

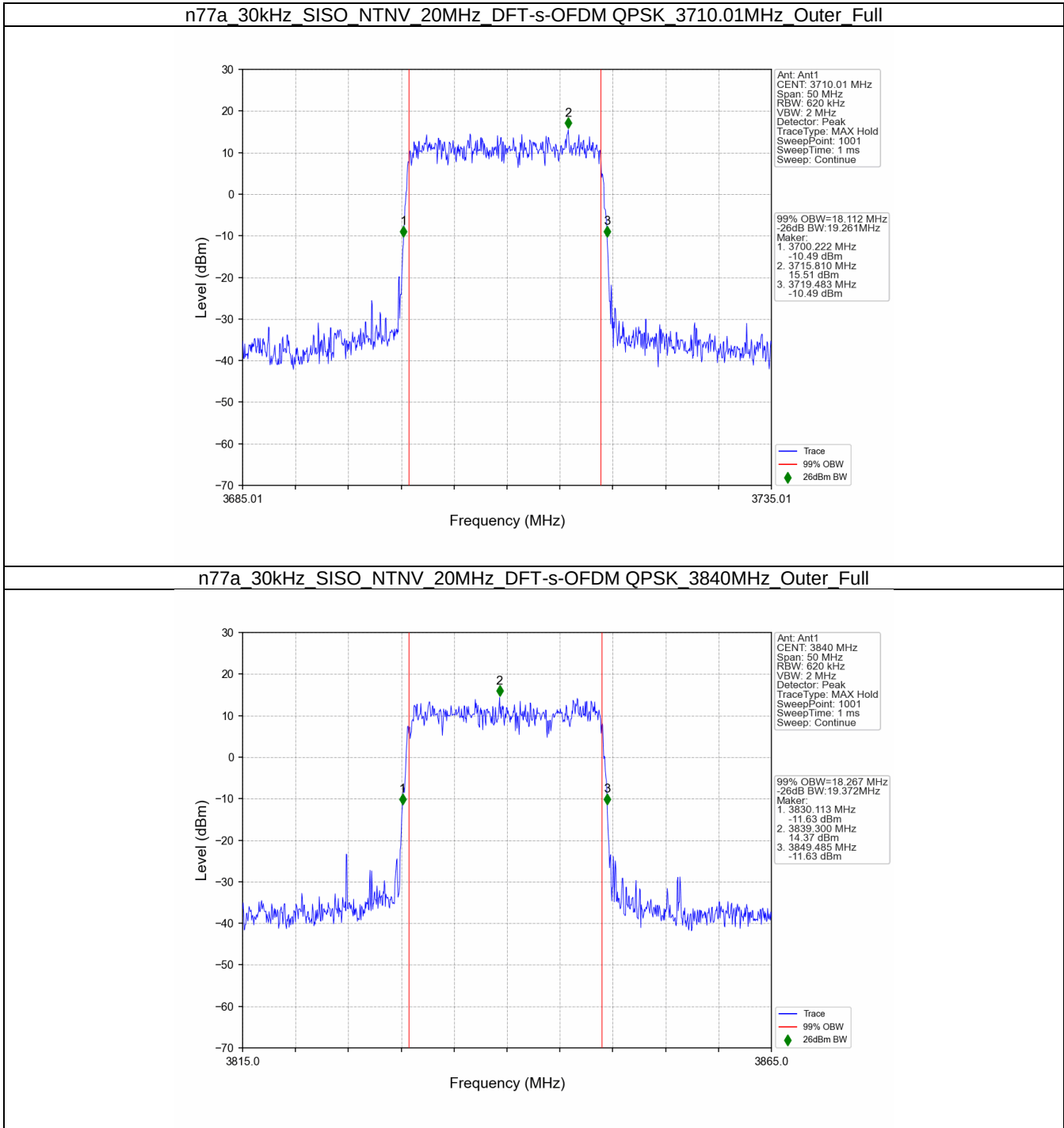
1. 99% & 26dB Bandwidth

1.1 30k_SISO_20MHz_NTNV

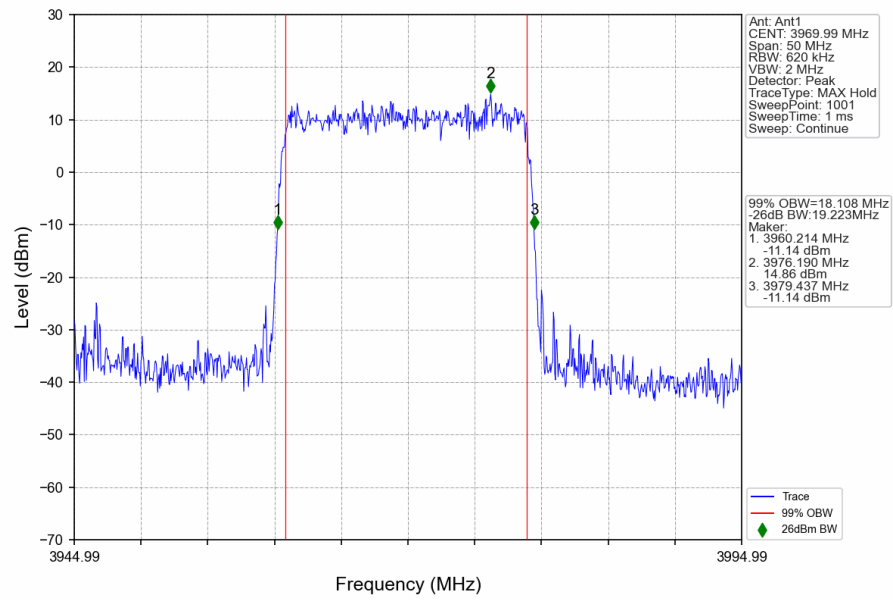
1.1.1 Test Result

5G NR n77a SCS=30kHz SISO 20MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3710.01	Outer_Full	18.11	19.26	/	Pass
	3840	Outer_Full	18.27	19.37	/	Pass
	3969.99	Outer_Full	18.11	19.22	/	Pass
DFT-s-OFDM 64 QAM	3710.01	Outer_Full	18.07	19.34	/	Pass
	3840	Outer_Full	17.99	19.24	/	Pass
	3969.99	Outer_Full	18.11	19.30	/	Pass
DFT-s-OFDM 256 QAM	3710.01	Outer_Full	18.17	19.39	/	Pass
	3840	Outer_Full	18.08	19.57	/	Pass
	3969.99	Outer_Full	18.00	19.24	/	Pass
CP-OFDM QPSK	3710.01	Outer_Full	18.37	19.69	/	Pass
	3840	Outer_Full	18.37	19.62	/	Pass
	3969.99	Outer_Full	18.35	19.61	/	Pass
CP-OFDM 64 QAM	3710.01	Outer_Full	18.27	19.75	/	Pass
	3840	Outer_Full	18.42	19.71	/	Pass
	3969.99	Outer_Full	18.38	19.68	/	Pass
CP-OFDM 256 QAM	3710.01	Outer_Full	18.31	19.78	/	Pass
	3840	Outer_Full	18.36	19.82	/	Pass
	3969.99	Outer_Full	18.33	19.64	/	Pass

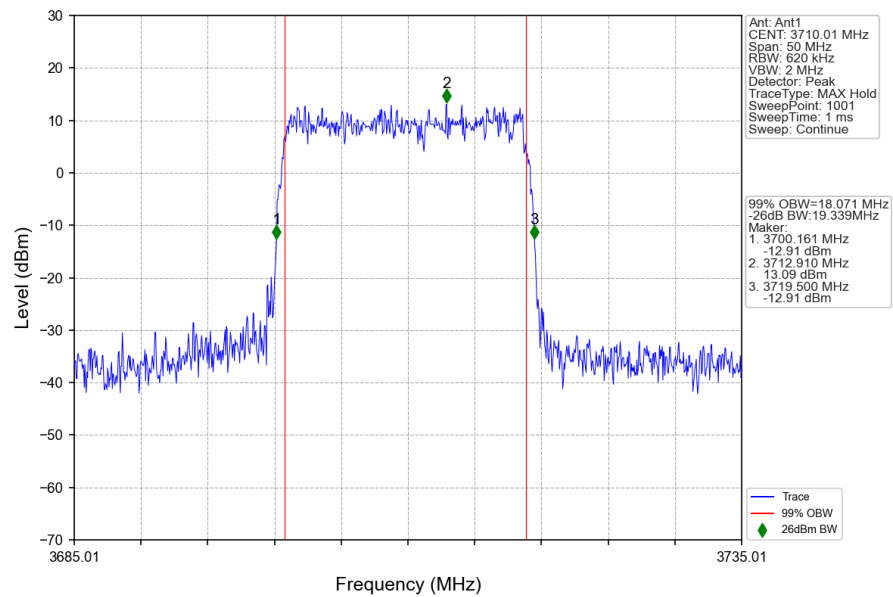
1.1.2 Test Graph



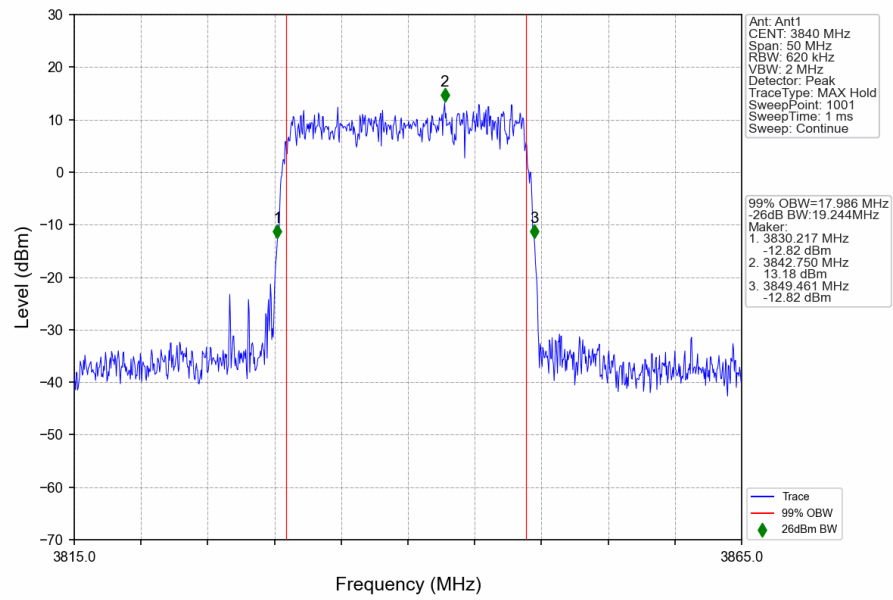
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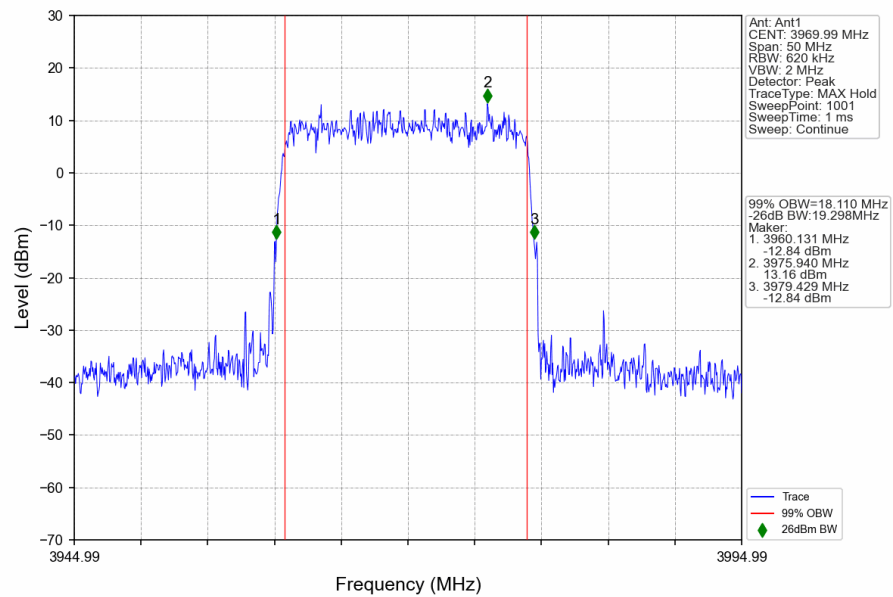
n77a_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_64_QAM_3710.01MHz_Outer_Full



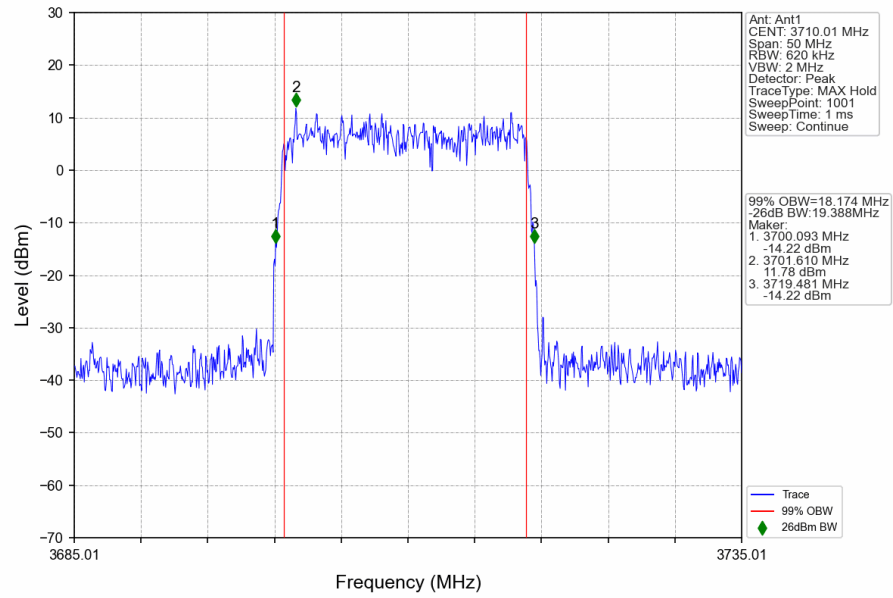
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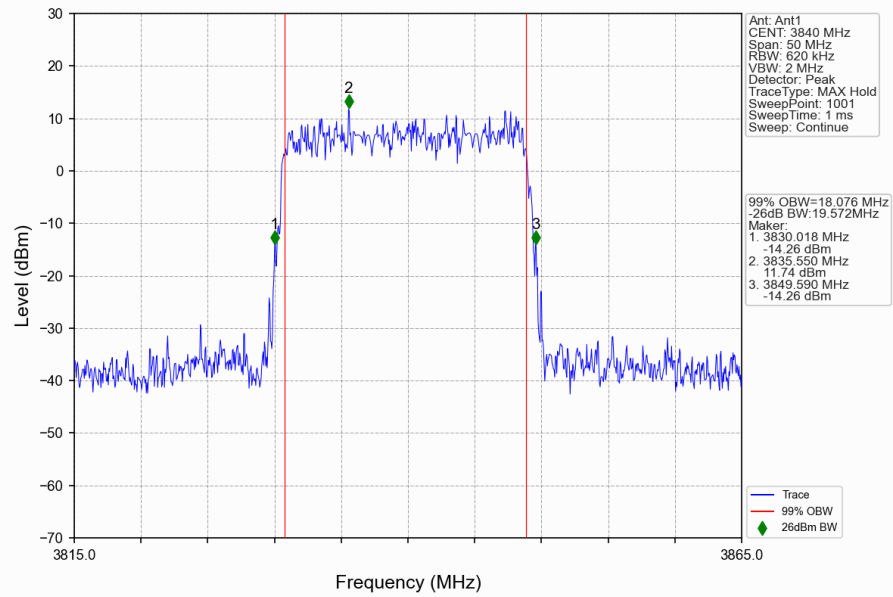
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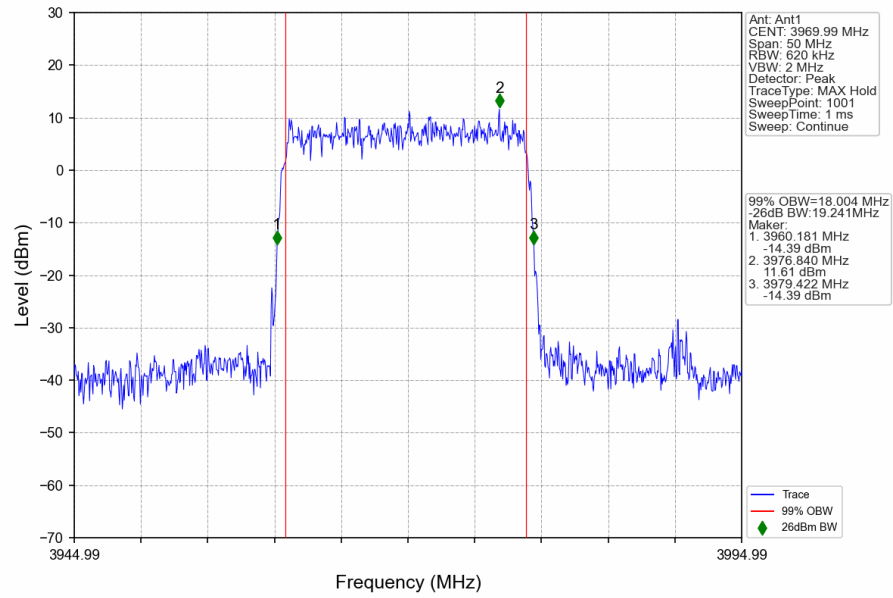
n77a_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_3710.01MHz_Outer_Full



