



3.4 In-Band Emissions (Channel Mask)

3.4.1 Limit of Unwanted Emissions

<FCC 14-30 CFR 15.407>

(a)(6) For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

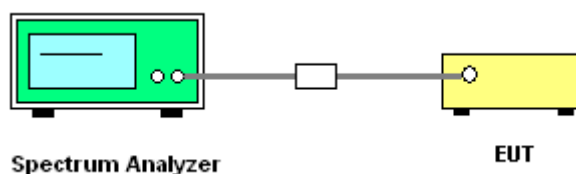
3.4.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v03.

Section J) In-Band Emissions.

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
 - b. Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

3.4.4 Test Setup





3.4.5 Test Result

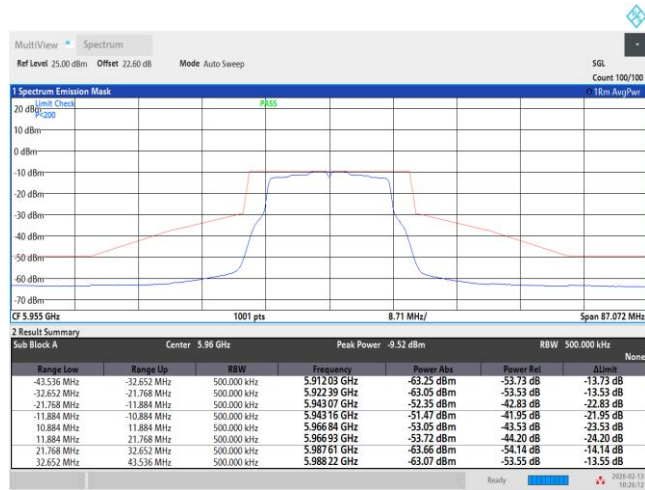
CDD Mode

MIMO <Ant. 4+3 (4)>

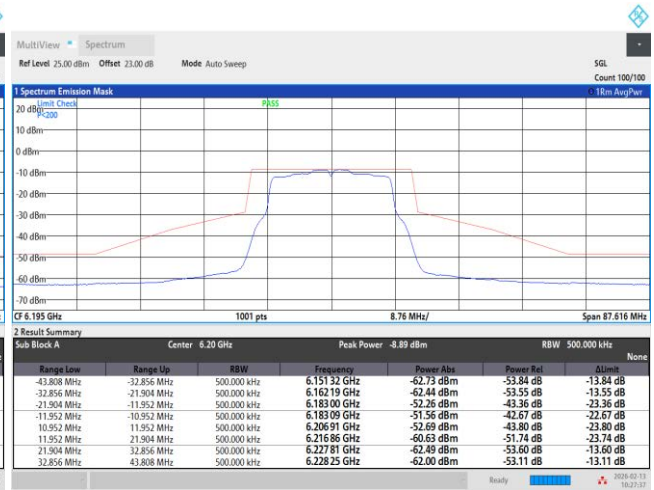
EUT Mode

802.11a

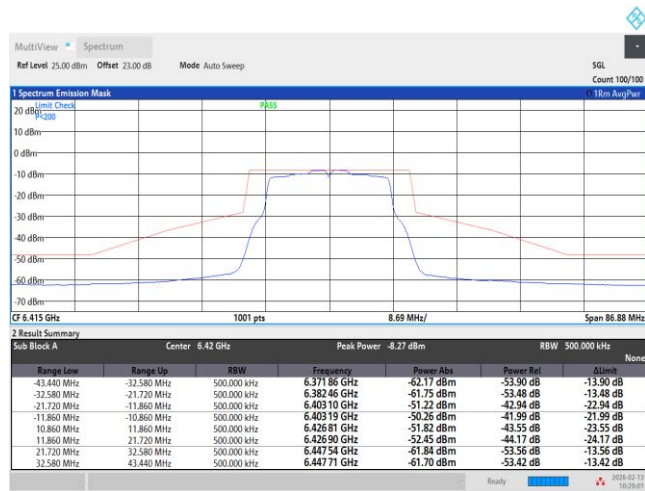
Plot on 5955 MHz



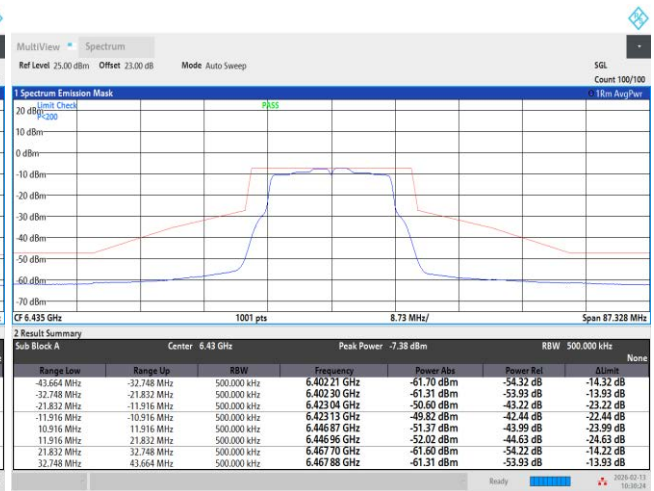
Plot on 6195 MHz



Plot on 6415 MHz

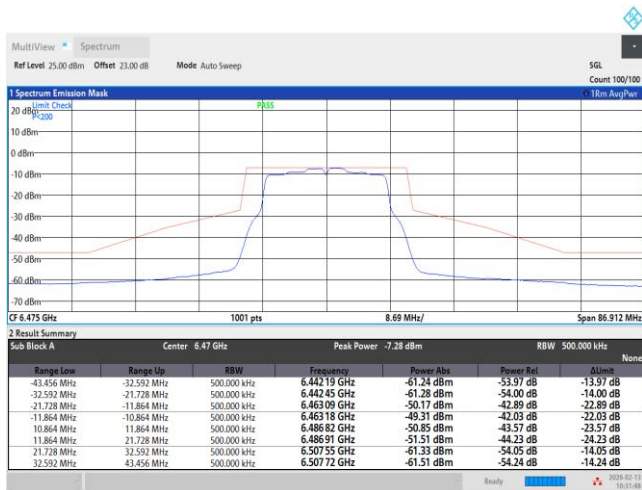


Plot on 6435 MHz



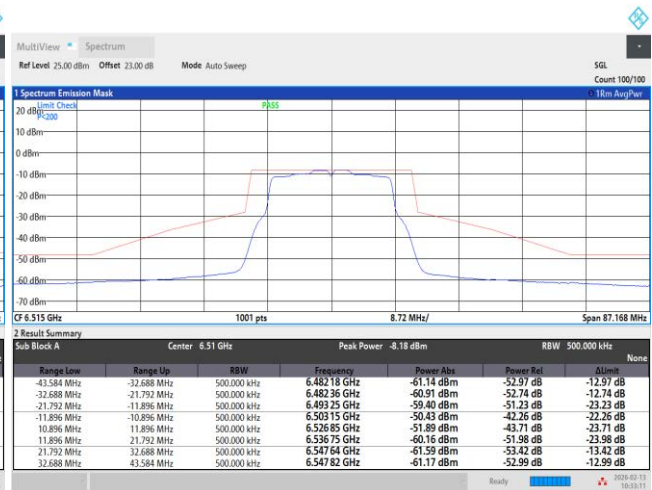


Plot on 6475 MHz



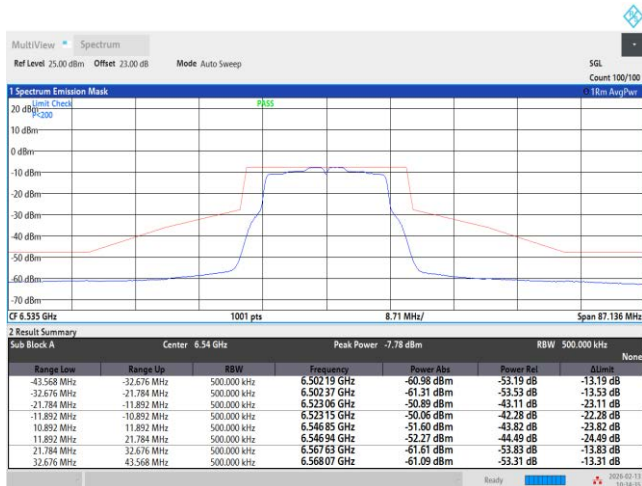
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Plot on 6515 MHz



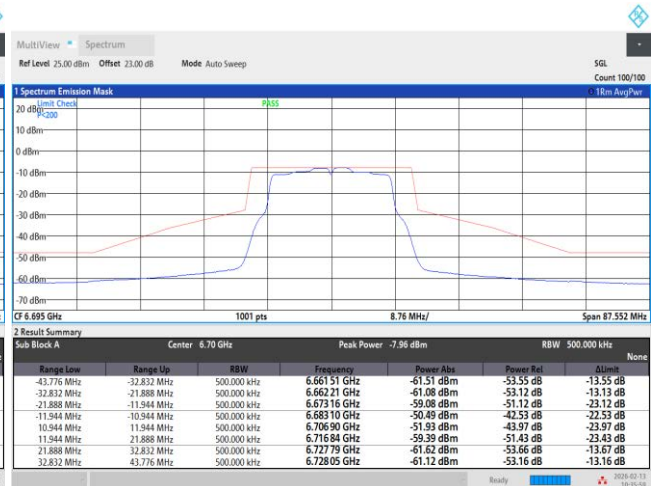
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Plot on 6535 MHz



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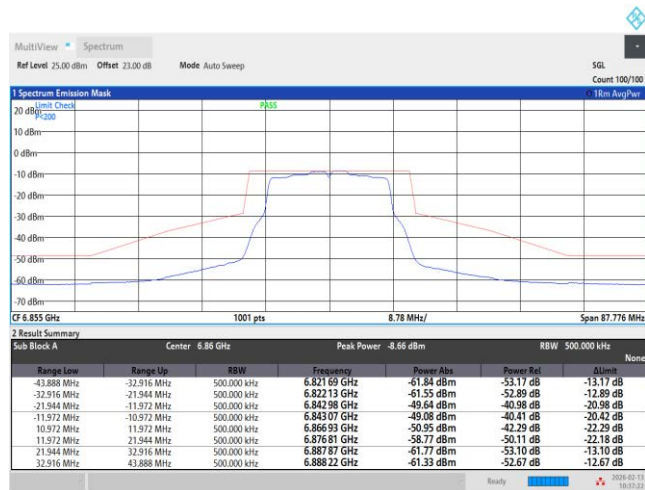
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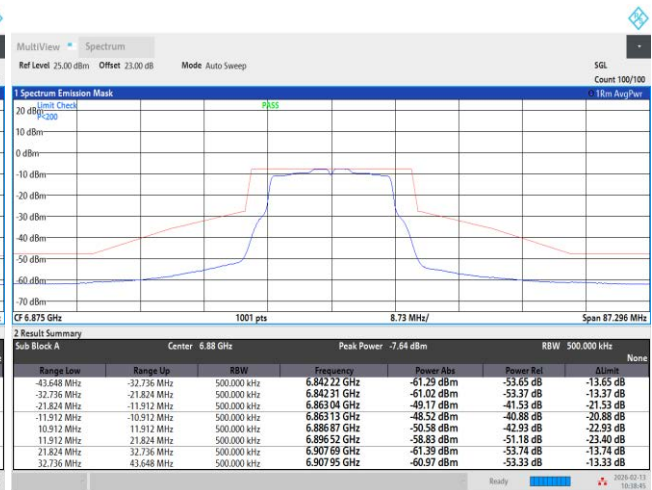


Plot on 6855 MHz



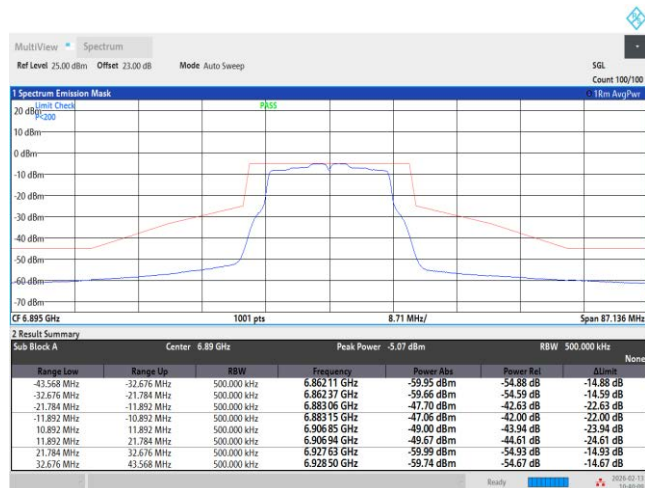
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Plot on 6875 MHz



