

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

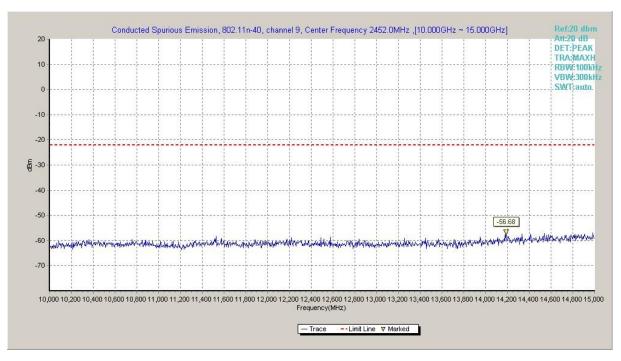


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)



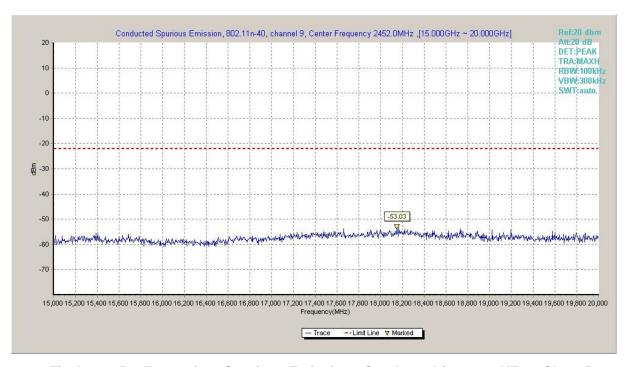


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

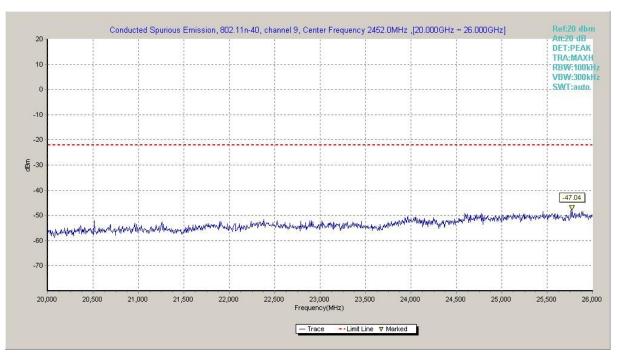


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)



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	Field strength(uV/m)	Field strength(dBuV/m)
(MHz)		
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	RBW/VBW	Sweep Time(s)
(MHz)		
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20



Measurement Results for Set.14:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
	Power	2.38GHz ~2.43GHz	Fig.A.6.2.1	Р
	1	1 GHz ~ 3 GHz		Р
	I	3 GHz ~ 18 GHz		Р
		9 kHz ~30 MHz		Р
	6 Power	30 MHz ~1 GHz		Р
802.11b		1 GHz ~ 3 GHz		Р
		3 GHz ~ 18 GHz		Р
		18 GHz~ 26.5 GHz		Р
		2.45GHz ~2.5GHz	Fig.A.6.2.2	Р
	11	1 GHz ~ 3 GHz		Р
	11	3 GHz ~ 18 GHz		Р

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	Р
	4	1 GHz ~ 3 GHz		Р
	'	3 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
902.11a	6 Power	1 GHz ~ 3 GHz		Р
802.11g		3 GHz ~ 18 GHz		Р
		18 GHz~ 26.5 GHz		Р
		2.45GHz ~2.5GHz	Fig.A.6.2.4	Р
	11	1 GHz ~ 3 GHz	-	Р
	11	3 GHz ~ 18 GHz		Р

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
	Power	2.38GHz ~2.43GHz	Fig.A.6.2.5	Р
	4	1 GHz ~ 3 GHz		Р
	ľ	3 GHz ~ 18 GHz		Р
	6 Power	30 MHz ~1 GHz		Р
802.11n		1 GHz ~ 3 GHz		Р
(HT20)		3 GHz ~ 18 GHz		Р
		18 GHz~ 26.5 GHz		Р
		2.45GHz ~2.5GHz	Fig.A.6.2.6	Р
	44	1 GHz ~ 3 GHz		Р
	11	3 GHz ~ 18 GHz		Р



802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
	Power	2.38GHz ~2.43GHz	Fig.A.6.2.7	Р
	3	1 GHz ~ 3 GHz		Р
	3	3 GHz ~ 18 GHz		Р
	6 Power	30 MHz ~1 GHz		Р
802.11n		1 GHz ~ 3 GHz		Р
(HT40)		3 GHz ~ 18 GHz		Р
		18 GHz~ 26.5 GHz		Р
		2.45GHz ~2.5GHz	Fig.A.6.2.8	Р
	0	1 GHz ~ 3 GHz		Р
	9	3 GHz ~ 18 GHz		Р

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.

