FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter)

SPECIFICATION:

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

RESULTS:

- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-0.9	-0.86	-1.03
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

  - **Mode 802.11 g**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-3.97	-4.21	-4.07
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

  - **Mode 802.11 N20**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-3.58	-3.85	-3.58
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-0.12	-0.43	-0.52
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

  - **Mode 802.11 g**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-3.36	-3.55	-3.54
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

  - **Mode 802.11 N20**

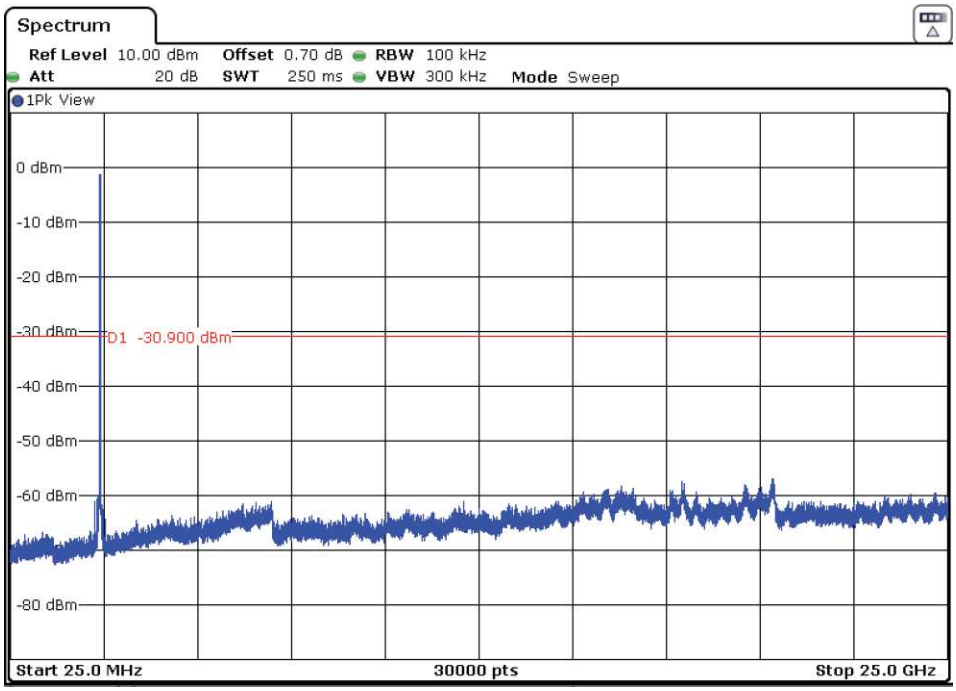
	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Reference Level Measurement (dBm)	-3.31	-3.62	-3.69
Measurement uncertainty (dB)	<±1.56		

No spurious peaks were found at less than 20 dB below the limit.

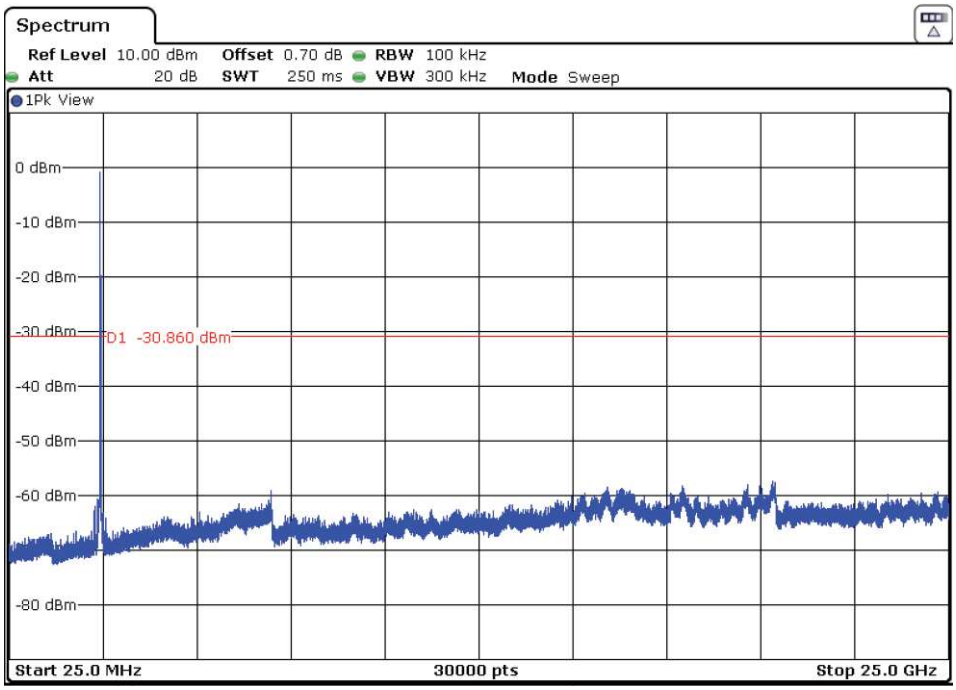
Verdict: PASS

- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Emission Limitations Conducted**

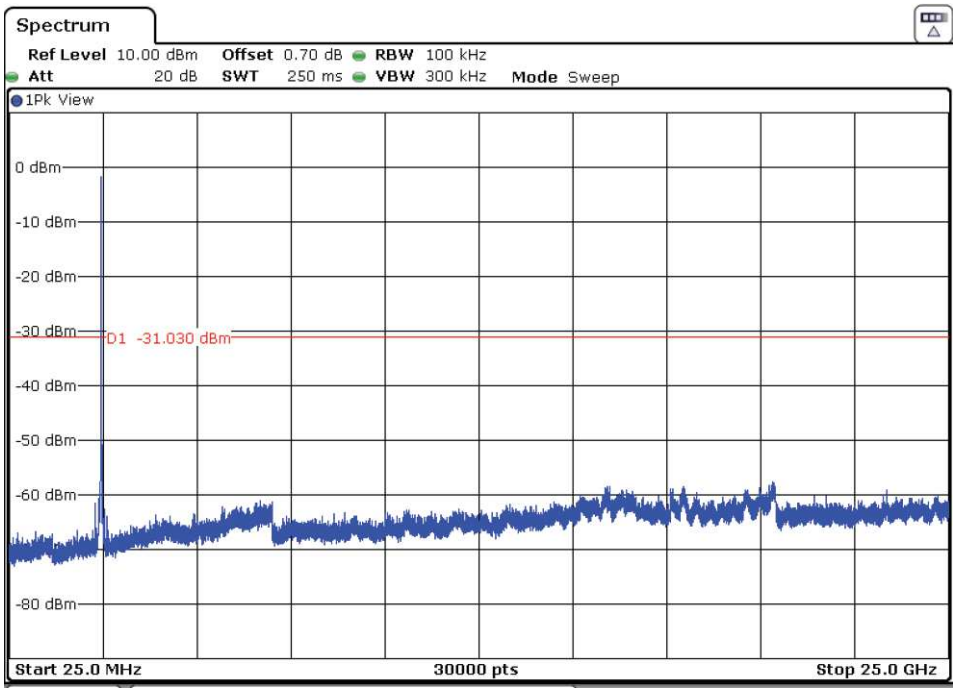
- Low Channel:



- Middle Channel:

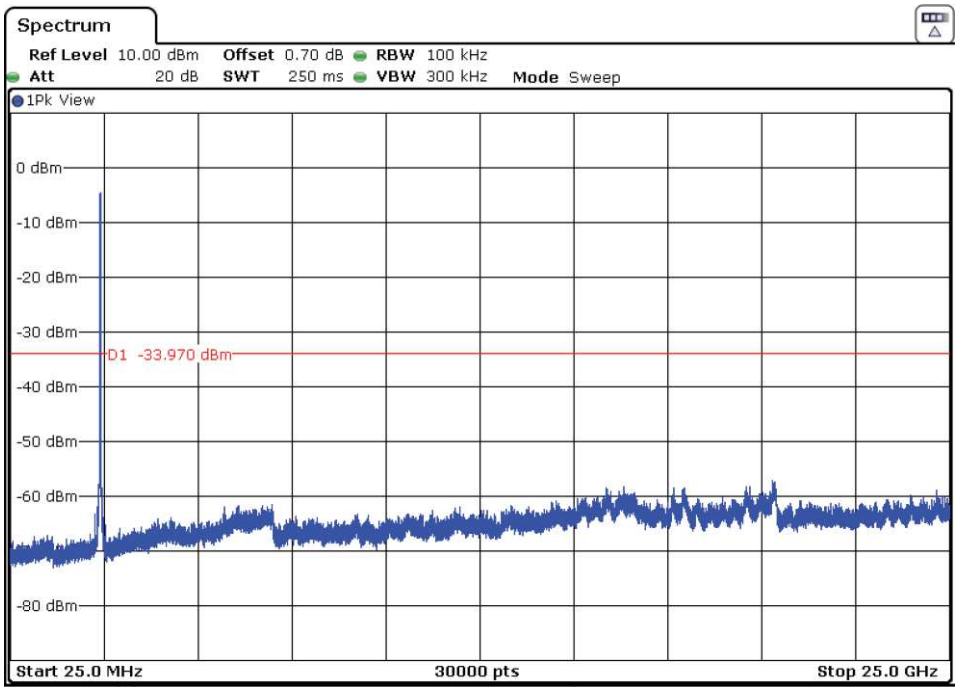


- High Channel:

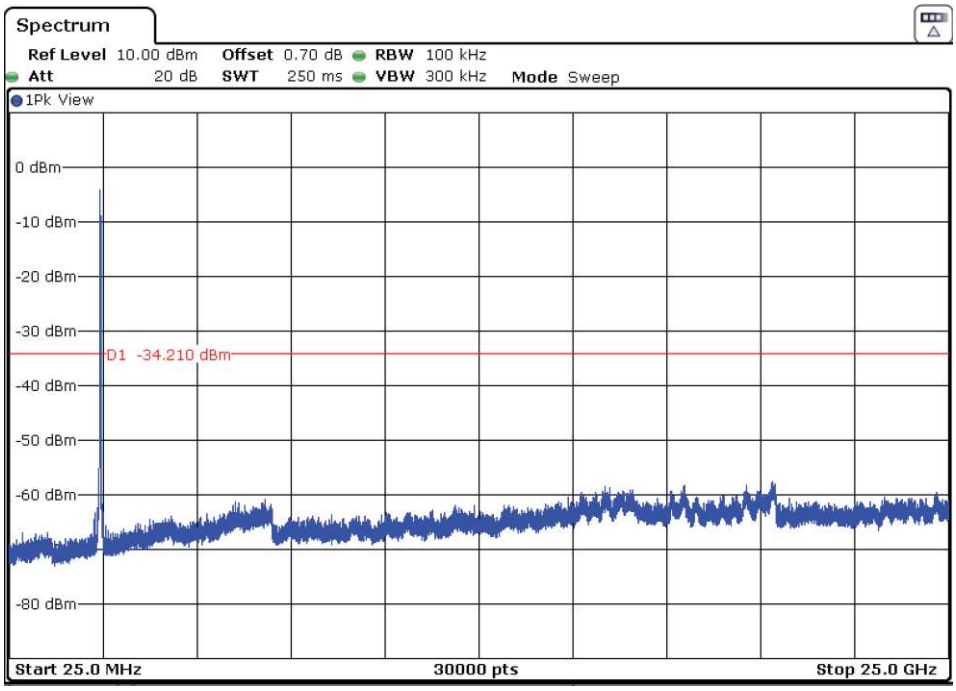


- **Mode 802.11 g – Emission Limitations Conducted**

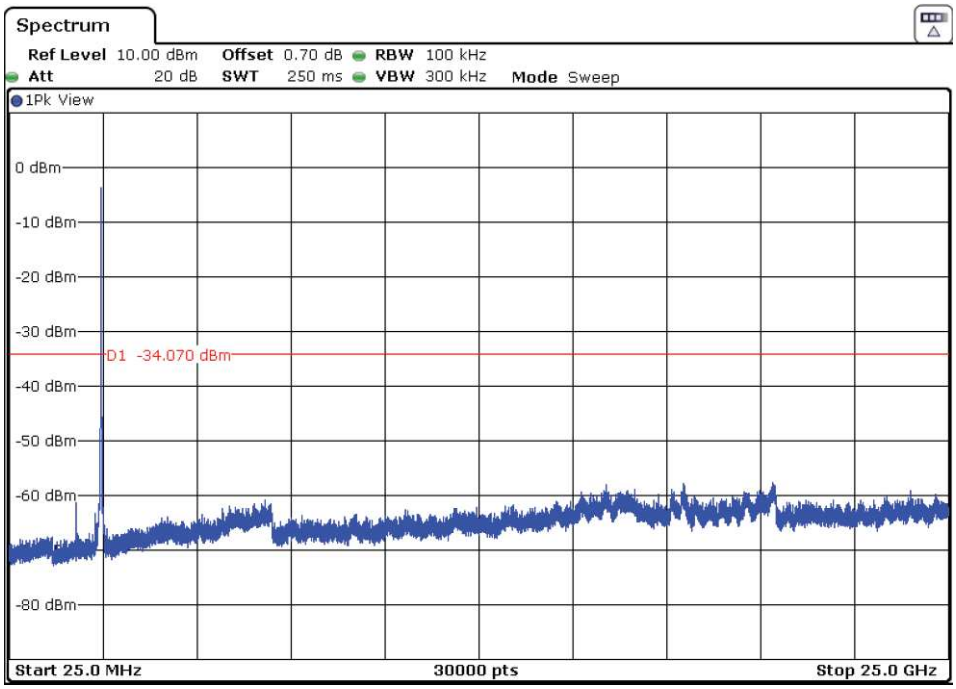
- Low Channel:



- Middle Channel:

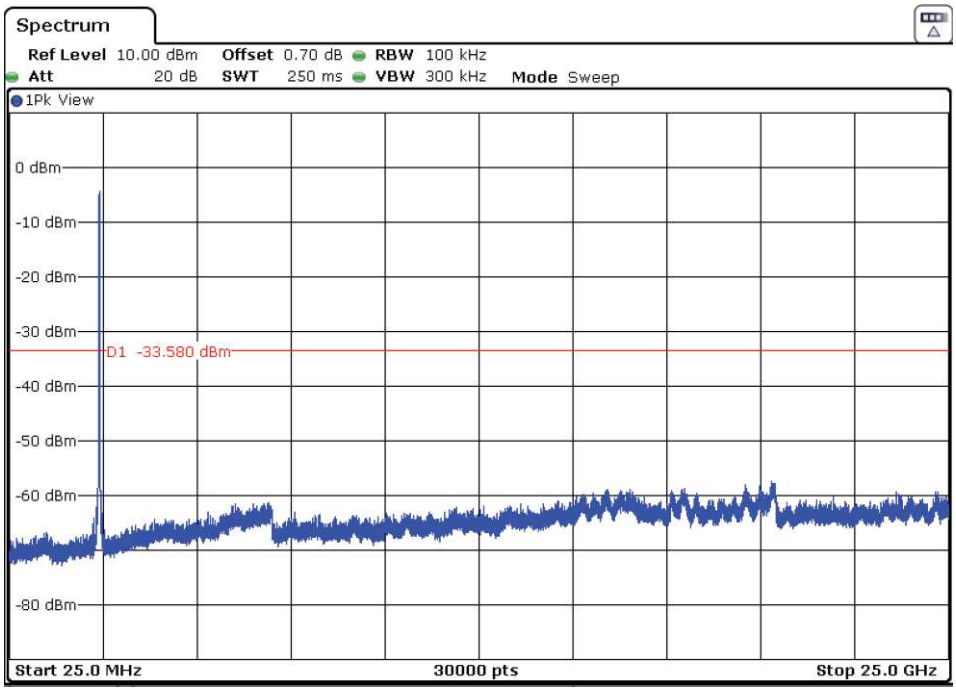


- High Channel:

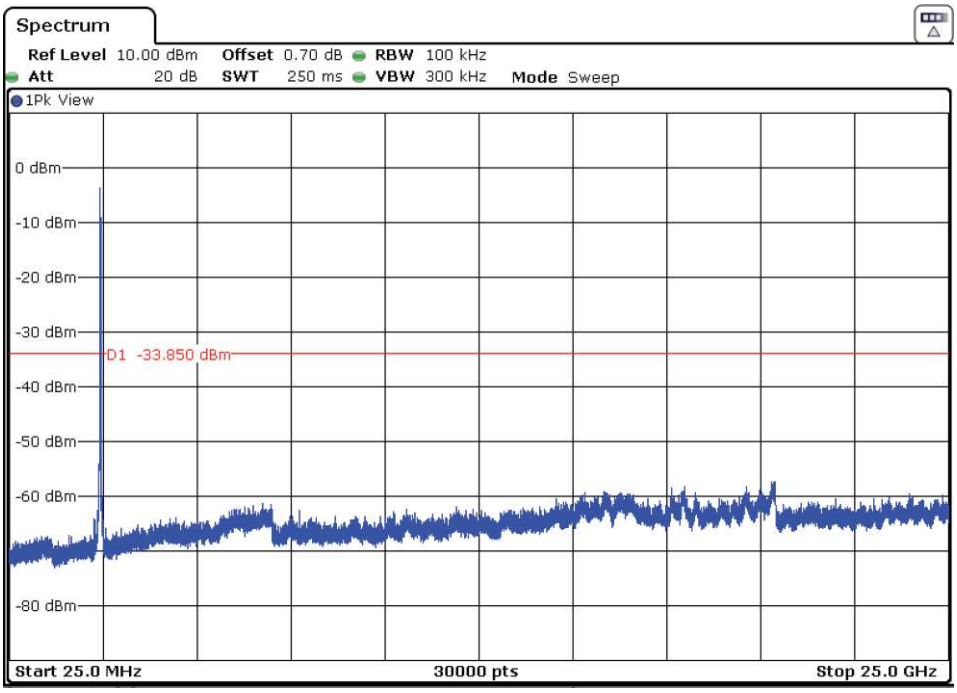


○ Mode 802.11 N20 – Emission Limitations Conducted

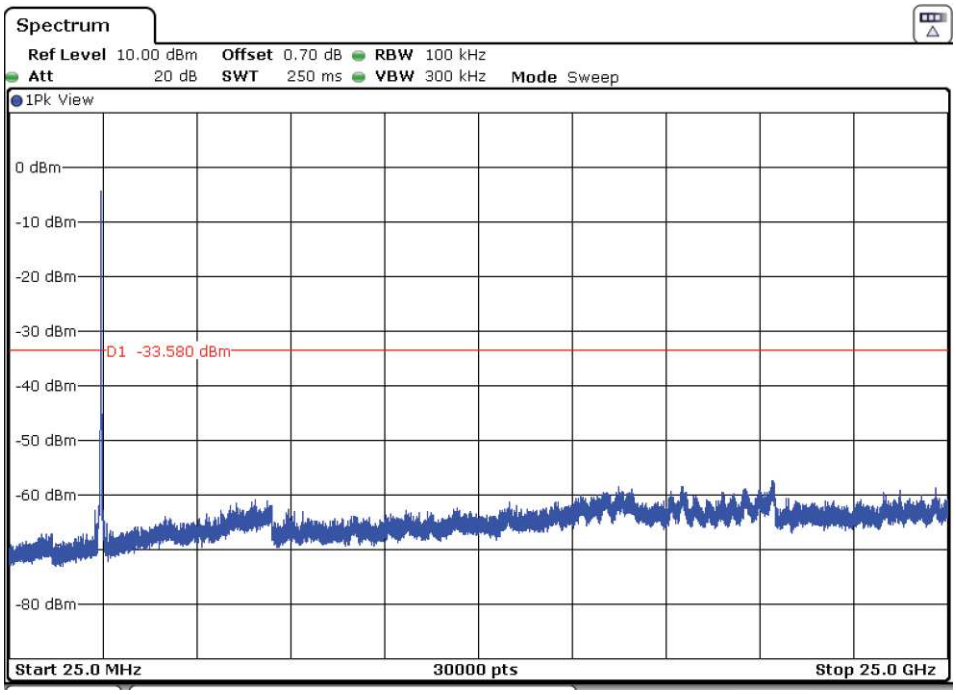
- Low Channel:



- Middle Channel:

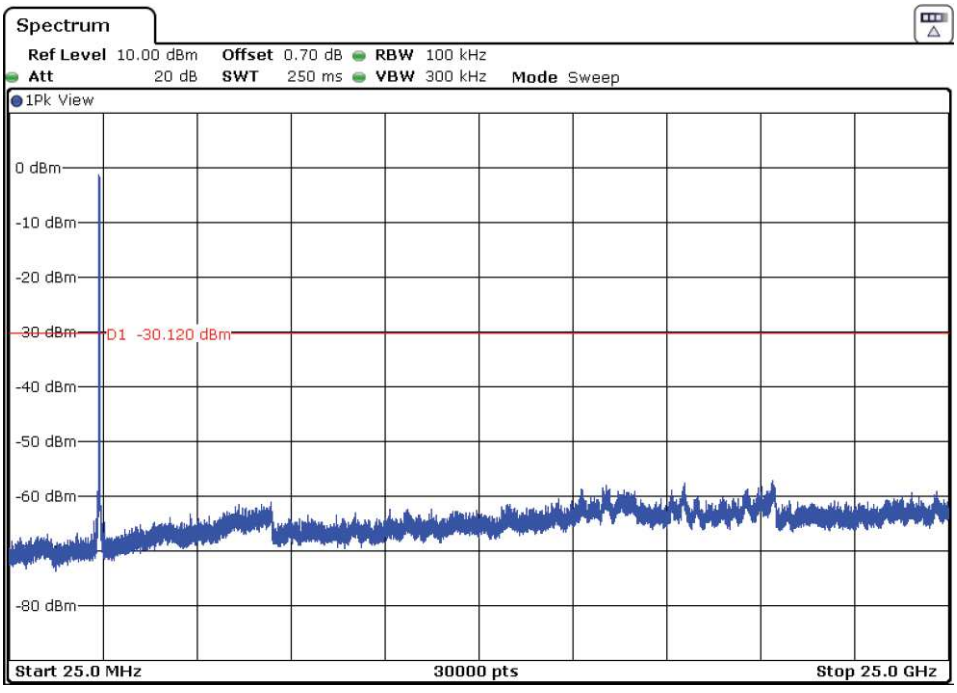


- High Channel:

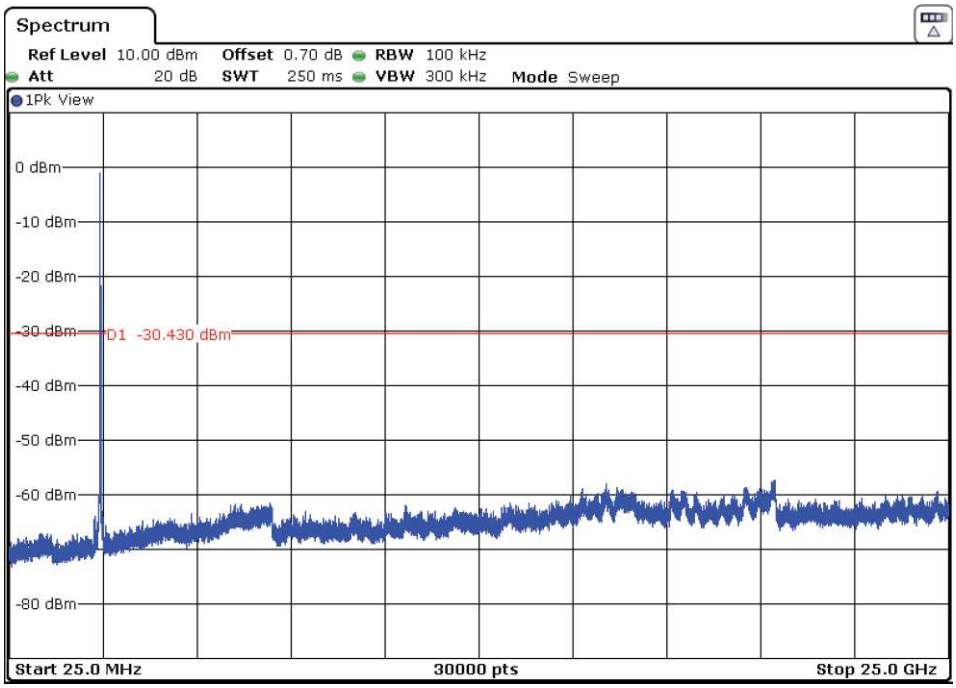


- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b – Emission Limitations Conducted**

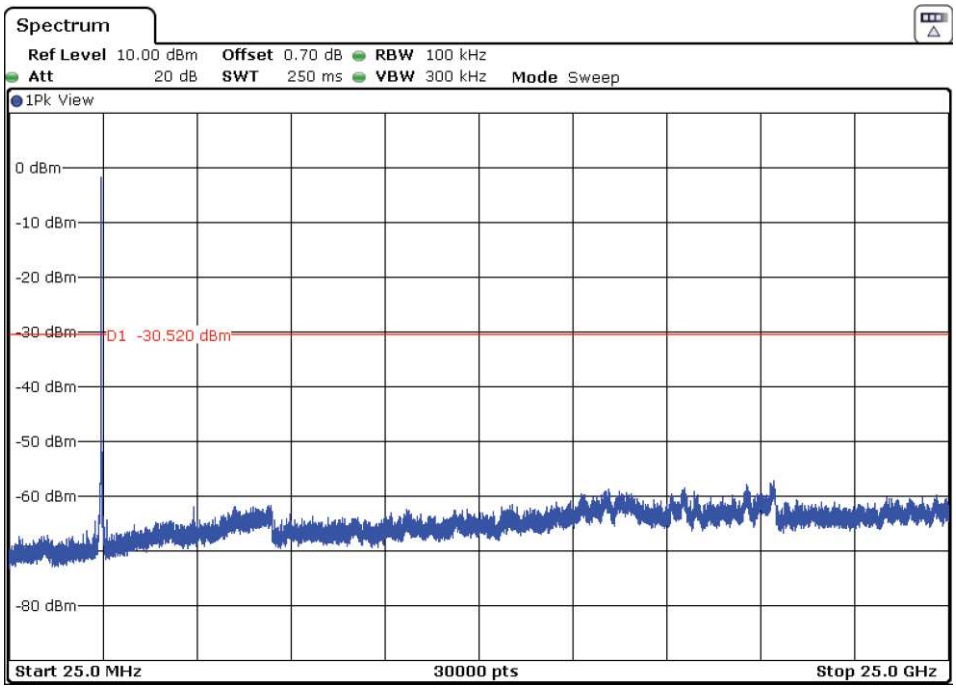
- Low Channel:



- Middle Channel:

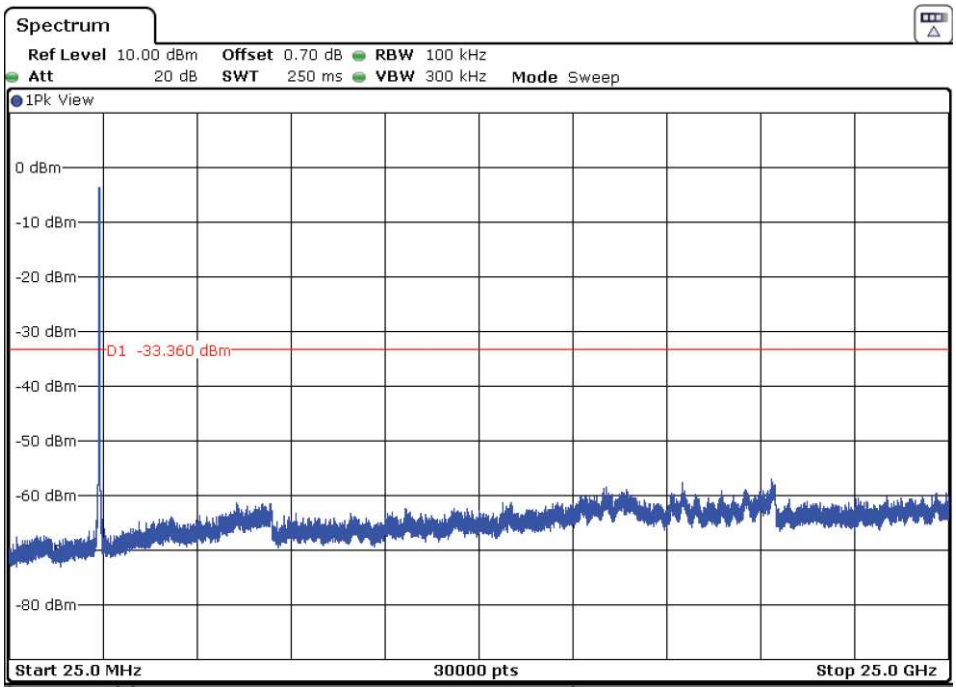


- High Channel:

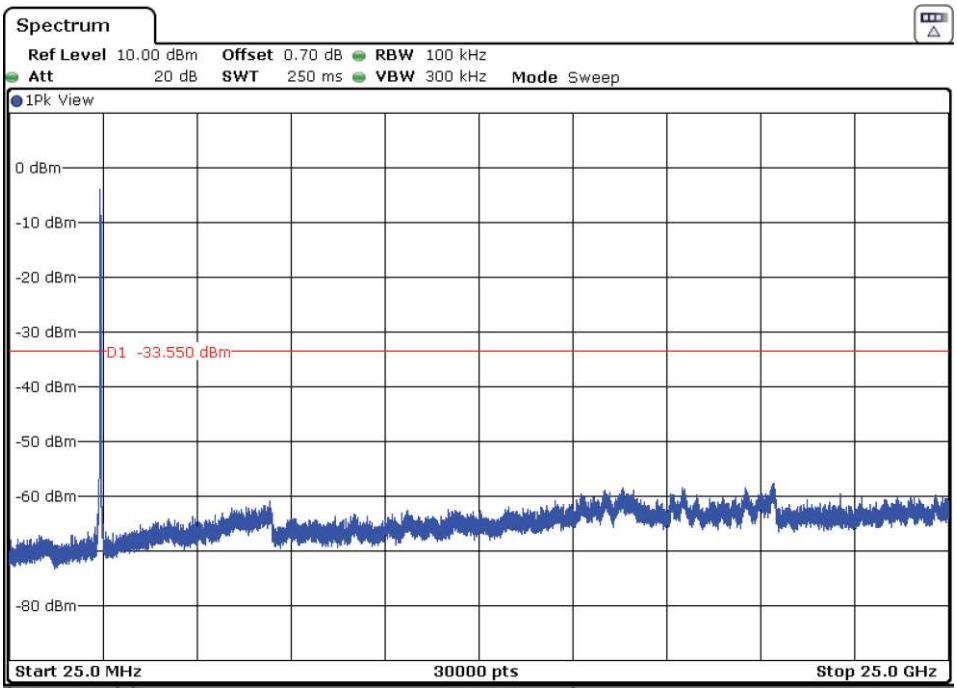


○ Mode 802.11 g – Emission Limitations Conducted

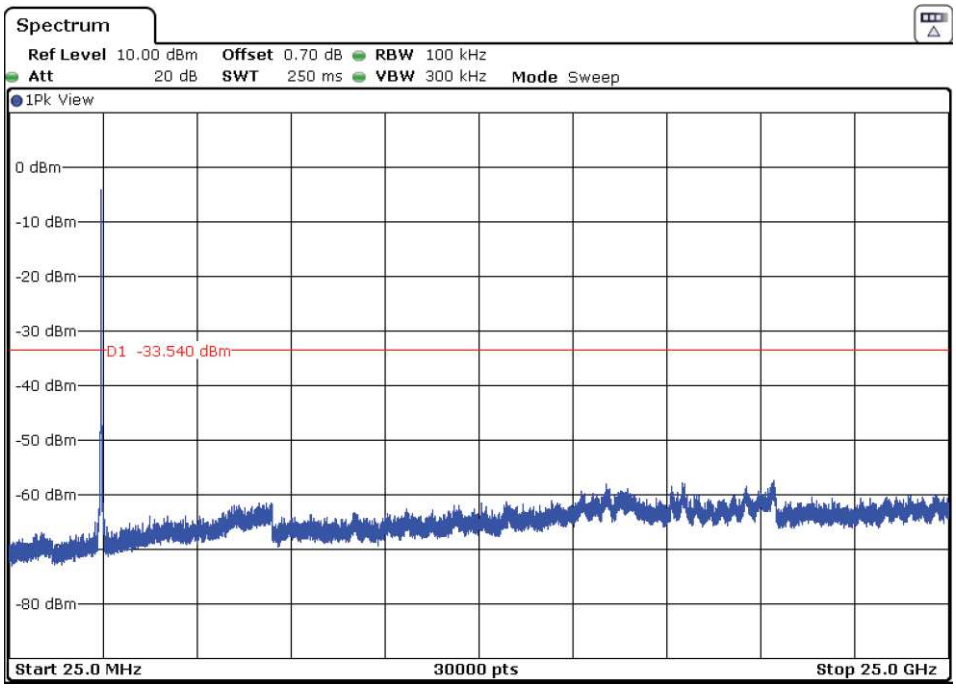
- Low Channel:



