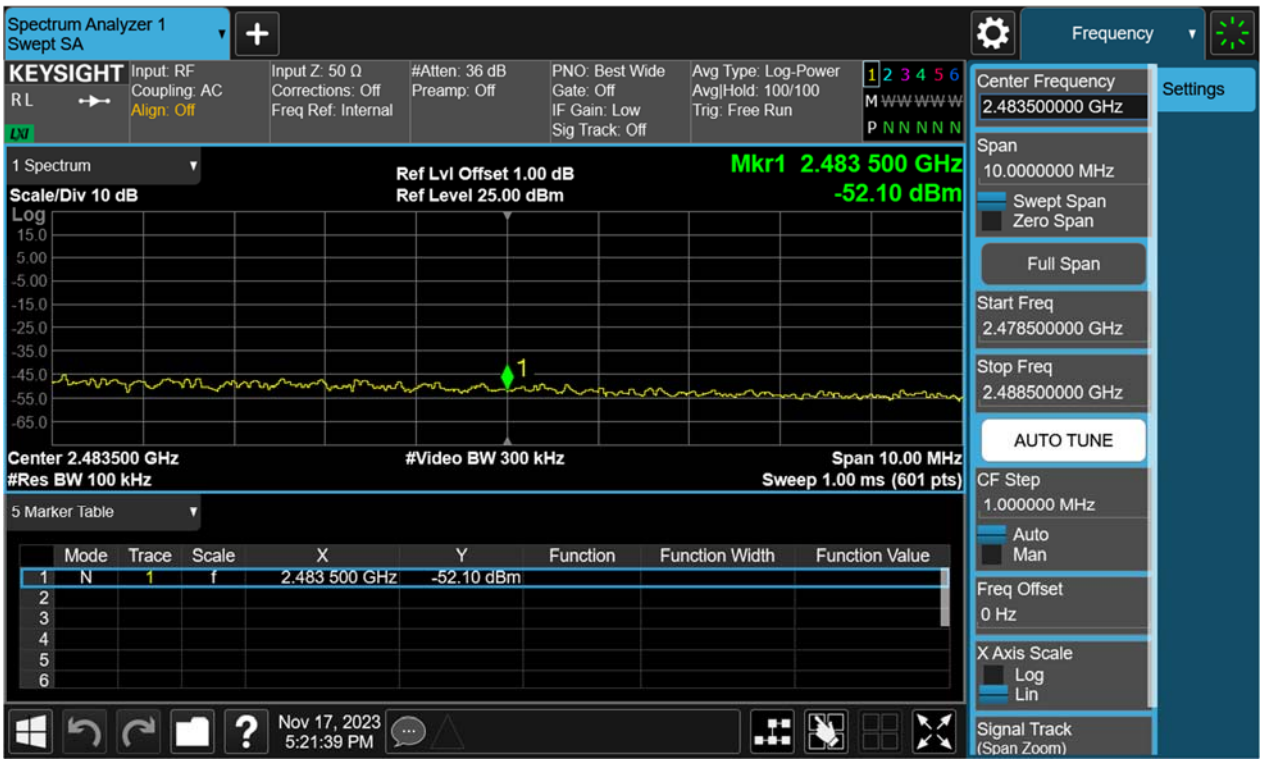
Band Edge



Conducted spurious emissions 30MHz-25GHz

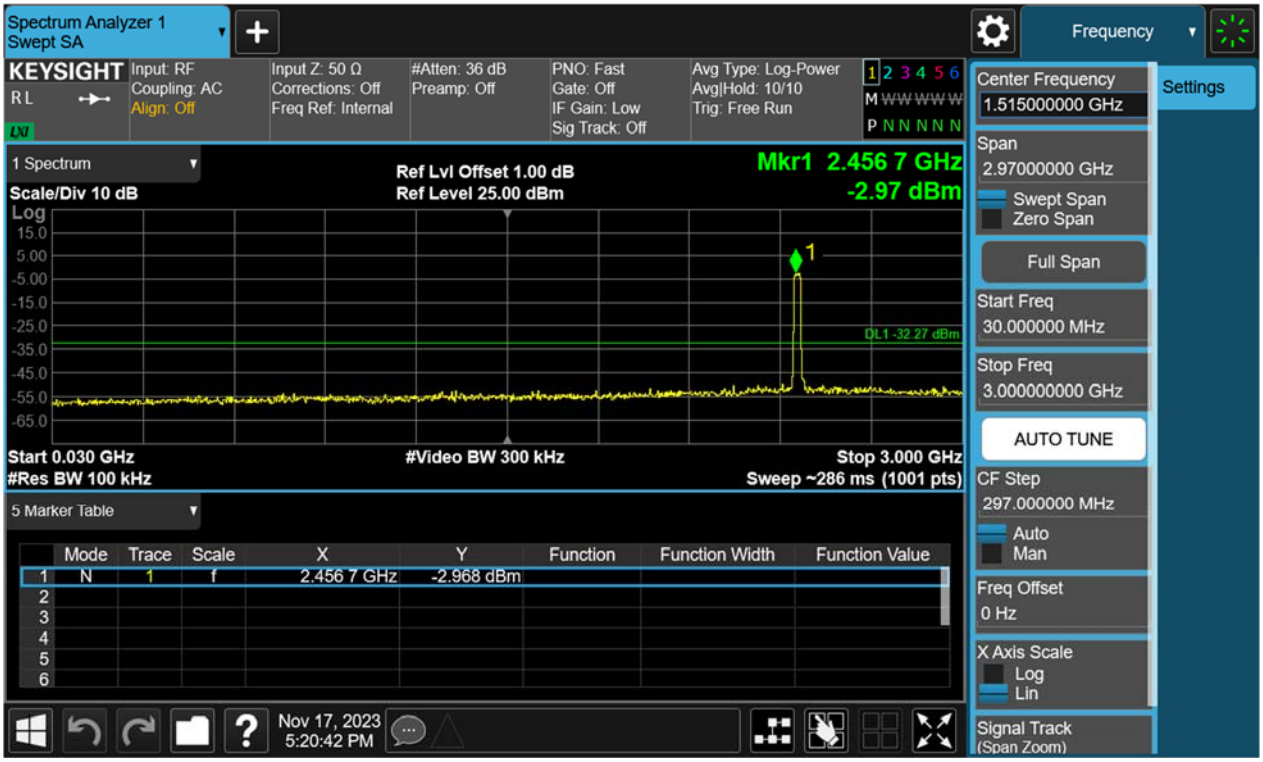


Figure 34: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