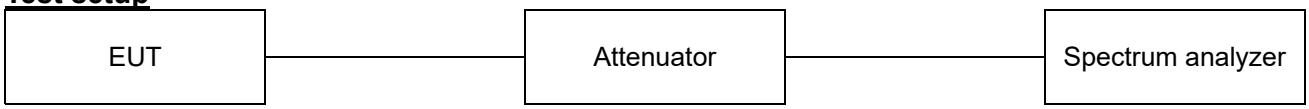
7.3. 6 dB Bandwidth(DTS Channel Bandwidth)

Test setup



Limit

According to §15.247(a)(2) and RSS-247(5.2) Systems using digital modulation techniques may operate in the 902–928 ㎒, 2 400–2 483.5 ㎒, and 5 725–5 850 ㎒ bands. The minimum 6 ㏈ bandwidth shall be at least 500 ㎑.

Test procedure

ANSI C63.10 - Section 11.8.2

Test settings

DTS bandwidth

One of the following procedures may be used to determine the modulated DTS bandwidth.

Option 1

1) Set RBW = 100 ㎑.
2) Set the video bandwidth (VBW) ≥ 3 x RBW.
3) Detector = Peak.
4) Trace mode = max hold.
5) Sweep = auto couple.
6) Allow the trace to stabilize.
7) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 ㏈ relative to the maximum level measured in the fundamental emission.

Option 2

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 ㏈, if the functionality described in 11.8.1 (i.e., RBW = 100 ㎑, VBW ≥ 3 × RBW, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥6 ㏈.

Test results

6 dB bandwidth

Test mode	Frequency(MHz)	6 dB bandwidth(MHz)
802.11b	2 412	8.69
	2 437	8.64
	2 462	8.69
	2 467	8.64
	2 472	8.14
802.11g	2 412	15.78
	2 437	15.18
	2 462	15.78
	2 467	15.48
	2 472	13.94
802.11n HT20	2 412	16.18
	2 437	15.18
	2 462	16.38
	2 467	14.29
	2 472	13.89

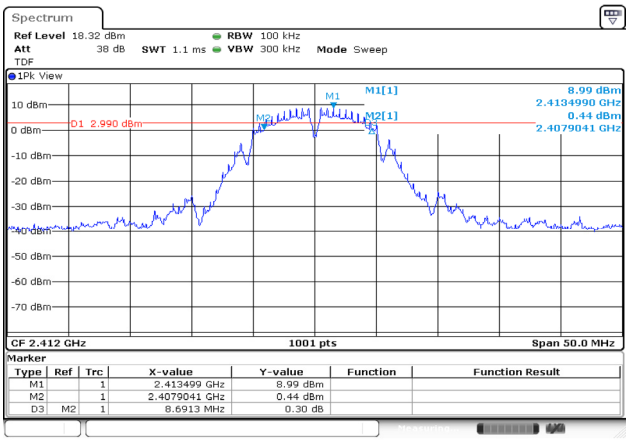
99% bandwidth

Test mode	Frequency(MHz)	99 % bandwidth(MHz)
802.11b	2 412	11.84
	2 437	11.34
	2 462	12.04
	2 467	11.29
	2 472	10.39
802.11g	2 412	16.43
	2 437	16.28
	2 462	16.43
	2 467	16.28
	2 472	16.08
802.11n HT20	2 412	17.73
	2 437	17.48
	2 462	17.68
	2 467	17.63
	2 472	17.28

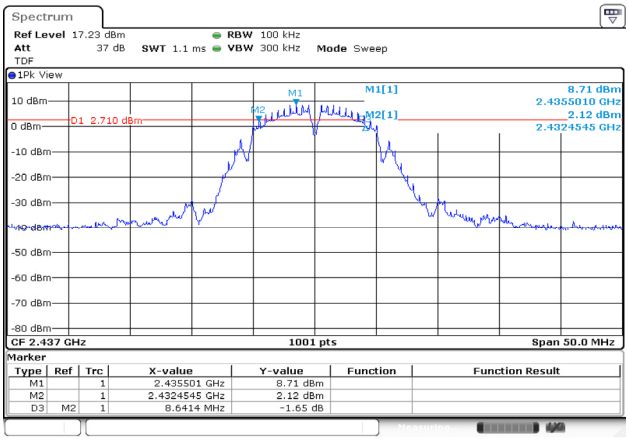
This test report shall not be reproduced, except in full, without the written approval

