

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

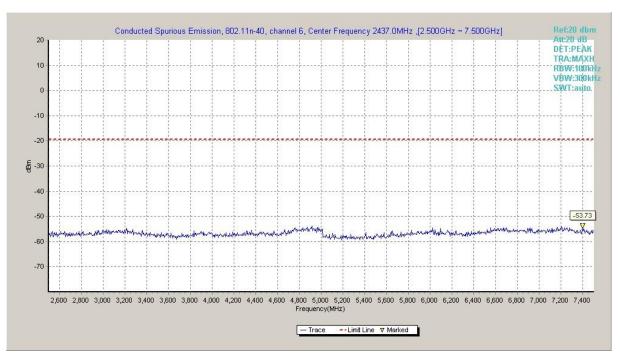


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)



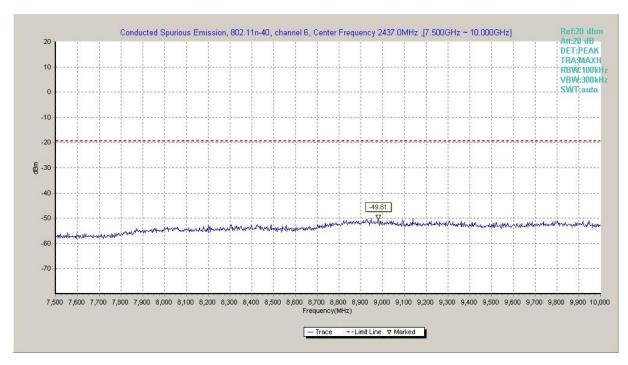


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

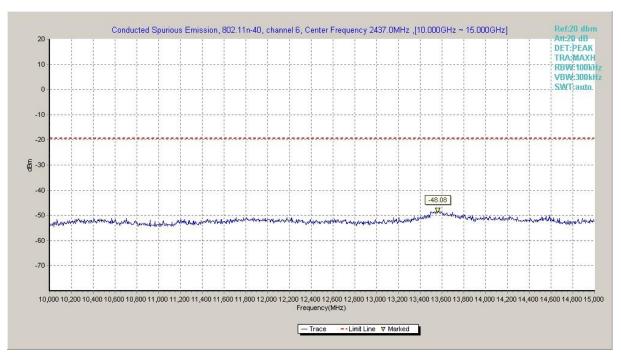


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)



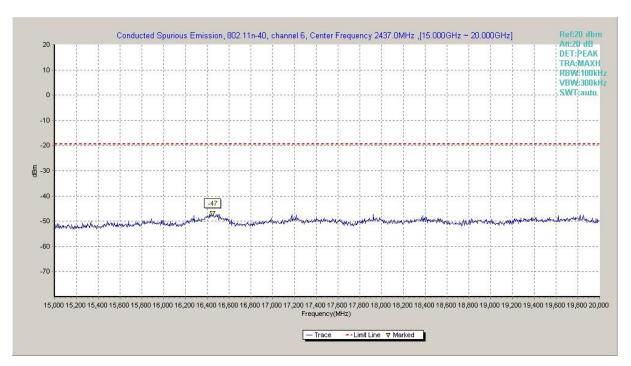


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

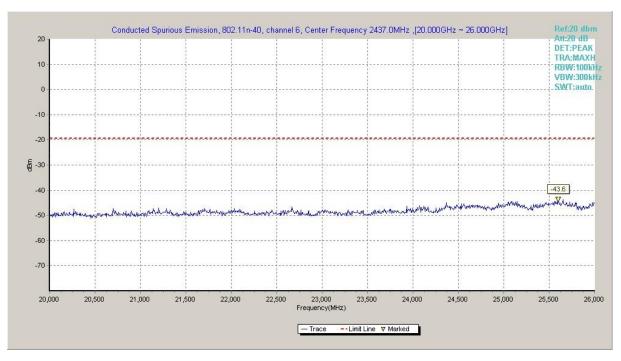


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)



