

7.10.AC Conducted Emissions Measurement

7.10.1.Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

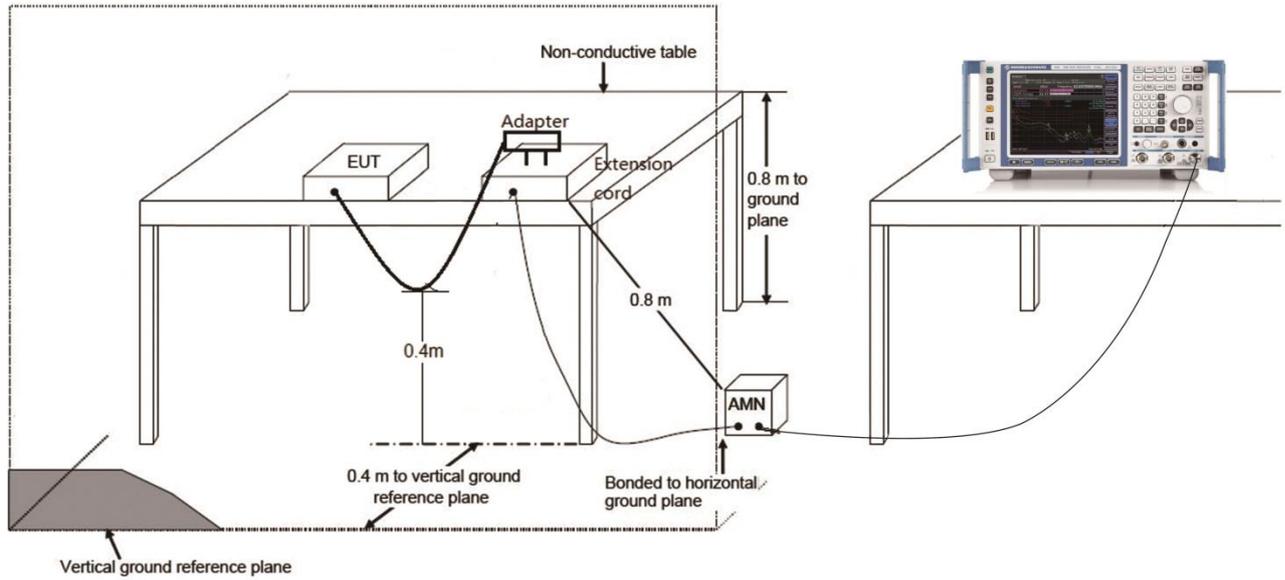
7.10.2.Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

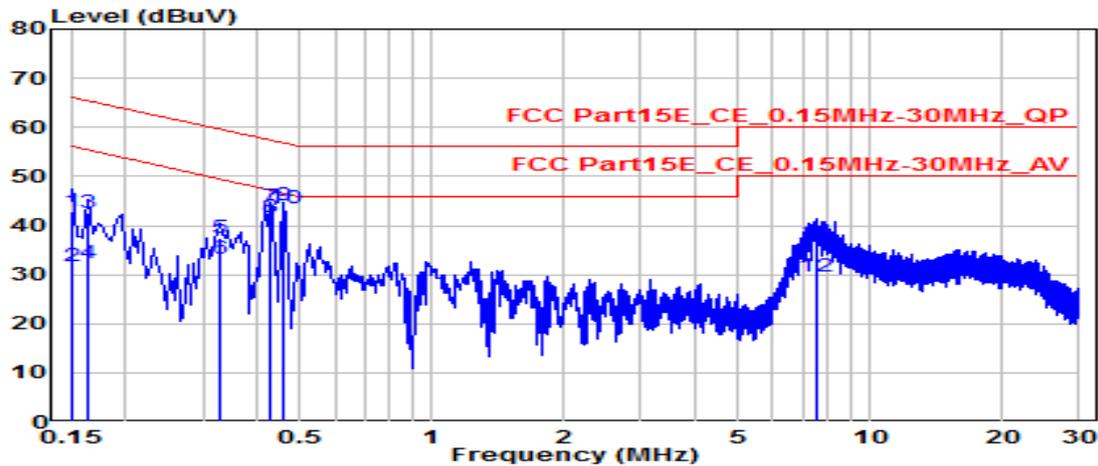
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

7.10.3. Test Setup



7.10.4. Test Result

EUT	AX5400 Ceiling Mount Wi-Fi 6 Access Point	Date of Test	2022-02-23
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	20.8°C /69%
Polarity	Line1	Site / Test Engineer	SR2 / Jay
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

