



Fig.A.6.1.7 Transmitter Spurious Emission - Conducted (802.11b, Ch11, Center Frequency)

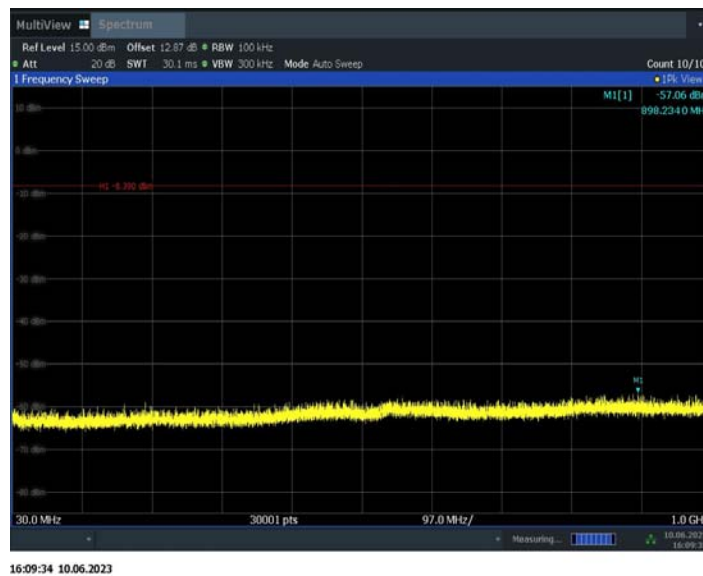


Fig.A.6.1.8 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 30 MHz-1 GHz)



Fig.A.6.1.9 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 1 GHz-26.5 GHz)



Fig.A.6.1.10 Transmitter Spurious Emission - Conducted (802.11g, Ch1, Center Frequency)



Fig.A.6.1.11 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 30 MHz-1 GHz)



Fig.A.6.1.12 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 1 GHz-26.5 GHz)

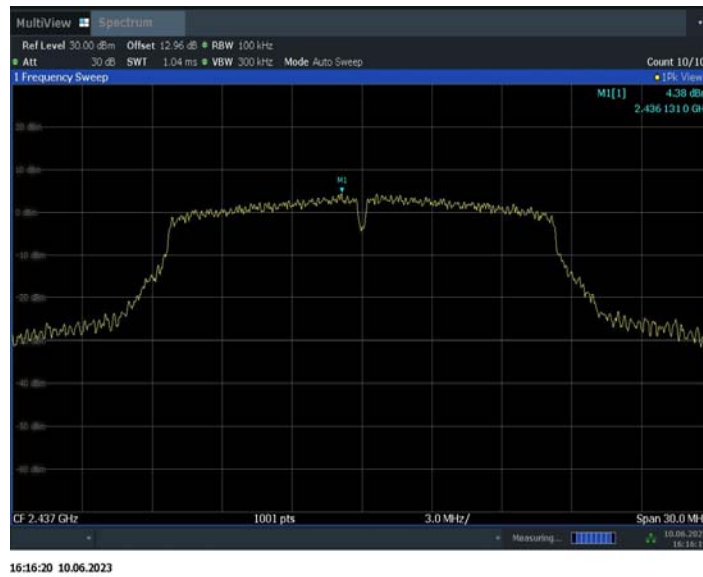


Fig.A.6.1.13 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

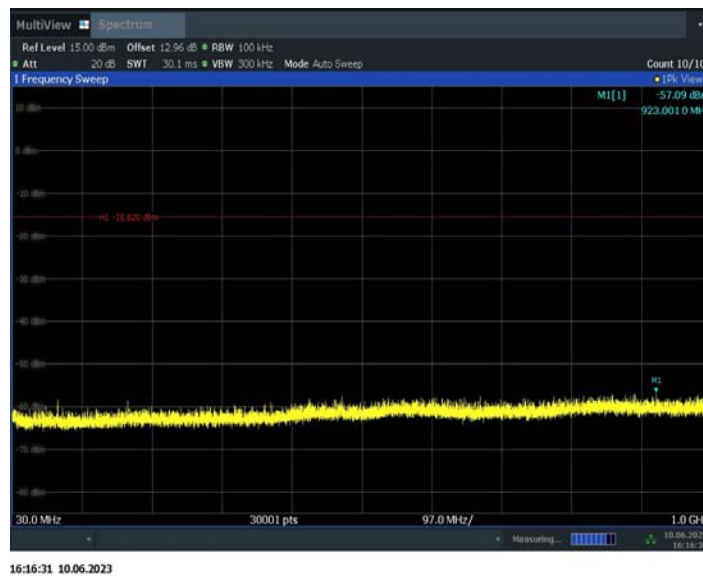


Fig.A.6.1.14 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)



Fig.A.6.1.15 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-26.5 GHz)



Fig.A.6.1.16 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

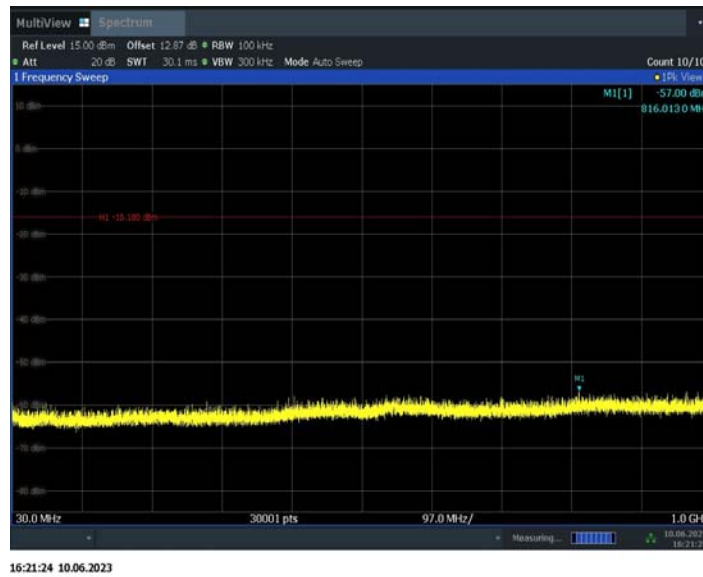


Fig.A.6.1.17 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)



Fig.A.6.1.18 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-26.5 GHz)

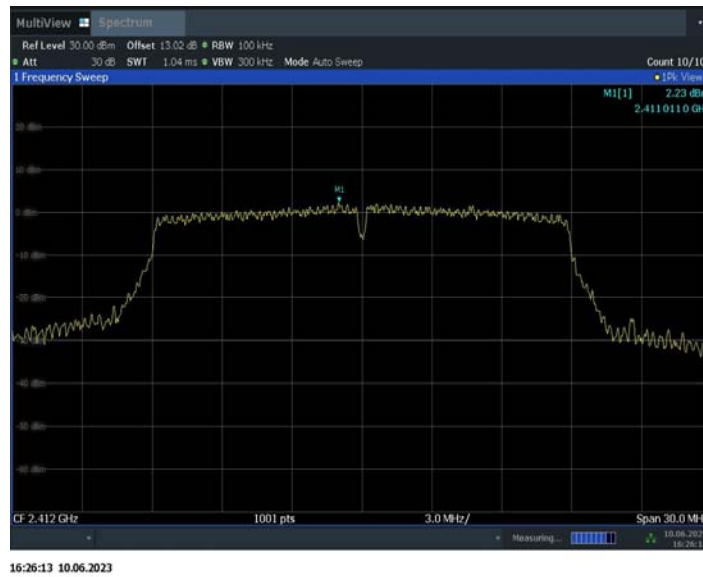


Fig.A.6.1.19 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)



