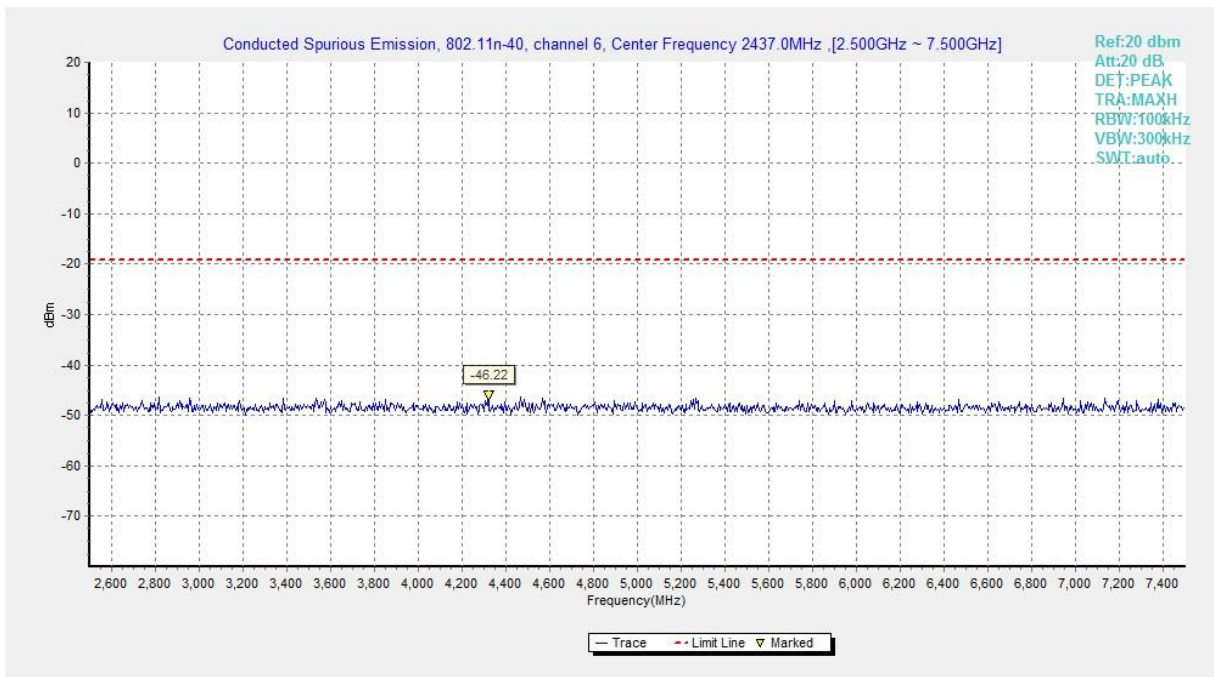
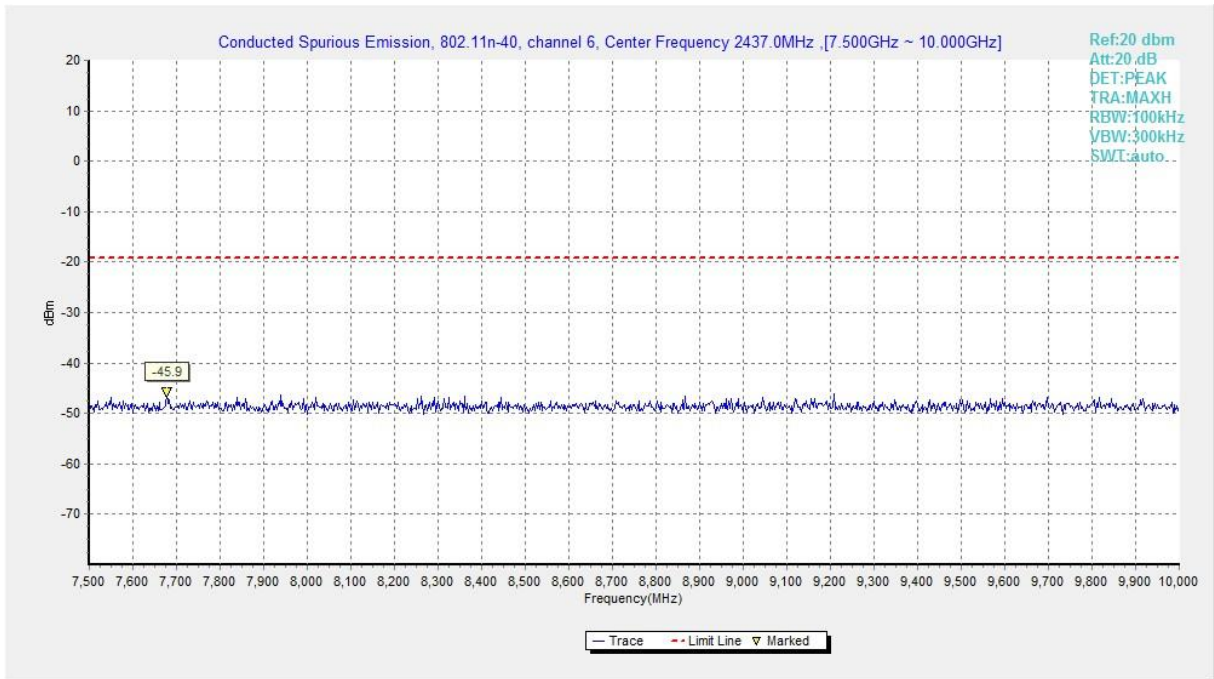


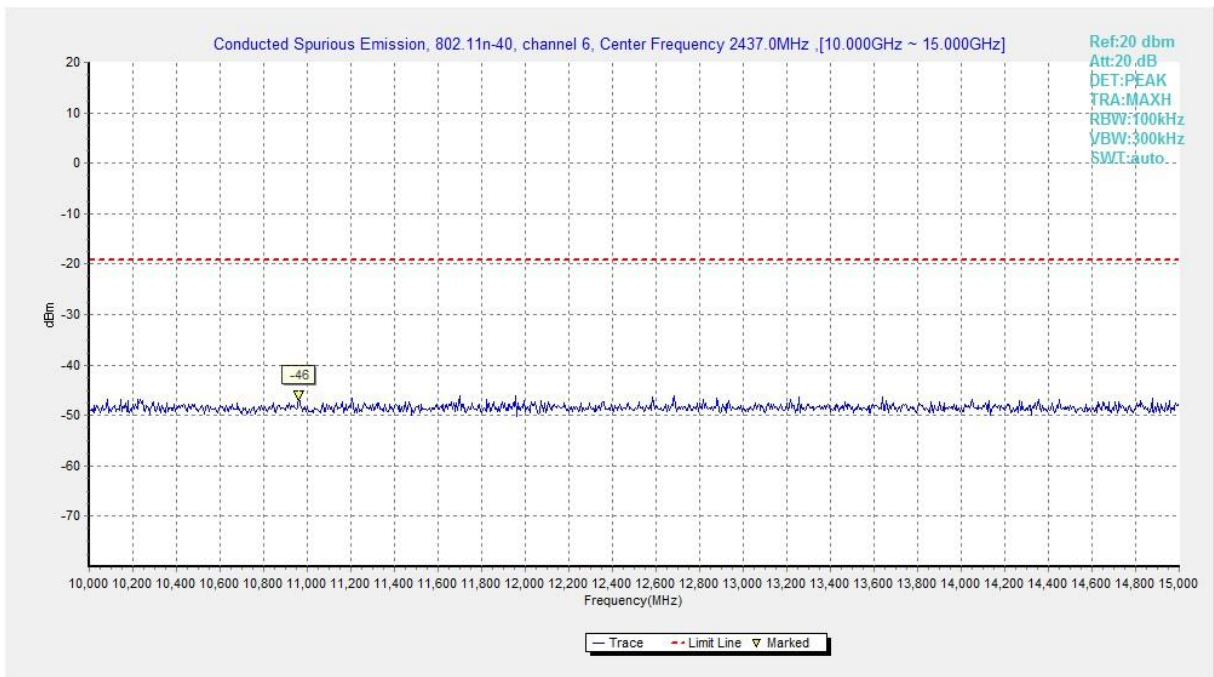
**Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)**