6 dB bandwidth

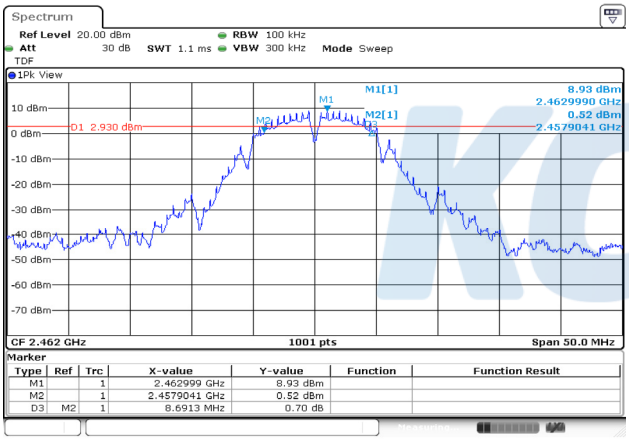
802.11b / 2 412 MHz



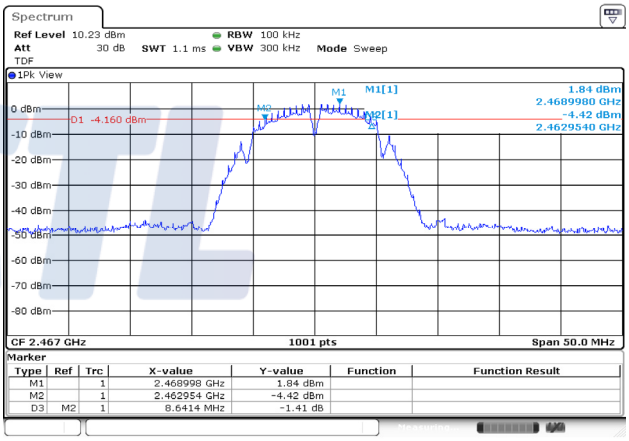
802.11b / 2 437 MHz



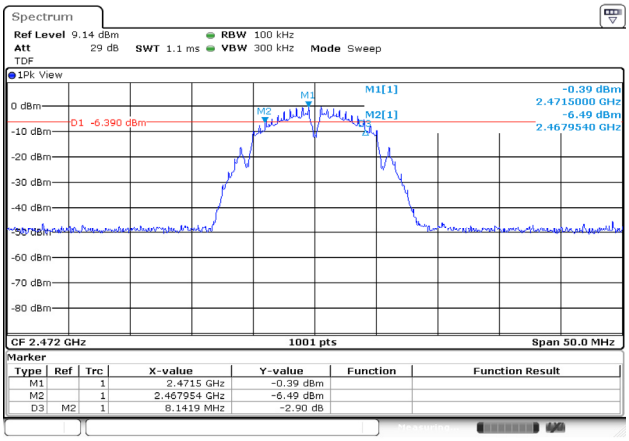
802.11b / 2 462 MHz



802.11b / 2 467 MHz



