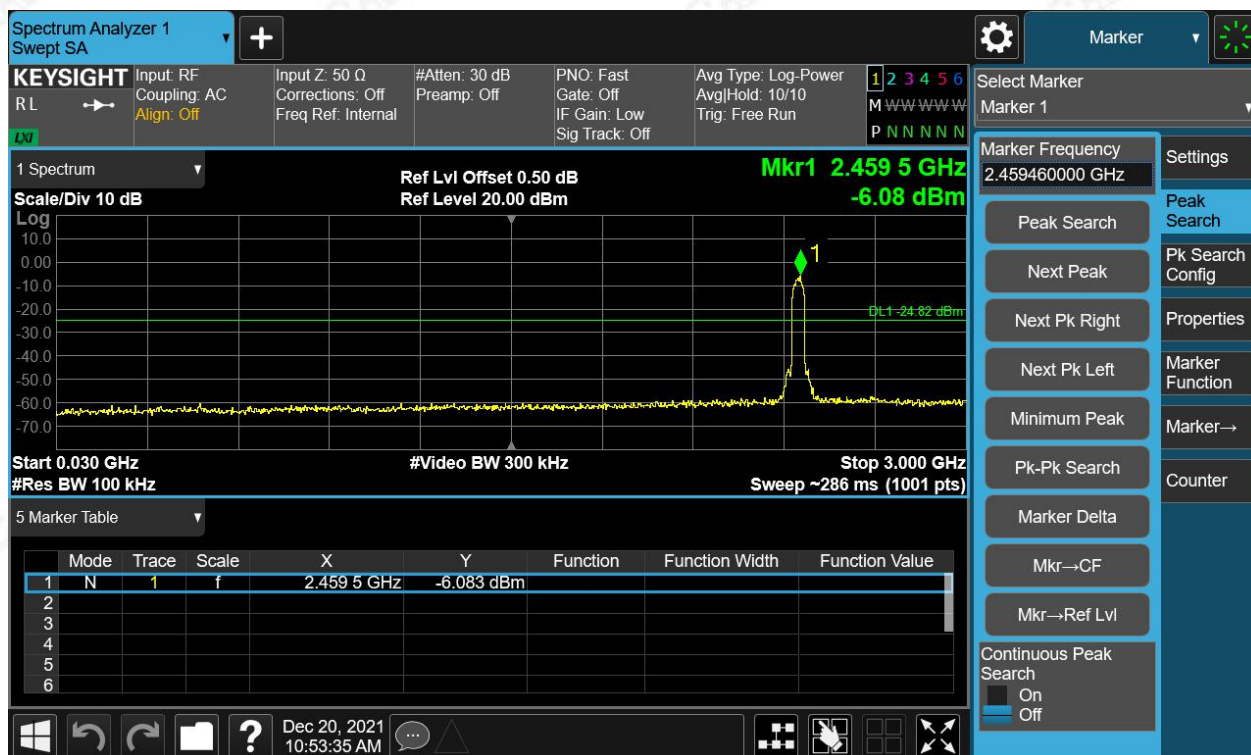
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Conducted spurious emissions 30MHz-25GHz





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4.1.6 Radiated Spurious 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 : 23°C
Relative humidity : 51%

Notes

Test plots please refer to the annex document "SHE21120035-02AE 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°C
Relative humidity : 51%

Notes:

1. Test plots please refer to the annex document "SHE21120035-02AE 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 by power adapter (which received AC 120V, 60Hz power)
Operation Mode	: A.1.a
Earthing	: Connected to GND
Ambient temperature	: 23°C
Relative humidity	: 51%

For details refer to following test plot.