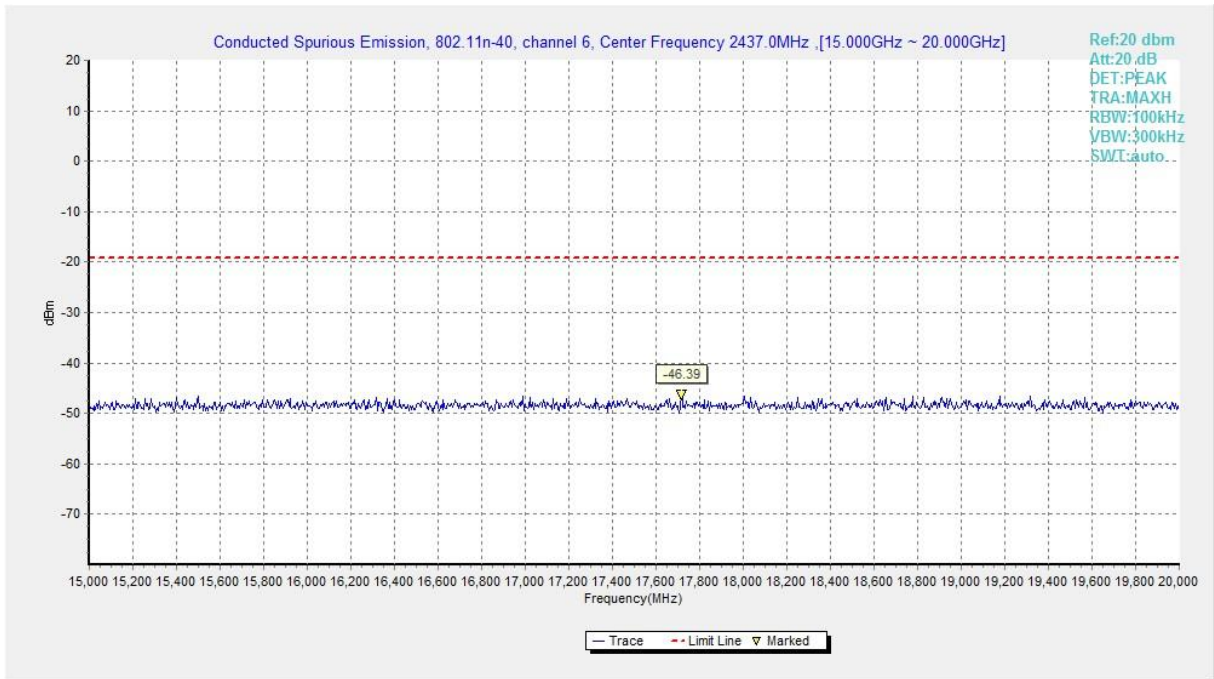
**Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)**



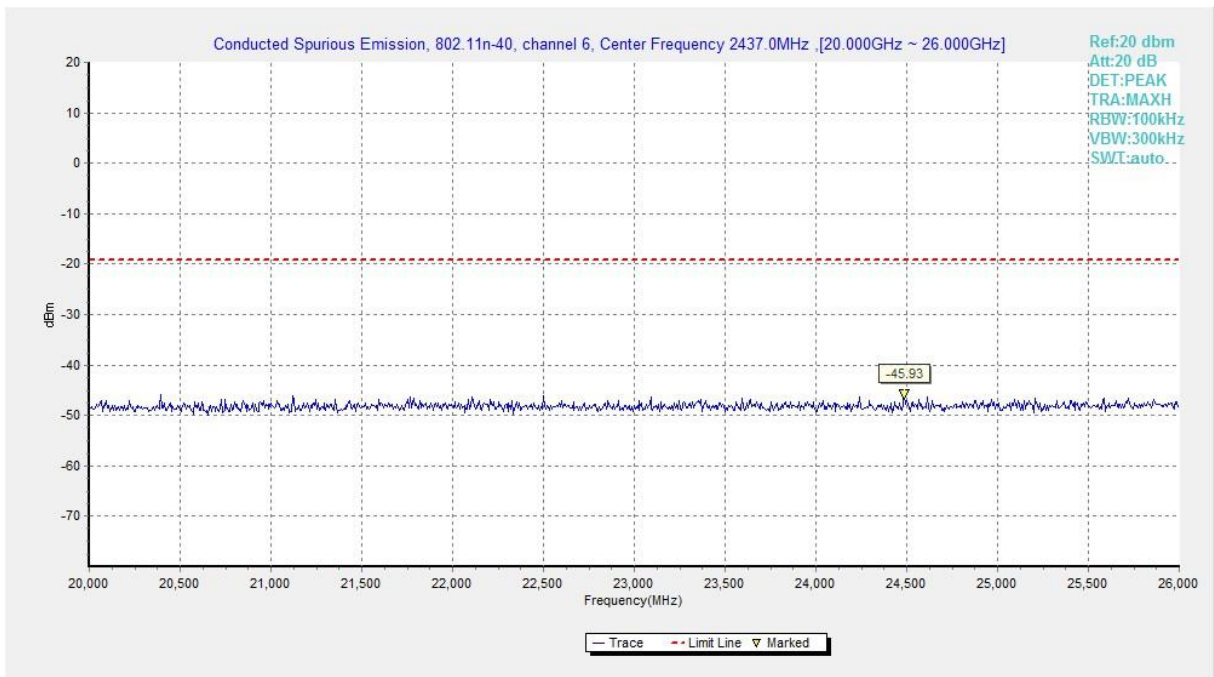
**Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)**