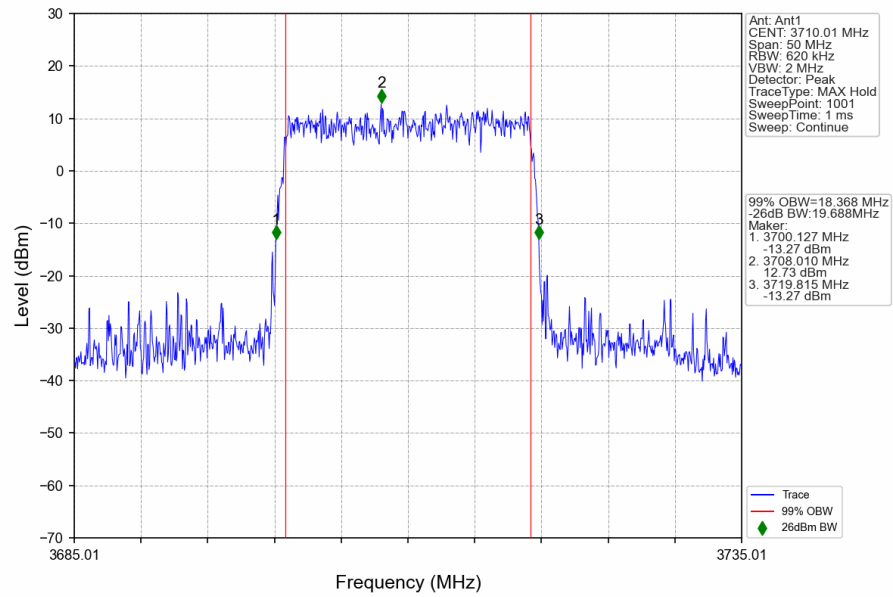
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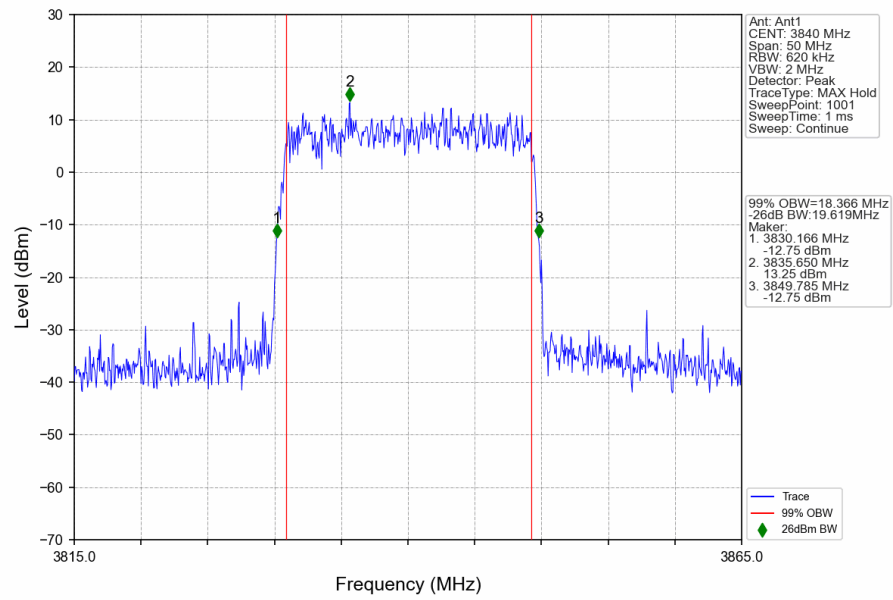
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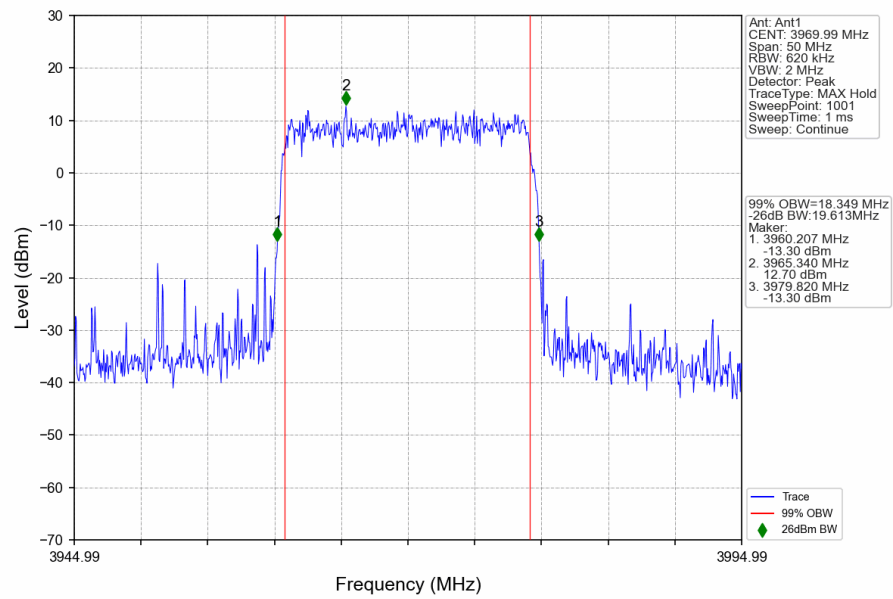
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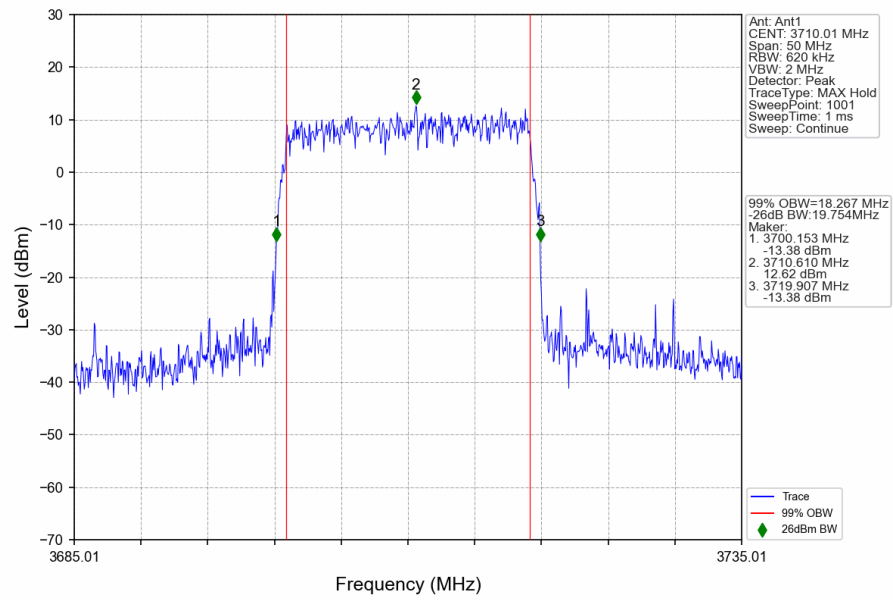
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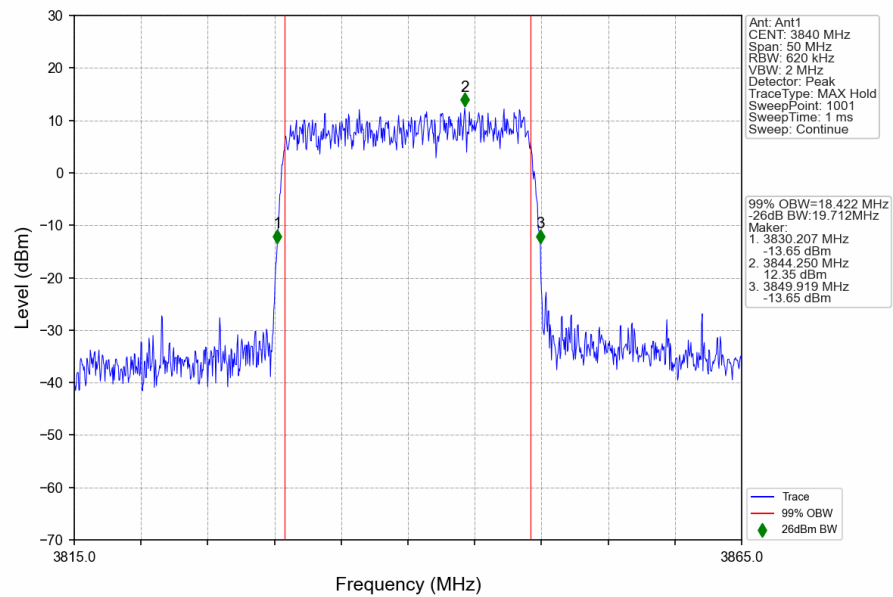
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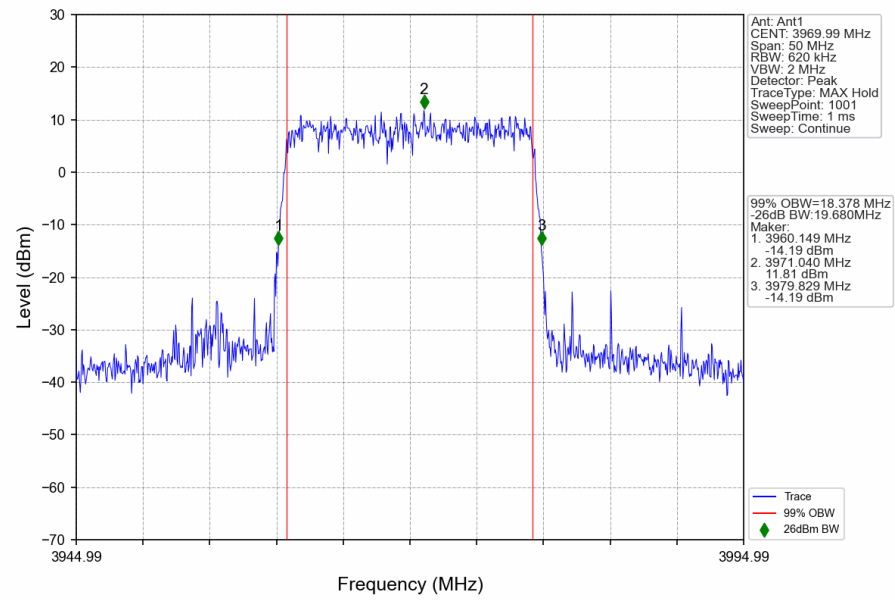
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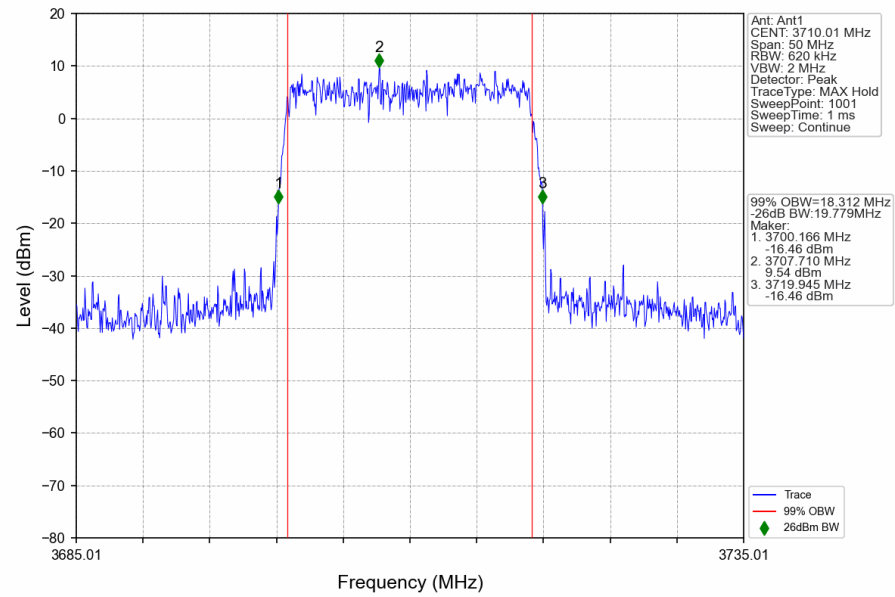
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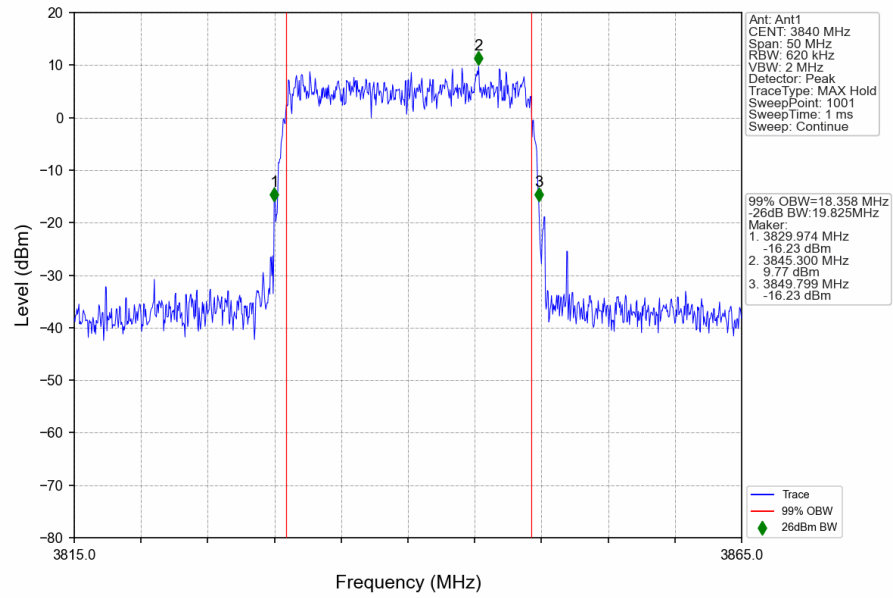
n77a_30kHz_SISO_NTNV_20MHz_CP-OFDM_64_QAM_3969.99MHz_Outer_Full