 $\ensuremath{P_{\text{Mea}}}$ 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

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITIZ)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2387.290	47.4	-14.3	27.2	34.542	Н
4824.000	43.3	-17.3	32.3	28.328	Н
3615.000	40.9	-18.1	31.1	27.863	V
3616.500	40.8	-18.1	31.1	27.763	Н
17998.500	40.6	-5.4	43.4	2.616	Н
17982.000	40.5	-5.4	43.4	2.516	Н

Ch6

Fraguanay	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17998.500	40.6	-5.4	43.4	2.616	Н
18000.000	40.6	-6.5	46.4	0.741	Н
17985.000	40.5	-5.4	43.4	2.516	V
17995.500	40.5	-5.4	43.4	2.516	Н
17973.000	40.5	-5.4	43.4	2.516	Н
17997.000	40.5	-5.4	43.4	2.516	Н

Fraguanay	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.520	45.9	-14.4	27.2	43.463	Н
17998.500	40.6	-5.4	43.4	2.616	Н
17997.000	40.5	-5.4	43.4	2.516	V
17956.500	40.5	-5.4	43.4	2.516	Н
17977.500	40.4	-5.4	43.4	2.416	Н
17940.000	40.4	-5.4	43.4	2.416	Н



802.11b-Peak

Ch1

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITIZ)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2386.855	57.1	-14.3	27.2	44.242	Н
17914.500	53.3	-5.4	43.4	15.316	Н
17908.500	52.3	-5.7	43.4	14.638	V
17997.000	52.1	-5.4	43.4	14.116	Н
17934.000	52.1	-5.4	43.4	14.116	Н
17973.000	52.0	-5.4	43.4	14.016	Н

Ch6

Fraguanay	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17983.500	52.8	-5.4	43.4	14.816	Н
17988.000	52.7	-5.4	43.4	14.716	Н
17926.500	52.4	-5.4	43.4	14.416	V
17916.000	52.4	-5.4	43.4	14.416	Н
17982.000	52.3	-5.4	43.4	14.316	Н
18000.000	52.1	-6.5	46.4	12.241	Н

Fragueno.	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.520	56.3	-14.4	27.2	43.463	Н
17971.500	53.0	-5.4	43.4	15.016	Н
17833.500	52.3	-5.7	43.4	14.638	V
17998.500	52.2	-5.4	43.4	14.216	Н
17911.500	52.0	-5.7	43.4	14.338	Н
17937.000	51.8	-5.4	43.4	13.816	Н



802.11g - Average

Ch1

F	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2390.000	50.3	-14.3	27.2	37.442	Н
18000.000	40.7	-6.5	46.4	0.841	Н
17998.500	40.7	-5.4	43.4	2.716	V
17994.000	40.6	-5.4	43.4	2.616	Н
17991.000	40.6	-5.4	43.4	2.616	Н
17964.000	40.6	-5.4	43.4	2.616	Н

Ch6

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17983.500	40.5	-5.4	43.4	2.516	Н
18000.000	40.5	-6.5	46.4	0.641	Н
17988.000	40.5	-5.4	43.4	2.516	V
17997.000	40.4	-5.4	43.4	2.416	Н
17956.500	40.4	-5.4	43.4	2.416	Н
17995.500	40.4	-5.4	43.4	2.416	Н

	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.500	51.5	-14.4	27.2	38.663	Н
17997.000	40.7	-5.4	43.4	2.716	Н
17998.500	40.4	-5.4	43.4	2.416	V
17989.500	40.4	-5.4	43.4	2.416	Н
17976.000	40.3	-5.4	43.4	2.316	Н
17995.500	40.3	-5.4	43.4	2.316	Н



802.11g - Peak

Ch1

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2389.985	64.3	-14.3	27.2	51.442	Н
17899.500	53.1	-5.7	43.4	15.438	Н
17982.000	52.9	-5.4	43.4	14.916	V
17988.000	52.2	-5.4	43.4	14.216	Н
17919.000	52.2	-5.4	43.4	14.216	Н
17977.500	52.1	-5.4	43.4	14.116	Н

