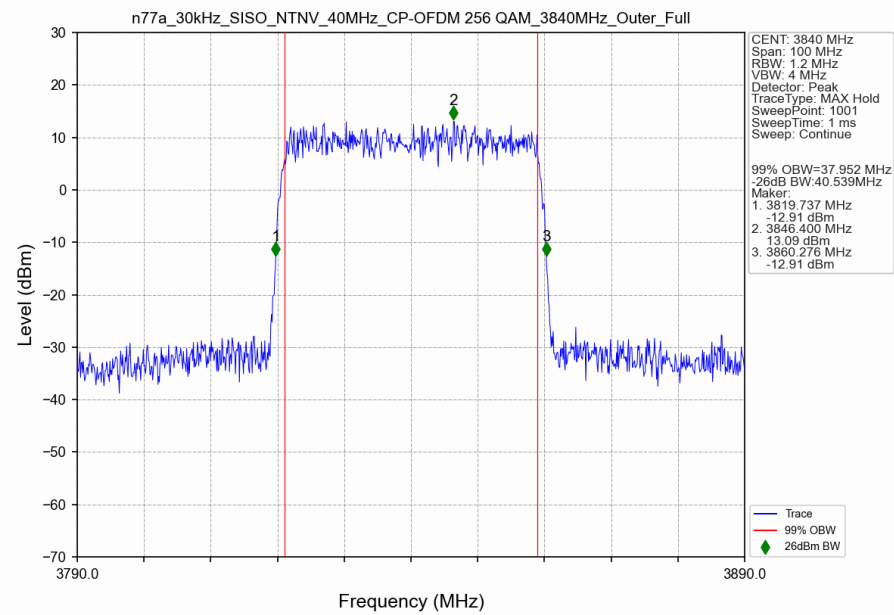
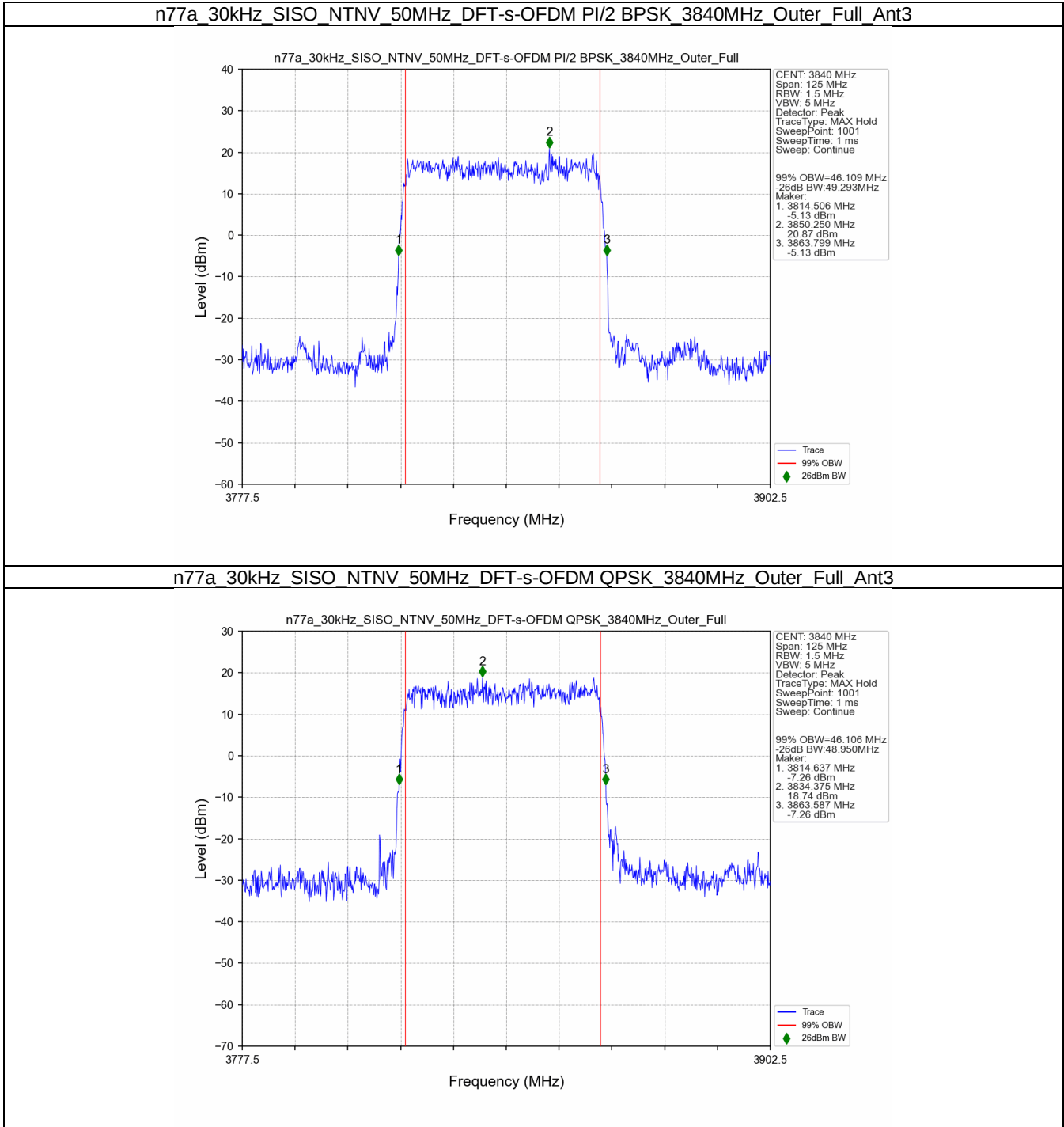


