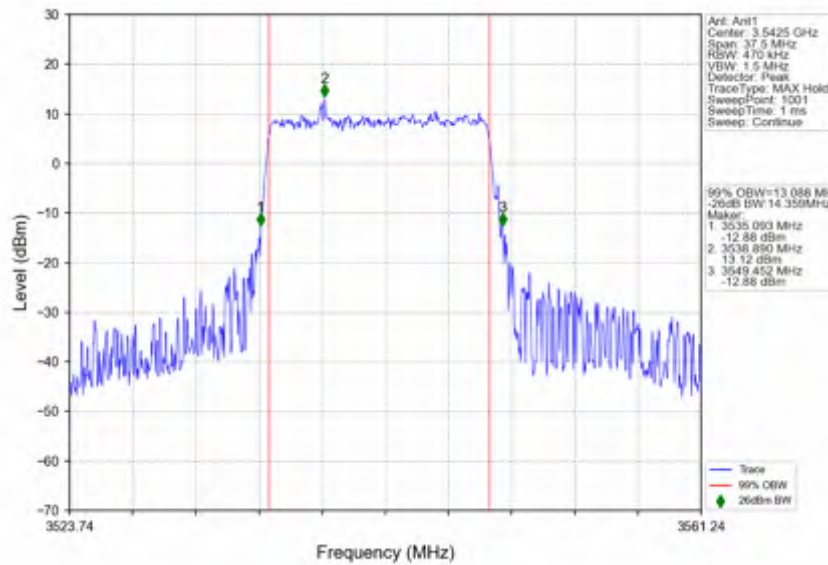
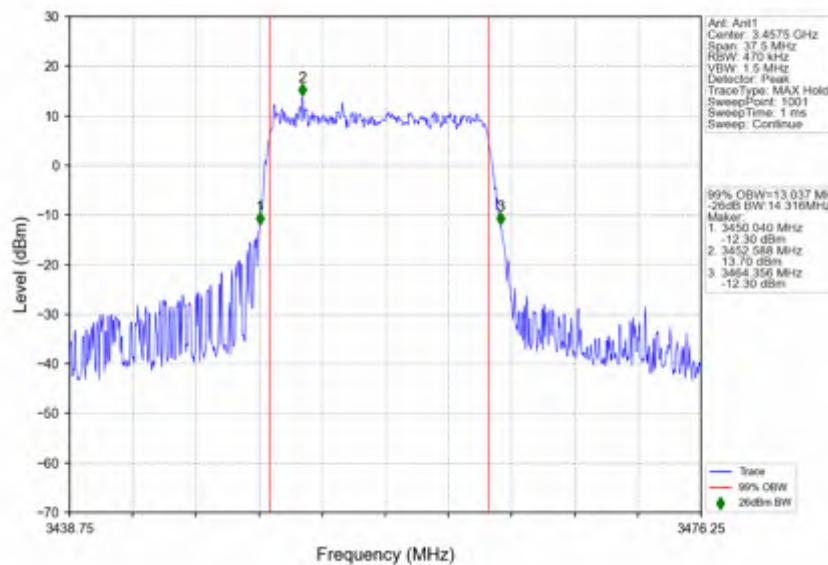


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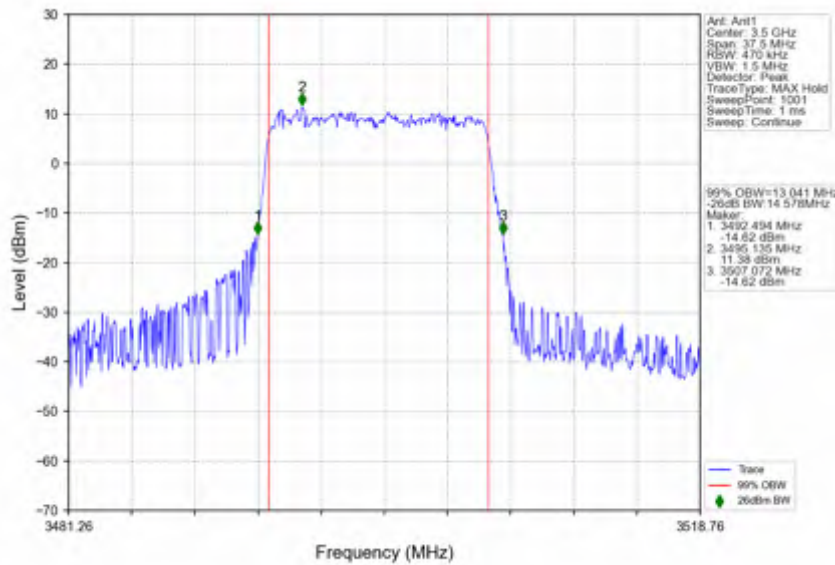
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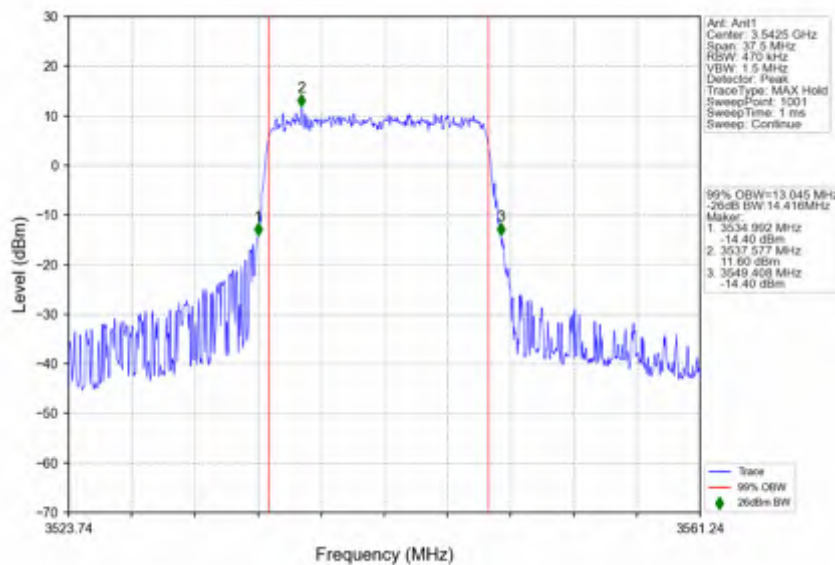
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n78e_30kHz_SISO_NTNV_15MHz_DFT-s-OFDM_QPSK_3500.01MHz_Outer_Full



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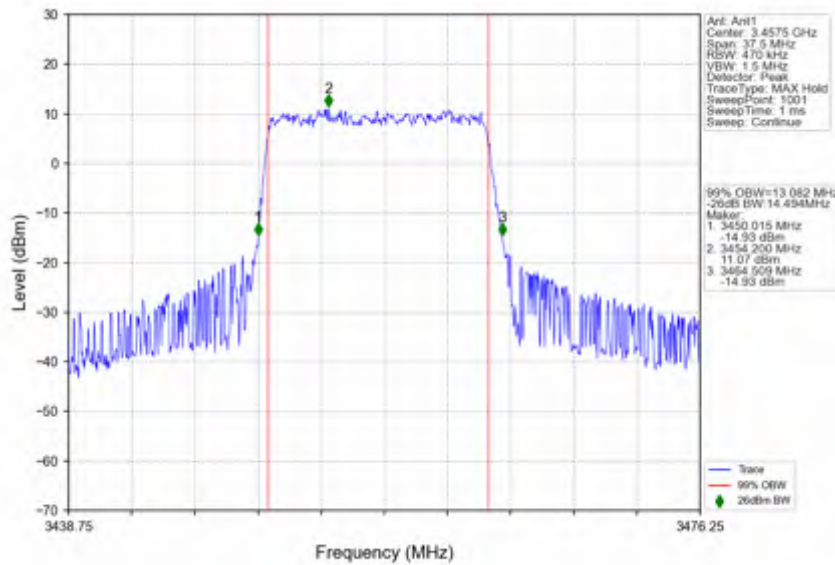
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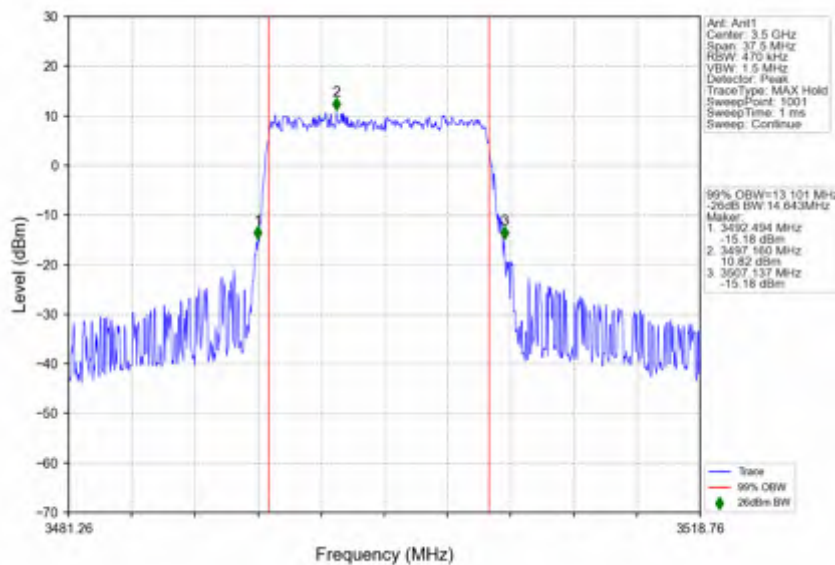
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n78e_30kHz_SISO_NTNV_15MHz_DFT-s-OFDM_16 QAM_3457.5MHz_Outer_Full



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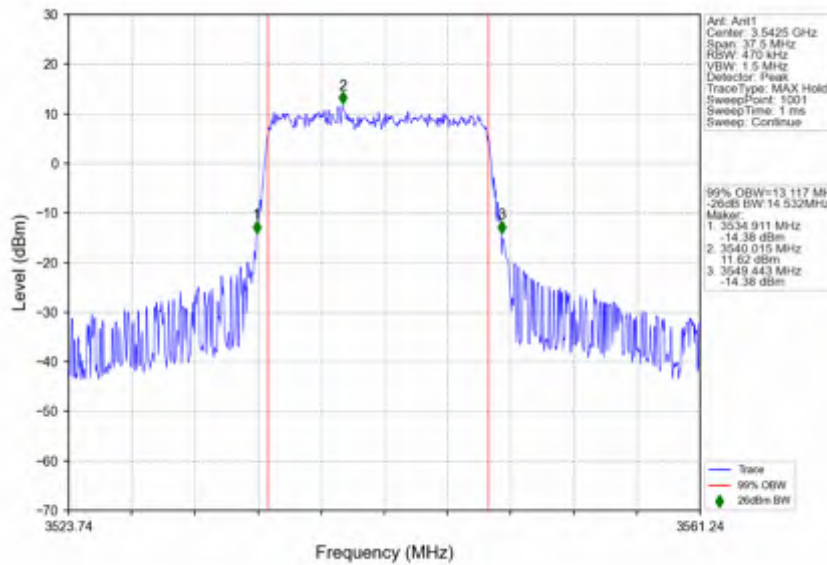
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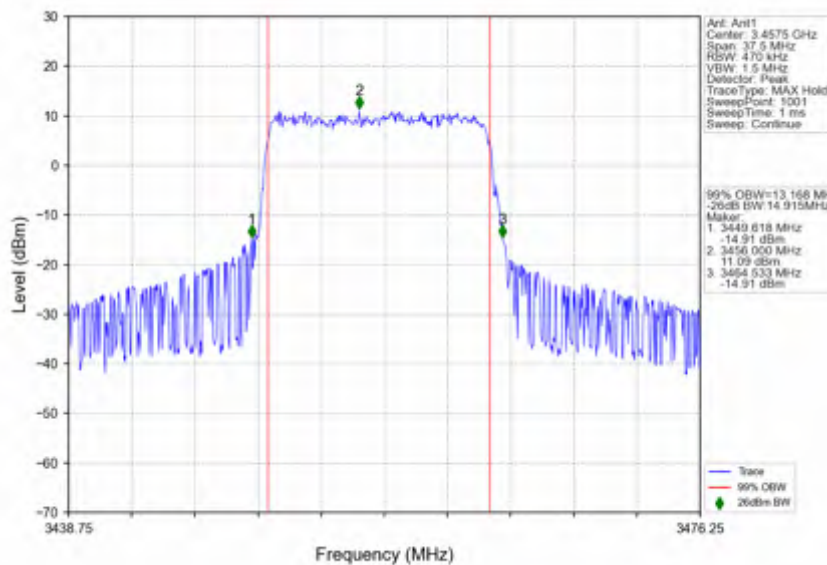
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n78e_30kHz_SISO_NTNV_15MHz_DFT-s-OFDM 16 QAM_3542.49MHz_Outer_Full



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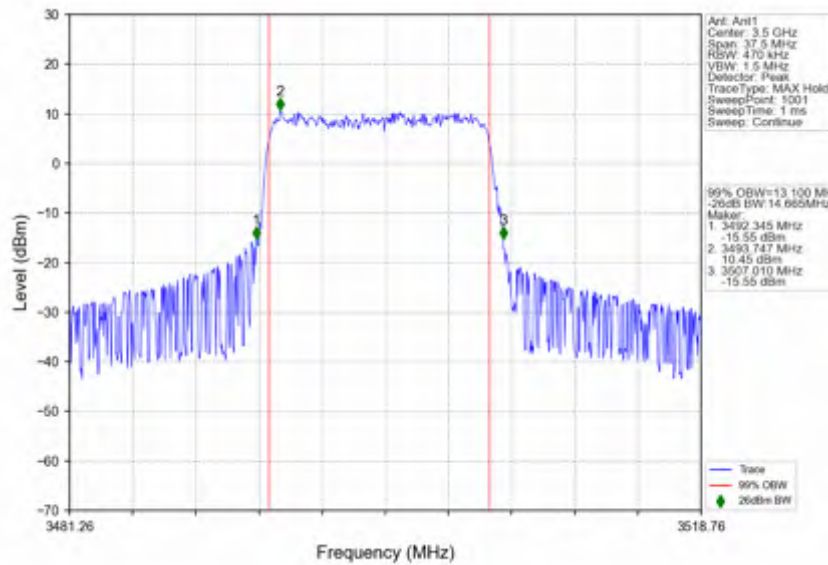
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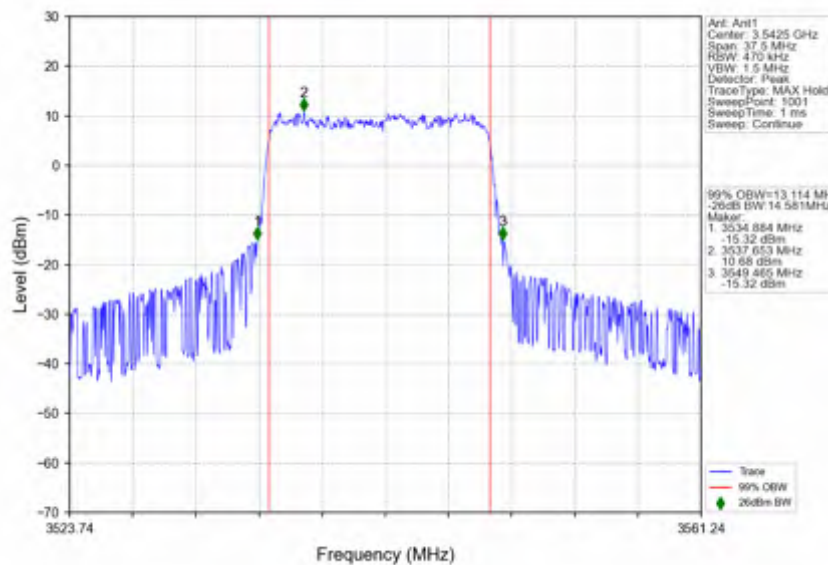
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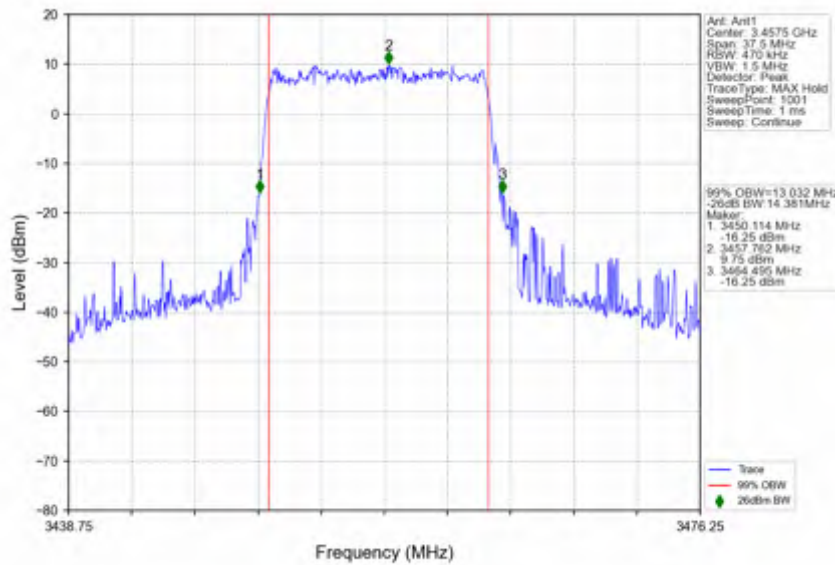


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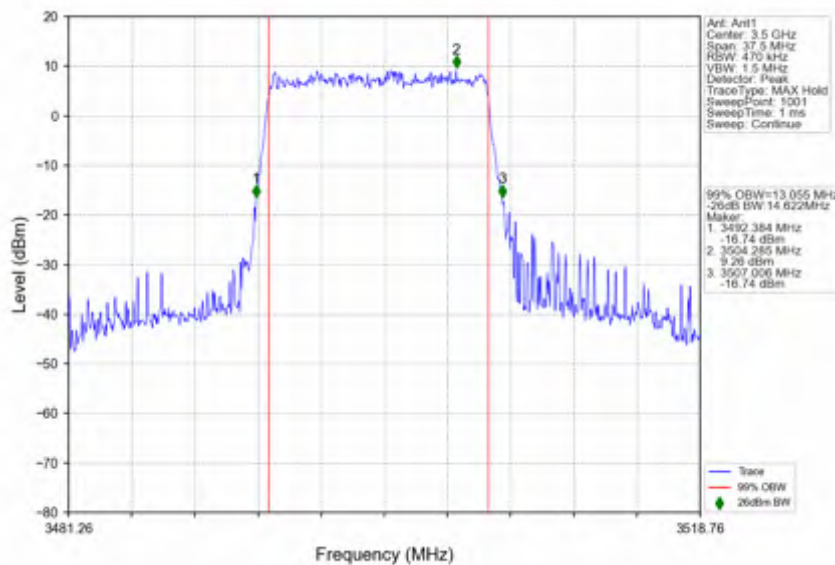
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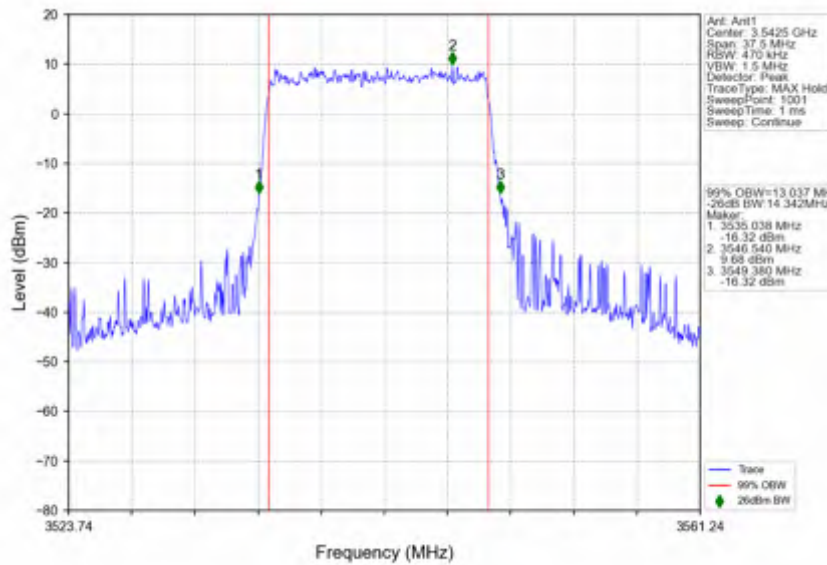
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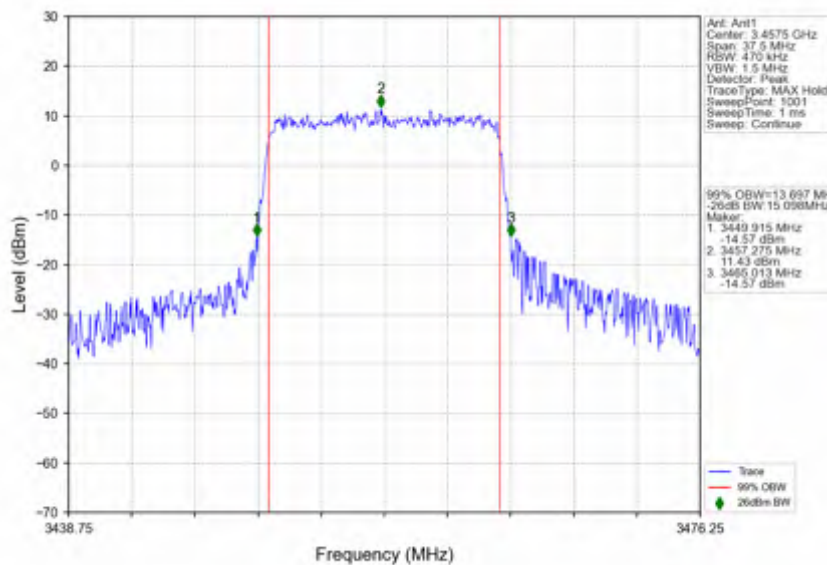
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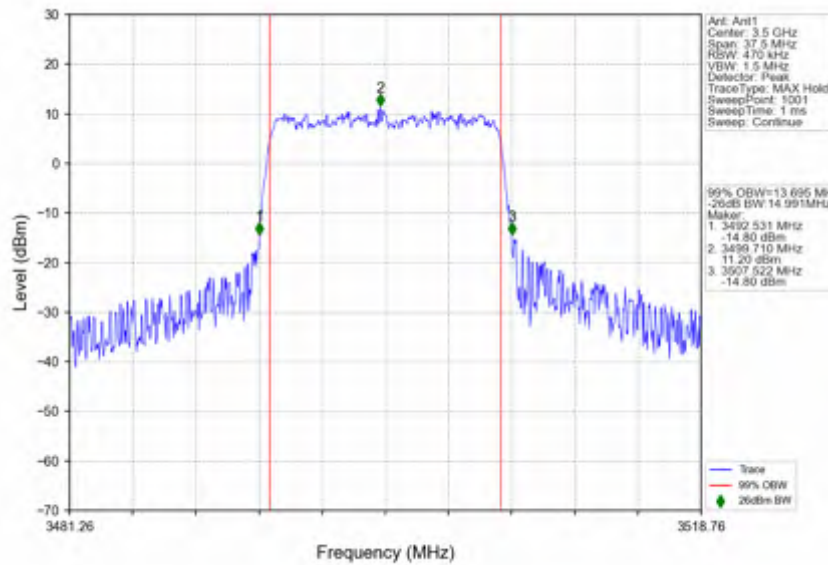
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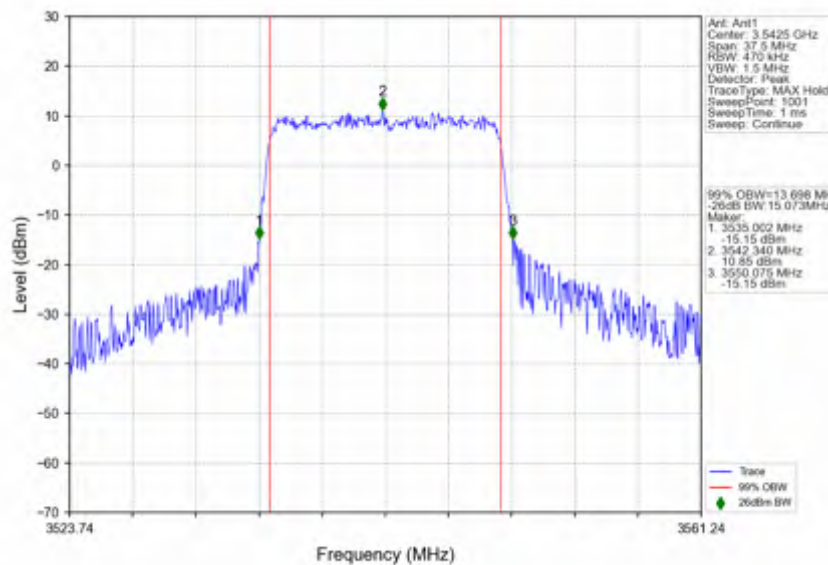
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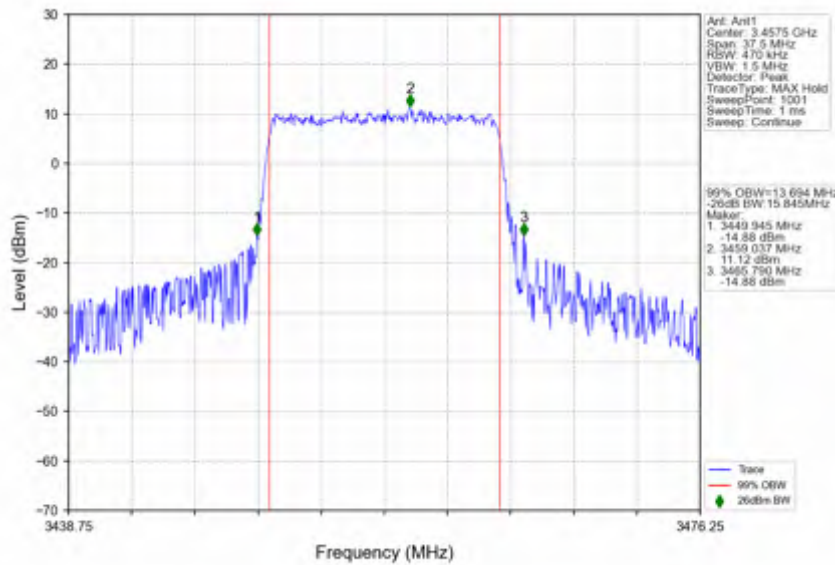
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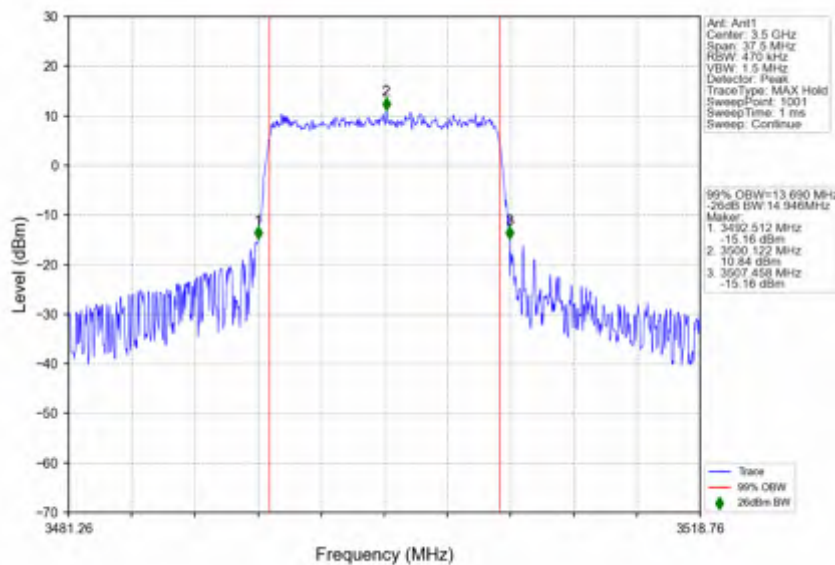
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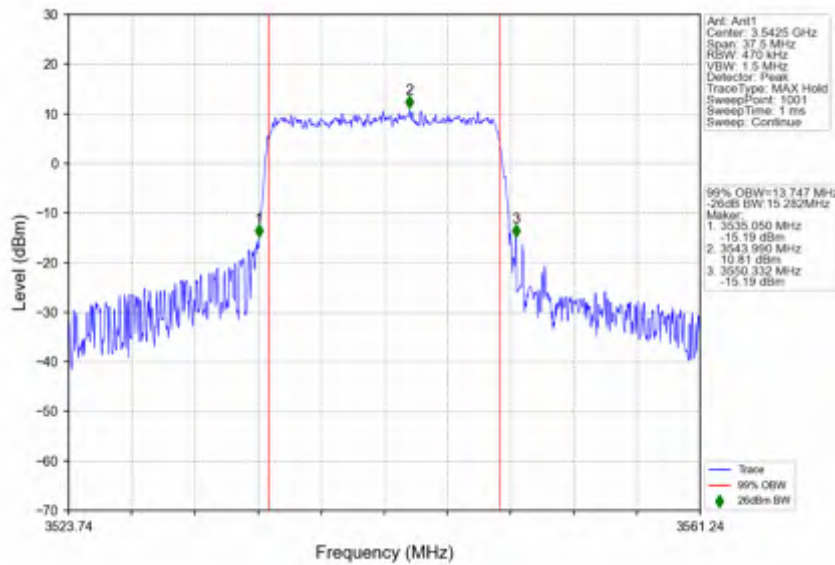
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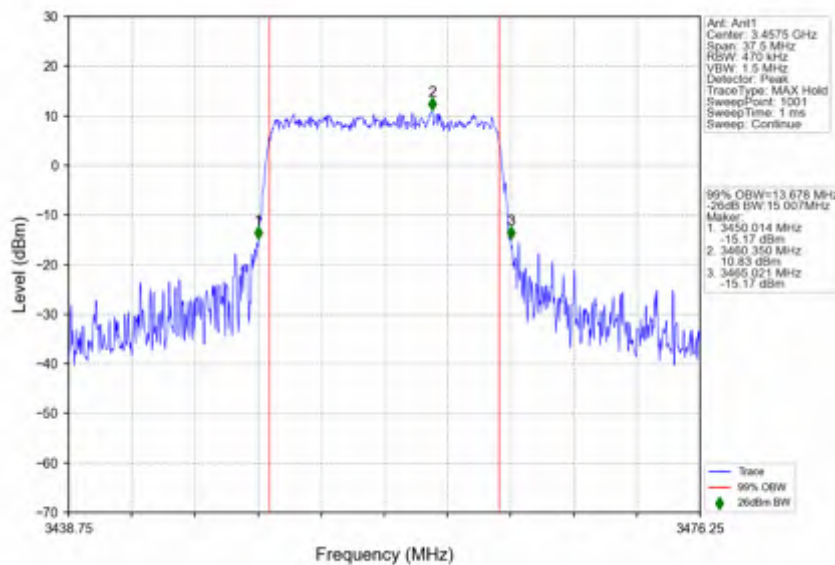
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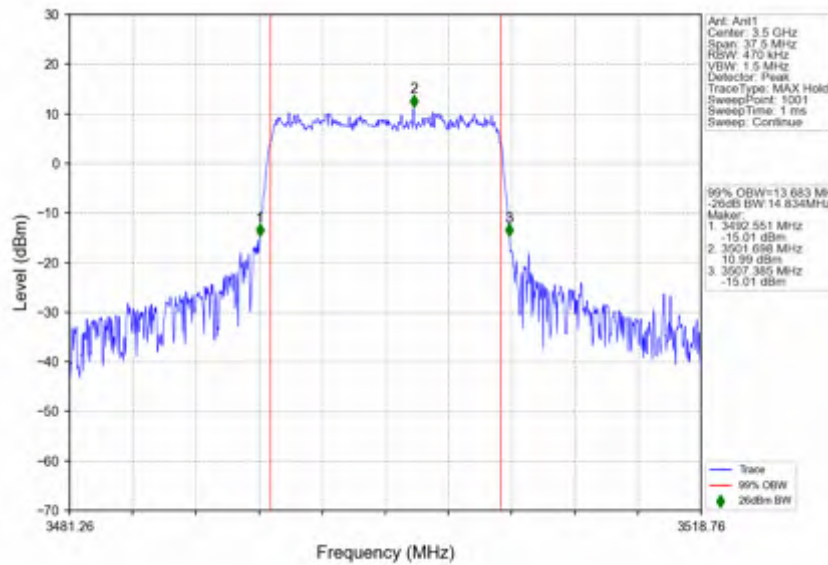


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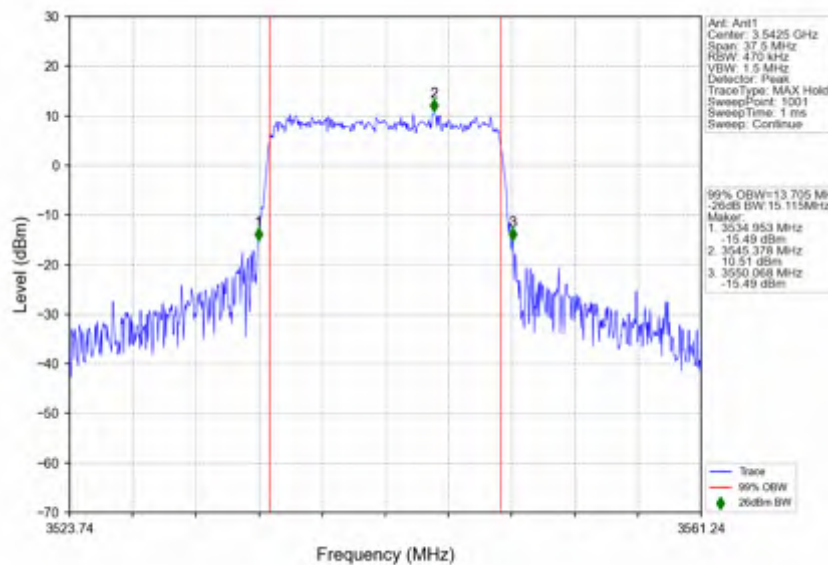
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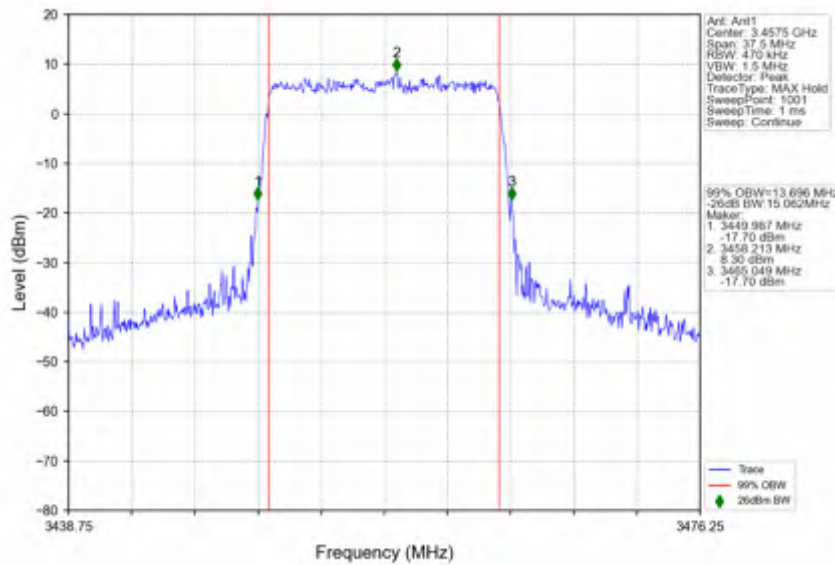
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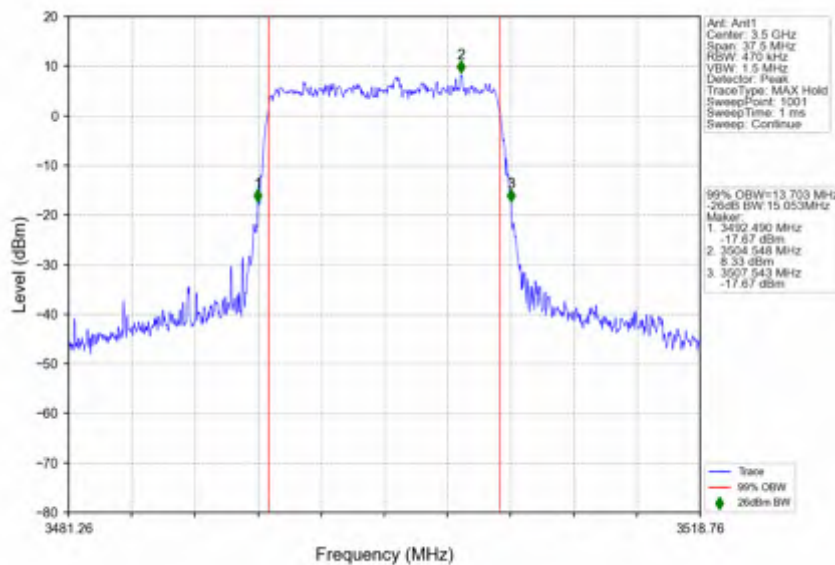
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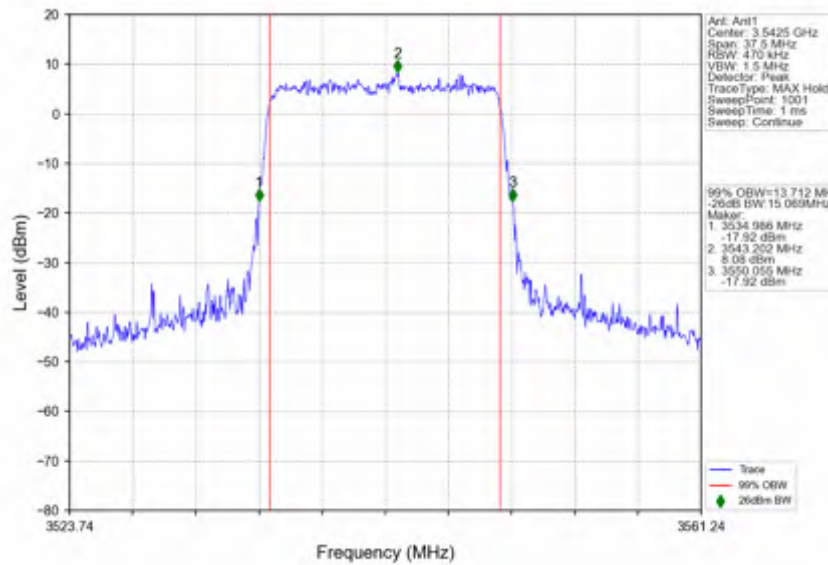
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9.10 30k_SISO_20MHz_NTNV

9.10.1 Test Result

5G NR n78e SCS=30kHz SISO 20MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3460.02	Outer_Full	18.05	19.77	/	Pass
	3500.01	Outer_Full	18.08	19.80	/	Pass
	3540	Outer_Full	18.05	19.66	/	Pass
DFT-s-OFDM QPSK	3460.02	Outer_Full	18.08	19.77	/	Pass
	3500.01	Outer_Full	18.07	19.61	/	Pass
	3540	Outer_Full	18.13	19.65	/	Pass
DFT-s-OFDM 16 QAM	3460.02	Outer_Full	18.13	19.86	/	Pass
	3500.01	Outer_Full	18.14	19.83	/	Pass
	3540	Outer_Full	18.14	19.75	/	Pass
DFT-s-OFDM 64 QAM	3460.02	Outer_Full	18.14	19.71	/	Pass
	3500.01	Outer_Full	18.14	19.80	/	Pass
	3540	Outer_Full	18.13	19.55	/	Pass
DFT-s-OFDM 256 QAM	3460.02	Outer_Full	18.09	19.79	/	Pass
	3500.01	Outer_Full	18.10	19.82	/	Pass
	3540	Outer_Full	18.08	19.86	/	Pass
CP-OFDM QPSK	3460.02	Outer_Full	18.37	19.94	/	Pass
	3500.01	Outer_Full	18.41	20.02	/	Pass
	3540	Outer_Full	18.39	19.91	/	Pass
CP-OFDM 16 QAM	3460.02	Outer_Full	18.41	20.18	/	Pass
	3500.01	Outer_Full	18.40	19.96	/	Pass
	3540	Outer_Full	18.40	20.28	/	Pass
CP-OFDM 64 QAM	3460.02	Outer_Full	18.37	20.01	/	Pass
	3500.01	Outer_Full	18.35	20.21	/	Pass
	3540	Outer_Full	18.37	20.21	/	Pass
CP-OFDM 256 QAM	3460.02	Outer_Full	18.44	20.38	/	Pass
	3500.01	Outer_Full	18.43	20.29	/	Pass
	3540	Outer_Full	18.43	20.16	/	Pass



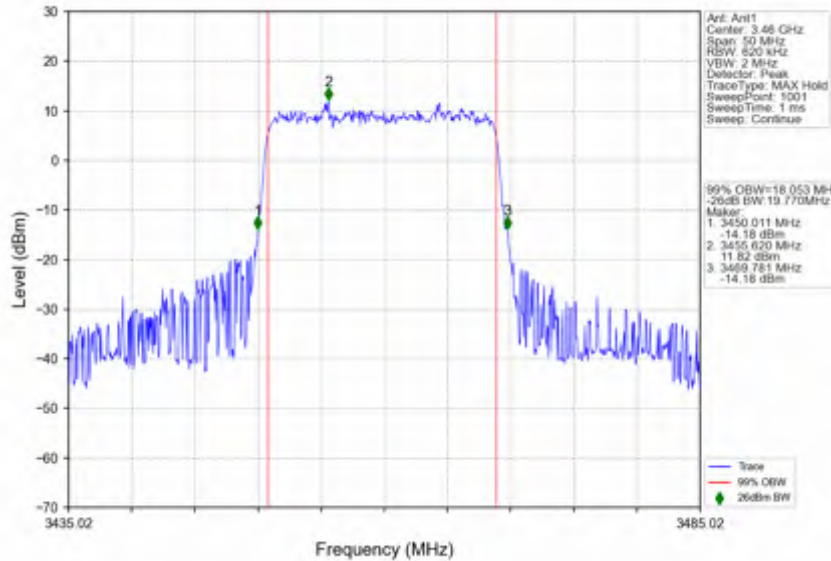
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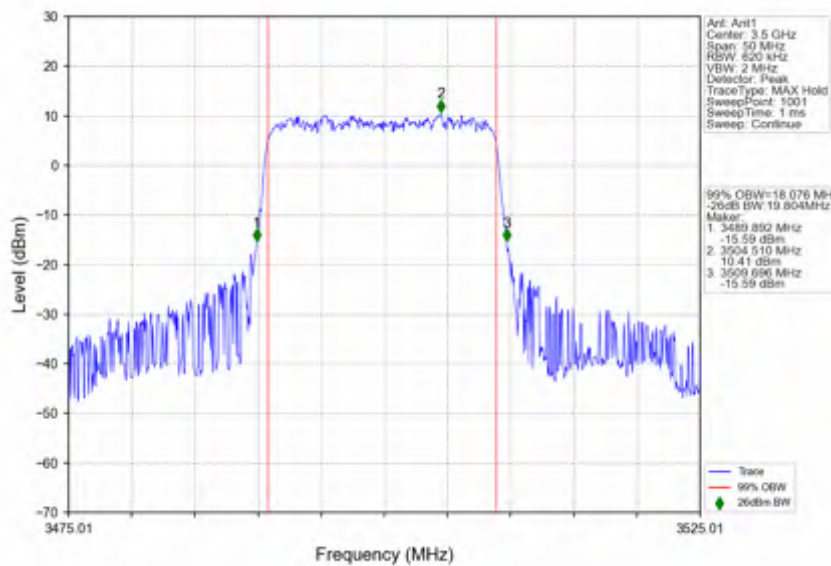
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9.10.2 Test Graph

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n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



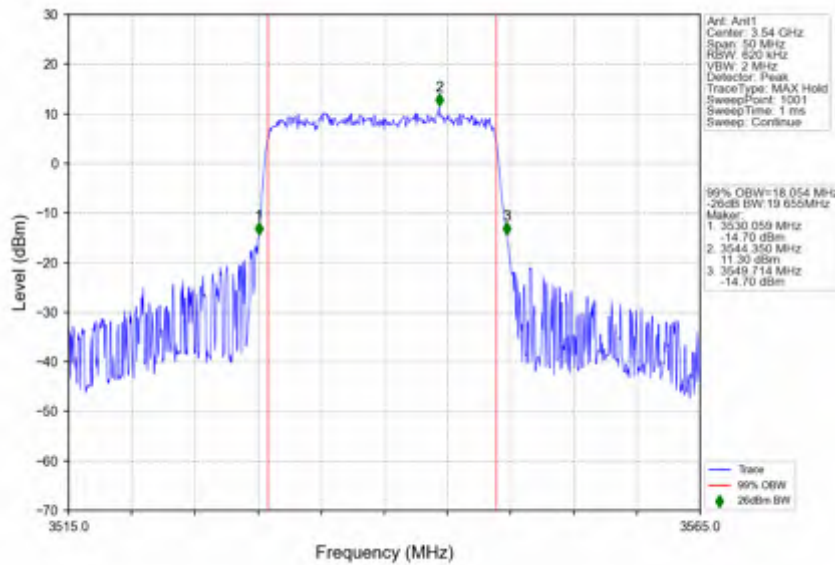
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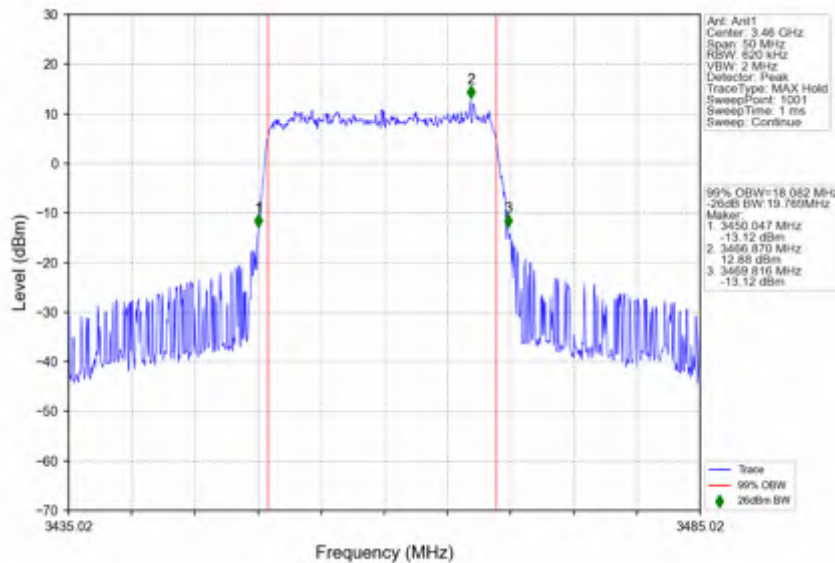
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n78e_30kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_3460.02MHz_Outer_Full



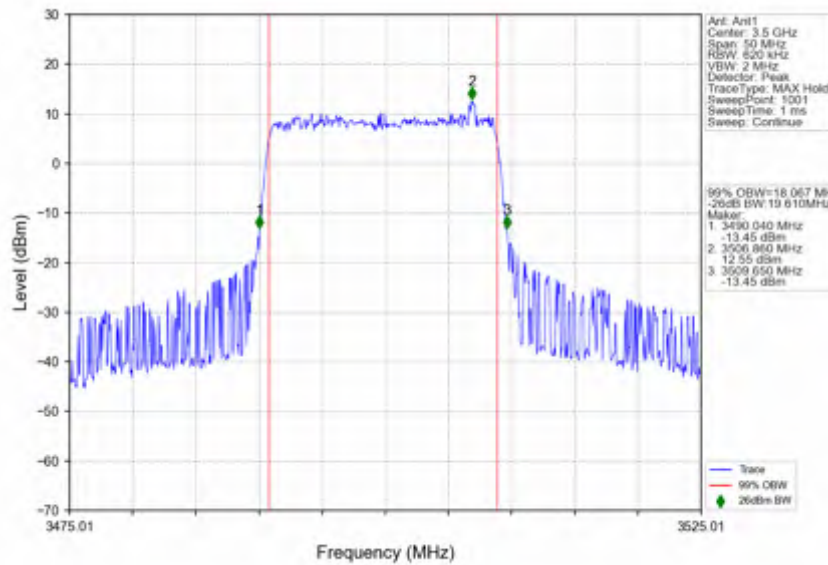
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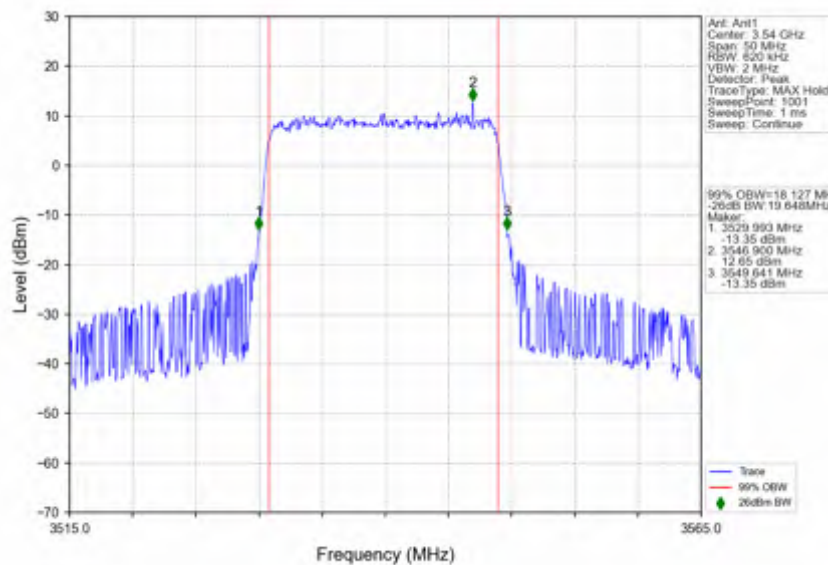
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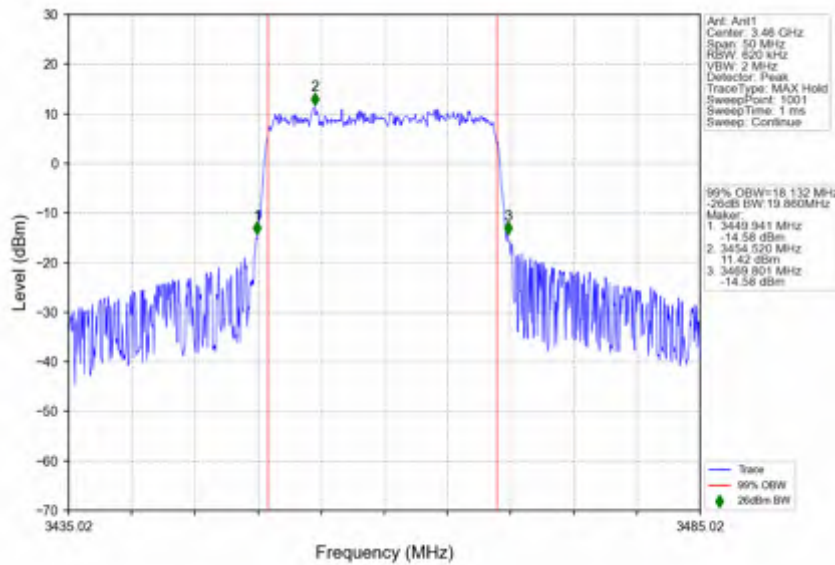
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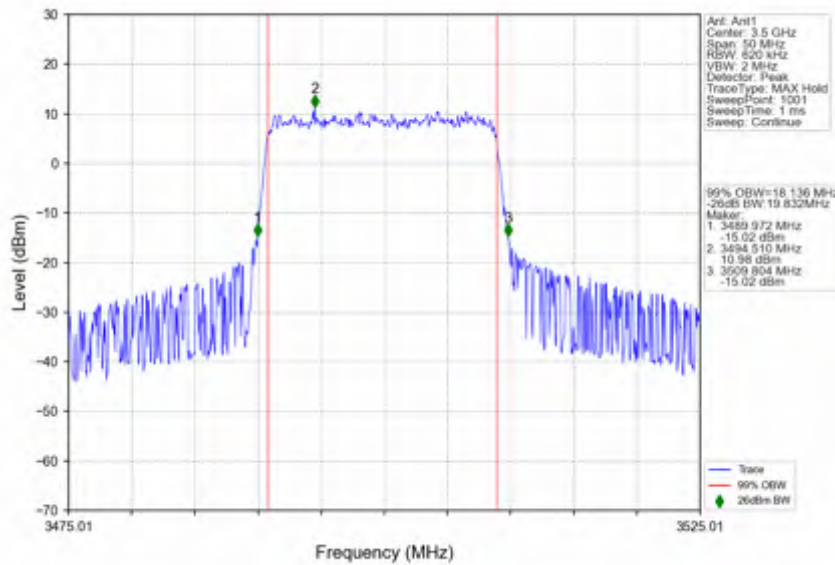
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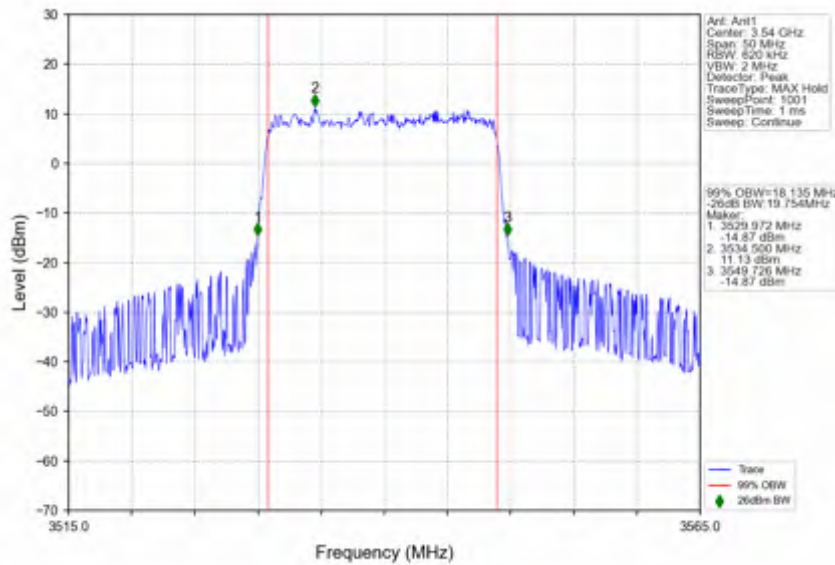


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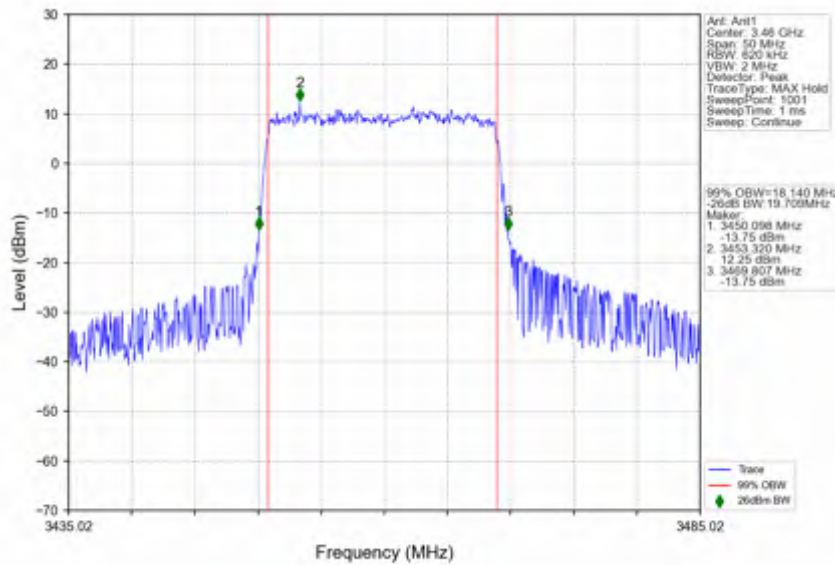
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n78e_30kHz_SISO_NTV_20MHz_DFT-s-OFDM 64 QAM_3460.02MHz_Outer_Full



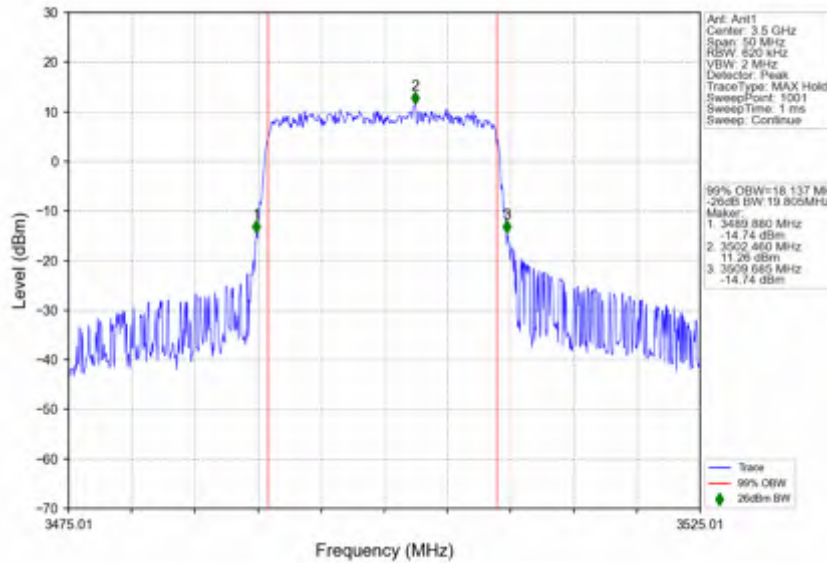
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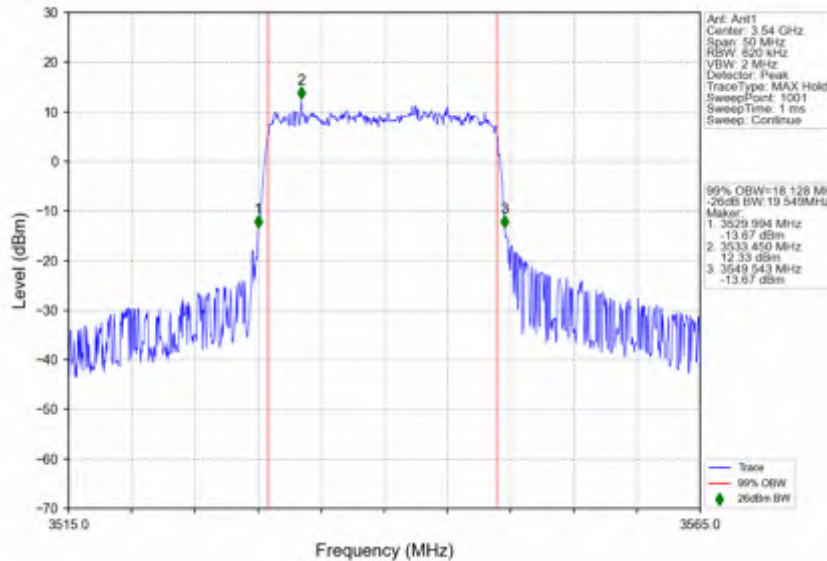
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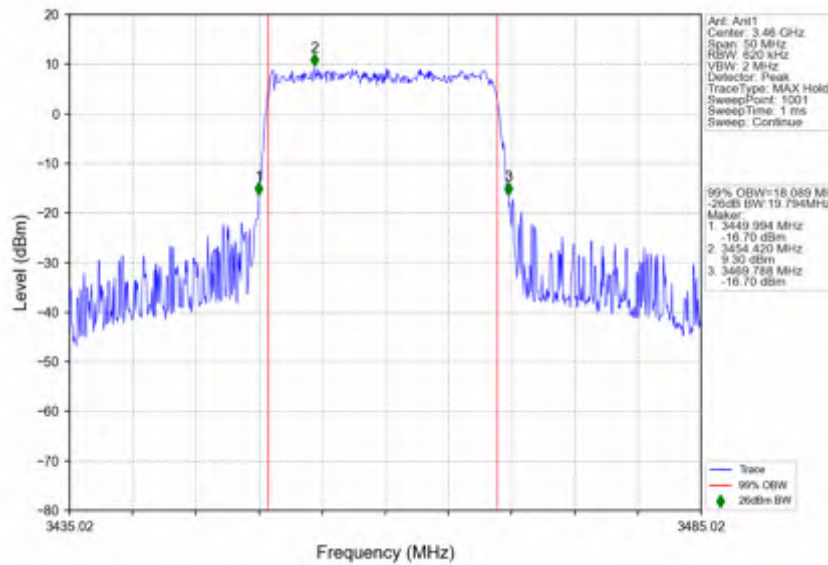


