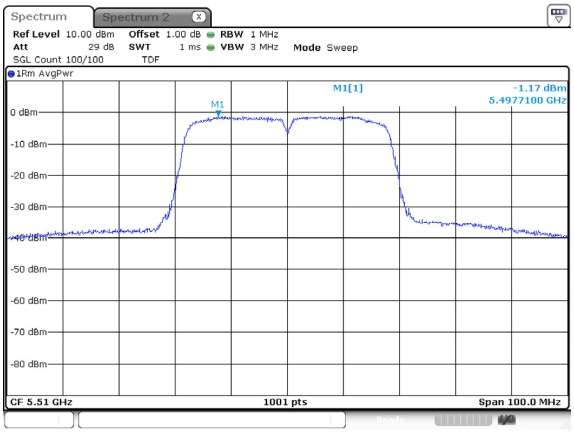
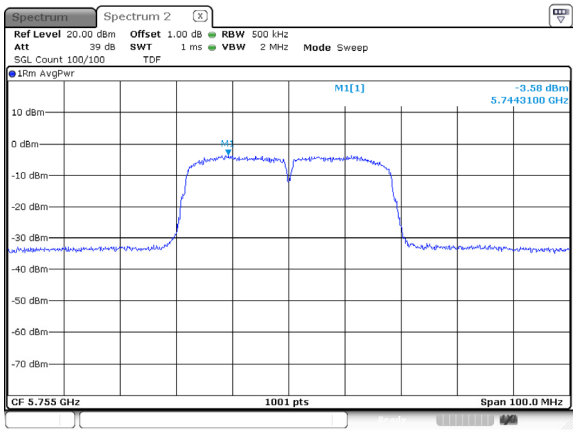
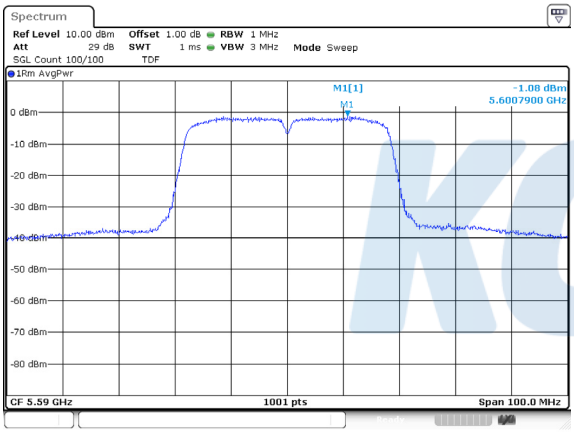
UNII-2C / 802.11ac VHT40 / Low ch.



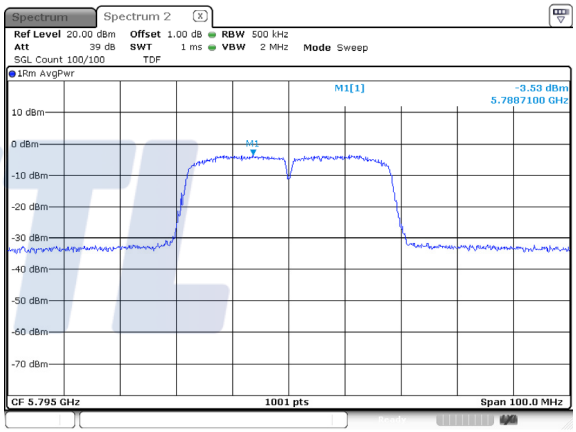
UNII-3 / 802.11ac VHT40 / Low ch.



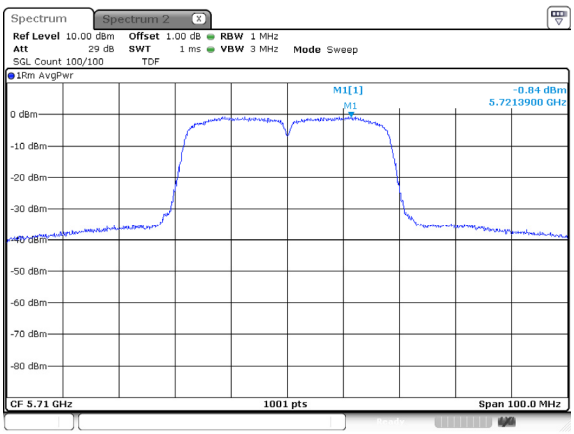
UNII-2C / 802.11ac VHT40 / Mid ch.



UNII-3 / 802.11ac VHT40 / High ch.

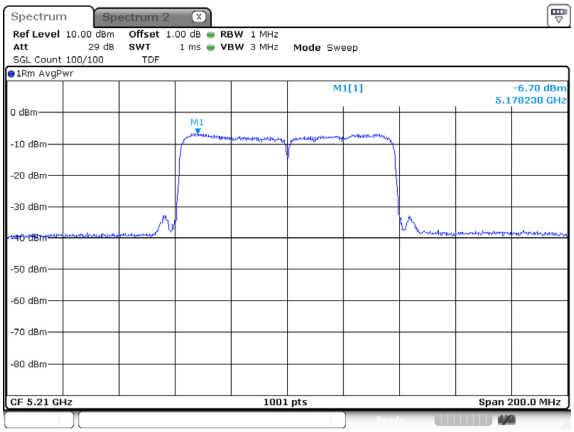


UNII-2C / 802.11ac VHT40 / High ch.

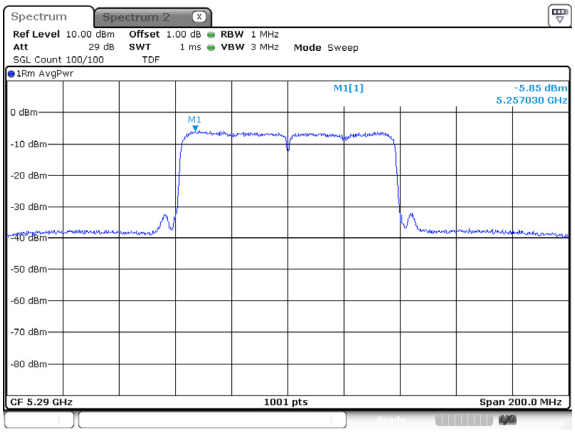


Blank

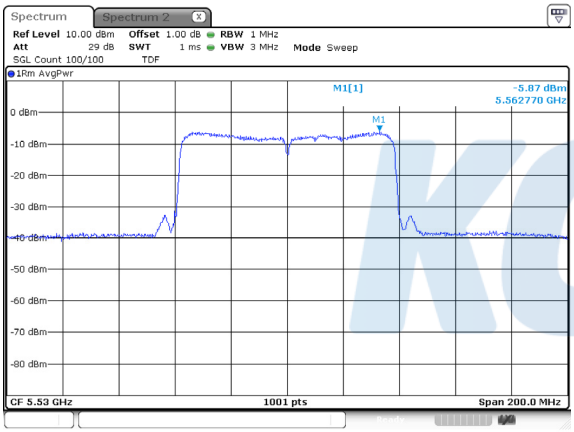
UNII-1 / 802.11ac VHT80 / Low ch.