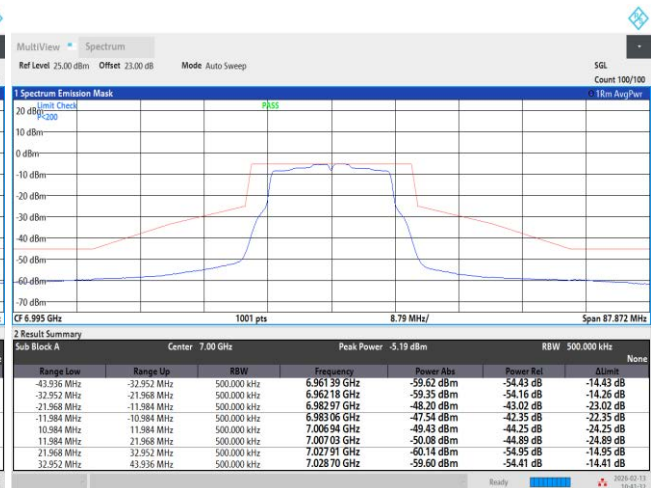
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Plot on 6895 MHz



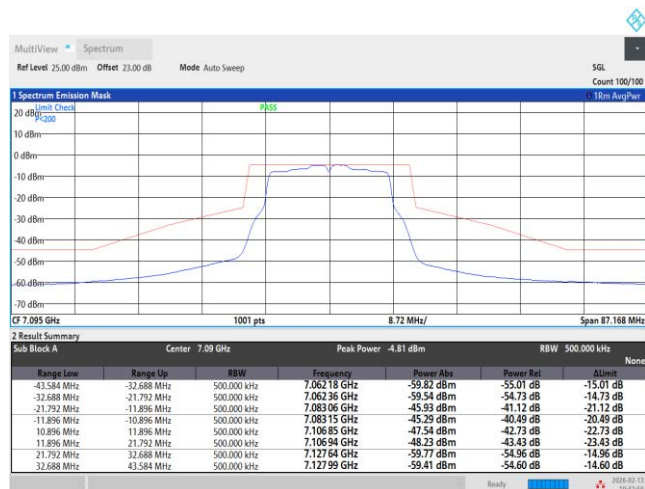
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Plot on 6995 MHz



10:41:33 AM 02/13/2026

Plot on 7095 MHz



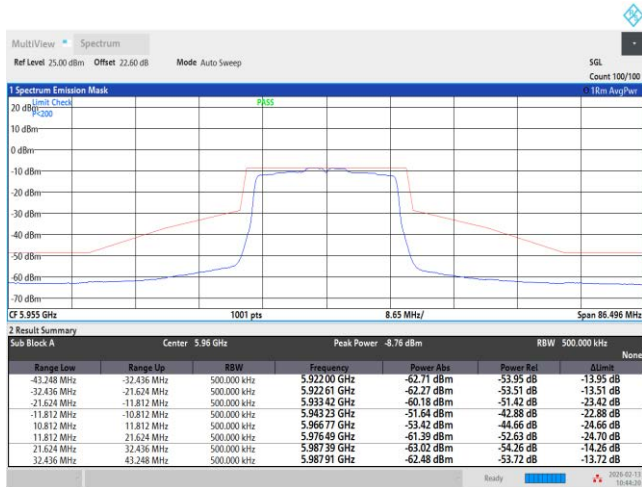
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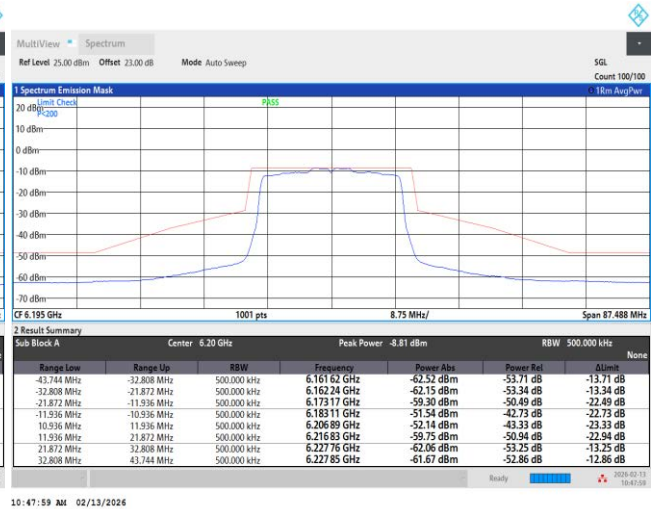
EUT Mode

802.11ax HE20 FullIRU

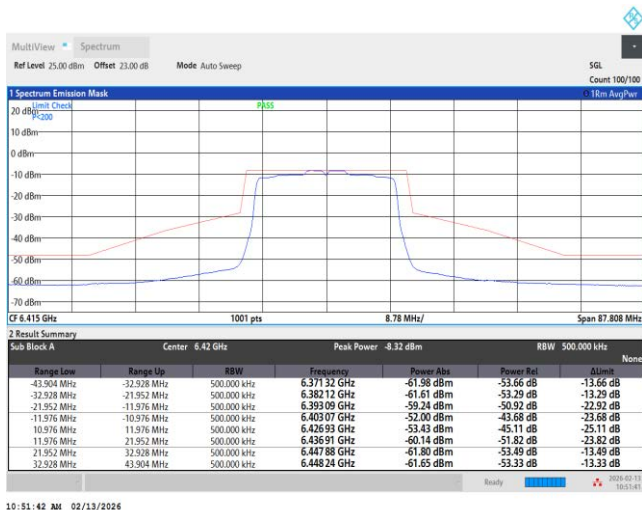
Plot on 5955 MHz



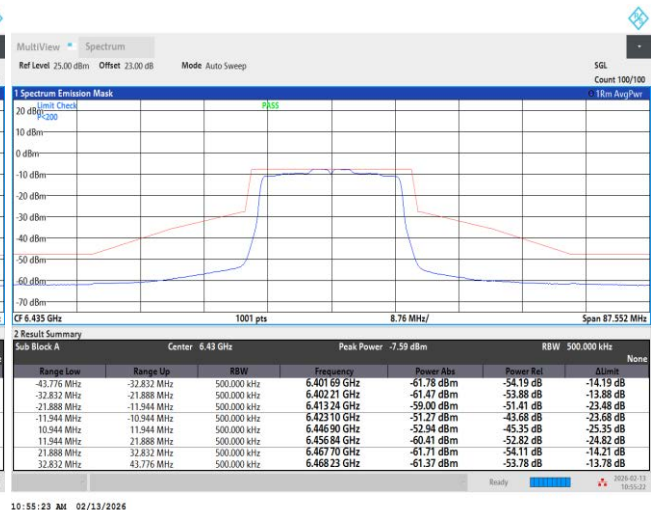
Plot on 6195 MHz



Plot on 6415 MHz

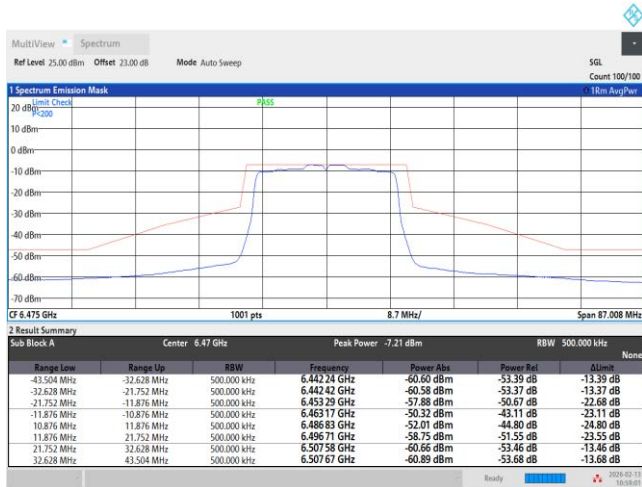


Plot on 6435 MHz



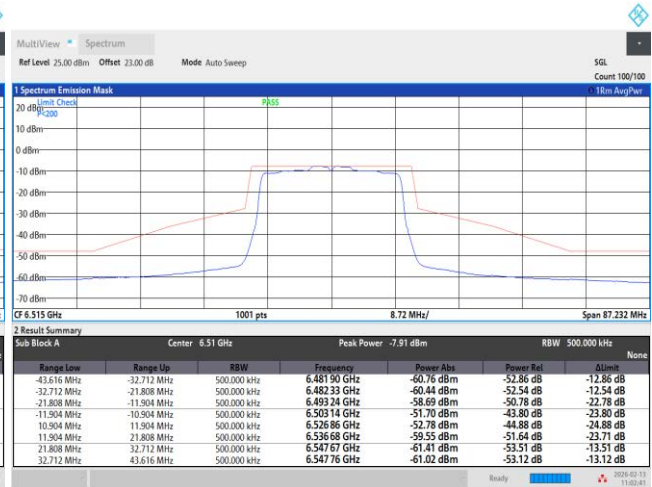


Plot on 6475 MHz



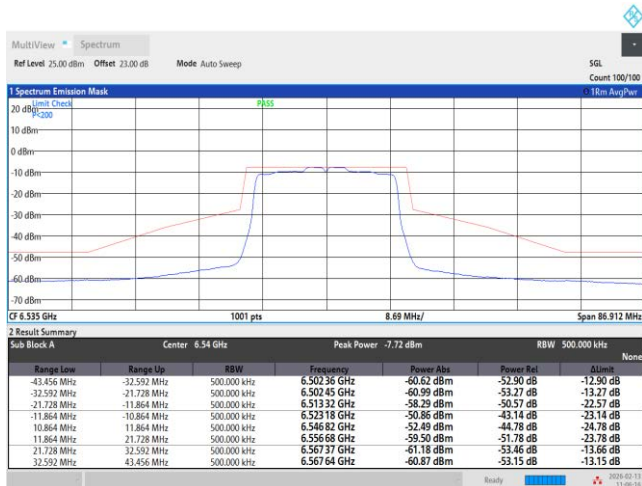
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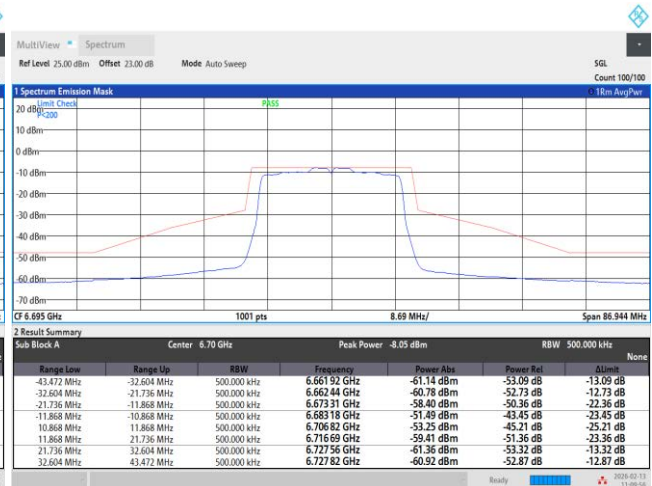
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Plot on 6535 MHz



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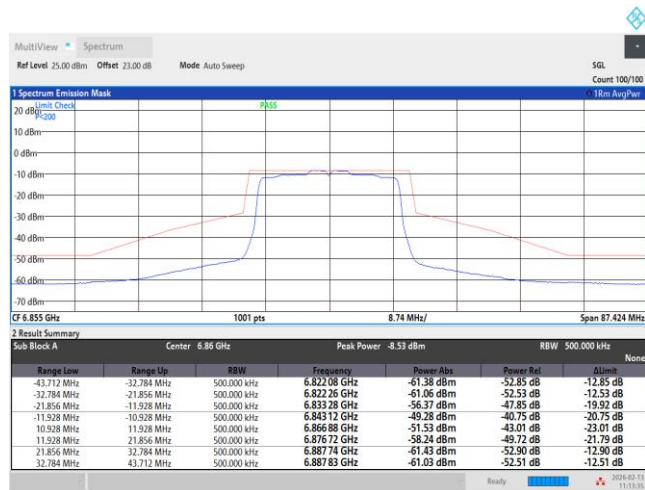
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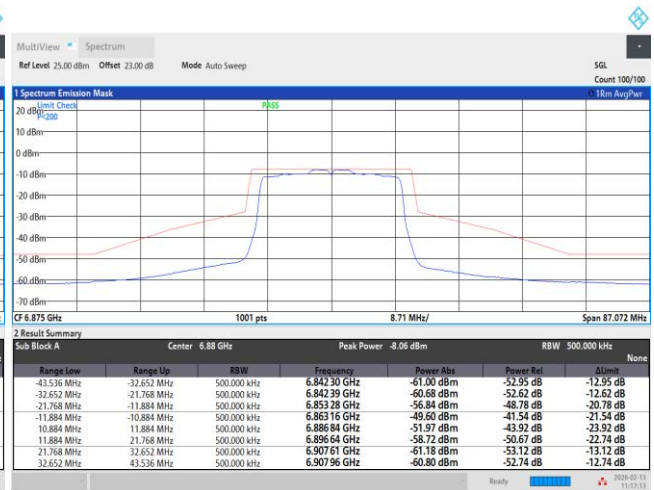