Fig.A.6.1.20 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)



Fig.A.6.1.21 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-26.5 GHz)

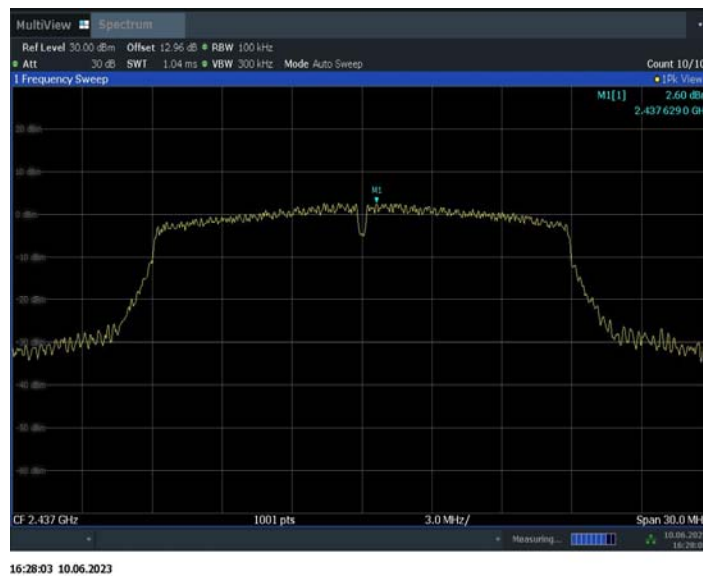


Fig.A.6.1.22 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

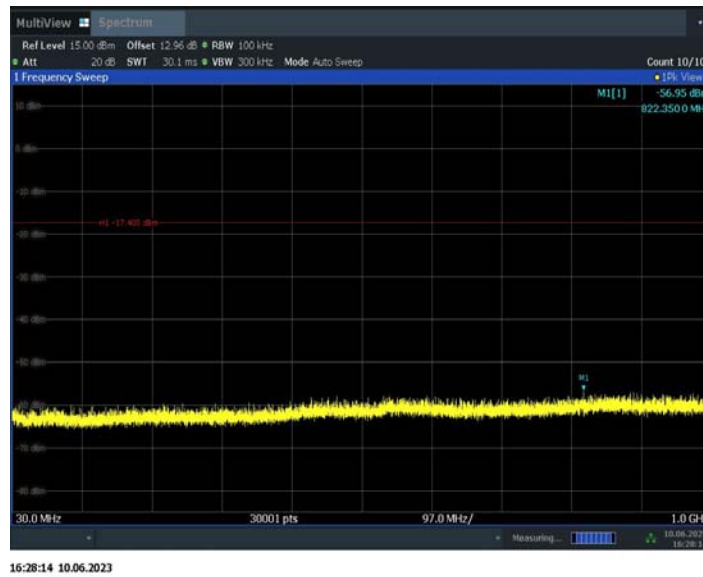


Fig.A.6.1.23 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)



Fig.A.6.1.24 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-26.5 GHz)

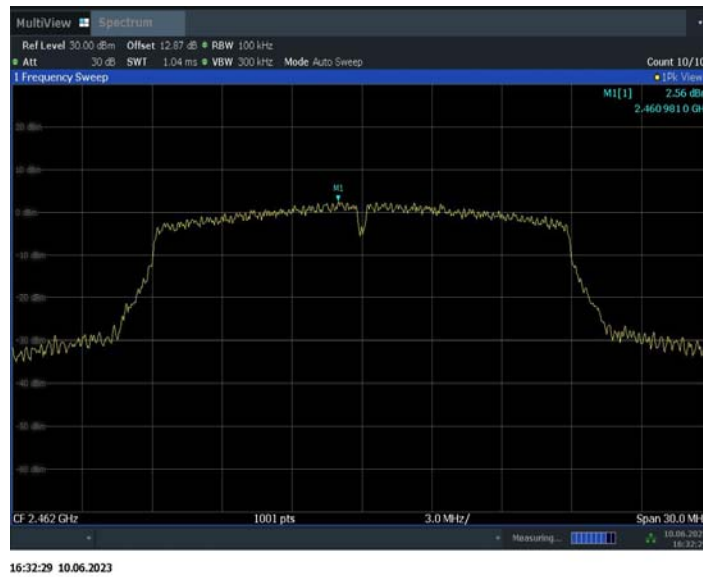


Fig.A.6.1.25 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)



Fig.A.6.1.26 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)



Fig.A.6.1.27 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-26.5 GHz)

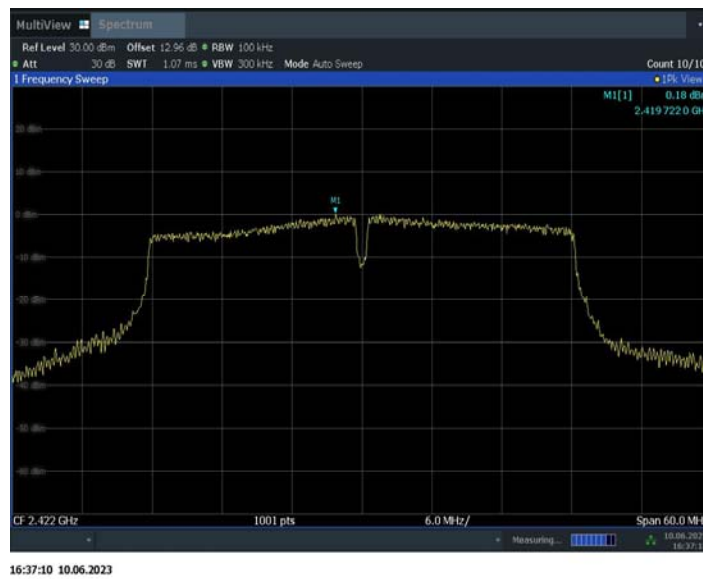


Fig.A.6.1.28 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)

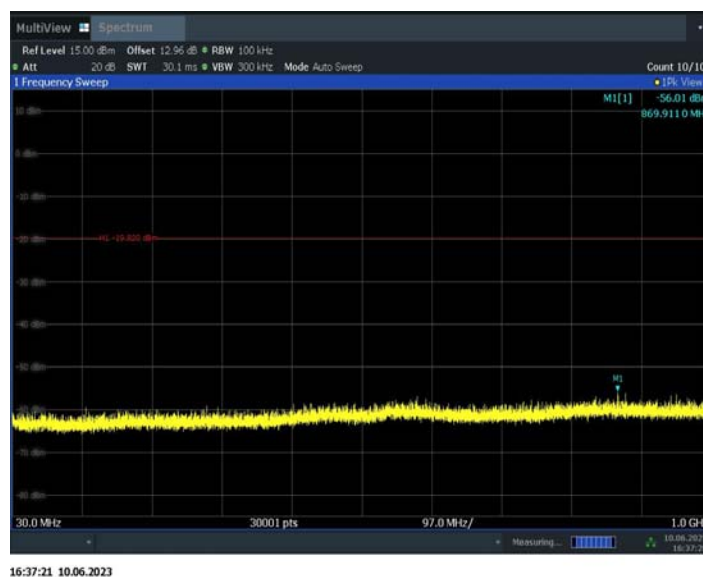


Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)



Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-26.5 GHz)