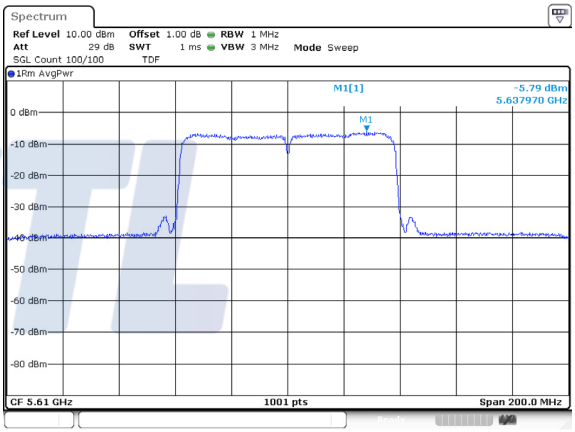
UNII-2A / 802.11ac VHT80 / Low ch.



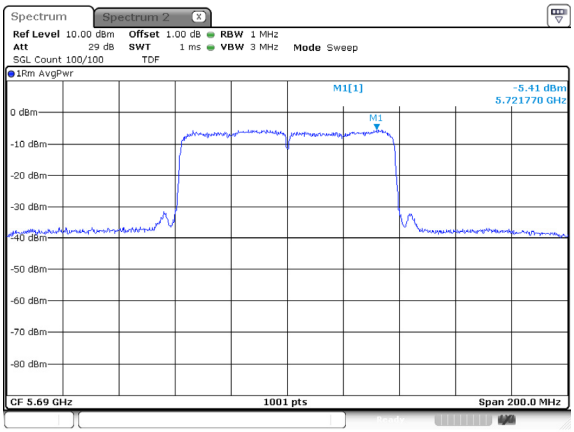
UNII-2C / 802.11ac VHT80 / Low ch.



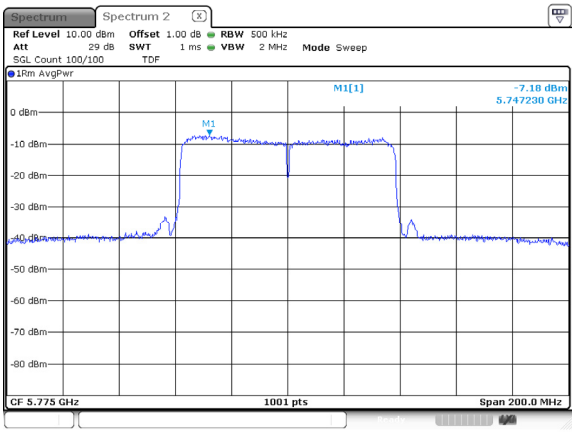
UNII-2C / 802.11ac VHT80 / Mid ch.



UNII-2C / 802.11ac VHT80 / High ch.

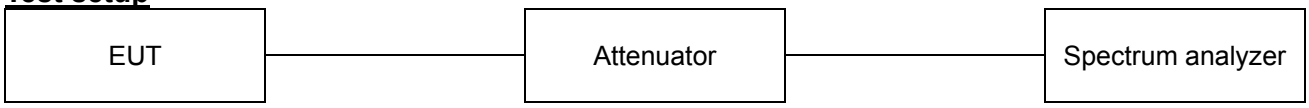


UNII-3 / 802.11ac VHT80 / Low ch.



7.3. 26 dB Bandwidth & 99% Occupied Bandwidth

Test setup



Limit

N/A

Test procedure

ANSI C63.10-2013 Section 12.4
KDB 789033 D02 v02r01 - Section C.1 (26dBbandwidth)
KDB 789033 D02 v02r01 - Section D (99% bandwidth)

Test settings

1. 26 dB Bandwidth

a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. 99% Occupied Bandwidth

a. Set center frequency to the nominal EUT channel center frequency.
b. Set span = 1.5 times to 5.0 times the OBW.
c. Set RBW = 1% to 5% of the OBW
d. Set VBW ≥ 3 x RBW
e. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
f. Use the 99% power bandwidth function of the instrument (if available).
g. If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Notes:

1. [1)] means Band-crossing channels.

Test results

26 dB bandwidth

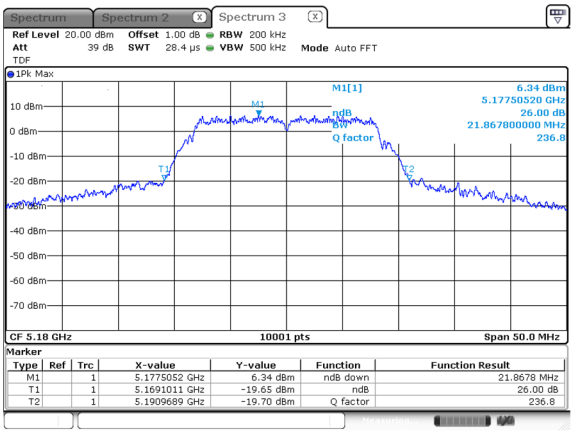
Test mode	Band	Frequency(㎒)	Measured Bandwidth (㎒)
802.11a	UNII-1	5 180	21.87
		5 200	21.81
		5 240	21.76
	UNII-2A	5 260	21.94
		5 280	21.69
		5 320	21.57
	UNII-2C	5 500	21.76
		5 600	21.42
		5 720[1)]	15.53
802.11n HT20	UNII-1	5 180	24.64
		5 200	24.04
		5 240	24.00
	UNII-2A	5 260	24.86
		5 280	25.02
		5 320	24.80
	UNII-2C	5 500	24.04
		5 600	24.13
		5 720[1)]	15.87
802.11n HT40	UNII-1	5 190	42.28
		5 230	42.38
	UNII-2A	5 270	42.16
		5 310	42.25
	UNII-2C	5 510	42.23
		5 590	42.41
		5 710[1)]	35.93