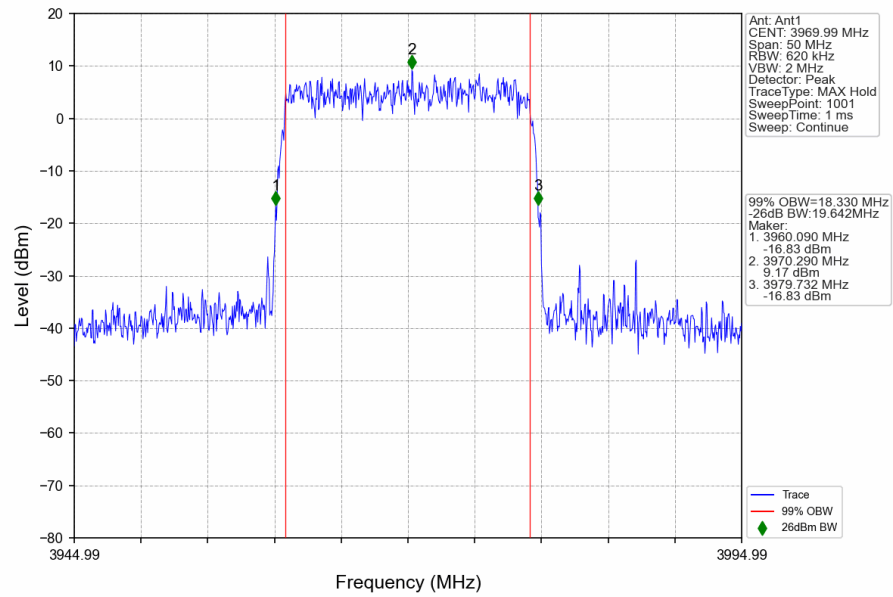
n77a_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3710.01MHz_Outer_Full



n77a_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full



n77a_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3969.99MHz_Outer_Full

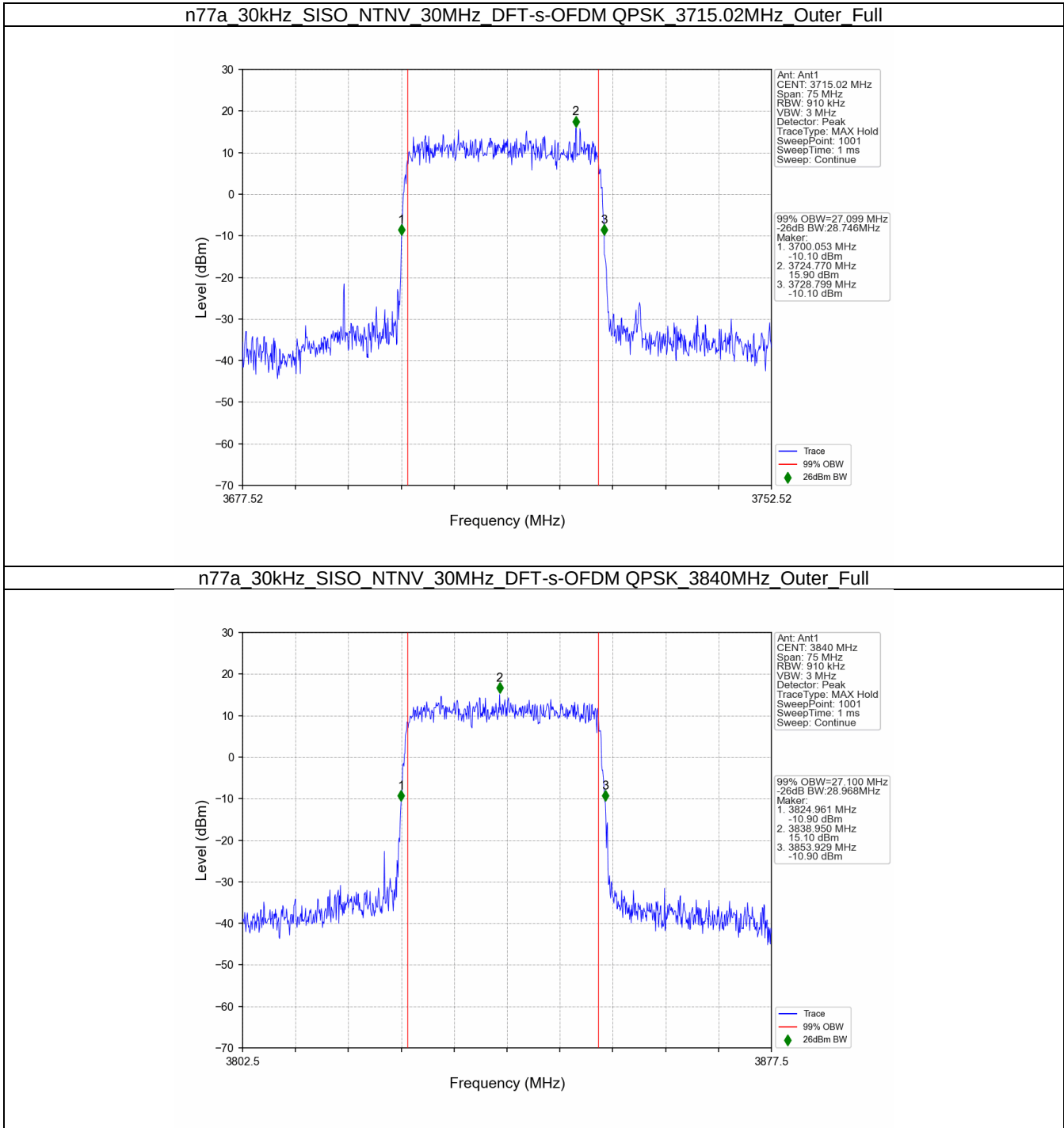


1.2 30k_SISO_30MHz_NTNV

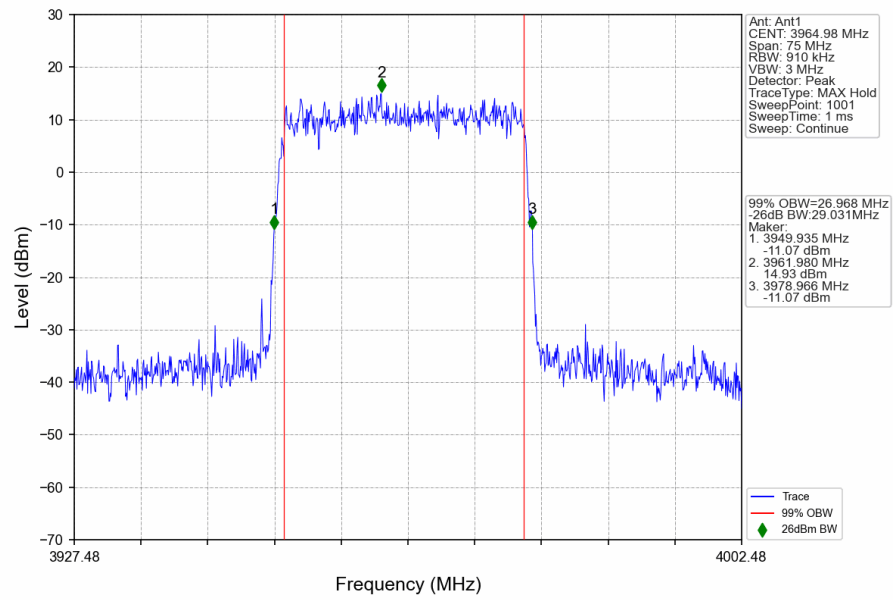
1.2.1 Test Result

5G NR n77a SCS=30kHz SISO 30MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3715.02	Outer_Full	27.10	28.75	/	Pass
	3840	Outer_Full	27.10	28.97	/	Pass
	3964.98	Outer_Full	26.97	29.03	/	Pass
DFT-s-OFDM 64 QAM	3715.02	Outer_Full	27.24	28.54	/	Pass
	3840	Outer_Full	27.12	28.95	/	Pass
	3964.98	Outer_Full	27.14	28.81	/	Pass
DFT-s-OFDM 256 QAM	3715.02	Outer_Full	26.75	28.94	/	Pass
	3840	Outer_Full	27.11	28.78	/	Pass
	3964.98	Outer_Full	27.09	28.63	/	Pass
CP-OFDM QPSK	3715.02	Outer_Full	27.98	29.99	/	Pass
	3840	Outer_Full	28.01	30.09	/	Pass
	3964.98	Outer_Full	28.07	29.96	/	Pass
CP-OFDM 64 QAM	3715.02	Outer_Full	28.04	30.18	/	Pass
	3840	Outer_Full	27.97	29.95	/	Pass
	3964.98	Outer_Full	28.03	29.99	/	Pass
CP-OFDM 256 QAM	3715.02	Outer_Full	28.16	30.01	/	Pass
	3840	Outer_Full	28.04	29.82	/	Pass
	3964.98	Outer_Full	27.98	29.79	/	Pass

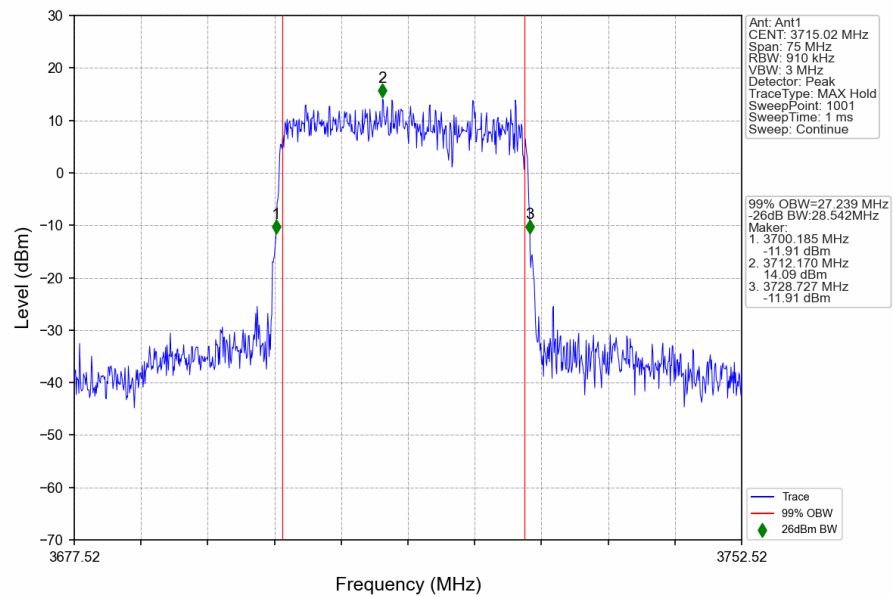
1.2.2 Test Graph



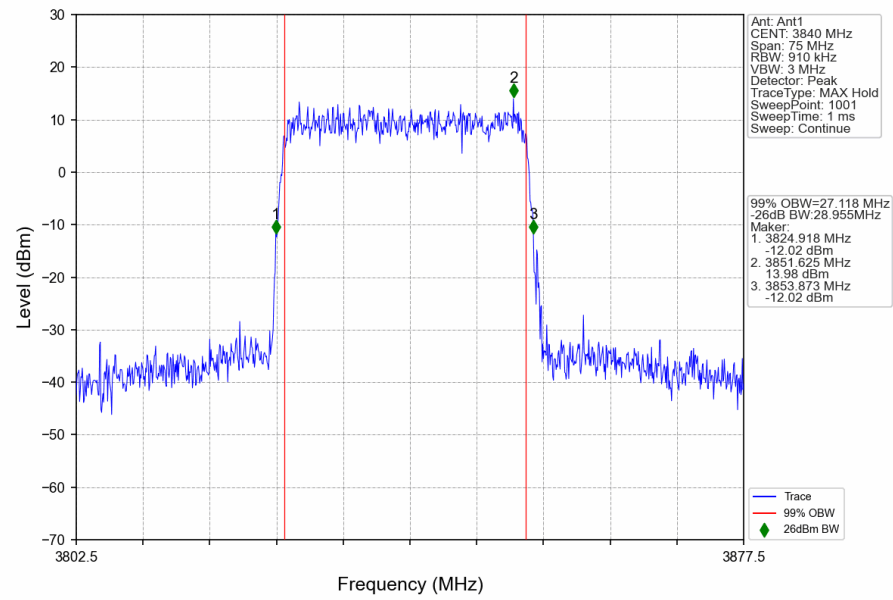
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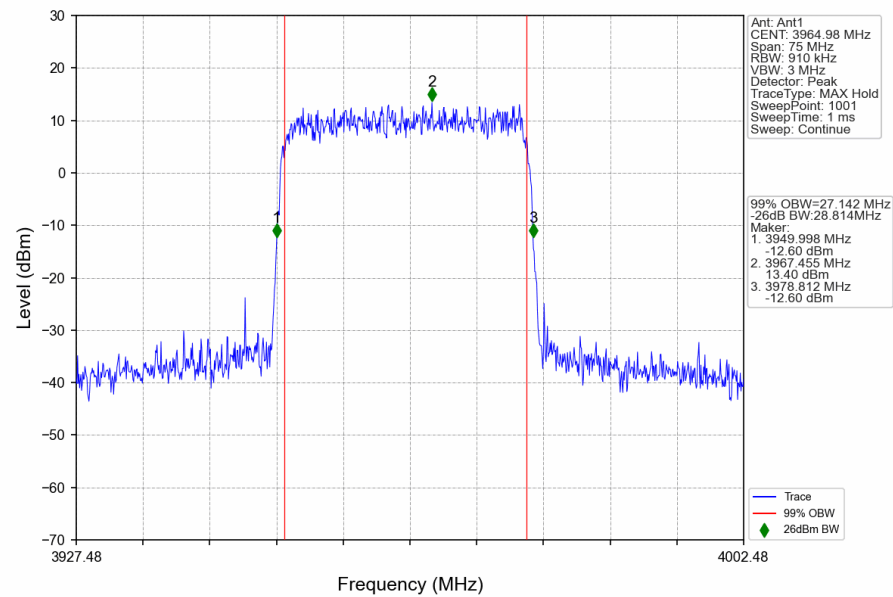
n77a_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3715.02MHz_Outer_Full



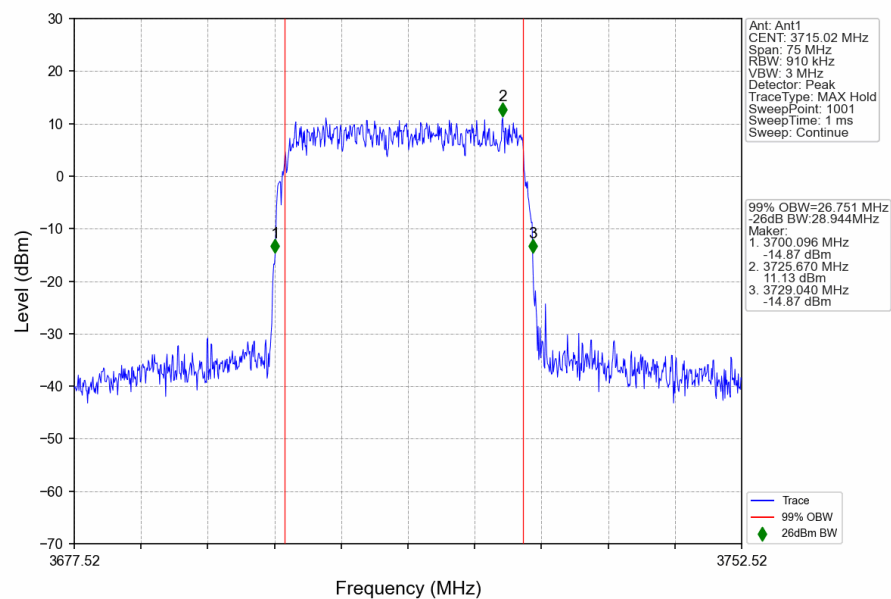
n77a_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full



