

Traffic:

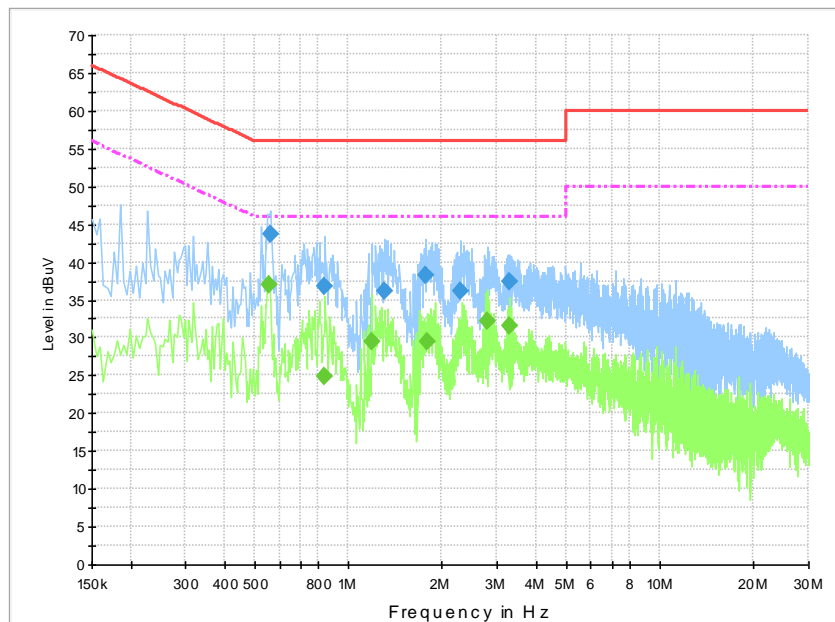


Fig.58 Conducted Emission (802.11a, Ch36, TX)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.559500	43.7	1000.0	9.000	On	L1	19.8	12.3	56.0
0.838500	36.8	1000.0	9.000	On	L1	19.7	19.2	56.0
1.306500	36.2	1000.0	9.000	On	L1	19.7	19.8	56.0
1.779000	38.3	1000.0	9.000	On	L1	19.7	17.7	56.0
2.287500	36.1	1000.0	9.000	On	L1	19.6	19.9	56.0
3.286500	37.3	1000.0	9.000	On	L1	19.7	18.7	56.0

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.555000	37.0	1000.0	9.000	On	N	19.8	9.0	46.0
0.838500	24.8	1000.0	9.000	On	L1	19.7	21.2	46.0
1.189500	29.5	1000.0	9.000	On	N	19.6	16.5	46.0
1.792500	29.6	1000.0	9.000	On	N	19.6	16.4	46.0
2.800500	32.1	1000.0	9.000	On	N	19.6	13.9	46.0
3.291000	31.5	1000.0	9.000	On	N	19.6	14.5	46.0

Idle:

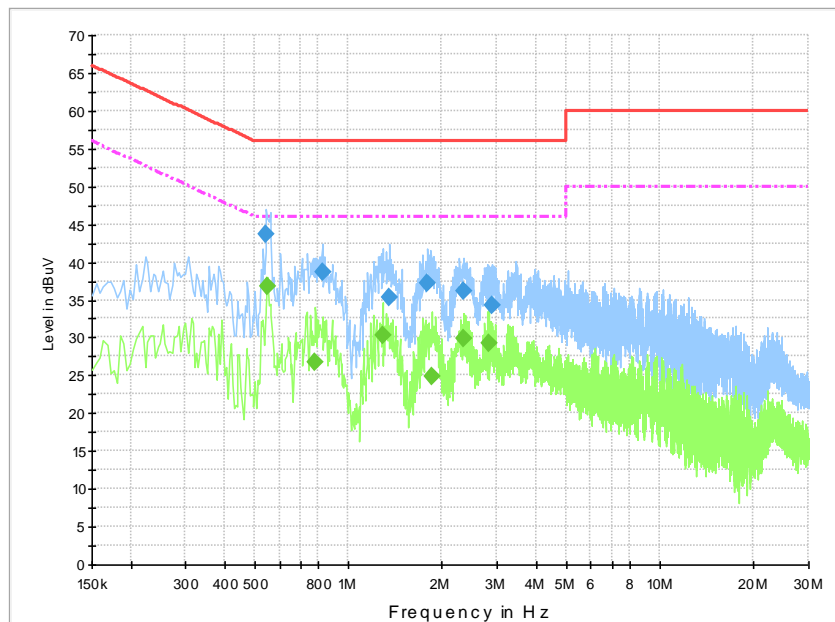


Fig.59 Conducted Emission(802.11a, IDLE)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.546000	43.6	1000.0	9.000	On	L1	19.8	12.4	56.0
0.825000	38.8	1000.0	9.000	On	L1	19.7	17.2	56.0
1.356000	35.2	1000.0	9.000	On	L1	19.6	20.8	56.0
1.797000	37.2	1000.0	9.000	On	N	19.6	18.8	56.0
2.350500	36.2	1000.0	9.000	On	N	19.6	19.8	56.0
2.877000	34.3	1000.0	9.000	On	L1	19.7	21.7	56.0

Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.550500	36.8	1000.0	9.000	On	N	19.8	9.2	46.0
0.784500	26.8	1000.0	9.000	On	N	19.7	19.2	46.0
1.284000	30.4	1000.0	9.000	On	N	19.6	15.6	46.0
1.855500	24.9	1000.0	9.000	On	N	19.6	21.1	46.0
2.346000	30.0	1000.0	9.000	On	N	19.6	16.0	46.0
2.827500	29.3	1000.0	9.000	On	N	19.6	16.7	46.0

A.8. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.60	17.97	P
	5200 MHz	Fig.61	18.05	P
	5240 MHz	Fig.62	17.98	P
802.11n HT20	5180 MHz	Fig.63	18.87	P
	5200 MHz	Fig.64	18.79	P
	5240 MHz	Fig.65	18.87	P
802.11n HT40	5190 MHz	Fig.66	36.53	P
	5230 MHz	Fig.67	36.54	P
802.11ac HT80	5210 MHz	Fig.68	75.29	P

Conclusion: PASS

Test graphs as below:

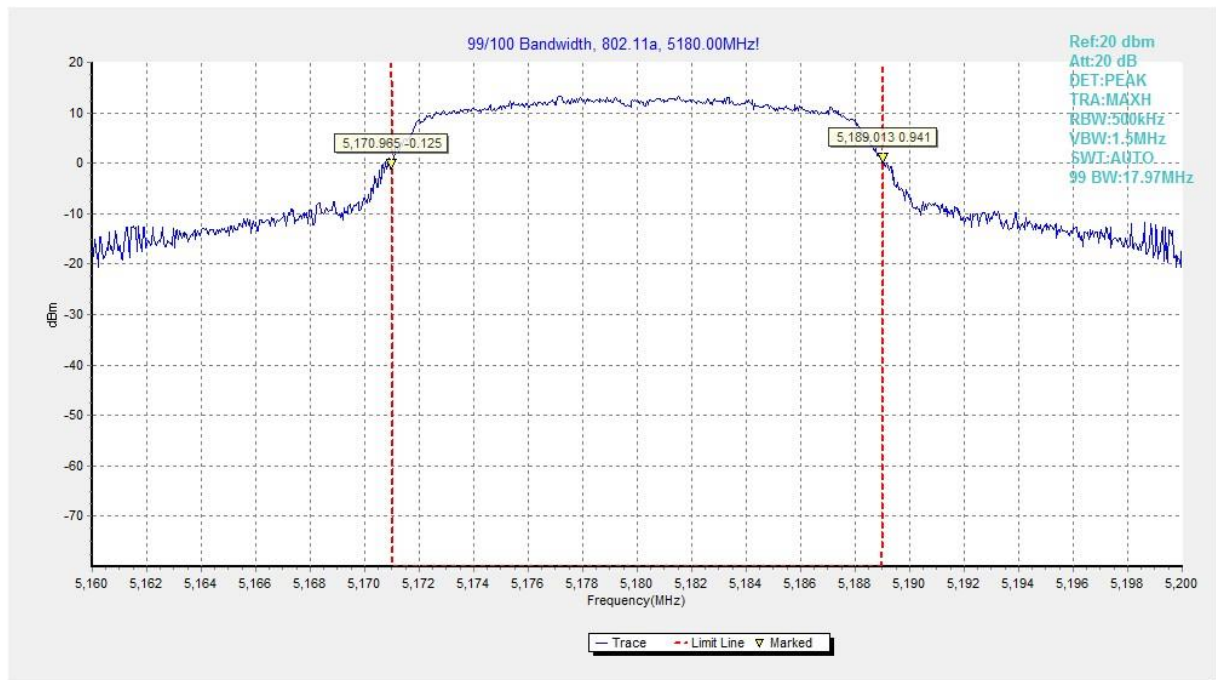


Fig.60 99% Occupied bandwidth (802.11a, 5180MHz)

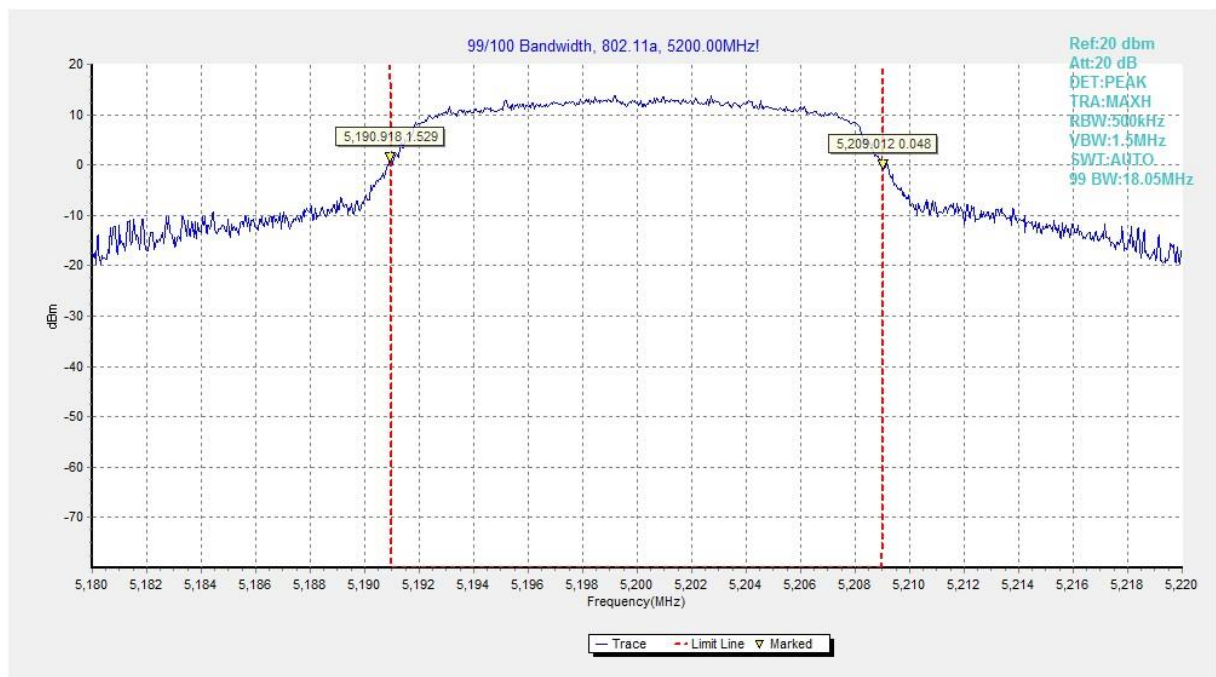


Fig.61 99% Occupied bandwidth (802.11a, 5200MHz)

