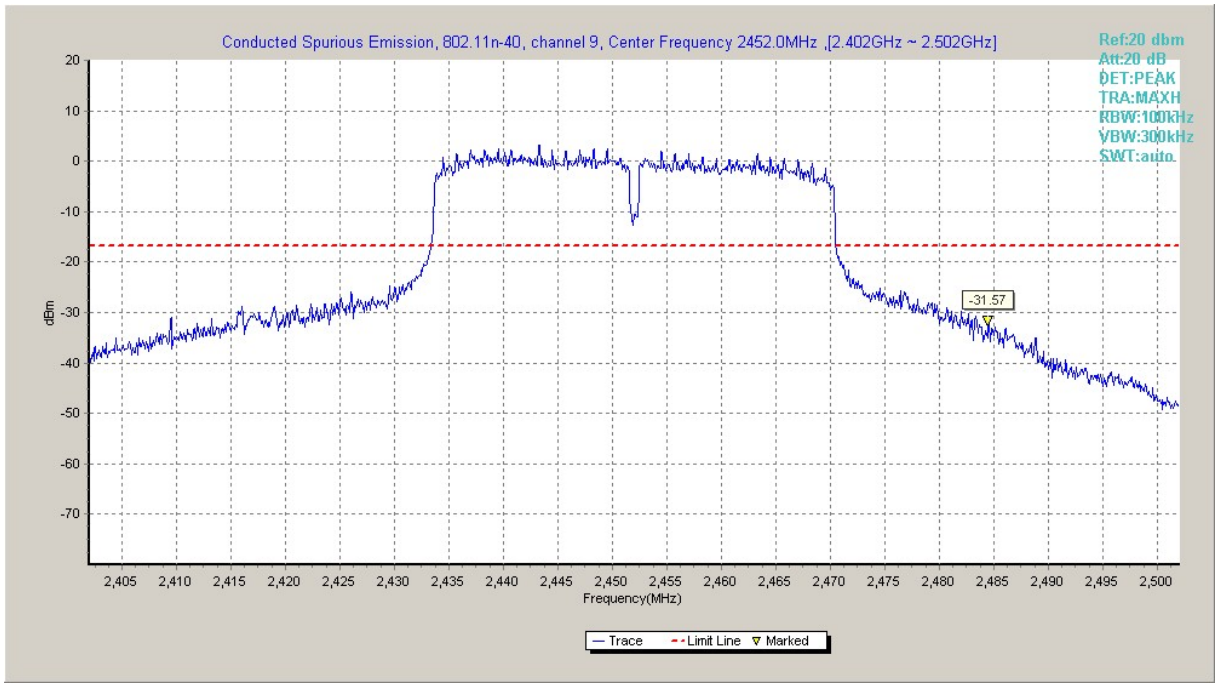

Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

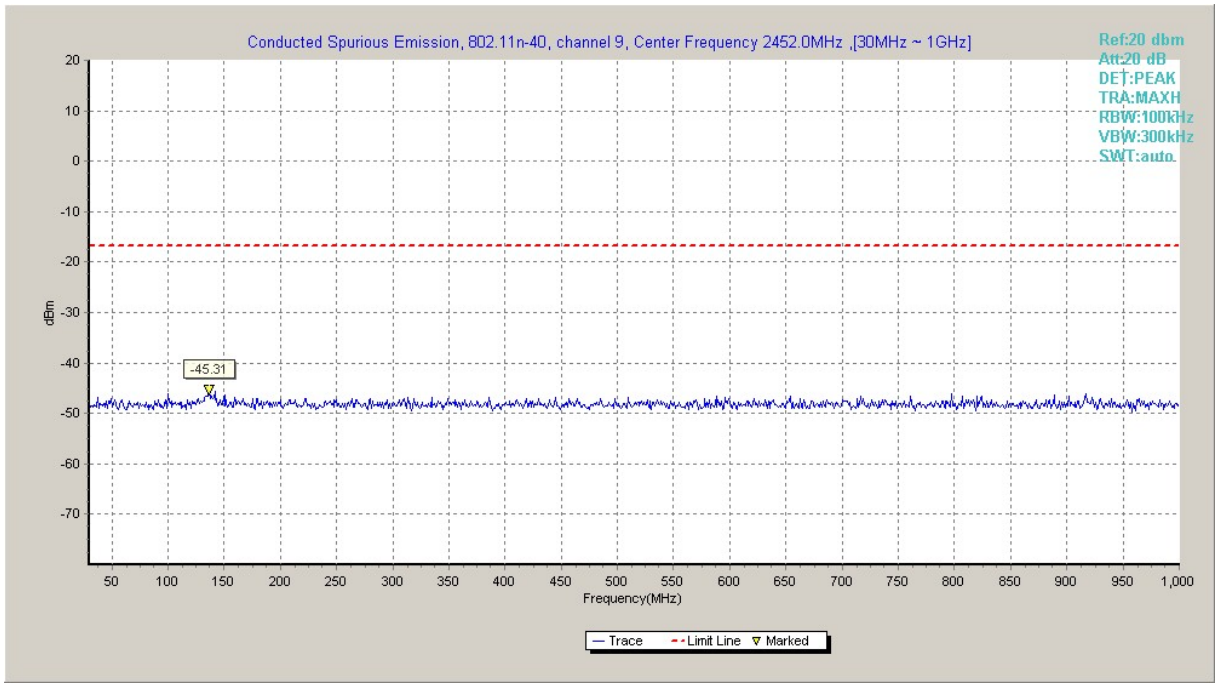

Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

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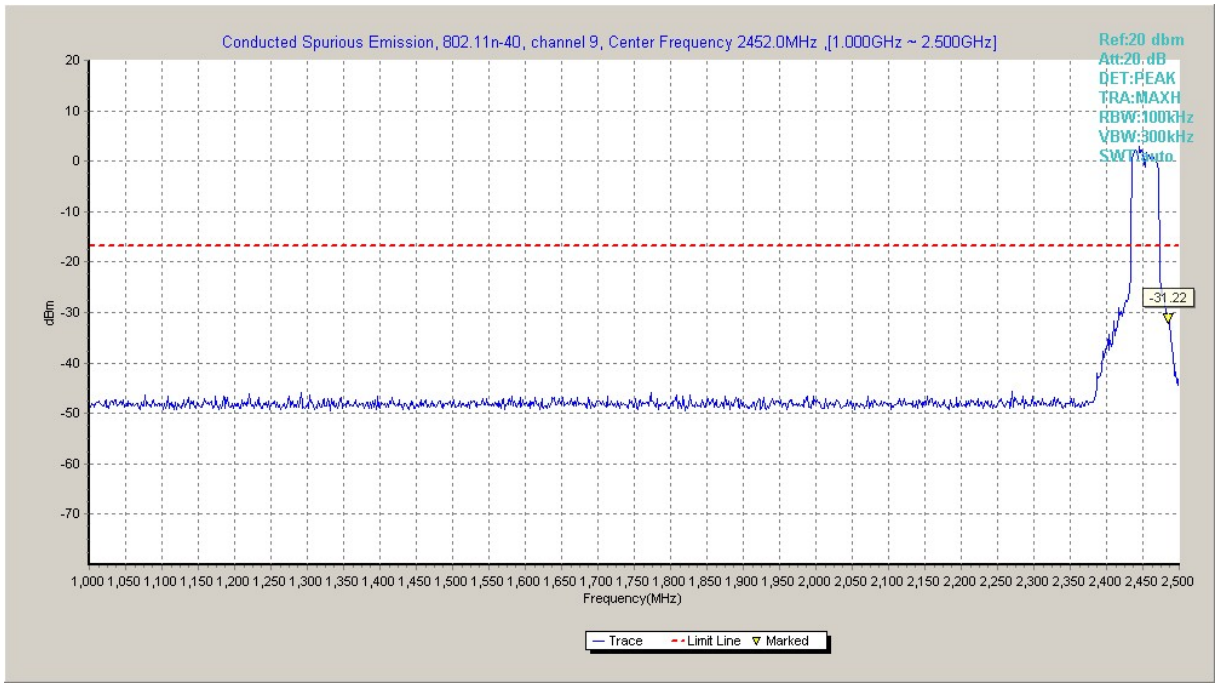

Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

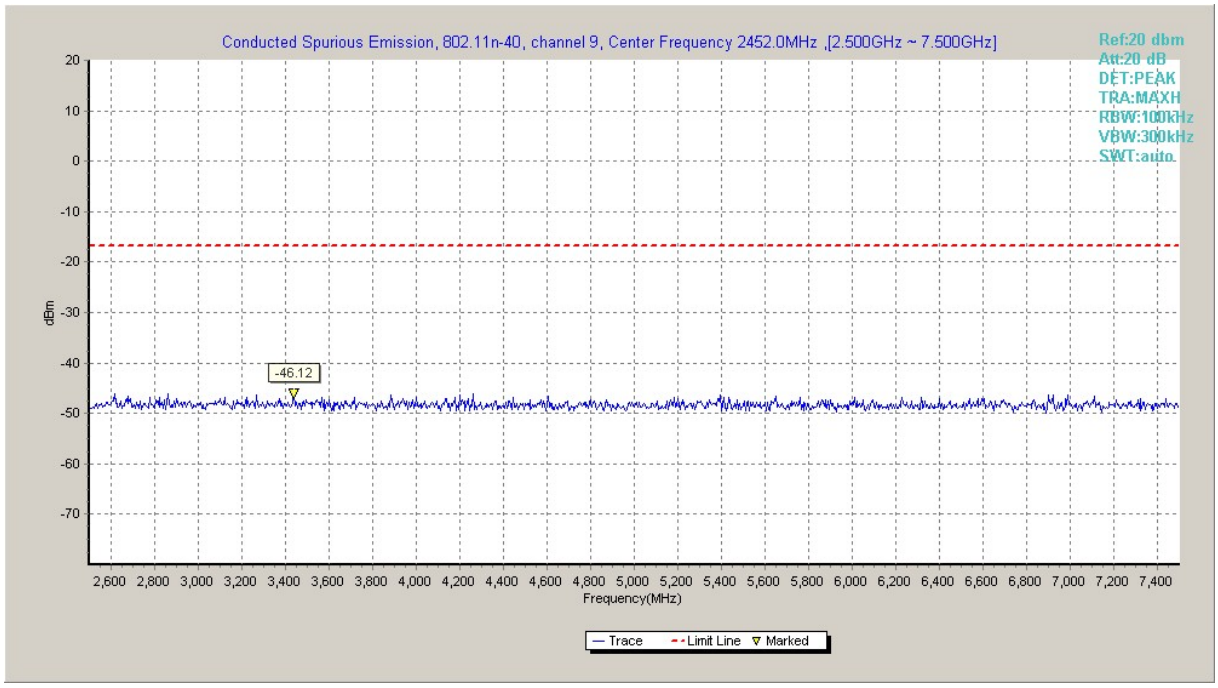

Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

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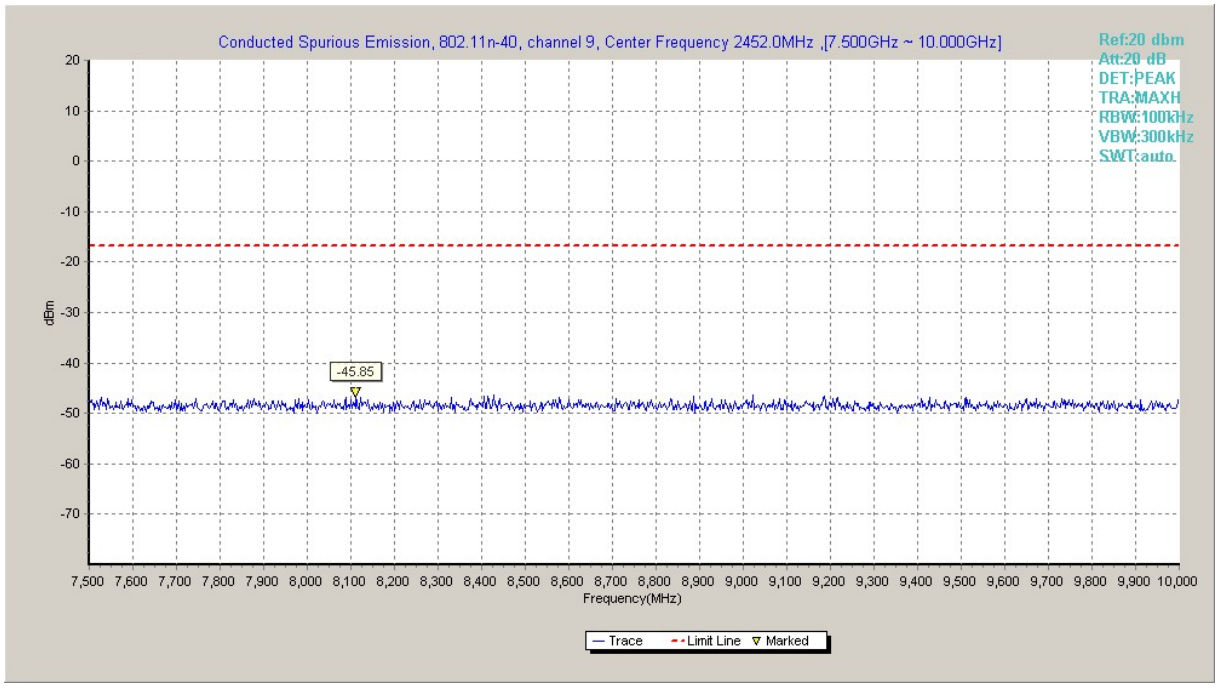

Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

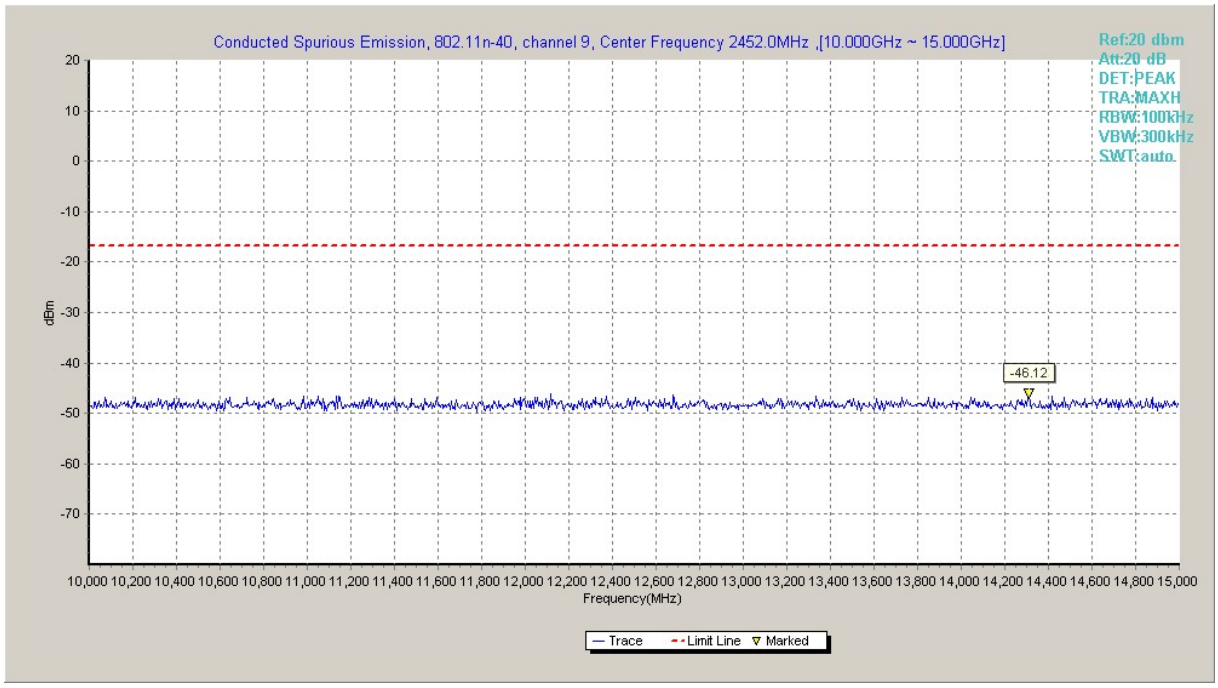

Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

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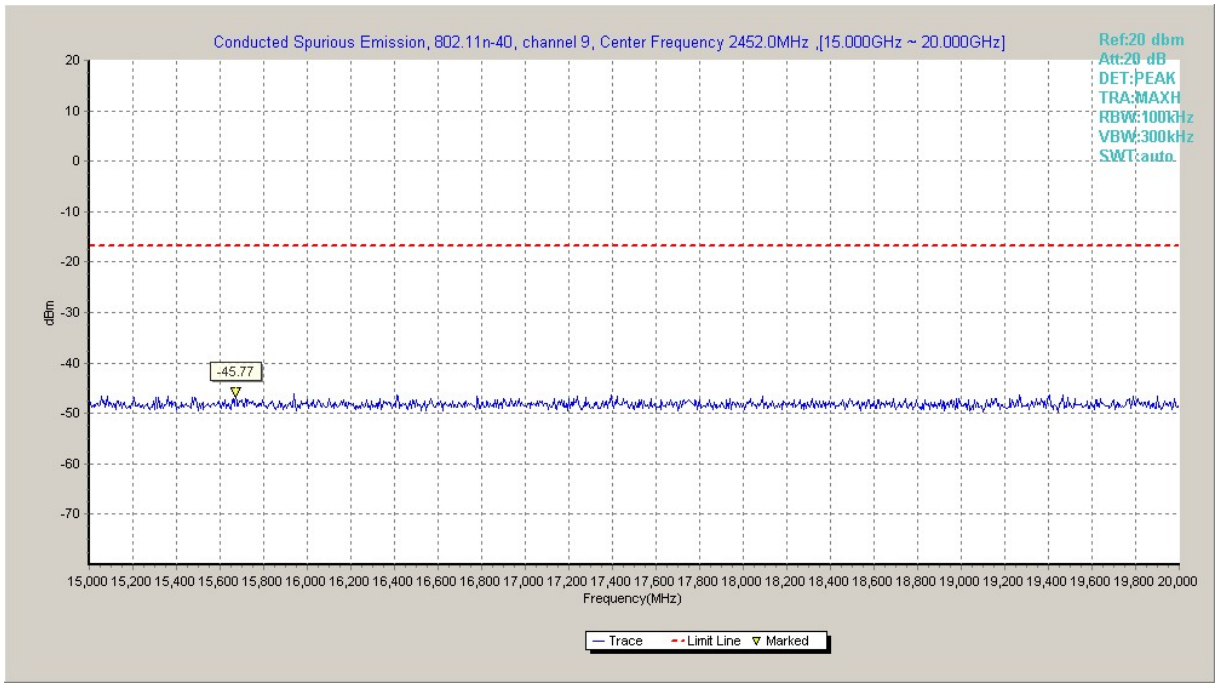

Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

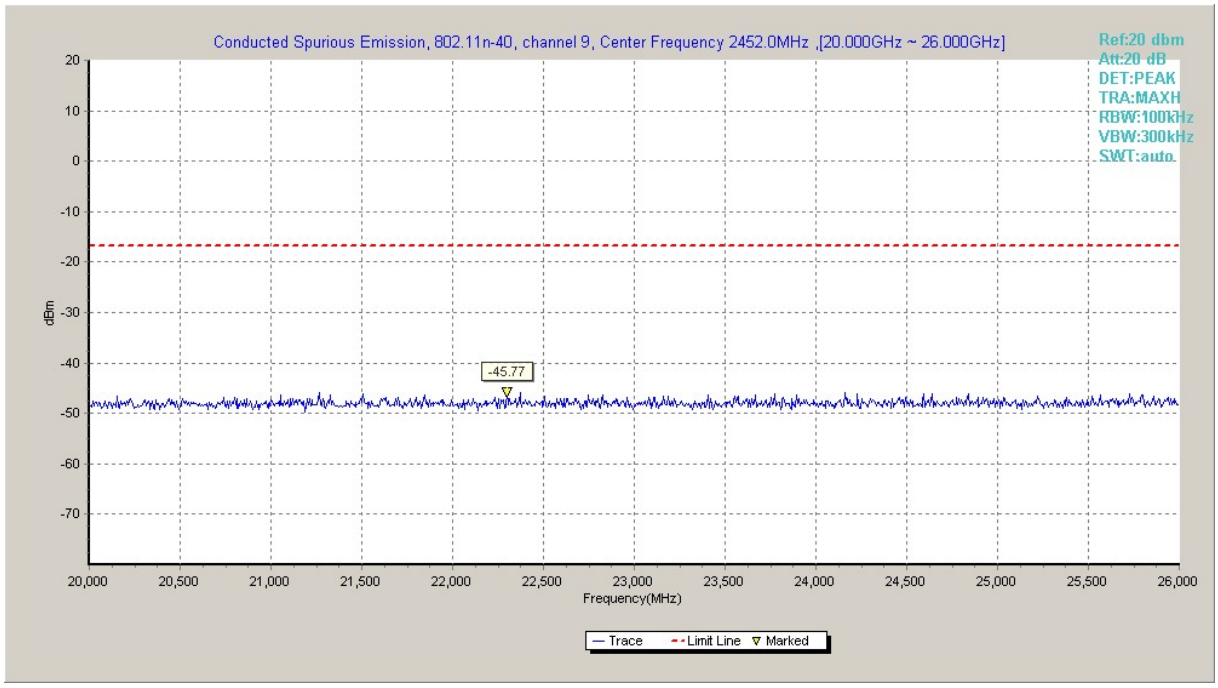

Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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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/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

EUT ID: EUT1

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Measurement Results for Set.11:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.1	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.2	**P**

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.3	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.4	**P**

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.5	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.6	**P**

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.38GHz ~2.43GHz	Fig.A.6.2.7	**P**
	Power(ch9)	2.45GHz ~2.5GHz	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

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802.11b-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.5	35.5	-25.5	43.4	17.6	54.0	18.5	V
17988	35.5	-25.5	43.4	17.6	54.0	18.5	V
17991	35.5	-25.5	43.4	17.6	54.0	18.5	V
17980.5	35.4	-25.5	43.4	17.5	54.0	18.6	V
17989.5	35.4	-25.5	43.4	17.5	54.0	18.6	H
2388.9	42.4	-14.2	27.2	29.4	54.0	11.6	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.5	35.6	-25.5	43.4	17.7	54.0	18.4	H
17989.5	35.5	-25.5	43.4	17.6	54.0	18.5	V
17898	35.4	-25.5	43.4	17.5	54.0	18.6	H
17940	35.4	-25.5	43.4	17.5	54.0	18.6	H
17964	35.4	-25.5	43.4	17.5	54.0	18.6	H
17971.5	35.4	-25.5	43.4	17.5	54.0	18.6	V

