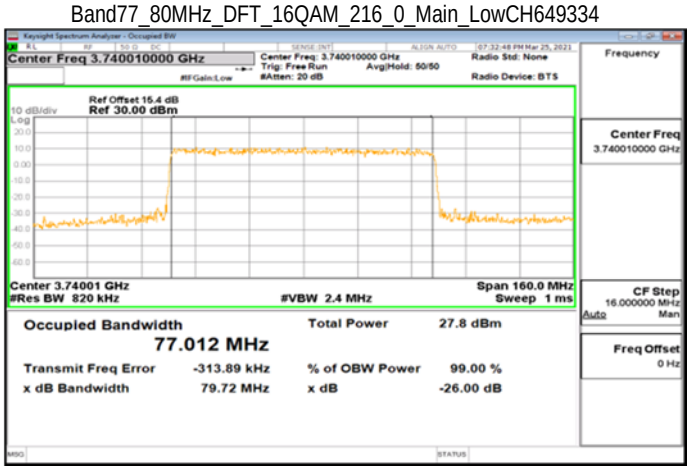
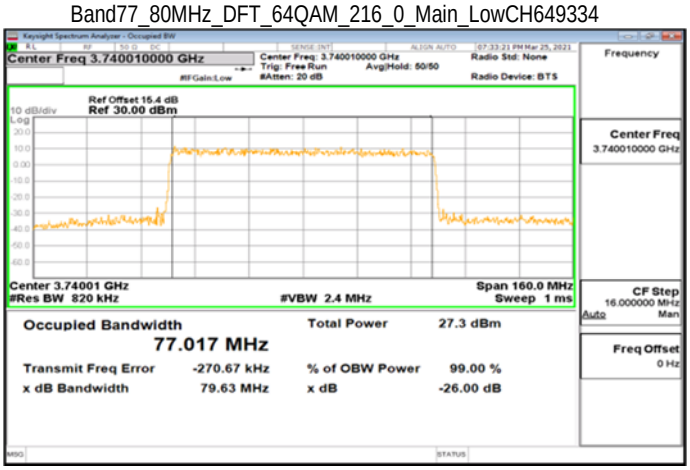
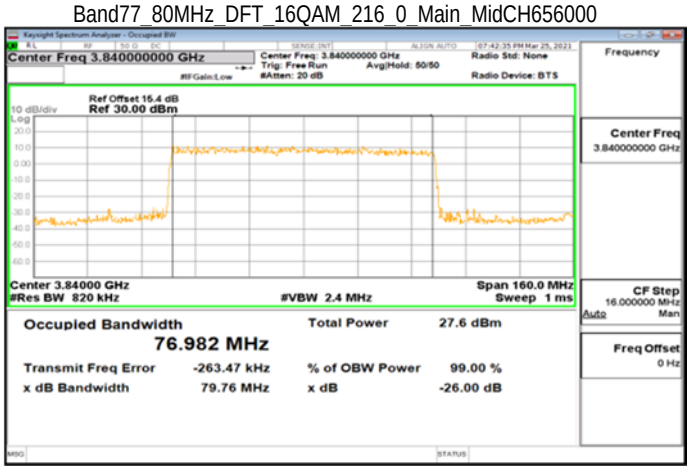
Band77_80MHz_DFT_16QAM_216_0_Main_LowCH649334



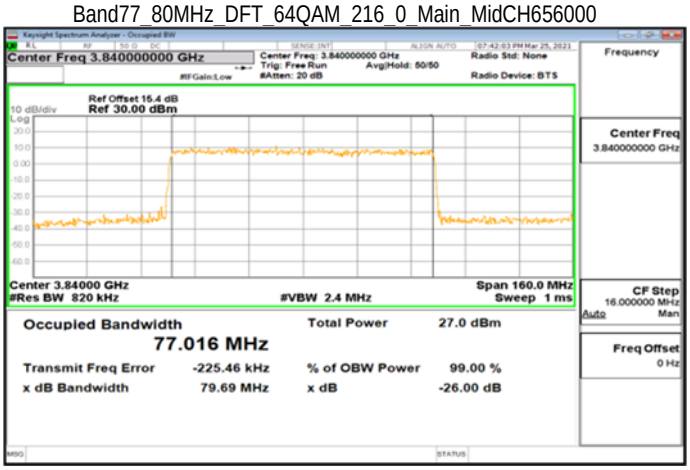
Band77_80MHz_DFT_64QAM_216_0_Main_LowCH649334



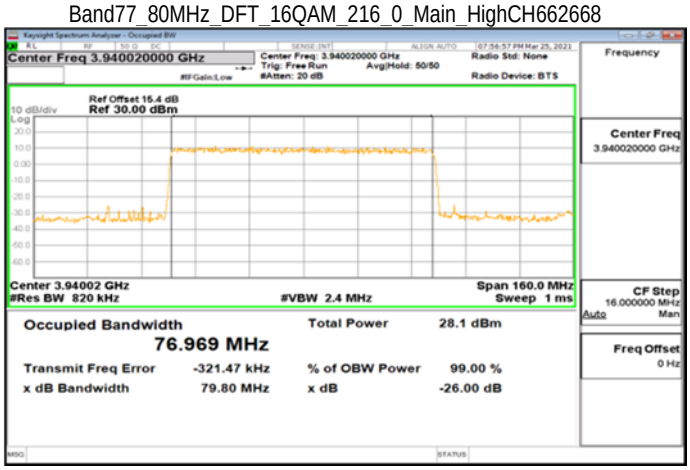
Band77_80MHz_DFT_16QAM_216_0_Main_MidCH656000



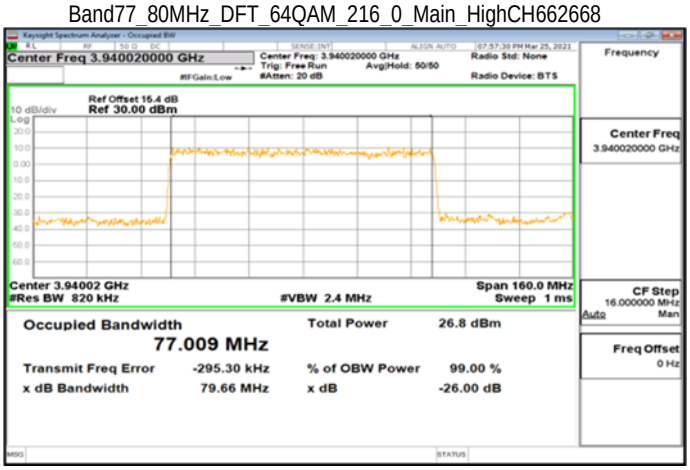
Band77_80MHz_DFT_64QAM_216_0_Main_MidCH656000



Band77_80MHz_DFT_16QAM_216_0_Main_HighCH662668



Band77_80MHz_DFT_64QAM_216_0_Main_HighCH662668



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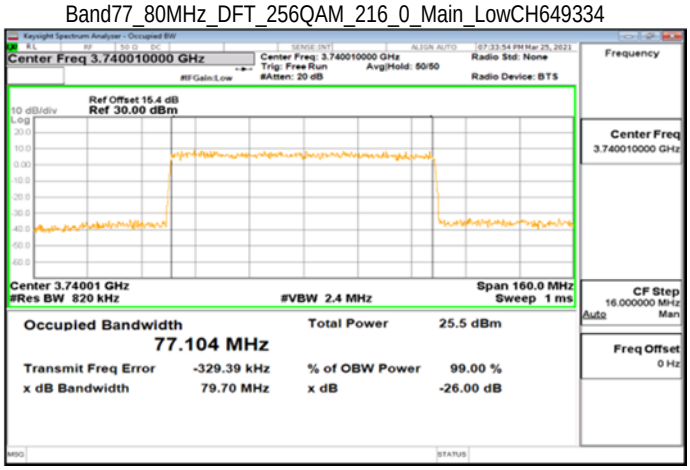
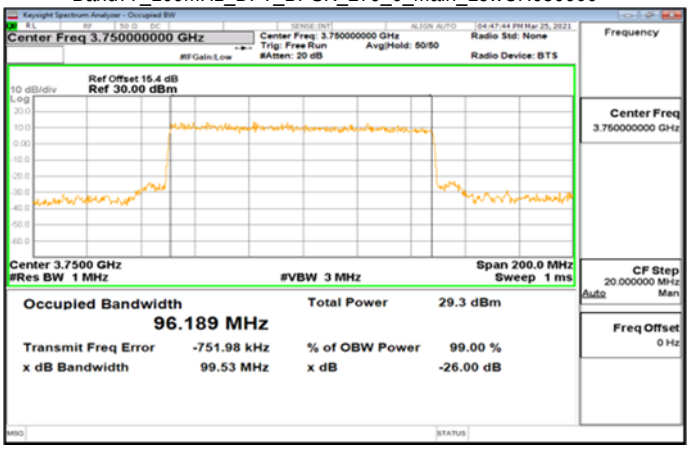
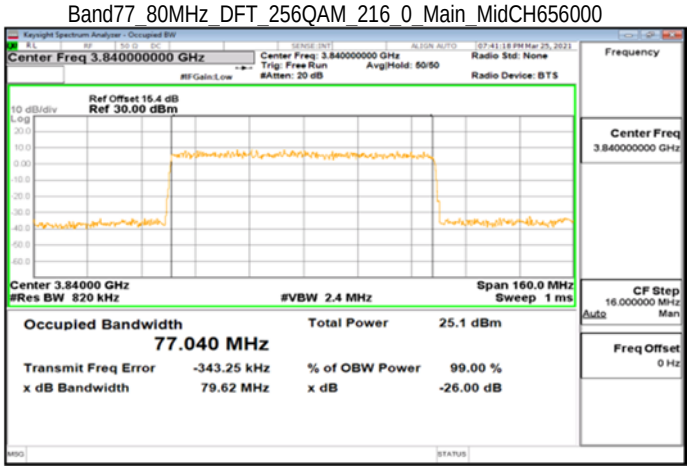
Band77_80MHz_DFT_256QAM_216_0_Main_LowCH649334



