

5G NR N48

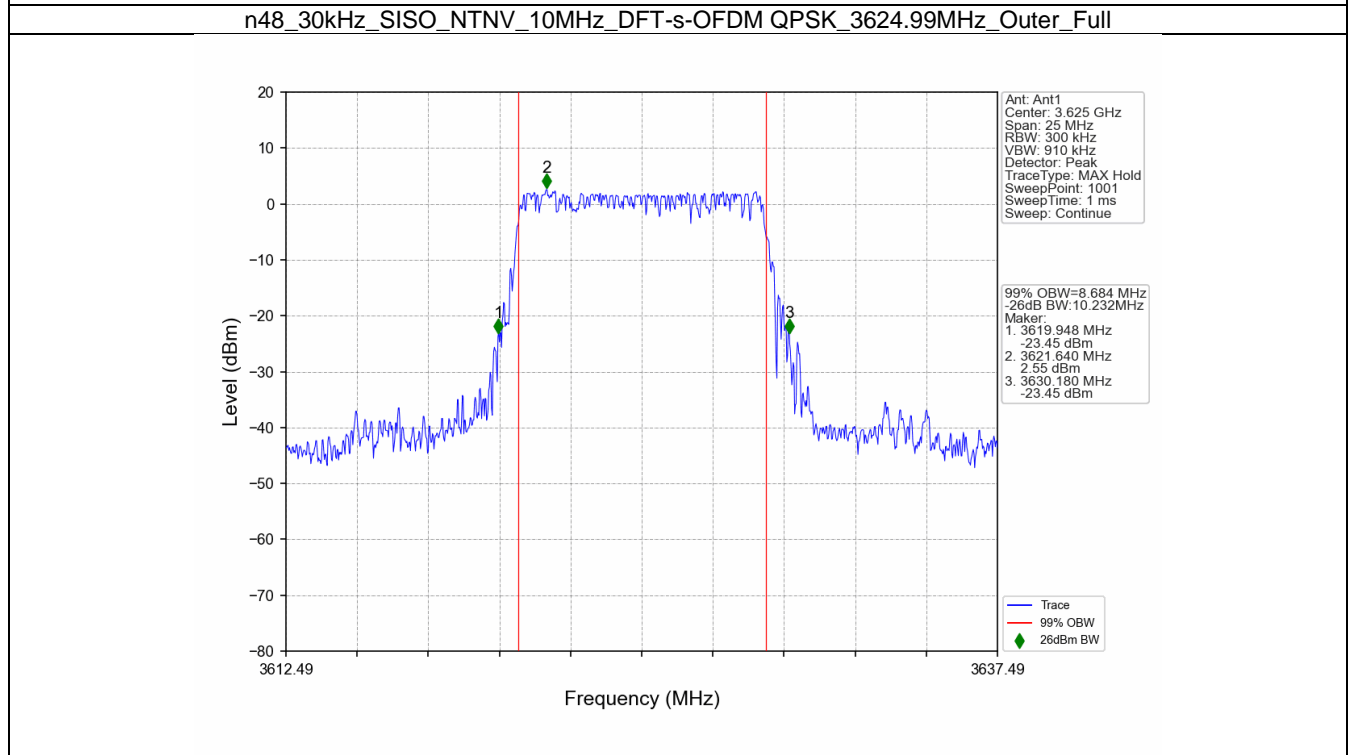
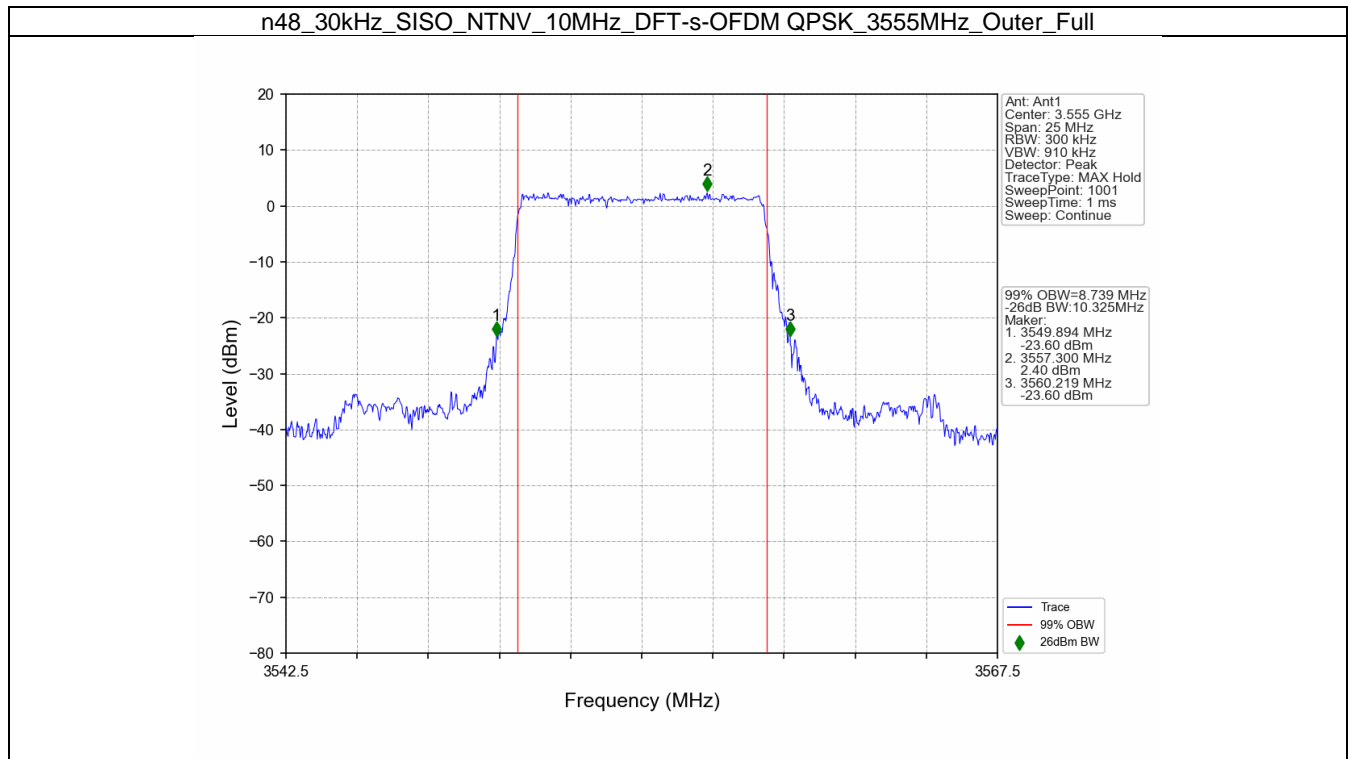
1. 99% & 26dB Bandwidth

1.1 30k_SISO_10MHz_NTNV

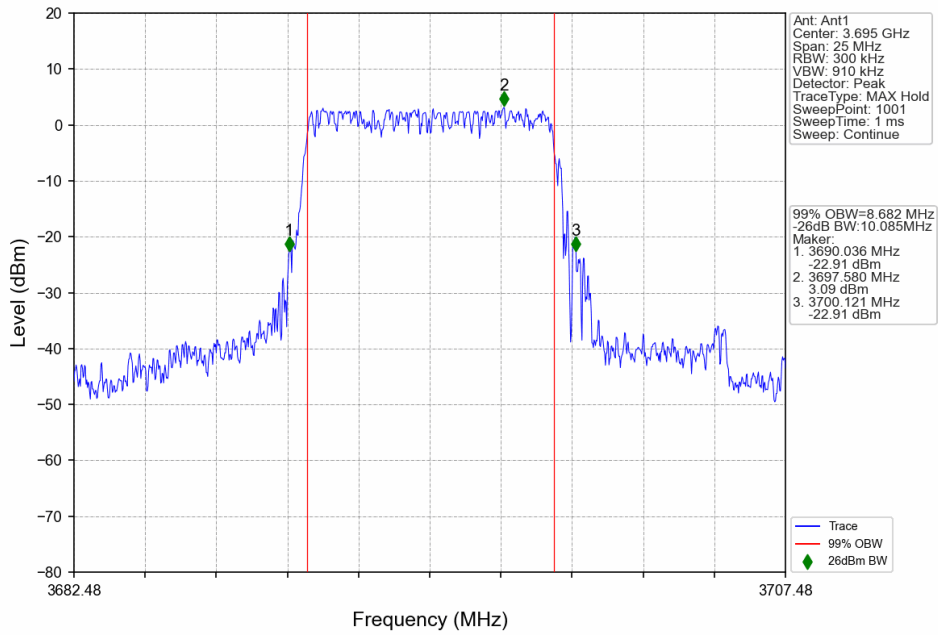
1.1.1 Test Result

5G NR n48 SCS=30kHz SISO 10MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3555	Outer_Full	8.74	10.32	/	Pass
	3624.99	Outer_Full	8.68	10.23	/	Pass
	3694.98	Outer_Full	8.68	10.09	/	Pass
DFT-s-OFDM 16 QAM	3555	Outer_Full	8.80	10.09	/	Pass
	3624.99	Outer_Full	8.71	10.05	/	Pass
	3694.98	Outer_Full	8.68	10.04	/	Pass
DFT-s-OFDM 64 QAM	3555	Outer_Full	8.71	10.19	/	Pass
	3624.99	Outer_Full	8.68	10.20	/	Pass
	3694.98	Outer_Full	8.69	10.17	/	Pass
DFT-s-OFDM 256 QAM	3555	Outer_Full	8.70	10.11	/	Pass
	3624.99	Outer_Full	8.62	10.05	/	Pass
	3694.98	Outer_Full	8.67	10.08	/	Pass
CP-OFDM QPSK	3555	Outer_Full	8.75	10.47	/	Pass
	3624.99	Outer_Full	8.71	9.94	/	Pass
	3694.98	Outer_Full	8.72	10.13	/	Pass
CP-OFDM 16 QAM	3555	Outer_Full	8.73	10.05	/	Pass
	3624.99	Outer_Full	8.72	9.96	/	Pass
	3694.98	Outer_Full	8.66	10.05	/	Pass
CP-OFDM 64 QAM	3555	Outer_Full	8.71	10.11	/	Pass
	3624.99	Outer_Full	8.65	10.08	/	Pass
	3694.98	Outer_Full	8.71	9.81	/	Pass
CP-OFDM 256 QAM	3555	Outer_Full	8.71	10.02	/	Pass
	3624.99	Outer_Full	8.64	9.77	/	Pass
	3694.98	Outer_Full	8.68	10.01	/	Pass

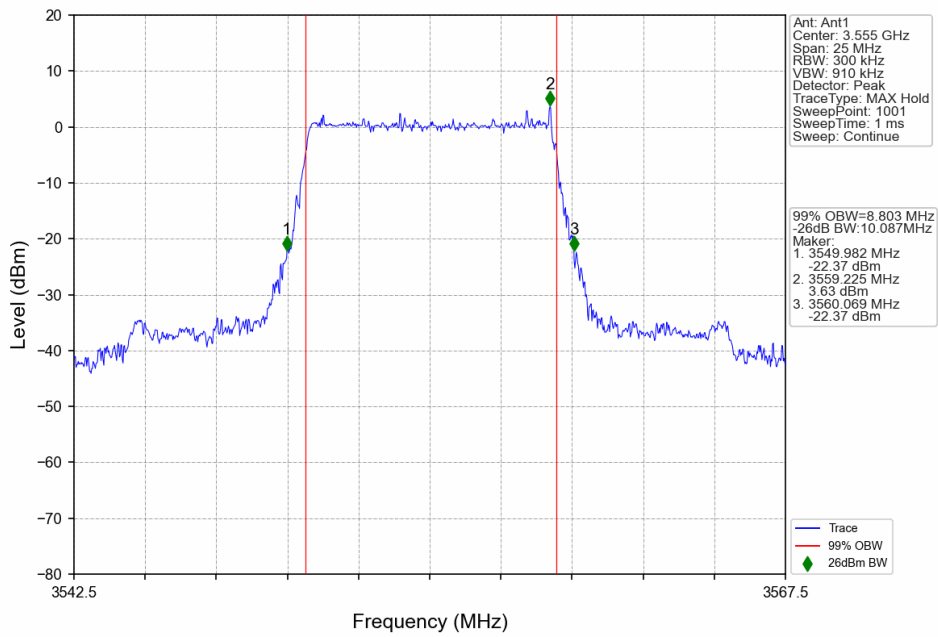
1.1.2 Test Graph



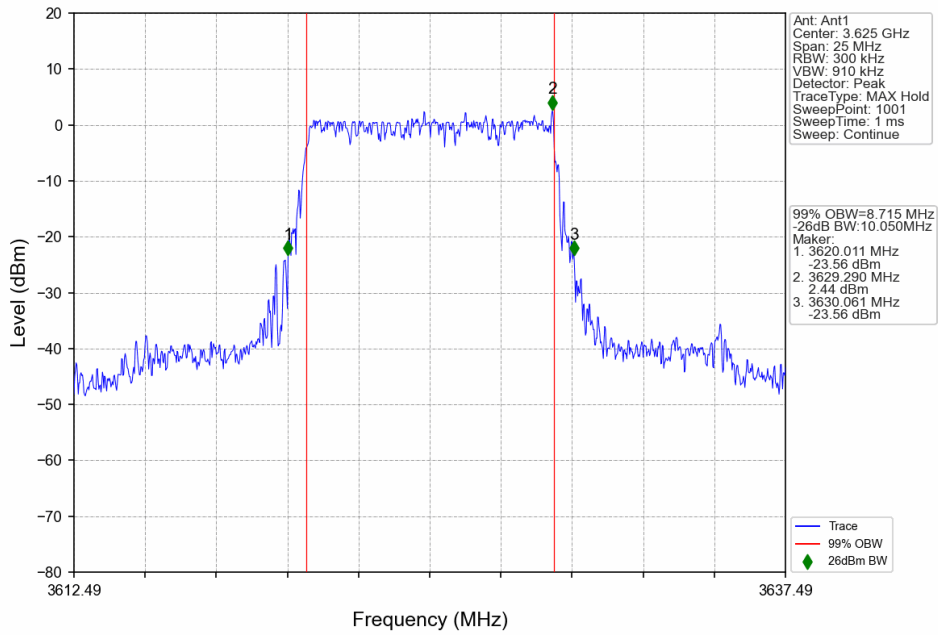
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_3694.98MHz_Outer_Full



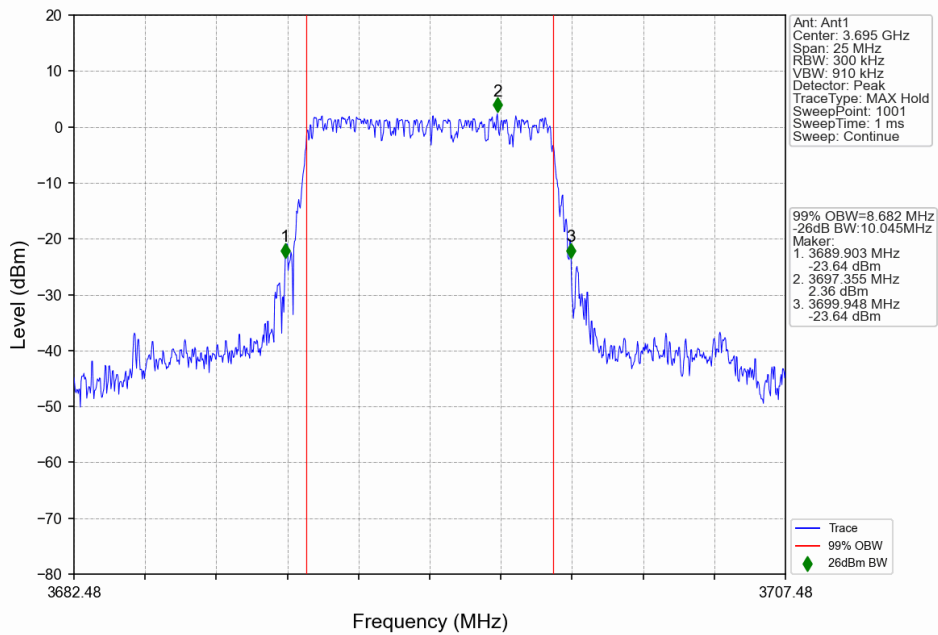
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM 16 QAM_3555MHz_Outer_Full



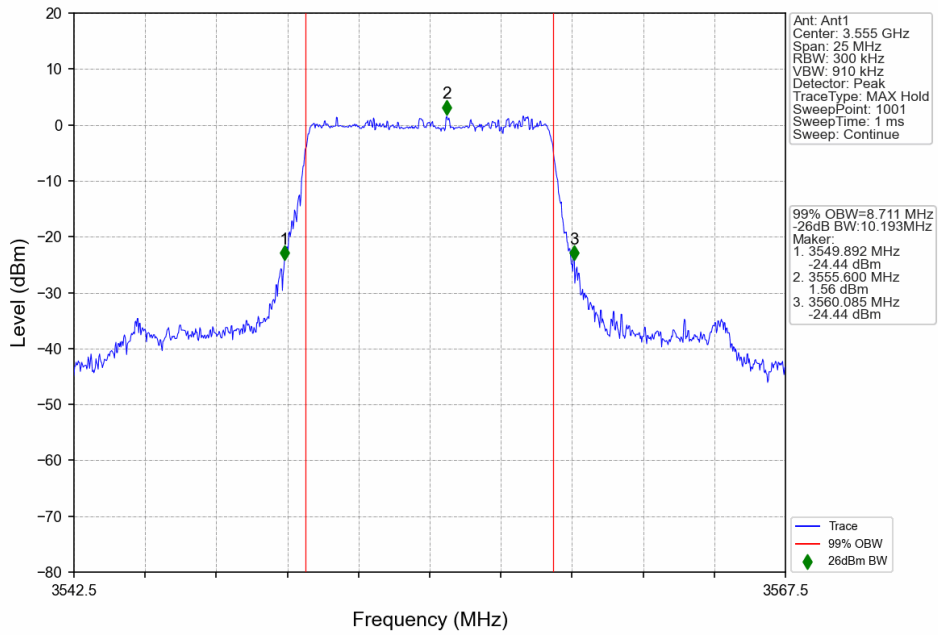
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_16_QAM_3624.99MHz_Outer_Full



