

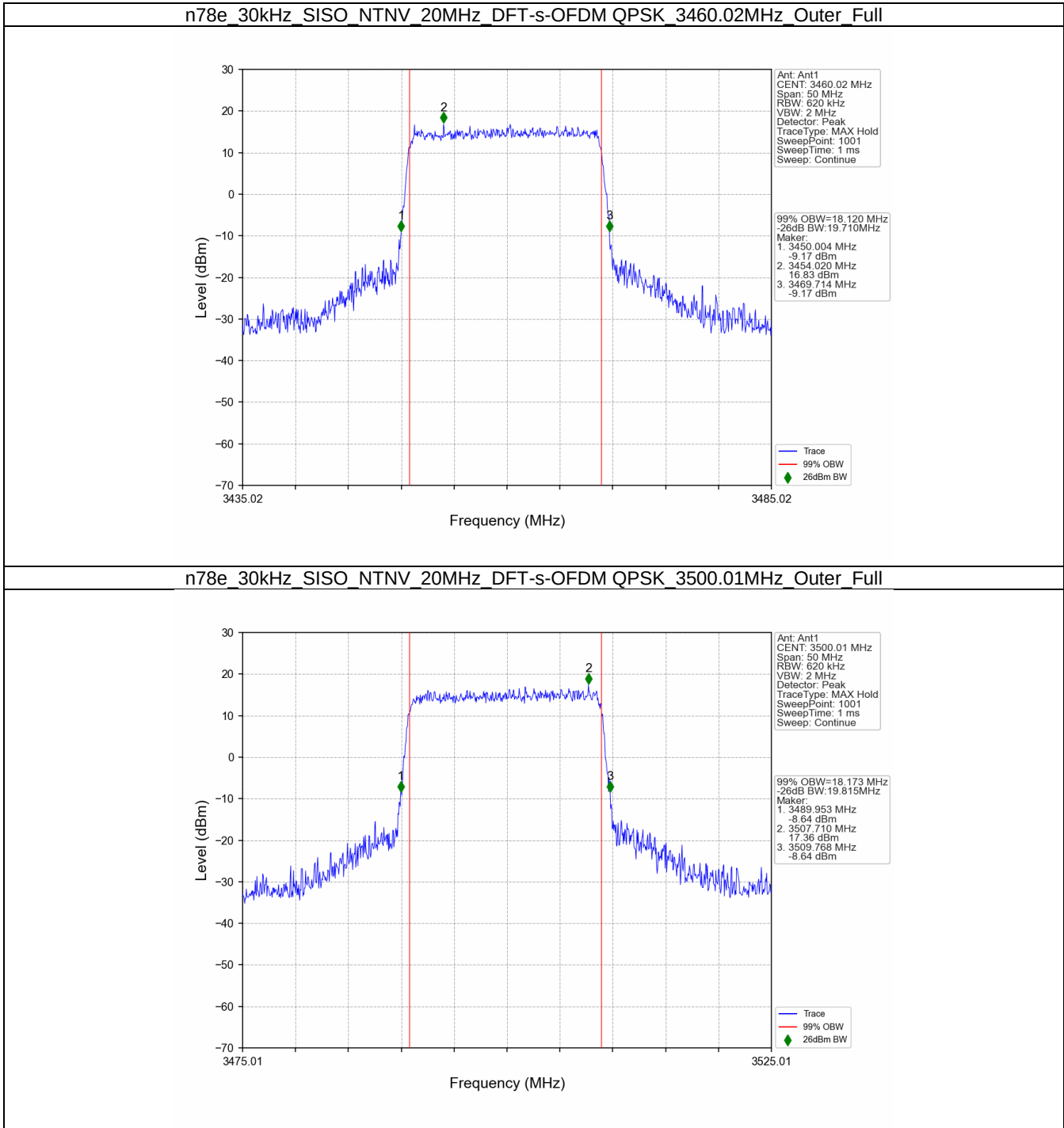
1. 99% & 26dB Bandwidth

1.1 30k_SISO_20MHz_NTNV

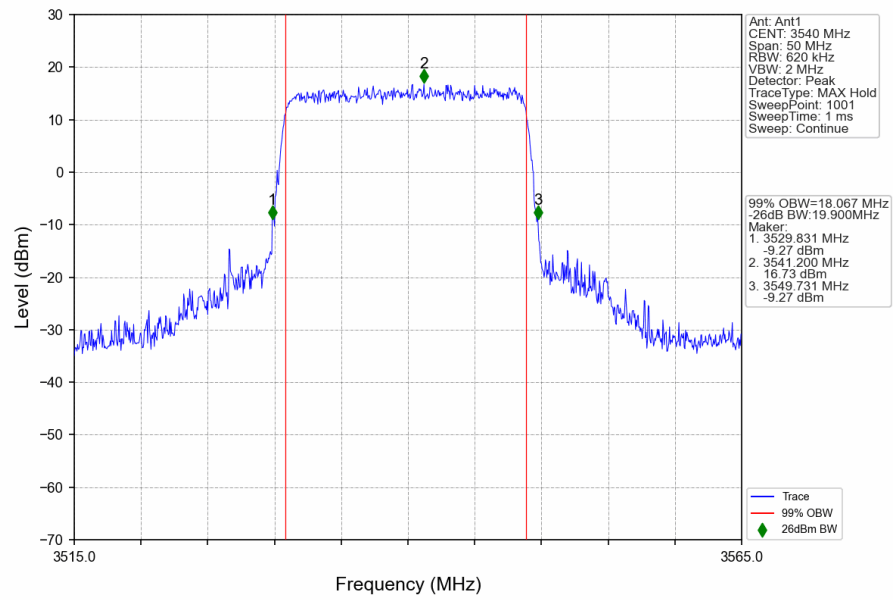
1.1.1 Test Result

5G NR n78e SCS=30kHz SISO 20MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3460.02	Outer_Full	18.12	19.71	/	Pass
	3500.01	Outer_Full	18.17	19.82	/	Pass
	3540	Outer_Full	18.07	19.90	/	Pass
DFT-s-OFDM 64 QAM	3460.02	Outer_Full	18.07	19.75	/	Pass
	3500.01	Outer_Full	18.11	19.68	/	Pass
	3540	Outer_Full	18.06	19.63	/	Pass
DFT-s-OFDM 256 QAM	3460.02	Outer_Full	18.08	19.67	/	Pass
	3500.01	Outer_Full	18.06	19.82	/	Pass
	3540	Outer_Full	18.12	19.85	/	Pass
CP-OFDM QPSK	3460.02	Outer_Full	18.44	20.14	/	Pass
	3500.01	Outer_Full	18.41	20.11	/	Pass
	3540	Outer_Full	18.43	20.23	/	Pass
CP-OFDM 64 QAM	3460.02	Outer_Full	18.44	20.27	/	Pass
	3500.01	Outer_Full	18.41	20.04	/	Pass
	3540	Outer_Full	18.38	20.16	/	Pass
CP-OFDM 256 QAM	3460.02	Outer_Full	18.45	20.33	/	Pass
	3500.01	Outer_Full	18.43	19.97	/	Pass
	3540	Outer_Full	18.43	20.10	/	Pass

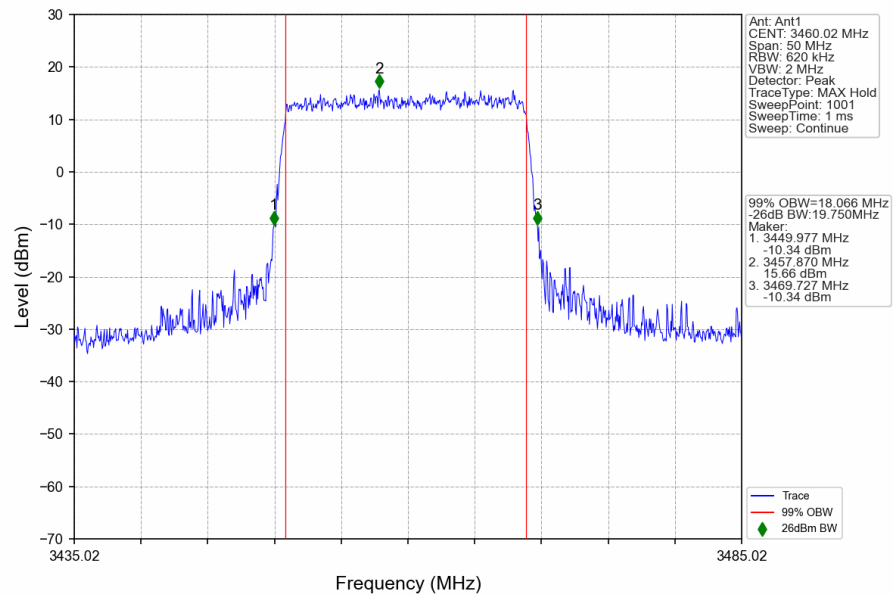
1.1.2 Test Graph



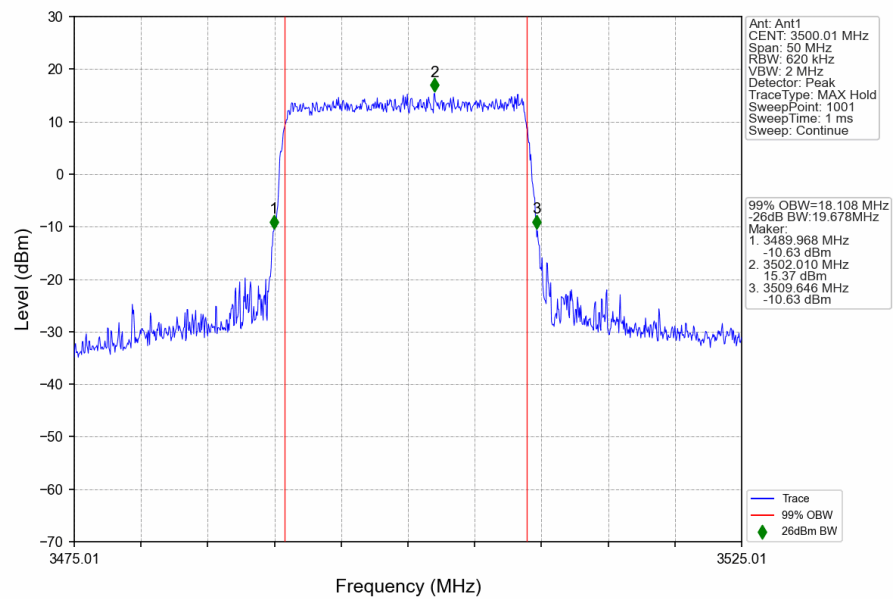
n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_QPSK_3540MHz_Outer_Full



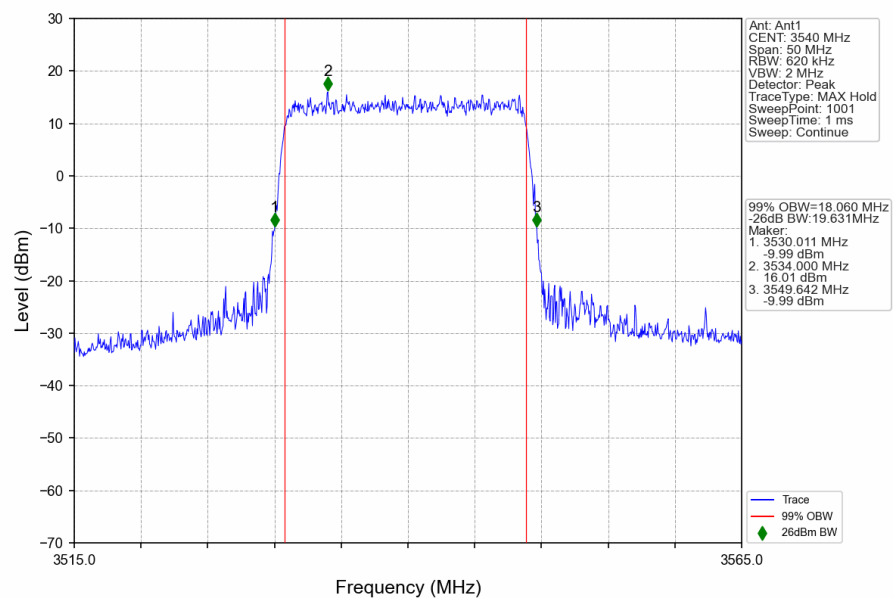
n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_64_QAM_3460.02MHz_Outer_Full



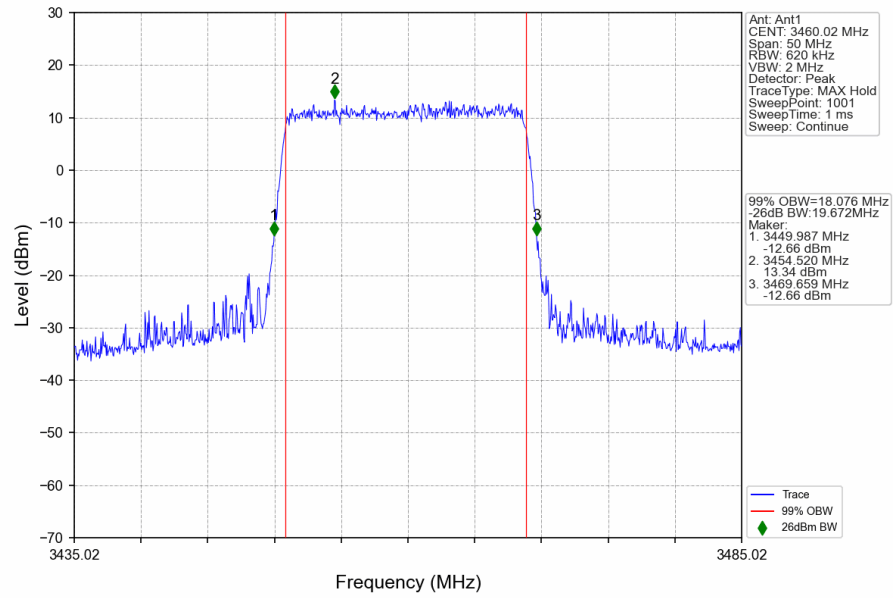
n78e 30kHz SISO NTN 20MHz DFT-s-OFDM 64 QAM 3500.01MHz Outer Full



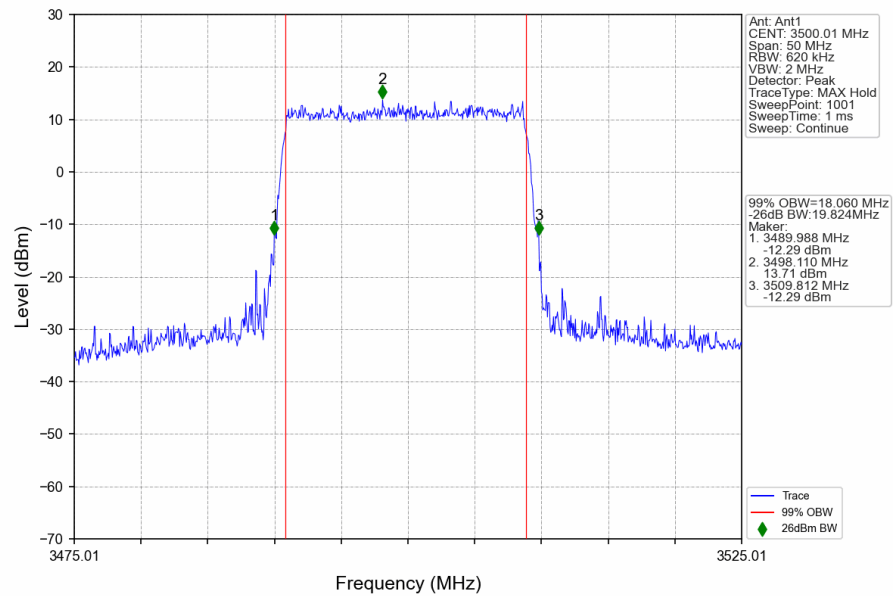
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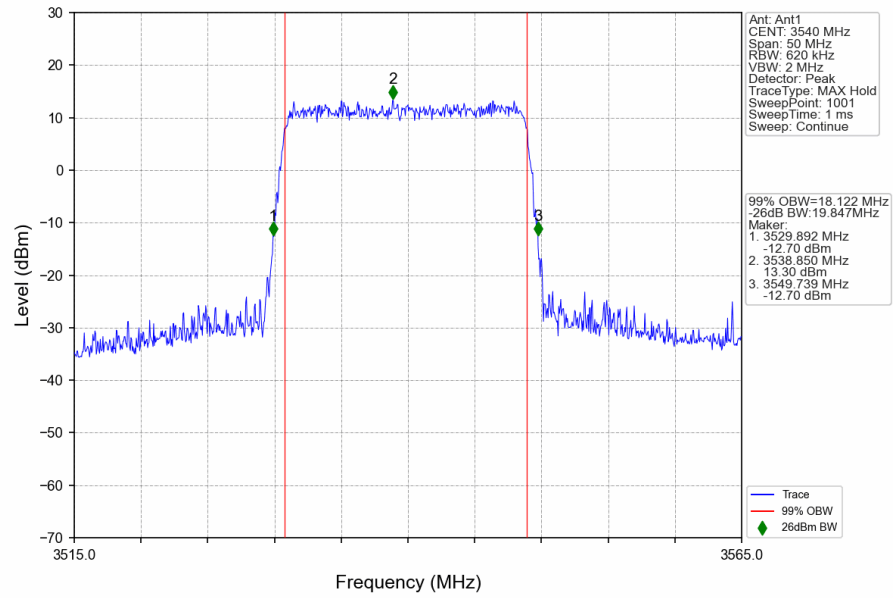
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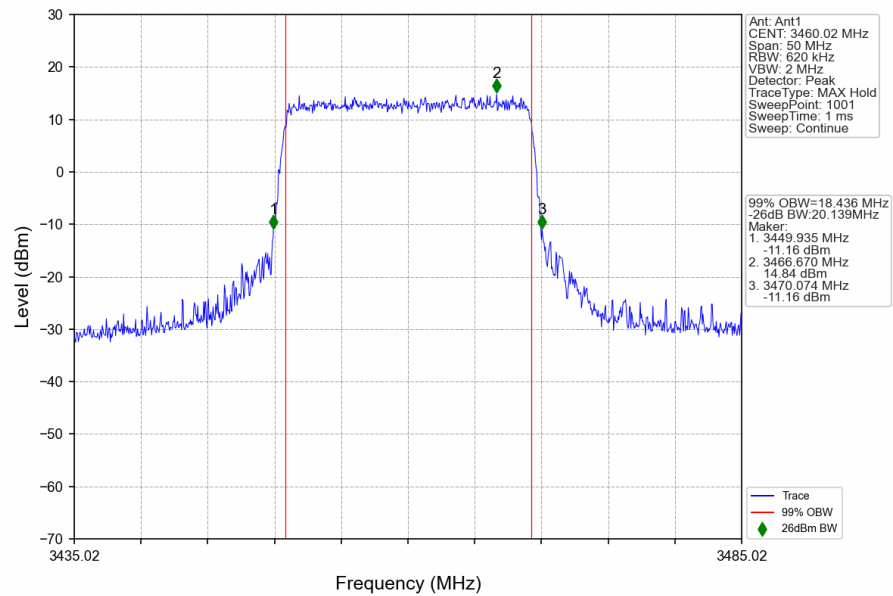
n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_3500.01MHz_Outer_Full



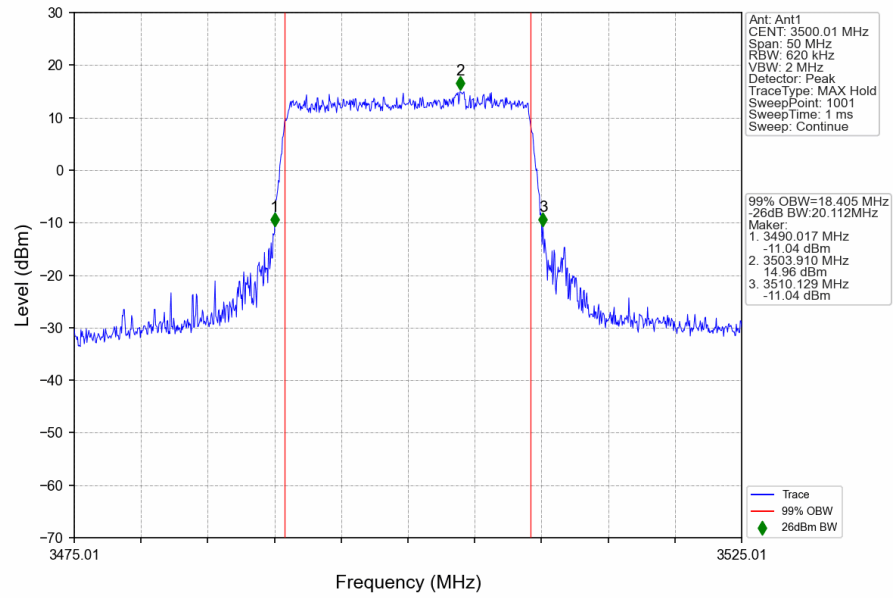
n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_3540MHz_Outer_Full



