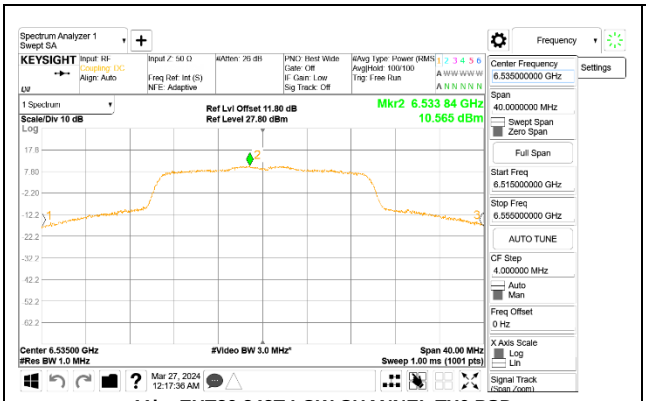
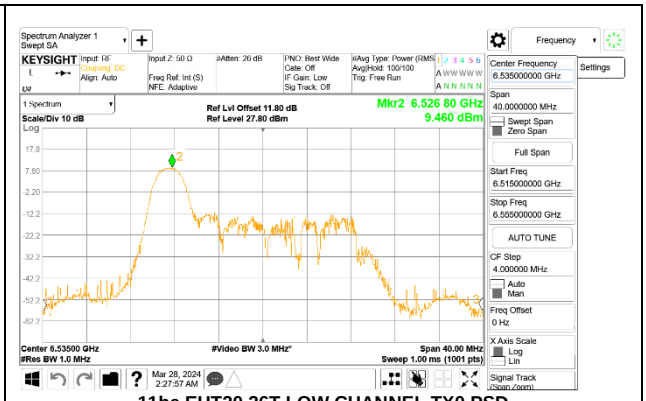


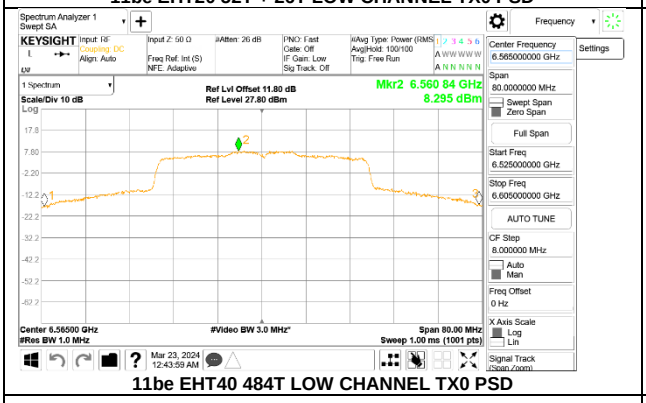
11be EHT20 242T LOW CHANNEL TX0 PSD



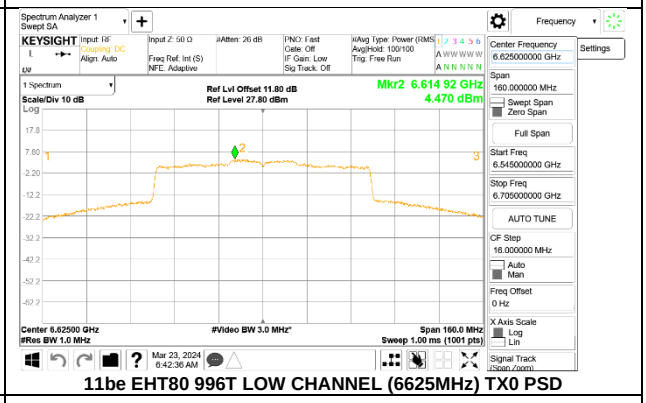
11be EHT20 26T LOW CHANNEL TX0 PSD

11be EHT20 52T + 26T LOW CHANNEL TX0 PSD

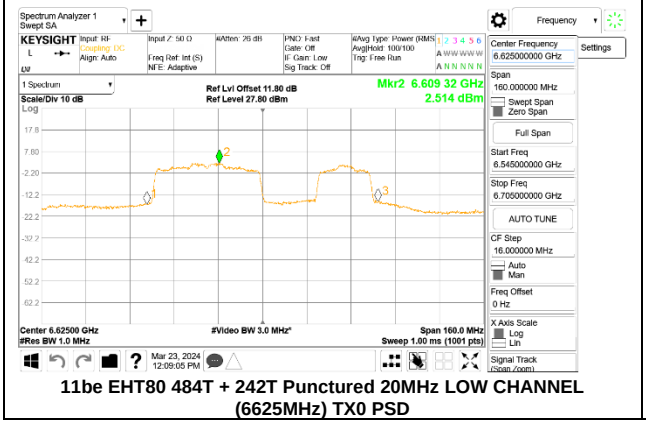
11be EHT20 106T + 26T LOW CHANNEL TX0 PSD



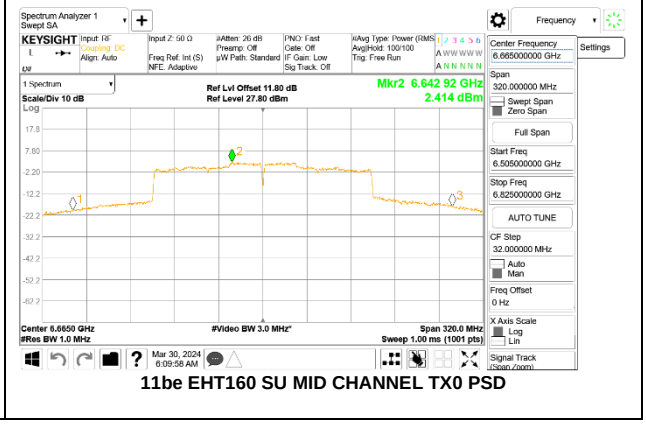
11be EHT40 484T LOW CHANNEL TX0 PSD



11be EHT80 996T LOW CHANNEL (6625MHz) TX0 PSD



11be EHT80 484T + 242T Punctured 20MHz LOW CHANNEL (6625MHz) TX0 PSD



11be EHT160 SU MID CHANNEL TX0 PSD

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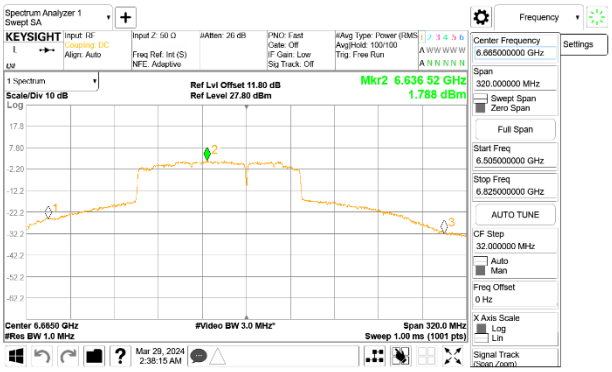
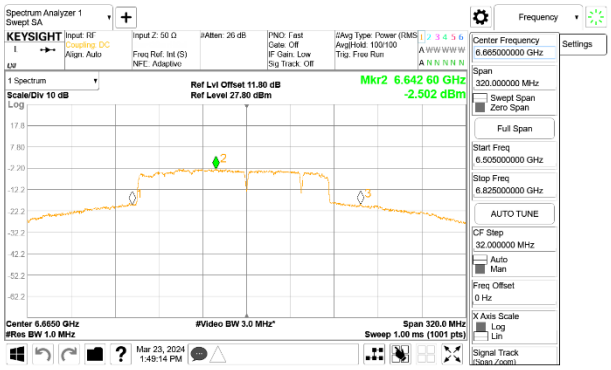


11be EHT160 996T + 484T Punctured 40MHz MID CHANNEL TX0 PSD



11be EHT160 996T + 484T+242T Punctured 20MHz MID CHANNEL TX0 PSD

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9.5. LOW POWER SPURIOUS EMMISSIONS IN-BAND – EMISSION MASK

LIMITS

FCC §15.407
(b)(7) 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.- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

TEST PROCEDURE

987594 D02 U-NII 6 GHz EMC Measurement Section II (J).

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. 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 ≥ 3 X RBW
    d) Number of points in sweep ≥ [2 X span / RBW].
    e) Sweep time = auto.
    f) Detector = RMS (i.e., power averaging)
    g) Trace average at least 100 traces in power averaging (rms) mode.

