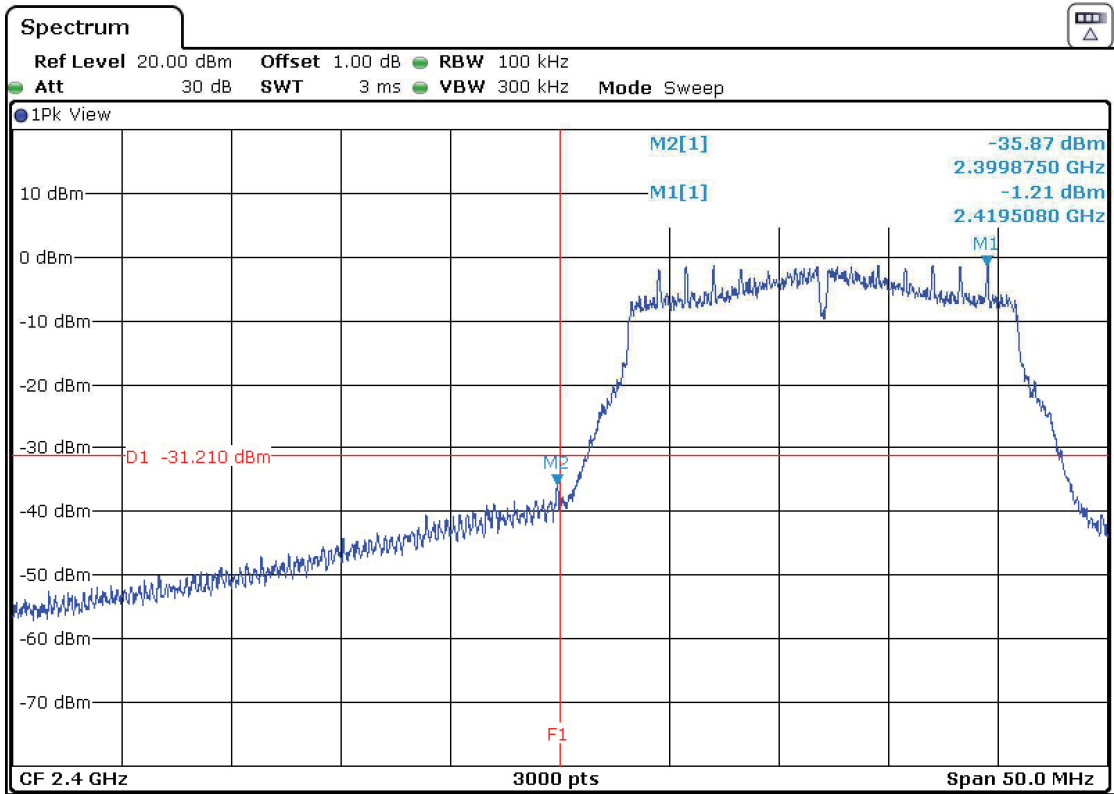


• Mode 802.11 n20 – Band-edge emissions compliance

- Low Channel:

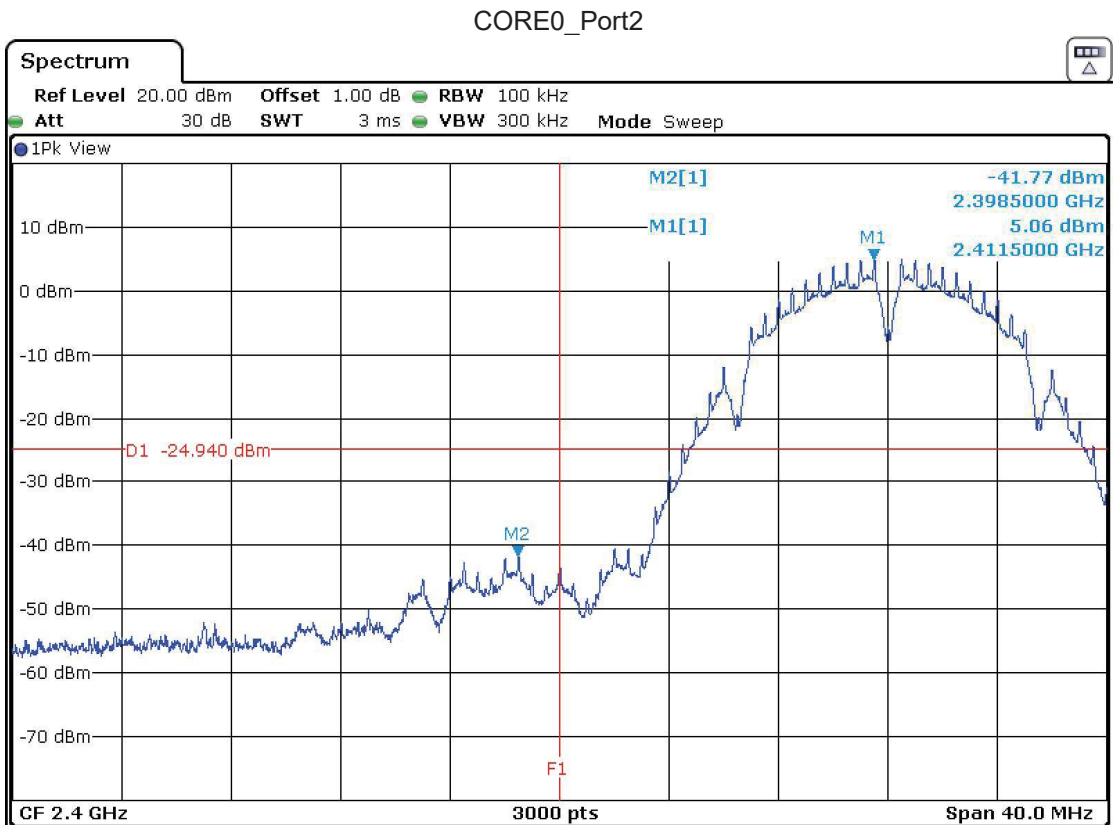
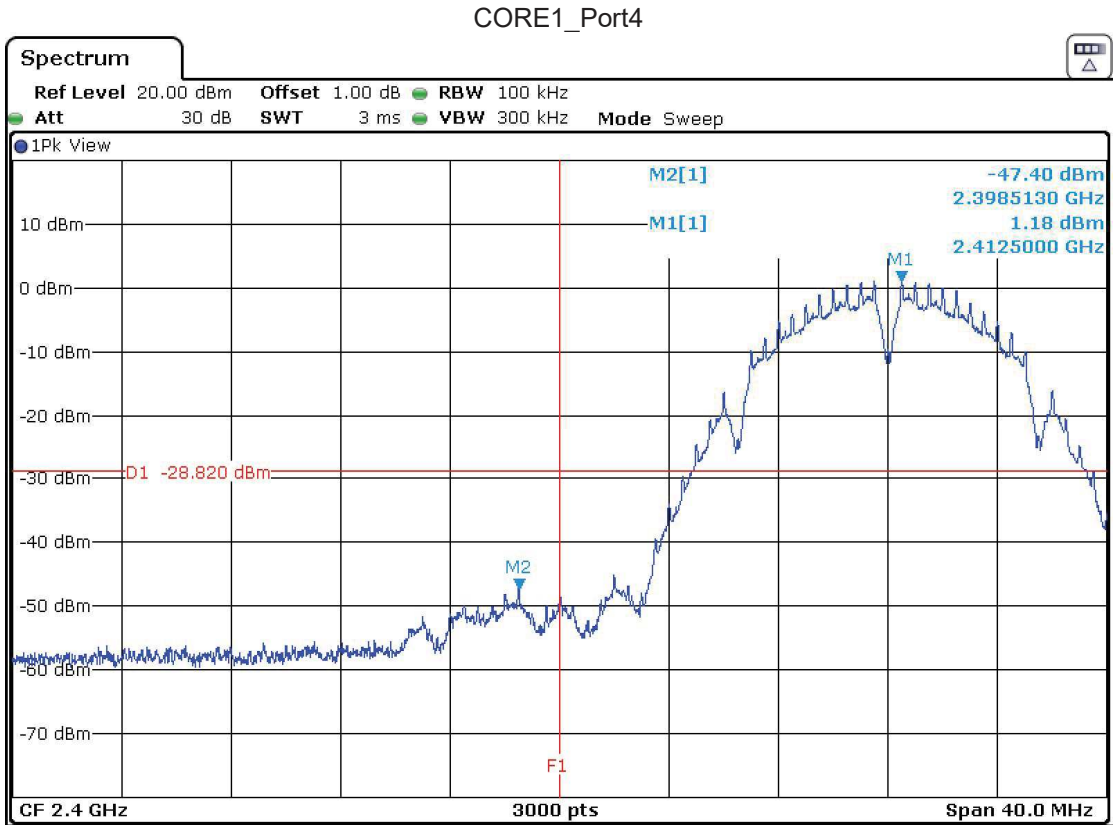


Verdict: PASS

MIMO – CORE1_Port4 Antenna & CORE0_Port2 Antenna:

- Mode 802.11 b – Band-edge emissions compliance

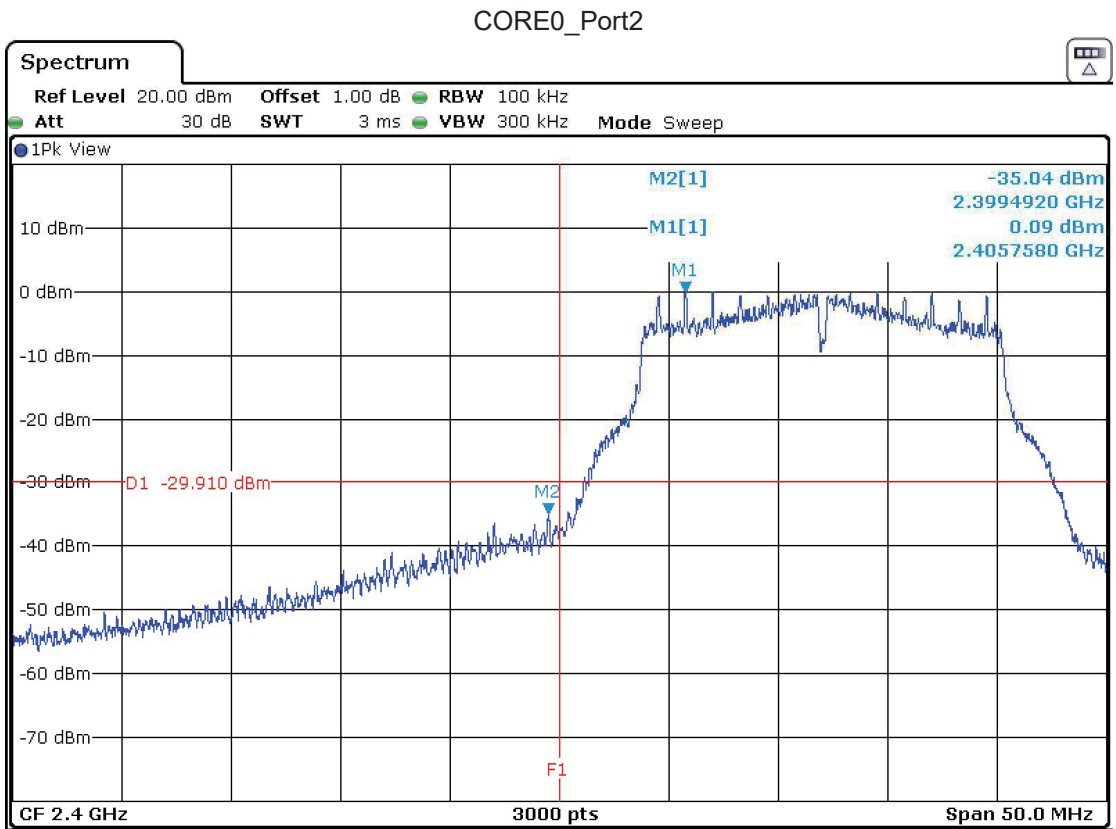
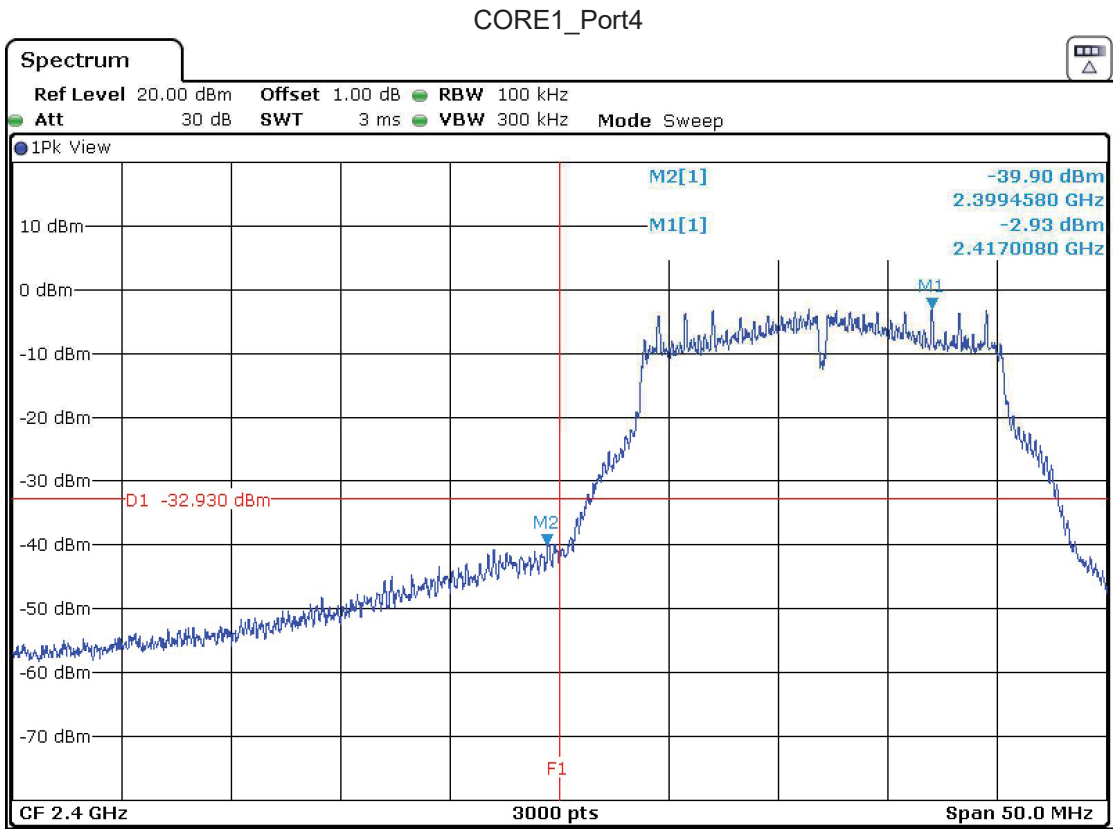
- Low Channel:



Verdict: PASS

• Mode 802.11 g – Band-edge emissions compliance

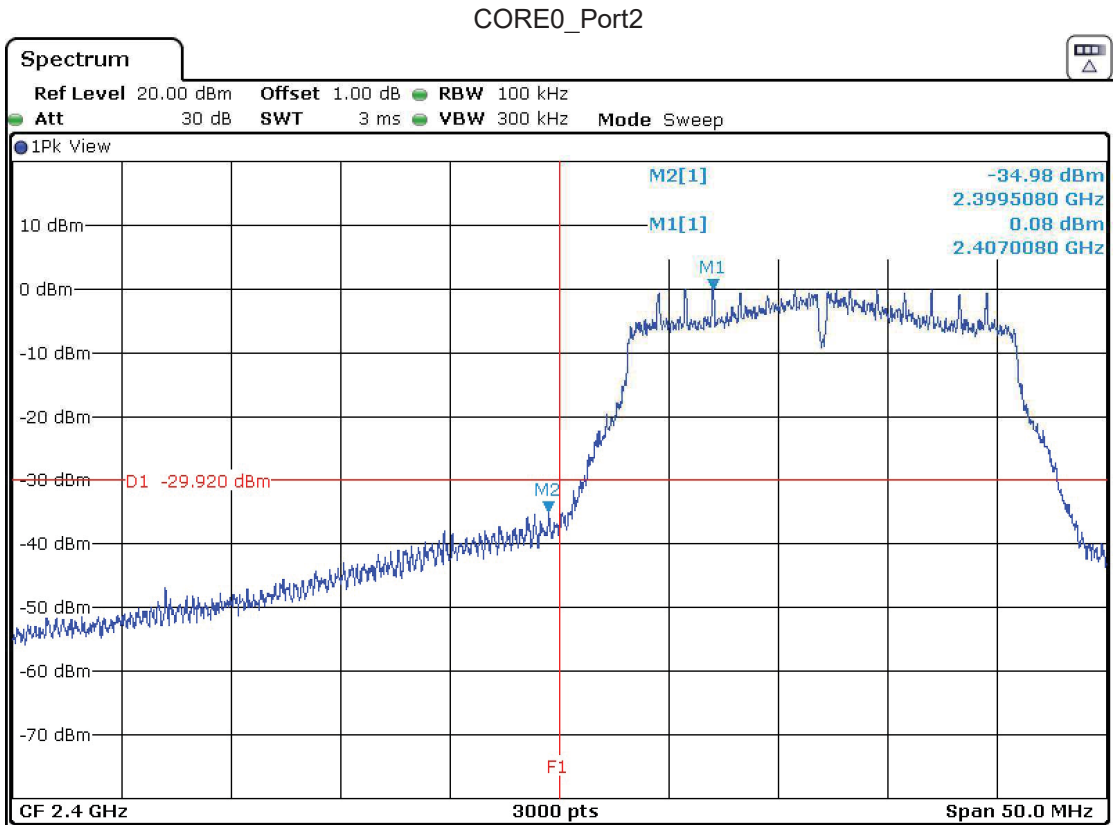
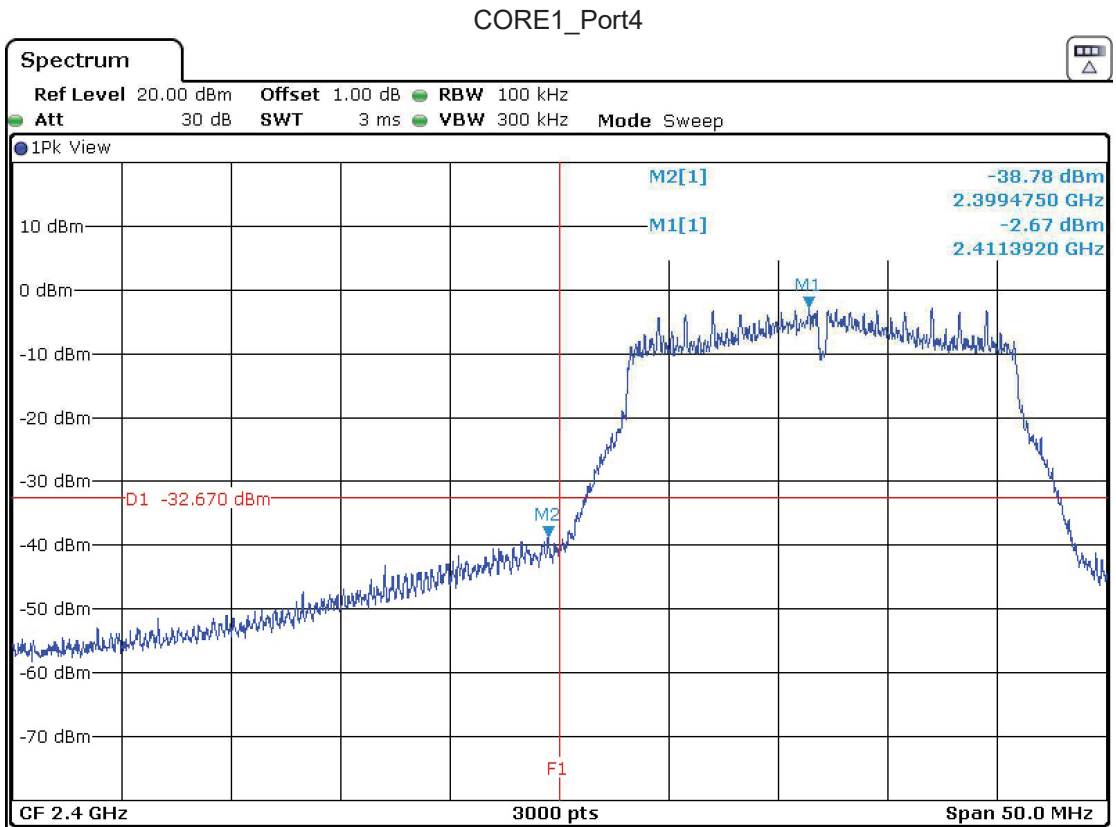
- Low Channel:



Verdict: PASS

• Mode 802.11 n20 – Band-edge emissions compliance

- Low Channel:



Verdict: PASS

FCC 15.247 (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:

For SISO and MIMO modes, the power spectral density was measured using the method according to point 11.10.5 "Method AVGPS-2" of ANSI C.63.10-2013.

Preliminary tests determined as the SISO worst case the CORE1_Port4 Antenna.
MIMO case is CORE1_Port4 Antenna & CORE0_Port2 Antenna.

The PSD was measured on all ports and then using the measure and sum spectral maxima across the outputs technique, stated in FCC KDB 662911 D01 Section E)2)b).