2422MHz Carrier Level

Band Edge

Conducted spurious emissions 30MHz-25GHz

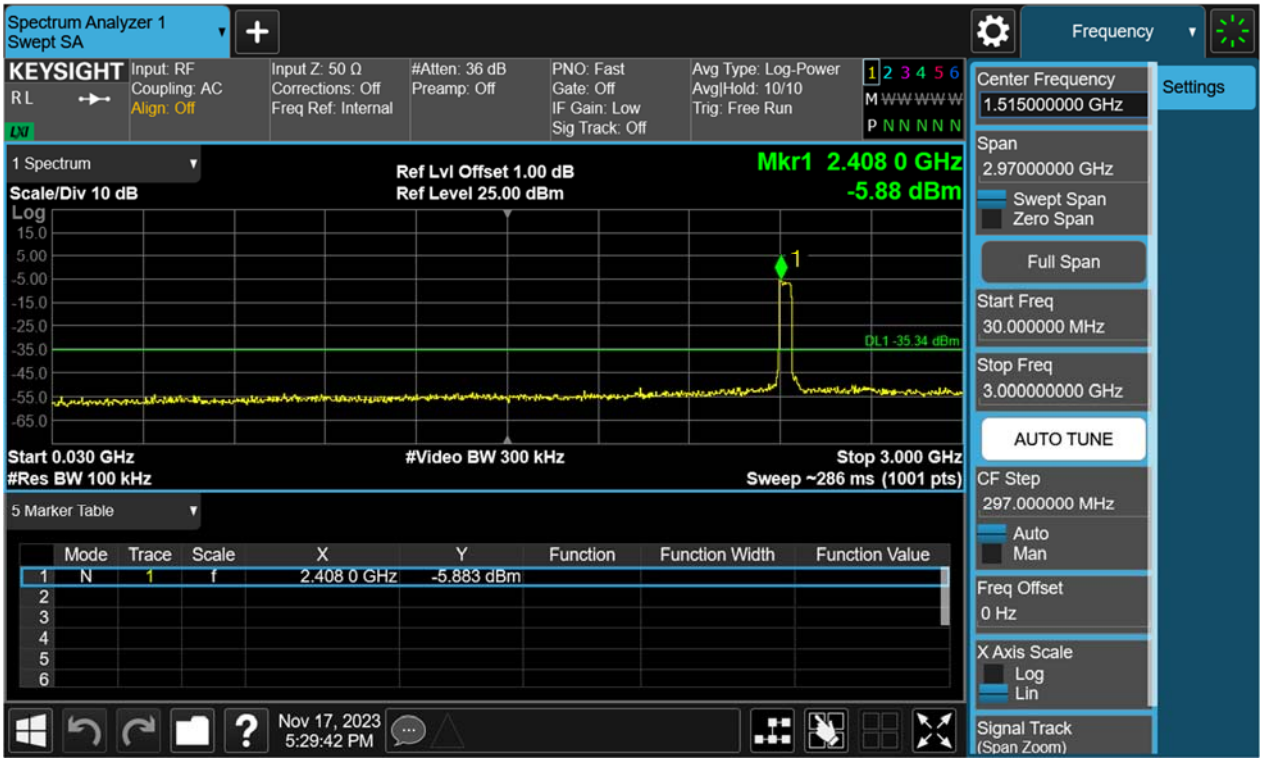
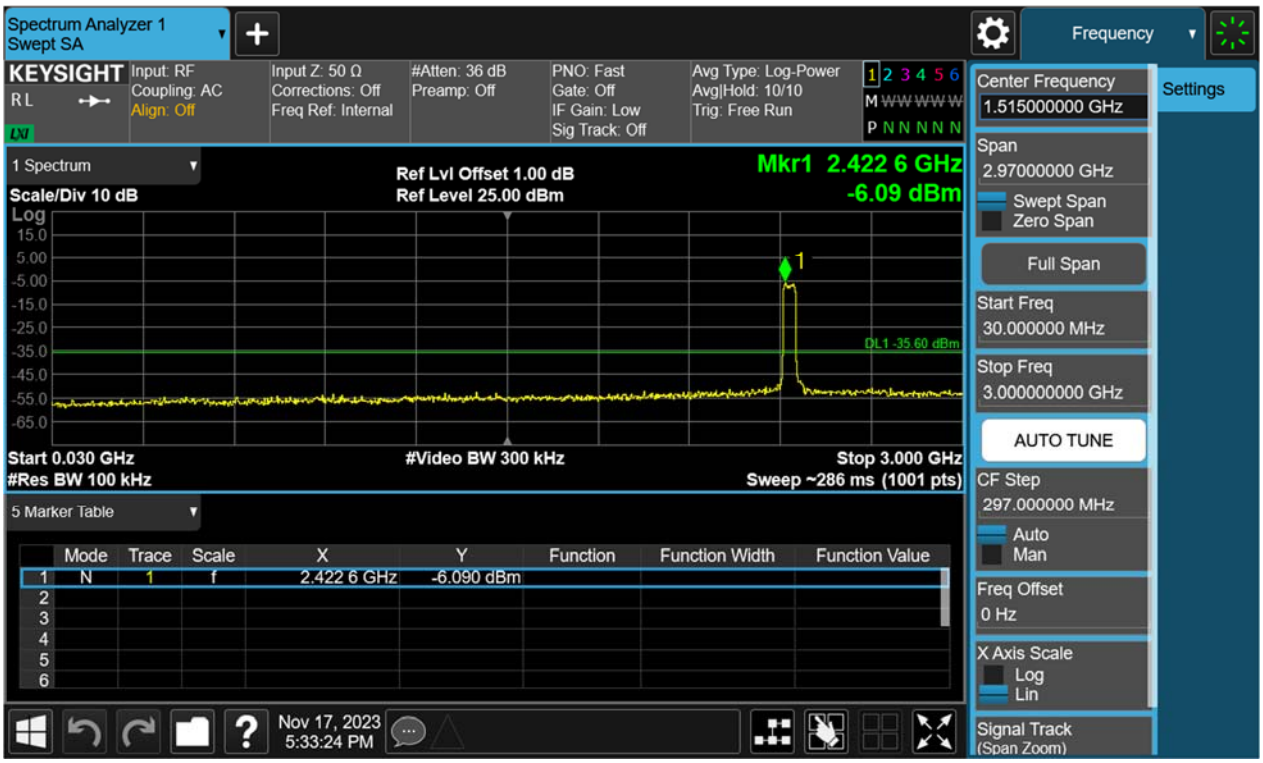


Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2437MHz Carrier Level

Conducted spurious emissions 30MHz-25GHz



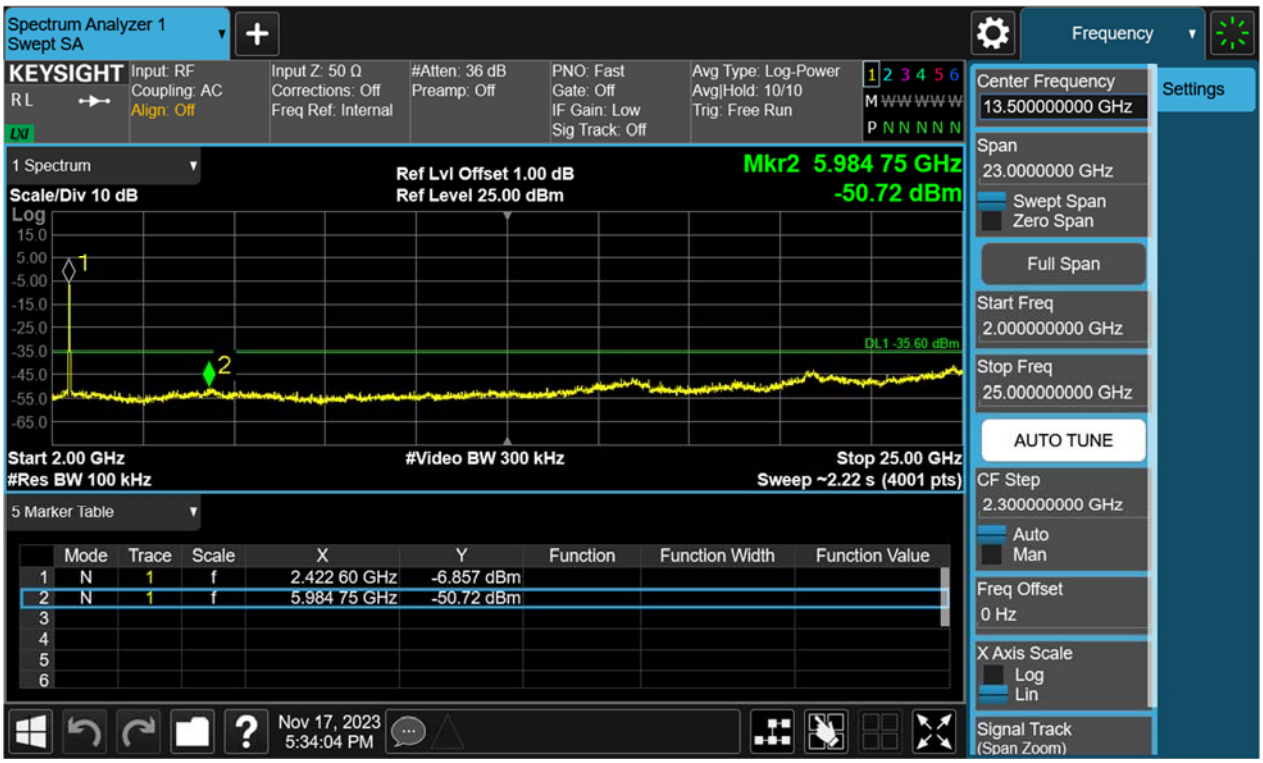
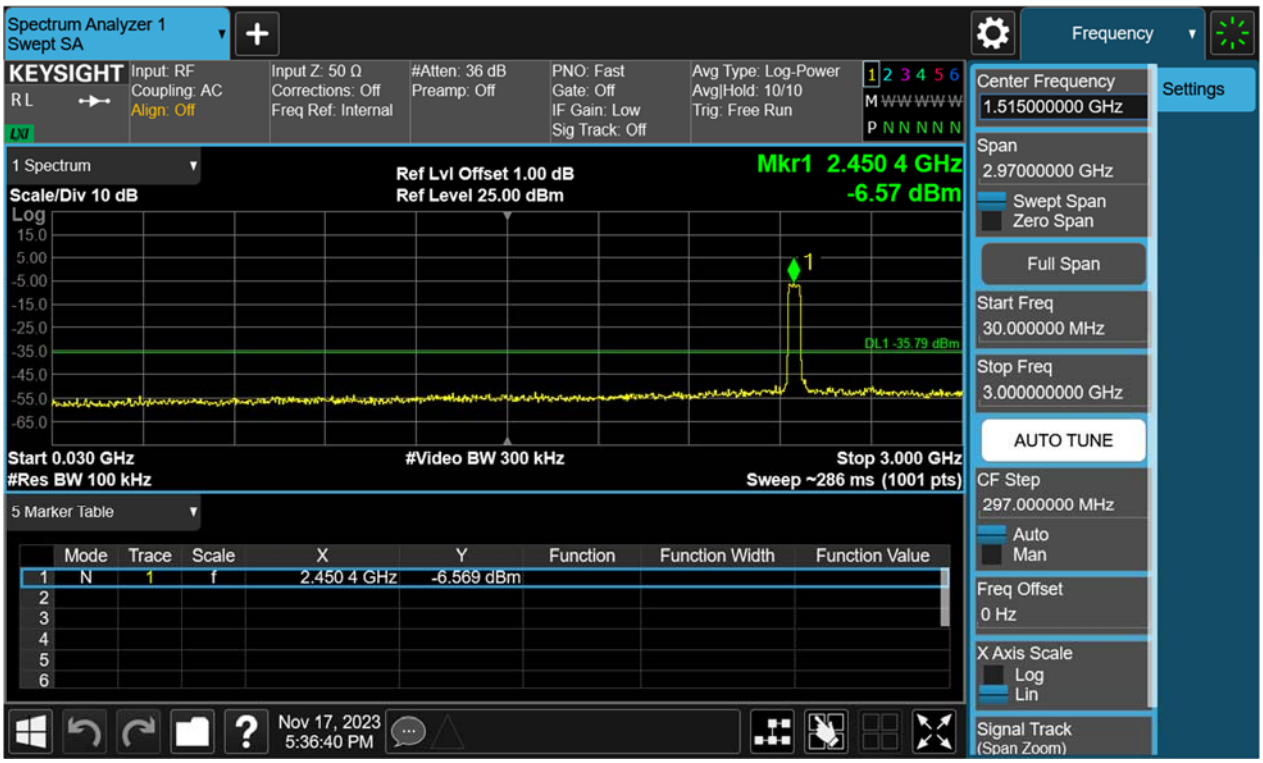


Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2452MHz Carrier Level

Band Edge

Conducted spurious emissions 30MHz-25GHz



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	:	25.1°C
Relative humidity	:	52%

Notes

Test plots please refer to the annex document "SHE23100101-02AE 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.

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	:	25.1°C
Relative humidity	:	52%

Notes:

1. Test plots please refer to the annex document "SHE23100101-02AE 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.

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

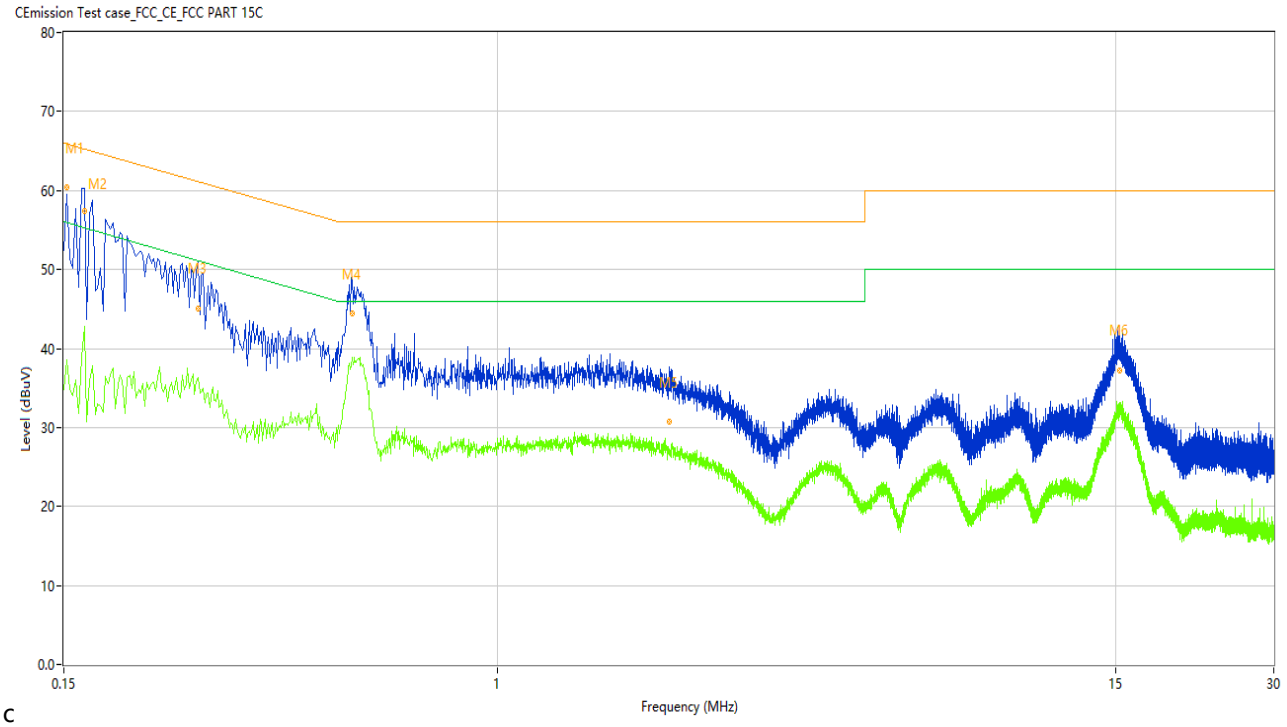
Test setup

Input Voltage	:	which received AC 120V, 60Hz Power
Operation Mode	:	A.1.a
Earthing	:	Disconnected to GND
Ambient temperature	:	26°C
Relative humidity	:	49%

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.

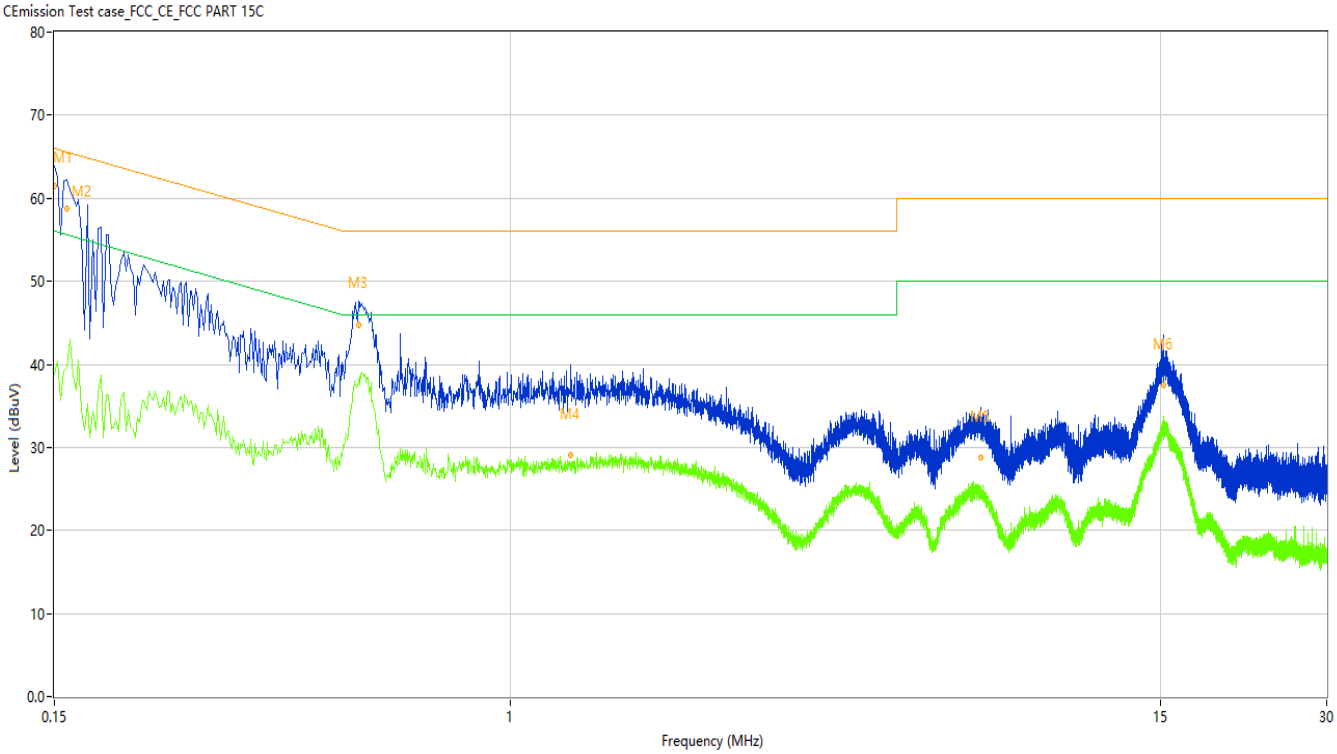
Figure 37: Conducted Emission on AC Mains, L Phase



C

No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	65.89	9.92	65.89	0.00	Peak	L	N/A
1*	0.152	60.36	9.92	65.89	5.53	QP	L	Pass
1**	0.152	38.60	9.92	55.89	17.29	AV	L	Pass
2	0.164	61.97	9.94	65.26	3.29	Peak	L	Pass
2*	0.164	57.42	9.94	65.26	7.84	QP	L	Pass
2**	0.164	42.76	9.94	55.26	12.50	AV	L	Pass
3	0.270	51.65	9.97	61.12	9.47	Peak	L	Pass
3*	0.270	45.11	9.97	61.12	16.01	QP	L	Pass
3**	0.270	36.28	9.97	51.12	14.84	AV	L	Pass
4	0.530	49.73	9.96	56.00	6.27	Peak	L	Pass
4*	0.530	44.46	9.96	56.00	11.54	QP	L	Pass
4**	0.530	38.83	9.96	46.00	7.17	AV	L	Pass
5	2.130	35.93	9.85	56.00	20.07	Peak	L	Pass
5*	2.130	30.73	9.85	56.00	25.27	QP	L	Pass
5**	2.130	27.25	9.85	46.00	18.75	AV	L	Pass
6	15.252	44.49	9.51	60.00	15.51	Peak	L	Pass
6*	15.252	37.24	9.51	60.00	22.76	QP	L	Pass
6**	15.252	32.46	9.51	50.00	17.54	AV	L	Pass