*According to Oct 25 2023 TCB Workshop:
However, as an option, a flat 1 MHz RBW may be used for the measurement of the PSD for placing the channel under the mask so long as 1 MHz is equal or greater than the RBW used for the initial EBW measurement.
→ 20, 40, and 80 MHz channels typically require a RBW of 1 MHz or less.
→ 160 and 320 MHz channels typically require a RBW of greater than 1 MHz.

For this report:
1. 1MHz RBW was used for 20, 40MHz channel
2. 1.6MHz RBW (same RBW as 80MHz EBW measurement) was used for 80MHz channel.
3. 3MHz RBW (same RBW as 160MHz EBW measurement) was used for 160MHz channel.

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RESULTS

Report shown Full tones and 26Tones plots as worse case.

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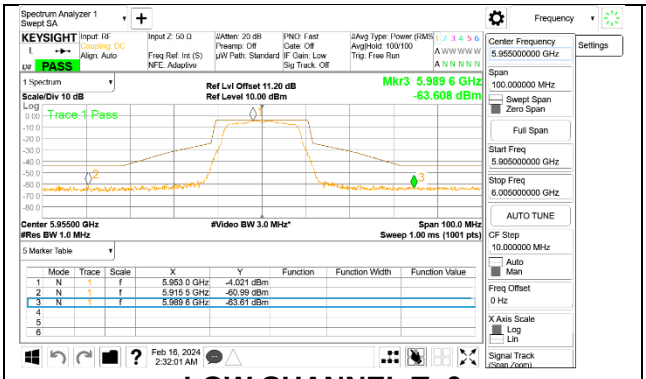
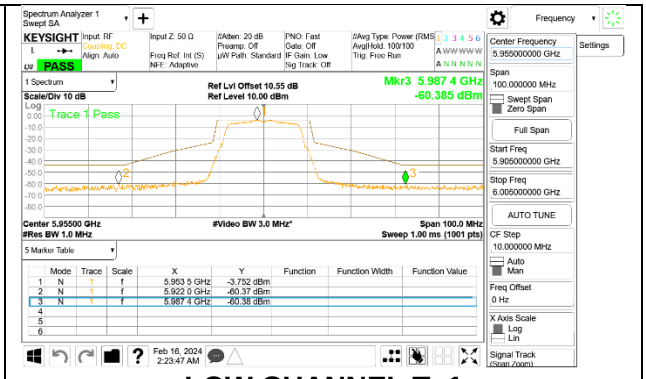
9.5.1. 802.11a MODE 2TX IN THE UNII-5

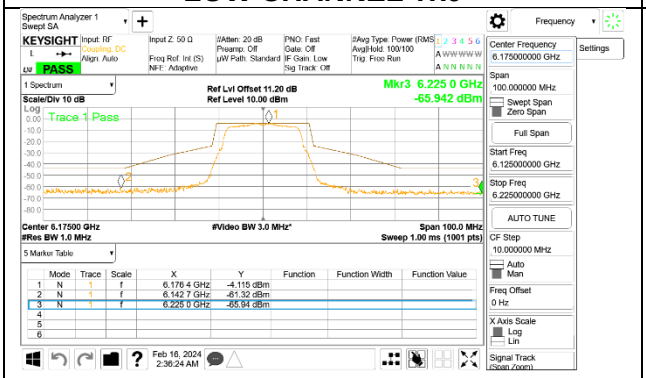
2TX Tx0 + Tx1 CDD



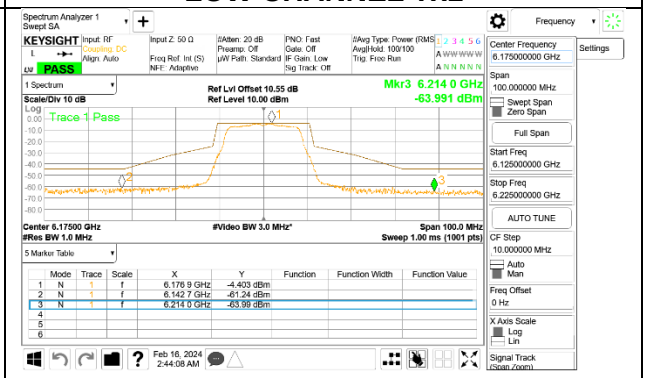
LOW CHANNEL Tx0



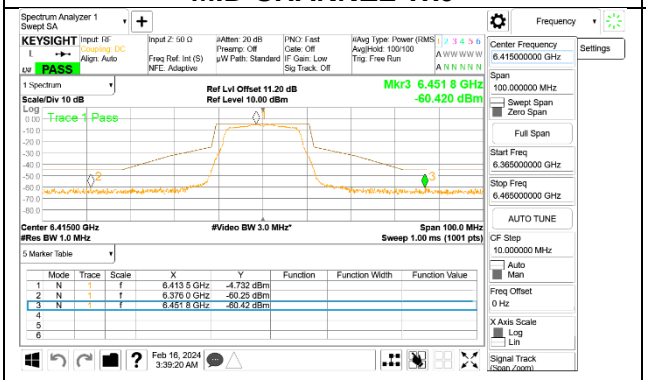
LOW CHANNEL Tx1



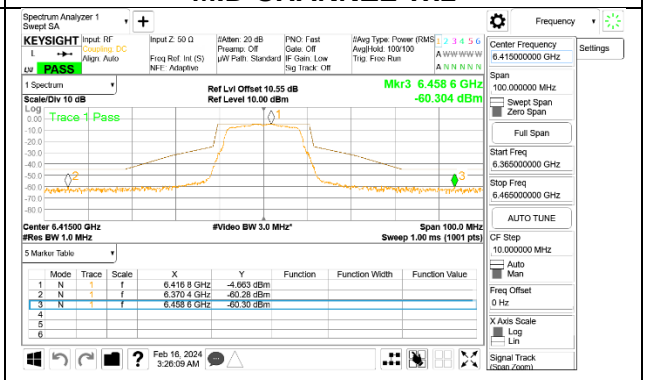
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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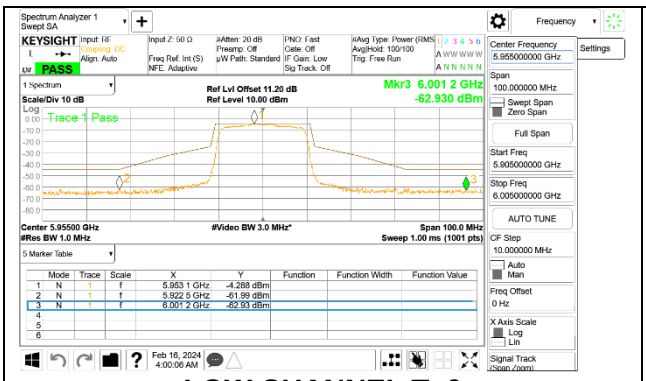
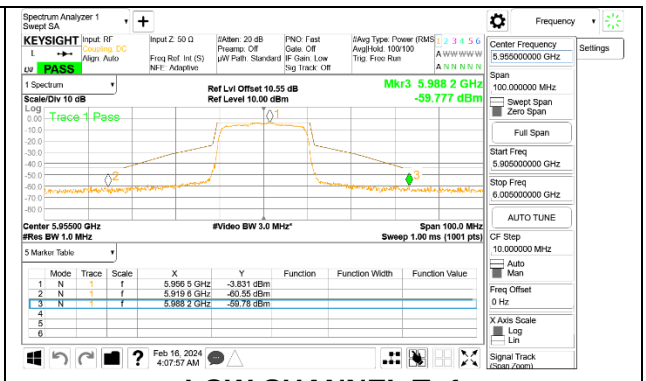
9.5.2. 802.11be EHT20 MODE 2TX IN THE UNII-5

