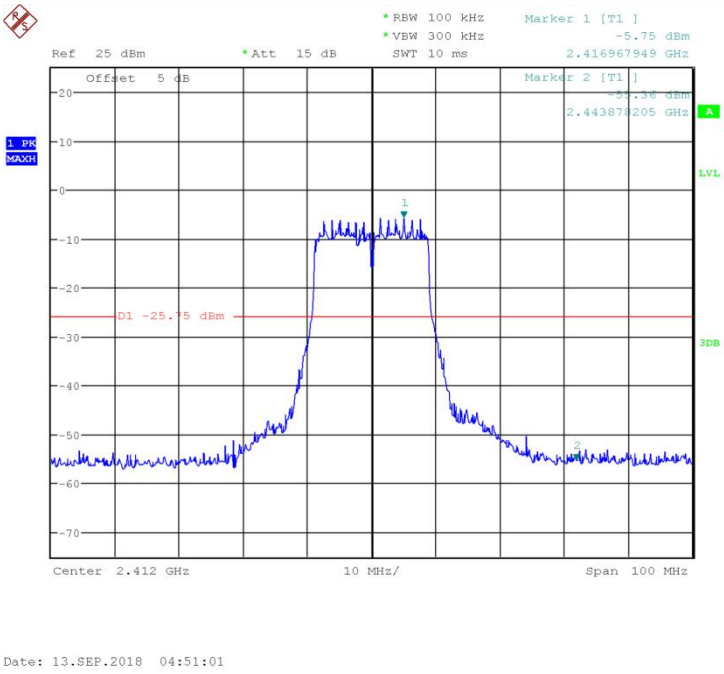


Fig 45. Conducted Spurious Emission (802.11n-20MHz, Ch1)

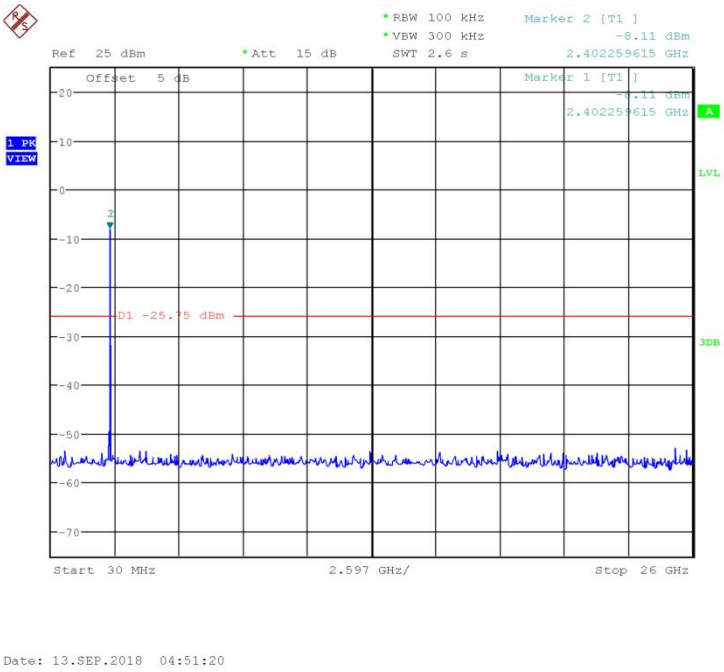


Fig 46. Conducted Spurious Emission (802.11n-20MHz, Ch1, 30MHz~26GHz)

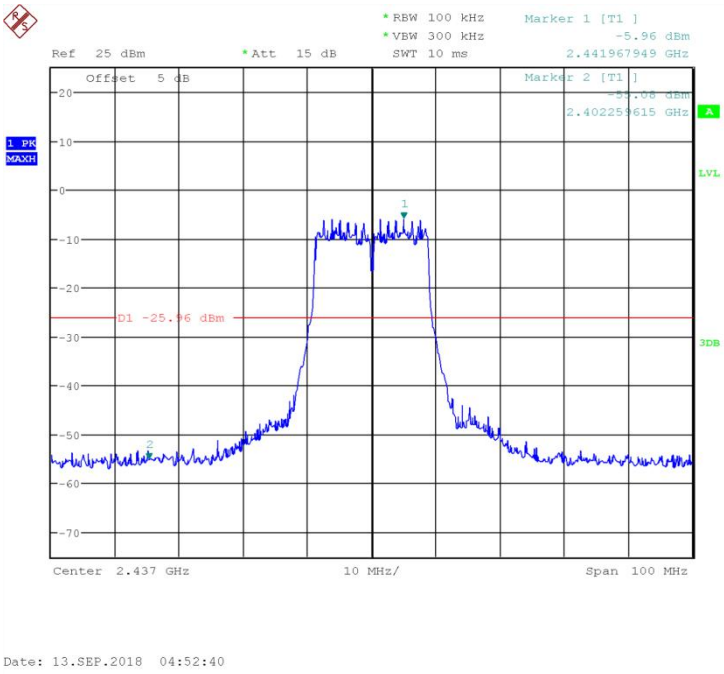


Fig 47. Conducted Spurious Emission (802.11n-20MHz, Ch6)

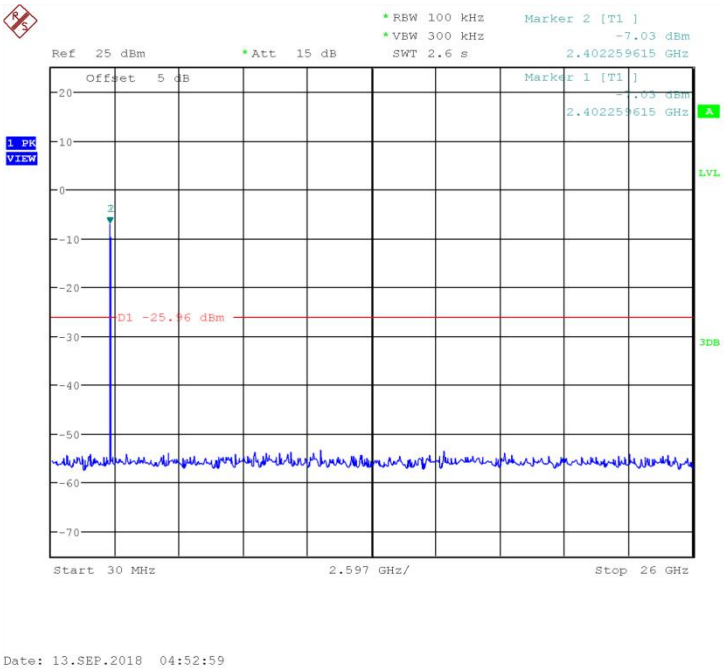


Fig 48. Conducted Spurious Emission (802.11n-20MHz, Ch6, 30MHz~26GHz)

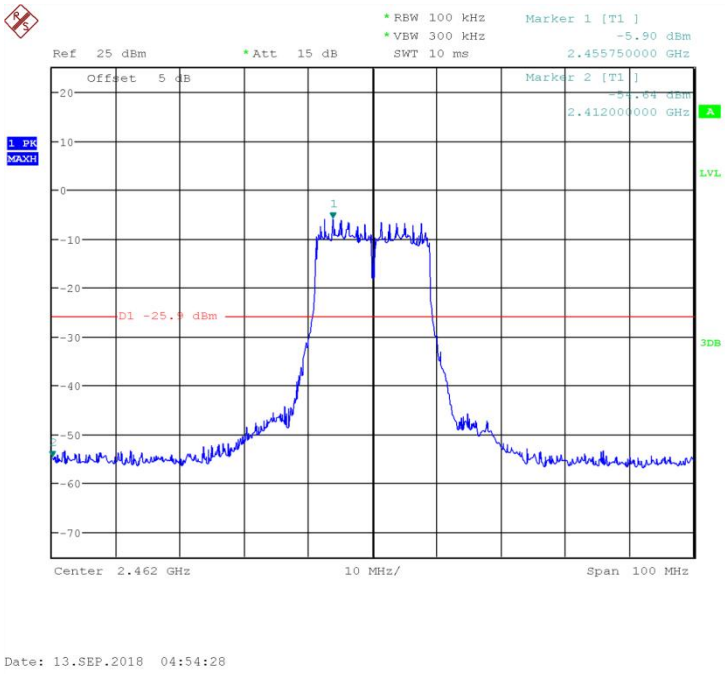


Fig 49. Conducted Spurious Emission (802.11n-20MHz, Ch11)

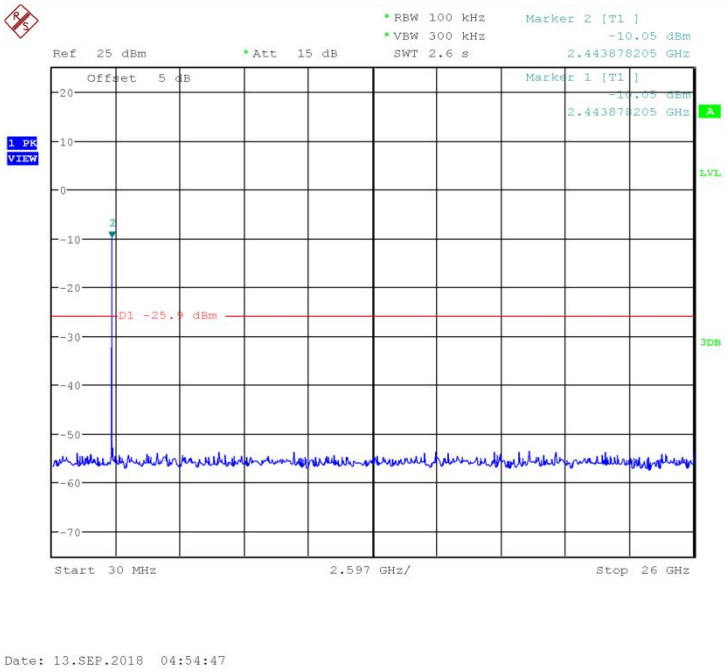


Fig 50. Conducted Spurious Emission (802.11n-20MHz, Ch11, 30MHz~26GHz)

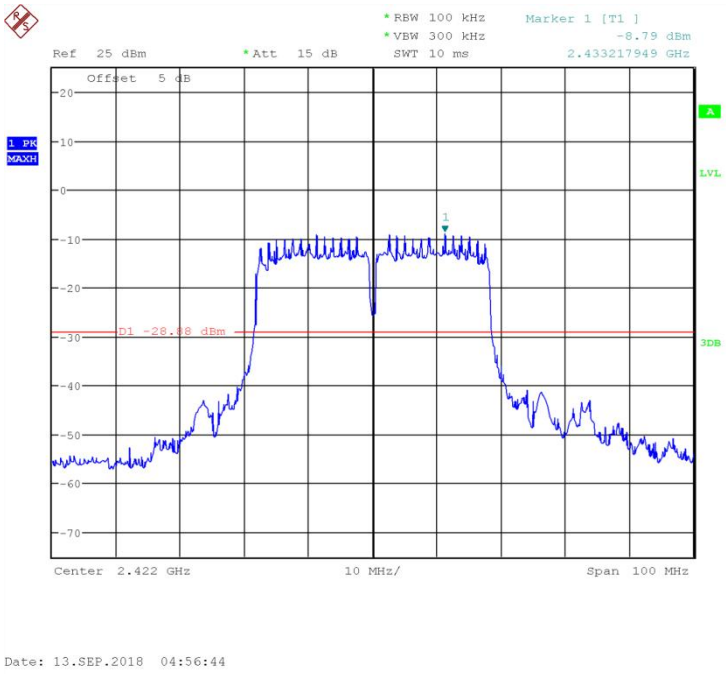


Fig 51. Conducted Spurious Emission (802.11n-40MHz, Ch3)

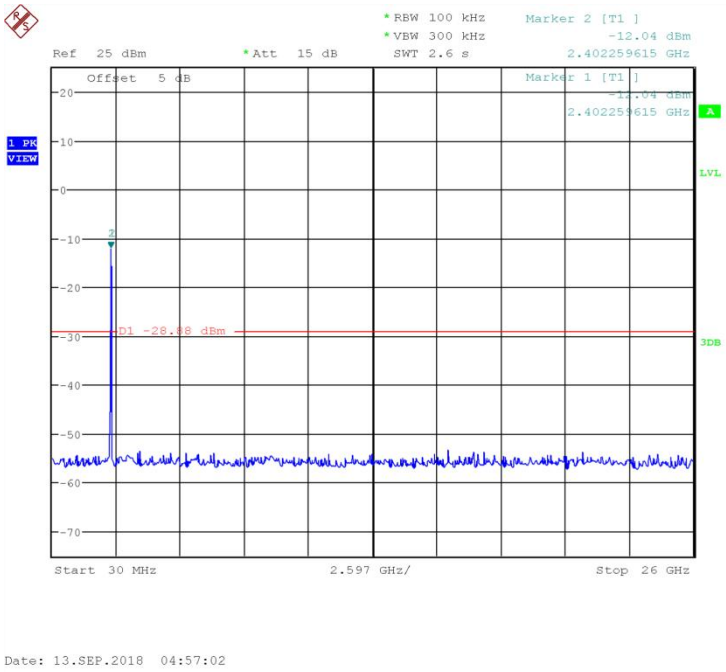


Fig 52. Conducted Spurious Emission (802.11n-40MHz, Ch3, 30MHz~26GHz)

