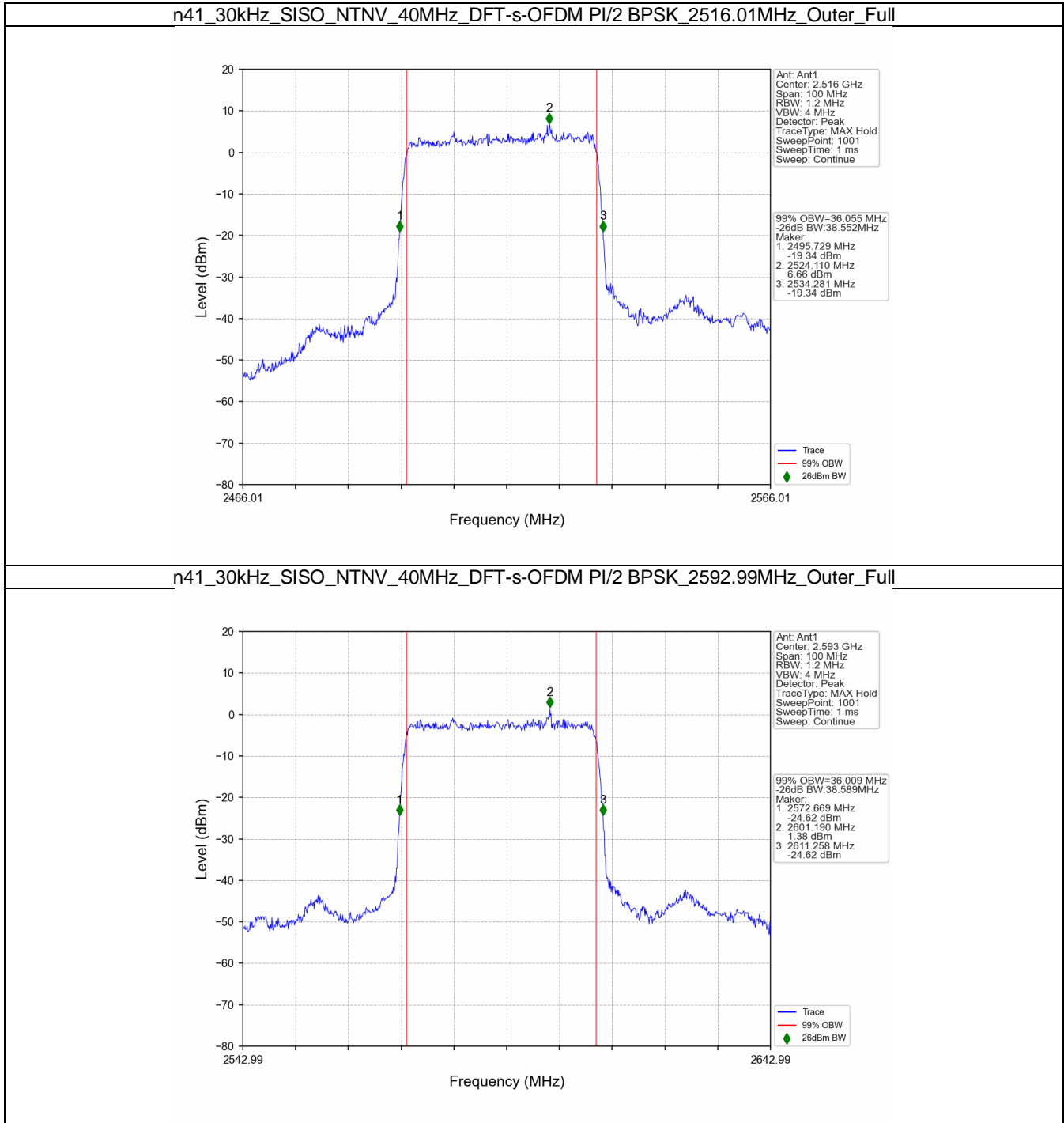
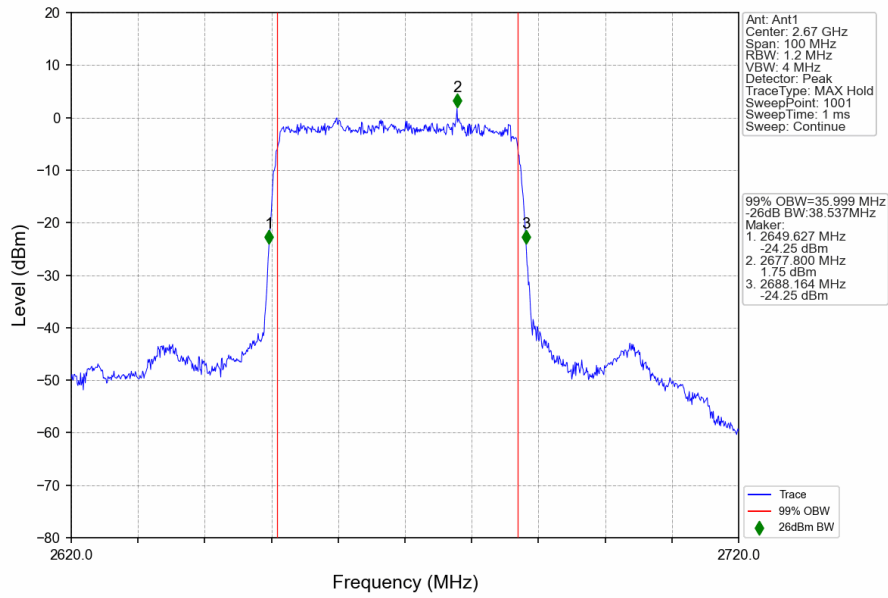


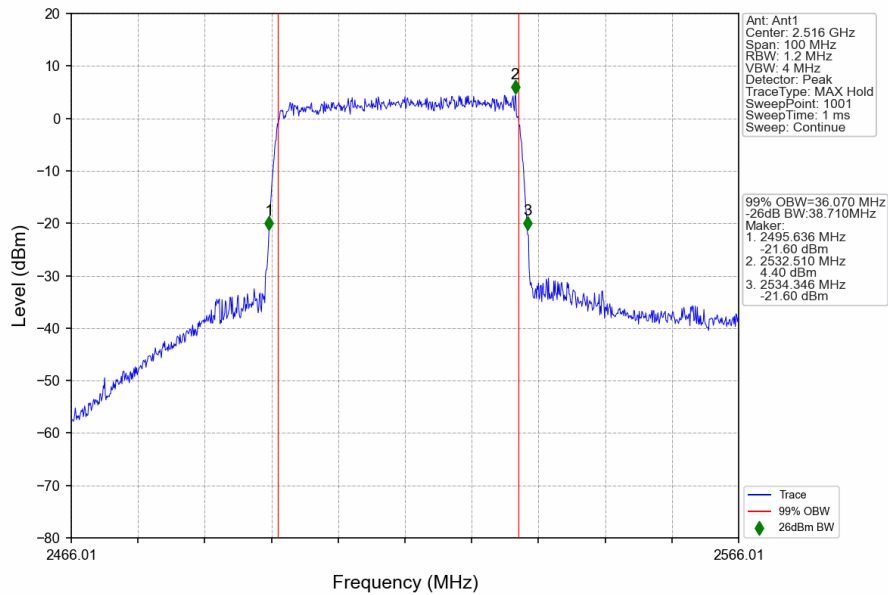
### 3.3.2 Test Graph



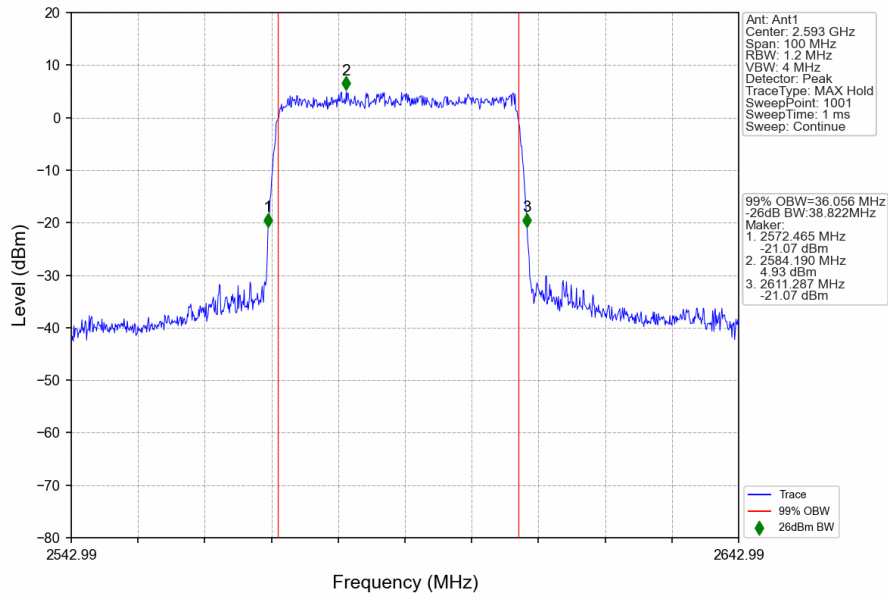
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM PI/2 BPSK\_2670MHz\_Outer\_Full



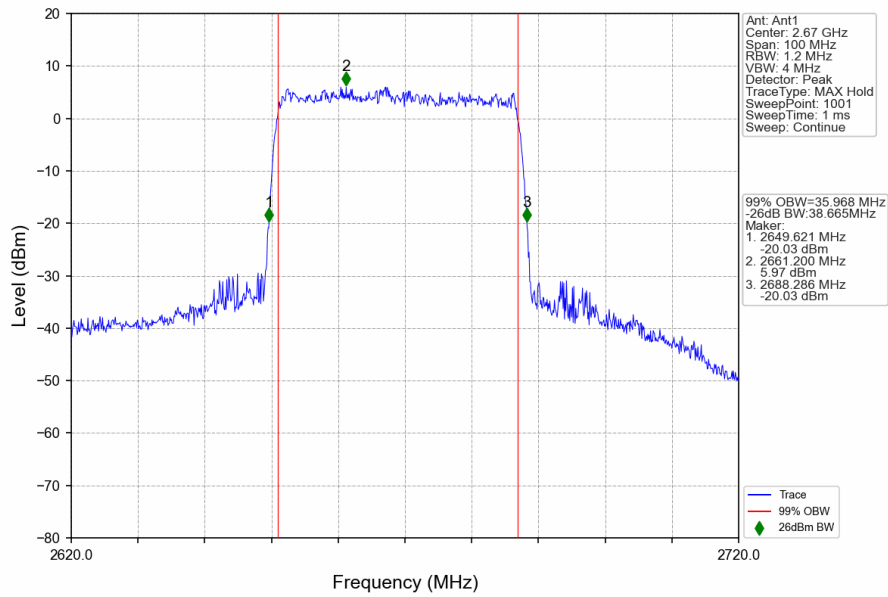
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM QPSK\_2516.01MHz\_Outer\_Full



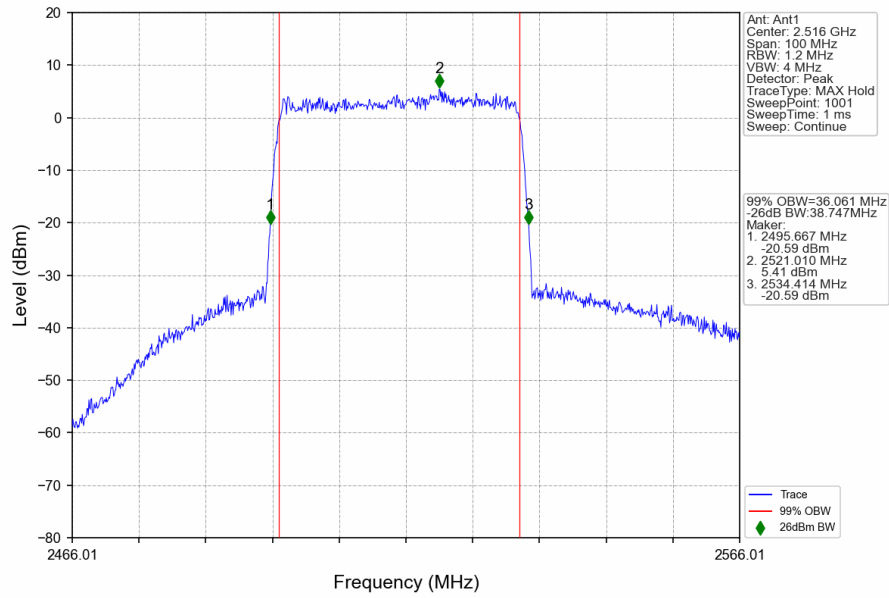
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM QPSK\_2592.99MHz\_Outer\_Full



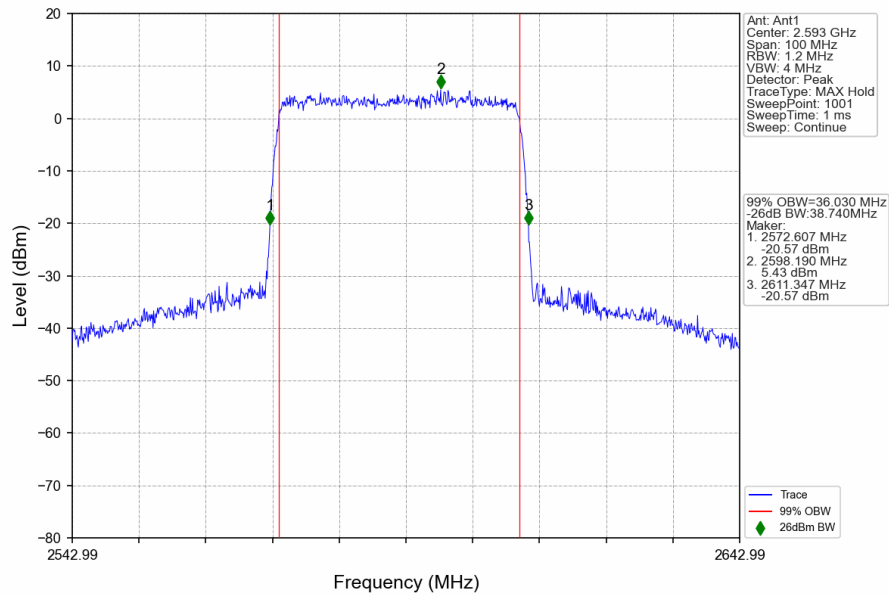
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM QPSK\_2670MHz\_Outer\_Full



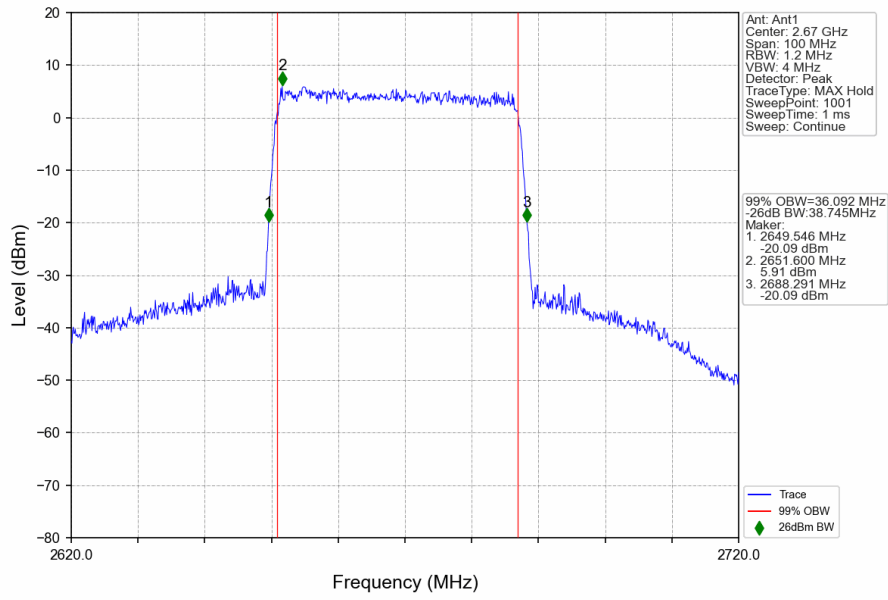
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_16 QAM\_2516.01MHz\_Outer\_Full



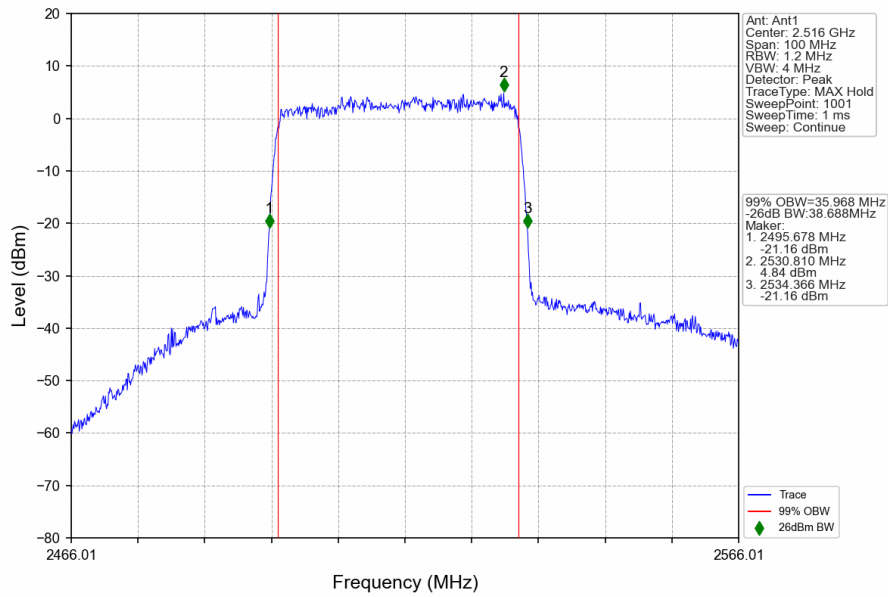
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_16 QAM\_2592.99MHz\_Outer\_Full



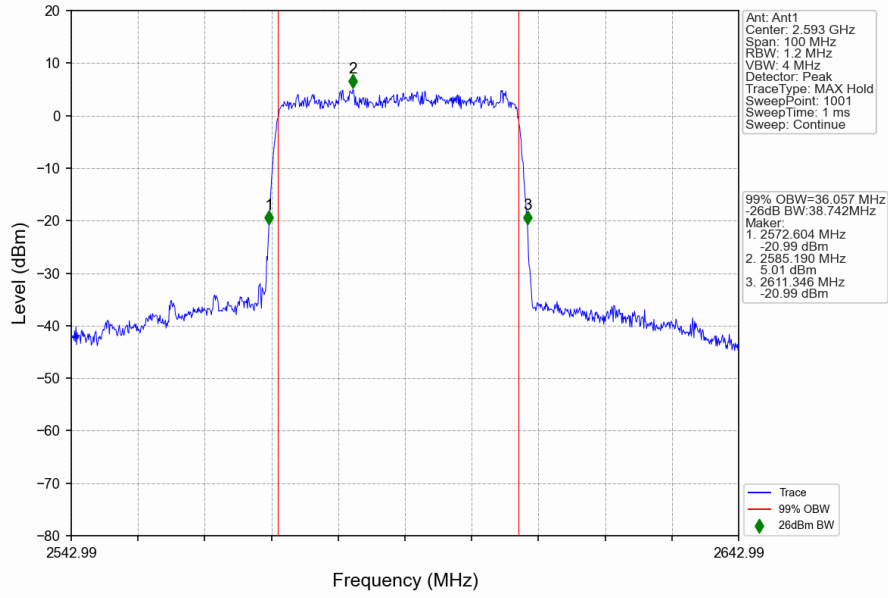
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM 16 QAM\_2670MHz\_Outer\_Full