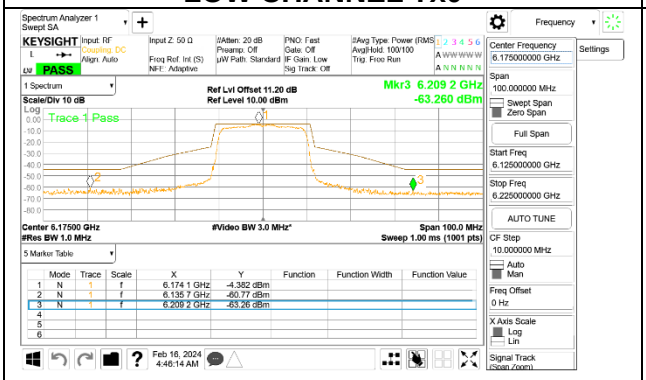
2TX Tx0 + Tx1 OFDMA MODE: 242T, RU Index 61



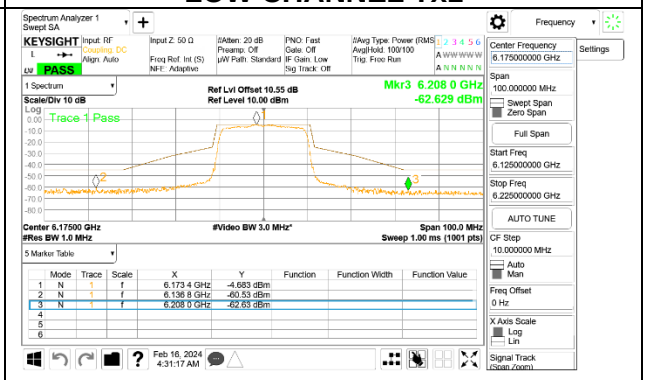
LOW CHANNEL Tx0



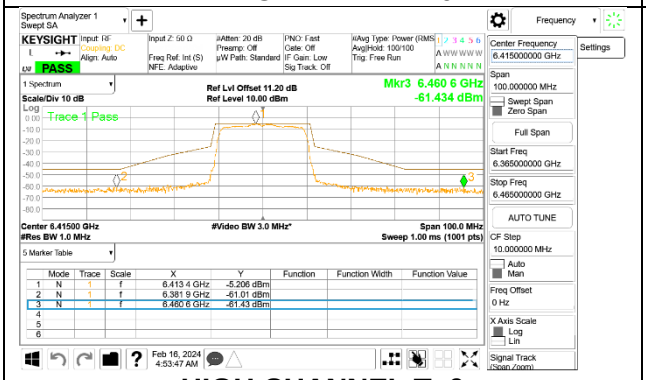
LOW CHANNEL Tx1



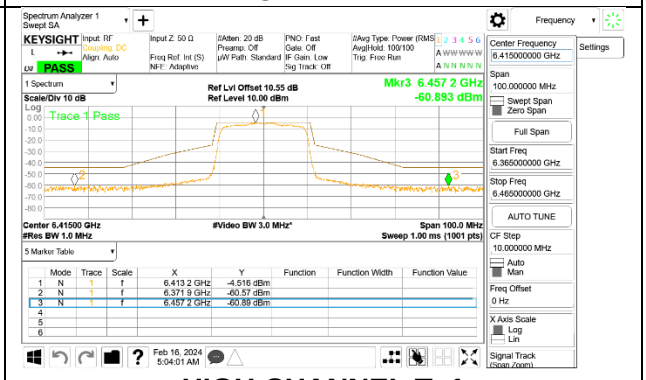
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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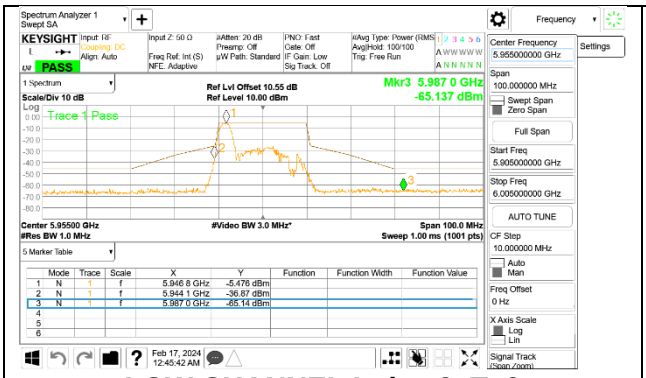
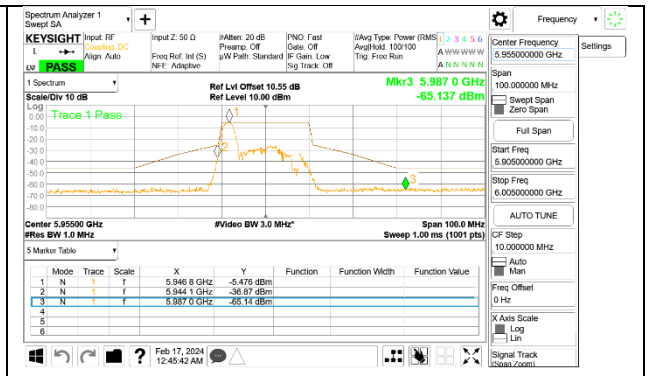
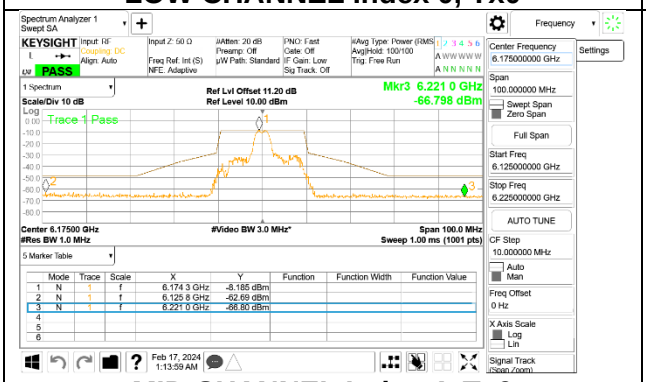
2TX Tx0 + Tx1 OFDMA MODE: 26T



