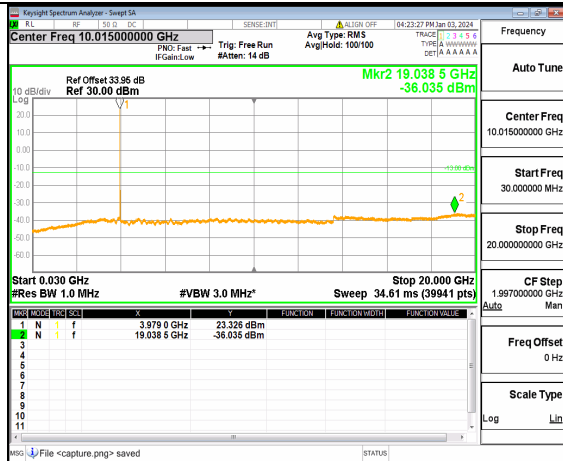
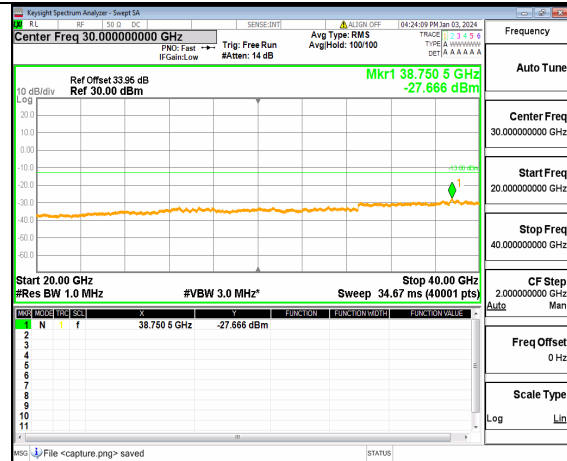
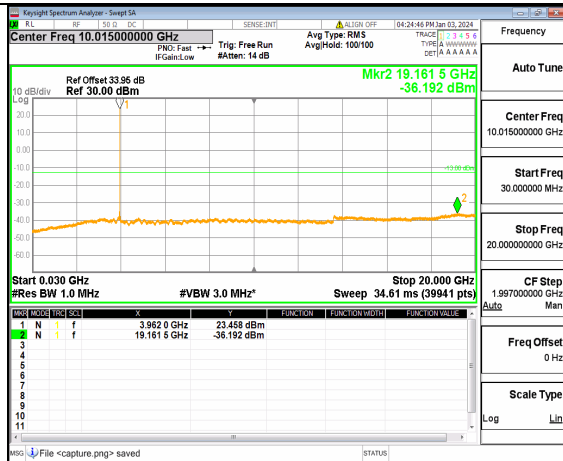




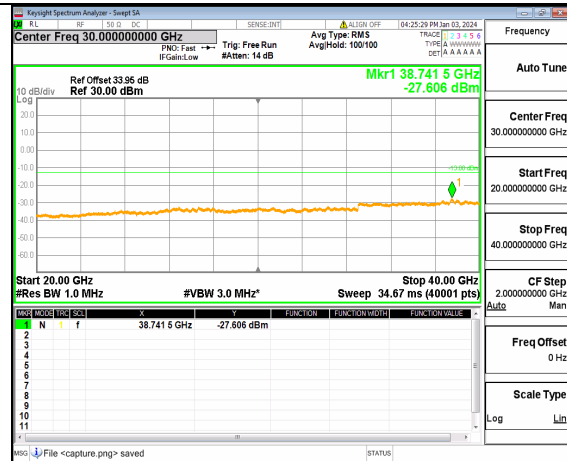
n77(3700-3980MHz) (30MHz-20GHz) 20M
DFT-s-OFDM BPSK Inner_1RB_Right High



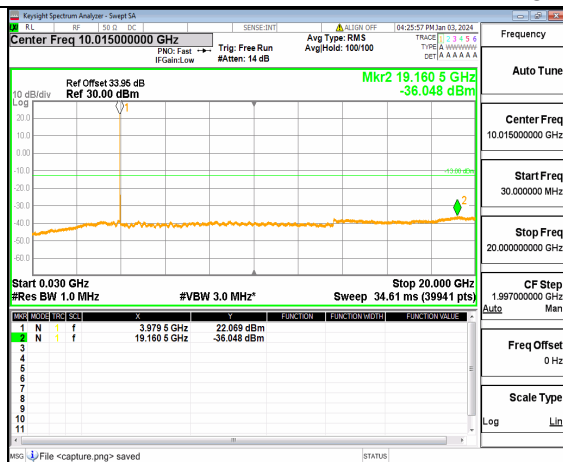
n77(3700-3980MHz) (20GHz-40GHz) 20M
DFT-s-OFDM BPSK Inner_1RB_Right High



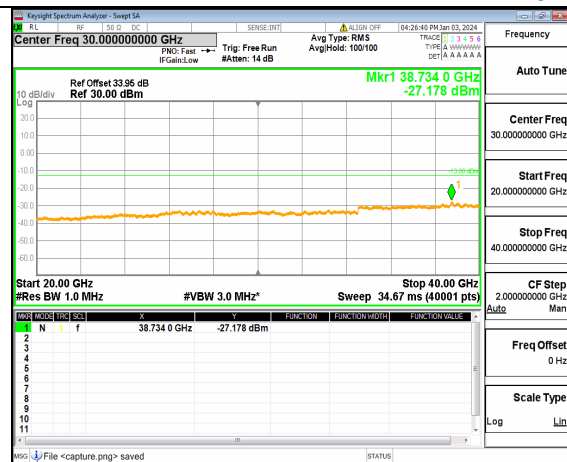
n77(3700-3980MHz) (30MHz-20GHz) 20M
DFT-s-OFDM QPSK Inner_1RB_Left High



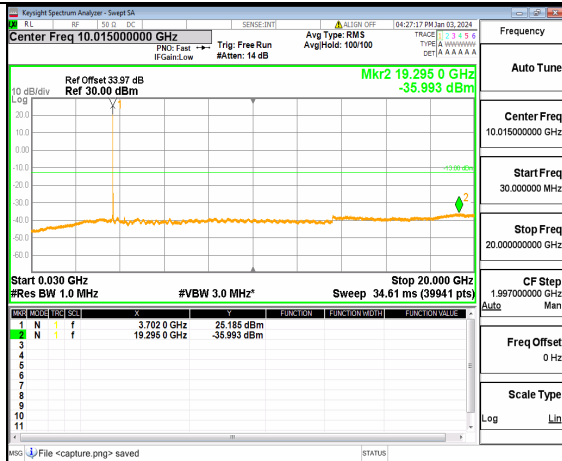
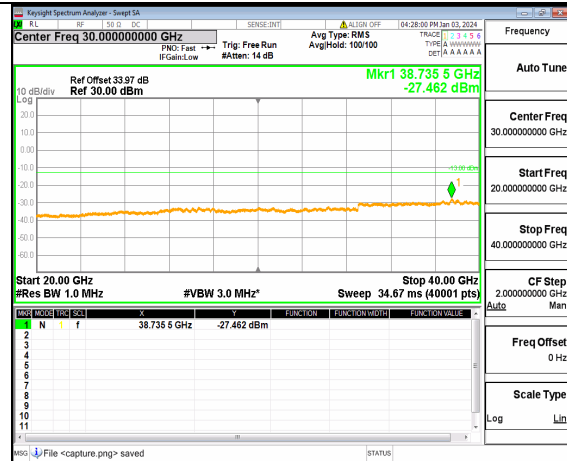
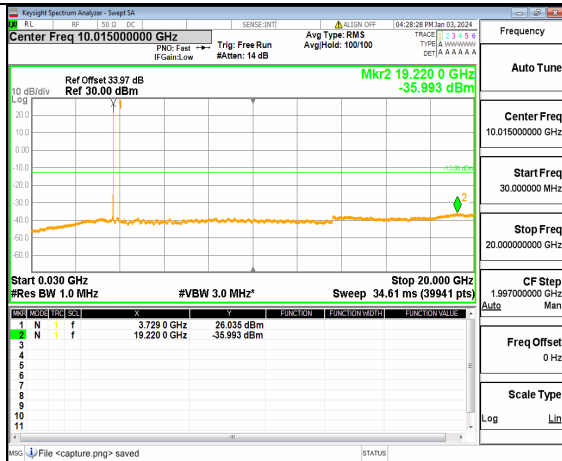
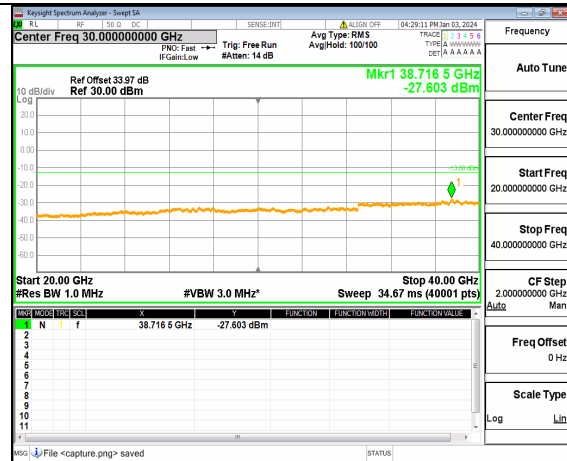
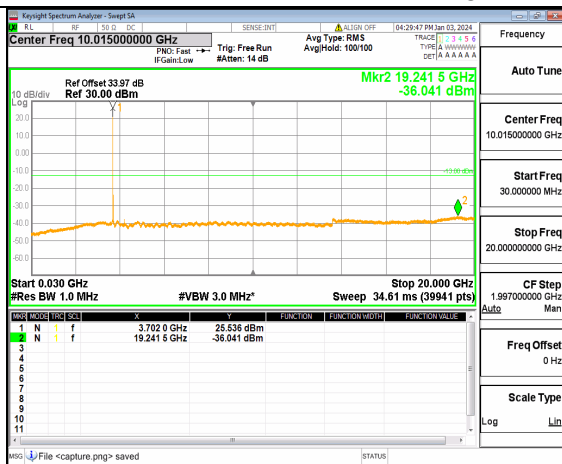
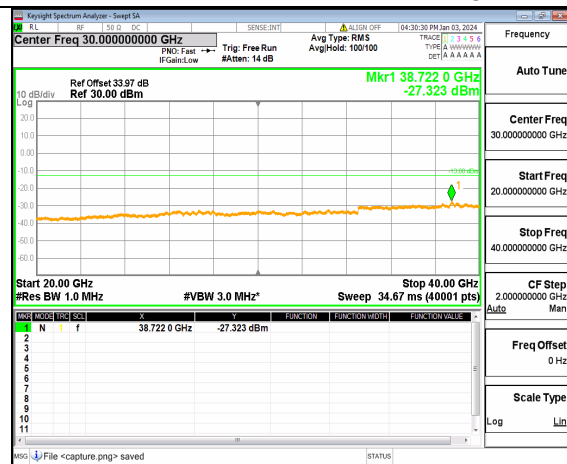
n77(3700-3980MHz) (20GHz-40GHz) 20M
DFT-s-OFDM QPSK Inner_1RB_Left High

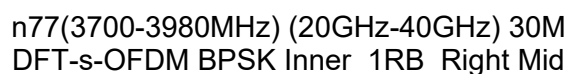
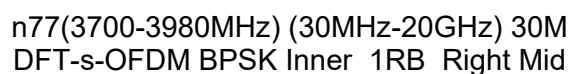
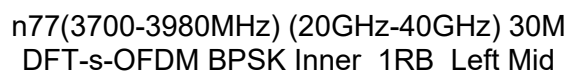
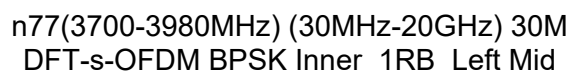
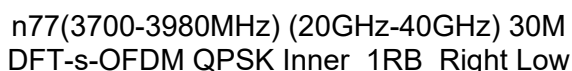
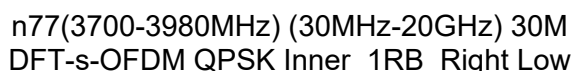


