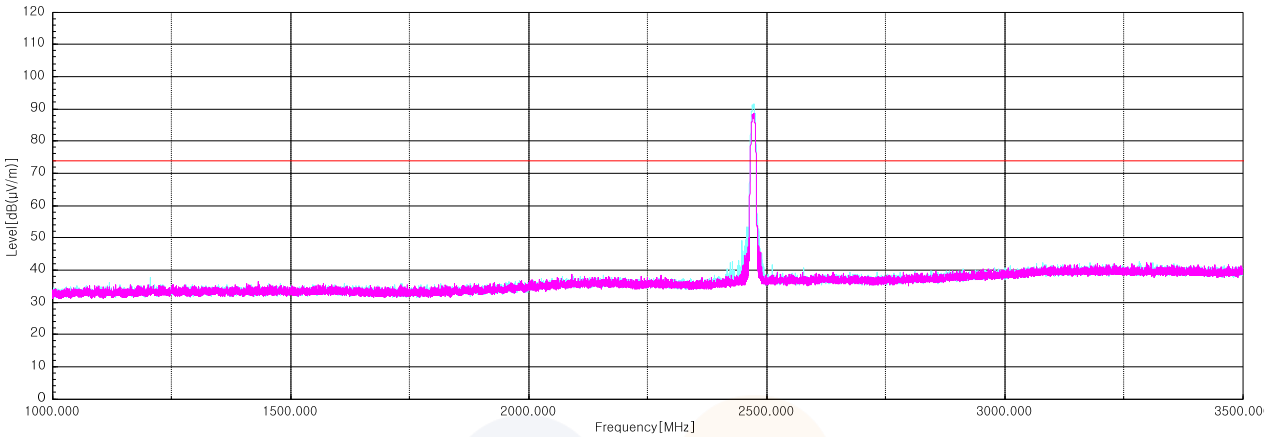
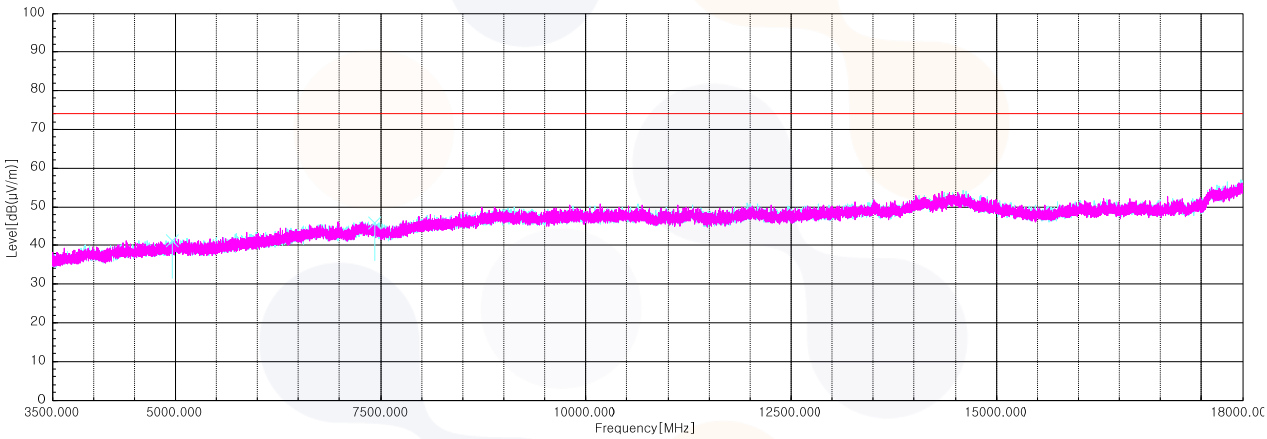
Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



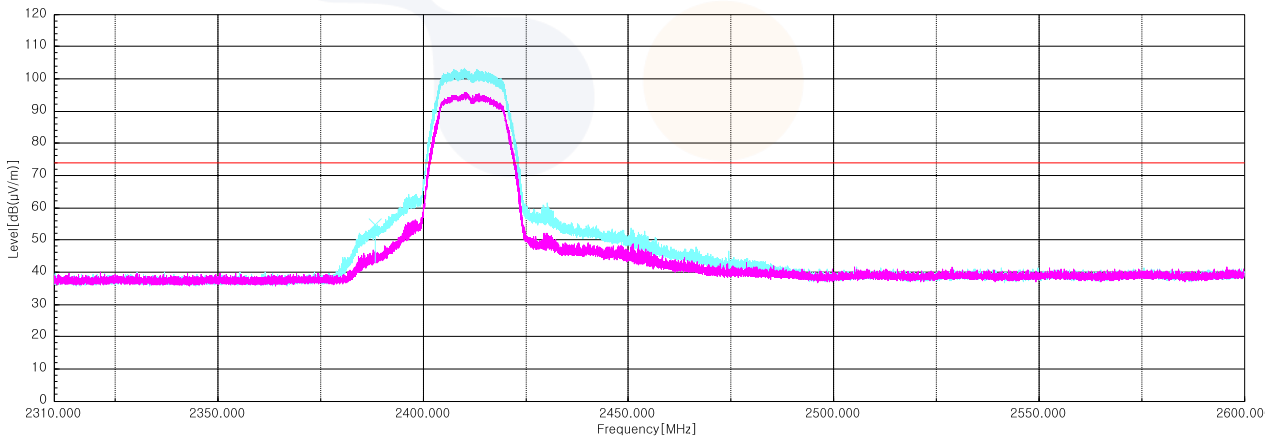
802.11g_2 412 ㎒

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 389.97[1)]	V	57.80	27.10	-30.39	-	54.51	74.00	19.49
4 826.75[1)]	V	58.80	32.46	-46.03	-	45.23	74.00	28.77
7 230.85	V	52.80	37.16	-44.37	-	45.59	74.00	28.41
Average Data								
2 389.97[1)]	V	48.09	27.10	-30.39	0.33	45.13	54.00	8.87

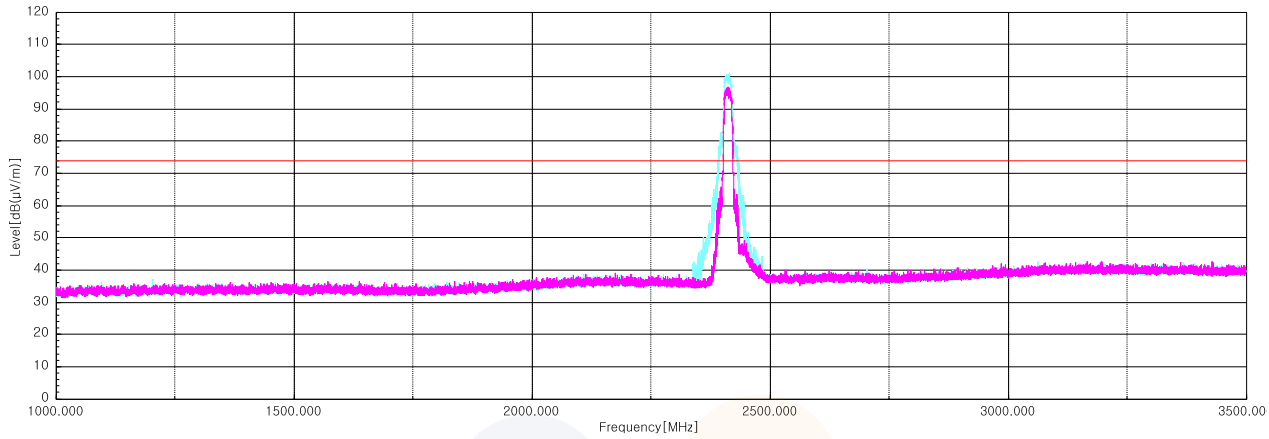
Average data

Blank

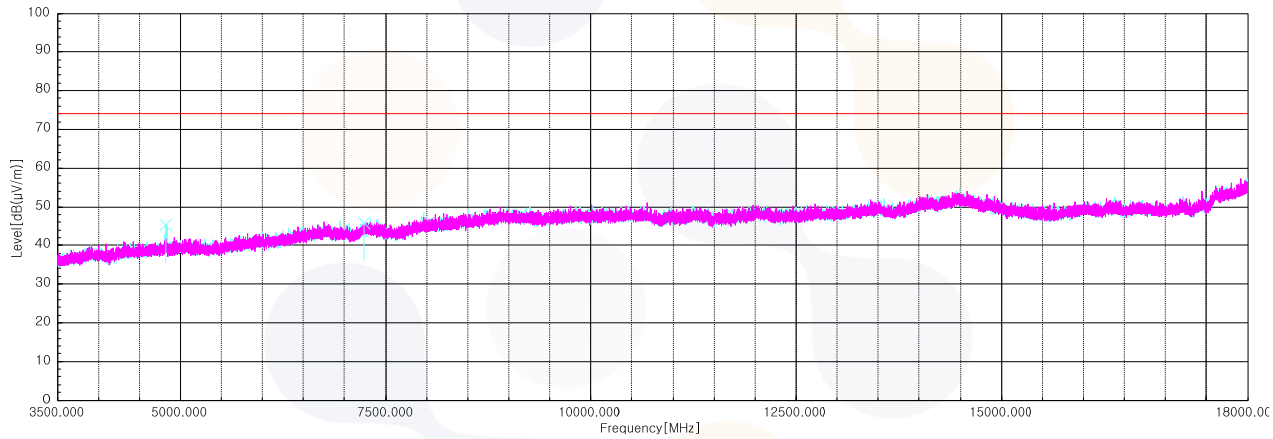
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



