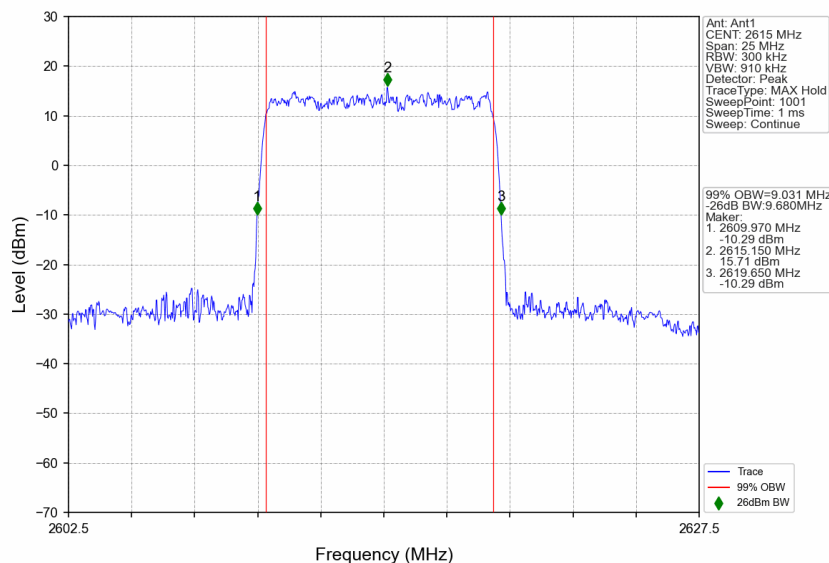


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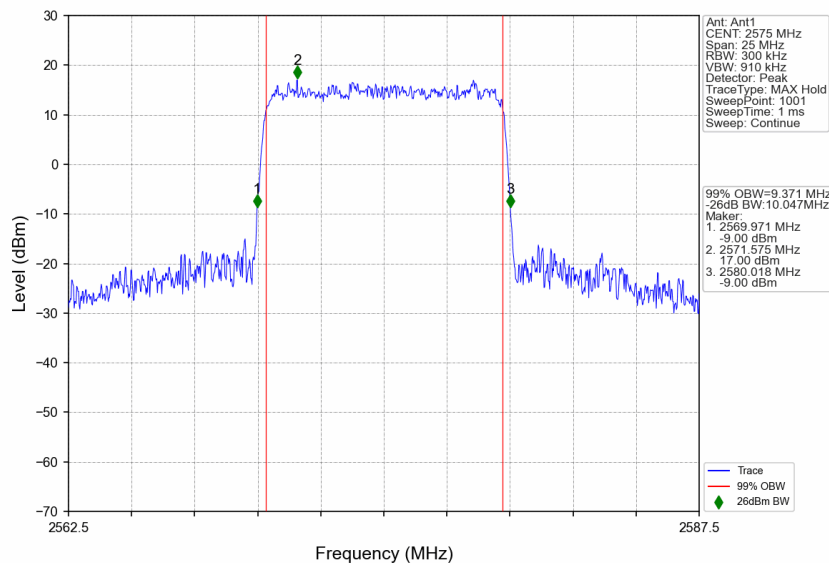
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n38_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM 2615MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK 2575MHz_Outer_Full



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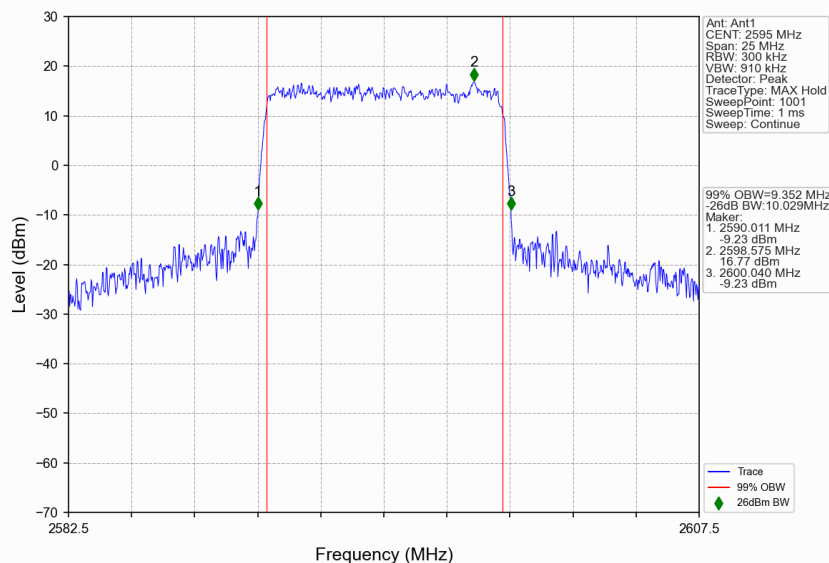
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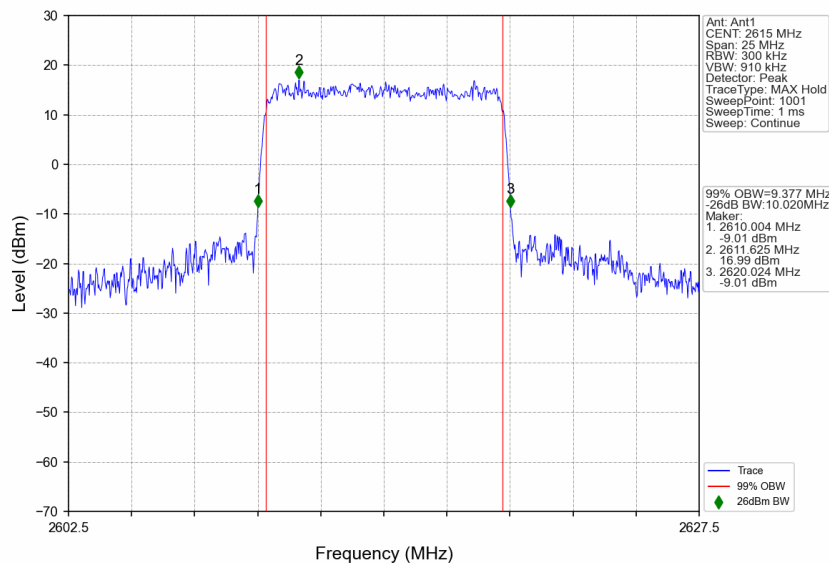
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_2615MHz_Outer_Full



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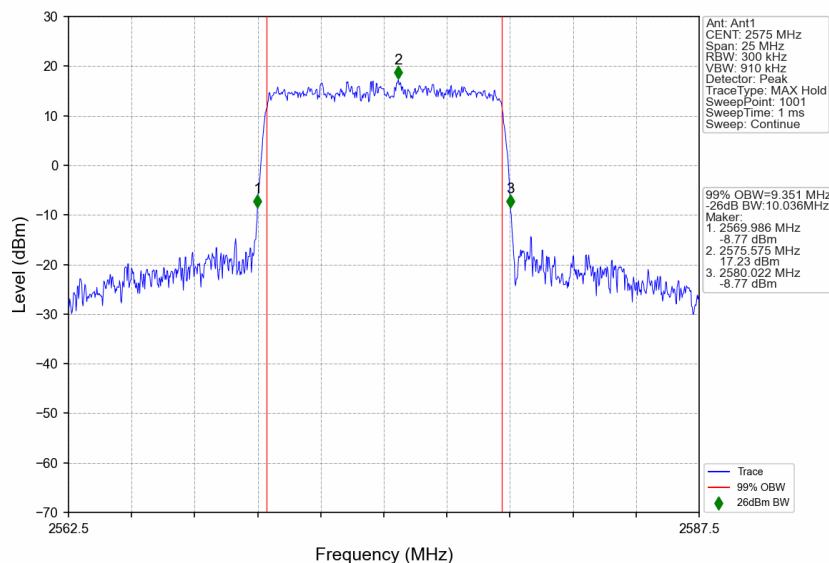
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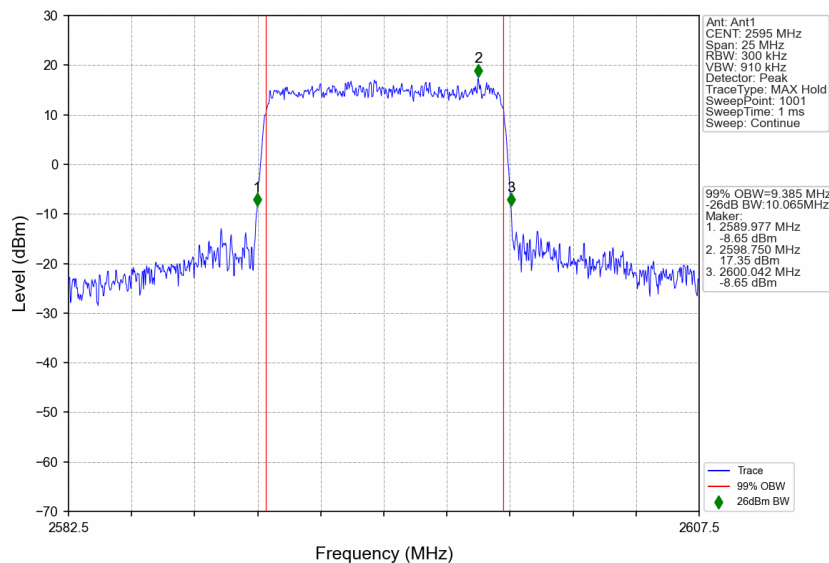
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_2575MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_2595MHz_Outer_Full



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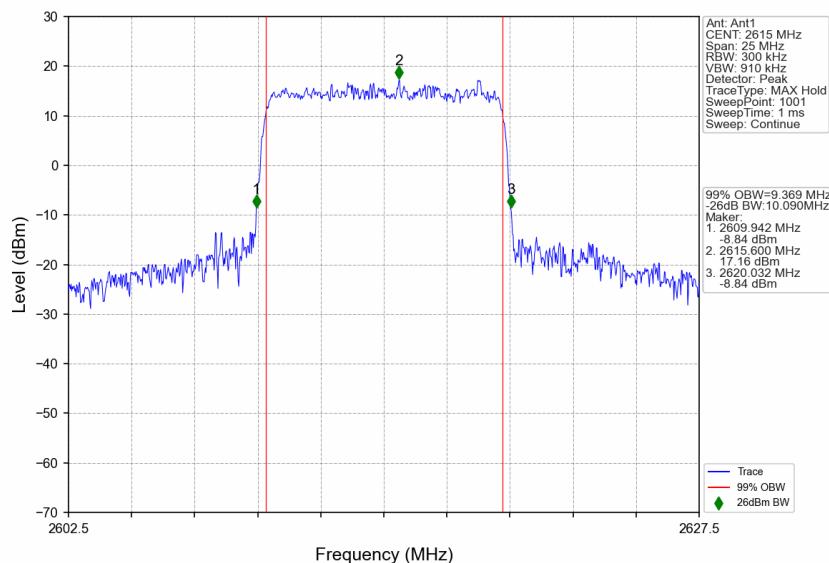
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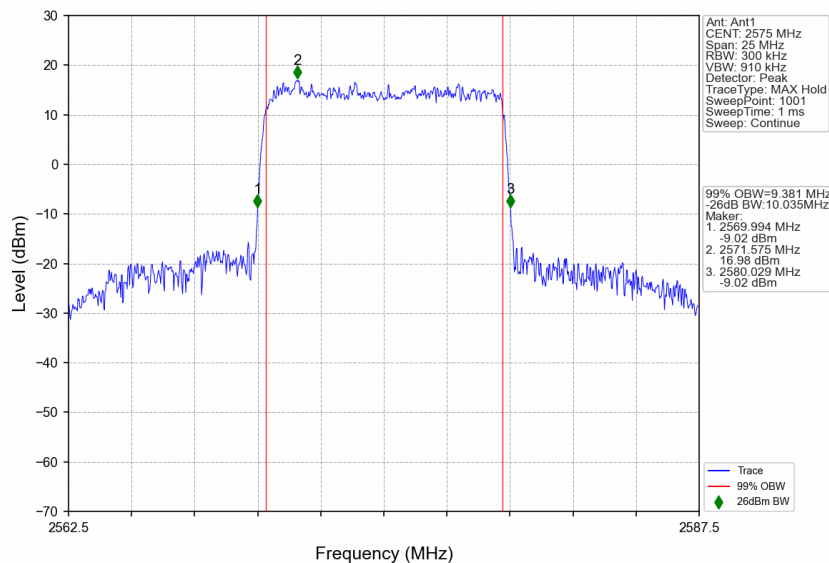
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM_2615MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_2575MHz_Outer_Full



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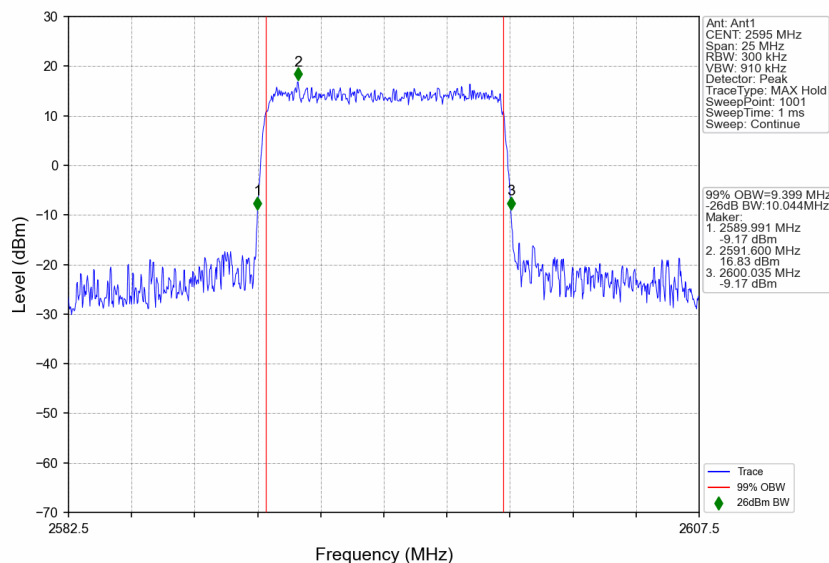
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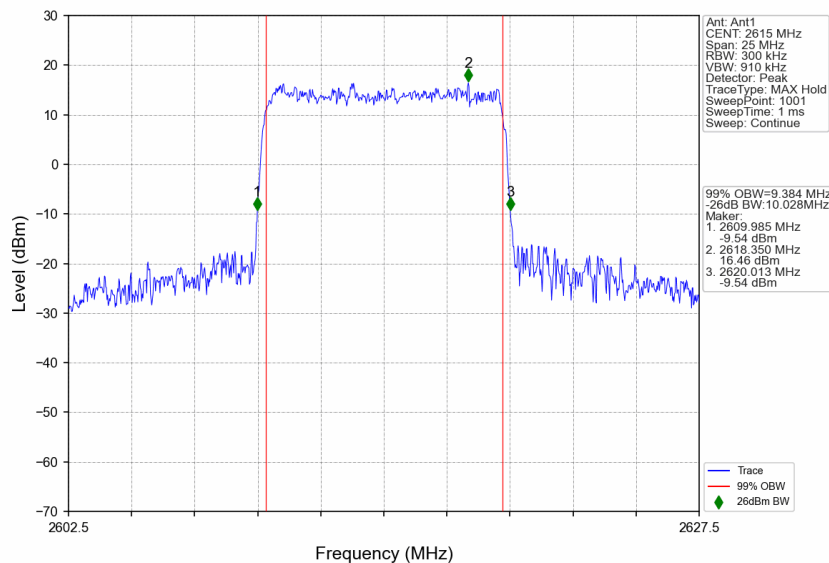
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM_2615MHz_Outer_Full