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17992.5	35.7	-25.5	43.4	17.8	54.0	18.3	H
17974.5	35.6	-25.5	43.4	17.7	54.0	18.4	H
17962.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17971.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17988	35.5	-25.5	43.4	17.6	54.0	18.5	H
2486.7	40.5	-14.2	27.2	27.5	54.0	13.5	H

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802.11b-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17737.5	48	-25.5	43.4	30.1	74.0	26	V
17802	47.7	-25.5	43.4	29.8	74.0	26.3	H
17836.5	47.7	-25.5	43.4	29.8	74.0	26.3	H
17823	47.5	-25.5	43.4	29.6	74.0	26.5	V
17952	47.5	-25.5	43.4	29.6	74.0	26.5	V
2334.6	52.6	-14.6	27.2	40	74.0	21.4	V

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17964	48.4	-25.5	43.4	30.5	74.0	25.6	H
17878.5	47.9	-25.5	43.4	30	74.0	26.1	H
17766	47.7	-25.5	43.4	29.8	74.0	26.3	H
17664	47.5	-25.7	43.4	29.8	74.0	26.5	V
17847	47.5	-25.5	43.4	29.6	74.0	26.5	V
17640	47.4	-25.7	43.4	29.7	74.0	26.6	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17440.5	48.2	-26.9	43.4	31.7	74.0	25.8	H
17941.5	47.9	-25.5	43.4	30	74.0	26.1	H
17470.5	47.5	-26.9	43.4	31	74.0	26.5	V
17917.5	47.5	-25.5	43.4	29.6	74.0	26.5	H
17922	47.5	-25.5	43.4	29.6	74.0	26.5	H
2499.9	51.6	-13.9	28.4	37.1	74.0	22.4	V

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802.11g - Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17979	35.7	-25.5	43.4	17.8	54.0	18.3	H
17995.5	35.7	-25.5	43.4	17.8	54.0	18.3	V
17982	35.6	-25.5	43.4	17.7	54.0	18.4	H
17887.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17970	35.5	-25.5	43.4	17.6	54.0	18.5	V
2390	52.7	-14.2	27.2	39.7	54.0	1.3	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17973	35.6	-25.5	43.4	17.7	54.0	18.4	H
17988	35.6	-25.5	43.4	17.7	54.0	18.4	H
17992.5	35.6	-25.5	43.4	17.7	54.0	18.4	H
17955	35.5	-25.5	43.4	17.6	54.0	18.5	H
17965.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17967	35.5	-25.5	43.4	17.6	54.0	18.5	V

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17997	35.8	-25.5	43.4	17.9	54.0	18.2	V
17989.5	35.6	-25.5	43.4	17.7	54.0	18.4	V
17995.5	35.6	-25.5	43.4	17.7	54.0	18.4	V
17947.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17970	35.5	-25.5	43.4	17.6	54.0	18.5	H
2485	43.9	-14.2	27.2	30.9	54.0	10.1	H

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802.11g - Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17959.5	47.9	-25.5	43.4	30	74.0	26.1	H
17961	47.9	-25.5	43.4	30	74.0	26.1	V
17881.5	47.8	-25.5	43.4	29.9	74.0	26.2	V
17890.5	47.6	-25.5	43.4	29.7	74.0	26.4	H
17620.5	47.5	-25.7	43.4	29.8	74.0	26.5	H
2389.7	64.3	-14.2	27.2	51.3	74.0	9.7	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17433	47.9	-26.9	43.4	31.4	74.0	26.1	V
17854.5	47.9	-25.5	43.4	30	74.0	26.1	V
17905.5	47.9	-25.5	43.4	30	74.0	26.1	V
17640	47.8	-25.7	43.4	30.1	74.0	26.2	V
17869.5	47.7	-25.5	43.4	29.8	74.0	26.3	V
17883	47.4	-25.5	43.4	29.5	74.0	26.6	V

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17994	48.4	-25.5	43.4	30.5	74.0	25.6	H
17520	47.8	-26.9	43.4	31.3	74.0	26.2	H
17893.5	47.8	-25.5	43.4	29.9	74.0	26.2	V
17845.5	47.6	-25.5	43.4	29.7	74.0	26.4	V
17815.5	47.5	-25.5	43.4	29.6	74.0	26.5	V
2485.1	56.5	-14.2	27.2	43.5	74.0	17.5	H

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802.11n-HT20-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17979	35.3	-25.5	43.4	17.4	54.0	18.7	H
17991	35.3	-25.5	43.4	17.4	54.0	18.7	H
17961	35.2	-25.5	43.4	17.3	54.0	18.8	H
17974.5	35.2	-25.5	43.4	17.3	54.0	18.8	H
17976	35.2	-25.5	43.4	17.3	54.0	18.8	H
2390	48.4	-14.2	27.2	35.4	54.0	5.6	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17985	35.4	-25.5	43.4	17.5	54.0	18.6	V
17968.5	35.3	-25.5	43.4	17.4	54.0	18.7	V
17970	35.3	-25.5	43.4	17.4	54.0	18.7	H
17979	35.3	-25.5	43.4	17.4	54.0	18.7	V
17988	35.3	-25.5	43.4	17.4	54.0	18.7	H
17995.5	35.3	-25.5	43.4	17.4	54.0	18.7	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17971.5	35.5	-25.5	43.4	17.6	54.0	18.5	V
17991	35.5	-25.5	43.4	17.6	54.0	18.5	H
17965.5	35.3	-25.5	43.4	17.4	54.0	18.7	H
17967	35.3	-25.5	43.4	17.4	54.0	18.7	H
17979	35.3	-25.5	43.4	17.4	54.0	18.7	V
2485.1	45.7	-14.2	27.2	32.7	54.0	8.3	H

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802.11n-HT20-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17764.5	47.6	-25.5	43.4	29.7	74.0	26.4	H
17910	47.4	-25.5	43.4	29.5	74.0	26.6	V
17830.5	47.3	-25.5	43.4	29.4	74.0	26.7	H
17925	47.3	-25.5	43.4	29.4	74.0	26.7	H
17922	47.2	-25.5	43.4	29.3	74.0	26.8	H
2389.7	61.7	-14.2	27.2	48.7	74.0	12.3	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17488.5	47.5	-26.9	43.4	31	74.0	26.5	V
17692.5	47.4	-25.7	43.4	29.7	74.0	26.6	H
17572.5	47.3	-25.7	43.4	29.6	74.0	26.7	H
17722.5	47.3	-25.7	43.4	29.6	74.0	26.7	H
17878.5	47.3	-25.5	43.4	29.4	74.0	26.7	H
17979	47.3	-25.5	43.4	29.4	74.0	26.7	V

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.5	48	-25.5	43.4	30.1	74.0	26	V
17928	47.7	-25.5	43.4	29.8	74.0	26.3	H
17818.5	47.5	-25.5	43.4	29.6	74.0	26.5	H
17986.5	47.4	-25.5	43.4	29.5	74.0	26.6	V
17770.5	47.3	-25.5	43.4	29.4	74.0	26.7	V
2485.3	58.7	-14.2	27.2	45.7	74.0	15.3	H