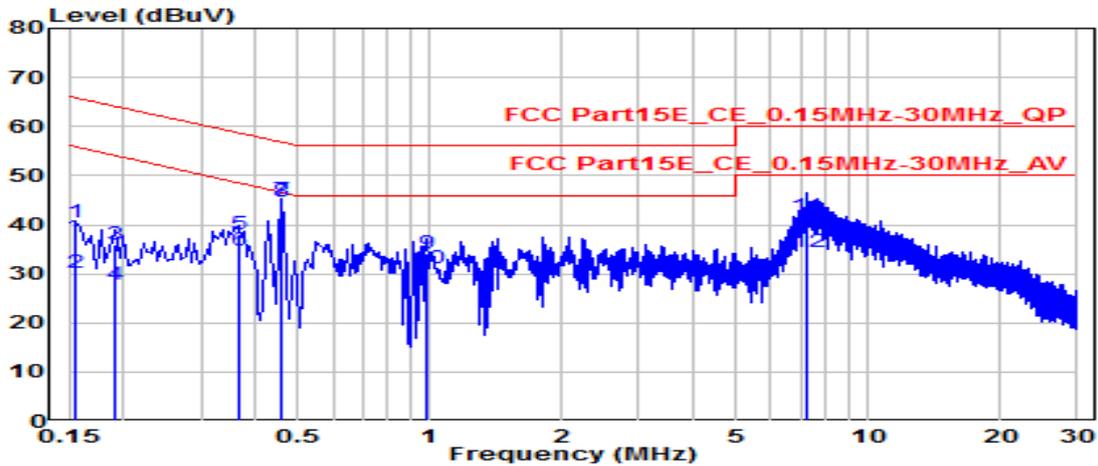


No	Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Remark (QP/PK/AV)
1	0.150	33.14	9.61	42.75	-23.25	66.00	QP
2	0.150	22.17	9.61	31.78	-24.22	56.00	Average
3	0.163	32.93	9.61	42.55	-22.74	65.28	QP
4	0.163	22.80	9.61	32.41	-22.88	55.28	Average
5	0.330	27.73	9.62	37.35	-22.10	59.45	QP
6	0.330	23.50	9.62	33.12	-16.33	49.45	Average
7	0.424	34.22	9.63	43.84	-13.52	57.36	QP
8	0.424	32.01	9.63	41.64	-5.72	47.36	Average
9	* 0.460	34.53	9.63	44.16	-12.53	56.68	QP
10	* 0.460	33.92	9.63	43.55	-3.14	46.68	Average
11	7.502	26.63	9.80	36.43	-23.57	60.00	QP
12	7.502	19.92	9.80	29.72	-20.28	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB).
3. Measurement (dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

EUT	AX5400 Ceiling Mount Wi-Fi 6 Access Point	Date of Test	2022-02-23
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	20.8°C /69%
Polarity	Neutral	Site / Test Engineer	SR2 / Jay
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1+2+3	Test Voltage	AC 120V/60Hz

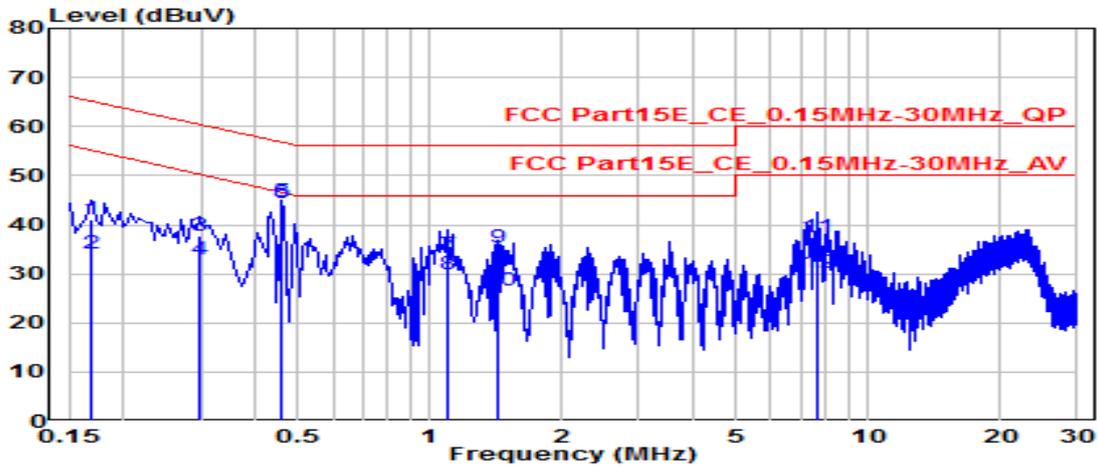


No	Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Remark (QP/PK/AV)
1	0.154	30.76	9.62	40.37	-25.38	65.75	QP
2	0.154	20.70	9.62	30.32	-25.43	55.75	Average
3	0.190	26.18	9.61	35.79	-28.22	64.01	QP
4	0.190	18.29	9.61	27.90	-26.11	54.01	Average
5	0.366	28.36	9.62	37.98	-20.61	58.59	QP
6	0.366	25.23	9.62	34.85	-13.74	48.59	Average
7	* 0.460	35.42	9.63	45.05	-11.63	56.68	QP
8	* 0.460	34.97	9.63	44.60	-2.08	46.68	Average
9	0.978	24.49	9.67	34.16	-21.84	56.00	QP
10	0.978	21.53	9.67	31.20	-14.80	46.00	Average
11	7.205	31.99	9.81	41.80	-18.20	60.00	QP
12	7.205	24.62	9.81	34.43	-15.57	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB).
3. Measurement (dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