- Middle Channel:

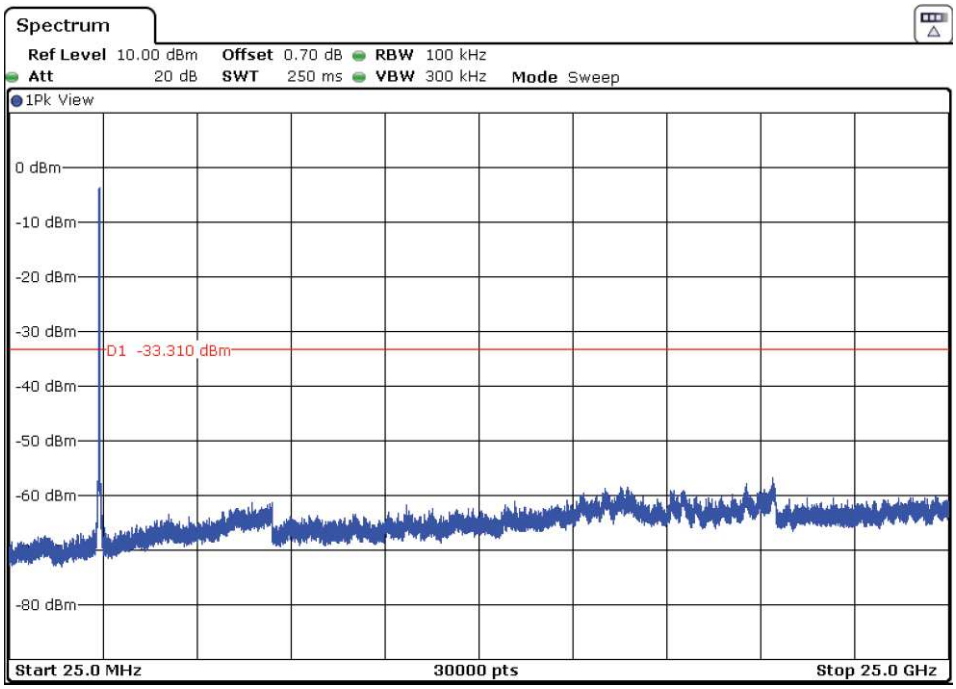


- High Channel:

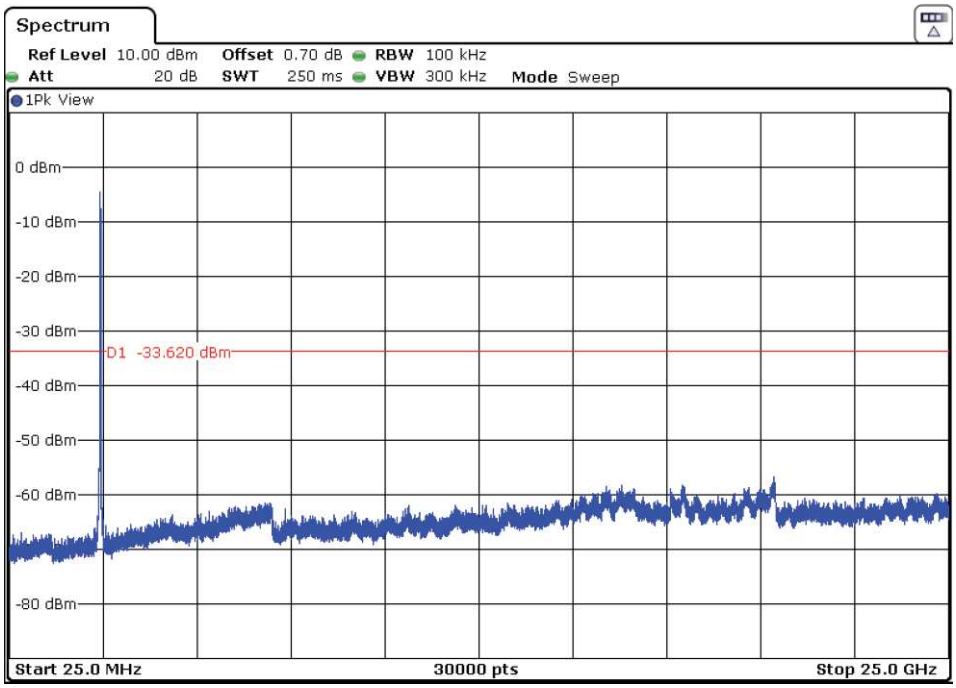


- **Mode 802.11 N20 – Emission Limitations Conducted**

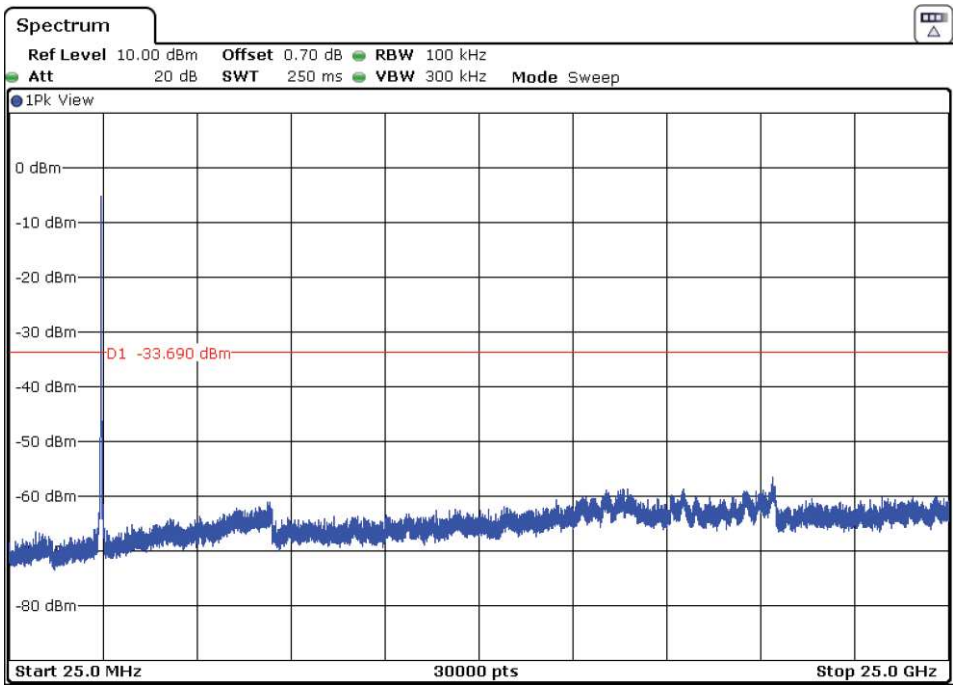
- Low Channel:



- Middle Channel:



- High Channel:



FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Band-edge emissions compliance (Transmitter)

SPECIFICATION:

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

RESULTS:

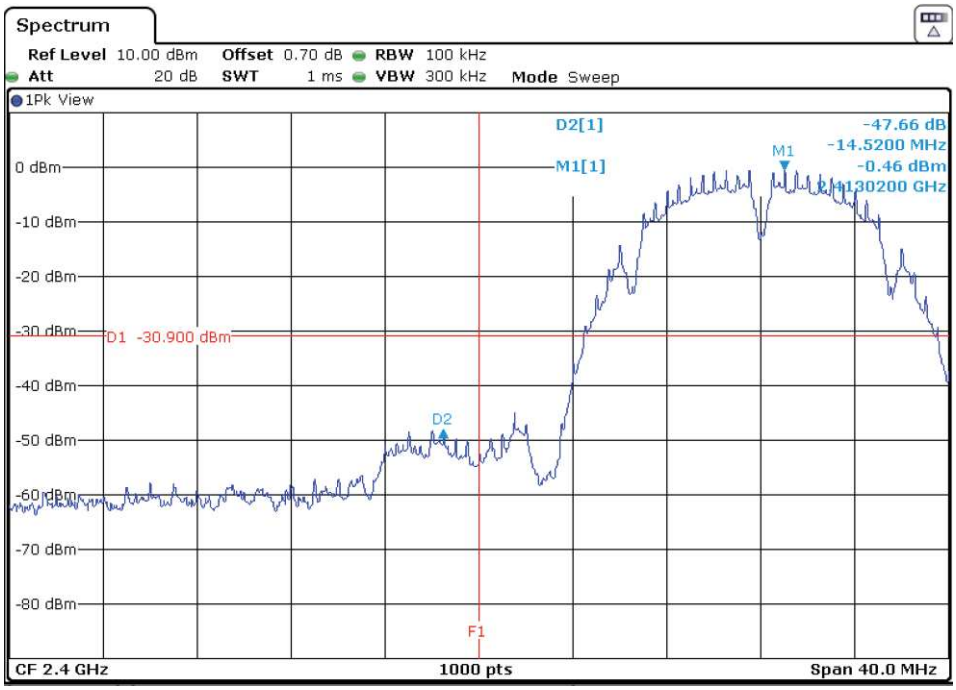
Radiated measurements were used to show compliance with the limits in the restricted bands 2.31-2.39 GHz and 2.4835-2.5 GHz.

Measurement uncertainty (dB)	<±1.56

LOW FREQUENCY SECTION 2412 MHz (b/g/n20) CONDUCTED

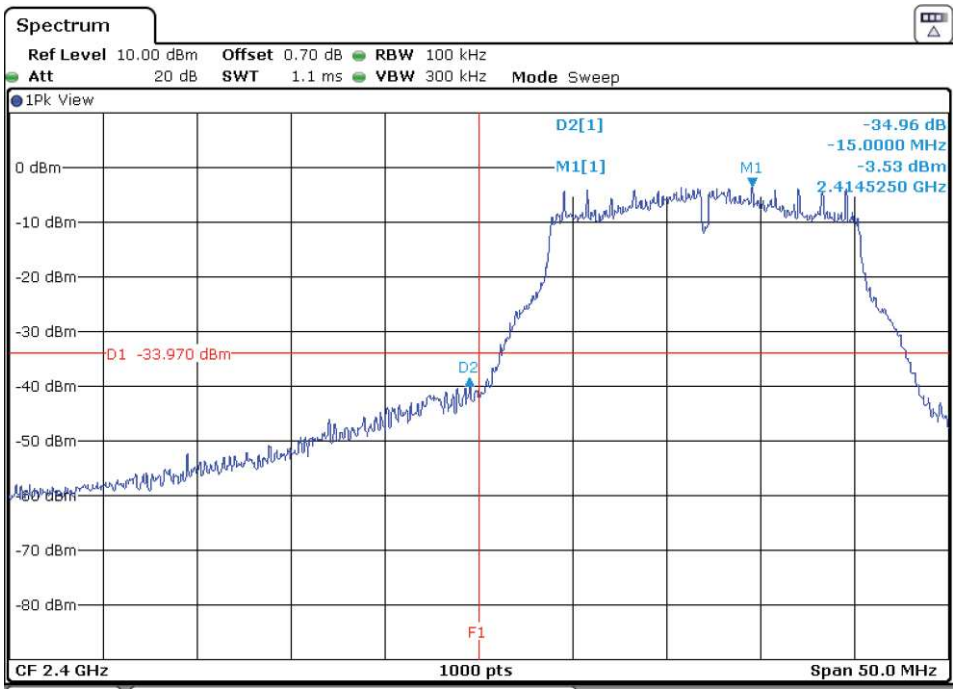
- **CORE 0 – Antenna RF External port 2**

  - **Mode 802.11 b – Band-edge emissions compliance**



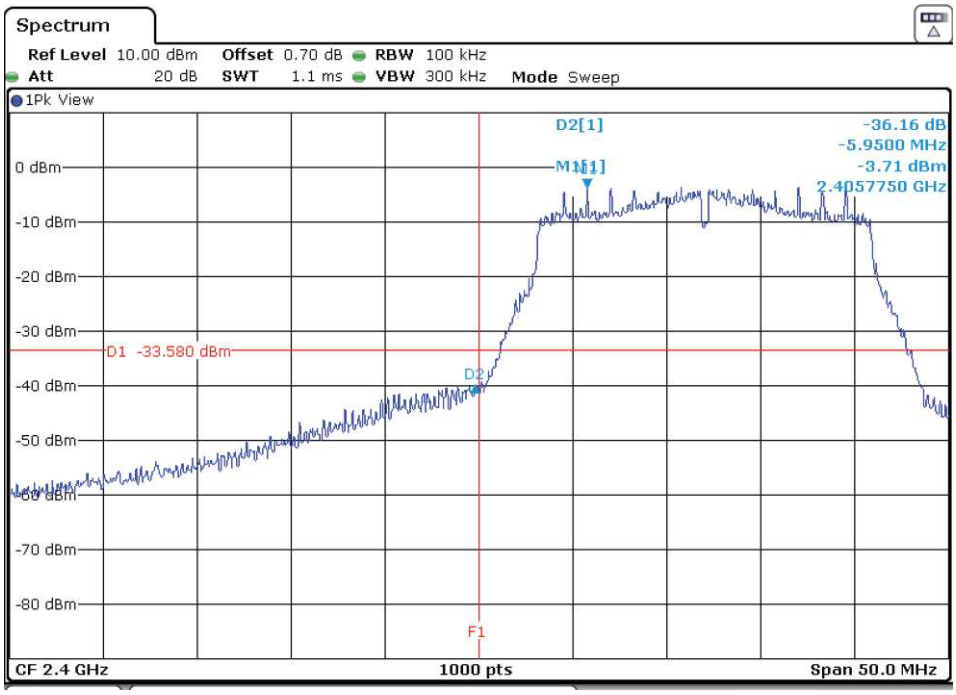
Verdict: PASS

  - **Mode 802.11 g – Band-edge emissions compliance**



Verdict: PASS

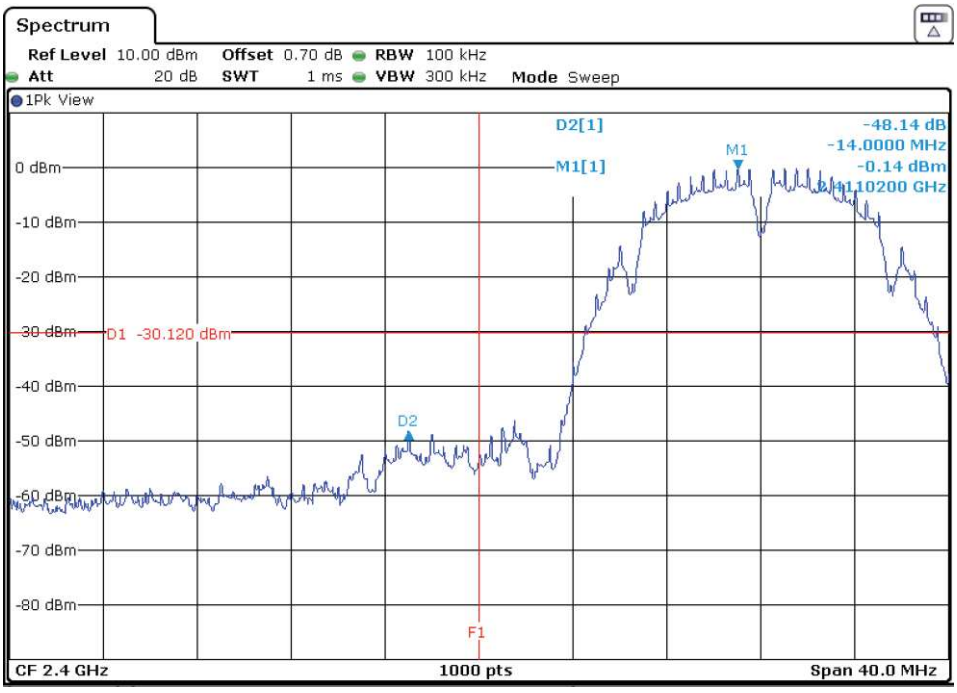
- **Mode 802.11 N20 – Band-edge emissions compliance**



Verdict: PASS

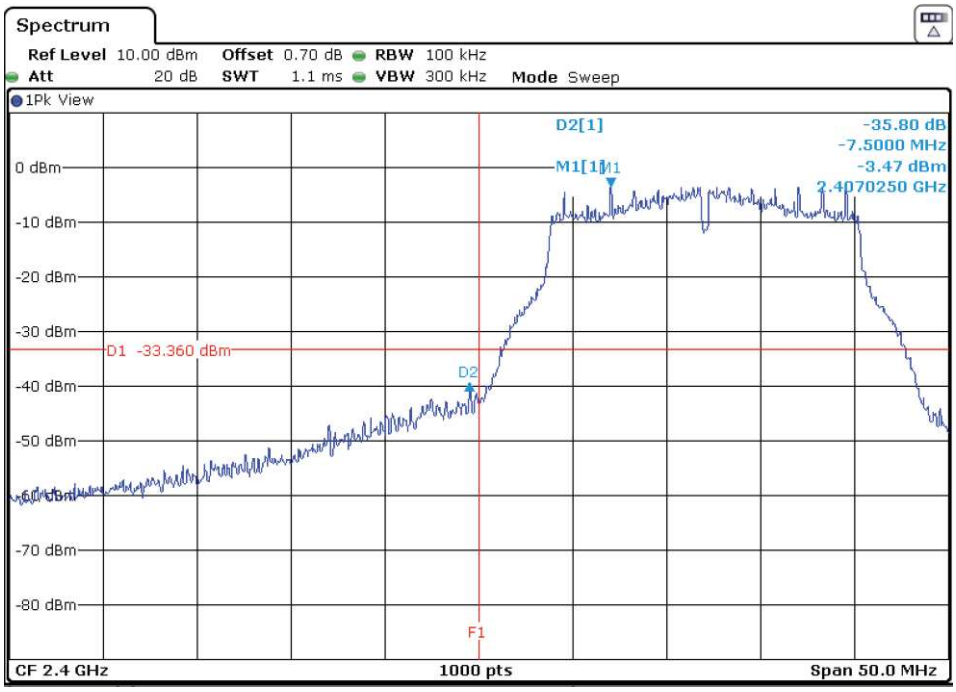
- **CORE 1 – Antenna RF External port 4**

  - **Mode 802.11 b – Band-edge emissions compliance**



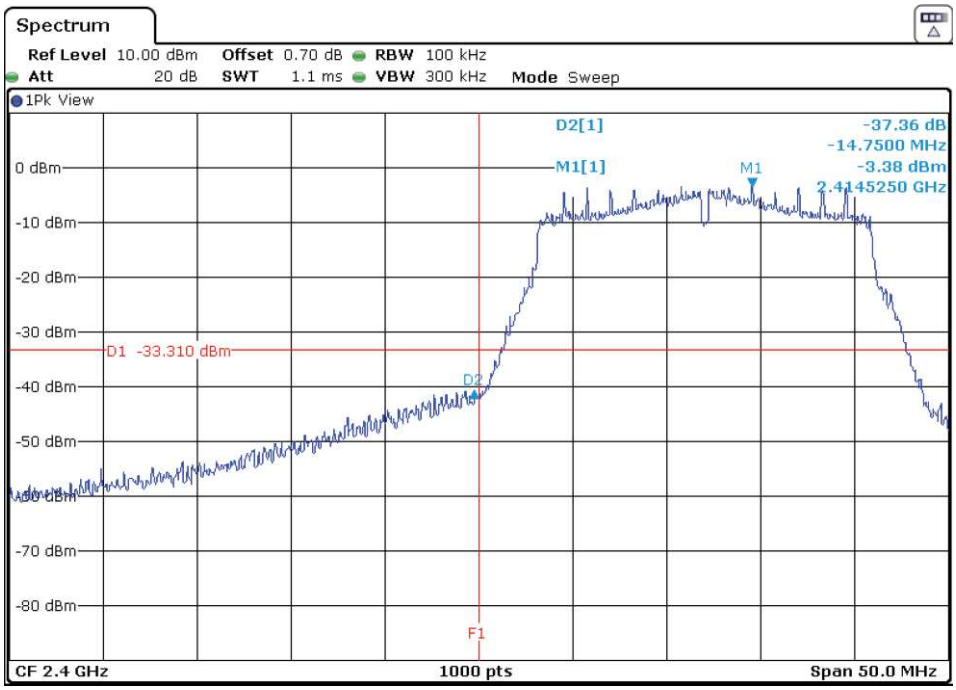
Verdict: PASS

- **Mode 802.11 g – Band-edge emissions compliance**



Verdict: PASS

- **Mode 802.11 N20 – Band-edge emissions compliance**



Verdict: PASS

FCC Section 15.247 Subclause (e) / RSS-247 5.2. (b) Power spectral density

SPECIFICATION:

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS:

The maximum power spectral density level in the fundamental emission was measured using the method according to point 11.10.5." Method AVGPSD-2" of of ANSI C.63.10-2013.

- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-9.45	-9.24	-9.53
Duty Cycle Correction Factor (dB)	0.181	0.181	0.181
Power Spectral Density corrected (dBm)	-9.269	-9.059	-9.349
Measurement uncertainty (dB)	<±0.78		

  - **Mode 802.11 g**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-10.37	-10.43	-10.47
Duty Cycle Correction Factor (dB)	0.97	0.97	0.97
Power Spectral Density corrected (dBm)	-9.40	-9.46	-9.50
Measurement uncertainty (dB)	<±0.78		

  - **Mode 802.11 N20**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-10.80	-10.79	-10.81
Duty Cycle Correction Factor (dB)	1.033	1.033	1.033
Power Spectral Density corrected (dBm)	-9.767	-9.757	-9.777
Measurement uncertainty (dB)	<±0.78		

Verdict: PASS

- **CORE 1 – Antenna RF External port 4**

  - **Mode 802.11 b**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-9.38	-9.26	-9.12
Duty Cycle Correction Factor (dB)	0.181	0.181	0.181
Power Spectral Density corrected (dBm)	-9.199	-9.079	-8.939
Measurement uncertainty (dB)	<±0.78		

  - **Mode 802.11 g**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-10.08	-10.21	-10.08
Duty Cycle Correction Factor (dB)	0.97	0.97	0.97
Power Spectral Density corrected (dBm)	-9.11	-9.24	-9.11
Measurement uncertainty (dB)	<±0.78		

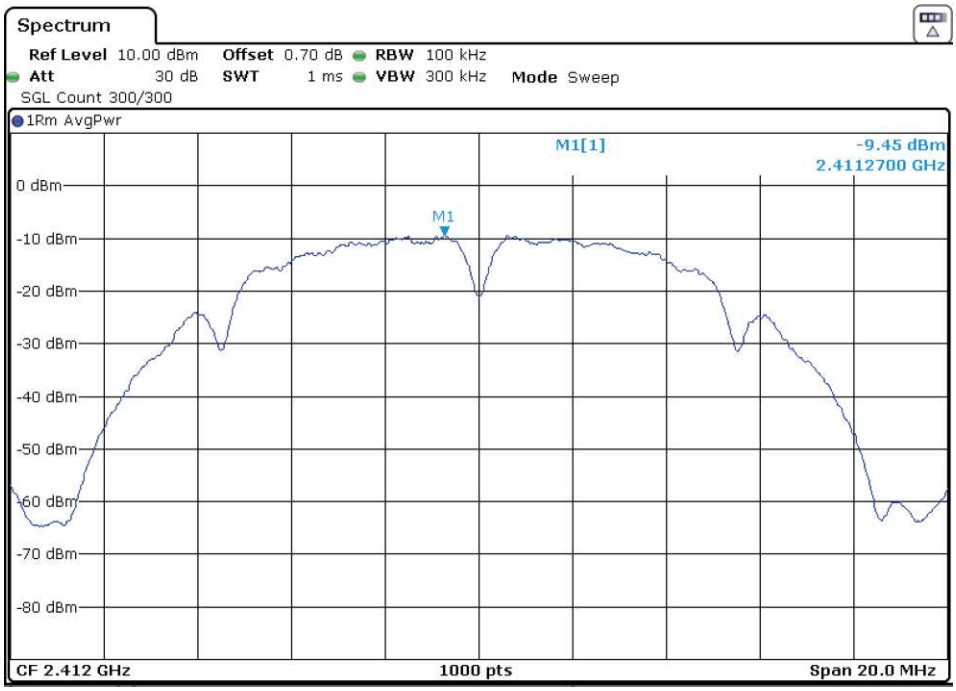
  - **Mode 802.11 N20**

	Low Channel 2412 MHz	Middle Channel 2437 MHz	High Channel 2462 MHz
Power Spectral Density (dBm)	-10.47	-10.55	-10.52
Duty Cycle Correction Factor (dB)	1.033	1.033	1.033
Power Spectral Density corrected (dBm)	-9.437	-9.517	-9.487
Measurement uncertainty (dB)	<±0.78		

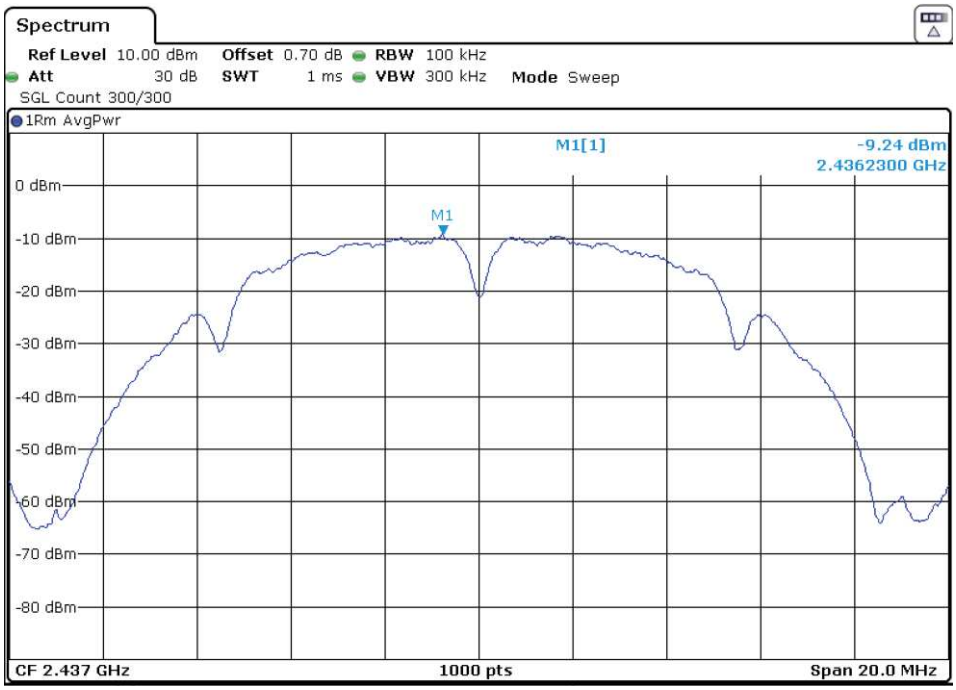
Verdict: PASS

- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Power Spectral Density**

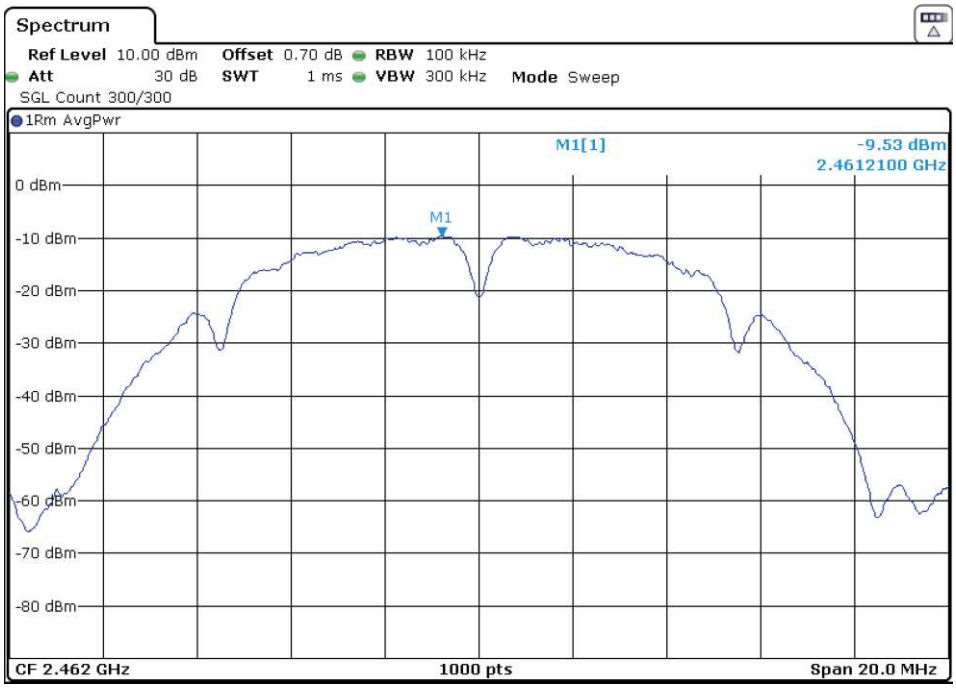
- Low Channel:



- Middle Channel:

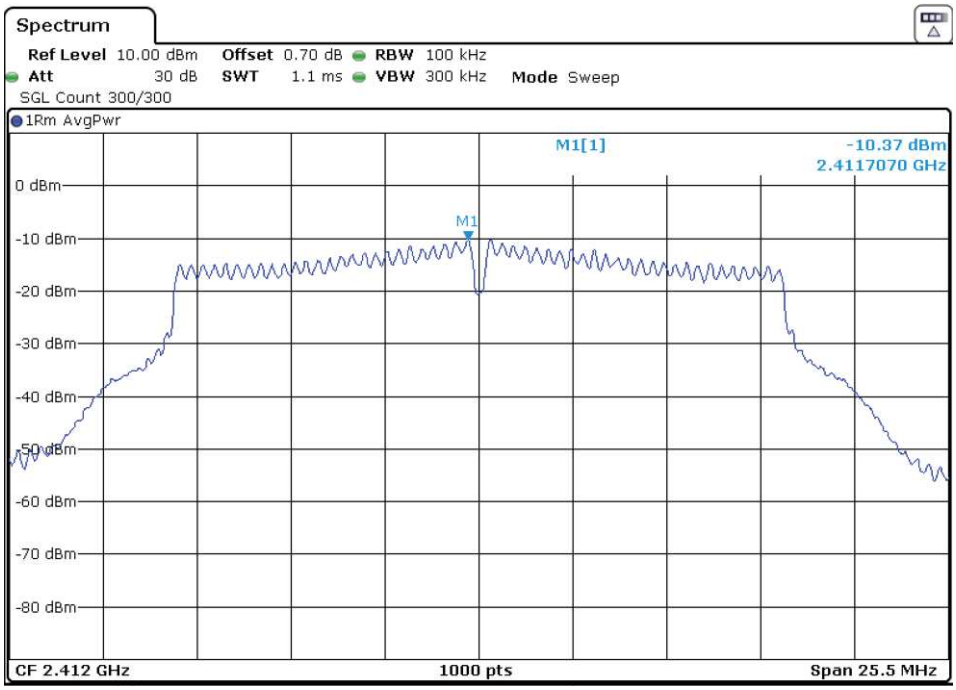


- High Channel:

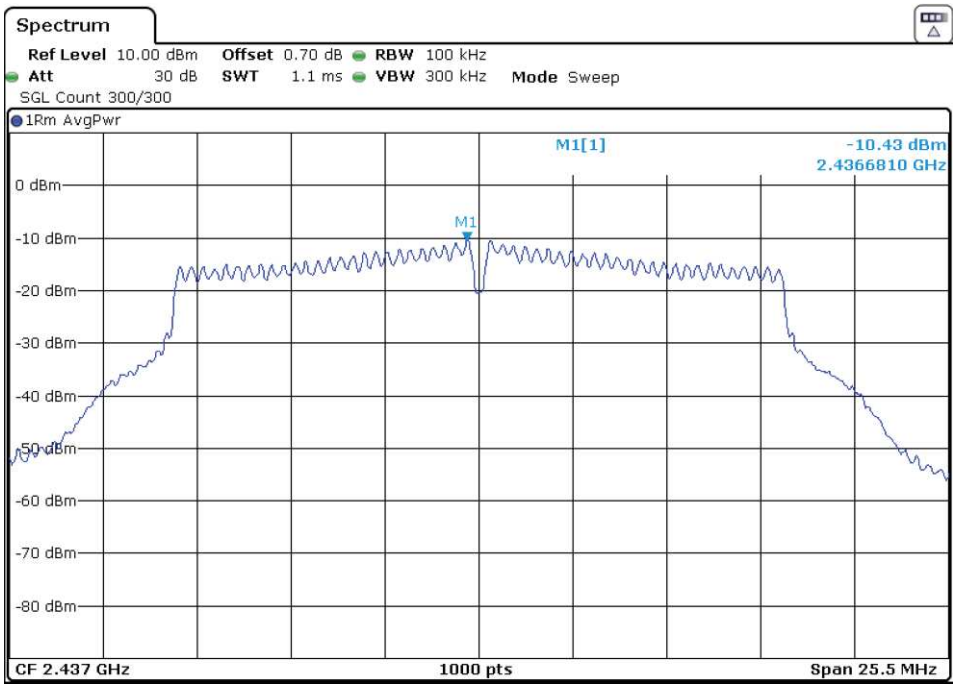


- **Mode 802.11 g – Power Spectral Density**

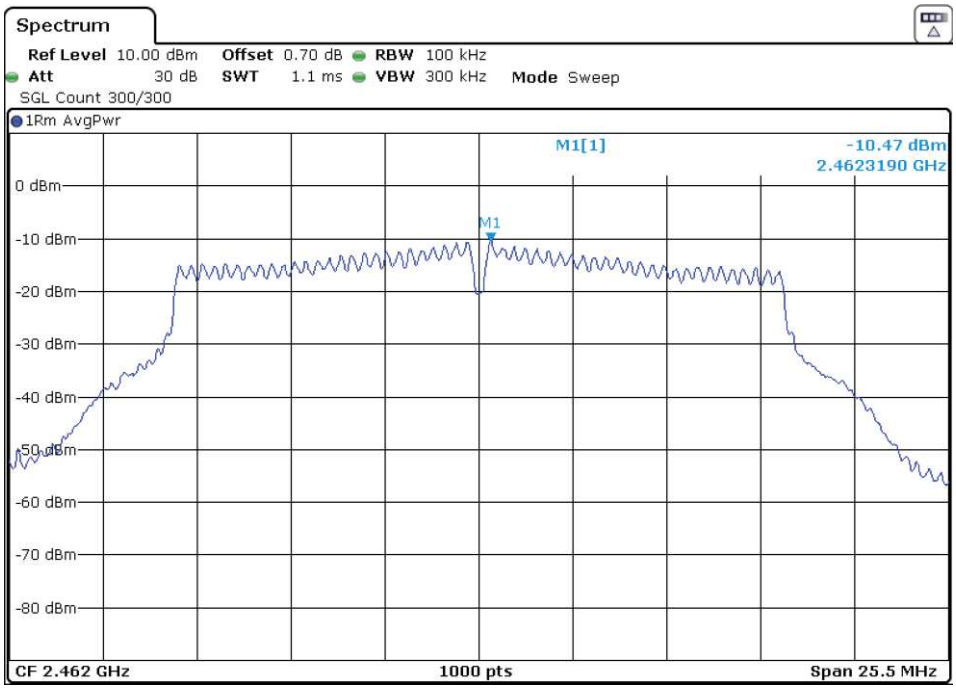
- Low Channel:



- Middle Channel:

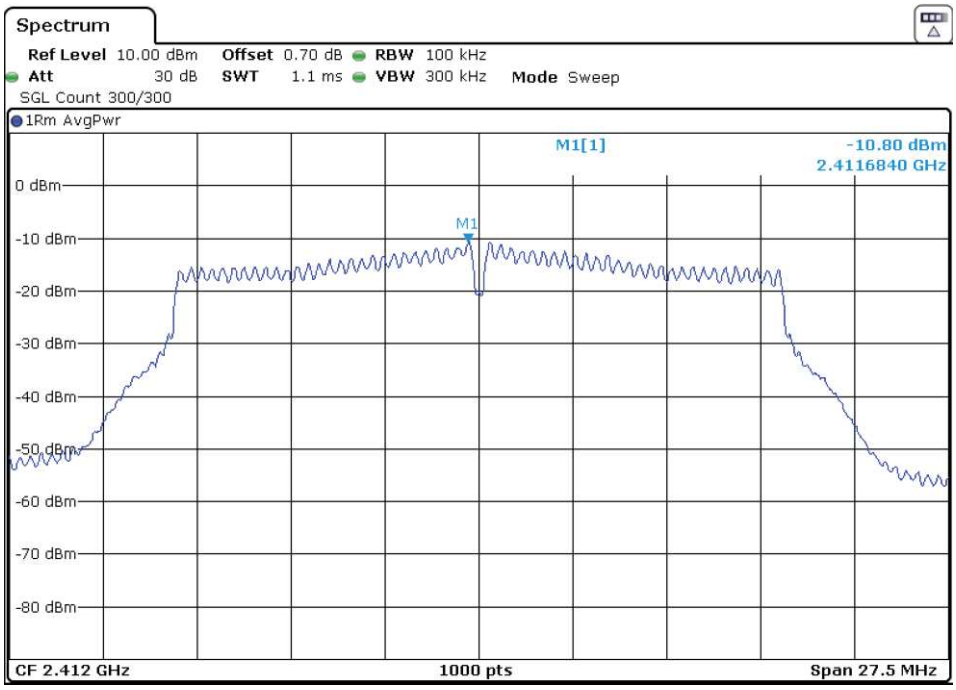


- High Channel:

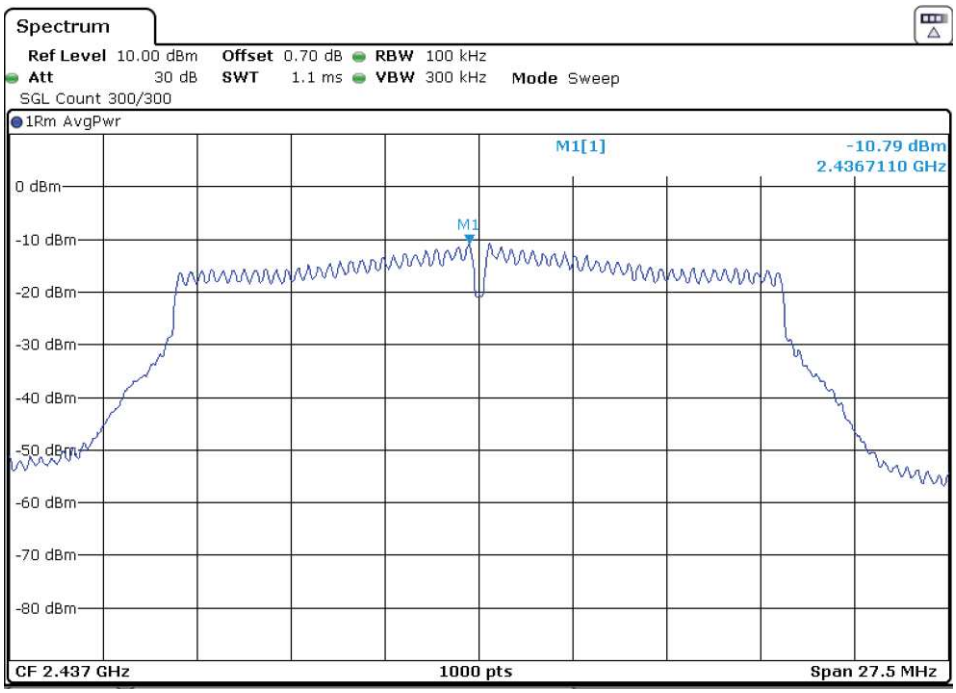


- **Mode 802.11 N20 – Power Spectral Density**

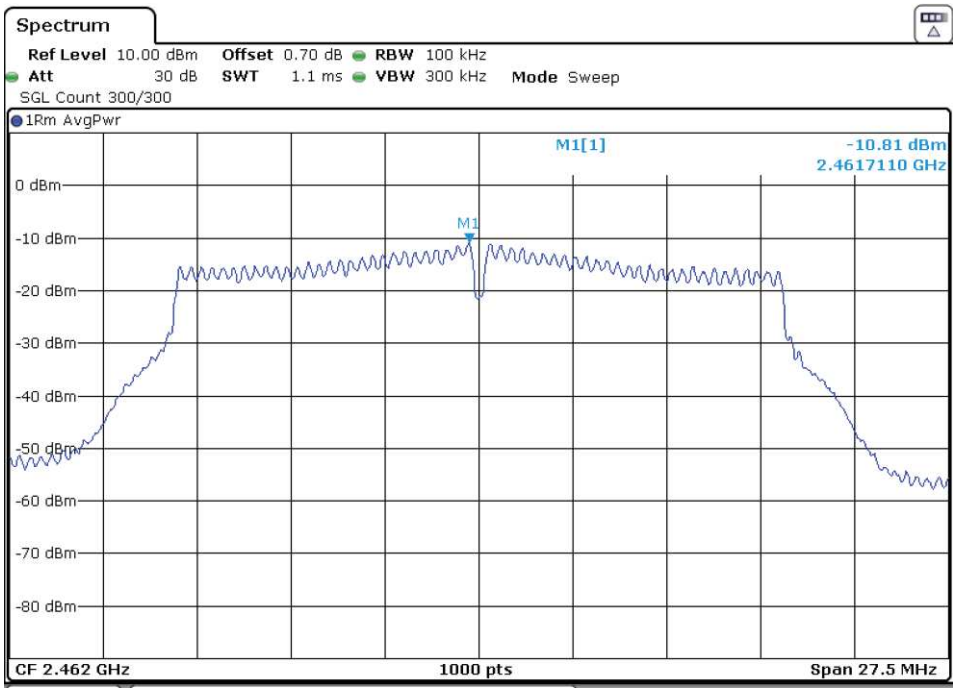
- Low Channel:



- Middle Channel:

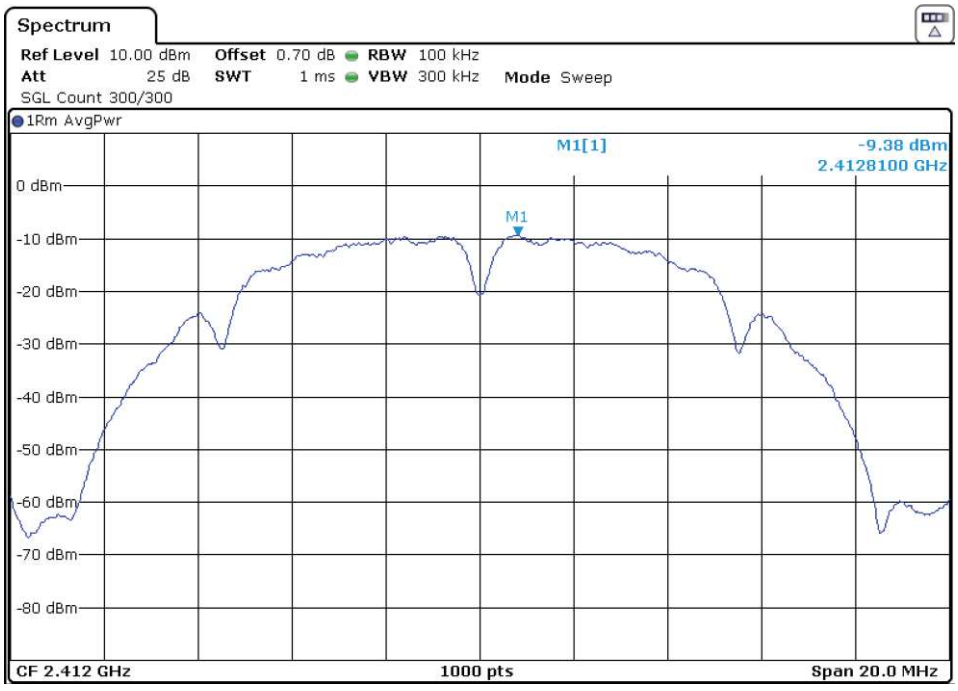


- High Channel:

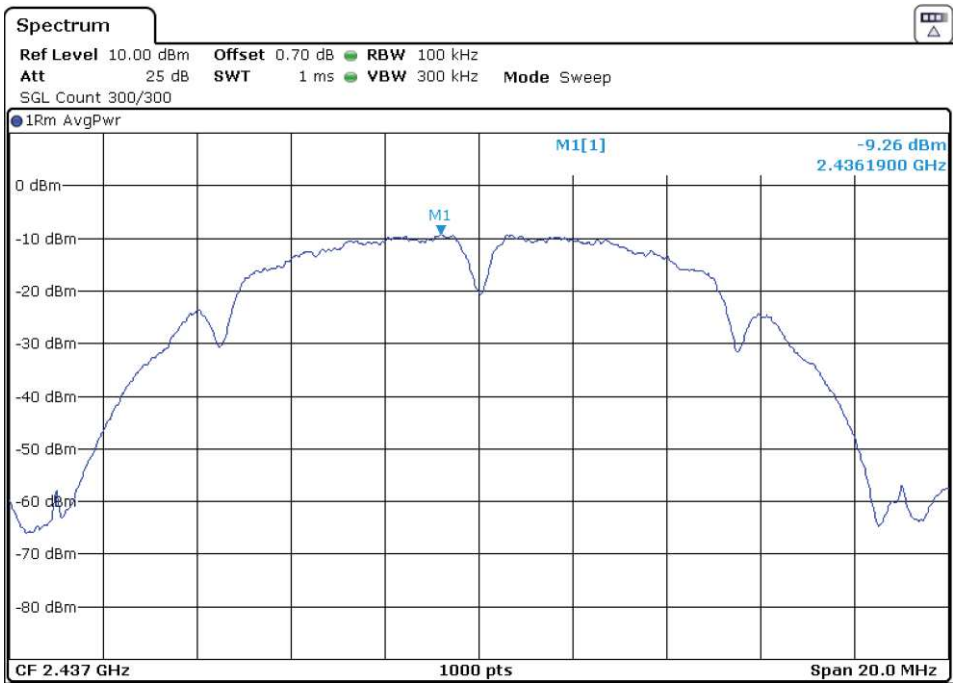


- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b – Power Spectral Density**

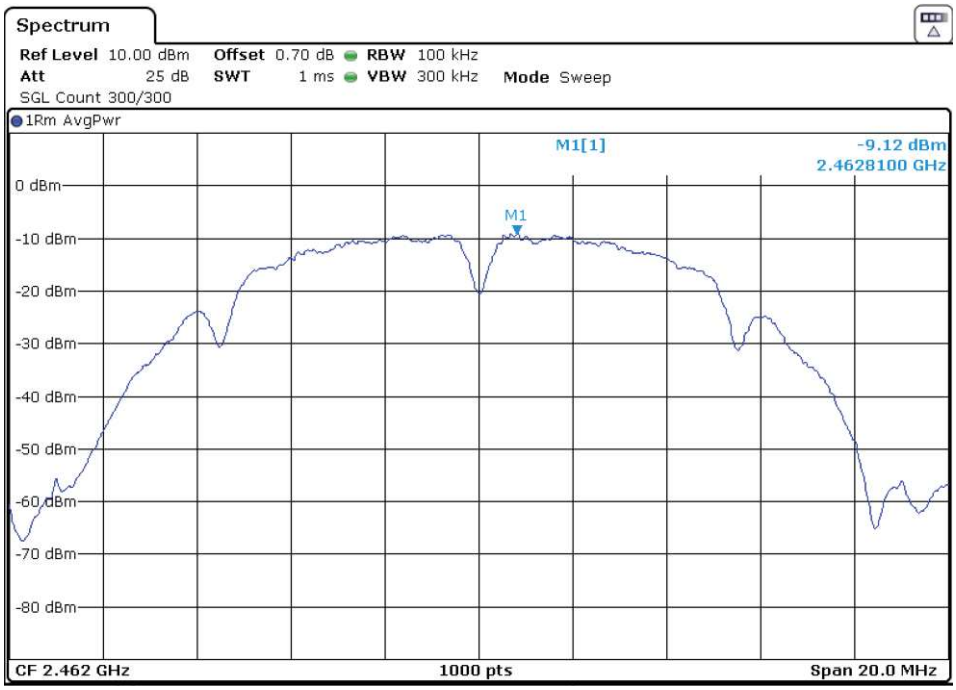
- Low Channel:



- Middle Channel:

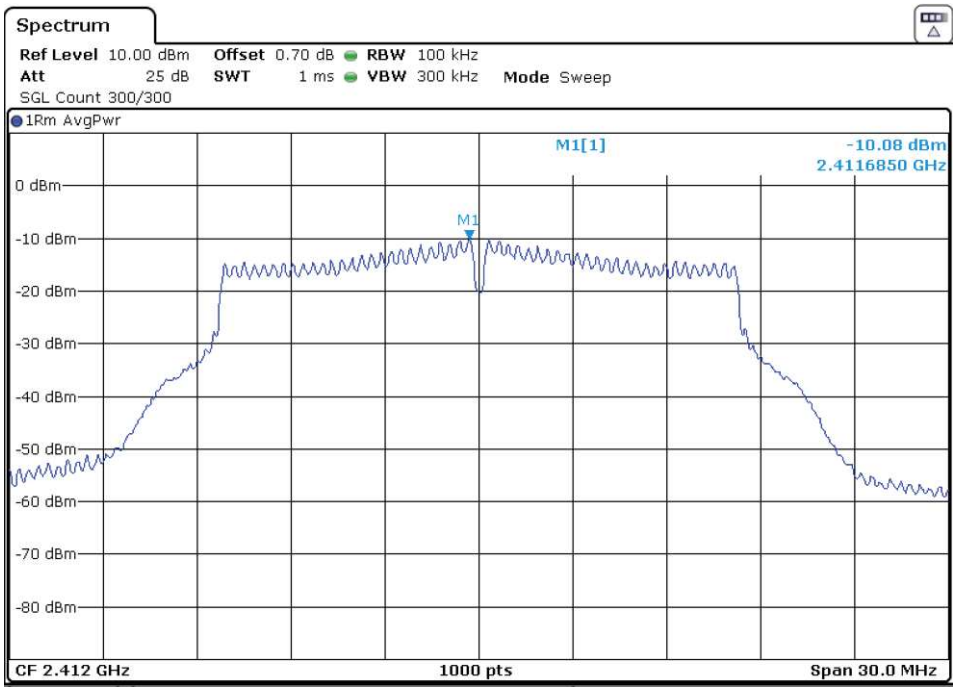


- High Channel:

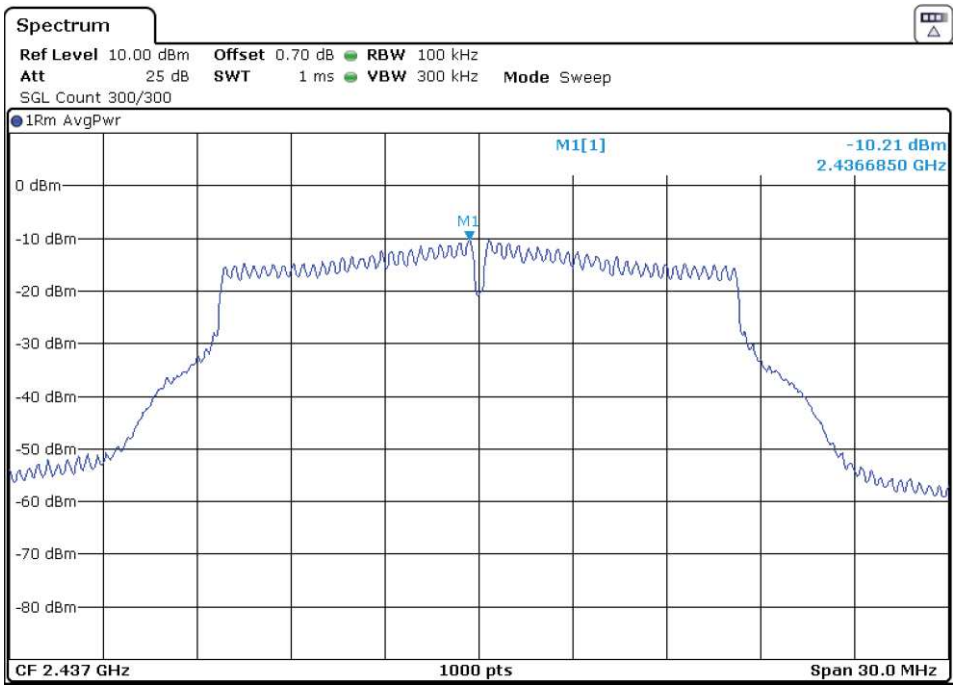


- **Mode 802.11 g – Power Spectral Density**

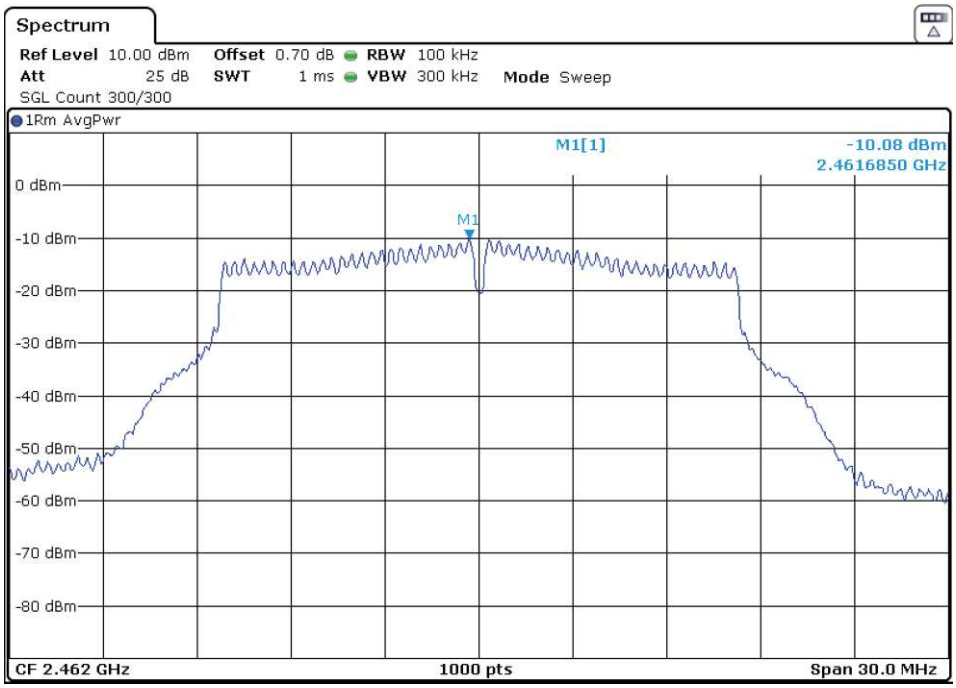
- Low Channel:



- Middle Channel:

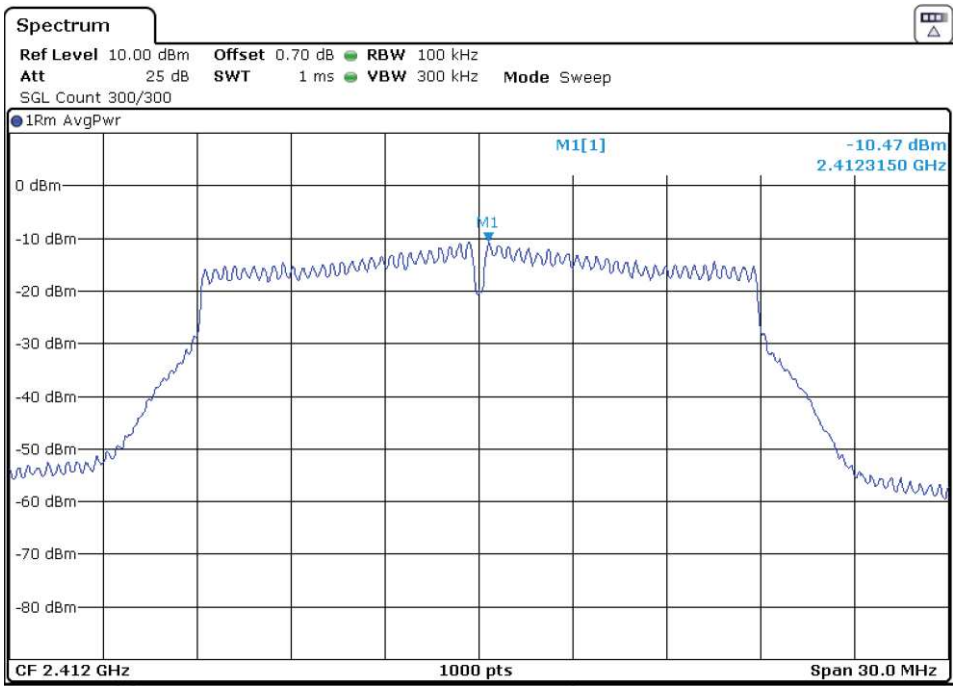


- High Channel:

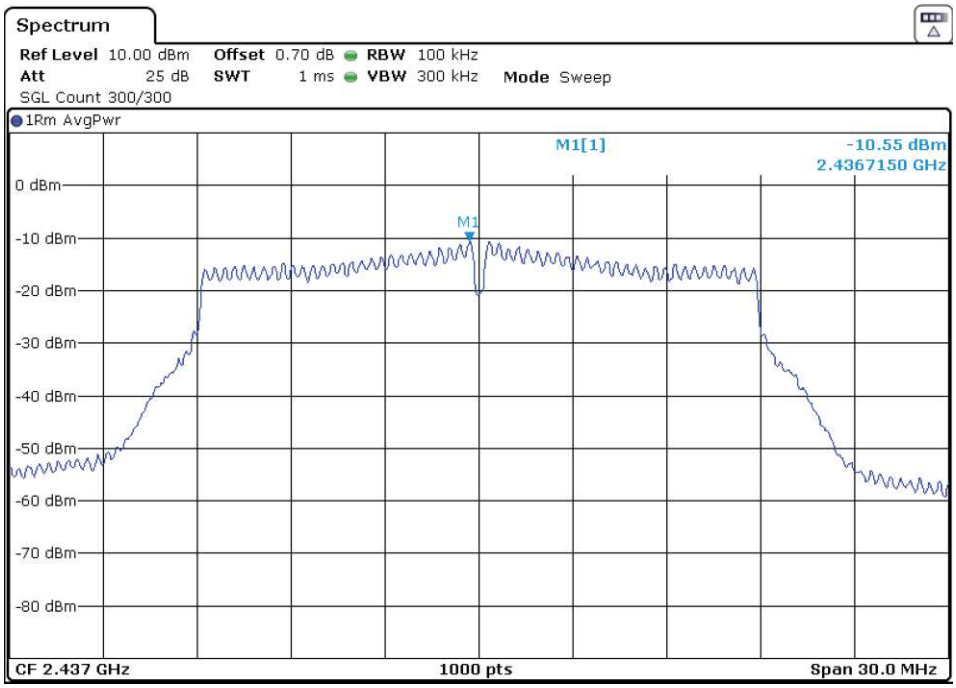


- **Mode 802.11 N20 – Power Spectral Density**

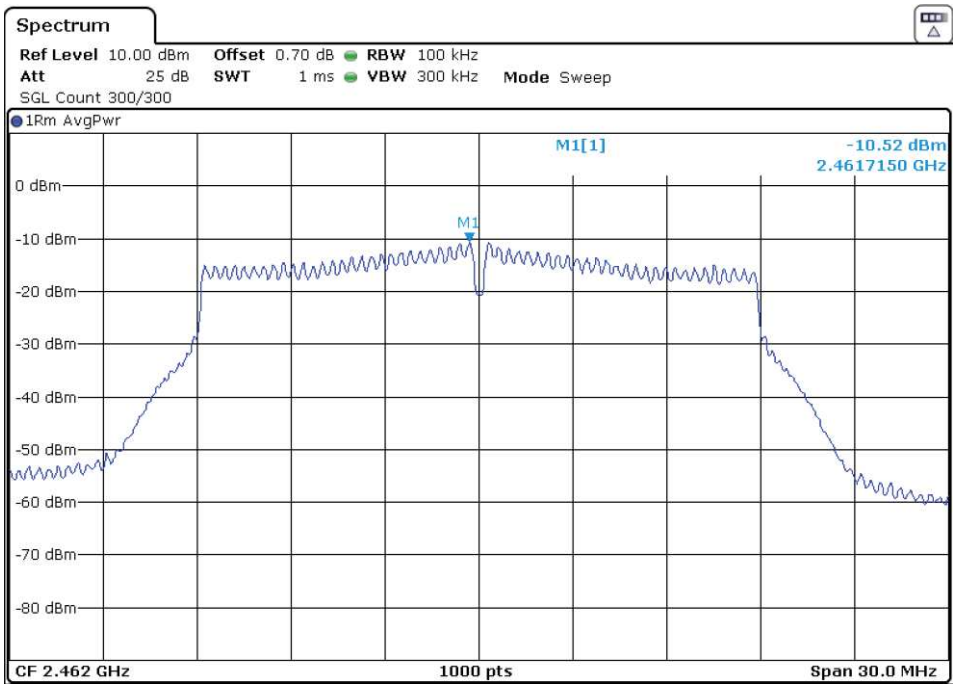
- Low Channel:



- Middle Channel:



- High Channel:



FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations radiated (Transmitter)

SPECIFICATION:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)/RSS-Gen):

Frequency Range (MHz)	Field strength (µV/m)	Field strength (dBµV/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
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
960 - 10000	500	54	3

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

RSS-247: Attenuation below the general field strength limits specified in RSS-Gen is not required.