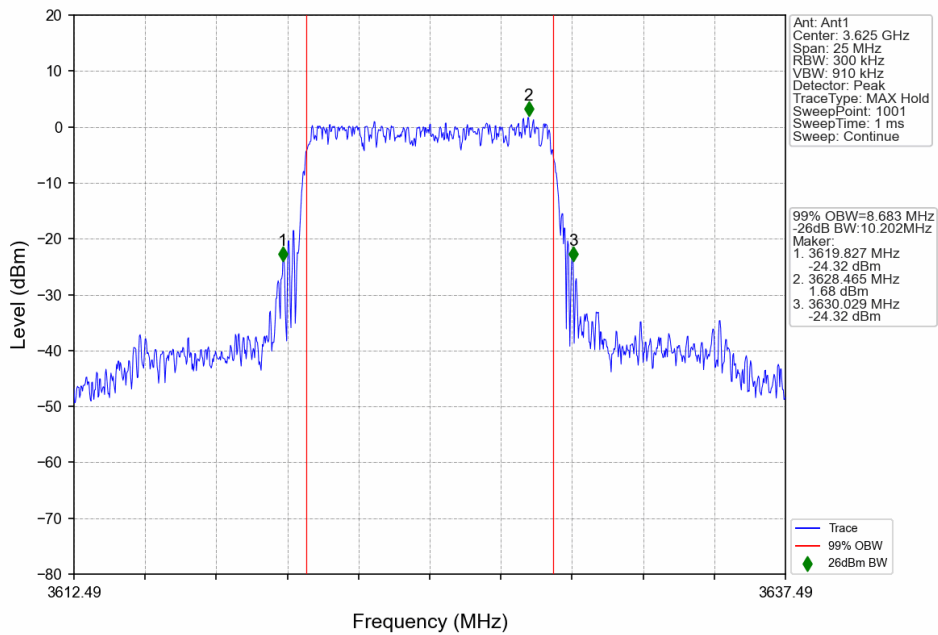
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_16_QAM_3694.98MHz_Outer_Full



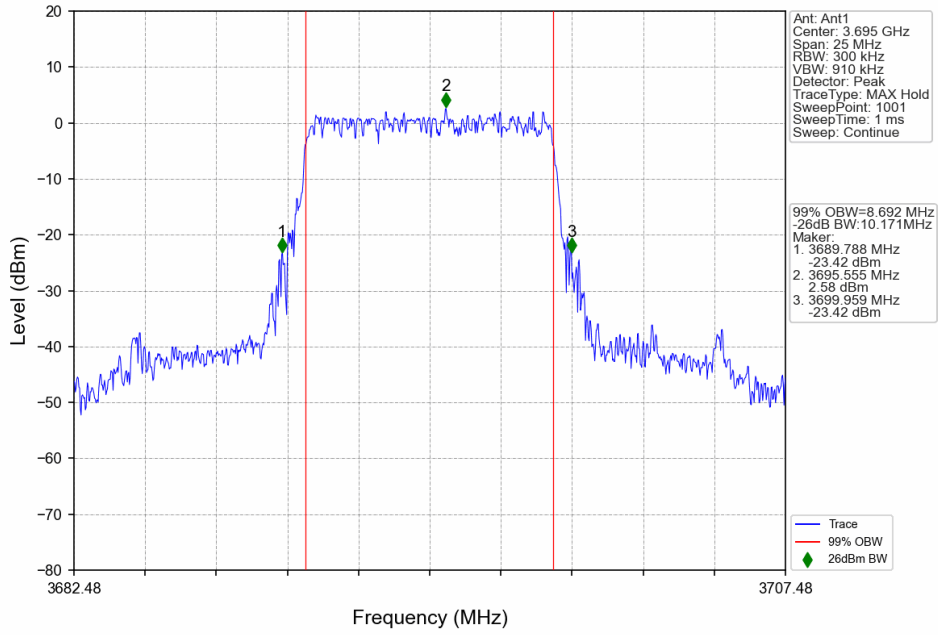
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_3555MHz_Outer_Full



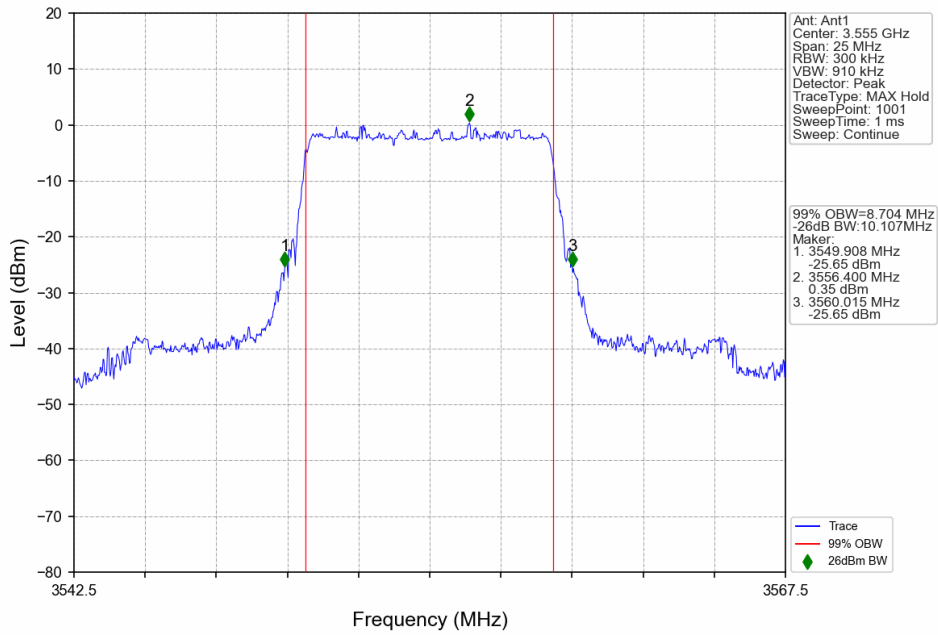
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_3624.99MHz_Outer_Full



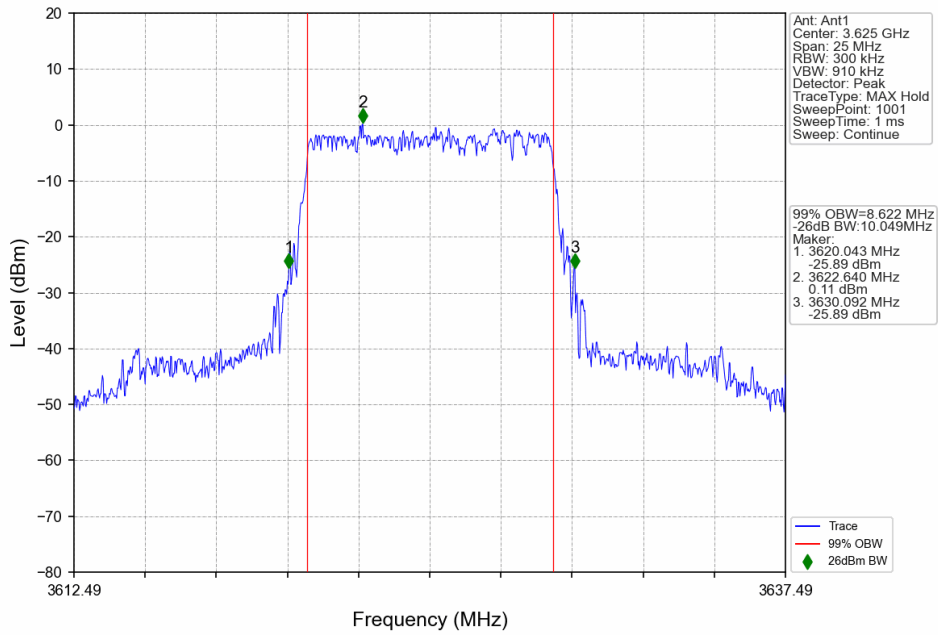
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_3694.98MHz_Outer_Full



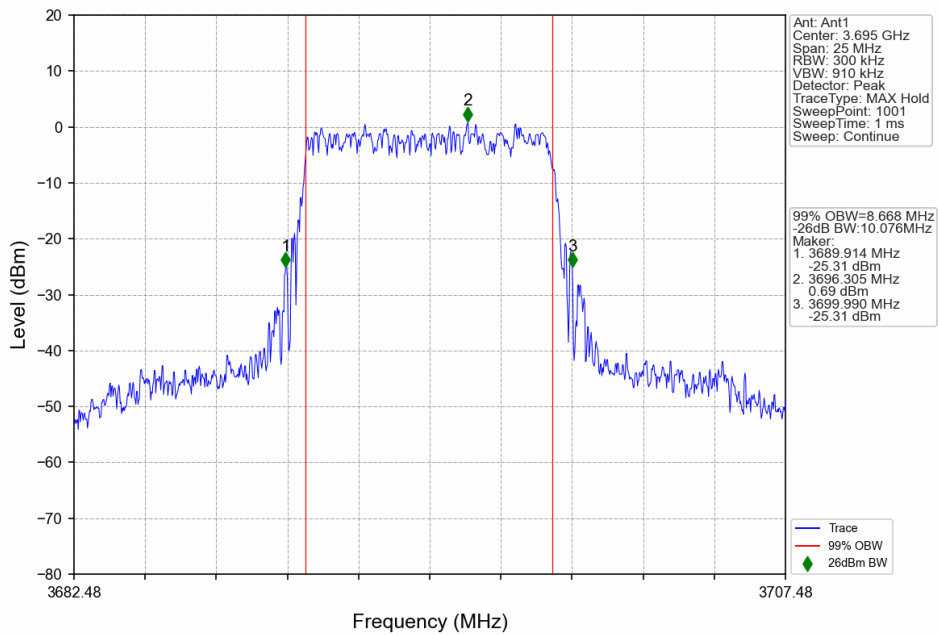
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM_3555MHz_Outer_Full



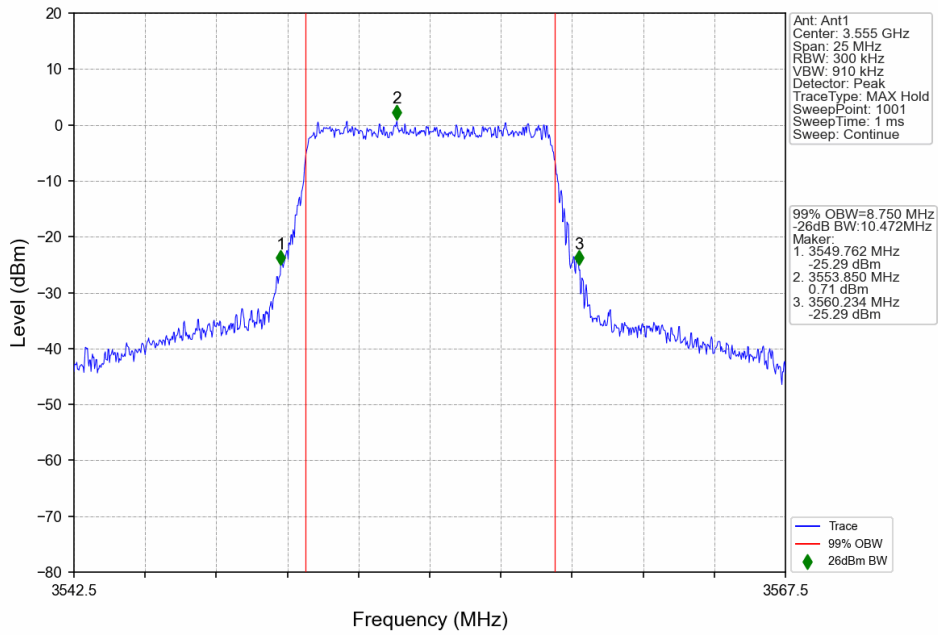
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_256_QAM_3624.99MHz_Outer_Full



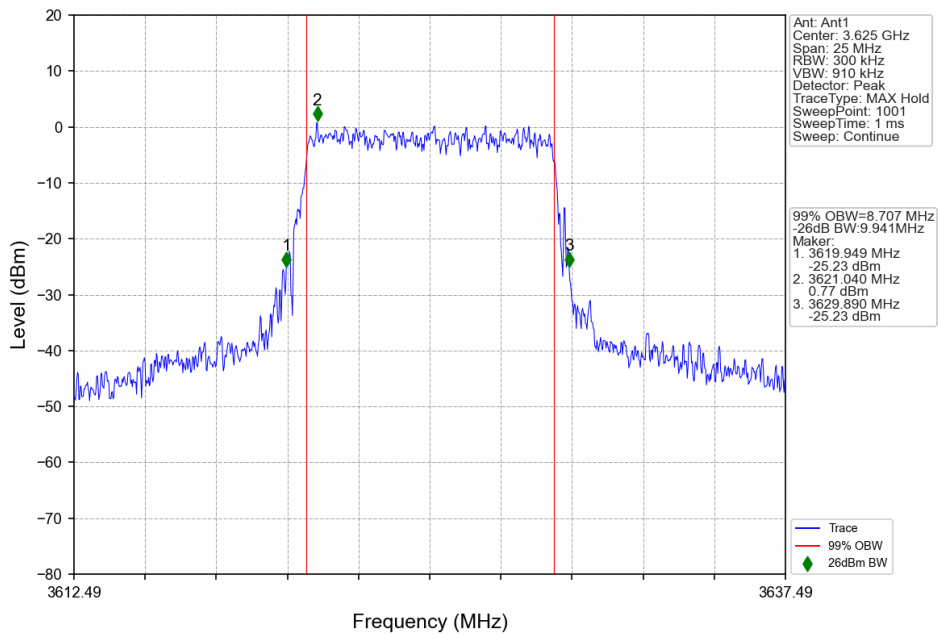
n48_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_256_QAM_3694.98MHz_Outer_Full



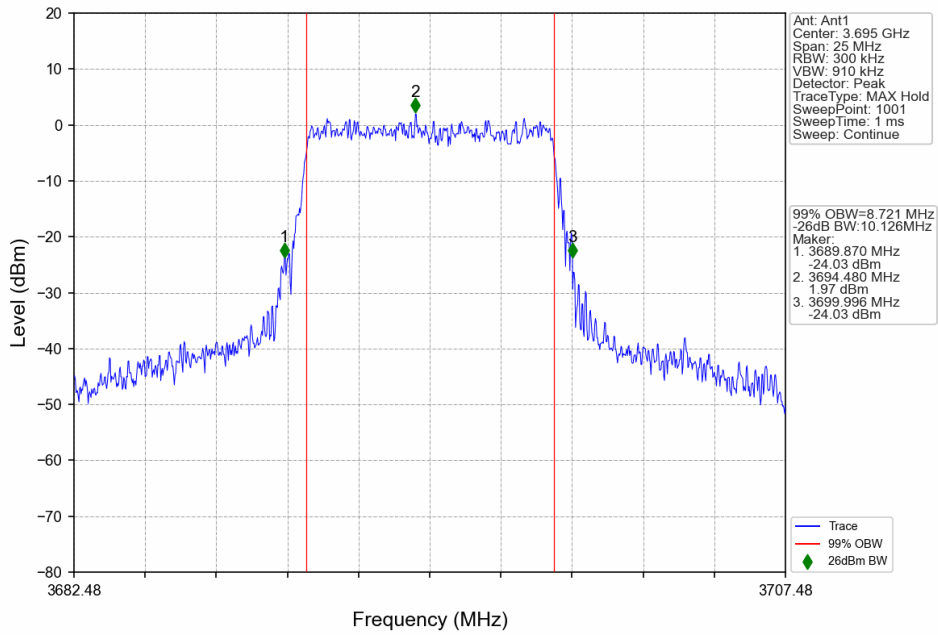
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_3555MHz_Outer_Full



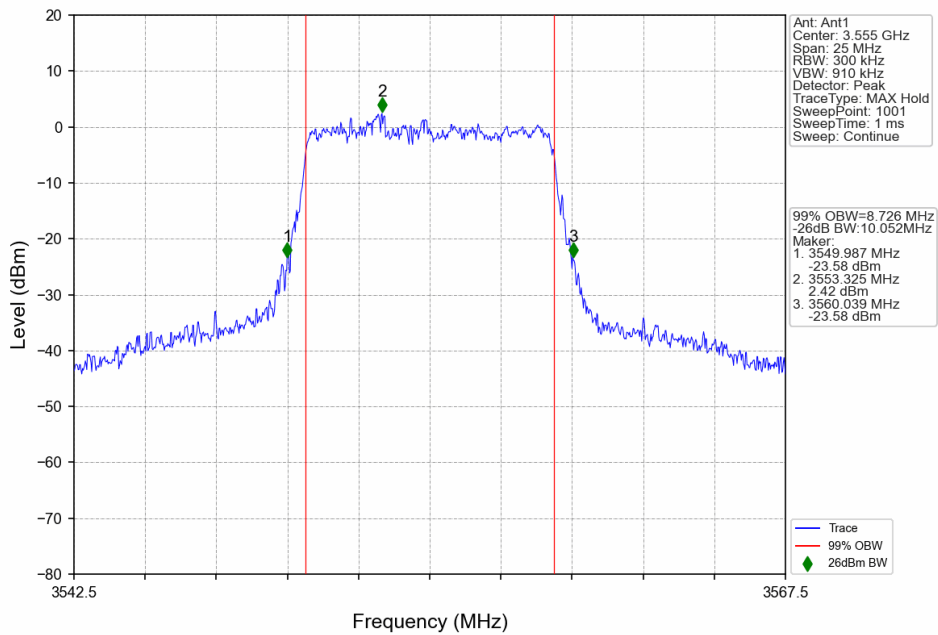
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