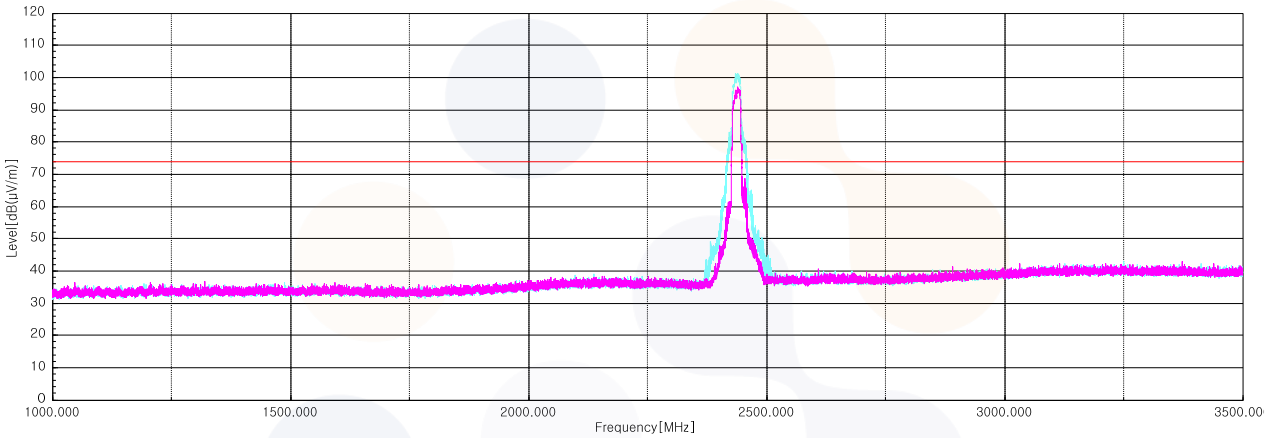
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



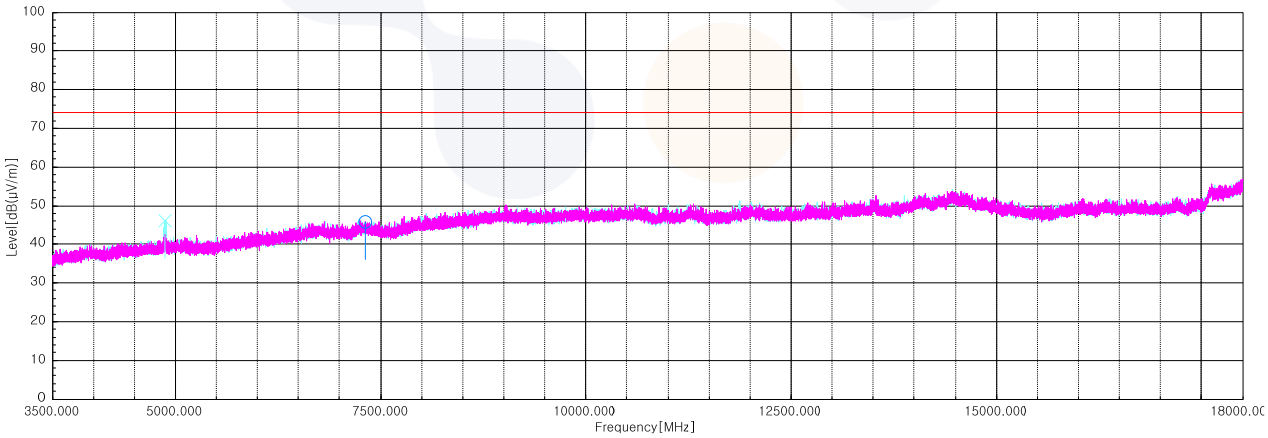
802.11g_2 437 ㎒

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
4 871.22[1)]	V	59.30	32.73	-45.83	-	46.20	74.00	27.80
7 309.15[1)]	H	53.10	37.06	-44.32	-	45.84	74.00	28.16
Average Data								
No spurious emissions were detected within 20 ㏈ of the limit.								

Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



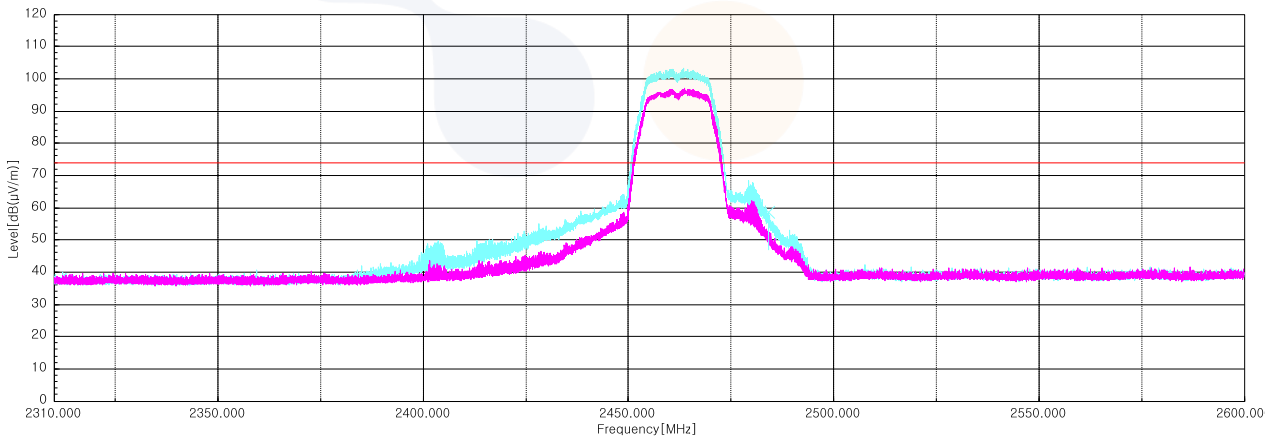
802.11g_2 462 ㎒

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.52[1)]	V	61.10	27.70	-30.24	-	58.56	74.00	15.44
4 934.05[1)]	V	57.60	32.77	-45.55	-	44.82	74.00	29.18
7 386.00[1)]	H	52.30	36.93	-44.19	-	45.04	74.00	28.96
Average Data								
2 483.52[1)]	V	51.13	27.70	-30.24	0.33	48.92	54.00	5.08

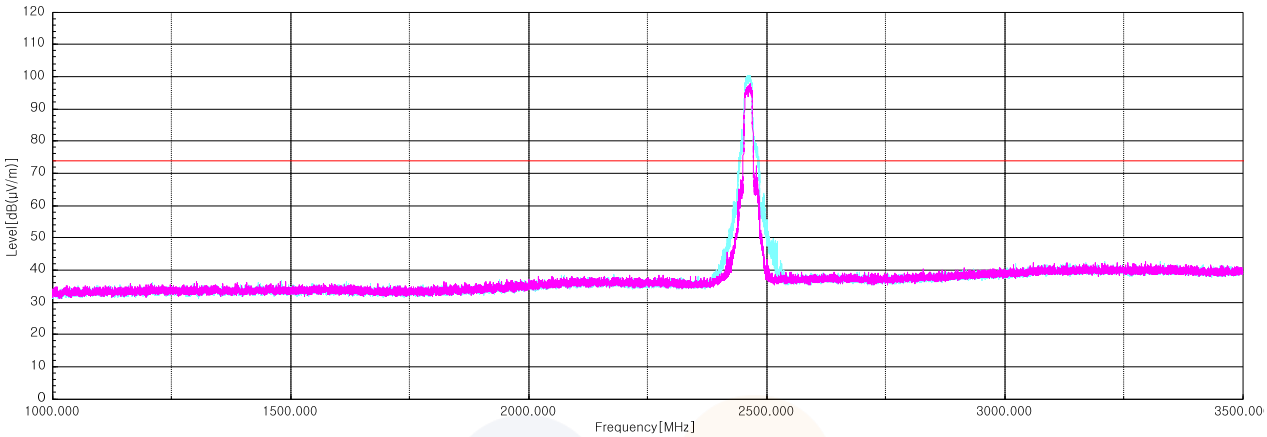
Average data

Blank

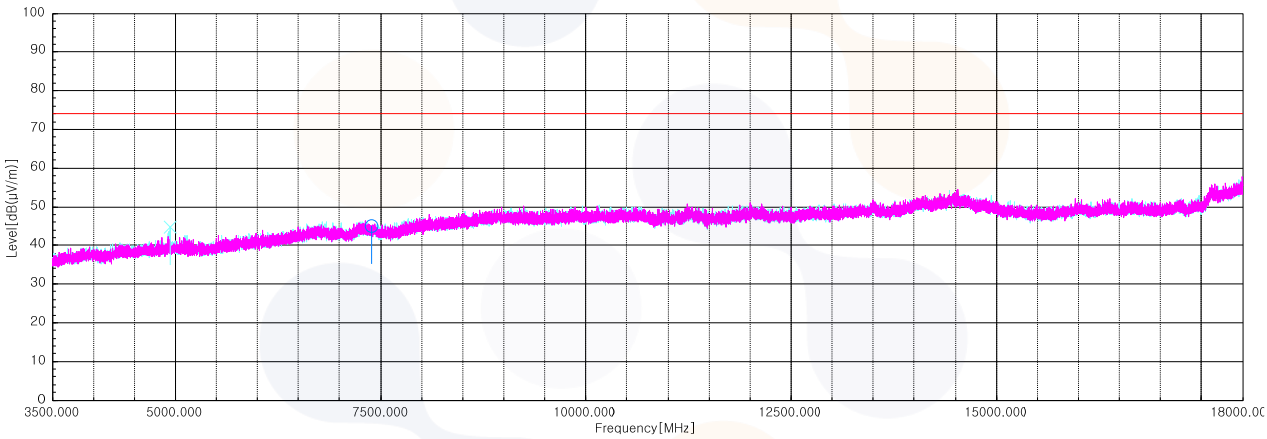
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



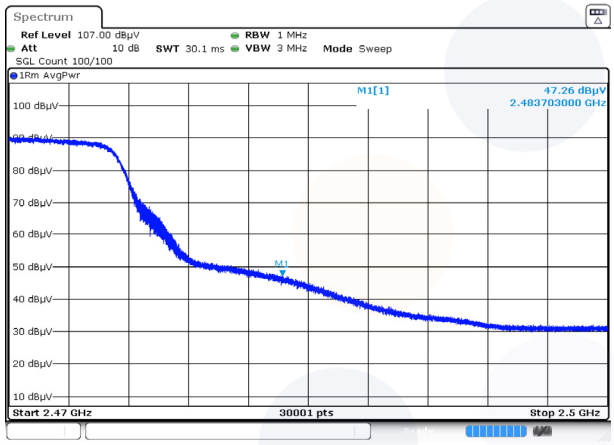
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11g_2 467 ㎒