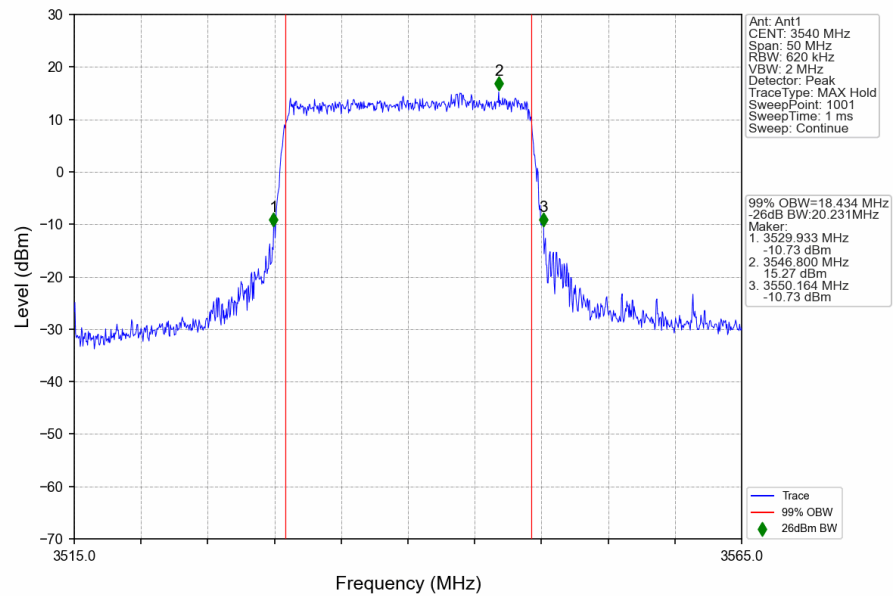
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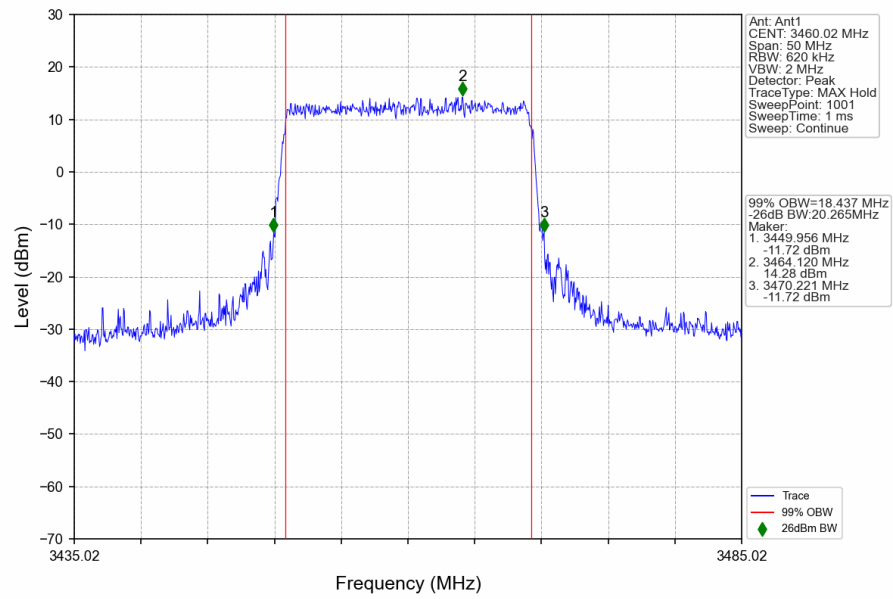
n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM_QPSK_3500.01MHz_Outer_Full



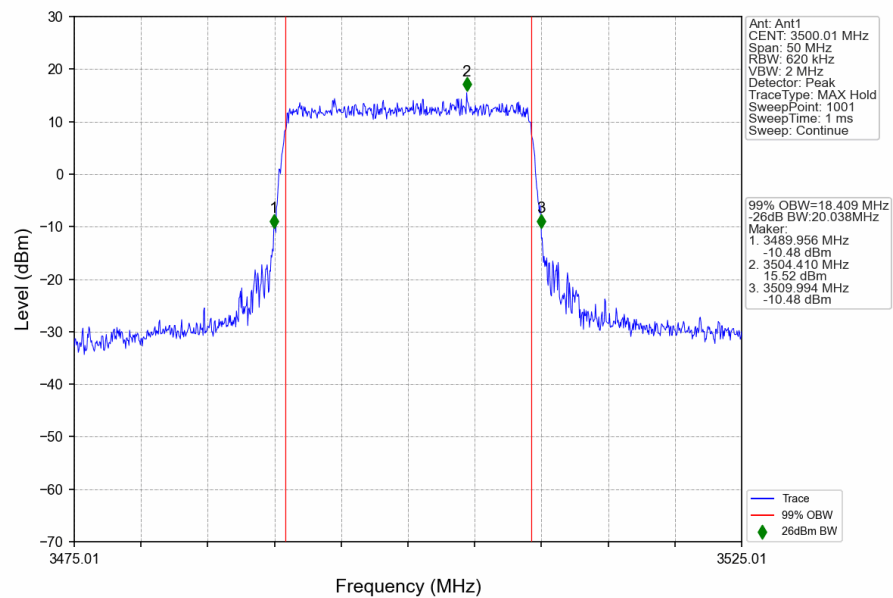
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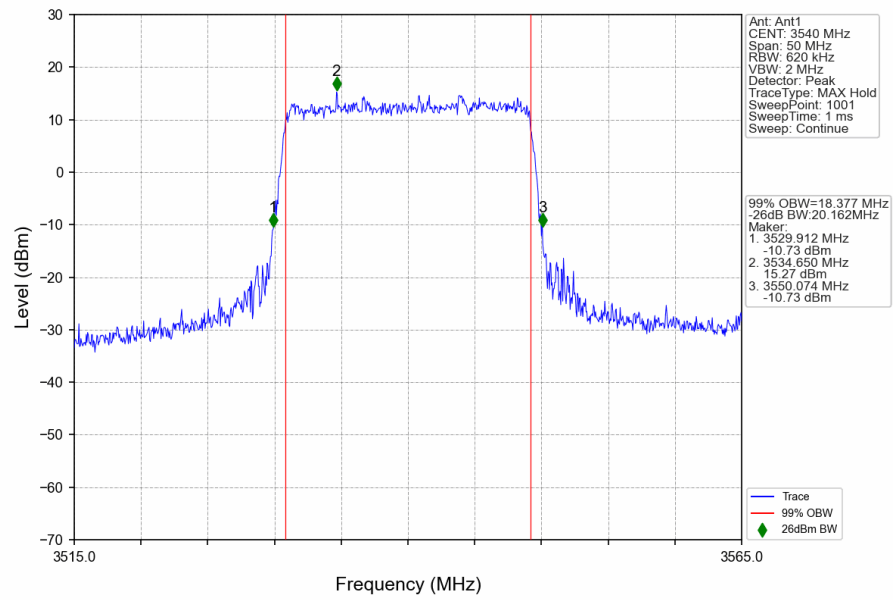
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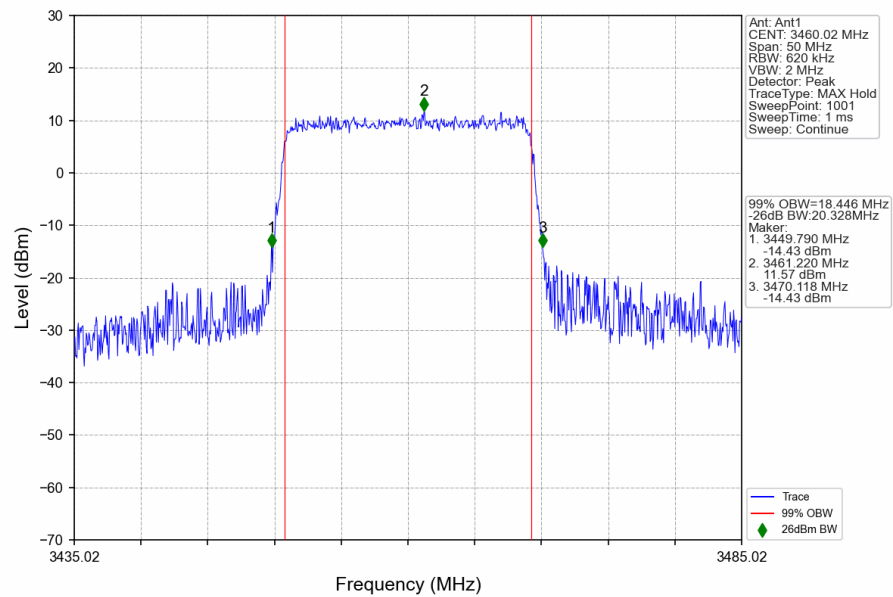
n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM_64_QAM_3500.01MHz_Outer_Full



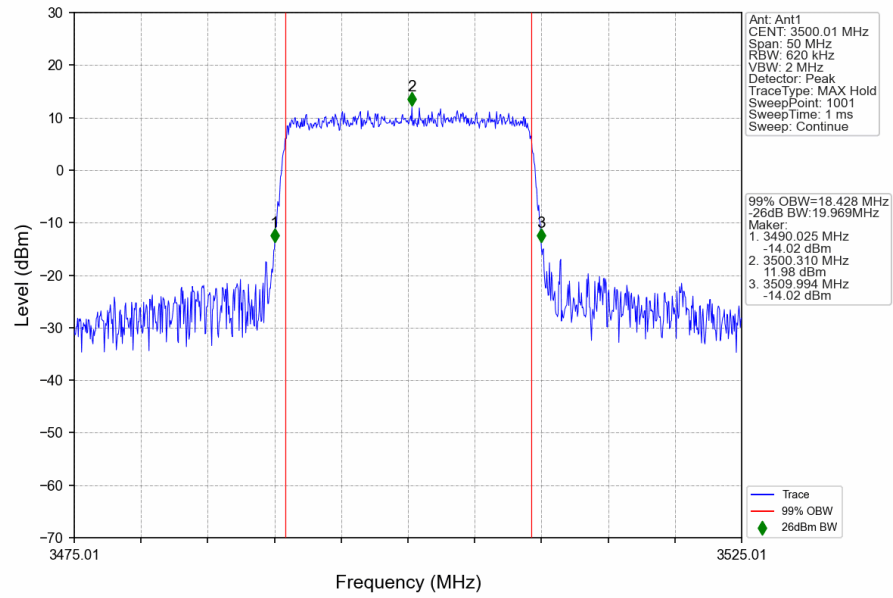
n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM_64_QAM_3540MHz_Outer_Full



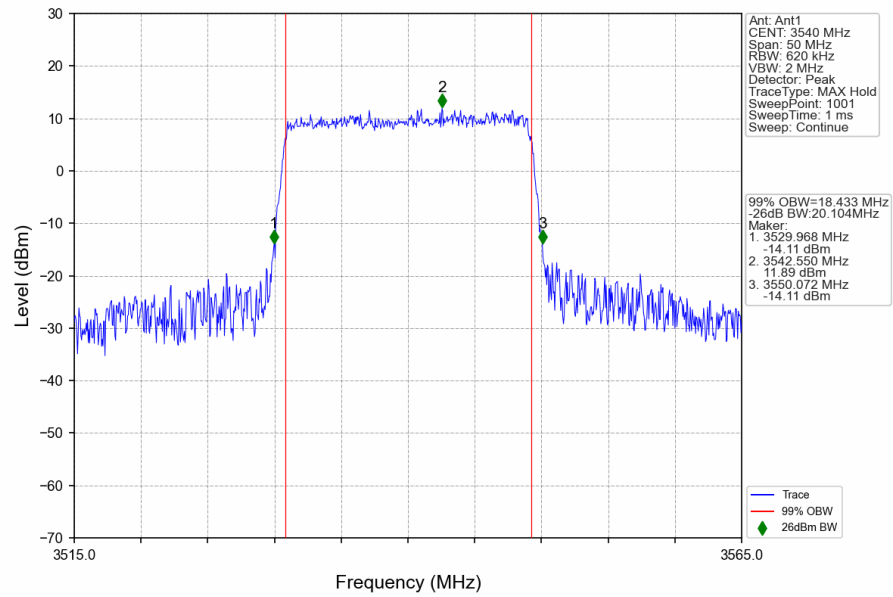
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n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM_256_QAM_3540MHz_Outer_Full

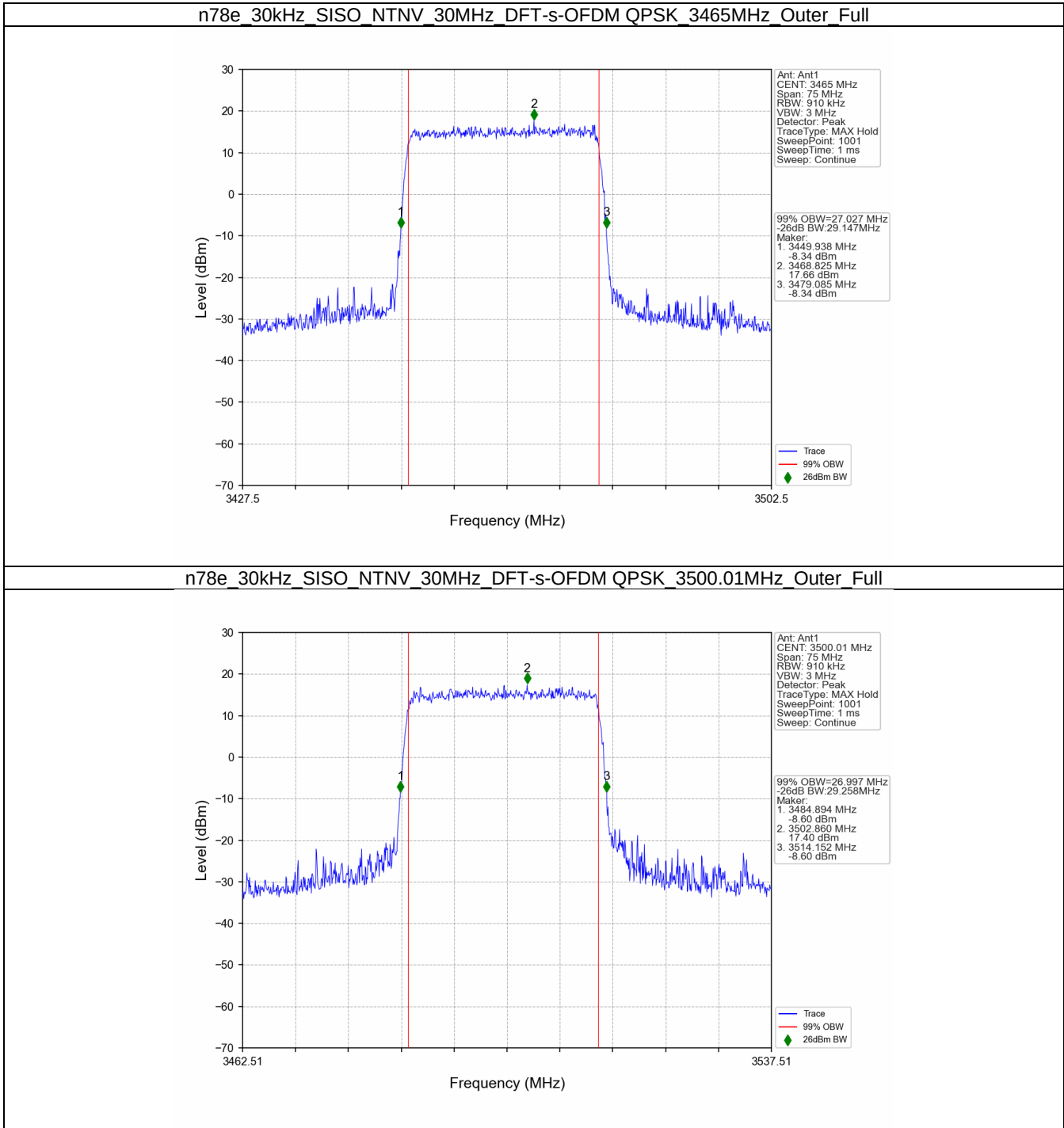


1.2 30k_SISO_30MHz_NTNV

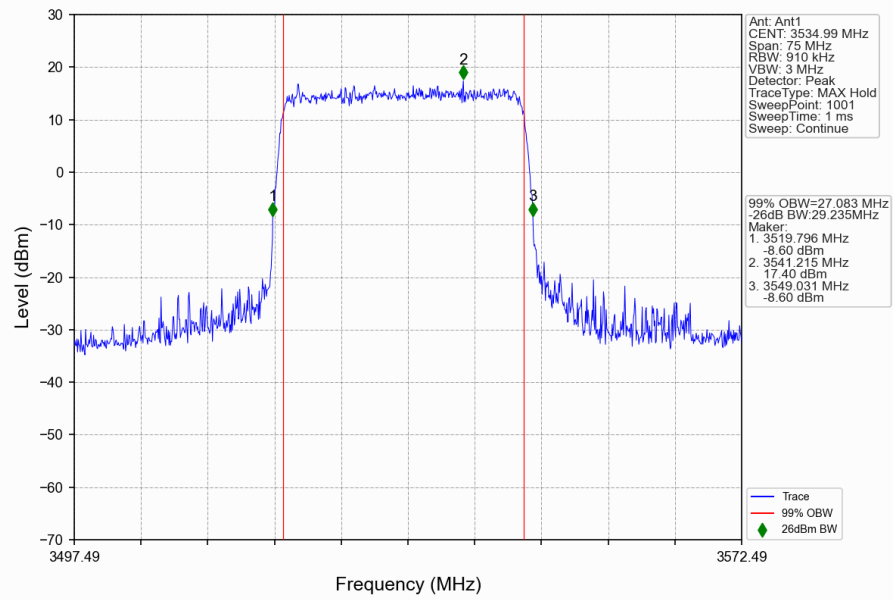
1.2.1 Test Result

5G NR n78e SCS=30kHz SISO 30MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3465	Outer_Full	27.03	29.15	/	Pass
	3500.01	Outer_Full	27.00	29.26	/	Pass
	3534.99	Outer_Full	27.08	29.23	/	Pass
DFT-s-OFDM 64 QAM	3465	Outer_Full	27.03	29.33	/	Pass
	3500.01	Outer_Full	27.08	29.19	/	Pass
	3534.99	Outer_Full	27.02	29.12	/	Pass
DFT-s-OFDM 256 QAM	3465	Outer_Full	27.01	29.13	/	Pass
	3500.01	Outer_Full	27.08	29.22	/	Pass
	3534.99	Outer_Full	27.02	29.20	/	Pass
CP-OFDM QPSK	3465	Outer_Full	28.12	30.21	/	Pass
	3500.01	Outer_Full	28.08	30.13	/	Pass
	3534.99	Outer_Full	28.10	30.25	/	Pass
CP-OFDM 64 QAM	3465	Outer_Full	28.09	30.24	/	Pass
	3500.01	Outer_Full	28.10	30.15	/	Pass
	3534.99	Outer_Full	28.12	30.35	/	Pass
CP-OFDM 256 QAM	3465	Outer_Full	28.15	30.11	/	Pass
	3500.01	Outer_Full	28.06	30.17	/	Pass
	3534.99	Outer_Full	28.03	30.32	/	Pass

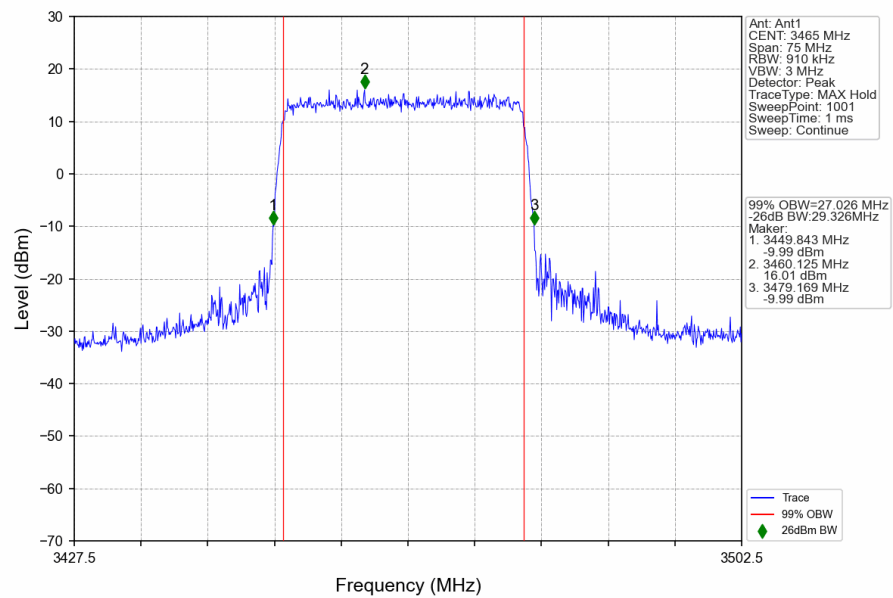
1.2.2 Test Graph



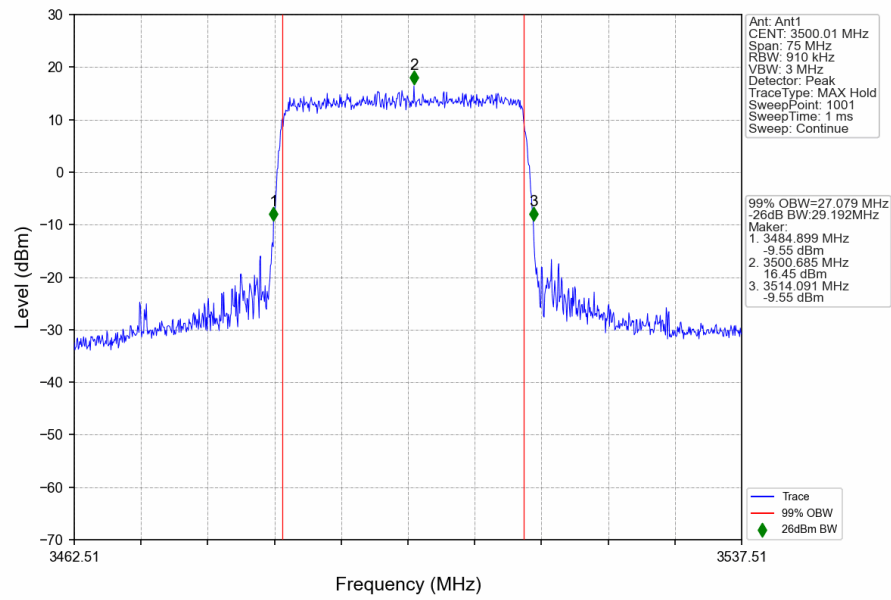
n78e_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_QPSK_3534.99MHz_Outer_Full



