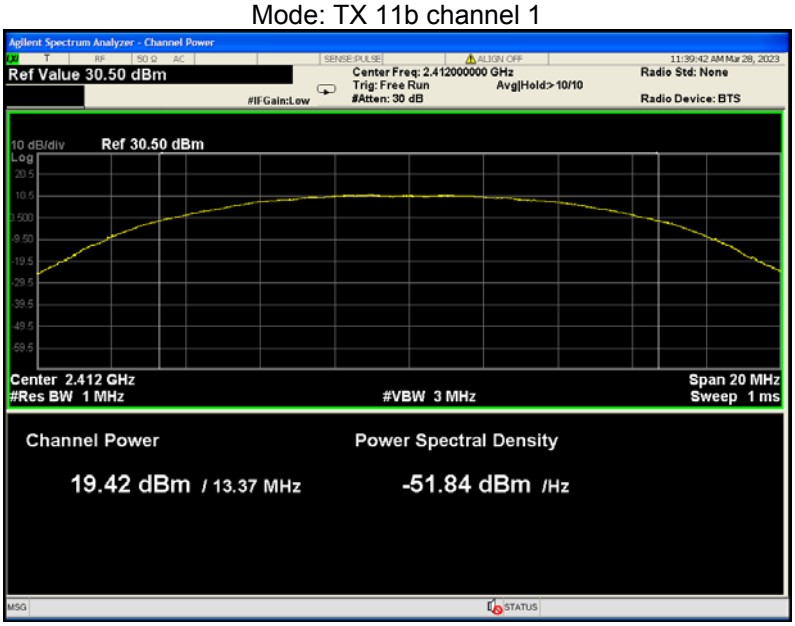
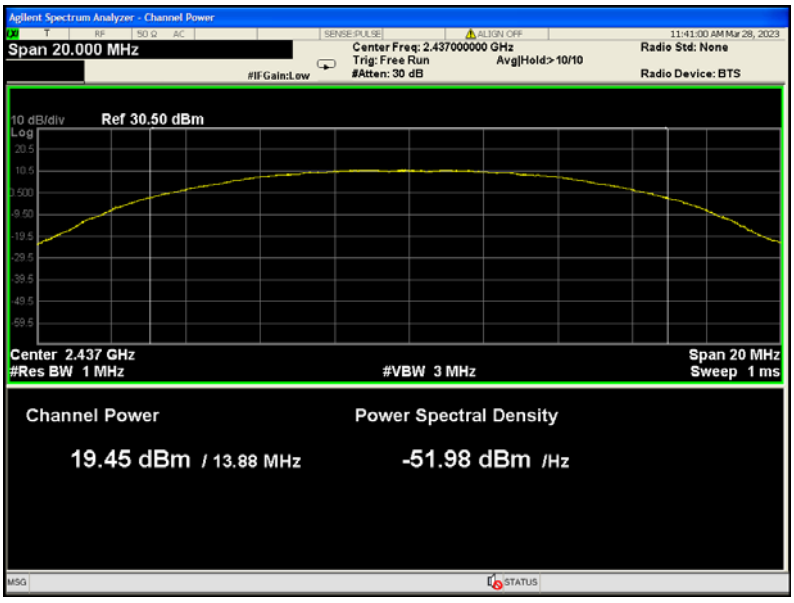
Test Plot