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

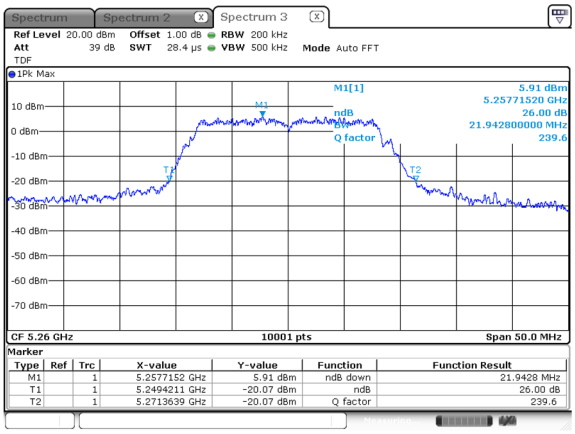
Test mode	Band	Frequency(㎒)	Measured Bandwidth (㎒)
802.11ac VHT20	UNII-1	5 180	25.14
		5 200	24.47
		5 240	24.01
	UNII-2A	5 260	24.34
		5 280	24.67
		5 320	24.01
	UNII-2C	5 500	23.77
		5 600	24.20
		5 720[1)]	17.29
802.11ac VHT40	UNII-1	5 190	42.45
		5 230	42.43
	UNII-2A	5 270	42.47
		5 310	42.20
	UNII-2C	5 510	42.32
		5 590	42.36
		5 710[1)]	35.99
802.11ac VHT80	UNII-1	5 210	82.99
	UNII-2A	5 290	82.85
	UNII-2C	5 530	82.63
		5 610	82.97
		5 690[1)]	75.44

26 dB bandwidth

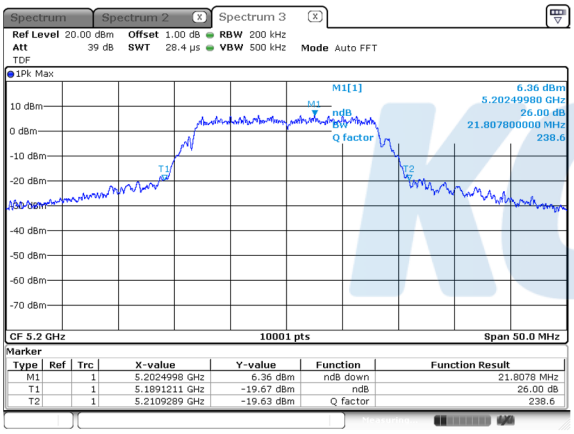
UNII-1 / 802.11a / Low ch.



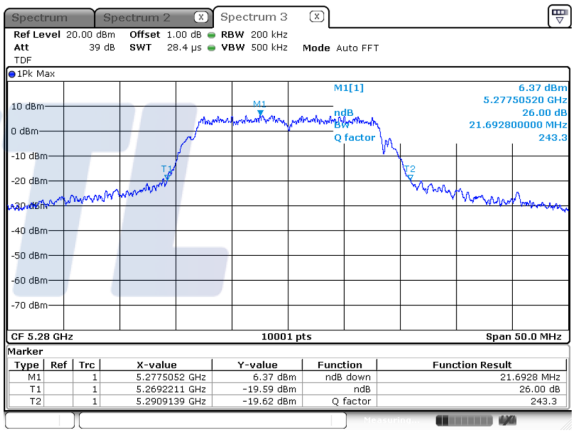
UNII-2A / 802.11a / Low ch.



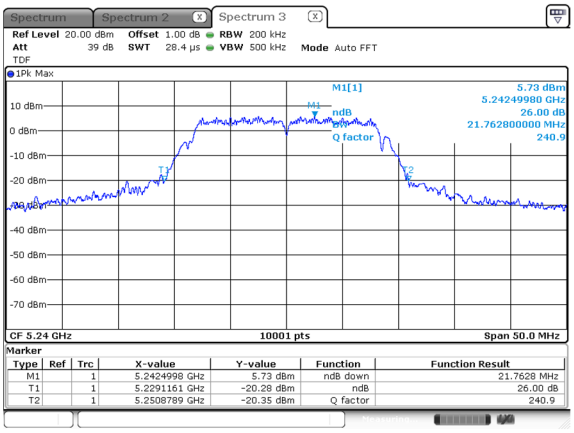
UNII-1 / 802.11a / Mid ch.



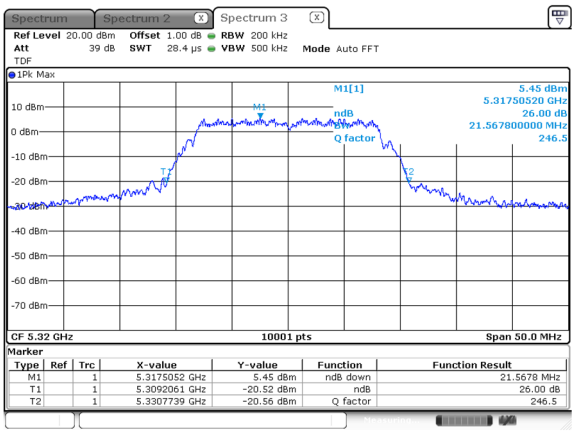
UNII-2A / 802.11a / Mid ch.



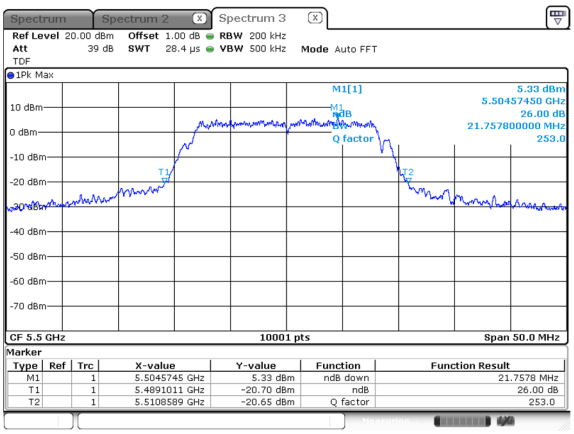
UNII-1 / 802.11a / High ch.



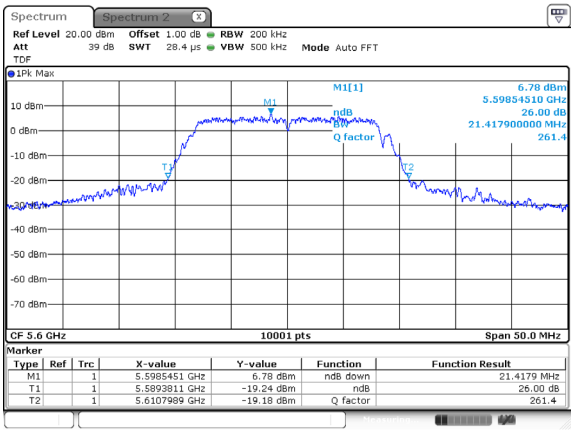
UNII-2A / 802.11a / High ch.



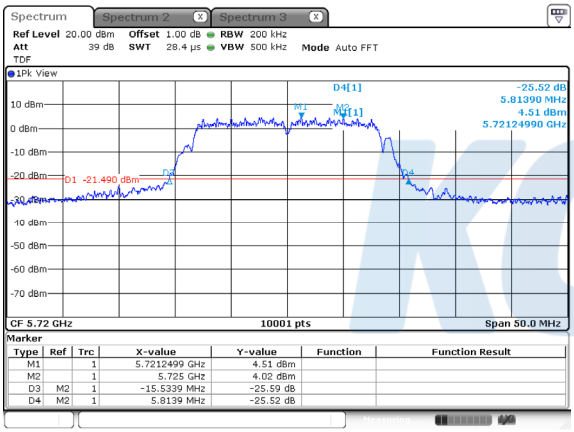
UNII-2C / 802.11a / Low ch.



