

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5190	-3.1	0.1	-3.0	-3.7	0.1	-3.6
Top	5230	3.7	0.1	3.8	3.7	0.1	3.8

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5190	-3.0	-3.6	-0.3	10.1	10.4	Complied
Top	5230	3.8	3.8	6.8	10.1	3.3	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx TxBF / BPSK / MCS0x1

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5210	-6.5	0.1	-6.4	-7.4	0.1	-7.3

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5210	-6.4	-7.3	-3.8	10.1	13.9	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5180	2.0	1.8	2.3	6.6
Middle	5200	2.7	2.7	2.8	7.1
Top	5240	2.4	2.7	2.3	7.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5180	6.6	9.2	2.6	Complied
Middle	5200	7.1	9.2	2.1	Complied
Top	5240	7.0	9.2	2.2	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5190	-3.4	0.1	-3.3	-3.2	0.1	-3.1
Top	5230	2.8	0.1	2.9	3.3	0.1	3.4

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5190	-3.2	0.1	-3.1	-3.3	-3.1	-3.1
Top	5230	2.5	0.1	2.6	2.9	3.4	2.6

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5190	1.3	9.2	7.9	Complied
Top	5230	7.6	9.2	1.6	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
42	5210	-6.5	0.2	-6.3	-6.0	0.2	-5.8

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
42	5210	-6.2	0.2	-6.0	-6.3	-5.8	-6.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
42	5210	-1.4	9.2	10.6	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16**

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5180	2.9	2.9	3.1	7.6
Middle	5200	4.6	5.0	4.8	9.2
Top	5240	5.0	5.1	4.5	9.4

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5180	7.6	11.0	3.4	Complied
Middle	5200	9.2	11.0	1.8	Complied
Top	5240	9.4	11.0	1.6	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5190	-3.2	0.1	-3.1	-3.0	0.1	-2.9
Top	5230	4.4	0.1	4.5	4.9	0.1	5.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5190	-3.1	0.1	-3.0	-3.1	-2.9	-3.0
Top	5230	3.9	0.1	4.0	4.5	5.0	4.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5190	1.5	11.0	9.5	Complied
Top	5230	9.1	11.0	1.9	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
42	5210	-6.2	0.2	-6.0	-5.5	0.2	-5.3

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
42	5210	-6.1	0.2	-5.9	-6.0	-5.3	-5.9

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
42	5210	-1.2	11.0	12.2	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5180	1.9	0.1	2.0	2.2	0.1	2.3
Middle	5200	2.3	0.1	2.4	2.9	0.1	3.0
Top	5240	2.9	0.1	3.0	2.6	0.1	2.7

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5180	1.7	0.1	1.8	2.0	2.3	1.8
Middle	5200	2.5	0.1	2.6	2.4	3.0	2.6
Top	5240	1.8	0.1	1.9	3.0	2.7	1.9

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5180	6.8	9.2	2.4	Complied
Middle	5200	7.4	9.2	1.8	Complied
Top	5240	7.3	9.2	1.9	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5190	-4.8	0.1	-4.7	-5.0	0.1	-4.9
Top	5230	0.7	0.1	0.8	0.3	0.1	0.4

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5190	-0.9	0.1	-0.8	-4.7	-4.9	-0.8
Top	5230	0.2	0.1	0.3	0.8	0.4	0.3

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5190	1.7	9.2	7.5	Complied
Top	5230	5.3	9.2	3.9	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Top	5210	-7.9	0.1	-7.8	-7.7	0.1	-7.6

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Top	5210	-6.2	0.1	-6.1	-7.8	-7.6	-6.1

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Top	5210	-2.3	9.2	11.5	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band)**4.5.2. 5.25-5.35 GHz band****Test Summary:**

Test Engineers:	Max Passell, Victor Carmon & Matthew Botfield	Test Dates:	07 November 2018 to 30 November 2018
Test Sample Serial Numbers:	C02X2007KFLX & C02WW00WKFMM		

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

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 52

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Note(s):**

1. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
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 maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
4. FCC Part 15.407(a)(2) limit for PSD in the 5.25-5.35 GHz band is <11 dBm/MHz.
5. For MIMO CDD and MIMO SDM modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)a).
6. For MIMO TxBF modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
7. For SISO and MIMO SDM modes of operation, the antenna gain is < 6 dBi.
8. For 2Tx CDD and 2Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 6.9 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 11.0 dBm has been reduced by 0.9 dB to 10.1 dBm.
9. For 3Tx CDD and 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 7.9 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 11.0 dBm has been reduced by 1.9 dB to 9.1 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. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.
13. The EUT with serial number C02X2007KFLX was used for non-TxBF tests, the EUT with serial C02WW00WKFMM number was used for TxBF tests.

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2**

Channel	Frequency (MHz)	PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5260	9.8	11.0	1.2	Complied
Middle	5280	9.8	11.0	1.2	Complied
Top	5320	6.3	11.0	4.7	Complied

Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5260	9.4	11.0	1.6	Complied
Middle	5280	9.4	11.0	1.6	Complied
Top	5320	6.1	11.0	4.9	Complied

Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm /MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5270	5.3	0.1	5.4	11.0	5.6	Complied
Top	5310	0.1	0.1	0.2	11.0	10.8	Complied

Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm /MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Single	5290	-2.9	0.2	-2.7	11.0	13.7	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5260	5.8	5.4	8.2	10.1	1.9	Complied
Middle	5280	5.7	5.6	8.6	10.1	1.5	Complied
Top	5320	6.0	5.3	8.4	10.1	1.7	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5270	4.4	0.1	4.5	3.6	0.1	3.7
Top	5310	-0.5	0.1	-0.4	-1.1	0.1	-1.0

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	4.5	3.7	6.8	10.1	3.3	Complied
Top	5310	-0.4	-1.0	2.2	10.1	7.9	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5290	-3.5	0.2	-3.3	-4.3	0.2	-4.1

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5290	-3.3	-4.1	-0.7	10.1	10.8	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8

Channel	Frequency (MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5260	6.8	6.3	9.4	11.0	1.6	Complied
Middle	5280	6.9	6.3	9.4	11.0	1.6	Complied
Top	5320	6.0	5.4	8.4	11.0	2.6	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8**

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5270	4.5	0.1	4.6	3.6	0.1	3.7
Top	5310	-0.6	0.1	-0.5	-1.0	0.1	-0.9

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	4.6	3.7	7.0	11.0	4.0	Complied
Top	5310	-0.5	-0.9	2.0	11.0	9.0	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5290	-3.2	0.2	-3.0	-3.9	0.2	-3.7

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5290	-3.0	-3.7	-0.6	11.0	11.6	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5260	6.5	0.1	6.6	5.9	0.1	6.0
Middle	5280	5.8	0.1	5.9	5.3	0.1	5.4
Top	5320	5.9	0.1	6.0	6.0	0.1	6.1

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5260	6.6	6.0	9.3	10.1	0.8	Complied
Middle	5280	5.9	5.4	8.7	10.1	1.4	Complied
Top	5320	6.0	6.1	9.1	10.1	1.0	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5270	3.2	0.1	3.3	3.2	0.1	3.3
Top	5310	-1.1	0.1	-1.0	-1.8	0.1	-1.7

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	3.3	3.3	6.3	10.1	3.8	Complied
Top	5310	-1.0	-1.7	1.7	10.1	8.4	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1

Channel	Frequency (MHz)	Core 1			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5290	-5.6	0.1	-5.5	-5.1	0.1	-5.0

Channel	Frequency (MHz)	Corrected PSD Core 1 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5290	-5.5	-5.0	-2.2	10.1	12.3	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5260	2.8	2.6	2.4	7.1
Middle	5280	2.6	2.8	2.4	7.1
Top	5320	3.0	3.2	2.6	7.4

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5260	7.1	9.1	2.0	Complied
Middle	5280	7.1	9.1	2.0	Complied
Top	5320	7.4	9.1	1.7	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5270	2.6	0.1	2.7	2.5	0.1	2.6
Top	5310	-1.1	0.1	-1.0	-0.4	0.1	-0.3

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5270	2.4	0.1	2.5	2.7	2.6	2.5
Top	5310	-0.9	0.1	-0.8	-1.0	-0.3	-0.8

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	7.2	9.1	1.9	Complied
Top	5310	3.8	9.1	5.3	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5290	-4.6	0.2	-4.4	-4.0	0.2	-3.8

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5290	-4.3	0.2	-4.1	-4.4	-3.8	-4.1

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5290	0.4	9.1	8.7	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16**

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5260	4.8	4.7	4.1	9.0
Middle	5280	4.6	4.9	4.2	9.0
Top	5320	3.8	4.1	3.7	8.5

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5260	9.0	11.0	2.0	Complied
Middle	5280	9.0	11.0	2.0	Complied
Top	5320	8.5	11.0	2.5	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5270	3.7	0.1	3.8	4.1	0.1	4.2
Top	5310	-1.1	0.1	-1.0	-0.3	0.1	-0.2

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5270	3.3	0.1	3.4	3.8	4.2	3.4
Top	5310	-0.8	0.1	-0.7	-1.0	-0.2	-0.7

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	8.3	11.0	2.7	Complied
Top	5310	3.9	11.0	7.1	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
58	5290	-4.7	0.2	-4.5	-3.7	0.2	-3.5

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
58	5290	-4.3	0.2	-4.1	-4.5	-3.5	-4.1

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
58	5290	0.4	11.0	10.6	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5260	2.1	0.1	2.2	2.7	0.1	2.8
Middle	5280	3.2	0.1	3.3	2.8	0.1	2.9
Top	5320	-1.0	0.1	-0.9	1.4	0.1	1.5

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5260	1.6	0.1	1.7	2.2	2.8	1.7
Middle	5280	1.5	0.1	1.6	3.3	2.9	1.6
Top	5320	2.8	0.1	2.9	-0.9	1.5	2.9

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5260	7.0	9.1	2.1	Complied
Middle	5280	7.4	9.1	1.7	Complied
Top	5320	6.2	9.1	2.9	Complied

Transmitter Maximum Power Spectral Density (5.25-5.35 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5270	1.3	0.1	1.4	1.7	0.1	1.8
Top	5310	-1.2	0.1	-1.1	-3.3	0.1	-3.2

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5270	0.4	0.1	0.5	1.4	1.8	0.5
Top	5310	-2.1	0.1	-2.0	-1.1	-3.2	-2.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5270	6.0	9.1	3.1	Complied
Top	5310	2.8	9.1	6.3	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Top	5290	-4.1	0.1	-4.0	-4.1	0.1	-4.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Top	5290	-6.1	0.1	-6.0	-4.0	-4.0	-6.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Top	5290	0.2	9.1	8.9	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band)**4.5.3. 5.47-5.725 GHz band****Test Summary:**

Test Engineers:	Max Passell, Victor Carmon & Matthew Botfield	Test Dates:	07 November 2018 to 30 November 2018
Test Sample Serial Numbers:	C02X2007KFLX & C02WW00WKFMM		

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

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 52

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Note(s):**

1. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
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 maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
4. FCC Part 15.407(a)(2) limit for PSD in the 5.47-5.725 GHz band is <11 dBm/MHz.
5. For MIMO CDD and MIMO SDM modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)a).
6. For MIMO TxBF modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
7. For SISO and MIMO SDM modes of operation, the antenna gain is < 6 dBi.
8. For 2Tx CDD and 2 Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 6.9 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 11.0 dBm has been reduced by 0.9 dB to 10.1 dBm.
9. For 3Tx CDD and 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 8.1 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 11.0 dBm has been reduced by 2.1 dB to 8.9 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. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.
13. The EUT with serial number C02X2007KFLX was used for non-TxBF tests, the EUT with serial C02WW00WKFMM number was used for TxBF tests.

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2**

Channel	Frequency (MHz)	PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	4.1	11.0	6.9	Complied
Middle	5580	9.2	11.0	1.8	Complied
Top	5700	3.3	11.0	7.7	Complied

Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	3.6	11.0	7.4	Complied
Middle	5580	9.1	11.0	1.9	Complied
Top	5700	3.0	11.0	8.0	Complied

Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	-0.9	0.1	-0.8	11.0	11.8	Complied
Middle	5590	7.5	0.1	7.6	11.0	3.4	Complied
Top	5670	1.7	0.1	1.8	11.0	9.2	Complied

Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-4.0	0.2	-3.8	11.0	14.8	Complied
Top	5610	0.4	0.2	0.6	11.0	10.4	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	2.3	2.2	5.2	10.1	4.9	Complied
Middle	5580	5.3	4.4	7.7	10.1	2.4	Complied
Top	5700	1.7	0.8	4.2	10.1	5.9	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5510	-2.6	0.1	-2.5	-1.9	0.1	-1.8
Middle	5590	5.4	0.1	5.5	4.6	0.1	4.7
Top	5670	1.4	0.1	1.5	1.0	0.1	1.1

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	-2.5	-1.8	0.7	10.1	9.4	Complied
Middle	5590	5.5	4.7	8.0	10.1	2.1	Complied
Top	5670	1.5	1.1	4.1	10.1	6.0	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5530	-5.0	0.2	-4.8	-5.8	0.2	-5.6
Top	5610	-1.4	0.2	-1.2	-2.7	0.2	-2.5

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-4.8	-5.6	-2.3	10.1	12.4	Complied
Top	5610	-1.2	-2.5	1.0	10.1	9.1	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	2.4	2.8	5.5	11.0	5.5	Complied
Middle	5580	6.1	5.3	8.6	11.0	2.4	Complied
Top	5700	1.6	0.5	3.8	11.0	7.2	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5510	-2.5	0.1	-2.4	-1.9	0.1	-1.8
Middle	5590	5.4	0.1	5.5	4.5	0.1	4.6
Top	5670	1.1	0.1	1.2	0.9	0.1	1.0

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	-2.4	-1.8	0.7	11.0	10.3	Complied
Middle	5590	5.5	4.6	7.9	11.0	3.1	Complied
Top	5670	1.2	1.0	3.9	11.0	7.1	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5530	-5.0	0.2	-4.8	-5.8	0.2	-5.6
Top	5610	-1.5	0.2	-1.3	-2.5	0.2	-2.3

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-4.8	-5.6	-2.2	11.0	13.2	Complied
Top	5610	-1.3	-2.3	1.0	11.0	10.0	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5500	3.0	0.1	3.1	2.7	0.1	2.8
Middle	5580	6.0	0.1	6.1	6.4	0.1	6.5
Top	5700	1.0	0.1	1.1	0.3	0.1	0.4

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	3.1	2.8	6.0	10.1	4.1	Complied
Middle	5580	6.1	6.5	9.3	10.1	0.8	Complied
Top	5700	1.1	0.4	3.8	10.1	6.3	Complied

Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5510	-3.4	0.1	-3.3	-4.6	0.1	-4.5
Middle	5590	3.0	0.1	3.1	2.8	0.1	2.9
Top	5670	-1.5	0.1	-1.4	-3.6	0.1	-3.5

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	-3.3	-4.5	-0.8	10.1	10.9	Complied
Middle	5590	3.1	2.9	6.0	10.1	4.1	Complied
Top	5670	-1.4	-3.5	0.7	10.1	9.4	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5530	-6.7	0.1	-6.6	-7.0	0.1	-6.9
Top	5610	-3.5	0.1	-3.4	-3.5	0.1	-3.4

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-6.6	-6.9	-3.7	10.1	13.8	Complied
Top	5610	-3.4	-3.4	-0.4	10.1	10.5	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5500	2.1	2.7	2.0	6.8
Middle	5580	2.1	2.5	0.9	6.3
Top	5700	1.5	1.6	0.8	5.7

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	6.8	8.9	2.1	Complied
Middle	5580	6.3	8.9	2.6	Complied
Top	5700	5.7	8.9	3.2	Complied

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

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5510	-2.6	0.1	-2.5	-2.2	0.1	-2.1
Middle	5590	1.9	0.1	2.0	2.9	0.1	3.0
Top	5670	0.9	0.1	1.0	1.0	0.1	1.1

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5510	-2.4	0.1	-2.3	-2.5	-2.1	-2.3
Middle	5590	1.9	0.1	2.0	2.0	3.0	2.0
Top	5670	0.4	0.1	0.5	1.0	1.1	0.5

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	2.4	8.9	6.5	Complied
Middle	5590	6.9	8.9	2.0	Complied
Top	5670	5.4	8.9	3.5	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5530	-5.9	0.2	-5.7	-5.5	0.2	-5.3
Top	5610	-1.7	0.2	-1.5	-1.2	0.2	-1.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5530	-7.2	0.2	-7.0	-5.7	-5.3	-7.0
Top	5610	-2.7	0.2	-2.5	-1.5	-1.0	-2.5

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-1.3	8.9	10.2	Complied
Top	5610	2.9	8.9	6.0	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16**

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Bottom	5500	3.0	3.4	2.9	7.6
Middle	5580	4.4	4.8	3.5	8.8
Top	5700	1.8	1.8	1.0	6.1

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	7.6	11.0	3.4	Complied
Middle	5580	8.8	11.0	2.2	Complied
Top	5700	6.1	11.0	4.9	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5510	-2.4	0.1	-2.3	-2.0	0.1	-1.9
Middle	5590	3.4	0.1	3.5	3.9	0.1	4.0
Top	5670	0.8	0.1	0.9	0.9	0.1	1.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5510	-2.0	0.1	-1.9	-2.3	-1.9	-1.9
Middle	5590	2.9	0.1	3.0	3.5	4.0	3.0
Top	5670	0.6	0.1	0.7	0.9	1.0	0.7

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	2.6	11.0	8.4	Complied
Middle	5590	8.1	11.0	2.9	Complied
Top	5670	5.4	11.0	5.6	Complied

Transmitter Maximum Power Spectral Density (5.47-5.725 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5530	-5.7	0.2	-5.5	-4.8	0.2	-4.6
Top	5610	-1.5	0.2	-1.3	-0.9	0.2	-0.7

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5530	-6.4	0.2	-6.2	-5.5	-4.6	-6.2
Top	5610	-2.6	0.2	-2.4	-1.3	-0.7	-2.4

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-1.0	11.0	12.0	Complied
Top	5610	2.9	11.0	8.1	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5500	3.0	0.1	3.1	2.6	0.1	2.7
Middle	5580	3.0	0.1	3.1	3.2	0.1	3.3
Top	5700	0.3	0.1	0.4	0.9	0.1	1.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5500	1.6	0.1	1.7	3.1	2.7	1.7
Middle	5580	2.9	0.1	3.0	3.1	3.3	3.0
Top	5700	-0.4	0.1	-0.3	0.4	1.0	-0.3

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5500	7.3	8.9	1.6	Complied
Middle	5580	7.9	8.9	1.0	Complied
Top	5700	5.2	8.9	3.7	Complied

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

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5510	-3.4	0.1	-3.3	-3.5	0.1	-3.4
Middle	5590	1.0	0.1	1.1	1.1	0.1	1.2
Top	5670	-2.0	0.1	-1.9	-1.9	0.1	-1.8

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5510	-5.2	0.1	-5.1	-3.3	-3.4	-5.1
Middle	5590	0.2	0.1	0.3	1.1	1.2	0.3
Top	5670	-2.6	0.1	-2.5	-1.9	-1.8	-2.5

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5510	0.9	8.9	8.0	Complied
Middle	5590	5.7	8.9	3.2	Complied
Top	5670	2.7	8.9	6.2	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Bottom	5530	-7.6	0.1	-7.5	-7.6	0.1	-7.5
Top	5610	-3.6	0.1	-3.5	-4.1	0.1	-4.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Bottom	5530	-8.7	0.1	-8.6	-7.5	-7.5	-8.6
Top	5610	-4.3	0.1	-4.2	-3.5	-4.0	-4.2

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5530	-3.1	8.9	12.0	Complied
Top	5610	0.9	8.9	8.0	Complied

Transmitter Maximum Power Spectral Density (Straddle channels)**4.5.4. Channels that straddle the U-NII-2C and U-NII-3 bands****Test Summary:**

Test Engineers:	Max Passell, Victor Carmon & Matthew Botfield	Test Dates:	07 November 2018 to 30 November 2018
Test Sample Serial Numbers:	C02X2007KFLX & C02WW00WKFMM		

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

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 52

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Note(s):**

1. 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 power spectral density limit being more stringent on U-NII-2C, compliance is shown against the limits of U-NII-2C. By default the EUT also complied on U-NII-3.
2. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
3. Measurements were performed using configurations detailed in Section 3.5 of this test report on the relevant channels.
4. 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 maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
5. FCC Part 15.407(a)(2) limit for PPSD in the 5.47-5.725 GHz band is <11 dBm/MHz.
6. For MIMO CDD and MIMO SDM modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)a).
7. For MIMO TxBF modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
8. For SISO and MIMO SDM modes of operation, the antenna gain is < 6 dBi.
9. For 2Tx CDD and 2 Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 6.9 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 11.0 dBm has been reduced by 0.9 dB to 10.1 dBm.
10. For 3Tx CDD and 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 8.1 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 11.0 dBm has been reduced by 2.1 dB to 8.9 dBm.
11. For details on antenna gains refer to Section 3.4 of this test report.
12. 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.
13. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.
14. The EUT with serial number C02X2007KFLX was used for non-TxBF tests, the EUT with serial C02WW00WKFMM number was used for TxBF tests.

