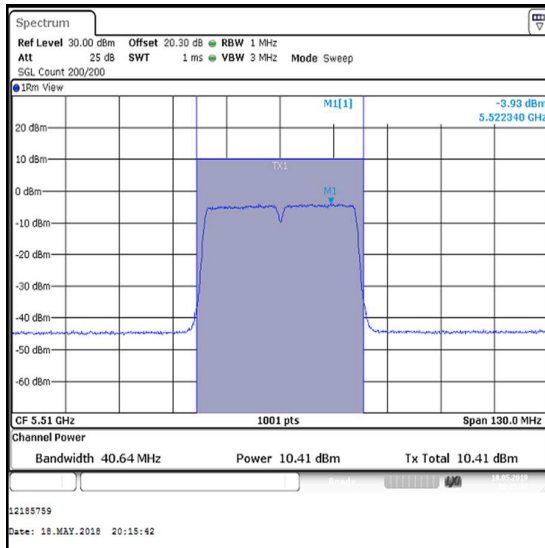
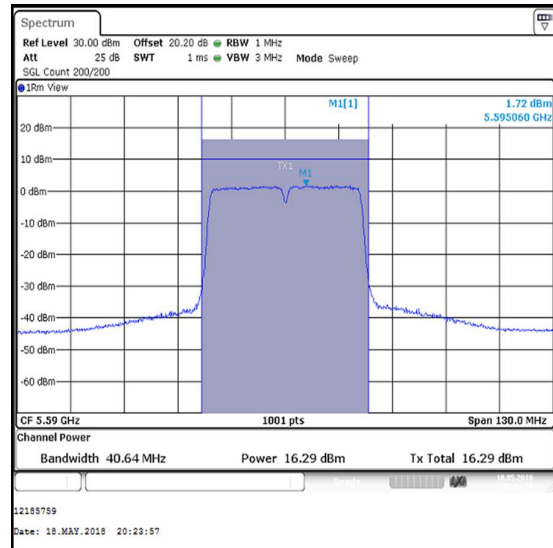
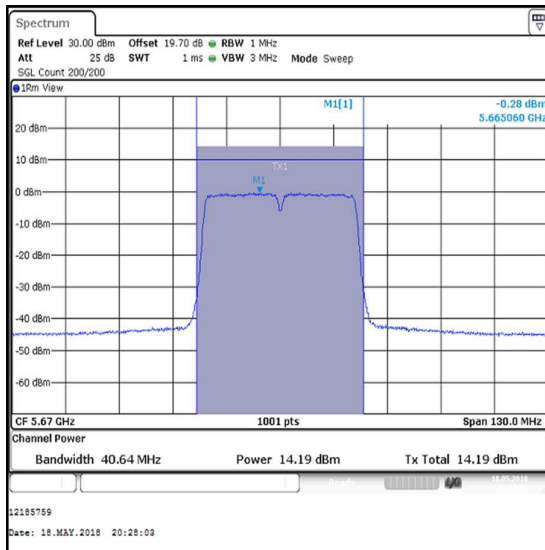
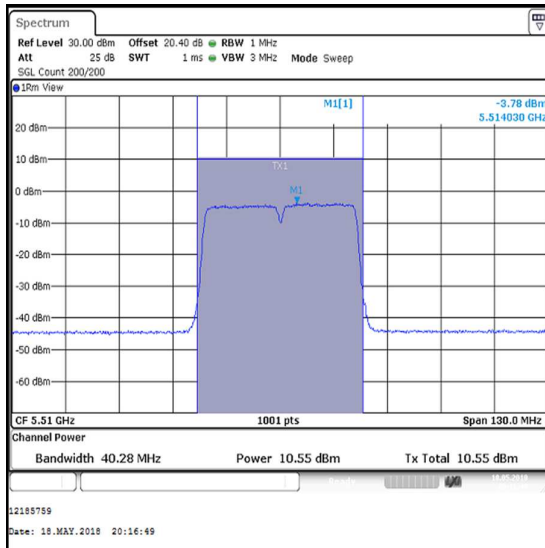
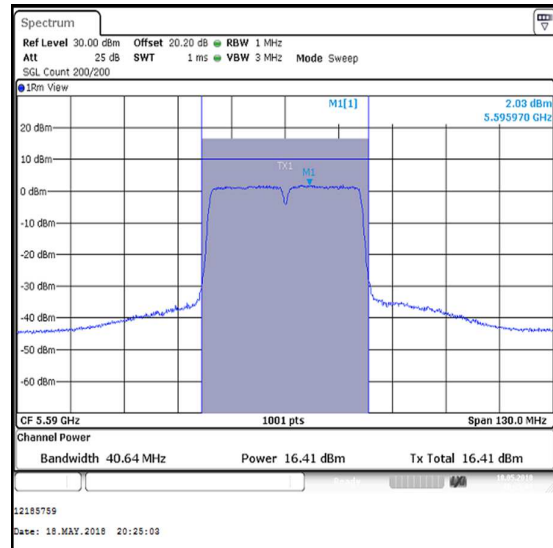
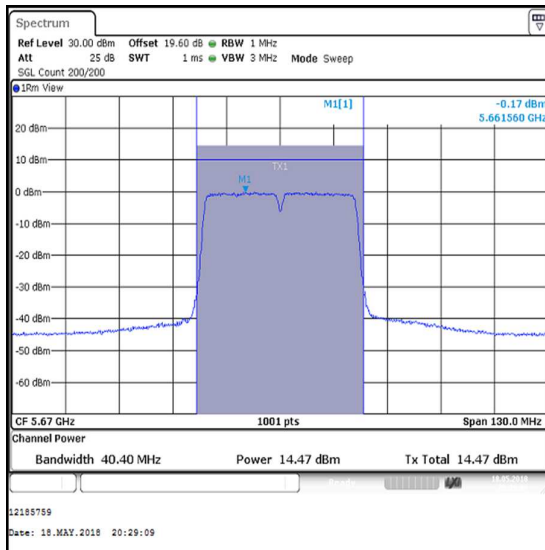


Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx STBC / BPSK / MCS0 / Core 0****Bottom Channel****Middle Channel****Top Channel**

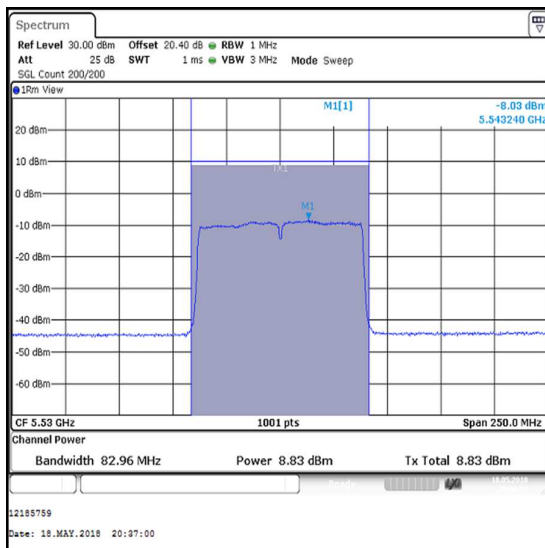
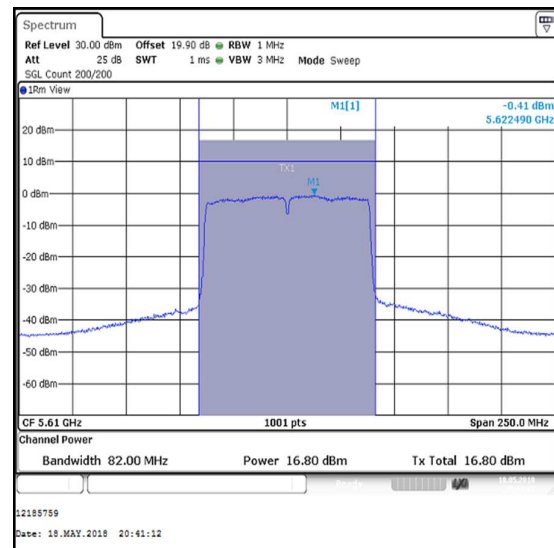
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx STBC / BPSK / MCS0 / Core 2****Bottom Channel****Middle Channel****Top Channel**

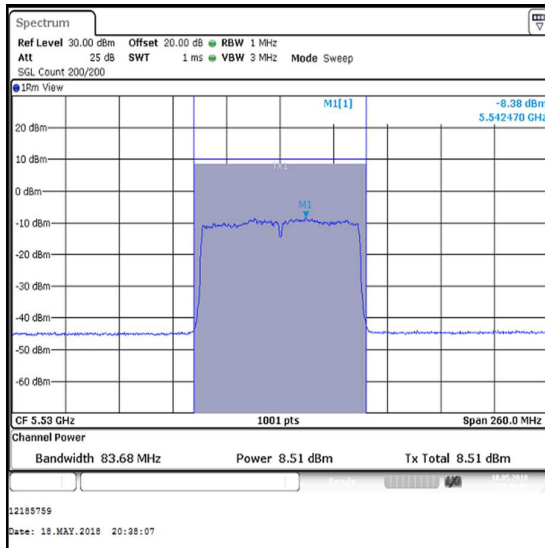
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Bottom	5530	8.8	0.2	9.0	8.5	0.2	8.7
Top	5610	16.8	0.2	17.0	16.9	0.2	17.1

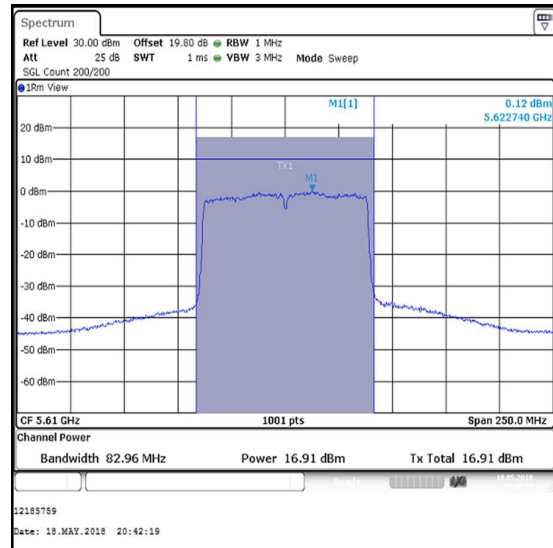
Channel	Frequency (MHz)	Core 2			Core 1, Core 0 & Core 2		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 2 (dBm)
Bottom	5530	8.2	0.2	8.4	9.0	8.7	8.4
Top	5610	16.7	0.2	16.9	17.0	17.1	16.9

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5530	13.5	24.0	10.5	Complied
Top	5610	21.8	24.0	2.2	Complied

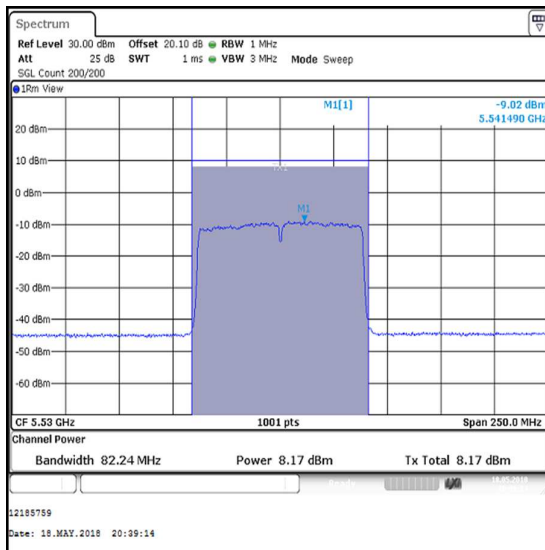
Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0 / Core 1**Bottom Channel****Top Channel**

Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0 / Core 0**

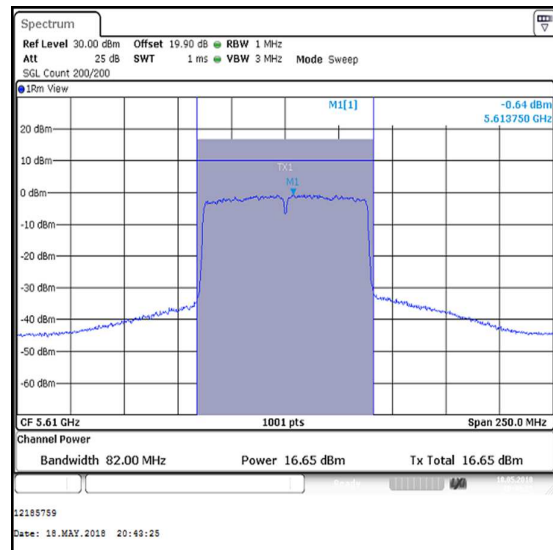
Bottom Channel



Top Channel

Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0 / Core 2

Bottom Channel

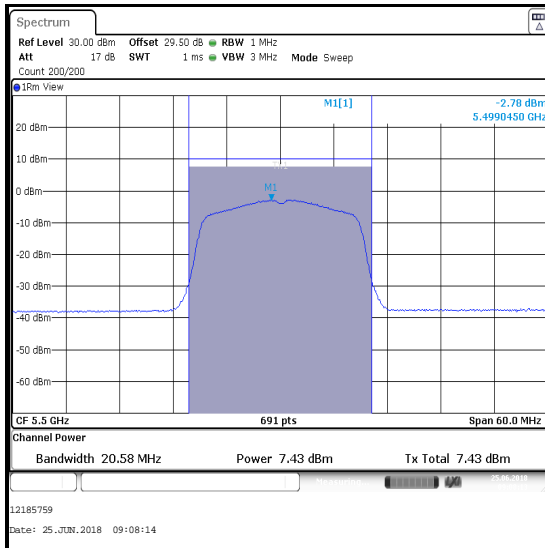
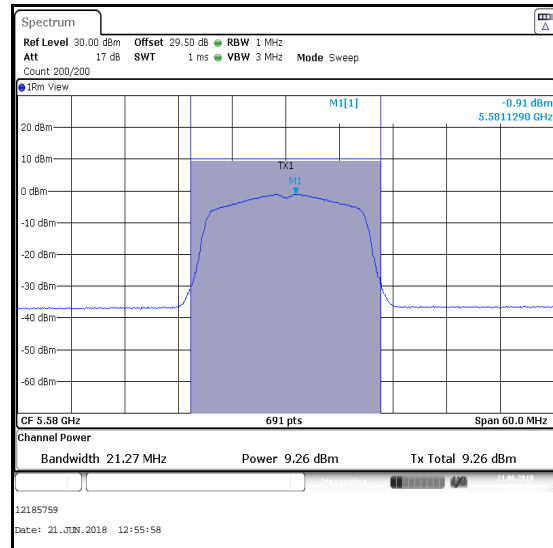
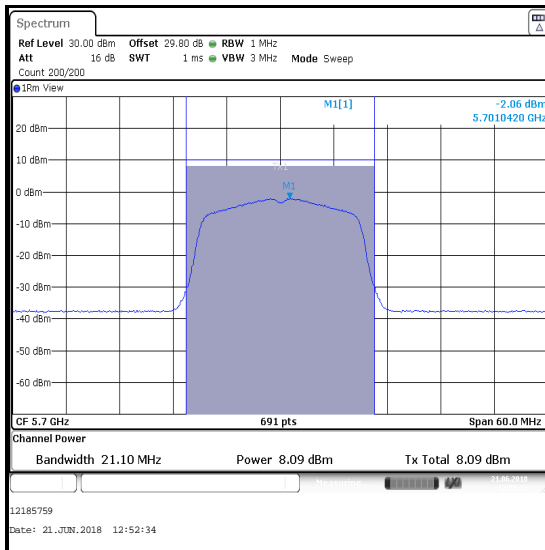


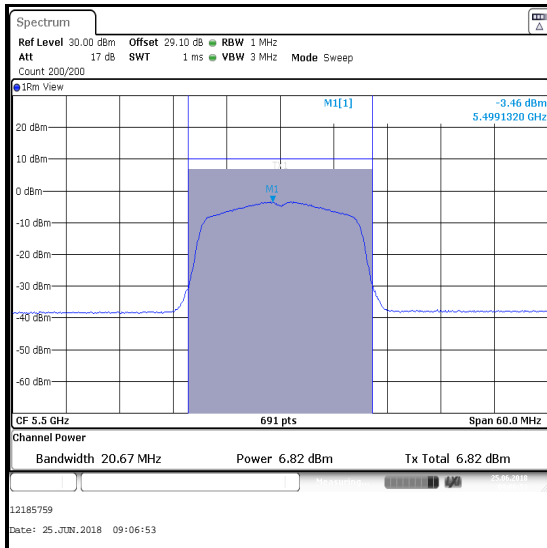
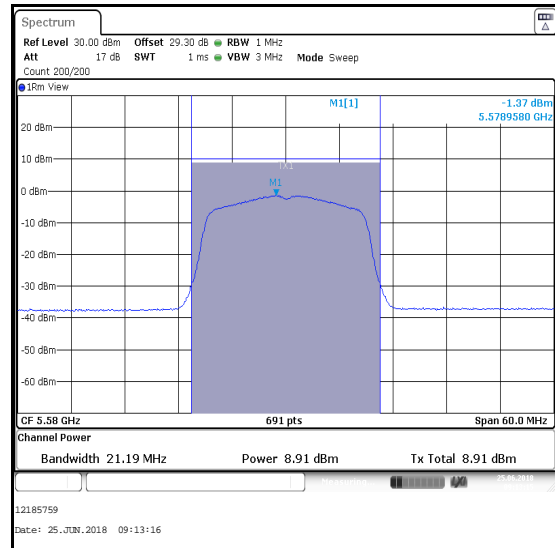
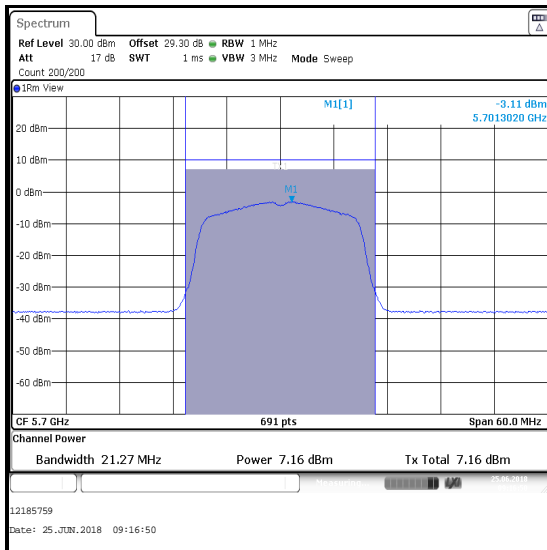
Top Channel

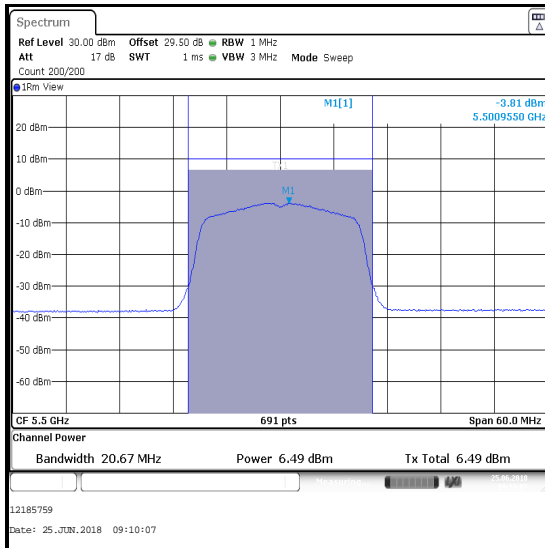
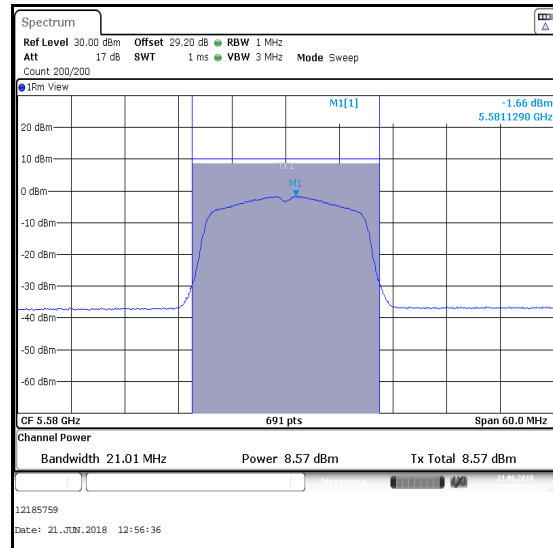
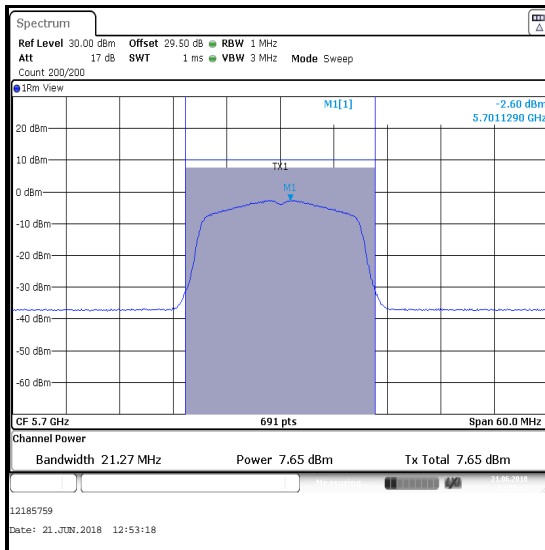
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Bottom	5500	7.4	6.8	6.5	11.7
Middle	5580	9.3	8.9	8.6	13.7
Top	5700	8.1	7.2	7.7	12.5

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5500	11.7	19.3	7.6	Complied
Middle	5580	13.7	19.3	5.6	Complied
Top	5700	12.5	19.3	6.8	Complied

Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 1****Bottom Channel****Middle Channel****Top Channel**

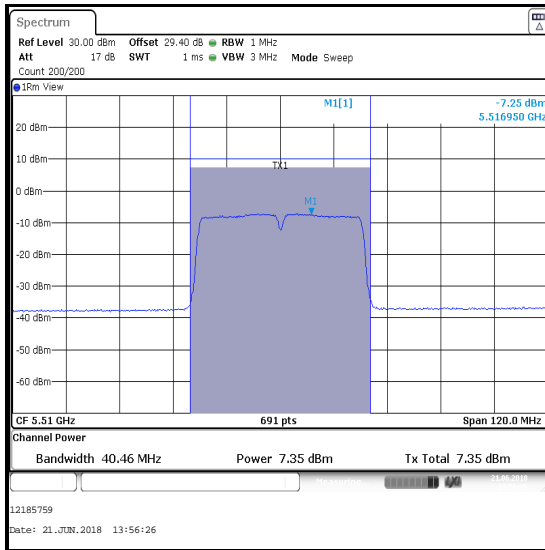
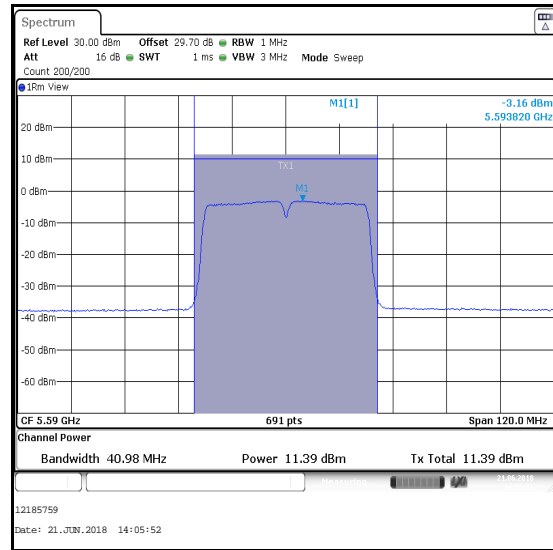
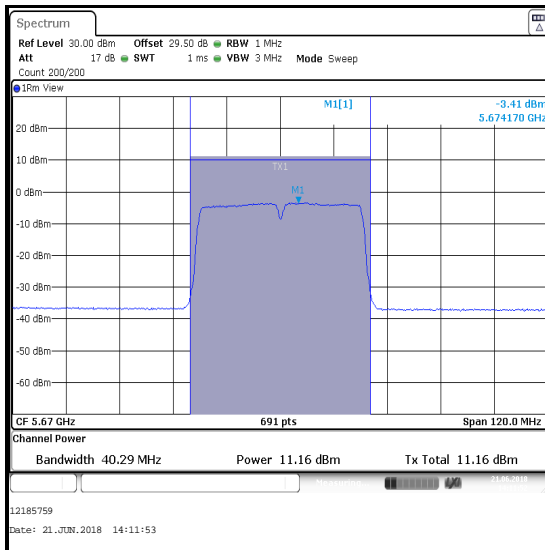
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 0****Bottom Channel****Middle Channel****Top Channel**

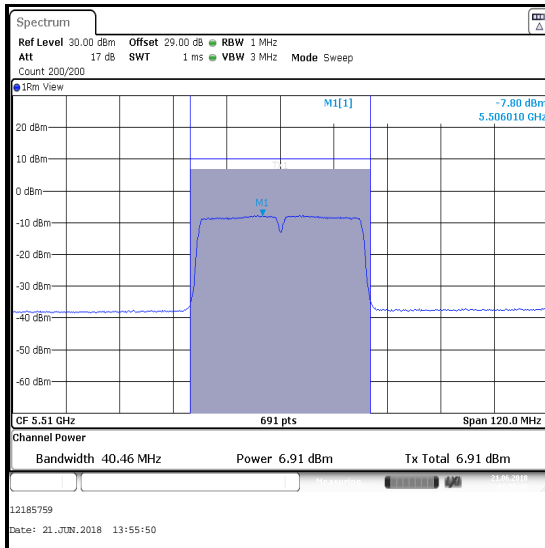
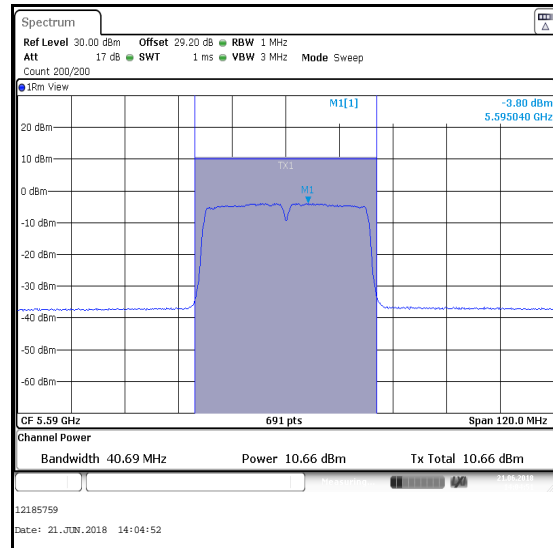
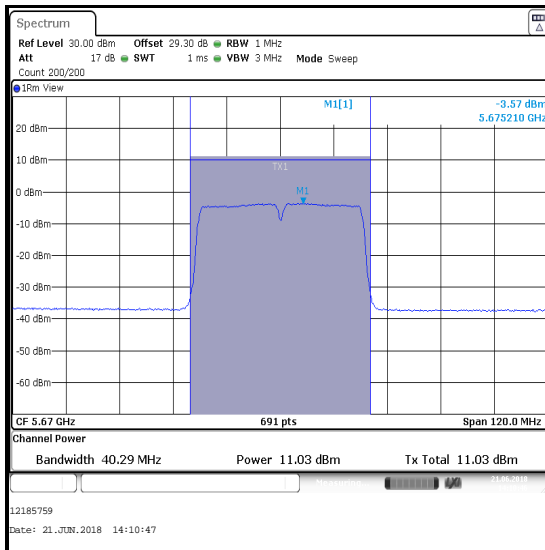
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 2****Bottom Channel****Middle Channel****Top Channel**

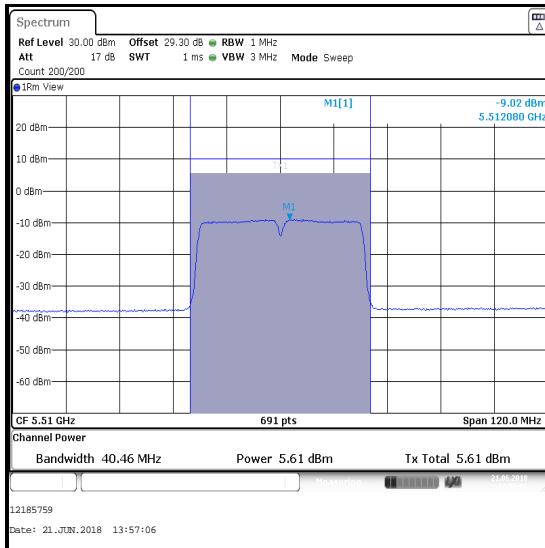
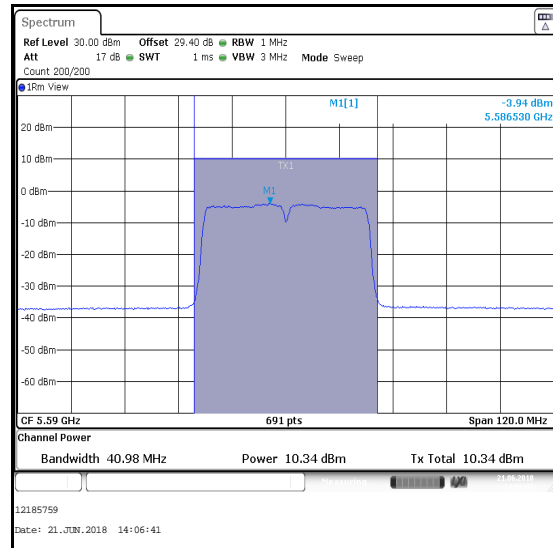
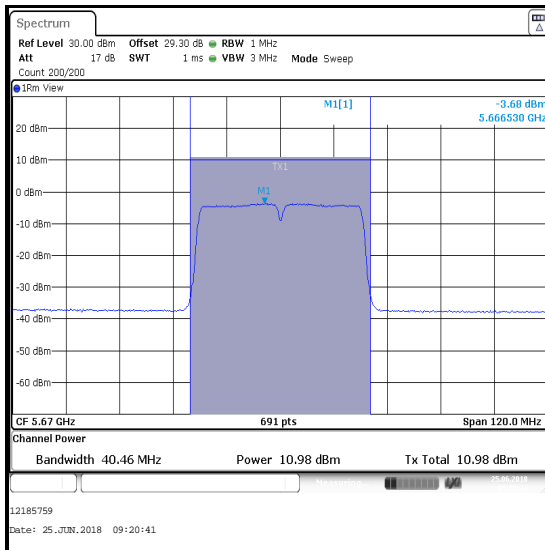
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Bottom	5510	7.4	6.9	5.6	11.5
Middle	5590	11.4	10.7	10.3	15.6
Top	5670	11.2	11.0	11.0	15.8

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5510	11.5	19.3	7.8	Complied
Middle	5590	13.6	19.3	3.7	Complied
Top	5670	15.8	19.3	3.5	Complied

Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 1****Bottom Channel****Middle Channel****Top Channel**

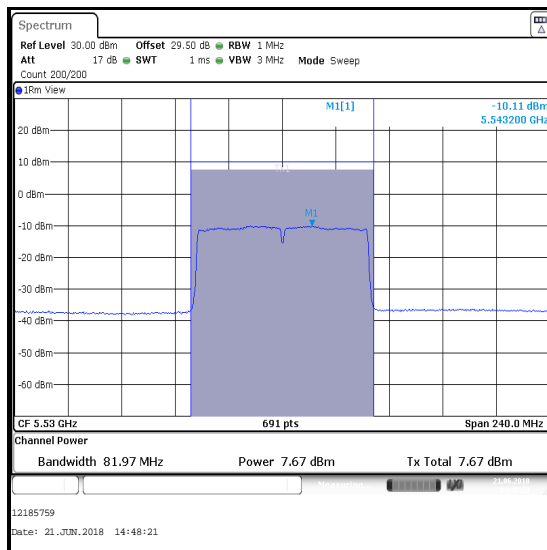
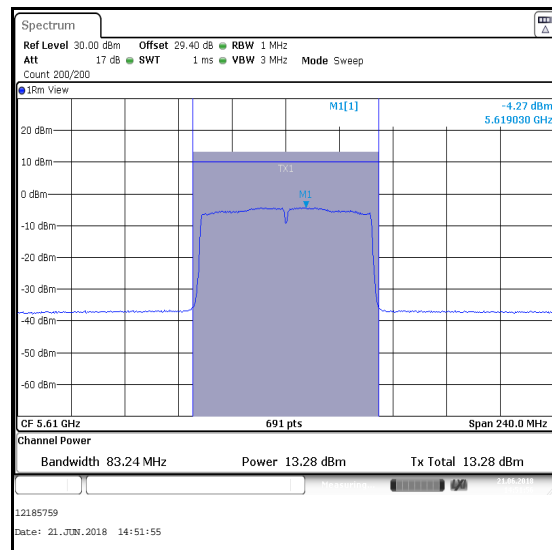
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 0****Bottom Channel****Middle Channel****Top Channel**

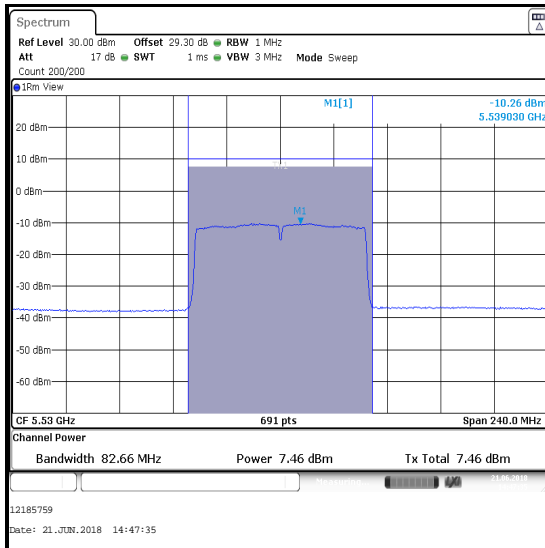
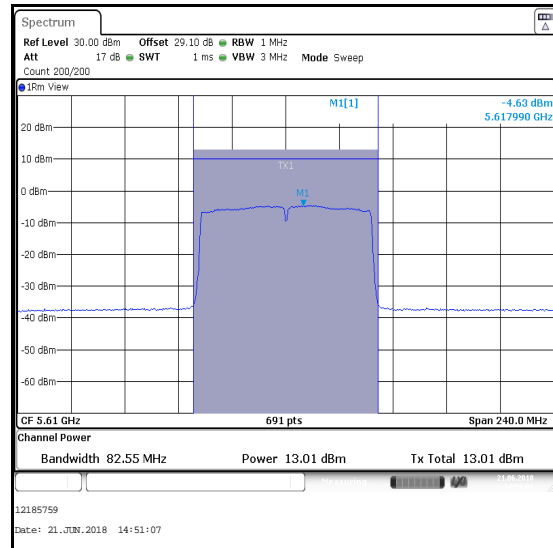
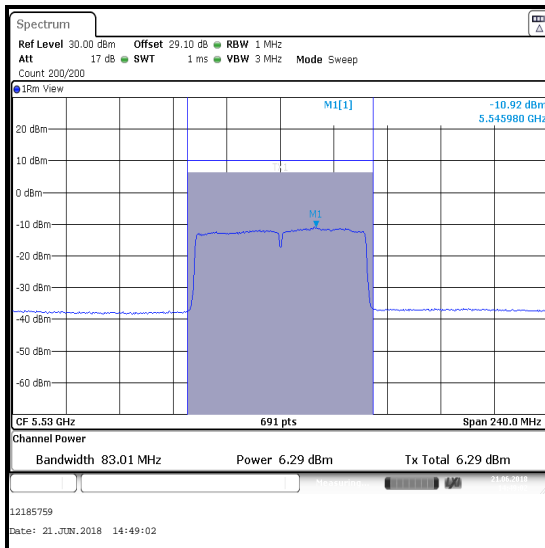
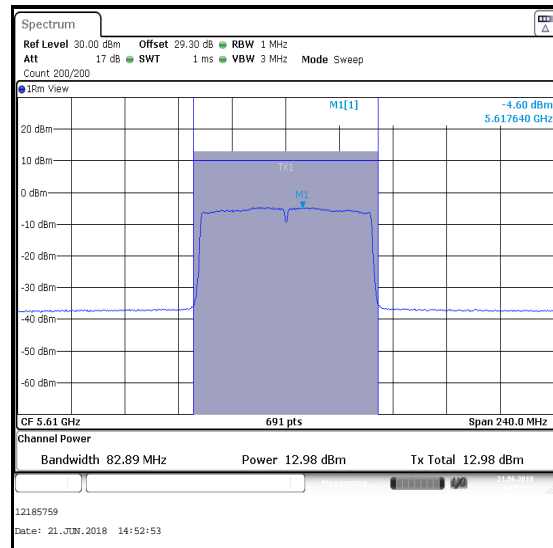
Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 2****Bottom Channel****Middle Channel****Top Channel**

Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Bottom	5530	7.7	7.5	6.3	12.0
Top	5610	13.3	13.0	13.0	17.9

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5530	12.0	19.3	7.3	Complied
Top	5610	17.9	19.3	1.4	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 1**Bottom Channel****Top Channel**

Transmitter Maximum Conducted Output Power (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 0****Bottom Channel****Top Channel****Results: 802.11ac / 80 MHz / MIMO / 3Tx TxBF / BPSK / MCS0 / Core 2****Bottom Channel****Top Channel**

Transmitter Maximum Conducted Output Power (Straddle Channels)**4.4.4. Channels that straddle the U-NII-2C and U-NII-3 bands****Test Summary:**

Test Engineers:	Max Passell & Matthew Botfield	Test Dates:	11 May 2018 & 25 June 2018
Test Sample Serial Numbers:	C02WC003JMFN & C02WC001JTGW		

FCC Reference:	Part 15.407(a)(2)
Test Method Used:	KDB 789033 D02 Section II.E.2.b) and II.E.2.d)

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 55

Note(s):

- Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz need to meet requirements of both U-NII bands. Due to maximum conducted power limit being more stringent on U-NII-2C, compliance is shown against the limits of U-NII-2C. By default, the EUT also complies on U-NII-3.
- For conducted power tests where the duty cycle is >98%, the measurements were performed using a signal analyser in accordance with FCC KDB 789033 II.E.2.b) Method SA-1. Where the duty cycle is <98%, the measurements were performed in accordance with FCC KDB 789033 II.E.2.d) Method SA-2. The signal analyser's integration function was used to integrate across the 26 dB emission bandwidth. The resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. An RMS detector was used and sweep time was set to auto and 200 traces performed. The span was set to encompass the entire 26 dB emission bandwidth. The channel power results are recorded in the tables below.
- Measurements were performed using configurations detailed in Section 3.5 of this test report on the relevant channels.
- For data rates where the EUT was transmitting at <98% duty cycle, the calculated duty cycle in Section 4.1 was added to the measured power in order to compute the average power during the actual transmission time.
- The FCC Part 15.407(a)(2) limit is the lesser of 250 mW (24.0 dBm) or $11 \text{ dBm} + 10 \log_{10} B$, where B is the previously measured 26 dB emission bandwidth in MHz. The 26 dB EBW is greater than 20 MHz.

$$\begin{aligned}
 &\text{For } B > 20 \text{ MHz} \rightarrow \\
 &\rightarrow \log_{10} B > \log_{10} 20 \rightarrow \\
 &\rightarrow 10 \log_{10} B > 10 \log_{10} 20 \rightarrow \\
 &\rightarrow 11 + 10 \log_{10} B > 11 + 10 \log_{10} 20 \rightarrow \\
 &\rightarrow 11 + 10 \log_{10} B > 24.0 \text{ dBm}
 \end{aligned}$$

Therefore for measured emission bandwidths greater than 20 MHz, the lesser of the two limits is the fixed limit of 250 mW (24.0 dBm). This was applied to the results.

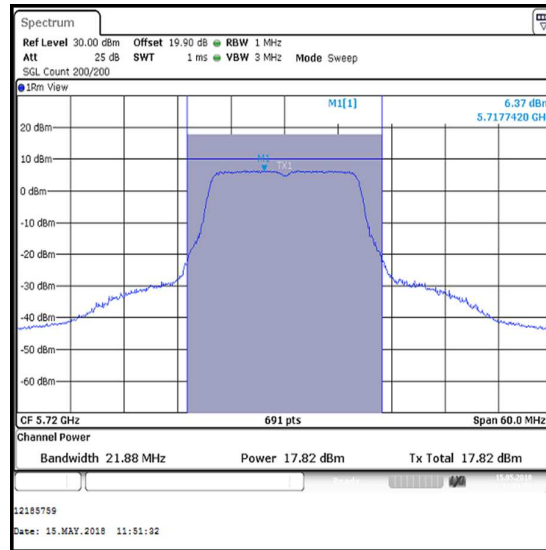
- For MIMO modes, conducted power was measured on both ports and then combined using the measure-and-sum method stated in FCC KDB 662911 D01 Section E)1).
- For 3Tx STBC modes of operation, the antenna gain is < 6 dBi.
- For SISO and MIMO CDD modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 7.4 dBi. In accordance with Part 15.407(a)(2), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 24.0 dBm has been reduced by 1.4 dB to 22.6 dBm.

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Note(s):**

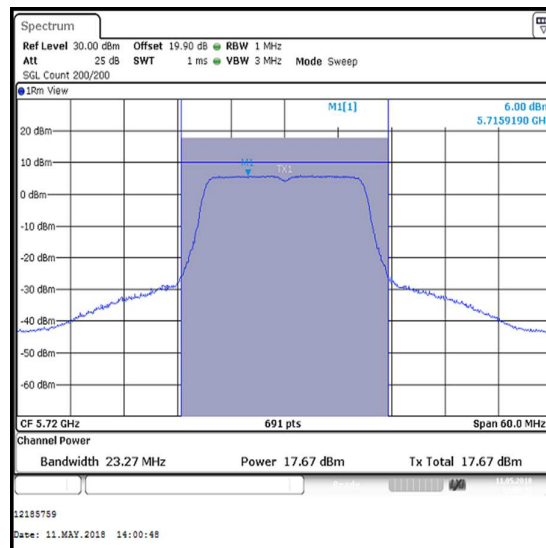
9. For 2Tx STBC modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 6.4 dBi. In accordance with Part 15.407(a)(2), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 24.0 dBm has been reduced by 0.4 dB to 23.6 dBm.
10. For 2Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 9.4 dBi. In accordance with Part 15.407(a)(2), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 24.0 dBm has been reduced by 3.4 dB to 20.6 dBm.
11. For 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 10.7 dBi. In accordance with Part 15.407(a)(2), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 24.0 dBm has been reduced by 4.7 dB to 19.3 dBm.
12. For details on antenna gains refer to Section 3.4 of this test report.
13. The signal analyser was connected to the RF port on the EUT using an RF switch, suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.
14. The EUT with serial number C02WC003JMFN was used for non-TxBF tests, the EUT with serial C02WC001JTGW number was used for TxBF tests.

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	17.8	22.6	4.8	Complied

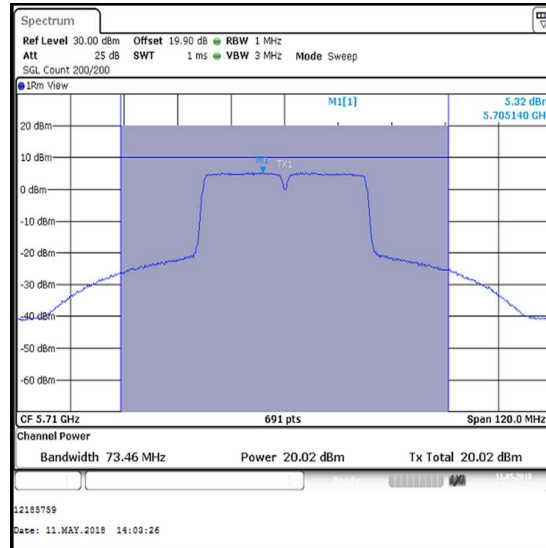
**Single Channel****Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	17.7	22.6	4.9	Complied

**Single Channel**

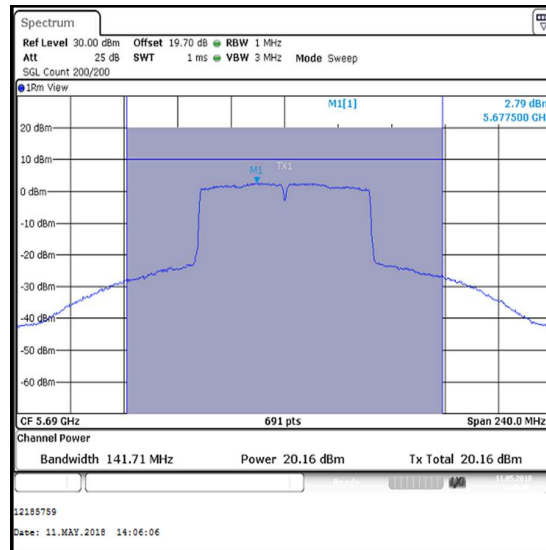
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	20.0	0.1	20.1	22.6	2.5	Complied

**Single Channel**

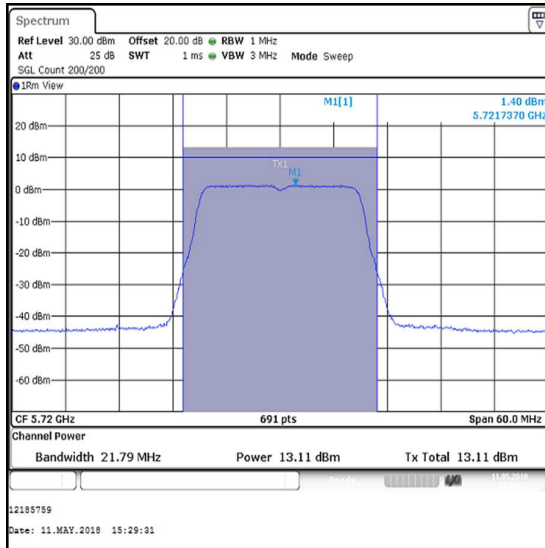
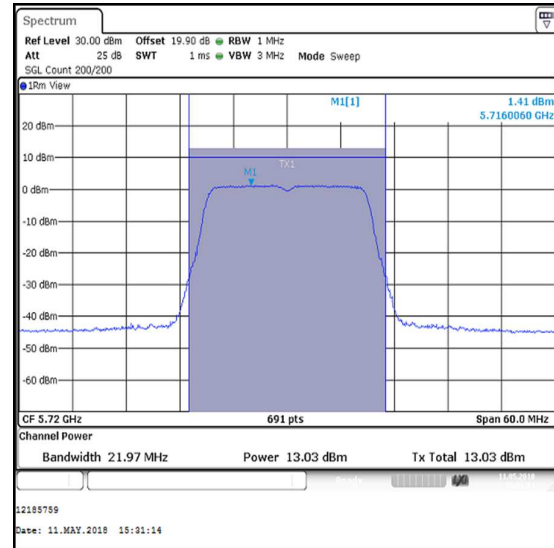
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	20.2	0.2	20.4	22.6	2.2	Complied

**Single Channel**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

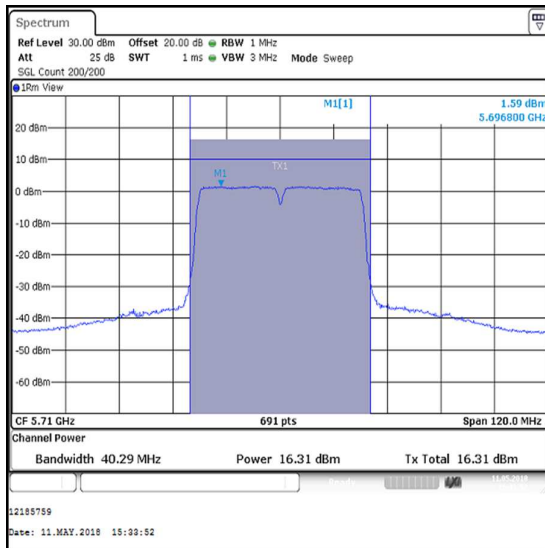
Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	13.1	13.0	16.1	22.6	6.5	Complied

**Single Channel / Core 1****Single Channel / Core 0**

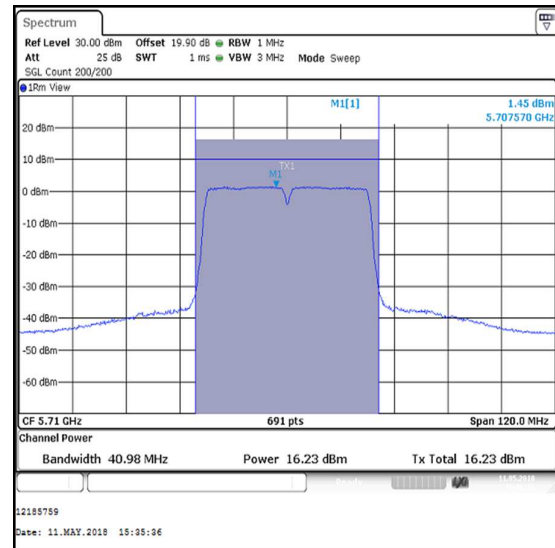
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5710	16.3	0.1	16.4	16.2	0.1	16.3

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	16.4	16.3	19.4	22.6	3.2	Complied



Single Channel / Core 1

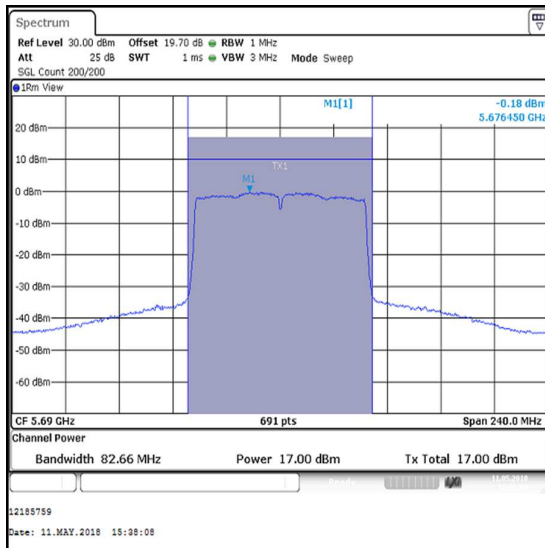
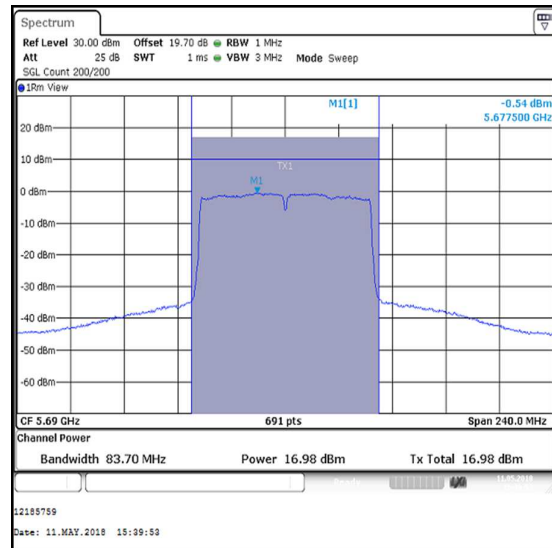


Single Channel / Core 0

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1**

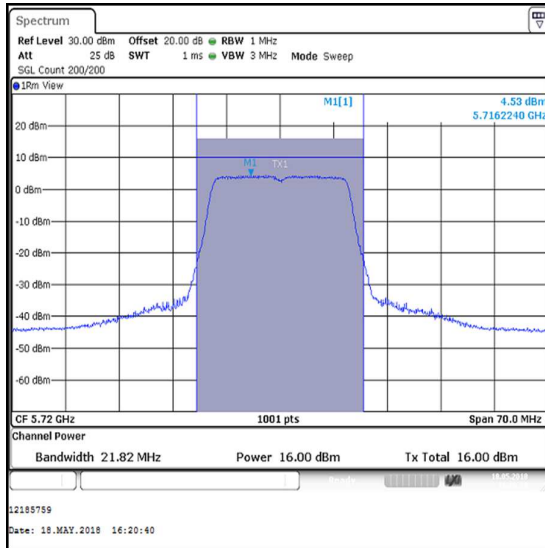
Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5690	17.0	0.2	17.2	17.0	0.2	17.2

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	17.2	17.2	20.2	22.6	2.4	Complied

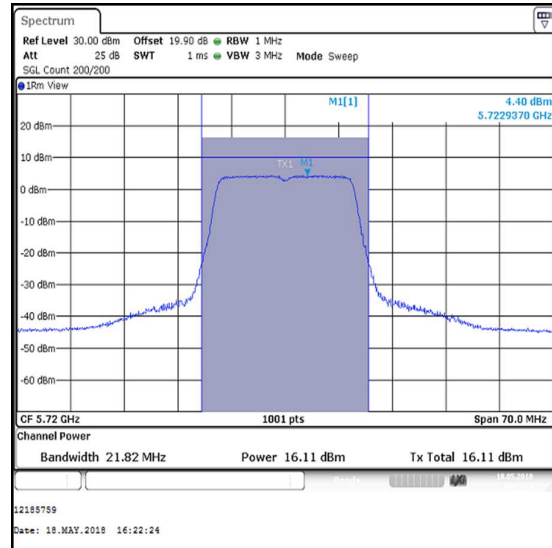
**Single Channel / Core 1****Single Channel / Core 0**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	16.0	16.1	19.1	23.6	4.5	Complied



Single Channel / Core 1

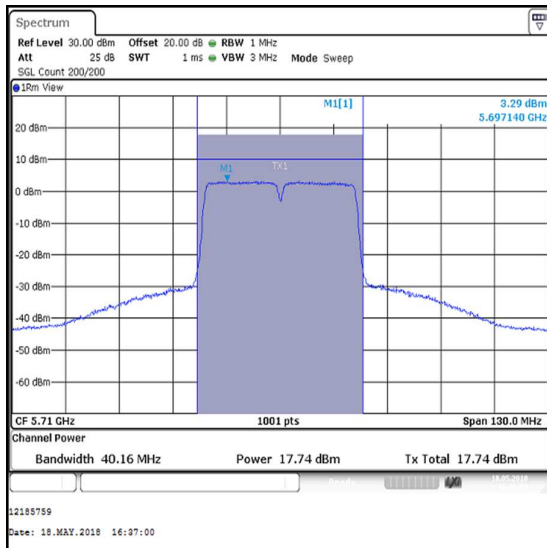


Single Channel / Core 0

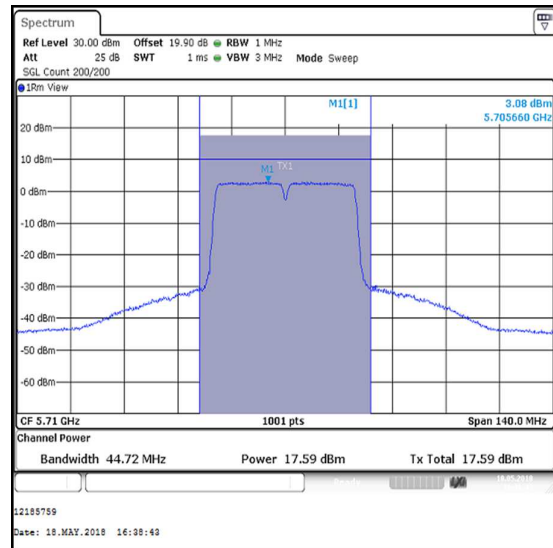
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5710	17.7	0.1	17.8	17.6	0.1	17.7

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	17.8	17.7	20.8	23.6	2.8	Complied



Single Channel / Core 1

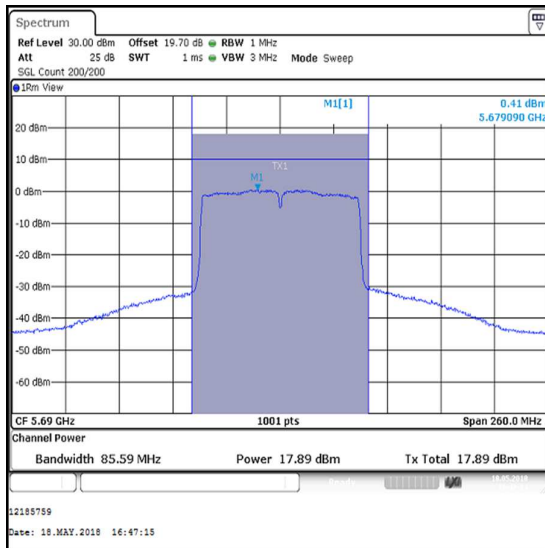


Single Channel / Core 0

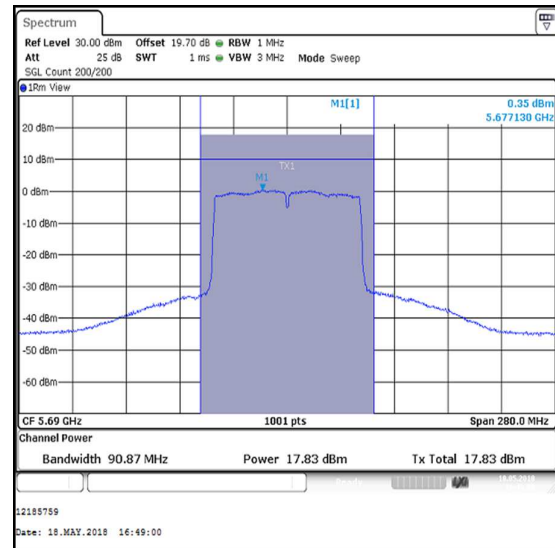
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5690	17.9	0.2	18.1	17.8	0.2	18.0

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	18.1	18.0	21.1	23.6	2.5	Complied



Single Channel / Core 1

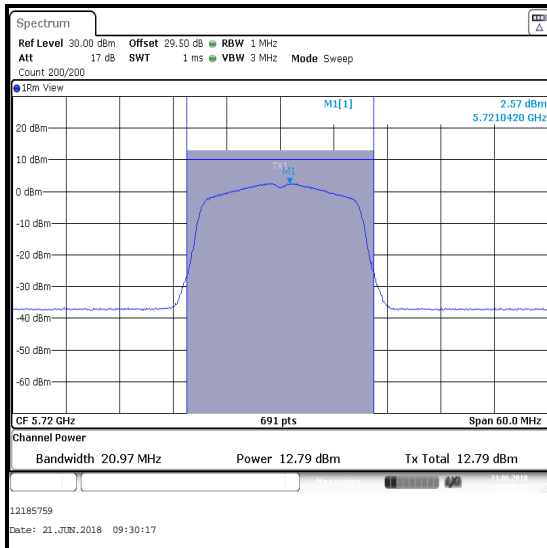
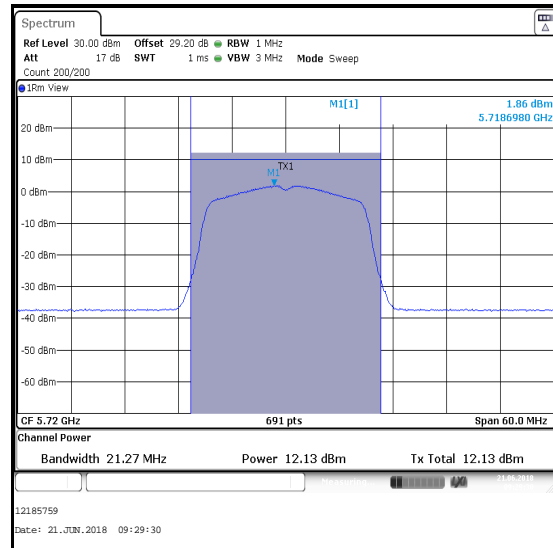


Single Channel / Core 0

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5720	12.8	0.2	13.0	12.1	0.2	12.3

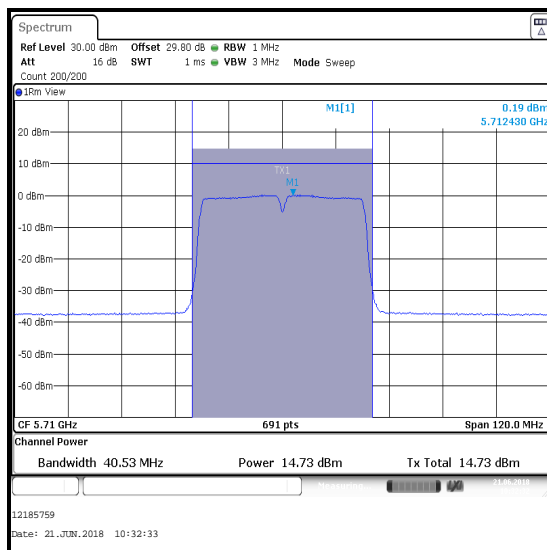
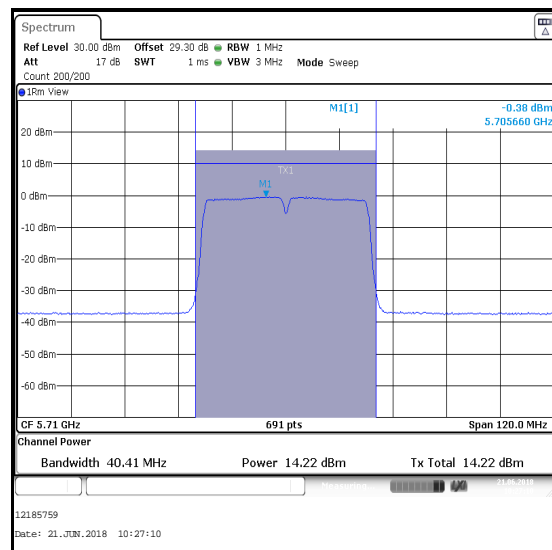
Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	13.0	12.3	15.7	20.6	4.9	Complied

**Single Channel / Core 1****Single Channel / Core 0**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5710	14.7	0.2	14.9	14.2	0.2	14.4

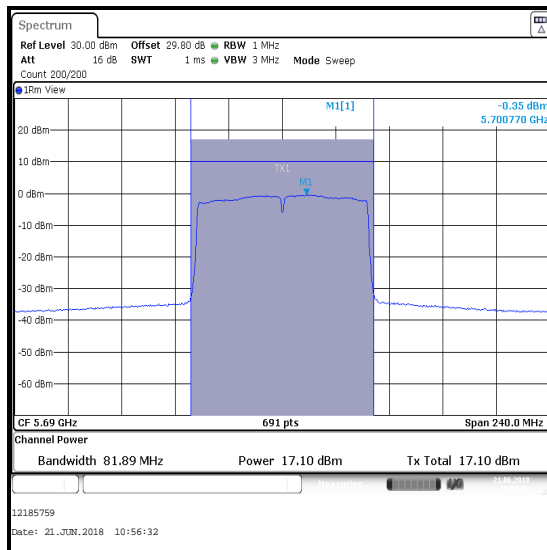
Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	14.9	14.4	17.7	20.6	2.9	Complied

**Single Channel / Core 1****Single Channel / Core 0**

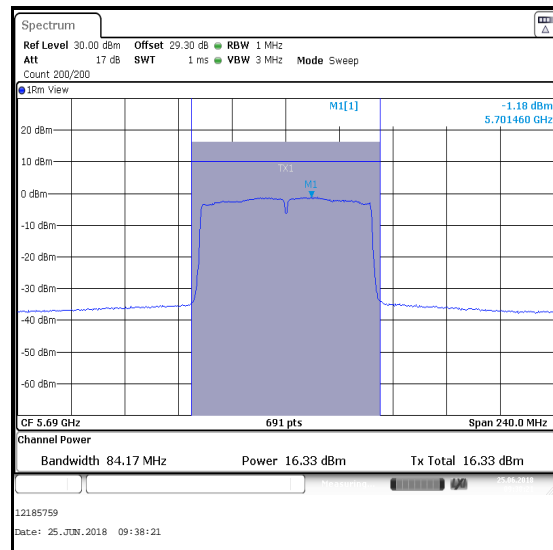
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5690	17.1	0.2	17.3	16.3	0.2	16.5

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	17.3	16.5	19.9	20.6	0.7	Complied



Single Channel / Core 1

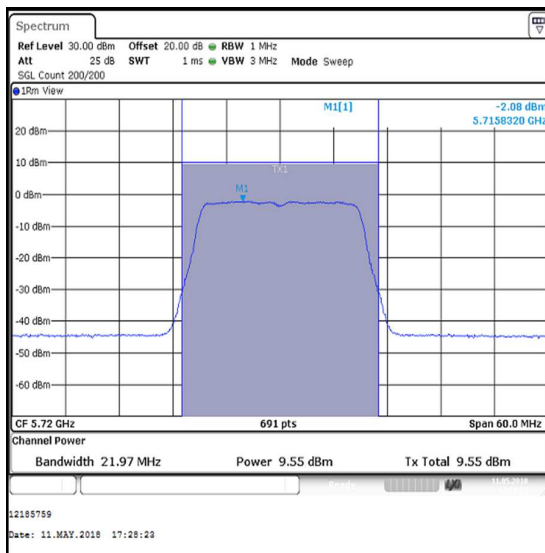


Single Channel / Core 0

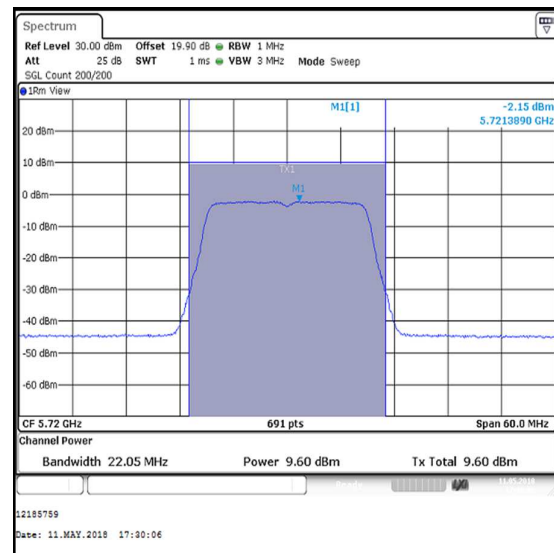
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Single	5720	9.6	9.6	9.1	14.2

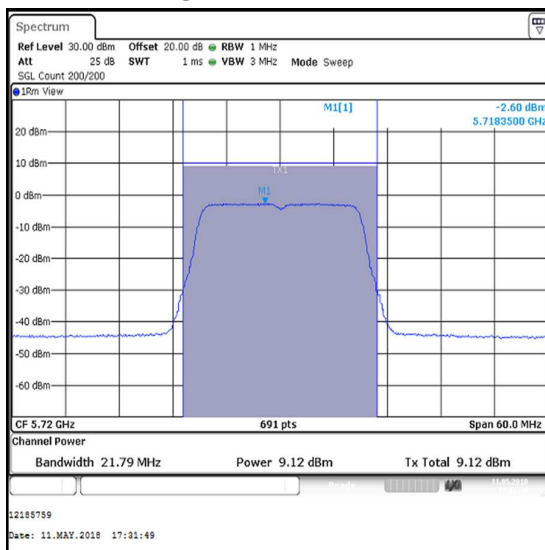
Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	14.2	22.6	8.4	Complied



Single Channel / Core 1



Single Channel / Core 0



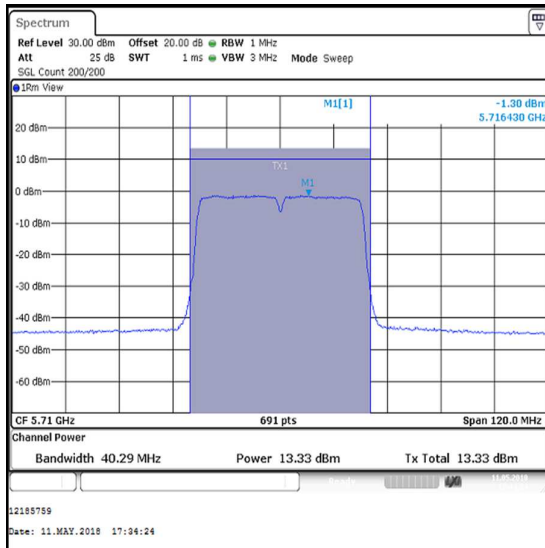
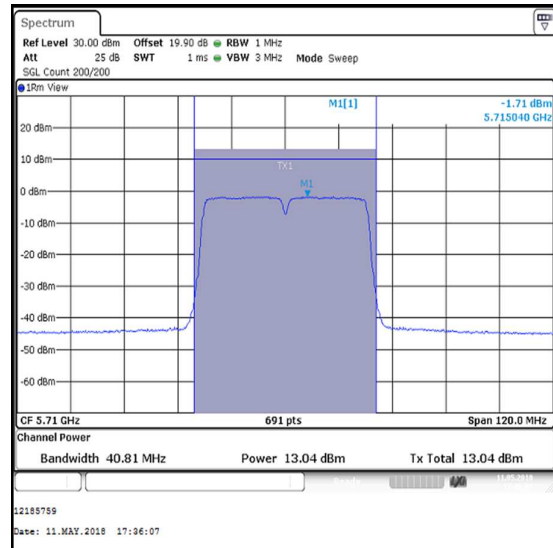
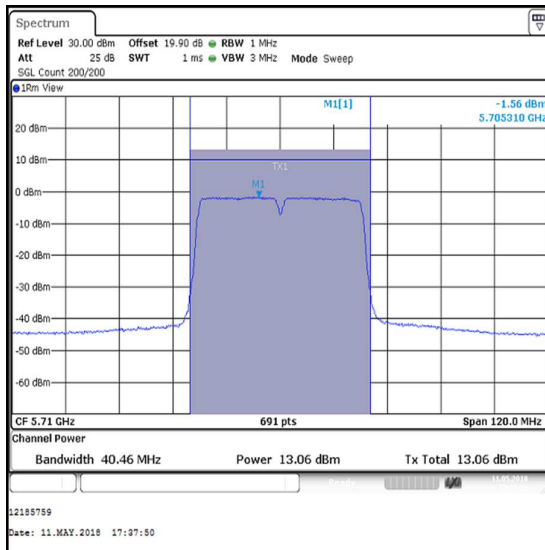
Single Channel / Core 2

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5710	13.3	0.1	13.4	13.0	0.1	13.1

Channel	Frequency (MHz)	Core 2			Core 1, Core 0 & Core 2		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 2 (dBm)
Single	5710	13.1	0.1	13.2	13.4	13.1	13.2

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	18.0	22.6	4.6	Complied

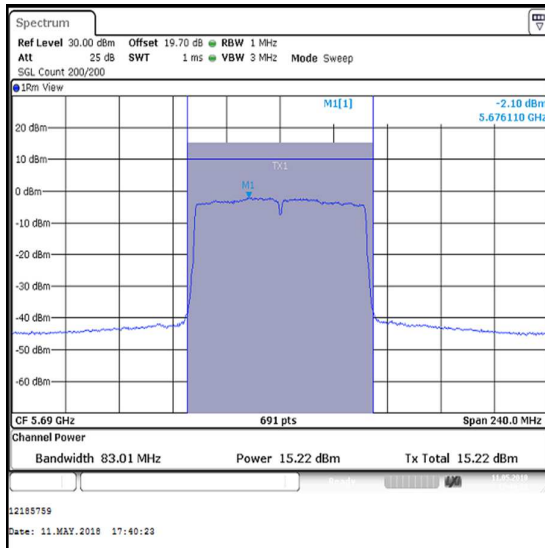
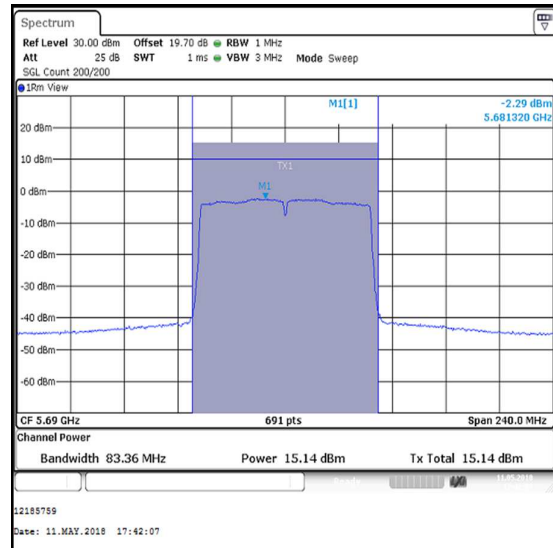
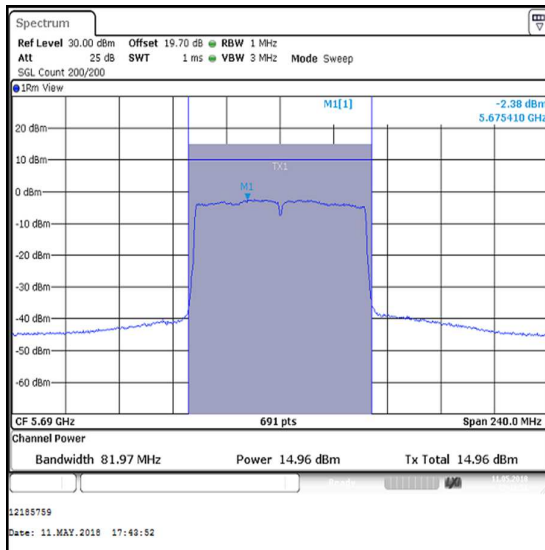
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0x1**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5690	15.2	0.2	15.4	15.1	0.2	15.3

Channel	Frequency (MHz)	Core 2			Core 1, Core 0 & Core 2		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 2 (dBm)
Single	5690	15.0	0.2	15.2	15.4	15.3	15.2

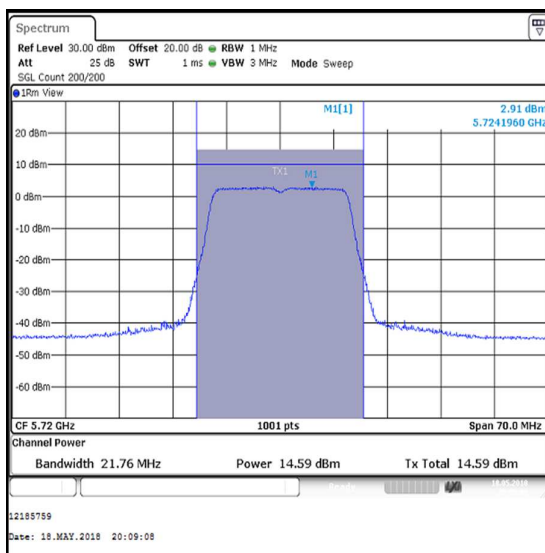
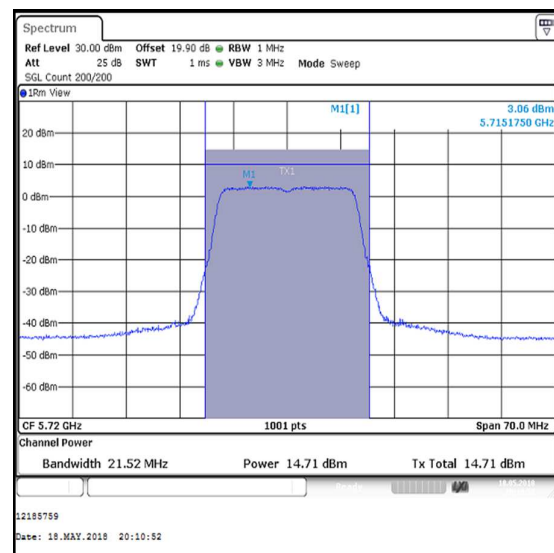
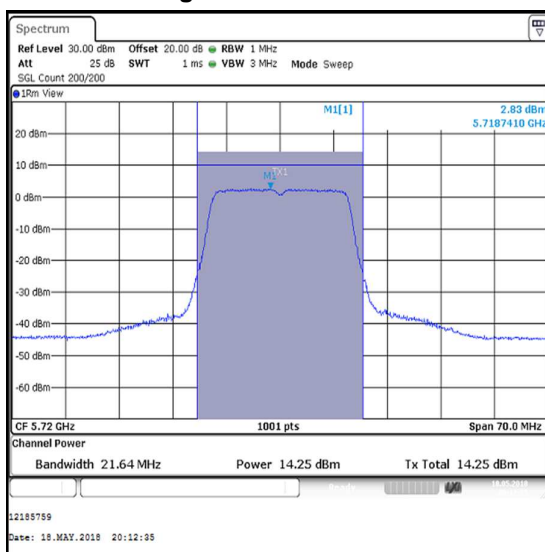
Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	20.1	22.6	2.5	Complied

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Single	5720	14.6	14.7	14.3	19.3

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	19.3	24.0	4.7	Complied

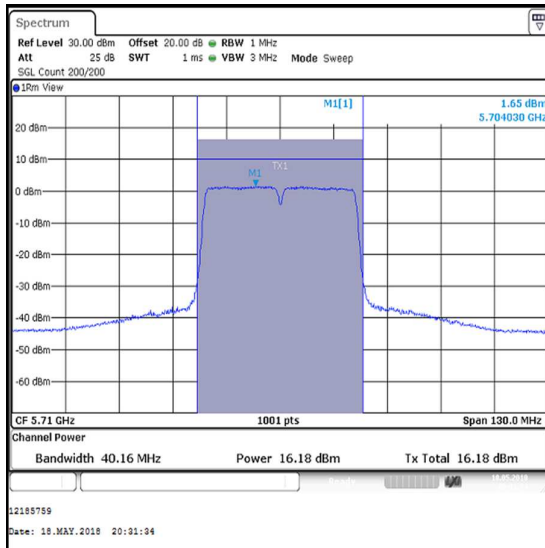
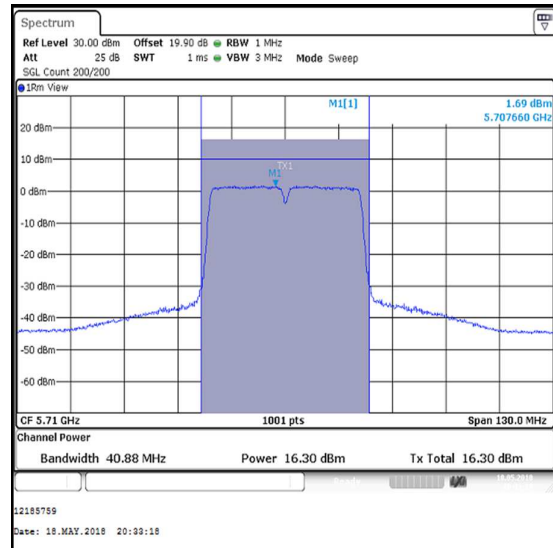
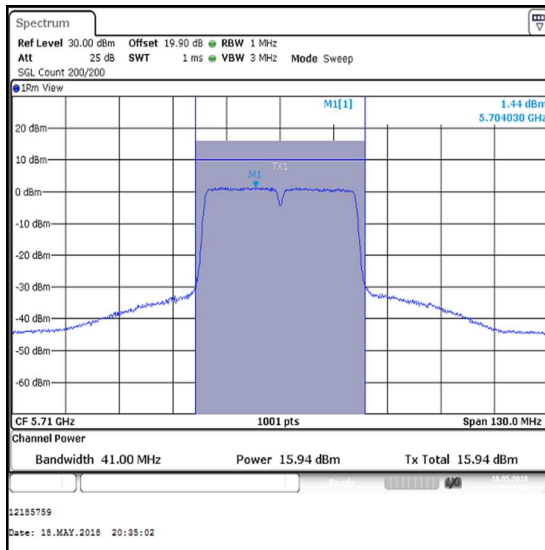
**Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5710	16.2	0.1	16.3	16.3	0.1	16.4

Channel	Frequency (MHz)	Core 2			Core 1, Core 0 & Core 2		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 2 (dBm)
Single	5710	15.9	0.1	16.0	16.3	16.4	16.0

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	21.0	24.0	3.0	Complied

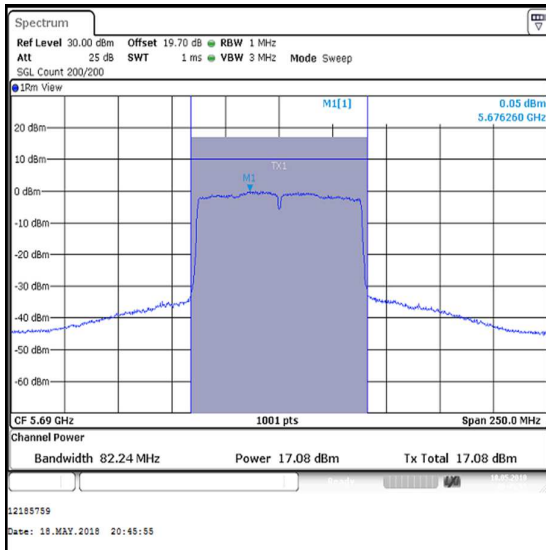
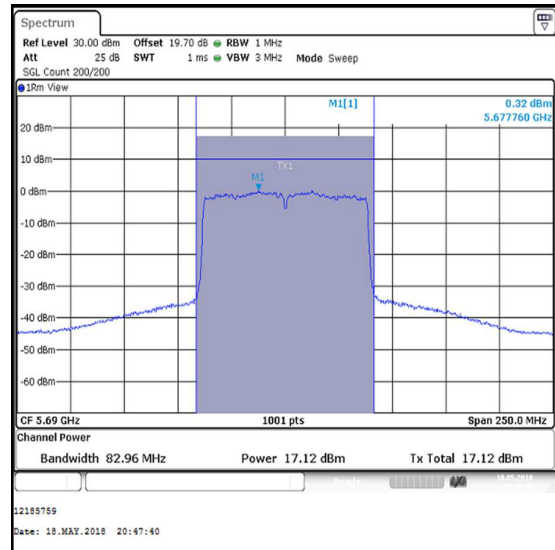
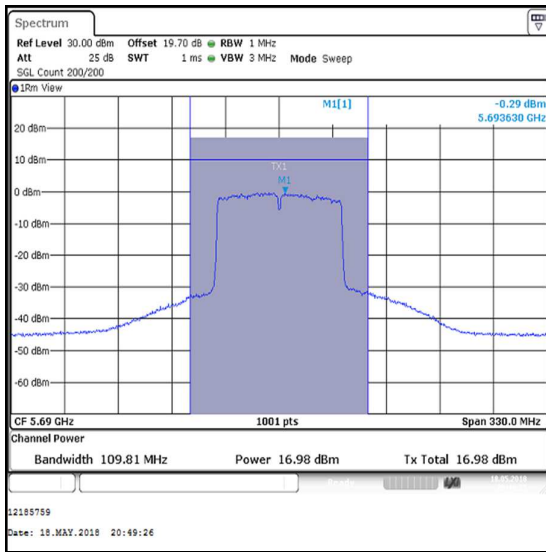
Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx STBC / BPSK / MCS0****Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5690	17.1	0.2	17.3	17.1	0.2	17.3

Channel	Frequency (MHz)	Core 2			Core 1, Core 0 & Core 2		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 2 (dBm)
Single	5690	17.0	0.2	17.2	17.3	17.3	17.2

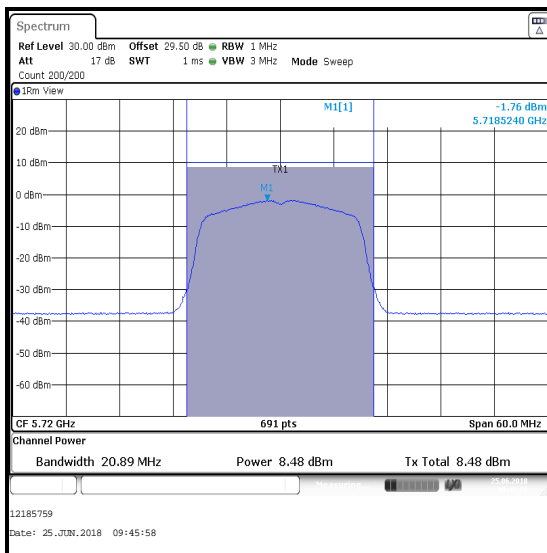
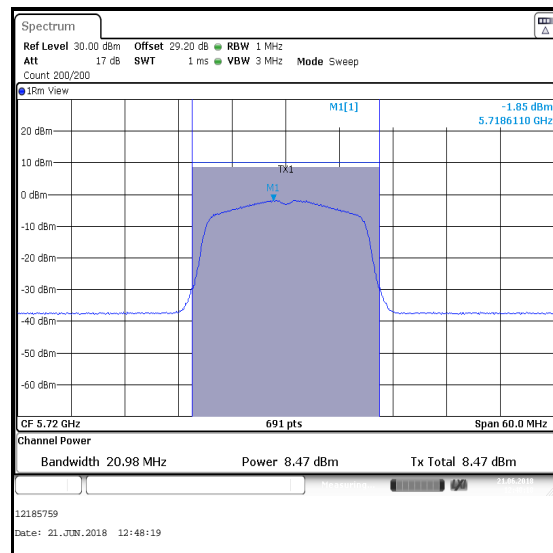
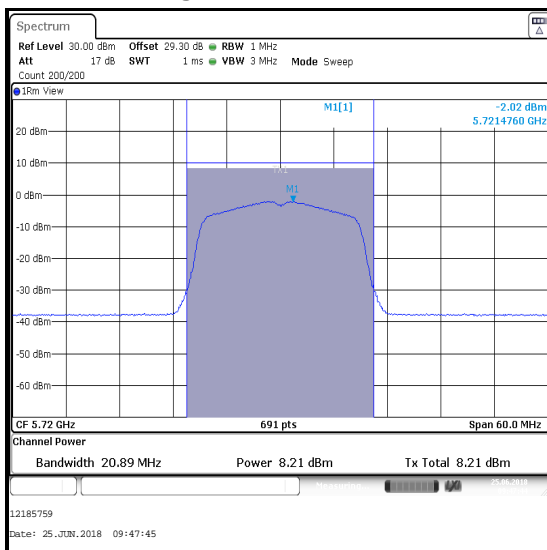
Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	22.0	24.0	2.0	Complied

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx STBC / BPSK / MCS0****Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Single	5720	8.5	8.5	8.2	13.2

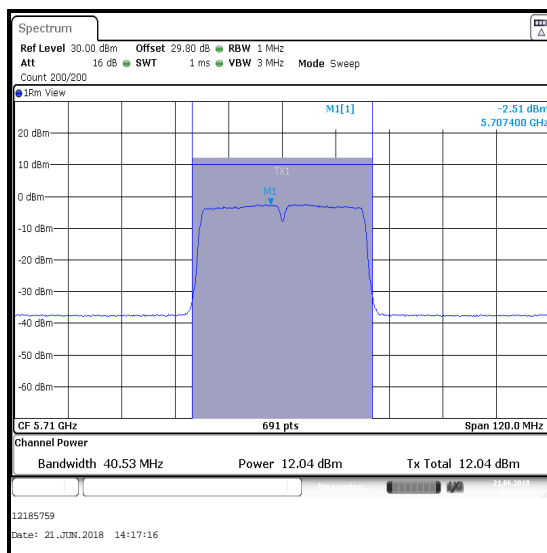
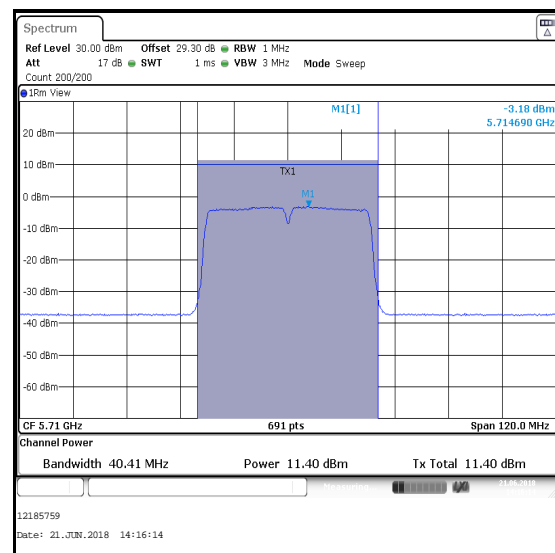
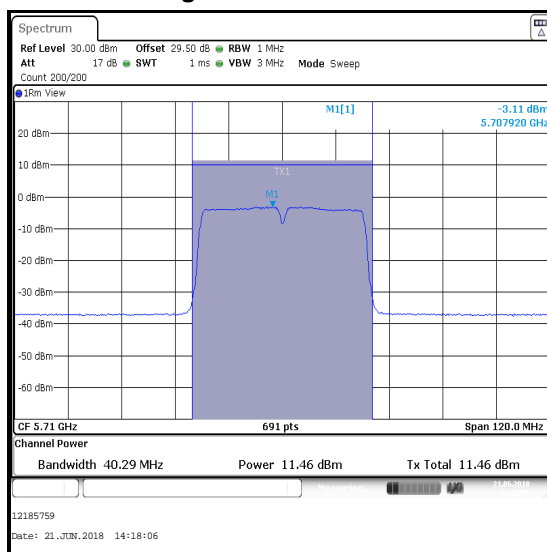
Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5720	13.2	19.3	6.1	Complied

**Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Single	5710	12.0	11.4	11.5	16.4

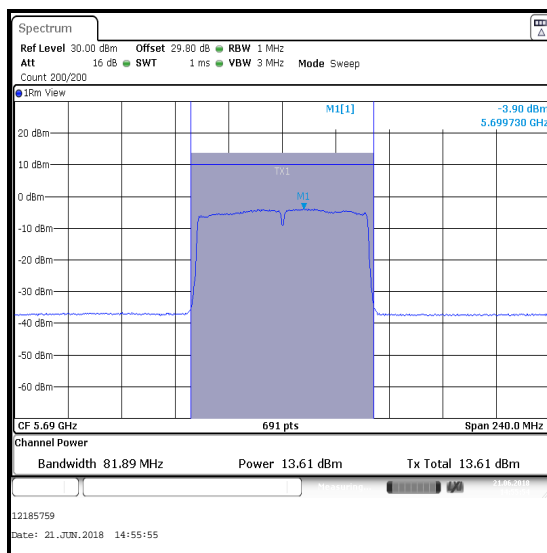
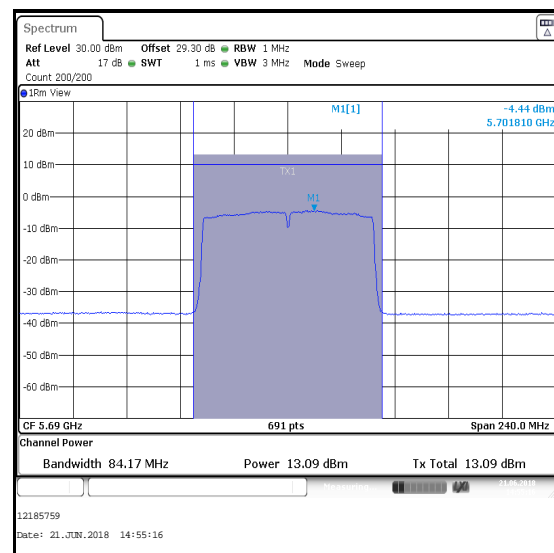
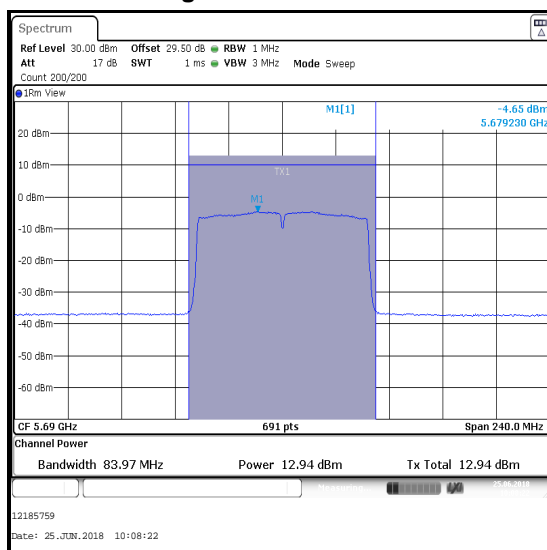
Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5710	16.4	19.3	2.9	Complied

**Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (Straddle Channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TxBF / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Conducted Power Core 2 (dBm)	Combined Conducted Power (dBm)
Single	5690	13.6	13.1	12.9	18.0

Channel	Frequency (MHz)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5690	18.0	19.3	1.3	Complied

**Single Channel / Core 1****Single Channel / Core 0****Single Channel / Core 2**

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band)**4.4.5. 5.725-5.85 GHz band****Test Summary:**

Test Engineers:	Max Passell & Matthew Botfield	Test Dates:	11 May 2018 & 25 June 2018
Test Sample Serial Numbers:	C02WC003JMFN & C02WC001JTGW		

FCC Reference:	Part 15.407(a)(3)
Test Method Used:	KDB 789033 D02 Section II.E.2.b) and II.E.2.d)

Environmental Conditions:

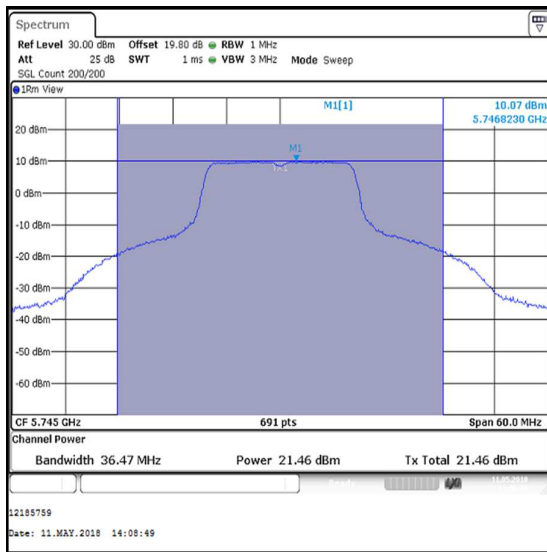
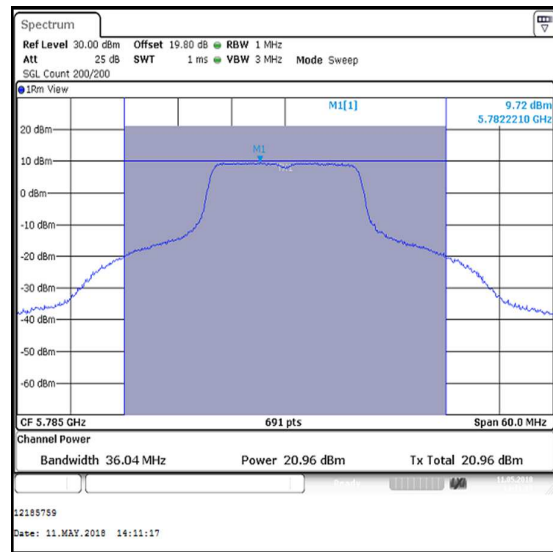
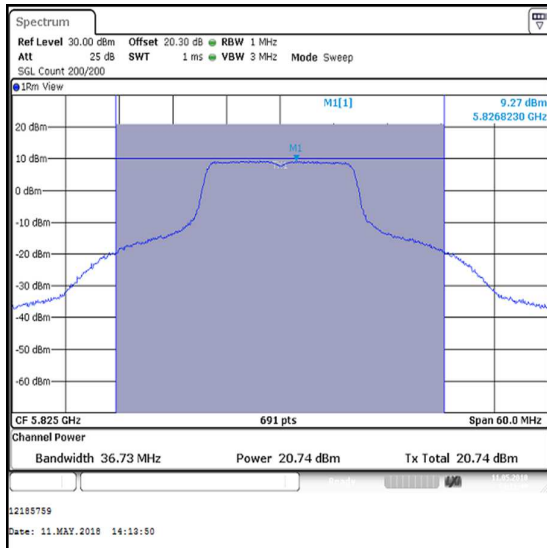
Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 55

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Note(s):**

1. For conducted power tests where the duty cycle is >98%, the measurements were performed using a signal analyser in accordance with FCC KDB 789033 II.E.2.b) Method SA-1. Where the duty cycle is <98%, the measurements were performed in accordance with FCC KDB 789033 II.E.2.d) Method SA-2. The signal analyser's integration function was used to integrate across the 26 dB emission bandwidth. The resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. An RMS detector was used and sweep time was set to auto and 200 traces performed. The span was set to encompass the entire 26 dB emission bandwidth. The channel power results are recorded in the tables below.
2. Measurements were performed using configurations detailed in Section 3.5 of this test report on the relevant channels.
3. For data rates where the EUT was transmitting at <98% duty cycle, the calculated duty cycle in Section 4.1 was added to the measured power in order to compute the average power during the actual transmission time.
4. The FCC Part 15.407(a)(3) limit shall not exceed 1 W (30.0 dBm).
5. For MIMO modes, conducted power was measured on both ports and then combined using the measure-and-sum method stated in FCC KDB 662911 D01 Section E)1).
6. For MIMO STBC modes of operation, the antenna gain is < 6 dBi
7. For SISO and MIMO CDD modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 6.3 dBi. In accordance with Part 15.407(a)(3), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm has been reduced by 0.3 dB to 29.7 dBm.
8. For 2Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 8.5 dBi. In accordance with Part 15.407(a)(3), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm has been reduced by 2.5 dB to 27.5 dBm.
9. For 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 9.8 dBi. In accordance with Part 15.407(a)(3), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm has been reduced by 3.8 dB to 26.2 dBm.
10. For details on antenna gains refer to Section 3.4 of this test report.
11. The signal analyser was connected to the RF port on the EUT using an RF switch, suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.
12. The EUT with serial number C02WC003JMFN was used for non-TxBF tests, the EUT with serial C02WC001JTGW number was used for TxBF tests.

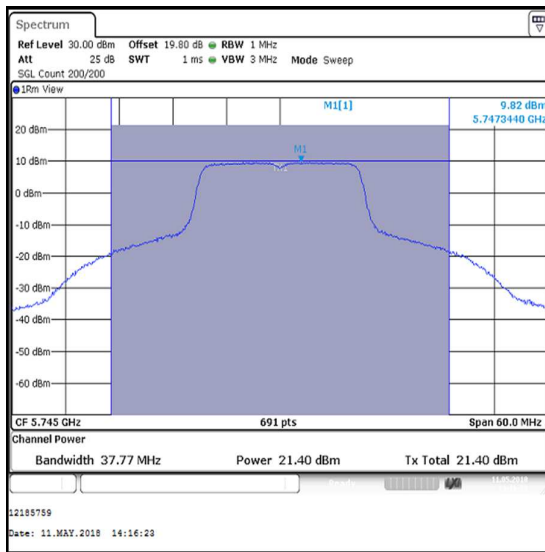
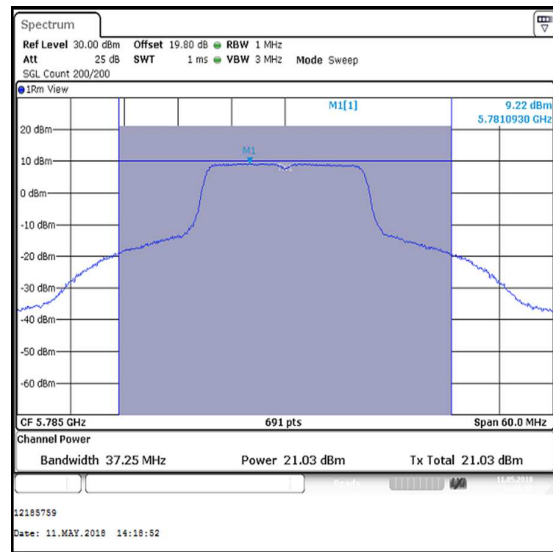
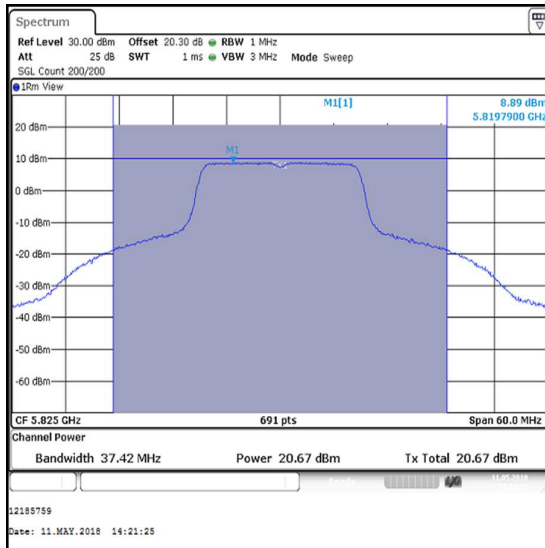
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5745	21.5	29.7	8.2	Complied
Middle	5785	21.0	29.7	8.7	Complied
Top	5825	20.7	29.7	9.0	Complied

**Bottom Channel****Middle Channel****Top Channel**

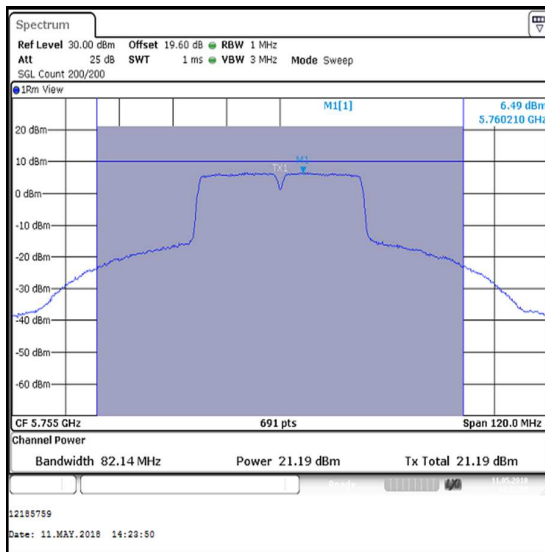
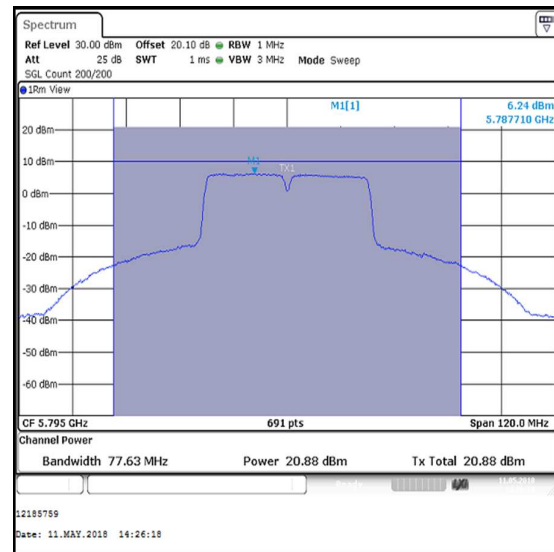
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5745	21.4	29.7	8.3	Complied
Middle	5785	21.0	29.7	8.7	Complied
Top	5825	20.7	29.7	9.0	Complied

**Bottom Channel****Middle Channel****Top Channel**

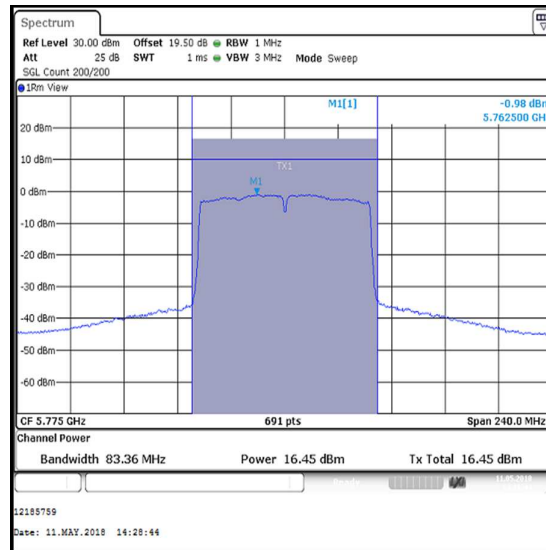
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0**

Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5755	21.2	0.1	21.3	29.7	8.4	Complied
Top	5795	20.9	0.1	21.0	29.7	8.7	Complied

**Bottom Channel****Top Channel**

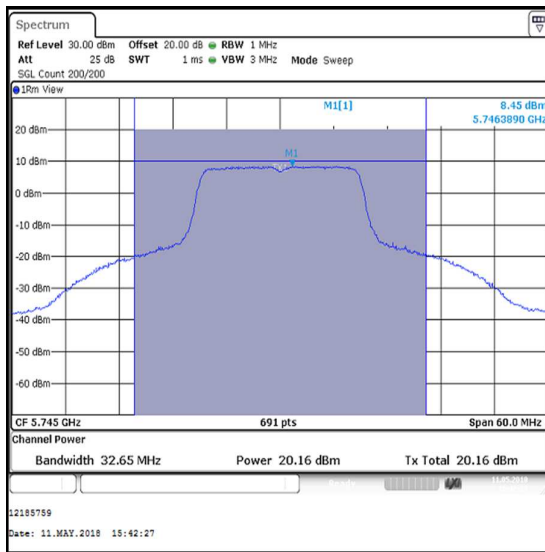
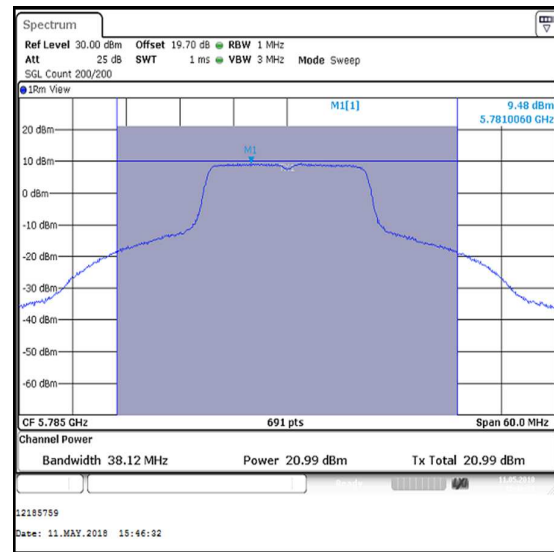
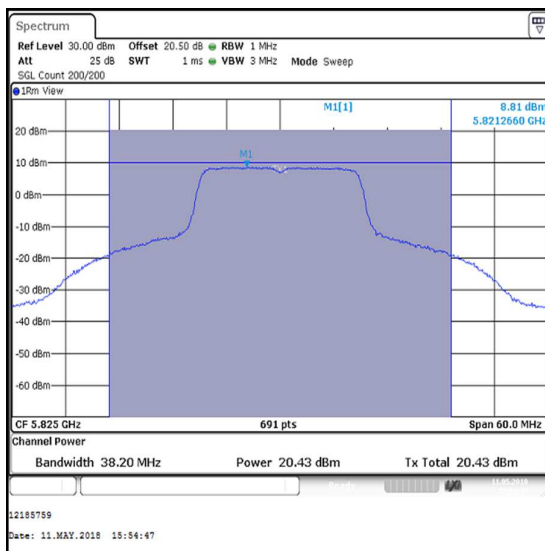
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 0**

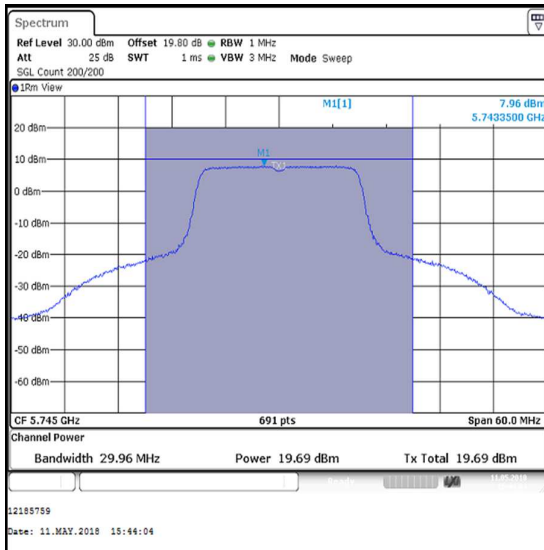
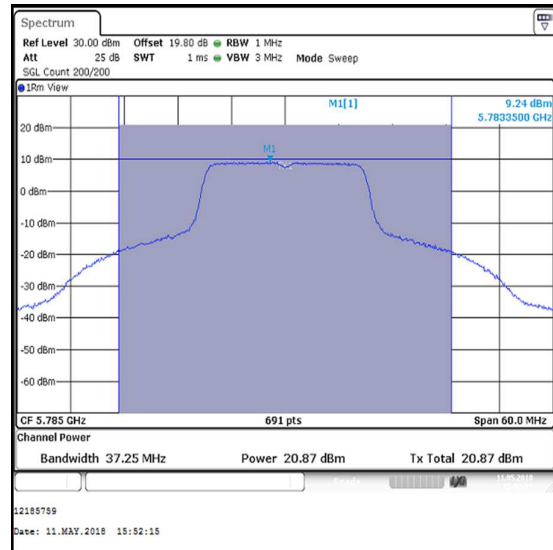
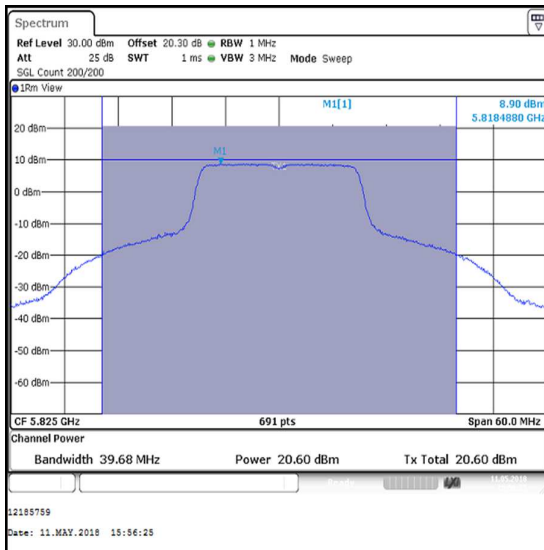
Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5775	16.4	0.2	16.6	29.7	13.1	Complied

**Single Channel**

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5745	20.2	19.7	23.0	29.7	6.7	Complied
Middle	5785	21.0	20.9	24.0	29.7	5.7	Complied
Top	5825	20.4	20.6	23.5	29.7	6.2	Complied

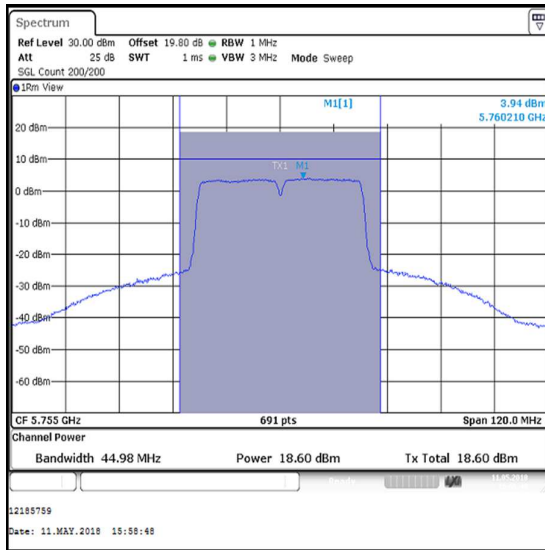
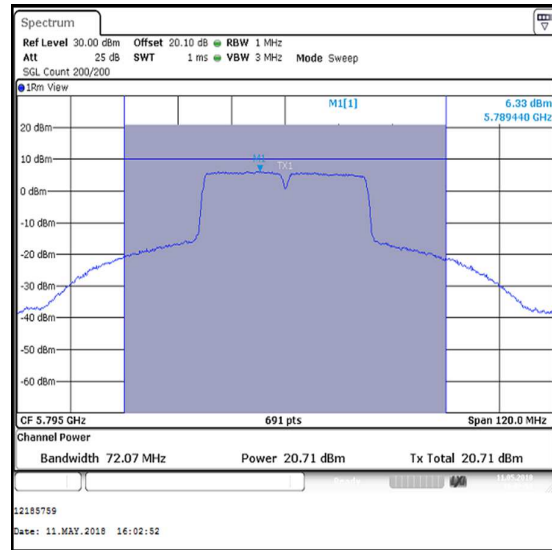
Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Core 1**Bottom Channel****Middle Channel****Top Channel**

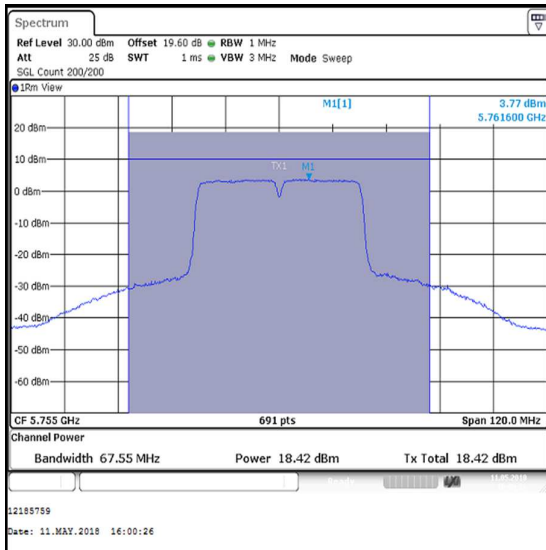
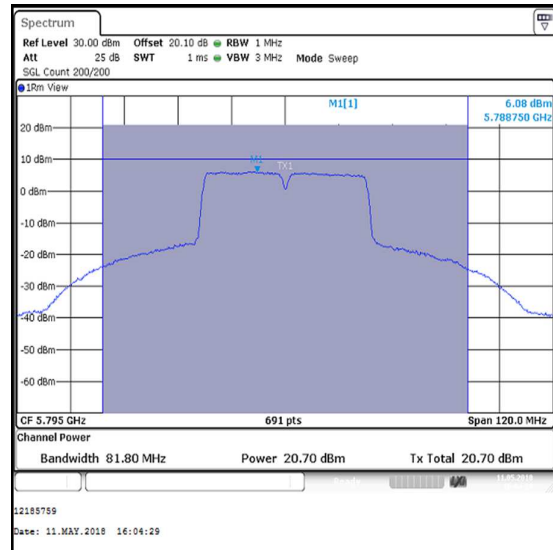
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Core 0****Bottom Channel****Middle Channel****Top Channel**

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Bottom	5755	18.6	0.1	18.7	18.4	0.1	18.5
Top	5795	20.7	0.1	20.8	20.7	0.1	20.8

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5755	18.7	18.5	21.6	29.7	8.1	Complied
Top	5795	20.8	20.8	23.8	29.7	5.9	Complied

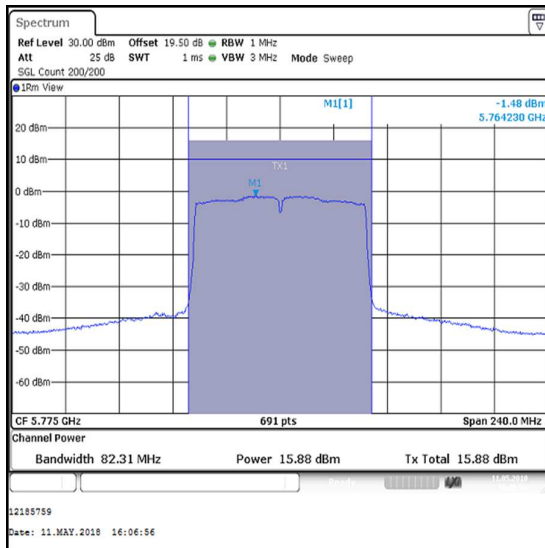
Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Core 1**Bottom Channel****Top Channel**

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Core 0****Bottom Channel****Top Channel**

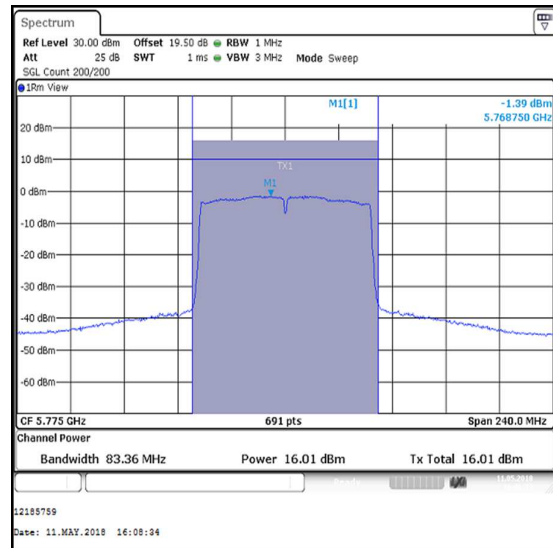
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1**

Channel	Frequency (MHz)	Core 1			Core 0		
		Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction (dB)	Corrected Conducted Power (dBm)
Single	5775	15.9	0.2	16.1	16.0	0.2	16.2

Channel	Frequency (MHz)	Corrected Conducted Power Core 1 (dBm)	Corrected Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Single	5775	16.1	16.2	19.2	29.7	10.5	Complied



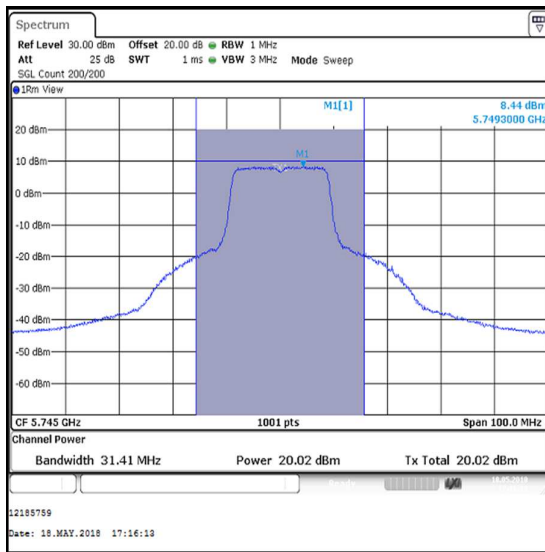
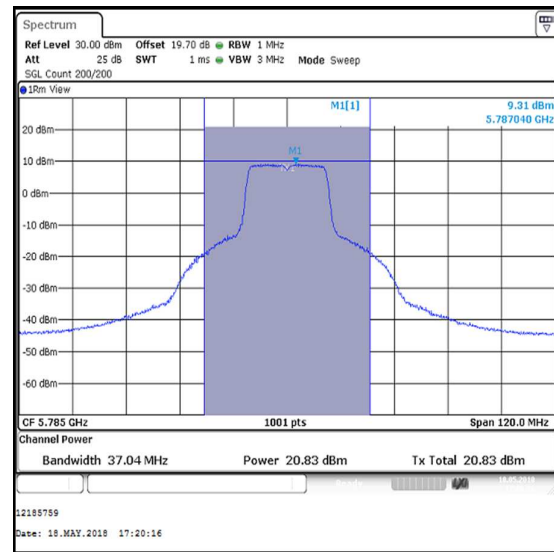
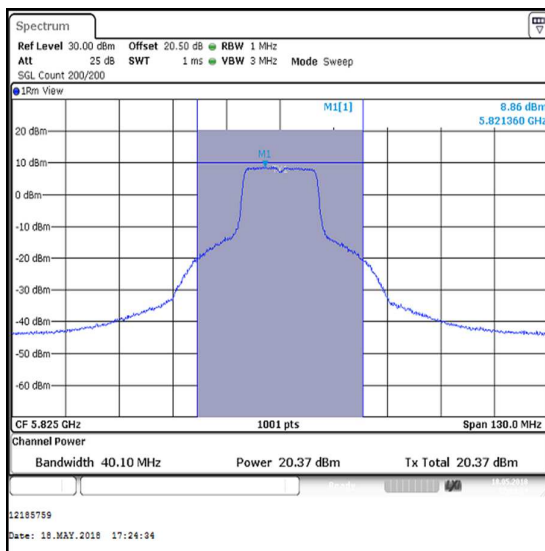
Single Channel / Core 1



Single Channel / Core 0

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx STBC / BPSK / MCS0**

Channel	Frequency (MHz)	Conducted Power Core 1 (dBm)	Conducted Power Core 0 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5745	20.0	19.8	22.9	30.0	7.1	Complied
Middle	5785	20.8	20.8	23.8	30.0	6.2	Complied
Top	5825	20.4	20.5	23.5	30.0	6.5	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx STBC / BPSK / MCS0 / Core 1**Bottom Channel****Middle Channel****Top Channel**