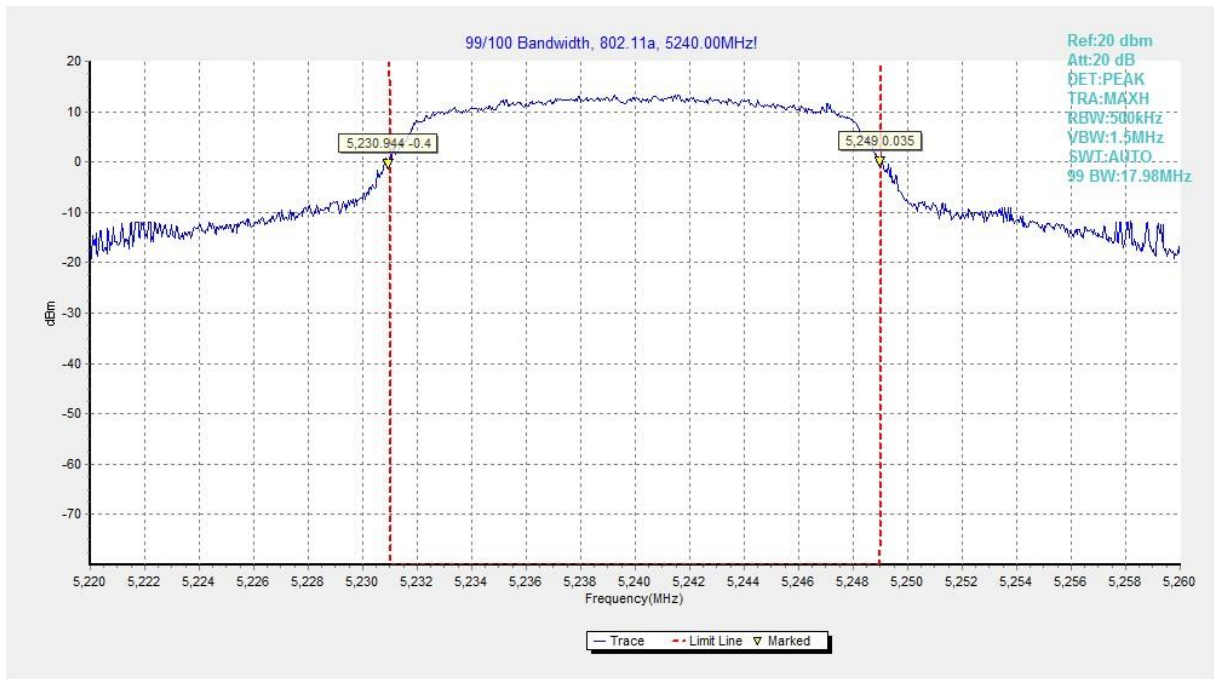


Fig.62 99% Occupied bandwidth (802.11a, 5240MHz)