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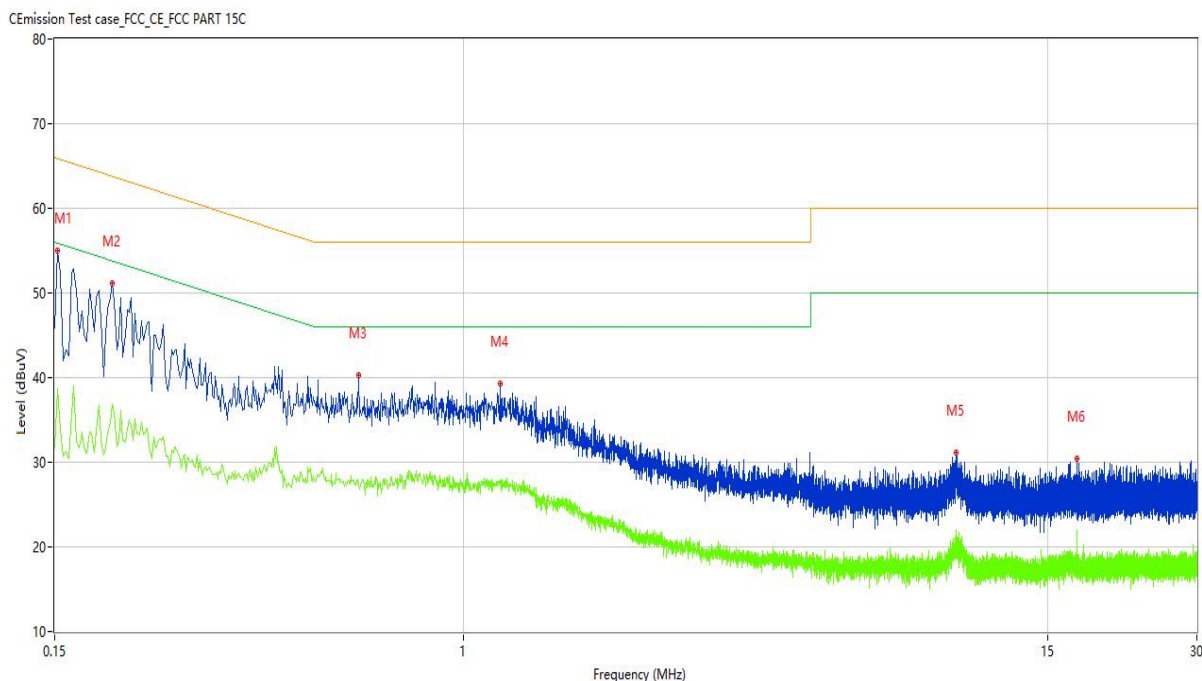
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Note: All test modes had been pre-tested, but only the 802.11b at low channel is the worst case and recorded in the report.

Figure 28: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	55.81	10.26	66.00	-10.19	Peak	L	Pass
1*	0.150	51.19	10.26	66.00	-14.81	QP	L	Pass
1**	0.150	31.70	10.26	56.00	-24.30	AV	L	Pass
2	0.196	49.98	10.23	63.78	-13.80	Peak	L	Pass
2*	0.196	46.60	10.23	63.78	-17.18	QP	L	Pass
2**	0.196	36.85	10.23	53.78	-16.93	AV	L	Pass
3	0.614	32.38	10.31	56.00	-23.62	Peak	L	Pass
3*	0.614	26.66	10.31	56.00	-29.34	QP	L	Pass
3**	0.614	27.36	10.31	46.00	-18.64	AV	L	Pass
4	1.186	33.68	10.19	56.00	-22.32	Peak	L	Pass
4*	1.186	28.48	10.19	56.00	-27.52	QP	L	Pass
4**	1.186	27.87	10.19	46.00	-18.13	AV	L	Pass
5	9.830	27.76	10.36	60.00	-32.24	Peak	L	Pass
5*	9.830	22.60	10.36	60.00	-37.40	QP	L	Pass
5**	9.830	20.38	10.36	50.00	-29.62	AV	L	Pass
6	17.214	21.44	10.67	60.00	-38.56	Peak	L	Pass
6*	17.214	14.55	10.67	60.00	-45.45	QP	L	Pass
6**	17.214	21.65	10.67	50.00	-28.35	AV	L	Pass