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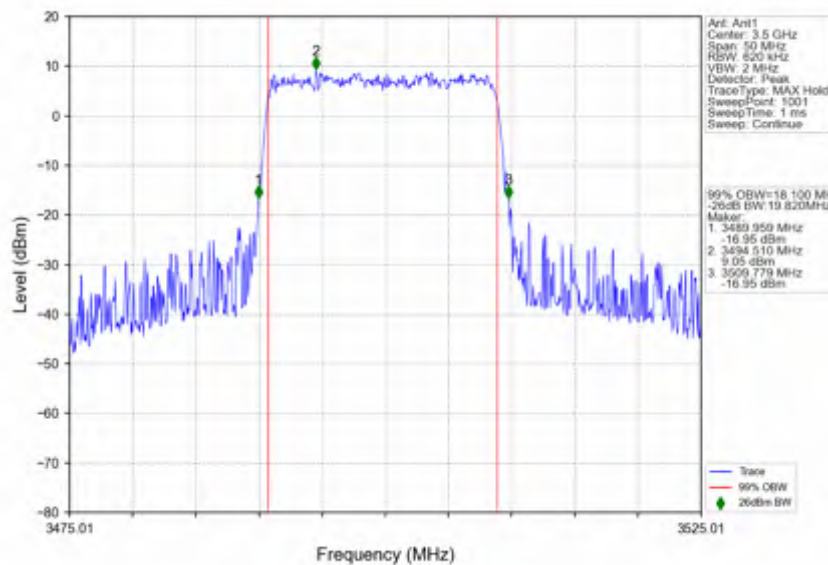
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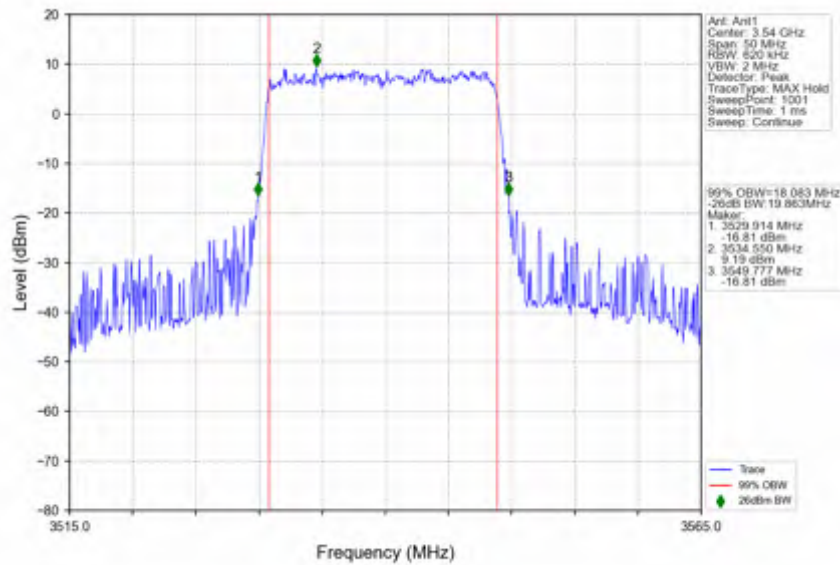
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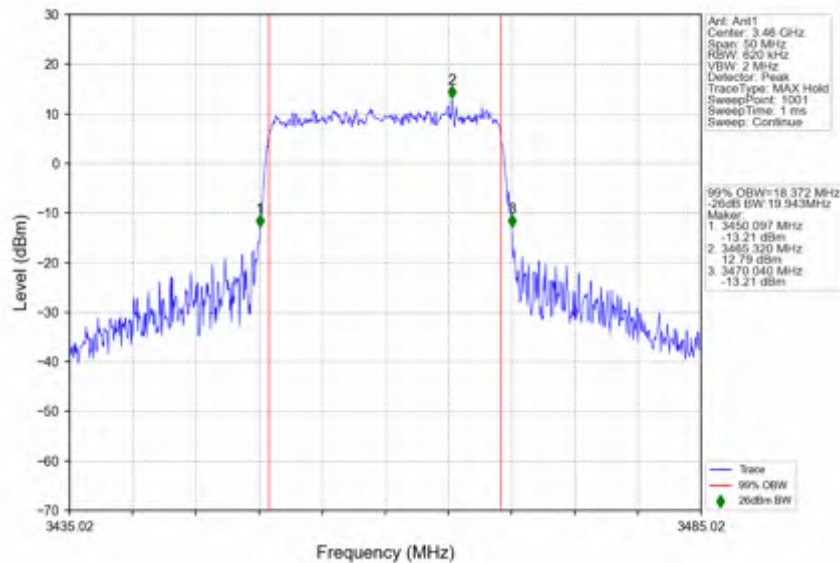
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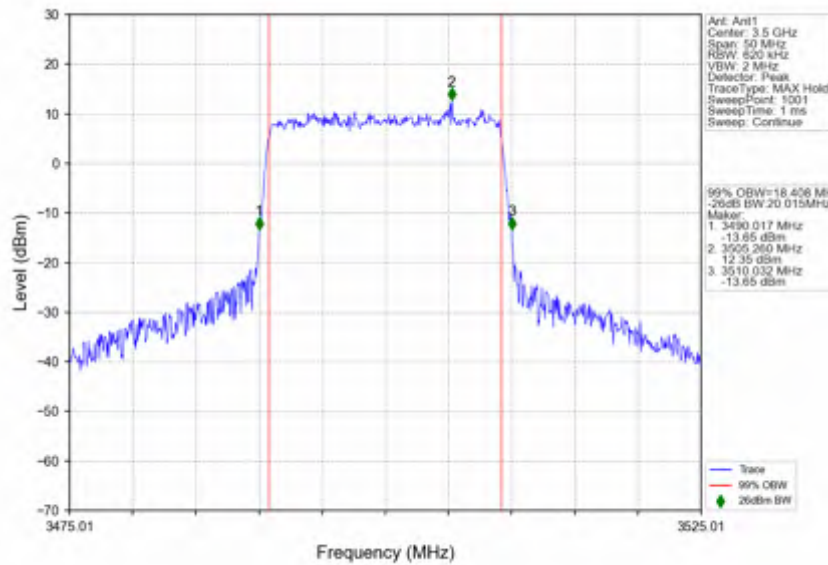
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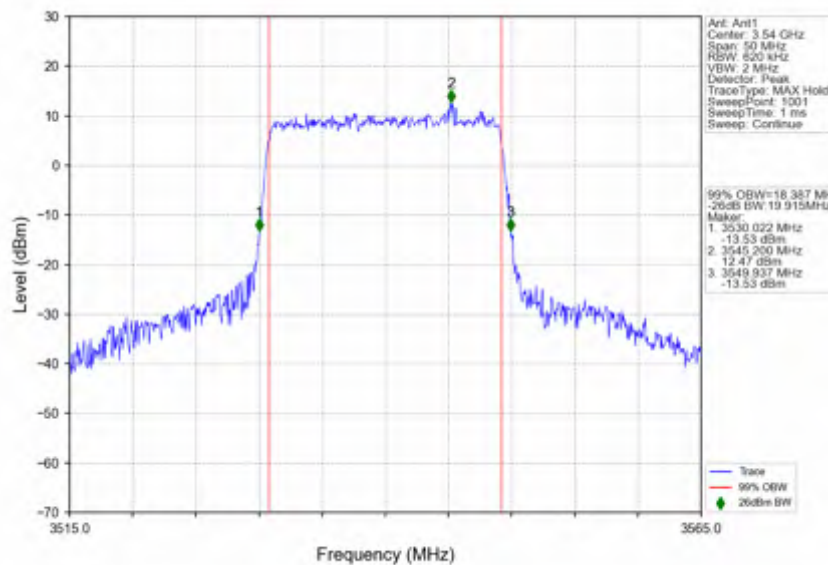
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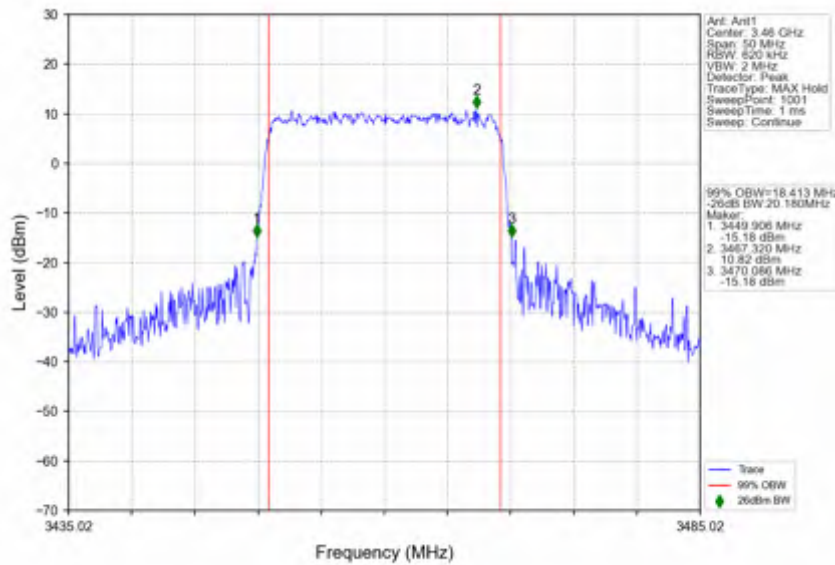
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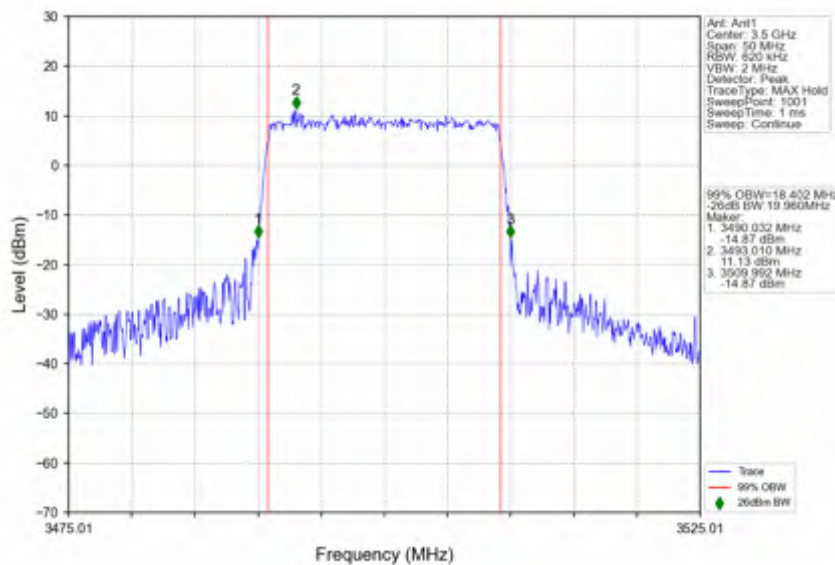
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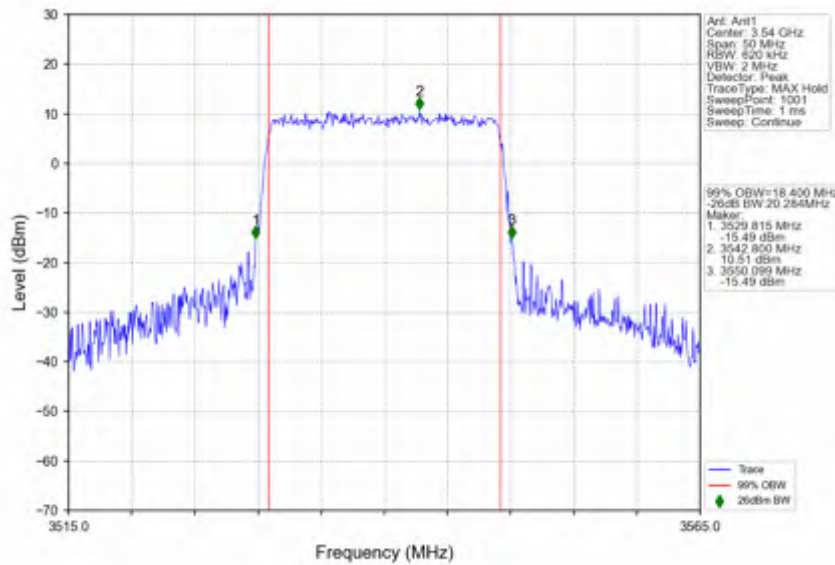


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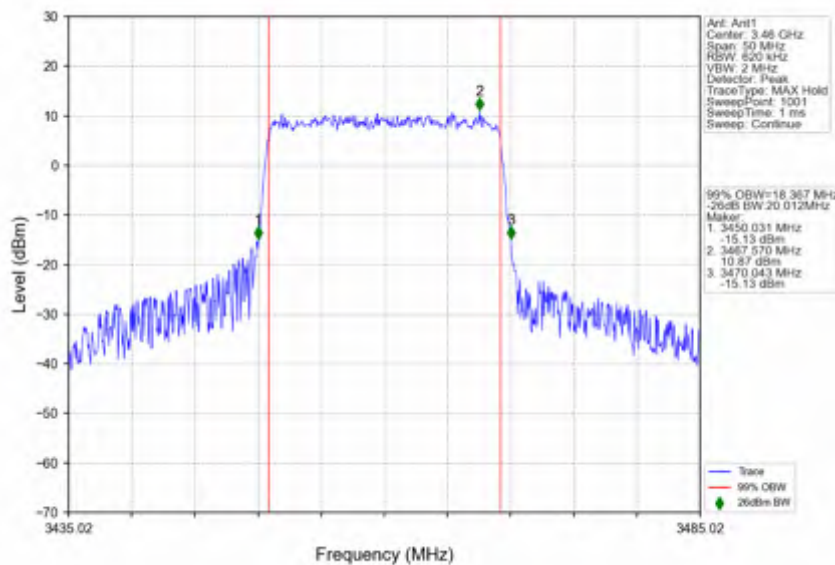
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n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_3540MHz_Outer_Full



n78e_30kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_3460.02MHz_Outer_Full



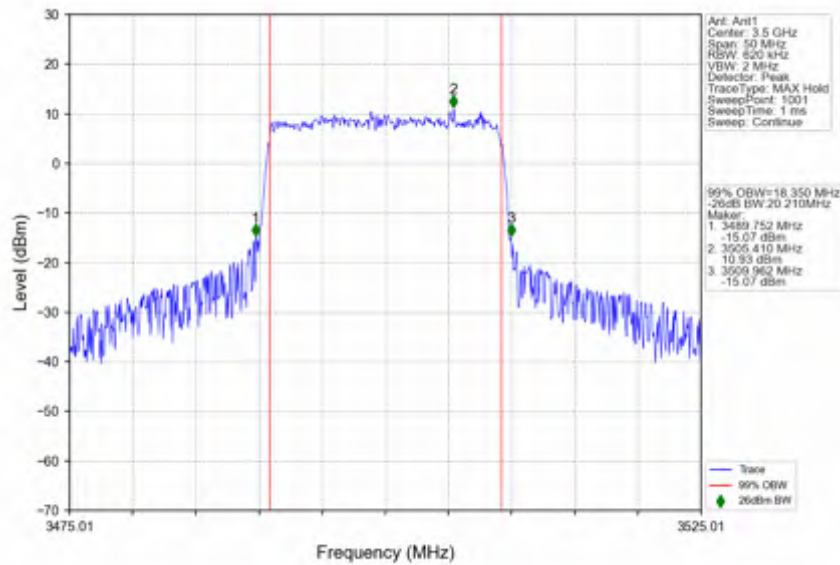
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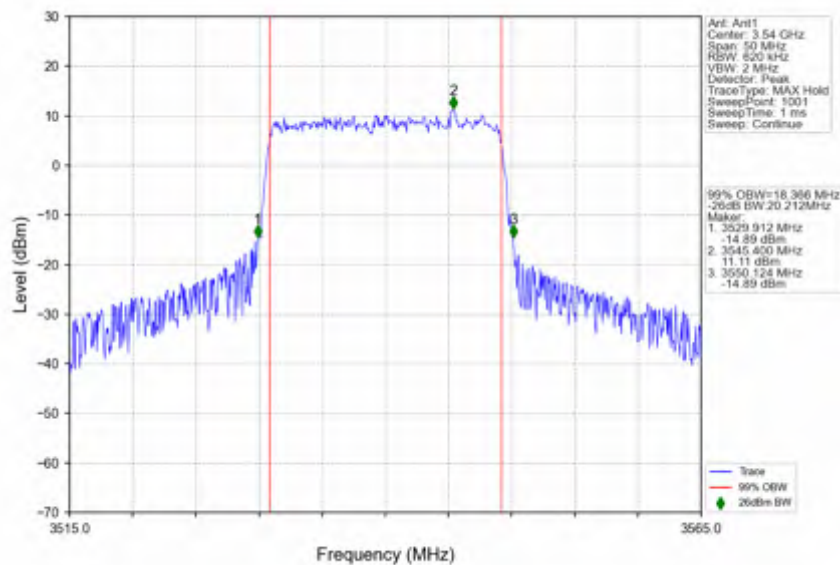
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n78e_30kHz_SISO_NTV_20MHz_CP-OFDM 64 QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTV_20MHz_CP-OFDM 64 QAM_3540MHz_Outer_Full

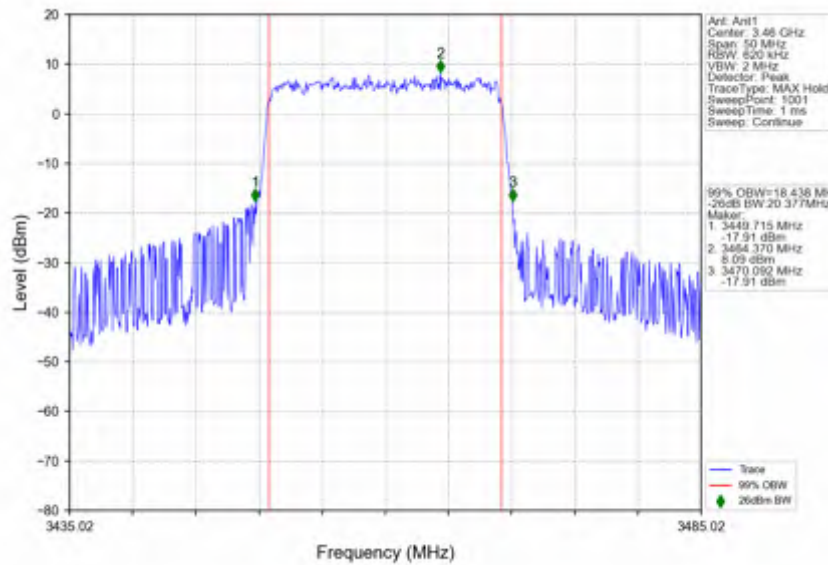


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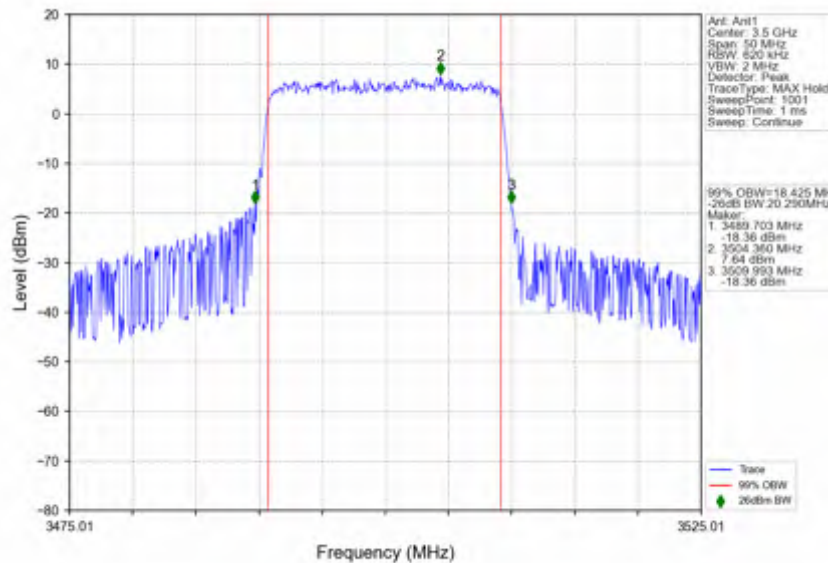
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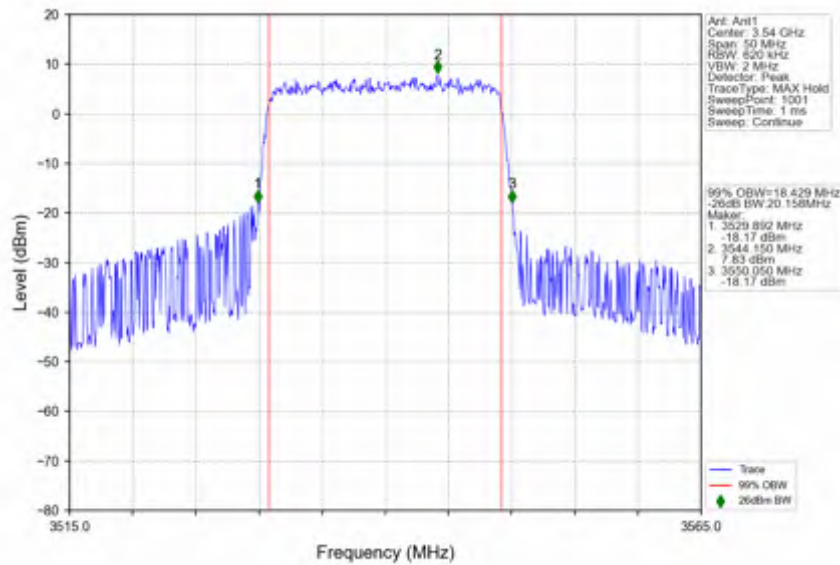
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9.11 30k_SISO_25MHz_NTNV

9.11.1 Test Result

5G NR n78e SCS=30kHz SISO 25MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3462.51	Outer_Full	23.12	25.00	/	Pass
	3500.01	Outer_Full	23.13	25.13	/	Pass
	3537.48	Outer_Full	23.11	25.06	/	Pass
DFT-s-OFDM QPSK	3462.51	Outer_Full	23.22	25.94	/	Pass
	3500.01	Outer_Full	23.21	25.78	/	Pass
	3537.48	Outer_Full	23.21	25.14	/	Pass
DFT-s-OFDM 16 QAM	3462.51	Outer_Full	23.15	25.08	/	Pass
	3500.01	Outer_Full	23.27	25.32	/	Pass
	3537.48	Outer_Full	23.20	25.39	/	Pass
DFT-s-OFDM 64 QAM	3462.51	Outer_Full	23.06	25.07	/	Pass
	3500.01	Outer_Full	23.04	25.48	/	Pass
	3537.48	Outer_Full	23.04	25.00	/	Pass
DFT-s-OFDM 256 QAM	3462.51	Outer_Full	23.13	24.80	/	Pass
	3500.01	Outer_Full	23.15	24.98	/	Pass
	3537.48	Outer_Full	23.11	24.96	/	Pass
CP-OFDM QPSK	3462.51	Outer_Full	23.43	25.50	/	Pass
	3500.01	Outer_Full	23.38	25.33	/	Pass
	3537.48	Outer_Full	23.39	25.66	/	Pass
CP-OFDM 16 QAM	3462.51	Outer_Full	23.40	25.41	/	Pass
	3500.01	Outer_Full	23.42	25.33	/	Pass
	3537.48	Outer_Full	23.40	25.46	/	Pass
CP-OFDM 64 QAM	3462.51	Outer_Full	23.43	25.63	/	Pass
	3500.01	Outer_Full	23.39	25.31	/	Pass
	3537.48	Outer_Full	23.42	25.32	/	Pass
CP-OFDM 256 QAM	3462.51	Outer_Full	23.43	25.82	/	Pass
	3500.01	Outer_Full	23.49	25.74	/	Pass
	3537.48	Outer_Full	23.46	25.52	/	Pass



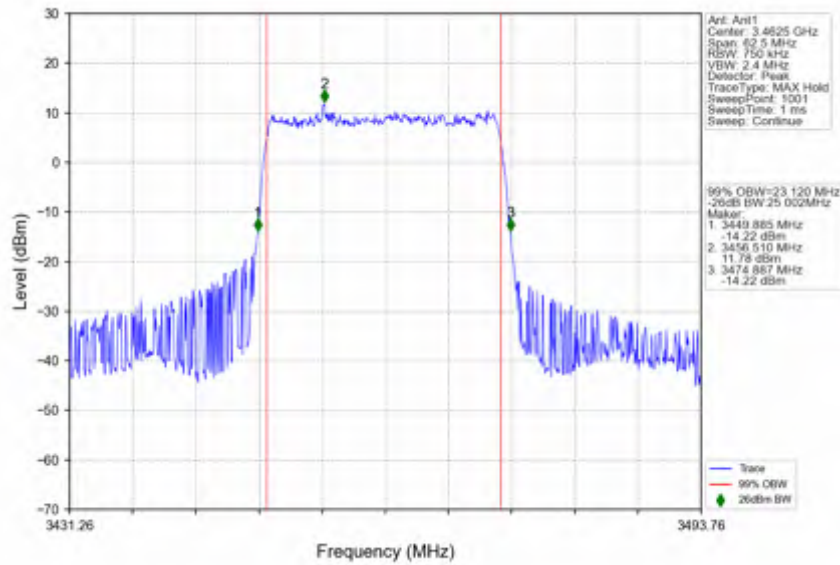
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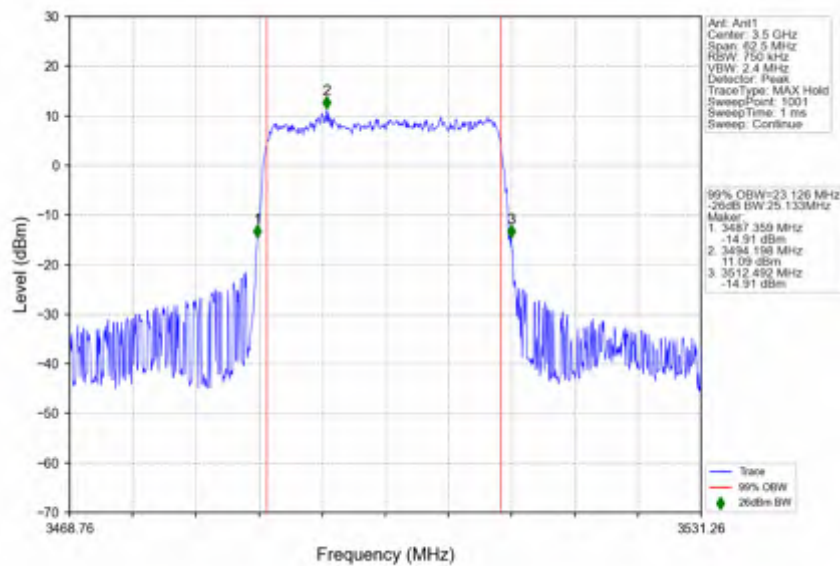
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9.11.2 Test Graph

n78e_30kHz_SISO_NTNV_25MHz_DFT-s-OFDM PI/2 BPSK_3462.51MHz_Outer_Full



n78e_30kHz_SISO_NTNV_25MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



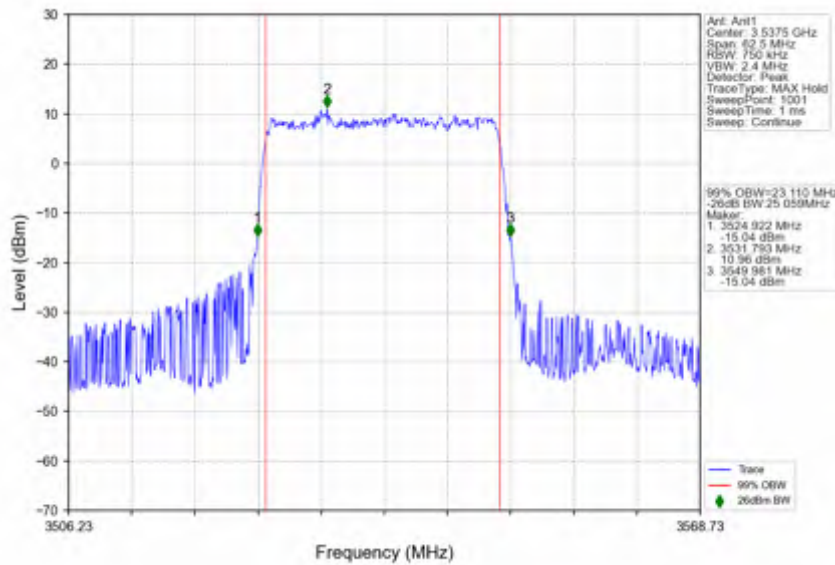
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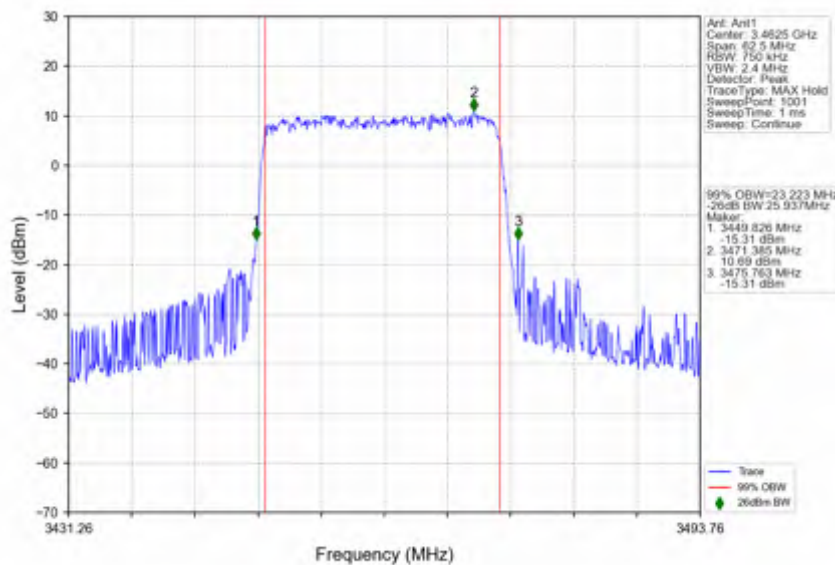
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n78e_30kHz_SISO_NTNV_25MHz_DFT-s-OFDM QPSK_3462.51MHz_Outer_Full



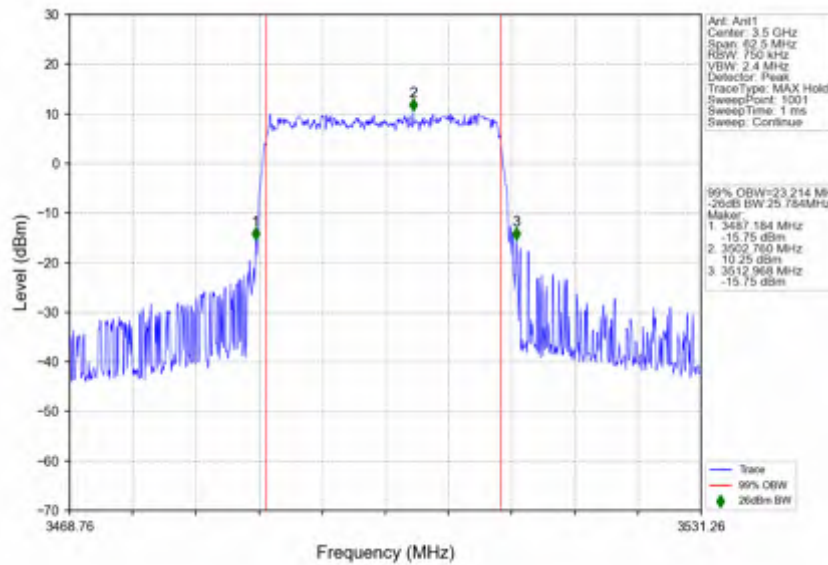
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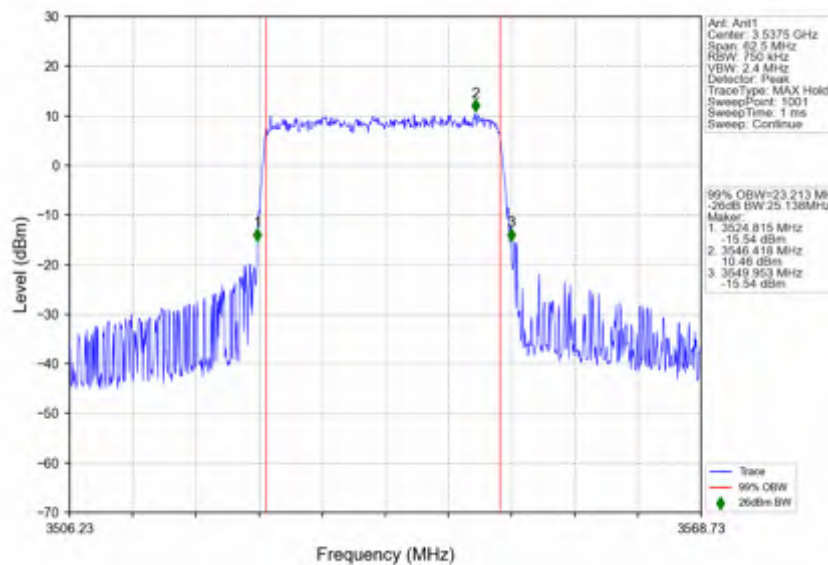
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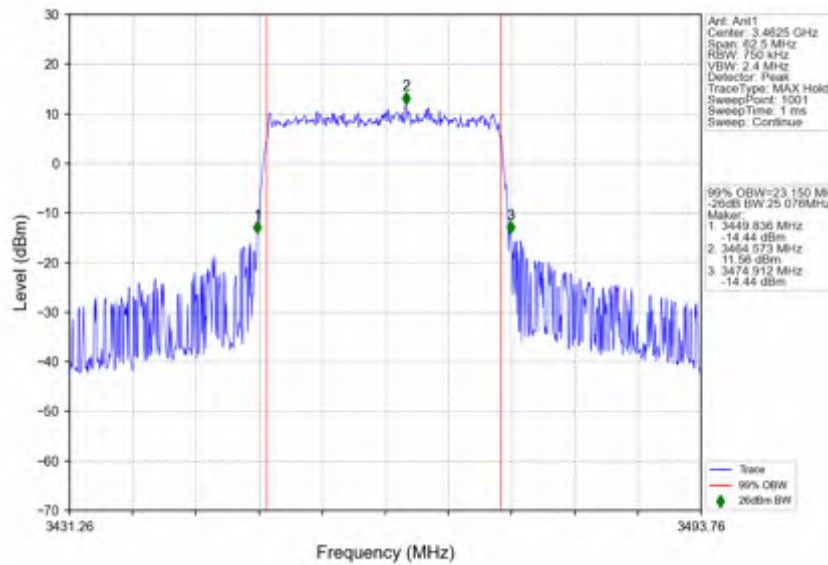
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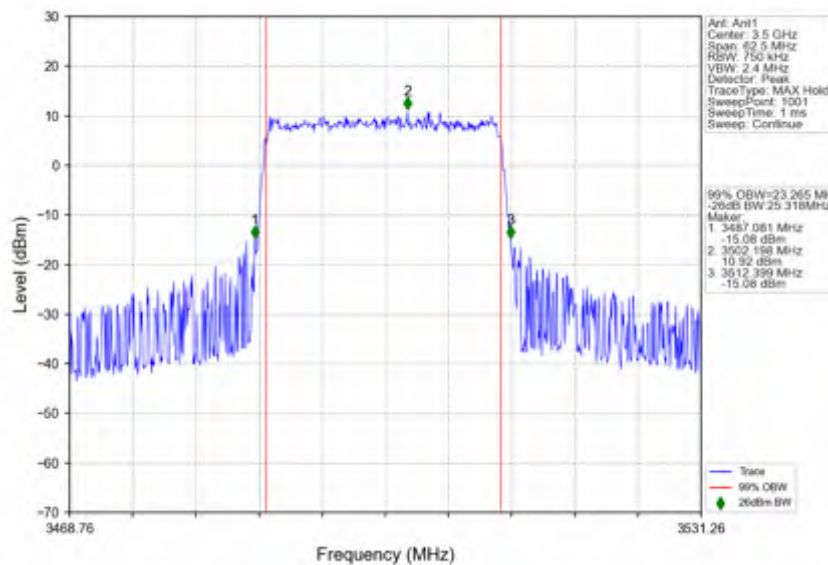
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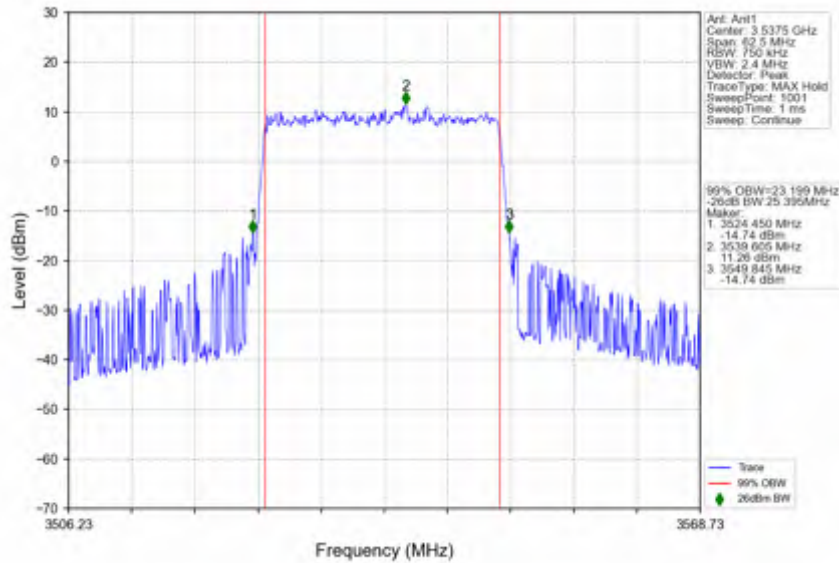
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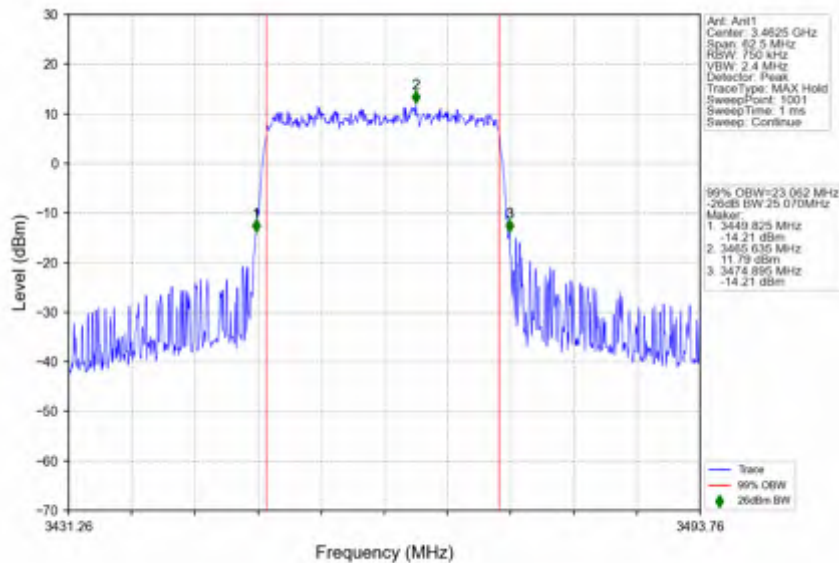
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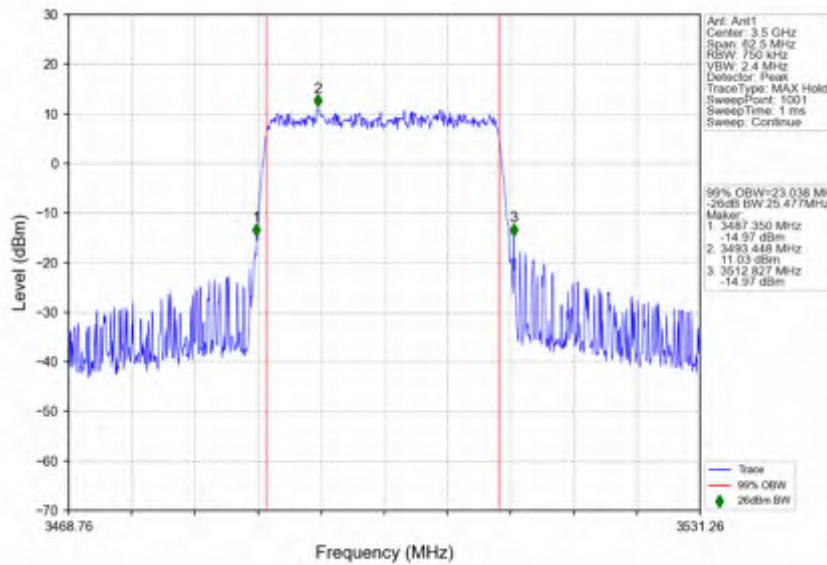
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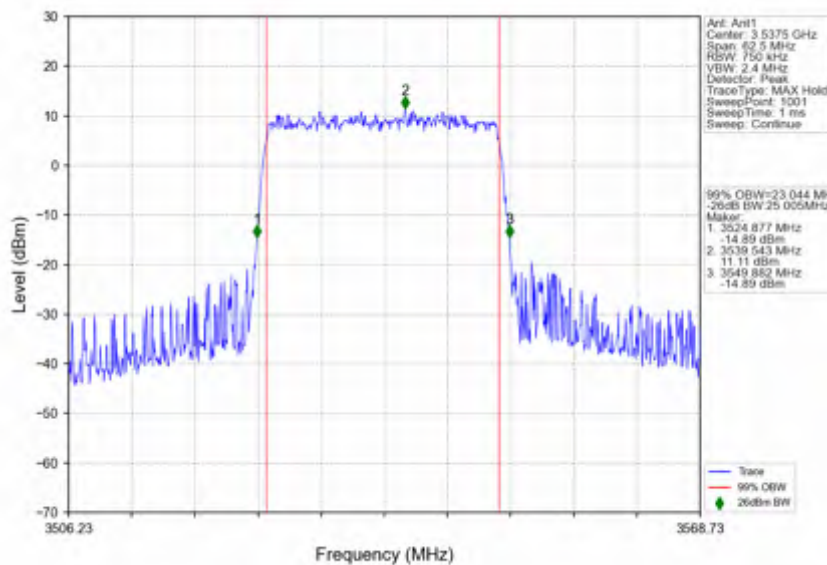
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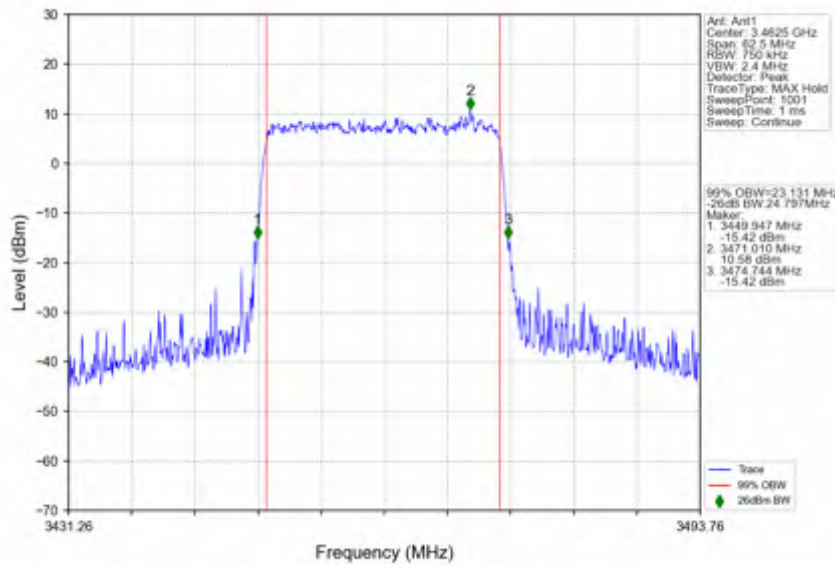
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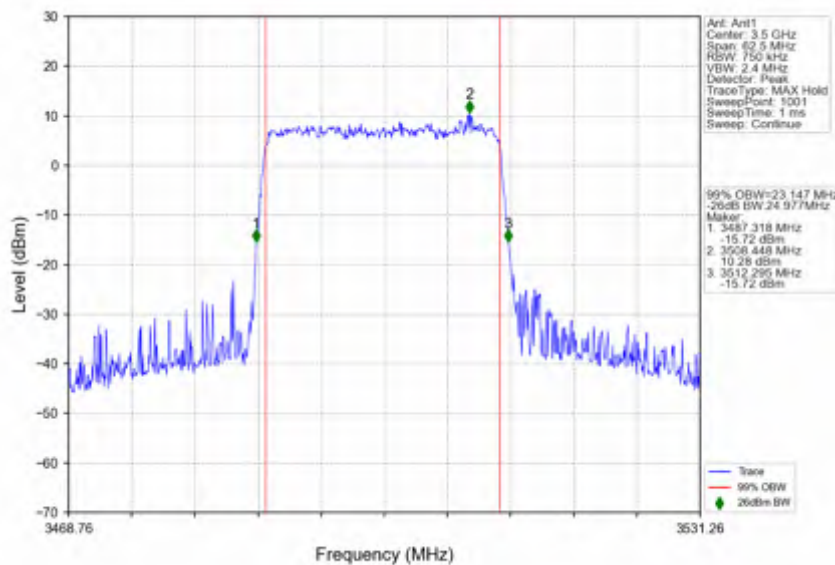
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n78e_30kHz_SISO_NTNV_25MHz_DFT-s-OFDM_256_QAM_3462.51MHz_Outer_Full



n78e_30kHz_SISO_NTNV_25MHz_DFT-s-OFDM_256_QAM_3500.01MHz_Outer_Full

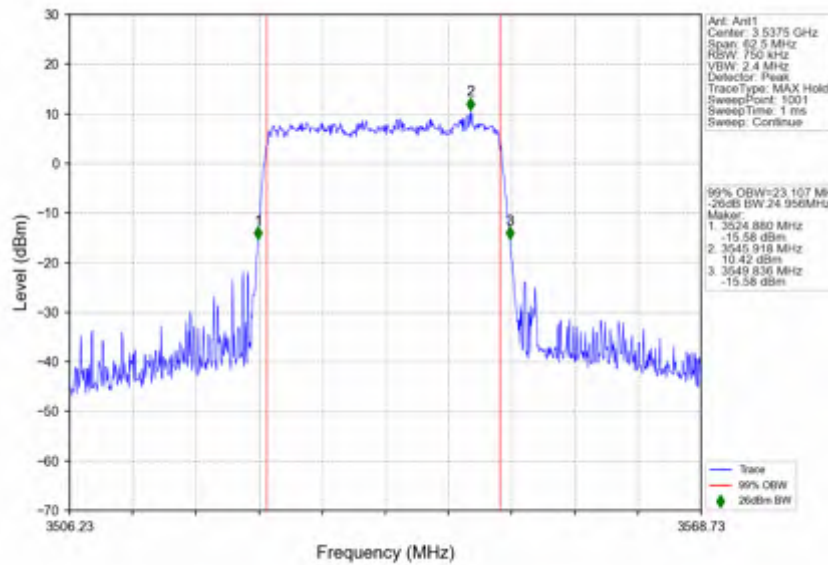


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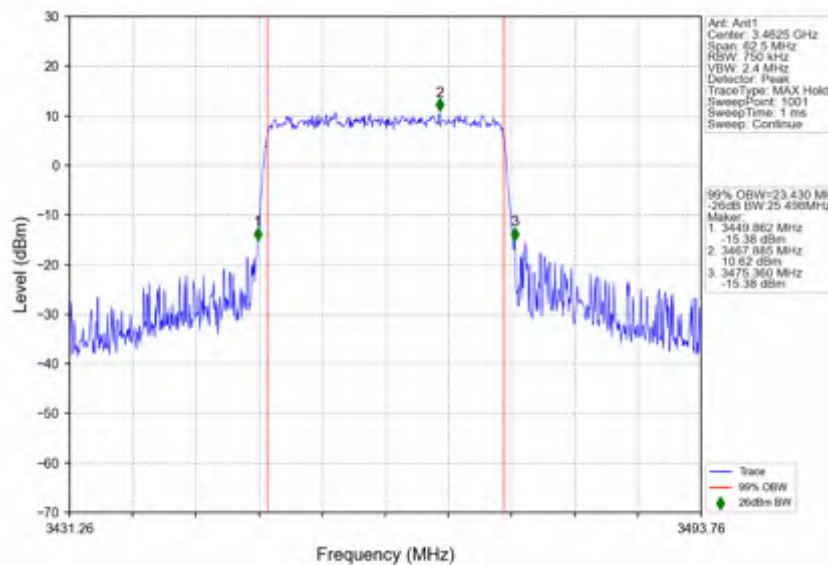
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n78e_30kHz_SISO_NTNV_25MHz_CP-OFDM QPSK_3462.51MHz_Outer_Full

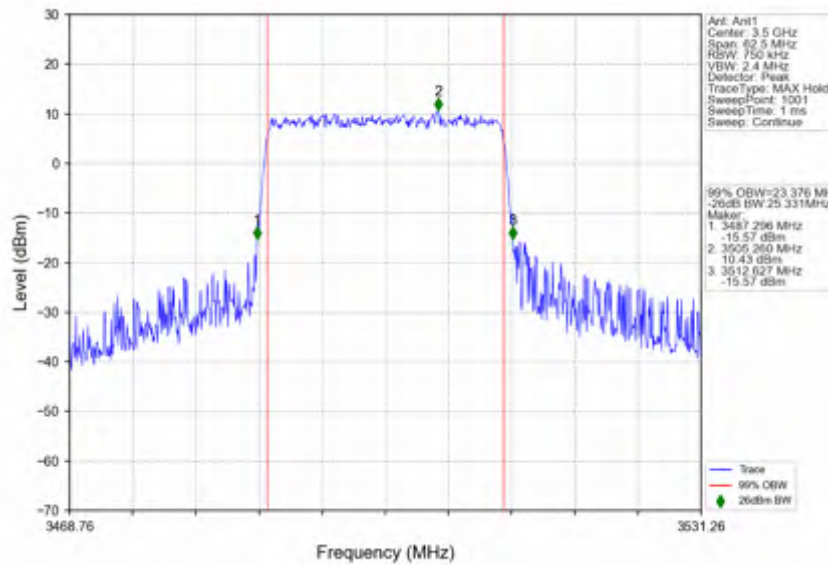


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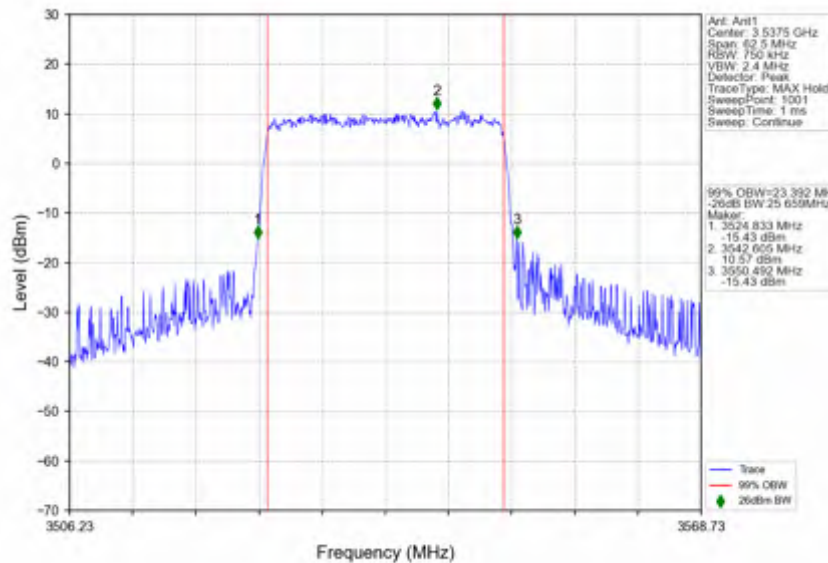
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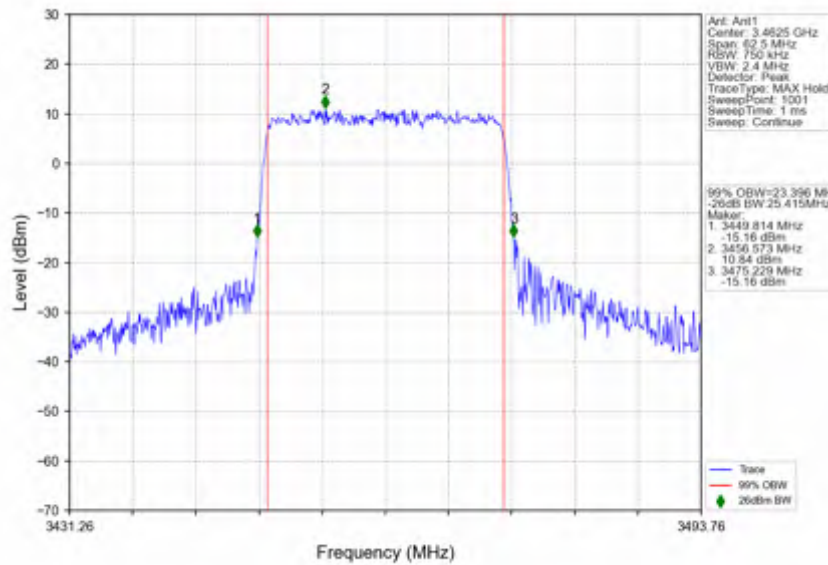
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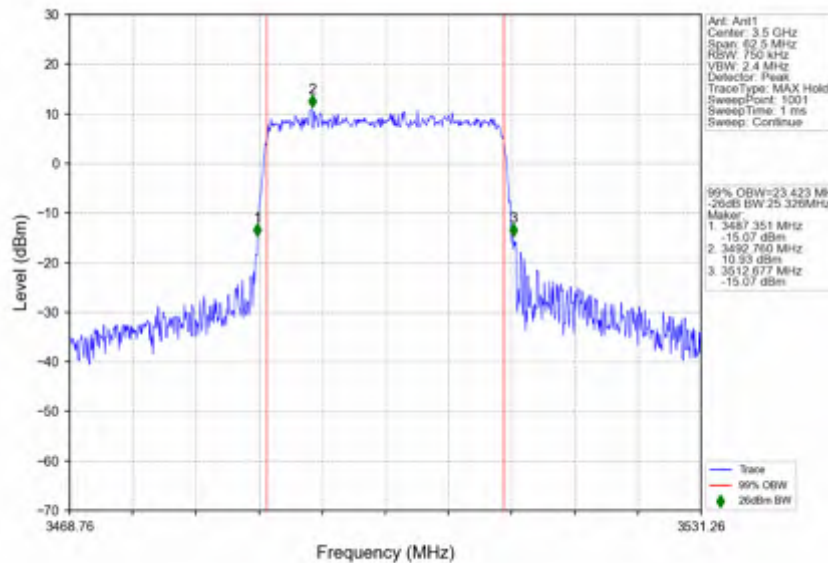
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n78e_30kHz_SISO_NTV_25MHz_CP-OFDM 16 QAM_3500.01MHz_Outer_Full



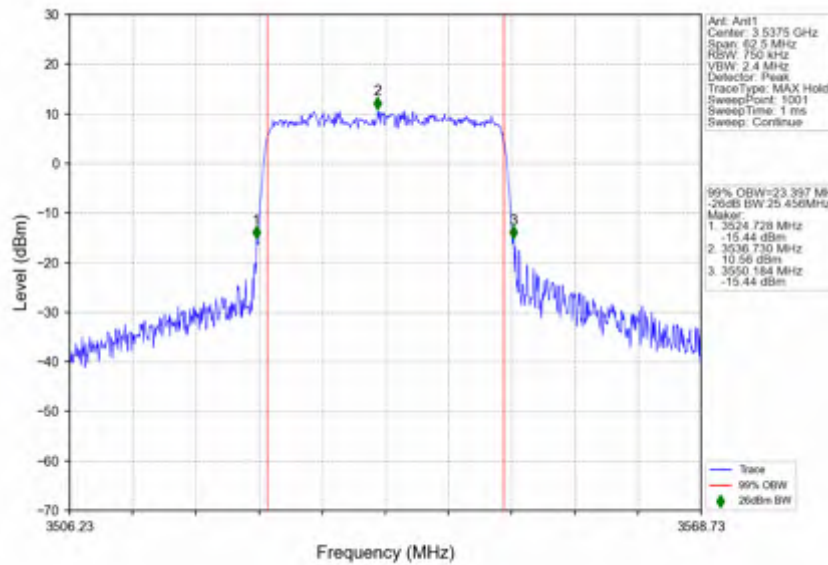
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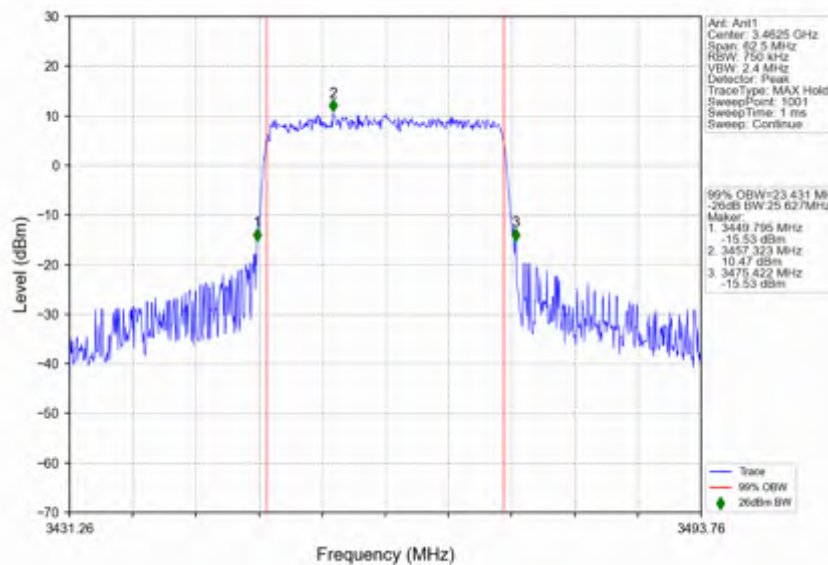
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n78e_30kHz_SISO_NTV_25MHz_CP-OFDM 64 QAM_3462.51MHz_Outer_Full