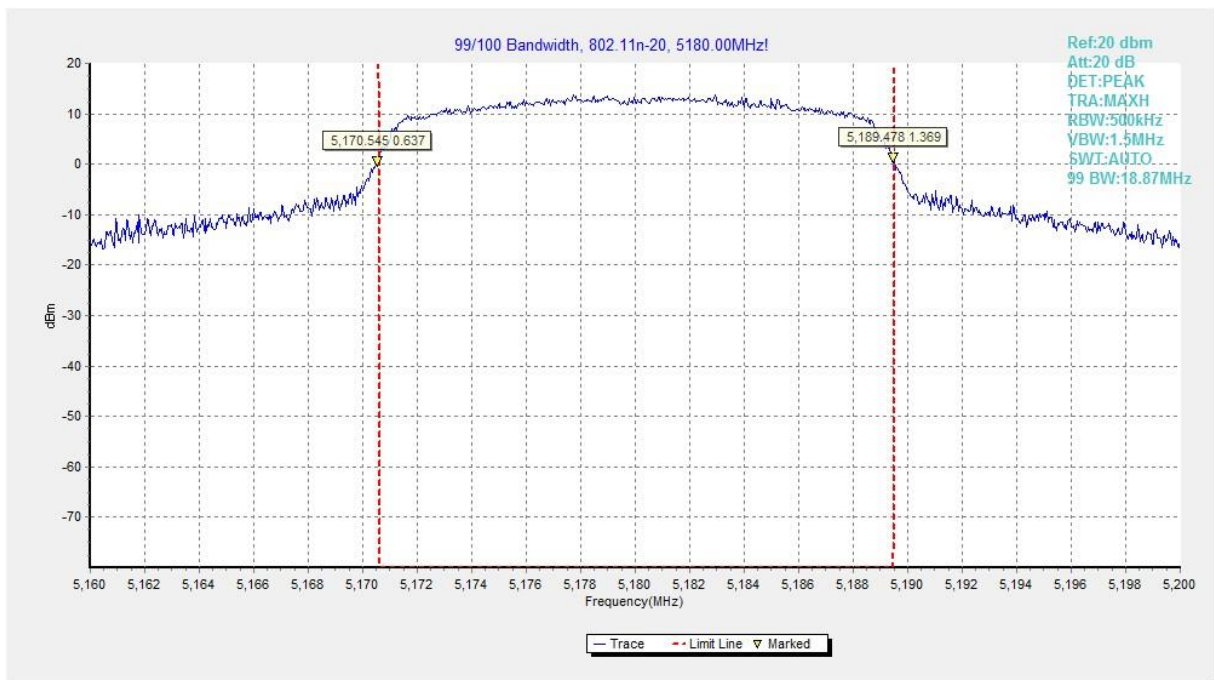


Fig.63 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

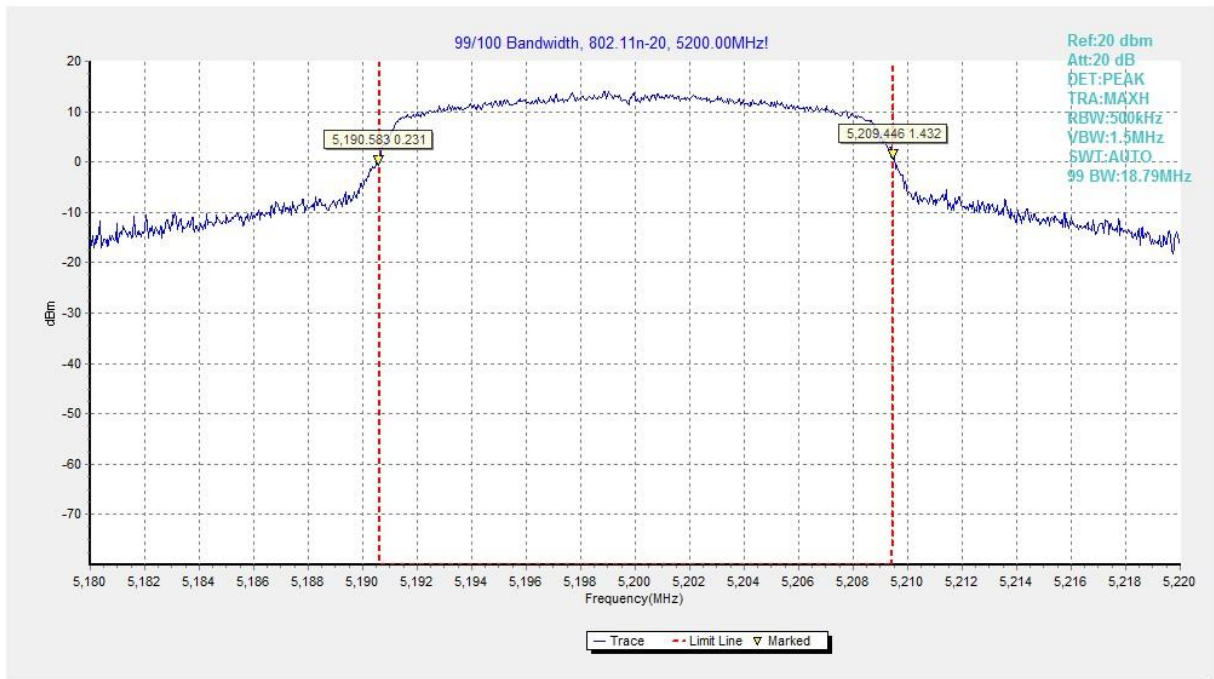


