

Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)

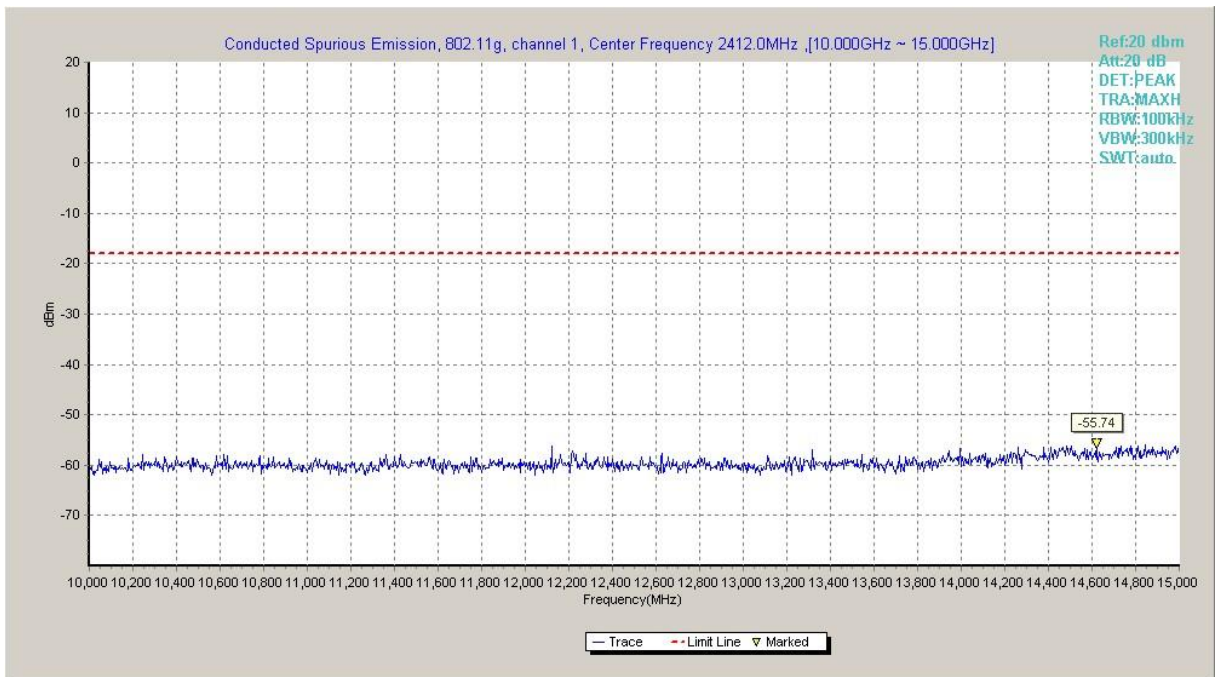


Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

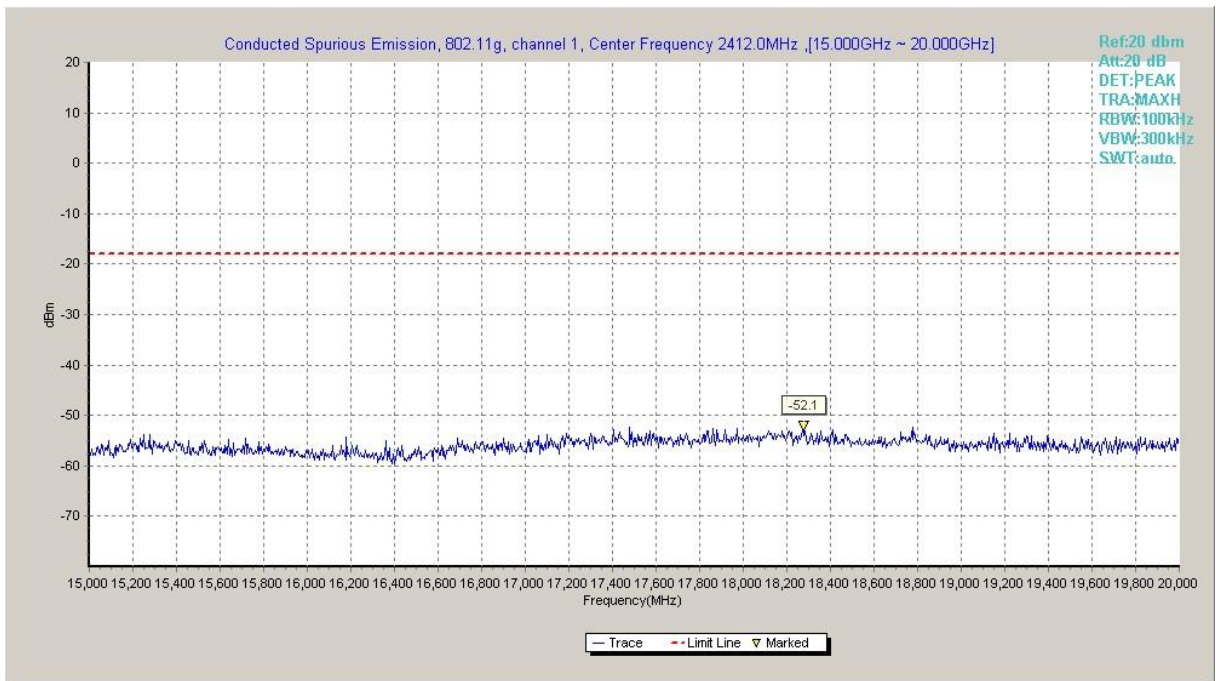


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

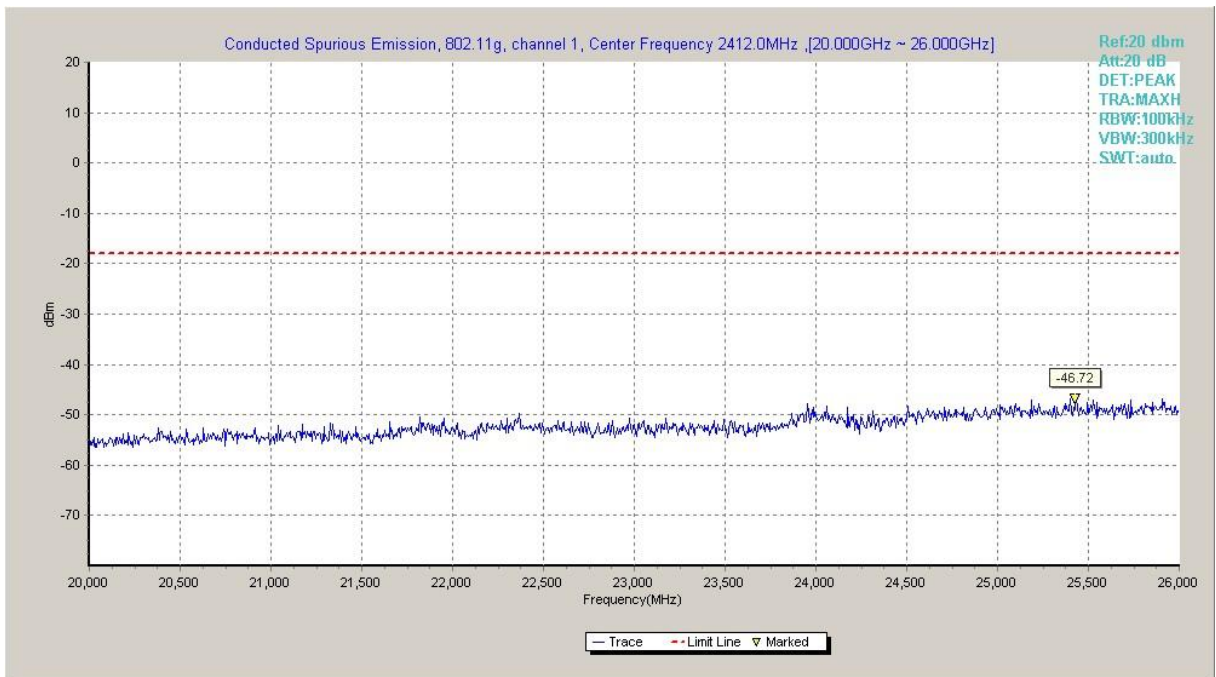


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

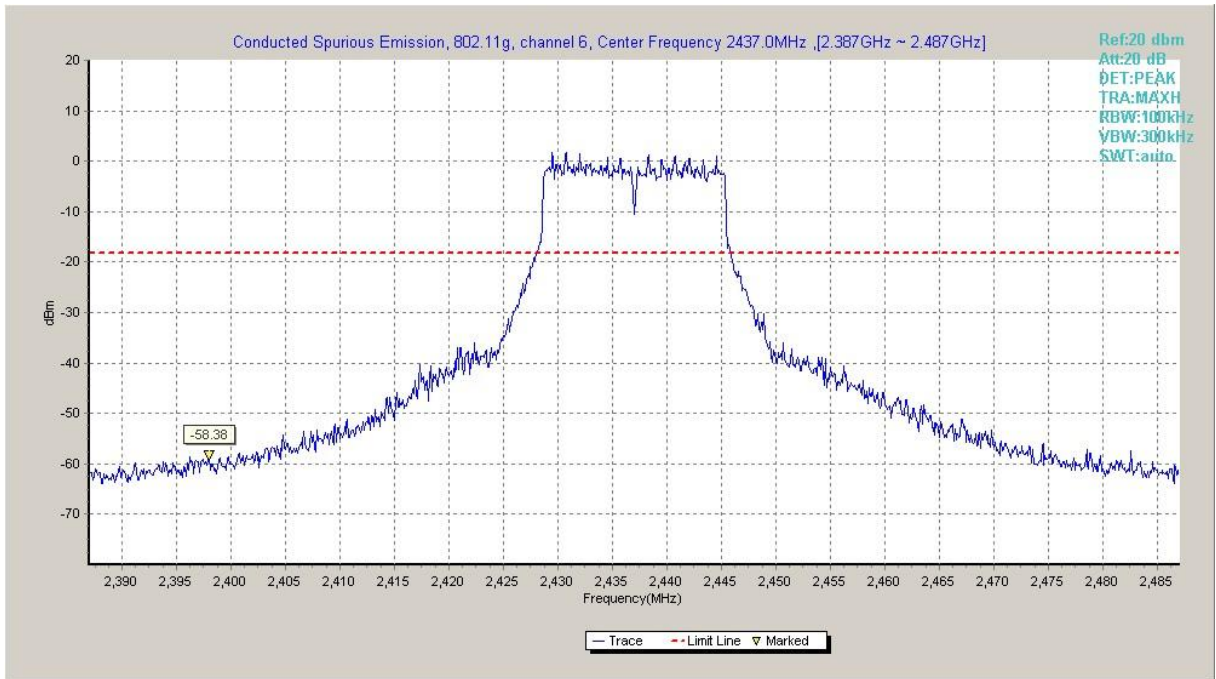


Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

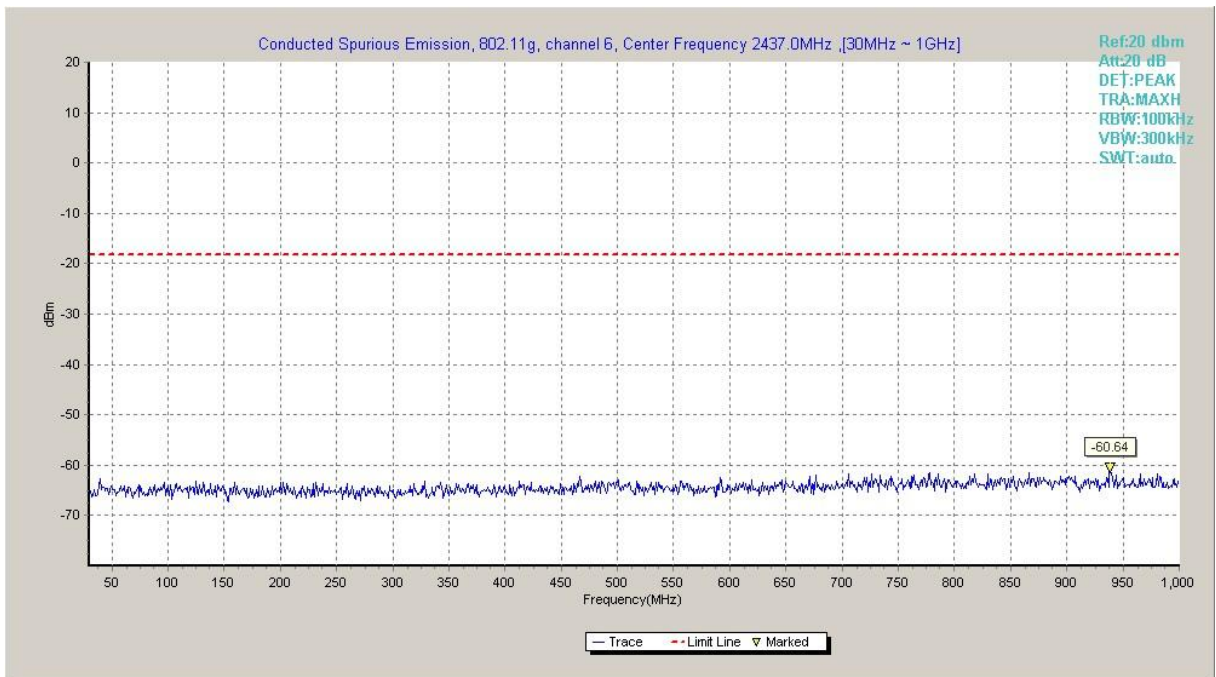


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

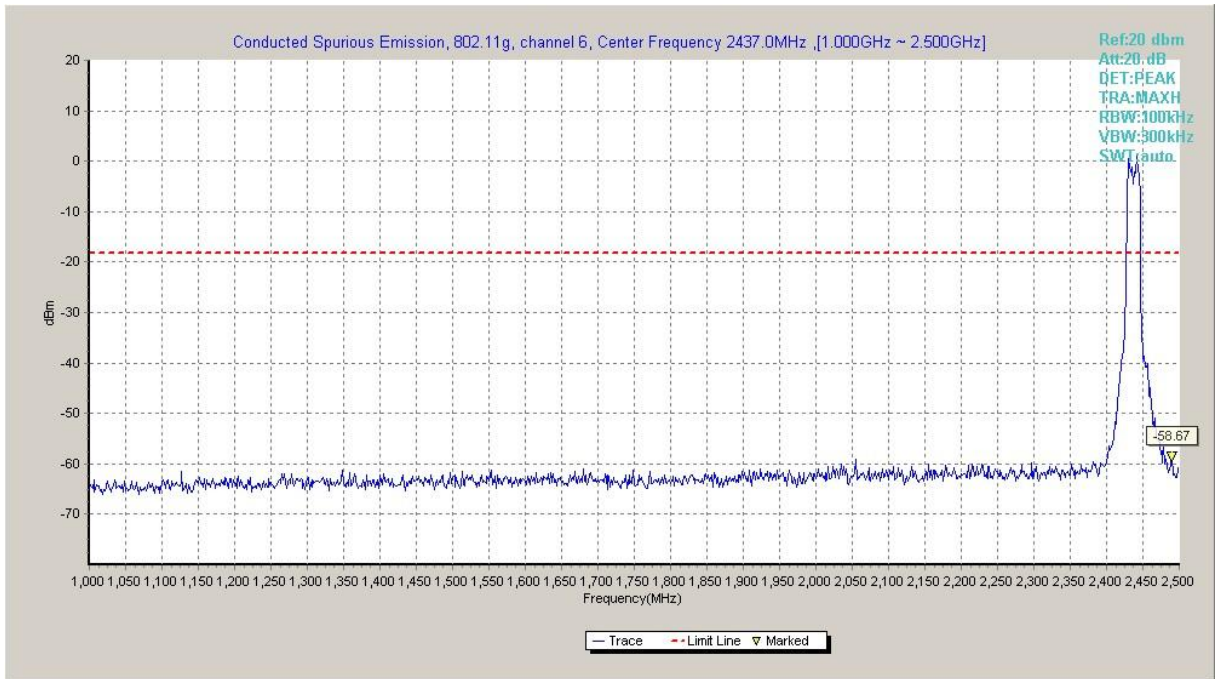


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

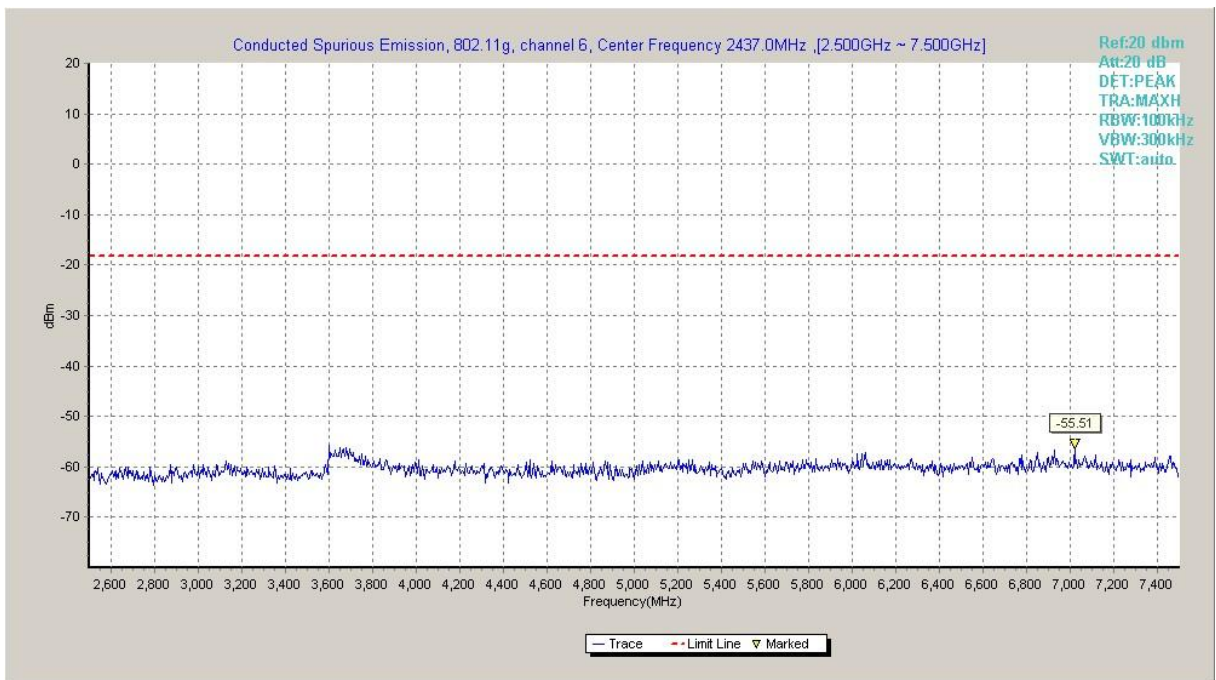


Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

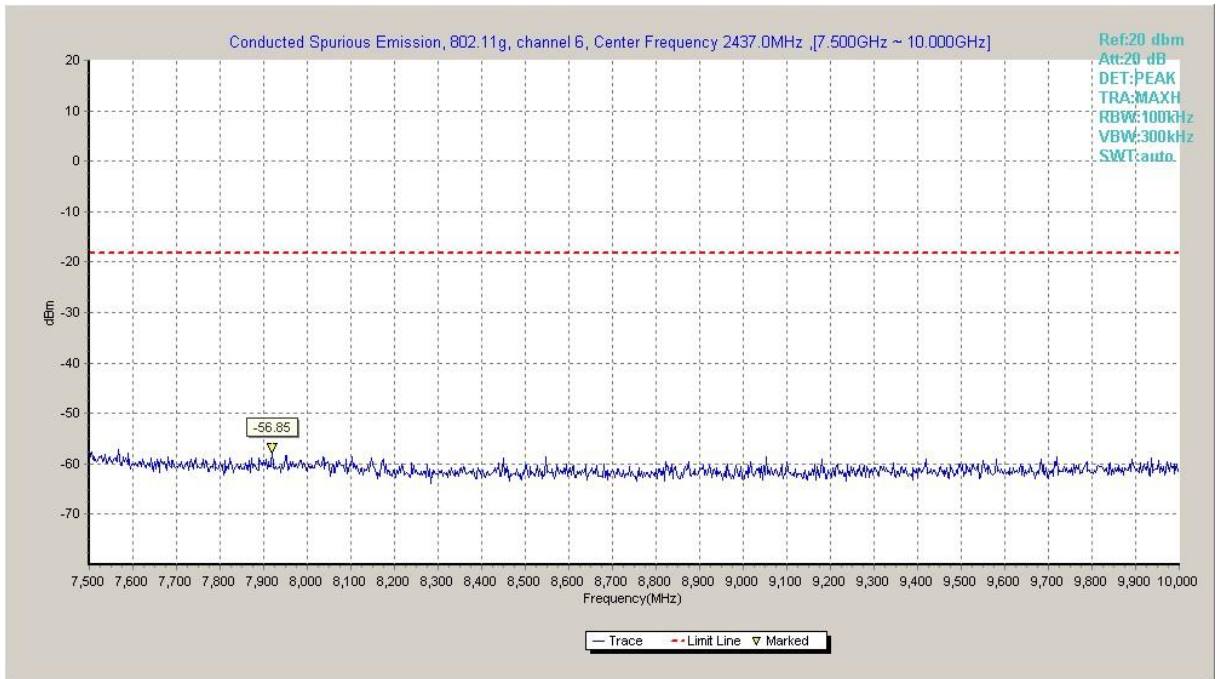


Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

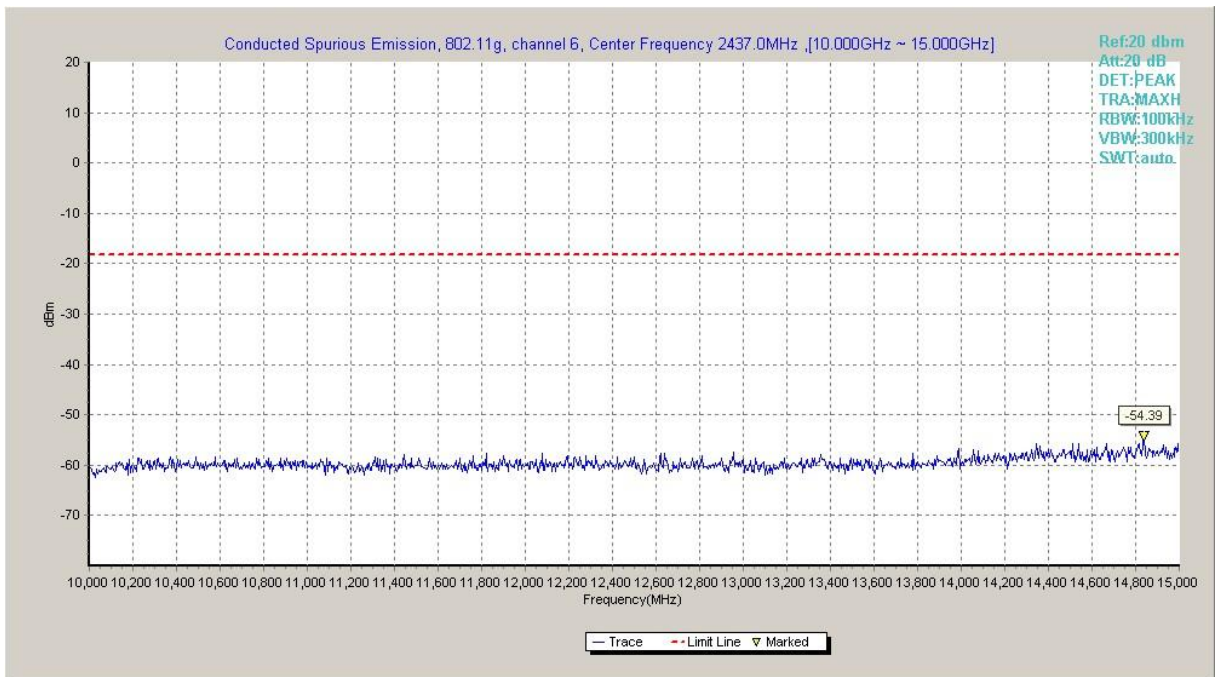


Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)

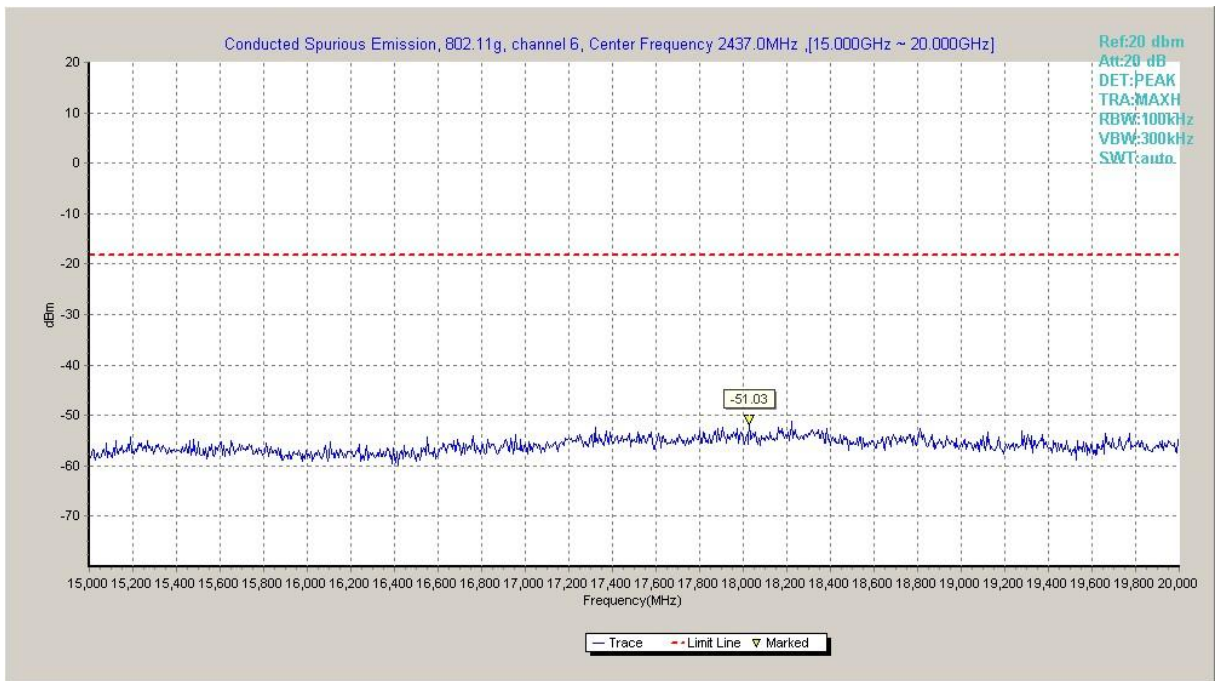


Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)

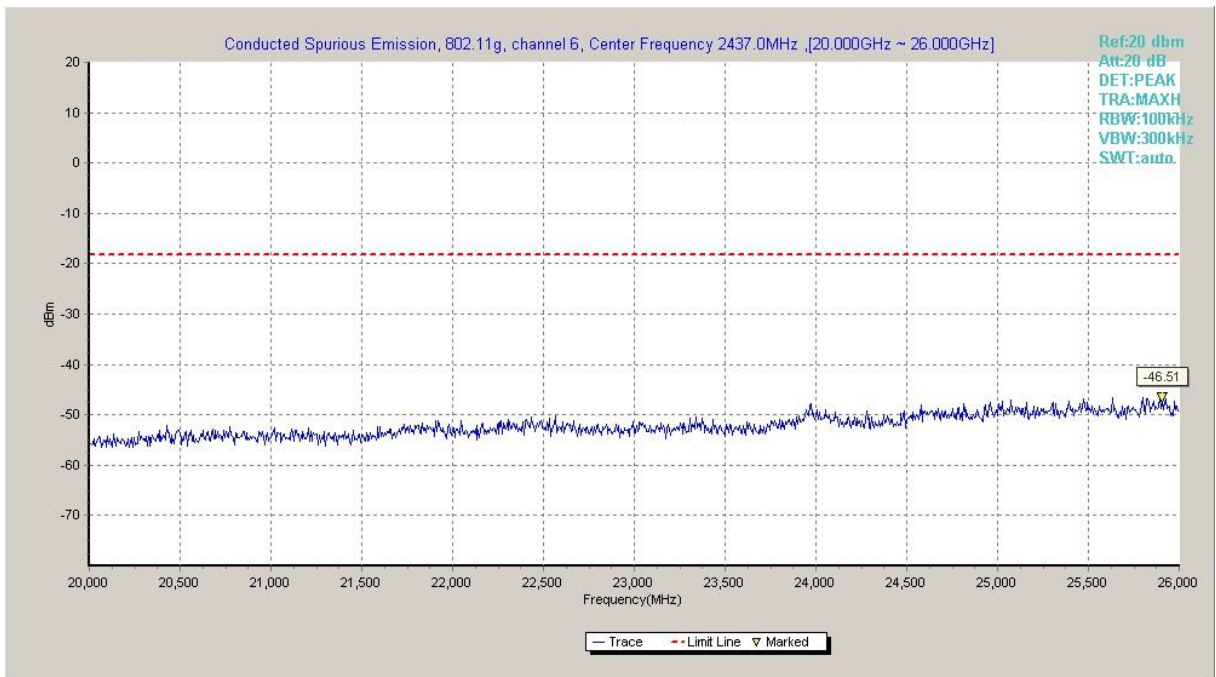


Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)

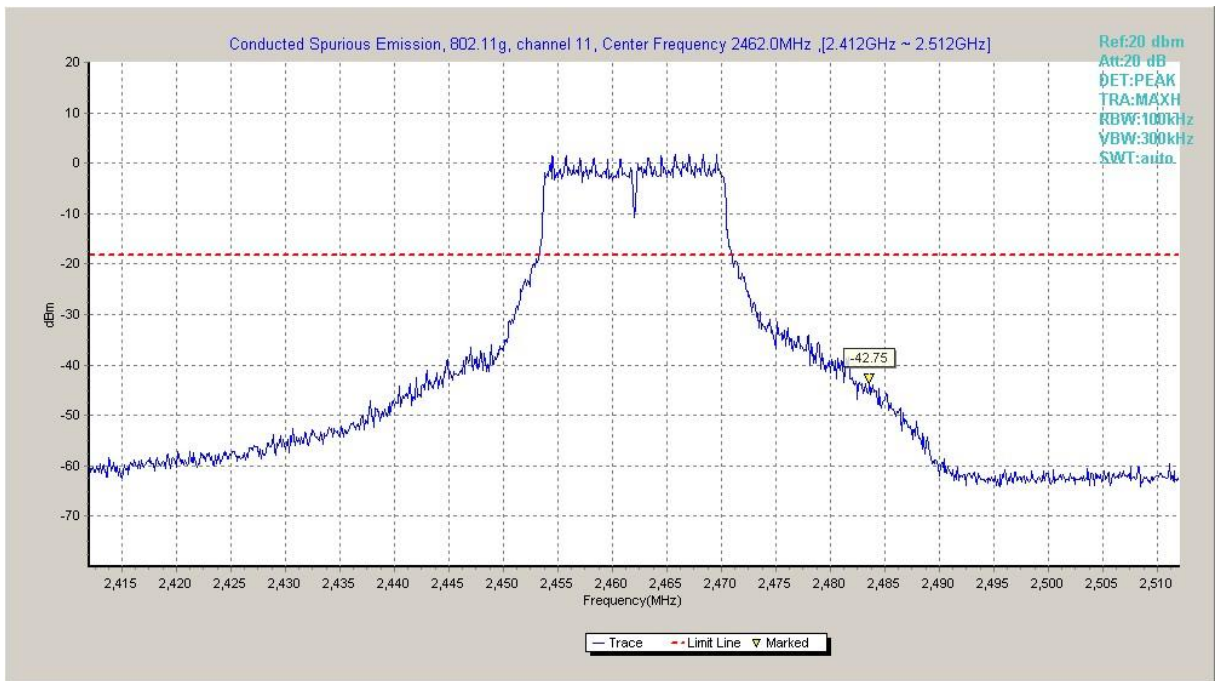


Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

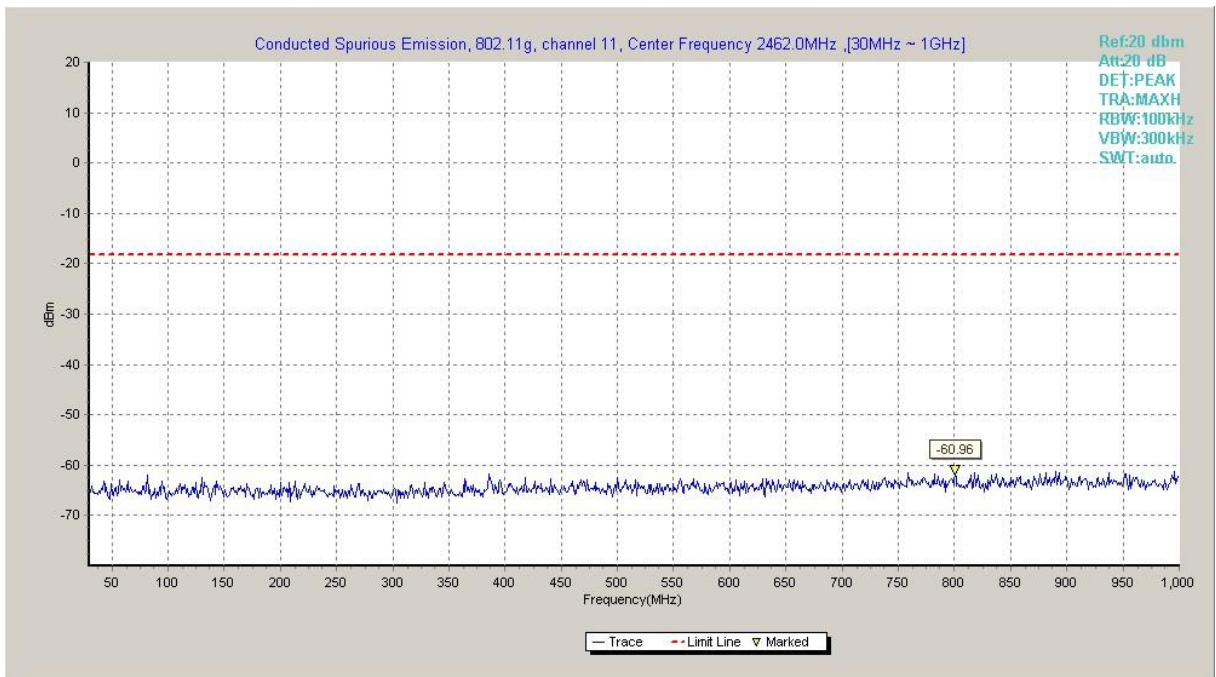


Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)