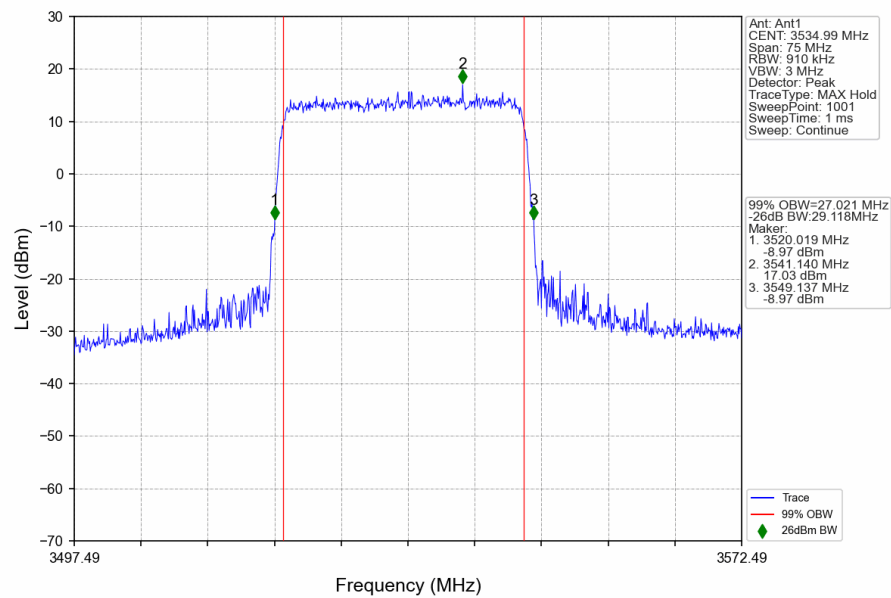
n78e_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3465MHz_Outer_Full



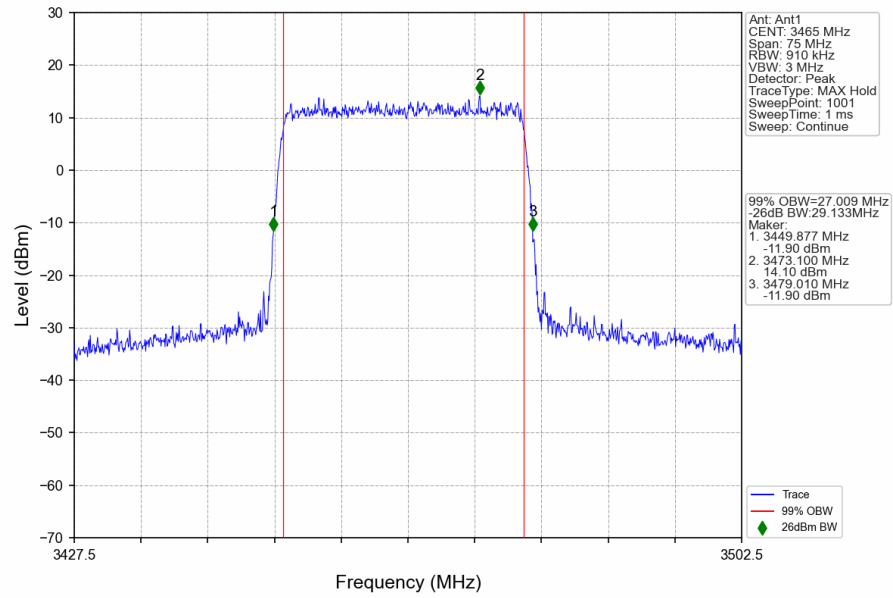
n78e_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3500.01MHz_Outer_Full



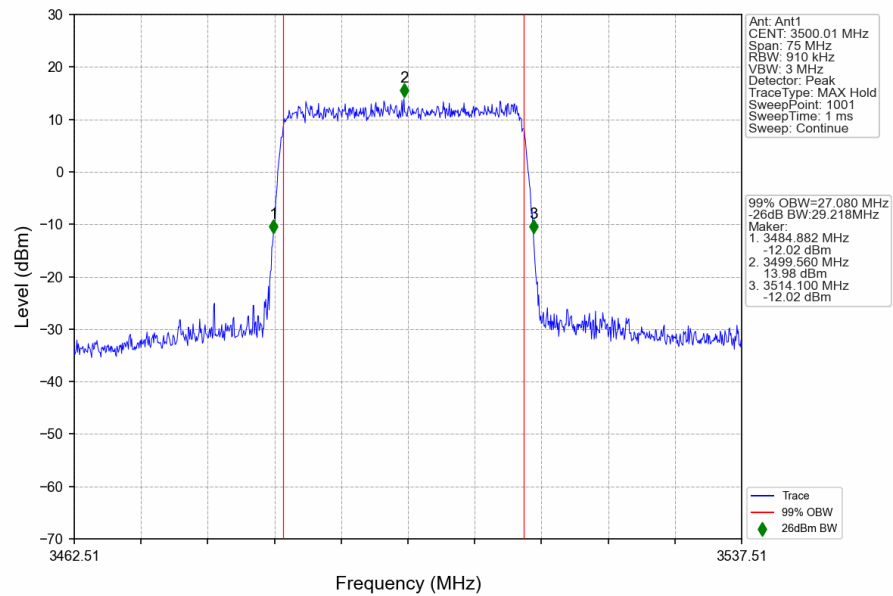
n78e_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_64_QAM_3534.99MHz_Outer_Full



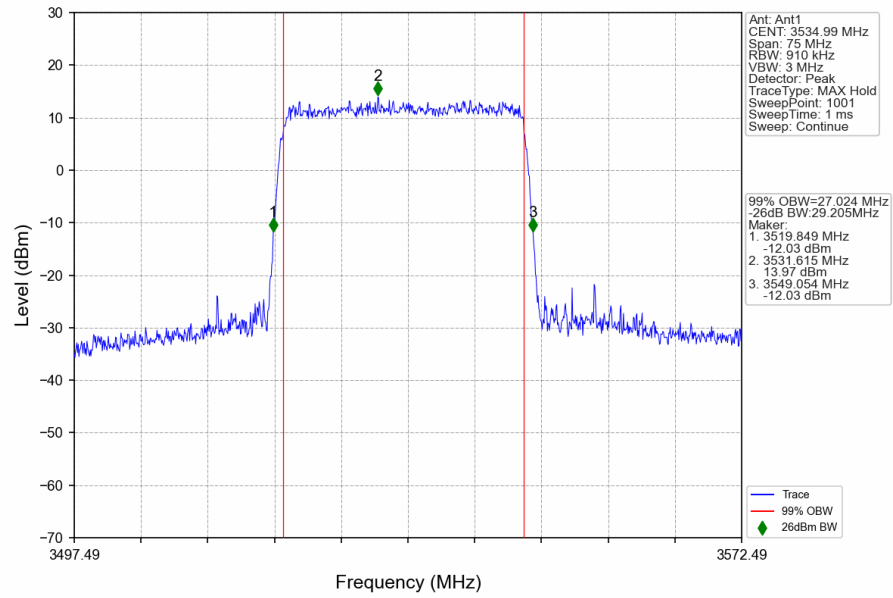
n78e 30kHz SISO NTN 30MHz DFT-s-OFDM 256 QAM 3465MHz Outer Full



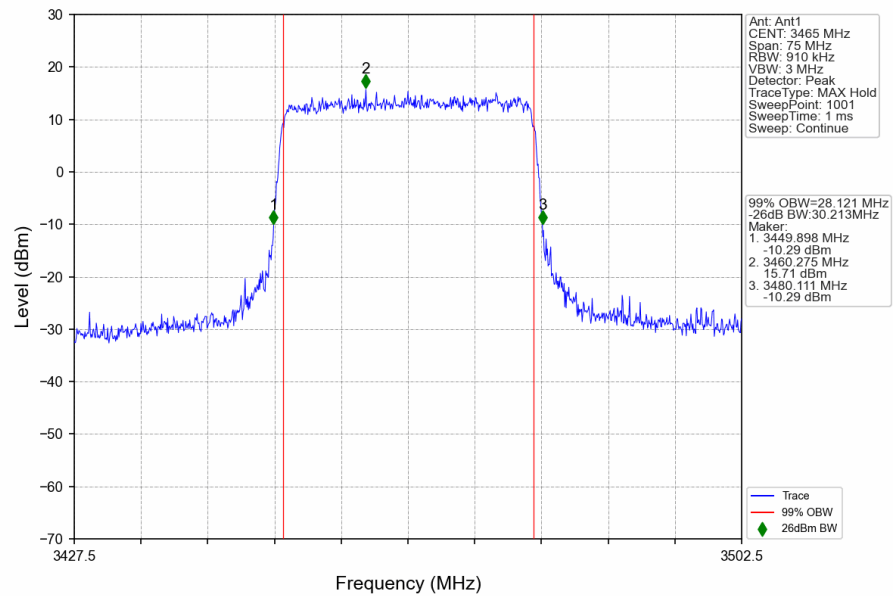
n78e 30kHz SISO NTN 30MHz DFT-s-OFDM 256 QAM 3500.01MHz Outer Full



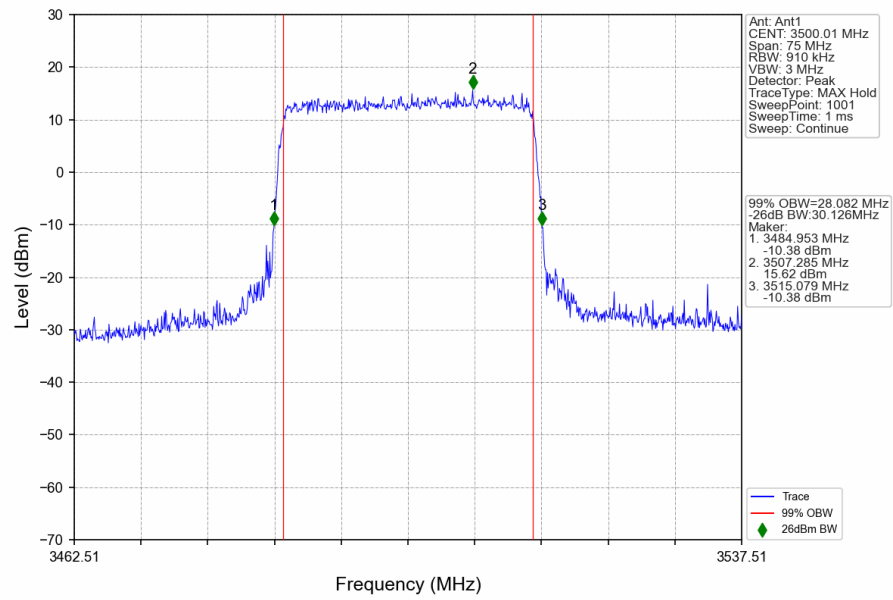
n78e_30kHz_SISO_NTNV_30MHz_DFT-s-OFDM_256_QAM_3534.99MHz_Outer_Full



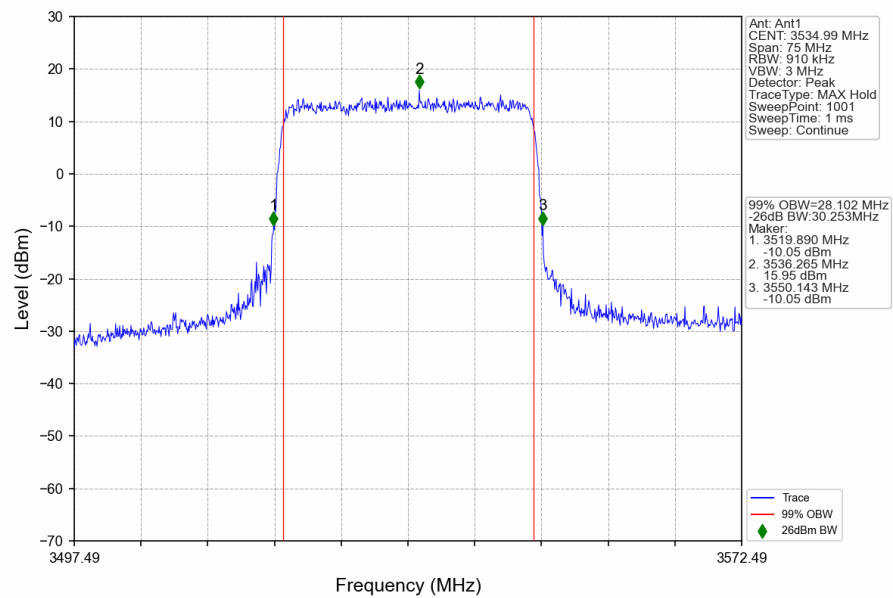
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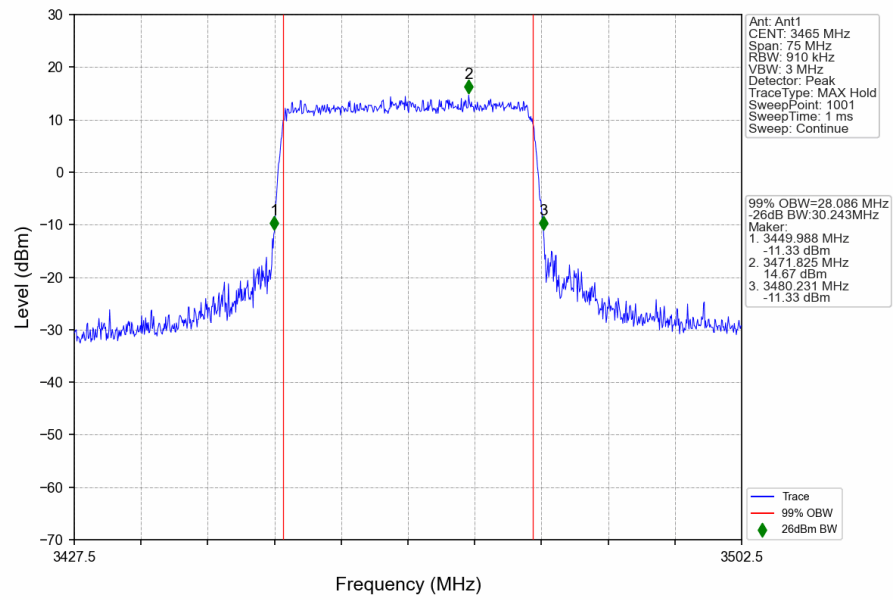
n78e_30kHz_SISO_NTNV_30MHz_CP-OFDM_QPSK_3500.01MHz_Outer_Full



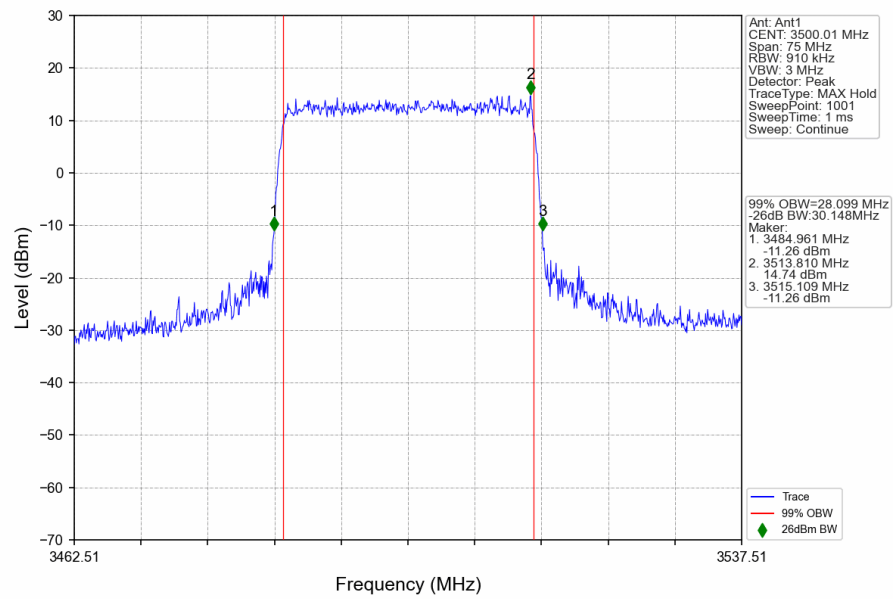
n78e_30kHz_SISO_NTNV_30MHz_CP-OFDM_QPSK_3534.99MHz_Outer_Full



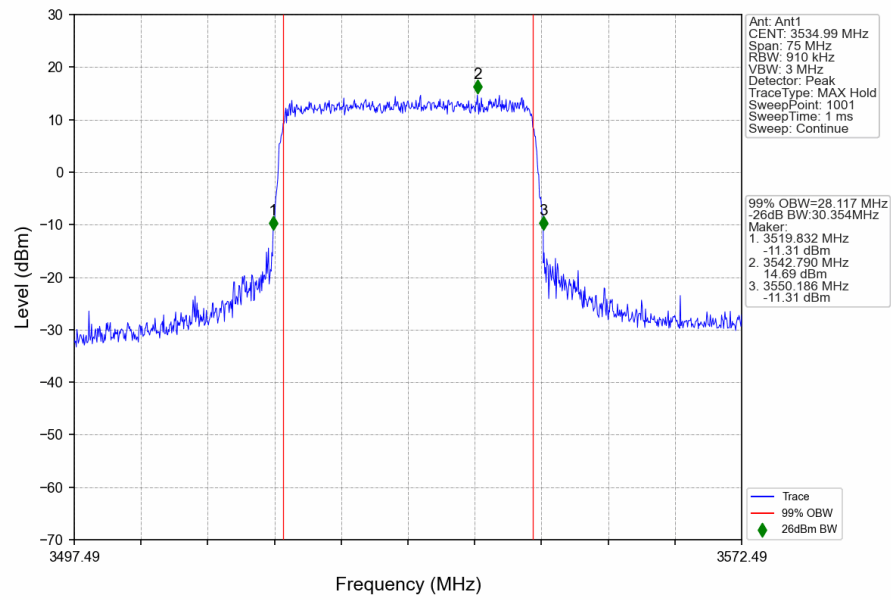
n78e 30kHz SISO NTN 30MHz CP-OFDM 64 QAM 3465MHz Outer Full



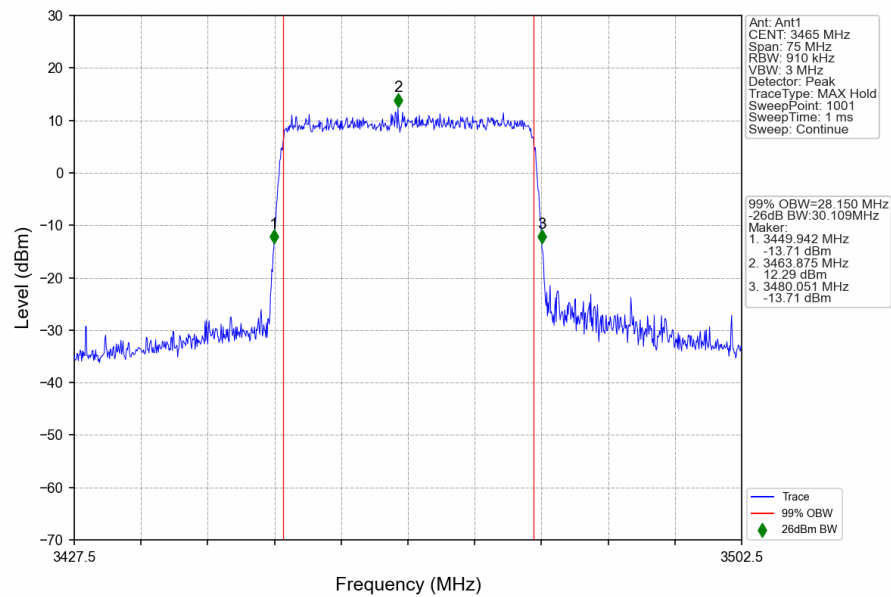
n78e 30kHz SISO NTN 30MHz CP-OFDM 64 QAM 3500.01MHz Outer Full