802.11b / 2 472 MHz



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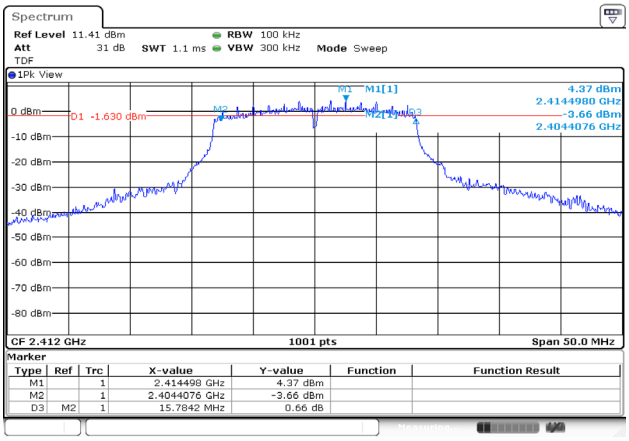
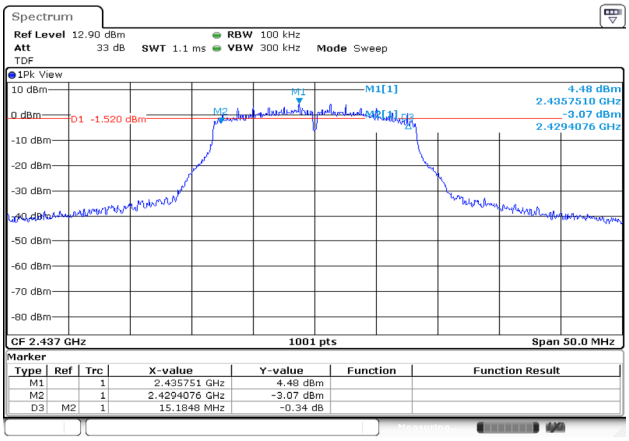
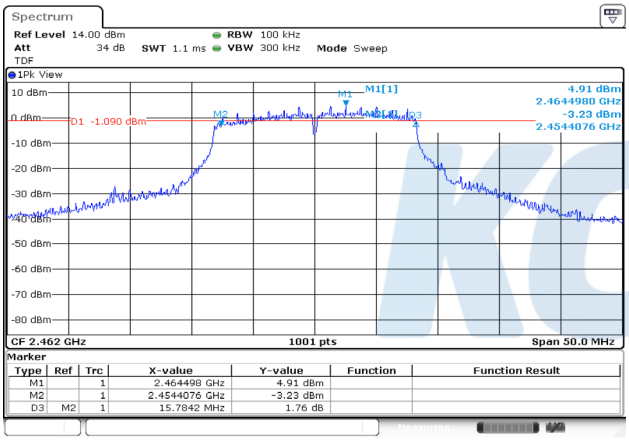
802.11g / 2 412 MHz