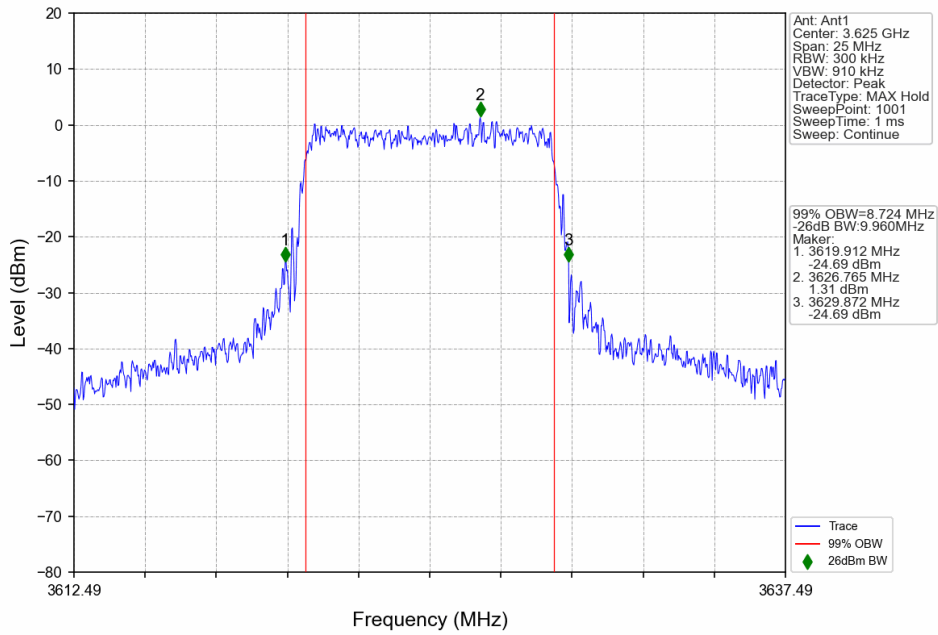
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_3694.98MHz_Outer_Full



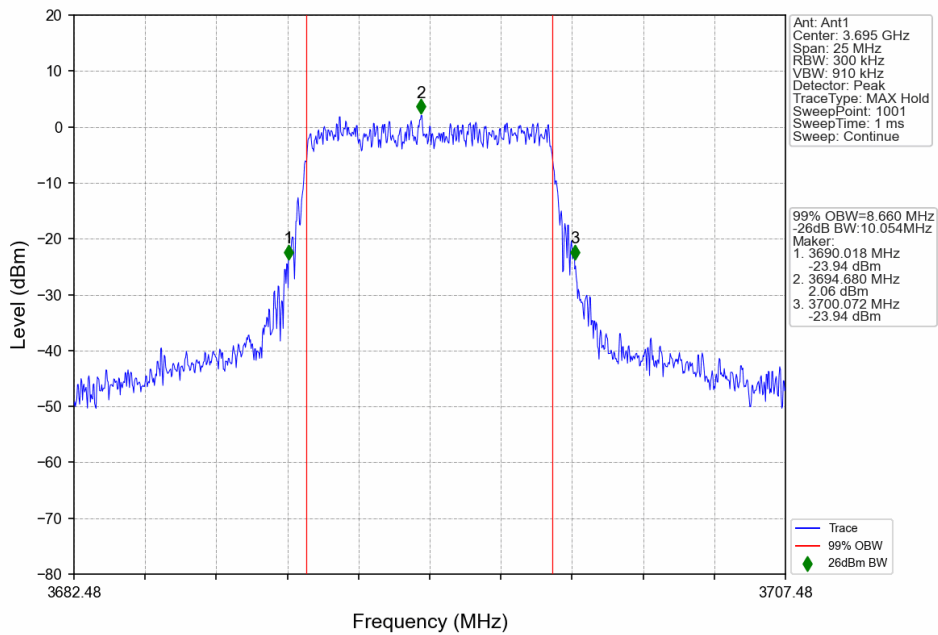
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_3555MHz_Outer_Full



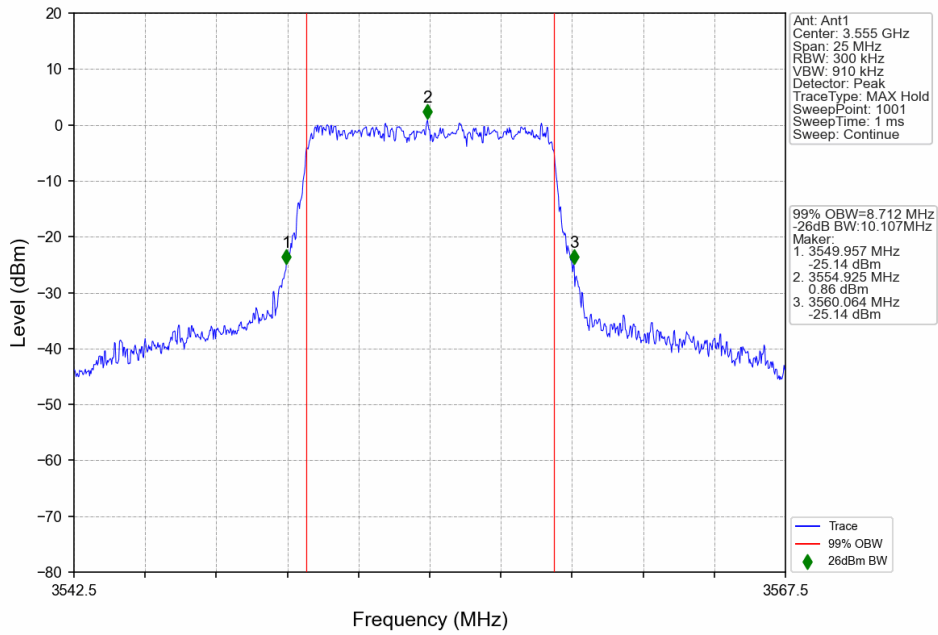
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM_16_QAM_3624.99MHz_Outer_Full



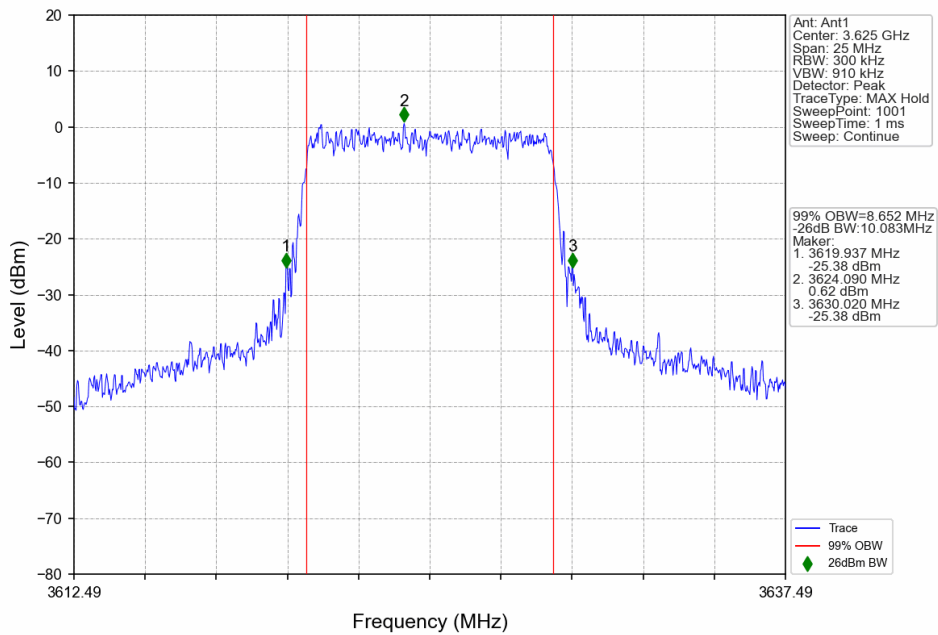
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM_16_QAM_3694.98MHz_Outer_Full



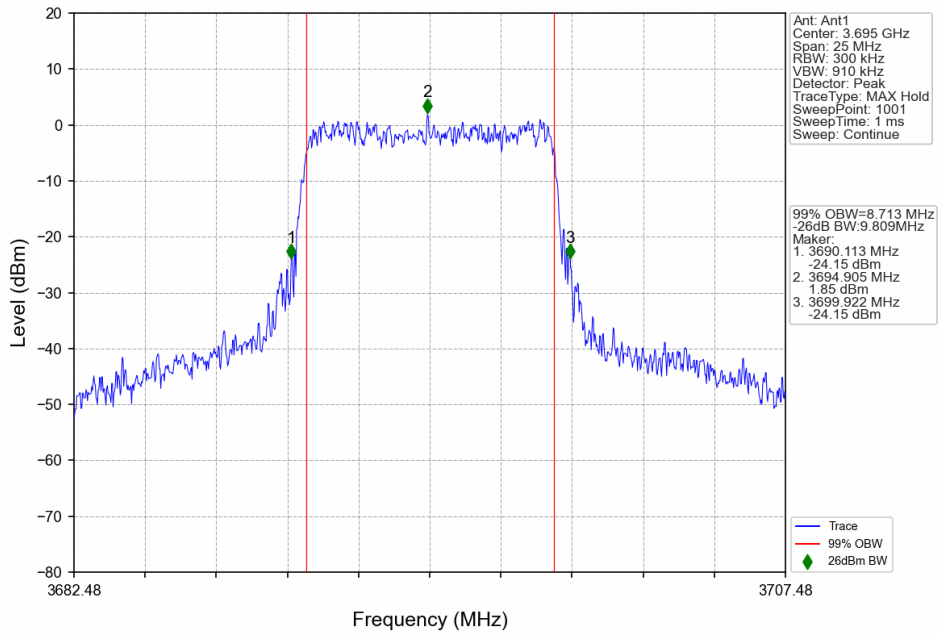
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_3555MHz_Outer_Full



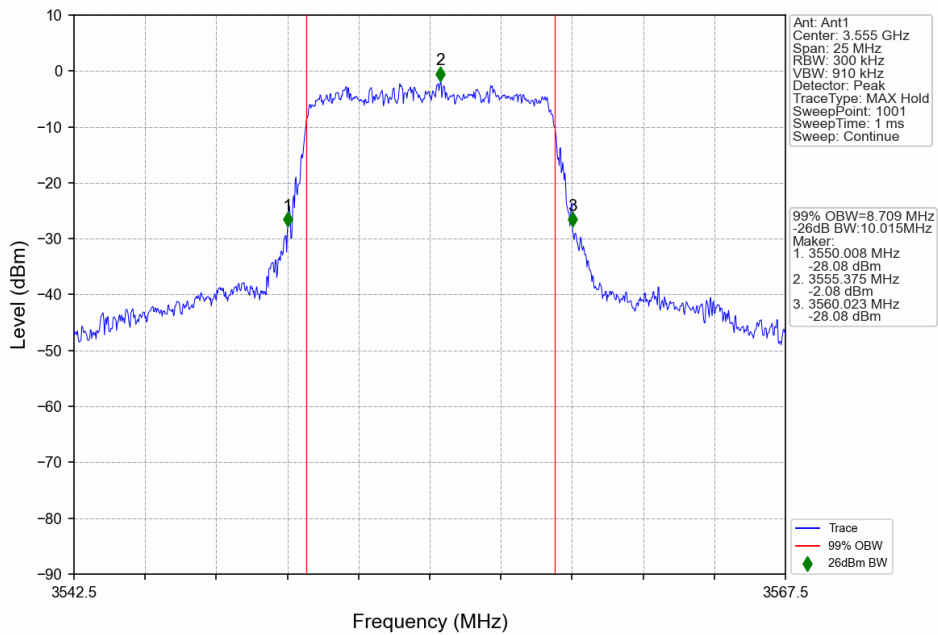
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_3624.99MHz_Outer_Full



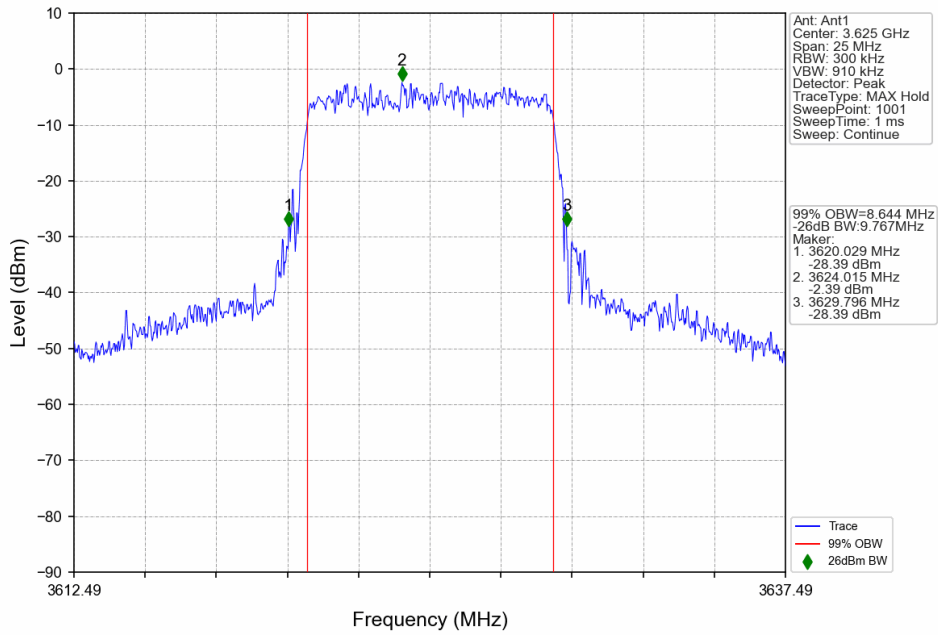
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_3694.98MHz_Outer_Full



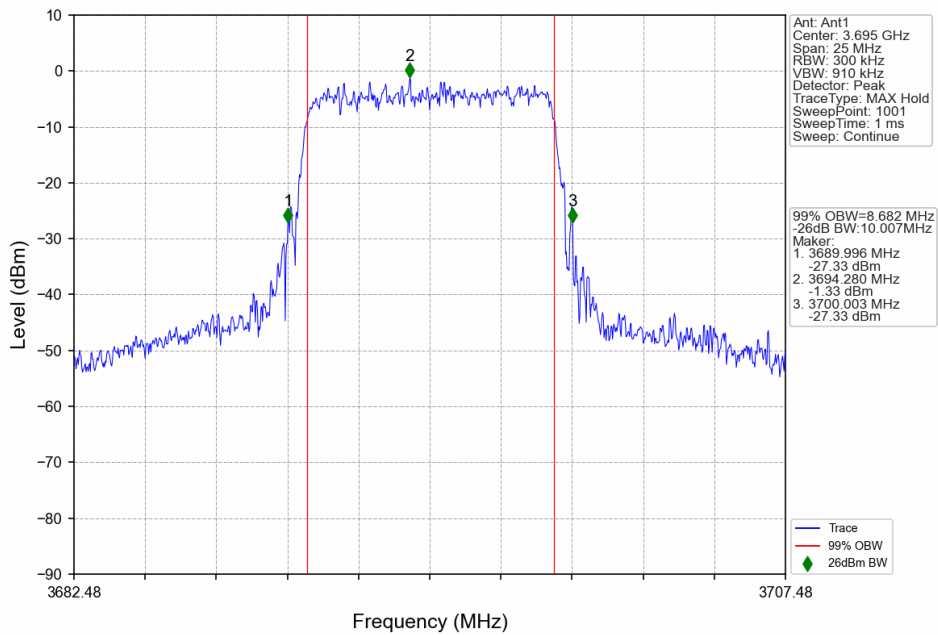
n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM_3555MHz_Outer_Full



n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM_3624.99MHz_Outer_Full



n48_30kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM_3694.98MHz_Outer_Full



1.2 30k_SISO_20MHz_NTNV

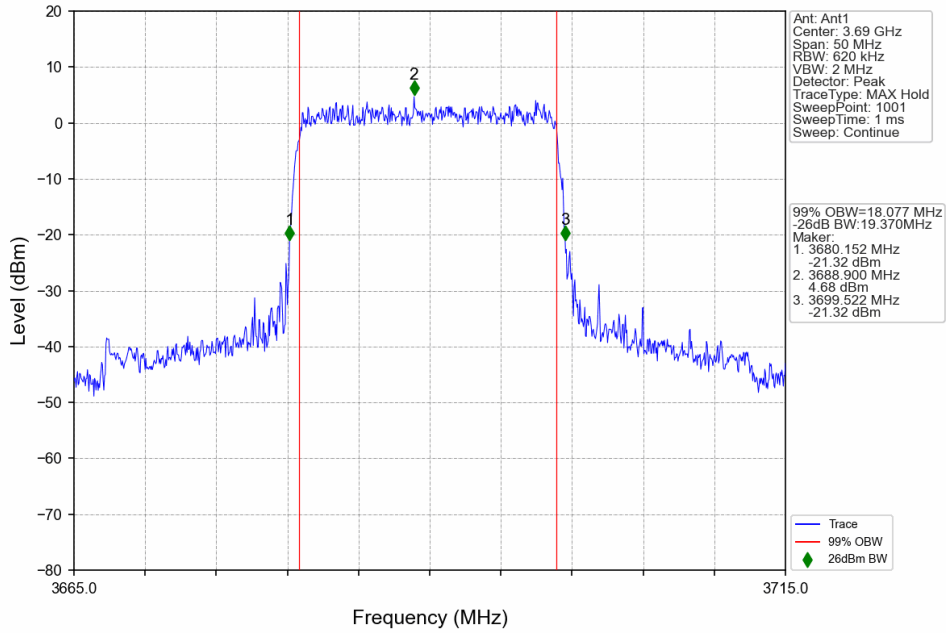
1.2.1 Test Result

5G NR n48 SCS=30kHz SISO 20MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3560.01	Outer_Full	18.10	19.79	/	Pass
	3624.99	Outer_Full	18.07	19.61	/	Pass
	3690	Outer_Full	18.08	19.37	/	Pass
DFT-s-OFDM 16 QAM	3560.01	Outer_Full	18.12	20.11	/	Pass
	3624.99	Outer_Full	18.05	19.67	/	Pass
	3690	Outer_Full	18.09	19.75	/	Pass
DFT-s-OFDM 64 QAM	3560.01	Outer_Full	18.14	19.90	/	Pass
	3624.99	Outer_Full	18.14	19.84	/	Pass
	3690	Outer_Full	18.16	19.76	/	Pass
DFT-s-OFDM 256 QAM	3560.01	Outer_Full	18.14	19.94	/	Pass
	3624.99	Outer_Full	18.12	19.57	/	Pass
	3690	Outer_Full	18.08	19.35	/	Pass
CP-OFDM QPSK	3560.01	Outer_Full	18.39	20.24	/	Pass
	3624.99	Outer_Full	18.36	20.06	/	Pass
	3690	Outer_Full	18.36	20.33	/	Pass
CP-OFDM 16 QAM	3560.01	Outer_Full	18.43	20.77	/	Pass
	3624.99	Outer_Full	18.44	19.90	/	Pass
	3690	Outer_Full	18.45	19.99	/	Pass
CP-OFDM 64 QAM	3560.01	Outer_Full	18.37	20.24	/	Pass
	3624.99	Outer_Full	18.43	19.70	/	Pass
	3690	Outer_Full	18.38	20.08	/	Pass
CP-OFDM 256 QAM	3560.01	Outer_Full	18.42	20.36	/	Pass
	3624.99	Outer_Full	18.34	20.03	/	Pass
	3690	Outer_Full	18.39	20.15	/	Pass