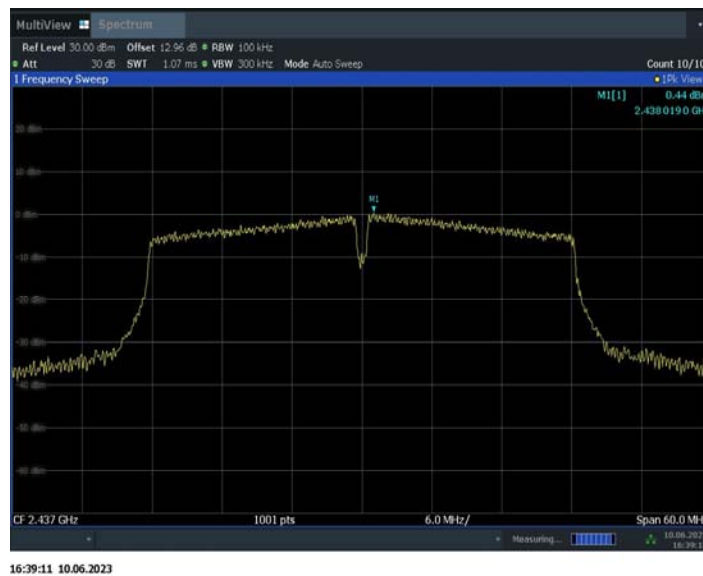


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

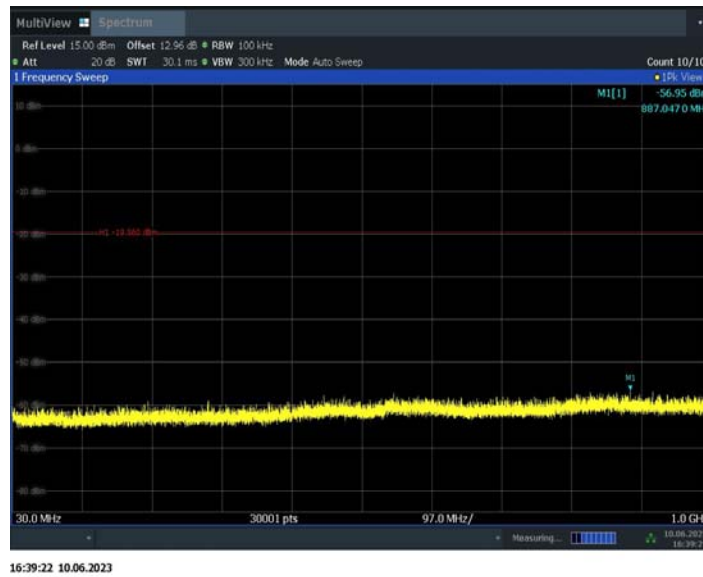


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)



Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-26.5 GHz)

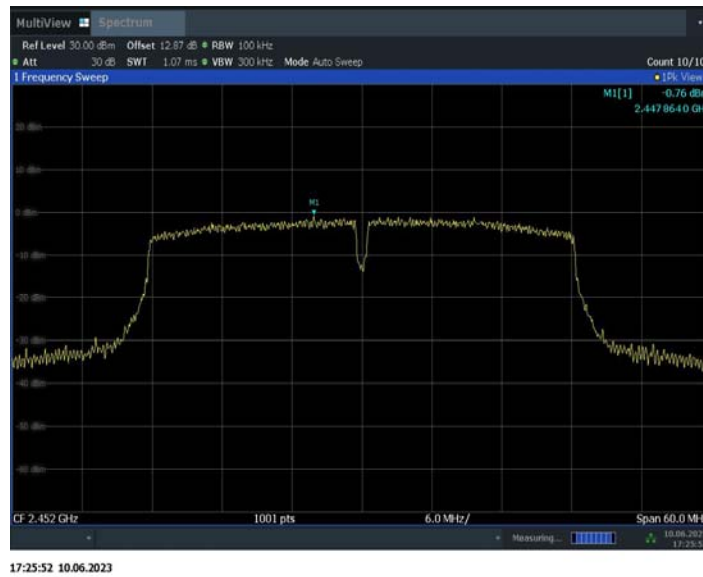


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

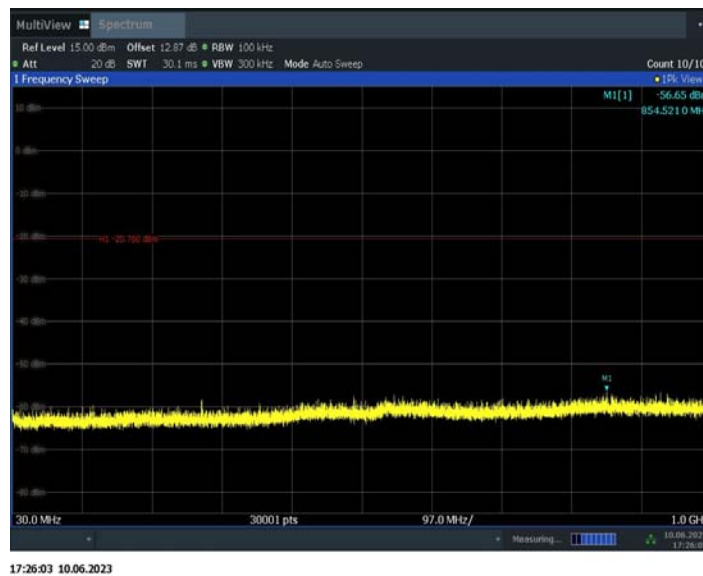


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)



Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-26.5 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)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

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

Set up:

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m

The EUT and transmitting antenna shall be centered on the turntable.

Test Procedure

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-3000	1MHz/3MHz	15
3000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Measurement results:
802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.31GHz~2.43GHz---L	Fig.A.6.1.1	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.1.2	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.31GHz~2.43GHz---L	Fig.A.6.1.3	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.1.4	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.31GHz~2.43GHz---L	Fig.A.6.1.5	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.1.6	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	3	2.31GHz~2.43GHz---L	Fig.A.6.1.7	P
	9	2.45GHz~2.50GHz---H	Fig.A.6.1.8	P

Conclusion: Pass
Note:

1. 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= $P_{Mea}+A_{Rpl}= P_{Mea}+Cable\ Loss+Antenna\ Factor$

2. The range of evaluated frequency is from 9 kHz to 26GHz. Measurement value show only up to 6 maximum emissions noted.

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)
2375.590	60.83	5.32	32.06	23.45	74.00	13.17	V
2783.066	60.56	5.80	32.07	22.69	74.00	13.44	H
4824.000	53.39	-35.00	34.10	54.29	74.00	20.61	V
7235.500	50.87	-32.59	35.87	47.58	74.00	23.13	H
9648.000	49.22	-32.04	36.90	44.36	74.00	24.78	V
12059.000	47.09	-31.70	38.82	39.98	74.00	26.91	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)
2374.400	42.62	-29.12	32.04	39.70	74.00	31.38	V
2501.200	43.91	-28.29	32.60	39.60	74.00	30.09	V
4873.500	45.10	-34.26	34.15	45.21	74.00	28.90	H
7309.500	50.12	-32.61	35.96	46.76	74.00	23.88	H
9747.500	46.70	-32.21	36.90	42.02	74.00	27.30	H
12182.000	46.47	-31.21	39.06	38.62	74.00	27.53	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)
2484.170	61.46	5.46	32.60	23.40	74.00	12.54	V
2487.345	62.31	5.47	32.60	24.24	74.00	11.69	V
4923.500	52.95	-34.61	34.25	53.31	74.00	21.05	H
7387.500	50.25	-32.60	35.80	47.05	74.00	23.75	V
9848.000	48.76	-32.52	37.00	44.28	74.00	25.24	H
12310.500	48.03	-31.03	38.91	40.15	74.00	25.97	V