Fig.64 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

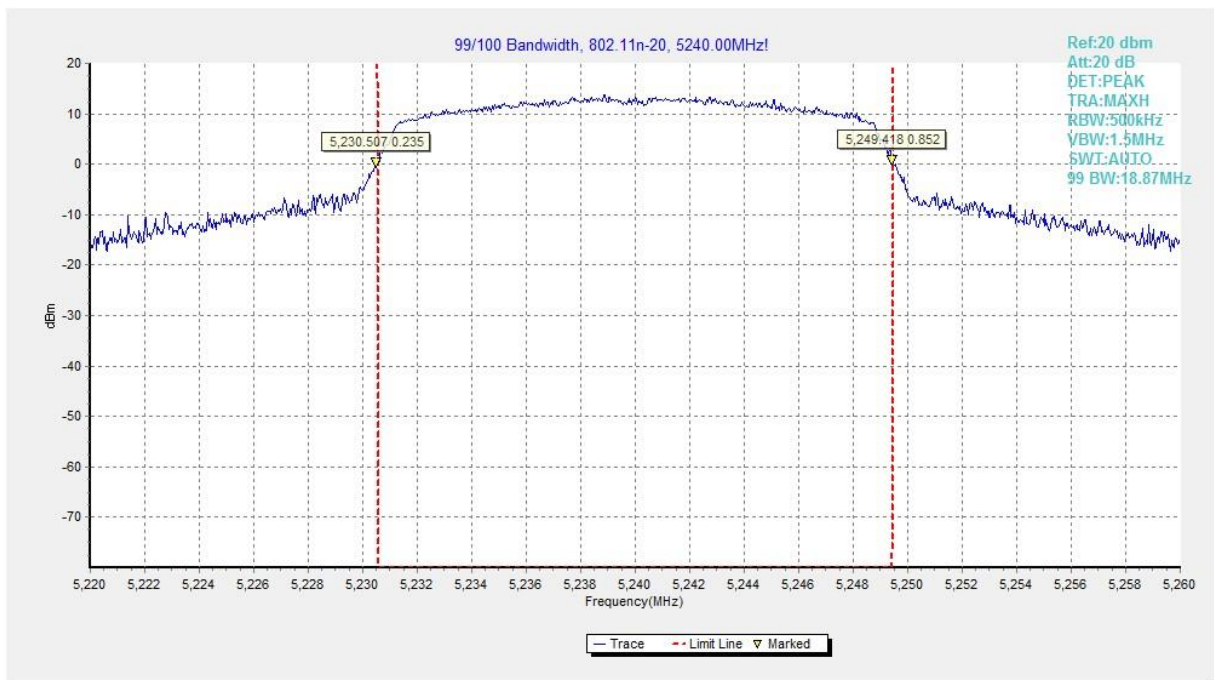


Fig.65 99% Occupied bandwidth (802.11n-HT20, 5240MHz)

