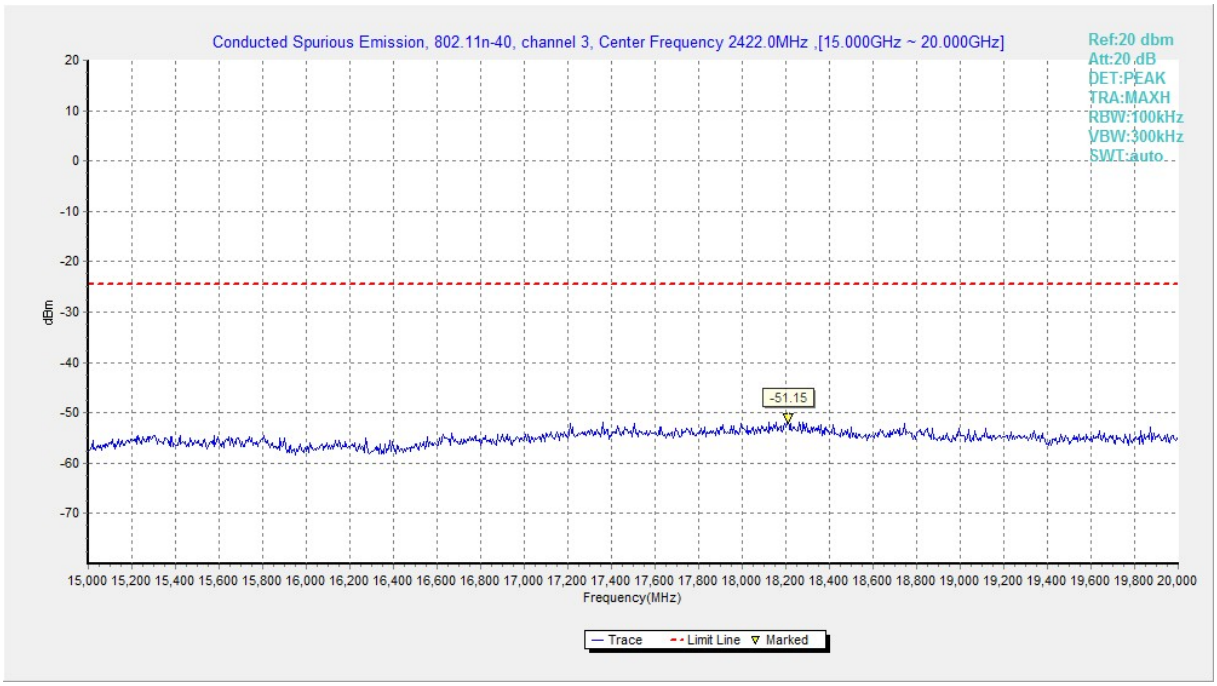


Fig.B.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

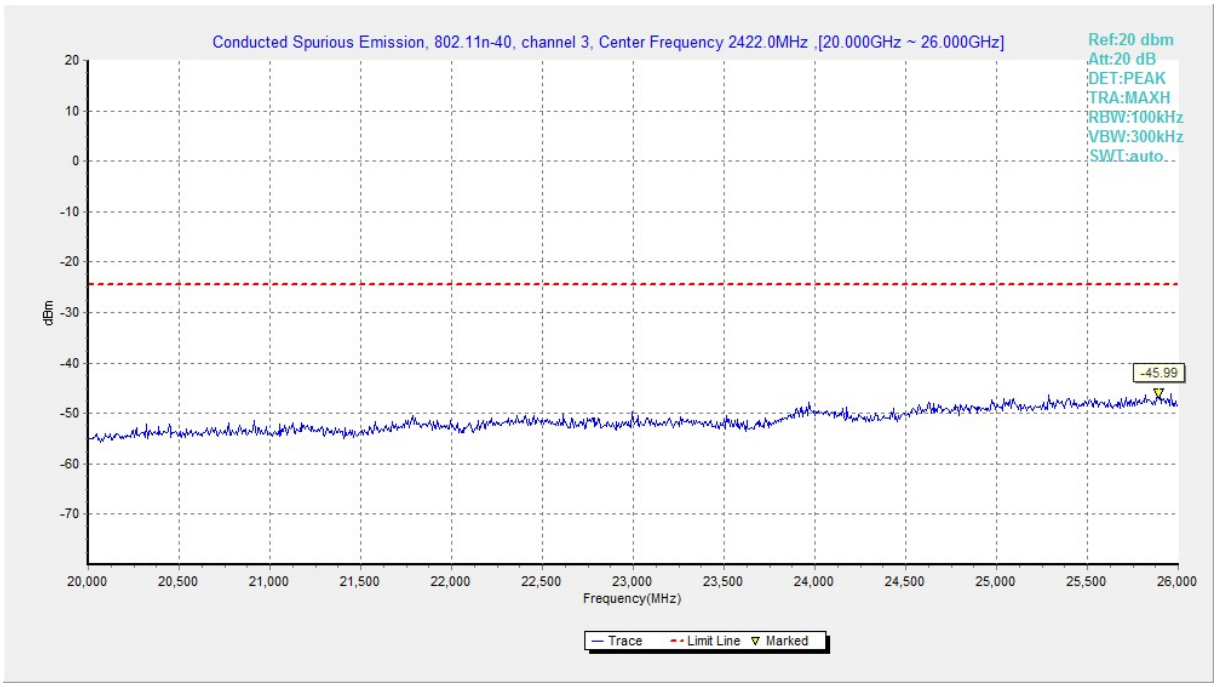


Fig.B.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

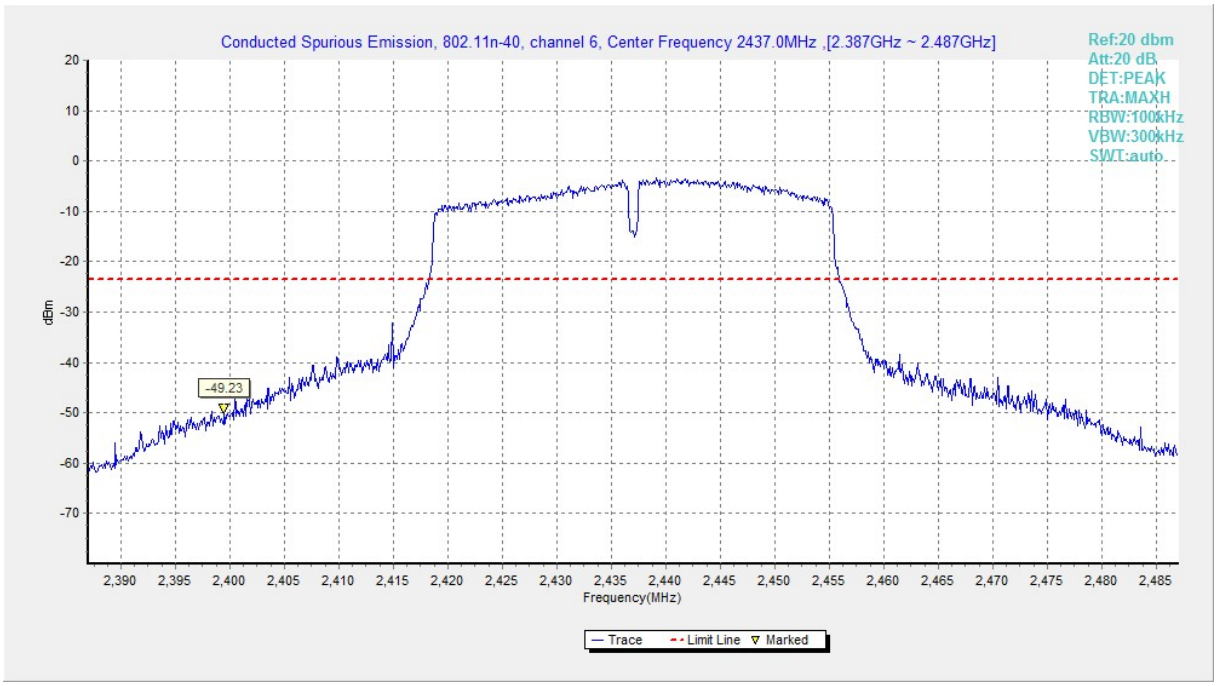


Fig.B.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

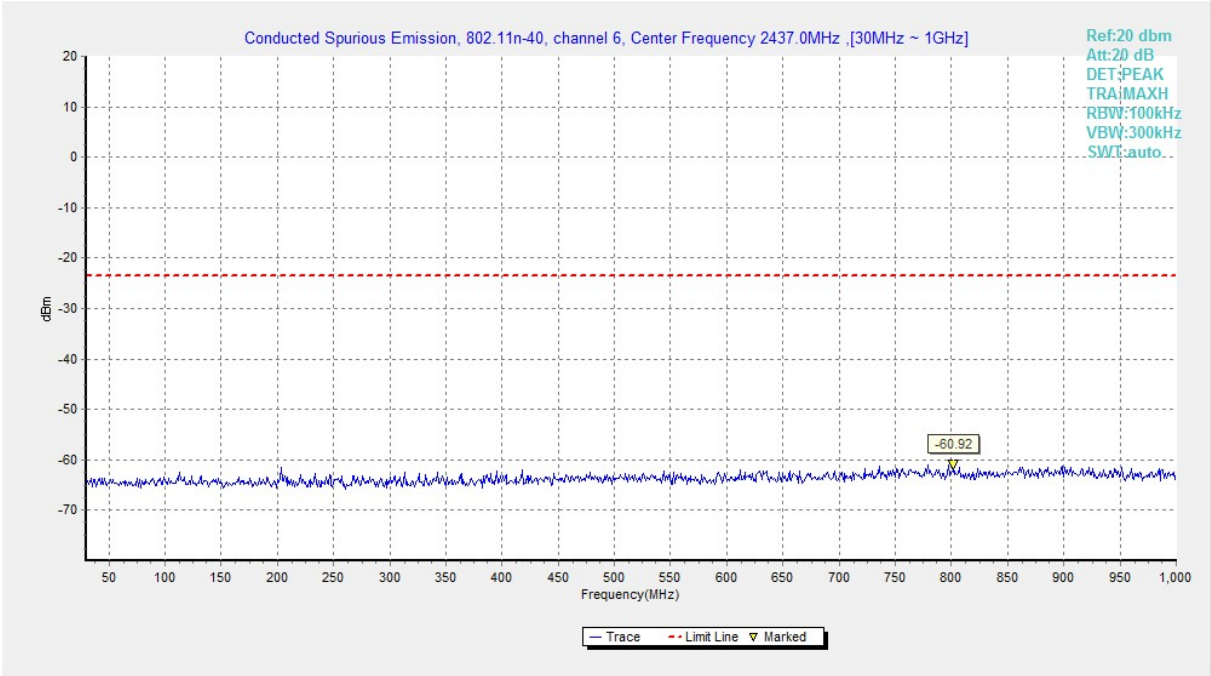


Fig.B.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

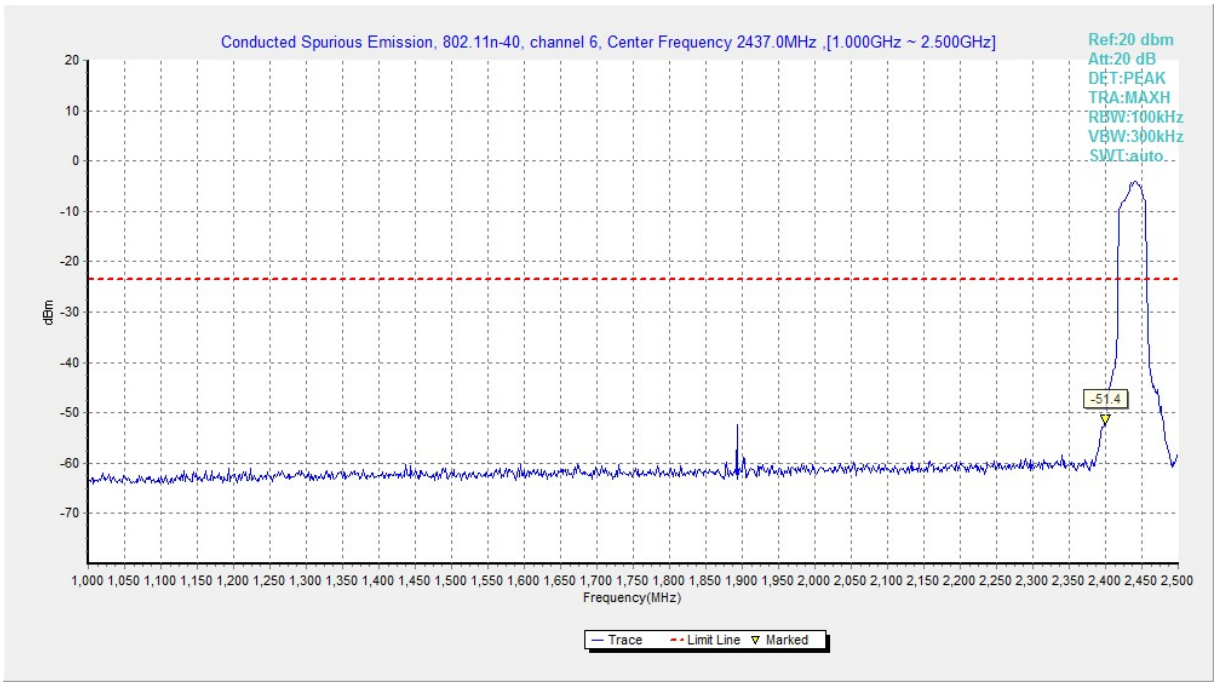


Fig.B.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

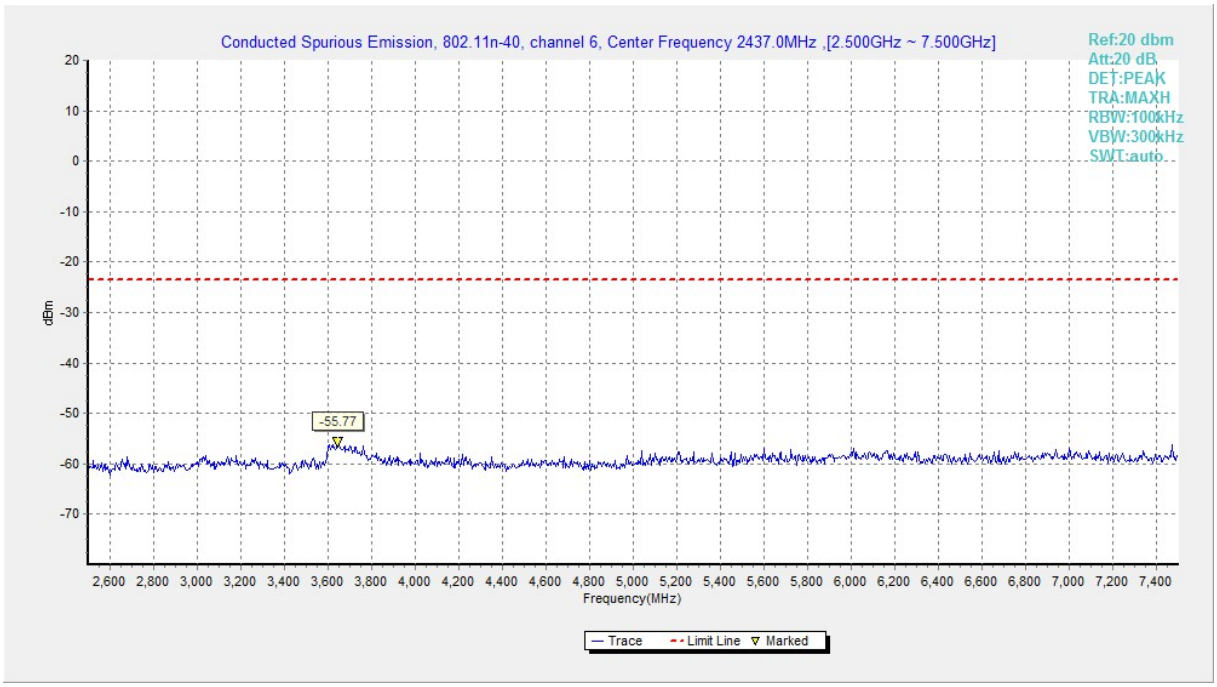


Fig.B.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

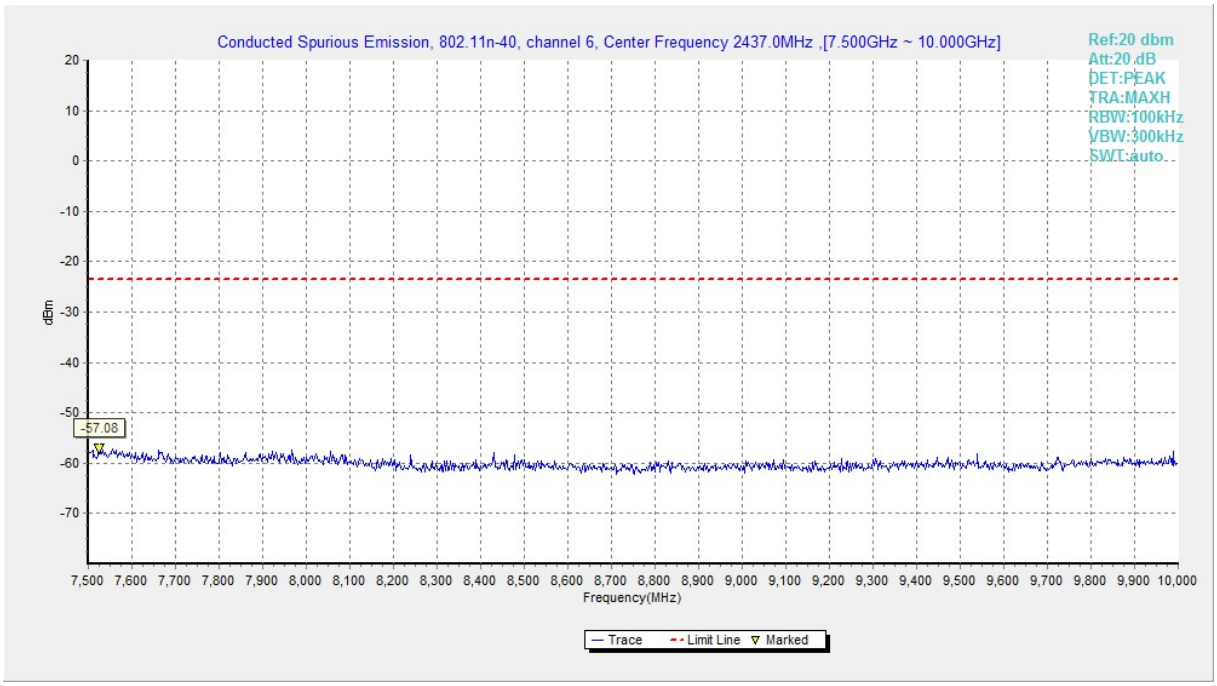


Fig.B.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

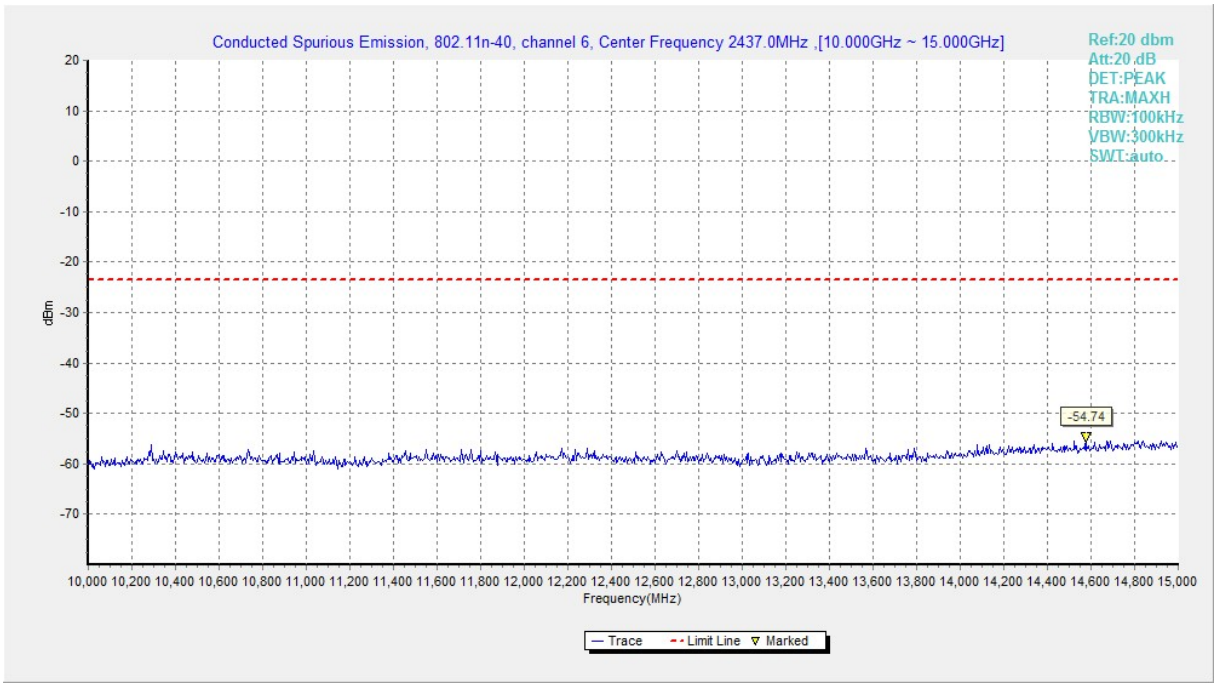


Fig.B.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

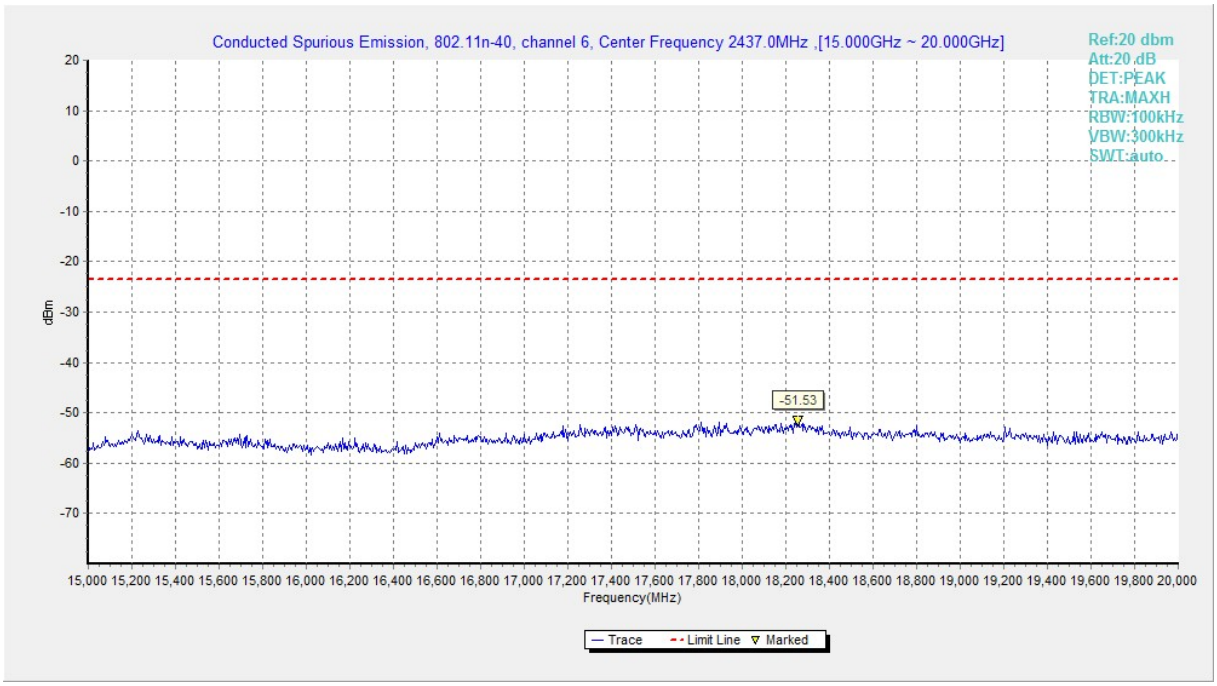


Fig.B.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

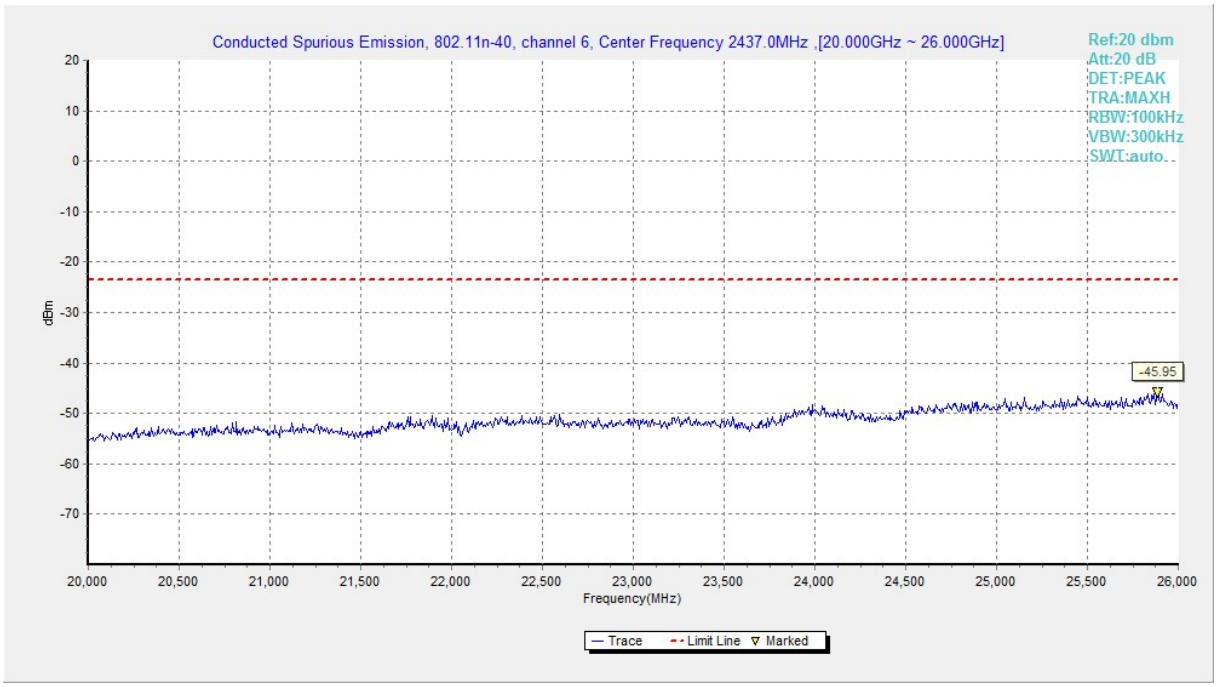


Fig.B.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

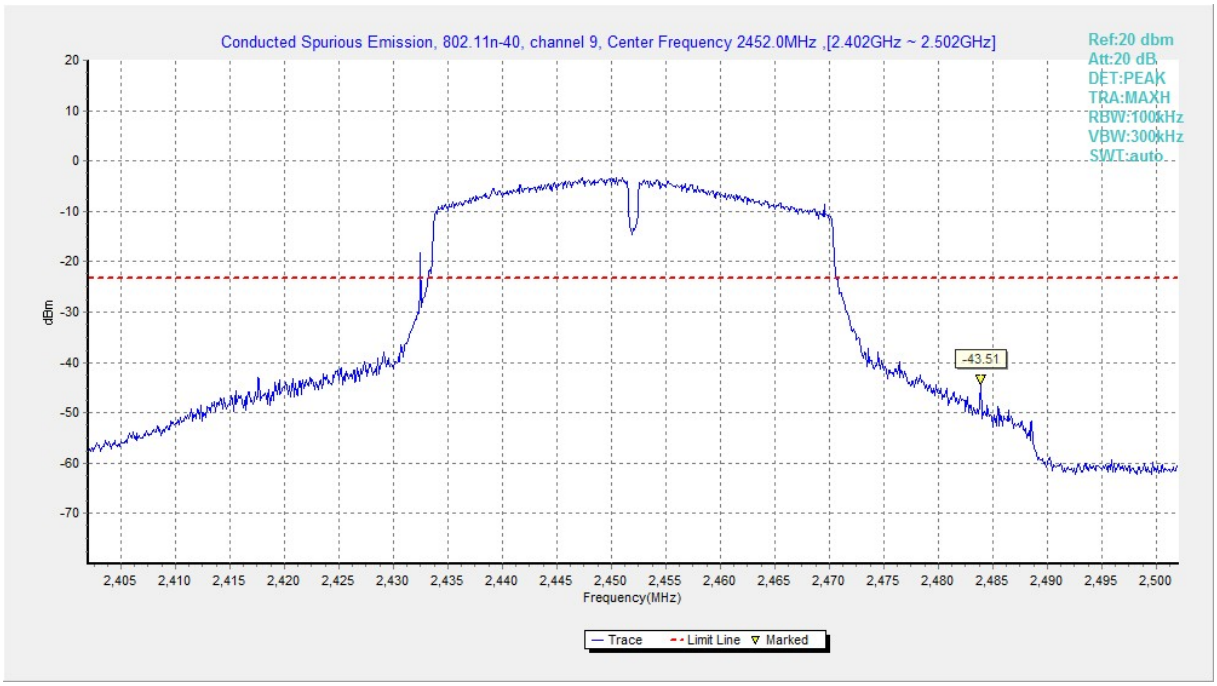


Fig.B.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

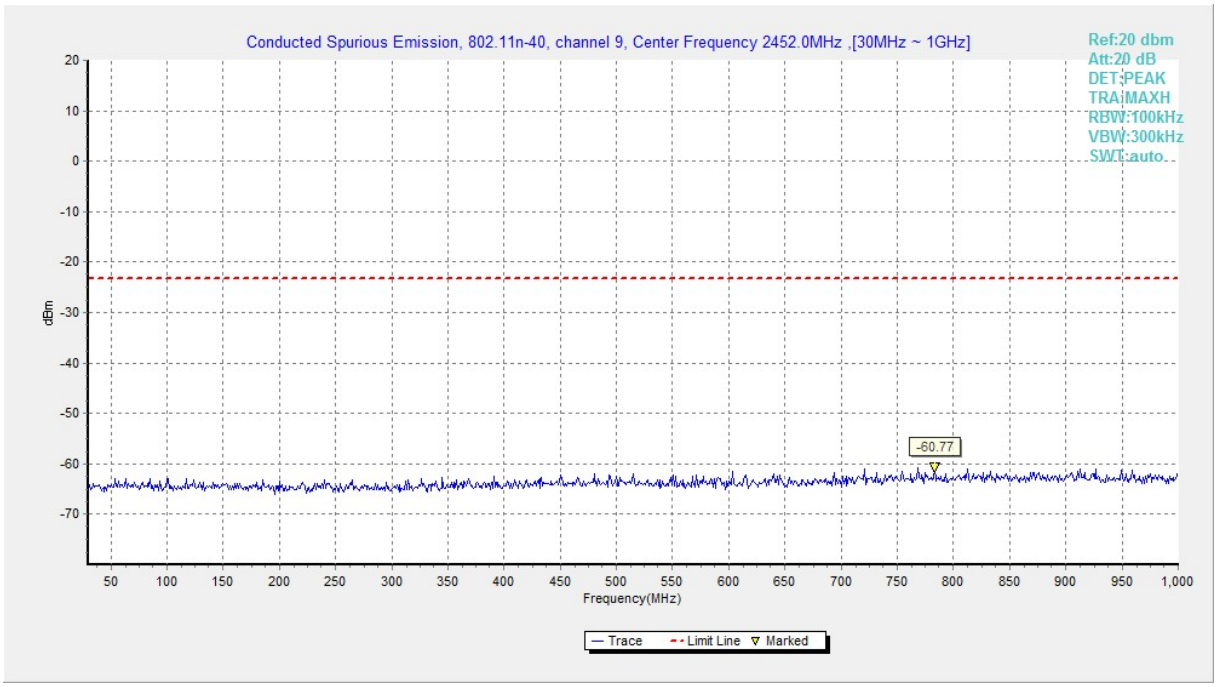


Fig.B.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

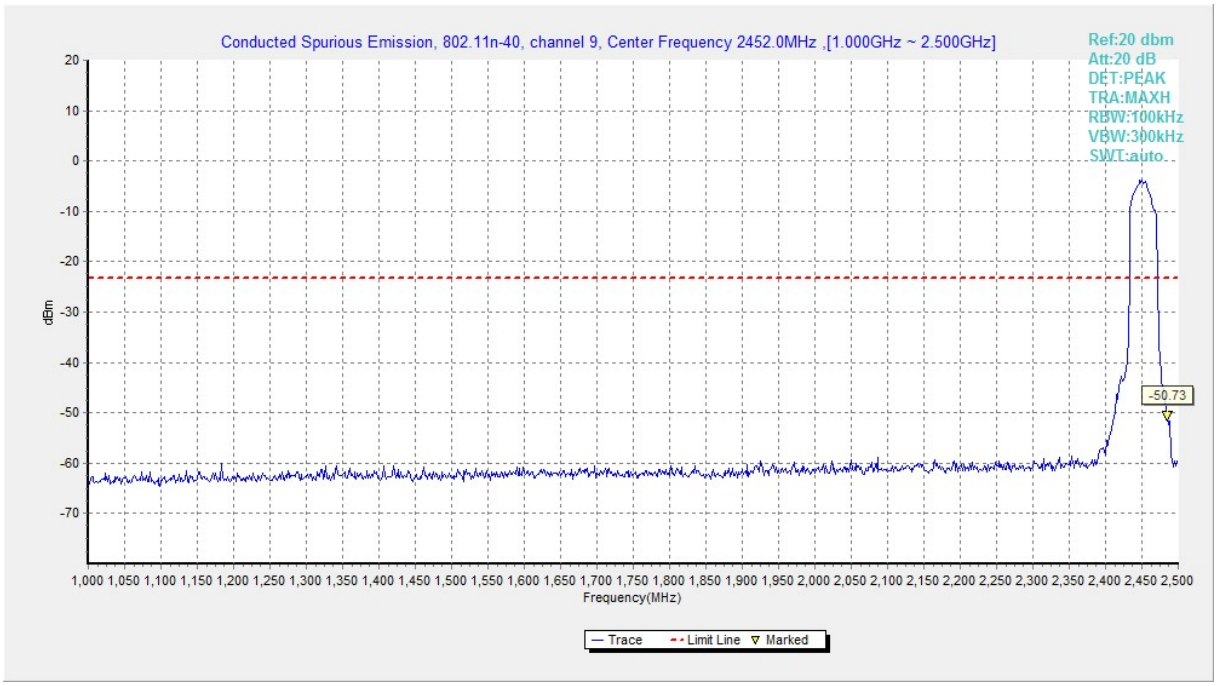


Fig.B.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

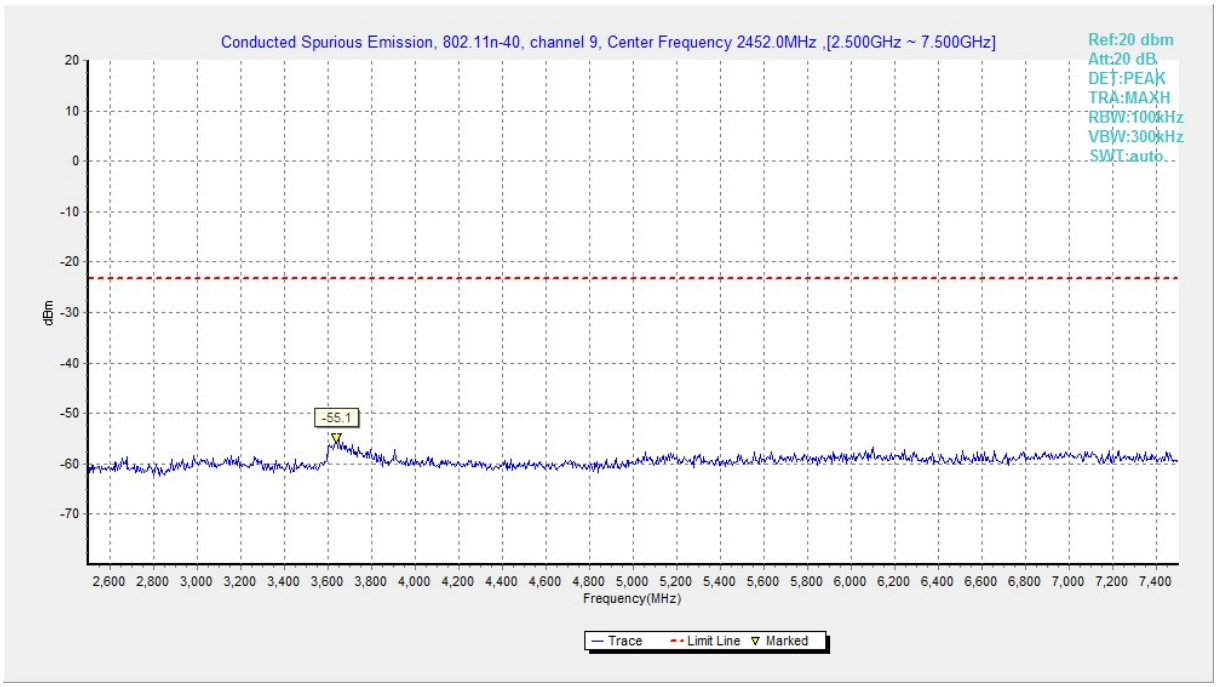