EUT	AX5400 Ceiling Mount Wi-Fi 6 Access Point	Date of Test	2022-02-23
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	20.8°C /69%
Polarity	Line1	Site / Test Engineer	SR2 / Jay
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1+2+3	Test Voltage	AC 240V/60Hz

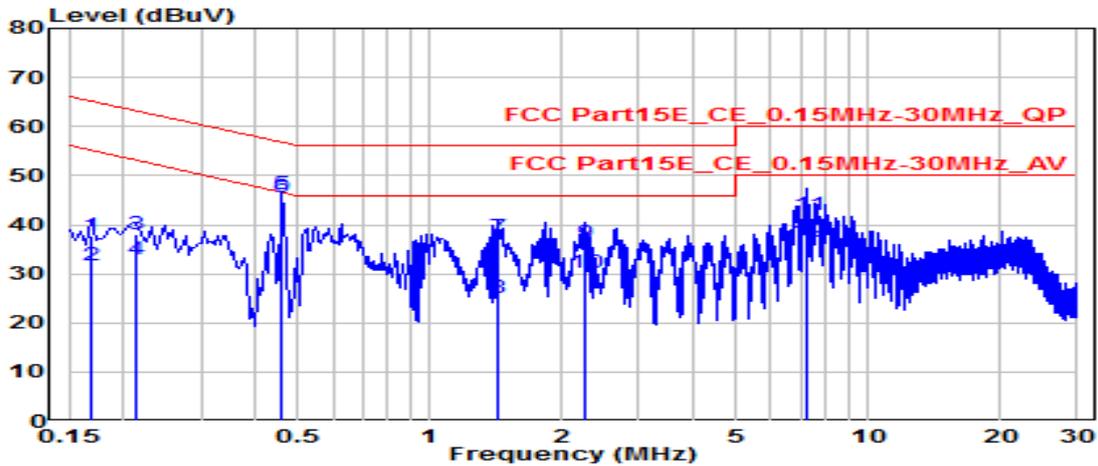


No	Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Remark (QP/PK/AV)
1	0.168	31.40	9.61	41.01	-24.05	65.06	QP
2	0.168	24.61	9.61	34.22	-20.84	55.06	Average
3	0.298	28.26	9.62	37.88	-22.41	60.28	QP
4	0.298	23.24	9.62	32.85	-17.43	50.28	Average
5	* 0.460	35.17	9.63	44.80	-11.89	56.68	QP
6	* 0.460	34.85	9.63	44.48	-2.20	46.68	Average
7	1.090	24.29	9.66	33.95	-22.05	56.00	QP
8	1.090	20.16	9.66	29.82	-16.18	46.00	Average
9	1.423	25.50	9.67	35.18	-20.82	56.00	QP
10	1.423	16.80	9.67	26.48	-19.52	46.00	Average
11	7.624	27.52	9.81	37.33	-22.67	60.00	QP
12	7.624	20.33	9.81	30.14	-19.86	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB).
3. Measurement (dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

EUT	AX5400 Ceiling Mount Wi-Fi 6 Access Point	Date of Test	2022-02-23
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	20.8°C /69%
Polarity	Neutral	Site / Test Engineer	SR2 / Jay
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1+2+3	Test Voltage	AC 240V/60Hz



No	Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Remark (QP/PK/AV)
1	0.168	28.06	9.62	37.68	-27.38	65.06	QP
2	0.168	22.03	9.62	31.65	-23.41	55.06	Average
3	0.213	28.30	9.61	37.91	-25.18	63.09	QP
4	0.213	23.30	9.61	32.91	-20.18	53.09	Average
5	* 0.460	36.46	9.63	46.09	-10.60	56.68	QP
6	* 0.460	36.05	9.63	45.68	-1.01	46.68	Average
7	1.423	27.77	9.68	37.45	-18.55	56.00	QP
8	1.423	15.52	9.68	25.20	-20.80	46.00	Average
9	2.256	26.65	9.70	36.34	-19.66	56.00	QP
10	2.256	20.51	9.70	30.21	-15.79	46.00	Average
11	7.277	32.09	9.81	41.91	-18.09	60.00	QP
12	7.277	26.61	9.81	36.42	-13.58	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB).
3. Measurement (dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

8. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with Part 15E of the FCC Rules.

————— The End —————

Appendix A : Test Setup Photograph

Refer to “2202TW0101-Setup Photo” file.

Appendix B : External Photograph

Refer to “2202TW0101-External Photo” file.

Appendix C : Internal Photograph

Refer to "2202TW0101-Internal Photo" file.