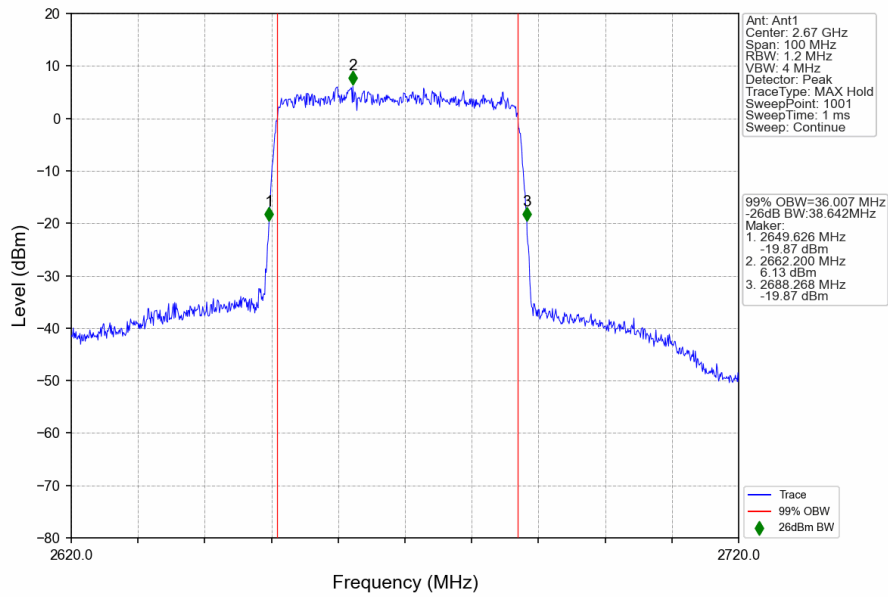
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM 64 QAM\_2516.01MHz\_Outer\_Full



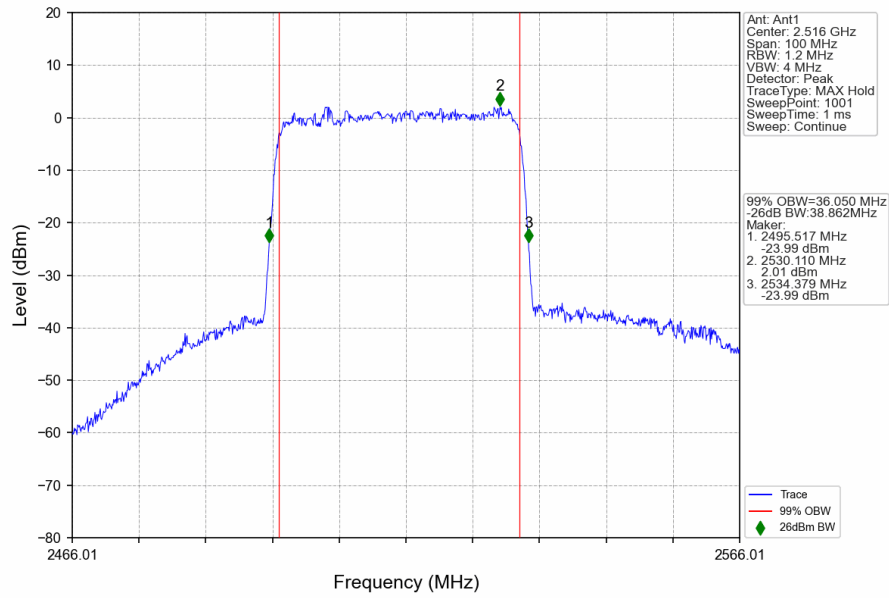
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_64\_QAM\_2592.99MHz\_Outer\_Full



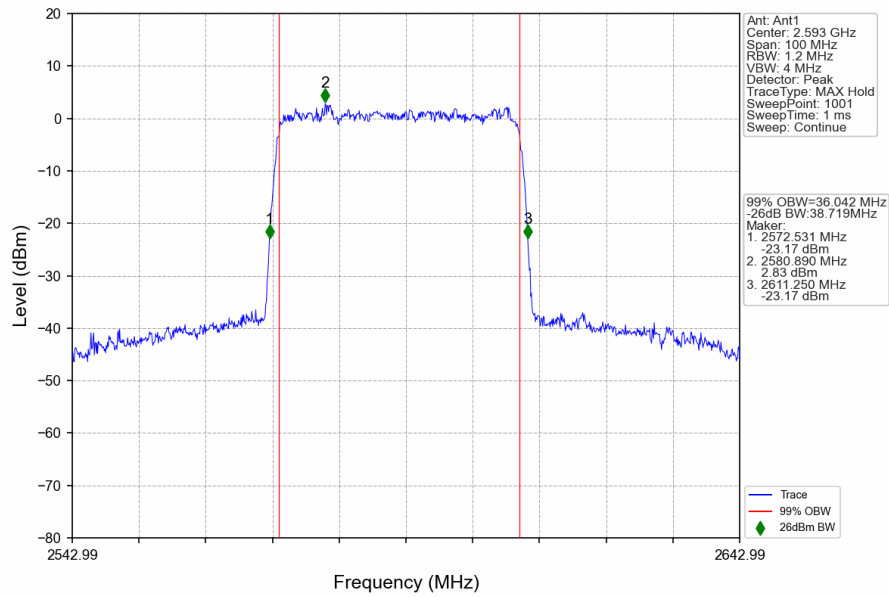
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_64\_QAM\_2670MHz\_Outer\_Full



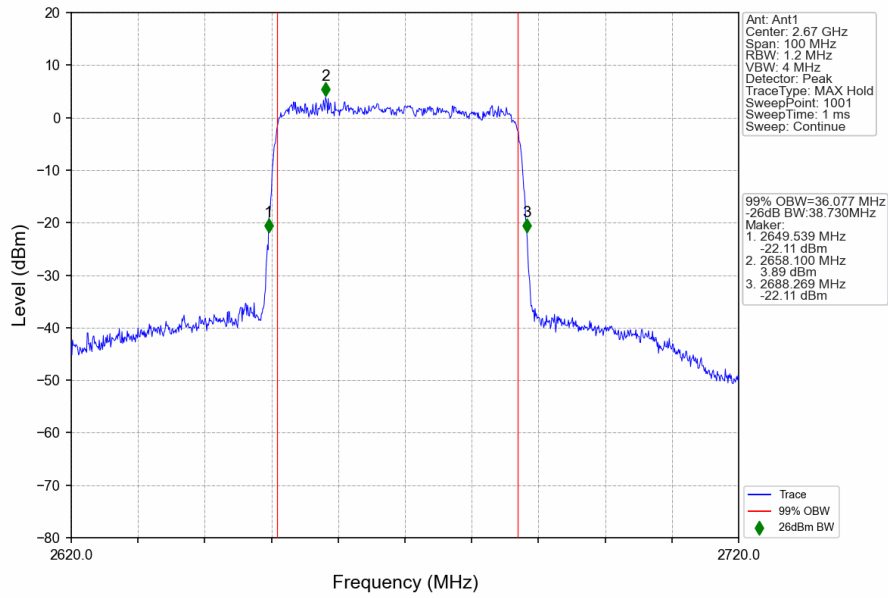
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_256 QAM\_2516.01MHz\_Outer\_Full



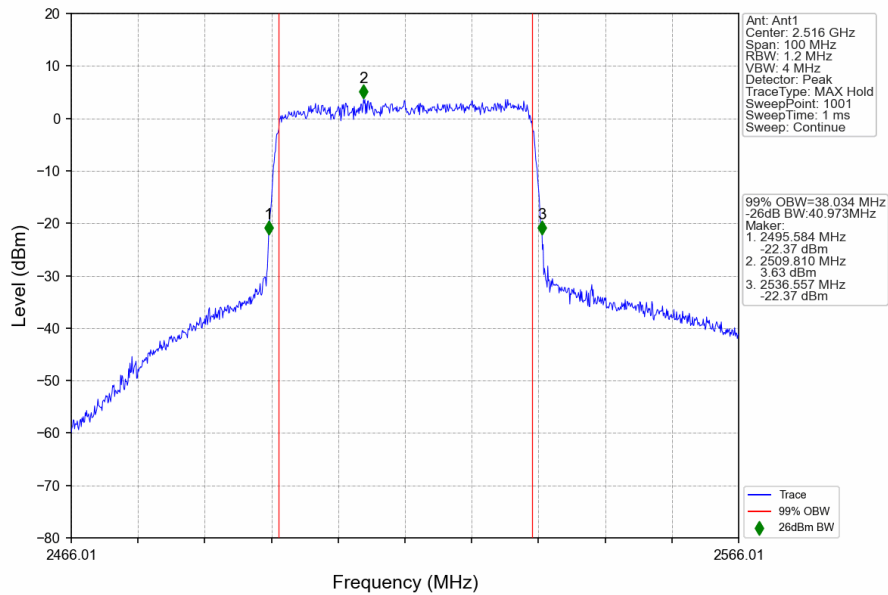
n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM\_256 QAM\_2592.99MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_40MHz\_DFT-s-OFDM 256 QAM 2670MHz\_Outer\_Full

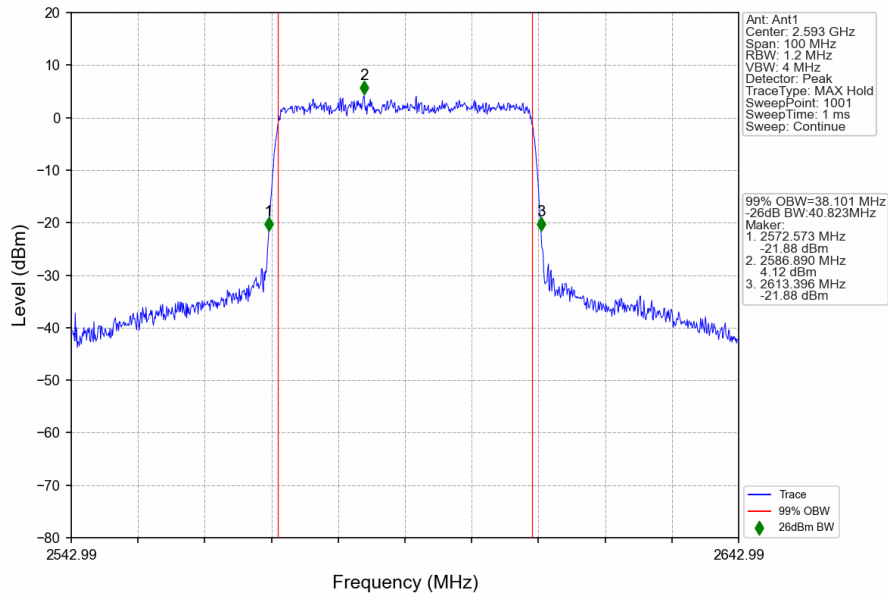


n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM QPSK 2516.01MHz\_Outer\_Full

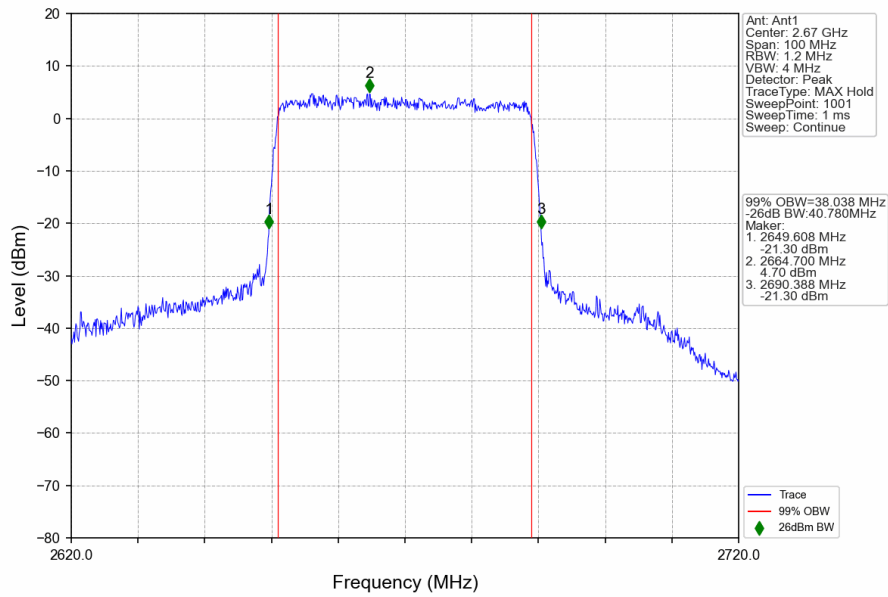




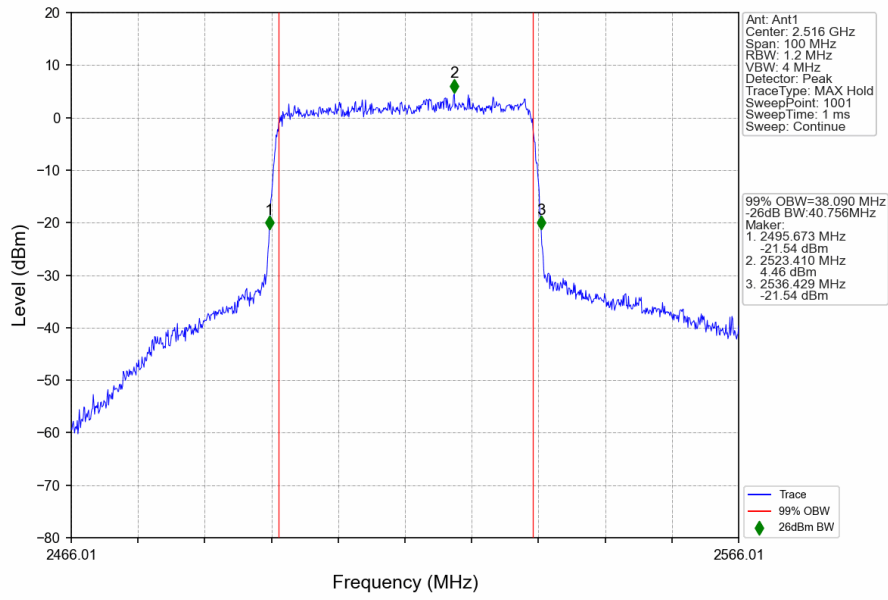
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM QPSK\_2592.99MHz\_Outer\_Full



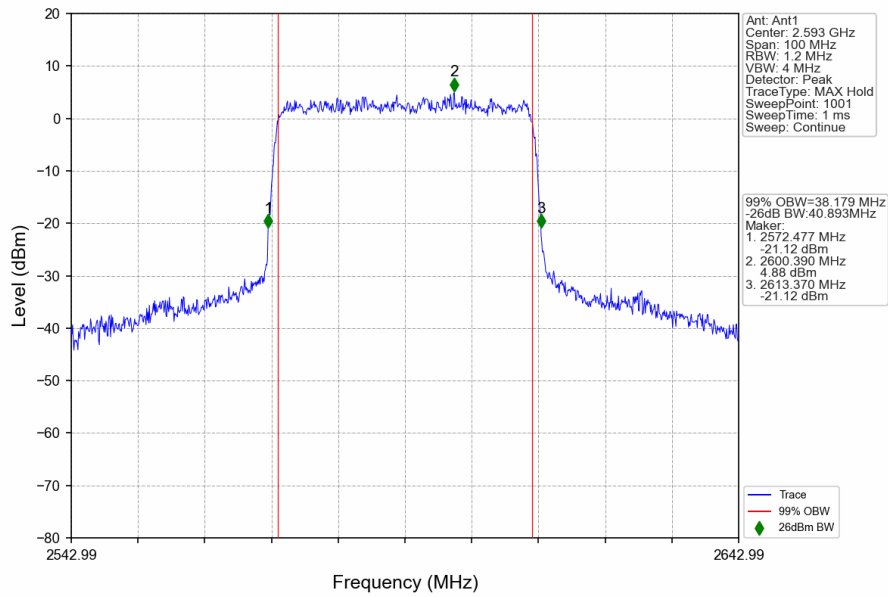
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM QPSK\_2670MHz\_Outer\_Full



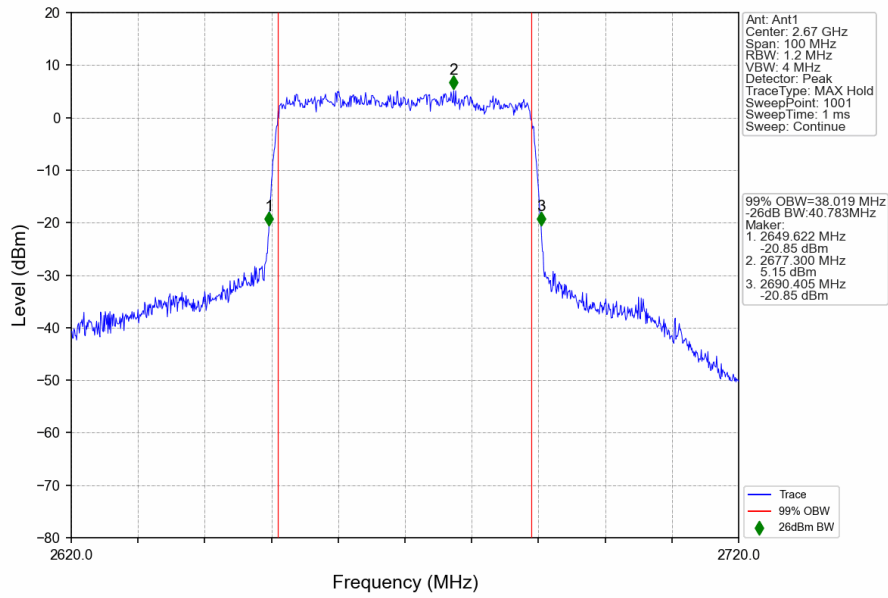
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 16 QAM\_2516.01MHz\_Outer\_Full



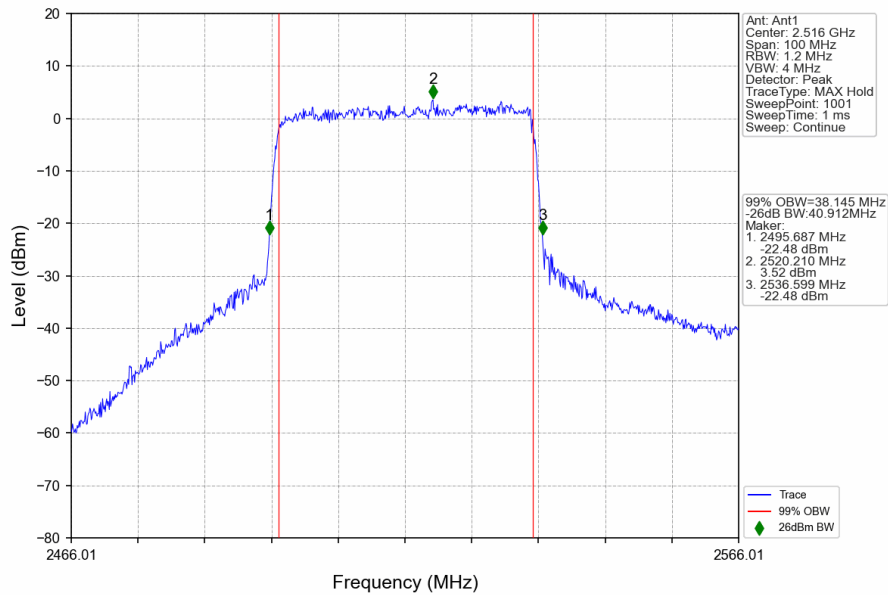
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 16 QAM\_2592.99MHz\_Outer\_Full



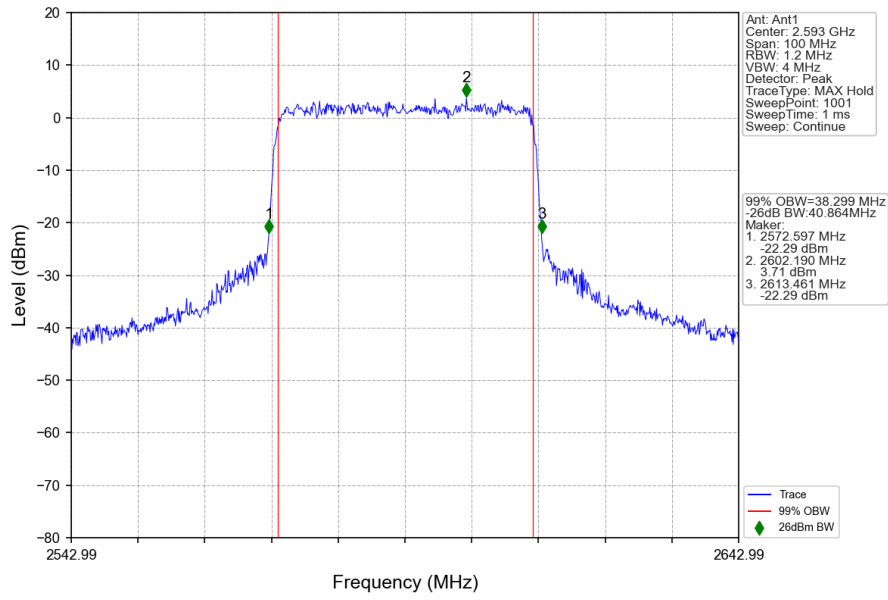
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 16 QAM\_2670MHz\_Outer\_Full