UNII-2C / 802.11a / Mid ch.

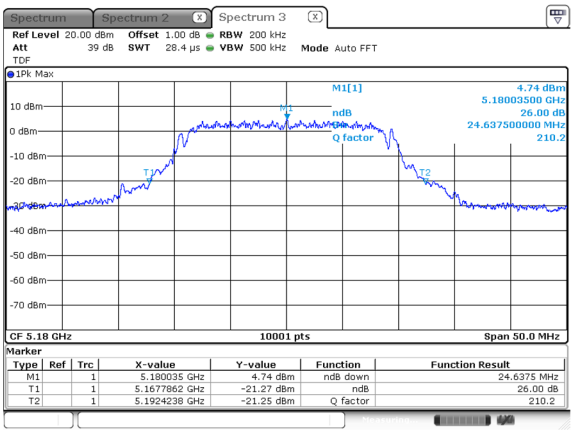


UNII-2C / 802.11a / High ch.

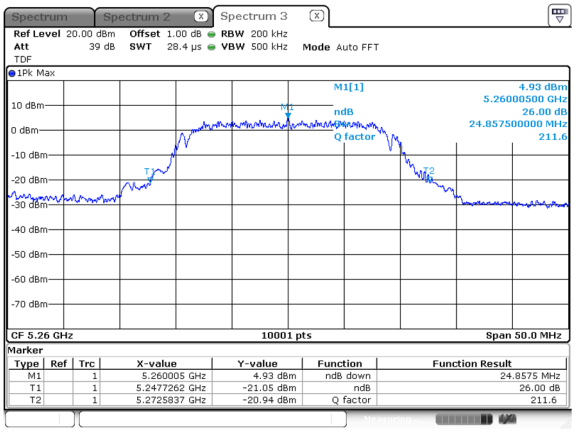


Blank

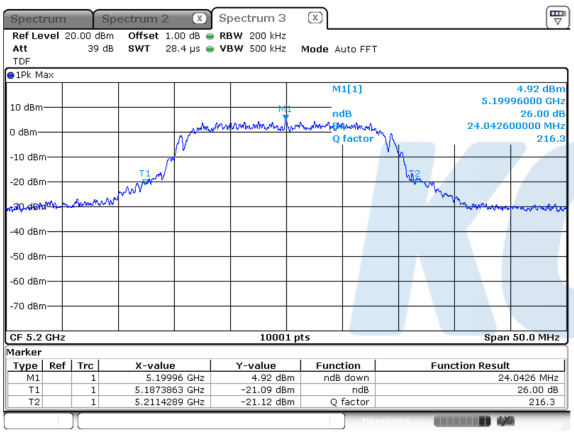
UNII-1 / 802.11n HT20 / Low ch.



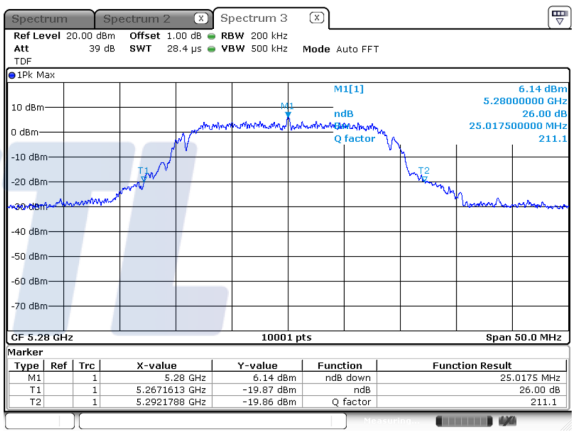
UNII-2A / 802.11n HT20 / Low ch.



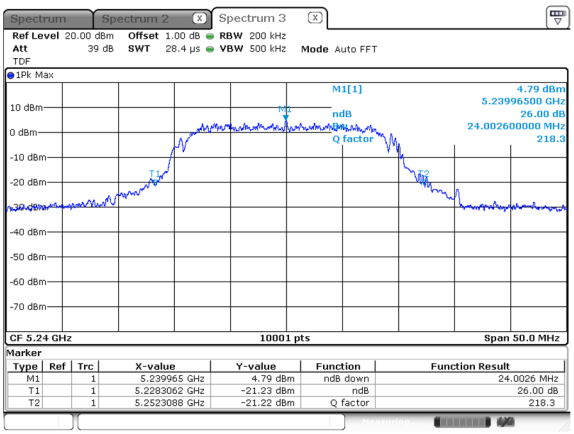
UNII-1 / 802.11n HT20 / Mid ch.



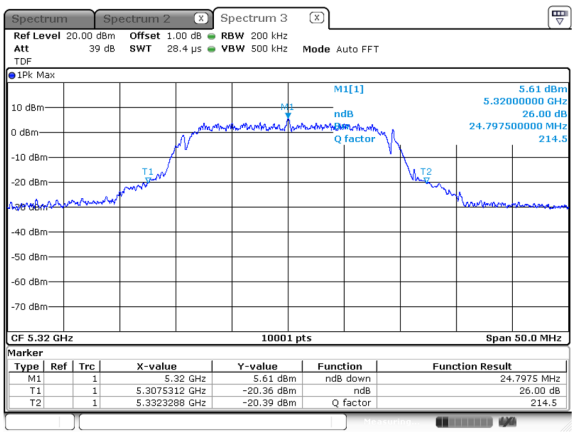
UNII-2A / 802.11n HT20 / Mid ch.



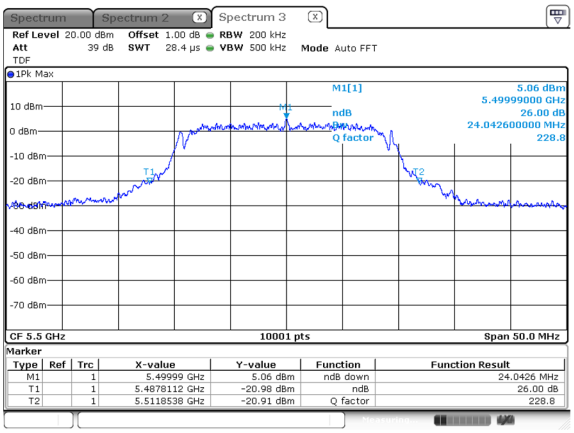
UNII-1 / 802.11n HT20 / High ch.