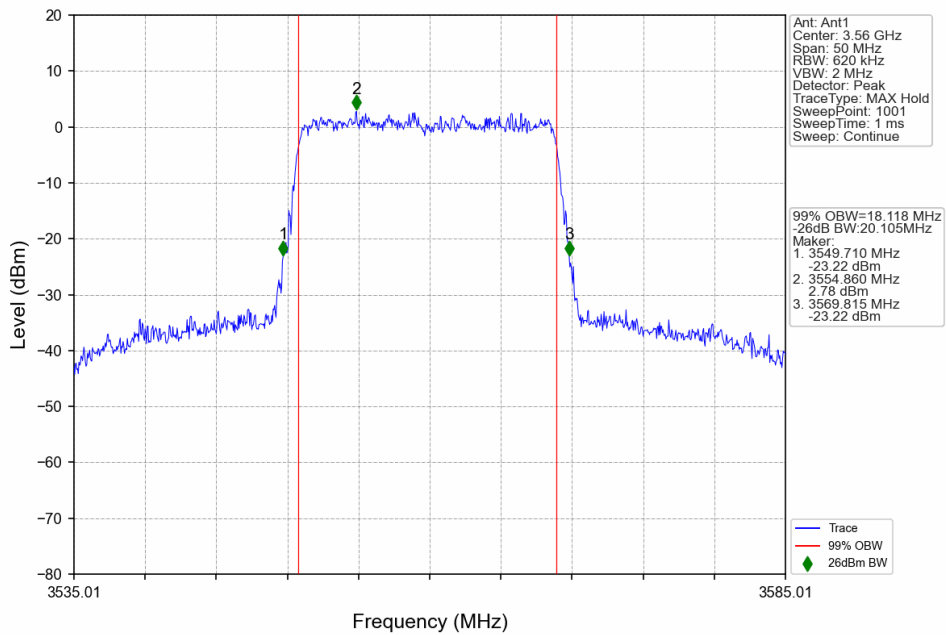
1.2.2 Test Graph



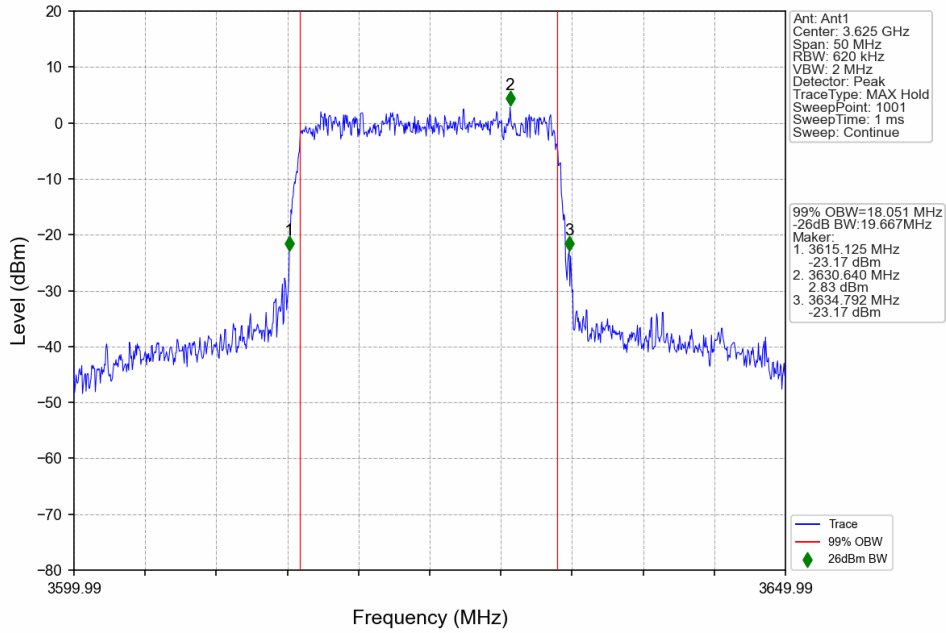
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_3690MHz_Outer_Full



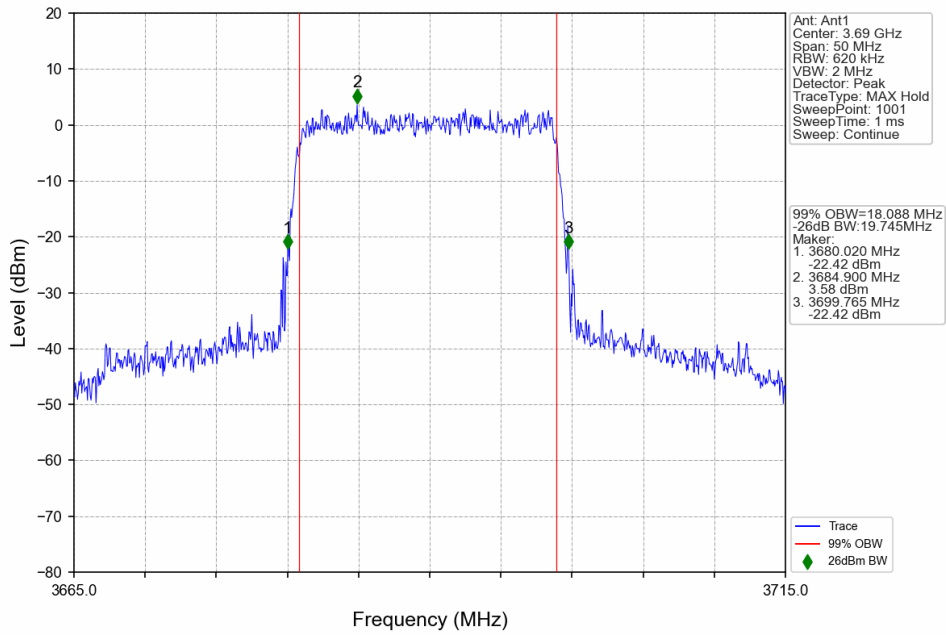
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM 16 QAM_3560.01MHz_Outer_Full



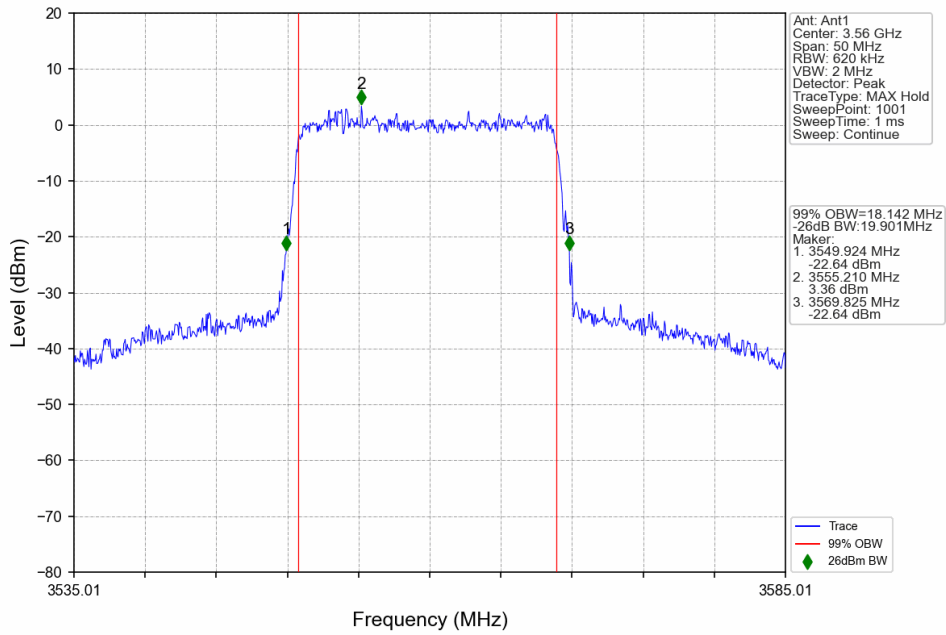
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_16_QAM_3624.99MHz_Outer_Full



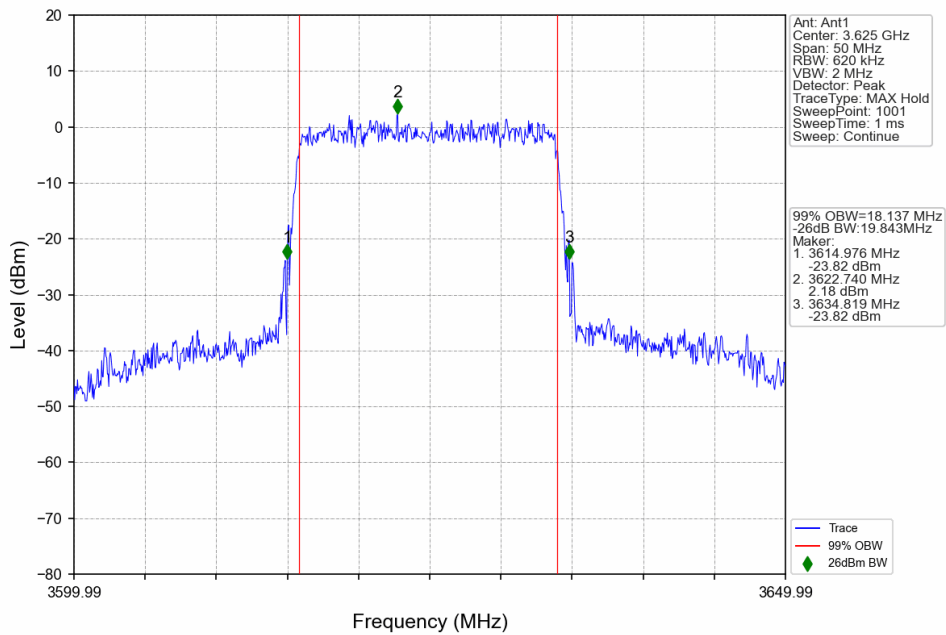
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_16_QAM_3690MHz_Outer_Full



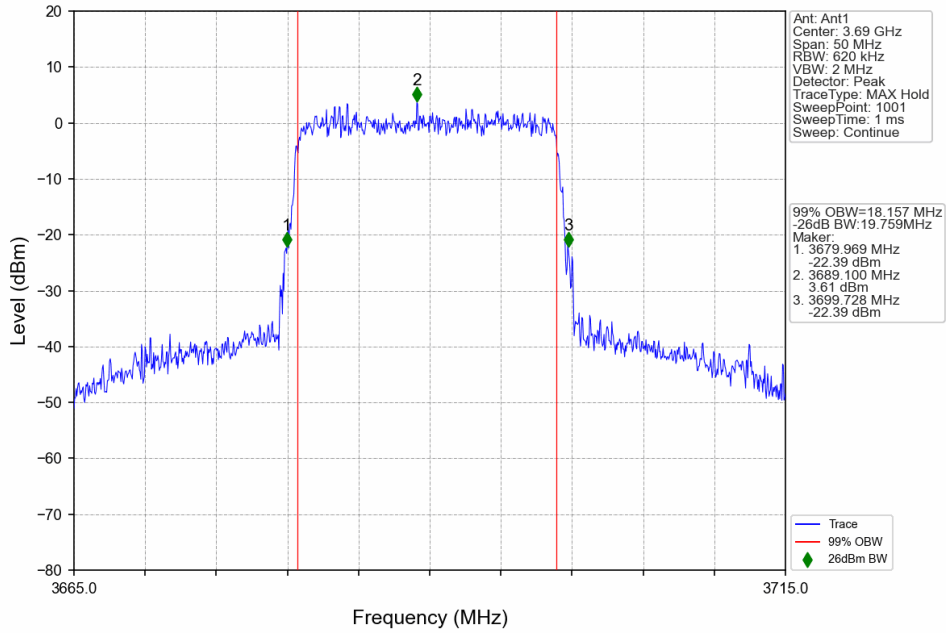
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_64_QAM_3560.01MHz_Outer_Full



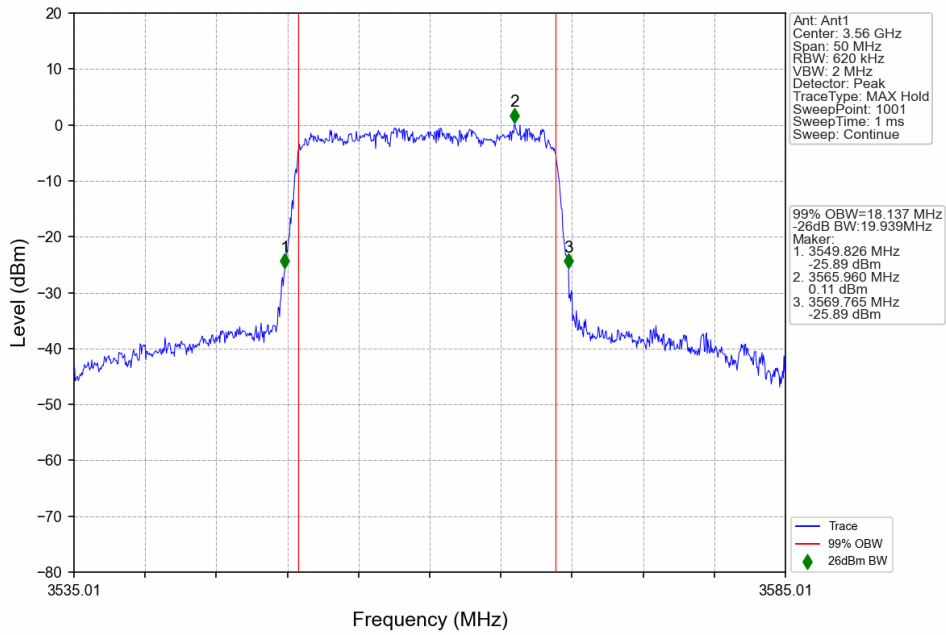
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_64_QAM_3624.99MHz_Outer_Full



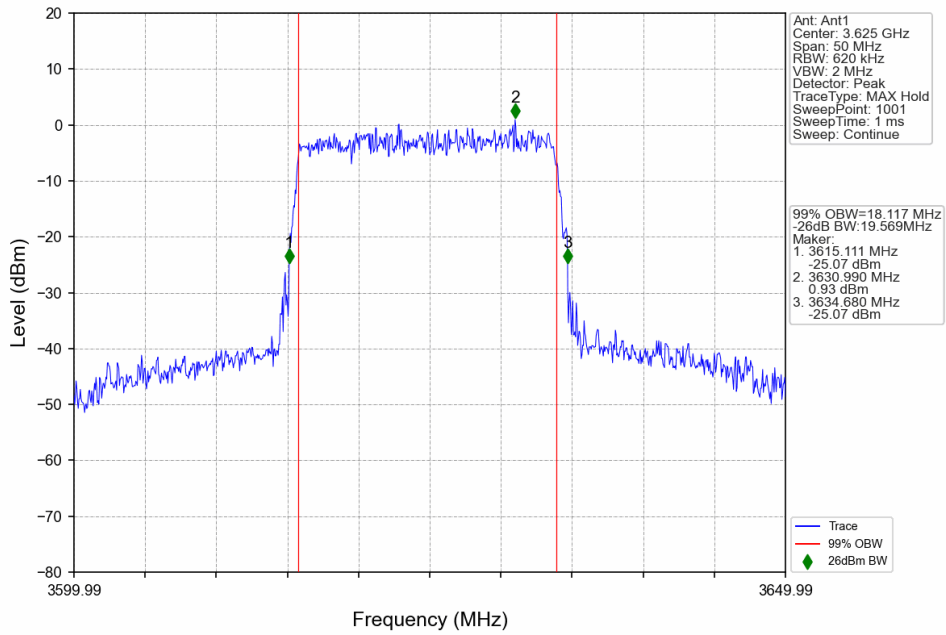
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM 64 QAM_3690MHz_Outer_Full



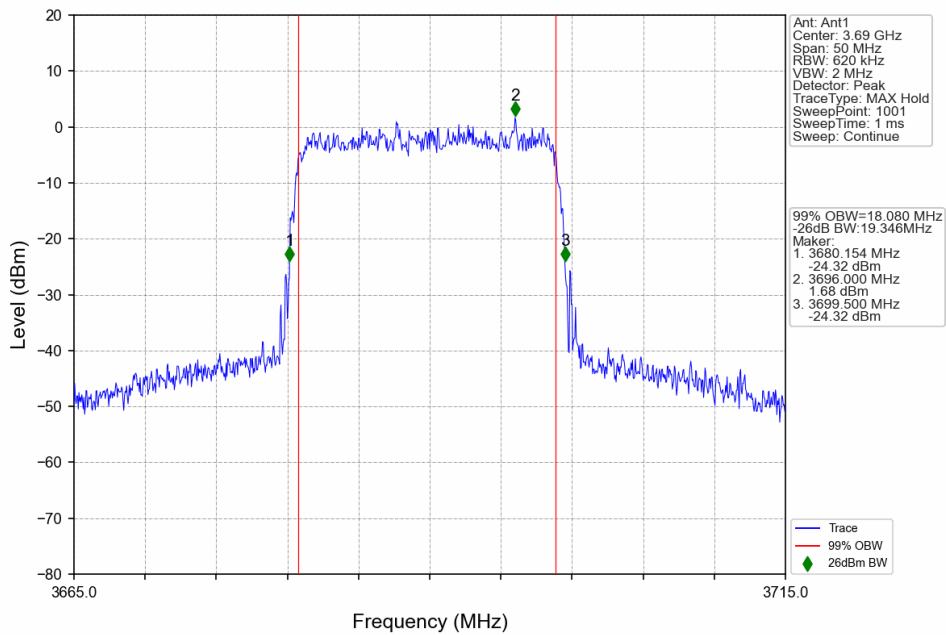
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_3560.01MHz_Outer_Full