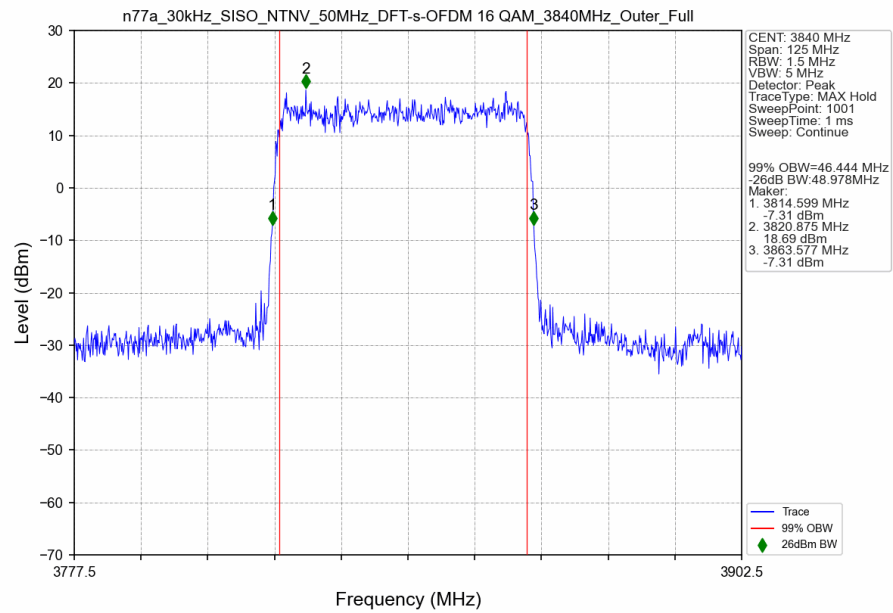
n77a 30kHz SISO NTN 40MHz CP-OFDM 256 QAM 3840MHz Outer Full Ant3



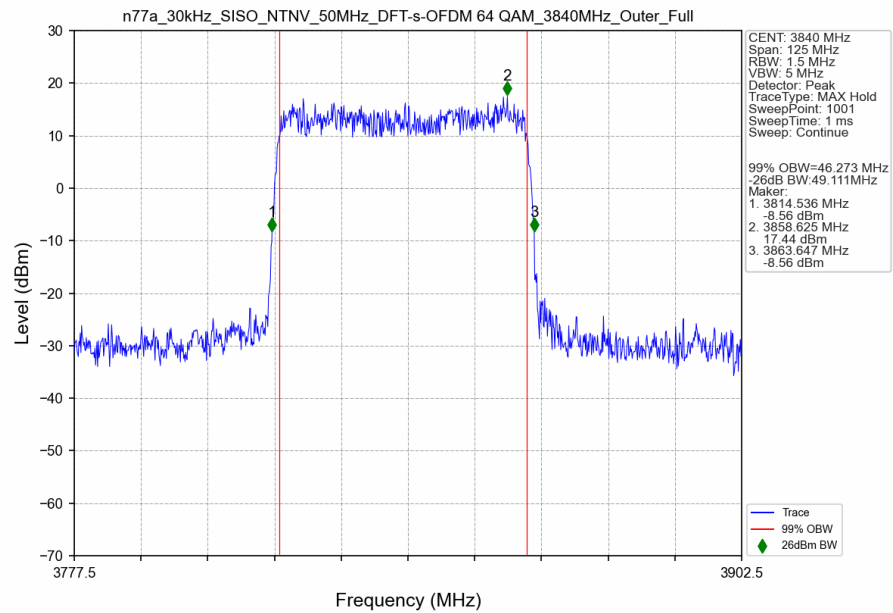
3.2.5 30k_SISO_50MHz_NTNV



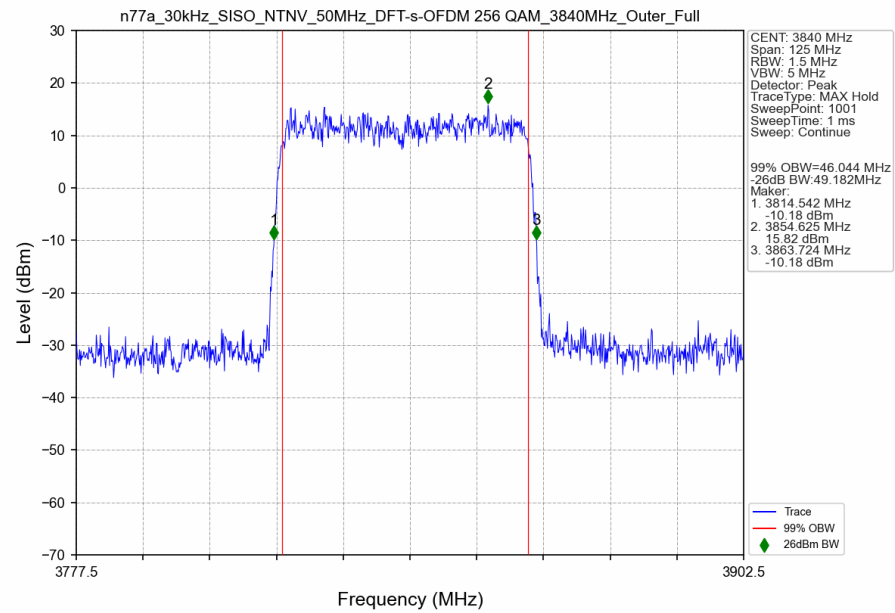
n77a_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



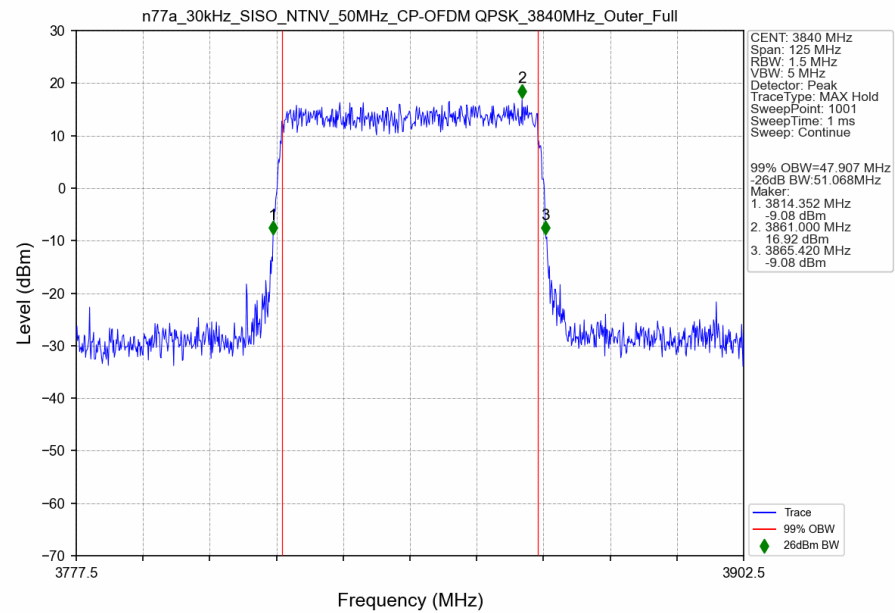
n77a_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