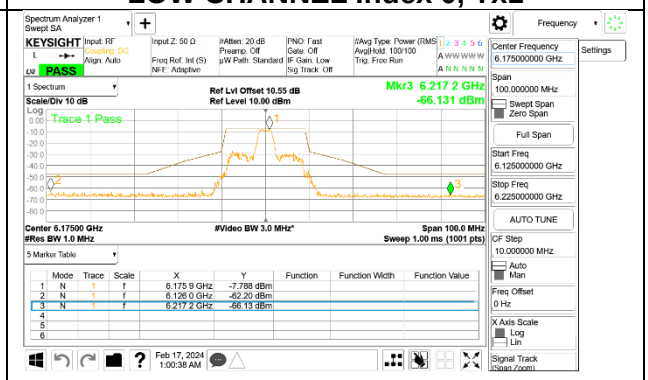
LOW CHANNEL Index 0, Tx0



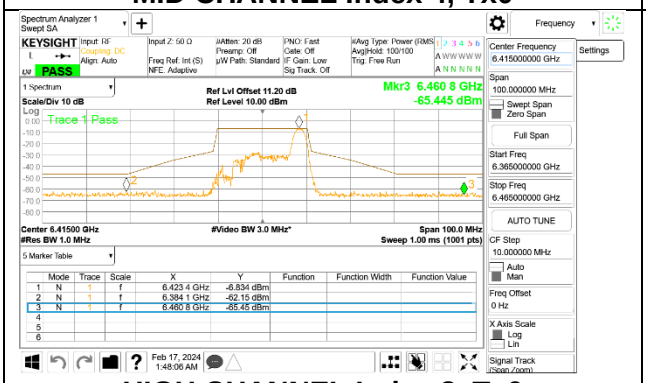
LOW CHANNEL Index 0, Tx1



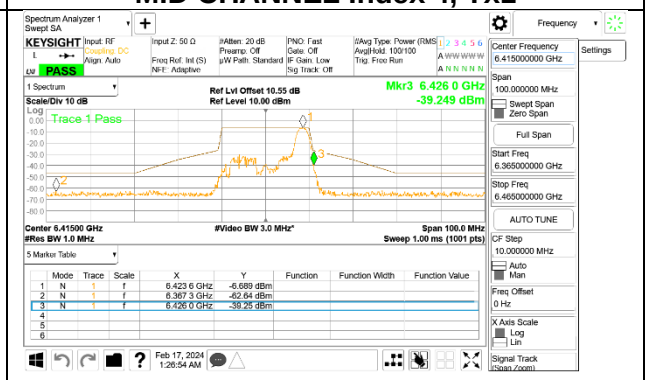
MID CHANNEL Index 4, Tx0



MID CHANNEL Index 4, Tx1



HIGH CHANNEL Index 8, Tx0



HIGH CHANNEL Index 8, Tx1

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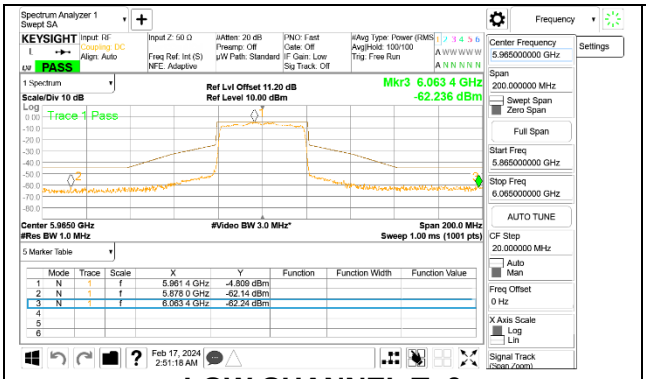
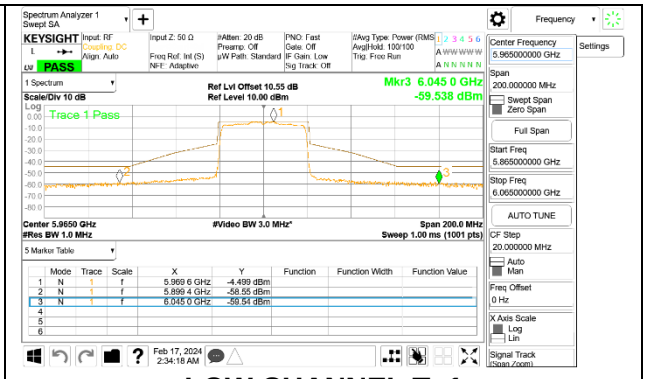
9.5.3. 802.11be EHT40 MODE 2TX IN THE UNII-5

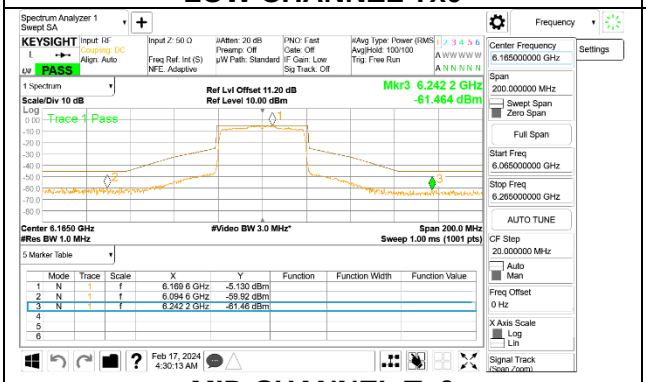
2TX Tx0 + Tx1 OFDMA MODE: 484T, RU Index 65



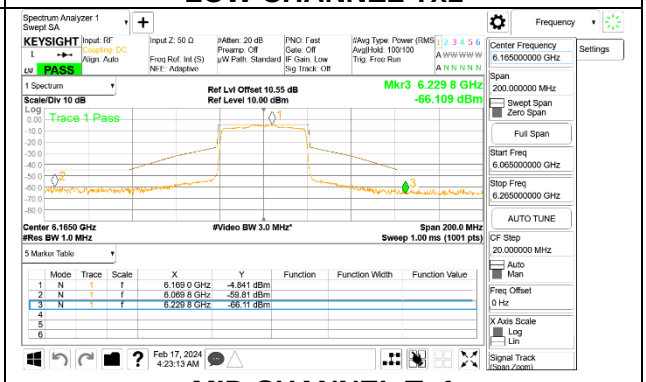
LOW CHANNEL Tx0



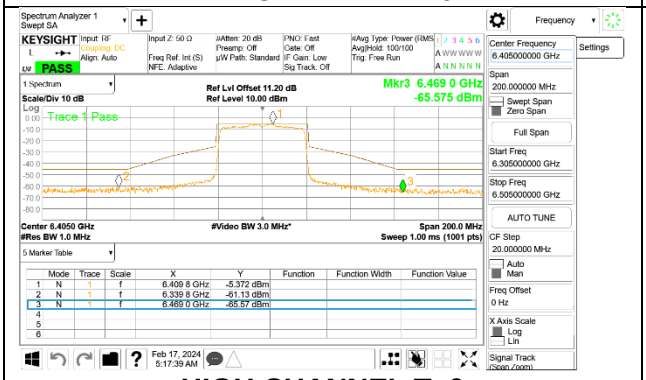
LOW CHANNEL Tx1



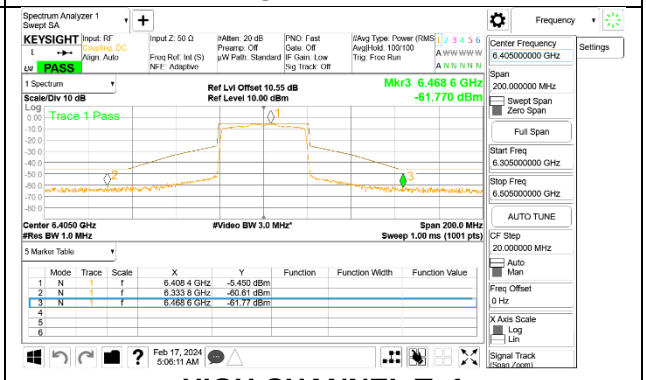
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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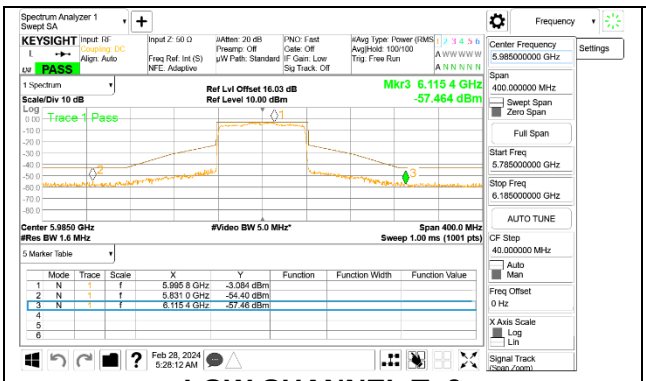
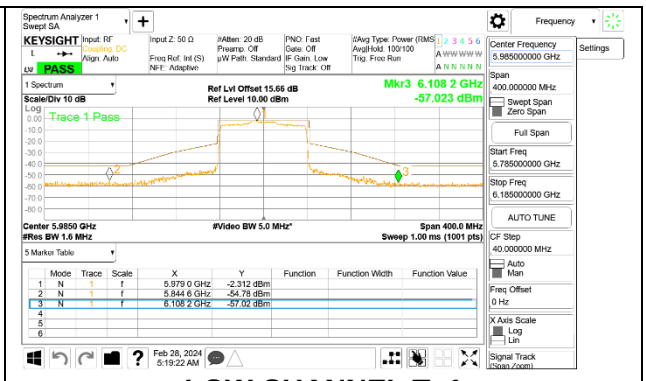
9.5.4. 802.11be EHT80 MODE 2TX IN THE UNII-5