Plot on 6855 MHz



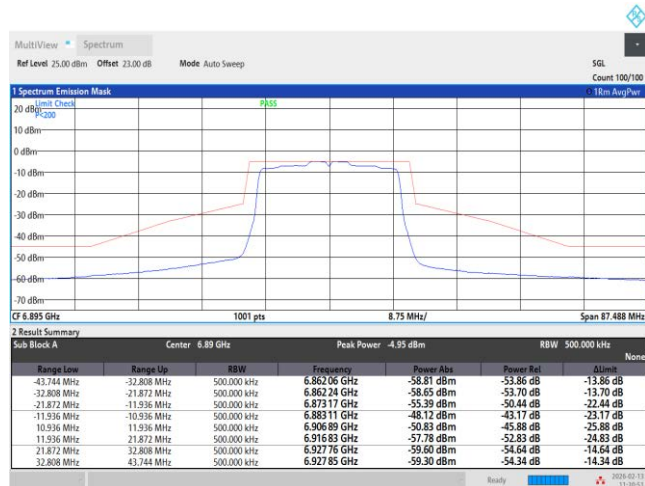
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Plot on 6875 MHz



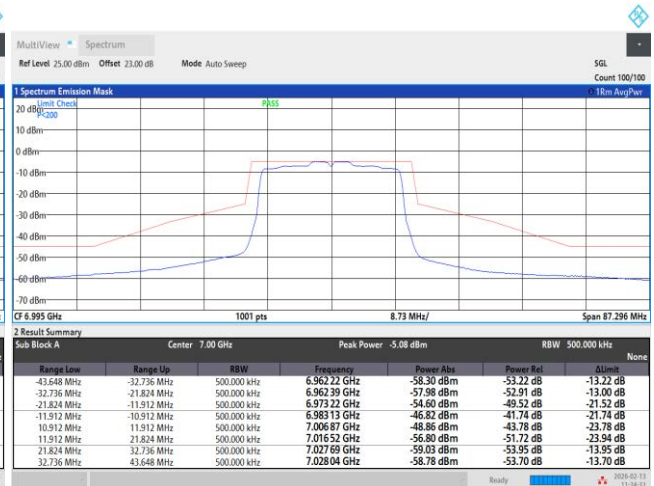
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Plot on 6895 MHz



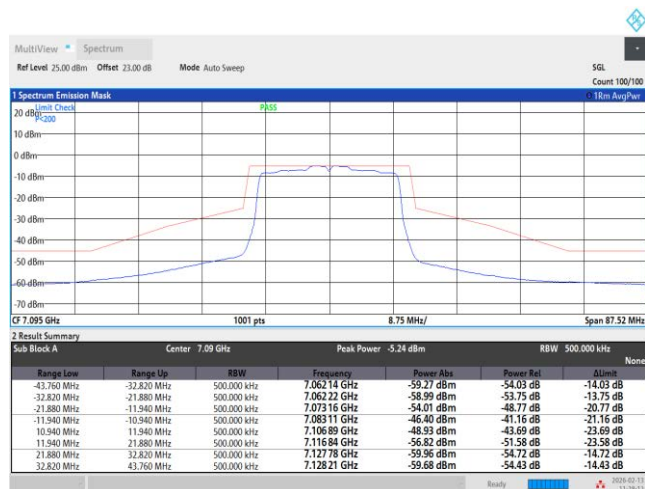
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Plot on 6995 MHz



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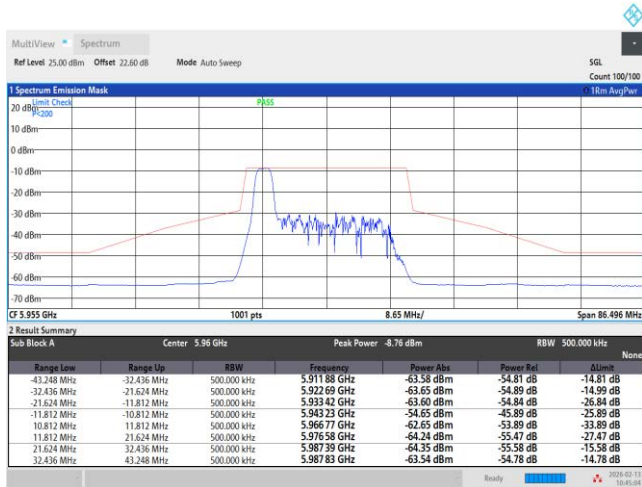
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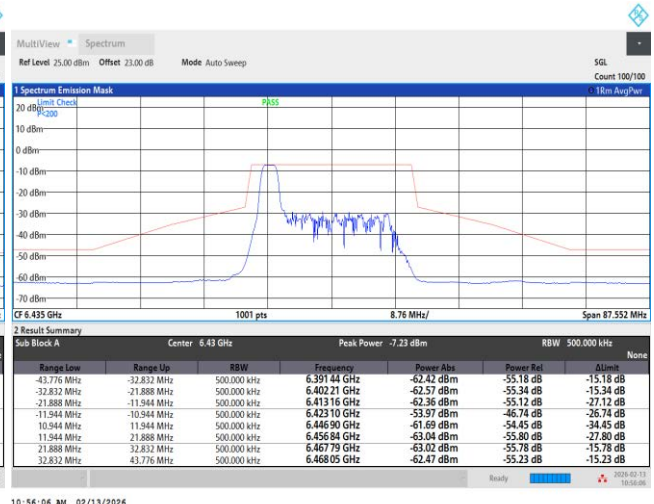
EUT Mode

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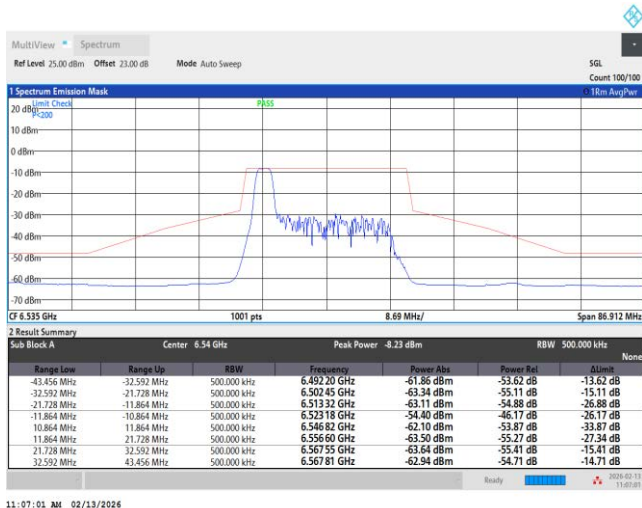
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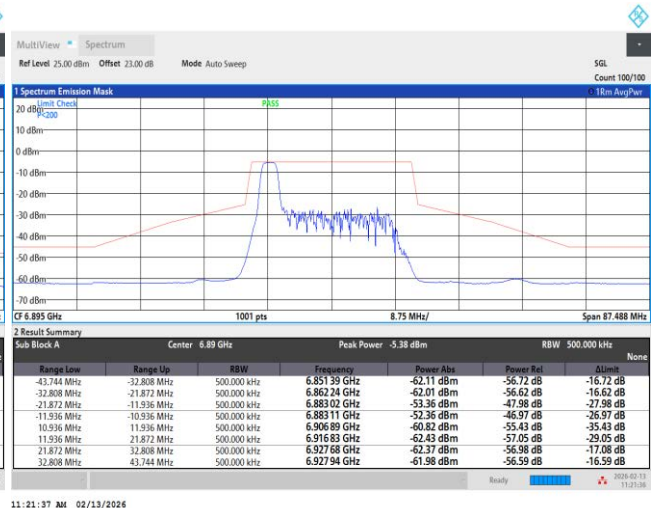
Plot on 6435 MHz



Plot on 6535 MHz



Plot on 6895 MHz

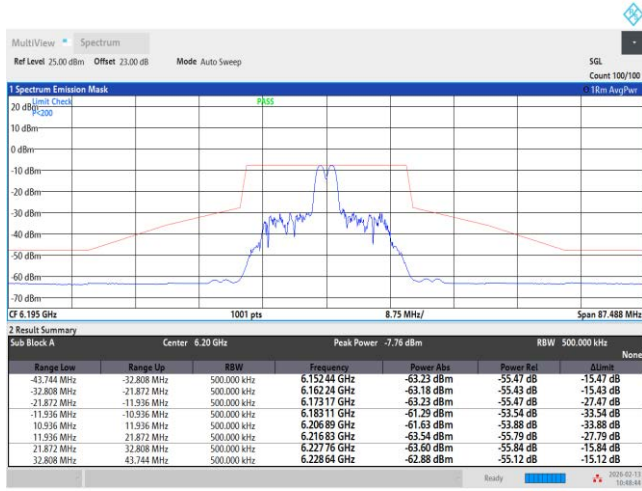




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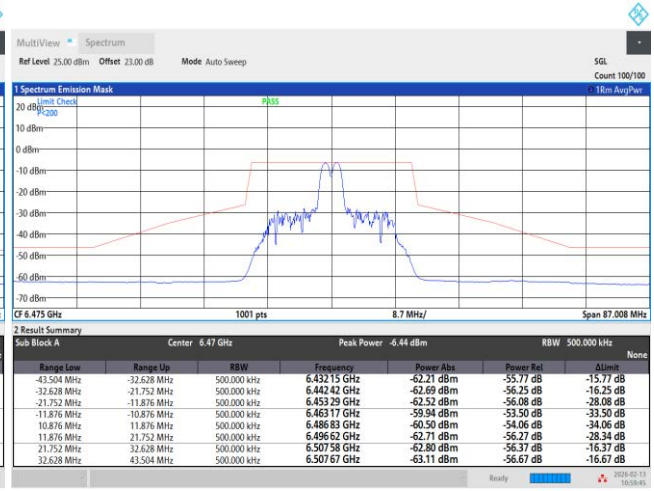
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Plot on 6195 MHz



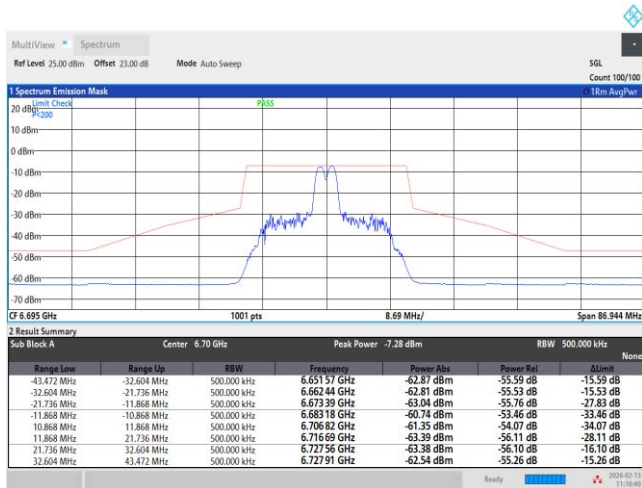
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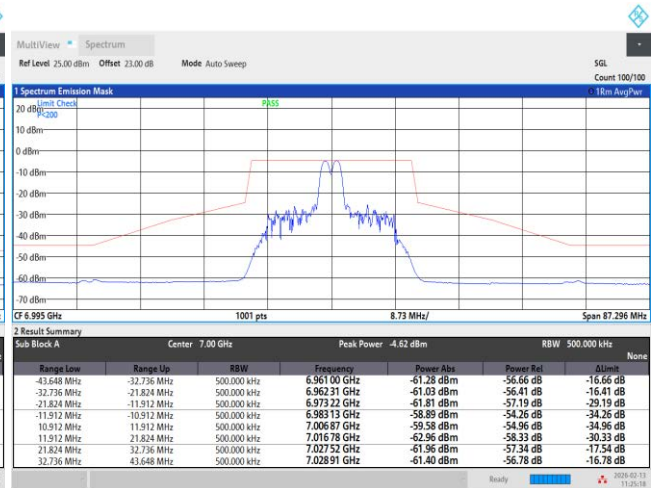
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Plot on 6695 MHz



11:10:41 AM 02/13/2026

Plot on 6995 MHz



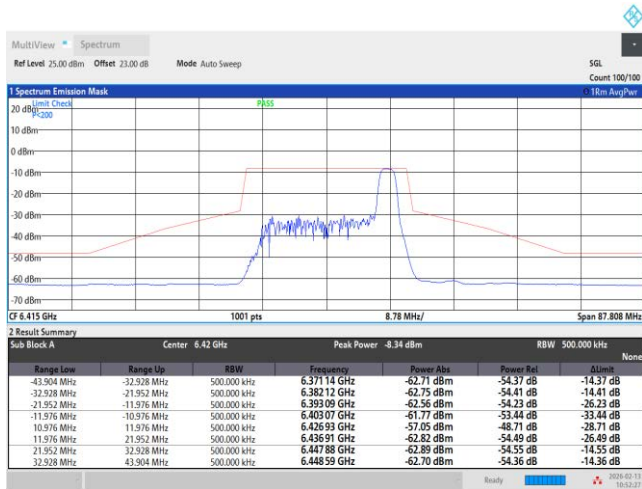
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EUT Mode