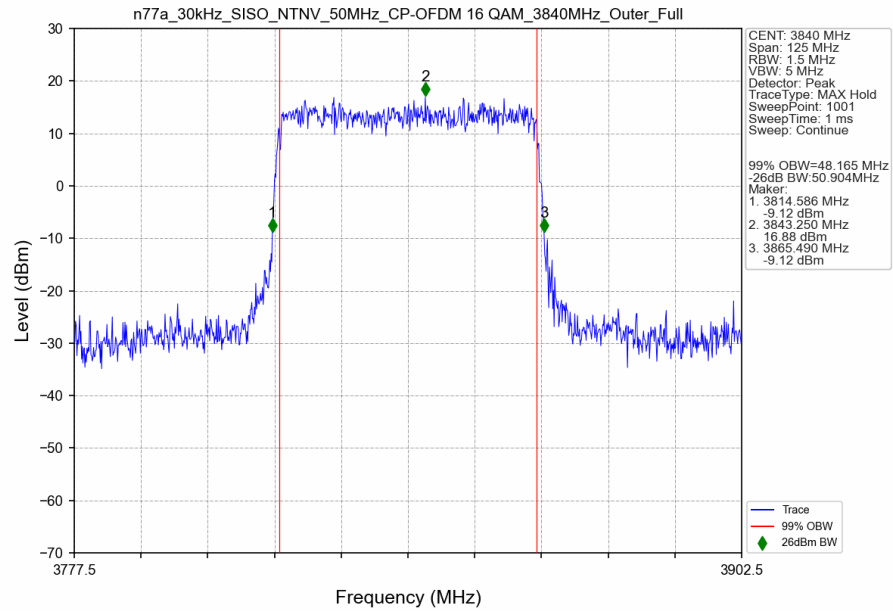
n77a_30kHz_SISO_NTNV_50MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



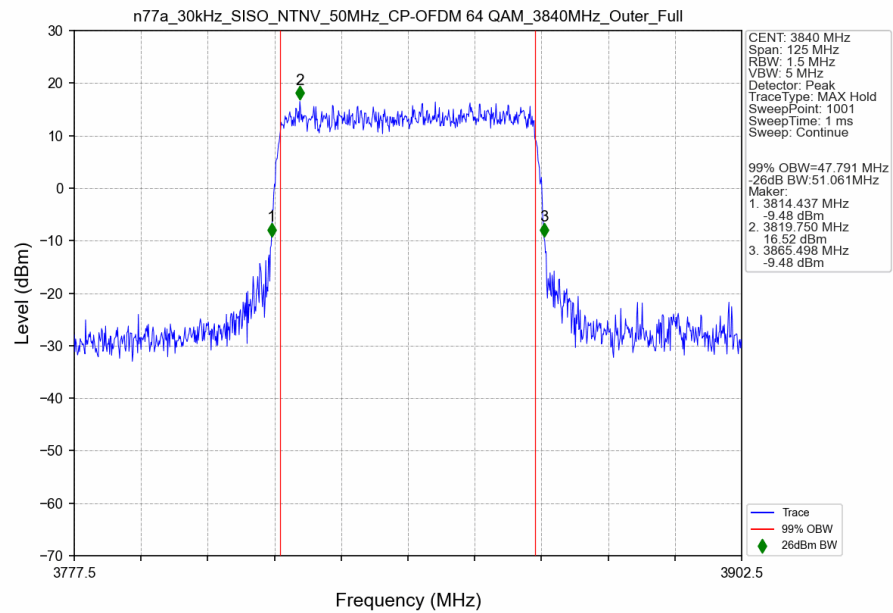
n77a_30kHz_SISO_NTNV_50MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



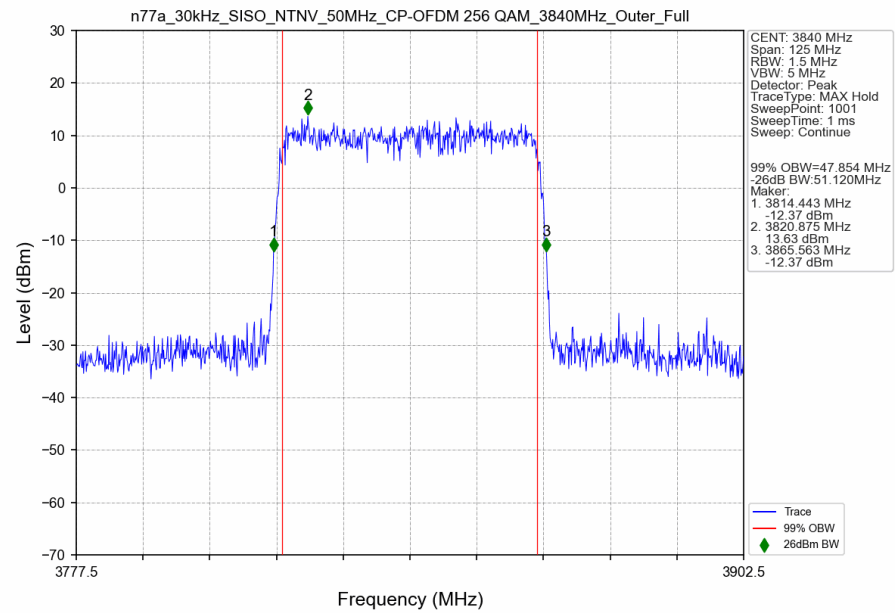
n77a_30kHz_SISO_NTNV_50MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