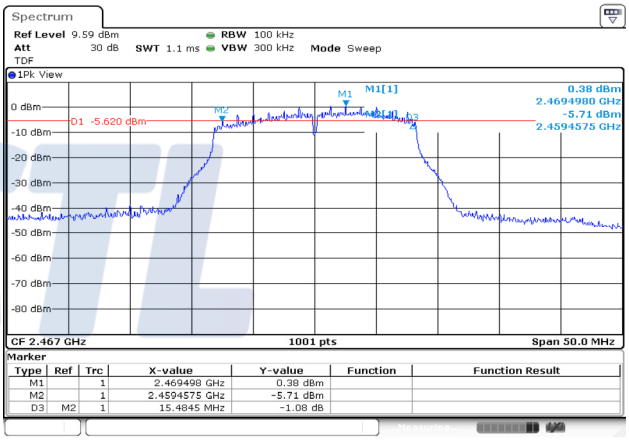
802.11g / 2 437 MHz



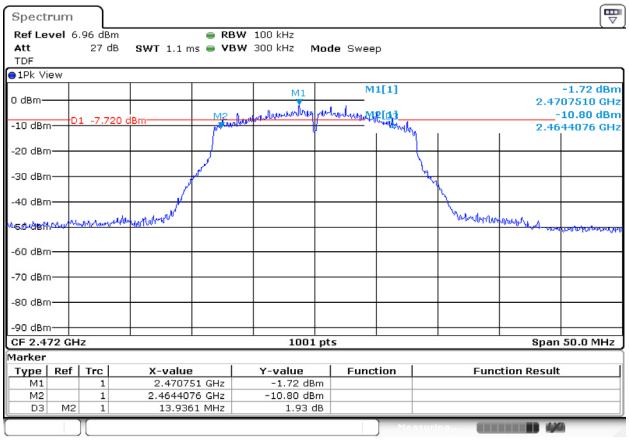
802.11g / 2 462 MHz



802.11g / 2 467 MHz



802.11g / 2 472 MHz



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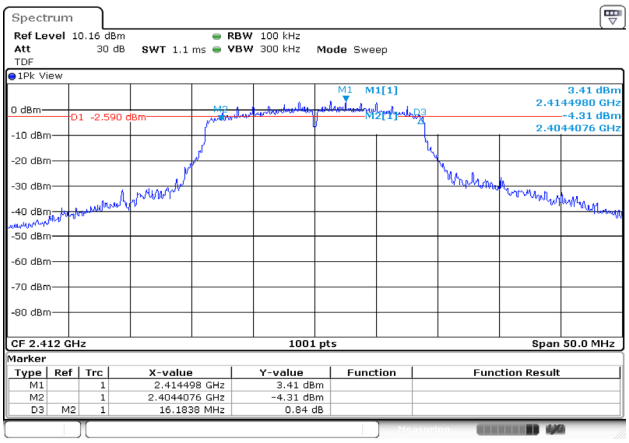
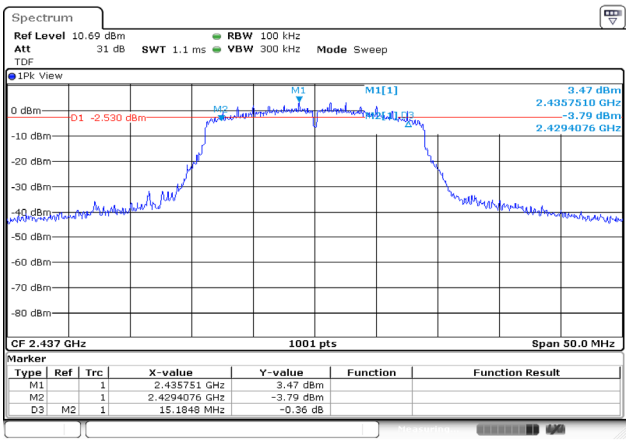
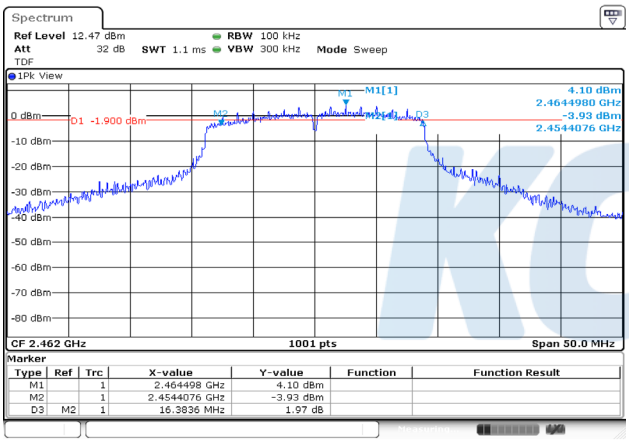
802.11n HT20 / 2 412 ㎒