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.688	67.23	5.35	32.26	29.62	74.00	6.77	V
2389.954	67.83	5.35	32.26	30.22	74.00	6.17	V
4821.500	46.47	-35.05	34.10	47.42	74.00	27.53	V
7233.500	49.97	-32.59	35.87	46.69	74.00	24.03	H
9648.000	44.95	-32.04	36.90	40.09	74.00	29.05	H
12060.000	44.67	-31.70	38.82	37.55	74.00	29.33	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2373.600	41.98	-29.14	32.03	39.09	74.00	32.02	H
2502.000	43.54	-28.33	32.60	39.27	74.00	30.46	V
4869.500	48.41	-34.23	34.14	48.51	74.00	25.59	H
7307.000	49.54	-32.61	35.97	46.18	74.00	24.46	H
9748.000	43.55	-32.22	36.90	38.87	74.00	30.45	H
12185.000	45.95	-31.20	39.07	38.08	74.00	28.05	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)
2483.535	71.85	5.46	32.60	33.79	74.00	2.15	V
2483.750	71.17	5.46	32.60	33.11	74.00	2.83	H
4936.000	49.40	-34.68	34.27	49.81	74.00	24.60	H
7396.000	50.67	-32.59	35.80	47.46	74.00	23.33	V
9848.000	43.42	-32.52	37.00	38.94	74.00	30.58	V
12310.000	47.22	-31.03	38.91	39.34	74.00	26.78	H

802.11n-HT20
Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.674	69.93	5.35	32.26	32.32	74.00	4.07	V
2389.912	69.74	5.35	32.26	32.13	74.00	4.26	H
4834.500	46.65	-34.80	34.10	47.35	74.00	27.35	H
7233.500	48.93	-32.59	35.87	45.65	74.00	25.07	V
9648.000	44.78	-32.04	36.90	39.91	74.00	29.22	V
12040.000	44.25	-31.78	38.78	37.25	74.00	29.75	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)
2374.600	42.28	-29.11	32.05	39.35	74.00	31.72	V
2501.400	43.03	-28.30	32.60	38.73	74.00	30.97	H
4864.500	47.05	-34.22	34.13	47.14	74.00	26.95	V
7304.500	48.98	-32.61	35.98	45.60	74.00	25.02	V
9748.000	44.32	-32.22	36.90	39.64	74.00	29.68	H
12185.000	45.40	-31.20	39.07	37.54	74.00	28.60	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)
2483.545	71.84	5.46	32.60	33.78	74.00	2.16	H
2484.205	71.52	5.46	32.60	33.46	74.00	2.48	V
4936.500	48.45	-34.68	34.27	48.86	74.00	25.55	H
7391.000	51.01	-32.60	35.80	47.80	74.00	22.99	V
9848.000	42.62	-32.52	37.00	38.14	74.00	31.38	H
12310.000	46.88	-31.03	38.91	39.00	74.00	27.12	H

802.11n-HT40
Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.764	67.20	5.35	32.24	29.60	74.00	6.80	V
2389.450	66.16	5.35	32.25	28.56	74.00	7.84	H
4860.500	44.77	-34.29	34.12	44.94	74.00	29.23	V
7276.000	45.20	-32.59	35.95	41.84	74.00	28.80	H
9688.000	44.53	-32.04	36.82	39.75	74.00	29.47	V
12110.000	45.25	-31.49	38.92	37.81	74.00	28.75	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)
2374.000	41.44	-29.13	32.04	38.53	74.00	32.56	V
2501.200	42.72	-28.29	32.60	38.41	74.00	31.28	H
4866.500	46.19	-34.21	34.13	46.27	74.00	27.81	H
7295.000	45.97	-32.60	35.99	42.58	74.00	28.03	H
9748.000	44.56	-32.22	36.90	39.88	74.00	29.44	V
12185.000	45.60	-31.20	39.07	37.73	74.00	28.40	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)
2484.360	67.75	5.46	32.60	29.69	74.00	6.25	H
2484.810	66.99	5.46	32.60	28.93	74.00	7.01	V
4904.000	41.19	-34.48	34.21	41.46	74.00	32.81	H
7356.000	42.91	-32.60	35.80	39.71	74.00	31.09	V
9808.000	43.55	-32.40	37.00	38.95	74.00	30.45	V
12260.000	46.90	-30.95	38.98	38.87	74.00	27.10	V

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)
2389.312	45.91	5.35	32.25	8.31	54.00	8.09	V
2389.988	46.07	5.35	32.26	8.46	54.00	7.93	V
4823.733	51.07	-35.00	34.10	51.97	54.00	2.93	H
7235.200	44.19	-32.59	35.87	40.91	54.00	9.81	H
9648.000	43.47	-32.04	36.90	38.60	54.00	10.53	H
12061.333	34.34	-31.69	38.82	27.20	54.00	19.66	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2411.963	46.52	5.38	32.45	8.69	54.00	7.48	V
2461.500	48.31	5.43	32.60	10.28	54.00	5.69	V
4870.933	37.36	-34.24	34.14	37.46	54.00	16.64	V
7310.133	43.90	-32.61	35.96	40.54	54.00	10.10	H
9748.000	38.54	-32.22	36.90	33.86	54.00	15.46	V
12183.733	34.72	-31.21	39.07	26.86	54.00	19.28	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)
2486.775	49.82	5.46	32.60	11.76	54.00	4.18	V
2487.075	49.85	5.47	32.60	11.79	54.00	4.15	V
4923.733	51.17	-34.61	34.25	51.53	54.00	2.83	H
7385.067	43.47	-32.60	35.80	40.27	54.00	10.53	H
9848.000	44.57	-32.52	37.00	40.09	54.00	9.43	H
12309.067	35.81	-31.02	38.91	27.92	54.00	18.19	H

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)
2389.950	50.32	5.35	32.26	12.70	54.00	3.68	V
2389.988	50.32	5.35	32.26	12.71	54.00	3.68	V
4825.333	34.55	-34.97	34.10	35.42	54.00	19.45	V
7236.000	35.97	-32.59	35.87	32.68	54.00	18.03	V
9648.000	33.25	-32.04	36.90	28.39	54.00	20.75	V
12060.000	33.31	-31.70	38.82	26.18	54.00	20.69	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)
2402.588	47.82	5.38	32.41	10.03	54.00	6.18	V
2472.562	49.13	5.45	32.60	11.08	54.00	4.87	V
4868.533	33.90	-34.23	34.14	33.99	54.00	20.10	V
7308.000	34.85	-32.61	35.97	31.49	54.00	19.15	V
9748.000	32.88	-32.22	36.90	28.20	54.00	21.12	H
121850.667	33.87	0.00	0.00	33.87	54.00	20.13	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)
2483.512	50.68	5.46	32.60	12.62	54.00	3.32	V
2483.625	50.45	5.46	32.60	12.39	54.00	3.55	V
4926.933	35.75	-34.63	34.25	36.12	54.00	18.25	V
7386.933	36.27	-32.60	35.80	33.07	54.00	17.73	H
9848.000	32.22	-32.52	37.00	27.75	54.00	21.78	V
12310.133	34.39	-31.03	38.91	26.51	54.00	19.61	H