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2**

Channel	Frequency (MHz)	PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	9.2	11.0	1.8	Complied

Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	8.9	11.0	2.1	Complied

Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	7.5	0.1	7.6	11.0	3.4	Complied

Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	0.6	0.2	0.8	11.0	10.2	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	5.2	4.8	7.9	10.1	2.2	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5710	5.5	0.1	5.6	4.9	0.1	5.0

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	5.6	5.0	8.1	10.1	2.0	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5690	0.6	0.2	0.8	-0.3	0.2	-0.1

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	0.8	-0.1	3.1	10.1	7.0	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	6.5	5.6	8.9	11.0	2.1	Complied

Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5710	5.4	0.1	5.5	5.1	0.1	5.2

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	5.5	5.2	8.1	11.0	2.9	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5690	0.4	0.2	0.6	-0.5	0.2	-0.3

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	0.6	-0.3	3.0	11.0	8.0	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5720	5.7	0.1	5.8	4.9	0.1	5.0

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	5.8	5.0	8.4	10.1	1.7	Complied

Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5710	3.5	0.1	3.6	2.5	0.1	2.6

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	3.6	2.6	6.1	10.1	4.0	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Single	5690	-0.3	0.1	-0.2	-1.6	0.1	-1.5

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm/MHz)	Corrected PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	-0.2	-1.5	2.2	10.1	7.9	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Single	5720	2.1	2.4	1.7	6.6

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	6.6	8.9	2.3	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5710	2.2	0.1	2.3	2.5	0.1	2.6

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5710	1.8	0.1	1.9	2.3	2.6	1.9

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	6.8	8.9	2.1	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5690	0.5	0.2	0.7	0.3	0.2	0.5

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5690	-0.2	0.2	0.0	0.7	0.5	0.0

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	4.8	8.9	4.1	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	PSD Core 0 (dBm/MHz)	PSD Core 1 (dBm/MHz)	PSD Core 2 (dBm/MHz)	Combined PSD (dBm/MHz)
Single	5720	4.2	4.6	3.8	8.8

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	8.8	11.0	2.2	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5710	3.5	0.1	3.6	3.9	0.1	4.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5710	3.3	0.1	3.4	3.6	4.0	3.4

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5710	8.1	11.0	2.9	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5690	0.5	0.2	0.7	0.8	0.2	1.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5690	0.2	0.2	0.4	0.7	1.0	0.4

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	5.3	11.0	5.7	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5720	2.6	0.1	2.7	2.9	0.1	3.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5720	1.8	0.1	1.9	2.7	3.0	1.9

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	7.3	8.9	1.6	Complied

Transmitter Maximum Power Spectral Density (Straddle channels) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5710	0.2	0.1	0.3	0.1	0.1	0.2

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5710	-1.9	0.1	-1.8	0.3	0.2	-1.8

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5720	4.4	8.9	4.5	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)
Single	5690	-2.1	0.1	-2.0	-2.5	0.1	-2.4

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm/MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm/MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Corrected PSD Core 2 (dBm /MHz)
Single	5690	-4.2	0.1	-4.1	-2.0	-2.4	-4.1

Channel	Frequency (MHz)	Combined PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Single	5690	2.0	8.9	6.9	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band)**4.5.5. 5.725-5.85 GHz band****Test Summary:**

Test Engineers:	Max Passell, Victor Carmon & Matthew Botfield	Test Dates:	07 November 2018 to 30 November 2018
Test Sample Serial Numbers:	C02X2007KFLX & C02WW00WKFMM		

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

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	42 to 52

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Note(s):**

1. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
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 maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
4. FCC Part 15.407(a)(3) limit for PPSD in the 5.725-5.85 GHz operating band is <30 dBm/500 kHz.
5. For MIMO CDD and MIMO SDM modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)a).
6. For MIMO TxBF modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
7. In accordance with ANSI C63.10 Section 4.1.4.1, use of bandwidths greater than those specified can produce higher readings. Compliance against the applicable limits is shown using a 1 MHz resolution bandwidth. This was deemed worst case.
8. For SISO and MIMO SDM modes of operation, the antenna gain is < 6 dBi.
9. For 2Tx CDD and 2Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 7.1 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/500 kHz has been reduced by 1.1 dB to 28.9 dBm.
10. For 3Tx CDD and 3Tx TxBF modes of operation presented in this section of the test report, the EUT has a directional antenna gain of 8.2 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/500 kHz has been reduced by 2.2 dB to 27.8 dBm.
11. For details on antenna gains refer to Section 3.4 of this test report.
12. 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.
13. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.
14. The EUT with serial number C02X2007KFLX was used for non-TxBF tests, the EUT with serial C02WW00WKFMM number was used for TxBF tests.

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2**

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	10.9	30.0	19.1	Complied
Middle	5785	10.7	30.0	19.3	Complied
Top	5825	11.2	30.0	18.8	Complied

Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	10.9	30.0	19.1	Complied
Middle	5785	10.4	30.0	19.6	Complied
Top	5825	11.0	30.0	19.0	Complied

Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	6.4	0.1	6.5	30.0	23.5	Complied
Top	5795	7.6	0.1	7.7	30.0	22.3	Complied

Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	-1.6	0.2	-1.4	30.0	31.4	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	11.0	10.6	13.6	28.9	15.3	Complied
Middle	5785	10.2	10.2	13.0	28.9	15.9	Complied
Top	5825	10.4	9.9	13.0	28.9	15.9	Complied

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

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	4.7	0.1	4.8	5.0	0.1	5.1
Top	5795	6.4	0.1	6.5	7.0	0.1	7.1

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	4.8	5.1	7.8	28.9	21.1	Complied
Top	5795	6.5	7.1	9.4	28.9	19.5	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-1.6	0.2	-1.4	-1.5	0.2	-1.3

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	-1.4	-1.3	1.4	28.9	27.5	Complied

Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	10.8	10.6	13.6	30.0	16.4	Complied
Middle	5785	10.4	10.2	13.1	30.0	16.9	Complied
Top	5825	10.8	10.3	13.3	30.0	16.7	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	4.6	0.1	4.7	5.0	0.1	5.1
Top	5795	6.3	0.1	6.4	6.6	0.1	6.7

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	4.7	5.1	7.8	30.0	22.2	Complied
Top	5795	6.4	6.7	9.4	30.0	20.6	Complied

Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-1.8	0.2	-1.6	-1.7	0.2	-1.5

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	-1.6	-1.5	1.2	30.0	28.8	Complied

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

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5745	11.0	0.1	11.1	9.9	0.1	10.0
Middle	5785	10.9	0.1	11.0	10.2	0.1	10.3
Top	5825	10.9	0.1	11.0	9.4	0.1	9.5

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	11.1	10.0	13.6	28.9	15.3	Complied
Middle	5785	11.0	10.3	13.7	28.9	15.2	Complied
Top	5825	11.0	9.5	13.3	28.9	15.6	Complied

Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	3.5	0.1	3.6	2.7	0.1	2.8
Top	5795	4.9	0.1	5.0	3.7	0.1	3.8

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	3.6	2.8	6.2	28.9	22.7	Complied
Top	5795	5.0	3.8	7.5	28.9	21.4	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-3.7	0.1	-3.6	-3.2	0.1	-3.1

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	-3.6	-3.1	-0.3	28.9	29.2	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm/MHz)
Bottom	5745	10.9	10.3	9.7	14.8
Middle	5785	10.3	10.1	9.7	14.6
Top	5825	10.7	10.3	10.1	14.9

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	14.8	27.8	13.0	Complied
Middle	5785	14.6	27.8	13.2	Complied
Top	5825	14.9	27.8	12.9	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	4.8	0.1	4.9	4.6	0.1	4.7
Top	5795	6.3	0.1	6.4	6.4	0.1	6.5

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Bottom	5755	5.1	0.1	5.2	4.9	4.7	5.2
Top	5795	6.6	0.1	6.7	6.4	6.5	6.7

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	9.3	27.8	18.5	Complied
Top	5795	11.0	27.8	16.8	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-2.2	0.2	-2.0	-2.2	0.2	-2.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Single	5775	-1.7	0.2	-1.5	-2.0	-2.0	-1.5

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	2.6	27.8	25.2	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16**

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	PSD Core 2 (dBm / 1 MHz)	Combined PSD (dBm/MHz)
Bottom	5745	10.8	10.7	9.4	14.8
Middle	5785	10.4	10.2	9.7	14.5
Top	5825	10.9	10.5	10.0	14.9

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	14.8	30.0	15.2	Complied
Middle	5785	14.5	30.0	15.5	Complied
Top	5825	14.9	30.0	15.1	Complied

Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	4.8	0.1	4.9	5.2	0.1	5.3
Top	5795	6.3	0.1	6.4	6.2	0.1	6.3

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Bottom	5755	5.2	0.1	5.3	4.9	5.3	5.3
Top	5795	6.7	0.1	6.8	6.4	6.3	6.8

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	9.6	30.0	20.4	Complied
Top	5795	11.2	30.0	18.8	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-2.3	0.2	-2.1	-2.1	0.2	-1.9

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Single	5775	-1.9	0.2	-1.7	-2.1	-1.9	-1.7

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	2.6	30.0	27.4	Complied

Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5745	10.5	0.1	10.6	9.9	0.1	10.0
Middle	5785	10.2	0.1	10.3	9.5	0.1	9.6
Top	5825	10.2	0.1	10.3	9.9	0.1	10.0

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Bottom	5745	8.0	0.1	8.1	10.6	10.0	8.1
Middle	5785	8.4	0.1	8.5	10.3	9.6	8.5
Top	5825	8.0	0.1	8.1	10.3	10.0	8.1

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5745	14.5	27.8	13.3	Complied
Middle	5785	14.3	27.8	13.5	Complied
Top	5825	14.3	27.8	13.5	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0**

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5755	2.5	0.1	2.6	2.6	0.1	2.7
Top	5795	4.2	0.1	4.3	3.4	0.1	3.5

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Bottom	5755	2.2	0.1	2.3	2.6	2.7	2.3
Top	5795	3.0	0.1	3.1	4.3	3.5	3.1

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5755	7.3	27.8	20.5	Complied
Top	5795	8.4	27.8	19.4	Complied

Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Single	5775	-3.9	0.1	-3.8	-4.2	0.1	-4.1

Channel	Frequency (MHz)	Core 2			Core 0, Core 1 & Core 2		
		PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	Corrected PSD Core 2 (dBm / 1 MHz)
Single	5775	-4.4	0.1	-4.3	-3.8	-4.1	-4.3

Channel	Frequency (MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Single	5775	0.7	27.8	27.1	Complied

5. Radiated Test Results

5.1. Transmitter Out of Band Radiated Emissions <1 GHz

Test Summary:

Test Engineer:	James O'Reilly	Test Date:	17 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Parts 15.407(b)(4),(6),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.5
Frequency Range:	30 MHz to 1000 MHz

Environmental Conditions:

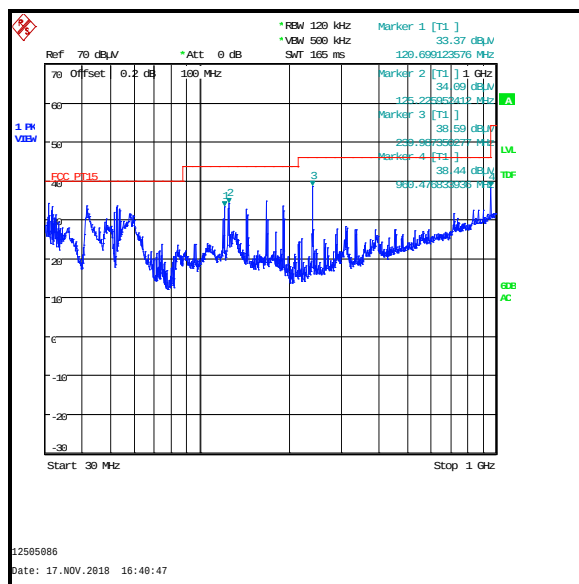
Temperature (°C):	21
Relative Humidity (%):	41

Note(s):

1. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
2. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a configuration of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
3. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
4. All other emissions shown on the pre-scan were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor.
5. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. The sweep time was set to auto. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
7. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and span wide enough to see the whole emission.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Quasi-Peak / Middle Channel / 802.11n / HT20 / MCS / MIMO**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
125.226	Vertical	22.9	43.5	20.6	Complied



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

5.2. Transmitter Out of Band Radiated Emissions >1 GHz

5.2.1. 5.15-5.25 GHz band

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation)

Test Summary:

Test Engineer:	James O'Reilly	Test Dates:	16 November 2018 to 18 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Part 15.407(b)(1),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	40 to 42

Note(s):

1. FCC Part 15.407(b)(1) states for transmitters operating in the band 5.15 to 5.25 GHz: all emissions outside of the 5.15 to 5.35 GHz band will not exceed -27 dBm/MHz. Part (b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2013 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
7. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. All other emissions shown on the pre-scan plots were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5612.000	Vertical	-38.2	-27.0	11.2	Complied
6043.400	Vertical	-38.2	-27.0	11.2	Complied

Results: Bottom Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4787.767	Vertical	53.5	54.0	0.5	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5633.380	Vertical	-37.1	-27.0	10.1	Complied
6066.680	Vertical	-37.1	-27.0	10.1	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5676.940	Vertical	-38.1	-27.0	11.1	Complied
6113.320	Vertical	-37.9	-27.0	10.9	Complied

5.2.2. 5.25-5.35 GHz band**Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation)****Test Summary:**

Test Engineer:	James O'Reilly	Test Dates:	16 November 2018 to 18 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Part 15.407(b)(2),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	40 to 42

Note(s):

1. FCC Part 15.407(b)(2) states for transmitters operating in the band 5.25 to 5.35 GHz: all emissions outside of the 5.15-5.35 GHz band will not exceed -27 dBm/MHz. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2013 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5698.300	Vertical	-38.6	-27.0	11.6	Complied
6136.500	Vertical	-38.1	-27.0	11.1	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5720.400	Vertical	-37.6	-27.0	10.6	Complied
6159.700	Vertical	-38.7	-27.0	11.7	Complied

Results: Middle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4928.000	Vertical	54.9	74.0	19.1	Complied

Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4840.000	Vertical	43.5	54.0	10.5	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5585.850	Vertical	-35.8	-27.0	8.8	Complied
5985.050	Vertical	-38.2	-27.0	11.2	Complied

5.2.3. 5.47-5.725 GHz band**Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation)****Test Summary:**

Test Engineer:	James O'Reilly	Test Dates:	16 November 2018 to 18 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Part 15.407(b)(3),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	40 to 42

Note(s):

1. FCC Part 15.407(b)(3) states for transmitters operating in the band 5.47 to 5.725 GHz: all emissions outside of the band will not exceed -27 dBm/MHz. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2013 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5271.100	Vertical	-39.4	-27.0	12.4	Complied
5736.300	Vertical	-38.6	-27.0	11.6	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5952.100	Vertical	-36.5	-27.0	9.5	Complied

Results: Top Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
5277.300	Vertical	-39.7	-27.0	12.7	Complied

5.2.4. Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz**Transmitter Out of Band Radiated Emissions (Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz)****Test Summary:**

Test Engineer:	James O'Reilly	Test Dates:	16 November 2018 to 18 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Part 15.407(b)(3),(4)(i),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	40 to 42

Note(s):

1. KDB 789033 Section III.B.2.b)(iii) states "Straddle channels are considered to be operating in both U-NII-2C and U-NII-3. The worst case out of band emission i.e. -27 dBm/MHz peak EIRP, applies at the band edges. The band edges are considered to be 5.47 GHz and 5.85 GHz."
2. In accordance with ANSI C63.10-2013 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz) (continued)**Results: Straddle Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5923.800	Vertical	-37.7	-27.0	10.7	Complied

Results: Straddle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5431.760	Complied	55.4	74.0	18.6	Complied

Results: Straddle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5427.860	Complied	43.5	54.0	10.5	Complied

5.2.5. 5.725-5.85 GHz band**Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation)****Test Summary:**

Test Engineer:	James O'Reilly	Test Dates:	16 November 2018 to 18 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Part 15.407(b)(4)(i),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	40 to 42

Note(s):

1. FCC Part 15.407(b)(4)(i) states for transmitters operating in the band 5.725 to 5.85 GHz: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2013 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 802.11n / HT20 / MCS0 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. The emission shown on the 1 GHz to 8 GHz plot is the EUT fundamental.
7. Measurements were performed across the two restricted bands closest to the bands of operation with the EUT transmitting on the bottom channel in the 5.15 to 5.25 GHz band and top channel 5.25 to 5.35 GHz range. Plots are included in this section of the test report. Peak and average measurements were made.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
9. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5319.000	Vertical	-39.4	-27.0	12.4	Complied
5539.125	Vertical	-36.6	-27.0	9.6	Complied
5952.085	Vertical	-36.0	-27.0	9.0	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5578.150	Vertical	-36.3	-27.0	9.3	Complied
5994.850	Vertical	-36.5	-27.0	9.5	Complied

Results: Middle Channel / Field Strength / Peak

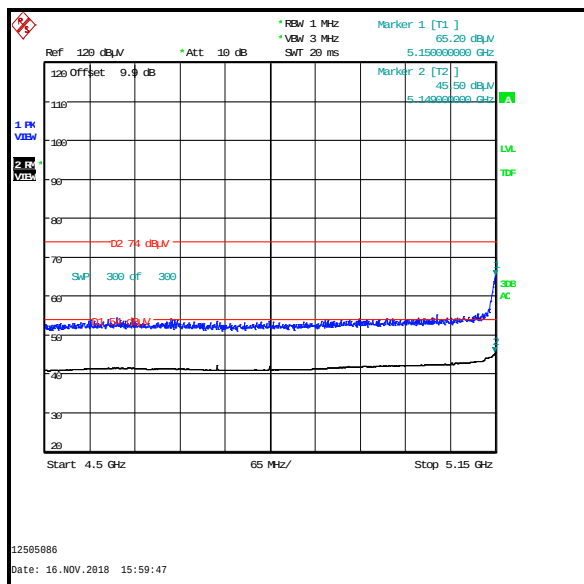
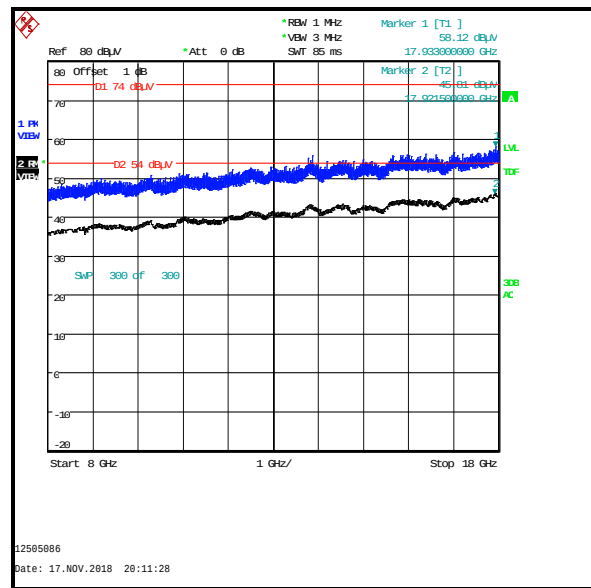
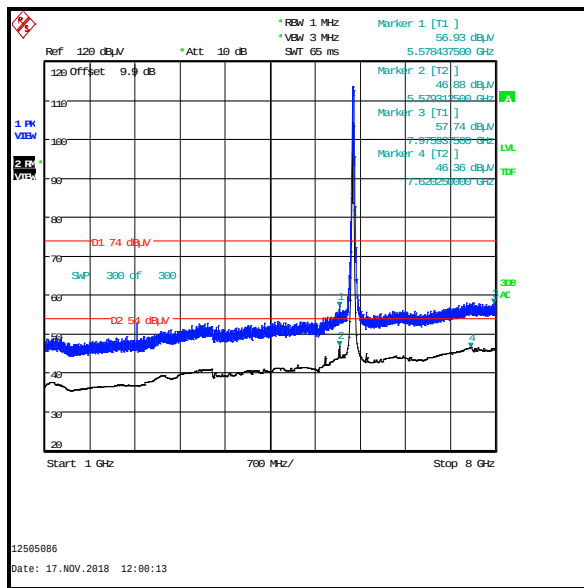
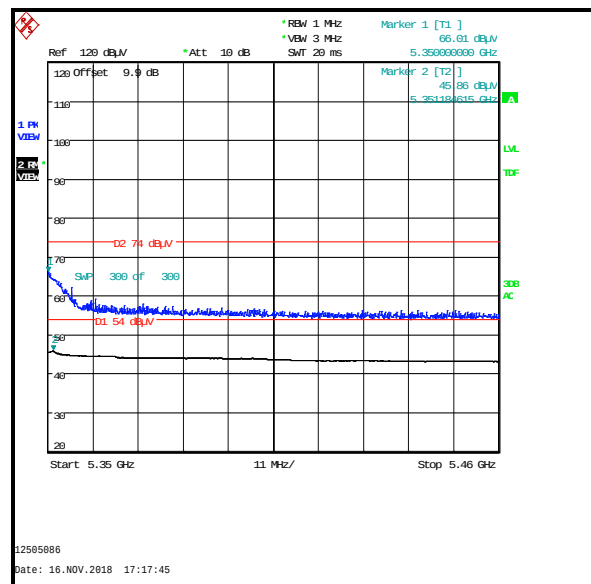
Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.560	Vertical	56.5	74.0	17.5	Complied

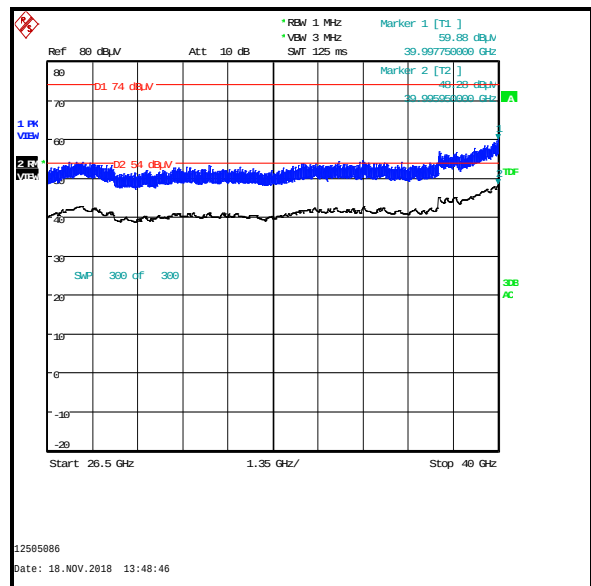
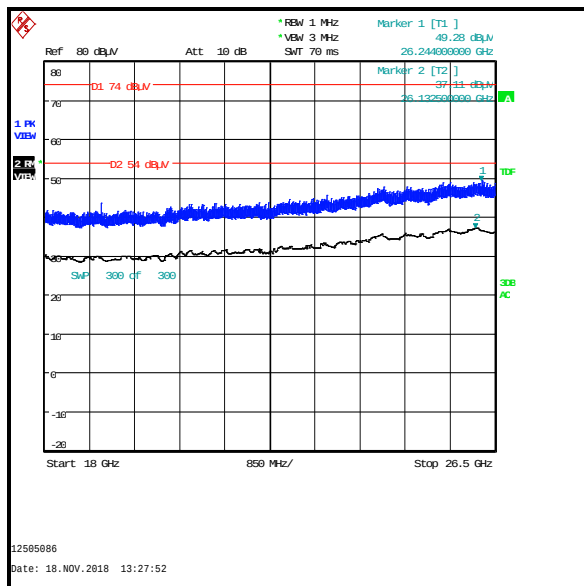
Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.510	Vertical	46.6	54.0	7.4	Complied

Results: Top Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
5617.575	Vertical	-35.5	-27.0	8.5	Complied
6047.775	Vertical	-36.6	-27.0	9.6	Complied

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Restricted Band 4.5 GHz to 5.15 GHz****Restricted Band 5.35 GHz to 5.46 GHz**

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.3. Transmitter Band Edge Radiated Emissions**5.3.1. 5.15-5.25 GHz band****Test Summary:**

Test Engineers:	Marco Zunarelli, John Ferdinand & Mark Perry	Test Dates:	19 October 2018 to 09 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Parts 15.407(b)(1),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	23 to 25
Relative Humidity (%):	40 to 50

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:

- o 802.11a - BPSK / 6 Mbps / Core 2
- o 802.11n HT20 / SISO - BPSK / MCS0 / Core 2
- o 802.11n HT40 / SISO - BPSK / MCS0 / Core 2
- o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 2
- o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
- o 802.11n HT20 / MIMO / 2Tx TxBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx TxBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx TxBF - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
- o 802.11n HT20 / MIMO / 3Tx TxBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx TxBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx TxBF - BPSK / MCS0x1

2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.