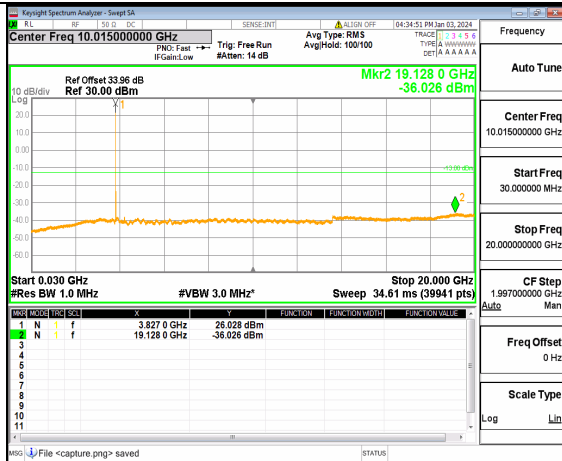
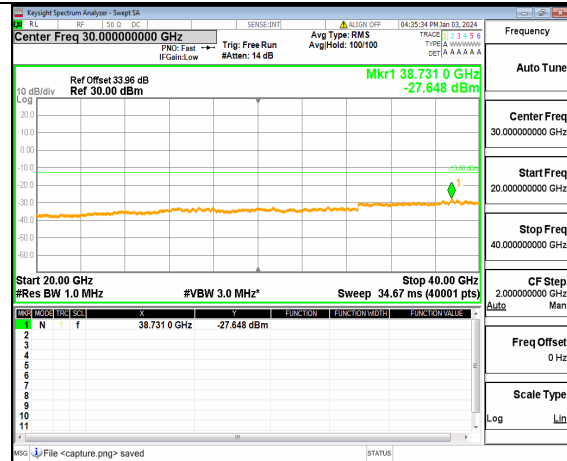
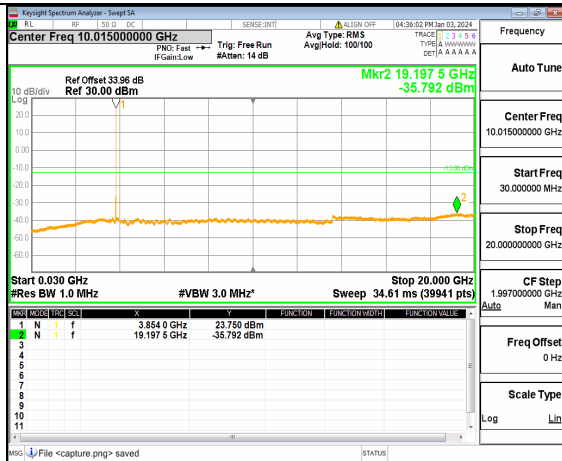
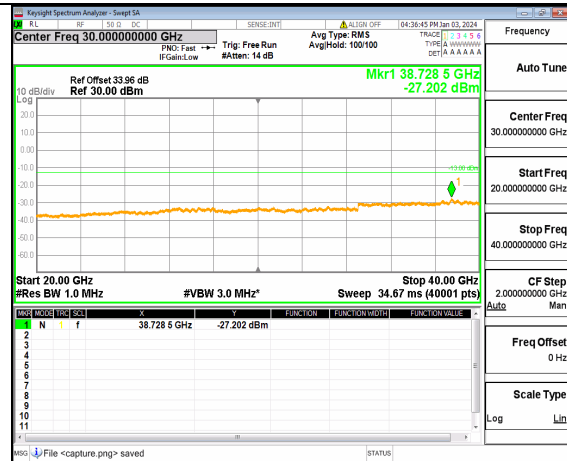
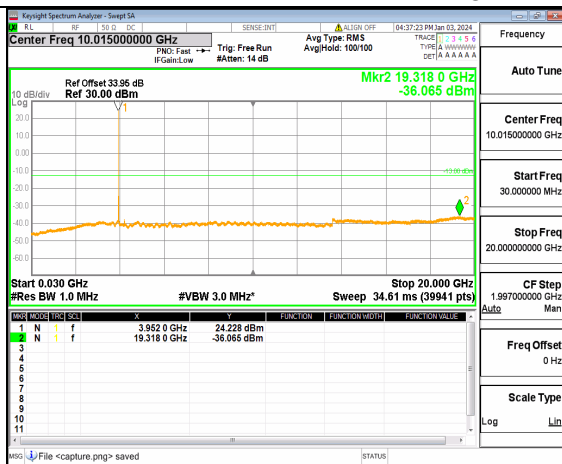
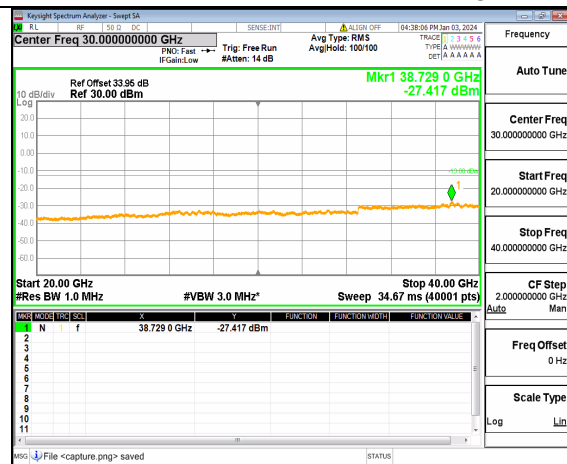
n77(3700-3980MHz) (30MHz-20GHz) 20M
DFT-s-OFDM QPSK Inner_1RB_Right High

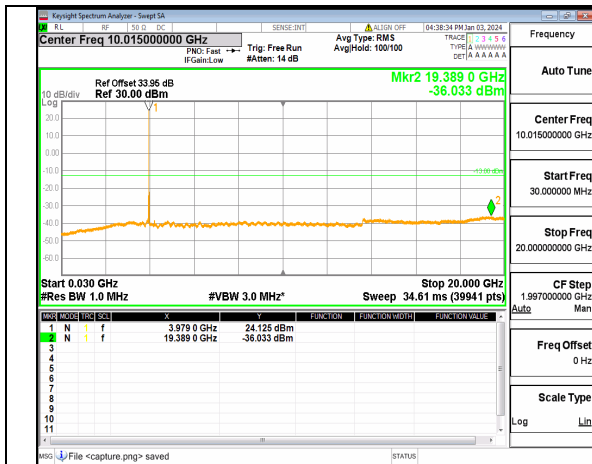


n77(3700-3980MHz) (20GHz-40GHz) 20M
DFT-s-OFDM QPSK Inner_1RB_Right High

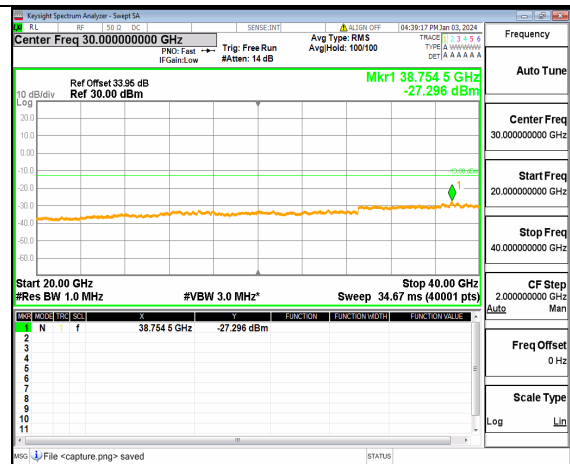
n77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left Low



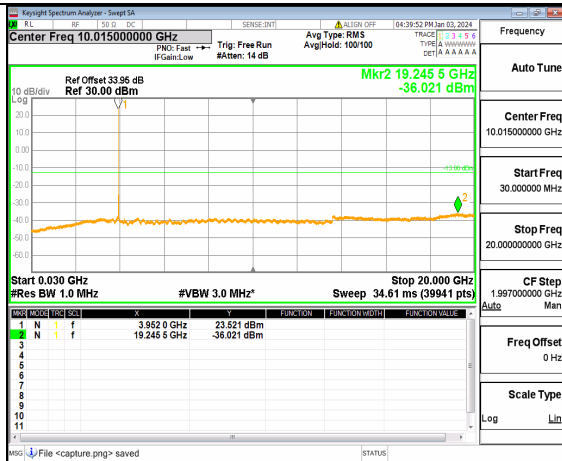
n77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left Midn77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left Midn77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Left Highn77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Left High



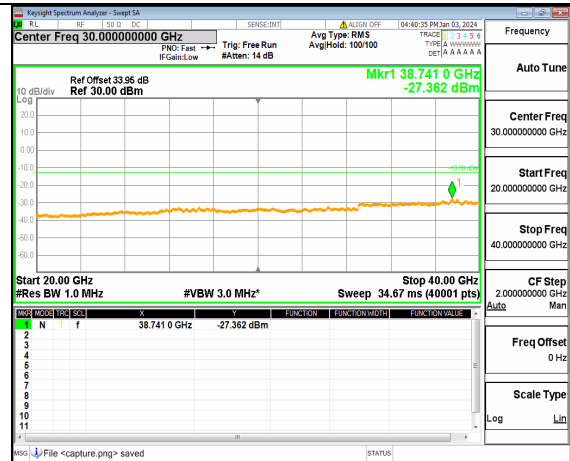
n77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Right High



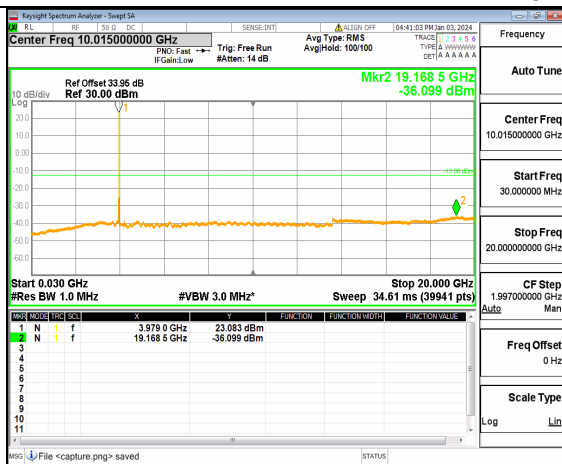
n77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM BPSK Inner_1RB_Right High



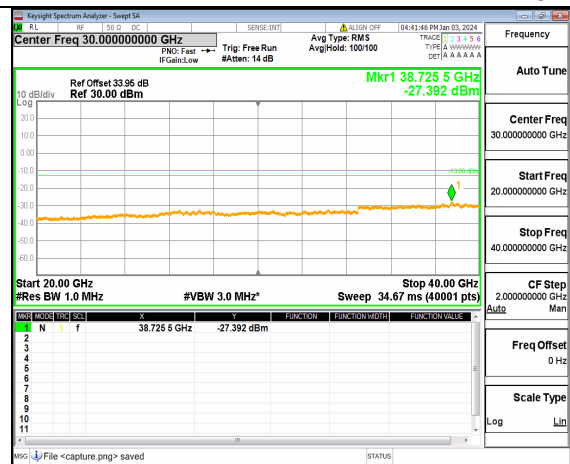
n77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left High



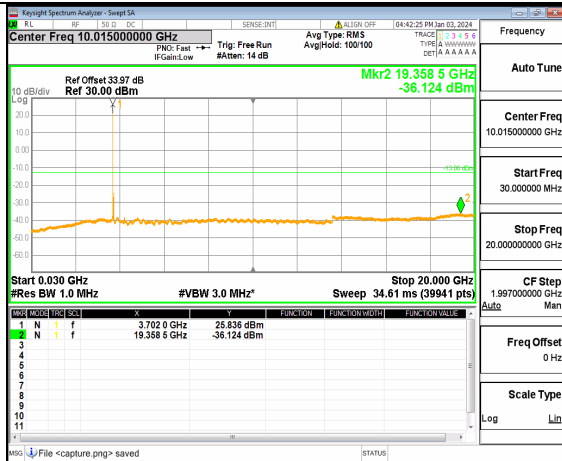
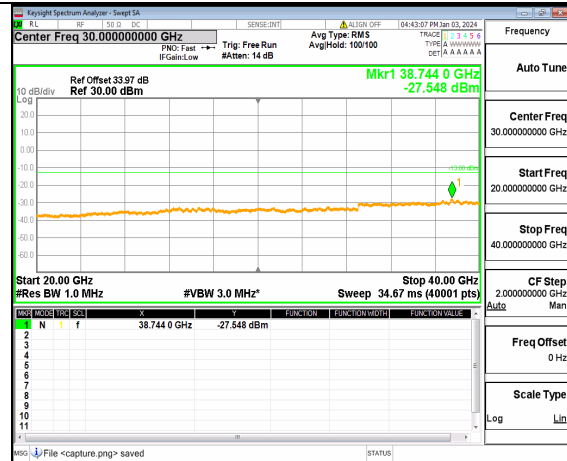
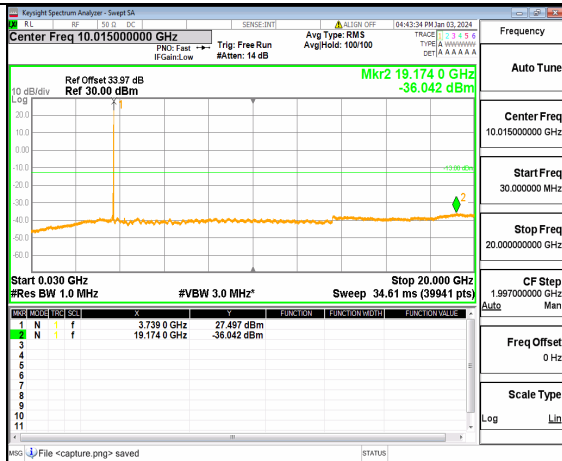
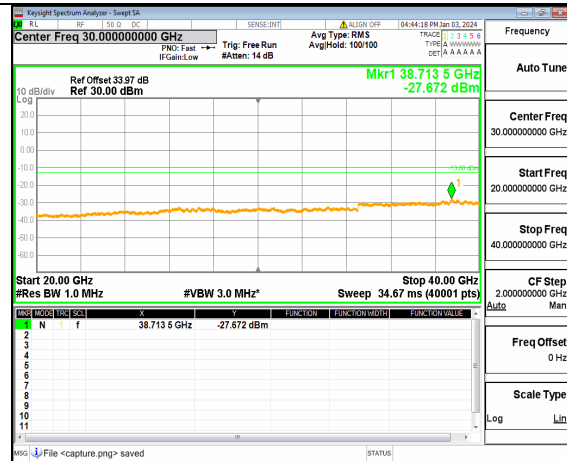
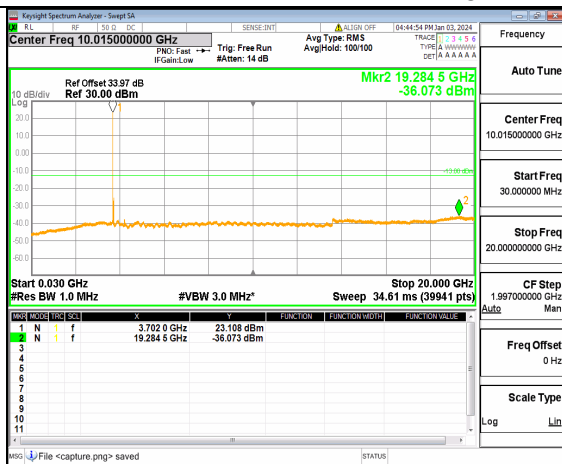
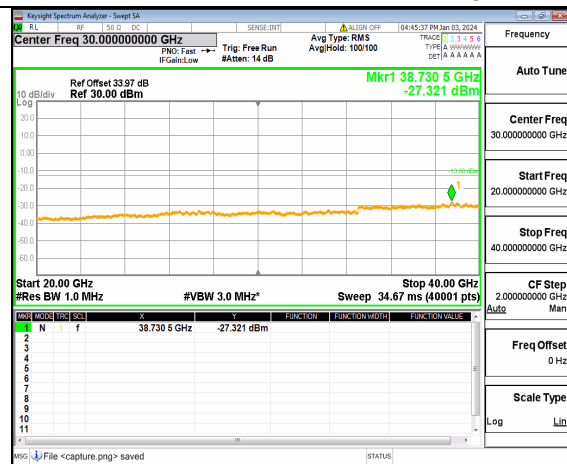
n77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Left High