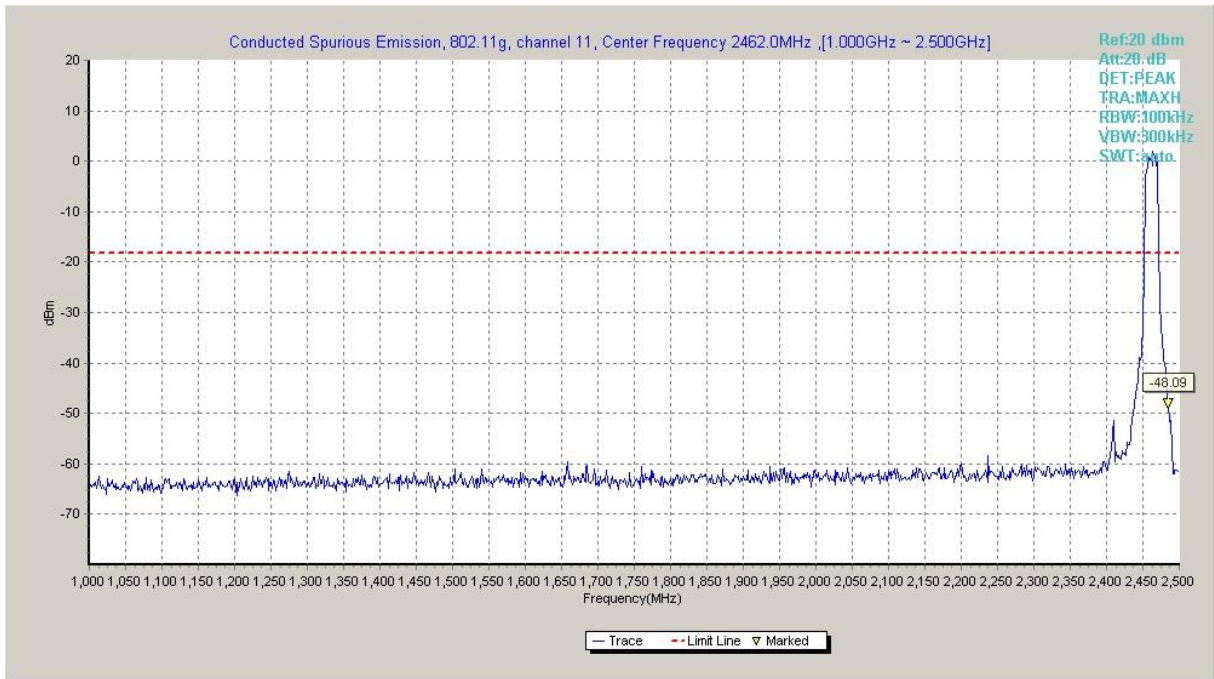


Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)

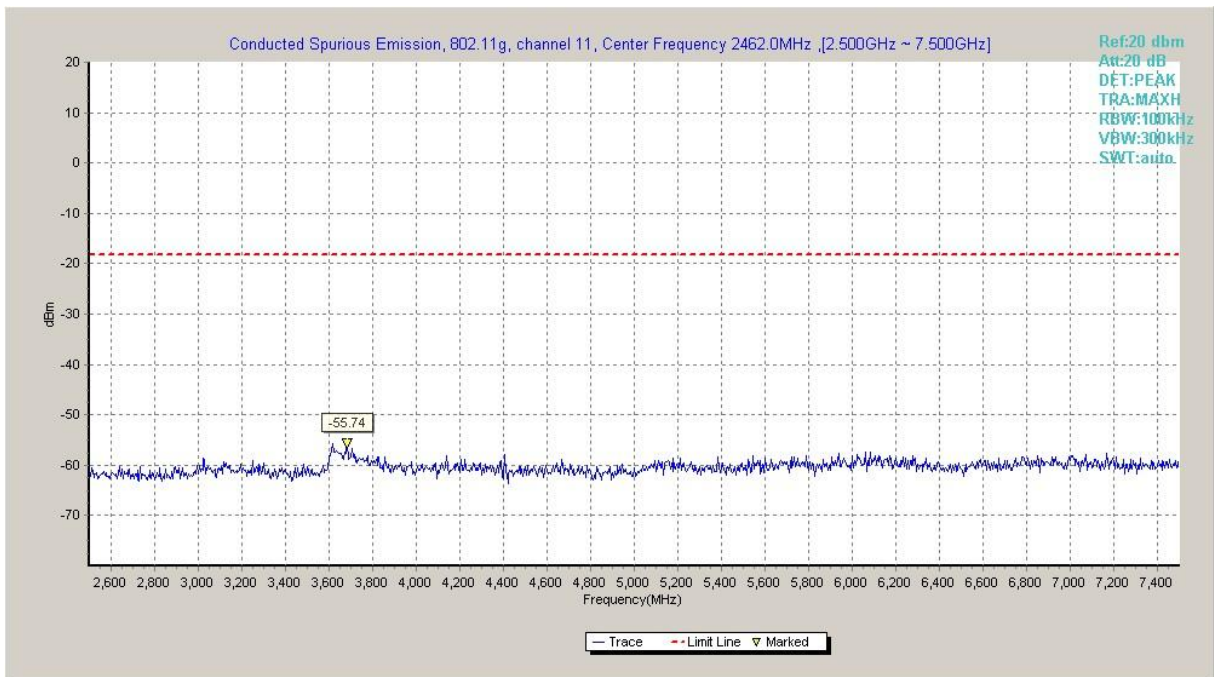


Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)

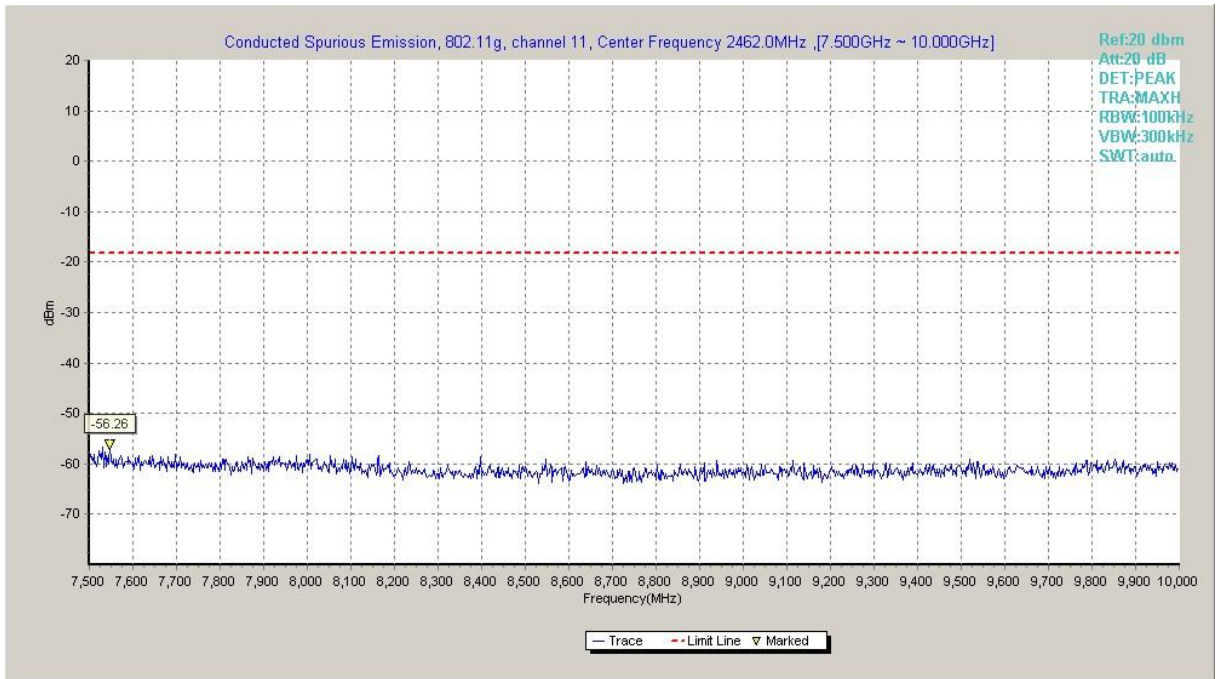


Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)

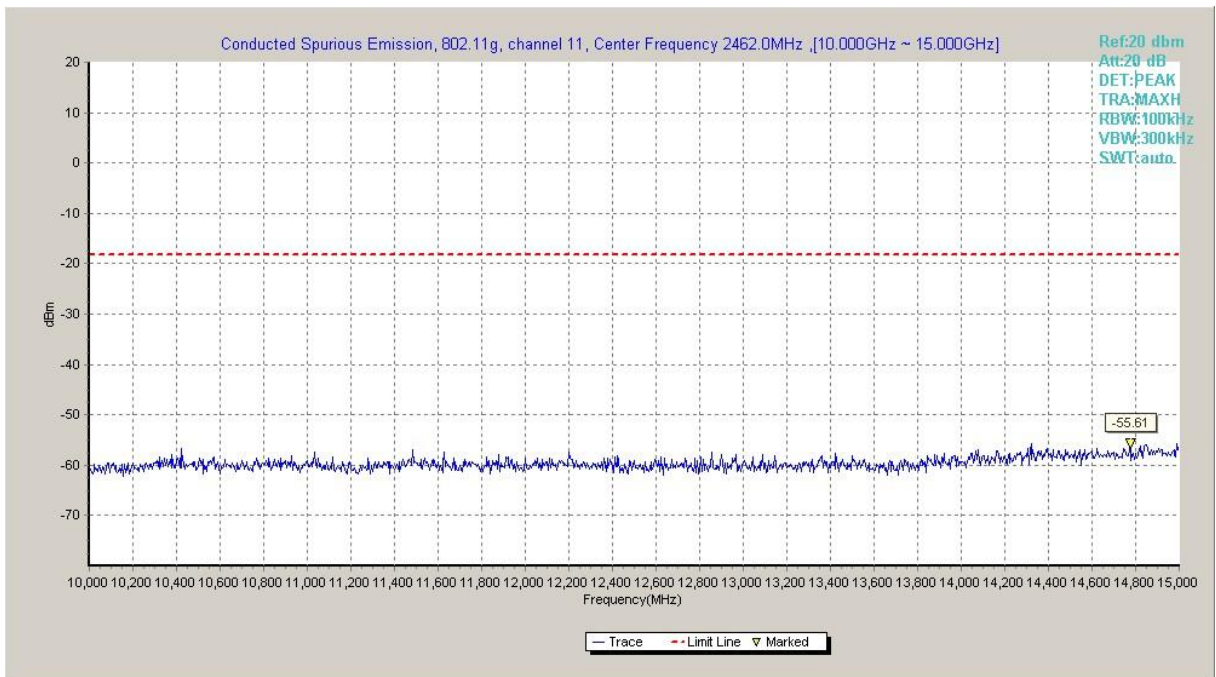


Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)

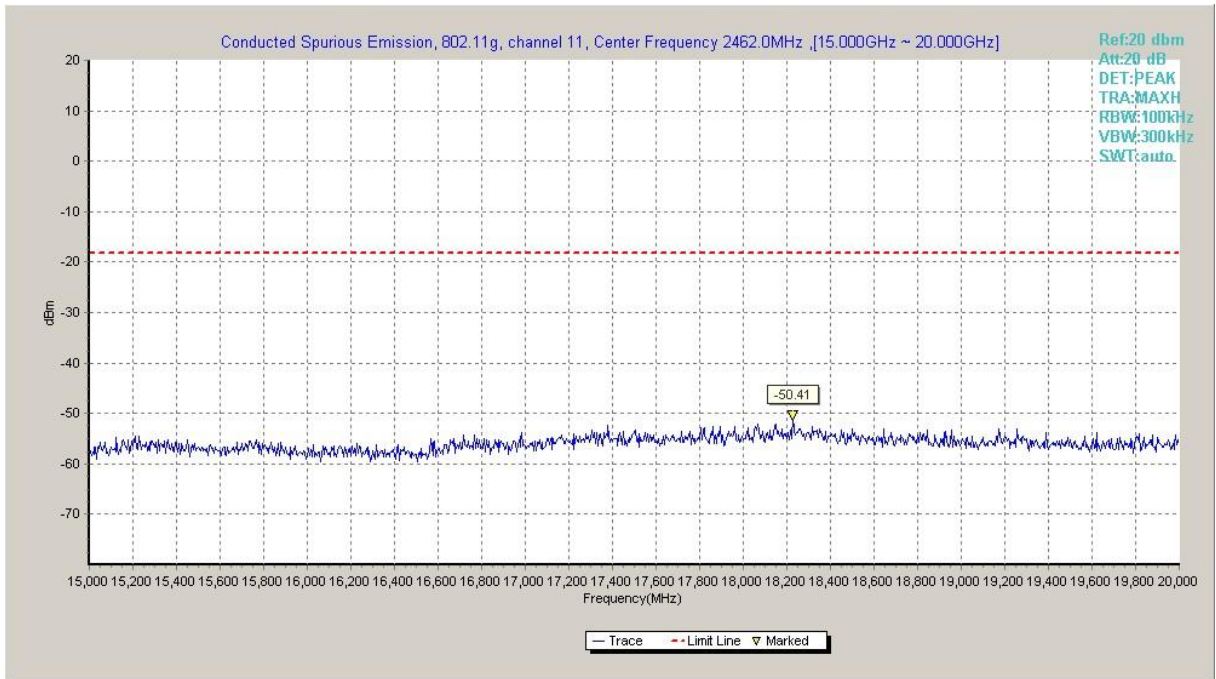


Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)

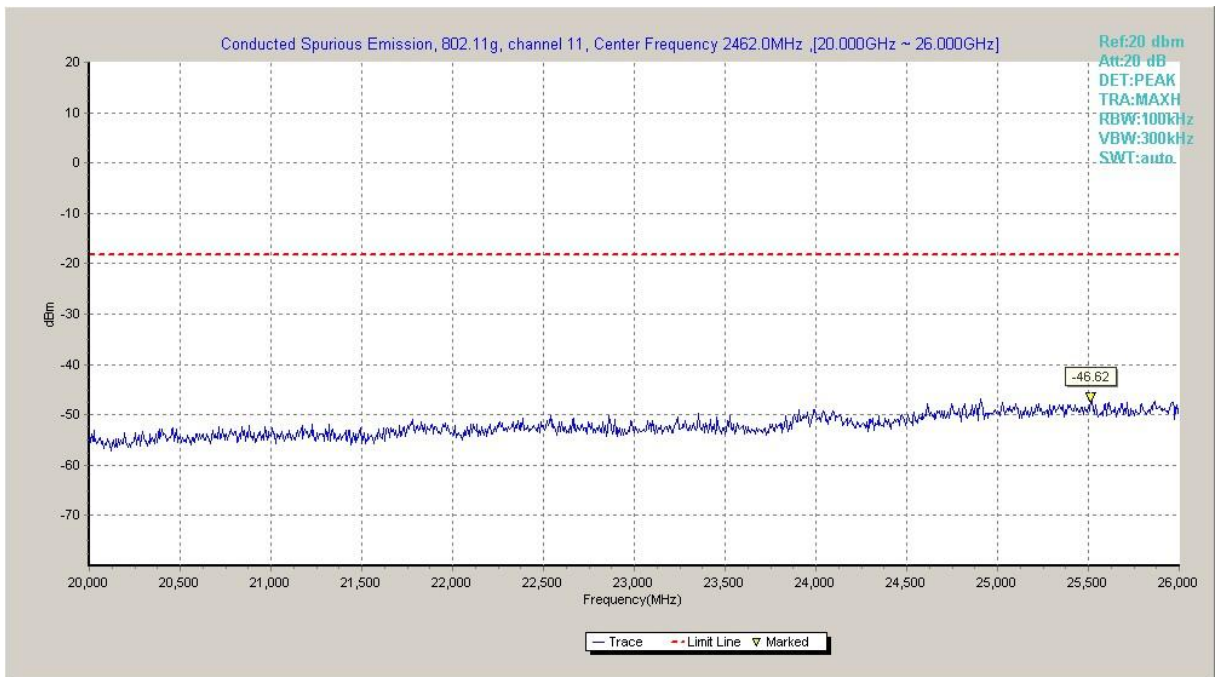


Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)

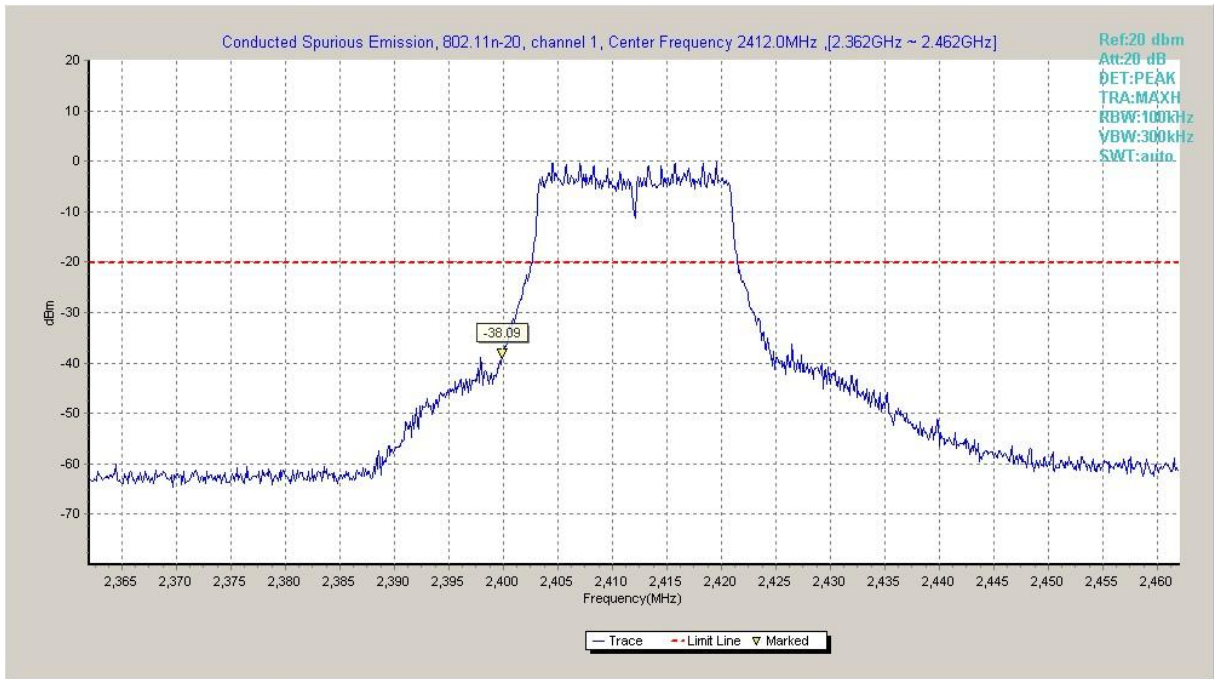


Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)