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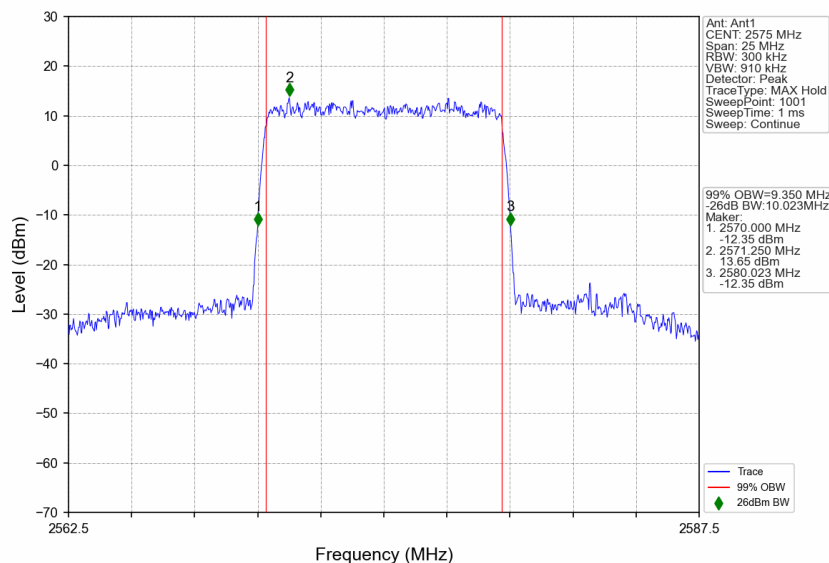
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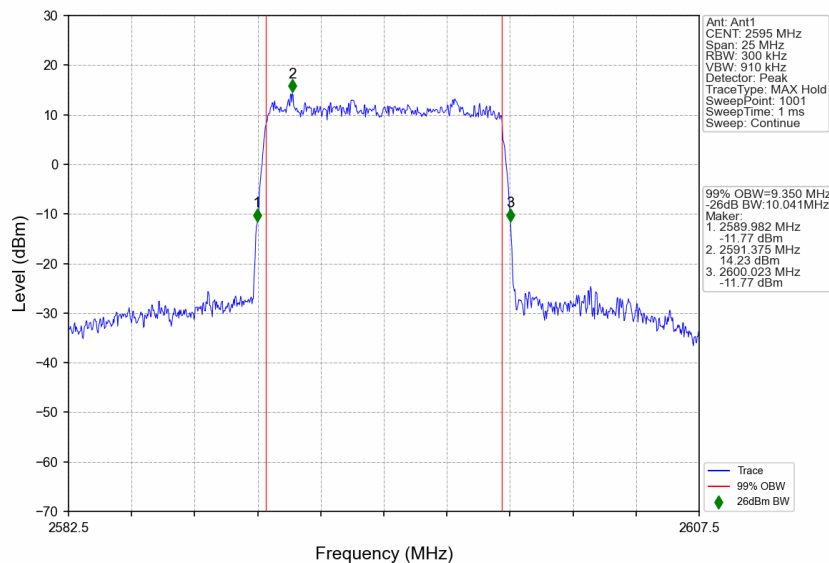
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 2575MHz_Outer_Full



n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 2595MHz_Outer_Full



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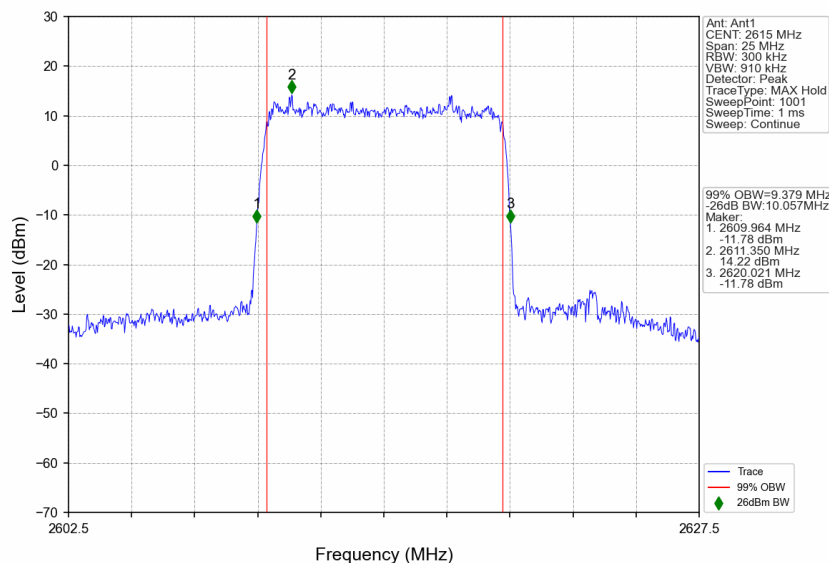
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n38_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM_2615MHz_Outer_Full



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4.3 15k_SISO_15MHz_NTNV

4.3.1 Test Result

5G NR n38 SCS=15kHz SISO 15MHz NTV						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2577.5	Outer Full	13.63	14.52	/	Pass
	2595	Outer Full	13.55	14.54	/	Pass
	2612.5	Outer Full	13.57	14.57	/	Pass
DFT-s-OFDM QPSK	2577.5	Outer Full	13.59	14.58	/	Pass
	2595	Outer Full	13.60	14.57	/	Pass
	2612.5	Outer Full	13.56	14.55	/	Pass
DFT-s-OFDM 16 QAM	2577.5	Outer Full	13.55	14.55	/	Pass
	2595	Outer Full	13.54	14.56	/	Pass
	2612.5	Outer Full	13.55	14.53	/	Pass
DFT-s-OFDM 64 QAM	2577.5	Outer Full	13.55	14.59	/	Pass
	2595	Outer Full	13.58	14.59	/	Pass
	2612.5	Outer Full	13.61	14.57	/	Pass
DFT-s-OFDM 256 QAM	2577.5	Outer Full	13.59	14.54	/	Pass
	2595	Outer Full	13.56	14.53	/	Pass
	2612.5	Outer Full	13.57	14.54	/	Pass
CP-OFDM QPSK	2577.5	Outer Full	14.24	15.25	/	Pass
	2595	Outer Full	14.23	15.28	/	Pass
	2612.5	Outer Full	14.24	15.22	/	Pass
CP-OFDM 16 QAM	2577.5	Outer Full	14.27	15.29	/	Pass
	2595	Outer Full	14.24	15.28	/	Pass
	2612.5	Outer Full	14.27	15.28	/	Pass
CP-OFDM 64 QAM	2577.5	Outer Full	14.27	15.28	/	Pass
	2595	Outer Full	14.28	15.26	/	Pass
	2612.5	Outer Full	14.29	15.34	/	Pass
CP-OFDM 256 QAM	2577.5	Outer Full	14.26	15.27	/	Pass
	2595	Outer Full	14.28	15.24	/	Pass
	2612.5	Outer Full	14.27	15.28	/	Pass



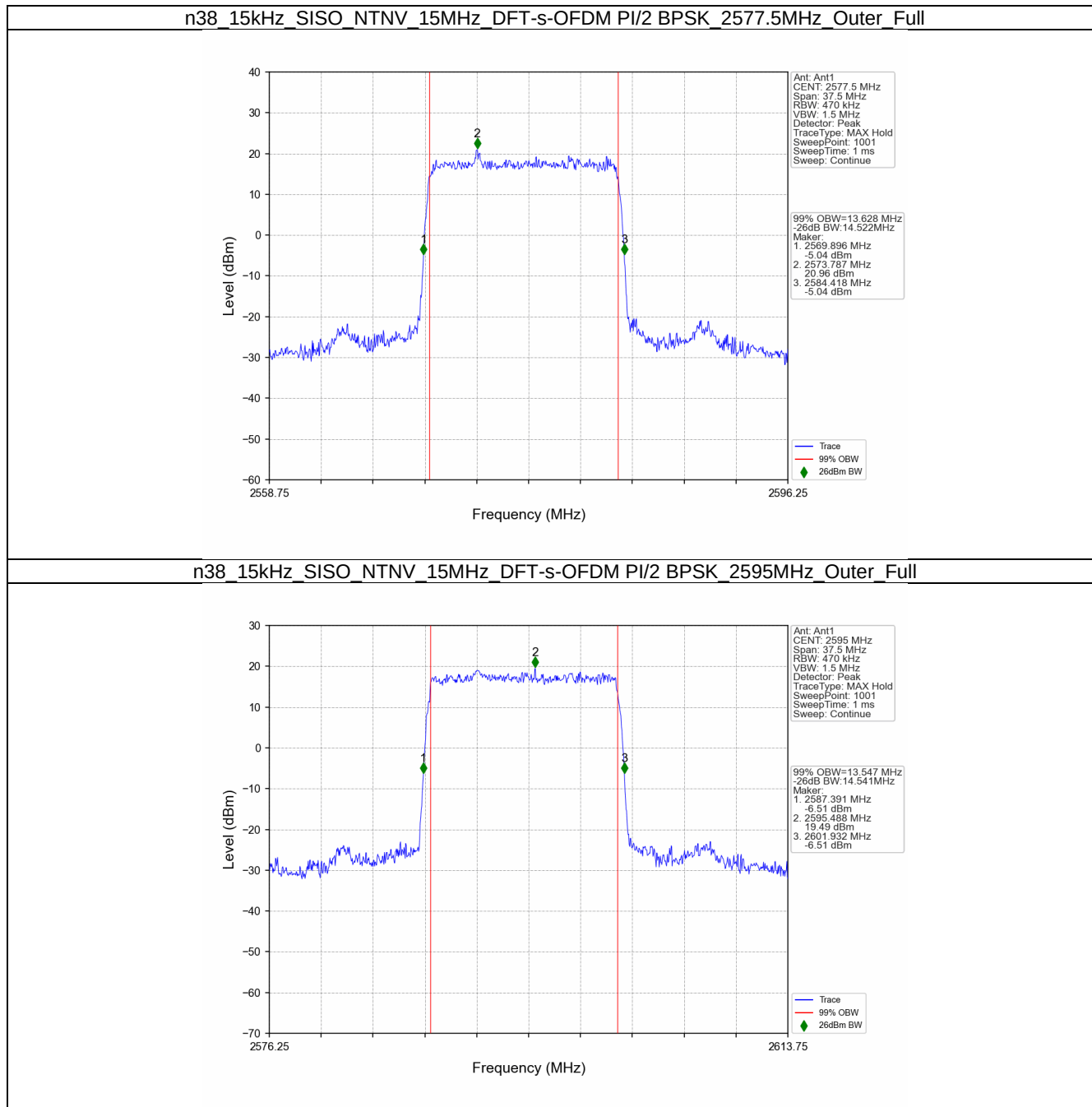
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4.3.2 Test Graph



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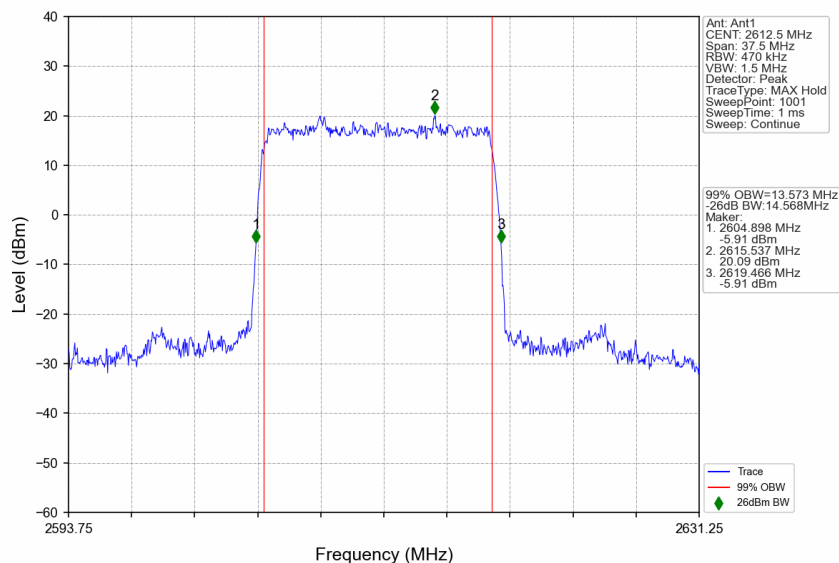
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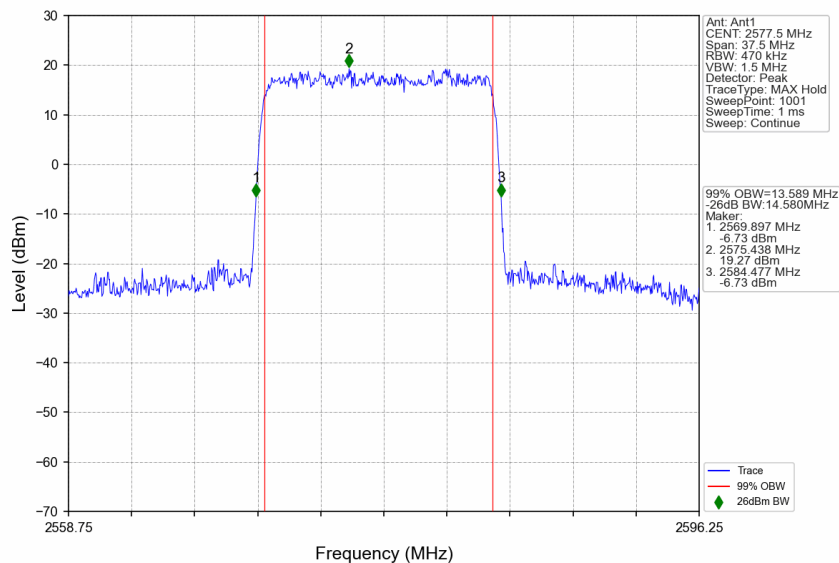
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_2577.5MHz_Outer_Full



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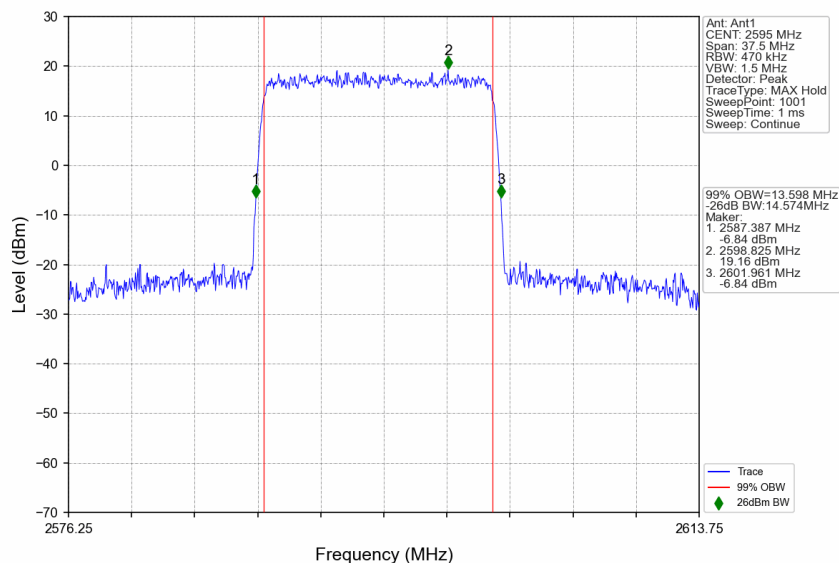
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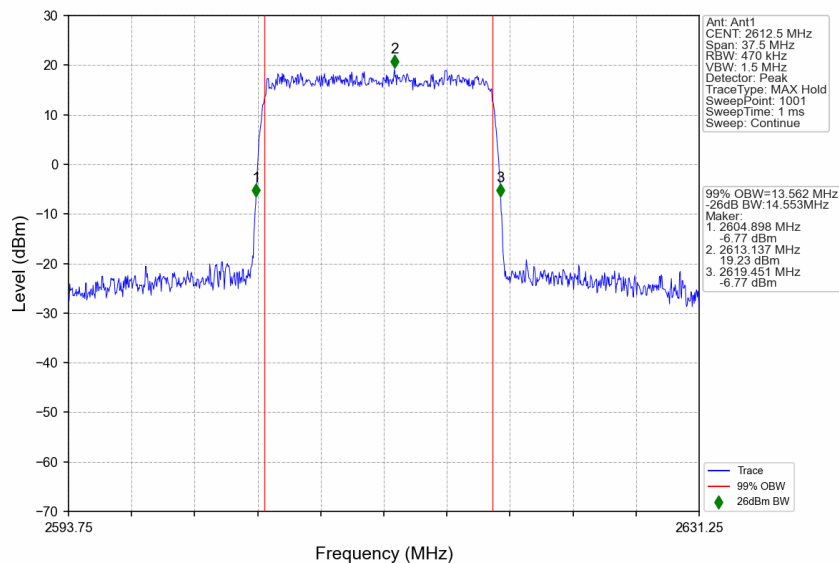
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_2612.5MHz_Outer_Full