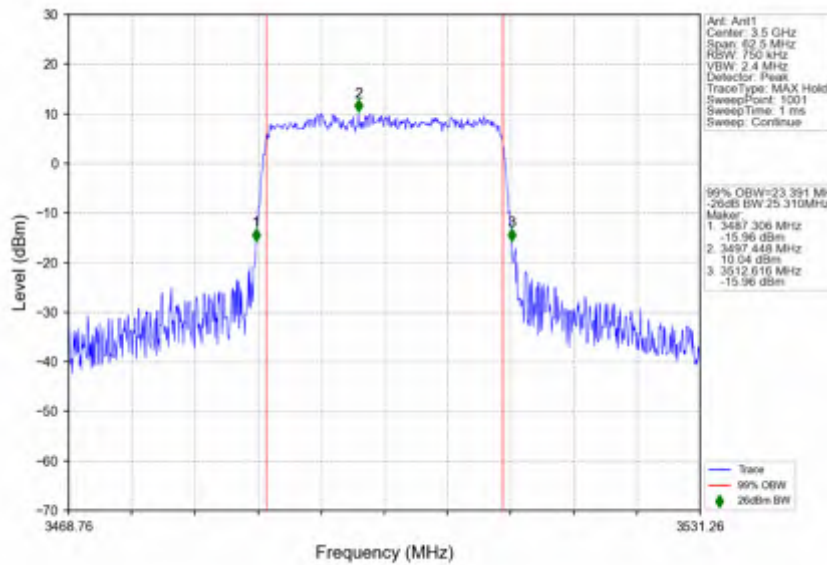


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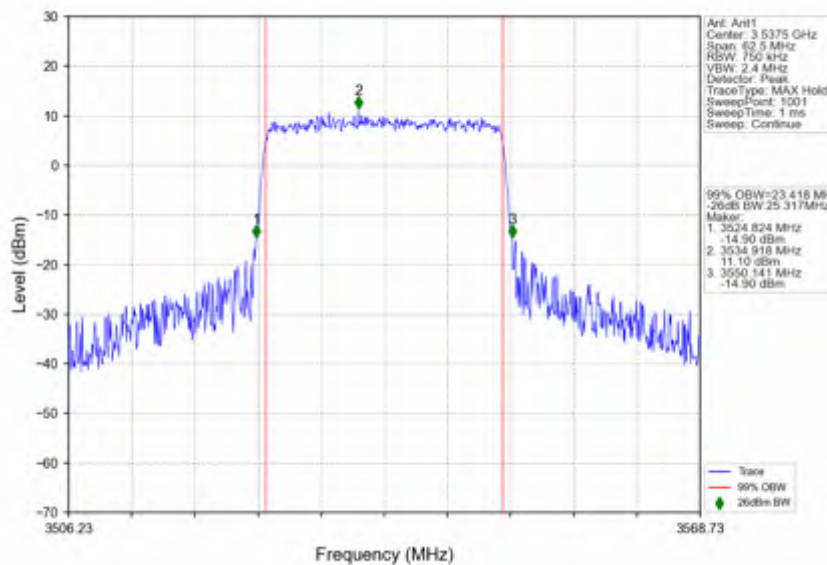
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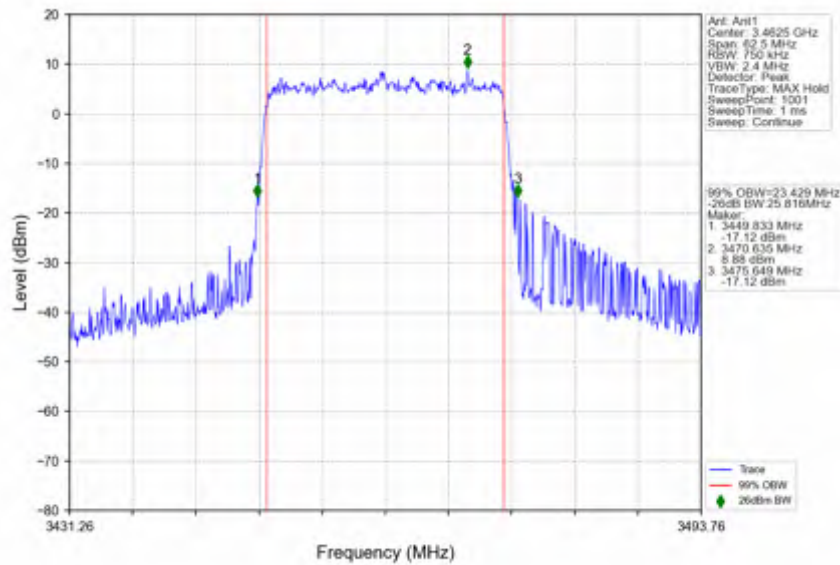
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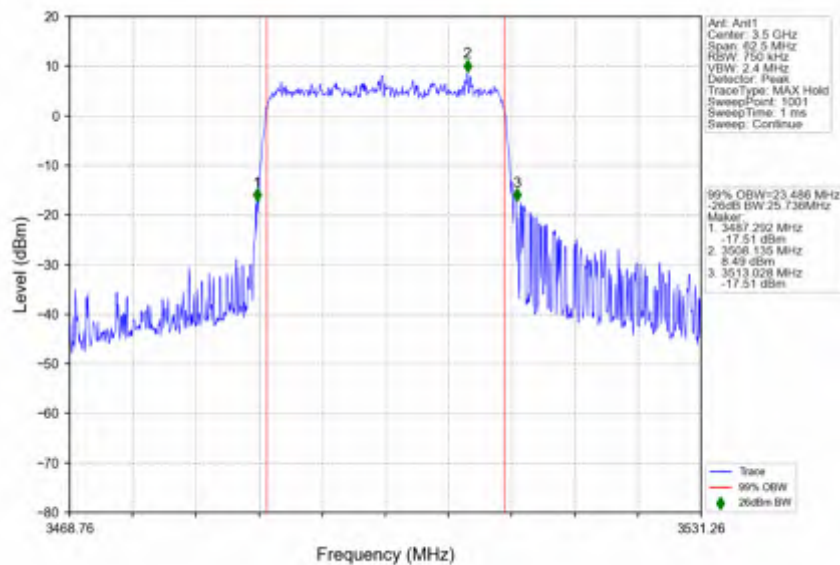
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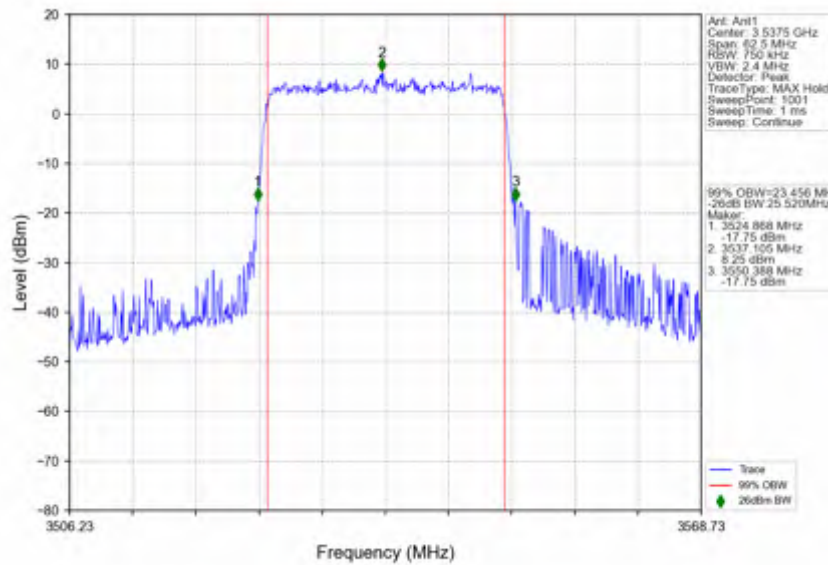
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n78e_30kHz_SISO_NTNV_25MHz_CP-OFDM 256 QAM_3537.48MHz_Outer_Full



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9.12 30k_SISO_30MHz_NTNV

9.12.1 Test Result

5G NR n78e SCS=30kHz SISO 30MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3465	Outer_Full	27.10	29.51	/	Pass
	3500.01	Outer_Full	27.09	29.27	/	Pass
	3534.99	Outer_Full	27.07	29.28	/	Pass
DFT-s-OFDM QPSK	3465	Outer_Full	27.18	31.46	/	Pass
	3500.01	Outer_Full	27.21	30.68	/	Pass
	3534.99	Outer_Full	27.25	29.67	/	Pass
DFT-s-OFDM 16 QAM	3465	Outer_Full	27.17	29.80	/	Pass
	3500.01	Outer_Full	27.06	29.66	/	Pass
	3534.99	Outer_Full	27.14	29.54	/	Pass
DFT-s-OFDM 64 QAM	3465	Outer_Full	27.14	29.51	/	Pass
	3500.01	Outer_Full	27.15	30.03	/	Pass
	3534.99	Outer_Full	27.18	31.17	/	Pass
DFT-s-OFDM 256 QAM	3465	Outer_Full	27.04	29.30	/	Pass
	3500.01	Outer_Full	26.97	29.50	/	Pass
	3534.99	Outer_Full	27.03	29.44	/	Pass
CP-OFDM QPSK	3465	Outer_Full	27.99	31.89	/	Pass
	3500.01	Outer_Full	28.05	31.14	/	Pass
	3534.99	Outer_Full	28.02	30.67	/	Pass
CP-OFDM 16 QAM	3465	Outer_Full	28.03	30.29	/	Pass
	3500.01	Outer_Full	28.05	30.30	/	Pass
	3534.99	Outer_Full	28.04	30.22	/	Pass
CP-OFDM 64 QAM	3465	Outer_Full	28.14	31.32	/	Pass
	3500.01	Outer_Full	28.14	31.17	/	Pass
	3534.99	Outer_Full	28.06	31.02	/	Pass
CP-OFDM 256 QAM	3465	Outer_Full	28.14	30.46	/	Pass
	3500.01	Outer_Full	28.08	30.53	/	Pass
	3534.99	Outer_Full	28.10	30.60	/	Pass



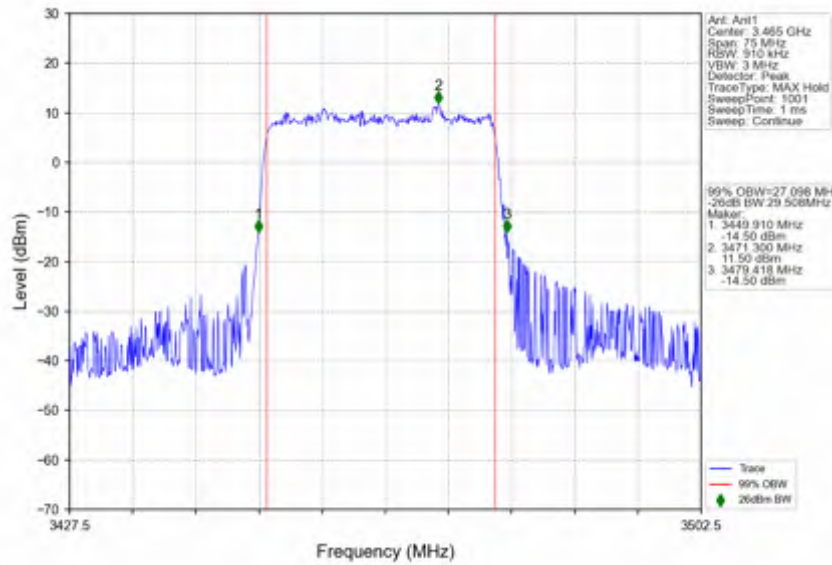
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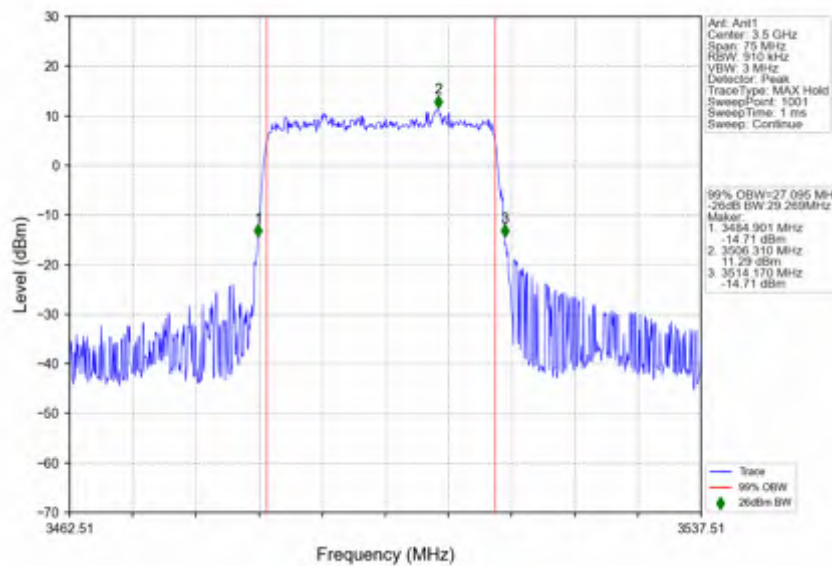
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9.12.2 Test Graph

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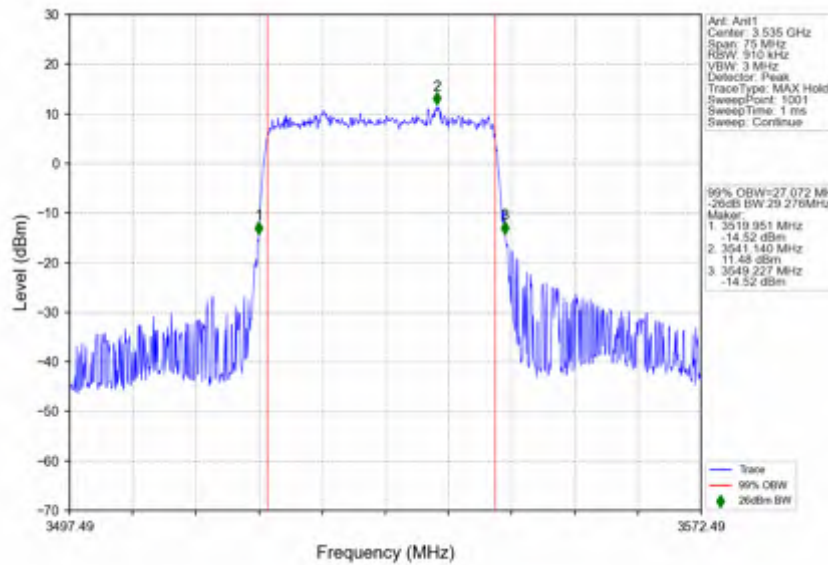
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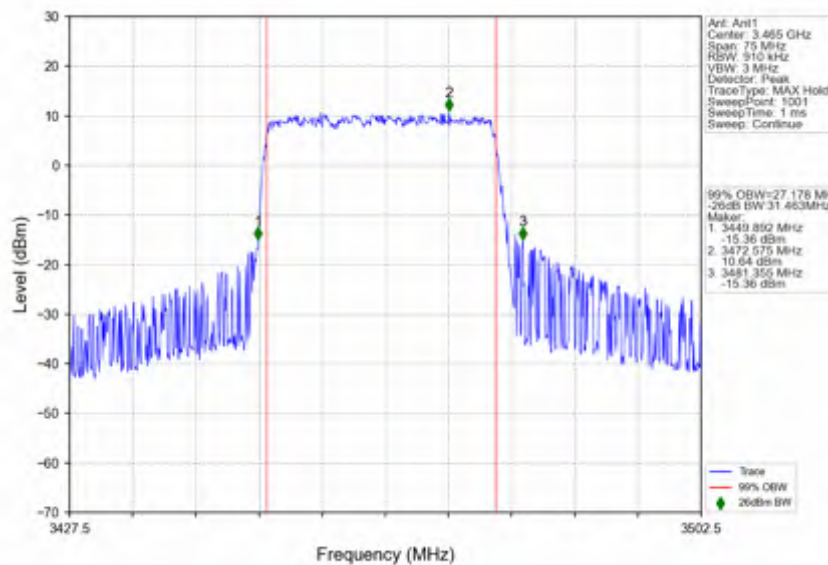
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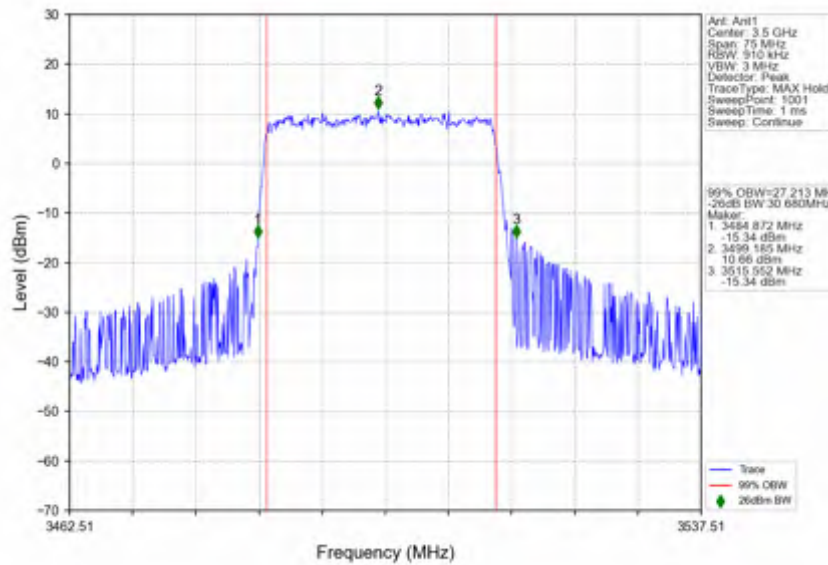


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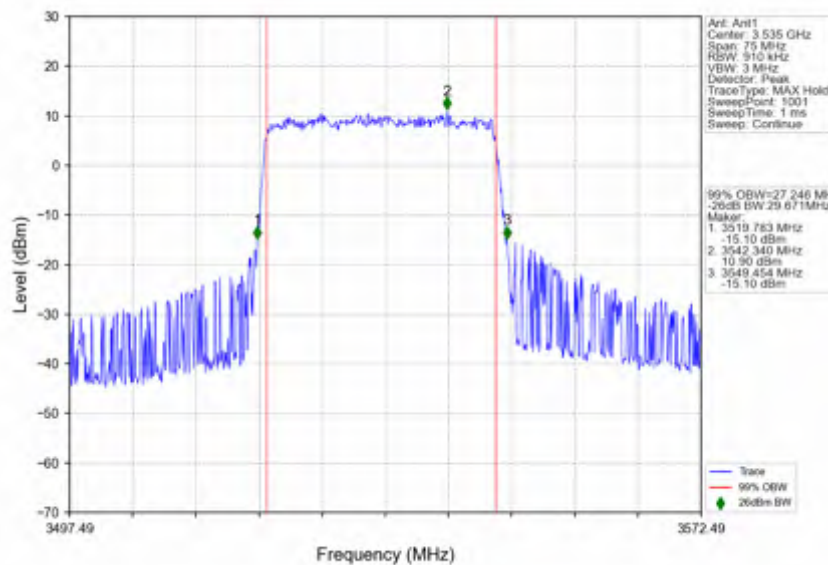
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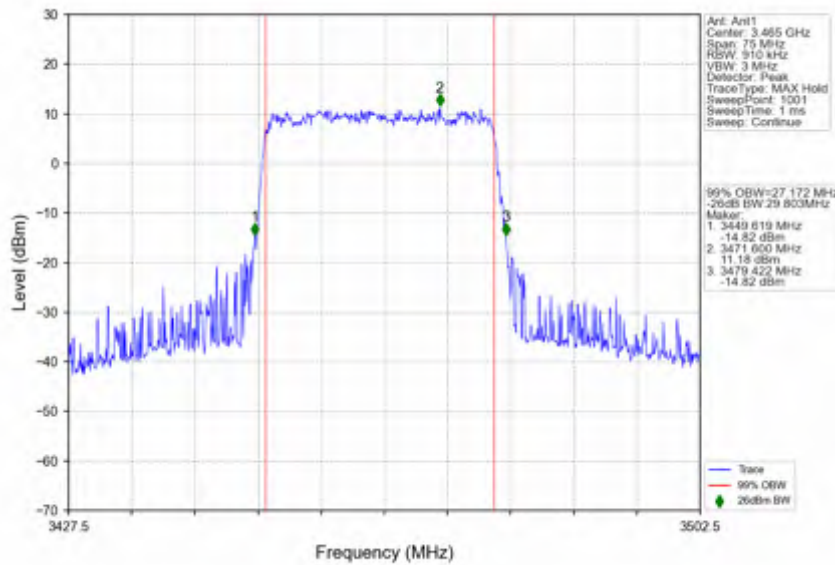
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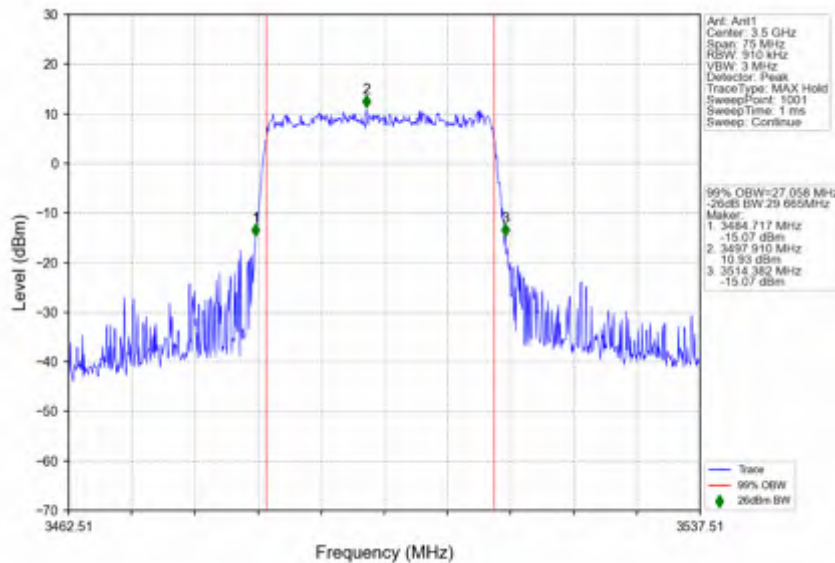
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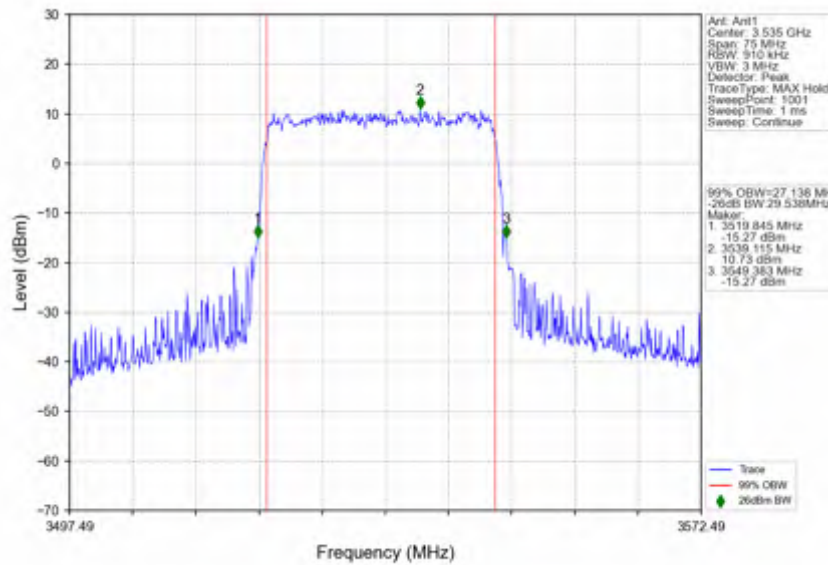
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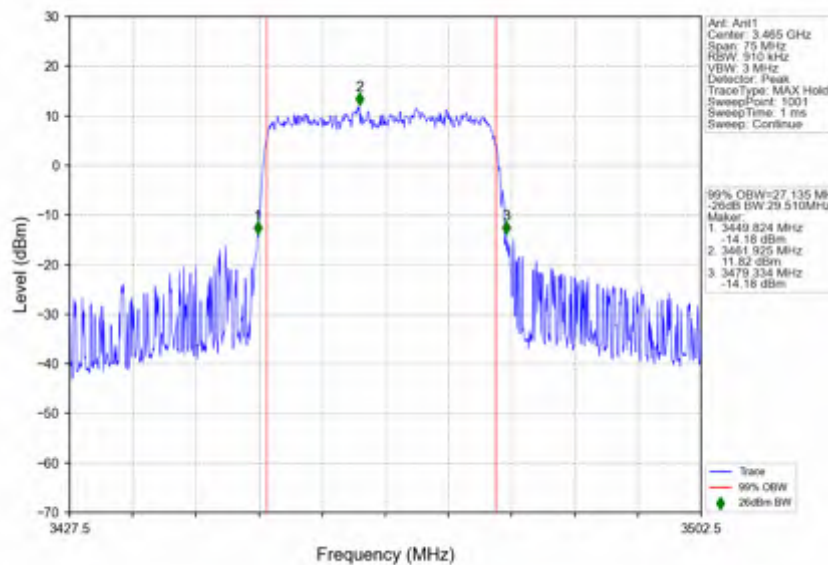
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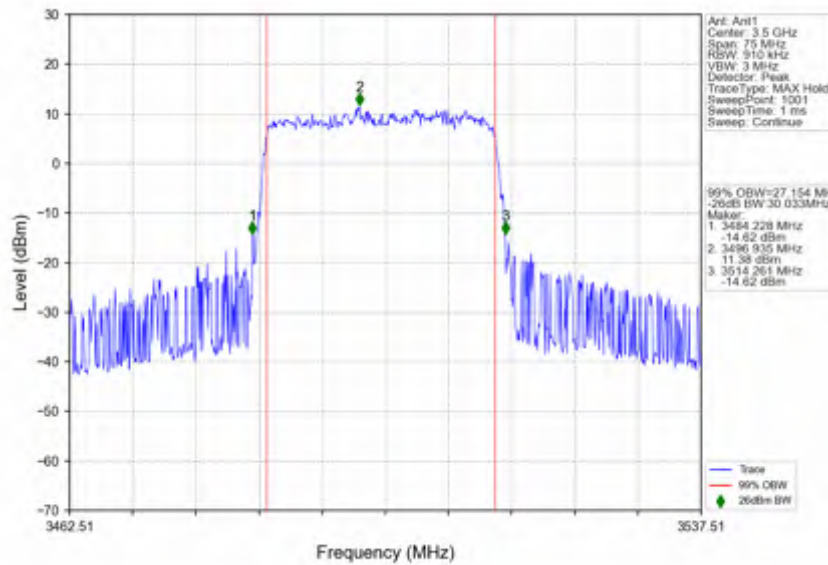
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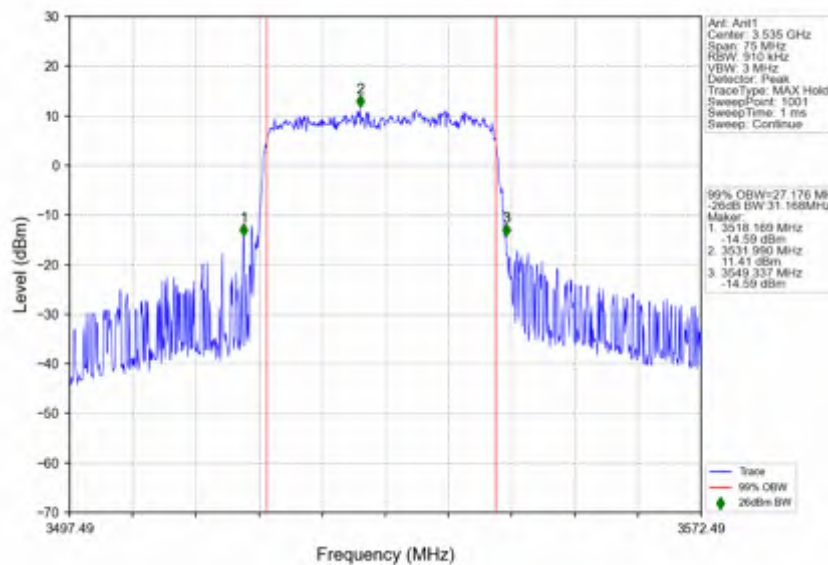
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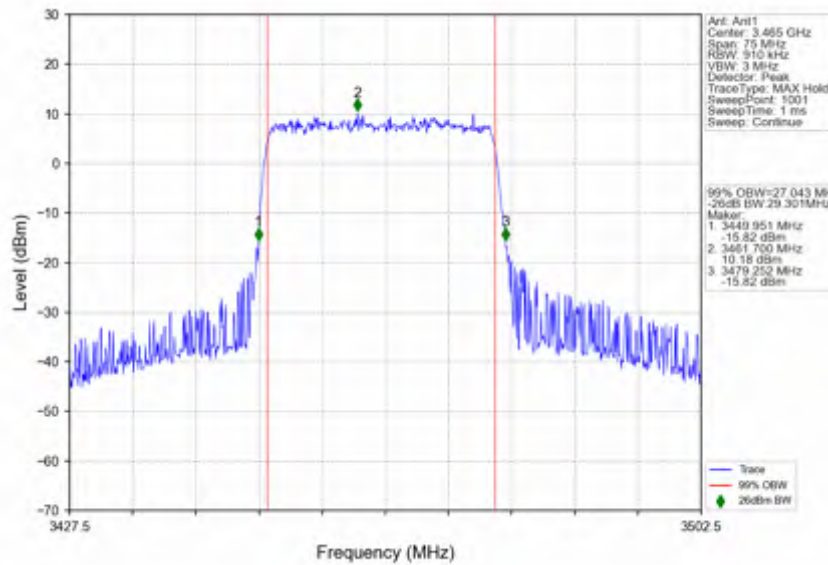
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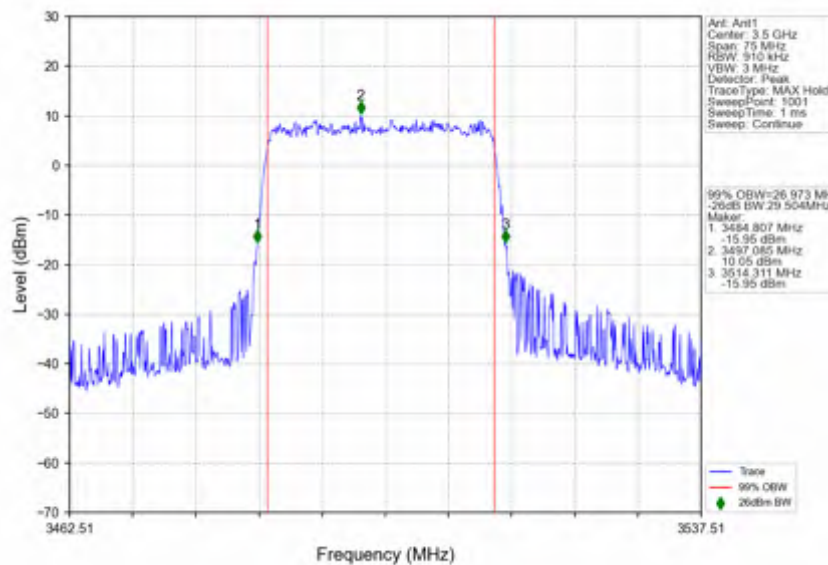
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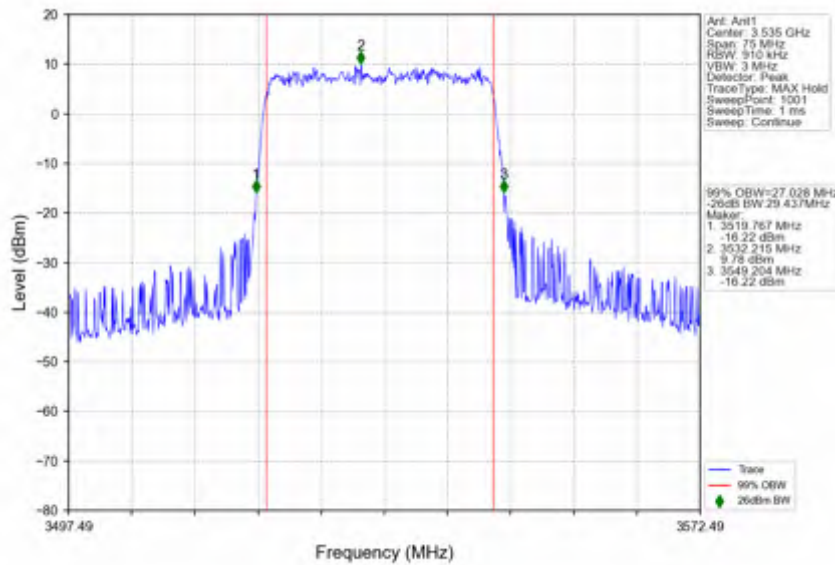
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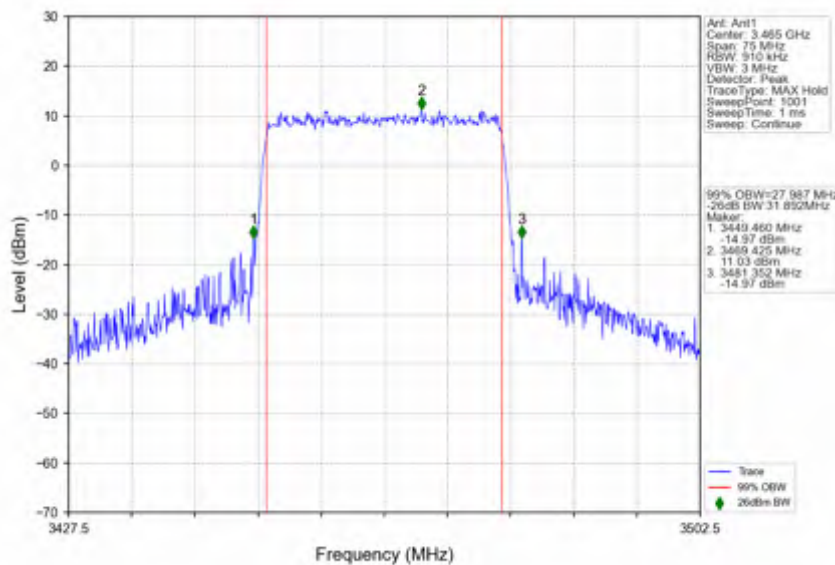
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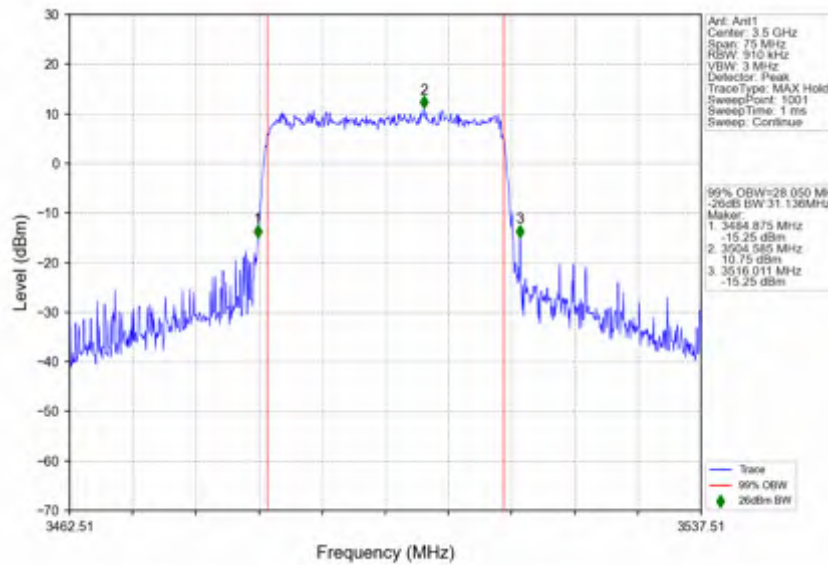
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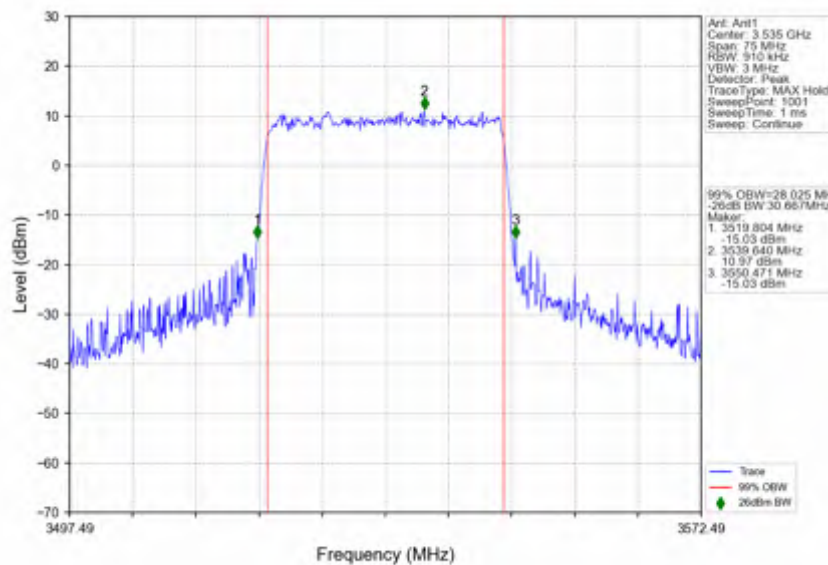
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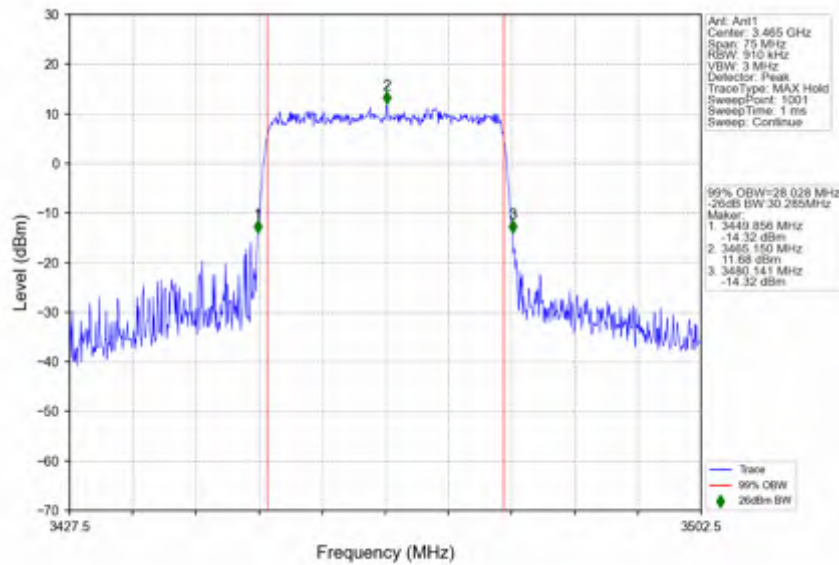
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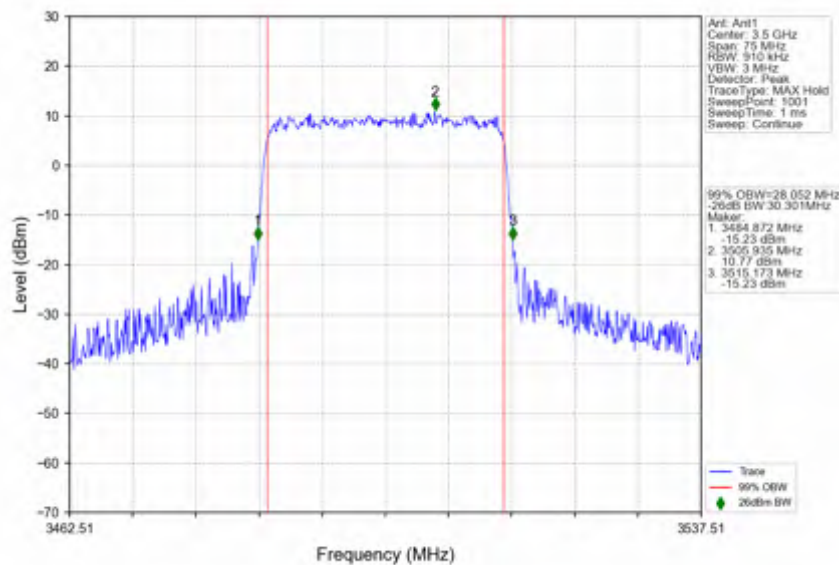
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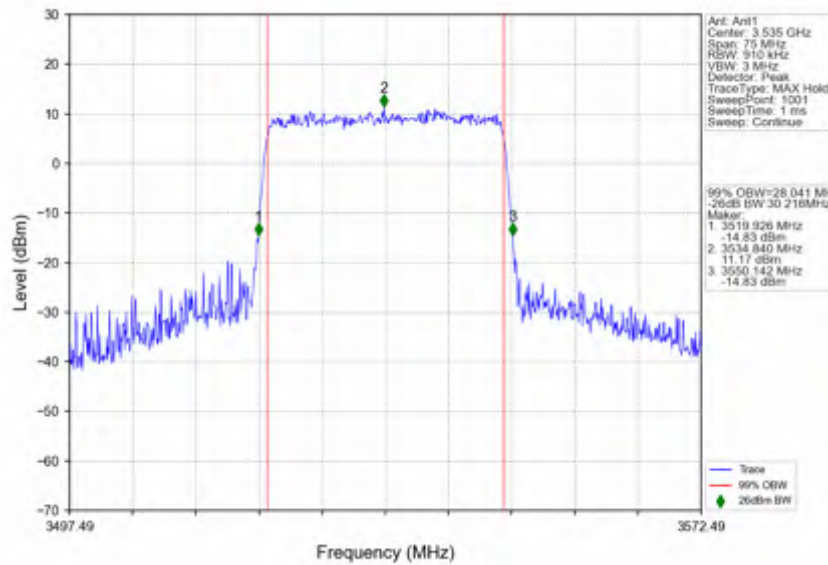
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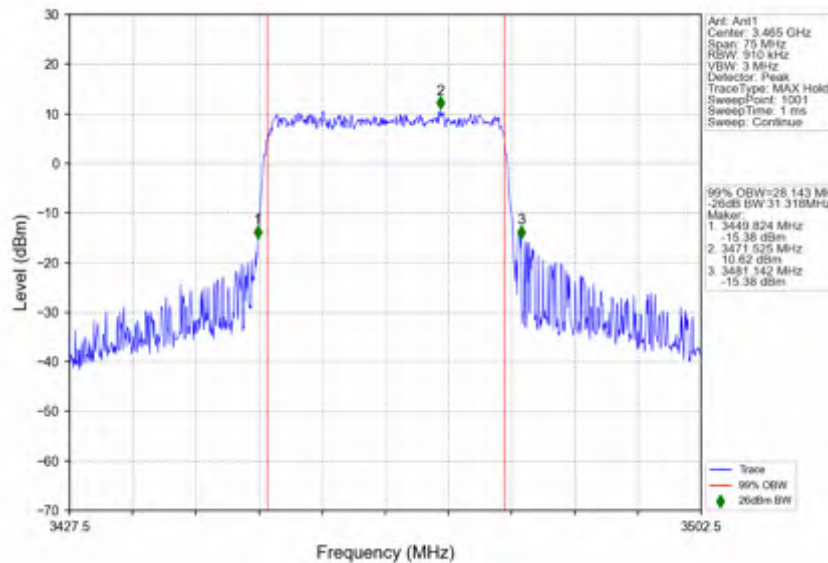
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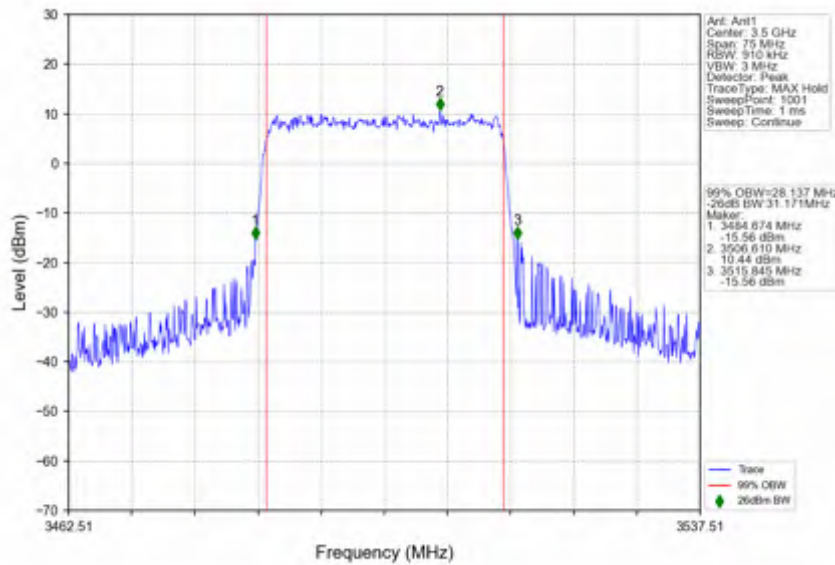
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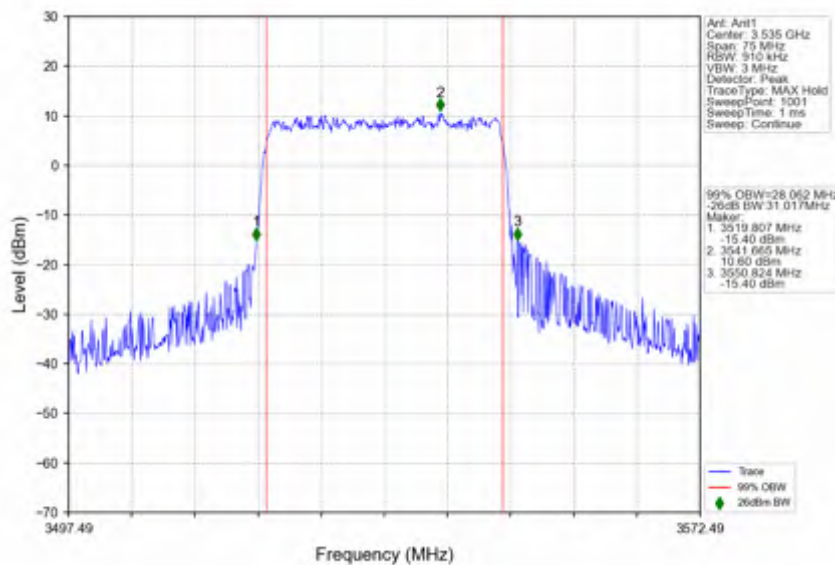
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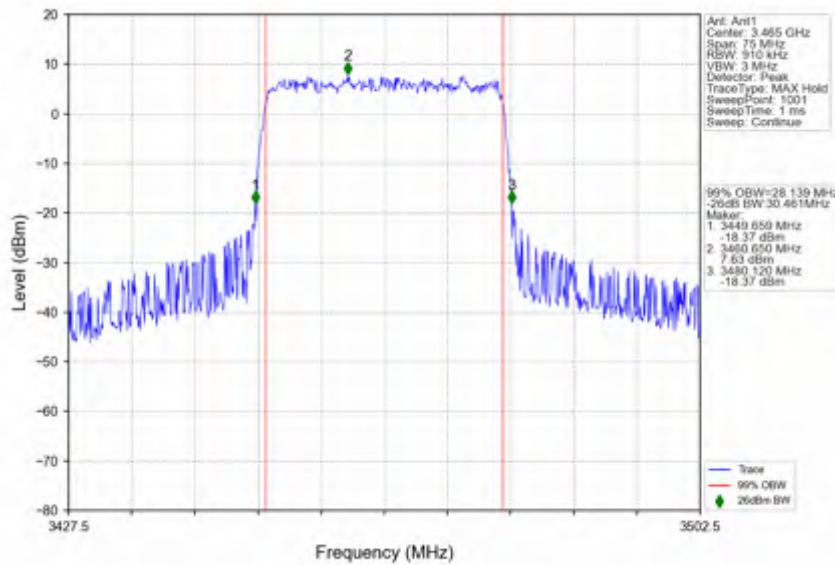


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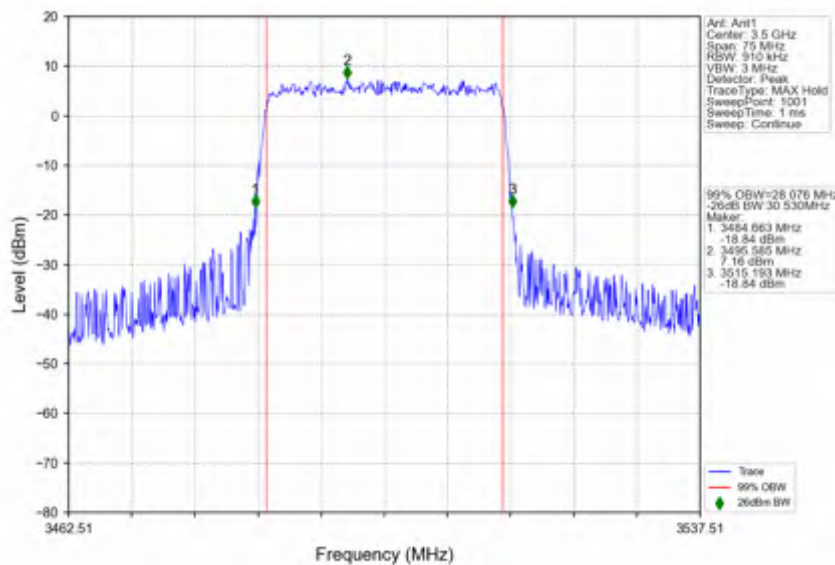
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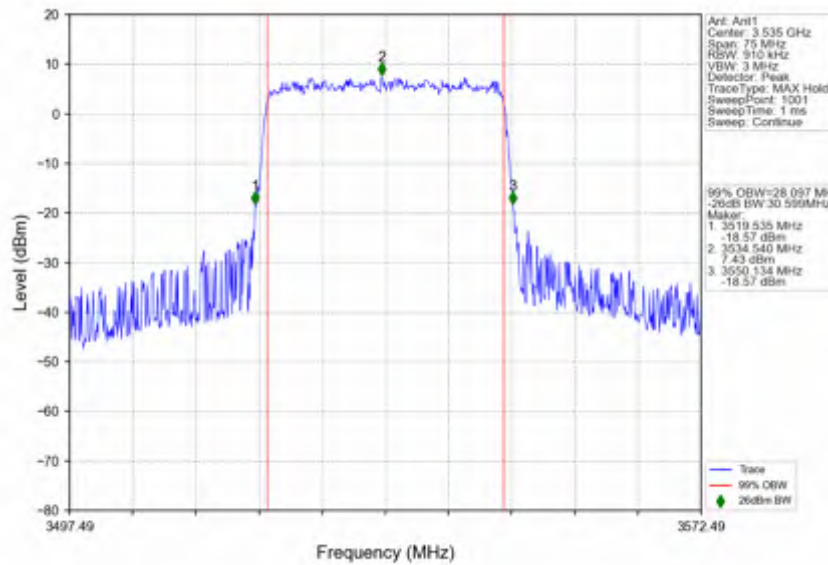
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9.13 30k_SISO_40MHz_NTNV

9.13.1 Test Result

5G NR n78e SCS=30kHz SISO 40MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3470.01	Outer_Full	36.01	38.92	/	Pass
	3500.01	Outer_Full	36.01	39.15	/	Pass
	3529.98	Outer_Full	35.99	38.71	/	Pass
DFT-s-OFDM QPSK	3470.01	Outer_Full	36.10	39.19	/	Pass
	3500.01	Outer_Full	36.09	38.92	/	Pass
	3529.98	Outer_Full	36.06	38.88	/	Pass
DFT-s-OFDM 16 QAM	3470.01	Outer_Full	36.18	39.49	/	Pass
	3500.01	Outer_Full	36.15	39.13	/	Pass
	3529.98	Outer_Full	36.14	39.58	/	Pass
DFT-s-OFDM 64 QAM	3470.01	Outer_Full	36.01	40.90	/	Pass
	3500.01	Outer_Full	36.02	39.56	/	Pass
	3529.98	Outer_Full	36.03	40.72	/	Pass
DFT-s-OFDM 256 QAM	3470.01	Outer_Full	35.94	38.84	/	Pass
	3500.01	Outer_Full	36.01	38.85	/	Pass
	3529.98	Outer_Full	36.03	38.65	/	Pass
CP-OFDM QPSK	3470.01	Outer_Full	38.06	40.75	/	Pass
	3500.01	Outer_Full	38.08	41.45	/	Pass
	3529.98	Outer_Full	38.05	40.82	/	Pass
CP-OFDM 16 QAM	3470.01	Outer_Full	38.21	42.01	/	Pass
	3500.01	Outer_Full	38.20	42.65	/	Pass
	3529.98	Outer_Full	38.12	42.27	/	Pass
CP-OFDM 64 QAM	3470.01	Outer_Full	38.02	40.84	/	Pass
	3500.01	Outer_Full	38.13	40.81	/	Pass
	3529.98	Outer_Full	38.02	40.96	/	Pass
CP-OFDM 256 QAM	3470.01	Outer_Full	38.07	41.10	/	Pass
	3500.01	Outer_Full	38.09	40.85	/	Pass
	3529.98	Outer_Full	38.09	42.70	/	Pass

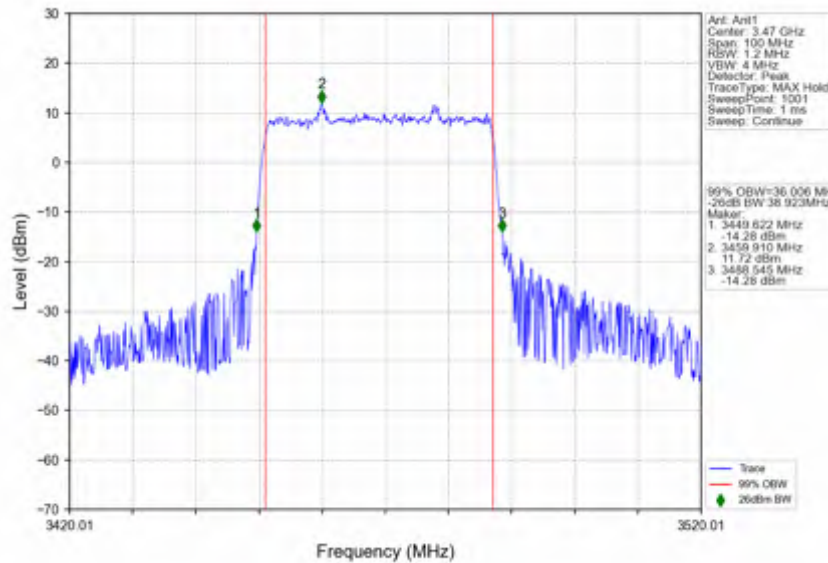


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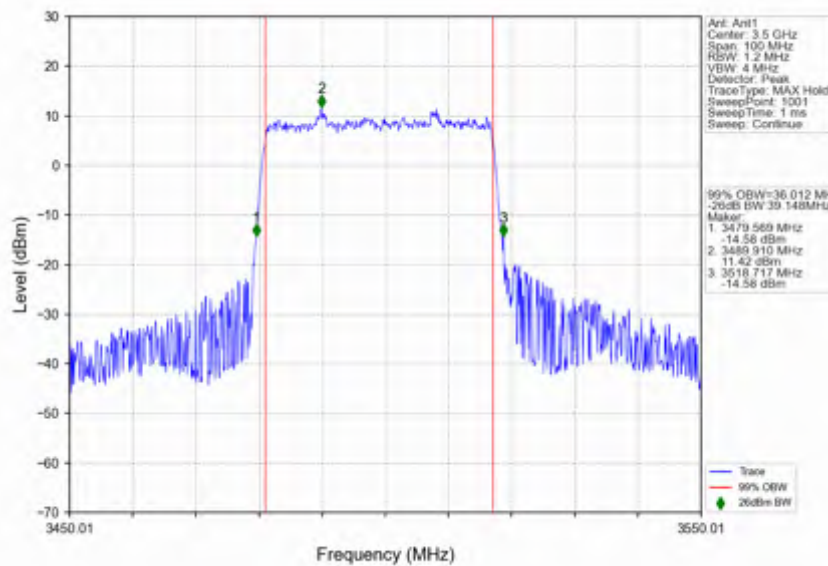
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9.13.2 Test Graph

n78e_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM PI/2 BPSK_3470.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



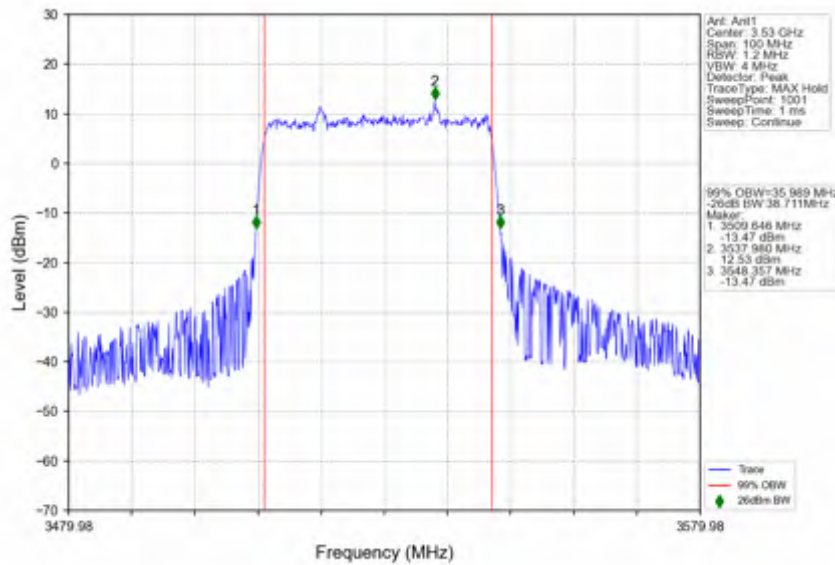
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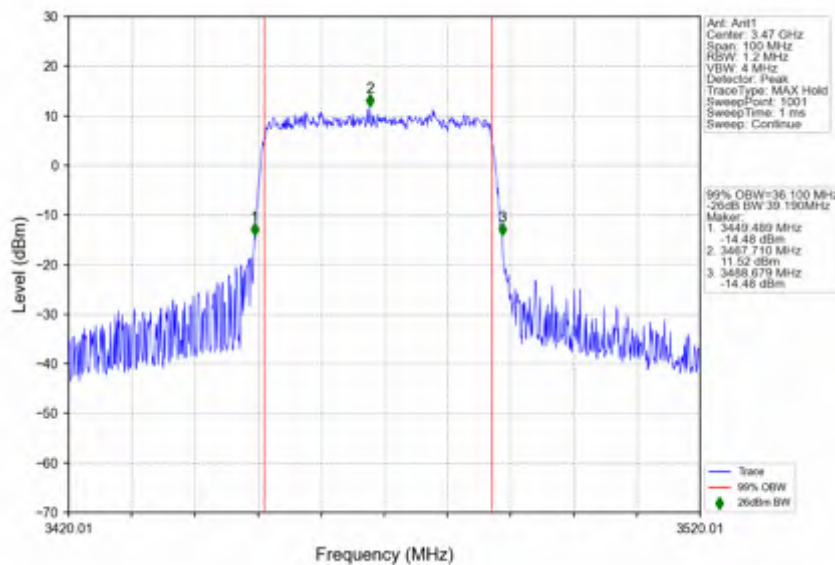
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n78e_30kHz_SISO_NTNV_40MHz_DFT-s-OFDM QPSK_3470.01MHz_Outer_Full



