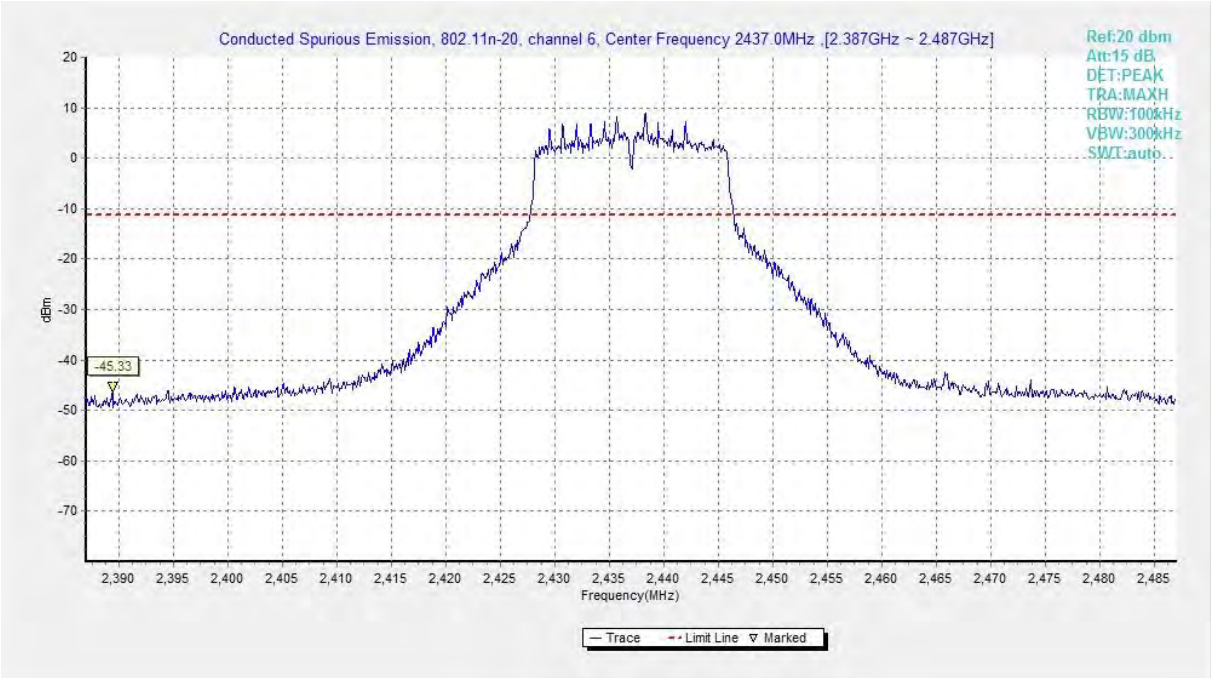

Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

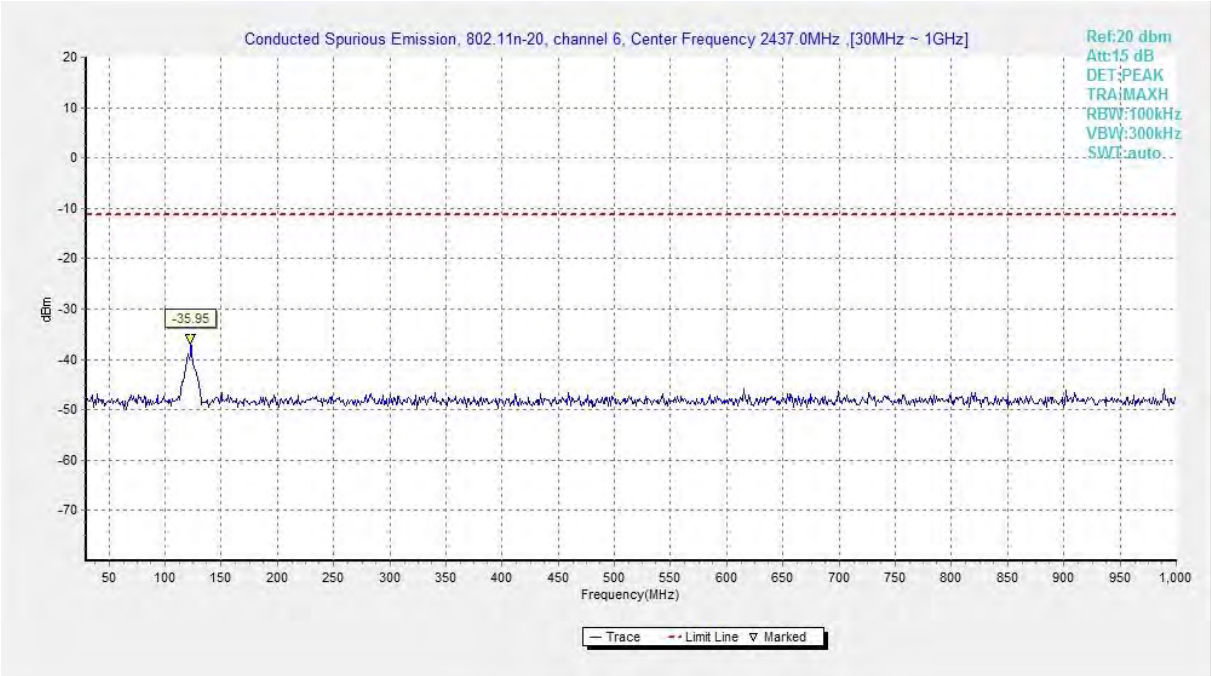

Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

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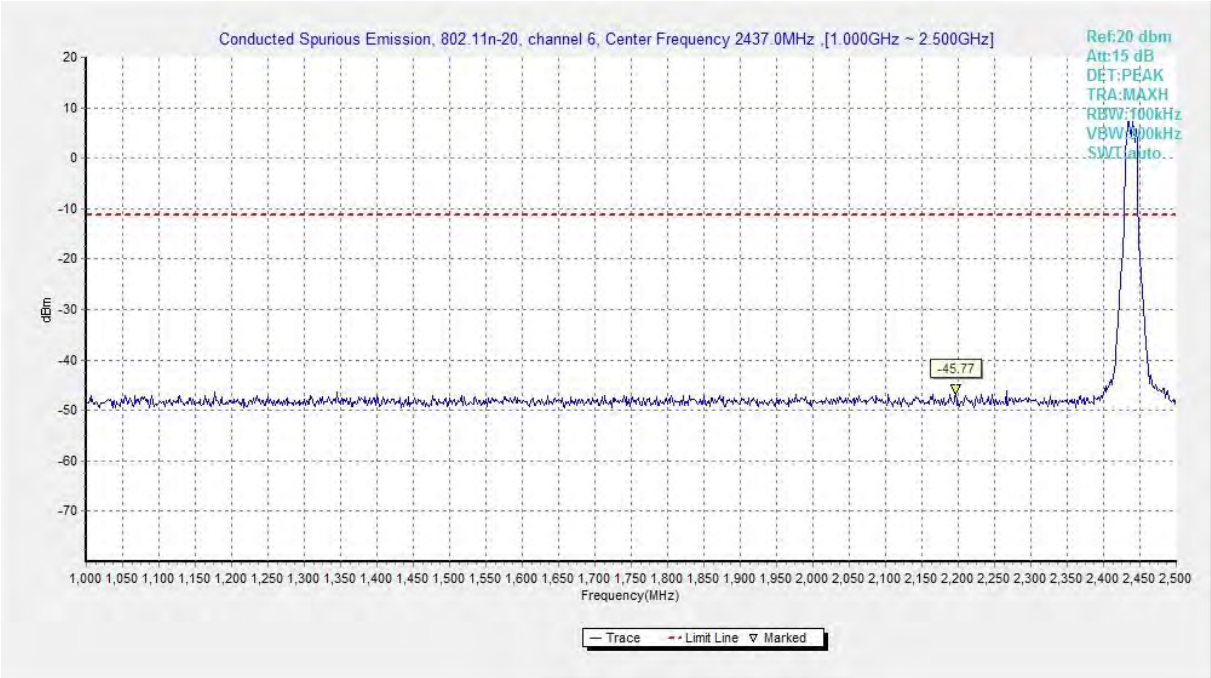

Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

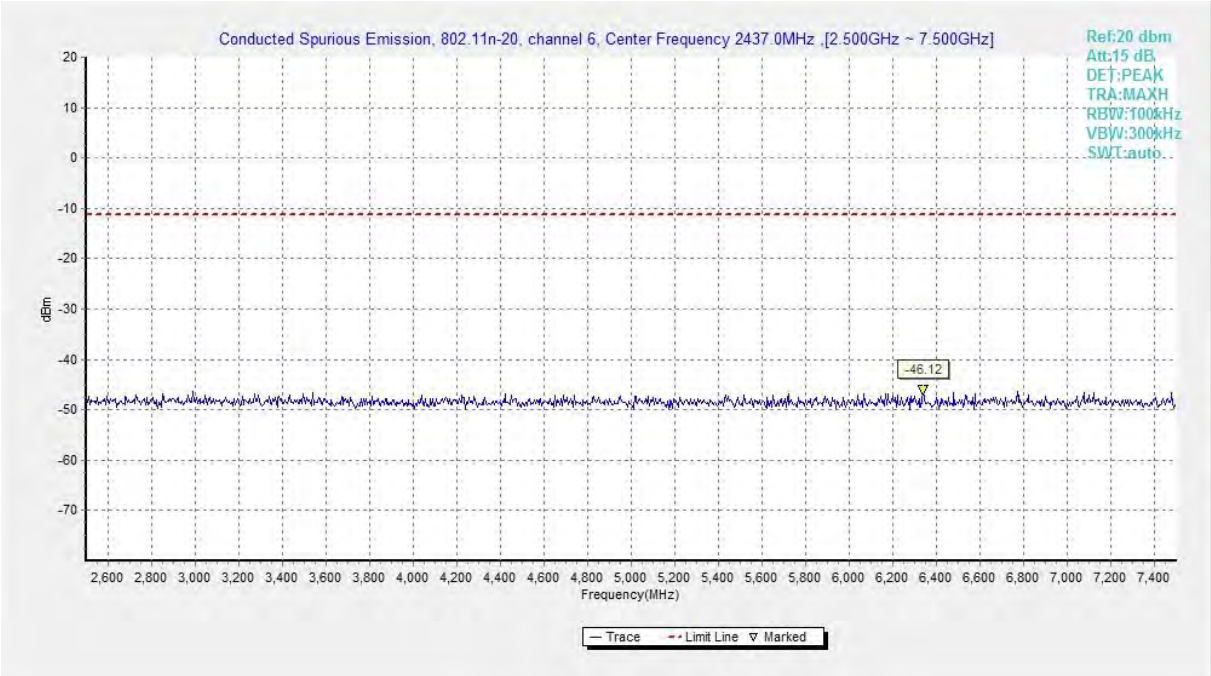

Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

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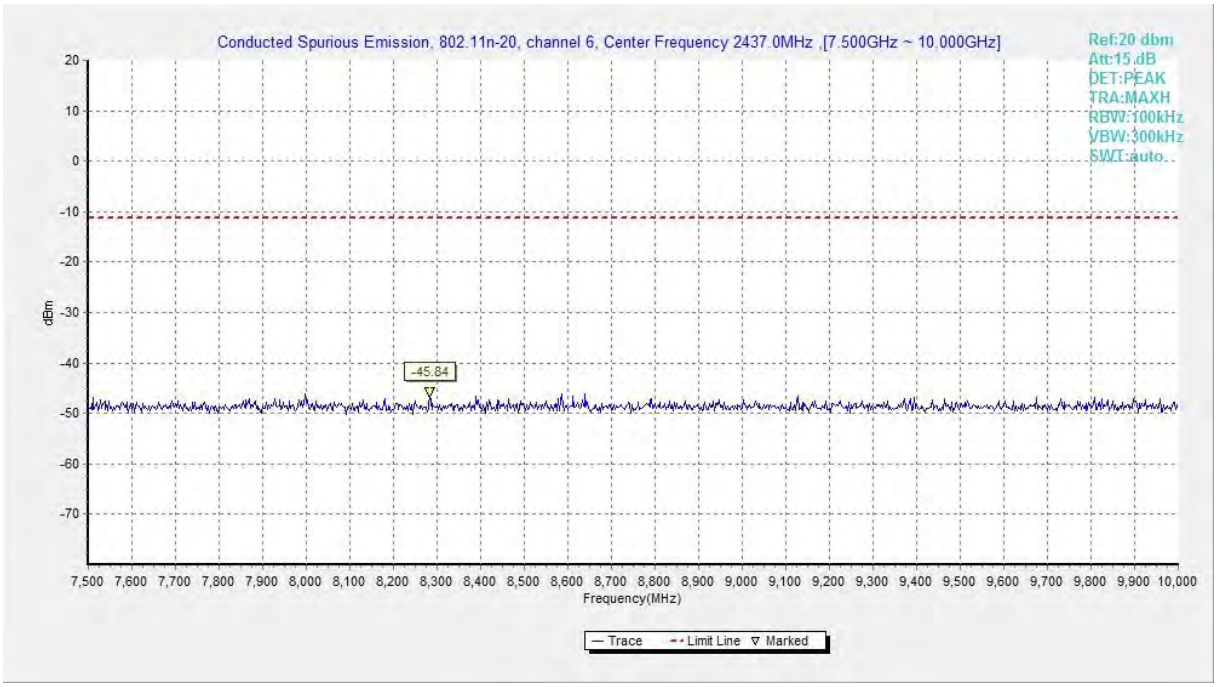

Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

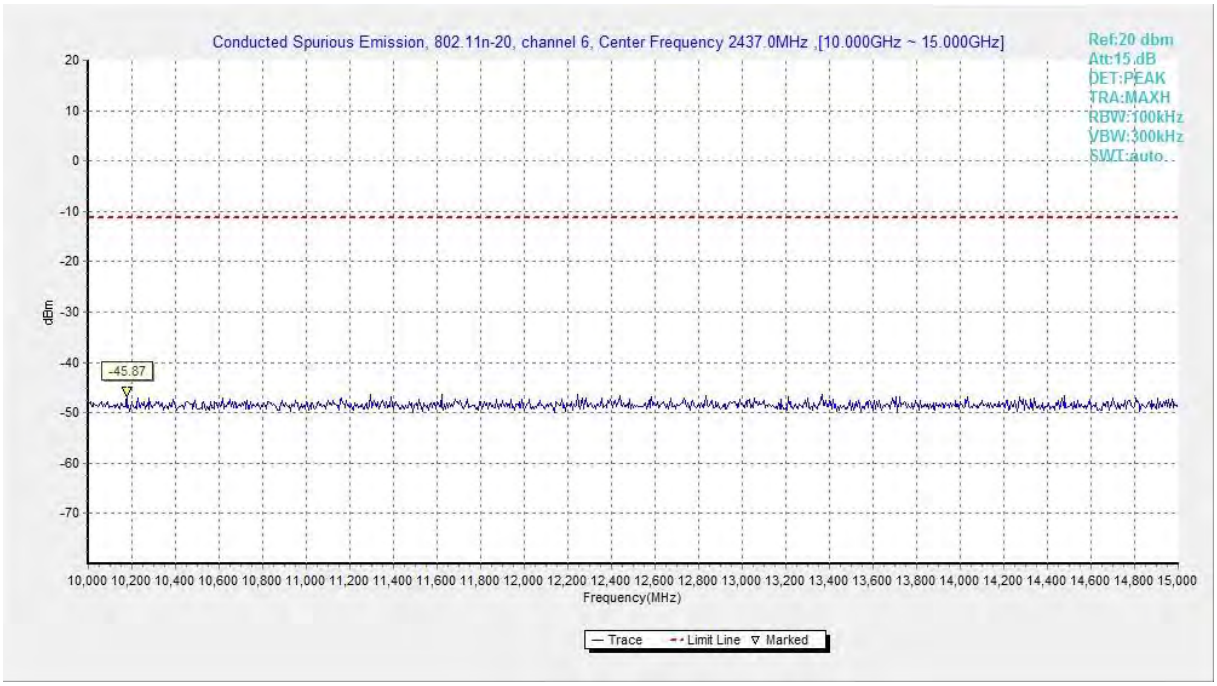

Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

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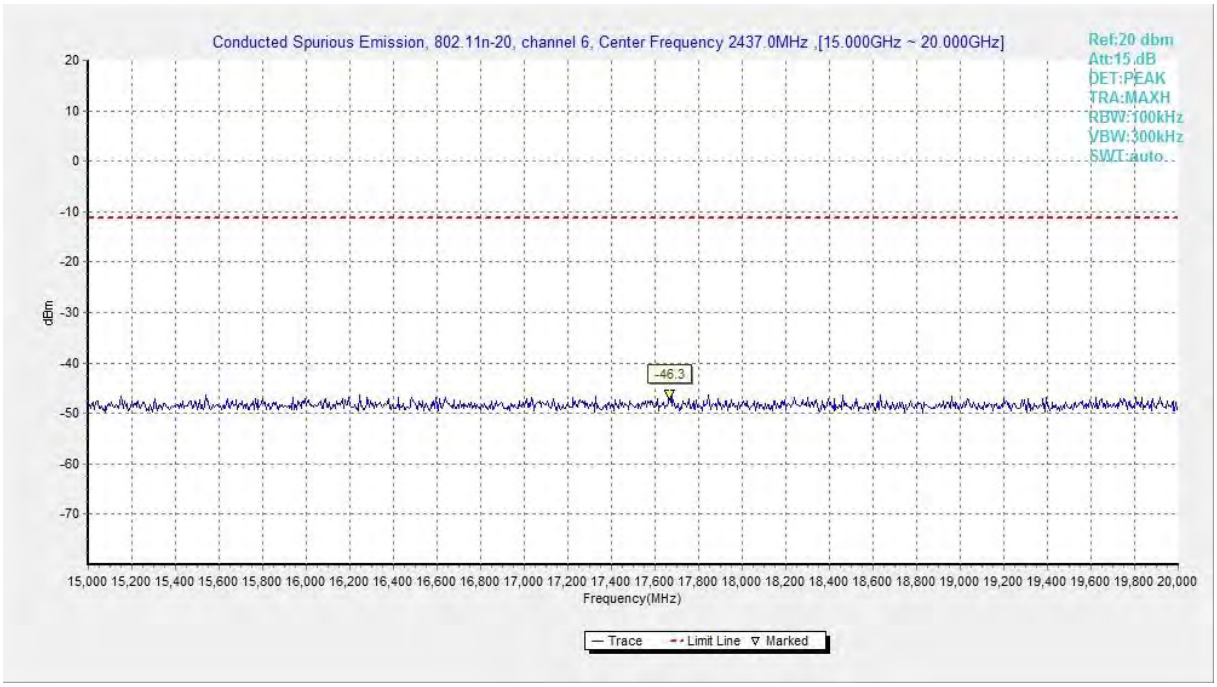

Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

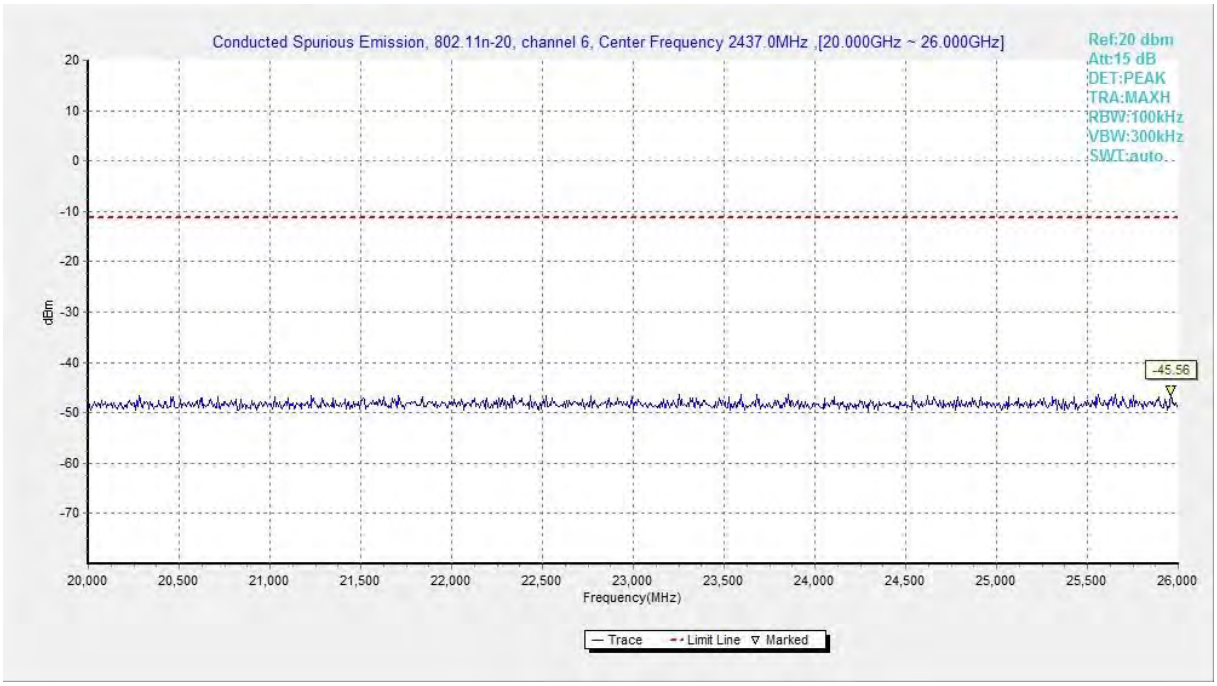

Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

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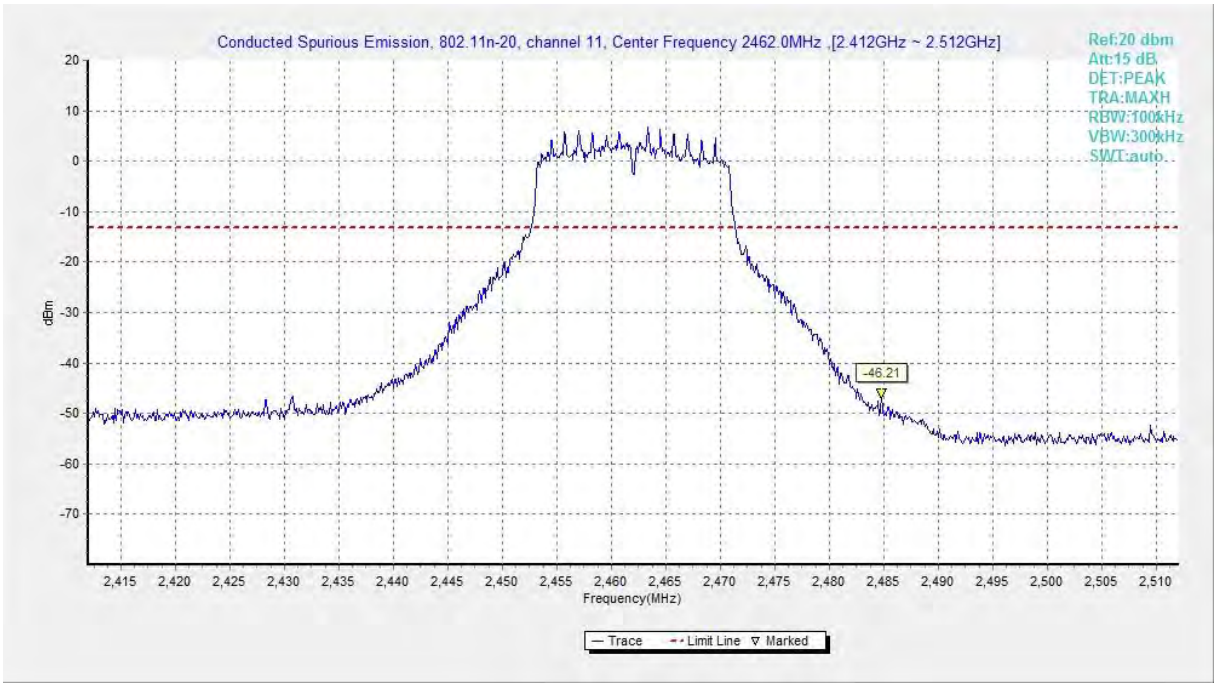

Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

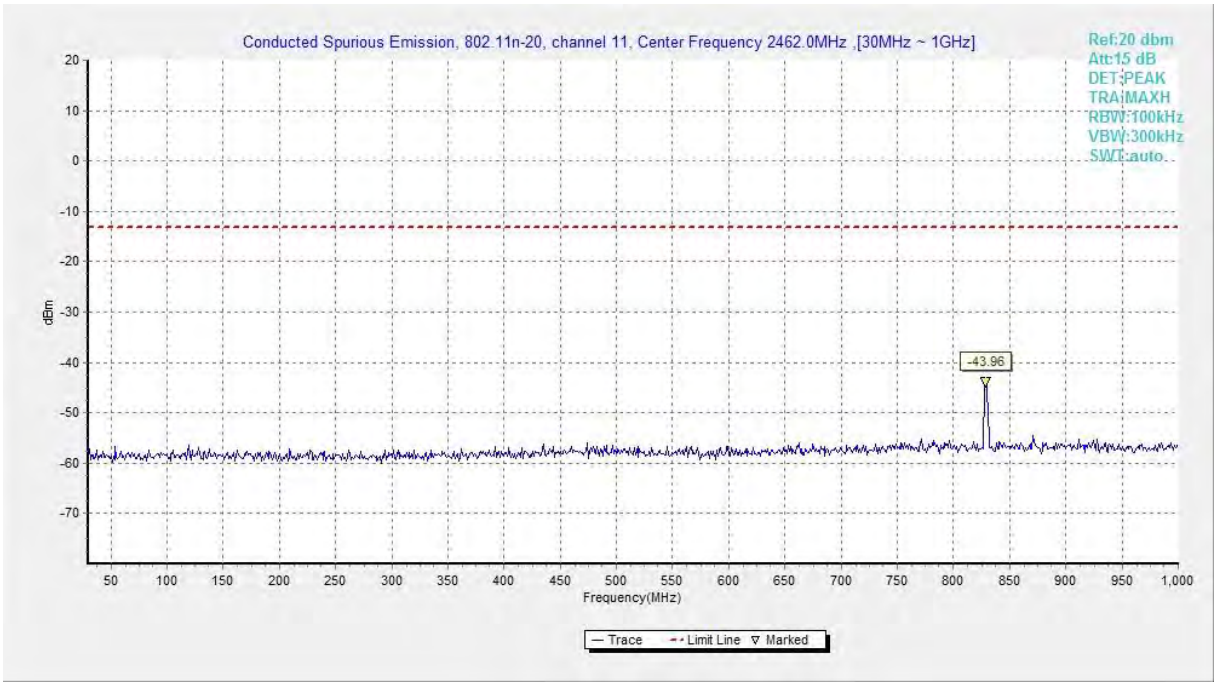

Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

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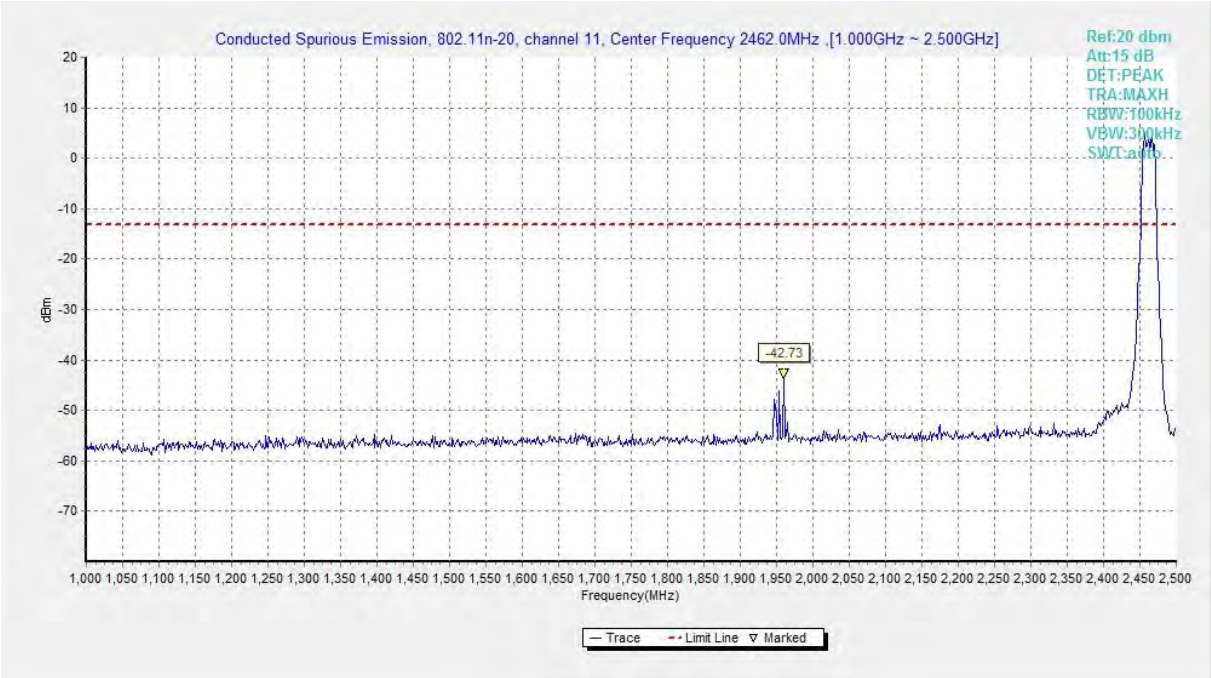

Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

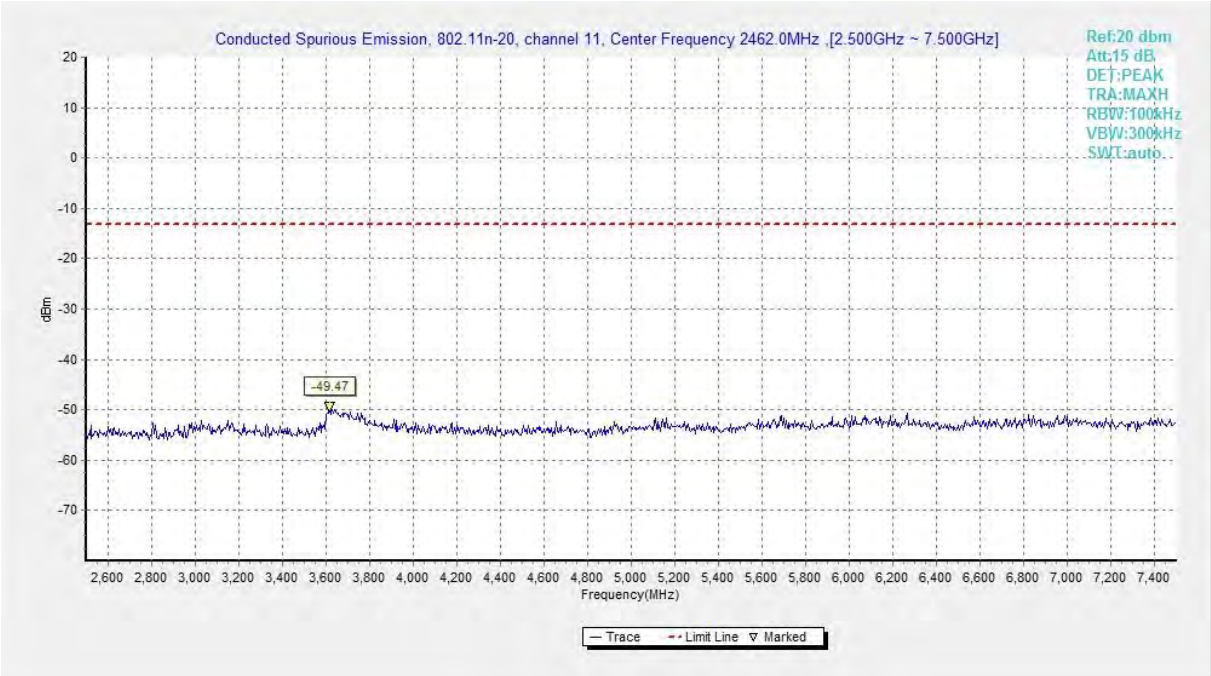

Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

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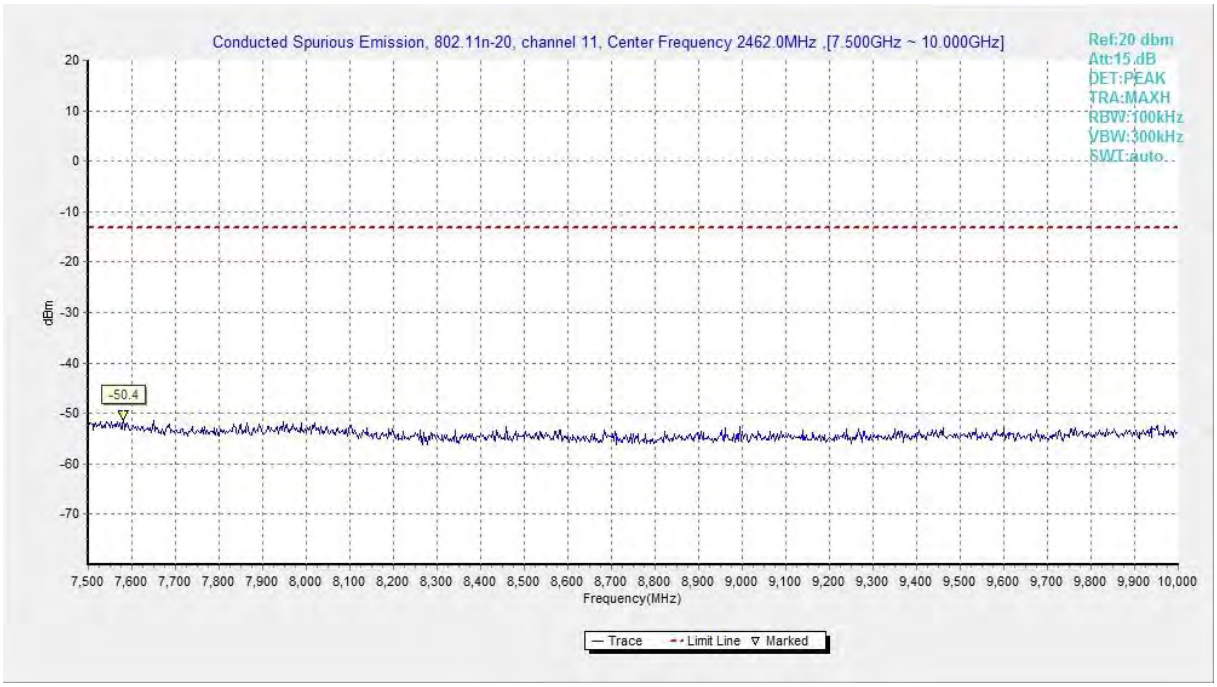

Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

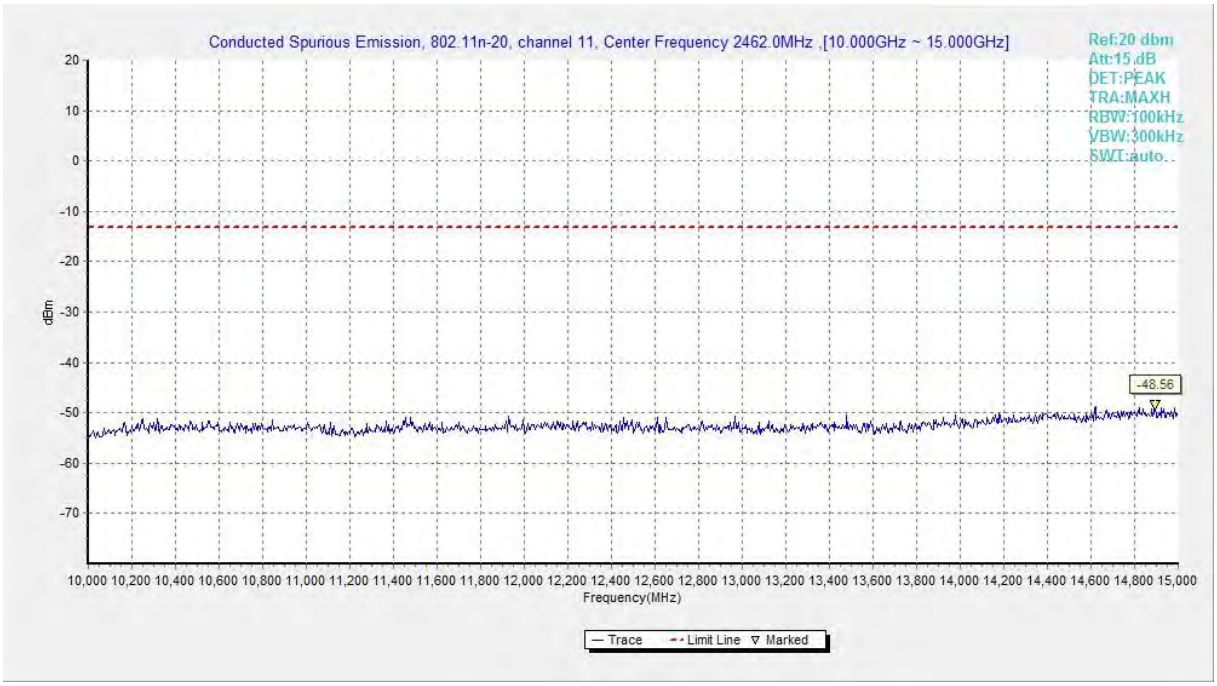

Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

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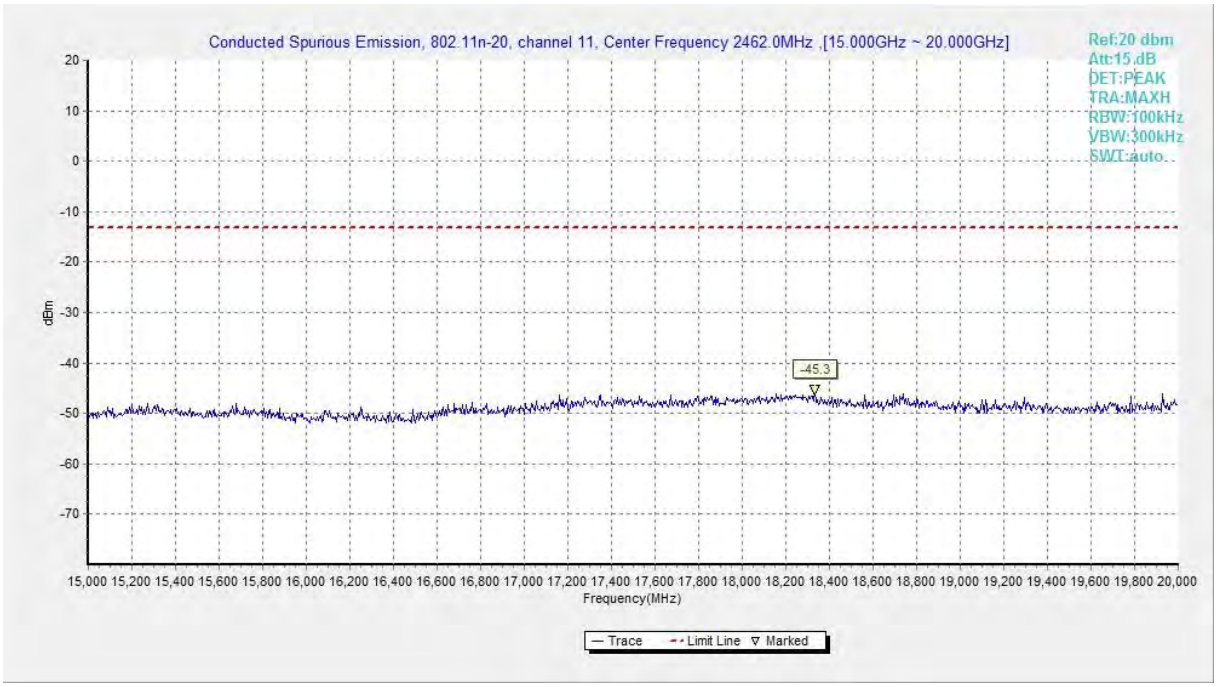

Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

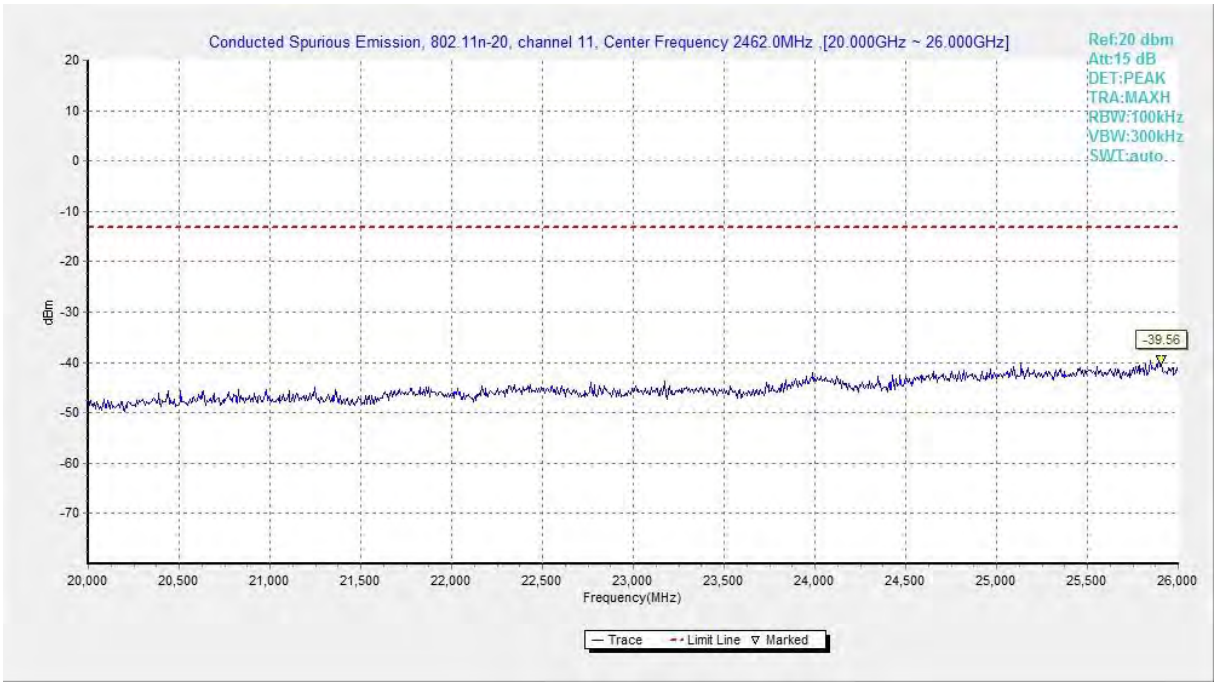

Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

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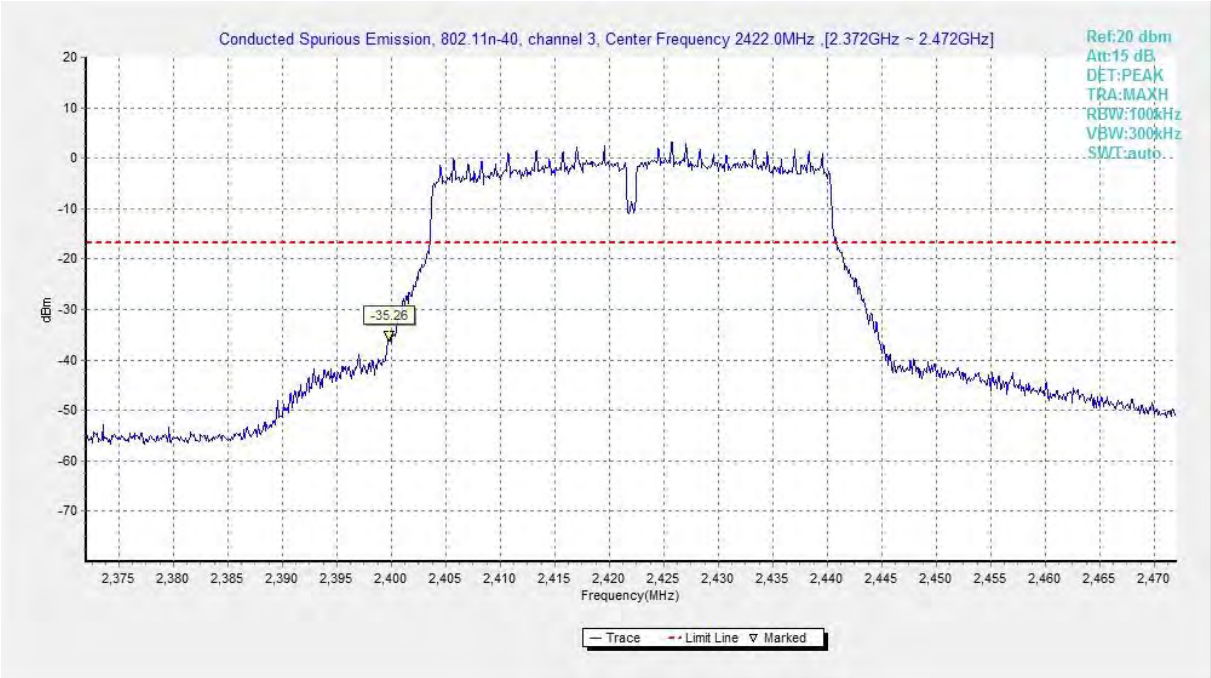

Fig.A.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)

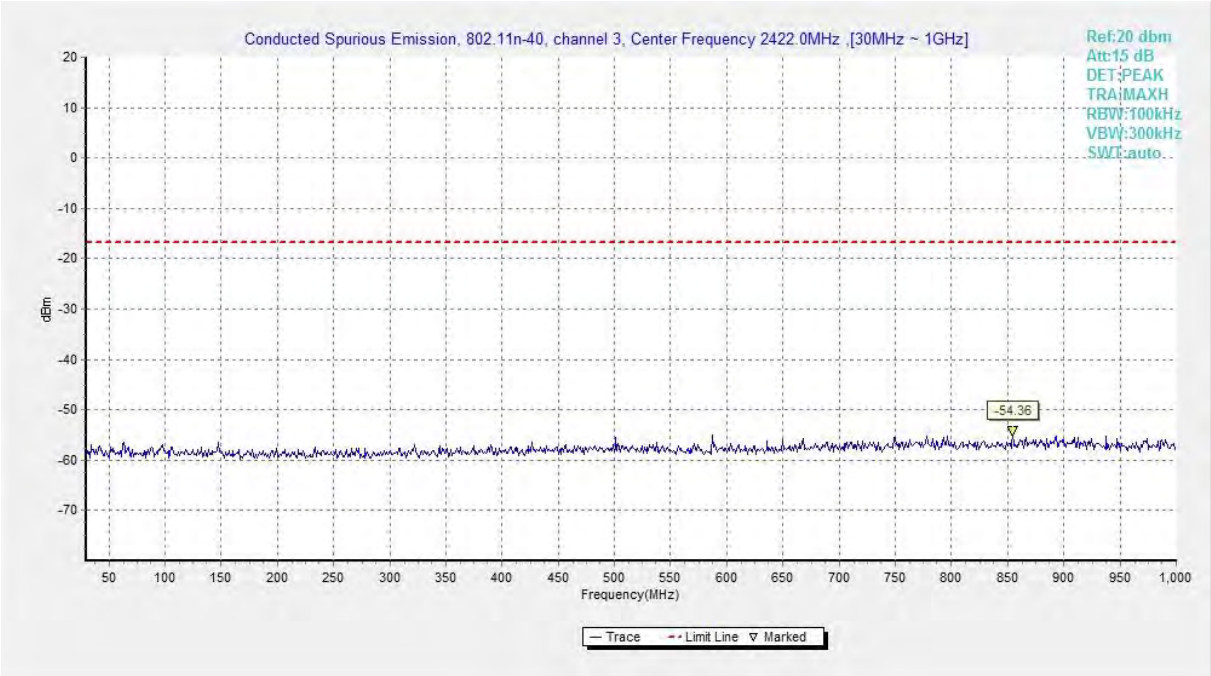

Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)

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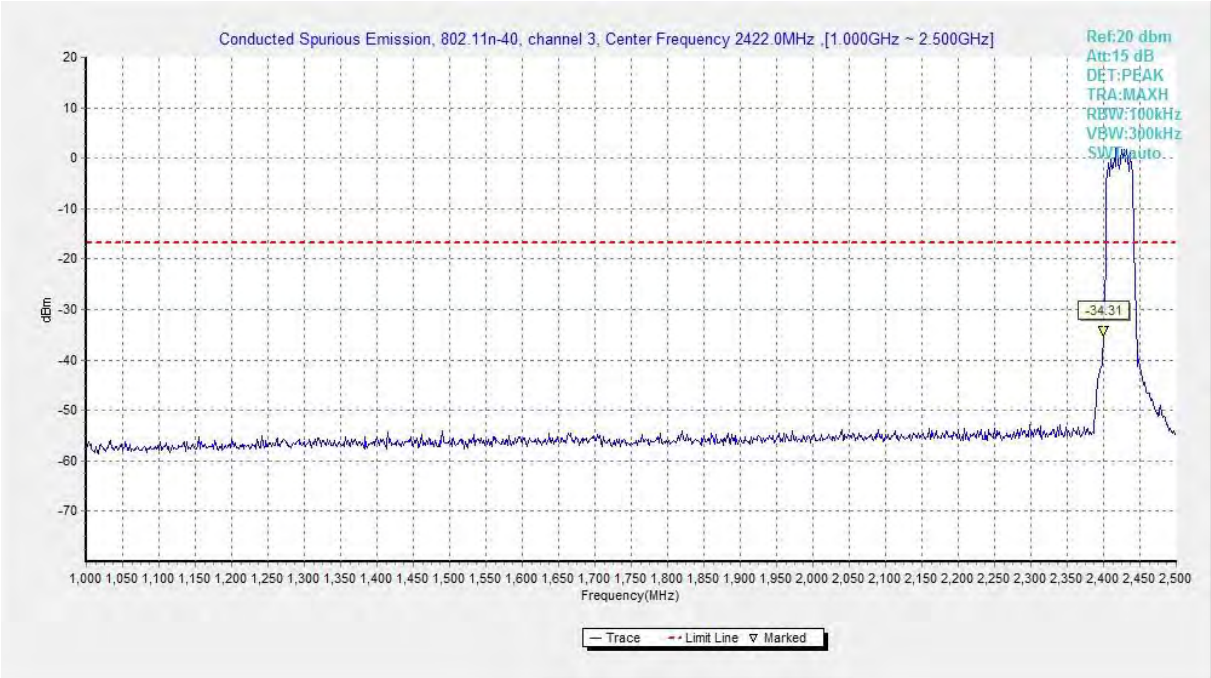

Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)