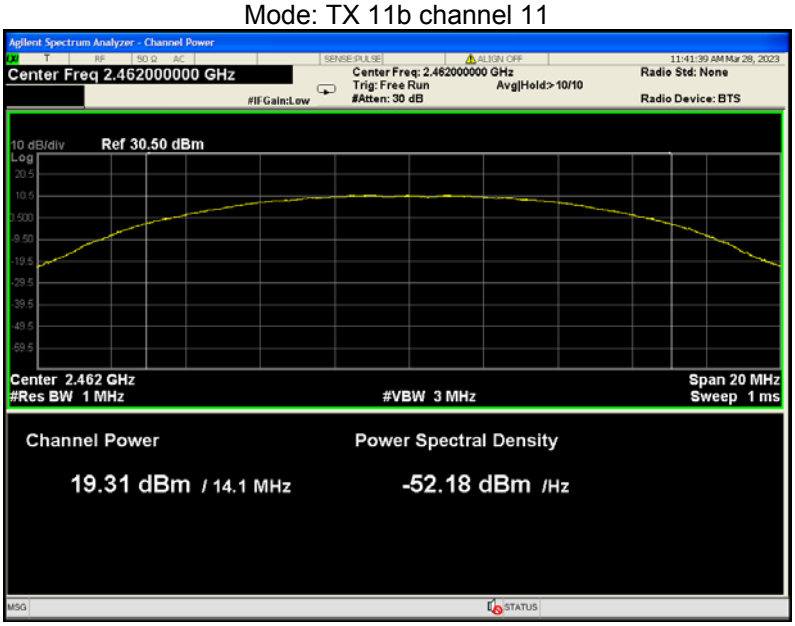
Mode: TX 11b channel 1



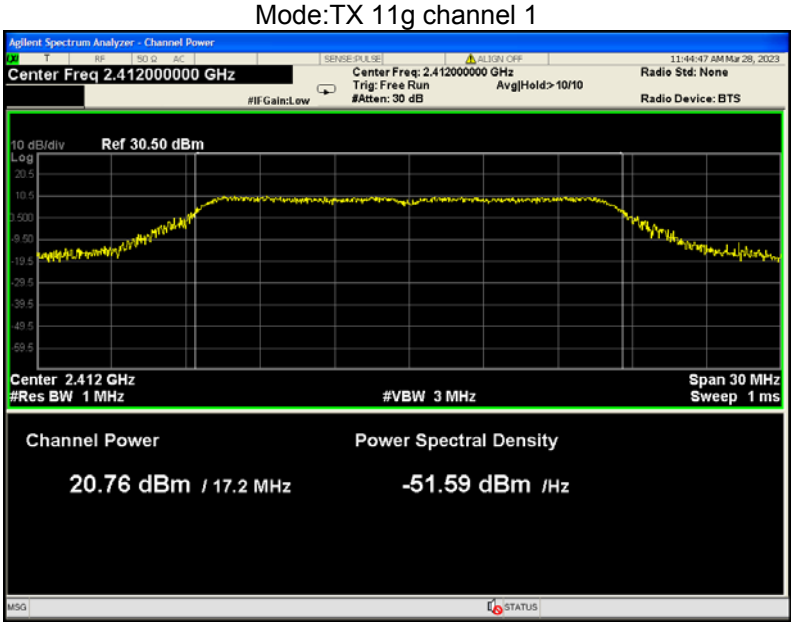
Mode: TX 11b channel 6



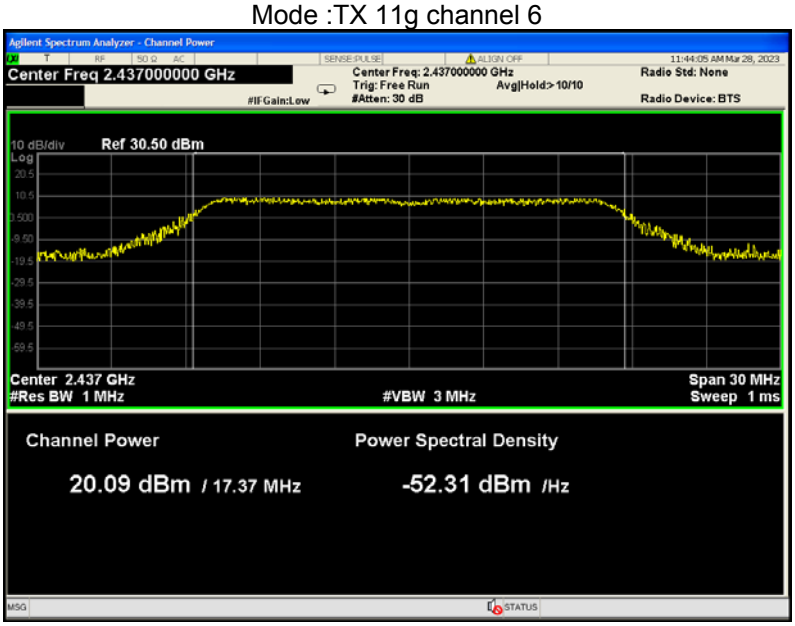
Mode: TX 11b channel 11



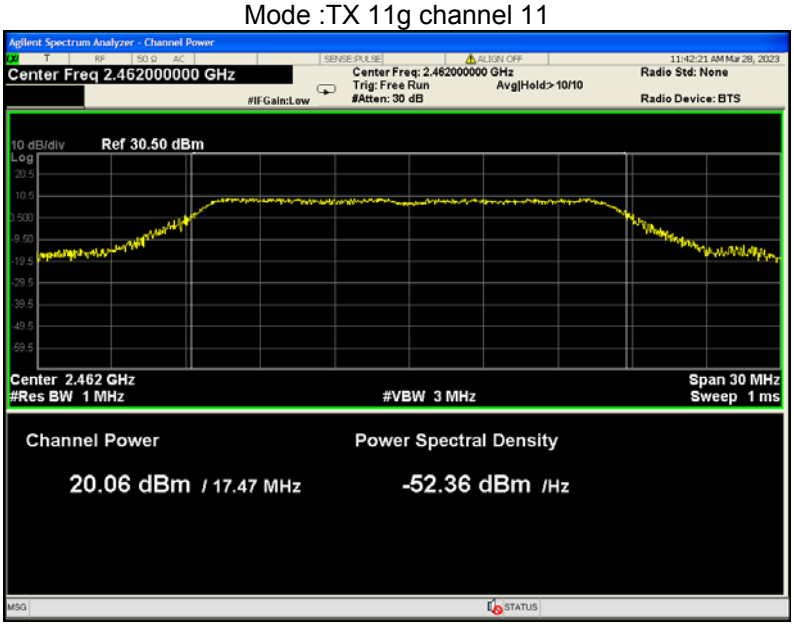
Mode:TX 11g channel 1



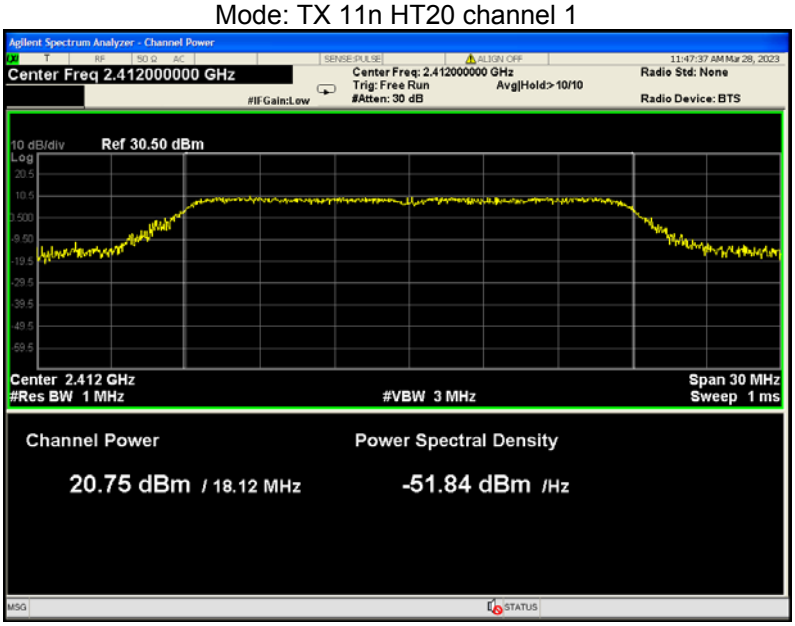
Mode :TX 11g channel 6



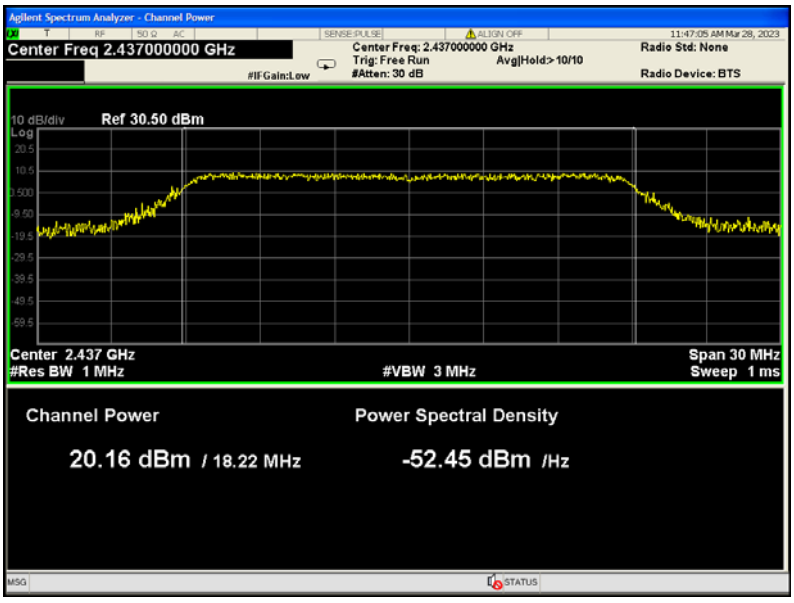
Mode :TX 11g channel 11