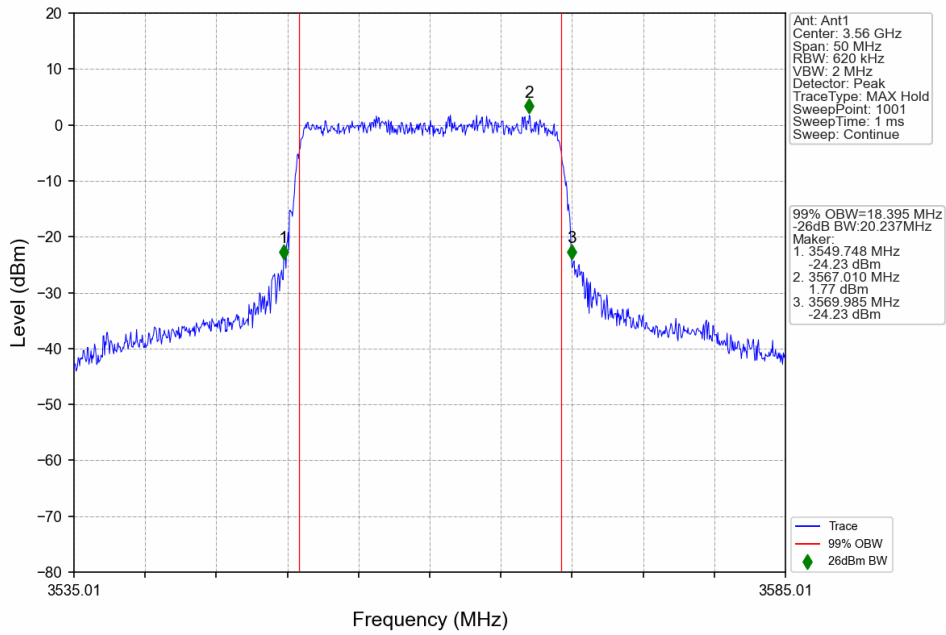
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_3624.99MHz_Outer_Full



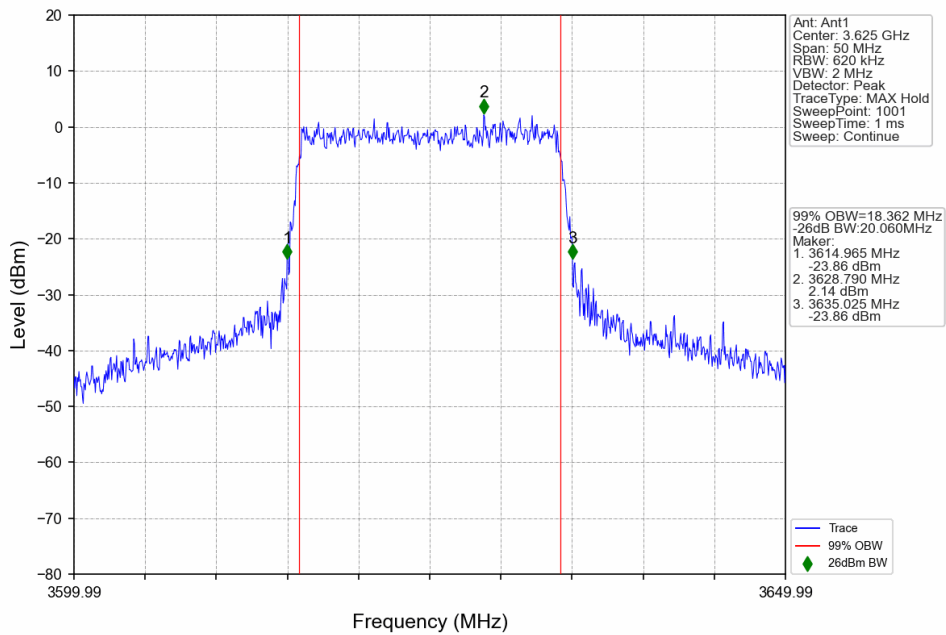
n48_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_3690MHz_Outer_Full



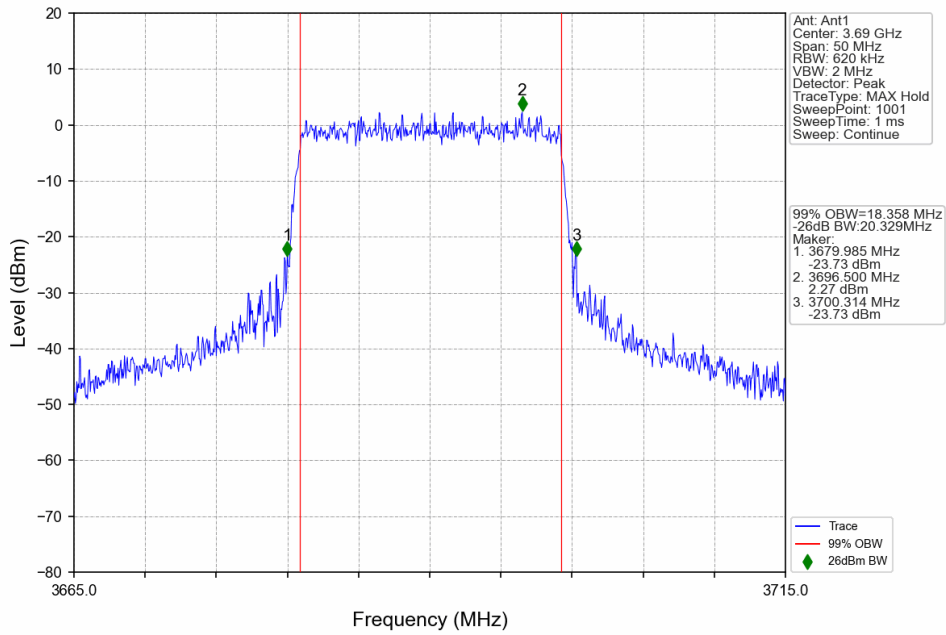
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_3560.01MHz_Outer_Full



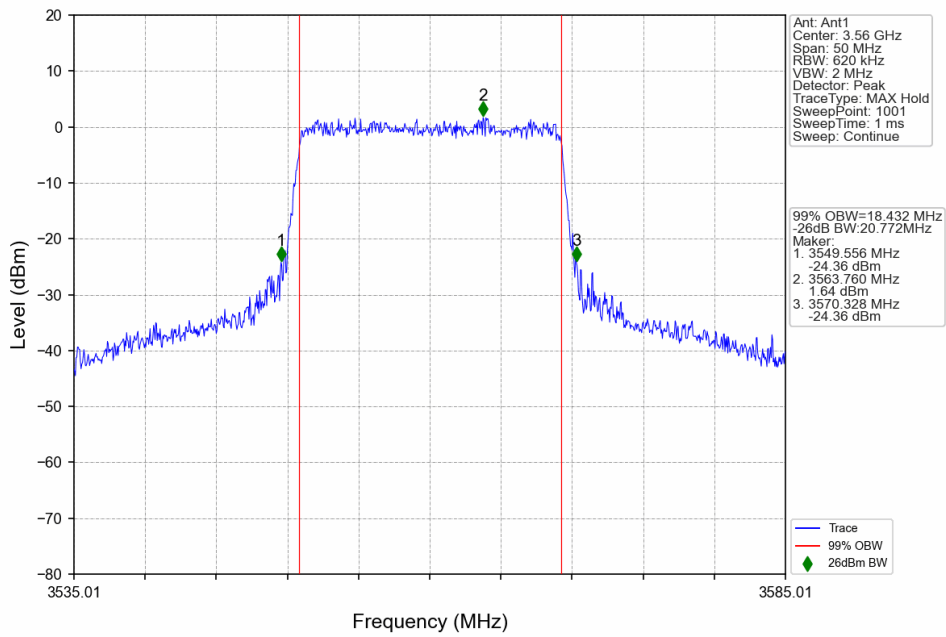
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



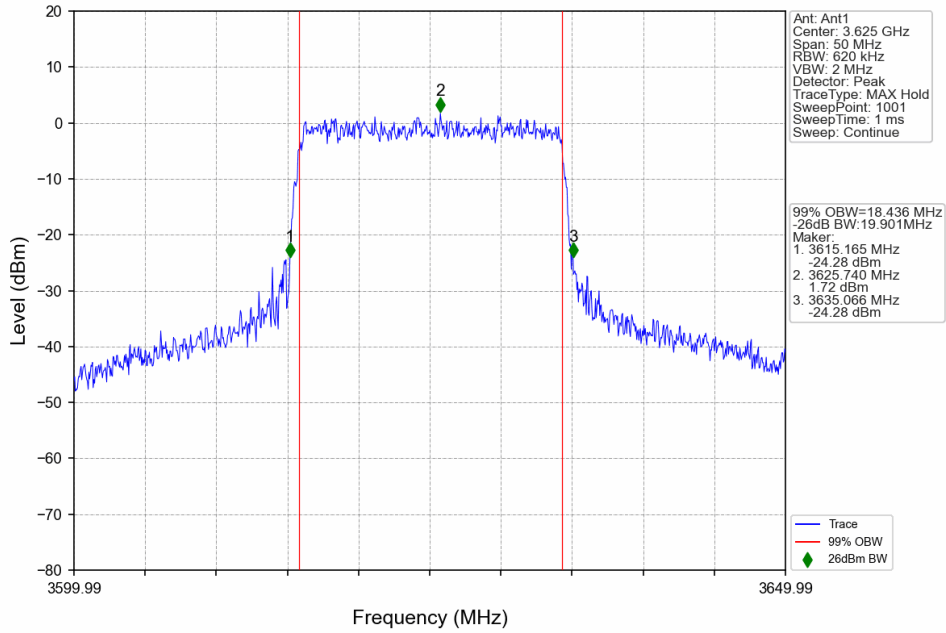
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_3690MHz_Outer_Full



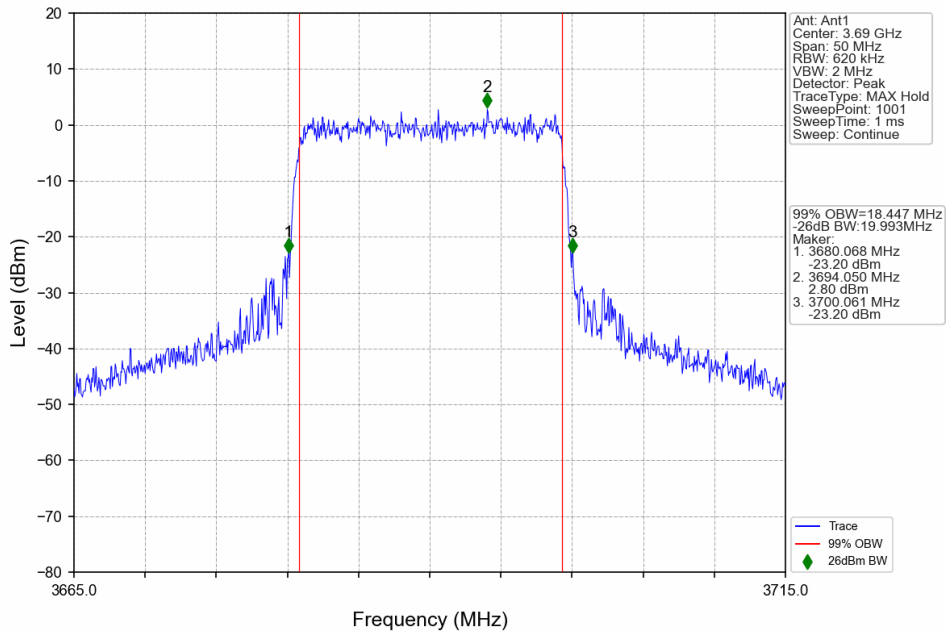
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_3560.01MHz_Outer_Full



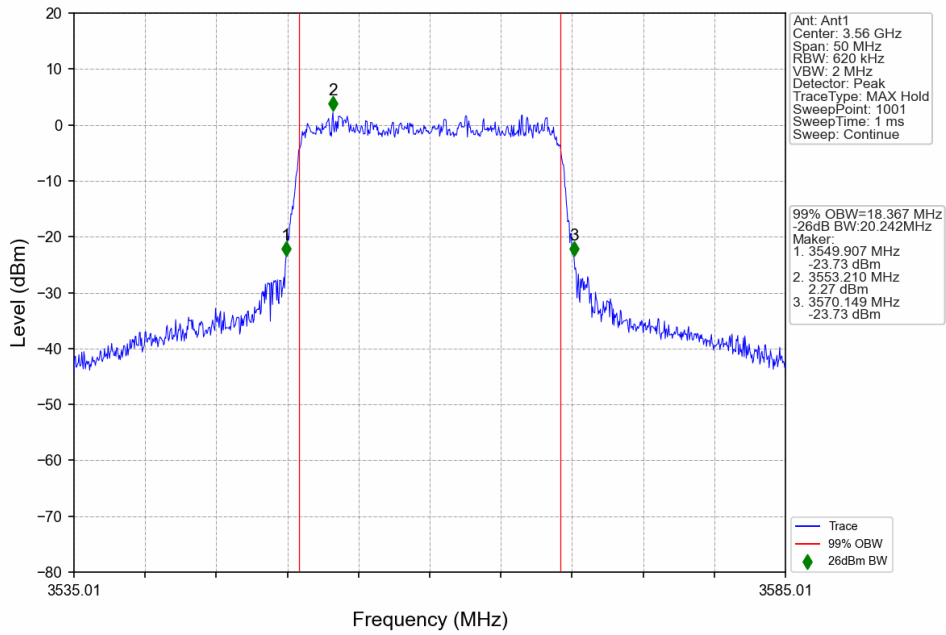
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_16_QAM_3624.99MHz_Outer_Full



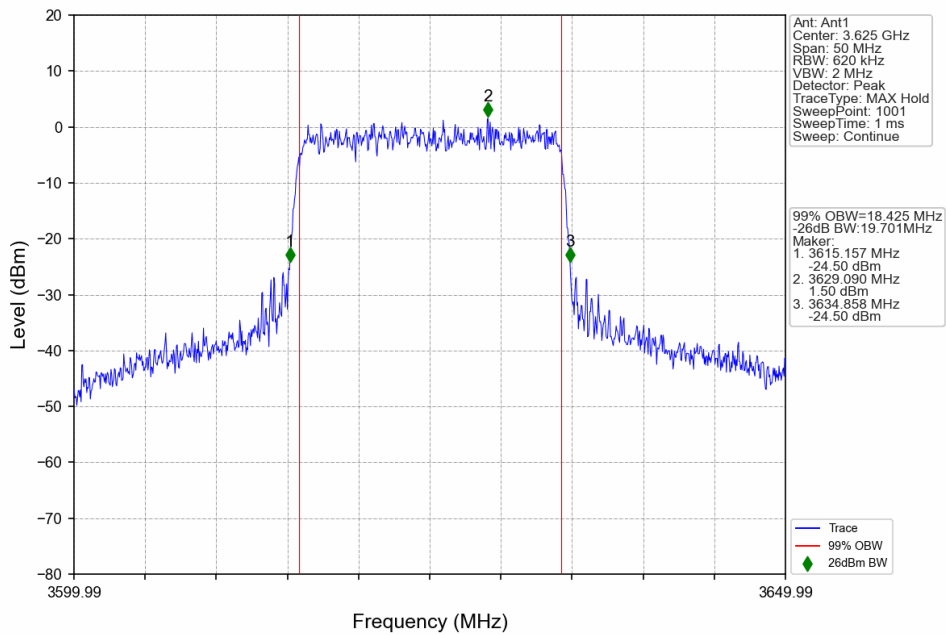
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_16_QAM_3690MHz_Outer_Full



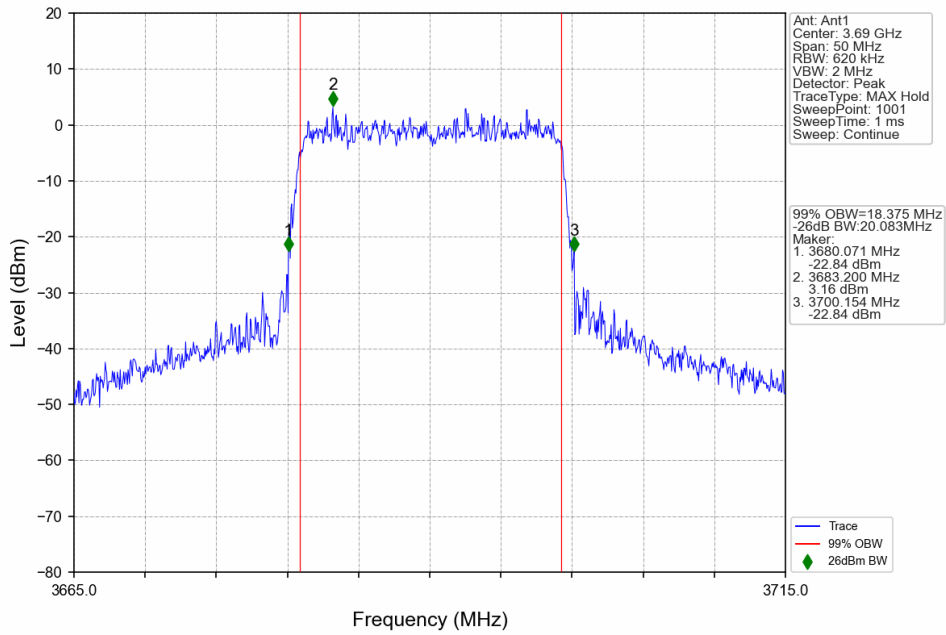
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_64_QAM_3560.01MHz_Outer_Full