RESULTS:

The situation and orientation was varied to find the maximum radiated emission. It was also rotated 360º and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

All tests were performed in a semi-anechoic chamber at a distance of 3 m for the frequency range 30 MHz-1000 MHz and at distance of 1m for the frequency range 1 GHz-26 GHz.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

Frequency range 30 MHz - 1 GHz:

The spurious frequencies do not depend on the operating channel or the modulation.

- **CORE 0 – Antenna RF External port 1**

Spurious frequencies at less than 20 dB below the limit.

Spurious frequency (MHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
43.450	Quasi peak	28.7	V	<± 3.88
786.470	Quasi peak	26.8	H	<± 3.88
884.764	Quasi peak	31.9	H	<± 3.88
933.912	Quasi peak	27.9	H	<± 3.88

- **CORE 0 – Antenna RF External port 2**

Spurious frequencies at less than 20 dB below the limit.

Spurious frequency (MHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
42.513	Quasi peak	23.9	V	<± 3.88
480.015	Quasi peak	26.4	V	<± 3.88
786.438	Quasi peak	28.5	V	<± 3.88
884.796	Quasi peak	29.9	V	<± 3.88

- **CORE 1 – Antenna RF External port 4**

Spurious frequencies at less than 20 dB below the limit.

Spurious frequency (MHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
688.177	Quasi peak	24.0	V	<± 3.88
786.471	Quasi peak	29.0	V	<± 3.88
884.764	Quasi peak	32.8	V	<± 3.88

Frequency range 1 - 26 GHz:

The results in the next tables show the maximum measured levels in the 1-26 GHz range including the restricted bands 2.31-2.39 GHz and 2.4835-2.5 GHz.

The field strength at the band edges was evaluated for each mode for the channel under test.

Spurious signals with peak levels above the average limit (54 dBµV/m at 3 m) are measured with average detector for checking compliance with the average limit.

For spurious emissions (except field strength at the band edges that was performed for all possibilities of different bandwidth) for ODFM modes 802.11g and 802.11n20 a preliminary scan was performed to determine the worst case. The next tables and plots show the results for the worst case to DSSS modulation (802.11b) and OFDM modulation (802.11g).

- **CORE 0 – Antenna RF External port 1**
    - **Mode 802.11 b**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37441	Peak	39.71	H	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37411	Peak	39.97	H	<± 3.70

- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37443	Peak	40	H	<± 3.70

Verdict: PASS

- **Mode 802.11 n20**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37457	Peak	40.73	H	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37457	Peak	40.21	H	<± 3.70

- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37457	Peak	39.86	H	<± 3.70

Verdict: PASS

- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37457	Peak	40.17	V	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37504	Peak	40.35	H	<± 3.70

- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37411	Peak	40.5	V	<± 3.70

Verdict: PASS

- **Mode 802.11 n20**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37411	Peak	40.44	V	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37411	Peak	40.51	V	<± 3.70

- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37456	Peak	39.47	V	<± 3.70

Verdict: PASS

- **CORE 1 – Antenna RF External port 4**
    - **Mode 802.11 b**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37461	Peak	39.4	V	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37505	Peak	38.75	H	<± 3.70

- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37479	Peak	40.17	H	<± 3.70

Verdict: PASS

- **Mode 802.11 n20**

- LOW CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37565	Peak	39.77	V	<± 3.70

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37473	Peak	39.25	V	<± 3.70

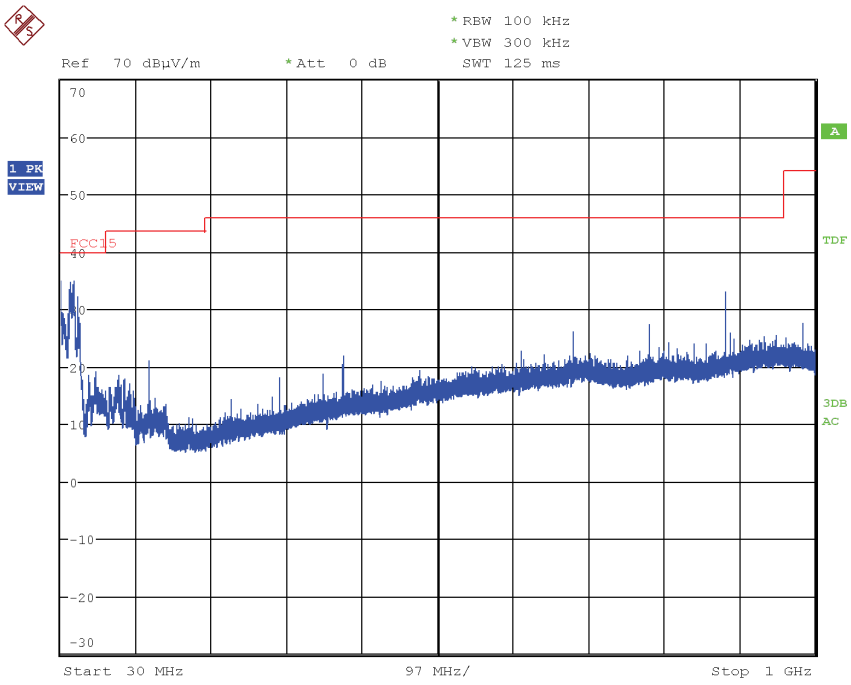
- HIGH CHANNEL. Spurious frequencies closest to the limit:

Spurious frequency (GHz)	Detector	Emission Level (dBµV/m)	Polarization	Measurement Uncertainty (dB)
5.37457	Peak	38.90	H	<± 3.70

Verdict: PASS

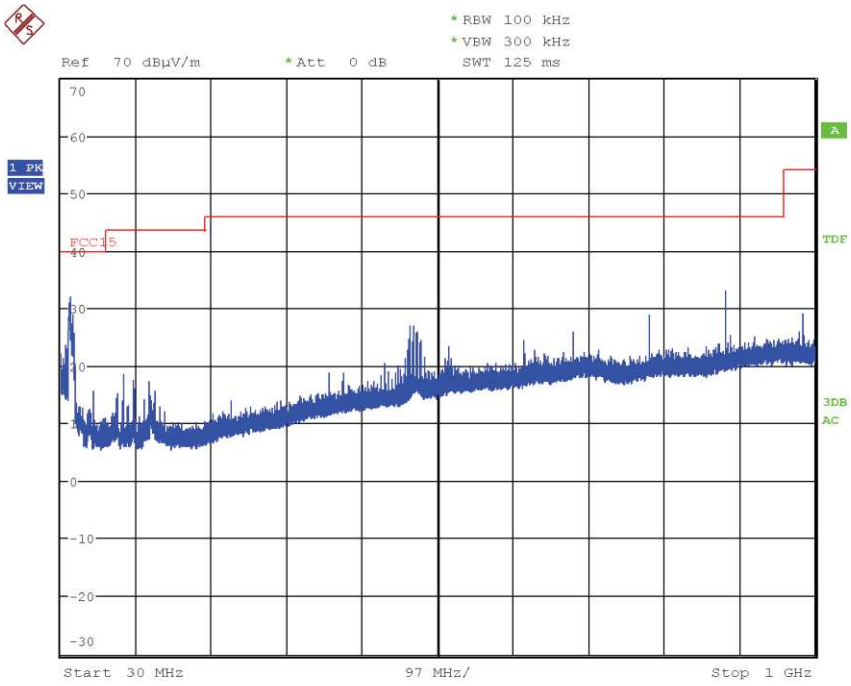
FREQUENCY RANGE 30 MHz - 1 GHz:

- **CORE 0 – Antenna RF External port 1**



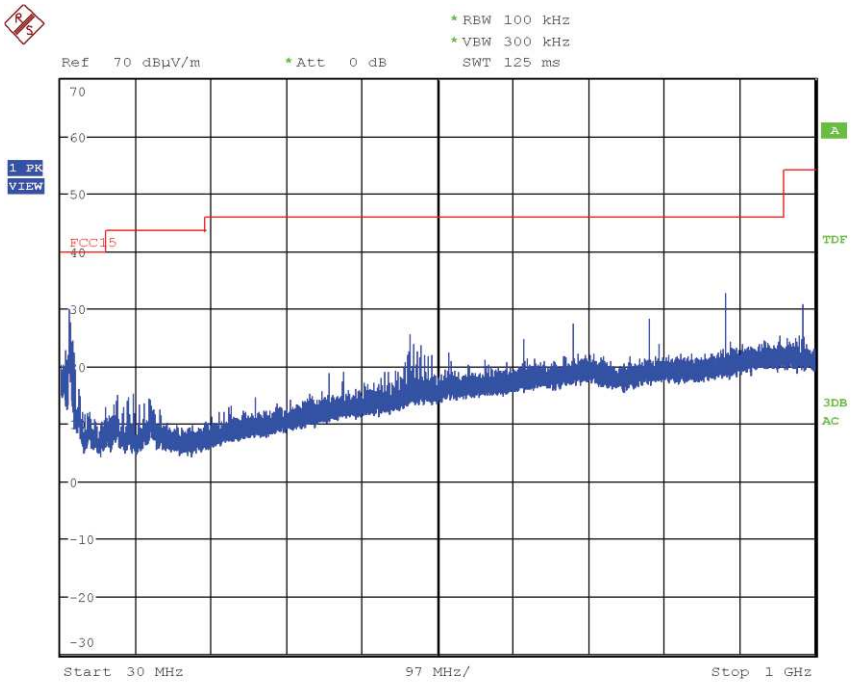
(This plot is valid for all three channels and modulations modes).

- **CORE 0 – Antenna RF External port 2**



(This plot is valid for all three channels and modulations modes).

- **CORE 1 – Antenna RF External port 4**

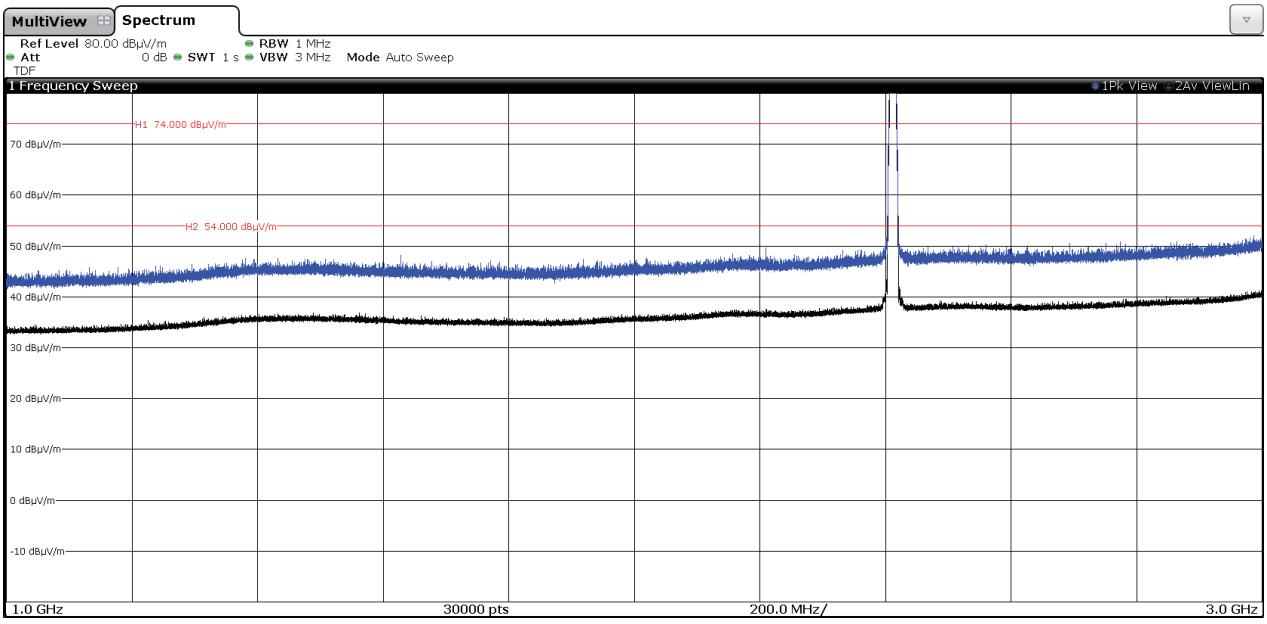


(This plot is valid for all three channels and modulations modes).

FREQUENCY RANGE 1 - 3 GHz:

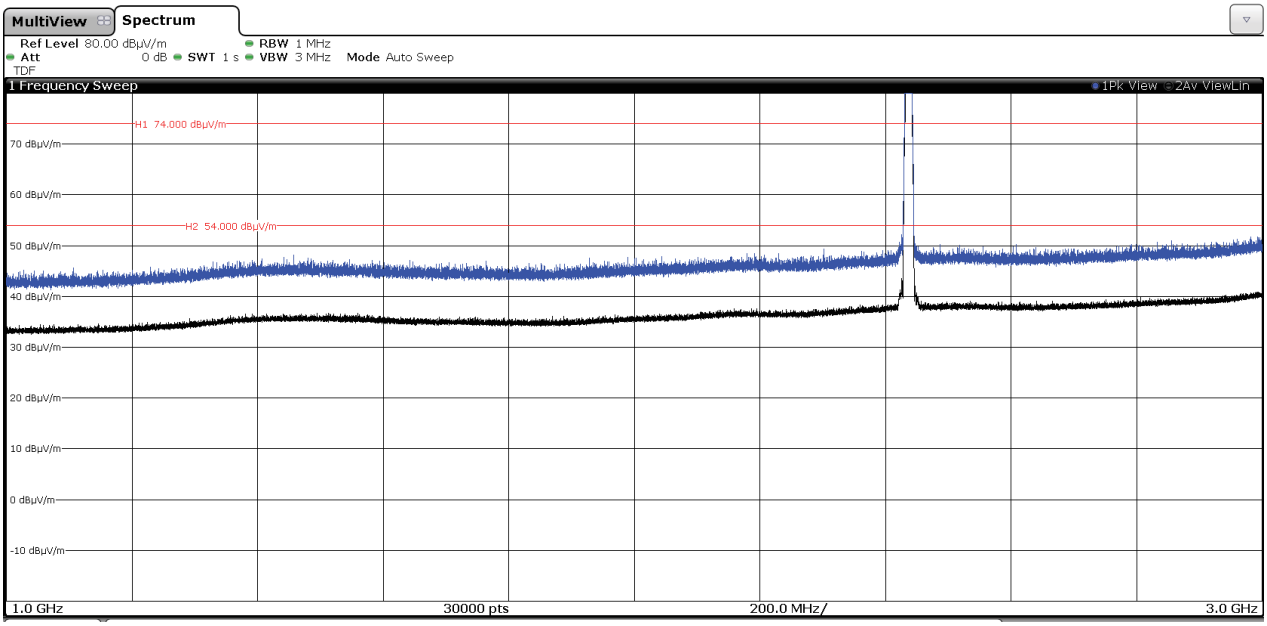
- **CORE 0 – Antenna RF External port 1**
  - **Mode 802.11 b – Emission Limitations Radiated**

- Low Channel:



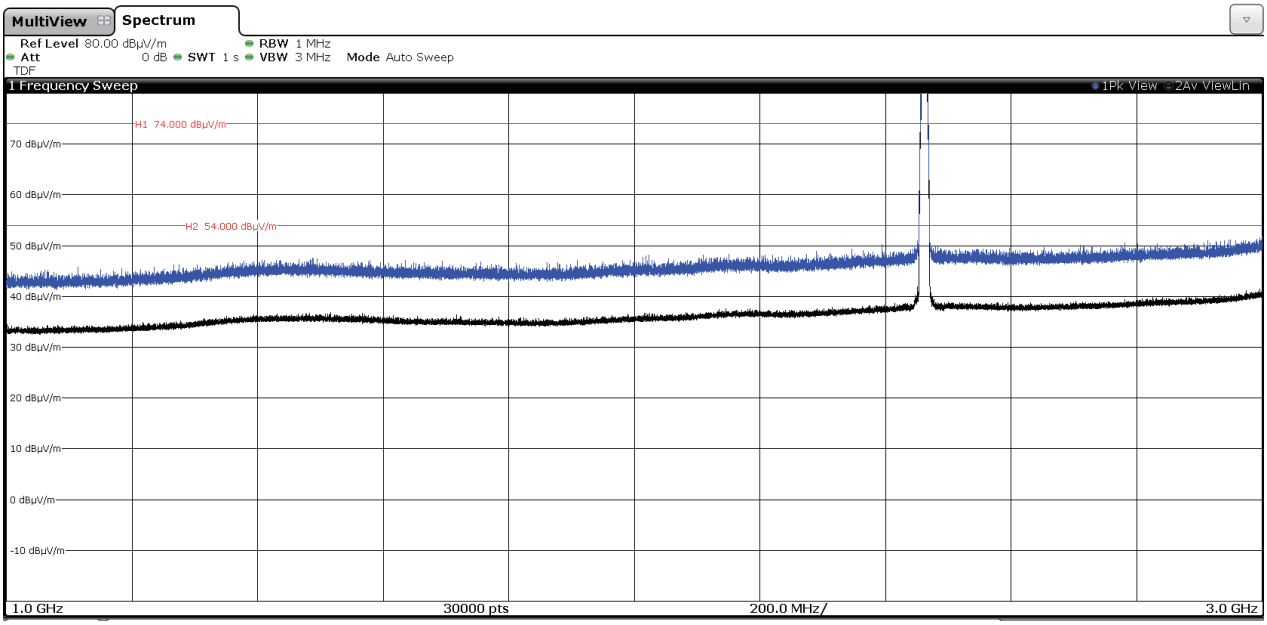
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

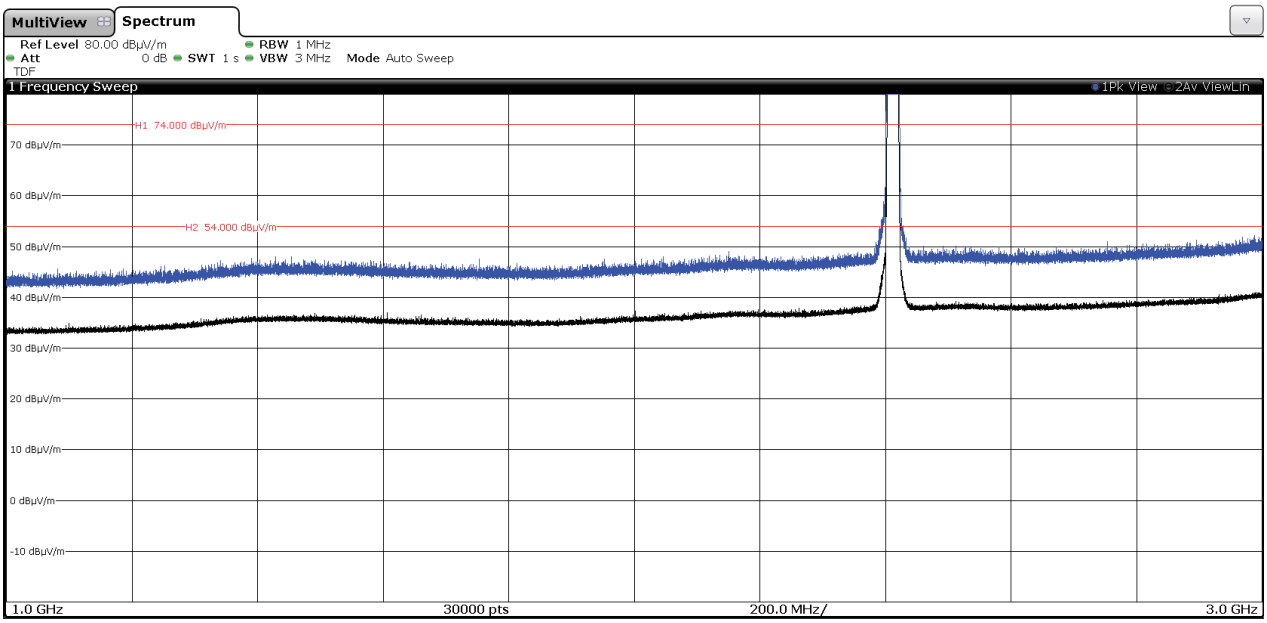
- High Channel:



The peak above the limit is the carrier frequency.

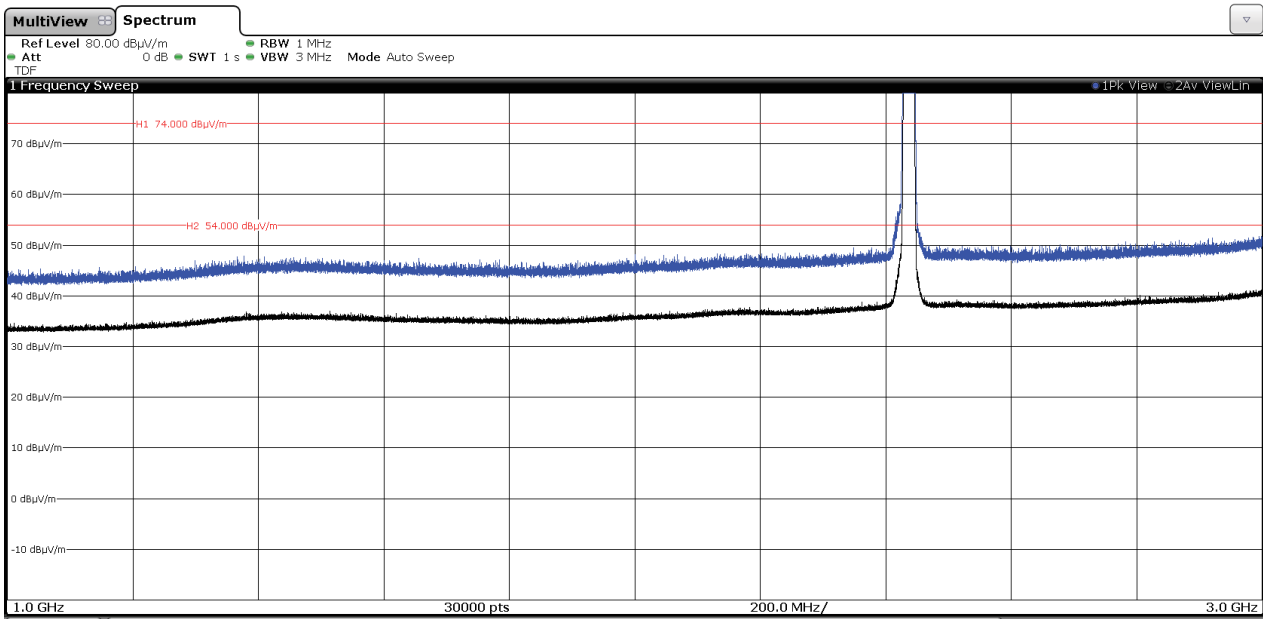
○ Mode 802.11 N20 – Emission Limitations Radiated

- Low Channel:



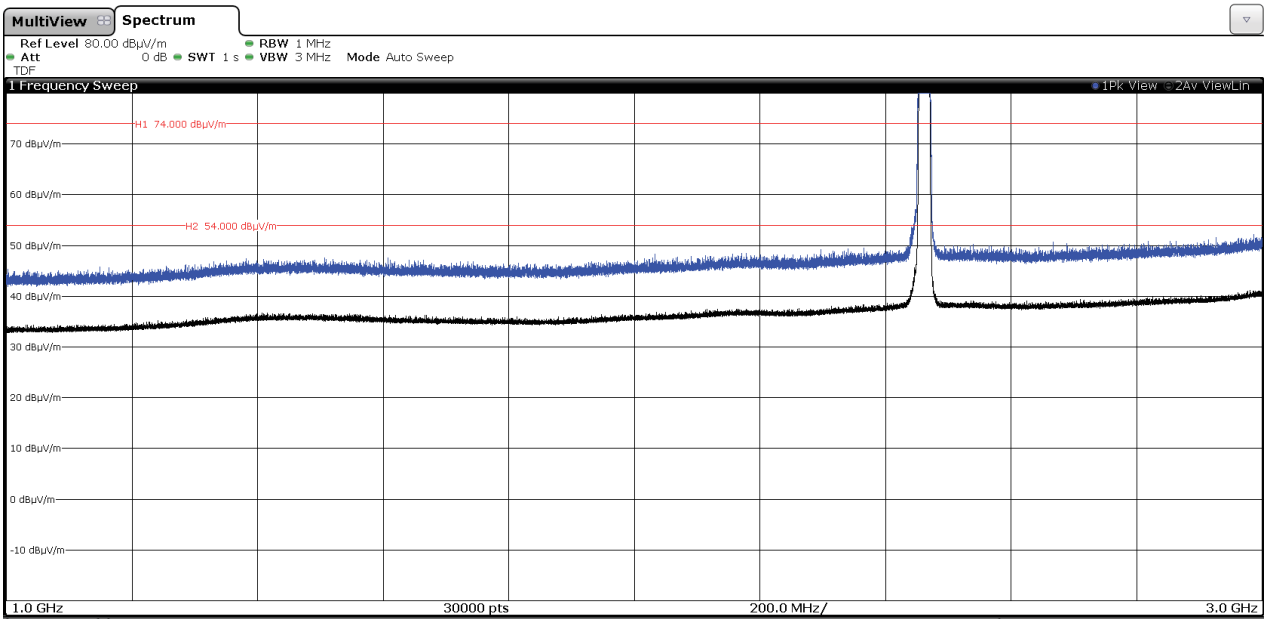
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

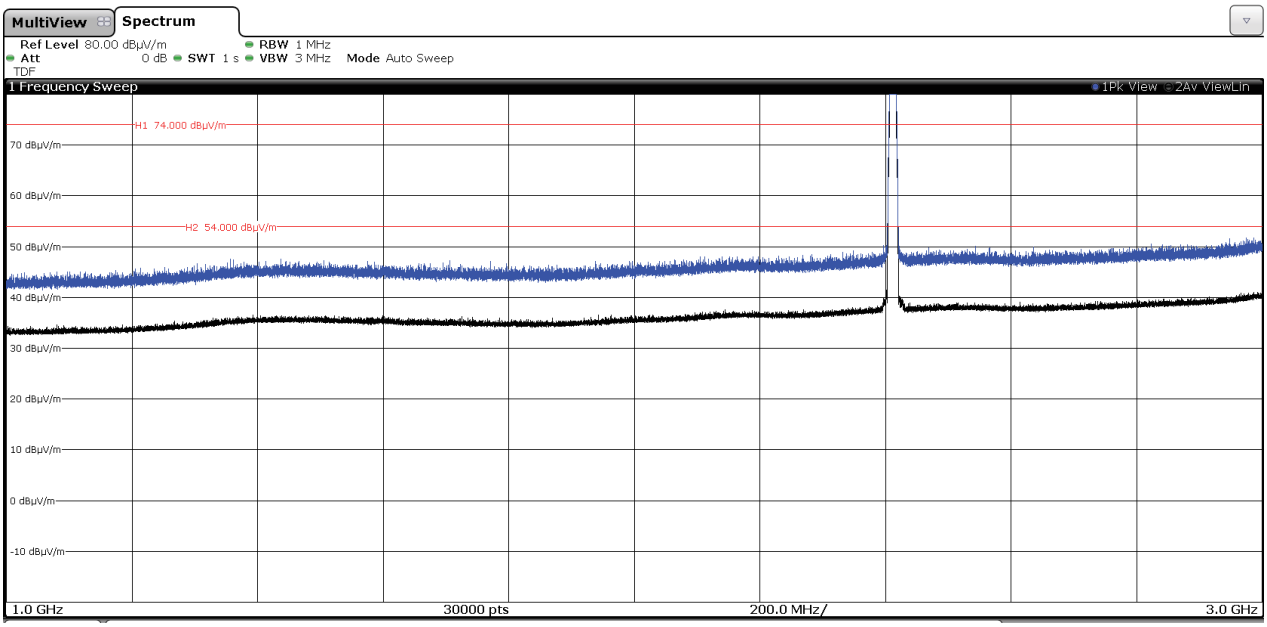
- High Channel:



The peak above the limit is the carrier frequency.