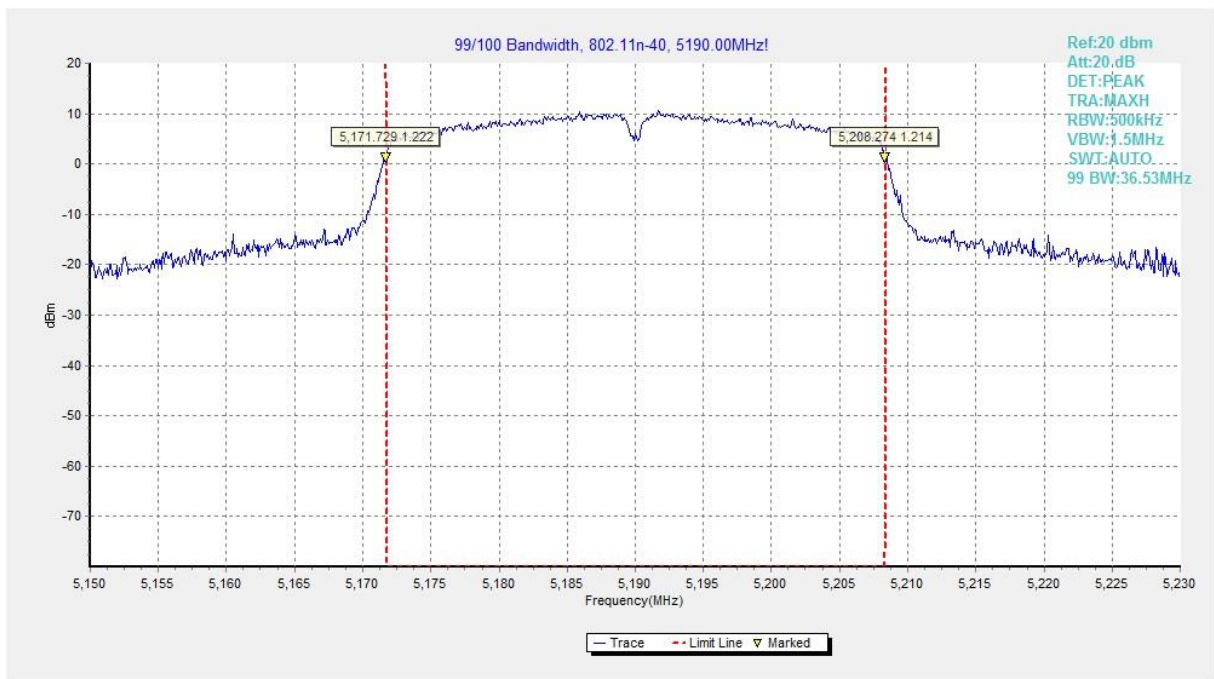


Fig.66 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

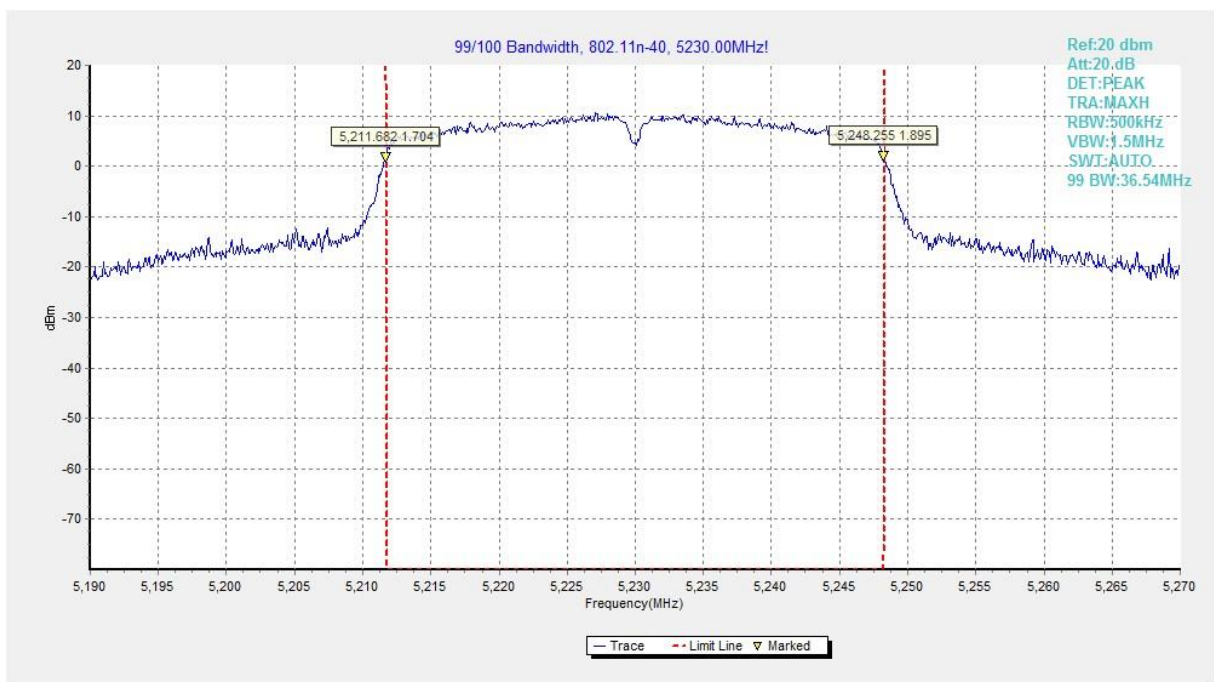


Fig.67 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

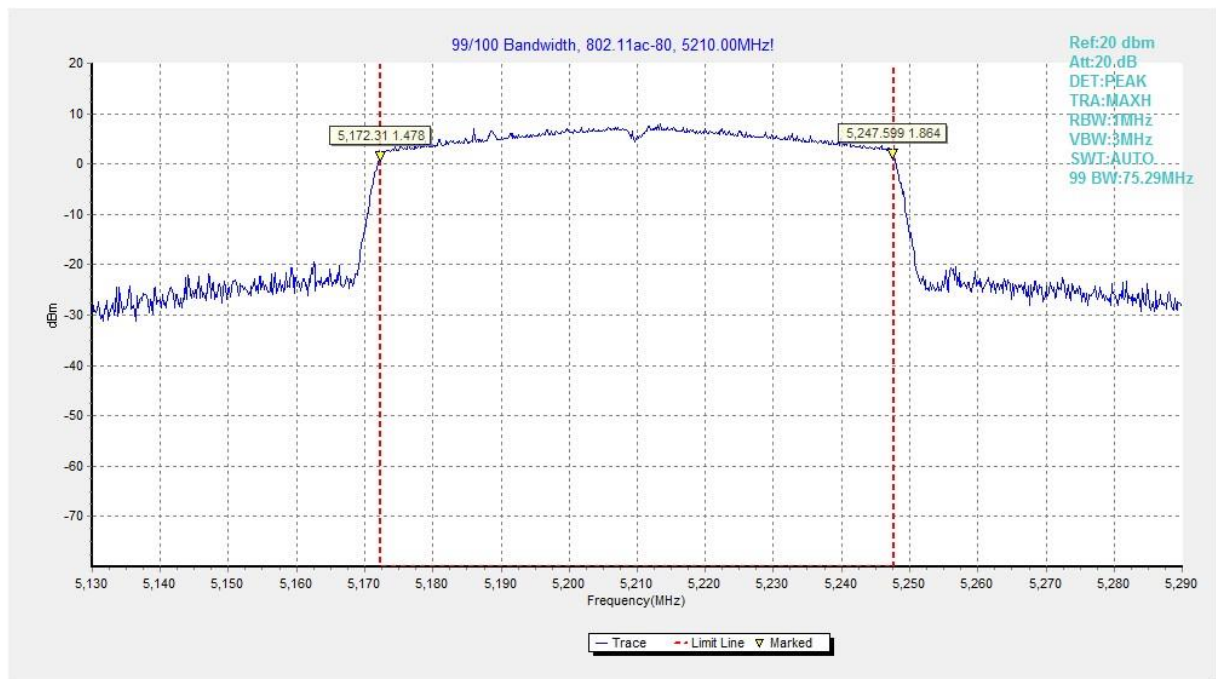


Fig.68 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)



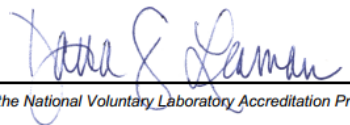
A.9. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

ANNEX B: EUT parameters

Disclaimer: The worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p> <div style="display: flex; justify-content: space-around; align-items: center;"><div style="font-size: 4em; font-weight: bold; letter-spacing: 0.5em;">NVLAP[®]</div><div style="text-align: center;"></div></div>	
<hr/> <h3>Certificate of Accreditation to ISO/IEC 17025:2017</h3> <hr/>	
<p>NVLAP LAB CODE: 600118-0</p>	
<p>Telecommunication Technology Labs, CAICT Beijing China</p>	
<p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p>	
<p>Electromagnetic Compatibility & Telecommunications</p>	
<p><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).</i></p>	
<hr/> <p>2020-09-29 through 2021-09-30 <i>Effective Dates</i></p>	<div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: center;"></div><div style="text-align: center;"> <i>For the National Voluntary Laboratory Accreditation Program</i></div></div>

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