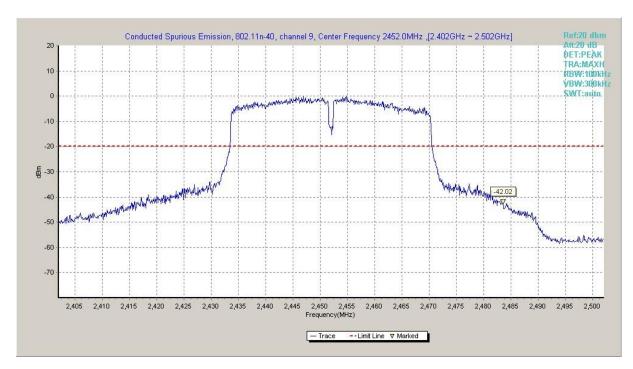


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

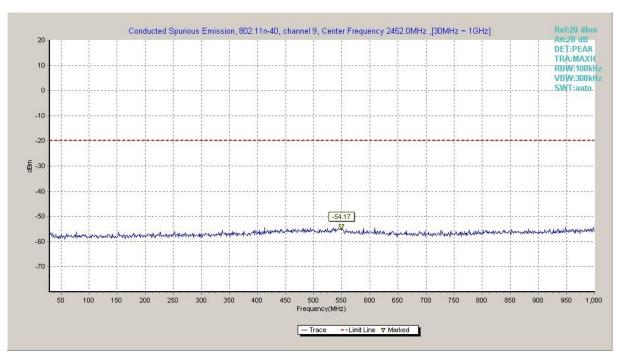


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)



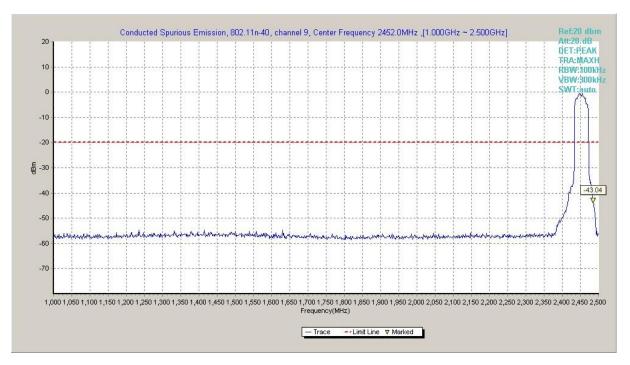


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

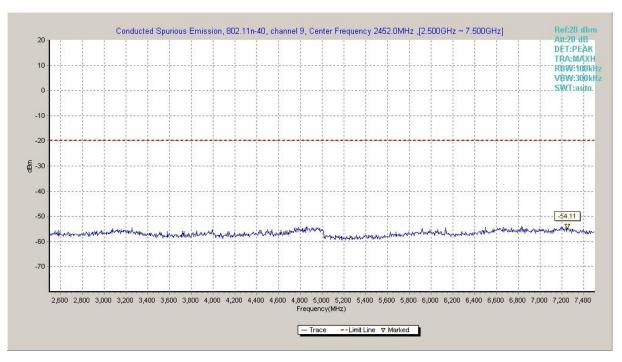


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)



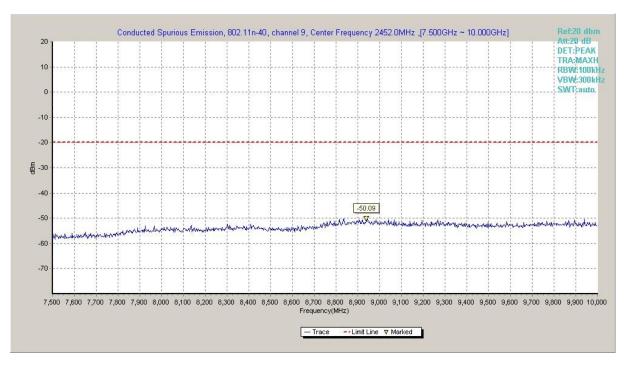


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

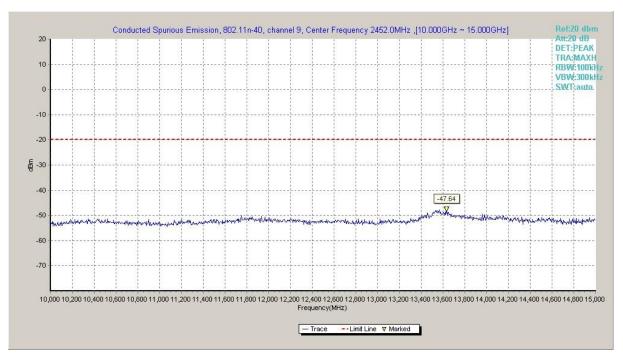


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)