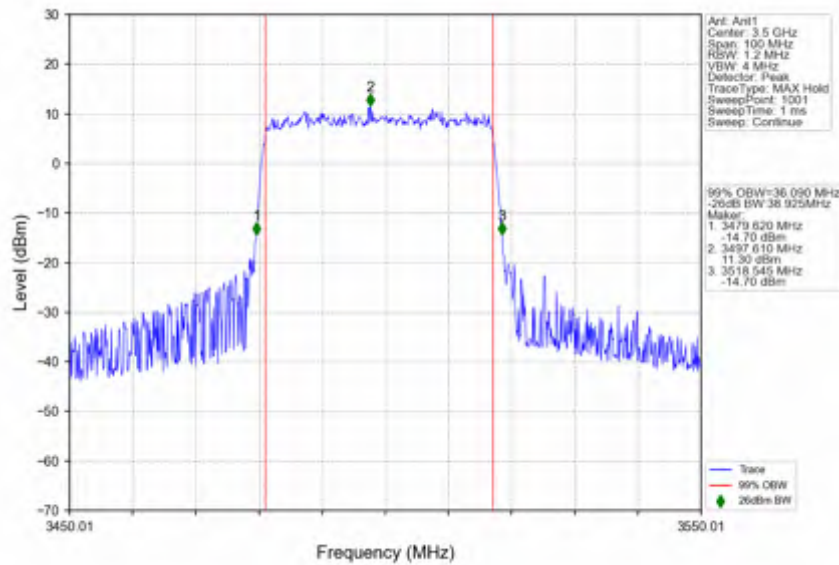
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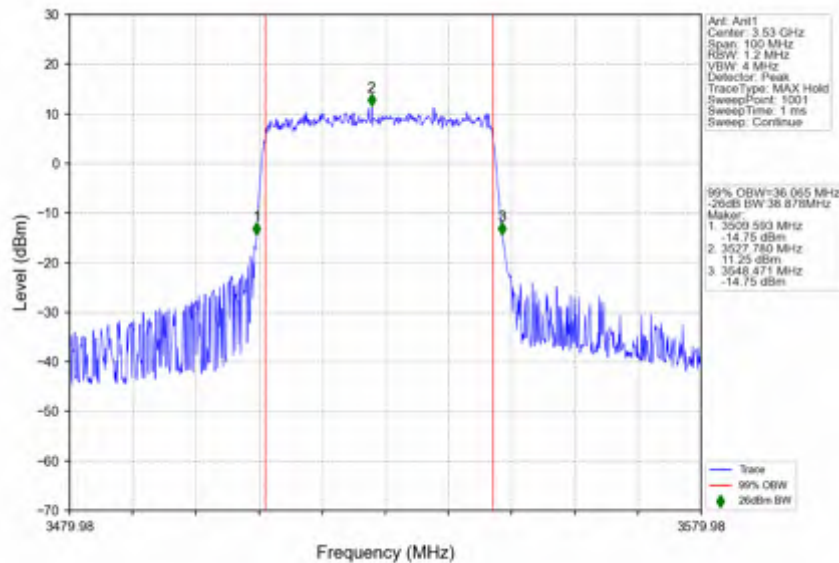
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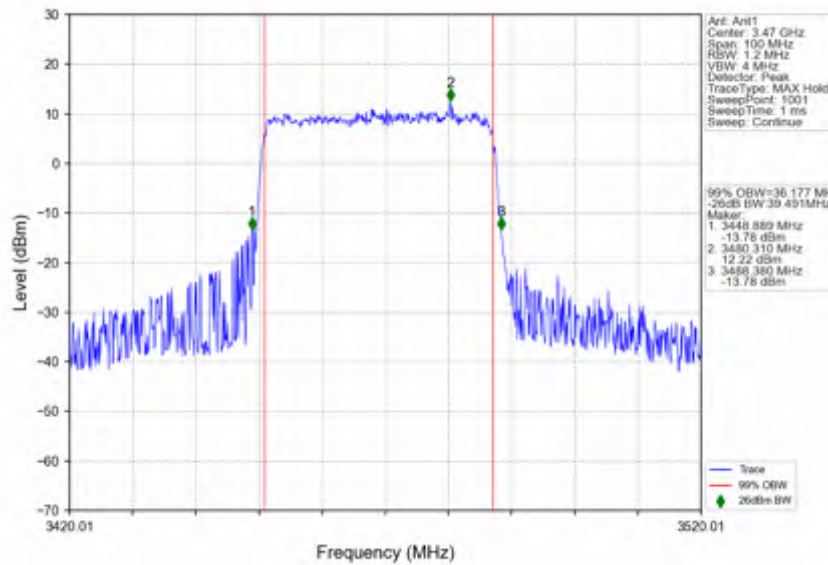
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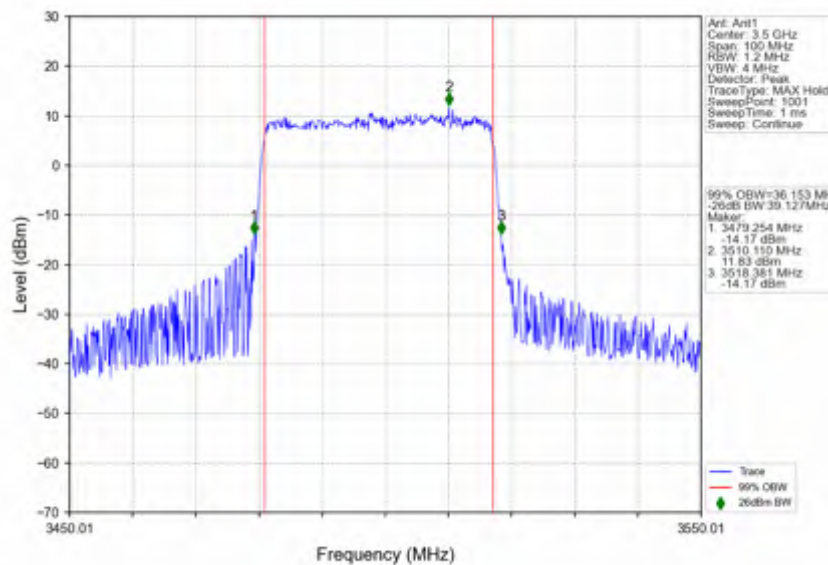
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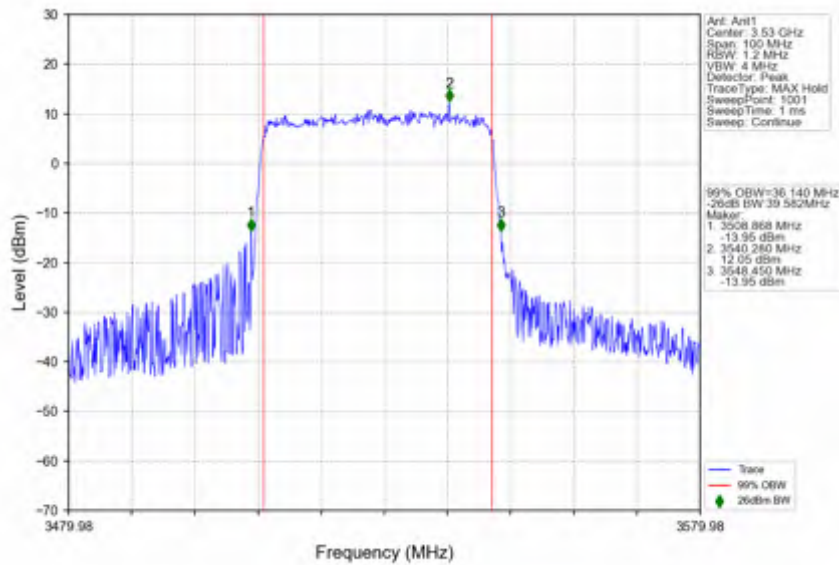


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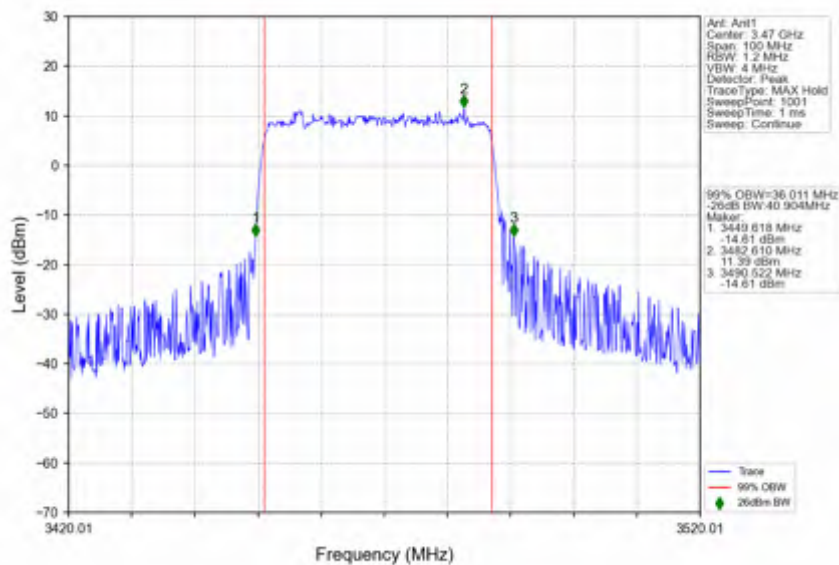
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n78e_30kHz_SISO_NTV_40MHz_DFT-s-OFDM 64 QAM_3470.01MHz_Outer_Full



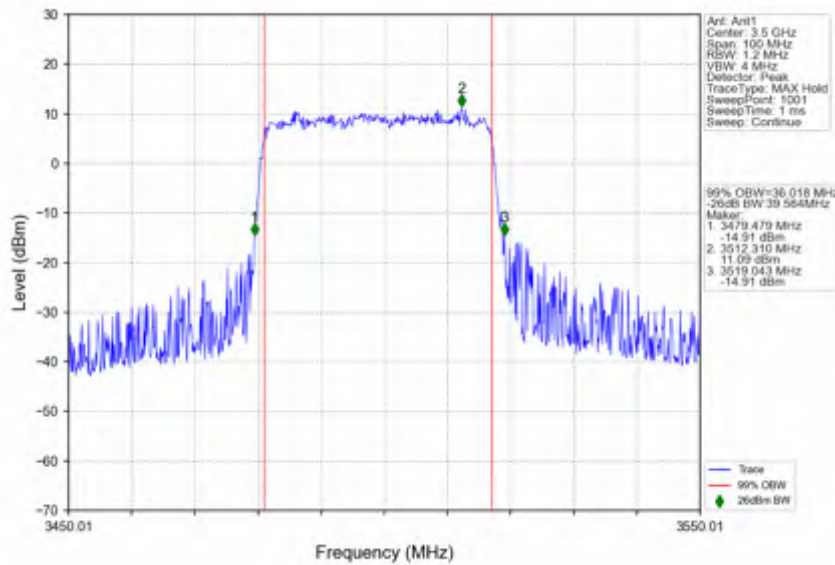
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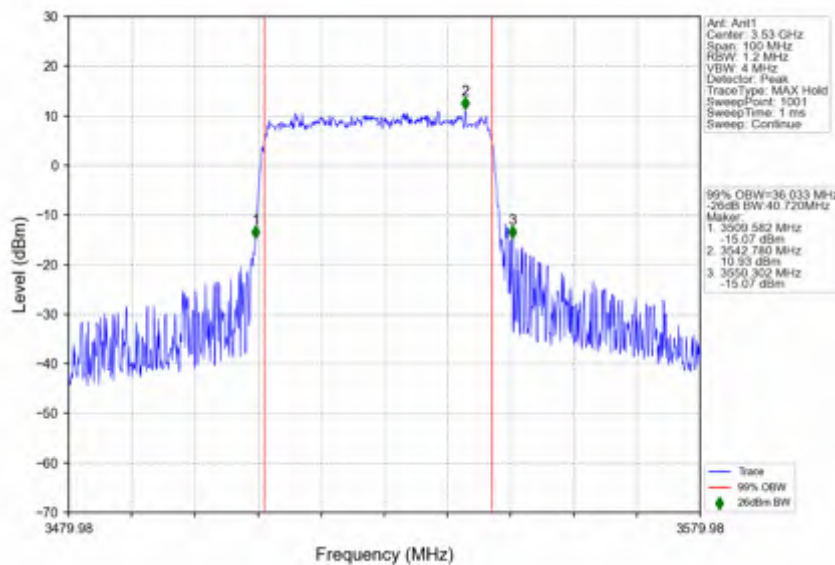
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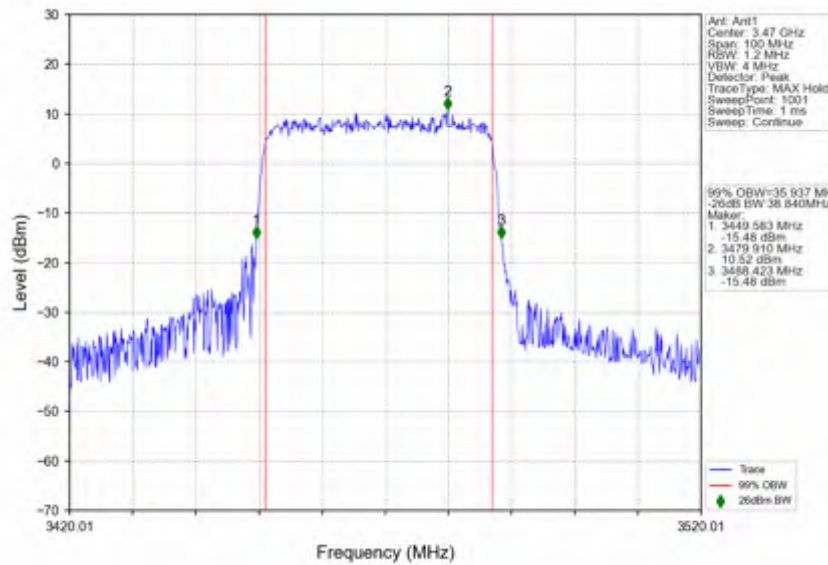
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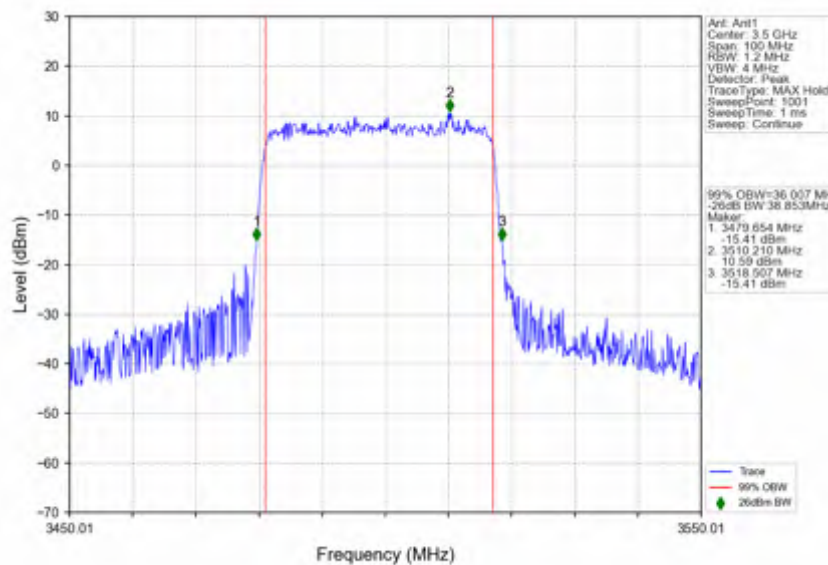
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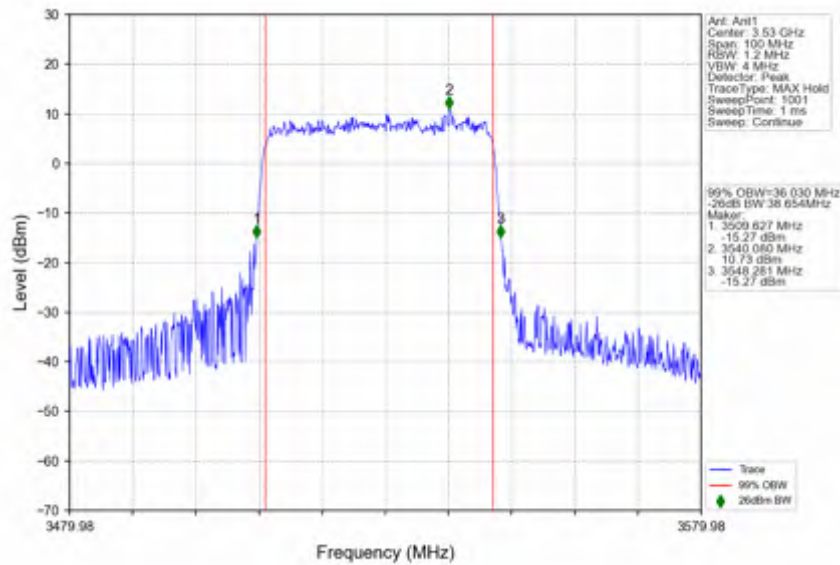
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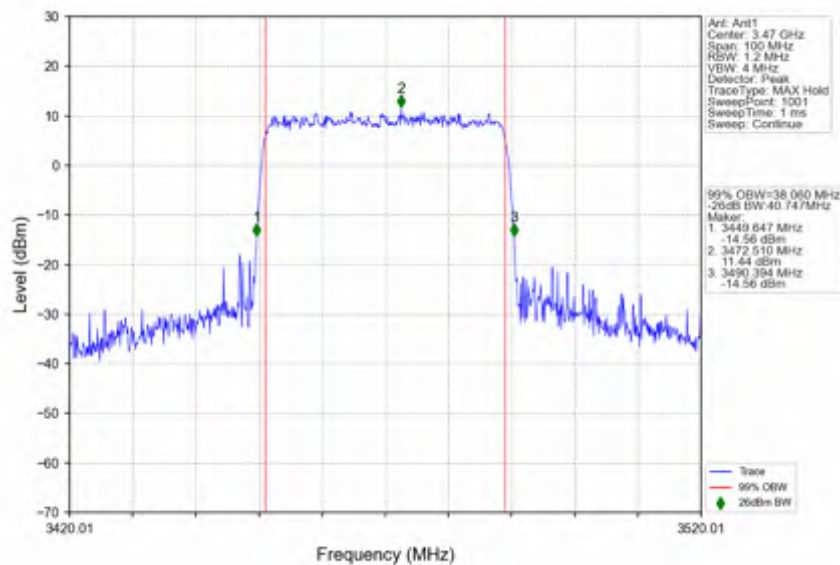
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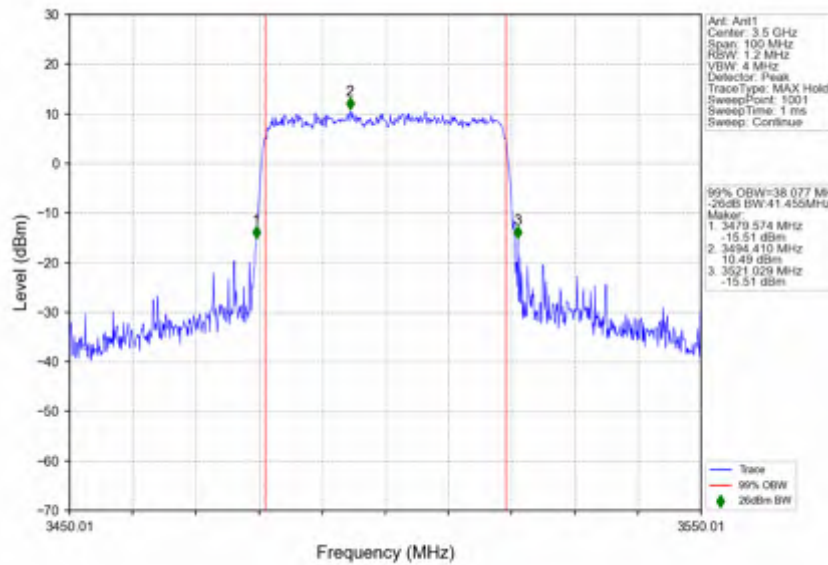
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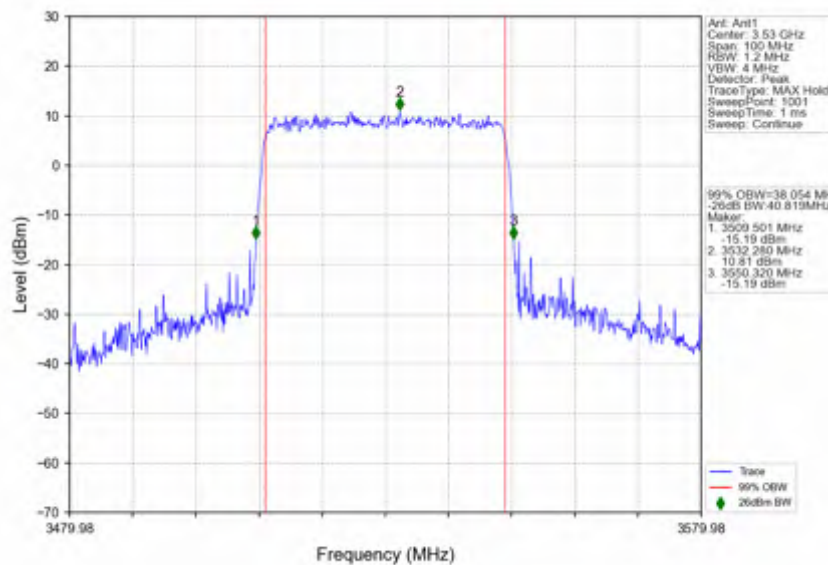
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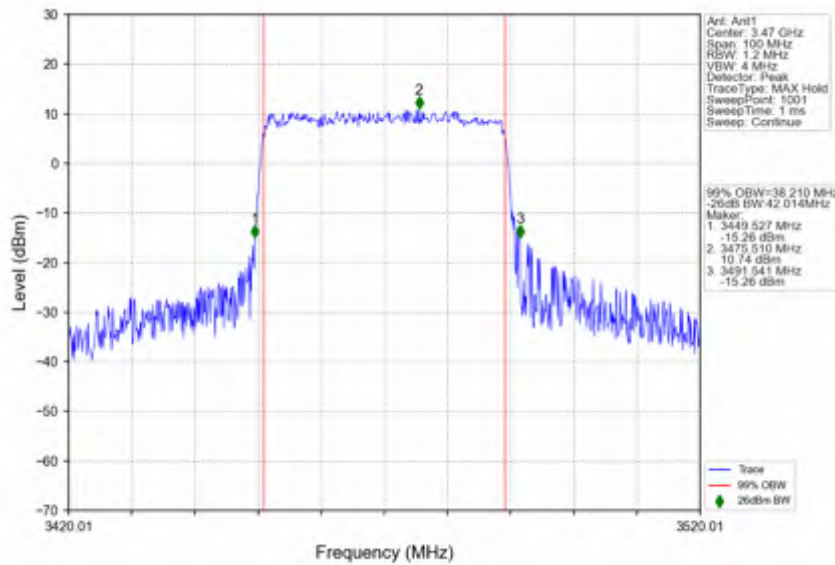
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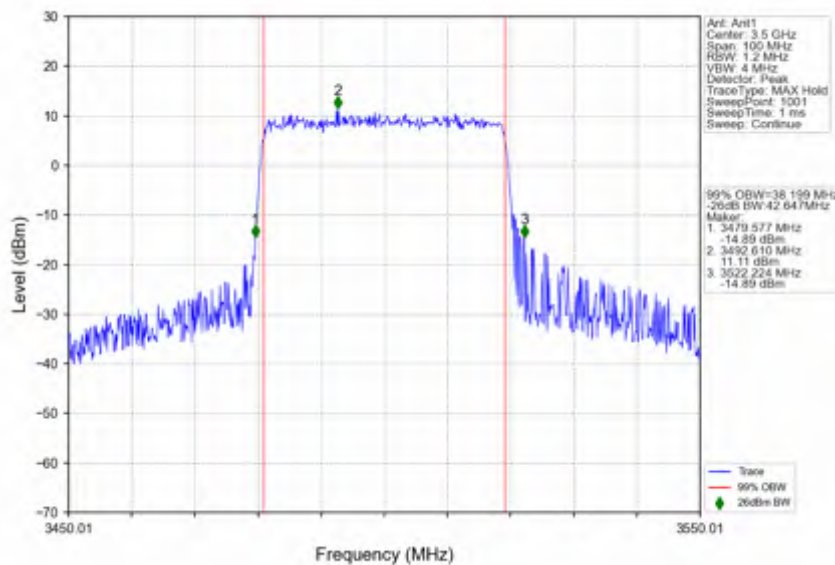
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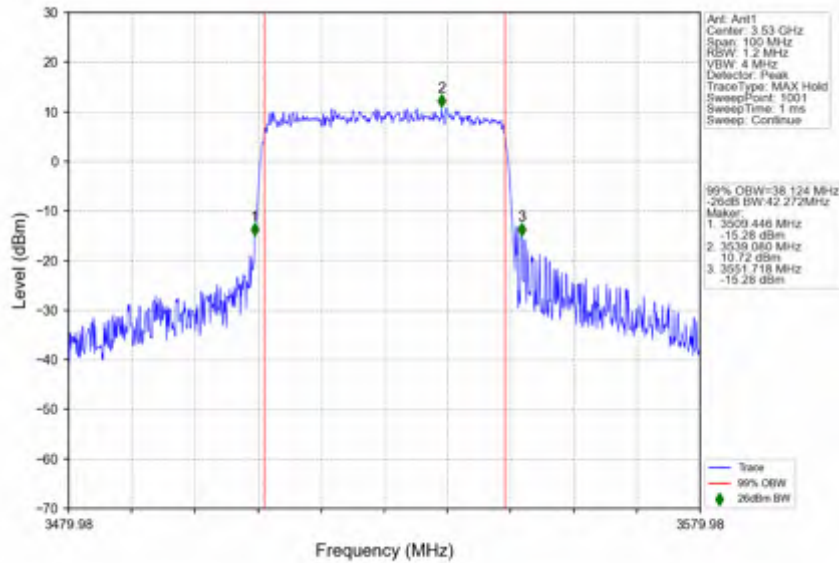
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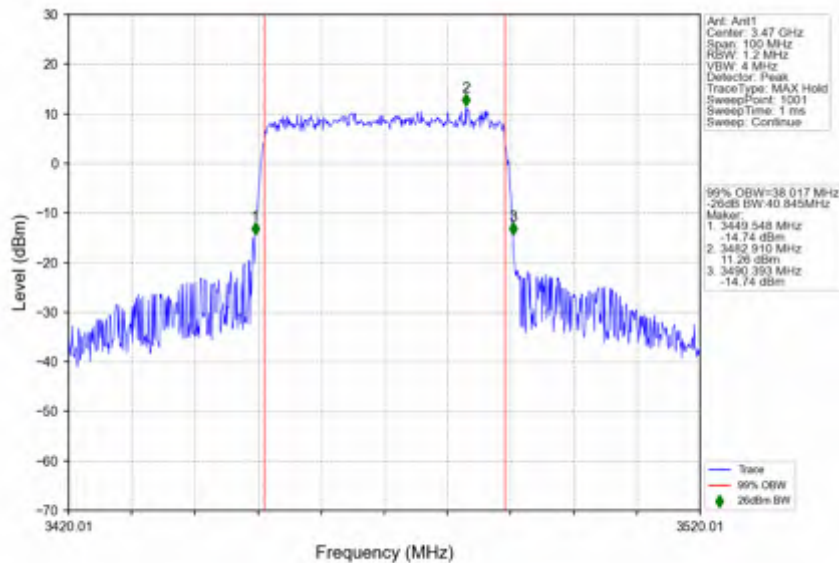
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n78e_30kHz_SISO_NTV_40MHz_CP-OFDM 64 QAM_3470.01MHz_Outer_Full



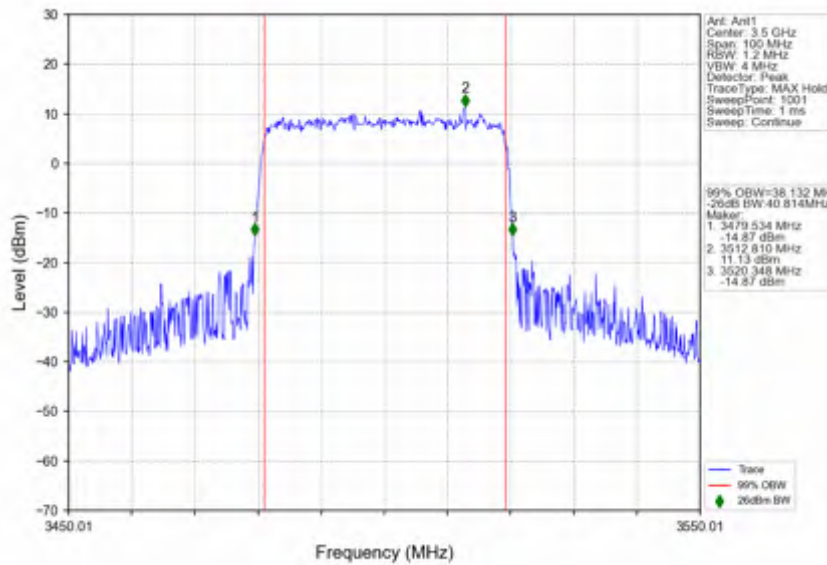
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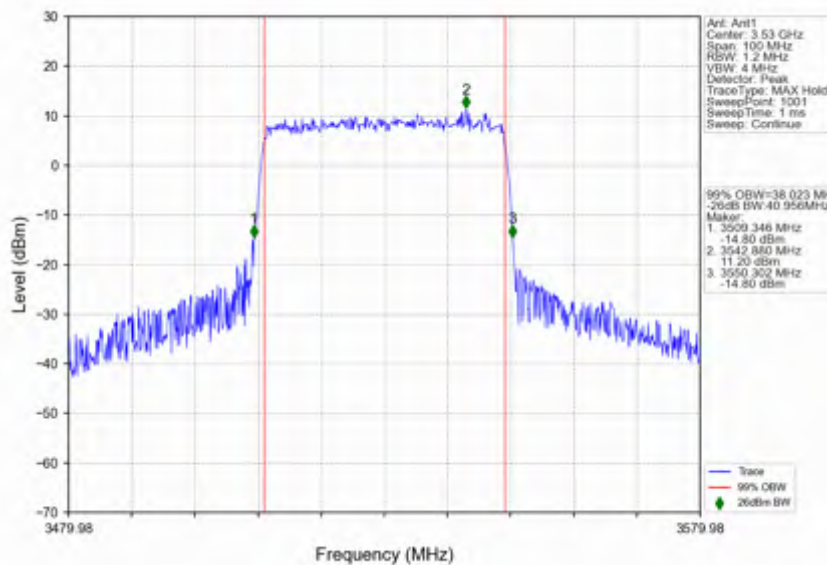
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n78e_30kHz_SISO_NTV_40MHz_CP-OFDM 64 QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTV_40MHz_CP-OFDM 64 QAM_3529.98MHz_Outer_Full



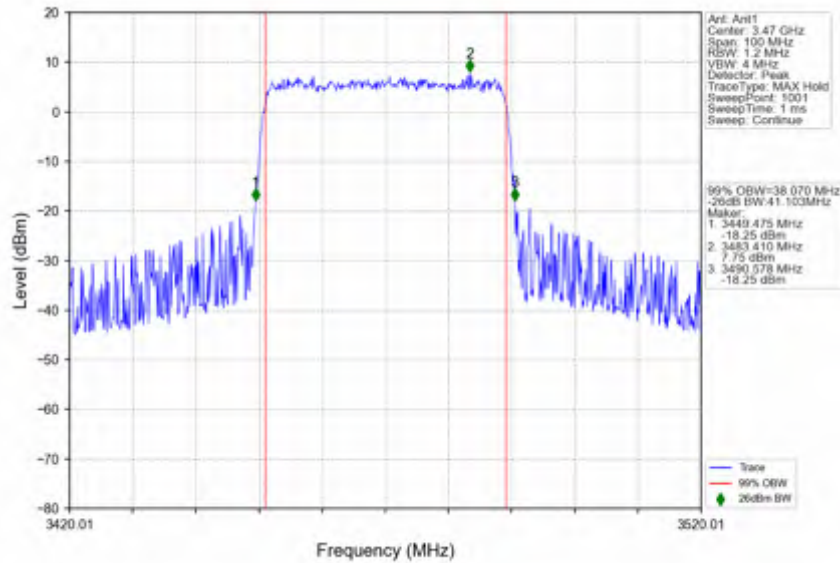
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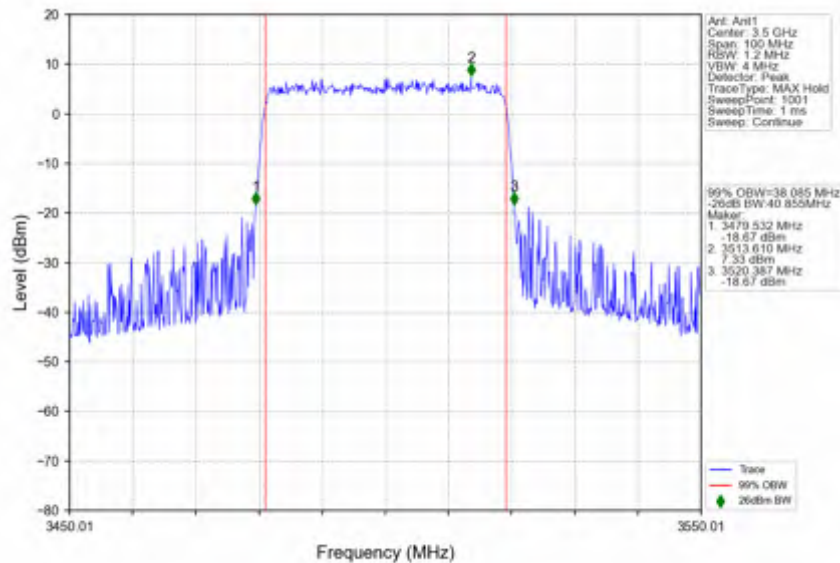
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n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM 256 QAM_3470.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM 256 QAM_3500.01MHz_Outer_Full

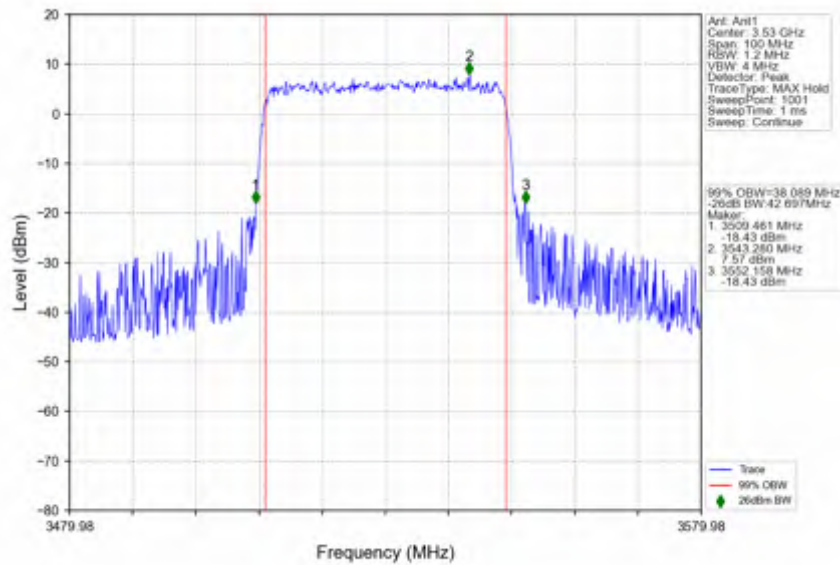


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n78e_30kHz_SISO_NTNV_40MHz_CP-OFDM_256_QAM_3529.98MHz_Outer_Full



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9.14 30k_SISO_50MHz_NTNV

9.14.1 Test Result

5G NR n78e SCS=30kHz SISO 50MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3475.02	Outer_Full	46.13	49.73	/	Pass
	3500.01	Outer_Full	46.21	49.84	/	Pass
	3525	Outer_Full	46.09	49.75	/	Pass
DFT-s-OFDM QPSK	3475.02	Outer_Full	46.05	49.87	/	Pass
	3500.01	Outer_Full	45.96	49.81	/	Pass
	3525	Outer_Full	46.12	49.89	/	Pass
DFT-s-OFDM 16 QAM	3475.02	Outer_Full	45.87	49.76	/	Pass
	3500.01	Outer_Full	46.02	49.74	/	Pass
	3525	Outer_Full	45.98	50.94	/	Pass
DFT-s-OFDM 64 QAM	3475.02	Outer_Full	46.05	53.79	/	Pass
	3500.01	Outer_Full	46.13	53.49	/	Pass
	3525	Outer_Full	46.12	53.67	/	Pass
DFT-s-OFDM 256 QAM	3475.02	Outer_Full	46.02	49.72	/	Pass
	3500.01	Outer_Full	46.21	49.50	/	Pass
	3525	Outer_Full	45.97	49.59	/	Pass
CP-OFDM QPSK	3475.02	Outer_Full	47.78	52.08	/	Pass
	3500.01	Outer_Full	47.81	51.09	/	Pass
	3525	Outer_Full	47.76	51.25	/	Pass
CP-OFDM 16 QAM	3475.02	Outer_Full	47.79	51.19	/	Pass
	3500.01	Outer_Full	47.99	51.56	/	Pass
	3525	Outer_Full	47.84	51.36	/	Pass
CP-OFDM 64 QAM	3475.02	Outer_Full	47.79	51.29	/	Pass
	3500.01	Outer_Full	47.83	51.38	/	Pass
	3525	Outer_Full	47.76	51.41	/	Pass
CP-OFDM 256 QAM	3475.02	Outer_Full	47.74	51.19	/	Pass
	3500.01	Outer_Full	47.78	51.24	/	Pass
	3525	Outer_Full	47.92	51.23	/	Pass

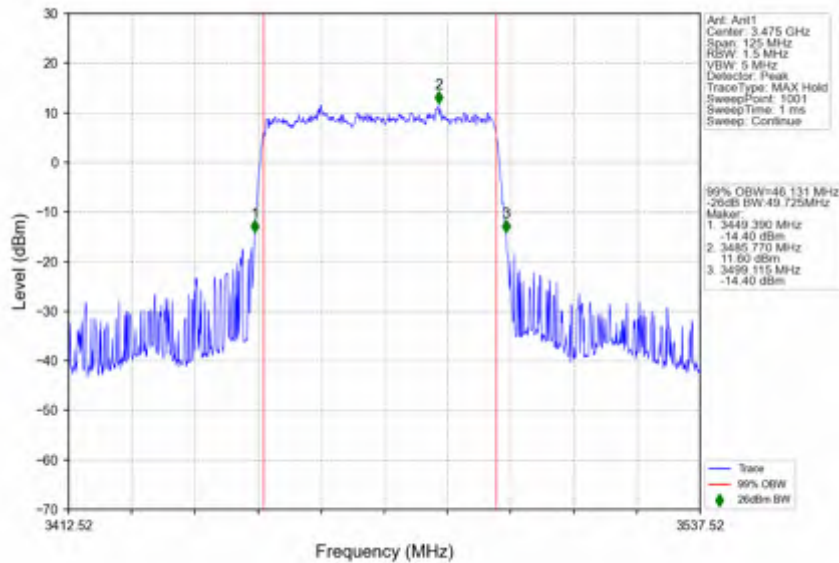


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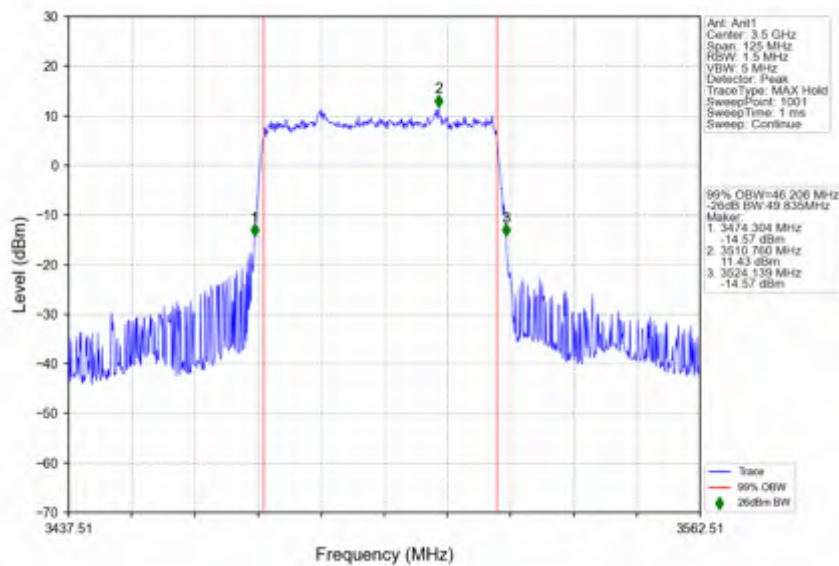
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9.14.2 Test Graph

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n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



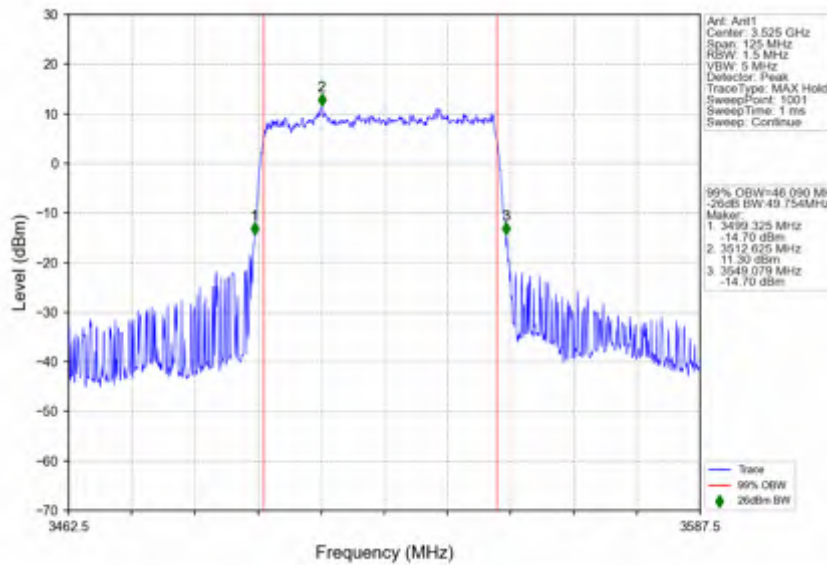
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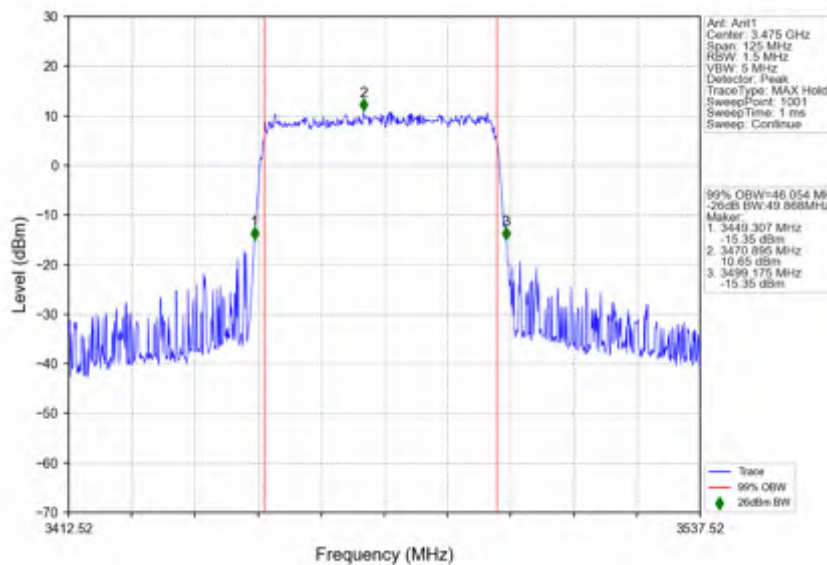
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n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM QPSK_3475.02MHz_Outer_Full



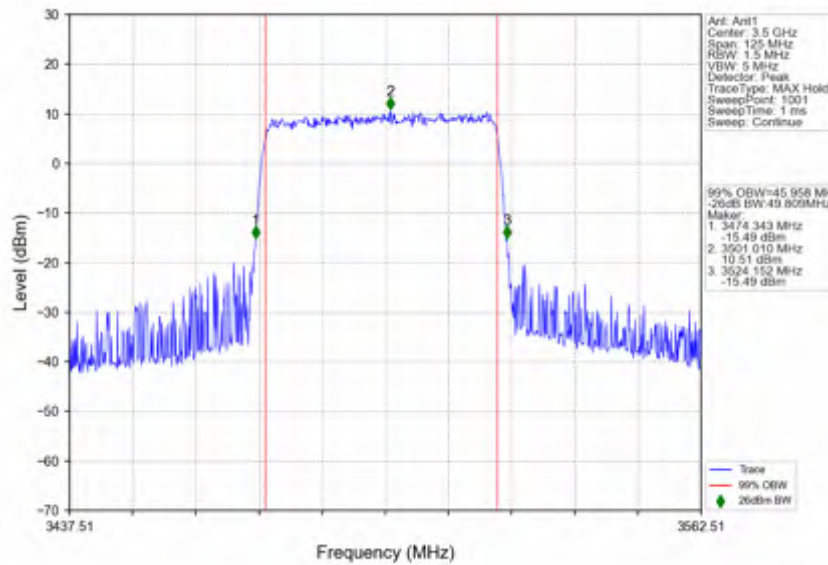
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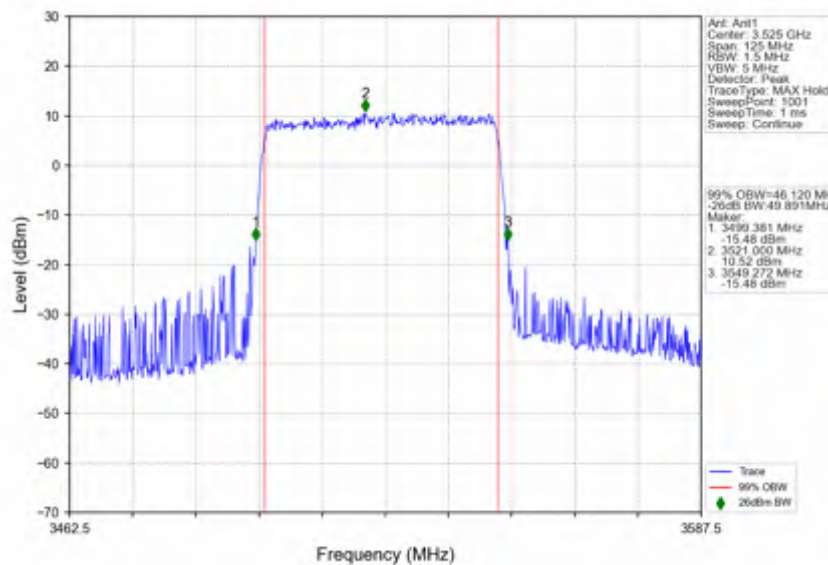
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n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM QPSK_3525MHz_Outer_Full



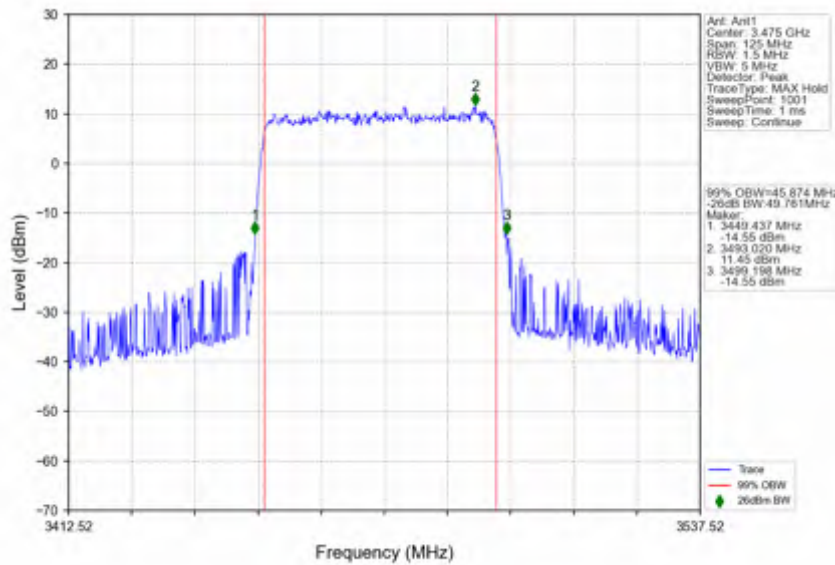
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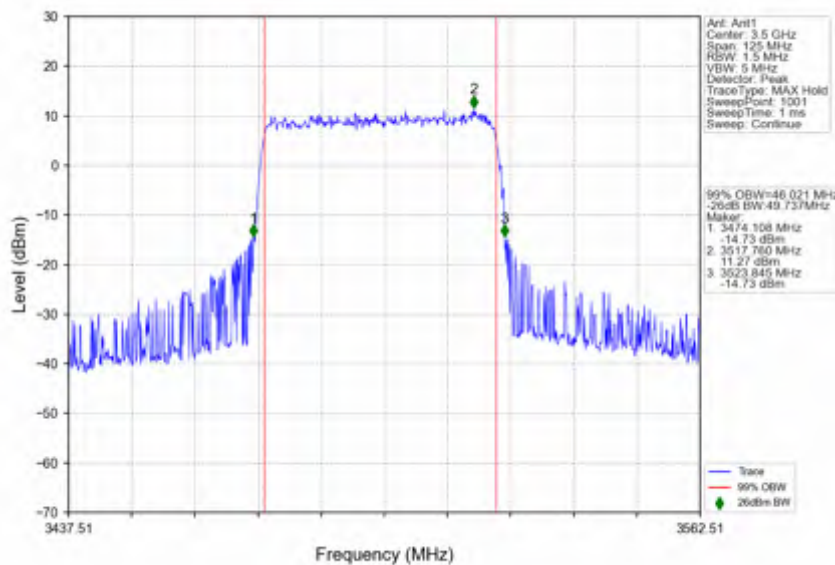
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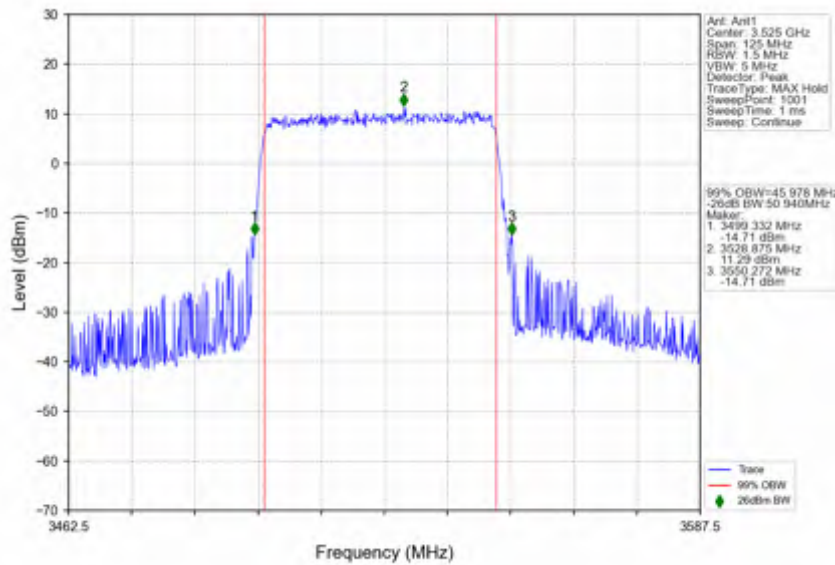
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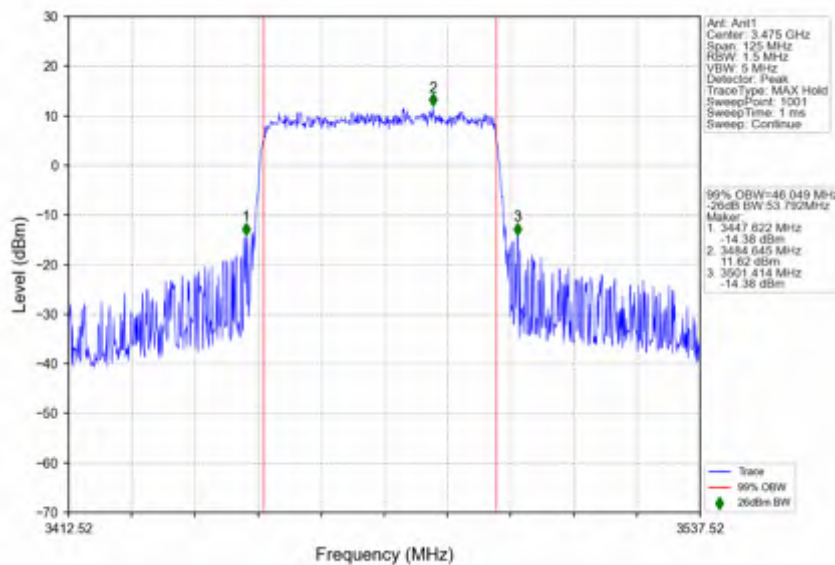
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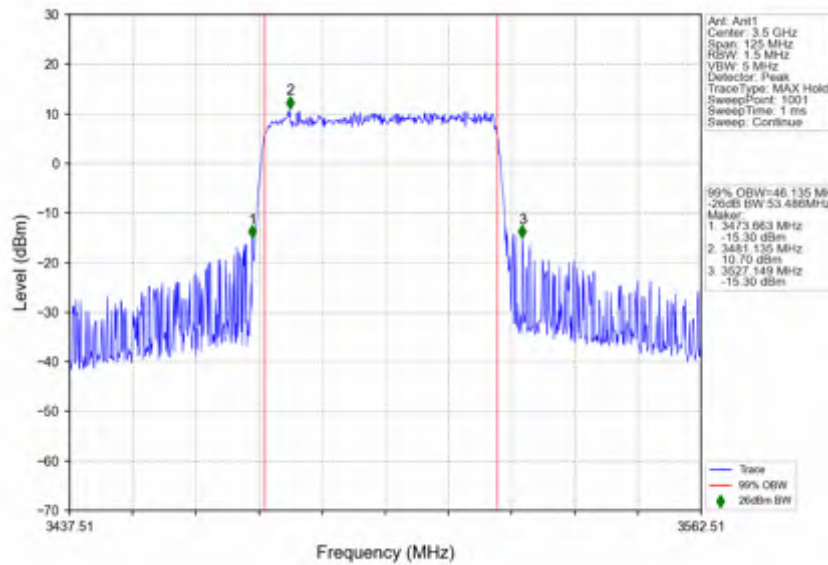
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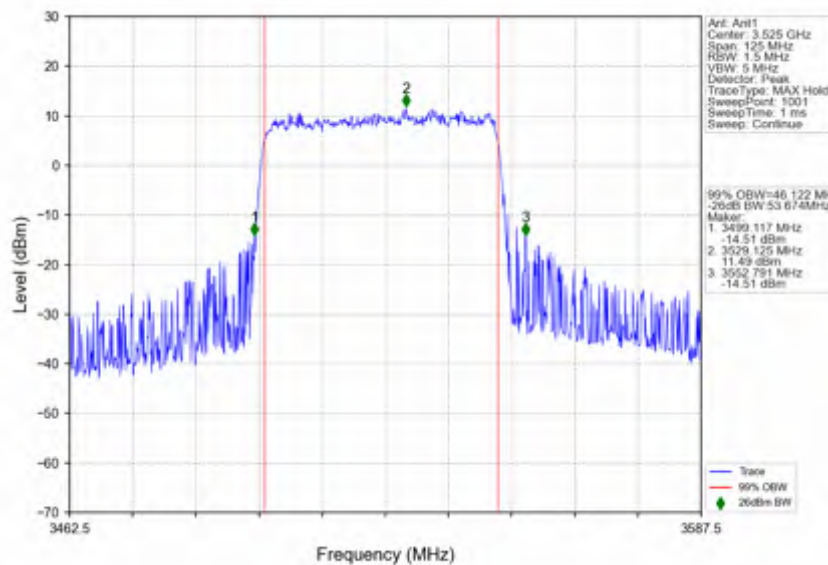
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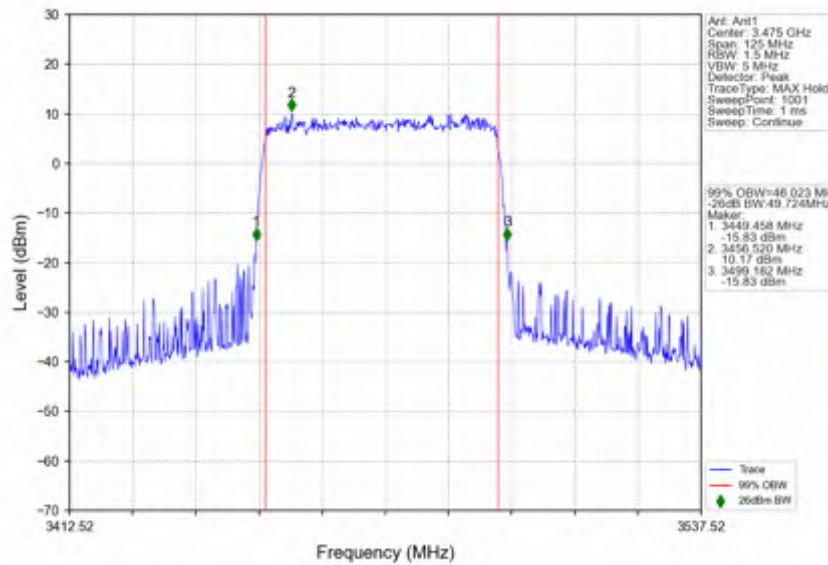
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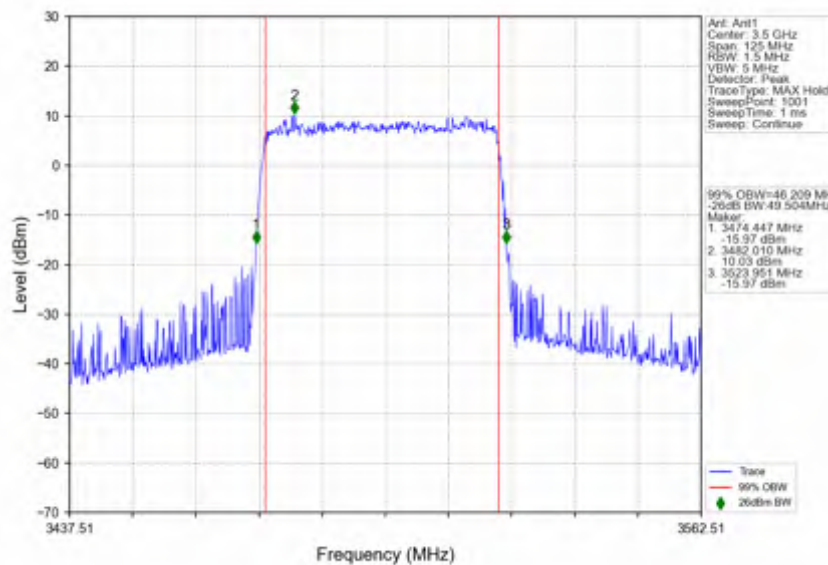
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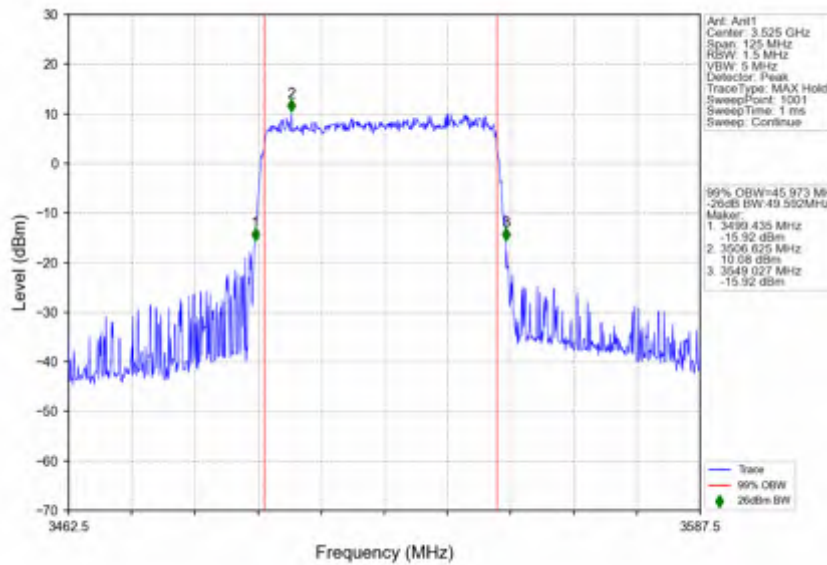
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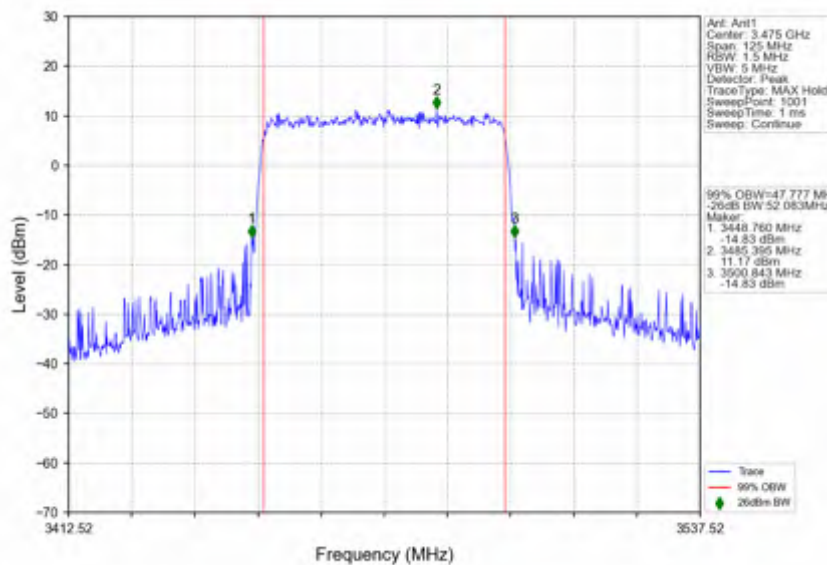
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n78e_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM 256 QAM_3525MHz_Outer_Full



n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM QPSK_3475.02MHz_Outer_Full