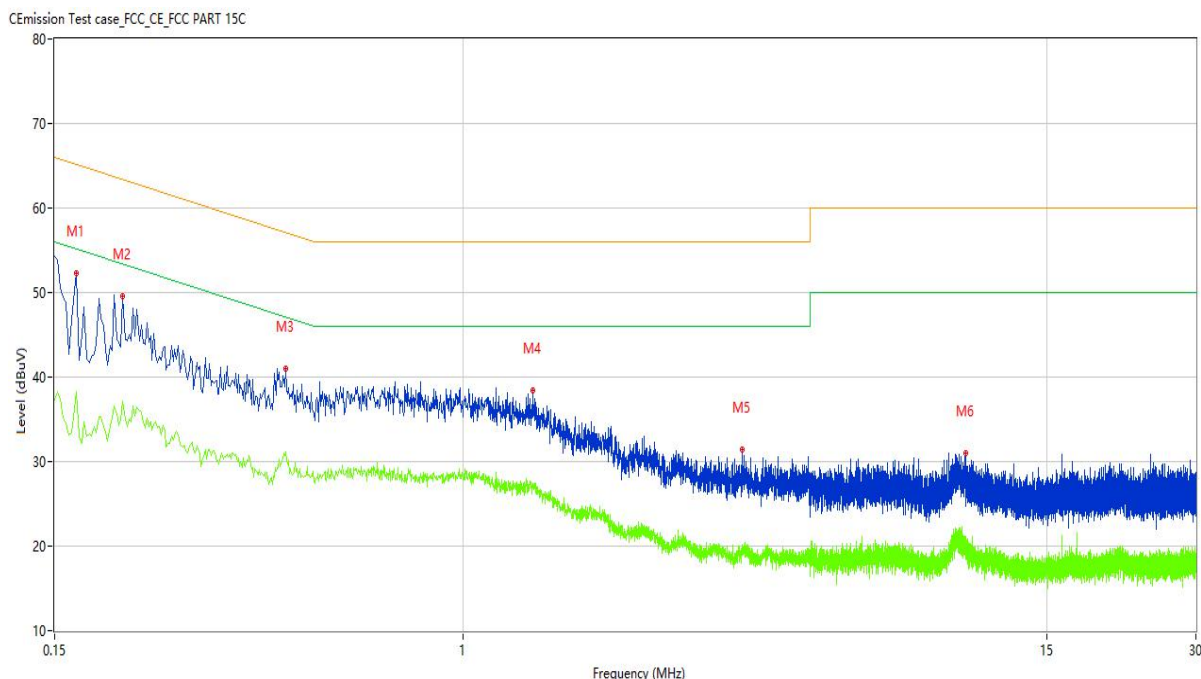
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Figure 29: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.166	52.55	10.26	65.16	-12.61	Peak	N	Pass
1*	0.166	48.11	10.26	65.16	-17.05	QP	N	Pass
1**	0.166	38.24	10.26	55.16	-16.92	AV	N	Pass
2	0.206	48.70	10.23	63.37	-14.67	Peak	N	Pass
2*	0.206	44.15	10.23	63.37	-19.22	QP	N	Pass
2**	0.206	37.08	10.23	53.37	-16.29	AV	N	Pass
3	0.438	38.53	10.26	57.10	-18.57	Peak	N	Pass
3*	0.438	34.38	10.26	57.10	-22.72	QP	N	Pass
3**	0.438	31.20	10.26	47.10	-15.90	AV	N	Pass
4	1.380	32.34	10.18	56.00	-23.66	Peak	N	Pass