Fig.B.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

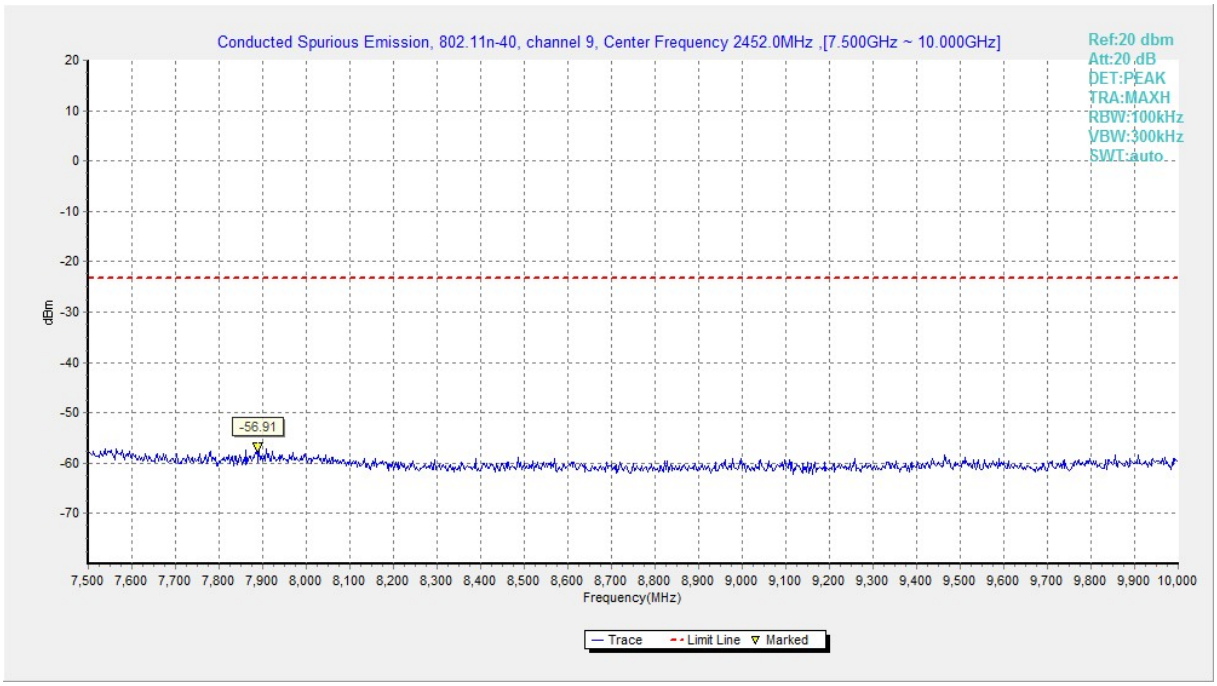


Fig.B.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

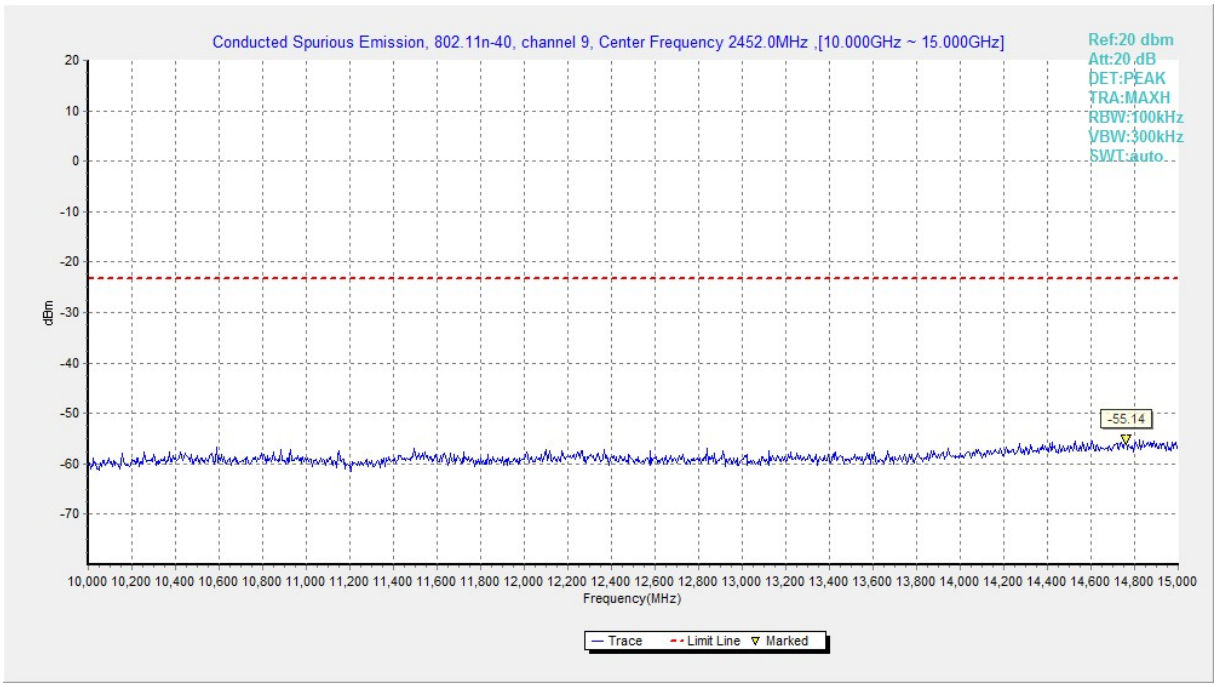


Fig.B.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

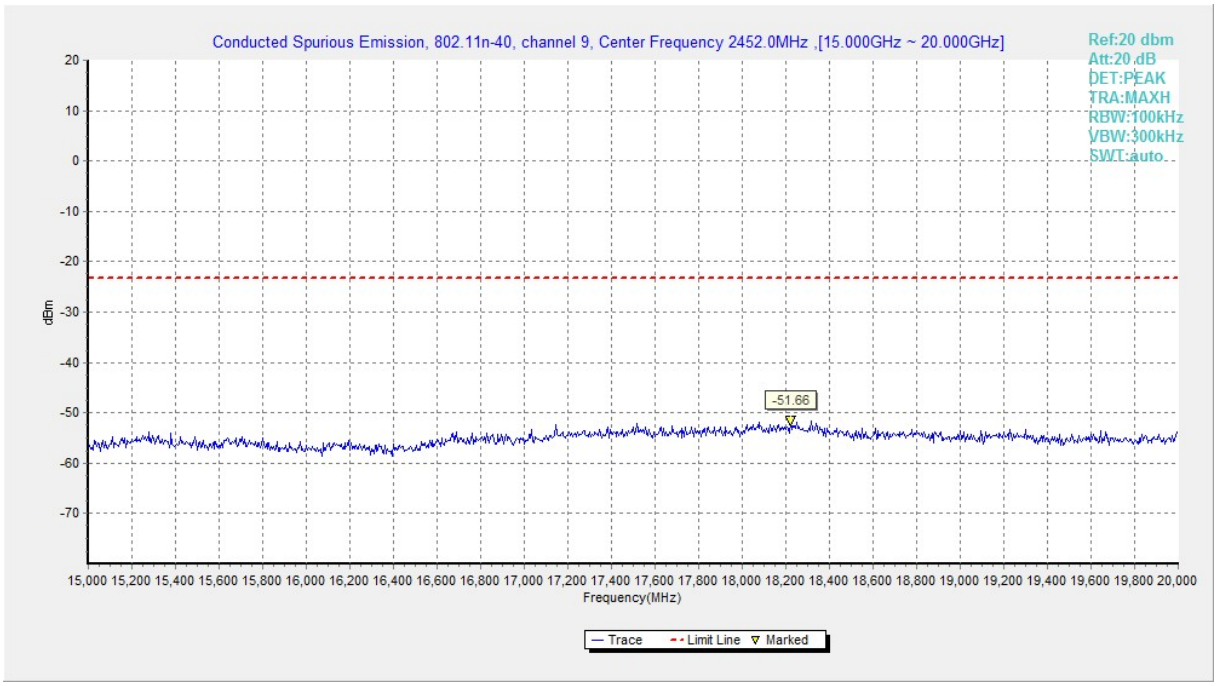


Fig.B.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

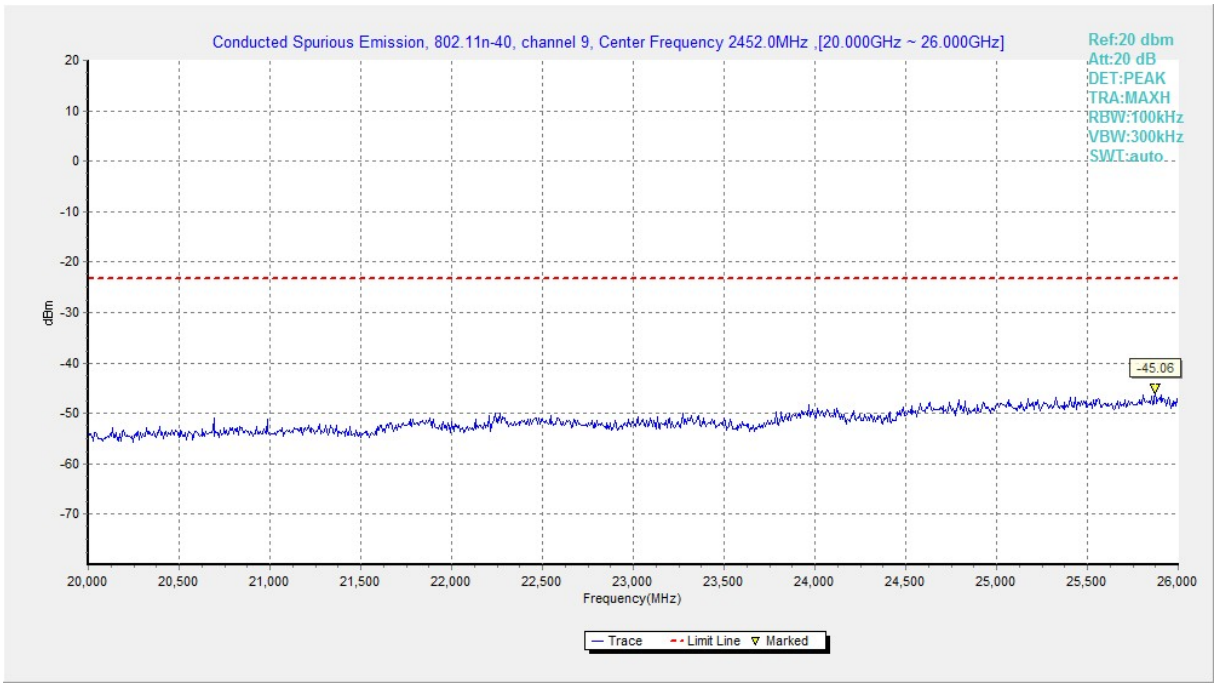


Fig.B.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

B.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: UT07a

Measurement Results for EUT1:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power(ch1)	2.31GHz ~2.43GHz	Fig.B.6.2.1	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.B.6.2.2	**P**

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power(ch1)	2.31GHz ~2.43GHz	Fig.B.6.2.3	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.B.6.2.4	**P**

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.31GHz ~2.43GHz	Fig.B.6.2.5	**P**
	Power(ch11)	2.45GHz ~2.5GHz	Fig.B.6.2.6	**P**

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.31GHz ~2.43GHz	Fig.B.6.2.7	**P**
	Power(ch9)	2.45GHz ~2.5GHz	Fig.B.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

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)	Turntable angle (deg)
2389.020	46.43	2.9	32.0	11.56	54.0	7.6	H	24
2389.800	46.41	2.9	32.0	11.54	54.0	7.6	H	46