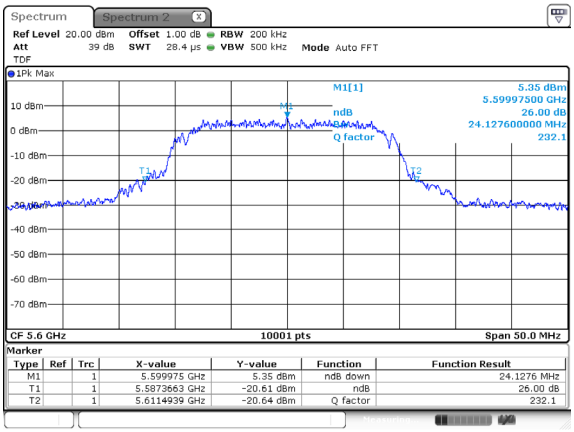
UNII-2A / 802.11n HT20 / High ch.



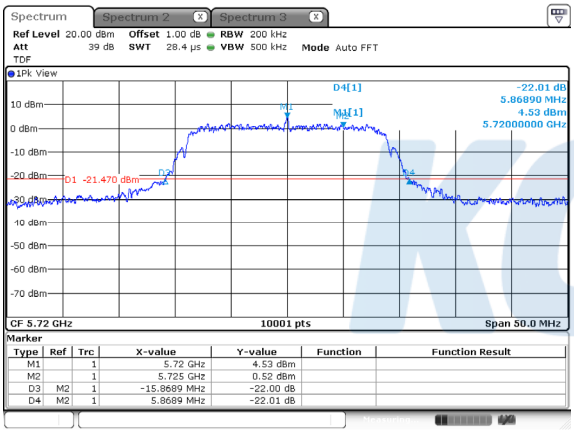
UNII-2C / 802.11n HT20 / Low ch.



UNII-2C / 802.11n HT20 / Mid ch.

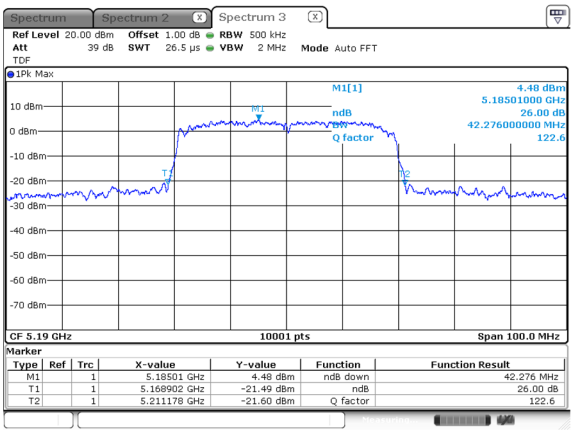


UNII-2C / 802.11n HT20 / High ch.

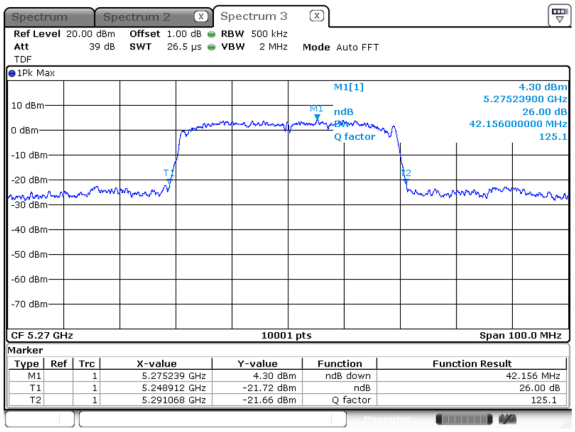


Blank

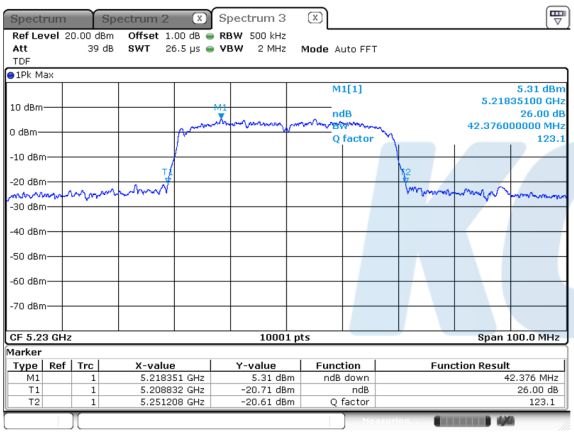
UNII-1 / 802.11n HT40 / Low ch.



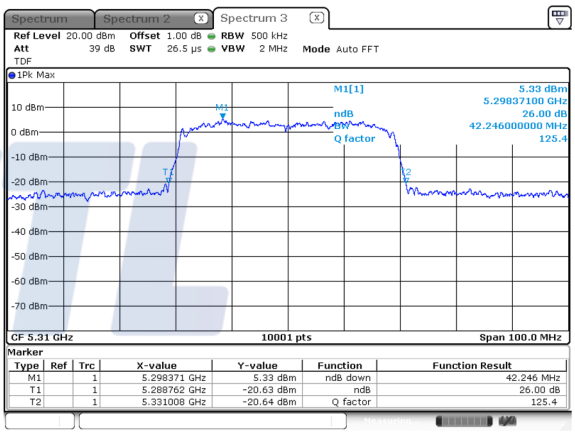
UNII-2A / 802.11n HT40 / Low ch.



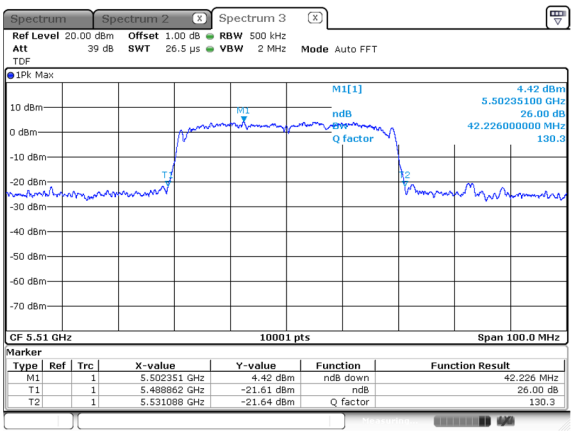
UNII-1 / 802.11n HT40 / High ch.



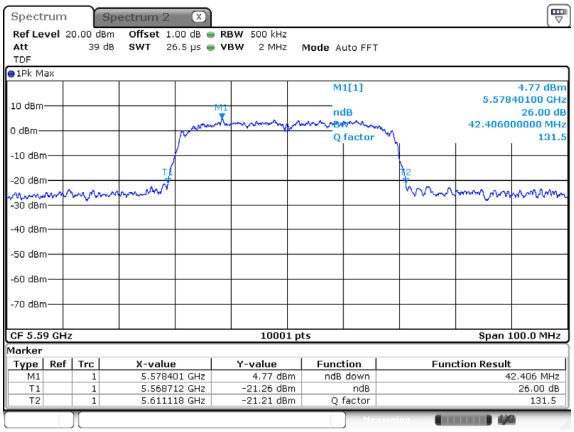
UNII-2A / 802.11n HT40 / High ch.