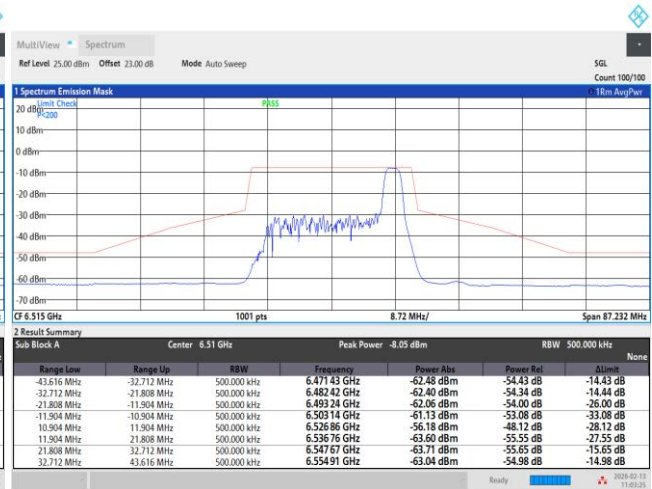
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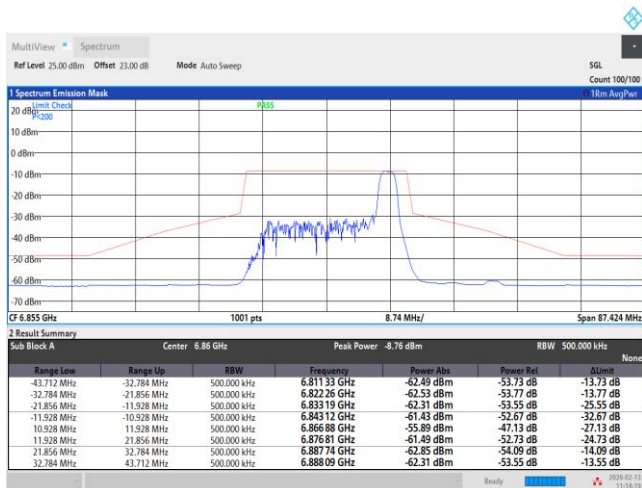
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Plot on 6515 MHz



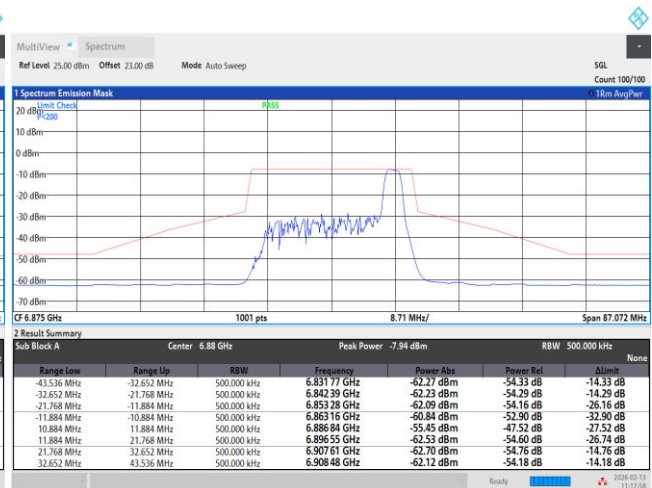
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Plot on 6855 MHz



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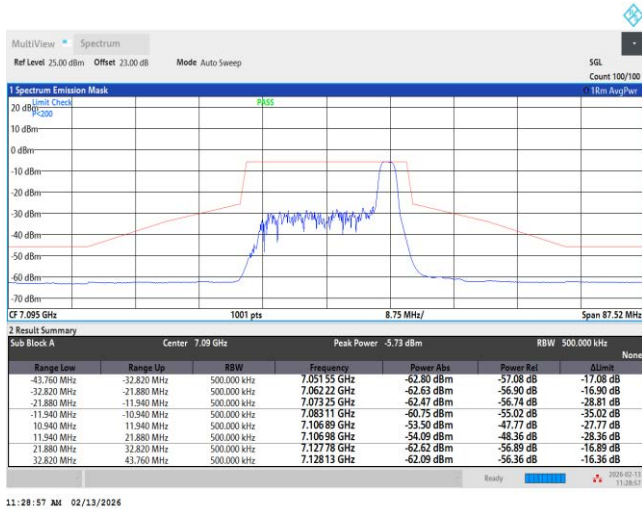
Plot on 6875 MHz



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Plot on 7095 MHz

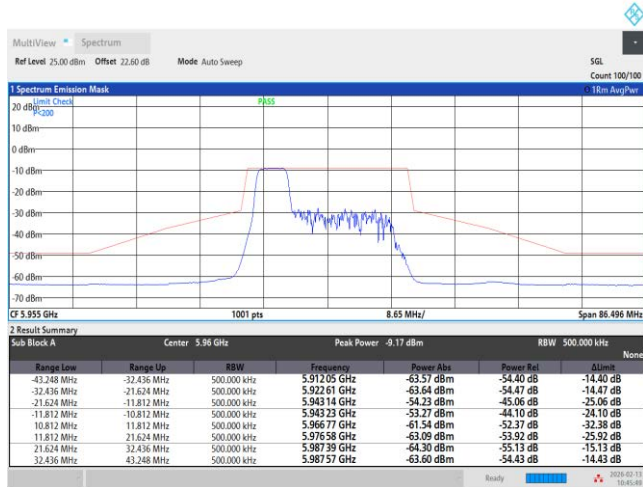




EUT Mode

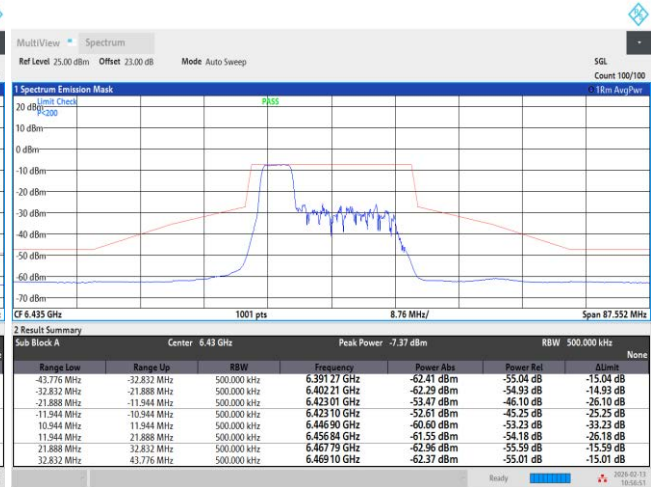
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Plot on 5955 MHz



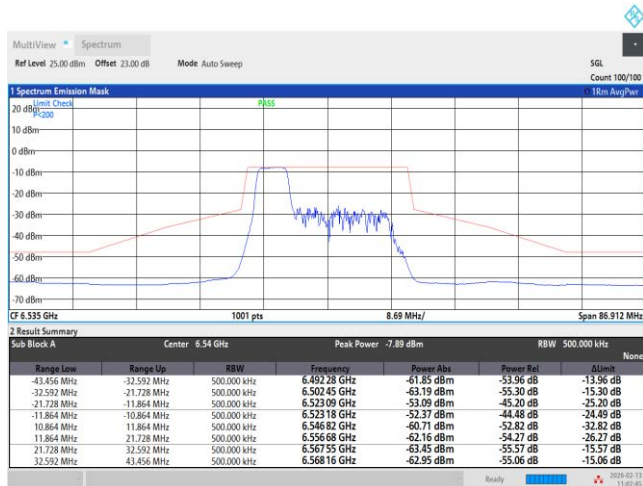
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Plot on 6435 MHz



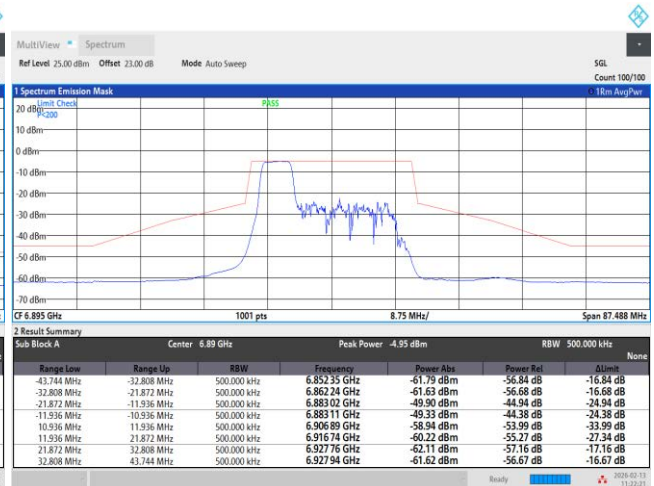
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Plot on 6535 MHz



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Plot on 6895 MHz



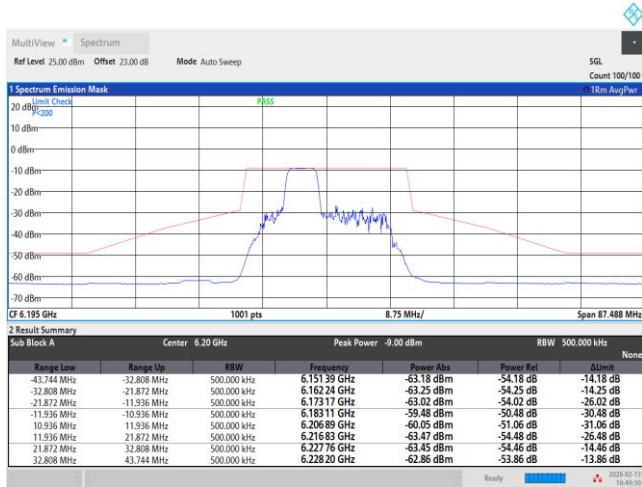
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EUT Mode

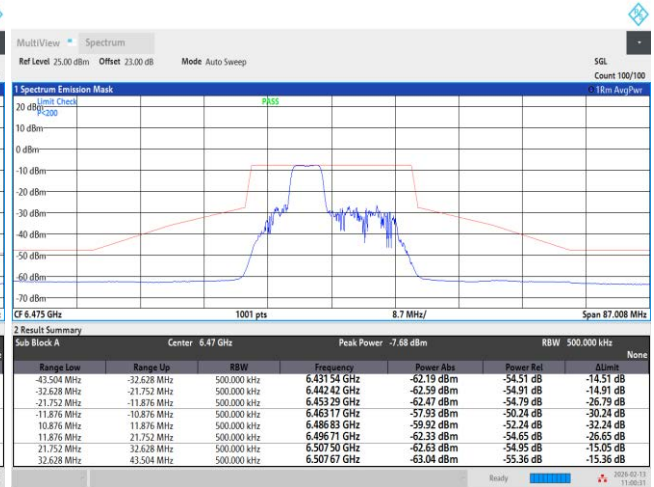
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Plot on 6195 MHz



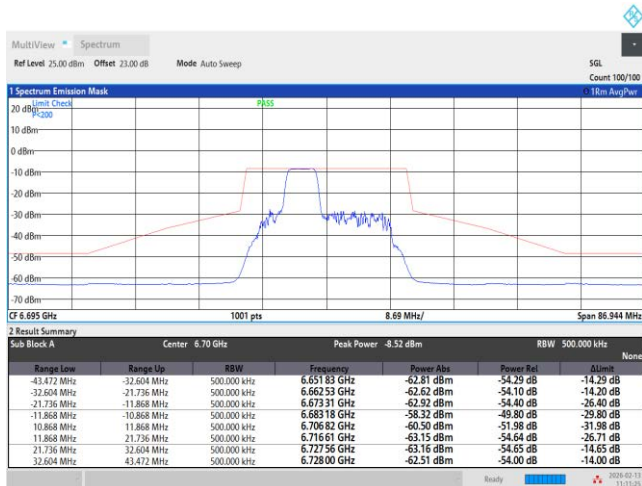
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Plot on 6475 MHz