4824.000	49.38	-33.2	34.1	48.48	54.0	4.6	H	6
7236.000	33.96	-30.9	35.8	29.05	54.0	20.0	H	5
9648.000	31.25	-30.5	36.7	25.00	54.0	22.8	H	25
12060.000	33.24	-28.7	38.7	23.21	54.0	20.8	H	184

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)	Turntable angle (deg)
2385.650	46.38	2.9	32.0	11.52	54.0	7.6	H	28
2485.800	46.45	2.9	32.1	11.43	54.0	7.5	H	248
4874.000	48.96	-33.3	34.2	48.11	54.0	5.0	H	38
7311.000	33.12	-30.8	35.8	28.11	54.0	20.9	H	98
9748.000	30.98	-30.3	36.9	24.46	54.0	23.0	H	183
12185.000	33.13	-28.1	38.8	22.42	54.0	20.9	H	356

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)	Turntable angle (deg)
2483.500	46.56	2.9	32.1	11.55	54.0	7.4	H	354
2483.950	46.52	2.9	32.1	11.50	54.0	7.5	H	28
4924.000	50.08	-33.5	34.2	49.44	54.0	3.9	H	348
7386.000	31.44	-31.5	35.9	27.04	54.0	22.6	H	345
9848.000	30.99	-30.2	37.0	24.18	54.0	23.0	H	184
12310.000	34.22	-27.8	38.9	23.09	54.0	19.8	H	182

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)	Turntable angle (deg)
2379.132	60.02	2.9	32.0	25.17	74.0	14.0	H	22
2388.904	59.98	2.9	32.0	25.12	74.0	14.0	H	44
4824.000	51.82	-33.2	34.1	50.93	74.0	22.2	V	0
7236.000	44.70	-30.9	35.8	39.79	74.0	29.3	H	0
9648.000	43.40	-30.5	36.7	37.15	74.0	30.6	V	22
12060.000	46.73	-28.7	38.7	36.69	74.0	27.3	H	176

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)	Turntable angle (deg)
2329.250	44.18	-35.3	31.9	47.58	74.0	29.8	H	22