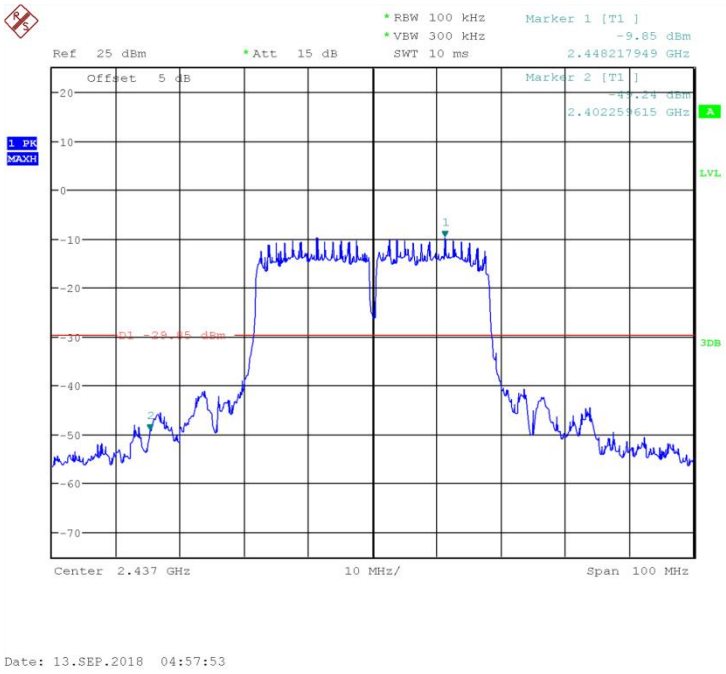


Fig 53. Conducted Spurious Emission (802.11n-40MHz, Ch6)

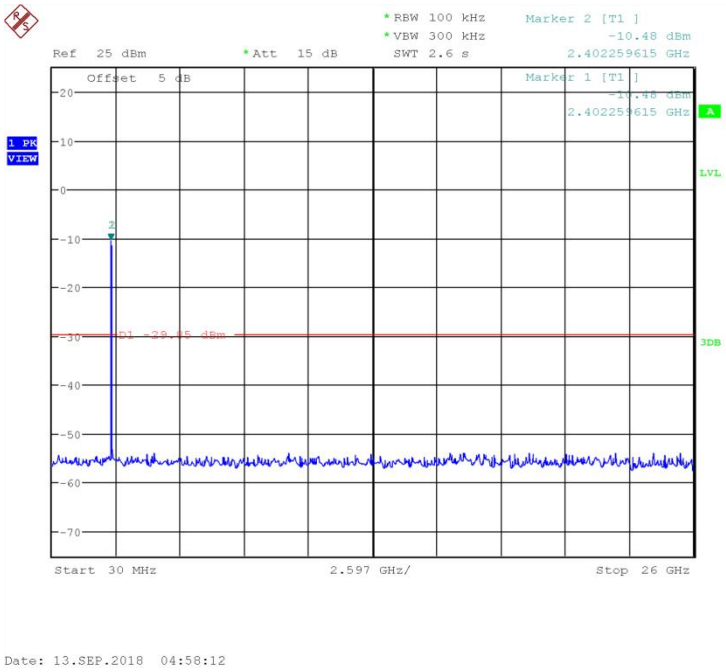


Fig 54. Conducted Spurious Emission (802.11n-40MHz, Ch6, 30MHz~26GHz)

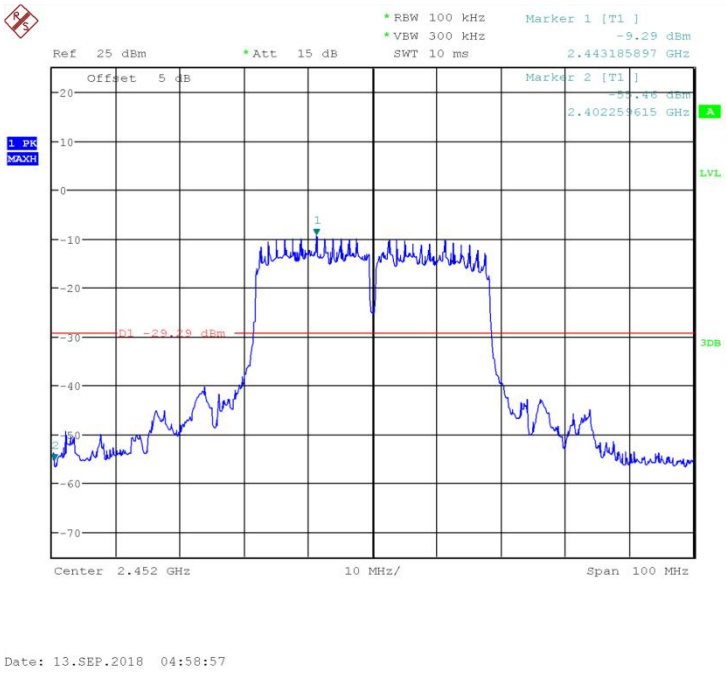


Fig 55. Conducted Spurious Emission (802.11n-40MHz, Ch9)

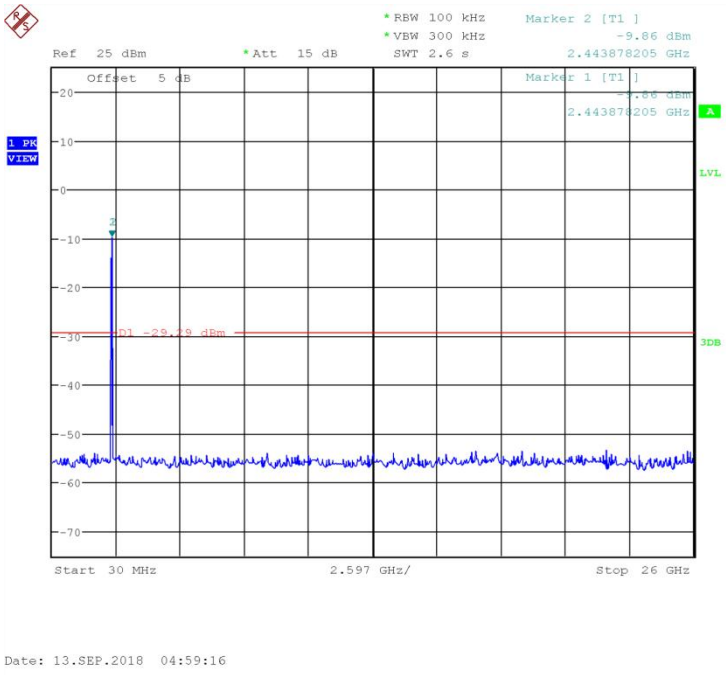


Fig 56. Conducted Spurious Emission (802.11n-40MHz, Ch9, 30MHz~26GHz)

6.6. Transmitter Spurious Emission-Radiated

6.6.1 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 25.205(a), must also comply with the radiated emission limits specified in 15.209(a)(see 15.205(c)). The measurement is according to ANSI C63.10 clause 11.11 and 11.12.

6.6.2 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

6.6.3 Test procedures

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a nonconducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.4-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

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

Frequency of emission (MHz)	RBW/VBW	Sweep Times (s)
30~1000	100kHz/300kHz	5
1000~4000	1MHz/3MHz	15
4000~18000	1MHz/3MHz	40
18000~26500	1MHz/3MHz	20

Measurement Uncertainty

Measurement Items	Range	Confidence Level	Calculated Uncertainty
Transmitter Spurious Emission-Radiated	9KHz-30MHz	95%	±5.66db
Transmitter Spurious Emission-Radiated	30MHz-1000MHz	95%	±4.98db
Transmitter Spurious Emission-Radiated	1000MHz -18000MHz	95%	±5.06db
Transmitter Spurious Emission-Radiated	18000MHz -40000MHz	95%	±5.20db

L1321

802.11b/g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power（low）	2.31GHz~2.5GHz	Fig 57.	P
	Power（high）	2.31GHz~2.5GHz	Fig 58.	P
	1	30MHz~1GHz	Fig 59.	P
		1GHz~3GHz	Fig 60.	P
		3GHz~18GHz	Fig 61.	P
802.11g	Power（low）	2.31GHz~2.5GHz	Fig 62.	P
	Power（high）	2.31GHz~2.5GHz	Fig 63.	P
	1	30MHz~1GHz	Fig 64.	P
		1GHz~3GHz	Fig 65.	P
		3GHz~18GHz	Fig 66.	P

802.11n mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(20MHz)	Power（low）	2.31GHz~2.5GHz	Fig 67.	P
	Power（high）	2.31GHz~2.5GHz	Fig 68.	P
	1	30MHz~1GHz	Fig 69.	P

		1GHz~3GHz	Fig 70.	P
		3GHz~18GHz	Fig 71.	P
802.11n(40MHz)	Power（low）	2.31GHz~2.5GHz	Fig 72.	P
	Power（high）	2.31GHz~2.5GHz	Fig 73.	P
	3	30MHz~1GHz	Fig 74.	P
		1GHz~3GHz	Fig 75.	P
		3GHz~18GHz	Fig 76.	P

Conclusion: PASS

Note:

A ”reference path loss” is established and A_{Rpi} 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:

ARpi = Cable loss + Antenna Gain-Preamplifier gain

Result = P_{Mea} + Cable loss + Antenna Gain-Preamplifier gain = P_{Mea} + ARpi .

802.11b mode

Ch1 30MHz~1GHz

Frequency(MHz)	Result(dBuV/m)	ARpI (dB)	PMea(dBuV/m)	Polarity
34.1	20.18	-22	42.18	V
44.9	25.57	-20.2	45.77	V
53.1	31.53	-20.6	52.13	V
80.4	23.25	-27.3	50.55	V
240.0	29	-23	52	H
478.3	29.91	-17.4	47.31	V

Ch1 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpI (dB)	PMea(dBuV/m)	Polarity
2578.3	53.72	7.2	46.52	V
2664.7	54.75	7.8	46.95	V
2772.3	54.5	7.8	46.7	H

2833.5	55.32	8.2	47.12	H
2889.8	55.26	8.8	46.46	H
2999.2	57.72	9	48.72	H

Ch1 1GHz~3GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2664.7	42.41	7.8	34.61	V
2772.3	42.24	7.8	34.44	H
2833.5	42.41	8.2	34.21	H
2889.8	43.21	8.8	34.41	H
2999.2	43.22	9	34.22	H

Ch1 3GHz~18GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
4824.1	57.9	0	57.9	V
14315.3	54.7	20.5	34.2	H
15137.5	54.9	21.2	33.7	H
15696.2	57.14	23.2	33.94	V
16450.7	58.72	25.8	32.92	V
17220.5	60.89	27.3	33.59	H

Ch1 3GHz~18GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
4824.1	47.18	0	47.18	V
14315.3	42.69	20.5	22.19	H
15137.5	42.92	21.2	21.72	H
15696.2	44.94	23.2	21.74	V
16450.7	45.97	25.8	20.17	V
17220.5	48.27	27.3	20.97	H

802.11g

Ch1 30MHz~1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
45.2	33.7	-20.2	53.9	V
53.5	33.06	-20.7	53.76	V
74.1	18.32	-26	44.32	V
97.9	16.25	-23.8	40.05	V
135.2	27.75	-27.7	55.45	H
240.0	34.89	-23	57.89	V

Ch1 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2539.9	54.26	7	47.26	H
2629.5	53.67	7.5	46.17	H
2727.0	53.95	7.8	46.15	H
2817.0	54.25	8	46.25	V
2883.2	55.12	8.7	46.42	H
2955.3	56.24	8.7	47.54	H

Ch1 1GHz~3GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2539.9	41.7	7	34.7	H
2817.0	42.59	8	34.59	V
2883.2	43.1	8.7	34.4	H
2955.3	42.98	8.7	34.28	H

Ch1 3GHz~18GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
4830.9	51.33	0	51.33	V

14316.3	55.08	20.5	34.58	H
15360.3	56.48	22.3	34.18	V
15992.9	58.87	25.3	33.57	H
16851.3	60.75	27.3	33.45	H
17838.6	60.39	28	32.39	V

Ch1 3GHz~18GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
14316.3	43.03	20.5	22.53	H
15360.3	43.84	22.3	21.54	V
15992.9	47.15	25.3	21.85	H
16851.3	48.38	27.3	21.08	H
17838.6	48.1	28	20.1	V

802.11n-20MHz

Ch1 30MHz~1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
33.5	21	-22	43	V
34.6	18.7	-22	40.7	V
54.0	21.21	-20.8	42.01	V
141.3	26.91	-28.1	55.01	H
218.8	23.09	-24.1	47.19	H
289.2	26.57	-22.2	48.77	V

Ch1 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2505.2	54.01	7.2	46.81	H
2626.1	53.91	7.5	46.41	H
2789.0	54.47	7.8	46.67	V

2879.4	55.34	8.6	46.74	H
2948.0	55.32	8.6	46.72	V
2995.8	57.95	9	48.95	H

Ch1 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2505.2	41.66	7.2	34.46	H
2789.0	42.39	7.8	34.59	V
2879.4	43.07	8.6	34.47	H
2948.0	43.13	8.6	34.53	V
2995.8	43.16	9	34.16	H

Ch1 3GHz~18GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
12933.2	52.84	17.1	35.74	V
14343.8	54.83	20	34.83	V
15319.3	55.5	21.8	33.7	V
16021.1	60.28	25.3	34.98	V
17223.6	60.16	27.3	32.86	H
17825.3	60.57	28.1	32.47	V