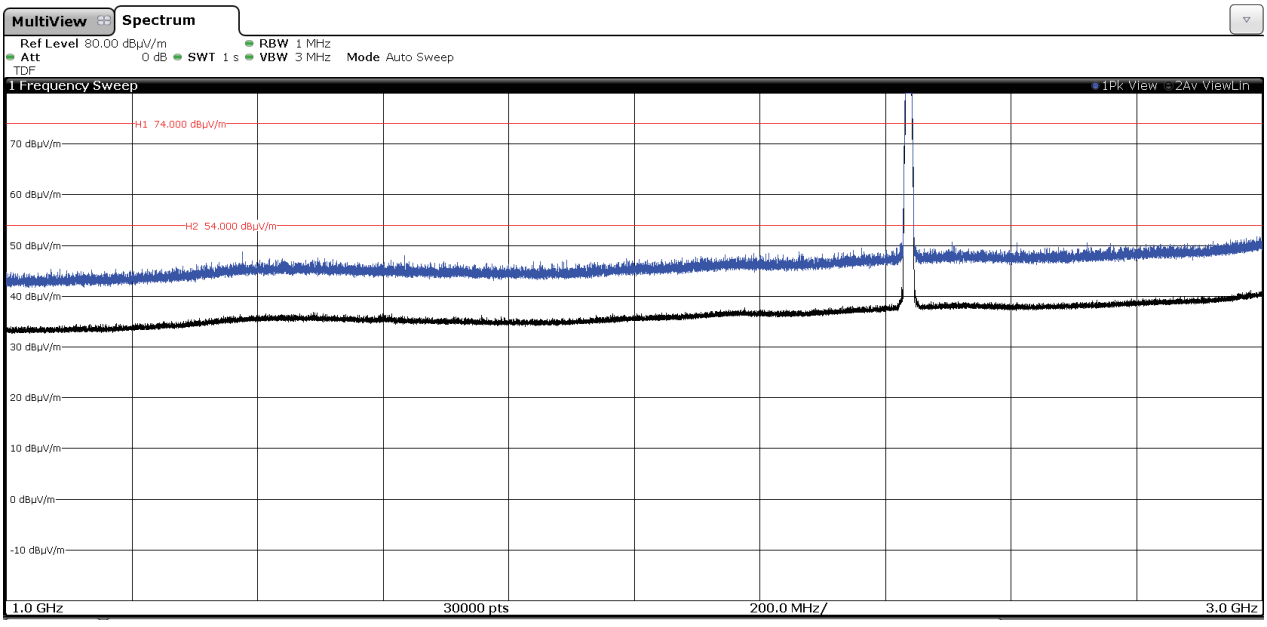
- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Emission Limitations Radiated**

- Low Channel:



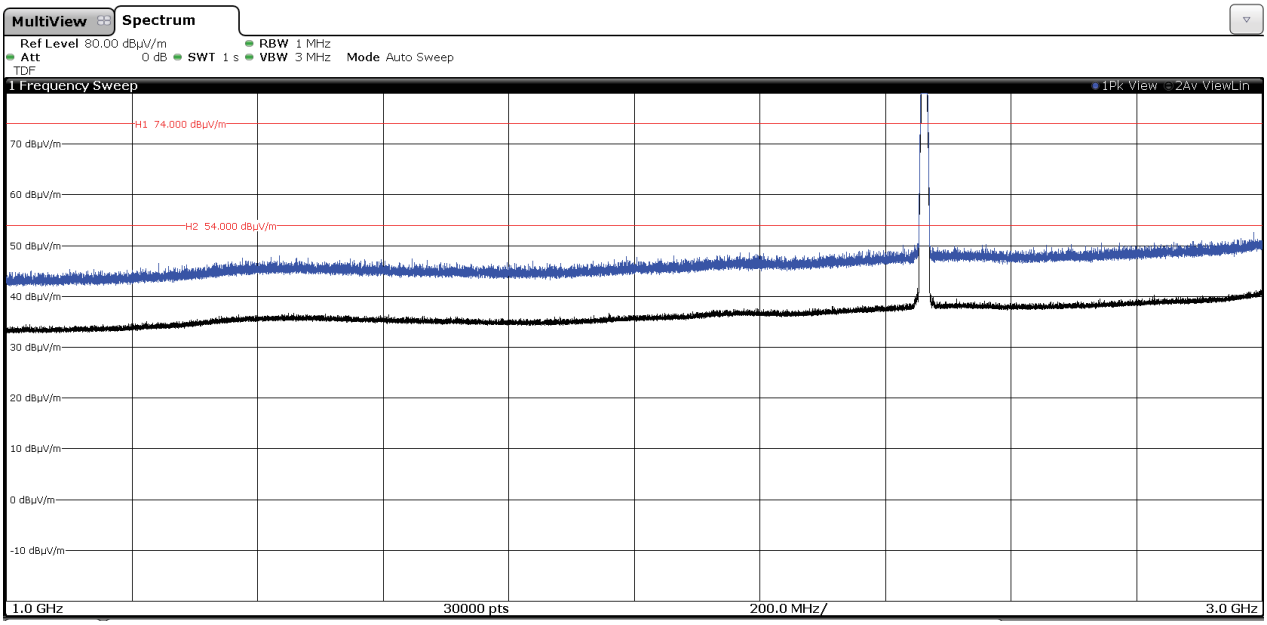
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

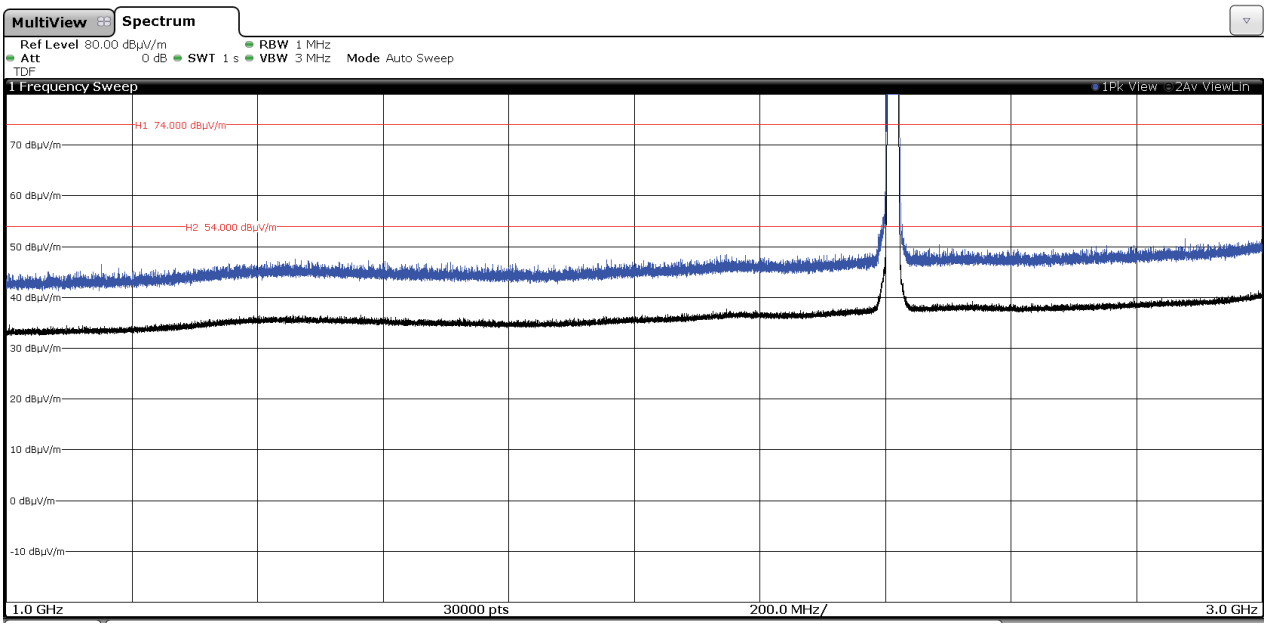
- High Channel:



The peak above the limit is the carrier frequency.

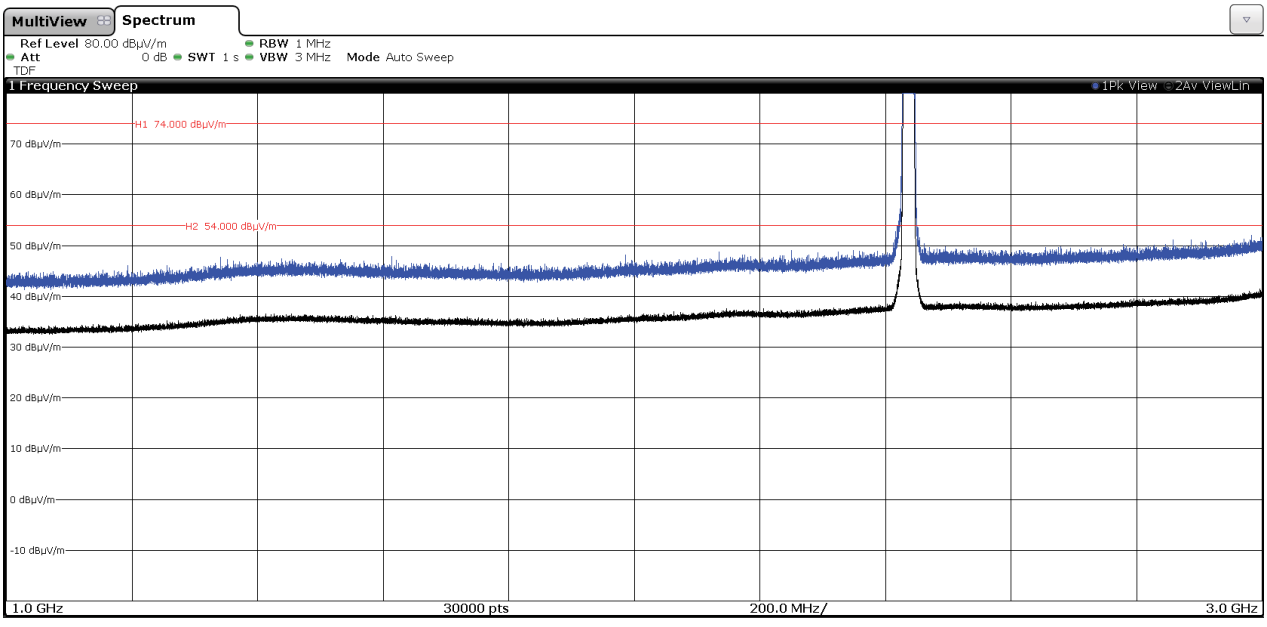
○ Mode 802.11 N20 – Emission Limitations Radiated

- Low Channel:



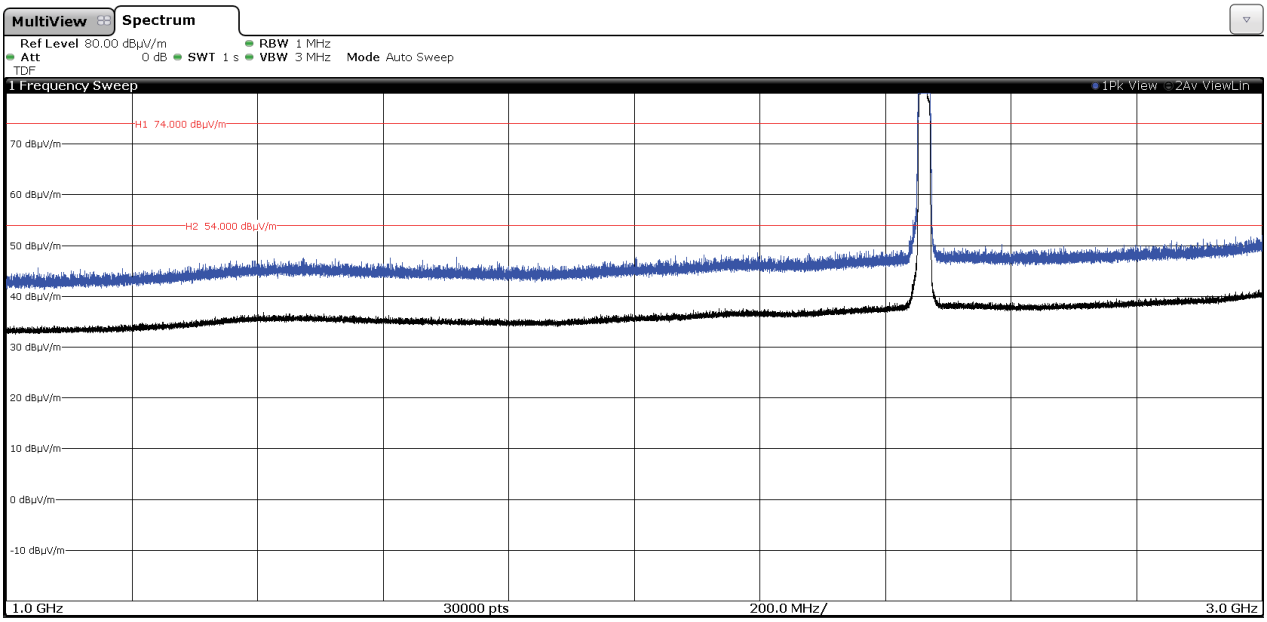
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

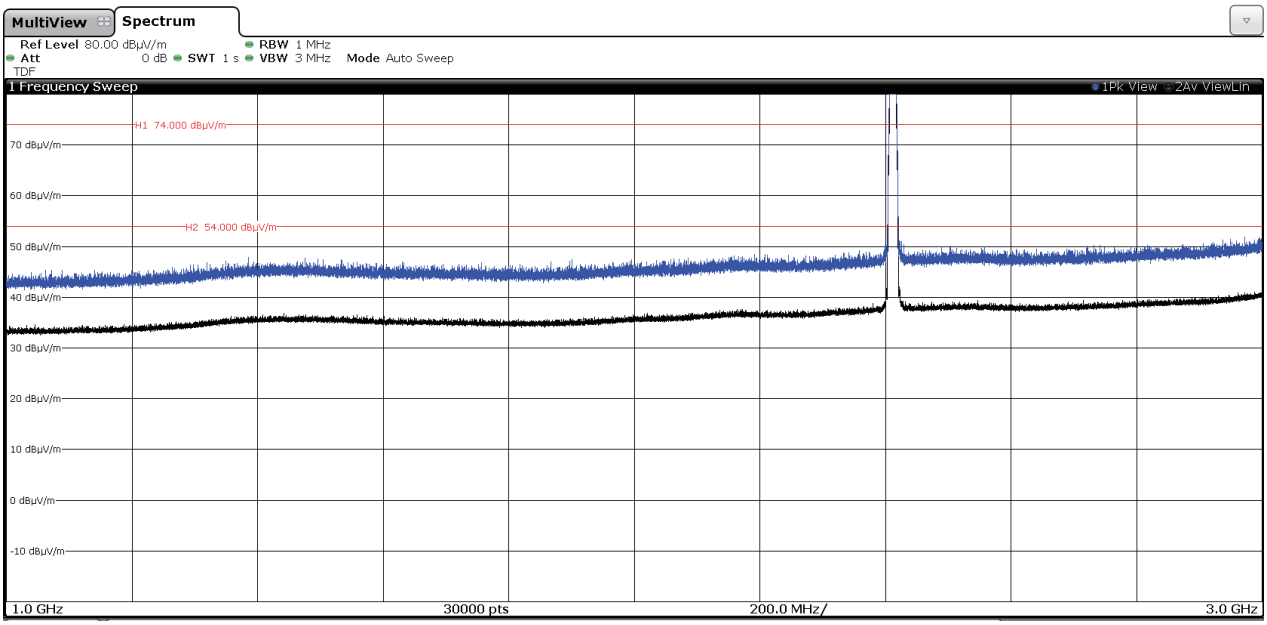
- High Channel:



The peak above the limit is the carrier frequency.

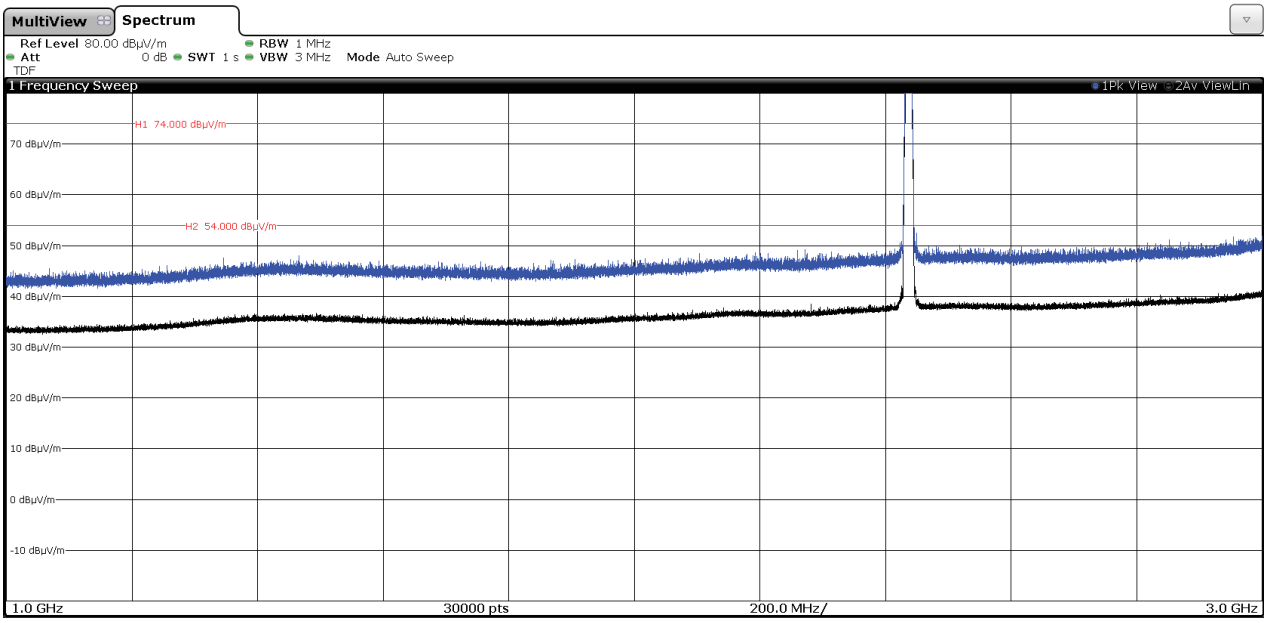
- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b – Emission Limitations Radiated**

- Low Channel:



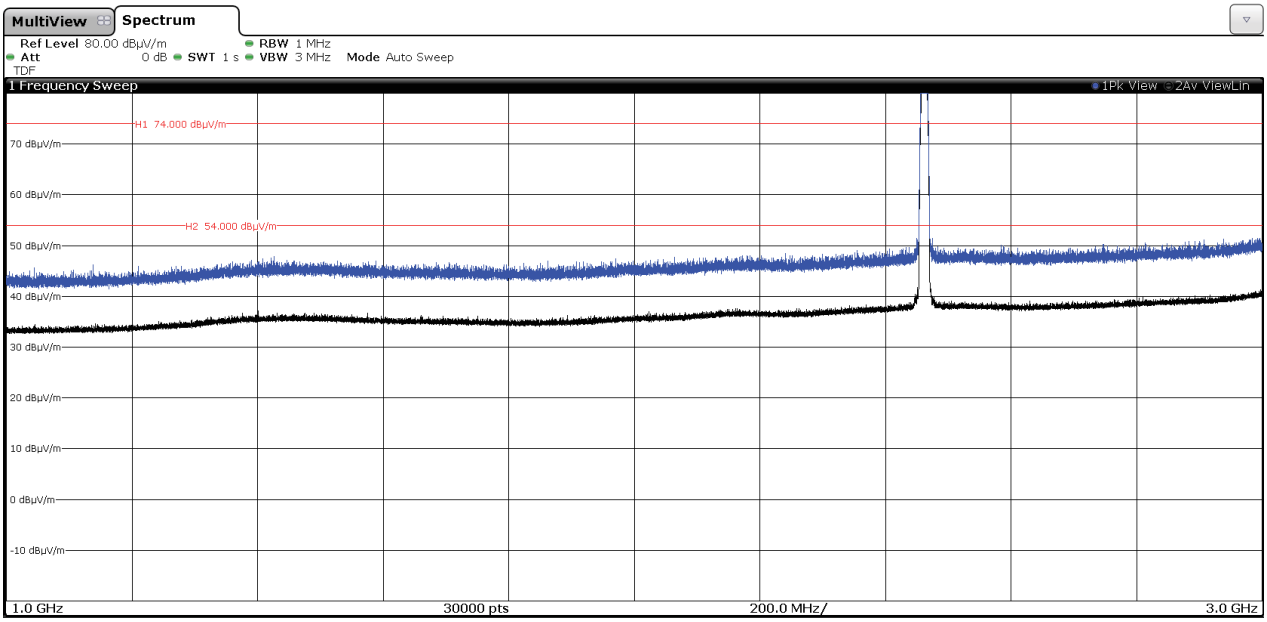
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

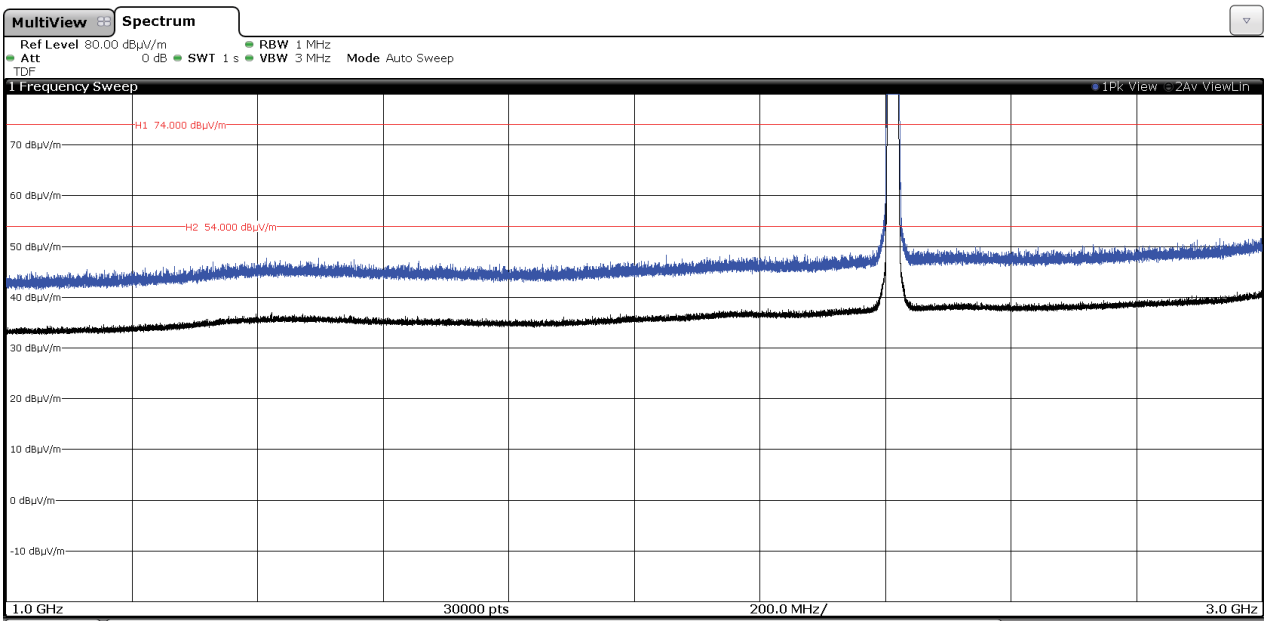
- High Channel:



The peak above the limit is the carrier frequency.

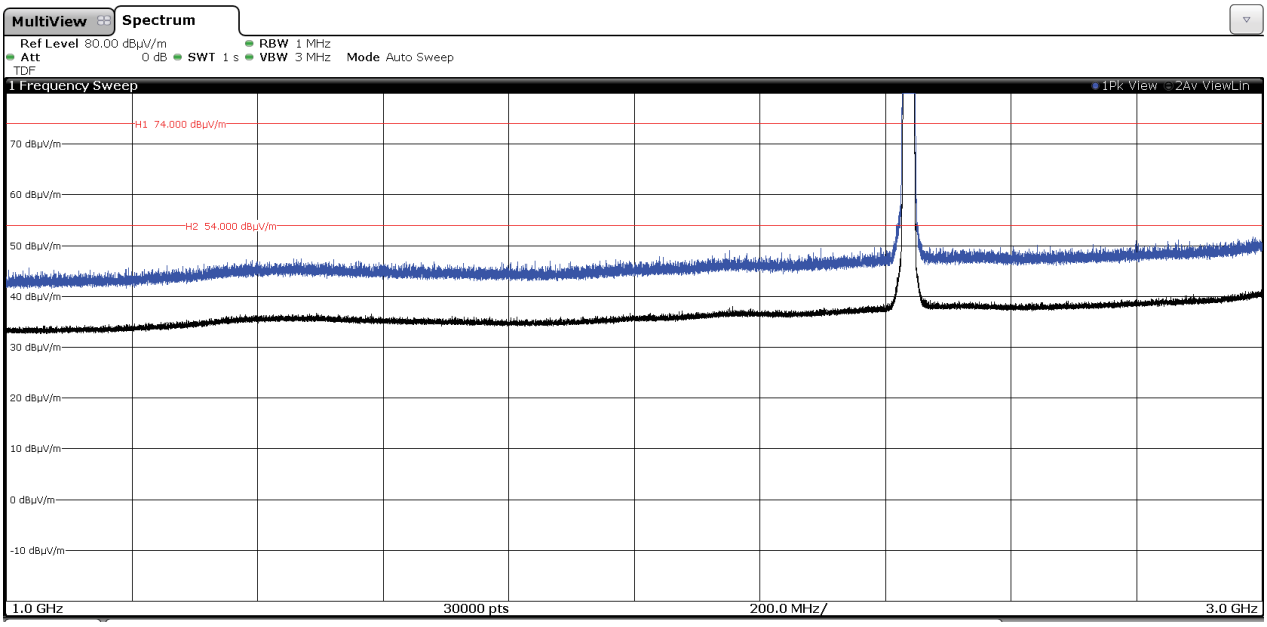
○ Mode 802.11 N20 – Emission Limitations Radiated

- Low Channel:



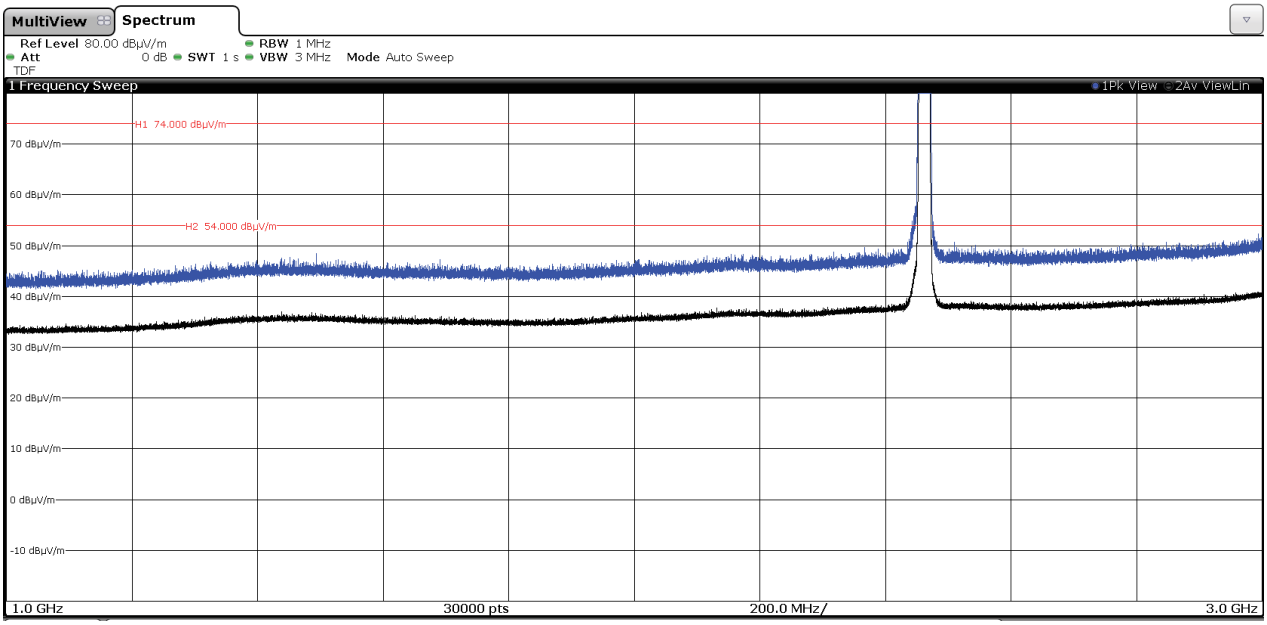
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

- High Channel:

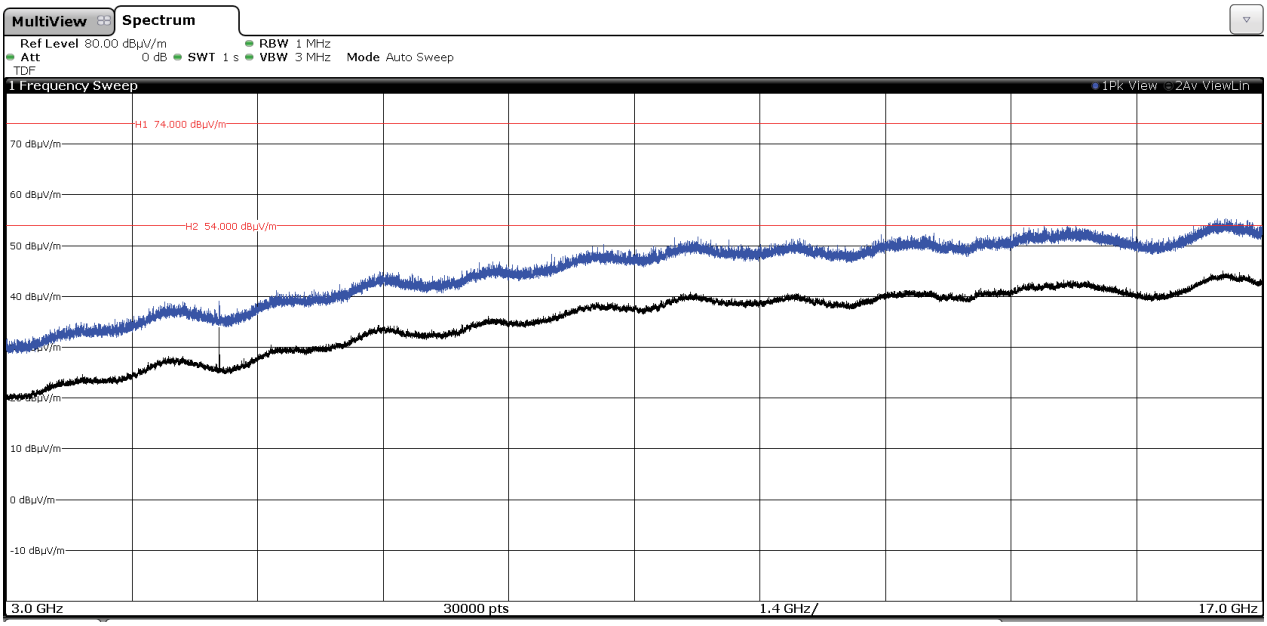


The peak above the limit is the carrier frequency.