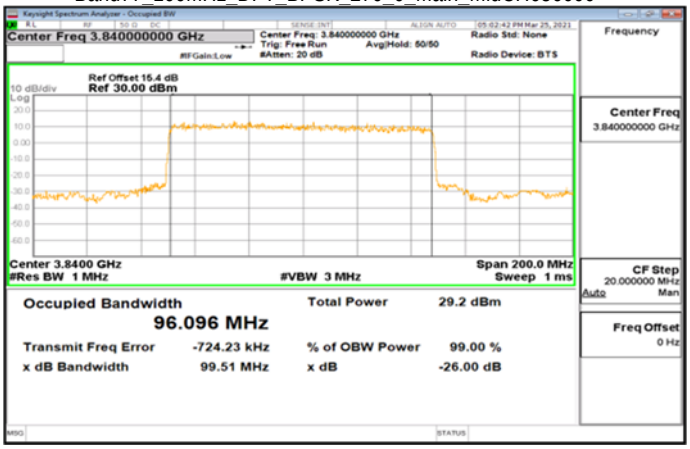
Band77_100MHz_DFT_BPSK_270_0_Main_LowCH650000



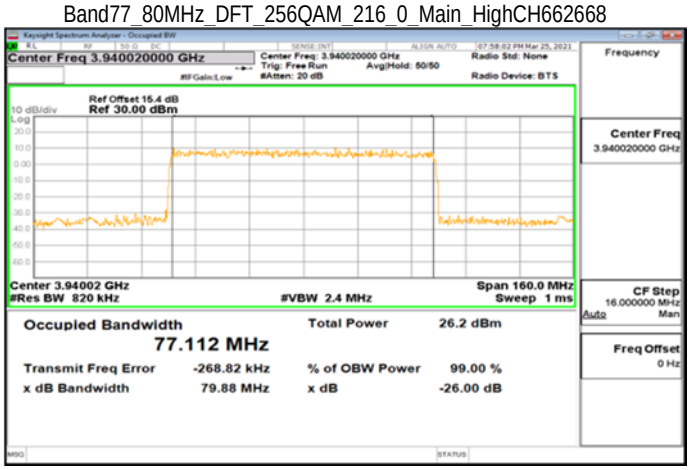
Band77_80MHz_DFT_256QAM_216_0_Main_MidCH656000



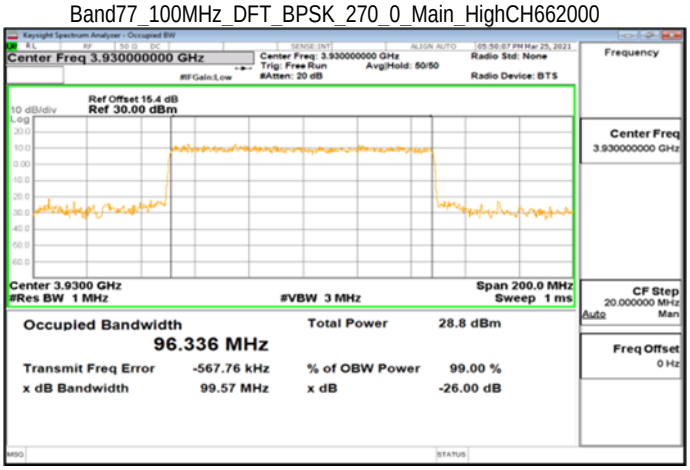
Band77_100MHz_DFT_BPSK_270_0_Main_MidCH656000



Band77_80MHz_DFT_256QAM_216_0_Main_HighCH662668



Band77_100MHz_DFT_BPSK_270_0_Main_HighCH662000



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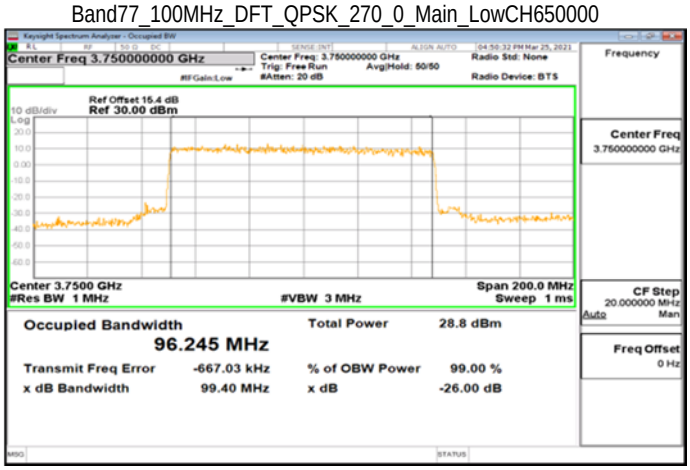
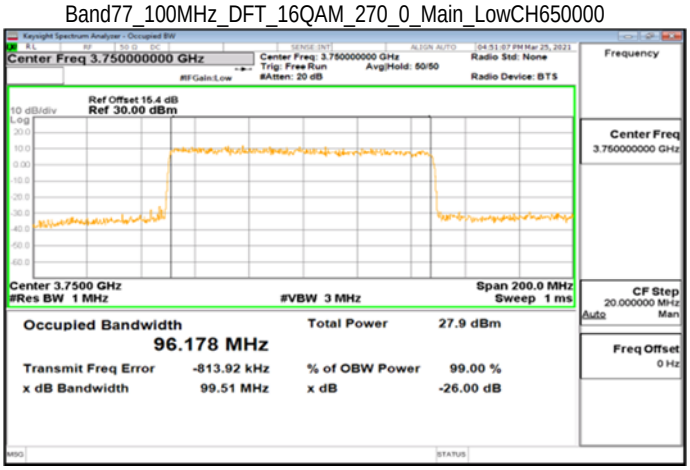
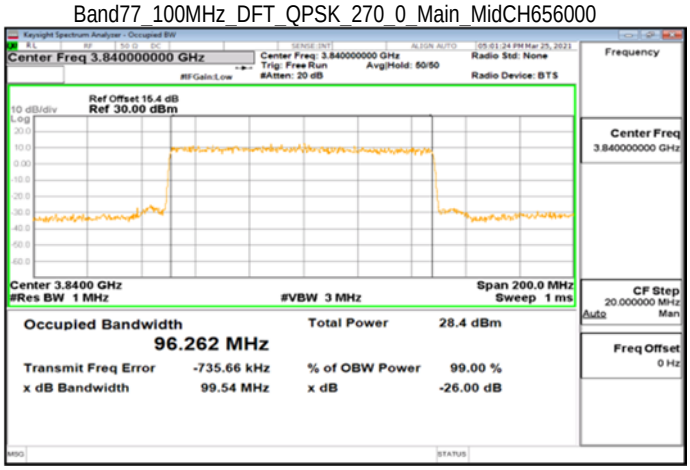
Band77_100MHz_DFT_QPSK_270_0_Main_LowCH650000



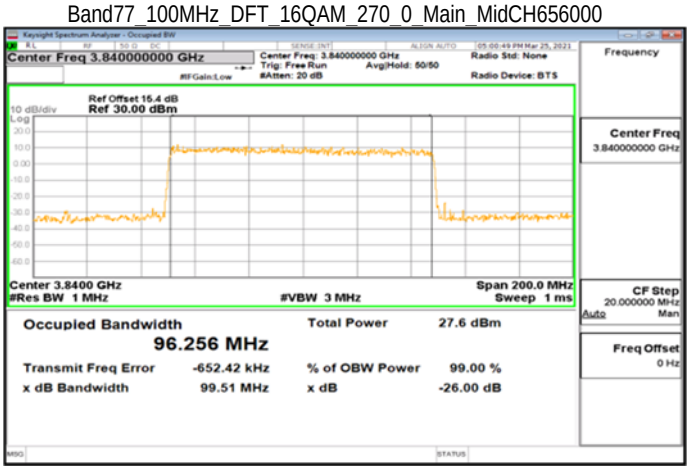
Band77_100MHz_DFT_16QAM_270_0_Main_LowCH650000



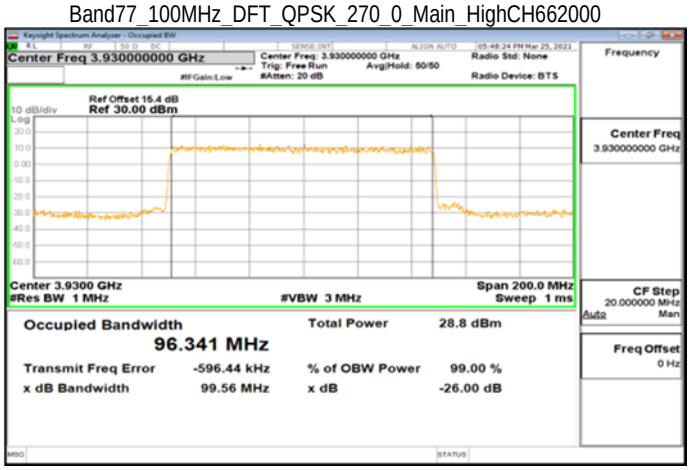
Band77_100MHz_DFT_QPSK_270_0_Main_MidCH656000



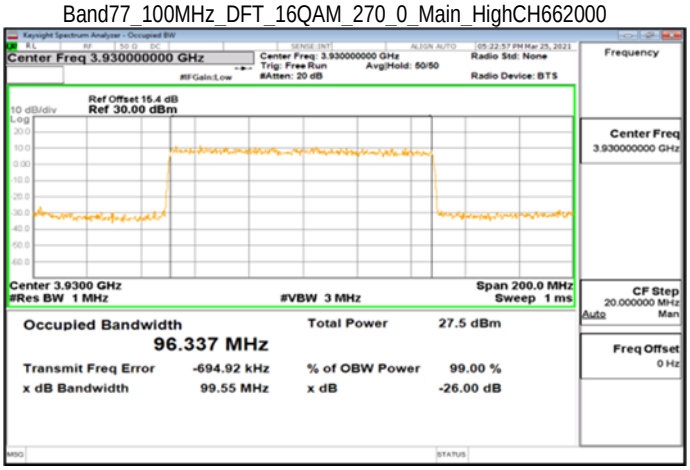
Band77_100MHz_DFT_16QAM_270_0_Main_MidCH656000