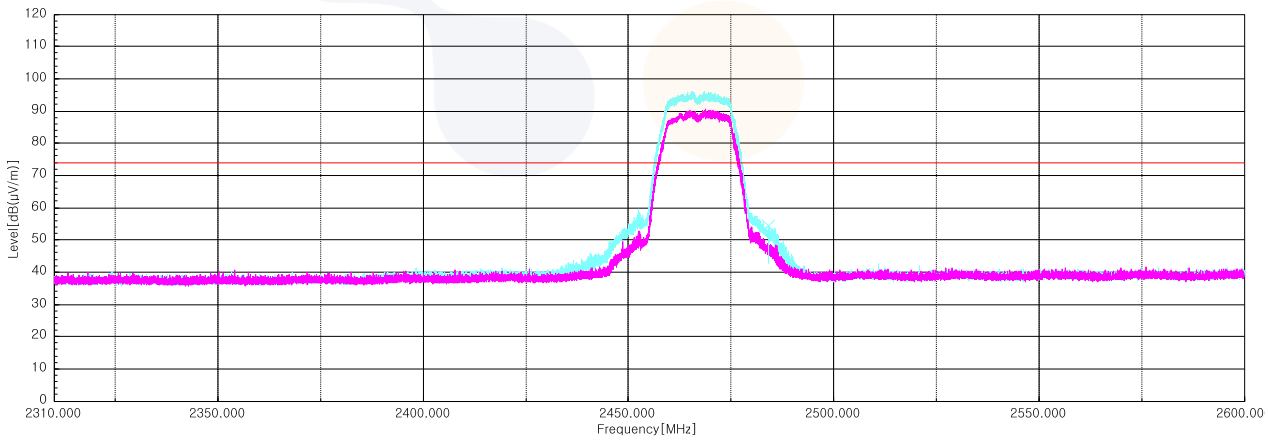
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.70[1)]	V	56.70	27.70	-30.24	-	54.16	74.00	19.84
4 934.53[1)]	H	54.00	32.77	-45.54	-	41.23	74.00	32.77
7 417.90[1)]	V	53.40	36.86	-44.13	-	46.13	74.00	27.87
Average Data								
2 483.70[1)]	V	47.26	27.70	-30.24	0.33	45.05	54.00	8.95

Average data

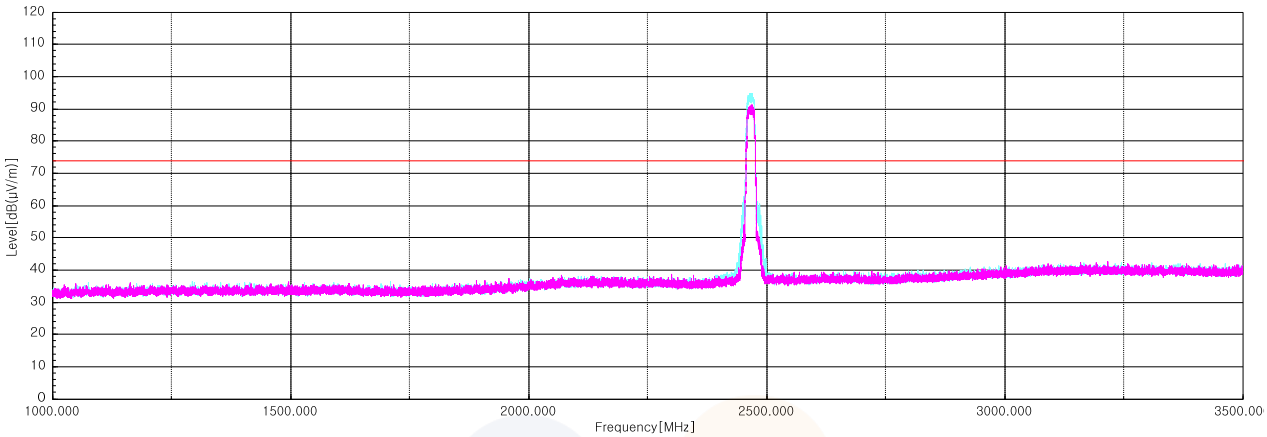


Blank

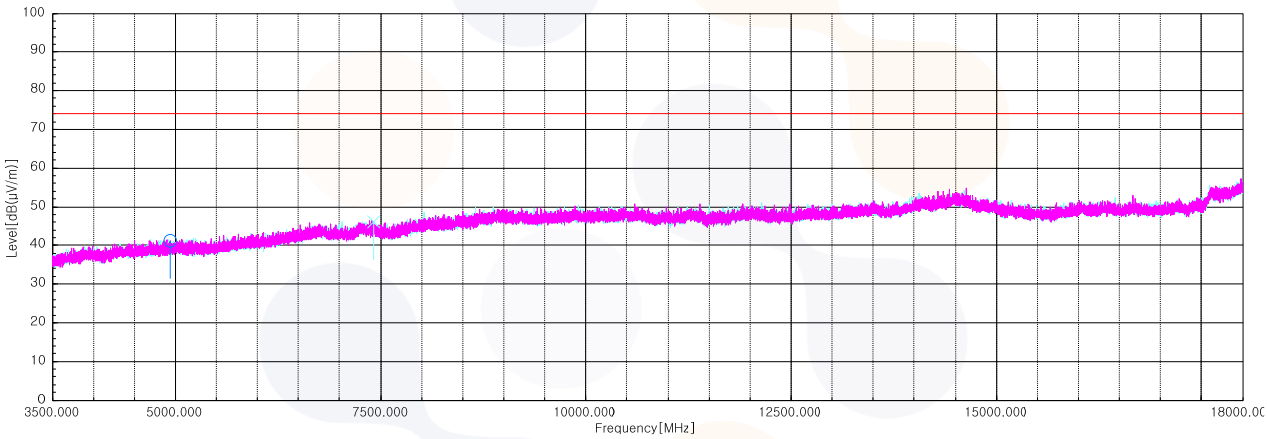
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



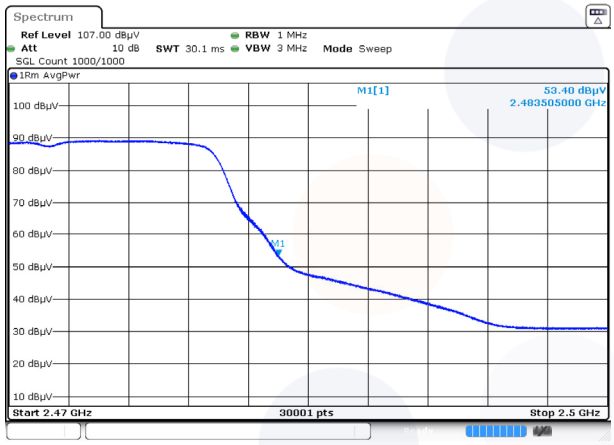
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11g_2 472 ㎒

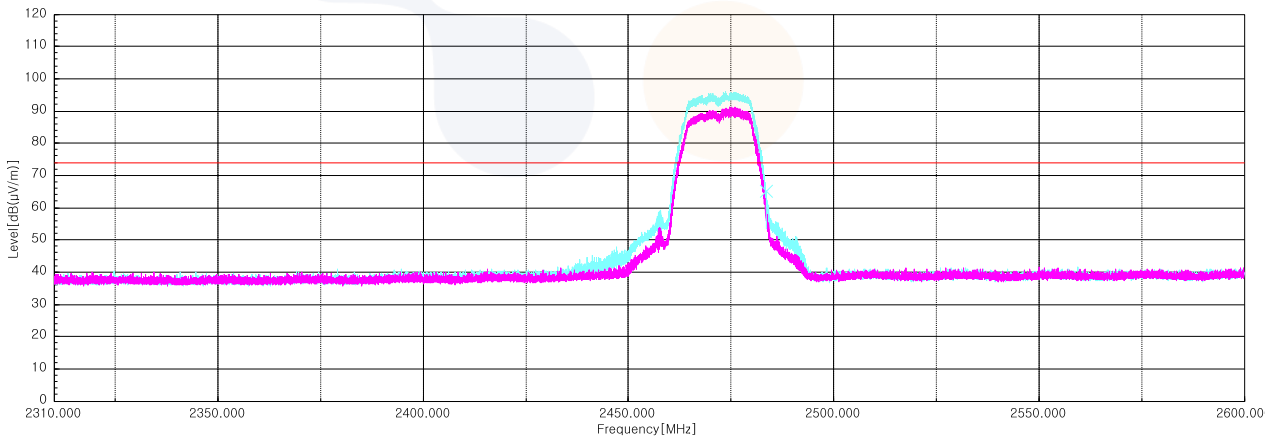
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.51[1)]	V	67.40	27.70	-30.24	-	64.86	74.00	9.14
4 946.13[1)]	H	53.70	32.79	-45.49	-	41.00	74.00	33.00
7 427.57[1)]	V	53.00	36.84	-44.11	-	45.73	74.00	28.27
Average Data								
2 483.51[1)]	V	53.40	27.70	-30.24	0.33	51.19	54.00	2.81