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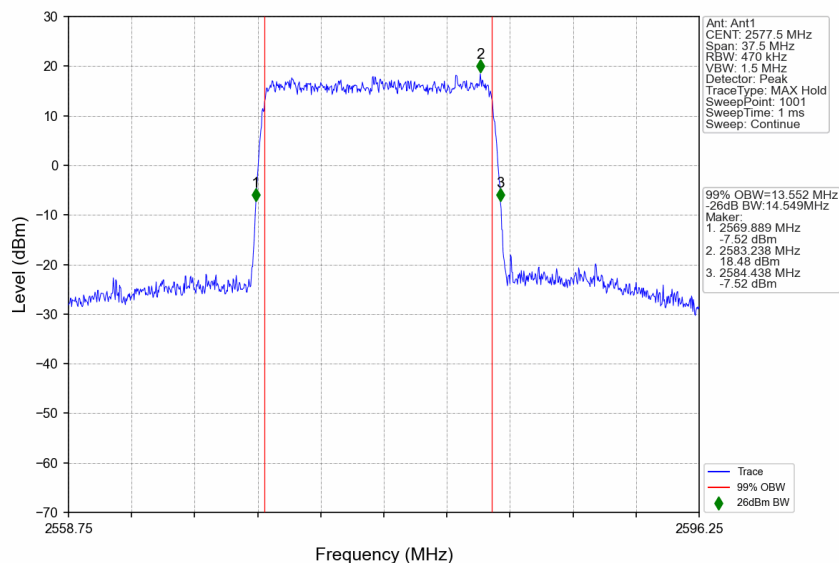
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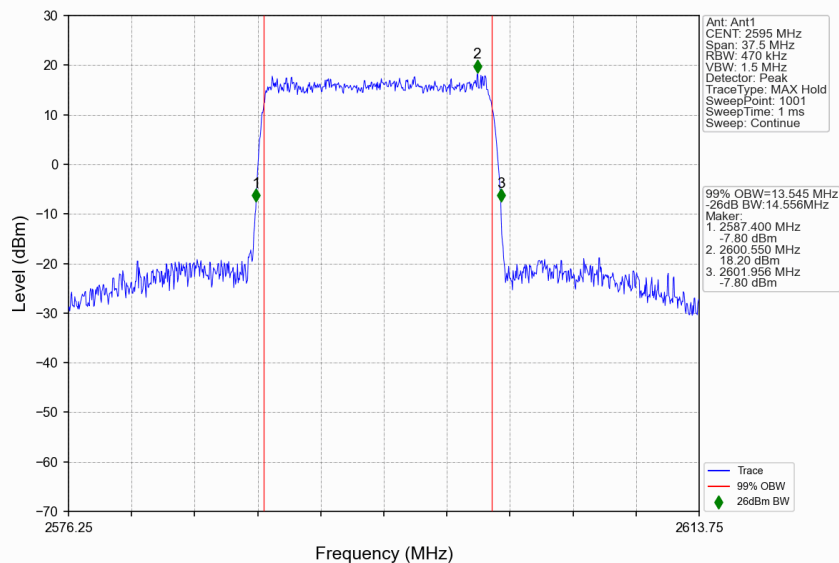
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_16_QAM_2577.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_16_QAM_2595MHz_Outer_Full



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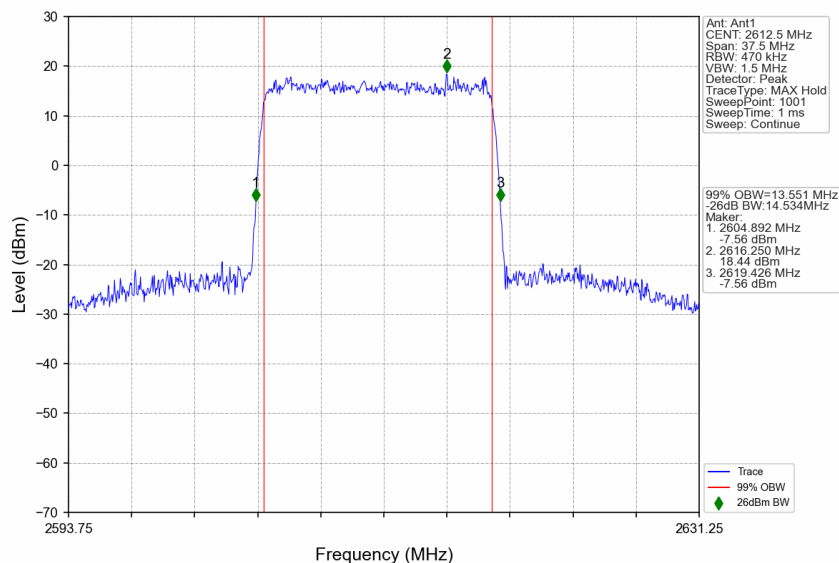
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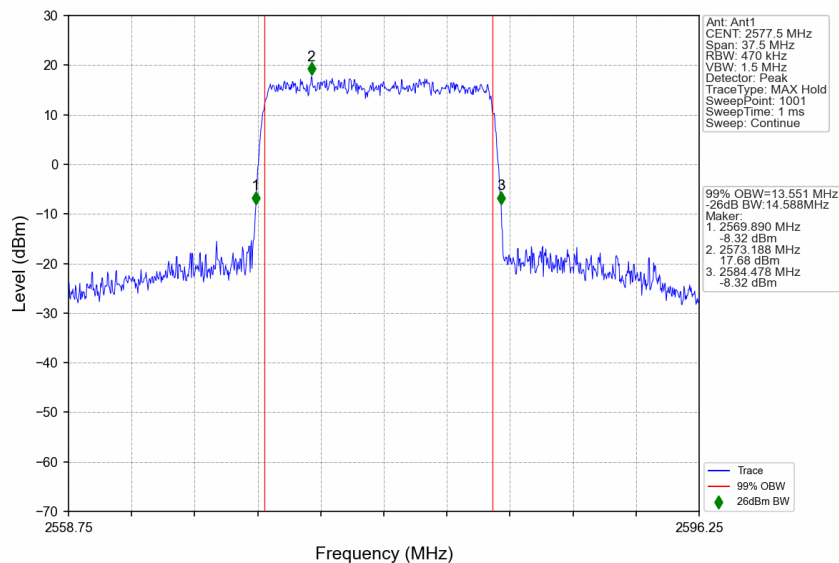
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_16_QAM_2612.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_64_QAM_2577.5MHz_Outer_Full



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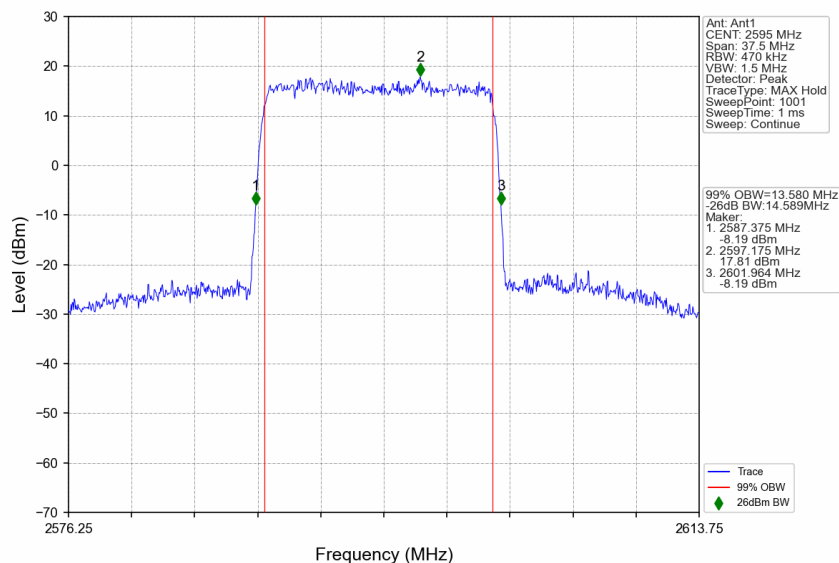
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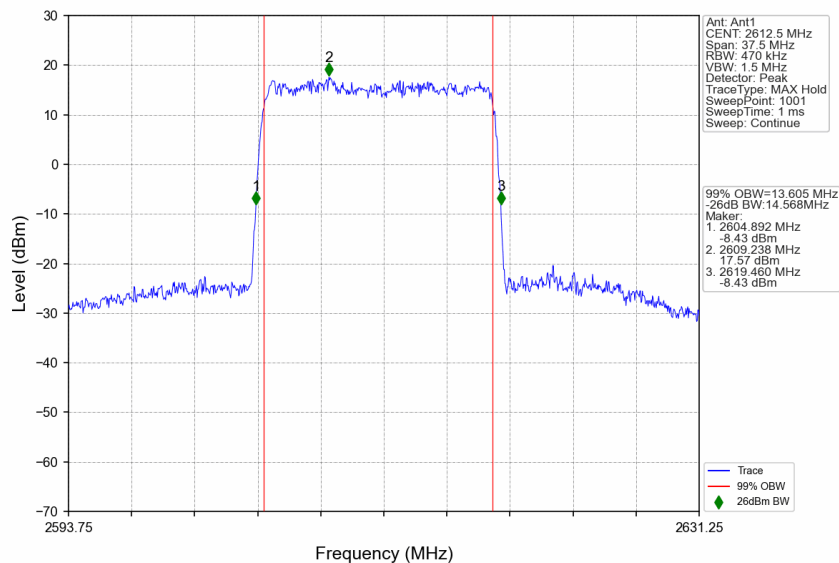
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_64_QAM_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_64_QAM_2612.5MHz_Outer_Full



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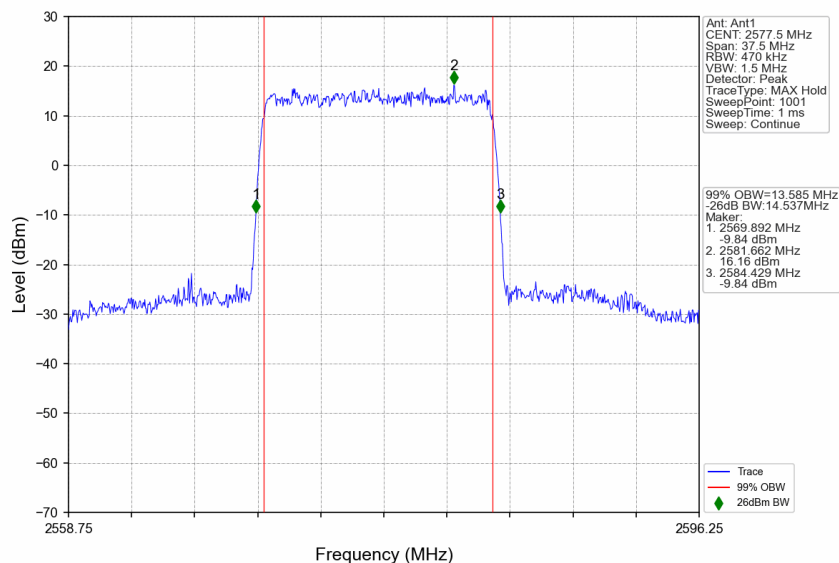
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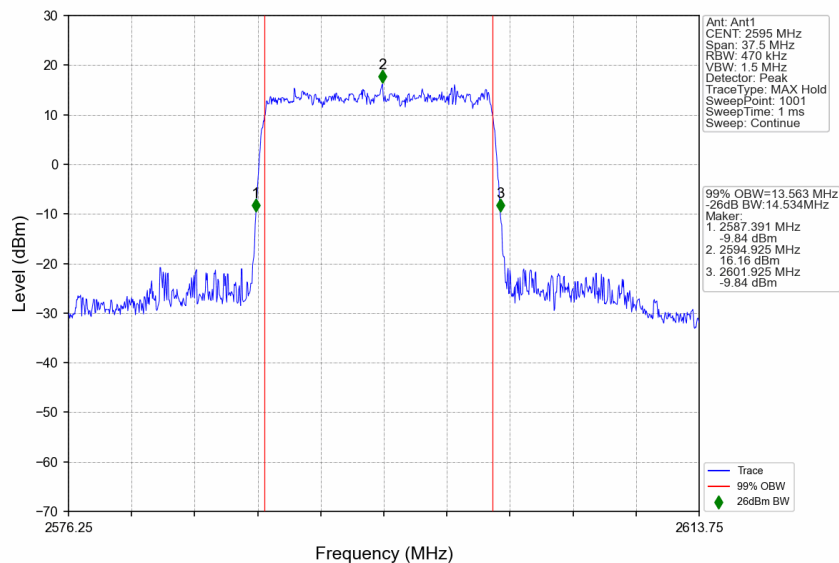
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_256_QAM_2577.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_256_QAM_2595MHz_Outer_Full



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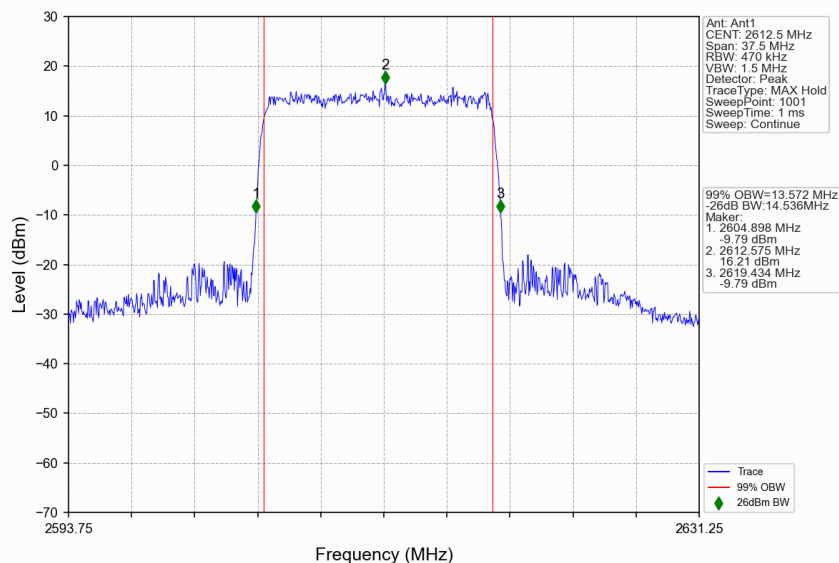
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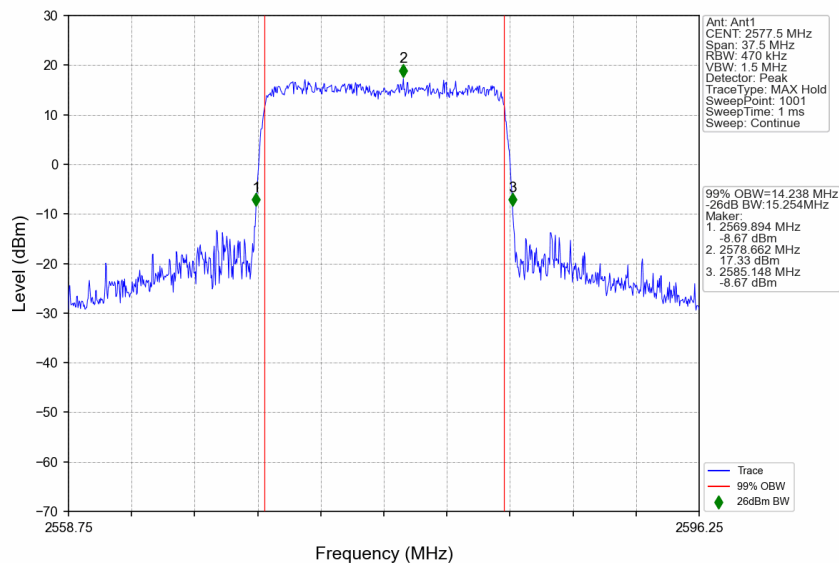
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n38_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM_256 QAM_2612.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_2577.5MHz_Outer_Full



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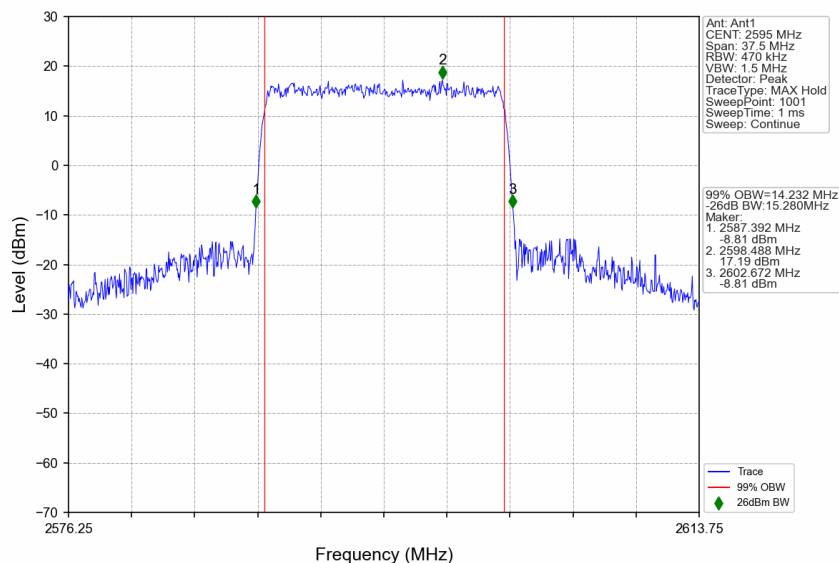
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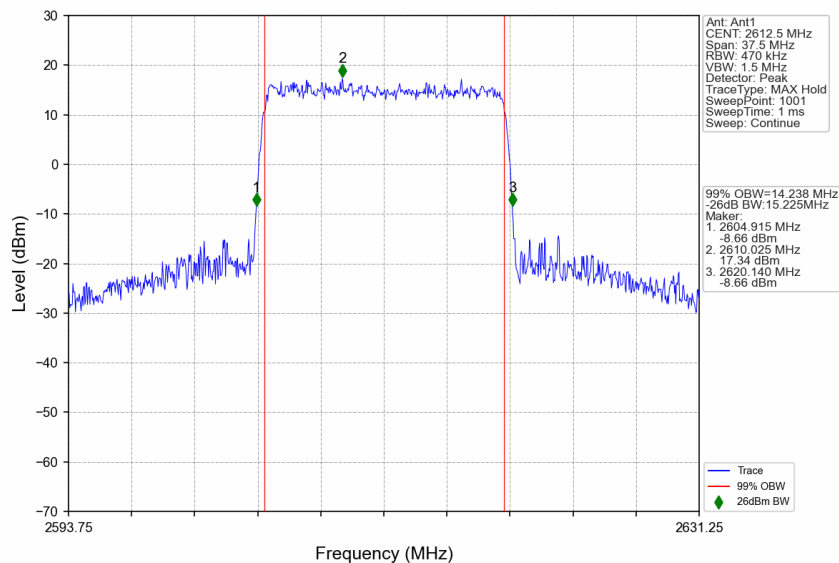
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n38_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_2612.5MHz_Outer_Full