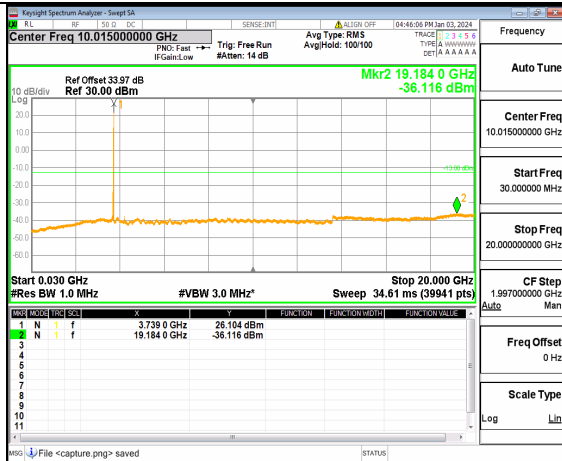


n77(3700-3980MHz) (30MHz-20GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Right High

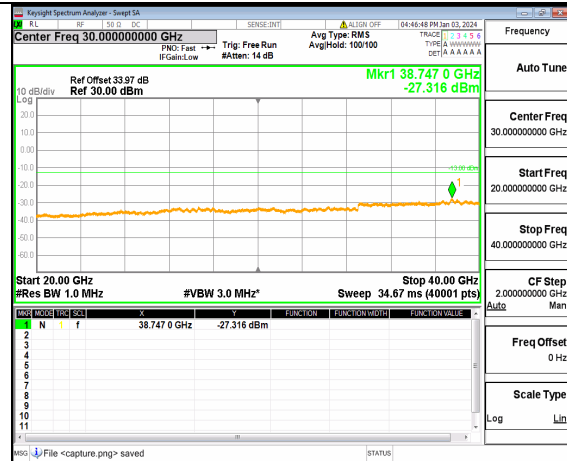


n77(3700-3980MHz) (20GHz-40GHz) 30M
DFT-s-OFDM QPSK Inner_1RB_Right High

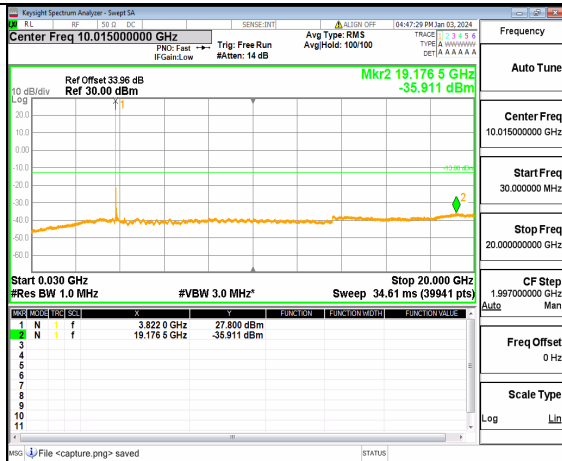
n77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Left Low



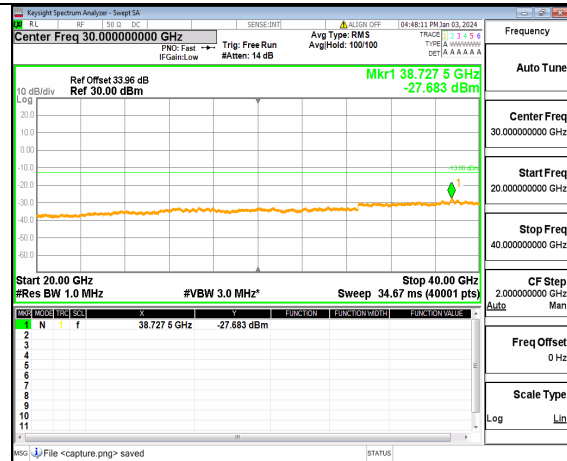
n77(3700-3980MHz) (30MHz-20GHz) 40M DFT-s-OFDM QPSK Inner_1RB_Right Low



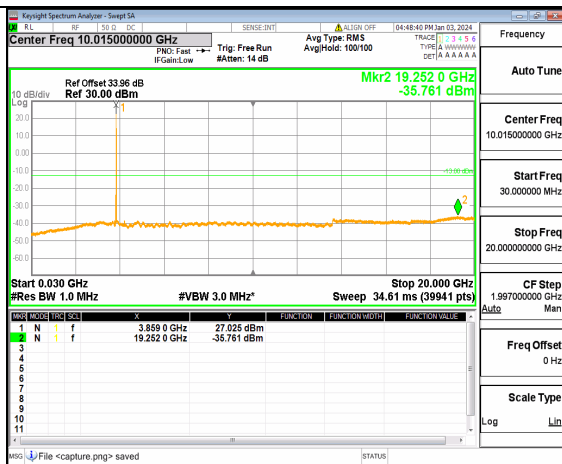
n77(3700-3980MHz) (20GHz-40GHz) 40M DFT-s-OFDM QPSK Inner_1RB_Right Low



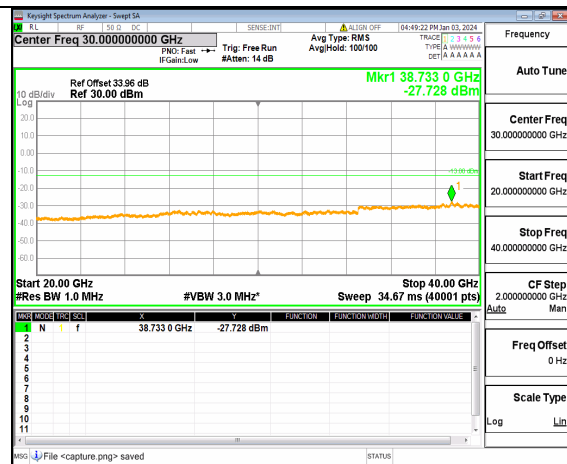
n77(3700-3980MHz) (30MHz-20GHz) 40M DFT-s-OFDM BPSK Inner_1RB_Left Mid



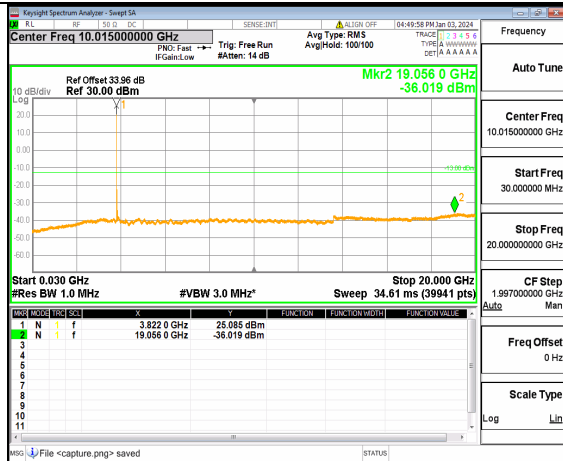
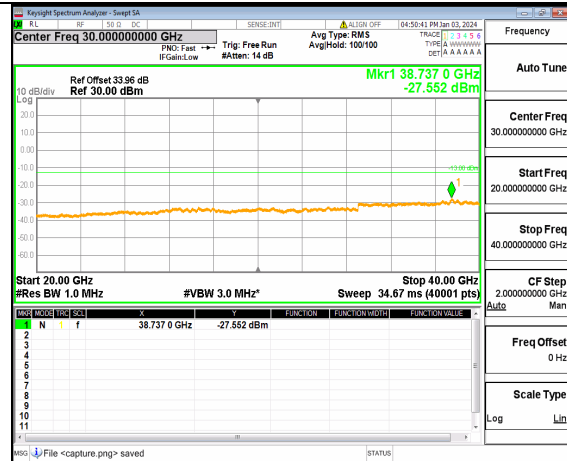
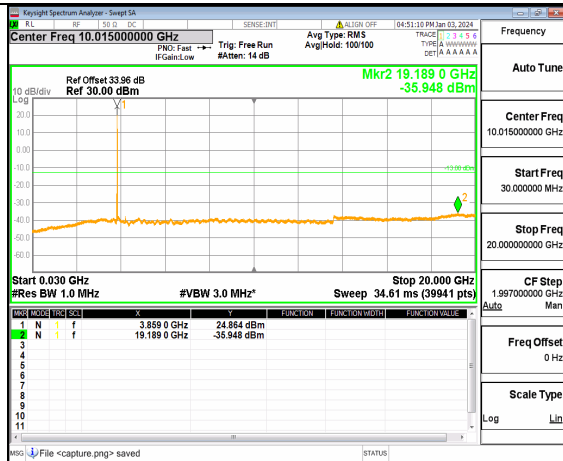
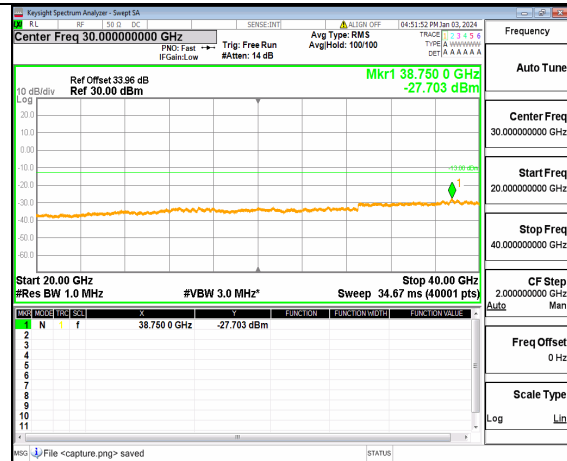
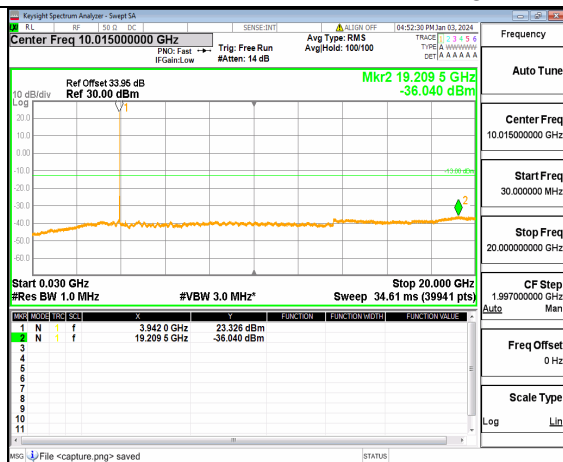
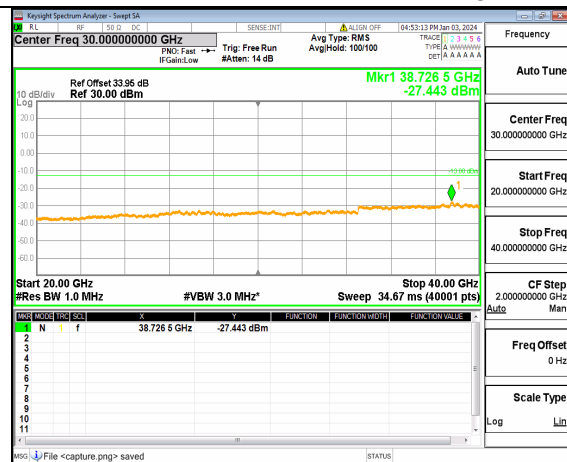
n77(3700-3980MHz) (20GHz-40GHz) 40M DFT-s-OFDM BPSK Inner_1RB_Left Mid