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.912	49.70	5.35	32.26	12.09	54.00	4.30	V
2389.988	49.80	5.35	32.26	12.19	54.00	4.20	V
4826.133	34.23	-34.96	34.10	35.09	54.00	19.77	H
7234.667	35.63	-32.59	35.87	32.35	54.00	18.37	H
9648.000	33.05	-32.04	36.90	28.19	54.00	20.95	H
12060.000	33.24	-31.70	38.82	26.12	54.00	20.76	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)
2400.525	47.95	5.38	32.40	10.17	54.00	6.05	V
2476.200	48.59	5.45	32.60	10.53	54.00	5.41	V
4866.933	33.54	-34.21	34.13	33.62	54.00	20.46	V
7308.080	34.53	-32.61	35.97	31.17	54.00	19.47	V
9748.000	32.78	-32.22	36.90	28.10	54.00	21.22	V
12185.067	33.94	-31.20	39.07	26.07	54.00	20.06	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)
2483.550	50.27	5.46	32.60	12.20	54.00	3.73	V
2483.662	50.20	5.46	32.60	12.14	54.00	3.80	V
4927.733	35.59	-34.63	34.26	35.97	54.00	18.41	H
7386.400	35.83	-32.60	35.80	32.62	54.00	18.17	V
9848.000	32.03	-32.52	37.00	27.56	54.00	21.97	V
12310.133	34.30	-31.03	38.91	26.41	54.00	19.70	V

802.11n-HT40
Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.875	50.21	5.35	32.26	12.60	54.00	3.79	V
2389.988	50.29	5.35	32.26	12.68	54.00	3.71	V
4859.733	32.41	-34.31	34.12	32.60	54.00	21.59	H
7275.733	32.77	-32.59	35.95	29.41	54.00	21.23	V
9688.000	32.59	-32.04	36.82	27.80	54.00	21.41	H
12110.133	33.23	-31.49	38.92	25.80	54.00	20.77	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.912	51.89	5.35	32.26	14.28	54.00	2.11	V
2483.400	50.93	5.46	32.60	12.87	54.00	3.07	V
4865.333	31.93	-34.20	34.13	32.00	54.00	22.07	H
7308.000	33.12	-32.61	35.97	29.76	54.00	20.88	V
9748.000	32.56	-32.22	36.90	27.88	54.00	21.44	H
12185.067	33.86	-31.20	39.07	25.99	54.00	20.14	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)
2483.550	50.64	5.46	32.60	12.58	54.00	3.36	V
2483.662	50.60	5.46	32.60	12.54	54.00	3.40	V
4904.000	30.29	-34.48	34.21	30.56	54.00	23.71	V
7356.000	32.08	-32.60	35.80	28.88	54.00	21.92	H
9808.000	32.10	-32.40	37.00	27.50	54.00	21.90	V
12260.000	34.42	-30.95	38.98	26.39	54.00	19.58	V

Test graphs as below:

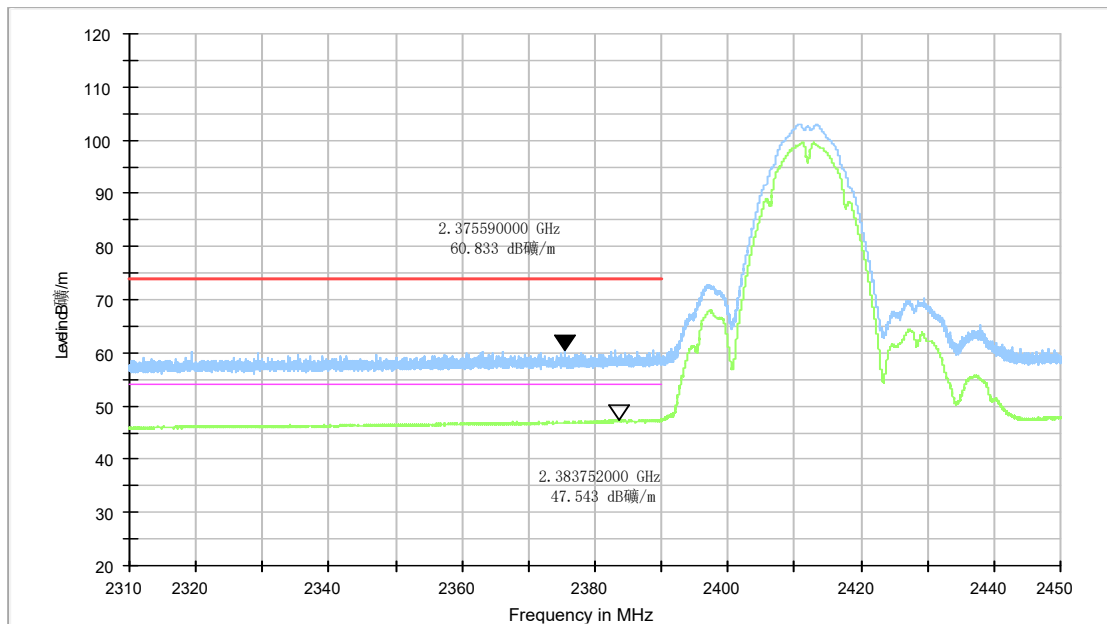


Fig.A.6.1.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

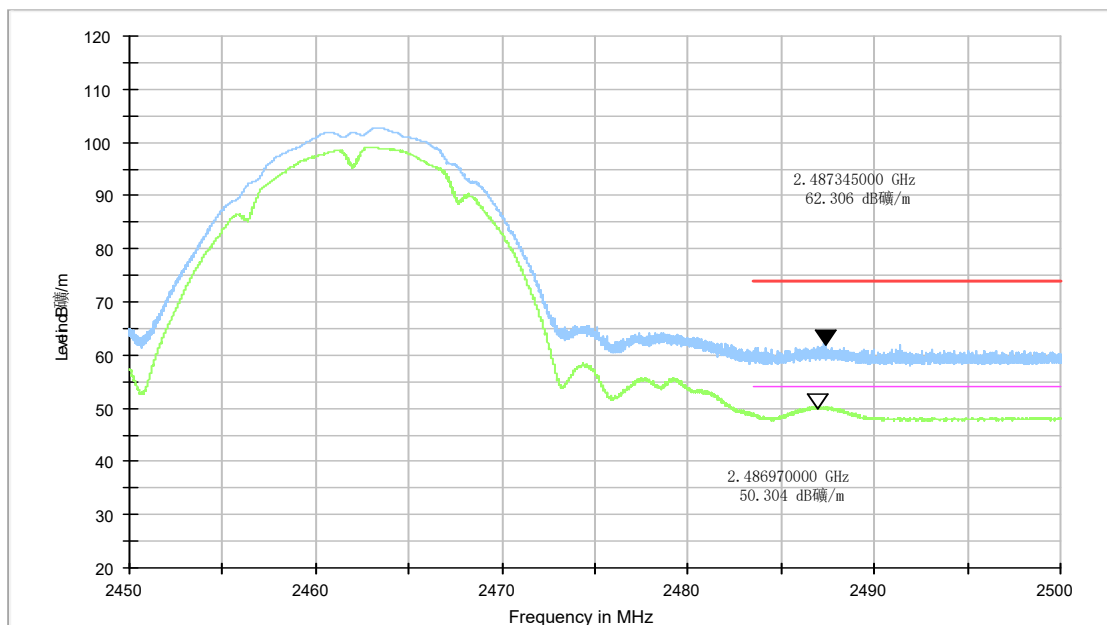


Fig.A.6.1.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

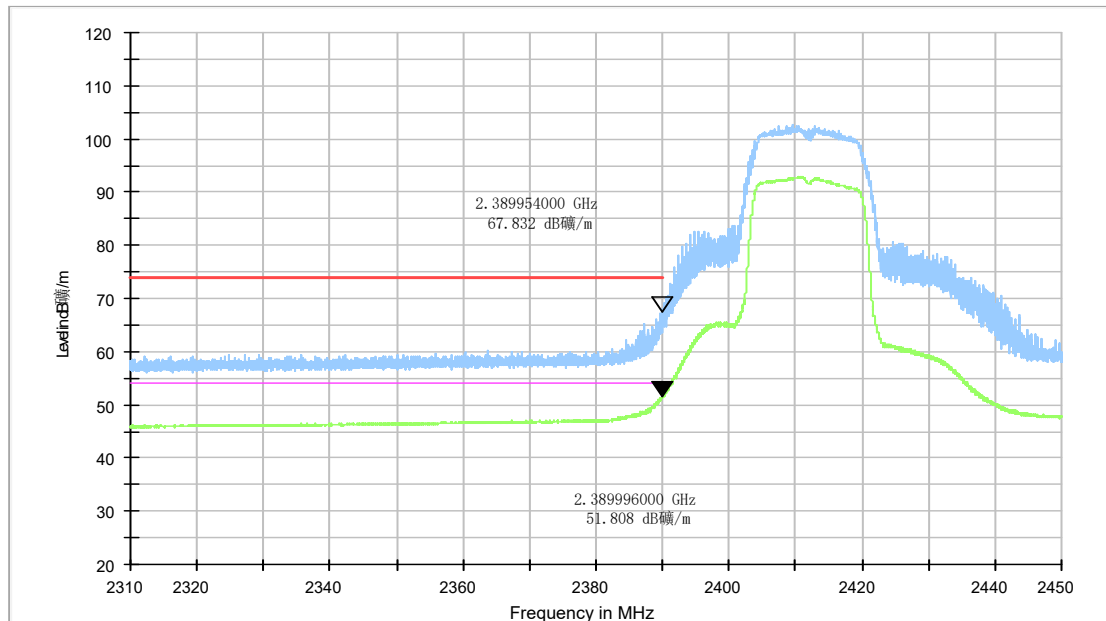


Fig.A.6.1.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz

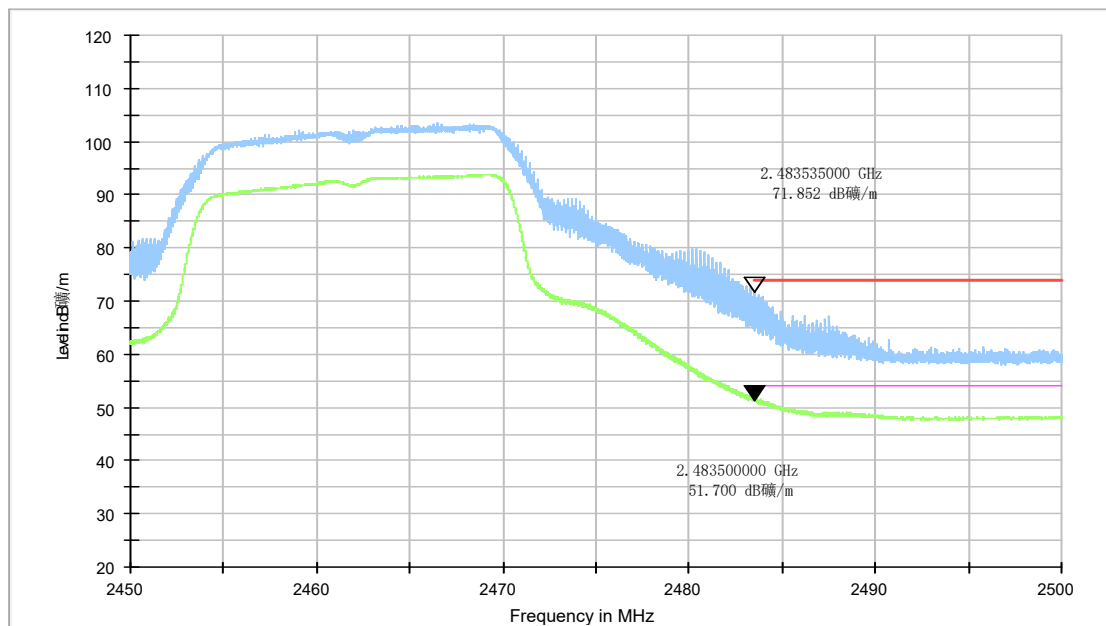


Fig.A.6.1.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

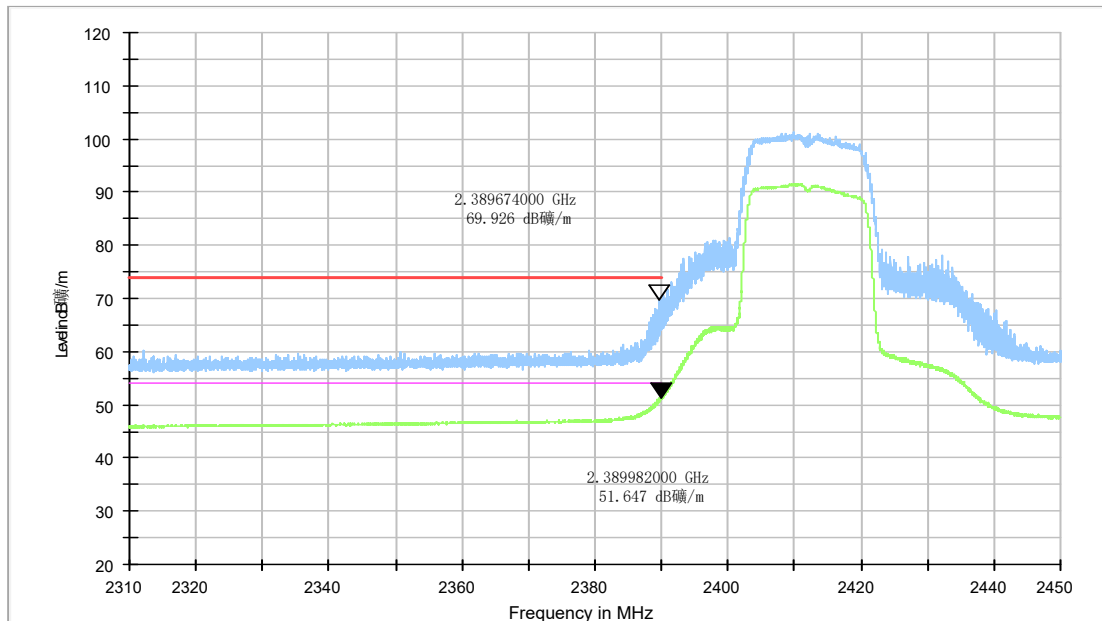


Fig.A.6.1.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz

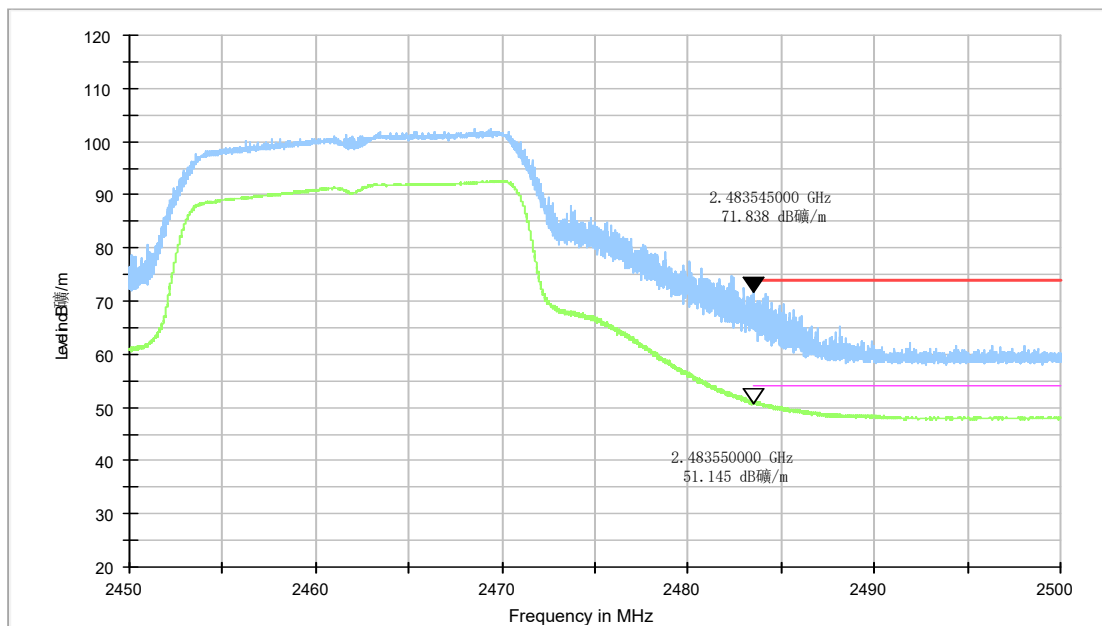


Fig.A.6.1.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

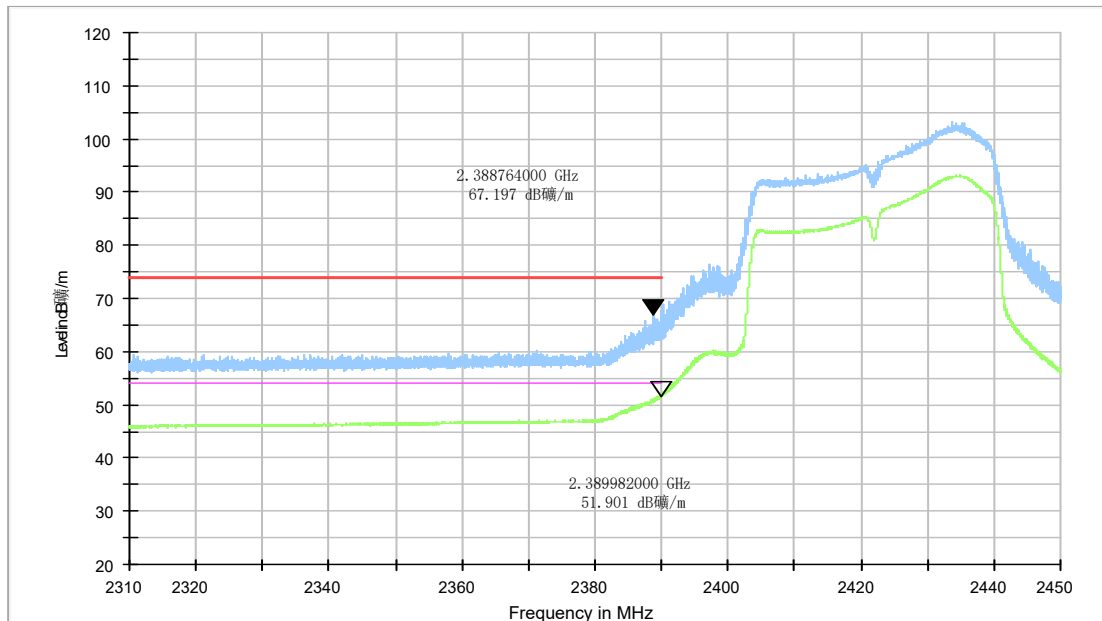


