

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

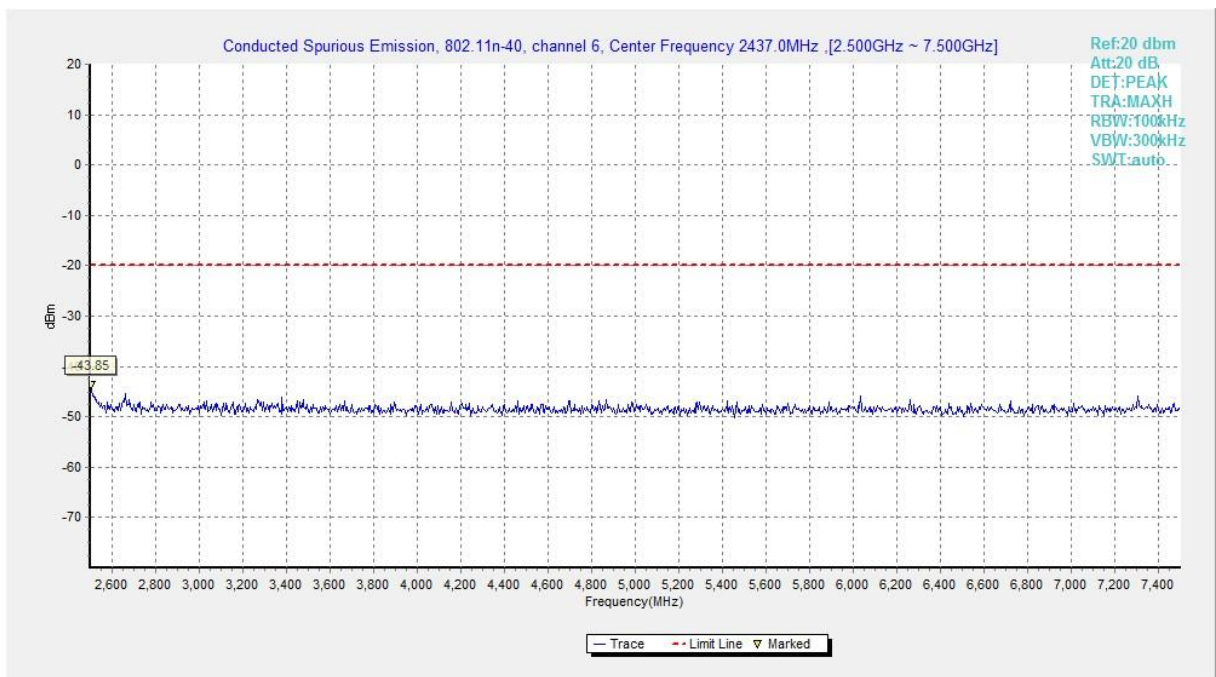


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

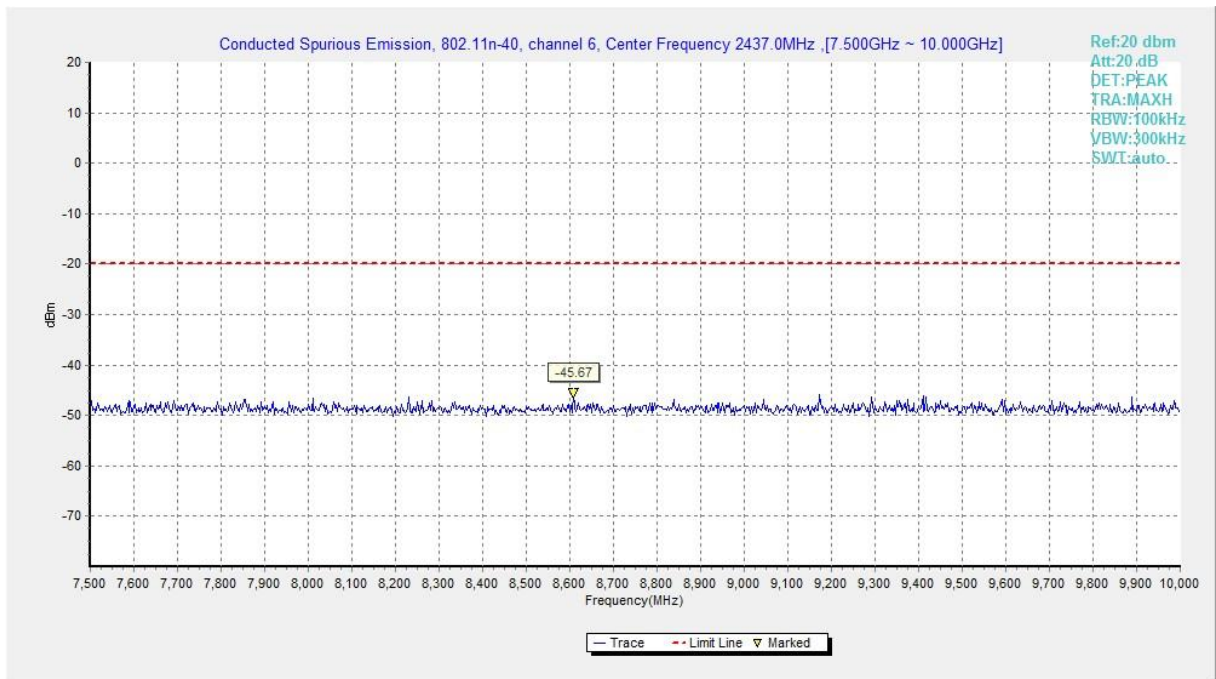


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

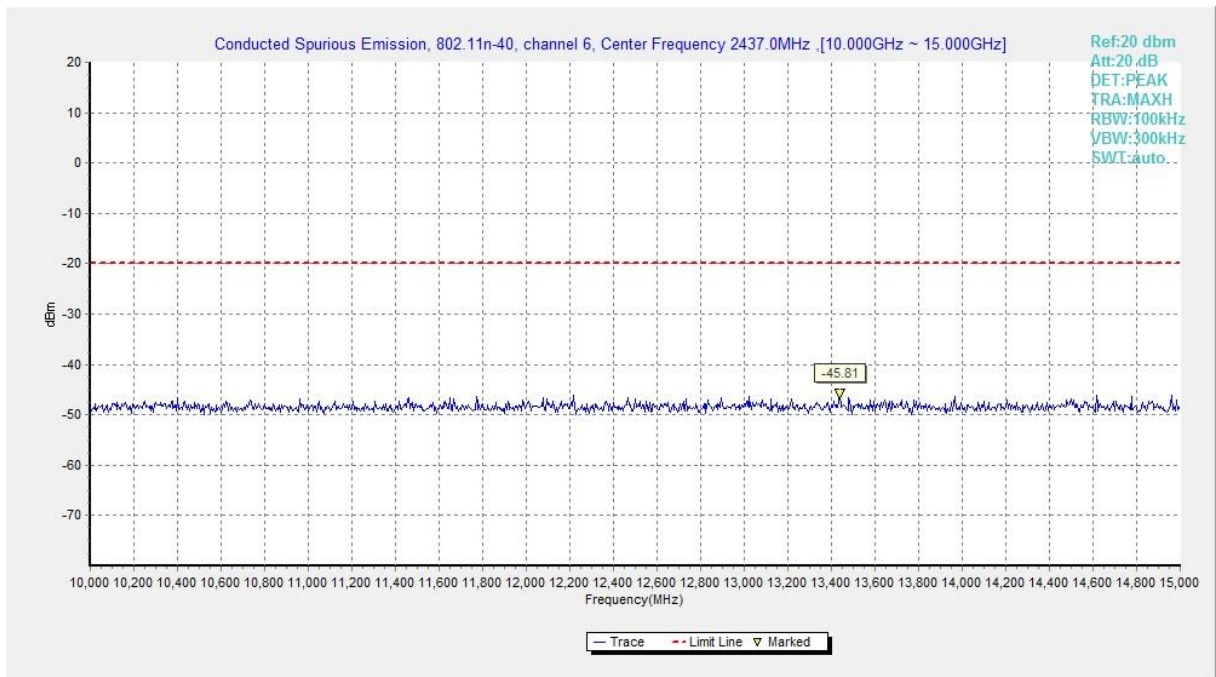


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

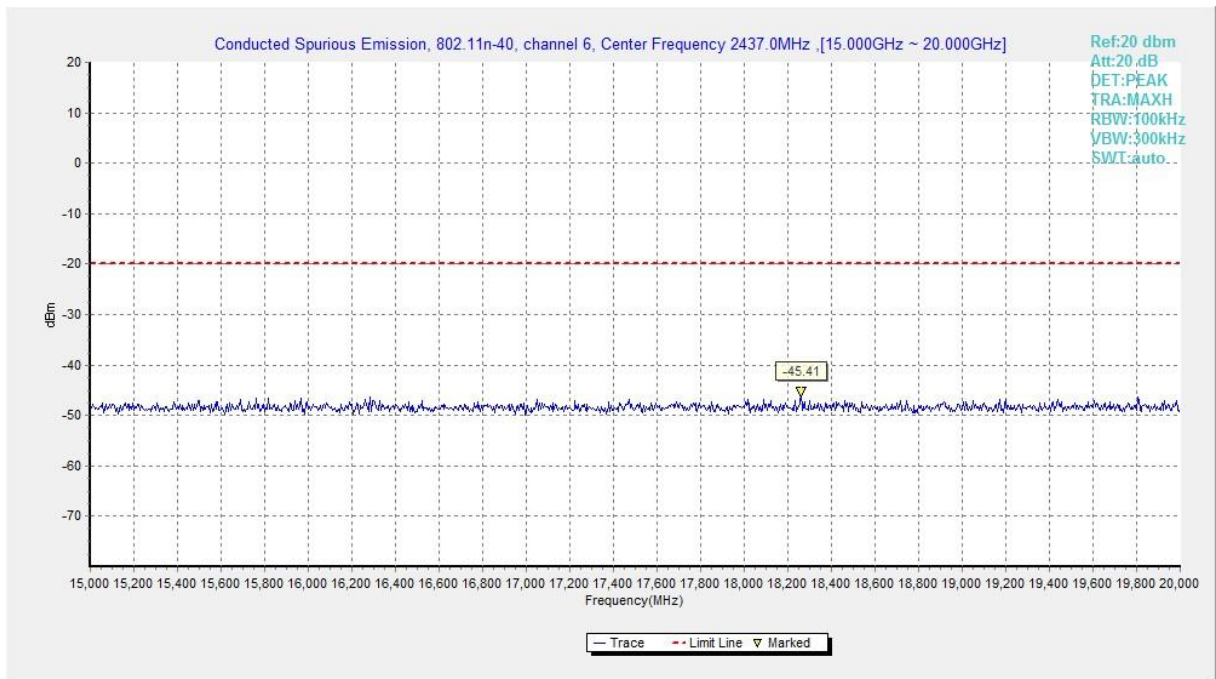


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

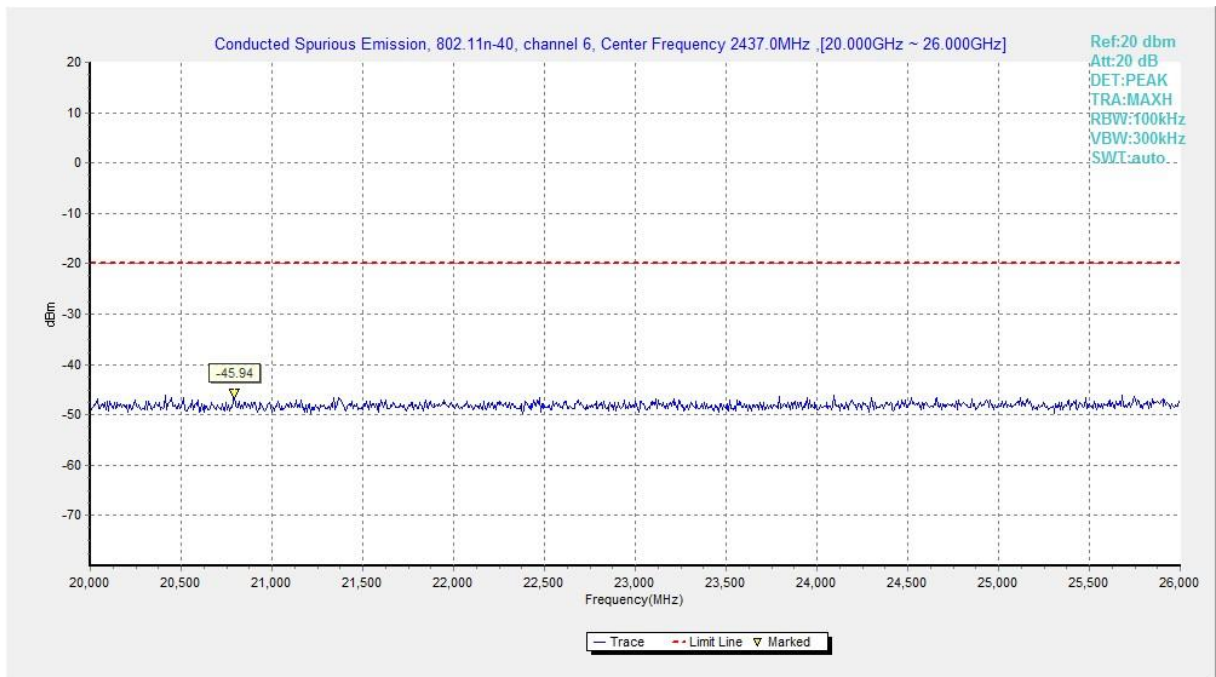


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

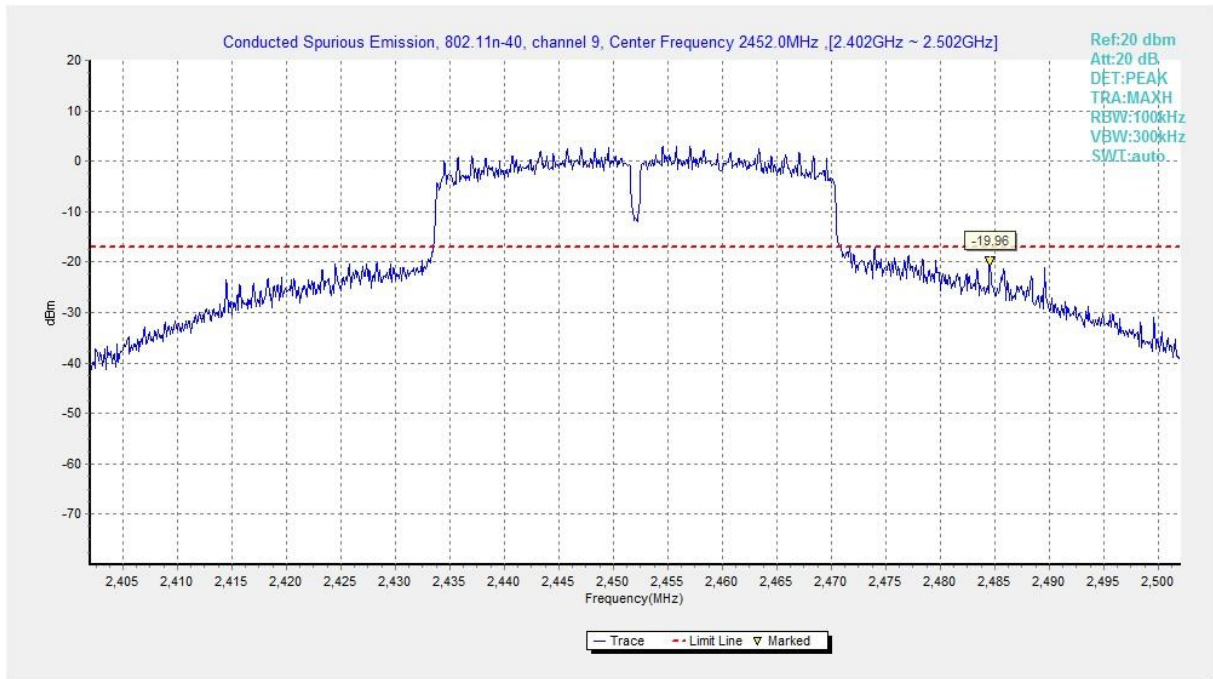


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

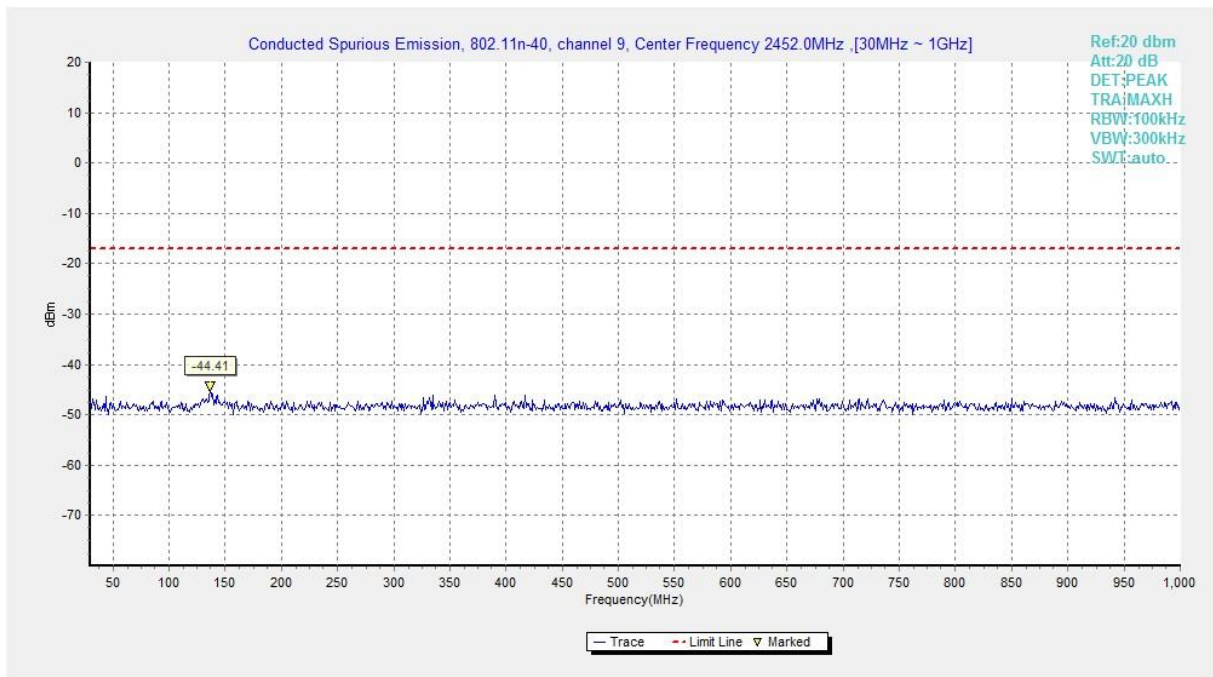