Ch6

F ** 0 ** 1 * 0 * 1	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17943.000	53.0	-5.4	43.4	15.016	Н
17935.500	52.3	-5.4	43.4	14.316	Н
17931.000	52.2	-5.4	43.4	14.216	V
17974.500	52.2	-5.4	43.4	14.216	Н
17944.500	52.0	-5.4	43.4	14.016	Н
17875.500	52.0	-5.7	43.4	14.338	Н

F ** 0 ** 1 * 0 * 1	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.535	66.1	-14.4	27.2	53.263	Н
17947.500	52.6	-5.4	43.4	14.616	Н
17926.500	52.6	-5.4	43.4	14.616	V
17998.500	52.3	-5.4	43.4	14.316	Н
17823.000	52.1	-5.7	43.4	14.438	Н
17994.000	51.9	-5.4	43.4	13.916	Н



802.11n-HT20-Average

Ch1

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITIZ)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2390.000	46.7	-14.3	27.2	33.842	Н
17997.000	40.5	-5.4	43.4	2.516	Н
18000.000	40.4	-6.5	46.4	0.541	V
17998.500	40.4	-5.4	43.4	2.416	Н
17995.500	40.4	-5.4	43.4	2.416	Н
17979.000	40.3	-5.4	43.4	2.316	Н

Ch6

	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17994.000	40.5	-5.4	43.4	2.516	Н
18000.000	40.4	-6.5	46.4	0.541	Н
17997.000	40.3	-5.4	43.4	2.316	V
17995.500	40.3	-5.4	43.4	2.316	Н
17992.500	40.3	-5.4	43.4	2.316	Н
17971.500	40.3	-5.4	43.4	2.316	Н

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.500	47.4	-14.4	27.2	34.563	Н
17997.000	40.5	-5.4	43.4	2.516	Н
17998.500	40.4	-5.4	43.4	2.416	V
17982.000	40.4	-5.4	43.4	2.416	Н
18000.000	40.3	-6.5	46.4	0.441	Н
17994.000	40.3	-5.4	43.4	2.316	Н



802.11n-HT20-Peak

Ch1

Fraguanay	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2390.000	63.2	-14.3	27.2	50.342	Н
17923.500	51.4	-5.4	43.4	13.416	Н
17994.000	51.3	-5.4	43.4	13.316	V
17977.500	51.2	-5.4	43.4	13.216	Н
17907.000	51.2	-5.7	43.4	13.538	Н
17962.500	51.2	-5.4	43.4	13.216	Н

Ch6

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17982.000	52.3	-5.4	43.4	14.316	Н
17964.000	52.1	-5.4	43.4	14.116	Н
17815.500	52.0	-5.7	43.4	14.338	V
17866.500	51.5	-5.7	43.4	13.838	Н
17991.000	51.5	-5.4	43.4	13.516	Н
17986.500	51.4	-5.4	43.4	13.416	Н

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2484.080	65.7	-14.4	27.2	52.863	Н
17814.000	52.5	-5.7	43.4	14.838	Н
17997.000	52.1	-5.4	43.4	14.116	V
17811.000	51.8	-5.7	43.4	14.138	Н
17992.500	51.7	-5.4	43.4	13.716	Н
17728.500	51.6	-6.9	43.4	15.102	Н



802.11n-HT40-Average

Ch3

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2389.955	49.0	-14.3	27.2	36.142	Н
17997.000	40.4	-5.4	43.4	2.416	Н
17995.500	40.3	-5.4	43.4	2.316	V
17985.000	40.2	-5.4	43.4	2.216	Н
17938.500	40.2	-5.4	43.4	2.216	Н
18000.000	40.2	-6.5	46.4	0.341	Н

Ch6

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
18000.000	40.6	-6.5	46.4	0.741	Н
17994.000	40.4	-5.4	43.4	2.416	Н
17998.500	40.4	-5.4	43.4	2.416	V
17997.000	40.4	-5.4	43.4	2.416	Н
17995.500	40.3	-5.4	43.4	2.316	Н
17941.500	40.3	-5.4	43.4	2.316	Н