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802.11n-HT40-Average

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17962.5	35.6	-25.5	43.4	17.7	54.0	18.4	V
17991	35.5	-25.5	43.4	17.6	54.0	18.5	H
17893.5	35.4	-25.5	43.4	17.5	54.0	18.6	H
17976	35.4	-25.5	43.4	17.5	54.0	18.6	H
17965.5	35.3	-25.5	43.4	17.4	54.0	18.7	V
2389.9	51.4	-14.2	27.2	38.4	54.0	2.6	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.5	35.5	-25.5	43.4	17.6	54.0	18.5	H
17991	35.5	-25.5	43.4	17.6	54.0	18.5	V
17985	35.4	-25.5	43.4	17.5	54.0	18.6	H
17994	35.4	-25.5	43.4	17.5	54.0	18.6	H
17995.5	35.4	-25.5	43.4	17.5	54.0	18.6	H
17883	35.3	-25.5	43.4	17.4	54.0	18.7	V

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17961	35.4	-25.5	43.4	17.5	54.0	18.6	H
17955	35.3	-25.5	43.4	17.4	54.0	18.7	H
17964	35.3	-25.5	43.4	17.4	54.0	18.7	V
17965.5	35.3	-25.5	43.4	17.4	54.0	18.7	H
17982	35.3	-25.5	43.4	17.4	54.0	18.7	V
2485	50.5	-14.2	27.2	37.5	54.0	3.5	H

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802.11n-HT40-Peak

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17974.5	48	-25.5	43.4	30.1	74.0	26	V
17502	47.6	-26.9	43.4	31.1	74.0	26.4	V
17493	47.4	-26.9	43.4	30.9	74.0	26.6	H
17883	47.4	-25.5	43.4	29.5	74.0	26.6	V
17896.5	47.4	-25.5	43.4	29.5	74.0	26.6	V
2387.4	67.7	-14.2	27.2	54.7	74.0	6.3	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17452.5	47.9	-26.9	43.4	31.4	74.0	26.1	H
17787	47.6	-25.5	43.4	29.7	74.0	26.4	V
17601	47.5	-25.7	43.4	29.8	74.0	26.5	V
17934	47.5	-25.5	43.4	29.6	74.0	26.5	H
17997	47.5	-25.5	43.4	29.6	74.0	26.5	V
17767.5	47.4	-25.5	43.4	29.5	74.0	26.6	H

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17710.5	48.2	-25.7	43.4	30.5	74.0	25.8	V
17958	48.2	-25.5	43.4	30.3	74.0	25.8	V
17884.5	47.6	-25.5	43.4	29.7	74.0	26.4	H
17830.5	47.3	-25.5	43.4	29.4	74.0	26.7	V
17761.5	47.2	-25.5	43.4	29.3	74.0	26.8	V
2485.2	68.4	-14.2	27.2	55.4	74.0	5.6	H

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Test graphs as below:

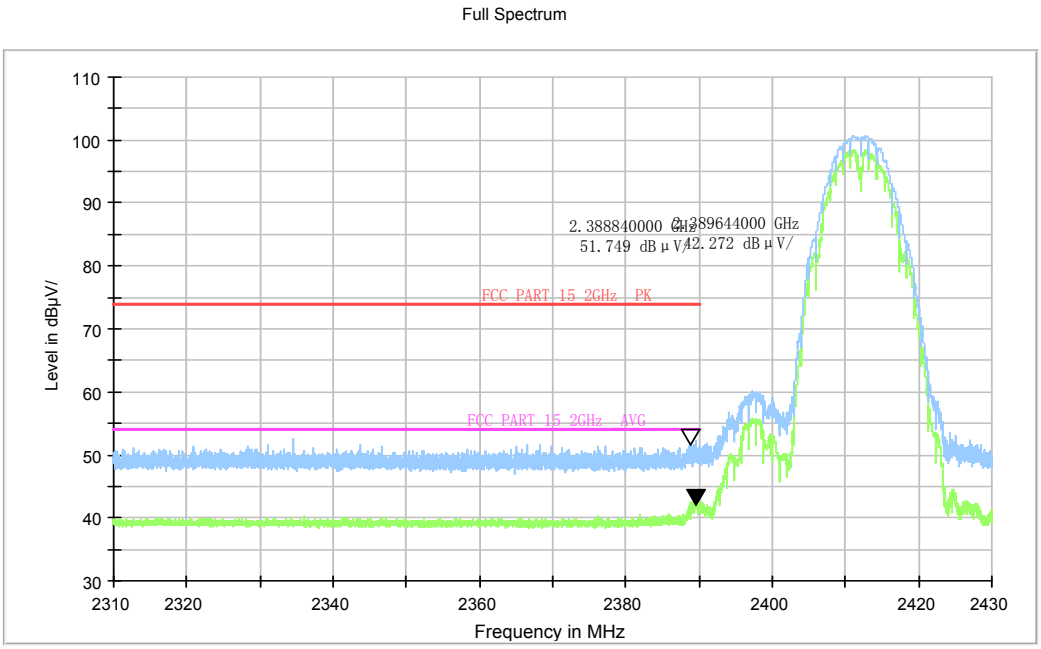

Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.43GHz

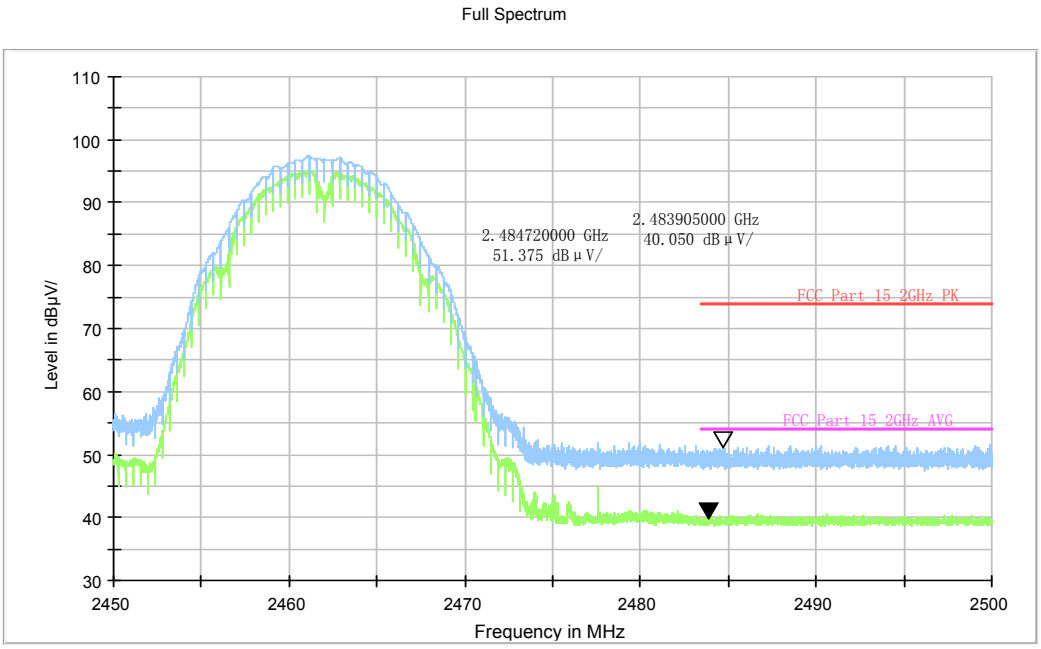

Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

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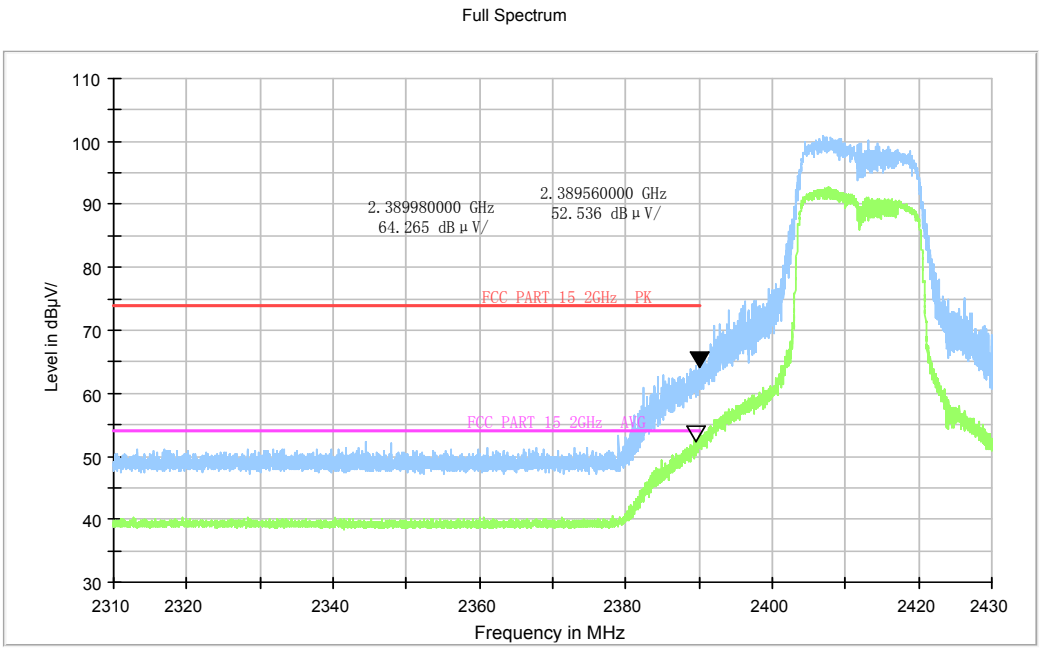

Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.43GHz

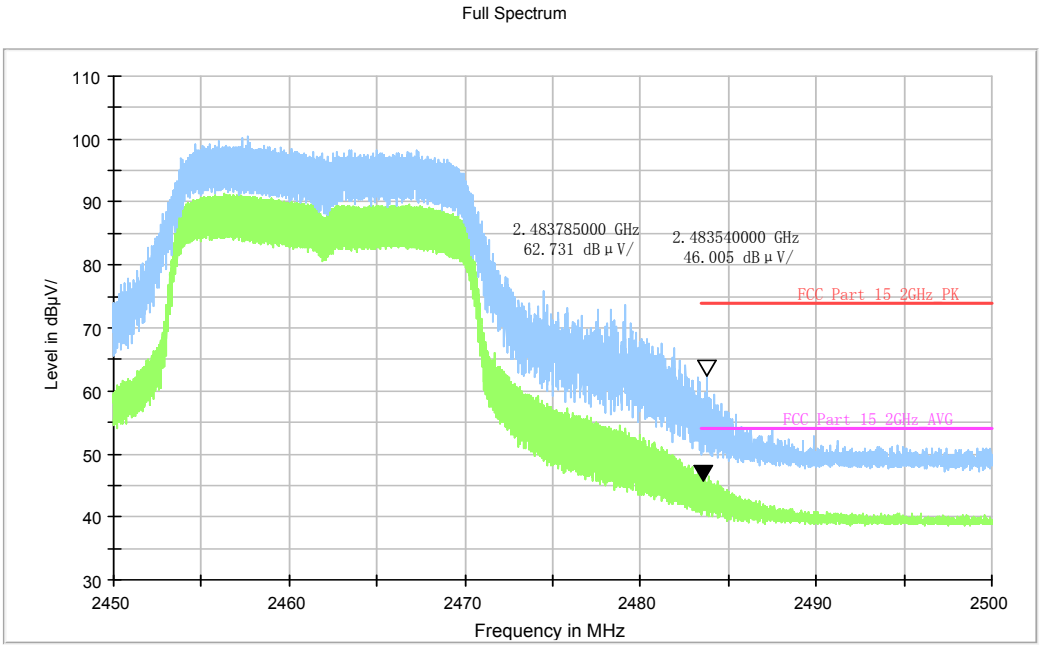

Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

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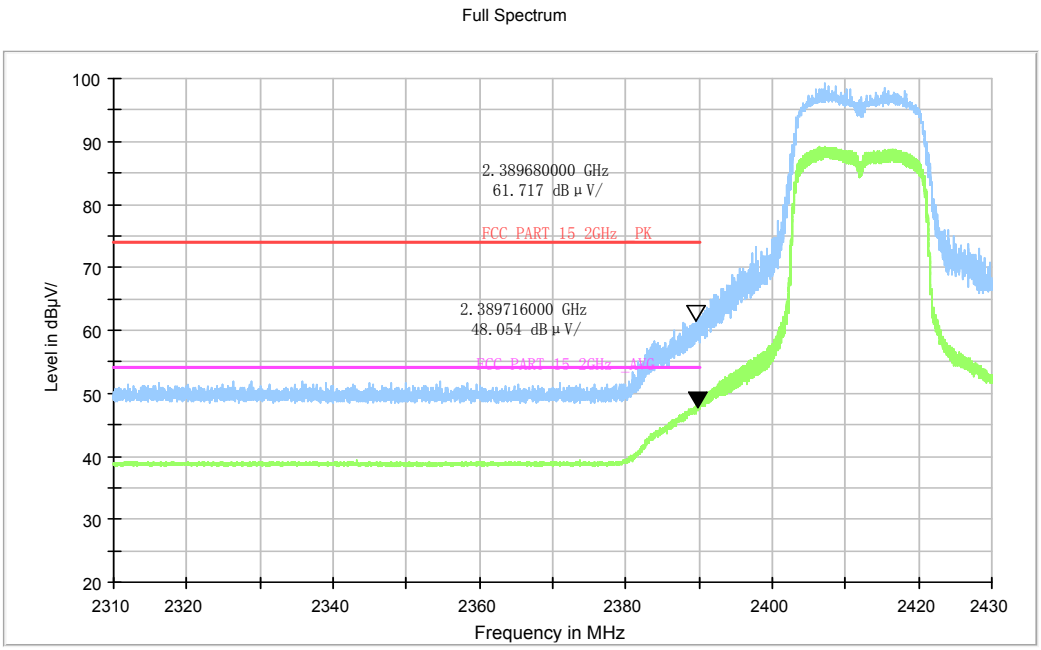

Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31GHz - 2.45GHz

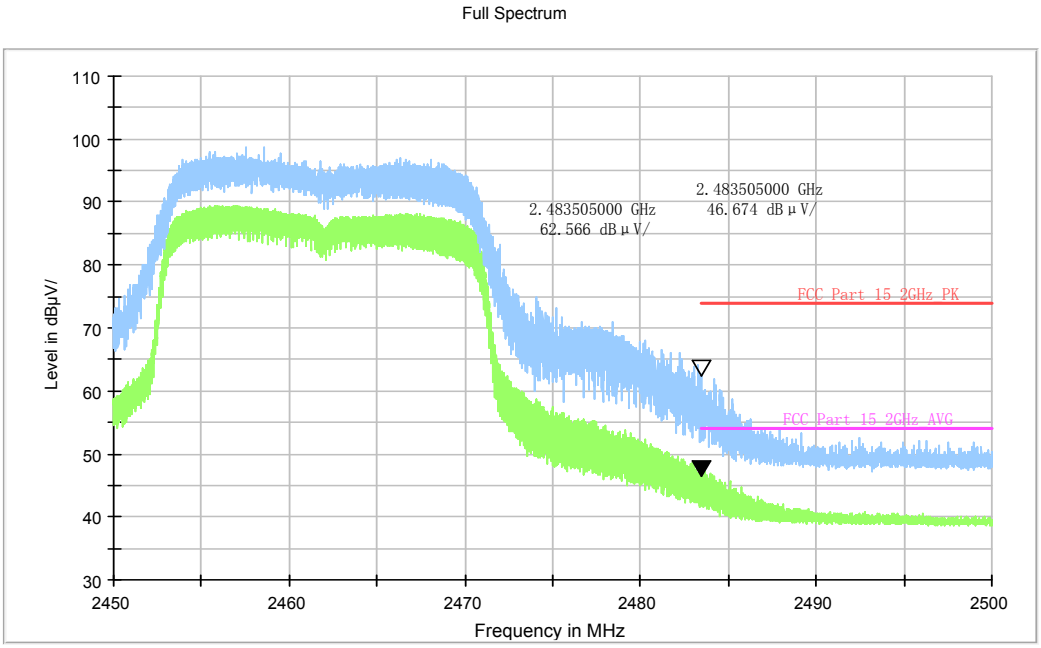

Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

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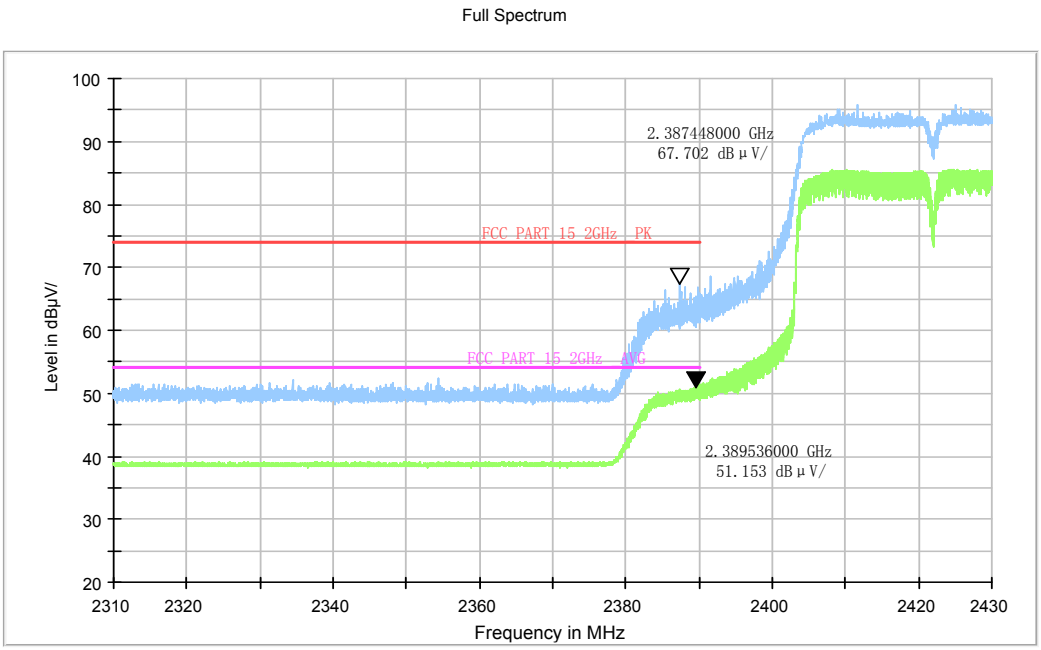

Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.45GHz

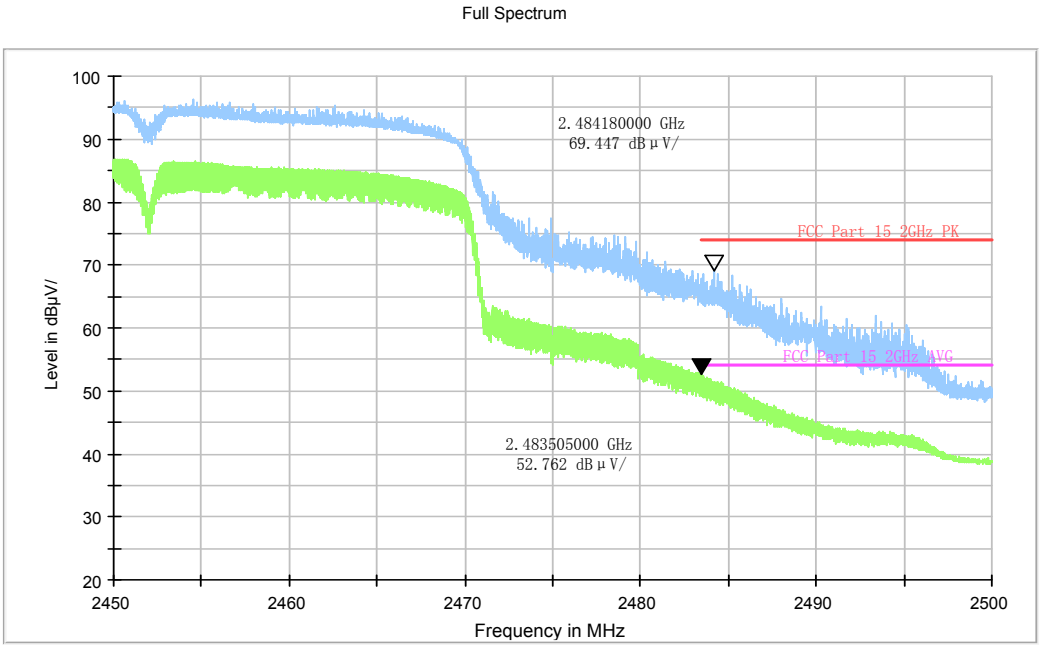

Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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A.7. AC Power-line Conducted Emission

Method of Measurement: See ANSI C63.10-2013-clause 6.2

1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

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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.7.3	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.7.3	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:

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Traffic with AE3:

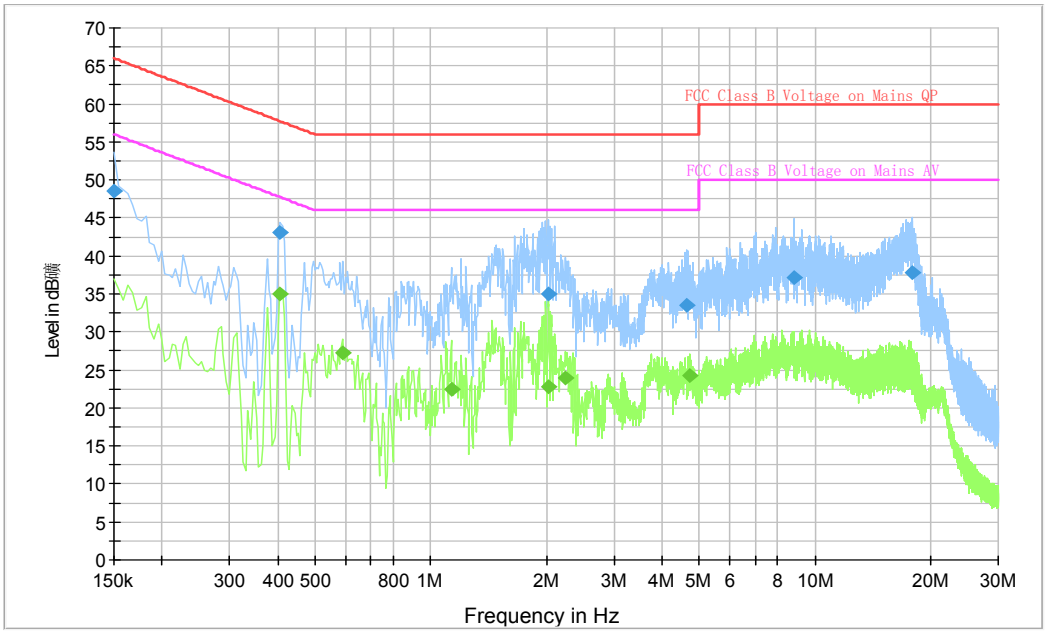

Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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 (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	48.6	2000.	9.000	On	L1	30.7	17.4	66.0
0.406500	43.1	2000.	9.000	On	L1	19.8	14.6	57.7
2.022000	35.0	2000.	9.000	On	L1	19.6	21.0	56.0
4.650000	33.5	2000.	9.000	On	L1	19.6	22.5	56.0
8.844000	37.2	2000.	9.000	On	L1	19.7	22.8	60.0
17.952000	37.9	2000.	9.000	On	L1	19.8	22.1	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.406500	35.0	2000.0	9.000	On	L1	19.8	12.8	47.7
0.591000	27.2	2000.0	9.000	On	L1	19.8	18.8	46.0
1.131000	22.4	2000.0	9.000	On	L1	19.7	23.6	46.0
2.022000	22.8	2000.0	9.000	On	L1	19.6	23.2	46.0
2.238000	24.0	2000.0	9.000	On	L1	19.6	22.0	46.0
4.726500	24.2	2000.0	9.000	On	L1	19.6	21.8	46.0