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

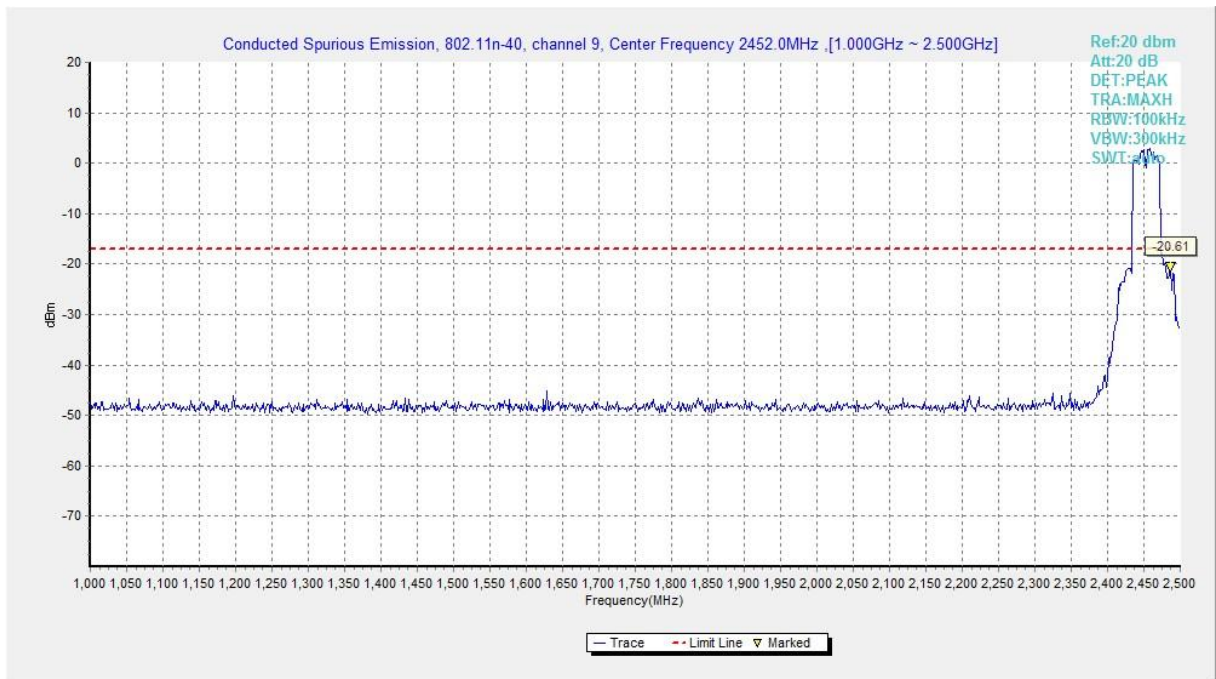


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

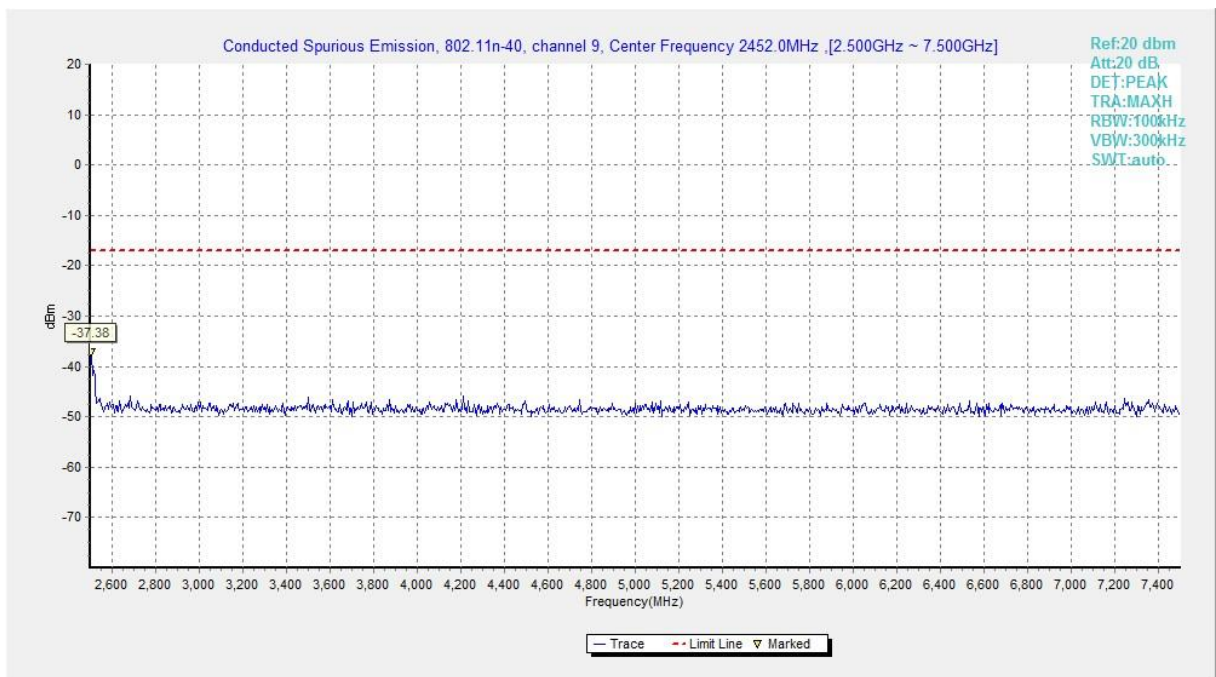


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

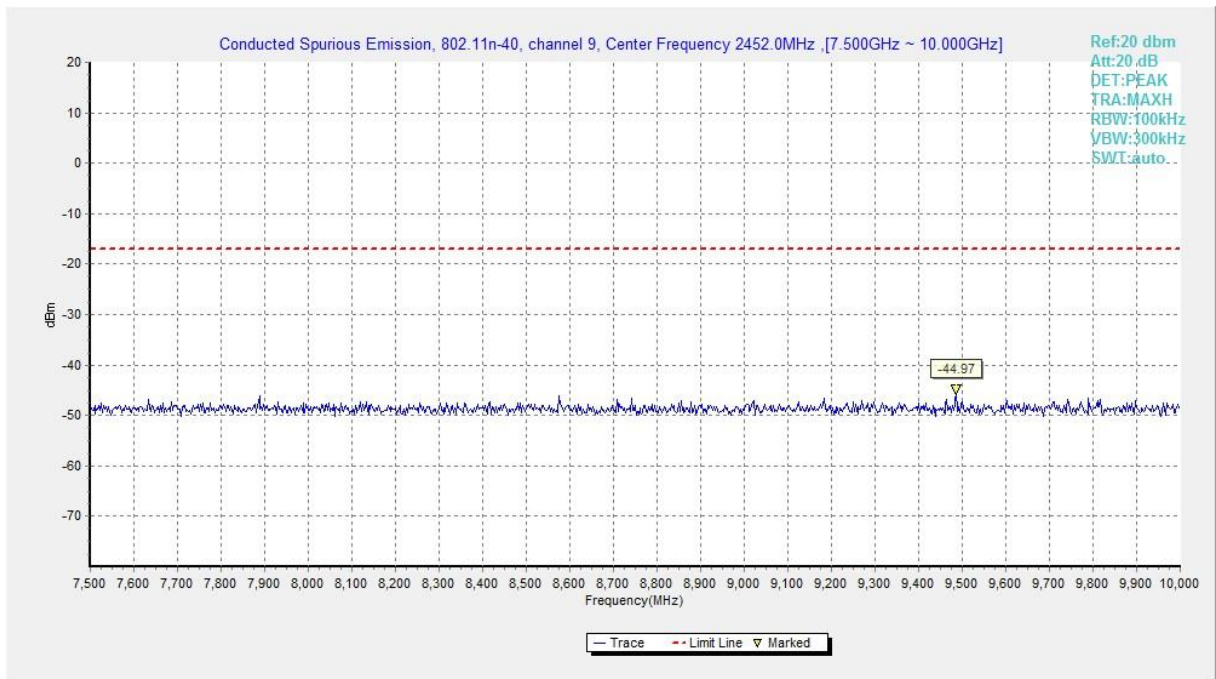


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

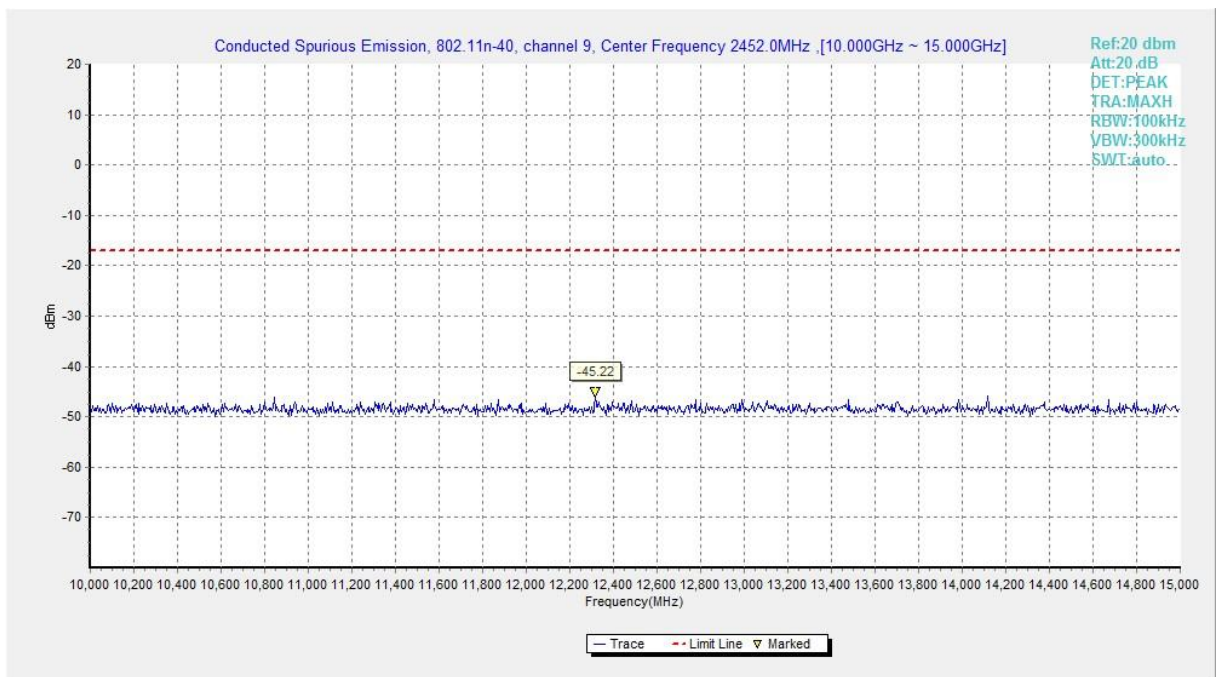


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

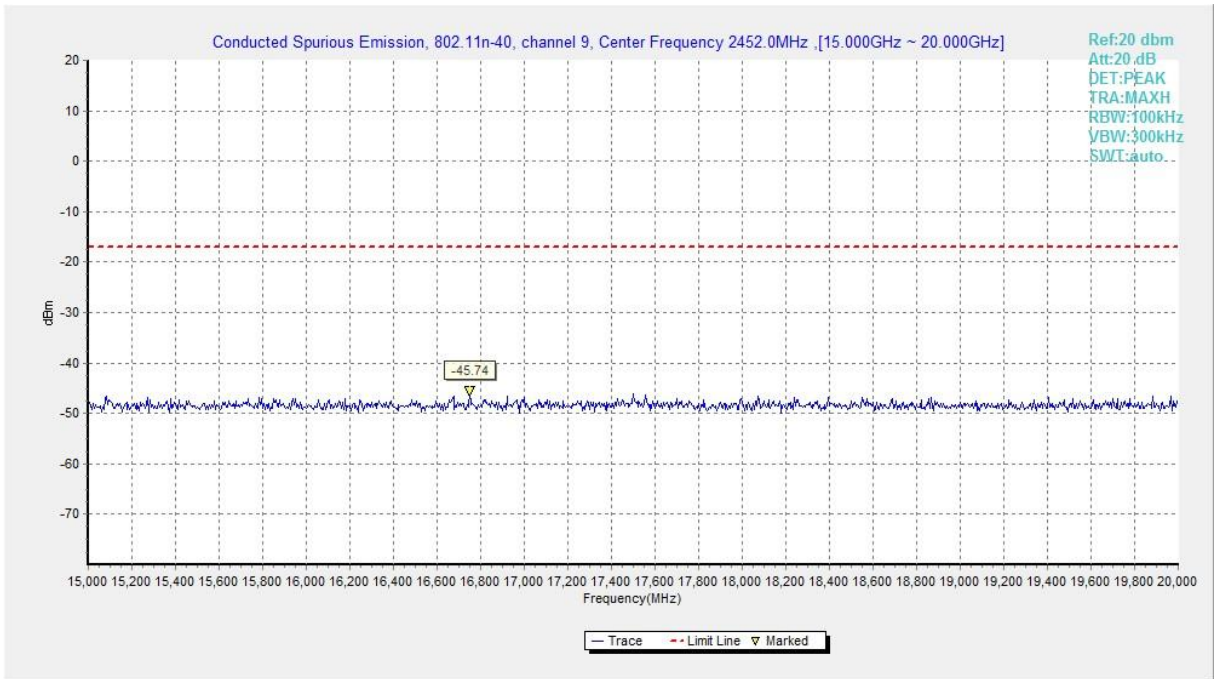


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

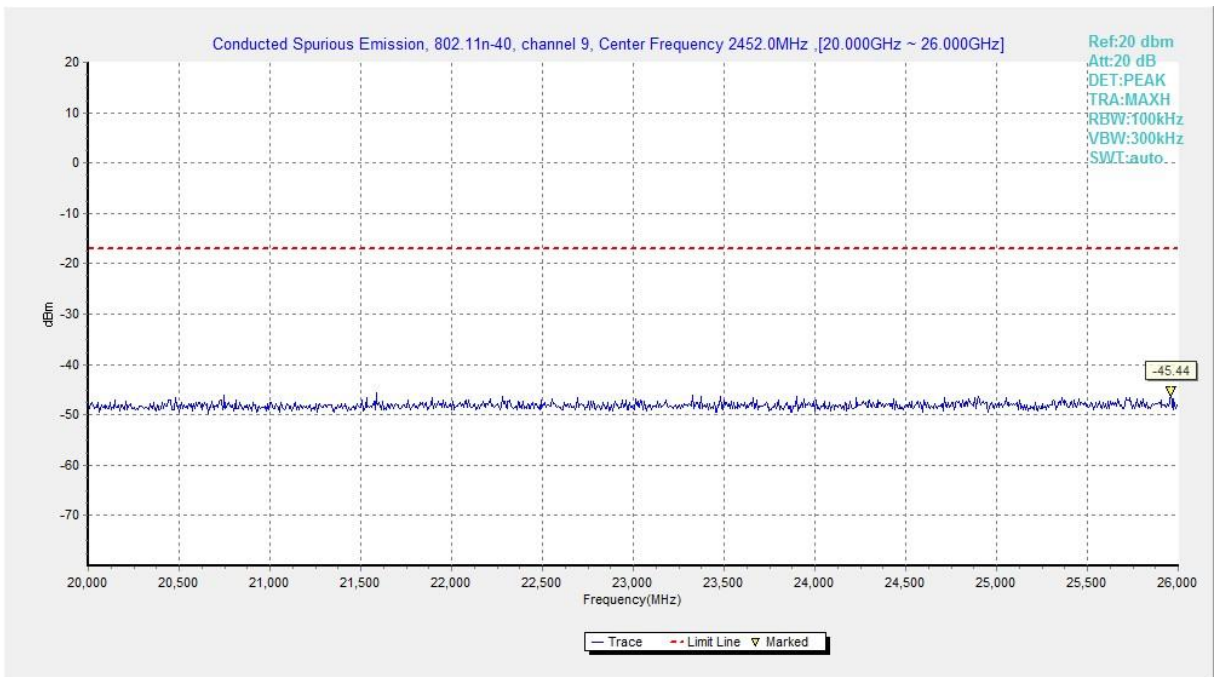


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

A.6.2 Transmitter Spurious Emission - Radiated

Method of Measurement: See ANSI C63.10-2013-clause 6.4 & 6.5 & 6.6

