

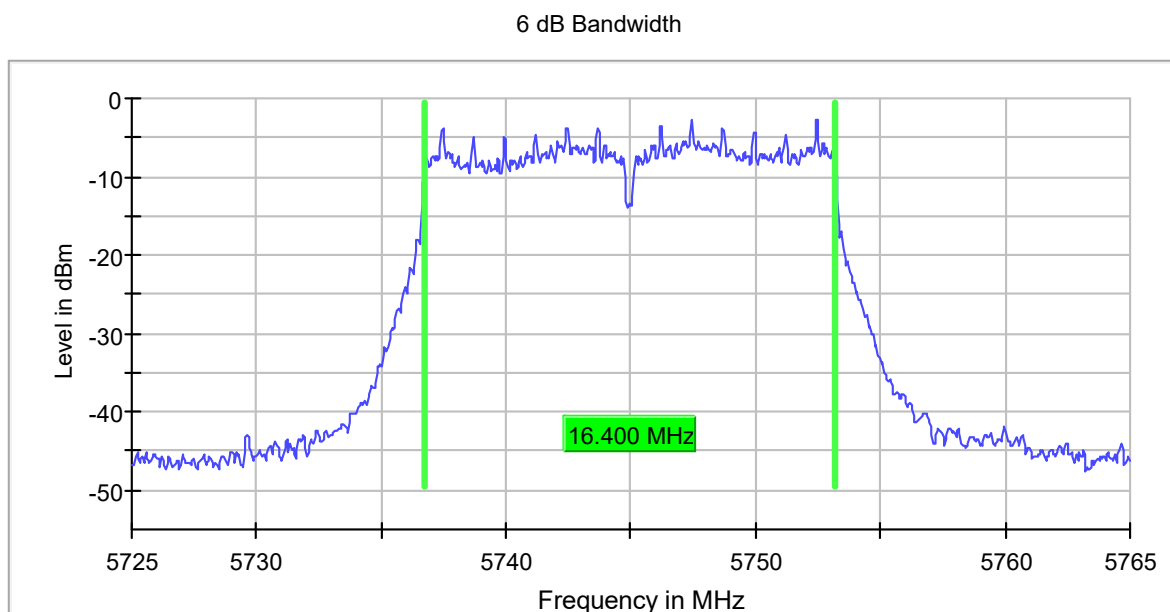
Mode 802.11 ac80 (VHT80):

	Single Channel 155 (5775 MHz)
6 dB bandwidth (MHz)	76.200000
Measurement uncertainty (%)	<±2.00

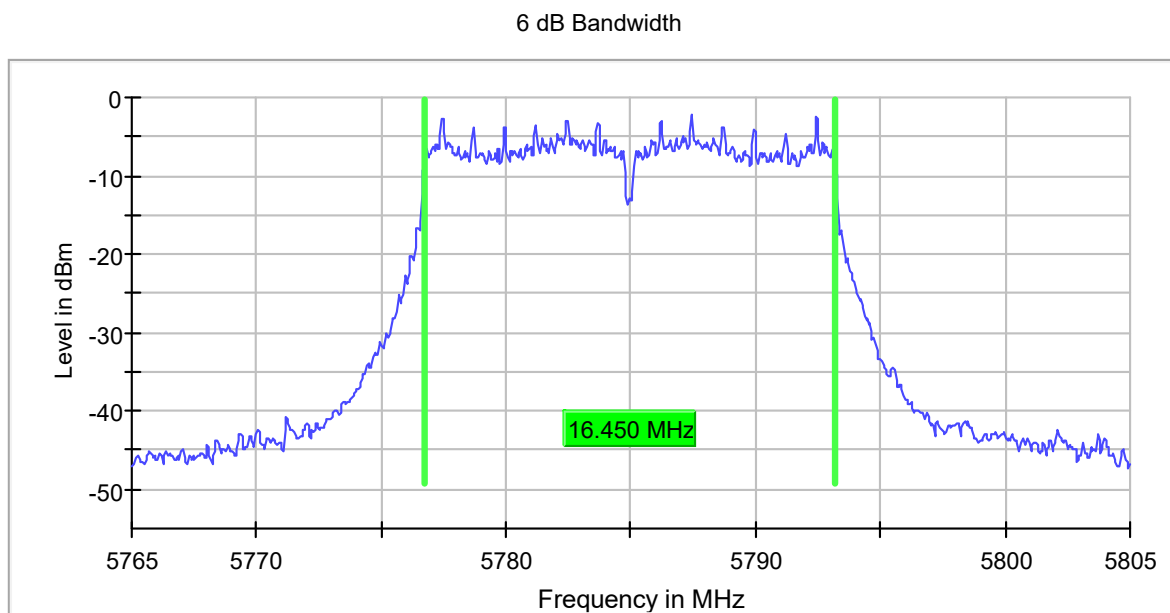
Verdict: PASS

Mode 802.11 a20:

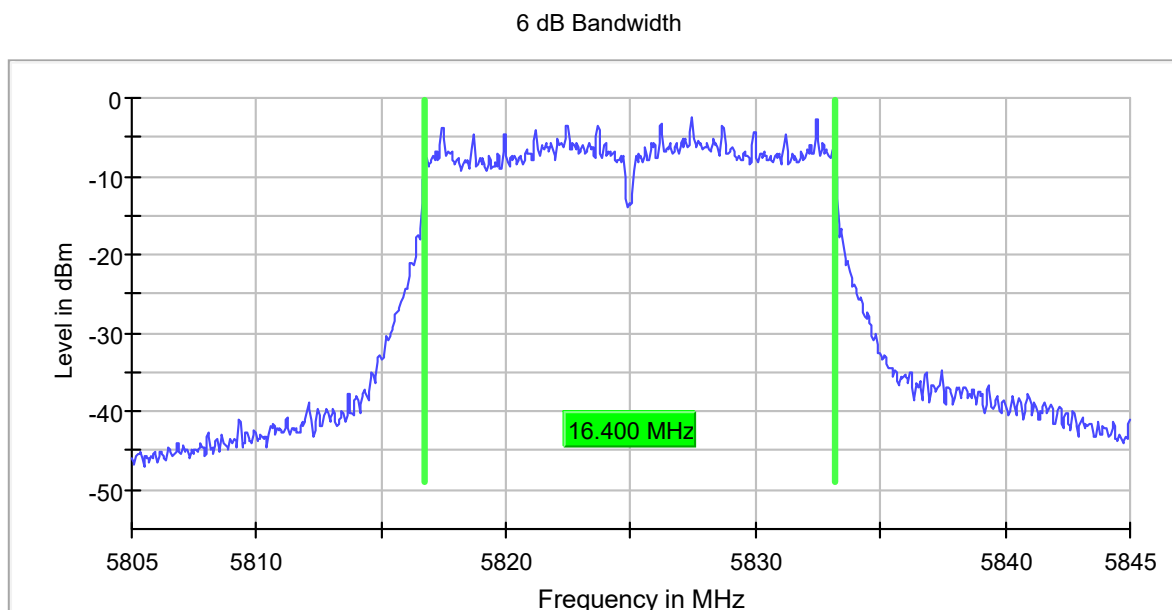
- Low Channel:



- Middle Channel:

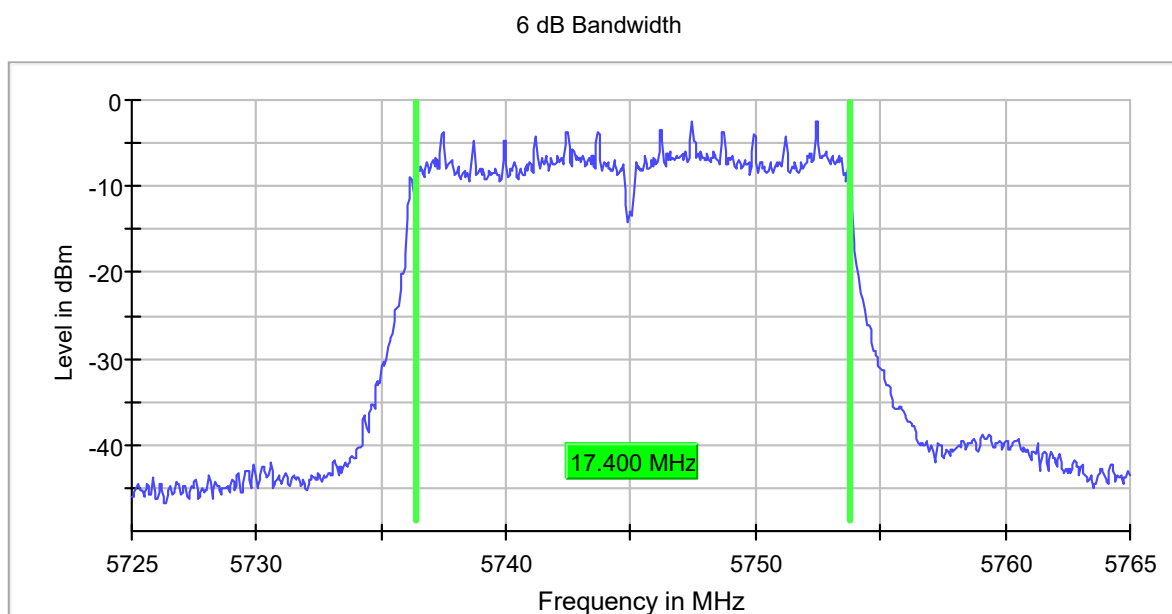


- High Channel:

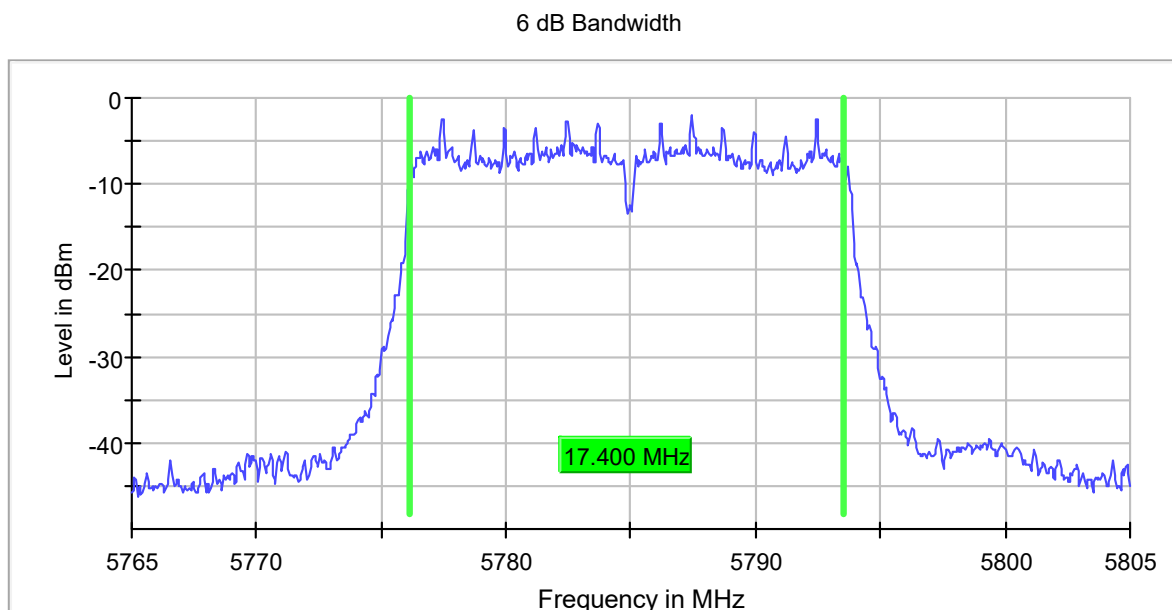


Mode 802.11 n20 (HT20):

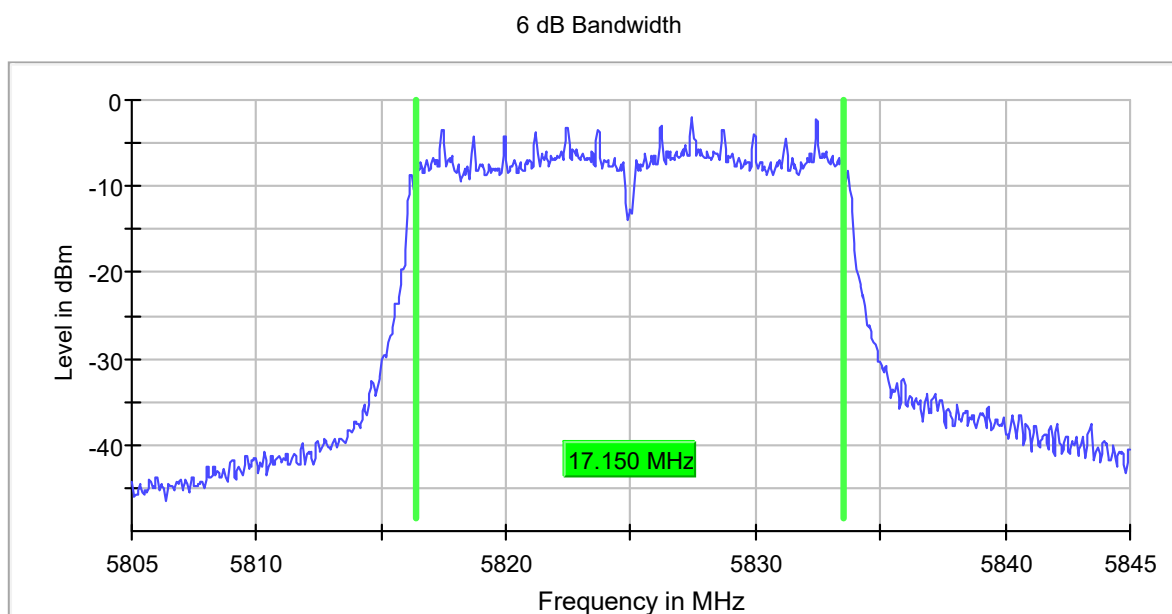
- Low Channel:



- Middle Channel:

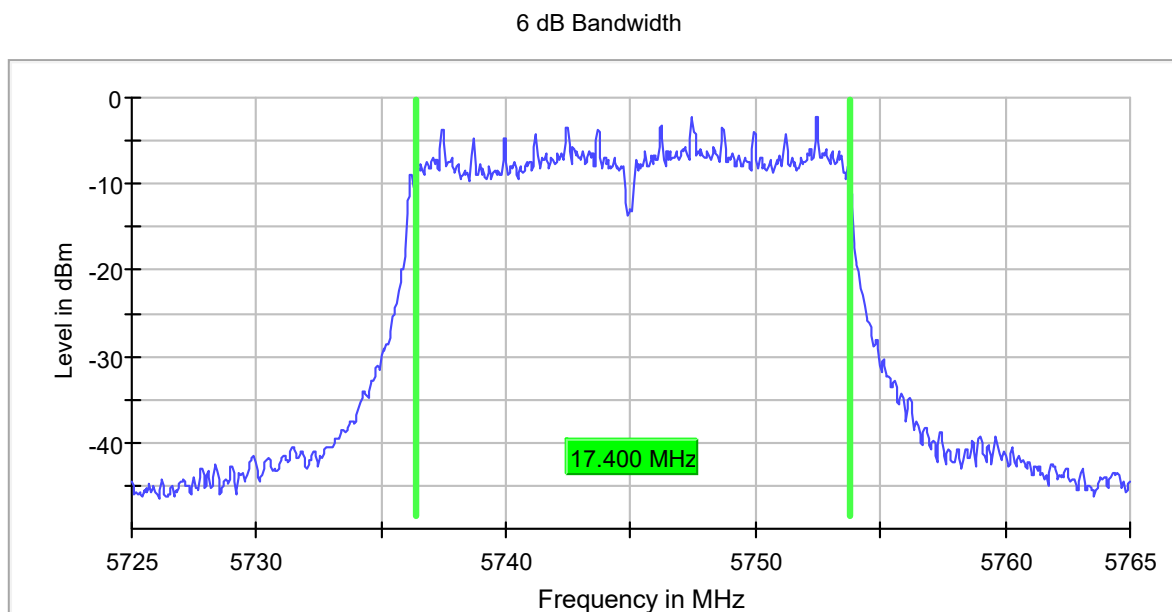


- High Channel:

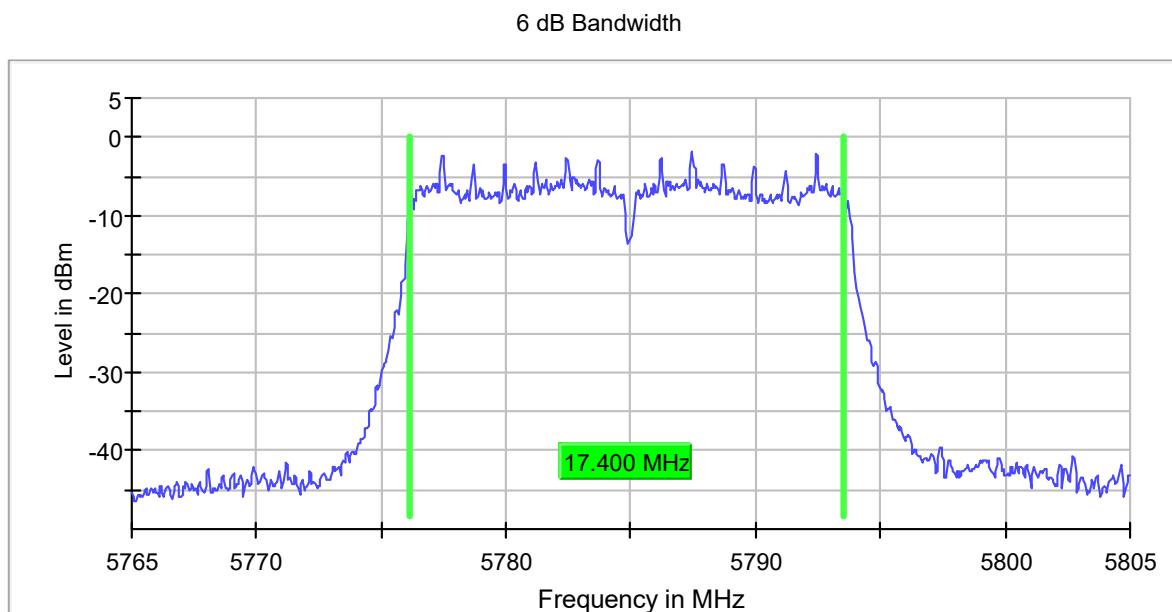


Mode 802.11 ac20 (VHT20):

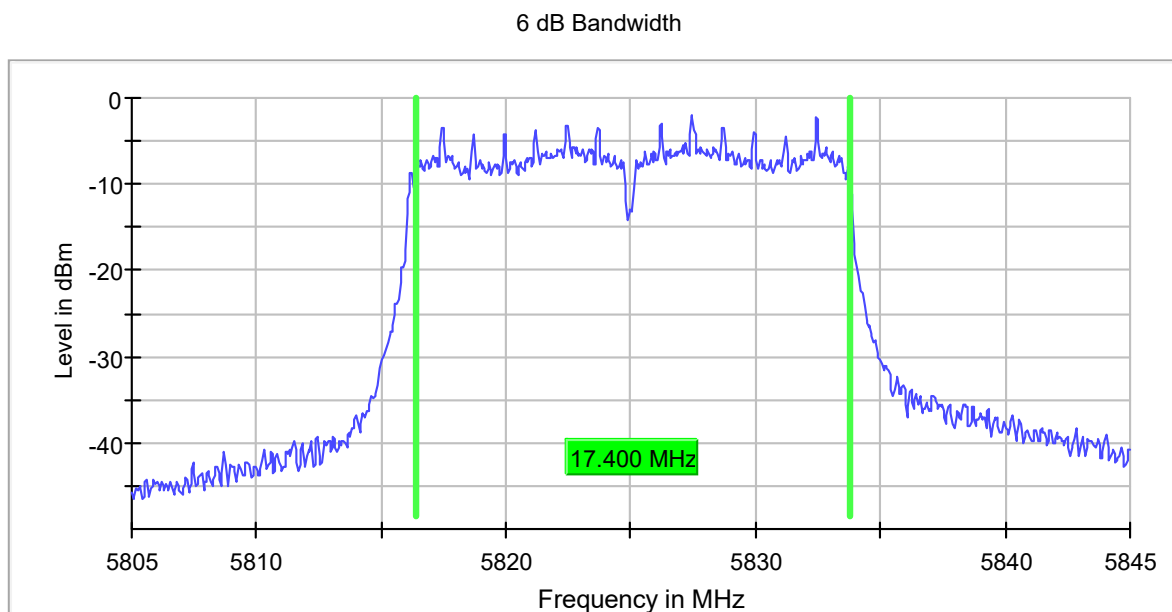
- Low Channel:



- Middle Channel:

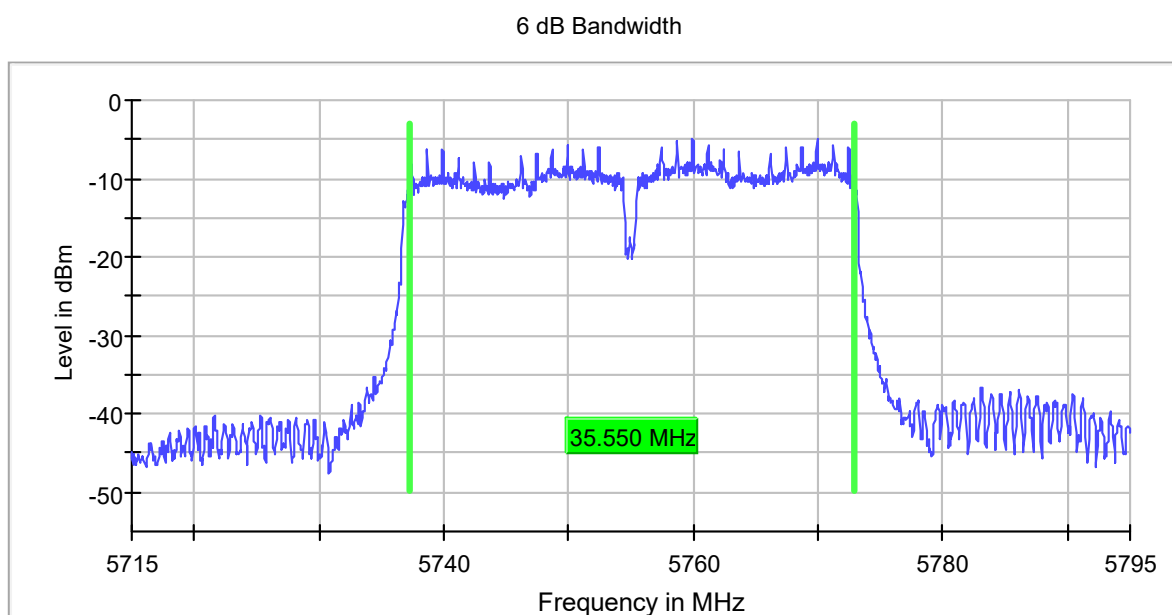


- High Channel:

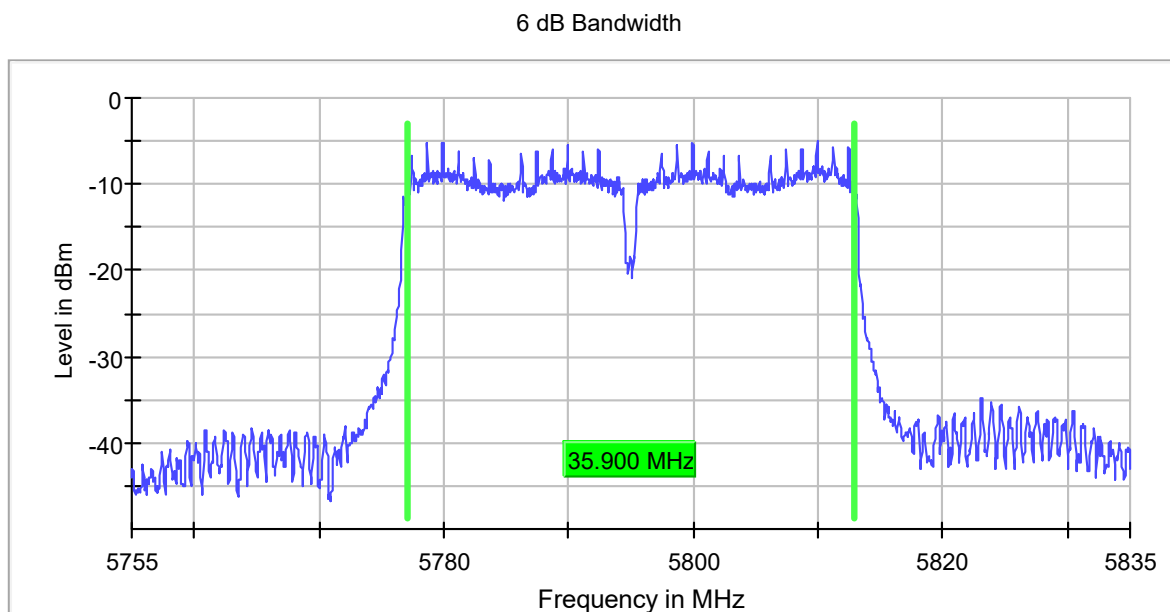


Mode 802.11 n40 (HT40):

- Low Channel:

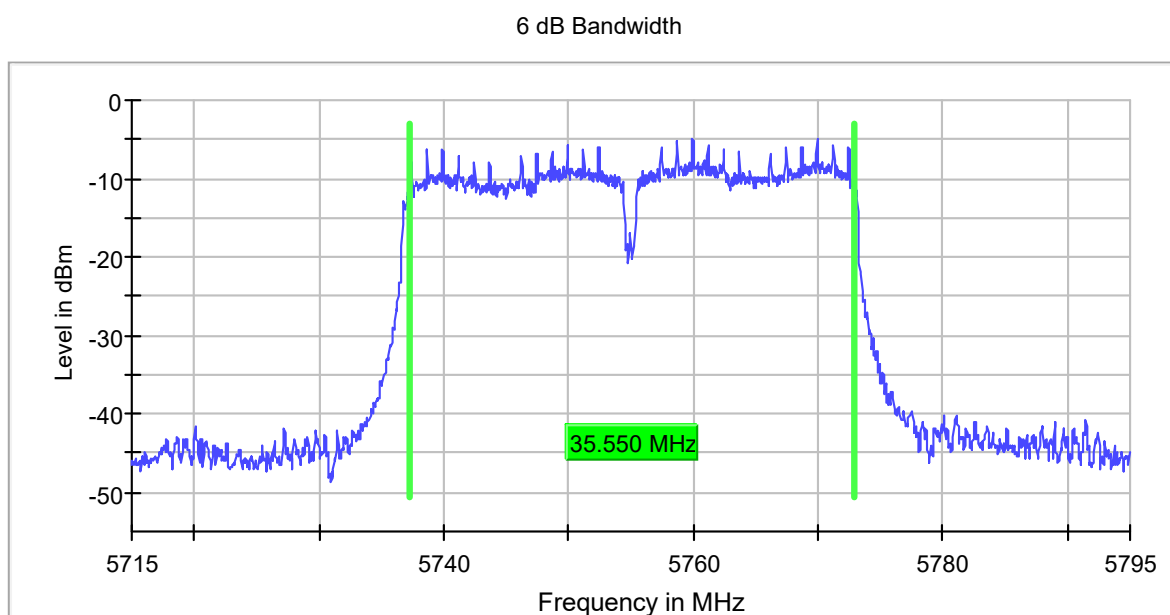


- High Channel:

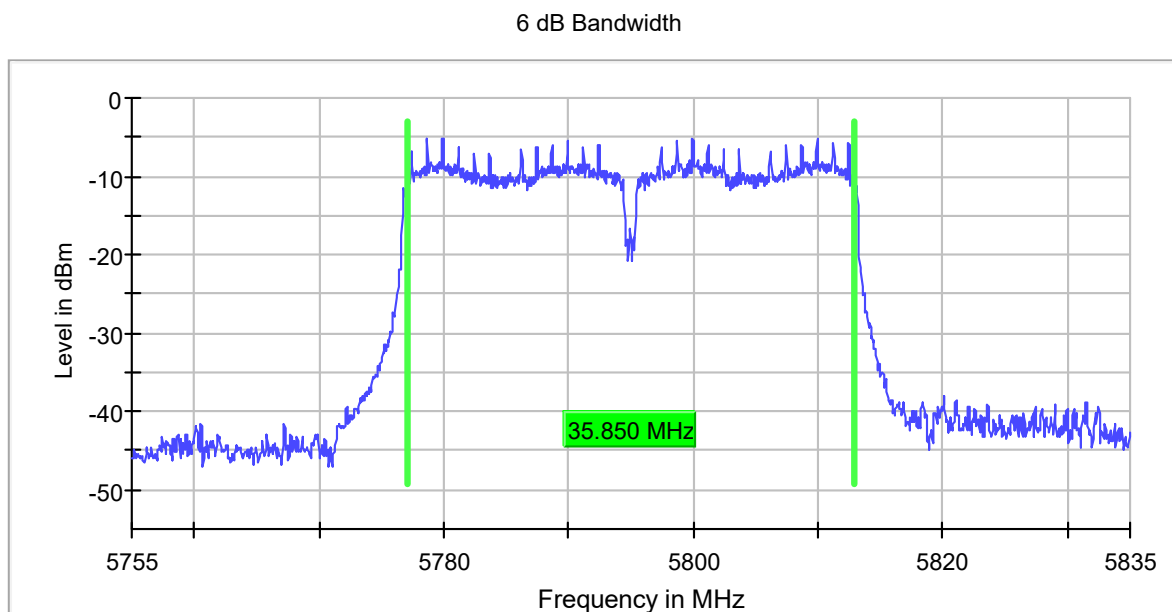


Mode 802.11 ac40 (VHT40):

- Low Channel:

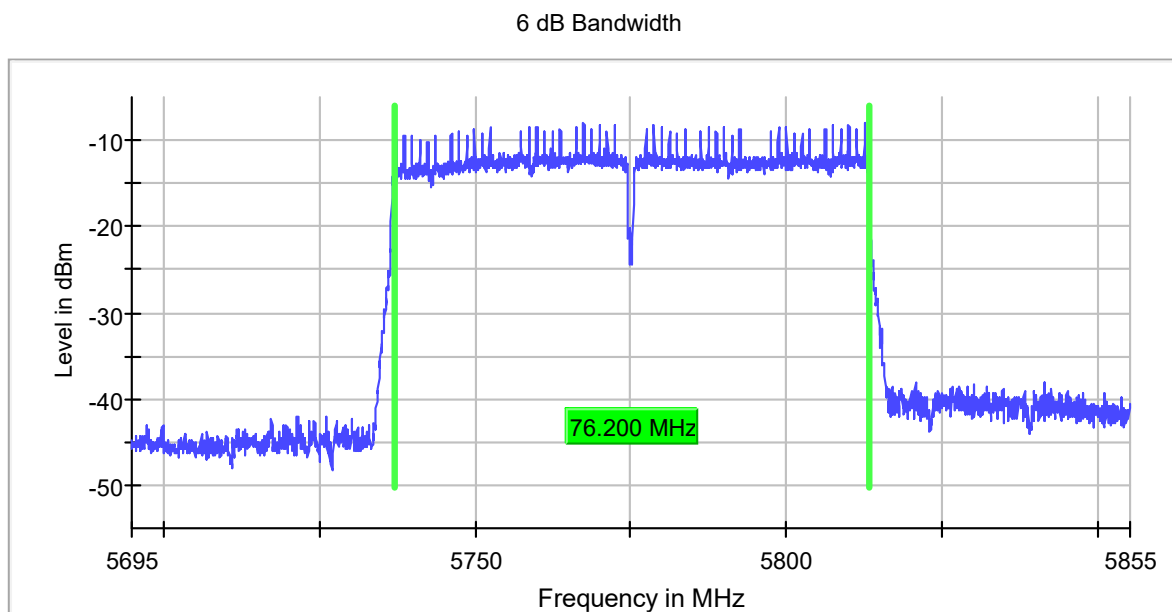


- High Channel:



Mode 802.11 ac80 (VHT80):

- Single Channel:



FCC 15.407 (a)(3) / RSS-247 6.2.4.1. Transmitter Maximum Conducted Output Power

SPECIFICATION:

* FCC 15.407: For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

* RSS-247: The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipointFootnote3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

RESULTS:

The maximum conducted output power was measured using the method according to point E) 3) b) (Method PM-G) of 789033 D02 General UNII Test Procedures New Rules v02r01.

Mode 802.11 a20:

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted Power (dBm)	9.8	10.1	9.7
Measurement uncertainty (dB)	<±1.00		

Mode 802.11 n20 (HT20):

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted Power (dBm)	9.8	10.1	9.7
Measurement uncertainty (dB)	<±1.00		

Mode 802.11 ac20 (VHT20):

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted Power (dBm)	9.8	10.1	9.7
Measurement uncertainty (dB)	<±1.00		

Mode 802.11 n40 (HT40):

Channels	Low Channel 151 (5755 MHz)	High Channel 159 (5795 MHz)
Maximum Conducted Power (dBm)	10.1	10.0
Measurement uncertainty (dB)	<±1.00	

Mode 802.11 ac40 (VHT40):

Channels	Low Channel 151 (5755 MHz)	High Channel 159 (5795 MHz)
Maximum Conducted Power (dBm)	10.0	10.0
Measurement uncertainty (dB)	<±1.00	

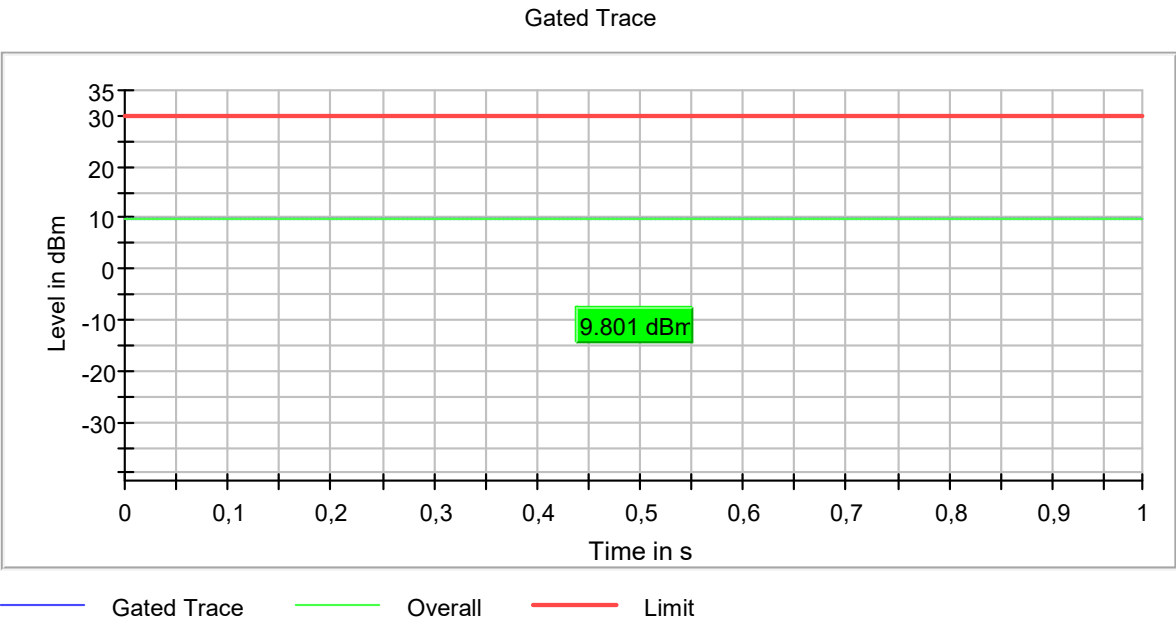
Mode 802.11 ac80 (VHT80):

Channels	Single Channel 155 (5775 MHz)
Maximum Conducted Power (dBm)	10.2
Measurement uncertainty (dB)	<±1.00

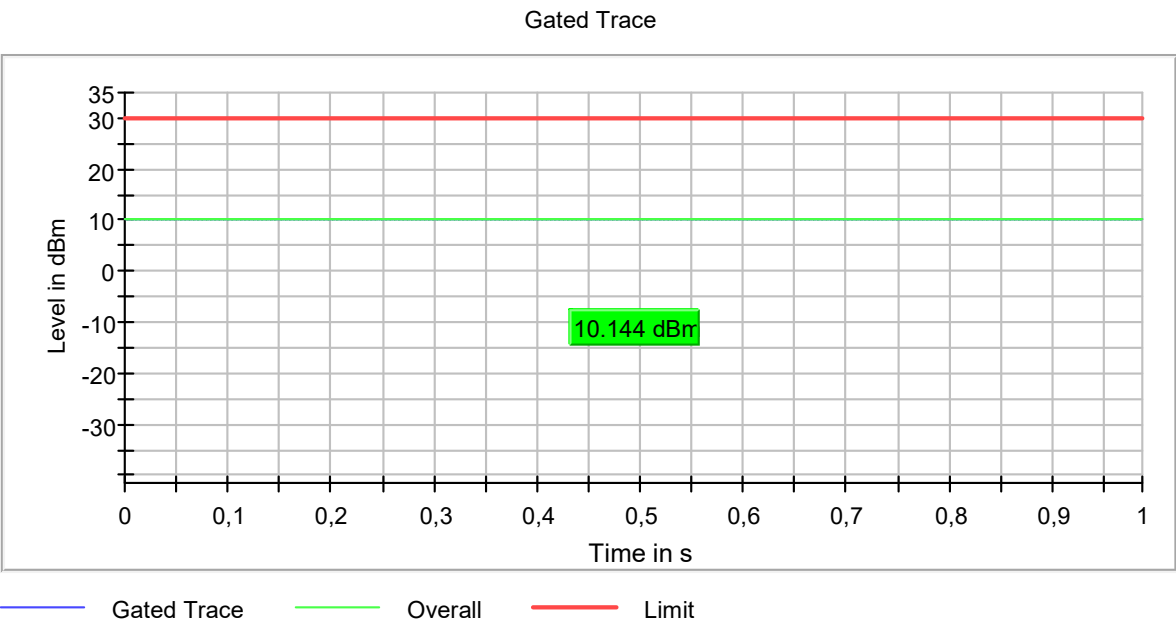
Verdict: PASS

Mode 802.11 a20:

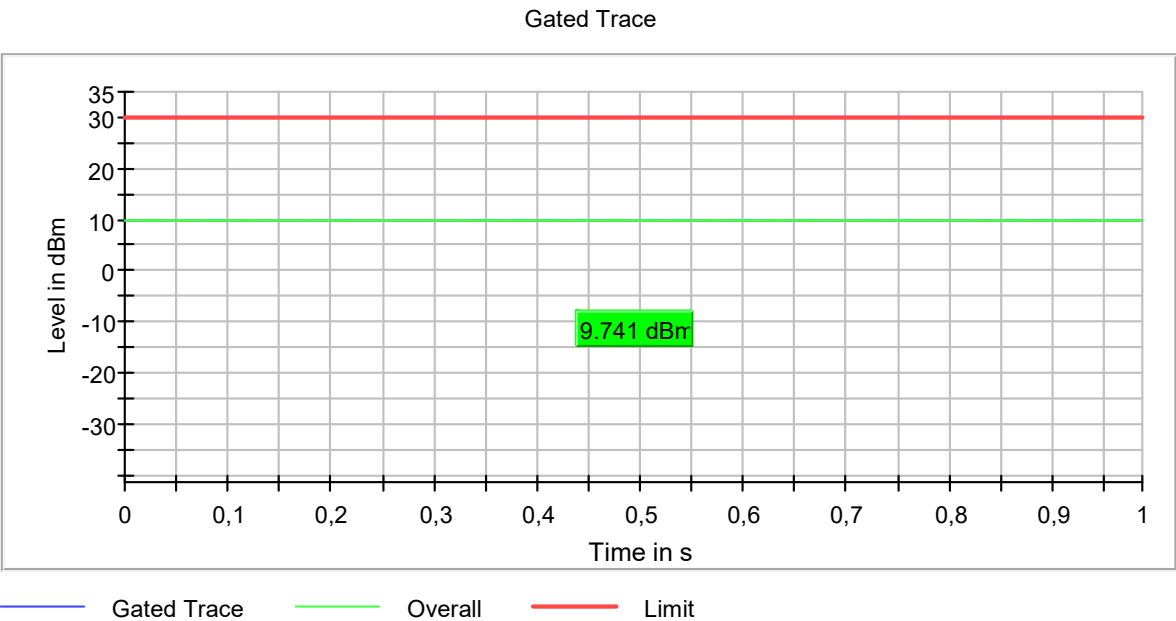
- Low Channel:



- Middle Channel:

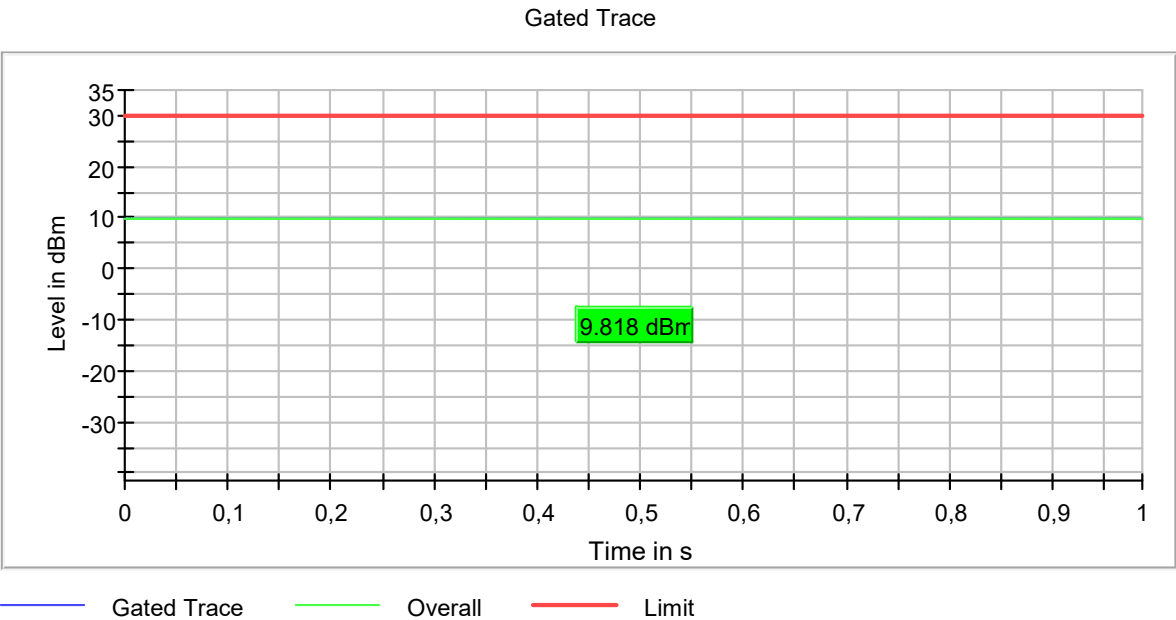


- High Channel:

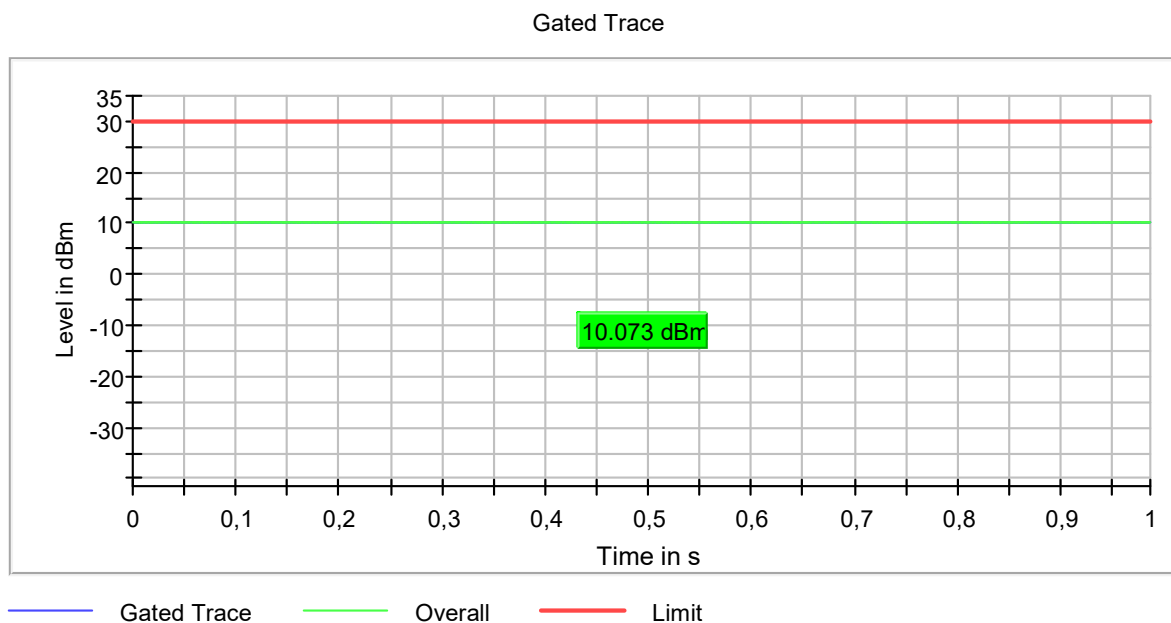


Mode 802.11 n20 (HT20):

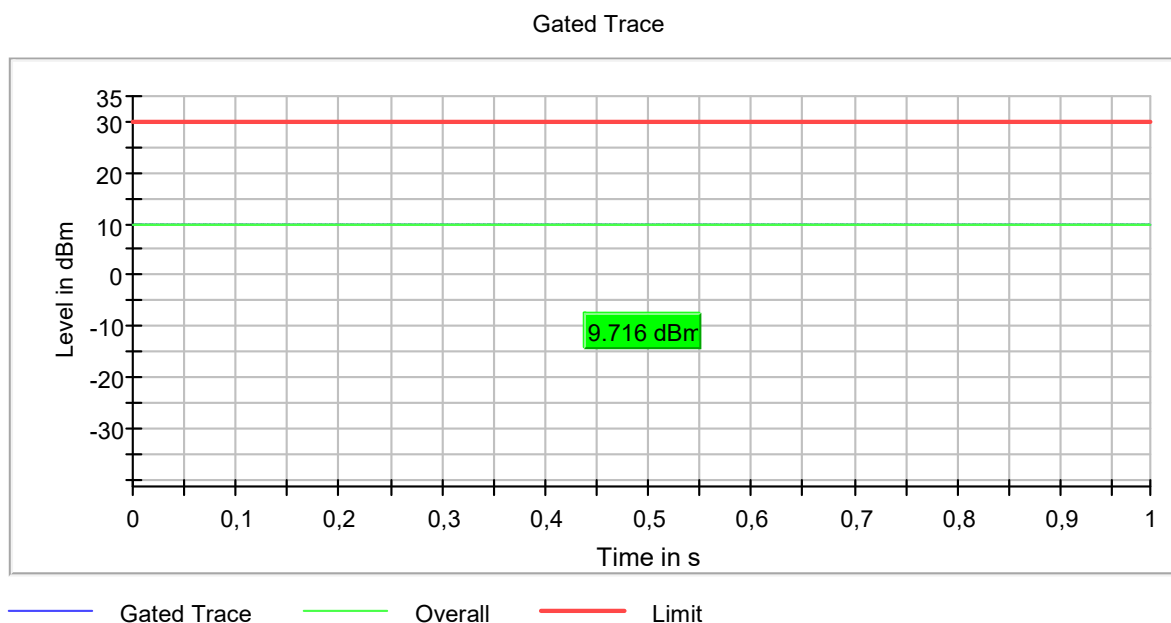
- Low Channel:



- Middle Channel:

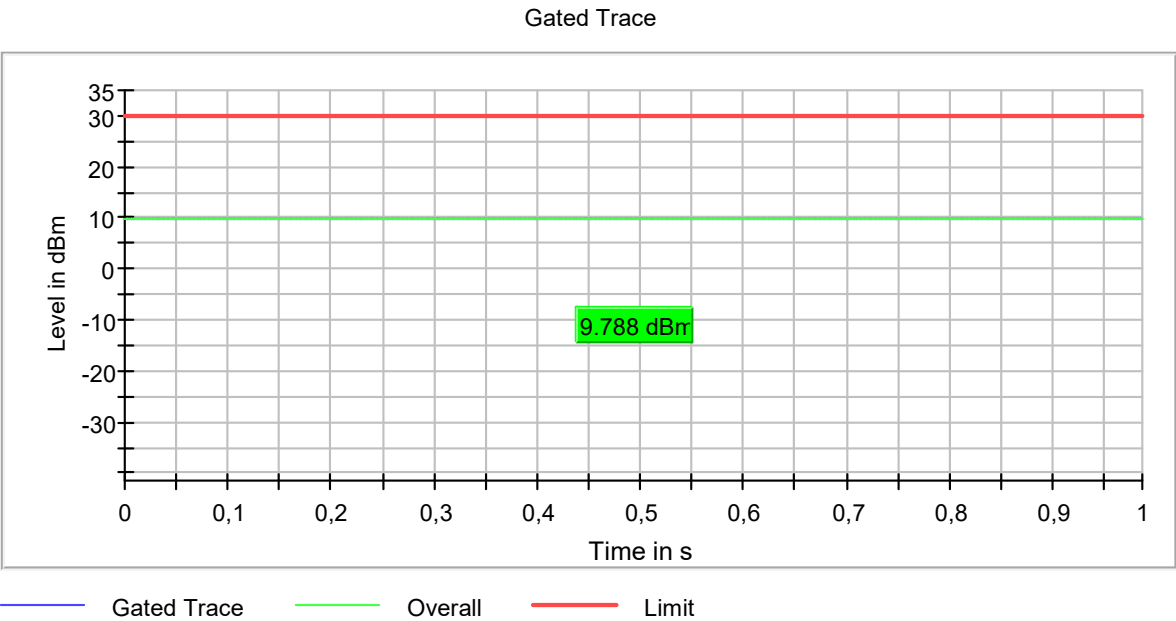


- High Channel:

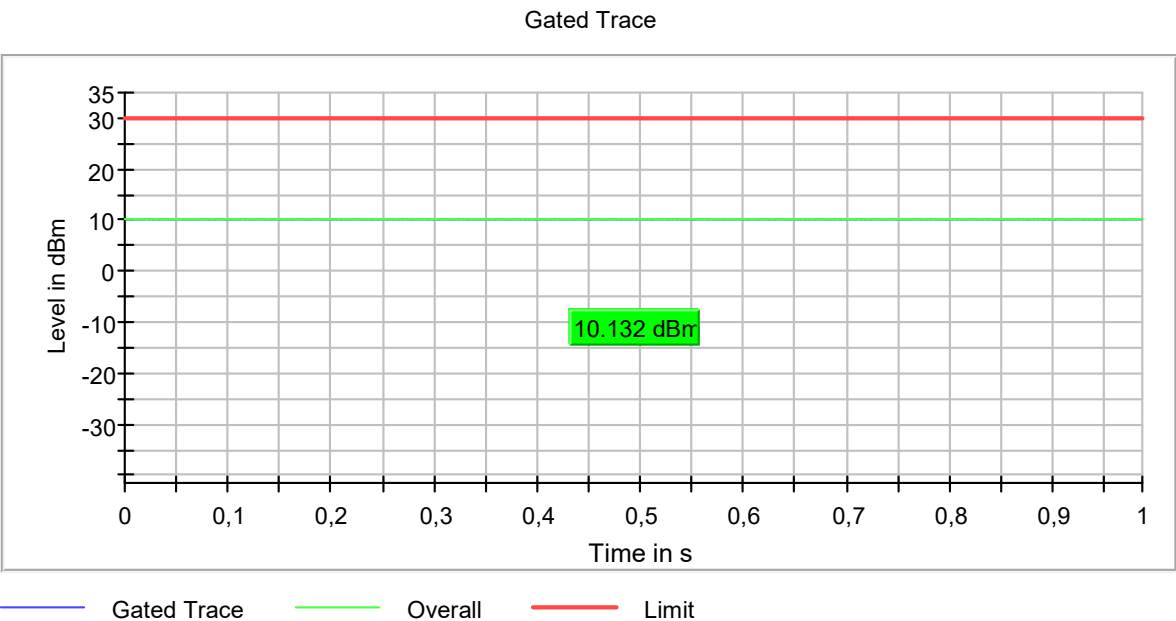


Mode 802.11 ac20 (VHT20):

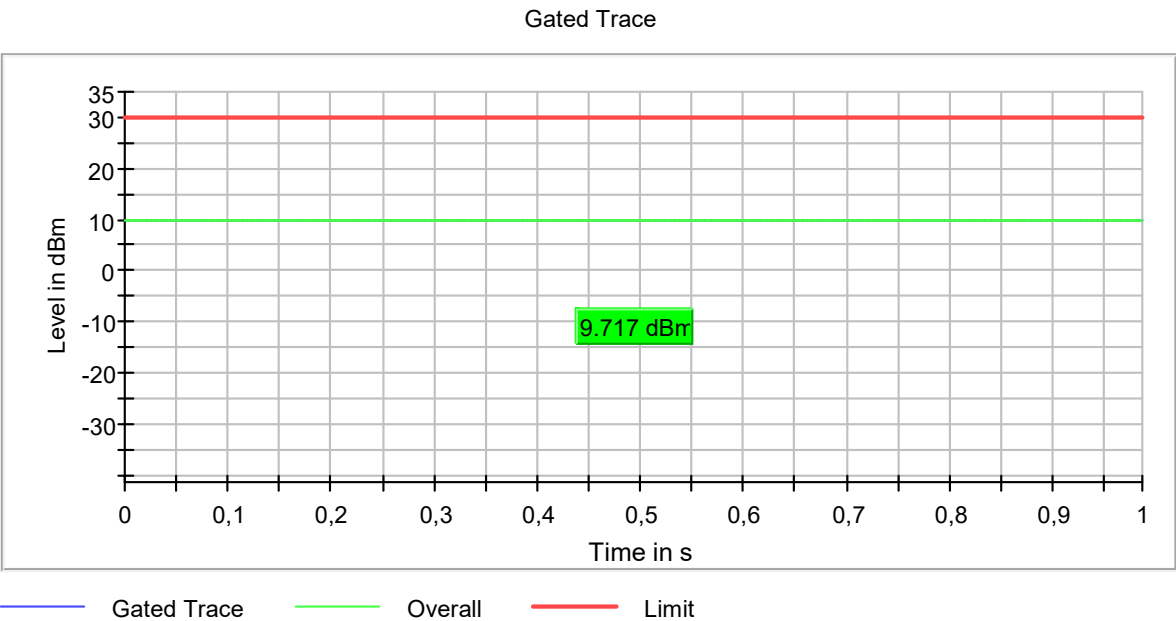
- Low Channel:



- Middle Channel:

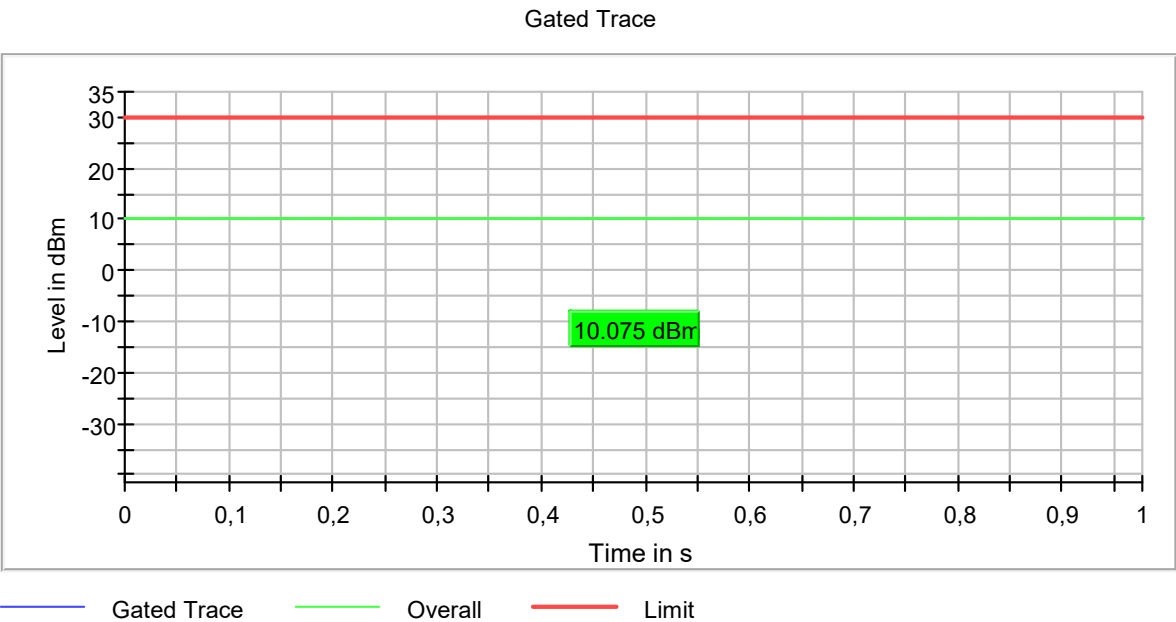


- High Channel:

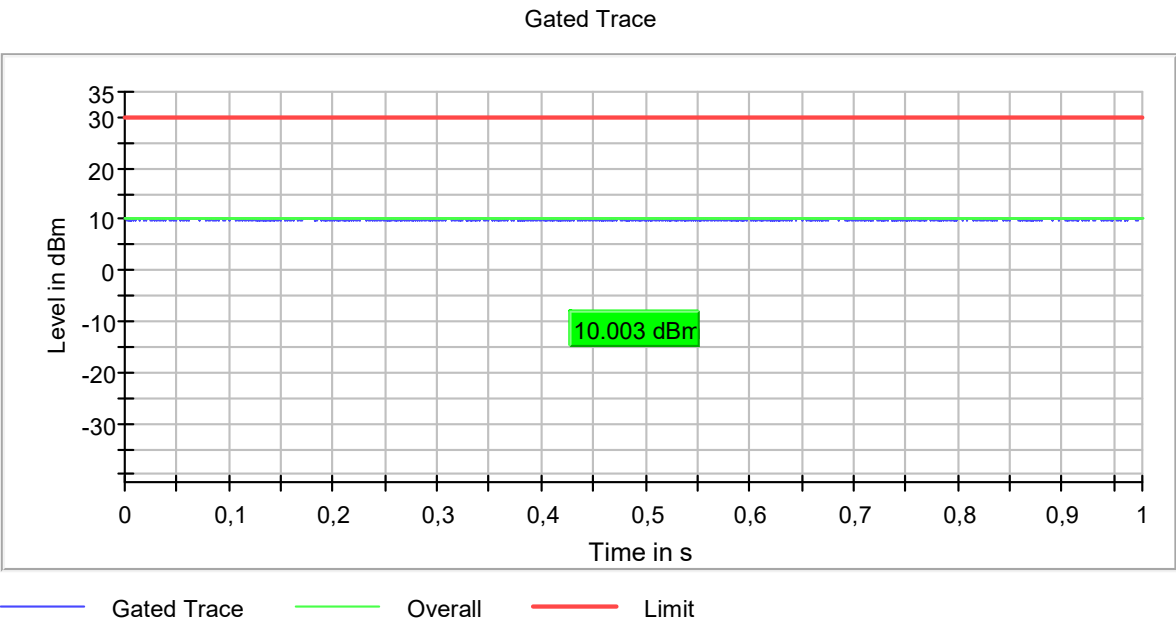


Mode 802.11 n40 (HT40):

- Low Channel:

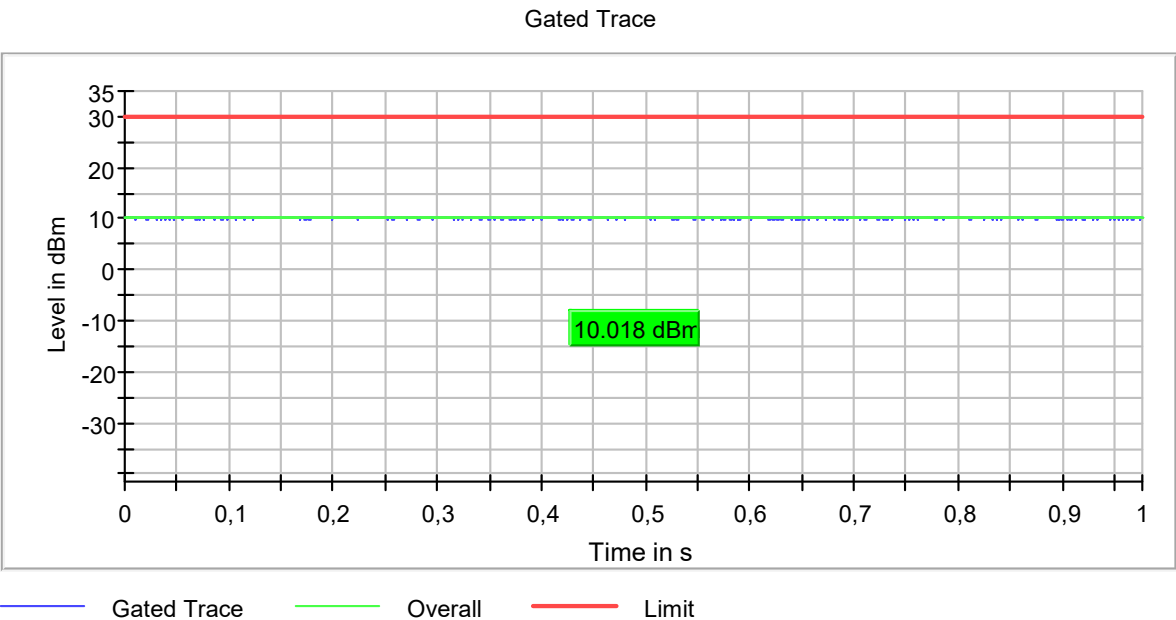


- High Channel:

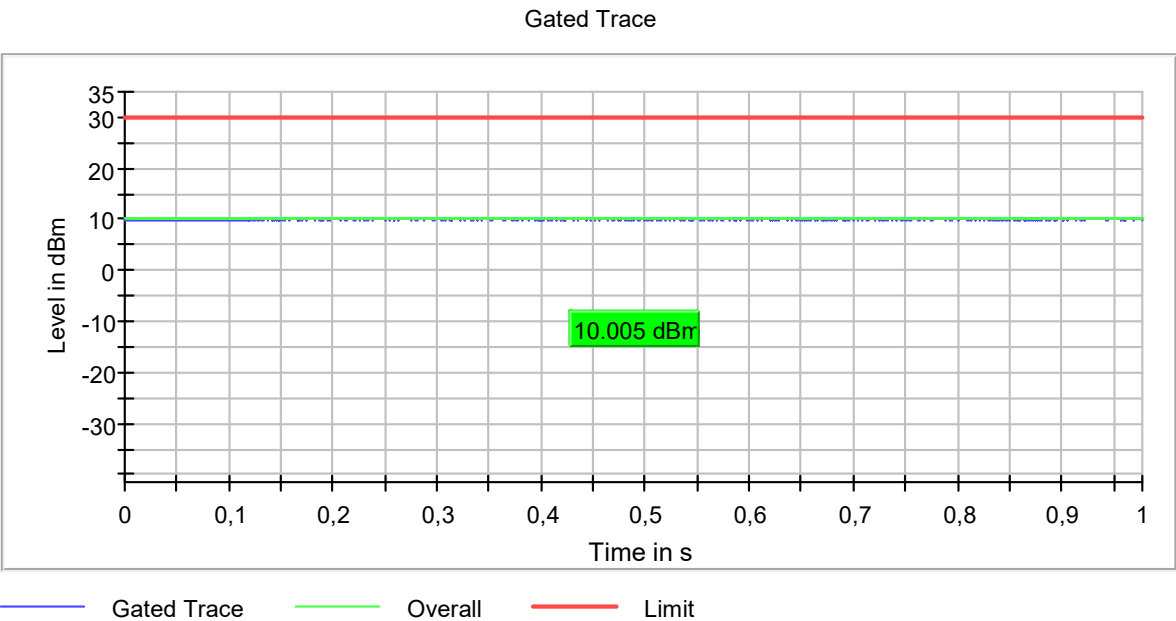


Mode 802.11 ac40 (VHT40):

- Low Channel:

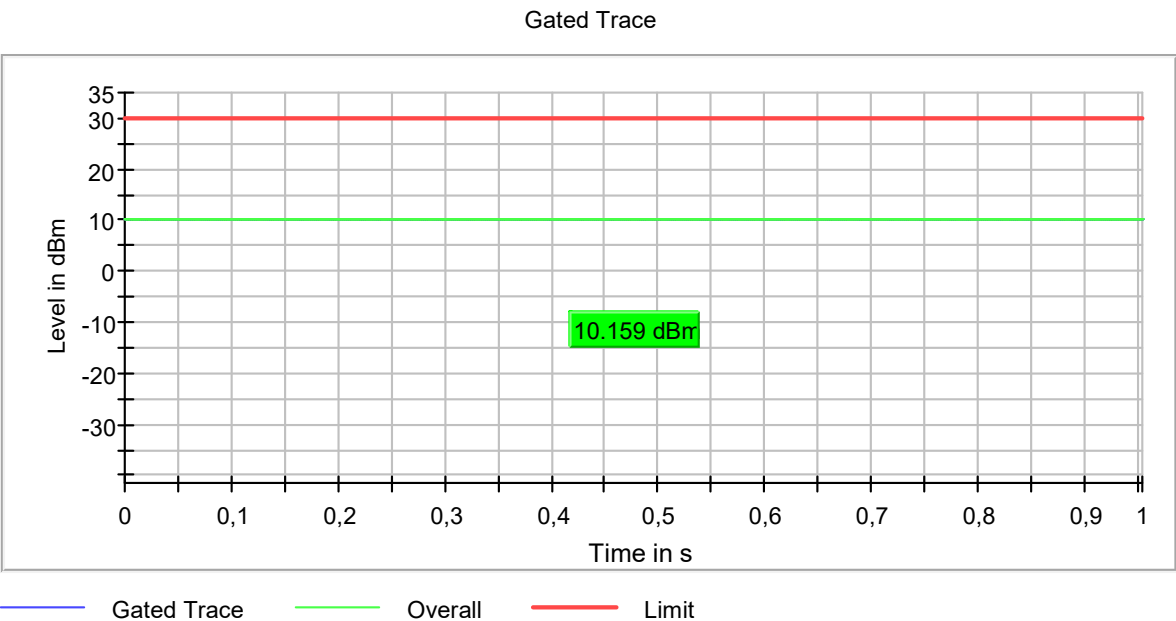


- High Channel:



Mode 802.11 ac80 (VHT80):

- Single Channel:



FCC 15.407 (a)(3) / RSS-247 6.2.4.1. Transmitter Maximum Power Spectral Density

SPECIFICATION:

* **FCC 15.407:** For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

* **RSS-247:** The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipointFootnote3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

RESULTS:

The maximum Power Spectral Density (PSD) was measured using the method according to point F) referencing E.2.b) (Method SA-1) of Guidance 789033 D02 General UNII Test Procedures New Rules v02r01.

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.

For all modes of operation, the antenna gain is < 6 dBi.

Maximum Declared Antenna Gain: +0.9 dBi

Mode 802.11 a20:

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted PSD (dBm)	-5.819	-5.344	-5.757
Measurement uncertainty (dB)	<±1.30		

Mode 802.11 n20 (HT20):

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted PSD (dBm)	-6.100	-5.655	-6.054
Measurement uncertainty (dB)	<±1.30		

Mode 802.11 ac20 (VHT20):

Channels	Low Channel 149 (5745 MHz)	Middle Channel 157 (5785 MHz)	High Channel 165 (5825 MHz)
Maximum Conducted PSD (dBm)	-6.051	-5.825	-6.067
Measurement uncertainty (dB)	<±1.30		

Mode 802.11 n40 (HT40):

Channels	Low Channel 151 (5755 MHz)	High Channel 159 (5795 MHz)
Maximum Conducted PSD (dBm)	-8.606	-8.795
Measurement uncertainty (dB)	<±1.30	

Mode 802.11 ac40 (VHT40):

Channels	Low Channel 151 (5755 MHz)	High Channel 159 (5795 MHz)
Maximum Conducted PSD (dBm)	-8.576	-8.851
Measurement uncertainty (dB)	<±1.30	

Mode 802.11 ac80 (VHT80):

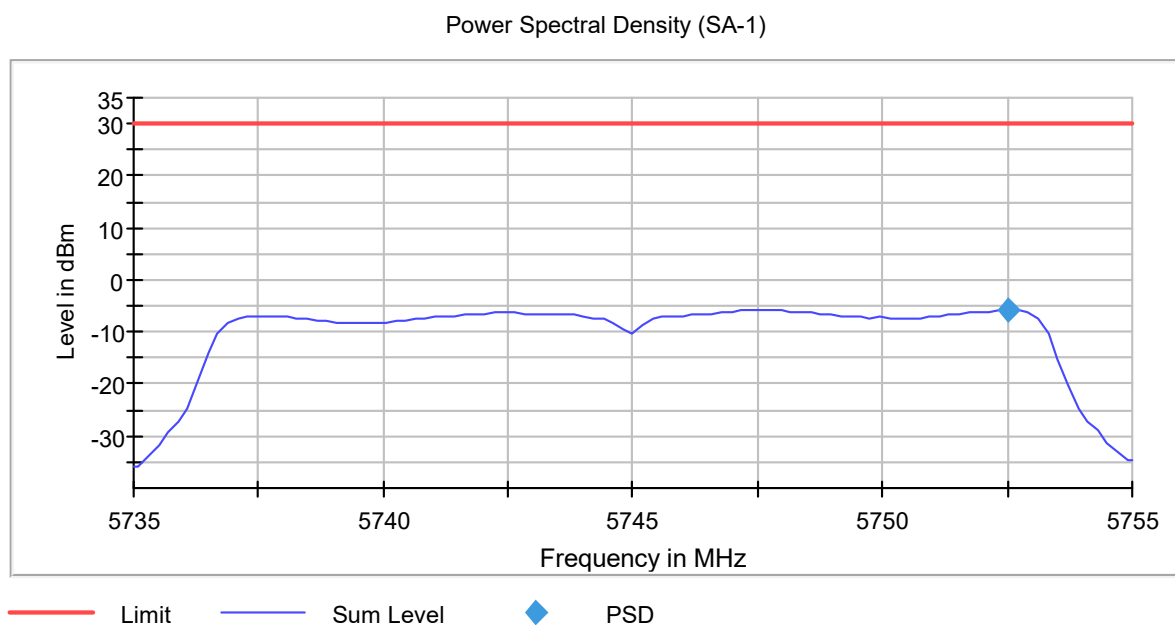
Channels	Low Channel 155 (5775 MHz)
Maximum Conducted PSD (dBm)	-12.091
Measurement uncertainty (dB)	<±1.30

Verdict: PASS

SISO 802.11 a20:

U-NII-3 (5725-5850 MHz)

- Low Channel 149 (5745 MHz):



- Middle Channel 157 (5785 MHz):