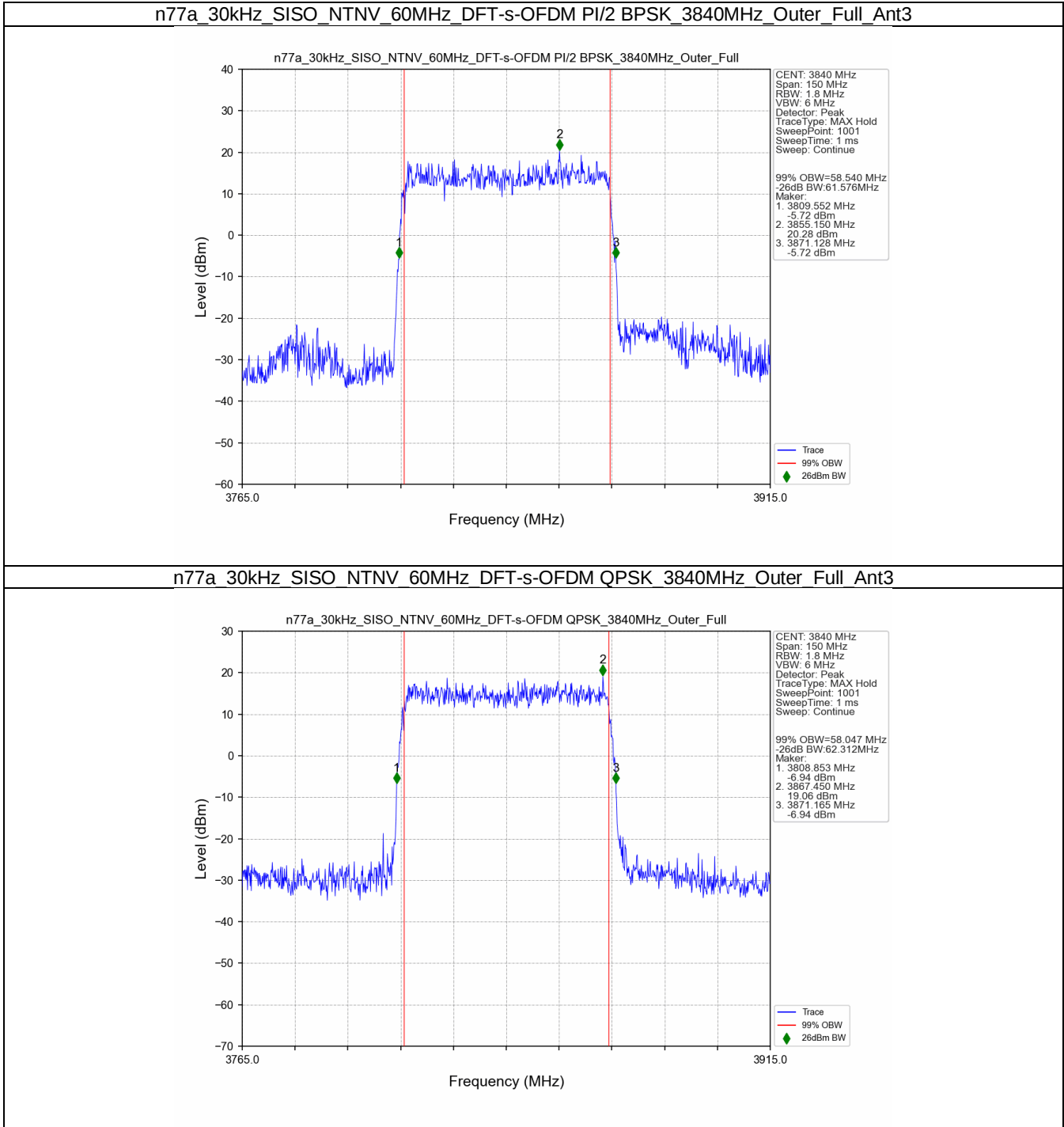
n77a_30kHz_SISO_NTNV_50MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



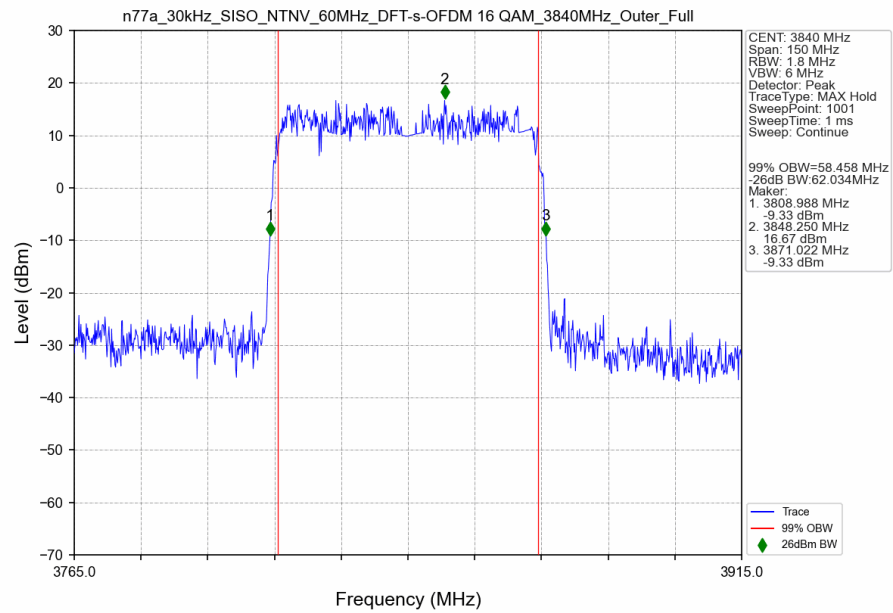
n77a_30kHz_SISO_NTNV_50MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