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength(μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3/10 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

EUT ID: EUT1

Measurement Results for Set.10:

802.11b mode

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

802.11g mode

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

802.11n-HT20 mode

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

802.11n-HT40 mode

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

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

802.11b-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2389.150	44.6	-38.8	27.7	55.7	54.0	H
4824.000	47.4	-35.1	33.1	49.4	54.0	H
9648.000	44.7	-25.4	38.0	32.1	54.0	V
4823.500	44.2	-35.1	33.1	46.2	54.0	H
9648.500	42.7	-25.4	38.0	30.1	54.0	H
3618.000	41.8	-37.1	32.1	46.8	54.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
9748.000	40.4	-24.5	38.0	26.9	54.0	H
9748.500	38.5	-24.5	38.0	25.0	54.0	H
17845.000	38.2	-18.5	45.6	11.1	54.0	V
17874.000	38.2	-18.5	45.6	11.1	54.0	H
17754.000	38.1	-18.5	45.6	11.0	54.0	H
17773.000	38.1	-18.5	45.6	11.0	54.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2483.735	41.6	-38.9	27.7	52.8	54.0	H
4924.000	39.6	-34.9	33.1	41.4	54.0	H
4924.500	39.3	-34.9	33.1	41.1	54.0	V
4927.500	39.3	-34.9	33.1	41.1	54.0	H
4923.000	39.1	-34.9	33.1	40.9	54.0	H
4925.000	39.1	-34.9	33.1	40.9	54.0	H