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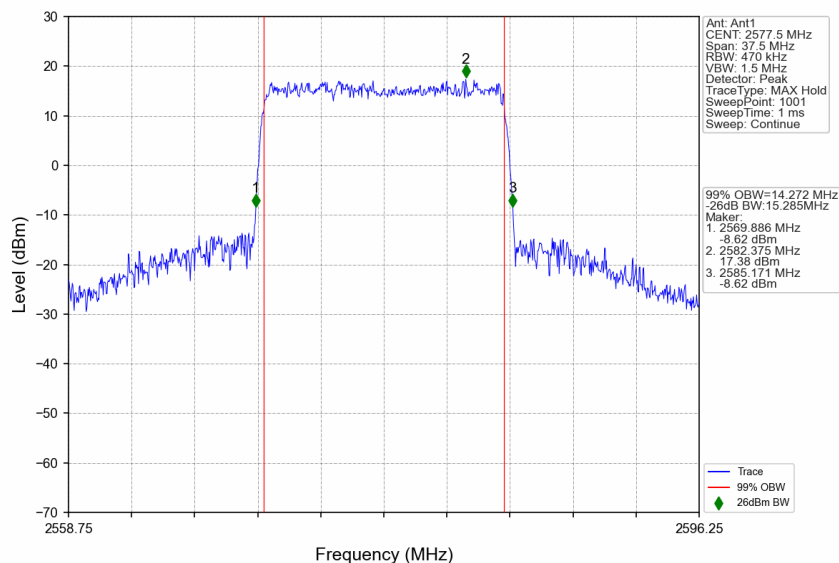
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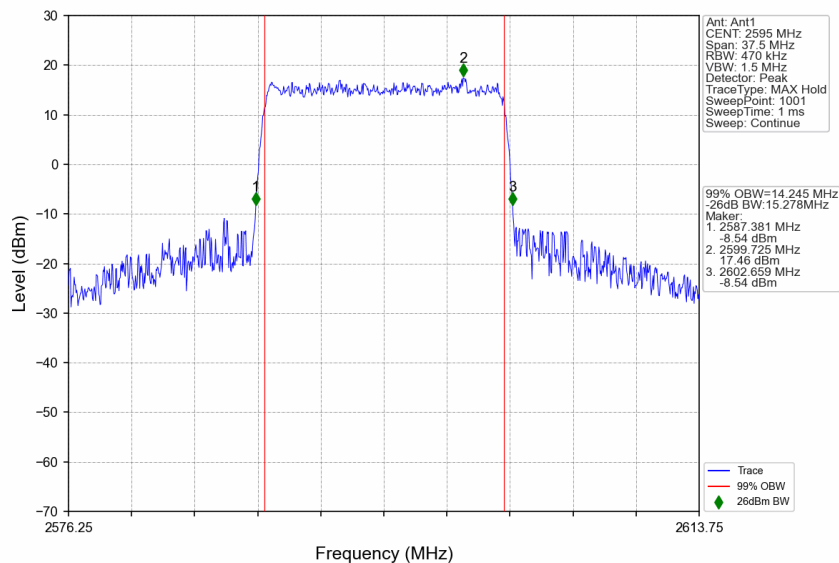
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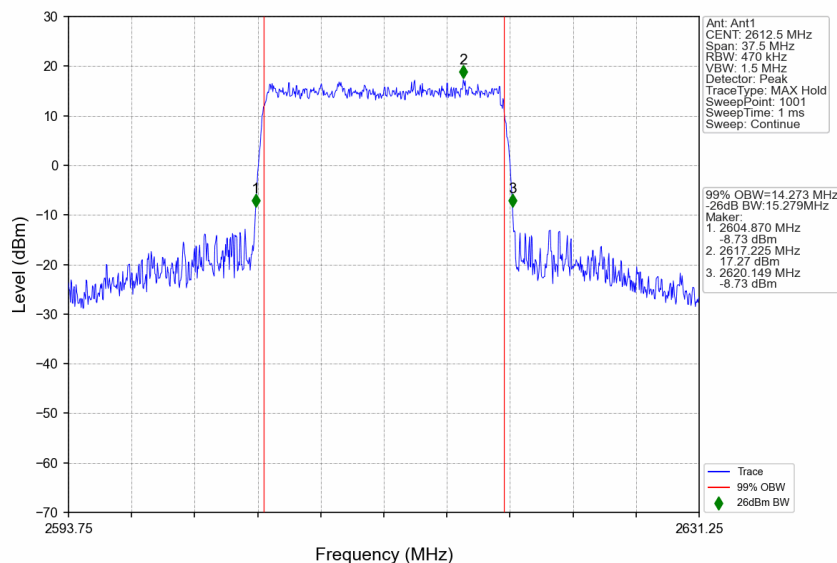
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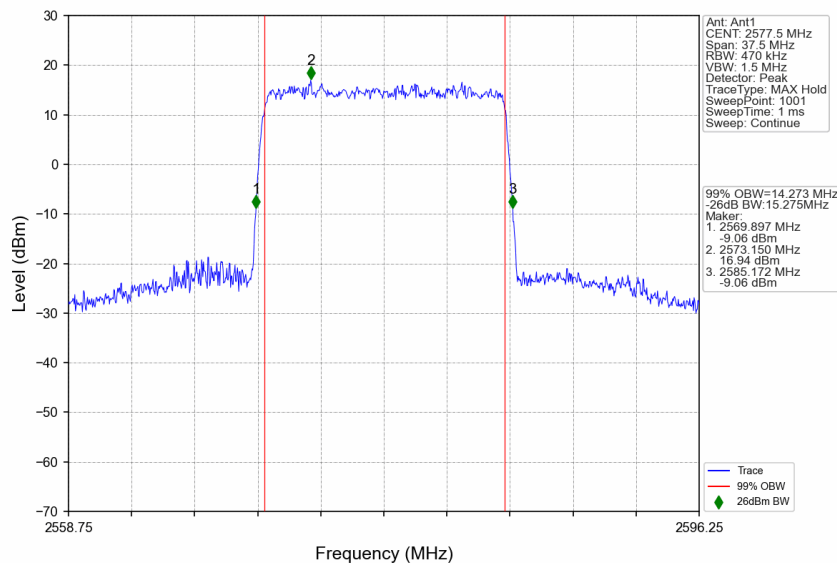
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n38_15kHz_SISO_NTNV_15MHz_CP-OFDM 16 QAM_2612.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_15MHz_CP-OFDM 64 QAM_2577.5MHz_Outer_Full



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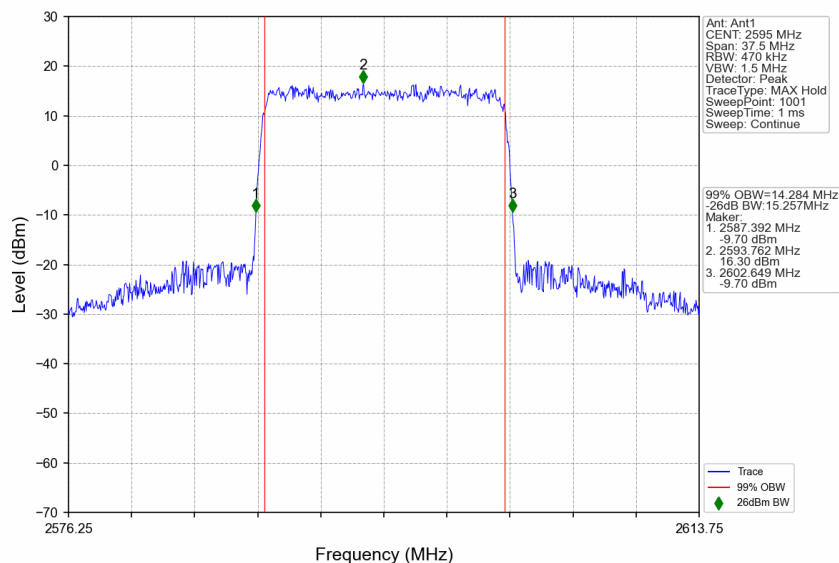
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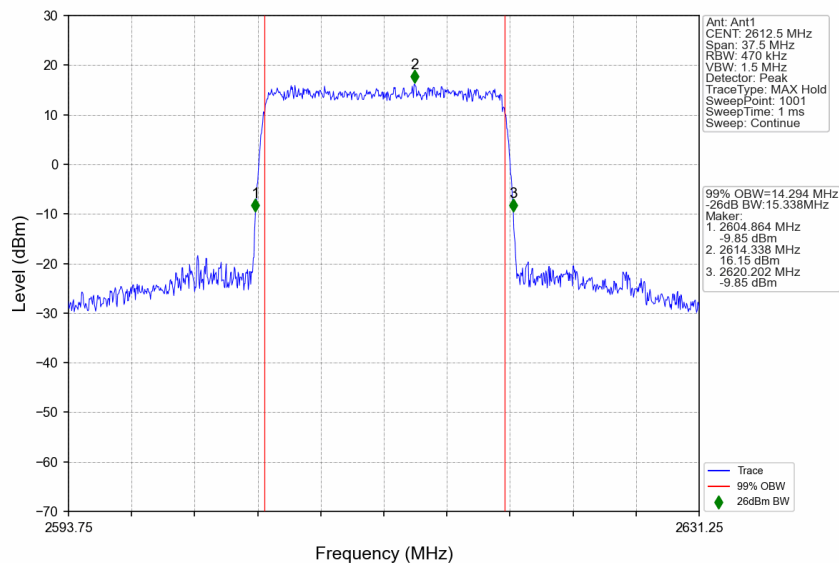
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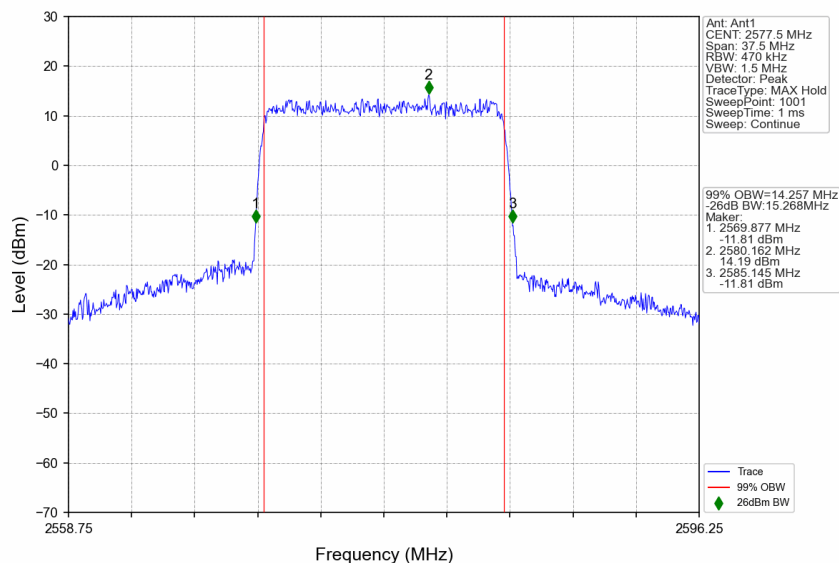
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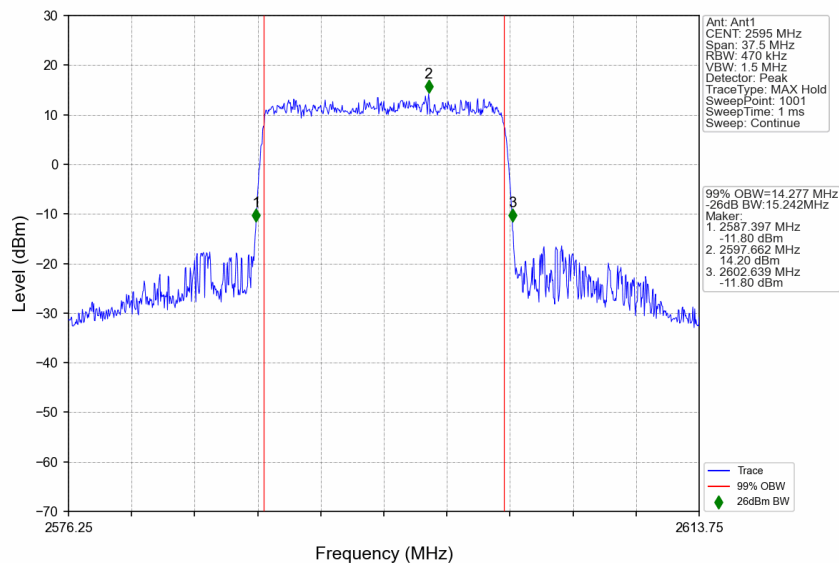
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n38_15kHz_SISO_NTNV_15MHz_CP-OFDM_2595MHz_Outer_Full



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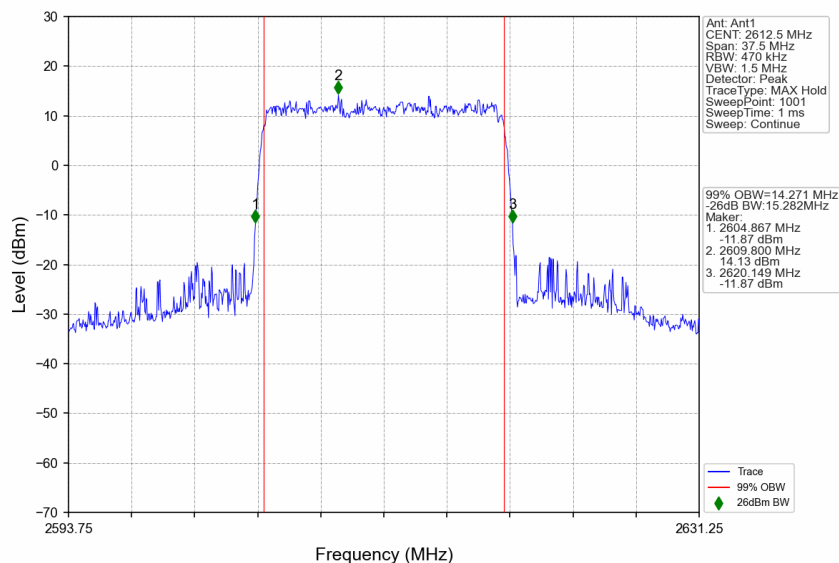
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n38_15kHz_SISO_NTNV_15MHz_CP-OFDM_256_QAM_2612.5MHz_Outer_Full



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4.4 15k_SISO_20MHz_NTNV

4.4.1 Test Result

5G NR n38 SCS=15kHz SISO 20MHz NTV						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2580	Outer Full	18.05	19.41	/	Pass
	2595	Outer Full	18.08	19.36	/	Pass
	2610	Outer Full	18.11	19.33	/	Pass
DFT-s-OFDM QPSK	2580	Outer Full	18.06	19.40	/	Pass
	2595	Outer Full	18.07	19.36	/	Pass
	2610	Outer Full	18.05	19.38	/	Pass
DFT-s-OFDM 16 QAM	2580	Outer Full	18.09	19.37	/	Pass
	2595	Outer Full	18.01	19.37	/	Pass
	2610	Outer Full	18.04	19.38	/	Pass
DFT-s-OFDM 64 QAM	2580	Outer Full	18.14	19.39	/	Pass
	2595	Outer Full	18.11	19.45	/	Pass
	2610	Outer Full	18.09	19.45	/	Pass
DFT-s-OFDM 256 QAM	2580	Outer Full	18.02	19.35	/	Pass
	2595	Outer Full	18.05	19.39	/	Pass
	2610	Outer Full	18.05	19.40	/	Pass
CP-OFDM QPSK	2580	Outer Full	19.09	20.40	/	Pass
	2595	Outer Full	19.07	20.42	/	Pass
	2610	Outer Full	19.08	20.44	/	Pass
CP-OFDM 16 QAM	2580	Outer Full	19.10	20.48	/	Pass
	2595	Outer Full	19.08	20.40	/	Pass
	2610	Outer Full	19.10	20.44	/	Pass
CP-OFDM 64 QAM	2580	Outer Full	19.09	20.47	/	Pass
	2595	Outer Full	19.07	20.45	/	Pass
	2610	Outer Full	19.09	20.48	/	Pass
CP-OFDM 256 QAM	2580	Outer Full	19.05	20.47	/	Pass
	2595	Outer Full	19.05	20.47	/	Pass
	2610	Outer Full	19.10	20.46	/	Pass