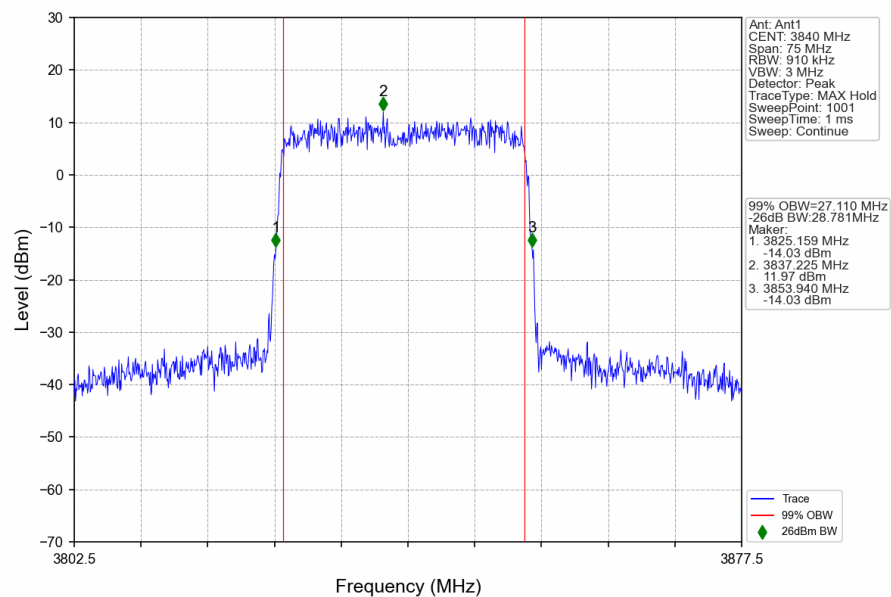
n77a_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3964.98MHz_Outer_Full



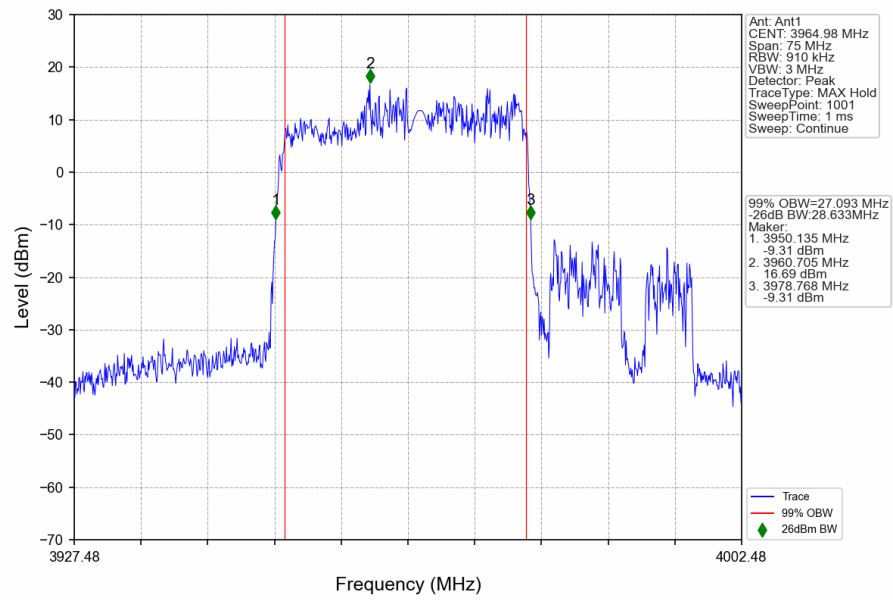
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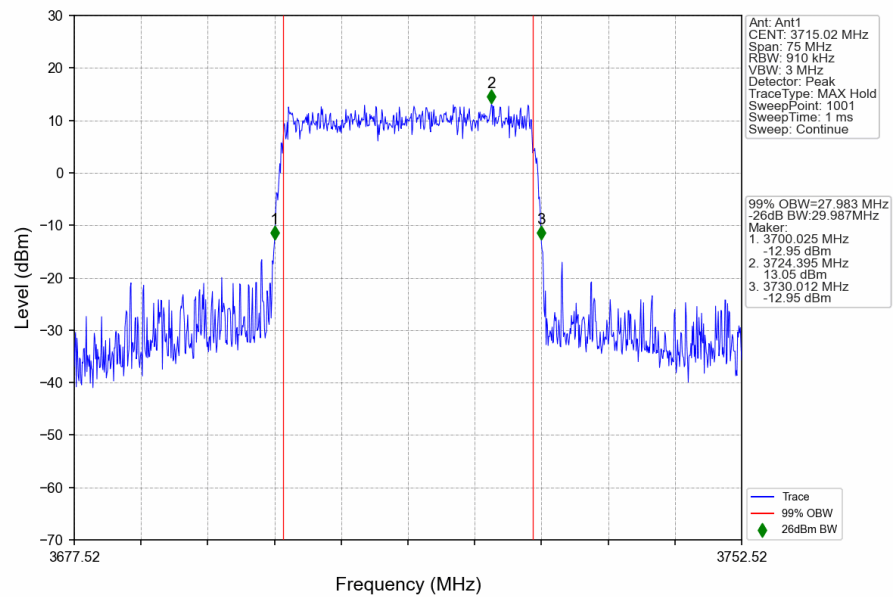
n77a_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full



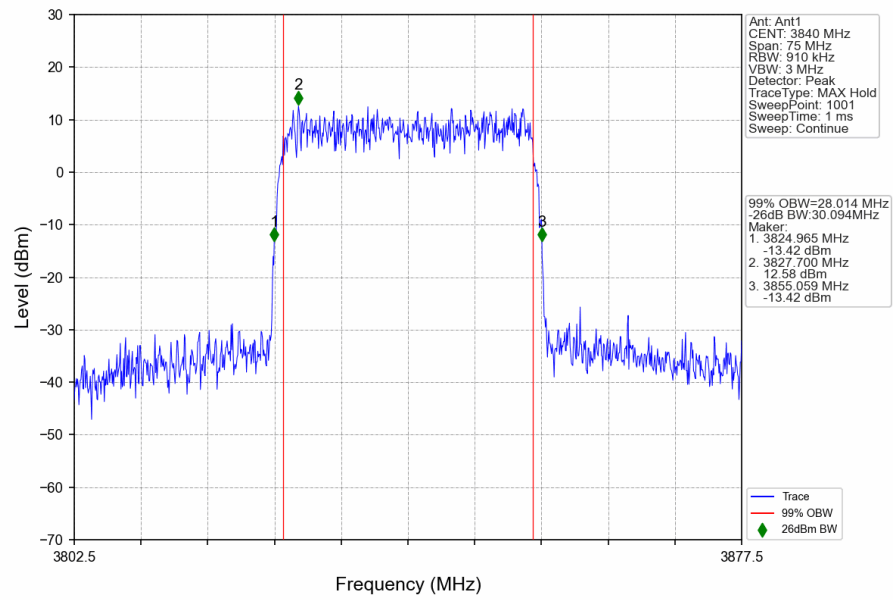
n77a_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_256_QAM_3964.98MHz_Outer_Full



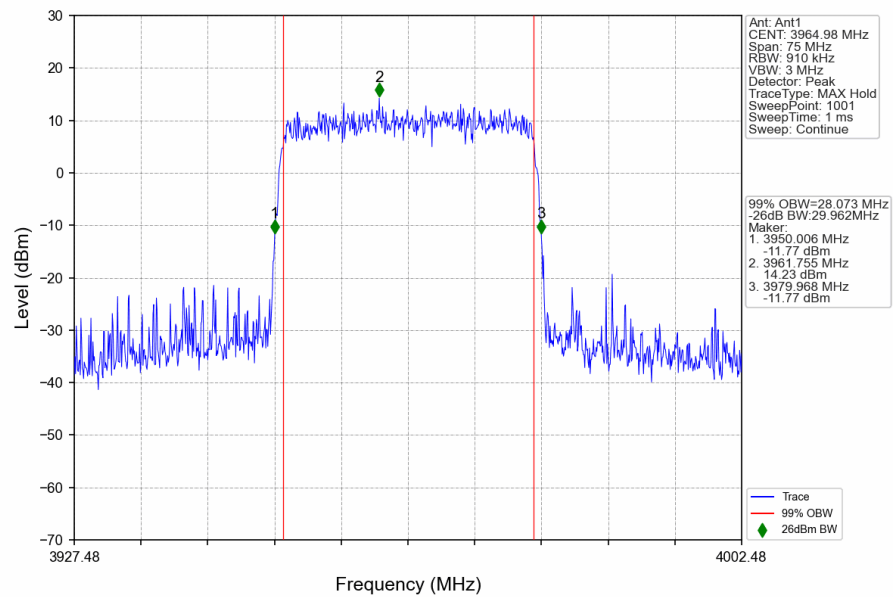
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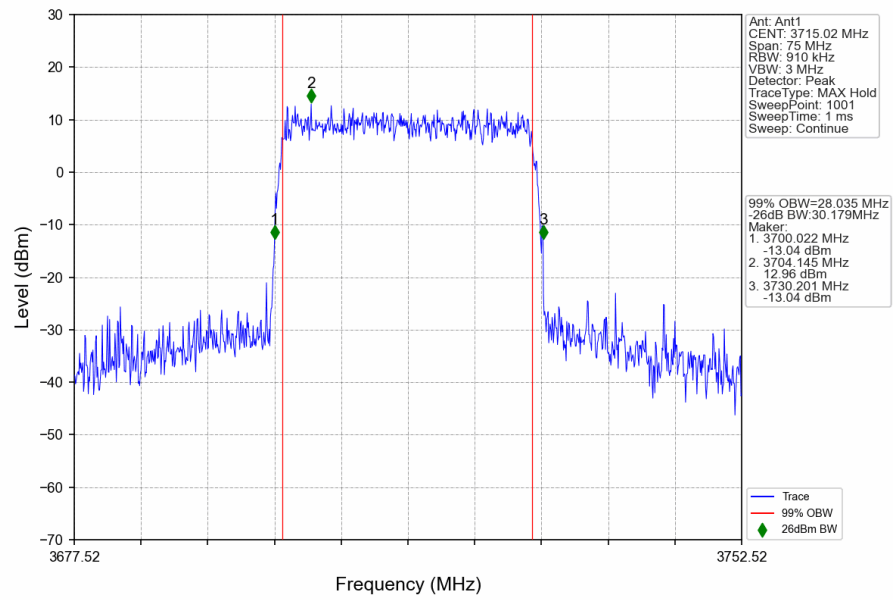
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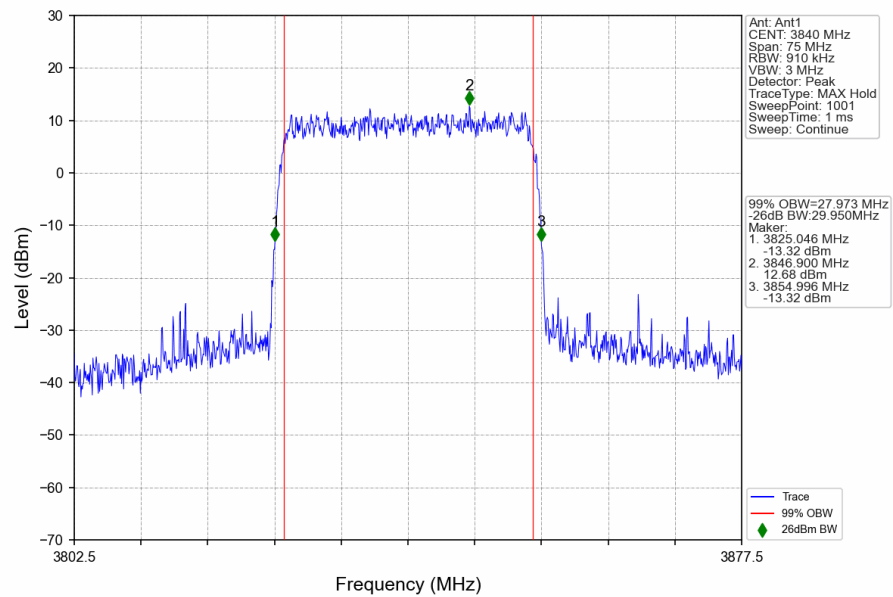
n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_QPSK_3964.98MHz_Outer_Full



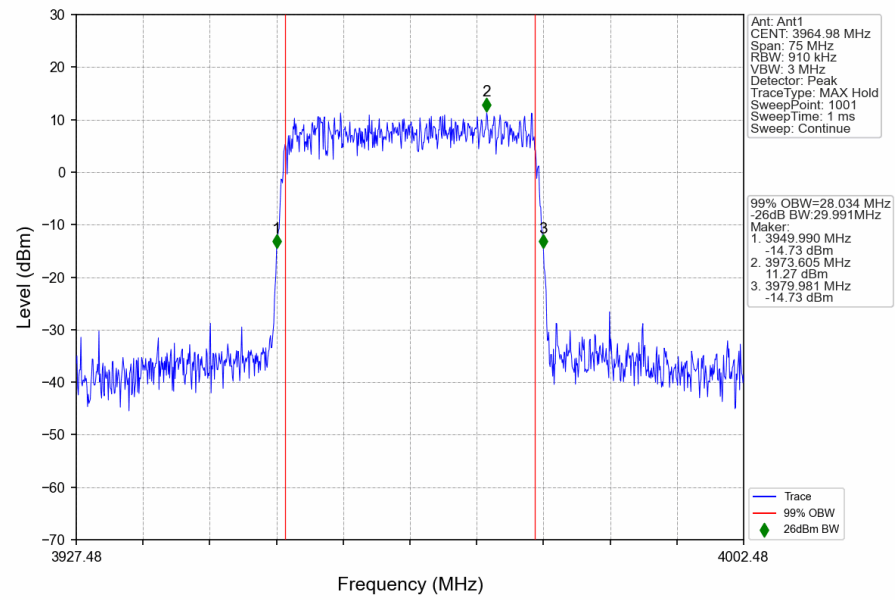
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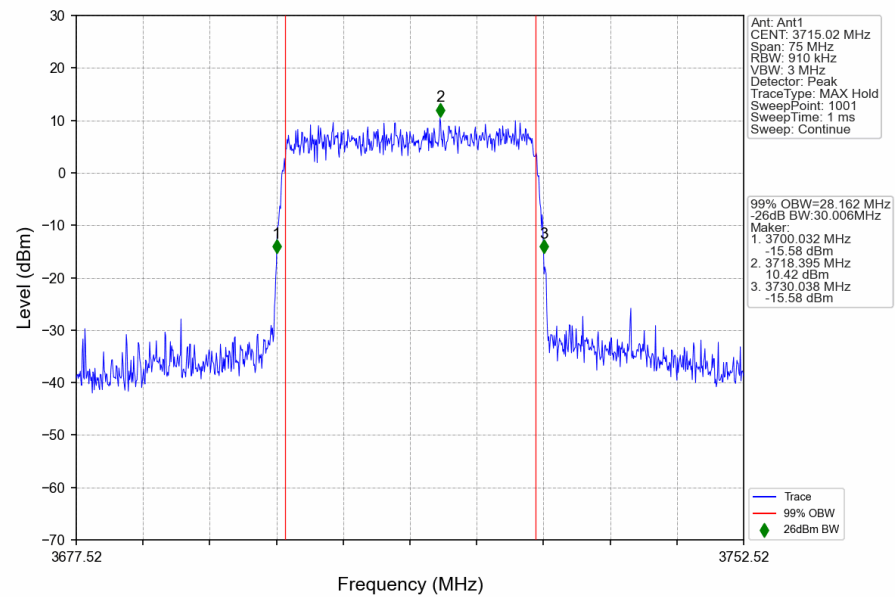
n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full



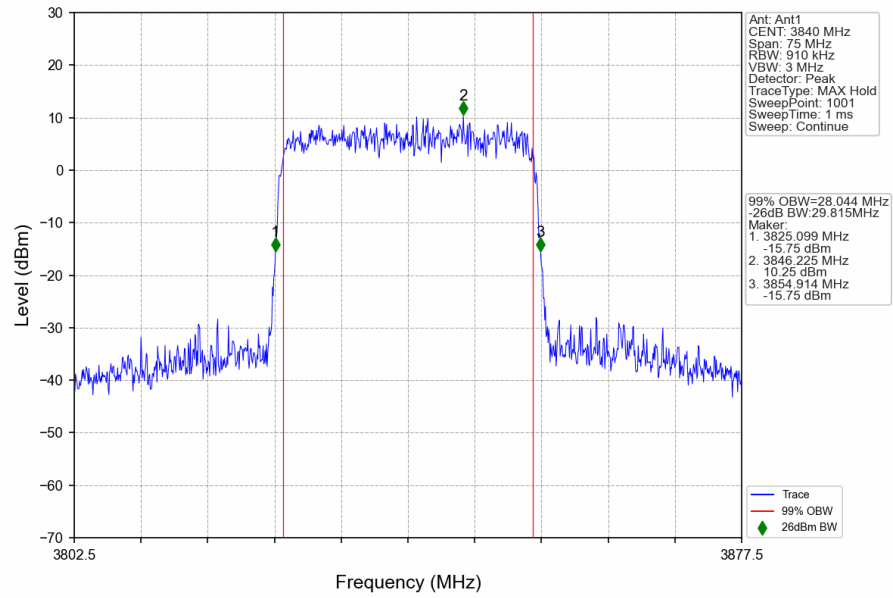
n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_64_QAM_3964.98MHz_Outer_Full