Band77_100MHz_DFT_QPSK_270_0_Main_HighCH662000



Band77_100MHz_DFT_16QAM_270_0_Main_HighCH662000



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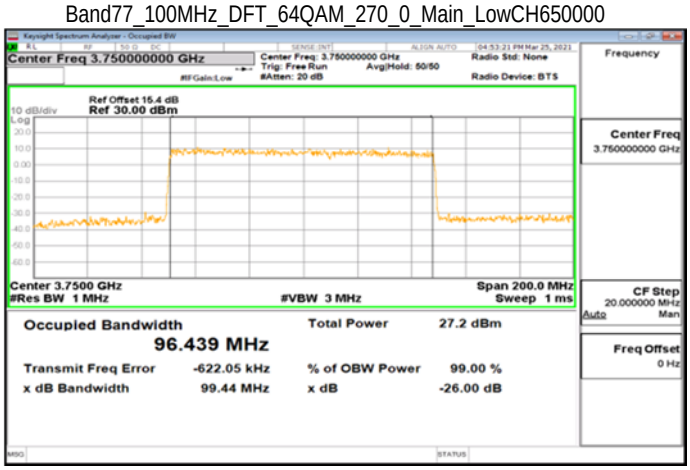
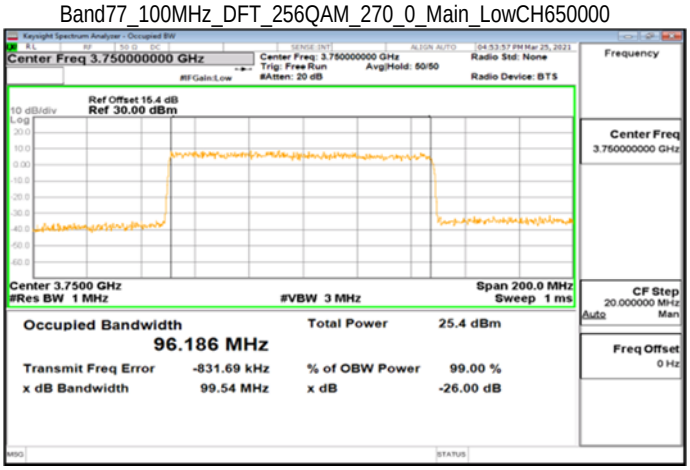
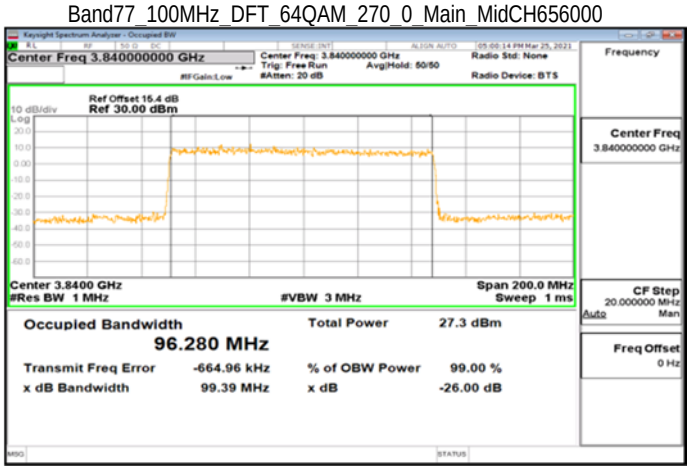
Band77_100MHz_DFT_64QAM_270_0_Main_LowCH650000



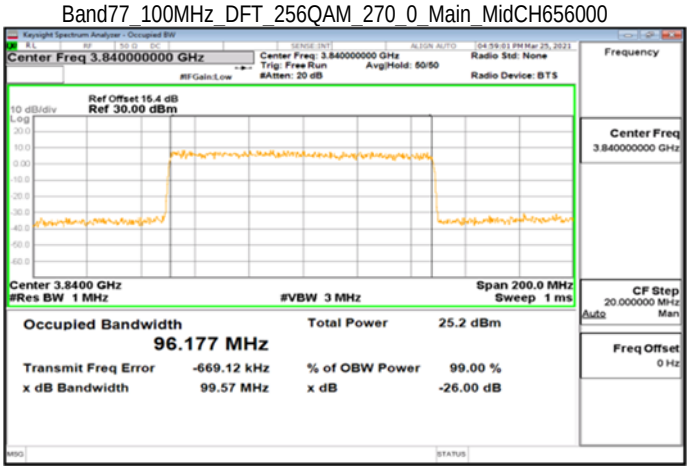
Band77_100MHz_DFT_256QAM_270_0_Main_LowCH650000



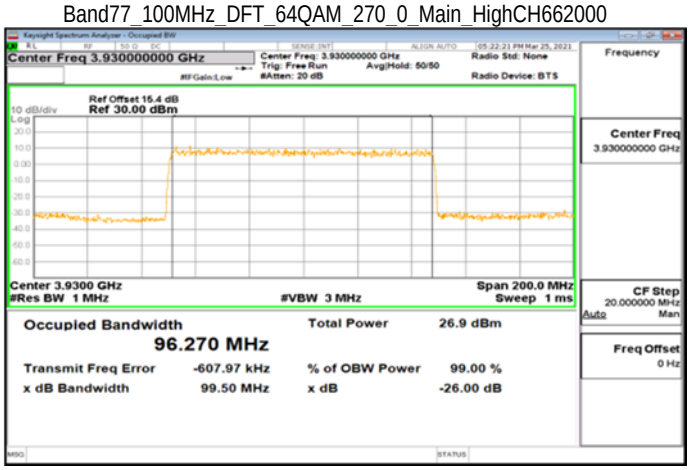
Band77_100MHz_DFT_64QAM_270_0_Main_MidCH656000



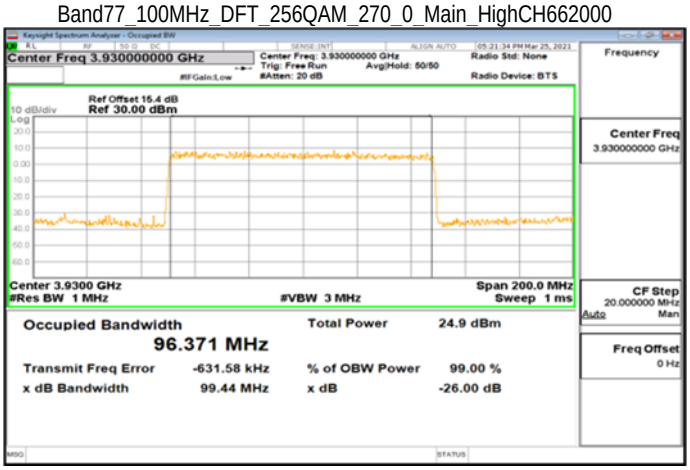
Band77_100MHz_DFT_256QAM_270_0_Main_MidCH656000



Band77_100MHz_DFT_64QAM_270_0_Main_HighCH662000



Band77_100MHz_DFT_256QAM_270_0_Main_HighCH662000



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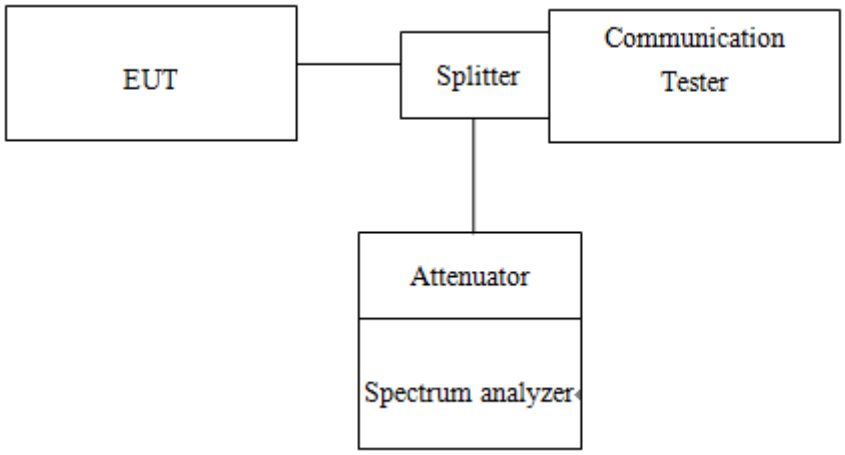
8 OUT OF BAND EMISSION AT ANTENNA TERMINALS

8.1 Standard Applicable

FCC §27.53(l) for 5G NR n77

(2) 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.

8.2 Test SET-UP



8.3 Measurement Procedure

8.3.1 Conducted Emission

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

1. To connect Antenna Port of EUT to Spectrum.
2. Set RBW = 1MHz & VBW = 1MHz on Spectrum.
3. Allow trace to fully stabilize
4. Repeat above procedures until all default test channel measured were complete.

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8.3.2 Emissions Adjacent to License Frequency Block

1. To connect Antenna Port of EUT to Spectrum.
2. The band edge of low and high channels for the highest RF powers was measured. Setting RBW according to each rule part required.
3. Allow trace to fully stabilize
4. Repeat above procedures until all default test channel measured were complete.

8.4 Measurement Equipment Used

Conducted Emission Test Site: Conducted 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	KEYSIGHT	N9010A	MY53400256	11/19/2020	11/18/2021
UXM 5G	KEYSIGHT	E7515B	MY59321561	12/22/2020	12/21/2021
Temperature Chamber	TERCHY	MHG-120LF	911009	05/20/2020	05/19/2021
DC Power Supply	Agilent	E3640A	MY52410006	12/17/2020	12/16/2021
Attenuator	Mini-Circuit	BW-S10W2+	2	12/16/2020	12/15/2021
DC Block	Mini-Circuits	BLK-18-S+	1	12/16/2020	12/15/2021
Power Divider	RF-LAMBDA	RFLT2W1G18G	18112200202	12/16/2020	12/15/2021

8.5 Measurement Result:

Refer to next pages.