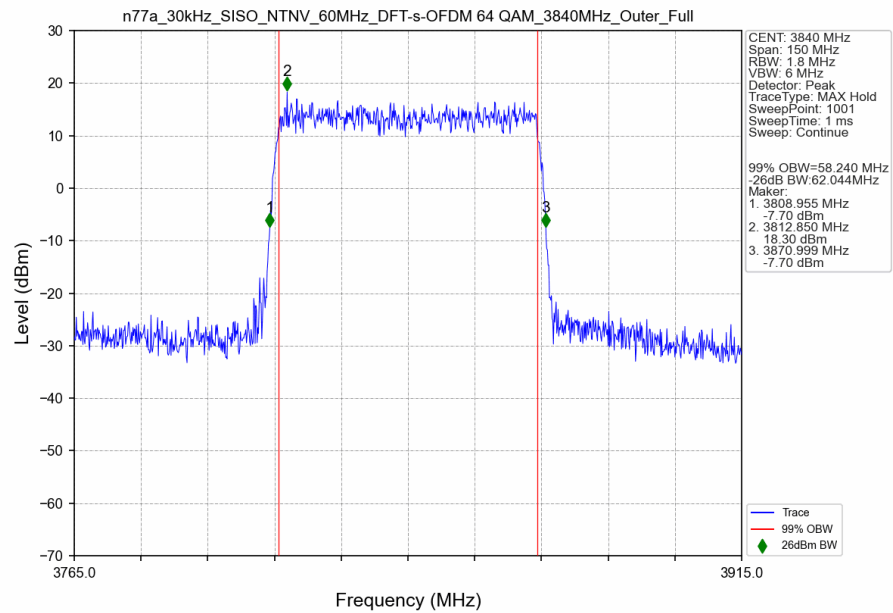
3.2.6 30k_SISO_60MHz_NTNV



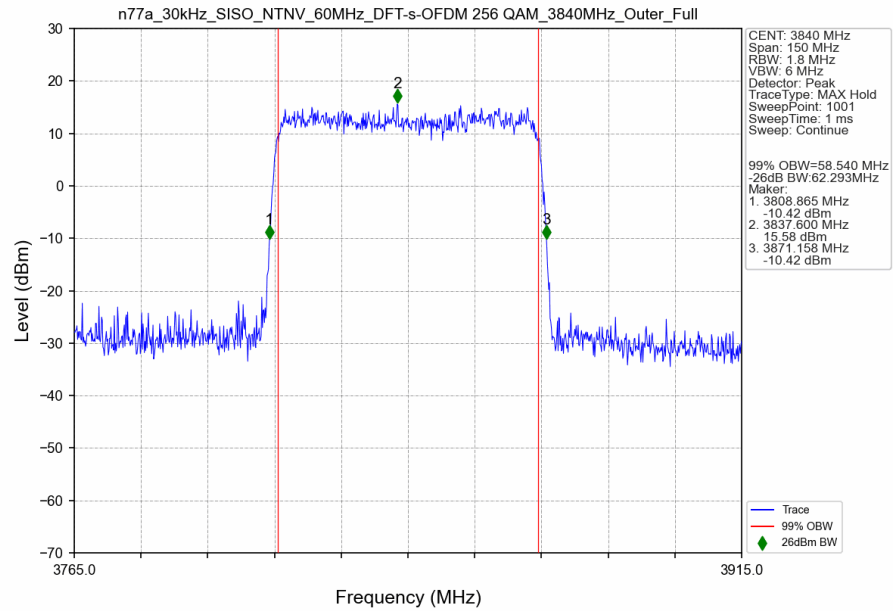
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



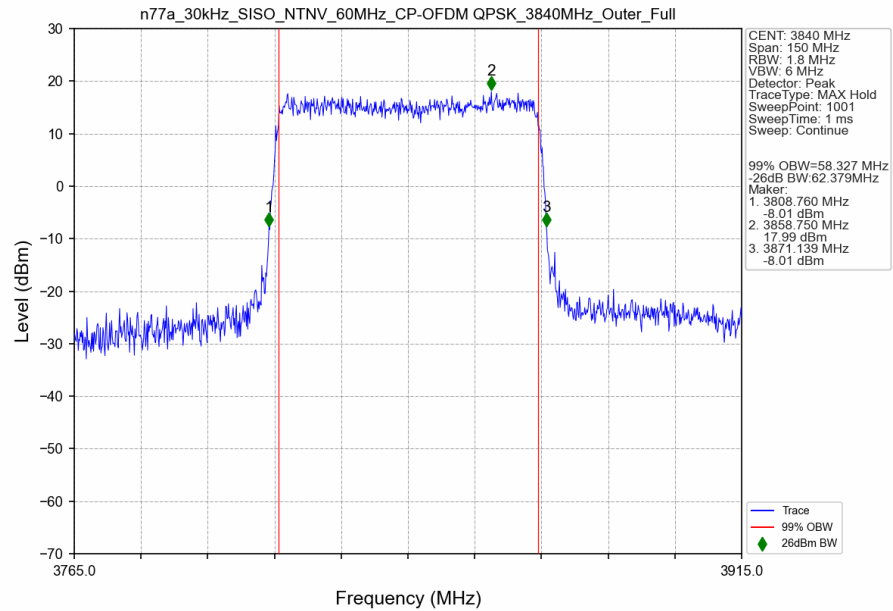
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



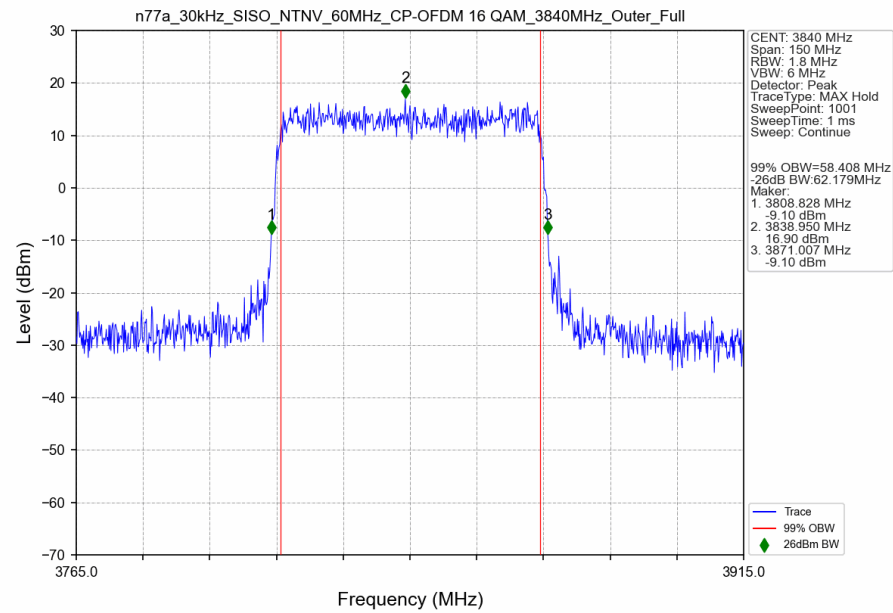
n77a_30kHz_SISO_NTNV_60MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