Ch1 3GHz~18GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
14343.8	42.33	20	22.33	V
15319.3	43.33	21.8	21.53	V
16021.1	47.03	25.3	21.73	V
17223.6	48.15	27.3	20.85	H
17825.3	48.24	28.1	20.14	V

802.11n-40MHz

Ch3 30MHz~1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
34.0	18.52	-22	40.52	V
41.1	20.19	-20.6	40.79	V
53.4	19.23	-20.7	39.93	V
71.8	18.35	-25.4	43.75	H
139.1	27.63	-28	55.63	H
210.9	24.83	-24.3	49.13	H

Ch3 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2505.2	53.77	7.2	46.57	V
2608.5	53.95	7.4	46.55	V
2675.8	53.8	7.8	46	V
2785.1	54.47	7.8	46.67	H
2905.2	55.44	8.9	46.54	H
2993.8	57.92	9	48.92	H

Ch3 1GHz~3GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2785.1	42.29	7.8	34.49	H
2905.2	43.11	8.9	34.21	H
2993.8	43.17	9	34.17	H

Ch3 3GHz~18GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
13259.4	53.62	17	36.62	H
14302.4	55.34	20.8	34.54	H
15570.6	56.01	22.8	33.21	H

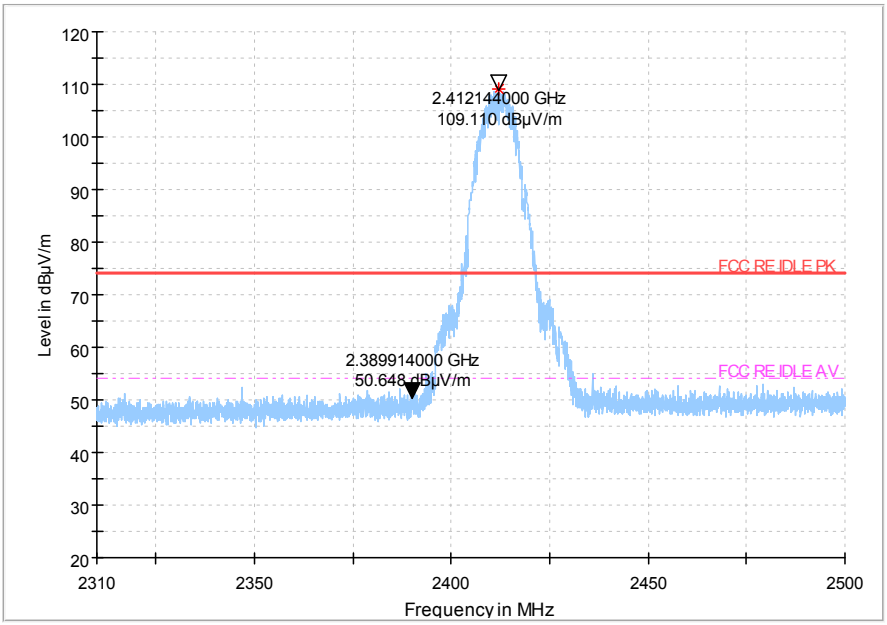
16305.4	58.08	25.8	32.28	H
16907.2	59.55	27.4	32.15	V
17802.0	60.43	28.4	32.03	V

Ch3 3GHz~18GHz(Average)

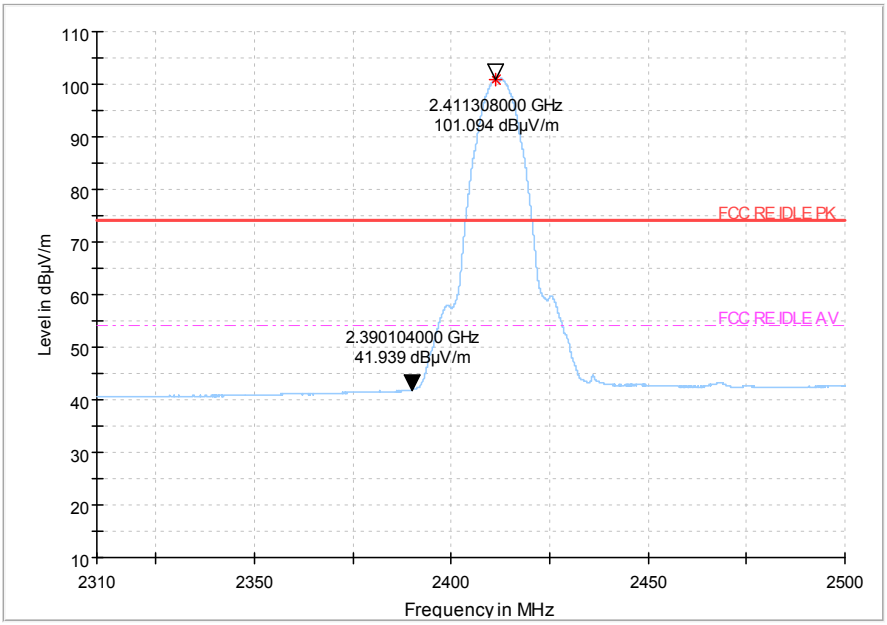
Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
14302.4	42.82	20.8	22.02	H
15570.6	44.08	22.8	21.28	H
16305.4	46.46	25.8	20.66	H
16907.2	47.95	27.4	20.55	V
17802.0	48.35	28.4	19.95	V

Note: Only the worst case is written in the report.

Test graphs as below:

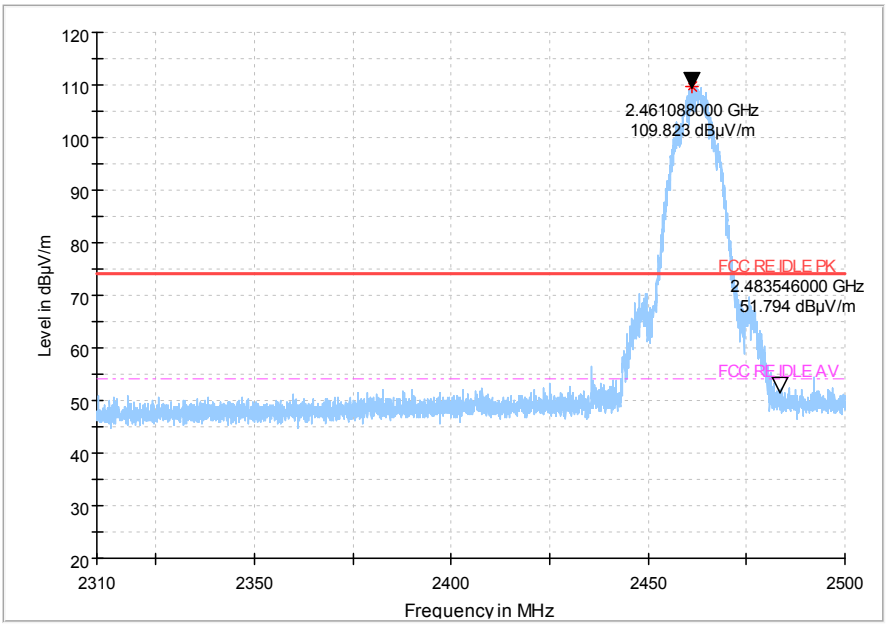


Peak detector

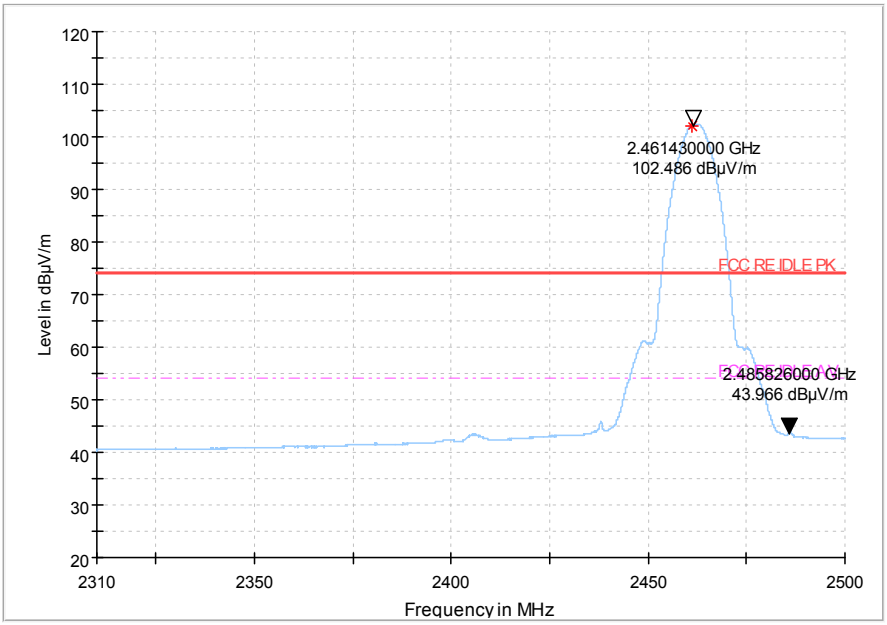


AV detector

Fig 57. Radiated emission (Power): 802.11b, low channel



Peak detector



AV detector

Fig 58. Radiated emission (Power): 802.11b, high channel

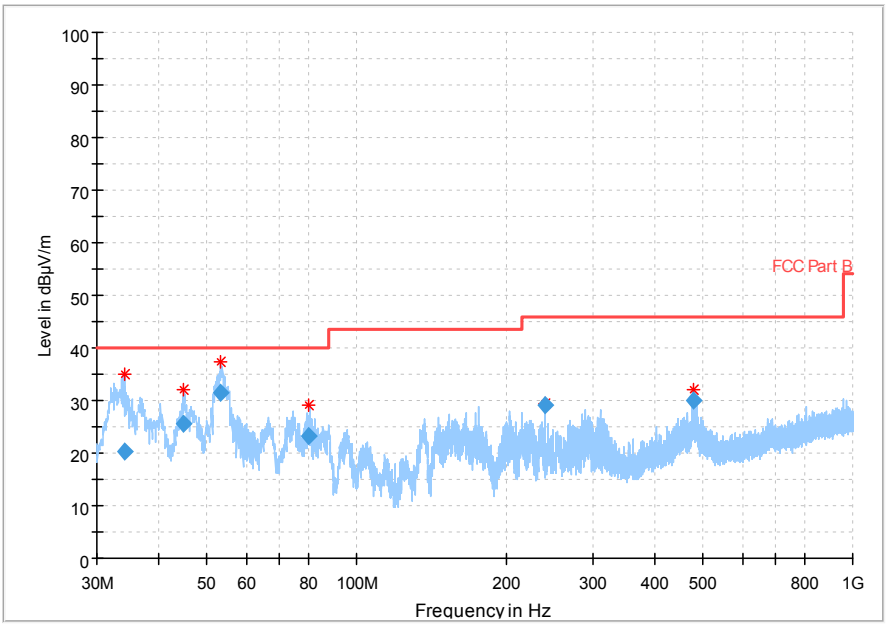


Fig 59. Radiated Spurious Emission (802.11b, Ch1,30MHz~1GHz)

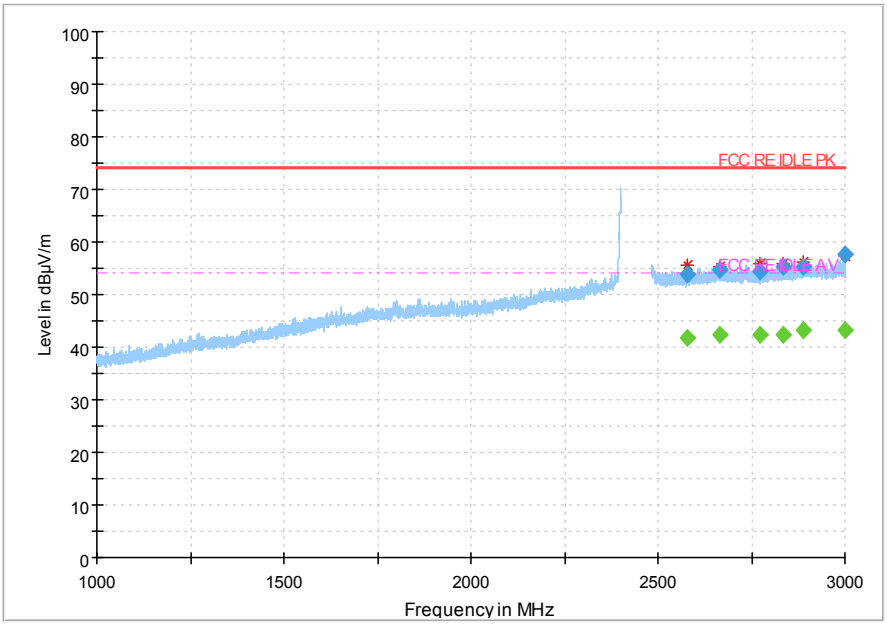


Fig 60. Radiated Spurious Emission (802.11b, Ch1,1GHz~3GHz)