802.11b-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2389.185	55.3	-38.8	27.7	66.4	74.0	H
9648.000	49.7	-25.4	38.0	37.1	74.0	H
17755.000	49.6	-18.5	45.6	22.5	74.0	V
17757.000	49.5	-18.5	45.6	22.4	74.0	H
4824.000	49.4	-35.1	33.1	51.4	74.0	H
17831.000	49.3	-18.5	45.6	22.2	74.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
17823.000	50.3	-18.5	45.6	23.2	74.0	H
17647.500	49.8	-18.9	45.6	23.1	74.0	H
17768.000	49.5	-18.5	45.6	22.4	74.0	V
17613.500	49.3	-18.9	45.6	22.6	74.0	H
17928.500	49.2	-17.7	45.6	21.3	74.0	H
17875.000	49.2	-18.5	45.6	22.1	74.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2483.660	53.1	-38.9	27.7	64.3	74.0	H
4922.000	51.1	-34.9	33.1	52.9	74.0	H
4917.500	51.1	-34.9	33.1	52.9	74.0	V
4928.500	50.8	-34.9	33.1	52.6	74.0	H
4920.500	50.7	-34.9	33.1	52.5	74.0	H
17901.500	50.5	-18.5	45.6	23.4	74.0	H

802.11g - Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2388.820	47.9	-38.8	27.7	59.0	54.0	H
4824.000	47.6	-35.1	33.1	49.6	54.0	H
4823.500	45.1	-35.1	33.1	47.1	54.0	V
9648.000	44.8	-25.4	38.0	32.2	54.0	H
9648.500	42.8	-25.4	38.0	30.2	54.0	H
3618.000	41.7	-37.1	32.1	46.7	54.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
9748.000	40.5	-24.5	38.0	27.0	54.0	H
9748.500	38.8	-24.5	38.0	25.3	54.0	H
17767.000	38.2	-18.5	45.6	11.1	54.0	V
17852.000	38.1	-18.5	45.6	11.0	54.0	H
17764.500	38.1	-18.5	45.6	11.0	54.0	H
17898.000	38.1	-18.5	45.6	11.0	54.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2484.850	47.2	-38.9	27.7	58.4	54.0	H
4923.500	39.4	-34.9	33.1	41.2	54.0	H
4924.000	39.3	-34.9	33.1	41.1	54.0	V
4922.500	39.2	-34.9	33.1	41.0	54.0	H
4923.000	39.2	-34.9	33.1	41.0	54.0	H
4925.000	39.1	-34.9	33.1	40.9	54.0	H

802.11g - Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2389.820	63.8	-38.8	27.7	74.9	74.0	H
17412.000	49.9	-19.2	41.5	27.6	74.0	H
4824.000	49.6	-35.1	33.1	51.6	74.0	V
17822.500	49.6	-18.5	45.6	22.5	74.0	H
17683.500	49.6	-18.9	45.6	22.9	74.0	H
17638.000	49.5	-18.9	45.6	22.8	74.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
17859.000	50.6	-18.5	45.6	23.5	74.0	H
17758.500	49.8	-18.5	45.6	22.7	74.0	H
17943.000	49.8	-17.7	45.6	21.9	74.0	V
17916.000	49.7	-17.7	45.6	21.8	74.0	H
17792.000	49.6	-18.5	45.6	22.5	74.0	H
17789.000	49.5	-18.5	45.6	22.4	74.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2484.550	61.5	-38.9	27.7	72.7	74.0	H
4923.000	52.3	-34.9	33.1	54.1	74.0	H
17399.000	50.8	-19.2	41.5	28.5	74.0	V
17857.000	50.6	-18.5	45.6	23.5	74.0	H
4926.500	50.5	-34.9	33.1	52.3	74.0	H
4927.000	50.2	-34.9	33.1	52.0	74.0	H

802.11n-HT20-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2389.410	48.7	-38.8	27.7	59.8	54.0	H
17399.000	38.3	-19.2	41.5	16.0	54.0	H
17435.500	38.2	-19.2	41.5	15.9	54.0	V
17866.000	38.2	-18.5	45.6	11.1	54.0	H
17872.500	38.2	-18.5	45.6	11.1	54.0	H
17884.500	38.2	-18.5	45.6	11.1	54.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
9748.000	40.4	-24.5	38.0	26.9	54.0	H
9748.500	38.4	-24.5	38.0	24.9	54.0	H
17861.500	38.1	-18.5	45.6	11.0	54.0	V
17865.000	38.0	-18.5	45.6	10.9	54.0	H
17736.000	38.0	-18.9	45.6	11.3	54.0	H
17832.500	38.0	-18.5	45.6	10.9	54.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2484.815	48.9	-38.9	27.7	60.1	54.0	H
4923.500	39.5	-34.9	33.1	41.3	54.0	H
4923.000	39.4	-34.9	33.1	41.2	54.0	V
4924.500	39.2	-34.9	33.1	41.0	54.0	H
4924.000	39.1	-34.9	33.1	40.9	54.0	H
4927.500	39.0	-34.9	33.1	40.8	54.0	H

802.11n-HT20-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2389.420	65.3	-38.8	27.7	76.4	74.0	H
17767.500	50.7	-18.5	45.6	23.6	74.0	H
17870.500	50.0	-18.5	45.6	22.9	74.0	V
17497.000	49.8	-19.2	41.5	27.5	74.0	H
17378.000	49.8	-19.5	41.5	27.8	74.0	H
17441.000	49.7	-19.2	41.5	27.4	74.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
17863.000	49.9	-18.5	45.6	22.8	74.0	H
17779.000	49.8	-18.5	45.6	22.7	74.0	H
17449.000	49.8	-19.2	41.5	27.5	74.0	V
17909.000	49.7	-18.5	45.6	22.6	74.0	H
17190.000	49.7	-19.8	41.5	28.0	74.0	H
17878.500	49.5	-18.5	45.6	22.4	74.0	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2484.365	65.6	-38.9	27.7	76.8	74.0	H
4923.000	52.1	-34.9	33.1	53.9	74.0	H
4918.000	50.7	-34.9	33.1	52.5	74.0	V
4921.500	50.2	-34.9	33.1	52.0	74.0	H
4927.500	50.2	-34.9	33.1	52.0	74.0	H
17814.000	50.0	-18.5	45.6	22.9	74.0	H

802.11n-HT40-Average

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2388.985	45.3	-38.8	27.7	56.4	54.0	H
9688.000	40.1	-24.5	38.0	26.6	54.0	H
9688.500	38.3	-24.5	38.0	24.8	54.0	V
17868.000	38.0	-18.5	45.6	10.9	54.0	H
17375.000	38.0	-19.5	41.5	16.0	54.0	H
17858.500	37.9	-18.5	45.6	10.8	54.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
17874.500	38.0	-18.5	45.6	10.9	54.0	H
17852.000	37.9	-18.5	45.6	10.8	54.0	H
17811.000	37.8	-18.5	45.6	10.7	54.0	V
17412.500	37.8	-19.2	41.5	15.5	54.0	H
17374.000	37.8	-19.5	41.5	15.8	54.0	H
17880.500	37.8	-18.5	45.6	10.7	54.0	H

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2485.835	43.9	-38.9	27.7	55.1	54.0	H
17866.000	38.1	-18.5	45.6	11.0	54.0	H
17911.000	38.0	-18.5	45.6	10.9	54.0	V
17399.000	37.9	-19.2	41.5	15.6	54.0	H
17850.500	37.9	-18.5	45.6	10.8	54.0	H
17443.500	37.8	-19.2	41.5	15.5	54.0	H

802.11n-HT40-Peak

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2388.830	60.8	-38.8	27.7	71.9	74.0	H
17952.000	50.5	-17.7	45.6	22.6	74.0	H
17984.000	49.8	-17.7	45.6	21.9	74.0	V
17875.000	49.8	-18.5	45.6	22.7	74.0	H
17308.500	49.7	-19.5	41.5	27.7	74.0	H
17967.000	49.4	-17.7	45.6	21.5	74.0	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
17413.500	49.7	-19.2	41.5	27.4	74.0	H
17824.500	49.6	-18.5	45.6	22.5	74.0	H
17384.500	49.4	-19.5	41.5	27.4	74.0	V
17353.000	49.4	-19.5	41.5	27.4	74.0	H
17392.500	49.0	-19.2	41.5	26.7	74.0	H
17424.500	49.0	-19.2	41.5	26.7	74.0	H

