A.6.2 Transmitter Spurious Emission - Radiated

Method of Measurement: See ANSI C63.10-2013-clause 6.4 &6.5 & 6.6

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength(μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

Measurement Results:

802.11b mode

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.A.6.2.1	**P**
	11	Fig.A.6.2.2	**P**

802.11g mode

Mode	Channel	Test Results	Conclusion
802.11g	1	Fig.A.6.2.3	**P**
	11	Fig.A.6.2.4	**P**

802.11n-HT20 mode

Mode	Channel	Test Results	Conclusion
802.11n (HT20)	1	Fig.A.6.2.5	**P**
	11	Fig.A.6.2.6	**P**

802.11n-HT40 mode

Mode	Channel	Test Results	Conclusion
802.11n (HT40)	3	Fig.A.6.2.7	**P**
	9	Fig.A.6.2.8	**P**

Conclusion: Pass

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+Antenna Factor

Peak

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4824.000	51.51	-37.70	33.00	56.21	74.00	22.49	V
17354.000	46.51	-28.60	43.40	31.71	74.00	27.49	H
14079.500	44.36	-30.20	41.70	32.86	74.00	29.64	V
12831.000	42.66	-31.90	39.90	34.66	74.00	31.34	H
8726.500	41.80	-34.80	37.90	38.70	74.00	32.20	H
2383.200	52.30	-19.80	28.20	43.90	74.00	21.70	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4873.500	53.75	-37.50	33.40	57.85	74.00	20.25	V
17921.500	47.22	-29.40	46.00	30.62	74.00	26.78	V
14012.000	43.97	-31.10	41.60	33.47	74.00	30.03	V
10754.000	43.05	-33.00	38.50	37.65	74.00	30.95	V
8601.500	41.94	-35.00	37.50	39.44	74.00	32.06	V
7786.500	41.22	-35.60	36.50	40.32	74.00	32.78	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	52.32	-37.60	33.30	56.62	74.00	21.68	V
16943.500	47.27	-29.70	40.60	36.37	74.00	26.73	V
14072.500	44.22	-30.20	41.70	32.72	74.00	29.78	H
12174.000	42.94	-32.30	38.90	36.34	74.00	31.06	V
9719.000	41.70	-34.50	37.80	38.40	74.00	32.30	V
2494.600	51.63	-19.70	28.20	43.13	74.00	22.37	V

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4824.000	51.27	-37.70	33.00	55.97	74.00	22.73	V
17379.000	46.88	-29.50	43.80	32.58	74.00	27.12	H
13949.500	43.72	-30.60	41.40	32.92	74.00	30.28	H
10605.000	42.74	-33.50	38.30	37.94	74.00	31.26	V
8516.500	42.13	-34.30	37.40	39.03	74.00	31.87	V
2360.700	51.35	-19.60	28.20	42.75	74.00	22.65	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4874.000	53.31	-37.50	33.40	57.41	74.00	20.69	V
17326.500	46.66	-29.50	42.90	33.26	74.00	27.34	H
13933.500	44.01	-30.60	41.40	33.21	74.00	29.99	V
11358.500	43.14	-33.40	38.90	37.74	74.00	30.86	V
9647.500	42.12	-34.30	37.60	38.82	74.00	31.88	V
6760.000	41.44	-36.00	35.20	42.24	74.00	32.56	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	52.21	-37.60	33.30	56.51	74.00	21.79	V
17018.000	47.36	-29.30	40.90	35.86	74.00	26.64	V
13962.000	44.16	-30.60	41.50	33.26	74.00	29.84	V
12810.500	43.45	-31.50	39.80	35.15	74.00	30.55	H
9487.000	42.14	-34.60	37.70	39.04	74.00	31.86	V
2485.900	52.28	-19.70	28.20	43.78	74.00	21.72	V

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4823.500	51.53	-37.70	33.00	56.23	74.00	22.47	V
17346.500	46.31	-28.60	43.40	31.51	74.00	27.69	H
13937.500	44.03	-30.60	41.40	33.23	74.00	29.97	H
12832.500	43.11	-31.90	39.90	35.11	74.00	30.89	V
9338.500	41.57	-34.10	37.80	37.87	74.00	32.43	H
2358.700	51.95	-19.60	28.20	43.35	74.00	22.05	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4873.500	54.01	-37.50	33.40	58.11	74.00	19.99	V
16957.000	47.10	-29.70	40.60	36.20	74.00	26.90	V
13979.500	44.06	-30.60	41.50	33.16	74.00	29.94	V
11357.500	43.32	-33.40	38.90	37.92	74.00	30.68	V
9604.000	42.06	-34.30	37.60	38.76	74.00	31.94	V
7527.500	41.56	-35.50	36.30	40.76	74.00	32.44	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	52.57	-37.60	33.30	56.87	74.00	21.43	V
17430.000	46.24	-28.50	44.20	30.54	74.00	27.76	H
14102.000	44.12	-30.20	41.70	32.62	74.00	29.88	H
12435.500	42.53	-31.50	39.00	35.03	74.00	31.47	V
9622.000	42.32	-34.30	37.60	39.02	74.00	31.68	V
2486.900	52.29	-19.70	28.20	43.79	74.00	21.71	H

