

Section 15.407 Subclause 15.403(i) Transmitter 26 dB Emission Bandwidth (EBW)

RESULTS:

The 26 dB emission Bandwidth was measured using the method according to point C) 1) of 789033 D02 General UNII Test Procedures New Rules v02r01.

Measurements were performed on the SISO modes for testing:

- 802.11a: 6 Mbit/s / SISO on WLAN0-Core 0 – Antenna RF Port 2
- 802.11n HT20: MCS0 / SISO on WLAN0-Core 0 – Antenna RF Port 2
- 802.11n HT40: MCS0 / SISO on WLAN0-Core 0 – Antenna RF Port 2
- 802.11ac VHT80: MCS0x1 / SISO on WLAN0-Core 0 – Antenna RF Port 2

- 802.11a: 6 Mbit/s / SISO on WLAN1-Core 0 – Antenna RF Port 3
- 802.11n HT20: MCS0 / SISO on WLAN1-Core 0 – Antenna RF Port 3
- 802.11n HT40: MCS0 / SISO on WLAN1-Core 0 – Antenna RF Port 3
- 802.11ac VHT80: MCS0x1 / SISO on WLAN1-Core 0 – Antenna RF Port 3

- 802.11a: 6 Mbit/s / SISO on WLAN1-Core 1 – Antenna RF Port 4
- 802.11n HT20: MCS0 / SISO on WLAN1-Core 1 – Antenna RF Port 4
- 802.11n HT40: MCS0 / SISO on WLAN1-Core 1 – Antenna RF Port 4
- 802.11ac VHT80: MCS0x1 / SISO on WLAN1-Core 1 – Antenna RF Port 4

Measurements were performed on the MIMO mode for testing:

- 802.11n HT20: MCS0 / MIMO on WLAN0 CORE2 (CORE0+CORE1) –Antenna Port 1 - 4
- 802.11n HT40: MCS0 / MIMO on WLAN0 CORE2 (CORE0+CORE1) –Antenna Port 1 - 4
- 802.11ac VHT80: MCS0 / MIMO on WLAN0 CORE2 (CORE0+CORE1) –Antenna Port 1 - 4

WLAN0 - CORE 0 – SISO - Antenna port 2

- **Mode : 802.11a - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	21.52	<±23.02
channel 40 (5200 MHz)	21.52	
channel 48 (5240 MHz)	21.52	
channel 149 (5745 MHz)	21.64	
channel 157 (5785 MHz)	21.52	
channel 165 (5825 MHz)	21.56	

- **Mode : 802.11n HT20 - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	21.92	<±23.02
channel 40 (5200 MHz)	22.04	
channel 48 (5240 MHz)	22.00	
channel 149 (5745 MHz)	22.00	
channel 157 (5785 MHz)	22.20	
channel 165 (5825 MHz)	21.96	

- **Mode : 802.11n HT40 - 40MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 38 (5190 MHz)	39.60	<±53.05
channel 46 (5230 MHz)	39.60	
channel 151 (5755 MHz)	39.72	
channel 159 (5795 MHz)	39.78	

- **Mode : 802.11ac VHT80 - 80MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 42 (5210 MHz)	81.60	<±103.10
channel 155 (5775 MHz)	83.64	

WLAN1 - CORE 0 – SISO - Antenna port 3

- **Mode : 802.11a - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	21.48	<±23.02
channel 40 (5200 MHz)	21.48	
channel 48 (5240 MHz)	21.36	
channel 149 (5745 MHz)	21.51	
channel 157 (5785 MHz)	21.56	
channel 165 (5825 MHz)	21.49	

- **Mode : 802.11n HT20 - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	22.87	<±23.02
channel 40 (5200 MHz)	23.12	
channel 48 (5240 MHz)	23.87	
channel 149 (5745 MHz)	22.09	
channel 157 (5785 MHz)	22.01	
channel 165 (5825 MHz)	22.19	

- **Mode : 802.11n HT40 - 40MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 38 (5190 MHz)	39.64	<±53.05
channel 46 (5230 MHz)	39.86	
channel 151 (5755 MHz)	39.79	
channel 159 (5795 MHz)	39.57	

- **Mode : 802.11ac VHT80 - 80MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 42 (5210 MHz)	82.36	<±103.10
channel 155 (5775 MHz)	82.28	

WLAN1 - CORE 1 – SISO - Antenna port 4

- **Mode : 802.11a - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	21.47	<±23.02
channel 40 (5200 MHz)	21.45	
channel 48 (5240 MHz)	21.37	
channel 149 (5745 MHz)	21.55	
channel 157 (5785 MHz)	21.45	
channel 165 (5825 MHz)	21.51	

- **Mode : 802.11n HT20 - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 36 (5180 MHz)	21.84	<±23.02
channel 40 (5200 MHz)	21.89	
channel 48 (5240 MHz)	21.89	
channel 149 (5745 MHz)	21.99	
channel 157 (5785 MHz)	22.03	
channel 165 (5825 MHz)	21.85	

- **Mode : 802.11n HT40 - 40MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 38 (5190 MHz)	39.67	<±53.05
channel 46 (5230 MHz)	39.64	
channel 151 (5755 MHz)	39.72	
channel 159 (5795 MHz)	39.56	

- **Mode : 802.11ac VHT80 - 80MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)	Measurement uncertainty (KHz)
channel 42 (5210 MHz)	81.93	<±103.10
channel 155 (5775 MHz)	83.82	

WLAN 0-CORE 2 (CORE 0+CORE 1) - MIMO – Antennas ports 1 - 4

- **Mode : 802.11n HT20 - 20MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)		Measurement uncertainty (KHz)
	Antenna 1	Antenna 4	
channel 36 (5180 MHz)	21.96	21.52	<±23.02
channel 40 (5200 MHz)	22.08	21.60	
channel 48 (5240 MHz)	22.00	21.60	
channel 149 (5745 MHz)	22.20	21.56	
channel 157 (5785 MHz)	21.92	21.68	
channel 165 (5825 MHz)	22.04	21.60	

- **Mode : 802.11n HT40 - 40MHz** (see next plots)

	26 dB Emission Bandwidth (MHz)		Measurement uncertainty (KHz)
	Antenna 1	Antenna 4	
channel 38 (5190 MHz)	39.60	39.12	<±53.05
channel 46 (5230 MHz)	39.78	39.36	
channel 151 (5755 MHz)	36.78	39.24	
channel 159 (5795 MHz)	39.90	39.06	

- **Mode : 802.11ac VHT80 - 80MHz** (see next plots)

	Occ. BW (MHz)		Measurement uncertainty (KHz)
	Antenna 1	Antenna 4	
channel 42 (5210 MHz)	82.08	81.60	<±103.10
channel 155 (5775 MHz)	81.84	81.48	