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Antenna Pol. (H/V)
2485.925	58.9	-38.9	27.7	70.1	74.0	H
17391.500	51.0	-19.2	41.5	28.7	74.0	H
17325.000	50.8	-19.5	41.5	28.8	74.0	V
17417.000	49.8	-19.2	41.5	27.5	74.0	H
17880.000	49.6	-18.5	45.6	22.5	74.0	H
17749.000	49.6	-18.5	45.6	22.5	74.0	H

Test graphs as below:

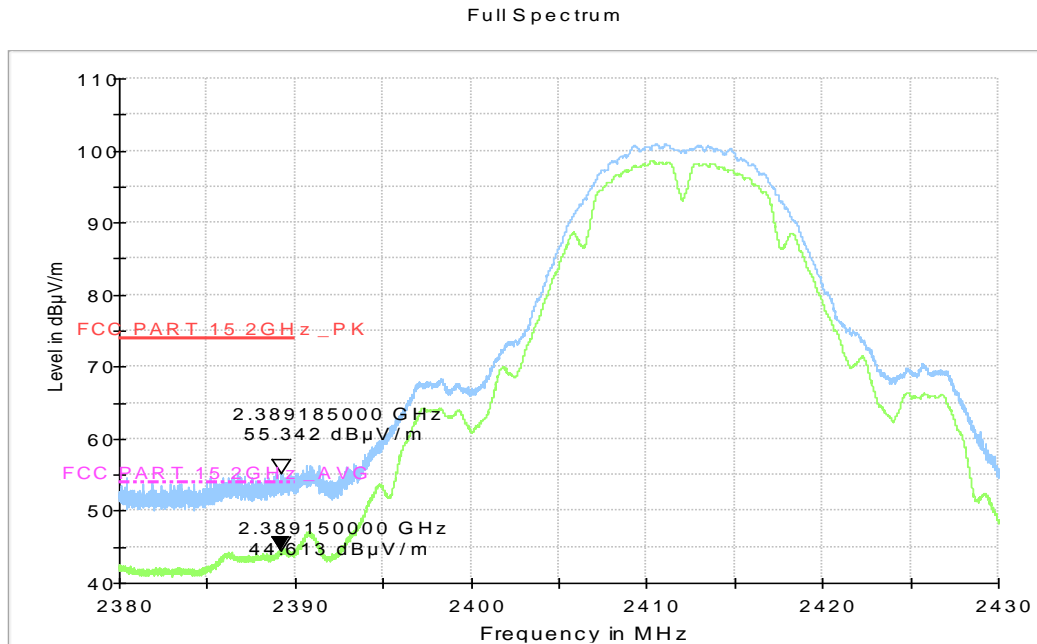


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz

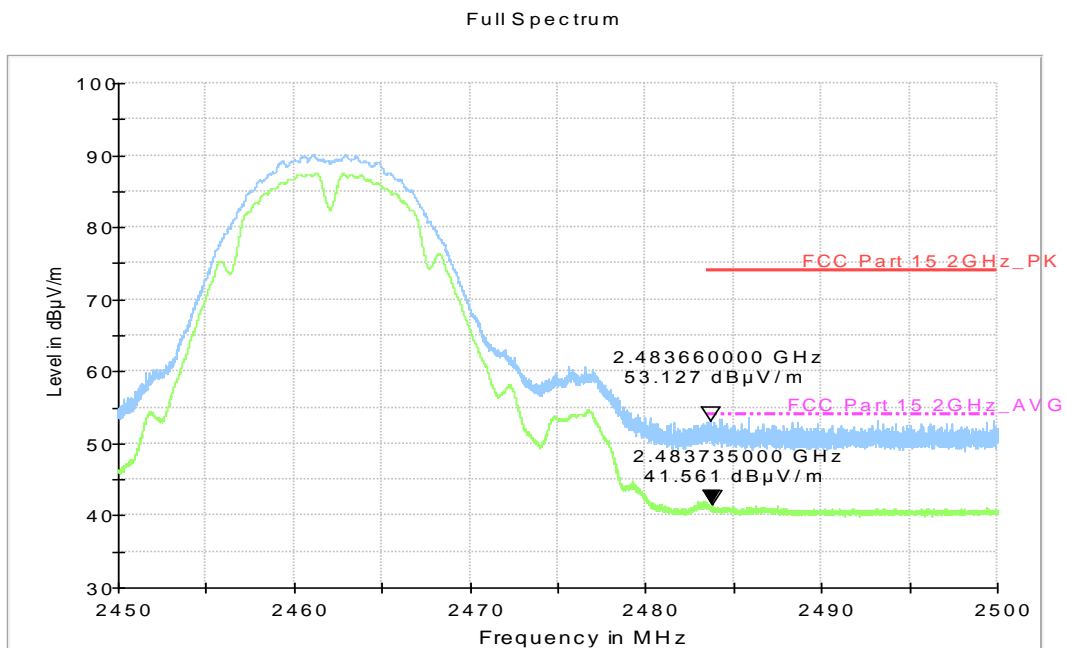


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

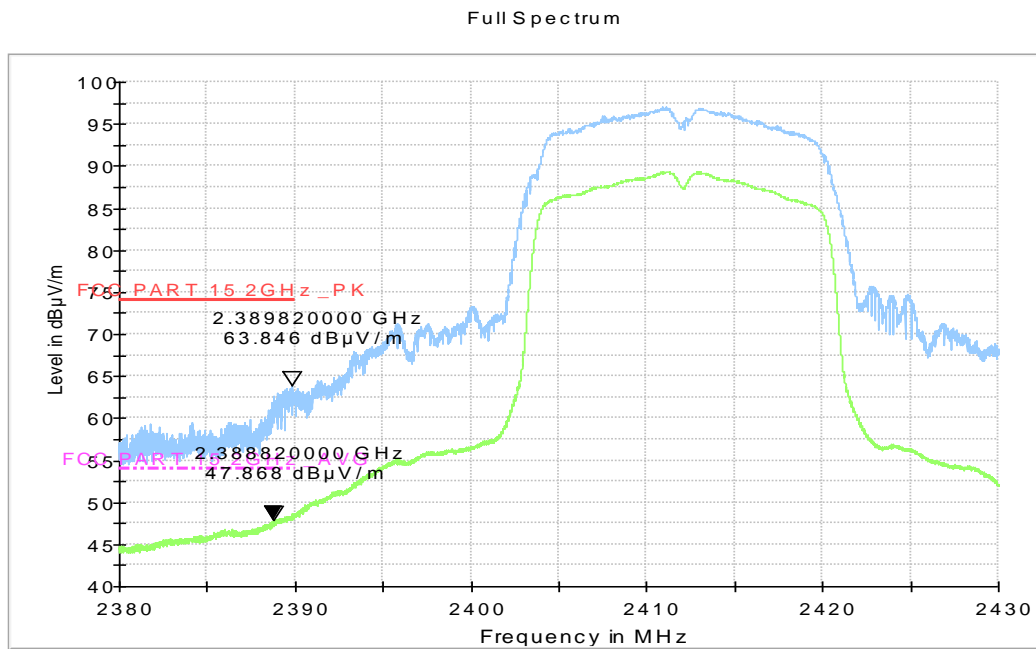


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

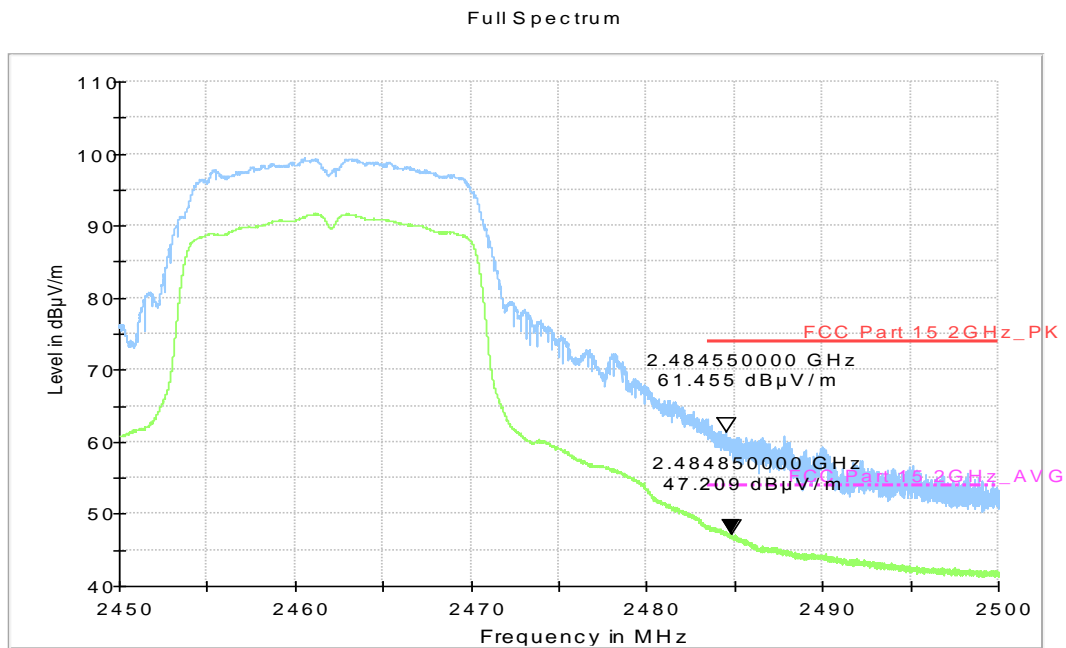


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