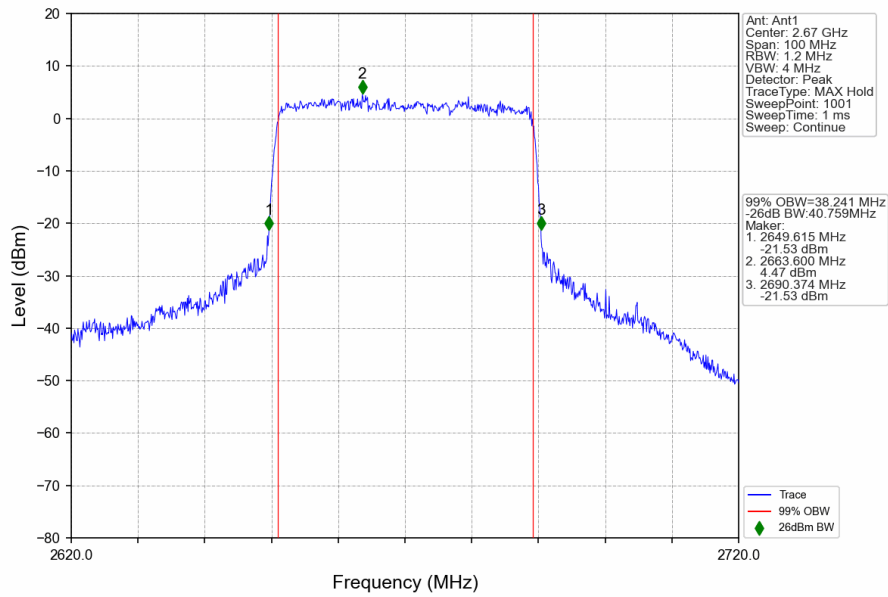
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 64 QAM\_2516.01MHz\_Outer\_Full



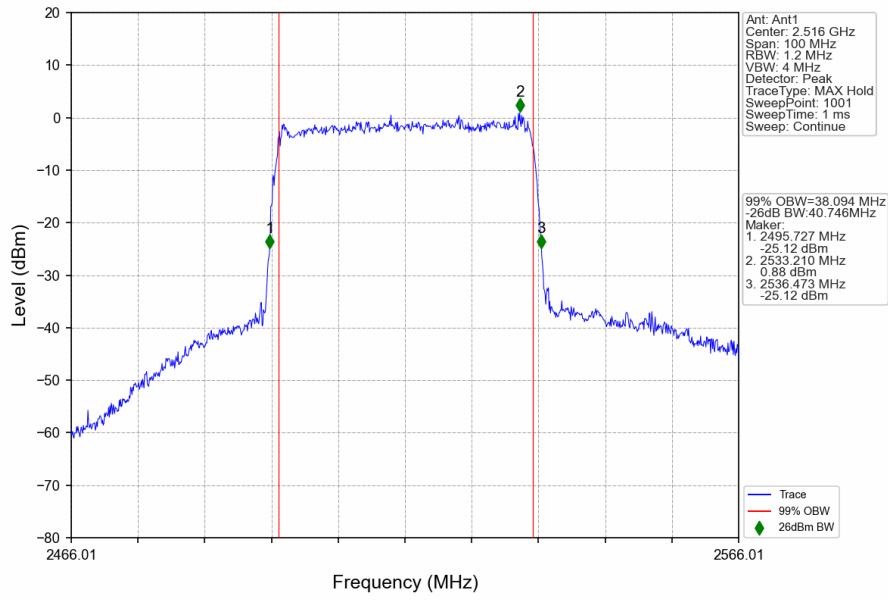
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 64 QAM\_2592.99MHz\_Outer\_Full



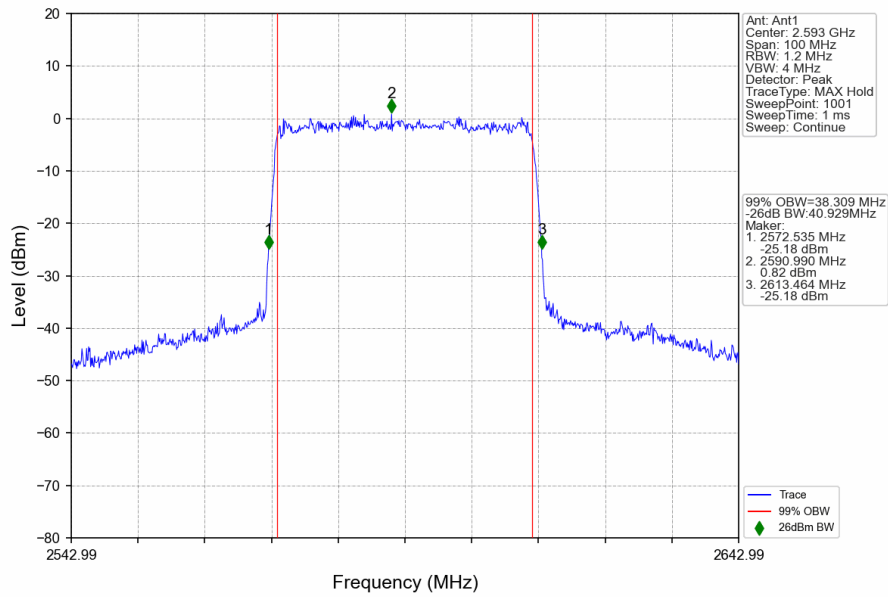
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 64 QAM\_2670MHz\_Outer\_Full



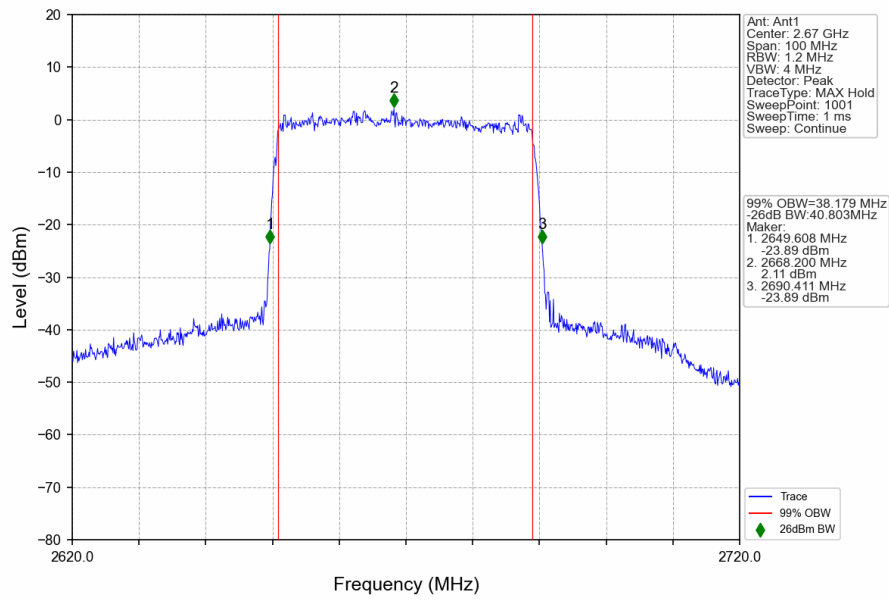
n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 256 QAM 2516.01MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 256 QAM 2592.99MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_40MHz\_CP-OFDM 256 QAM 2670MHz\_Outer\_Full

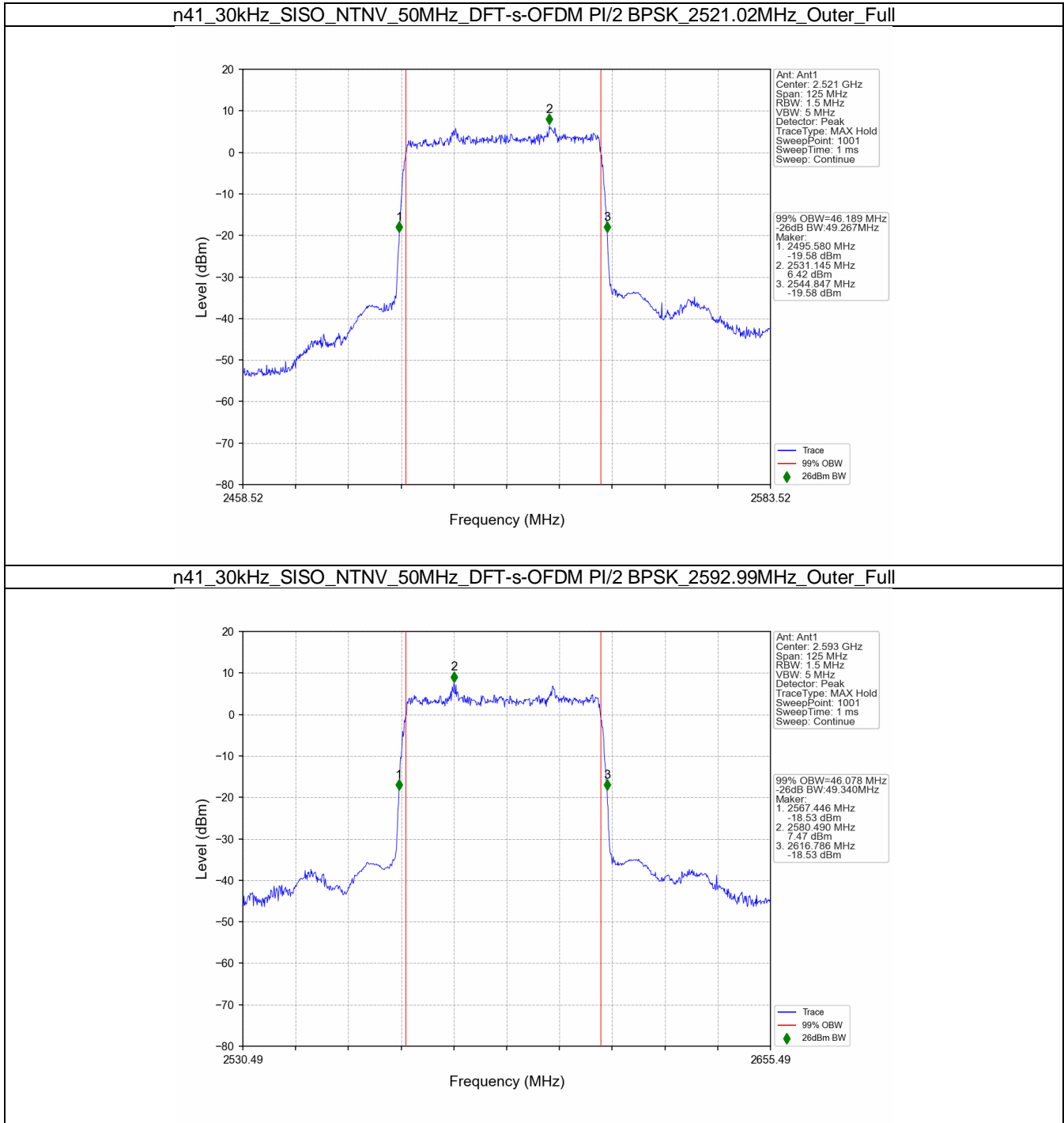


### 3.4 30k\_SISO\_50MHz\_NTNV

#### 3.4.1 Test Result

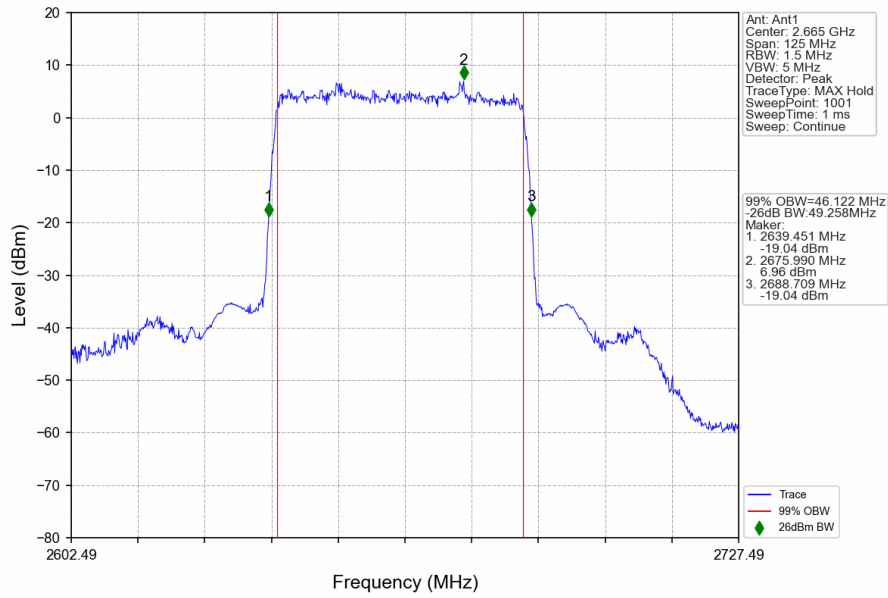
5G NR n41 SCS=30kHz SISO 50MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2521.02	Outer_Full	46.19	49.27	/	Pass
	2592.99	Outer_Full	46.08	49.34	/	Pass
	2664.99	Outer_Full	46.12	49.26	/	Pass
DFT-s-OFDM QPSK	2521.02	Outer_Full	46.18	49.45	/	Pass
	2592.99	Outer_Full	46.25	49.45	/	Pass
	2664.99	Outer_Full	46.30	49.46	/	Pass
DFT-s-OFDM 16 QAM	2521.02	Outer_Full	46.24	49.42	/	Pass
	2592.99	Outer_Full	46.29	49.47	/	Pass
	2664.99	Outer_Full	46.13	49.29	/	Pass
DFT-s-OFDM 64 QAM	2521.02	Outer_Full	46.04	49.21	/	Pass
	2592.99	Outer_Full	46.06	49.25	/	Pass
	2664.99	Outer_Full	46.09	49.23	/	Pass
DFT-s-OFDM 256 QAM	2521.02	Outer_Full	46.06	49.40	/	Pass
	2592.99	Outer_Full	46.17	49.50	/	Pass
	2664.99	Outer_Full	46.05	49.41	/	Pass
CP-OFDM QPSK	2521.02	Outer_Full	47.88	51.15	/	Pass
	2592.99	Outer_Full	47.91	51.13	/	Pass
	2664.99	Outer_Full	47.84	51.04	/	Pass
CP-OFDM 16 QAM	2521.02	Outer_Full	47.87	51.32	/	Pass
	2592.99	Outer_Full	47.91	51.23	/	Pass
	2664.99	Outer_Full	47.81	51.13	/	Pass
CP-OFDM 64 QAM	2521.02	Outer_Full	47.78	51.09	/	Pass
	2592.99	Outer_Full	47.95	51.37	/	Pass
	2664.99	Outer_Full	47.78	51.24	/	Pass
CP-OFDM 256 QAM	2521.02	Outer_Full	47.79	51.10	/	Pass
	2592.99	Outer_Full	47.90	51.12	/	Pass
	2664.99	Outer_Full	47.85	51.15	/	Pass

### 3.4.2 Test Graph

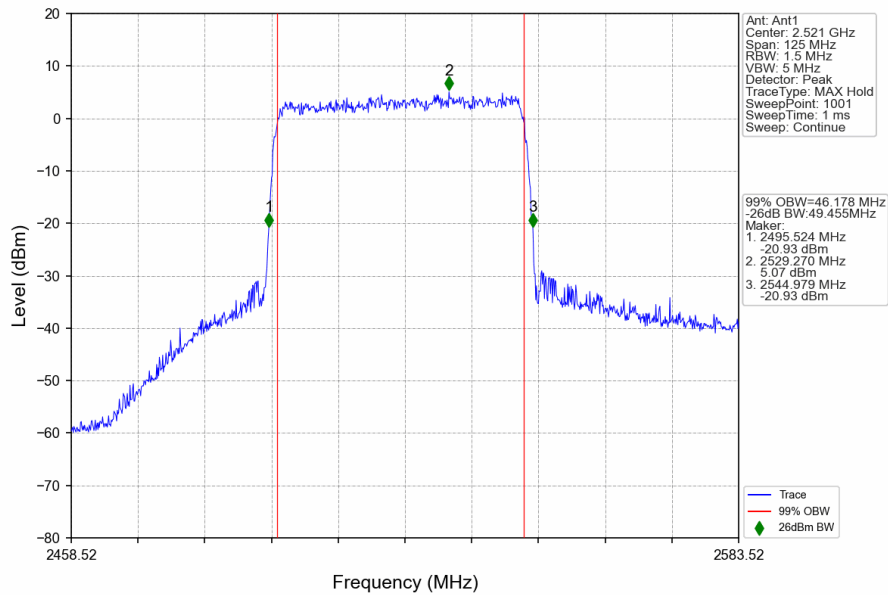




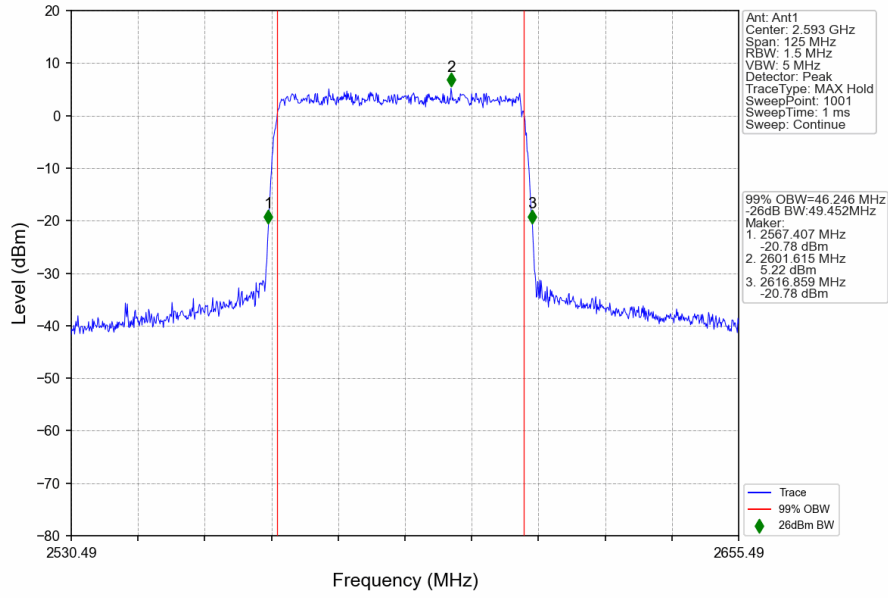
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM PI/2 BPSK\_2664.99MHz\_Outer\_Full



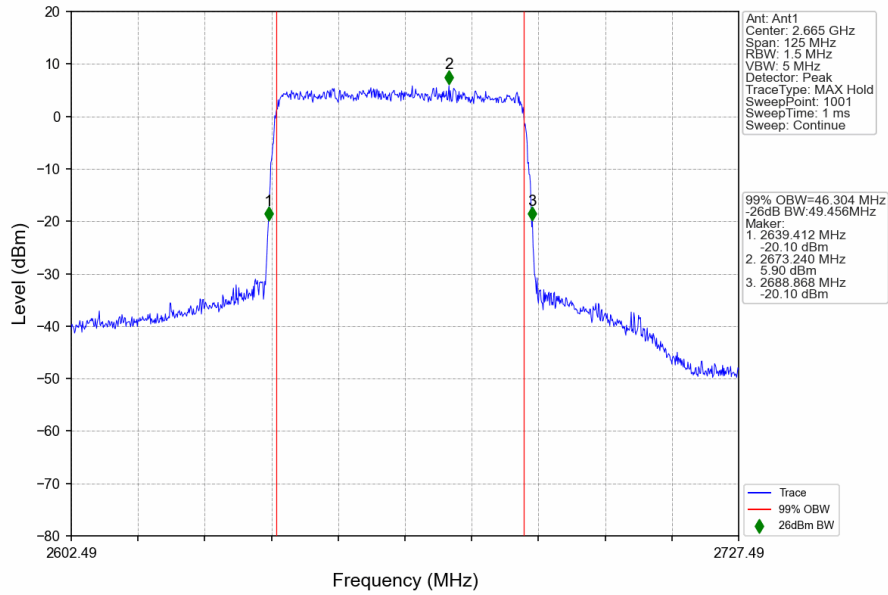
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM QPSK\_2521.02MHz\_Outer\_Full