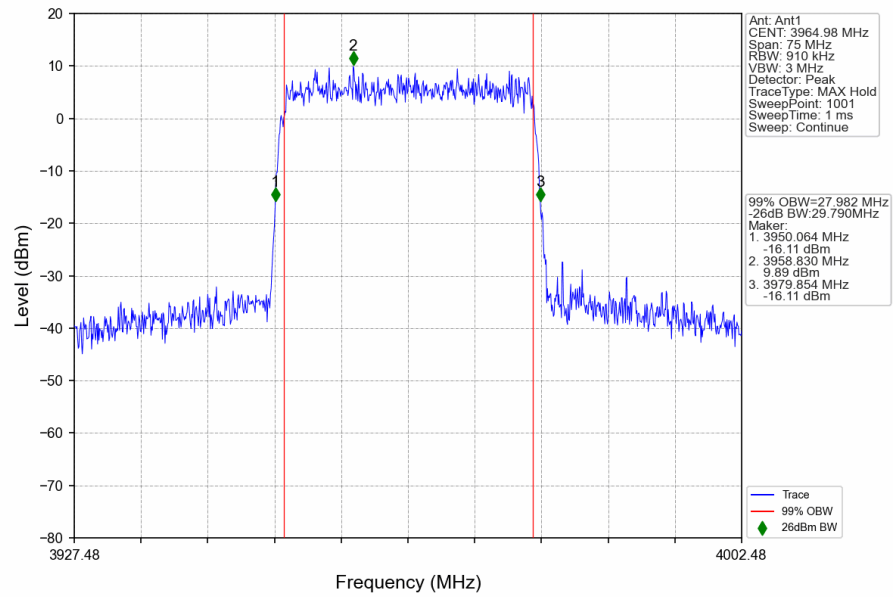
n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_256_QAM_3715.02MHz_Outer_Full



n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full



n77a_30kHz_SISO_NTNV_30MHz_CP-OFDM_256_QAM_3964.98MHz_Outer_Full

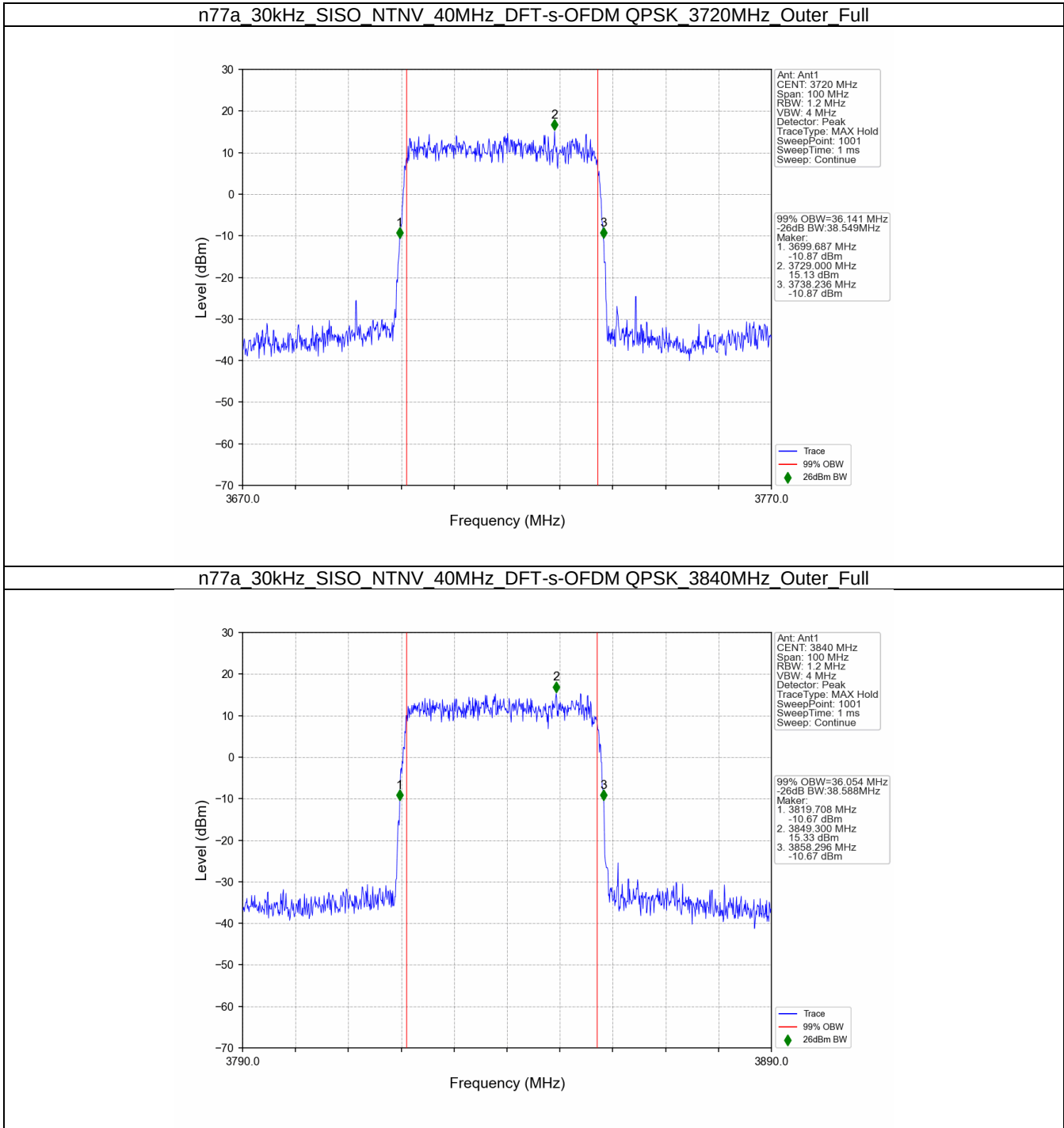


1.3 30k_SISO_40MHz_NTNV

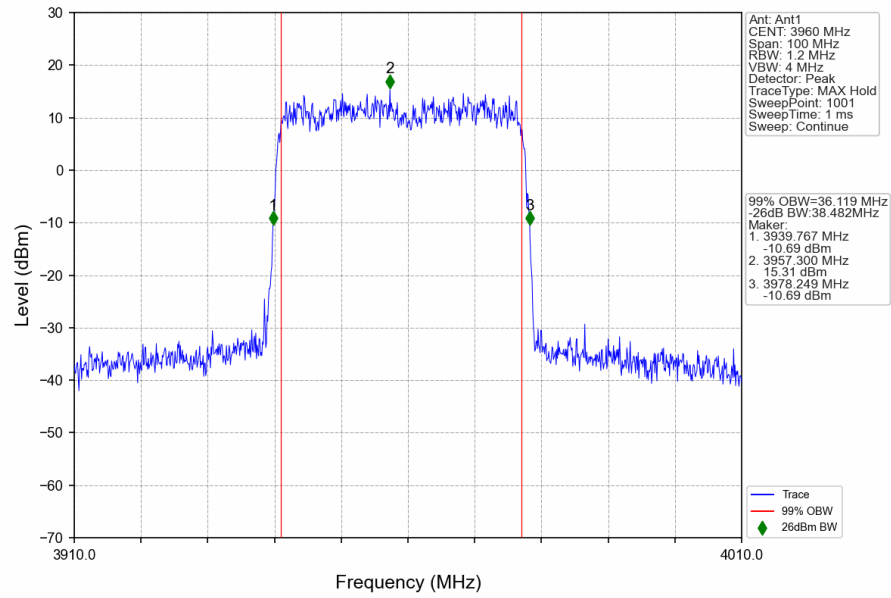
1.3.1 Test Result

5G NR n77a SCS=30kHz SISO 40MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3720	Outer_Full	36.14	38.55	/	Pass
	3840	Outer_Full	36.05	38.59	/	Pass
	3960	Outer_Full	36.12	38.48	/	Pass
DFT-s-OFDM 64 QAM	3720	Outer_Full	36.27	38.48	/	Pass
	3840	Outer_Full	36.12	38.53	/	Pass
	3960	Outer_Full	35.77	38.52	/	Pass
DFT-s-OFDM 256 QAM	3720	Outer_Full	35.76	38.24	/	Pass
	3840	Outer_Full	35.68	38.44	/	Pass
	3960	Outer_Full	35.92	38.56	/	Pass
CP-OFDM QPSK	3720	Outer_Full	38.07	40.61	/	Pass
	3840	Outer_Full	38.12	40.60	/	Pass
	3960	Outer_Full	38.12	40.33	/	Pass
CP-OFDM 64 QAM	3720	Outer_Full	37.97	40.53	/	Pass
	3840	Outer_Full	38.08	40.61	/	Pass
	3960	Outer_Full	38.26	40.69	/	Pass
CP-OFDM 256 QAM	3720	Outer_Full	38.15	40.48	/	Pass
	3840	Outer_Full	38.02	40.65	/	Pass
	3960	Outer_Full	37.96	40.58	/	Pass

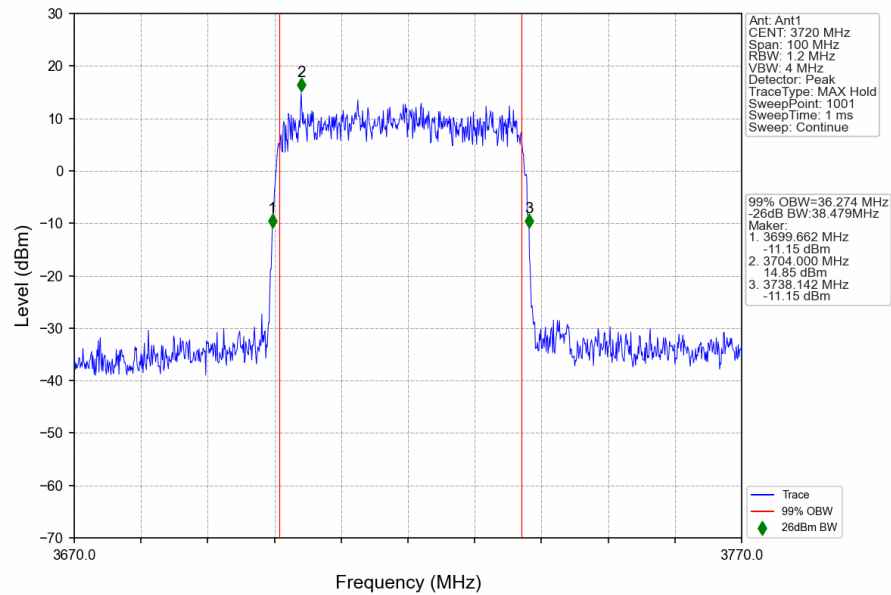
1.3.2 Test Graph



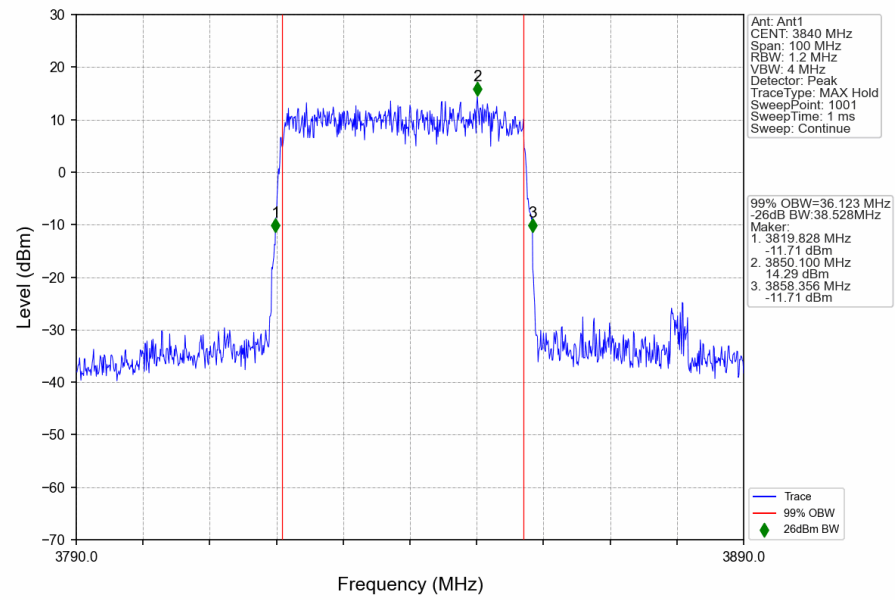
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_QPSK_3960MHz_Outer_Full



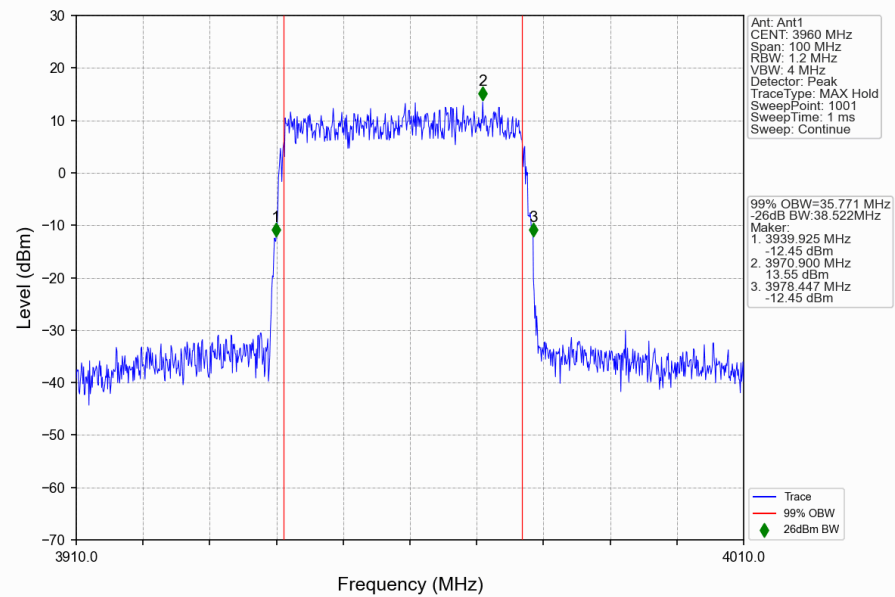
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_64_QAM_3720MHz_Outer_Full



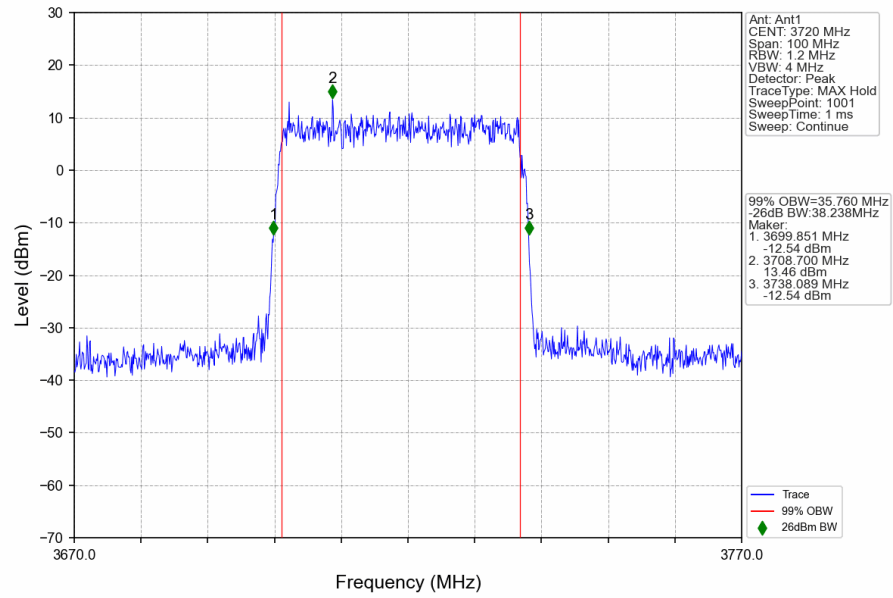
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full