2603.600	45.08	-35.1	32.3	47.86	74.0	28.9	H	242
4874.000	50.74	-33.3	34.2	49.89	74.0	23.3	V	44
7311.000	43.65	-30.8	35.8	38.64	74.0	30.4	H	88
9748.000	44.22	-30.3	36.9	37.70	74.0	29.8	V	176
12185.000	48.57	-28.1	38.8	37.86	74.0	25.4	H	0

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)	Turntable angle (deg)
2495.200	60.36	2.9	32.1	25.32	74.0	13.6	H	0
2492.750	60.13	2.9	32.1	25.10	74.0	13.9	H	22
4924.000	53.65	-33.5	34.2	53.01	74.0	20.4	V	352
7386.000	44.06	-31.5	35.9	39.65	74.0	29.9	V	352
9848.000	44.03	-30.2	37.0	37.22	74.0	30.0	H	176
12310.000	47.64	-27.8	38.9	36.50	74.0	26.4	V	176

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)	Turntable angle (deg)
2388.590	46.82	2.9	32.0	11.96	54.0	7.2	H	6
2389.350	46.69	2.9	32.0	11.83	54.0	7.3	H	26
4824.000	32.95	-33.2	34.1	32.06	54.0	21.0	H	92
7236.000	30.27	-30.9	35.8	25.35	54.0	23.7	H	24
9648.000	30.53	-30.5	36.7	24.27	54.0	23.5	H	136
12060.000	33.26	-28.7	38.7	23.23	54.0	20.7	H	356

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)	Turntable angle (deg)
2384.900	46.75	2.9	32.0	11.89	54.0	7.3	H	18
2485.620	47.39	2.9	32.1	12.37	54.0	6.6	H	4
4874.000	32.26	-33.3	34.2	31.41	54.0	21.7	H	20
7311.000	30.18	-30.8	35.8	25.17	54.0	23.8	H	28
9748.000	30.76	-30.3	36.9	24.24	54.0	23.2	H	4
12185.000	33.46	-28.1	38.8	22.76	54.0	20.5	H	40

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)	Turntable angle (deg)