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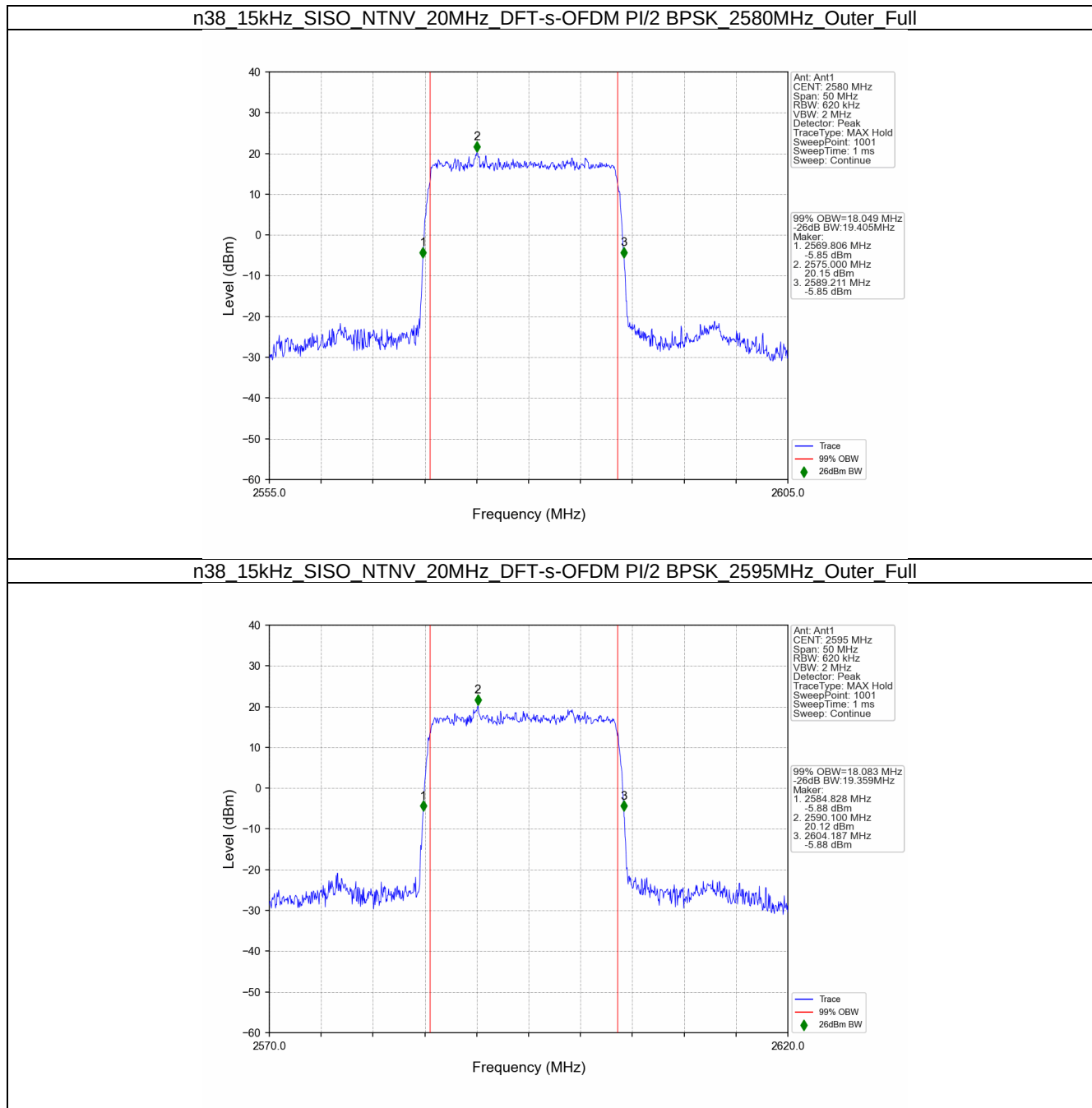
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4.4.2 Test Graph



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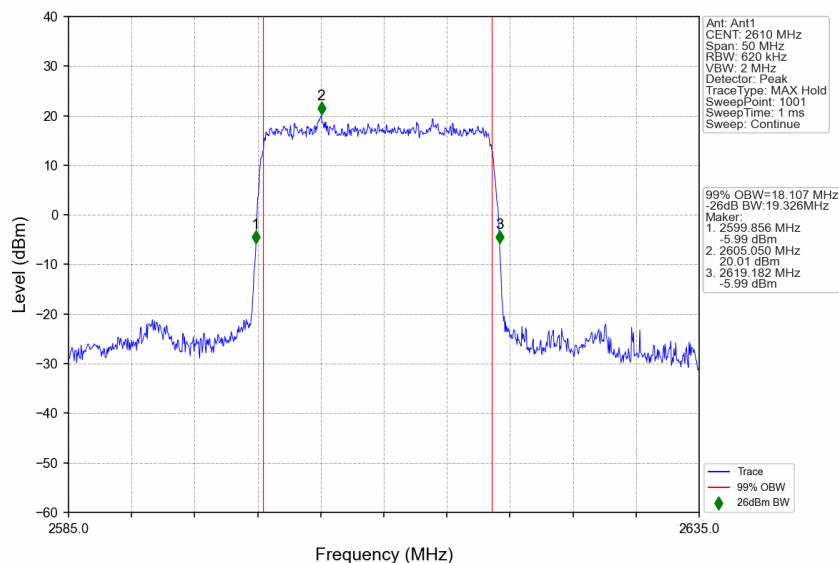
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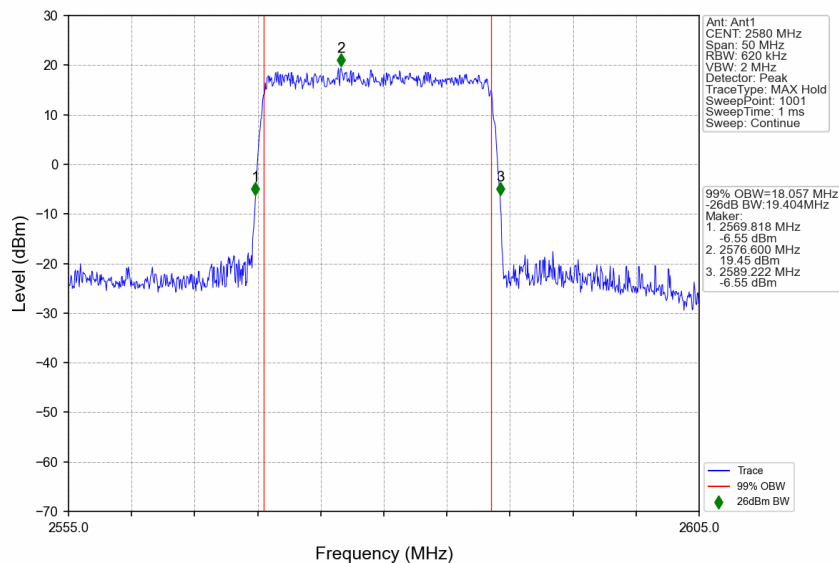
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n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM PI/2 BPSK_2610MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_2580MHz_Outer_Full



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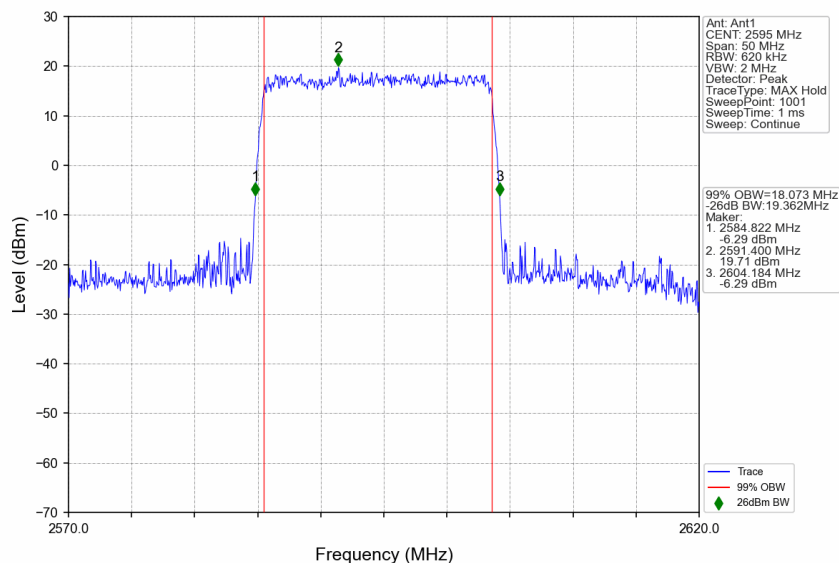
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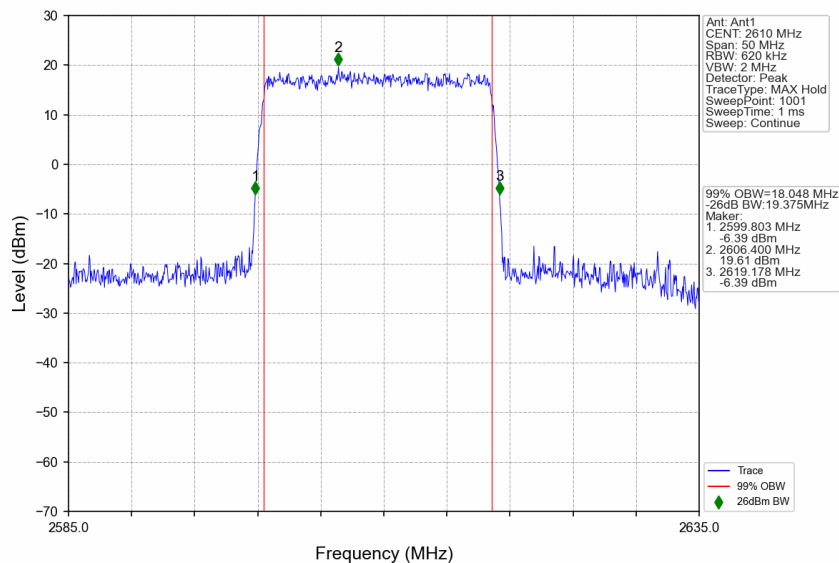
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n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM QPSK_2610MHz_Outer_Full



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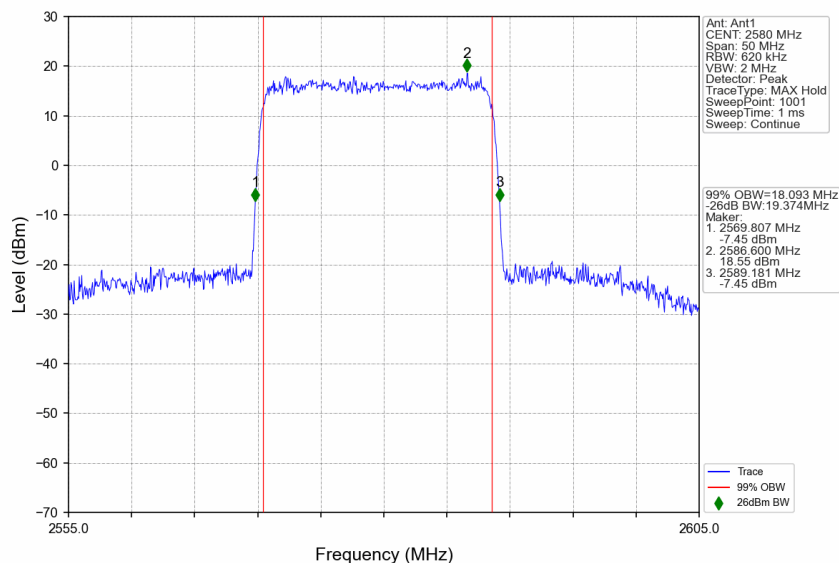
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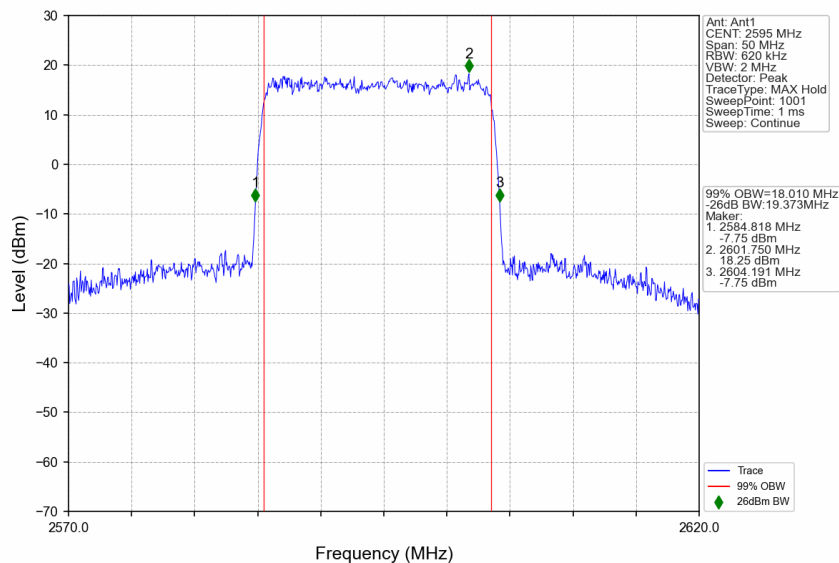
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n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM_16_QAM_2580MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM_16_QAM_2595MHz_Outer_Full



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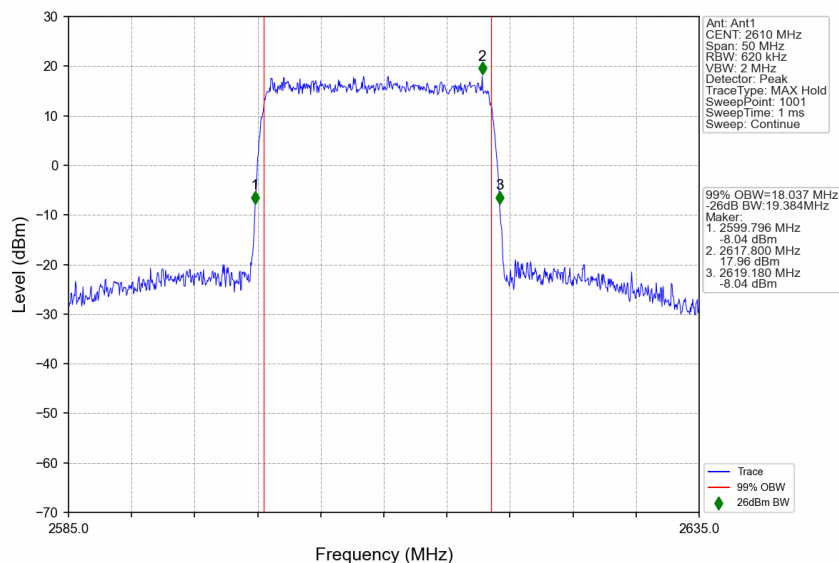
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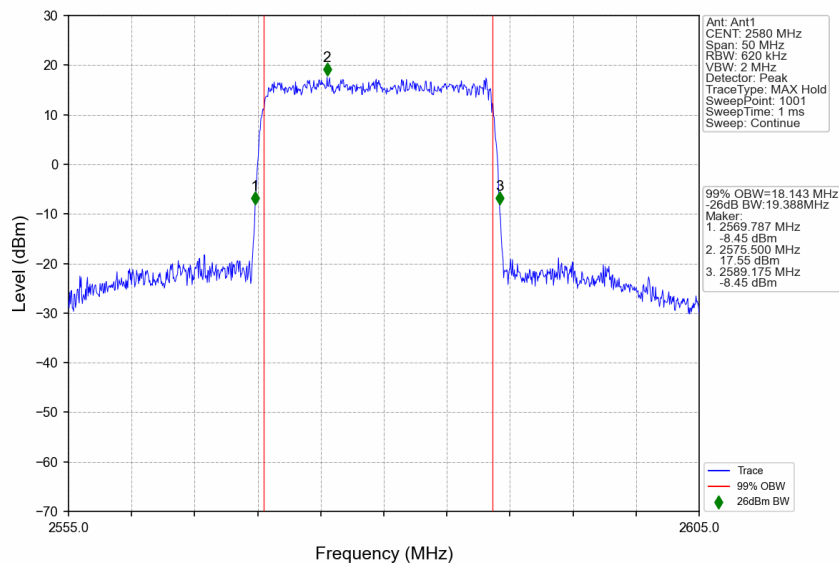
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n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 16 QAM_2610MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 64 QAM_2580MHz_Outer_Full