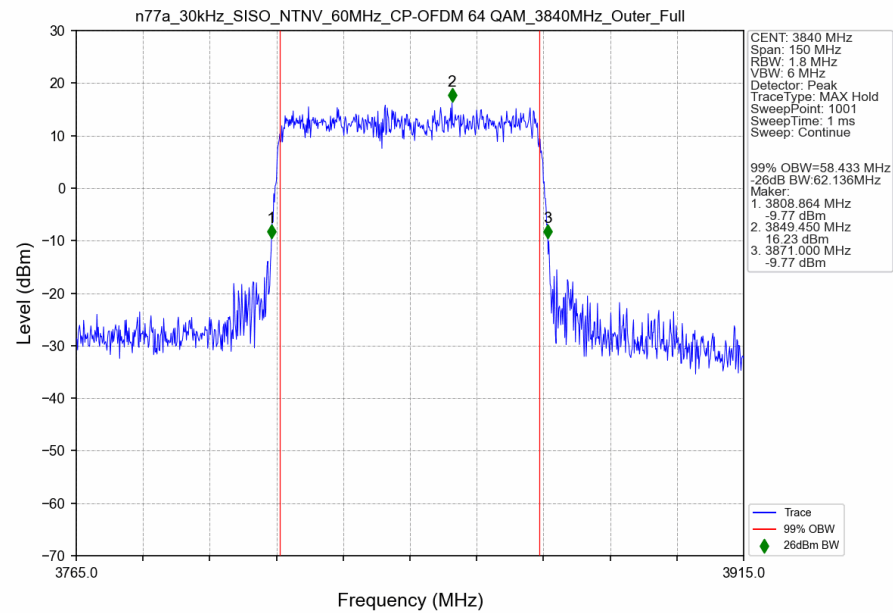
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



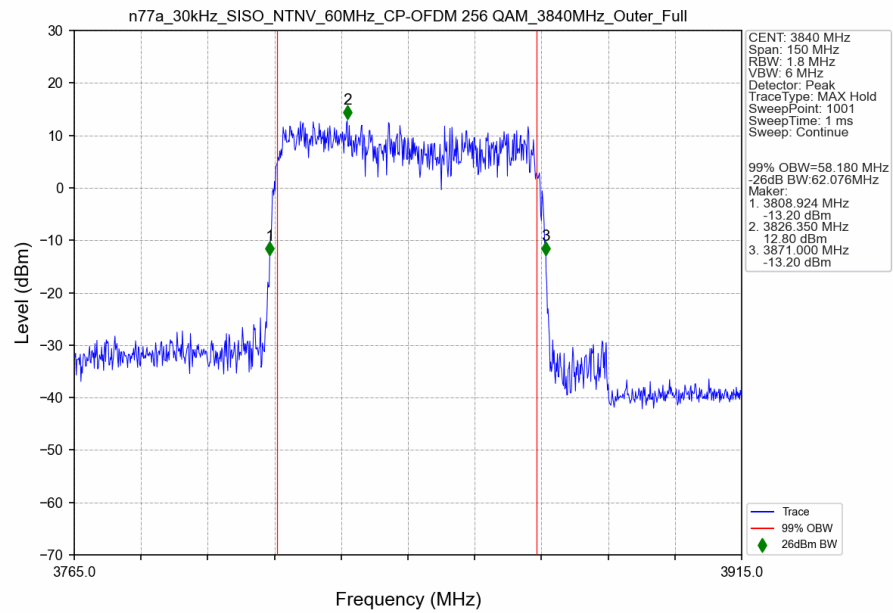
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



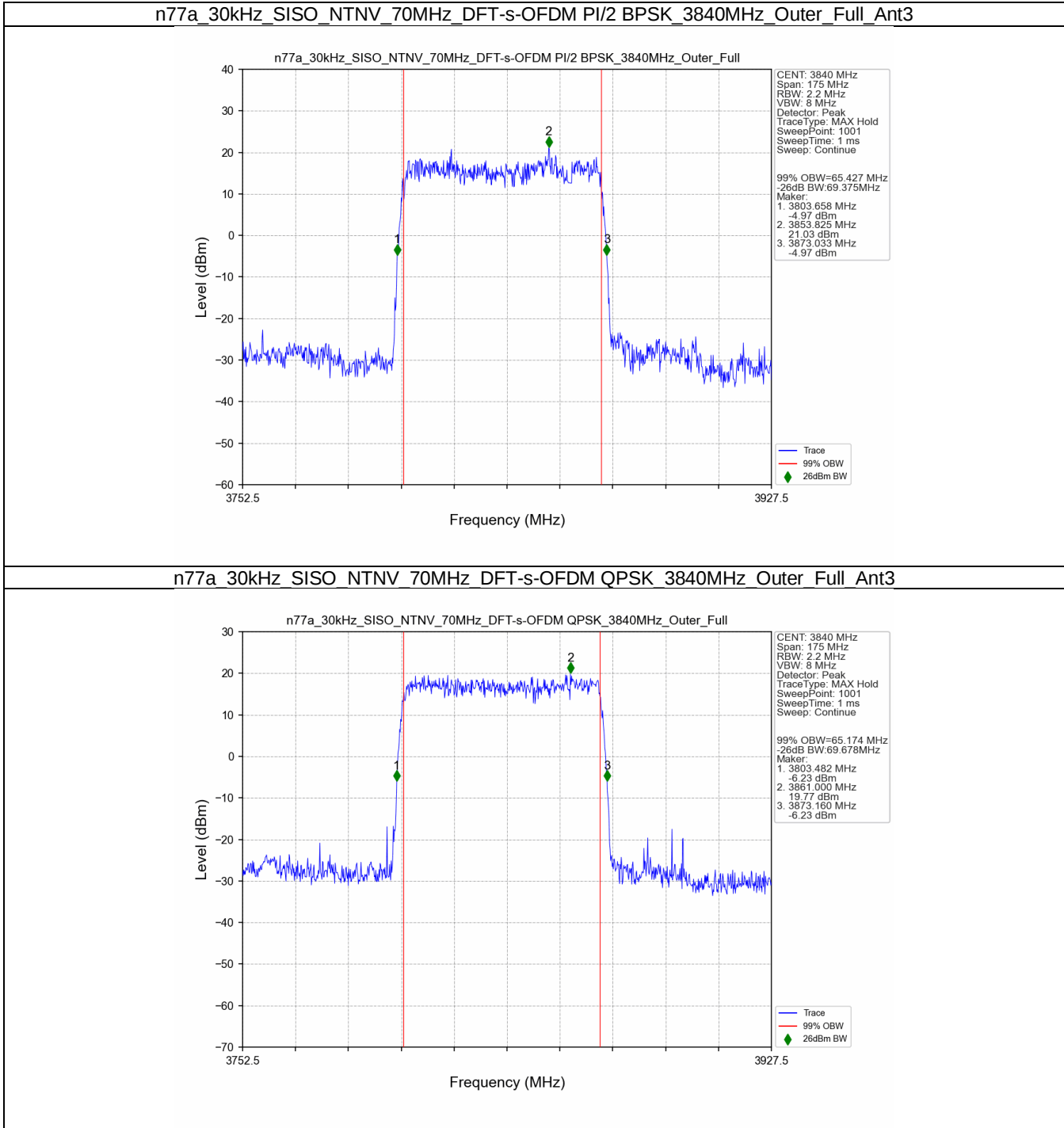
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