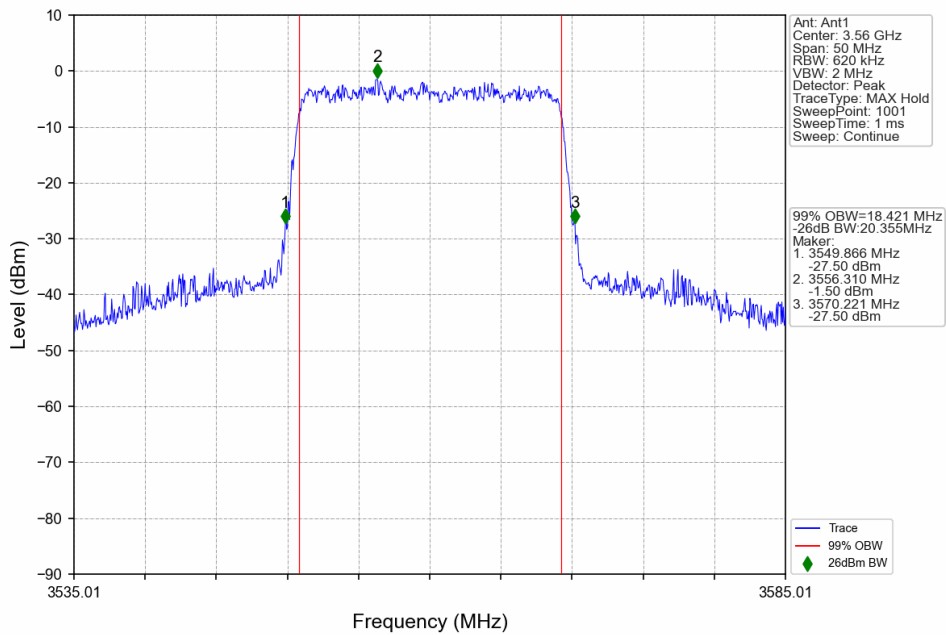
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_64_QAM_3624.99MHz_Outer_Full



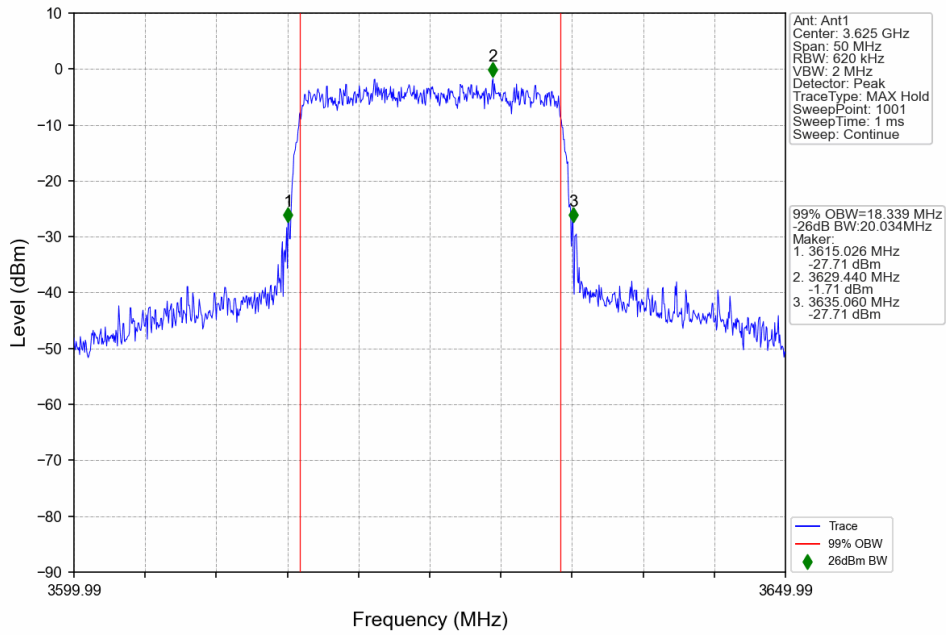
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM 3690MHz_Outer_Full



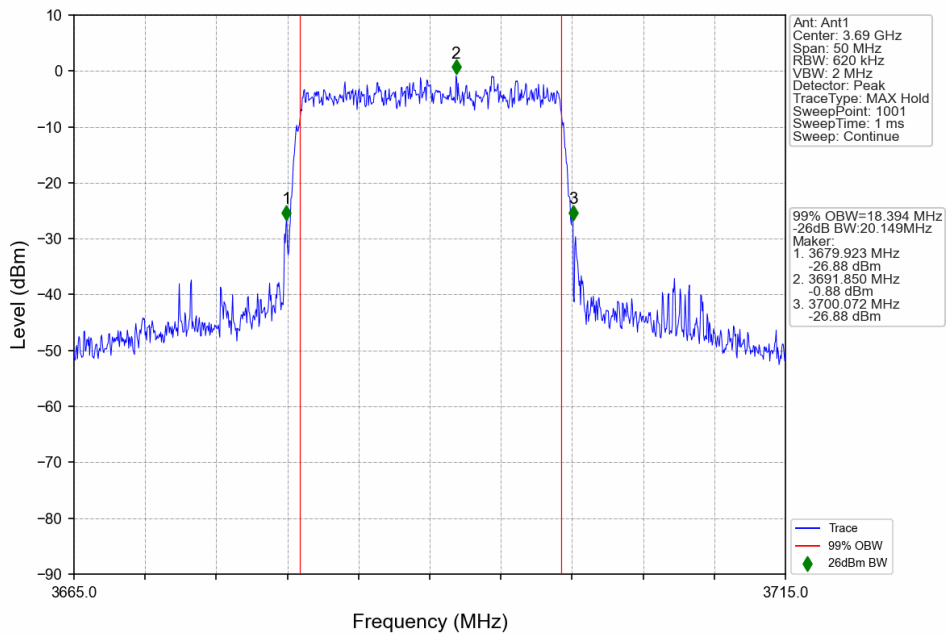
n48_30kHz_SISO_NTNV_20MHz_CP-OFDM 256 QAM 3560.01MHz_Outer_Full



n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3624.99MHz_Outer_Full



n48_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3690MHz_Outer_Full

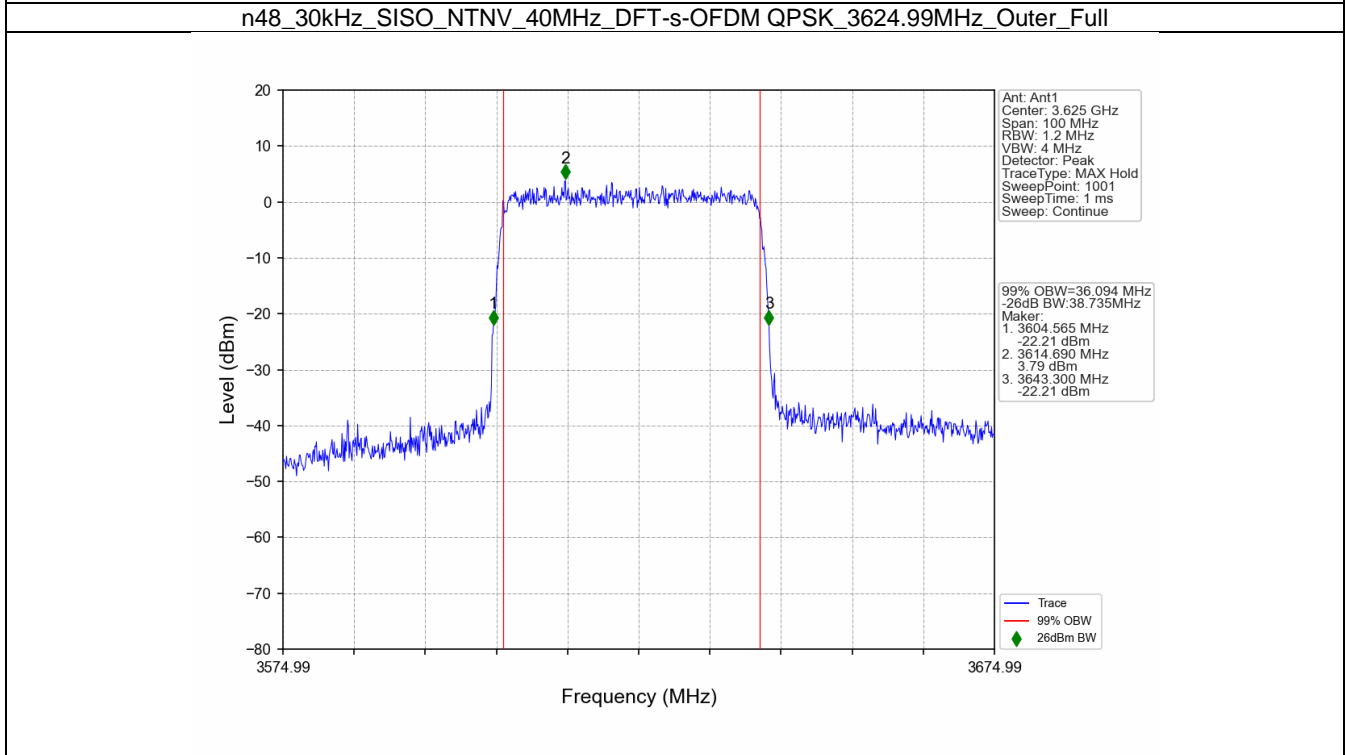
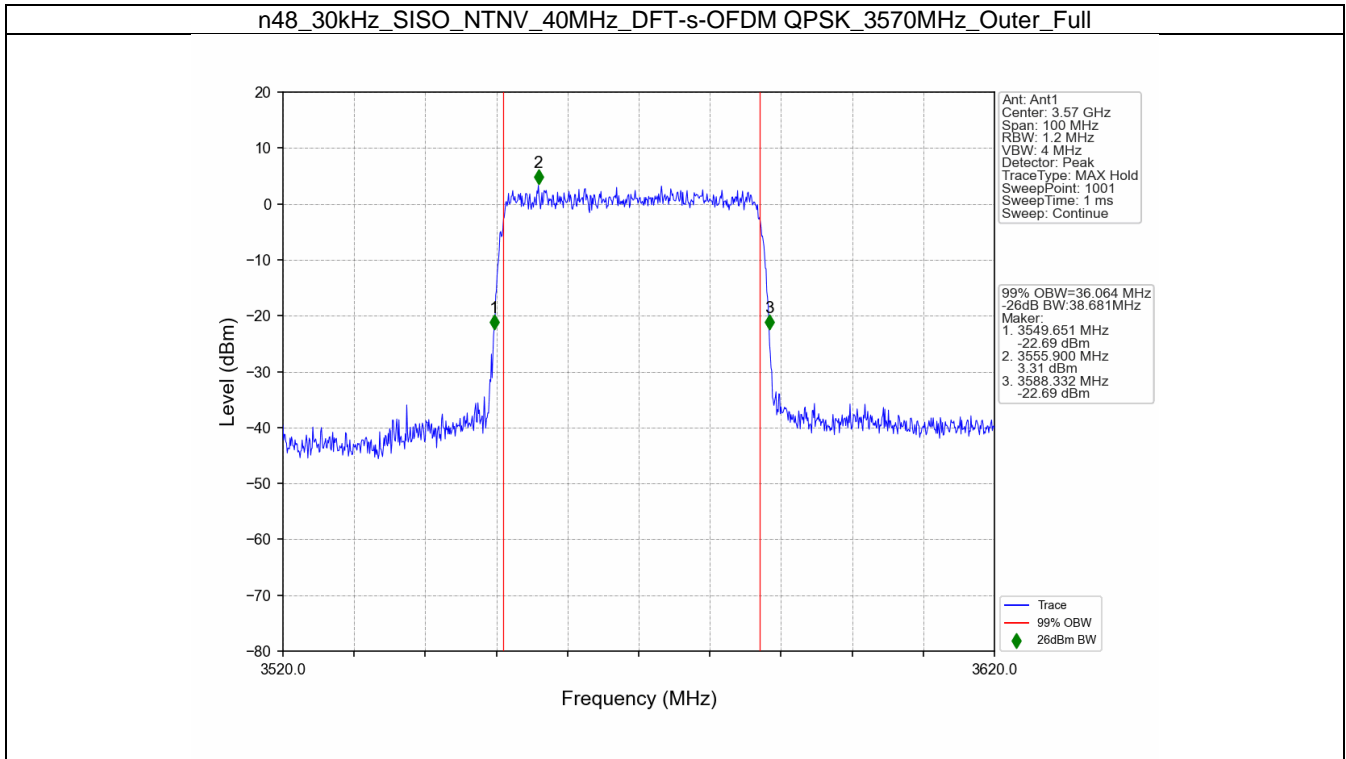


1.3 30k_SISO_40MHz_NTNV

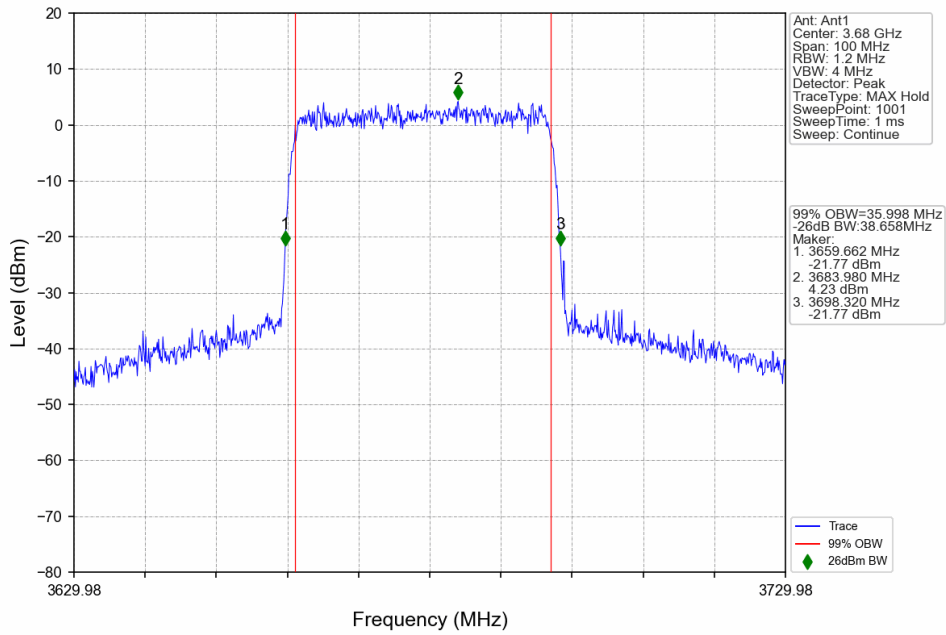
1.3.1 Test Result

5G NR n48 SCS=30kHz SISO 40MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3570	Outer_Full	36.06	38.68	/	Pass
	3624.99	Outer_Full	36.09	38.73	/	Pass
	3679.98	Outer_Full	36.00	38.66	/	Pass
DFT-s-OFDM 16 QAM	3570	Outer_Full	35.95	38.71	/	Pass
	3624.99	Outer_Full	36.14	38.66	/	Pass
	3679.98	Outer_Full	36.04	38.68	/	Pass
DFT-s-OFDM 64 QAM	3570	Outer_Full	36.06	38.58	/	Pass
	3624.99	Outer_Full	36.05	38.67	/	Pass
	3679.98	Outer_Full	36.05	38.75	/	Pass
DFT-s-OFDM 256 QAM	3570	Outer_Full	36.17	38.53	/	Pass
	3624.99	Outer_Full	35.98	38.65	/	Pass
	3679.98	Outer_Full	35.99	38.65	/	Pass
CP-OFDM QPSK	3570	Outer_Full	38.15	41.05	/	Pass
	3624.99	Outer_Full	38.10	40.76	/	Pass
	3679.98	Outer_Full	38.17	40.70	/	Pass
CP-OFDM 16 QAM	3570	Outer_Full	38.27	40.68	/	Pass
	3624.99	Outer_Full	38.10	40.76	/	Pass
	3679.98	Outer_Full	38.09	40.84	/	Pass
CP-OFDM 64 QAM	3570	Outer_Full	38.09	40.76	/	Pass
	3624.99	Outer_Full	38.02	40.93	/	Pass
	3679.98	Outer_Full	38.16	40.89	/	Pass
CP-OFDM 256 QAM	3570	Outer_Full	38.14	41.12	/	Pass
	3624.99	Outer_Full	38.06	40.57	/	Pass
	3679.98	Outer_Full	38.12	40.88	/	Pass

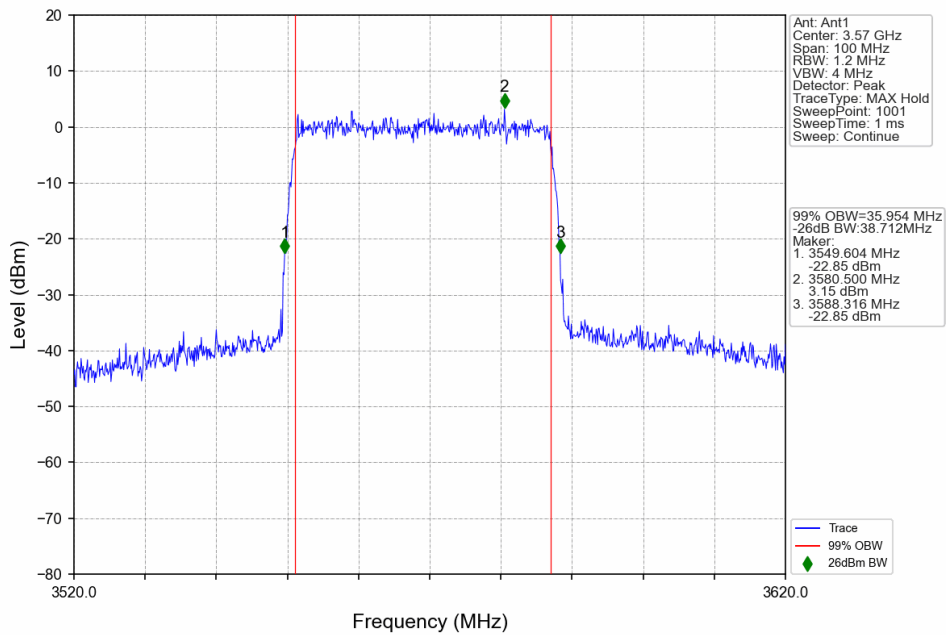
1.3.2 Test Graph



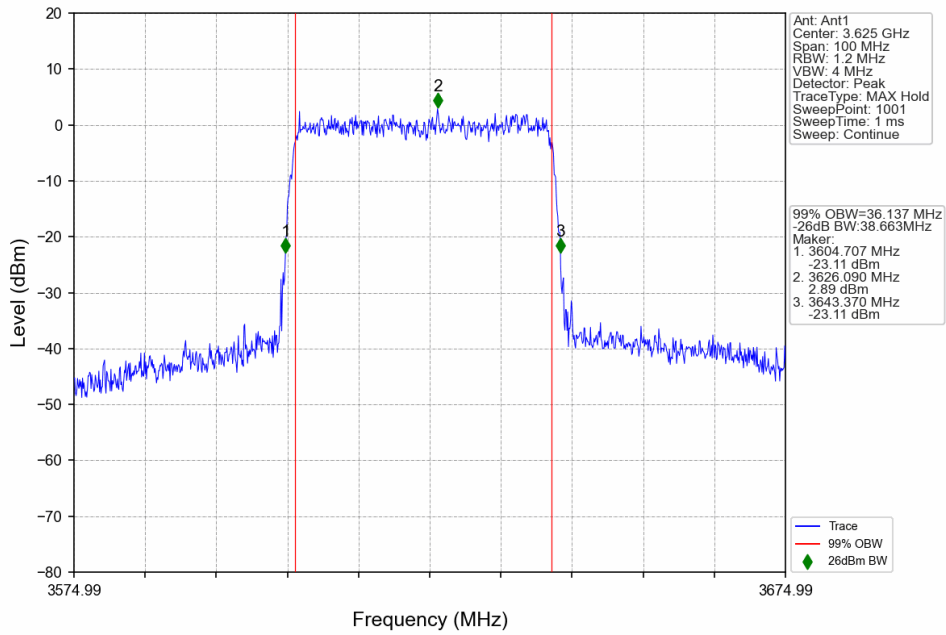
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM QPSK_3679.98MHz_Outer_Full