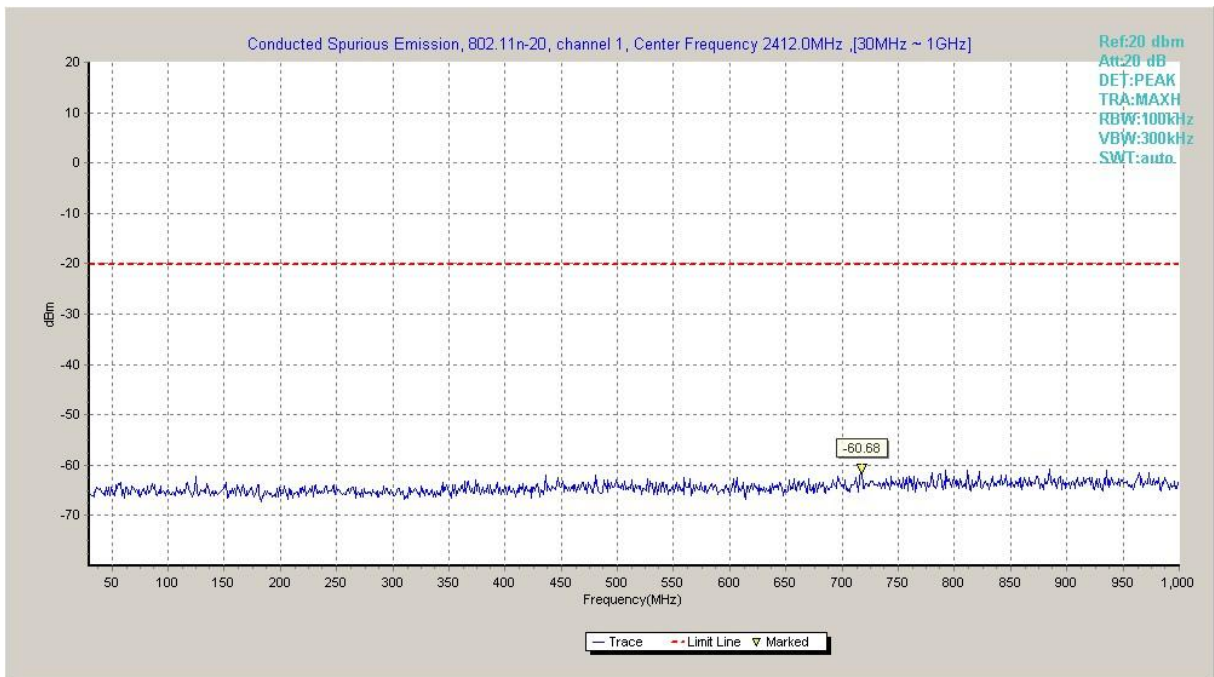


Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)

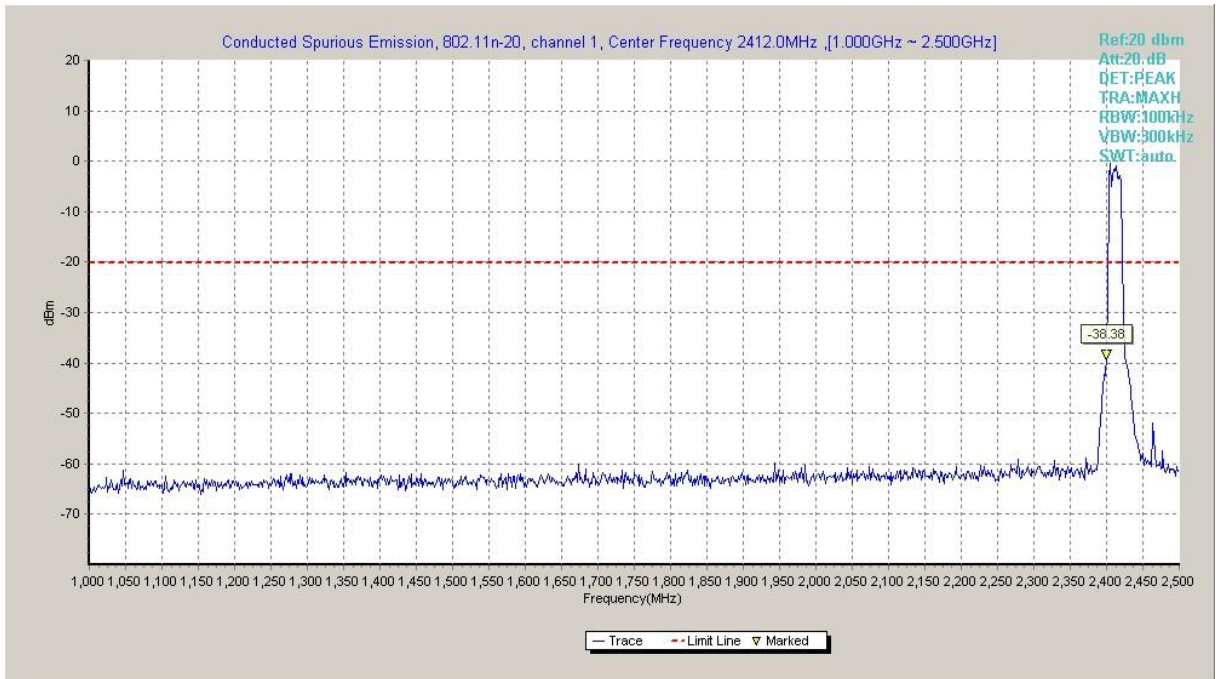


Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

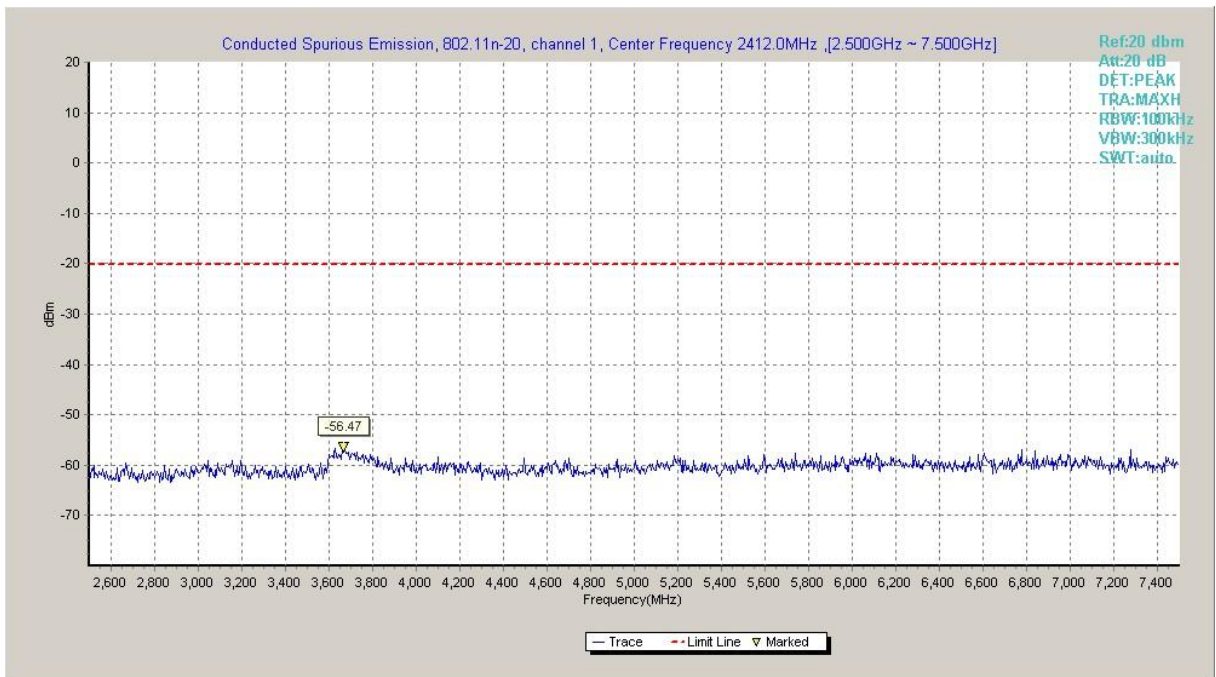


Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

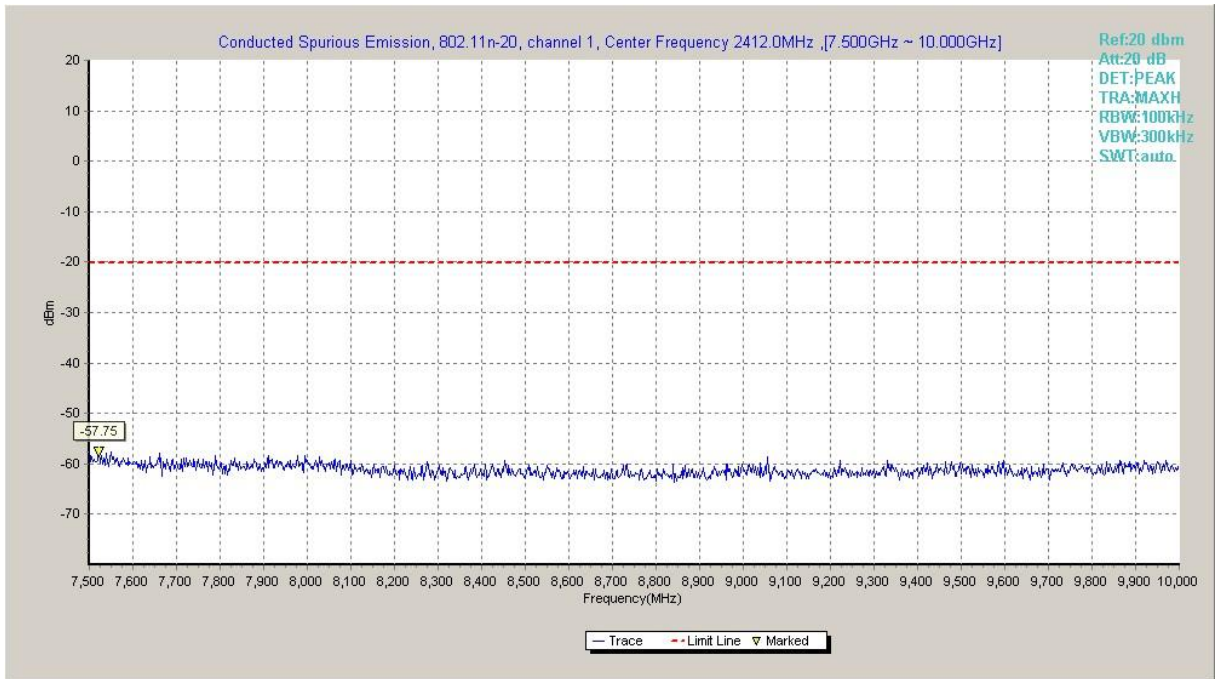


Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

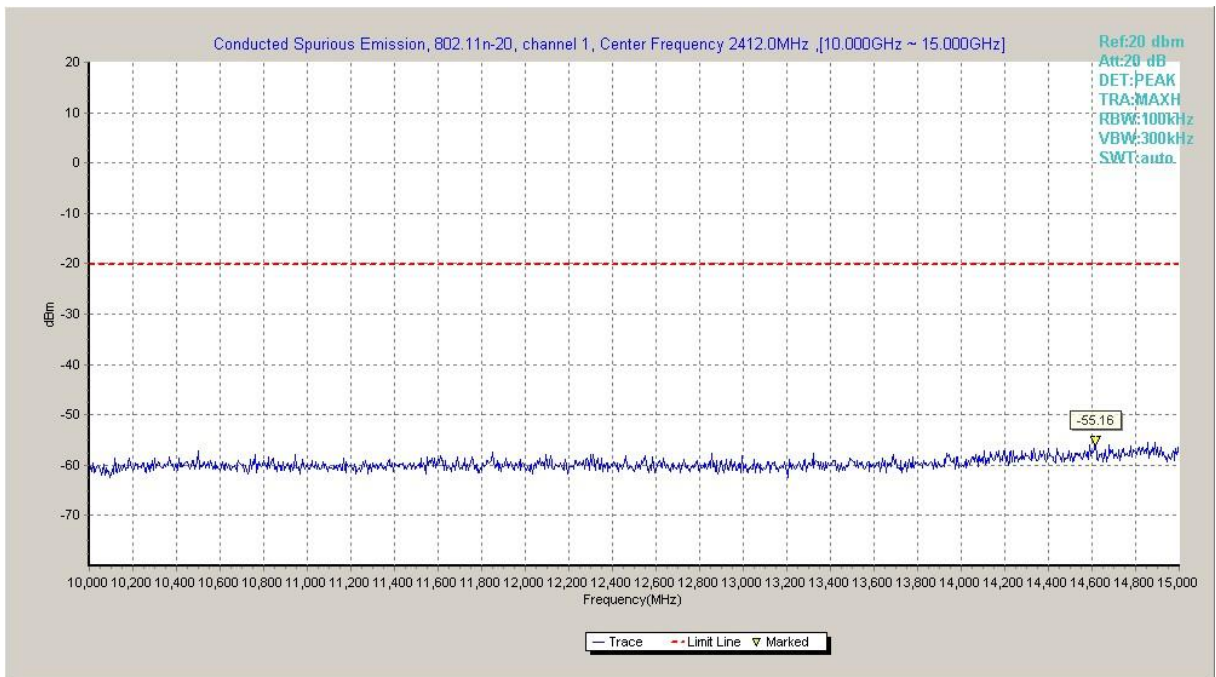


Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)

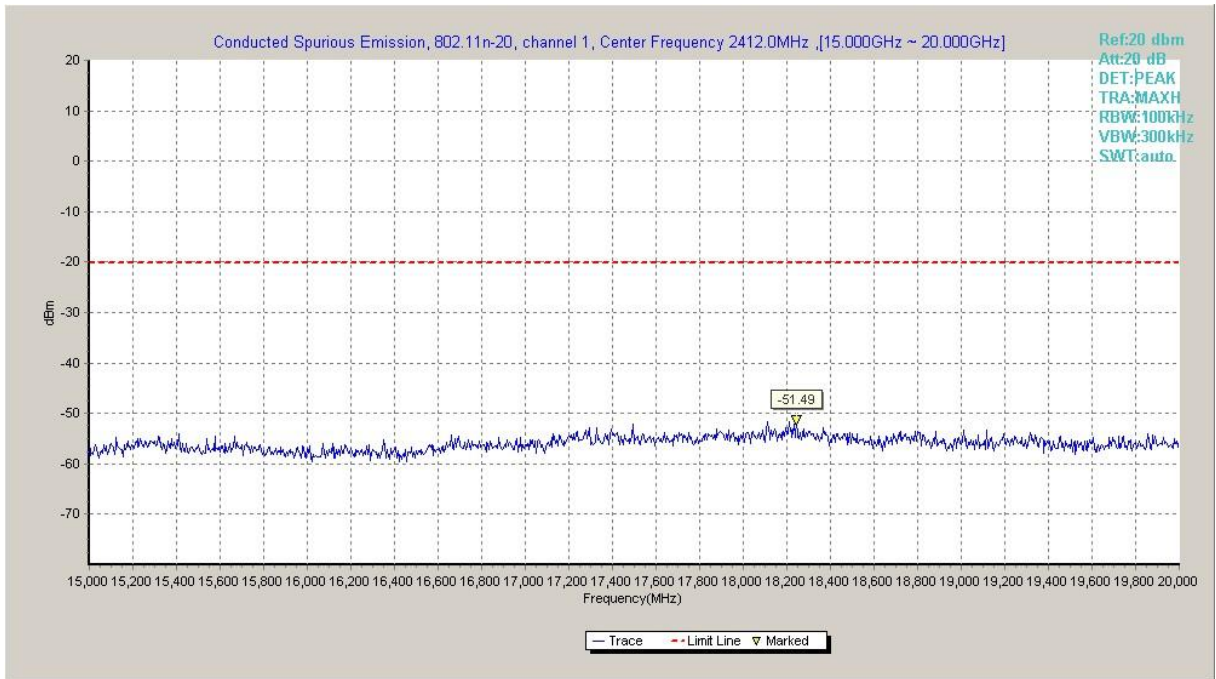


Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)

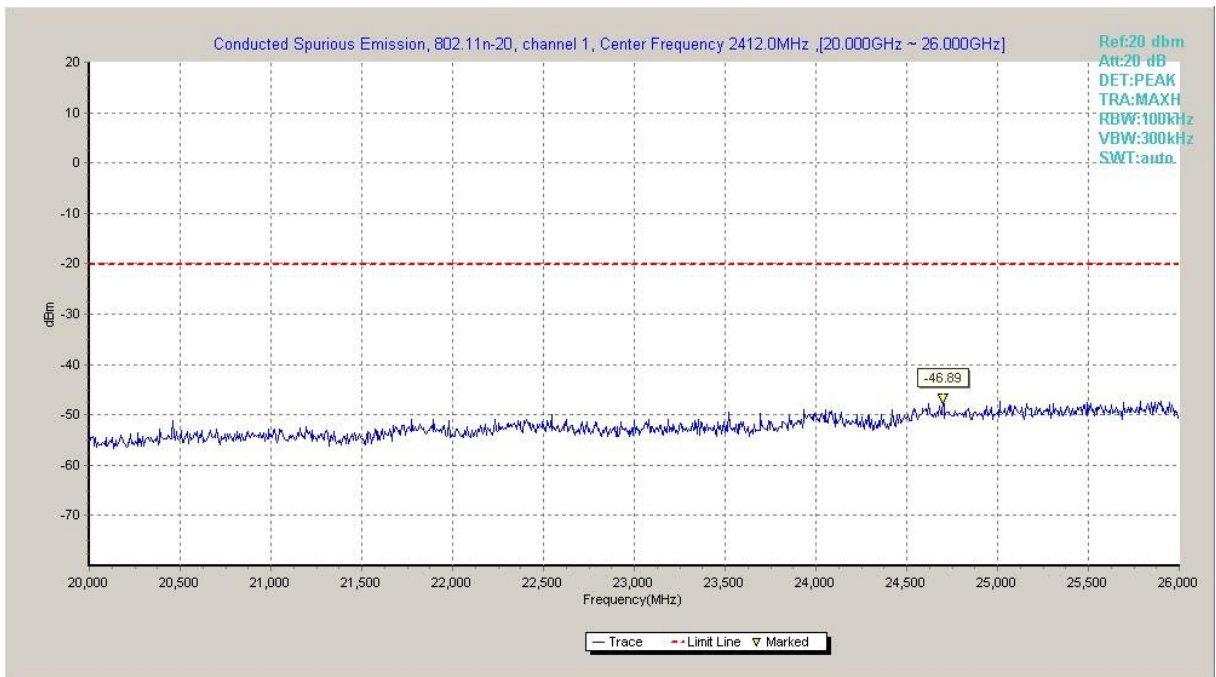


Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)