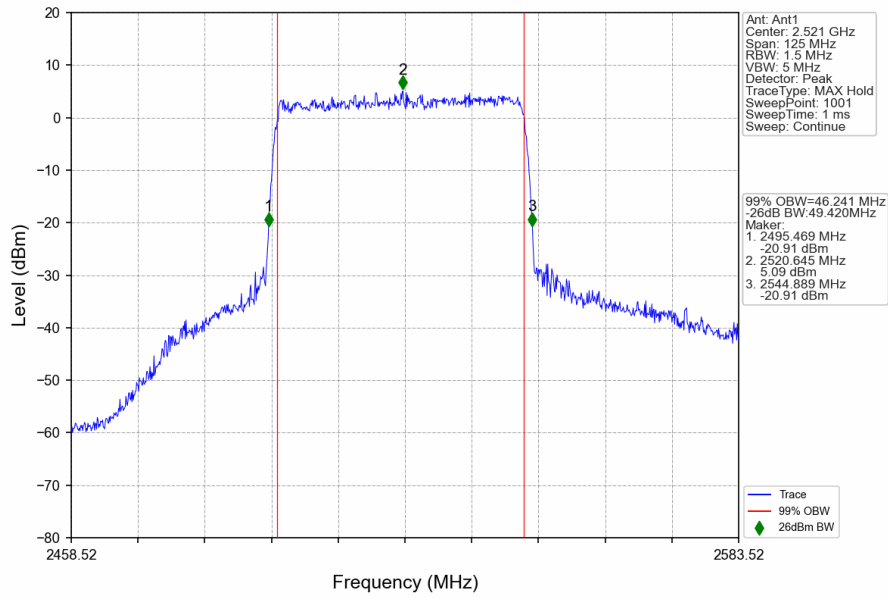
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM QPSK\_2592.99MHz\_Outer\_Full



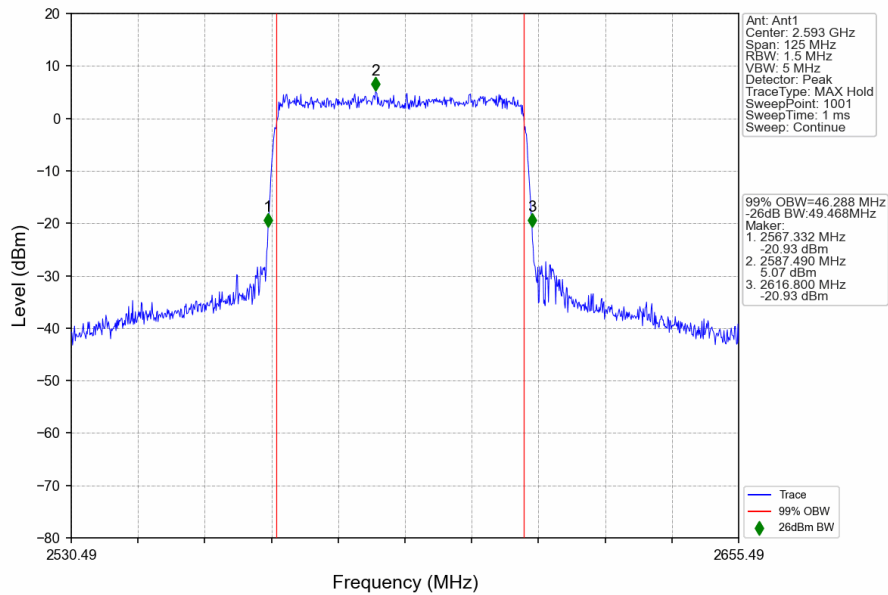
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM QPSK\_2664.99MHz\_Outer\_Full



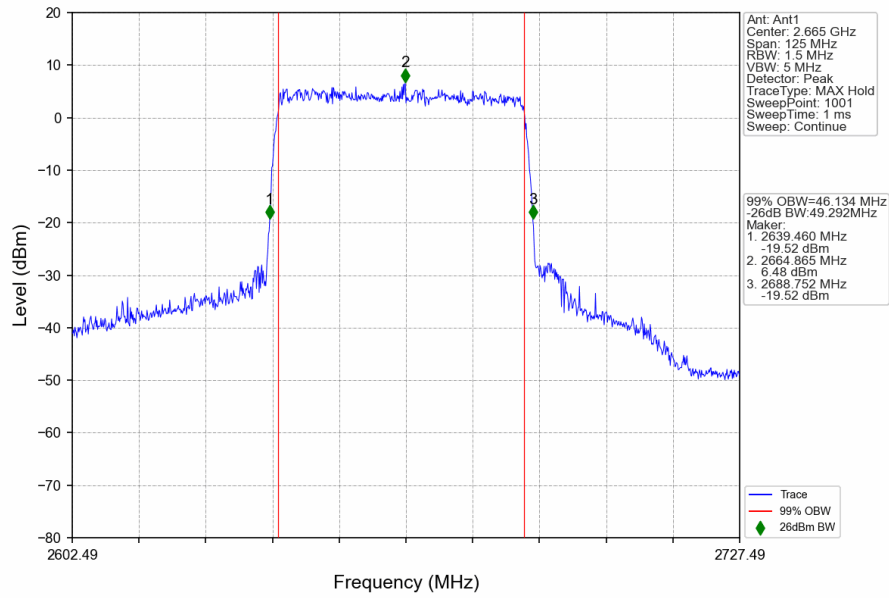
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 16 QAM\_2521.02MHz\_Outer\_Full



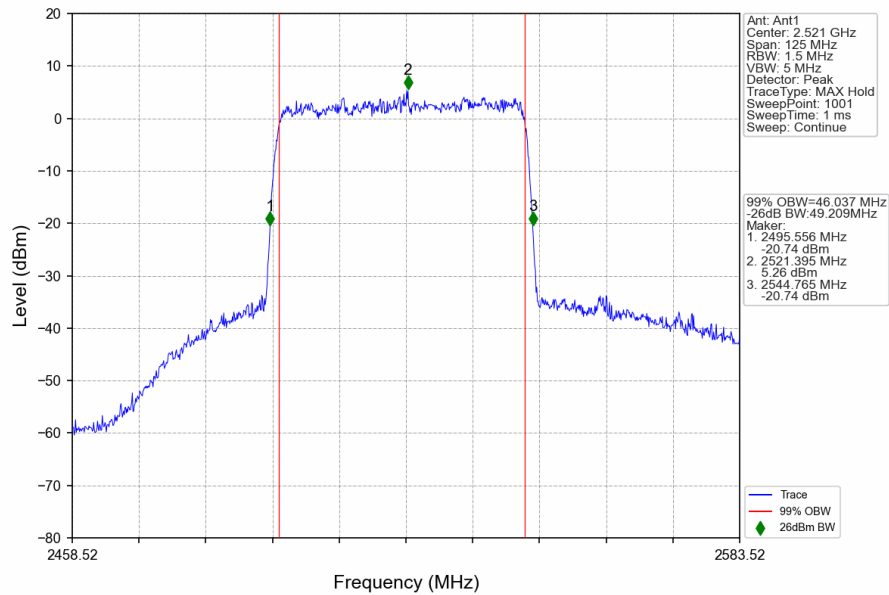
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 16 QAM\_2592.99MHz\_Outer\_Full



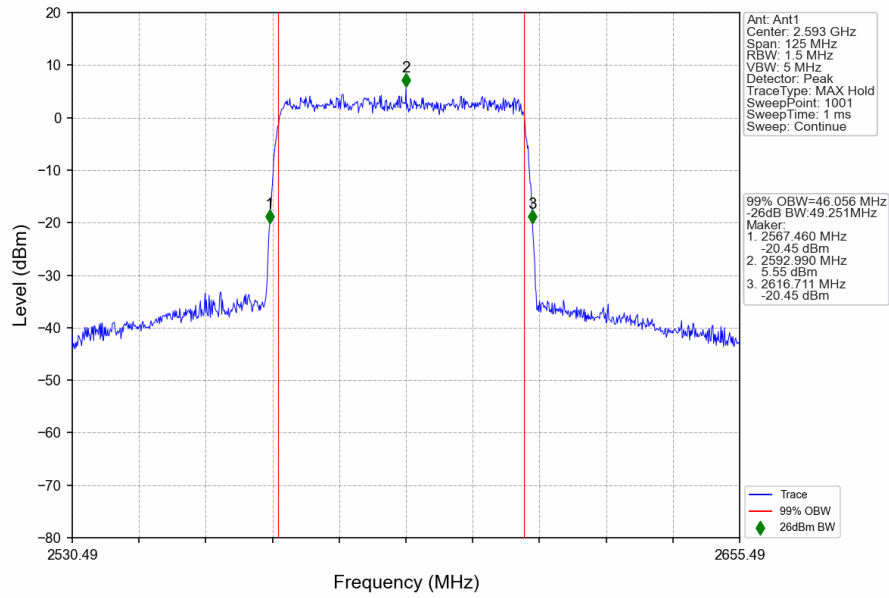
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 16 QAM\_2664.99MHz\_Outer\_Full



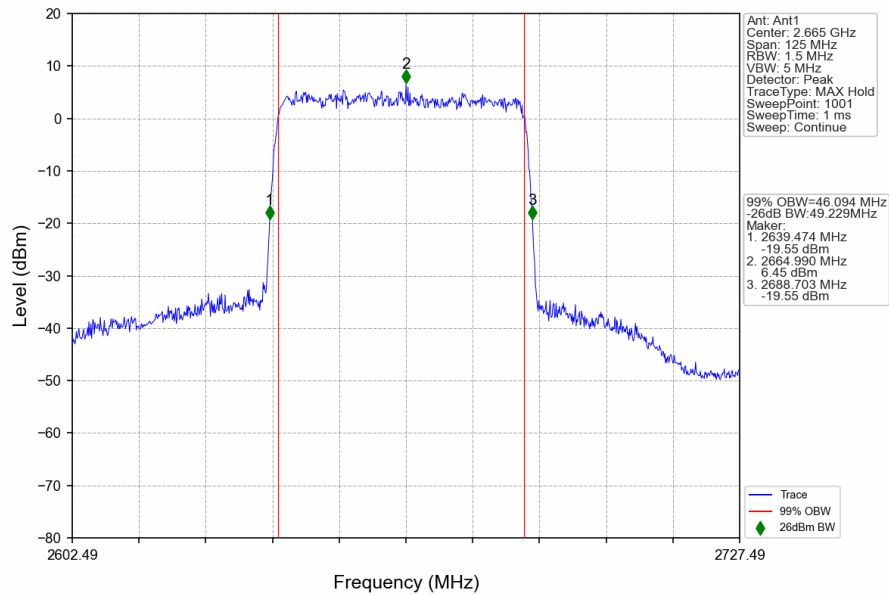
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 64 QAM\_2521.02MHz\_Outer\_Full



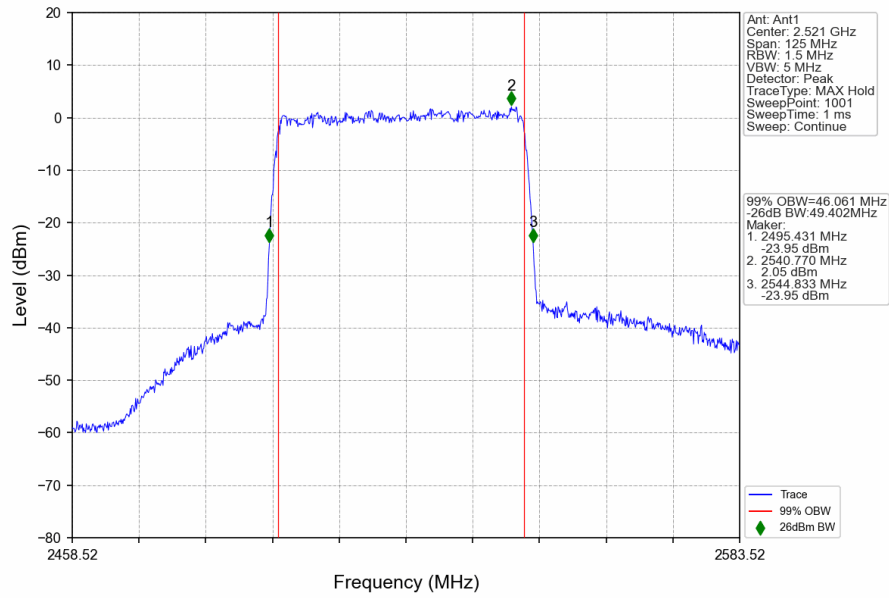
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 64 QAM\_2592.99MHz\_Outer\_Full



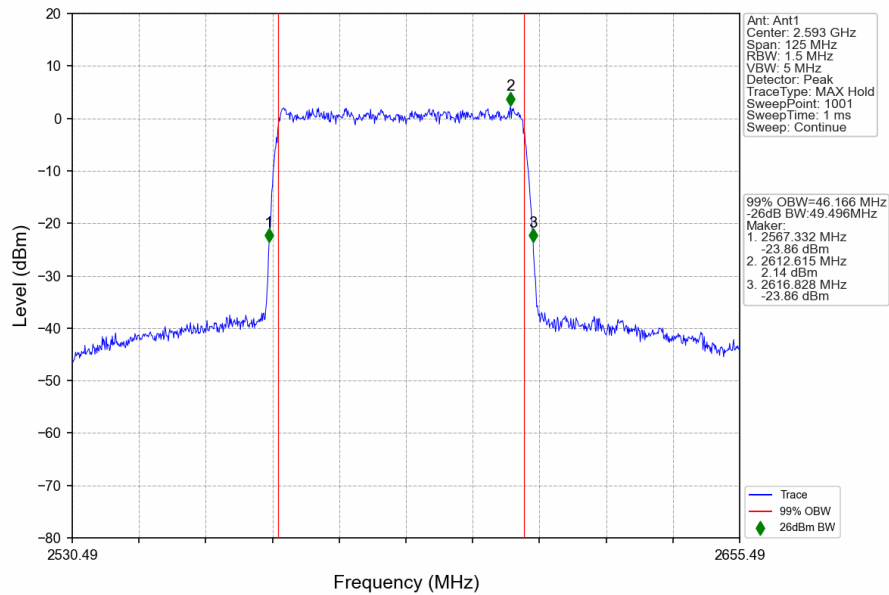
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 64 QAM\_2664.99MHz\_Outer\_Full



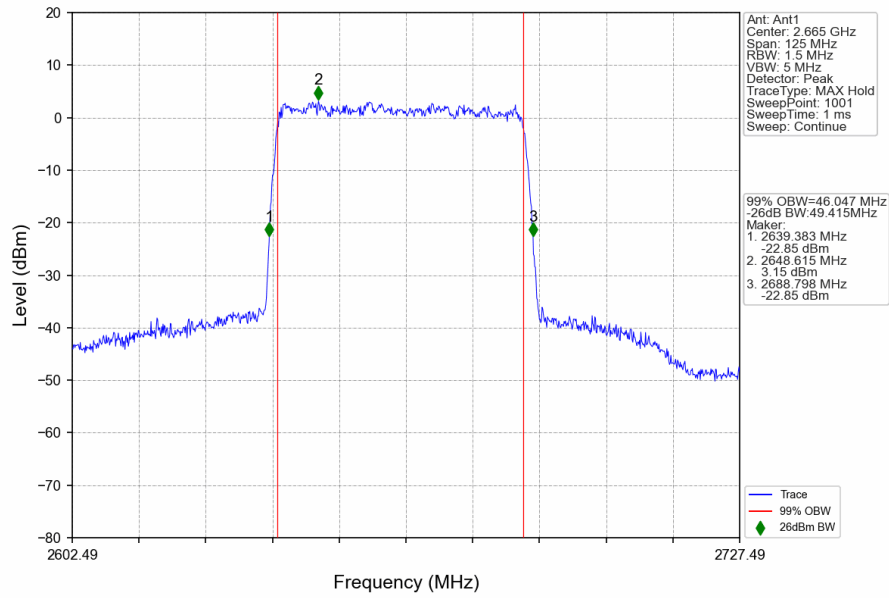
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 256 QAM\_2521.02MHz\_Outer\_Full



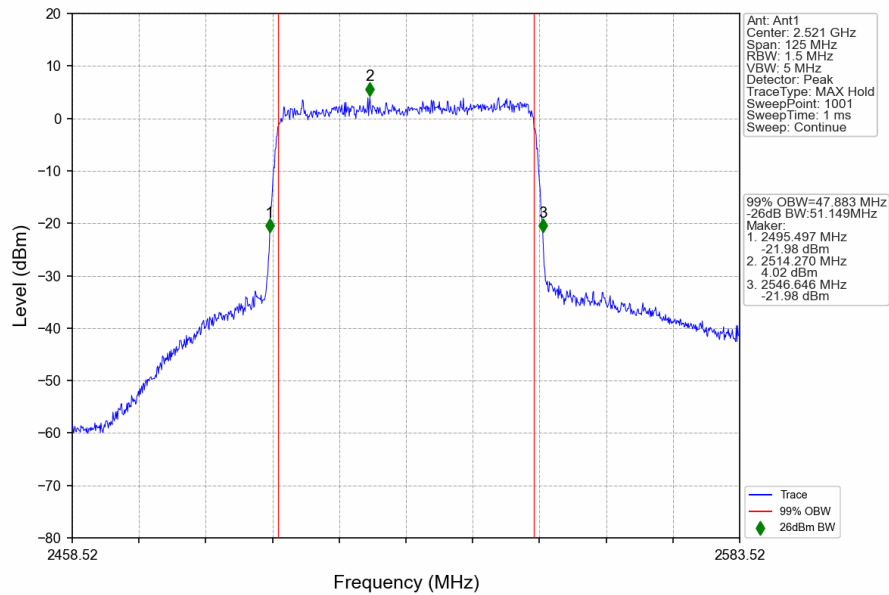
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 256 QAM\_2592.99MHz\_Outer\_Full



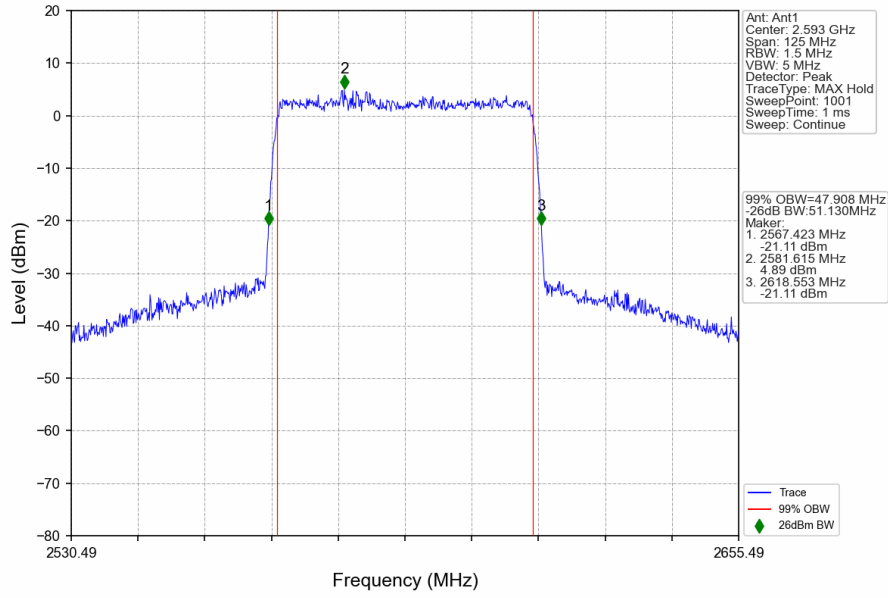
n41\_30kHz\_SISO\_NTNV\_50MHz\_DFT-s-OFDM 256 QAM\_2664.99MHz\_Outer\_Full



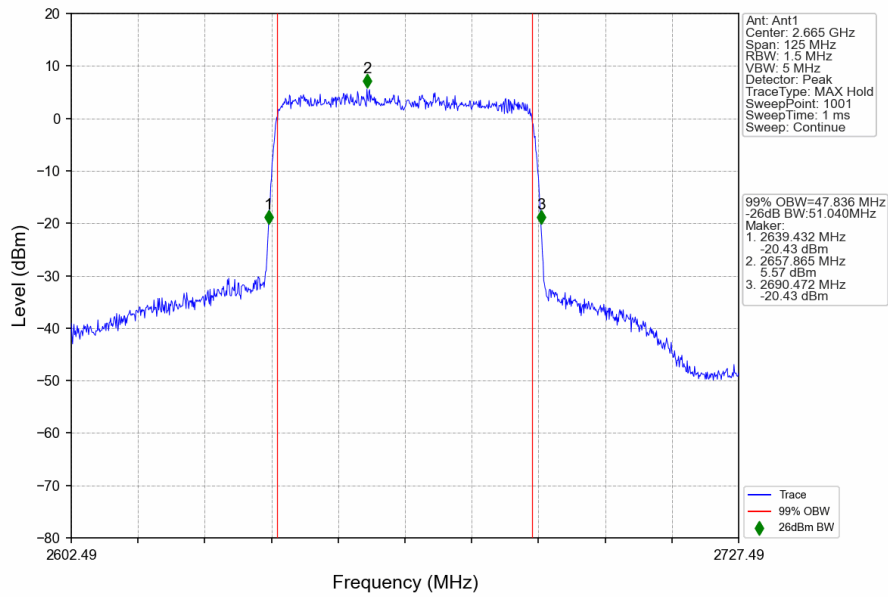
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM QPSK\_2521.02MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM QPSK\_2592.99MHz\_Outer\_Full