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16960.000	45.38	-29.70	40.60	34.48	74.00	28.62	V
13969.000	42.36	-30.60	41.50	31.46	74.00	31.64	V
12354.500	40.76	-32.30	39.00	34.16	74.00	33.24	V
9104.000	39.18	-34.60	37.70	36.08	74.00	34.82	V
7291.000	38.86	-35.40	36.60	37.66	74.00	35.14	V
2370.400	52.37	-19.60	28.20	43.77	74.00	21.63	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16943.500	45.98	-29.70	40.60	35.08	74.00	28.02	H
13938.500	42.95	-30.60	41.40	32.15	74.00	31.05	H
12382.500	41.89	-31.90	38.90	34.89	74.00	32.11	V
9414.500	41.26	-33.60	37.90	36.96	74.00	32.74	V
7217.000	39.95	-35.40	36.20	39.15	74.00	34.05	V
4873.500	39.01	-37.50	33.40	43.11	74.00	34.99	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16884.000	45.76	-29.30	40.30	34.76	74.00	28.24	H
13956.000	43.33	-30.60	41.40	32.53	74.00	30.67	V
12379.000	42.35	-31.90	38.90	35.35	74.00	31.65	V
9397.500	41.59	-34.10	37.90	37.79	74.00	32.41	V
7222.500	39.89	-35.40	36.20	39.09	74.00	34.11	V
2486.400	58.75	-19.70	28.20	50.25	74.00	15.25	H

Average

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4824.000	49.46	-37.70	33.00	54.16	54.00	4.54	V
17054.500	37.33	-29.40	41.10	25.63	54.00	16.67	V
14077.500	34.74	-30.20	41.70	23.24	54.00	19.26	H
12376.500	33.67	-31.90	38.90	26.67	54.00	20.33	V
9408.500	32.95	-33.60	37.90	28.65	54.00	21.05	V
2344.500	41.11	-19.60	28.20	32.51	54.00	12.89	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4874.000	51.81	-37.50	33.40	55.91	54.00	2.19	V
17346.500	38.63	-28.60	43.40	23.83	54.00	15.37	V
13979.500	35.08	-30.60	41.50	24.18	54.00	18.92	V
12836.500	34.02	-31.90	39.90	26.02	54.00	19.98	V
9618.500	32.97	-34.30	37.60	29.67	54.00	21.03	V
7313.000	32.75	-35.40	36.60	31.55	54.00	21.25	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	50.00	-37.60	33.30	54.30	54.00	4.00	V
17338.500	37.88	-28.60	43.40	23.08	54.00	16.12	V
13972.500	35.29	-30.60	41.50	24.39	54.00	18.71	H
11388.000	33.84	-32.60	39.00	27.44	54.00	20.16	H
9393.500	33.15	-34.10	37.90	29.35	54.00	20.85	V
2497.800	40.90	-19.70	28.20	32.40	54.00	13.10	V

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4824.000	49.61	-37.70	33.00	54.31	54.00	4.39	V
17030.500	37.61	-29.40	41.10	25.91	54.00	16.39	V
13946.500	35.82	-30.60	41.40	25.02	54.00	18.18	V
12845.000	34.03	-31.90	39.90	26.03	54.00	19.97	V
9611.500	32.67	-34.30	37.60	29.37	54.00	21.33	V
2388.400	40.62	-19.80	28.20	32.22	54.00	13.38	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4874.000	51.47	-37.50	33.40	55.57	54.00	2.53	V
17349.500	37.89	-28.60	43.40	23.09	54.00	16.11	V
13922.000	35.06	-30.60	41.40	24.26	54.00	18.94	V
12360.500	33.80	-32.30	39.00	27.20	54.00	20.20	V
9418.000	33.36	-33.60	37.90	29.06	54.00	20.64	V
7212.500	32.08	-35.40	36.20	31.28	54.00	21.92	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	50.24	-37.60	33.30	54.54	54.00	3.76	V
17344.000	37.55	-28.60	43.40	22.75	54.00	16.45	H
13960.000	35.27	-30.60	41.40	24.47	54.00	18.73	H
11413.500	34.16	-32.60	39.00	27.76	54.00	19.84	V
9411.500	33.26	-33.60	37.90	28.96	54.00	20.74	V
2485.100	41.14	-19.70	28.20	32.64	54.00	12.86	H