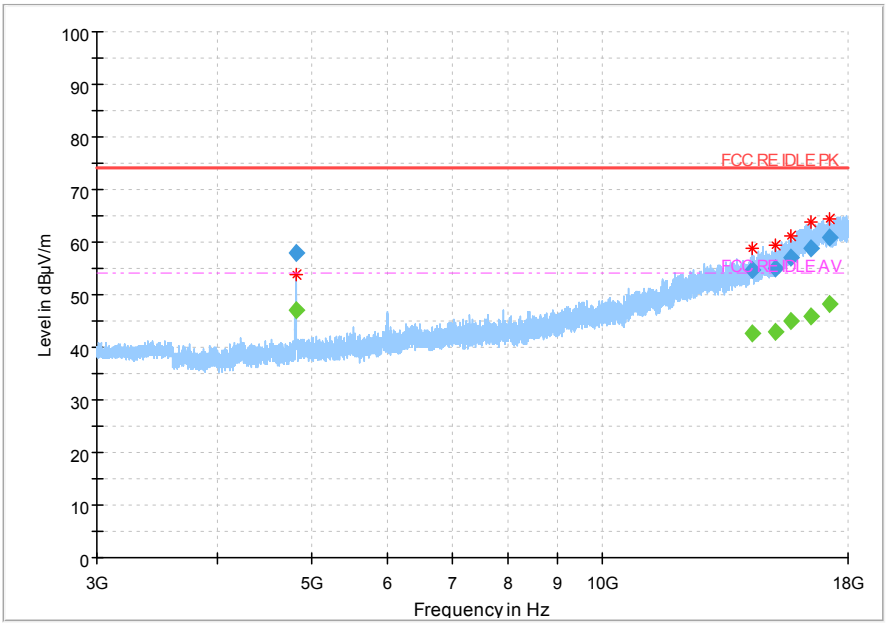
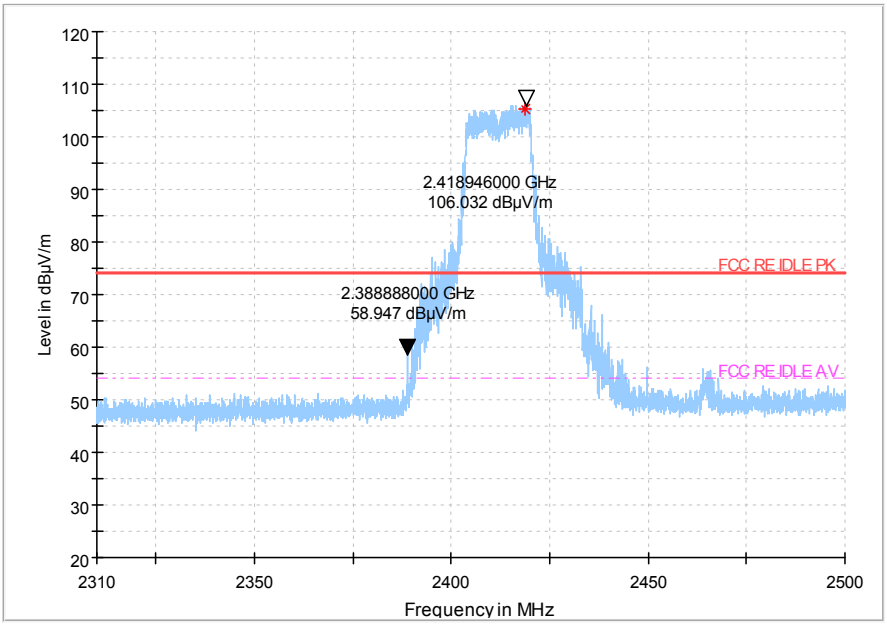
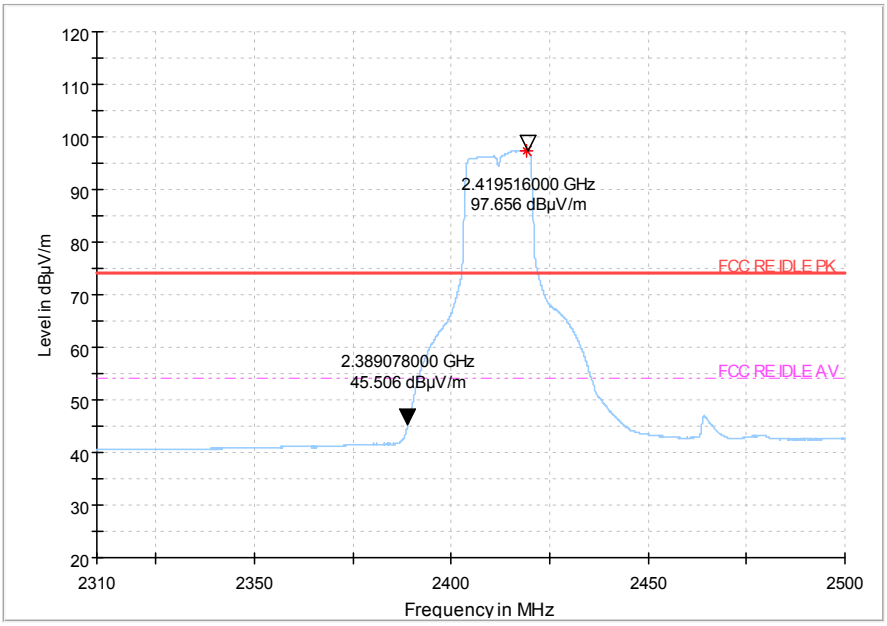


Fig 61. Radiated Spurious Emission (802.11b, Ch1,3GHz~18GHz)

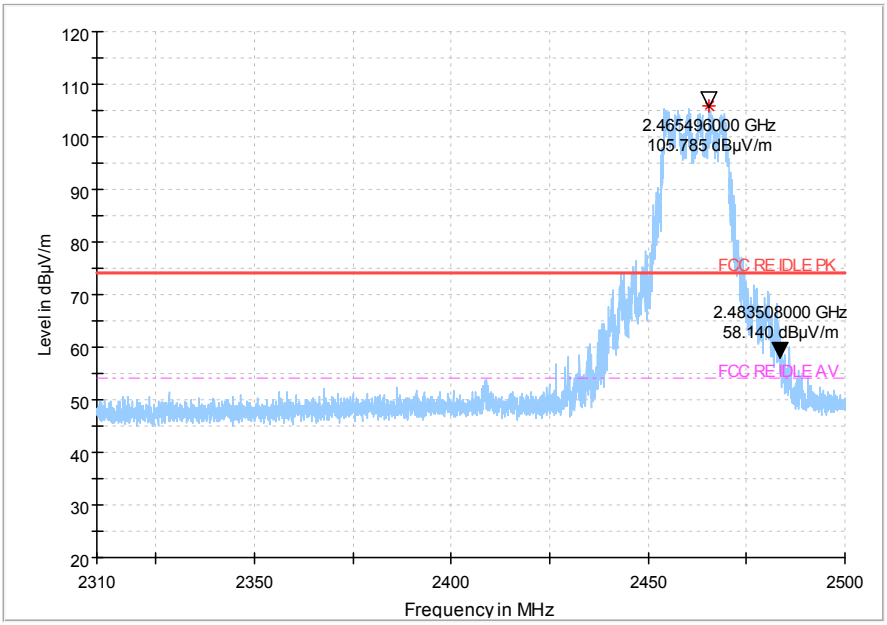


Peak detector

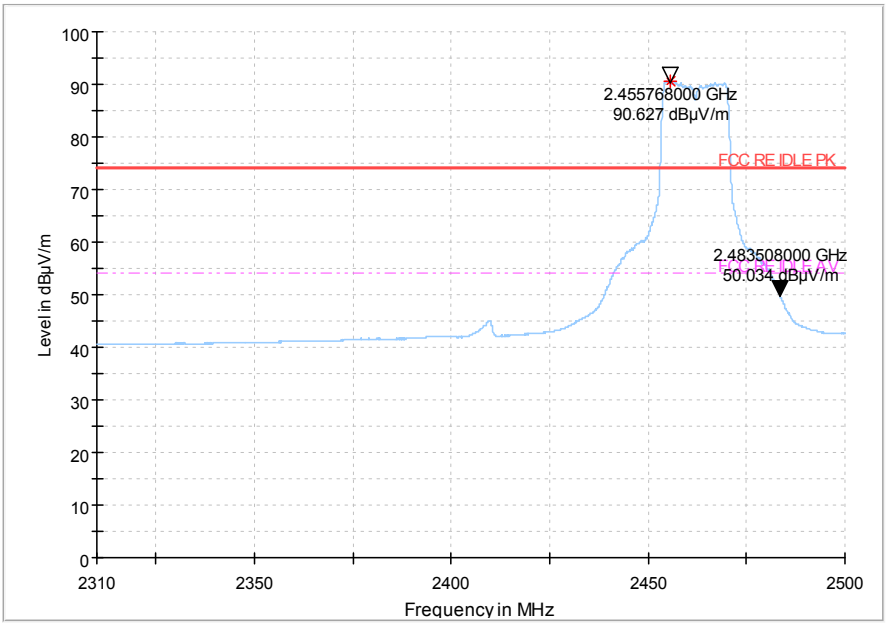


AV detector

Fig 62. Fig.102 Radiated emission (Power): 802.11g, low channel



Peak detector



AV detector

Fig 63. Radiated emission (Power): 802.11g, high channel

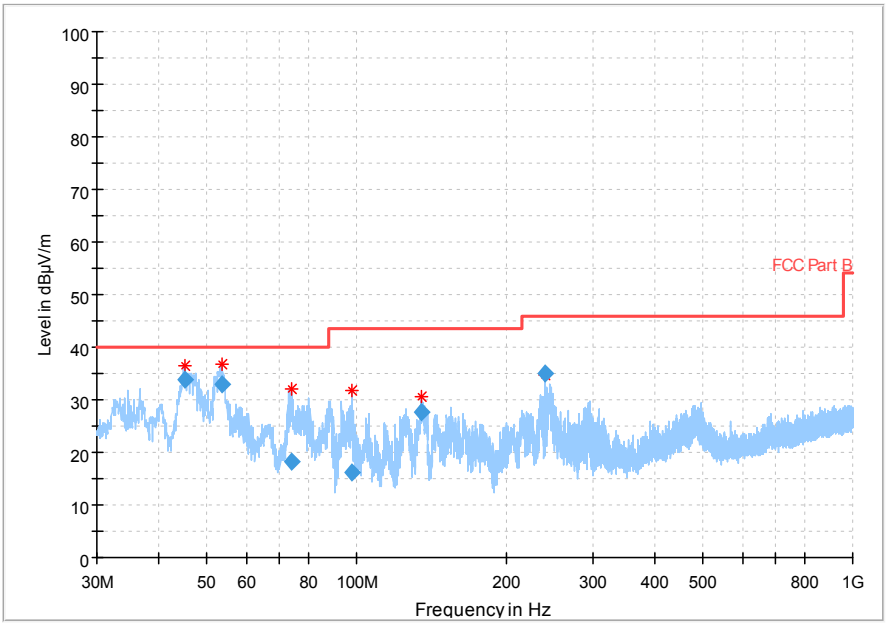


Fig 64. Radiated Spurious Emission (802.11g, Ch1,30MHz~1GHz)

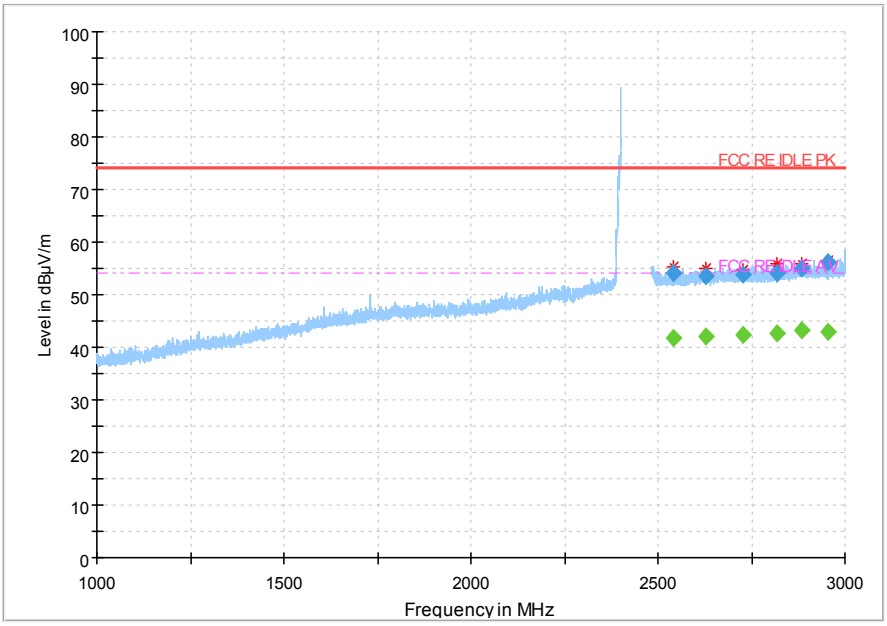


Fig 65. Radiated Spurious Emission (802.11g, Ch1,1GHz~3GHz)