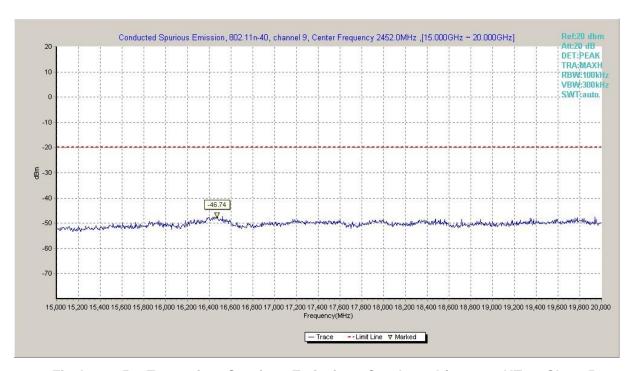


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

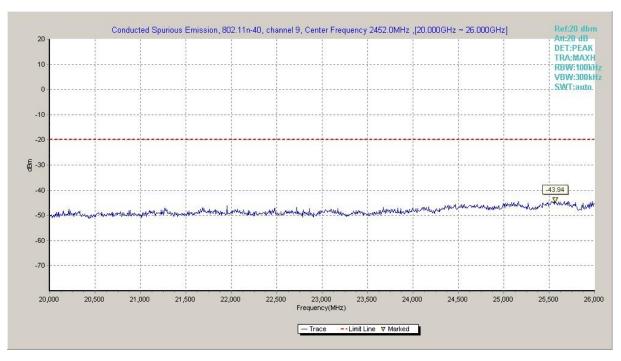


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)



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	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)	quency (MHz) Field strength(μV/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	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

EUT ID: EUT1



Measurement Results:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
000 445	Power	2.38GHz ~2.45GHz	Fig.A.6.2.1	Р
802.11b	Power	2.45GHz ~2.5GHz	Fig.A.6.2.2	Р

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
000 44 ~	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	Р
802.11g	Power	2.45GHz ~2.5GHz	Fig.A.6.2.4	Р

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n	Power	2.38GHz ~2.45GHz	Fig.A.6.2.5	Р
(HT20)	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	Р

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n	Power	2.38GHz ~2.45GHz	Fig.A.6.2.7	Р
(HT40)	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8	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-Peak

Ch1

Frequency (MHz)	Measure ment 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)
2385.082	59.80	2.9	32.0	24.92	74.0	14.2	Н	155	22
2386.524	59.43	2.9	32.0	24.56	74.0	14.6	Н	155	44
4824.000	40.49	-32.8	34.5	38.74	74.0	33.5	Н	155	132
7236.000	41.45	-31.7	36.1	37.08	74.0	32.6	V	155	110
9648.000	42.82	-30.4	37.0	36.13	74.0	31.2	Н	155	88
12060.000	44.43	-29.6	39.3	34.76	74.0	29.6	Н	155	44

Ch6

Frequency (MHz)	Measure ment 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)
2352.600	48.01	-27.8	31.7	44.09	74.0	26.0	Н	155	264
2542.400	48.57	-26.8	33.0	42.40	74.0	25.4	Н	155	132
4874.250	42.74	-32.7	34.5	40.95	74.0	31.3	Н	155	110
7311.000	43.38	-31.9	36.1	39.22	74.0	30.6	Н	155	44
9747.750	40.80	-30.7	37.2	34.27	74.0	33.2	Н	155	22
12185.250	45.19	-29.4	39.2	35.40	74.0	28.8	٧	155	0

Frequency (MHz)	Measure ment 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)
2483.570	60.07	2.9	32.8	24.38	74.0	13.9	Н	155	22
2493.700	59.95	2.9	32.5	24.53	74.0	14.1	Н	155	44
4923.750	42.18	-33.1	34.5	40.76	74.0	31.8	٧	155	88
7386.000	41.87	-31.8	36.0	37.67	74.0	32.1	V	155	0
9848.250	42.29	-30.1	37.3	35.04	74.0	31.7	Н	155	110
12310.500	44.56	-29.7	39.2	35.09	74.0	29.4	Н	155	132



802.11g-Peak

Ch1

Frequency (MHz)	Measure ment 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)
2389.380	64.45	2.9	32.0	29.60	74.0	9.5	Н	155	22
2389.674	66.05	2.9	32.0	31.20	74.0	8.0	Н	155	44
4824.000	40.26	-32.8	34.5	38.51	74.0	33.7	V	155	0
7236.000	40.87	-31.7	36.1	36.51	74.0	33.1	Н	155	0
9648.000	41.76	-30.4	37.0	35.07	74.0	32.2	V	155	22
12060.750	45.01	-29.6	39.3	35.33	74.0	29.0	Н	155	176