Average data

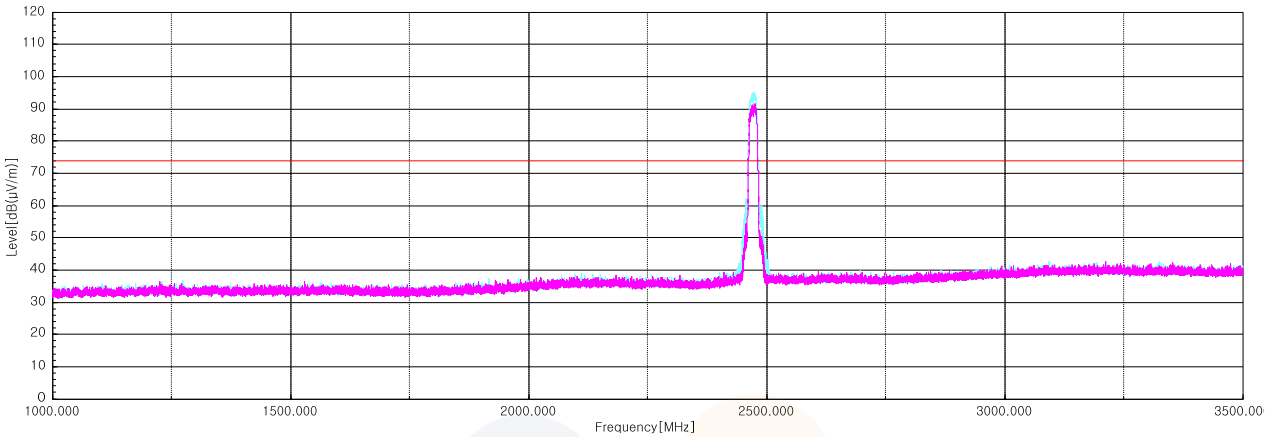


Blank

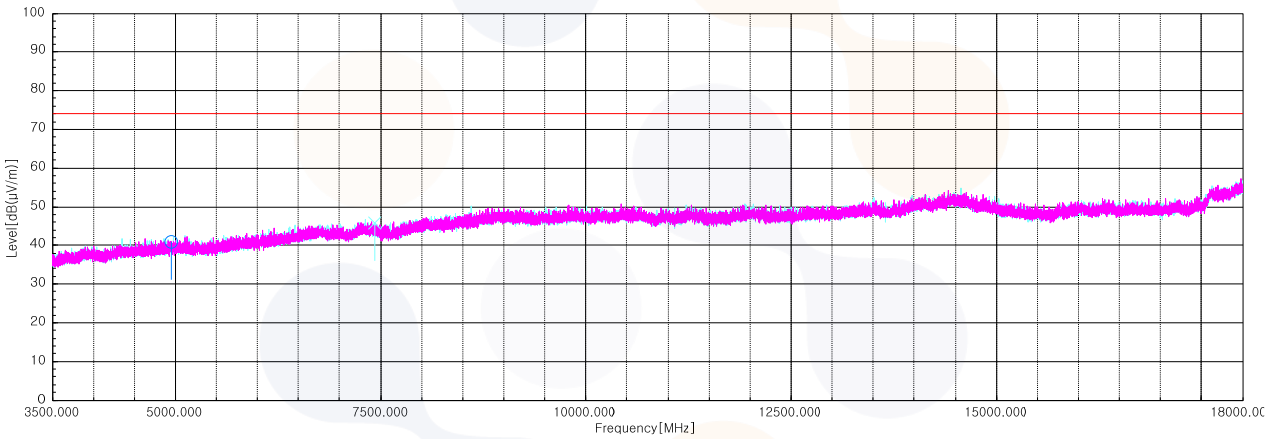
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



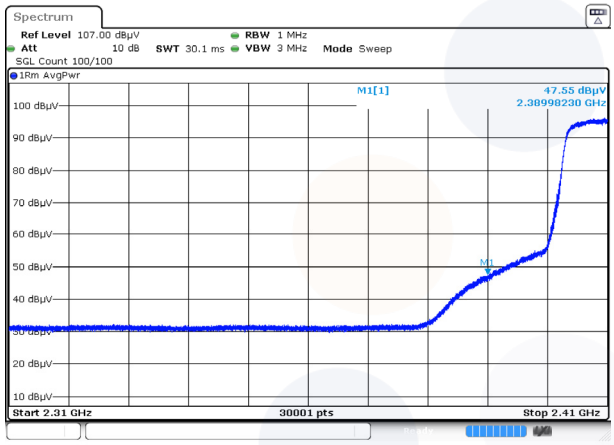
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11n HT20_2 412 ㎒

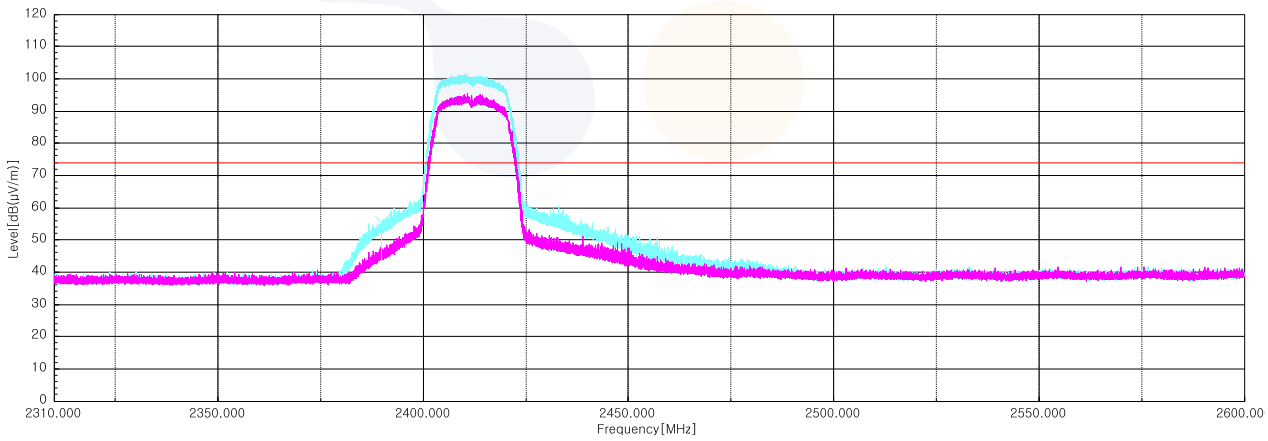
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 389.98[1)]	V	58.60	27.10	-30.39	-	55.31	74.00	18.69
4 823.37[1)]	V	58.00	32.44	-46.04	-	44.40	74.00	29.60
7 248.25	H	53.40	37.20	-44.42	-	46.18	74.00	27.82
Average Data								
2 389.98[1)]	V	47.55	27.10	-30.39	0.35	44.61	54.00	9.39

Average data

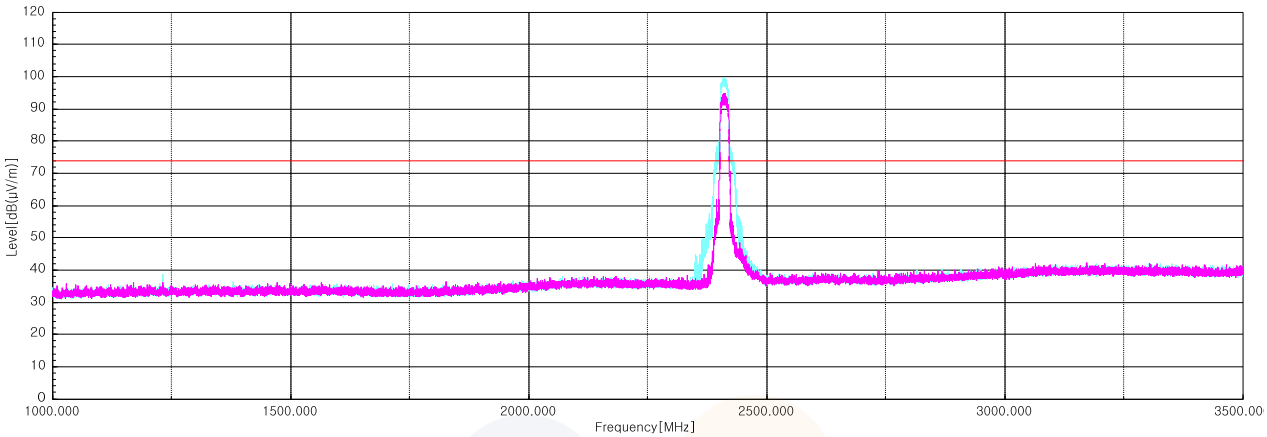


Blank

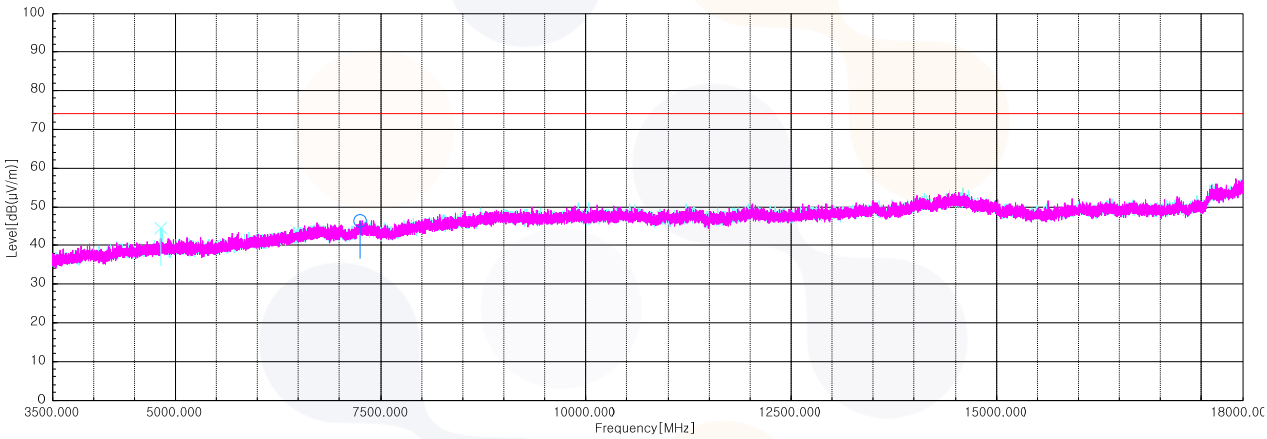
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