4*	1.380	27.59	10.18	56.00	-28.41	QP	N	Pass
4**	1.380	27.50	10.18	46.00	-18.50	AV	N	Pass
5	3.652	25.16	10.19	56.00	-30.84	Peak	N	Pass
5*	3.652	19.14	10.19	56.00	-36.86	QP	N	Pass
5**	3.652	20.09	10.19	46.00	-25.91	AV	N	Pass
6	10.306	26.63	10.37	60.00	-33.37	Peak	N	Pass
6*	10.306	21.61	10.37	60.00	-38.39	QP	N	Pass
6**	10.306	20.73	10.37	50.00	-29.27	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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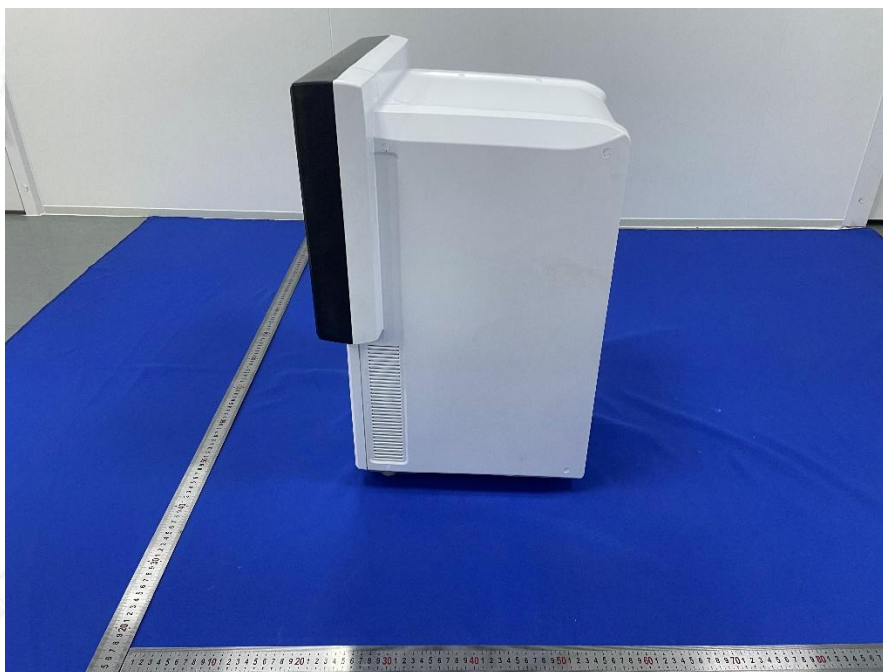
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Rear of the sample