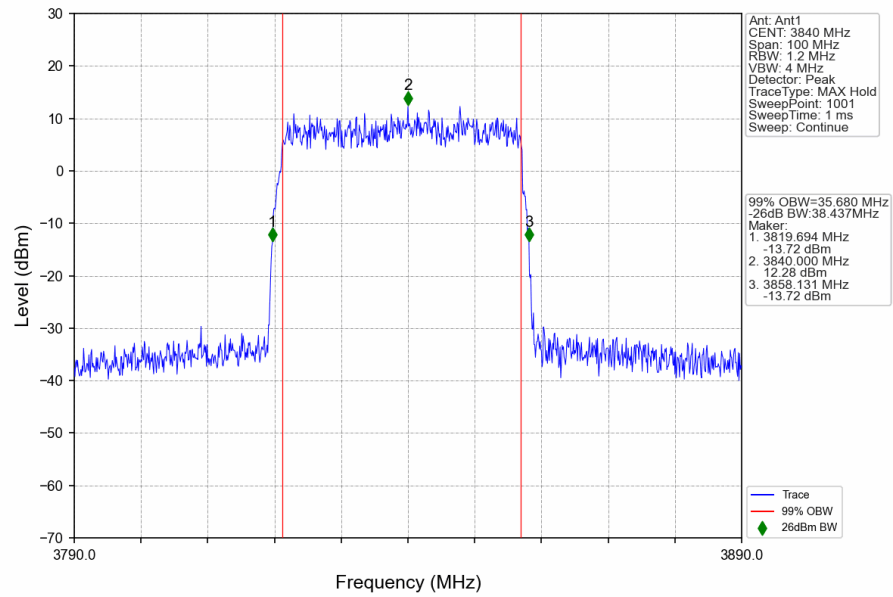
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_64_QAM_3960MHz_Outer_Full



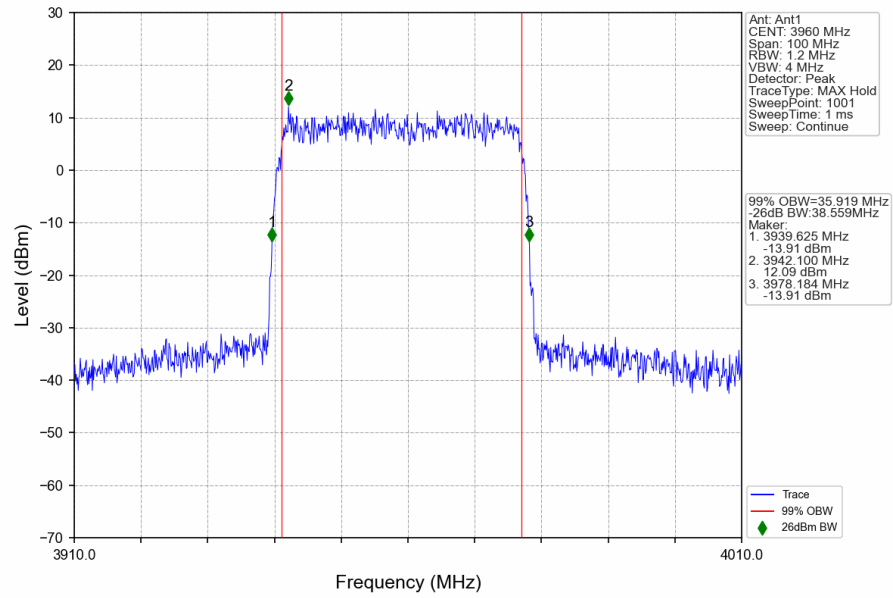
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3720MHz_Outer_Full



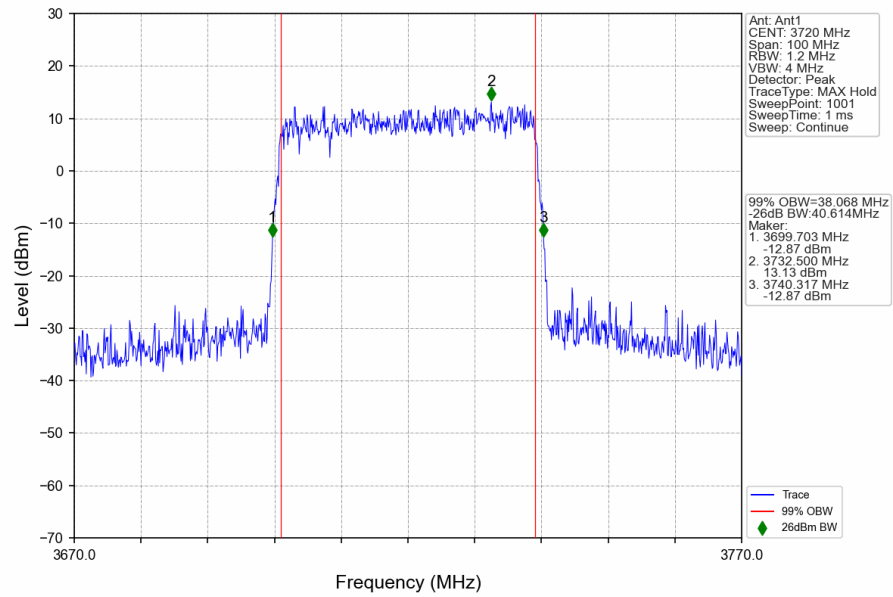
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full



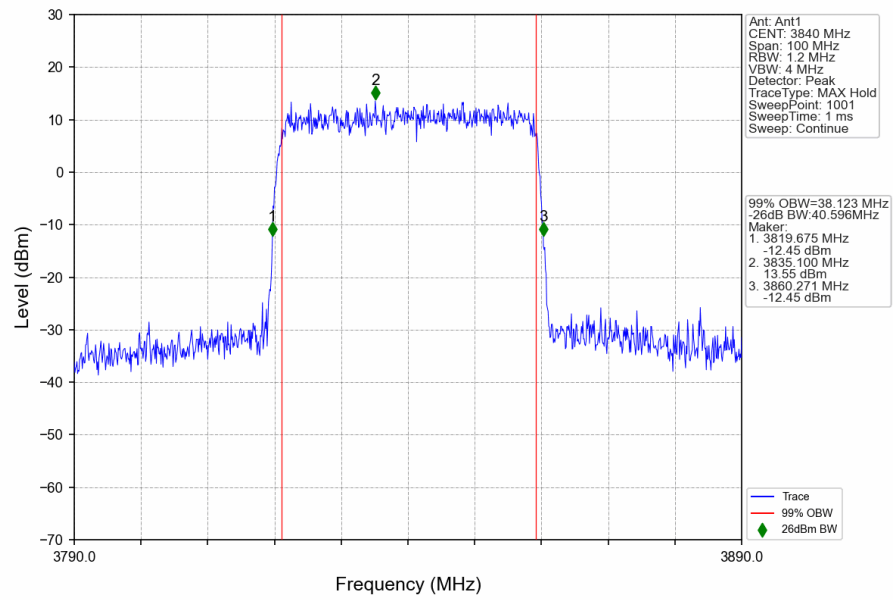
n77a_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3960MHz_Outer_Full



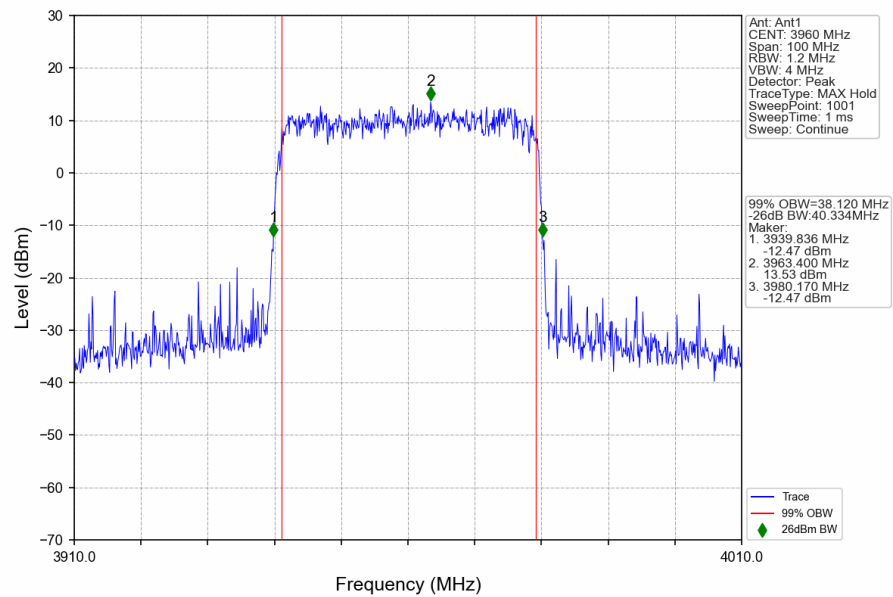
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3720MHz_Outer_Full



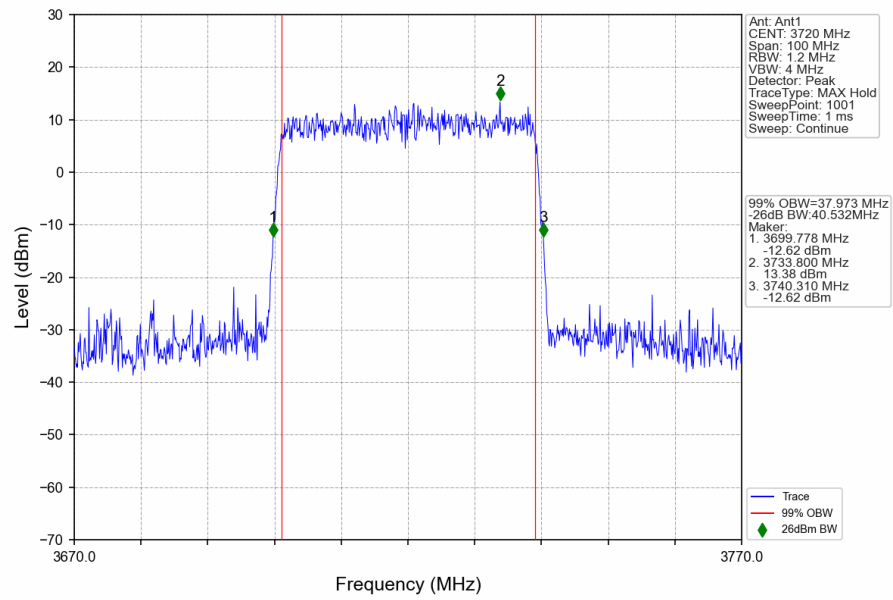
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3840MHz_Outer_Full



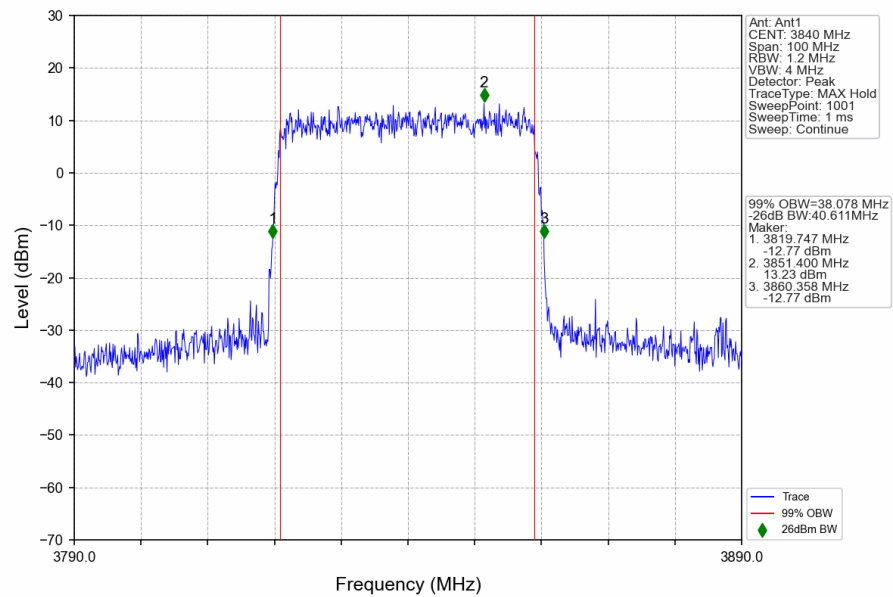
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3960MHz_Outer_Full



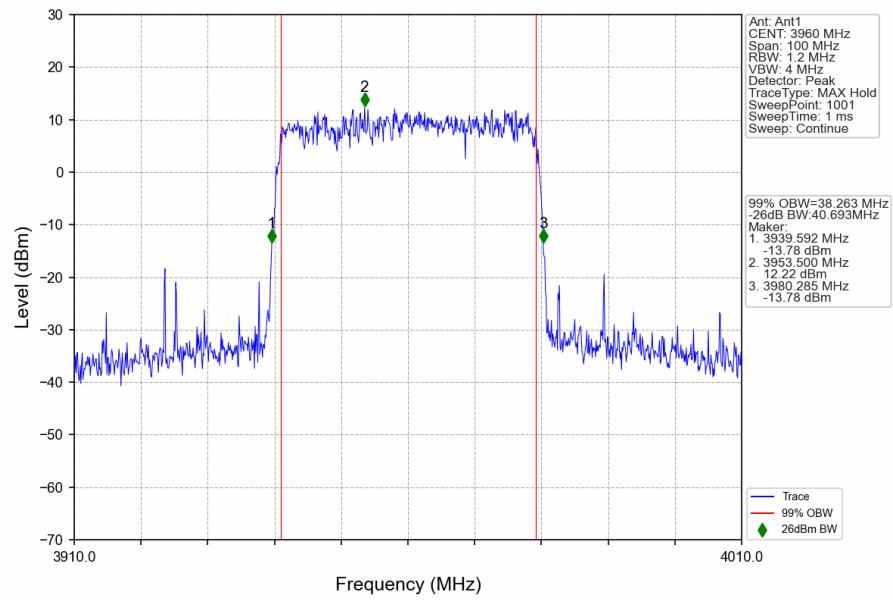
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3720MHz_Outer_Full



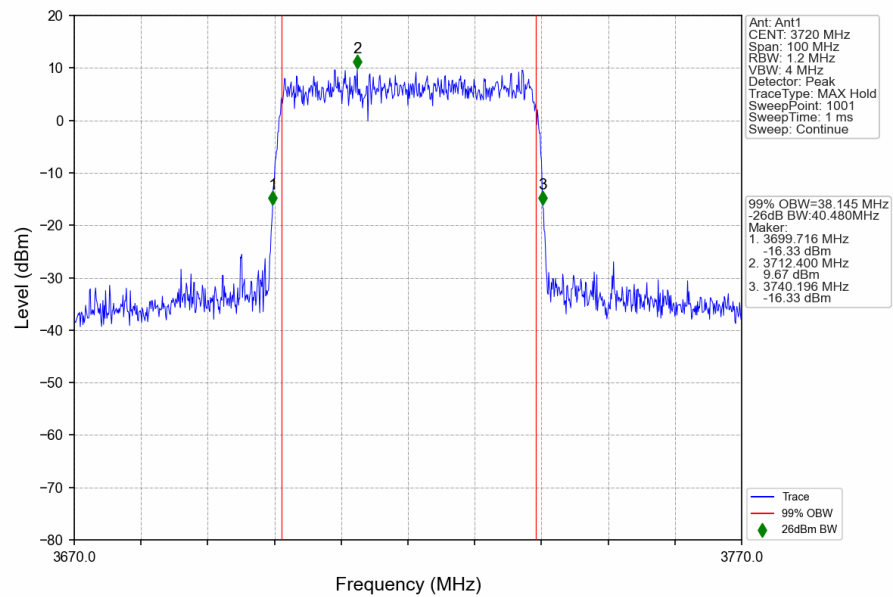
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full