3. For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation, the results are included in the transmitter 5.725-5.85 GHz band radiated spurious emission section of this test report.

4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.

5. For all average measurements in this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).

6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.231	68.9	74.0	5.1	Complied
5150	67.1	74.0	6.9	Complied

Results: Upper Band Edge / Peak

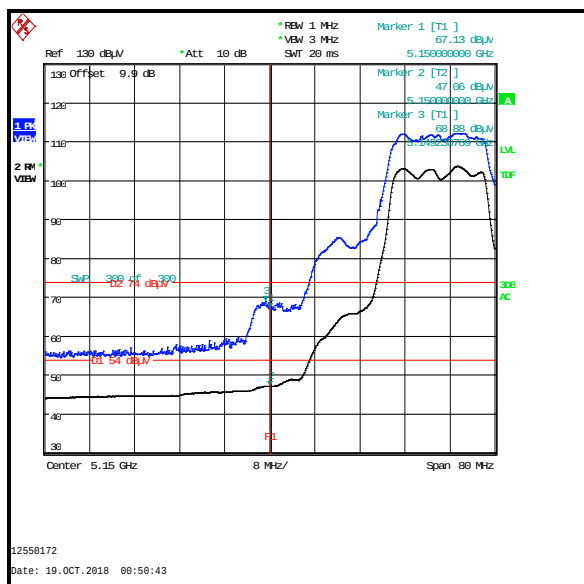
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	58.2	74.0	15.8	Complied
5428.846	59.2	74.0	14.8	Complied

Results: Lower Band Edge / Average

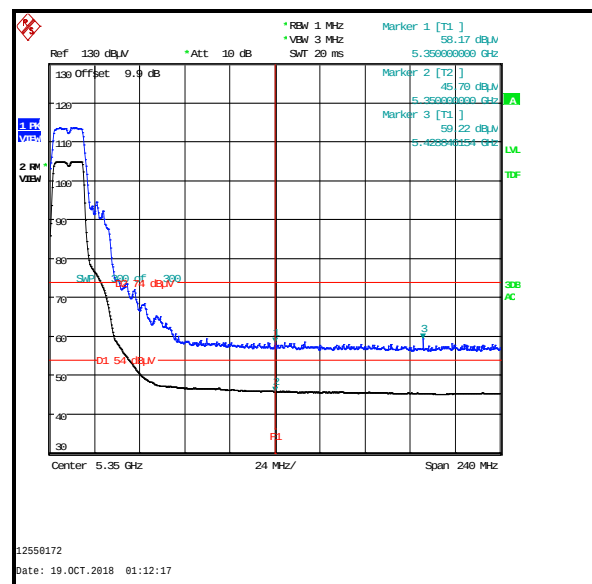
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.1	54.0	6.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.7	54.0	8.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.051	65.8	74.0	8.2	Complied
5150	62.7	74.0	11.3	Complied

Results: Upper Band Edge / Peak

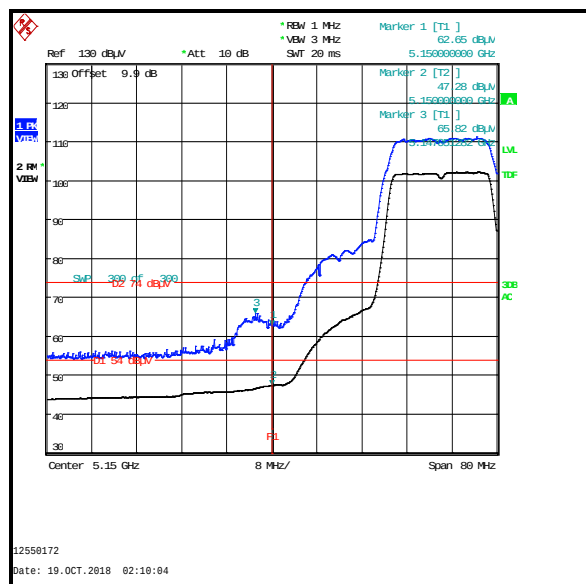
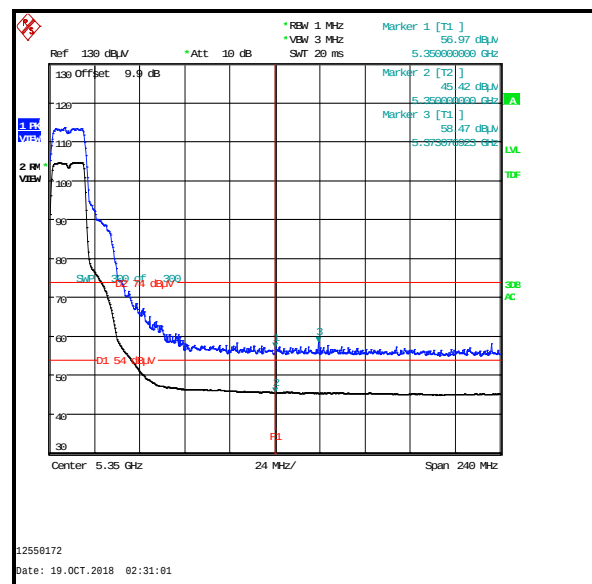
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.0	74.0	17.0	Complied
5373.077	58.5	74.0	15.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.3	54.0	6.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.4	54.0	8.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.231	62.6	74.0	11.4	Complied
5150	61.6	74.0	12.4	Complied

Results: Upper Band Edge / Peak

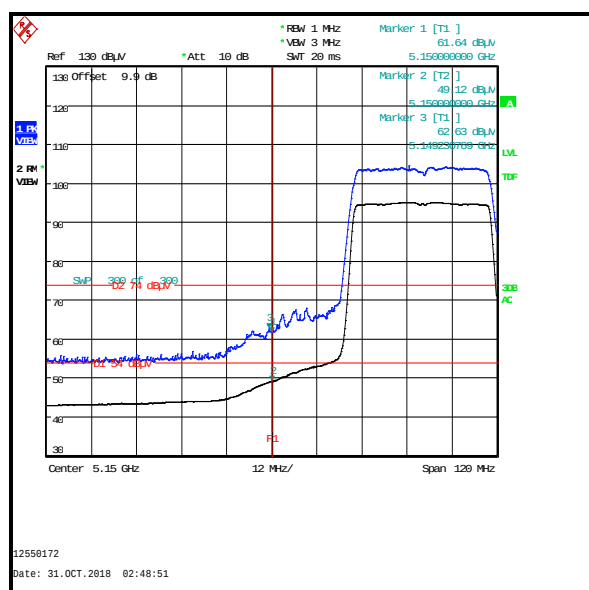
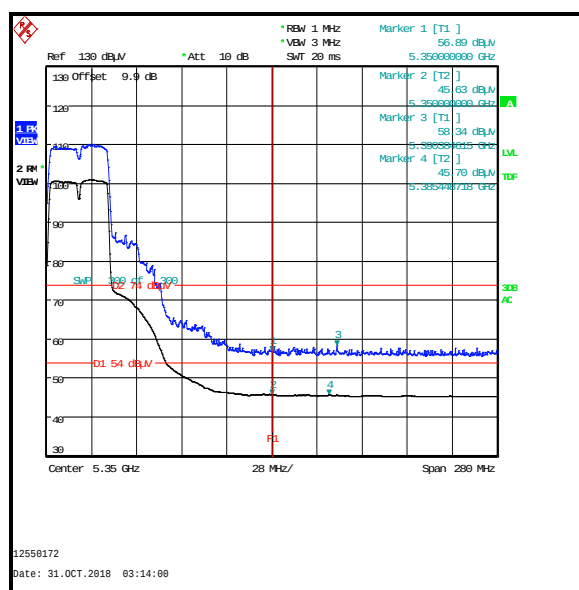
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.9	74.0	17.1	Complied
5390.385	58.3	74.0	15.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.1	0.1	49.2	54.0	4.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.6	0.1	45.7	54.0	8.3	Complied
5385.449	45.7	0.1	45.8	54.0	8.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.756	63.6	74.0	10.4	Complied
5150	62.8	74.0	11.2	Complied

Results: Upper Band Edge / Peak

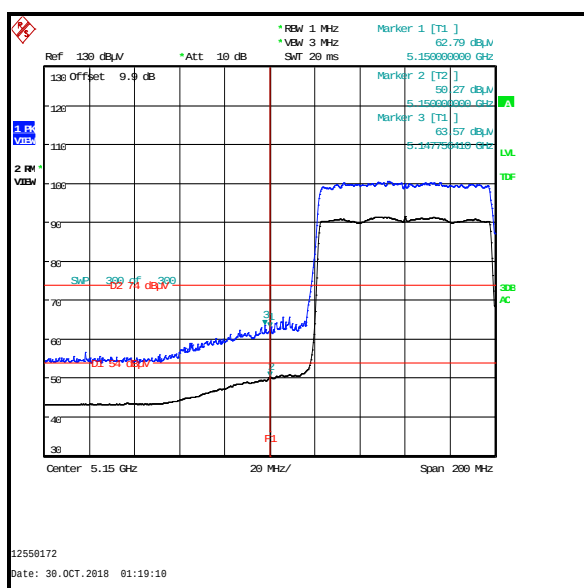
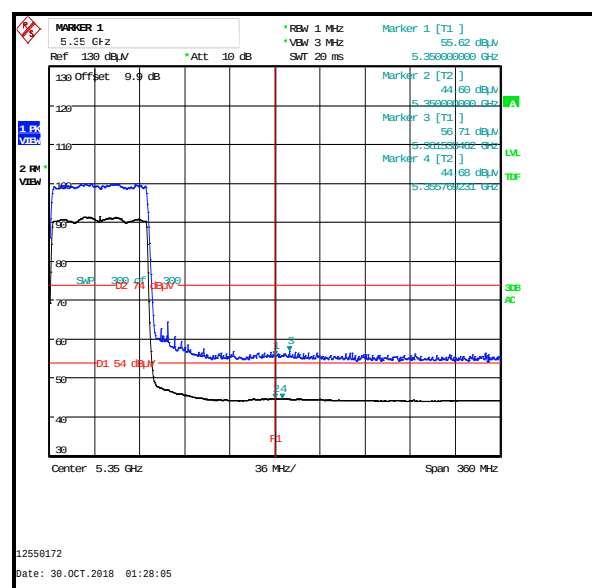
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.6	74.0	18.4	Complied
5361.538	56.7	74.0	17.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	50.3	0.2	50.5	54.0	3.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.6	0.2	44.8	54.0	9.2	Complied
5355.769	44.7	0.2	44.9	54.0	9.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.359	63.7	74.0	10.3	Complied
5150	62.4	74.0	11.6	Complied

Results: Upper Band Edge / Peak

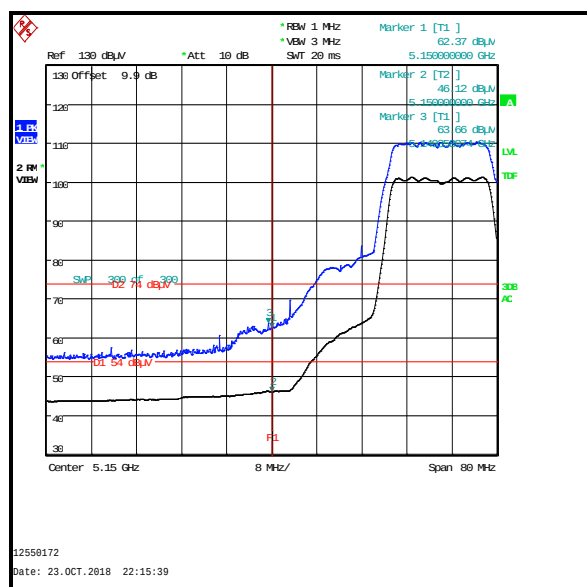
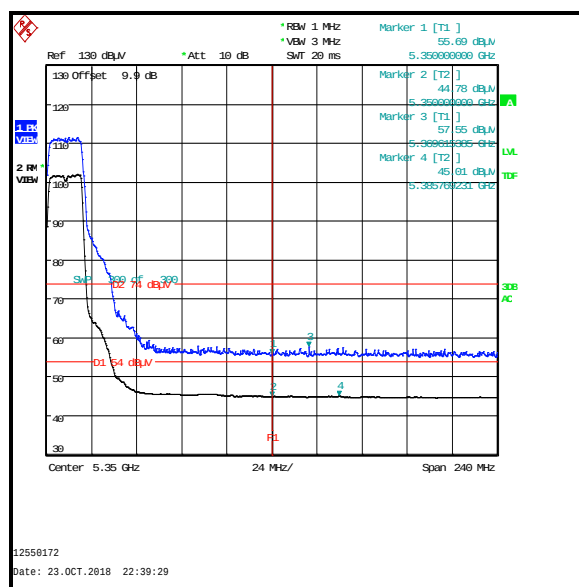
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.7	74.0	18.3	Complied
5369.615	57.6	74.0	16.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	46.1	54.0	7.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.8	54.0	9.2	Complied
5385.769	45.0	54.0	9.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.423	63.6	74.0	10.4	Complied
5150	62.3	74.0	11.7	Complied

Results: Upper Band Edge / Peak

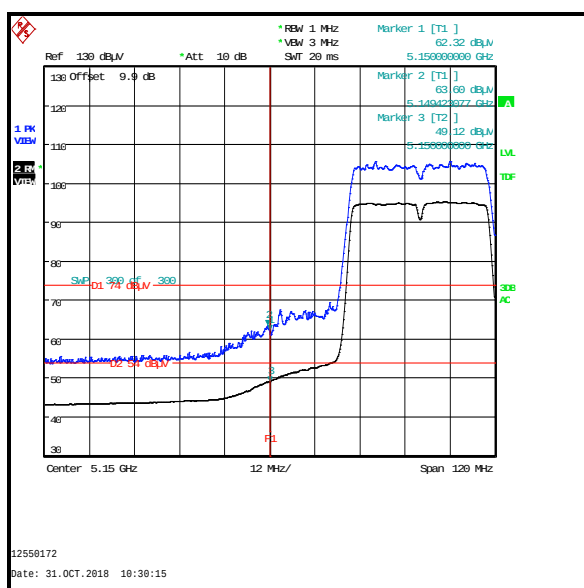
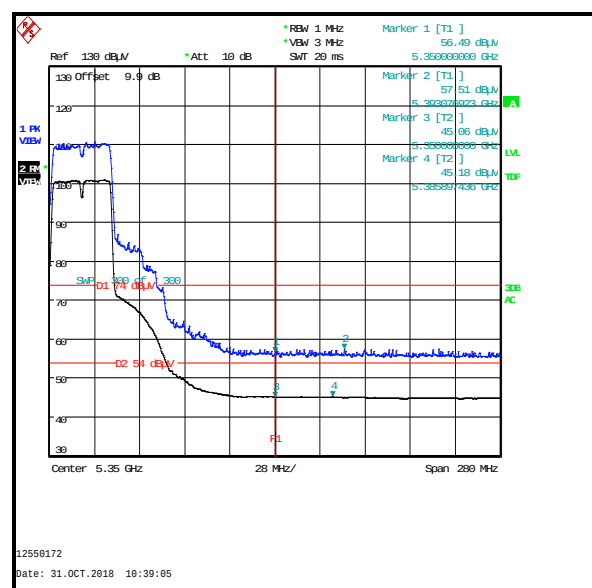
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.5	74.0	17.5	Complied
5393.074	57.5	74.0	16.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.1	0.1	49.2	54.0	4.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.1	0.1	45.2	54.0	8.8	Complied
5385.897	45.2	0.1	45.3	54.0	8.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5139.103	63.5	74.0	10.5	Complied
5150	60.1	74.0	13.9	Complied

Results: Upper Band Edge / Peak

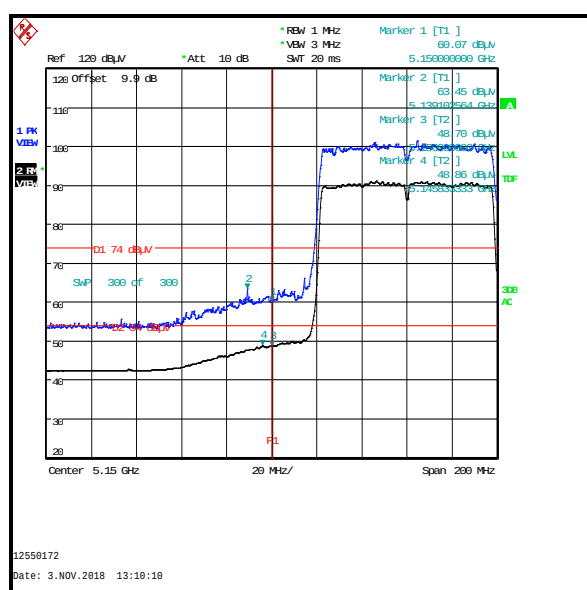
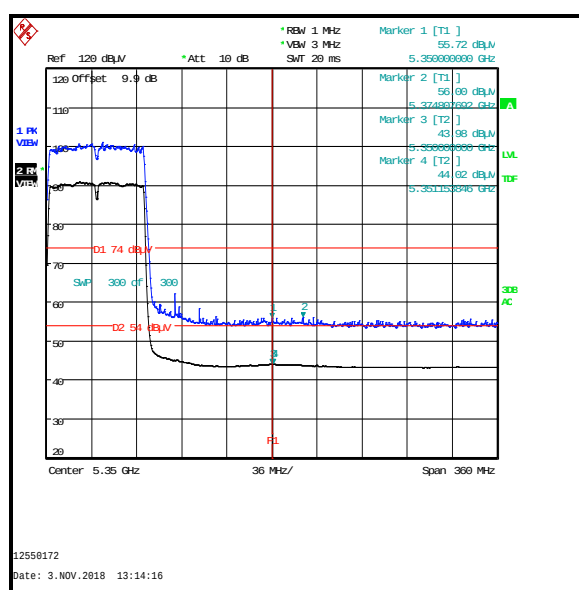
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.7	74.0	18.3	Complied
5374.808	56.0	74.0	18.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.833	48.9	0.2	49.1	54.0	4.9	Complied
5150	48.7	0.2	48.9	54.0	5.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.0	0.2	44.2	54.0	9.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.359	68.8	74.0	5.2	Complied
5150	67.9	74.0	6.1	Complied

Results: Upper Band Edge / Peak

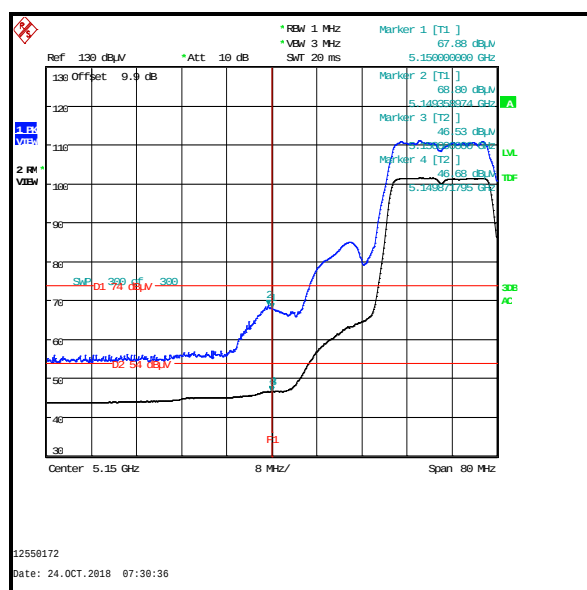
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.0	74.0	19.0	Complied
5424.615	57.0	74.0	17.0	Complied

Results: Lower Band Edge / Average

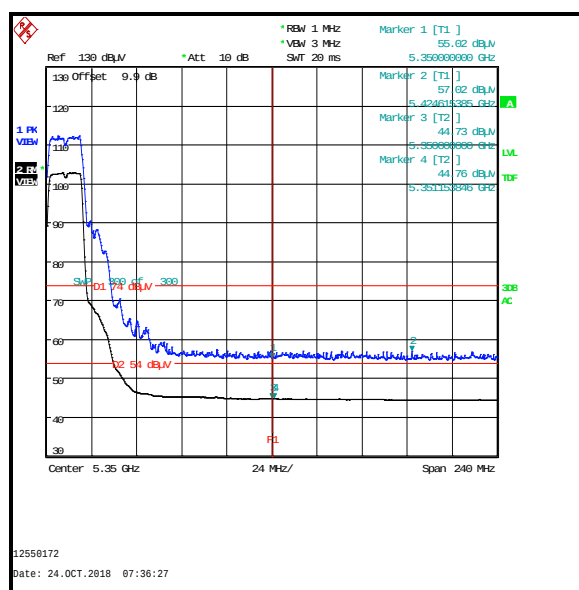
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.872	46.7	54.0	7.3	Complied
5150	46.5	54.0	7.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.7	54.0	9.3	Complied
5351.154	44.8	54.0	9.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	65.5	74.0	8.5	Complied
5150	64.9	74.0	9.1	Complied