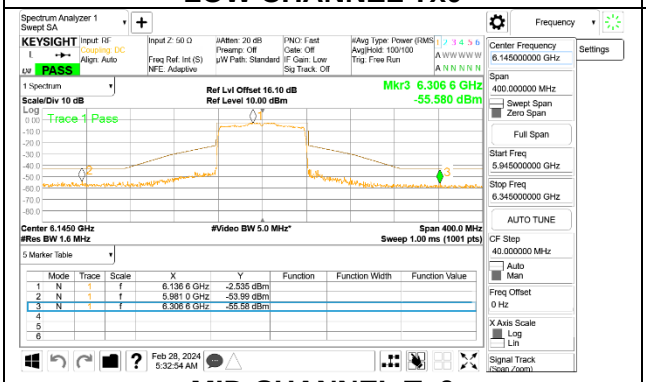
2TX Tx0 + Tx1 OFDMA MODE: 996T, RU Index 67



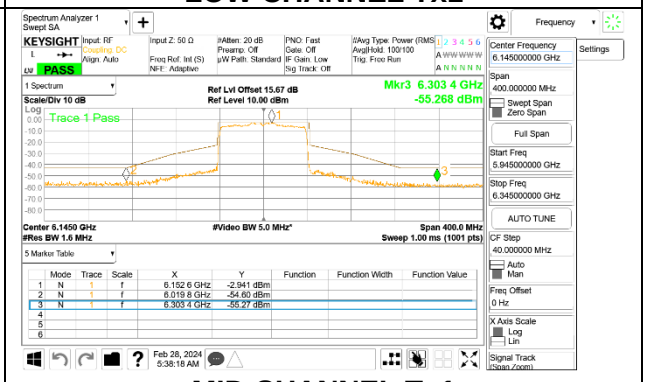
LOW CHANNEL Tx0



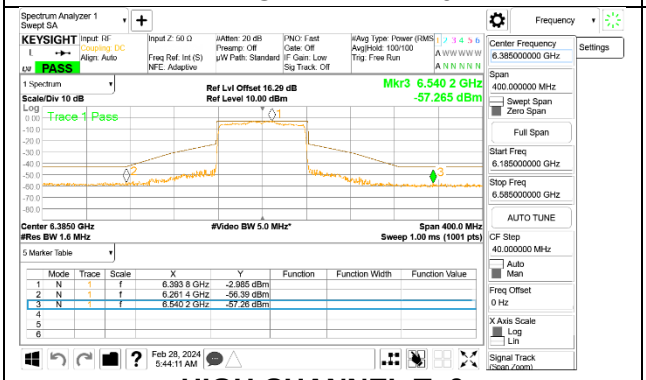
LOW CHANNEL Tx1



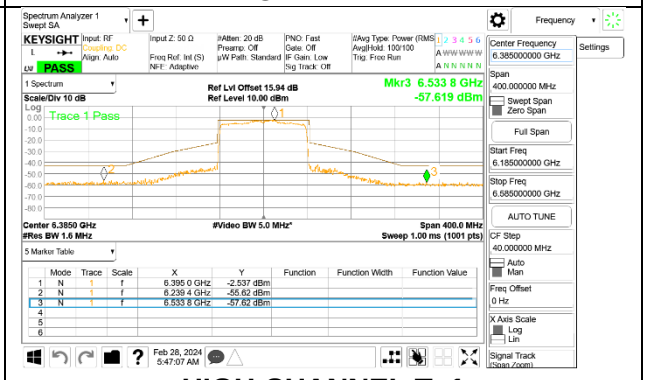
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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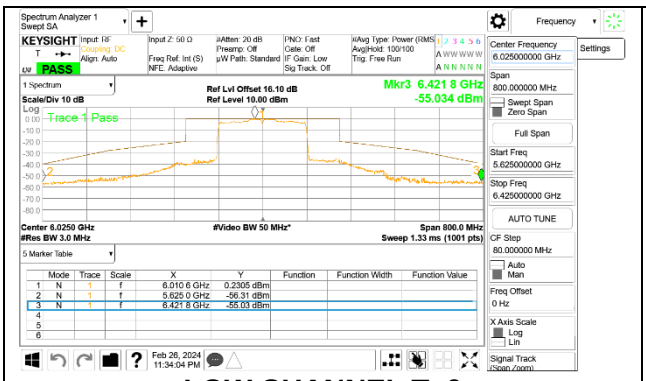
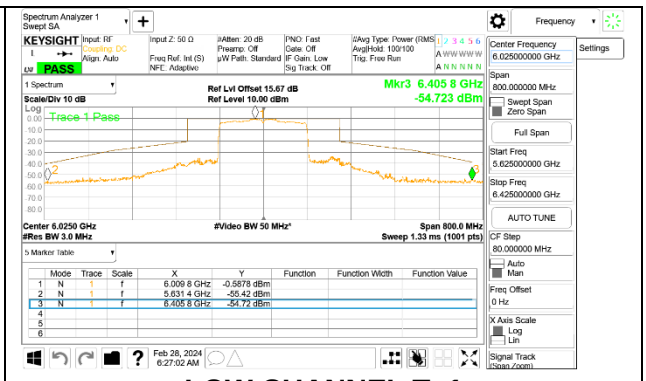
9.5.5. 802.11be EHT160 MODE 2TX IN THE UNII-5