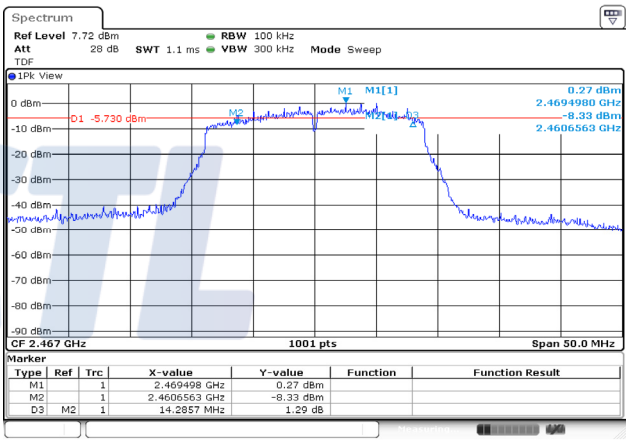
802.11n HT20 / 2 437 ㎒



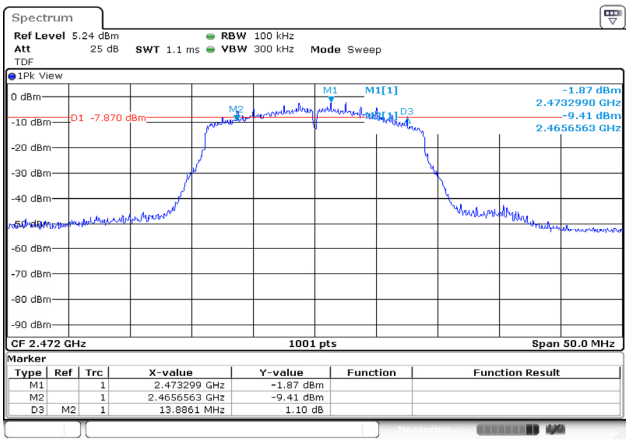
802.11n HT20 / 2 462 ㎒



802.11n HT20 / 2 467 ㎒



802.11n HT20 / 2 472 ㎒



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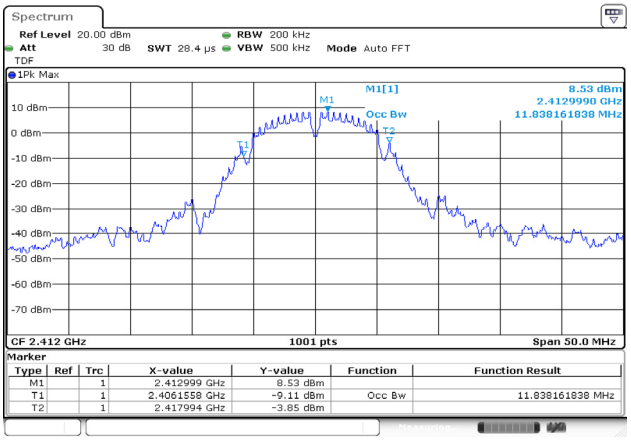
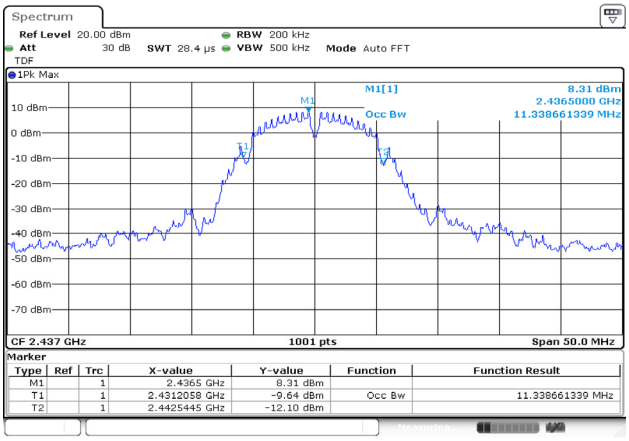
99% bandwidth