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

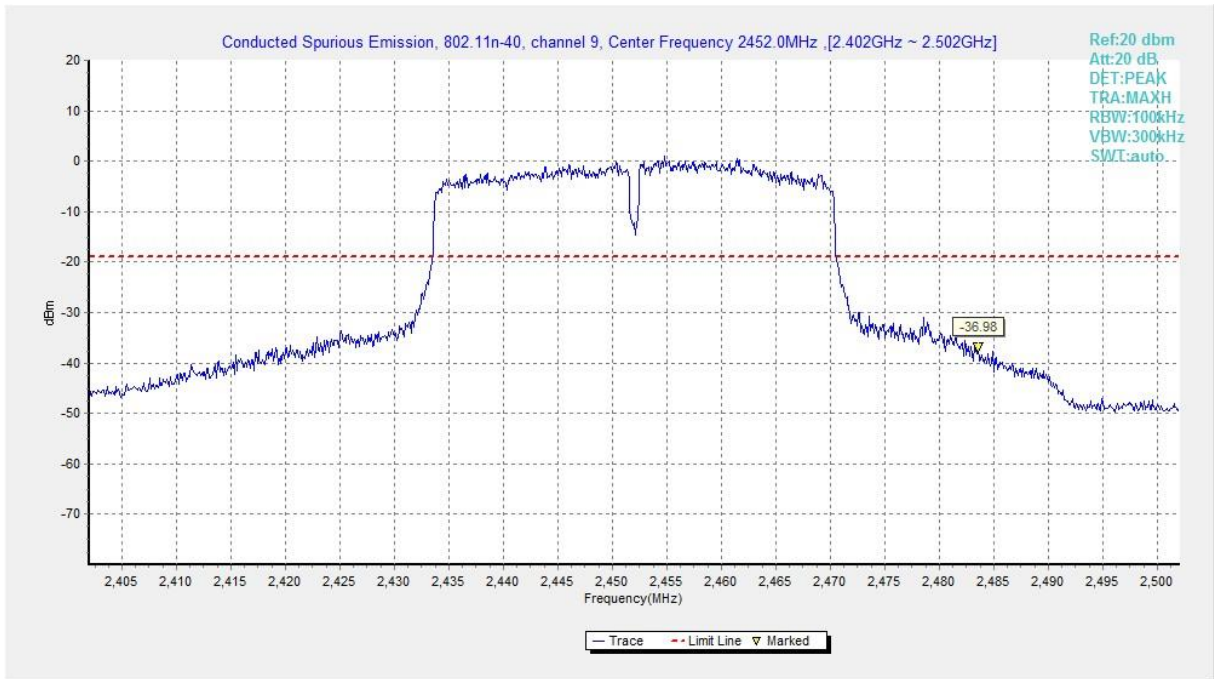


**Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)**

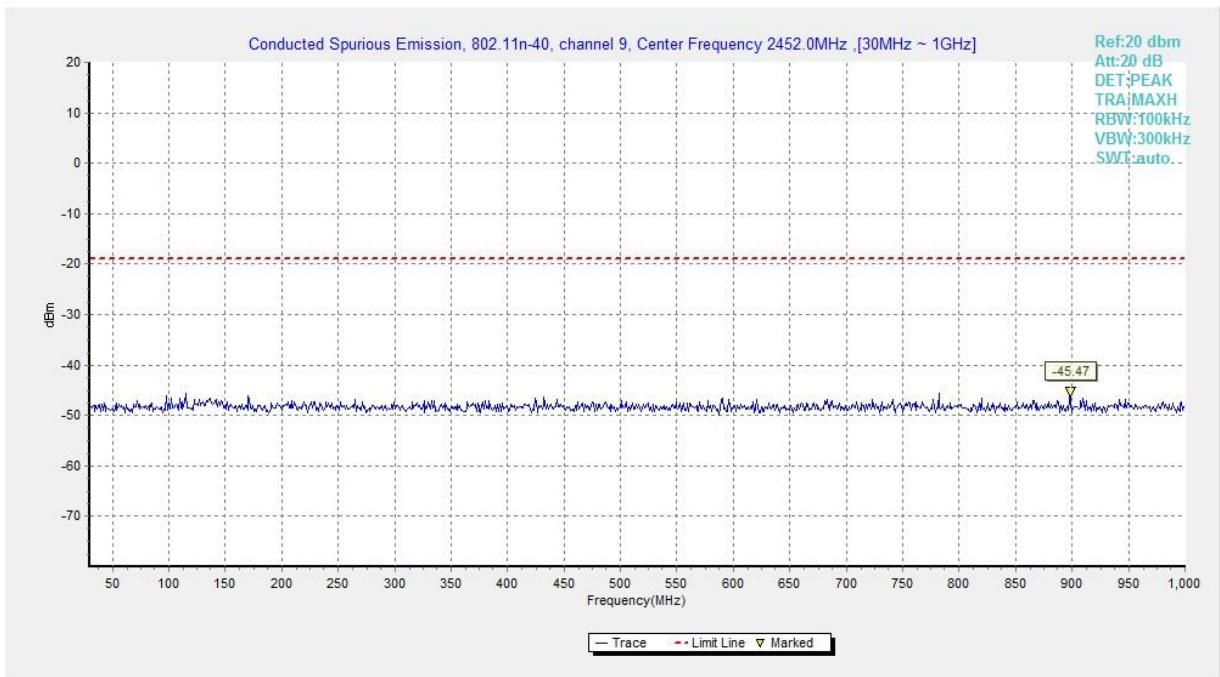


**Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)**

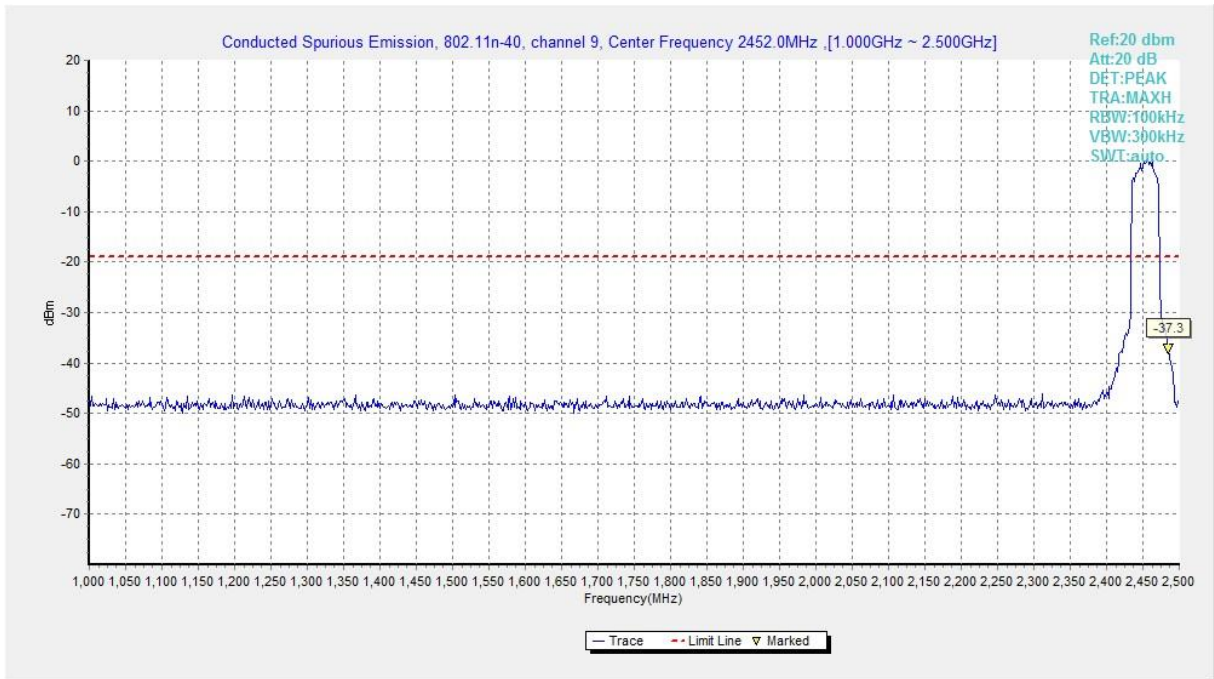




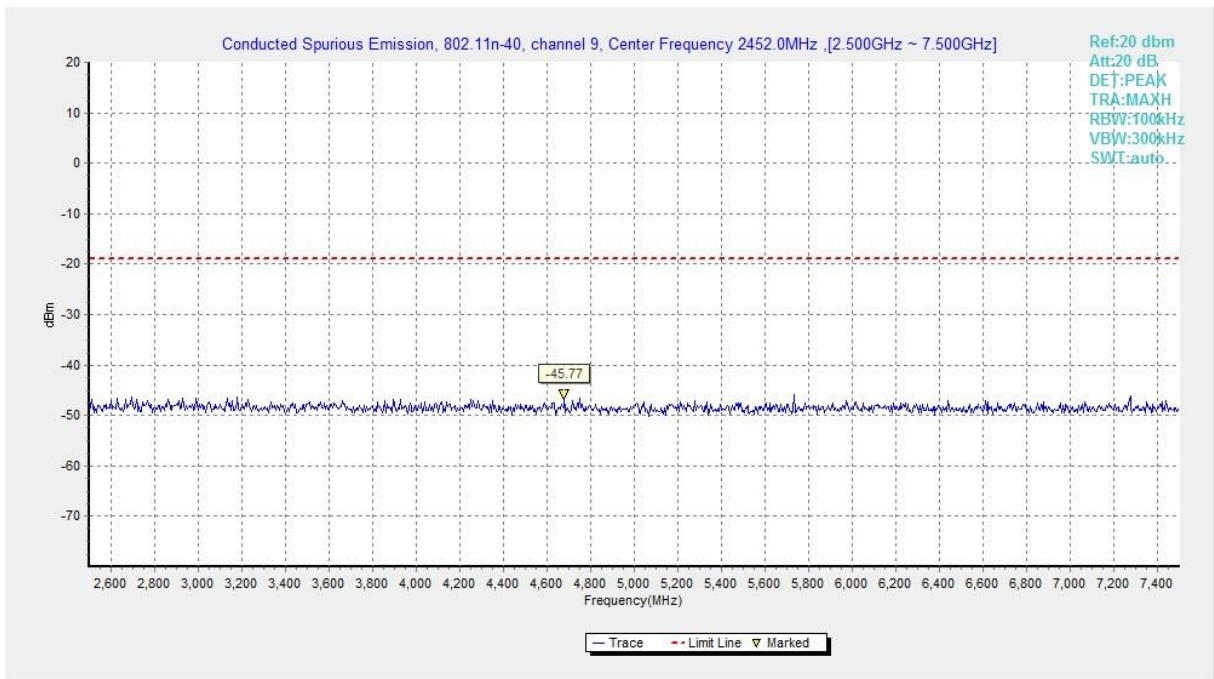
**Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)**



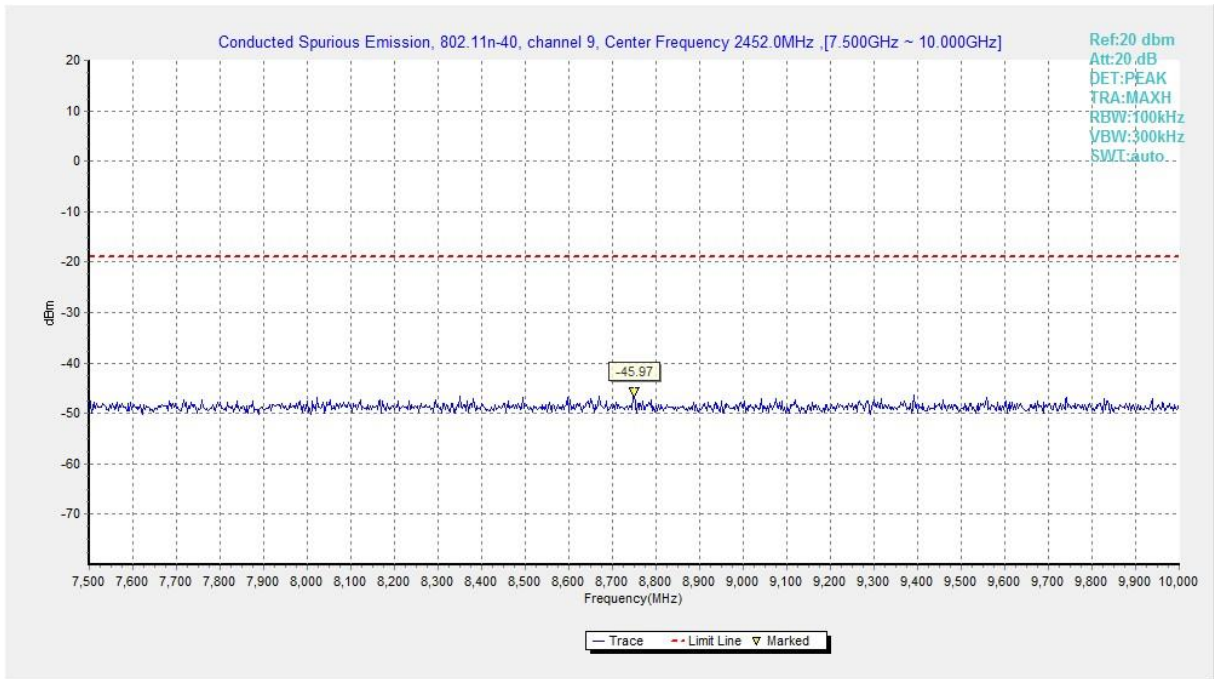
**Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)**