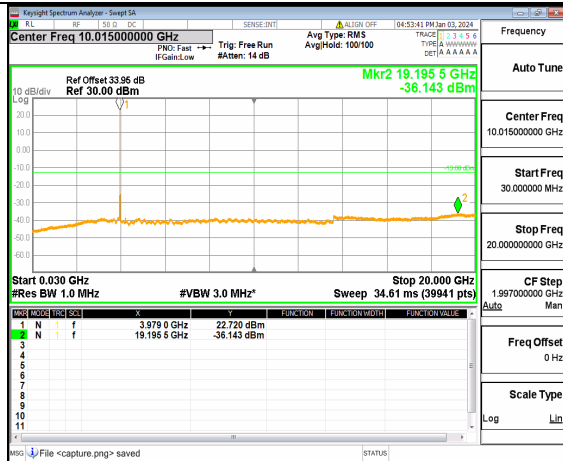


n77(3700-3980MHz) (30MHz-20GHz) 40M DFT-s-OFDM BPSK Inner_1RB_Right Mid

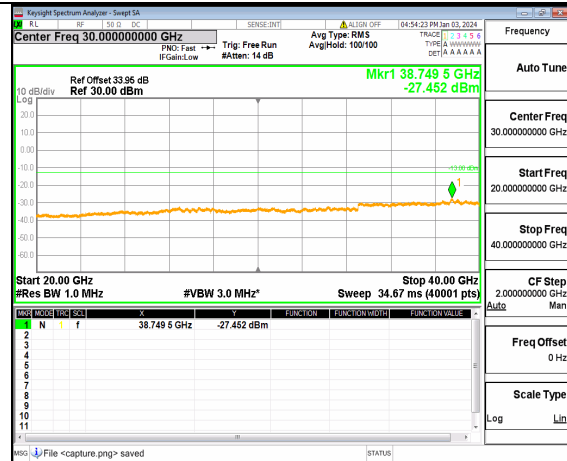


n77(3700-3980MHz) (20GHz-40GHz) 40M DFT-s-OFDM BPSK Inner_1RB_Right Mid

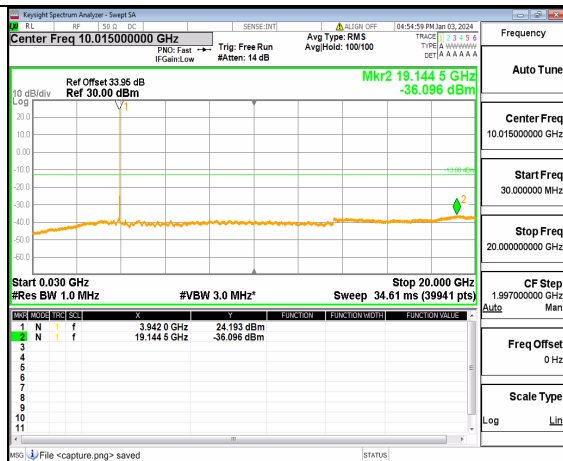
n77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Left Midn77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Left Midn77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Left Highn77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Left High



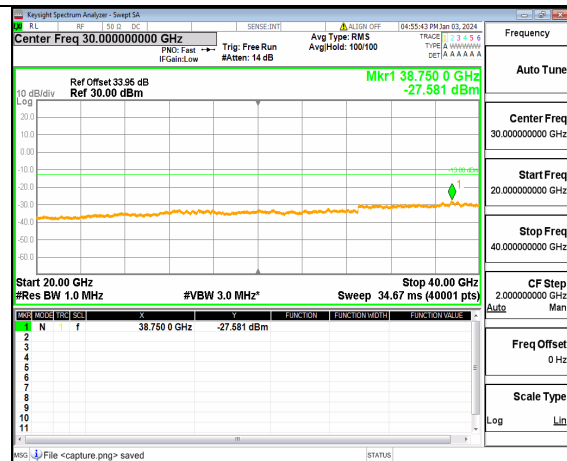
n77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Right High



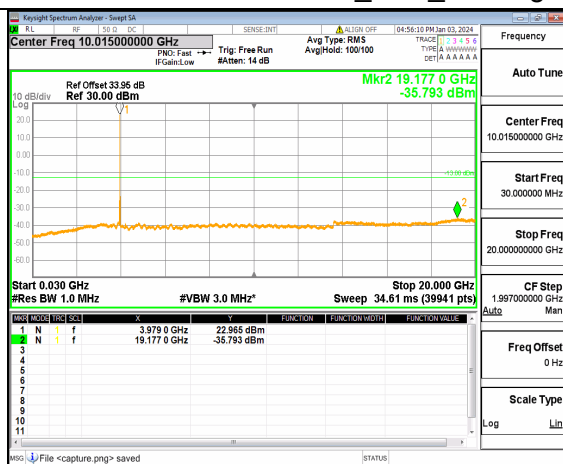
n77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM BPSK Inner_1RB_Right High



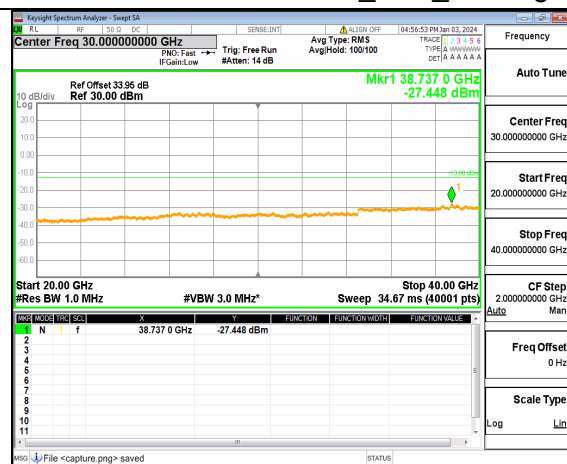
n77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM QPSK Inner 1RB Left High



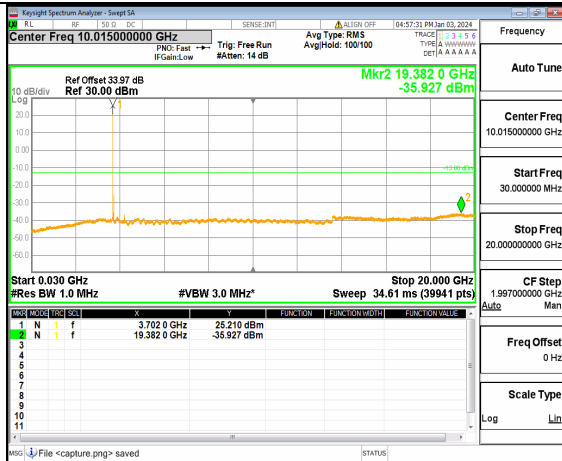
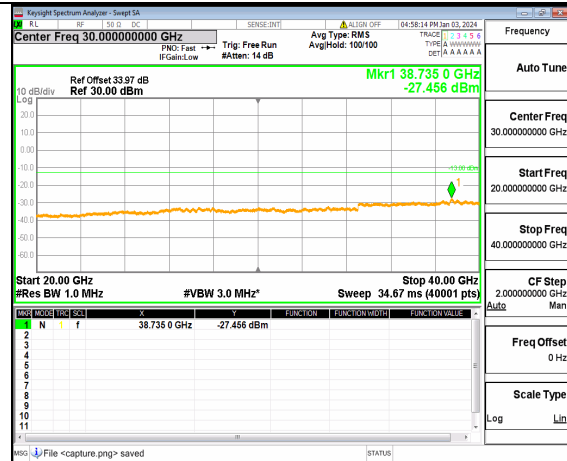
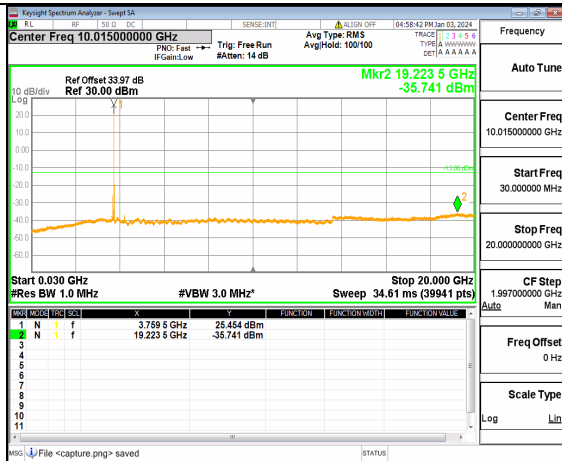
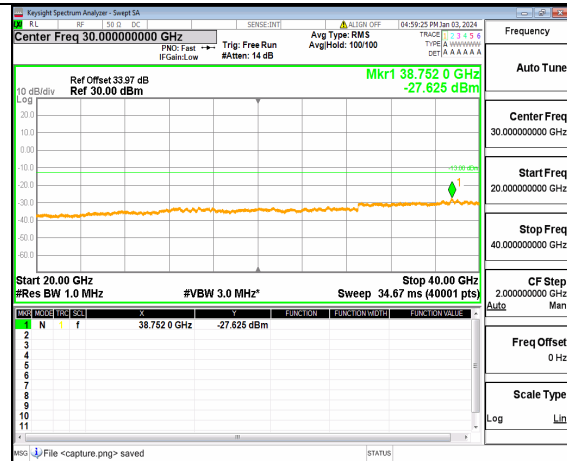
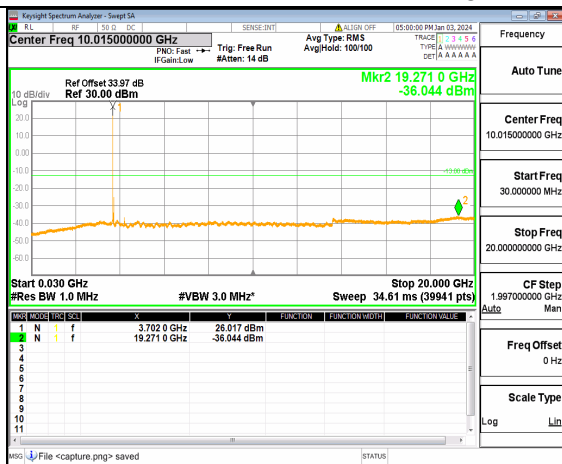
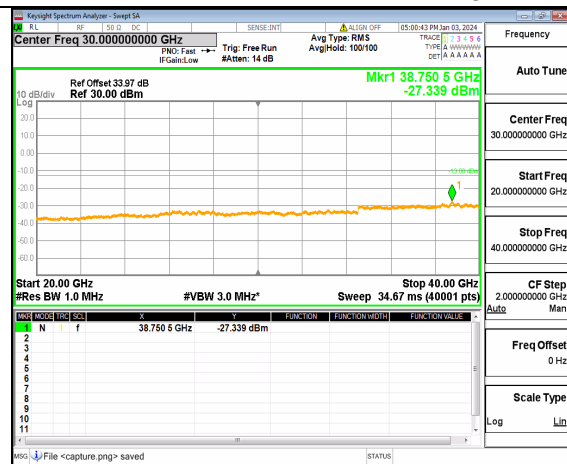
n77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM QPSK Inner 1RB Left High

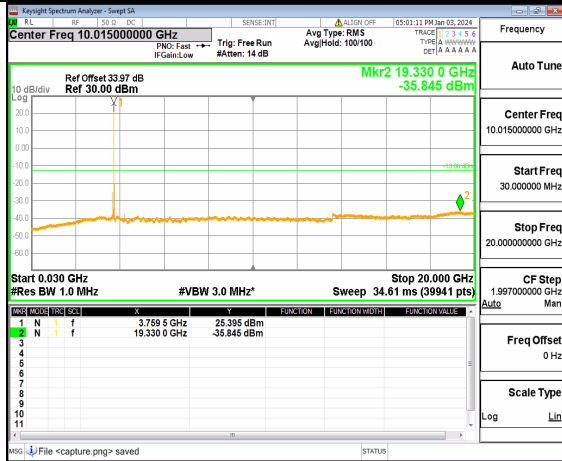


n77(3700-3980MHz) (30MHz-20GHz) 40M
DFT-s-OFDM QPSK Inner 1RB Right High

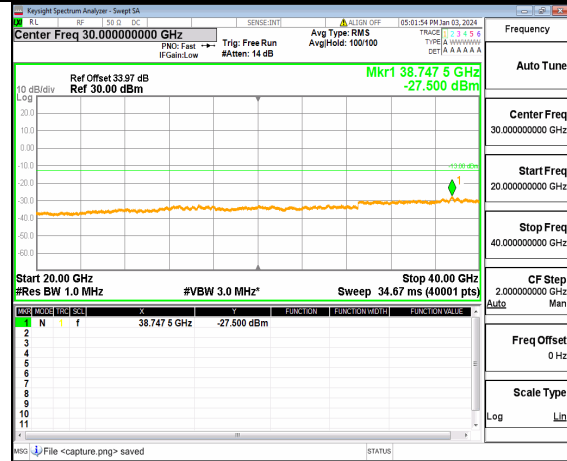


n77(3700-3980MHz) (20GHz-40GHz) 40M
DFT-s-OFDM QPSK Inner 1RB Right High

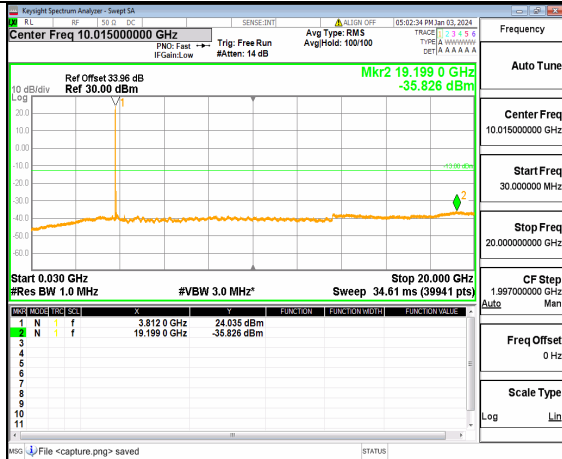
n77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Left Lown77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM QPSK Inner_1RB_Left Lown77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM QPSK Inner_1RB_Left Low



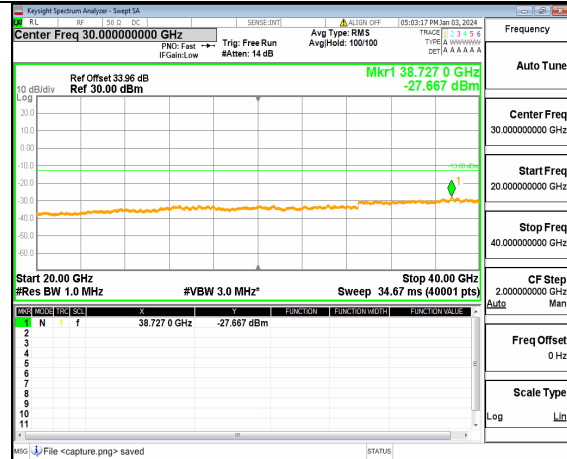
n77(3700-3980MHz) (30MHz-20GHz) 60M DFT-s-OFDM QPSK Inner_1RB_Right Low