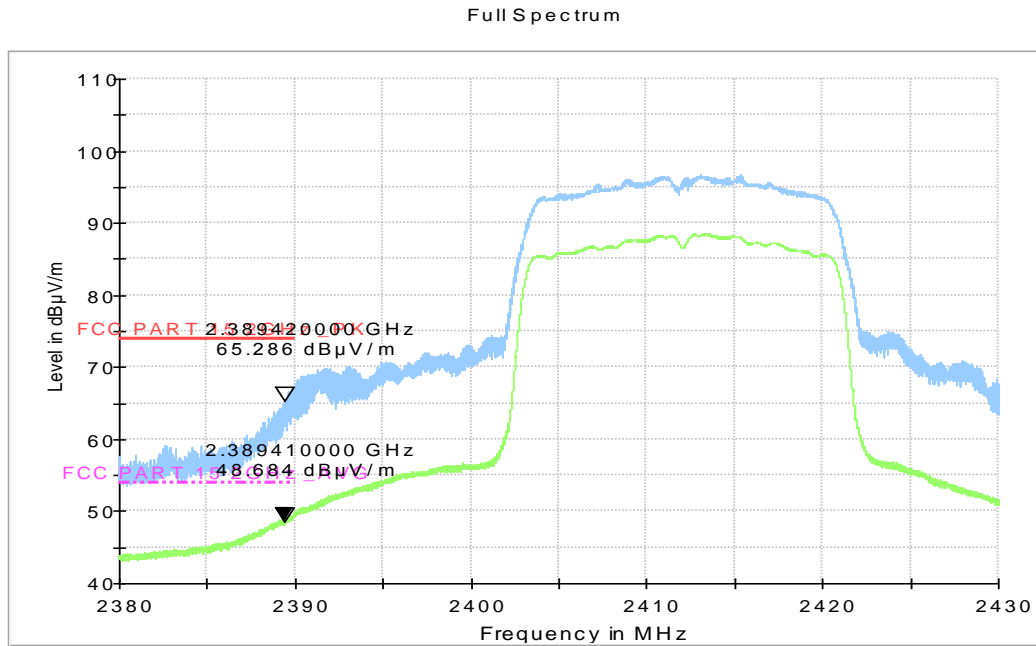


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

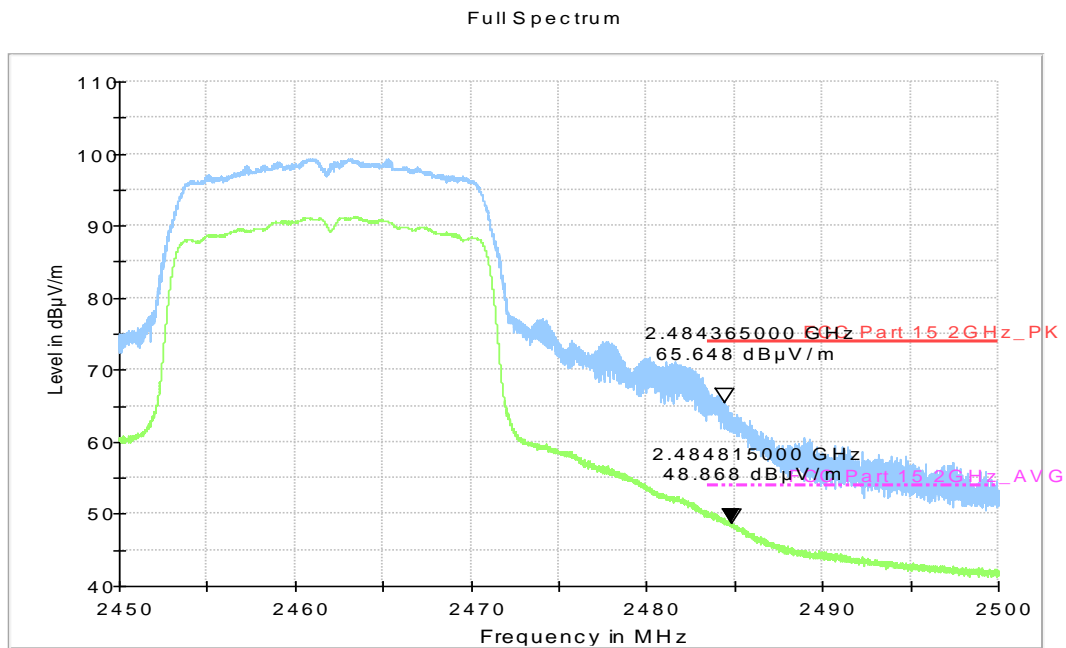


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

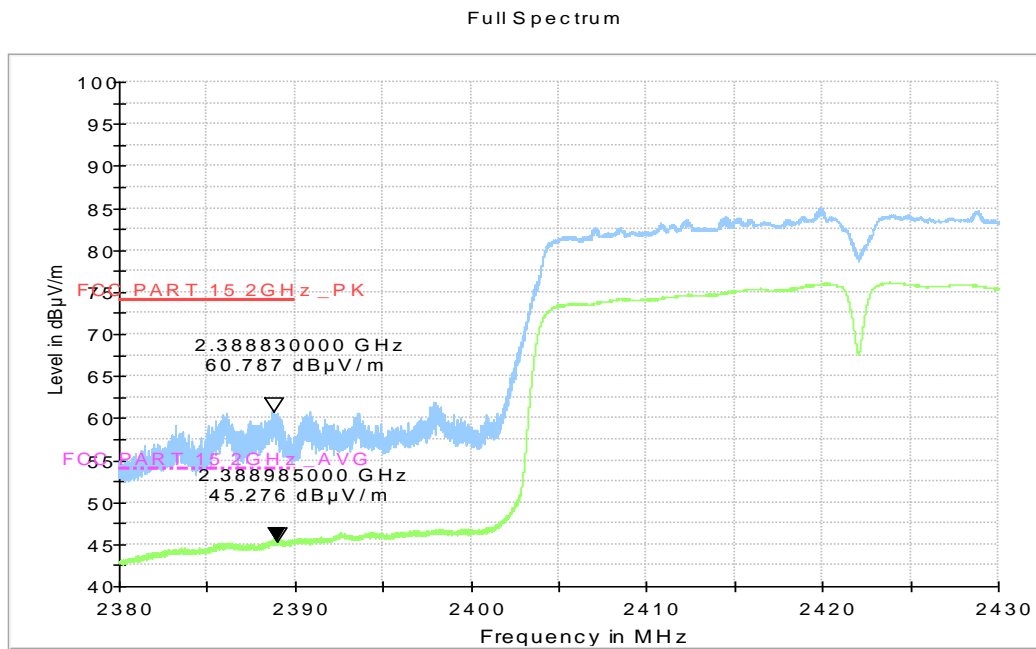


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz

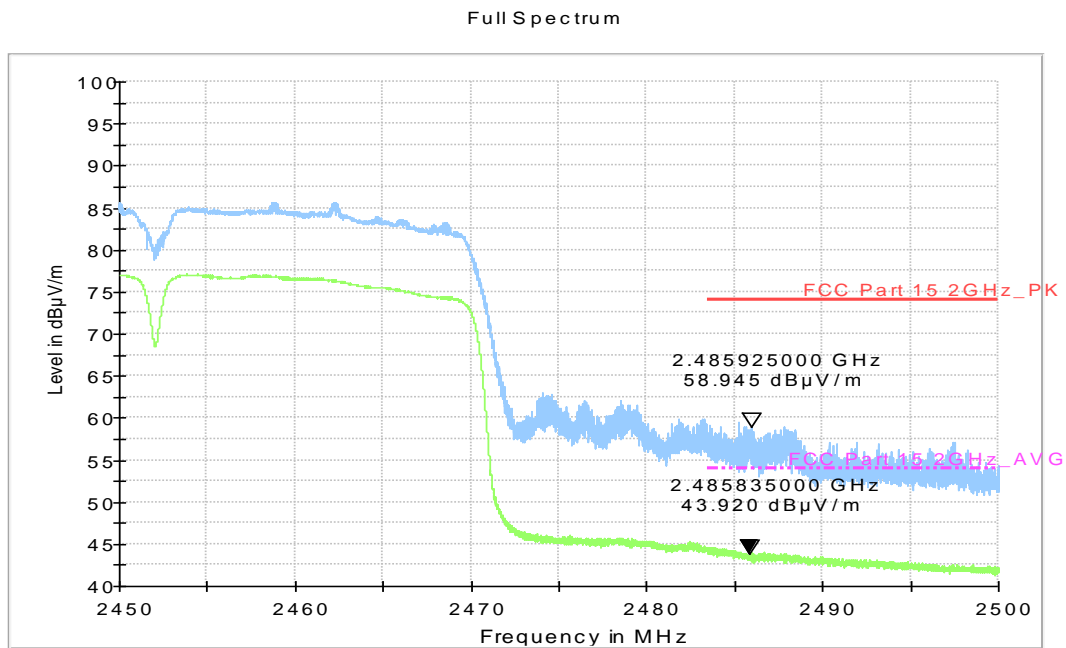


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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.
- 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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1 Fig.A.7.3	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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1 Fig.A.7.3	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: CBA0058AGAC5