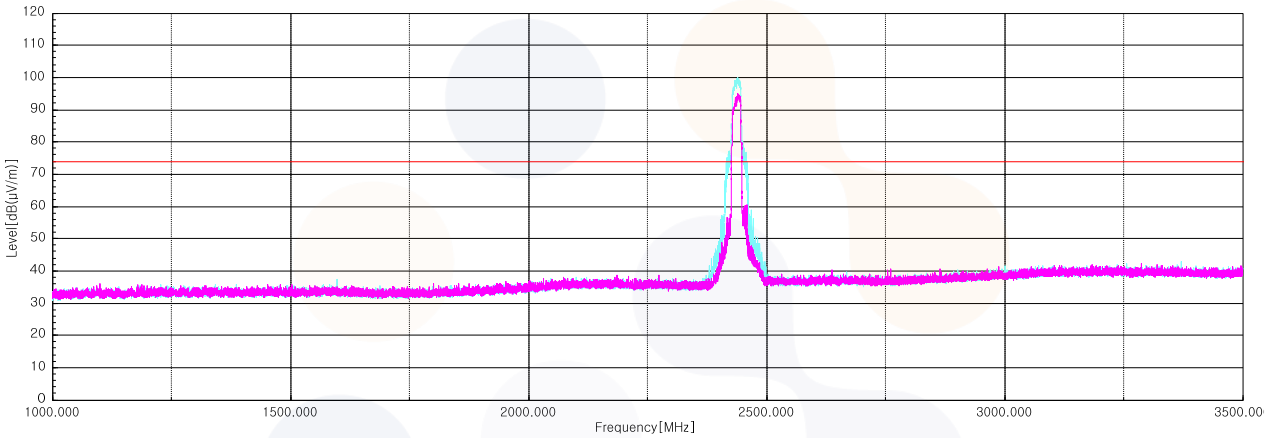
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



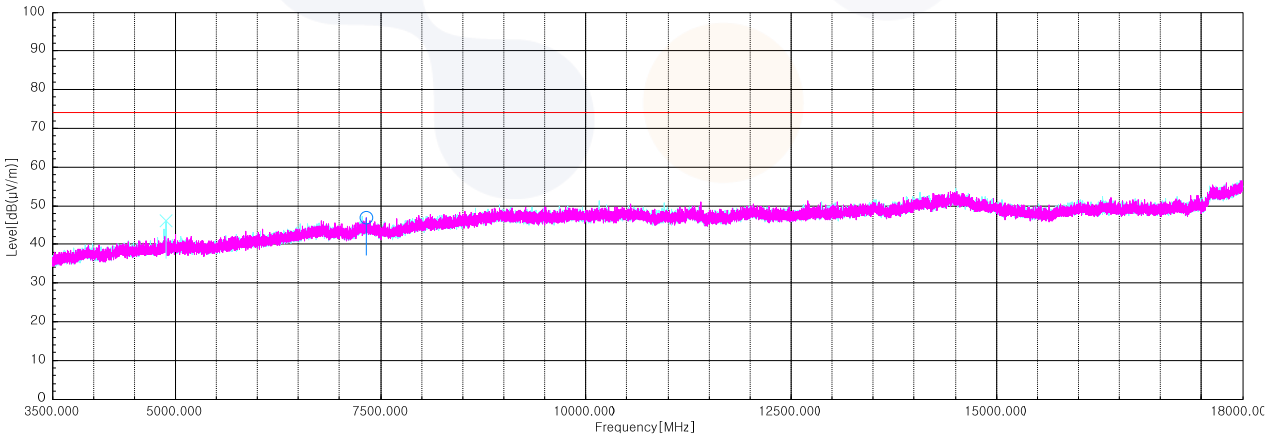
802.11n HT20_2 437 ㎒

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
4 880.88[1)]	V	59.10	32.79	-45.78	-	46.11	74.00	27.89
7 320.27[1)]	H	54.10	37.02	-44.30	-	46.82	74.00	27.18
Average Data								
No spurious emissions were detected within 20 ㏈ of the limit.								

Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



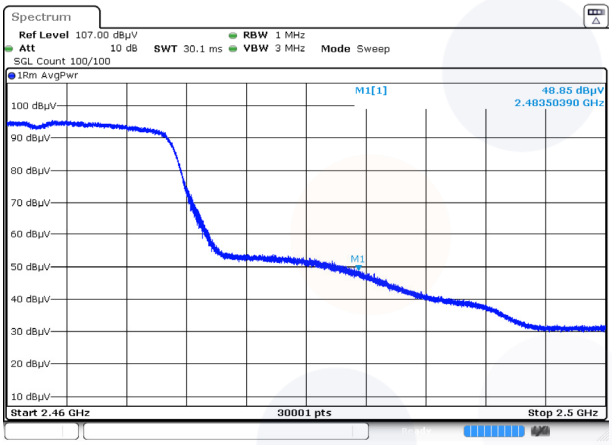
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11n HT20_2 462 ㎒

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.50[1)]	V	65.90	27.70	-30.24	-	63.36	74.00	10.64
4 928.73[1)]	V	55.30	32.76	-45.57	-	42.49	74.00	31.51
7 388.42[1)]	V	52.80	36.92	-44.18	-	45.54	74.00	28.46
Average Data								
2 483.50[1)]	V	48.85	27.70	-30.24	0.35	46.66	54.00	7.34

Average data



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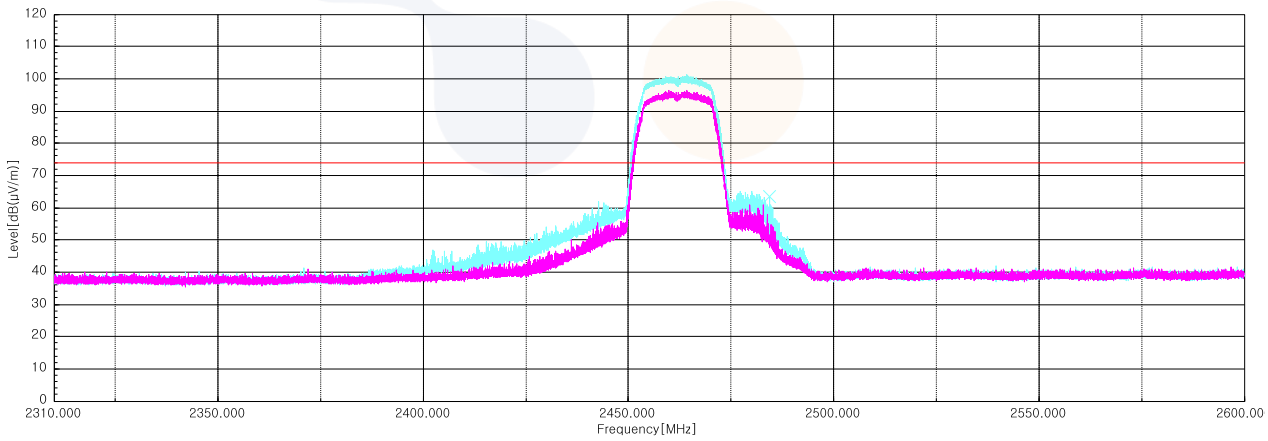
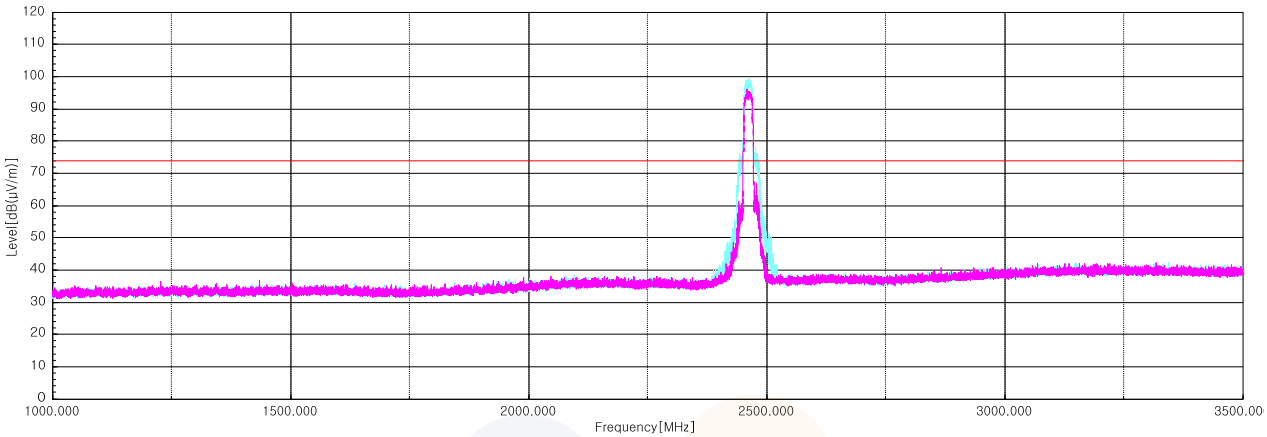
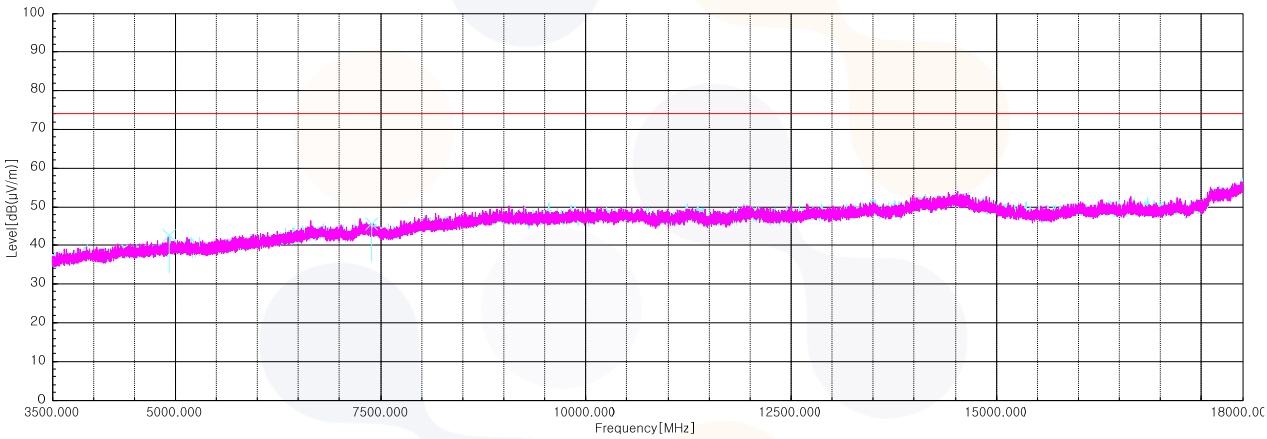
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



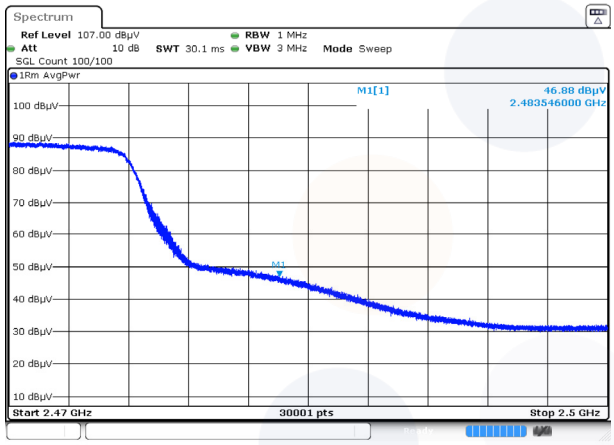
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11n HT20_2 467 ㎒

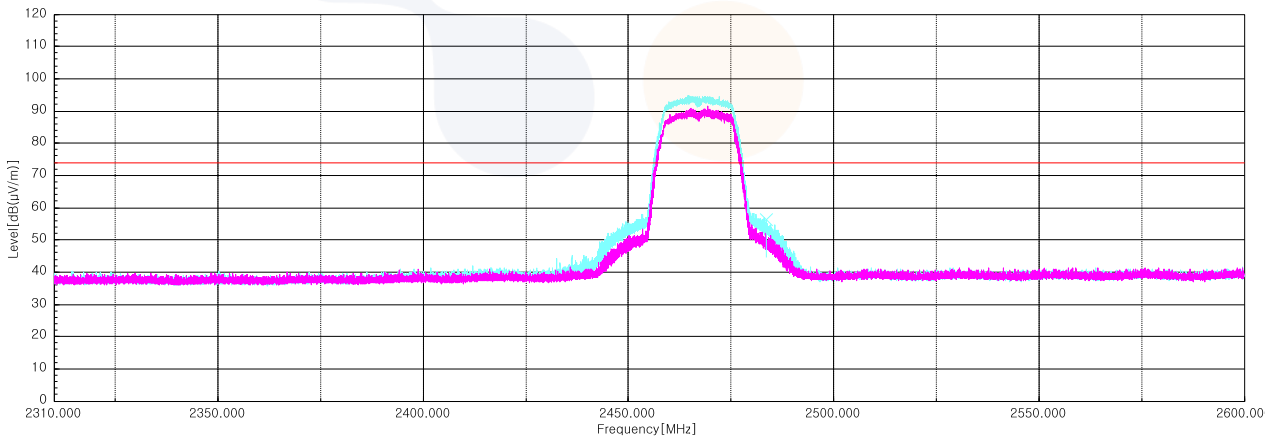
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.55[1)]	V	58.70	27.70	-30.24	-	56.16	74.00	17.84
4 936.95[1)]	H	54.00	32.77	-45.53	-	41.24	74.00	32.76
7 405.33[1)]	V	52.40	36.89	-44.15	-	45.14	74.00	28.86
Average Data								
2 483.55[1)]	V	46.88	27.70	-30.24	0.35	44.69	54.00	9.31

Average data

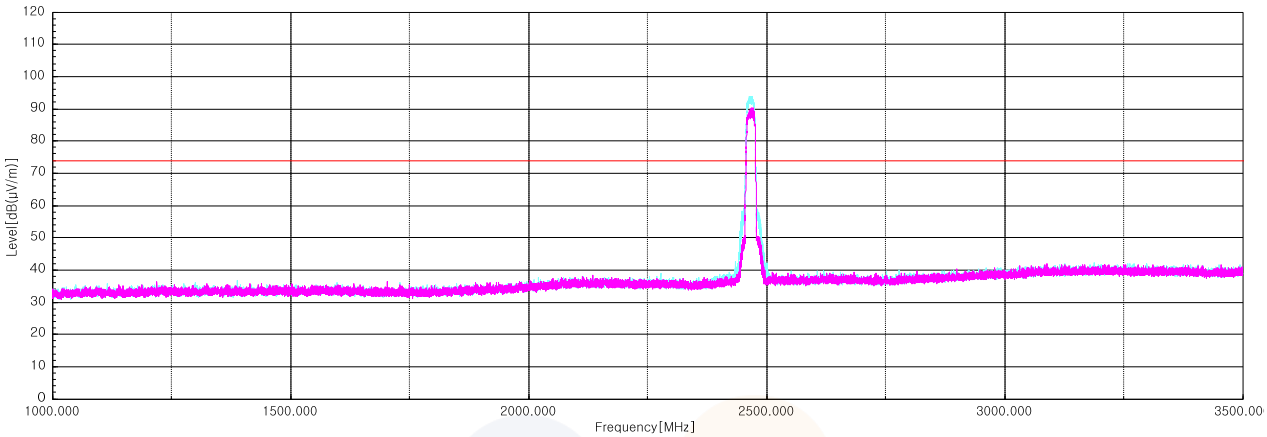


Blank

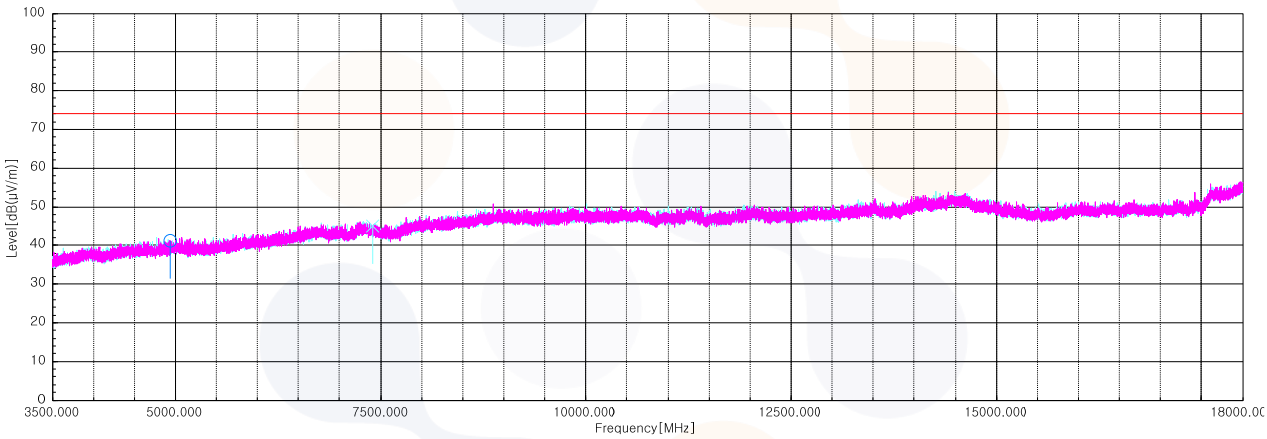
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓



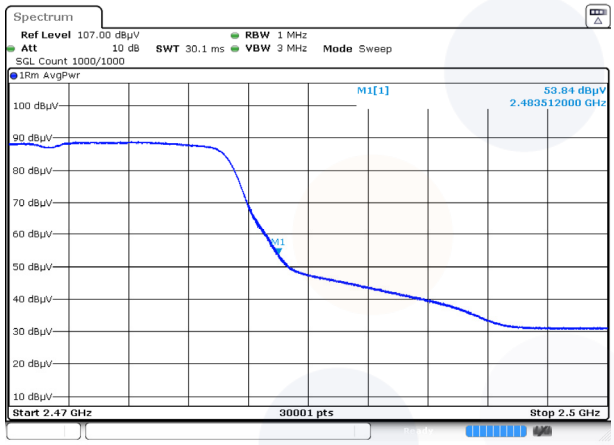
Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



802.11n HT20_2 472 ㎒

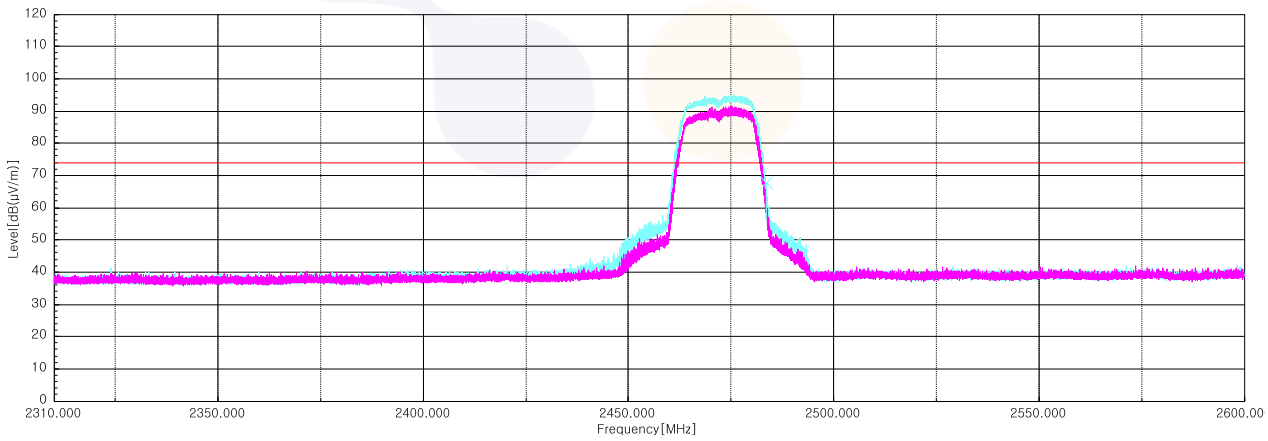
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Peak data								
2 483.51[1)]	V	70.10	27.70	-30.24	-	67.56	74.00	6.44
4 950.97[1)]	H	53.70	32.80	-45.47	-	41.03	74.00	32.97
7 416.45[1)]	H	52.90	36.87	-44.13	-	45.64	74.00	28.36
Average Data								
2 483.51[1)]	V	53.84	27.70	-30.24	0.35	51.65	54.00	2.35