2483.500	47.59	2.9	32.1	12.57	54.0	6.4	H	92
2483.780	47.51	2.9	32.1	12.49	54.0	6.5	H	26
4920.700	33.72	-33.5	34.2	33.06	54.0	20.3	H	222
7385.800	29.53	-31.5	35.9	25.12	54.0	24.5	H	248
9848.200	30.90	-30.2	37.0	24.08	54.0	23.1	H	46
12309.700	33.30	-27.8	38.9	22.16	54.0	20.7	H	68

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)	Turntable angle (deg)
2386.832	60.35	2.9	32.0	25.49	74.0	13.7	H	0
2389.898	60.55	2.9	32.0	25.69	74.0	13.4	H	22
4824.000	45.65	-33.2	34.1	44.76	74.0	28.3	H	88
7236.000	42.85	-30.9	35.8	37.94	74.0	31.1	V	22
9648.000	43.66	-30.5	36.7	37.40	74.0	30.3	V	132
12060.000	46.14	-28.7	38.7	36.10	74.0	27.9	H	352

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)	Turntable angle (deg)
2096.500	44.14	-35.0	31.7	47.41	74.0	29.9	H	22
2534.600	44.69	-34.5	32.2	47.06	74.0	29.3	H	0
4874.000	46.06	-33.3	34.2	45.20	74.0	27.9	V	44
7311.000	40.85	-30.8	35.8	35.84	74.0	33.2	H	22
9748.000	42.43	-30.3	36.9	35.91	74.0	31.6	V	0
12185.000	44.34	-28.1	38.8	33.64	74.0	29.7	V	44

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)	Turntable angle (deg)
2483.605	63.23	2.9	32.1	28.22	74.0	10.8	H	88
2484.125	61.95	2.9	32.1	26.93	74.0	12.1	H	22
4924.500	47.99	-33.5	34.2	47.35	74.0	26.0	V	220
7386.000	40.77	-31.5	35.9	36.36	74.0	33.2	V	242
9848.000	42.10	-30.2	37.0	35.28	74.0	31.9	V	44
12310.000	44.44	-27.8	38.9	33.31	74.0	29.6	V	66