F	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2483.500	50.8	-14.4	27.2	37.963	Н
17997.000	40.5	-5.4	43.4	2.516	Н
17995.500	40.5	-5.4	43.4	2.516	V
18000.000	40.4	-6.5	46.4	0.541	Н
17998.500	40.3	-5.4	43.4	2.316	Н
17992.500	40.3	-5.4	43.4	2.316	Н



802.11n-HT40-Peak

Ch3

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITZ)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2389.925	63.4	-14.3	27.2	50.542	Н
17926.500	52.7	-5.4	43.4	14.716	Н
17827.500	52.2	-5.7	43.4	14.538	V
17985.000	52.2	-5.4	43.4	14.216	Н
17937.000	52.1	-5.4	43.4	14.116	Н
17982.000	52.0	-5.4	43.4	14.016	Н

Ch6

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	Pol.
(IVITIZ)	(dBμV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
17817.000	51.5	-5.7	43.4	13.838	Н
17995.500	51.3	-5.4	43.4	13.316	Н
17917.500	51.3	-5.4	43.4	13.316	V
17916.000	51.3	-5.4	43.4	13.316	Н
17986.500	51.3	-5.4	43.4	13.316	Н
17982.000	51.3	-5.4	43.4	13.316	Н

Fraguency	Measurement	Cable	Antenna	Receiver	Antenna
Frequency	Result	loss	Factor	Reading	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBμV)	(H/V)
2484.525	67.3	-14.4	27.2	54.463	Н
17964.000	52.5	-5.4	43.4	14.516	Н
17832.000	52.0	-5.7	43.4	14.338	V
17970.000	51.8	-5.4	43.4	13.816	Н
17940.000	51.8	-5.4	43.4	13.816	Н
17982.000	51.7	-5.4	43.4	13.716	Н



Test graphs as below:

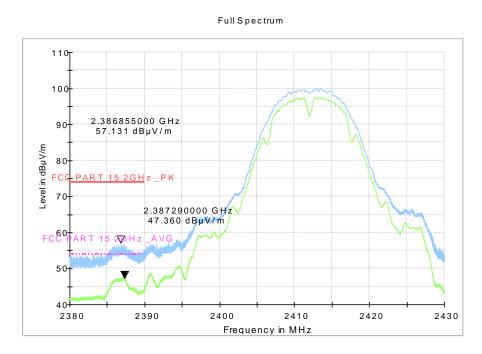


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz - 2.43GHz

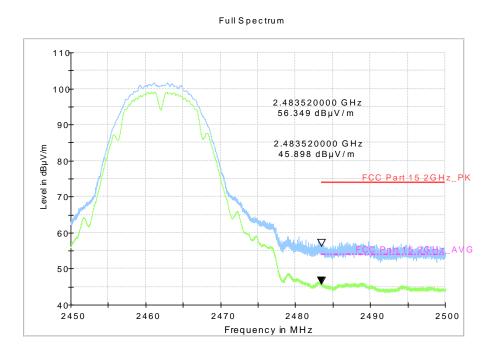


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz



2380

2390

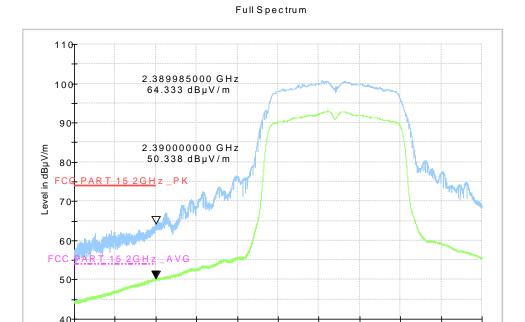


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

Frequency in MHz

2410

2420

2430

2400

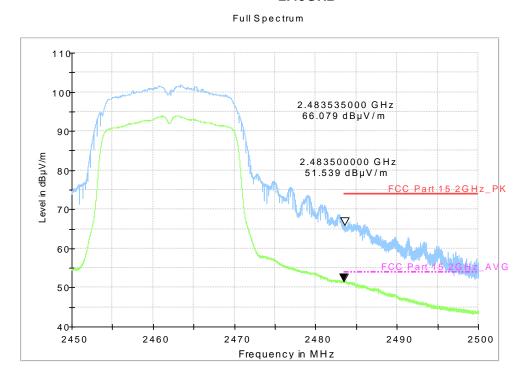


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz



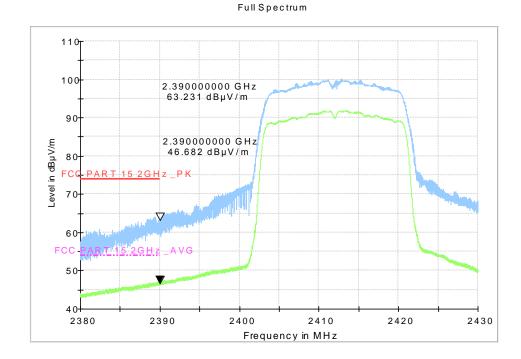


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

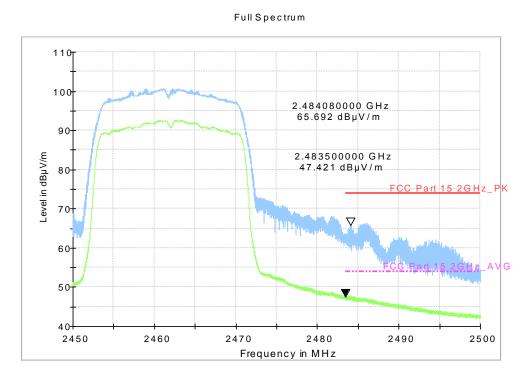


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz





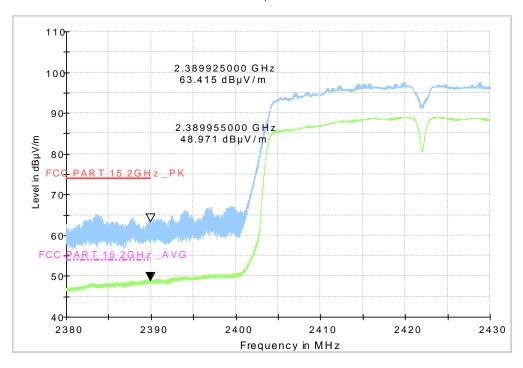


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz



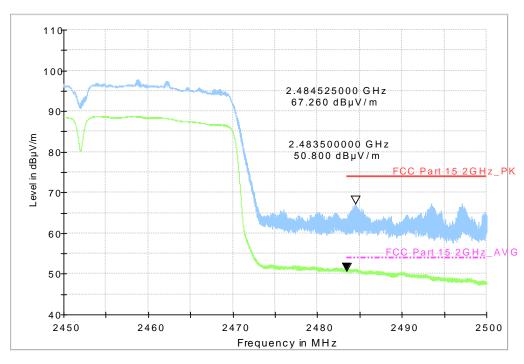


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz



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.
- 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.
- 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.
- 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) With charger		Conclusion	
(1411 12)	Еппи (авру)	802.11b	Idle	1	
0.15 to 0.5	66 to 56				
0.5 to 5	56	Fig.A.7.1	Fig.A.7.3	D	
5 to 30	60	Fig.A.7.2	i ig.A.7.3	r	

NOTE: The limit decreases linearly with the logarithm of the frequency in the range $0.15\,\mathrm{MHz}$ to $0.5\,\mathrm{MHz}$.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit	Result With cl	` ,	Conclusion
(IVIFIZ)	(dBμV)	802.11b	ldle	
0.15 to 0.5	56 to 46	Fig A 7.1		
0.5 to 5	46	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	Р
5 to 30	50	Fig.A.7.2		

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.14

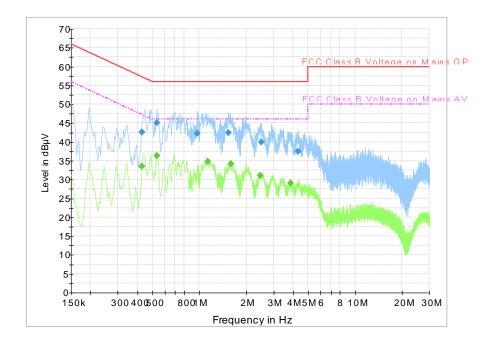


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.429000	42.6	2000.0	9.000	On	L1	19.9	14.7	57.3	
0.532500	45.1	2000.0	9.000	On	L1	19.9	10.9	56.0	
0.969000	42.3	2000.0	9.000	On	L1	19.6	13.7	56.0	
1.531500	42.4	2000.0	9.000	On	L1	19.7	13.6	56.0	
2.494500	40.0	2000.0	9.000	On	L1	19.7	16.0	56.0	
4.321500	37.5	2000.0	9.000	On	L1	19.6	18.5	56.0	