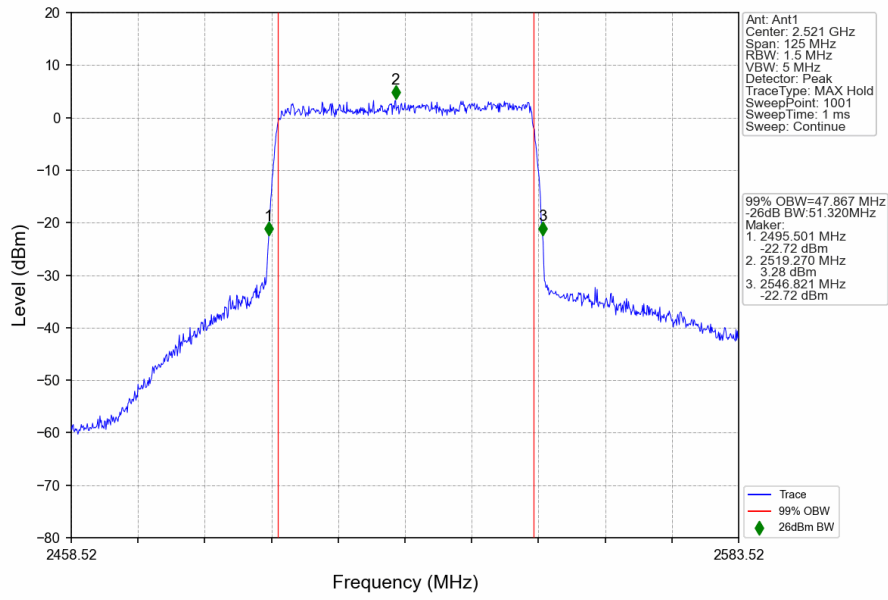


n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM QPSK\_2664.99MHz\_Outer\_Full

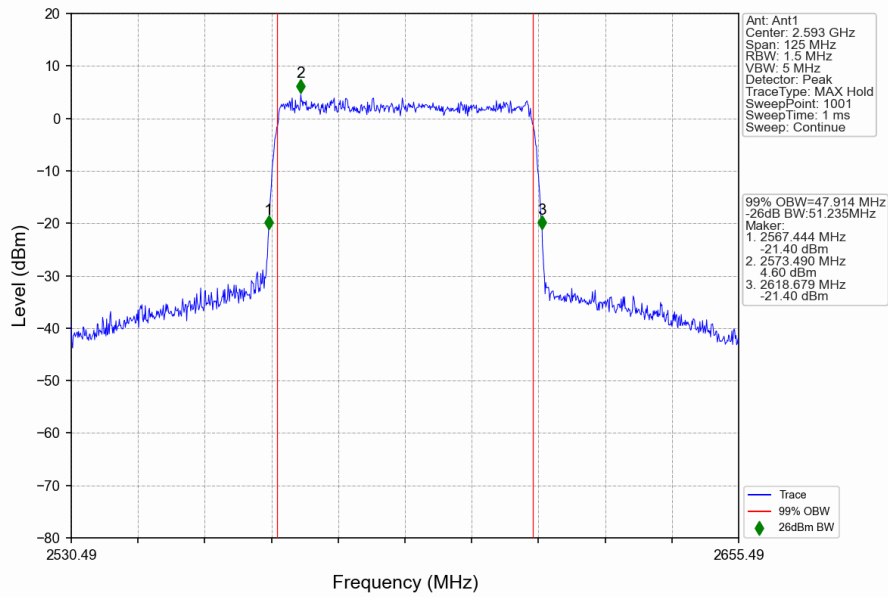




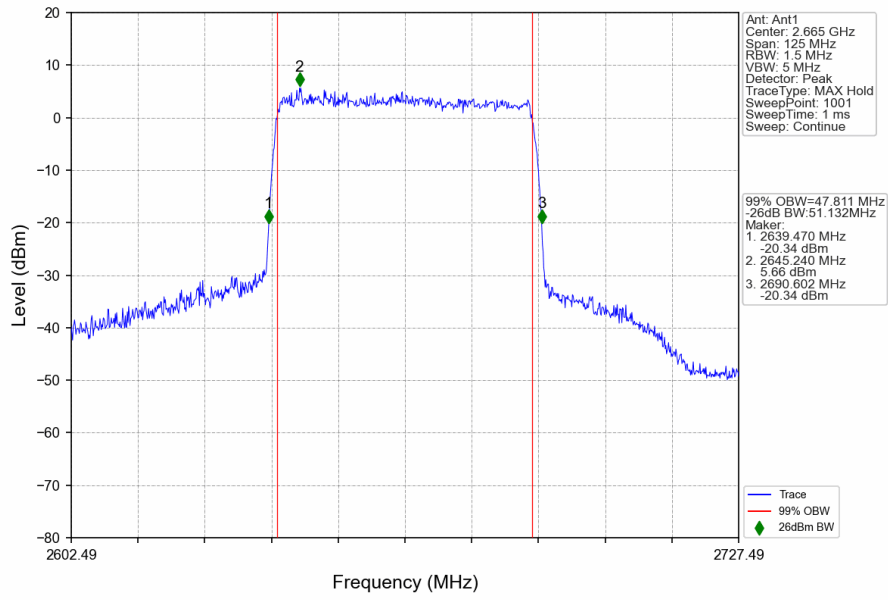
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 16 QAM\_2521.02MHz\_Outer\_Full



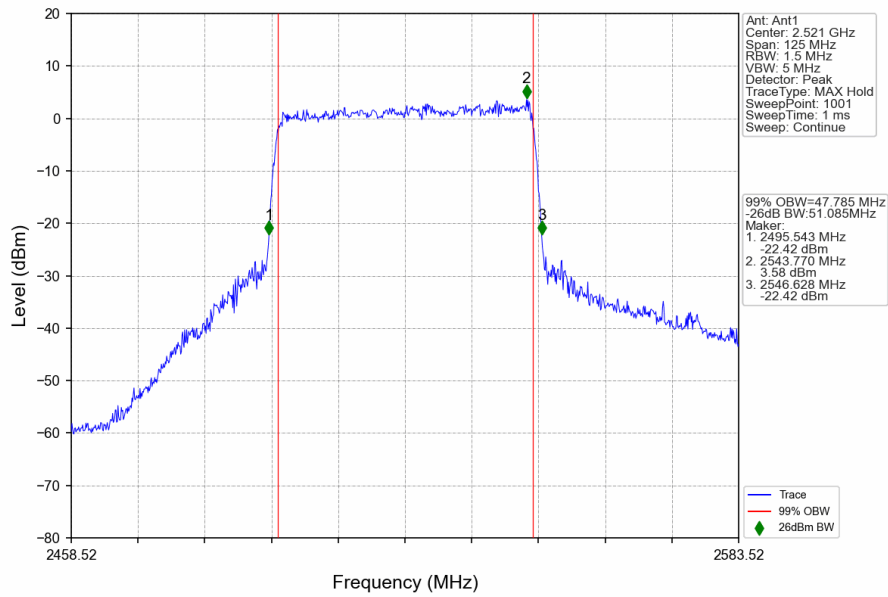
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 16 QAM\_2592.99MHz\_Outer\_Full



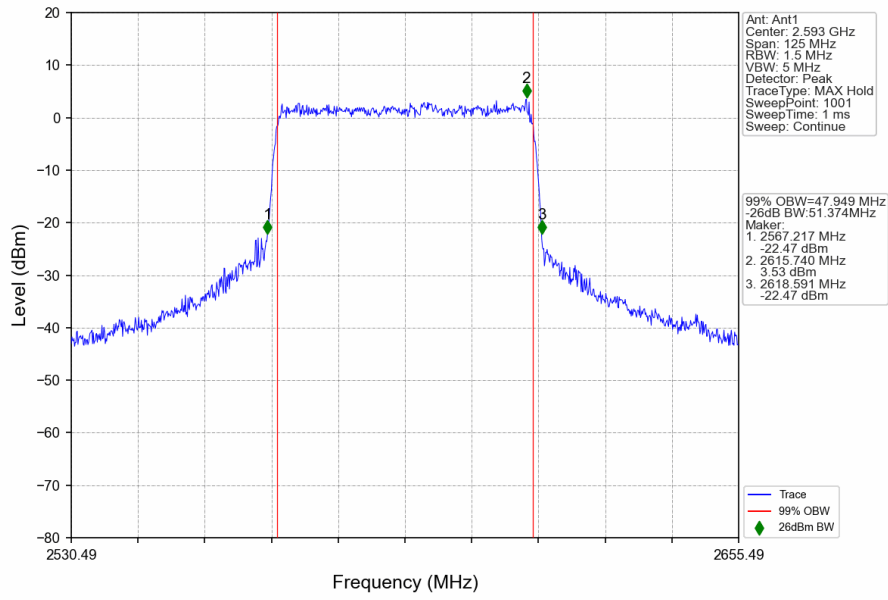
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 16 QAM\_2664.99MHz\_Outer\_Full



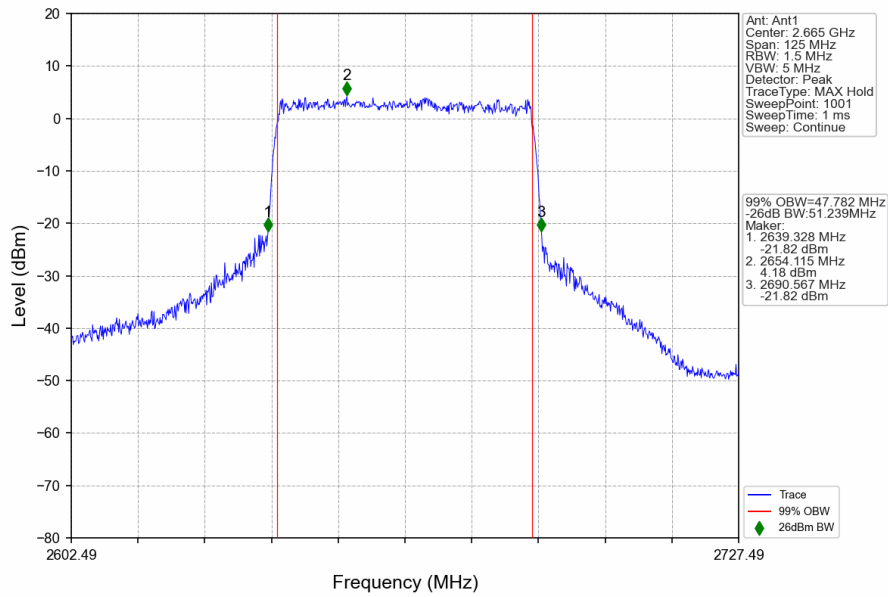
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 64 QAM\_2521.02MHz\_Outer\_Full



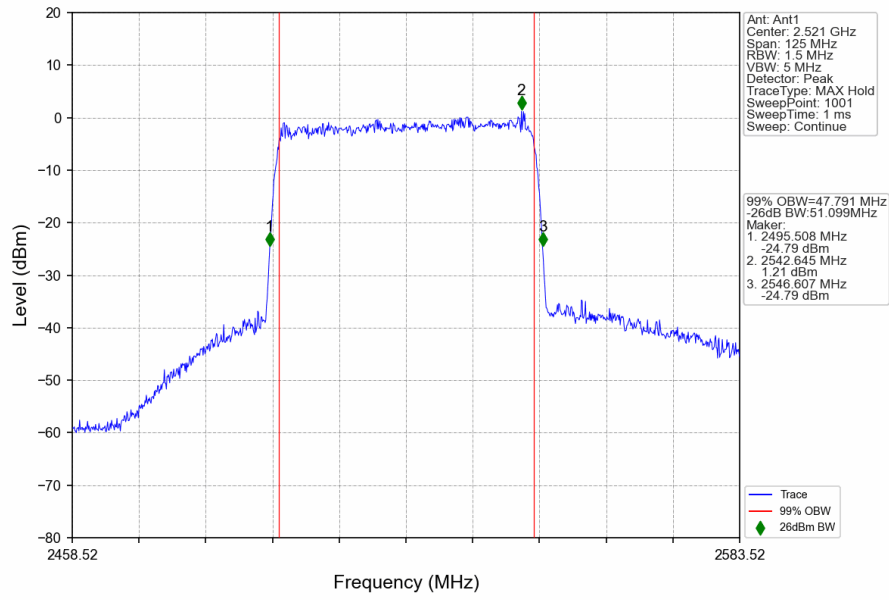
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 64 QAM\_2592.99MHz\_Outer\_Full



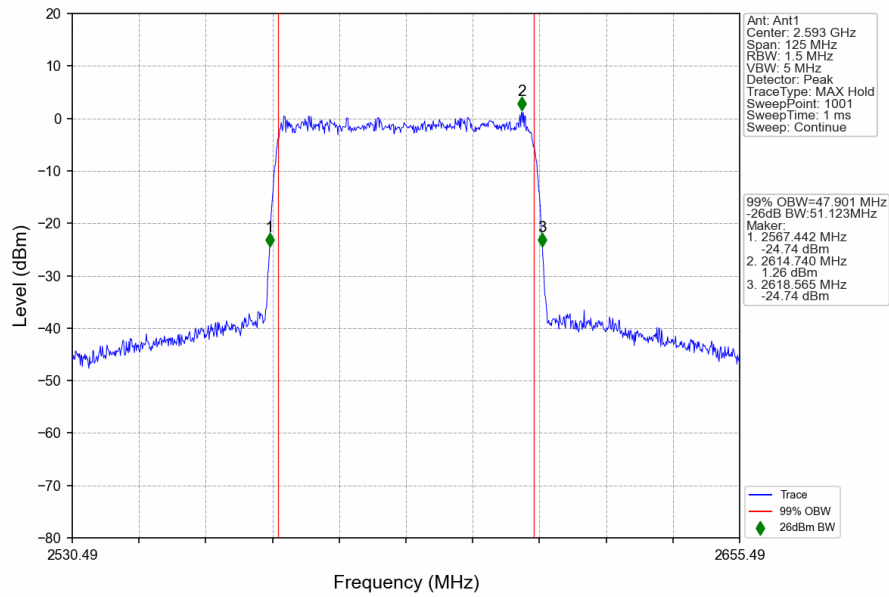
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 64 QAM\_2664.99MHz\_Outer\_Full



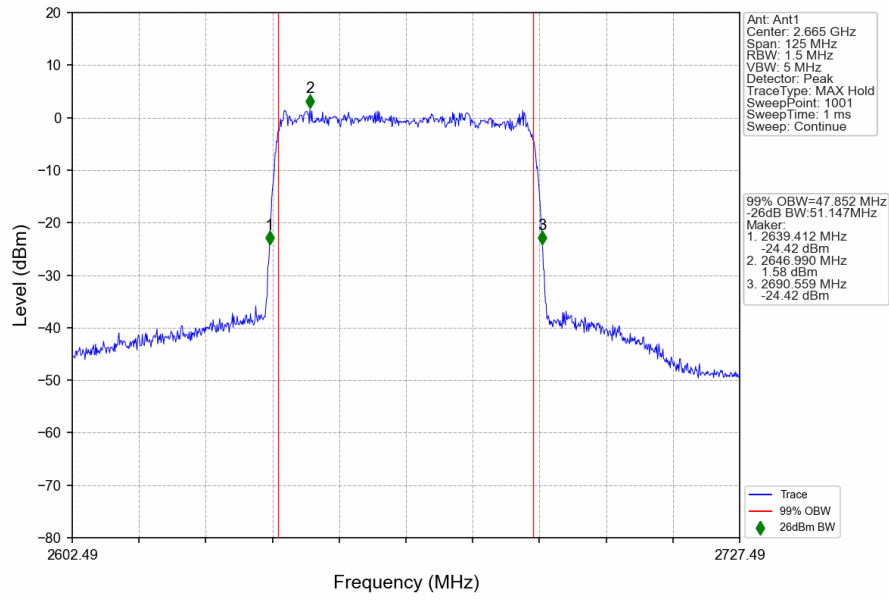
n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 256 QAM 2521.02MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 256 QAM 2592.99MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_50MHz\_CP-OFDM 256 QAM 2664.99MHz\_Outer\_Full