Left of the sample

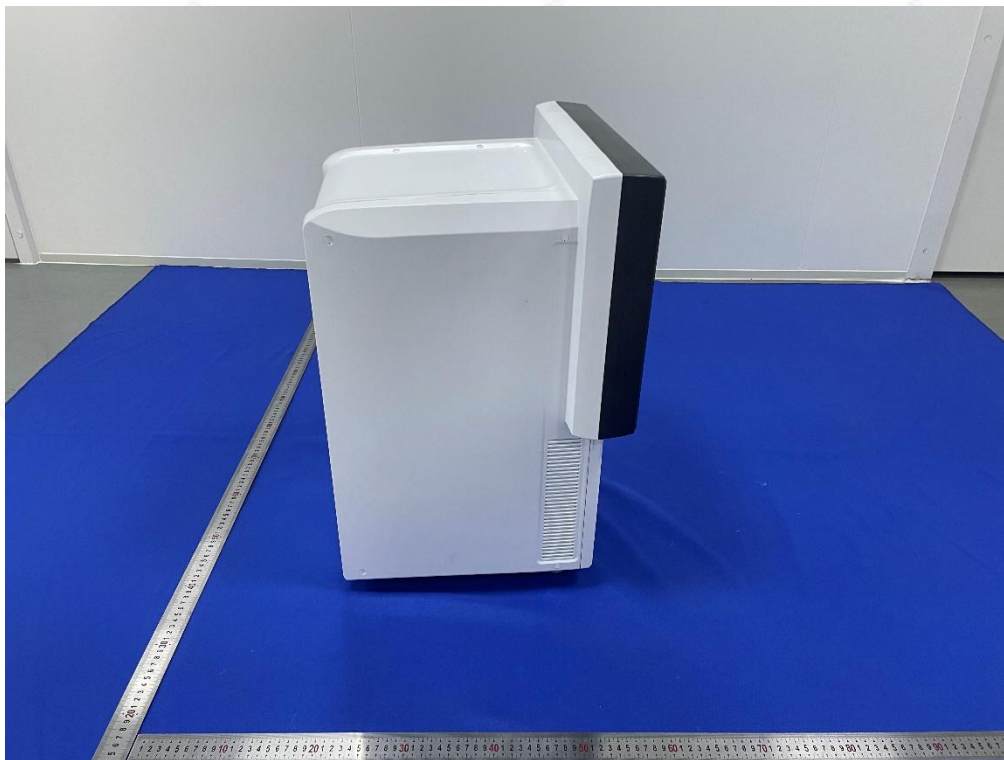


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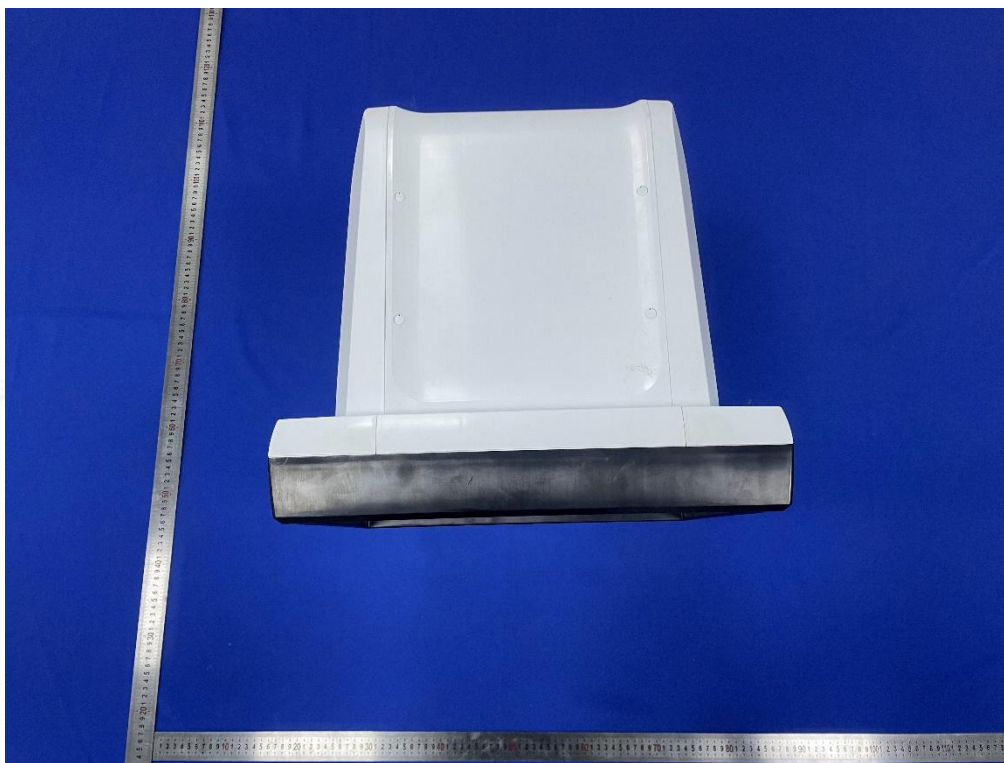
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Right of the sample