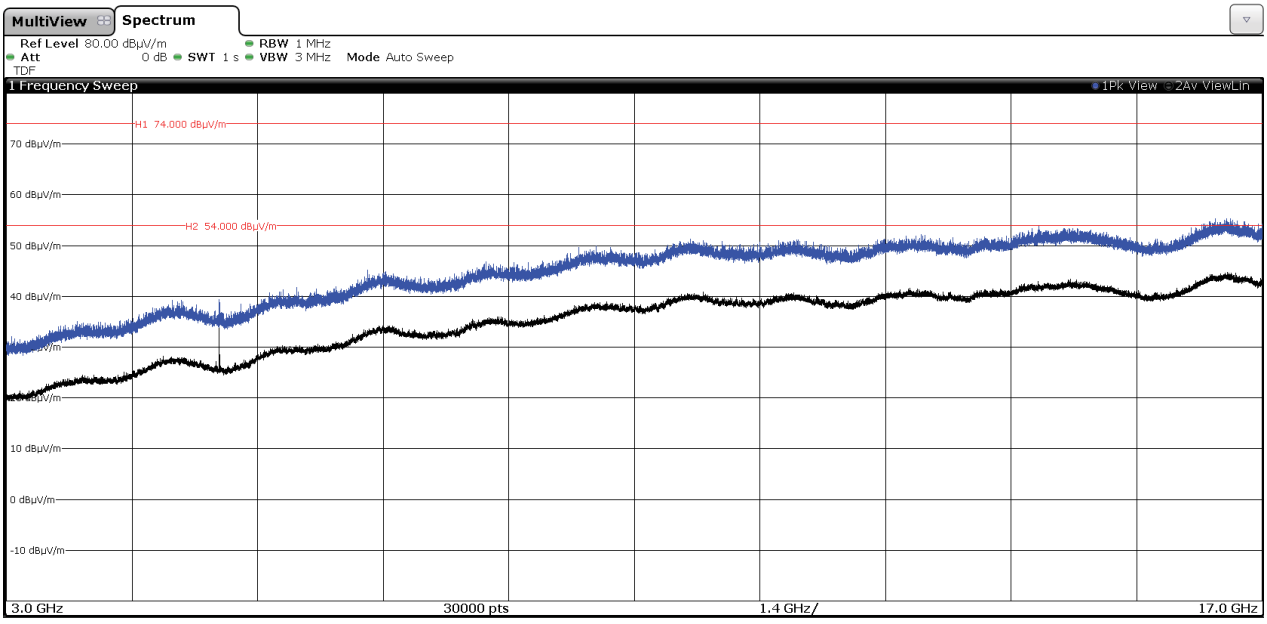
FREQUENCY RANGE 3 - 17 GHz:

- **CORE 0 – Antenna RF External port 1**
  - **Mode 802.11 b – Emission Limitations Radiated**

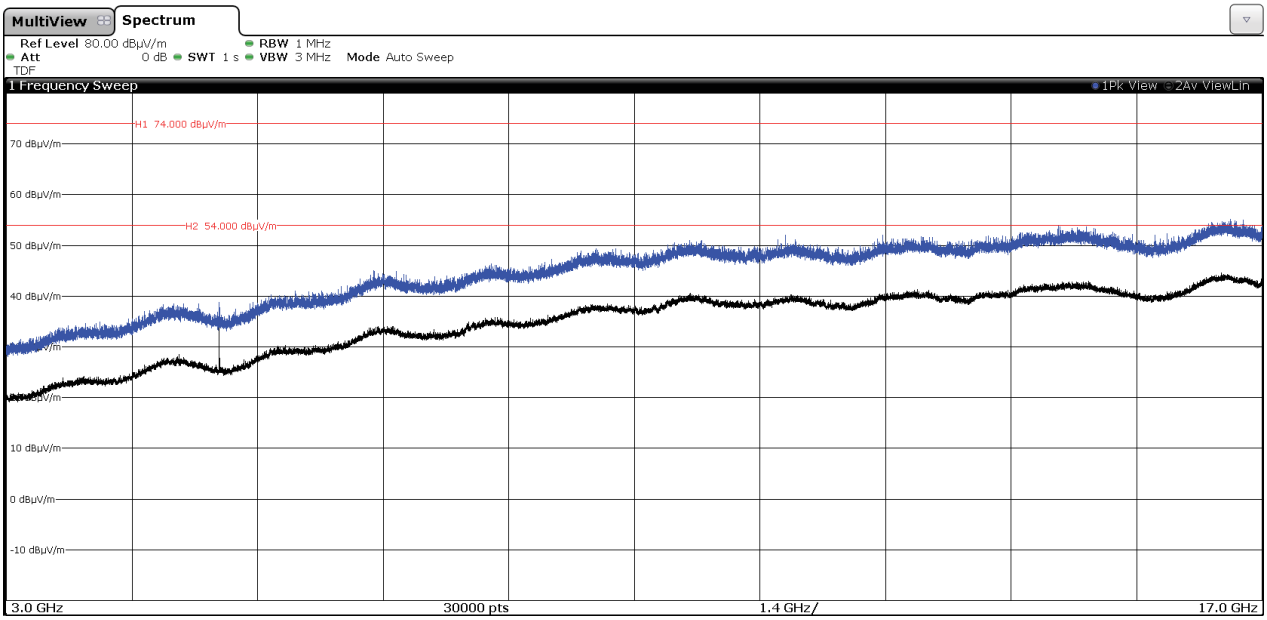
- Low Channel:



- Middle Channel:

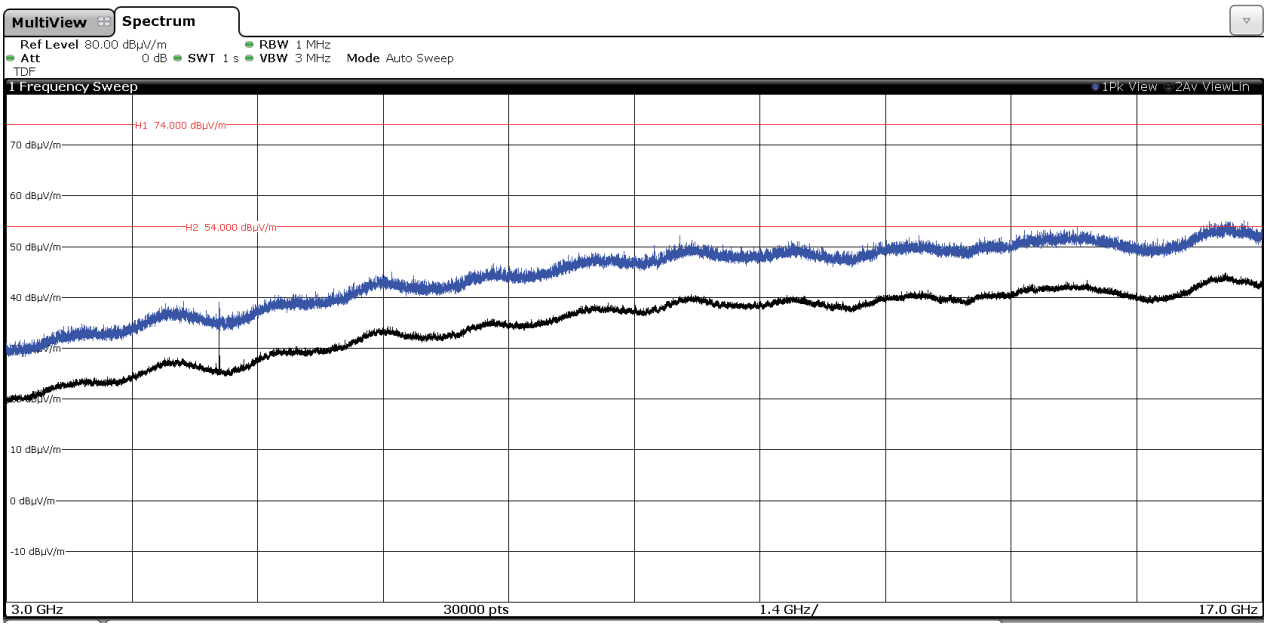


- High Channel:

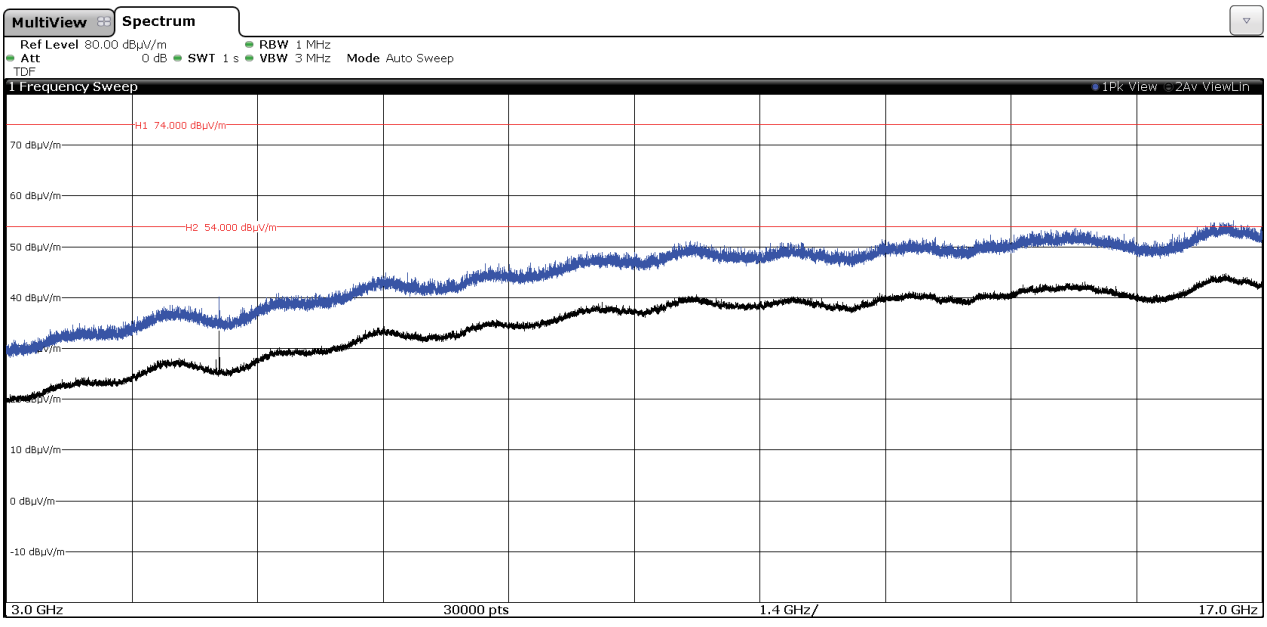


○ Mode 802.11 N20 – Emission Limitations Radiated

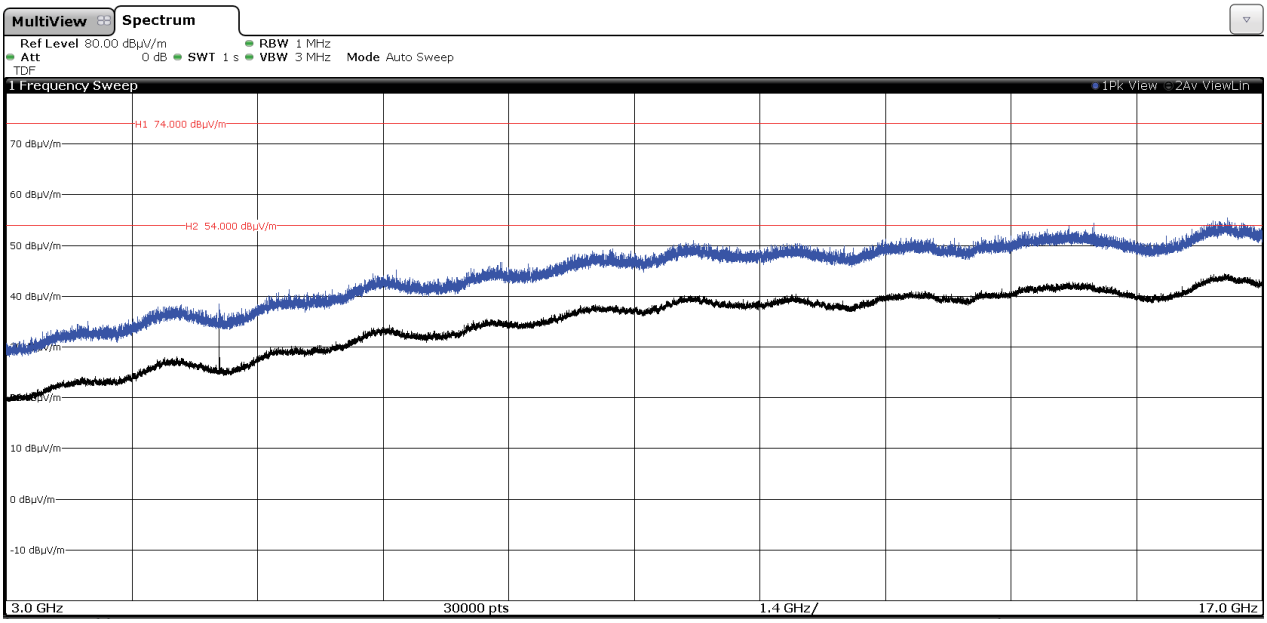
- Low Channel:



- Middle Channel:

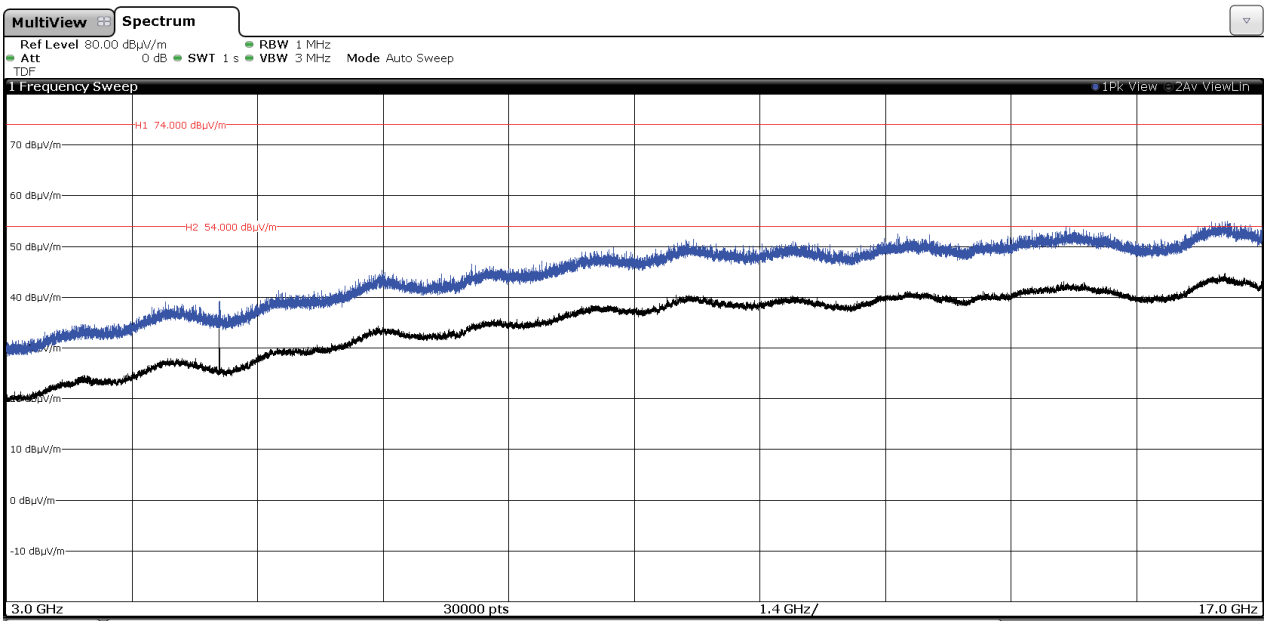


- High Channel:

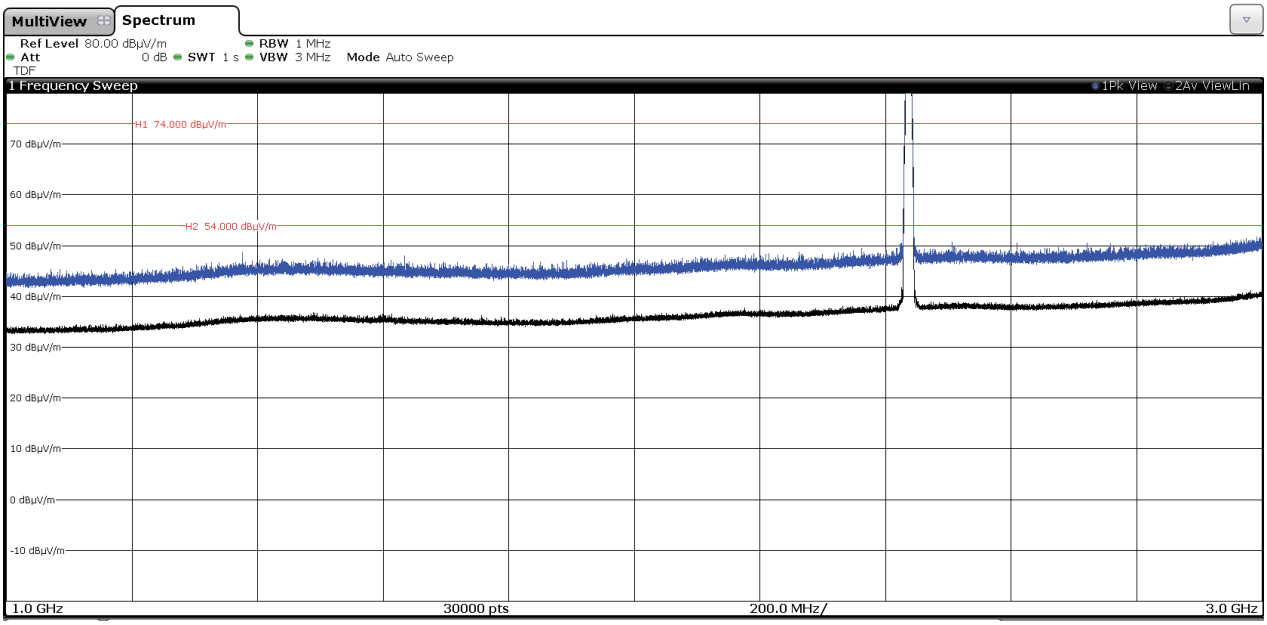


- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Emission Limitations Radiated**

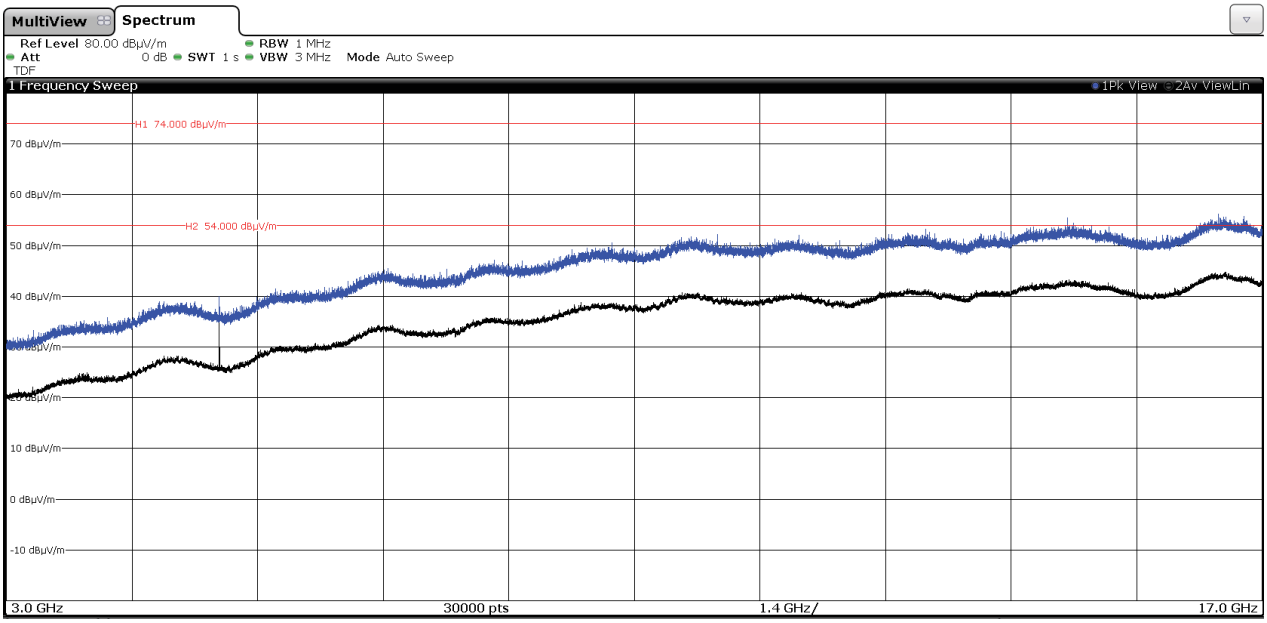
- Low Channel:



- Middle Channel:

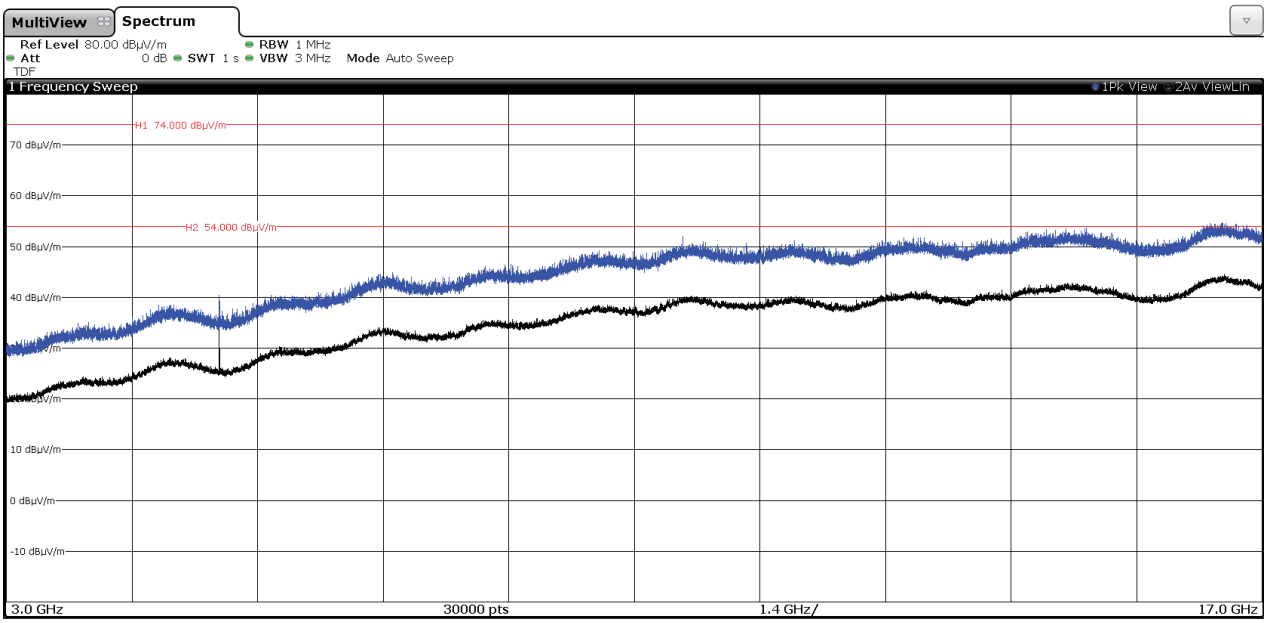


- High Channel:

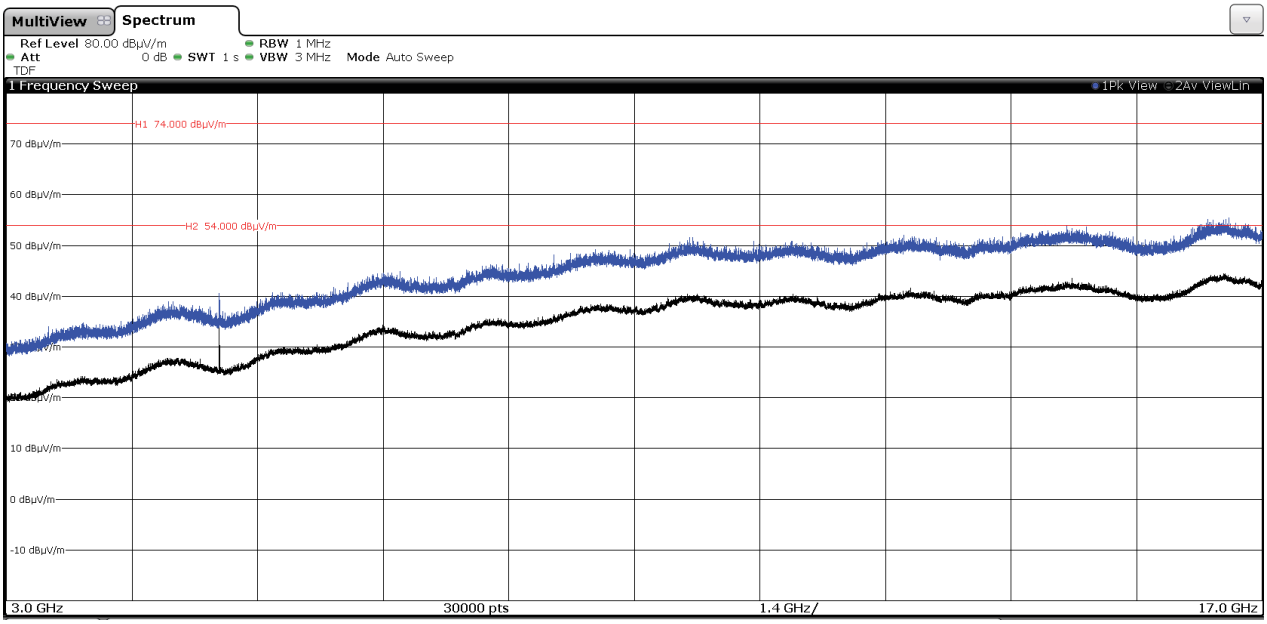


○ Mode 802.11 N20 – Emission Limitations Radiated

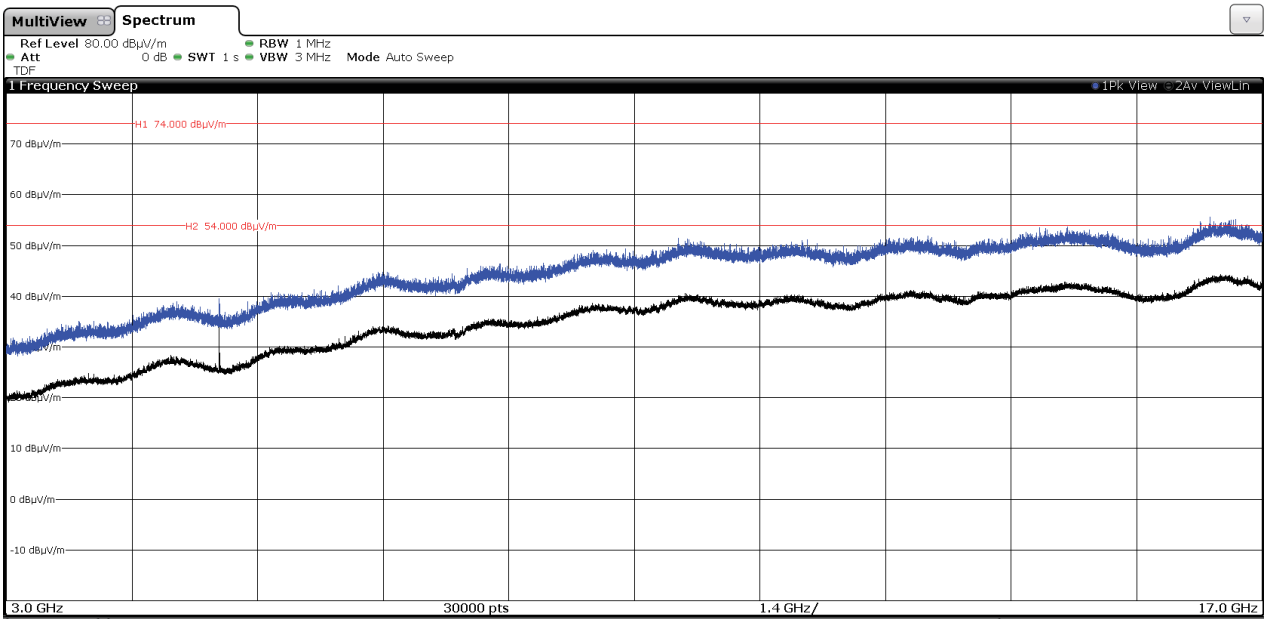
- Low Channel:



- Middle Channel:

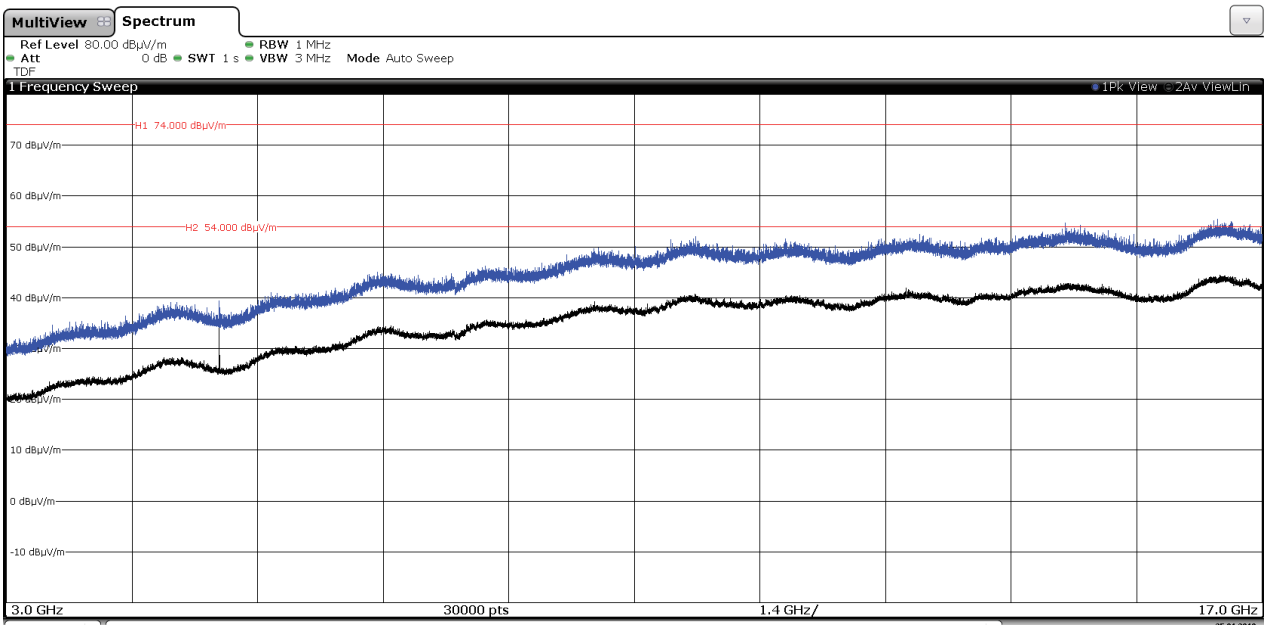


- High Channel:

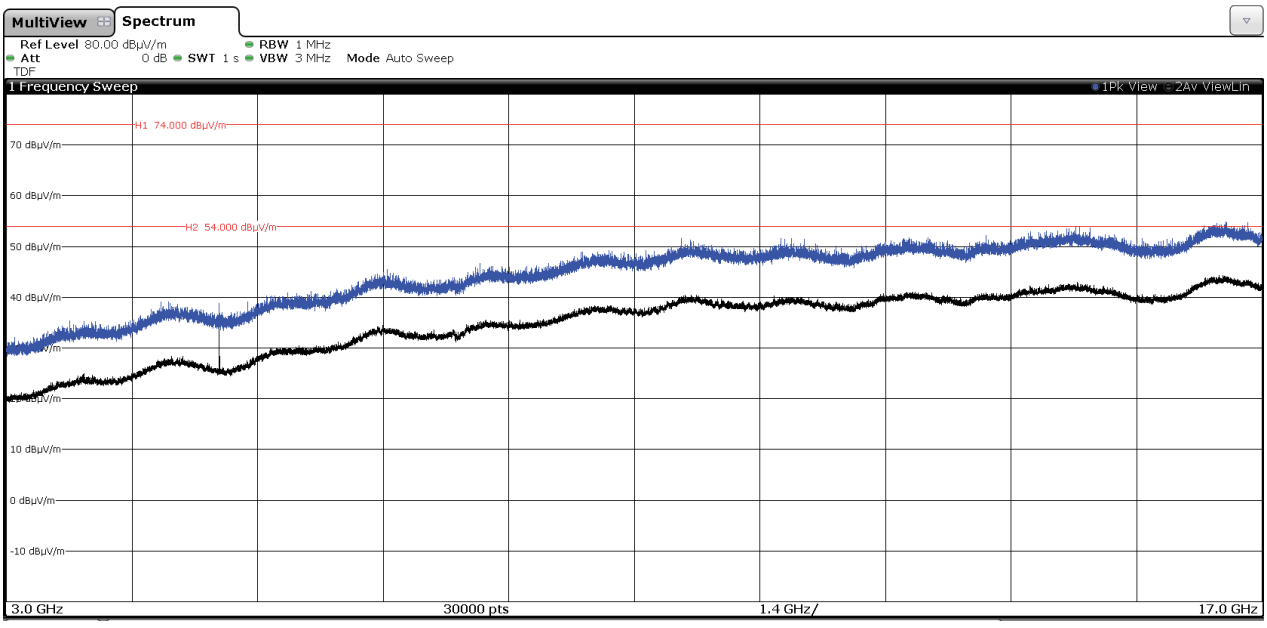


- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b – Emission Limitations Radiated**