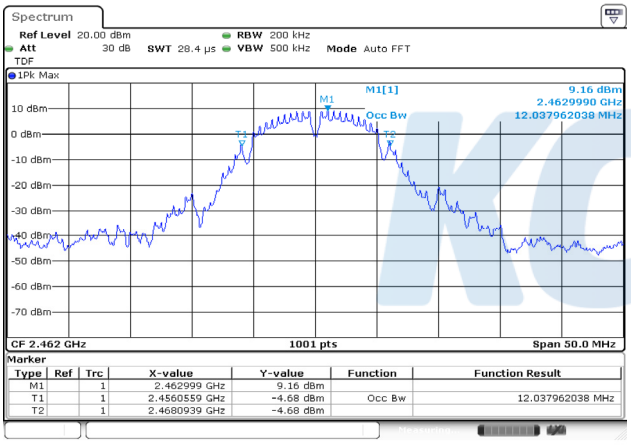
802.11b / 2 412 MHz



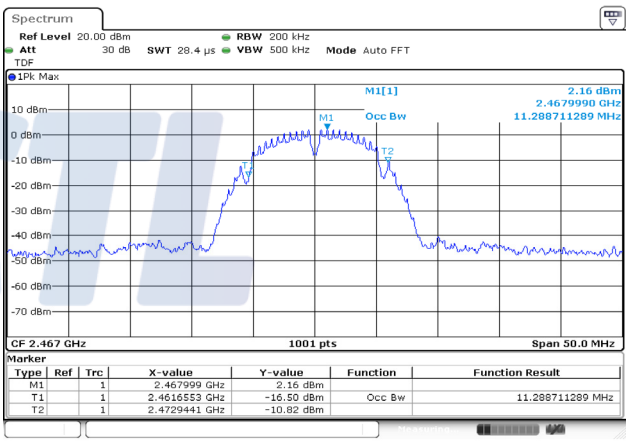
802.11b / 2 437 MHz



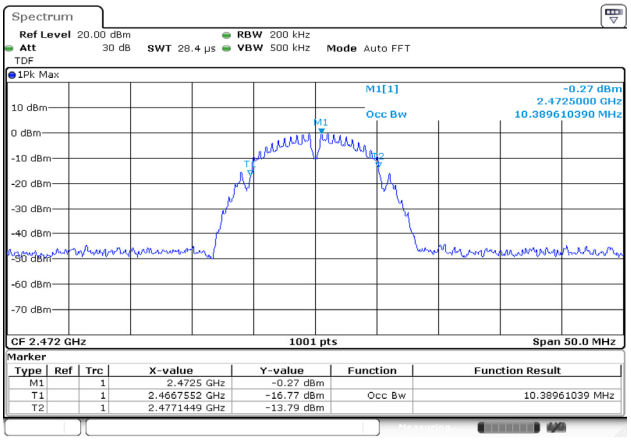
802.11b / 2 462 MHz



802.11b / 2 467 MHz



802.11b / 2 472 MHz



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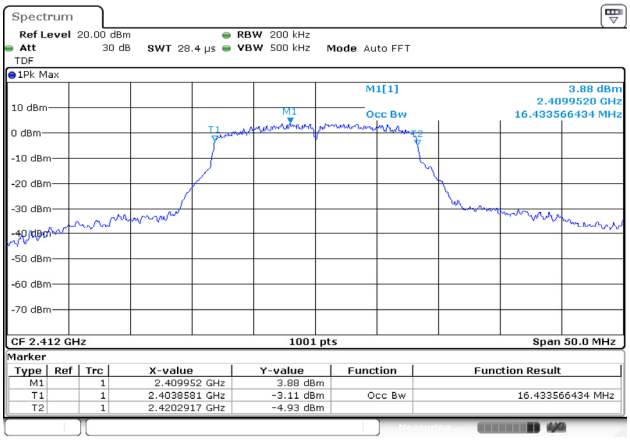
802.11g / 2 412 ㎒



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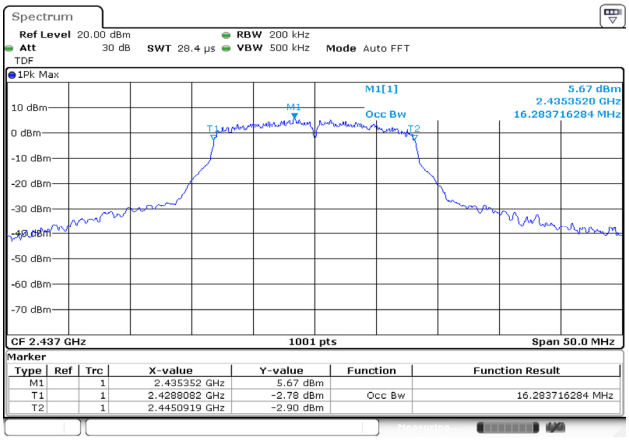