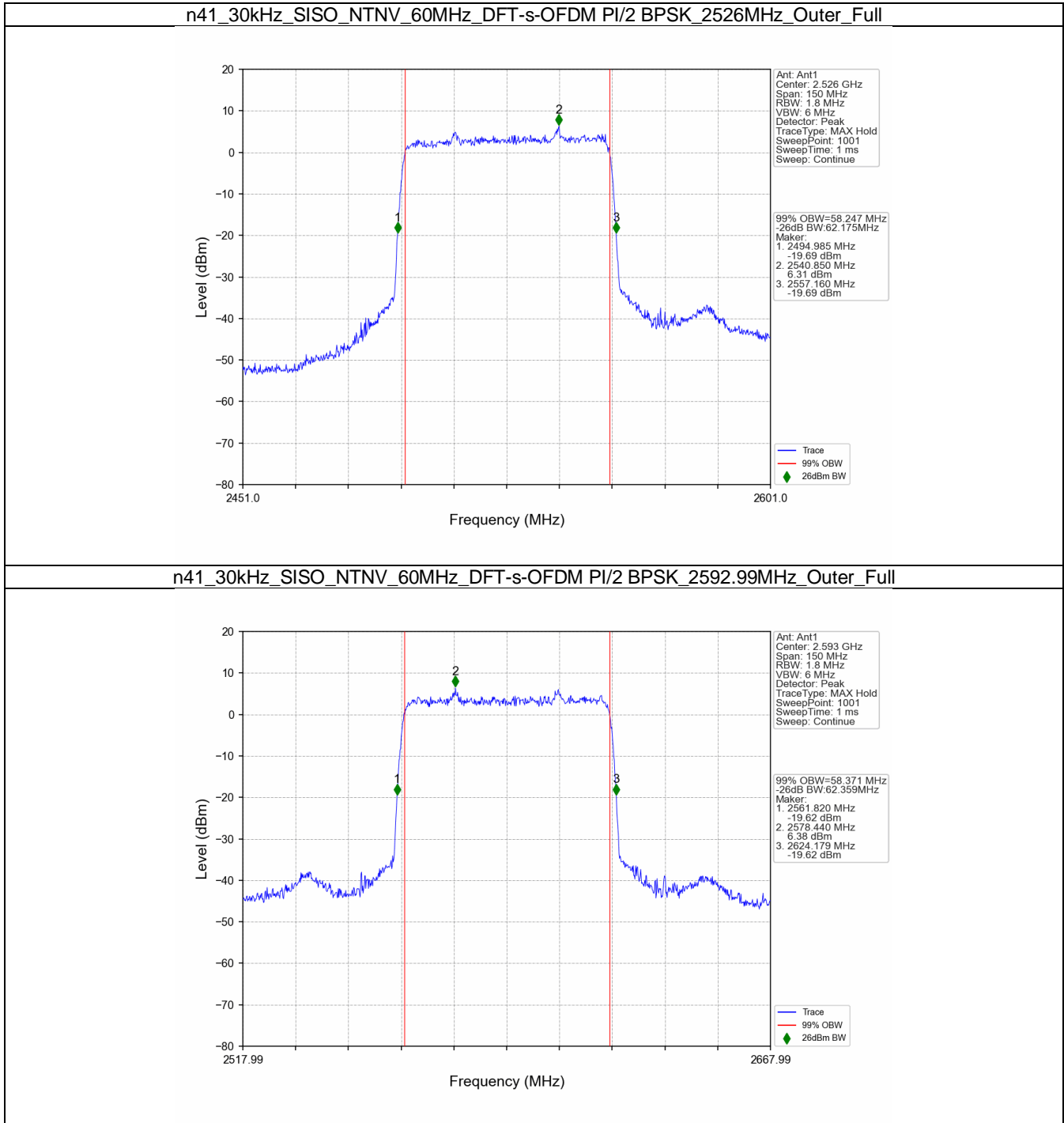


### 3.5 30k\_SISO\_60MHz\_NTNV

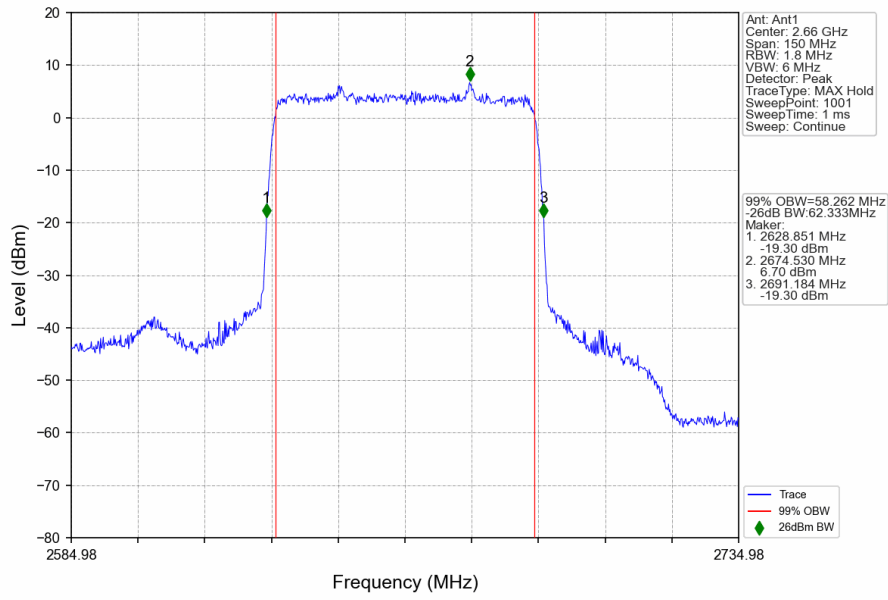
#### 3.5.1 Test Result

5G NR n41 SCS=30kHz SISO 60MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2526	Outer_Full	58.25	62.17	/	Pass
	2592.99	Outer_Full	58.37	62.36	/	Pass
	2659.98	Outer_Full	58.26	62.33	/	Pass
DFT-s-OFDM QPSK	2526	Outer_Full	58.66	62.43	/	Pass
	2592.99	Outer_Full	58.62	62.58	/	Pass
	2659.98	Outer_Full	58.58	62.48	/	Pass
DFT-s-OFDM 16 QAM	2526	Outer_Full	58.15	62.28	/	Pass
	2592.99	Outer_Full	58.16	62.32	/	Pass
	2659.98	Outer_Full	58.26	62.23	/	Pass
DFT-s-OFDM 64 QAM	2526	Outer_Full	58.09	62.28	/	Pass
	2592.99	Outer_Full	58.25	62.33	/	Pass
	2659.98	Outer_Full	58.09	62.20	/	Pass
DFT-s-OFDM 256 QAM	2526	Outer_Full	58.02	62.05	/	Pass
	2592.99	Outer_Full	58.21	62.27	/	Pass
	2659.98	Outer_Full	58.01	62.07	/	Pass
CP-OFDM QPSK	2526	Outer_Full	58.25	62.23	/	Pass
	2592.99	Outer_Full	58.39	62.30	/	Pass
	2659.98	Outer_Full	58.08	62.22	/	Pass
CP-OFDM 16 QAM	2526	Outer_Full	58.08	62.21	/	Pass
	2592.99	Outer_Full	58.12	62.23	/	Pass
	2659.98	Outer_Full	58.06	62.20	/	Pass
CP-OFDM 64 QAM	2526	Outer_Full	58.29	62.33	/	Pass
	2592.99	Outer_Full	58.44	62.31	/	Pass
	2659.98	Outer_Full	58.26	62.26	/	Pass
CP-OFDM 256 QAM	2526	Outer_Full	58.19	62.20	/	Pass
	2592.99	Outer_Full	58.32	62.18	/	Pass
	2659.98	Outer_Full	58.22	62.16	/	Pass

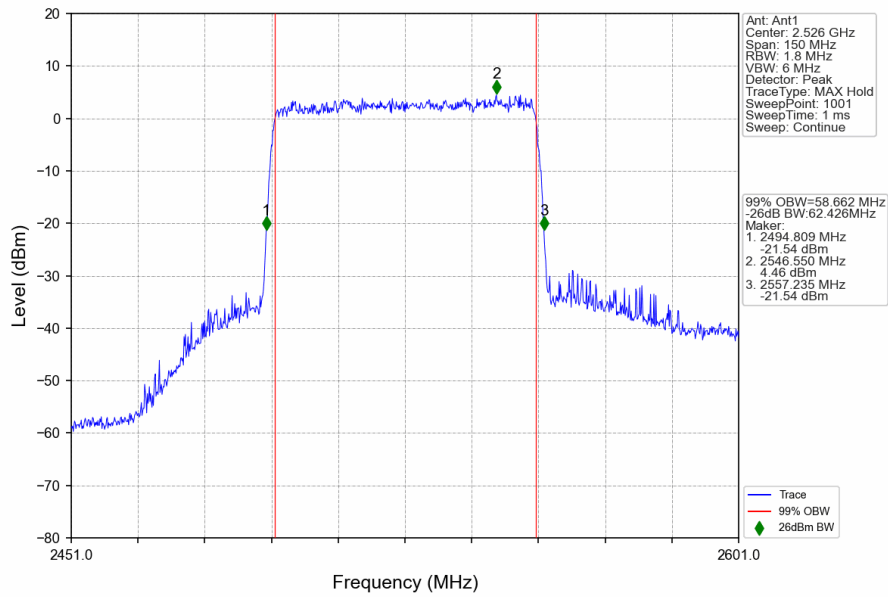
### 3.5.2 Test Graph



n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM PI/2 BPSK\_2659.98MHz\_Outer\_Full

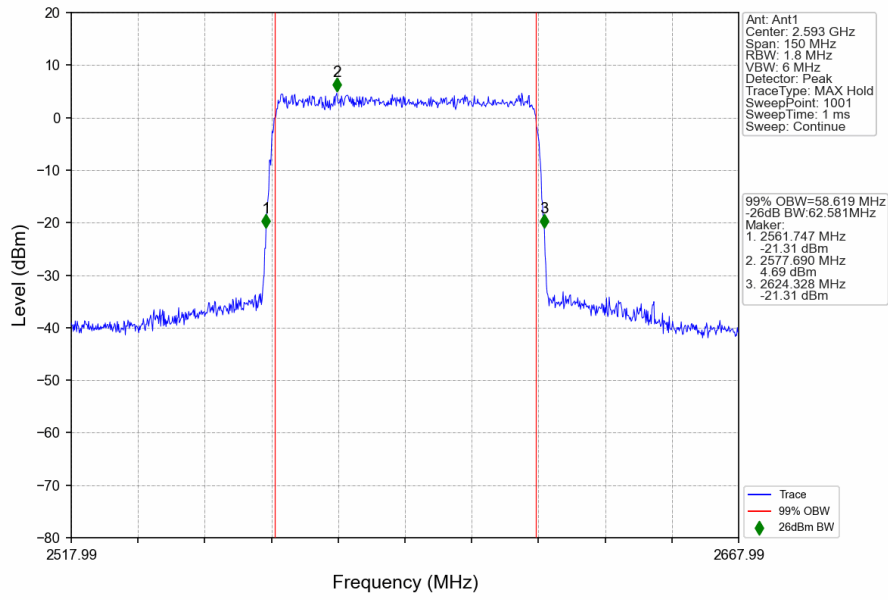


n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM QPSK\_2526MHz\_Outer\_Full

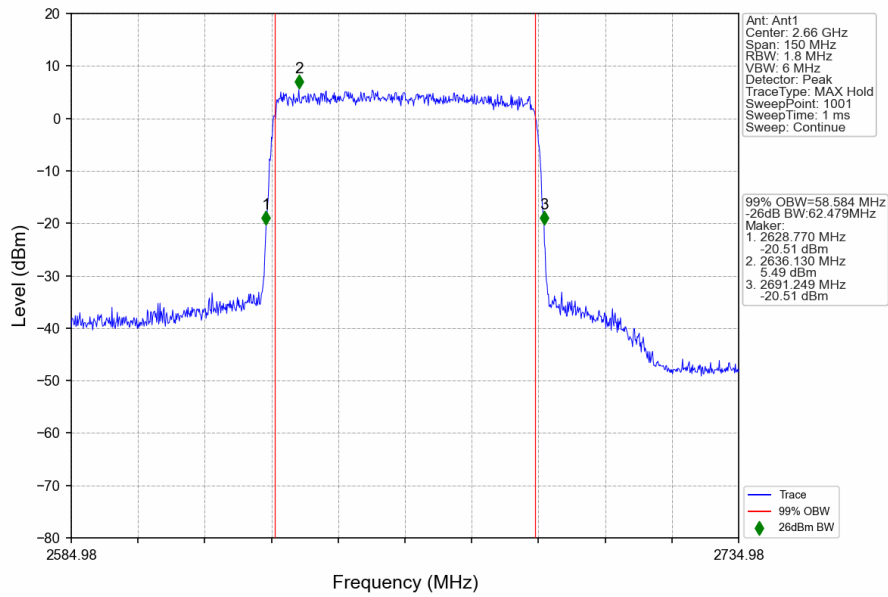




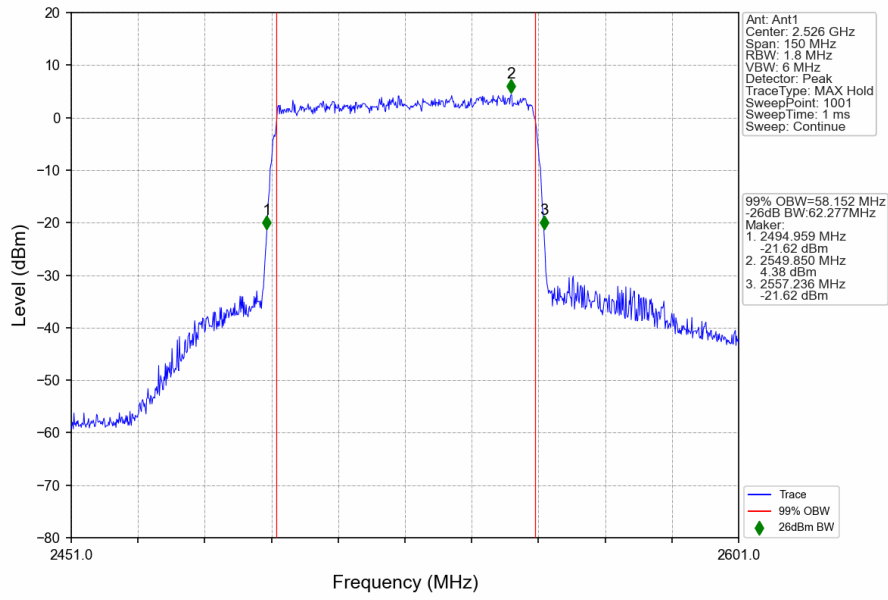
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM QPSK\_2592.99MHz\_Outer\_Full



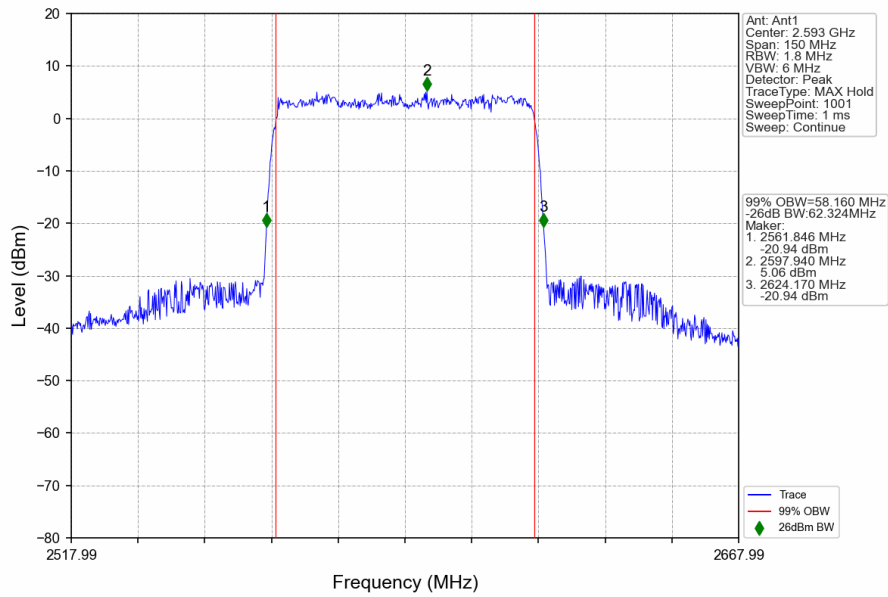
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM QPSK\_2659.98MHz\_Outer\_Full



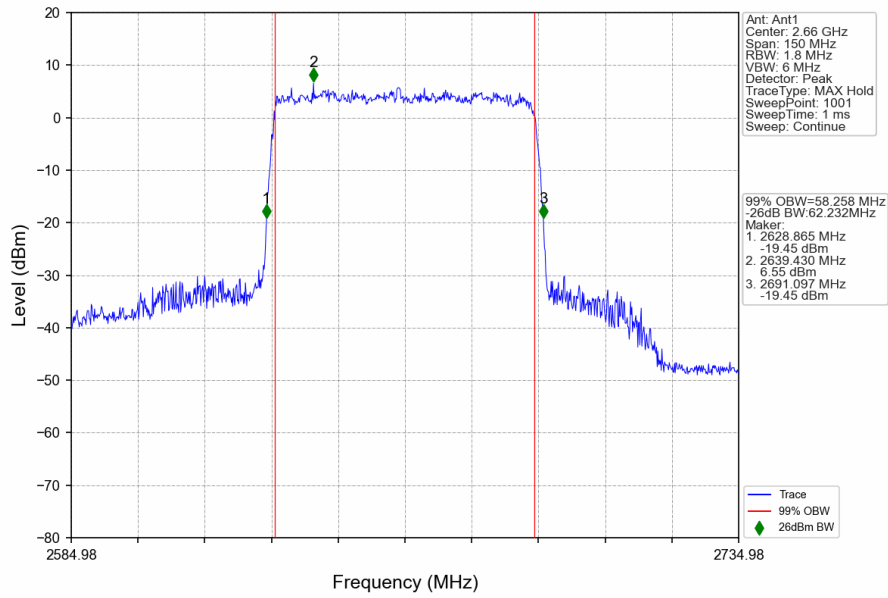
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 16 QAM\_2526MHz\_Outer\_Full



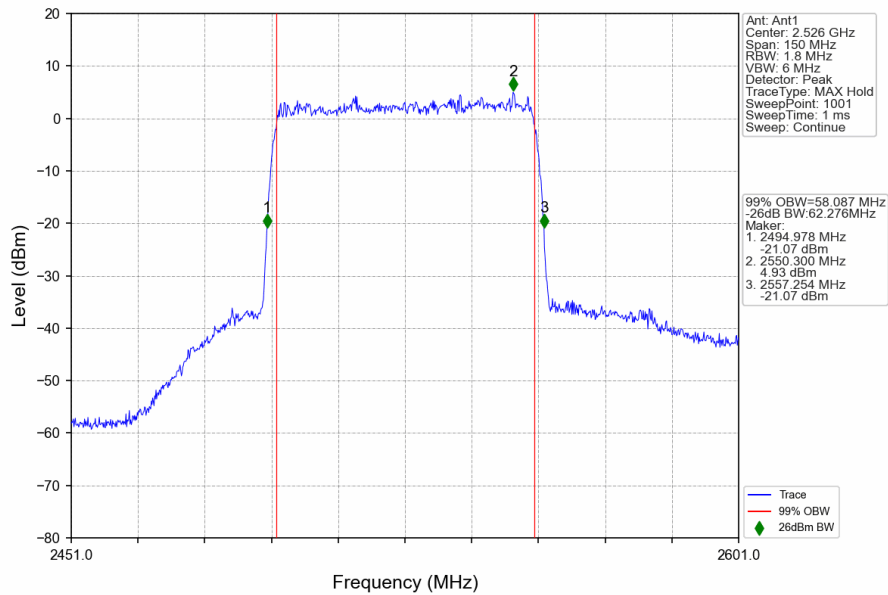
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 16 QAM\_2592.99MHz\_Outer\_Full



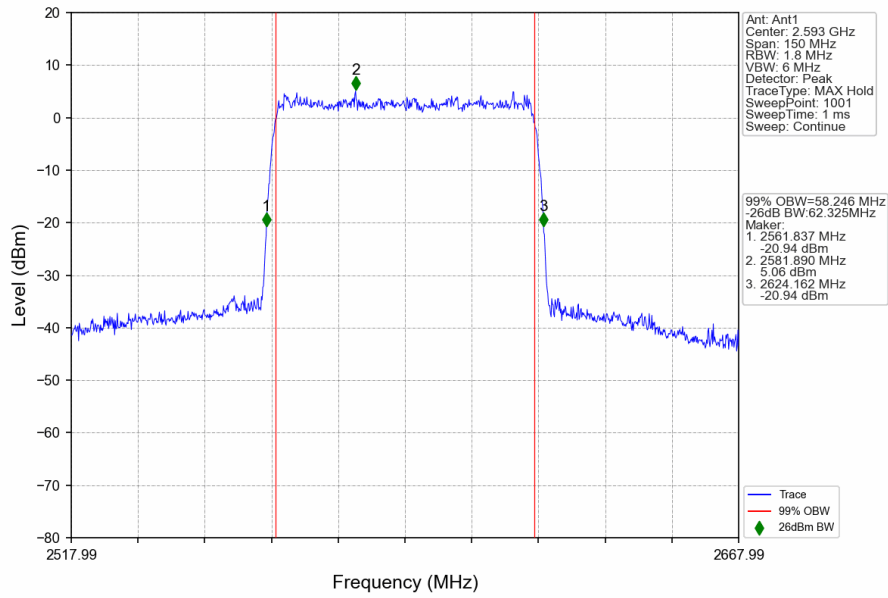
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 16 QAM\_2659.98MHz\_Outer\_Full



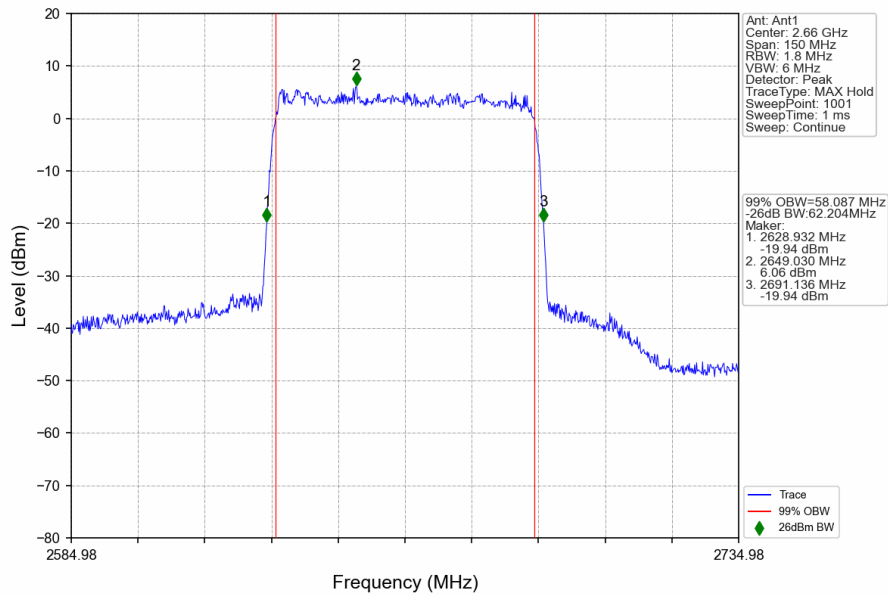
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 64 QAM\_2526MHz\_Outer\_Full