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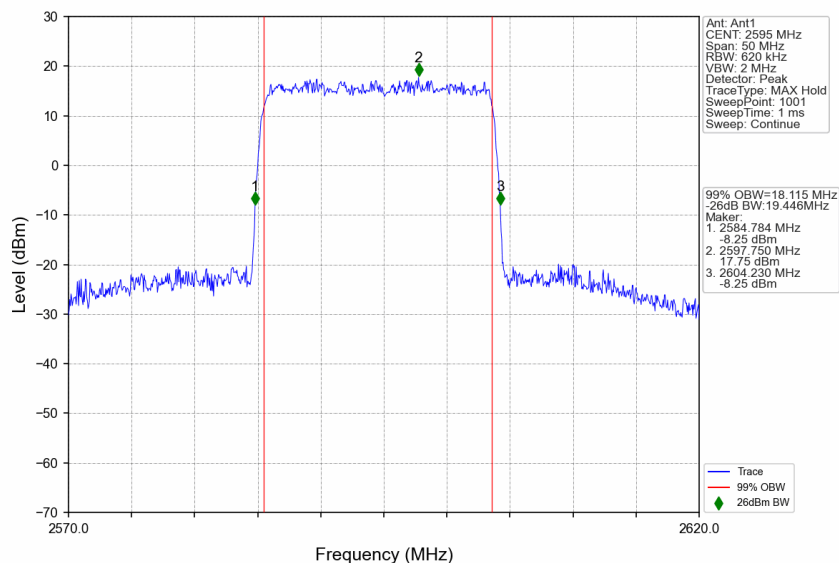
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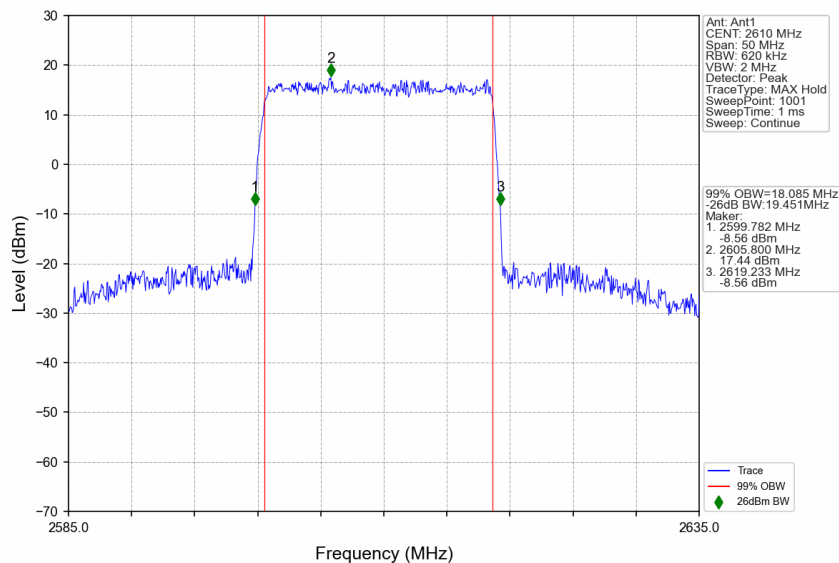
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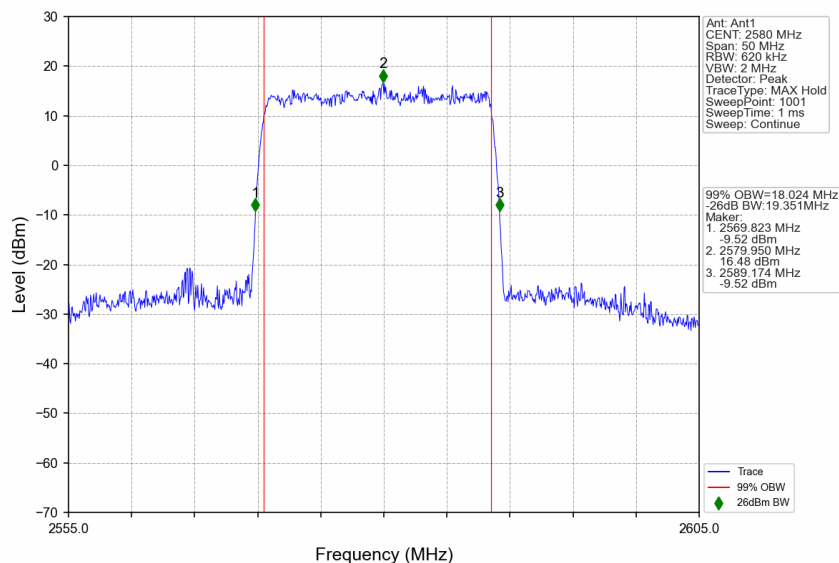
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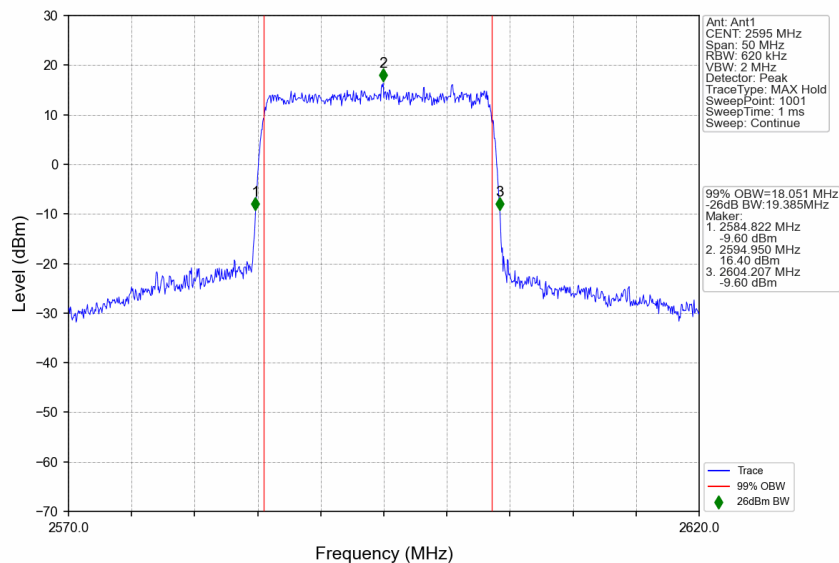
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n38_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM_256_QAM_2580MHz_Outer_Full



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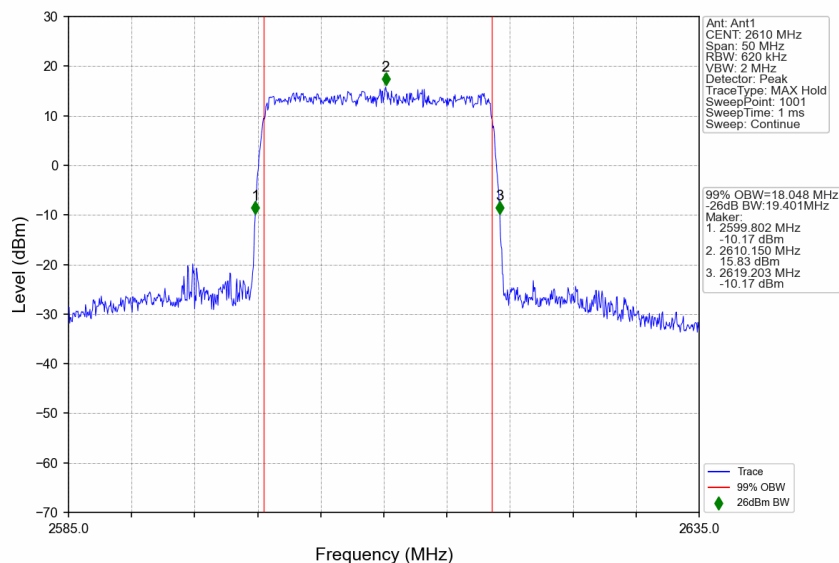
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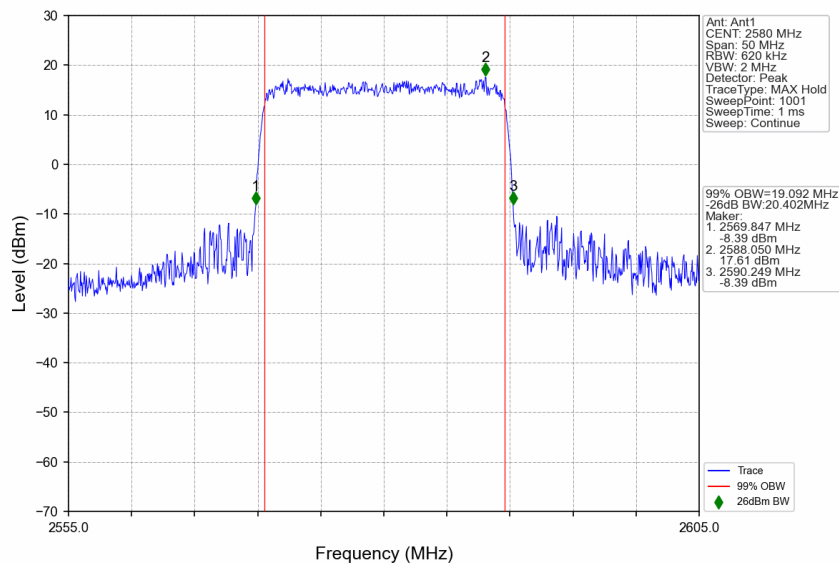
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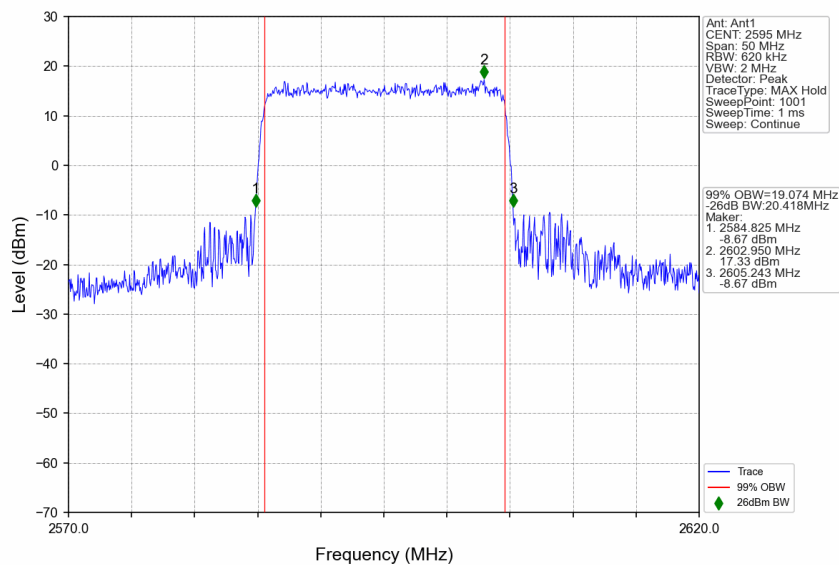
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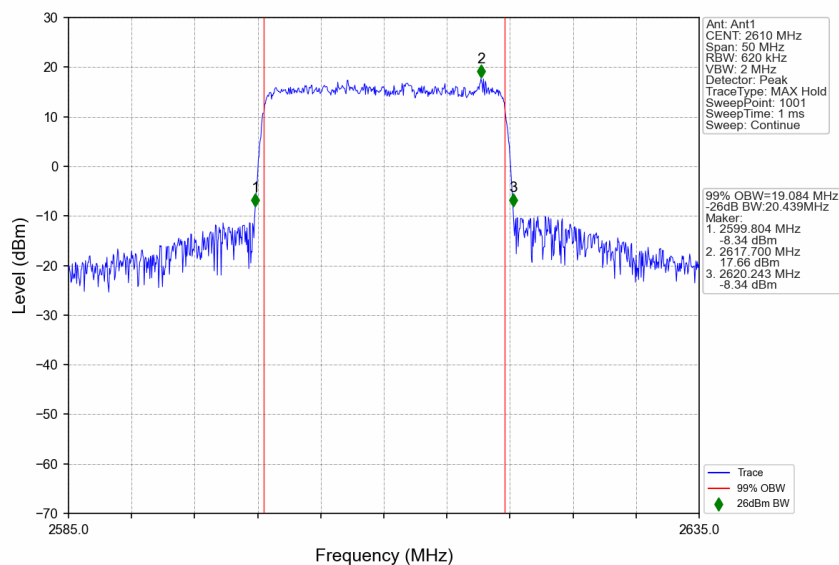
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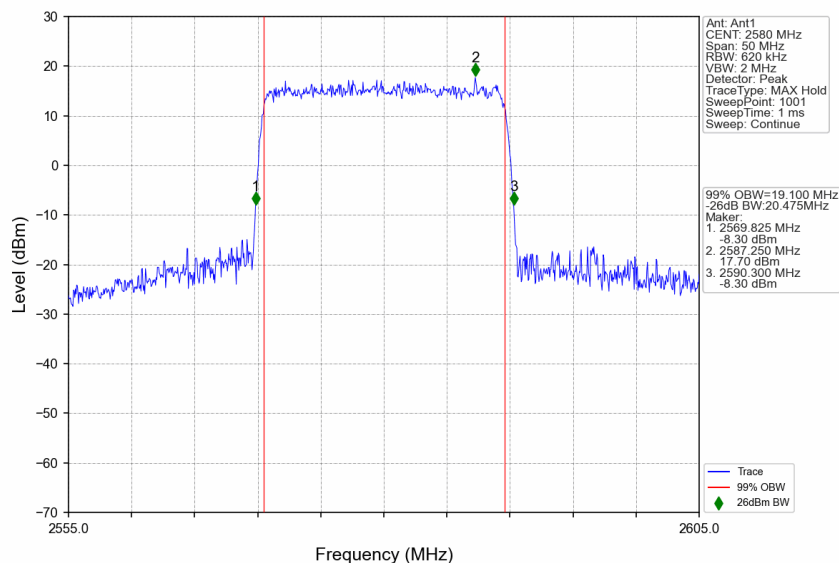
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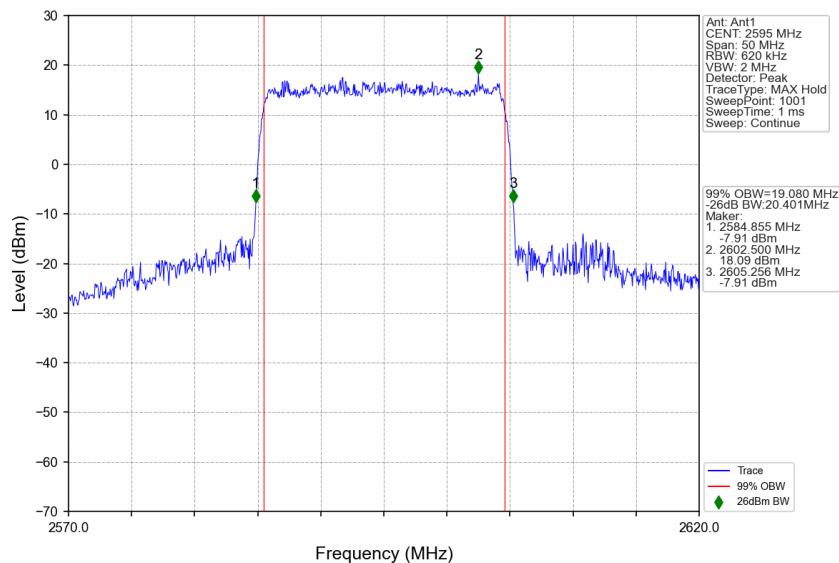
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n38_15kHz_SISO_NTNV_20MHz_CP-OFDM_16_QAM_2580MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_CP-OFDM_16_QAM_2595MHz_Outer_Full



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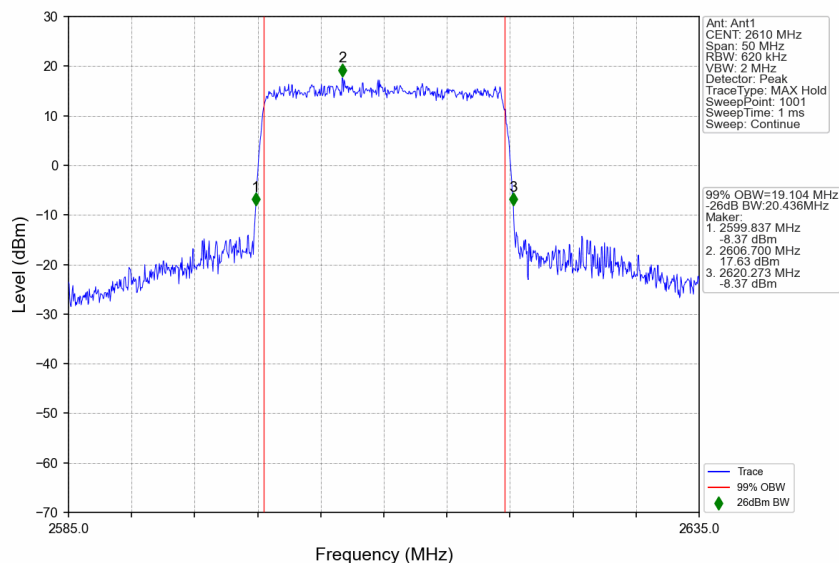
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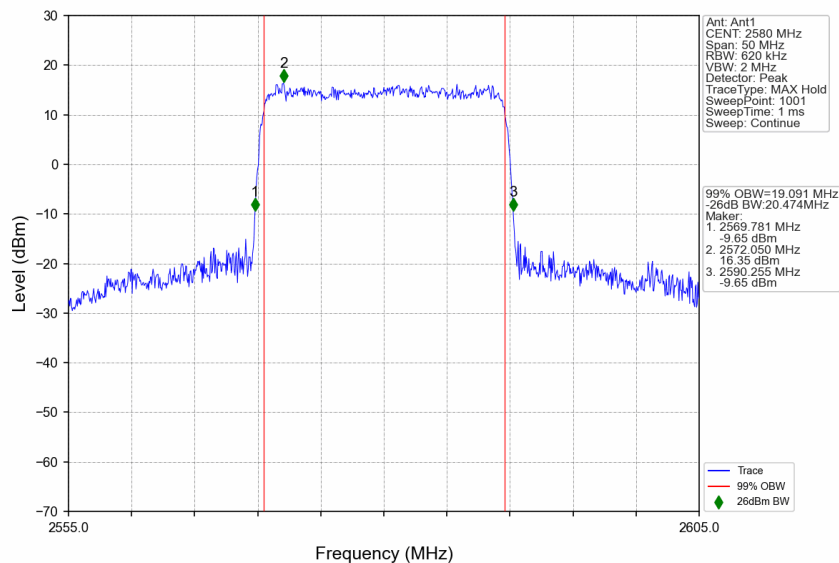
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n38_15kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_2610MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_2580MHz_Outer_Full