Results: Upper Band Edge / Peak

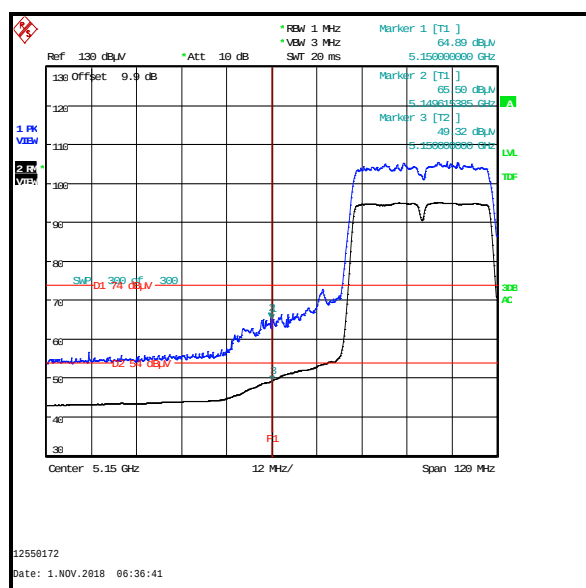
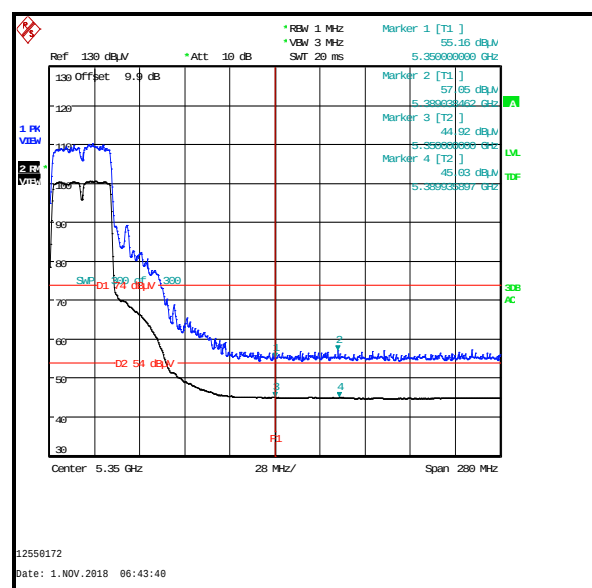
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.2	74.0	18.8	Complied
5389.038	57.1	74.0	16.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.3	0.1	49.4	54.0	4.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.9	0.1	45.0	54.0	9.0	Complied
5389.936	45.0	0.1	45.1	54.0	8.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5134.936	63.1	74.0	10.9	Complied
5150	60.4	74.0	13.6	Complied

Results: Upper Band Edge / Peak

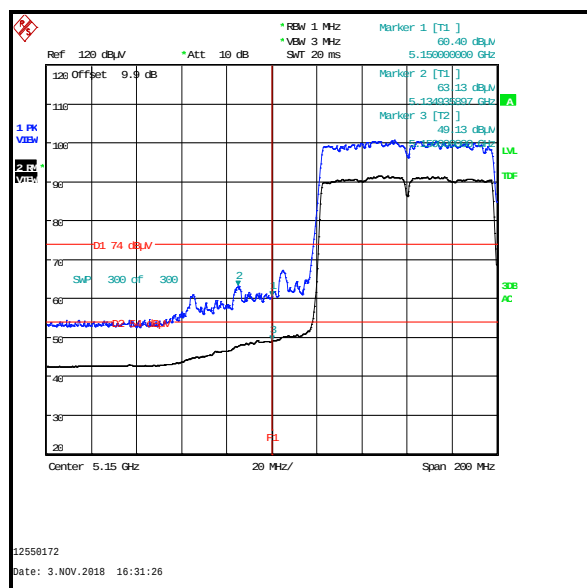
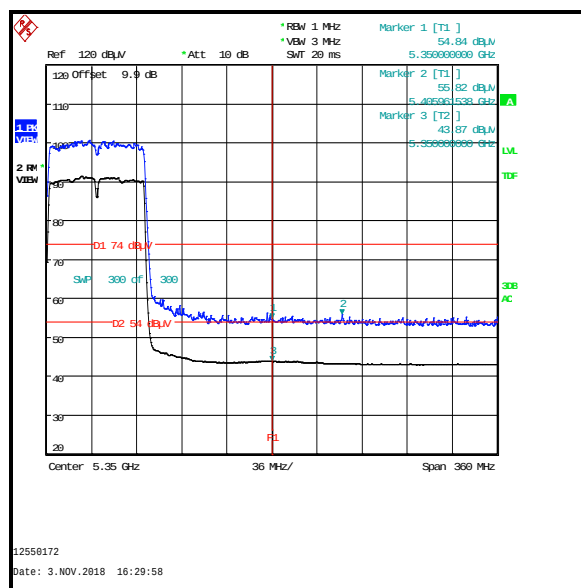
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	54.8	74.0	19.2	Complied
5405.962	55.8	74.0	18.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.1	0.2	49.3	54.0	4.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.9	0.2	44.1	54.0	9.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.821	59.9	74.0	14.1	Complied
5150	59.3	74.0	14.7	Complied

Results: Upper Band Edge / Peak

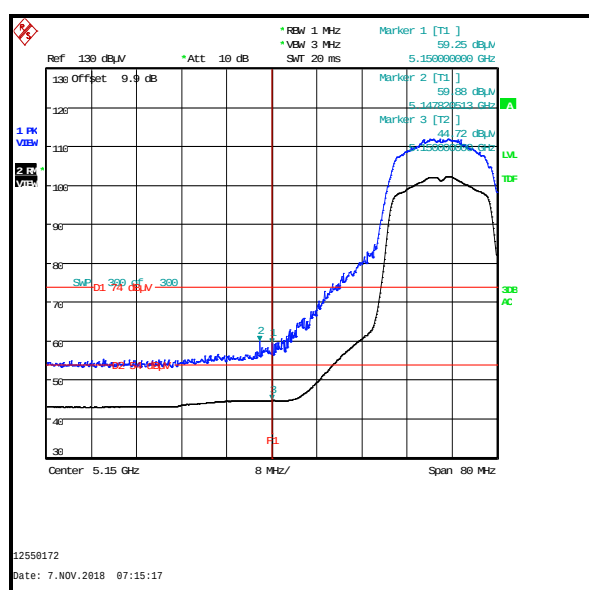
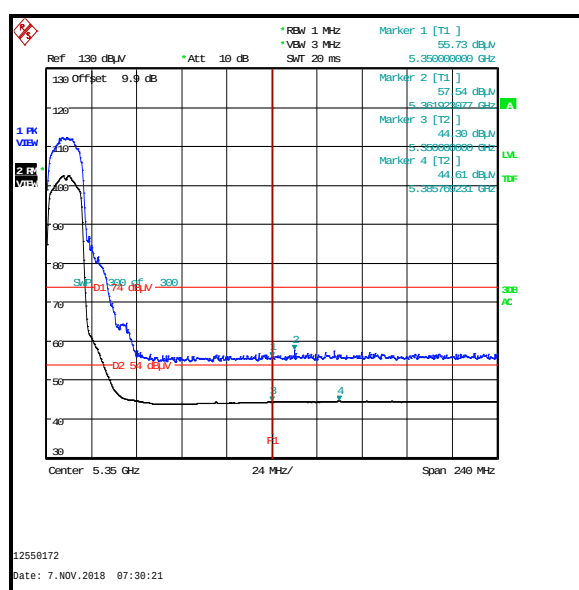
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.7	74.0	18.3	Complied
5361.923	57.5	74.0	16.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	44.7	0.1	44.8	54.0	9.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.3	0.1	44.4	54.0	9.6	Complied
5385.769	44.6	0.1	44.7	54.0	9.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.808	65.3	74.0	8.7	Complied
5150	64.8	74.0	9.2	Complied

Results: Upper Band Edge / Peak

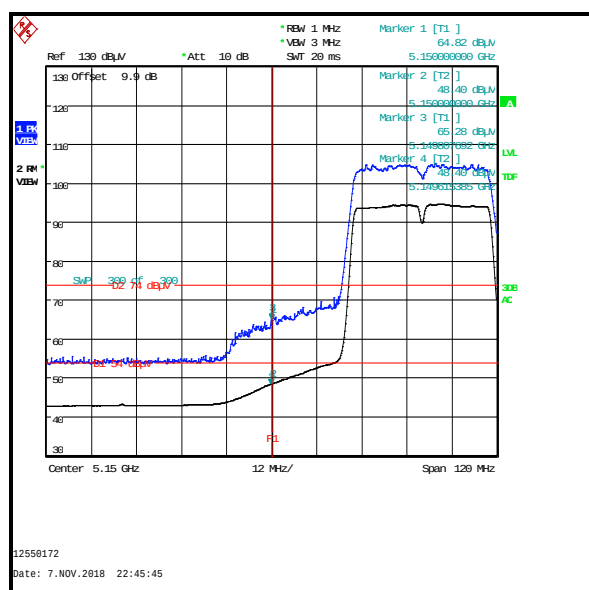
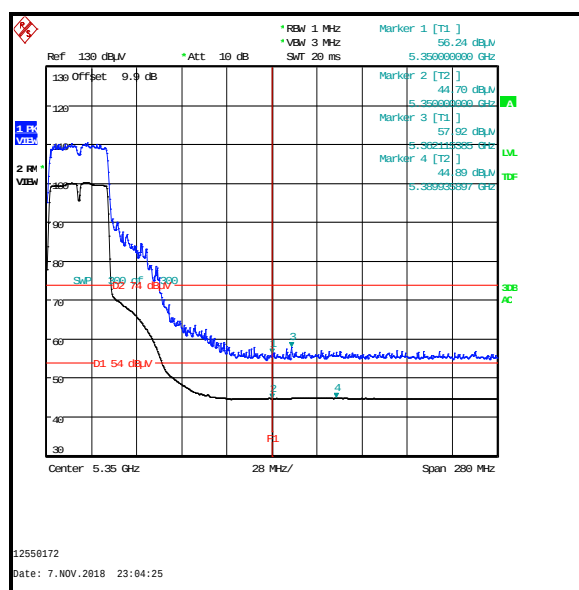
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.2	74.0	17.8	Complied
5362.115	57.9	74.0	16.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.4	0.1	48.5	54.0	5.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.7	0.1	44.8	54.0	9.2	Complied
5389.936	44.9	0.1	45.0	54.0	9.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.513	66.3	74.0	7.7	Complied
5150	63.1	74.0	10.9	Complied

Results: Upper Band Edge / Peak

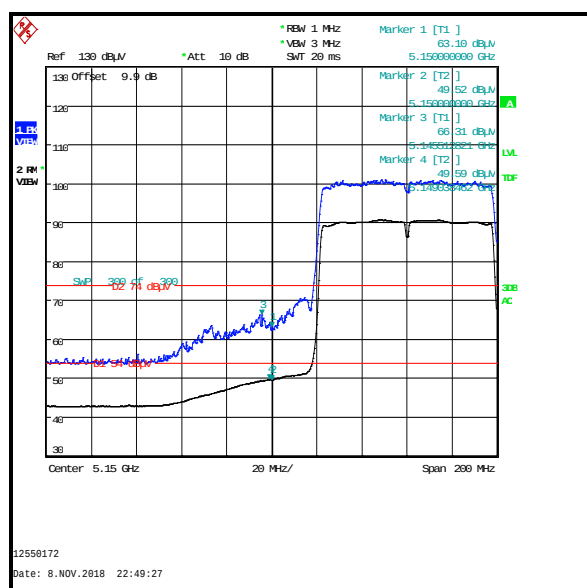
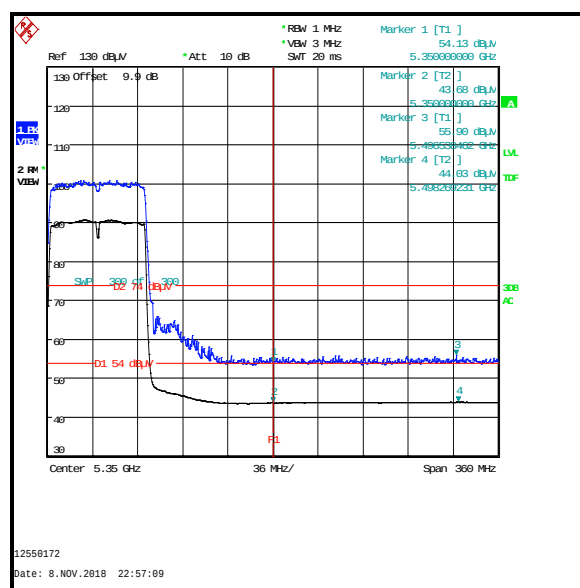
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	54.1	74.0	19.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.038	49.6	0.1	49.7	54.0	4.3	Complied
5150	49.5	0.1	49.6	54.0	4.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.7	0.1	43.8	54.0	10.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	66.0	74.0	8.0	Complied
5150	65.9	74.0	8.1	Complied

Results: Upper Band Edge / Peak

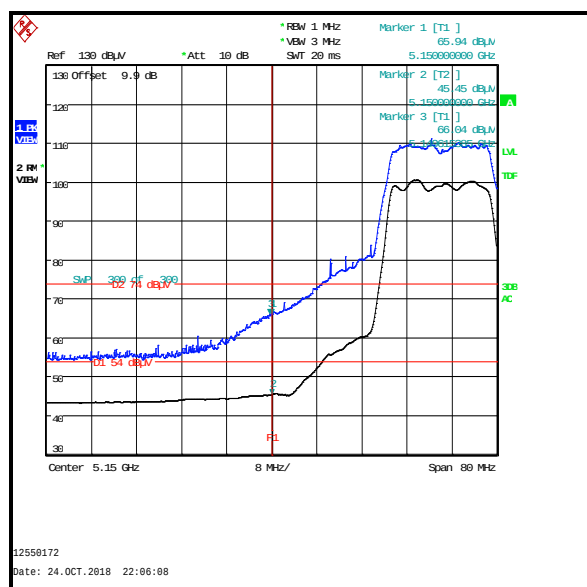
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.9	74.0	7.1	Complied
5350.769	67.2	74.0	6.8	Complied

Results: Lower Band Edge / Average

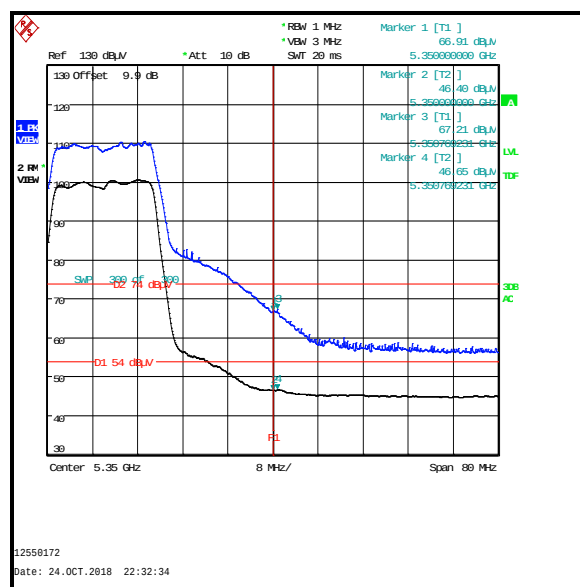
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	45.5	54.0	8.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.4	54.0	7.6	Complied
5350.769	46.7	54.0	7.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	60.9	74.0	13.1	Complied

Results: Upper Band Edge / Peak

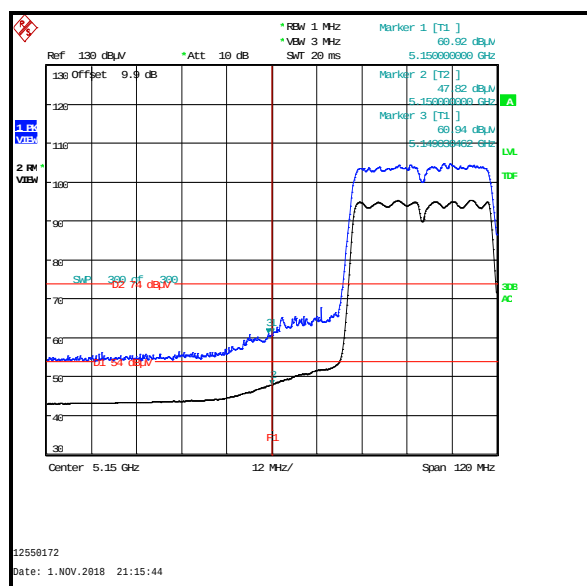
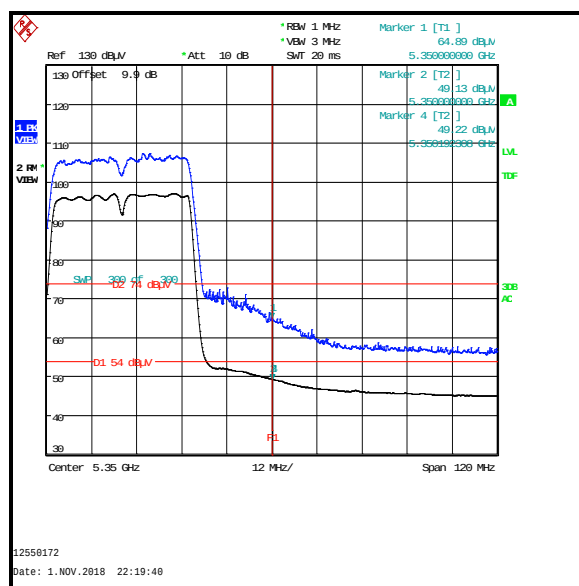
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.9	74.0	9.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.8	0.1	47.9	54.0	6.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.1	0.1	49.2	54.0	4.8	Complied
5350.193	49.2	0.1	49.3	54.0	4.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5140.000	60.6	74.0	13.4	Complied
5150	58.3	74.0	15.7	Complied

Results: Upper Band Edge / Peak

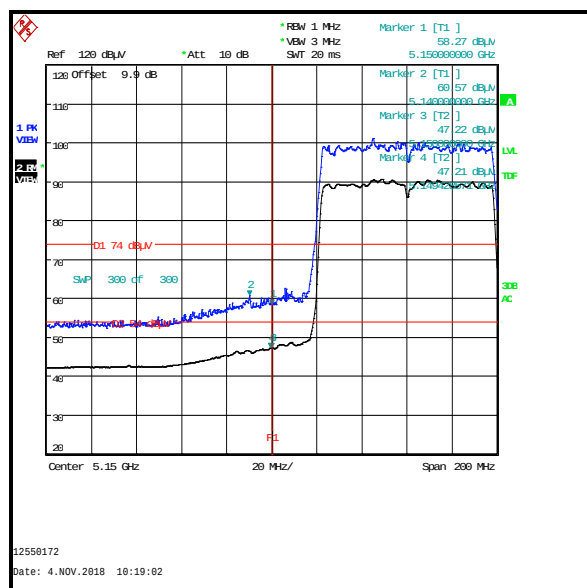
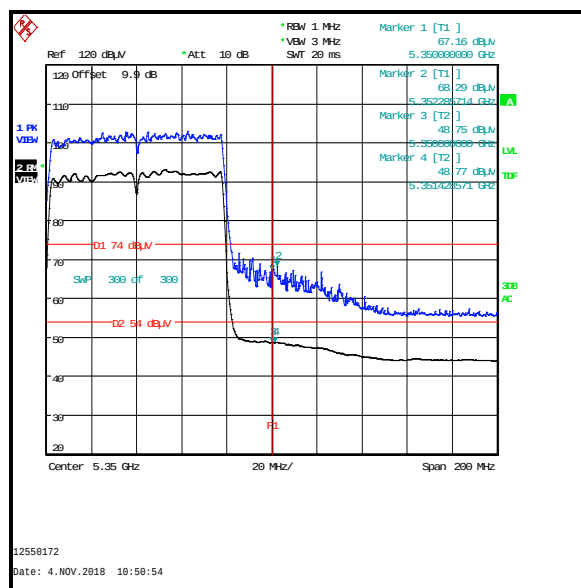
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	67.2	74.0	6.8	Complied
5352.286	68.3	74.0	5.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.2	0.2	47.4	54.0	6.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.8	0.2	49.0	54.0	5.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.359	63.3	74.0	10.7	Complied
5150	62.8	74.0	11.2	Complied

Results: Upper Band Edge / Peak

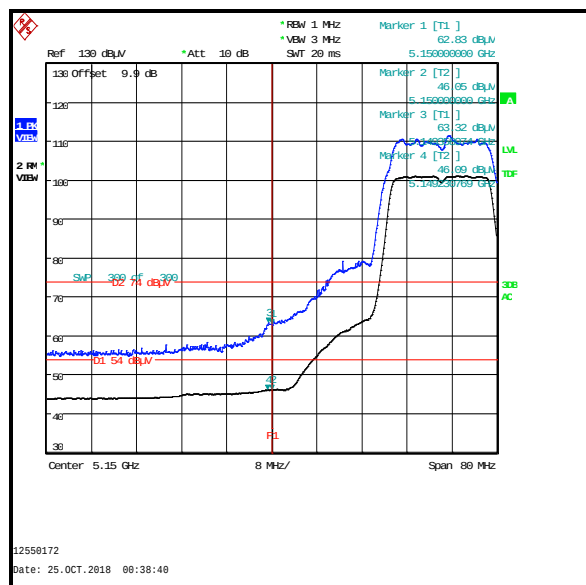
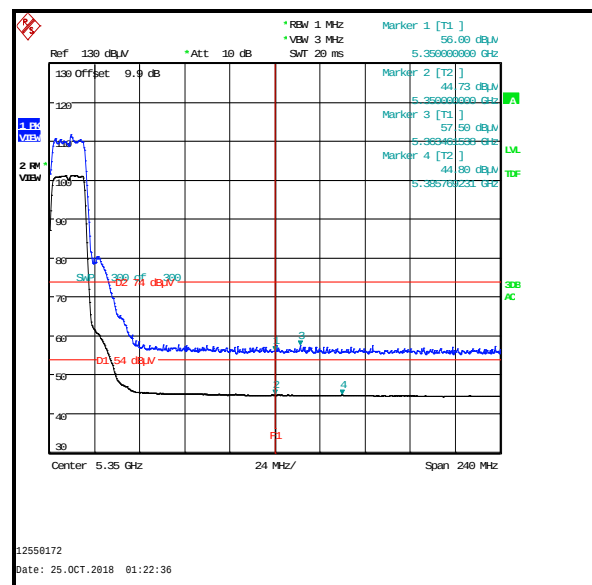
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.0	74.0	18.0	Complied
5363.462	57.5	74.0	16.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	46.1	54.0	7.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.7	54.0	9.3	Complied
5385.769	44.8	54.0	9.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.769	62.7	74.0	11.3	Complied
5150	61.8	74.0	12.2	Complied

Results: Upper Band Edge / Peak

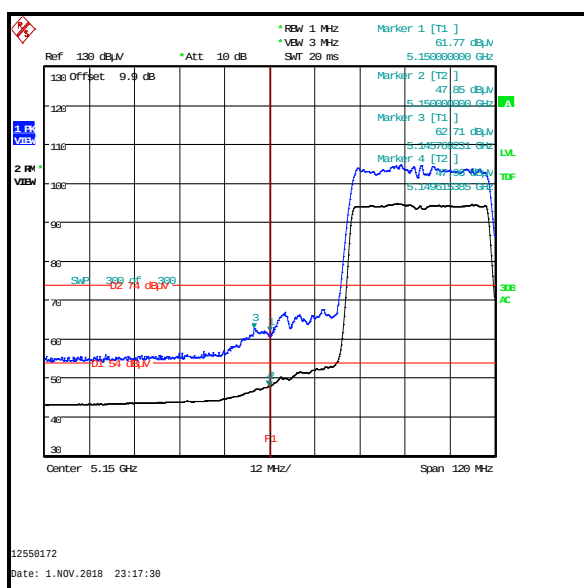
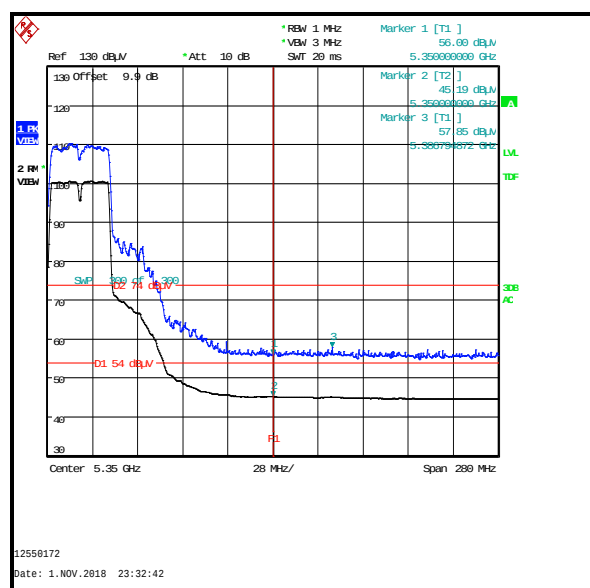
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.0	74.0	18.0	Complied
5386.795	57.9	74.0	16.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	48.0	0.1	48.1	54.0	5.9	Complied
5150	47.9	0.1	48.0	54.0	6.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.2	0.1	45.3	54.0	8.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.143	61.7	74.0	12.3	Complied
5150	59.6	74.0	14.4	Complied

Results: Upper Band Edge / Peak

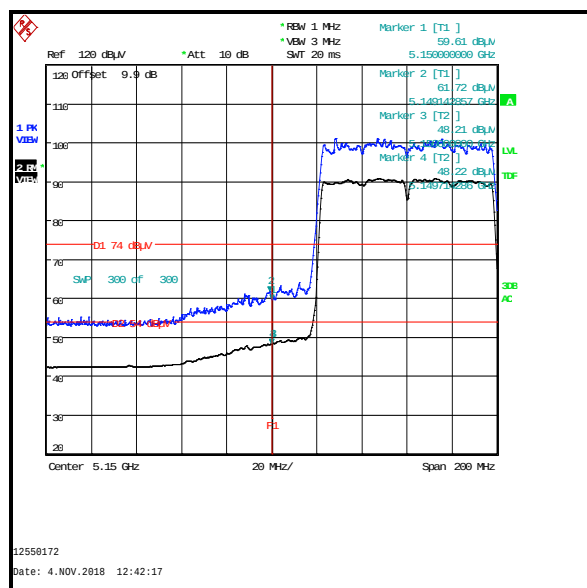
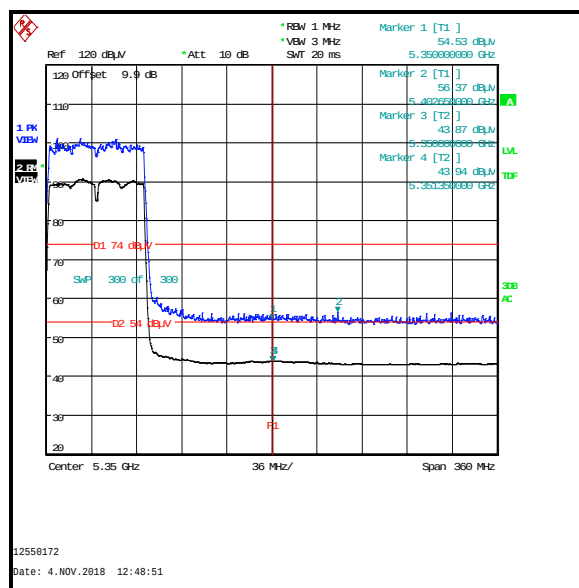
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	54.5	74.0	19.5	Complied
5402.650	56.4	74.0	17.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.2	0.2	48.4	54.0	5.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.9	0.2	44.1	54.0	9.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5140.256	57.2	74.0	16.8	Complied
5150	56.1	74.0	17.9	Complied

Results: Upper Band Edge / Peak

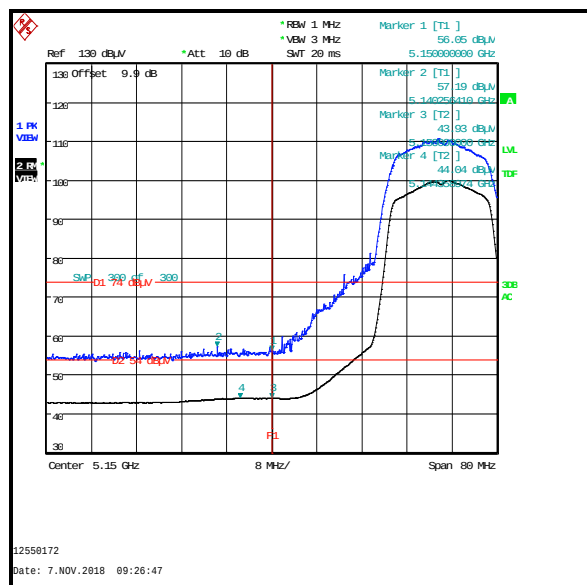
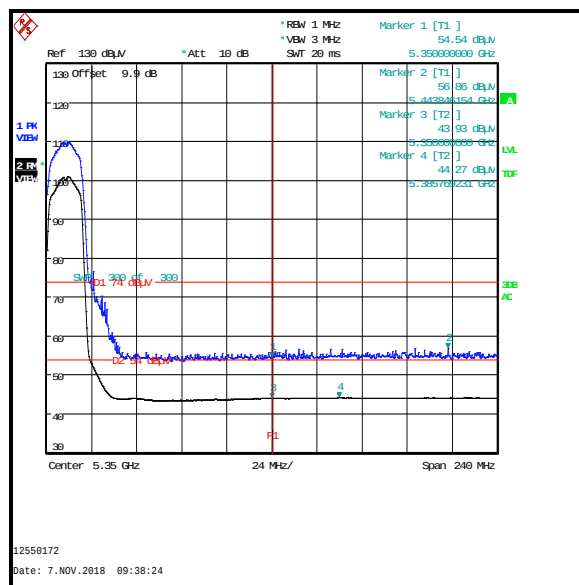
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	54.5	74.0	19.5	Complied
5443.846	56.9	74.0	17.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5144.359	44.0	0.1	44.1	54.0	9.9	Complied
5150	43.9	0.1	44.0	54.0	10.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.9	0.1	44.0	54.0	10.0	Complied
5385.769	44.3	0.1	44.4	54.0	9.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.077	63.8	74.0	10.2	Complied
5150	61.2	74.0	12.8	Complied

Results: Upper Band Edge / Peak

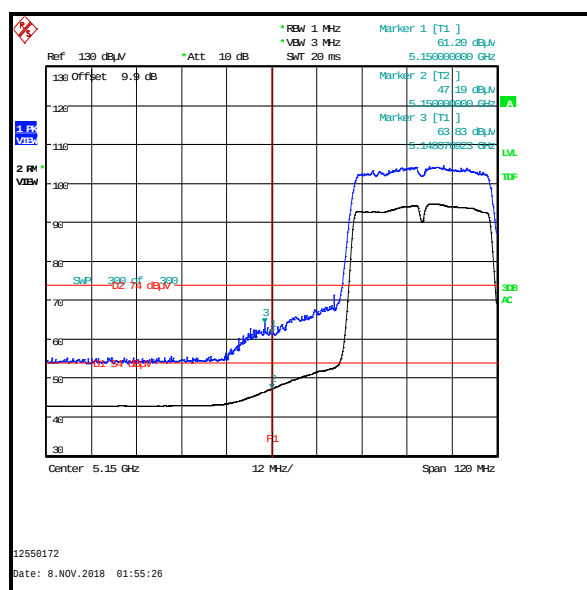
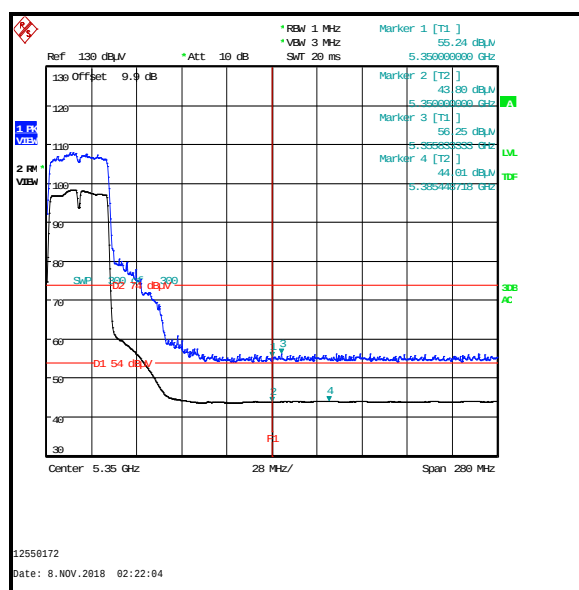
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.2	74.0	18.8	Complied
5355.833	56.3	74.0	17.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.2	0.1	47.3	54.0	6.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.8	0.1	43.9	54.0	10.1	Complied
5385.449	44.0	0.1	44.1	54.0	9.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.077	64.1	74.0	9.9	Complied
5150	62.7	74.0	11.3	Complied

Results: Upper Band Edge / Peak

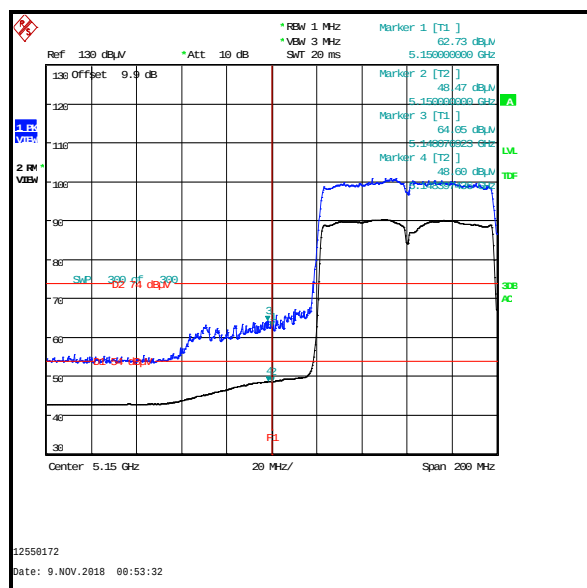
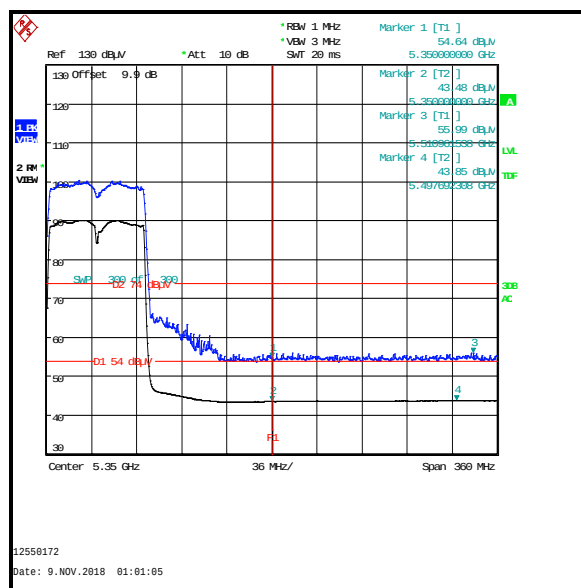
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	54.6	74.0	19.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.397	48.6	0.1	48.7	54.0	5.3	Complied
5150	48.5	0.1	48.6	54.0	5.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	43.5	0.1	43.6	54.0	10.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band)**5.3.2. 5.25-5.35 GHz band****Test Summary:**

Test Engineers:	Marco Zunarelli, John Ferdinand & Mark Perry	Test Dates:	19 October 2018 to 09 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Parts 15.407(b)(2),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	23 to 25
Relative Humidity (%):	40 to 50

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:

- o 802.11a - BPSK / 6 Mbps / Core 2
- o 802.11n HT20 / SISO - BPSK / MCS0 / Core 2
- o 802.11n HT40 / SISO - BPSK / MCS0 / Core 2
- o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 2
- o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
- o 802.11n HT20 / MIMO / 2Tx TxBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx TxBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx TxBF - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
- o 802.11n HT20 / MIMO / 3Tx TxBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx TxBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx TxBF - BPSK / MCS0x1

2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.

3. For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation with the EUT transmitting on the bottom and top channels within 5.25-5.35 GHz band, the results are included in the transmitter 5.725-5.85 GHz band radiated spurious emissions section of this test report.

4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.

5. For all average measurements in this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).

6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.154	56.4	74.0	17.6	Complied
5150	55.2	74.0	18.8	Complied

Results: Upper Band Edge / Peak

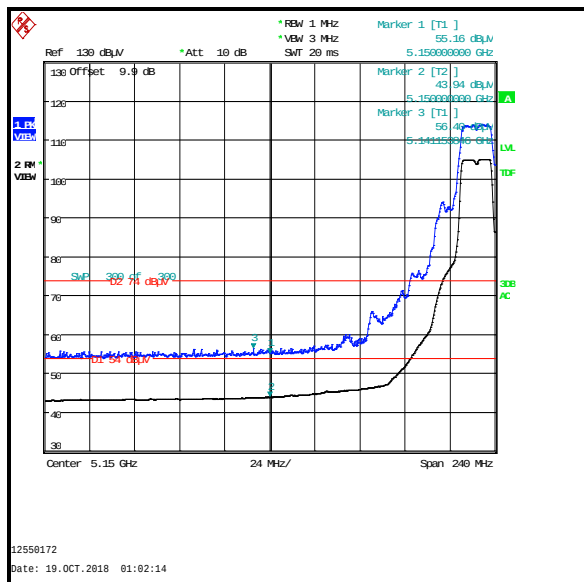
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.4	74.0	7.6	Complied

Results: Lower Band Edge / Average

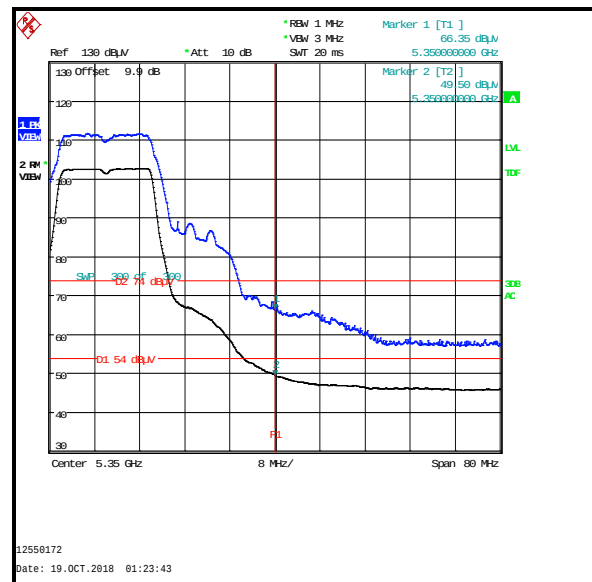
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.9	54.0	10.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.5	54.0	4.5	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5140.000	56.1	74.0	17.9	Complied
5150	54.9	74.0	19.1	Complied

Results: Upper Band Edge / Peak

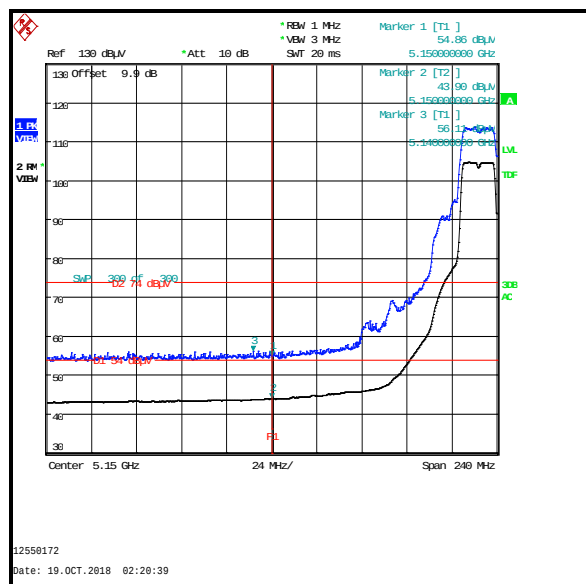
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.7	74.0	9.3	Complied
5350.641	66.7	74.0	7.3	Complied

Results: Lower Band Edge / Average

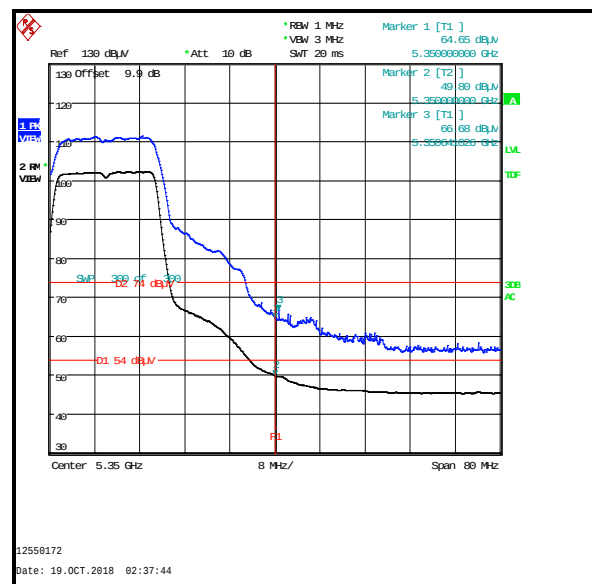
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.9	54.0	10.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.8	54.0	5.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)

Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5138.782	55.9	74.0	18.1	Complied
5150	55.2	74.0	18.8	Complied

Results: Upper Band Edge / Peak

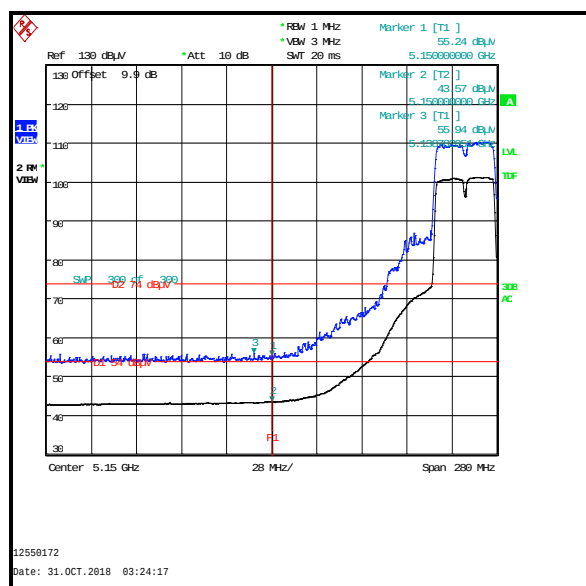
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	62.8	74.0	11.2	Complied

Results: Lower Band Edge / Average

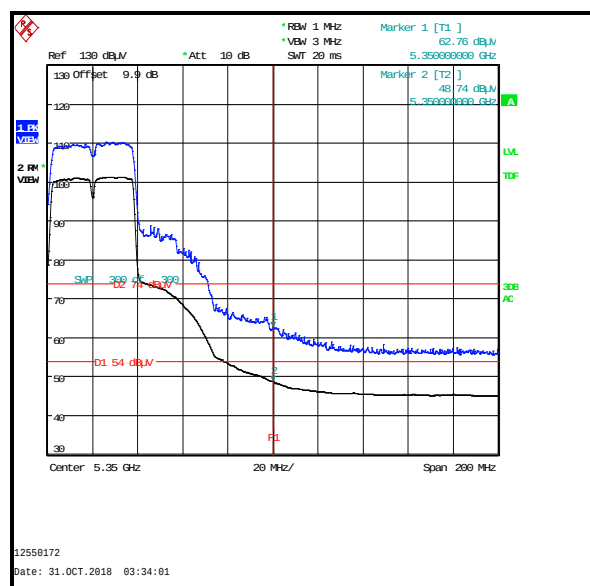
Frequency (MHz)	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5150	43.6	0.1	43.7	54.0	10.3	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	48.7	0.1	48.8	54.0	5.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5115.385	55.8	74.0	18.2	Complied
5150	53.7	74.0	20.3	Complied

Results: Upper Band Edge / Peak

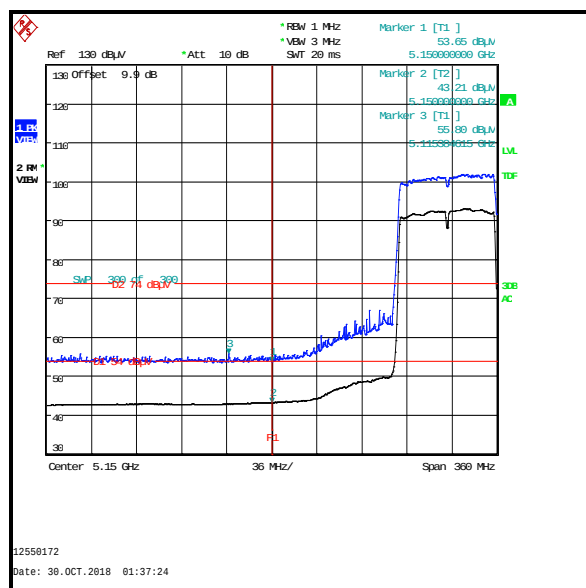
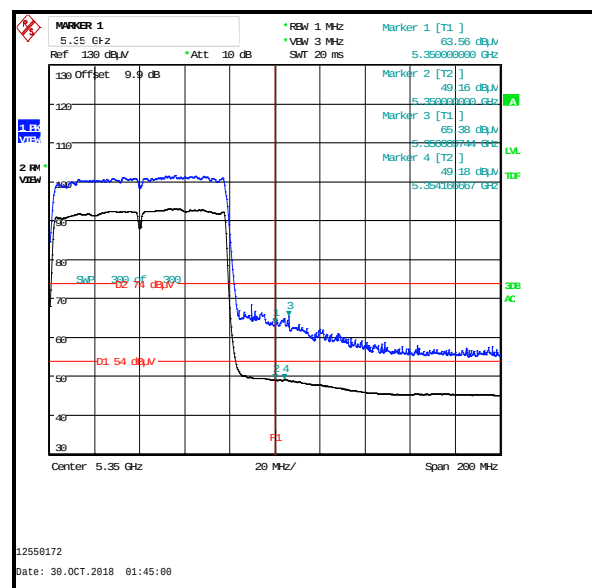
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	63.6	74.0	10.4	Complied
5356.090	65.4	74.0	8.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.2	0.2	43.4	54.0	10.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.2	0.2	49.4	54.0	4.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.846	55.8	74.0	18.2	Complied
5150	54.2	74.0	19.8	Complied

Results: Upper Band Edge / Peak

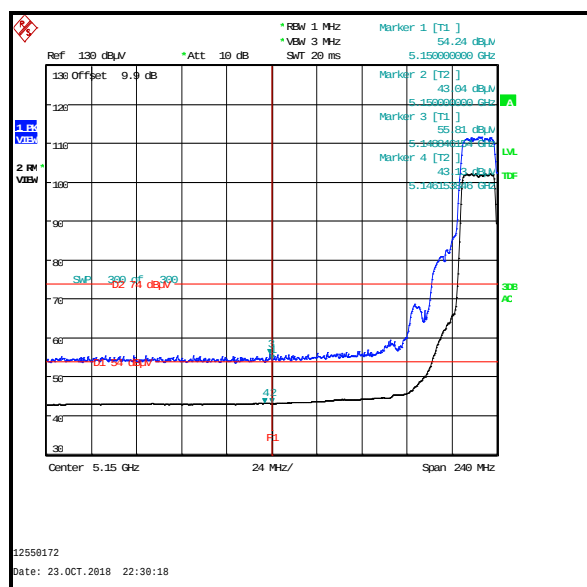
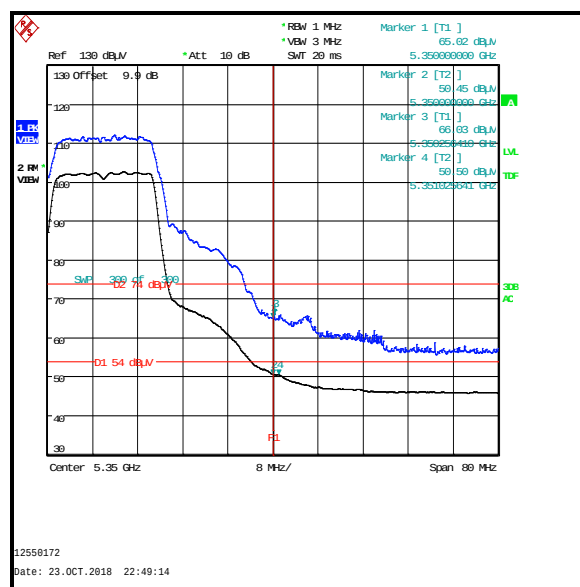
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.0	74.0	9.0	Complied
5350.256	66.0	74.0	8.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.153	43.1	54.0	10.9	Complied
5150	43.0	54.0	11.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.5	54.0	3.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5079.103	56.0	74.0	18.0	Complied
5150	54.3	74.0	19.7	Complied

Results: Upper Band Edge / Peak

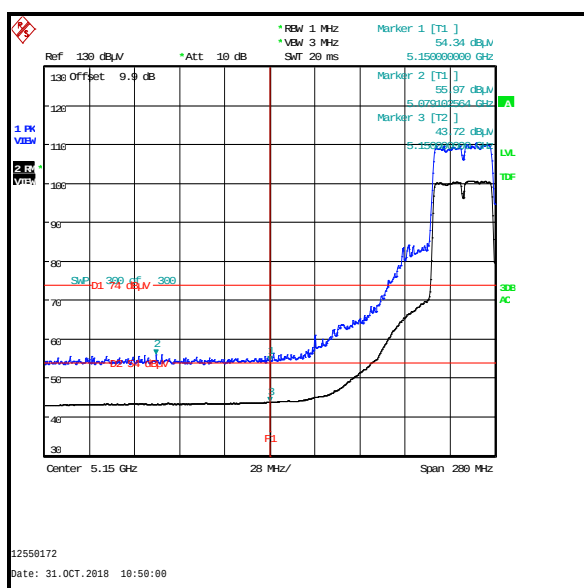
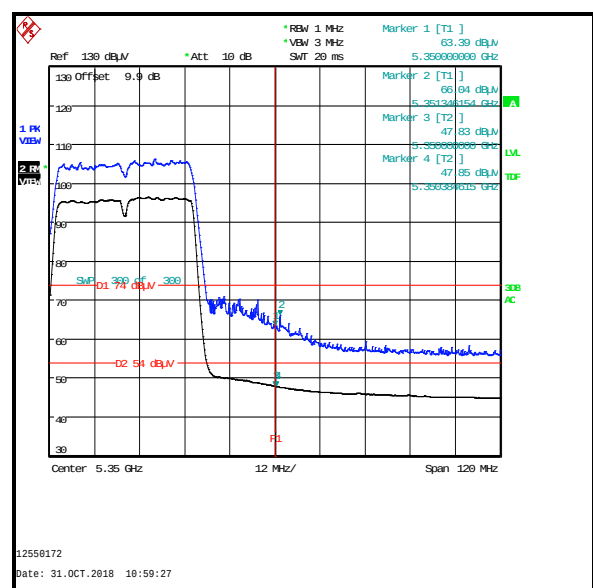
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	63.4	74.0	10.6	Complied
5351.346	66.0	74.0	8.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.7	0.1	43.8	54.0	10.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.8	0.1	47.9	54.0	6.1	Complied
5350.385	47.9	0.1	48.0	54.0	6.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5139.615	54.9	74.0	19.1	Complied
5150	53.9	74.0	20.1	Complied

Results: Upper Band Edge / Peak

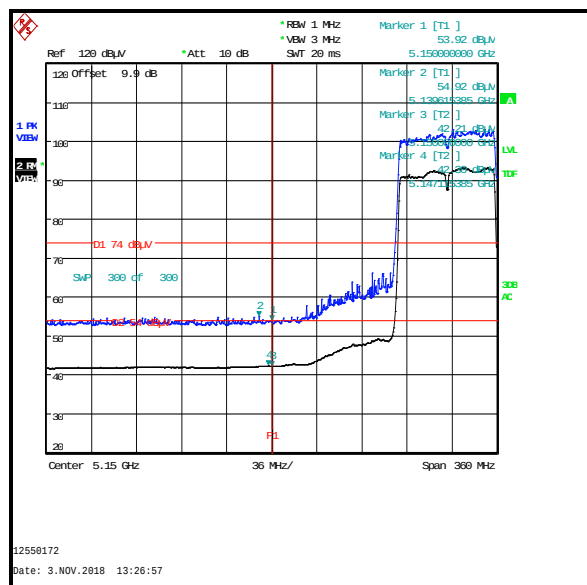
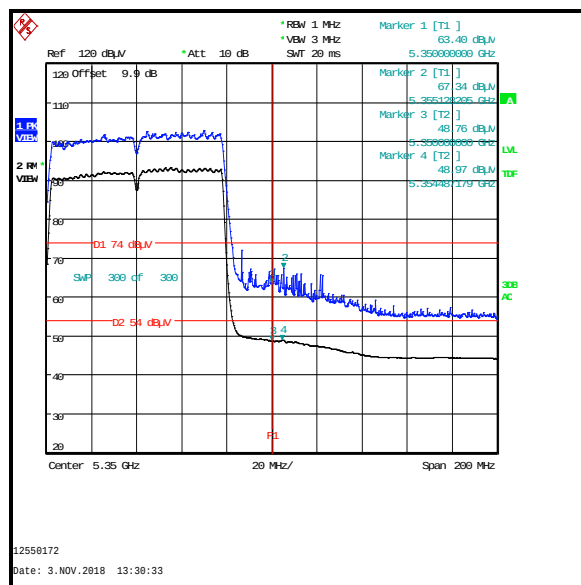
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	63.4	74.0	10.6	Complied
5355.128	67.3	74.0	6.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.115	42.3	0.2	42.5	54.0	11.5	Complied
5150	42.2	0.2	42.4	54.0	11.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.8	0.2	49.0	54.0	5.0	Complied
5354.487	49.0	0.2	49.2	54.0	4.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5095.000	56.0	74.0	18.0	Complied
5150	54.5	74.0	19.5	Complied

Results: Upper Band Edge / Peak

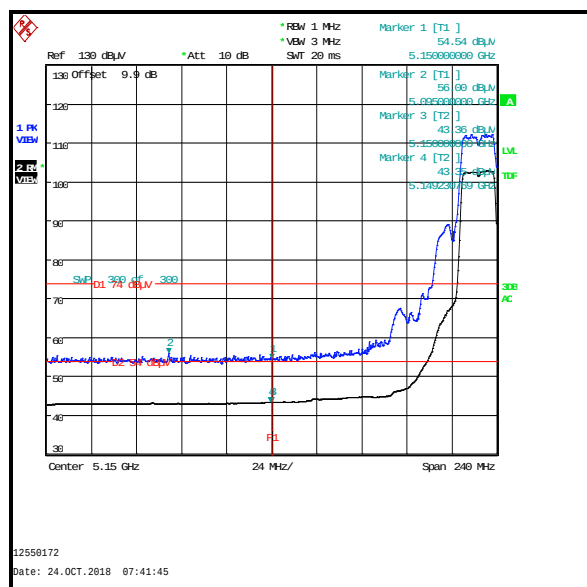
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	67.7	74.0	6.3	Complied

Results: Lower Band Edge / Average

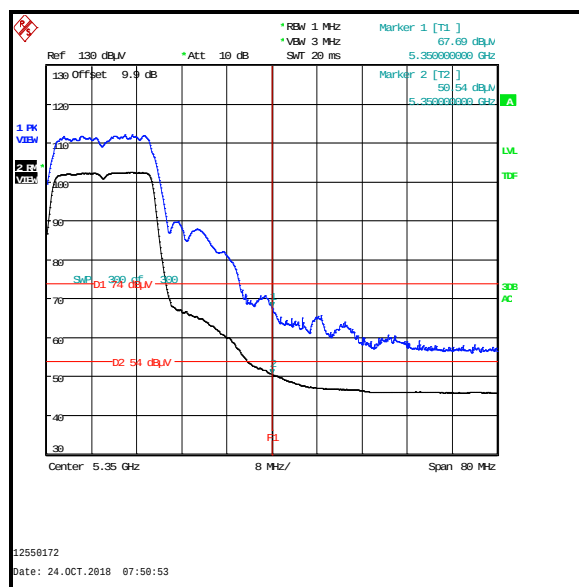
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.4	54.0	10.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.5	54.0	3.5	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5144.615	55.6	74.0	18.4	Complied
5150	53.5	74.0	20.5	Complied

Results: Upper Band Edge / Peak

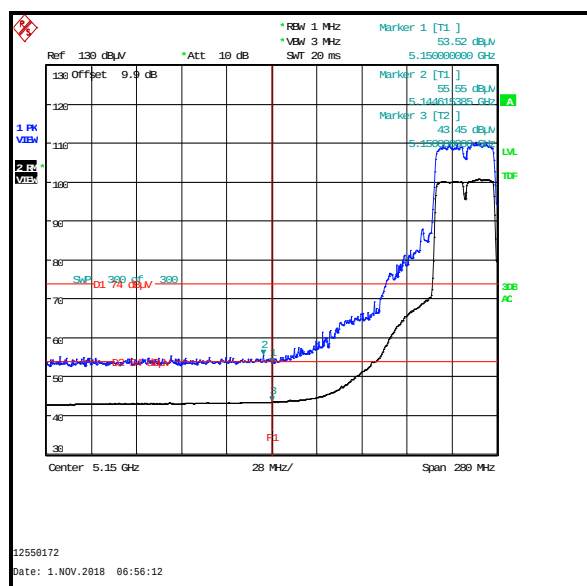
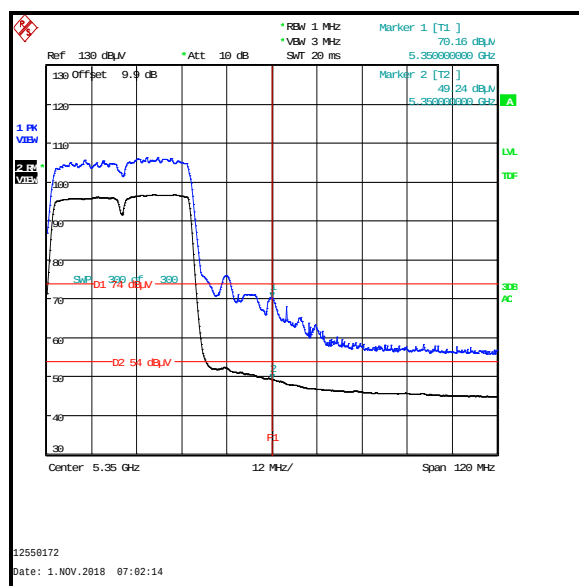
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	70.2	74.0	3.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.5	0.1	43.6	54.0	10.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.2	0.1	49.3	54.0	4.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.038	54.8	74.0	19.2	Complied
5150	53.7	74.0	20.3	Complied

Results: Upper Band Edge / Peak

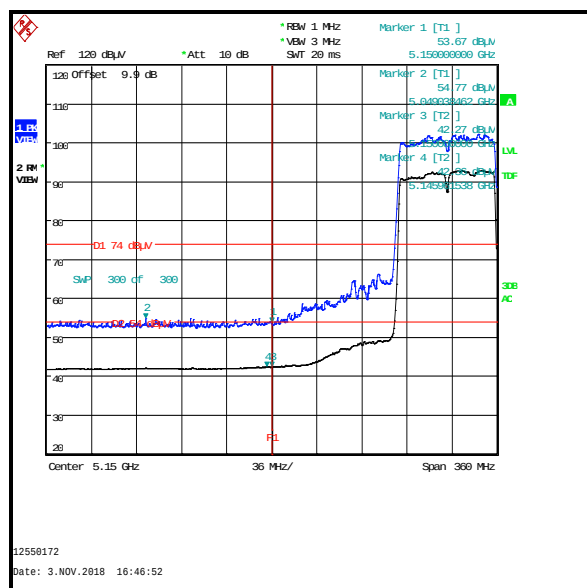
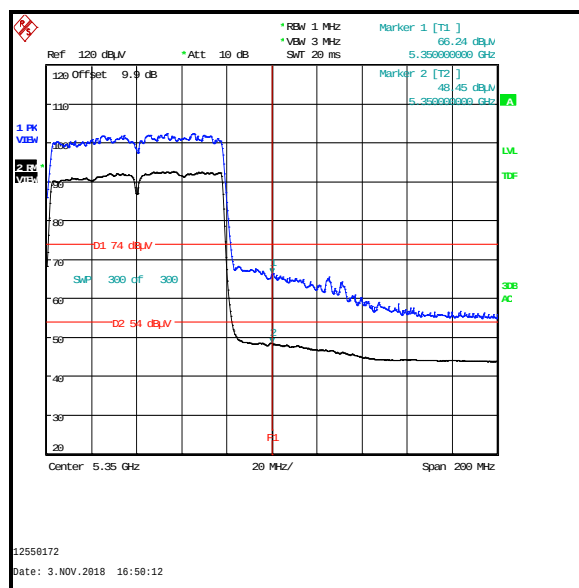
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.2	74.0	7.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.962	42.4	0.2	42.6	54.0	11.4	Complied
5150	42.3	0.2	42.5	54.0	11.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.5	0.2	48.7	54.0	5.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5086.923	55.3	74.0	18.7	Complied
5150	53.8	74.0	20.2	Complied

Results: Upper Band Edge / Peak

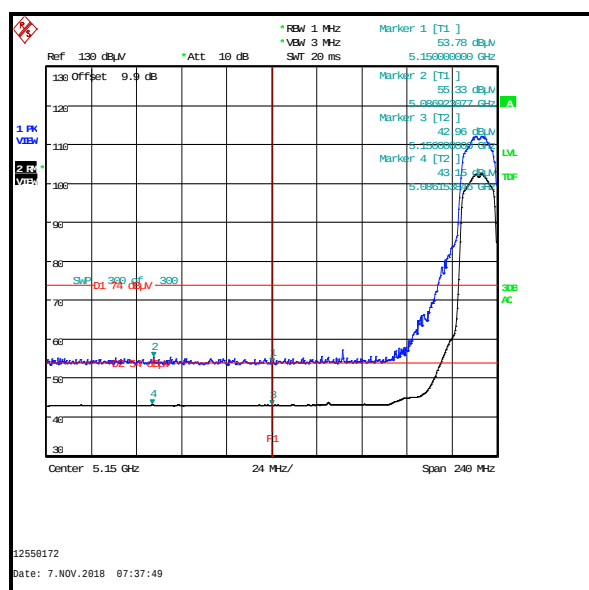
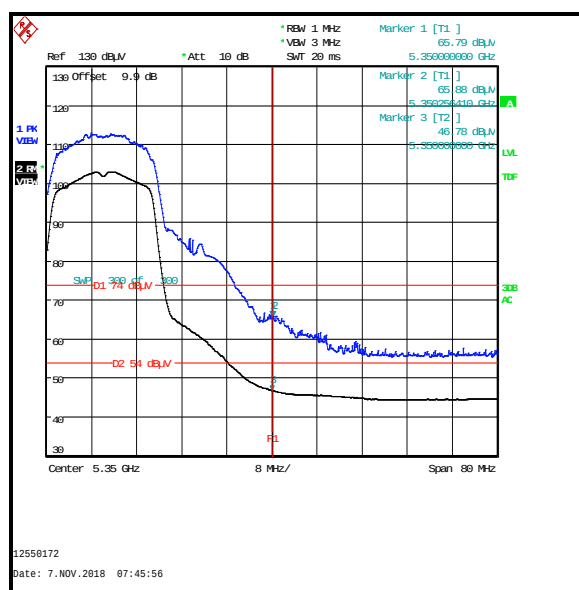
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.8	74.0	8.2	Complied
5350.256	65.9	74.0	8.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5086.154	43.2	0.1	43.3	54.0	10.7	Complied
5150	43.0	0.1	43.1	54.0	10.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.8	0.1	46.9	54.0	7.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.487	55.3	74.0	18.7	Complied
5150	53.7	74.0	20.3	Complied

Results: Upper Band Edge / Peak

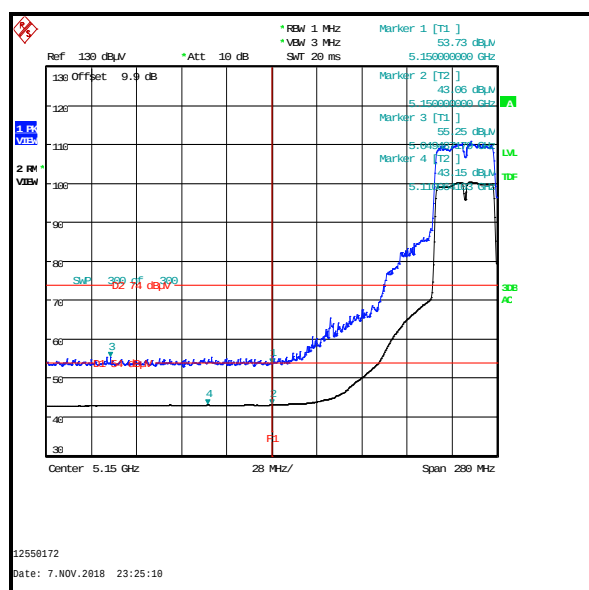
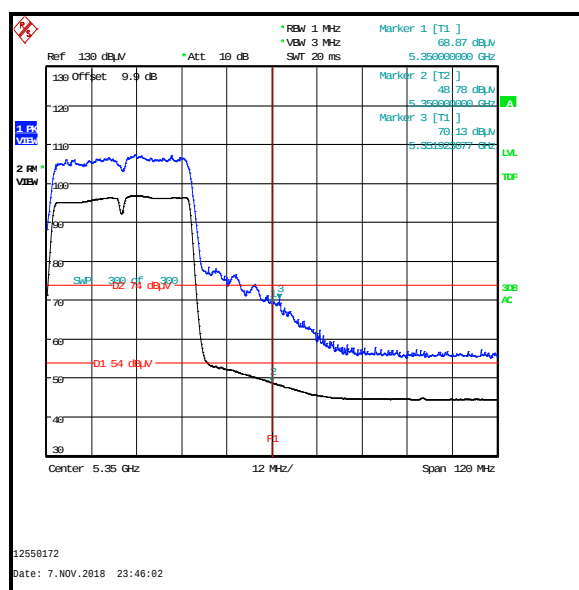
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	68.9	74.0	5.1	Complied
5351.923	70.1	74.0	3.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5110.064	43.2	0.1	43.3	54.0	10.7	Complied
5150	43.1	0.1	43.2	54.0	10.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.8	0.1	48.9	54.0	5.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4987.885	55.0	74.0	19.0	Complied
5150	53.2	74.0	20.8	Complied

Results: Upper Band Edge / Peak

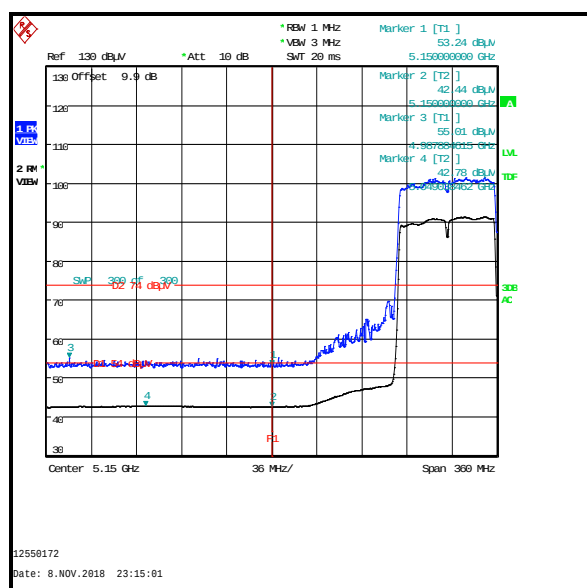
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.3	74.0	8.7	Complied
5353.205	68.2	74.0	5.8	Complied

Results: Lower Band Edge / Average

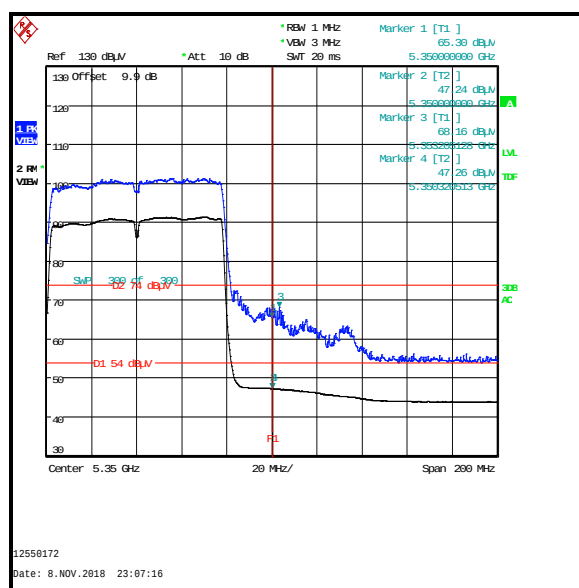
Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.038	42.8	0.1	42.9	54.0	11.1	Complied
5150	42.4	0.1	42.5	54.0	11.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.2	0.1	47.3	54.0	6.7	Complied
5350.321	47.3	0.1	47.4	54.0	6.6	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5044.616	55.8	74.0	18.2	Complied
5150	54.4	74.0	19.6	Complied

Results: Upper Band Edge / Peak

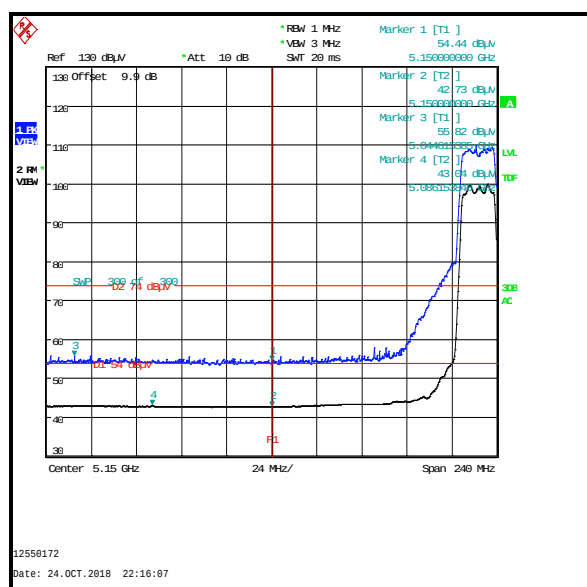
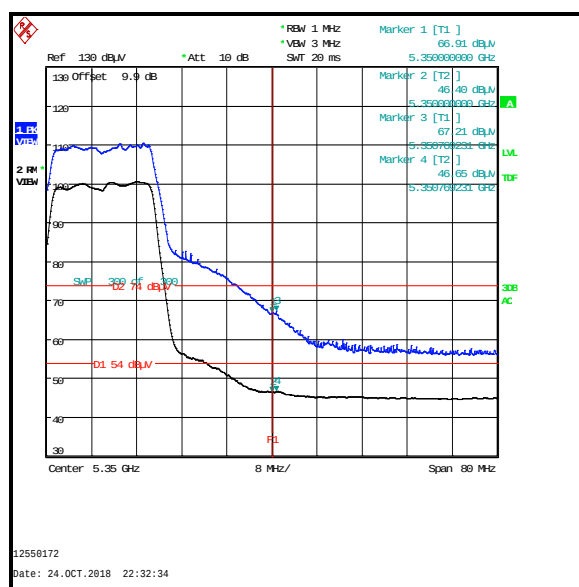
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.9	74.0	7.1	Complied
5350.769	67.2	74.0	6.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5086.154	43.0	54.0	11.0	Complied
5150	42.7	54.0	11.3	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.4	54.0	7.6	Complied
5350.769	46.7	54.0	7.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5052.628	56.2	74.0	17.8	Complied
5150	54.9	74.0	19.1	Complied

Results: Upper Band Edge / Peak

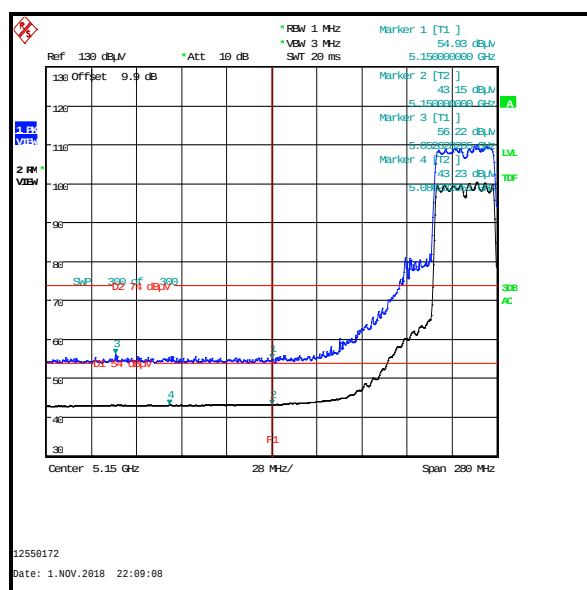
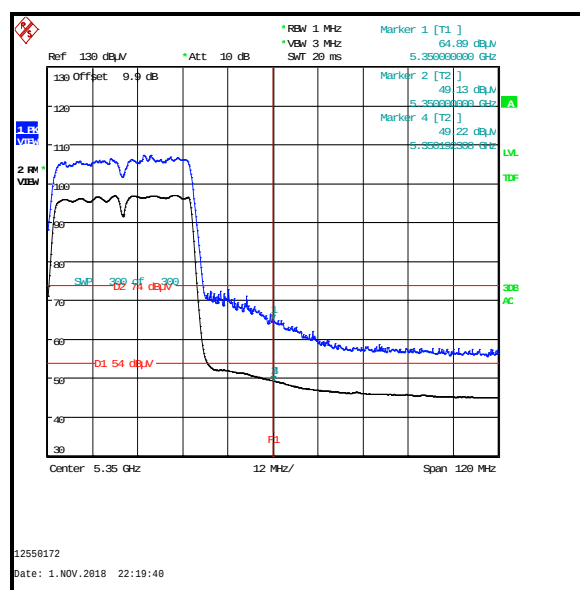
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.9	74.0	9.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	43.2	0.1	43.3	54.0	10.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.1	0.1	49.2	54.0	4.8	Complied
5350.192	49.2	0.1	49.3	54.0	4.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5102.300	54.6	74.0	19.4	Complied
5150	53.2	74.0	20.8	Complied

Results: Upper Band Edge / Peak

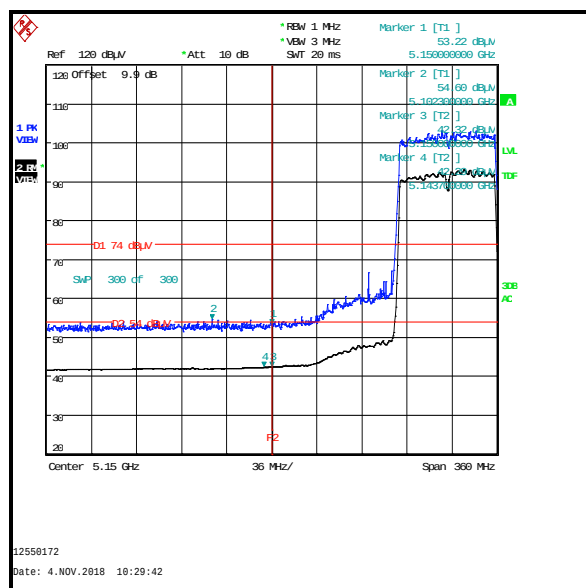
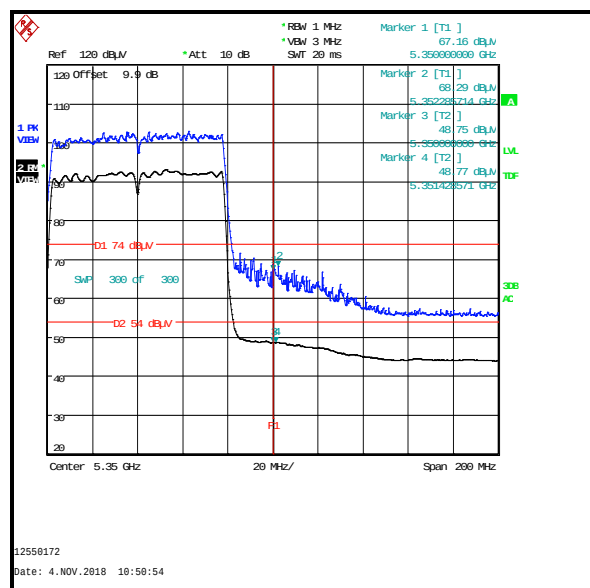
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	67.2	74.0	6.8	Complied
5352.286	68.3	74.0	5.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	42.3	0.2	42.5	54.0	11.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.8	0.2	49.0	54.0	5.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5121.154	55.9	74.0	18.1	Complied
5150	54.8	74.0	19.2	Complied

Results: Upper Band Edge / Peak

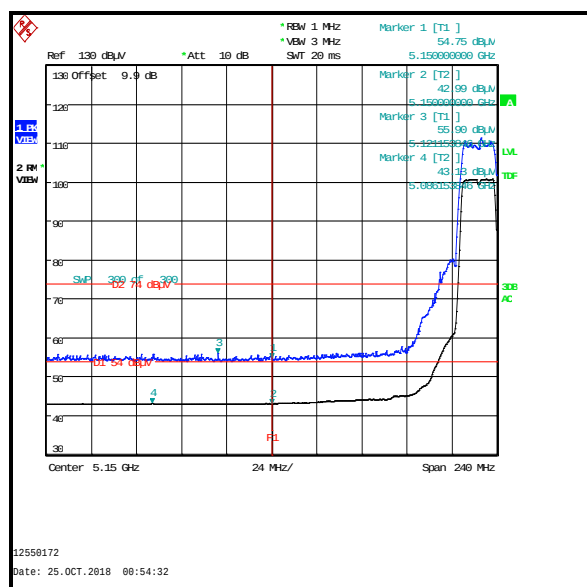
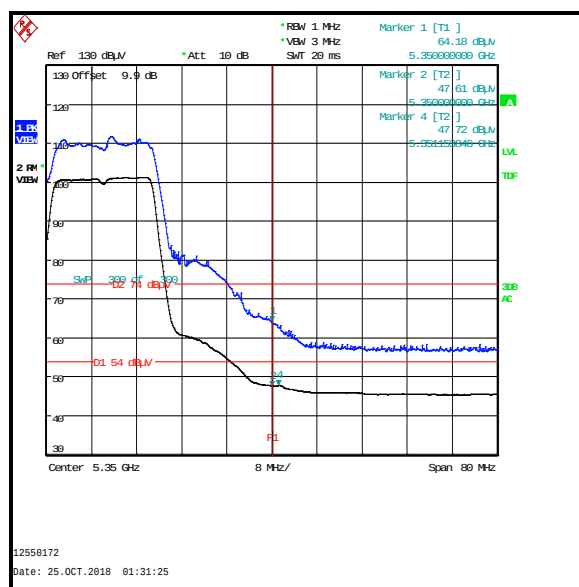
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.2	74.0	9.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5086.154	43.1	54.0	10.9	Complied
5150	43.0	54.0	11.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.6	54.0	6.4	Complied
5351.154	47.7	54.0	6.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5135.641	55.6	74.0	18.4	Complied
5150	55.4	74.0	18.6	Complied

Results: Upper Band Edge / Peak

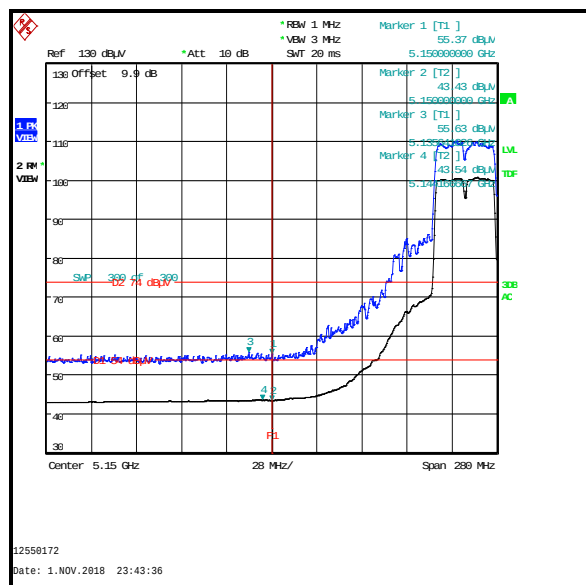
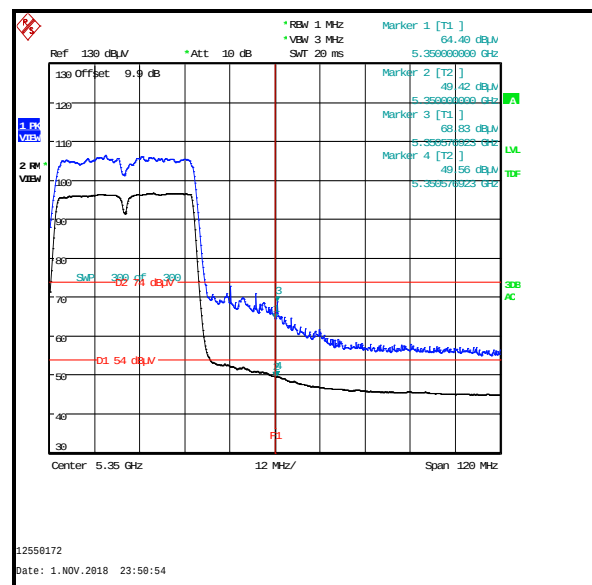
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.4	74.0	9.6	Complied
5350.577	68.8	74.0	5.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5144.167	43.5	0.1	43.6	54.0	10.4	Complied
5150	43.4	0.1	43.5	54.0	10.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.4	0.1	49.5	54.0	4.5	Complied
5350.577	49.6	0.1	49.7	54.0	4.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.000	54.9	74.0	19.1	Complied
5150	53.4	74.0	20.6	Complied

Results: Upper Band Edge / Peak

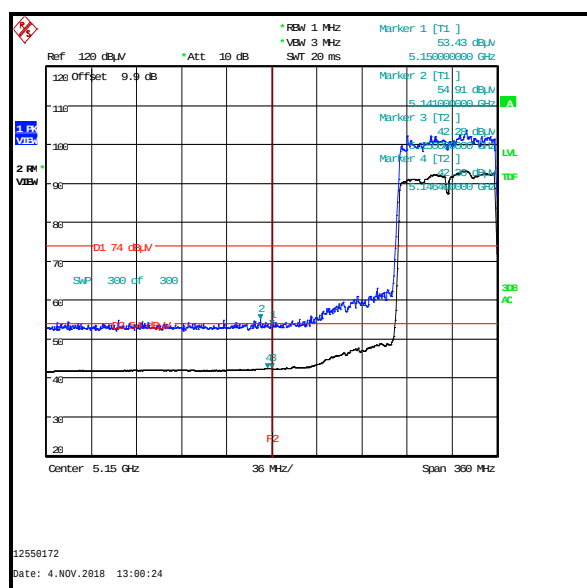
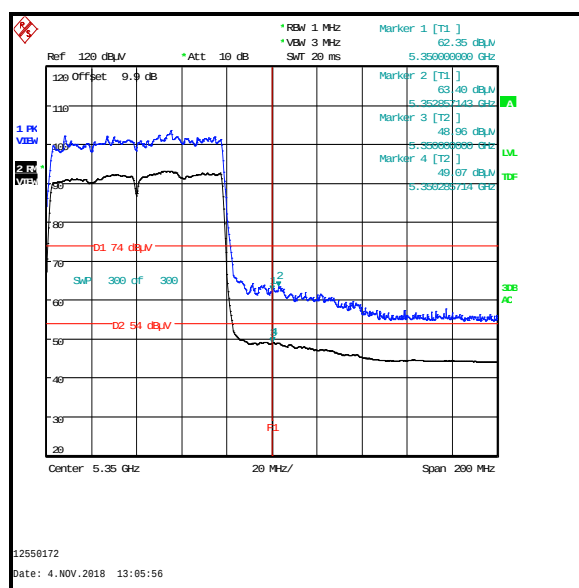
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	62.4	74.0	11.6	Complied
5352.857	63.4	74.0	10.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.460	42.4	0.2	42.6	54.0	11.4	Complied
5150	42.3	0.2	42.5	54.0	11.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.0	0.2	49.2	54.0	4.8	Complied
5350.286	49.1	0.2	49.3	54.0	4.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5059.615	55.4	74.0	18.6	Complied
5150	53.6	74.0	20.4	Complied

Results: Upper Band Edge / Peak

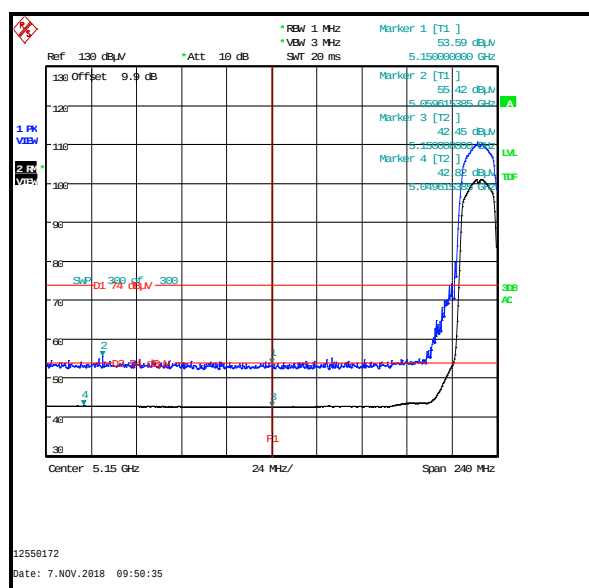
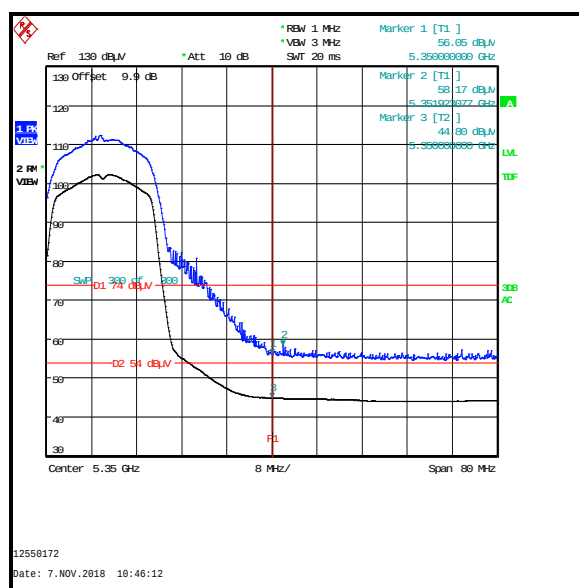
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.1	74.0	17.9	Complied
5351.923	58.2	74.0	15.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.615	42.8	0.1	42.9	54.0	11.1	Complied
5150	42.5	0.1	42.6	54.0	11.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.8	0.1	44.9	54.0	9.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.551	56.0	74.0	18.0	Complied
5150	54.4	74.0	19.6	Complied

Results: Upper Band Edge / Peak

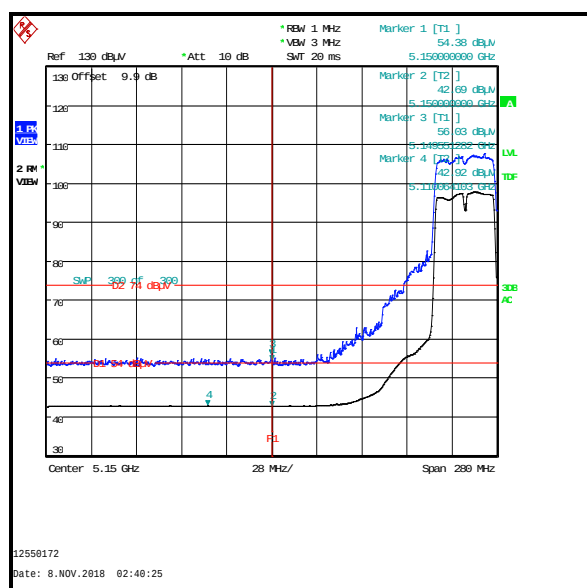
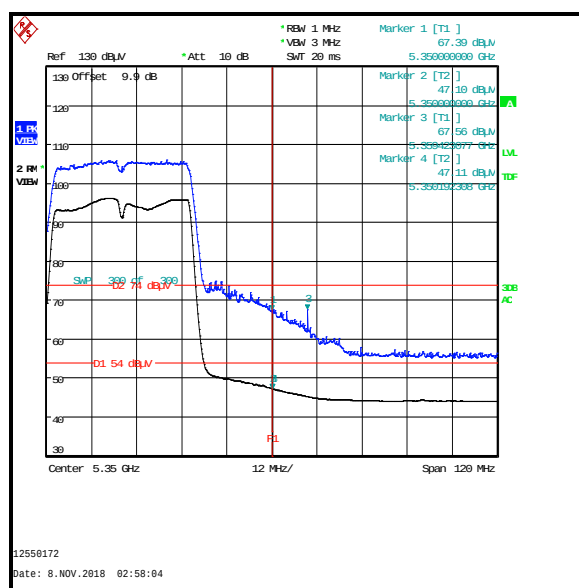
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	67.4	74.0	6.6	Complied
5359.423	67.6	74.0	6.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5110.064	42.9	0.1	43.0	54.0	11.0	Complied
5150	42.7	0.1	42.8	54.0	11.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.1	0.1	47.2	54.0	6.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5020.192	54.6	74.0	19.4	Complied
5150	53.1	74.0	20.9	Complied

Results: Upper Band Edge / Peak

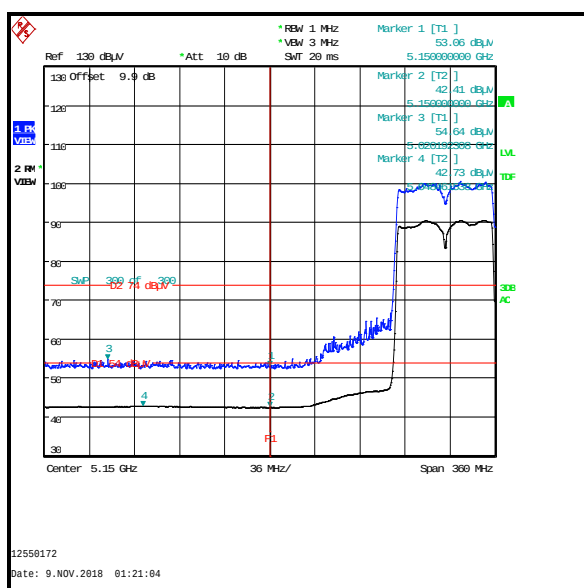
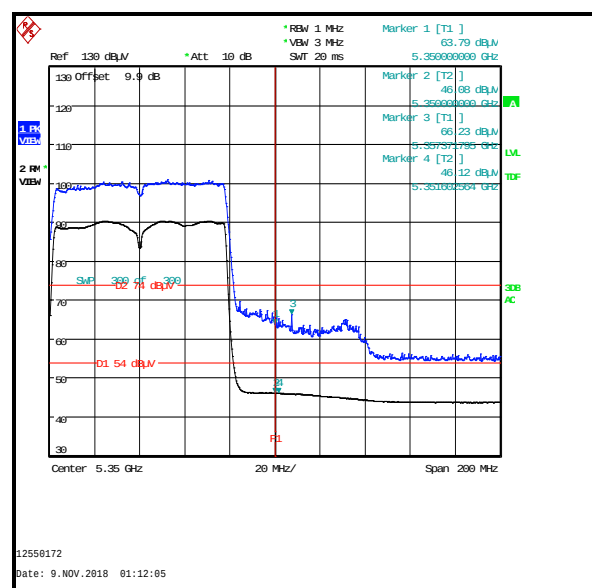
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	63.8	74.0	10.2	Complied
5357.372	66.2	74.0	7.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5048.462	42.7	0.1	42.8	54.0	11.2	Complied
5150	42.4	0.1	42.5	54.0	11.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.1	0.1	46.2	54.0	7.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band)**5.3.3. 5.47-5.725 GHz band****Test Summary:**

Test Engineers:	Marco Zunarelli, John Ferdinand & Mark Perry	Test Dates:	19 October 2018 to 15 November 2018
Test Sample Serial Number:	C02WW00PKFMM		

FCC Reference:	Parts 15.407(b)(3),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	23 to 25
Relative Humidity (%):	40 to 50

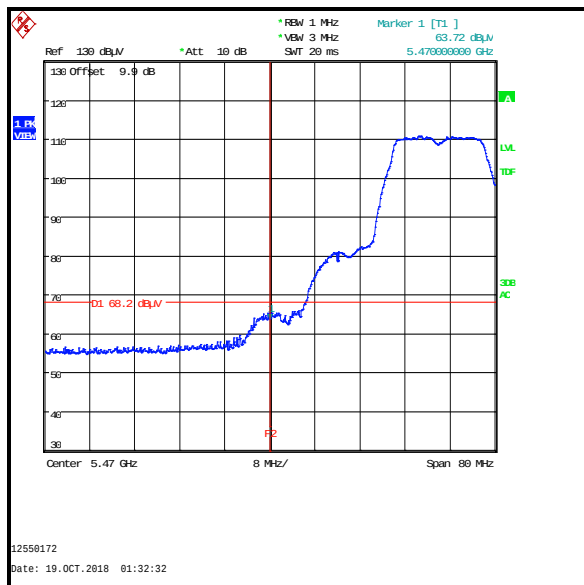
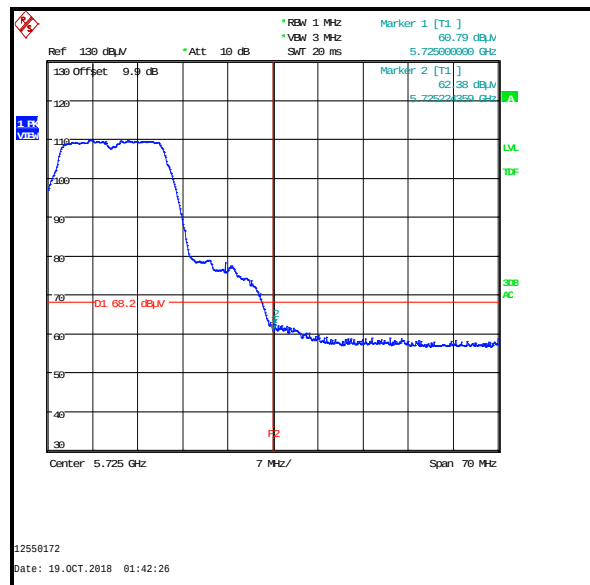
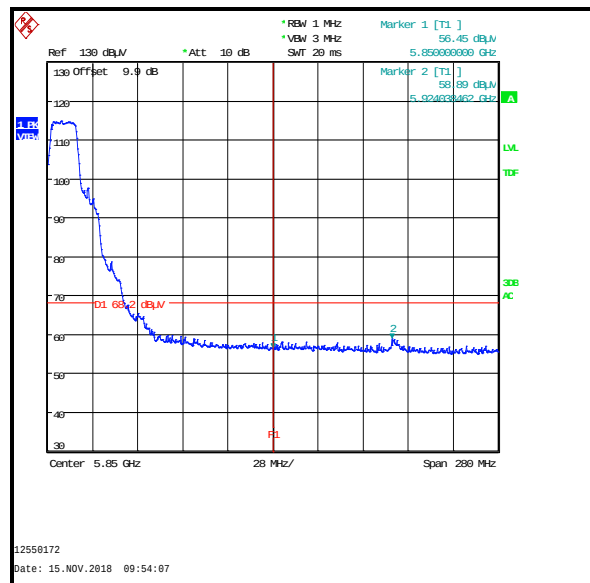
Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:
 - o 802.11a - BPSK / 6 Mbps / Core 2
 - o 802.11n HT20 / SISO - BPSK / MCS0 / Core 2
 - o 802.11n HT40 / SISO - BPSK / MCS0 / Core 2
 - o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 2
 - o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
 - o 802.11n HT20 / MIMO / 2Tx TxBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx TxBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx TxBF - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
 - o 802.11n HT20 / MIMO / 3Tx TxBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx TxBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx TxBF - BPSK / MCS0x1
2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
3. For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation with the EUT transmitting on the bottom and top channels within 5.47-5.725 GHz band, the results are included in the transmitter 5.725-5.85 GHz band radiated spurious emissions section of this test report.
4. For completeness, results are also shown as EIRP in dBm and also as field strength in dBμV/m. Measured field strength was converted to EIRP in accordance with KDB 789033 II.G.2.c)(iii) using a conversion factor of 95.2.
5. As straddle channels overlap the upper band edge at 5725 MHz, additional testing was performed in accordance with KDB 778093 III.B.2.b)(iii) which requires compliance of overlapping channels to an unwanted emission level of -27 dBm/MHz at 5850 MHz instead of 5725 MHz. The EUT was configured to transmit on the straddle channels and the emission levels at 5850 MHz were recorded. A marker was placed on the band edge spot frequency and a second marker placed on the highest emission level in the adjacent non-restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5470	-31.5	-27.0	4.5	Complied
5725	-34.4	-27.0	7.4	Complied
5725.224	-32.8	-27.0	5.8	Complied
5850	-38.7	-27.0	11.7	Complied
5924.038	-36.3	-27.0	9.3	Complied

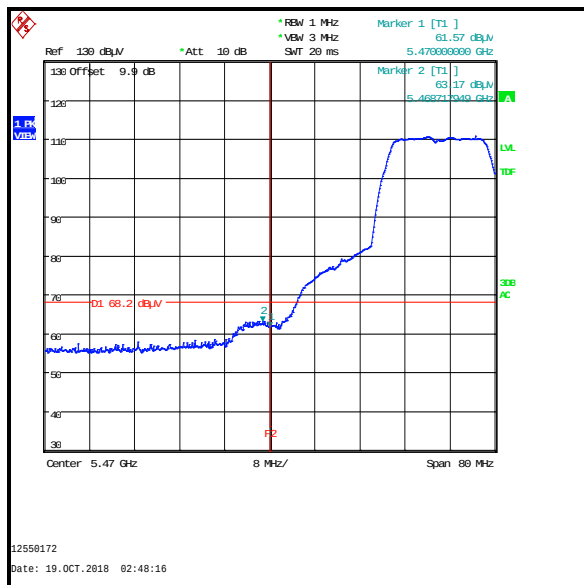
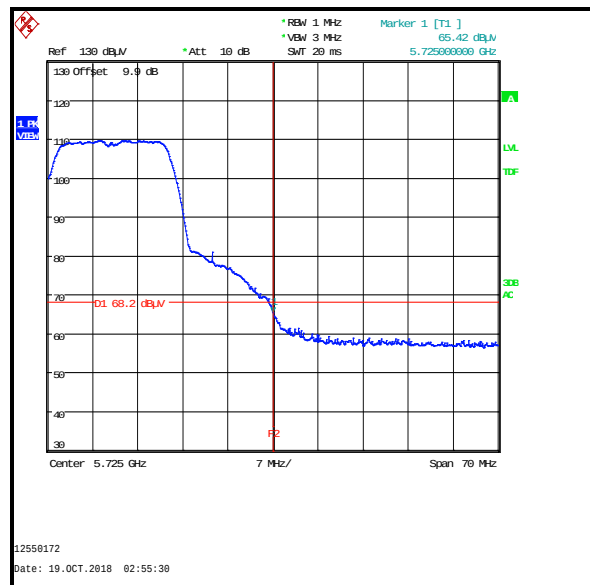
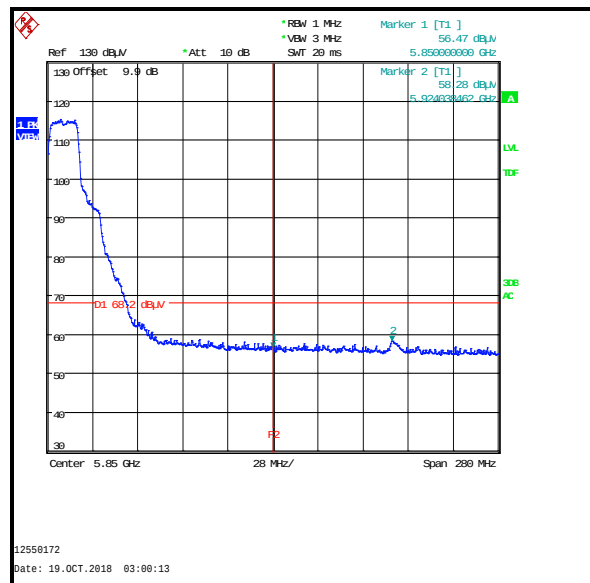
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5470	63.7	68.2	4.5	Complied
5725	60.8	68.2	7.4	Complied
5725.224	62.4	68.2	5.8	Complied
5850	56.5	68.2	11.7	Complied
5924.038	58.9	68.2	9.3	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 2 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5468.718	-32.0	-27.0	5.0	Complied
5470	-33.6	-27.0	6.6	Complied
5725	-29.8	-27.0	2.8	Complied
5850	-38.7	-27.0	11.7	Complied
5924.038	-36.9	-27.0	9.9	Complied

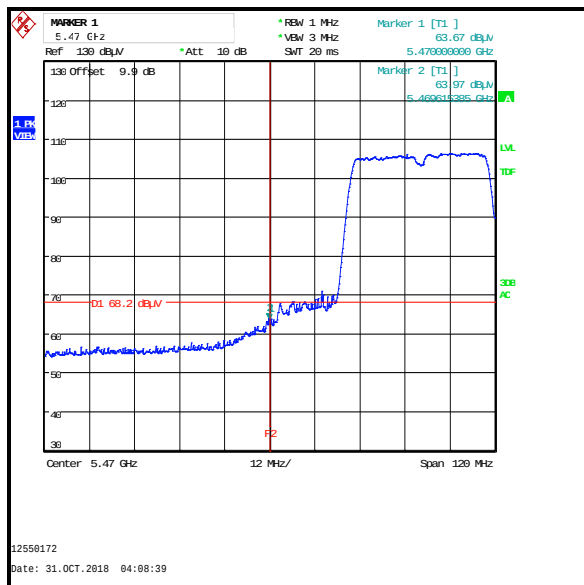
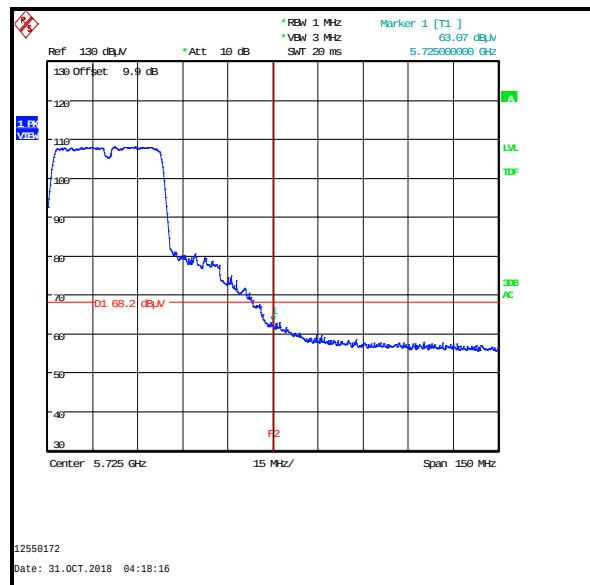
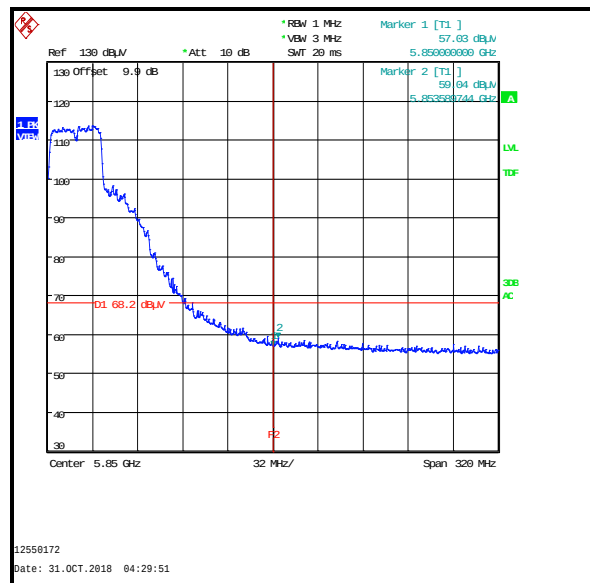
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5468.718	63.2	68.2	5.0	Complied
5470	61.6	68.2	6.6	Complied
5725	65.4	68.2	2.8	Complied
5850	56.5	68.2	11.7	Complied
5924.038	58.3	68.2	9.9	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 2 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5469.615	-31.2	-27.0	4.2	Complied
5470	-31.5	-27.0	4.5	Complied
5725	-32.1	-27.0	5.1	Complied
5850	-38.2	-27.0	11.2	Complied
5853.590	-36.2	-27.0	9.2	Complied

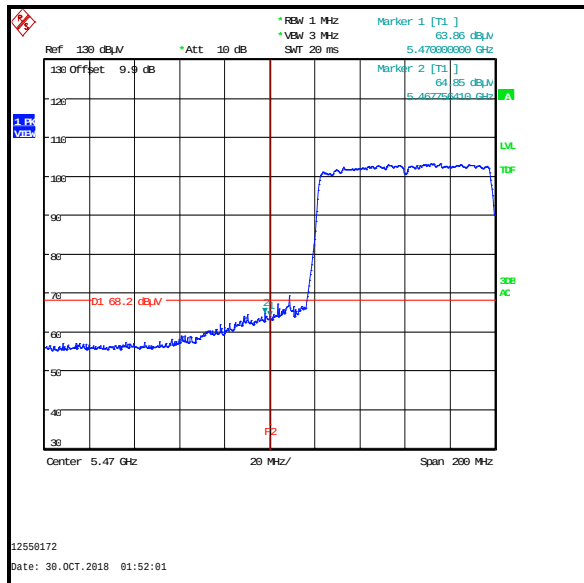
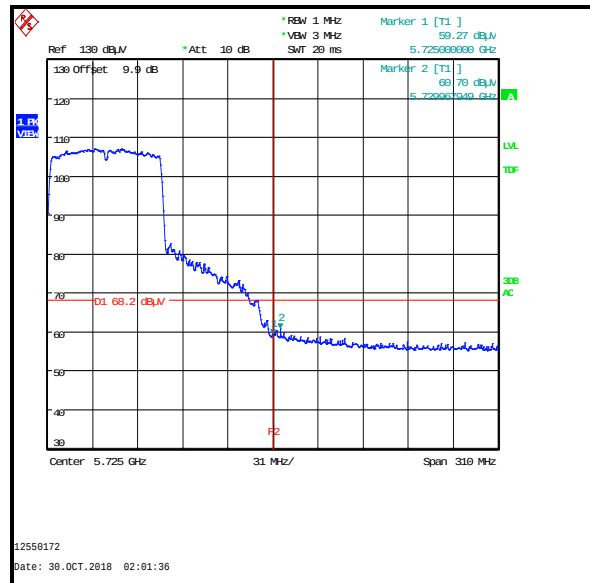
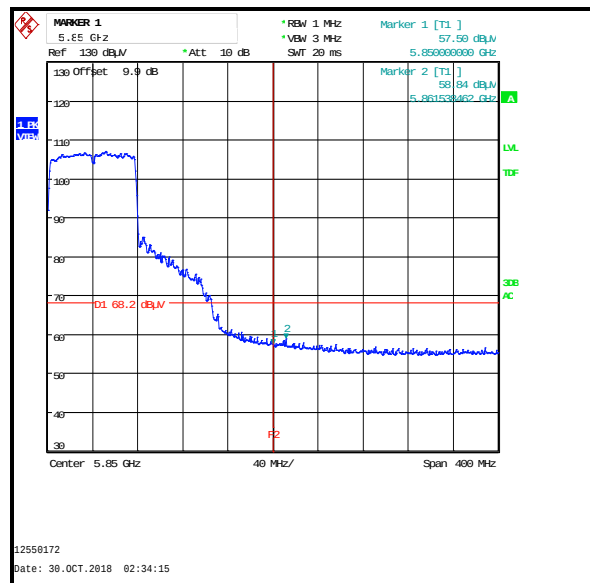
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5469.615	64.0	68.2	4.2	Complied
5470	63.7	68.2	4.5	Complied
5725	63.1	68.2	5.1	Complied
5850	57.0	68.2	11.2	Complied
5853.590	59.0	68.2	9.2	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 2 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5467.756	-30.3	-27.0	3.3	Complied
5470	-31.3	-27.0	4.3	Complied
5725	-35.9	-27.0	8.9	Complied
5729.968	-34.5	-27.0	7.5	Complied
5850	-37.7	-27.0	10.7	Complied
5861.538	-36.4	-27.0	9.4	Complied

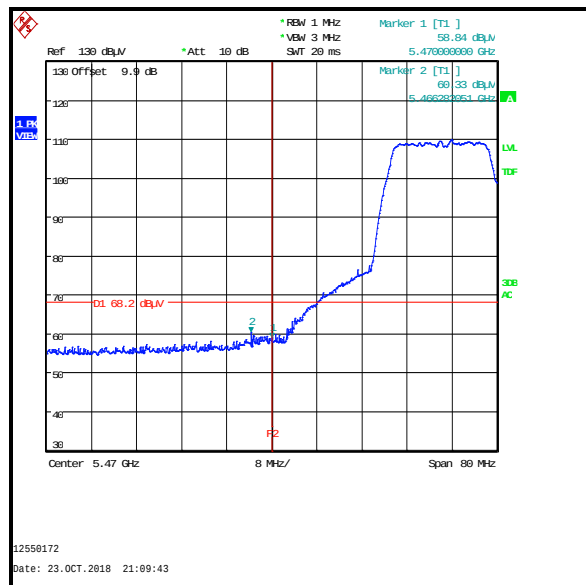
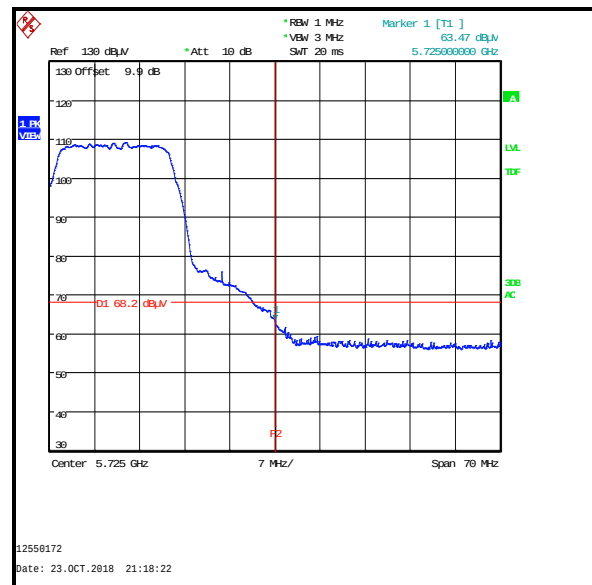
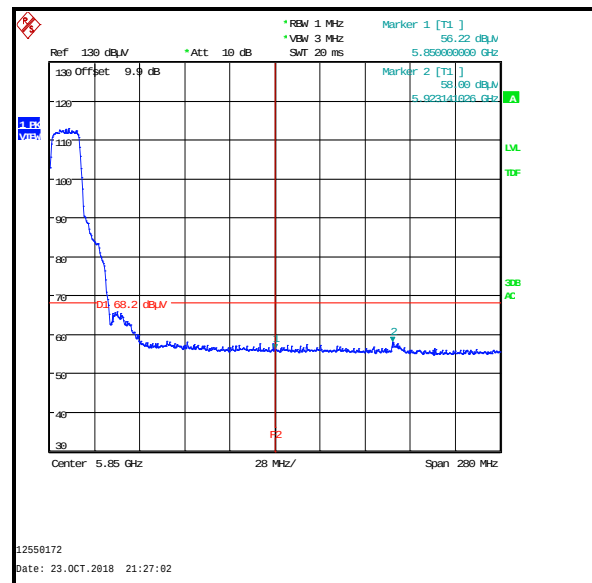
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5467.756	64.9	68.2	3.3	Complied
5470	63.9	68.2	4.3	Complied
5725	59.3	68.2	8.9	Complied
5729.968	60.7	68.2	7.5	Complied
5850	57.5	68.2	10.7	Complied
5861.538	58.8	68.2	9.4	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 2 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5466.282	-34.9	-27.0	7.9	Complied
5470	-36.4	-27.0	9.4	Complied
5725	-31.7	-27.0	4.7	Complied
5850	-39.0	-27.0	12.0	Complied
5923.141	-37.2	-27.0	10.2	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5466.282	60.3	68.2	7.9	Complied
5470	58.8	68.2	9.4	Complied
5725	63.5	68.2	4.7	Complied
5850	56.2	68.2	12.0	Complied
5923.141	58.0	68.2	10.2	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5469.615	-31.2	-27.0	4.2	Complied
5470	-31.5	-27.0	4.5	Complied
5725	-32.0	-27.0	5.0	Complied
5850	-38.3	-27.0	11.3	Complied
5860.256	-37.2	-27.0	10.2	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5469.615	64.0	68.2	4.2	Complied
5470	63.7	68.2	4.5	Complied
5725	63.2	68.2	5.0	Complied
5850	56.9	68.2	11.3	Complied
5860.256	58.0	68.2	10.2	Complied