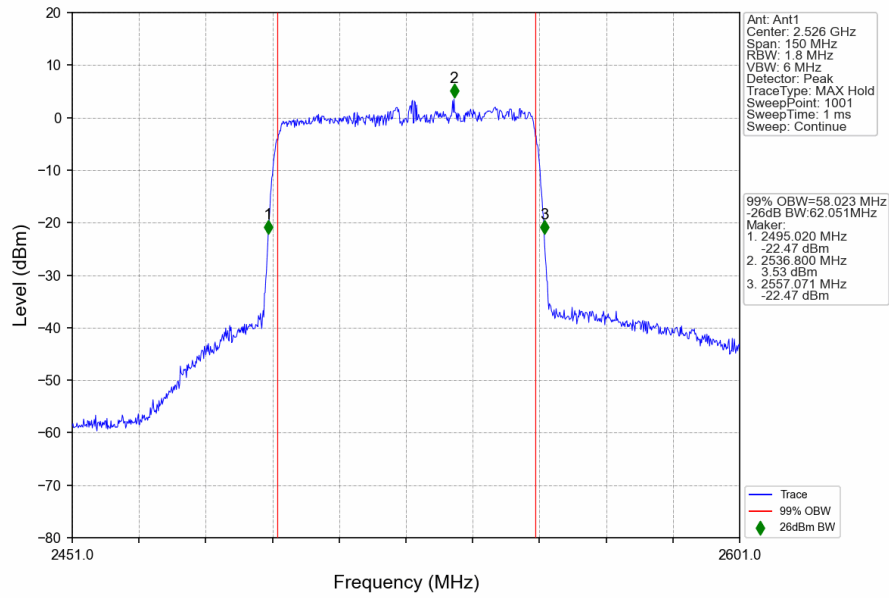
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 64 QAM\_2592.99MHz\_Outer\_Full



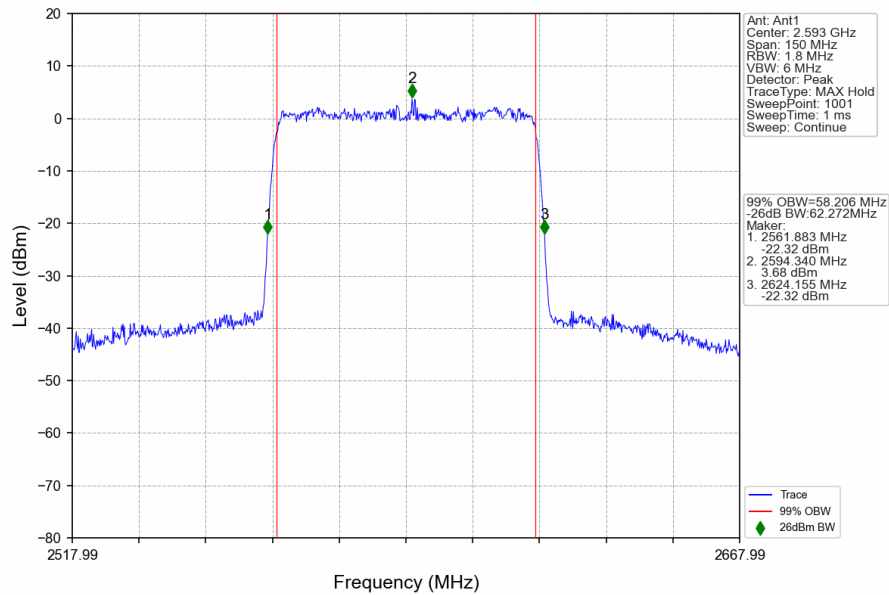
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 64 QAM\_2659.98MHz\_Outer\_Full



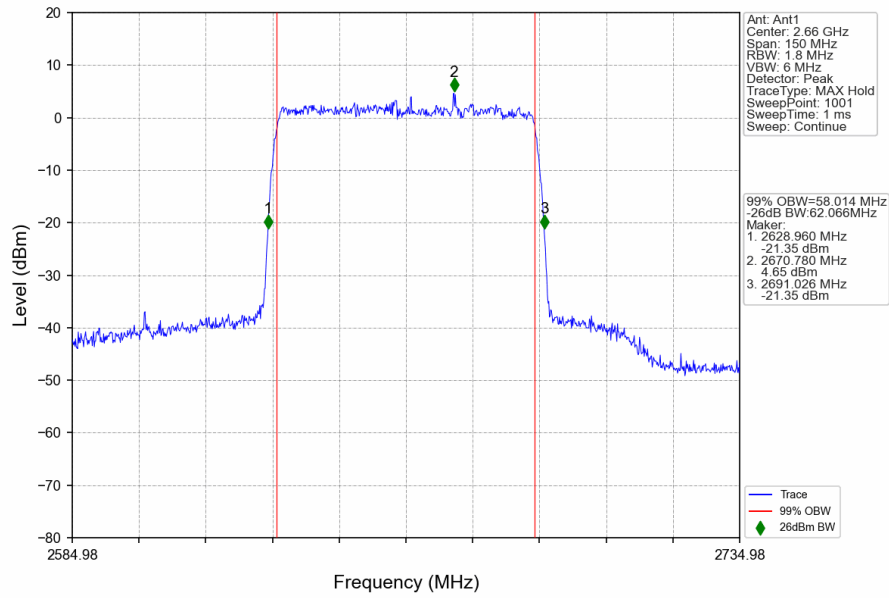
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 256 QAM\_2526MHz\_Outer\_Full



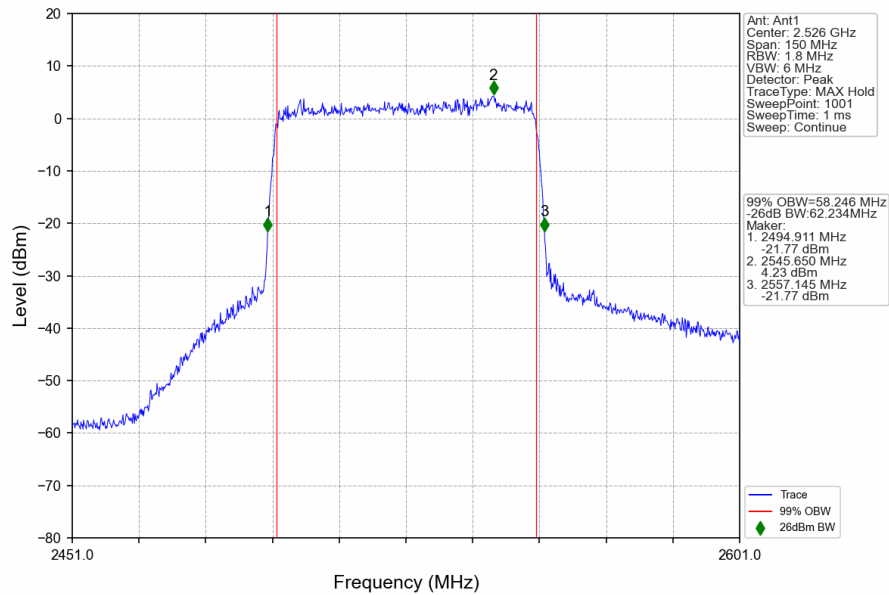
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 256 QAM\_2592.99MHz\_Outer\_Full



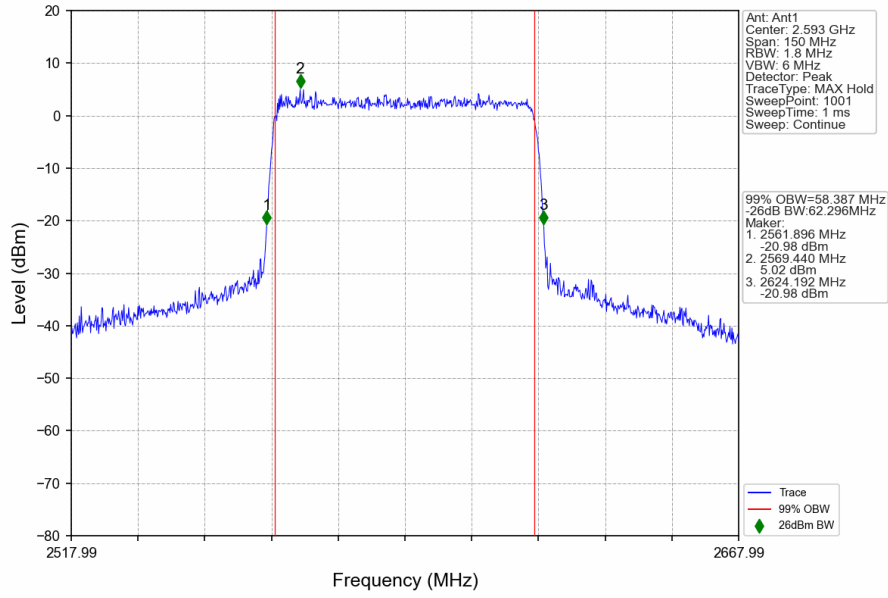
n41\_30kHz\_SISO\_NTNV\_60MHz\_DFT-s-OFDM 256 QAM 2659.98MHz\_Outer\_Full



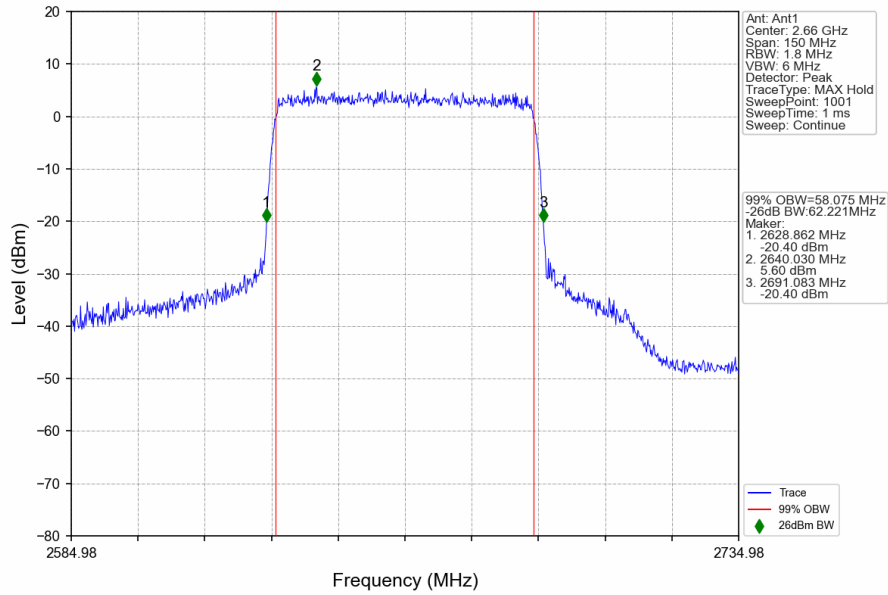
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM QPSK 2526MHz\_Outer\_Full



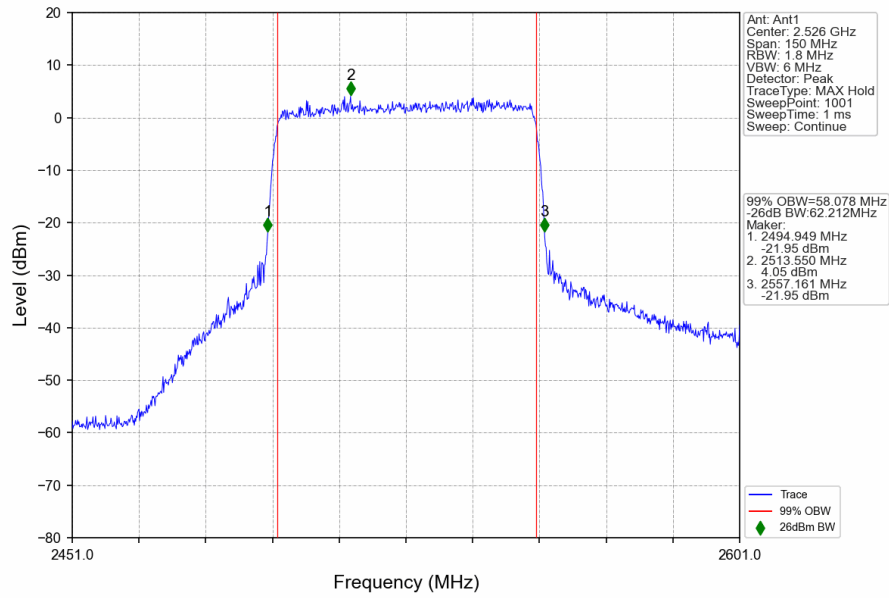
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM QPSK\_2592.99MHz\_Outer\_Full



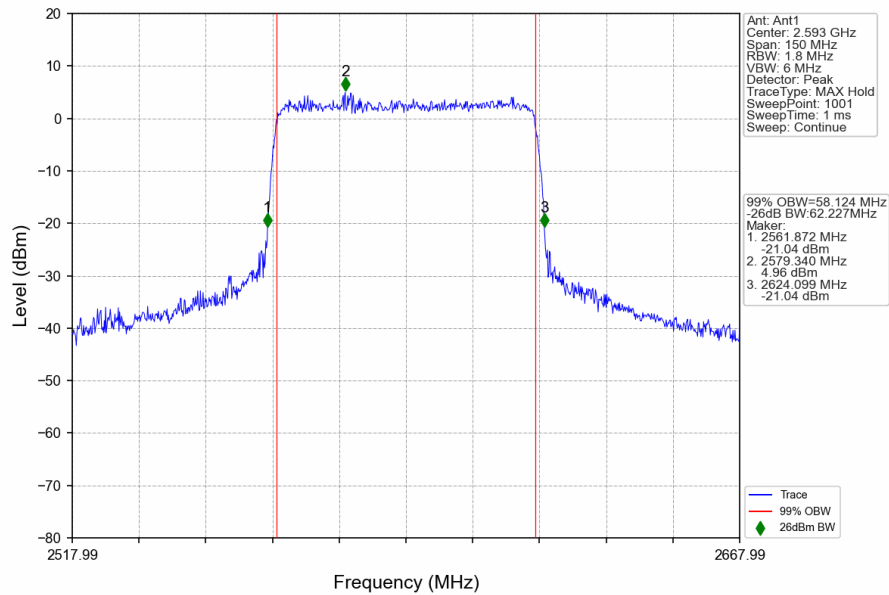
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM QPSK\_2659.98MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM\_16 QAM\_2526MHz\_Outer\_Full

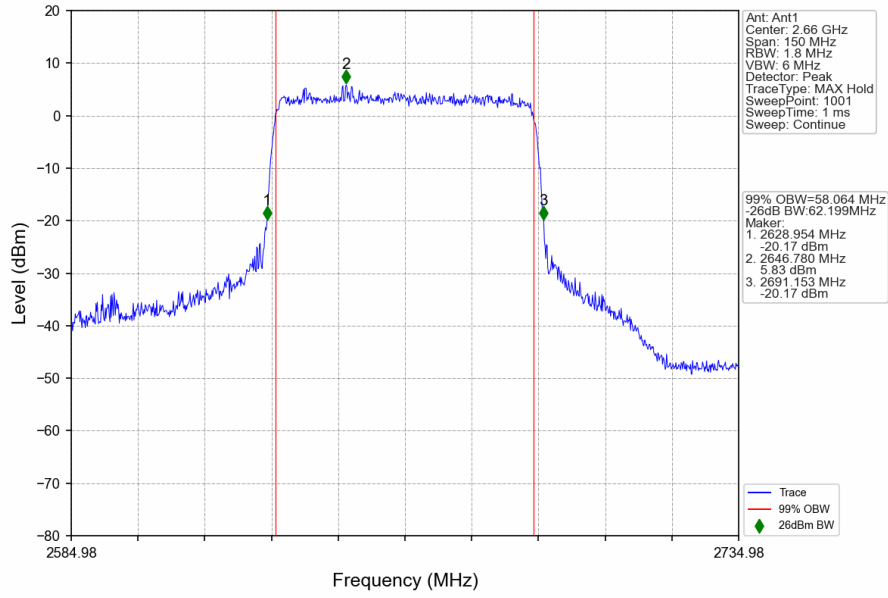


n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM\_16 QAM\_2592.99MHz\_Outer\_Full

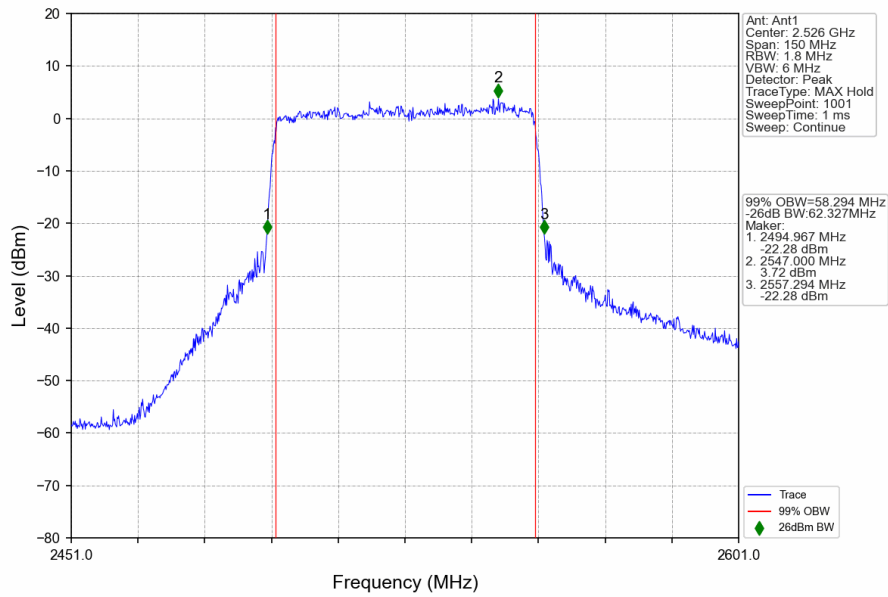




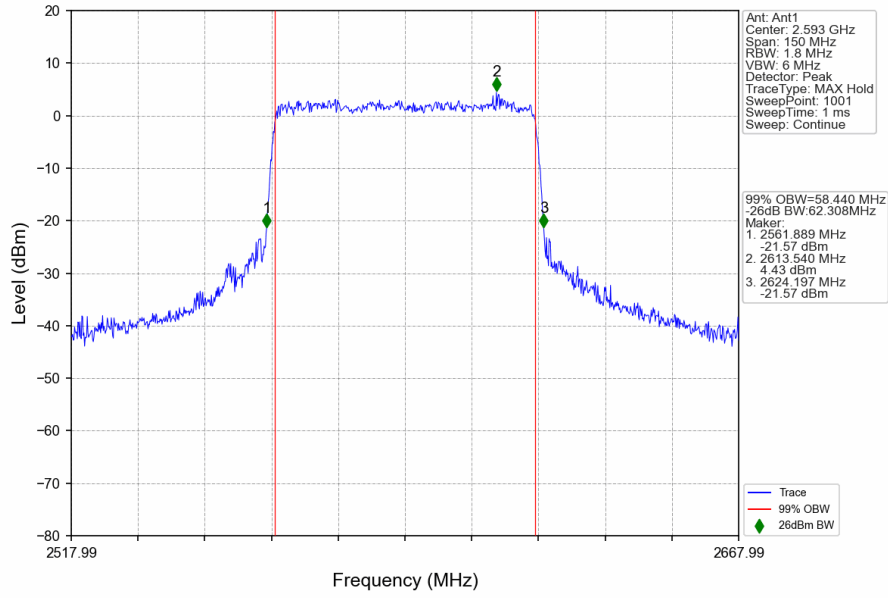
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 16 QAM\_2659.98MHz\_Outer\_Full



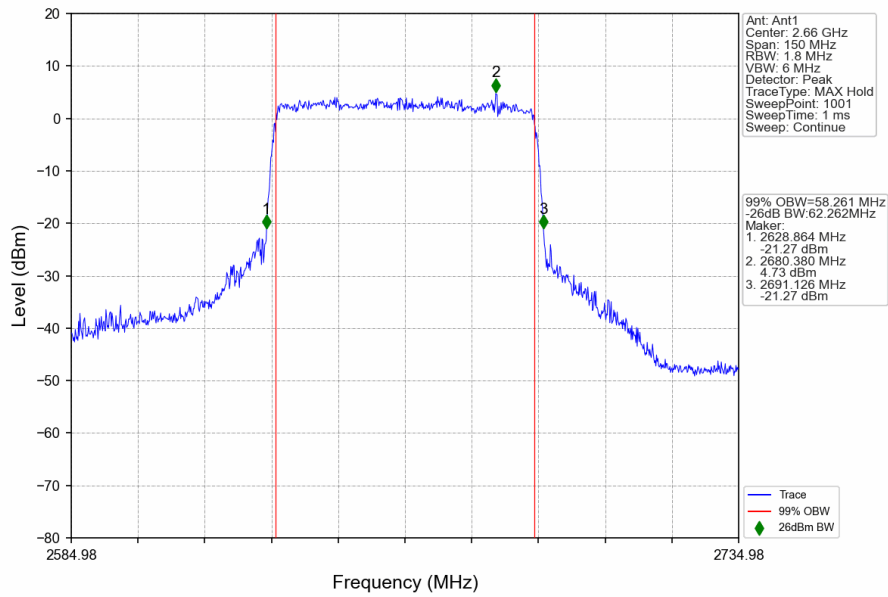
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 64 QAM\_2526MHz\_Outer\_Full