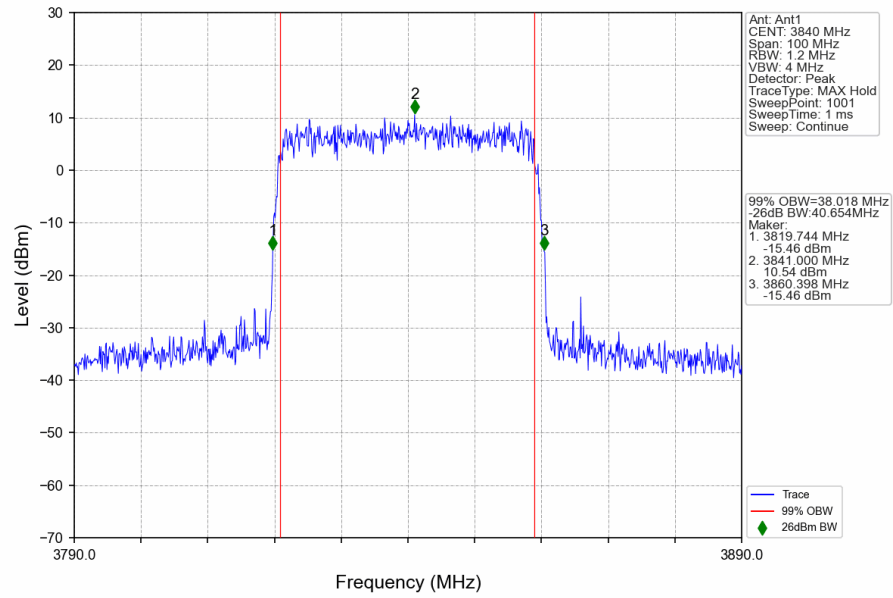
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3960MHz_Outer_Full



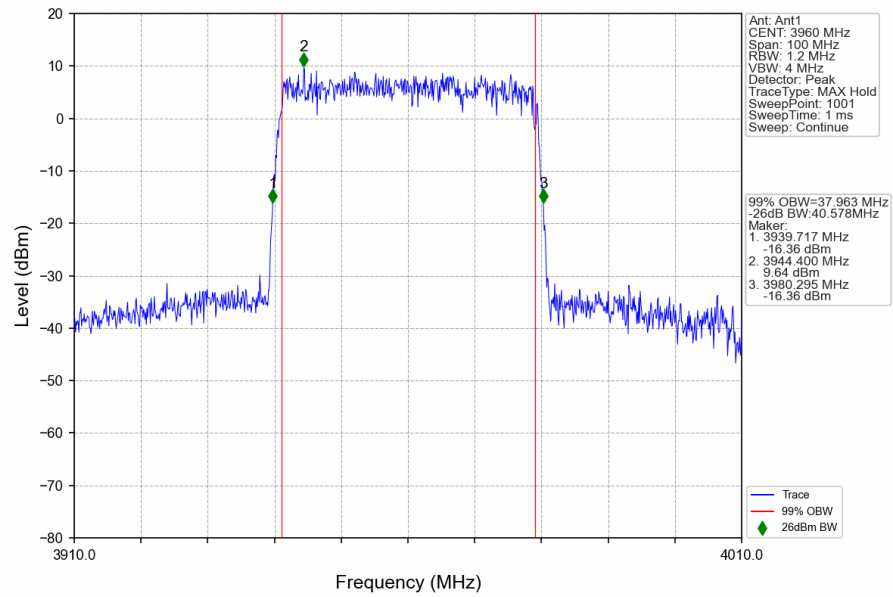
n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3720MHz_Outer_Full



n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full



n77a_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3960MHz_Outer_Full

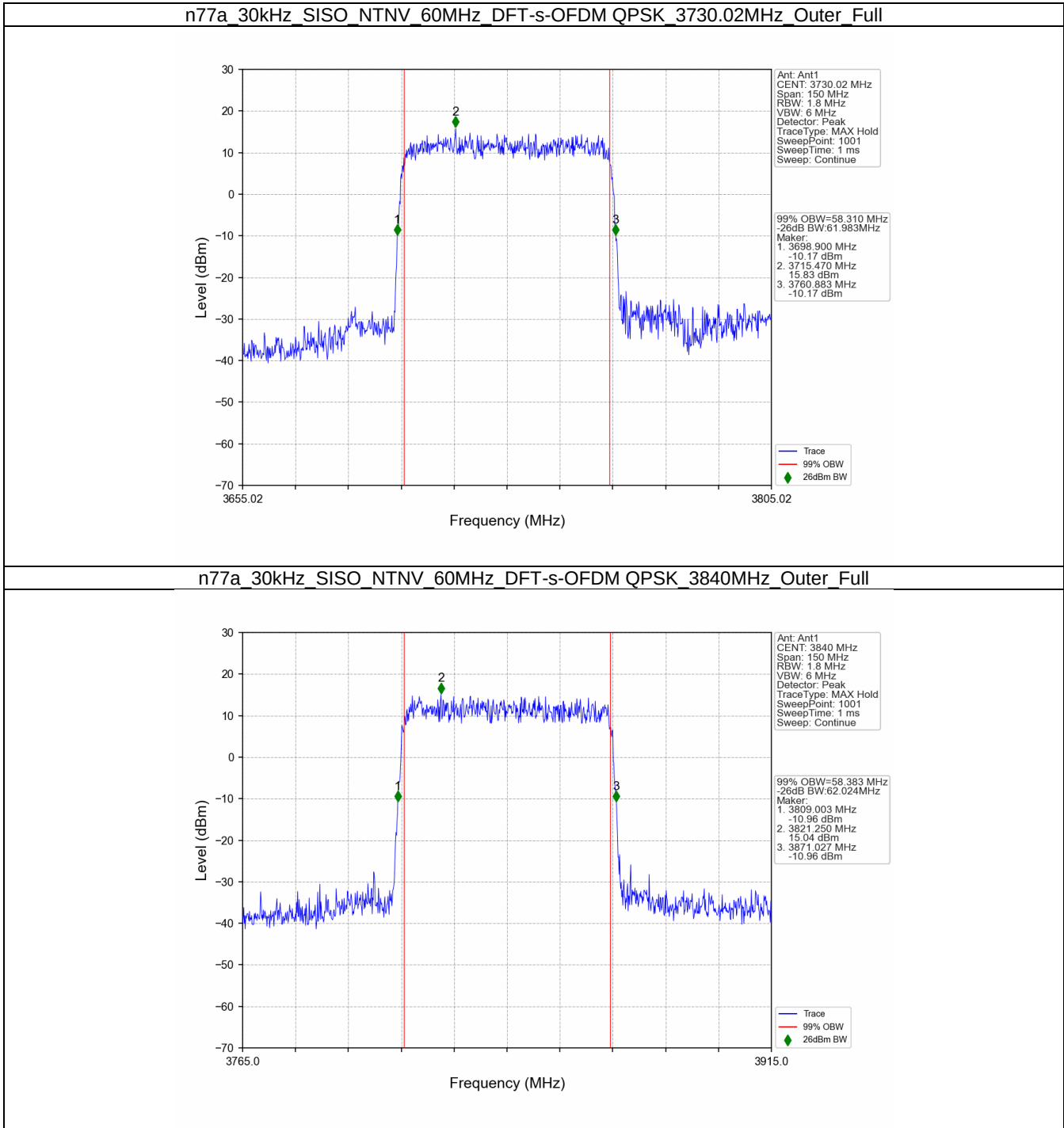


1.4 30k_SISO_60MHz_NTNV

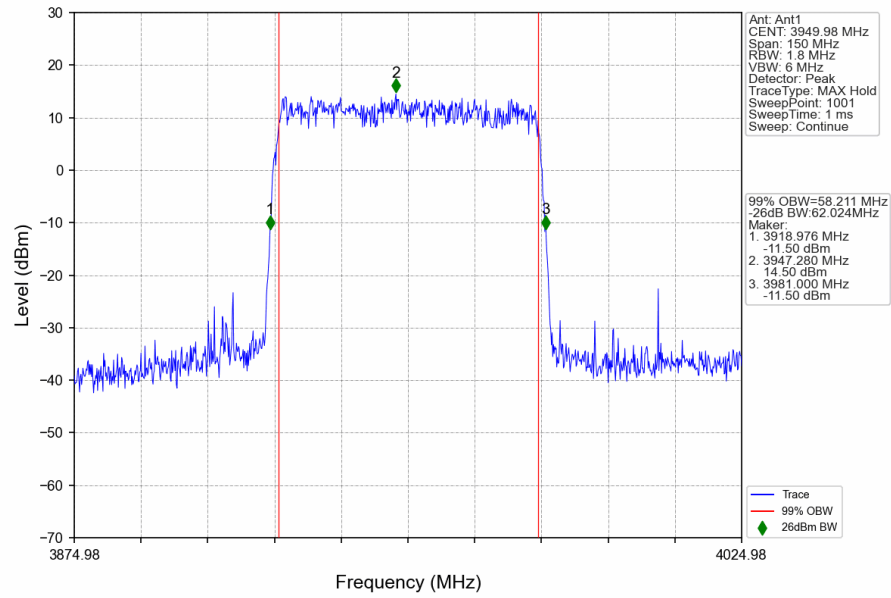
1.4.1 Test Result

5G NR n77a SCS=30kHz SISO 60MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3730.02	Outer_Full	58.31	61.98	/	Pass
	3840	Outer_Full	58.38	62.02	/	Pass
	3949.98	Outer_Full	58.21	62.02	/	Pass
DFT-s-OFDM 64 QAM	3730.02	Outer_Full	58.13	61.98	/	Pass
	3840	Outer_Full	58.35	61.94	/	Pass
	3949.98	Outer_Full	58.12	61.98	/	Pass
DFT-s-OFDM 256 QAM	3730.02	Outer_Full	58.09	61.90	/	Pass
	3840	Outer_Full	58.15	62.10	/	Pass
	3949.98	Outer_Full	58.03	62.08	/	Pass
CP-OFDM QPSK	3730.02	Outer_Full	58.10	62.14	/	Pass
	3840	Outer_Full	58.15	61.74	/	Pass
	3949.98	Outer_Full	58.11	61.94	/	Pass
CP-OFDM 64 QAM	3730.02	Outer_Full	58.31	62.01	/	Pass
	3840	Outer_Full	58.07	61.86	/	Pass
	3949.98	Outer_Full	44.99	47.23	/	Pass
CP-OFDM 256 QAM	3730.02	Outer_Full	58.32	61.88	/	Pass
	3840	Outer_Full	58.21	62.16	/	Pass
	3949.98	Outer_Full	44.48	46.82	/	Pass

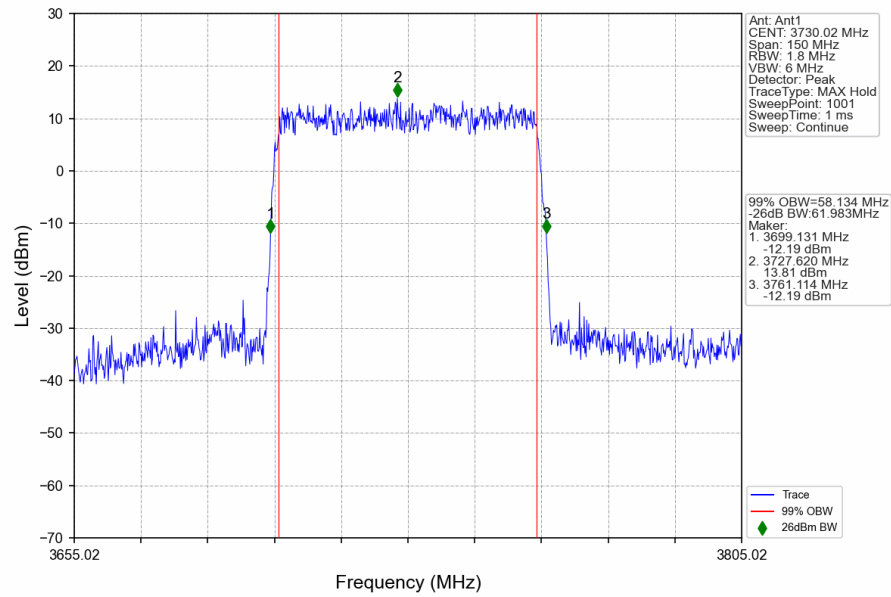
1.4.2 Test Graph



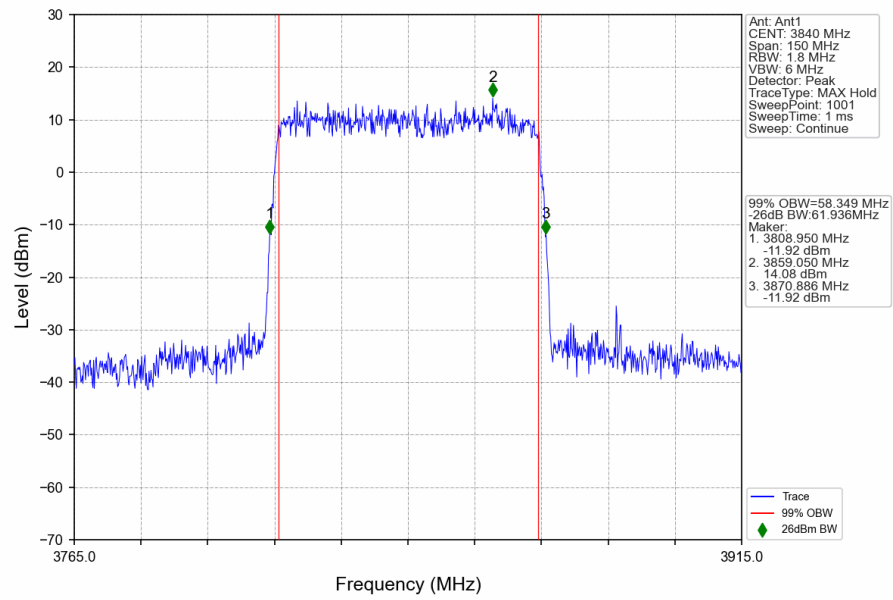
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_QPSK_3949.98MHz_Outer_Full