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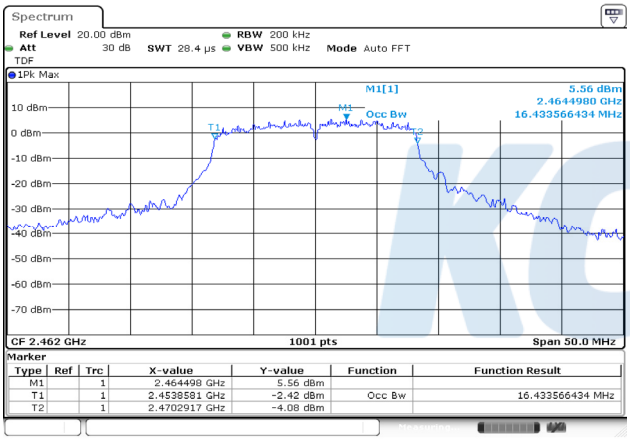

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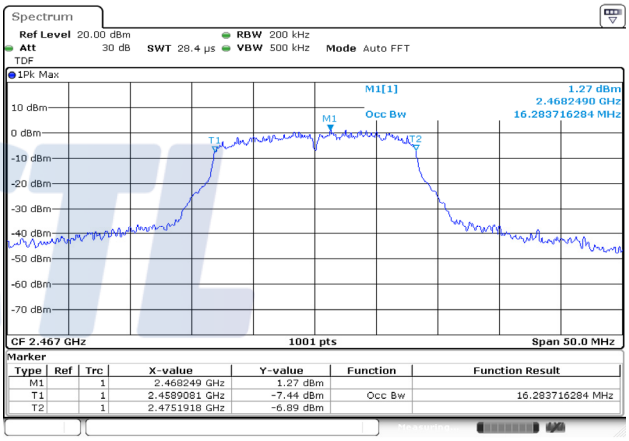

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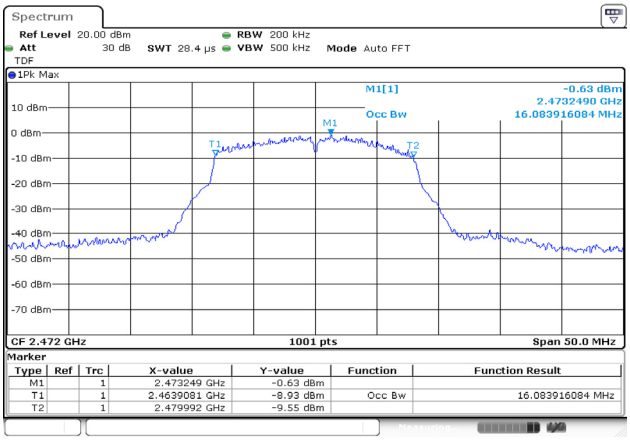

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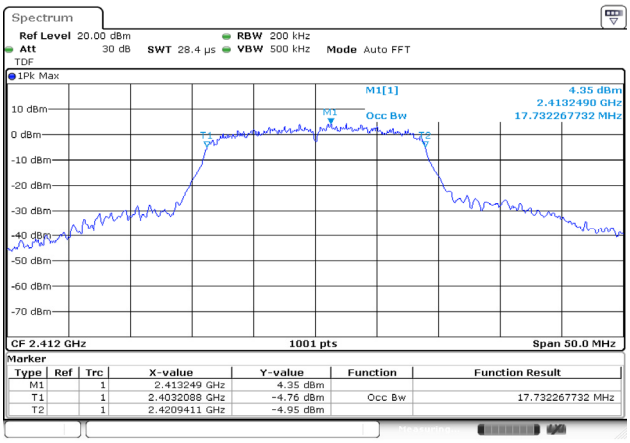
802.11n HT20 / 2 412 ㎒