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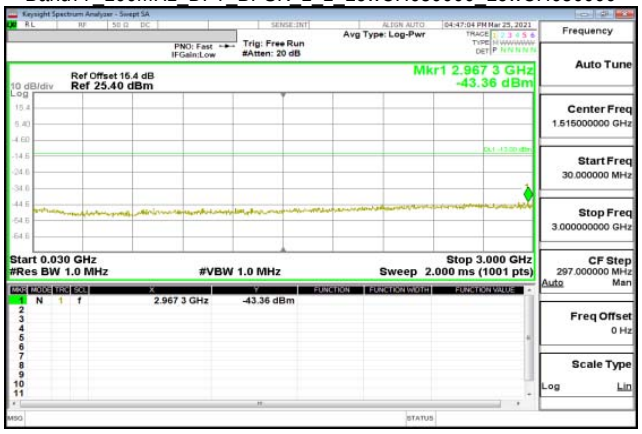
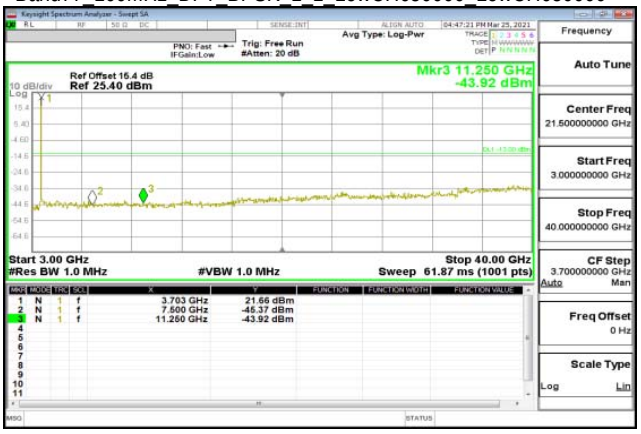
Out of Band Emission

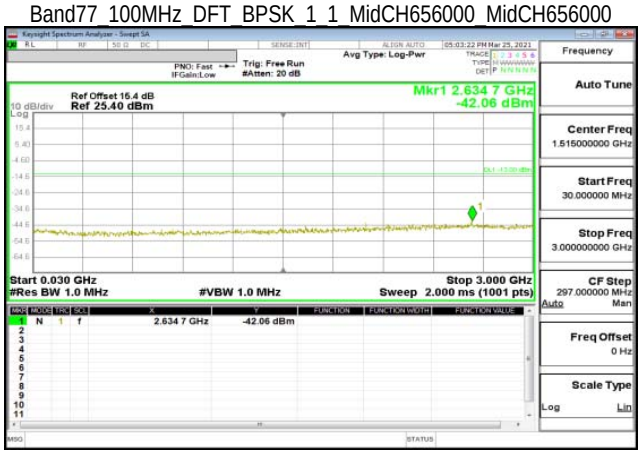
Band77_100MHz_DFT_BPSK_1_1_LowCH650000_LowCH650000



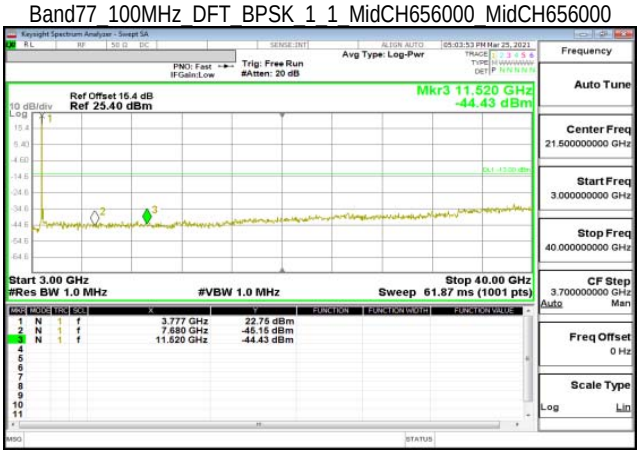
Band77_100MHz_DFT_BPSK_1_1_LowCH650000_LowCH650000



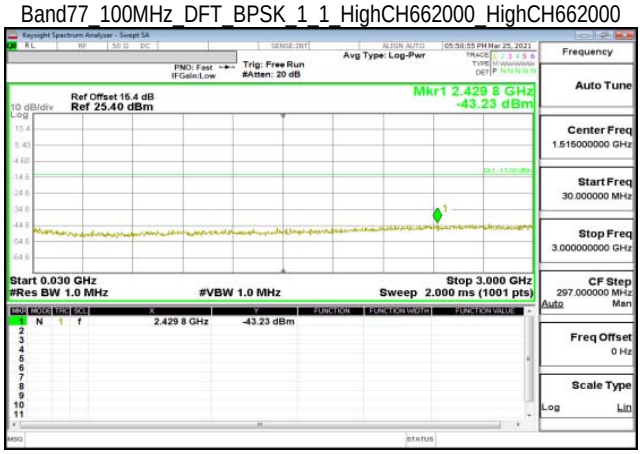
Band77_100MHz_DFT_BPSK_1_1_MidCH656000_MidCH656000



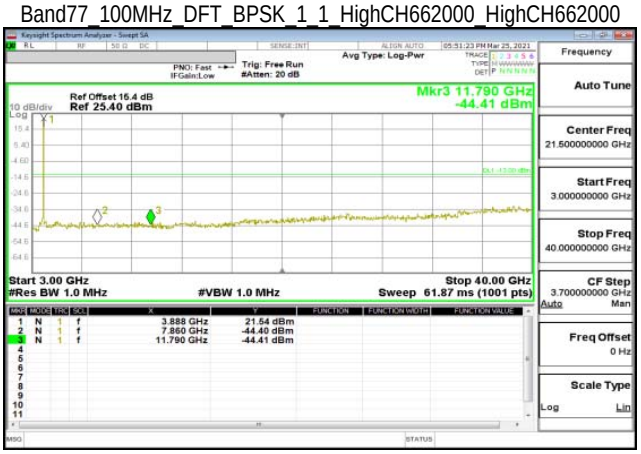
Band77_100MHz_DFT_BPSK_1_1_MidCH656000_MidCH656000



Band77_100MHz_DFT_BPSK_1_1_HighCH662000_HighCH662000



Band77_100MHz_DFT_BPSK_1_1_HighCH662000_HighCH662000



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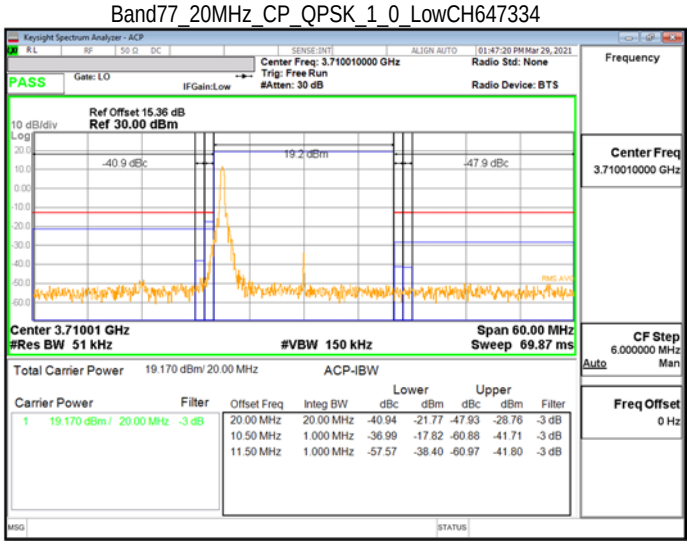
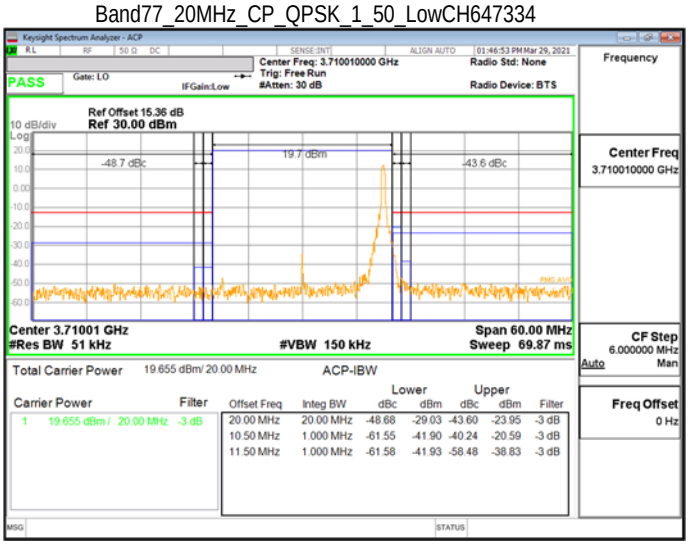
ACLR

Band77_20MHz_CP_QPSK_1_0_LowCH647334



Band77_20MHz_CP_QPSK_1_50_LowCH647334



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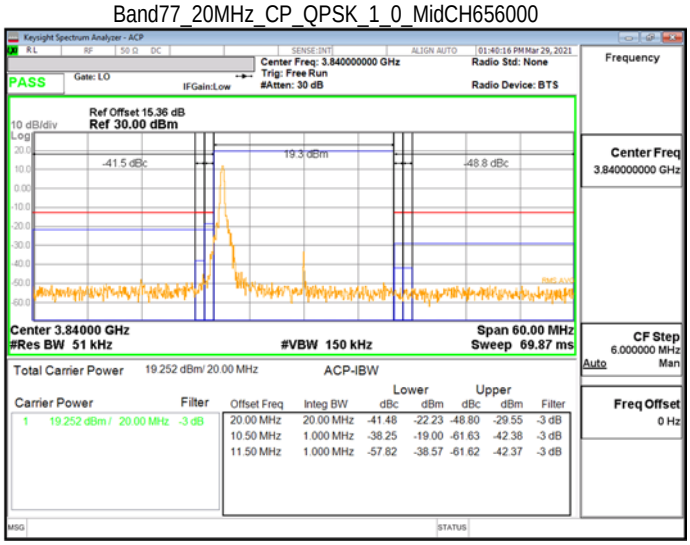

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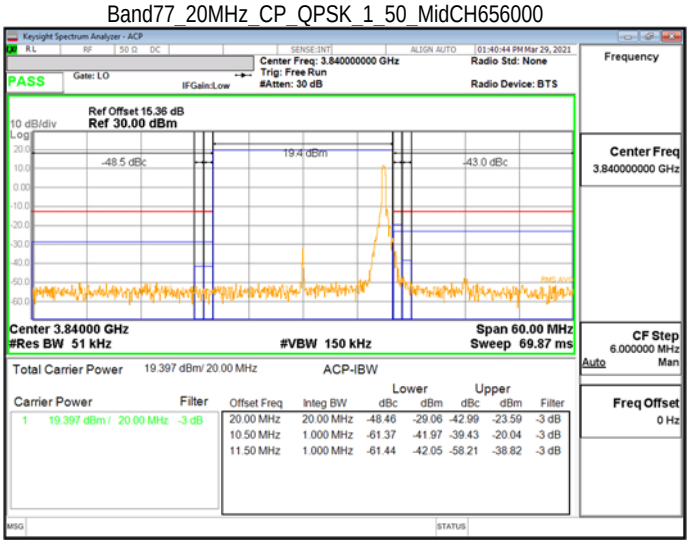
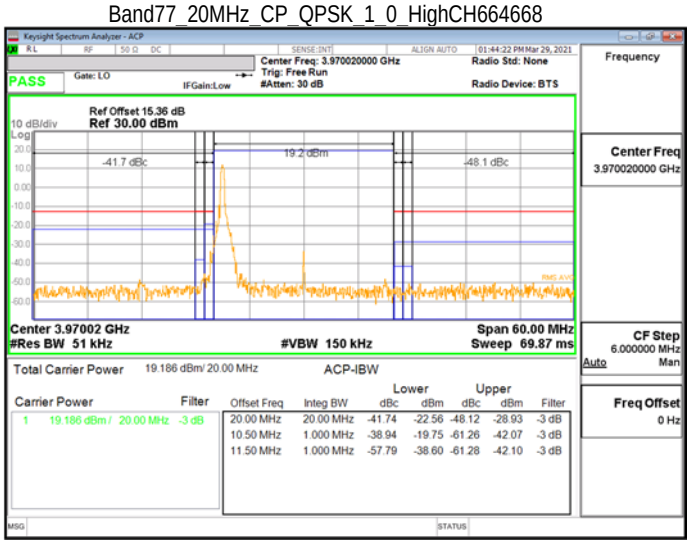
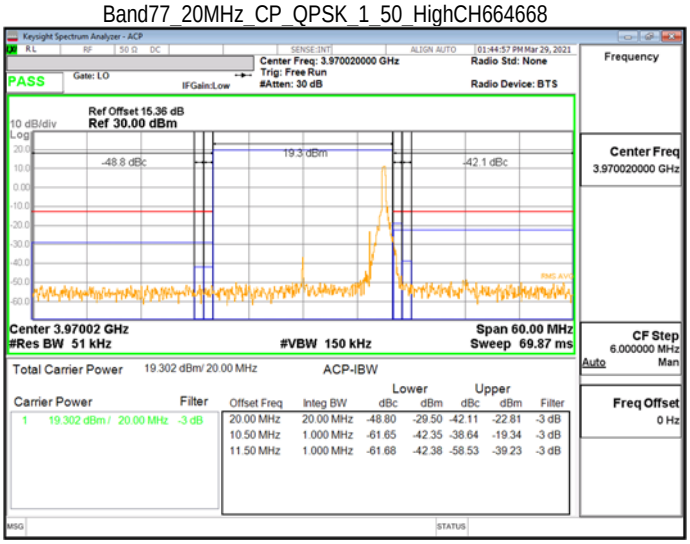


Band77_20MHz_CP_QPSK_1_0_HighCH664668



Band77_20MHz_CP_QPSK_1_50_HighCH664668



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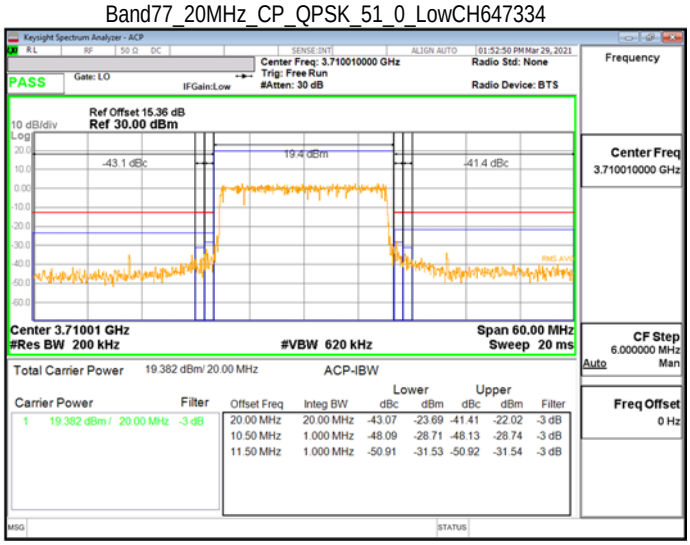
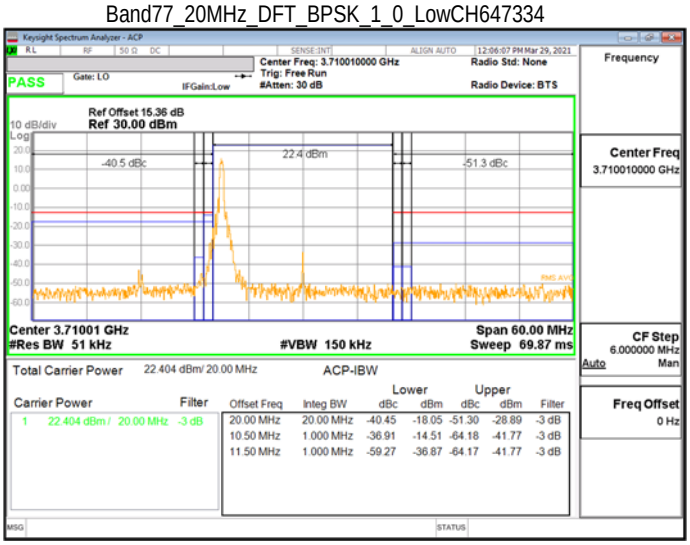
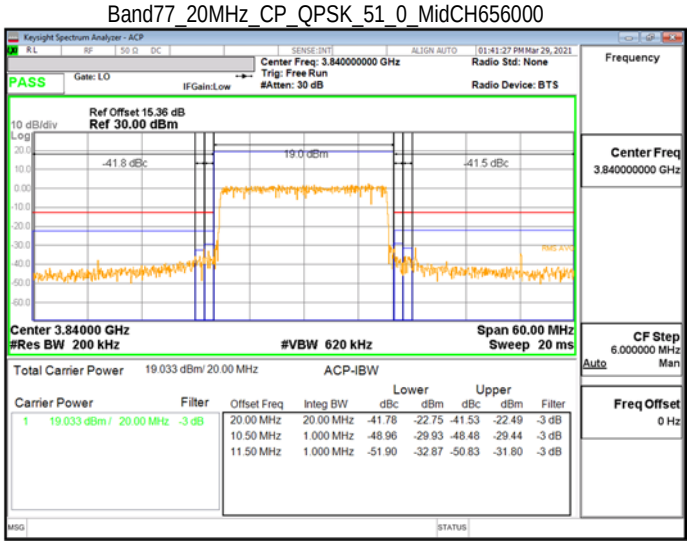
Band77_20MHz_CP_QPSK_51_0_LowCH647334