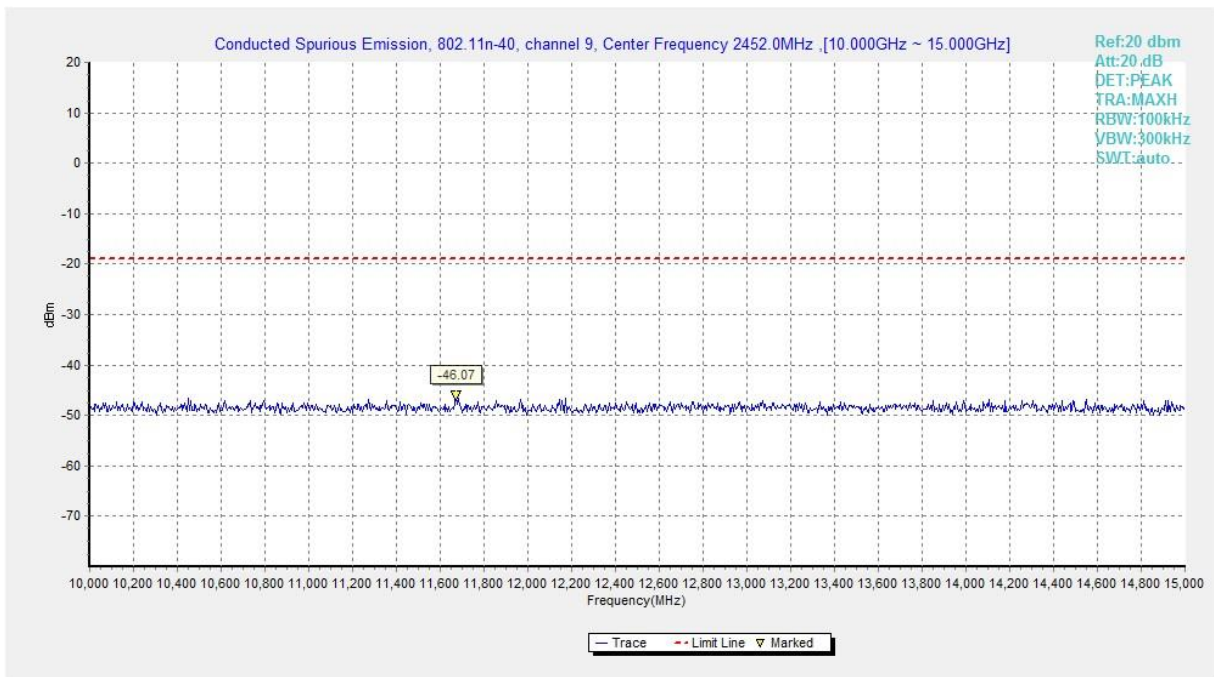
**Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)**



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

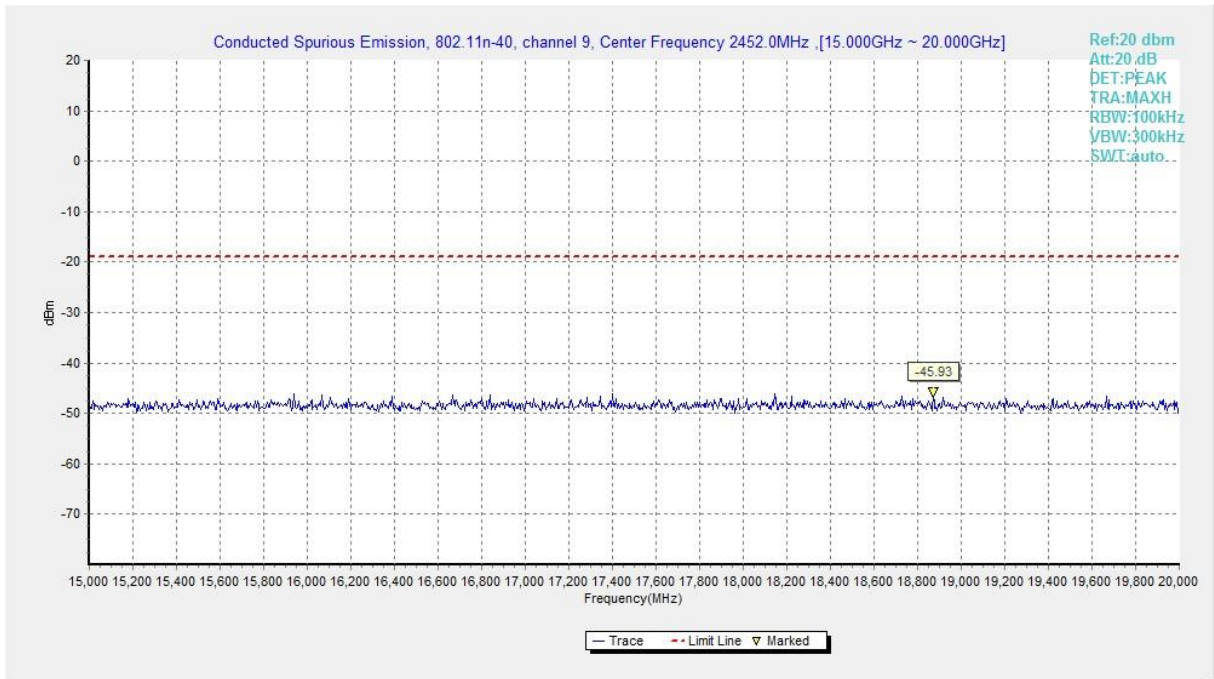


**Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)**

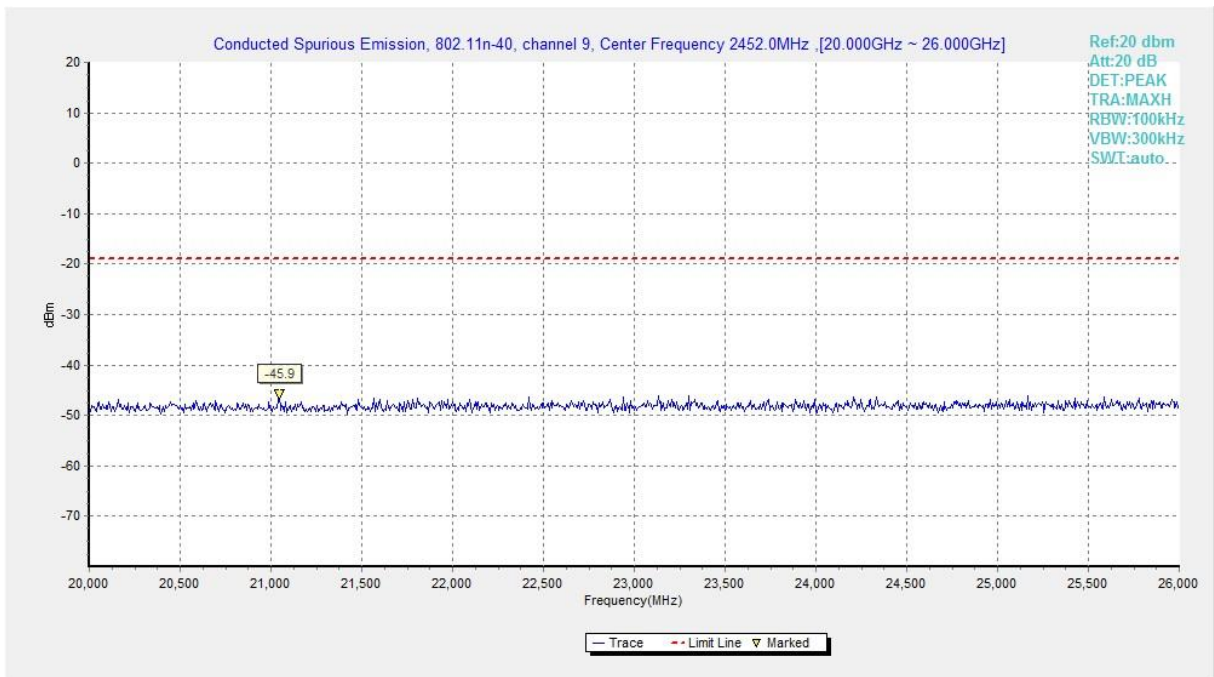


**Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)**





**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)**

**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 3/10 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

**EUT ID: EUT1**



**Measurement Results for Set.6:**

**802.11b mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.43GHz	Fig.A.6.2.1	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.2	<b>P</b>

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.4	<b>P</b>

**802.11n-HT20 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n	Power	2.38GHz ~2.43GHz	Fig.A.6.2.5	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	<b>P</b>

**802.11n-HT40 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n	Power	2.38GHz ~2.43GHz	Fig.A.6.2.7	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8	<b>P</b>

**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:

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

**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)	Antenna Height (cm)	Turntable angle (deg)
2389.000	42.53	2.9	32.0	7.67	54.0	11.5	H	155	135
2389.700	42.58	2.9	32.0	7.73	54.0	11.4	H	155	160
4824.000	34.80	-32.8	34.5	33.06	54.0	19.2	H	155	92
7236.000	51.27	-31.7	36.1	46.91	54.0	2.7	H	155	115
9648.000	38.70	-30.4	37.0	32.02	54.0	15.3	H	155	112
12060.000	42.91	-29.6	39.3	33.23	54.0	11.1	H	155	85

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)	Antenna Height (cm)	Turntable angle (deg)
2414.000	42.07	2.9	31.8	7.40	54.0	11.9	H	155	8
2458.800	44.06	2.9	32.6	8.57	54.0	9.9	H	155	28
4873.500	35.61	-32.7	34.5	33.82	54.0	18.4	H	155	135
7311.000	46.79	-31.9	36.1	42.62	54.0	7.2	H	155	156
9748.500	39.18	-30.7	37.2	32.65	54.0	14.8	H	155	180
12184.500	43.42	-29.4	39.2	33.62	54.0	10.6	H	155	204