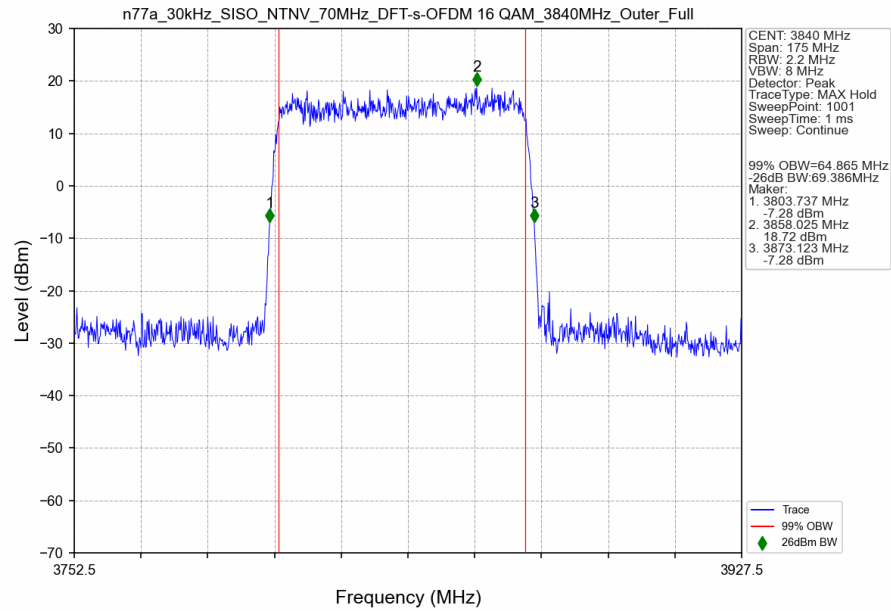
n77a_30kHz_SISO_NTNV_60MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



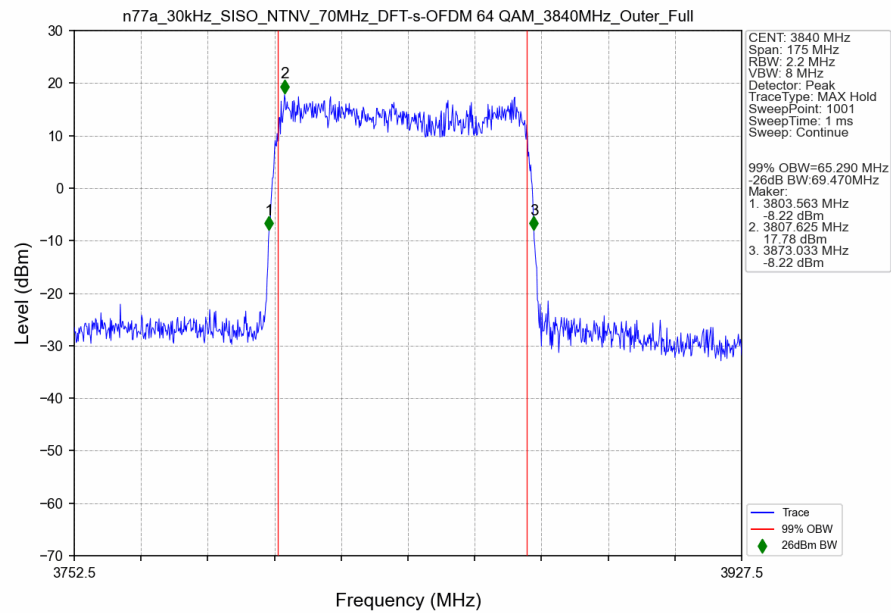
3.2.7 30k_SISO_70MHz_NTNV



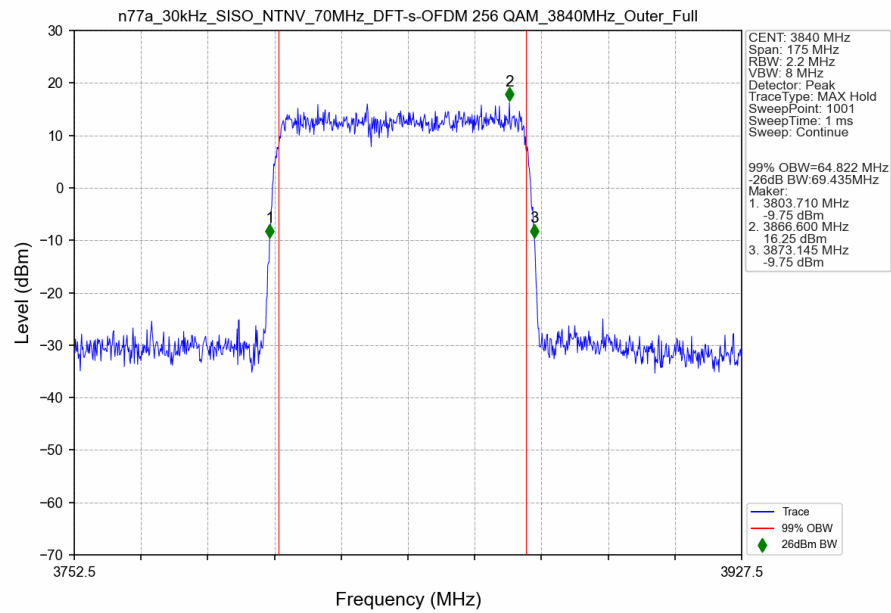
n77a_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