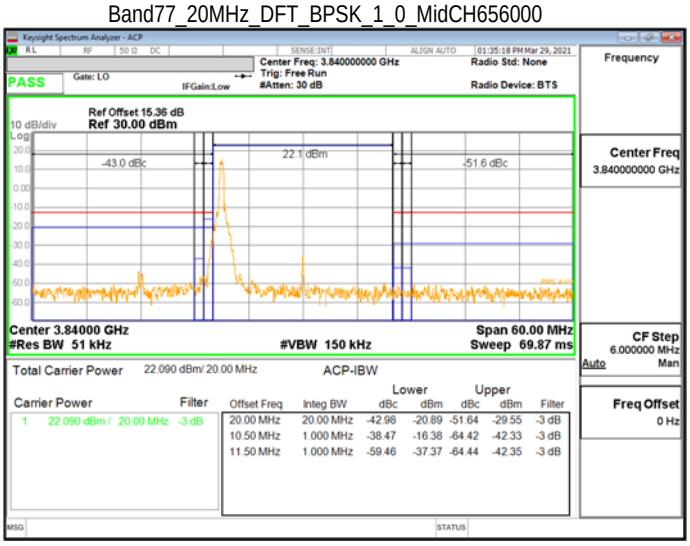
Band77_20MHz_DFT_BPSK_1_0_LowCH647334



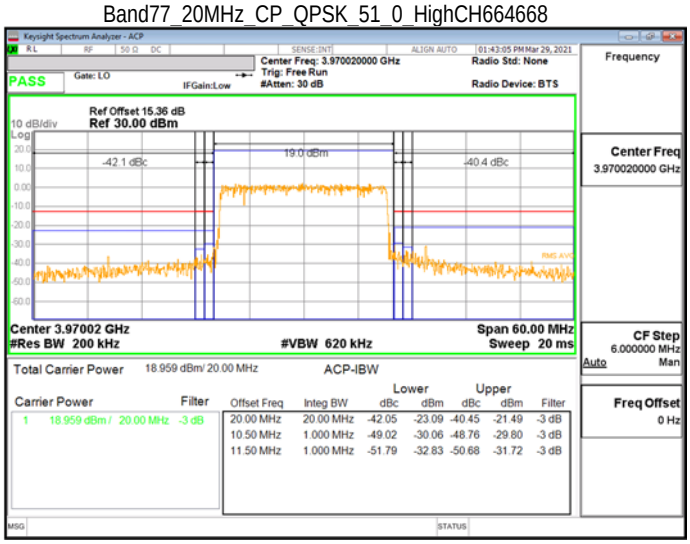
Band77_20MHz_CP_QPSK_51_0_MidCH656000



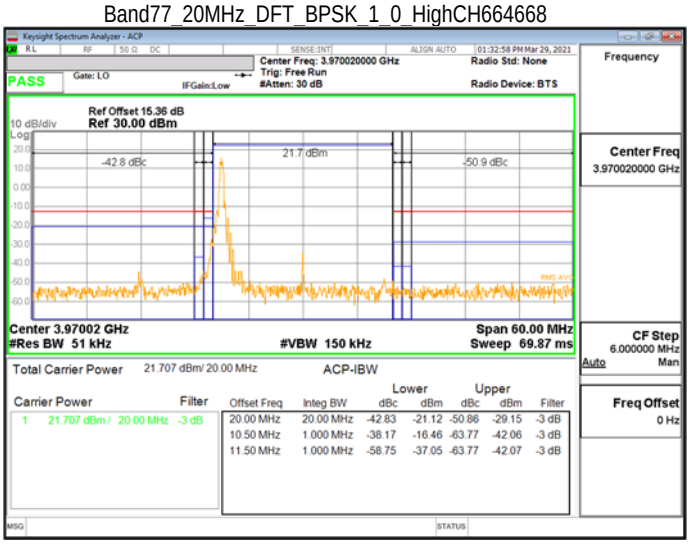
Band77_20MHz_DFT_BPSK_1_0_MidCH656000



Band77_20MHz_CP_QPSK_51_0_HighCH664668



Band77_20MHz_DFT_BPSK_1_0_HighCH664668



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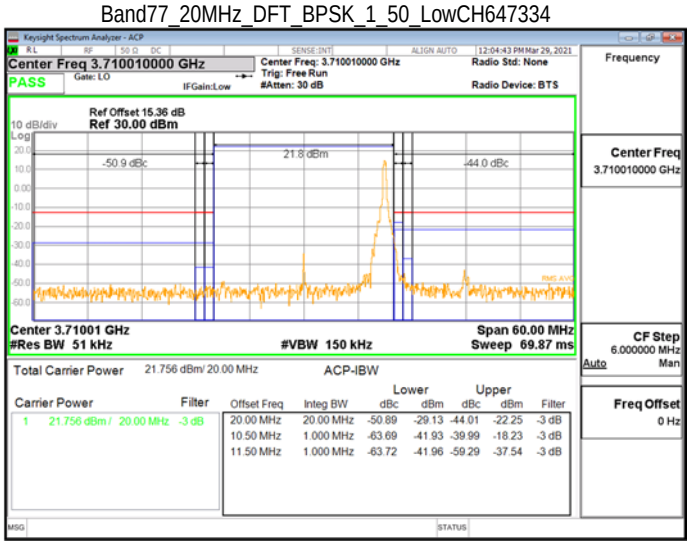
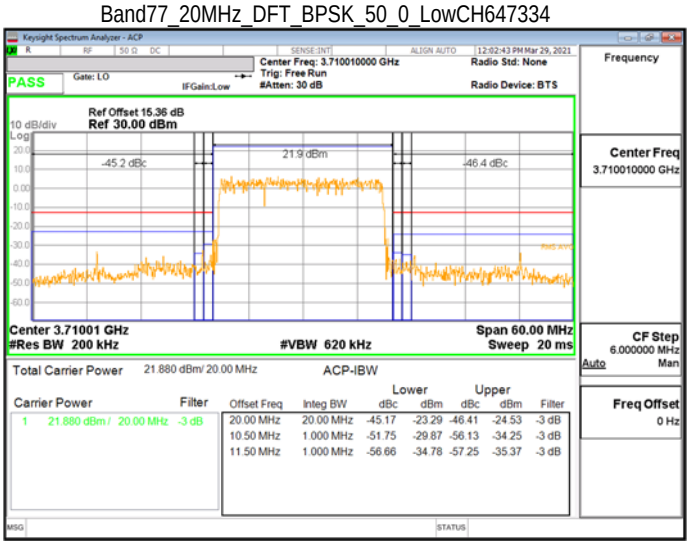
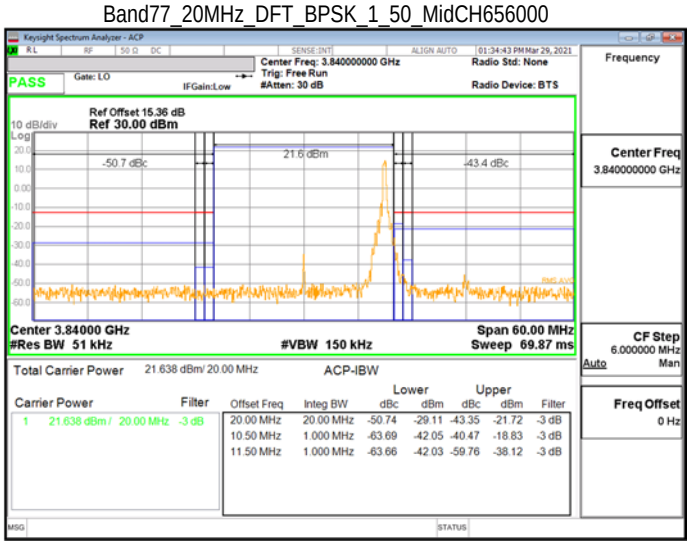
Band77_20MHz_DFT_BPSK_1_50_LowCH647334



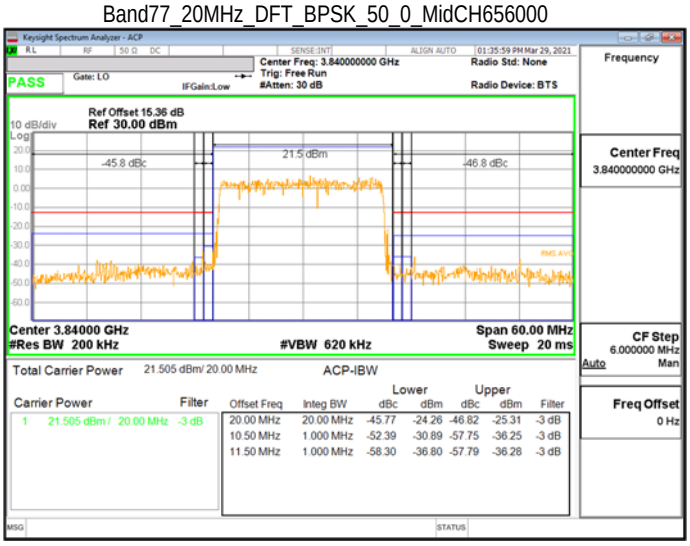
Band77_20MHz_DFT_BPSK_50_0_LowCH647334



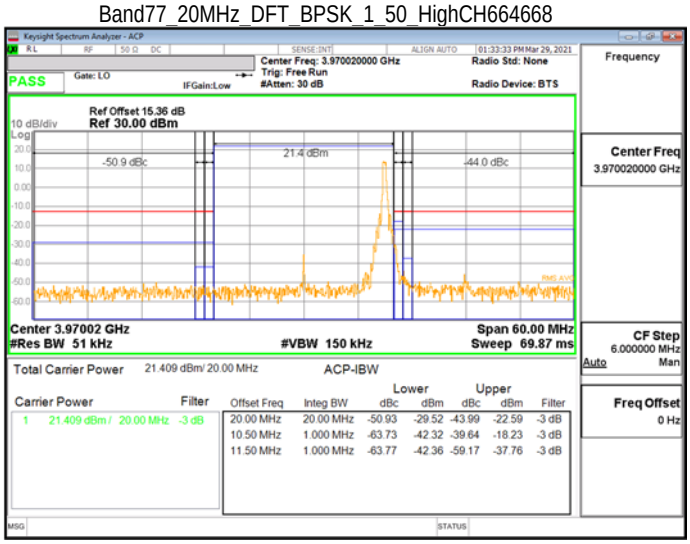
Band77_20MHz_DFT_BPSK_1_50_MidCH656000



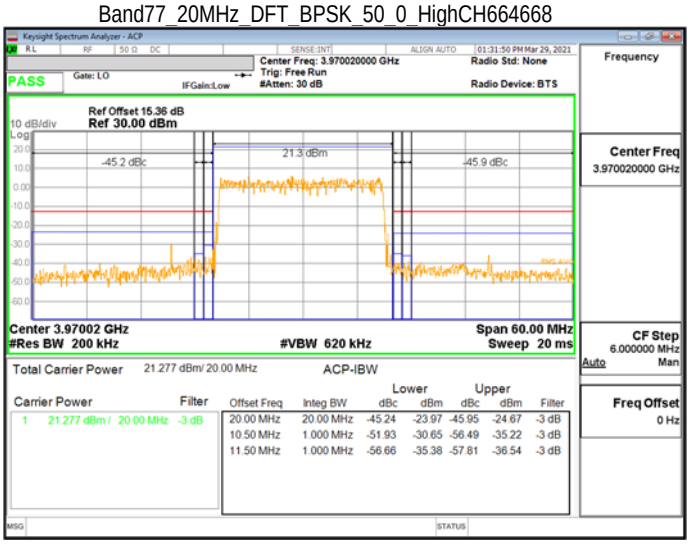
Band77_20MHz_DFT_BPSK_50_0_MidCH656000



Band77_20MHz_DFT_BPSK_1_50_HighCH664668



Band77_20MHz_DFT_BPSK_50_0_HighCH664668



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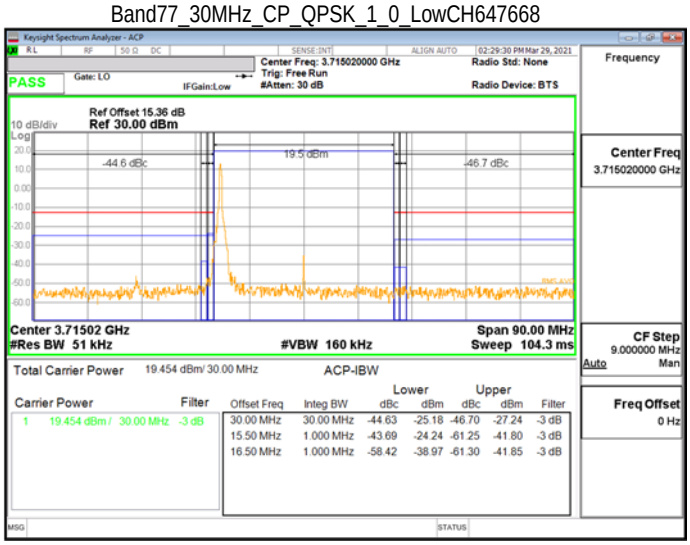
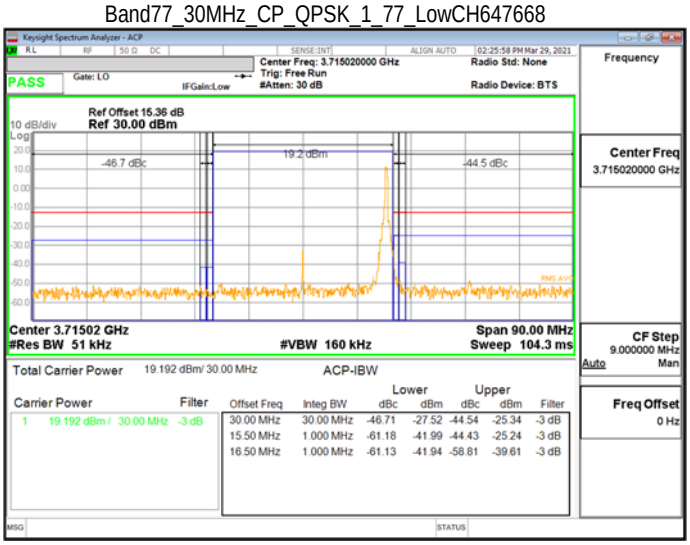
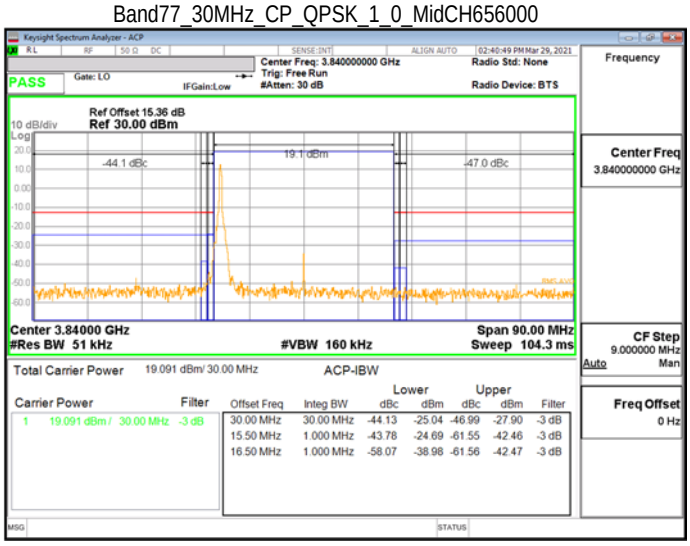
Band77_30MHz_CP_QPSK_1_0_LowCH647668