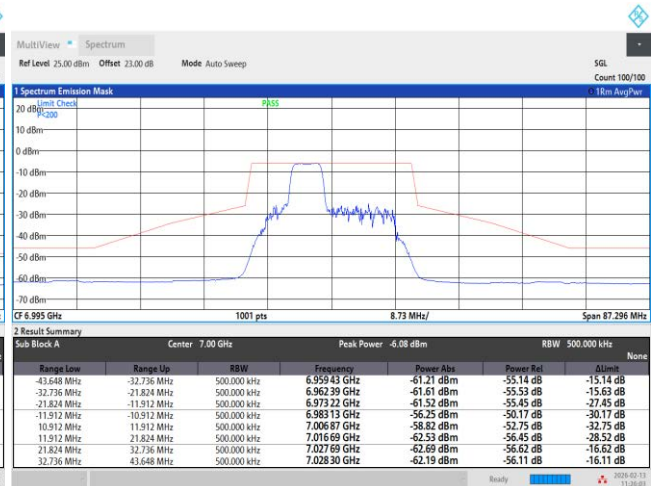
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Plot on 6695 MHz



11:11:25 AM 02/13/2026

Plot on 6995 MHz



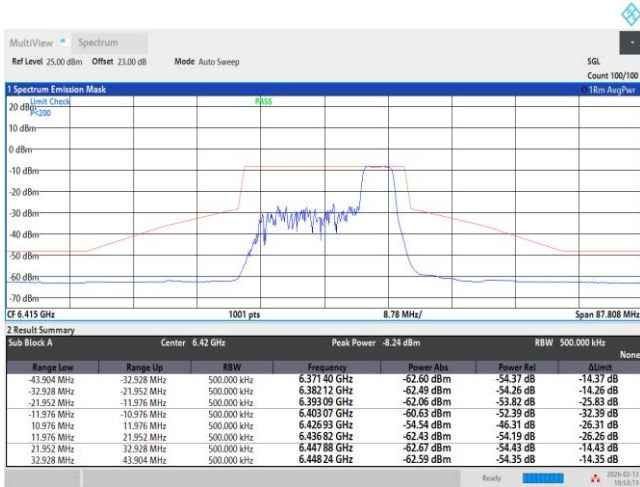
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EUT Mode

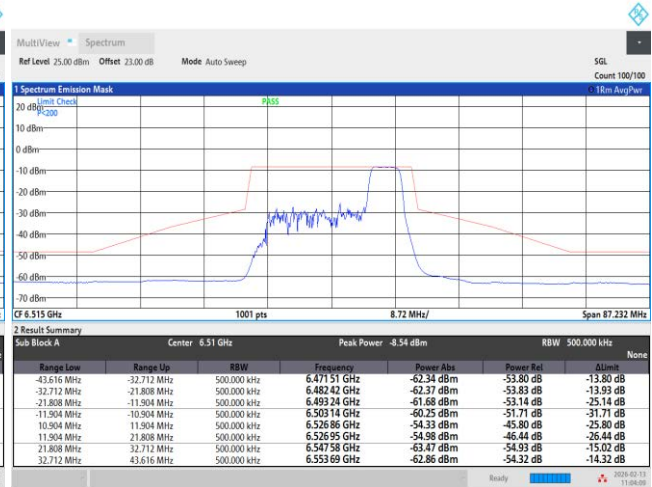
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Plot on 6415 MHz



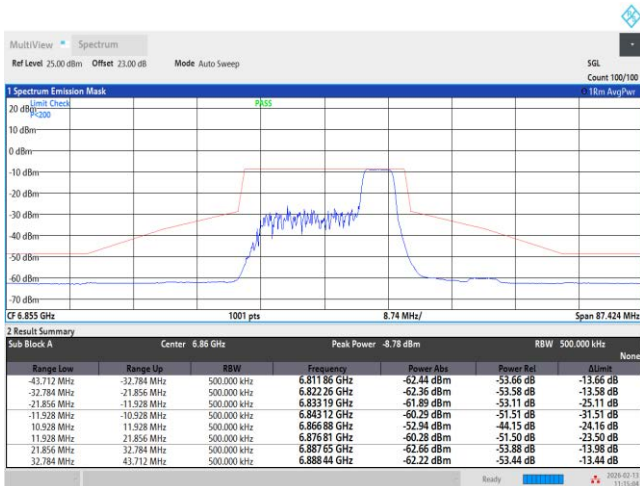
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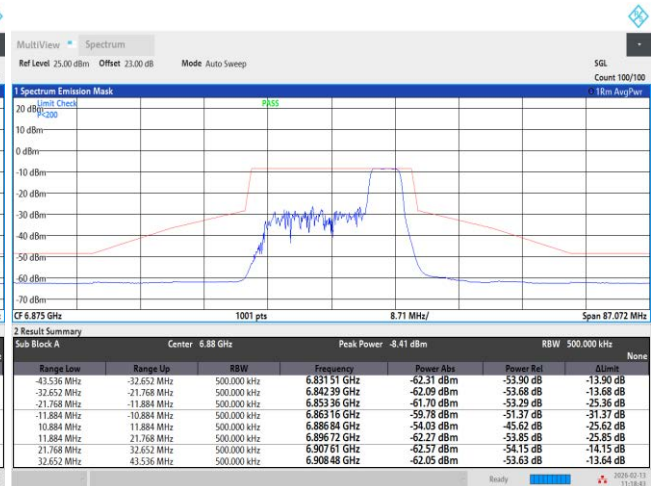
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Plot on 6855 MHz



11:15:05 AM 02/13/2026

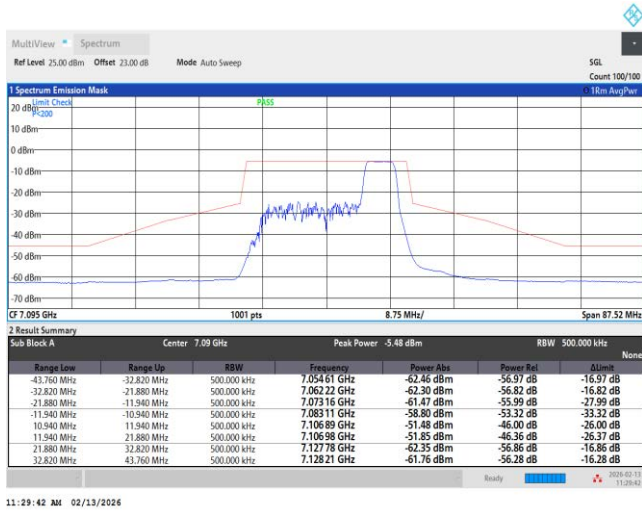
Plot on 6875 MHz



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Plot on 7095 MHz

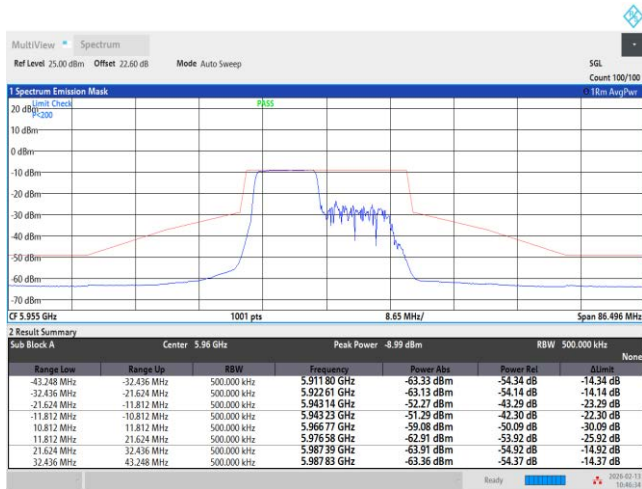




EUT Mode

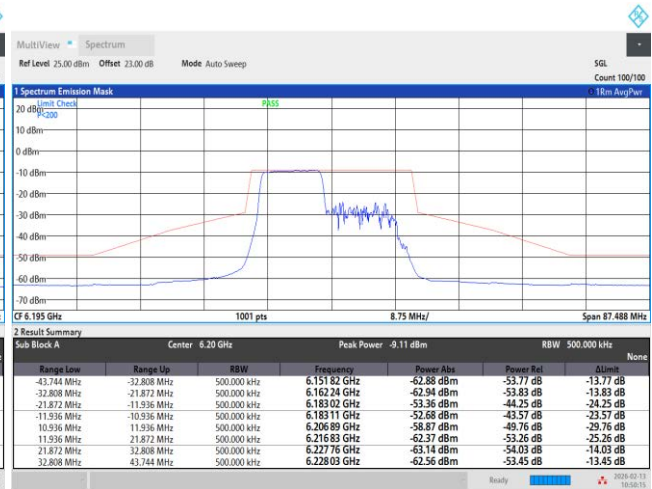
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Plot on 5955 MHz



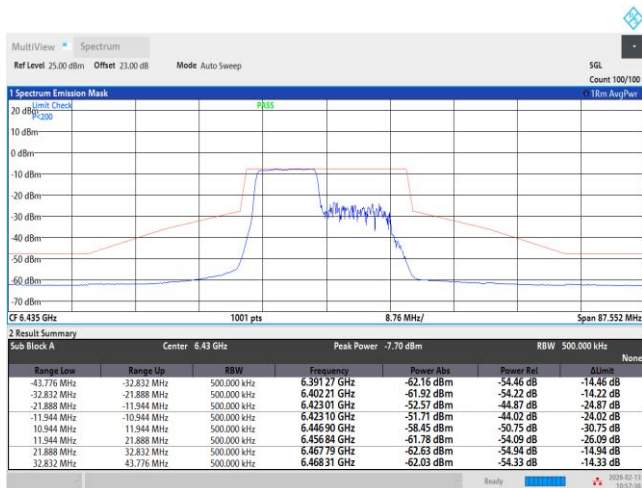
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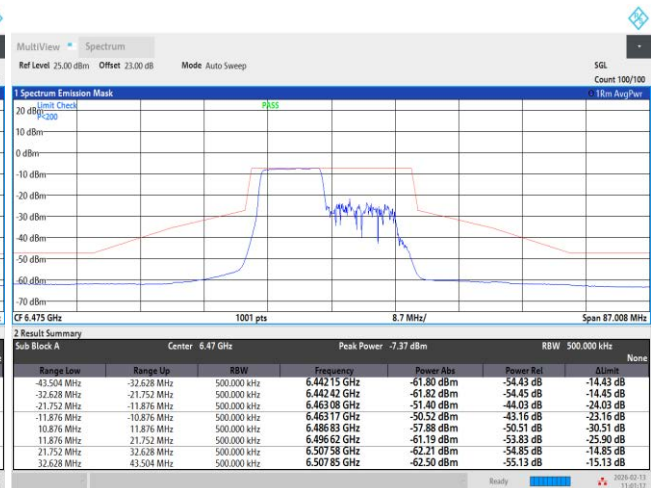
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Plot on 6435 MHz



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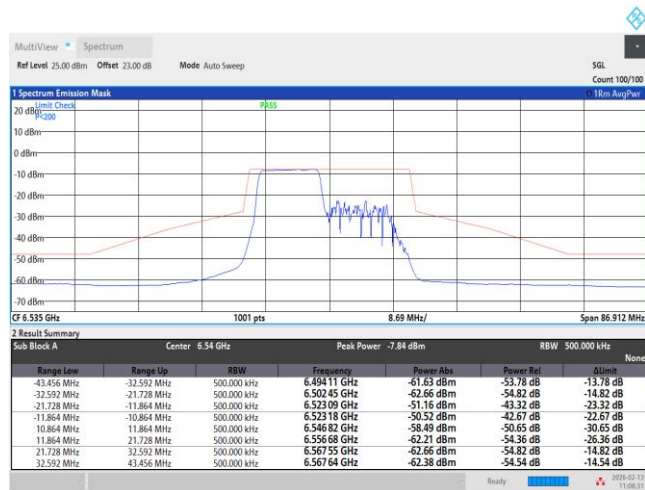
Plot on 6475 MHz



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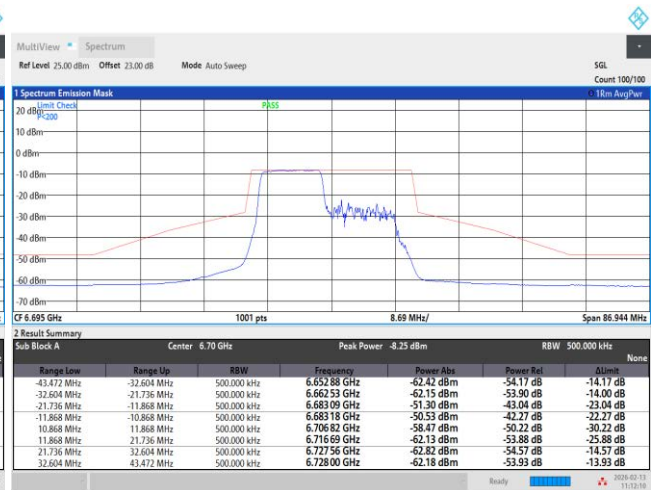