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Idle with AE3:

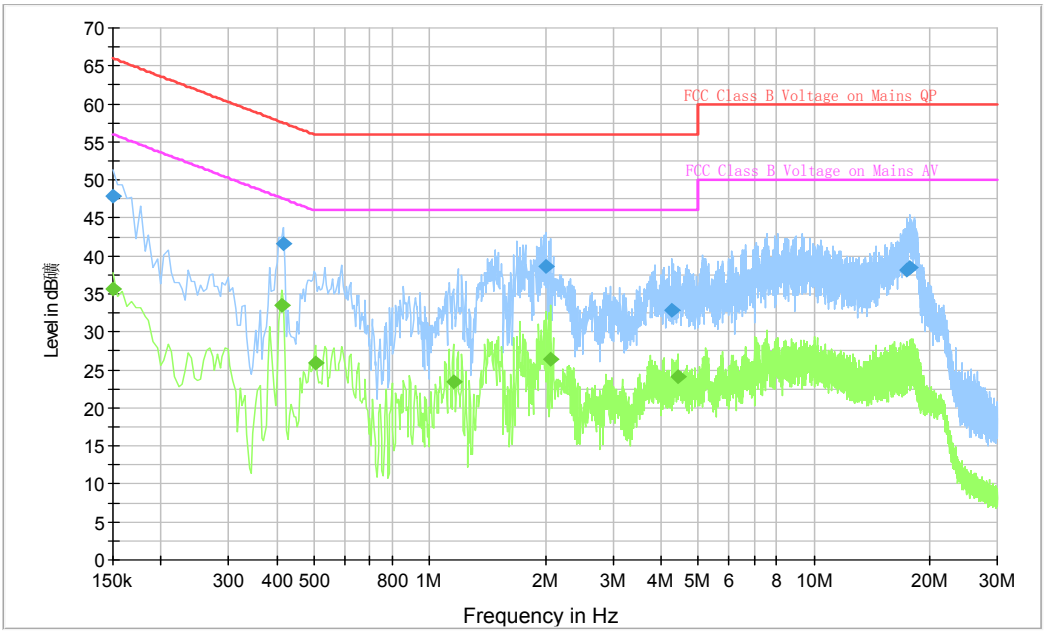

Fig.A.7.2 AC Powerline Conducted Emission-Idle

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 (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	47.8	2000.	9.000	On	N	30.6	18.2	66.0
0.415500	41.7	2000.	9.000	On	L1	19.8	15.9	57.5
2.008500	38.6	2000.	9.000	On	L1	19.6	17.4	56.0
4.263000	32.8	2000.	9.000	On	L1	19.6	23.2	56.0
17.475000	38.1	2000.	9.000	On	L1	19.8	21.9	60.0
17.727000	38.5	2000.	9.000	On	L1	19.8	21.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	35.7	2000.0	9.000	On	L1	30.7	20.3	56.0
0.411000	33.4	2000.0	9.000	On	L1	19.8	14.2	47.6
0.505500	25.9	2000.0	9.000	On	L1	19.8	20.1	46.0
1.153500	23.4	2000.0	9.000	On	L1	19.7	22.6	46.0
2.067000	26.4	2000.0	9.000	On	L1	19.6	19.6	46.0
4.416000	24.1	2000.0	9.000	On	L1	19.6	21.9	46.0

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Traffic with AE4:

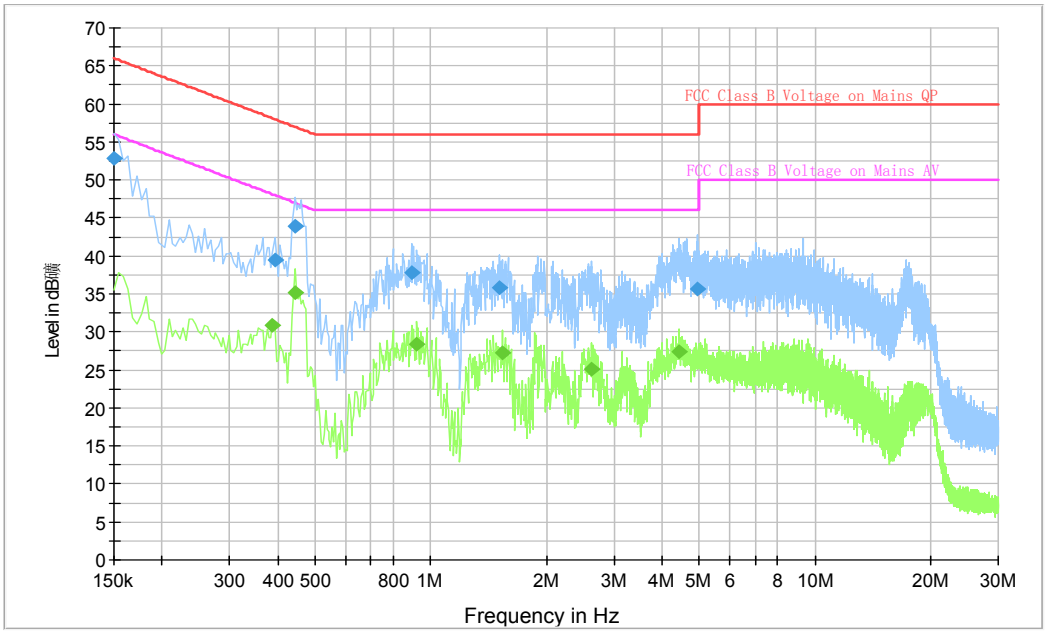

Fig.A.7.3 AC Powerline Conducted Emission-802.11b

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 (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	52.8	2000.	9.000	On	N	30.6	13.2	66.0
0.393000	39.4	2000.	9.000	On	L1	19.8	18.6	58.0
0.442500	44.0	2000.	9.000	On	L1	19.8	13.0	57.0
0.892500	37.7	2000.	9.000	On	L1	19.7	18.3	56.0
1.509000	35.8	2000.	9.000	On	L1	19.6	20.2	56.0
4.956000	35.6	2000.	9.000	On	L1	19.6	20.4	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.388500	30.9	2000.0	9.000	On	L1	19.8	17.2	48.1
0.442500	35.1	2000.0	9.000	On	L1	19.8	11.9	47.0
0.919500	28.4	2000.0	9.000	On	L1	19.7	17.6	46.0
1.536000	27.2	2000.0	9.000	On	L1	19.6	18.8	46.0
2.620500	25.0	2000.0	9.000	On	L1	19.6	21.0	46.0
4.420500	27.4	2000.0	9.000	On	L1	19.6	18.6	46.0

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ANNEX B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT
Beijing
China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-09-26 through 2020-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

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

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