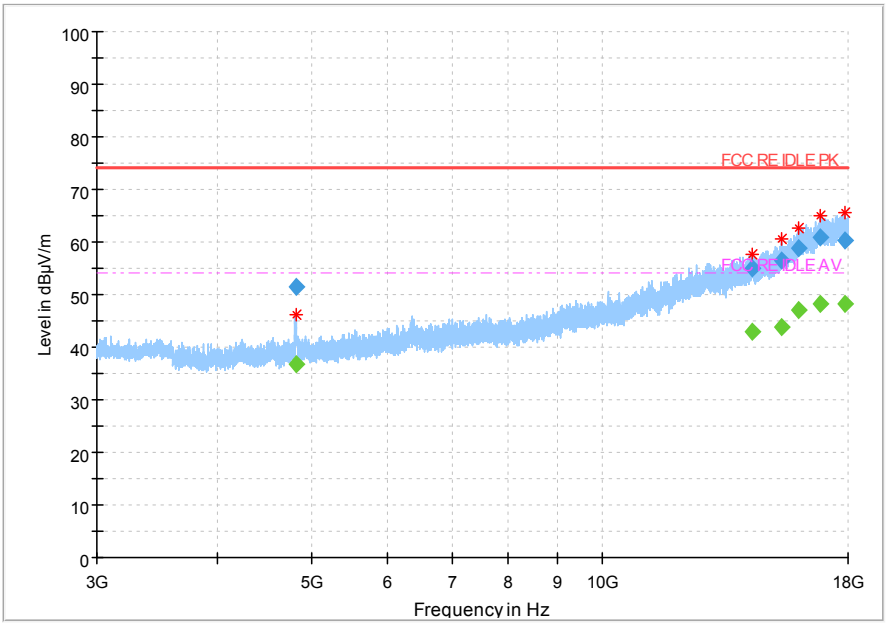
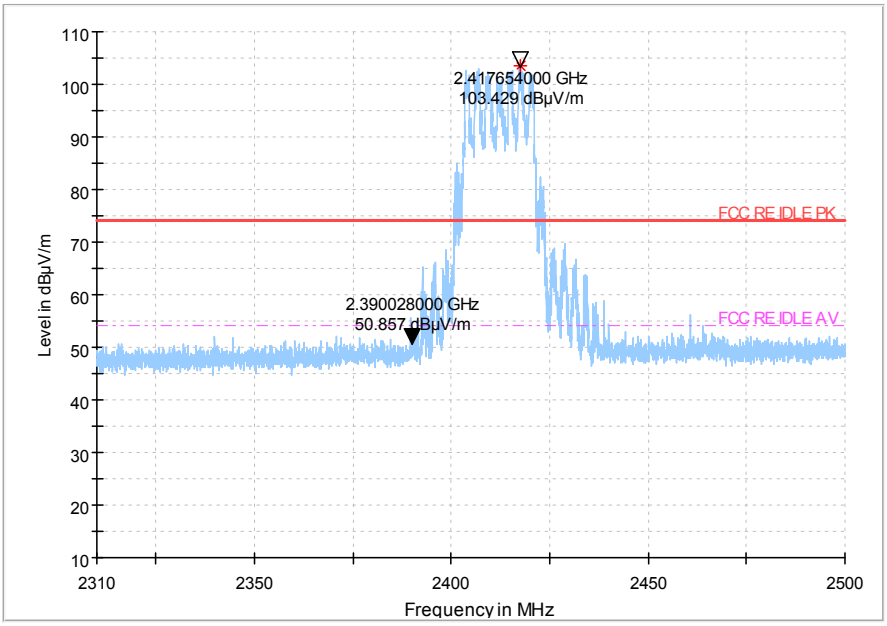
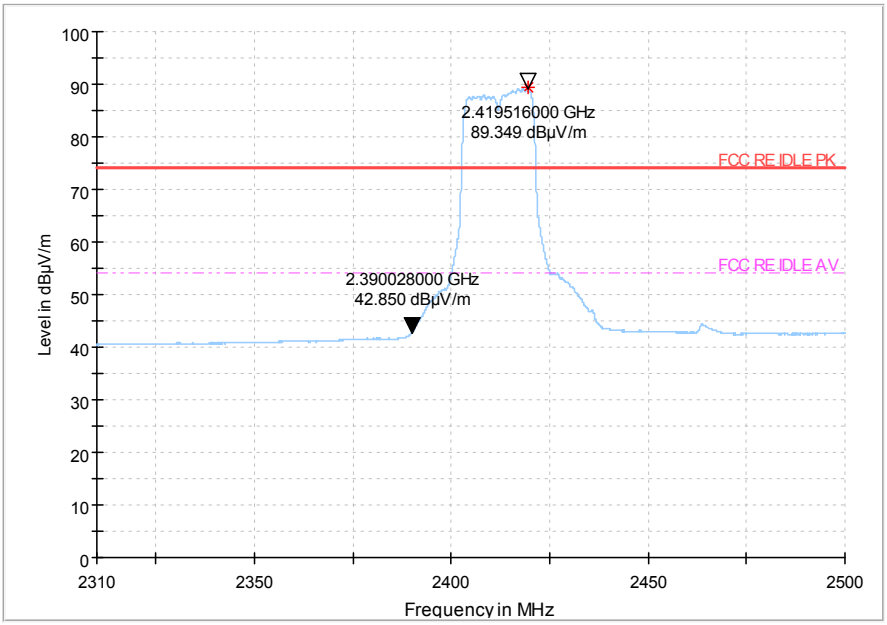


Fig 66. Radiated Spurious Emission (802.11g, Ch1,3GHz~18GHz)

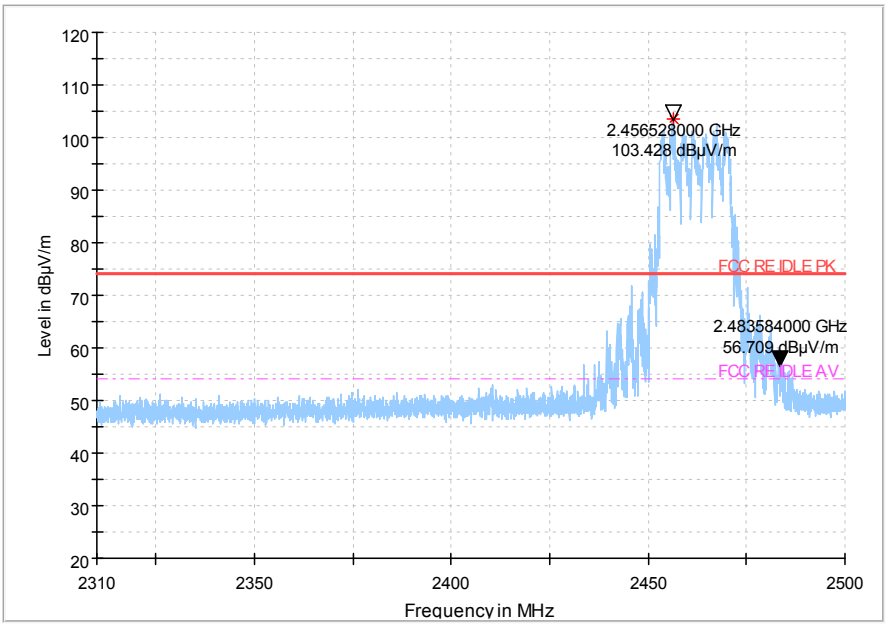


Peak detector

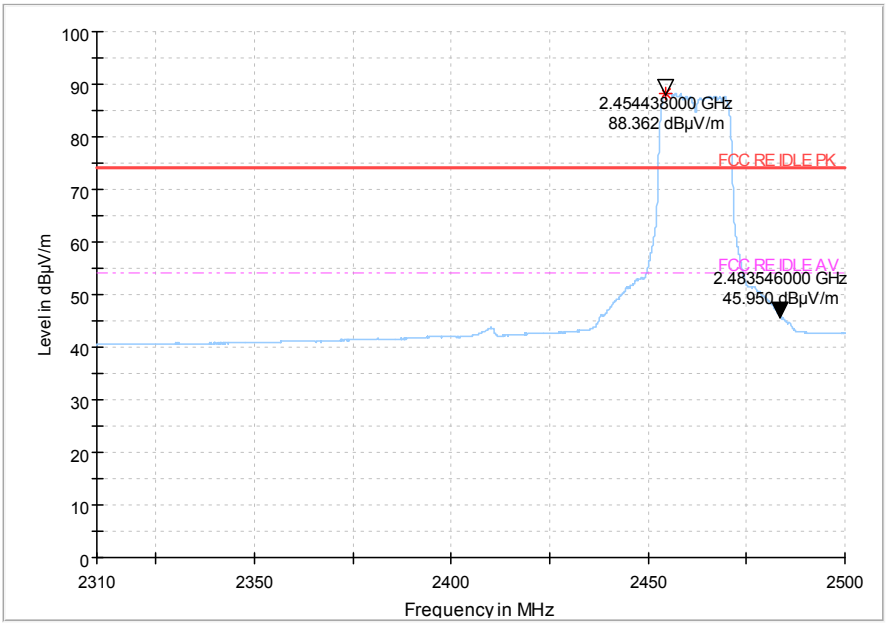


AV detector

Fig 67. Radiated emission (Power): 802.11n, low channel



Peak detector



AV detector

Fig 68. Radiated emission (Power): 802.11n, high channel

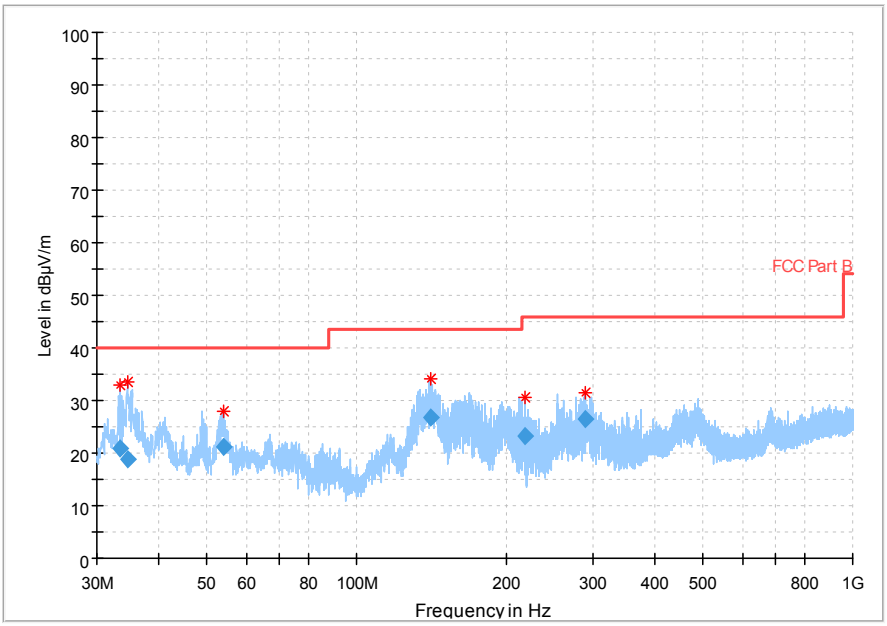


Fig 69. Radiated Spurious Emission (802.11 n-20MHz, Ch1,30MHz~1GHz)

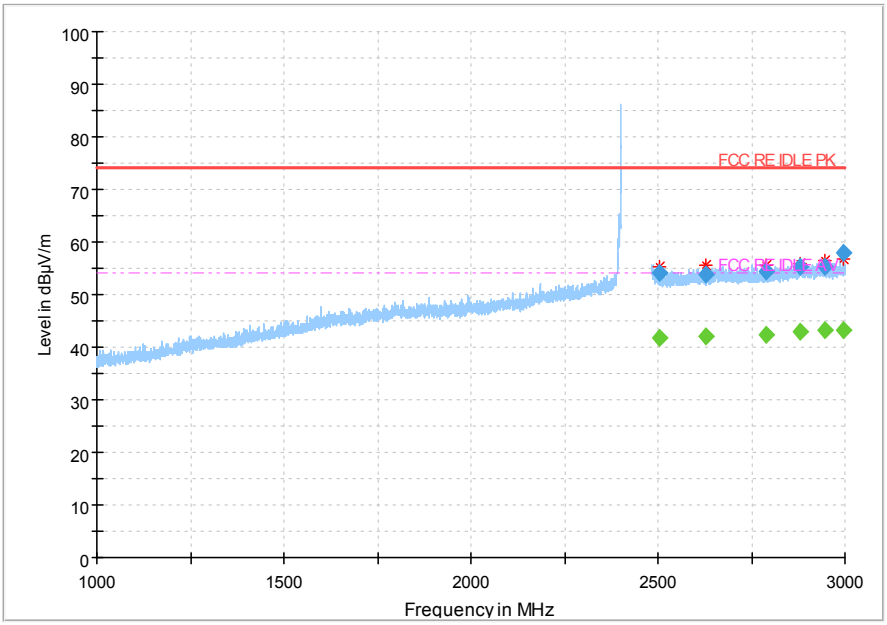


Fig 70. Radiated Spurious Emission (802.11 n-20MHz, Ch1,1GHz~3GHz)