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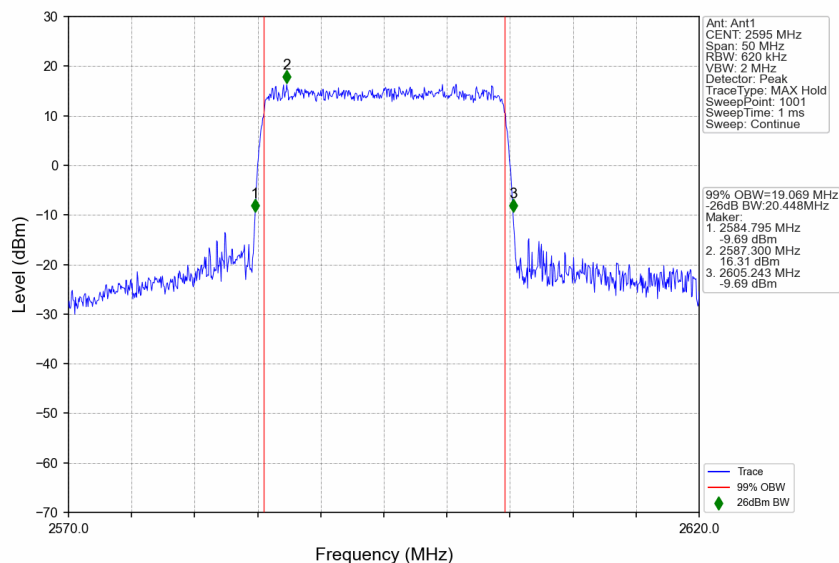
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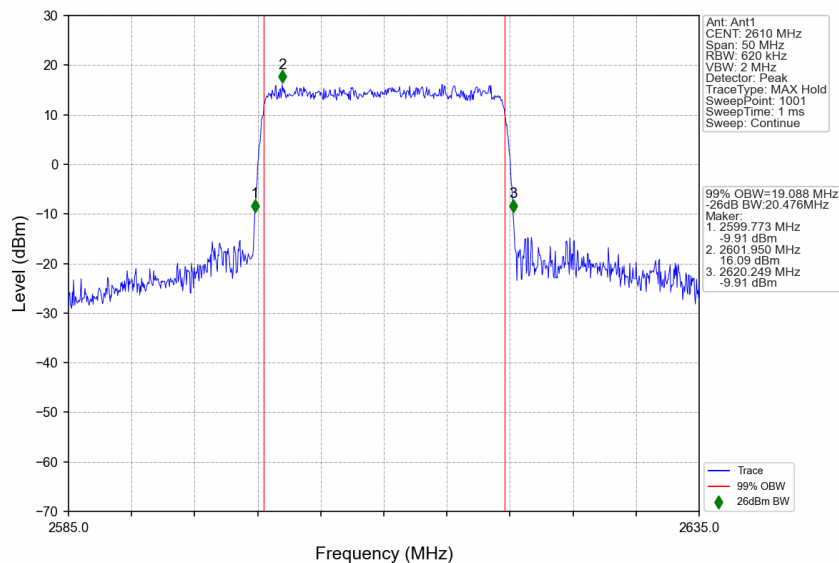
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n38_15kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_2610MHz_Outer_Full



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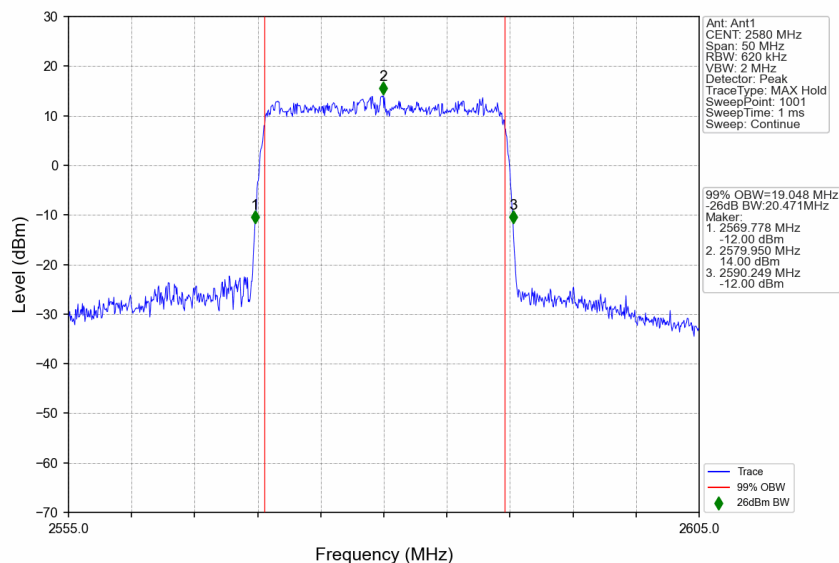
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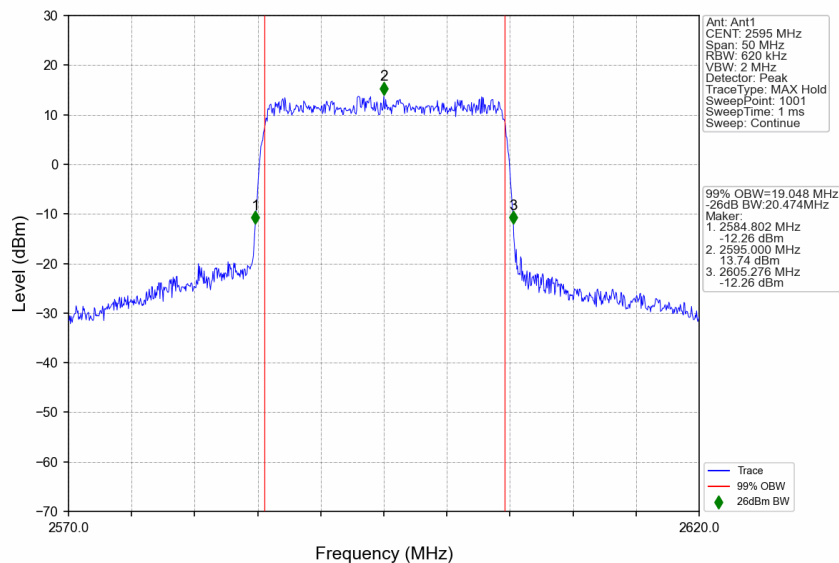
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n38_15kHz_SISO_NTNV_20MHz_CP-OFDM_256 QAM_2580MHz_Outer_Full



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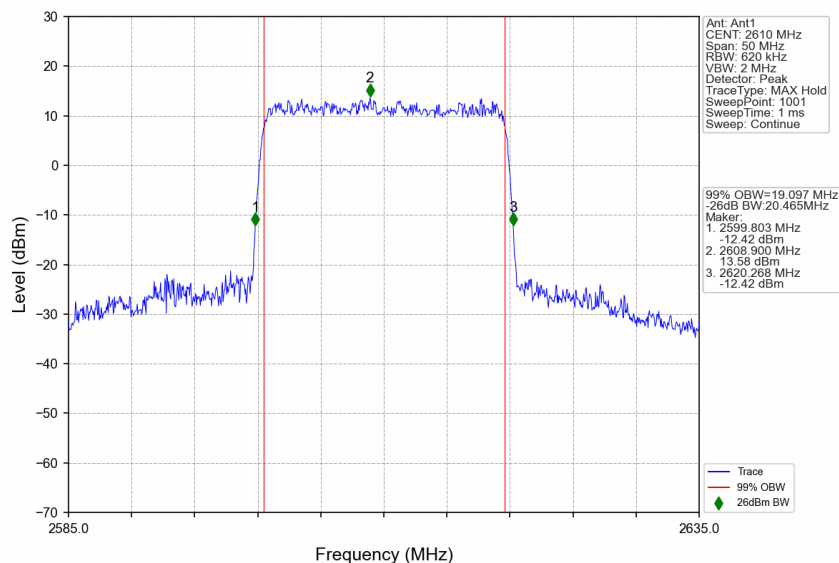
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n38_15kHz_SISO_NTNV_20MHz_CP-OFDM 256 QAM_2610MHz_Outer_Full



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4.5 15k_SISO_25MHz_NTNV

4.5.1 Test Result

5G NR n38 SCS=15kHz SISO 25MHz NTV						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	2582.5	Outer Full	23.08	24.70	/	Pass
	2595	Outer Full	23.15	24.75	/	Pass
	2607.5	Outer Full	23.11	24.71	/	Pass
DFT-s-OFDM QPSK	2582.5	Outer Full	23.11	24.73	/	Pass
	2595	Outer Full	23.11	24.75	/	Pass
	2607.5	Outer Full	23.15	24.73	/	Pass
DFT-s-OFDM 16 QAM	2582.5	Outer Full	23.04	24.69	/	Pass
	2595	Outer Full	23.07	24.66	/	Pass
	2607.5	Outer Full	23.09	24.69	/	Pass
DFT-s-OFDM 64 QAM	2582.5	Outer Full	23.12	24.72	/	Pass
	2595	Outer Full	23.14	24.76	/	Pass
	2607.5	Outer Full	23.10	24.74	/	Pass
DFT-s-OFDM 256 QAM	2582.5	Outer Full	23.05	24.68	/	Pass
	2595	Outer Full	23.07	24.68	/	Pass
	2607.5	Outer Full	23.09	24.71	/	Pass
CP-OFDM QPSK	2582.5	Outer Full	23.96	25.58	/	Pass
	2595	Outer Full	23.97	25.58	/	Pass
	2607.5	Outer Full	23.95	25.63	/	Pass
CP-OFDM 16 QAM	2582.5	Outer Full	23.98	25.59	/	Pass
	2595	Outer Full	23.95	25.61	/	Pass
	2607.5	Outer Full	23.95	25.58	/	Pass
CP-OFDM 64 QAM	2582.5	Outer Full	23.96	25.61	/	Pass
	2595	Outer Full	23.98	25.62	/	Pass
	2607.5	Outer Full	24.04	25.67	/	Pass
CP-OFDM 256 QAM	2582.5	Outer Full	23.96	25.62	/	Pass
	2595	Outer Full	23.92	25.55	/	Pass
	2607.5	Outer Full	23.94	25.57	/	Pass



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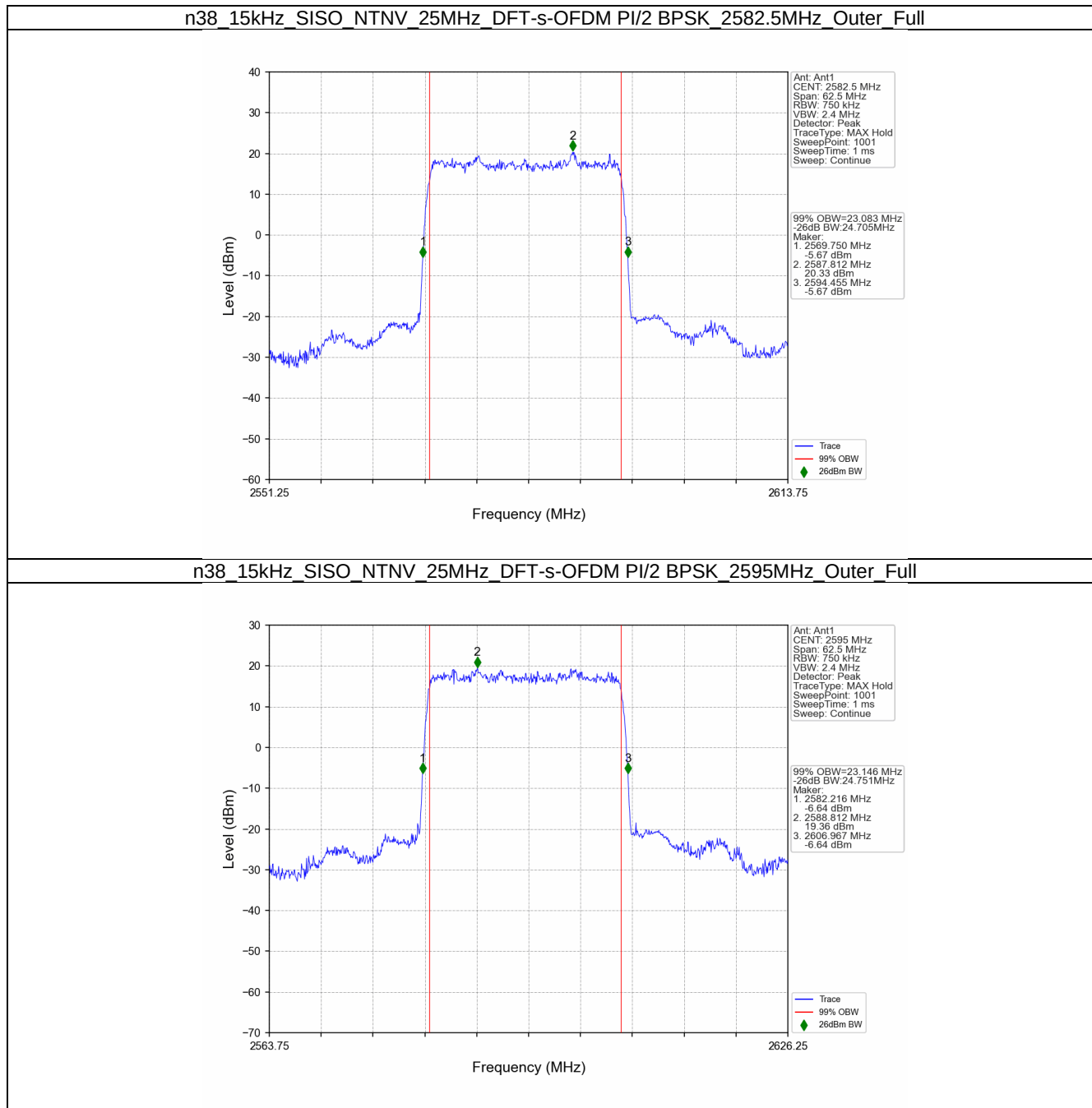
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4.5.2 Test Graph



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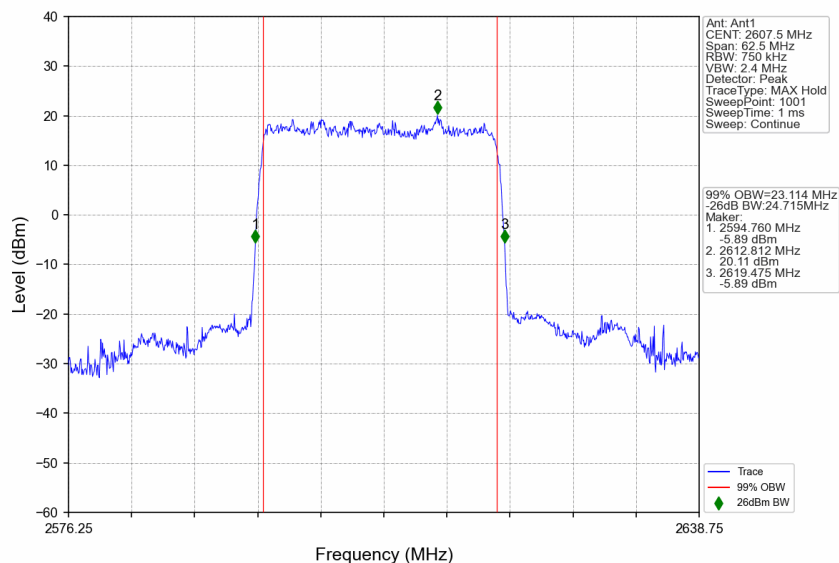
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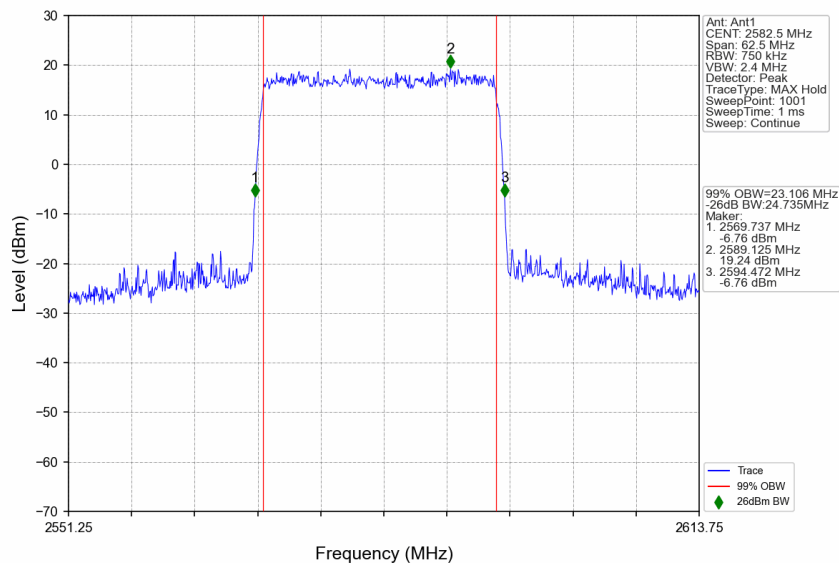
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM PI/2 BPSK_2607.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM QPSK_2582.5MHz_Outer_Full