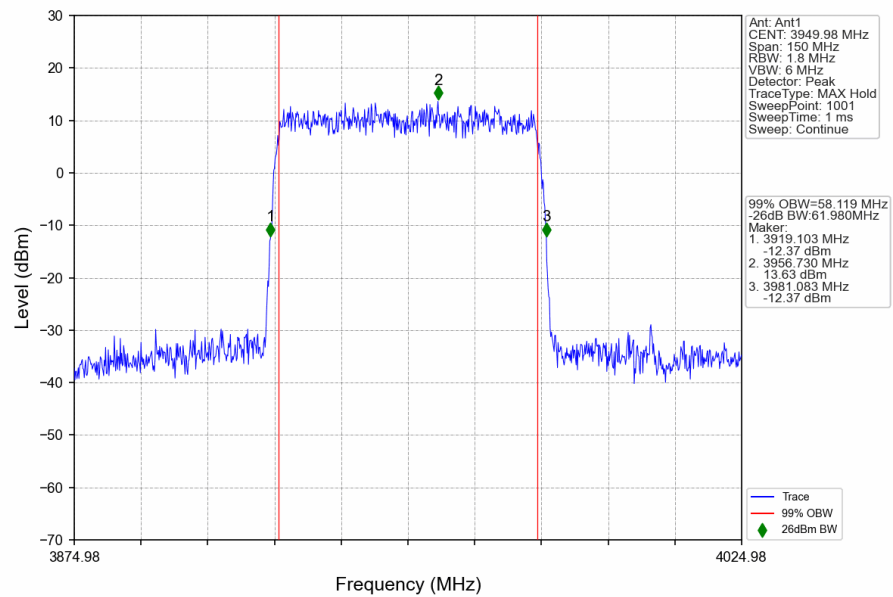
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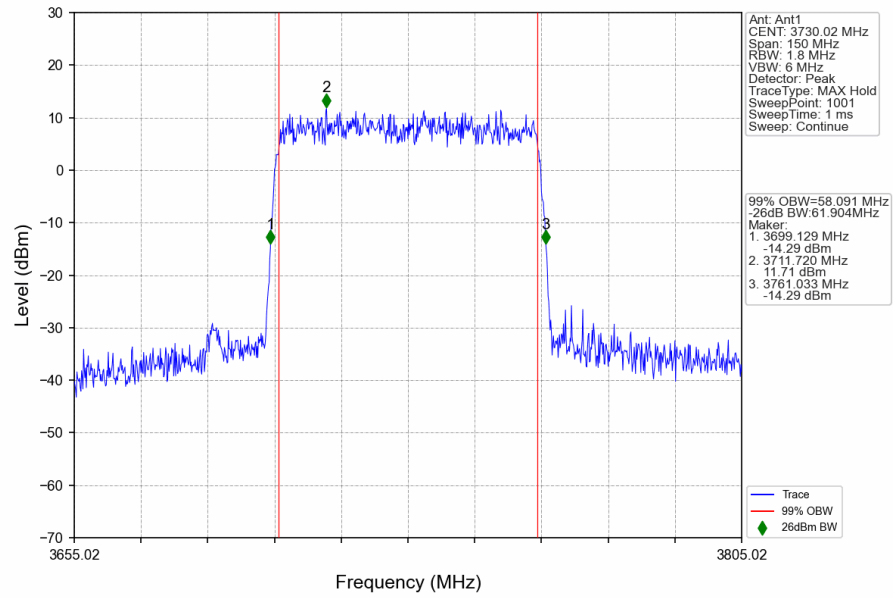
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full



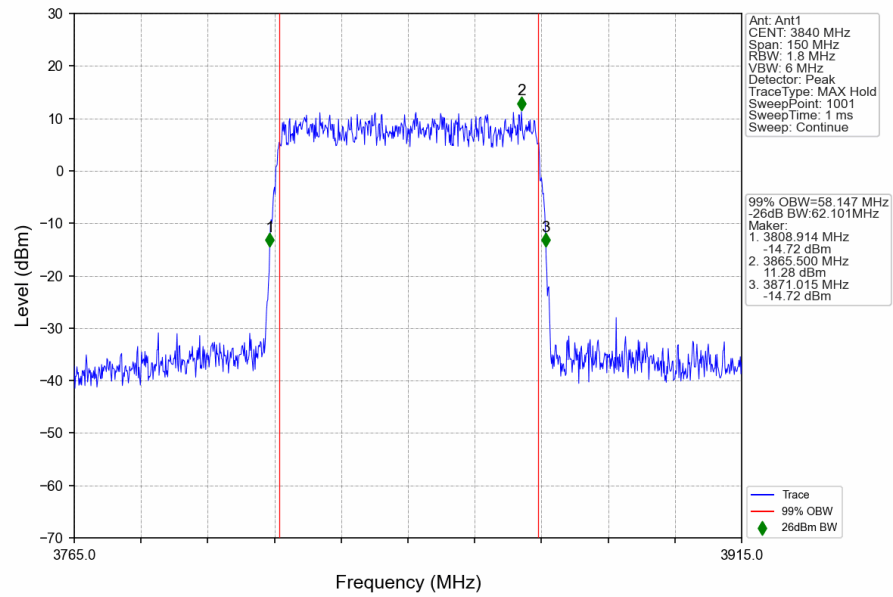
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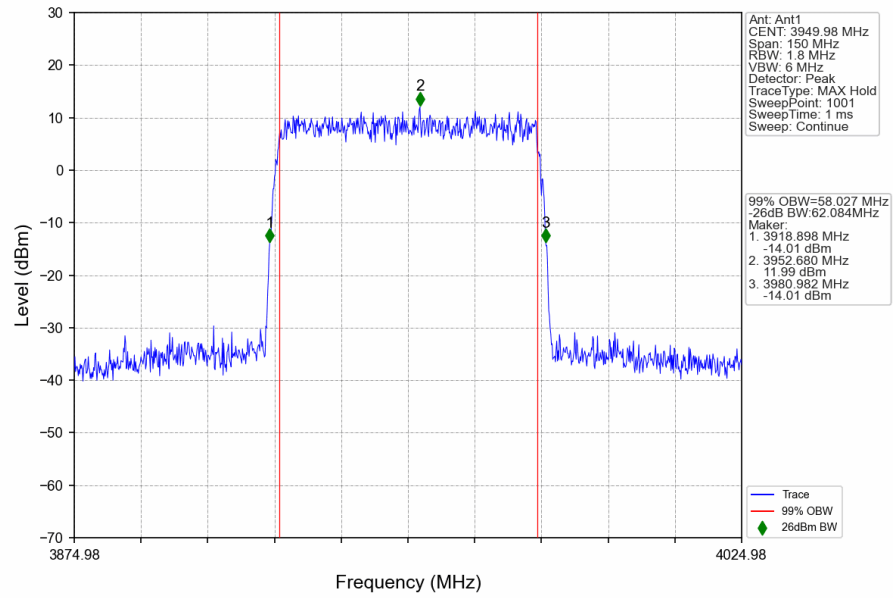
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_256_QAM_3730.02MHz_Outer_Full



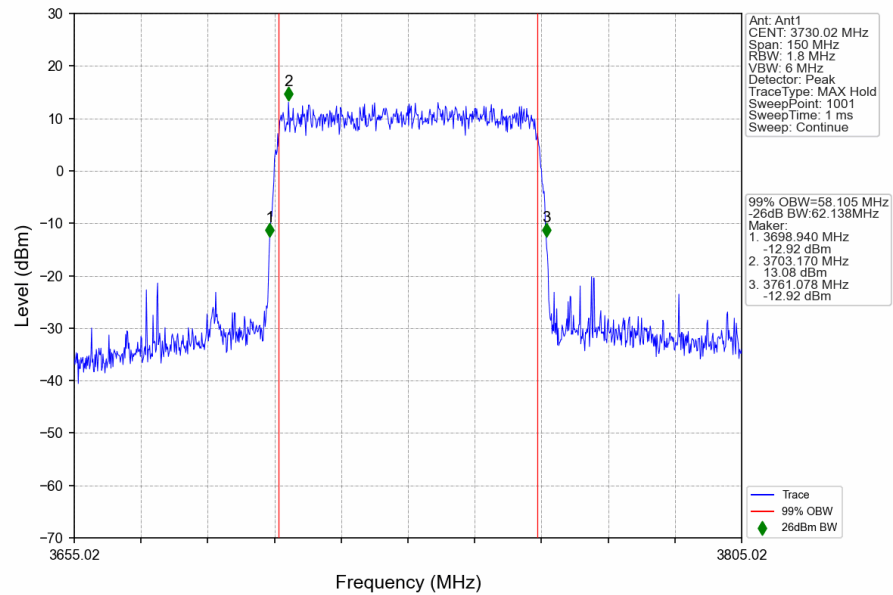
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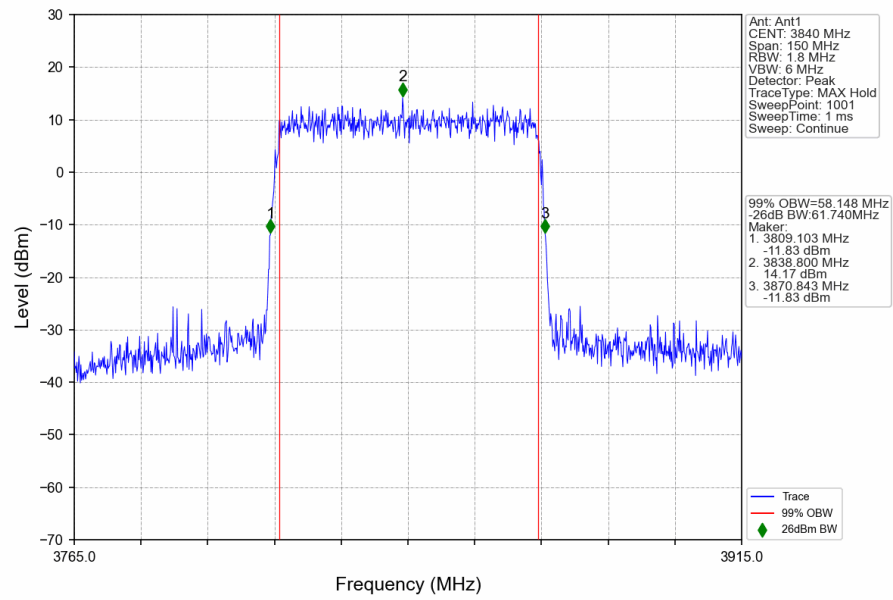
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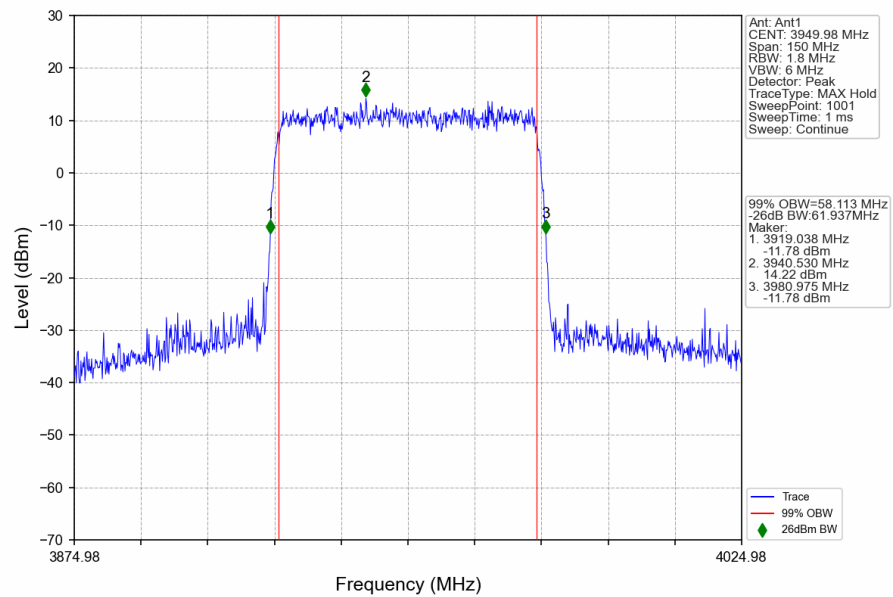
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3730.02MHz_Outer_Full



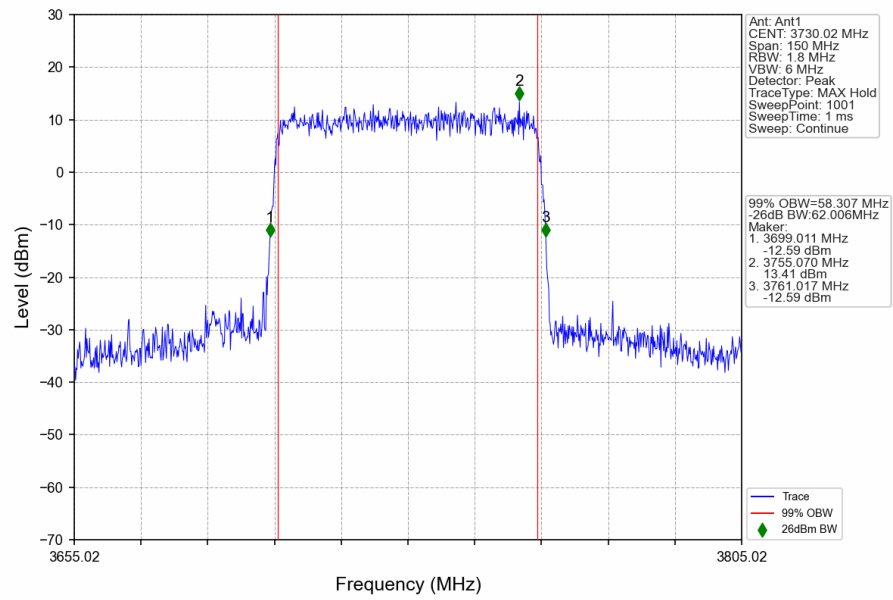
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3840MHz_Outer_Full



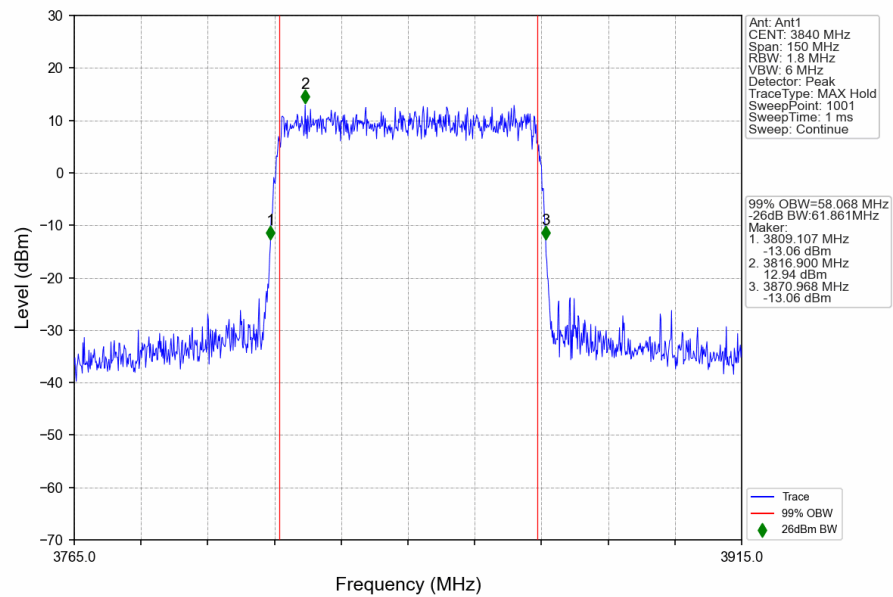
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3949.98MHz_Outer_Full



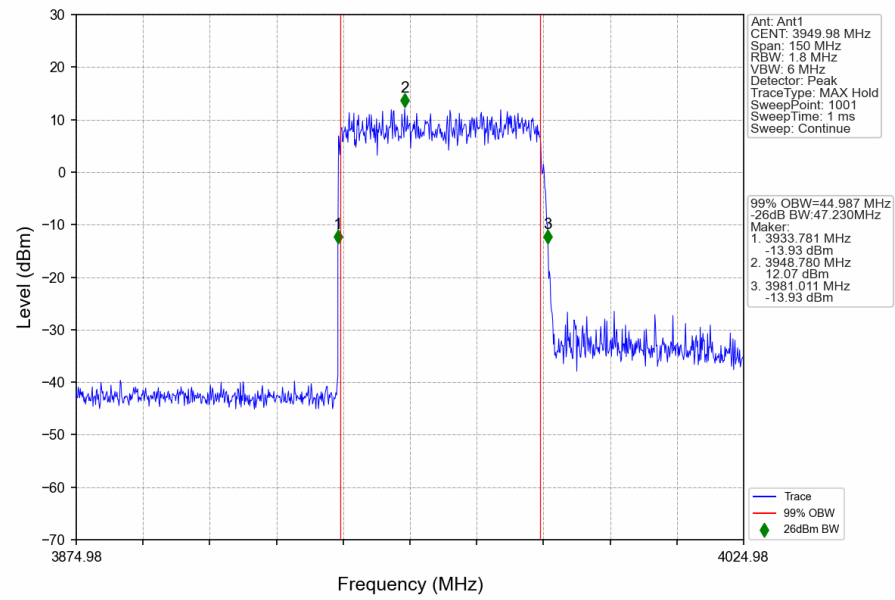
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3730.02MHz_Outer_Full



n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full



n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3949.98MHz_Outer_Full



n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_256_QAM_3730.02MHz_Outer_Full