SISO – CORE1_Port4 Antenna:

- Mode 802.11 b**

	Low Channel	Middle Channel	High Channel
Average Power Spectral Density (dBm)	-10.41	-10.35	-9.82
Duty Cycle correction Factor (dB)	0.180		
Average Power Spectral Density corrected (dBm)	-10.23	-10.17	-9.64
Measurement uncertainty (dB)	<±2.57		

- Mode 802.11 g**

	Low Channel	Middle Channel	High Channel
Average Power Spectral Density (dBm)	-12.24	-11.43	-11.25
Duty Cycle correction Factor (dB)	0.996		
Average Power Spectral Density corrected (dBm)	-11.24	-10.43	-10.25
Measurement uncertainty (dB)	<±2.57		

- Mode 802.11 n20**

	Low Channel	Middle Channel	High Channel
Average Power Spectral Density (dBm)	-12.67	-12.32	-11.68
Duty Cycle correction Factor (dB)	1.068		
Average Power Spectral Density corrected (dBm)	-11.60	-11.25	-10.61
Measurement uncertainty (dB)	<±2.57		

Verdict: PASS

MIMO – CORE1_Port4 Antenna & CORE0_Port2 Antenna:

- Mode 802.11 b

	Low Channel 2412 MHz		Middle Channel 2437MHz		High Channel 2462MHz	
	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2
Average Power Spectral Density (dBm)	-7.18	-3.83	-7.73	-4.74	-7.34	-4.98
Duty Cycle correction Factor (dB)	0.180	0.182	0.18	0.182	0.18	0.182
Average Power Spectral Density corrected (dBm)	-7	-3.648	-7.550	-4.558	-7.160	-4.798
	CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2	
Total PSD/100KHz (dBm)	-1.998		-2.791		-2.810	
Measurement uncertainty (dB)	<±2.57					

- **Mode 802.11 g**

	Low Channel 2412 MHz		Middle Channel 2437MHz		High Channel 2462MHz	
	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2
Average Power Spectral Density (dBm)	-9.41	-6.32	-9.8	-7.08	-9.7	-7.67
Duty Cycle correction Factor (dB)	0.980	0.997	0.980	0.997	0.980	0.997
Average Power Spectral Density corrected (dBm)	-8.430	-5.323	-8.820	-6.083	-8.720	-6.673
	CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2	
Total PSD/100KHz (dBm)	-3.595		-4.229		-4.567	
Measurement uncertainty (dB)	<±2.57					

- **Mode 802.11 n20**

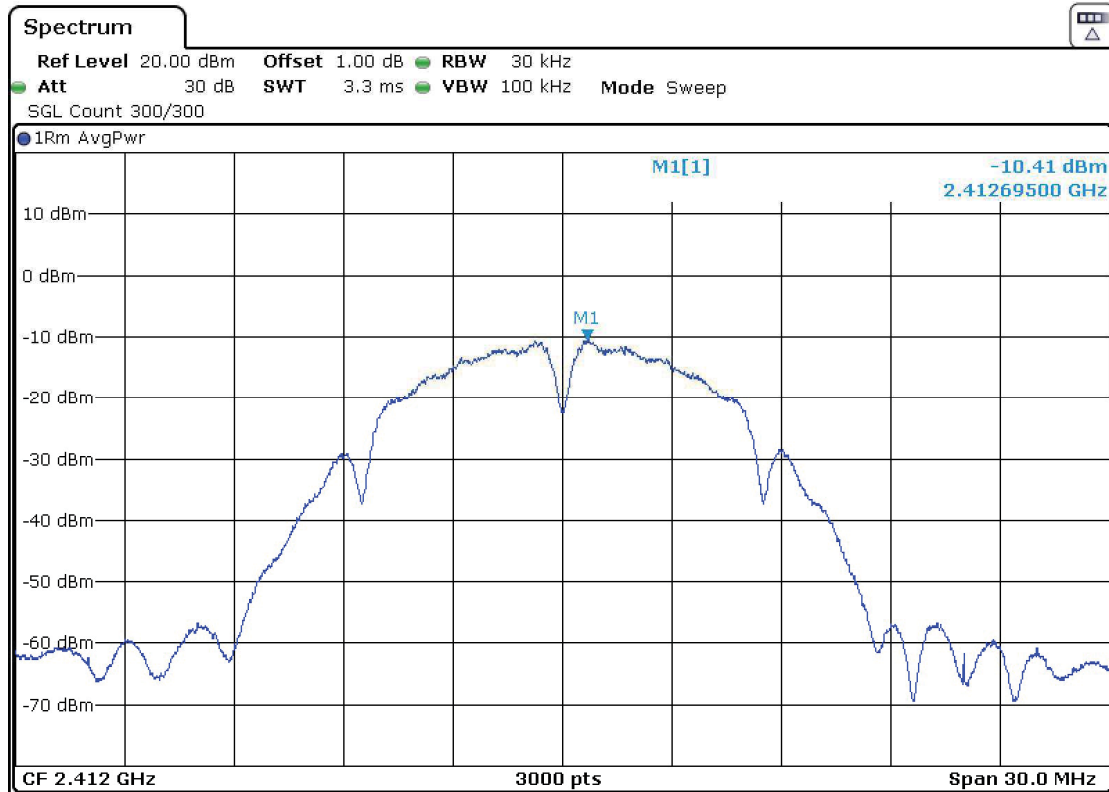
	Low Channel 2412 MHz		Middle Channel 2437MHz		High Channel 2462MHz	
	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2	CORE1_Port4	CORE0_Port2
Average Power Spectral Density (dBm)	-9.96	-7.17	-10.43	-7.6	-9,85	-8,2
Duty Cycle correction Factor (dB)	1.069	1.063	1.069	1.063	1.069	1.063
Average Power Spectral Density corrected (dBm)	-8.891	-6.107	-9.361	-6.537	-8.781	-7.137
	CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2		CORE1_Port4 + CORE0_Port2	
Total PSD/100KHz (dBm)	-4.269		-4.713		-4.871	
Measurement uncertainty (dB)	<±2.57					

Verdict: PASS

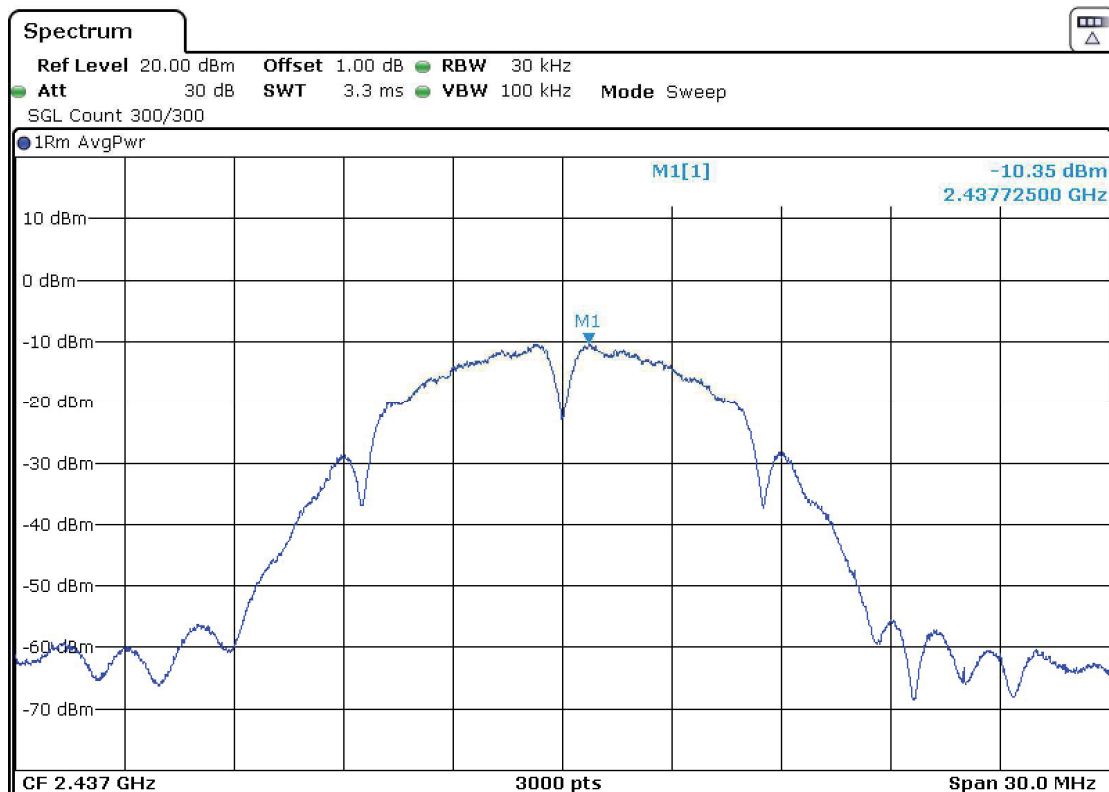
SISO CORE1_Port4 Antenna:

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

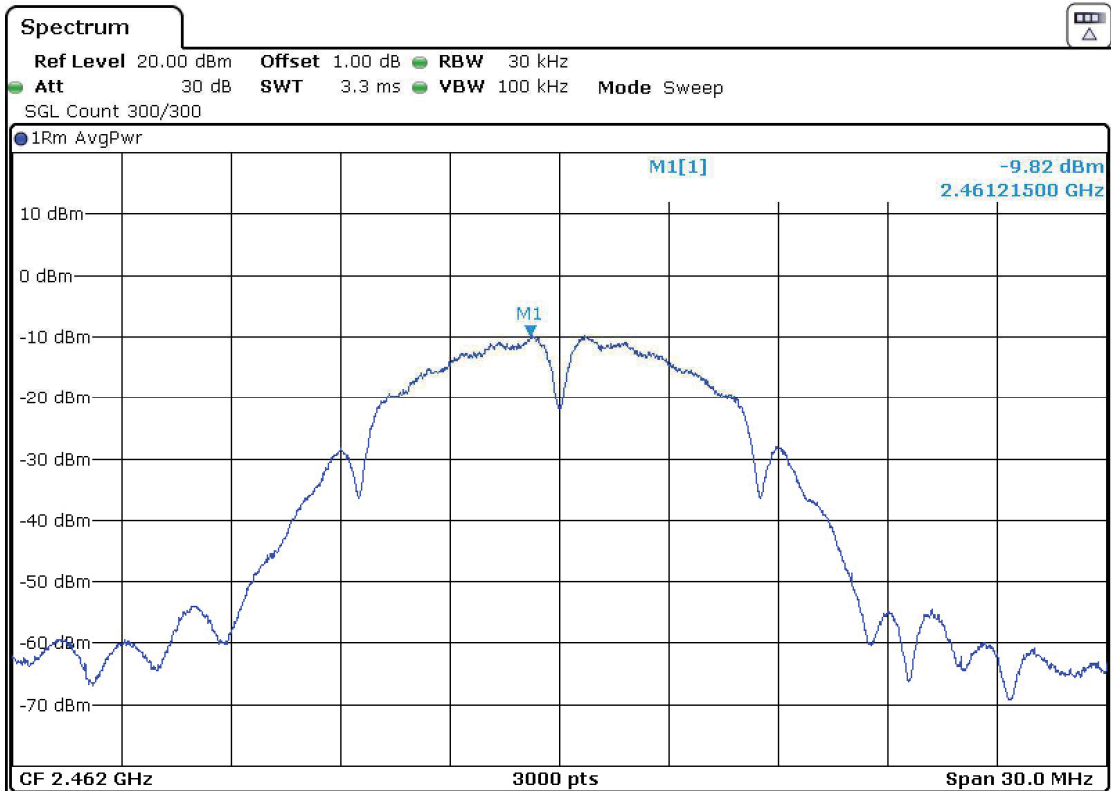
- Low Channel:



- Middle Channel:



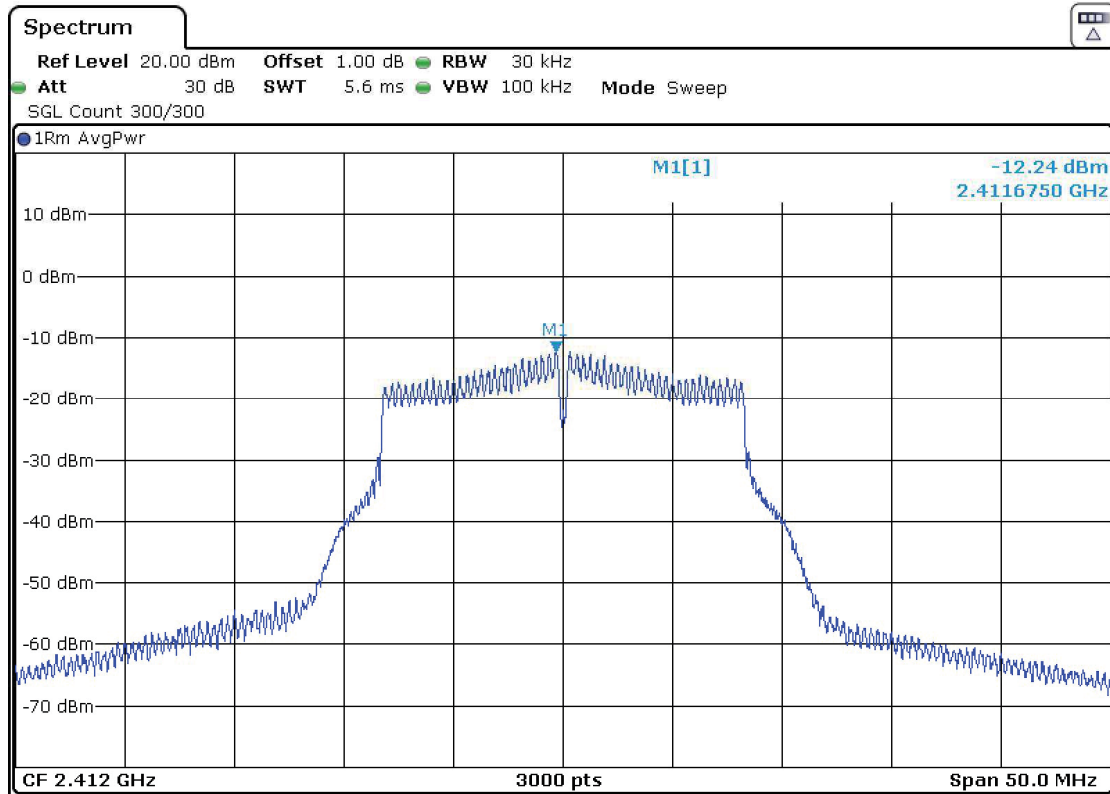
- High Channel:



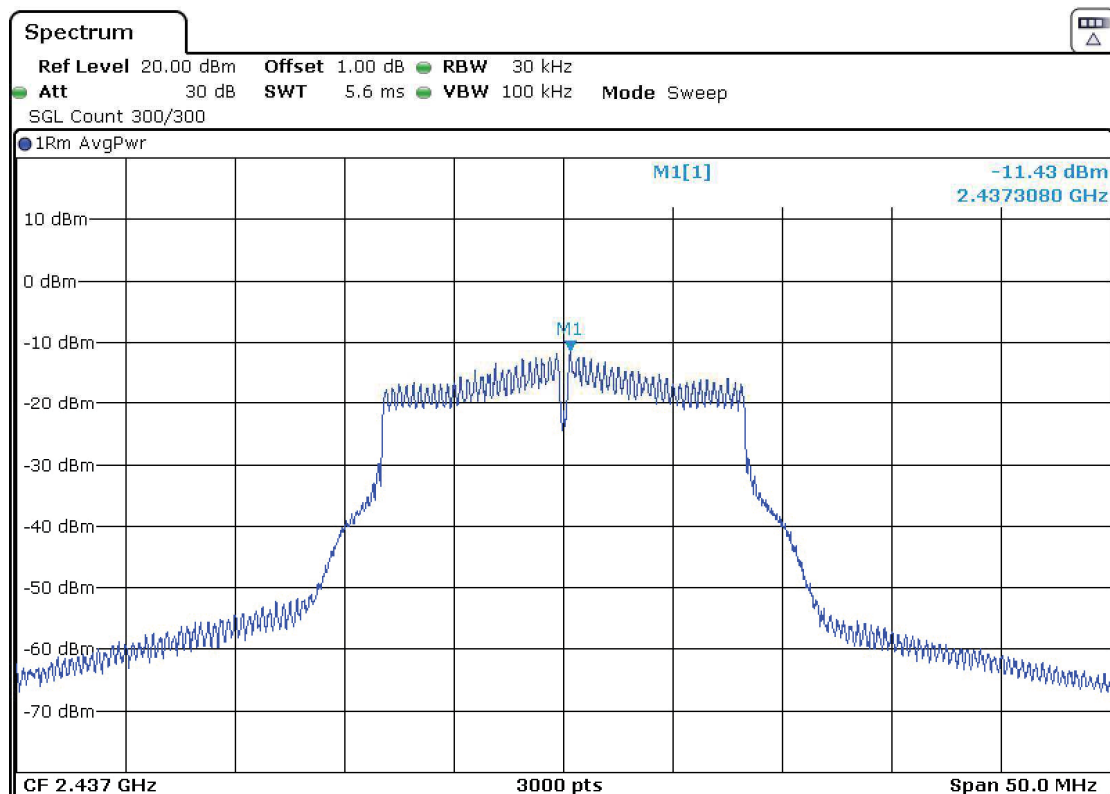
SISO CORE1_Port4 Antenna:

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

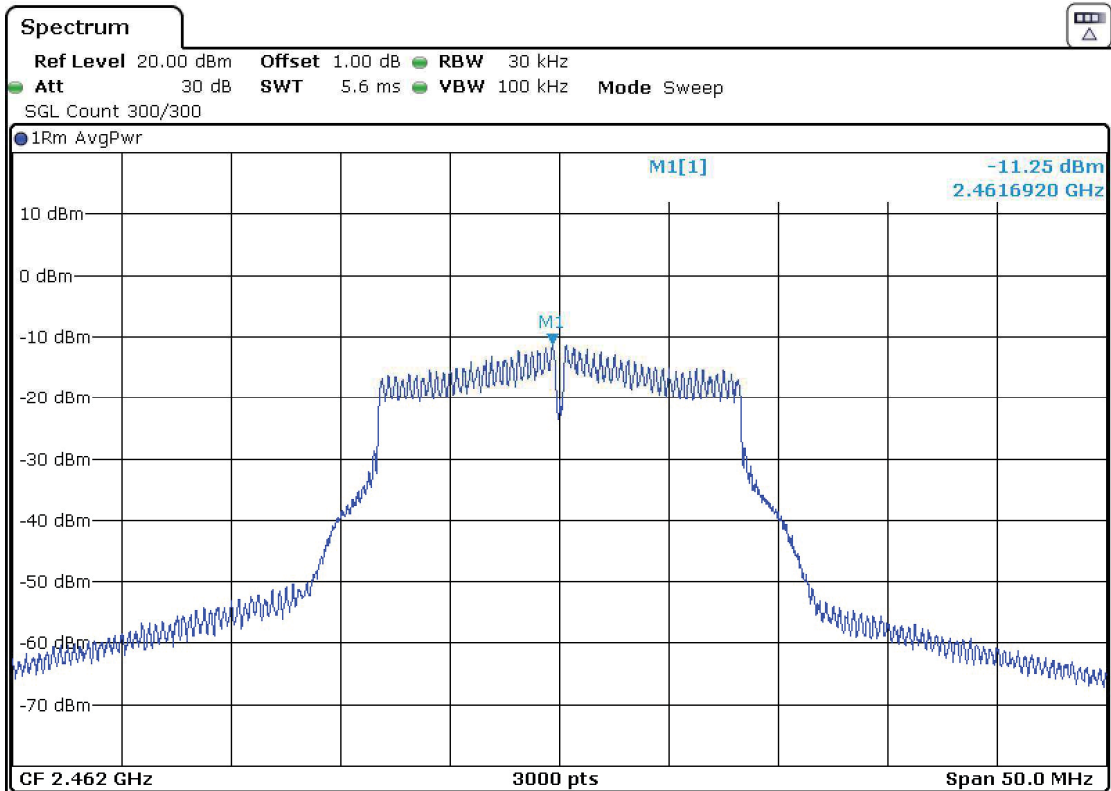
- Low Channel:



- Middle Channel:



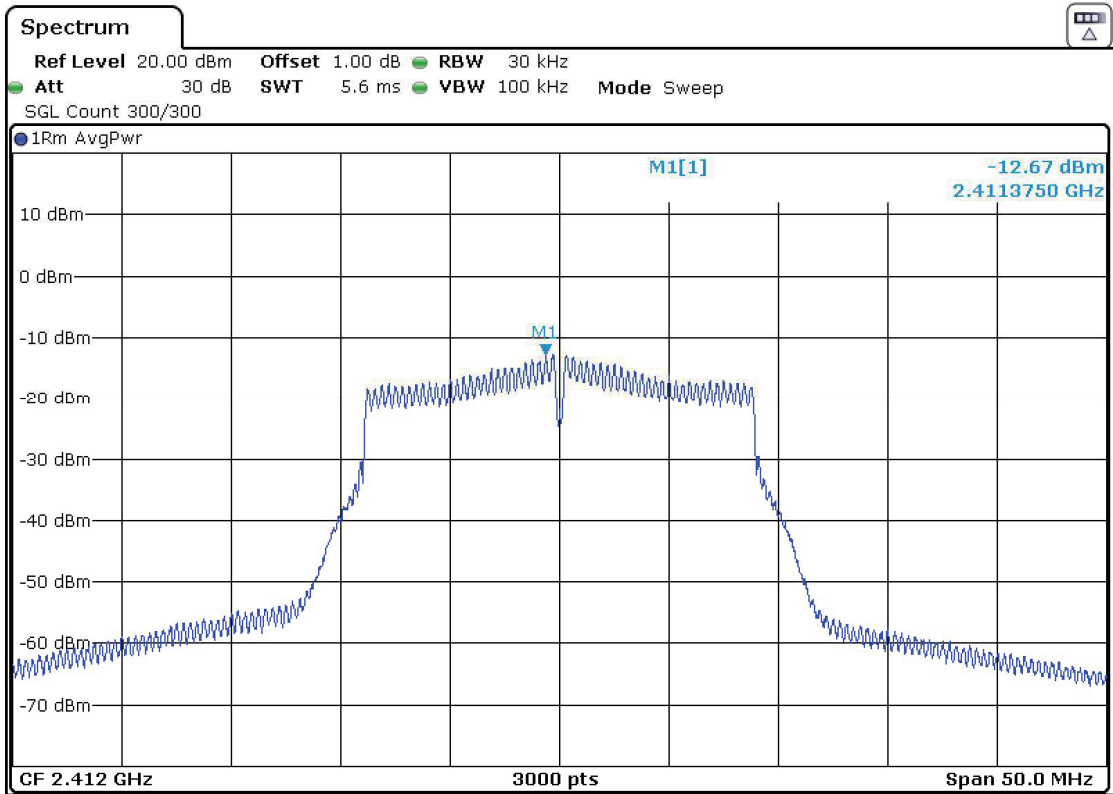
- High Channel:



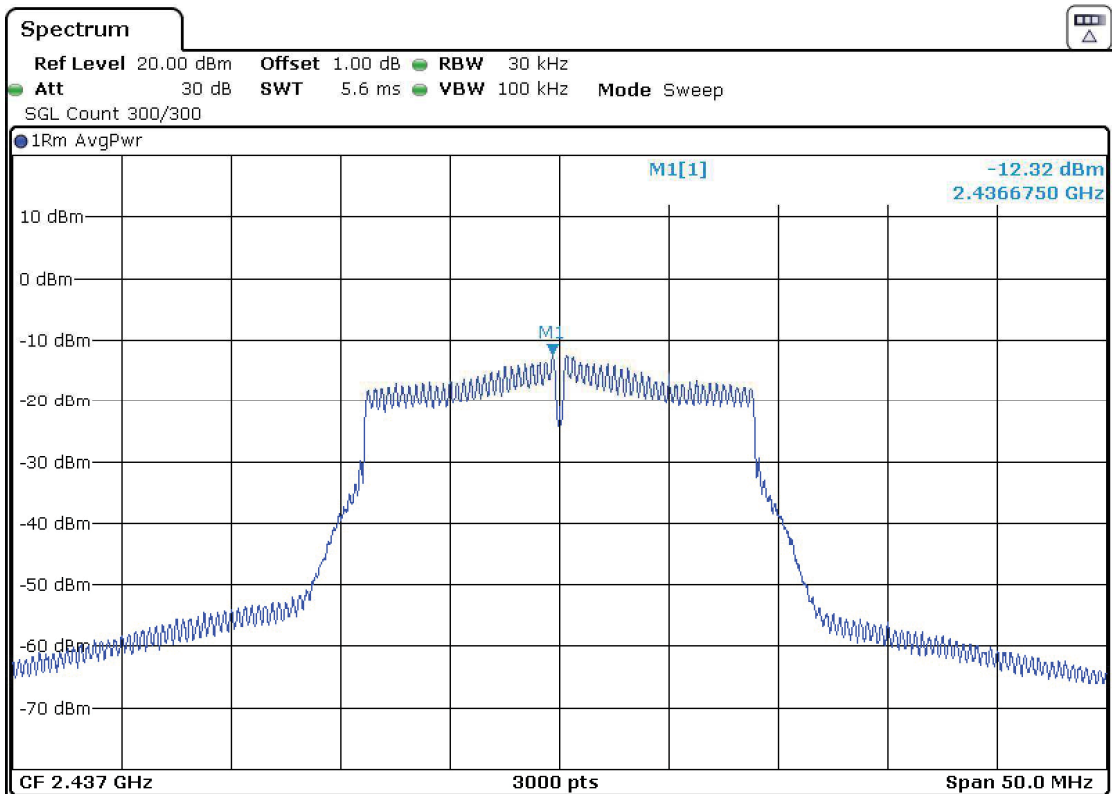
SISO CORE1_Port4 Antenna:

- Mode 802.11 n20 – Power Spectral Density

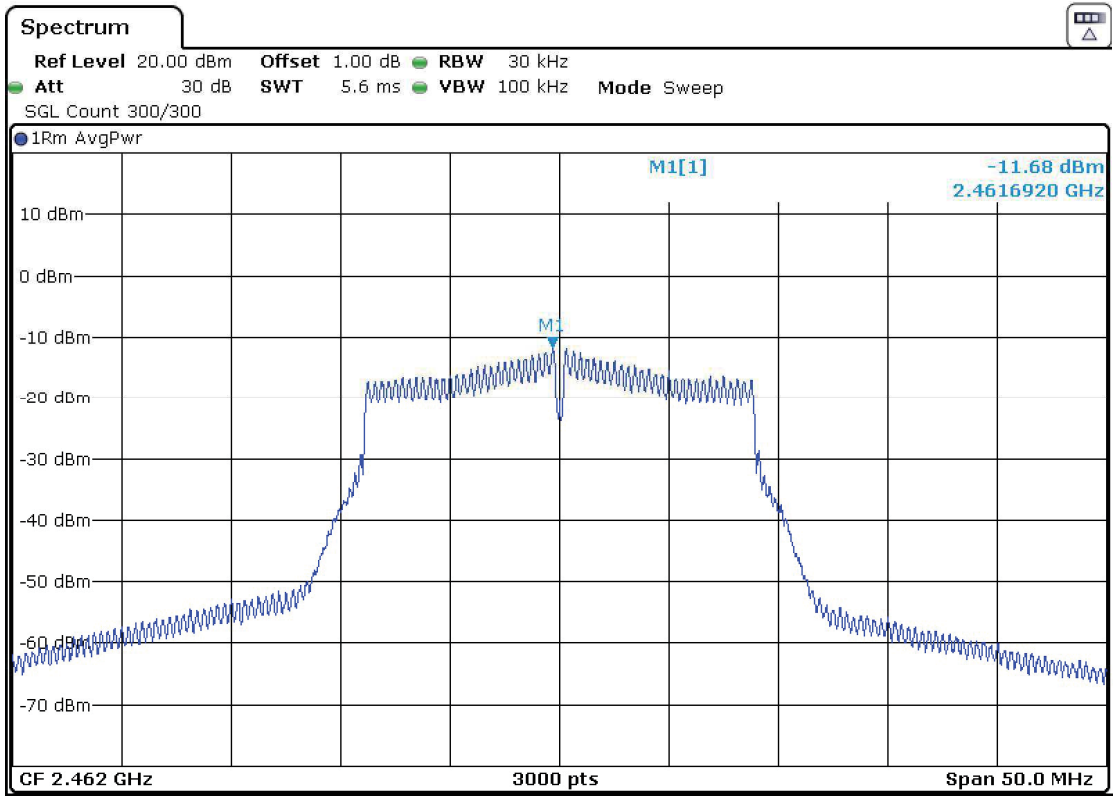
- Low Channel:



- Middle Channel:



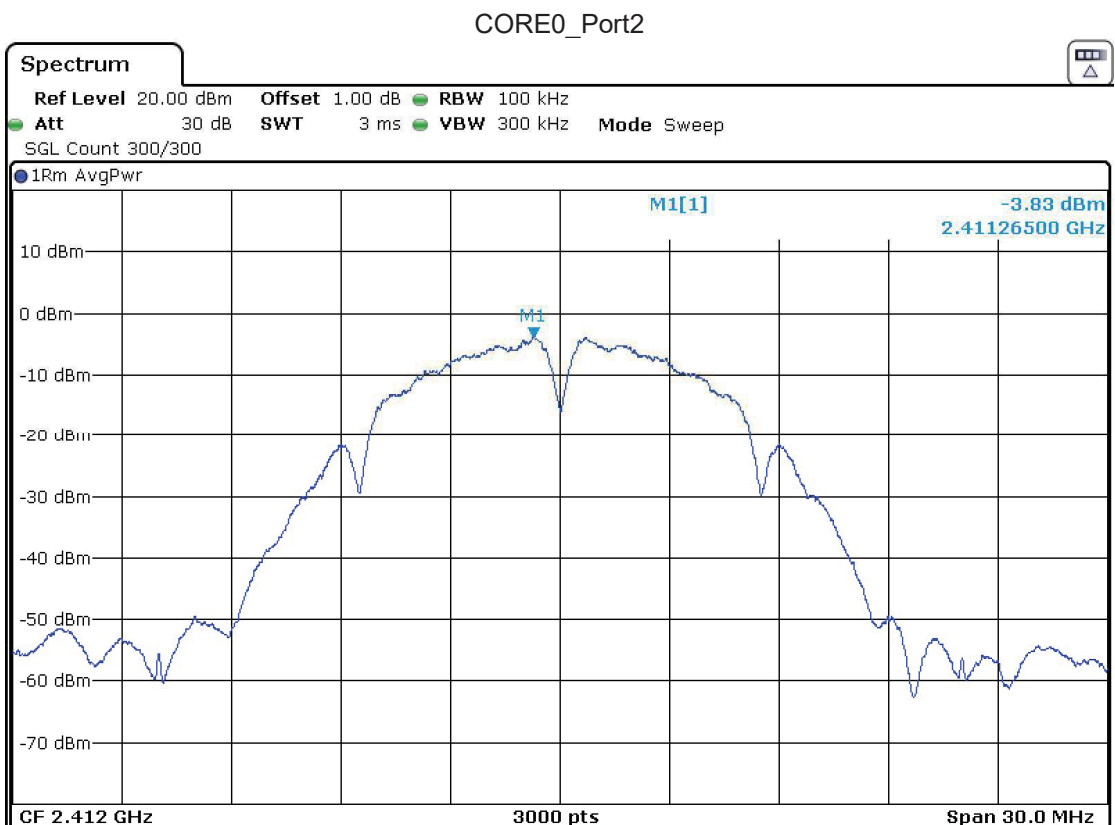
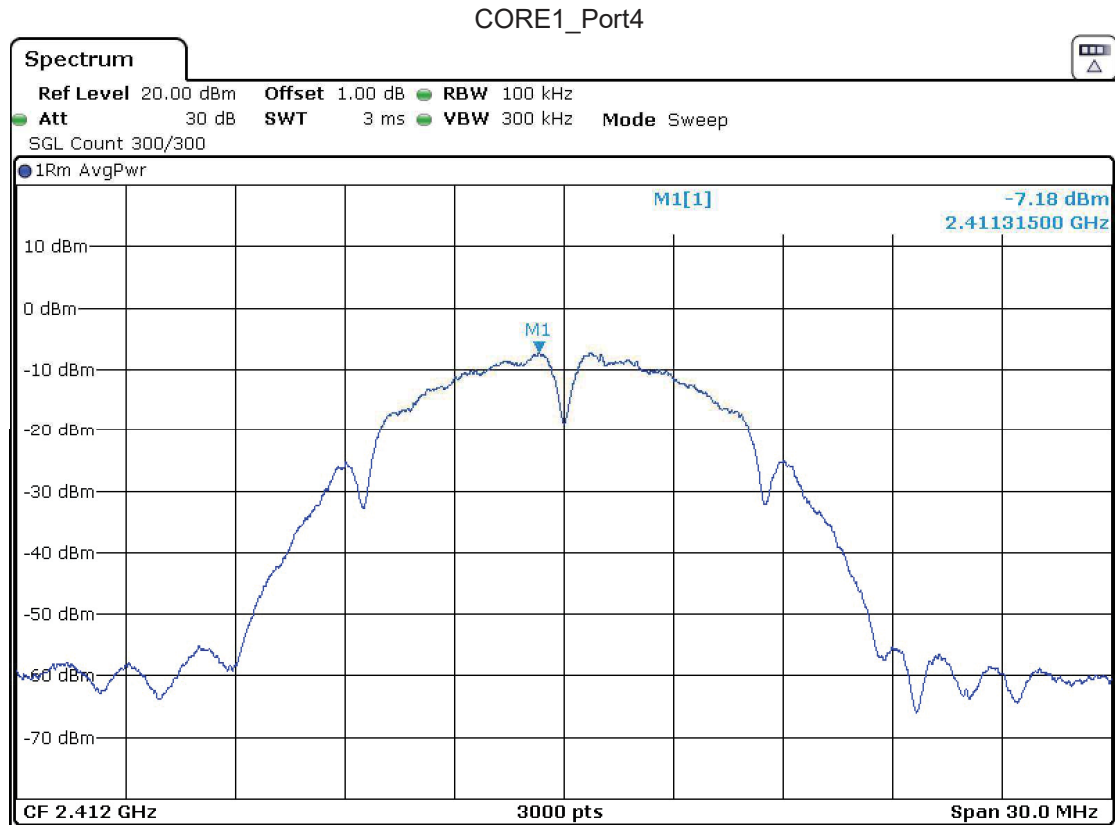
- High Channel:



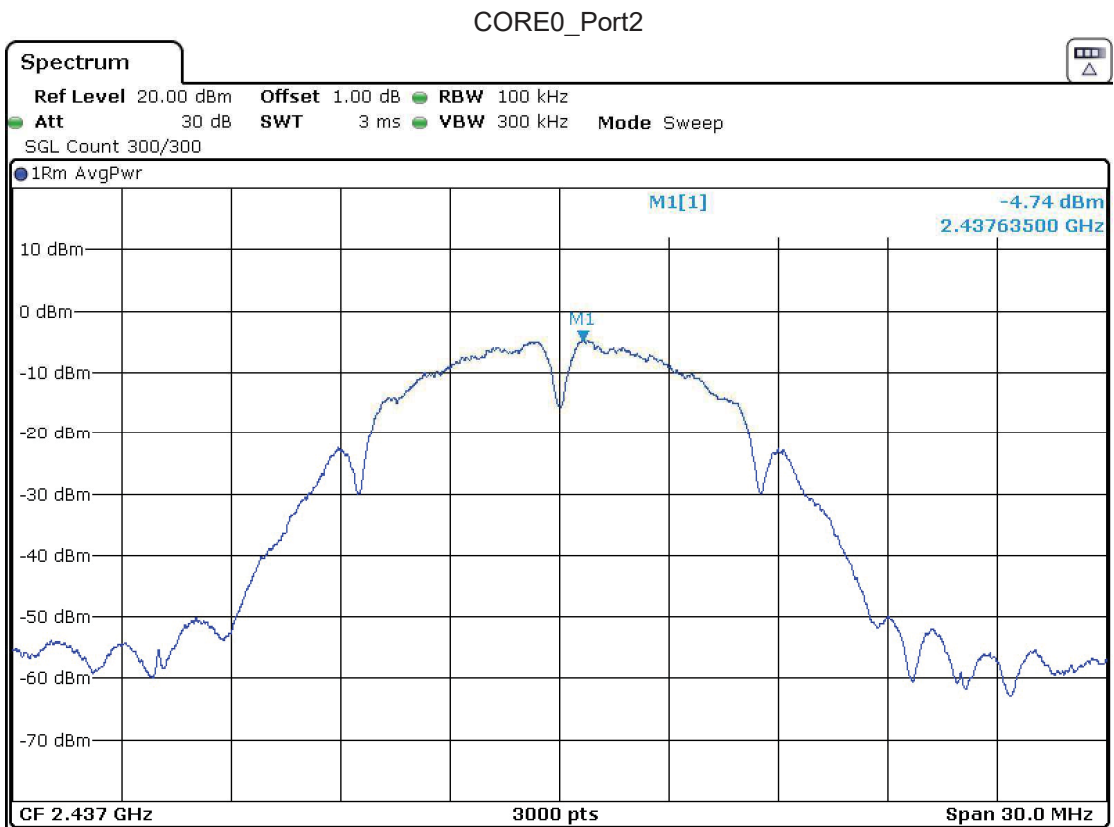
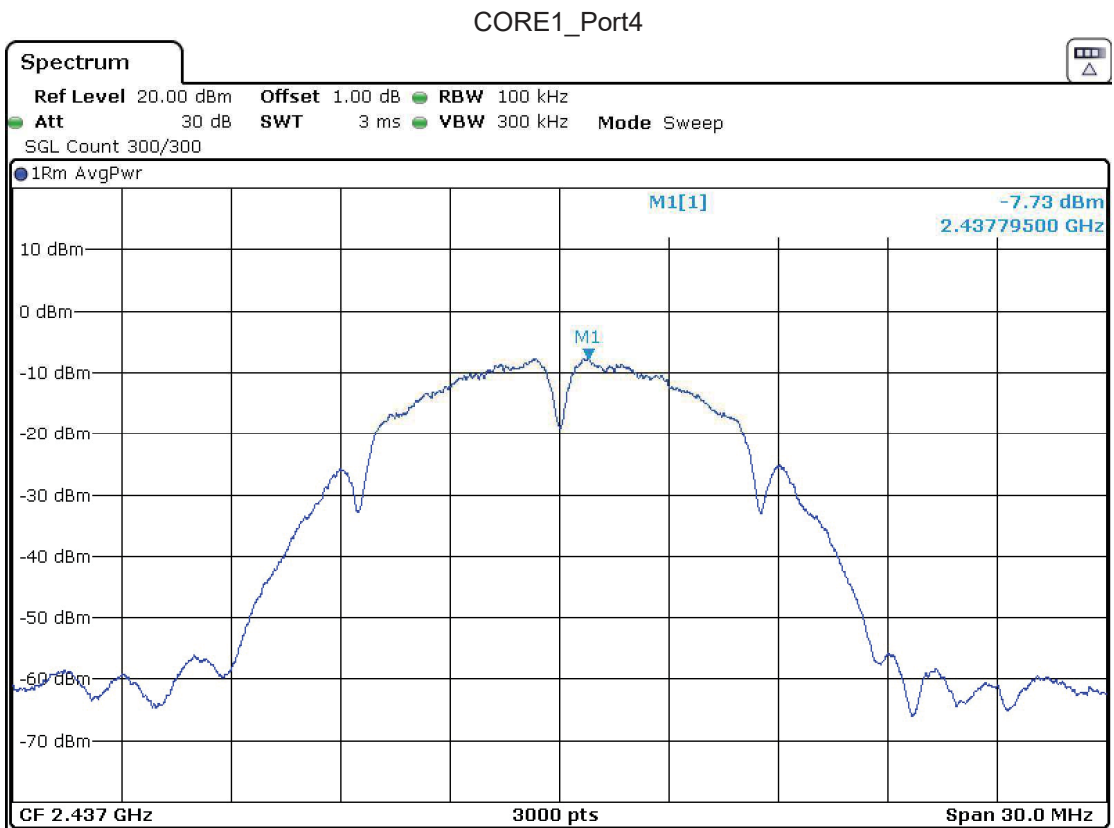
MIMO – CORE1_Port4 Antenna & CORE0_Port2 Antenna:

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

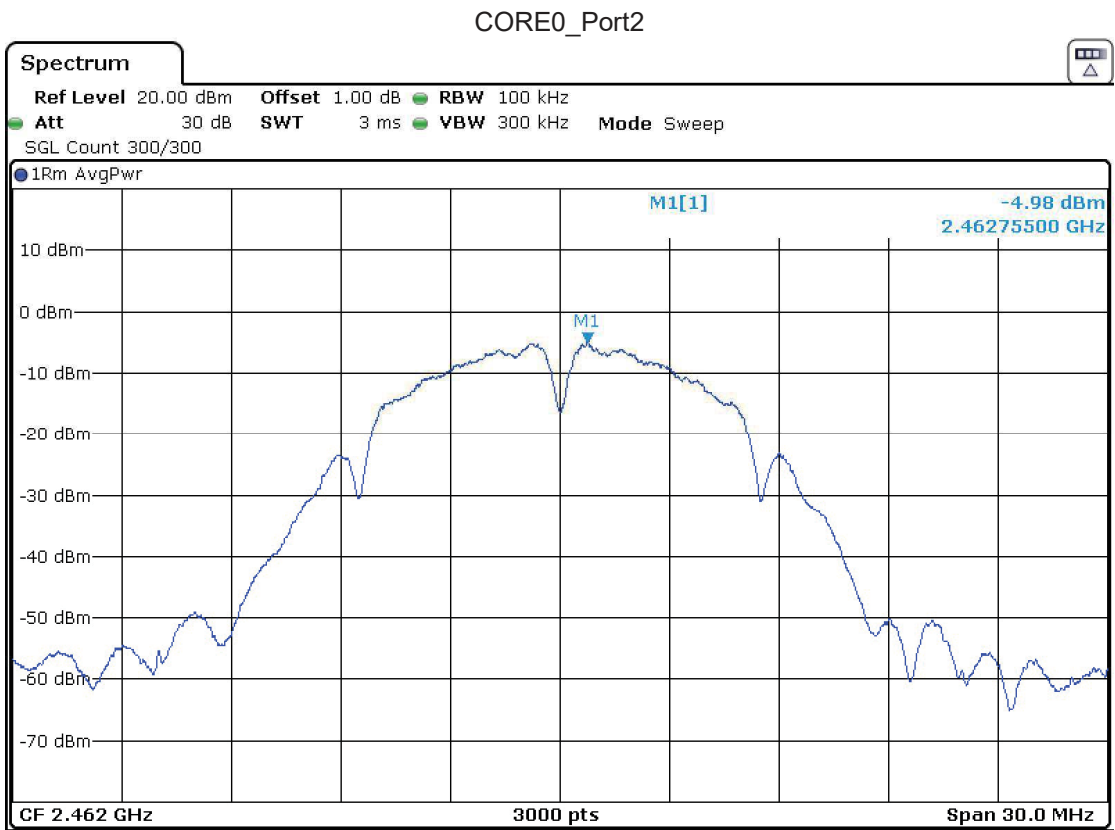
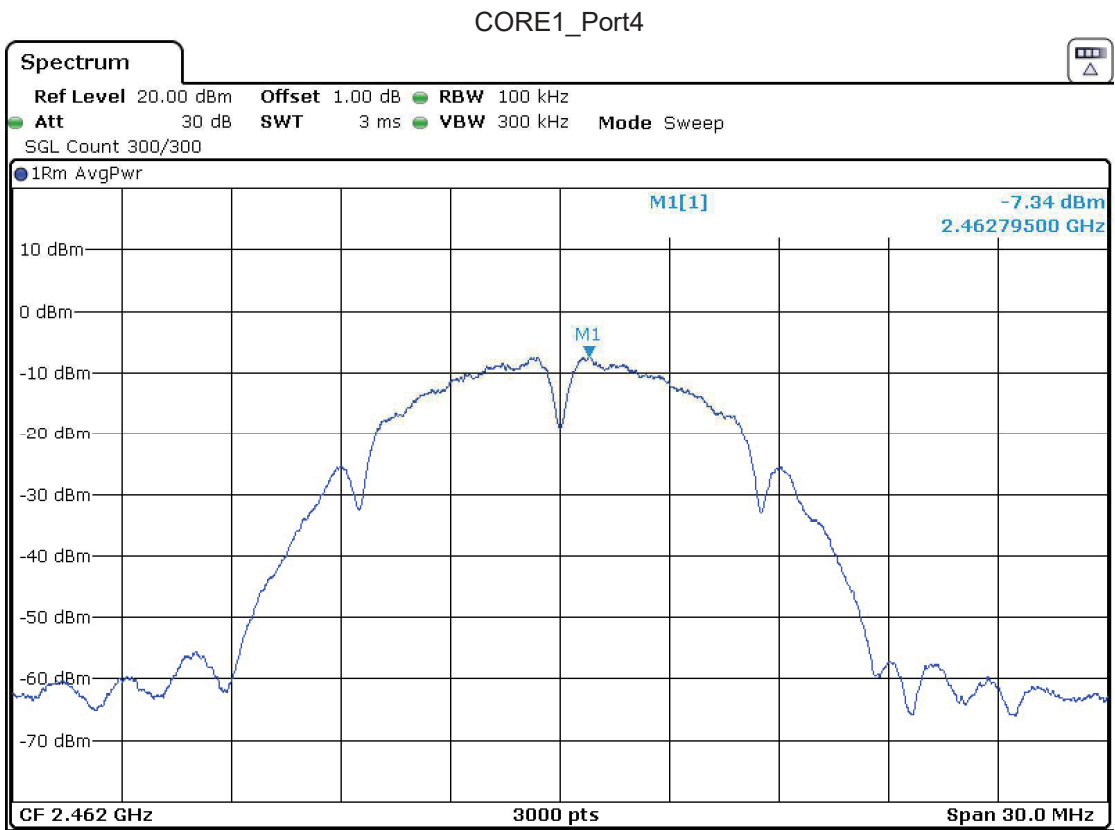
- Low Channel:



- Middle Channel:



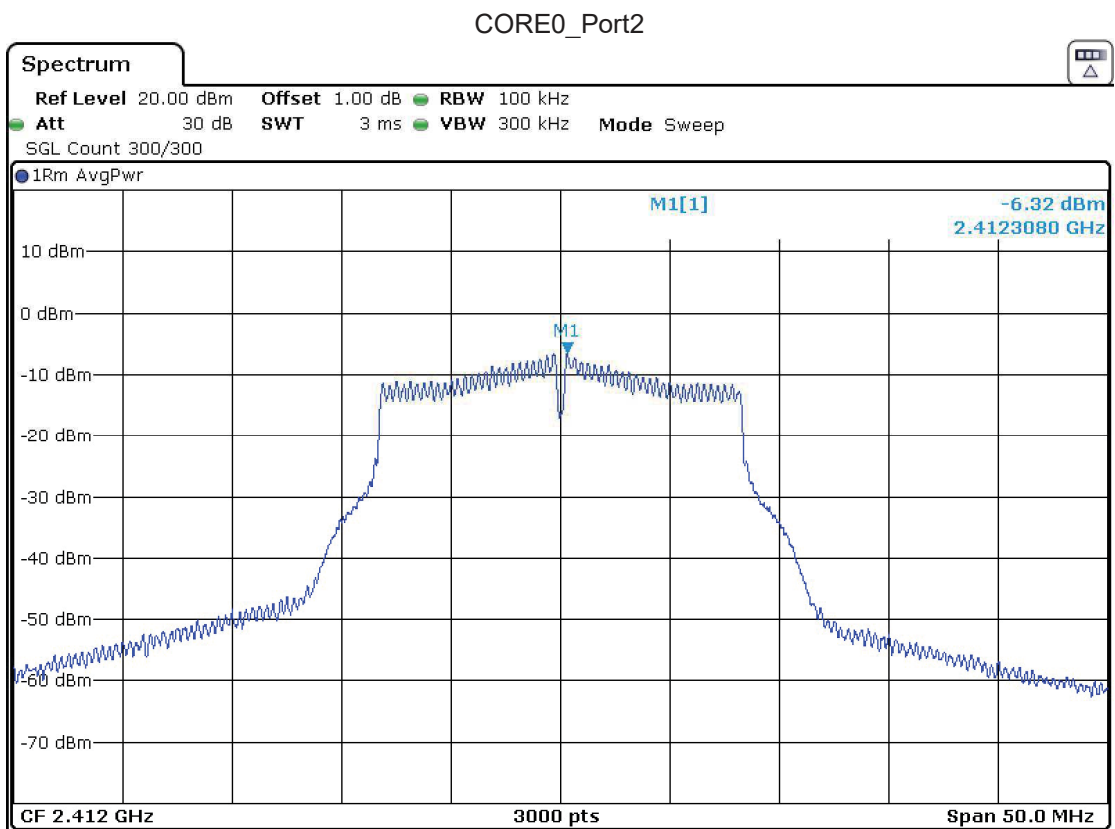
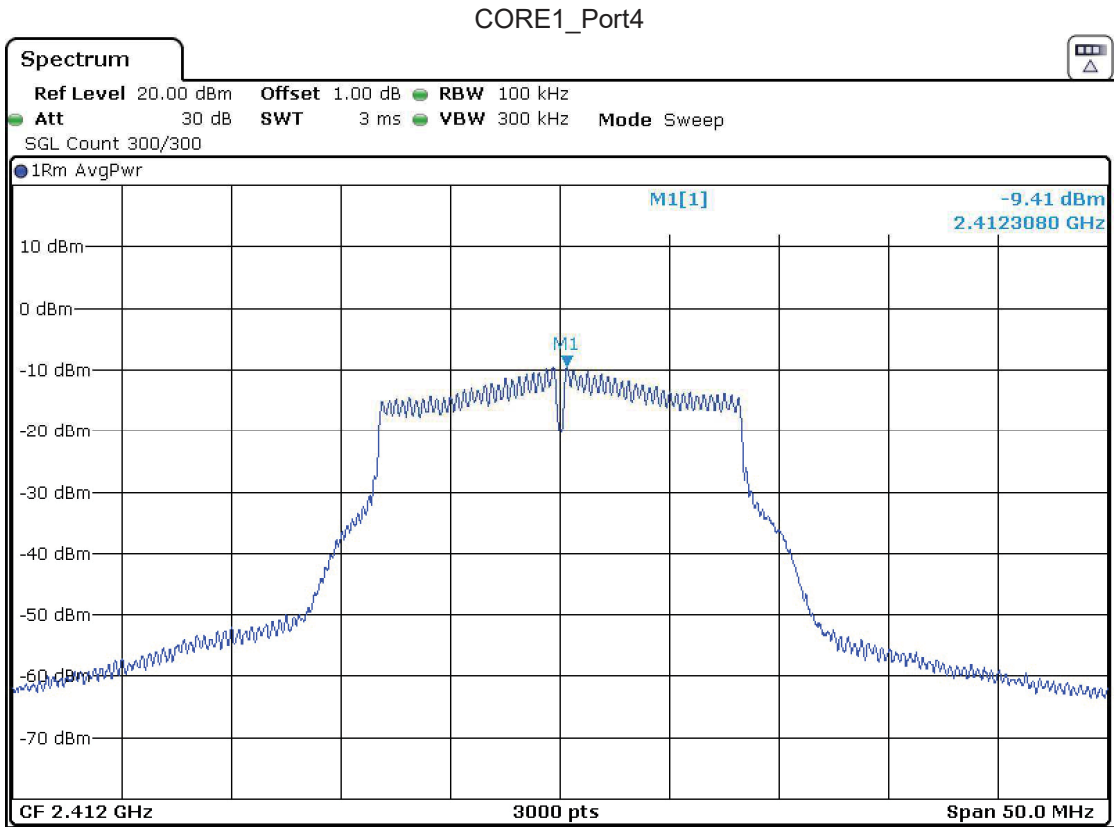
- High Channel:



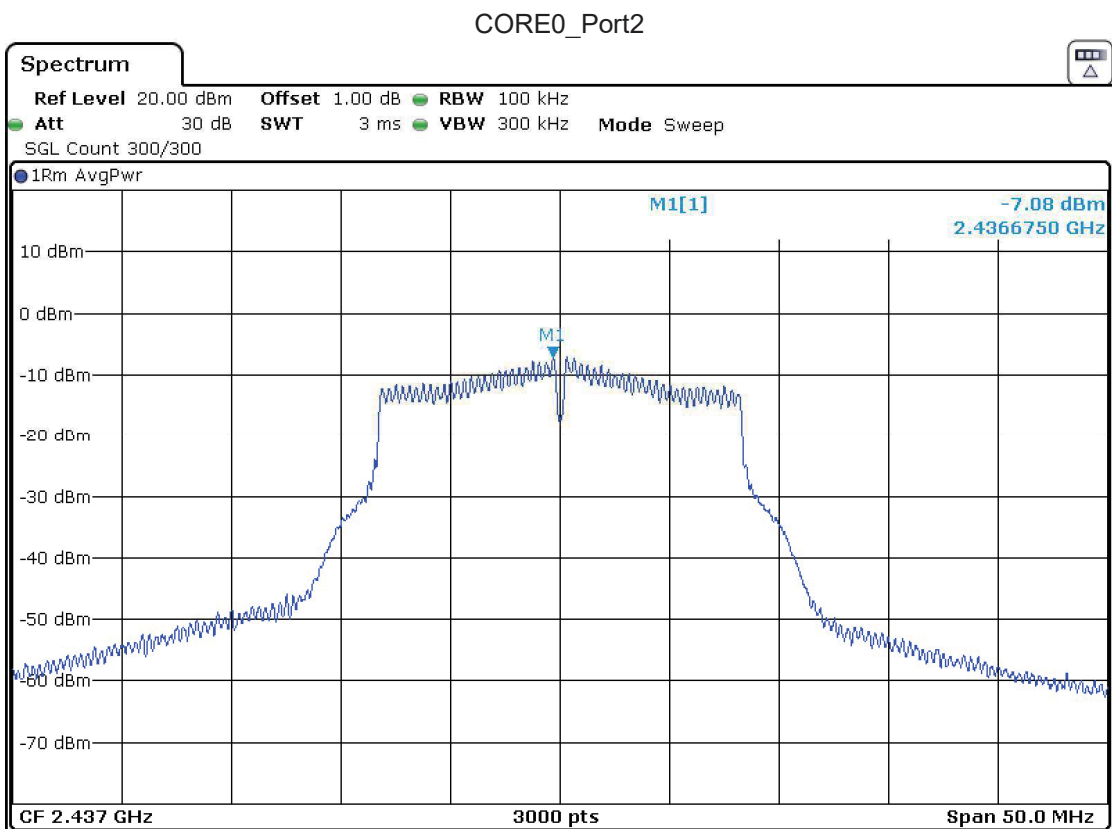
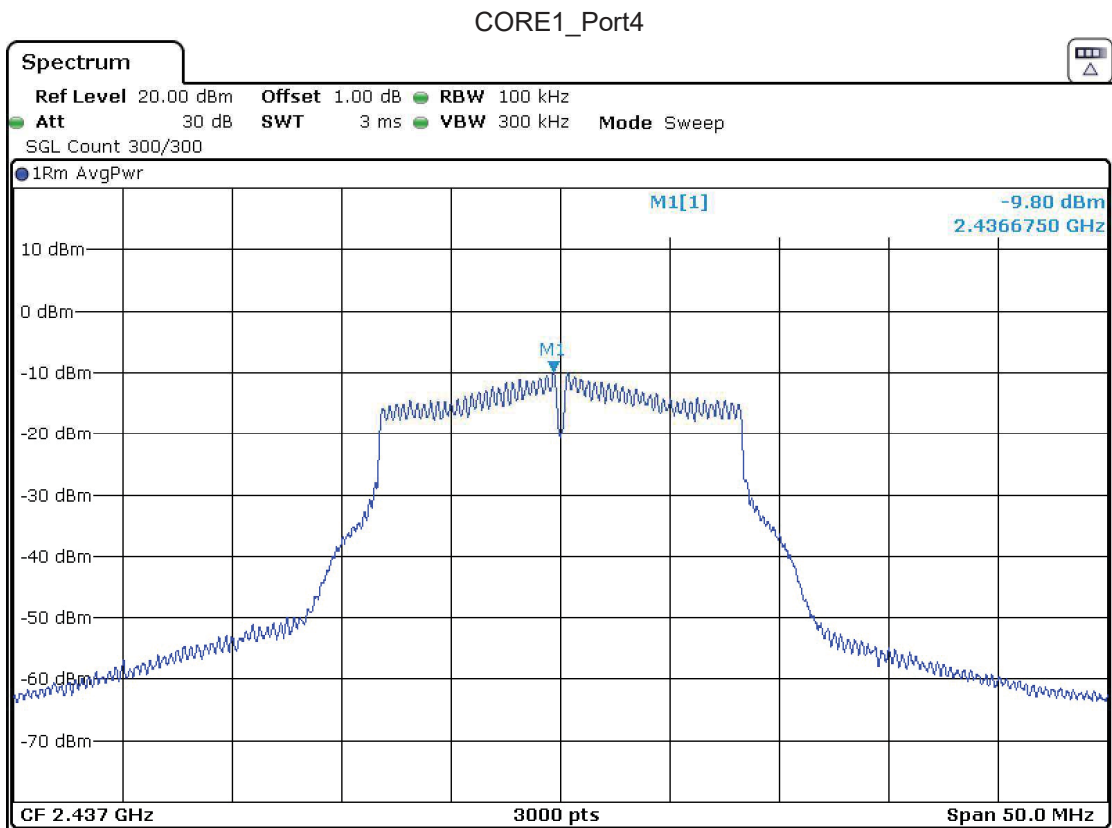
MIMO – CORE1_Port4 Antenna & CORE0_Port2 Antenna:

- Mode 802.11 g – Power Spectral Density

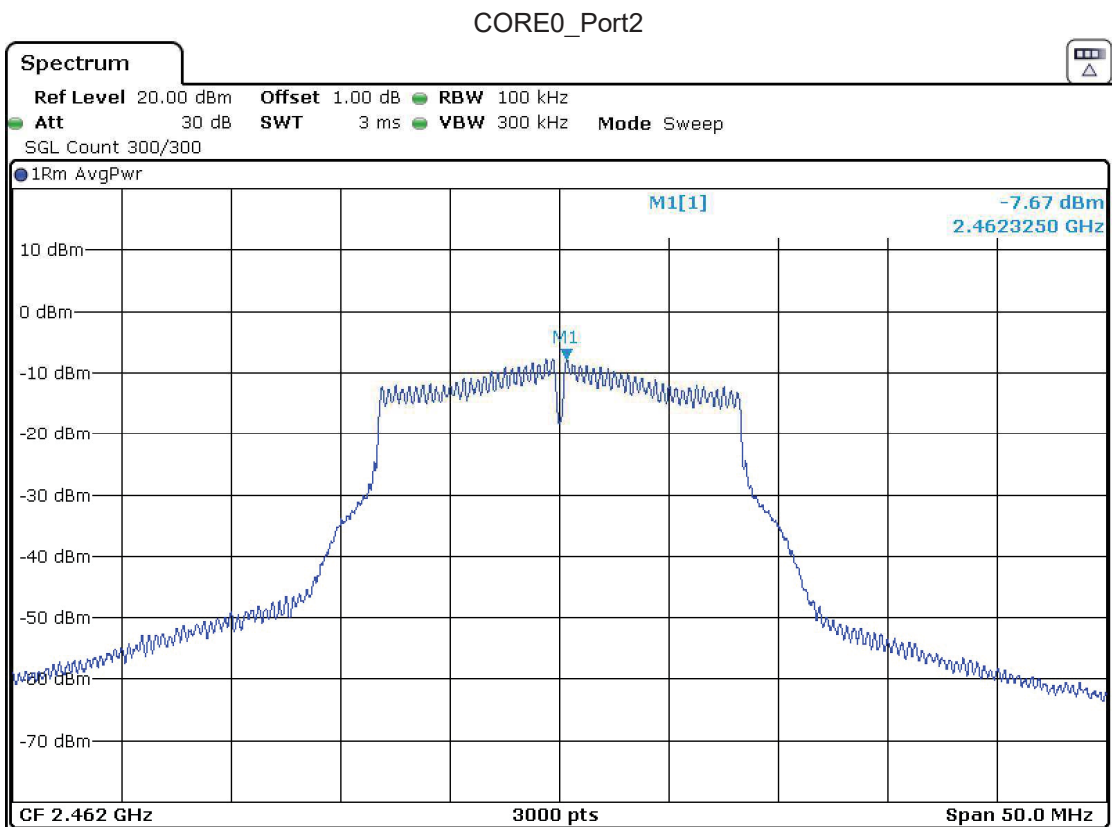
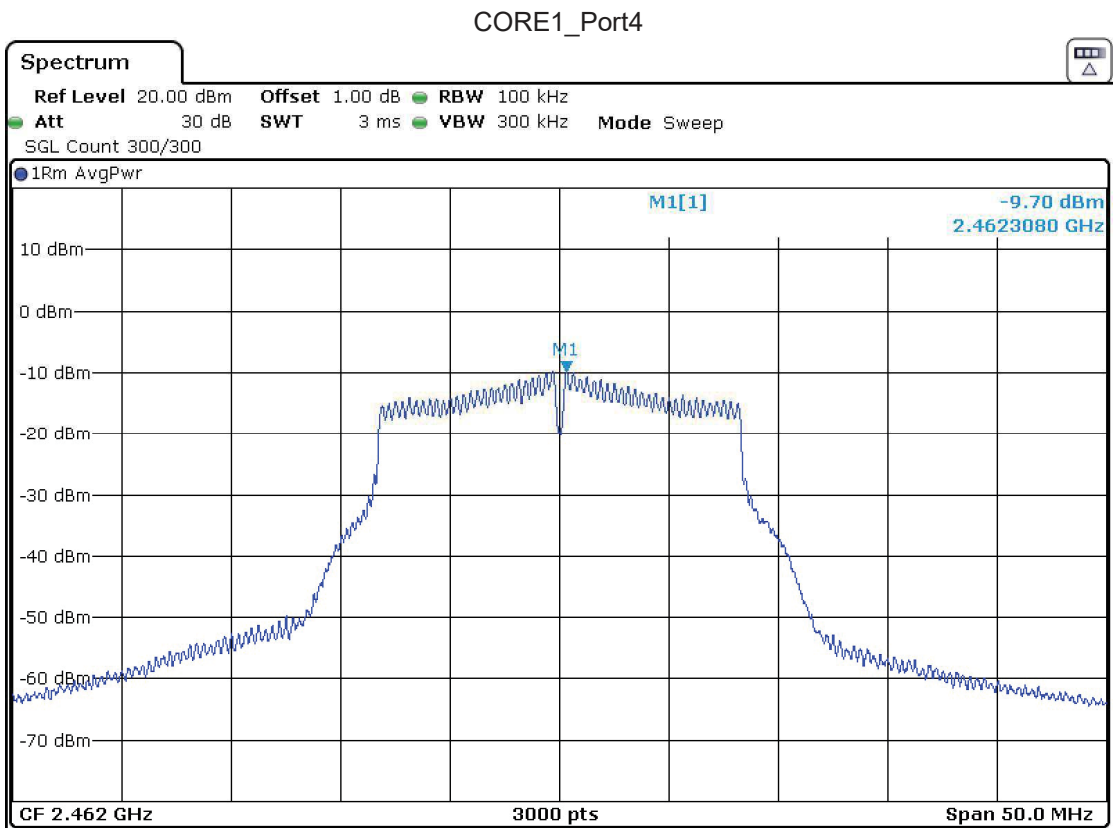
- Low Channel:



- Middle Channel:



- High Channel:



MIMO – CORE1_Port4 Antenna & CORE0_Port2 Antenna:

- **Mode 802.11 n20 – Power Spectral Density**

- Low Channel:

