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Band Edge





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



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Band Edge





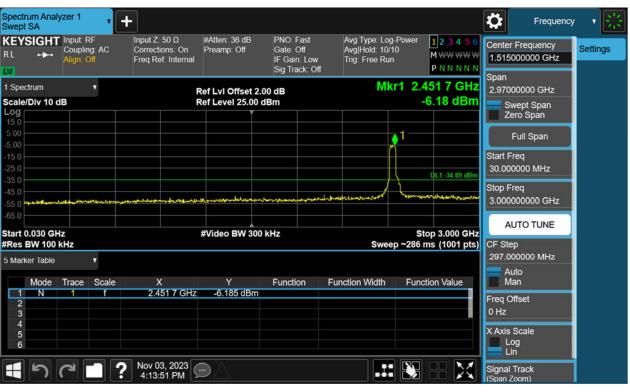
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Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2437MHz Carrier Level



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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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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 "SHE23100101-01AE 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 : 25.1°C

Relative humidity : 52%

Notes:

1. Test plots please refer to the annex document "SHE23100101-01AE 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 : which received AC 120V, 60Hz Power

Operation Mode : A.1.a

Earthing : Disconnected to GND

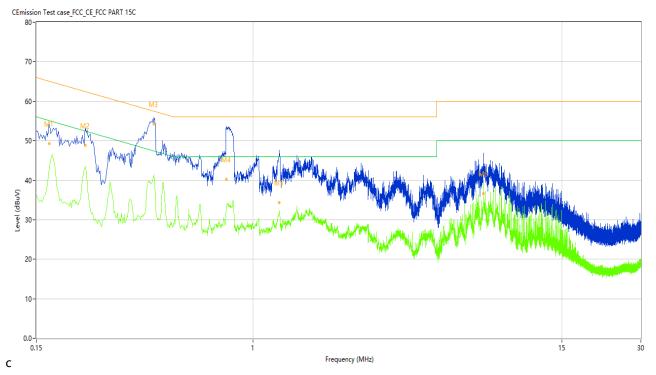
Ambient temperature : 26°C Relative humidity : 49%

For details refer to following test plot.

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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.

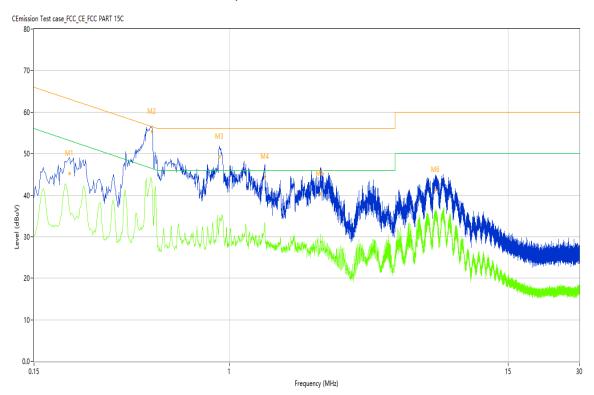
Figure 37: Conducted Emission on AC Mains, L Phase



No.	Frequency	Results (dBuV)	Factor	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
	(MHz)		(dB)					
1	0.168	55.82	9.94	65.06	9.24	Peak	L	0.168
1*	0.168	49.26	9.94	65.06	15.80	QP	L	0.168
1**	0.168	42.93	9.94	55.06	12.13	AV	L	0.168
2	0.230	54.65	9.96	62.45	7.80	Peak	L	0.230
2*	0.230	48.81	9.96	62.45	13.64	QP	L	0.230
2**	0.230	43.49	9.96	52.45	8.96	AV	L	0.230
3	0.420	55.96	9.97	57.45	1.49	Peak	L	0.420
3*	0.420	54.31	9.97	57.45	3.14	QP	L	0.420
3**	0.420	41.36	9.97	47.45	6.09	AV	L	0.420
4	0.794	46.31	9.94	56.00	9.69	Peak	L	0.794
4*	0.794	40.24	9.94	56.00	15.76	QP	L	0.794
4**	0.794	33.45	9.94	46.00	12.55	AV	L	0.794
5	1.262	41.64	9.84	56.00	14.36	Peak	L	1.262
5*	1.262	34.28	9.84	56.00	21.72	QP	L	1.262
5**	1.262	32.46	9.84	46.00	13.54	AV	L	1.262
6	7.554	43.66	9.76	60.00	16.34	Peak	L	7.554
6*	7.554	36.64	9.76	60.00	23.36	QP	L	7.554
6**	7.554	39.03	9.76	50.00	10.97	AV	L	7.554