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)	Antenna Height (cm)	Turntable angle (deg)
2485.400	42.29	2.9	32.7	6.65	54.0	11.7	H	155	86
2489.600	42.31	2.9	32.6	6.78	54.0	11.7	H	155	107
4873.500	33.86	-32.7	34.5	32.07	54.0	20.1	H	155	72
7311.000	40.30	-31.9	36.1	36.13	54.0	13.7	H	155	92
9847.500	40.88	-30.1	37.3	33.63	54.0	13.1	H	155	40
12310.500	43.87	-29.7	39.2	34.40	54.0	10.1	H	155	6



**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)	Antenna Height (cm)	Turntable angle (deg)
2384.816	55.71	2.9	32.0	20.83	74.0	18.3	H	155	135
2387.686	55.66	2.9	32.0	20.79	74.0	18.3	H	155	160
4824.000	41.30	-32.8	34.5	39.55	74.0	32.7	H	155	92
7236.000	55.69	-31.7	36.1	51.33	74.0	18.3	H	155	115
9648.000	42.33	-30.4	37.0	35.64	74.0	31.7	H	155	112
12060.000	45.77	-29.6	39.3	36.09	74.0	28.2	H	155	85

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)	Antenna Height (cm)	Turntable angle (deg)
2375.200	43.96	-26.6	32.1	38.50	74.0	30.0	V	155	0
2506.400	43.73	-26.4	32.4	37.74	74.0	30.3	V	155	22
4874.250	40.14	-32.7	34.5	38.35	74.0	33.9	H	155	132
7311.000	51.46	-31.9	36.1	47.29	74.0	22.5	V	155	154
9747.750	43.45	-30.7	37.2	36.92	74.0	30.6	V	155	176
12185.250	46.81	-29.4	39.2	37.02	74.0	27.2	H	155	198

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)	Antenna Height (cm)	Turntable angle (deg)
2486.830	56.46	2.9	32.7	20.86	74.0	17.5	H	155	88
2498.890	56.39	2.9	32.3	21.11	74.0	17.6	H	155	110
4824.000	39.59	-32.8	34.5	37.84	74.0	34.4	V	155	66
7386.000	46.44	-31.8	36.0	42.24	74.0	27.6	H	155	88
9848.250	44.54	-30.1	37.3	37.28	74.0	29.5	V	155	44
12309.750	46.52	-29.7	39.2	37.04	74.0	27.5	V	155	0

**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)	Antenna Height (cm)	Turntable angle (deg)
2389.800	43.34	2.9	32.0	8.49	54.0	10.7	H	155	174
2389.400	43.28	2.9	32.0	8.43	54.0	10.7	H	155	195
4824.000	33.43	-32.8	34.5	31.68	54.0	20.6	H	155	140
7236.000	46.47	-31.7	36.1	42.11	54.0	7.5	H	155	8
9648.000	38.60	-30.4	37.0	31.92	54.0	15.4	H	155	80
12060.000	42.80	-29.6	39.3	33.13	54.0	11.2	H	155	243

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)	Antenna Height (cm)	Turntable angle (deg)
2396.100	43.09	2.9	31.9	8.29	54.0	10.9	H	155	175
2484.400	45.82	2.9	32.7	10.15	54.0	8.2	H	155	194
4873.500	33.71	-32.7	34.5	31.92	54.0	20.3	H	155	296
7311.000	44.08	-31.9	36.1	39.91	54.0	9.9	H	155	314
9748.500	38.93	-30.7	37.2	32.40	54.0	15.1	H	155	90
12184.500	43.28	-29.4	39.2	33.49	54.0	10.7	H	155	112

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)	Antenna Height (cm)	Turntable angle (deg)
2483.800	42.35	2.9	32.8	6.66	54.0	11.7	H	155	4
2485.300	42.35	2.9	32.7	6.71	54.0	11.7	H	155	26
4924.500	34.01	-33.1	34.5	32.60	54.0	20.0	H	155	72
7386.000	40.04	-31.8	36.0	35.83	54.0	14.0	H	155	90
9847.500	40.76	-30.1	37.3	33.51	54.0	13.2	H	155	46
12310.500	43.74	-29.7	39.2	34.27	54.0	10.3	H	155	16





**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)	Antenna Height (cm)	Turntable angle (deg)
2389.520	58.61	2.9	32.0	23.77	74.0	15.4	V	155	176
2389.898	59.56	2.9	32.0	24.71	74.0	14.4	V	155	198
4824.000	37.34	-32.8	34.5	35.59	74.0	36.7	V	155	132
7236.000	65.29	-31.7	36.1	60.93	74.0	8.7	H	155	0
9648.000	43.67	-30.4	37.0	36.99	74.0	30.3	V	155	88
12060.000	46.87	-29.6	39.3	37.20	74.0	27.1	V	155	242

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)	Antenna Height (cm)	Turntable angle (deg)
2365.400	43.94	-27.3	31.9	39.28	74.0	30.1	H	155	176
2516.000	44.29	-26.6	32.6	38.36	74.0	29.7	H	155	198
4874.250	38.46	-32.7	34.5	36.67	74.0	35.5	V	155	286
7311.000	58.57	-31.9	36.1	54.41	74.0	15.4	H	155	308
9747.750	42.49	-30.7	37.2	35.96	74.0	31.5	V	155	88
12185.250	47.50	-29.4	39.2	37.71	74.0	26.5	V	155	110

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)	Antenna Height (cm)	Turntable angle (deg)
2483.860	61.89	2.9	32.8	26.21	74.0	12.1	H	155	0
2484.010	62.58	2.9	32.7	26.91	74.0	11.4	V	155	22
4923.750	37.66	-33.1	34.5	36.24	74.0	36.3	V	155	66
7386.000	50.07	-31.8	36.0	45.87	74.0	23.9	V	155	88
9848.250	43.95	-30.1	37.3	36.69	74.0	30.1	V	155	44
12309.750	45.03	-29.7	39.2	35.55	74.0	29.0	H	155	22

**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)	Antenna Height (cm)	Turntable angle (deg)
2389.500	43.72	2.9	32.0	8.87	54.0	10.3	H	155	4
2389.800	43.92	2.9	32.0	9.07	54.0	10.1	H	155	2
4824.000	33.29	-32.8	34.5	31.54	54.0	20.7	H	155	25
7236.000	45.13	-31.7	36.1	40.77	54.0	8.9	H	155	350
9648.000	38.31	-30.4	37.0	31.63	54.0	15.7	H	155	92
12060.000	42.49	-29.6	39.3	32.82	54.0	11.5	H	155	85

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)	Antenna Height (cm)	Turntable angle (deg)
2398.600	42.69	2.9	31.9	7.91	54.0	11.3	H	155	40
2482.800	45.08	2.9	32.8	9.36	54.0	8.9	H	155	65
4873.500	33.43	-32.7	34.5	31.64	54.0	20.6	H	155	222
7311.000	41.99	-31.9	36.1	37.82	54.0	12.0	H	155	190
9748.500	38.77	-30.7	37.2	32.24	54.0	15.2	H	155	240
12184.500	43.08	-29.4	39.2	33.29	54.0	10.9	H	155	270

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)	Antenna Height (cm)	Turntable angle (deg)
2483.600	43.16	2.9	32.8	7.46	54.0	10.8	H	155	180
2484.200	42.93	2.9	32.7	7.26	54.0	11.1	H	155	202
4924.500	33.95	-33.1	34.5	32.54	54.0	20.1	H	155	312
7386.000	39.75	-31.8	36.0	35.54	54.0	14.3	H	155	46
9847.500	40.80	-30.1	37.3	33.55	54.0	13.2	H	155	70
12310.500	43.80	-29.7	39.2	34.33	54.0	10.2	H	155	92

**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)	Antenna Height (cm)	Turntable angle (deg)
2389.464	62.38	2.9	32.0	27.53	74.0	11.6	H	155	0
2389.744	62.80	2.9	32.0	27.95	74.0	11.2	H	155	0
4824.000	36.79	-32.8	34.5	35.05	74.0	37.2	V	155	22
7236.000	62.11	-31.7	36.1	57.74	74.0	11.9	V	155	352
9648.000	40.59	-30.4	37.0	33.91	74.0	33.4	V	155	88
12060.000	44.70	-29.6	39.3	35.03	74.0	29.3	V	155	88

**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)	Antenna Height (cm)	Turntable angle (deg)
2375.600	44.32	-26.6	32.1	38.83	74.0	29.7	V	155	44
2511.600	44.15	-26.5	32.5	38.19	74.0	29.9	H	155	66
4874.250	36.86	-32.7	34.5	35.06	74.0	37.1	V	155	220
7311.000	59.02	-31.9	36.1	54.86	74.0	15.0	V	155	198
9747.750	41.28	-30.7	37.2	34.75	74.0	32.7	H	155	242
12185.250	44.41	-29.4	39.2	34.62	74.0	29.6	V	155	264

**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)	Antenna Height (cm)	Turntable angle (deg)
2483.860	67.32	2.9	32.8	31.64	74.0	6.7	H	155	176
2483.970	67.12	2.9	32.7	31.44	74.0	6.9	H	155	198
4923.750	38.80	-33.1	34.5	37.38	74.0	35.2	V	155	308
7386.000	52.32	-31.8	36.0	48.12	74.0	21.7	H	155	44
9848.250	44.16	-30.1	37.3	36.91	74.0	29.8	H	155	66
12309.750	45.43	-29.7	39.2	35.96	74.0	28.6	V	155	88