Ch6

Frequency (MHz)	Measure ment 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)
2361.600	48.15	-27.5	31.9	43.78	74.0	25.9	Н	155	22
2503.200	48.23	-26.3	32.4	42.22	74.0	25.8	Н	155	242
4874.250	39.45	-32.7	34.5	37.66	74.0	34.6	٧	155	44
7311.000	41.65	-31.9	36.1	37.49	74.0	32.3	Н	155	88
9747.750	41.16	-30.7	37.2	34.64	74.0	32.8	V	155	176
12185.250	44.68	-29.4	39.2	34.89	74.0	29.3	Н	155	0

Frequency (MHz)	Measure ment 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)
2484.470	59.88	2.9	32.7	24.21	74.0	14.1	Н	155	22
2487.190	59.89	2.9	32.7	24.30	74.0	14.1	Н	155	22
4923.750	40.22	-33.1	34.5	38.80	74.0	33.8	Н	155	88
7386.000	42.16	-31.8	36.0	37.96	74.0	31.8	V	155	110
9848.250	43.22	-30.1	37.3	35.96	74.0	30.8	V	155	44
12309.750	44.25	-29.7	39.2	34.77	74.0	29.8	Н	155	0



802.11n-HT20-Peak

Ch1

Frequency (MHz)	Measure ment 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)
2388.666	60.72	2.9	32.0	25.87	74.0	13.3	Н	155	44
2389.968	62.46	2.9	32.0	27.61	74.0	11.5	Н	155	0
4824.000	38.89	-32.8	34.5	37.14	74.0	35.1	V	155	308
7236.750	41.12	-31.7	36.1	36.76	74.0	32.9	Н	155	44
9647.250	41.59	-30.3	37.0	34.90	74.0	32.4	٧	155	66
12060.000	45.37	-29.6	39.3	35.70	74.0	28.6	Н	155	88

Ch6

Frequency (MHz)	Measure ment 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)
2340.600	48.09	-27.7	31.5	44.27	74.0	25.9	Н	155	22
2537.200	48.64	-26.8	32.9	42.56	74.0	25.4	Н	155	44
4874.250	39.64	-32.7	34.5	37.85	74.0	34.4	V	155	220
7311.000	41.91	-31.9	36.1	37.75	74.0	32.1	٧	155	242
9747.750	41.09	-30.7	37.2	34.56	74.0	32.9	Н	155	264
12185.250	44.94	-29.4	39.2	35.15	74.0	29.1	Н	155	286

Frequency (MHz)	Measure ment 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)
2484.640	59.86	2.9	32.7	24.19	74.0	14.1	Н	155	22
2490.390	60.13	2.9	32.6	24.62	74.0	13.9	Н	155	44
4923.500	39.33	-33.1	34.5	37.91	74.0	34.7	V	155	0
7386.000	43.82	-31.8	36.0	39.61	74.0	30.2	Н	155	22
9848.250	42.31	-30.1	37.3	35.05	74.0	31.7	Н	155	242
12310.500	46.49	-29.7	39.2	37.02	74.0	27.5	Н	155	88



802.11n-HT40-Peak

Ch3

Frequency (MHz)	Measure ment 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)
2389.226	61.45	2.9	32.0	26.60	74.0	12.6	Н	155	22
2389.800	61.67	2.9	32.0	26.82	74.0	12.3	Н	155	44
4844.250	39.28	-32.7	34.5	37.47	74.0	34.7	V	155	242
7266.000	41.66	-31.9	36.1	37.42	74.0	32.3	Н	155	176
9687.750	42.13	-30.7	37.1	35.75	74.0	31.9	V	155	88
12110.250	45.45	-29.5	39.3	35.68	74.0	28.6	V	155	22

Ch6

Frequency (MHz)	Measure ment 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)
2344.400	47.80	-27.7	31.6	43.90	74.0	26.2	Н	155	88
2573.600	48.67	-26.8	33.0	42.49	74.0	25.3	Н	155	132
4874.250	39.57	-32.7	34.5	37.78	74.0	34.4	H	155	0
7311.000	42.80	-31.9	36.1	38.63	74.0	31.2	V	155	66
9747.750	41.83	-30.7	37.2	35.30	74.0	32.2	٧	155	44
12185.250	45.14	-29.4	39.2	35.34	74.0	28.9	Н	155	242