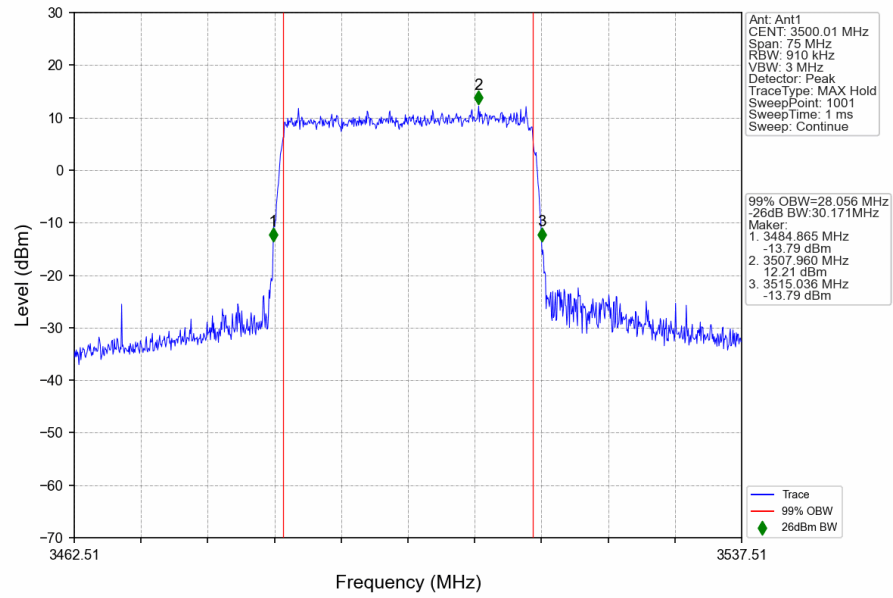
n78e 30kHz SISO NTN 30MHz CP-OFDM 64 QAM 3534.99MHz Outer Full



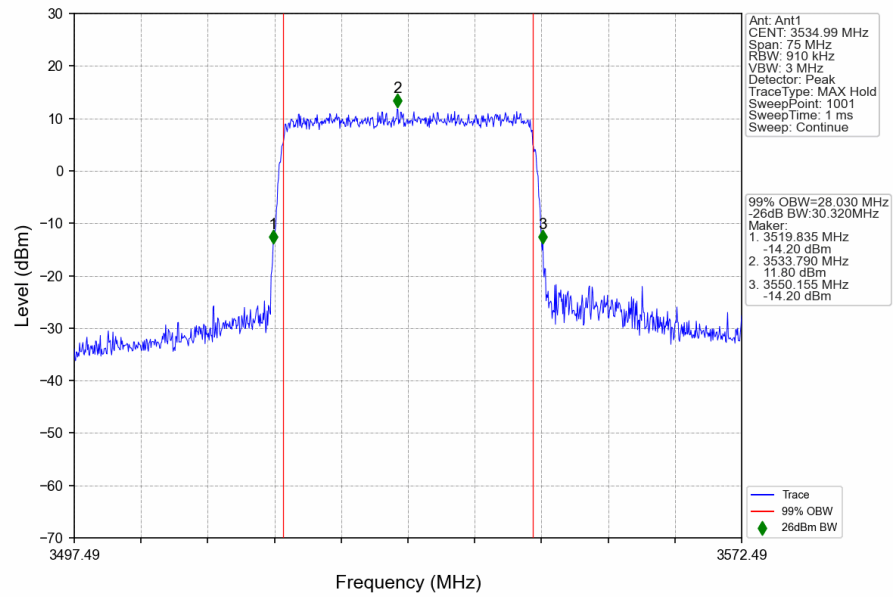
n78e 30kHz SISO NTN 30MHz CP-OFDM 256 QAM 3465MHz Outer Full



n78e_30kHz_SISO_NTNV_30MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_30MHz_CP-OFDM_256_QAM_3534.99MHz_Outer_Full

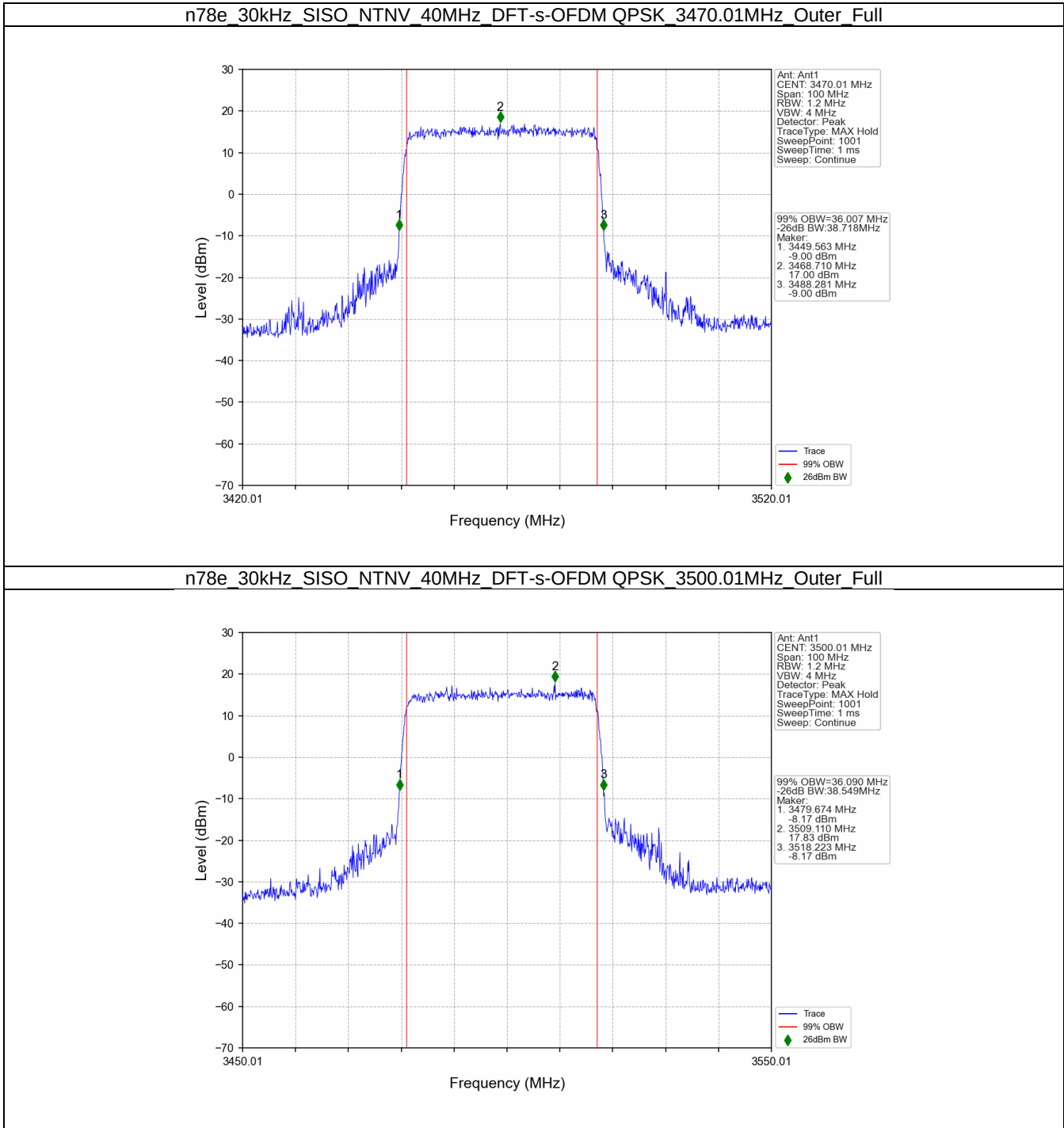


1.3 30k_SISO_40MHz_NTNV

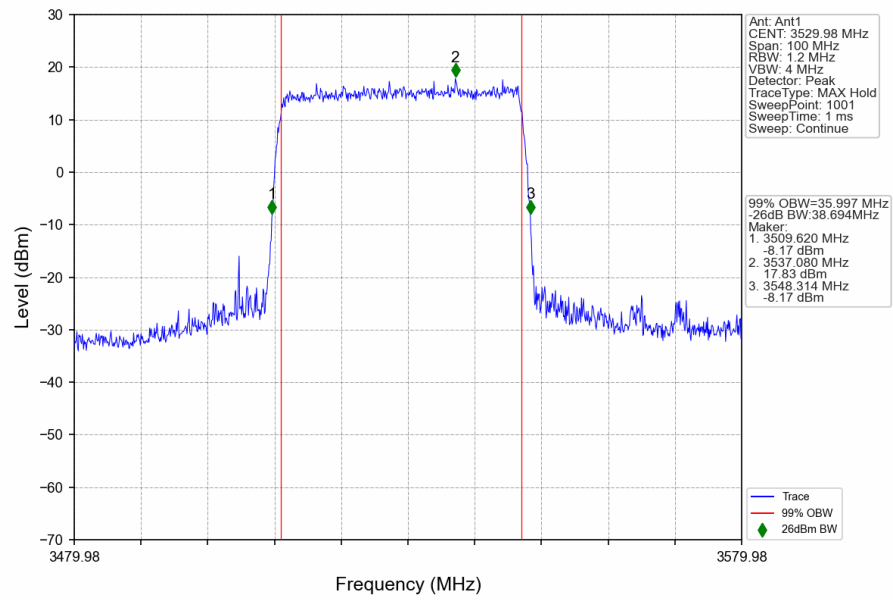
1.3.1 Test Result

5G NR n78e SCS=30kHz SISO 40MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3470.01	Outer_Full	36.01	38.72	/	Pass
	3500.01	Outer_Full	36.09	38.55	/	Pass
	3529.98	Outer_Full	36.00	38.69	/	Pass
DFT-s-OFDM 64 QAM	3470.01	Outer_Full	36.07	38.69	/	Pass
	3500.01	Outer_Full	36.05	38.65	/	Pass
	3529.98	Outer_Full	35.94	38.64	/	Pass
DFT-s-OFDM 256 QAM	3470.01	Outer_Full	35.99	38.64	/	Pass
	3500.01	Outer_Full	36.02	38.60	/	Pass
	3529.98	Outer_Full	35.94	38.60	/	Pass
CP-OFDM QPSK	3470.01	Outer_Full	38.13	40.88	/	Pass
	3500.01	Outer_Full	38.06	40.82	/	Pass
	3529.98	Outer_Full	38.06	40.95	/	Pass
CP-OFDM 64 QAM	3470.01	Outer_Full	38.12	40.86	/	Pass
	3500.01	Outer_Full	38.11	40.79	/	Pass
	3529.98	Outer_Full	38.20	40.80	/	Pass
CP-OFDM 256 QAM	3470.01	Outer_Full	38.17	40.85	/	Pass
	3500.01	Outer_Full	38.06	40.72	/	Pass
	3529.98	Outer_Full	38.04	40.83	/	Pass

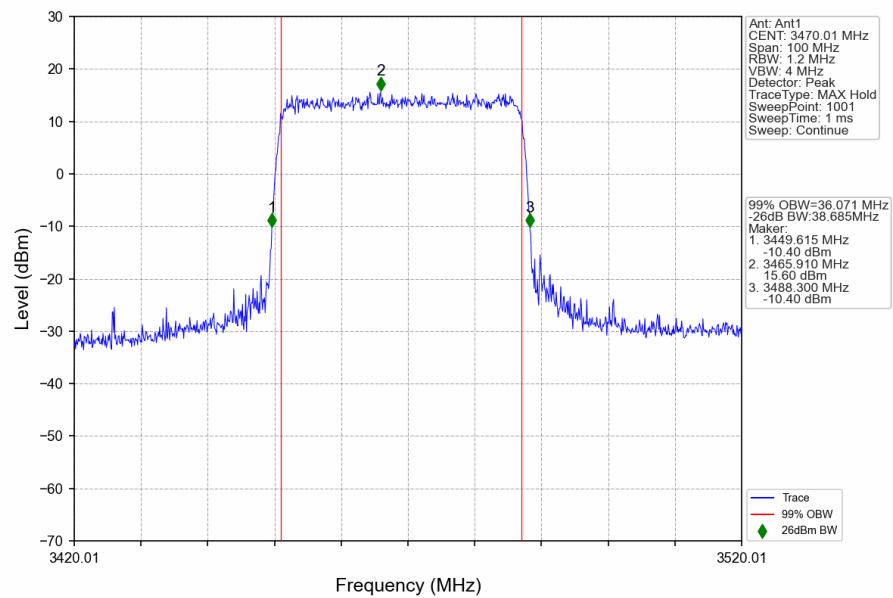
1.3.2 Test Graph



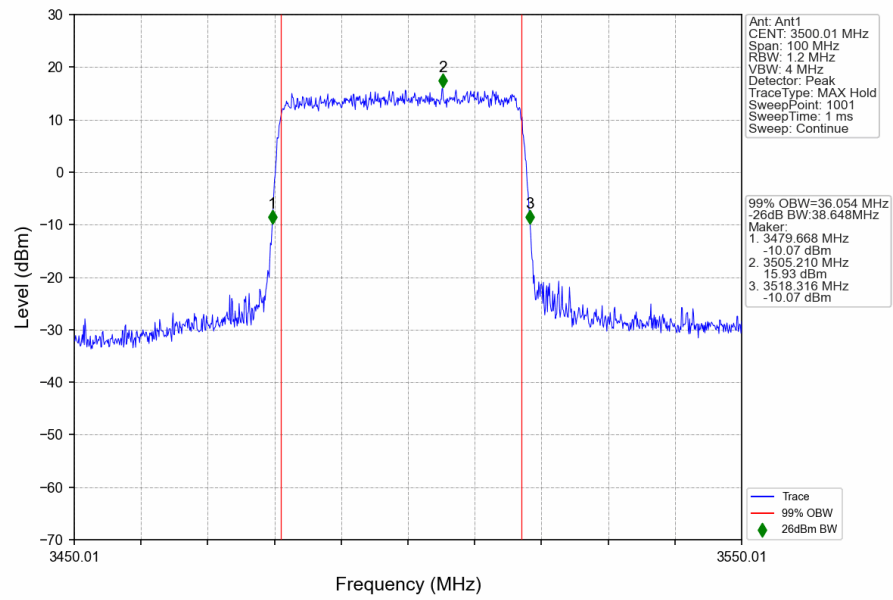
n78e_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_QPSK_3529.98MHz_Outer_Full



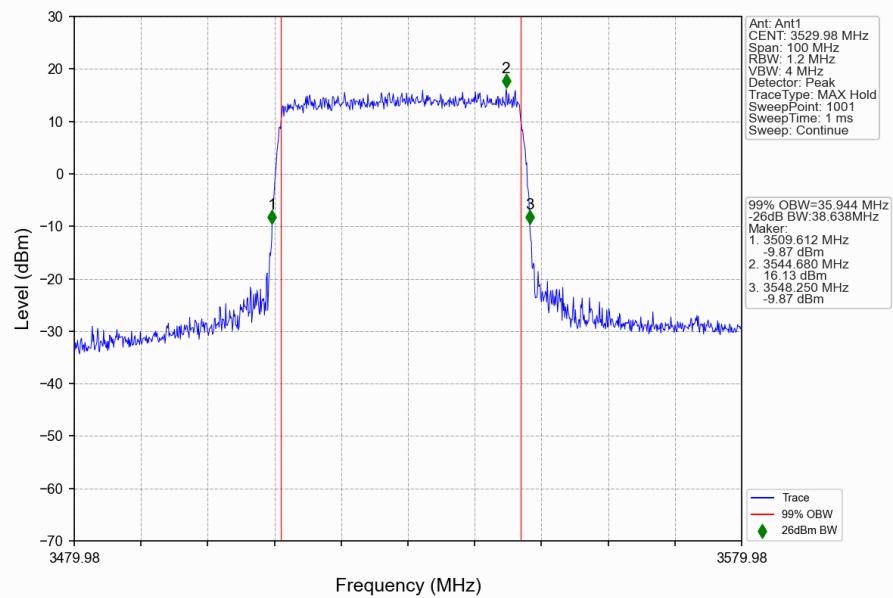
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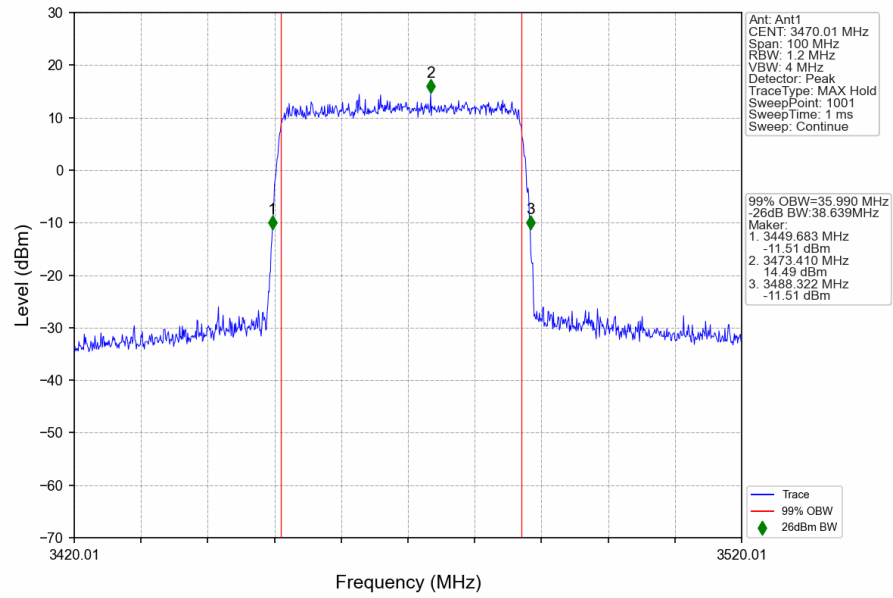
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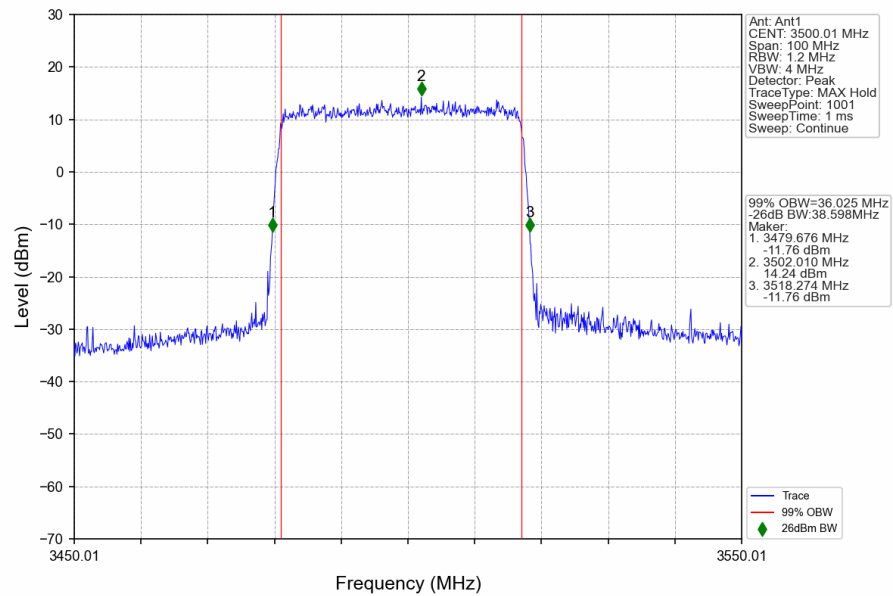
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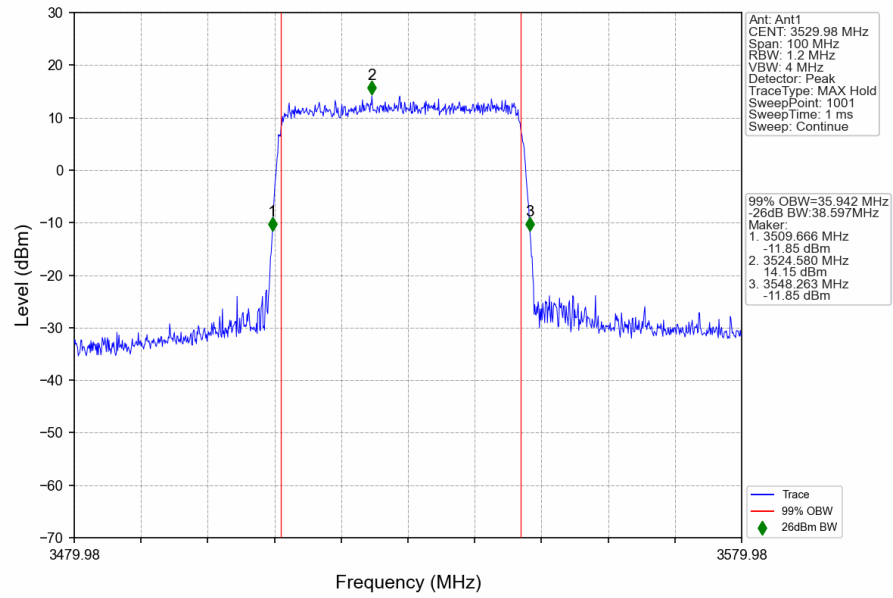
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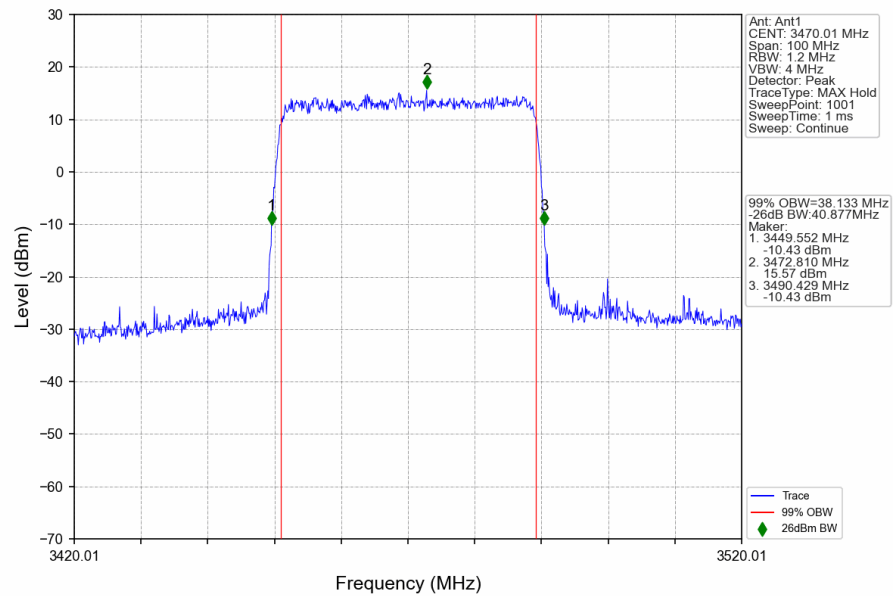
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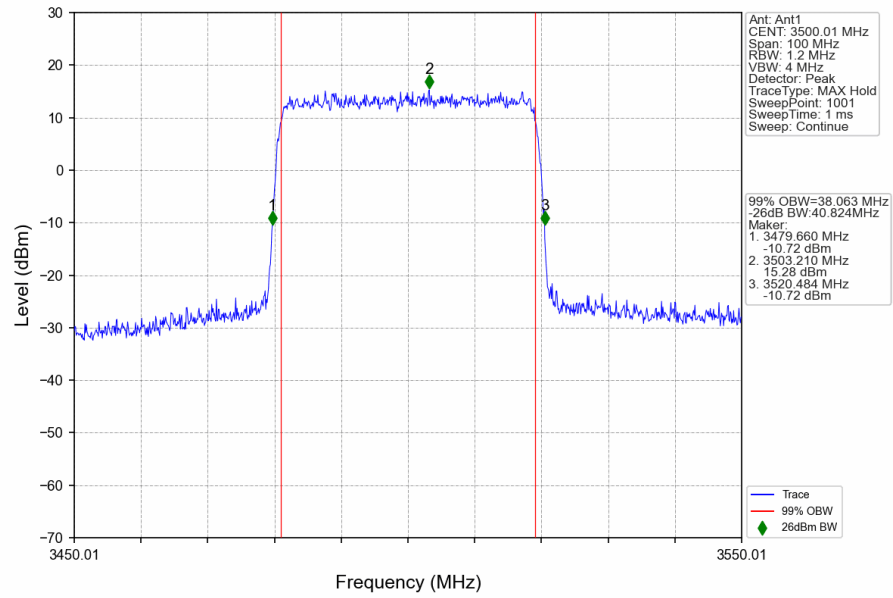
n78e_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM_256_QAM_3529.98MHz_Outer_Full