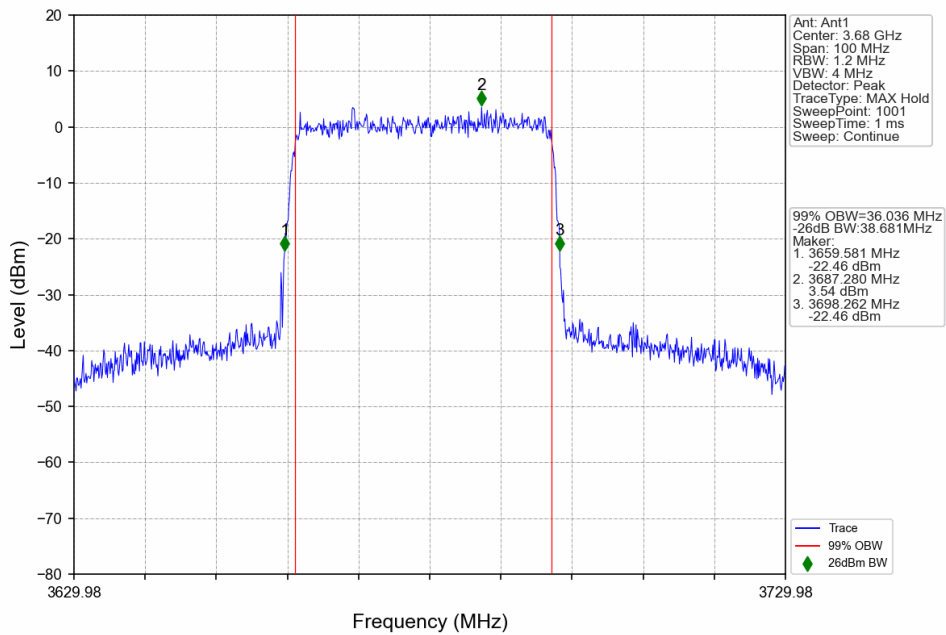
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM 16 QAM_3570MHz_Outer_Full



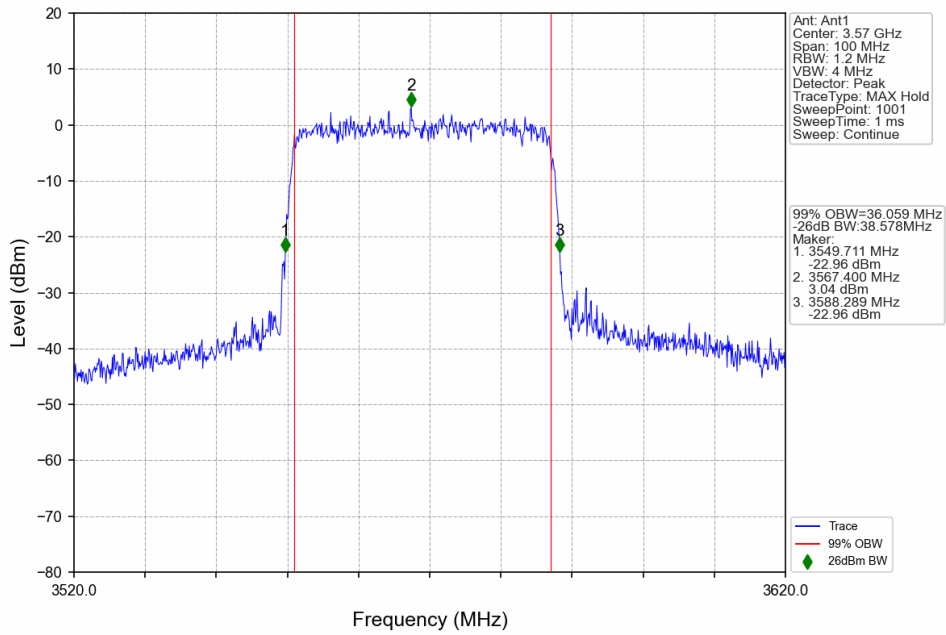
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_16_QAM_3624.99MHz_Outer_Full



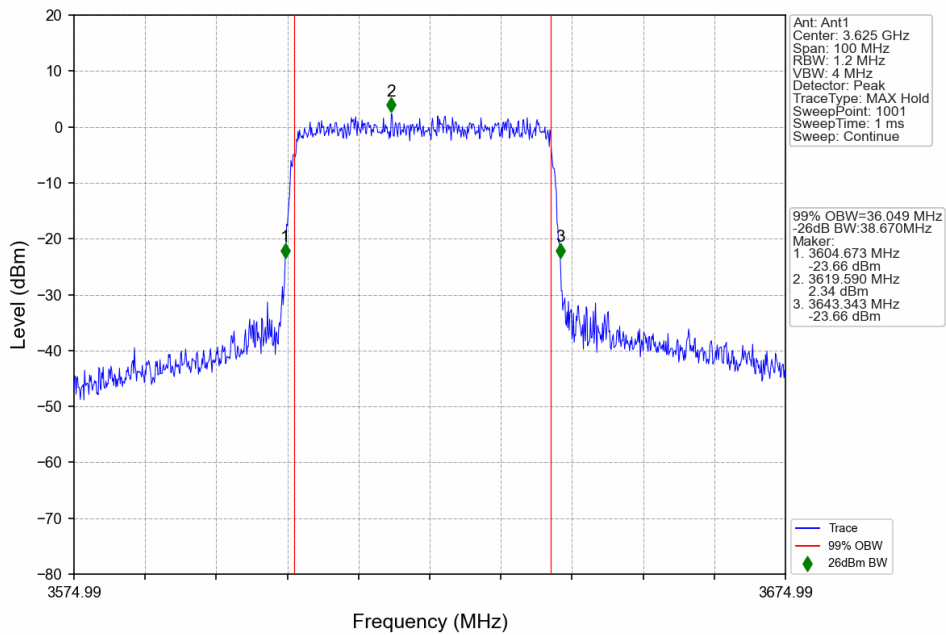
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_16_QAM_3679.98MHz_Outer_Full



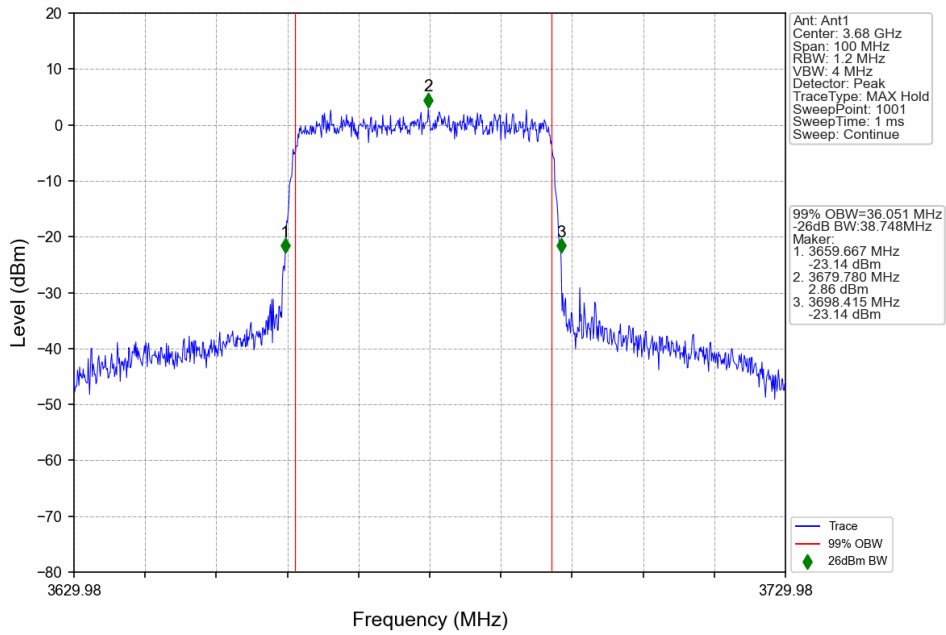
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM 64 QAM_3570MHz_Outer_Full



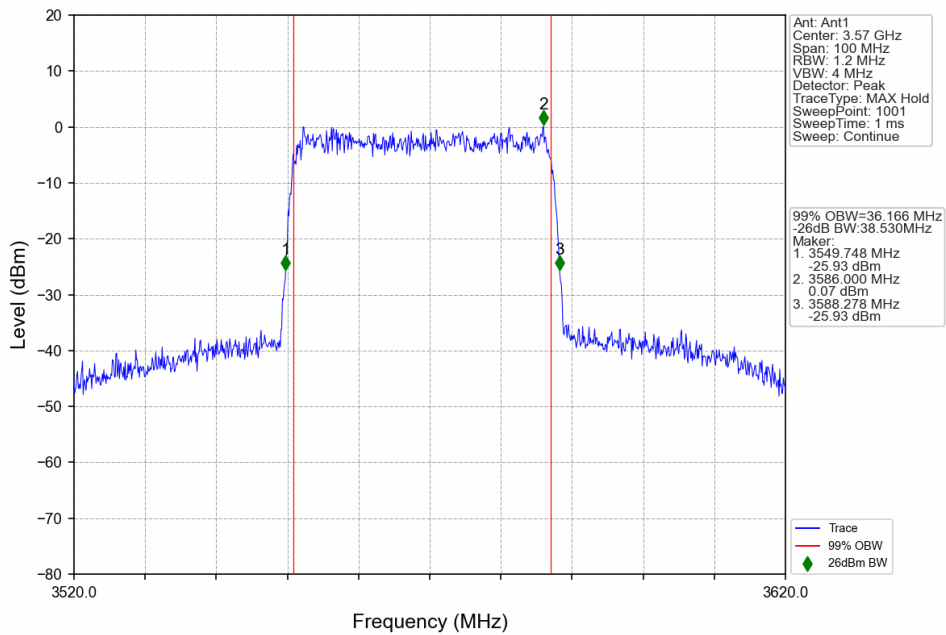
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM 64 QAM_3624.99MHz_Outer_Full



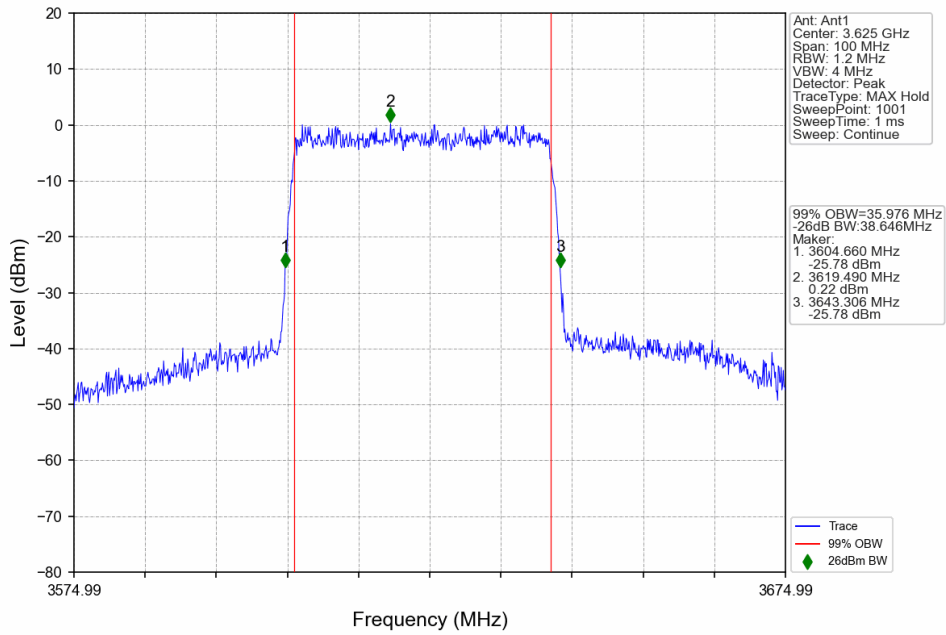
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM 64 QAM_3679.98MHz_Outer_Full



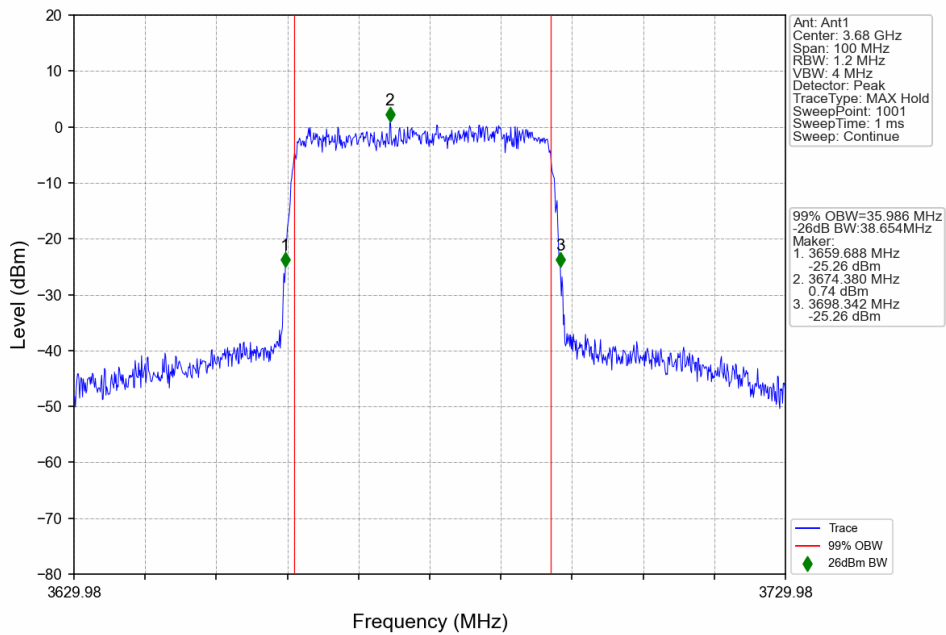
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM 256 QAM_3570MHz_Outer_Full



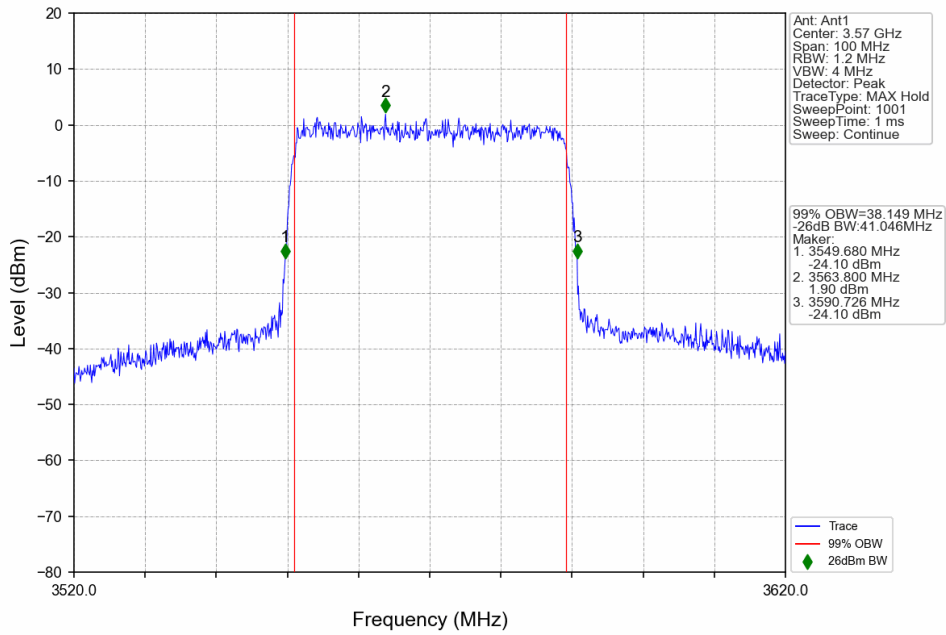
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3624.99MHz_Outer_Full



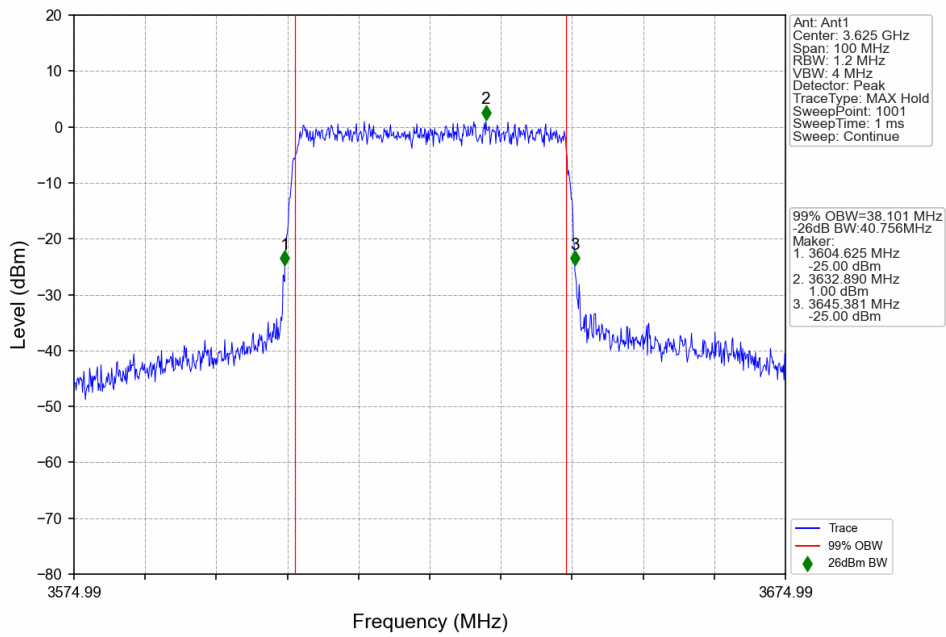
n48_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3679.98MHz_Outer_Full