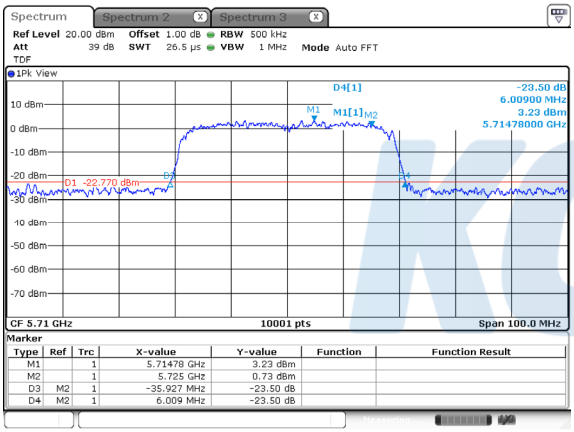
UNII-2C / 802.11n HT40 / Low ch.



UNII-2C / 802.11n HT40 / Mid ch.

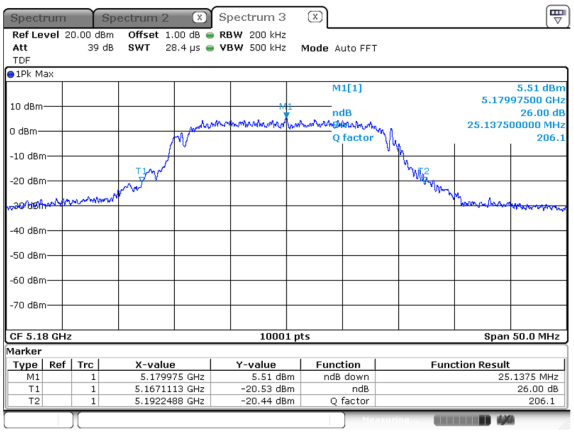


UNII-2C / 802.11n HT40 / High ch.

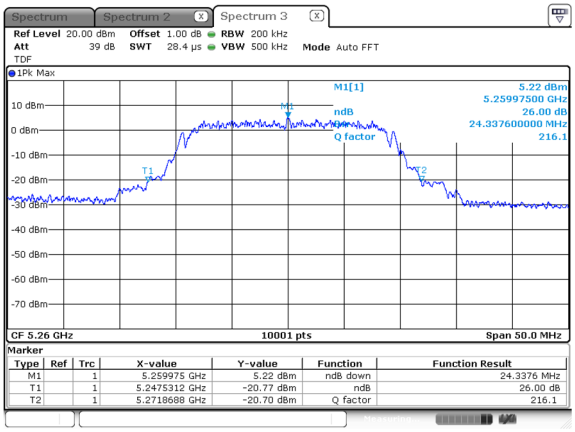


Blank

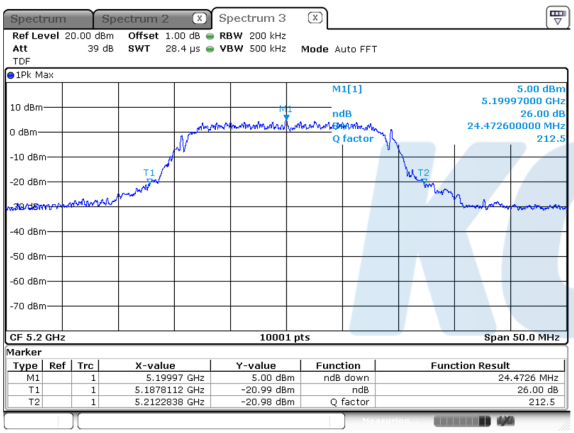
UNII-1 / 802.11ac VHT20 / Low ch.



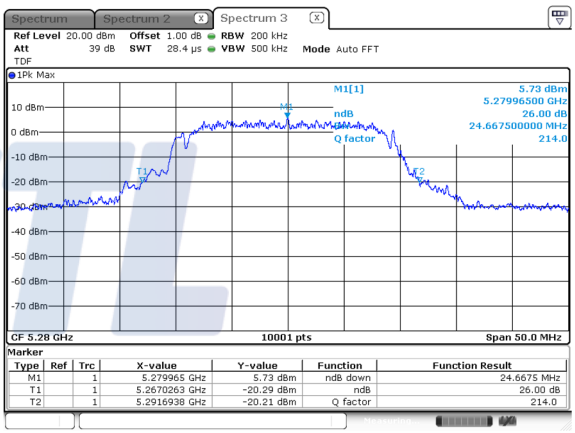
UNII-2A / 802. 11ac VHT20 / Low ch.



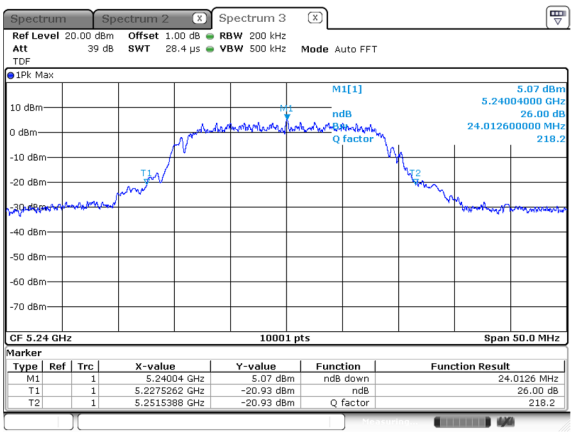
UNII-1 / 802. 11ac VHT20 / Mid ch.



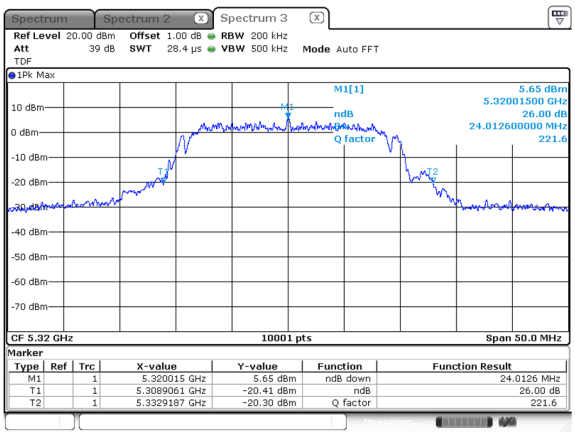
UNII-2A / 802. 11ac VHT20 / Mid ch.