Average data

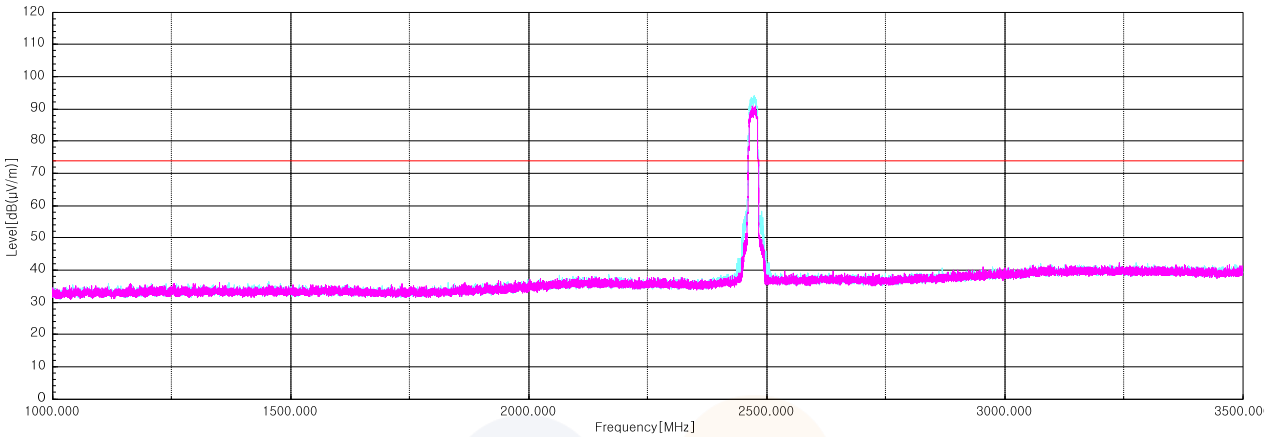


Blank

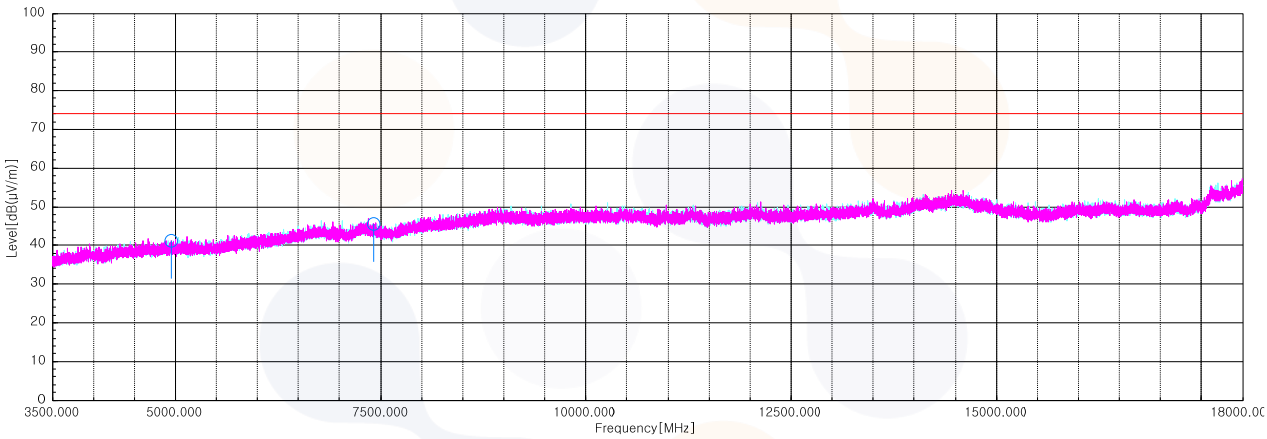
Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 ㎓ ~ 3.5 ㎓

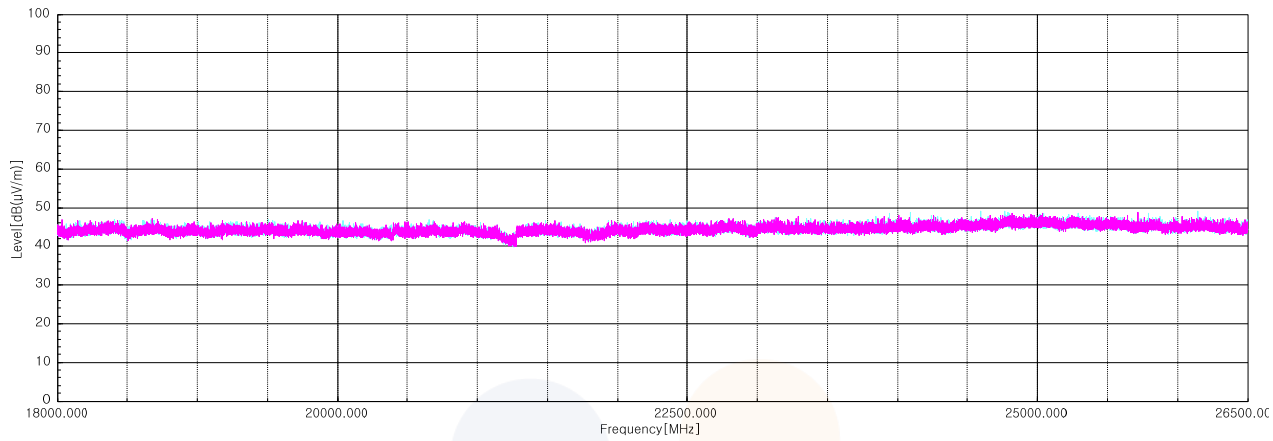


Horizontal/Vertical for 3.5 ㎓ ~ 18 ㎓



Test results (Above 18 ㎓) – Worst case: 802.11n HT20 / 2 472 ㎒

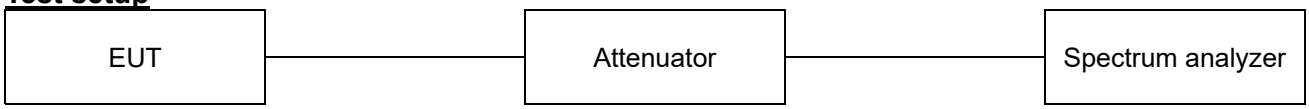
Horizontal/Vertical for 18 ㎓ ~ 26.5 ㎓



Note: The Worst case was based on the lowest margin condition considering Harmonic and Spurious Emission

7.5. Conducted Spurious Emission

Test setup



Limit

According to §15.247(d),

In any 100 ㎑ bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 ㏈ below that in the 100 ㎑ bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be30 ㏈ instead of 20 ㏈. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Limit : 20 ㏈c

Test procedure

ANSI C63.10 - Section 11.11.3

KDB 558074 D01 v05 - Section 8.5

Test settings

Establish an emission level by using the following procedure:

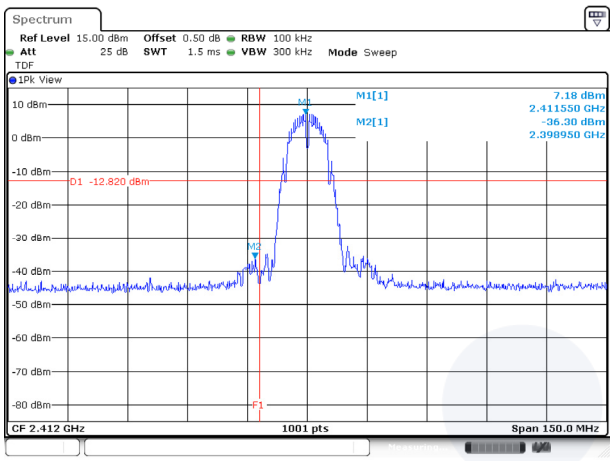
1) Set the center frequency and span to encompass frequency range to be measured.
2) Set the RBW = 100 ㎑
3) Set the VBW ≥ [3 x RBW]
4) Detector = peak
5) Sweep time = auto couple
6) Trace mode = max hold
7) Allow trace to fully stabilize.
8) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