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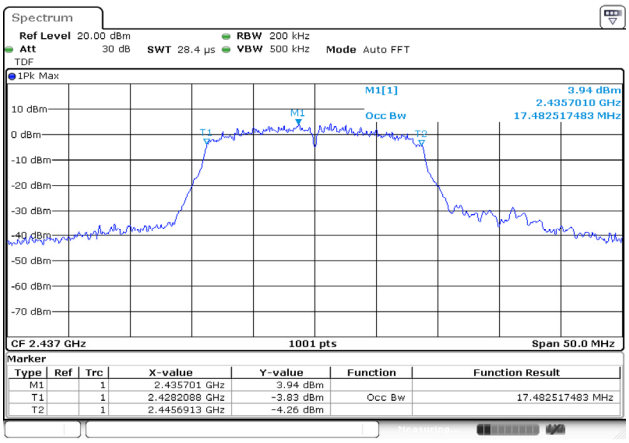

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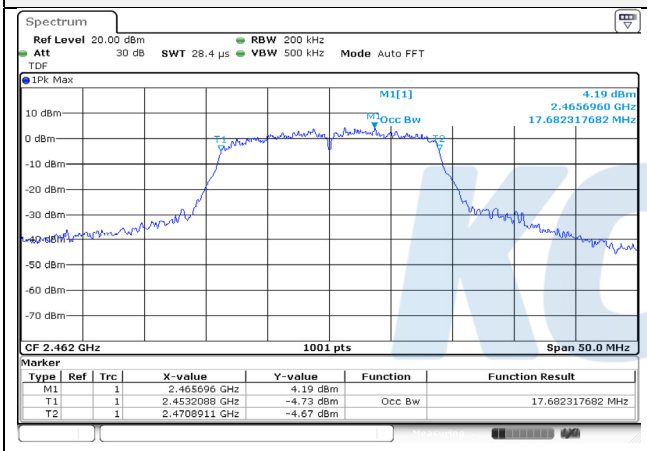

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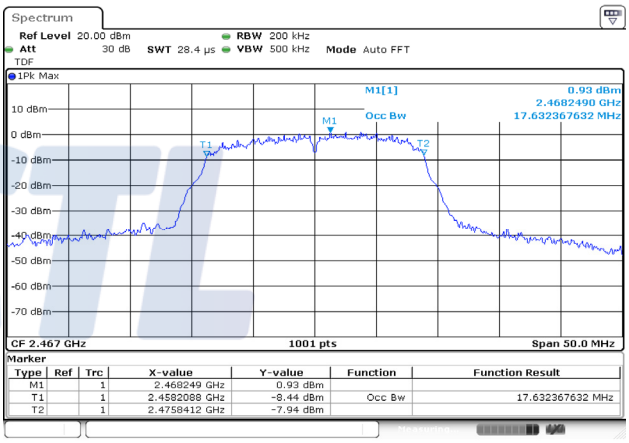

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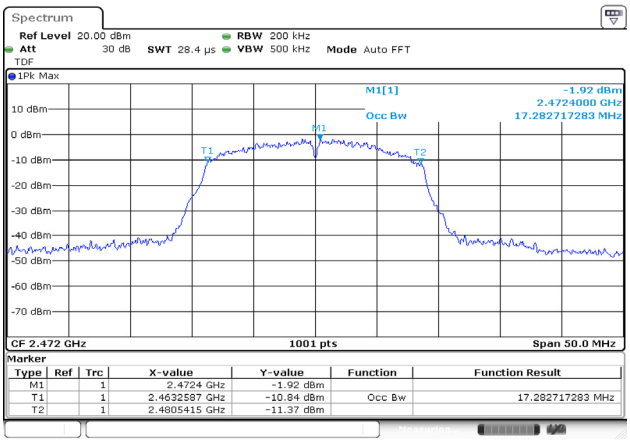

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