**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)	Antenna Height (cm)	Turntable angle (deg)
2389.100	44.87	2.9	32.0	10.02	54.0	9.1	H	155	28
2389.800	45.28	2.9	32.0	10.43	54.0	8.7	H	155	6
4843.500	33.32	-32.7	34.5	31.51	54.0	20.7	H	155	92
7266.000	42.23	-31.9	36.1	38.00	54.0	11.8	H	155	112
9688.500	38.26	-30.7	37.1	31.88	54.0	15.7	H	155	136
12109.500	42.95	-29.5	39.3	33.18	54.0	11.1	H	155	156

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)	Antenna Height (cm)	Turntable angle (deg)
2384.200	41.98	2.9	32.0	7.09	54.0	12.0	H	155	5
2489.900	42.10	2.9	32.6	6.58	54.0	11.9	H	155	25
4873.500	33.51	-32.7	34.5	31.72	54.0	20.5	H	155	356
7311.000	40.46	-31.9	36.1	36.29	54.0	13.5	H	155	350
9748.500	38.86	-30.7	37.2	32.33	54.0	15.1	H	155	185
12184.500	43.17	-29.4	39.2	33.37	54.0	10.8	H	155	187

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)	Antenna Height (cm)	Turntable angle (deg)
2483.800	42.36	2.9	32.8	6.68	54.0	11.6	H	155	152
2486.500	42.35	2.9	32.7	6.74	54.0	11.7	H	155	174
4903.500	33.91	-32.9	34.5	32.30	54.0	20.1	H	155	72
7356.000	39.24	-31.9	36.1	35.08	54.0	14.8	H	155	136
9808.500	39.93	-30.3	37.3	33.01	54.0	14.1	H	155	94
12259.500	43.49	-29.6	39.2	33.86	54.0	10.5	H	155	48



**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)	Antenna Height (cm)	Turntable angle (deg)
2389.646	66.68	2.9	32.0	31.83	74.0	7.3	V	155	22
2389.898	66.72	2.9	32.0	31.87	74.0	7.3	H	155	0
4844.250	37.61	-32.7	34.5	35.80	74.0	36.4	H	155	88
7266.000	56.61	-31.9	36.1	52.37	74.0	17.4	H	155	110
9687.750	41.39	-30.7	37.1	35.00	74.0	32.6	H	155	132
12110.250	45.35	-29.5	39.3	35.58	74.0	28.6	H	155	154

**Ch6**

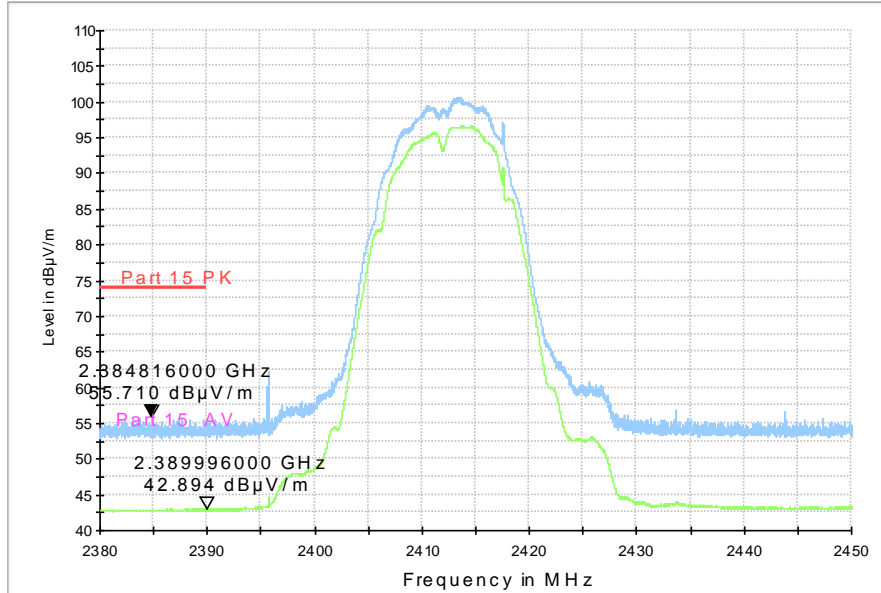
Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2375.400	44.68	-26.6	32.1	39.20	74.0	29.3	H	155	0
2506.200	44.17	-26.4	32.4	38.18	74.0	29.8	H	155	22
4874.250	37.28	-32.7	34.5	35.49	74.0	36.7	H	155	352
7311.000	50.92	-31.9	36.1	46.75	74.0	23.1	V	155	352
9747.750	41.64	-30.7	37.2	35.11	74.0	32.4	V	155	176
12185.250	45.66	-29.4	39.2	35.87	74.0	28.3	V	155	176

**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)	Antenna Height (cm)	Turntable angle (deg)
2484.110	68.33	2.9	32.7	32.65	74.0	5.7	H	155	154
2484.480	68.41	2.9	32.7	32.74	74.0	5.6	V	155	176
4904.250	37.27	-32.9	34.5	35.67	74.0	36.7	H	155	66
7356.000	50.33	-31.9	36.1	46.18	74.0	23.7	V	155	132
9807.750	42.80	-30.4	37.3	35.88	74.0	31.2	H	155	88
12260.250	45.74	-29.6	39.2	36.12	74.0	28.3	V	155	44

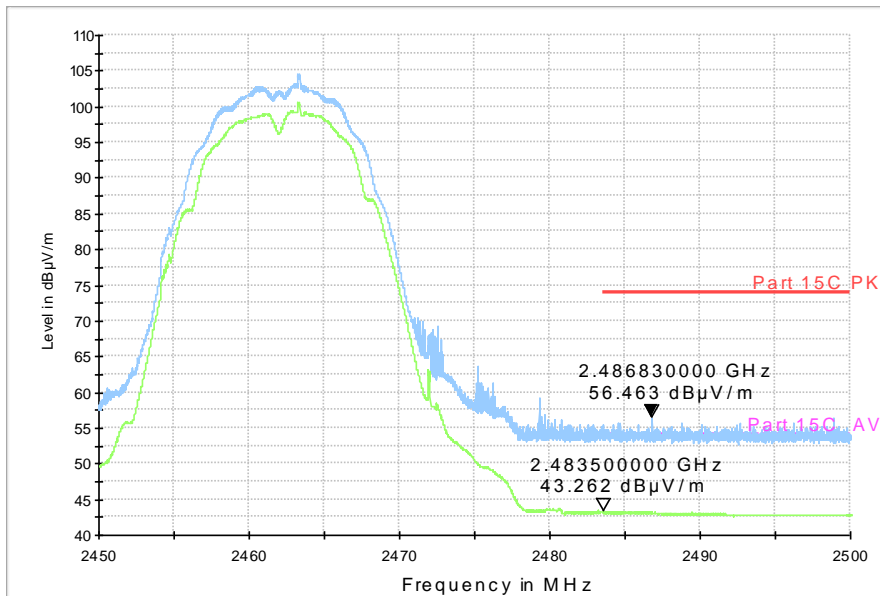
Test graphs as below:

RE - Power-2.38GHz-2.45GHz



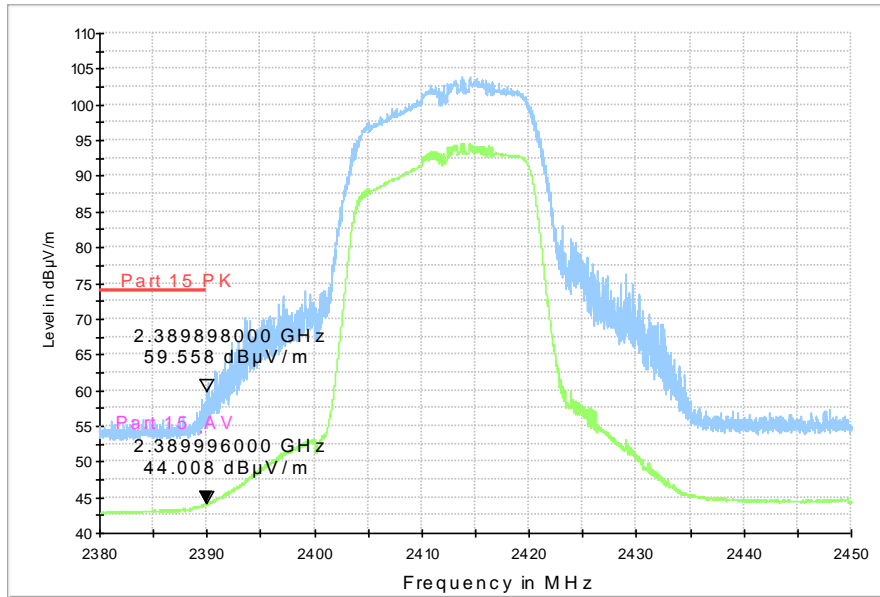
**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz**