Fig.A.6.1.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.45GHz

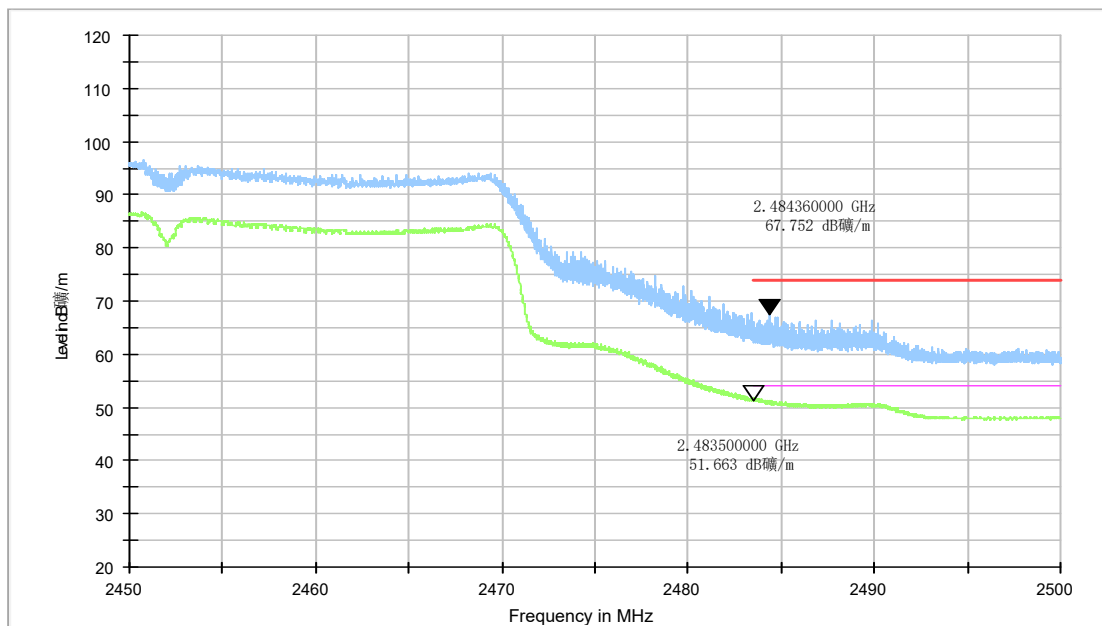


Fig.A.6.1.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

A.7. AC Power-line Conducted Emission

Method of Measurement:

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

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

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

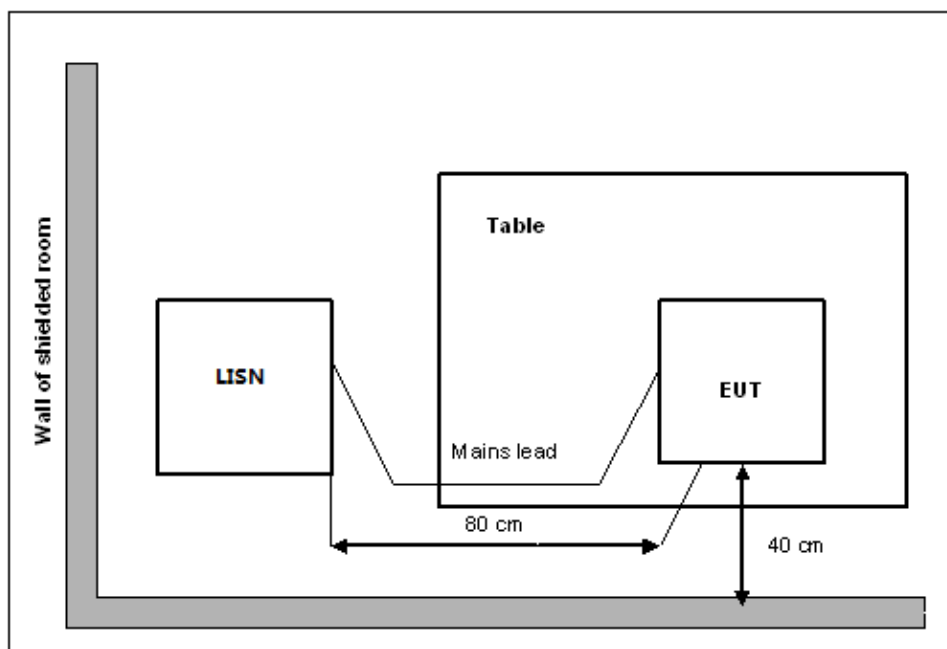
The measurement bandwidth is:

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

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Setup



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:

Note: The measurement results showed here are worst cases.