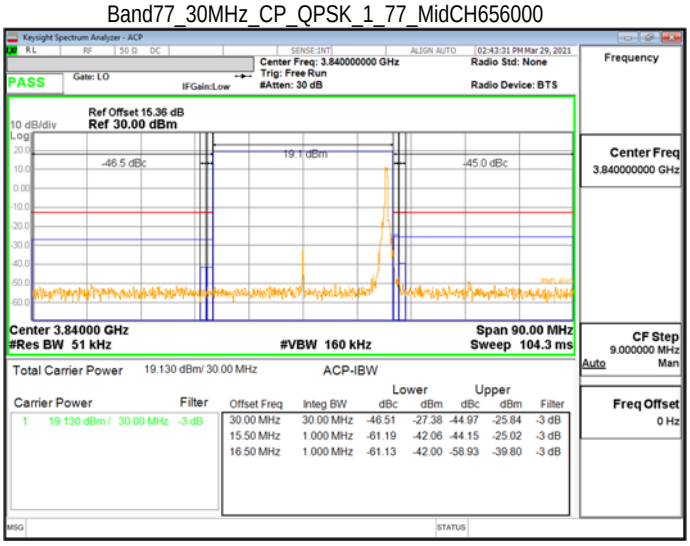
Band77_30MHz_CP_QPSK_1_77_LowCH647668



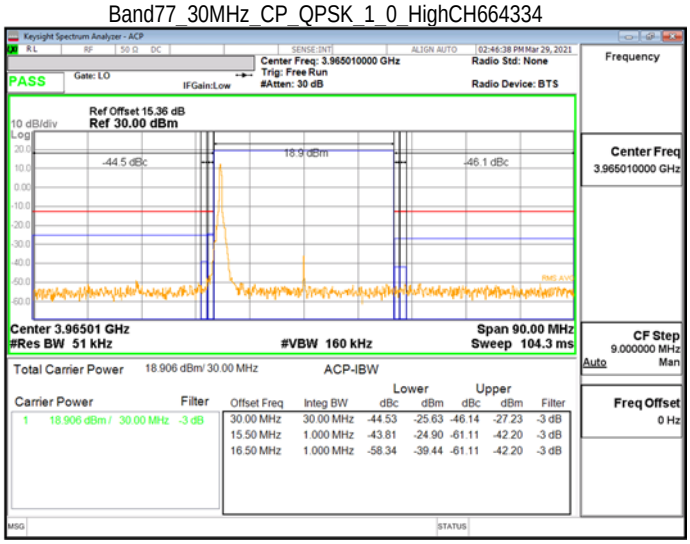
Band77_30MHz_CP_QPSK_1_0_MidCH656000



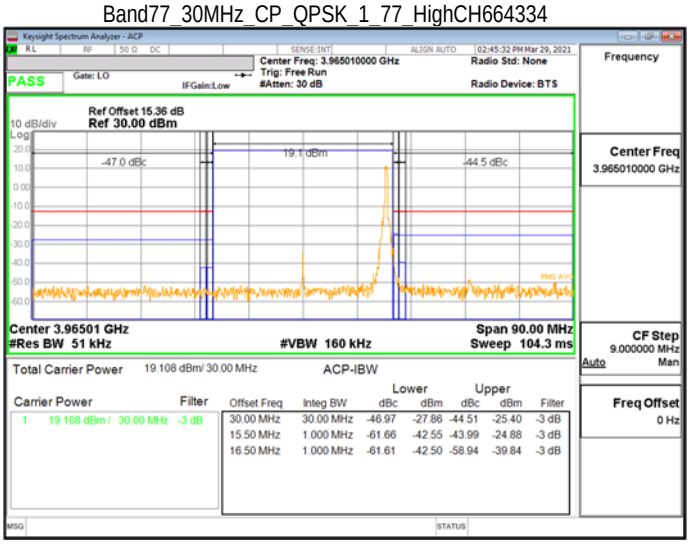
Band77_30MHz_CP_QPSK_1_77_MidCH656000



Band77_30MHz_CP_QPSK_1_0_HighCH664334



Band77_30MHz_CP_QPSK_1_77_HighCH664334



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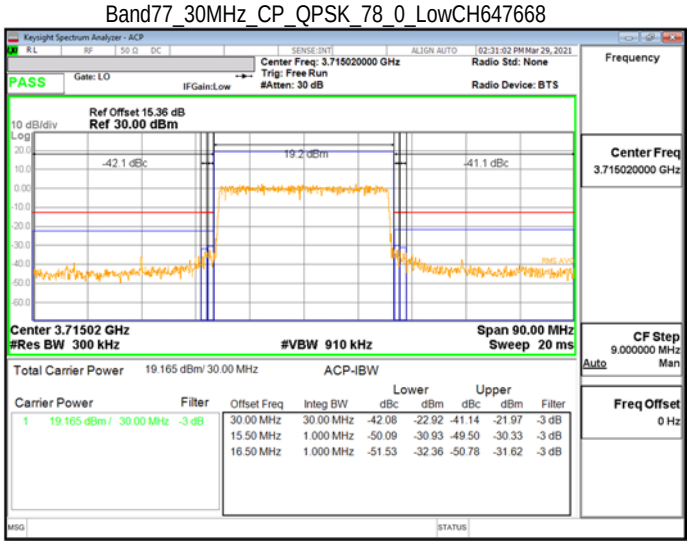
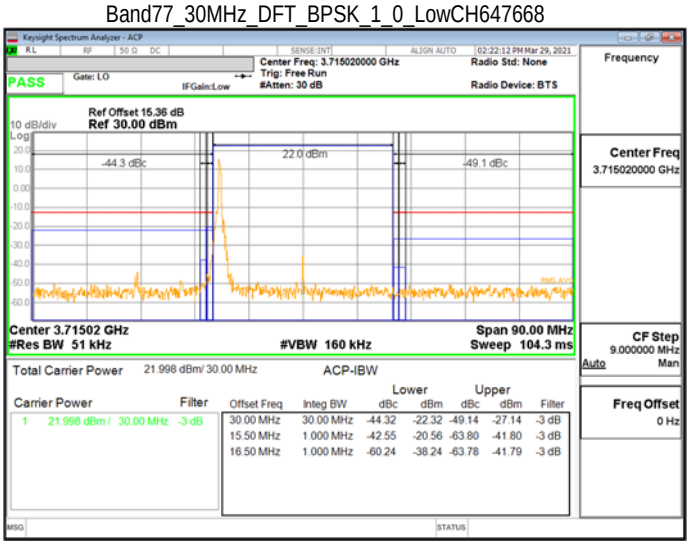
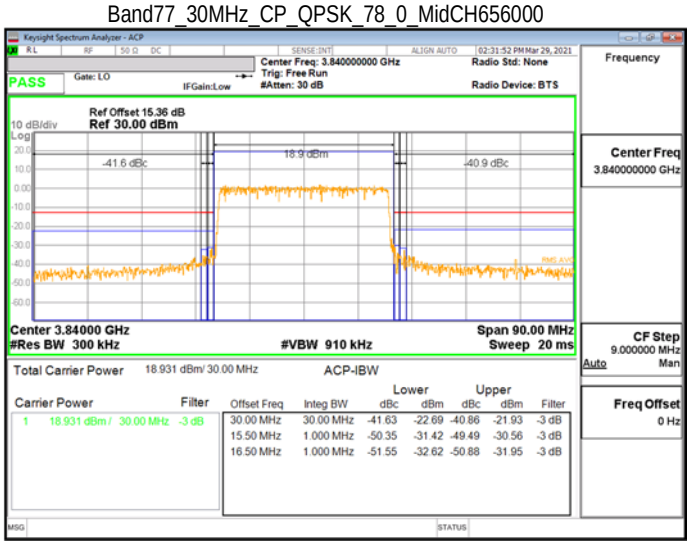
Band77_30MHz_CP_QPSK_78_0_LowCH647668



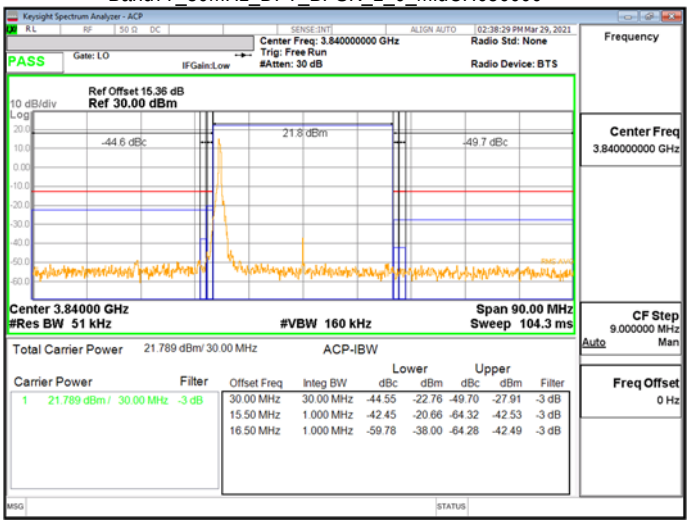
Band77_30MHz_DFT_BPSK_1_0_LowCH647668



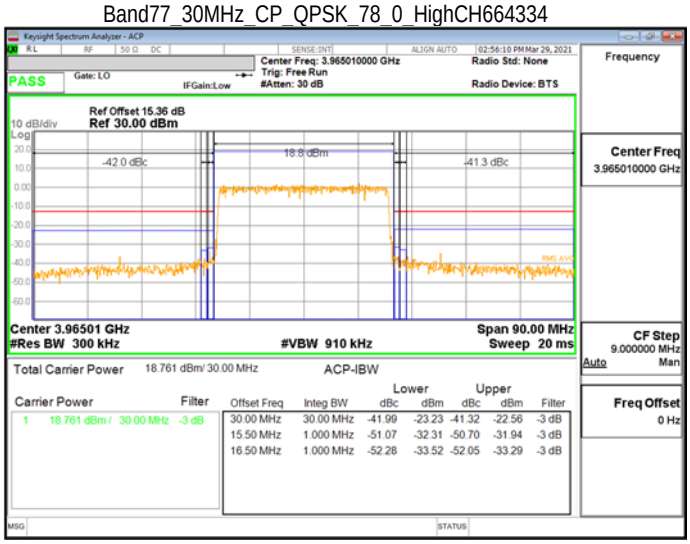
Band77_30MHz_CP_QPSK_78_0_MidCH656000



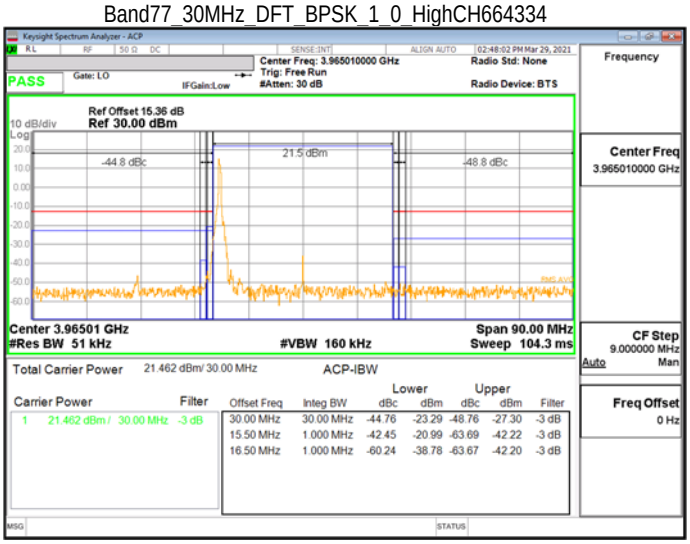
Band77_30MHz_DFT_BPSK_1_0_MidCH656000



Band77_30MHz_CP_QPSK_78_0_HighCH664334



Band77_30MHz_DFT_BPSK_1_0_HighCH664334



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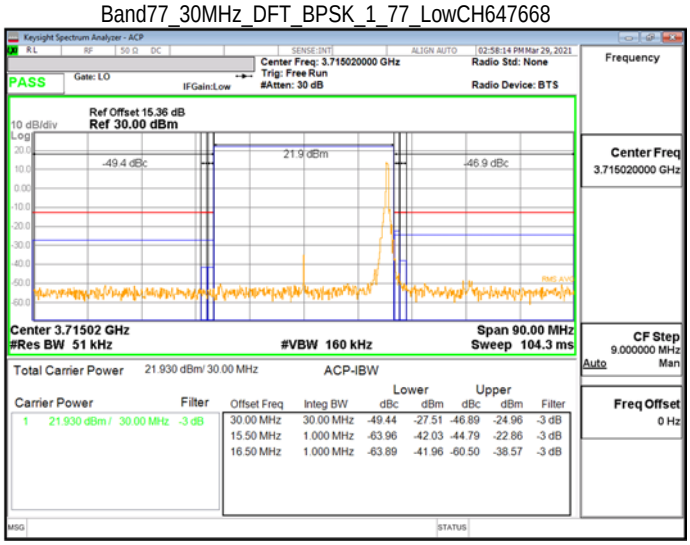
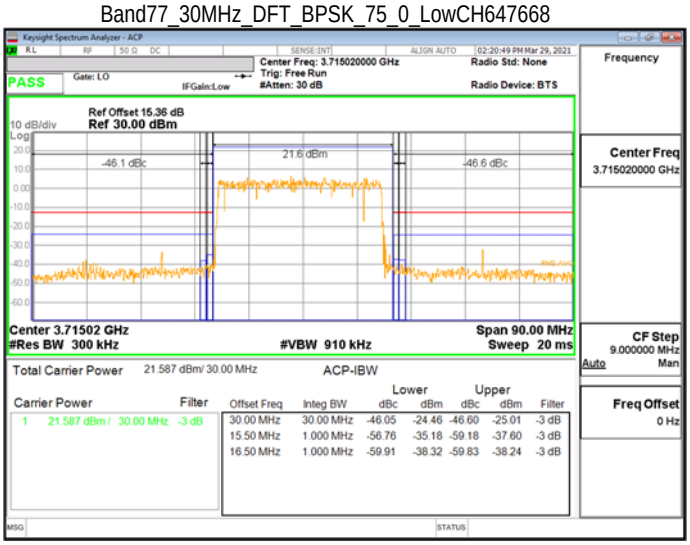
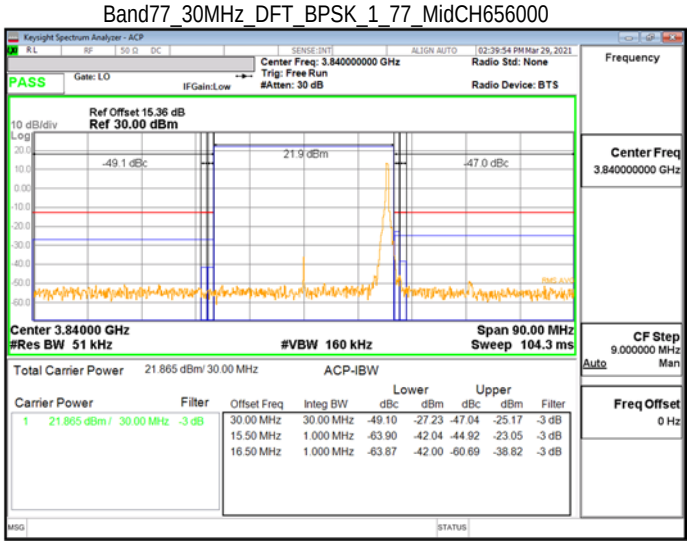
Band77_30MHz_DFT_BPSK_1_77_LowCH647668



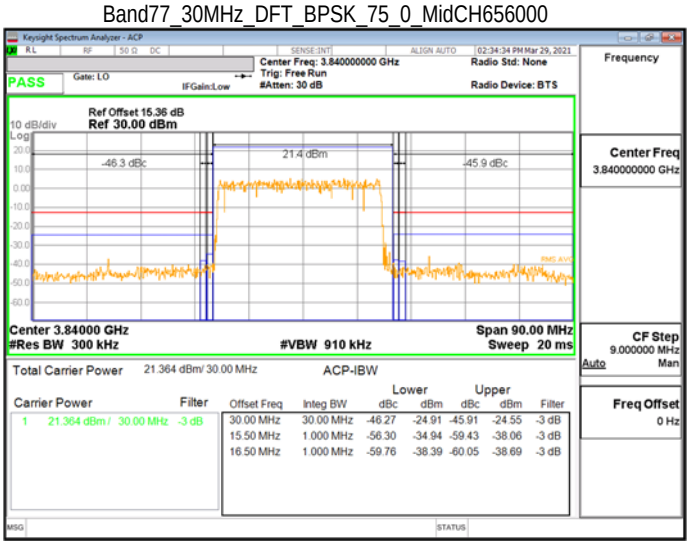
Band77_30MHz_DFT_BPSK_75_0_LowCH647668



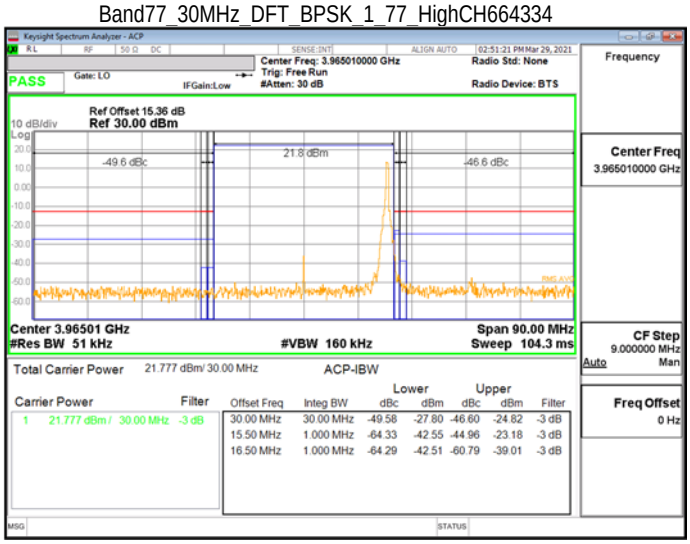
Band77_30MHz_DFT_BPSK_1_77_MidCH656000



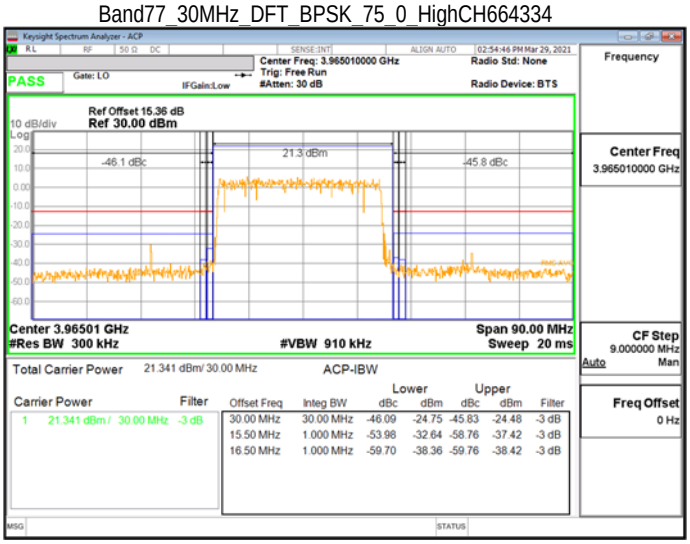
Band77_30MHz_DFT_BPSK_75_0_MidCH656000



Band77_30MHz_DFT_BPSK_1_77_HighCH664334



Band77_30MHz_DFT_BPSK_75_0_HighCH664334



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