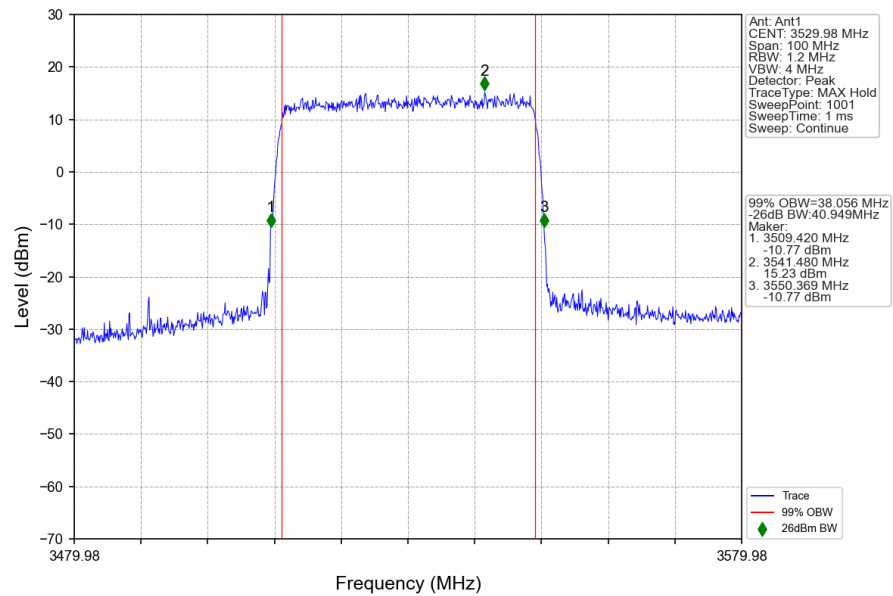
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3470.01MHz_Outer_Full



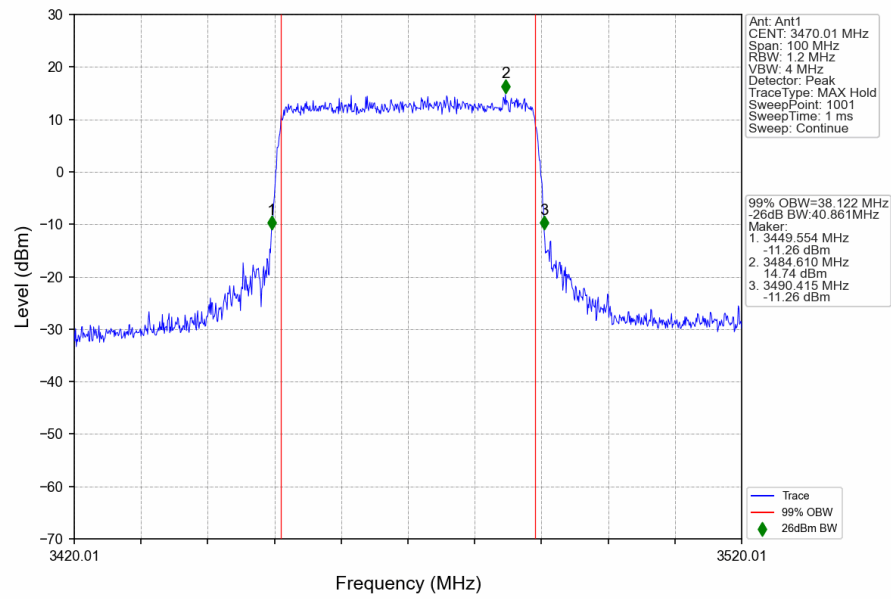
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3500.01MHz_Outer_Full



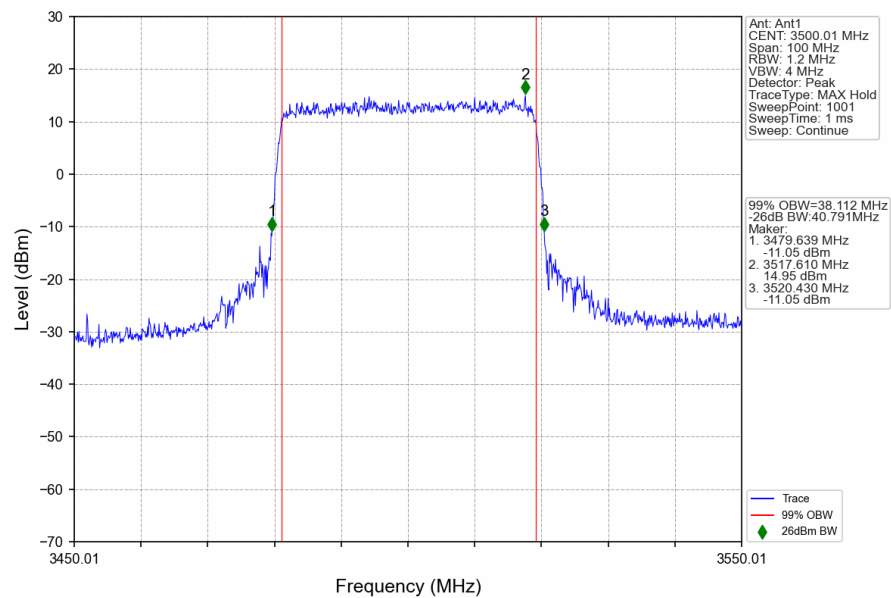
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_QPSK_3529.98MHz_Outer_Full



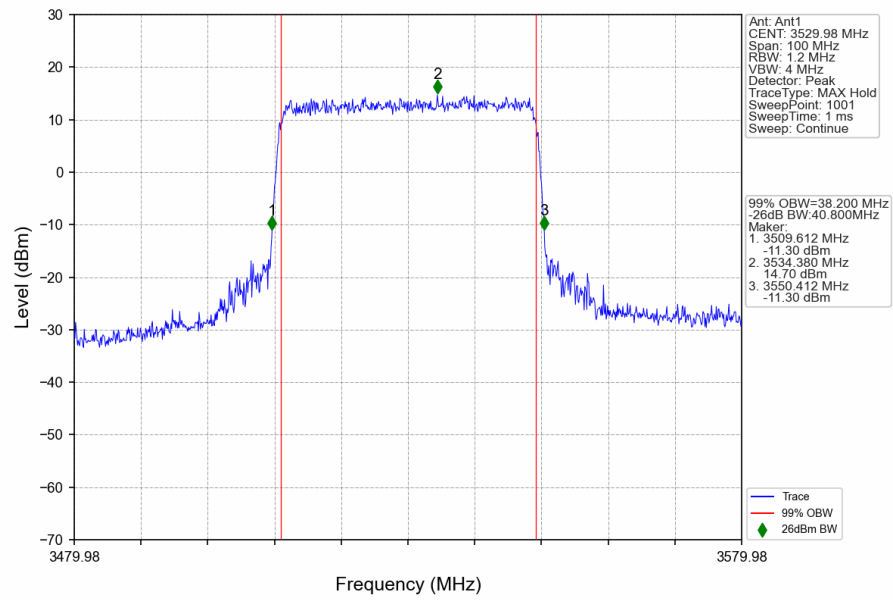
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3470.01MHz_Outer_Full



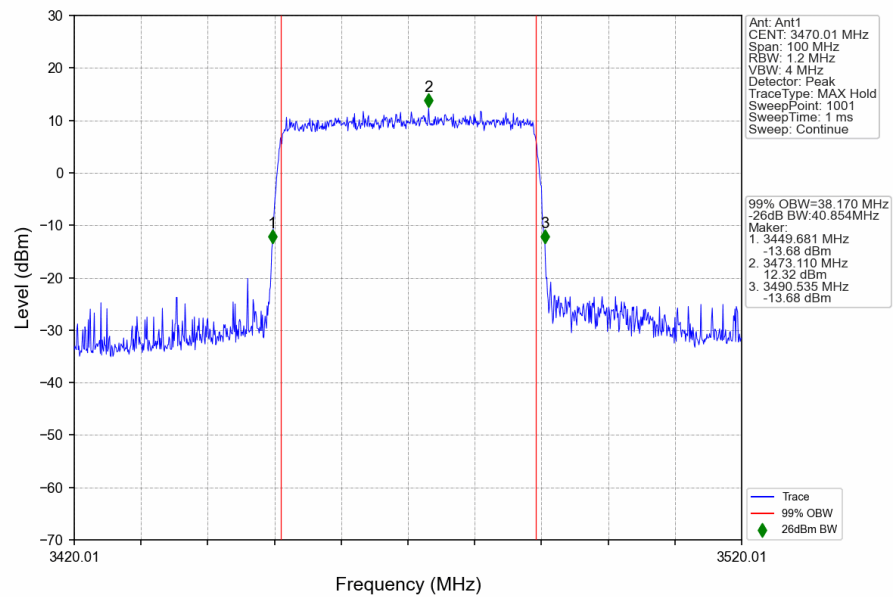
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3500.01MHz_Outer_Full



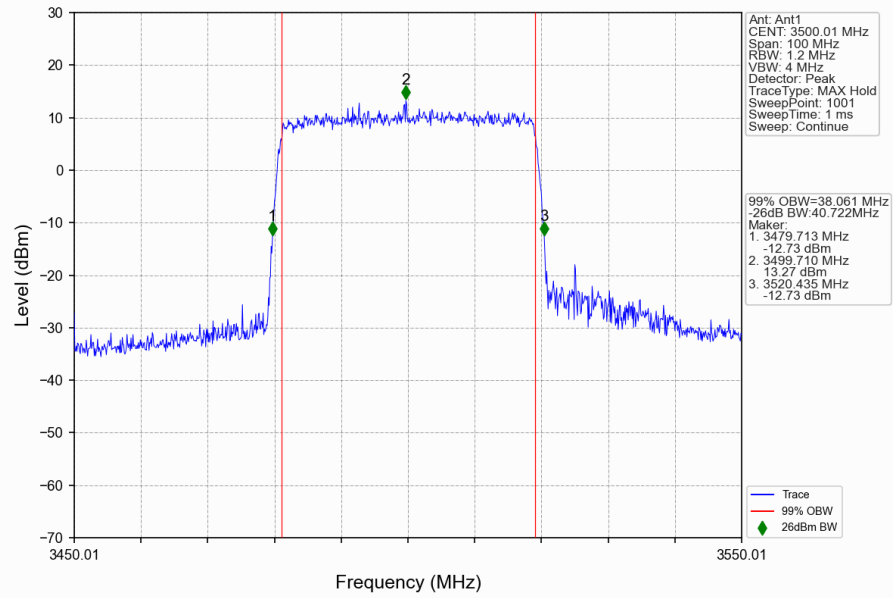
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_64_QAM_3529.98MHz_Outer_Full



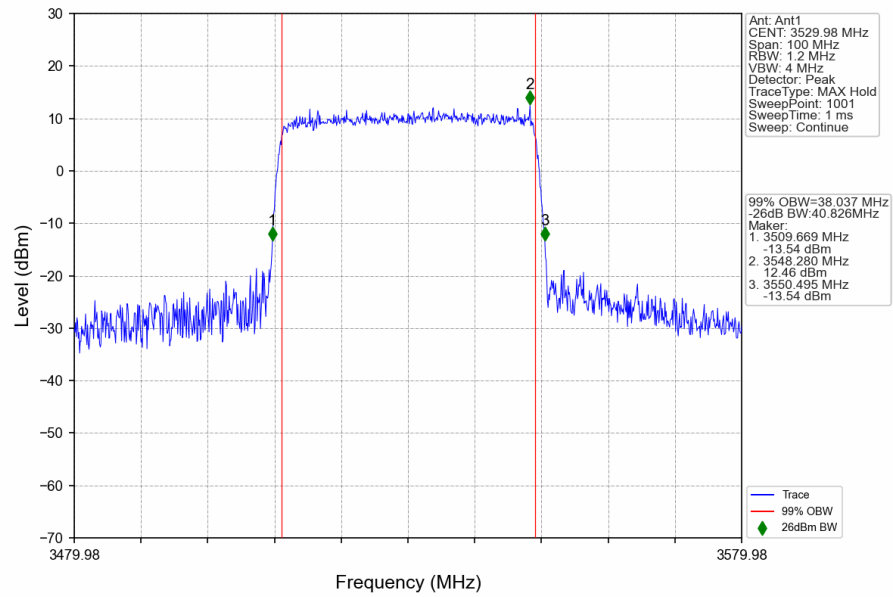
n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3470.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3529.98MHz_Outer_Full

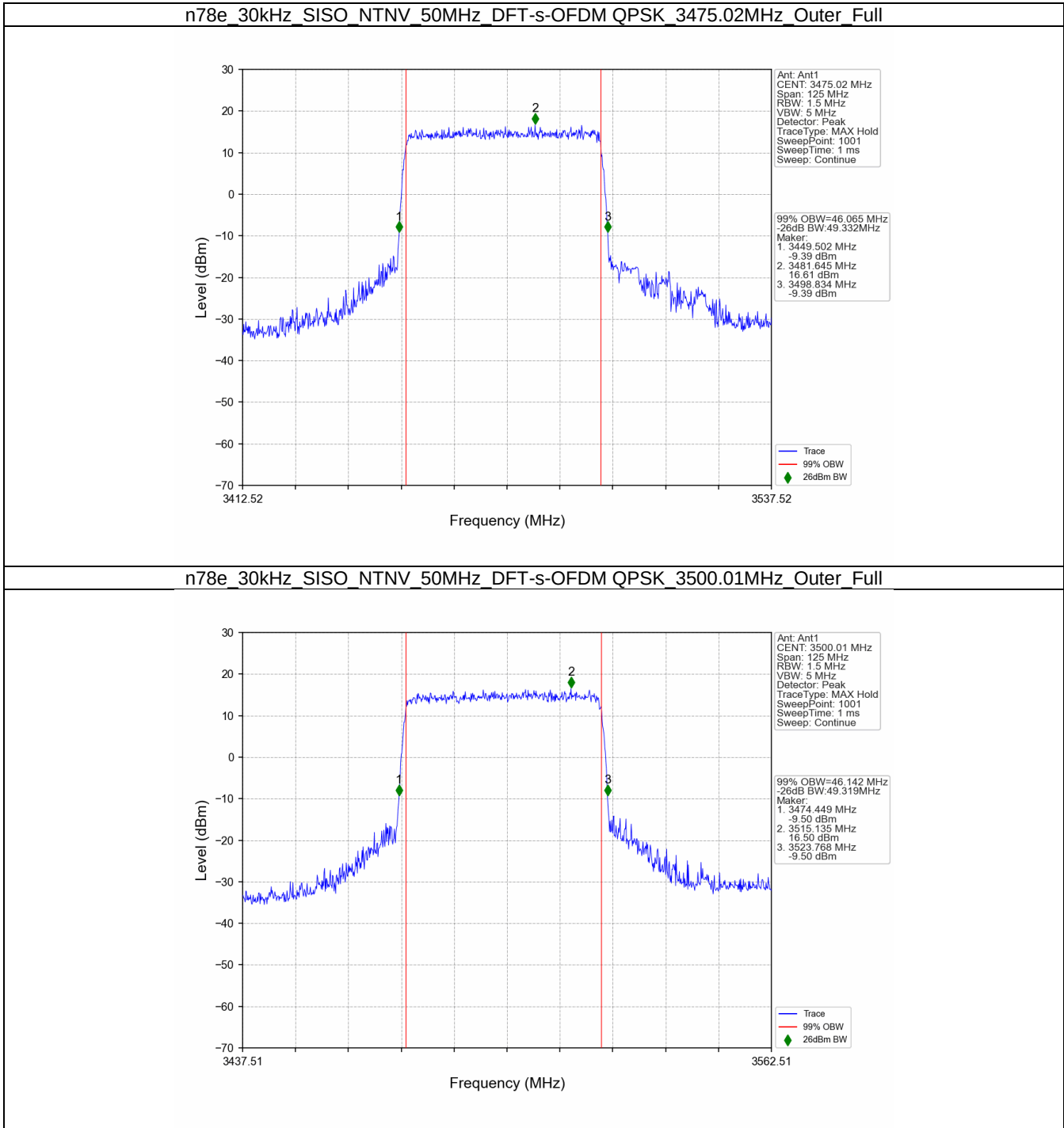


1.4 30k_SISO_50MHz_NTNV

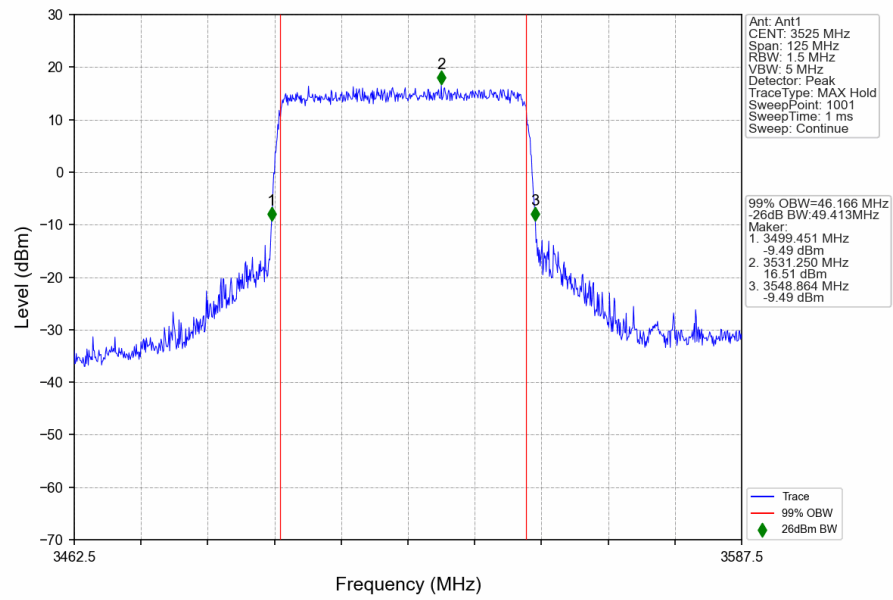
1.4.1 Test Result

5G NR n78e SCS=30kHz SISO 50MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3475.02	Outer_Full	46.06	49.33	/	Pass
	3500.01	Outer_Full	46.14	49.32	/	Pass
	3525	Outer_Full	46.17	49.41	/	Pass
DFT-s-OFDM 64 QAM	3475.02	Outer_Full	46.11	49.43	/	Pass
	3500.01	Outer_Full	46.06	49.38	/	Pass
	3525	Outer_Full	46.22	49.37	/	Pass
DFT-s-OFDM 256 QAM	3475.02	Outer_Full	46.14	49.28	/	Pass
	3500.01	Outer_Full	46.19	49.22	/	Pass
	3525	Outer_Full	45.99	49.28	/	Pass
CP-OFDM QPSK	3475.02	Outer_Full	47.73	51.04	/	Pass
	3500.01	Outer_Full	47.78	51.13	/	Pass
	3525	Outer_Full	47.87	50.99	/	Pass
CP-OFDM 64 QAM	3475.02	Outer_Full	47.92	50.96	/	Pass
	3500.01	Outer_Full	47.85	51.14	/	Pass
	3525	Outer_Full	47.77	51.09	/	Pass
CP-OFDM 256 QAM	3475.02	Outer_Full	47.79	51.16	/	Pass
	3500.01	Outer_Full	47.77	51.04	/	Pass
	3525	Outer_Full	47.81	51.03	/	Pass