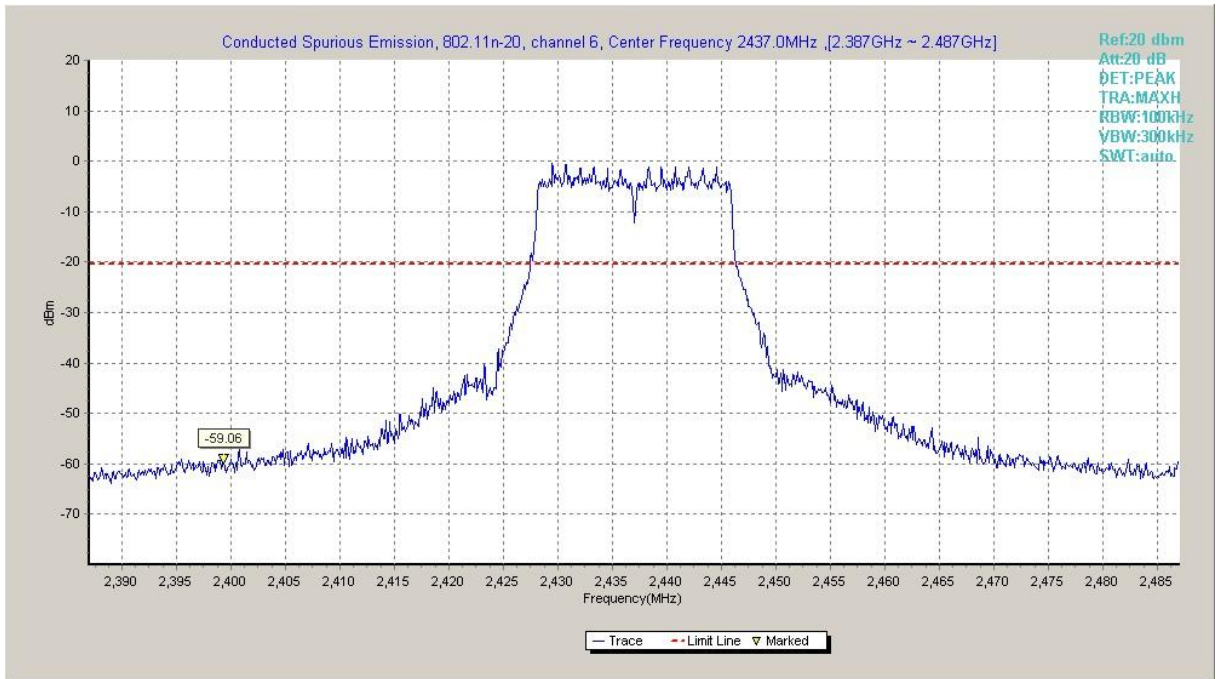


Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

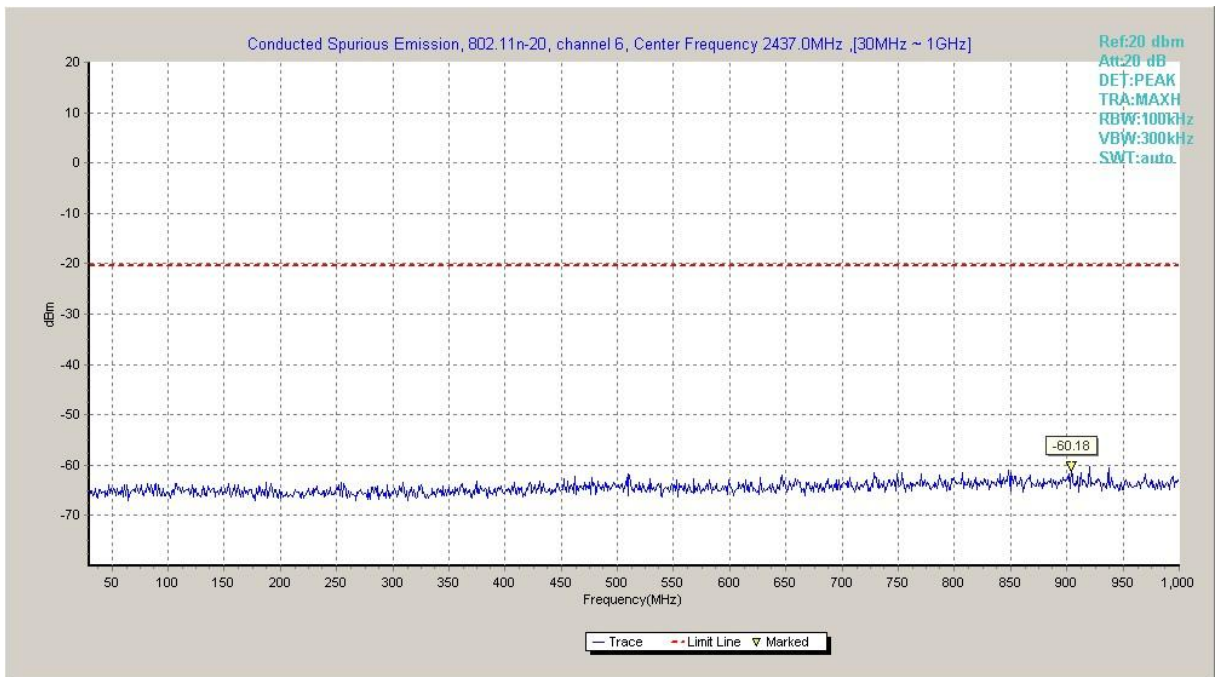


Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

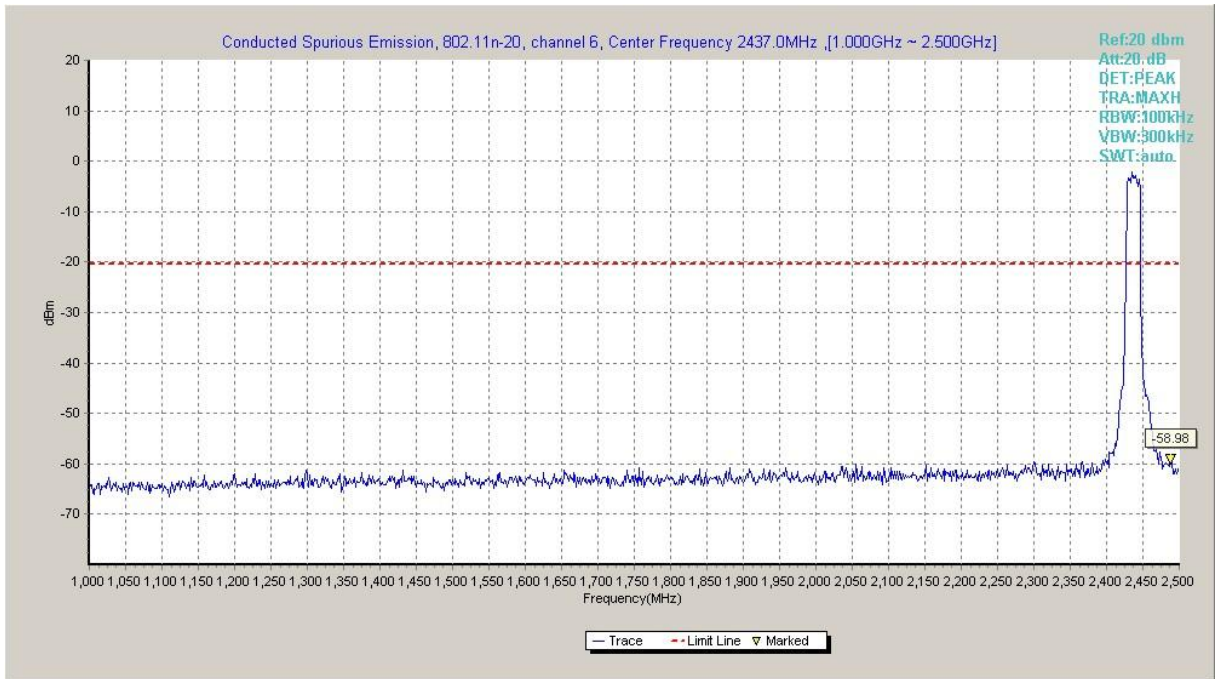


Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

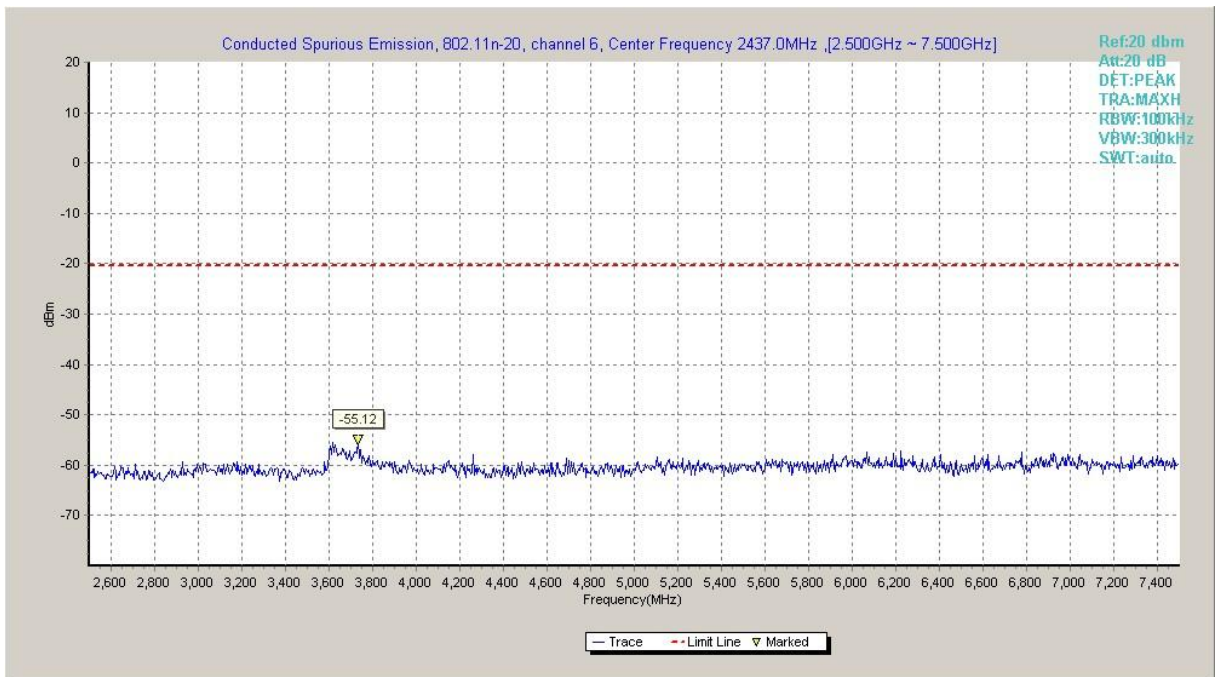


Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

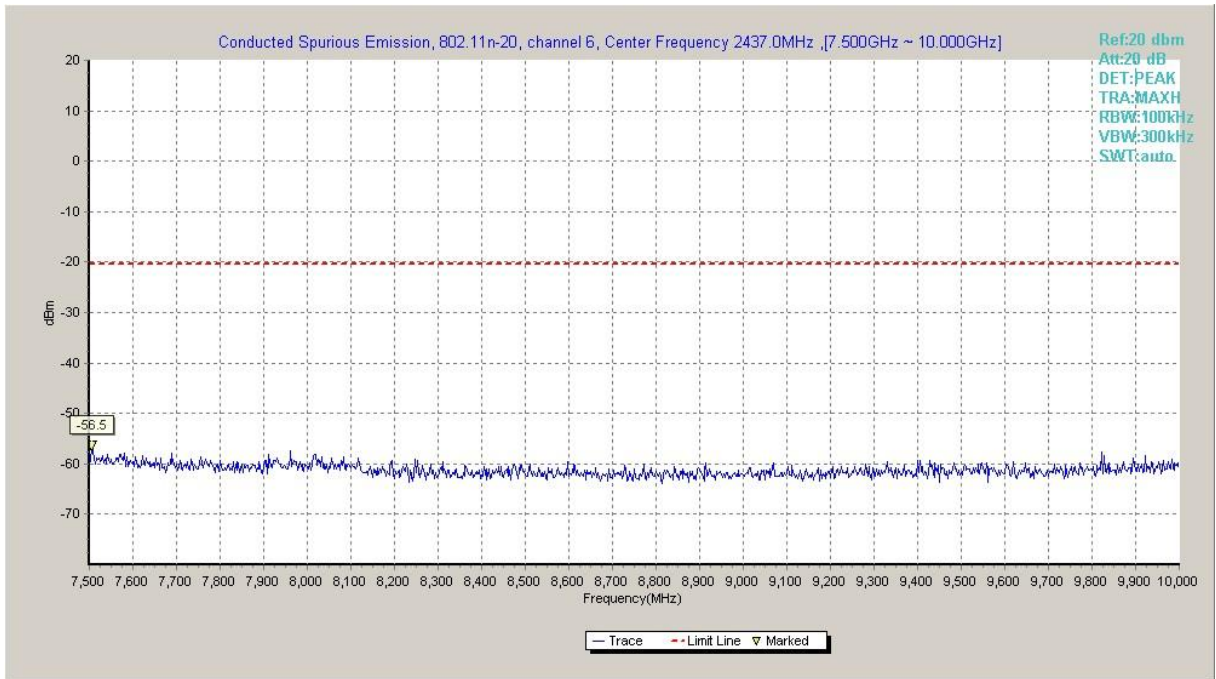


Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

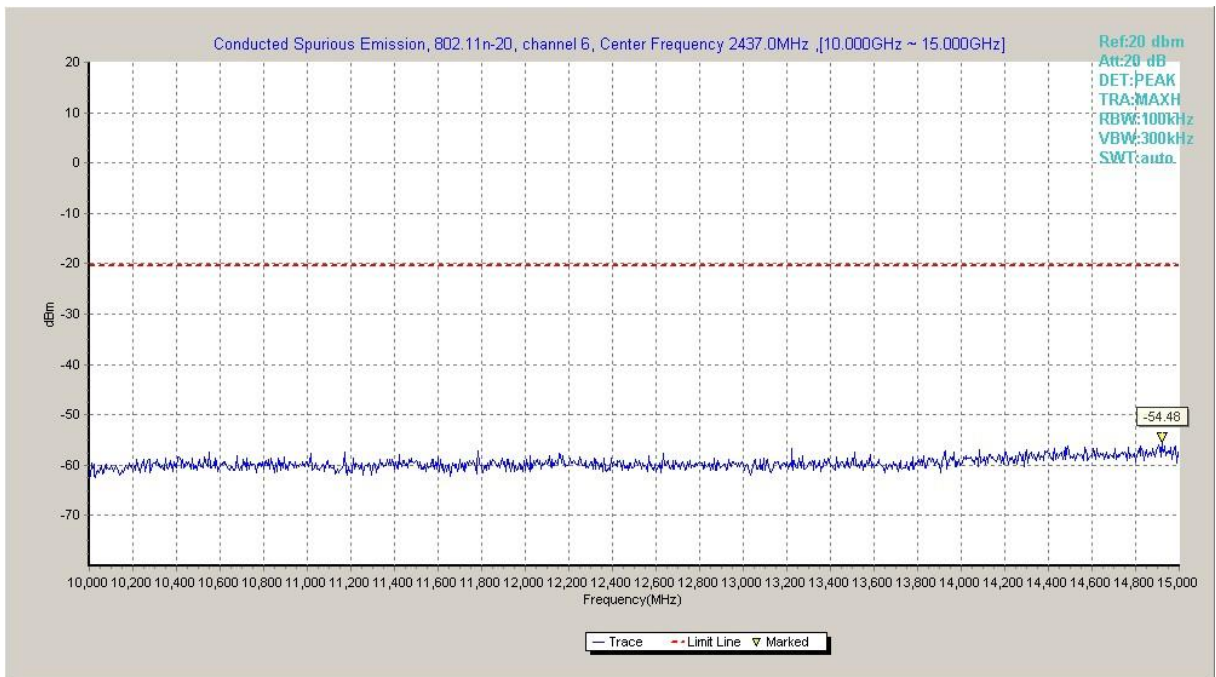


Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

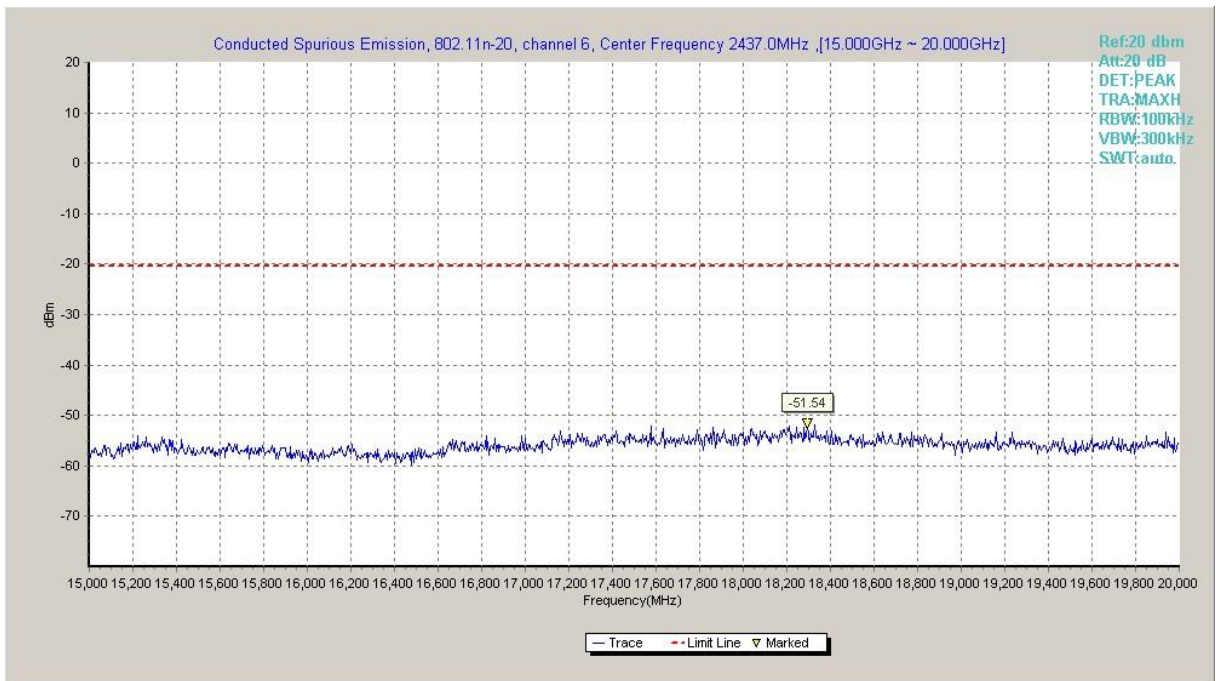


Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

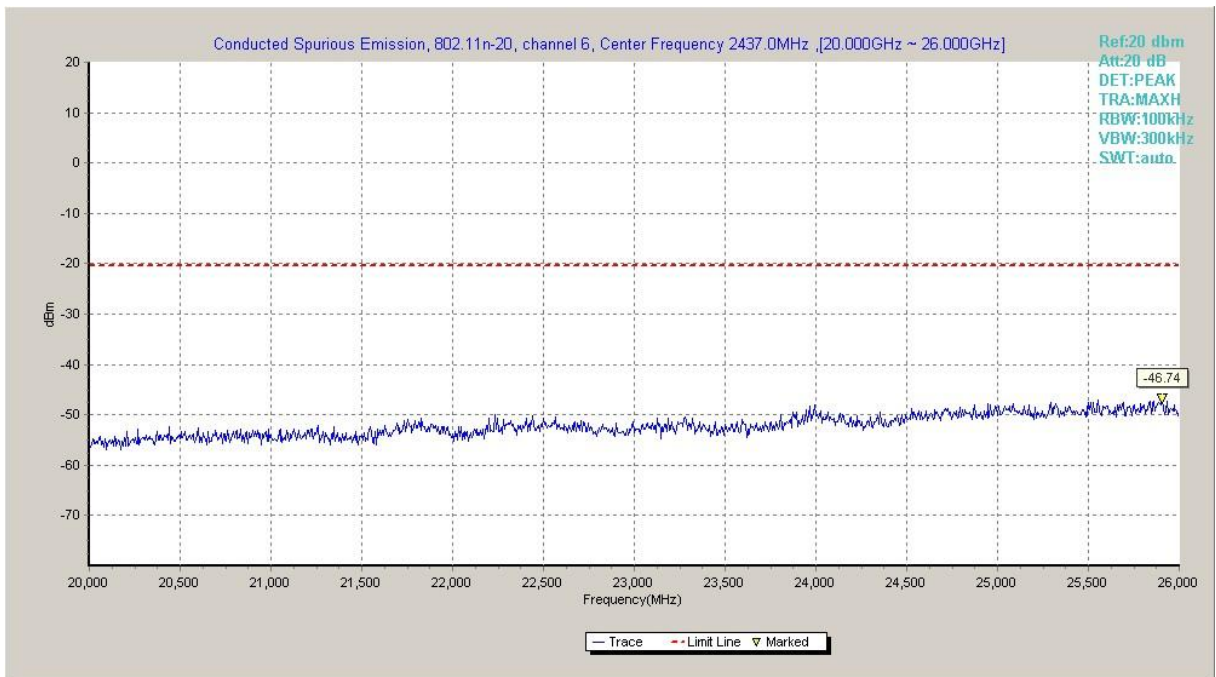


Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

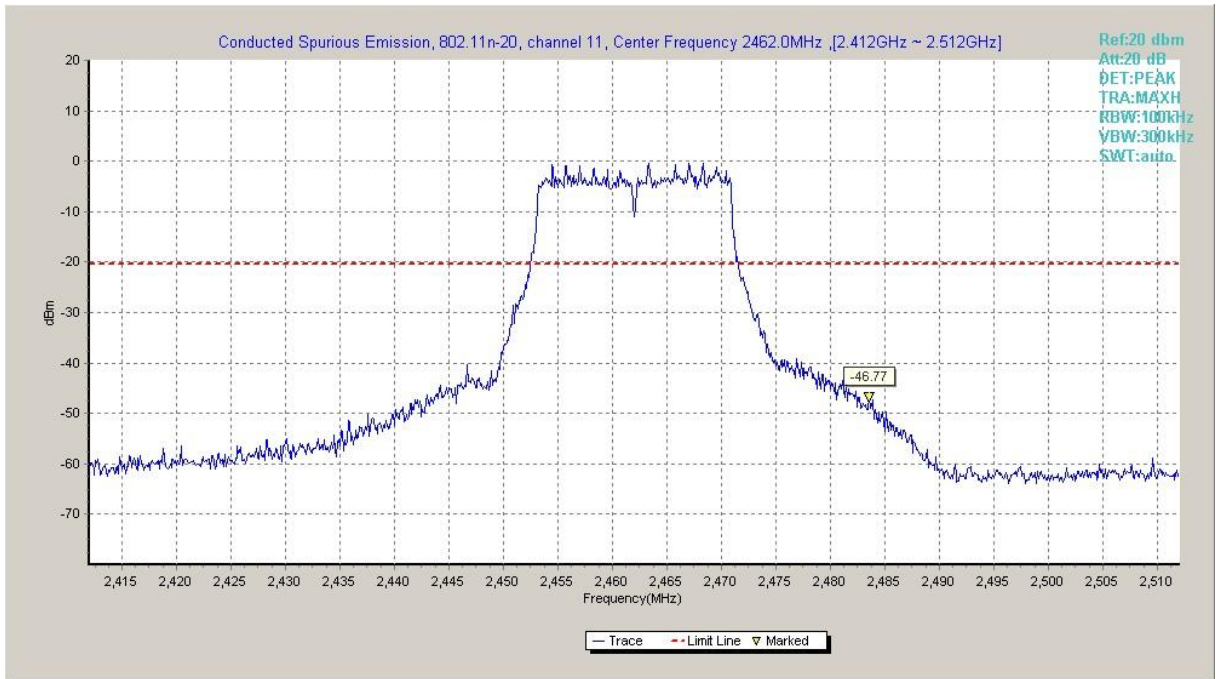


Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

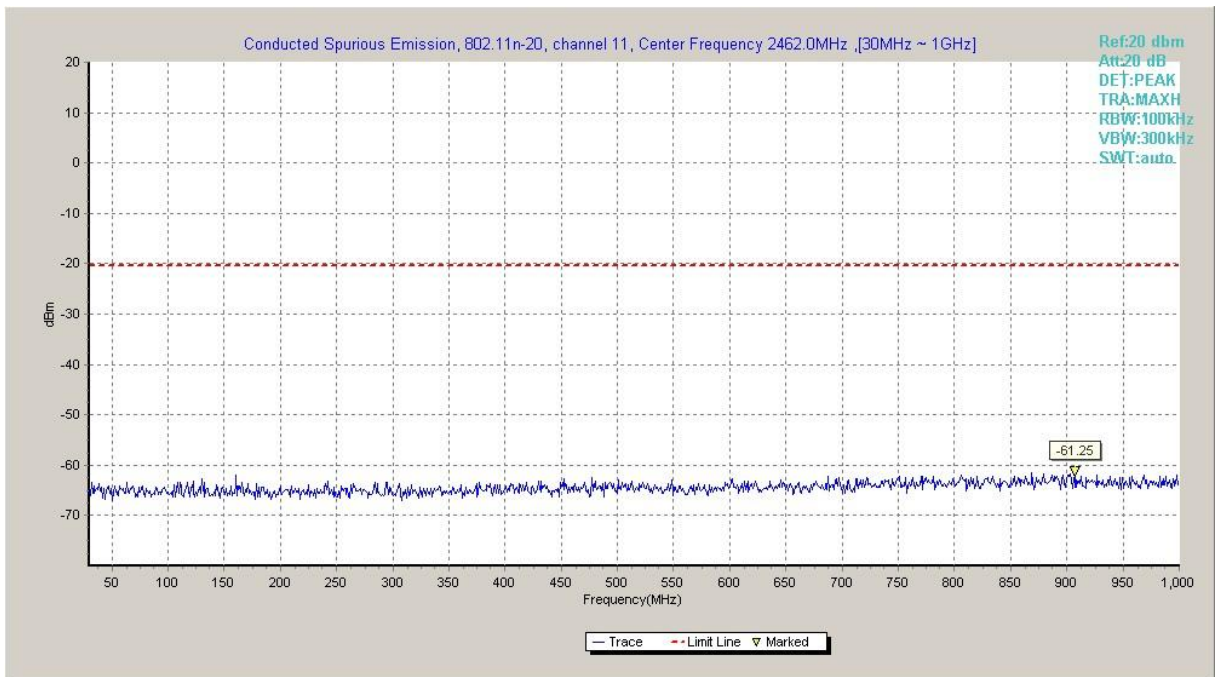


Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

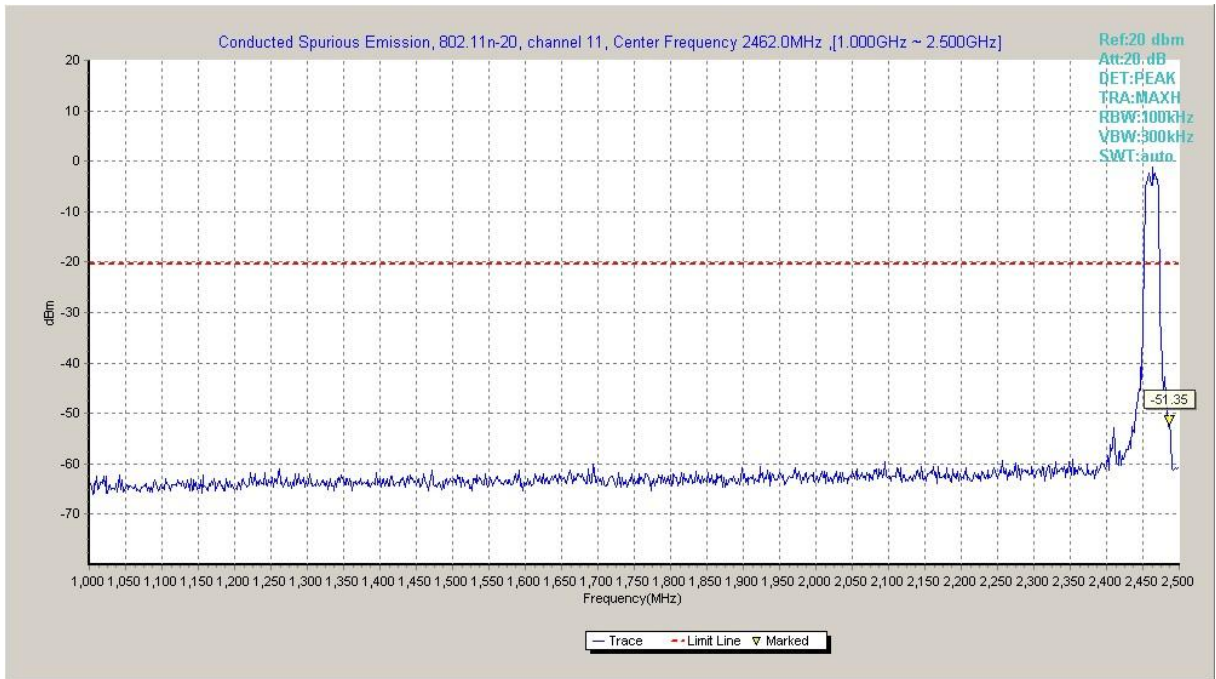


Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

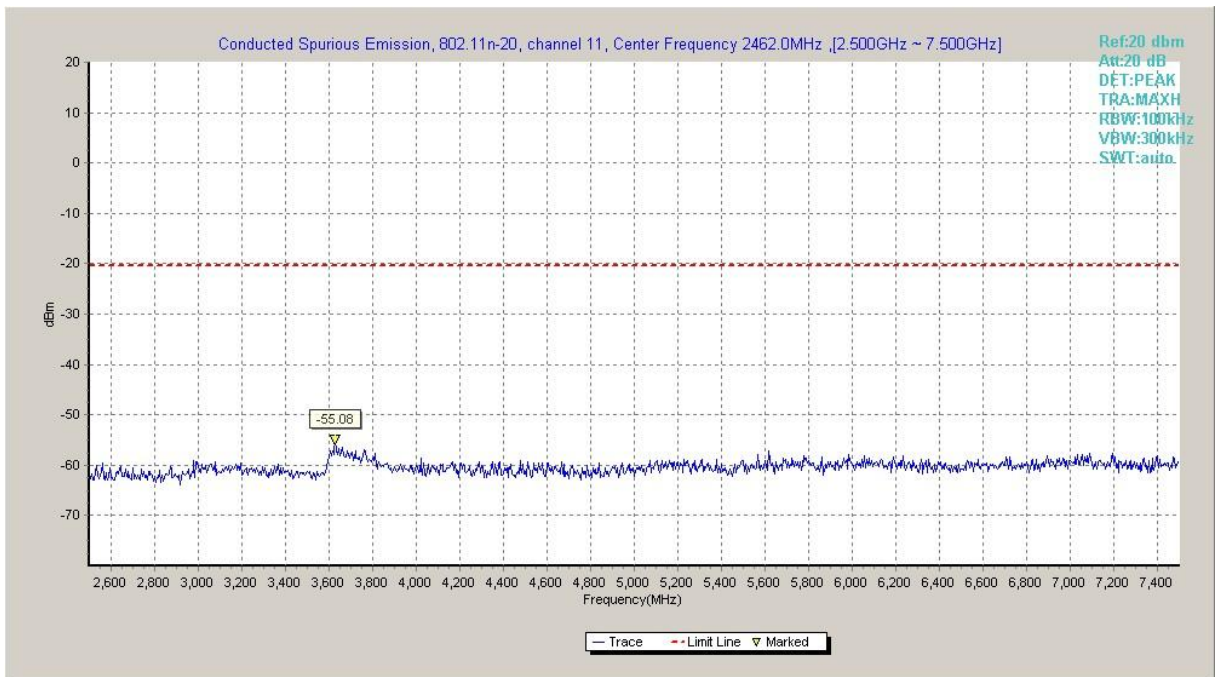


Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

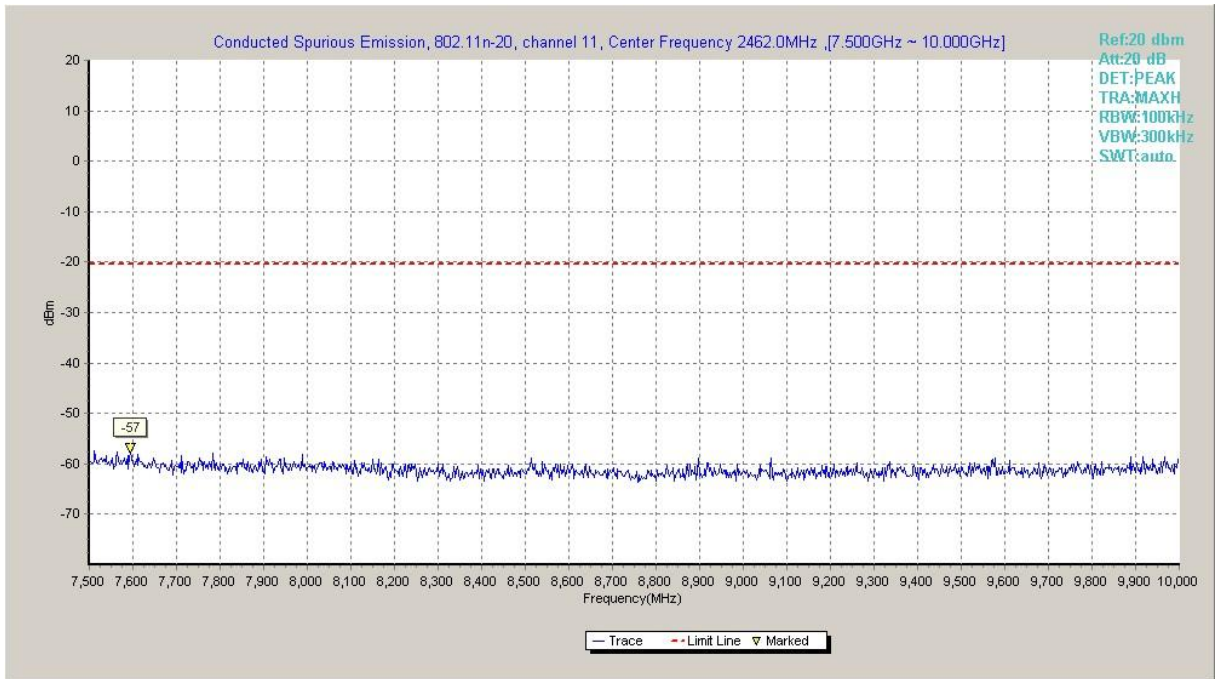


Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

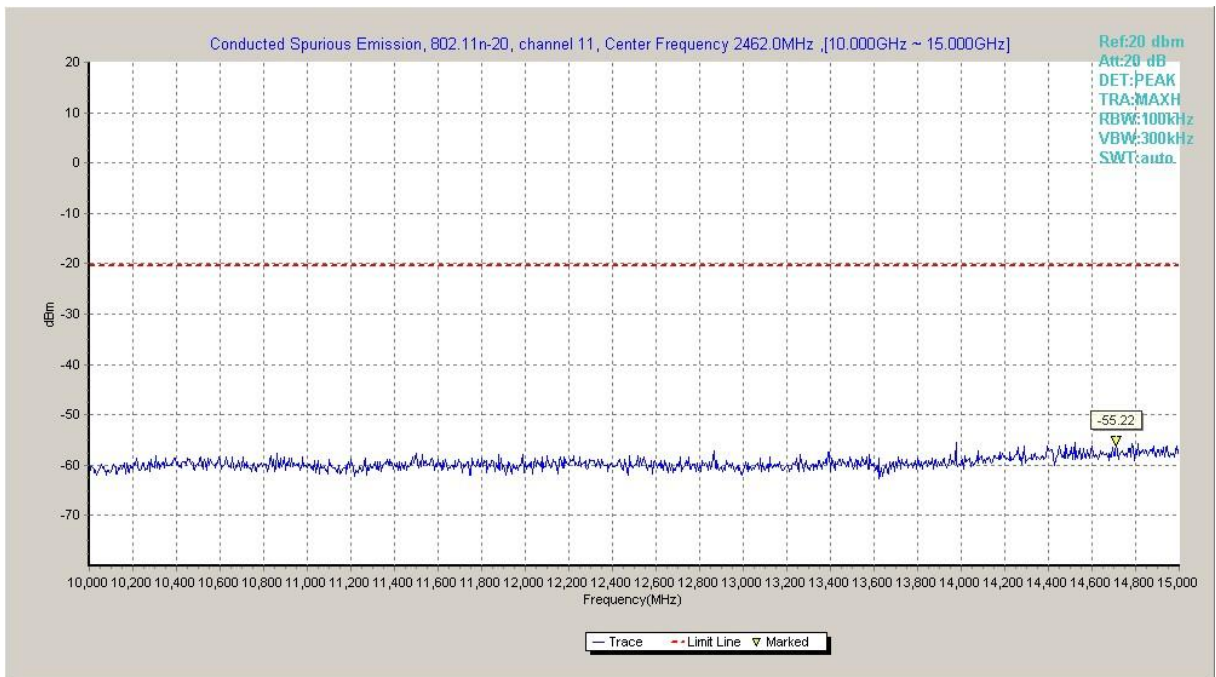


Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

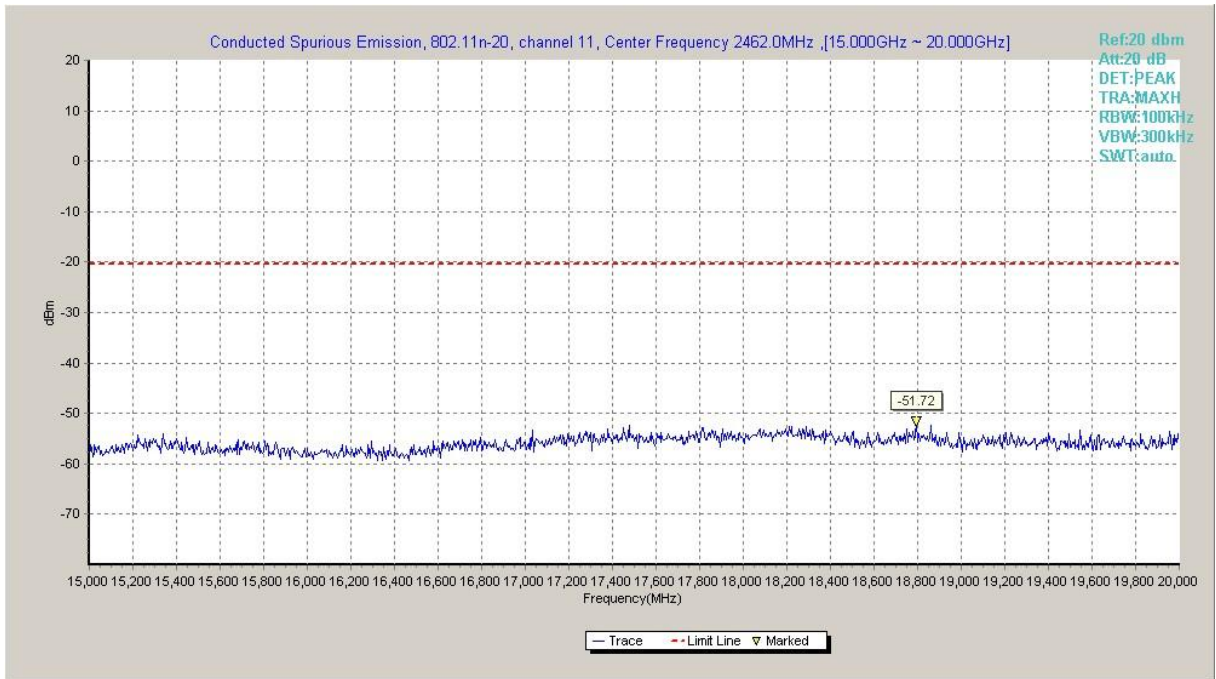


Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

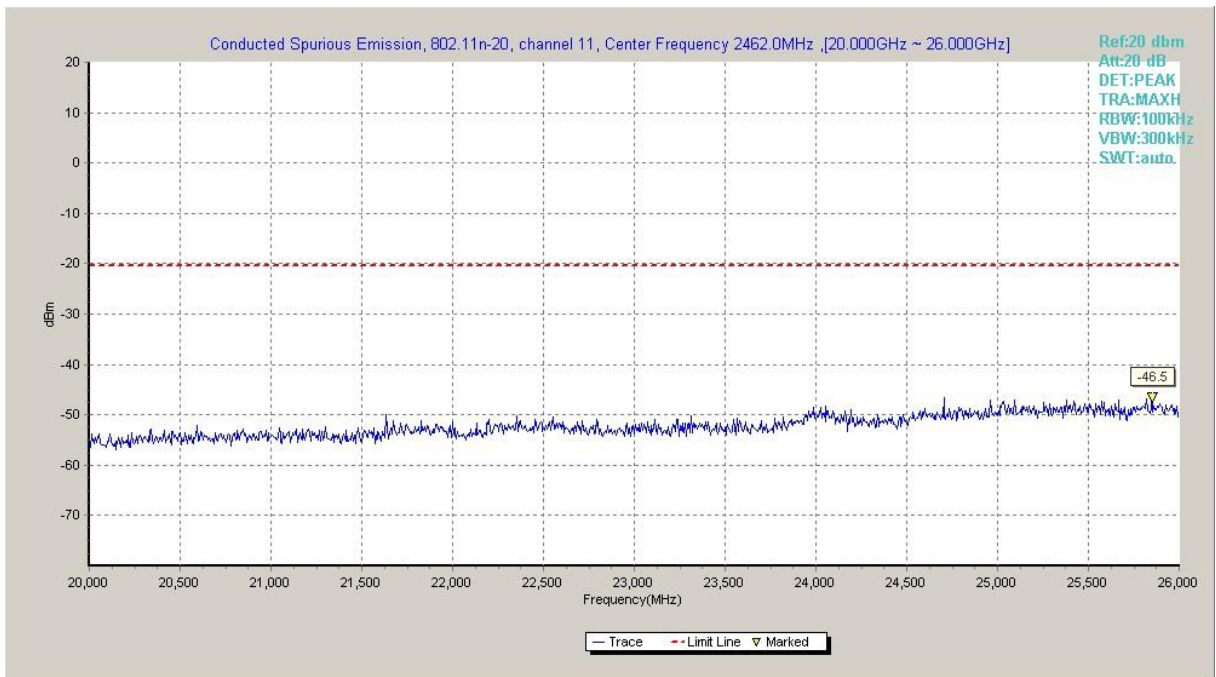


Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

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 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.1:

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	2.45GHz ~2.5GHz	Fig.A.6.2.2	P	
		11	1 GHz ~ 3 GHz	--	P
			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



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)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2387.700	46.41	2.9	32.0	11.55	54.0	7.6	H	155	46
2390.000	46.43	2.9	32.0	11.59	54.0	7.6	H	155	60
4824.000	41.20	-32.8	34.5	39.46	54.0	12.8	H	155	116
4236.000	38.22	-33.0	34.1	37.18	54.0	15.8	H	155	8
9648.000	38.40	-30.4	37.0	31.72	54.0	15.6	H	155	128
12060.000	43.05	-29.6	39.3	33.37	54.0	11.0	H	155	94

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2412.000	46.84	2.9	31.8	12.15	54.0	7.2	H	155	92
2462.700	46.80	2.9	32.7	11.20	54.0	7.2	H	155	136
4874.000	42.76	-32.7	34.5	40.97	54.0	11.2	H	155	8
7311.000	38.06	-31.9	36.1	33.90	54.0	15.9	H	155	70
9748.000	38.79	-30.7	37.2	32.26	54.0	15.2	H	155	48
12185.000	43.62	-29.4	39.2	33.83	54.0	10.4	H	155	246

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.500	46.45	2.9	32.8	10.76	54.0	7.5	H	155	226
2484.000	46.55	2.9	32.7	10.87	54.0	7.5	H	155	92
4924.000	36.42	-33.1	34.5	35.01	54.0	17.6	H	155	70