Plot on 6535 MHz



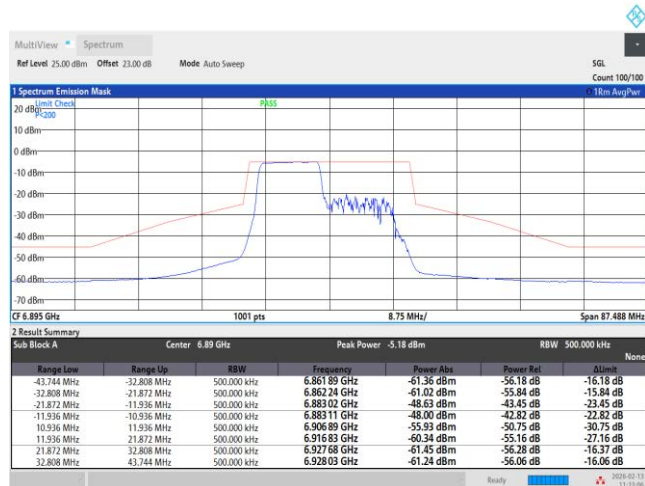
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Plot on 6695 MHz



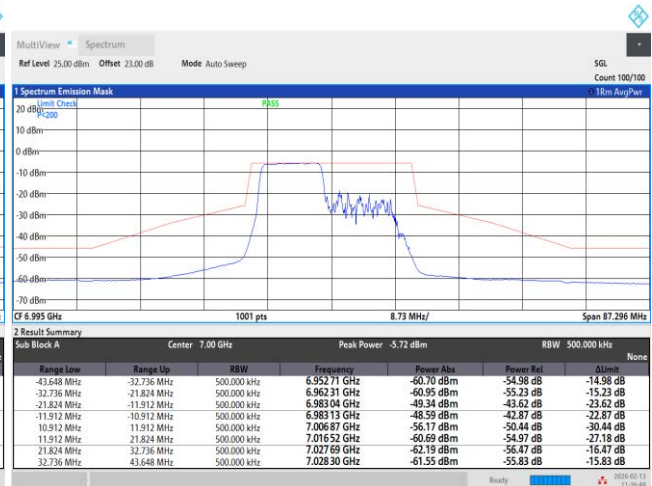
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Plot on 6895 MHz



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Plot on 6995 MHz



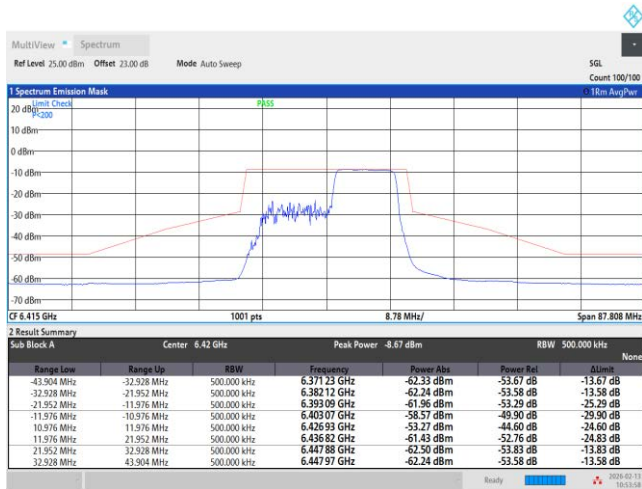
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EUT Mode

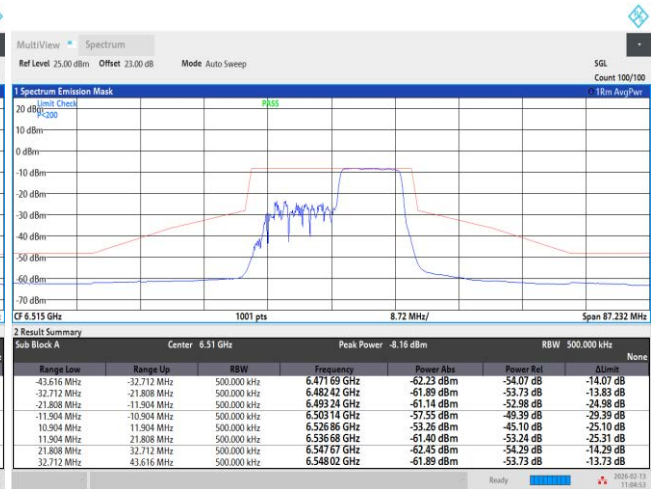
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Plot on 6415 MHz



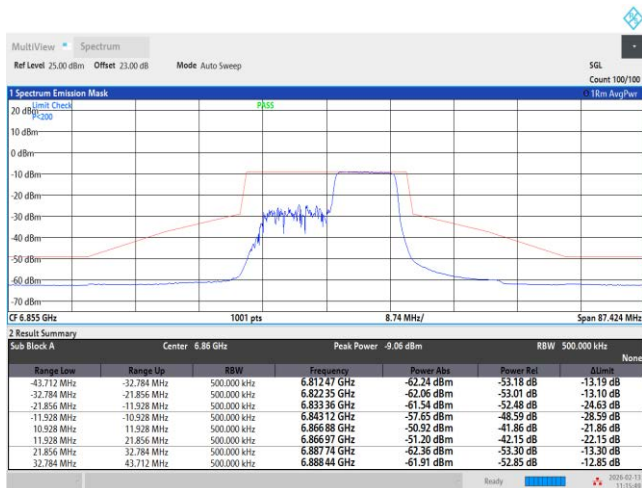
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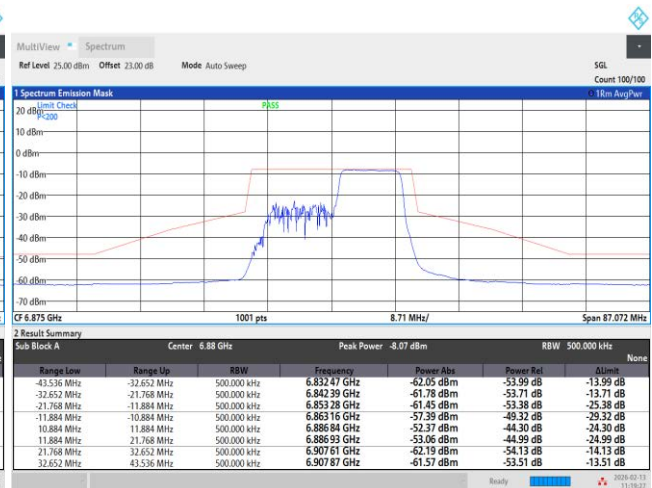
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Plot on 6855 MHz



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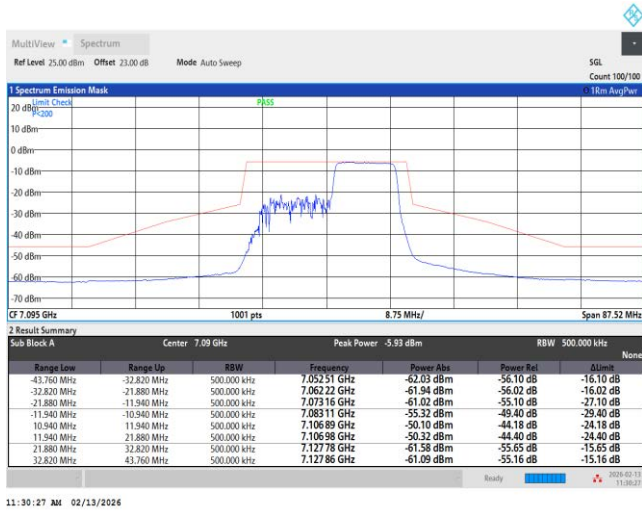
Plot on 6875 MHz



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Plot on 7095 MHz

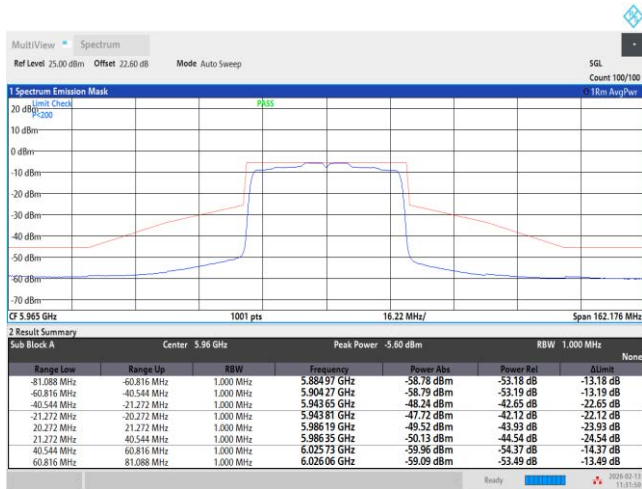




EUT Mode

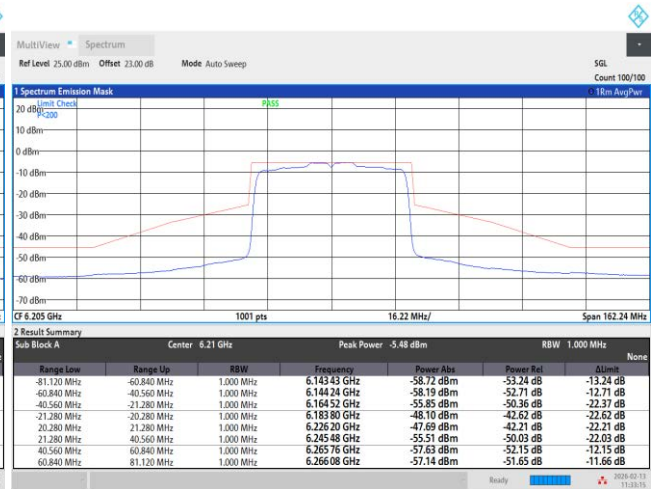
802.11ax HE40 FullIRU

Plot on 5965 MHz



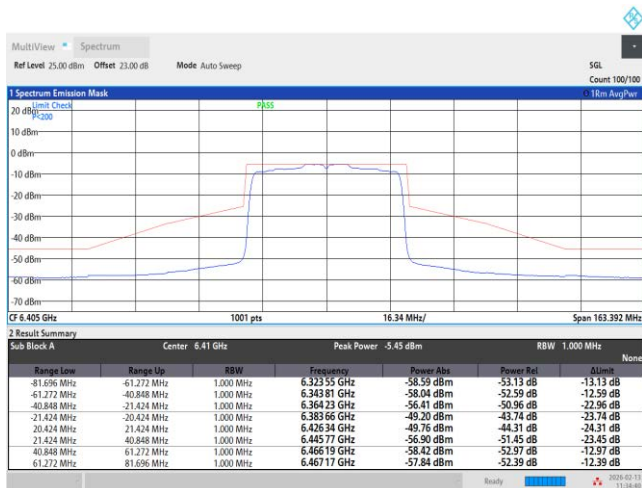
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Plot on 6205 MHz



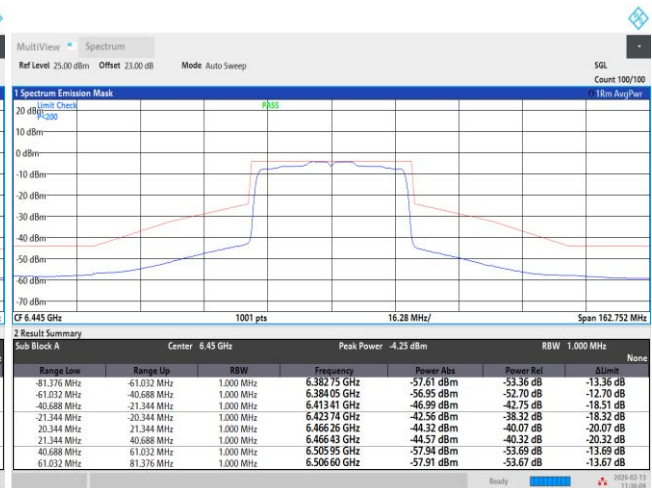
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Plot on 6405 MHz