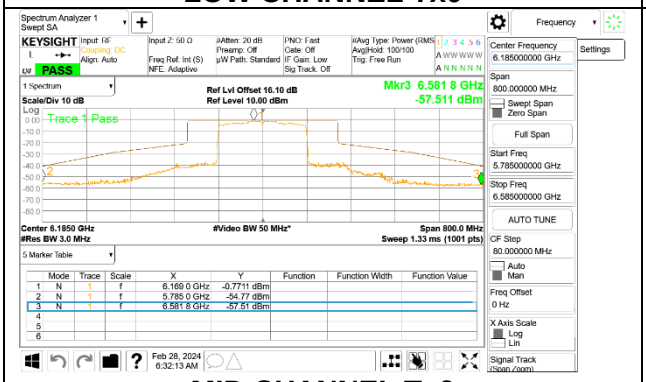
2TX Tx0 + Tx1 OFDMA MODE: SU



LOW CHANNEL Tx0

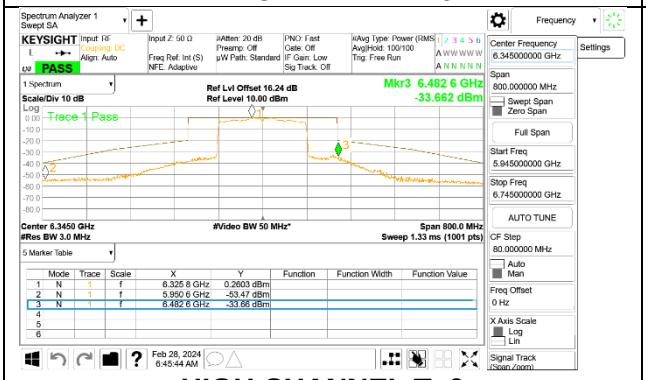


LOW CHANNEL Tx1

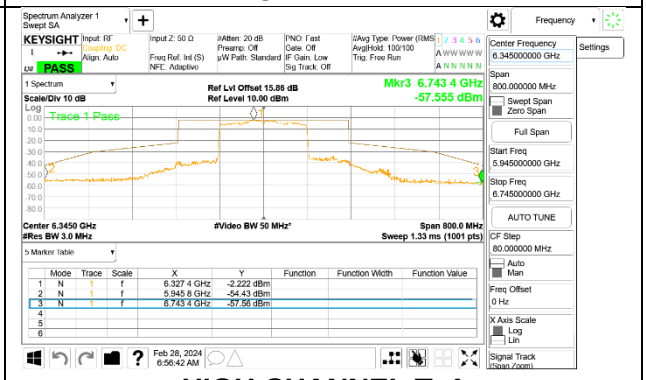


MID CHANNEL Tx0

MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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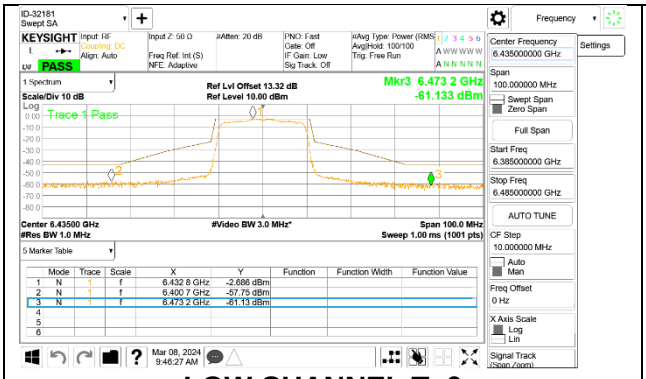
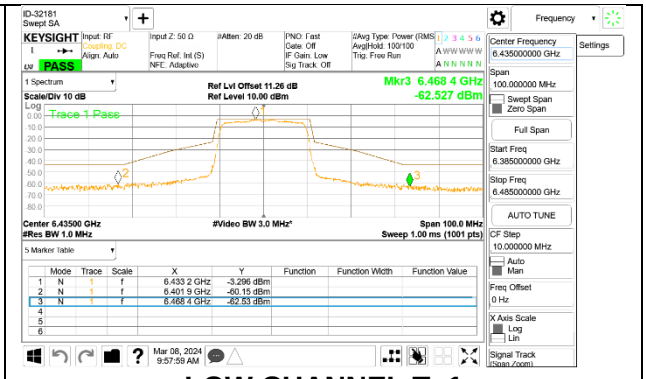
9.5.6. 802.11a MODE 2TX IN THE UNII-6

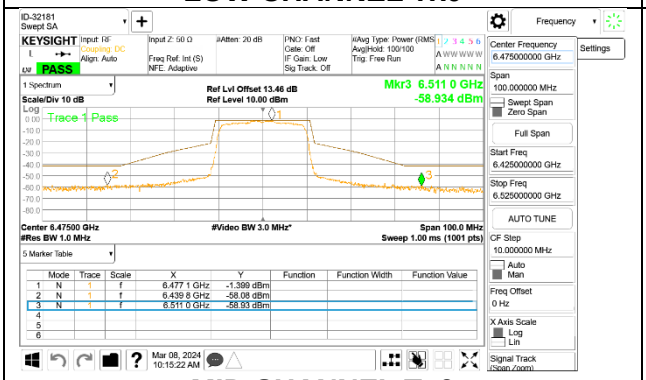
2TX Tx0 + Tx1 CDD



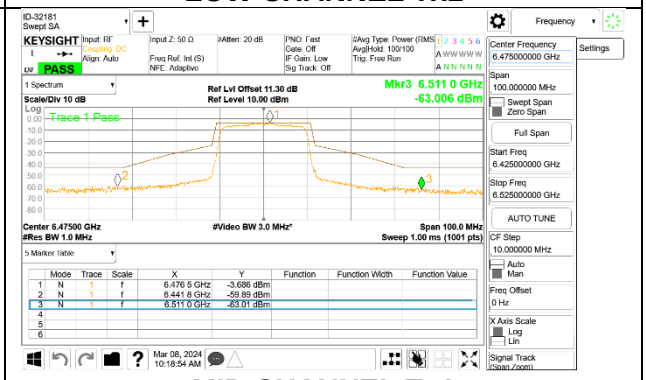
LOW CHANNEL Tx0



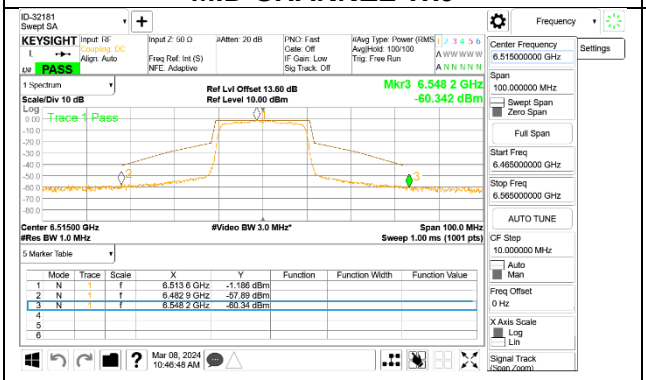
LOW CHANNEL Tx1



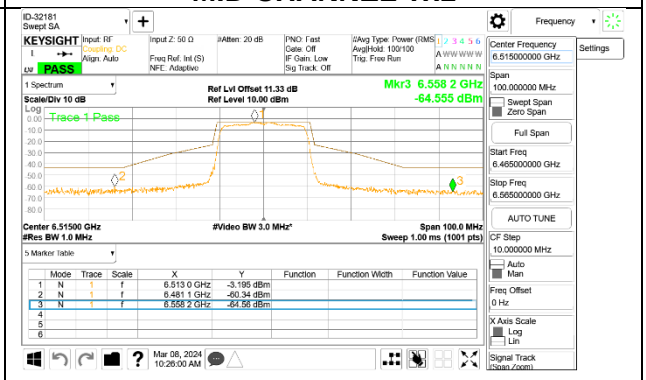
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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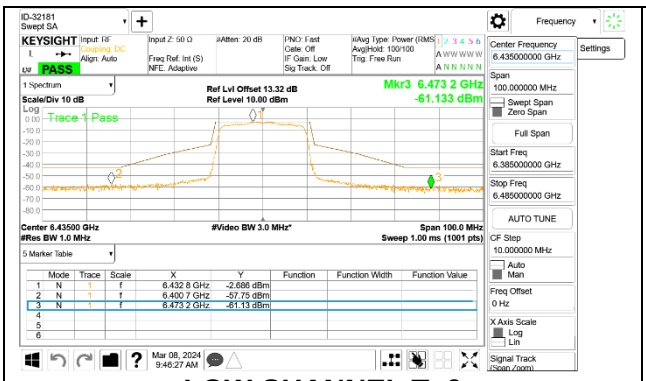
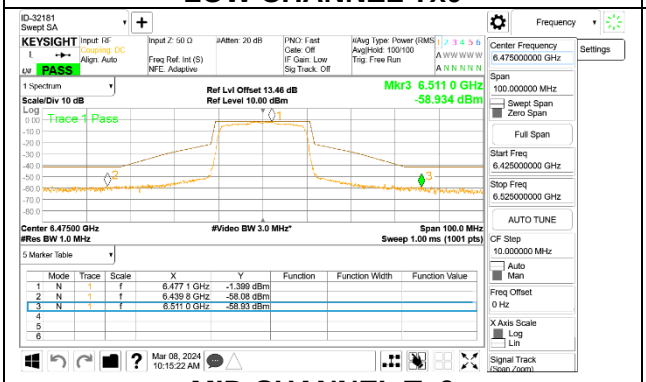
9.5.7. 802.11be EHT20 MODE 2TX IN THE UNII-6