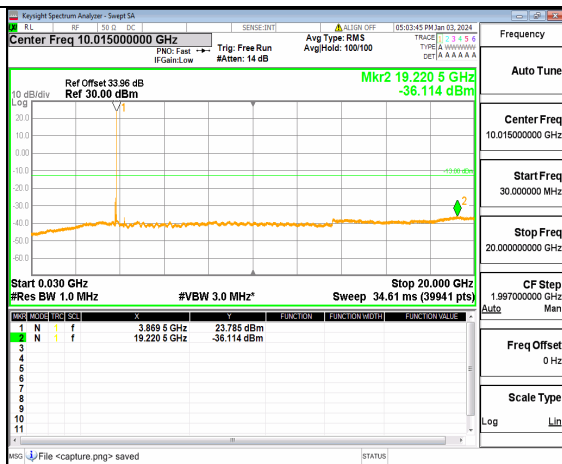
n77(3700-3980MHz) (20GHz-40GHz) 60M DFT-s-OFDM QPSK Inner_1RB_Right Low



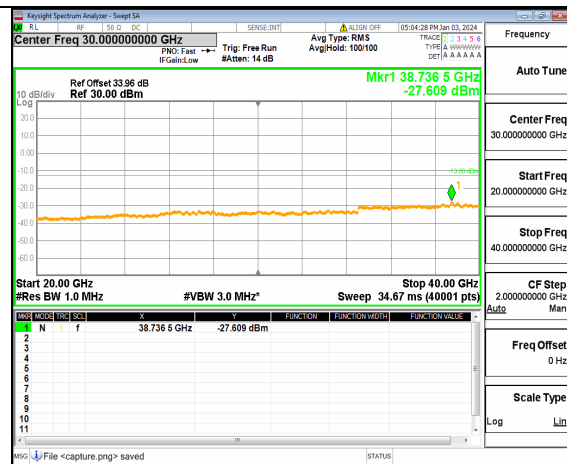
n77(3700-3980MHz) (30MHz-20GHz) 60M DFT-s-OFDM BPSK Inner_1RB_Left Mid



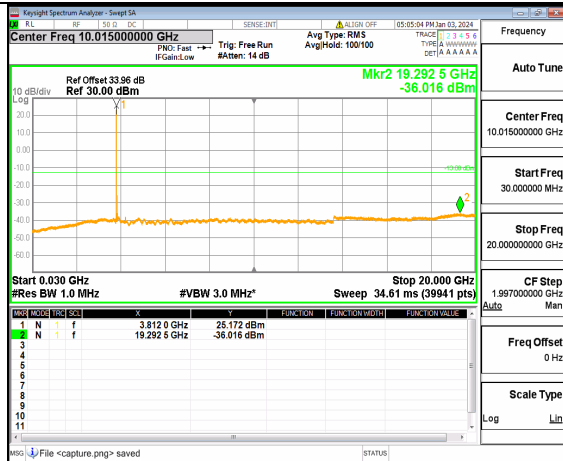
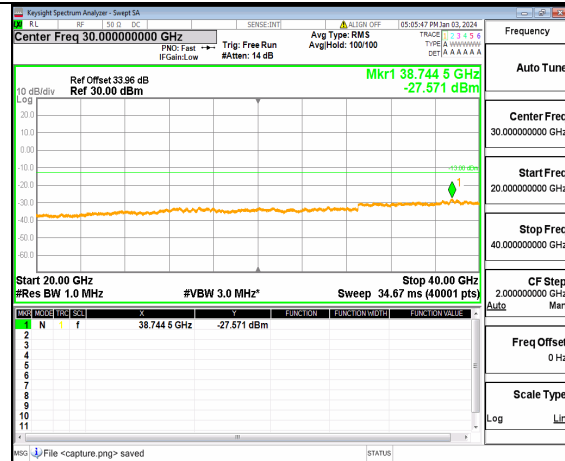
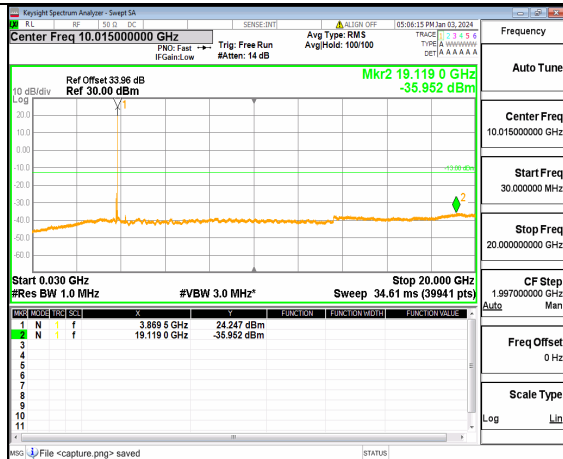
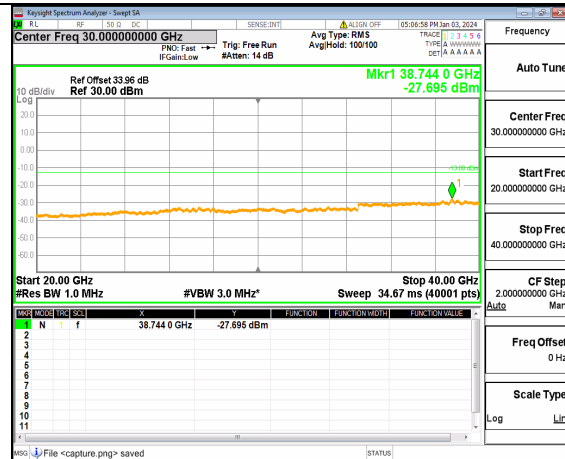
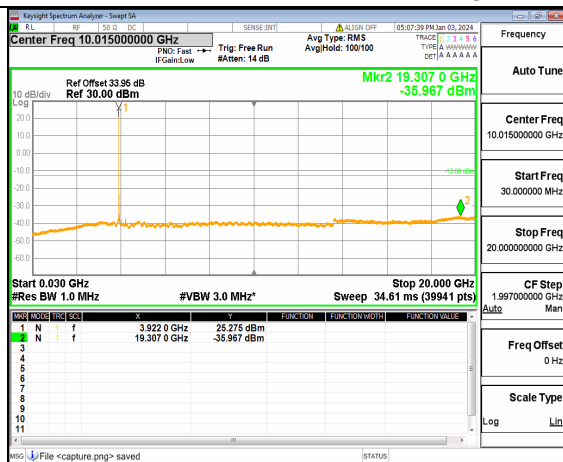
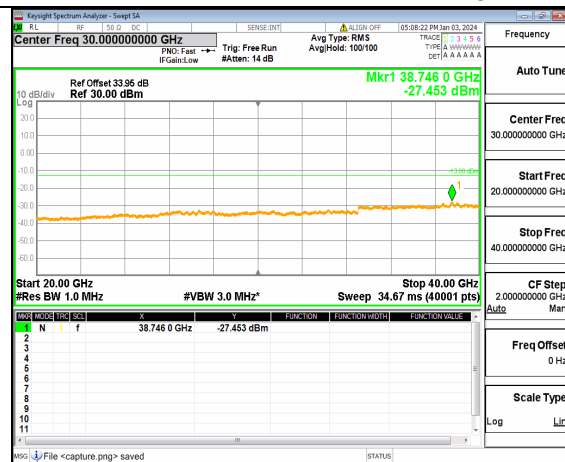
n77(3700-3980MHz) (20GHz-40GHz) 60M DFT-s-OFDM BPSK Inner_1RB_Left Mid

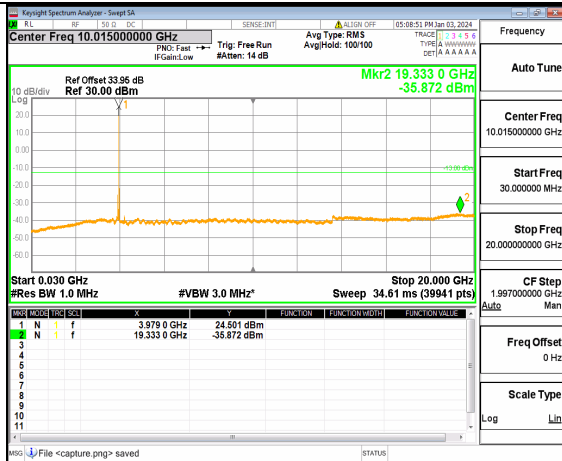
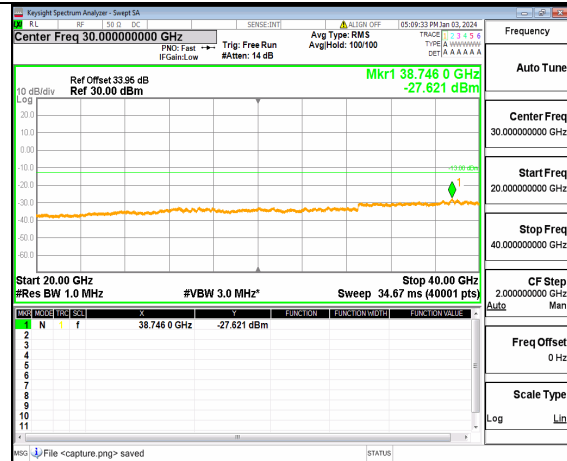
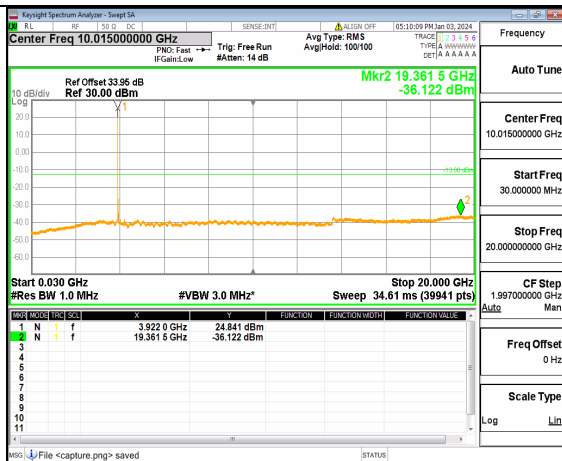
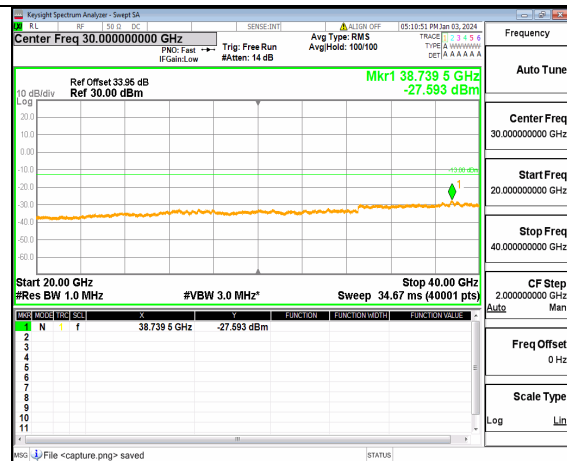
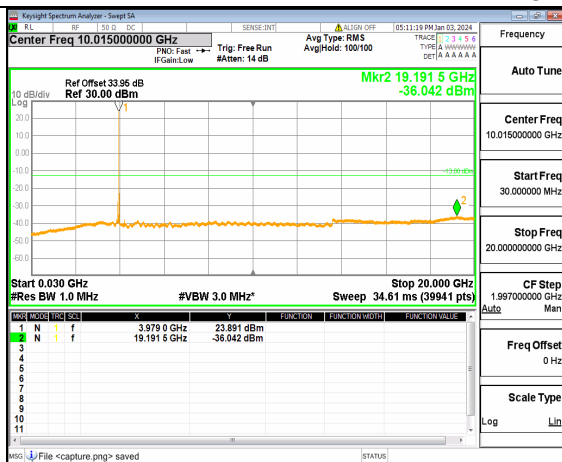
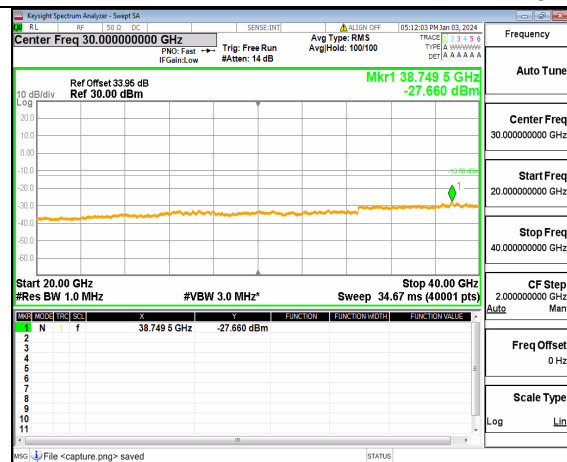


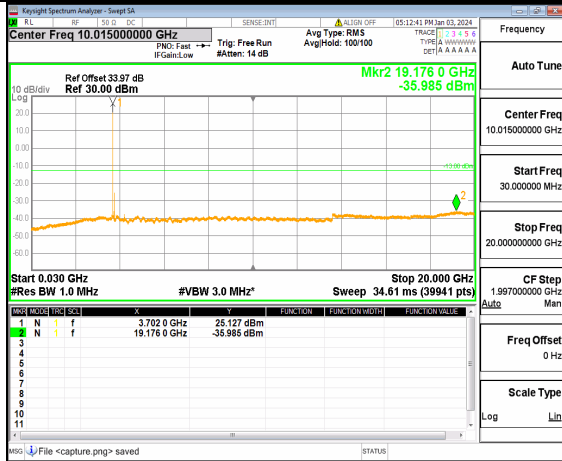
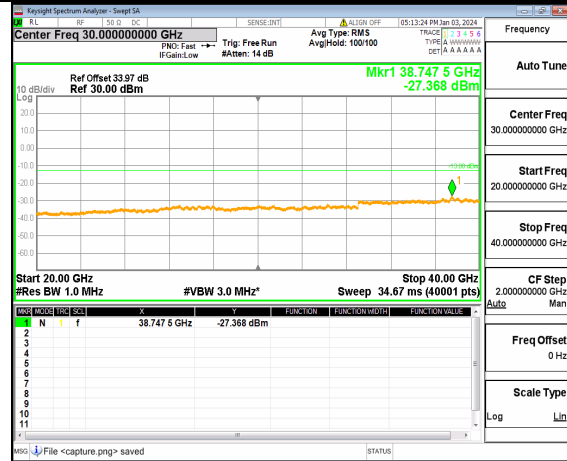
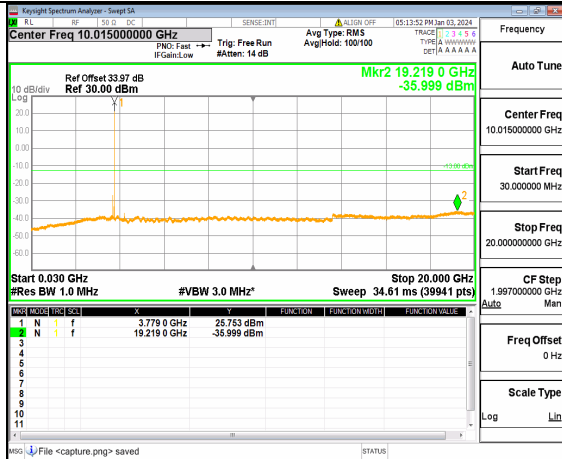
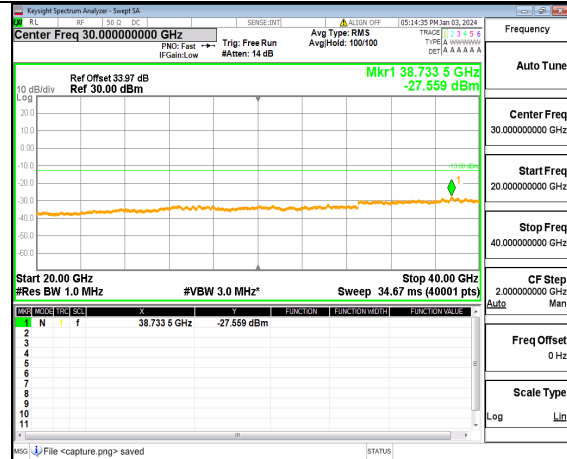
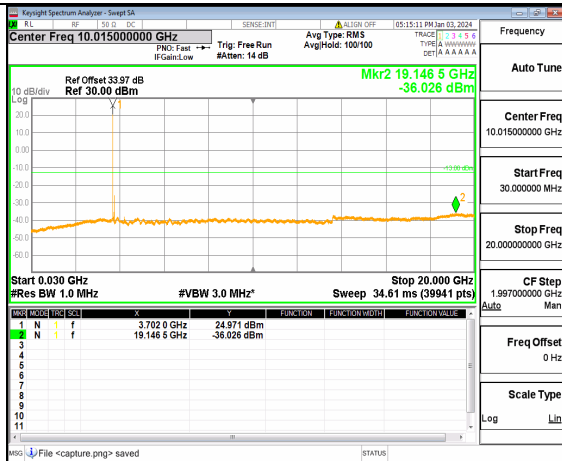
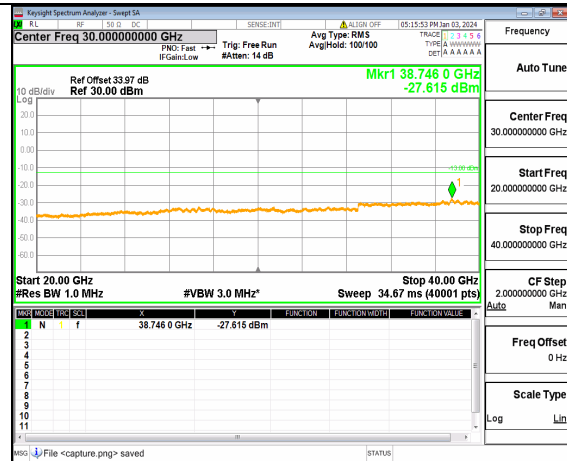
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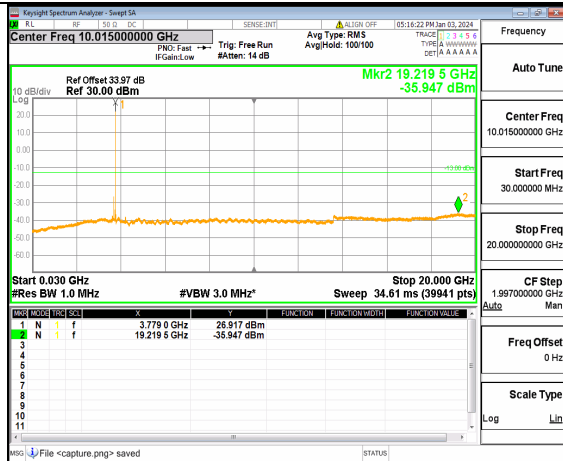


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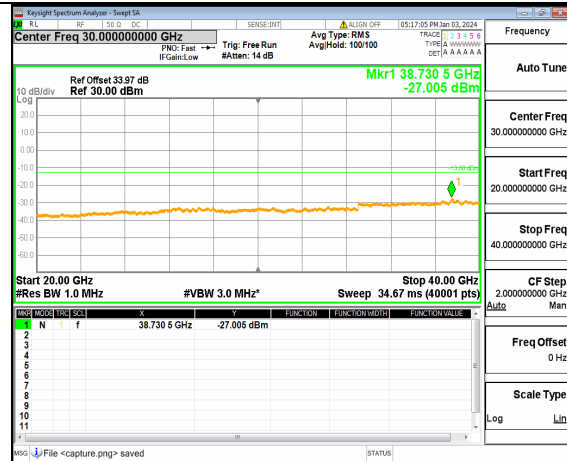
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DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Left Highn77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Left High

n77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Right Highn77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM BPSK Inner_1RB_Right Highn77(3700-3980MHz) (30MHz-20GHz) 60M
DFT-s-OFDM QPSK Inner_1RB_Left Highn77(3700-3980MHz) (20GHz-40GHz) 60M
DFT-s-OFDM QPSK Inner_1RB_Left Highn77(3700-3980MHz) (30MHz-20GHz) 60M
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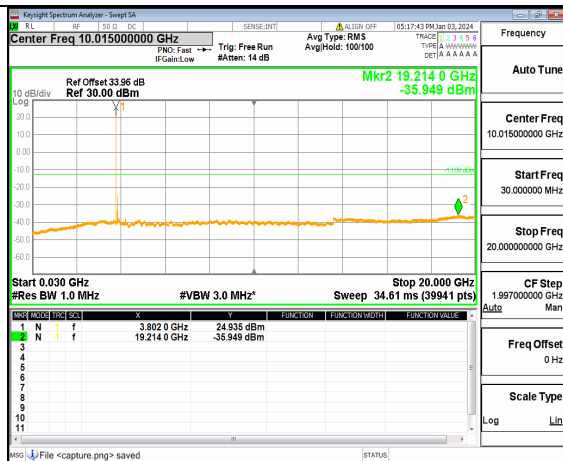
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DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (20GHz-40GHz) 80M
DFT-s-OFDM BPSK Inner_1RB_Right Lown77(3700-3980MHz) (30MHz-20GHz) 80M
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DFT-s-OFDM QPSK Inner_1RB_Left Low



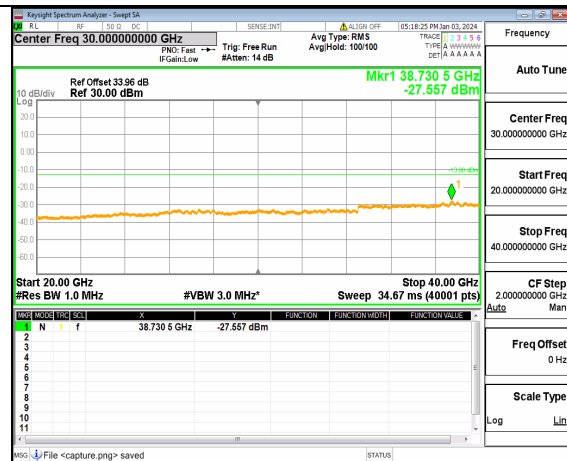
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DFT-s-OFDM QPSK Inner_1RB_Right Low



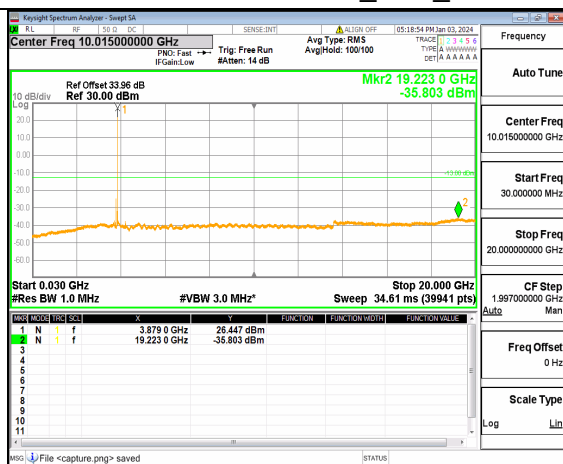
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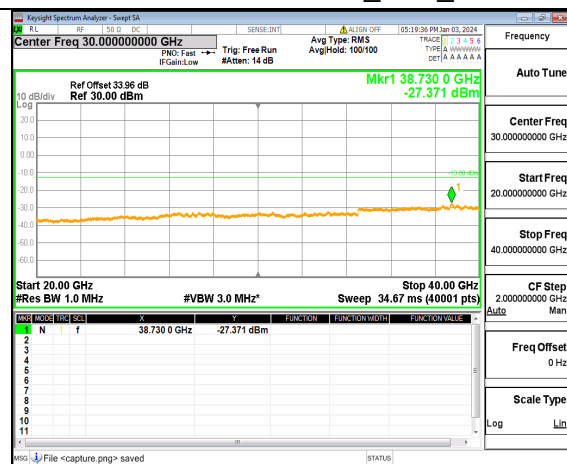
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DFT-s-OFDM BPSK Inner_1RB_Left Mid



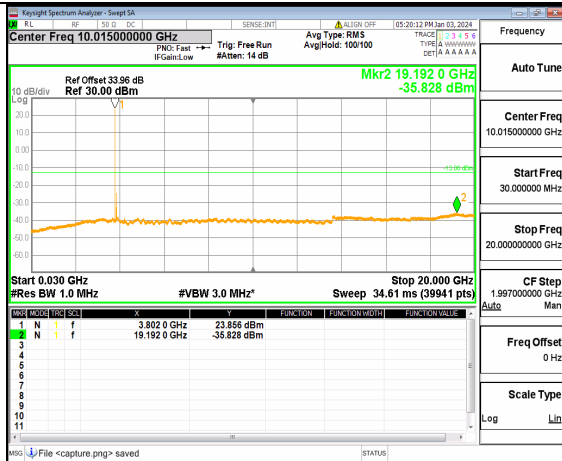
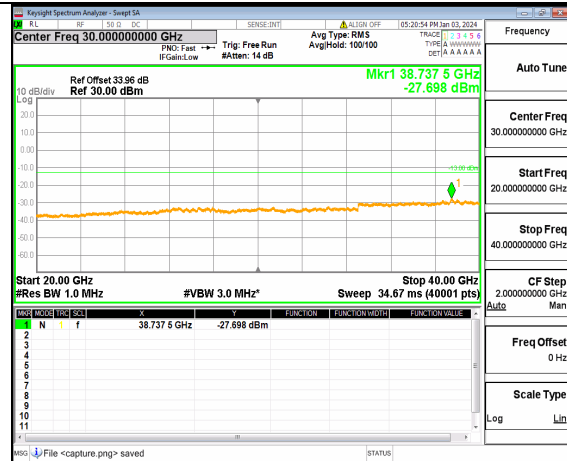
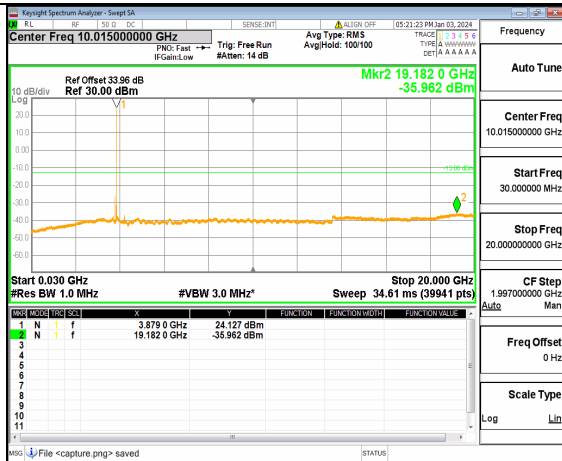
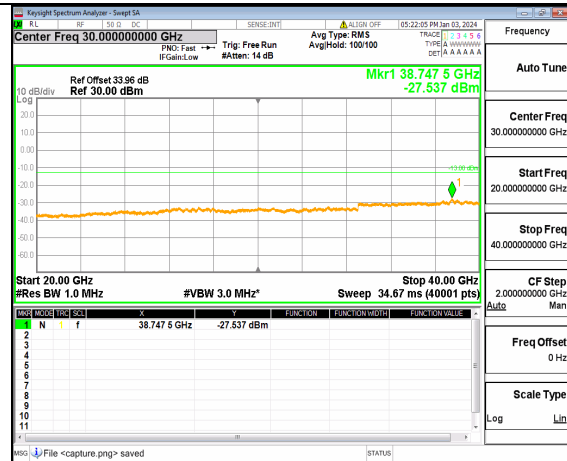
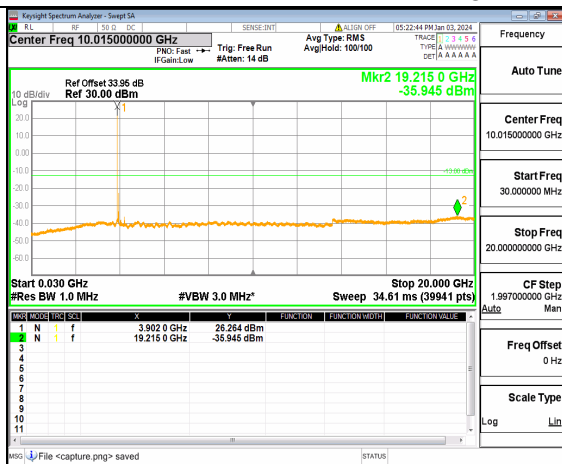
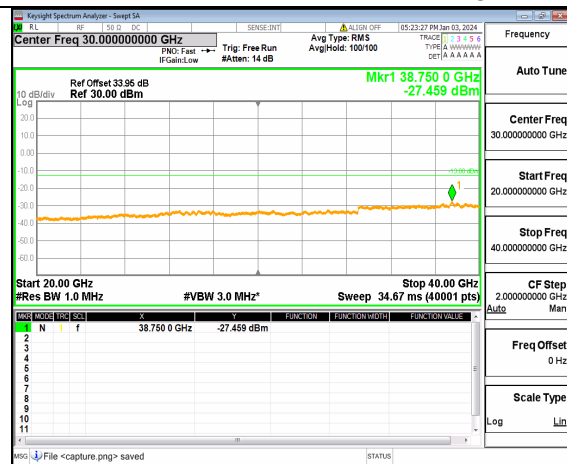
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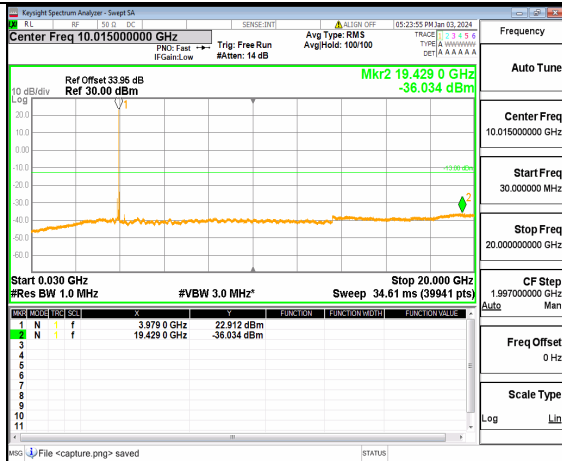


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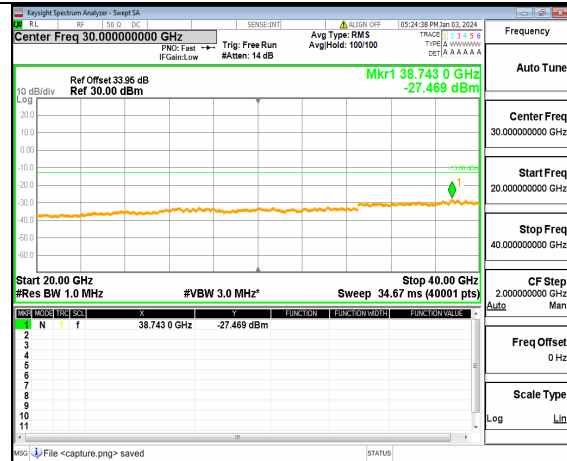


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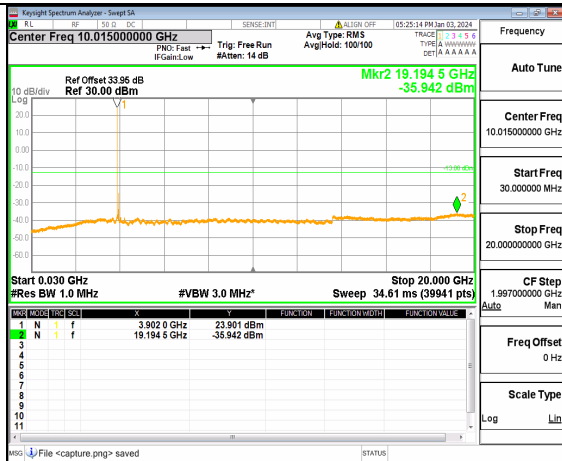
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DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (20GHz-40GHz) 80M
DFT-s-OFDM QPSK Inner_1RB_Right Midn77(3700-3980MHz) (30MHz-20GHz) 80M
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DFT-s-OFDM BPSK Inner_1RB_Left High



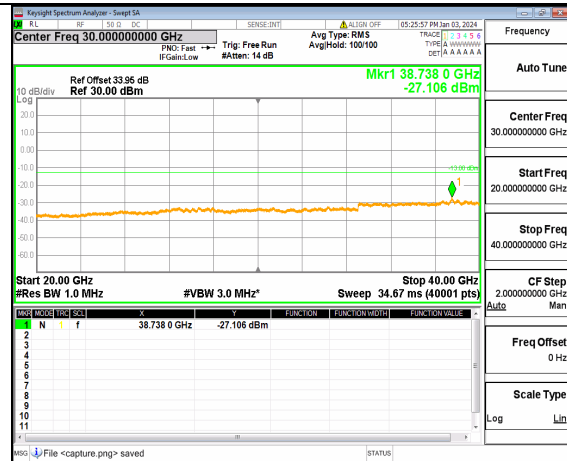
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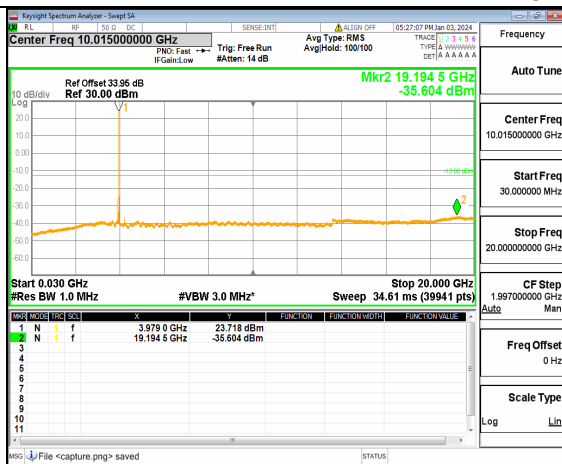
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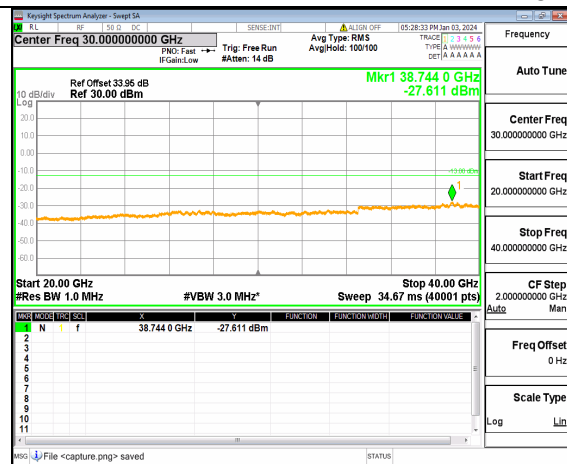
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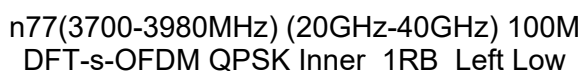
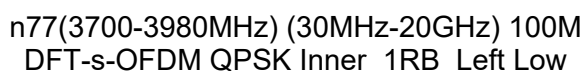
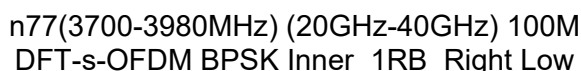
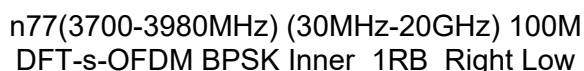
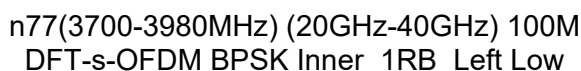
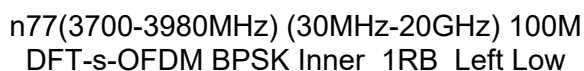
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DFT-s-OFDM QPSK Inner_1RB_Left High

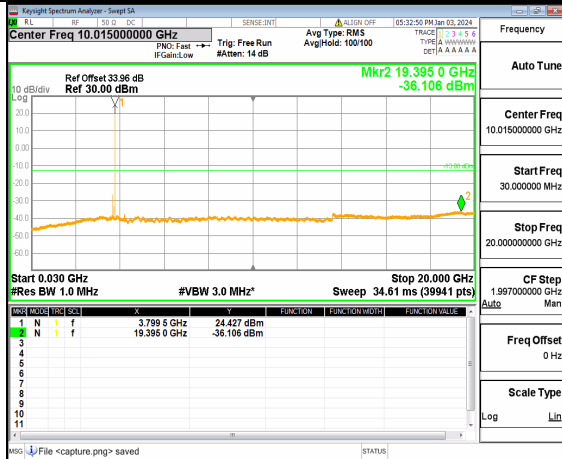
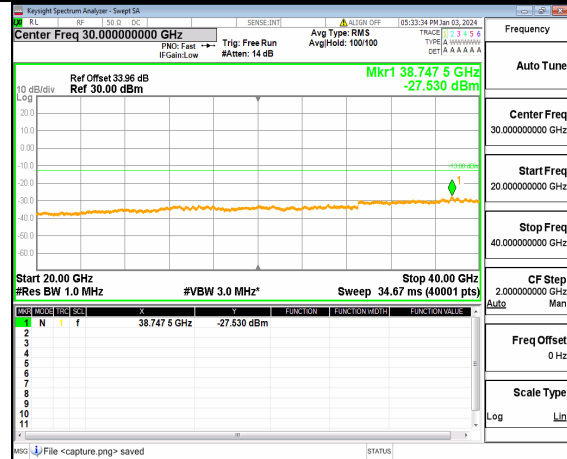
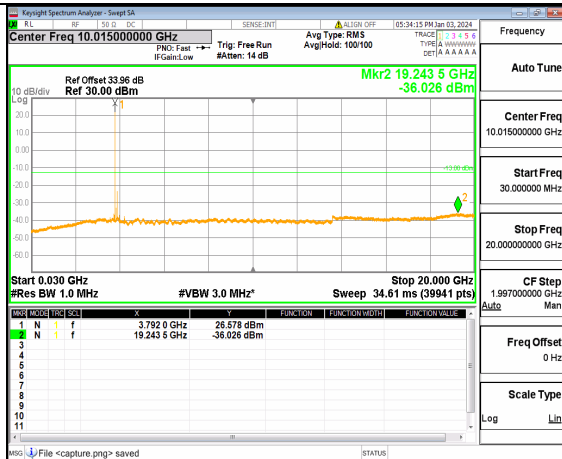
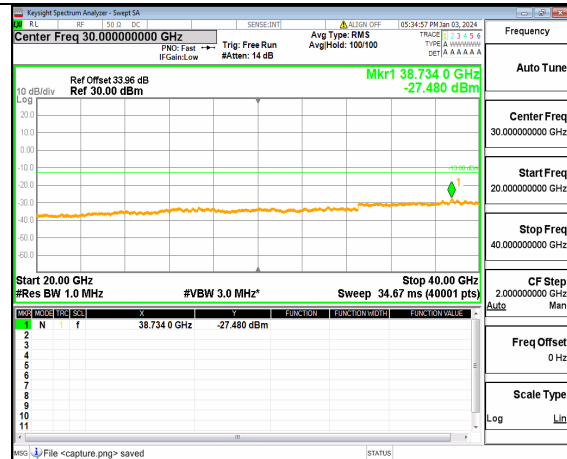
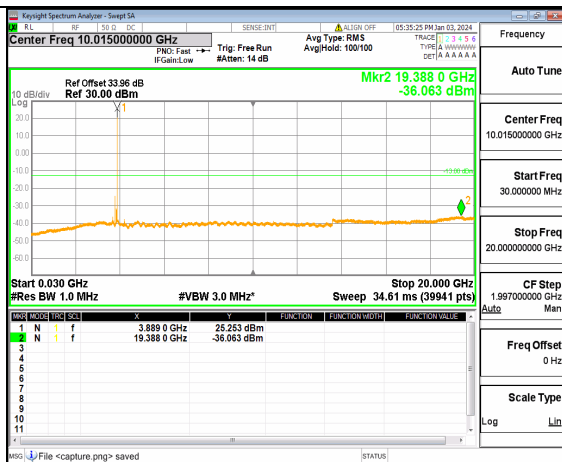
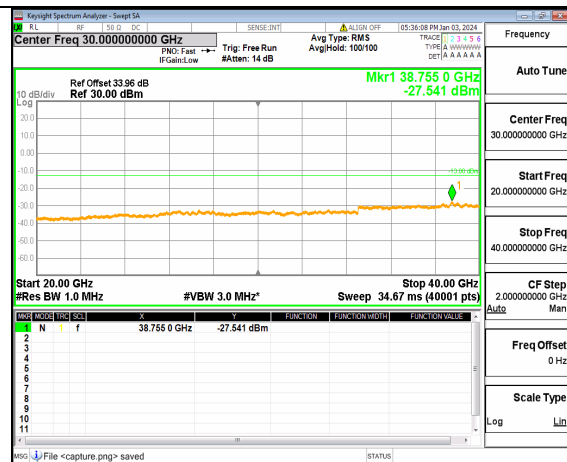


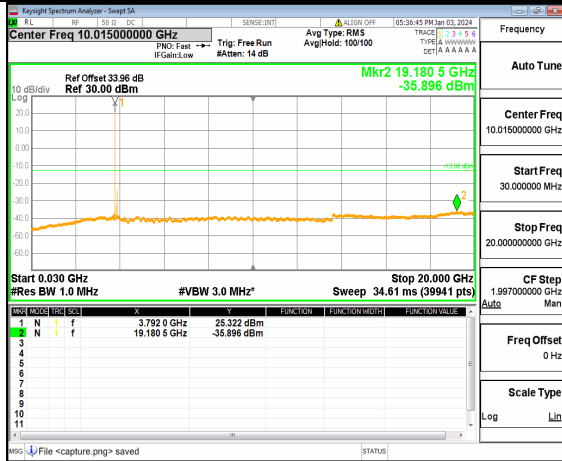
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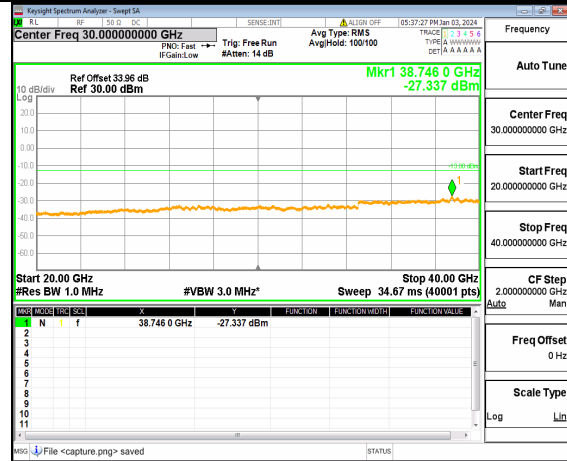
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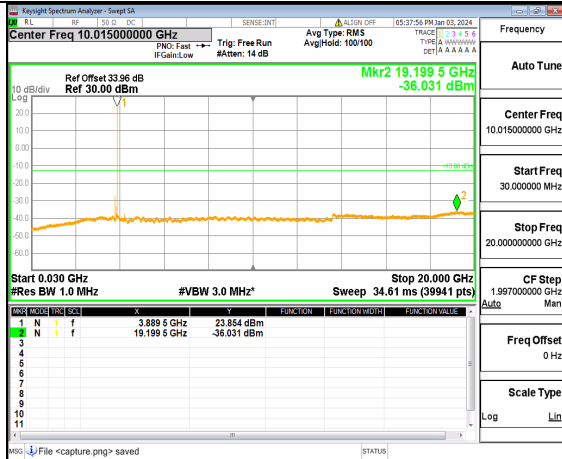
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DFT-s-OFDM BPSK Inner_1RB_Left Midn77(3700-3980MHz) (20GHz-40GHz) 100M
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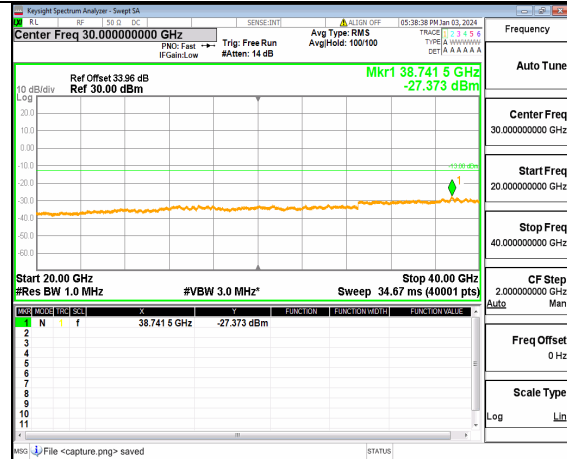
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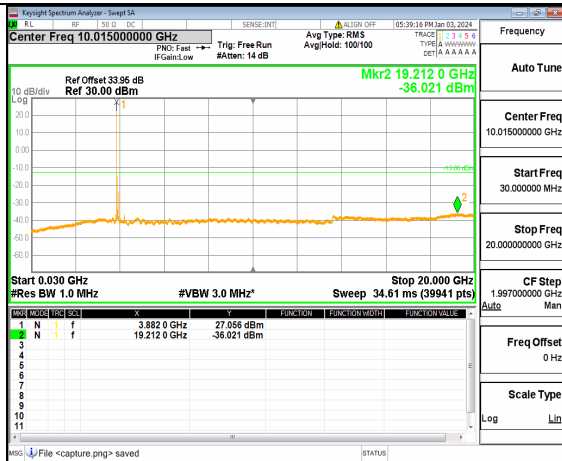
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DFT-s-OFDM QPSK Inner_1RB_Left Mid



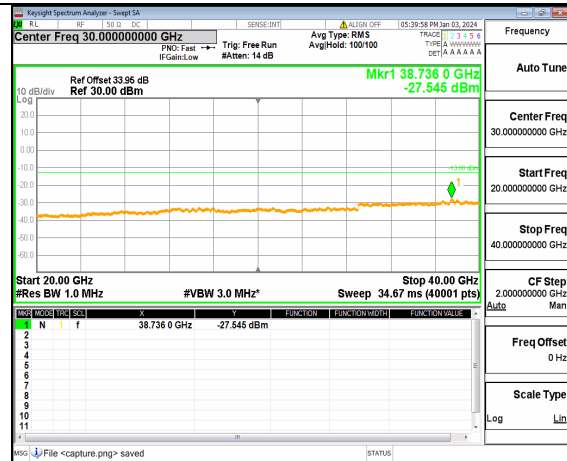
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DFT-s-OFDM QPSK Inner_1RB_Right Mid



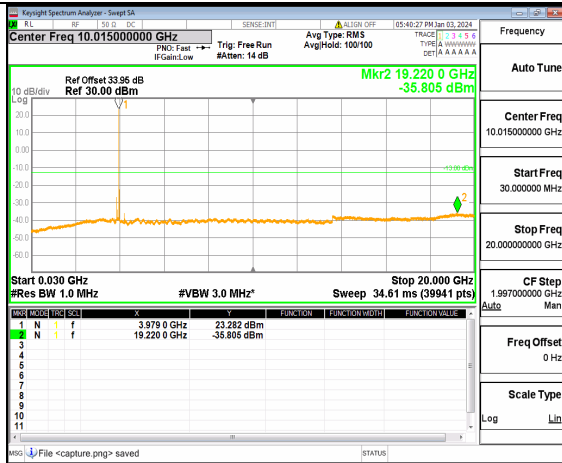
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DFT-s-OFDM QPSK Inner_1RB_Right Mid



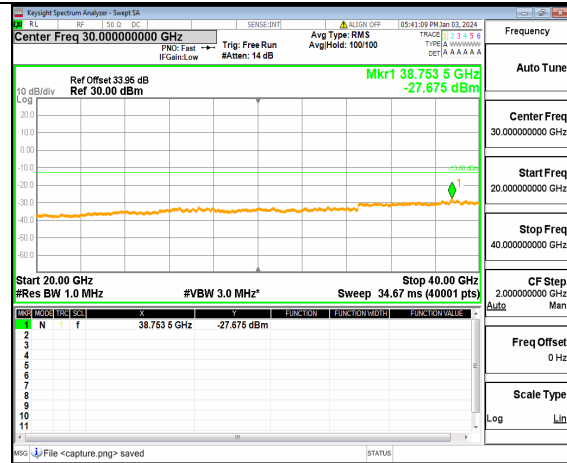
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DFT-s-OFDM BPSK Inner_1RB_Left High



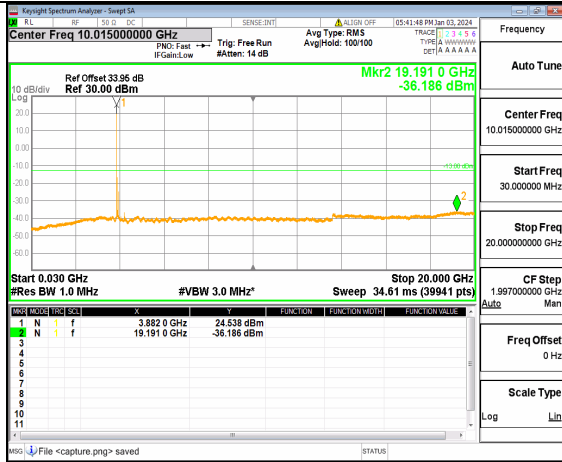
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DFT-s-OFDM BPSK Inner_1RB_Left High



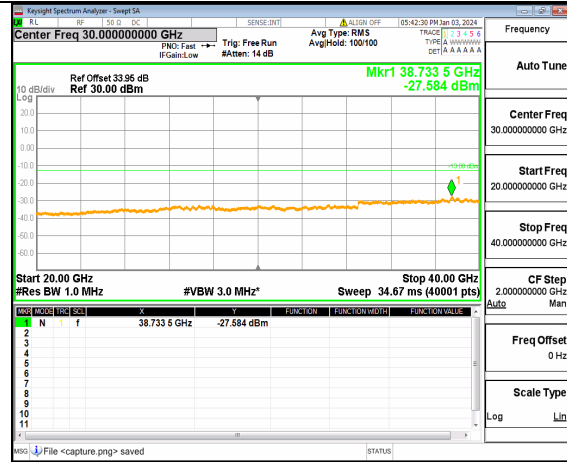
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DFT-s-OFDM BPSK Inner_1RB_Right High



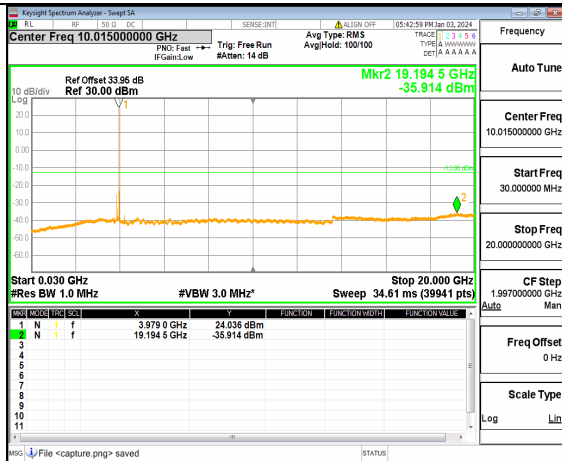
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DFT-s-OFDM BPSK Inner_1RB_Right High



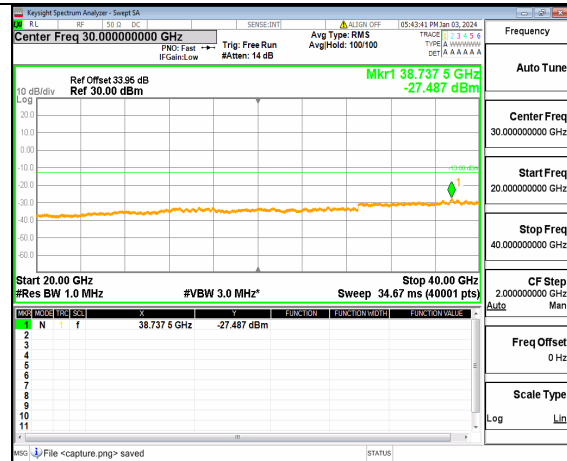
n77(3700-3980MHz) (30MHz-20GHz) 100M
DFT-s-OFDM QPSK Inner_1RB_Left High



n77(3700-3980MHz) (20GHz-40GHz) 100M
DFT-s-OFDM QPSK Inner_1RB_Left High



n77(3700-3980MHz) (30MHz-20GHz) 100M
DFT-s-OFDM QPSK Inner_1RB_Right High



n77(3700-3980MHz) (20GHz-40GHz) 100M
DFT-s-OFDM QPSK Inner_1RB_Right High

2.6. Band Edge

2.6.1. Requirement

n2,

According to FCC section 24.238(a), for operations in the 1850–1910MHz bands, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dBm a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

n5,

According to FCC section 22.917(a), for operations in the 824–849MHz bands, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dBm a 100kHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

n48

Part 96.41(e)(1)(i)

For channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed -25 dBm/MHz.

Part 96.41(e)(1)(ii)

For channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz.



Part 96.41(e)(2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

n66

According to FCC section 27.53(h), for operations in the 1710–1755 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dBm 1 MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

n77 (3700-3980 MHz)

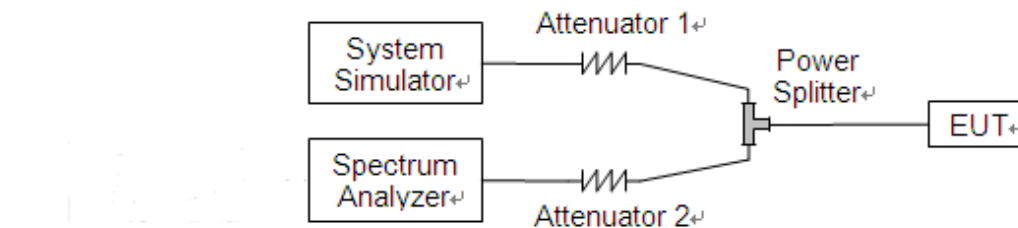
According to FCC section 27.53(l) (2) for, for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1-megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

n77 (3450-3550 MHz)

According to FCC section 27.53(n) (2) for, for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.



2.6.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.6.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

2.6.4. Test Result

The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

Note: In the same NR frequency band, The measured power in SA mode is higher than that in NSA mode, SA mode is selected to test all test cases.