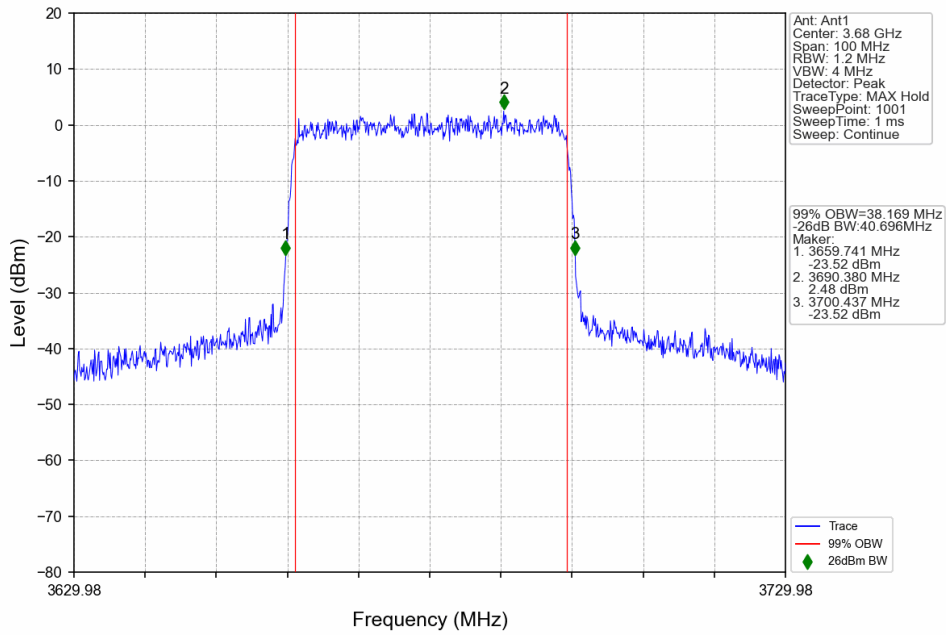
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM QPSK_3570MHz_Outer_Full



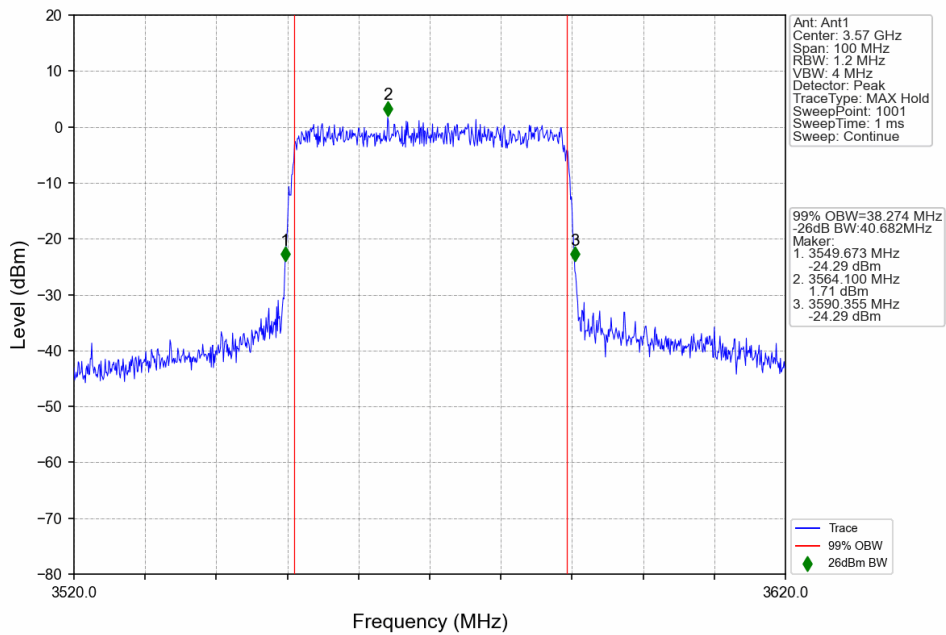
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



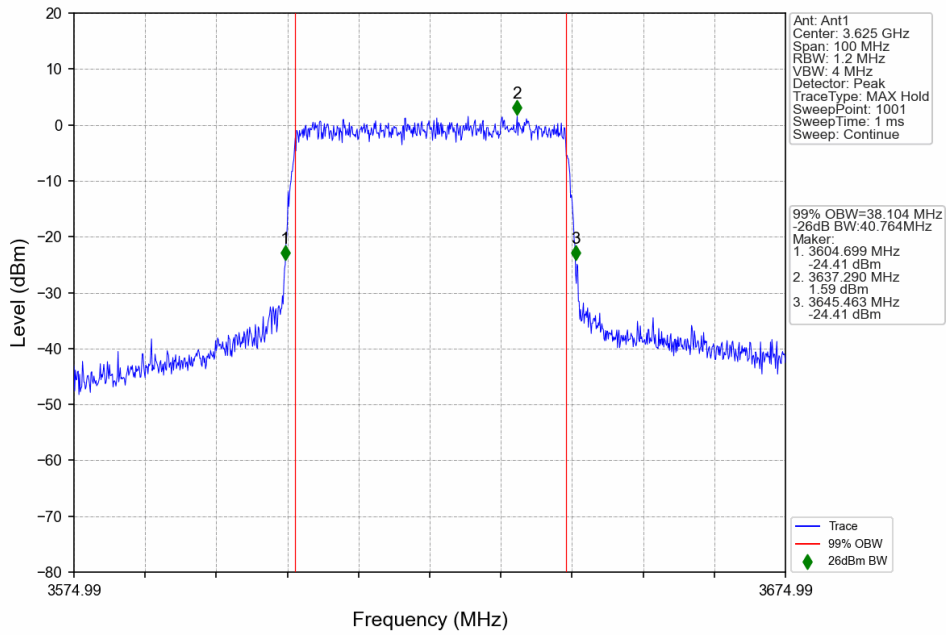
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM QPSK_3679.98MHz_Outer_Full



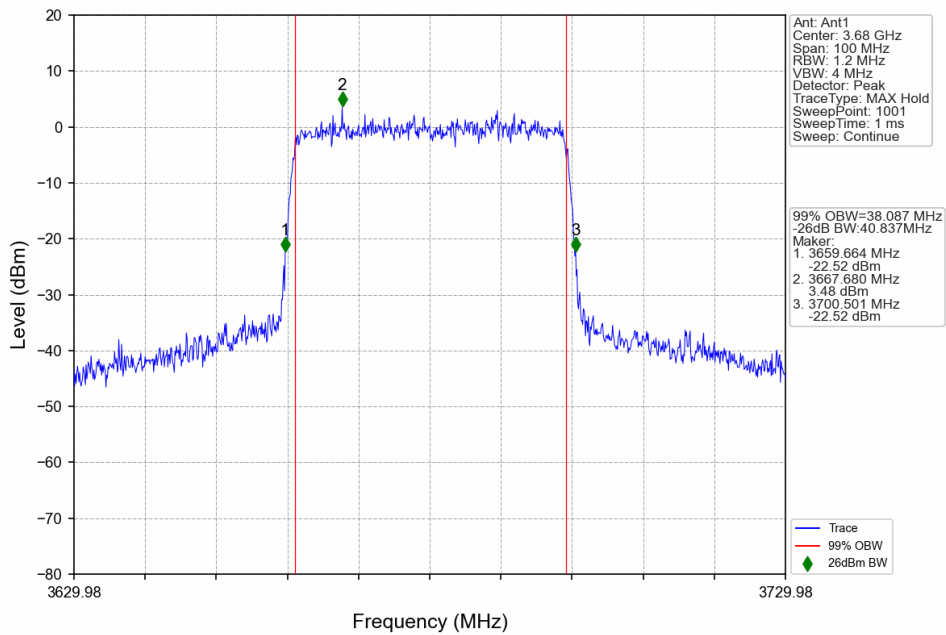
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM 16 QAM_3570MHz_Outer_Full



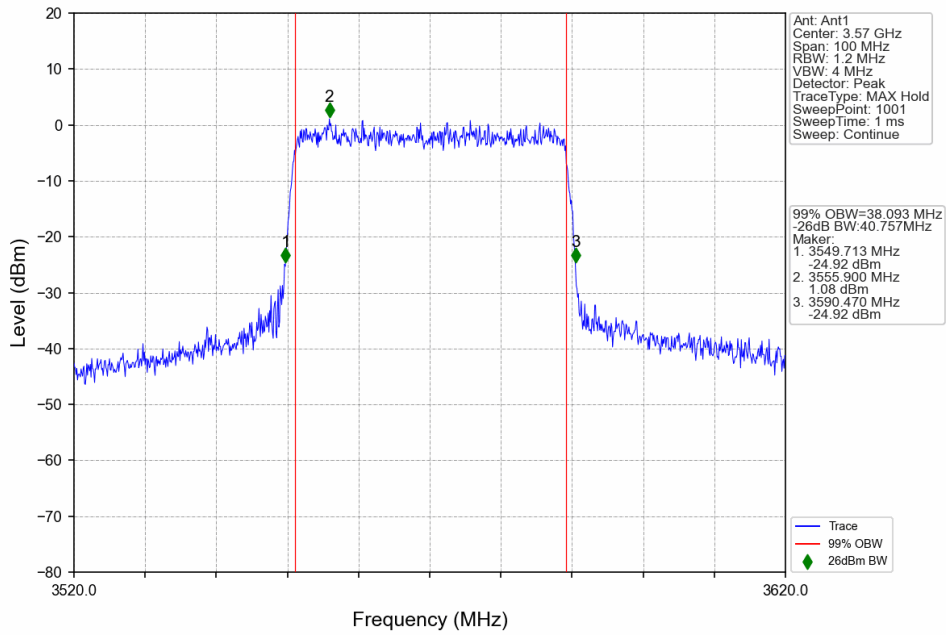
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM_16 QAM_3624.99MHz_Outer_Full



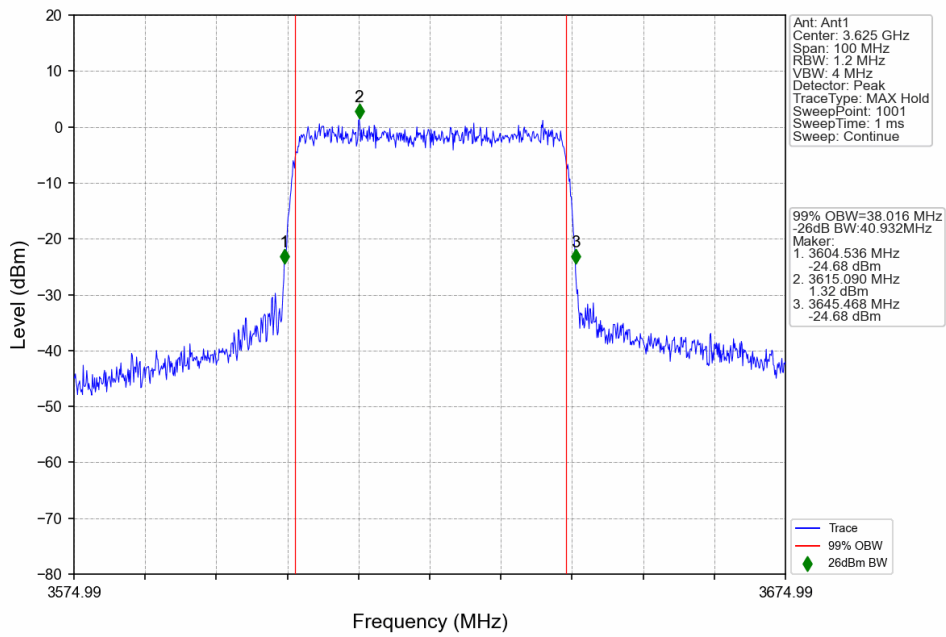
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM_16 QAM_3679.98MHz_Outer_Full



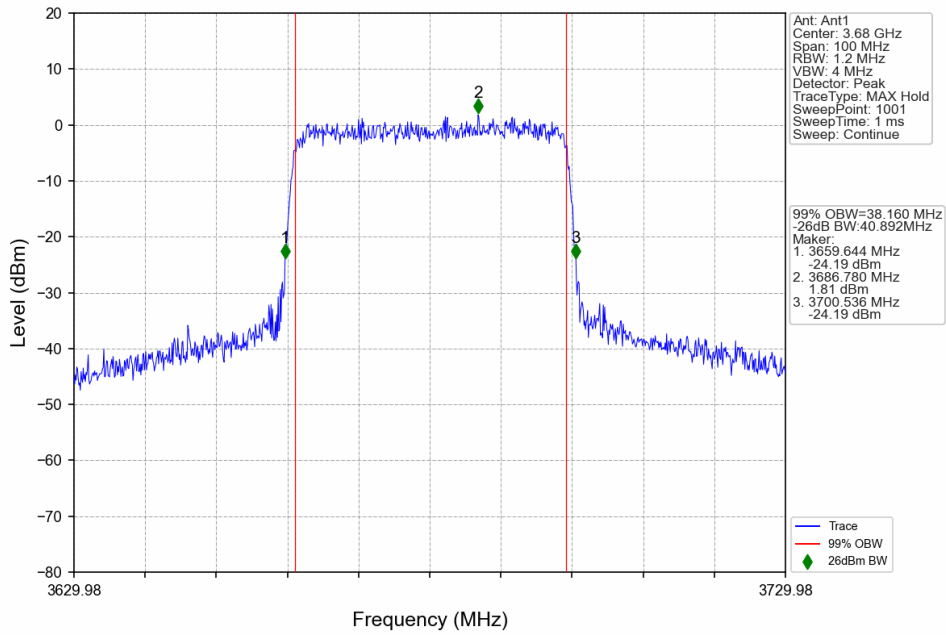
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM 64 QAM_3570MHz_Outer_Full



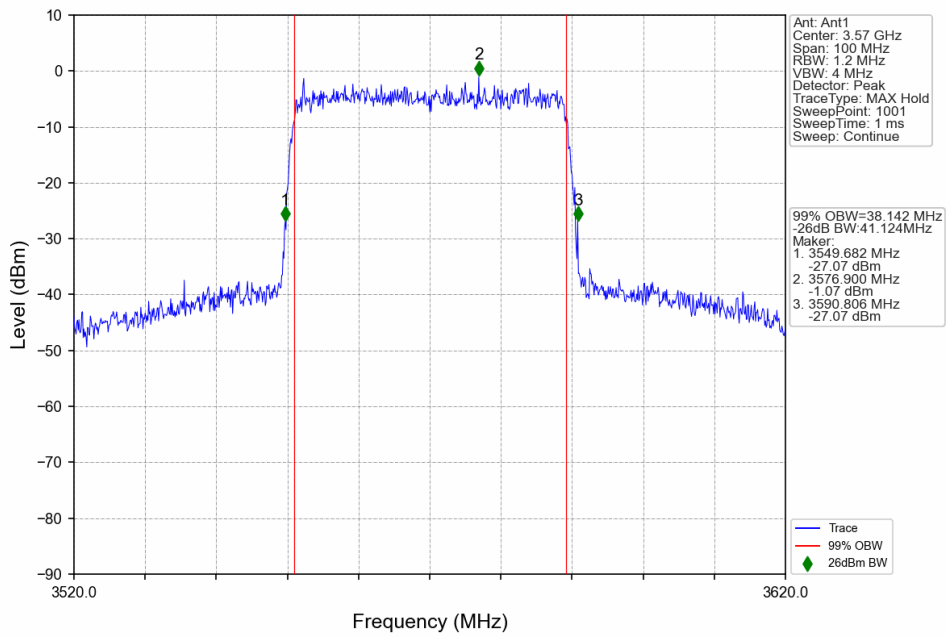
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM 64 QAM_3624.99MHz_Outer_Full



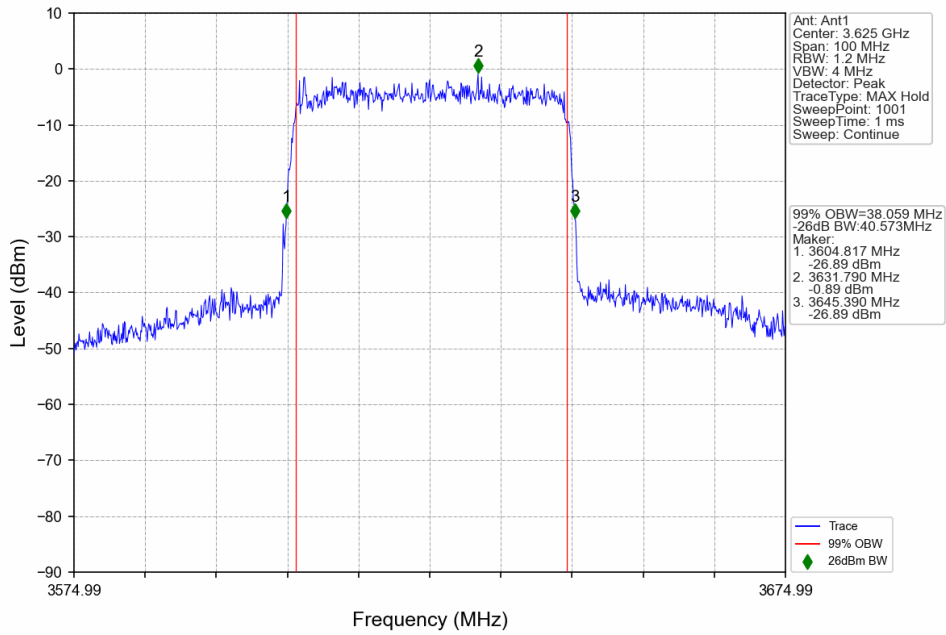
n48_30kHz_SISO_NTNV_40MHz_CP-OFDM 64 QAM_3679.98MHz_Outer_Full



n48_30kHz_SISO_NTNV_40MHz_CP-OFDM 256 QAM_3570MHz_Outer_Full



n48_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3624.99MHz_Outer_Full



n48_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3679.98MHz_Outer_Full