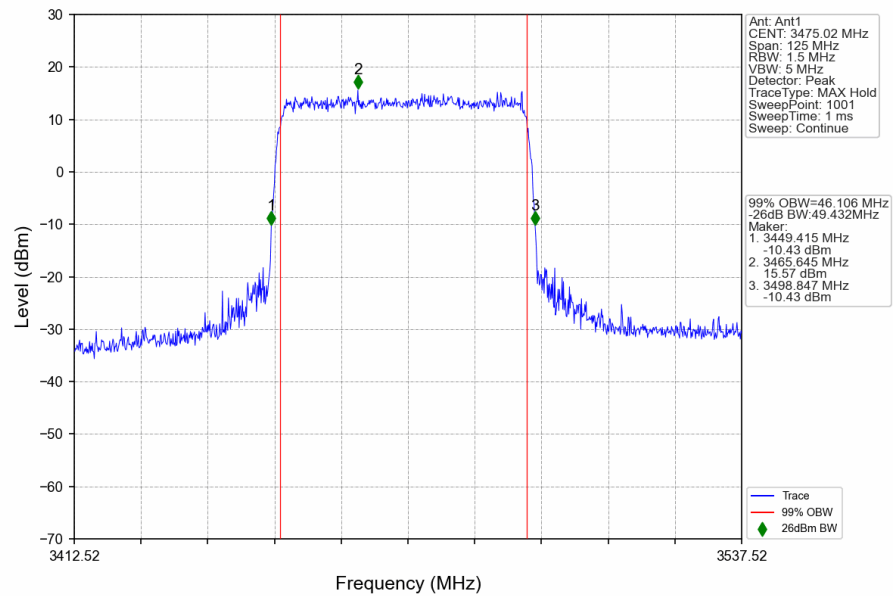
1.4.2 Test Graph



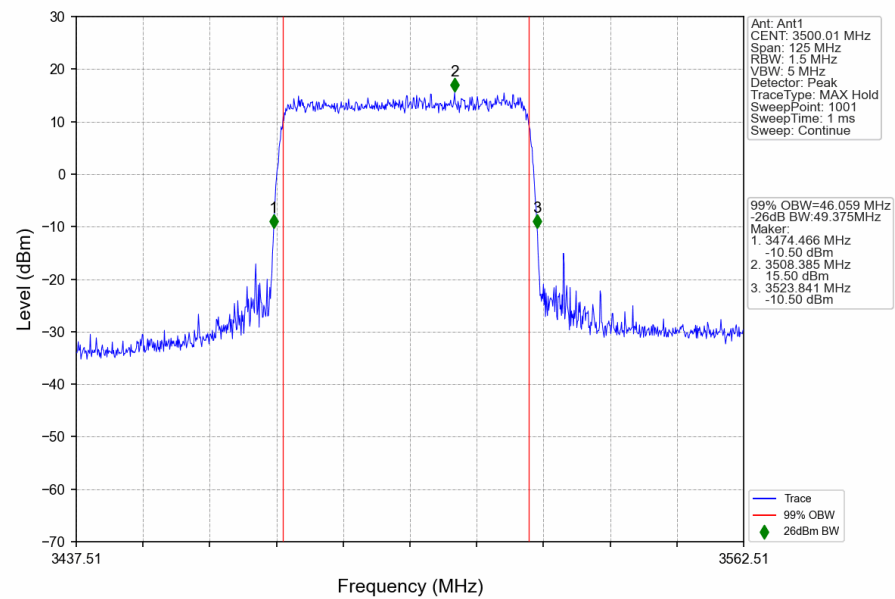
n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_QPSK_3525MHz_Outer_Full



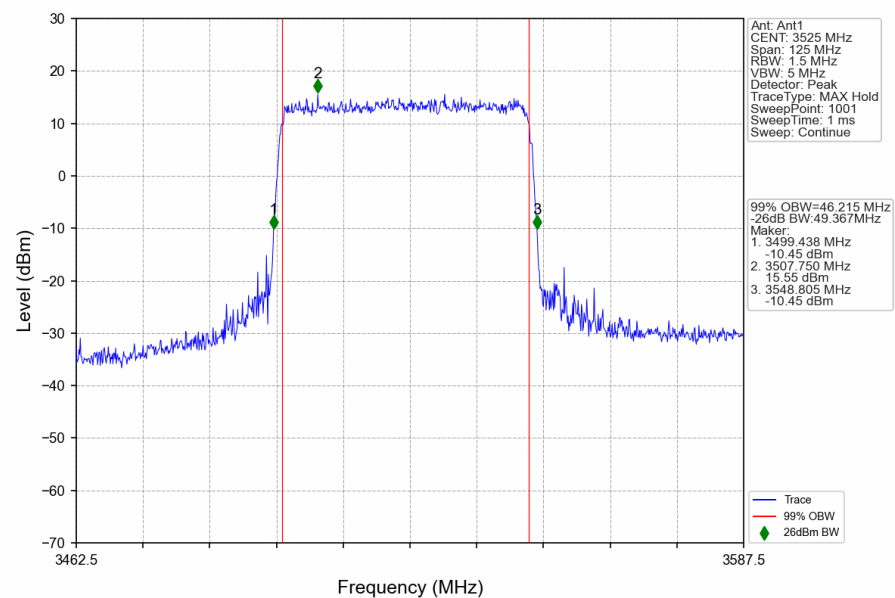
n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_64_QAM_3475.02MHz_Outer_Full



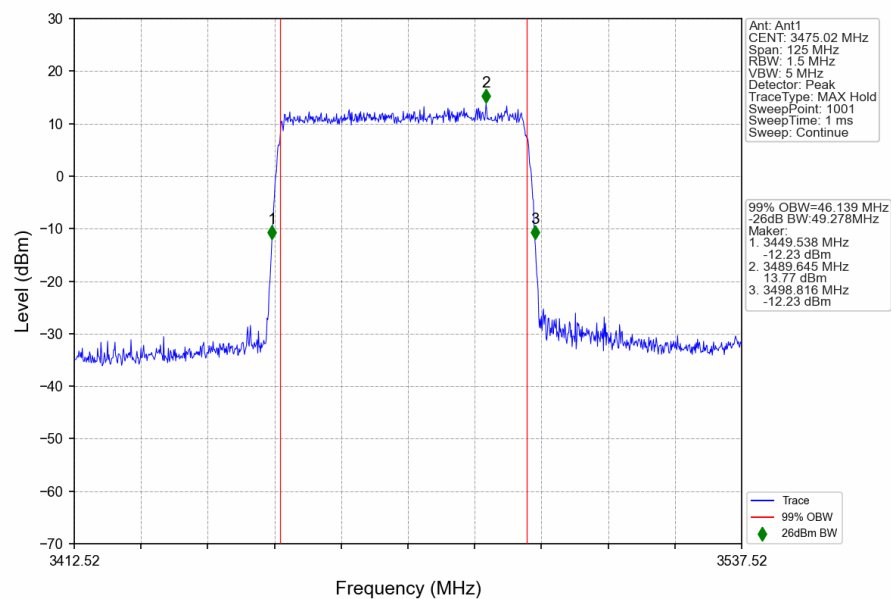
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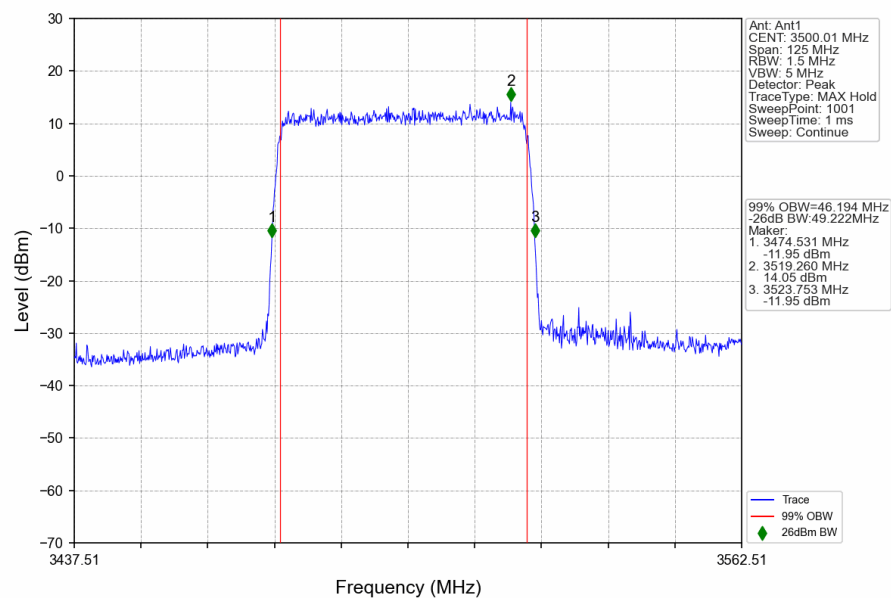
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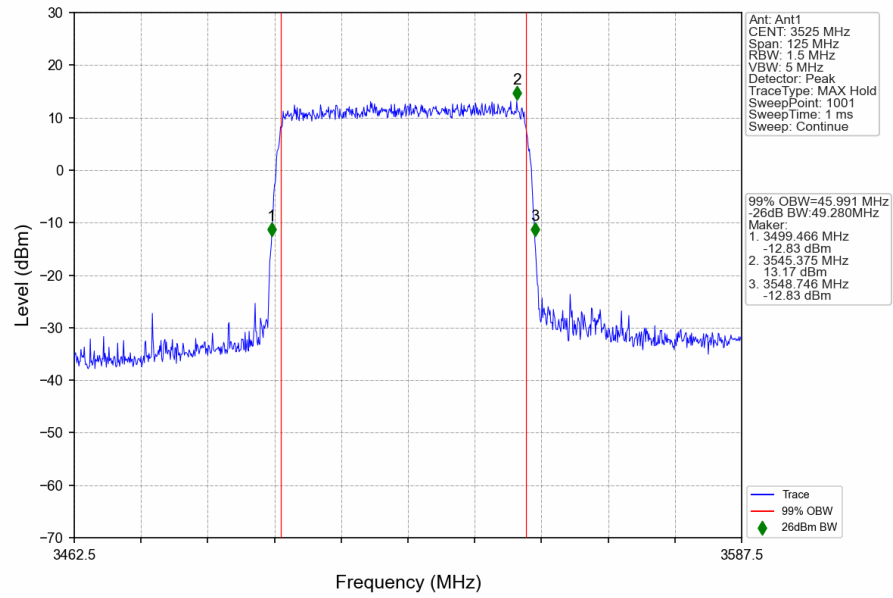
n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_256_QAM_3475.02MHz_Outer_Full



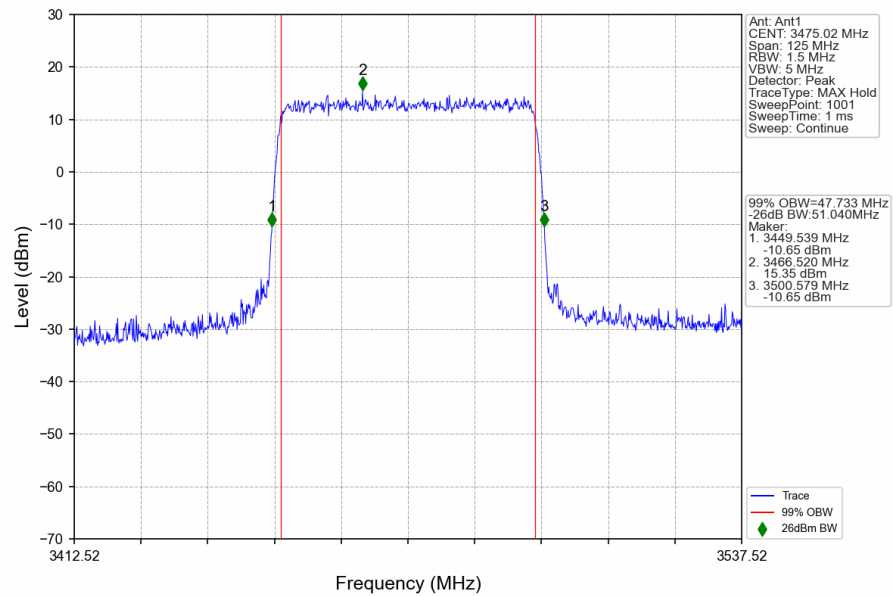
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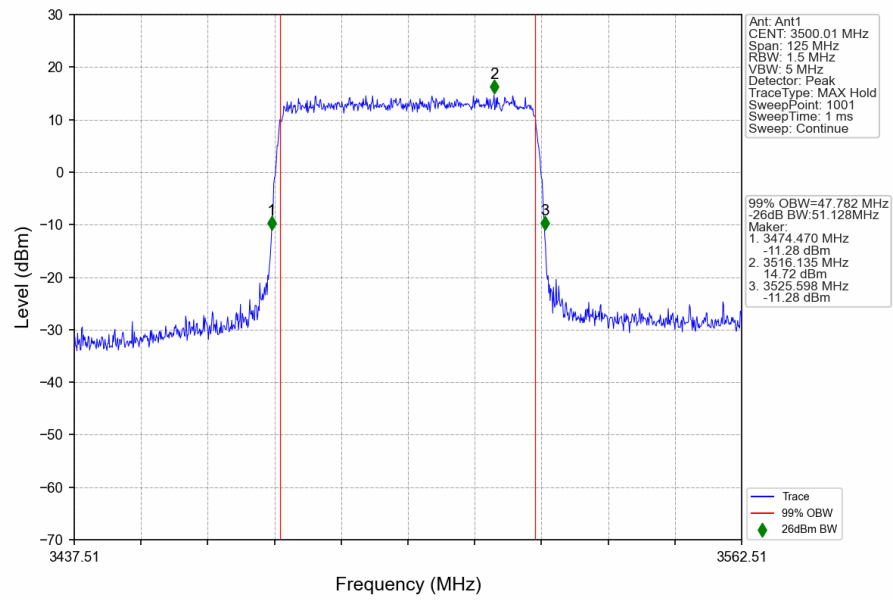
n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_256_QAM_3525MHz_Outer_Full



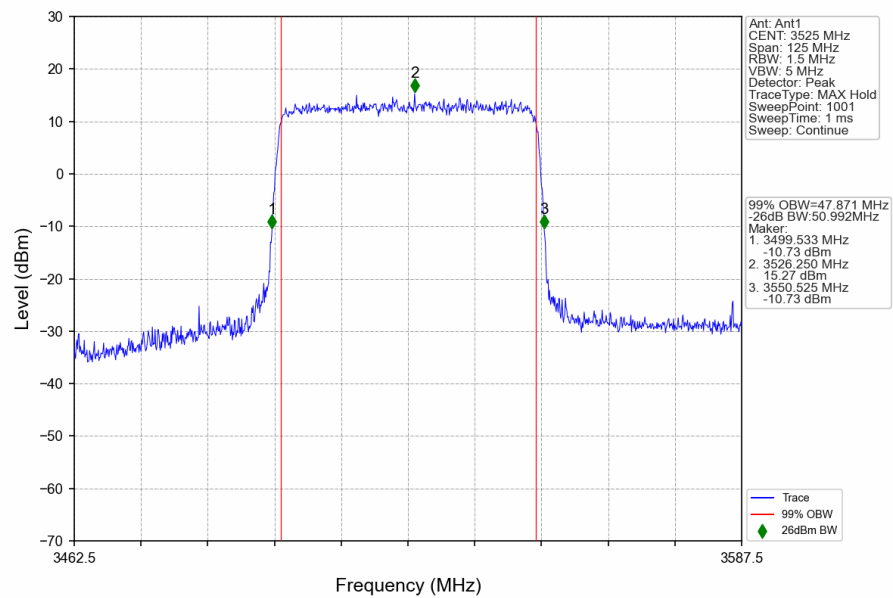
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_QPSK_3475.02MHz_Outer_Full



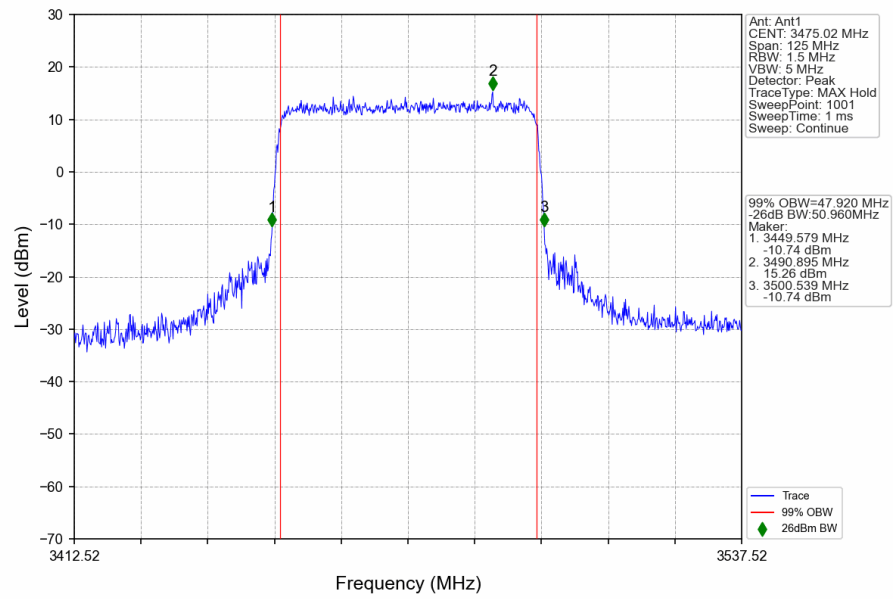
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_QPSK_3500.01MHz_Outer_Full