RE - Power-2.45GHz-2.5GHz



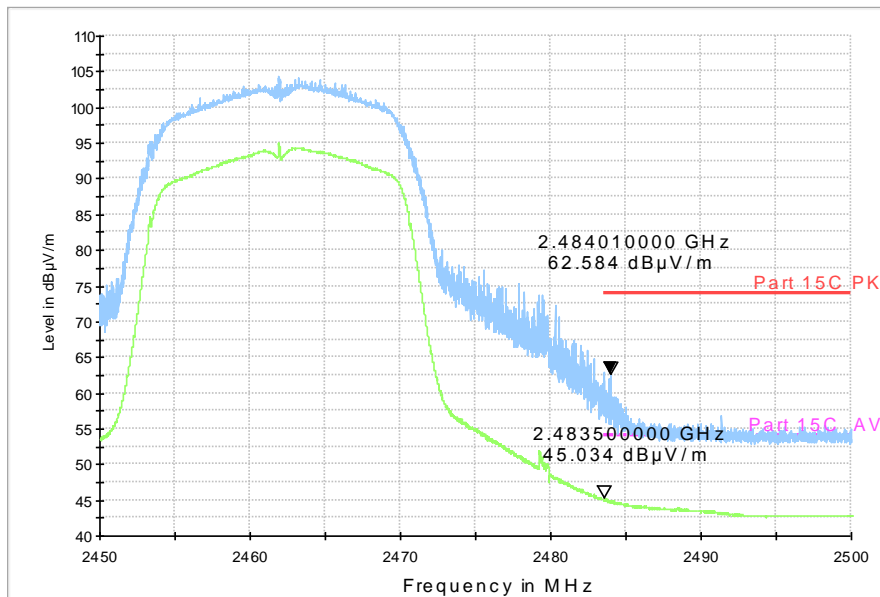
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



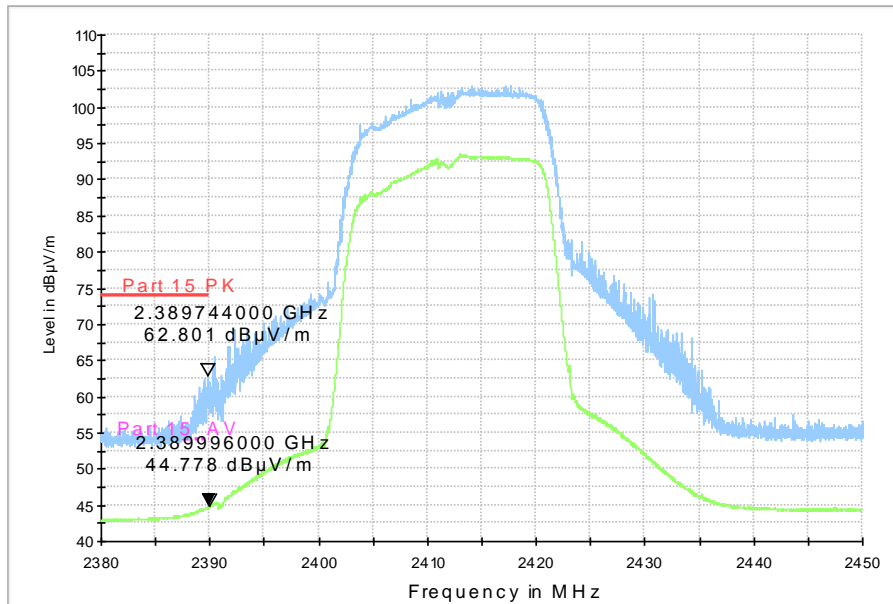
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz**

RE - Power-2.45GHz-2.5GHz



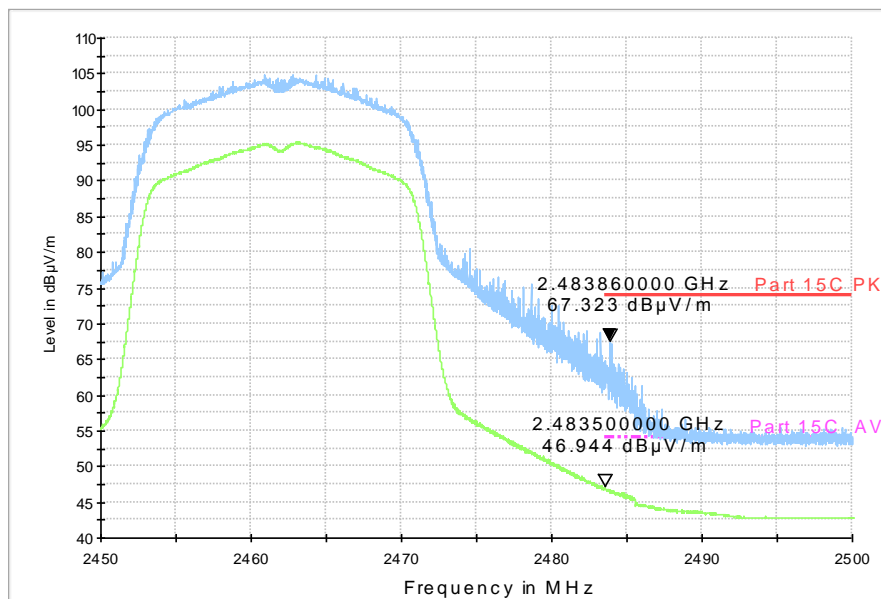
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**

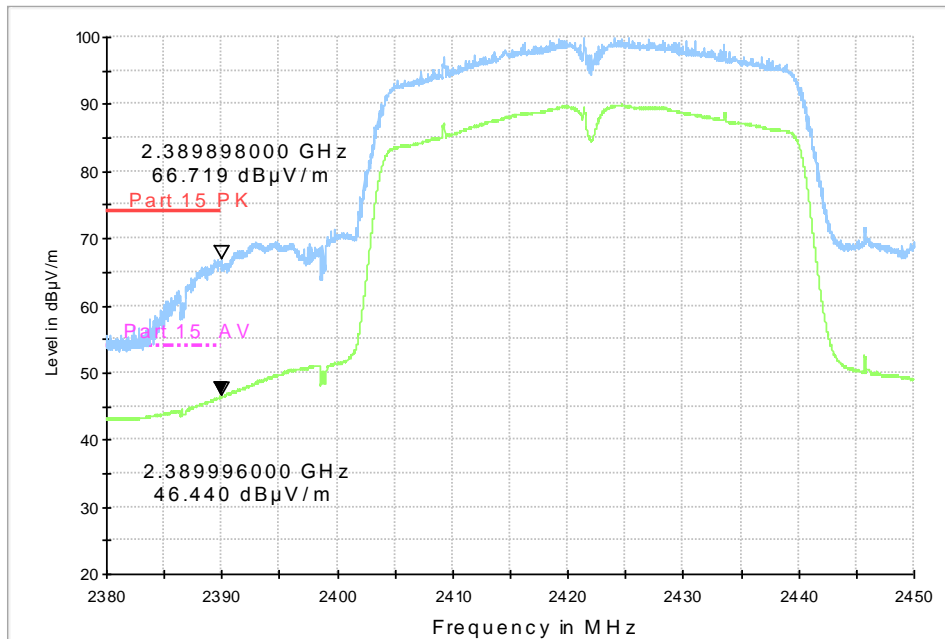
RE - Power-2.45GHz-2.5GHz



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

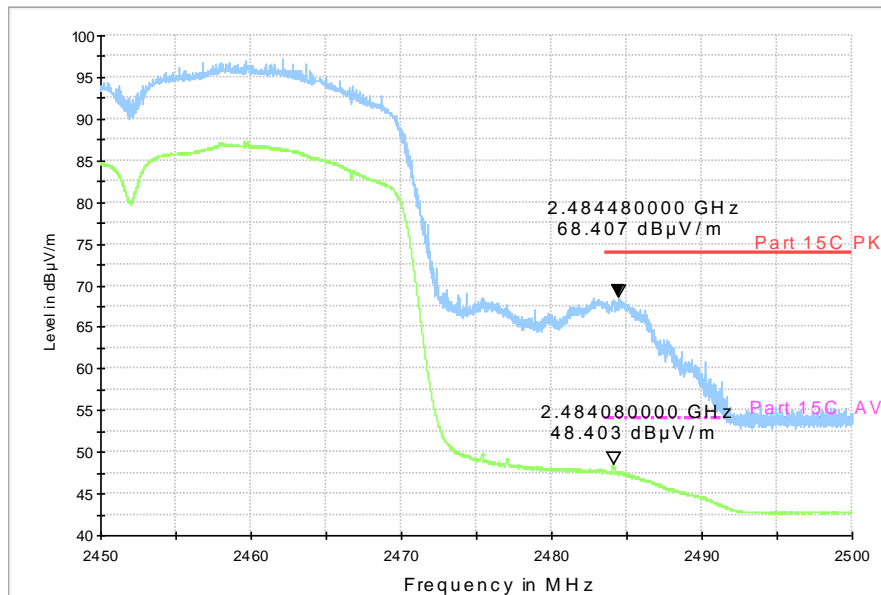


RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz**

RE - Power-2.45GHz-2.5GHz



**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**

### **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.<sup>36</sup> 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:**

<b>Voltage (V)</b>	<b>Frequency (Hz)</b>
120	60

**Measurement Result and limit:**

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	<b>P</b>
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 (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	<b>P</b>
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:**