Top of the sample

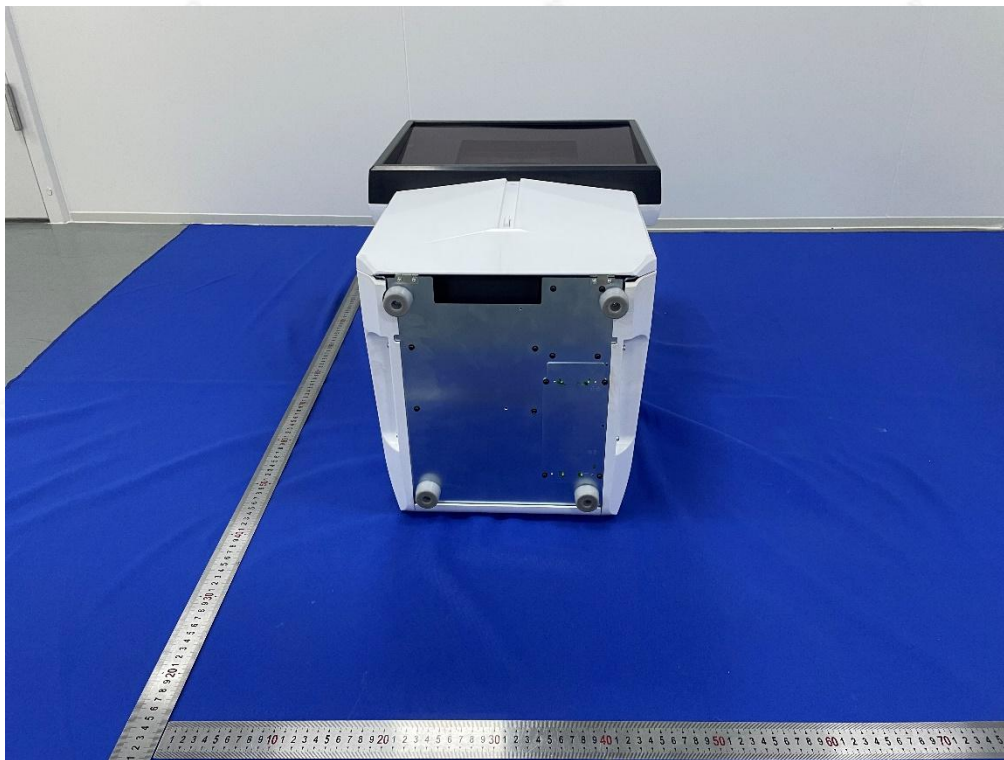


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Bottom of the sample

5.2 Set-up for Conducted Emissions





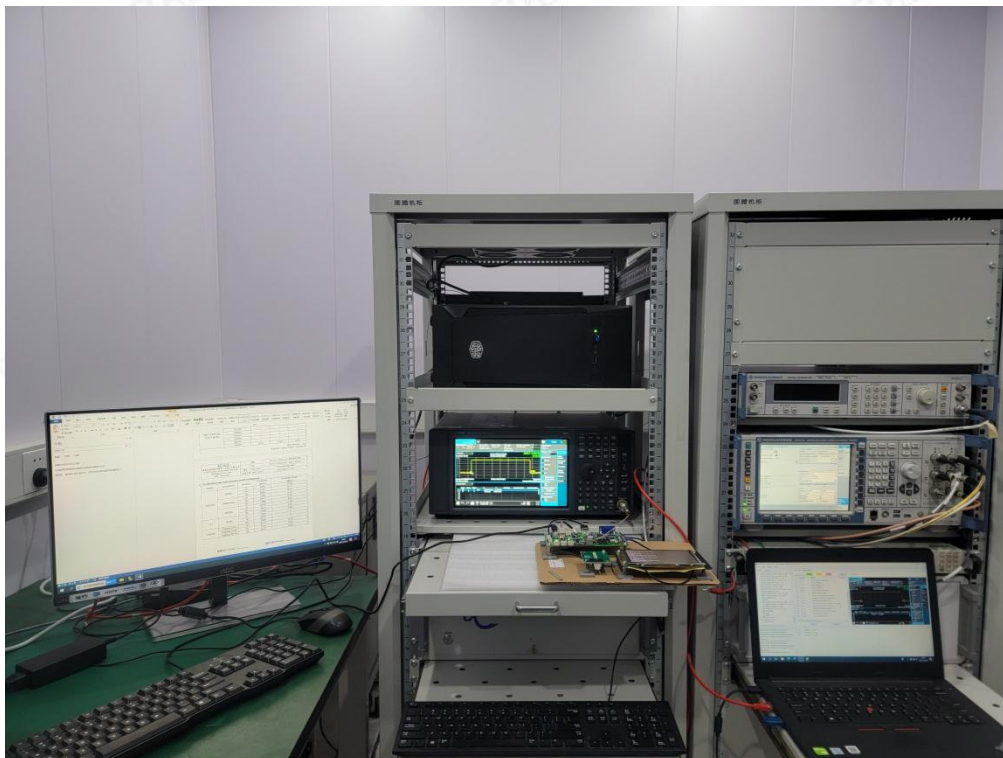
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5.3 Set-up for Conducted RF test at Antenna Port



5.4 Set-up for Spurious Emissions below 1GHz

Below 30MHz





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30MHz-1GHz



5.5 Set-up for Spurious Emissions above 1GHz

1GHz-18GHz





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18GHz-25GHz



End of the report

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