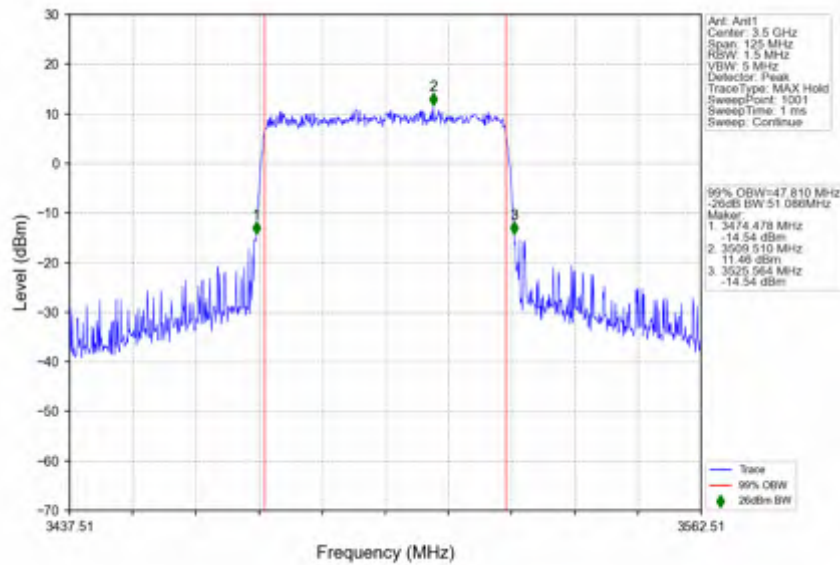
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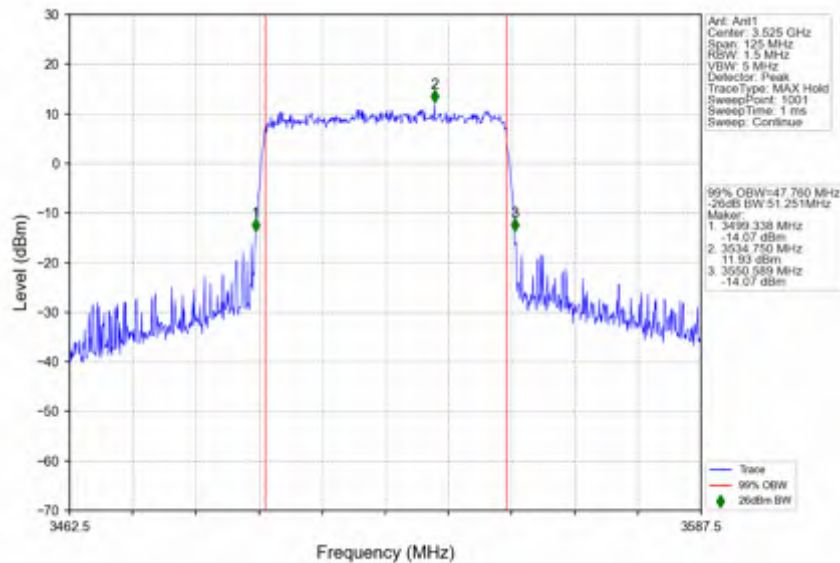
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n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM QPSK_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM QPSK_3525MHz_Outer_Full



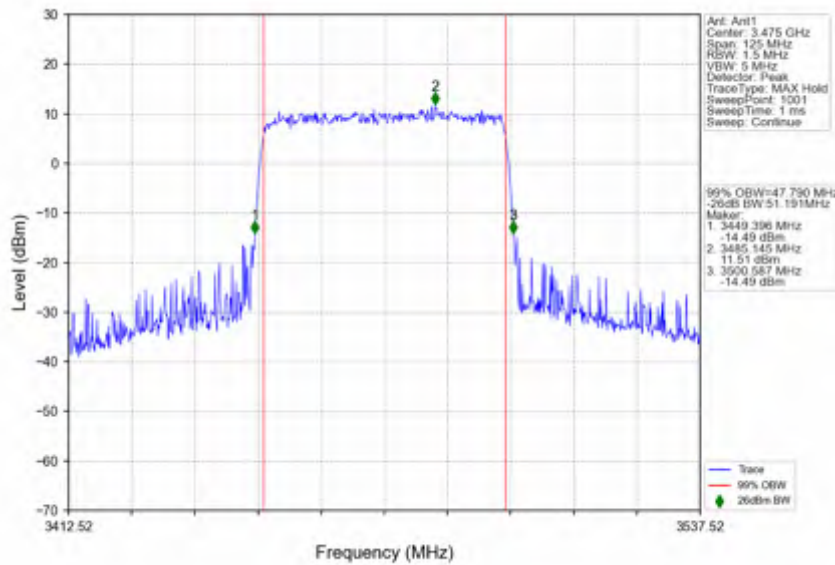
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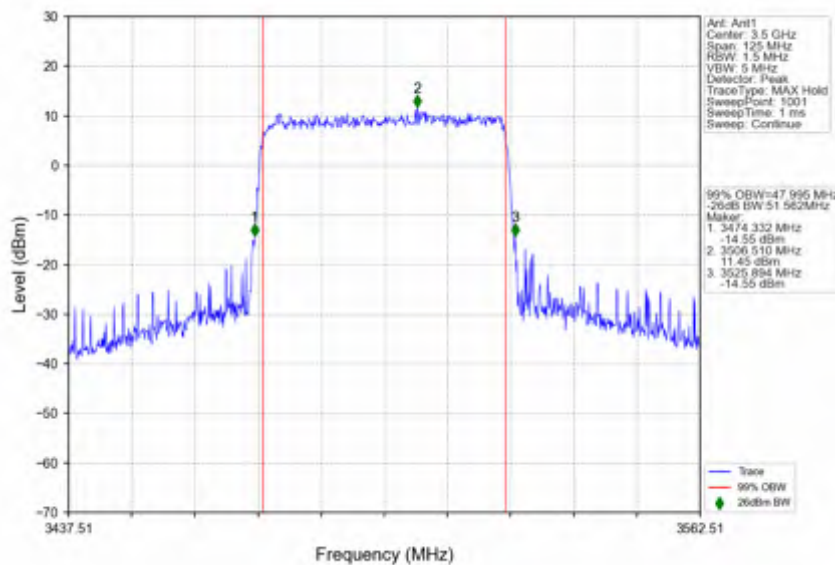
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n78e_30kHz_SISO_NTV_50MHz_CP-OFDM 16 QAM_3475.02MHz_Outer_Full



n78e_30kHz_SISO_NTV_50MHz_CP-OFDM 16 QAM_3500.01MHz_Outer_Full

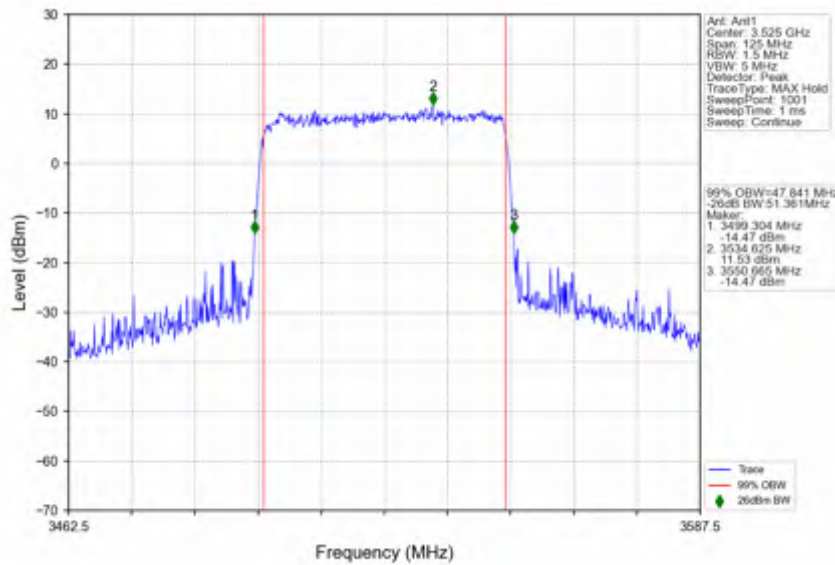


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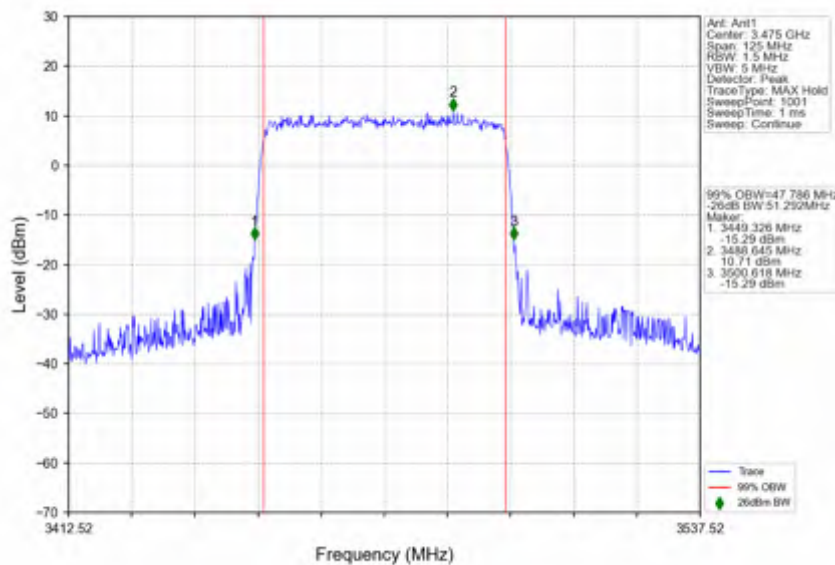
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n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM 16 QAM_3525MHz_Outer_Full



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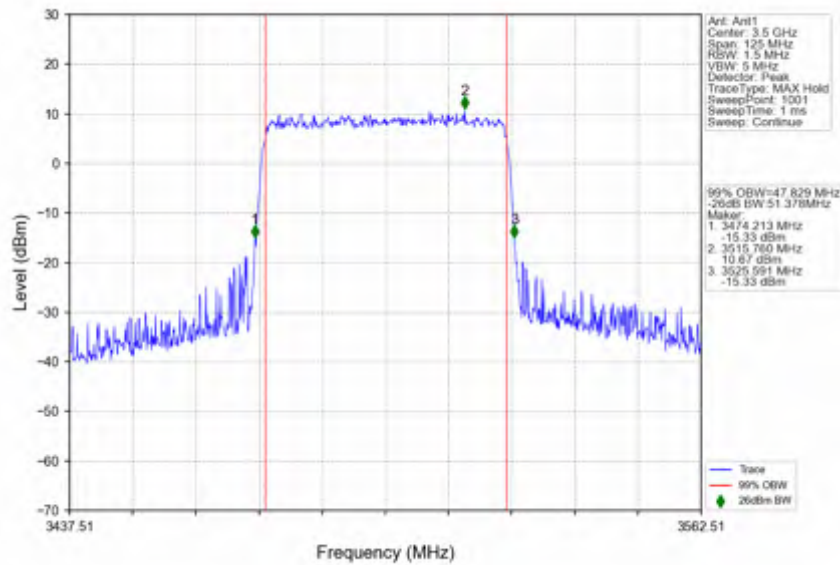
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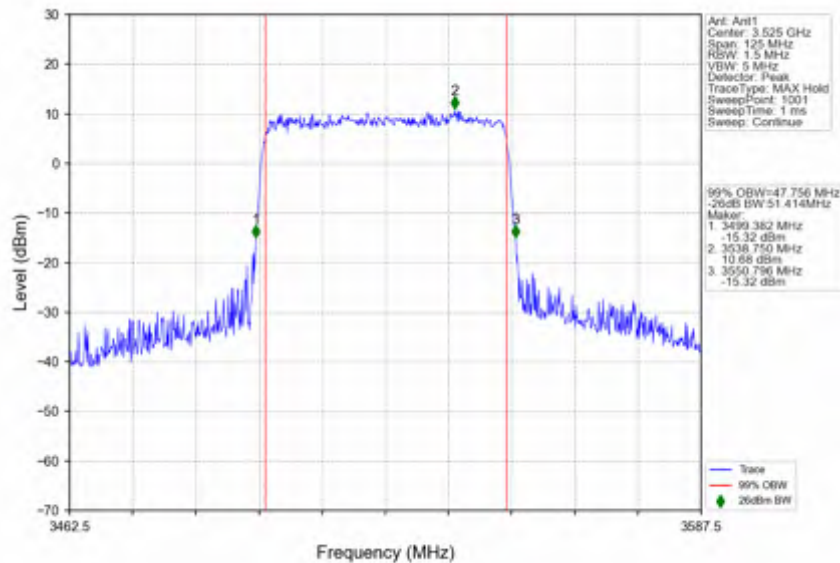
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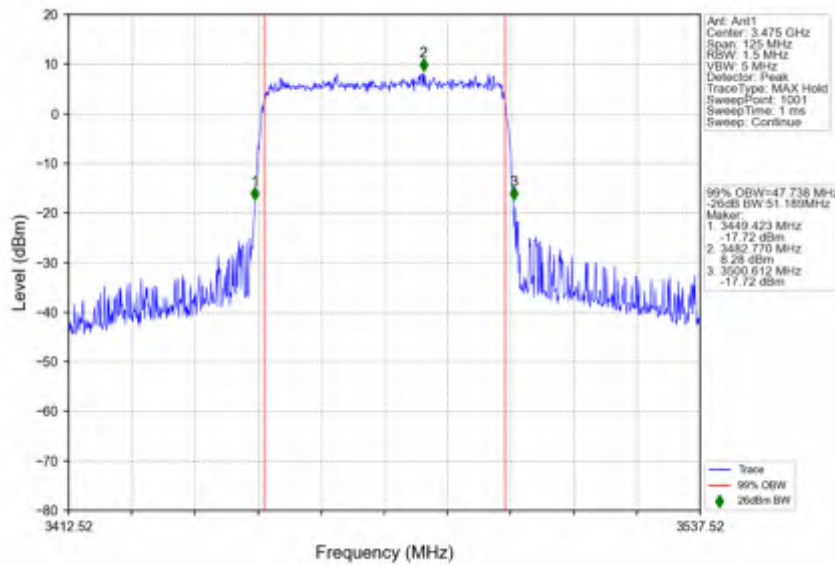
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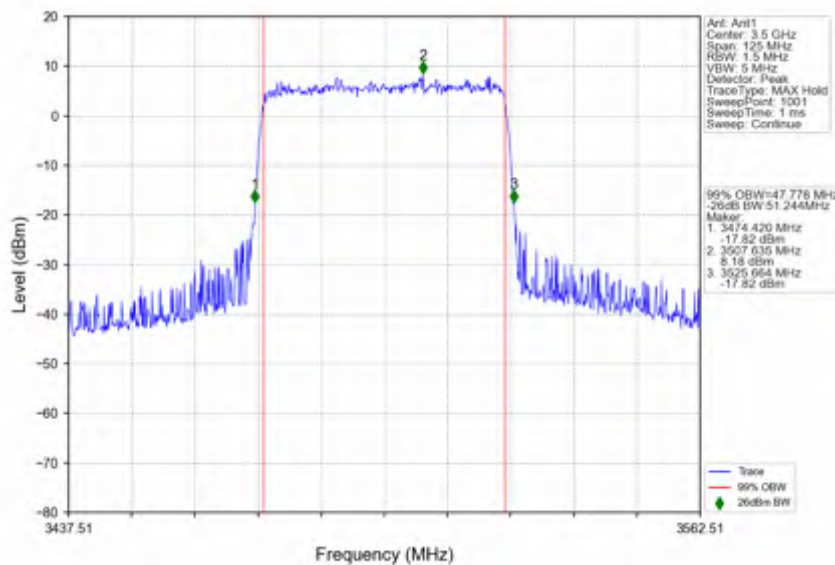
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n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM_256_QAM_3500.01MHz_Outer_Full



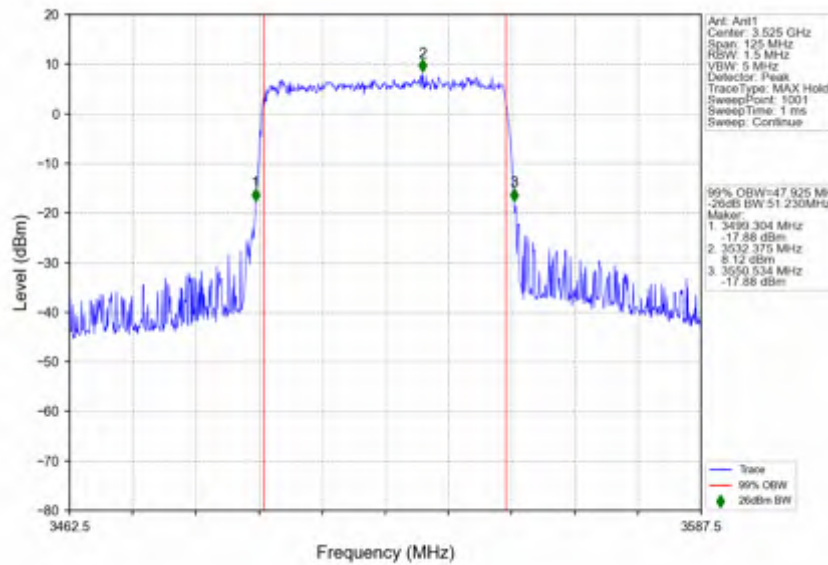
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n78e_30kHz_SISO_NTNV_50MHz_CP-OFDM 256 QAM_3525MHz_Outer_Full



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9.15 30k_SISO_60MHz_NTNV

9.15.1 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 PI/2 BPSK	3480	Outer_Full	58.34	62.15	/	Pass
	3500.01	Outer_Full	58.34	62.42	/	Pass
	3519.99	Outer_Full	58.32	62.28	/	Pass
DFT-s-OFDM QPSK	3480	Outer_Full	58.24	62.37	/	Pass
	3500.01	Outer_Full	58.36	62.27	/	Pass
	3519.99	Outer_Full	58.37	62.62	/	Pass
DFT-s-OFDM 16 QAM	3480	Outer_Full	58.09	63.35	/	Pass
	3500.01	Outer_Full	58.22	64.22	/	Pass
	3519.99	Outer_Full	58.30	63.37	/	Pass
DFT-s-OFDM 64 QAM	3480	Outer_Full	58.23	64.98	/	Pass
	3500.01	Outer_Full	58.11	63.60	/	Pass
	3519.99	Outer_Full	58.19	63.44	/	Pass
DFT-s-OFDM 256 QAM	3480	Outer_Full	58.29	62.28	/	Pass
	3500.01	Outer_Full	58.44	62.38	/	Pass
	3519.99	Outer_Full	58.31	62.17	/	Pass
CP-OFDM QPSK	3480	Outer_Full	58.30	63.70	/	Pass
	3500.01	Outer_Full	58.30	63.34	/	Pass
	3519.99	Outer_Full	58.32	63.25	/	Pass
CP-OFDM 16 QAM	3480	Outer_Full	58.30	64.74	/	Pass
	3500.01	Outer_Full	58.27	63.52	/	Pass
	3519.99	Outer_Full	58.26	65.78	/	Pass
CP-OFDM 64 QAM	3480	Outer_Full	58.21	62.18	/	Pass
	3500.01	Outer_Full	58.30	62.31	/	Pass
	3519.99	Outer_Full	58.16	62.20	/	Pass
CP-OFDM 256 QAM	3480	Outer_Full	58.24	65.06	/	Pass
	3500.01	Outer_Full	58.31	62.50	/	Pass
	3519.99	Outer_Full	58.20	63.23	/	Pass



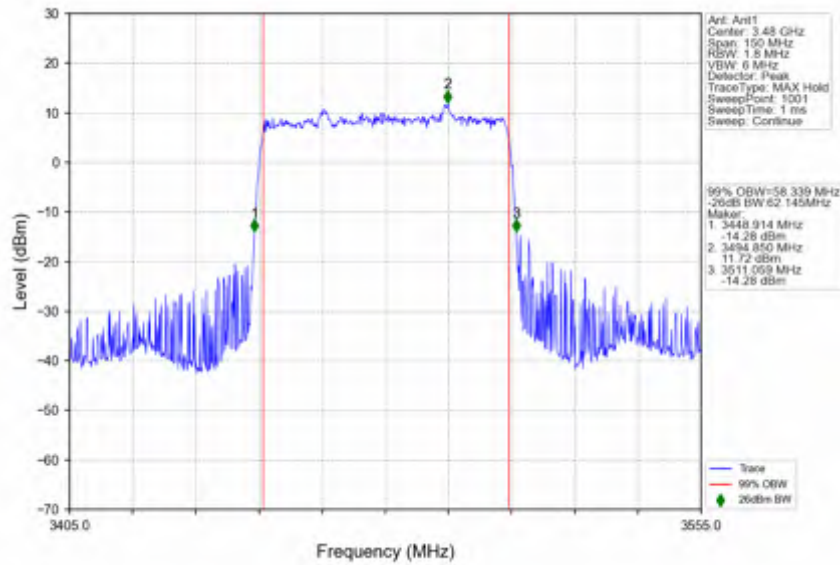
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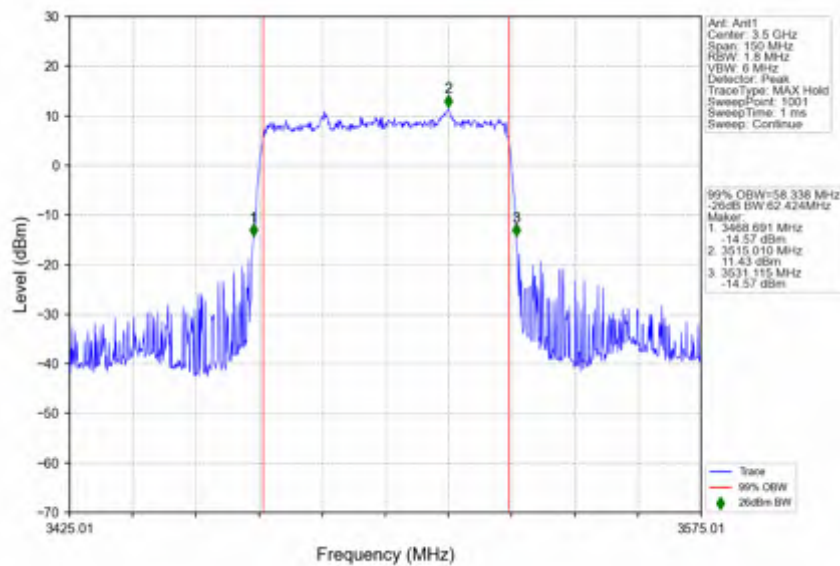
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9.15.2 Test Graph

n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM PI/2 BPSK_3480MHz_Outer_Full



n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



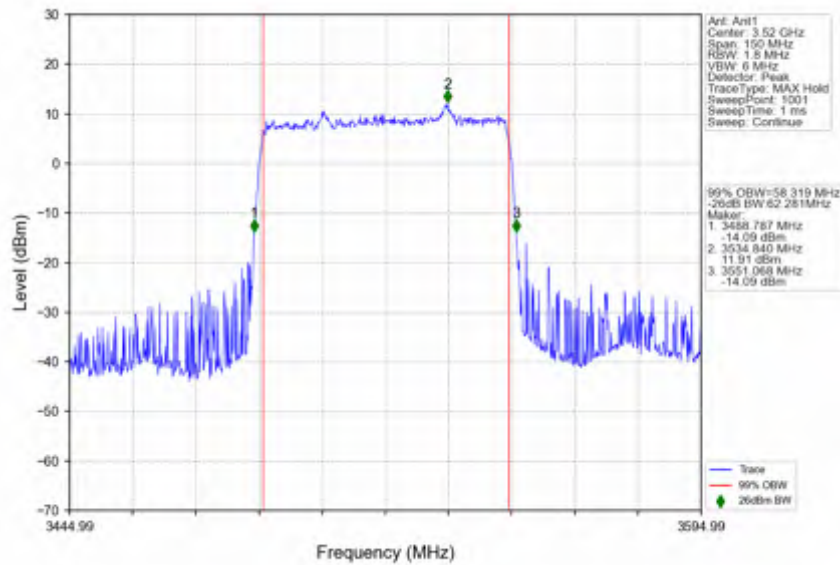
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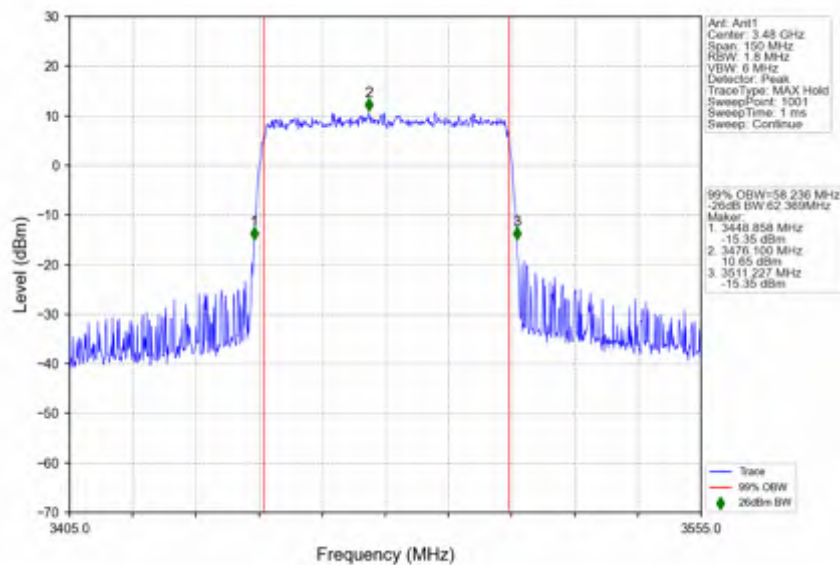
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n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM QPSK_3480MHz_Outer_Full



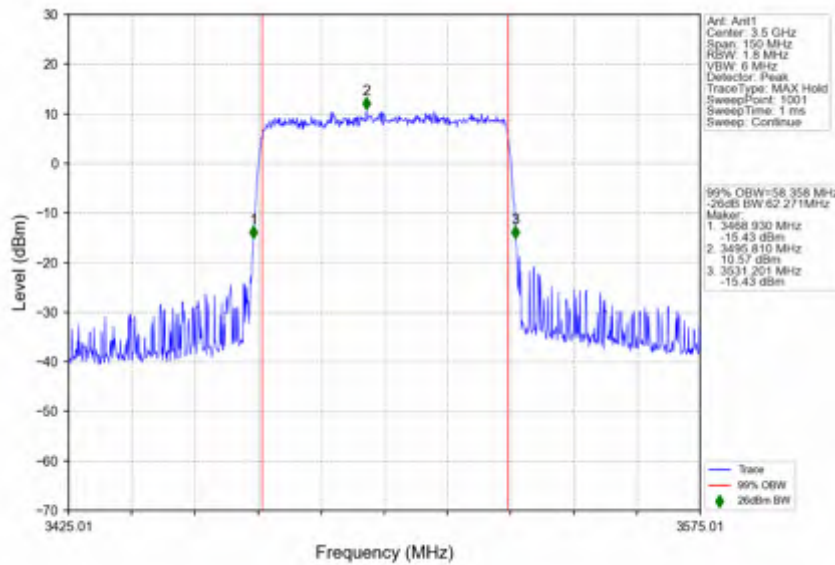
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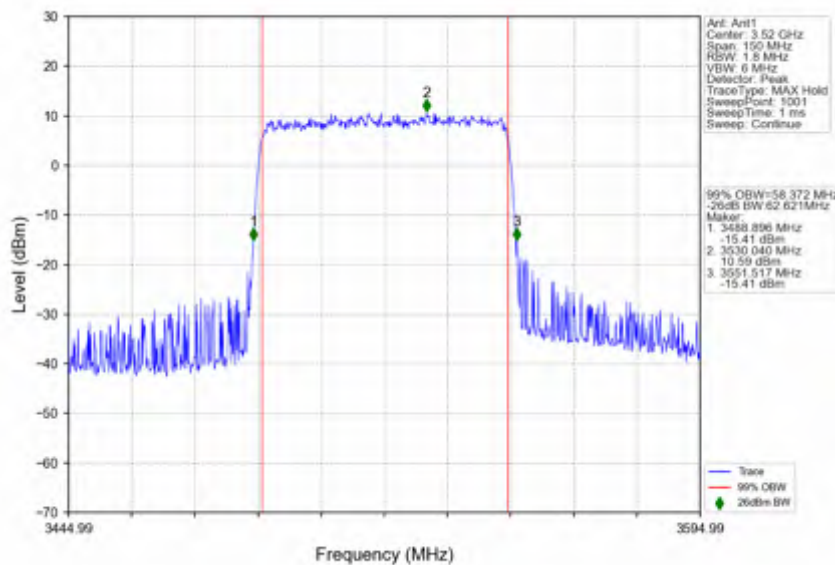
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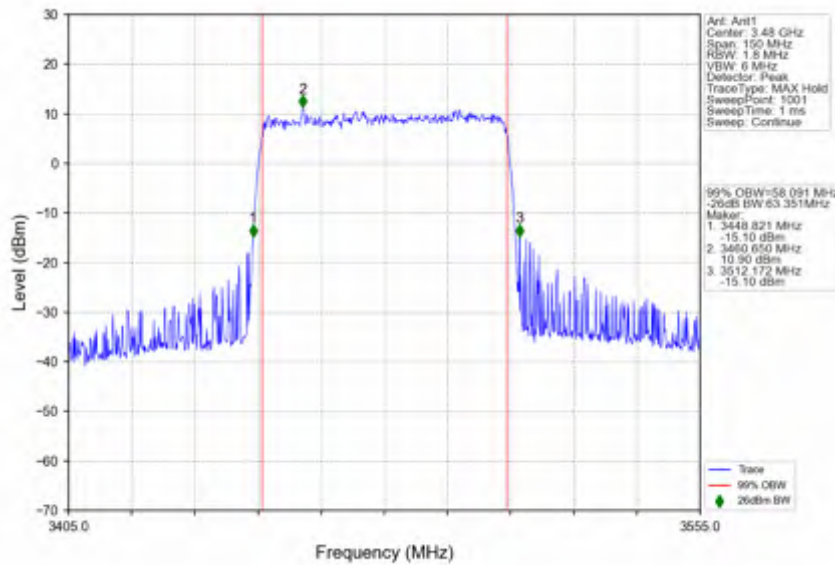


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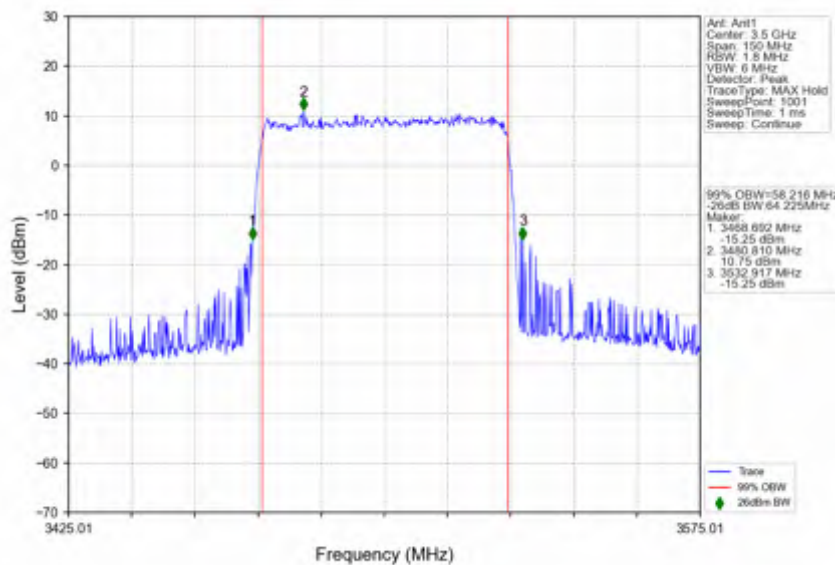
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n78e_30kHz_SISO_NTV_60MHz_DFT-s-OFDM 16 QAM_3480MHz_Outer_Full



n78e_30kHz_SISO_NTV_60MHz_DFT-s-OFDM 16 QAM_3500.01MHz_Outer_Full



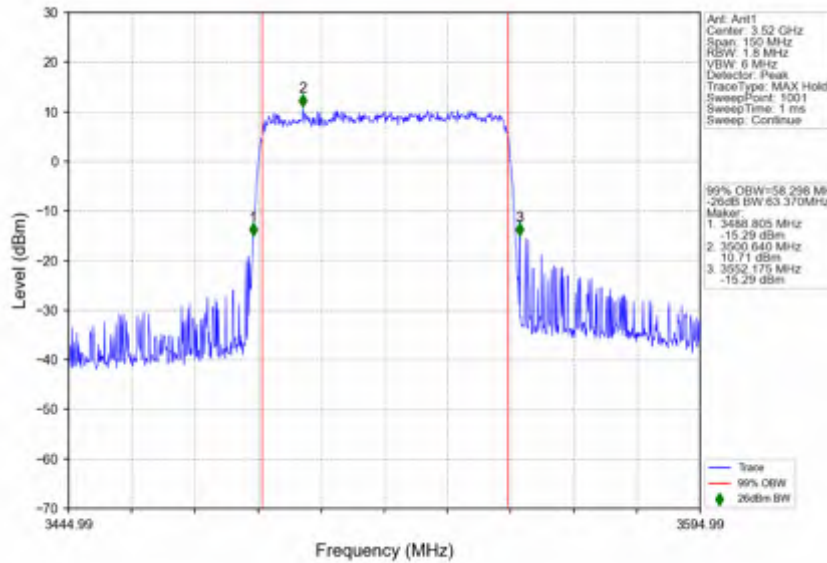
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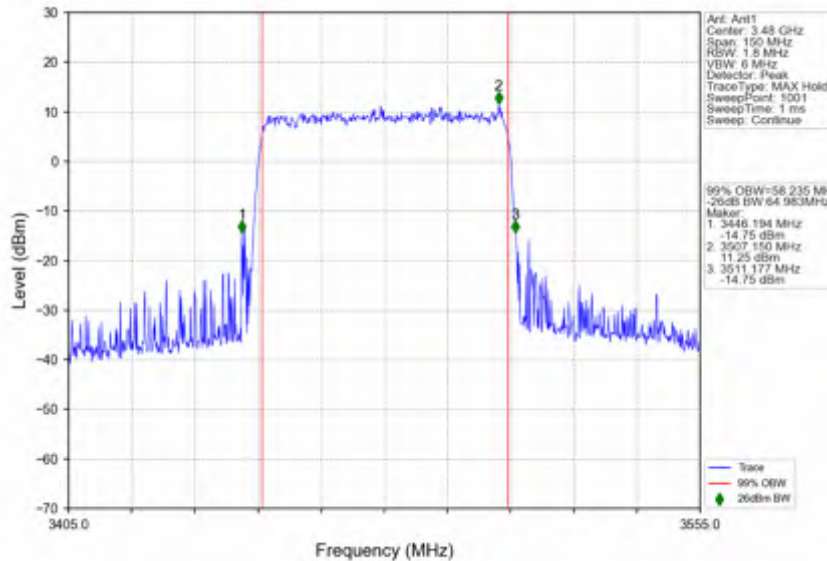
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n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM 16 QAM_3519.99MHz_Outer_Full



n78e_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM 64 QAM_3480MHz_Outer_Full



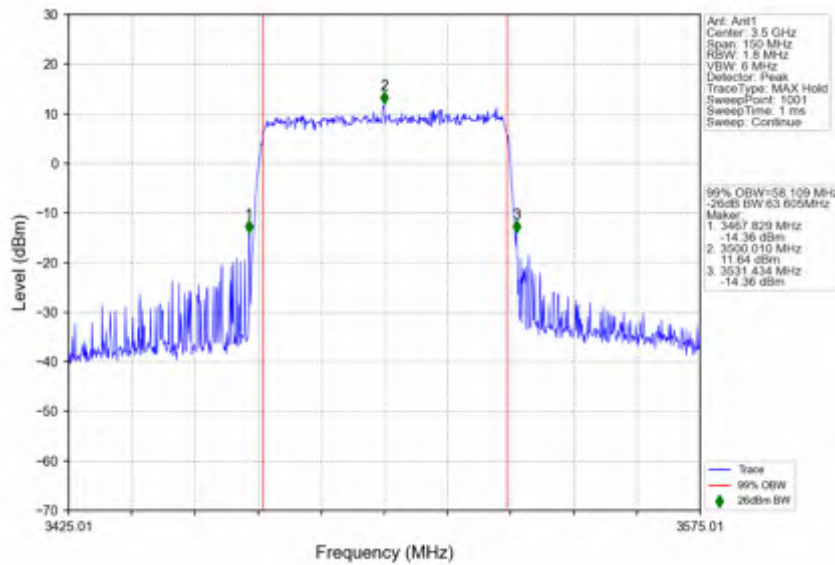
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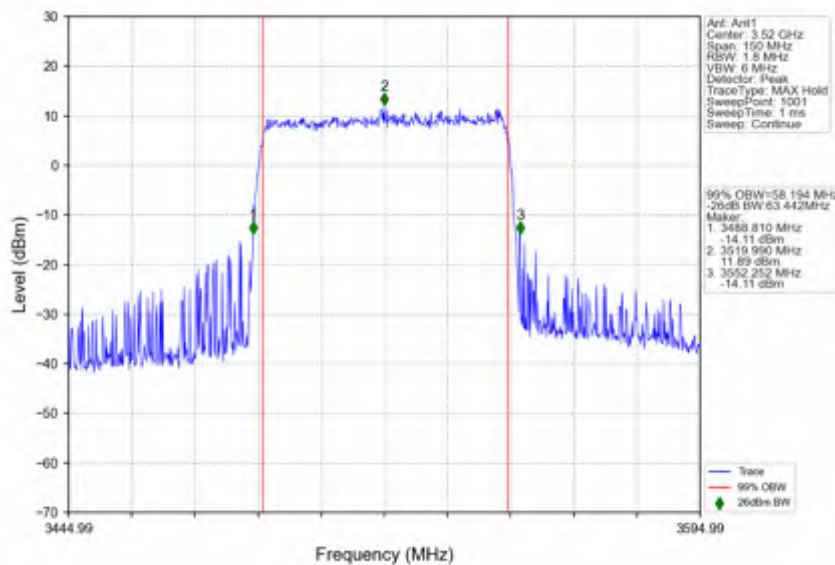
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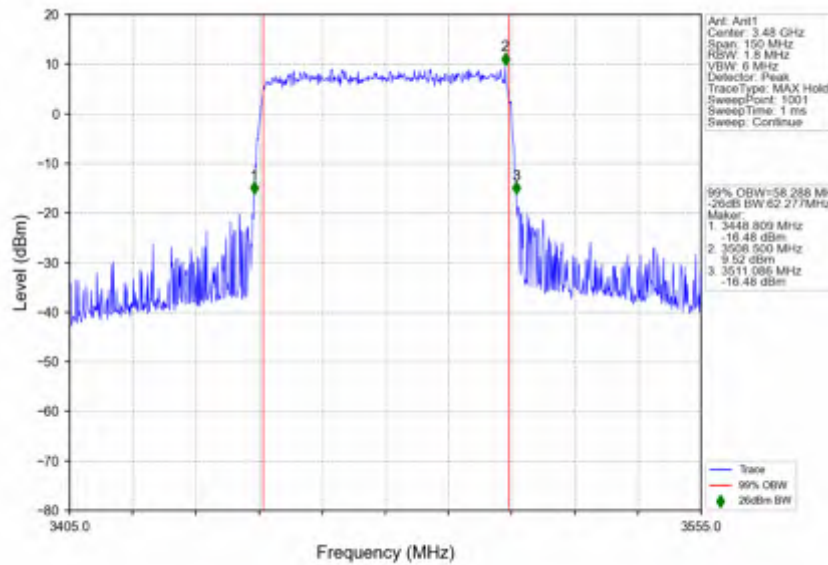
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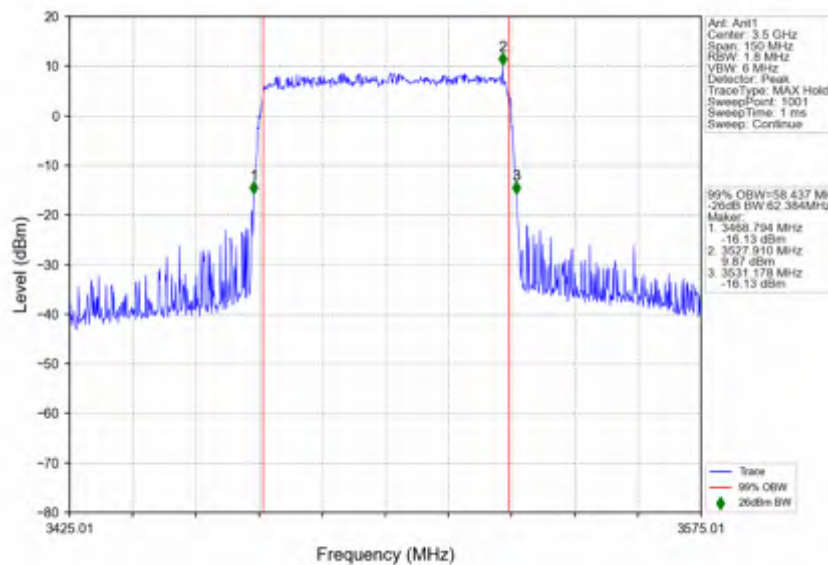
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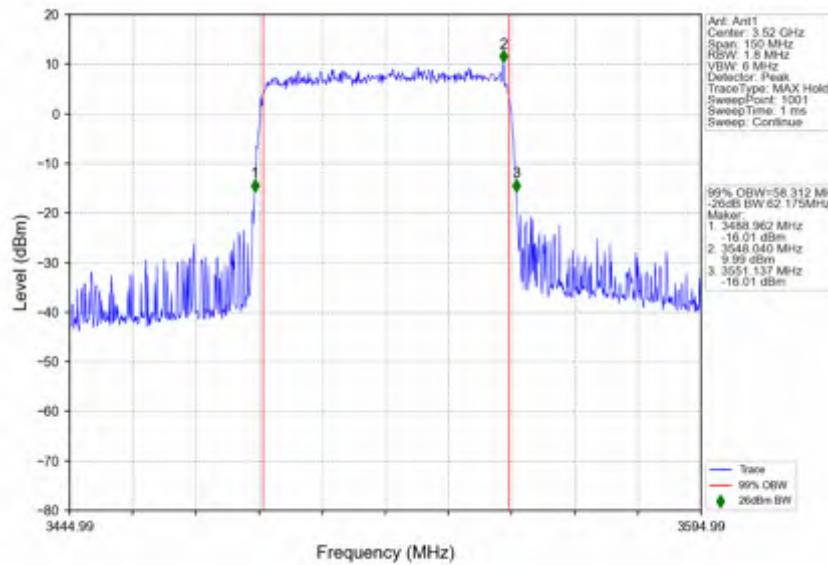


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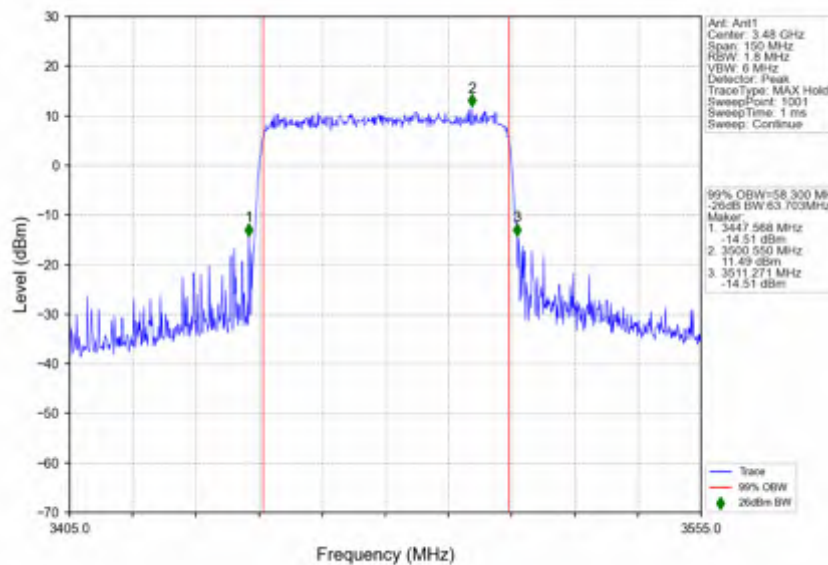
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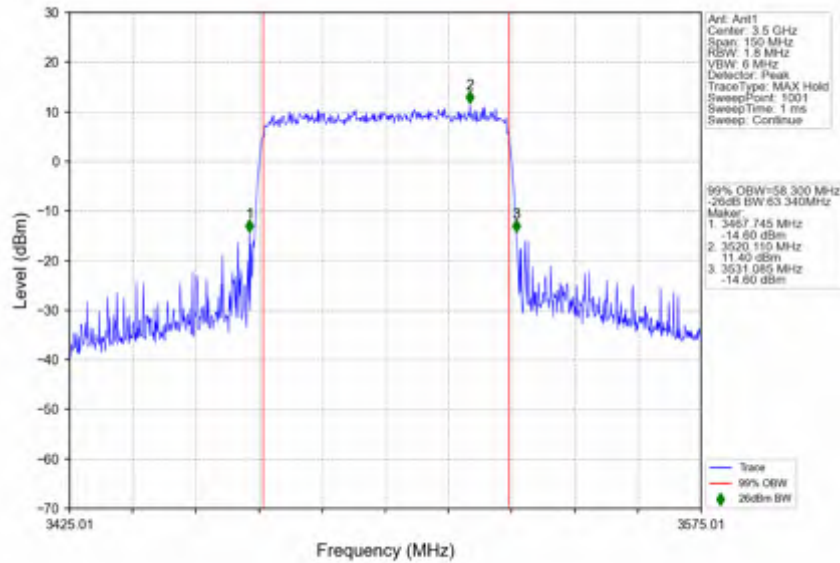
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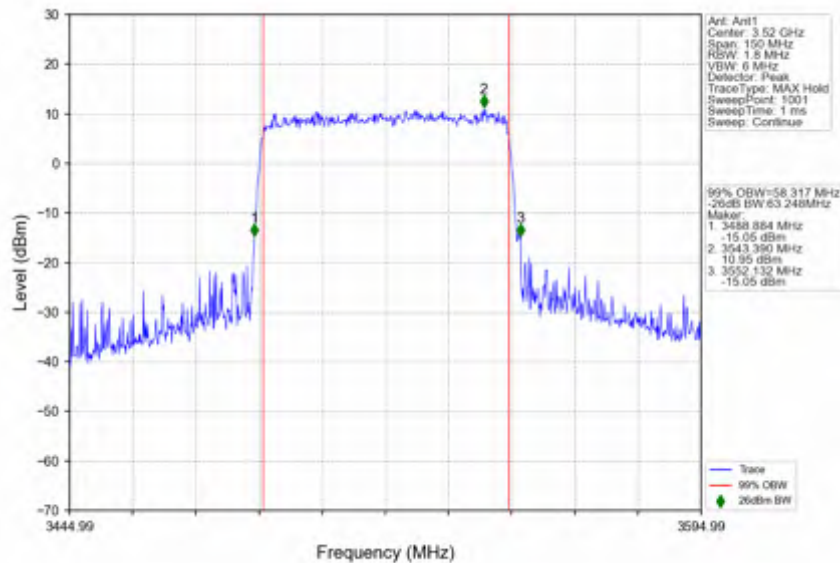
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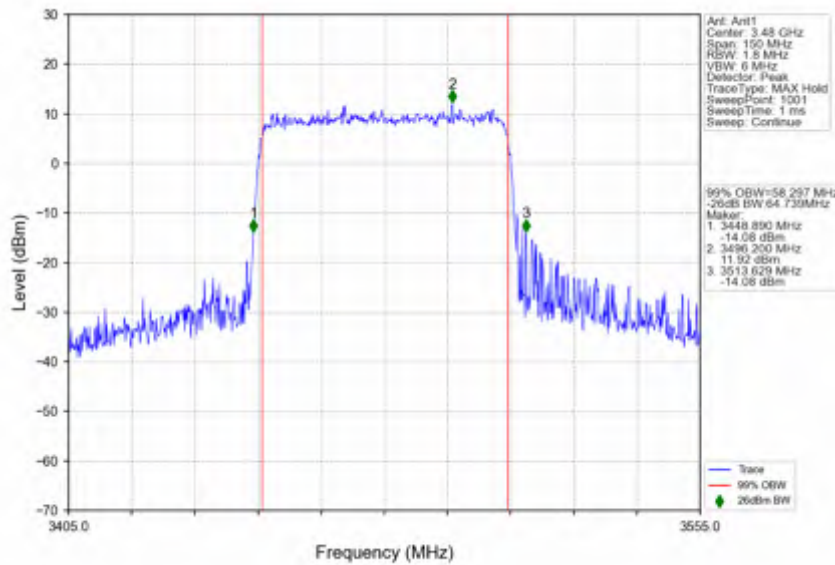
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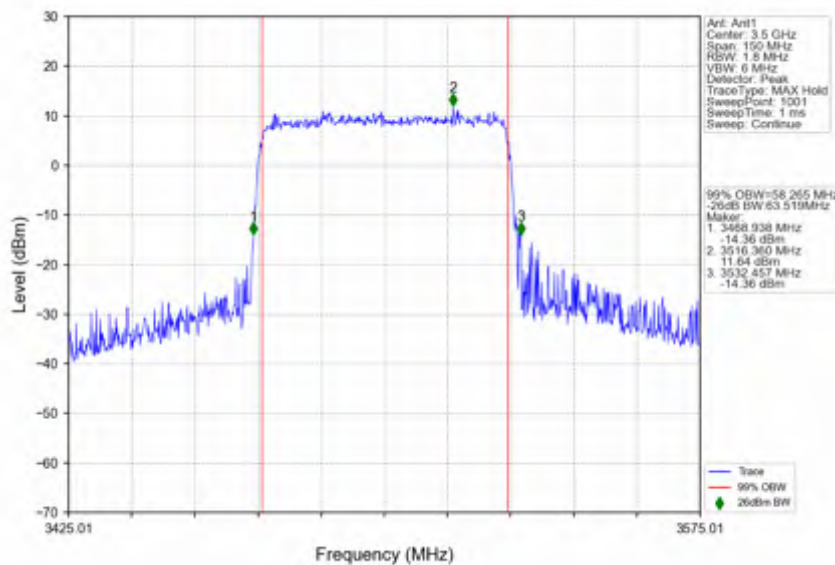
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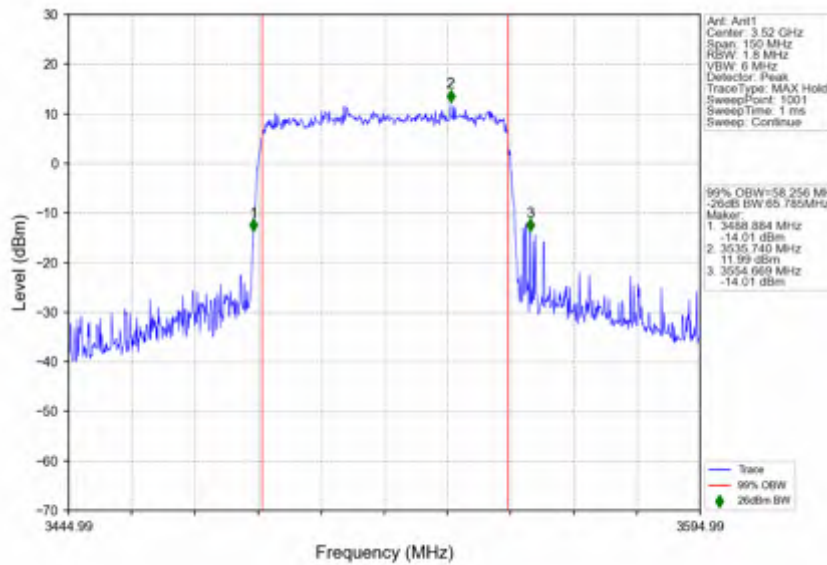
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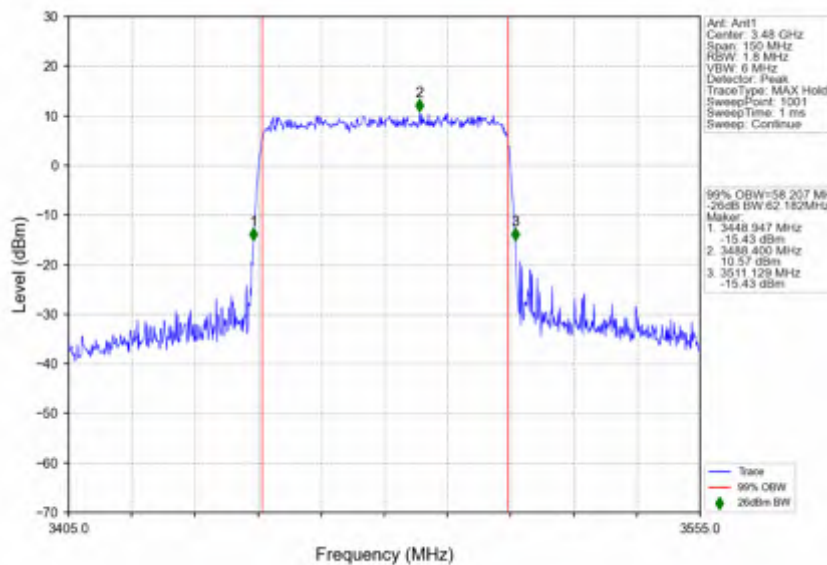
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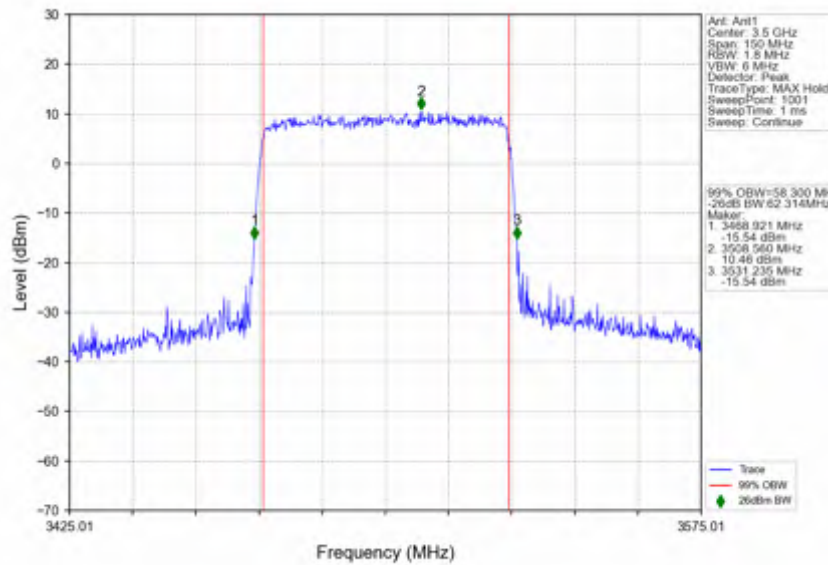
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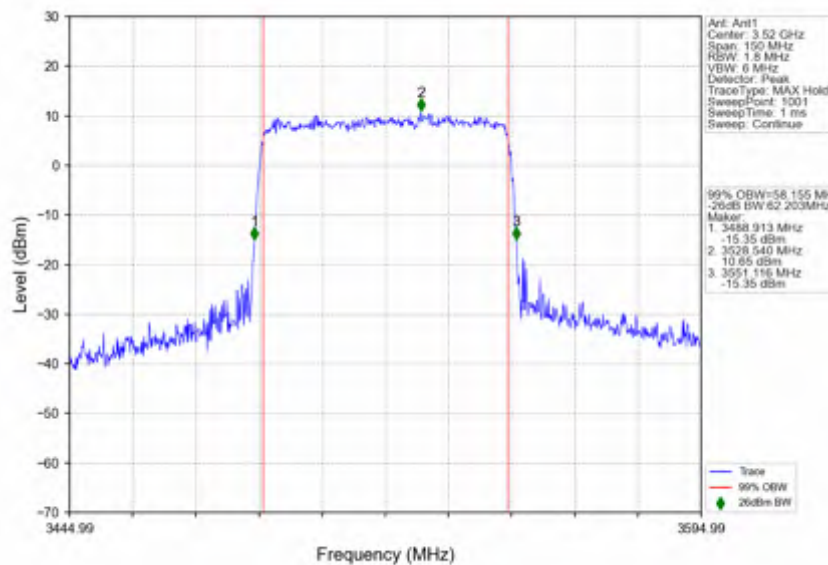
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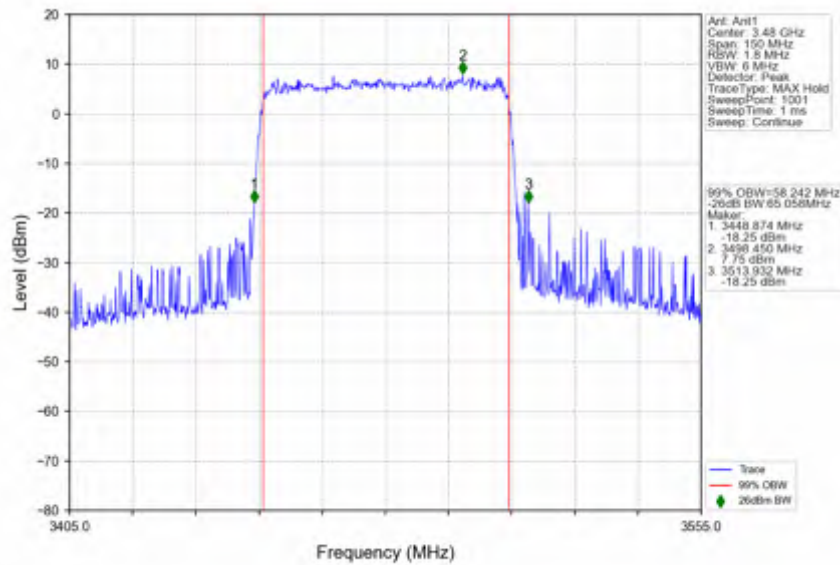
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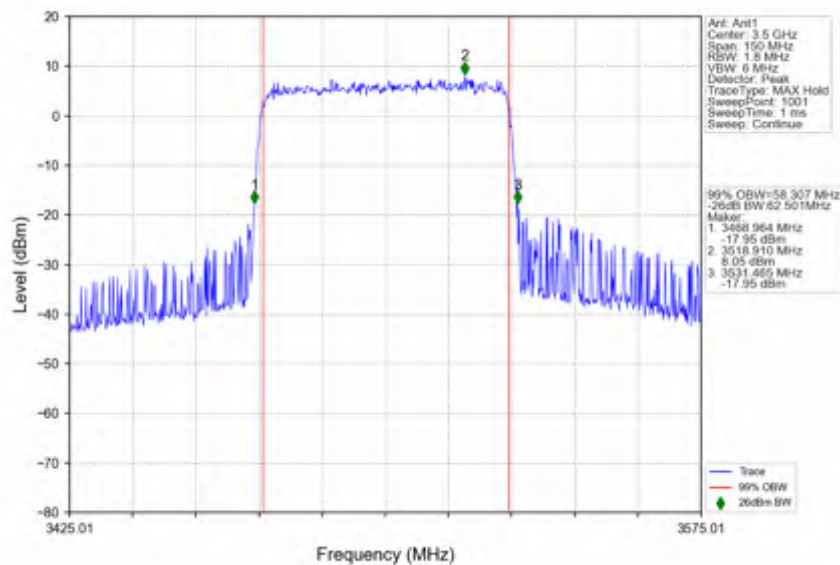
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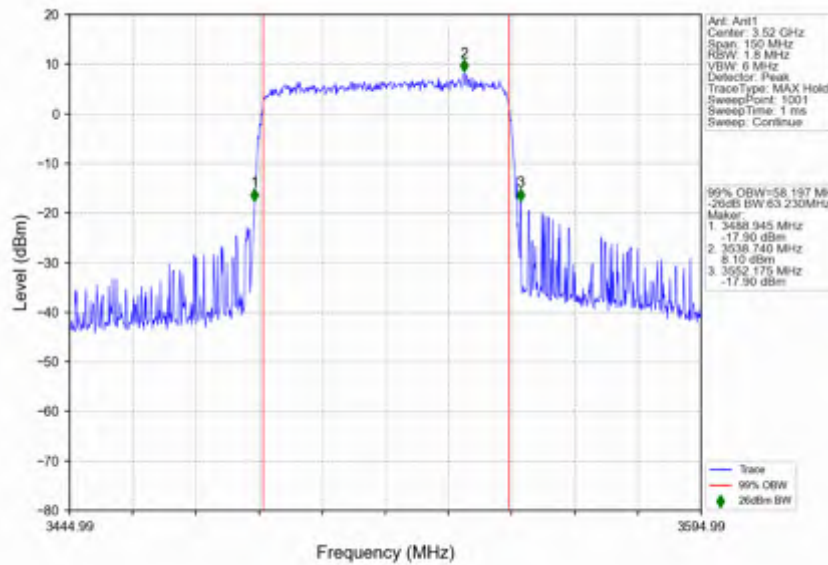
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9.16 30k_SISO_70MHz_NTNV