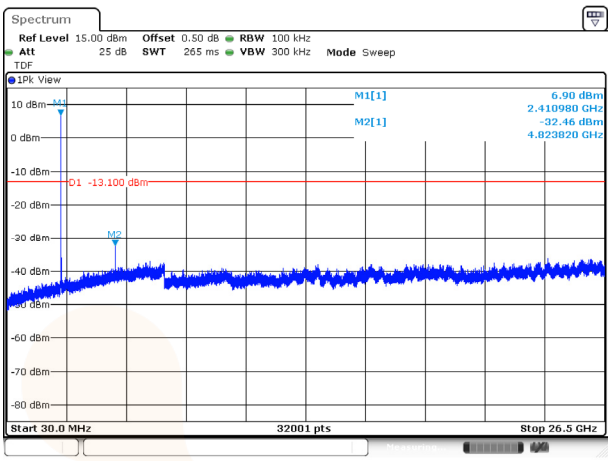
Test results

802.11b

Conducted band-edge / 2 412 ㎒



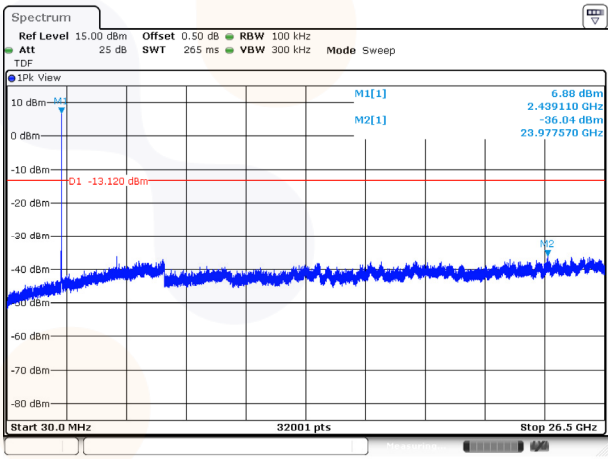
Conducted spurious / 2 412 ㎒



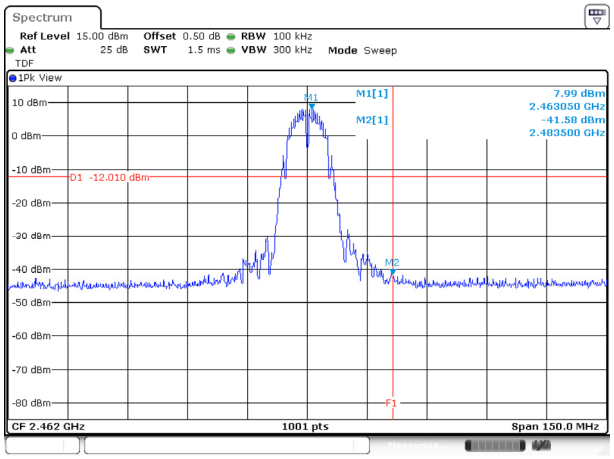
Conducted band-edge / 2 437 ㎒

Blank

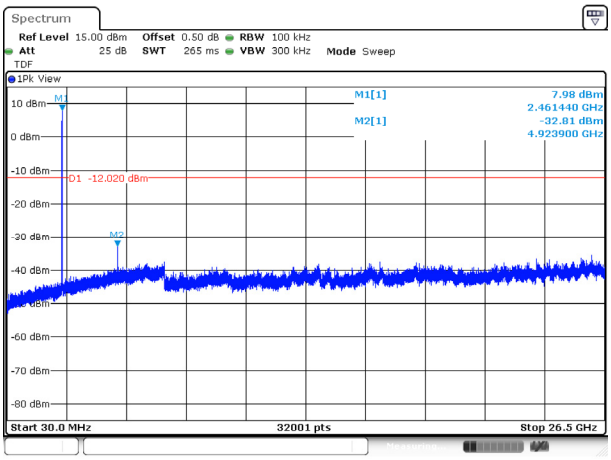
Conducted spurious / 2 437 ㎒



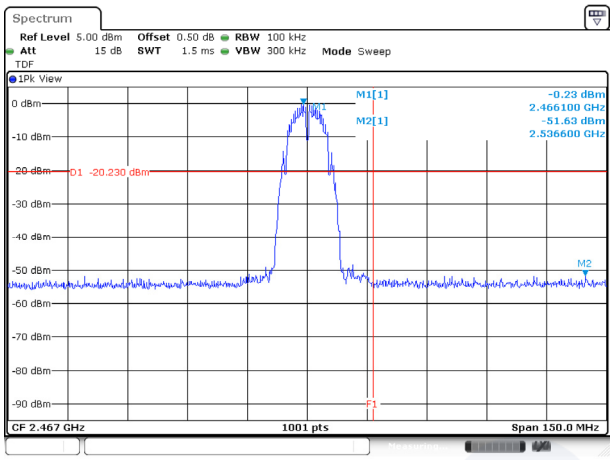
Conducted band-edge / 2 462 ㎒



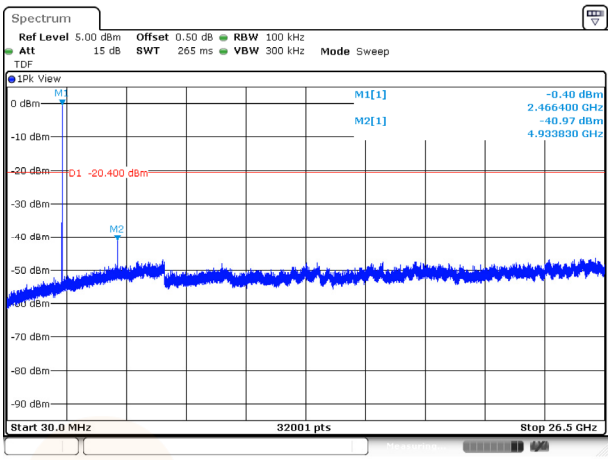
Conducted spurious / 2 462 ㎒



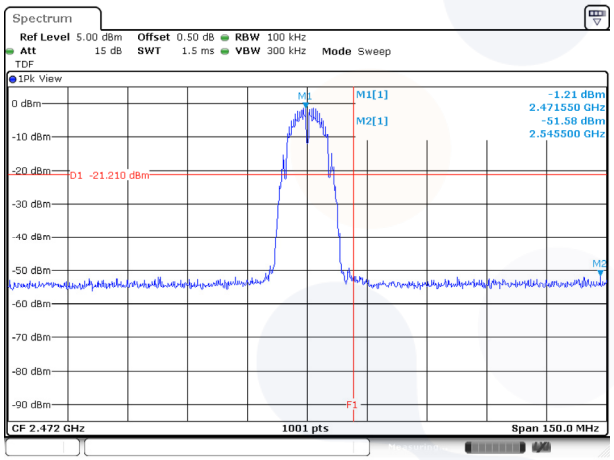
Conducted band-edge / 2 467 MHz



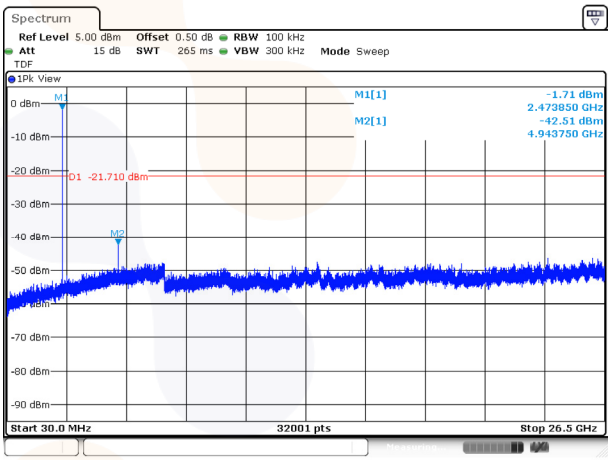
Conducted spurious / 2 467 MHz



Conducted band-edge / 2 472 MHz

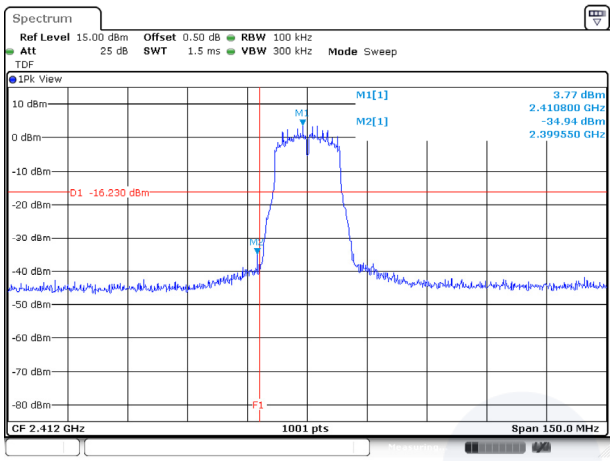


Conducted spurious / 2 472 MHz

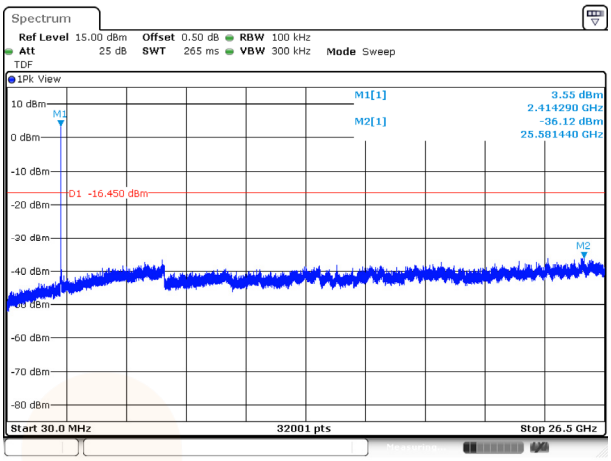


802.11g

Conducted band-edge / 2 412 ㎒



Conducted spurious / 2 412 ㎒



Conducted band-edge / 2 437 ㎒

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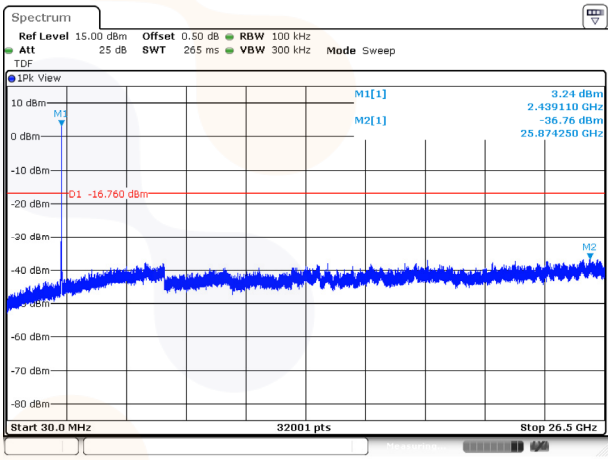
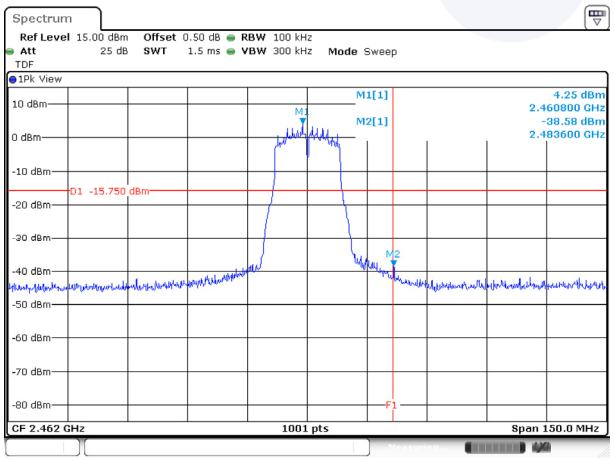
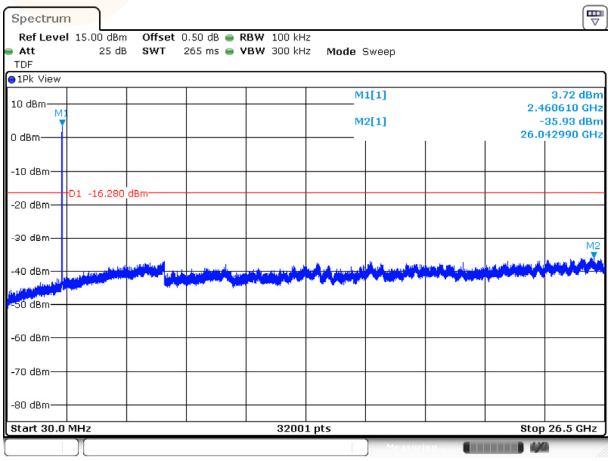
Conducted spurious / 2 437 ㎒



Conducted band-edge / 2 462 ㎒



Conducted spurious / 2 462 ㎒