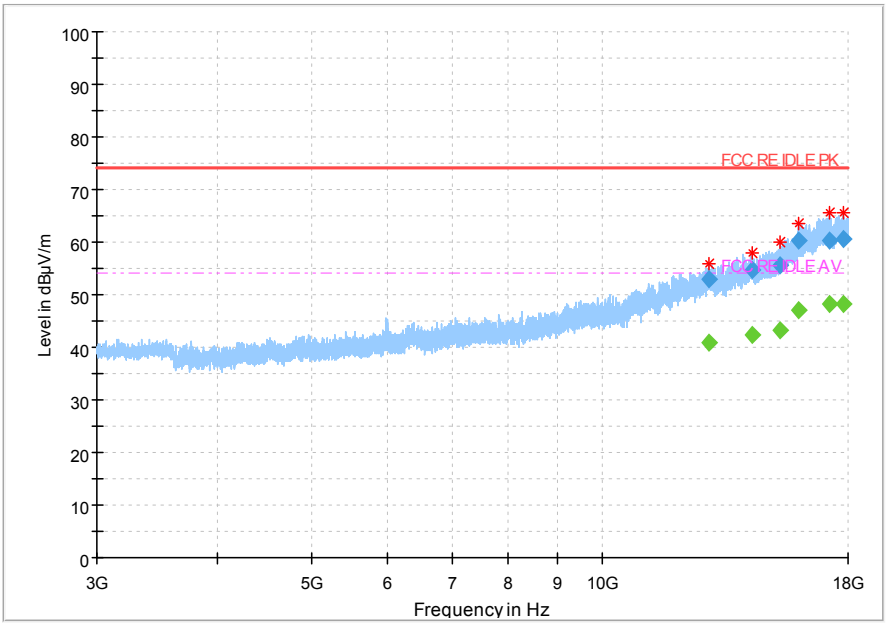
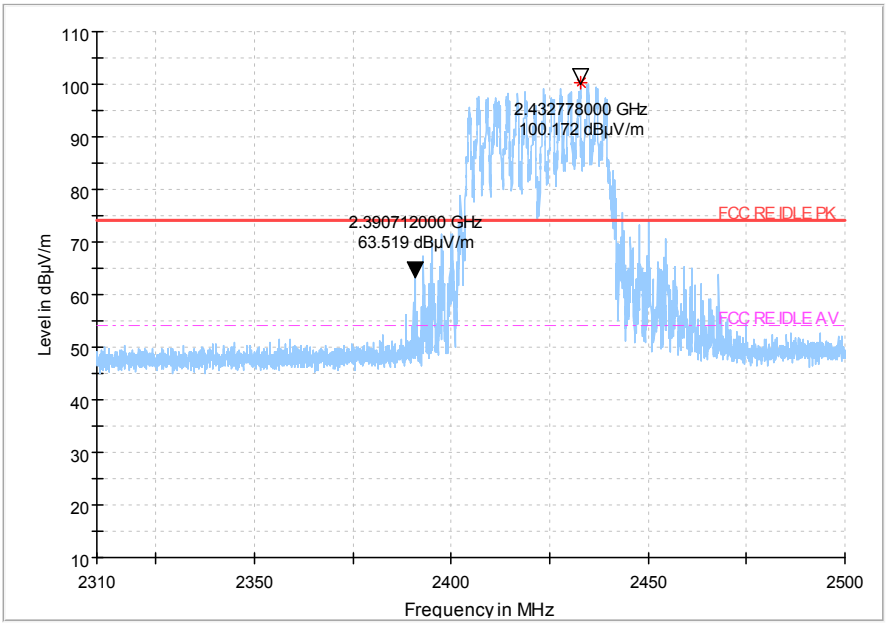
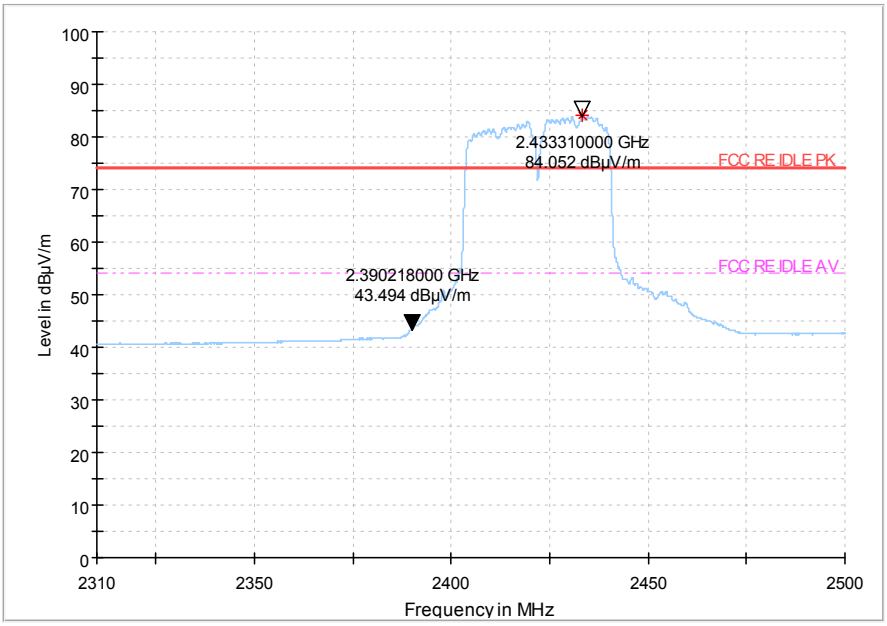


Fig 71. Radiated Spurious Emission (802.11 n-20MHz, Ch1,3GHz~18GHz)

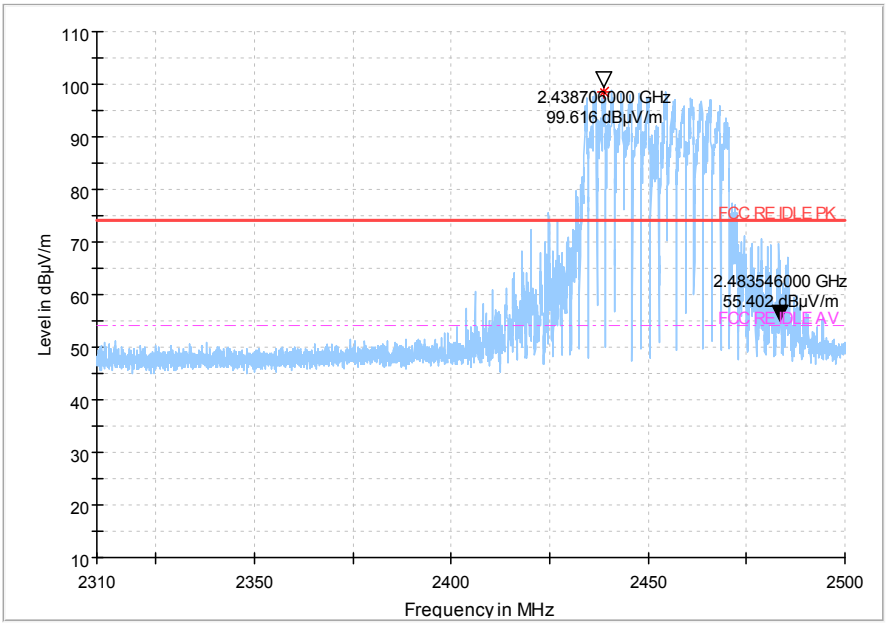


Peak detector

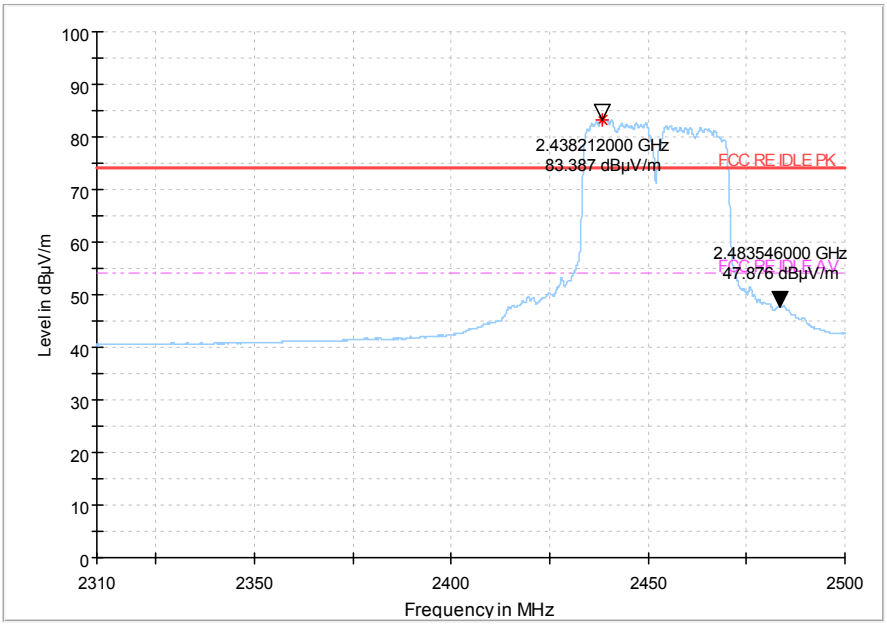


Average detector

Fig 72. Radiated emission (Power): 802.11n（40M）, low channel



Peak detector



Average detector

Fig 73. Radiated emission (Power): 802.11n（40M）, high channel

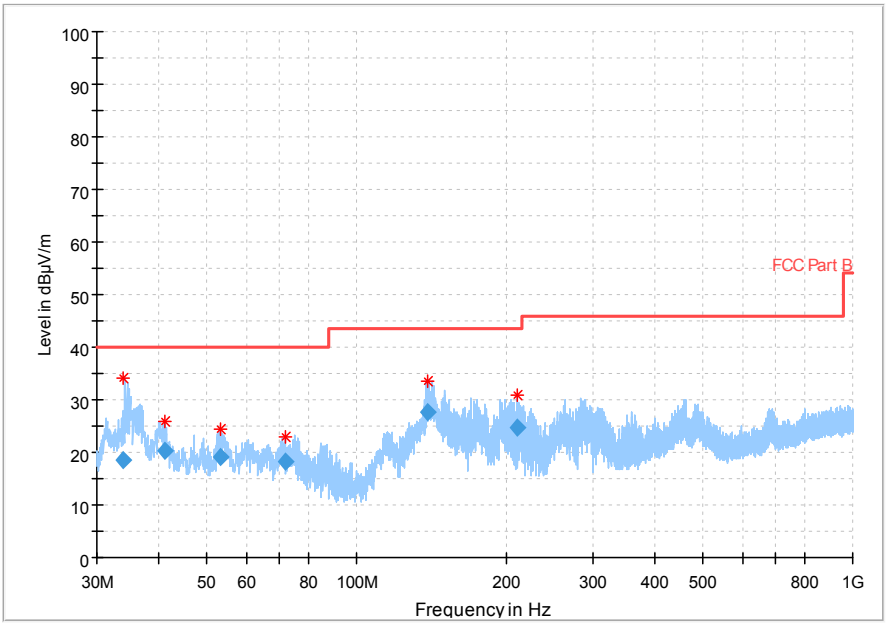


Fig 74. Radiated Spurious Emission (802.11 n-40MHz, Ch3,30MHz~1GHz)

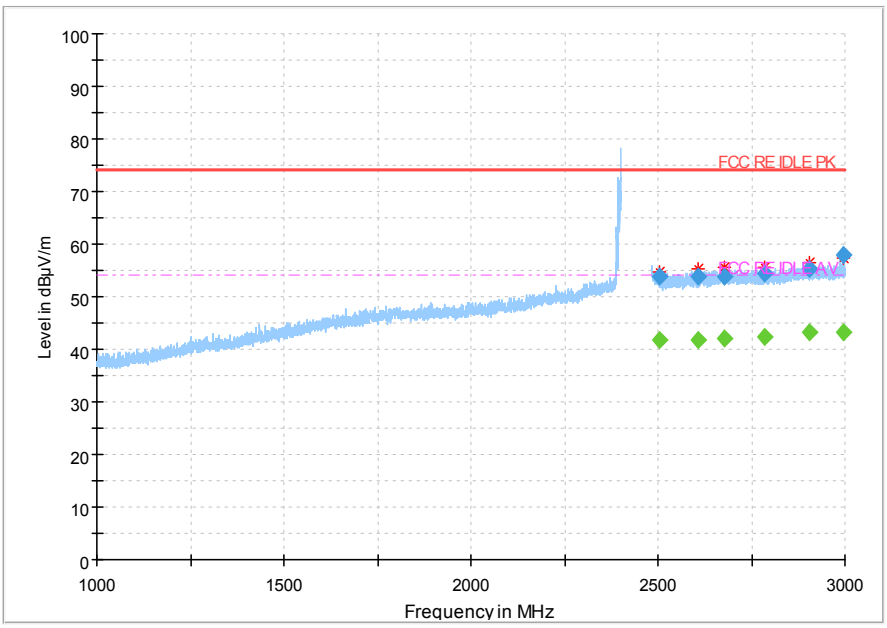


Fig 75. Radiated Spurious Emission (802.11 n-40MHz, Ch3,1GHz~3GHz)