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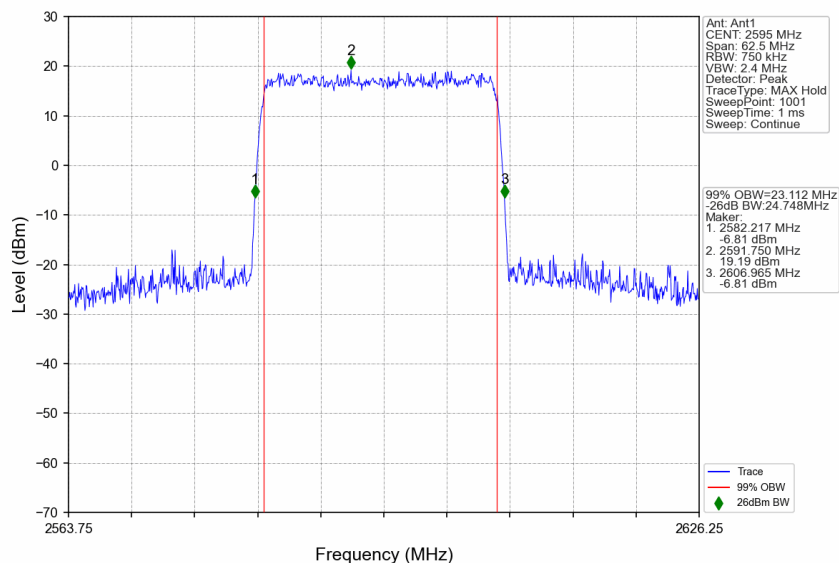
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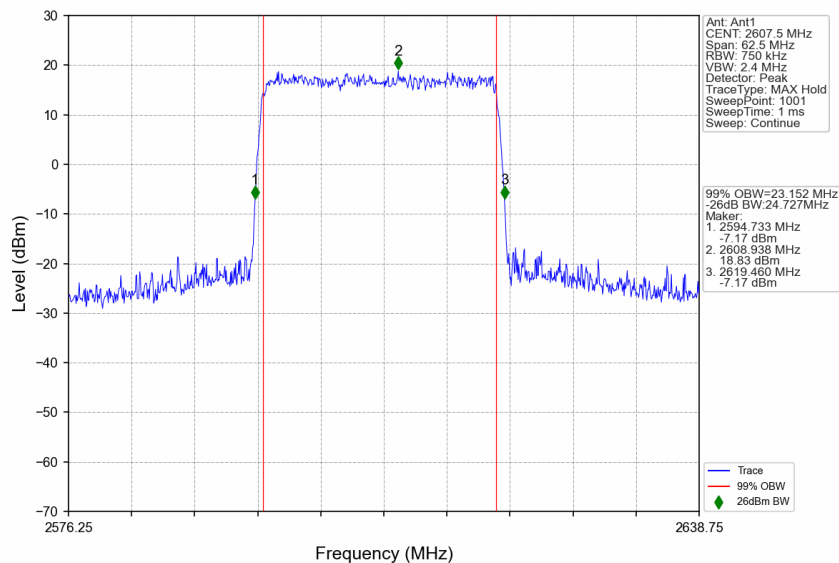
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM QPSK_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM QPSK_2607.5MHz_Outer_Full



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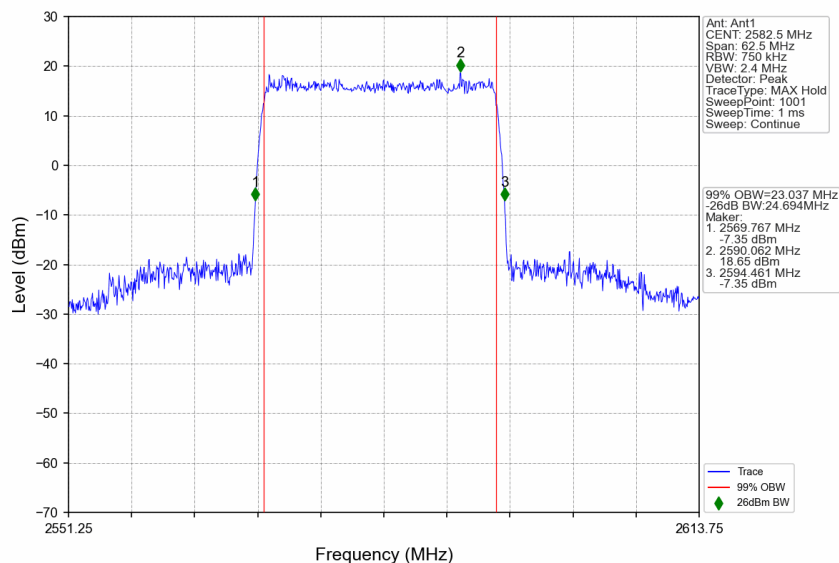
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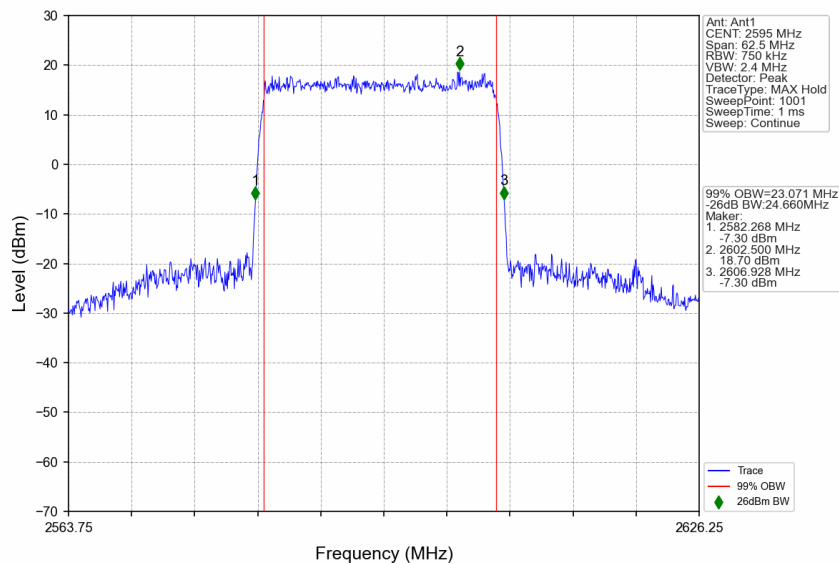
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_16_QAM_2582.5MHz_Outer_Full



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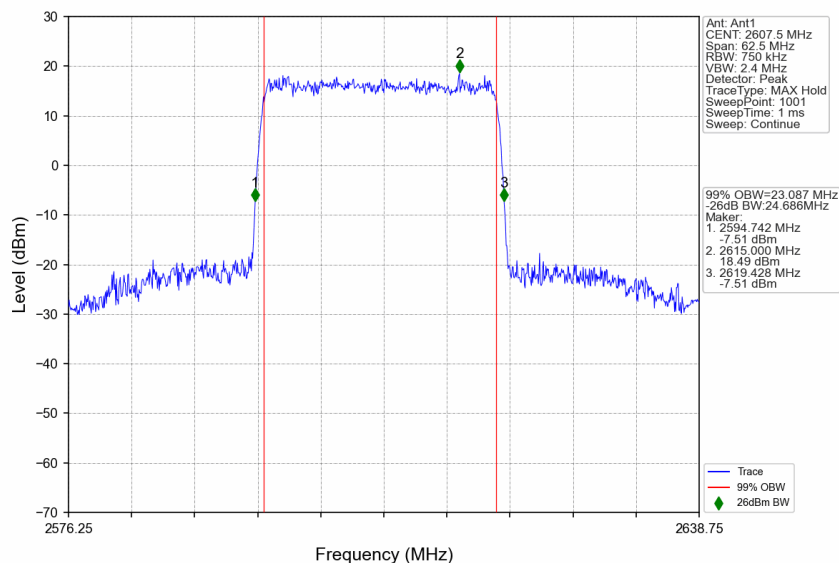
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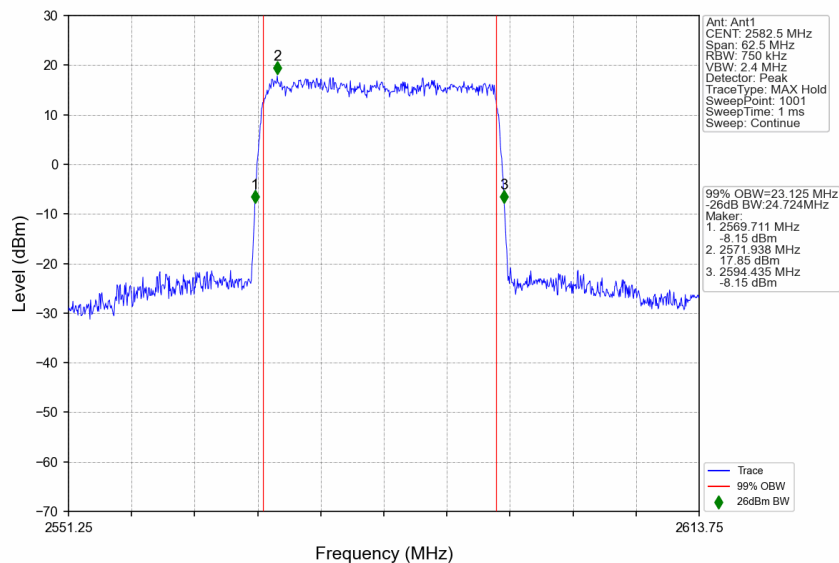
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_16_QAM_2607.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_64_QAM_2582.5MHz_Outer_Full



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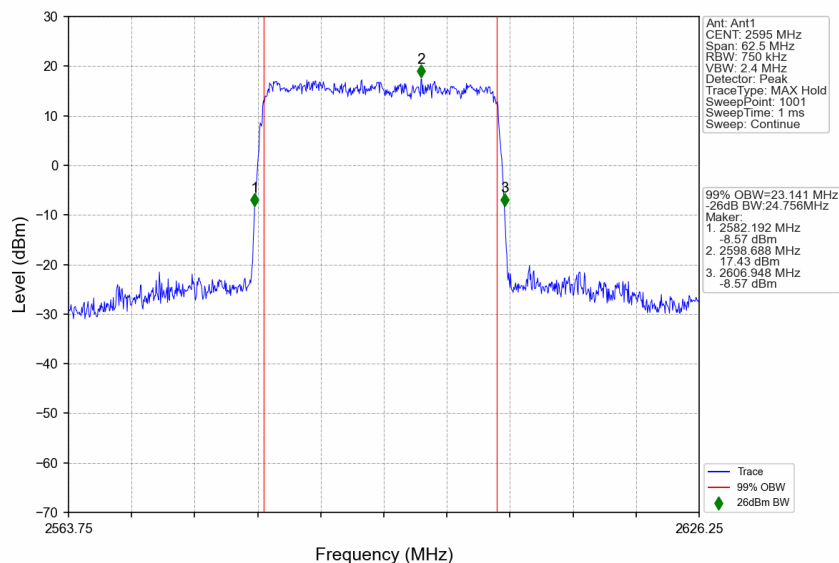
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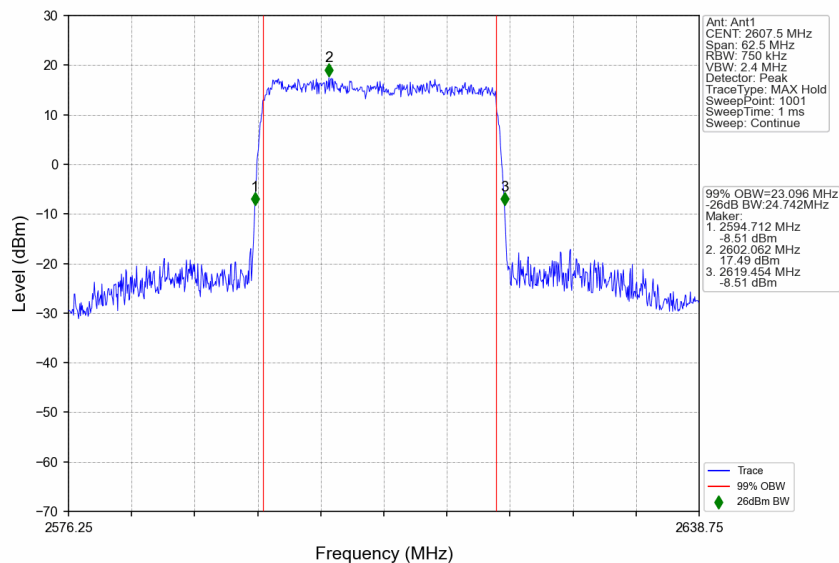
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_64_QAM_2595MHz_Outer_Full



n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_64_QAM_2607.5MHz_Outer_Full



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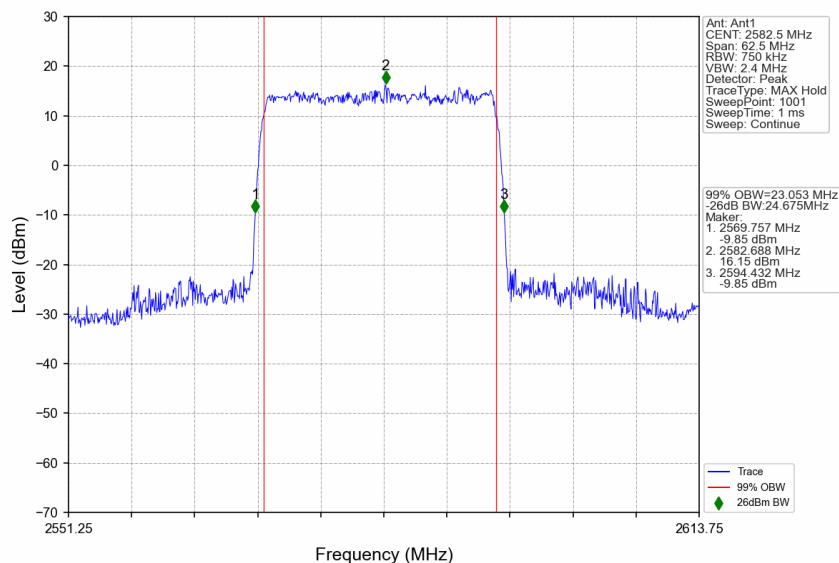
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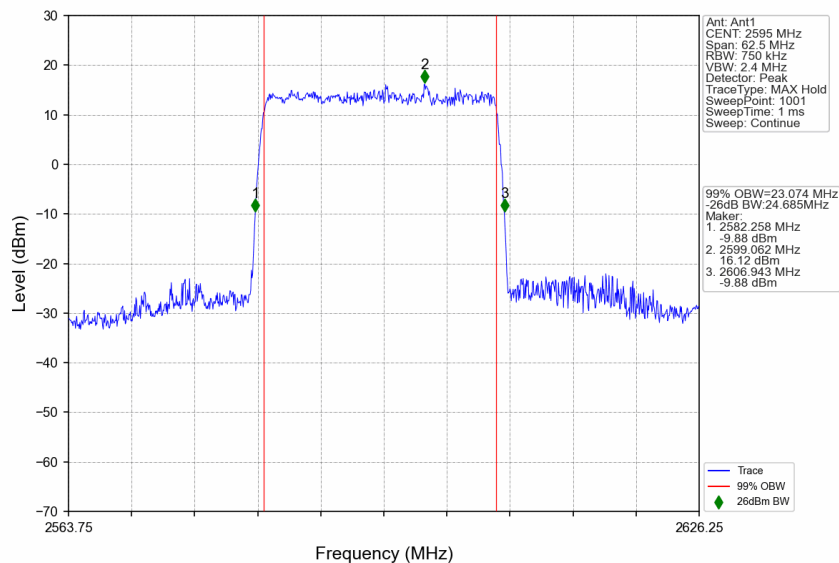
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n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_256_QAM_2582.5MHz_Outer_Full



n38_15kHz_SISO_NTNV_25MHz_DFT-s-OFDM_256_QAM_2595MHz_Outer_Full



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