7386.000	38.21	-31.8	36.0	34.01	54.0	15.8	H	155	8
9848.000	40.12	-30.1	37.3	32.87	54.0	13.9	H	155	48
12310.000	44.00	-29.7	39.2	34.53	54.0	10.0	H	155	246



802.11b-Peak
Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2384.186	59.43	2.9	32.0	24.54	74.0	14.6	H	155	44
2388.582	59.51	2.9	32.0	24.66	74.0	14.5	H	155	66
4824.000	47.34	-32.8	34.5	45.59	74.0	26.7	V	155	110
4236.000	44.29	-33.0	34.1	43.25	74.0	29.7	V	155	0
9468.000	44.15	-30.5	36.8	37.84	74.0	29.9	H	155	132
12060.000	45.75	-29.6	39.3	36.08	74.0	28.2	H	155	88

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2364.200	48.60	-27.3	31.9	44.03	74.0	25.4	H	155	88
2503.200	48.91	-26.3	32.4	42.89	74.0	25.1	V	155	132
4873.500	44.76	-32.7	34.5	42.97	74.0	29.2	H	155	0
7129.500	44.31	-31.5	36.0	39.78	74.0	29.7	H	155	66
9747.750	45.20	-30.7	37.2	38.67	74.0	28.8	V	155	44
12185.250	46.72	-29.4	39.2	36.93	74.0	27.3	V	155	242

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2488.300	60.35	2.9	32.6	24.79	74.0	13.6	H	155	220
2498.520	60.61	2.9	32.3	25.33	74.0	13.4	V	155	88
4923.750	43.52	-33.1	34.5	42.10	74.0	30.5	H	155	66
7386.000	41.05	-31.8	36.0	36.85	74.0	33.0	H	155	0
9848.250	44.86	-30.1	37.3	37.61	74.0	29.1	H	155	44
12309.750	46.14	-29.7	39.2	36.66	74.0	27.9	V	155	242



802.11g - Average
Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2388.900	46.60	2.9	32.0	11.75	54.0	7.4	H	155	6
2390.000	46.86	2.9	32.0	12.01	54.0	7.1	H	155	26
4824.000	35.91	-32.8	34.5	34.16	54.0	18.1	H	155	92
7236.000	38.30	-31.7	36.1	33.94	54.0	15.7	H	155	24
9648.000	38.05	-30.4	37.0	31.37	54.0	16.0	H	155	136
12060.000	43.17	-29.6	39.3	33.49	54.0	10.8	H	155	356

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2410.400	46.72	2.9	31.8	12.03	54.0	7.3	H	155	8
2470.100	46.69	2.9	32.9	10.89	54.0	7.3	H	155	6
4874.000	35.46	-32.7	34.5	33.67	54.0	18.5	H	155	25
7311.000	38.08	-31.9	36.1	33.91	54.0	15.9	H	155	70
9748.000	38.49	-30.7	37.2	31.96	54.0	15.5	H	155	135
12185.000	43.69	-29.4	39.2	33.90	54.0	10.3	H	155	270

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.500	47.30	2.9	32.8	11.60	54.0	6.7	H	155	170
2484.200	47.13	2.9	32.7	11.46	54.0	6.9	H	155	150
4924.000	35.62	-33.1	34.5	34.21	54.0	18.4	H	155	20
7386.000	38.14	-31.8	36.0	33.93	54.0	15.9	H	155	180
9848.000	40.03	-30.1	37.3	32.78	54.0	14.0	H	155	202
12310.000	44.09	-29.7	39.2	34.62	54.0	9.9	H	155	8



802.11g - Peak
Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2389.870	64.70	2.9	32.0	29.86	74.0	9.3	V	155	0
2389.982	64.14	2.9	32.0	29.29	74.0	9.9	V	155	22
4815.750	45.49	-32.8	34.5	43.78	74.0	28.5	V	155	88
7236.000	40.90	-31.7	36.1	36.54	74.0	33.1	V	155	22
9648.000	43.25	-30.4	37.0	36.57	74.0	30.8	H	155	132
12060.000	45.13	-29.6	39.3	35.45	74.0	28.9	H	155	352

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2322.000	48.11	-27.7	31.2	44.68	74.0	25.9	H	155	0