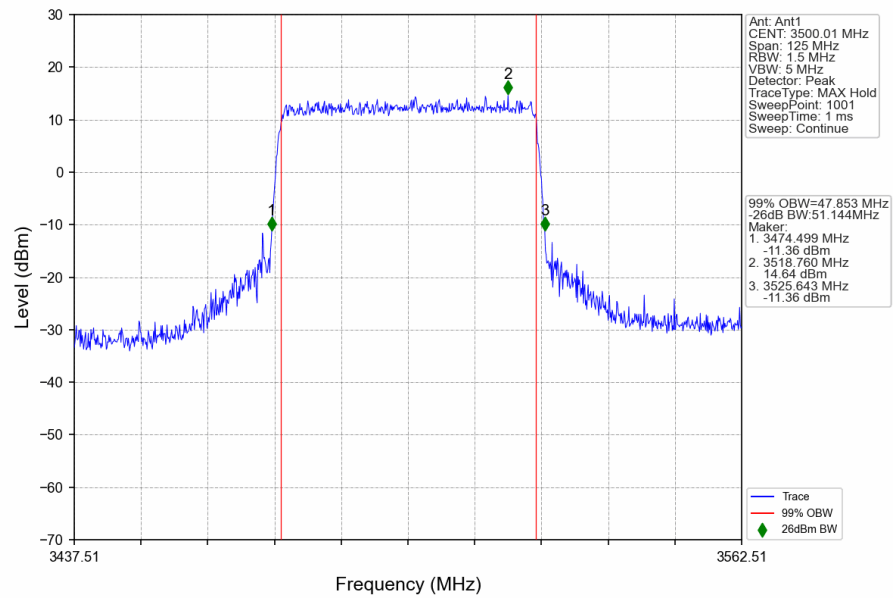
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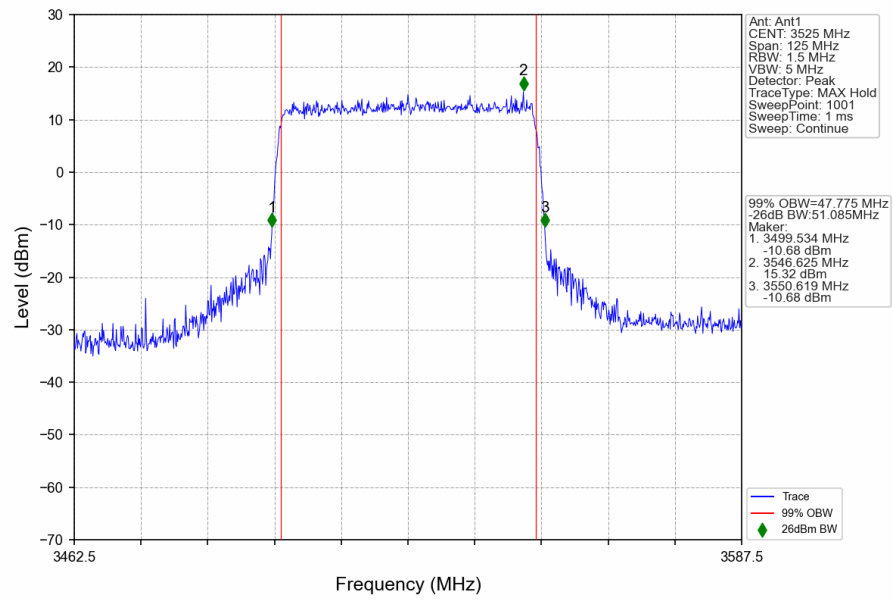
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_64_QAM_3475.02MHz_Outer_Full



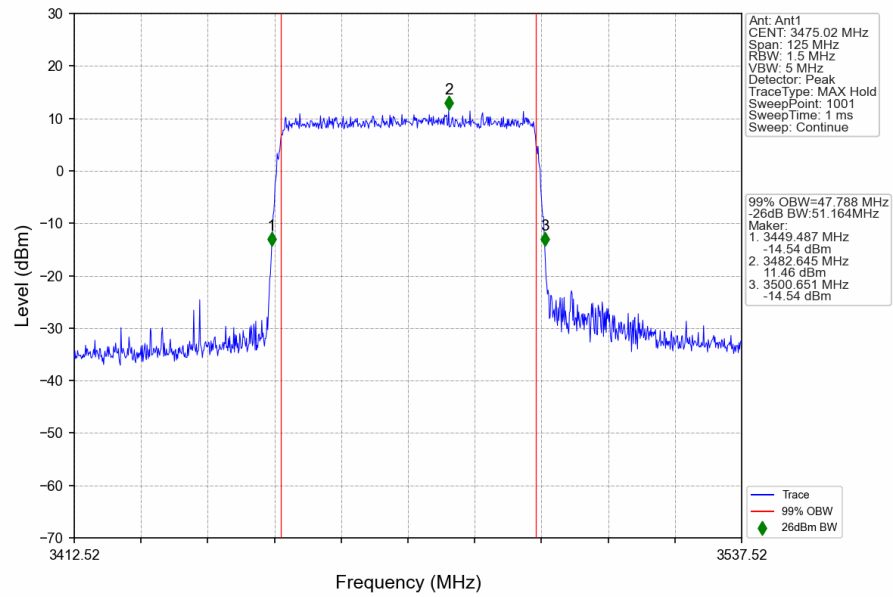
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_64_QAM_3500.01MHz_Outer_Full



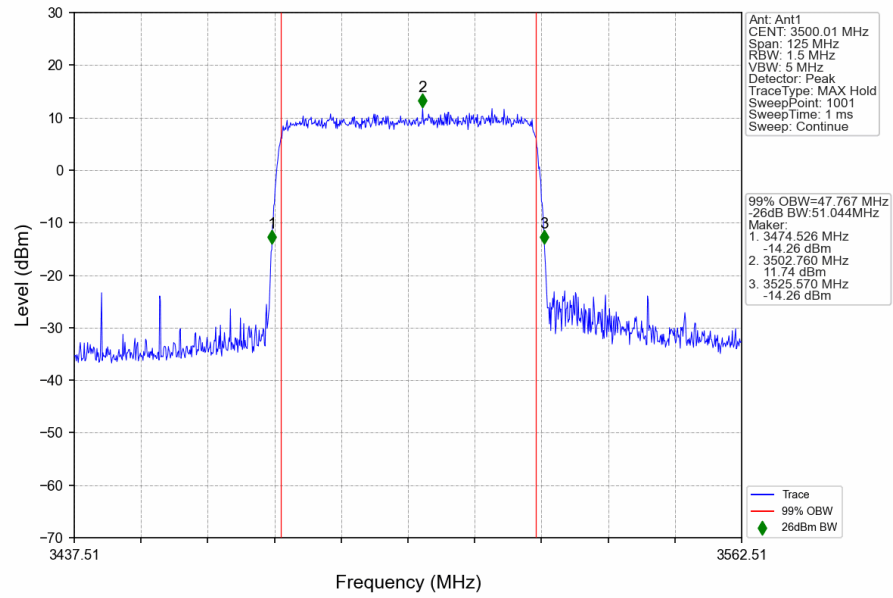
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_64_QAM_3525MHz_Outer_Full



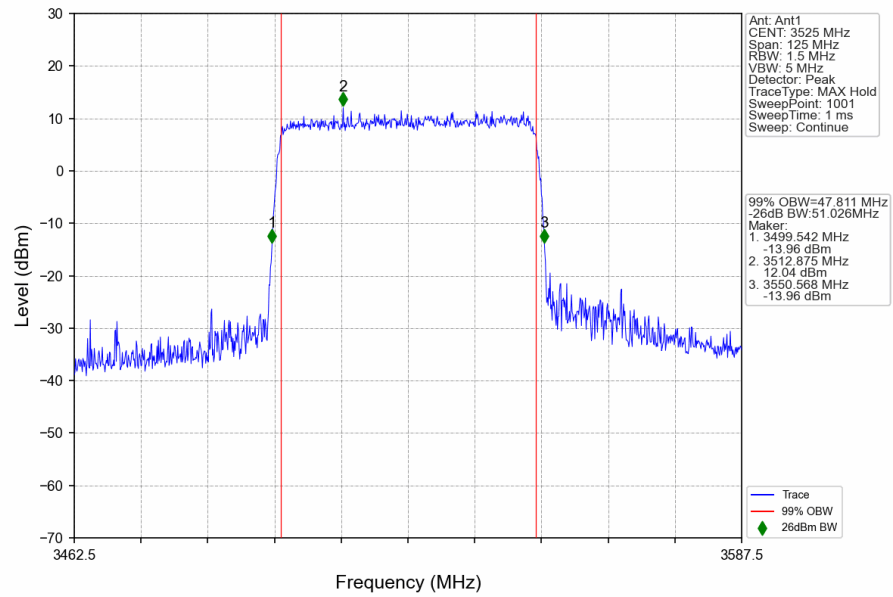
n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_256_QAM_3475.02MHz_Outer_Full



n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_256_QAM_3525MHz_Outer_Full

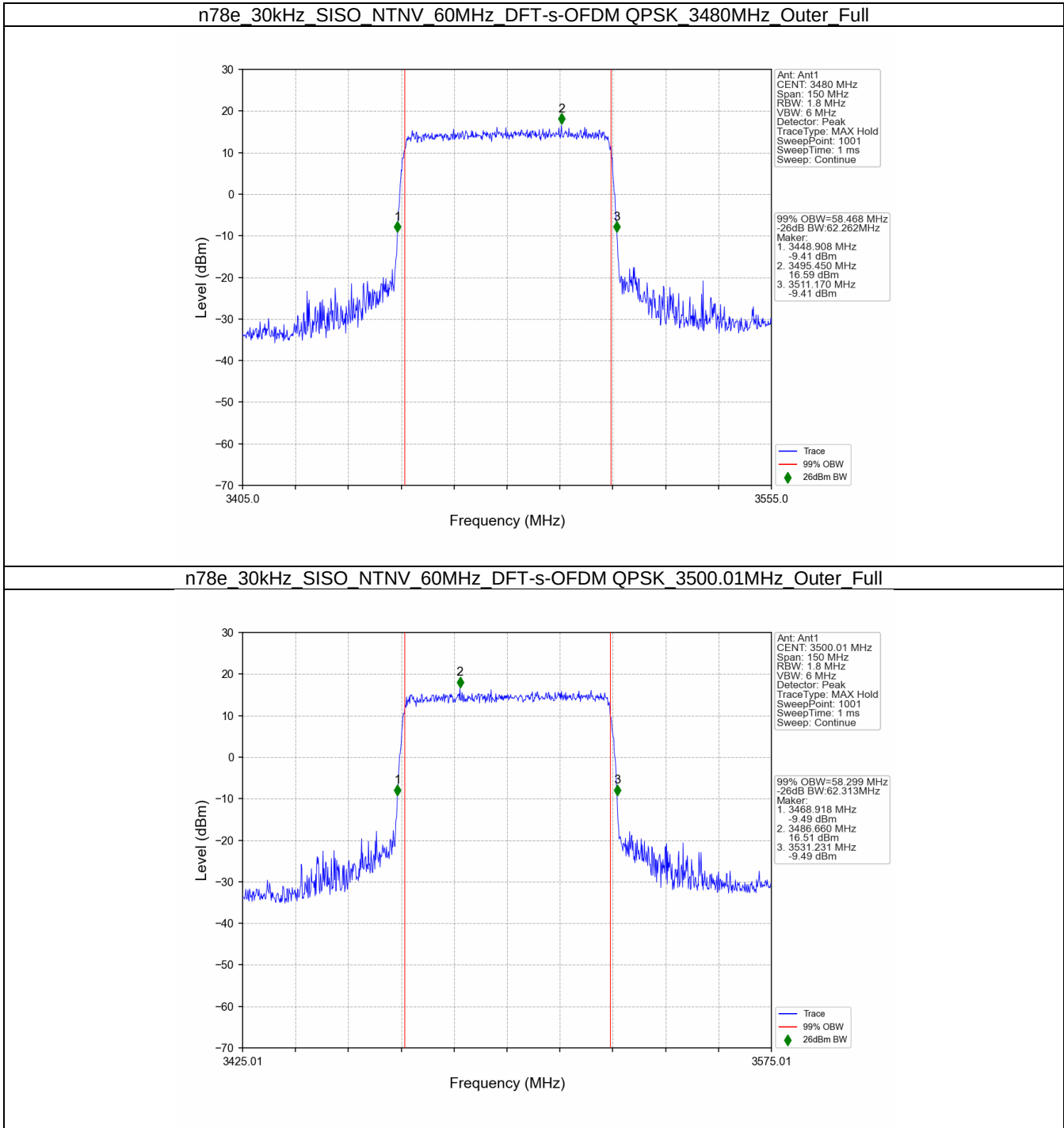


1.5 30k_SISO_60MHz_NTNV

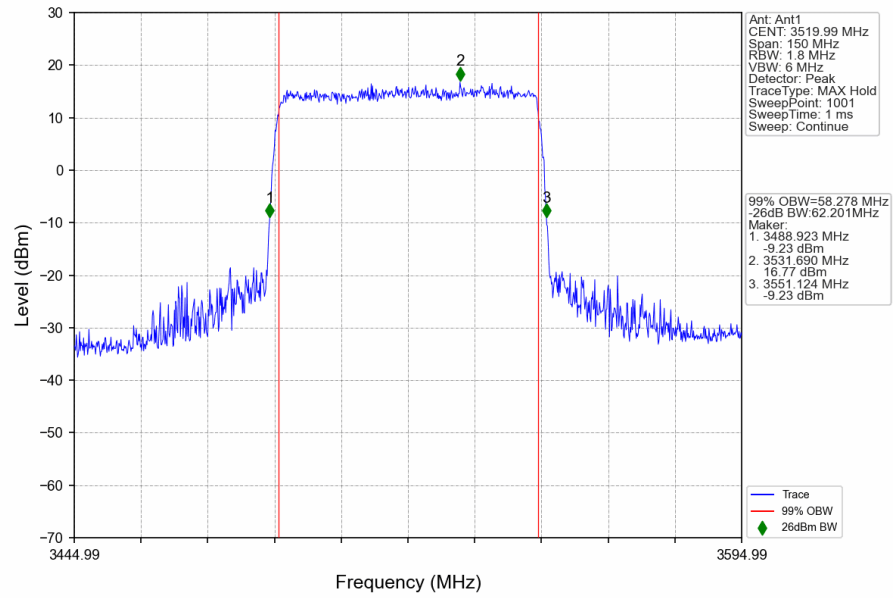
1.5.1 Test Result

5G NR n78e SCS=30kHz SISO 60MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3480	Outer_Full	58.47	62.26	/	Pass
	3500.01	Outer_Full	58.30	62.31	/	Pass
	3519.99	Outer_Full	58.28	62.20	/	Pass
DFT-s-OFDM 64 QAM	3480	Outer_Full	58.40	62.42	/	Pass
	3500.01	Outer_Full	58.43	62.24	/	Pass
	3519.99	Outer_Full	58.27	62.32	/	Pass
DFT-s-OFDM 256 QAM	3480	Outer_Full	58.30	62.36	/	Pass
	3500.01	Outer_Full	58.44	62.38	/	Pass
	3519.99	Outer_Full	58.35	62.30	/	Pass
CP-OFDM QPSK	3480	Outer_Full	58.23	62.30	/	Pass
	3500.01	Outer_Full	58.35	62.20	/	Pass
	3519.99	Outer_Full	58.30	62.26	/	Pass
CP-OFDM 64 QAM	3480	Outer_Full	58.27	62.22	/	Pass
	3500.01	Outer_Full	58.27	62.24	/	Pass
	3519.99	Outer_Full	58.19	62.27	/	Pass
CP-OFDM 256 QAM	3480	Outer_Full	58.30	62.27	/	Pass
	3500.01	Outer_Full	58.30	62.20	/	Pass
	3519.99	Outer_Full	58.31	62.24	/	Pass

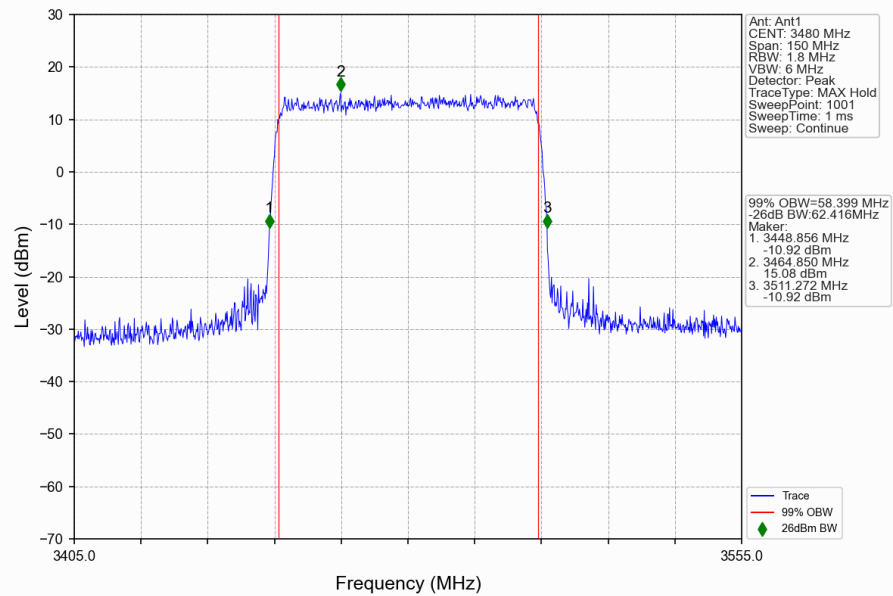
1.5.2 Test Graph



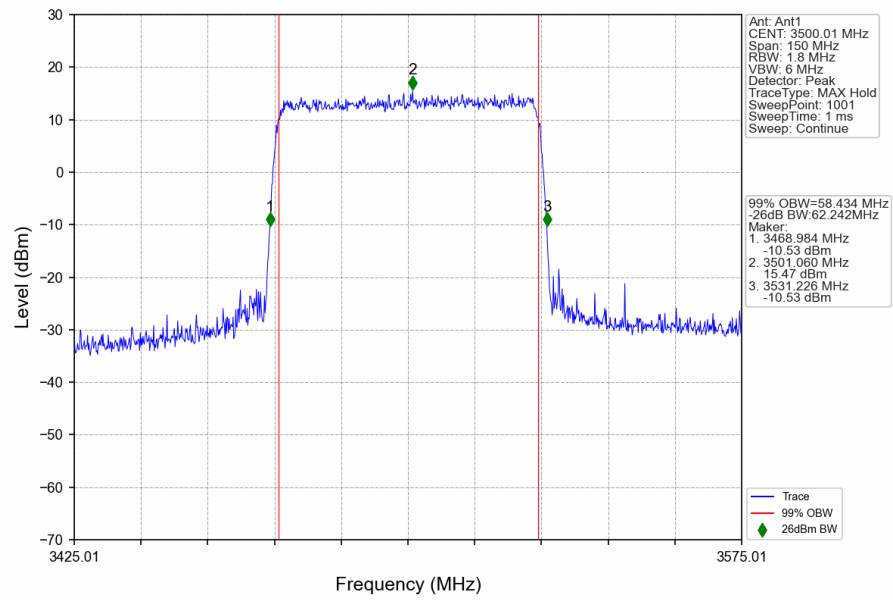
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_QPSK_3519.99MHz_Outer_Full



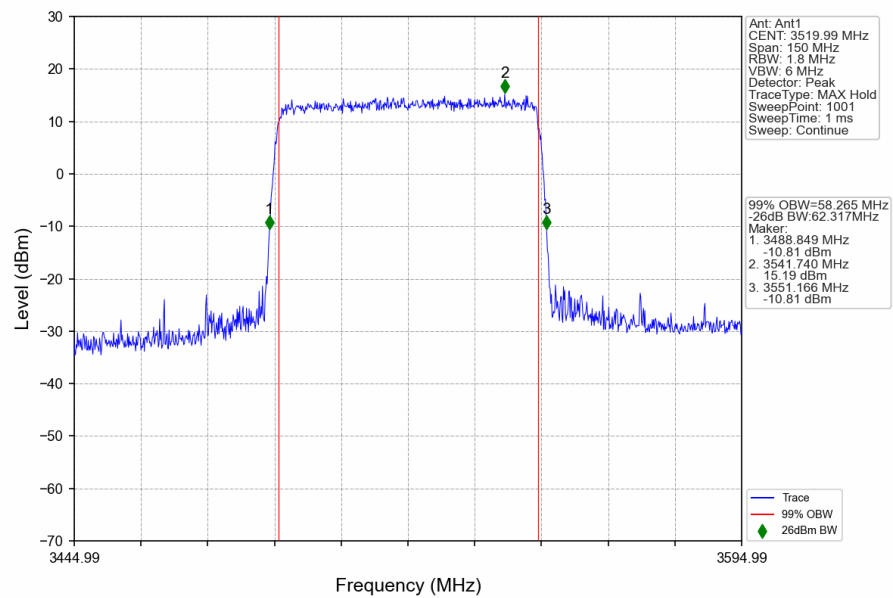
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_64_QAM_3480MHz_Outer_Full



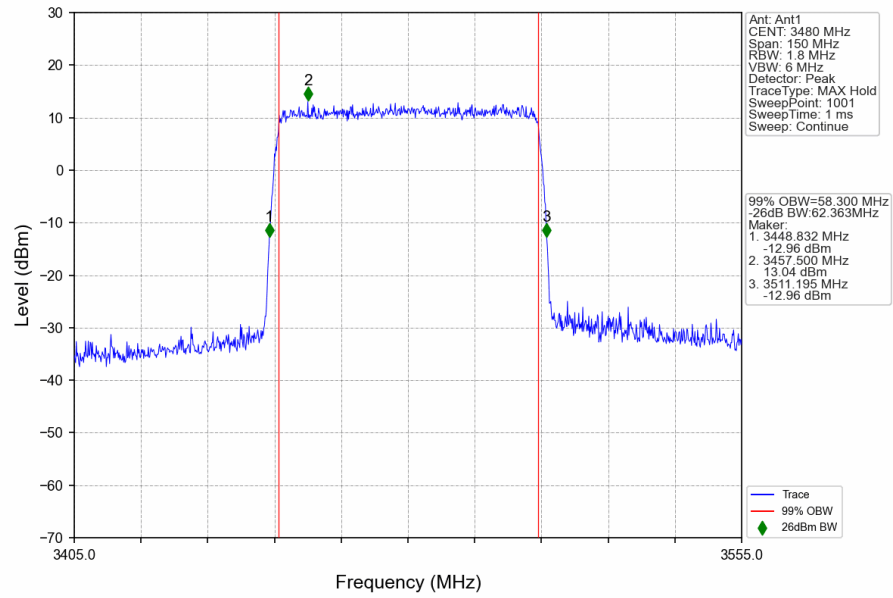
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_64_QAM_3500.01MHz_Outer_Full