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4824.000	49.45	-37.70	33.00	54.15	54.00	4.55	V
17326.000	37.51	-29.50	42.90	24.11	54.00	16.49	H
13929.000	35.46	-30.60	41.40	24.66	54.00	18.54	V
12371.500	34.11	-32.30	39.00	27.51	54.00	19.89	H
9391.500	32.75	-34.10	37.90	28.95	54.00	21.25	H
2359.300	40.74	-19.60	28.20	32.14	54.00	13.26	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4874.000	52.25	-37.50	33.40	56.35	54.00	1.75	V
16947.000	37.94	-29.70	40.60	27.04	54.00	16.06	V
14089.000	35.17	-30.20	41.70	23.67	54.00	18.83	V
12807.000	34.56	-31.50	39.80	26.26	54.00	19.44	V
9408.500	32.82	-33.60	37.90	28.52	54.00	21.18	V
7309.500	32.80	-35.40	36.60	31.60	54.00	21.20	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4924.000	50.40	-37.60	33.30	54.70	54.00	3.60	V
16910.500	37.49	-29.30	40.30	26.49	54.00	16.51	V
13910.000	35.09	-31.10	41.30	24.89	54.00	18.91	V
12836.000	33.85	-31.90	39.90	25.85	54.00	20.15	V
7497.500	32.81	-35.10	36.40	31.51	54.00	21.19	V
2489.700	41.18	-19.70	28.20	32.68	54.00	12.82	V

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17336.000	36.57	-28.60	43.40	21.77	54.00	17.43	V
13908.000	33.15	-31.10	41.30	22.95	54.00	20.85	V
12622.000	31.56	-32.20	39.30	24.46	54.00	22.44	V
9399.500	30.77	-34.10	37.90	26.97	54.00	23.23	V
6055.000	30.49	-36.30	34.50	32.29	54.00	23.51	V
2389.600	41.41	-19.80	28.20	33.01	54.00	12.59	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17372.500	36.83	-28.60	43.40	22.03	54.00	17.17	V
13986.000	34.03	-30.60	41.50	23.13	54.00	19.97	V
12858.500	32.45	-31.90	39.90	24.45	54.00	21.55	V
9398.000	31.70	-34.10	37.90	27.90	54.00	22.30	V
6092.500	31.45	-37.00	34.50	33.95	54.00	22.55	V
4873.500	30.55	-37.50	33.40	34.65	54.00	23.45	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17358.500	37.05	-28.60	43.40	22.25	54.00	16.95	H
13921.500	34.21	-30.60	41.40	23.41	54.00	19.79	H
12838.500	32.99	-31.90	39.90	24.99	54.00	21.01	H
9622.500	32.38	-34.30	37.60	29.08	54.00	21.62	V
7317.500	31.47	-35.40	36.60	30.27	54.00	22.53	V
2487.900	43.08	-19.70	28.20	34.58	54.00	10.92	H

Test graphs as below:

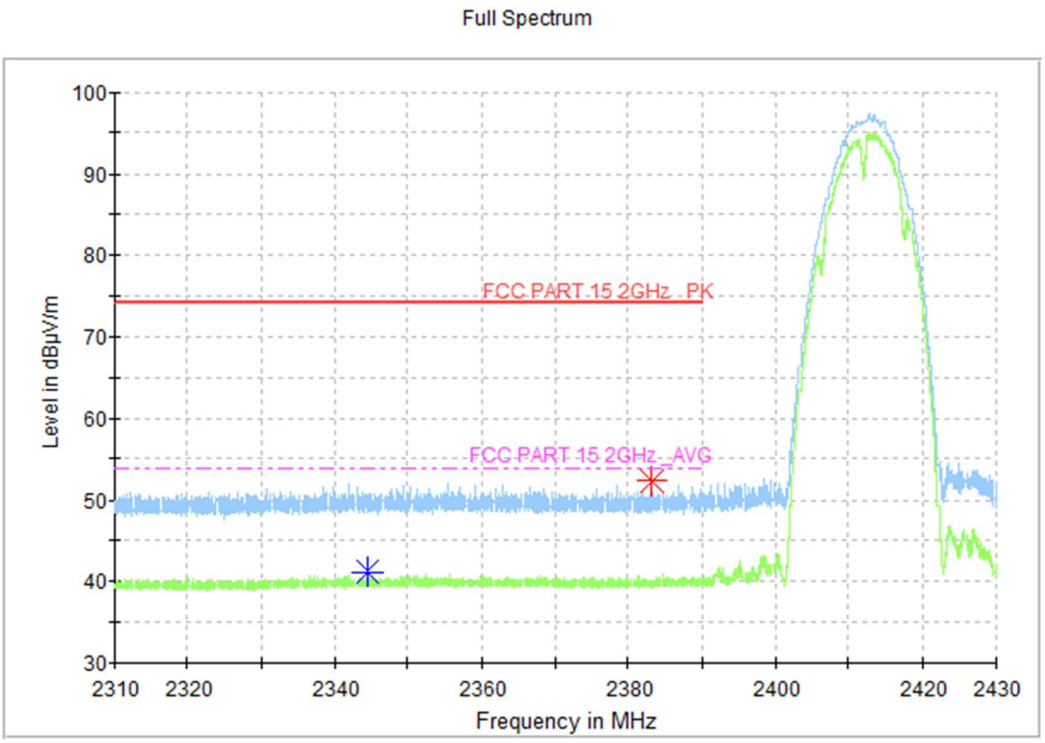

Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.43GHz

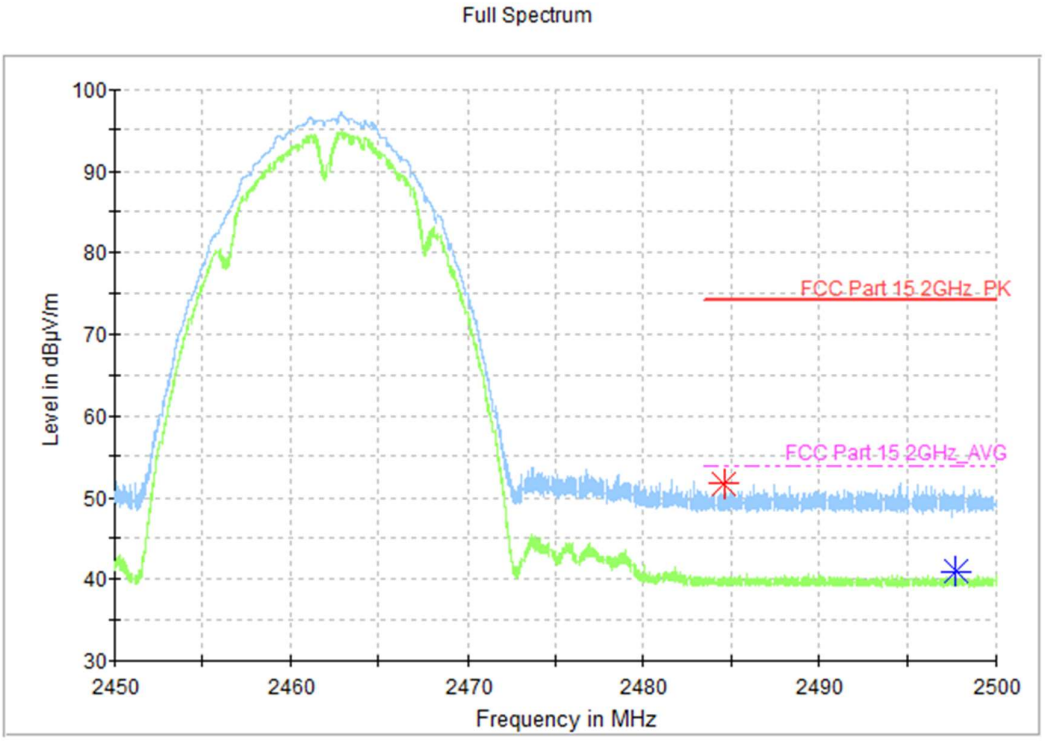

Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

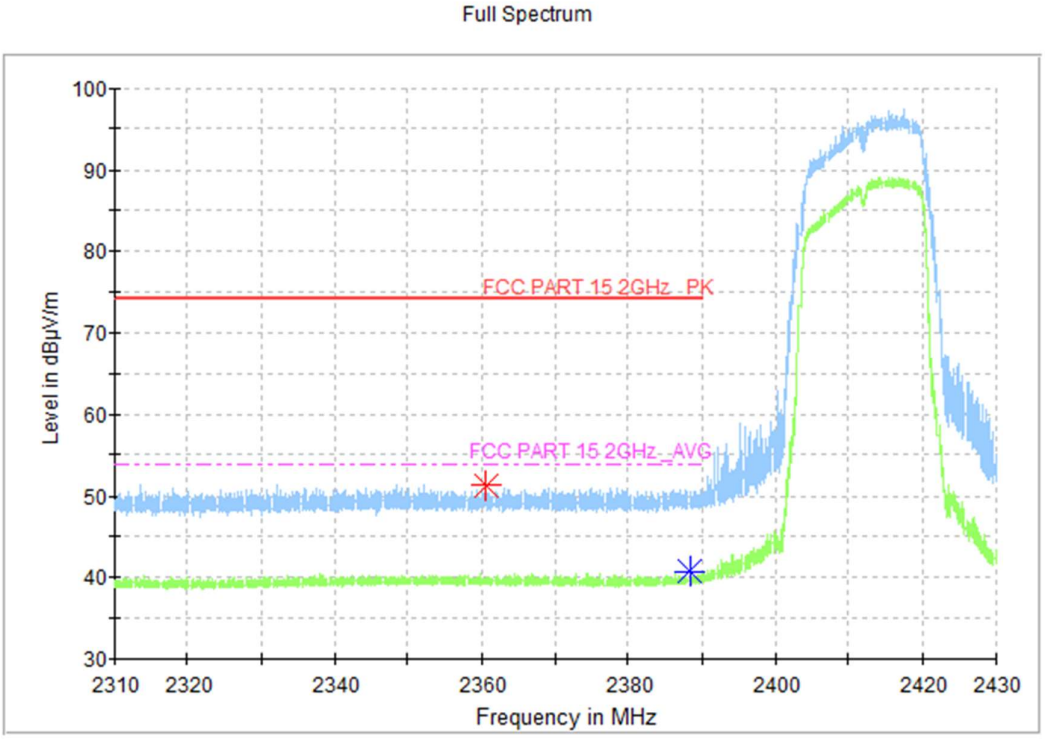

Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz

- 2.43GHz

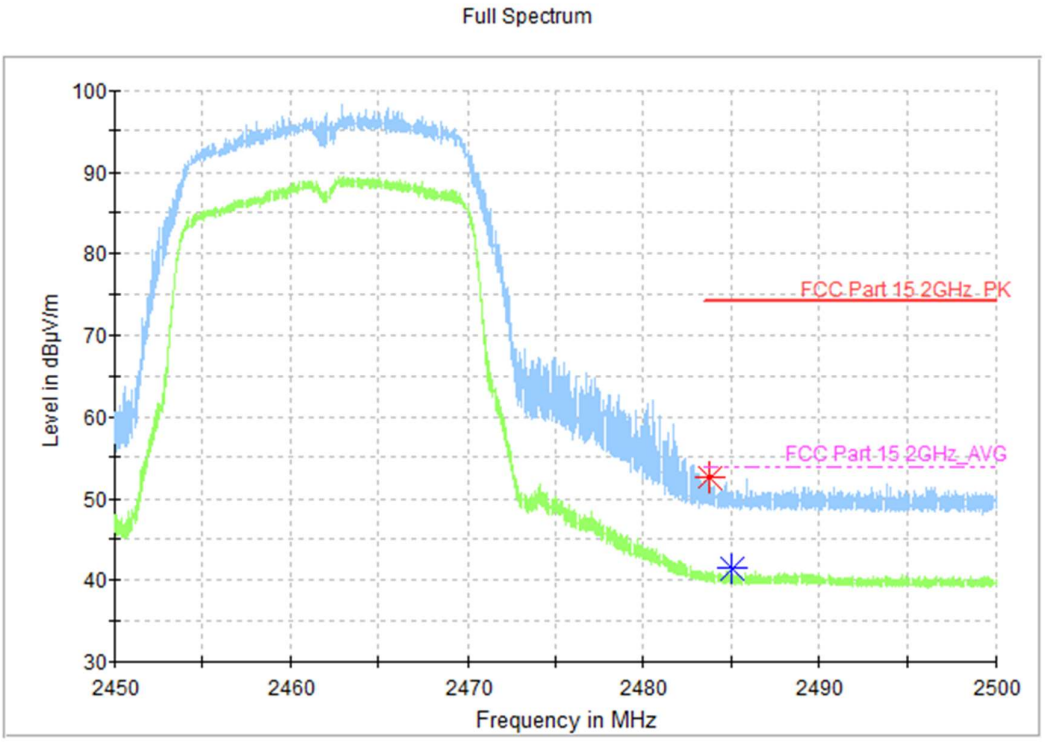

Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

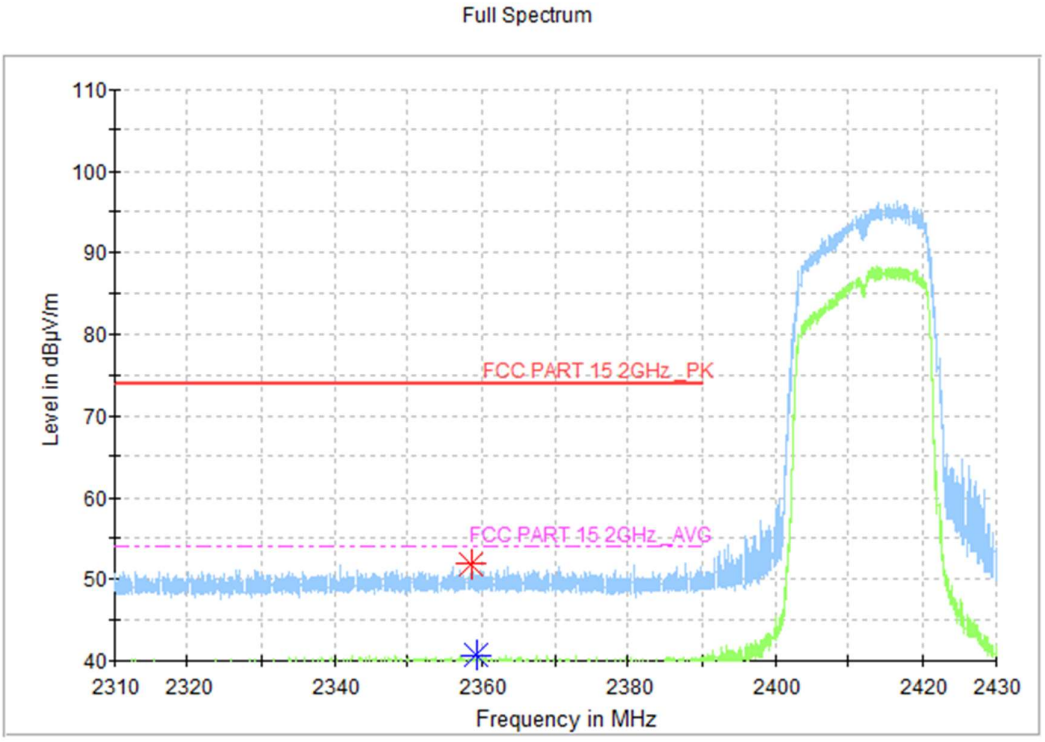

Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.43GHz

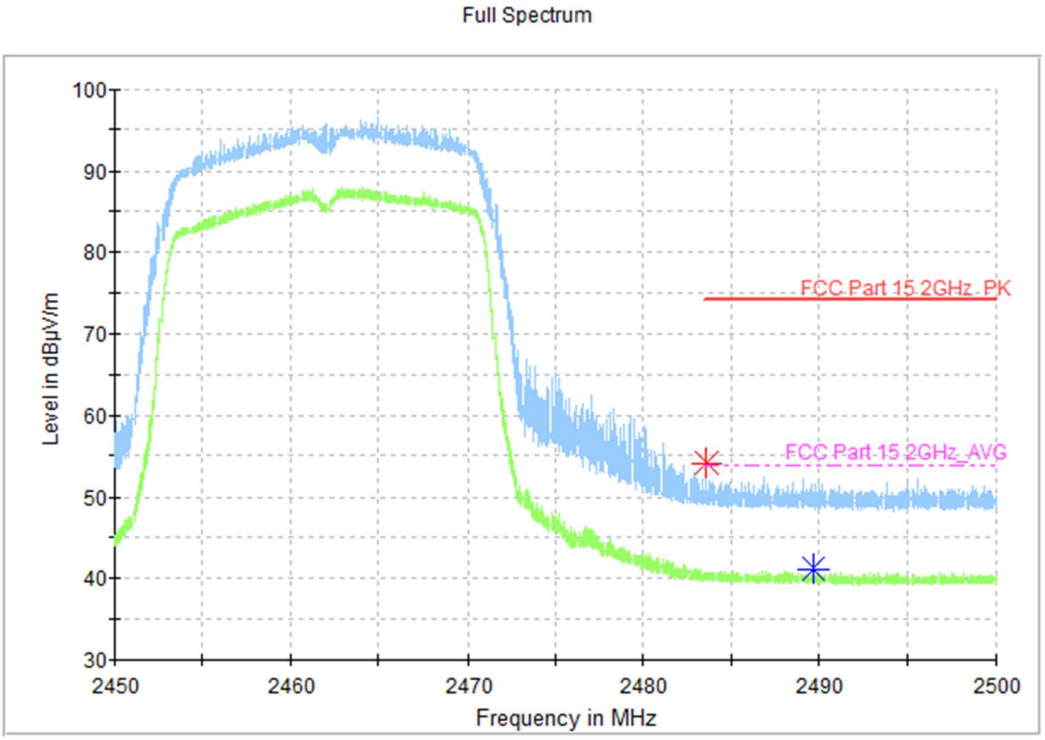

Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