0113									
Frequency (MHz)	Measure ment 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)
2483.560	62.84	2.9	32.8	27.15	74.0	11.2	Н	155	88
2485.350	61.82	2.9	32.7	26.18	74.0	12.2	Н	155	66
4904.250	39.14	-32.9	34.5	37.54	74.0	34.9	Н	155	110
7356.000	42.69	-31.9	36.1	38.54	74.0	31.3	V	155	0
9807.750	41.77	-30.4	37.3	34.85	74.0	32.2	Н	155	22
12260.250	45.22	-29.6	39.2	35.60	74.0	28.8	Н	155	44



802.11b-Average

Ch1

Frequency (MHz)	Measure ment 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)
2387.500	46.50	2.9	32.0	11.63	54.0	7.5	Н	155	18
2390.000	46.53	2.9	32.0	11.68	54.0	7.5	Н	155	56
4824.000	34.34	-32.8	34.5	32.59	54.0	19.7	Н	155	139
7236.000	37.68	-31.7	36.1	33.32	54.0	16.3	Н	155	108
9648.000	37.85	-30.4	37.0	31.17	54.0	16.2	Н	155	78
12060.000	42.28	-29.6	39.3	32.60	54.0	11.7	Н	155	36

Ch6

Frequency (MHz)	Measure ment 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)
2388.700	46.43	2.9	32.0	11.57	54.0	7.6	Н	155	268
2488.700	46.52	2.9	32.6	10.97	54.0	7.5	Н	155	138
4874.000	34.55	-32.7	34.5	32.76	54.0	19.4	Н	155	104
7311.000	38.43	-31.9	36.1	34.26	54.0	15.6	Н	155	40
9748.000	37.43	-30.7	37.2	30.90	54.0	16.6	Н	155	28
12185.000	42.34	-29.4	39.2	32.55	54.0	11.7	Н	155	8

Frequency (MHz)	Measure ment 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)
2486.600	46.57	2.9	32.7	10.96	54.0	7.4	Н	155	16
2498.300	46.58	2.9	32.3	11.29	54.0	7.4	Н	155	48
4924.000	35.36	-33.1	34.5	33.94	54.0	18.6	Н	155	80
7386.000	38.31	-31.8	36.0	34.10	54.0	15.7	Н	155	8
9848.000	38.73	-30.1	37.3	31.48	54.0	15.3	Н	155	102
12310.000	42.63	-29.7	39.2	33.16	54.0	11.4	Н	155	118



802.11g-Average

Ch1

Frequency (MHz)	Measure ment 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)
2384.400	46.38	2.9	32.0	11.49	54.0	7.6	Н	155	28
2389.800	46.50	2.9	32.0	11.65	54.0	7.5	Н	155	46
4824.000	34.46	-32.8	34.5	32.71	54.0	19.5	Н	155	8
7236.000	37.82	-31.7	36.1	33.46	54.0	16.2	Н	155	6
9648.000	38.01	-30.4	37.0	31.33	54.0	16.0	Н	155	24
12060.000	42.38	-29.6	39.3	32.70	54.0	11.6	Н	155	185

Ch6

Frequency (MHz)	Measure ment 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)
2388.100	46.45	2.9	32.0	11.59	54.0	7.6	Н	155	28
2493.000	46.55	2.9	32.5	11.12	54.0	7.4	Н	155	248
4874.000	34.74	-32.7	34.5	32.94	54.0	19.3	Н	155	38
7311.000	38.49	-31.9	36.1	34.32	54.0	15.5	Н	155	98
9748.000	37.59	-30.7	37.2	31.06	54.0	16.4	Н	155	183
12185.000	42.47	-29.4	39.2	32.67	54.0	11.5	Н	155	356

Frequency	Measure ment	Cable	Antenna Factor	Receiver Reading	Limit	Margin	Antenna Pol.	Antenna Height	Turntable angle
(MHz)	Result (dBµV/m)	(dB)	(dB/m)	(dBμV)	(dBμV/m)	(dB)	(H/V)	(cm)	(deg)
2486.500	46.52	2.9	32.7	10.91	54.0	7.5	Н	155	20
2491.200	46.56	2.9	32.5	11.08	54.0	7.4	Н	155	18
4924.000	34.67	-33.1	34.5	33.25	54.0	19.3	Н	155	90
7386.000	38.44	-31.8	36.0	34.24	54.0	15.6	Н	155	114
9848.000	38.91	-30.1	37.3	31.66	54.0	15.1	Н	155	36
12310.000	42.79	-29.7	39.2	33.31	54.0	11.2	Н	155	2