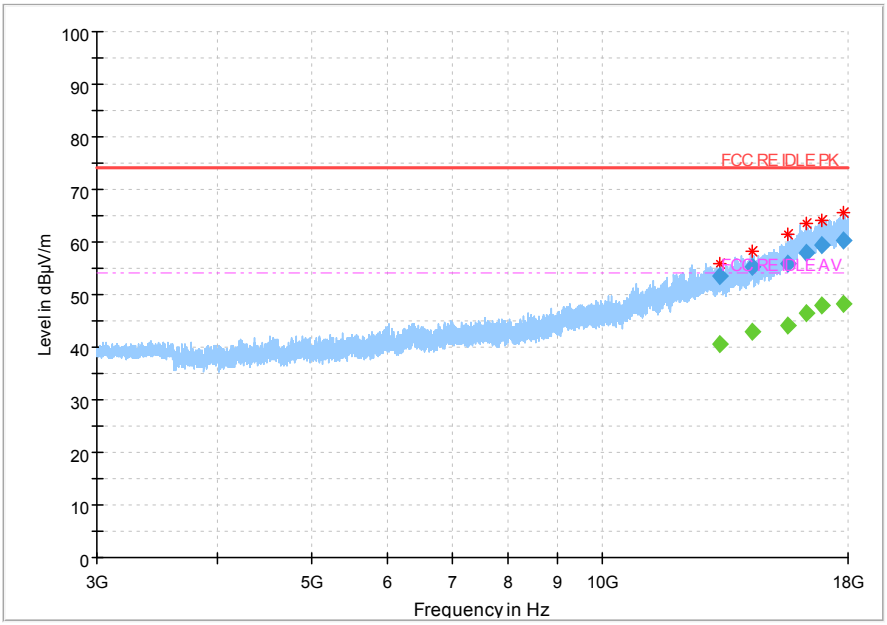


Fig 76. Radiated Spurious Emission (802.11 n-40MHz, Ch3,3GHz~18GHz)

L1323

802.11b/g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power（low）	2.31GHz~2.5GHz	Fig 77.	P
	Power（high）	2.31GHz~2.5GHz	Fig 78.	P
	1	30MHz~1GHz	Fig 79.	P
		1GHz~3GHz	Fig 80.	P
		3GHz~18GHz	Fig 81.	P

802.11b mode

Ch1 30MHz~1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
32.9	34.53	-22.1	56.63	V
37.2	34.95	-21.5	56.45	V
40.7	35.13	-20.8	55.93	V
44.8	36.23	-20.3	56.53	V
47.0	34.32	-20.1	54.42	V

145.6	29.99	-28	57.99	H

Ch1 1GHz~3GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2585.4	53.85	7.3	46.55	H
2641.2	54.38	7.6	46.78	V
2706.8	54.36	7.9	46.46	H
2787.8	54.81	7.8	47.01	V
2839.3	55.16	8.2	46.96	V
2989.1	60.49	8.9	51.59	H

Ch1 1GHz~3GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2641.2	42.08	7.6	34.48	V
2706.8	42.29	7.9	34.39	H
2787.8	42.41	7.8	34.61	V
2839.3	42.57	8.2	34.37	V
2989.1	43.41	8.9	34.51	H

Ch1 3GHz~18GHz(Peak)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
14314.9	55.42	20.6	34.82	H
15441.3	56.31	22.7	33.61	H
15701.6	56.36	23.2	33.16	V
16086.4	59.14	24.9	34.24	H
17052.1	60.1	26.9	33.2	H
17822.2	60.16	28.2	31.96	V

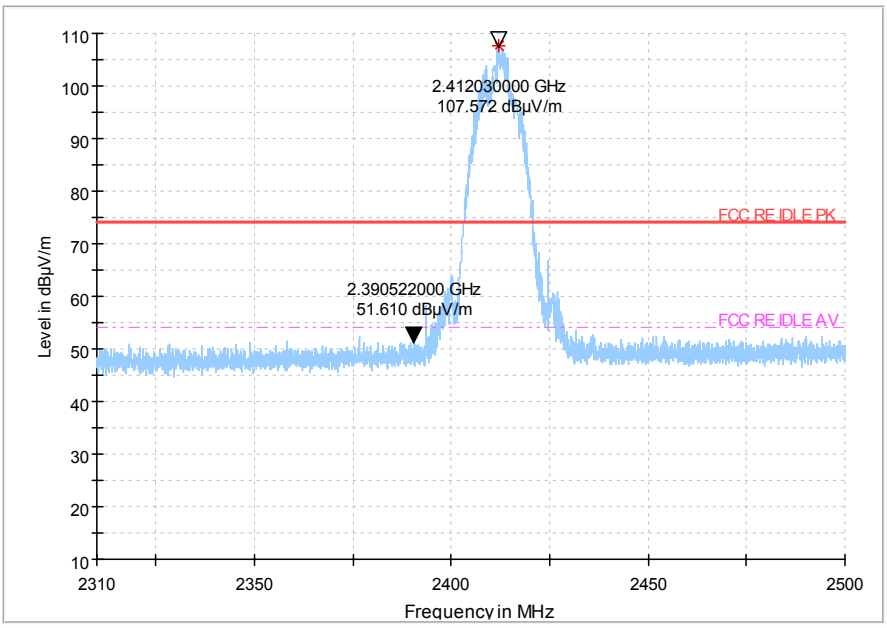
Ch1 3GHz~18GHz(Average)

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity

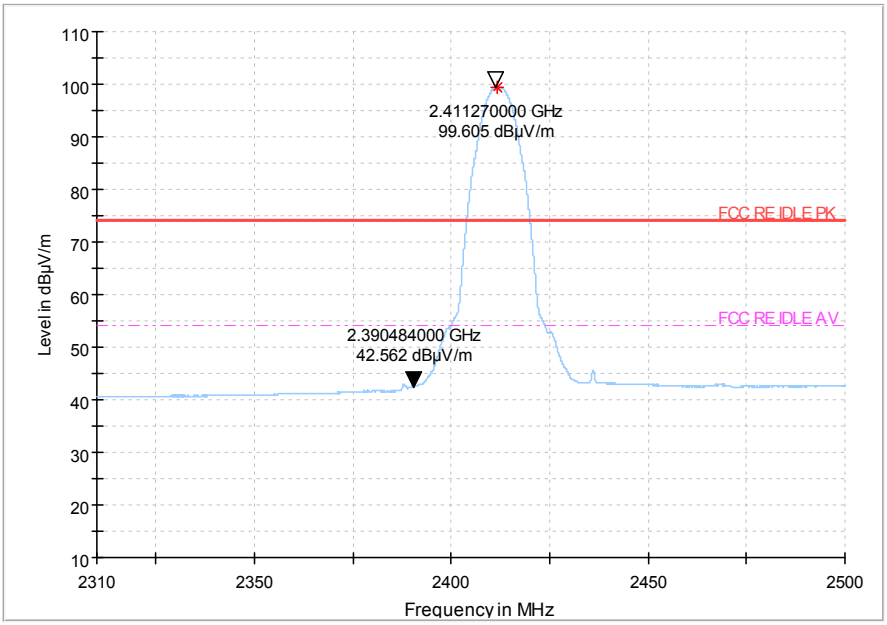
14314.9	43.01	20.6	22.41	H
15441.3	43.84	22.7	21.14	H
15701.6	44.56	23.2	21.36	V
16086.4	46.65	24.9	21.75	H
17052.1	47.81	26.9	20.91	H
17822.2	48.28	28.2	20.08	V

Note: Only the worst case is written in the report.

Test graphs as below:

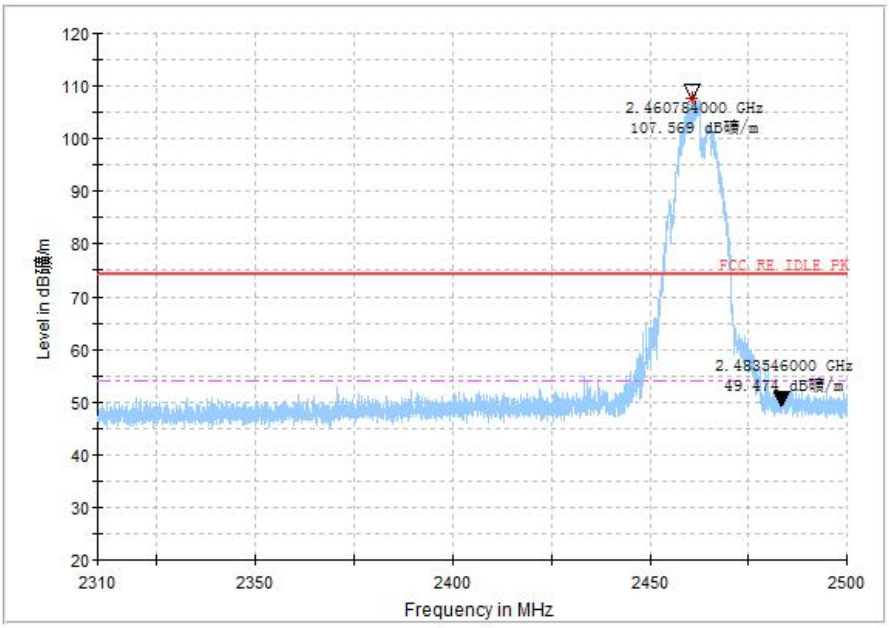


Peak detector

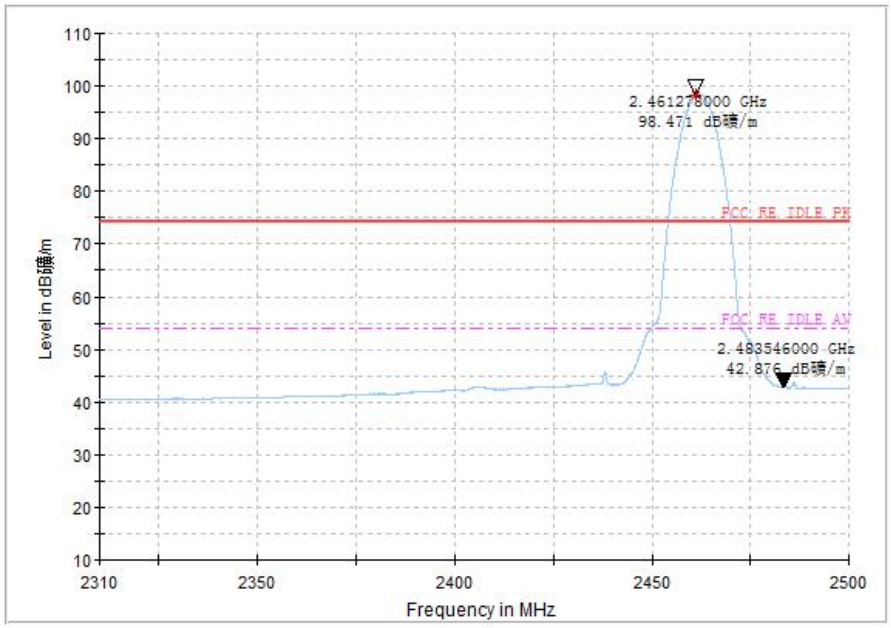


AV detector

Fig 77. Radiated emission (Power): 802.11b, low channel



Peak detector



AV detector

Fig 78. Radiated emission (Power): 802.11b, high channel

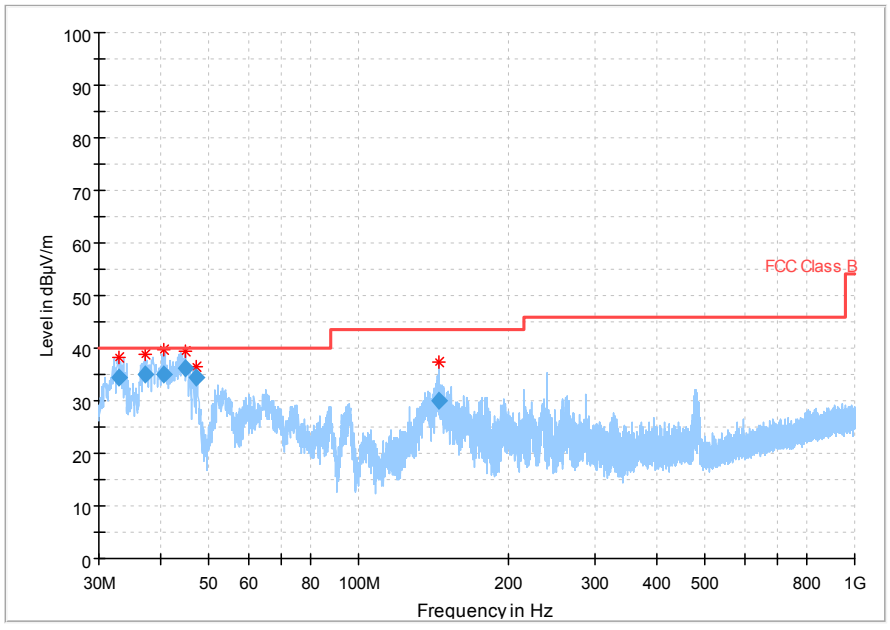


Fig 79. Radiated Spurious Emission (802.11b, Ch1,30MHz~1GHz)