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)	Turntable angle (deg)
2390.000	47.80	2.9	32.0	12.93	54.0	6.2	H	24
2389.980	47.53	2.9	32.0	12.66	54.0	6.5	H	336
4822.600	32.94	-33.2	34.1	32.04	54.0	21.1	H	248
7236.400	30.94	-30.9	35.8	26.03	54.0	23.1	H	268
9648.400	30.84	-30.5	36.7	24.58	54.0	23.2	H	290
12060.000	33.29	-28.7	38.7	23.26	54.0	20.7	H	300

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)	Turntable angle (deg)
2386.590	47.48	2.9	32.0	12.62	54.0	6.5	H	16
2485.650	47.76	2.9	32.1	12.74	54.0	6.2	H	48
4873.900	32.71	-33.3	34.2	31.86	54.0	21.3	H	80
7311.100	30.14	-30.8	35.8	25.13	54.0	23.9	H	8
9748.300	30.95	-30.3	36.9	24.43	54.0	23.0	H	102
12184.600	33.55	-28.1	38.8	22.84	54.0	20.5	H	118

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)	Turntable angle (deg)
2483.520	47.94	2.9	32.1	12.93	54.0	6.1	H	92
2484.580	47.89	2.9	32.1	12.87	54.0	6.1	H	136
4926.100	33.54	-33.5	34.2	32.91	54.0	20.5	H	8
7385.800	29.59	-31.5	35.9	25.18	54.0	24.4	H	70
9848.200	30.81	-30.2	37.0	24.00	54.0	23.2	H	48
12309.700	33.23	-27.8	38.9	22.10	54.0	20.8	H	246

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)	Turntable angle (deg)
2389.954	64.47	2.9	32.0	29.60	74.0	9.5	H	110
2389.926	64.19	2.9	32.0	29.33	74.0	9.8	V	132
4822.500	46.11	-33.2	34.1	45.22	74.0	27.9	H	242
7236.000	43.04	-30.9	35.8	38.12	74.0	31.0	V	264
9648.000	42.83	-30.5	36.7	36.57	74.0	31.2	V	286
12060.000	44.41	-28.7	38.7	34.37	74.0	29.6	V	308

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)	Turntable angle (deg)
2257.500	44.36	-35.7	31.9	48.21	74.0	29.6	H	22
2590.600	44.74	-34.9	32.3	47.40	74.0	29.3	H	44
4875.000	45.17	-33.3	34.2	44.32	74.0	28.8	V	88
7311.000	40.87	-30.8	35.8	35.86	74.0	33.1	V	0
9748.000	41.54	-30.3	36.9	35.02	74.0	32.5	H	110
12185.000	44.21	-28.1	38.8	33.50	74.0	29.8	H	132

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)	Turntable angle (deg)
2483.515	64.80	2.9	32.1	29.79	74.0	9.2	H	88
2483.655	64.79	2.9	32.1	29.78	74.0	9.2	H	132
4924.500	47.81	-33.5	34.2	47.17	74.0	26.2	H	0
7386.600	40.50	-31.5	35.9	36.10	74.0	33.5	H	66
9848.000	41.97	-30.2	37.0	35.15	74.0	32.0	V	44
12310.000	44.69	-27.8	38.9	33.56	74.0	29.3	H	242

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)	Turntable angle (deg)
2389.860	48.63	2.9	32.0	13.77	54.0	5.4	H	226
2389.920	48.74	2.9	32.0	13.87	54.0	5.3	H	92
4843.300	30.32	-33.2	34.1	29.41	54.0	23.7	H	70
7266.100	30.70	-30.6	35.8	25.48	54.0	23.3	H	8
9688.000	30.73	-30.4	36.8	24.33	54.0	23.3	H	48
12109.900	33.40	-28.5	38.8	23.10	54.0	20.6	H	246

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)	Turntable angle (deg)
2388.500	48.51	2.9	32.0	13.65	54.0	5.5	H	28
2485.750	48.32	2.9	32.1	13.30	54.0	5.7	H	46
4870.300	30.59	-33.3	34.2	29.73	54.0	23.4	H	8
7311.100	30.37	-30.8	35.8	25.36	54.0	23.6	H	6
9748.300	31.07	-30.3	36.9	24.55	54.0	22.9	H	24
12184.600	33.68	-28.1	38.8	22.98	54.0	20.3	H	185

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)	Turntable angle (deg)
2483.520	48.50	2.9	32.1	13.48	54.0	5.5	H	184
2483.760	48.44	2.9	32.1	13.43	54.0	5.6	H	6
4901.800	30.92	-33.4	34.2	30.17	54.0	23.1	H	26
7356.100	30.45	-31.2	35.8	25.78	54.0	23.6	H	246
9807.700	30.74	-30.3	36.9	24.13	54.0	23.3	H	8
12260.200	33.26	-27.9	38.9	22.28	54.0	20.7	H	2

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)	Turntable angle (deg)
2389.380	67.86	2.9	32.0	33.00	74.0	6.1	H	220
2389.700	67.73	2.9	32.0	32.86	74.0	6.3	H	88
4848.000	43.74	-33.2	34.1	42.84	74.0	30.3	H	66
7266.000	41.77	-30.6	35.8	36.56	74.0	32.2	V	0
9688.000	42.57	-30.4	36.8	36.17	74.0	31.4	V	44
12110.000	45.44	-28.5	38.8	35.14	74.0	28.6	V	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)	Turntable angle (deg)
2218.600	43.92	-35.7	31.8	47.75	74.0	30.1	H	22
2604.800	45.02	-35.1	32.3	47.77	74.0	29.0	H	44
4865.500	43.40	-33.3	34.1	42.53	74.0	30.6	V	0
7311.000	42.65	-30.8	35.8	37.64	74.0	31.3	H	0
9748.000	44.69	-30.3	36.9	38.17	74.0	29.3	V	22
12185.000	45.12	-28.1	38.8	34.42	74.0	28.9	H	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)	Turntable angle (deg)
2483.705	68.85	2.9	32.1	33.83	74.0	5.1	H	176
2483.780	68.86	2.9	32.1	33.85	74.0	5.1	H	0
4878.500	43.78	-33.3	34.2	42.94	74.0	30.2	V	22
7356.000	42.04	-31.2	35.8	37.37	74.0	32.0	V	352
9808.000	41.81	-30.3	36.9	35.19	74.0	32.2	V	0
12260.000	45.40	-27.9	38.9	34.42	74.0	28.6	H	0

Test graphs as below:

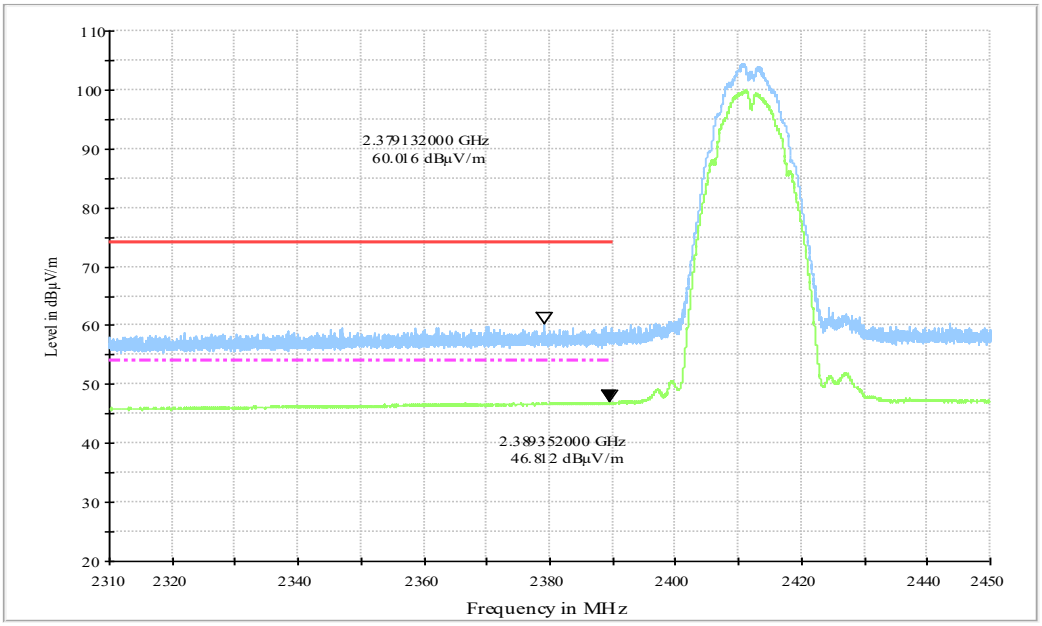


Fig.B.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

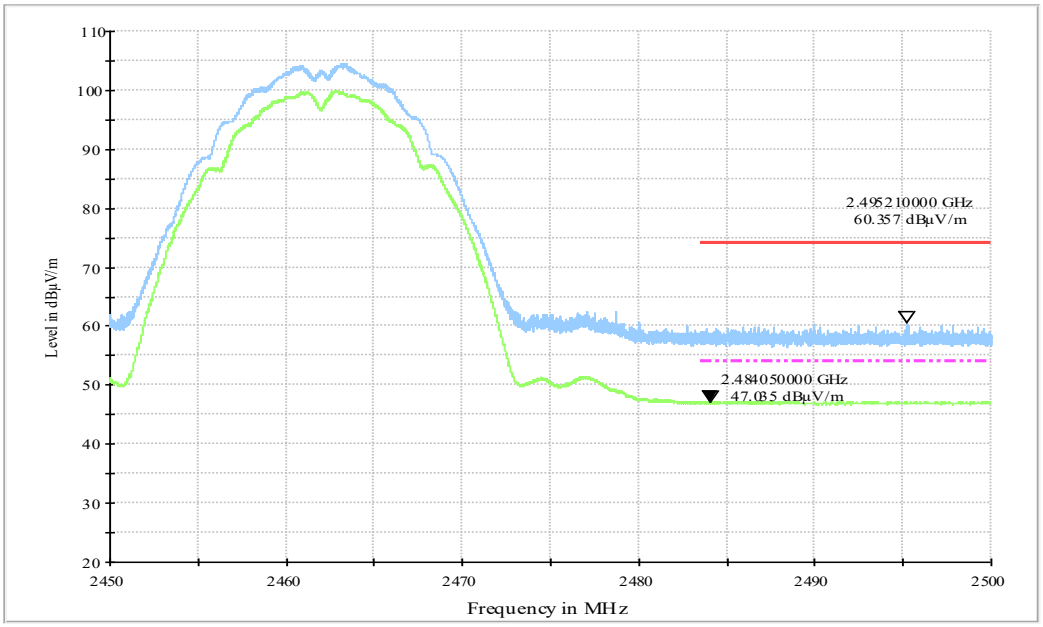


Fig.B.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

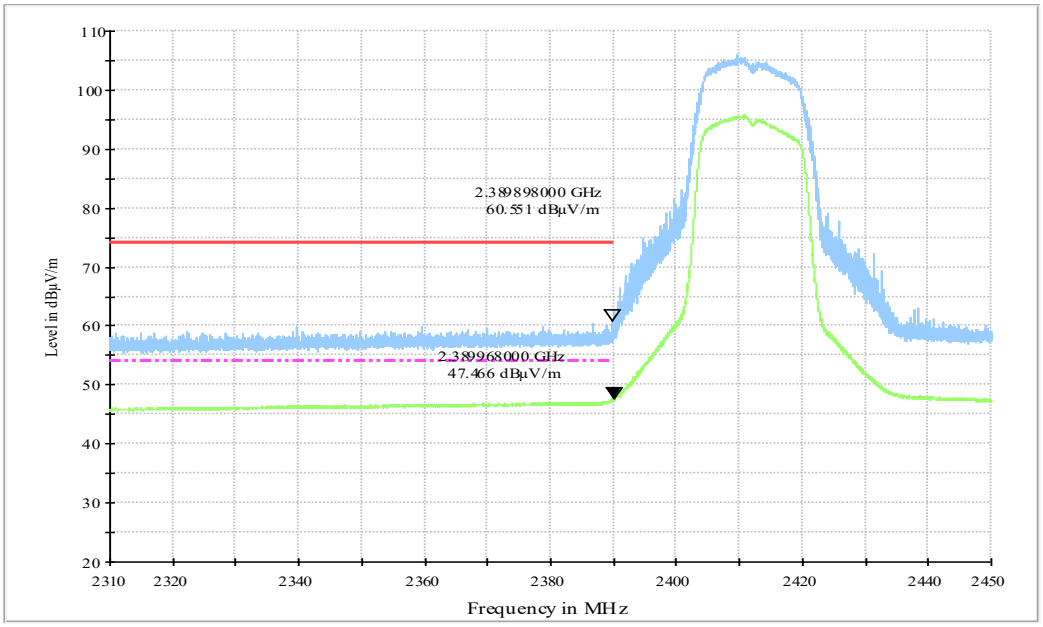


Fig.B.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.43GHz

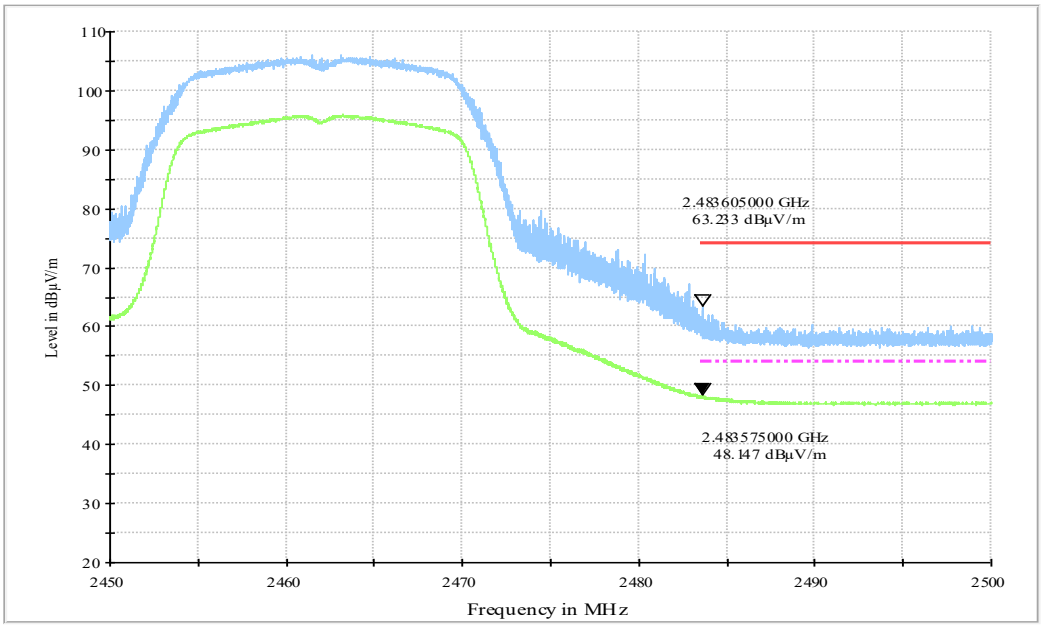


Fig.B.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

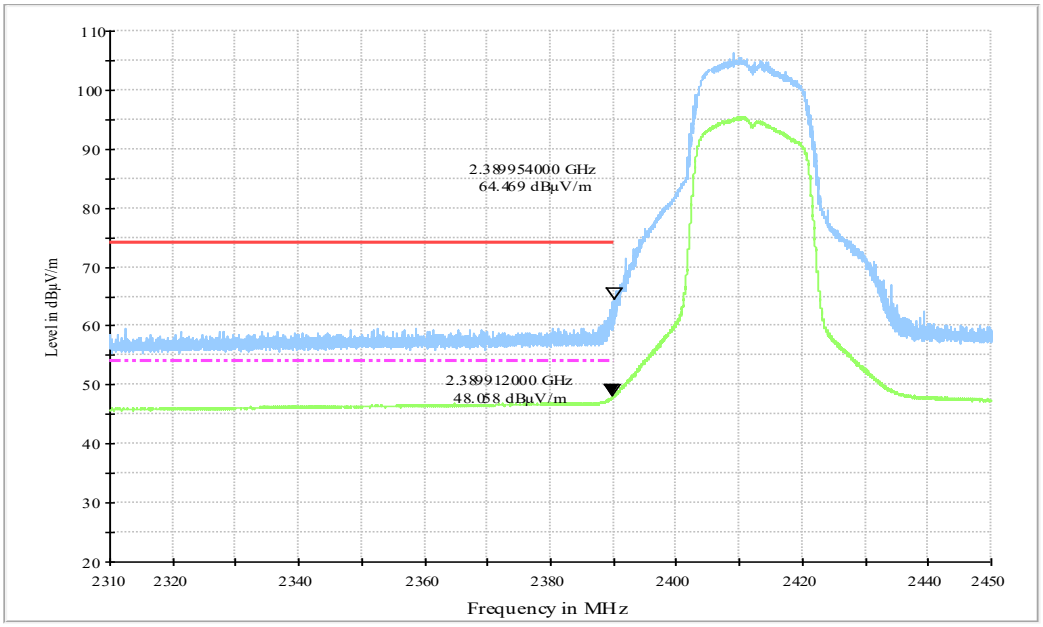


Fig.B.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31GHz - 2.45GHz

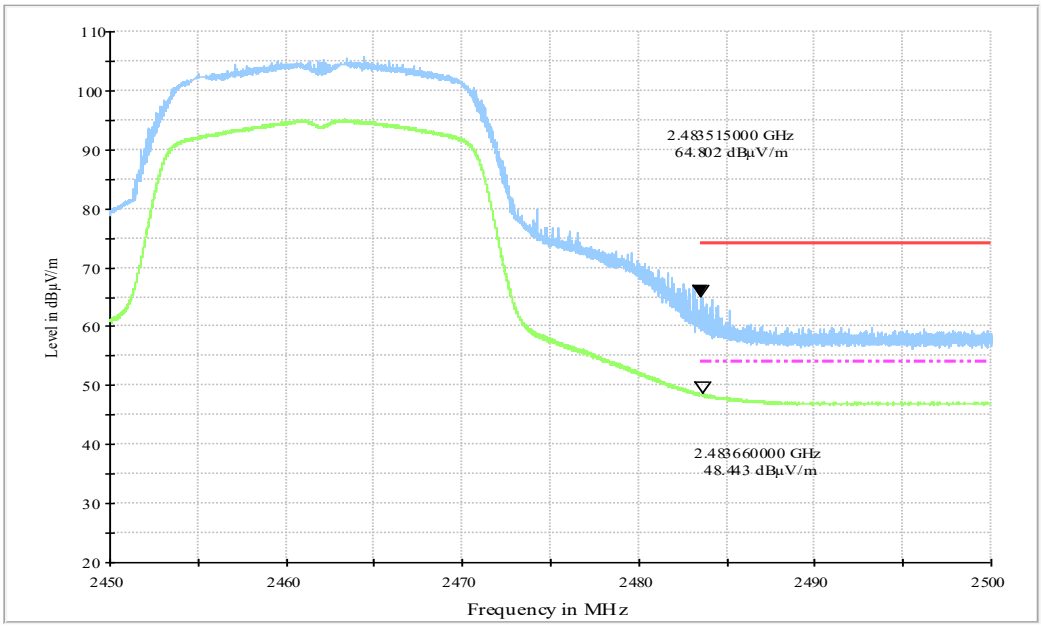


Fig.B.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

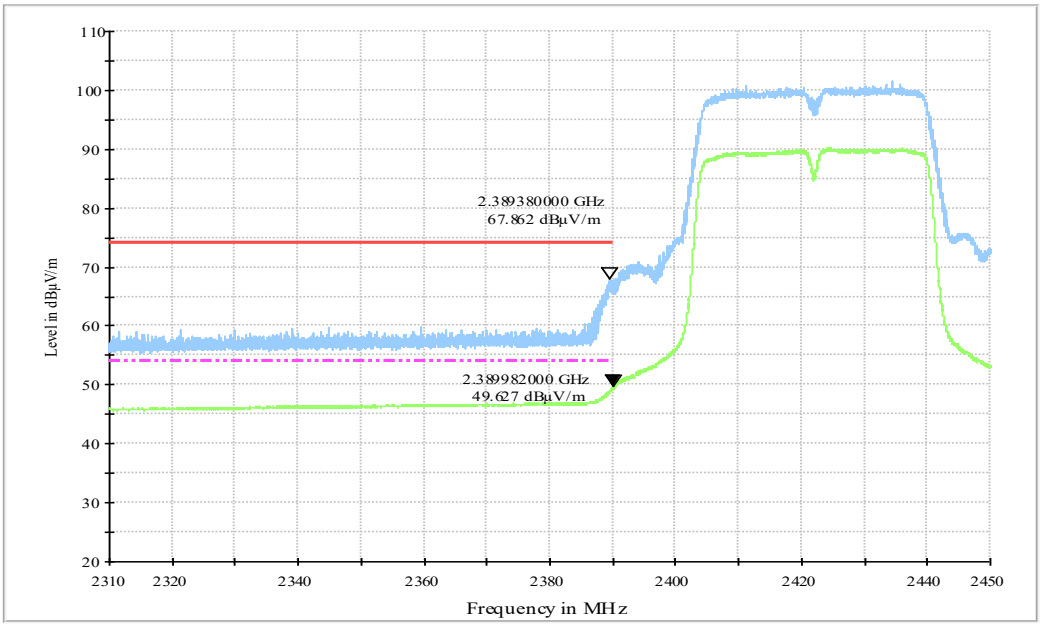


Fig.B.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31GHz - 2.45GHz

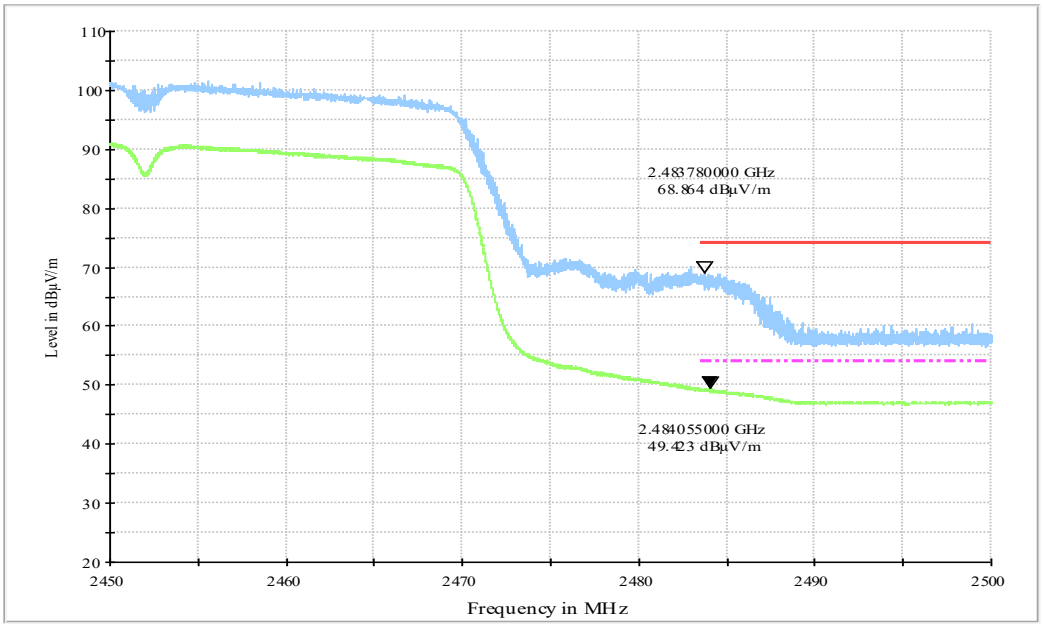


Fig.B.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

B.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

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:

Traffic:

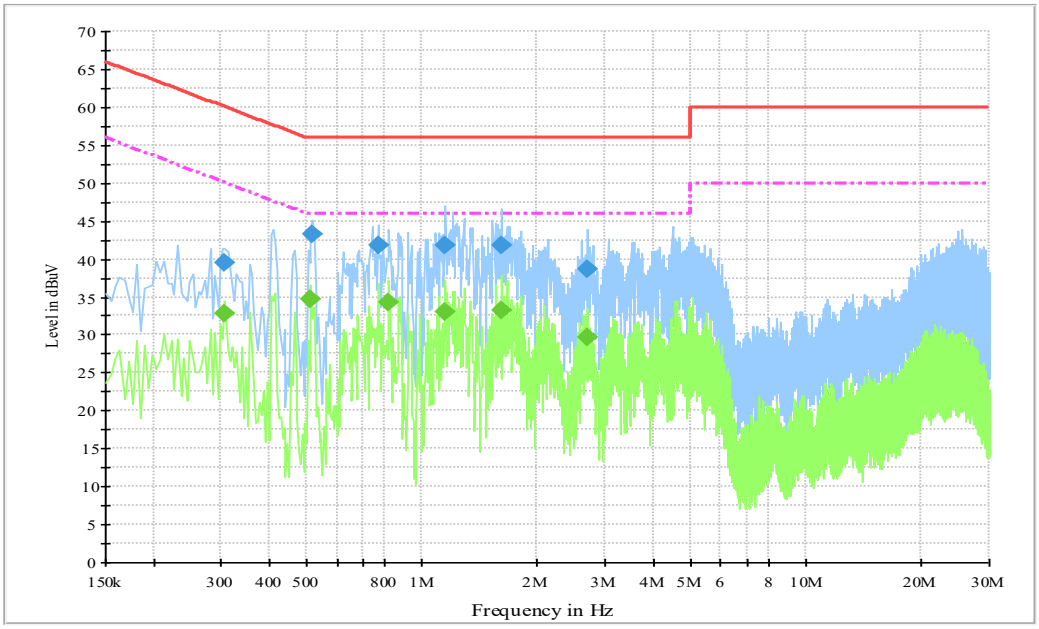


Fig.B.7.1 AC Powerline Conducted Emission-802.11b

Note1: 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)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.307500	39.4	1000.	9.000	L1	19.9	20.6	60.0
0.519000	43.3	1000.	9.000	L1	19.9	12.7	56.0
0.771000	41.9	1000.	9.000	L1	19.8	14.1	56.0
1.153500	41.7	1000.	9.000	L1	19.7	14.3	56.0
1.612500	41.8	1000.	9.000	L1	19.7	14.2	56.0
2.688000	38.7	1000.	9.000	L1	19.6	17.3	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.307500	32.8	1000.0	9.000	L1	19.9	17.2	50.0
0.514500	34.6	1000.0	9.000	L1	19.9	11.4	46.0
0.820500	34.3	1000.0	9.000	L1	19.8	11.7	46.0
1.153500	33.1	1000.0	9.000	L1	19.7	12.9	46.0
1.612500	33.3	1000.0	9.000	L1	19.7	12.7	46.0
2.688000	29.6	1000.0	9.000	L1	19.6	16.4	46.0

Note2: The measurement results showed here are worst cases of the combinations of different chargers。

Idle:

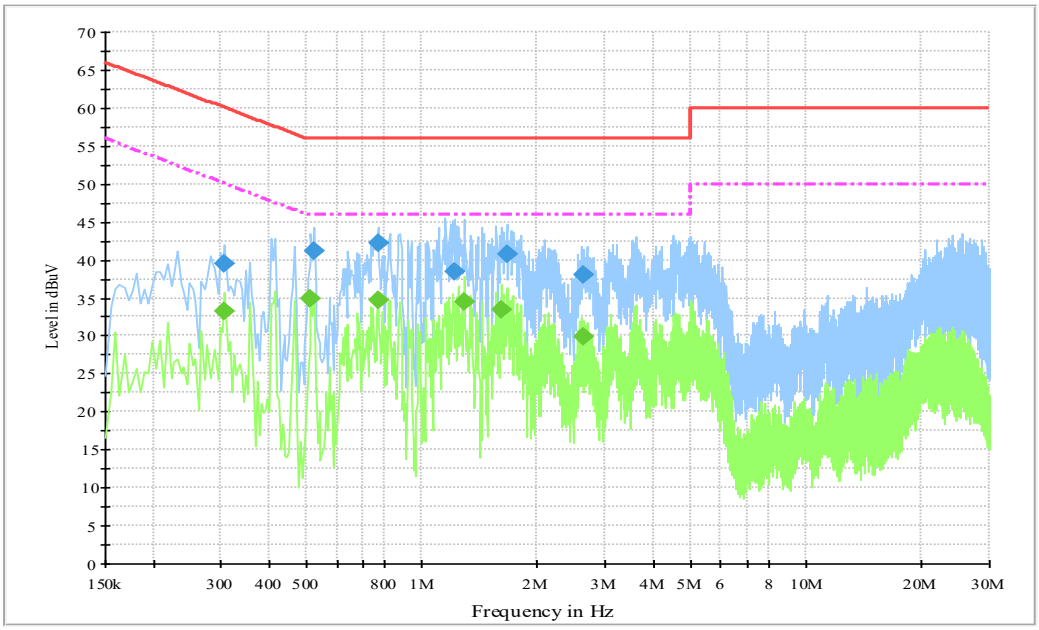


Fig.B.7.2 AC Powerline Conducted Emission-Idle

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

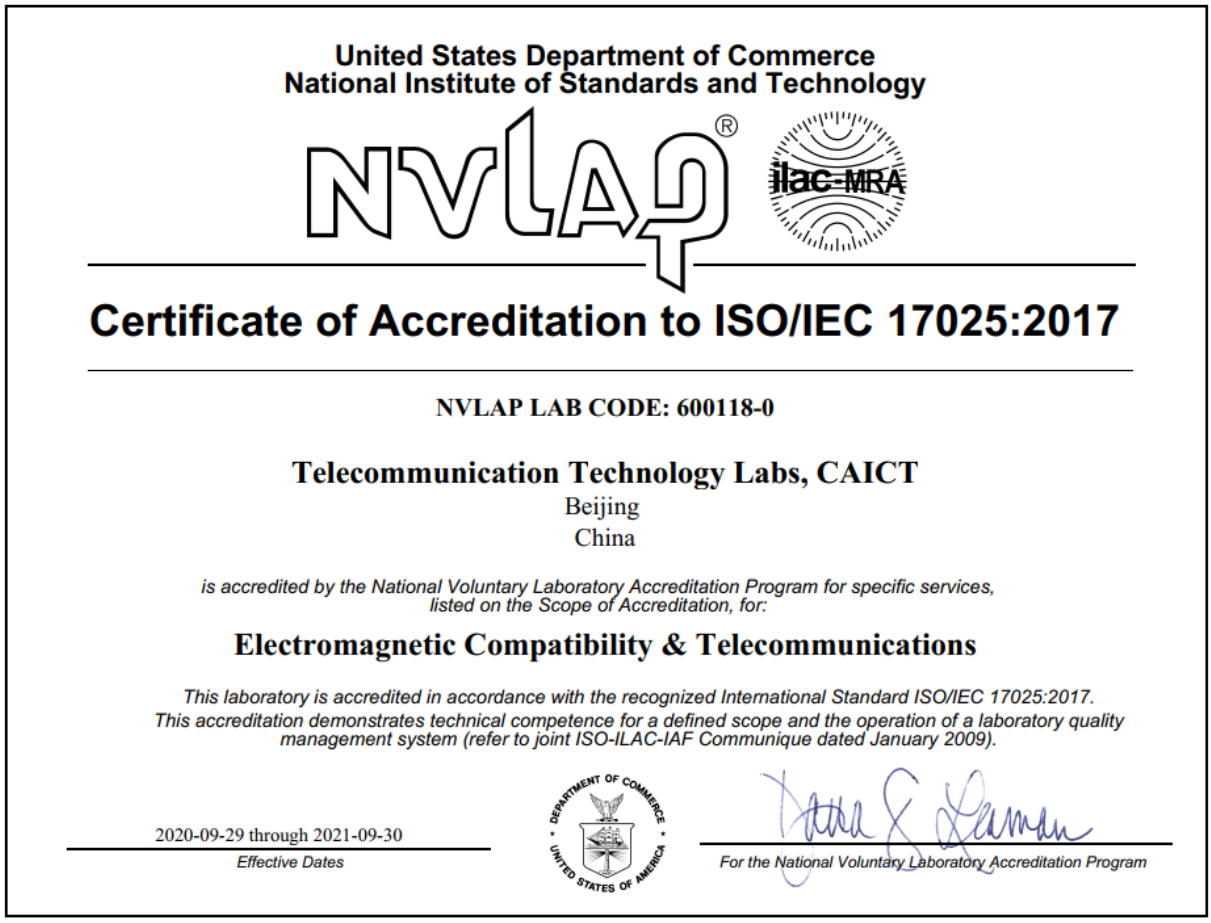
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.307500	39.4	1000.	9.000	L1	19.9	20.6	60.0
0.523500	41.1	1000.	9.000	L1	19.9	14.9	56.0
0.771000	42.2	1000.	9.000	L1	19.8	13.8	56.0
1.221000	38.5	1000.	9.000	L1	19.7	17.5	56.0
1.662000	40.7	1000.	9.000	L1	19.7	15.3	56.0
2.634000	38.0	1000.	9.000	L1	19.6	18.0	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.307500	33.3	1000.0	9.000	L1	19.9	16.7	50.0
0.514500	34.8	1000.0	9.000	L1	19.9	11.2	46.0
0.771000	34.7	1000.0	9.000	L1	19.8	11.3	46.0
1.288500	34.5	1000.0	9.000	L1	19.7	11.5	46.0
1.612500	33.4	1000.0	9.000	L1	19.7	12.6	46.0
2.638500	29.8	1000.0	9.000	L1	19.6	16.2	46.0

Note2: The measurement results showed here are worst cases of the combinations of different chargers

ANNEX C: Accreditation Certificate



United States Department of Commerce
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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).

2020-09-29 through 2021-09-30
Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

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