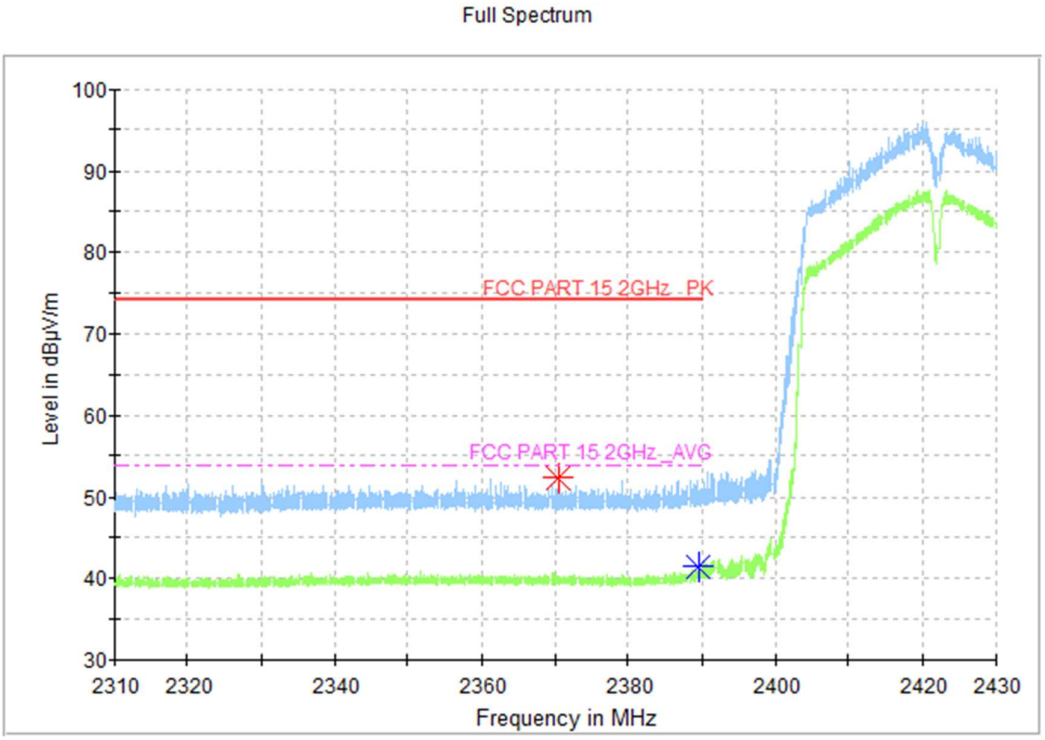

Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.43GHz

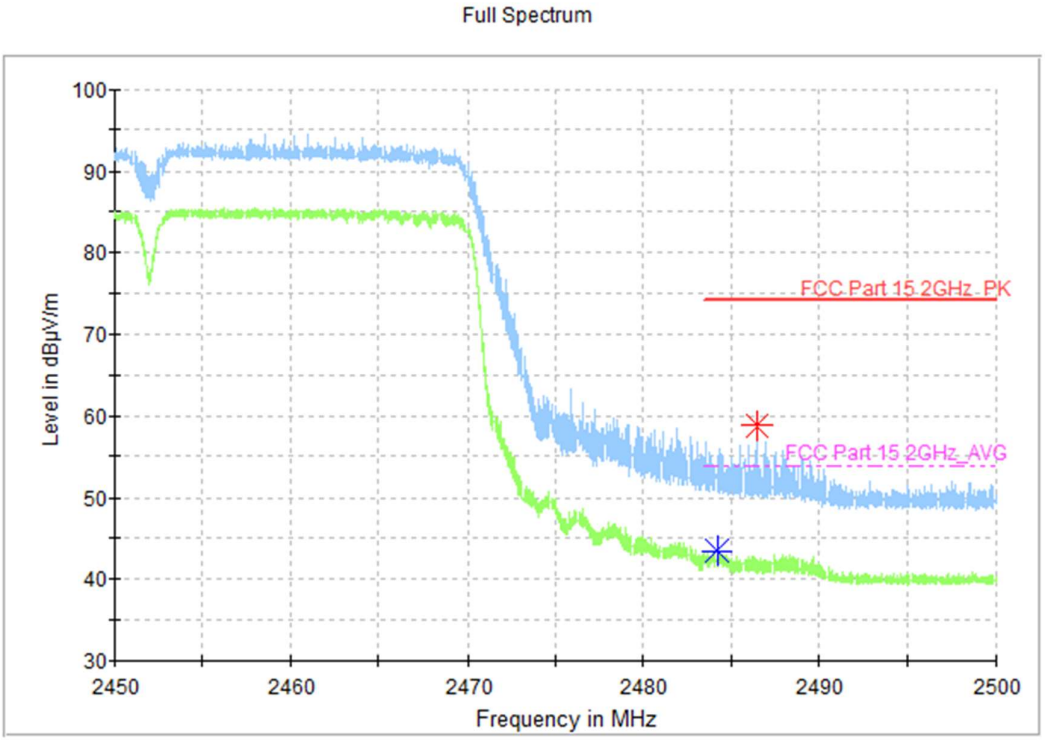

Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

A.7. AC Power-line Conducted Emission

Summary

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section

Method of Measurement:

See Clause 6.2 of ANSI C63.10 specifically.

See Clause 4 and Clause 5 of ANSI C63.10 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1	Fig.A.7.2	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: Pass

Test graphs as below:

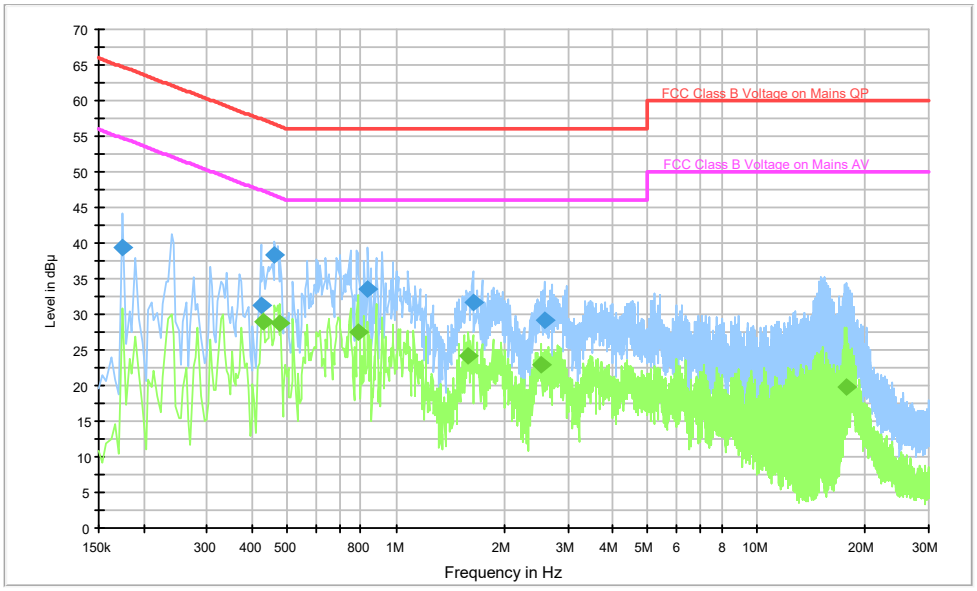

Fig.A.7.1 AC Powerline Conducted Emission-802.11b

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	39.4	2000.0	9.000	On	L1	19.7	25.3	64.8
0.422000	31.3	2000.0	9.000	On	N	19.7	26.1	57.4
0.462000	38.4	2000.0	9.000	On	L1	19.7	18.2	56.7
0.838000	33.5	2000.0	9.000	On	N	19.6	22.5	56.0
1.634000	31.6	2000.0	9.000	On	N	19.6	24.4	56.0
2.574000	29.2	2000.0	9.000	On	N	19.6	26.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.430000	28.9	2000.0	9.000	On	L1	19.7	18.4	47.3
0.478000	28.8	2000.0	9.000	On	L1	19.7	17.6	46.4
0.786000	27.6	2000.0	9.000	On	L1	19.7	18.4	46.0
1.590000	24.1	2000.0	9.000	On	L1	19.6	21.9	46.0
2.522000	22.9	2000.0	9.000	On	L1	19.6	23.1	46.0
17.814000	19.8	2000.0	9.000	On	L1	19.8	30.2	50.0

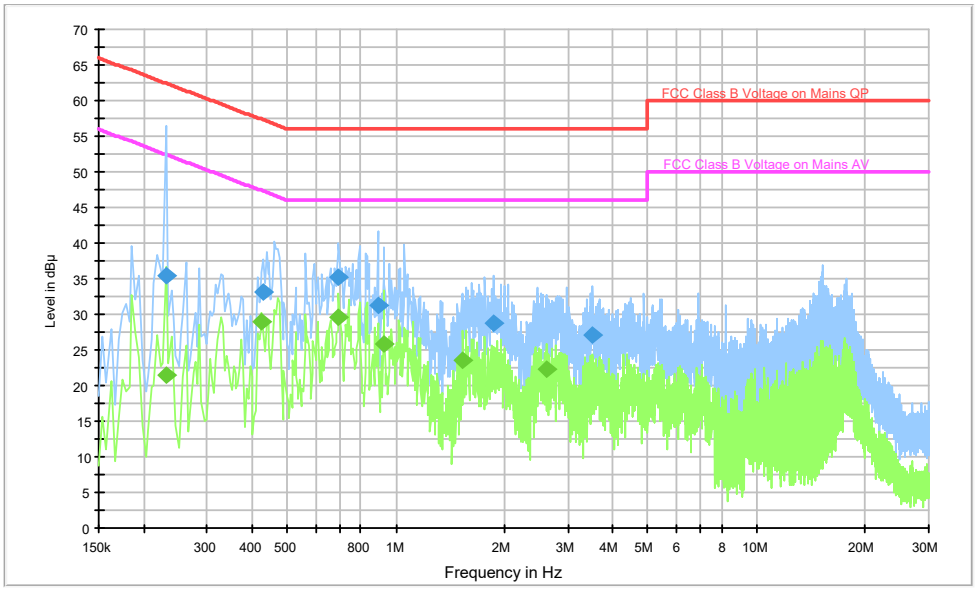

Fig.A.7.2 AC Powerline Conducted Emission-Idle

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.230000	35.5	2000.0	9.000	On	N	19.7	26.9	62.4
0.430000	33.0	2000.0	9.000	On	N	19.7	24.2	57.3
0.694000	35.1	2000.0	9.000	On	N	19.7	20.9	56.0
0.890000	31.2	2000.0	9.000	On	N	19.6	24.8	56.0
1.862000	28.8	2000.0	9.000	On	N	19.6	27.2	56.0
3.522000	27.2	2000.0	9.000	On	N	19.6	28.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.230000	21.5	2000.0	9.000	On	N	19.7	30.9	52.4
0.426000	29.0	2000.0	9.000	On	L1	19.7	18.3	47.3
0.694000	29.6	2000.0	9.000	On	L1	19.7	16.4	46.0
0.926000	25.9	2000.0	9.000	On	L1	19.7	20.1	46.0
1.538000	23.5	2000.0	9.000	On	L1	19.6	22.5	46.0
2.610000	22.3	2000.0	9.000	On	L1	19.6	23.7	46.0

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 26th day of June 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

*****END OF REPORT*****