9.16.1 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 PI/2 BPSK	3485.01	Outer_Full	64.96	69.97	/	Pass
	3500.01	Outer_Full	64.92	70.26	/	Pass
	3514.98	Outer_Full	64.68	69.61	/	Pass
DFT-s-OFDM QPSK	3485.01	Outer_Full	65.01	70.80	/	Pass
	3500.01	Outer_Full	64.96	71.19	/	Pass
	3514.98	Outer_Full	64.59	70.15	/	Pass
DFT-s-OFDM 16 QAM	3485.01	Outer_Full	65.03	71.89	/	Pass
	3500.01	Outer_Full	64.98	70.89	/	Pass
	3514.98	Outer_Full	64.59	69.10	/	Pass
DFT-s-OFDM 64 QAM	3485.01	Outer_Full	64.91	70.17	/	Pass
	3500.01	Outer_Full	64.94	71.43	/	Pass
	3514.98	Outer_Full	64.44	69.38	/	Pass
DFT-s-OFDM 256 QAM	3485.01	Outer_Full	65.23	73.90	/	Pass
	3500.01	Outer_Full	65.05	73.57	/	Pass
	3514.98	Outer_Full	64.86	69.50	/	Pass
CP-OFDM QPSK	3485.01	Outer_Full	68.14	73.18	/	Pass
	3500.01	Outer_Full	68.11	73.34	/	Pass
	3514.98	Outer_Full	68.11	72.52	/	Pass
CP-OFDM 16 QAM	3485.01	Outer_Full	68.04	73.93	/	Pass
	3500.01	Outer_Full	68.04	73.04	/	Pass
	3514.98	Outer_Full	67.83	72.50	/	Pass
CP-OFDM 64 QAM	3485.01	Outer_Full	67.98	73.06	/	Pass
	3500.01	Outer_Full	68.14	72.85	/	Pass
	3514.98	Outer_Full	67.97	72.33	/	Pass
CP-OFDM 256 QAM	3485.01	Outer_Full	67.90	72.88	/	Pass
	3500.01	Outer_Full	67.94	72.85	/	Pass
	3514.98	Outer_Full	67.89	71.98	/	Pass



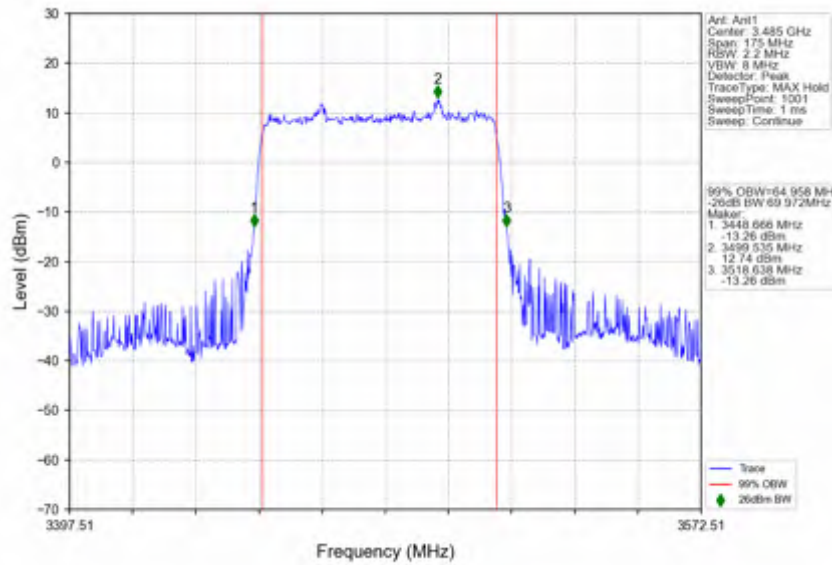
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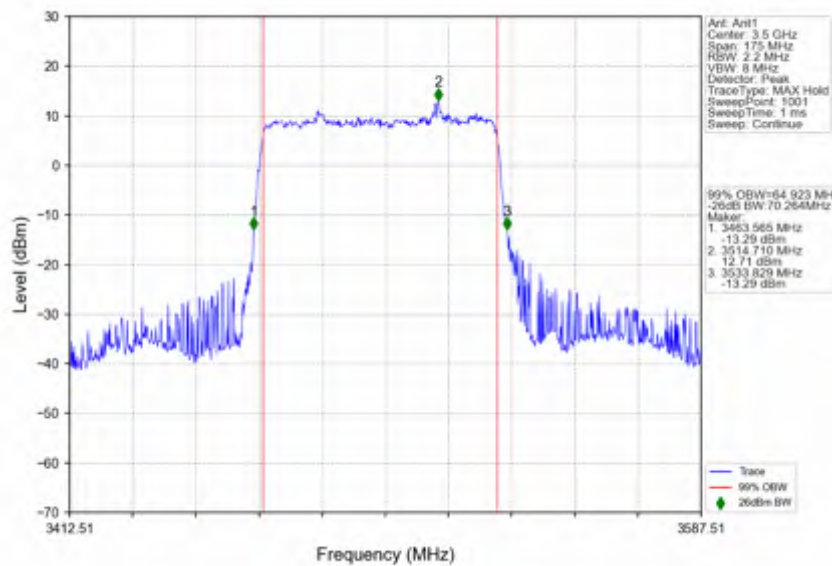
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9.16.2 Test Graph

n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM PI/2 BPSK_3485.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



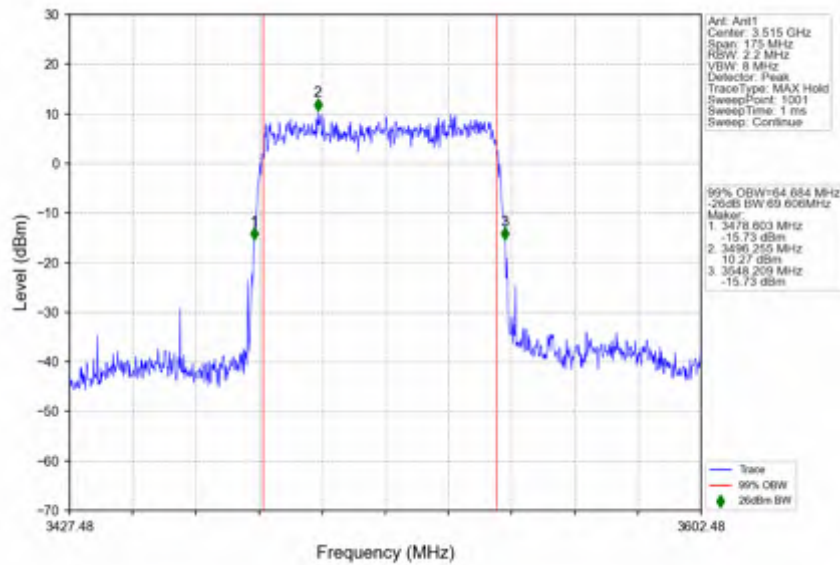
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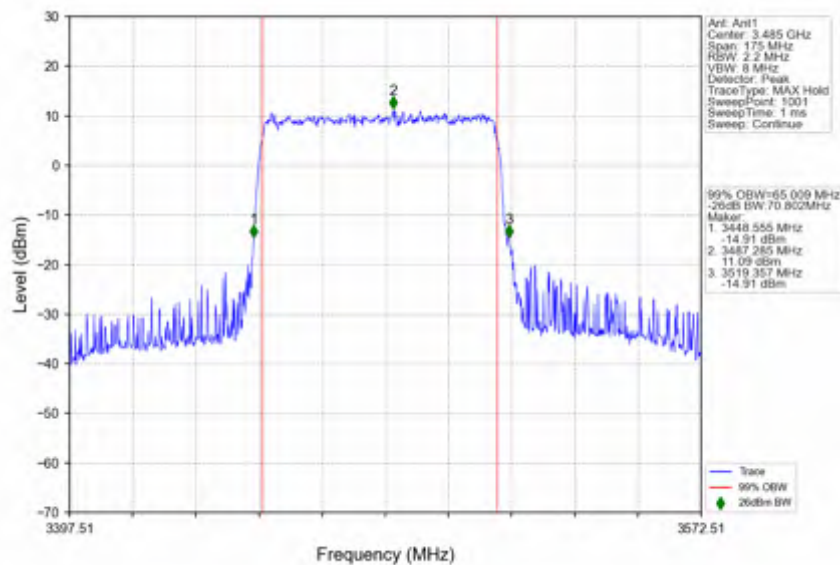
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n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM QPSK_3485.01MHz_Outer_Full



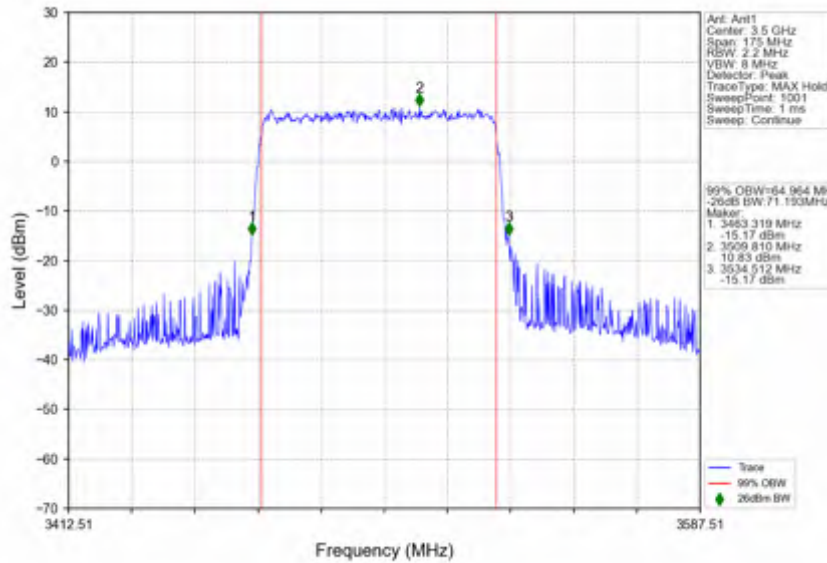
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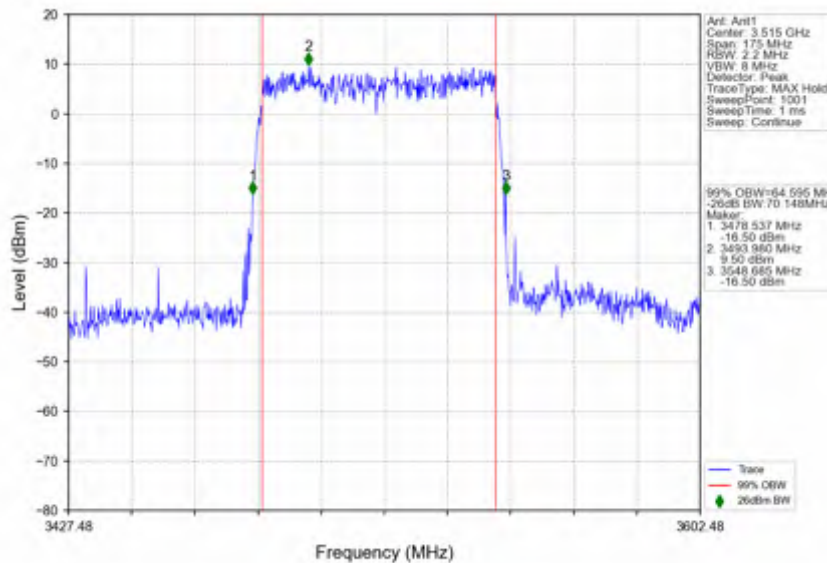
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n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM_QPSK_3500.01MHz_Outer_Full



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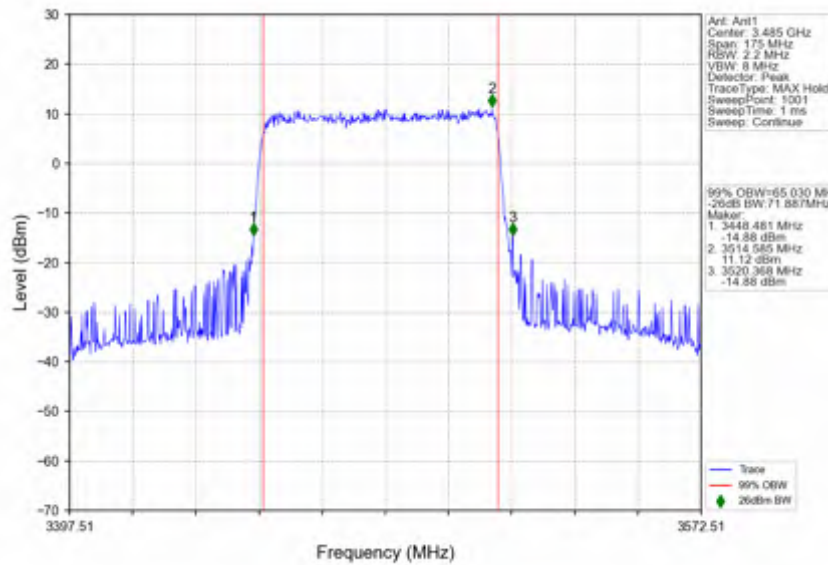


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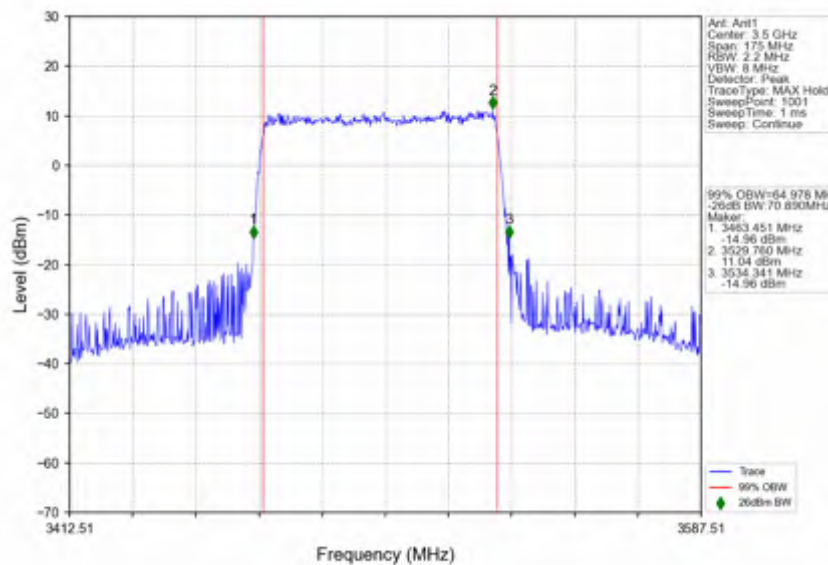
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n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM_16 QAM_3500.01MHz_Outer_Full



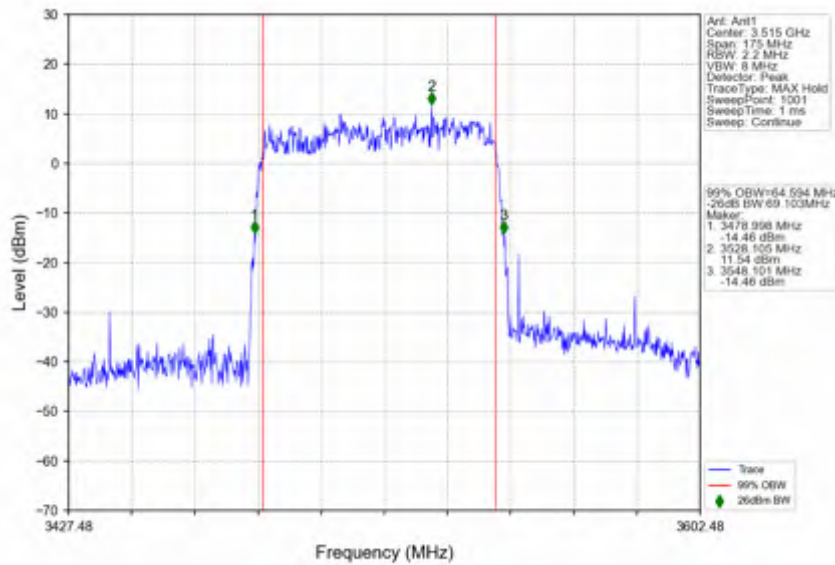
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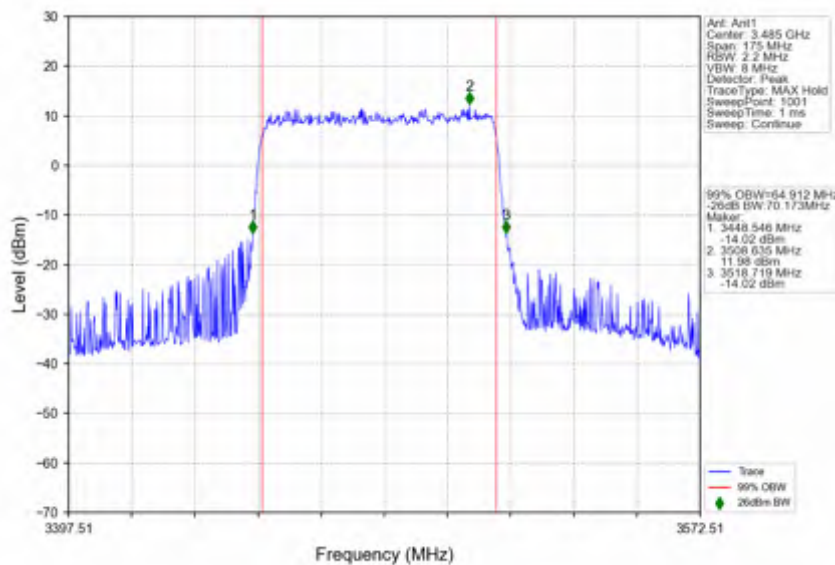
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n78e_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM 64 QAM_3485.01MHz_Outer_Full



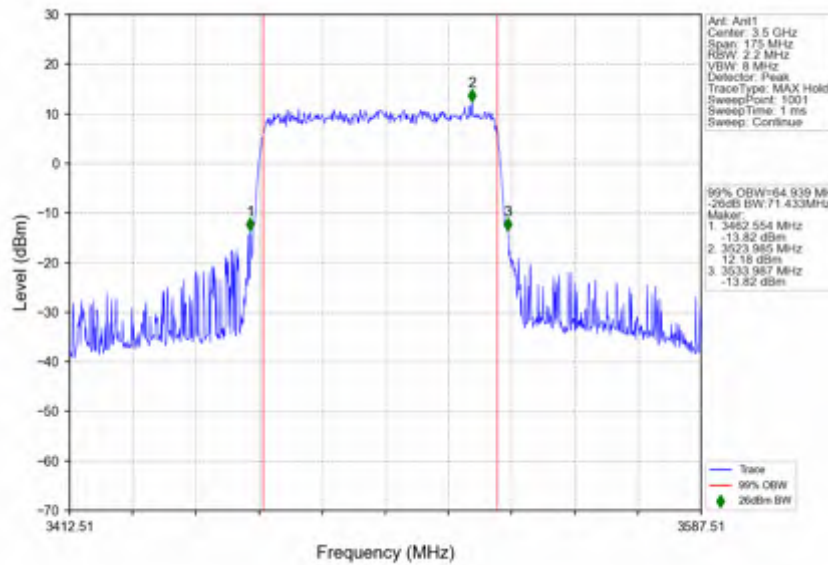
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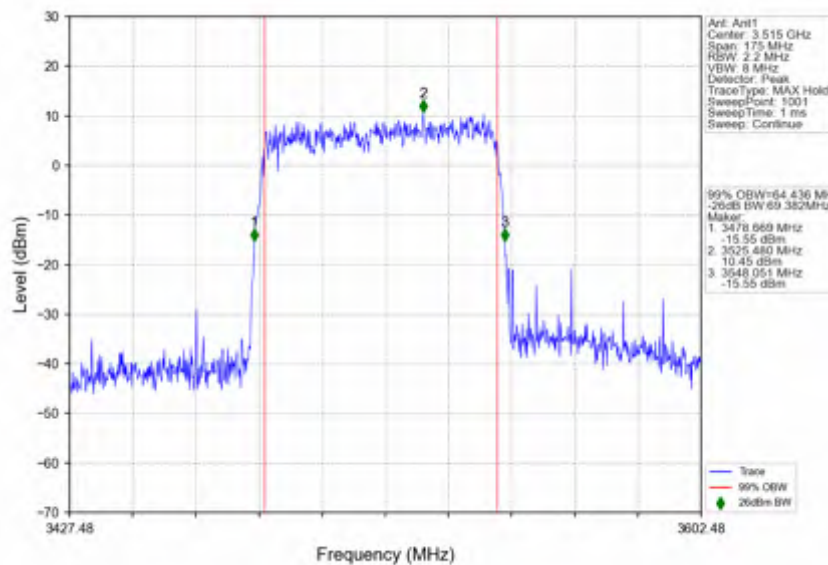
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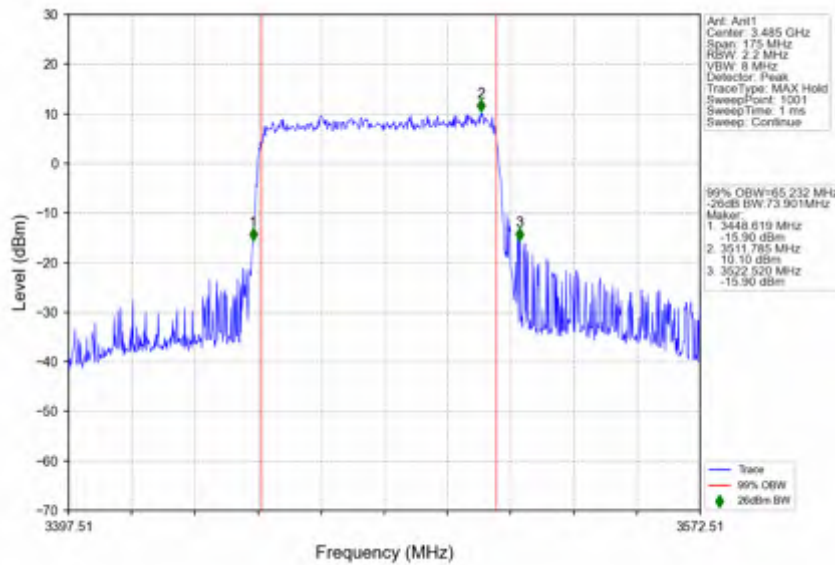
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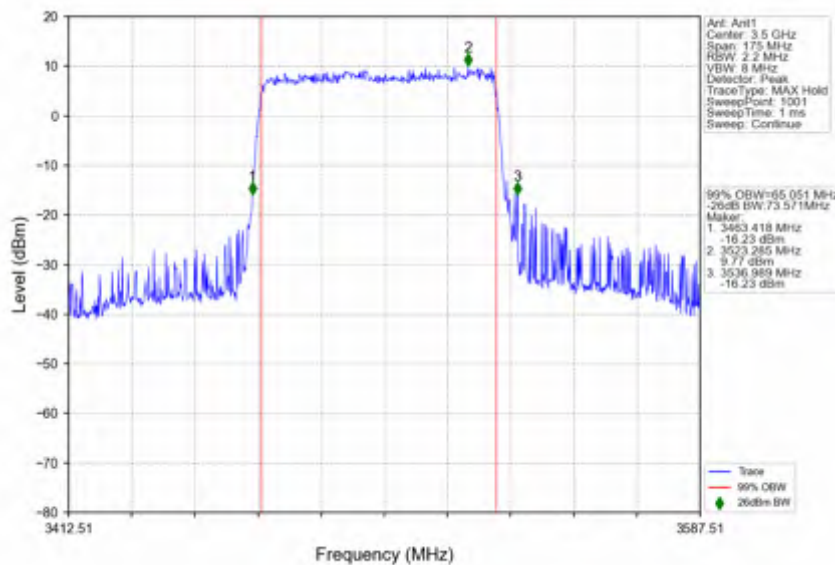
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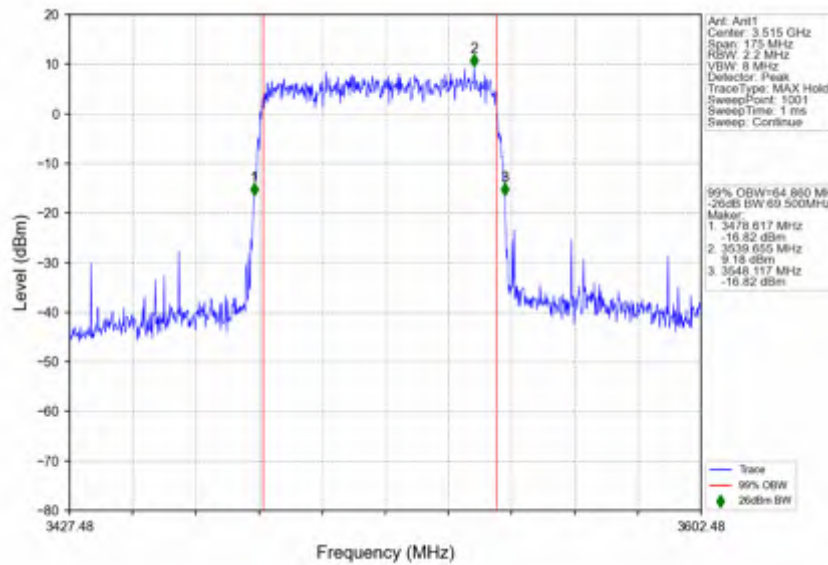
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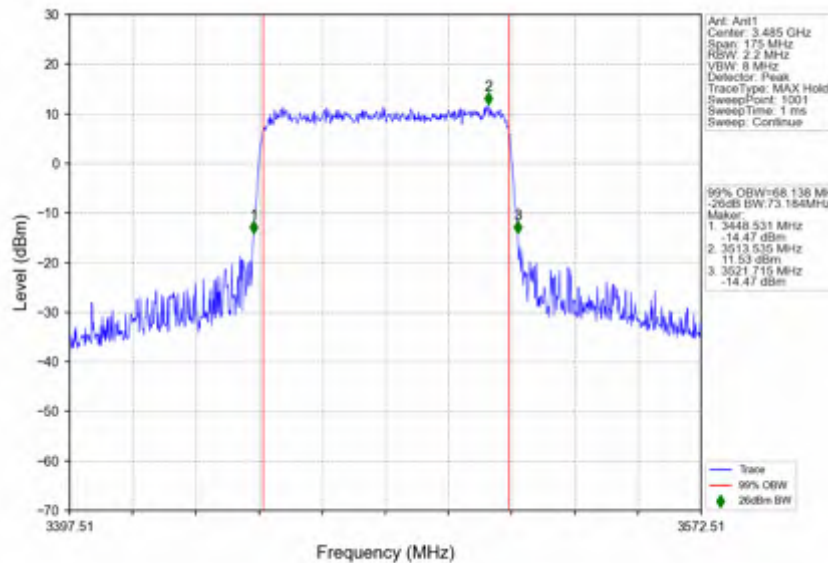
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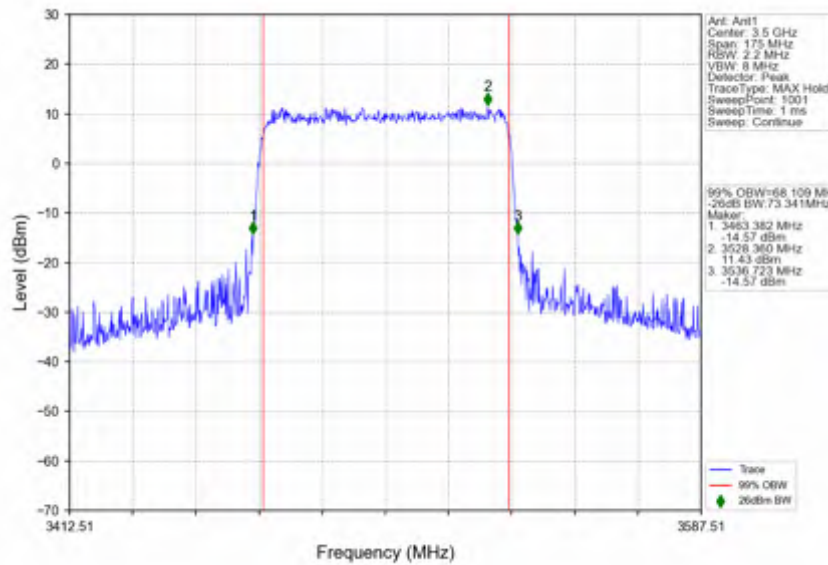
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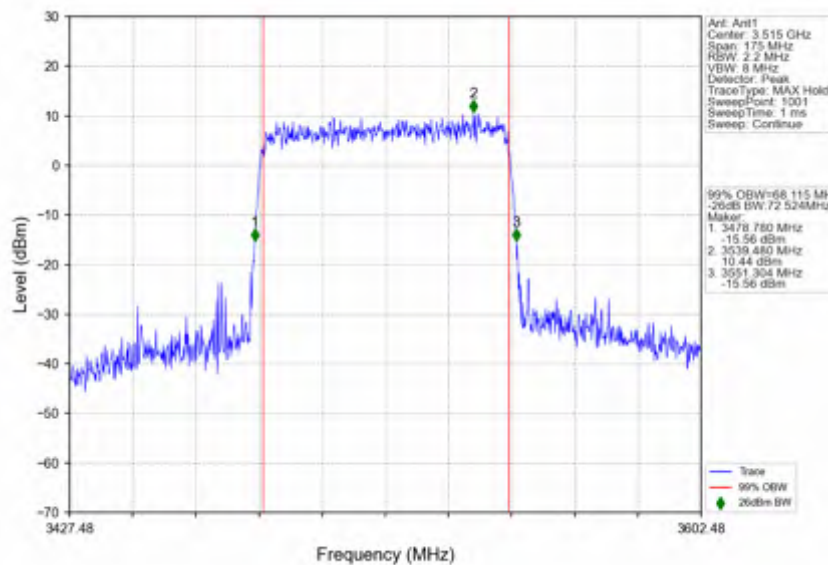
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n78e_30kHz_SISO_NTNV_70MHz_CP-OFDM QPSK_3514.98MHz_Outer_Full



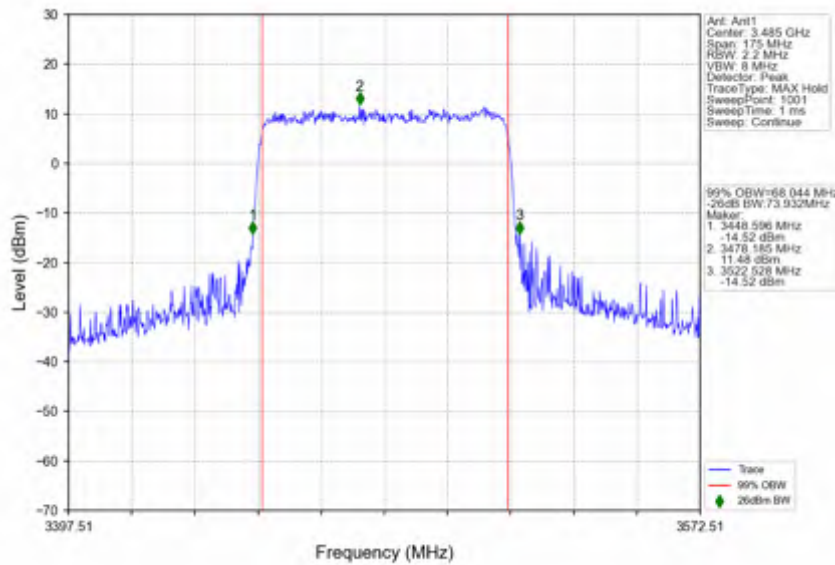
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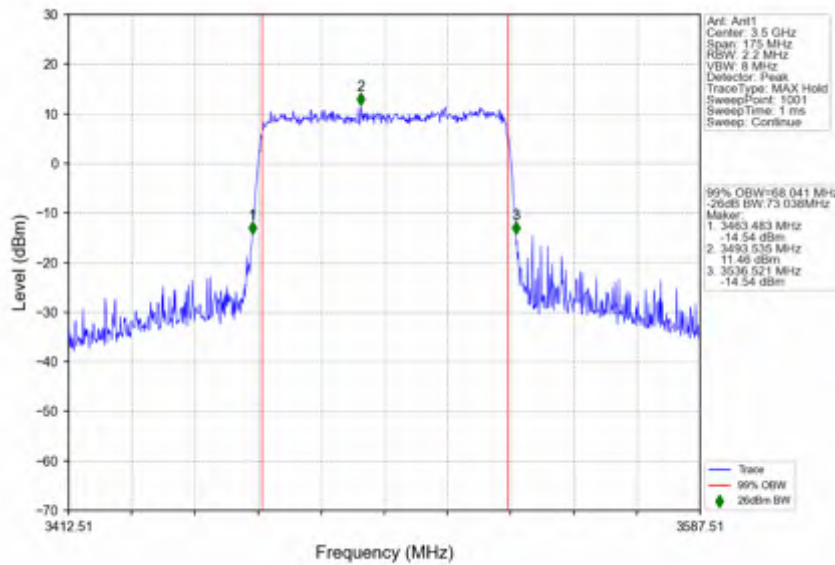
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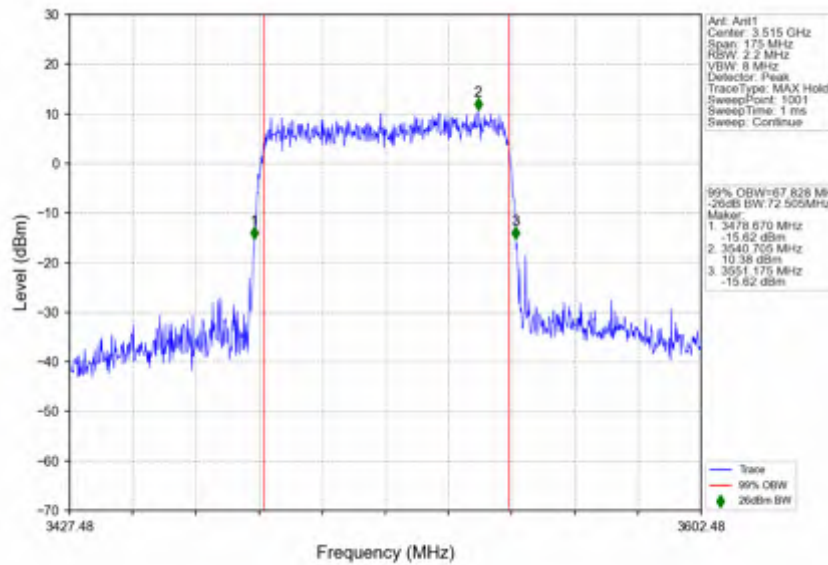
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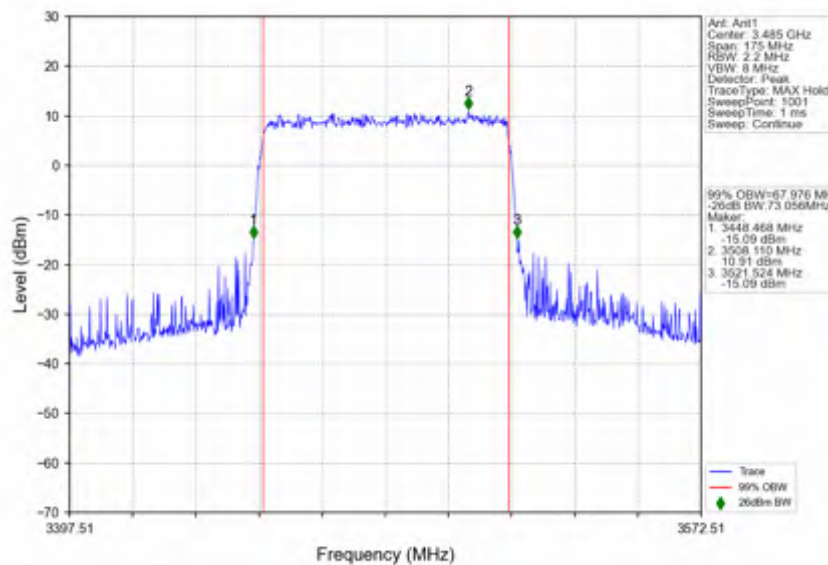
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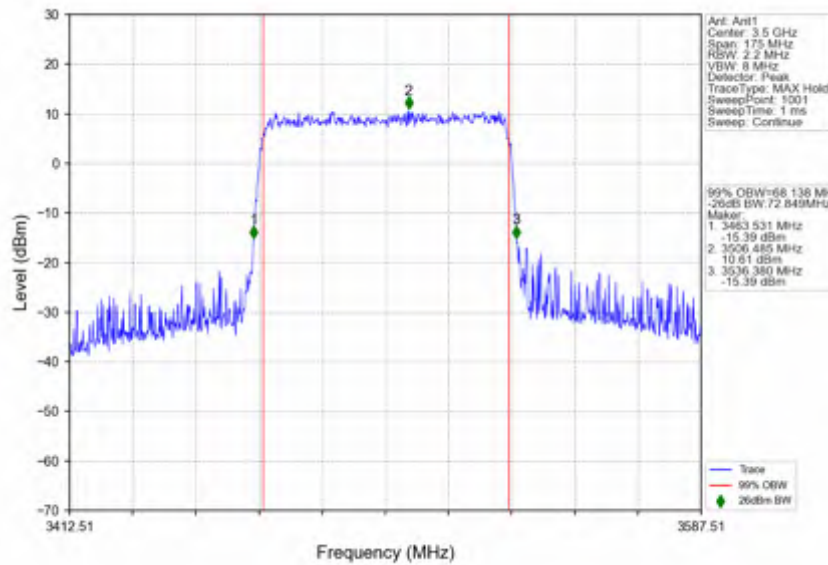
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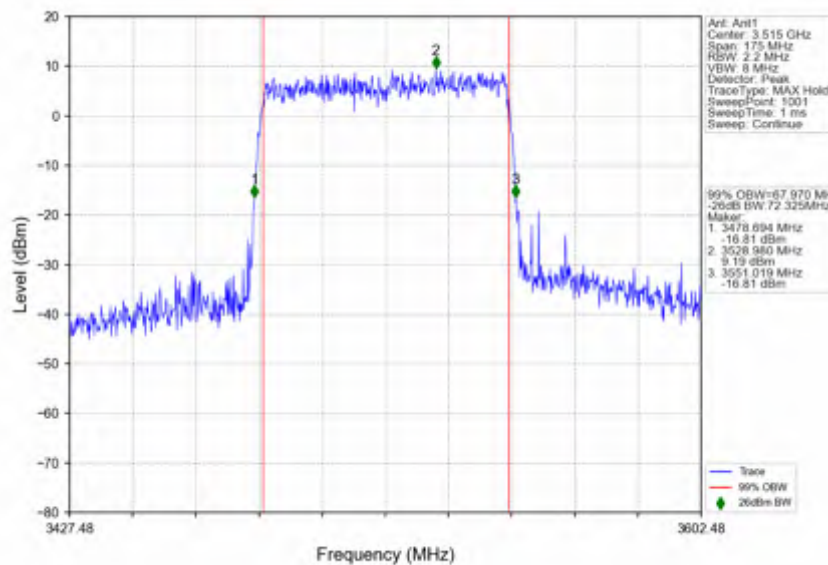
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n78e_30kHz_SISO_NTV_70MHz_CP-OFDM 64 QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTV_70MHz_CP-OFDM 64 QAM_3514.98MHz_Outer_Full



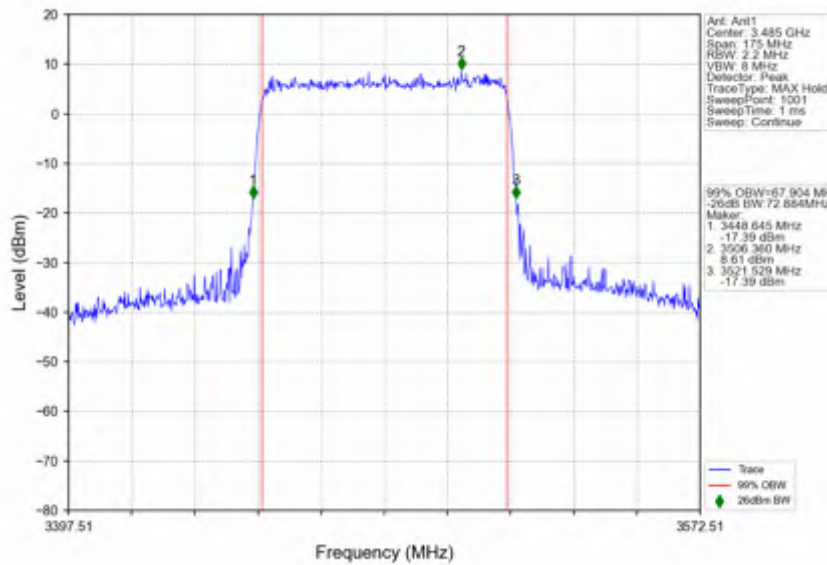
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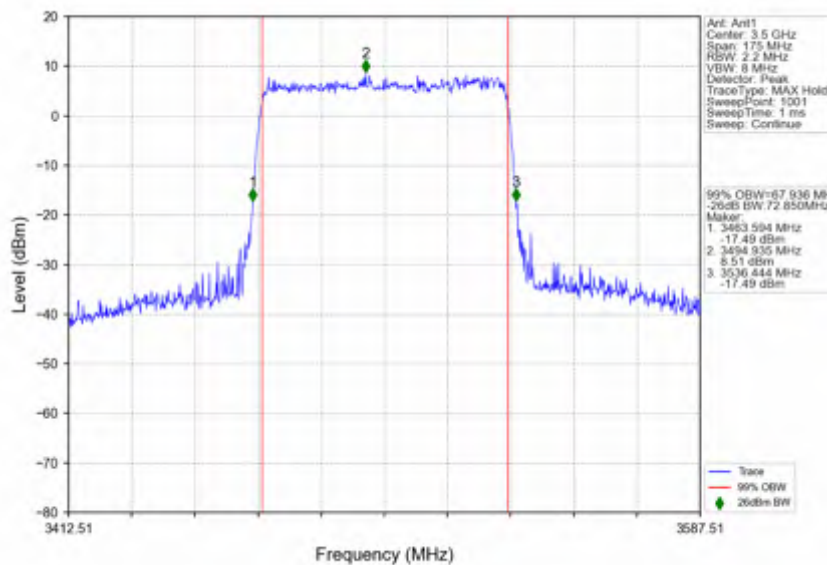
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n78e_30kHz_SISO_NTNV_70MHz_CP-OFDM 256 QAM_3485.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_70MHz_CP-OFDM 256 QAM_3500.01MHz_Outer_Full



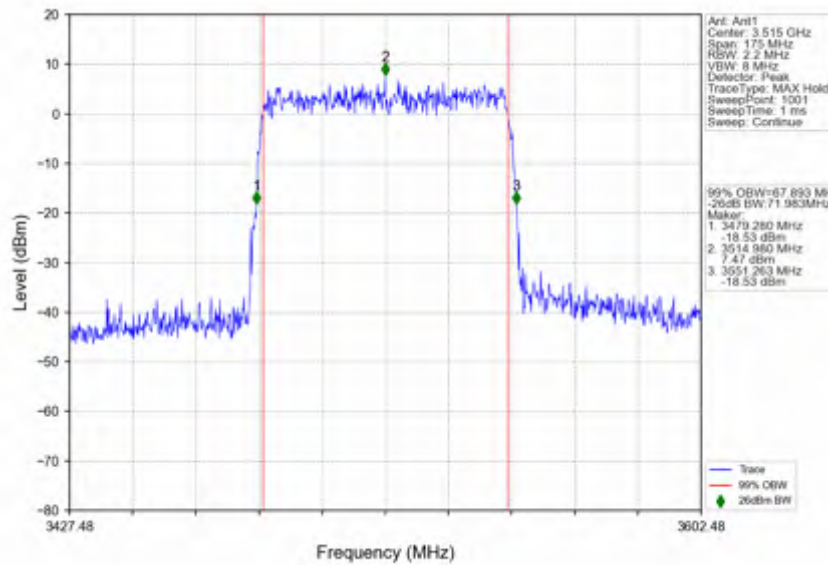
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9.17 30k_SISO_80MHz_NTNV

9.17.1 Test Result

5G NR n78e SCS=30kHz SISO 80MHz NTV						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3490.02	Outer_Full	78.13	83.28	/	Pass
	3500.01	Outer_Full	77.22	82.71	/	Pass
	3510	Outer_Full	77.72	82.66	/	Pass
DFT-s-OFDM QPSK	3490.02	Outer_Full	77.70	83.38	/	Pass
	3500.01	Outer_Full	77.65	82.64	/	Pass
	3510	Outer_Full	77.32	82.46	/	Pass
DFT-s-OFDM 16 QAM	3490.02	Outer_Full	77.72	82.82	/	Pass
	3500.01	Outer_Full	77.81	82.68	/	Pass
	3510	Outer_Full	77.84	82.42	/	Pass
DFT-s-OFDM 64 QAM	3490.02	Outer_Full	77.78	82.88	/	Pass
	3500.01	Outer_Full	77.44	82.64	/	Pass
	3510	Outer_Full	77.54	82.88	/	Pass
DFT-s-OFDM 256 QAM	3490.02	Outer_Full	77.75	82.99	/	Pass
	3500.01	Outer_Full	77.92	82.59	/	Pass
	3510	Outer_Full	77.80	82.39	/	Pass
CP-OFDM QPSK	3490.02	Outer_Full	78.18	84.38	/	Pass
	3500.01	Outer_Full	77.81	82.98	/	Pass
	3510	Outer_Full	78.17	83.12	/	Pass
CP-OFDM 16 QAM	3490.02	Outer_Full	77.96	83.45	/	Pass
	3500.01	Outer_Full	77.62	82.87	/	Pass
	3510	Outer_Full	78.06	82.92	/	Pass
CP-OFDM 64 QAM	3490.02	Outer_Full	78.14	84.55	/	Pass
	3500.01	Outer_Full	77.59	83.09	/	Pass
	3510	Outer_Full	77.90	82.95	/	Pass
CP-OFDM 256 QAM	3490.02	Outer_Full	78.11	83.32	/	Pass
	3500.01	Outer_Full	77.68	82.85	/	Pass
	3510	Outer_Full	78.44	82.93	/	Pass



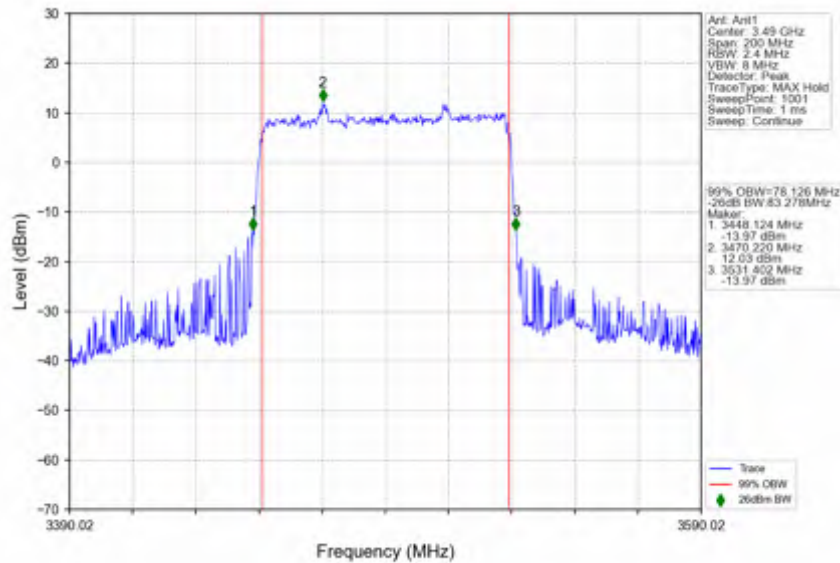
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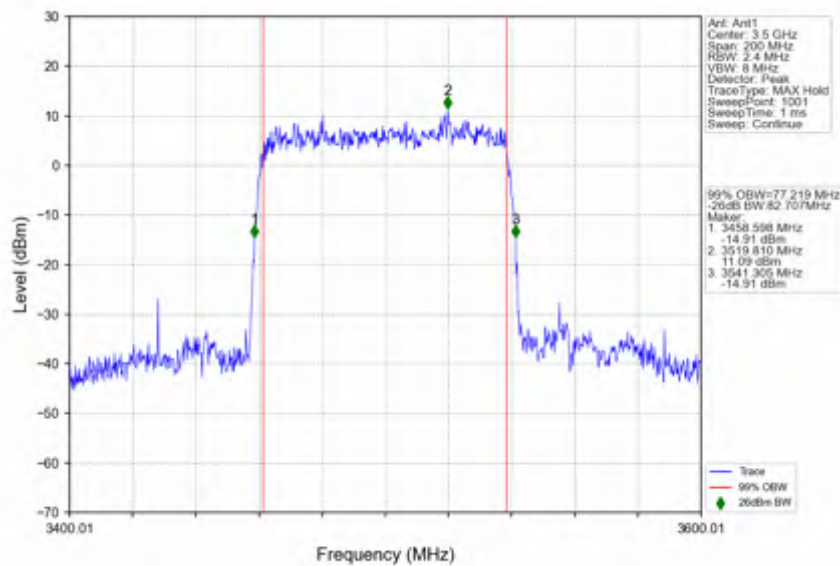
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9.17.2 Test Graph

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n78e_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



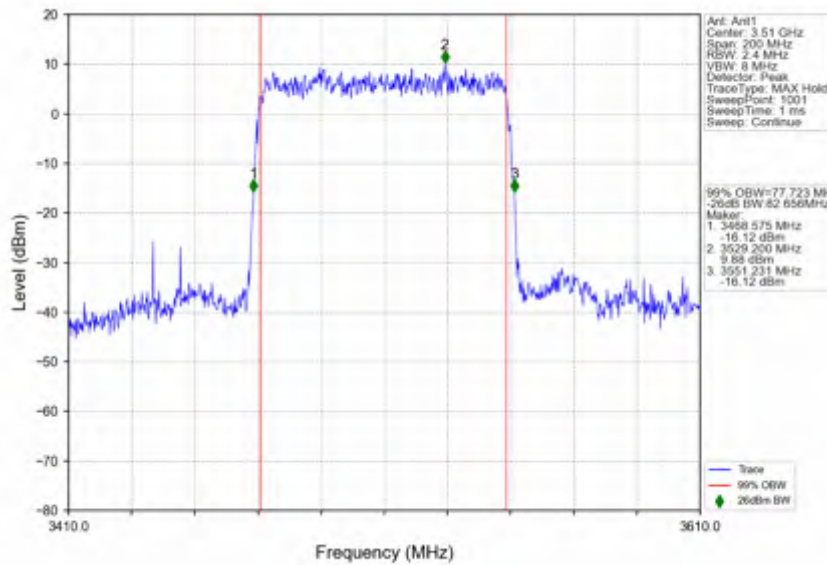
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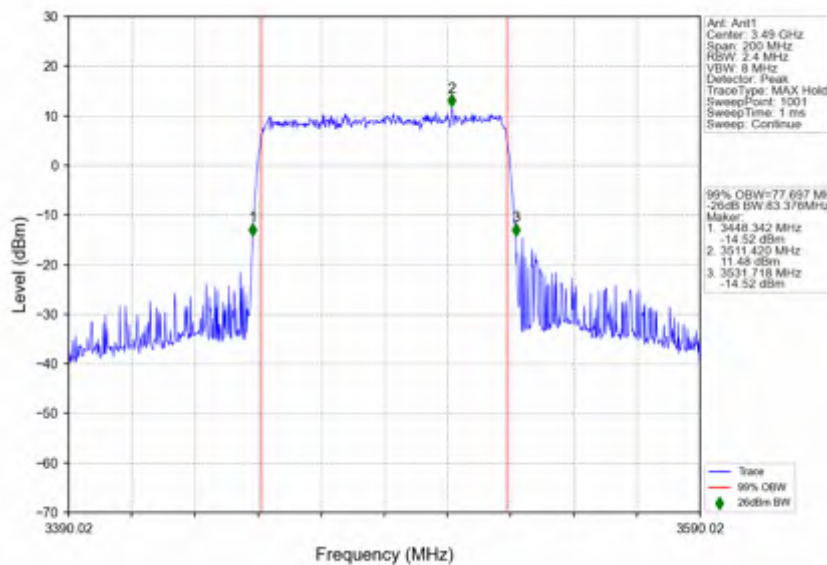
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n78e_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM QPSK_3490.02MHz_Outer_Full



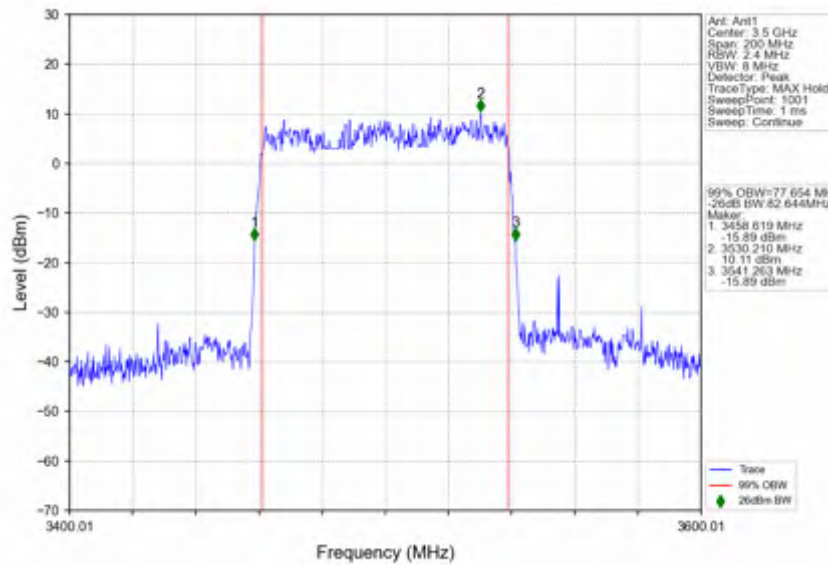
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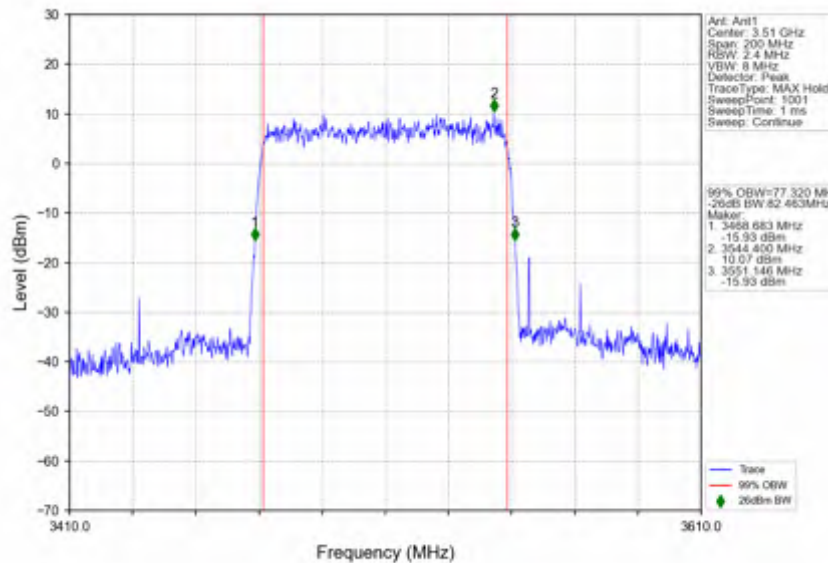
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n78e_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM QPSK_3510MHz_Outer_Full