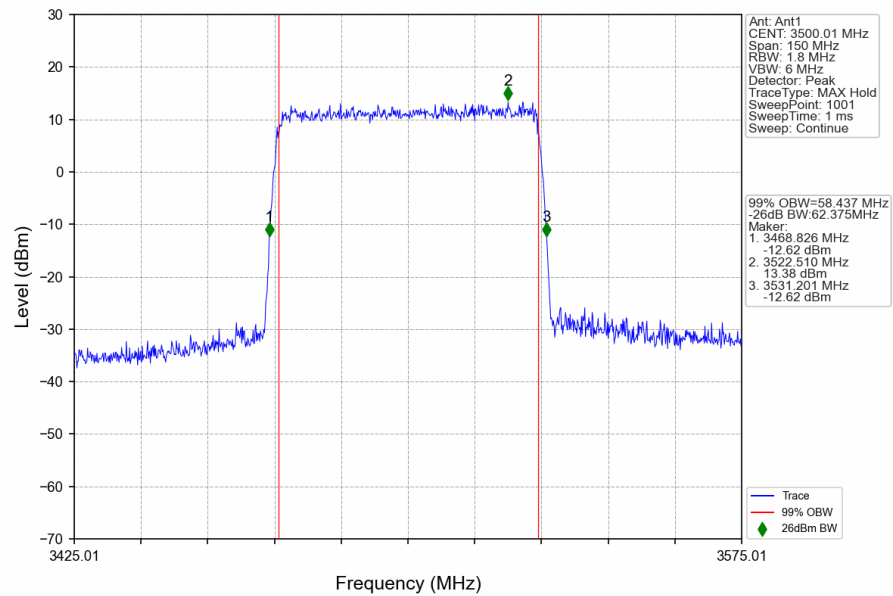
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_64_QAM_3519.99MHz_Outer_Full



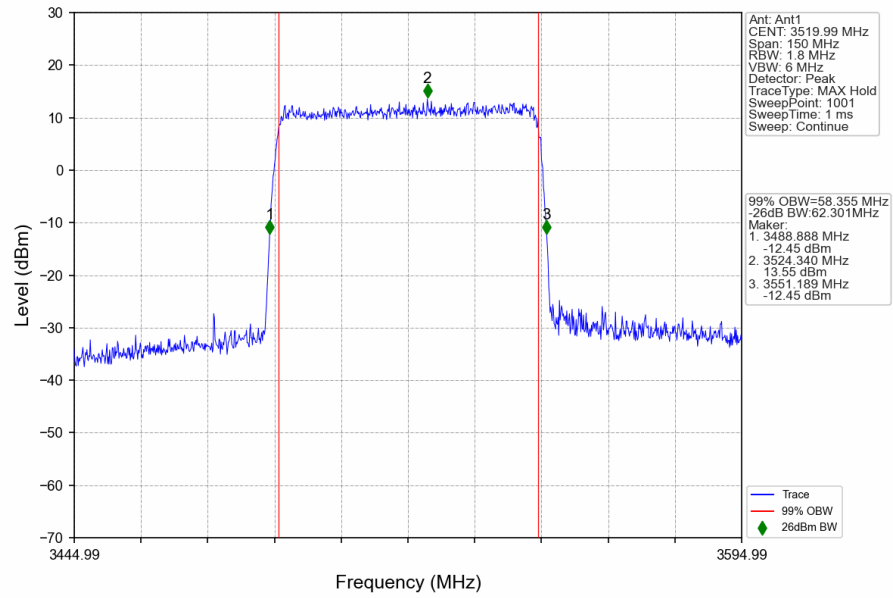
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_256_QAM_3480MHz_Outer_Full



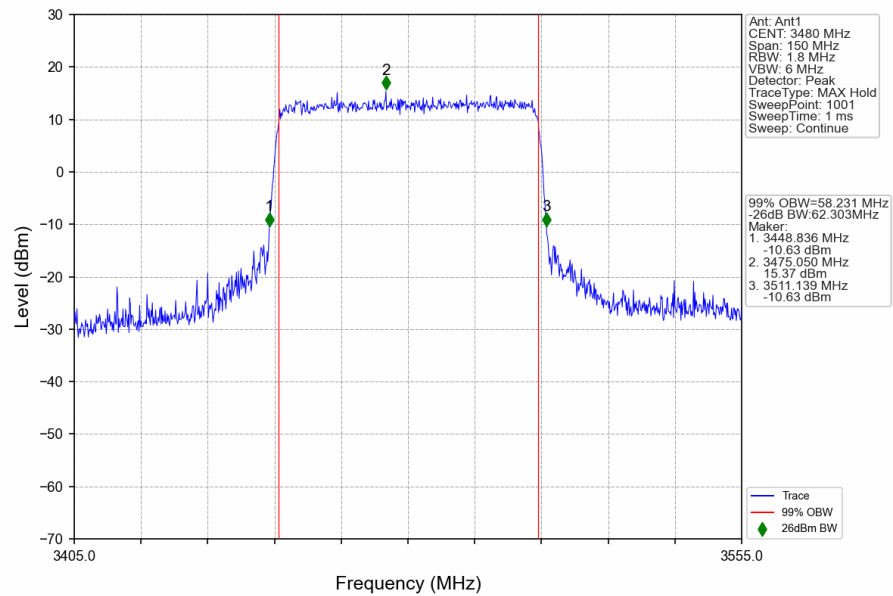
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_256_QAM_3500.01MHz_Outer_Full



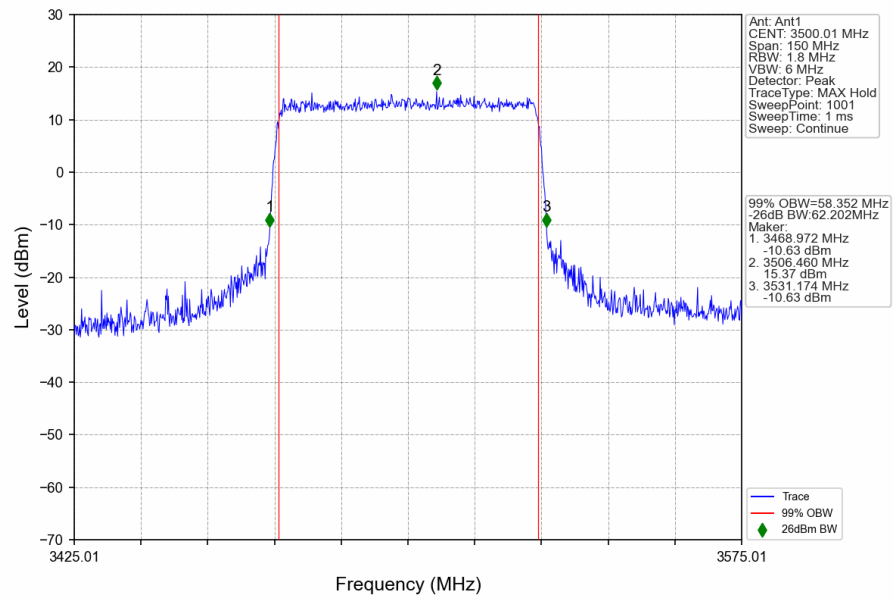
n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_256_QAM_3519.99MHz_Outer_Full



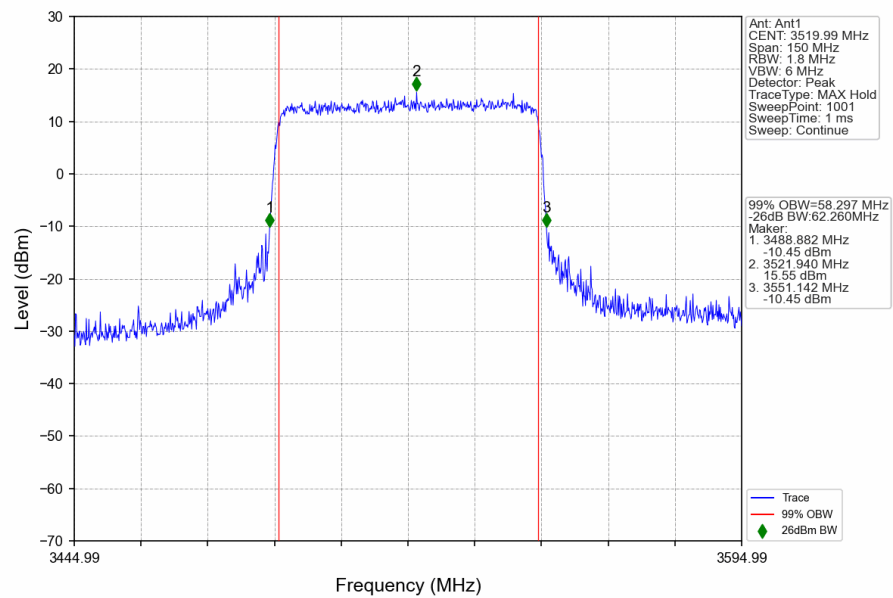
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3480MHz_Outer_Full



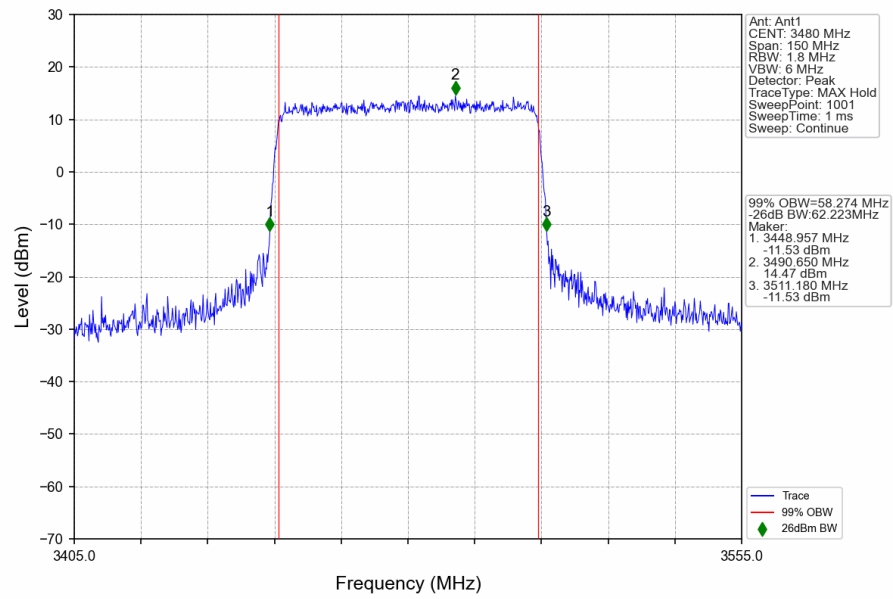
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3500.01MHz_Outer_Full



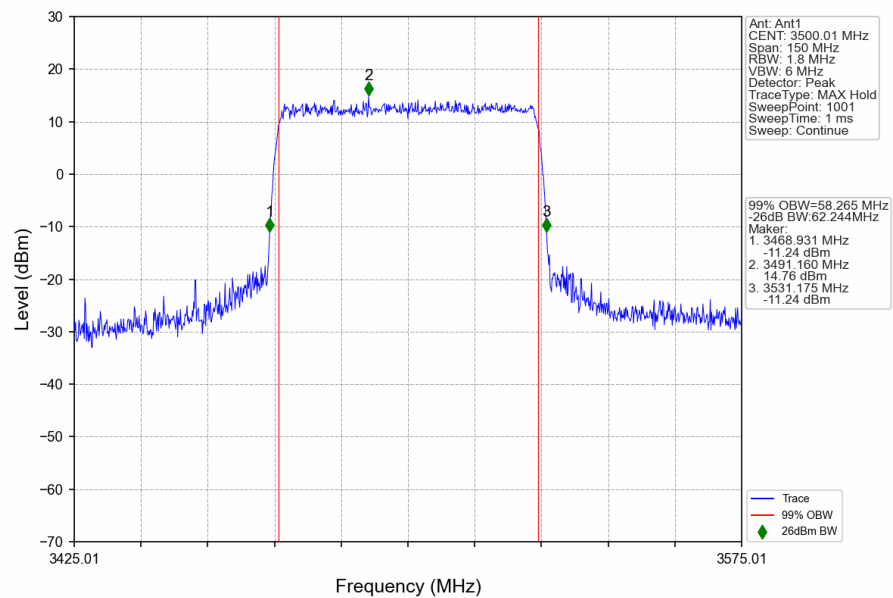
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3519.99MHz_Outer_Full



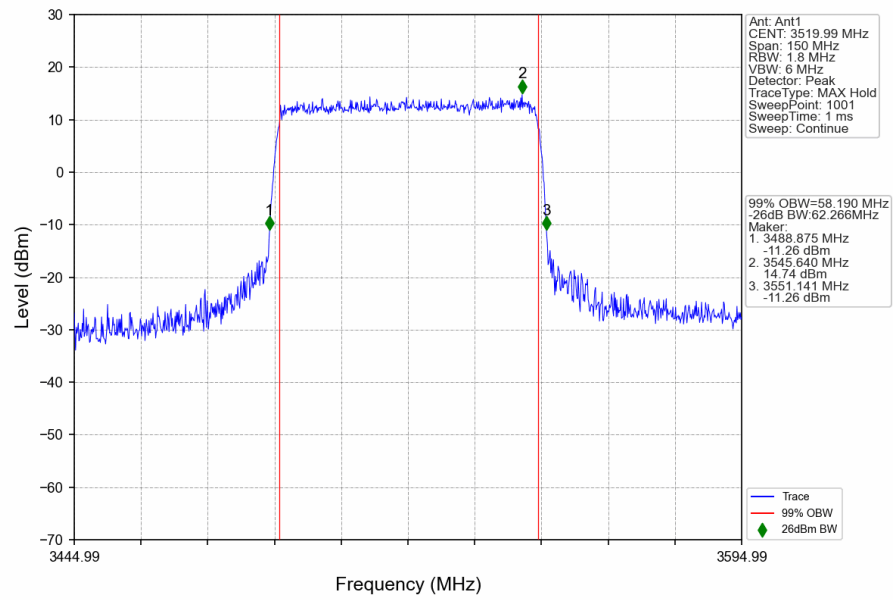
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3480MHz_Outer_Full



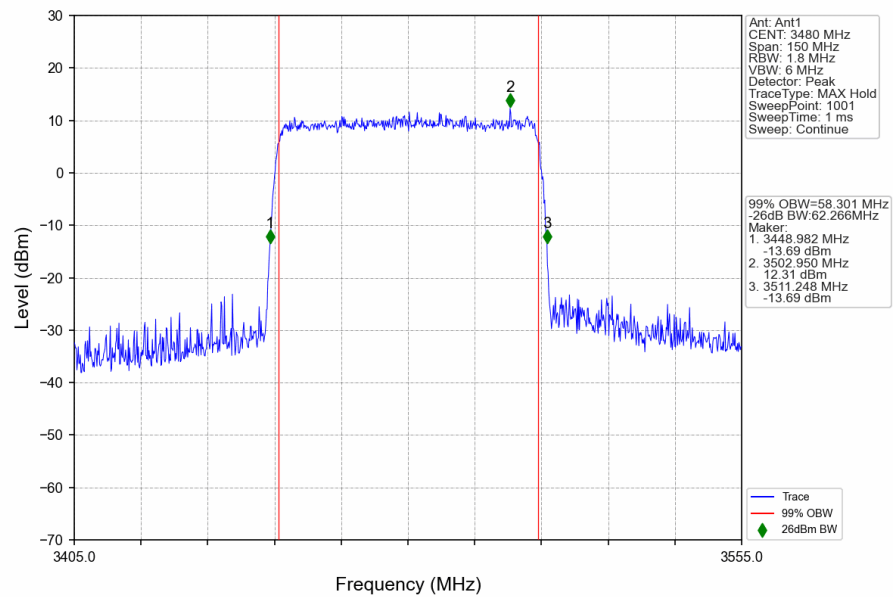
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3500.01MHz_Outer_Full



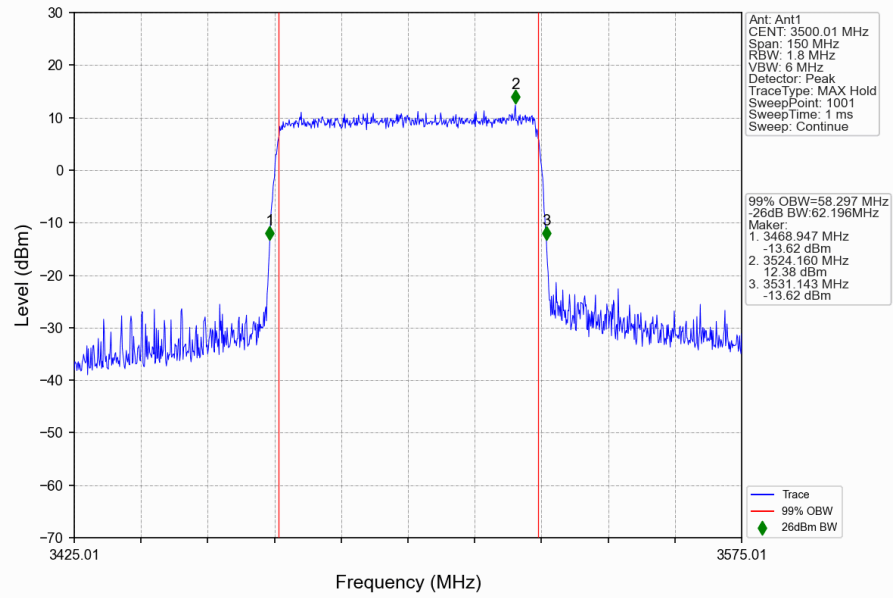
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM 64 QAM 3519.99MHz_Outer_Full



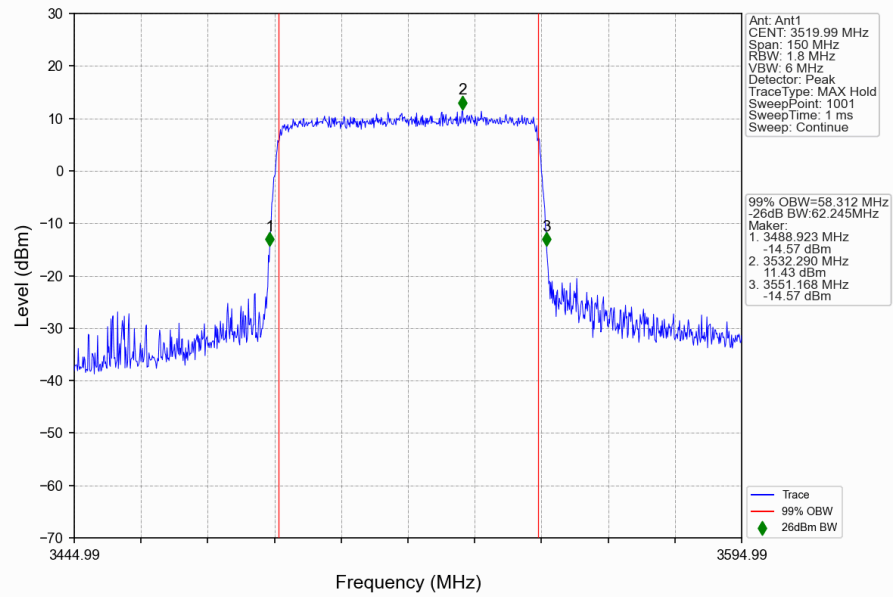
n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM 256 QAM 3480MHz_Outer_Full



n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_60MHz_CP-OFDM_256_QAM_3519.99MHz_Outer_Full



1.6 30k_SISO_70MHz_NTNV

1.6.1 Test Result

5G NR n78e SCS=30kHz SISO 70MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM QPSK	3485.01	Outer_Full	64.98	69.61	/	Pass
	3500.01	Outer_Full	64.91	69.58	/	Pass
	3514.98	Outer_Full	64.86	69.42	/	Pass
DFT-s-OFDM 64 QAM	3485.01	Outer_Full	65.09	69.59	/	Pass
	3500.01	Outer_Full	64.81	69.64	/	Pass
	3514.98	Outer_Full	64.65	68.97	/	Pass
DFT-s-OFDM 256 QAM	3485.01	Outer_Full	64.82	69.51	/	Pass
	3500.01	Outer_Full	64.83	69.53	/	Pass
	3514.98	Outer_Full	64.90	69.08	/	Pass
CP-OFDM QPSK	3485.01	Outer_Full	68.15	72.59	/	Pass
	3500.01	Outer_Full	67.96	72.75	/	Pass
	3514.98	Outer_Full	67.79	72.30	/	Pass
CP-OFDM 64 QAM	3485.01	Outer_Full	68.10	72.76	/	Pass
	3500.01	Outer_Full	68.04	72.76	/	Pass
	3514.98	Outer_Full	68.02	72.46	/	Pass
CP-OFDM 256 QAM	3485.01	Outer_Full	67.97	72.68	/	Pass
	3500.01	Outer_Full	68.08	72.68	/	Pass
	3514.98	Outer_Full	67.93	72.17	/	Pass

1.6.2 Test Graph