802.11n-HT20-Average

Ch1

Frequency (MHz)	Measure ment 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)
2388.100	46.48	2.9	32.0	11.62	54.0	7.5	Н	155	48
2389.300	46.49	2.9	32.0	11.64	54.0	7.5	Н	155	6
4824.000	34.29	-32.8	34.5	32.54	54.0	19.7	H	155	312
7236.000	37.66	-31.7	36.1	33.29	54.0	16.3	Н	155	48
9648.000	37.91	-30.4	37.0	31.23	54.0	16.1	Н	155	68
12060.000	42.26	-29.6	39.3	32.59	54.0	11.7	Н	155	80

Ch6

Frequency (MHz)	Measure ment 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)
2389.300	46.44	2.9	32.0	11.59	54.0	7.6	Н	155	28
2484.300	46.49	2.9	32.7	10.82	54.0	7.5	Н	155	49
4874.000	34.56	-32.7	34.5	32.77	54.0	19.4	Н	155	226
7311.000	38.42	-31.9	36.1	34.26	54.0	15.6	Н	155	248
9748.000	37.41	-30.7	37.2	30.88	54.0	16.6	Н	155	268
12185.000	42.31	-29.4	39.2	32.52	54.0	11.7	Н	155	298

Frequency (MHz)	Measure ment 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)
2484.100	46.53	2.9	32.7	10.85	54.0	7.5	Н	155	28
2486.200	46.53	2.9	32.7	10.91	54.0	7.5	Н	155	48
4923.000	34.46	-33.1	34.5	33.04	54.0	19.5	Н	155	8
7386.000	38.25	-31.8	36.0	34.05	54.0	15.7	Н	155	16
9848.000	38.74	-30.1	37.3	31.48	54.0	15.3	Н	155	228
12310.000	42.78	-29.7	39.2	33.31	54.0	11.2	Н	155	92



802.11n-HT40-Average

Ch3

Frequency (MHz)	Measure ment 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)
2387.000	46.39	2.9	32.0	11.53	54.0	7.6	Н	155	28
2388.700	46.42	2.9	32.0	11.56	54.0	7.6	Н	155	49
4844.000	34.52	-32.7	34.5	32.71	54.0	19.5	Н	155	246
7266.000	37.90	-31.9	36.1	33.67	54.0	16.1	H	155	182
9688.000	37.83	-30.7	37.1	31.45	54.0	16.2	Н	155	94
12110.000	42.28	-29.5	39.3	32.51	54.0	11.7	Н	155	42

Ch6

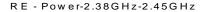
Frequency (MHz)	Measure ment Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2388.800	46.42	2.9	32.0	11.57	54.0	7.6	Н	155	98
2488.300	46.58	2.9	32.6	11.02	54.0	7.4	Н	155	135
4874.000	34.69	-32.7	34.5	32.90	54.0	19.3	Н	155	4
7311.000	38.33	-31.9	36.1	34.16	54.0	15.7	Н	155	74
9748.000	37.50	-30.7	37.2	30.97	54.0	16.5	Н	155	48
12185.000	42.38	-29.4	39.2	32.59	54.0	11.6	Н	155	246

Ch9

0113									
Frequency (MHz)	Measure ment 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	46.49	2.9	32.8	10.80	54.0	7.5	Н	155	92
2486.000	46.50	2.9	32.7	10.88	54.0	7.5	Н	155	68
4904.000	34.53	-32.9	34.5	32.93	54.0	19.5	Н	155	118
7356.000	38.54	-31.9	36.1	34.39	54.0	15.5	Н	155	354
9808.000	38.05	-30.4	37.3	31.13	54.0	15.9	Н	155	18
12260.000	42.47	-29.6	39.2	32.85	54.0	11.5	Н	155	38

Test graphs as below:





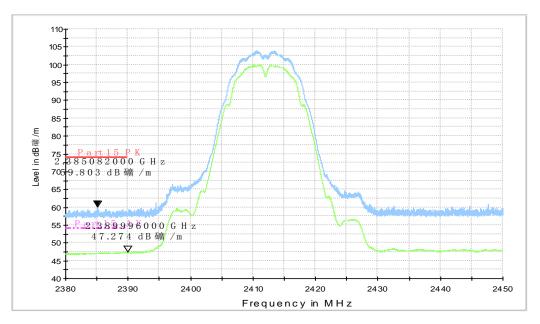


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz - 2.45GHz

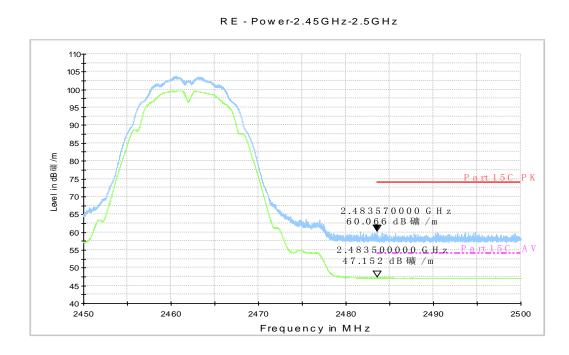
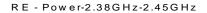


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz





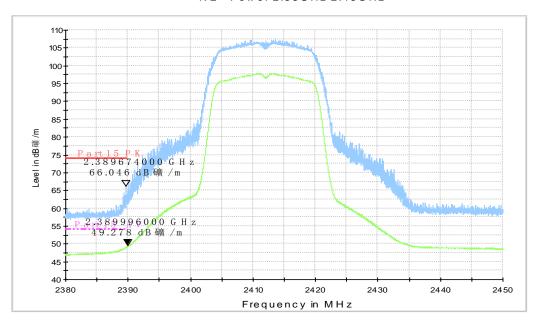


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

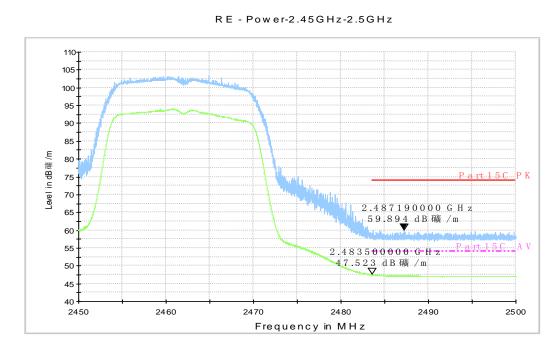
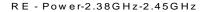


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz





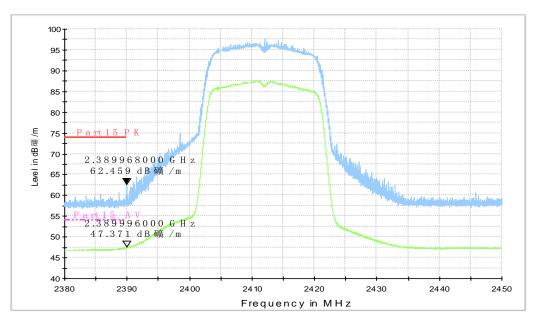


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

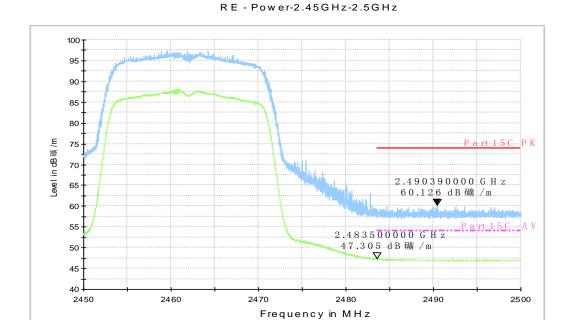
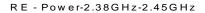