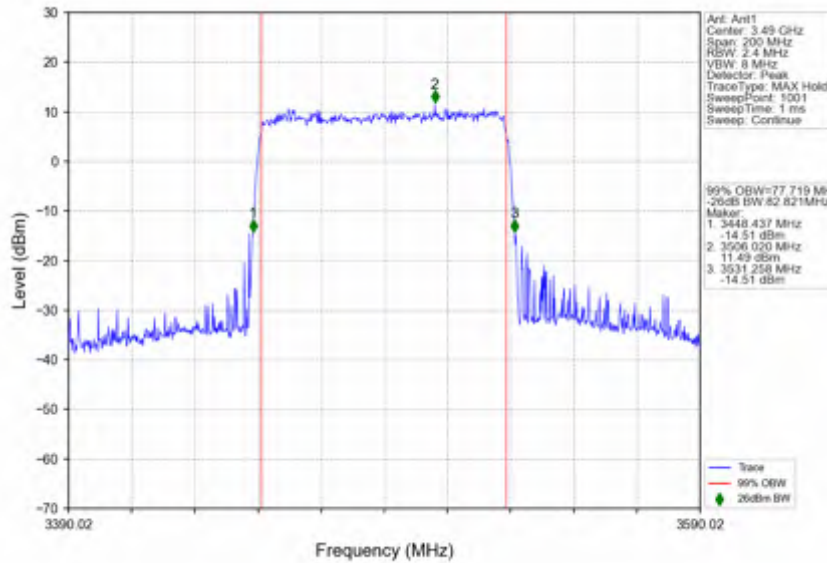


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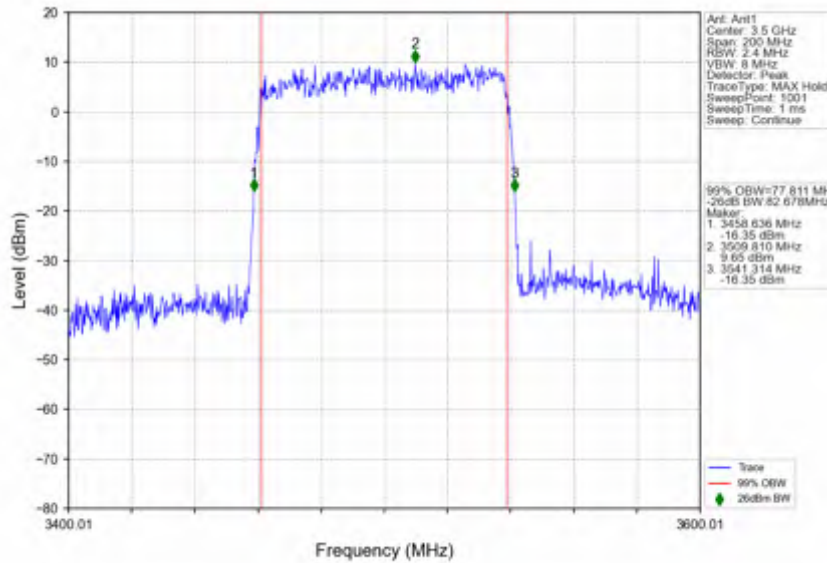
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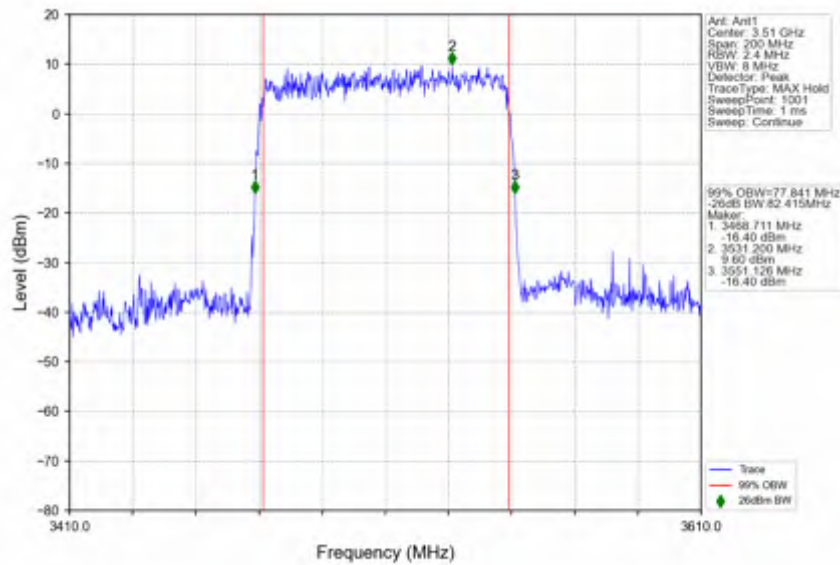
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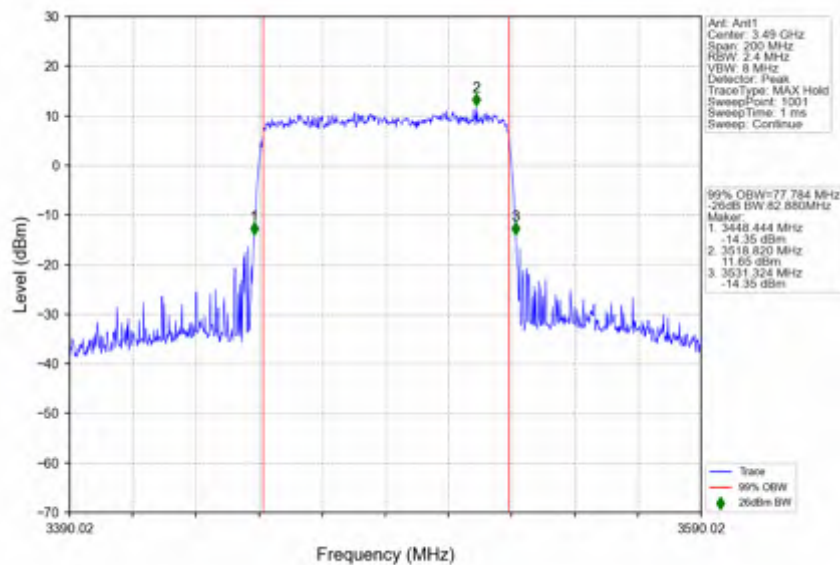
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n78e_30kHz_SISO_NTV_80MHz_DFT-s-OFDM 64 QAM_3490.02MHz_Outer_Full



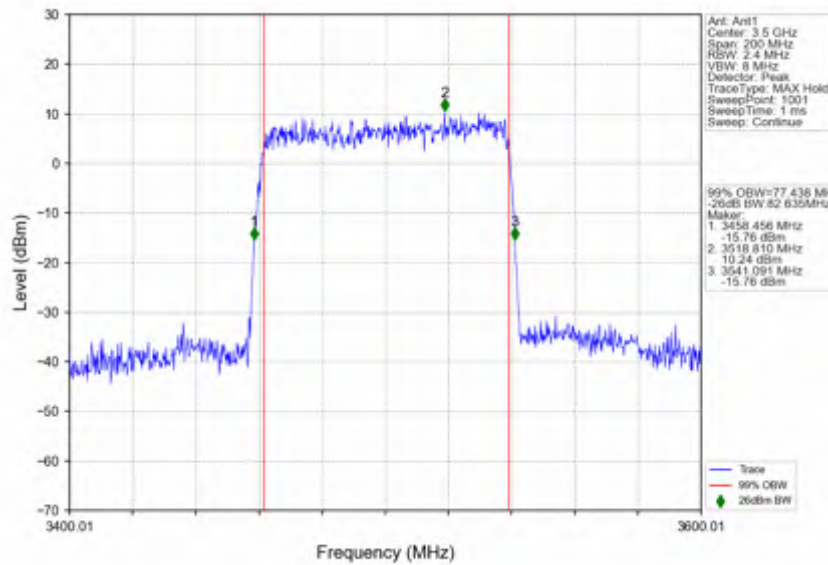
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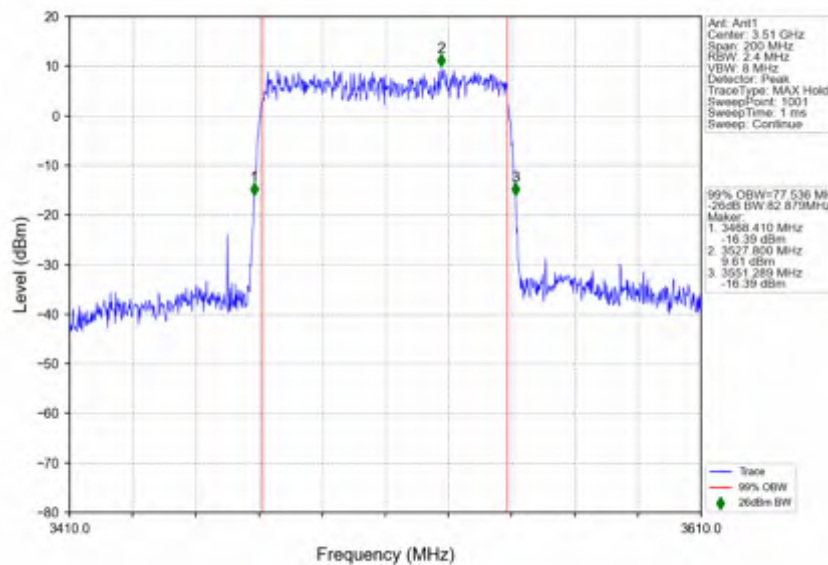
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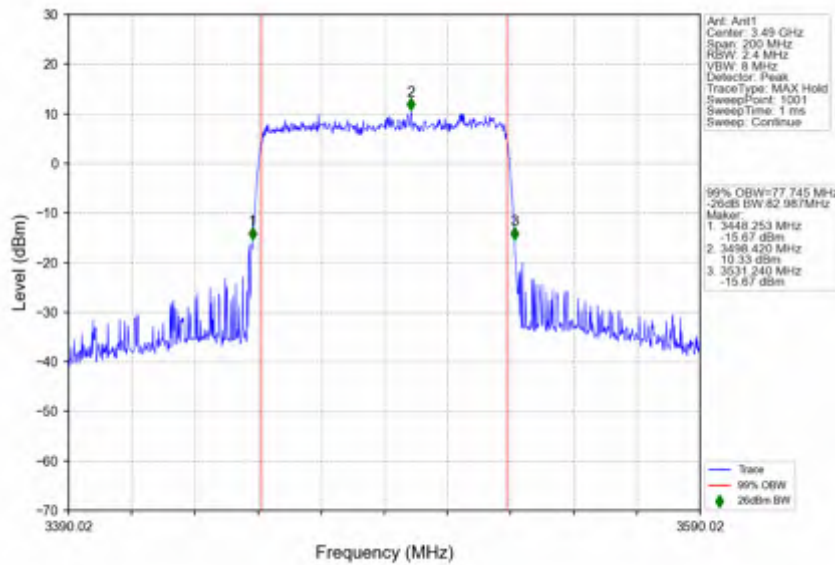


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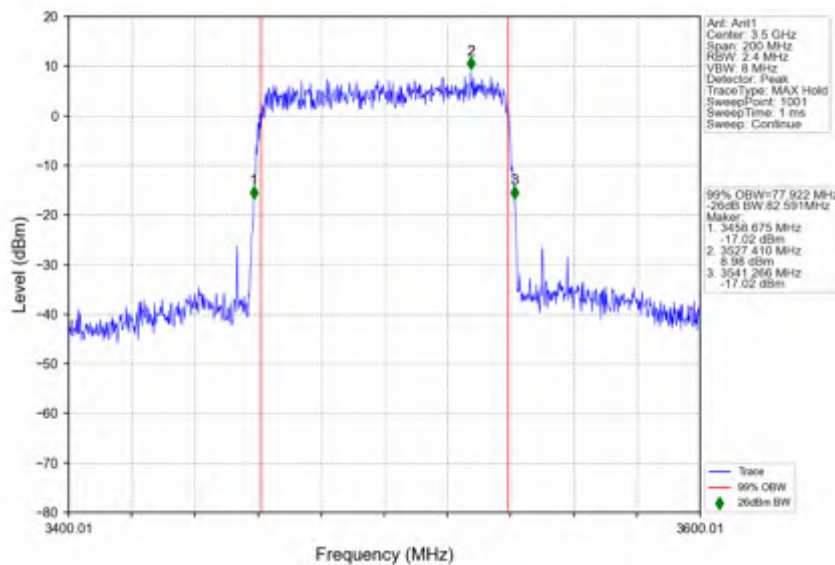
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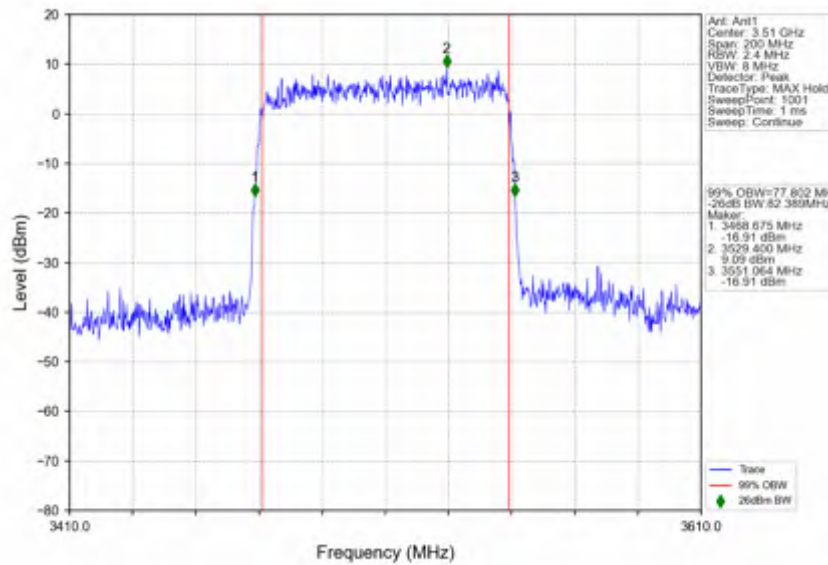
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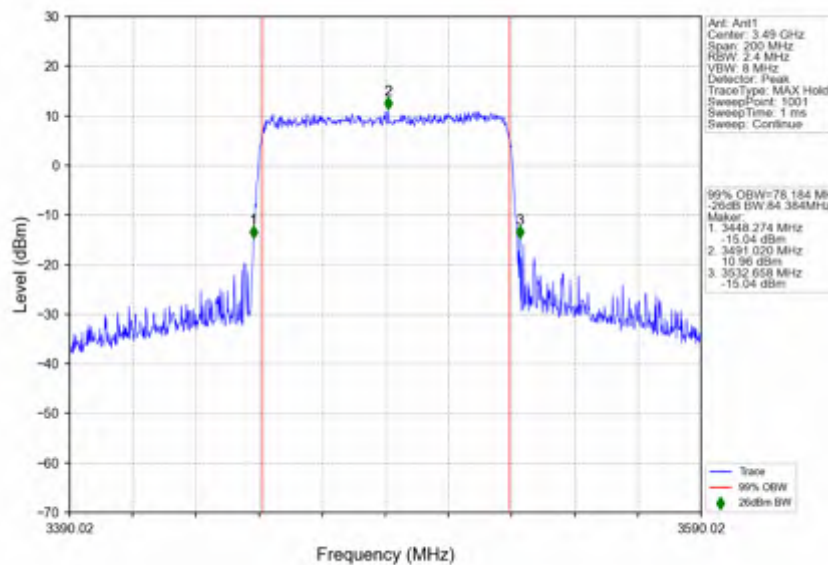
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n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM QPSK_3490.02MHz_Outer_Full



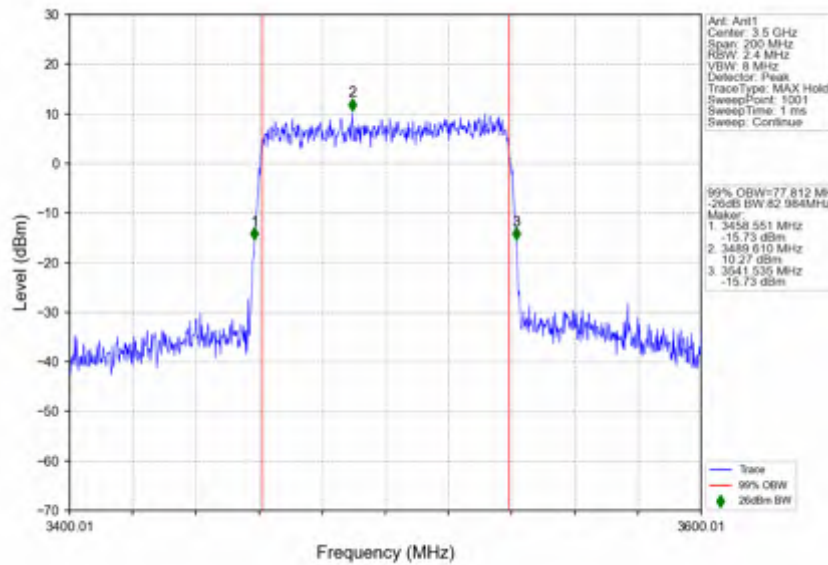
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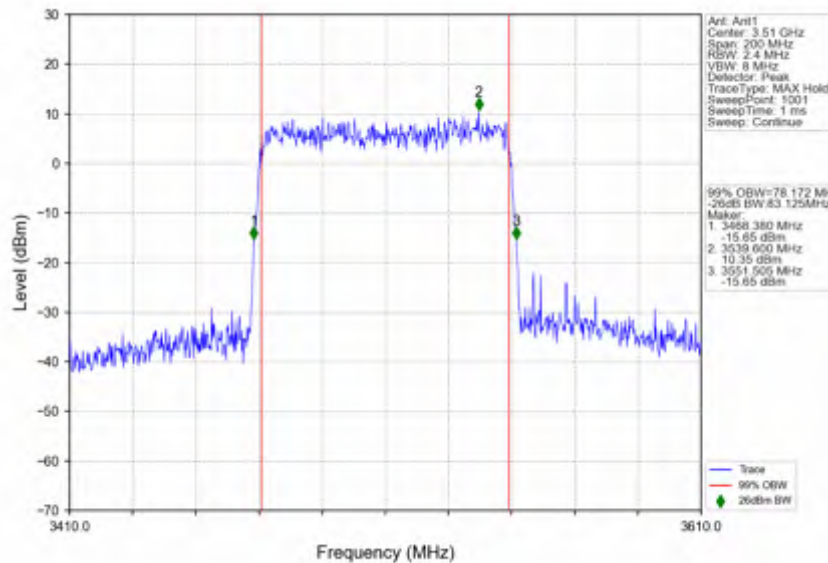
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n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM QPSK_3510MHz_Outer_Full



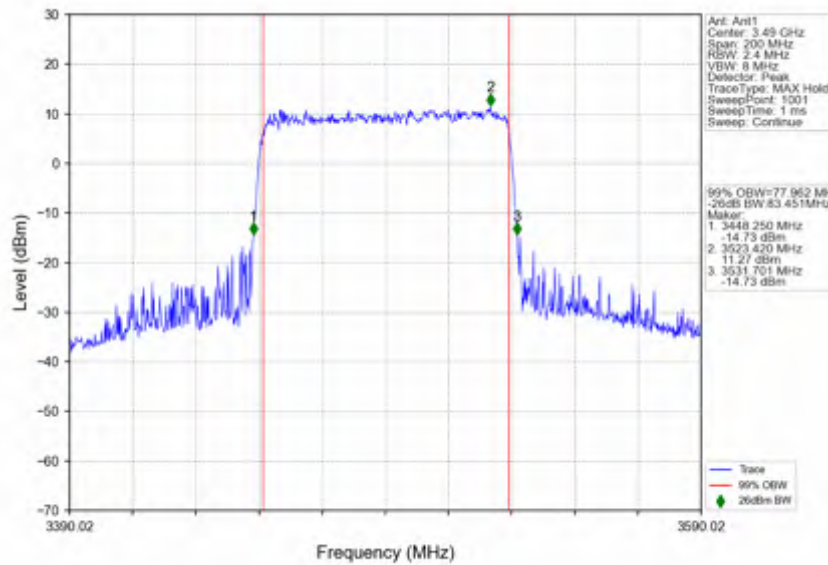
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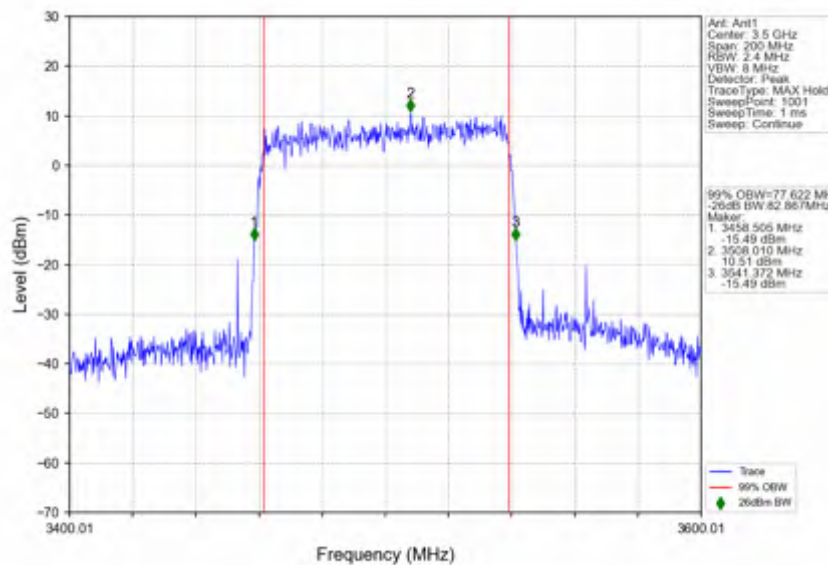
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n78e_30kHz_SISO_NTV_80MHz_CP-OFDM 16 QAM_3490.02MHz_Outer_Full



n78e_30kHz_SISO_NTV_80MHz_CP-OFDM 16 QAM_3500.01MHz_Outer_Full



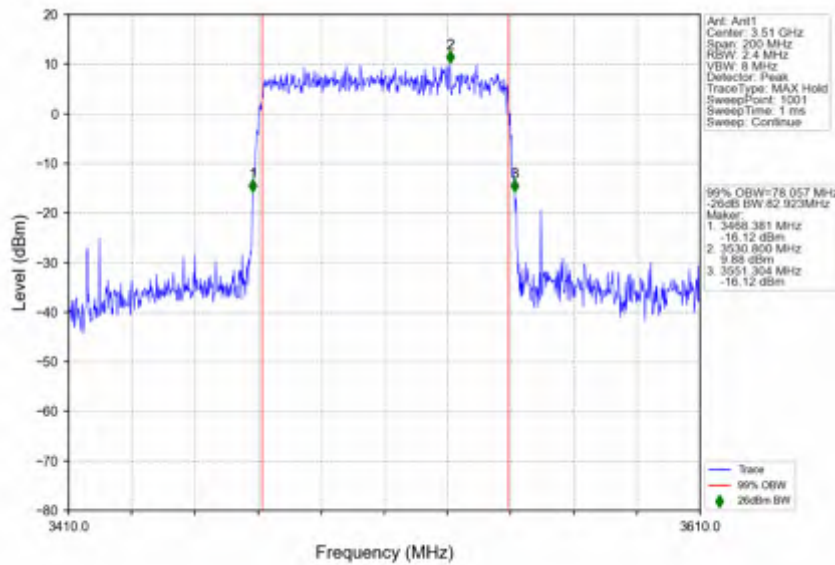
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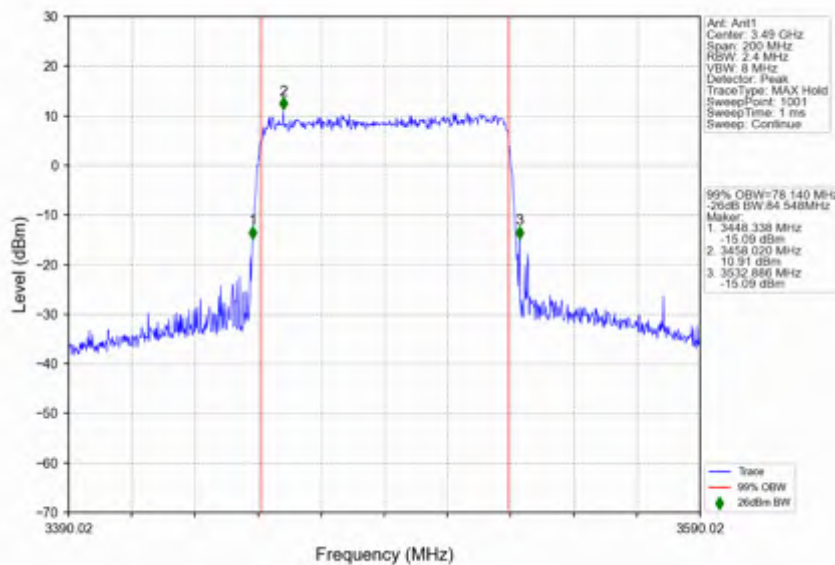
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n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM 16 QAM_3510MHz_Outer_Full



n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM 64 QAM_3490.02MHz_Outer_Full

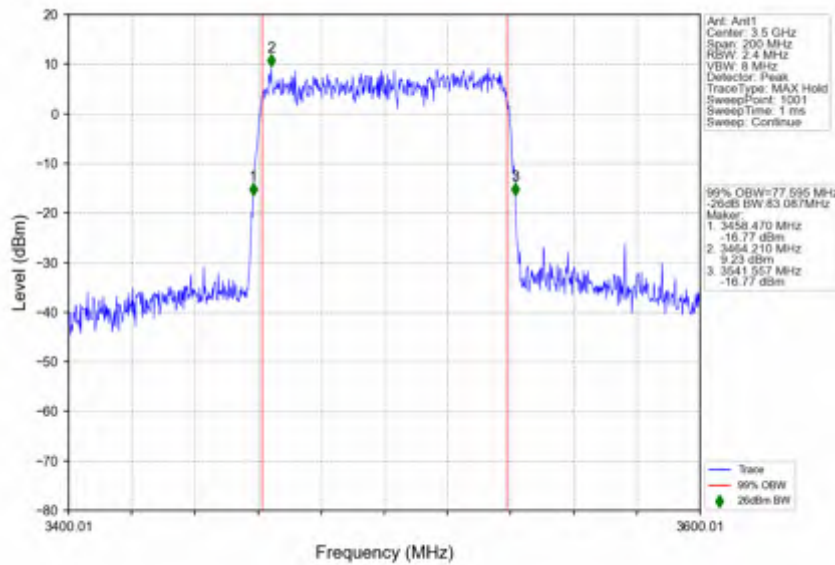


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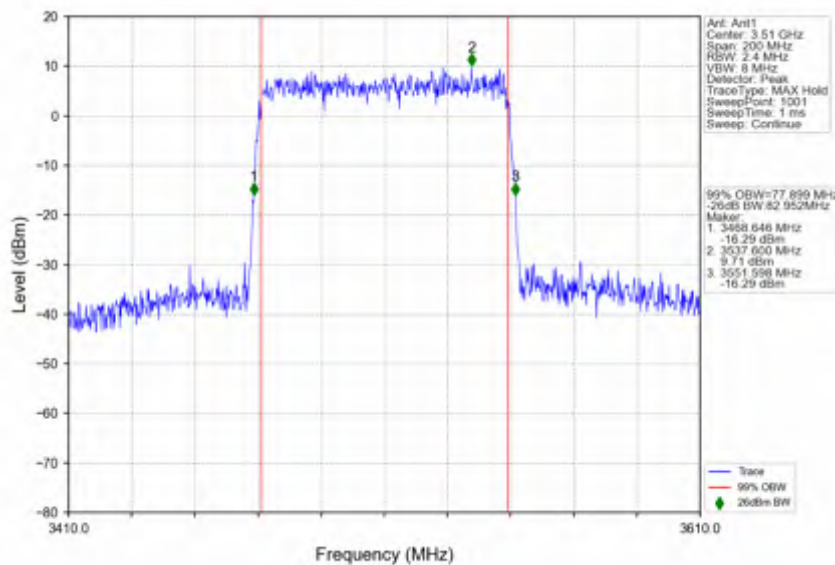
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n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM 64 QAM_3510MHz_Outer_Full



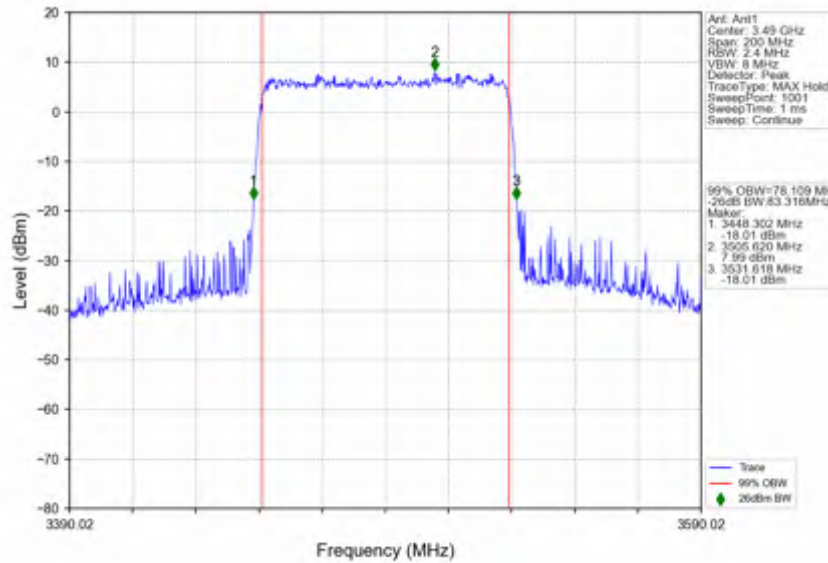
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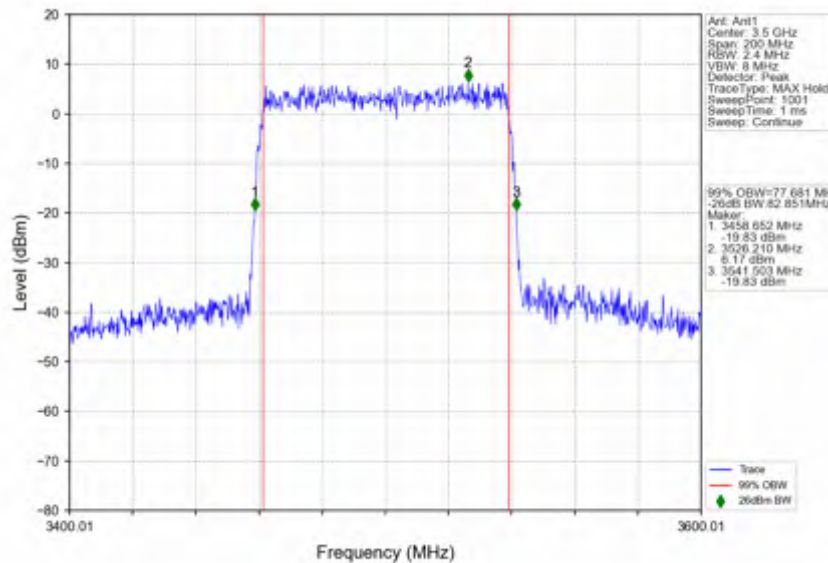
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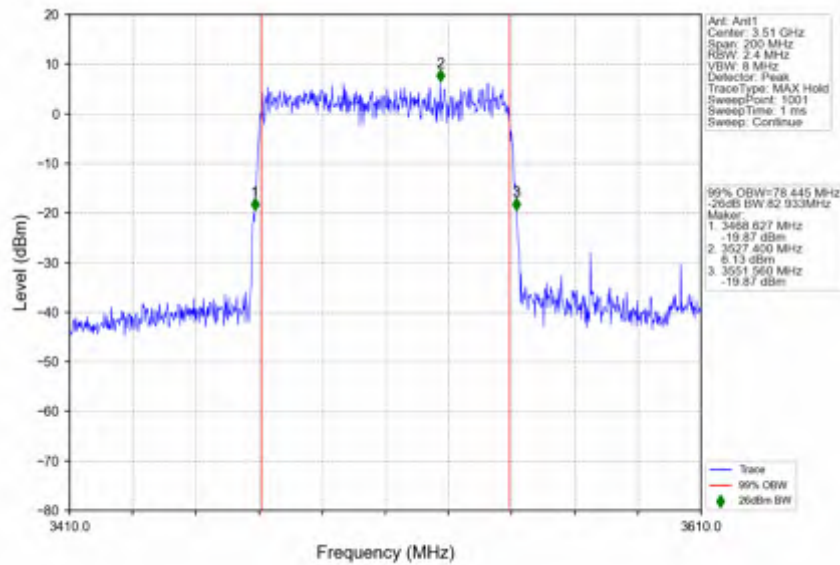
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n78e_30kHz_SISO_NTNV_80MHz_CP-OFDM 256 QAM_3510MHz_Outer_Full



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9.18 30k_SISO_90MHz_NTNV

9.18.1 Test Result

5G NR n78e SCS=30kHz SISO 90MHz NTNv						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3495	Outer_Full	87.44	93.17	/	Pass
	3500.01	Outer_Full	87.35	92.95	/	Pass
	3504.99	Outer_Full	87.12	92.94	/	Pass
DFT-s-OFDM QPSK	3495	Outer_Full	87.07	92.98	/	Pass
	3500.01	Outer_Full	87.08	92.83	/	Pass
	3504.99	Outer_Full	87.31	92.94	/	Pass
DFT-s-OFDM 16 QAM	3495	Outer_Full	87.07	92.18	/	Pass
	3500.01	Outer_Full	87.23	93.26	/	Pass
	3504.99	Outer_Full	87.12	92.58	/	Pass
DFT-s-OFDM 64 QAM	3495	Outer_Full	87.39	92.92	/	Pass
	3500.01	Outer_Full	87.32	92.95	/	Pass
	3504.99	Outer_Full	87.22	92.65	/	Pass
DFT-s-OFDM 256 QAM	3495	Outer_Full	86.88	93.08	/	Pass
	3500.01	Outer_Full	86.60	92.58	/	Pass
	3504.99	Outer_Full	87.24	92.78	/	Pass
CP-OFDM QPSK	3495	Outer_Full	87.77	93.67	/	Pass
	3500.01	Outer_Full	87.89	93.92	/	Pass
	3504.99	Outer_Full	88.07	93.76	/	Pass
CP-OFDM 16 QAM	3495	Outer_Full	87.75	93.86	/	Pass
	3500.01	Outer_Full	87.93	93.58	/	Pass
	3504.99	Outer_Full	88.10	93.84	/	Pass
CP-OFDM 64 QAM	3495	Outer_Full	87.87	93.43	/	Pass
	3500.01	Outer_Full	87.70	93.51	/	Pass
	3504.99	Outer_Full	87.81	93.69	/	Pass
CP-OFDM 256 QAM	3495	Outer_Full	87.84	94.12	/	Pass
	3500.01	Outer_Full	87.85	93.46	/	Pass
	3504.99	Outer_Full	87.98	93.95	/	Pass



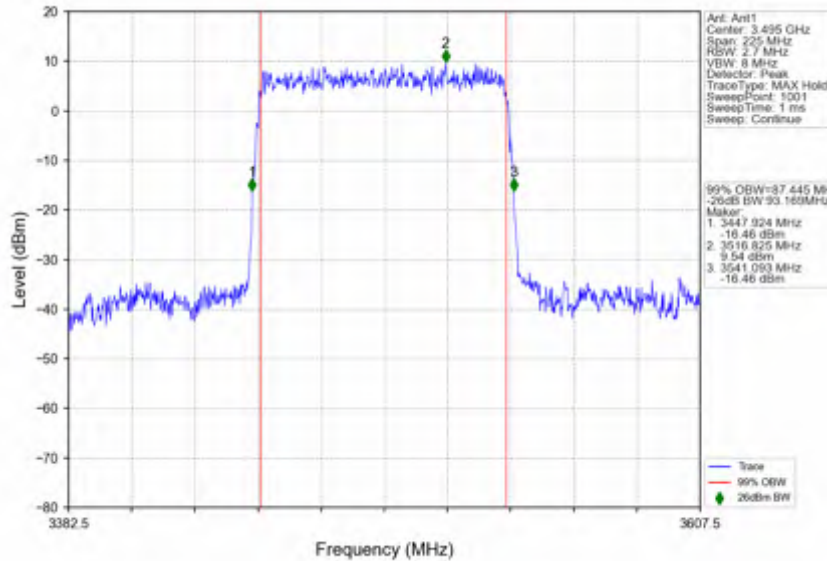
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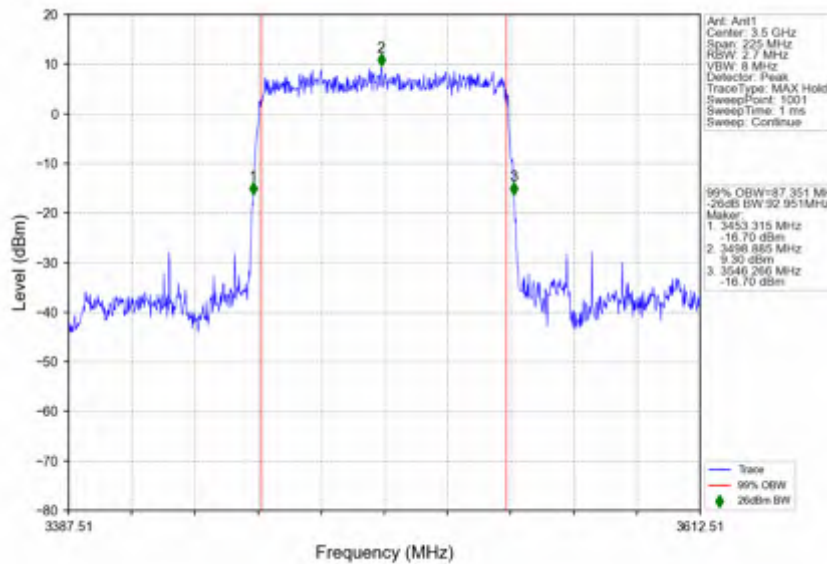
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9.18.2 Test Graph

n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM PI/2 BPSK_3495MHz_Outer_Full



n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



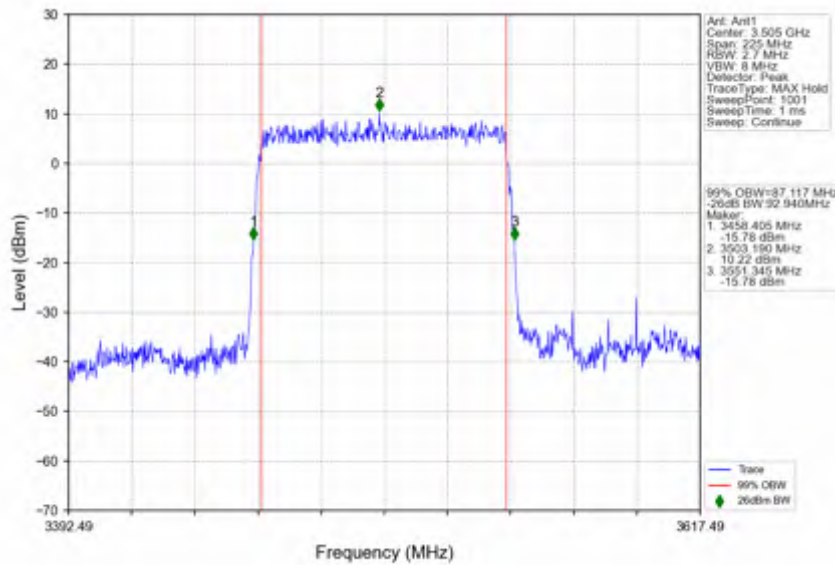
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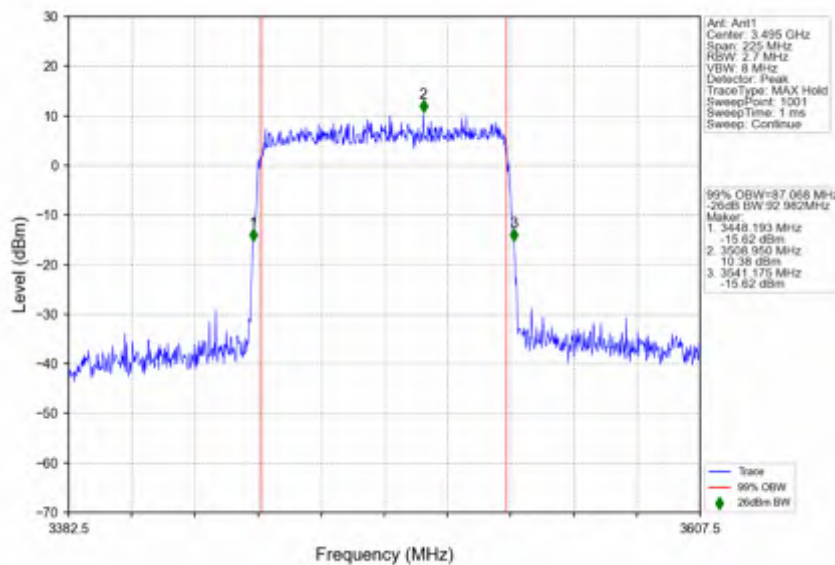
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n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM QPSK_3495MHz_Outer_Full



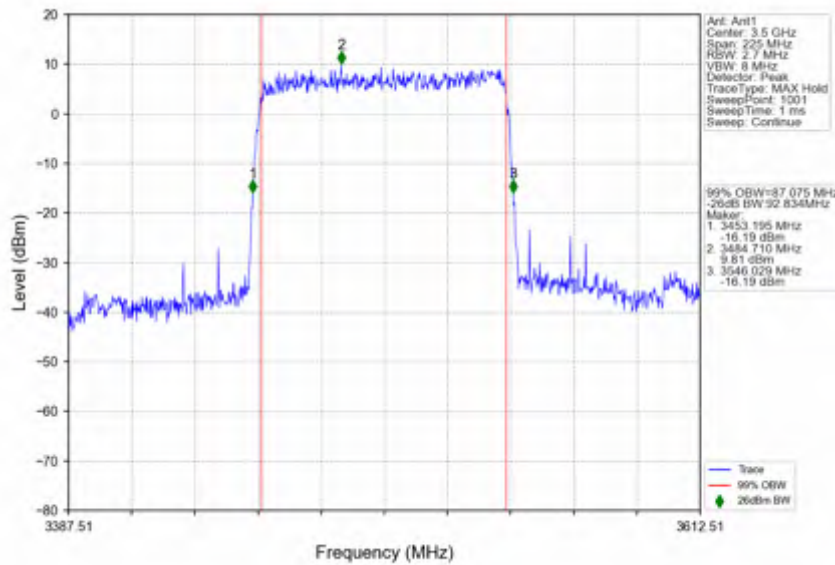
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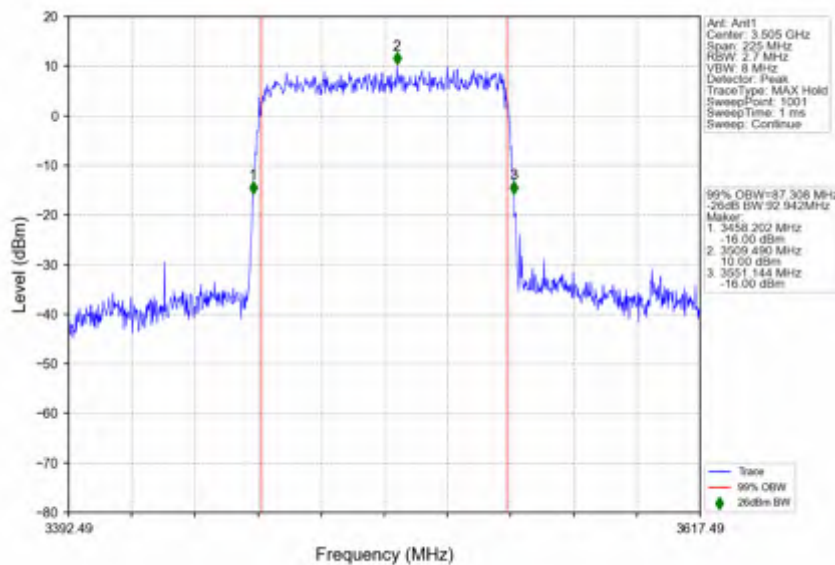
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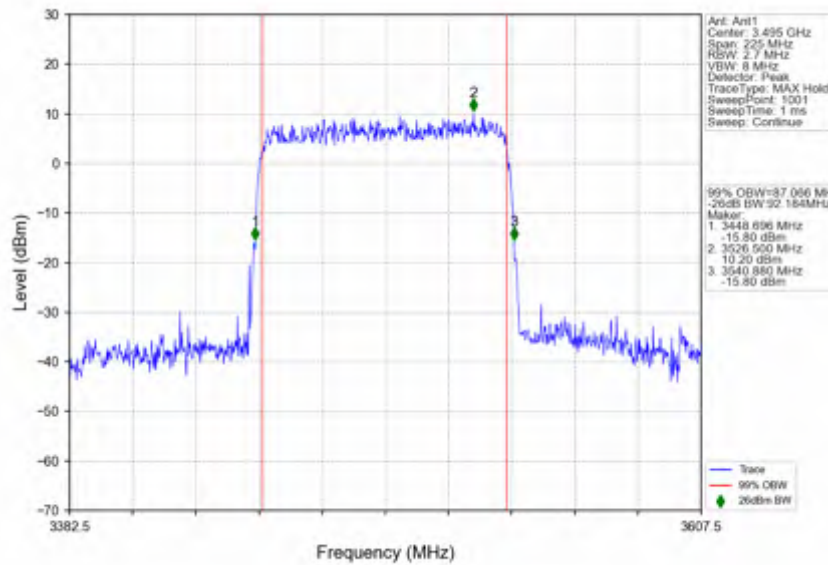
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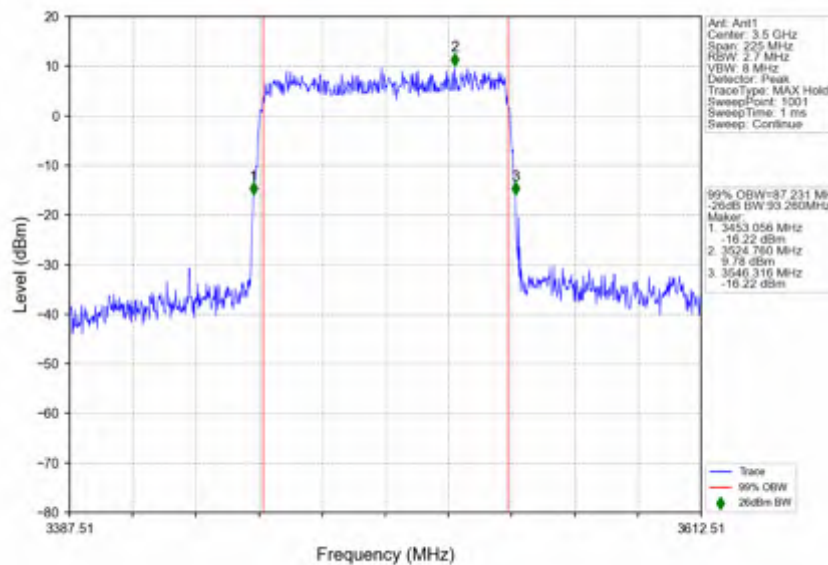
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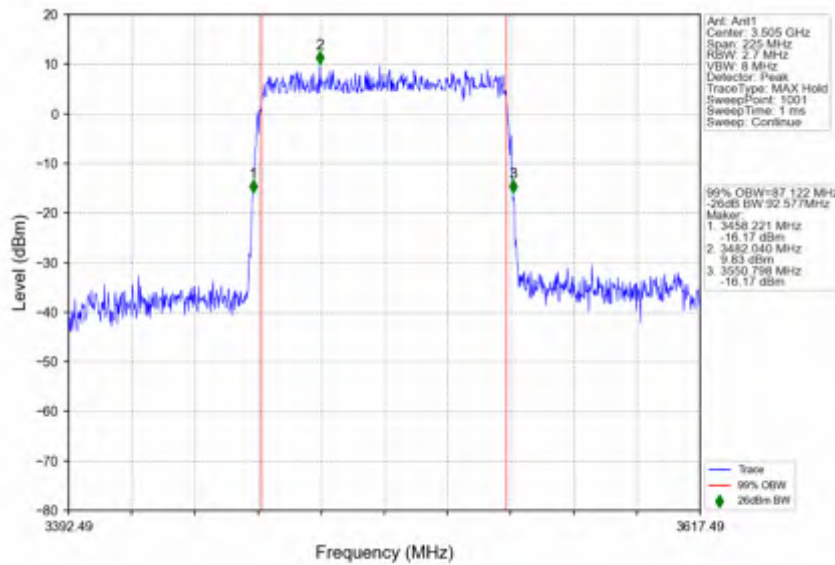
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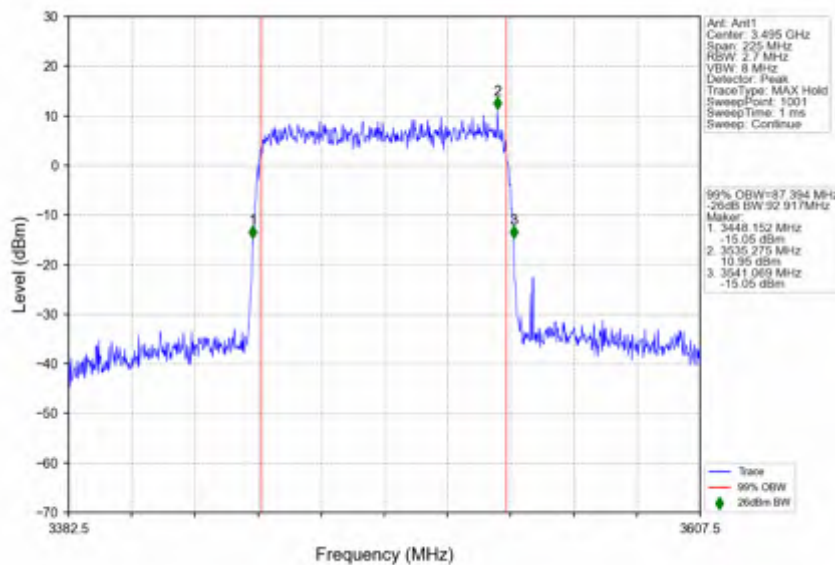
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n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM 16 QAM_3504.99MHz_Outer_Full



n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM 64 QAM_3495MHz_Outer_Full



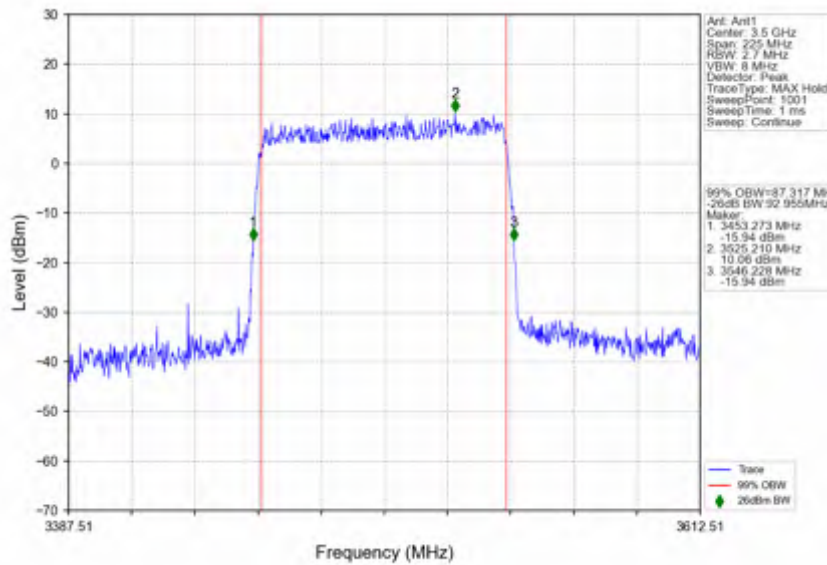
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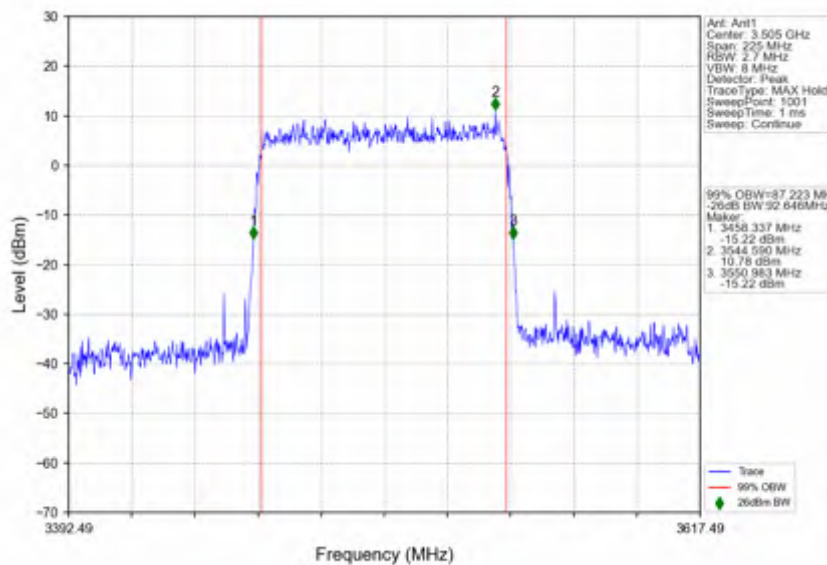
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n78e_30kHz_SISO_NTV_90MHz_DFT-s-OFDM 64 QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTV_90MHz_DFT-s-OFDM 64 QAM_3504.99MHz_Outer_Full



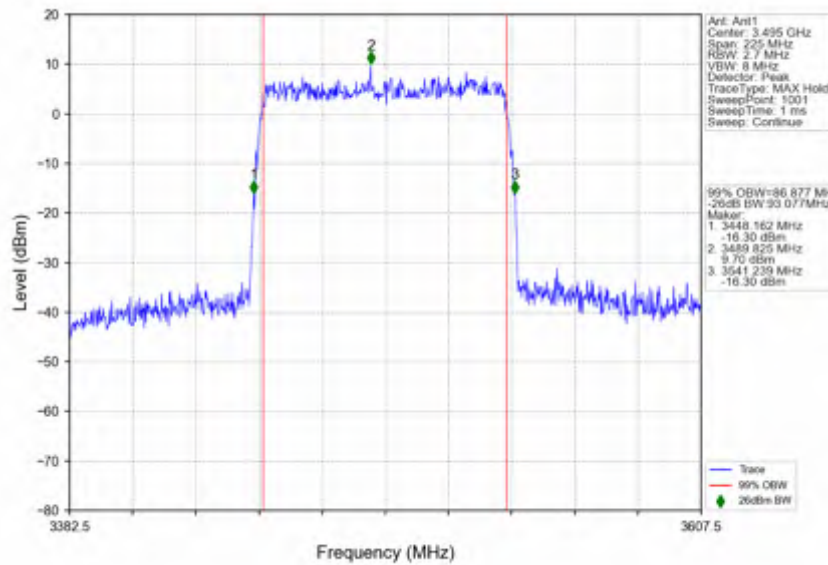
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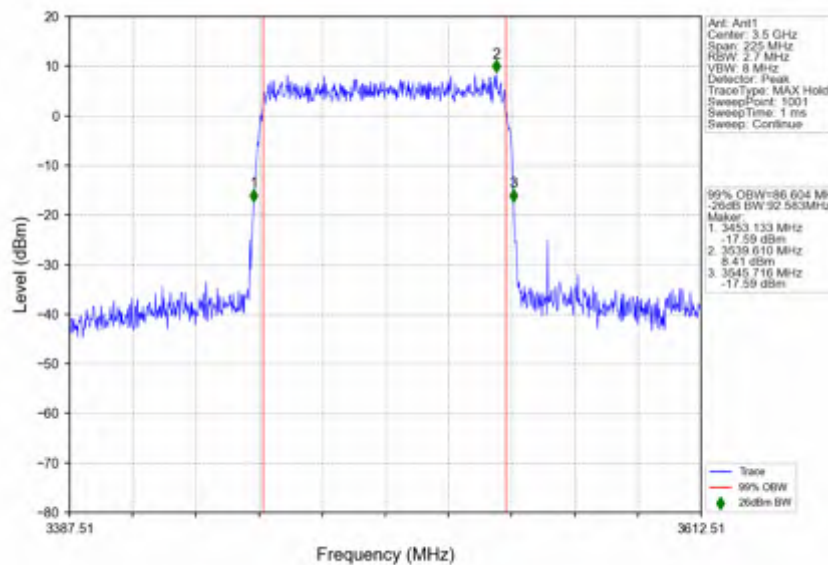
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n78e_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM_256_QAM_3500.01MHz_Outer_Full



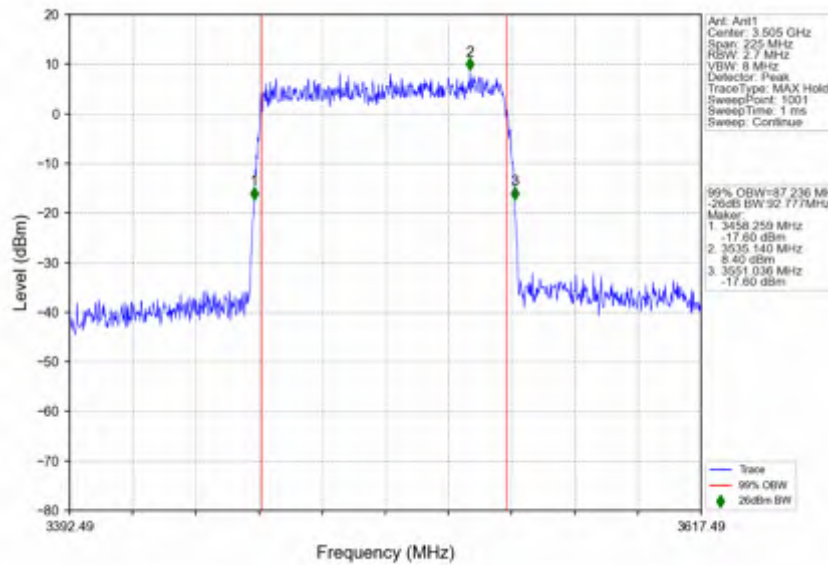
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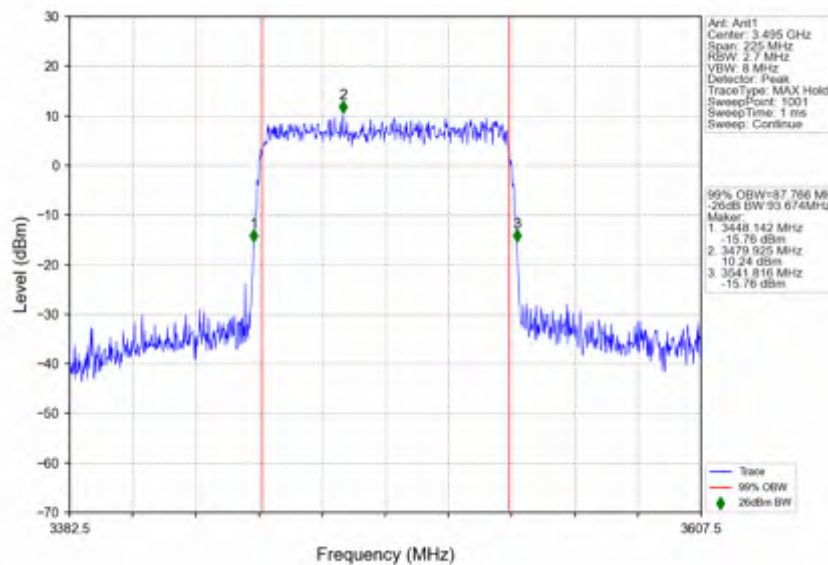
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n78e_30kHz_SISO_NTNV_90MHz_CP-OFDM QPSK_3495MHz_Outer_Full