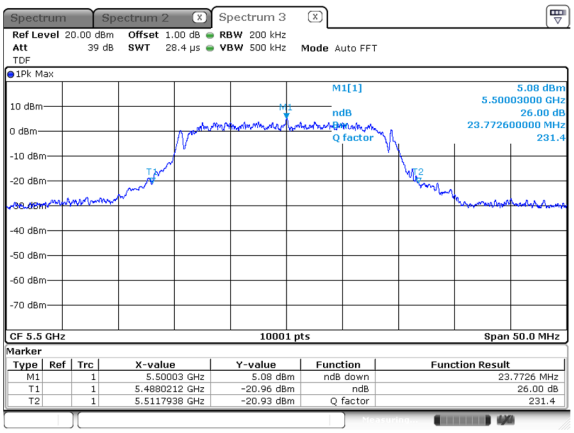
UNII-1 / 802. 11ac VHT20 / High ch.



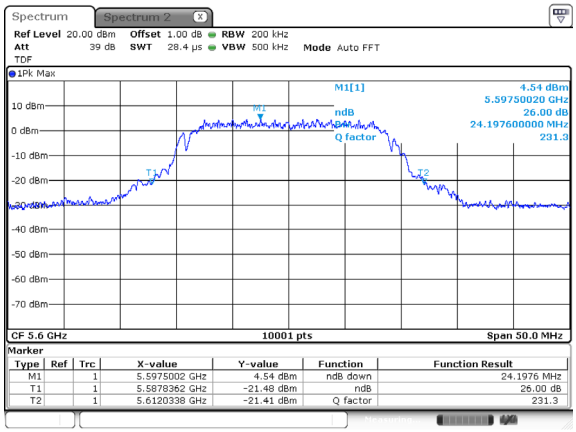
UNII-2A / 802. 11ac VHT20 / High ch.



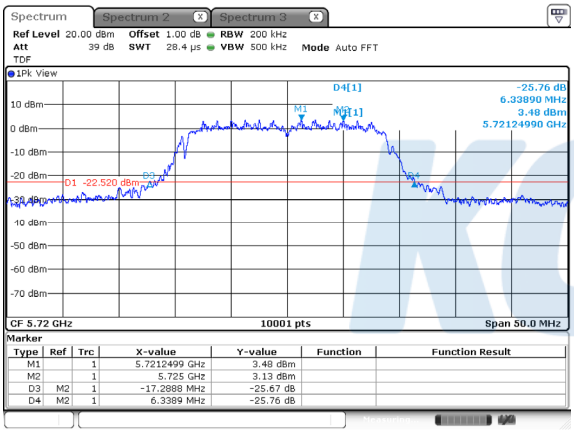
UNII-2C / 802.11ac VHT20 / Low ch.



UNII-2C / 802.11ac VHT20 / Mid ch.

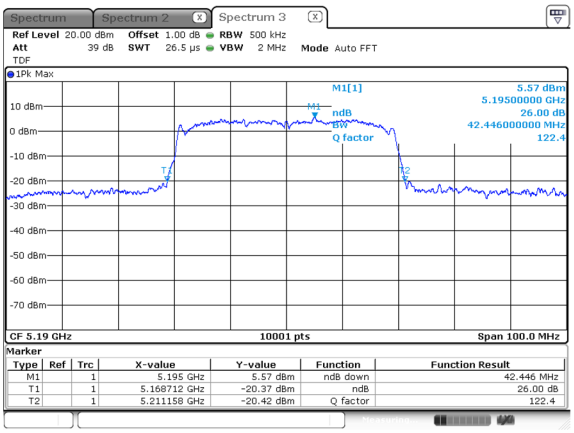


UNII-2C / 802.11ac VHT20 / High ch.

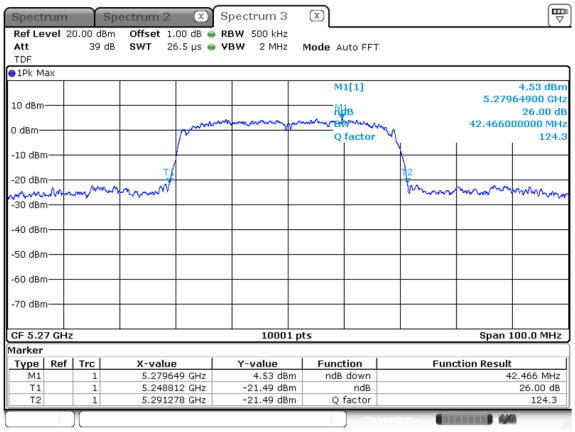


Blank

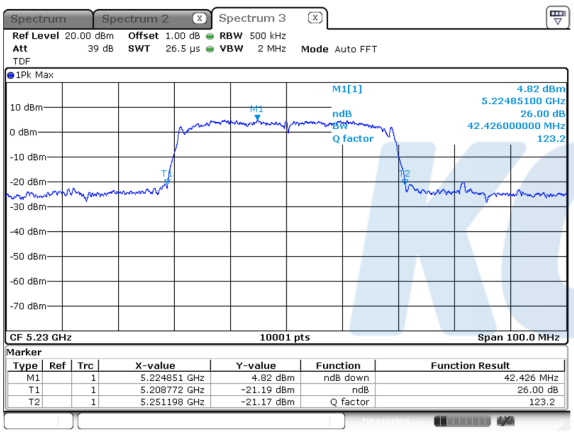
UNII-1 / 802.11ac VHT40 / Low ch.



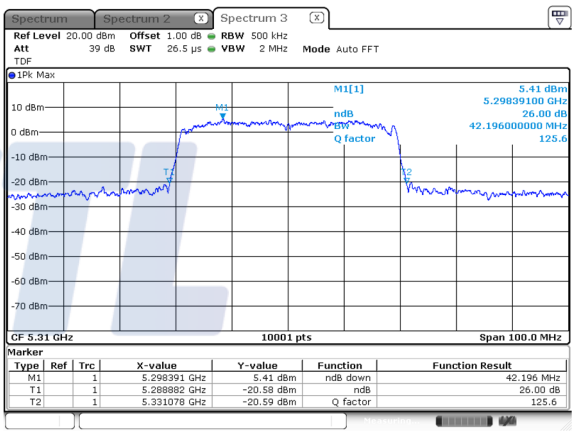
UNII-2A / 802.11ac VHT40 / Low ch.



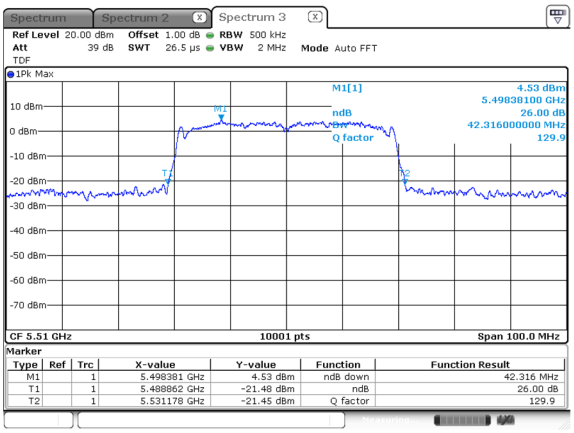
UNII-1 / 802.11ac VHT40 / High ch.