2TX Tx0 + Tx1 OFDMA MODE: 242T, RU Index 61

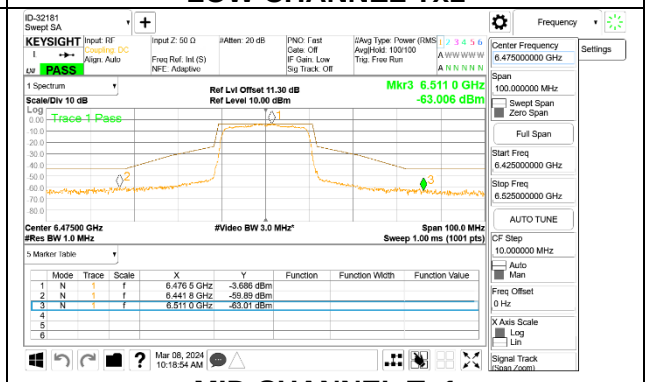


LOW CHANNEL Tx0

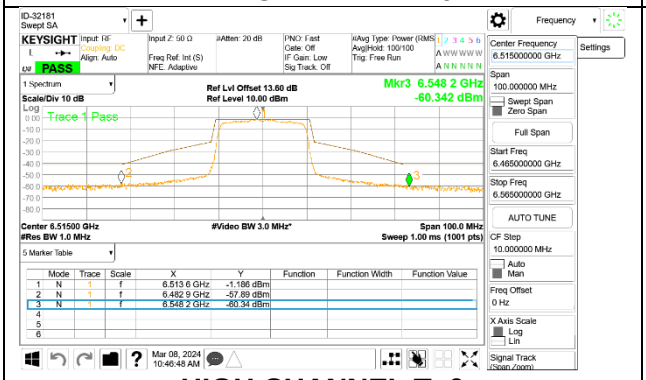
LOW CHANNEL Tx1



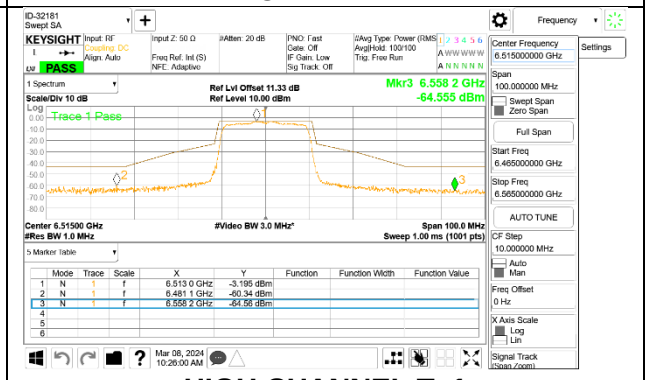
MID CHANNEL Tx0



MID CHANNEL Tx1



HIGH CHANNEL Tx0



HIGH CHANNEL Tx1

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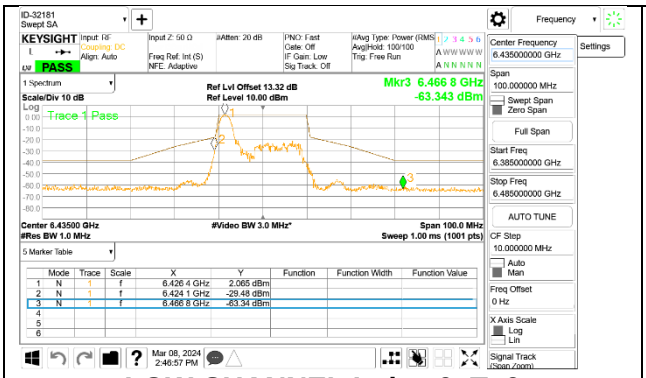
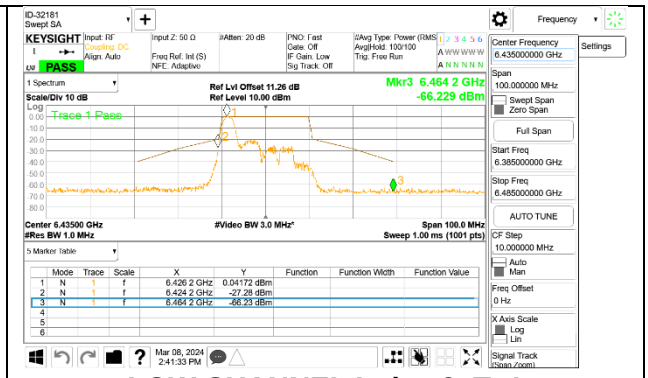
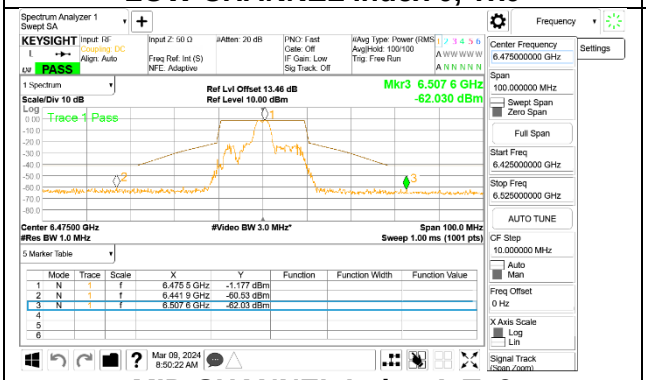
2TX Tx0 + Tx1 OFDMA MODE: 26T