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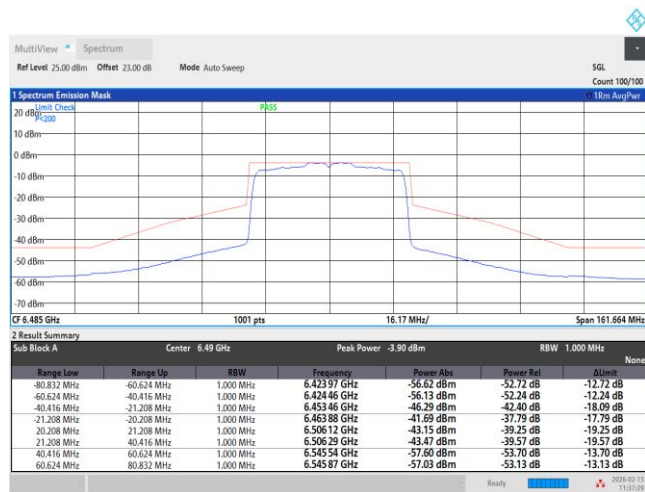
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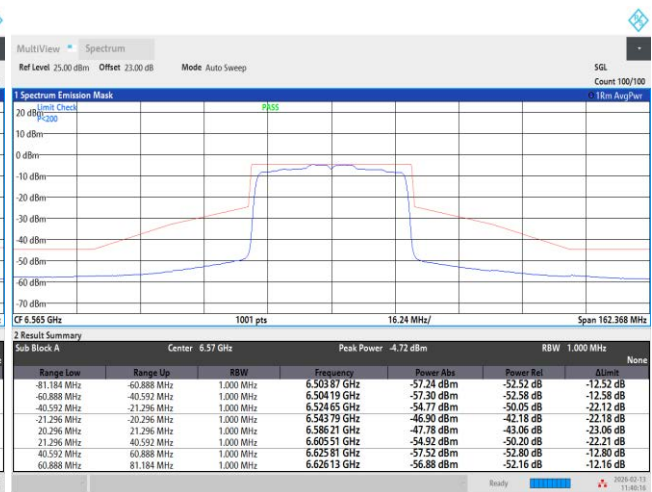
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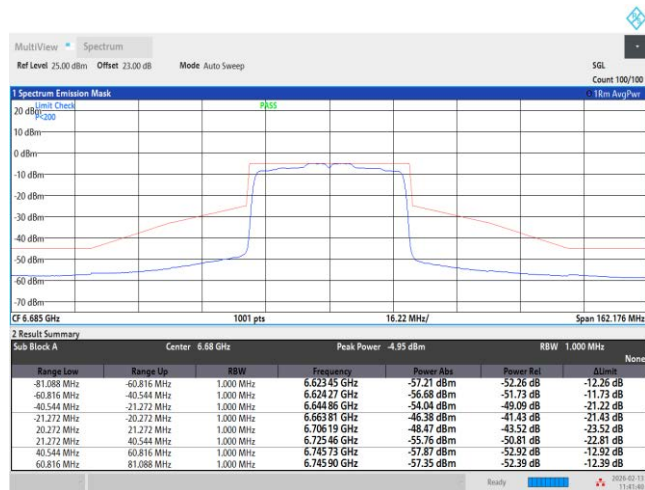
Plot on 6485 MHz