Result for Traffic:

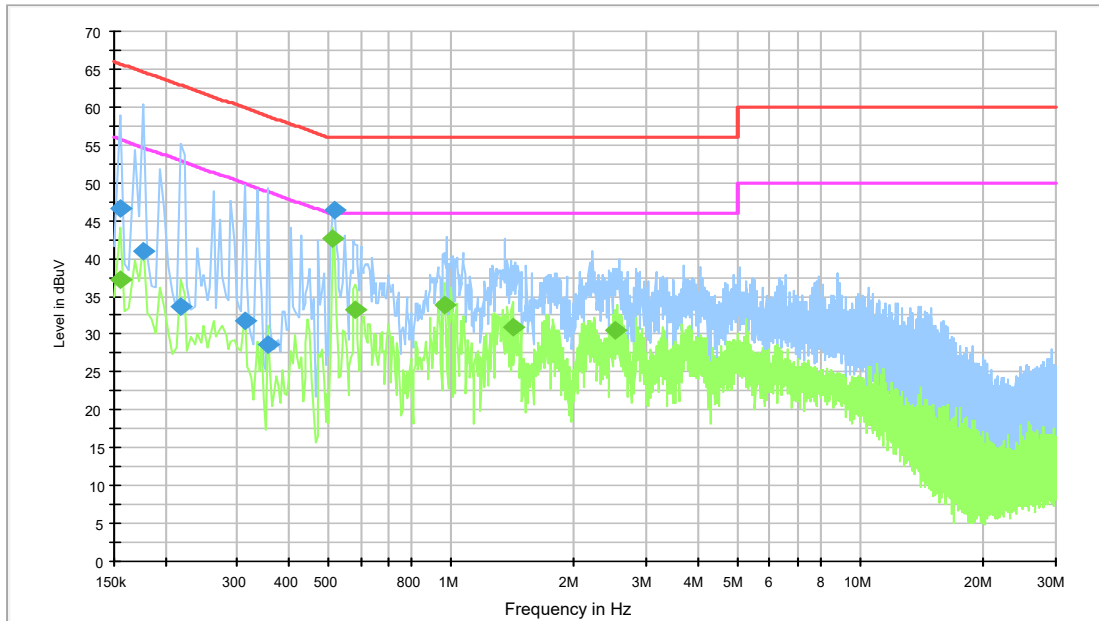


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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)
0.154500	46.5	1000.	9.000	N	27.7	19.3	65.8
0.177000	41.1	1000.	9.000	N	23.5	23.6	64.6
0.217500	33.7	1000.	9.000	N	19.7	29.2	62.9
0.312000	31.7	1000.	9.000	N	19.7	28.2	59.9
0.357000	28.7	1000.	9.000	N	19.7	30.1	58.8
0.519000	46.4	1000.	9.000	N	19.8	9.6	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154500	37.2	1000.0	9.000	N	27.7	18.6	55.8
0.514500	42.6	1000.0	9.000	N	19.8	3.4	46.0
0.582000	33.2	1000.0	9.000	N	19.7	12.8	46.0
0.960000	33.8	1000.0	9.000	N	19.7	12.2	46.0
1.410000	30.9	1000.0	9.000	N	19.6	15.1	46.0
2.499000	30.4	1000.0	9.000	N	19.6	15.6	46.0

Result for Idle:

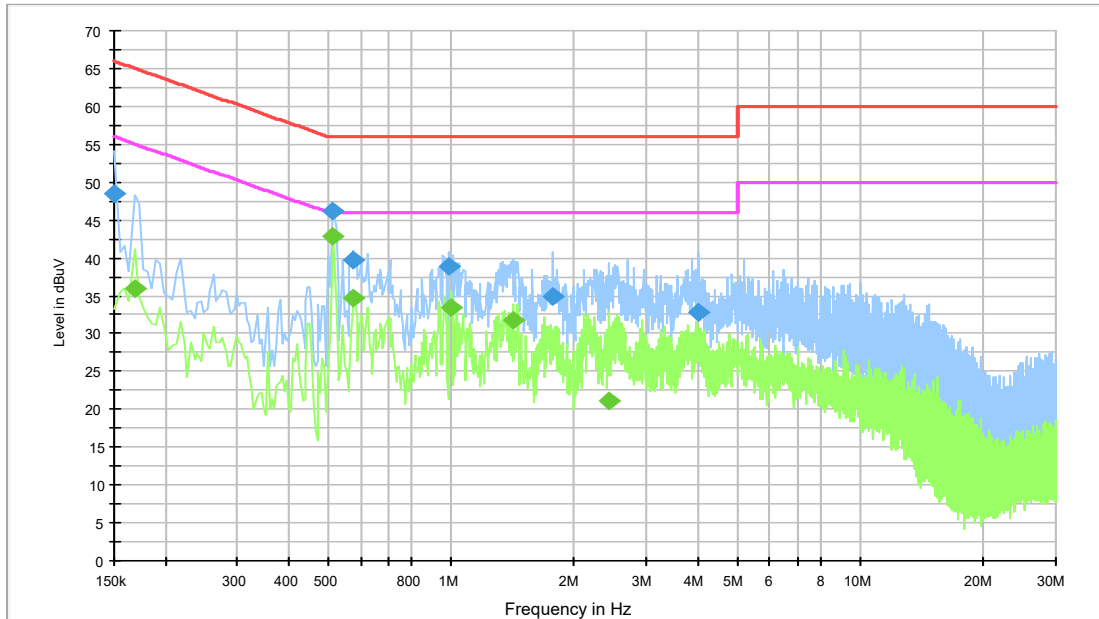


Fig.A.7.2 AC Powerline Conducted Emission-Idle

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)
0.150000	48.6	1000.	9.000	L1	28.6	17.4	66.0
0.514500	46.1	1000.	9.000	N	19.8	9.9	56.0
0.577500	39.7	1000.	9.000	N	19.7	16.3	56.0
0.987000	38.9	1000.	9.000	N	19.6	17.1	56.0
1.770000	34.8	1000.	9.000	N	19.6	21.2	56.0
4.033500	32.9	1000.	9.000	N	19.6	23.1	56.0

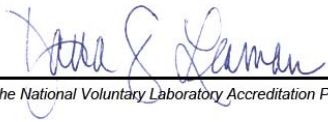
Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.168000	35.9	1000.0	9.000	N	25.1	19.1	55.1
0.514500	42.9	1000.0	9.000	N	19.8	3.1	46.0
0.577500	34.6	1000.0	9.000	N	19.7	11.4	46.0
1.000500	33.5	1000.0	9.000	N	19.6	12.5	46.0
1.414500	31.8	1000.0	9.000	N	19.6	14.2	46.0
2.422500	21.2	1000.0	9.000	L1	19.6	24.8	46.0

ANNEX B: EUT parameters

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

ANNEX C: Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology  Certificate of Accreditation to ISO/IEC 17025:2017 NVLAP LAB CODE: 600118-0 Telecommunication Technology Labs, CAICT Beijing China <i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i> Electromagnetic Compatibility & Telecommunications <i>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 Communiqué dated January 2009).</i> 2022-10-01 through 2023-09-30 Effective Dates   For the National Voluntary Laboratory Accreditation Program	
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END OF REPORT