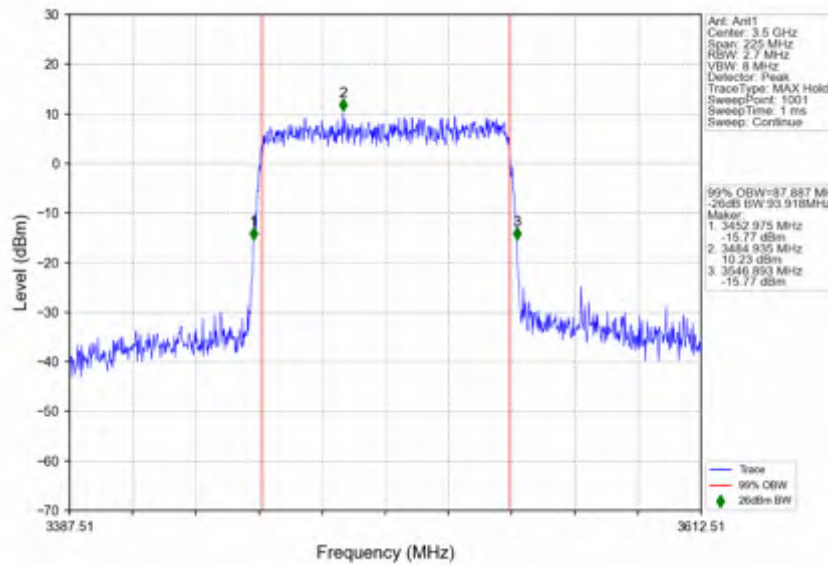
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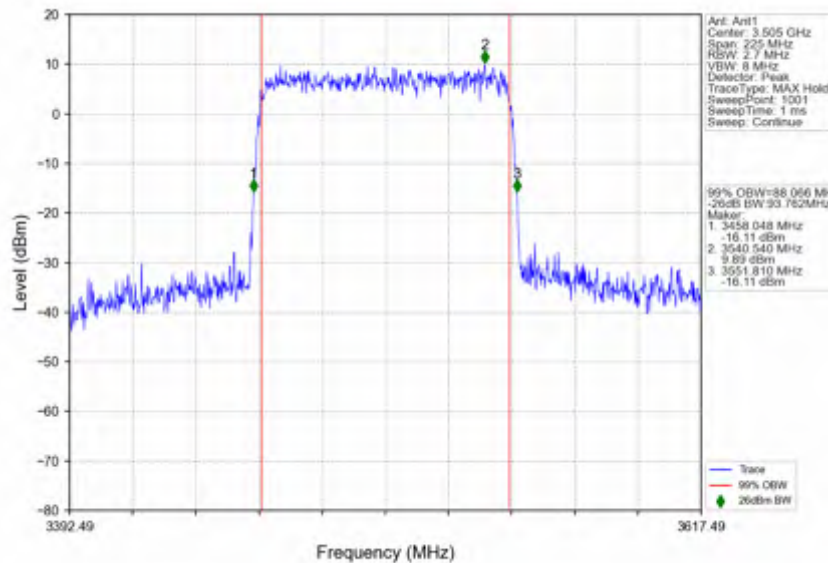
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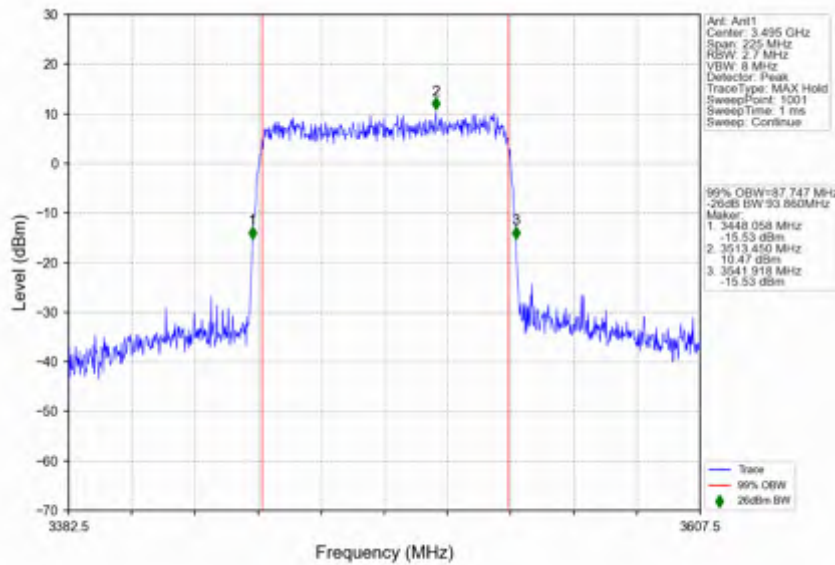
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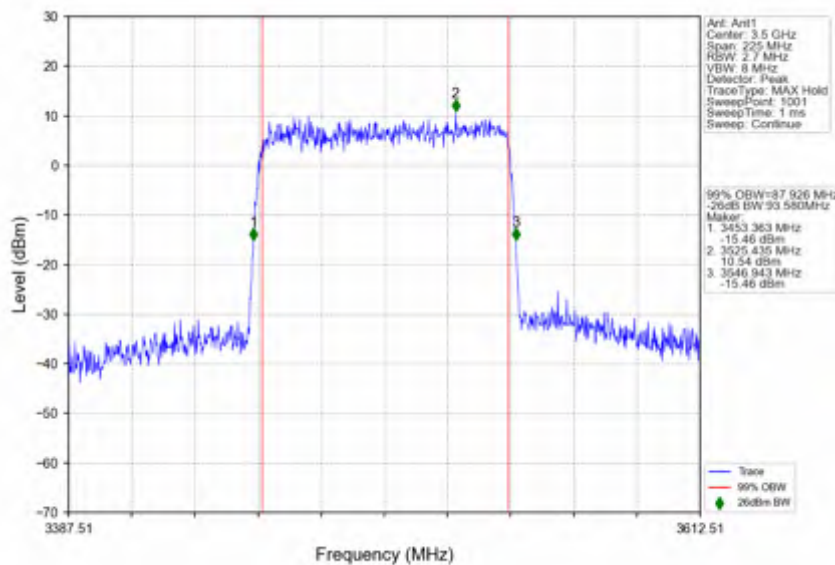
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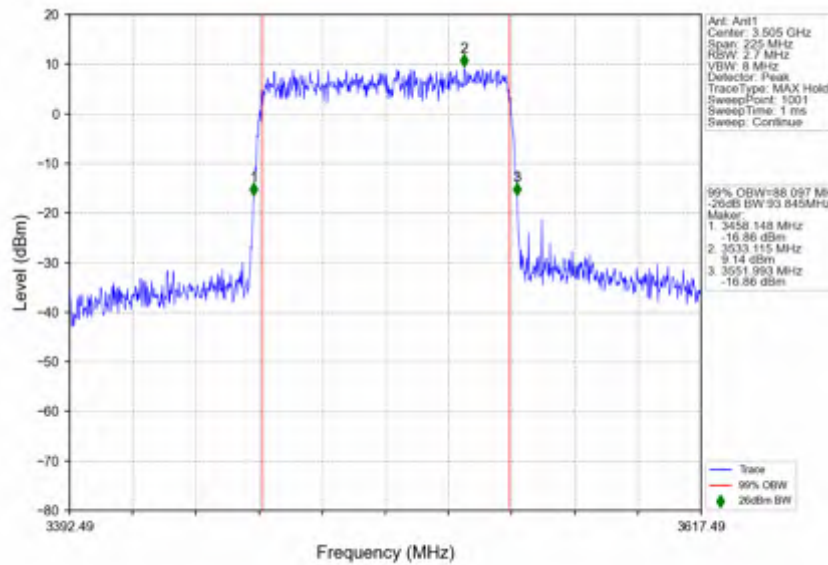
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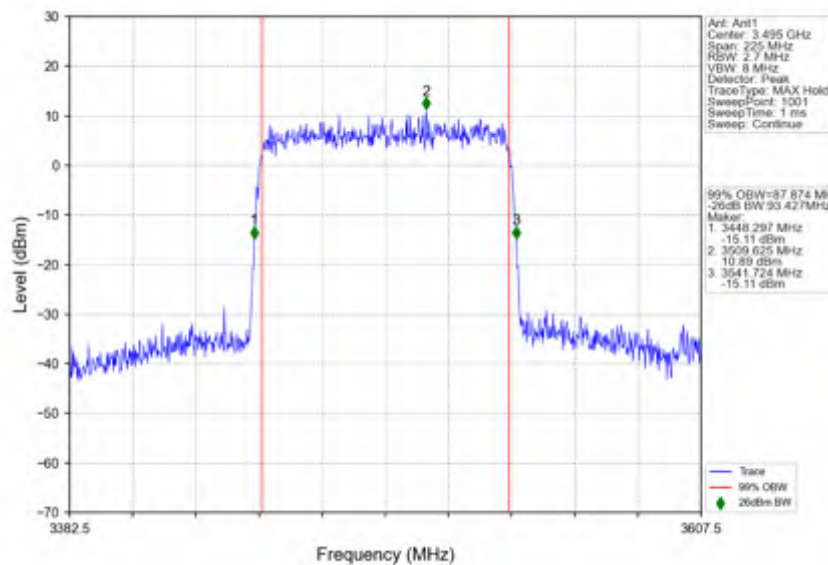
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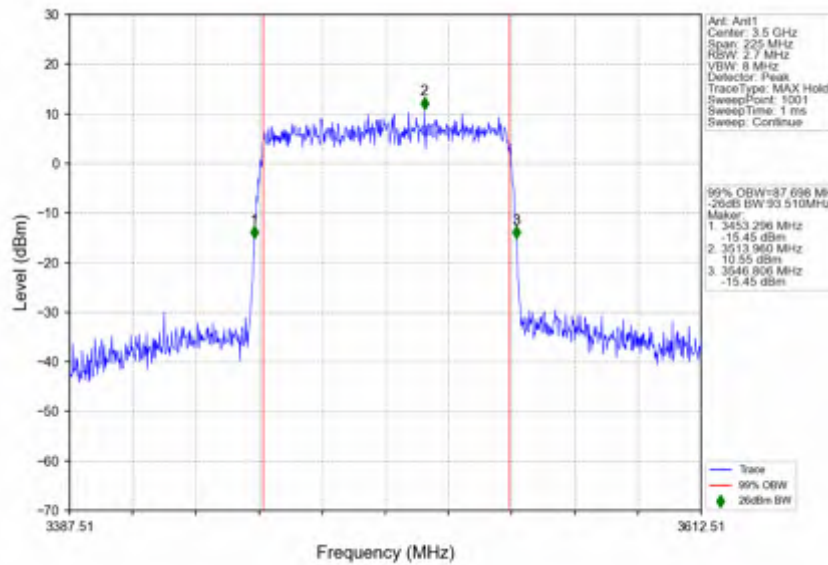
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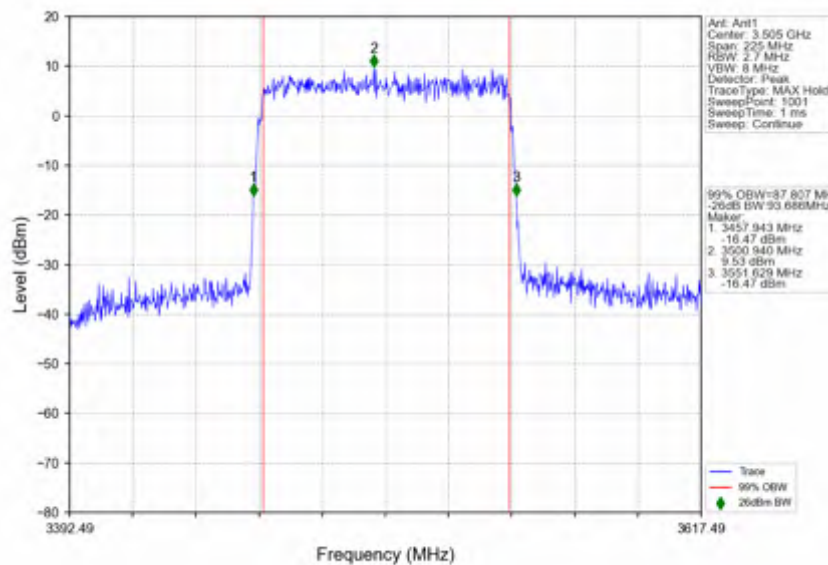
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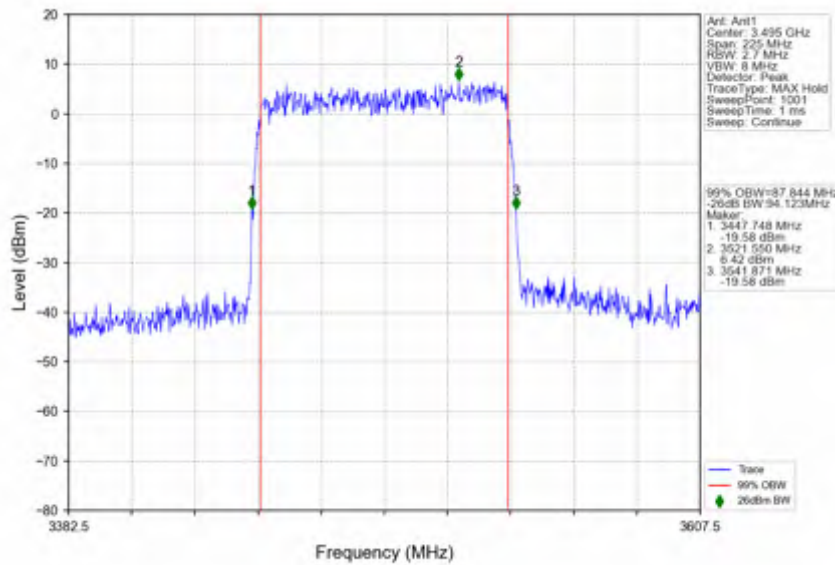
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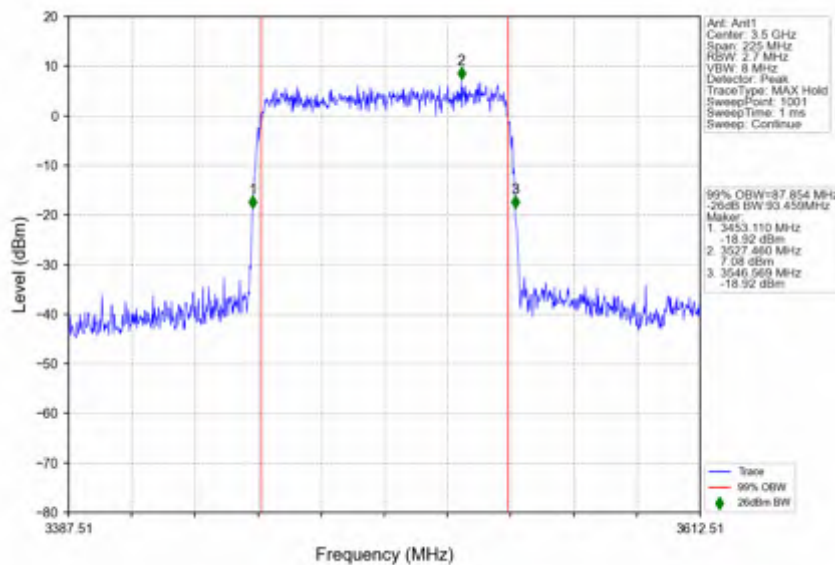
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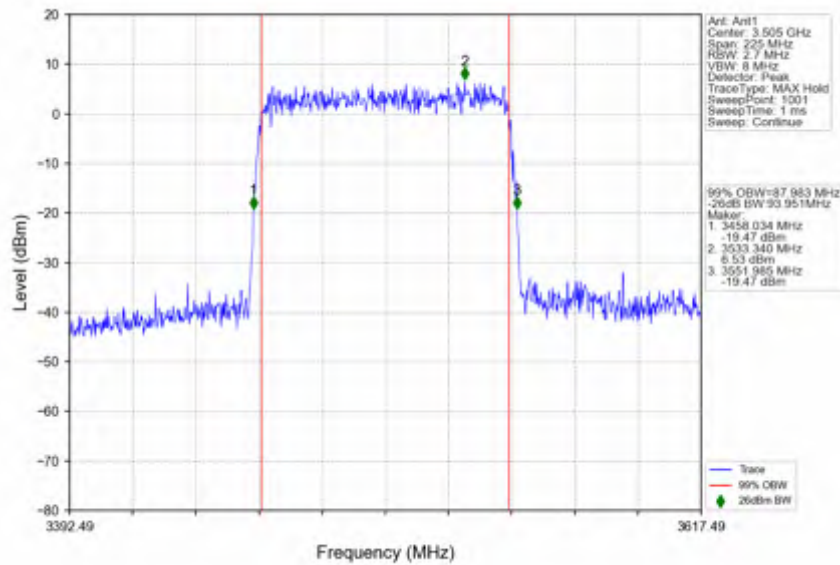
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9.19 30k_SISO_100MHz_NTNV

9.19.1 Test Result

5G NR n78e SCS=30kHz SISO 100MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	3500.01	Outer_Full	97.25	103.27	/	Pass
	3500.01	Outer_Full	96.52	102.96	/	Pass
	3499.98	Outer_Full	96.83	103.02	/	Pass
DFT-s-OFDM QPSK	3500.01	Outer_Full	96.52	103.09	/	Pass
	3500.01	Outer_Full	96.28	103.10	/	Pass
	3499.98	Outer_Full	96.34	103.38	/	Pass
DFT-s-OFDM 16 QAM	3500.01	Outer_Full	96.27	103.22	/	Pass
	3500.01	Outer_Full	97.13	103.48	/	Pass
	3499.98	Outer_Full	96.67	103.64	/	Pass
DFT-s-OFDM 64 QAM	3500.01	Outer_Full	96.58	102.99	/	Pass
	3500.01	Outer_Full	96.76	102.79	/	Pass
	3499.98	Outer_Full	96.78	103.40	/	Pass
DFT-s-OFDM 256 QAM	3500.01	Outer_Full	96.82	103.31	/	Pass
	3500.01	Outer_Full	96.67	103.54	/	Pass
	3499.98	Outer_Full	96.46	102.93	/	Pass
CP-OFDM QPSK	3500.01	Outer_Full	97.64	103.84	/	Pass
	3500.01	Outer_Full	97.65	104.06	/	Pass
	3499.98	Outer_Full	97.77	104.36	/	Pass
CP-OFDM 16 QAM	3500.01	Outer_Full	97.87	104.30	/	Pass
	3500.01	Outer_Full	97.82	104.32	/	Pass
	3499.98	Outer_Full	98.08	104.36	/	Pass
CP-OFDM 64 QAM	3500.01	Outer_Full	97.86	104.54	/	Pass
	3500.01	Outer_Full	97.34	104.10	/	Pass
	3499.98	Outer_Full	97.68	103.87	/	Pass
CP-OFDM 256 QAM	3500.01	Outer_Full	97.60	104.29	/	Pass
	3500.01	Outer_Full	97.71	104.15	/	Pass
	3499.98	Outer_Full	97.69	103.98	/	Pass



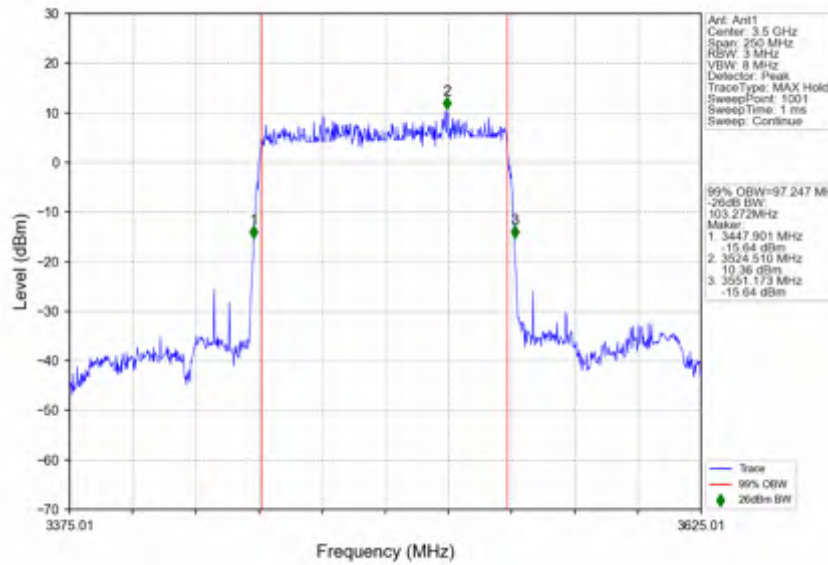
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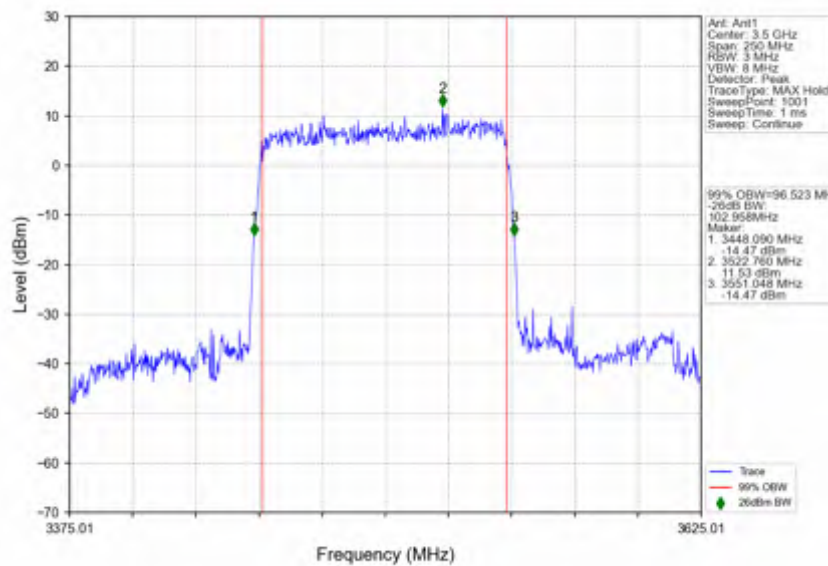
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9.19.2 Test Graph

n78e_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM PI/2 BPSK_3500.01MHz_Outer_Full



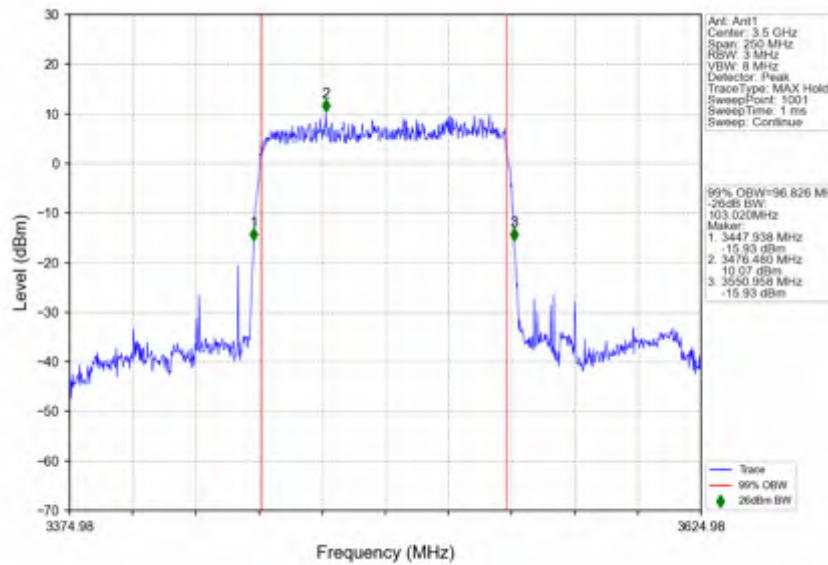
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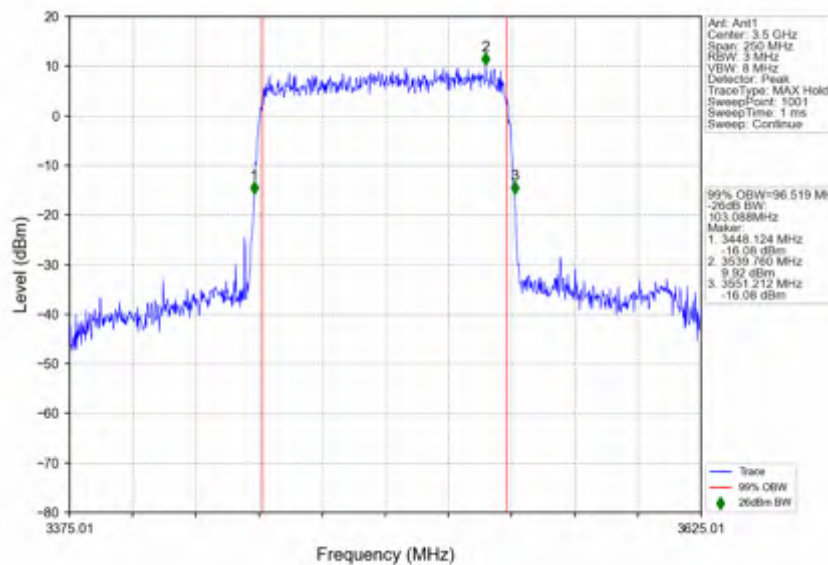
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n78e_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM QPSK_3500.01MHz_Outer_Full



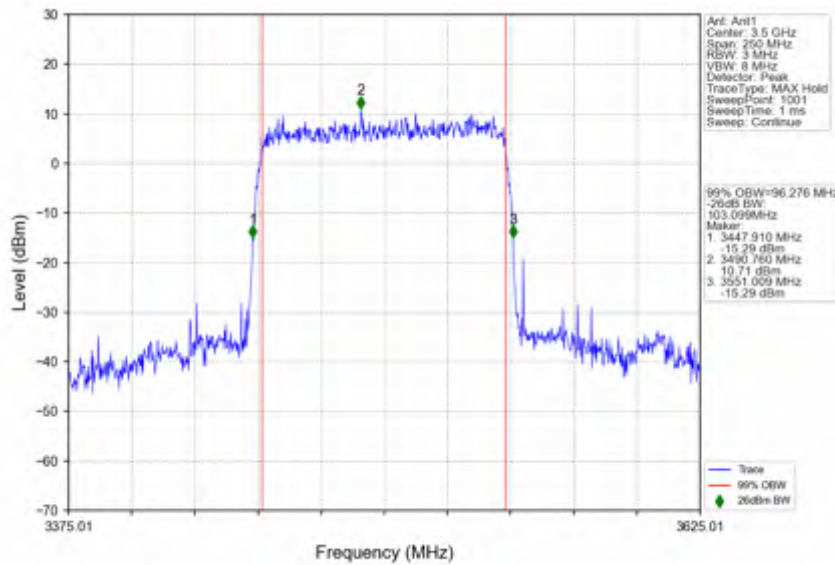
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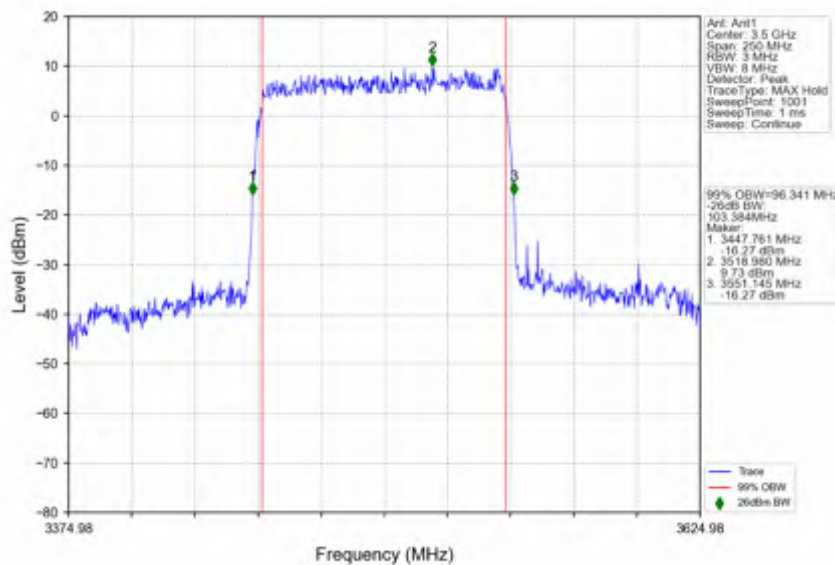
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n78e_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM QPSK_3499.98MHz_Outer_Full



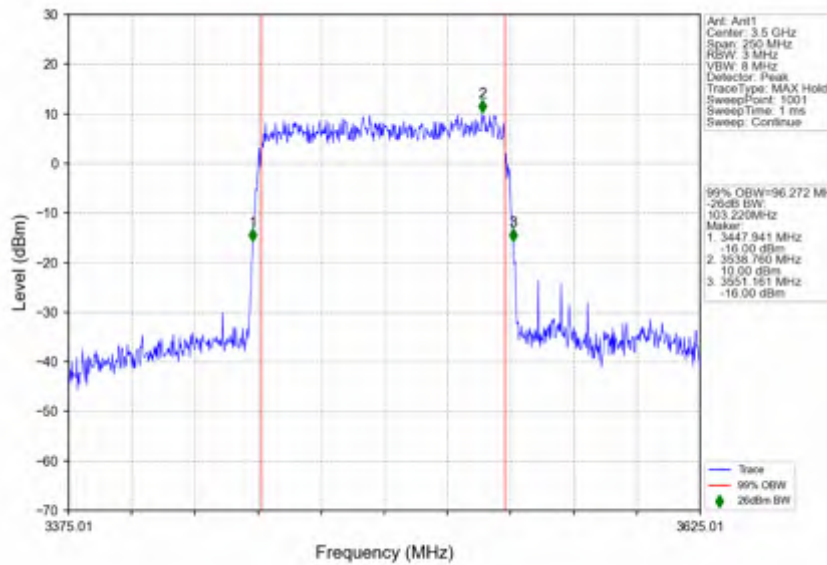
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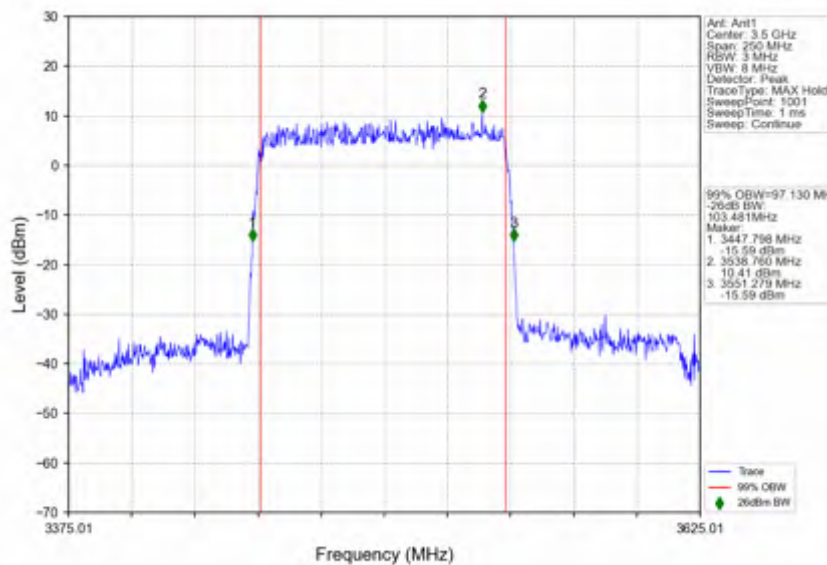
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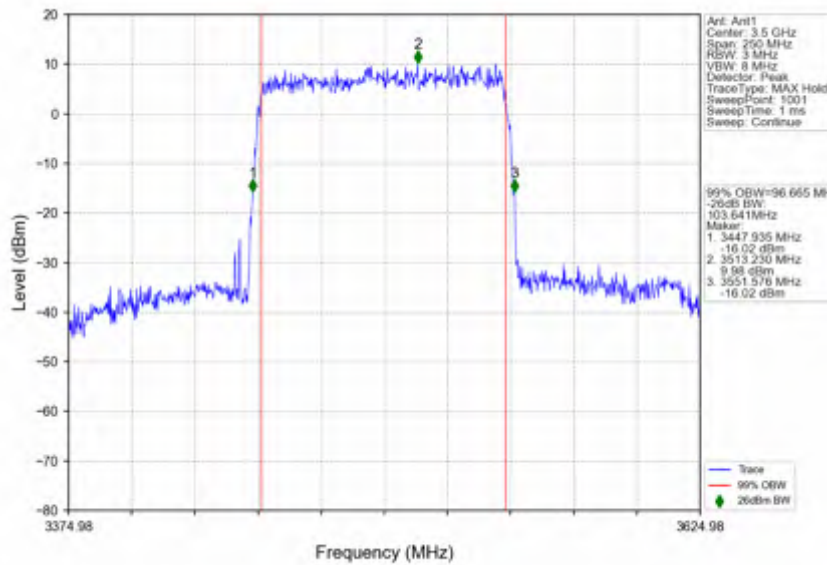
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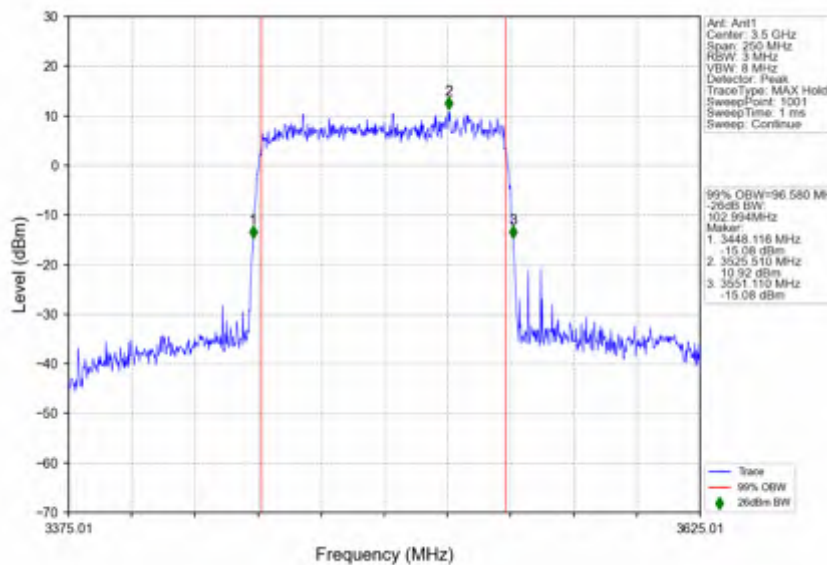
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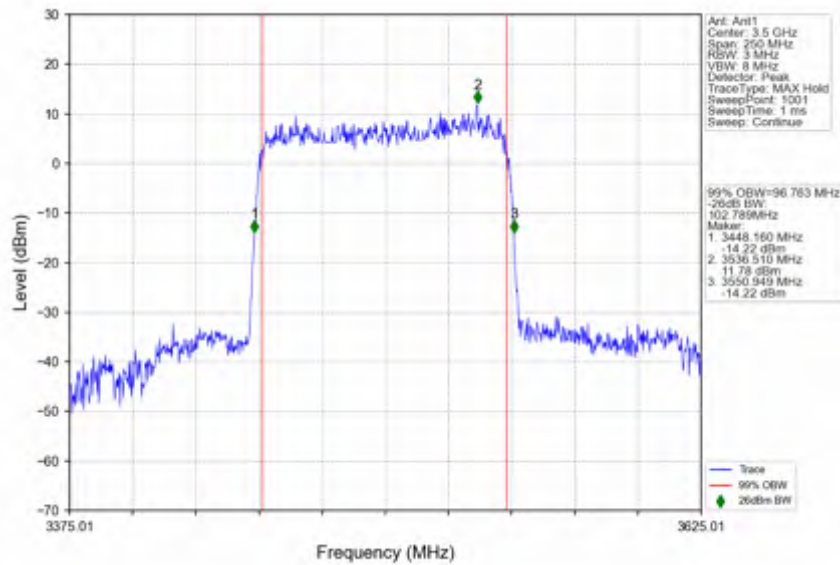
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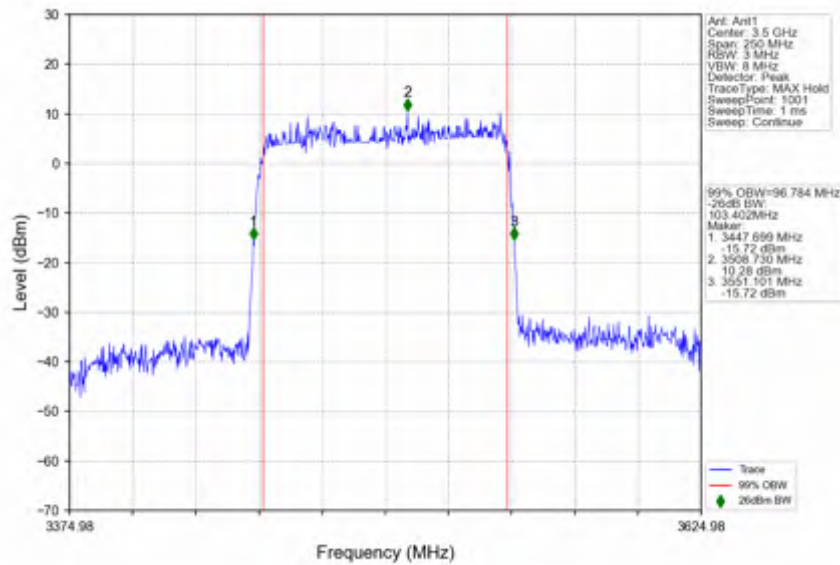
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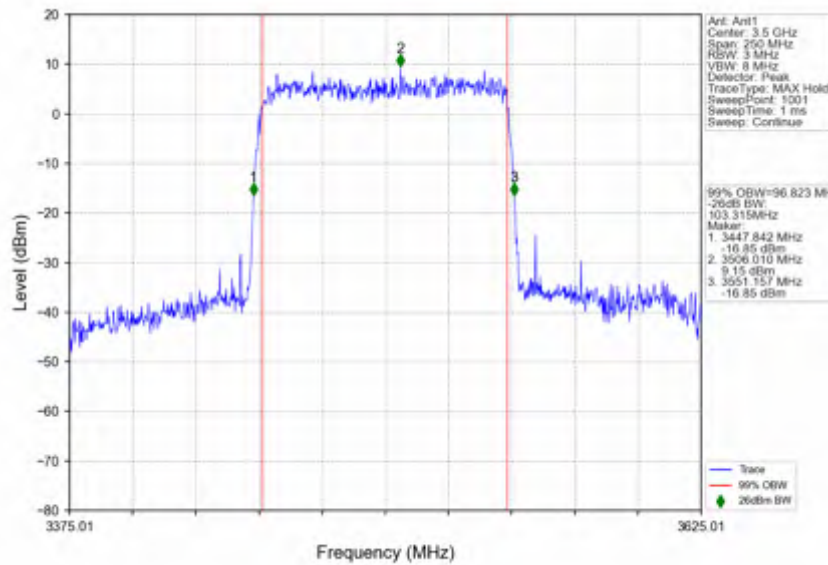
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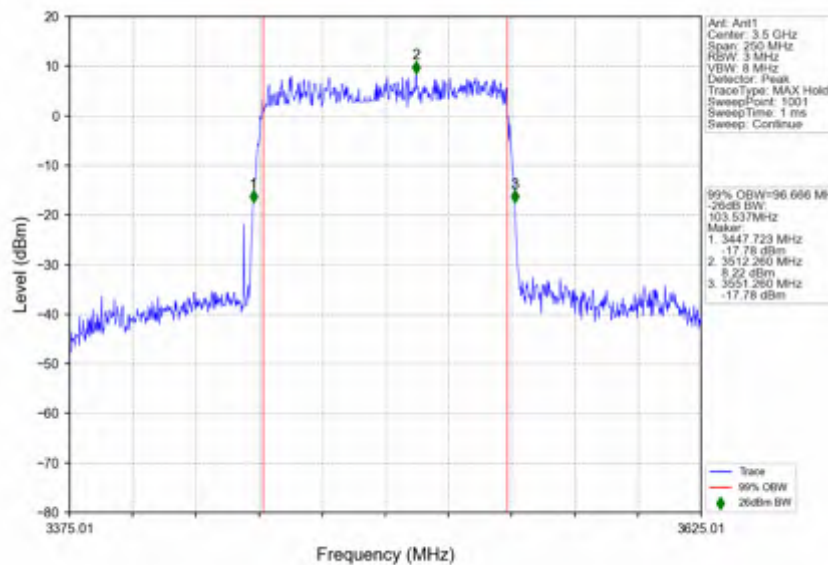
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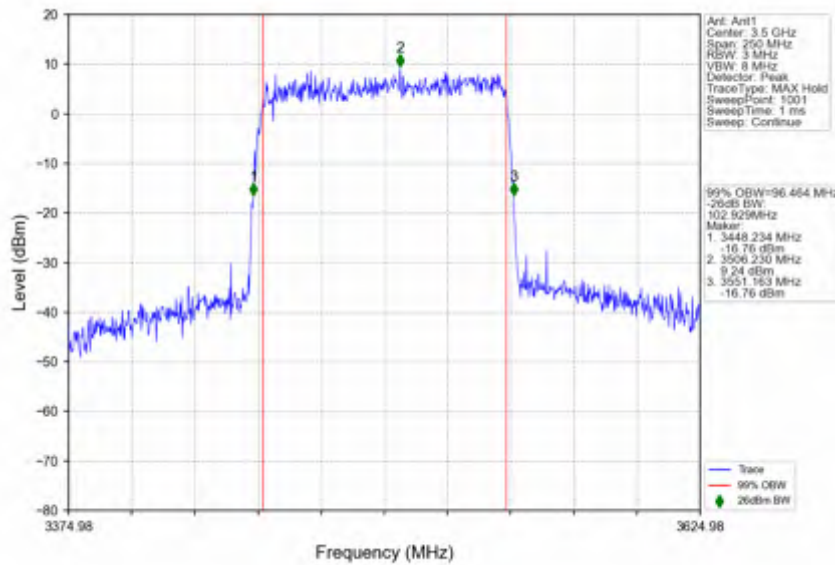
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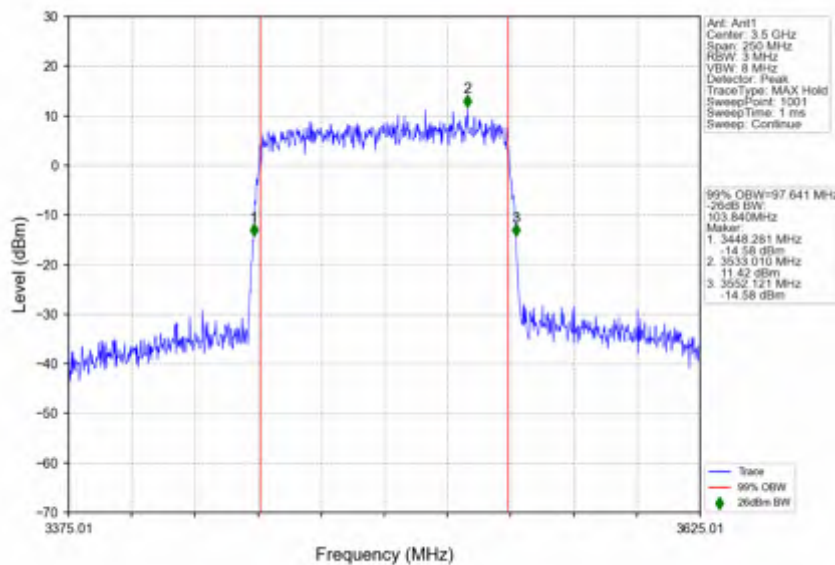
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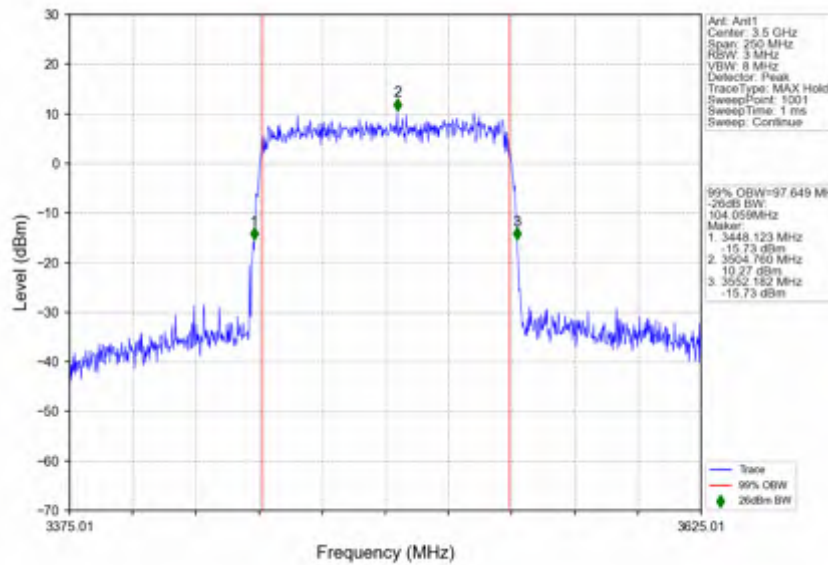
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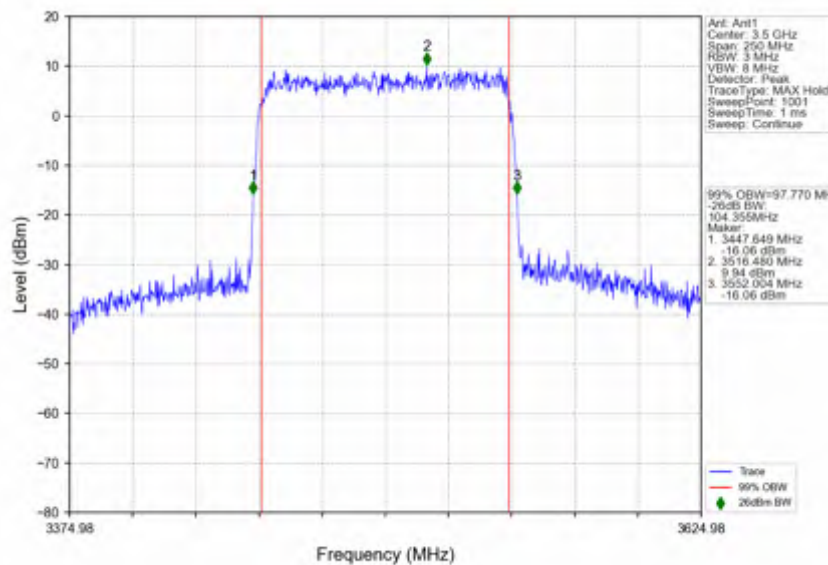
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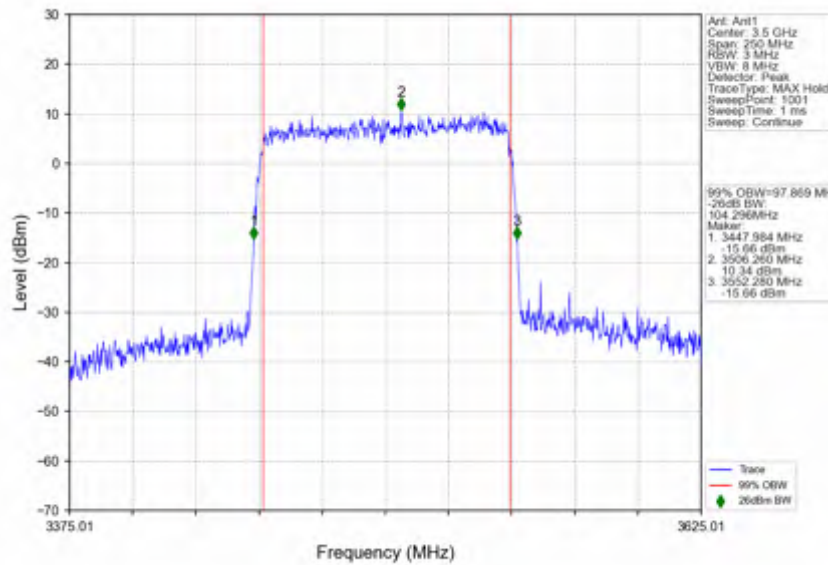
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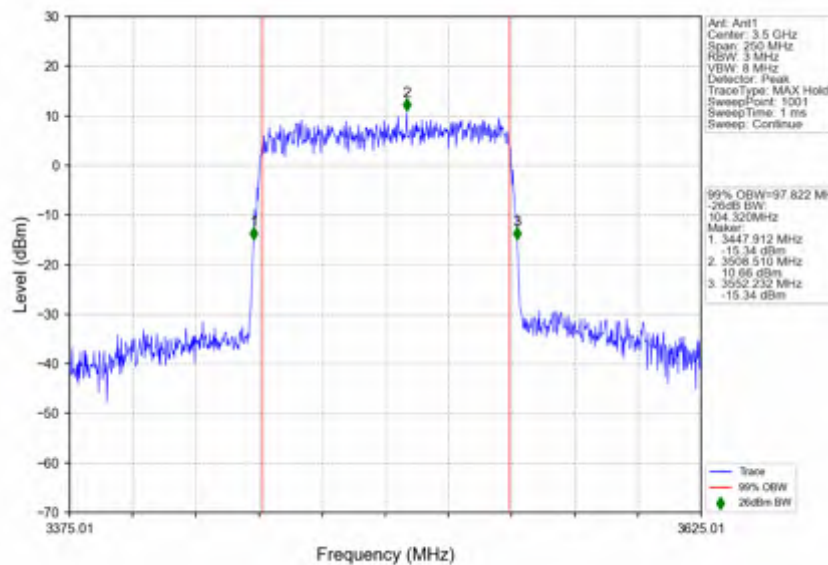
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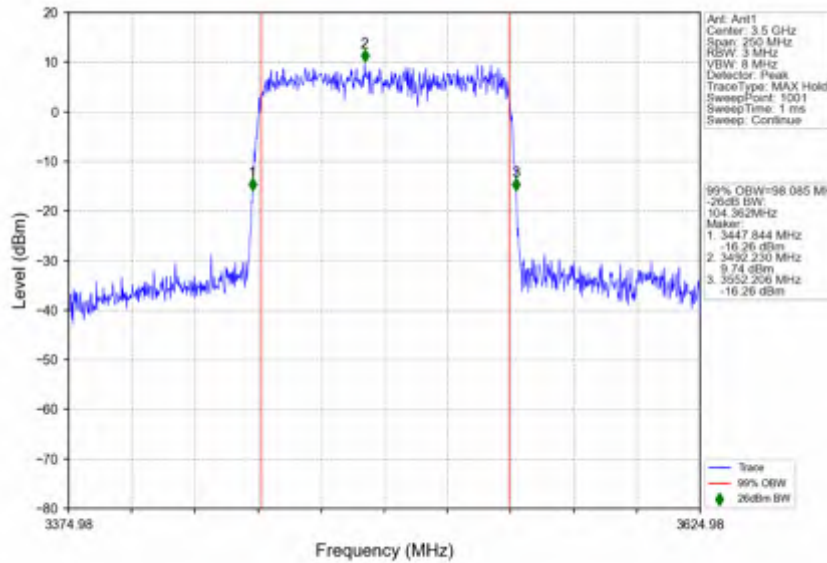
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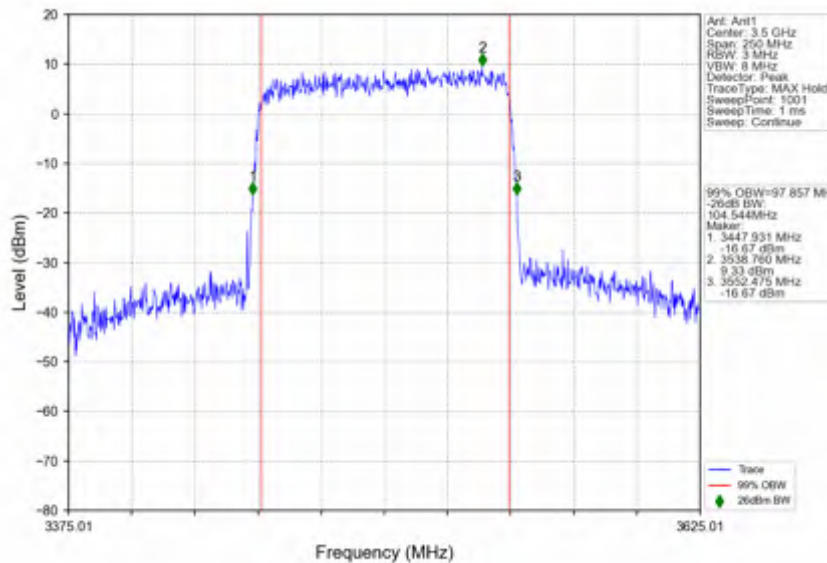
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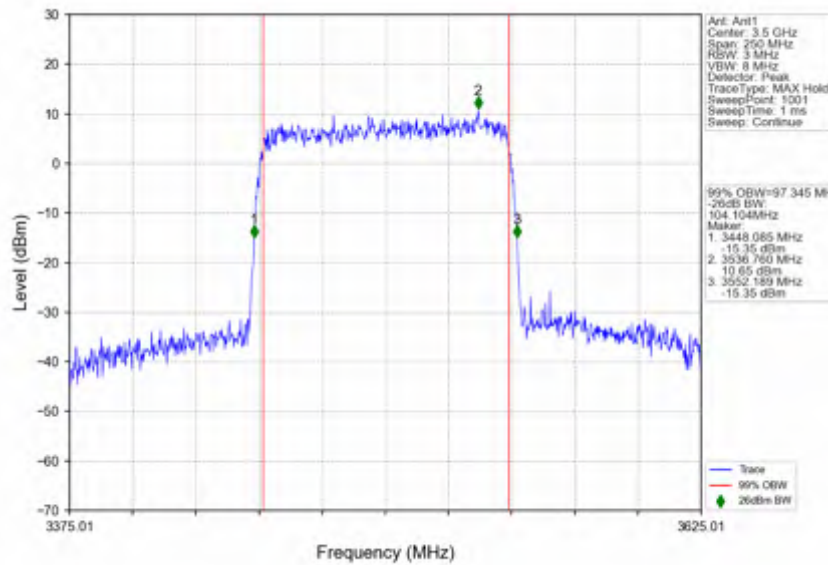


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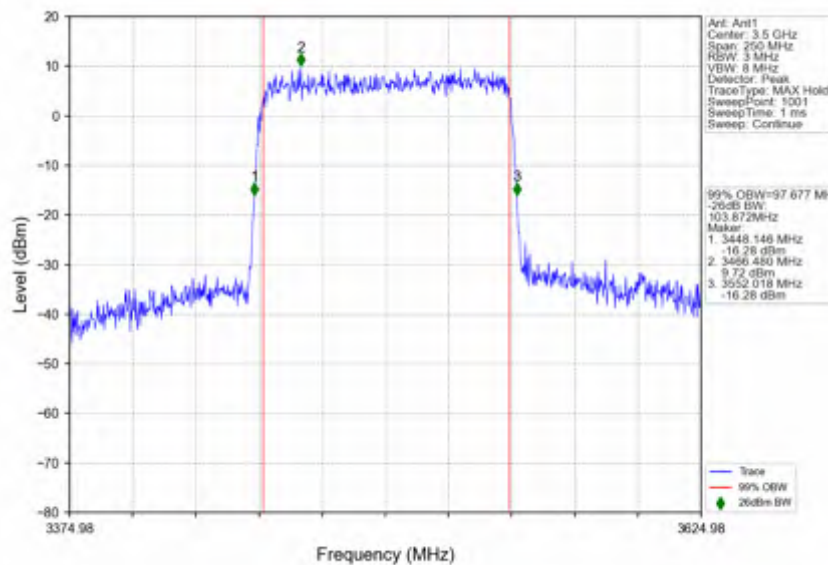
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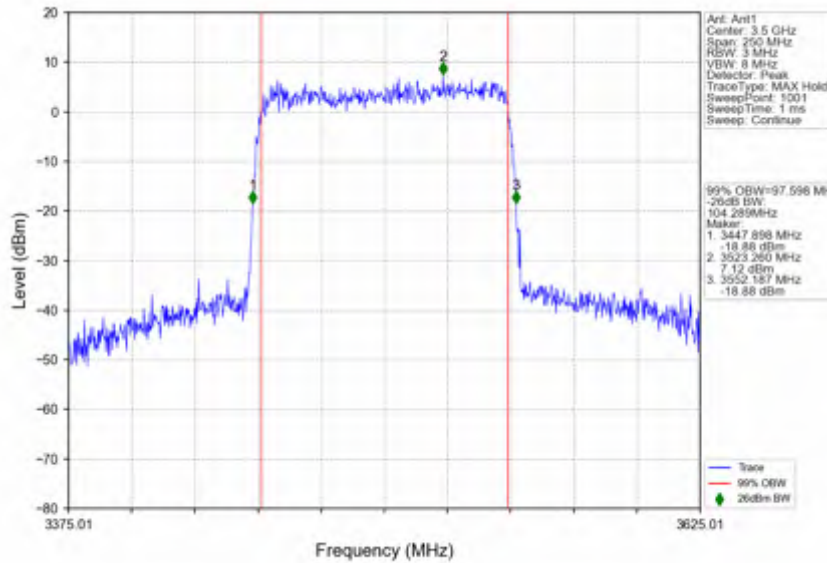
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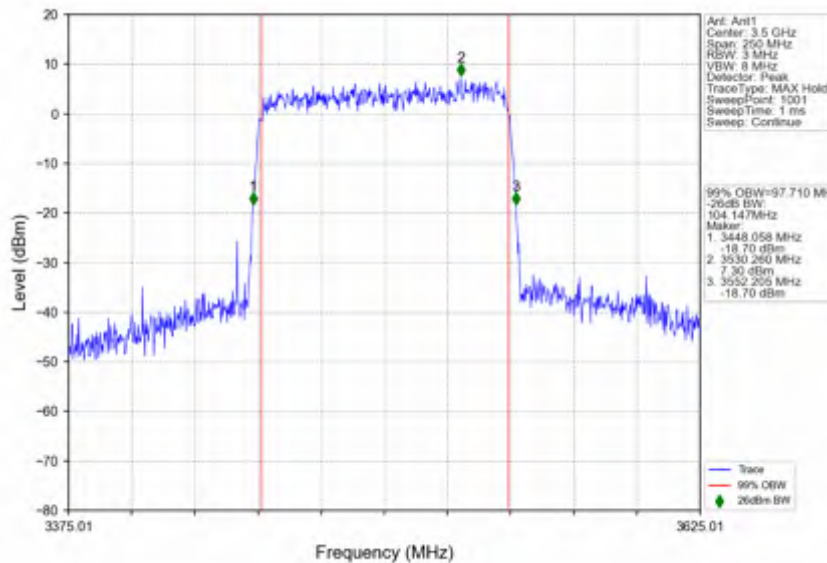
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n78e_30kHz_SISO_NTNV_100MHz_CP-OFDM 256 QAM_3500.01MHz_Outer_Full



n78e_30kHz_SISO_NTNV_100MHz_CP-OFDM 256 QAM_3500.01MHz_Outer_Full



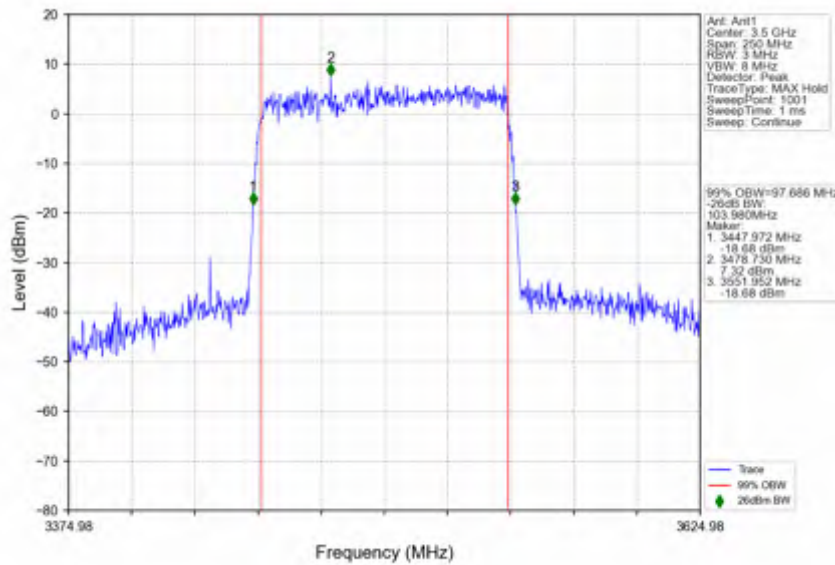
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