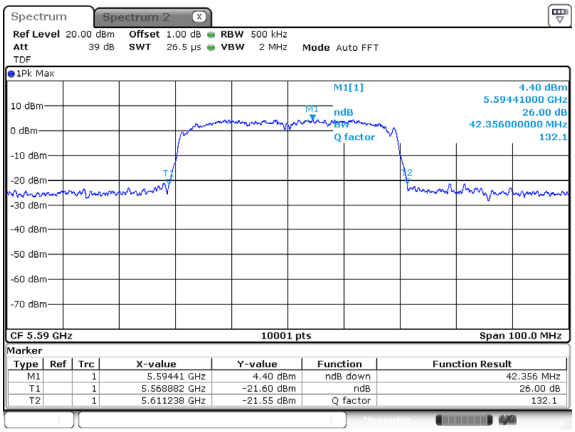
UNII-2A / 802.11ac VHT40 / High ch.



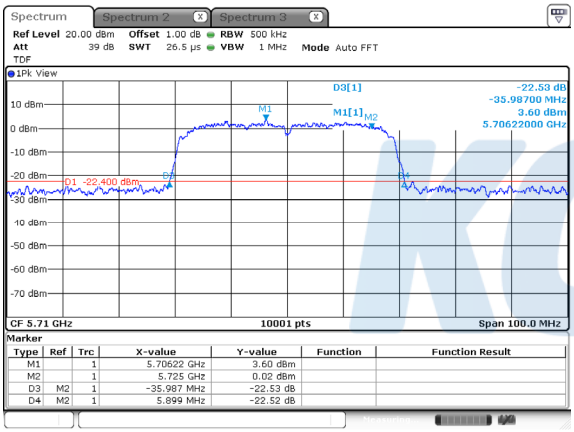
UNII-2C / 802.11ac VHT40 / Low ch.



UNII-2C / 802.11ac VHT40 / Mid ch.

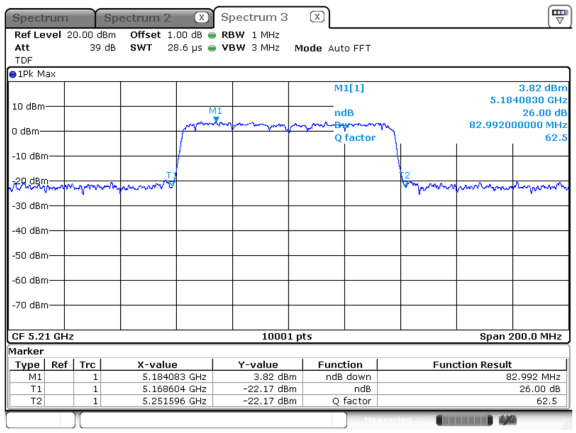


UNII-2C / 802.11ac VHT40 / High ch.

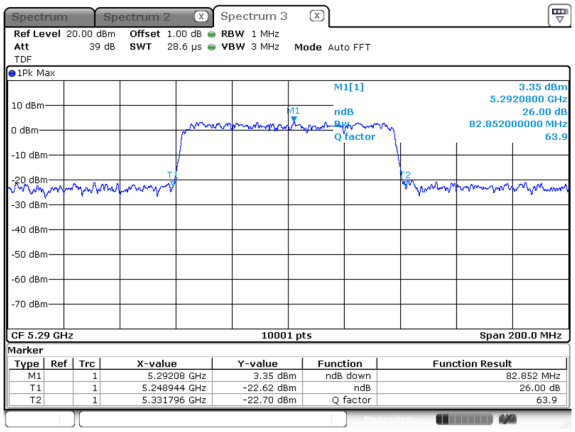


Blank

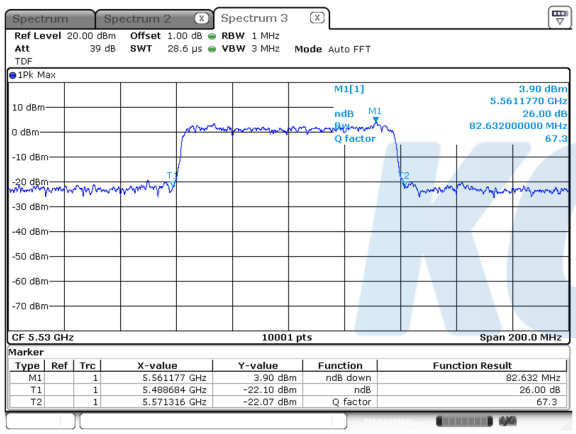
UNII-1 / 802.11ac VHT80 / Low ch.



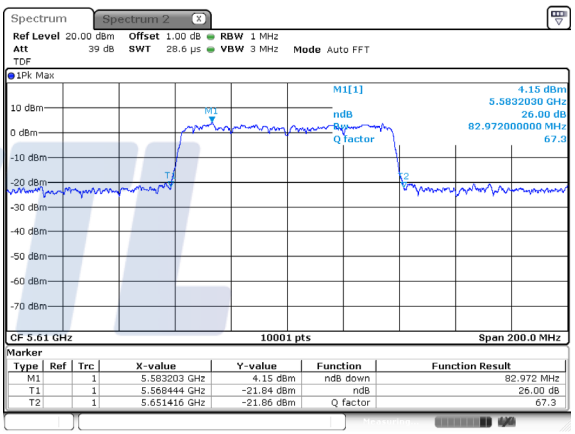
UNII-2A / 802.11ac VHT80 / Low ch.



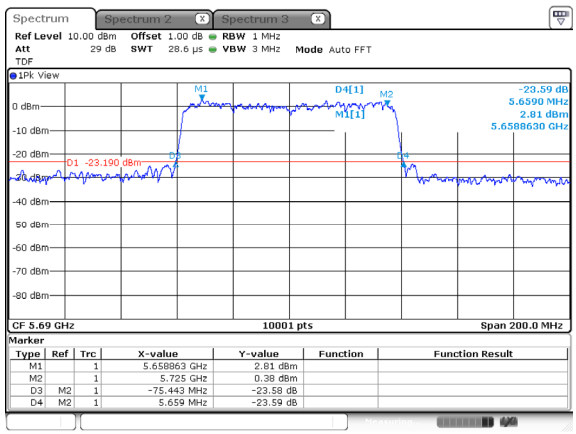
UNII-2C / 802.11ac VHT80 / Low ch.



UNII-2C / 802.11ac VHT80 / Mid ch.



UNII-2C / 802.11ac VHT80 / High ch.



Blank