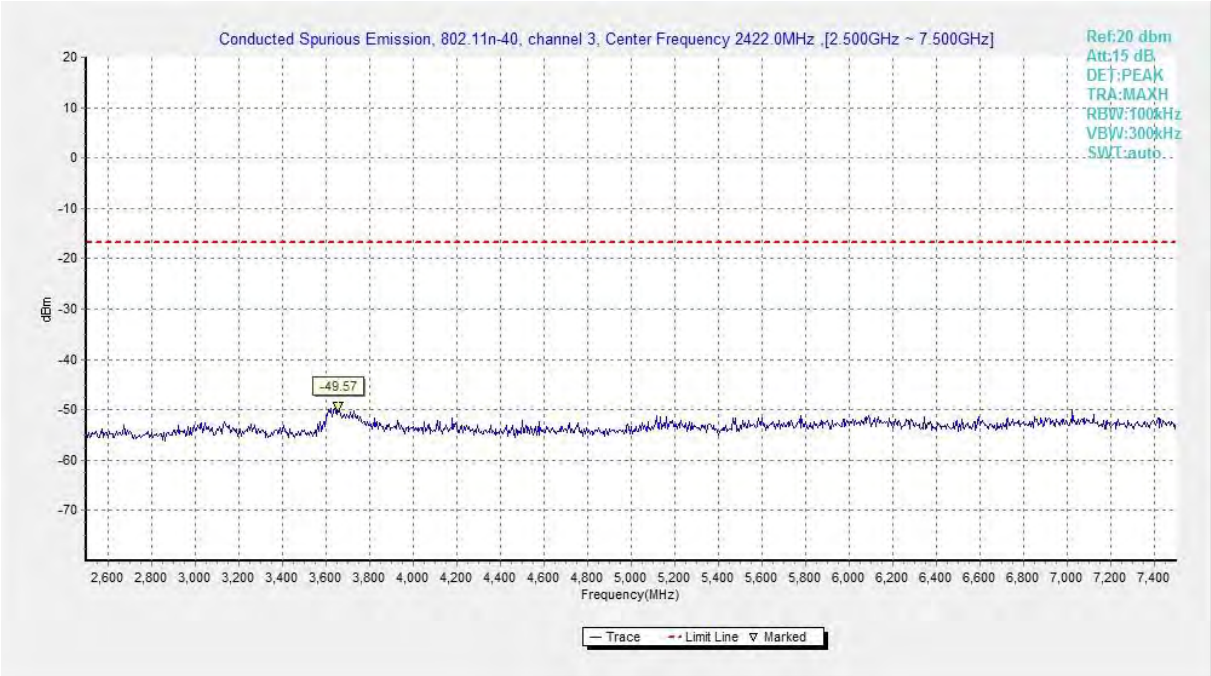

Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)

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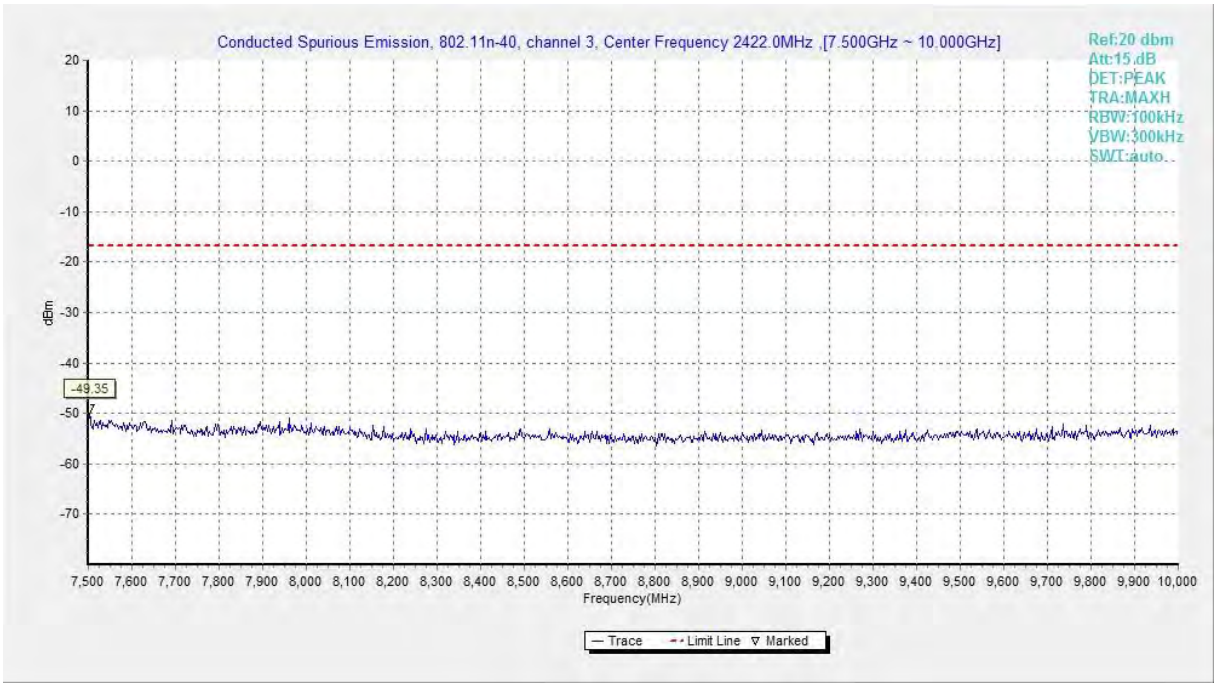

Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)

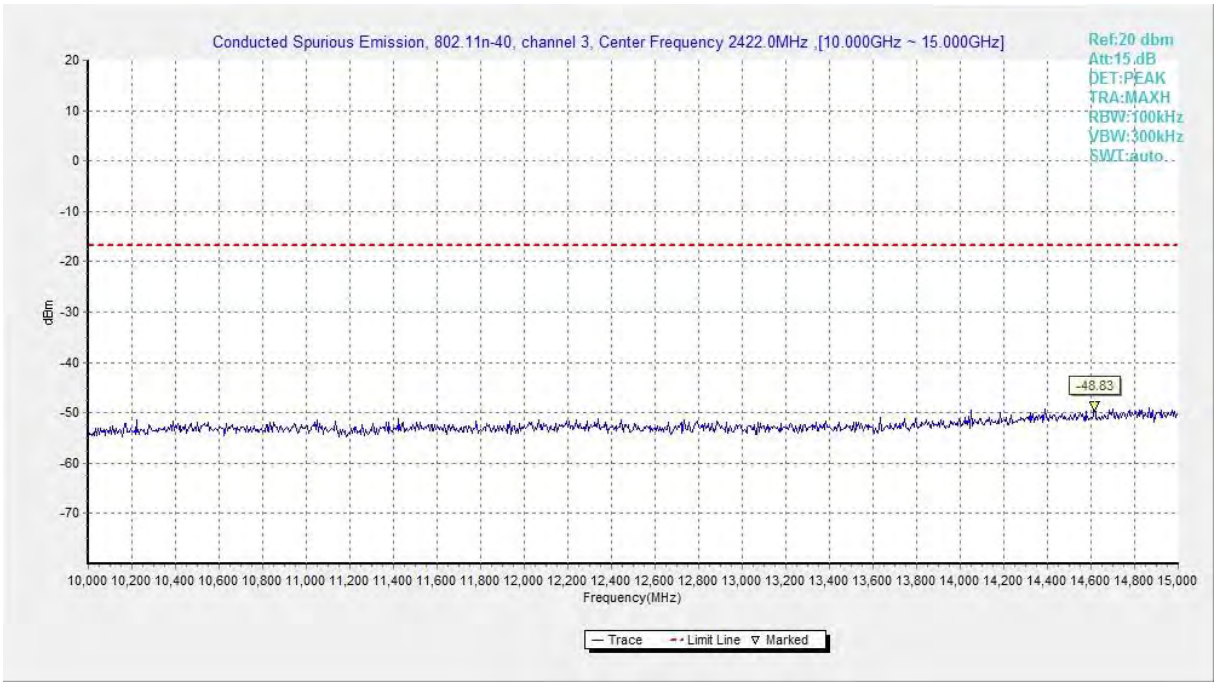

Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)

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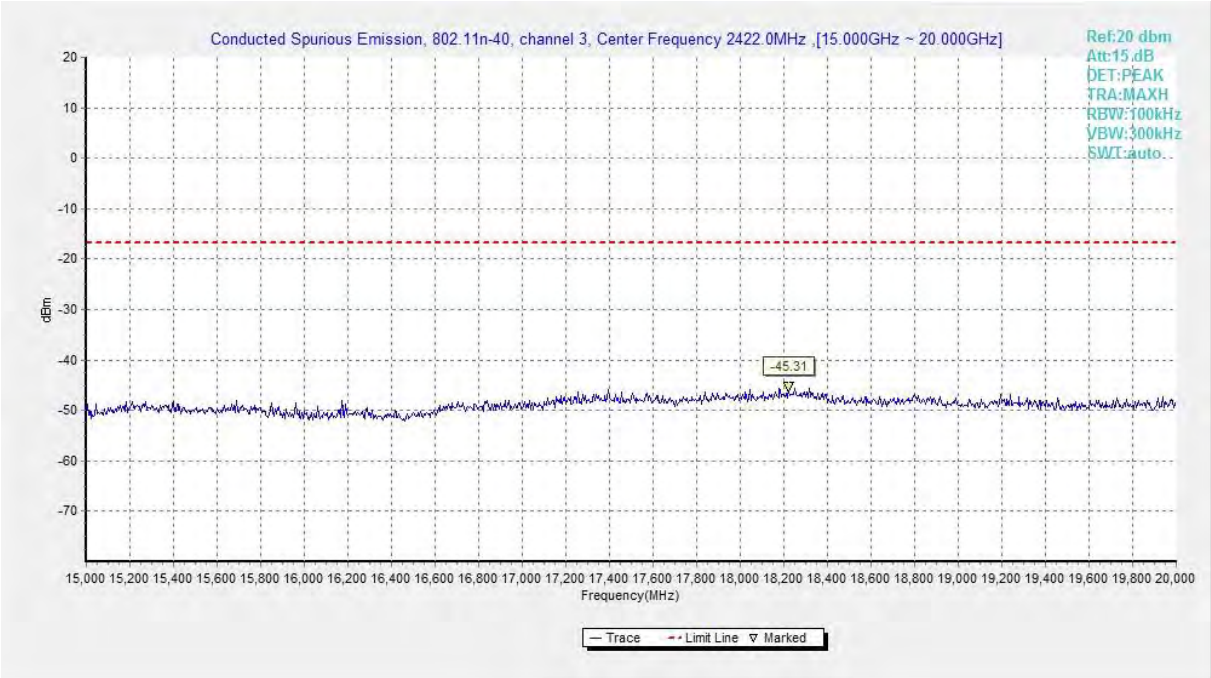

Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

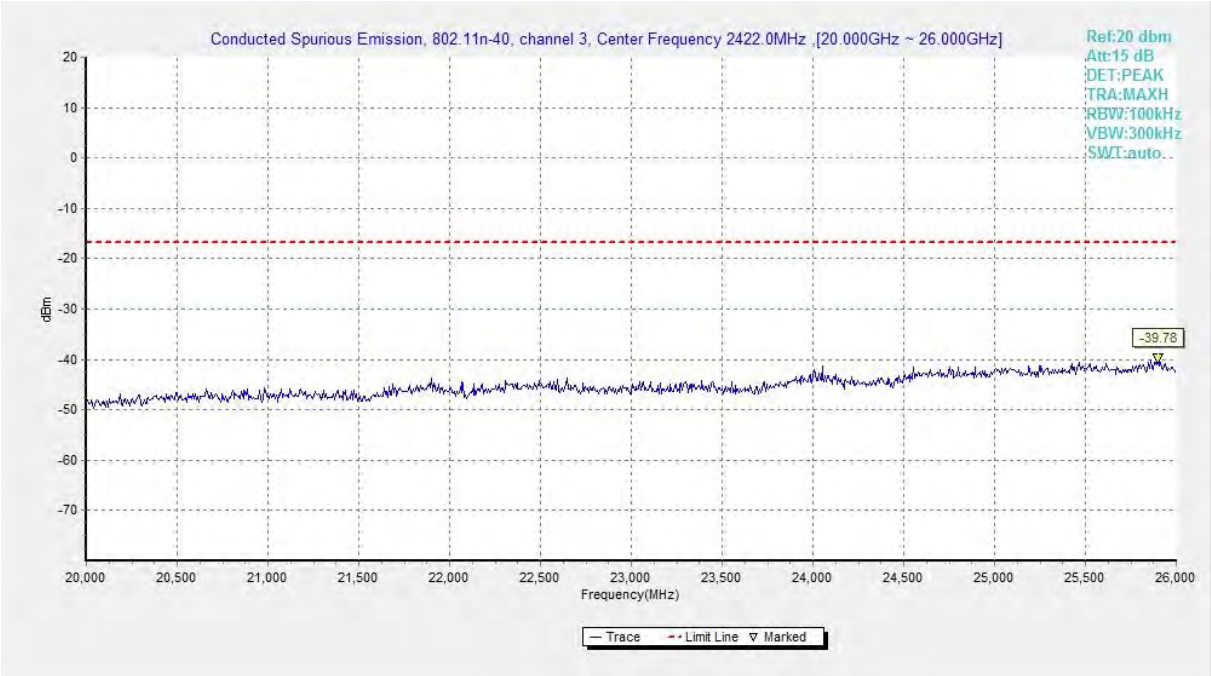

Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

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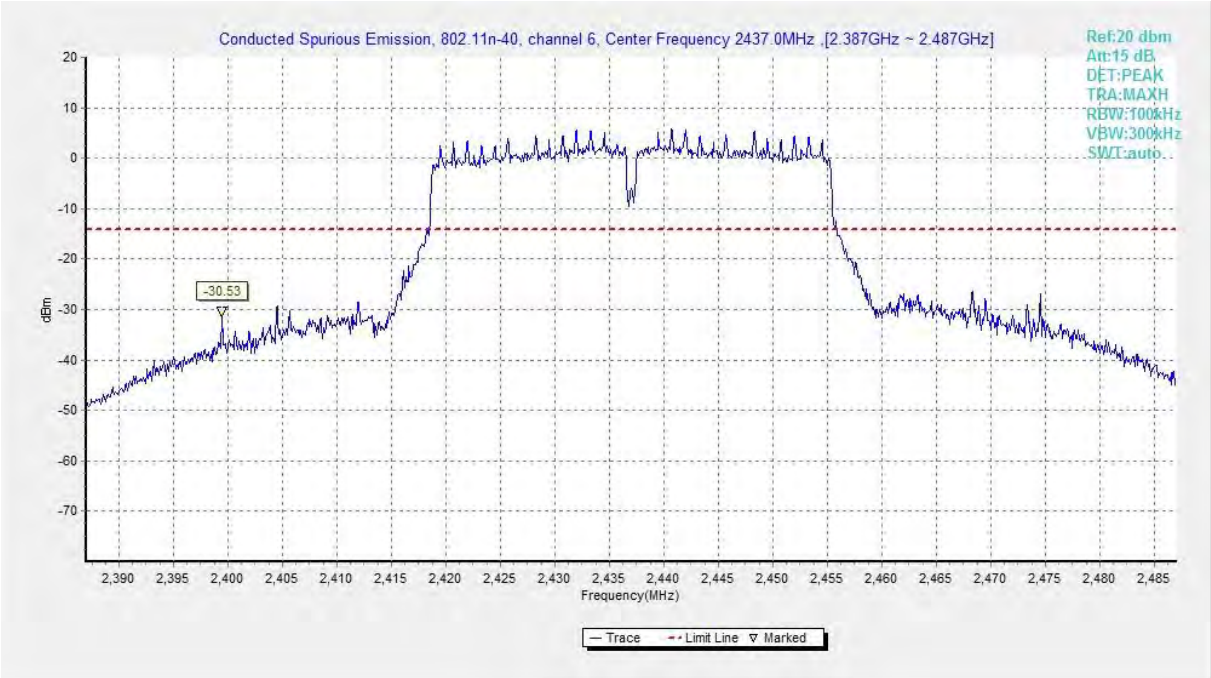

Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

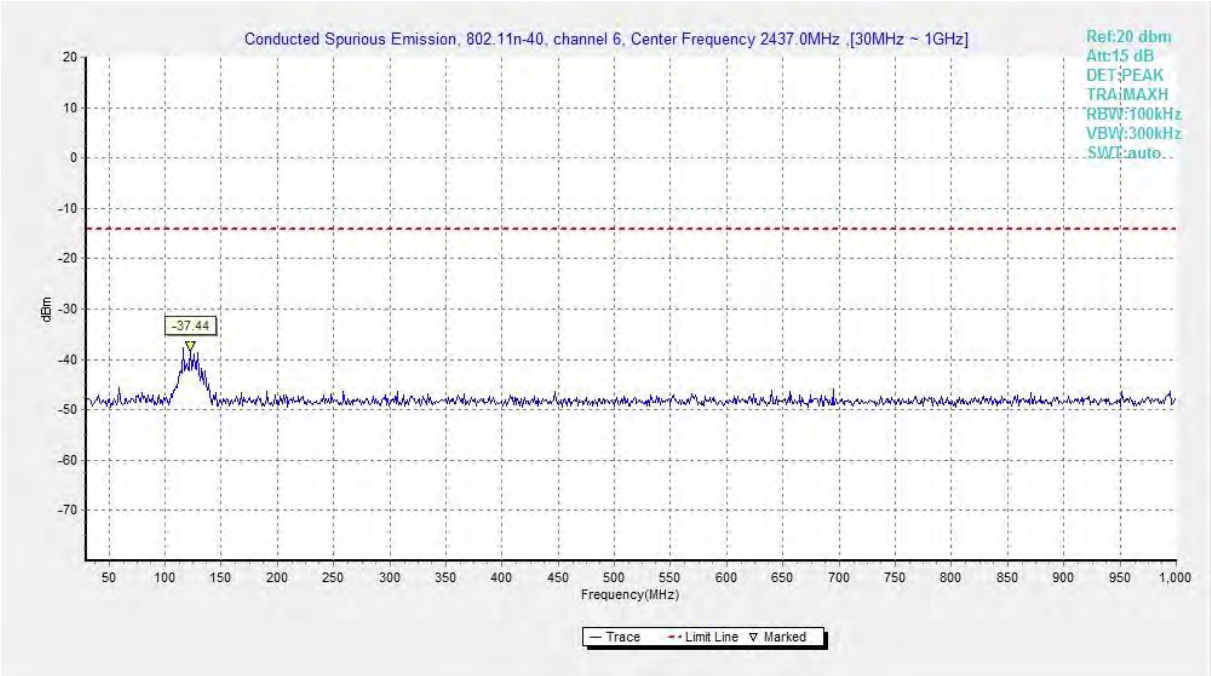

Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

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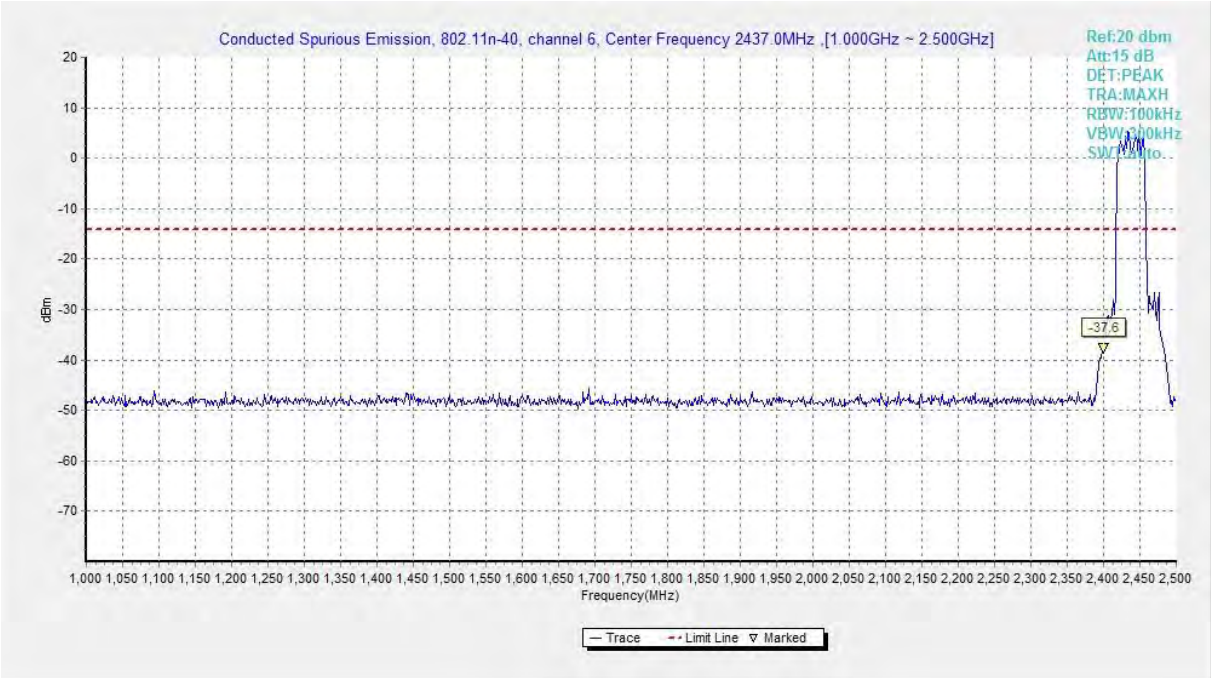

Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

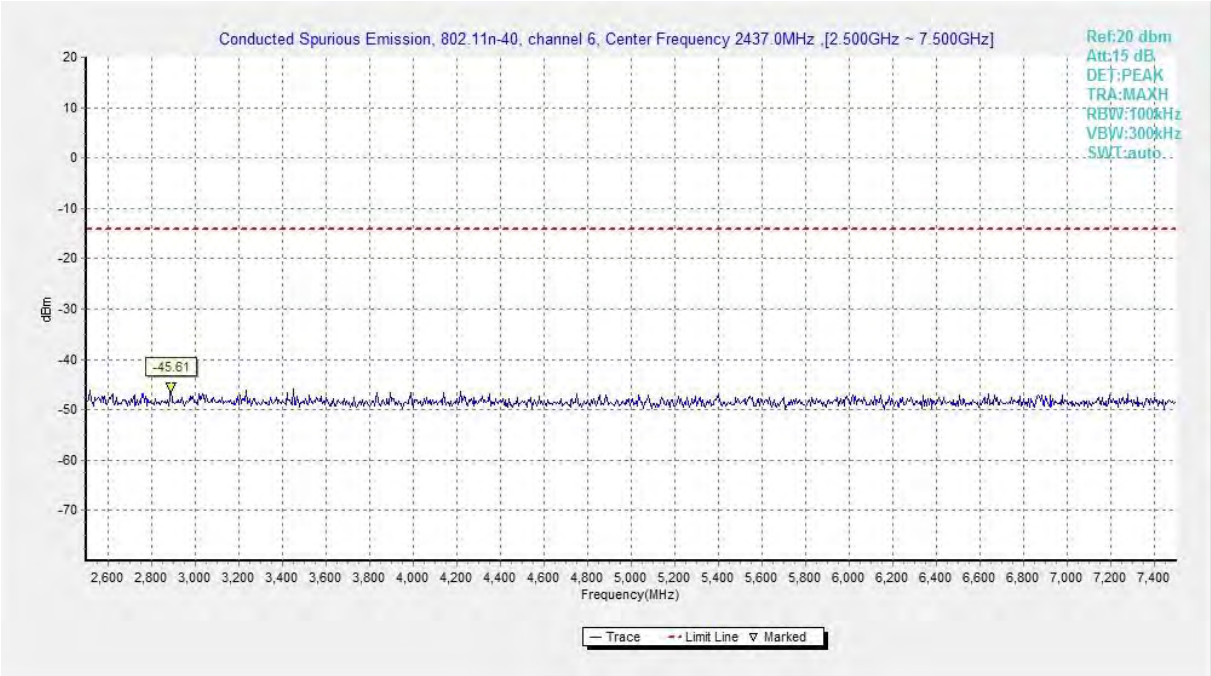

Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

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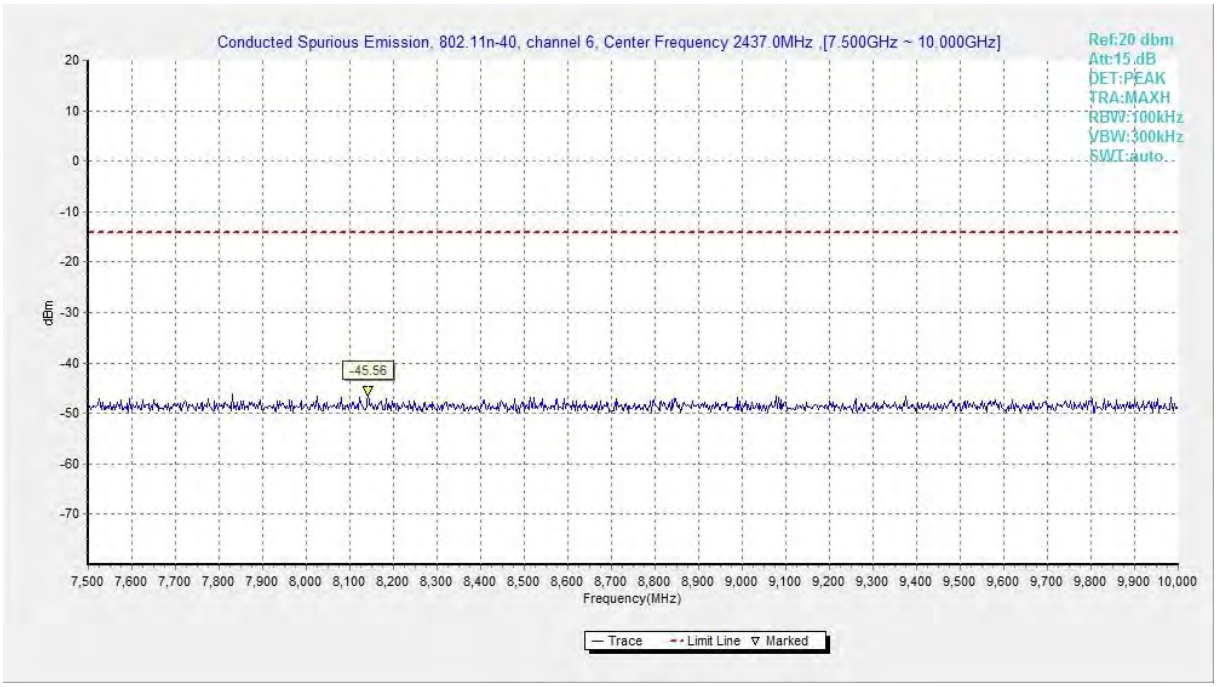

Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

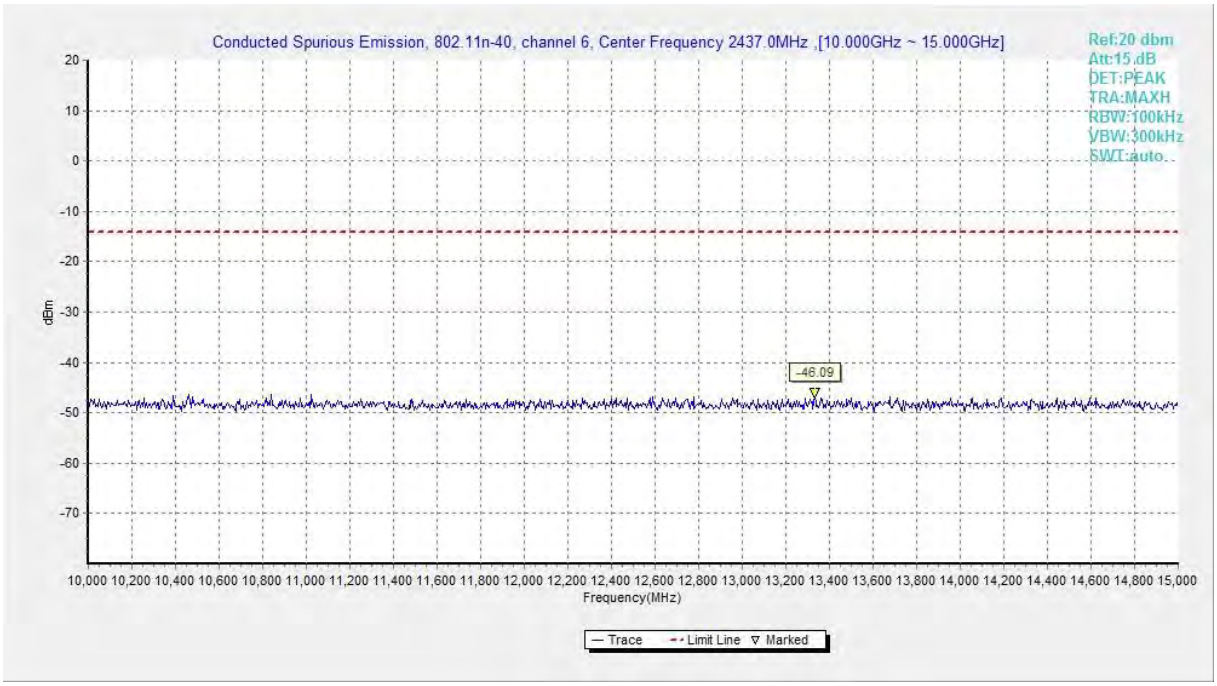

Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

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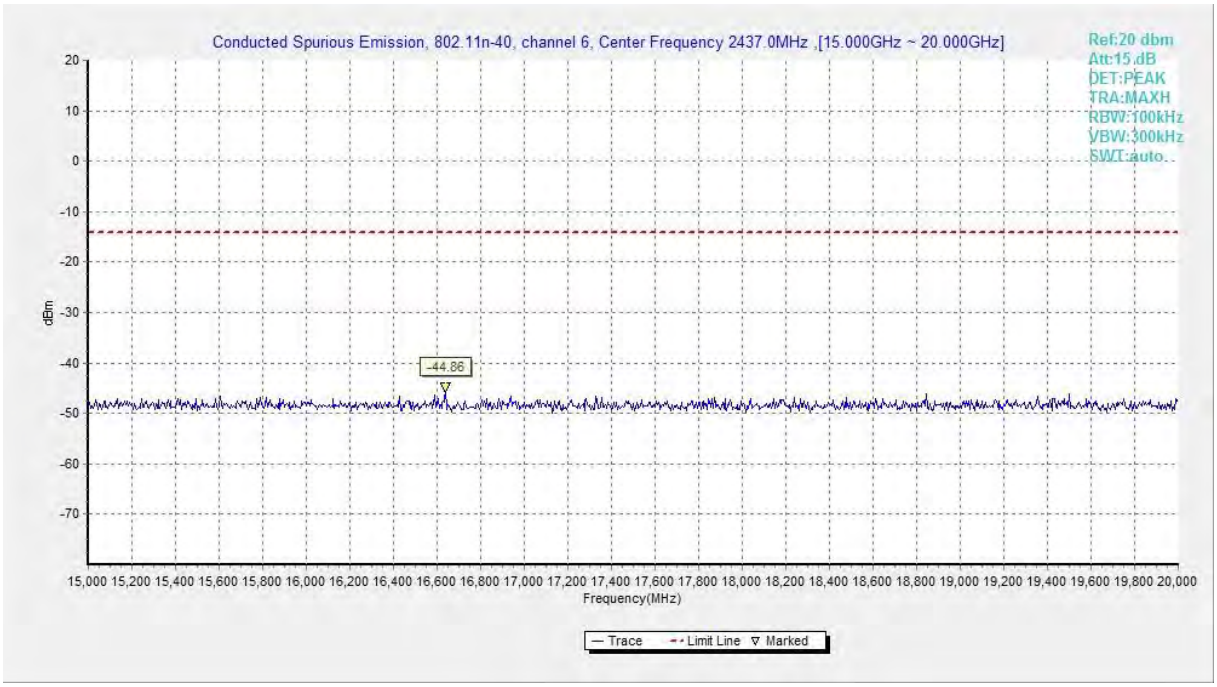

Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

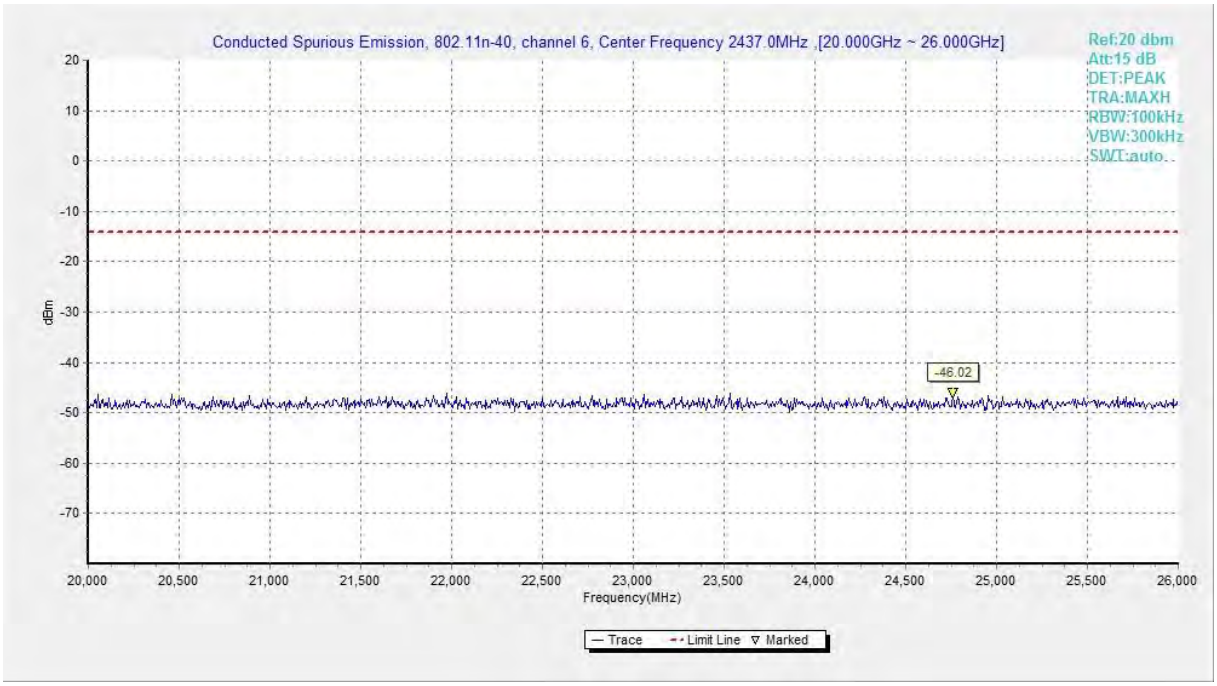

Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

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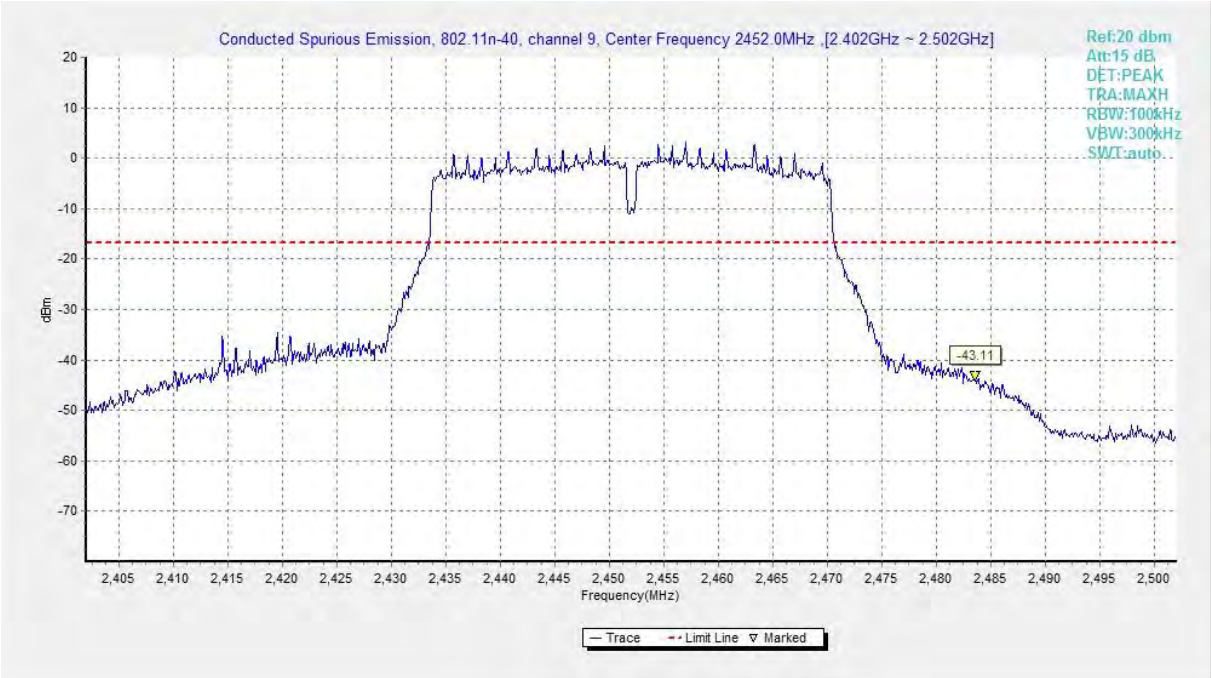

Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

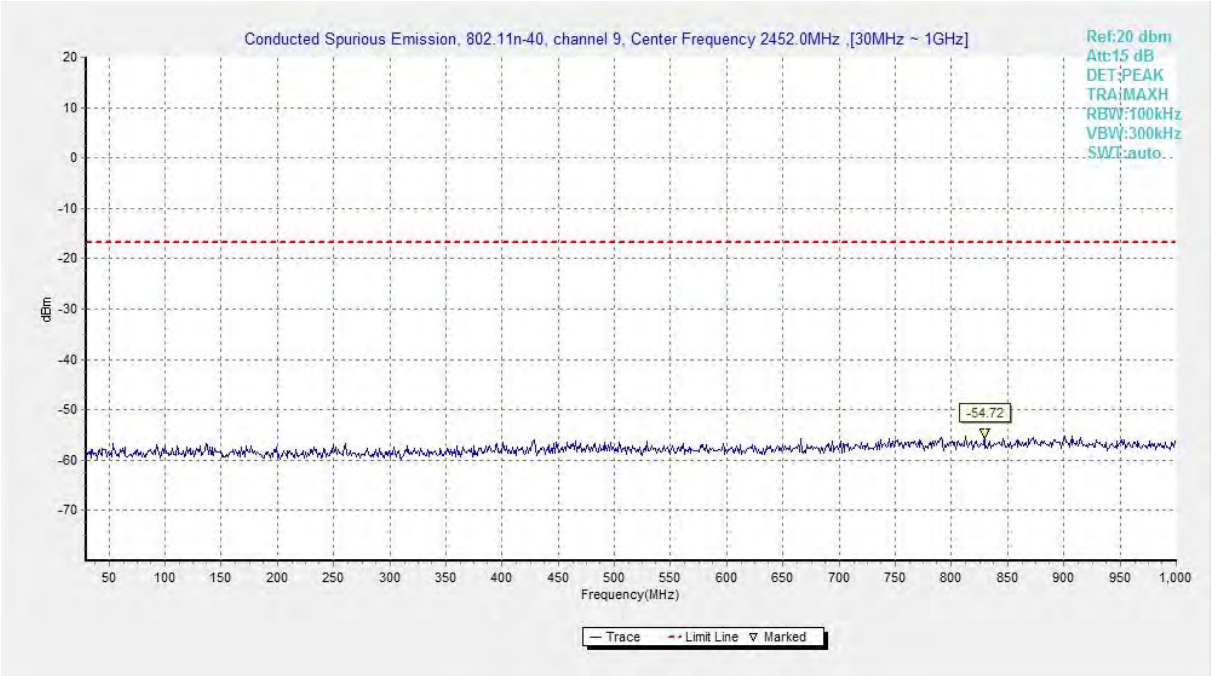

Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

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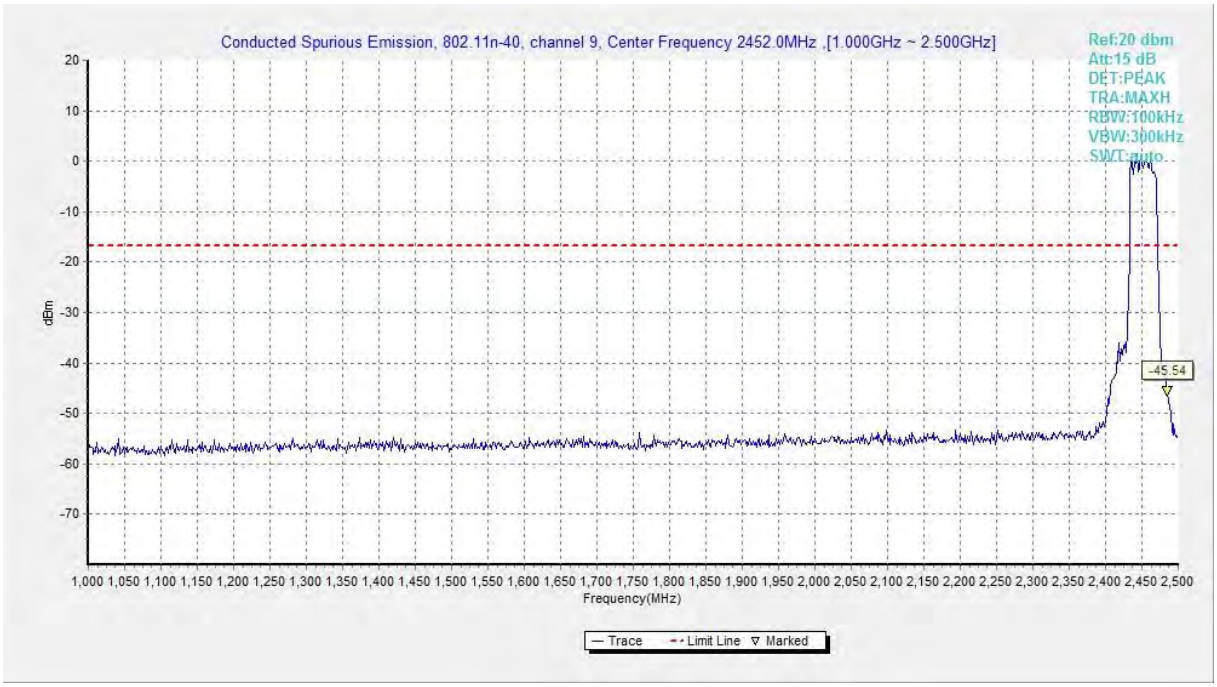

Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

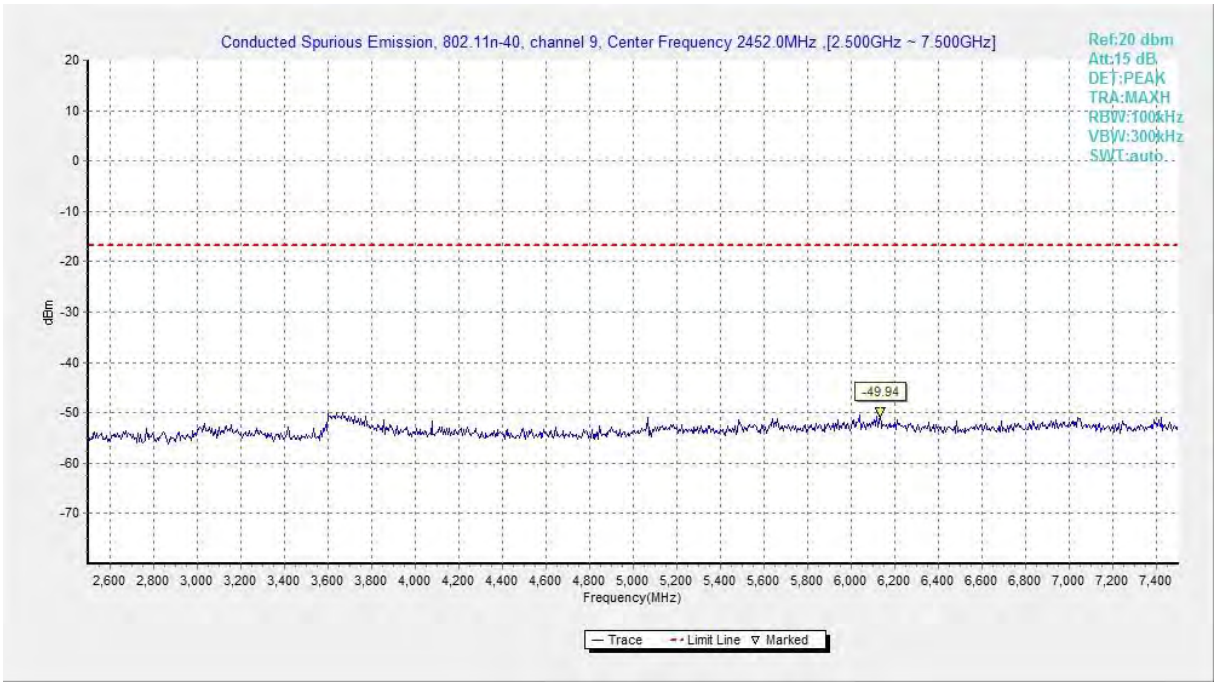

Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

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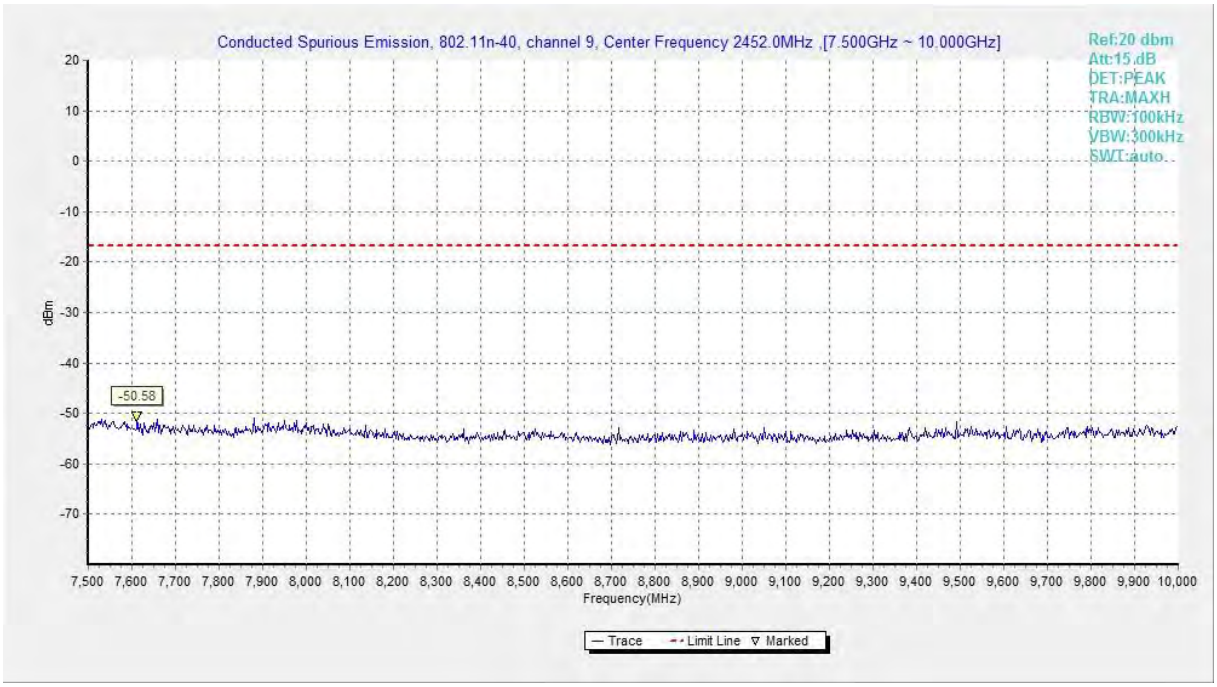

Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

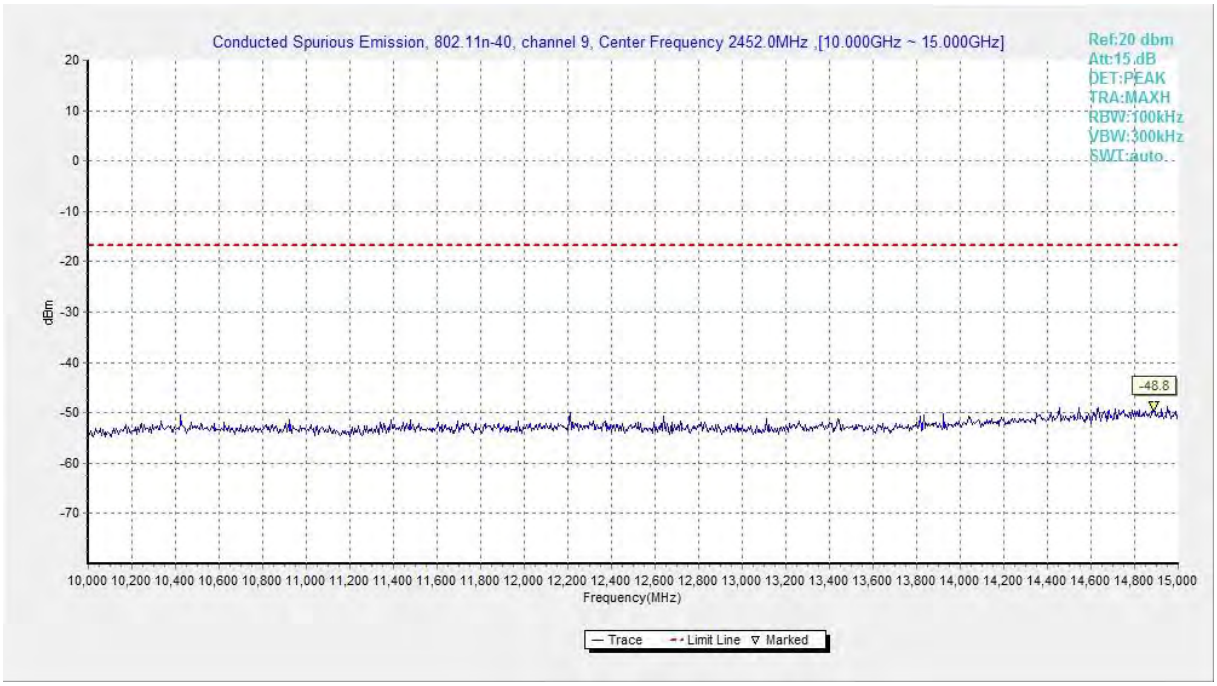

Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

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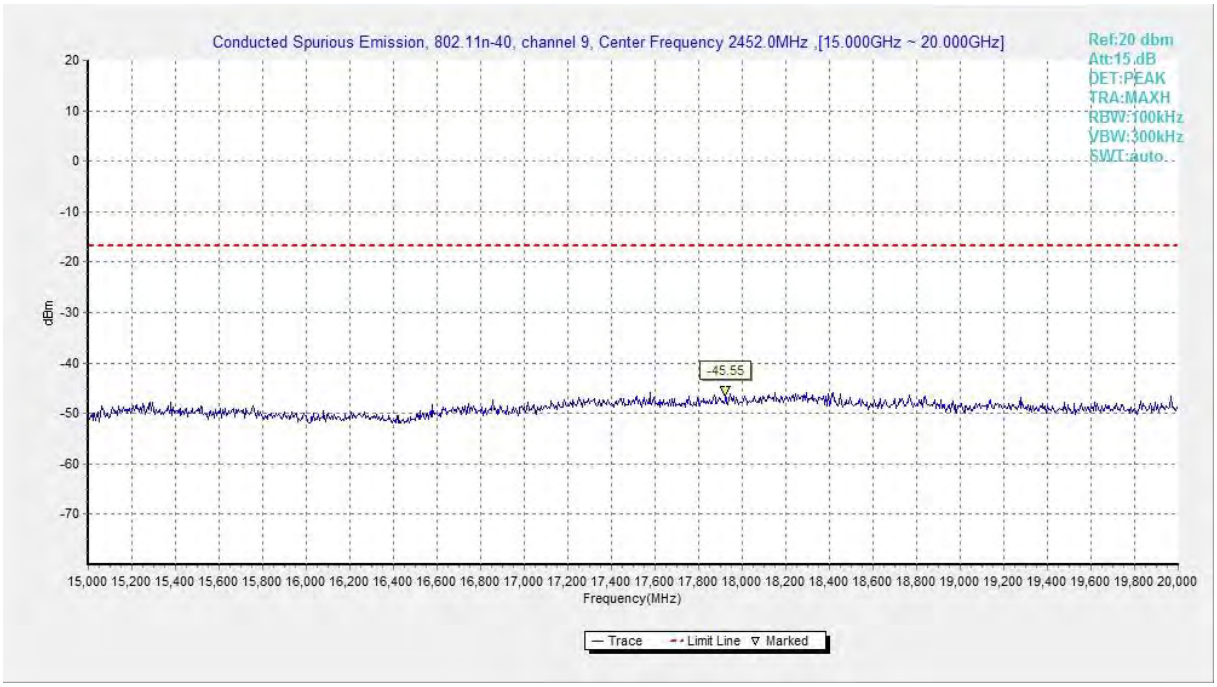

Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

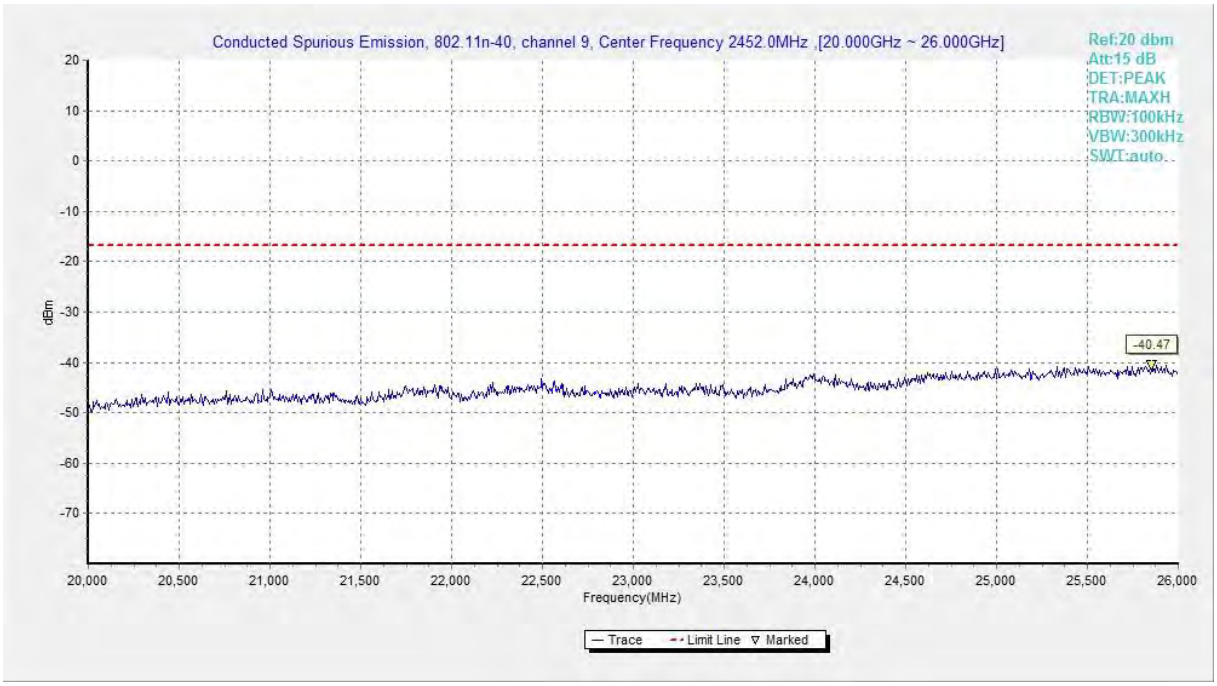

Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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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:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.31GHz~2.43GHz---L	Fig.A.6.2.1	**P**
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.2	**P**

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.31GHz~2.43GHz---L	Fig.A.6.2.3	**P**
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.4	**P**

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.31GHz~2.43GHz---L	Fig.A.6.2.5	**P**
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.6	**P**

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	3	2.31GHz~2.43GHz---L	Fig.A.6.2.7	**P**
	9	2.45GHz~2.50GHz---H	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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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)
17597.000	55.03	-25.70	46.00	34.83	74.00	18.97	H
13502.500	51.83	-29.60	40.00	41.43	74.00	22.17	H
12835.000	50.44	-30.70	39.10	41.94	74.00	23.56	V
9007.500	47.89	-33.30	38.20	42.99	74.00	26.11	H
7563.500	46.91	-35.00	36.90	45.11	74.00	27.09	V
2388.700	59.79	-20.00	28.10	51.79	74.00	14.21	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)
17607.500	55.28	-25.70	46.00	35.08	74.00	18.72	H
13626.500	51.73	-29.50	40.40	40.83	74.00	22.27	H
12371.000	49.74	-31.10	38.90	41.94	74.00	24.26	H
9555.500	47.59	-33.20	37.90	42.89	74.00	26.41	V
7413.500	46.47	-35.20	36.70	44.87	74.00	27.53	H
4874.000	43.88	-37.20	33.20	47.88	74.00	30.12	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)
17985.500	55.06	-25.50	46.70	33.86	74.00	18.94	H
14190.000	51.83	-29.00	42.00	38.83	74.00	22.17	H
12860.500	49.94	-30.70	39.10	41.44	74.00	24.06	H
9972.500	47.91	-33.60	38.10	43.41	74.00	26.09	H
7591.000	46.71	-35.00	36.90	44.91	74.00	27.29	V
2486.100	62.85	-20.00	28.30	54.55	74.00	11.15	H

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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)
17986.500	55.03	-25.50	46.70	33.83	74.00	18.97	V
14103.500	51.85	-29.40	41.70	39.65	74.00	22.15	V
12853.500	50.45	-30.70	39.10	41.95	74.00	23.55	V
9101.000	48.25	-33.80	38.10	43.85	74.00	25.75	V
7883.000	46.71	-34.90	37.10	44.51	74.00	27.29	V
2390.000	62.17	-20.00	28.10	54.17	74.00	11.83	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)
17935.000	55.07	-25.50	46.70	33.87	74.00	18.93	H
13638.500	51.31	-29.50	40.40	40.41	74.00	22.69	V
12888.000	50.11	-30.70	39.10	41.61	74.00	23.89	H
9124.000	47.84	-33.80	38.10	43.64	74.00	26.16	V
7403.000	46.55	-35.20	36.70	44.95	74.00	27.45	V
4818.500	42.24	-37.50	33.10	46.54	74.00	31.76	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)
17587.500	54.46	-25.70	46.00	34.26	74.00	19.54	V
13724.500	51.79	-29.10	40.90	39.99	74.00	22.21	V
12858.500	50.52	-30.70	39.10	42.02	74.00	23.48	H
9222.000	47.70	-33.70	38.00	43.40	74.00	26.30	V
7799.000	46.45	-35.10	37.00	44.55	74.00	27.55	V
2485.200	60.83	-20.00	28.30	52.53	74.00	13.17	H

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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)
17989.000	54.90	-25.50	46.70	33.70	74.00	19.10	V
14183.500	51.97	-29.00	42.00	38.97	74.00	22.03	V
12872.500	49.96	-30.70	39.10	41.46	74.00	24.04	V
9886.500	48.12	-33.50	38.10	43.52	74.00	25.88	V
7214.000	46.55	-35.50	36.40	45.65	74.00	27.45	H
2390.000	64.27	-20.00	28.10	56.27	74.00	9.73	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)
17217.500	55.40	-25.90	44.40	37.00	74.00	18.60	H
13679.000	51.71	-29.50	40.40	40.81	74.00	22.29	H
12840.000	49.51	-30.70	39.10	41.01	74.00	24.49	H
9746.000	47.84	-33.00	38.00	42.84	74.00	26.16	H
7235.500	46.49	-35.50	36.40	45.59	74.00	27.51	V
4879.000	42.35	-37.20	33.20	46.35	74.00	31.65	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)
17954.500	55.16	-25.50	46.70	33.96	74.00	18.84	H
14196.000	51.37	-29.00	42.00	38.37	74.00	22.63	V
12767.000	49.88	-30.50	39.10	41.28	74.00	24.12	V
9394.500	48.14	-32.90	37.90	43.14	74.00	25.86	H
7205.000	46.86	-35.50	36.40	45.96	74.00	27.14	V
2485.100	62.35	-20.00	28.30	54.05	74.00	11.65	H

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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)
17906.500	54.54	-25.50	46.70	33.34	74.00	19.46	V
14190.000	51.32	-29.00	42.00	38.32	74.00	22.68	V
12992.000	50.16	-30.50	39.20	41.46	74.00	23.84	V
9143.500	48.07	-33.80	38.10	43.87	74.00	25.93	H
7214.500	46.80	-35.50	36.40	45.90	74.00	27.20	V
2389.900	62.01	-20.00	28.10	54.01	74.00	11.99	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)
17581.000	54.63	-25.70	46.00	34.43	74.00	19.37	V
13693.000	51.36	-29.50	40.40	40.46	74.00	22.64	H
12810.000	50.50	-30.70	39.10	42.00	74.00	23.50	V
9523.500	47.97	-33.20	37.90	43.27	74.00	26.03	V
7017.000	46.18	-35.20	36.10	45.28	74.00	27.82	H
4860.000	41.81	-37.50	33.10	46.11	74.00	32.19	H

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)
17384.000	55.01	-25.90	44.40	36.61	74.00	18.99	V
14026.000	51.26	-29.40	41.70	39.06	74.00	22.74	V
12765.500	49.70	-30.50	39.10	41.10	74.00	24.30	H
8984.500	47.64	-33.30	38.20	42.74	74.00	26.36	V
7694.500	47.01	-34.80	37.00	44.91	74.00	26.99	H
2485.200	63.73	-20.00	28.30	55.43	74.00	10.27	H

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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)
17598.000	42.68	-25.70	46.00	22.48	54.00	11.32	H
4824.000	39.96	-37.50	33.10	44.26	54.00	14.04	H
14202.500	39.07	-29.00	42.00	26.07	54.00	14.93	H
12862.000	37.59	-30.70	39.10	29.09	54.00	16.41	H
9648.000	36.59	-33.10	38.00	31.69	54.00	17.41	V
2390.000	45.34	-20.00	28.10	37.34	54.00	8.66	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)
17600.000	42.44	-25.70	46.00	22.24	54.00	11.56	H
14190.500	38.95	-29.00	42.00	25.95	54.00	15.05	V
4874.000	37.96	-37.20	33.20	41.96	54.00	16.04	H
12874.500	37.42	-30.70	39.10	28.92	54.00	16.58	V
9748.000	35.32	-33.00	38.00	30.32	54.00	18.68	V
7885.000	33.88	-34.90	37.10	31.68	54.00	20.12	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)
17597.500	42.38	-25.70	46.00	22.18	54.00	11.62	H
14202.500	38.96	-29.00	42.00	25.96	54.00	15.04	V
12848.000	37.38	-30.70	39.10	28.88	54.00	16.62	V
4924.000	37.34	-37.10	33.30	41.14	54.00	16.66	H
9848.000	35.60	-33.50	38.00	31.10	54.00	18.40	V
2485.900	45.39	-20.00	28.30	37.09	54.00	8.61	H

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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)
17996.500	42.32	-25.50	46.70	21.12	54.00	11.68	V
14196.000	38.80	-29.00	42.00	25.80	54.00	15.20	V
12849.000	37.37	-30.70	39.10	28.87	54.00	16.63	V
9848.000	36.28	-33.50	38.00	31.78	54.00	17.72	V
7805.500	33.85	-35.10	37.00	31.95	54.00	20.15	H
2390.000	48.91	-20.00	28.10	40.91	54.00	5.09	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)
17988.000	42.24	-25.50	46.70	21.04	54.00	11.76	H
14199.000	38.82	-29.00	42.00	25.82	54.00	15.18	V
12850.000	37.29	-30.70	39.10	28.79	54.00	16.71	H
9748.500	34.80	-33.00	38.00	29.80	54.00	19.20	V
7993.500	33.83	-34.80	37.10	31.53	54.00	20.17	H
4875.500	29.73	-37.20	33.20	33.73	54.00	24.27	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)
17602.000	42.39	-25.70	46.00	22.19	54.00	11.61	H
14175.000	38.99	-29.00	42.00	25.99	54.00	15.01	V
12836.500	37.28	-30.70	39.10	28.78	54.00	16.72	V
9848.000	36.45	-33.50	38.00	31.95	54.00	17.55	V
7799.500	33.78	-35.10	37.00	31.88	54.00	20.22	V
2485.000	47.01	-20.00	28.30	38.71	54.00	6.99	H

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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)
17979.500	42.20	-25.50	46.70	21.00	54.00	11.80	H
13629.000	38.80	-29.50	40.40	27.90	54.00	15.20	V
12864.000	37.31	-30.70	39.10	28.81	54.00	16.69	V
9648.000	36.16	-33.10	38.00	31.26	54.00	17.84	V
7891.500	33.67	-34.90	37.10	31.47	54.00	20.33	H
2390.000	49.88	-20.00	28.10	41.88	54.00	4.12	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)
17998.500	42.21	-25.50	46.70	21.01	54.00	11.79	H
14194.500	38.90	-29.00	42.00	25.90	54.00	15.10	H
12849.500	37.50	-30.70	39.10	29.00	54.00	16.50	H
9748.000	35.11	-33.00	38.00	30.11	54.00	18.89	V
7885.500	33.69	-34.90	37.10	31.49	54.00	20.31	V
4873.500	29.47	-37.20	33.20	33.47	54.00	24.53	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)
17984.500	42.38	-25.50	46.70	21.18	54.00	11.62	H
14190.000	38.90	-29.00	42.00	25.90	54.00	15.10	V
12862.500	37.34	-30.70	39.10	28.84	54.00	16.66	H
9116.000	34.90	-33.80	38.10	30.70	54.00	19.10	V
7795.000	33.79	-35.10	37.00	31.89	54.00	20.21	V
2485.100	48.19	-20.00	28.30	39.89	54.00	5.81	H

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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)
17404.000	42.35	-26.90	45.20	23.95	54.00	11.65	V
14186.500	38.85	-29.00	42.00	25.85	54.00	15.15	V
12863.000	37.24	-30.70	39.10	28.74	54.00	16.76	H
9688.000	35.50	-33.00	38.00	30.50	54.00	18.50	V
7802.500	33.68	-35.10	37.00	31.78	54.00	20.32	H
2390.000	50.57	-20.00	28.10	42.57	54.00	3.43	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)
17989.500	42.25	-25.50	46.70	21.05	54.00	11.75	V
14198.000	38.89	-29.00	42.00	25.89	54.00	15.11	H
12856.500	37.28	-30.70	39.10	28.78	54.00	16.72	H
9748.000	35.19	-33.00	38.00	30.19	54.00	18.81	V
7809.000	33.66	-35.10	37.00	31.76	54.00	20.34	H
4868.500	29.21	-37.20	33.20	33.21	54.00	24.79	H

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)
17399.000	42.24	-26.90	45.20	23.84	54.00	11.76	H
14194.500	38.92	-29.00	42.00	25.92	54.00	15.08	V
12861.500	37.25	-30.70	39.10	28.75	54.00	16.75	V
9808.000	36.05	-33.50	38.00	31.55	54.00	17.95	V
7796.500	33.70	-35.10	37.00	31.80	54.00	20.30	V
2485.100	50.13	-20.00	28.30	41.83	54.00	3.87	H

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Test graphs as below:

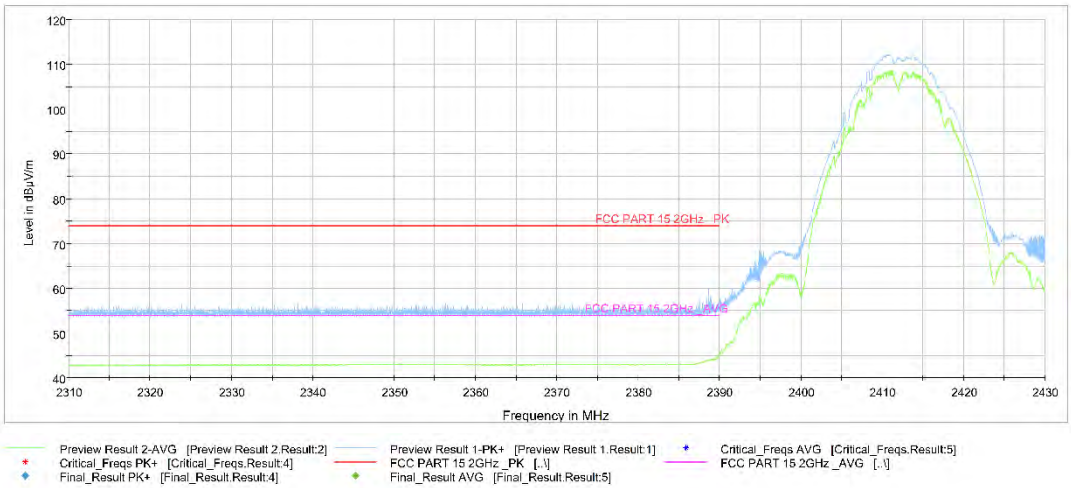

Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.43GHz

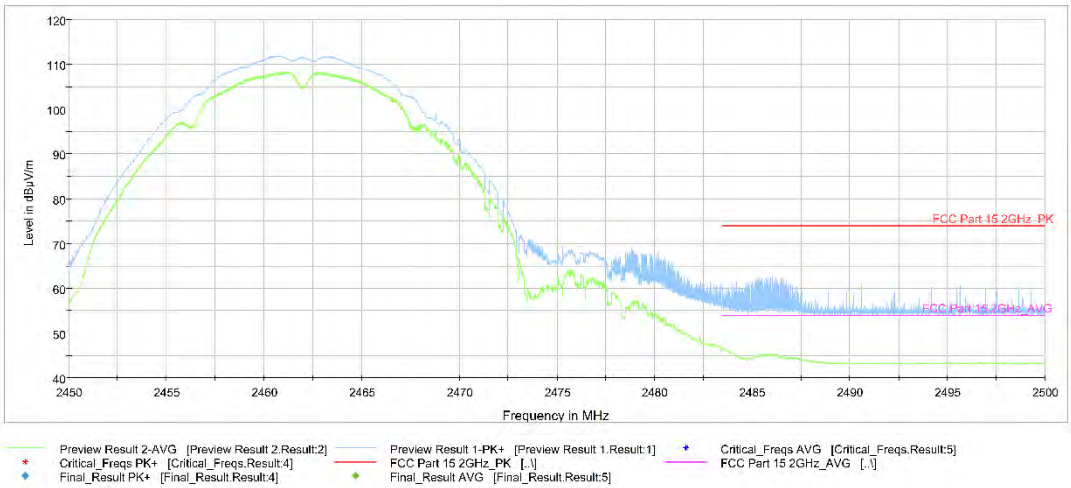

Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

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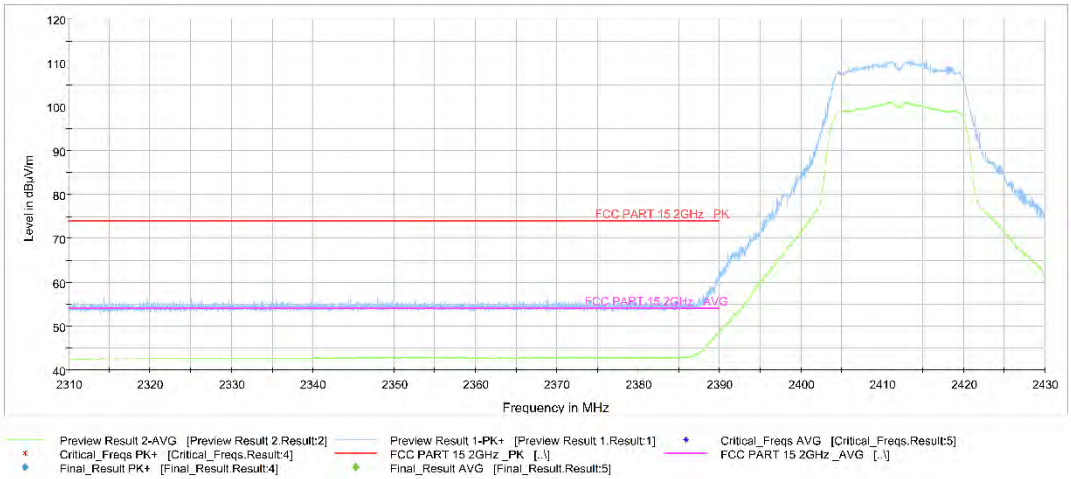

Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.43GHz

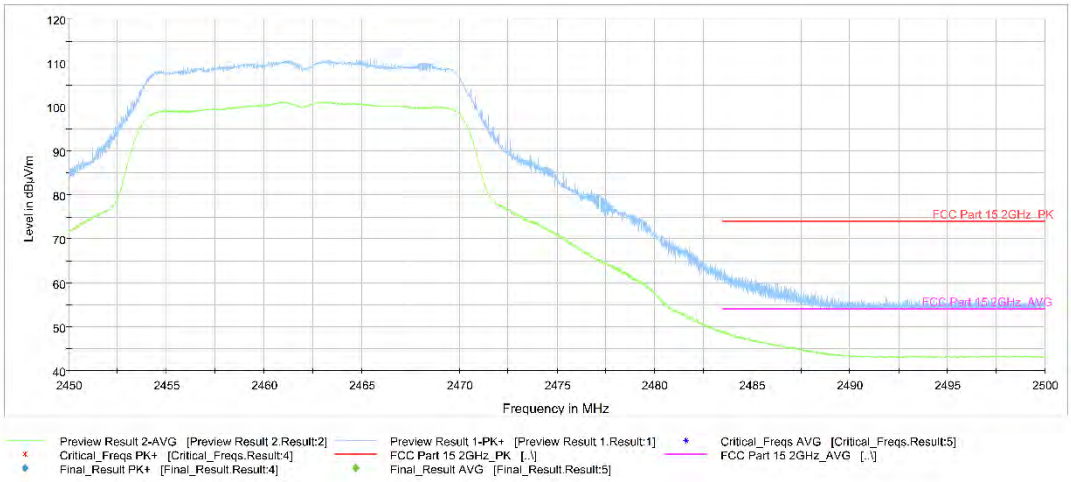

Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

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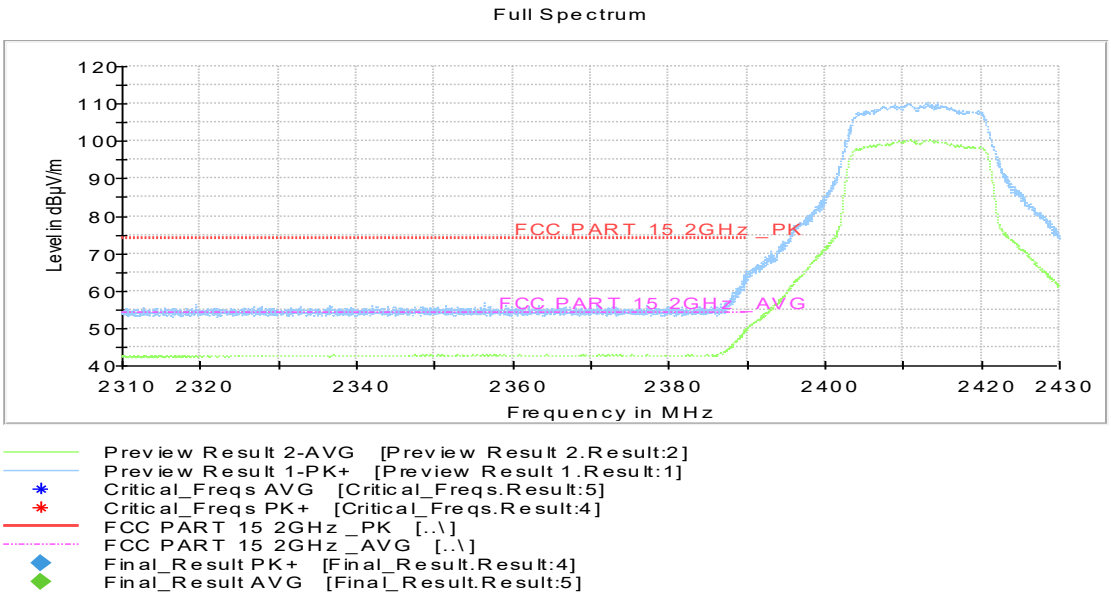

Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.43GHz

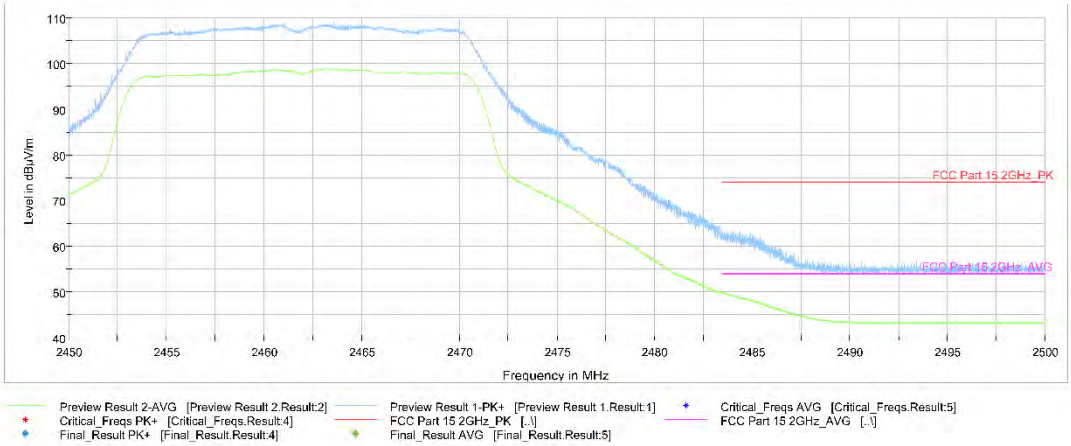

Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

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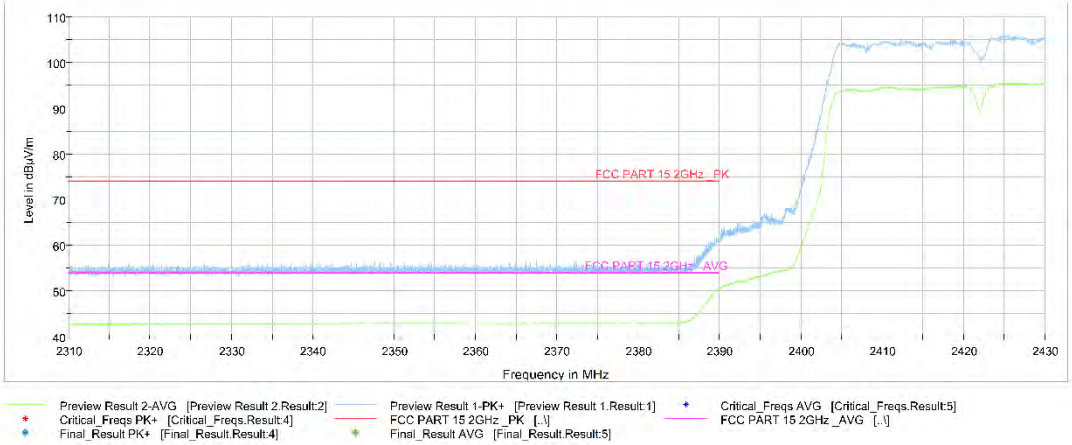

Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.43GHz

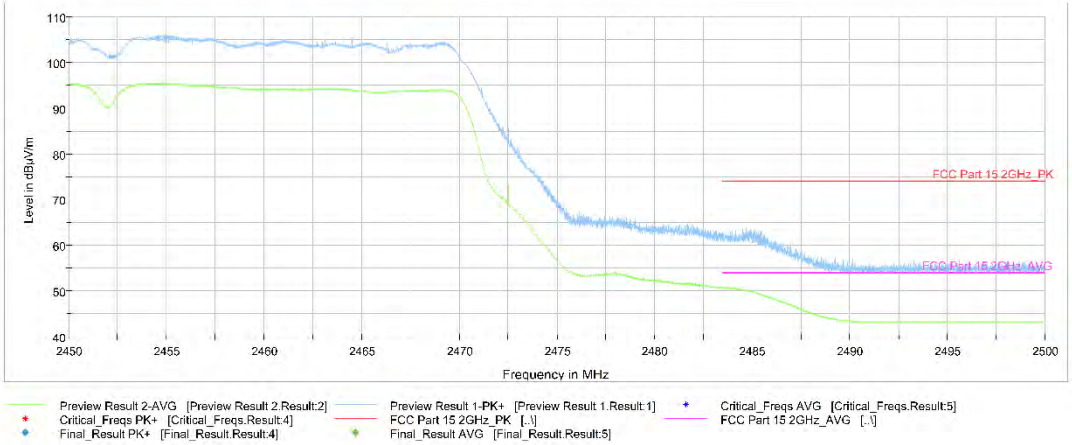

Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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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.7.2	**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:

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Measurement results:

Result for Traffic:

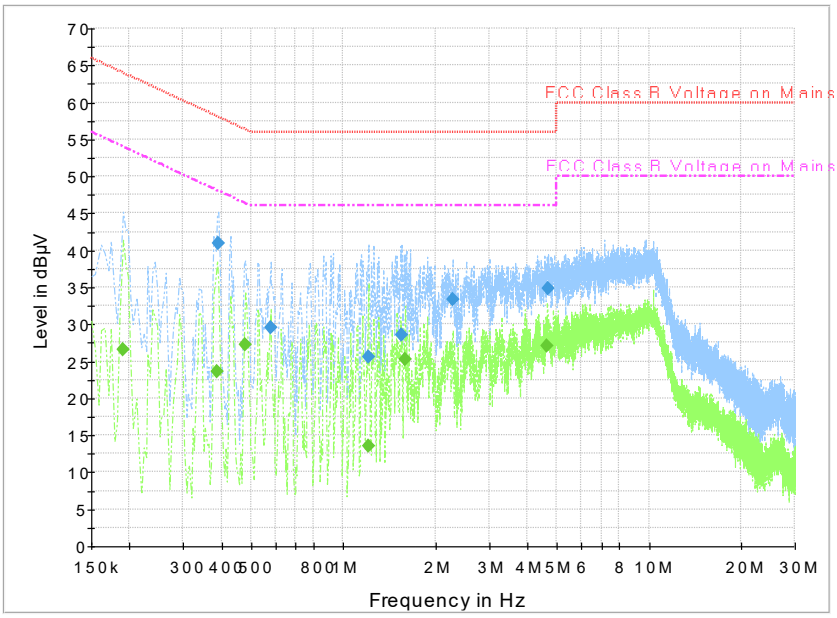

Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.390000	40.9	2000.0	9.000	On	L1	19.9	17.2	58.1
0.578000	29.6	2000.0	9.000	On	N	19.9	26.4	56.0
1.206000	25.6	2000.0	9.000	On	N	19.8	30.4	56.0
1.558000	28.6	2000.0	9.000	On	N	19.7	27.4	56.0
2.274000	33.3	2000.0	9.000	On	N	19.7	22.7	56.0
4.658000	34.8	2000.0	9.000	On	L1	19.6	21.2	56.0

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.190000	26.6	2000.0	9.000	On	L1	20.0	27.4	54.0
0.386000	23.7	2000.0	9.000	On	L1	19.9	24.5	48.1
0.478000	27.2	2000.0	9.000	On	N	20.0	19.1	46.4
1.206000	13.6	2000.0	9.000	On	N	19.8	32.4	46.0
1.590000	25.3	2000.0	9.000	On	N	19.8	20.7	46.0
4.654000	27.2	2000.0	9.000	On	L1	19.6	18.8	46.0

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Measurement results:

Result for Idle:

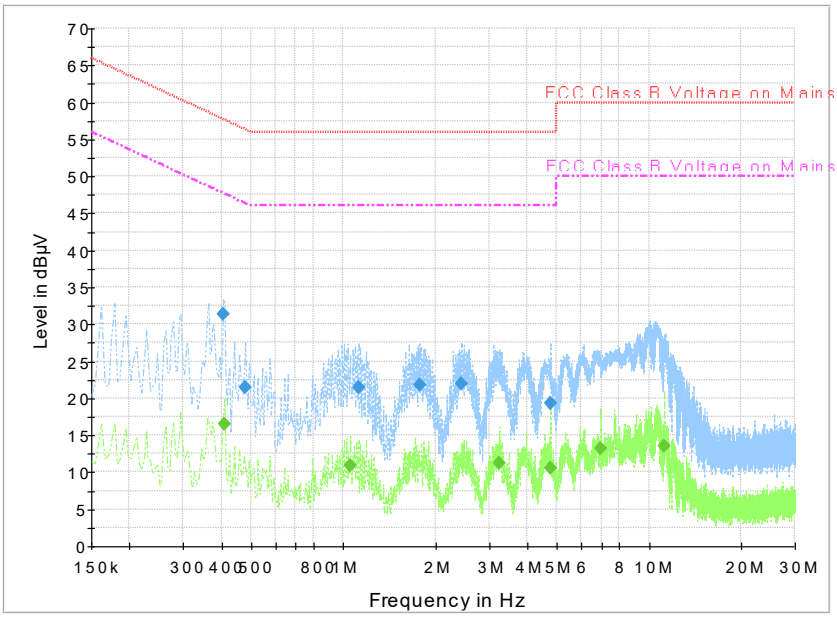

Fig.A.7.2 AC Powerline Conducted Emission-Idle

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.406000	31.3	2000.0	9.000	On	N	19.9	26.4	57.7
0.478000	21.5	2000.0	9.000	On	N	20.0	34.8	56.4
1.122000	21.5	2000.0	9.000	On	N	19.8	34.5	56.0
1.782000	21.7	2000.0	9.000	On	N	19.8	34.3	56.0
2.430000	21.9	2000.0	9.000	On	N	19.7	34.1	56.0
4.754000	19.3	2000.0	9.000	On	N	19.7	36.7	56.0

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.410000	16.5	2000.0	9.000	On	N	19.9	31.2	47.6
1.054000	10.9	2000.0	9.000	On	N	19.8	35.1	46.0
3.242000	11.2	2000.0	9.000	On	L1	19.5	34.8	46.0
4.758000	10.5	2000.0	9.000	On	N	19.7	35.5	46.0
6.966000	13.2	2000.0	9.000	On	L1	19.5	36.8	50.0
11.218000	13.5	2000.0	9.000	On	N	19.7	36.5	50.0

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ANNEX B: EUT parameters

Disclaimer: The 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

United States Department of Commerce
National Institute of Standards and Technology

NVLAP ilac-MRA

Certificate of Accreditation to ISO/IEC 17025:2017

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 17025:2017. 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).

2021-09-29 through 2022-09-30
Effective Dates

For the National Voluntary Laboratory Accreditation Program

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

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