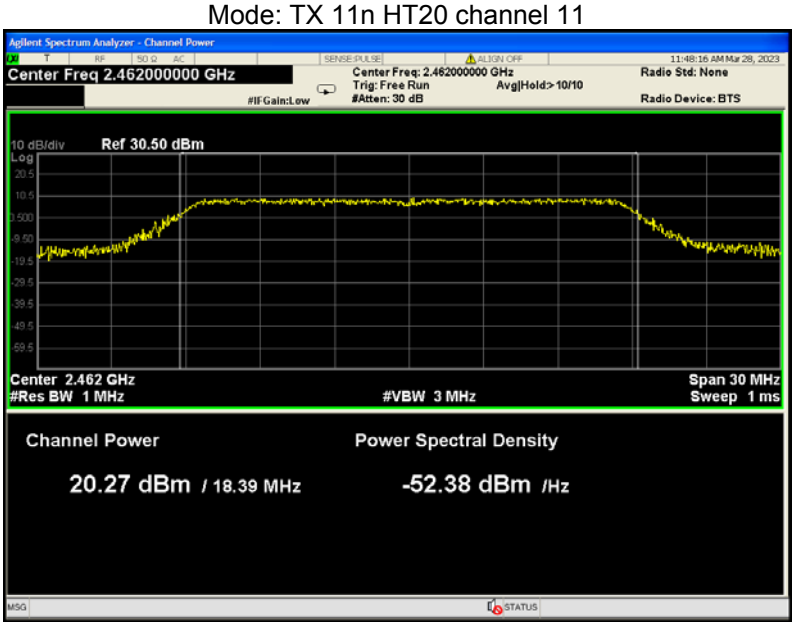
Mode: TX 11n HT20 channel 1



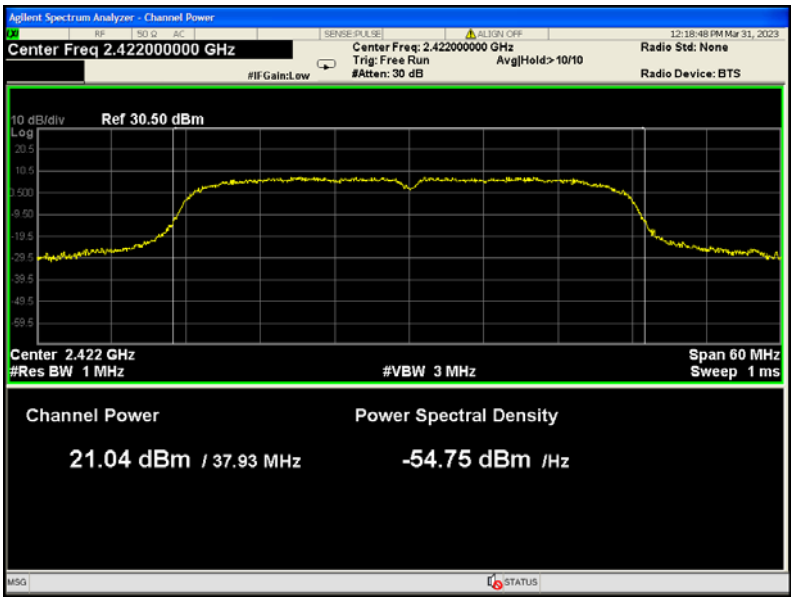
Mode: TX 11n HT20 channel 6



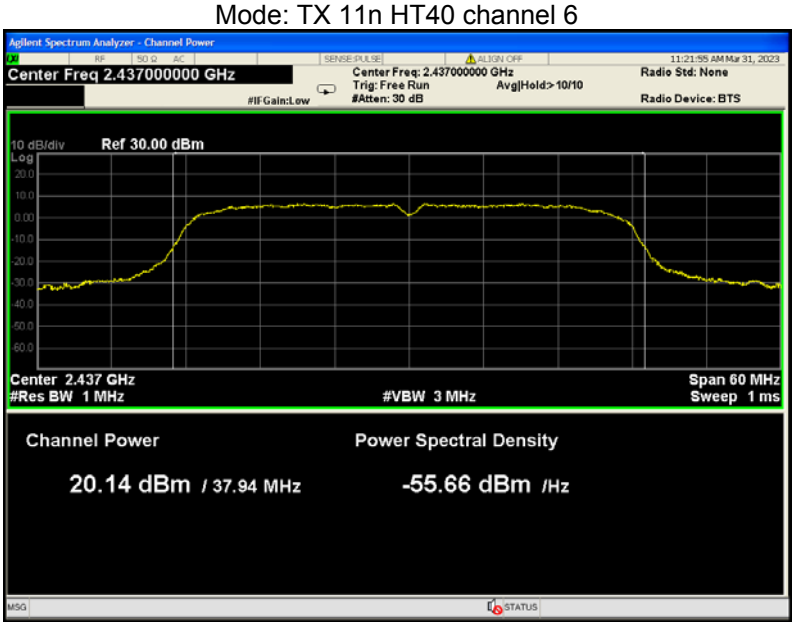
Mode: TX 11n HT20 channel 11



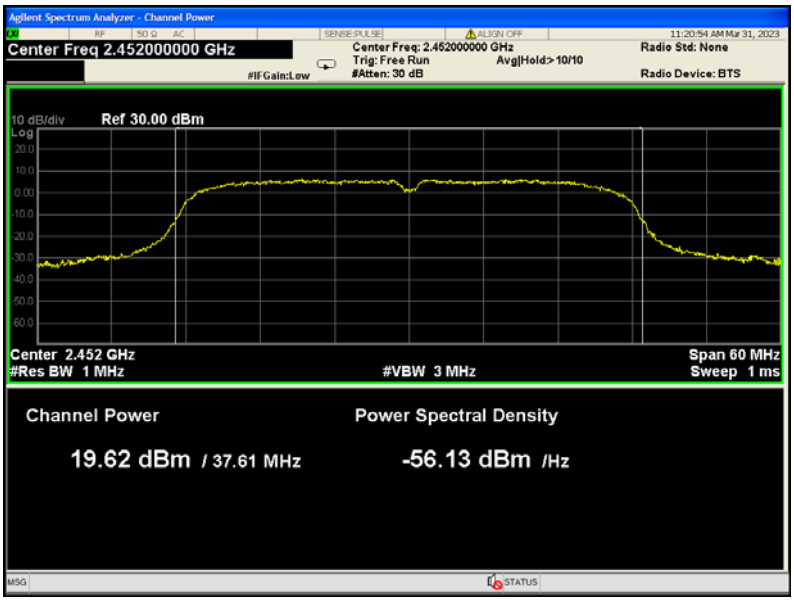
Mode: TX 11n HT40 channel 3



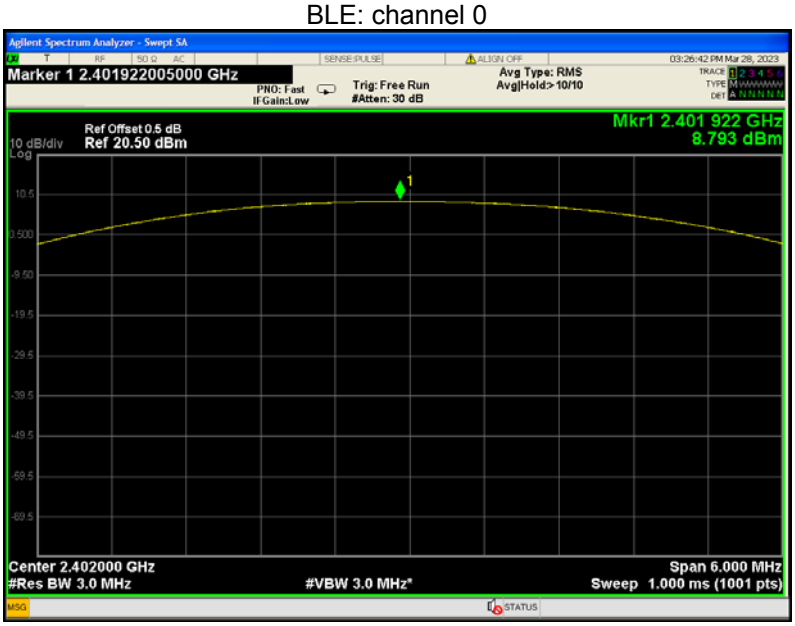
Mode: TX 11n HT40 channel 6



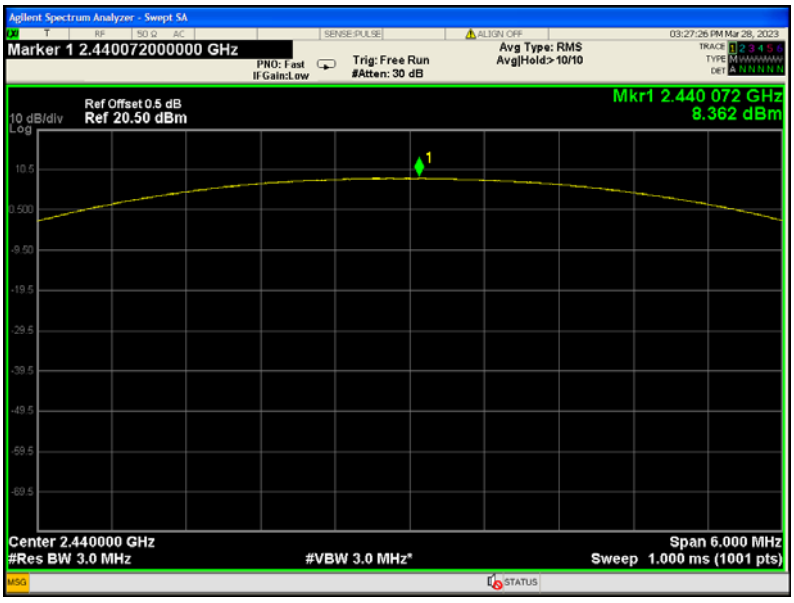
Mode: TX 11n HT40 channel 9



BLE: channel 0



BLE: channel 19



BLE: channel 39

13 Power Spectral density

Test Requirement: FCC 47CFR Part 15 Section 15.247

Test Method: KDB 558074 D01 15.247 Meas Guidance v05r02 April 2, 2019;
ANSI C63.10:2013

13.1 Test Procedure:

KDB 558074 D01 15.247 Meas Guidance v05r02 April 2, 2019 section 10.2

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.

2. Set the spectrum analyzer: RBW = 3kHz. VBW = 10kHz , Span = 1.5 times the DTS channel bandwidth(6 dB bandwidth). Sweep = auto; Detector Function = Peak. Trace = Max hold.

3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

13.2 Test Result:

2.4G Wi-Fi:

Operation mode	Channel Frequency (MHz)	Measurements (dBm per 3kHz)	Duty Cycle Factor (dB)	Power Spectral density (dBm per 3kHz)	Limit
TX 11b	Low-2412	-15.284	0	-15.284	8dBm per 3kHz
	Middle-2437	-15.992		-15.992	8dBm per 3kHz
	High-2462	-15.760		-15.760	8dBm per 3kHz
TX 11g	Low-2412	-21.079	0	-21.079	8dBm per 3kHz
	Middle-2437	-21.232		-21.232	8dBm per 3kHz
	High-2462	-21.531		-21.531	8dBm per 3kHz
TX 11n HT20	Low-2412	-21.487	0	-21.487	8dBm per 3kHz
	Middle-2437	-21.582		-21.582	8dBm per 3kHz
	High-2462	-21.892		-21.892	8dBm per 3kHz
TX 11n HT40	Low-2422	-26.545	0	-26.545	8dBm per 3kHz
	Middle-2437	-27.229		-27.229	8dBm per 3kHz
	High-2452	-26.914		-26.914	8dBm per 3kHz

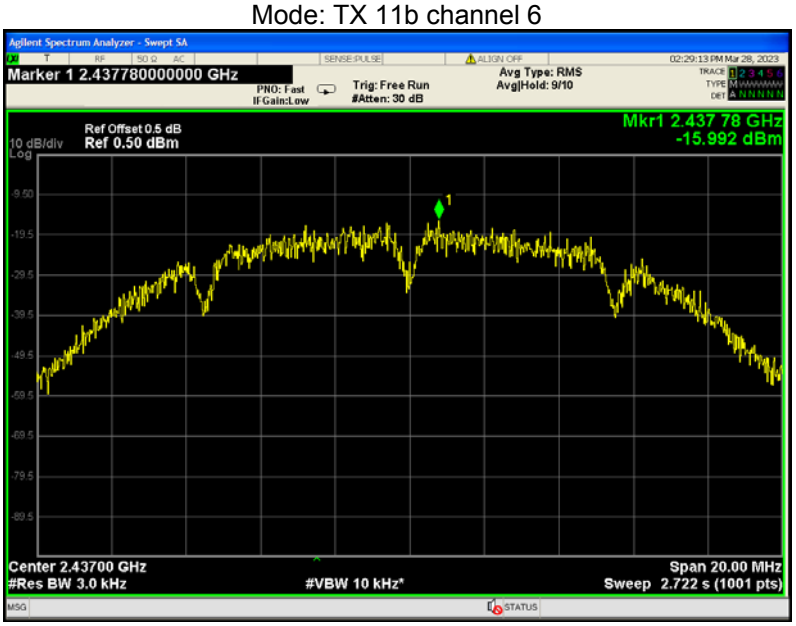
BLE:

Operation mode	Channel Frequency (MHz)	Power Spectral (dBm per 3kHz)	Limit
BLE	Low-2402	-8.732	8dBm per 3kHz
	Middle-2440	-9.686	8dBm per 3kHz
	High-2480	-9.912	8dBm per 3kHz

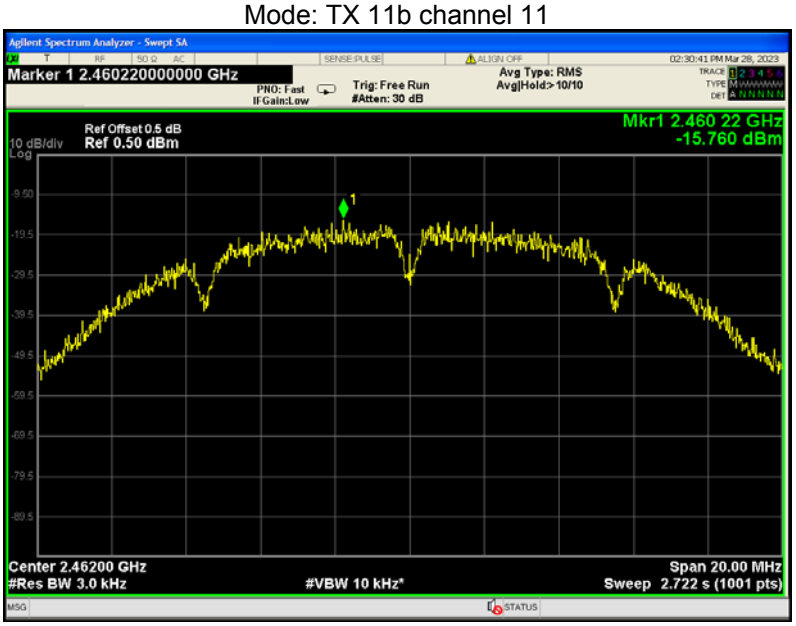
Test Plot

Mode: TX 11b channel 1

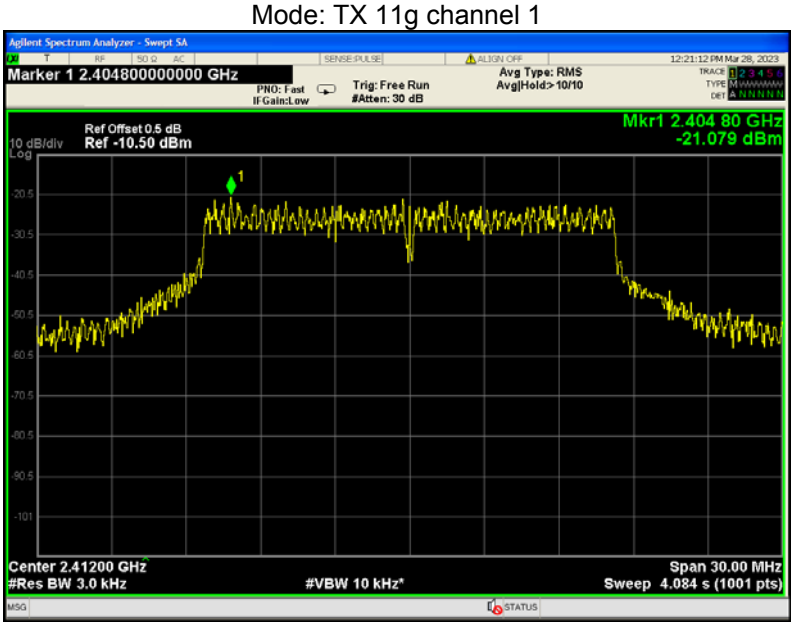
Mode: TX 11b channel 6



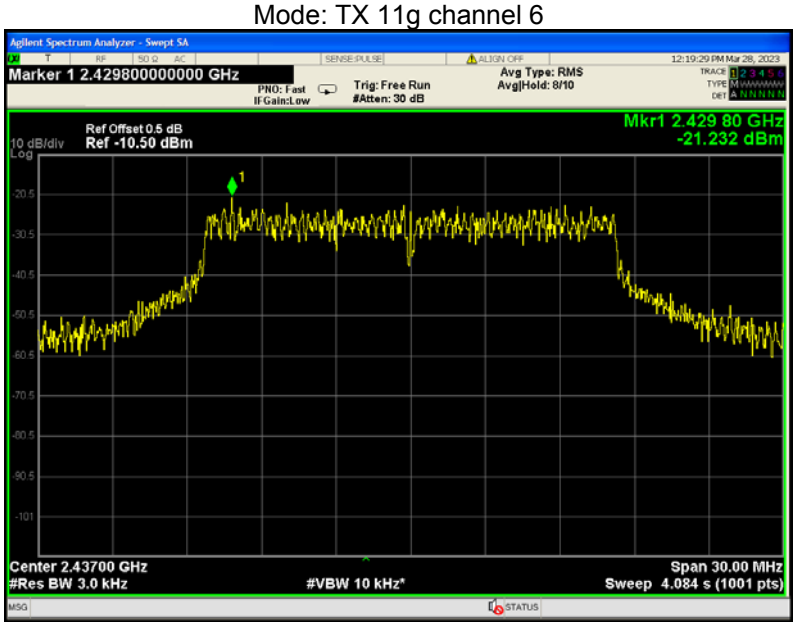
Mode: TX 11b channel 11



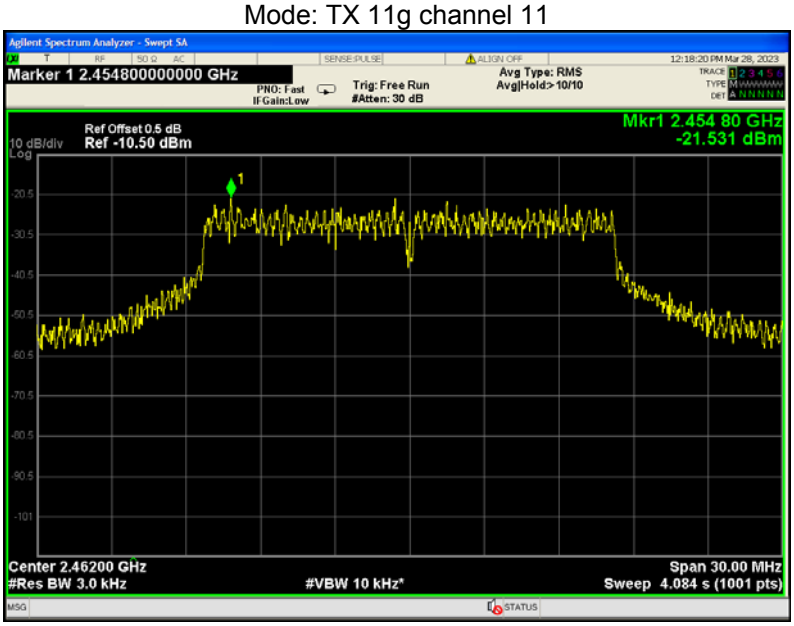
Mode: TX 11g channel 1



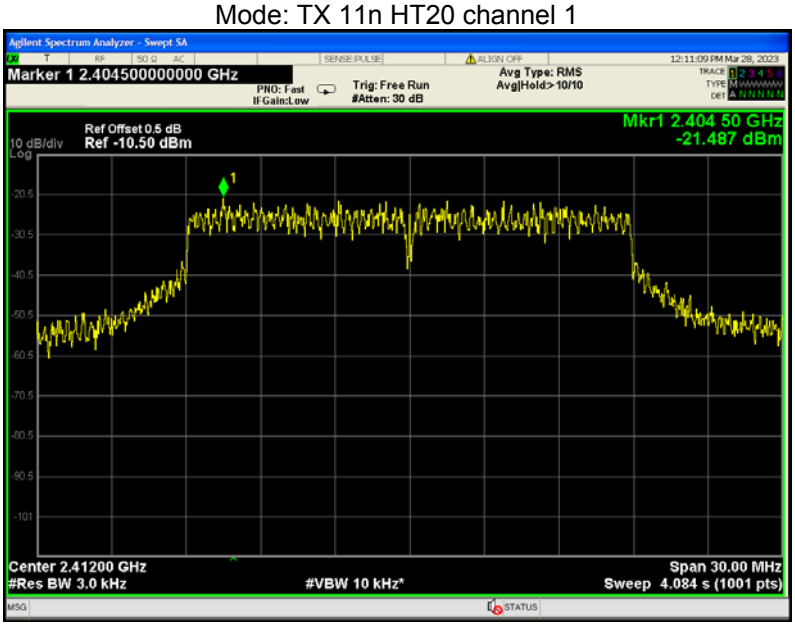
Mode: TX 11g channel 6



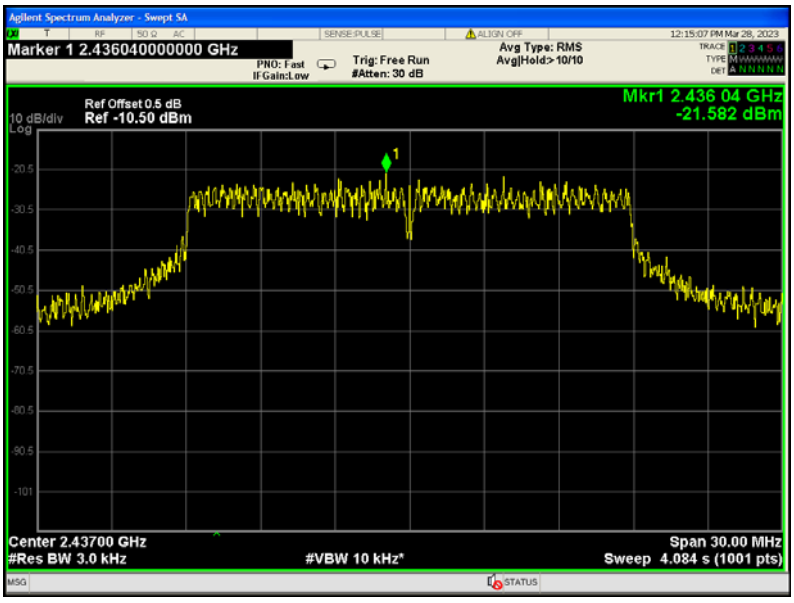
Mode: TX 11g channel 11



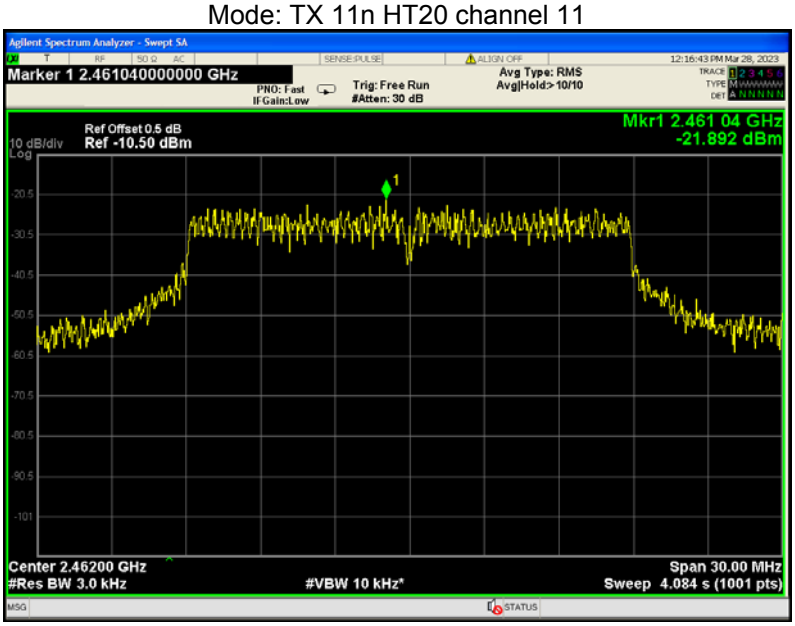
Mode: TX 11n HT20 channel 1



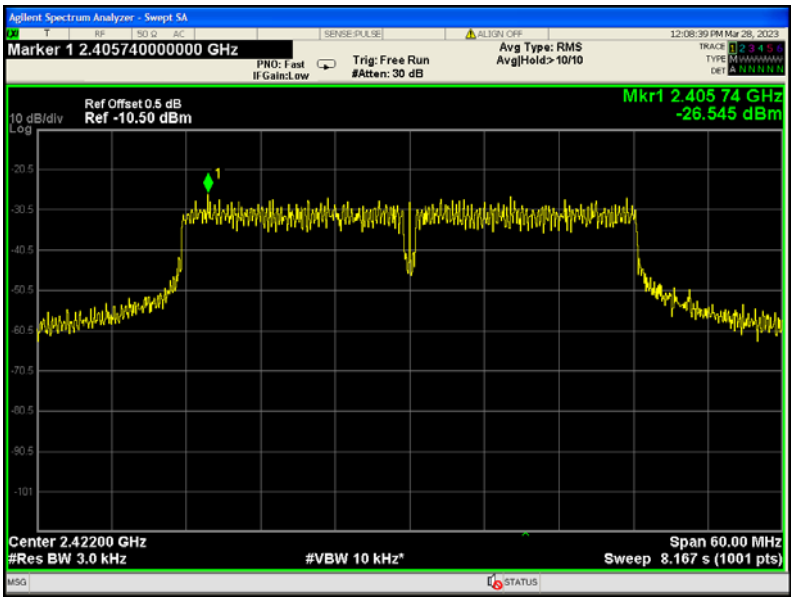
Mode: TX 11n HT20 channel 6



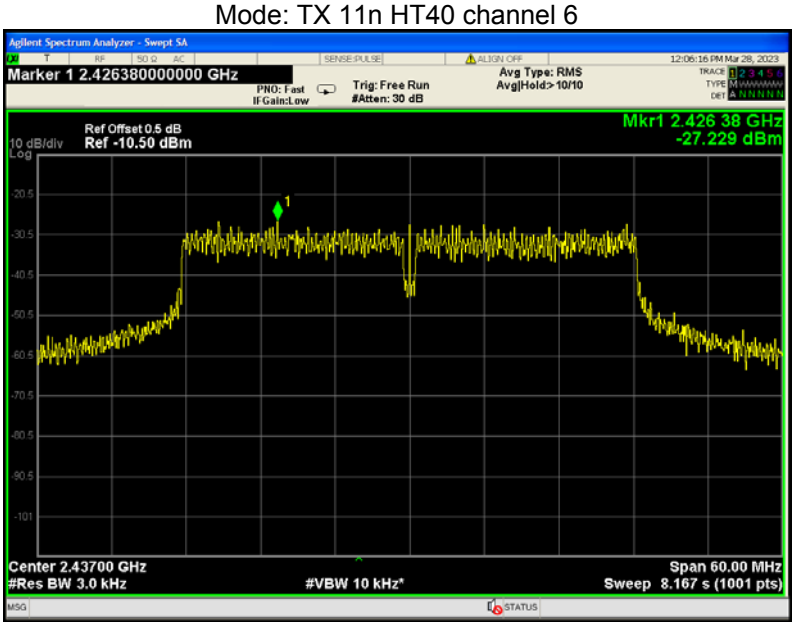
Mode: TX 11n HT20 channel 11



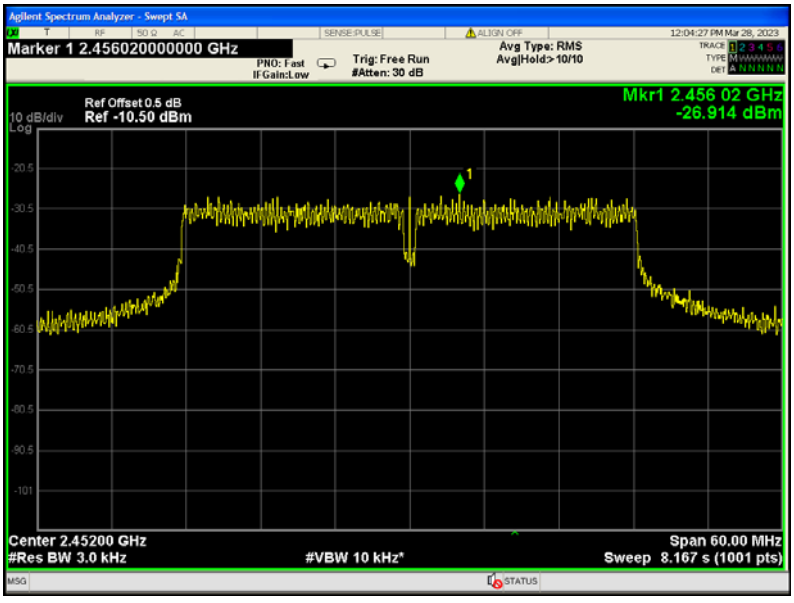
Mode: TX 11n HT40 channel 3



Mode: TX 11n HT40 channel 6

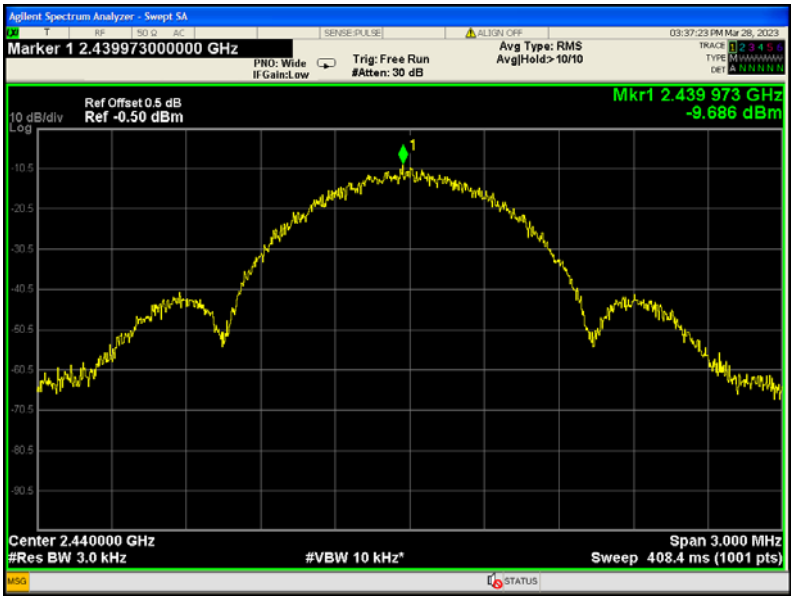


Mode: TX 11n HT40 channel 9



BLE: channel 0

BLE: channel 19



BLE: channel 39

14 Antenna Requirement

According to the FCC Part 15 Paragraph 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. This product has an integrated antenna fulfill the requirement of this section.

15 RF Exposure

Remark: refer to MPE test report: WTD23D03043940W002.

16 Photographs of test setup and EUT.

Note: Please refer to appendix: Appendix_BTS-U1_Photos.

======End of Report======