2512.600	48.91	-26.6	32.5	42.96	74.0	25.1	V	155	0
4874.250	40.21	-32.7	34.5	38.42	74.0	33.8	V	155	22
7311.000	42.53	-31.9	36.1	38.36	74.0	31.5	V	155	66
9748.500	45.34	-30.7	37.2	38.81	74.0	28.7	V	155	132
12185.250	46.02	-29.4	39.2	36.23	74.0	28.0	V	155	274

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.630	71.72	2.9	32.8	36.03	74.0	2.3	H	155	176
2484.050	70.24	2.9	32.7	34.56	74.0	3.8	H	155	154
4928.250	43.18	-33.1	34.5	41.80	74.0	30.8	V	155	22
7386.000	41.96	-31.8	36.0	37.75	74.0	32.0	V	155	176
9848.250	45.96	-30.1	37.3	38.71	74.0	28.0	H	155	198
12309.750	45.71	-29.7	39.2	36.24	74.0	28.3	H	155	0



802.11n-HT20-Average
Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2388.400	46.49	2.9	32.0	11.64	54.0	7.5	H	155	25
2390.000	46.57	2.9	32.0	11.73	54.0	7.4	H	155	49
4824.000	35.38	-32.8	34.5	33.63	54.0	18.6	H	155	4
7236.000	38.28	-31.7	36.1	33.91	54.0	15.7	H	155	6
9648.000	37.99	-30.4	37.0	31.31	54.0	16.0	H	155	25
12060.000	43.16	-29.6	39.3	33.49	54.0	10.8	H	155	186

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2410.300	46.72	2.9	31.8	12.03	54.0	7.3	H	155	4
2465.100	46.67	2.9	32.7	11.01	54.0	7.3	H	155	2
4874.000	35.45	-32.7	34.5	33.65	54.0	18.6	H	155	25
7311.000	38.01	-31.9	36.1	33.85	54.0	16.0	H	155	350
9748.000	38.57	-30.7	37.2	32.04	54.0	15.4	H	155	92
12185.000	43.62	-29.4	39.2	33.83	54.0	10.4	H	155	85

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.500	46.91	2.9	32.8	11.22	54.0	7.1	H	155	135
2484.400	46.83	2.9	32.7	11.17	54.0	7.2	H	155	160
4924.000	35.48	-33.1	34.5	34.06	54.0	18.5	H	155	92
7386.000	38.11	-31.8	36.0	33.90	54.0	15.9	H	155	115
9848.000	40.16	-30.1	37.3	32.91	54.0	13.8	H	155	112
12310.000	43.92	-29.7	39.2	34.45	54.0	10.1	H	155	85



802.11n-HT20-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2389.562	63.15	2.9	32.0	28.30	74.0	10.9	H	155	22
2389.926	63.50	2.9	32.0	28.65	74.0	10.5	V	155	44
4824.000	40.32	-32.8	34.5	38.57	74.0	33.7	H	155	0
7236.000	41.25	-31.7	36.1	36.89	74.0	32.8	H	155	0
9648.000	42.36	-30.4	37.0	35.68	74.0	31.6	H	155	22
12060.000	45.28	-29.6	39.3	35.61	74.0	28.7	H	155	176

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2369.200	48.64	-27.0	32.0	43.69	74.0	25.4	H	155	0
2504.000	48.58	-26.4	32.4	42.57	74.0	25.4	H	155	0
4874.250	41.71	-32.7	34.5	39.92	74.0	32.3	V	155	22
7311.000	40.32	-31.9	36.1	36.15	74.0	33.7	V	155	352
9747.750	43.91	-30.7	37.2	37.38	74.0	30.1	V	155	88
12185.250	45.78	-29.4	39.2	35.99	74.0	28.2	V	155	88

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.530	70.72	2.9	32.8	35.03	74.0	3.3	H	155	132
2483.560	71.89	2.9	32.8	36.20	74.0	2.1	H	155	154
4923.750	39.73	-33.1	34.5	38.31	74.0	34.3	V	155	88
7386.000	41.55	-31.8	36.0	37.35	74.0	32.4	H	155	110
9848.250	45.78	-30.1	37.3	38.52	74.0	28.2	V	155	110
12309.750	45.85	-29.7	39.2	36.37	74.0	28.2	V	155	88

Test graphs as below for Set1:

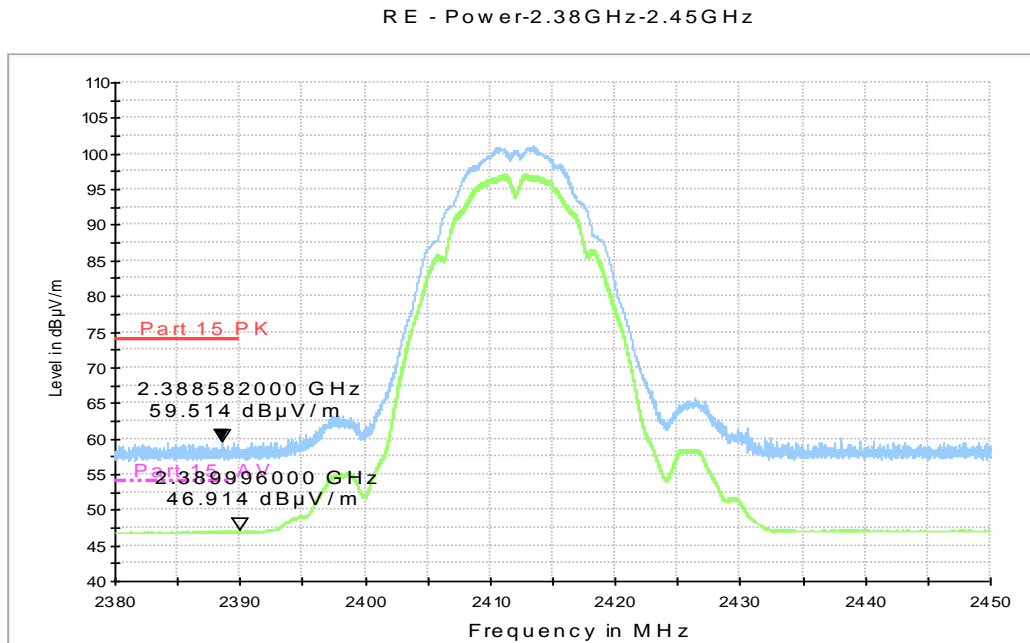


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz

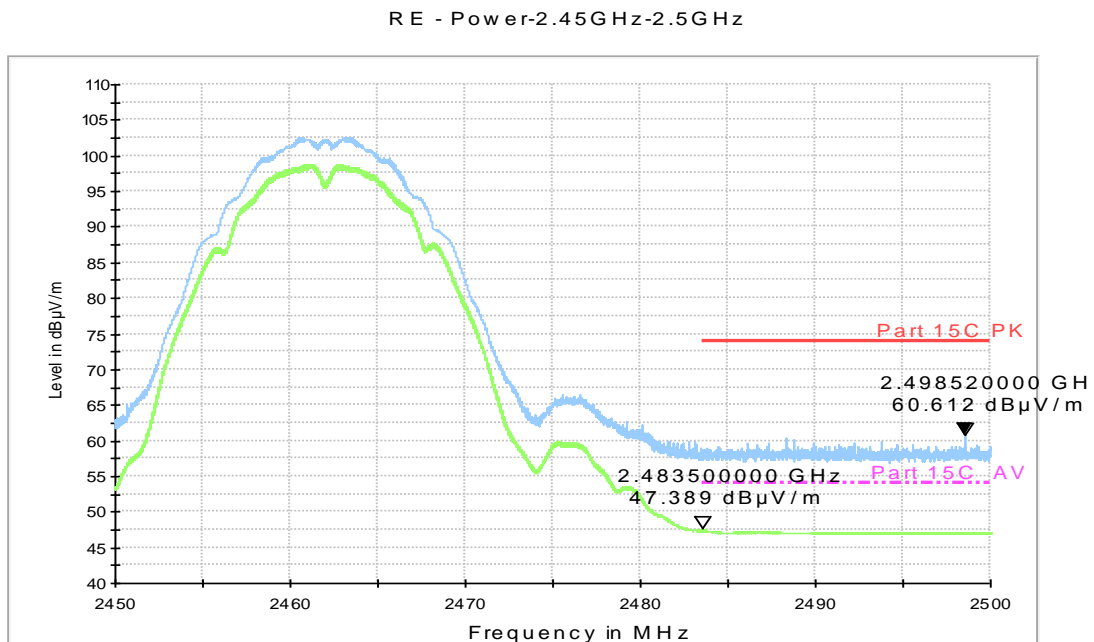


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

RE - Power-2.38GHz-2.45GHz

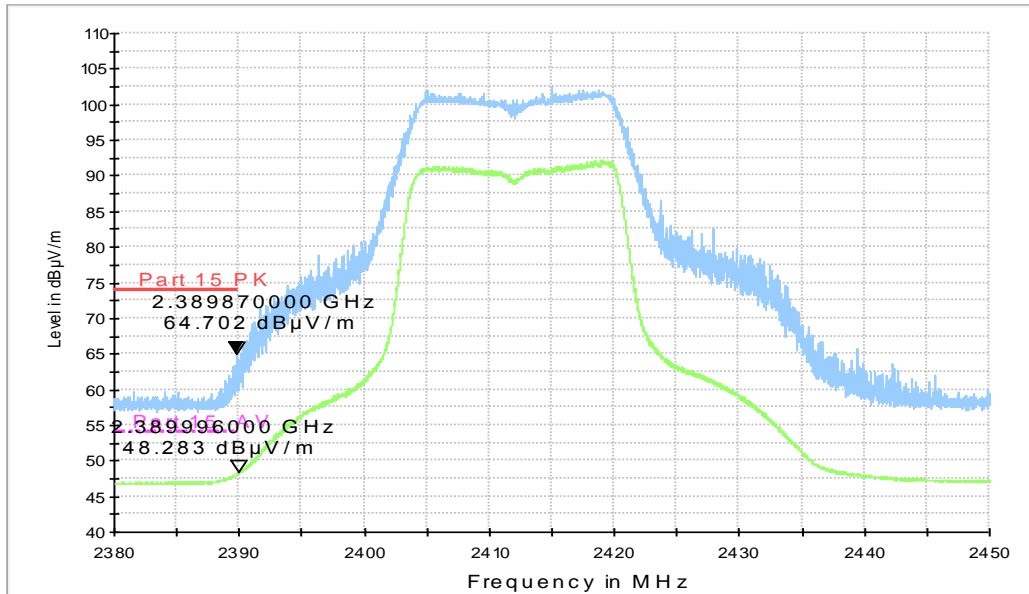
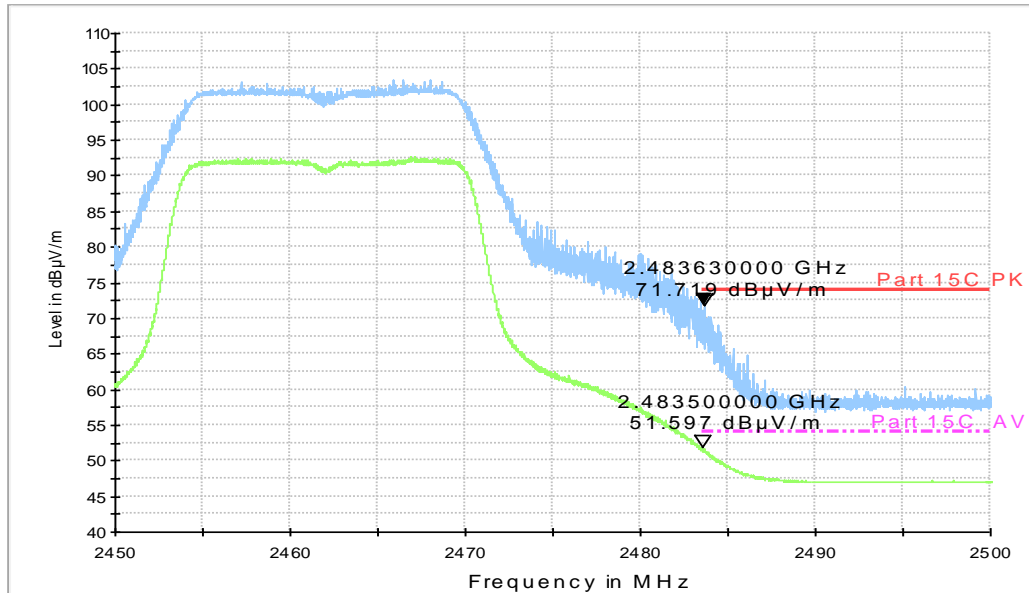


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

RE - Power-2.45GHz-2.5GHz



3

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

RE - Power-2.38GHz-2.45GHz

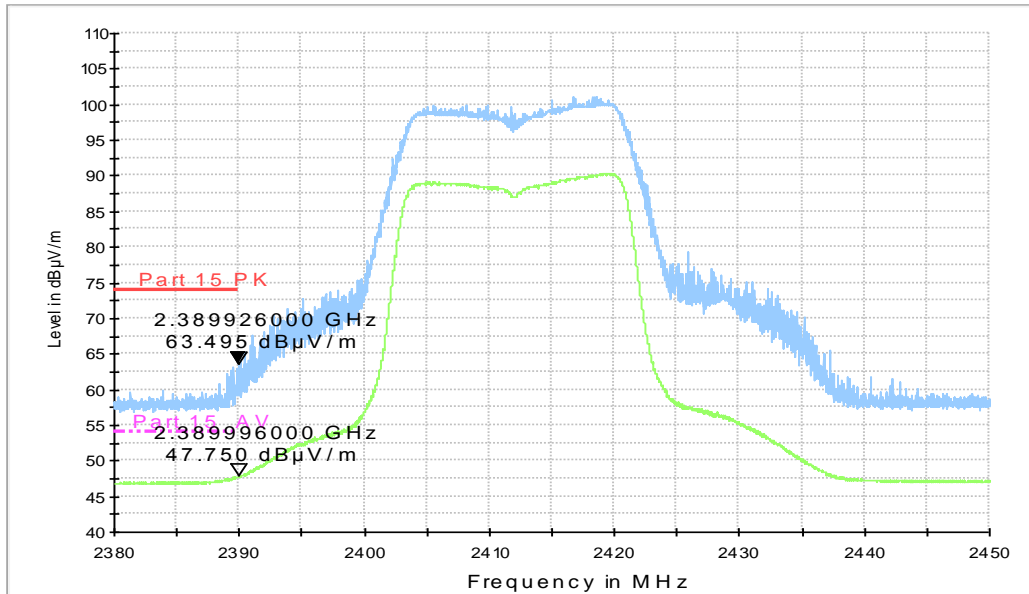


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

RE - Power-2.45GHz-2.5GHz

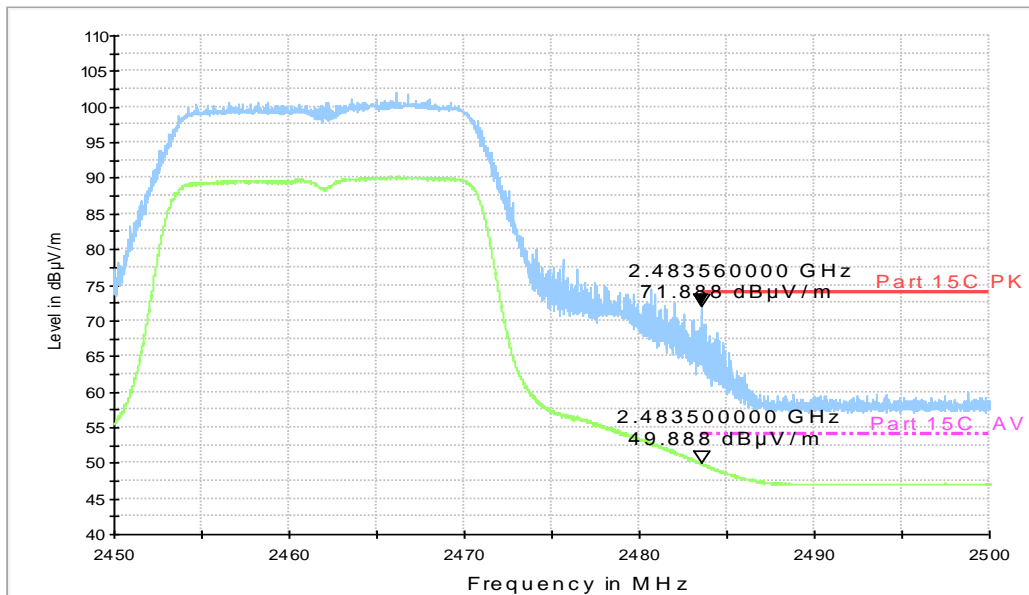


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

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.7.2	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.7.2	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: Set.1

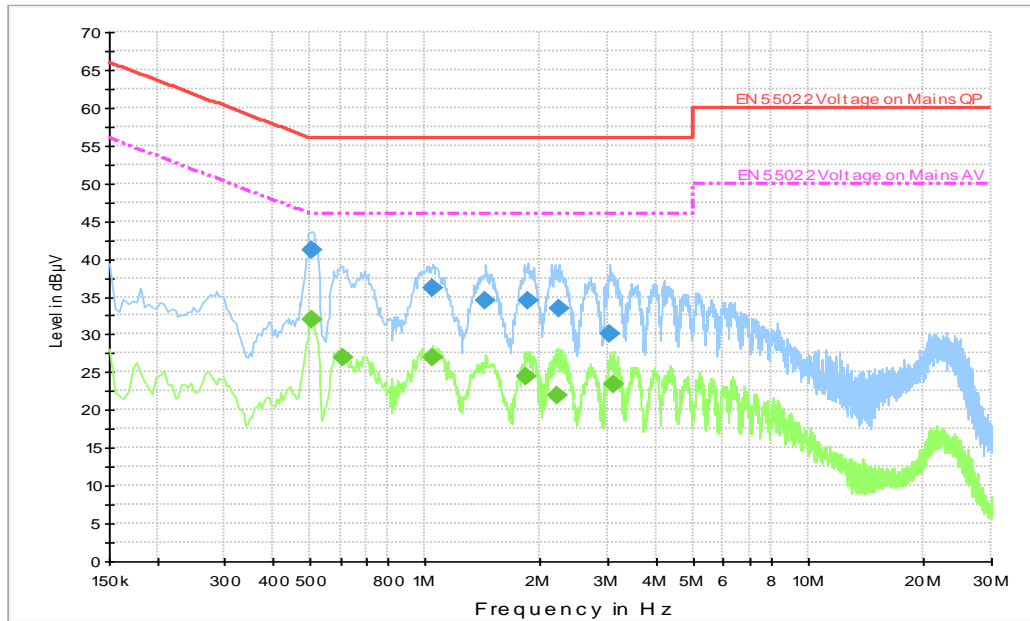


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.505500	41.2	2000.0	9.000	L1	10.7	14.8	56.0
1.045500	36.1	2000.0	9.000	L1	10.9	19.9	56.0
1.441500	34.5	2000.0	9.000	L1	10.7	21.5	56.0
1.855500	34.5	2000.0	9.000	N	10.9	21.5	56.0
2.229000	33.5	2000.0	9.000	L1	10.3	22.5	56.0
3.030000	30.0	2000.0	9.000	N	10.5	26.0	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.505500	31.9	2000.0	9.000	L1	10.7	14.1	46.0
0.609000	26.9	2000.0	9.000	N	10.7	19.1	46.0
1.050000	27.0	2000.0	9.000	L1	10.9	19.0	46.0
1.833000	24.4	2000.0	9.000	L1	10.5	21.6	46.0
2.202000	21.9	2000.0	9.000	N	10.7	24.1	46.0
3.111000	23.4	2000.0	9.000	L1	10.5	22.6	46.0

Idle: Set.1

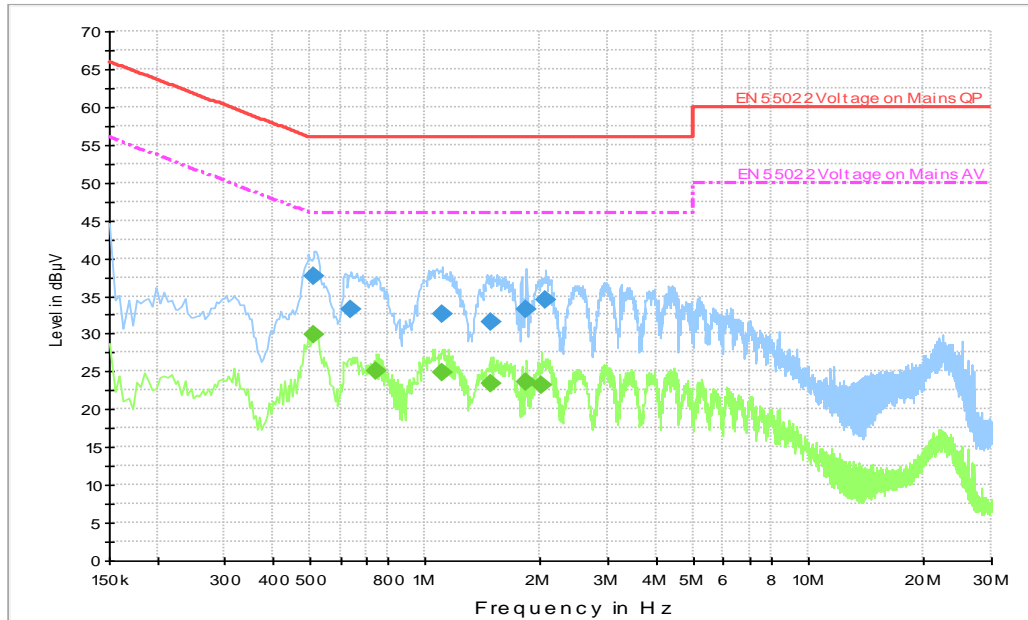


Fig.A.7.2 AC Powerline Conducted Emission-Idle

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.514500	37.6	2000.0	9.000	N	10.5	18.4	56.0
0.640500	33.2	2000.0	9.000	N	10.6	26.8	56.0
1.108500	32.6	2000.0	9.000	N	10.7	29.4	56.0
1.477500	31.6	2000.0	9.000	L1	10.6	24.4	56.0
1.842000	33.3	2000.0	9.000	N	10.9	22.7	56.0
2.053500	34.4	2000.0	9.000	N	10.9	21.6	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.514500	29.8	2000.0	9.000	L1	10.6	16.2	46.0
0.748500	25.0	2000.0	9.000	L1	10.7	21.0	46.0
1.104000	24.8	2000.0	9.000	L1	10.8	27.2	46.0
1.477500	23.4	2000.0	9.000	L1	10.6	22.6	46.0
1.842000	23.5	2000.0	9.000	L1	10.5	22.5	46.0
2.017500	23.3	2000.0	9.000	N	10.9	22.7	46.0

ANNEX B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

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*****