Figure 38: Conducted Emission on AC Mains, N Phase

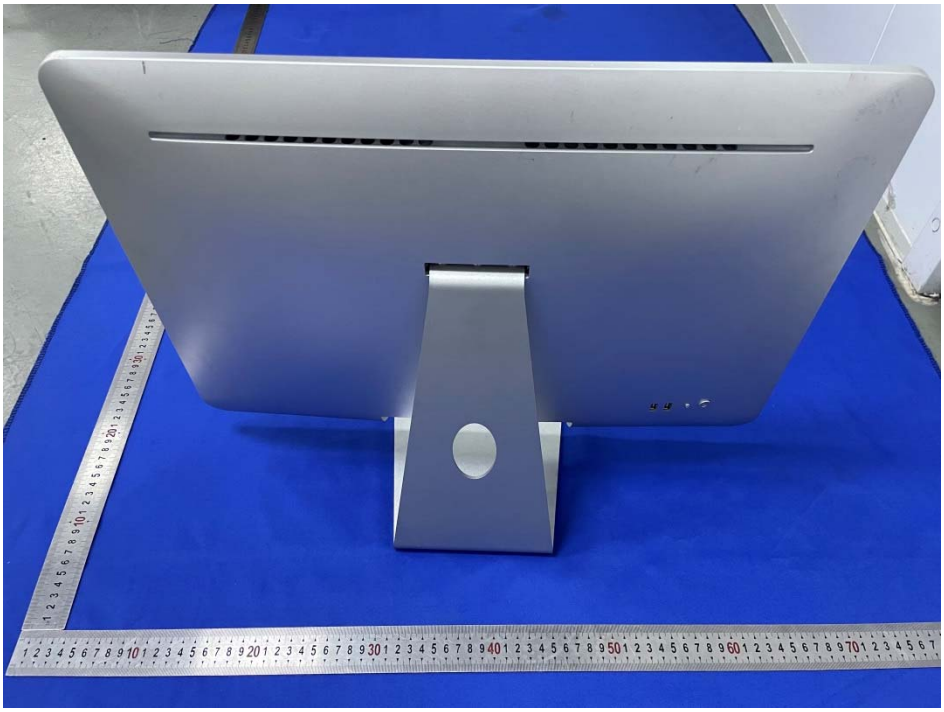


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	66.85	10.02	66.00	-0.85	Peak	N	N/A
1*	0.150	61.41	10.02	66.00	4.59	QP	N	Pass
1**	0.150	38.88	10.02	56.00	17.12	AV	N	Pass
2	0.158	63.22	10.03	65.57	2.35	Peak	N	Pass
2*	0.158	58.77	10.03	65.57	6.80	QP	N	Pass
2**	0.158	39.68	10.03	55.57	15.89	AV	N	Pass
3	0.532	50.28	10.06	56.00	5.72	Peak	N	Pass
3*	0.532	44.72	10.06	56.00	11.28	QP	N	Pass
3**	0.532	37.94	10.06	46.00	8.06	AV	N	Pass
4	1.288	37.54	9.94	56.00	18.46	Peak	N	Pass
4*	1.288	29.13	9.94	56.00	26.87	QP	N	Pass
4**	1.288	27.78	9.94	46.00	18.22	AV	N	Pass
5	7.110	34.22	9.84	60.00	25.78	Peak	N	Pass
5*	7.110	28.79	9.84	60.00	31.21	QP	N	Pass
5**	7.110	25.33	9.84	50.00	24.67	AV	N	Pass
6	15.242	43.76	9.59	60.00	16.24	Peak	N	Pass
6*	15.242	37.49	9.59	60.00	22.51	QP	N	Pass
6**	15.242	33.81	9.59	50.00	16.19	AV	N	Pass