Final Result 2

Frequency	Average	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.429000	33.6	2000.0	9.000	On	L1	19.9	13.7	47.3	
0.532500	36.4	2000.0	9.000	On	L1	19.9	9.6	46.0	
1.135500	34.8	2000.0	9.000	On	L1	19.6	11.2	46.0	
1.590000	34.2	2000.0	9.000	On	L1	19.7	11.8	46.0	
2.463000	31.1	2000.0	9.000	On	L1	19.7	14.9	46.0	
3.844500	29.1	2000.0	9.000	On	L1	19.6	16.9	46.0	



Traffic: Set.15

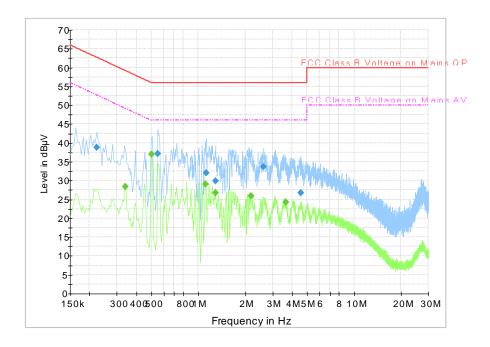


Fig.A.7.2 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.222000	38.7	2000.0	9.000	On	N	19.8	24.0	62.7	
0.550500	37.2	2000.0	9.000	On	N	19.9	18.8	56.0	
1.122000	32.0	2000.0	9.000	On	N	19.7	24.0	56.0	
1.288500	30.0	2000.0	9.000	On	N	19.6	26.0	56.0	
2.620500	33.7	2000.0	9.000	On	L1	19.7	22.3	56.0	
4.560000	26.8	2000.0	9.000	On	N	19.7	29.2	56.0	

Final Result 2

Frequency	Average	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.339000	28.3	2000.0	9.000	On	L1	19.8	20.9	49.2	
0.501000	37.0	2000.0	9.000	On	L1	19.9	9.0	46.0	
1.113000	29.0	2000.0	9.000	On	L1	19.6	17.0	46.0	
1.288500	26.8	2000.0	9.000	On	L1	19.6	19.2	46.0	
2.184000	25.9	2000.0	9.000	On	L1	19.7	20.1	46.0	
3.642000	24.2	2000.0	9.000	On	L1	19.6	21.8	46.0	



Idle: Set.14

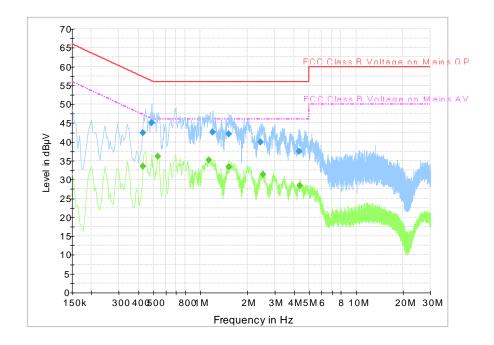


Fig.A.7.3 AC Powerline Conducted Emission-Idle

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

Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.429000	42.4	2000.0	9.000	On	L1	19.9	14.9	57.3	
0.487500	45.1	2000.0	9.000	On	L1	19.9	11.1	56.2	
1.203000	42.6	2000.0	9.000	On	L1	19.6	13.4	56.0	
1.527000	42.2	2000.0	9.000	On	L1	19.7	13.8	56.0	
2.436000	40.0	2000.0	9.000	On	L1	19.7	16.0	56.0	
4.308000	37.5	2000.0	9.000	On	L1	19.6	18.5	56.0	

Final Result 2

Frequency	Average	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)	
		(ms)							
0.429000	33.4	2000.0	9.000	On	L1	19.9	13.8	47.3	
0.532500	36.2	2000.0	9.000	On	L1	19.9	9.8	46.0	
1.131000	35.1	2000.0	9.000	On	L1	19.6	10.9	46.0	
1.527000	33.4	2000.0	9.000	On	L1	19.7	12.6	46.0	
2.526000	31.4	2000.0	9.000	On	L1	19.7	14.6	46.0	
4.362000	28.4	2000.0	9.000	On	L1	19.6	17.6	46.0	



ANNEX B: Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT

Beijing China

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

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2018-09-28 through 2019-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program

END OF REPORT