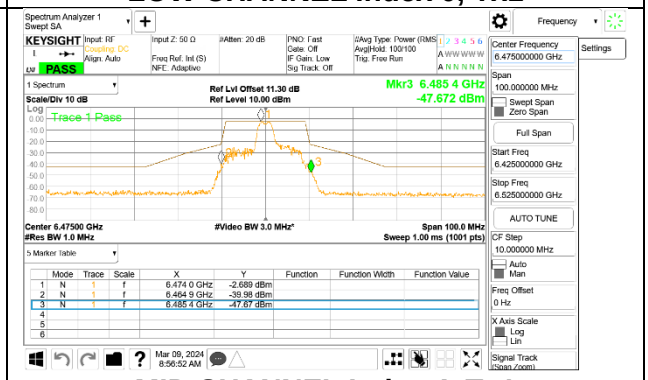
LOW CHANNEL Index 0, Tx0



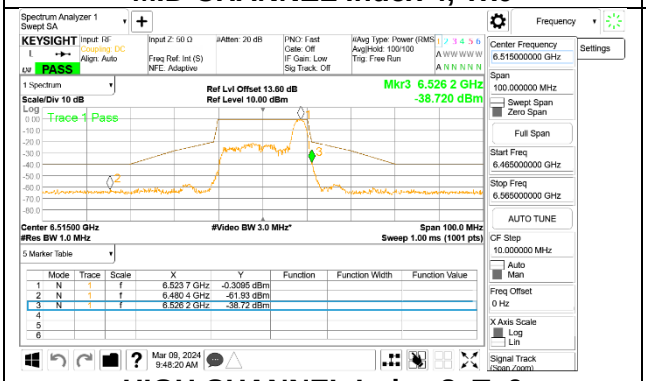
LOW CHANNEL Index 0, Tx1



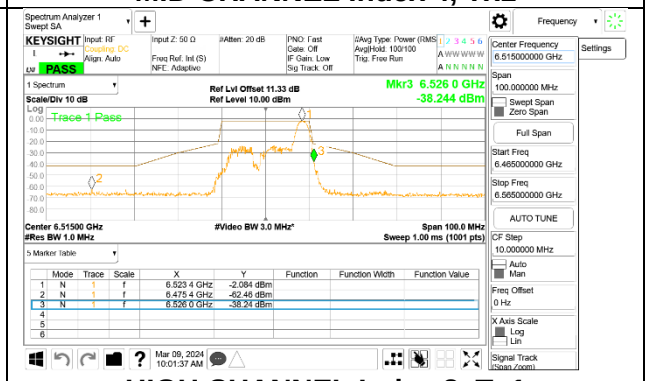
MID CHANNEL Index 4, Tx0



MID CHANNEL Index 4, Tx1



HIGH CHANNEL Index 8, Tx0



HIGH CHANNEL Index 8, Tx1

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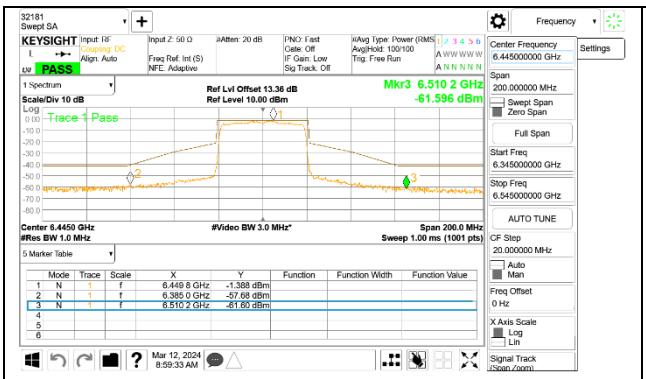
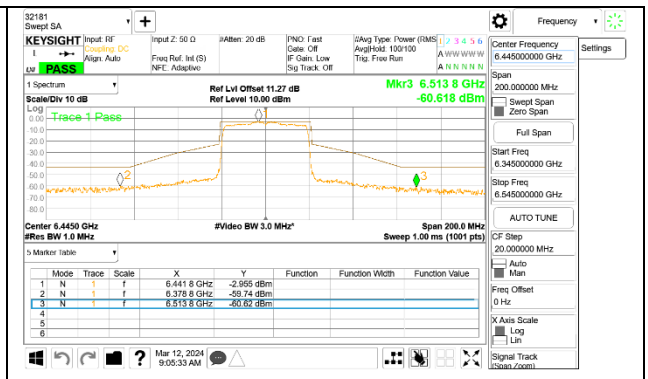
9.5.8. 802.11be EHT40 MODE 2TX IN THE UNII-6

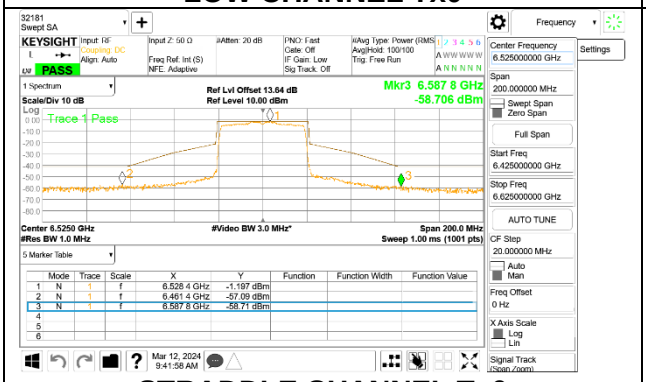
2TX Tx0 + Tx1 OFDMA MODE: 484T, RU Index 65



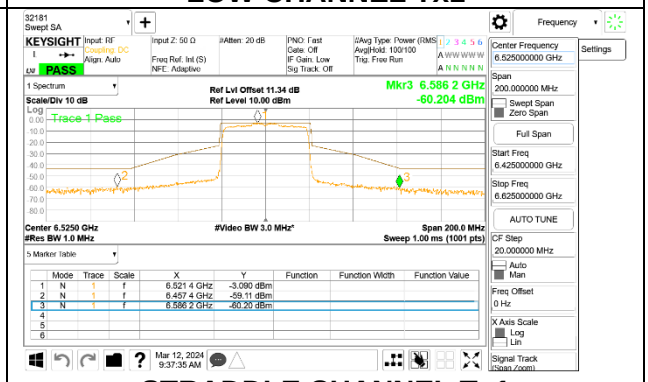
LOW CHANNEL Tx0



LOW CHANNEL Tx1



STRADDLE CHANNEL Tx0



STRADDLE CHANNEL Tx1

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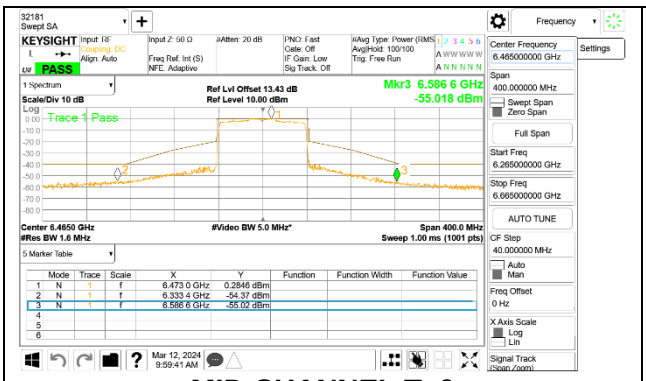
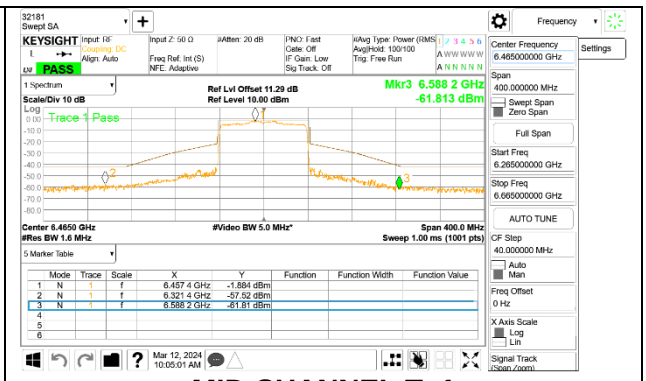
9.5.9. 802.11be EHT80 MODE 2TX IN THE UNII-6

2TX Tx0 + Tx1 OFDMA MODE: 996T, RU Index 67



MID CHANNEL Tx0



MID CHANNEL Tx1

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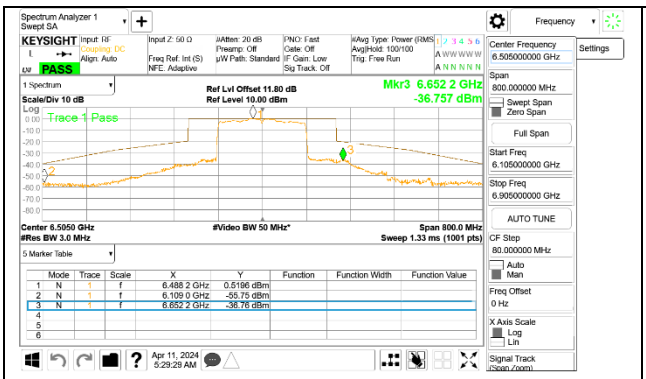
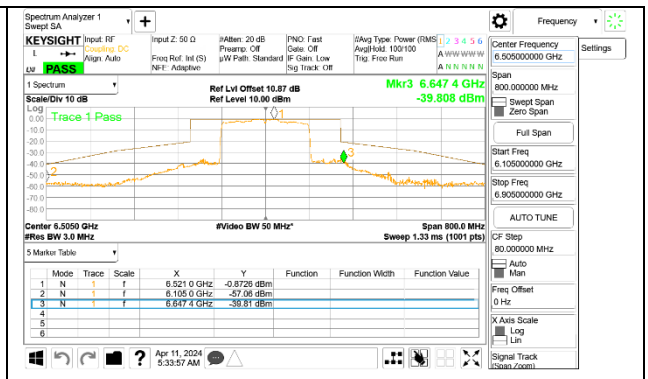
9.5.10. 802.11be EHT160 MODE 2TX IN THE UNII-6

2TX Tx0 + Tx1 OFDMA MODE: SU



STRADDLE CHANNEL Tx0



STRADDLE CHANNEL Tx1

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