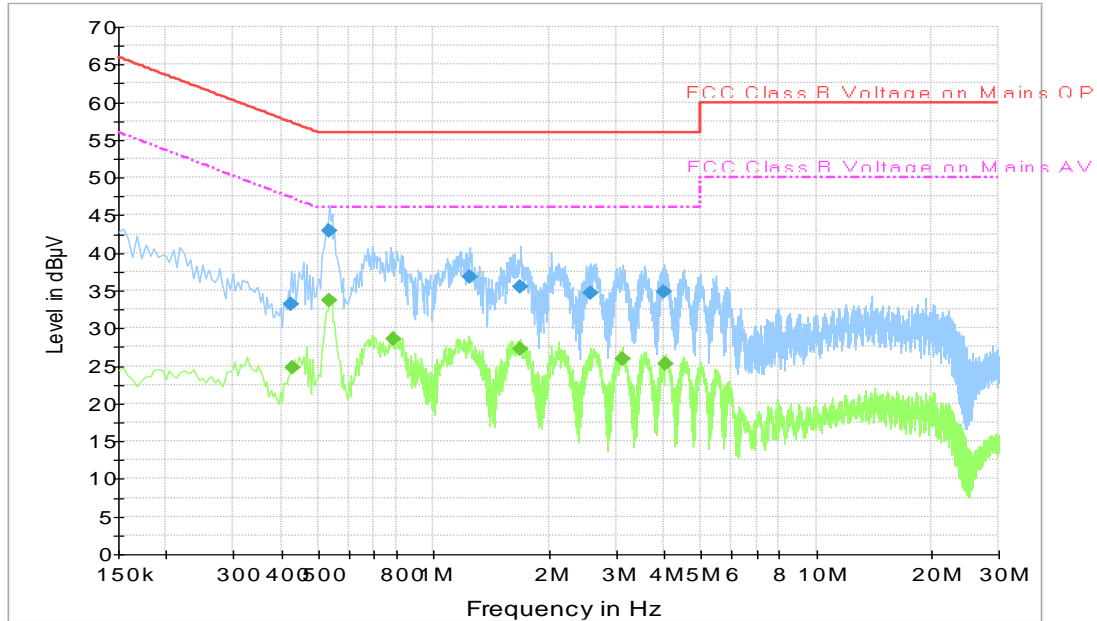


Fig.A.7.1 AC Power line Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.424500	33.2	L1	24.1	57.4
0.532500	43.0	L1	13.0	56.0
1.239000	36.7	L1	19.3	56.0
1.689000	35.4	L1	20.6	56.0
2.562000	34.7	L1	21.3	56.0
3.988500	34.8	L1	21.2	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.429000	24.8	L1	22.4	47.3
0.532500	33.7	L1	12.3	46.0
0.789000	28.5	L1	17.5	46.0
1.689000	27.3	L1	18.7	46.0
3.111000	25.9	L1	20.1	46.0
4.029000	25.3	L1	20.7	46.0

Idle:

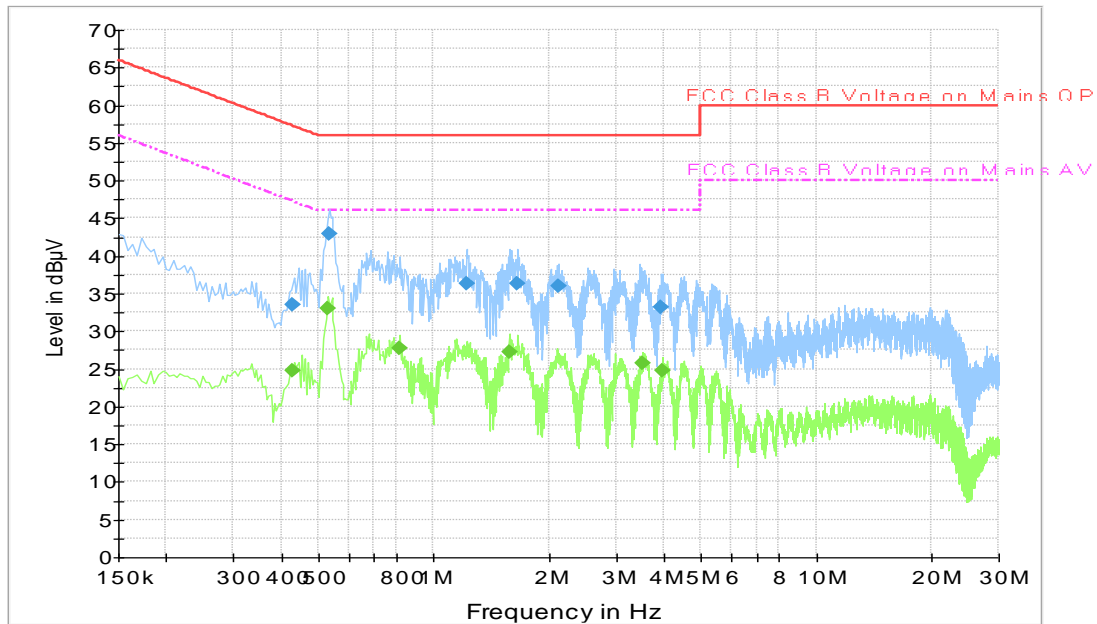


Fig.A.7.2 AC Power line Conducted Emission-Idle

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.429000	33.6	L1	23.7	57.3
0.532500	42.9	L1	13.1	56.0
1.216500	36.3	L1	19.7	56.0
1.662000	36.3	L1	19.7	56.0
2.125500	36.0	L1	20.0	56.0
3.943500	33.1	L1	22.9	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.429000	24.7	L1	22.5	47.3
0.528000	33.0	L1	13.0	46.0
0.816000	27.8	L1	18.2	46.0
1.576500	27.2	L1	18.8	46.0
3.525000	25.7	L1	20.3	46.0
3.966000	24.7	L1	21.3	46.0

Traffic: CBA0058AGAC7

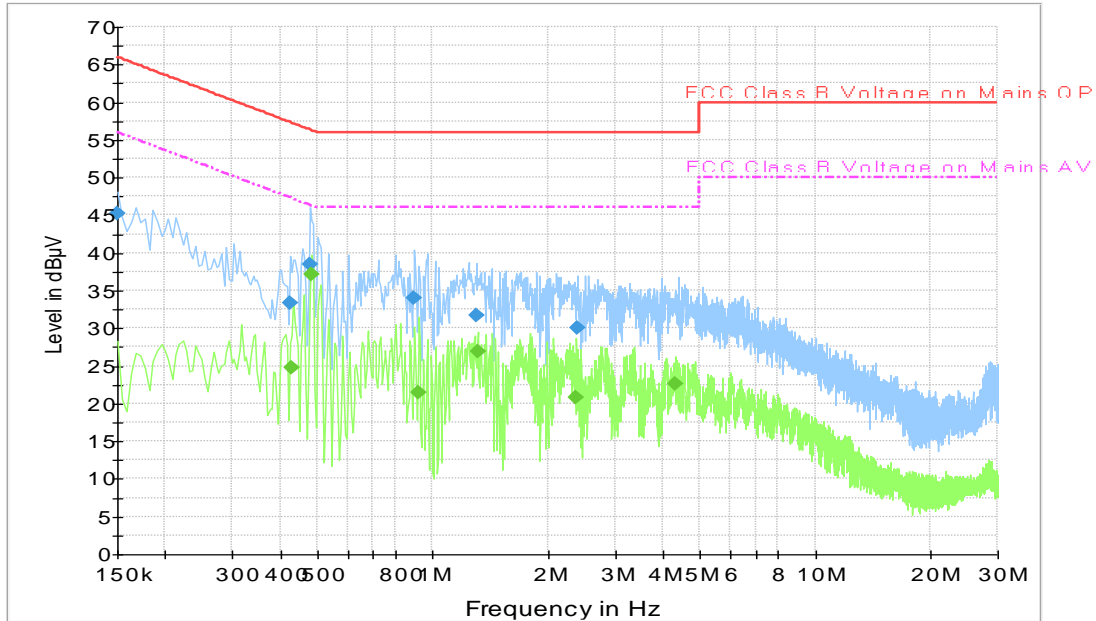


Fig.A.7.3 AC Power line Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.150000	45.2	L1	20.8	66.0
0.424500	33.3	N	24.1	57.4
0.478500	38.5	N	17.9	56.4
0.897000	34.0	N	22.0	56.0
1.302000	31.8	N	24.2	56.0
2.391000	30.0	N	26.0	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.429000	24.7	N	22.6	47.3
0.483000	37.1	L1	9.2	46.3
0.919500	21.4	L1	24.6	46.0
1.311000	27.0	L1	19.0	46.0
2.377500	20.8	L1	25.2	46.0
4.321500	22.6	L1	23.4	46.0