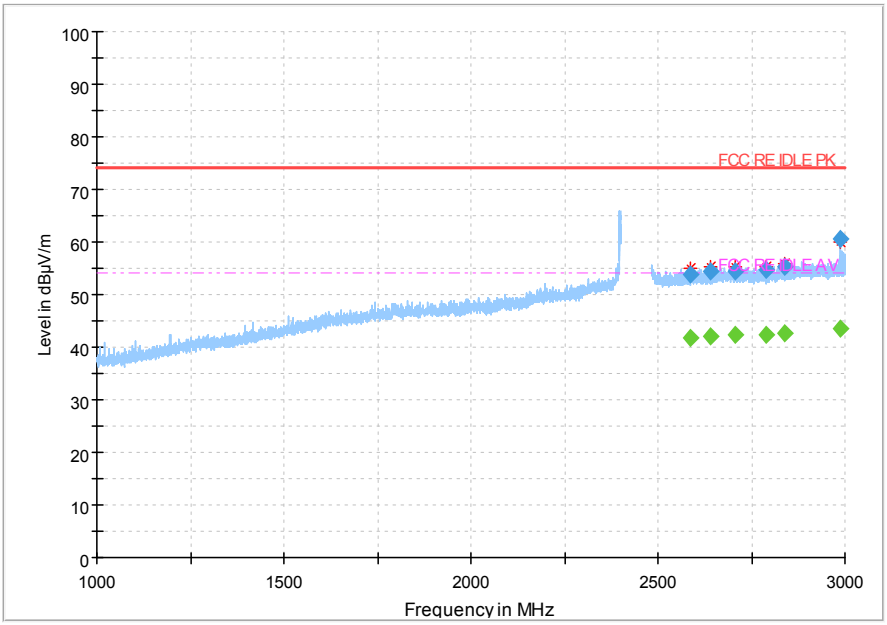


Fig 80. Radiated Spurious Emission (802.11b, Ch1,1GHz~3GHz)

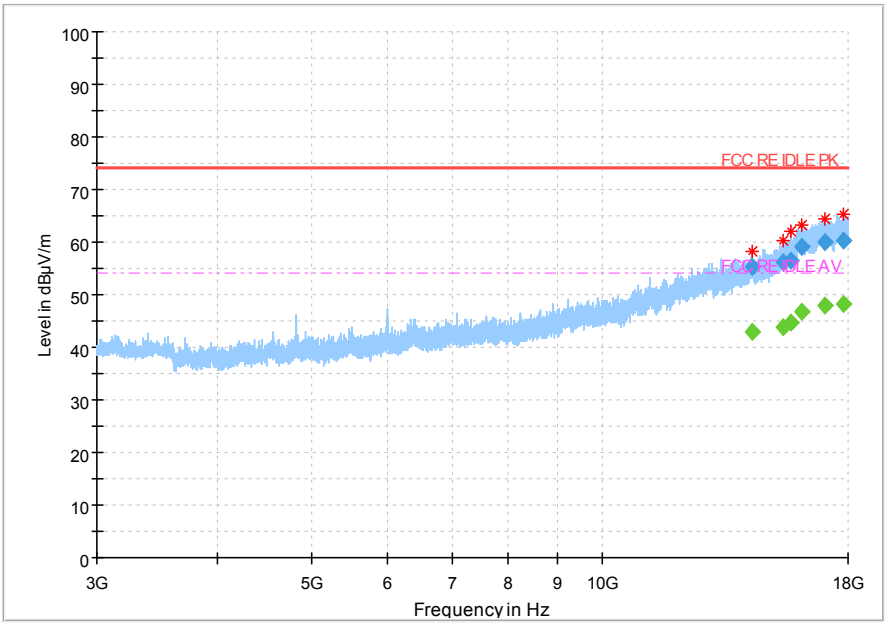
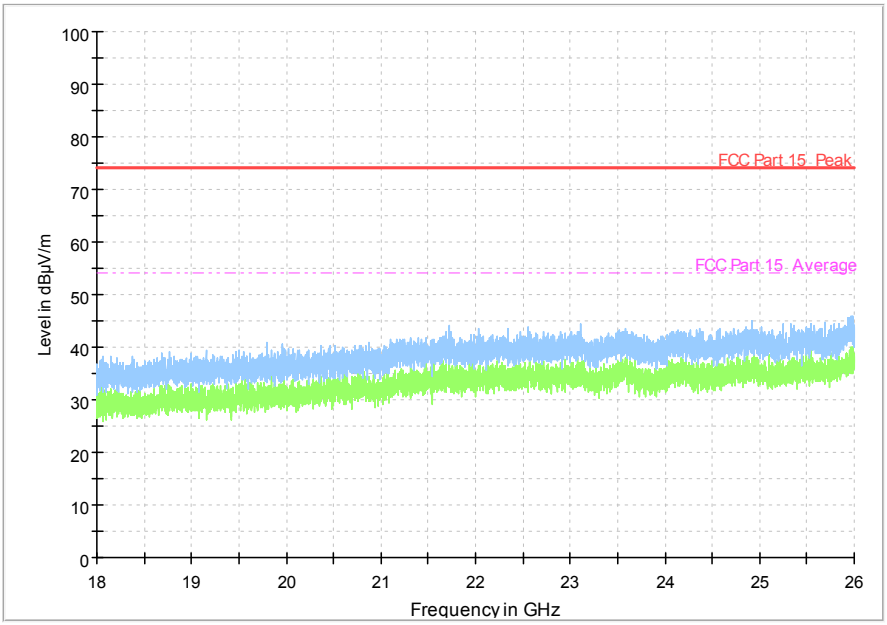


Fig 81. Radiated Spurious Emission (802.11b, Ch1,3GHz~18GHz)



All Channel

6.7. AC Powerline Conducted Emission

Method of Measurement: See ANSI C63.10 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.

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 Uncertainty

Measurement Items	Range	Confidence Level	Calculated Uncertainty
AC Power line Conducted Emission	0.15MHz-30MHz	95%	±5.66 db

Measurement Result and limit:

(Quasi-peak-average Limit)

L1321

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) With charger 802.11b	Conclusion
0.15 to 0.5	66 to 56	56 to 46	Fig 82.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: Pass

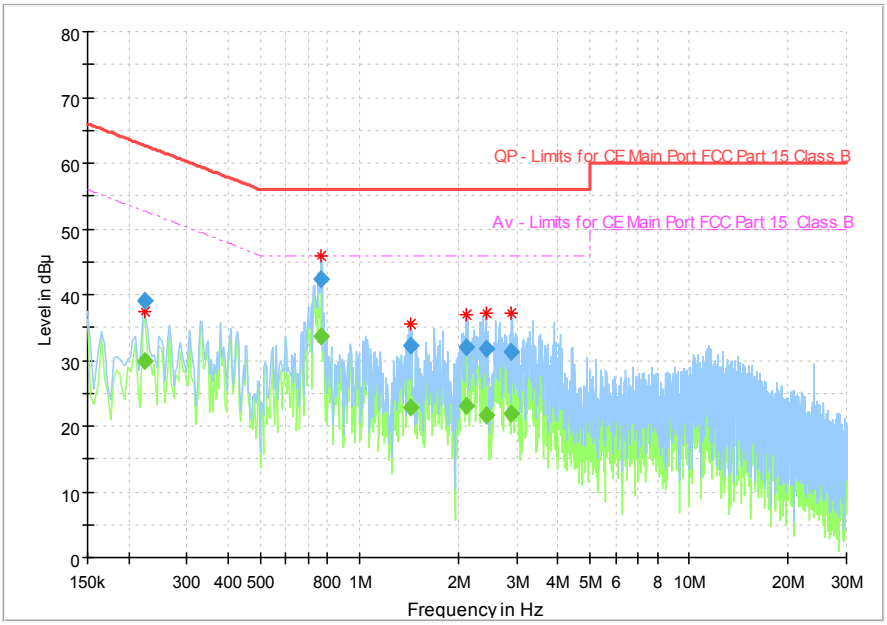


Fig 82. AC Powerline Conducted Emission

Frequency (MHz)	QuasiPeak (dB µ V)	Average (dB µ V)	Limit (dB µ	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.224625	39.01	---	62.65	23.64	1000.0	9.000	N	ON	9.7
0.224625	---	29.89	52.65	22.76	1000.0	9.000	N	ON	9.7
0.765656	42.25	---	56.00	13.75	1000.0	9.000	L1	ON	9.7
0.765656	---	33.67	46.00	12.33	1000.0	9.000	L1	ON	9.7
1.426088	---	22.81	46.00	23.19	1000.0	9.000	L1	ON	9.7
1.426088	32.31	---	56.00	23.69	1000.0	9.000	L1	ON	9.7
2.108906	---	23.06	46.00	22.94	1000.0	9.000	N	ON	9.7
2.108906	31.95	---	56.00	24.05	1000.0	9.000	N	ON	9.7
2.414869	---	21.56	46.00	24.44	1000.0	9.000	L1	ON	9.7
2.414869	31.74	---	56.00	24.26	1000.0	9.000	L1	ON	9.7
2.899931	---	21.83	46.00	24.17	1000.0	9.000	L1	ON	9.7
2.899931	31.28	---	56.00	24.72	1000.0	9.000	L1	ON	9.7

L1323

Frequency range (MHz)	Quasi-peak Limit (dBµV)	Average Limit (dBµV)	Result (dBµV) With charger 802.11b	Conclusion
0.15 to 0.5	67 to 56	56 to 46	Fig 83.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: Pass

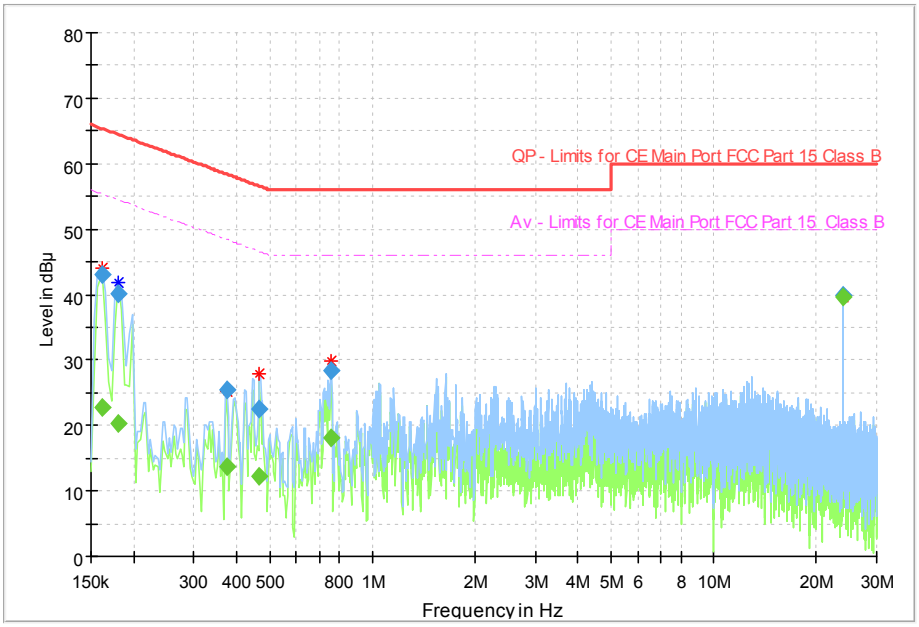


Fig 83. AC Powerline Conducted Emission

Frequency (MHz)	QuasiPeak (dB µ V)	Average (dB µ V)	Limit (dB µ	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.161194	---	22.65	55.40	32.75	1000.0	9.000	L1	ON	9.7
0.161194	43.01	---	65.40	22.39	1000.0	9.000	L1	ON	9.7
0.179850	---	20.21	54.49	34.28	1000.0	9.000	L1	ON	9.7
0.179850	40.13	---	64.49	24.36	1000.0	9.000	L1	ON	9.7
0.373875	---	13.60	48.41	34.81	1000.0	9.000	L1	ON	9.7
0.373875	25.52	---	58.41	32.89	1000.0	9.000	L1	ON	9.7
0.467156	---	12.27	46.56	34.30	1000.0	9.000	L1	ON	9.7
0.467156	22.49	---	56.56	34.07	1000.0	9.000	L1	ON	9.7
0.754463	---	18.05	46.00	27.95	1000.0	9.000	L1	ON	9.7
0.754463	28.32	---	56.00	27.68	1000.0	9.000	L1	ON	9.7
24.000150	---	39.59	50.00	10.41	1000.0	9.000	N	ON	9.9
24.000150	39.76	---	60.00	20.24	1000.0	9.000	N	ON	9.9

7. Test Equipment and Ancillaries Used For Tests

The test equipment and ancillaries used are as follows.

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Cal.interval
1	Vector Signal Analyzer	FSQ26	101096	Rohde&Schwarz	2018-05-11	1 Year
2	DC Power Supply	ZUP60-14	LOC-220Z006-0007	TDL-Lambda	2018-05-11	1 Year

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Cal.interval
1	Universal Radio Communication Tester	CMU200	123123	R&S	2018-05-11	1 Year
2	EMI Test Receiver	ESU40	100307	R&S	2018-05-11	1 Year
3	TRILOG Broadband Antenna	VULB9163	VULB9163-515	Schwarzbeck	2017-02-25	3 Year
4	Double-ridged Waveguide Antenna	ETS-3117	00135890	ETS	2017-01-11	3 Year
5	2-Line V-Network	ENV216	101380	R&S	2018-05-11	1 Year

Anechoic chamber

Fully anechoic chamber by Frankonia German.

8. Test Environment

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Ground system resistance	< 0.5

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 k
Ground system resistance	< 0.5

Fully-anechoic chamber1 (6.9 meters×10.9 meters×5.4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 k
Ground system resistance	< 0.5
VSWR	Between 0 and 6 dB, from 1GHz to 18GHz
Site Attenuation Deviation	Between -4 and 4 dB,30MHz to 1GHz
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

ANNEX A. Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

ANNEX B. Accreditation Certificate

Accredited Laboratory

A2LA has accredited

EAST CHINA INSTITUTE OF TELECOMMUNICATIONS

Shanghai, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 15th day of March 2017.

President and CEO
For the Accreditation Council
Certificate Number 3682.01
Valid to February 28, 2019

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

************End The Report************