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Figure 38: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.212	50.67	10.04	63.13	12.46	Peak	N	Pass
1*	0.212	45.24	10.04	63.13	17.89	QP	N	Pass
1**	0.212	36.25	10.04	53.13	16.88	AV	N	Pass
2	0.472	56.82	10.07	56.48	-0.34	Peak	N	N/A
2*	0.472	55.30	10.07	56.48	1.18	QP	N	Pass
2**	0.472	42.81	10.07	46.48	3.67	AV	N	Pass
3	0.910	51.96	10.03	56.00	4.04	Peak	N	Pass
3*	0.910	49.22	10.03	56.00	6.78	QP	N	Pass
3**	0.910	34.58	10.03	46.00	11.42	AV	N	Pass
4	1.414	47.37	9.94	56.00	8.63	Peak	N	Pass
4*	1.414	44.46	9.94	56.00	11.54	QP	N	Pass
4**	1.414	33.00	9.94	46.00	13.00	AV	N	Pass
5	2.422	46.74	9.93	56.00	9.26	Peak	N	Pass
5*	2.422	40.42	9.93	56.00	15.58	QP	N	Pass
5**	2.422	28.97	9.93	46.00	17.03	AV	N	Pass
6	7.412	45.34	9.83	60.00	14.66	Peak	N	Pass
6*	7.412	41.25	9.83	60.00	18.75	QP	N	Pass
6**	7.412	36.09	9.83	50.00	13.91	AV	N	Pass

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5 Appendixes

5.1 Photographs of the Sample



Front of the sample

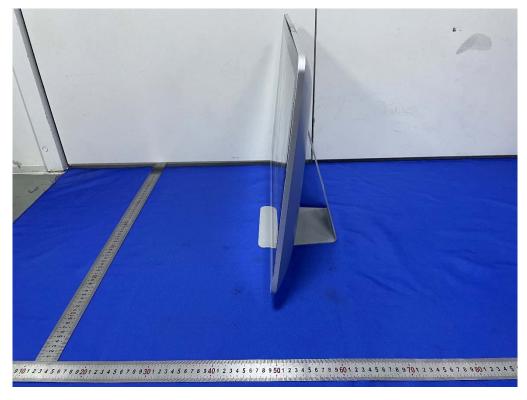


Rear of the sample

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Left of the sample

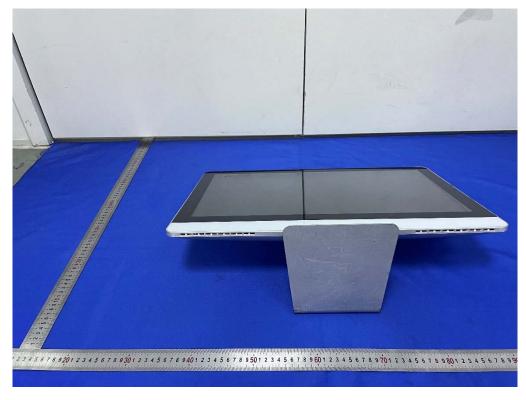


Right of the sample

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Top of the sample



Bottom of the sample

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5.2 Set-up for Conducted Emissions

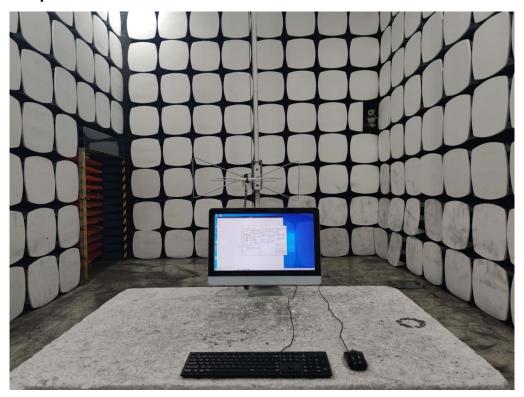


5.3 Set-up for Conducted RF test at Antenna Port

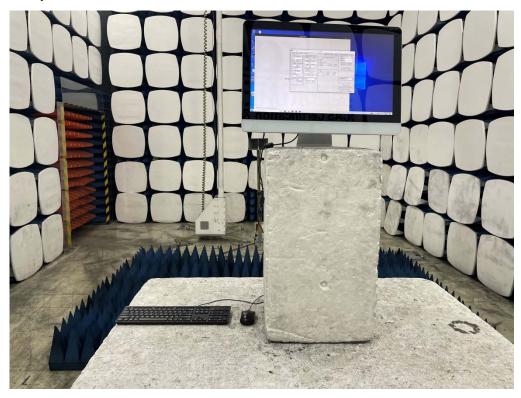


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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report