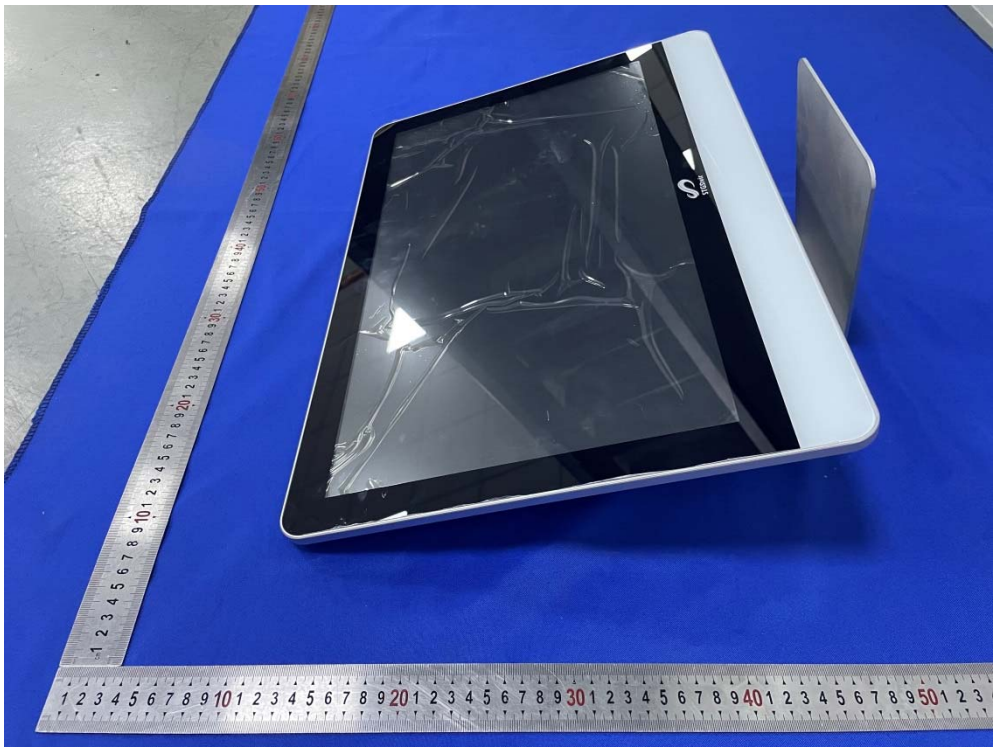
5 Appendixes

5.1 Photographs of the Sample

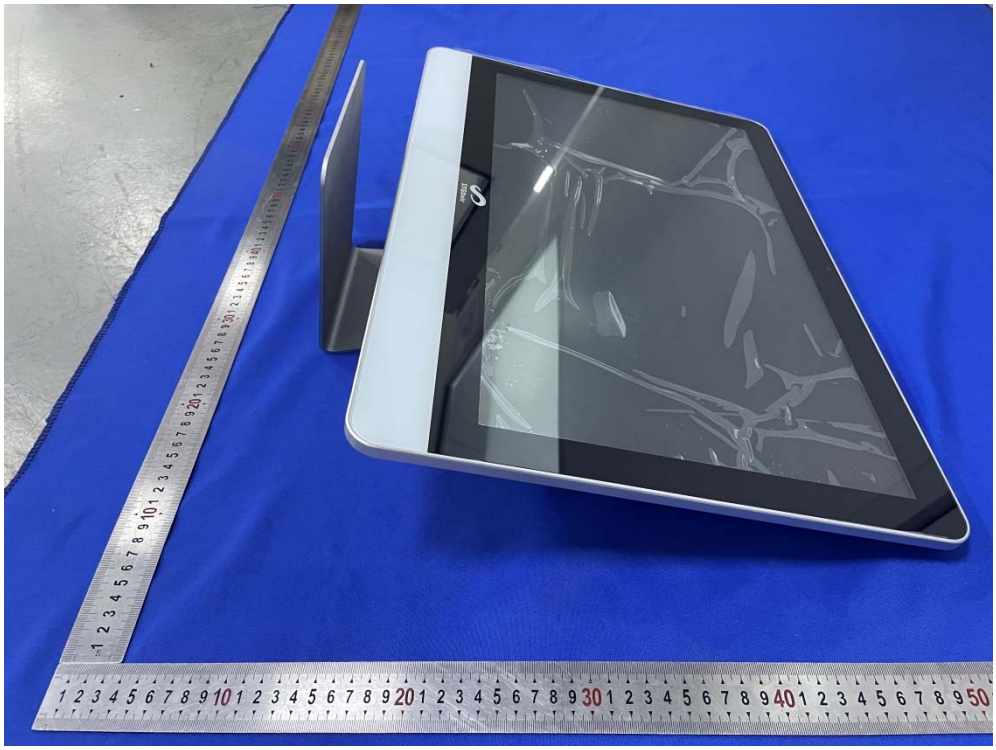
Front of the sample



Rear of the sample

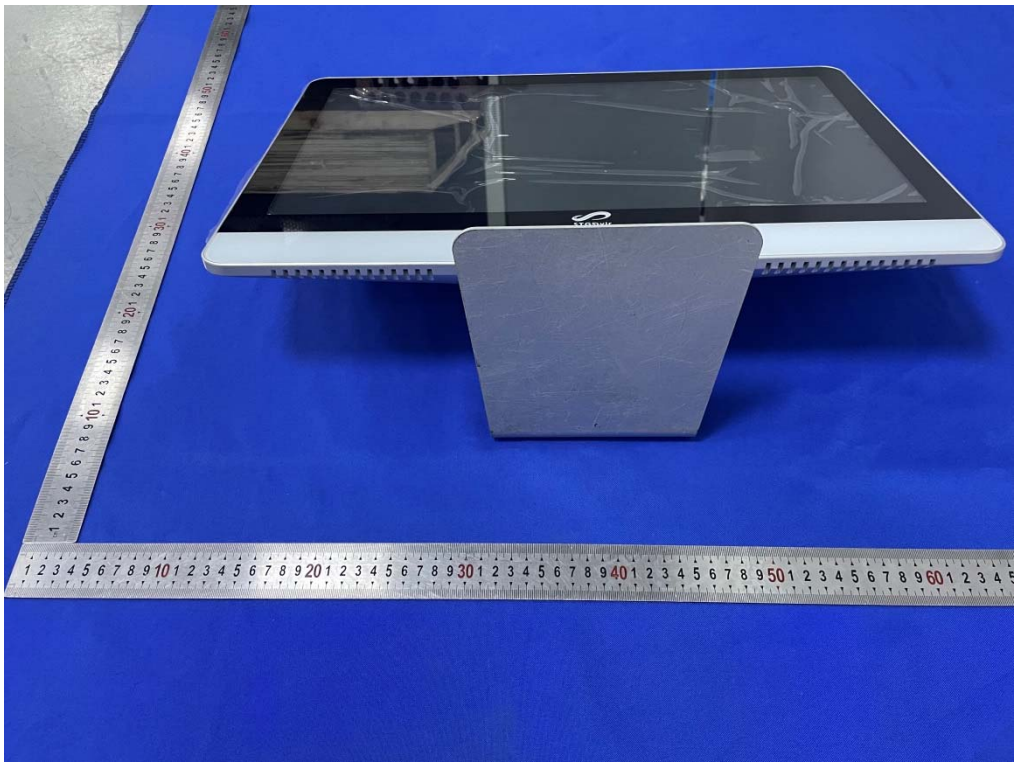


Left of the sample



Right of the sample

Top of the sample

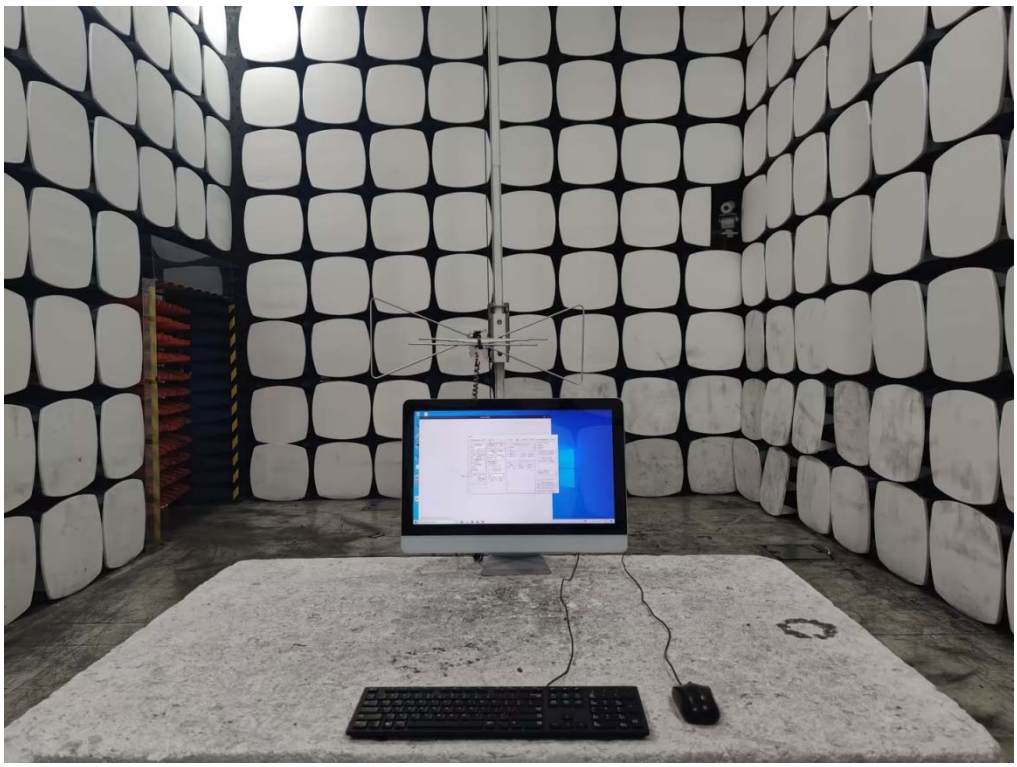


Bottom of the sample

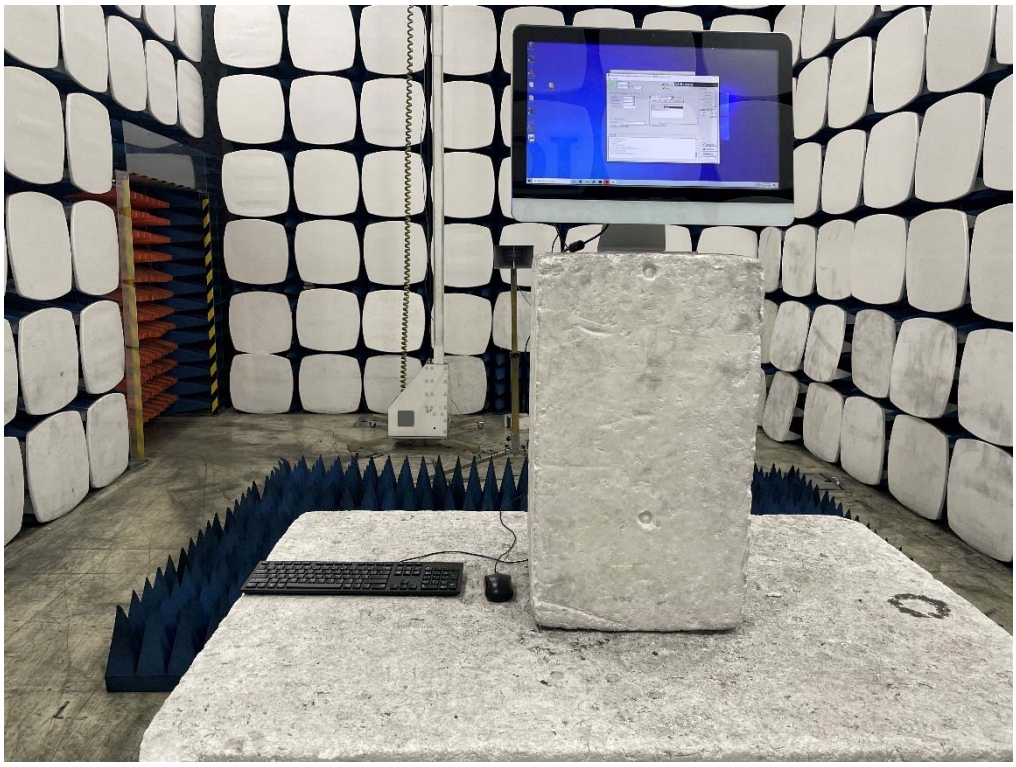
5.2 Set-up for Conducted Emissions

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