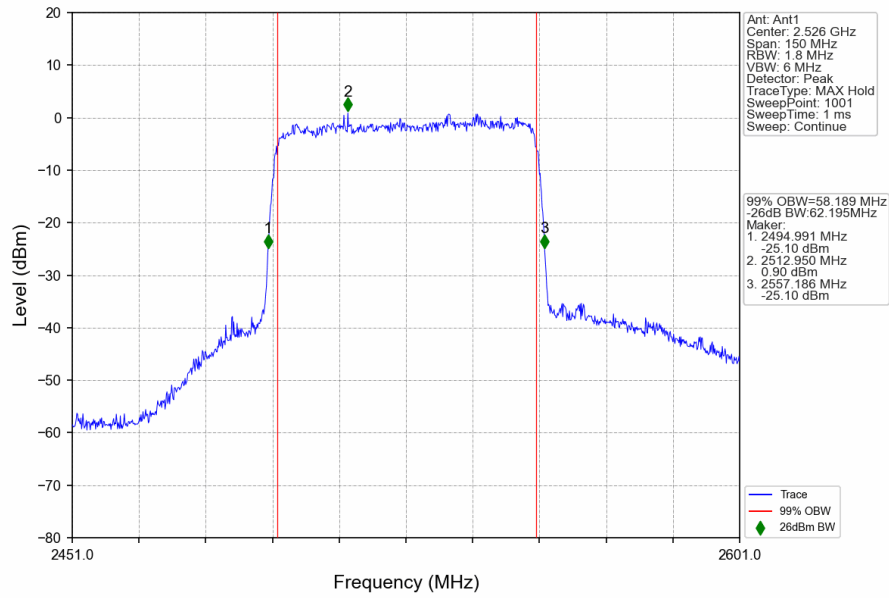
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 64 QAM\_2592.99MHz\_Outer\_Full



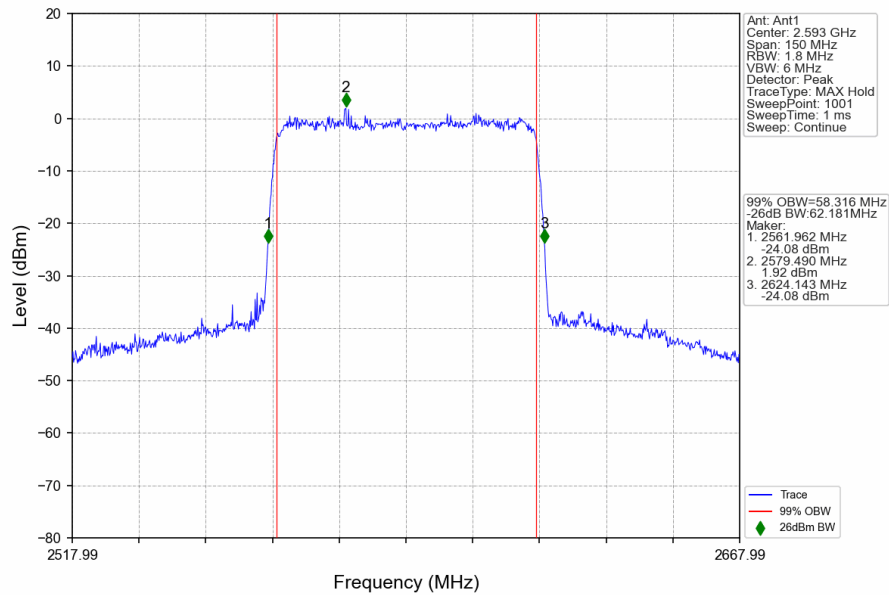
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 64 QAM\_2659.98MHz\_Outer\_Full



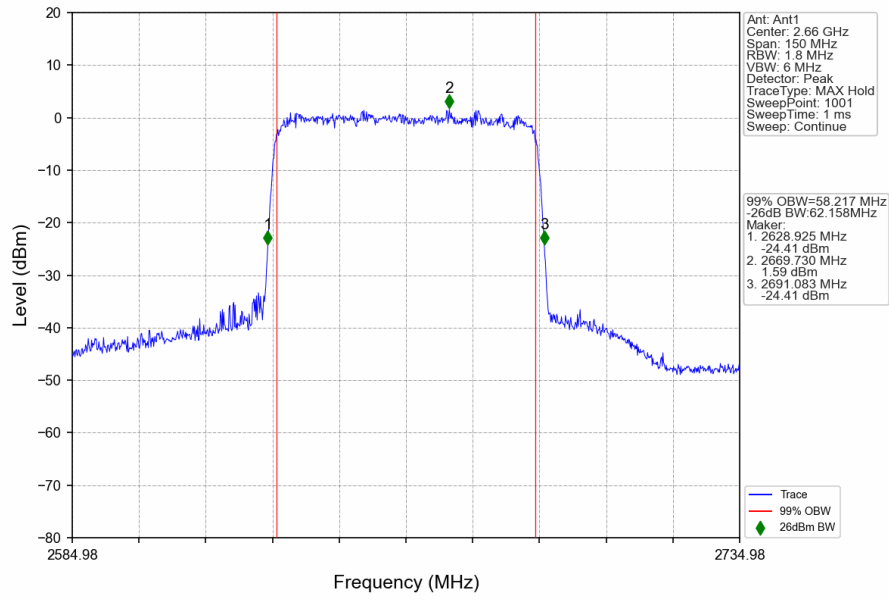
n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 256 QAM 2526MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 256 QAM 2592.99MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_60MHz\_CP-OFDM 256 QAM 2659.98MHz\_Outer\_Full

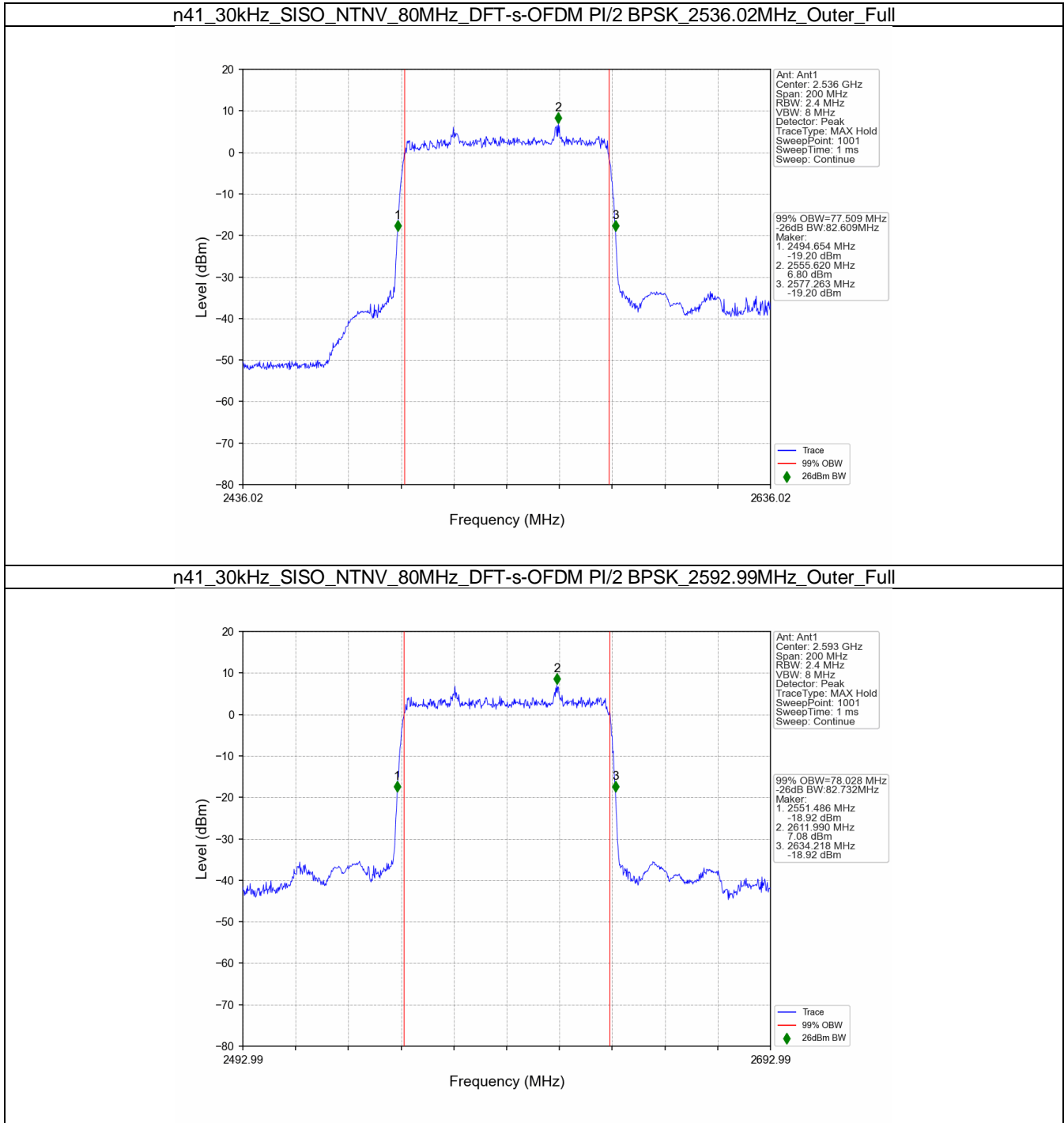


### 3.6 30k\_SISO\_80MHz\_NTNV

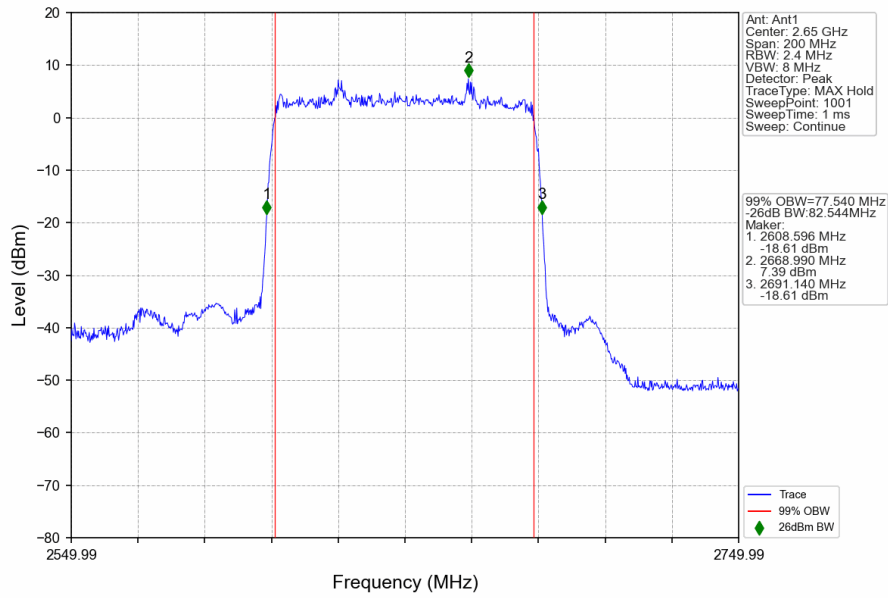
#### 3.6.1 Test Result

5G NR n41 SCS=30kHz SISO 80MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2536.02	Outer_Full	77.51	82.61	/	Pass
	2592.99	Outer_Full	78.03	82.73	/	Pass
	2649.99	Outer_Full	77.54	82.54	/	Pass
DFT-s-OFDM QPSK	2536.02	Outer_Full	77.75	83.14	/	Pass
	2592.99	Outer_Full	77.87	83.14	/	Pass
	2649.99	Outer_Full	77.58	82.98	/	Pass
DFT-s-OFDM 16 QAM	2536.02	Outer_Full	77.82	83.00	/	Pass
	2592.99	Outer_Full	77.97	83.06	/	Pass
	2649.99	Outer_Full	77.83	83.05	/	Pass
DFT-s-OFDM 64 QAM	2536.02	Outer_Full	77.39	82.66	/	Pass
	2592.99	Outer_Full	77.78	82.88	/	Pass
	2649.99	Outer_Full	77.37	82.97	/	Pass
DFT-s-OFDM 256 QAM	2536.02	Outer_Full	77.61	82.88	/	Pass
	2592.99	Outer_Full	77.75	82.99	/	Pass
	2649.99	Outer_Full	77.64	82.81	/	Pass
CP-OFDM QPSK	2536.02	Outer_Full	77.72	83.39	/	Pass
	2592.99	Outer_Full	77.97	83.32	/	Pass
	2649.99	Outer_Full	77.82	83.34	/	Pass
CP-OFDM 16 QAM	2536.02	Outer_Full	77.88	83.47	/	Pass
	2592.99	Outer_Full	78.27	83.49	/	Pass
	2649.99	Outer_Full	77.92	83.20	/	Pass
CP-OFDM 64 QAM	2536.02	Outer_Full	77.79	83.50	/	Pass
	2592.99	Outer_Full	78.18	83.54	/	Pass
	2649.99	Outer_Full	77.84	83.41	/	Pass
CP-OFDM 256 QAM	2536.02	Outer_Full	77.62	83.28	/	Pass
	2592.99	Outer_Full	77.83	83.23	/	Pass
	2649.99	Outer_Full	77.62	83.31	/	Pass

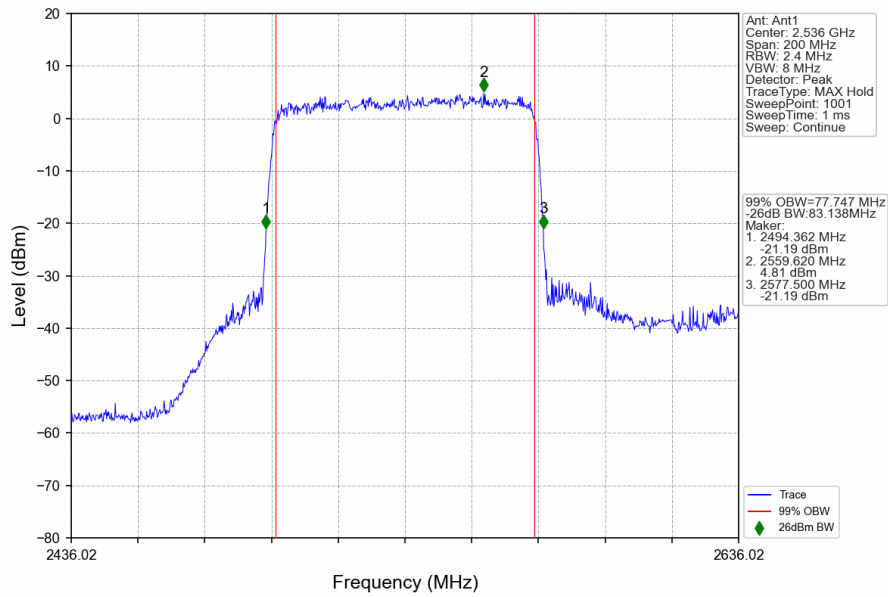
### 3.6.2 Test Graph



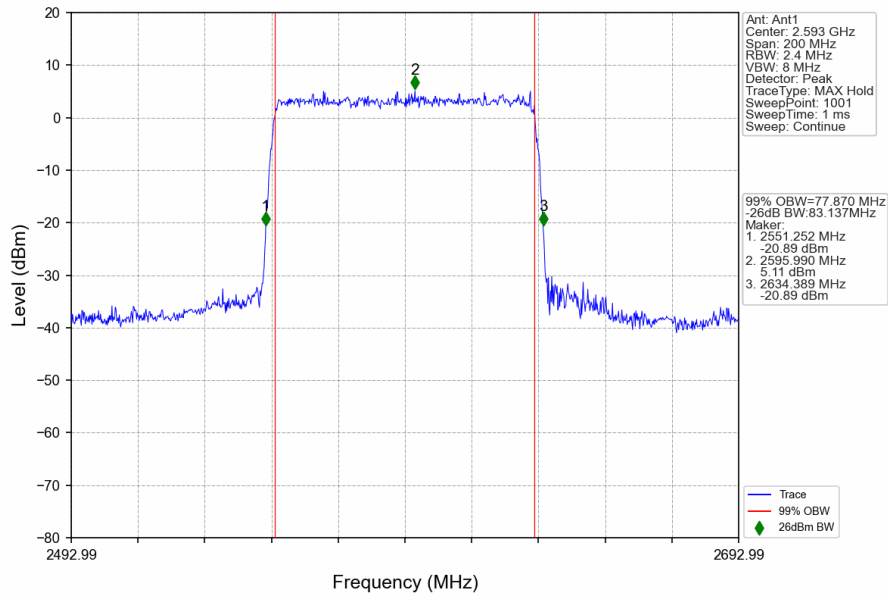
n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM PI/2 BPSK\_2649.99MHz\_Outer\_Full



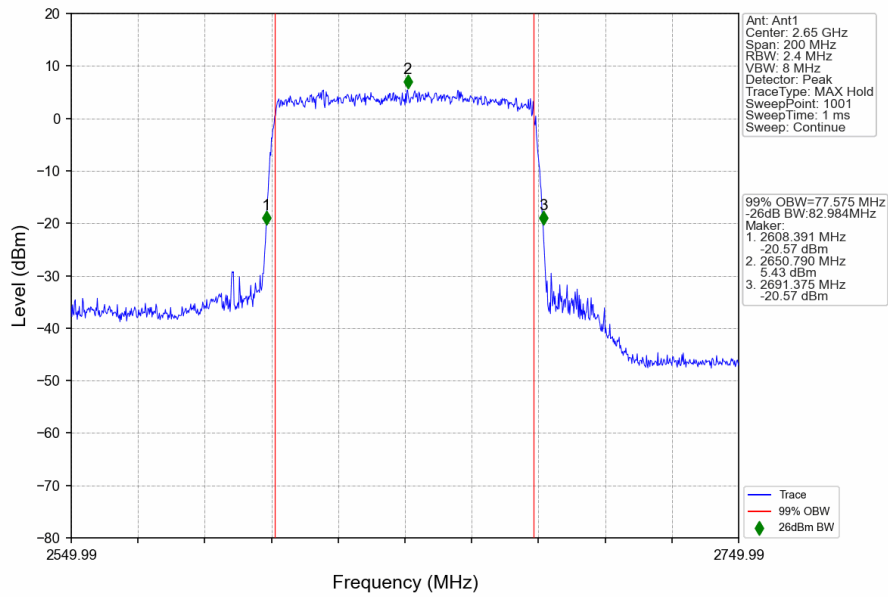
n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM QPSK\_2536.02MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM QPSK\_2592.99MHz\_Outer\_Full

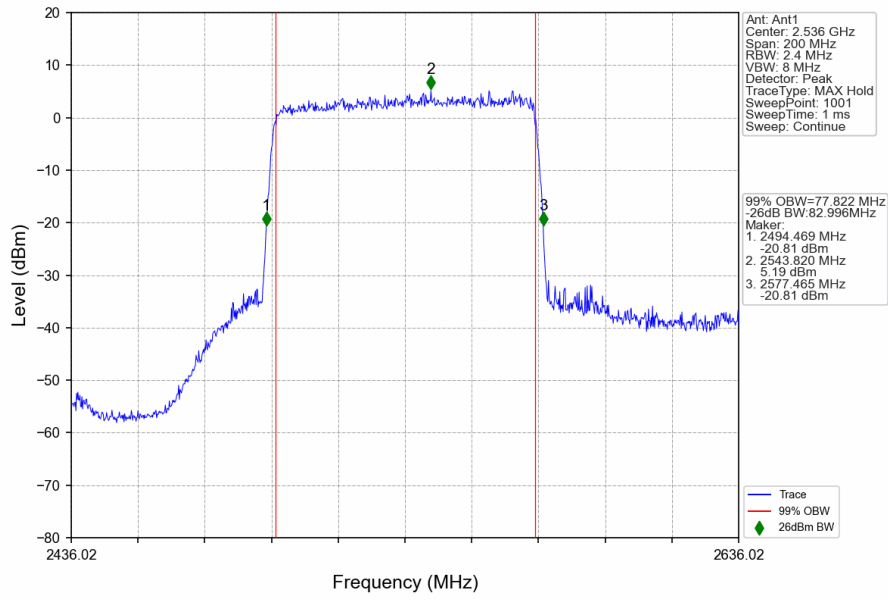


n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM QPSK\_2649.99MHz\_Outer\_Full





n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_16\_QAM\_2536.02MHz\_Outer\_Full



n41\_30kHz\_SISO\_NTNV\_80MHz\_DFT-s-OFDM\_16\_QAM\_2592.99MHz\_Outer\_Full