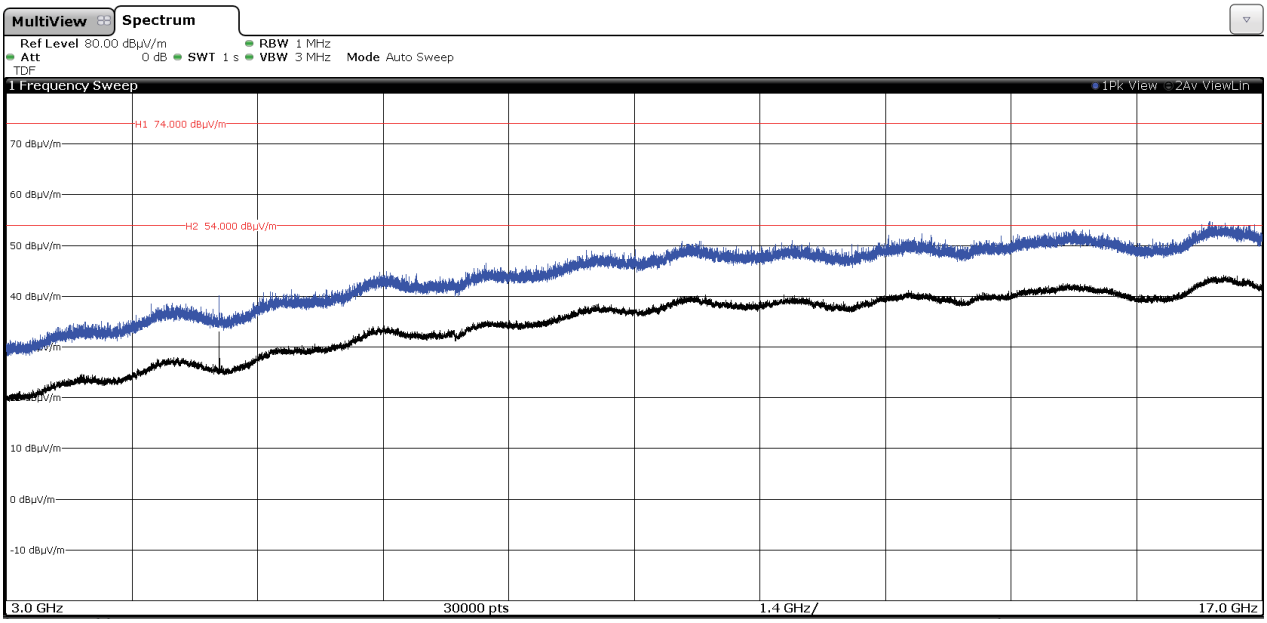
- Low Channel:



- Middle Channel:

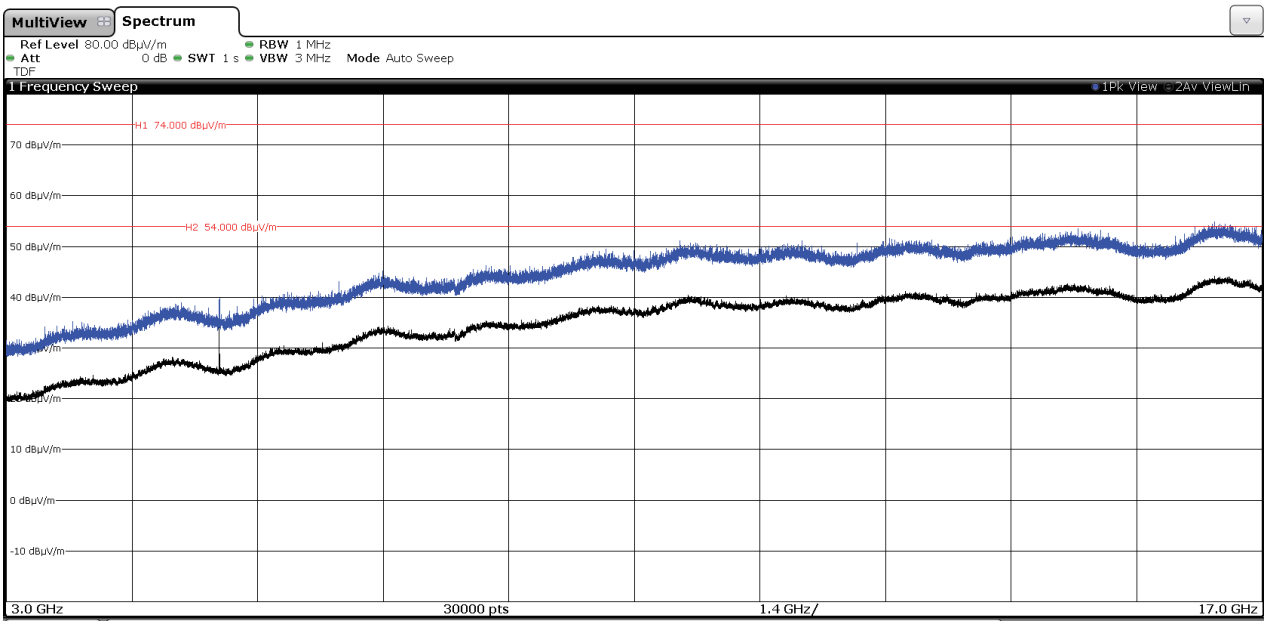


- High Channel:

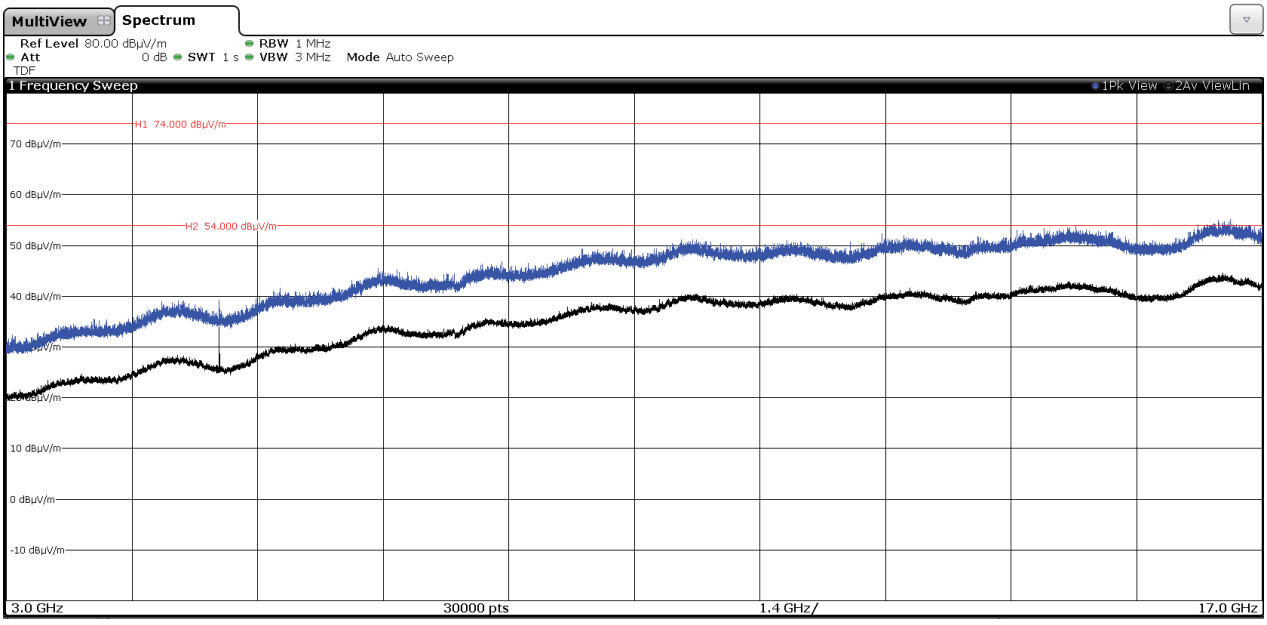


○ Mode 802.11 N20 – Emission Limitations Radiated

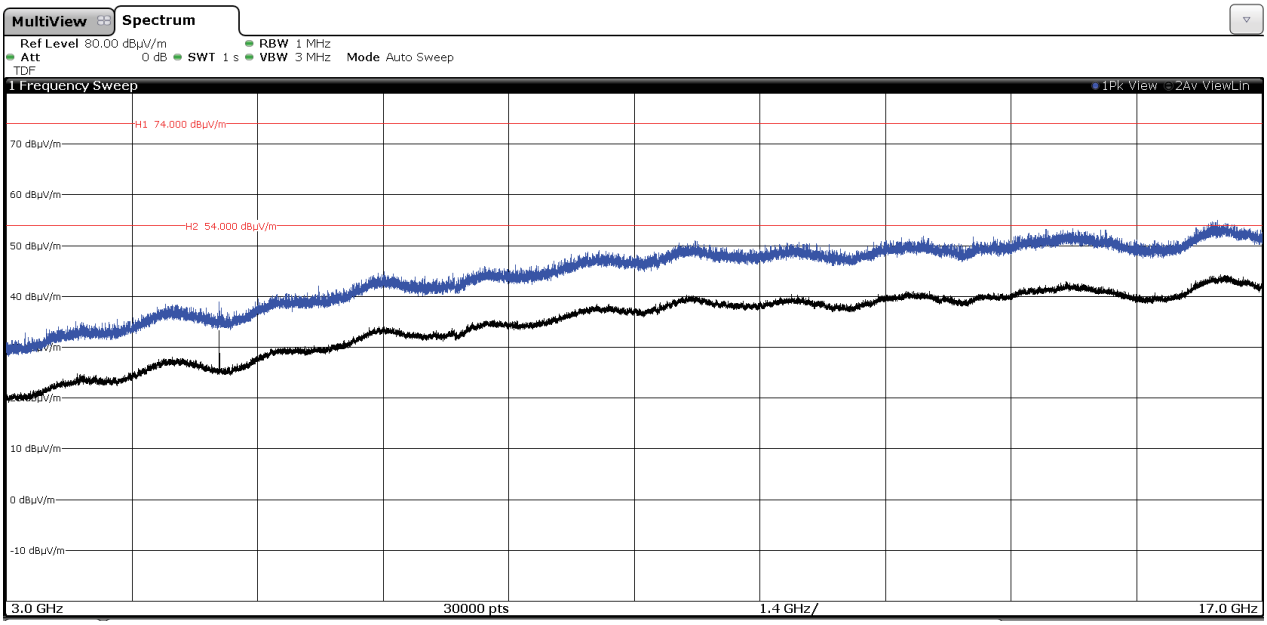
- Low Channel:



- Middle Channel:



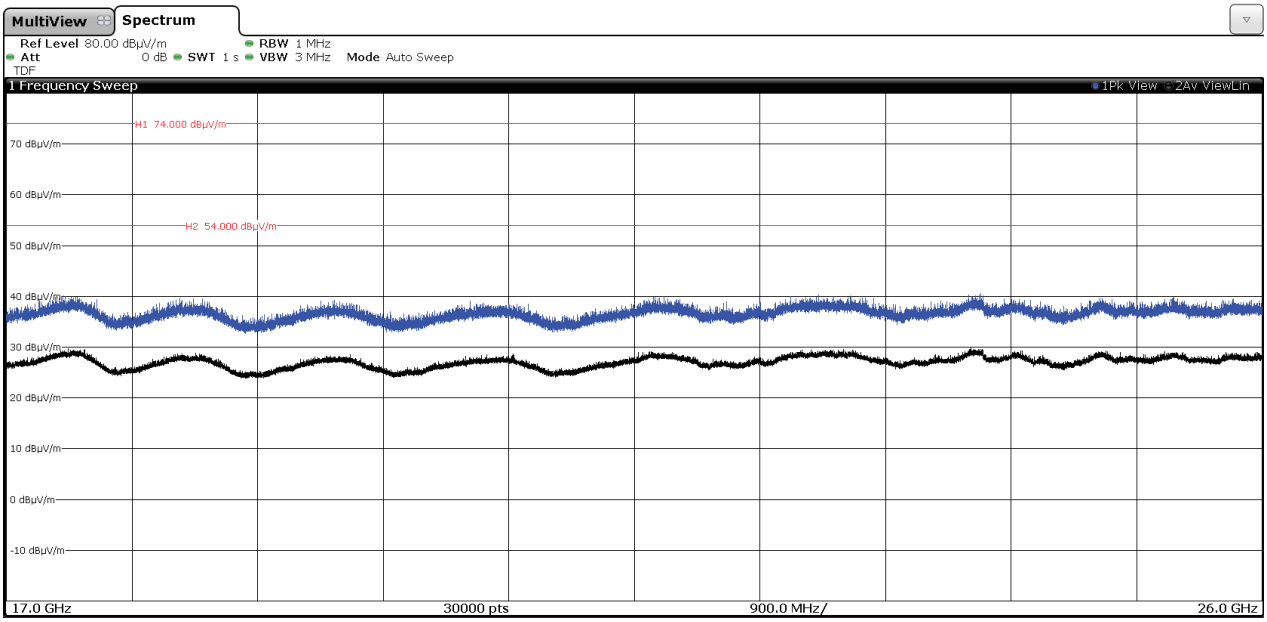
- High Channel:



FREQUENCY RANGE 17 - 26 GHz:

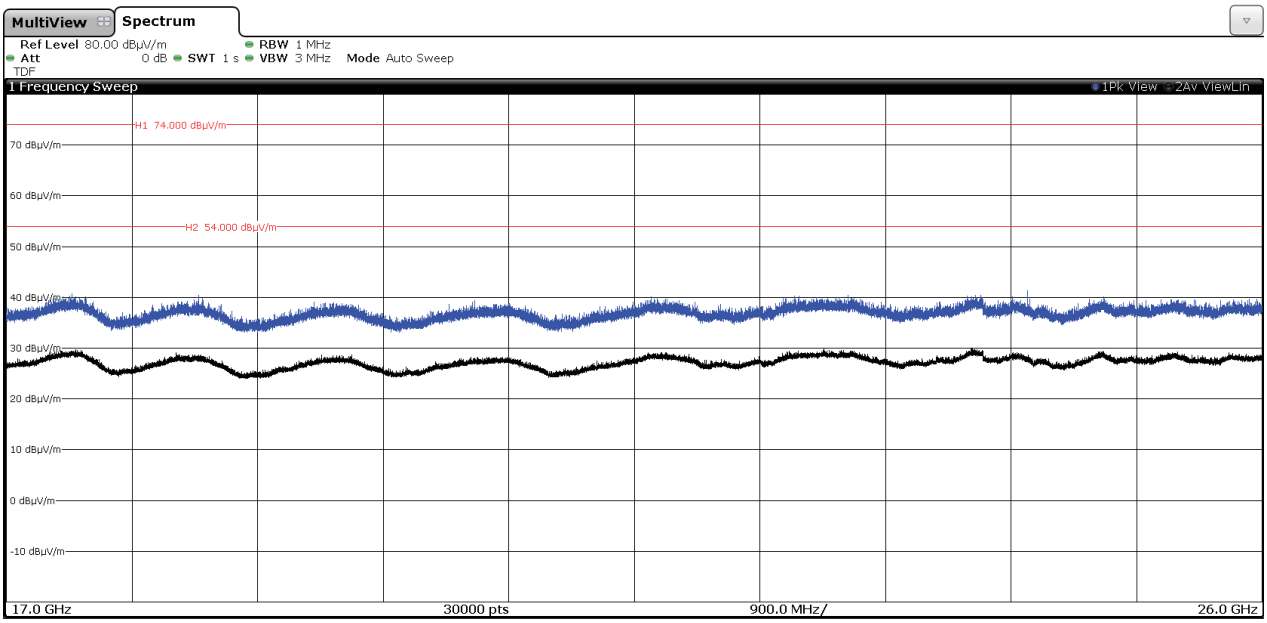
- **CORE 0 – Antenna RF External port 1**

The spurious frequencies detected do not depend on either the operating channel or the modulation mode.



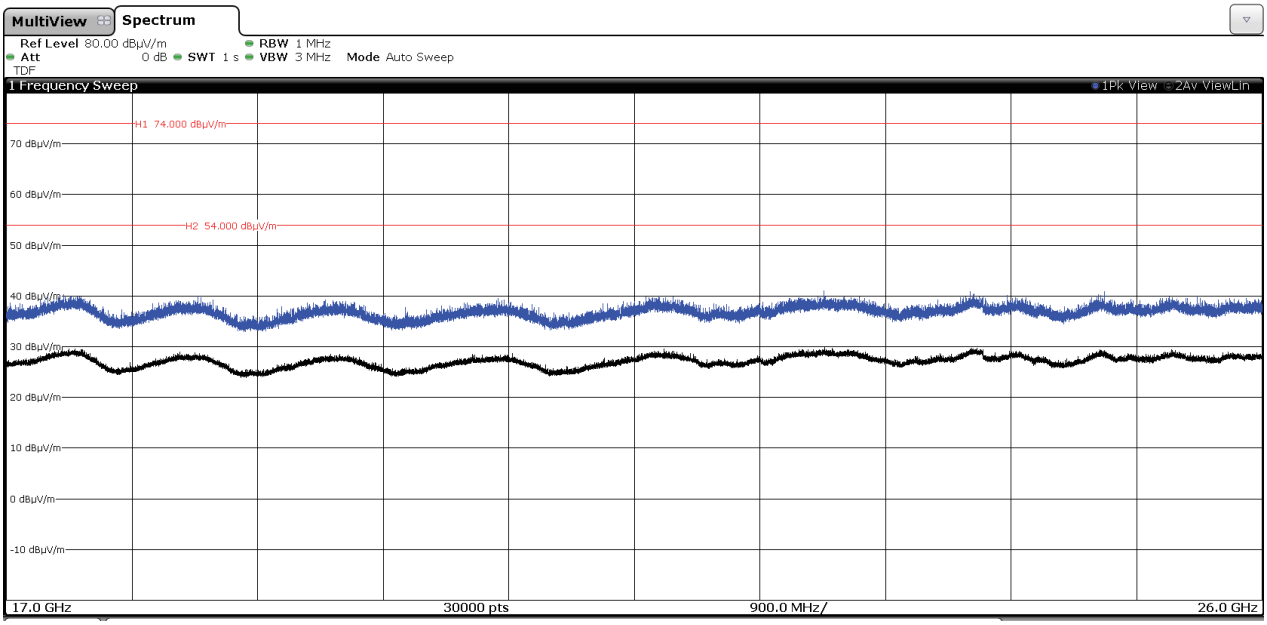
- **CORE 0 – Antenna RF External port 2**

The spurious frequencies detected do not depend on either the operating channel or the modulation mode.



- **CORE 1 – Antenna RF External port 4**

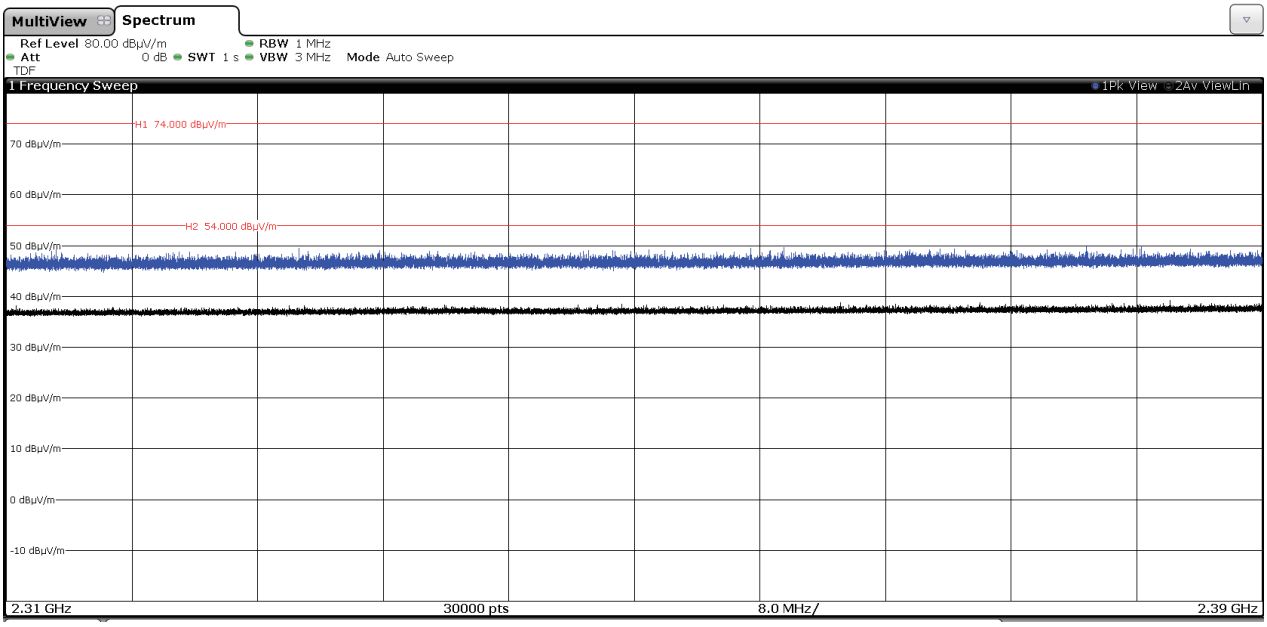
The spurious frequencies detected do not depend on either the operating channel or the modulation mode.



FREQUENCY RANGE 2.31-2.39 GHz (Restricted Band 1):

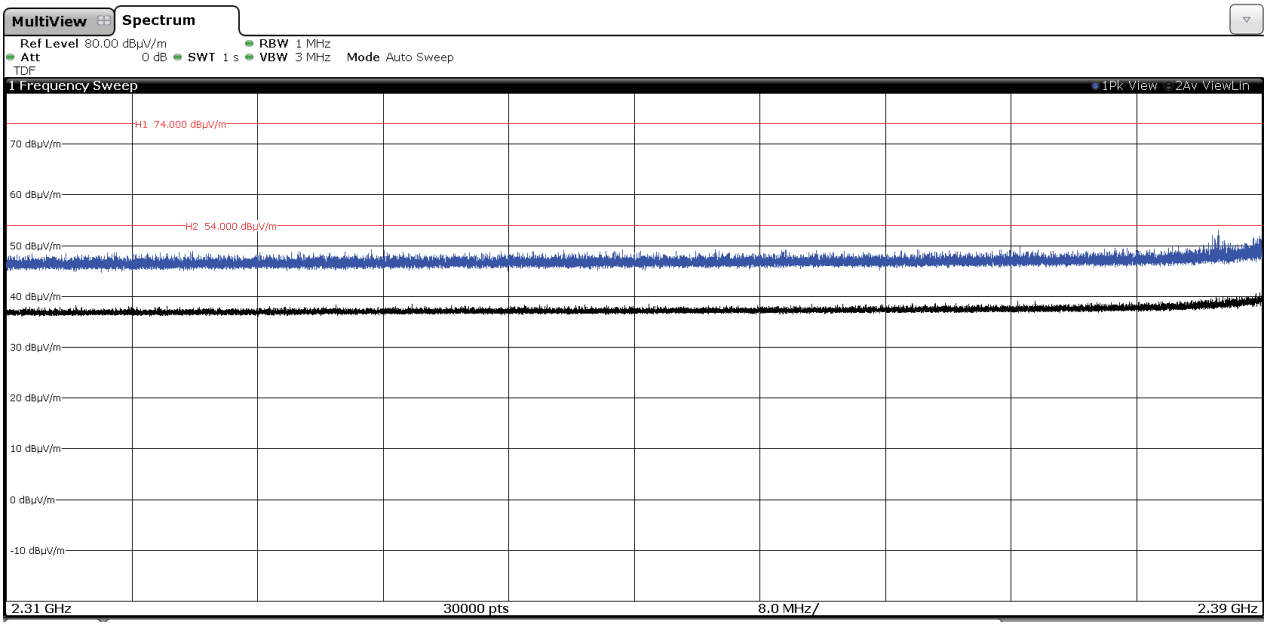
- **CORE 0 – Antenna RF External port 1**
  - **Mode 802.11 b – Restricted Bands**

- Low Channel:



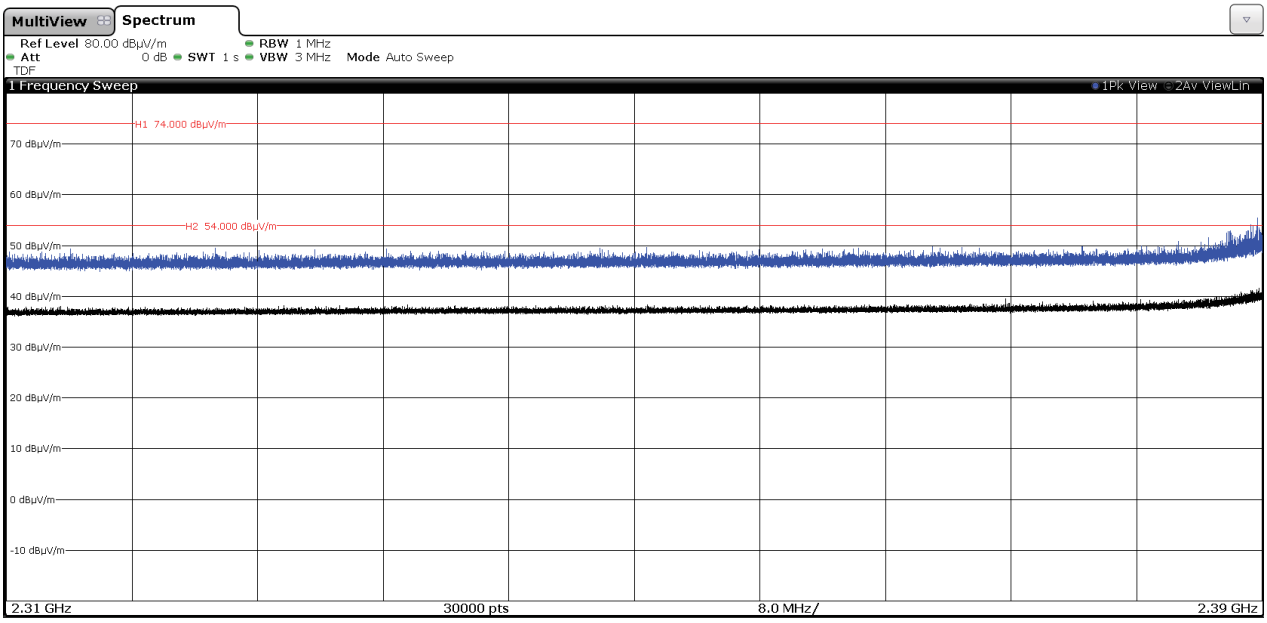
  - **Mode 802.11 g – Restricted Bands**

- Low Channel:



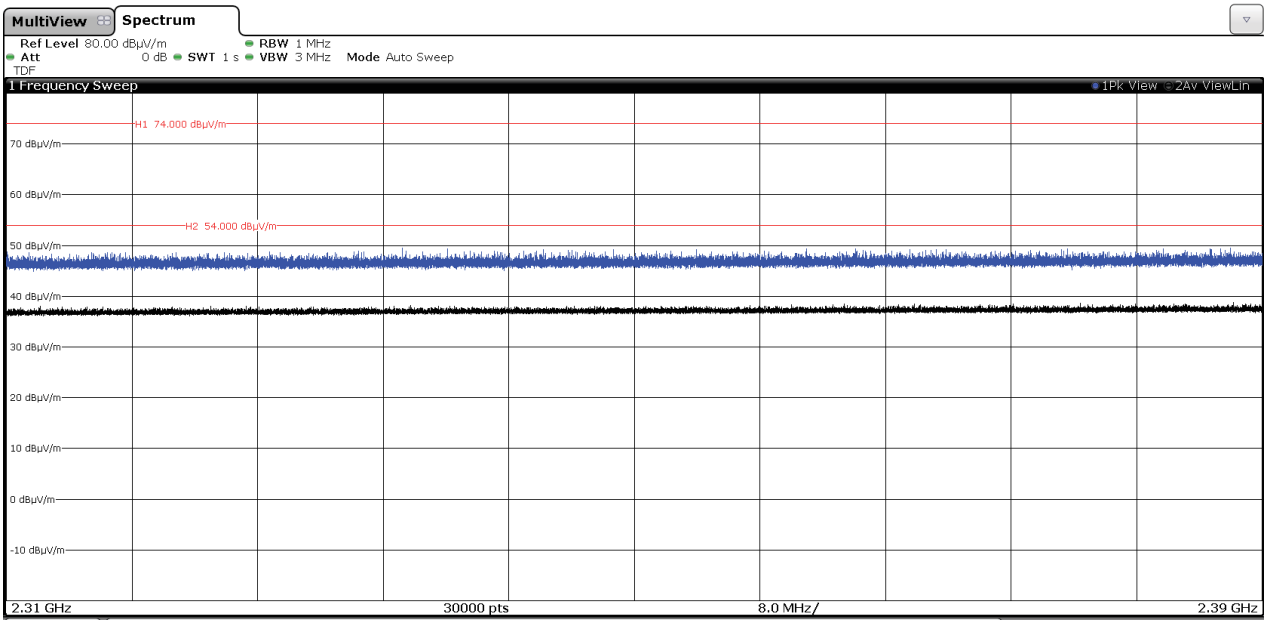
○ Mode 802.11 N20 – Restricted Bands

- Low Channel:



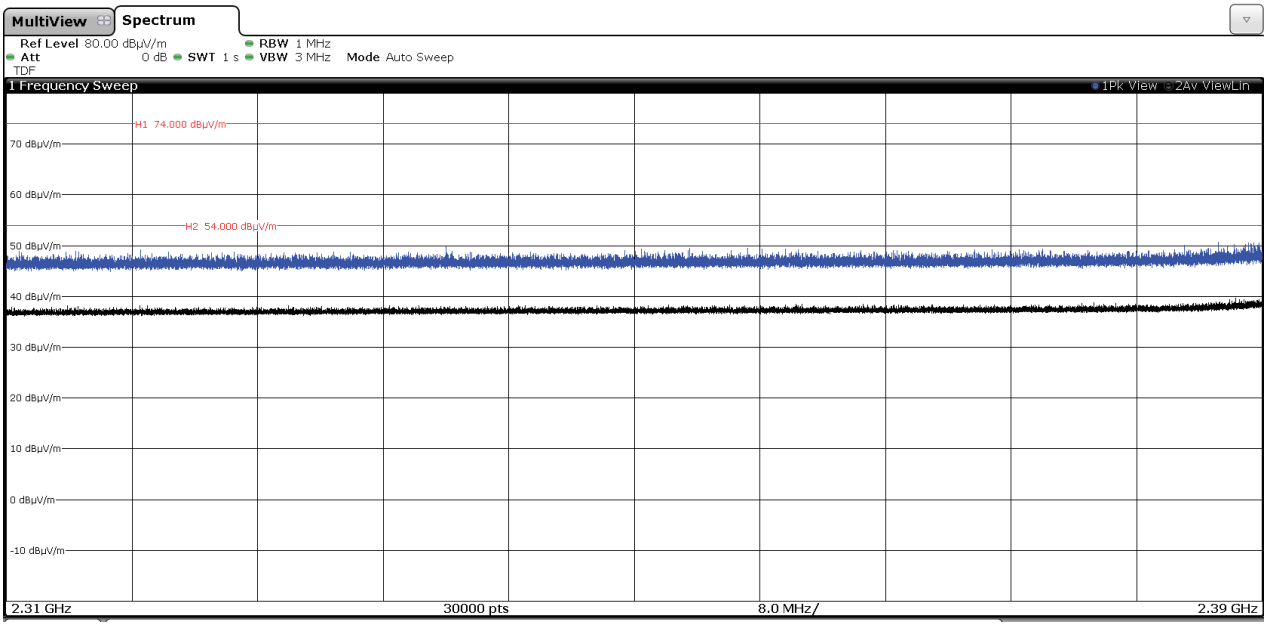
- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Restricted Bands**

- Low Channel:



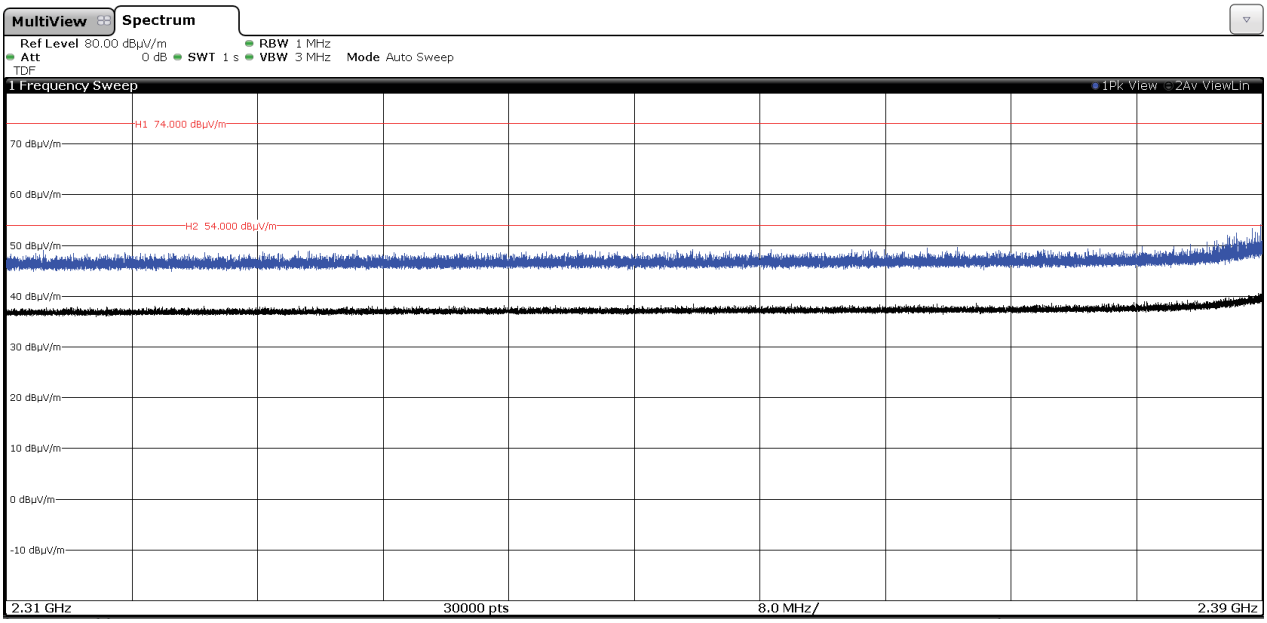
  - **Mode 802.11 g – Restricted Bands**

- Low Channel:



- **Mode 802.11 N20 – Restricted Bands**

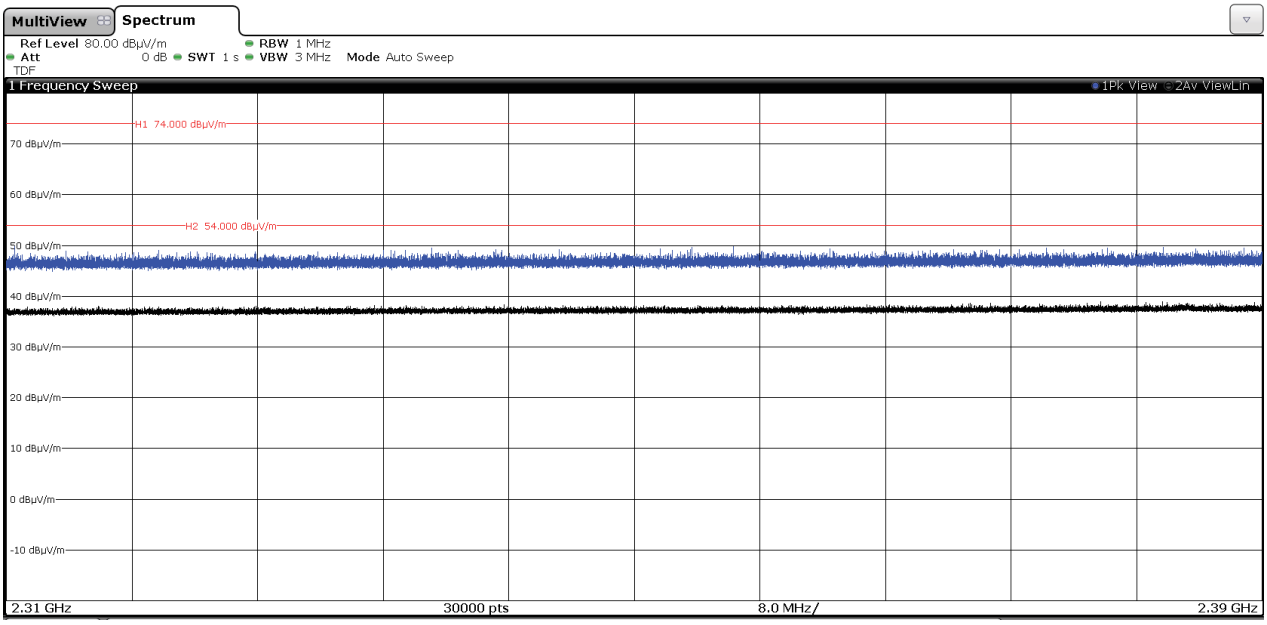
- Low Channel:



- **CORE 1 – Antenna RF External port 4**

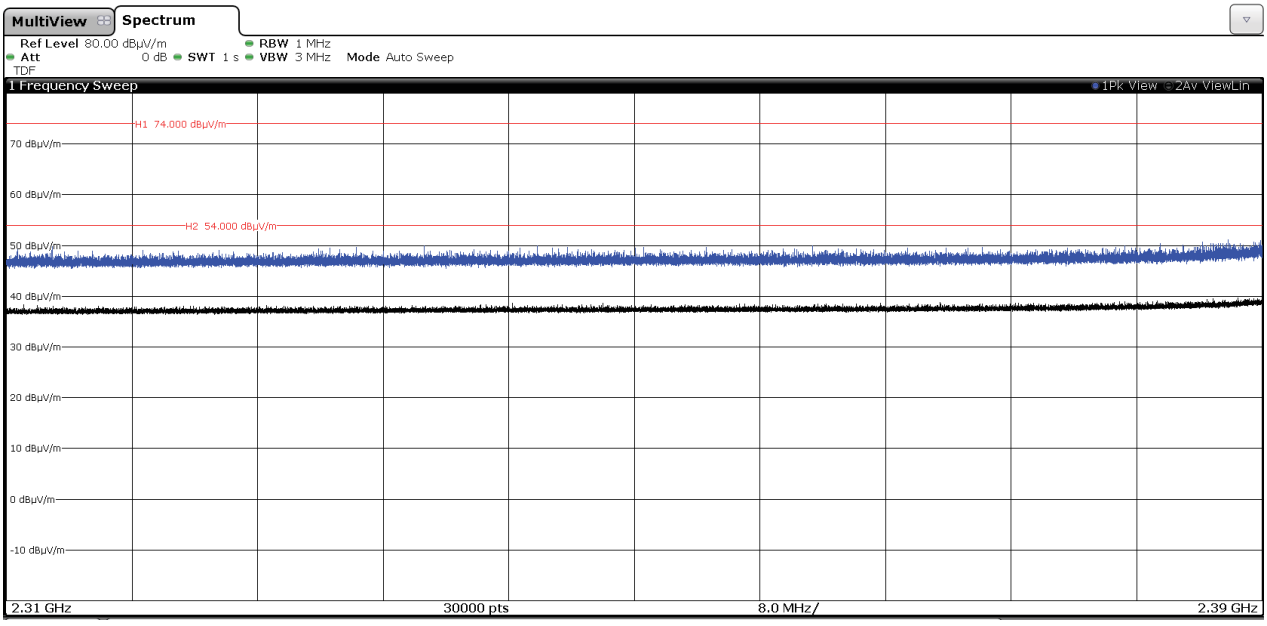
  - **Mode 802.11 b – Restricted Bands**

- Low Channel:



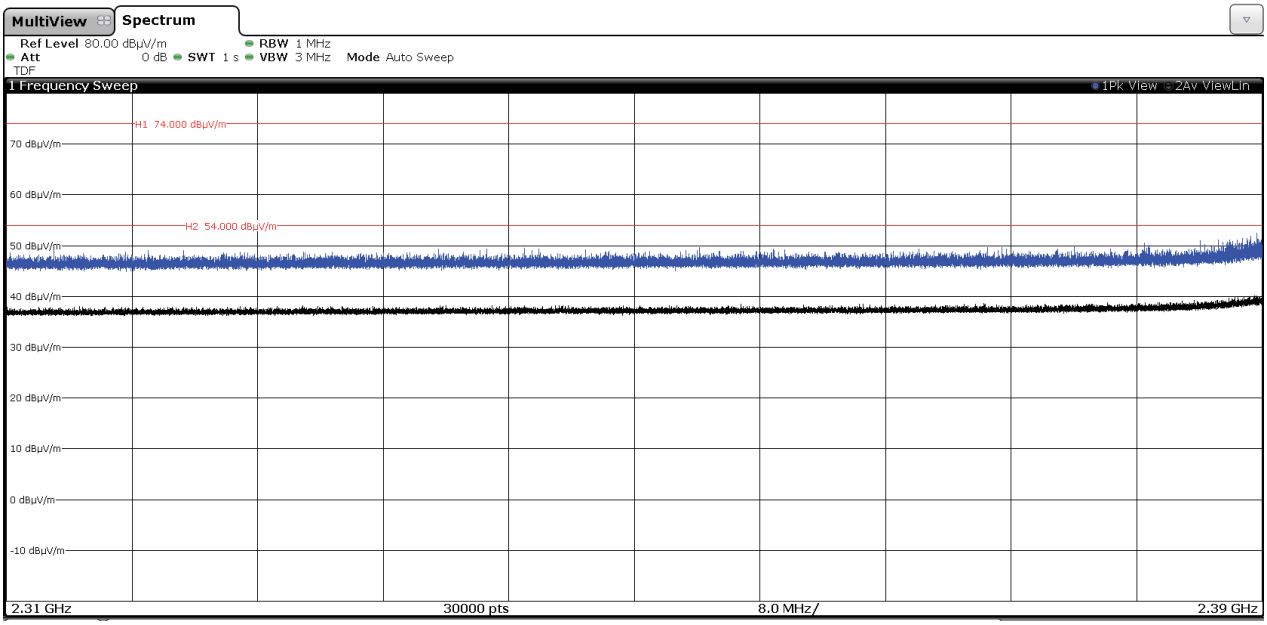
  - **Mode 802.11 g – Restricted Bands**

- Low Channel:



- **Mode 802.11 N20 – Restricted Bands**

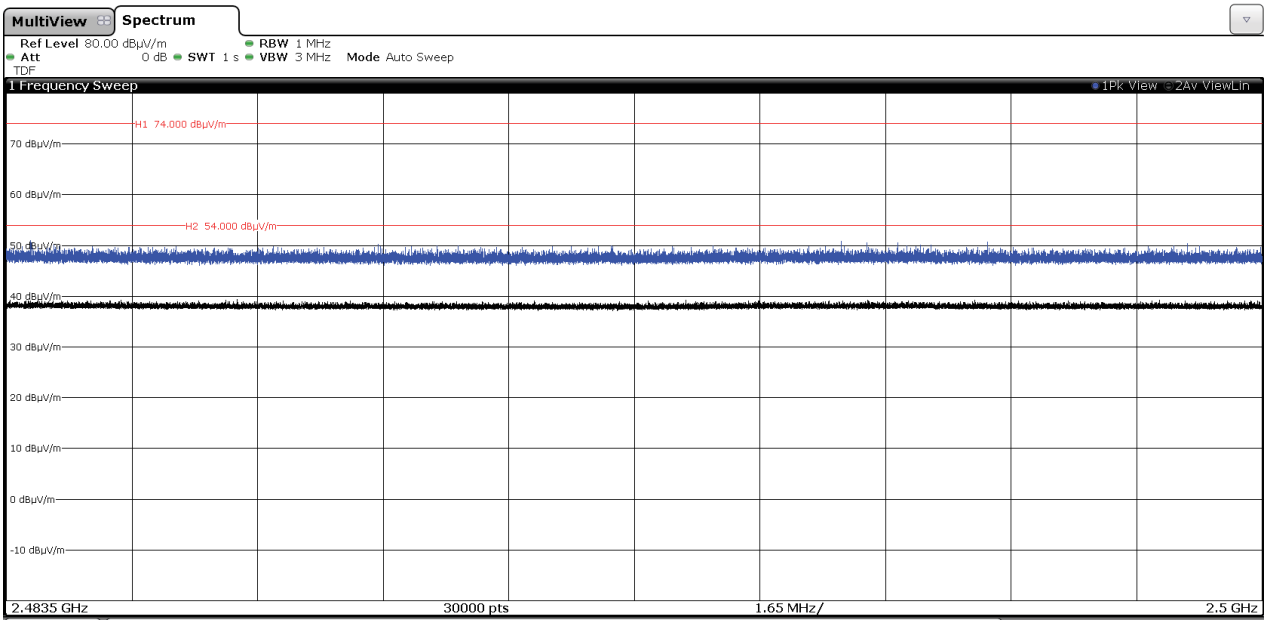
- Low Channel:



FREQUENCY RANGE 2.4835-2.5 GHz (Restricted Band 2):

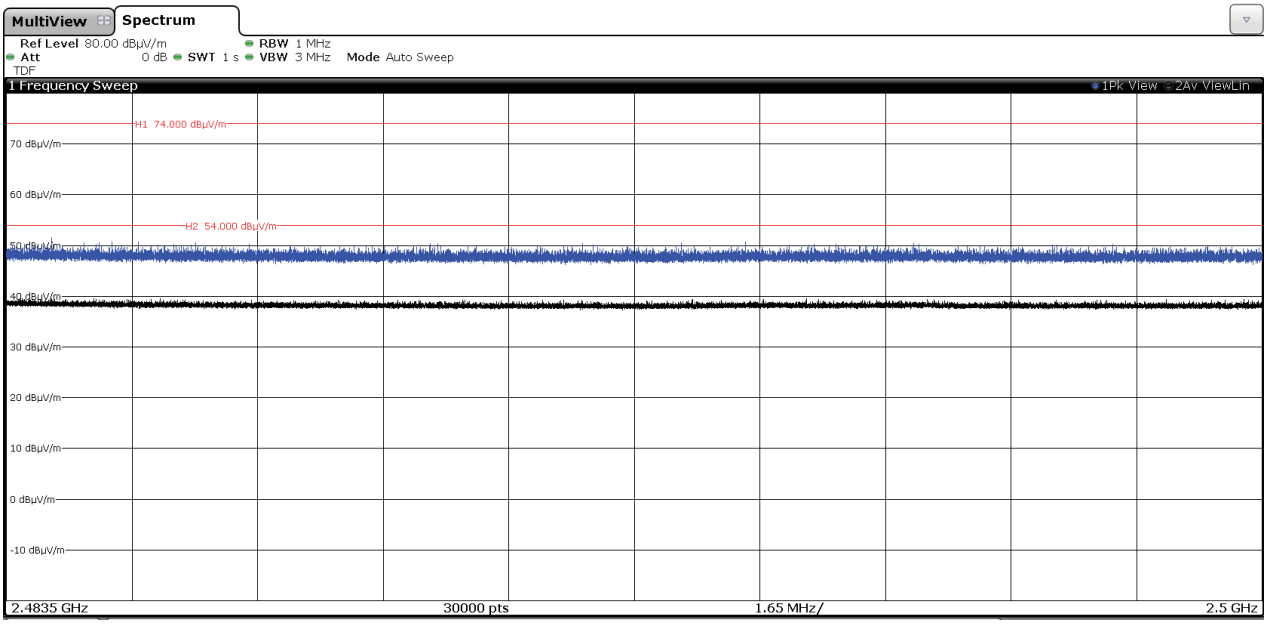
- **CORE 0 – Antenna RF External port 1**
  - **Mode 802.11 b – Restricted Bands**

- High Channel:



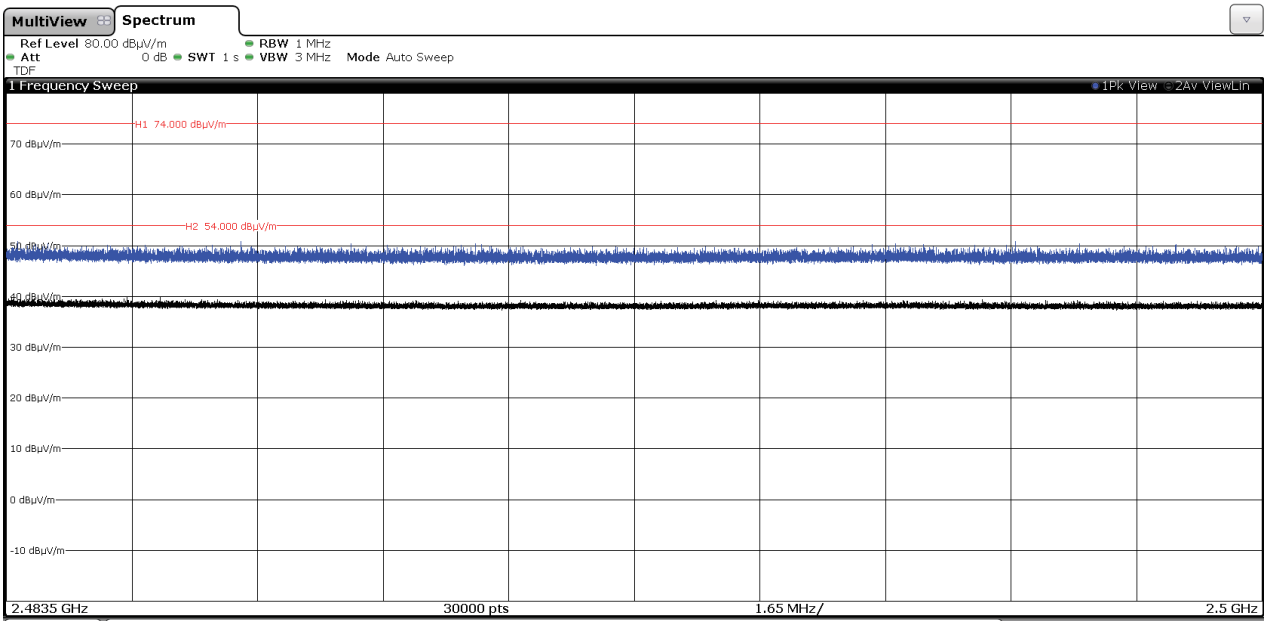
  - **Mode 802.11 g – Restricted Bands**

- High Channel:



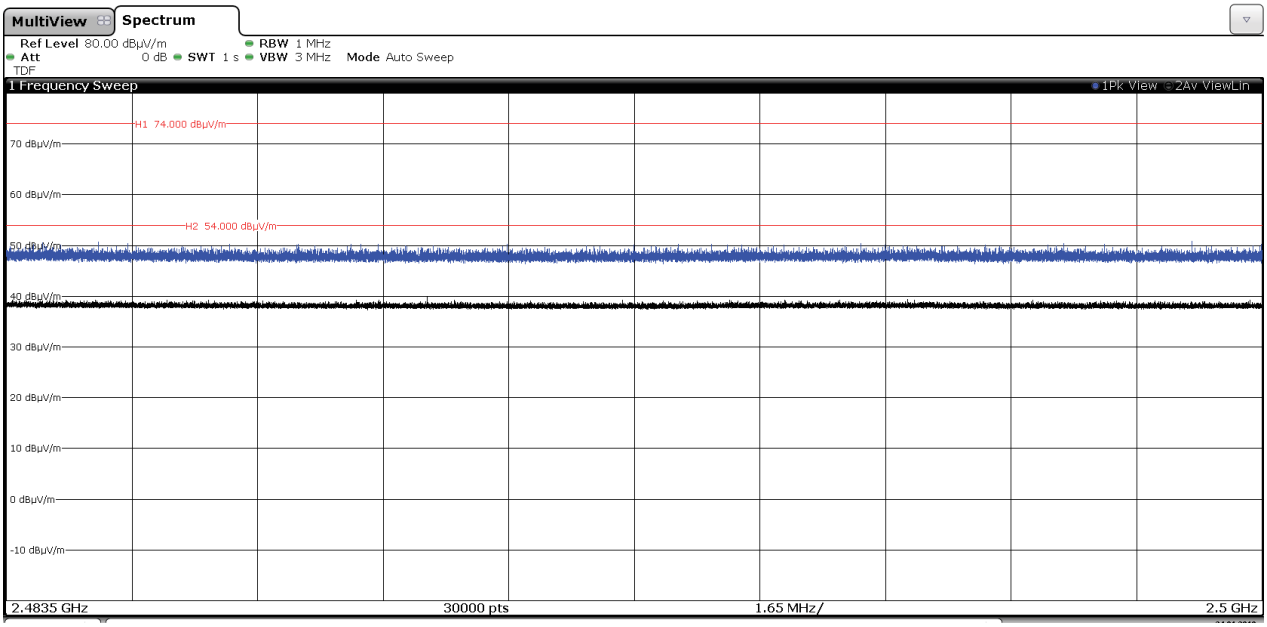
○ Mode 802.11 N20 – Restricted Bands

- High Channel:



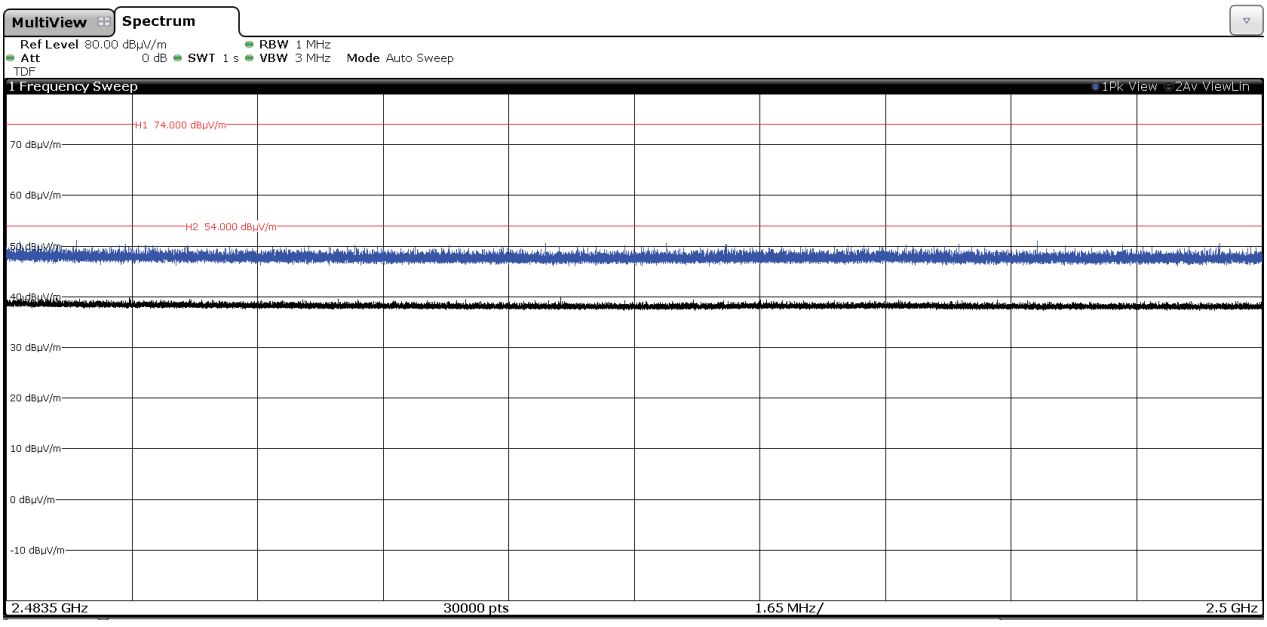
- **CORE 0 – Antenna RF External port 2**
  - **Mode 802.11 b – Restricted Bands**

- High Channel:



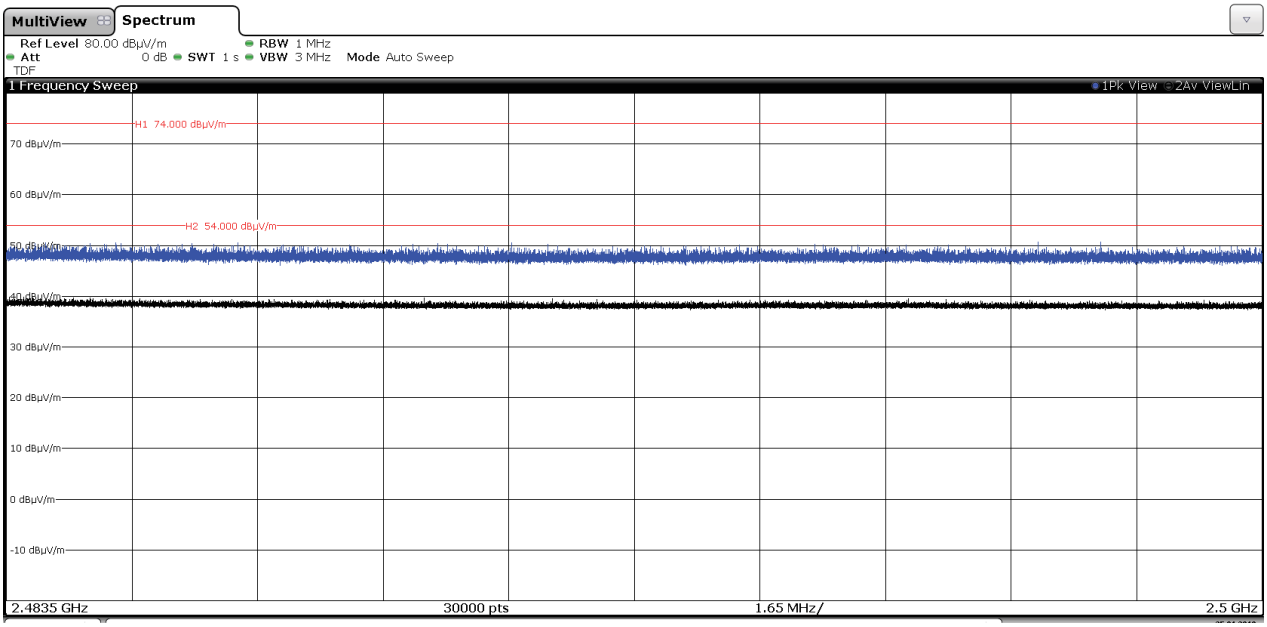
  - **Mode 802.11 g – Restricted Bands**

- High Channel:



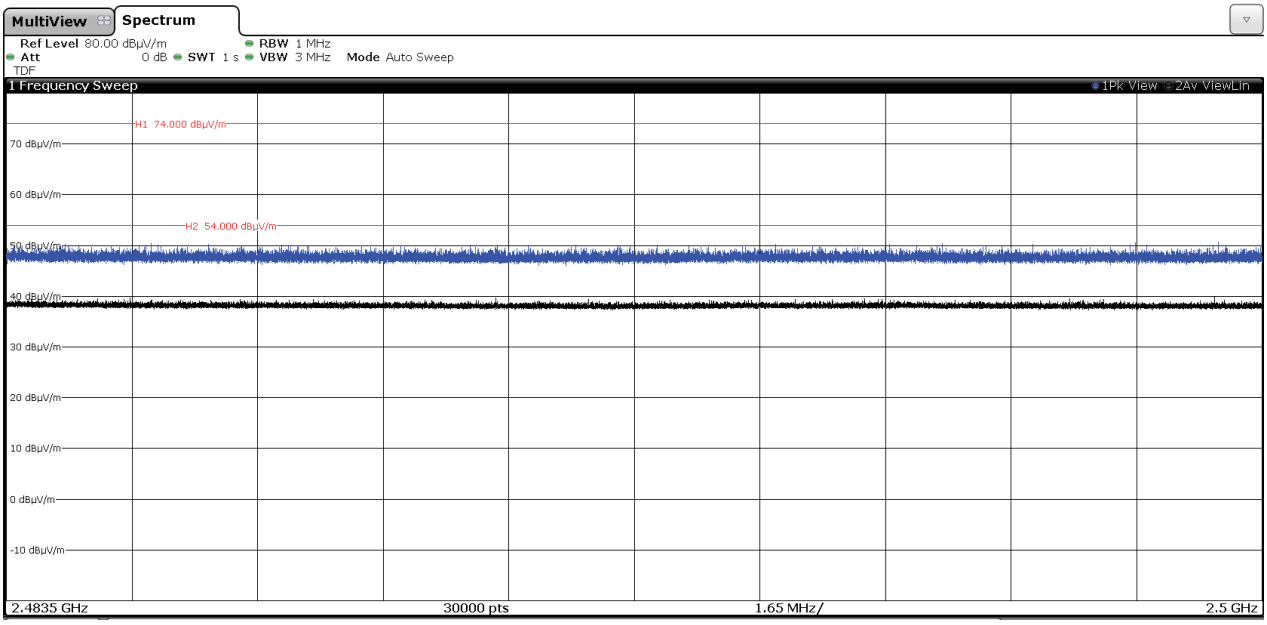
○ Mode 802.11 N20 – Restricted Bands

- High Channel:



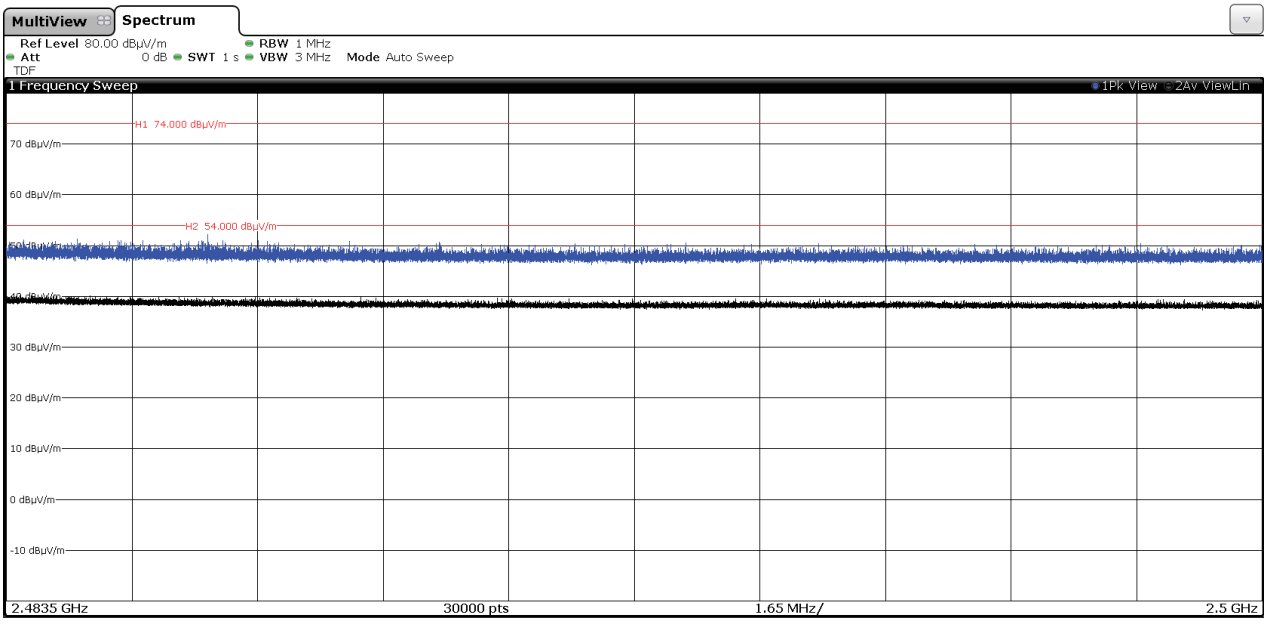
- **CORE 1 – Antenna RF External port 4**
  - **Mode 802.11 b – Restricted Bands**

- High Channel:



  - **Mode 802.11 g – Restricted Bands**

- High Channel:



- **Mode 802.11 N20 – Restricted Bands**

- High Channel: