

## 6. Maximum Conducted Output power

### 6.1. Limit

Frequency Band	Limit
5150-5250MHz	Not exceed 250mW(24dBm)
5250-5350MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
5470-5725MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
5725-5850MHz	Not exceed 1W(30dBm)

**\*Where B is the 26dB emission bandwidth in MHz**

The maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

### 6.2. Test procedure (KDB 789033)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99% occupied bandwidth of the signal.<sup>1</sup> However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

a) The test method shall be selected as follows:

(i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

- The EUT transmits continuously (or with a duty cycle  $\geq 98\%$ ).

Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration  $T$  of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than  $\pm 2\%$ .

(iii) Method SA-3 (power averaging (rms) detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

#### 6.4. Test results

 Ambient temperature: 22°C

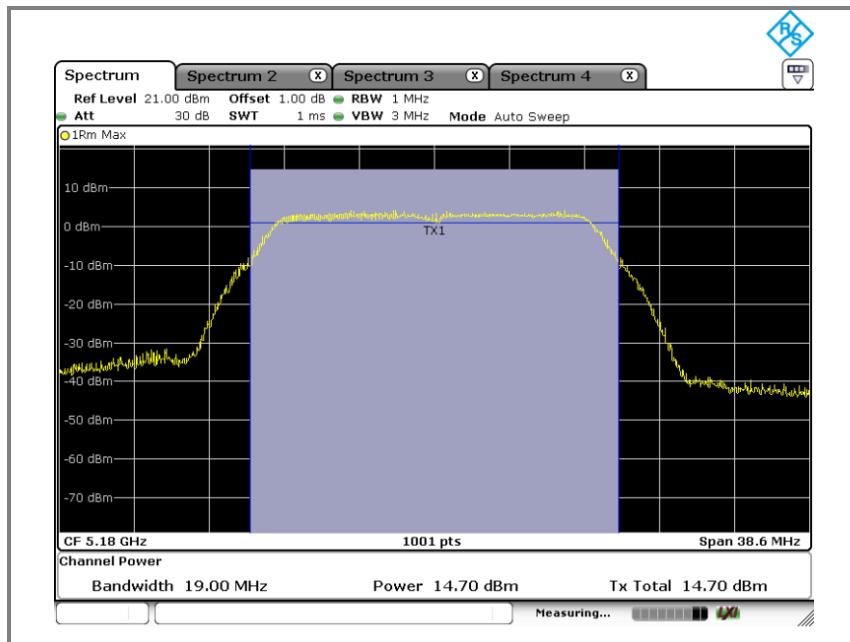
 Relative humidity: 45% R.H.

Mode	Frequency(MHz)	Output Power(dB m)
U-NII-1(802.11a)	5 180	14.70
	5 220	14.74
	5 240	15.03
U-NII-1(n_HT20)	5 180	14.68
	5 220	14.66
	5 240	14.76
U-NII-1(n_HT40)	5 190	13.41
	5 230	13.23
U-NII-1(VHT80)	5 210	11.97
U-NII-2A(802.11a)	5 260	15.36
	5 300	15.33
	5 320	15.15
U-NII-2A(n_HT20)	5 260	15.12
	5 300	14.95
	5 320	15.26
U-NII-2A(n_HT40)	5 270	13.84
	5 310	14.05
U-NII-2A(VHT80)	5 290	11.75
U-NII-2C(802.11a)	5 500	15.40
	5 560	14.66
	5 620	14.43
U-NII-2C(n_HT20)	5 500	15.19
	5 560	14.77
	5 620	14.43
U-NII-2C(n_HT40)	5 510	13.13
	5 550	12.72
	5 590	12.83
U-NII-2C(VHT80)	5 530	11.18
	5 610	10.93

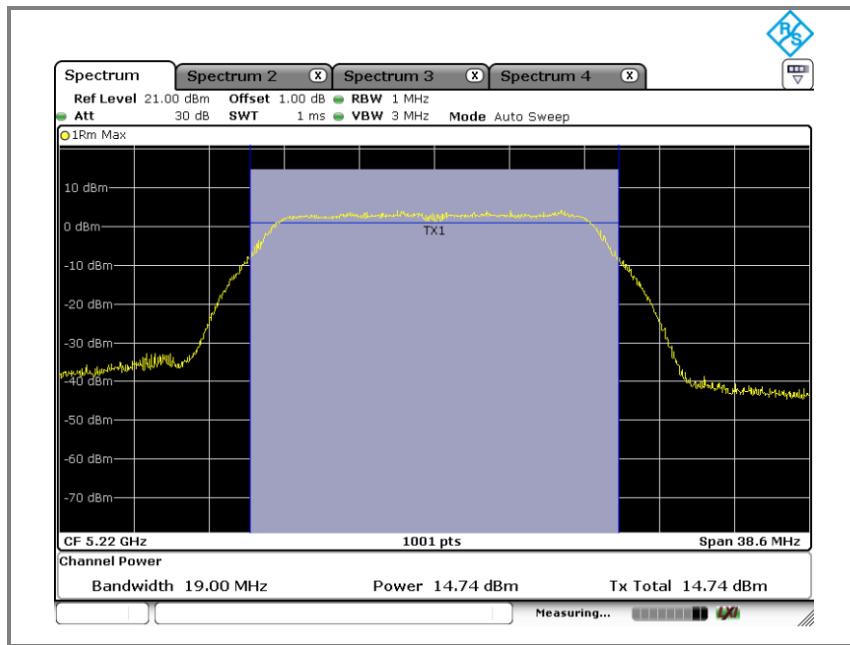
<b>Mode</b>	<b>Frequency(MHz)</b>	<b>Output Power(dB m)</b>
U-NII-3(802.11a)	5 745	12.81
	5 785	12.60
	5 805	11.95
U-NII-3(n_HT20)	5 745	12.47
	5 785	12.81
	5 805	11.81
U-NII-3(n_HT40)	5 755	11.15
	5 795	10.74
U-NII-3(VHT80)	5 775	9.54

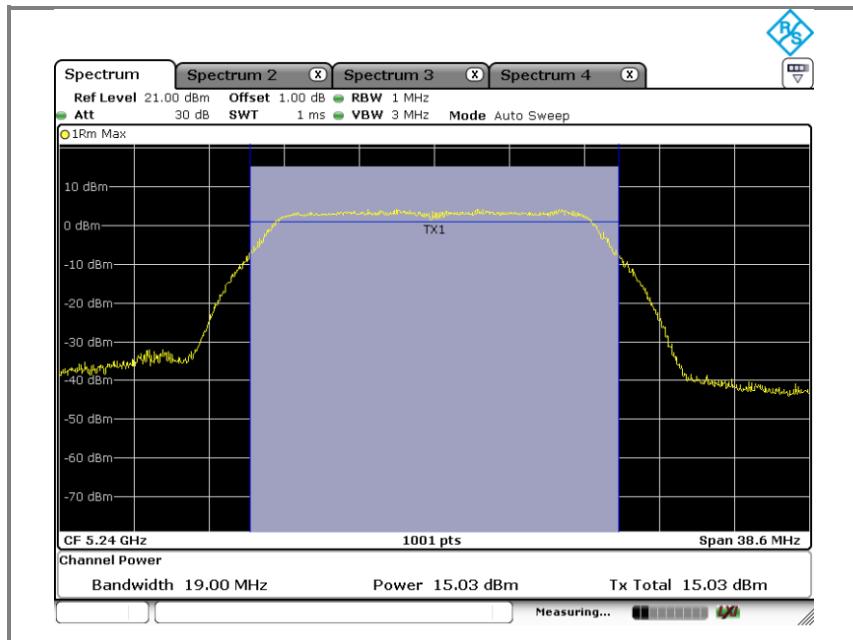
**Operation mode: U-NII-1(802.11a)**

**A. Low channel(5180 MHz)**



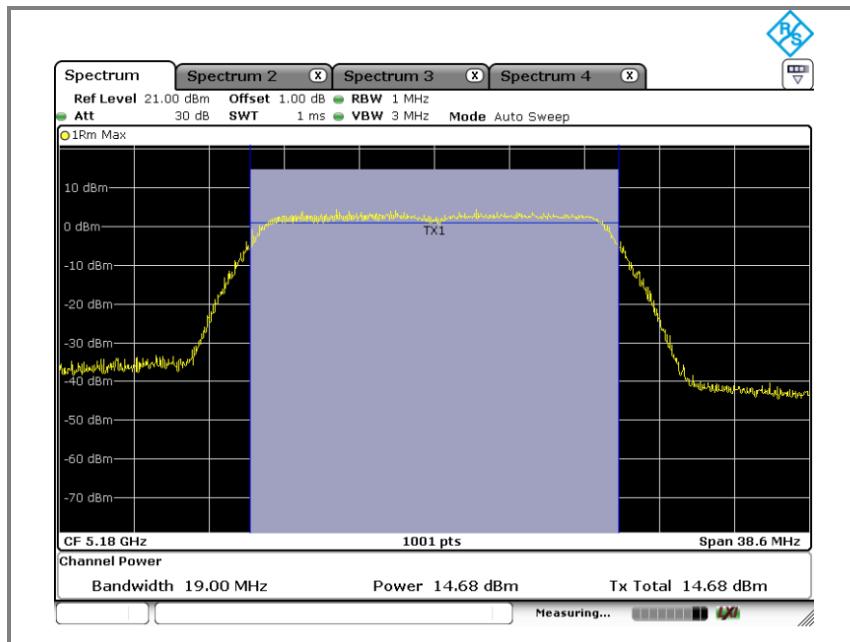
**B. Middle channel(5220 MHz)**



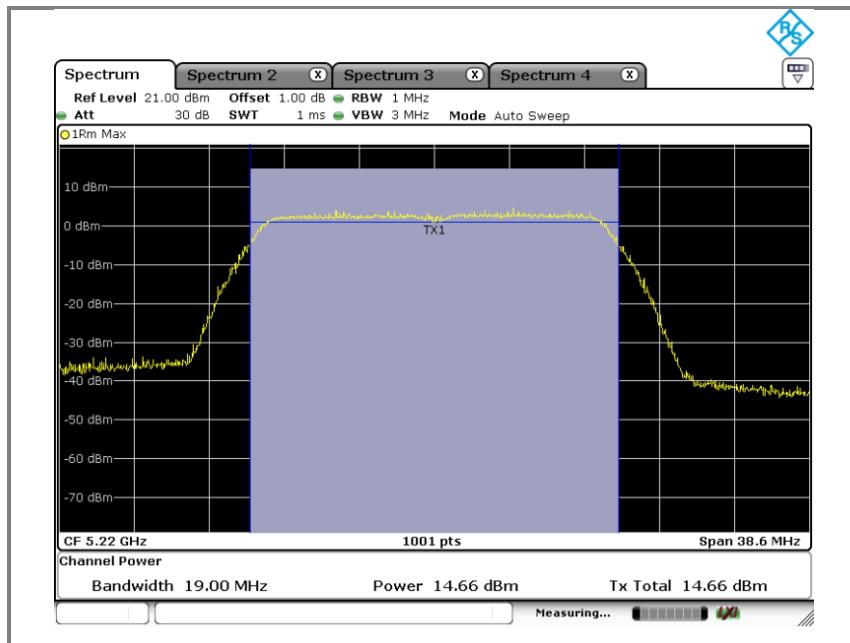
**C. High channel(5240 MHz)**

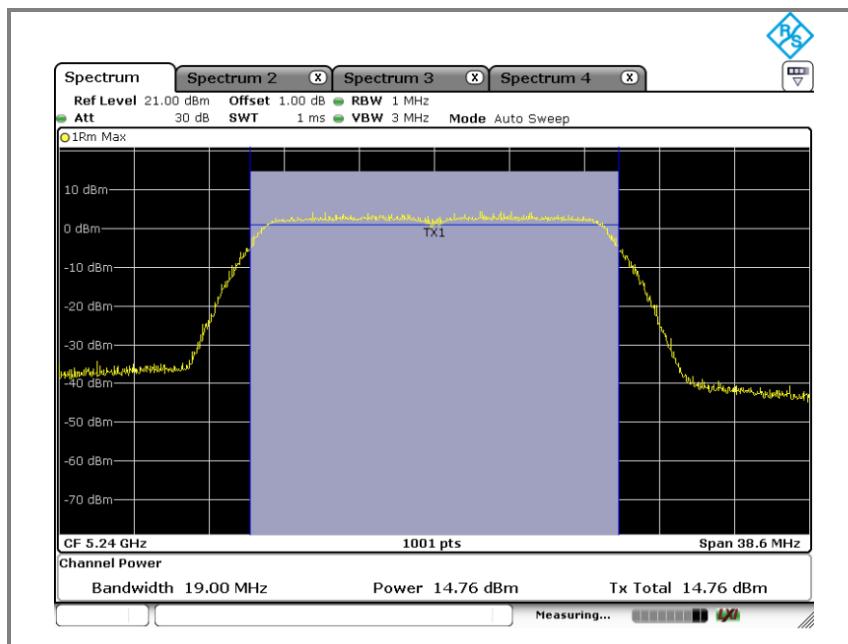
Operation mode: U-NII-1(n\_HT20)

**A. Low channel(5180 MHz)**



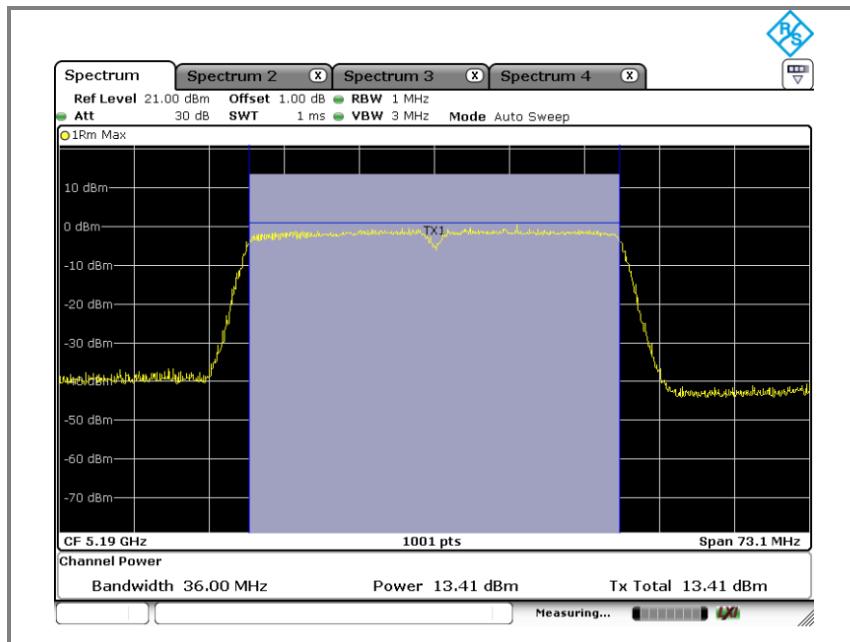
**B. Middle channel(5220 MHz)**



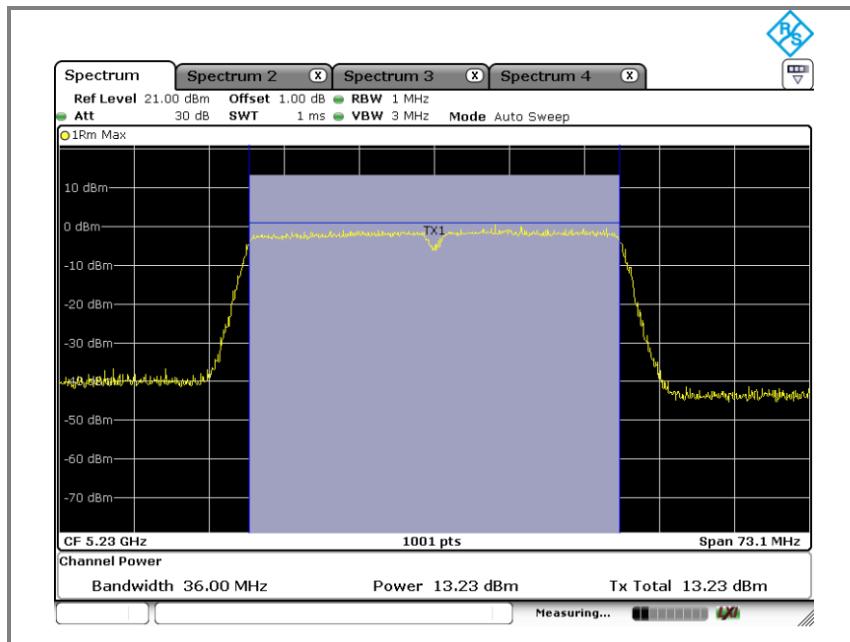
**C. High channel(5240 MHz)**

**Operation mode: U-NII-1(n\_HT40)**

**A. Low channel(5190 MHz)**

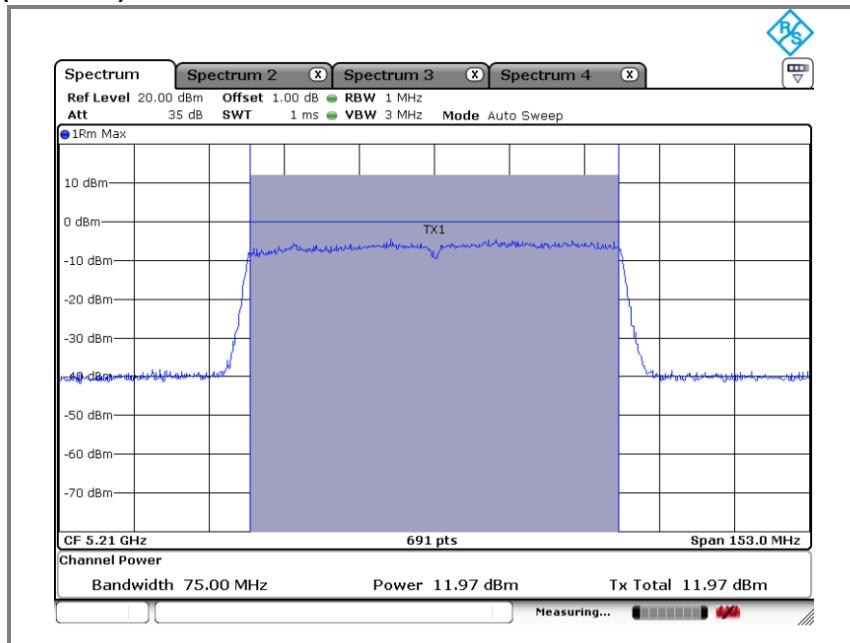


**B. High channel(5230 MHz)**



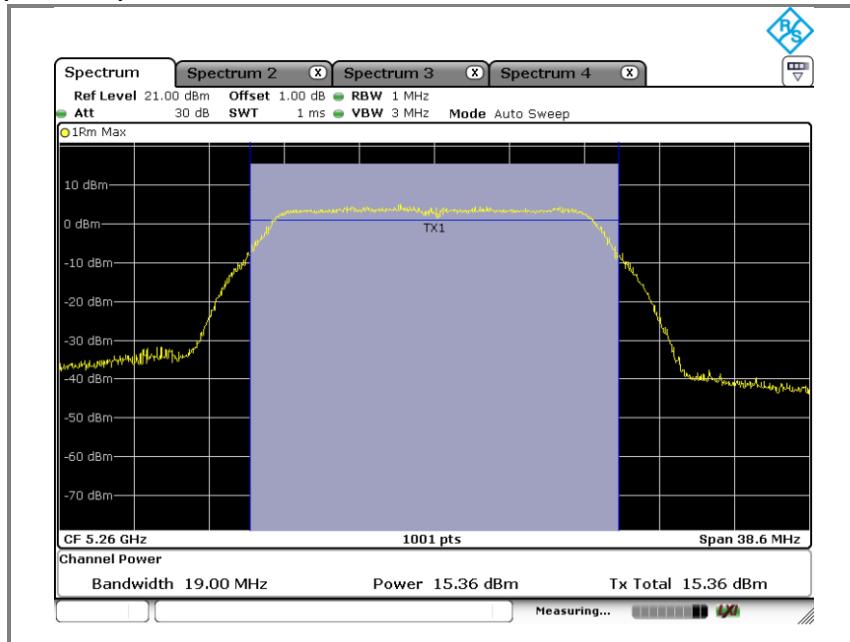
**Operation mode: U-NII-1(VHT80)**

**A. Low channel(5210 MHz)**

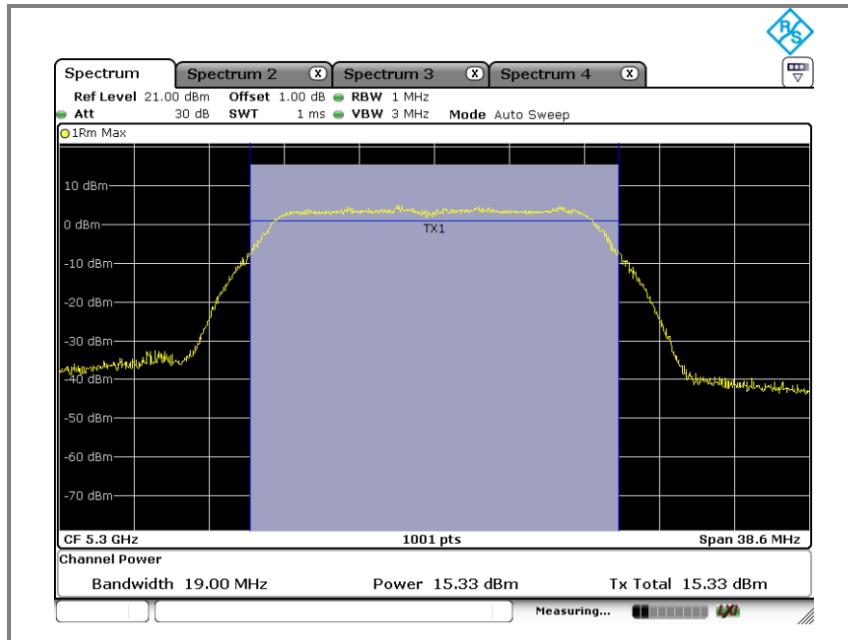


**Operation mode: U-NII-2A(802.11a)**

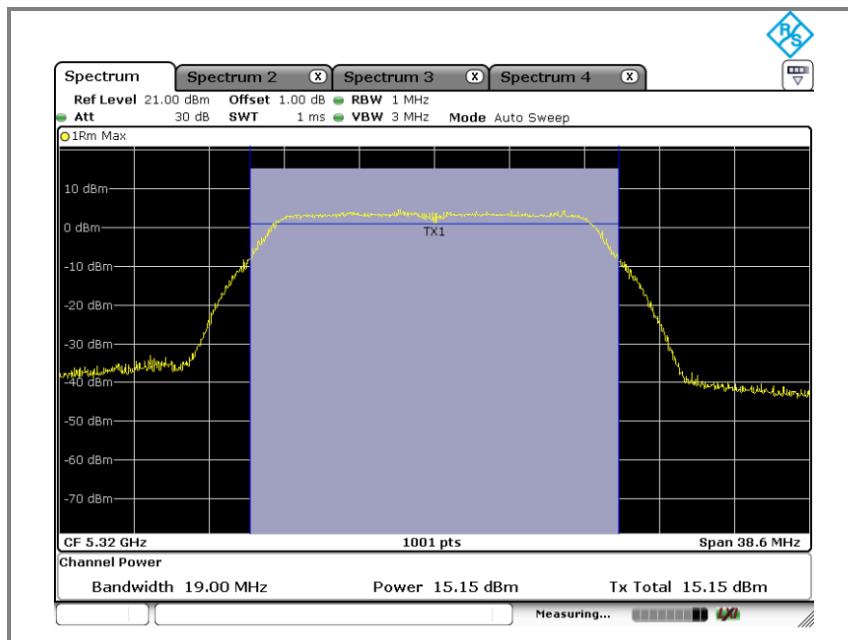
**A. Low channel(5260 MHz)**



**B. Middle channel(5300 MHz)**

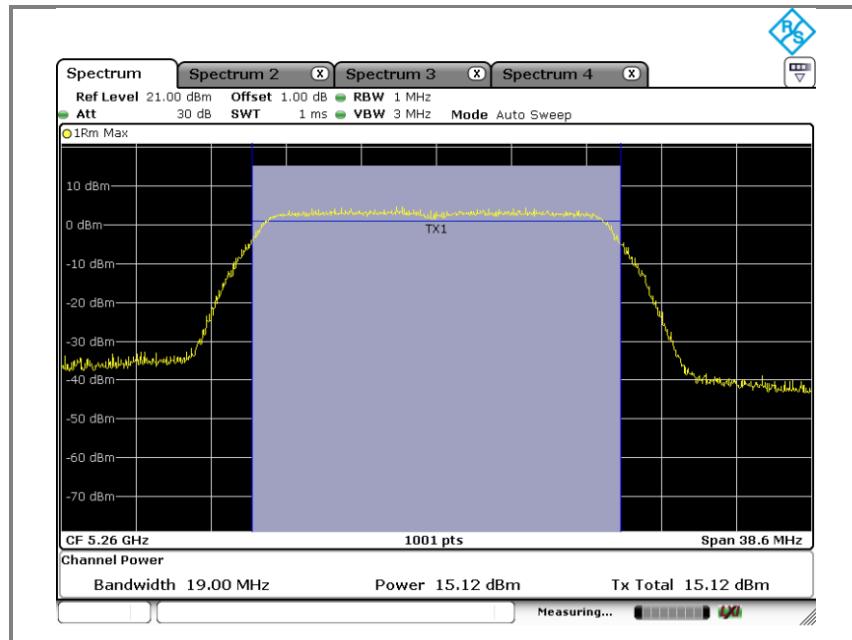


**C. High channel(5320 MHz)**

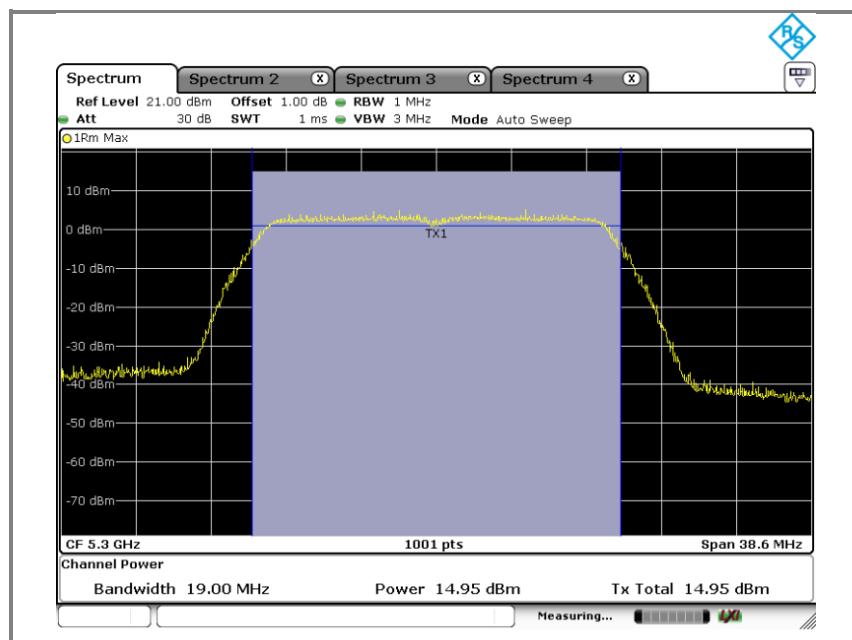


**Operation mode: U-NII-2A(n\_HT20)**

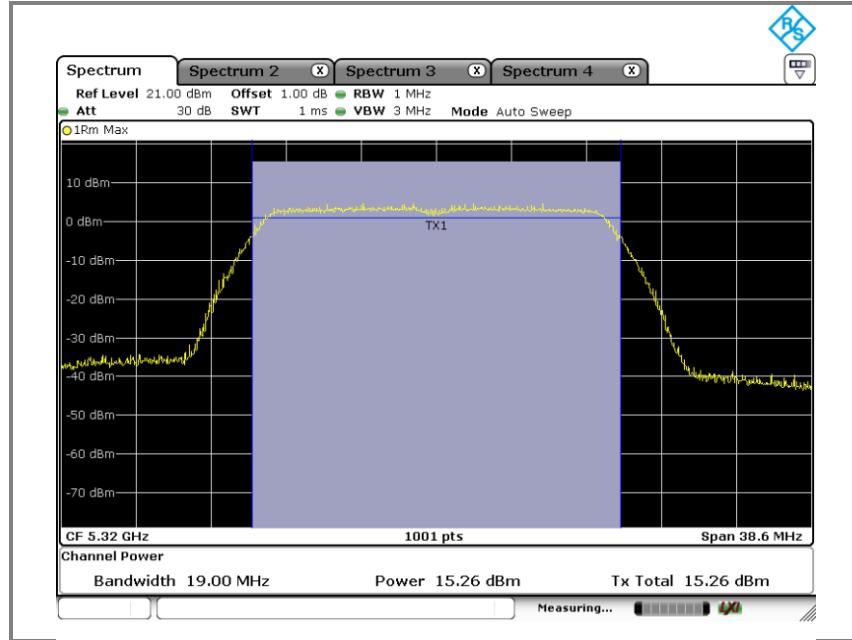
**A. Low channel(5260 MHz)**



**B. Middle channel(5300 MHz)**

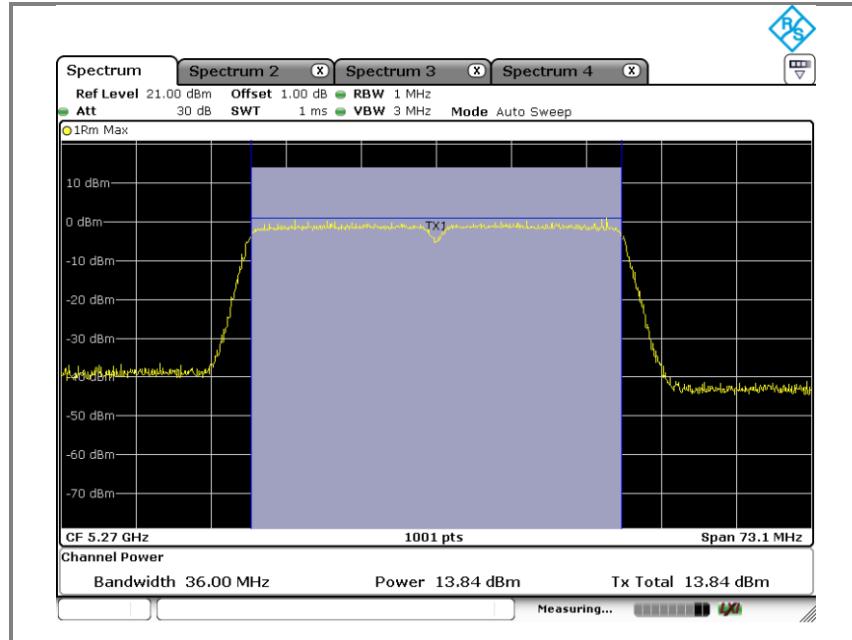


### C. High channel(5320 MHz)

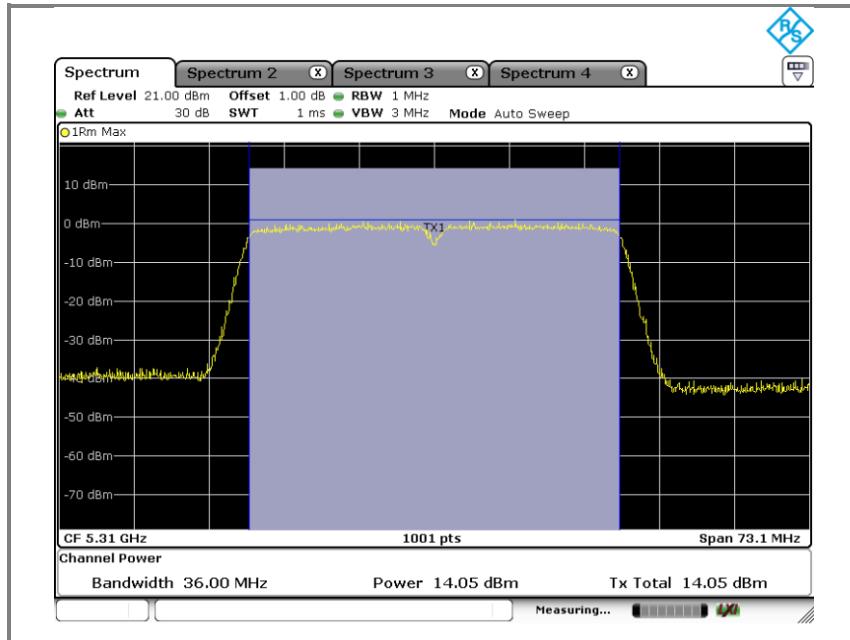


### Operation mode: U-NII-2A(n-HT40)

#### A. Low channel(5270 MHz)

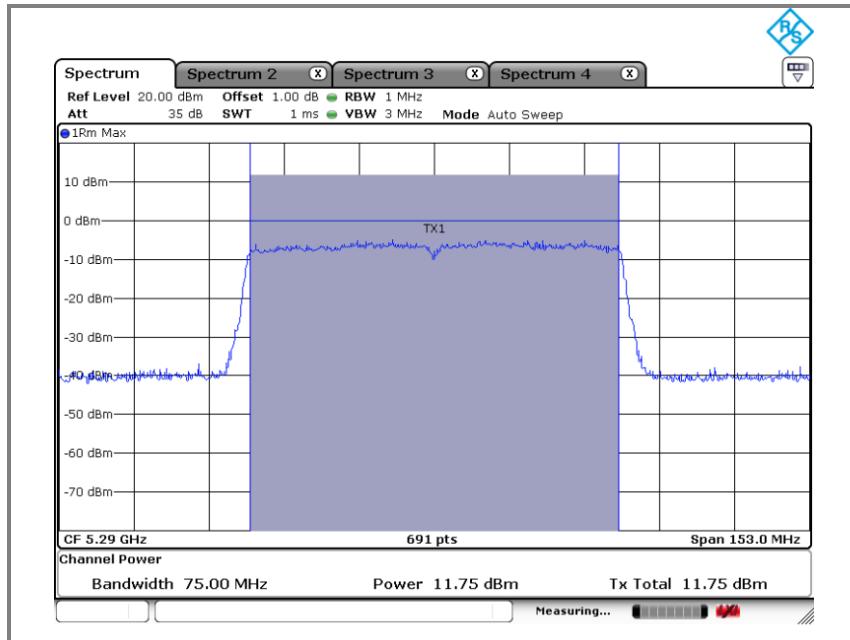


**B. High channel(5310 MHz)**



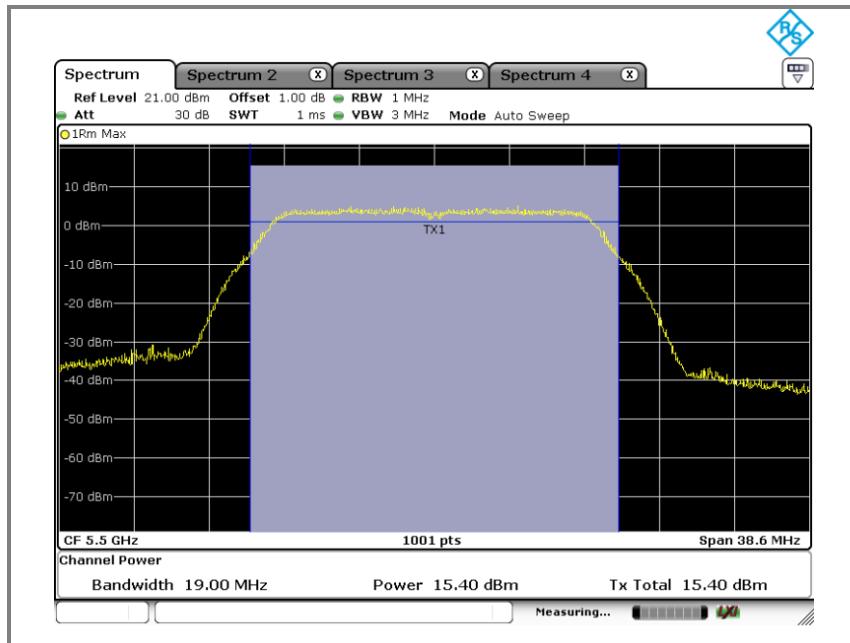
**Operation mode: U-NII-2A(VHT80)**

**A. Low channel(5290 MHz)**

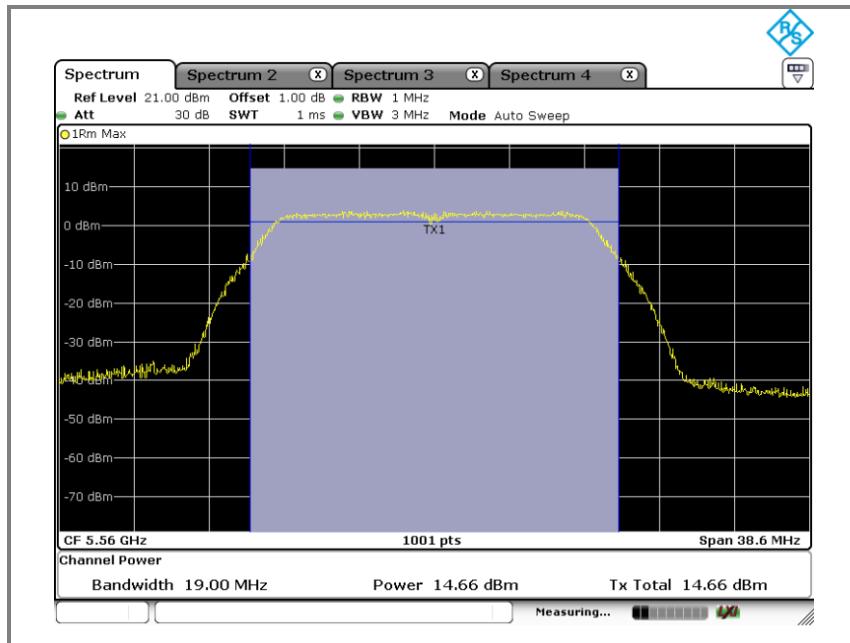


Operation mode: U-NII-2C(802.11a)

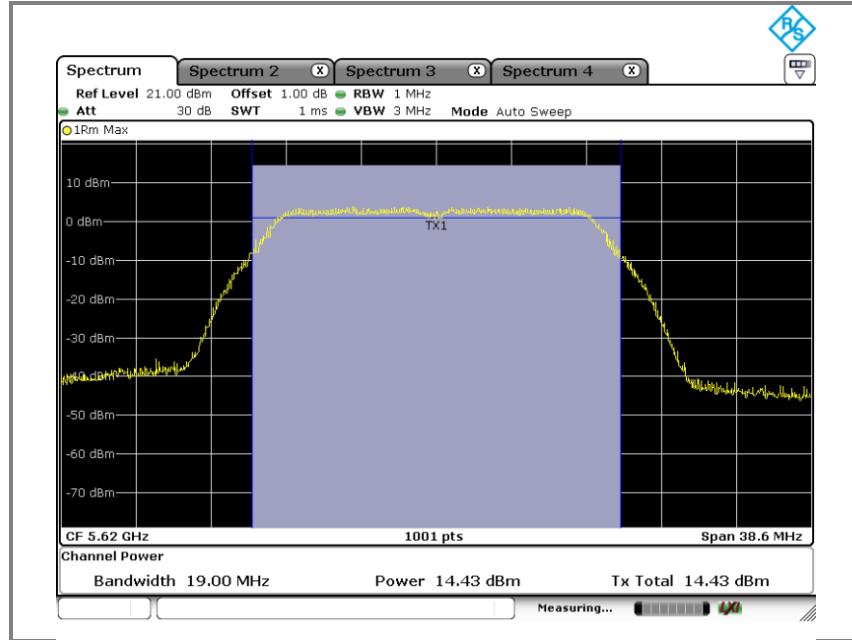
**A. Low channel(5500 MHz)**



**B. Middle channel(5560 MHz)**

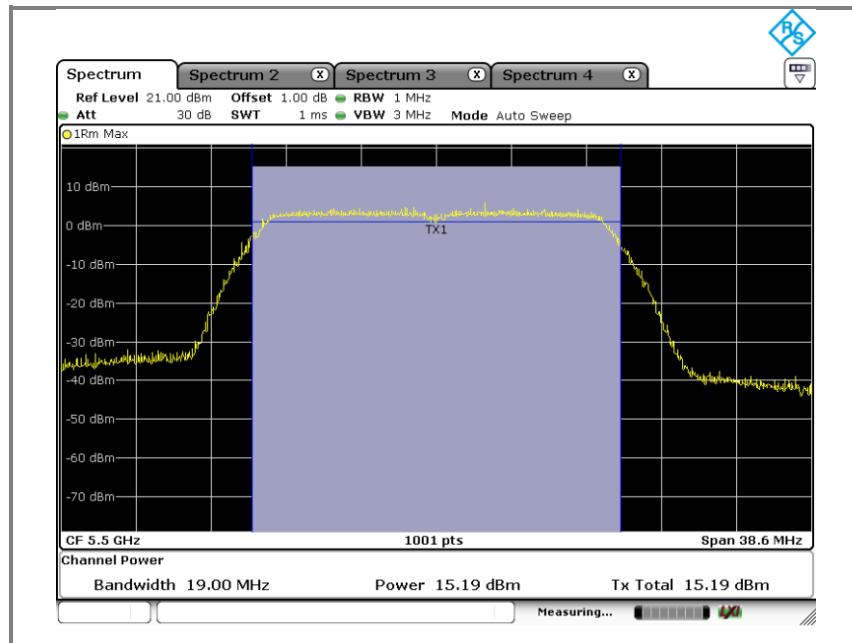


### C. High channel(5620 MHz)

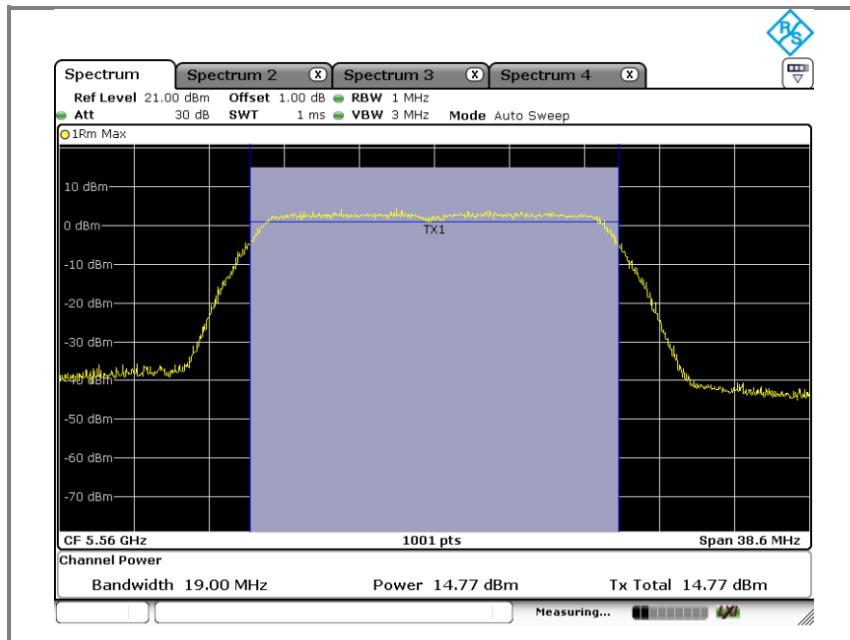


### Operation mode: U-NII-2C(n\_HT20)

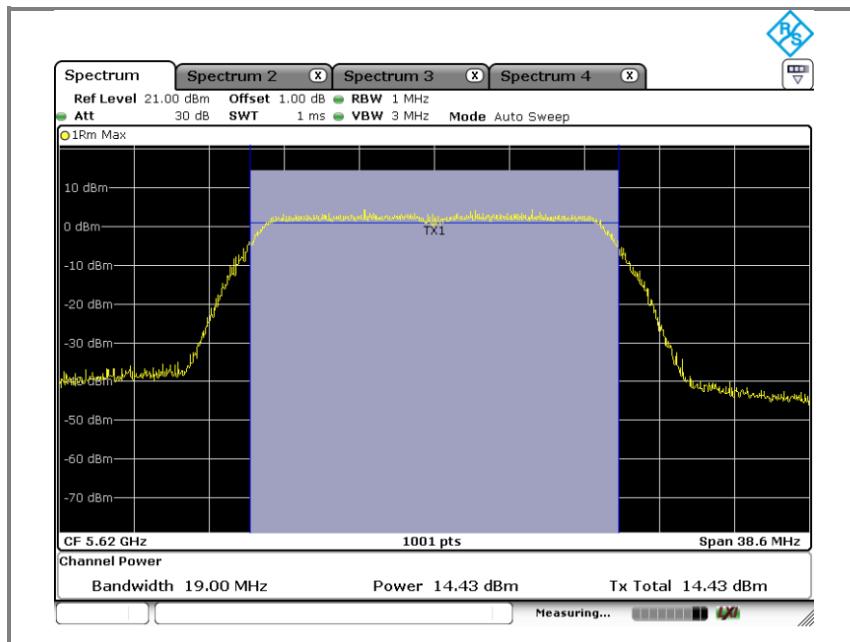
#### A. Low channel(5500 MHz)



**B. Middle channel(5560 MHz)**

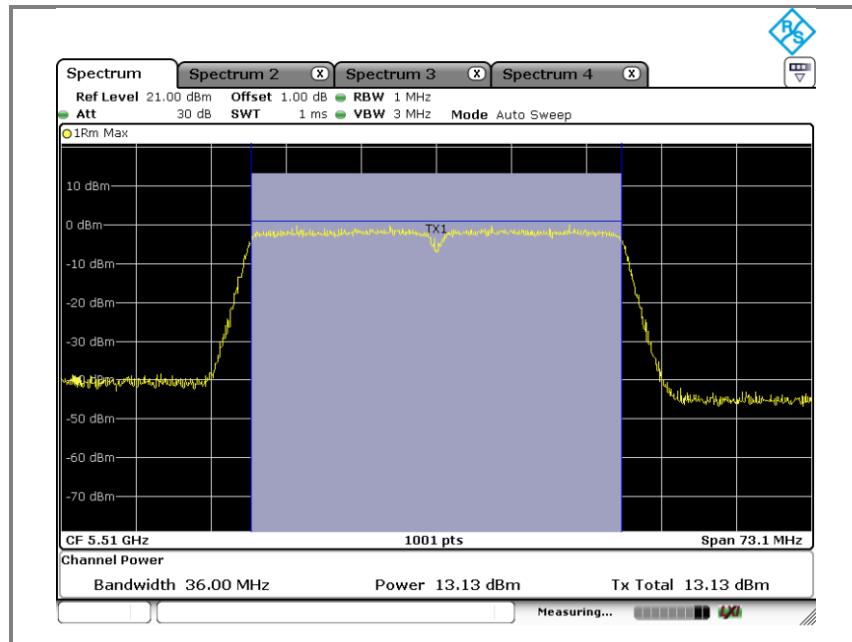


**C. High channel(5620 MHz)**

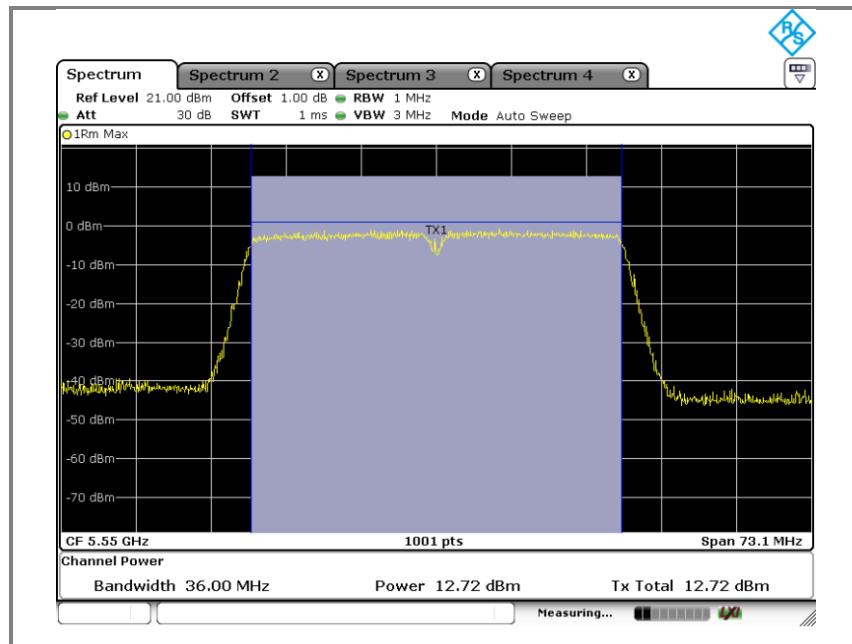


**Operation mode: U-NII-2C(n\_HT40)**

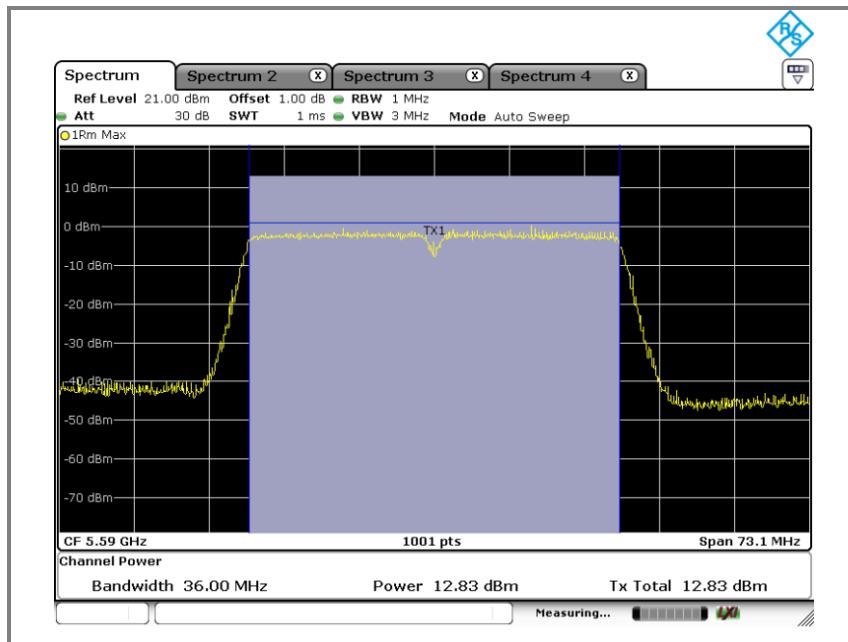
**A. Low channel(5510 MHz)**



**B. Middle channel(5550 MHz)**

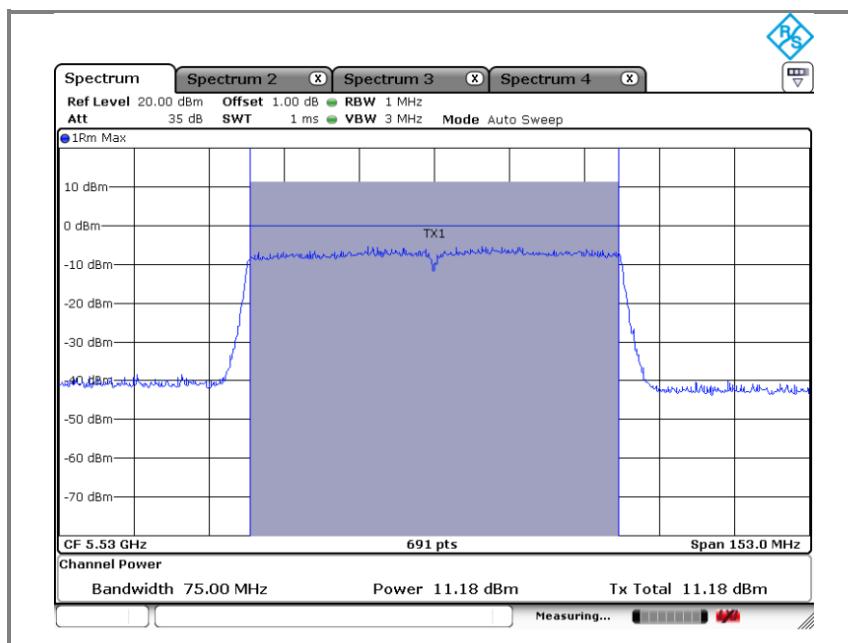


### C. High channel(5590 MHz)

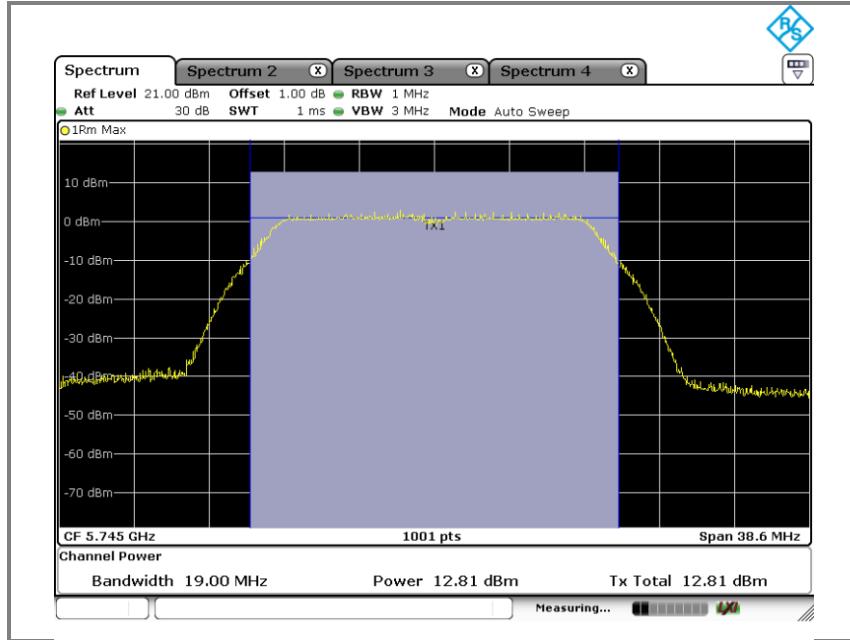


### Operation mode: U-NII-2C(VHT80)

#### A. Low channel(5530 MHz)

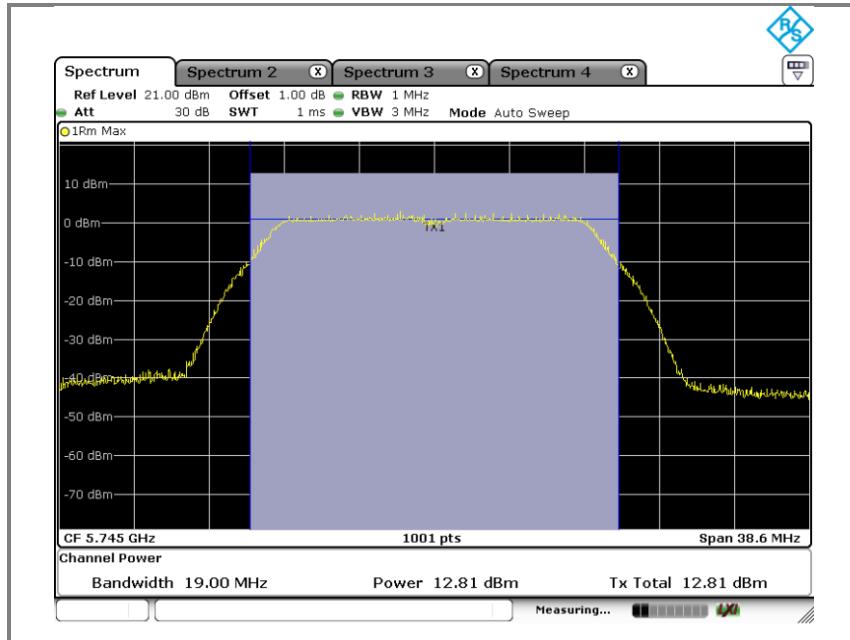


**A. High channel(5610 MHz)**

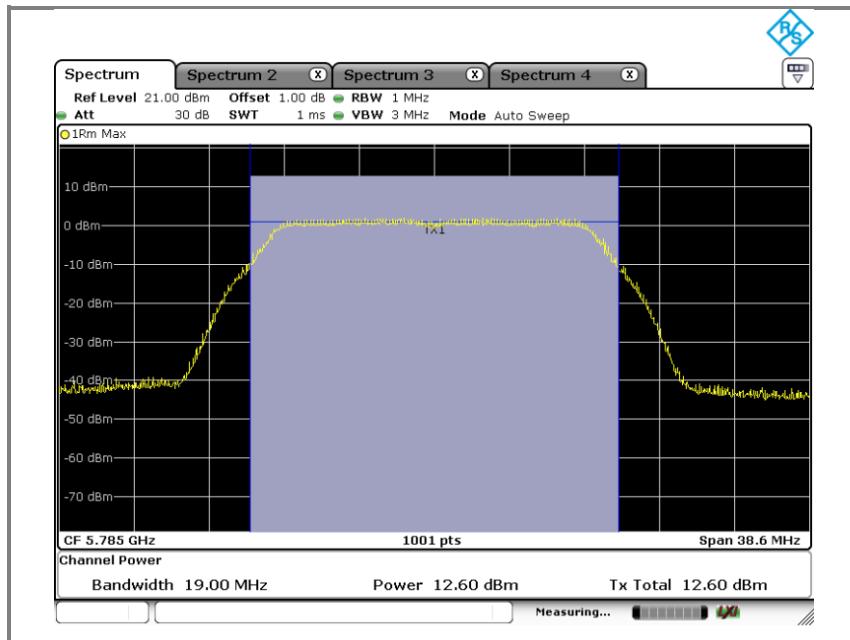


**Operation mode: U-NII-3(802.11a)**

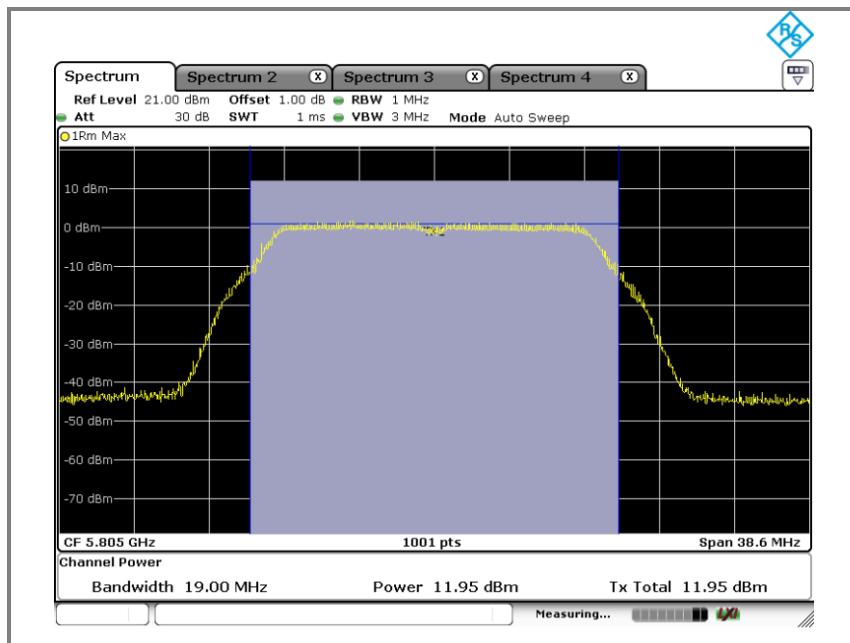
**A. Low channel(5745 MHz)**



**B. Middle channel(5785 MHz)**

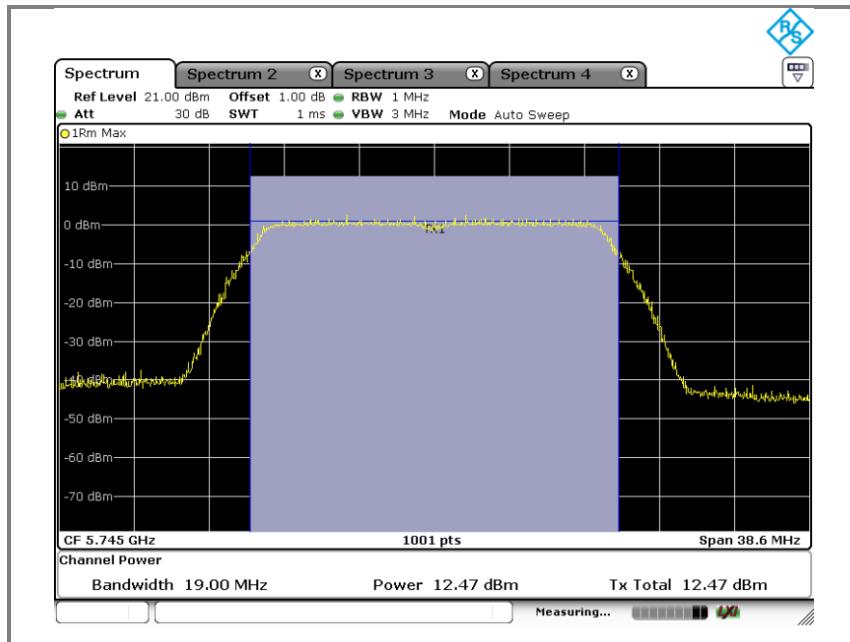


**C. High channel(5805 MHz)**

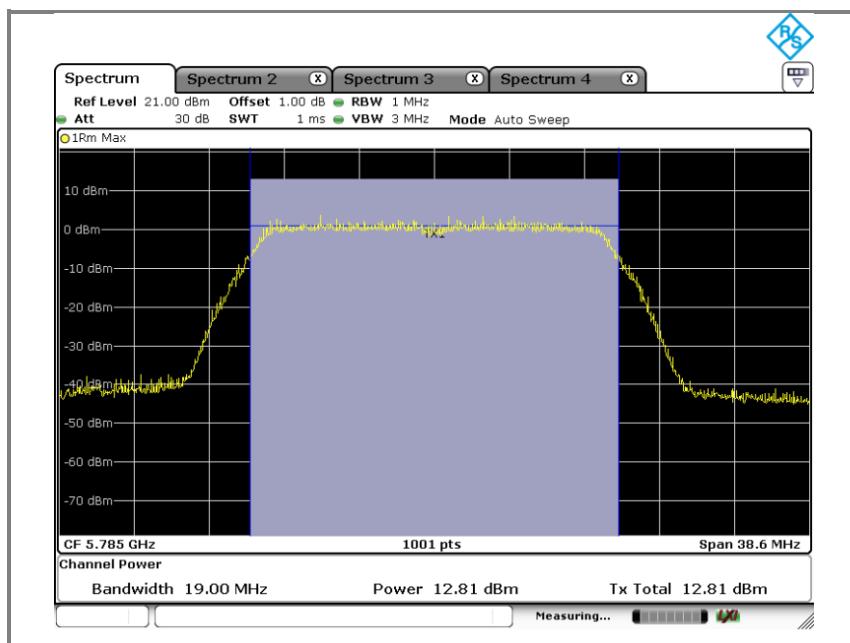


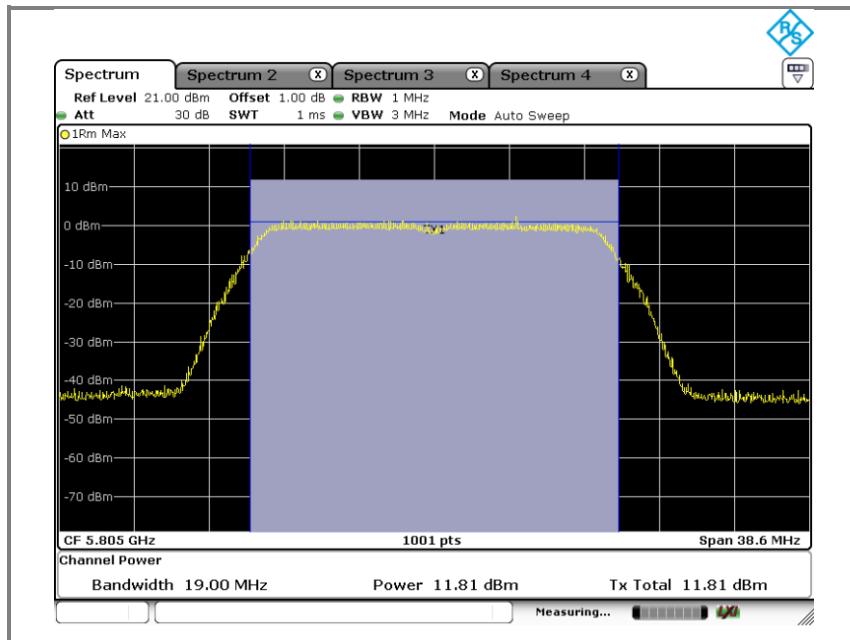
**Operation mode: U-NII-3(n\_HT20)**

**A. Low channel(5745 MHz)**



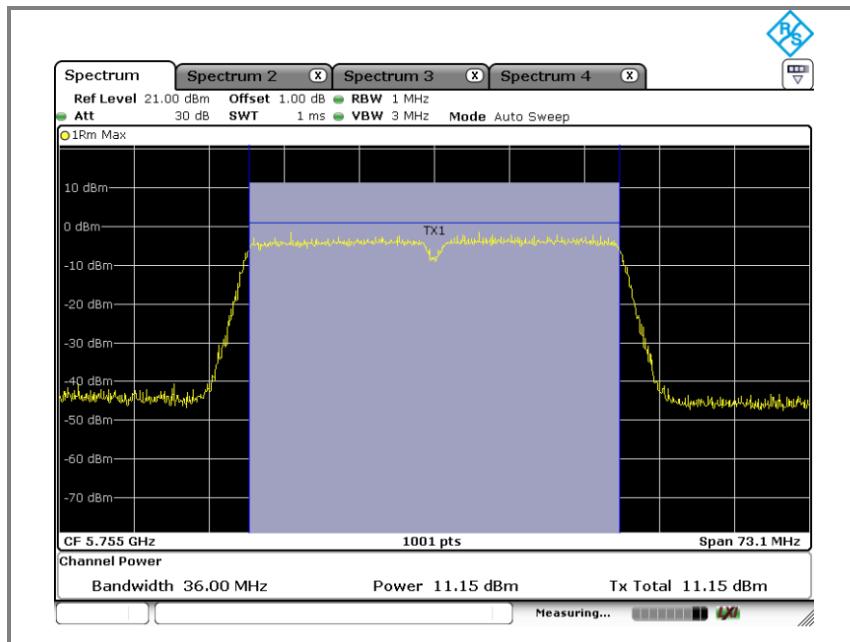
**B. Middle channel(5785 MHz)**



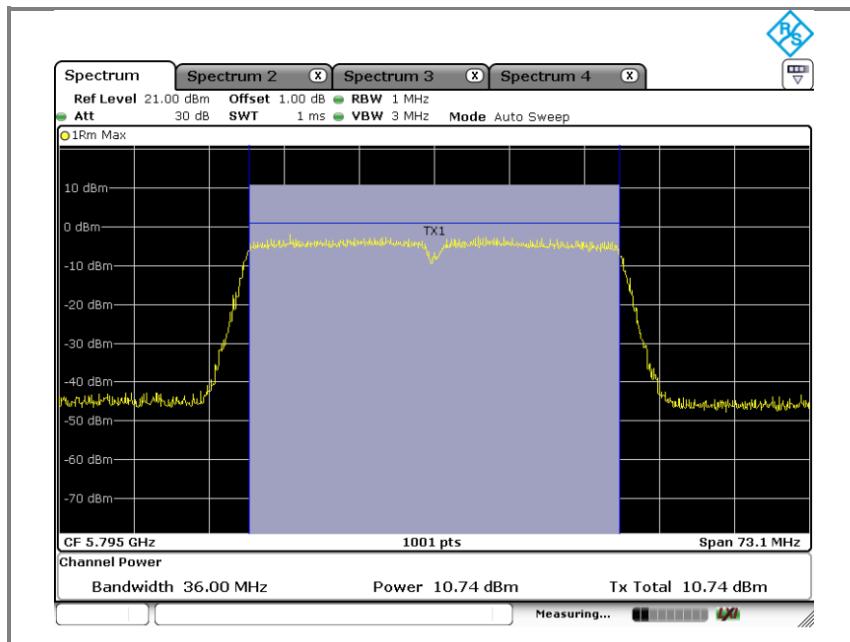
**C. High channel(5805 MHz)**

Operation mode: U-NII-3(n\_HT40)

**A. Low channel(5755 MHz)**



**B. High channel(5795 MHz)**



**Operation mode: U-NII-3(VHT80)****A. Low channel(5775 MHz)**