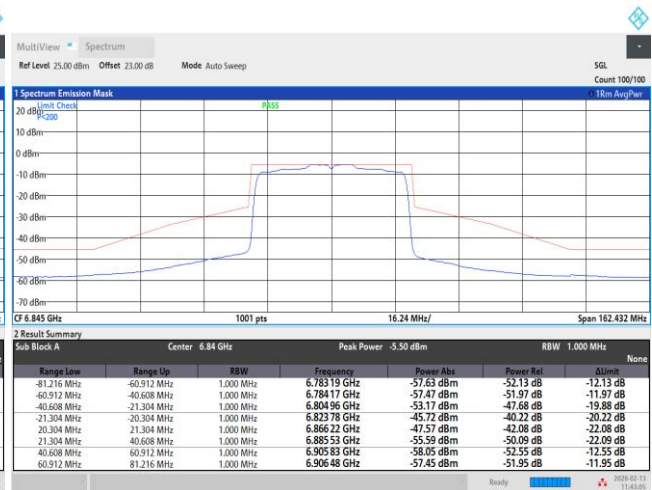
Plot on 6565 MHz



Plot on 6685 MHz

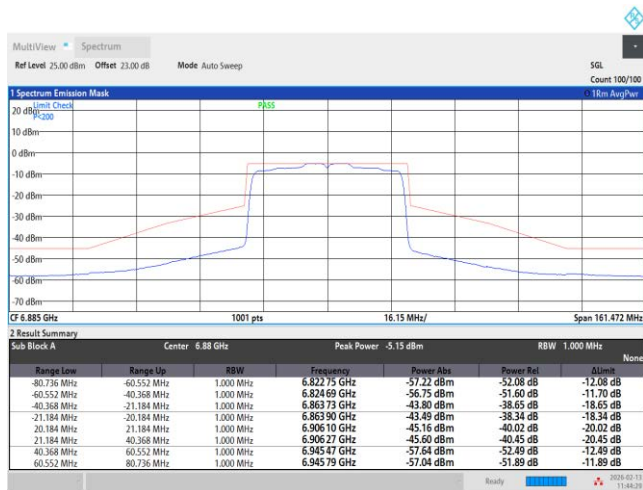


Plot on 6845 MHz

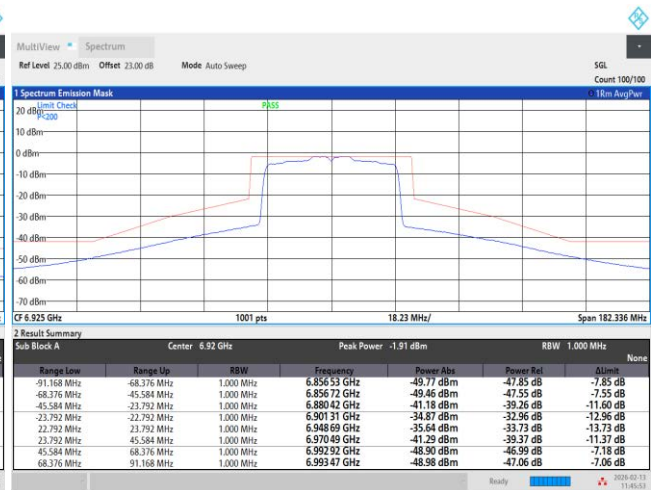




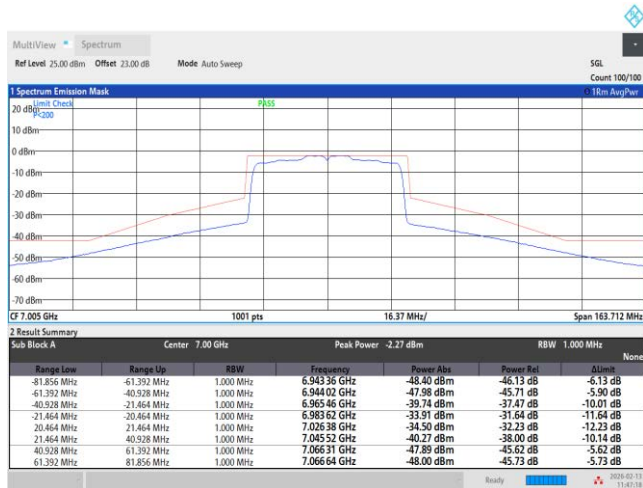
Plot on 6885 MHz



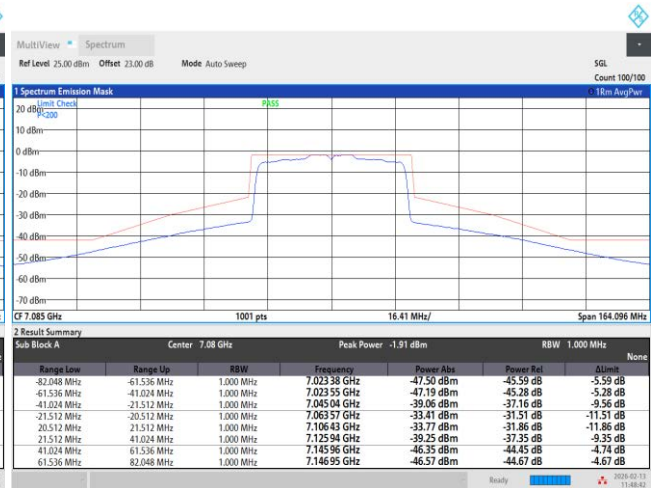
Plot on 6925 MHz



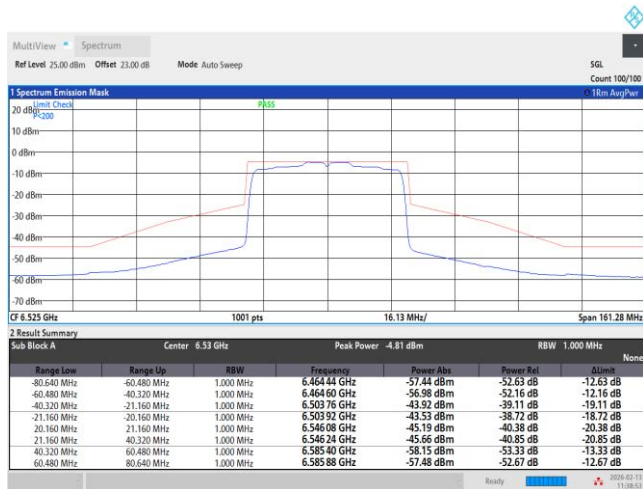
Plot on 7005 MHz



Plot on 7085 MHz



Plot on 6525 MHz

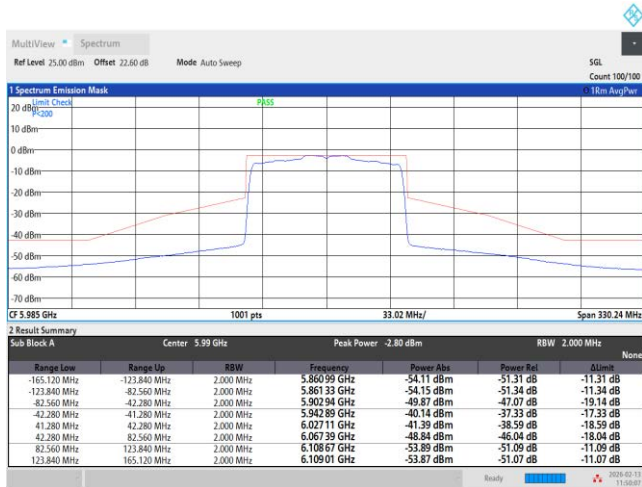




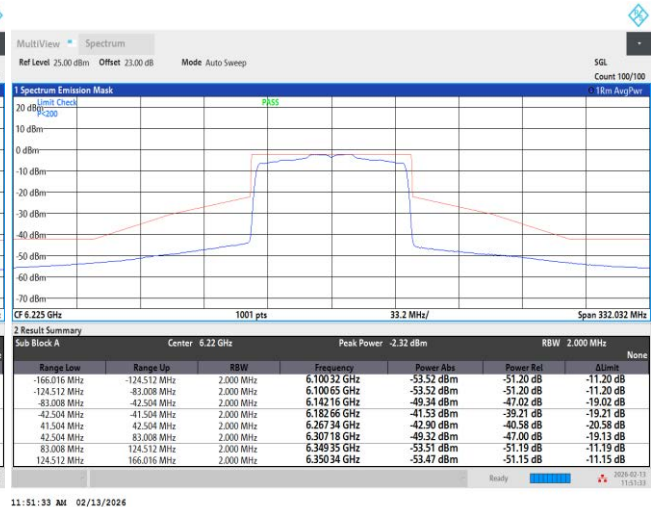
EUT Mode

802.11ax HE80 FullIRU

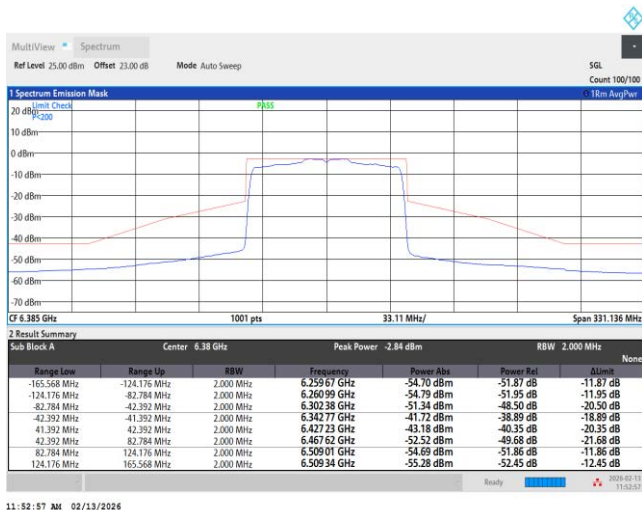
Plot on 5985 MHz



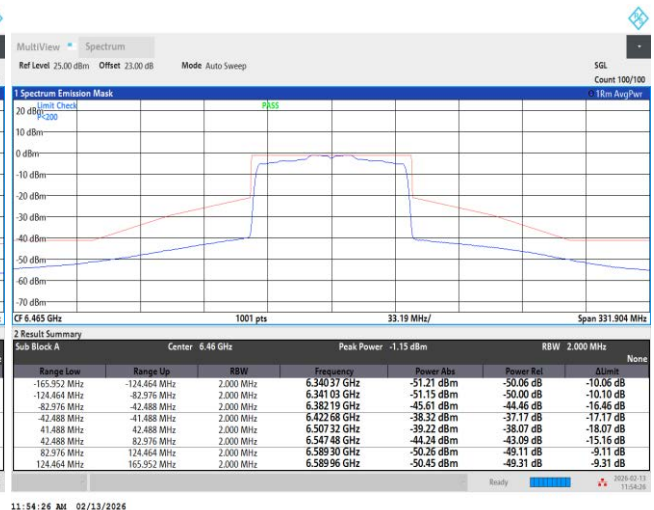
Plot on 6225 MHz



Plot on 6385 MHz

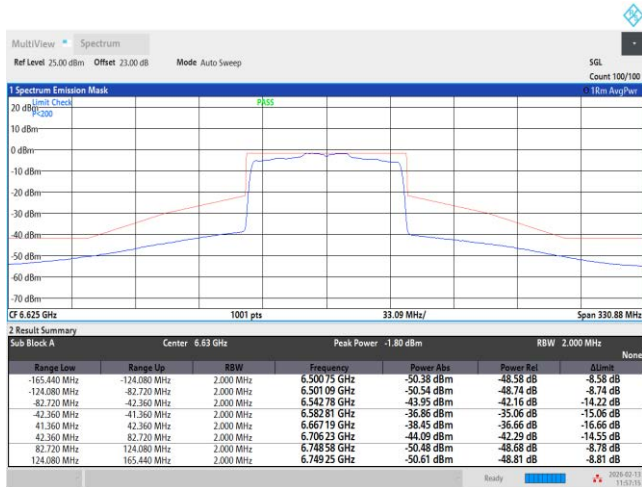


Plot on 6465 MHz



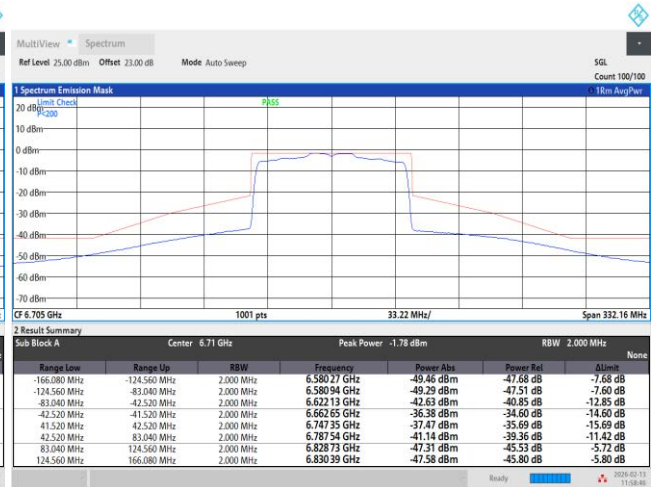


Plot on 6625 MHz



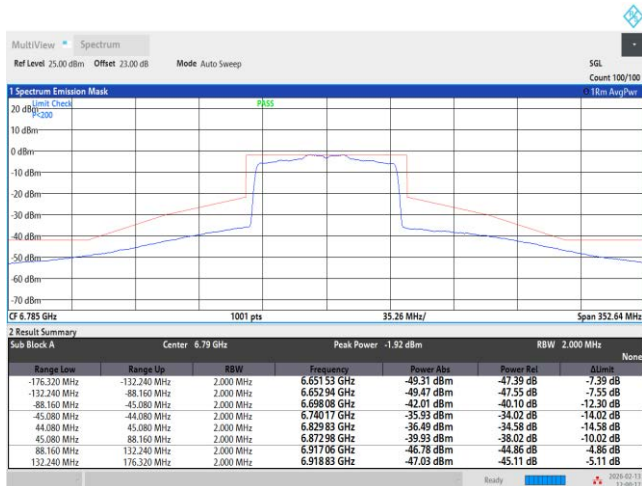
11:57:16 AM 02/13/2026

Plot on 6705 MHz



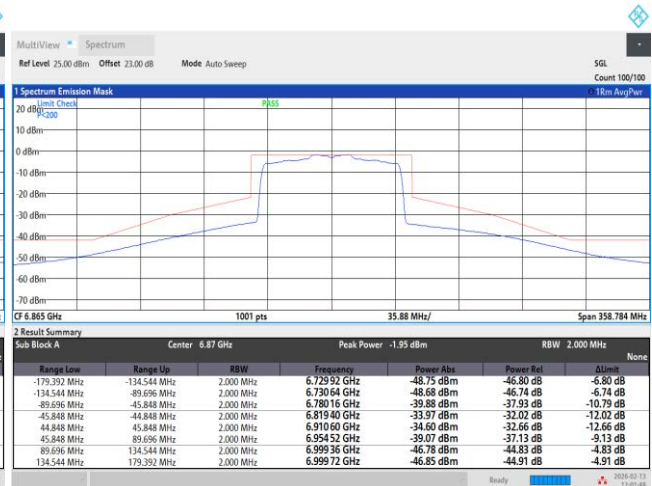
11:58:47 AM 02/13/2026

Plot on 6785 MHz



12:00:17 PM 02/13/2026

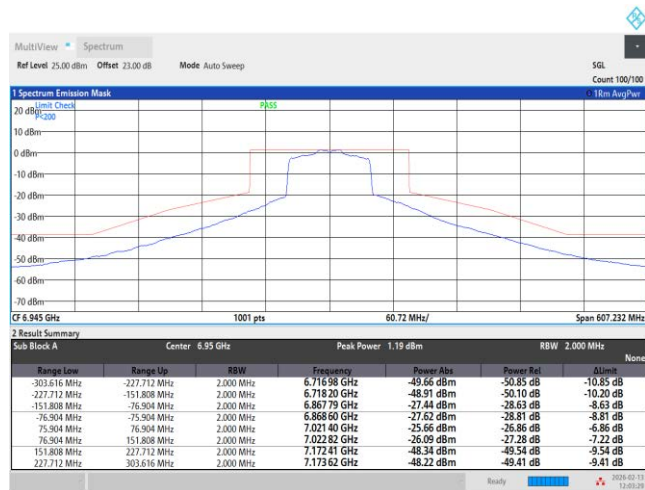
Plot on 6865 MHz



12:01:48 PM 02/13/2026

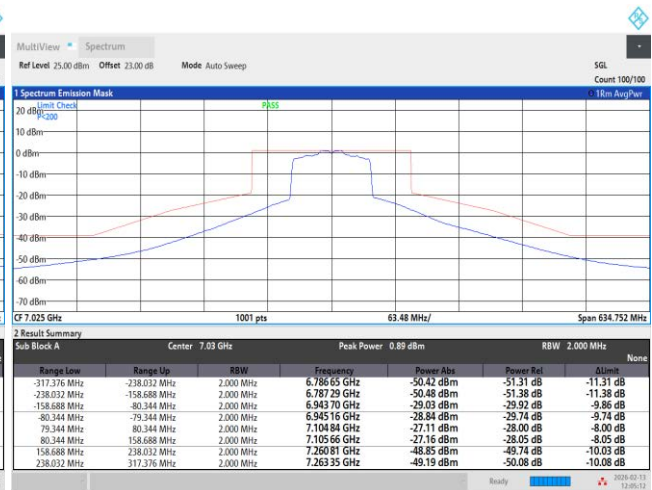


Plot on 6945 MHz



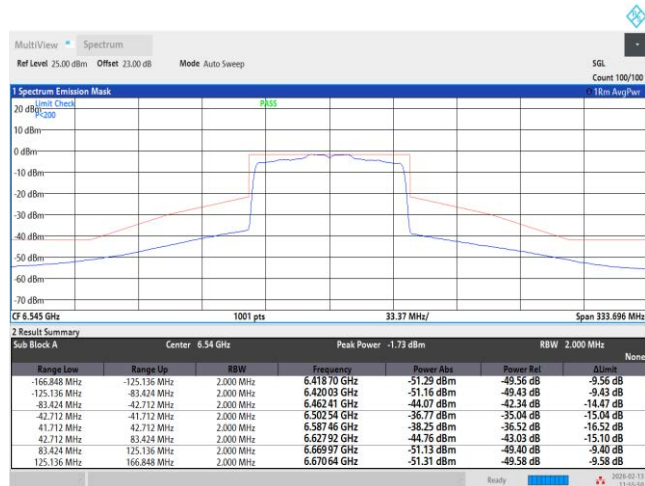
12:03:29 PM 02/13/2026

Plot on 7025 MHz



12:05:12 PM 02/13/2026

Plot on 6545 MHz



11:55:50 AM 02/13/2026

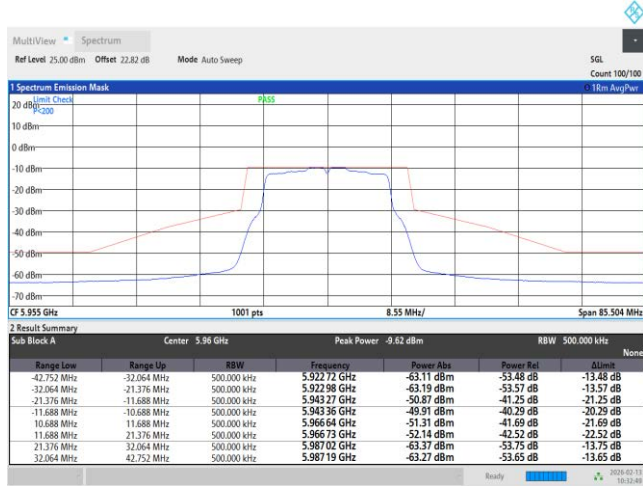


MIMO <Ant. 4+3 (3)>

EUT Mode

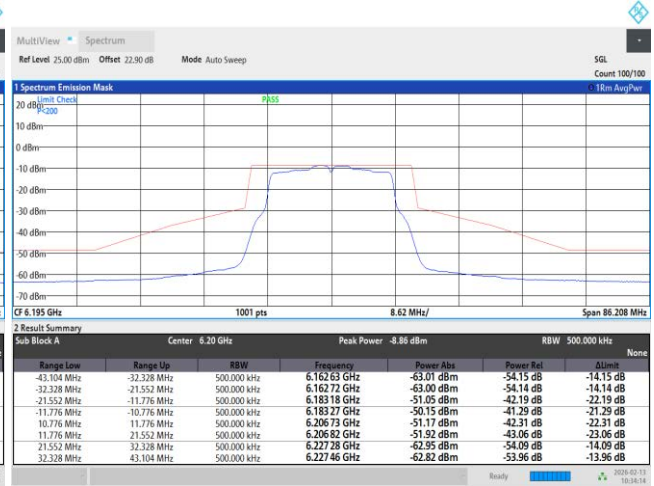
802.11a

Plot on 5955 MHz



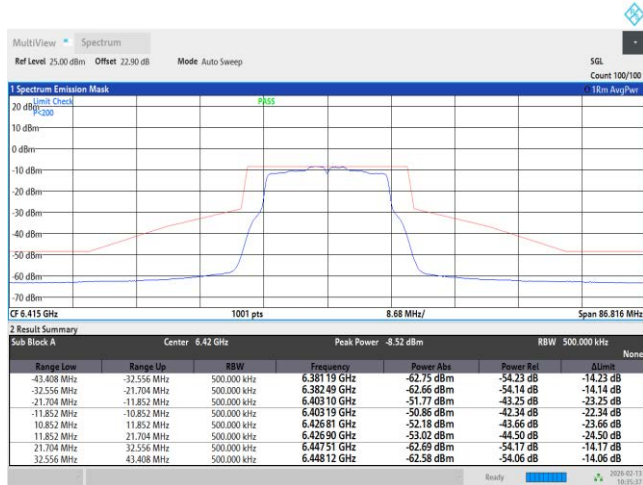
10:30:50 AM 02/13/2026

Plot on 6195 MHz



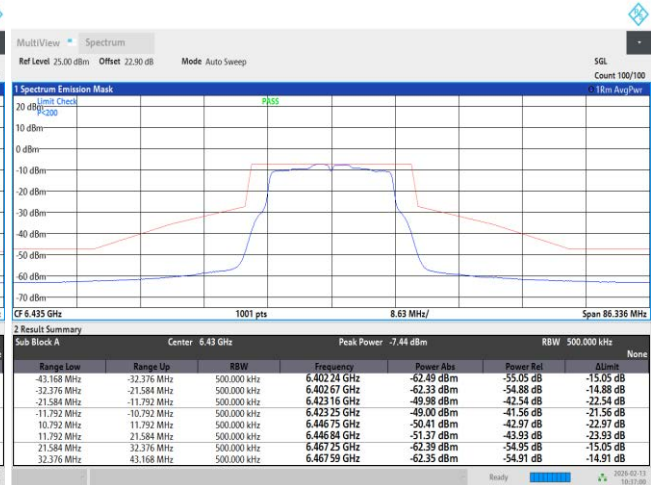
10:34:14 AM 02/13/2026

Plot on 6415 MHz



10:35:37 AM 02/13/2026

Plot on 6435 MHz



10:37:01 AM 02/13/2026