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz





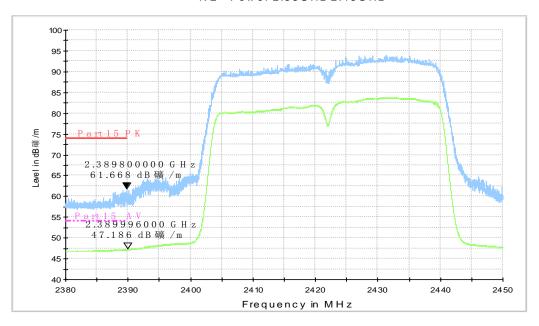


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz

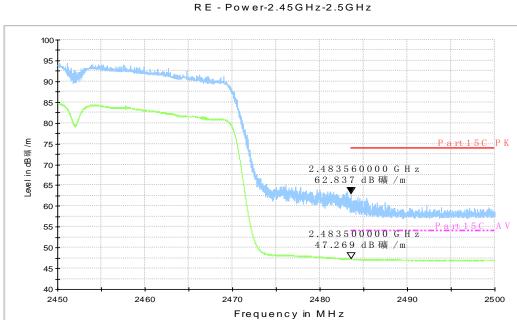


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz



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 (With ch	Conclusion			
(11112)	Emili (abµv)	802.11b	802.11b Idle			
0.15 to 0.5	66 to 56					
0.5 to 5	56	Fig.A.7.1	Fig.A.7.2	Р		
5 to 30	60					

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	Average Limit	Result With c	Conclusion		
(MHz)	(dBμV)	802.11b	Idle	-	
0.15 to 0.5	56 to 46				
0.5 to 5	46	Fig.A.7.1	Fig.A.7.2	Р	
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:



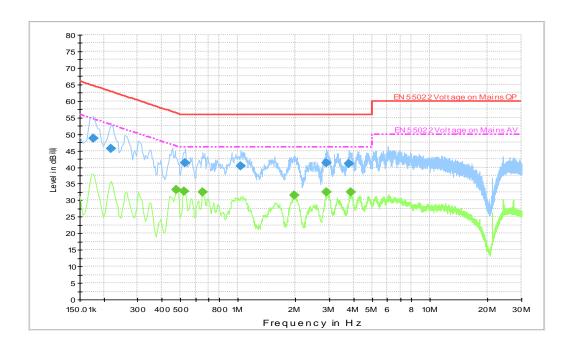


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dB礦)		(dB)	(dB)	(dB礦)
0.177000	48.8	L1	10.8	15.8	64.6
0.217500	45.6	L1	10.8	17.3	62.9
0.532500	41.2	L1	10.6	14.8	56.0
1.032000	40.4	L1	10.9	15.6	56.0
2.886000	41.4	L1	10.5	14.6	56.0
3.804000	41.2	L1	10.4	14.8	56.0

Final Result 2

Frequency	Average	Line	Corr.	Margin	Limit
(MHz)	(dB礦)		(dB)	(dB)	(dB礦)
0.478500	33.2	N	10.5	13.2	46.4
0.523500	32.6	L1	10.6	13.4	46.0
0.658500	32.5	L1	10.7	13.5	46.0
1.977000	31.5	L1	10.5	14.5	46.0
2.890500	32.5	L1	10.5	13.5	46.0
3.867000	32.5	L1	10.4	13.5	46.0



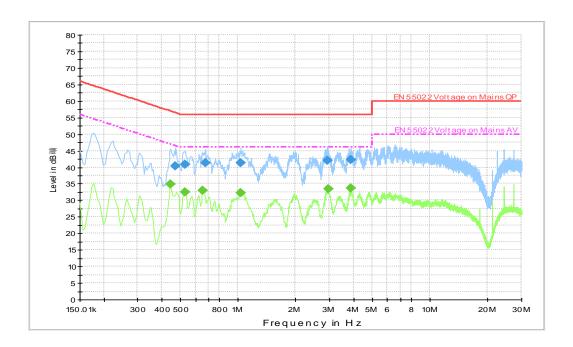


Fig.A.7.2 AC Powerline Conducted Emission-Idle

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

Final Result 1

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dB礦)		(dB)	(dB)	(dB礦)
0.474000	40.3	L1	10.7	16.2	56.4
0.532500	40.7	L1	10.6	15.3	56.0
0.676500	41.3	L1	10.8	14.7	56.0
1.036500	41.3	L1	10.9	14.7	56.0
2.931000	42.0	L1	10.5	14.0	56.0
3.858000	42.3	L1	10.4	13.7	56.0

Final Result 2

Frequency	Average	Line	Corr.	Margin	Limit
(MHz)	(dB礦)		(dB)	(dB)	(dB礦)
0.447000	34.9	L1	10.8	12.0	46.9
0.528000	32.5	L1	10.6	13.5	46.0
0.658500	33.0	L1	10.7	13.0	46.0
1.032000	32.2	L1	10.9	13.8	46.0
2.944500	33.5	L1	10.5	12.5	46.0
3.889500	33.7	L1	10.4	12.3	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).

2017-08-22 through 2018-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program

END OF REPORT