Traffic: Set.6

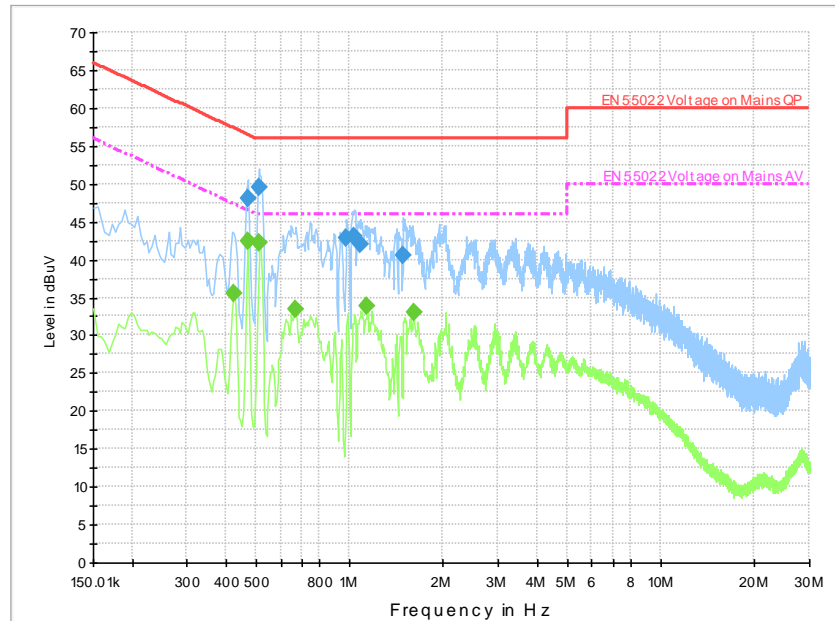


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.469500	48.1	2000.0	9.000	GND	L1	10.1	8.4	56.5	
0.510000	49.4	2000.0	9.000	GND	L1	10.1	6.6	56.0	
0.978000	42.8	2000.0	9.000	GND	L1	10.1	13.2	56.0	
1.036500	43.0	2000.0	9.000	GND	L1	10.1	13.0	56.0	
1.086000	41.9	2000.0	9.000	GND	L1	10.2	14.1	56.0	
1.482000	40.5	2000.0	9.000	GND	L1	10.1	15.5	56.0	

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.424500	35.4	2000.0	9.000	GND	N	10.1	11.9	47.4	
0.469500	42.4	2000.0	9.000	GND	N	10.1	4.1	46.5	
0.514500	42.2	2000.0	9.000	GND	N	10.1	3.8	46.0	
0.667500	33.5	2000.0	9.000	GND	N	10.1	12.5	46.0	
1.140000	33.9	2000.0	9.000	GND	N	10.1	12.1	46.0	
1.612500	33.1	2000.0	9.000	GND	N	10.2	12.9	46.0	



Traffic: Set.7

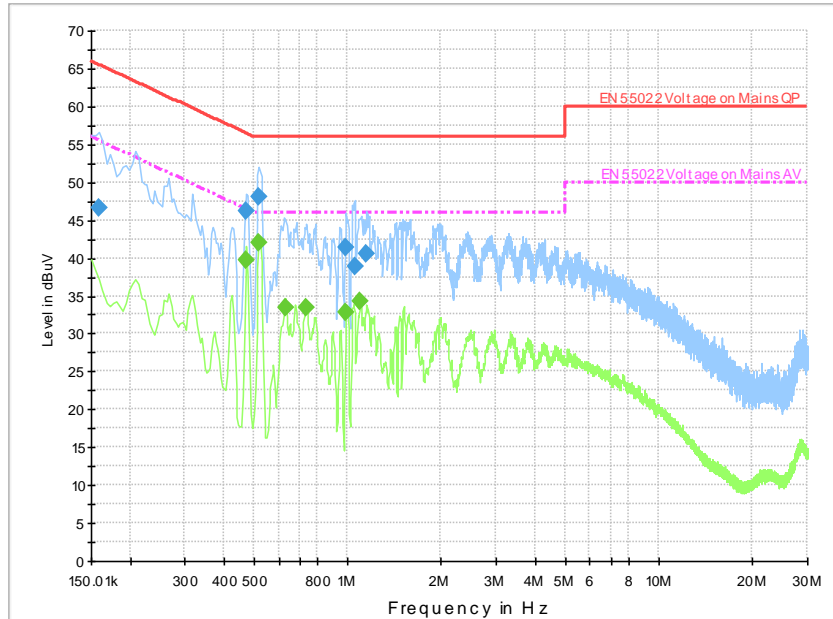


Fig.A.7.2 AC Powerline Conducted Emission-802.11b

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

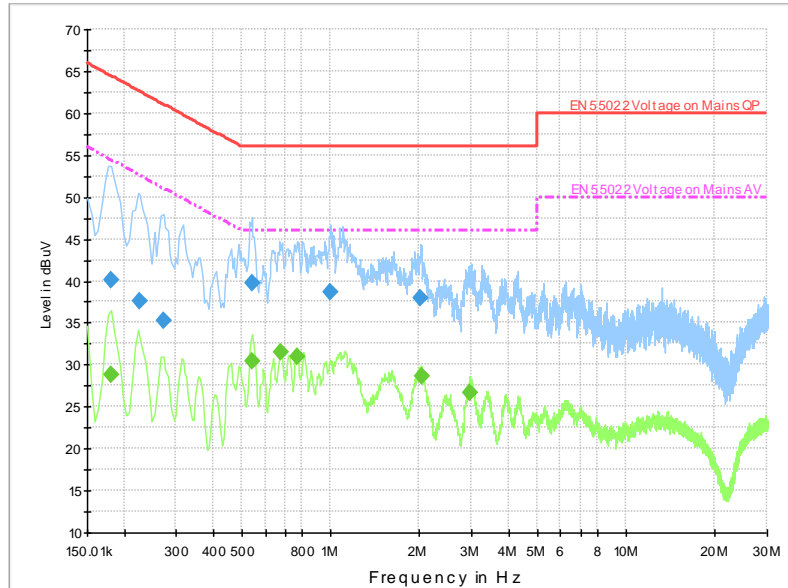
Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.159000	46.5	2000.0	9.000	GND	L1	10.1	19.0	65.5	
0.474000	46.1	2000.0	9.000	GND	L1	10.1	10.3	56.4	
0.519000	48.0	2000.0	9.000	GND	L1	10.1	8.0	56.0	
0.991500	41.4	2000.0	9.000	GND	L1	10.1	14.6	56.0	
1.054500	38.8	2000.0	9.000	GND	L1	10.1	17.2	56.0	
1.153500	40.5	2000.0	9.000	GND	L1	10.2	15.5	56.0	

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.474000	39.6	2000.0	9.000	GND	N	10.1	6.8	46.4	
0.519000	42.0	2000.0	9.000	GND	N	10.1	4.0	46.0	
0.631500	33.4	2000.0	9.000	GND	N	10.1	12.6	46.0	
0.739500	33.5	2000.0	9.000	GND	N	10.1	12.5	46.0	
0.991500	32.8	2000.0	9.000	GND	N	10.1	13.2	46.0	
1.099500	34.3	2000.0	9.000	GND	N	10.1	11.7	46.0	

Idle: Set.6



**Fig.A.7.3 AC Powerline Conducted Emission-Idle**

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



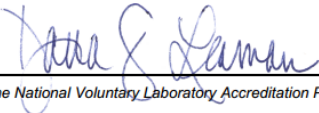

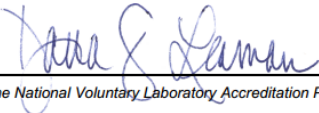

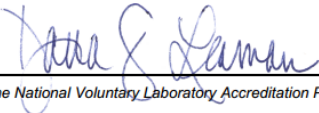
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.181500	40.1	2000.0	9.000	GND	L1	10.1	24.4	64.4	
0.226500	37.6	2000.0	9.000	GND	L1	10.1	24.9	62.6	
0.271500	35.2	2000.0	9.000	GND	L1	10.1	25.8	61.1	
0.541500	39.7	2000.0	9.000	GND	L1	10.1	16.3	56.0	
1.000500	38.6	2000.0	9.000	GND	L1	10.1	17.4	56.0	
2.022000	38.0	2000.0	9.000	GND	L1	10.2	18.0	56.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.181500	28.8	2000.0	9.000	GND	L1	10.1	25.6	54.4	
0.541500	30.5	2000.0	9.000	GND	L1	10.1	15.6	46.0	
0.676500	31.6	2000.0	9.000	GND	L1	10.1	14.4	46.0	
0.771000	30.9	2000.0	9.000	GND	L1	10.1	15.1	46.0	
2.026500	28.5	2000.0	9.000	GND	L1	10.2	17.5	46.0	
2.962500	26.7	2000.0	9.000	GND	L1	9.9	19.3	46.0	

## **ANNEX B: Accreditation Certificate**

<p><b>United States Department of Commerce National Institute of Standards and Technology</b></p>  <hr/> <p><b>Certificate of Accreditation to ISO/IEC 17025:2005</b></p> <hr/> <p><b>NVLAP LAB CODE: 600118-0</b></p> <p><b>Telecommunication Technology Labs, CAICT</b> Beijing China</p> <p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p> <p><b>Electromagnetic Compatibility &amp; Telecommunications</b></p> <p><i>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 Communiqué dated January 2009).</i></p> <hr/> <table border="0" style="width: 100%;"><tr><td style="width: 40%;"><p>2018-09-28 through 2019-09-30 <i>Effective Dates</i></p></td><td style="width: 20%; text-align: center;"></td><td style="width: 40%; text-align: right;"> <i>For the National Voluntary Laboratory Accreditation Program</i></td></tr></table>		<p>2018-09-28 through 2019-09-30 <i>Effective Dates</i></p>		 <i>For the National Voluntary Laboratory Accreditation Program</i>
<p>2018-09-28 through 2019-09-30 <i>Effective Dates</i></p>		 <i>For the National Voluntary Laboratory Accreditation Program</i>		

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