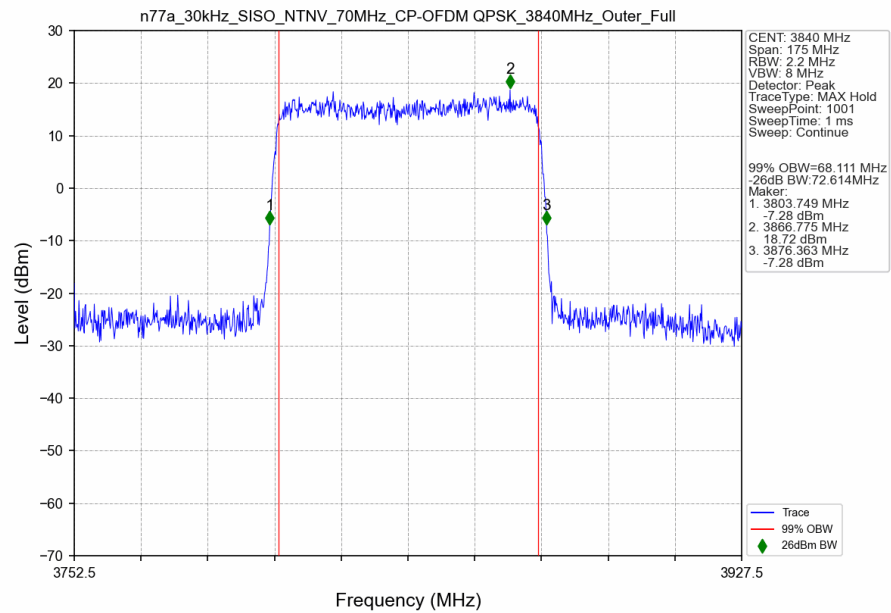
n77a_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



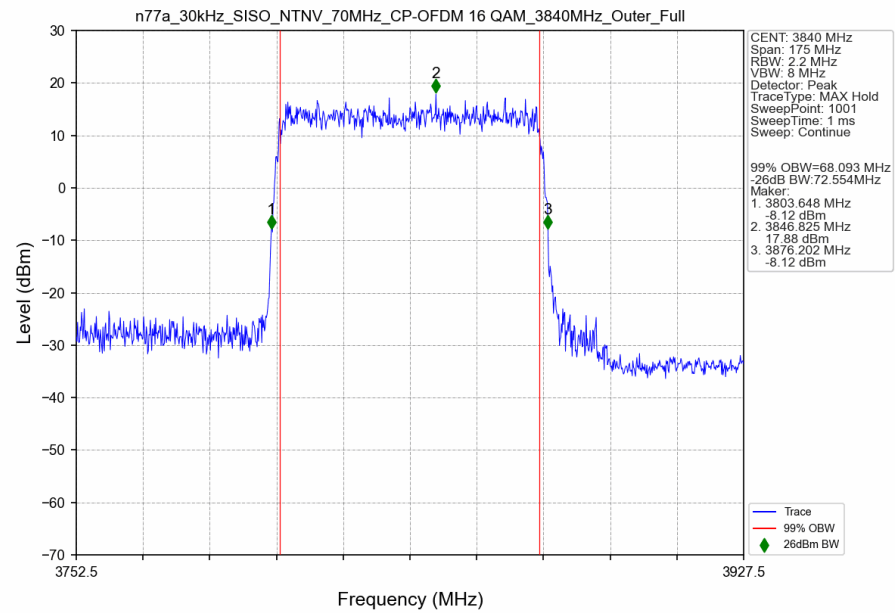
n77a_30kHz_SISO_NTNV_70MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



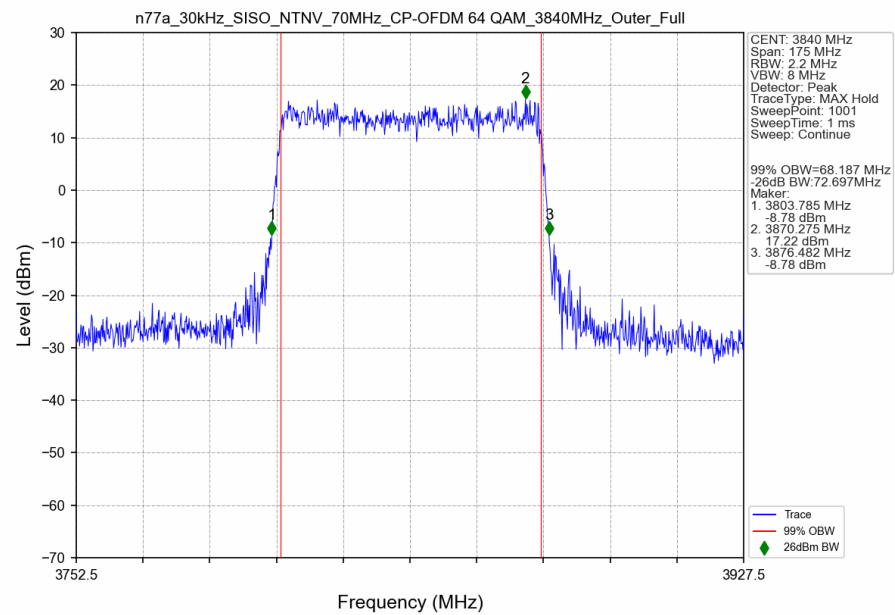
n77a_30kHz_SISO_NTNV_70MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



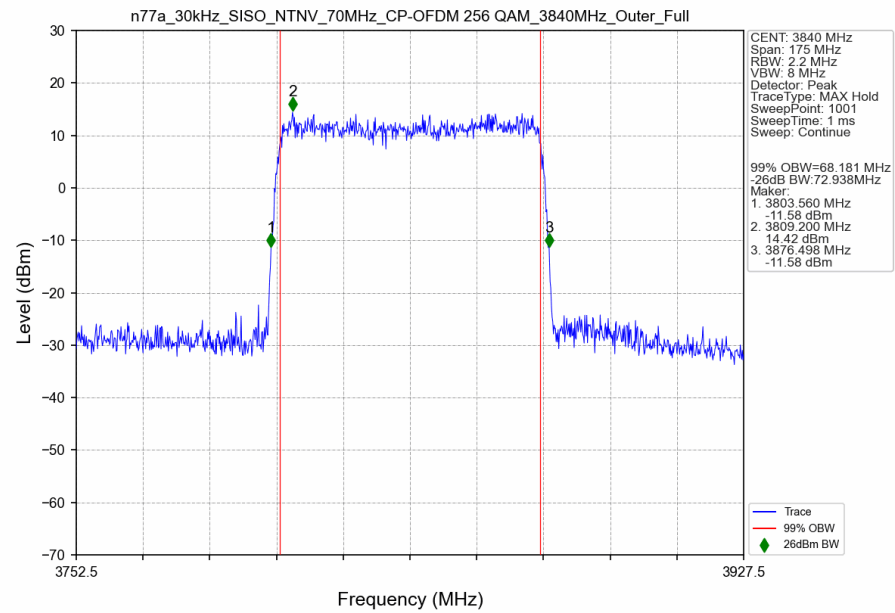
n77a_30kHz_SISO_NTNV_70MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



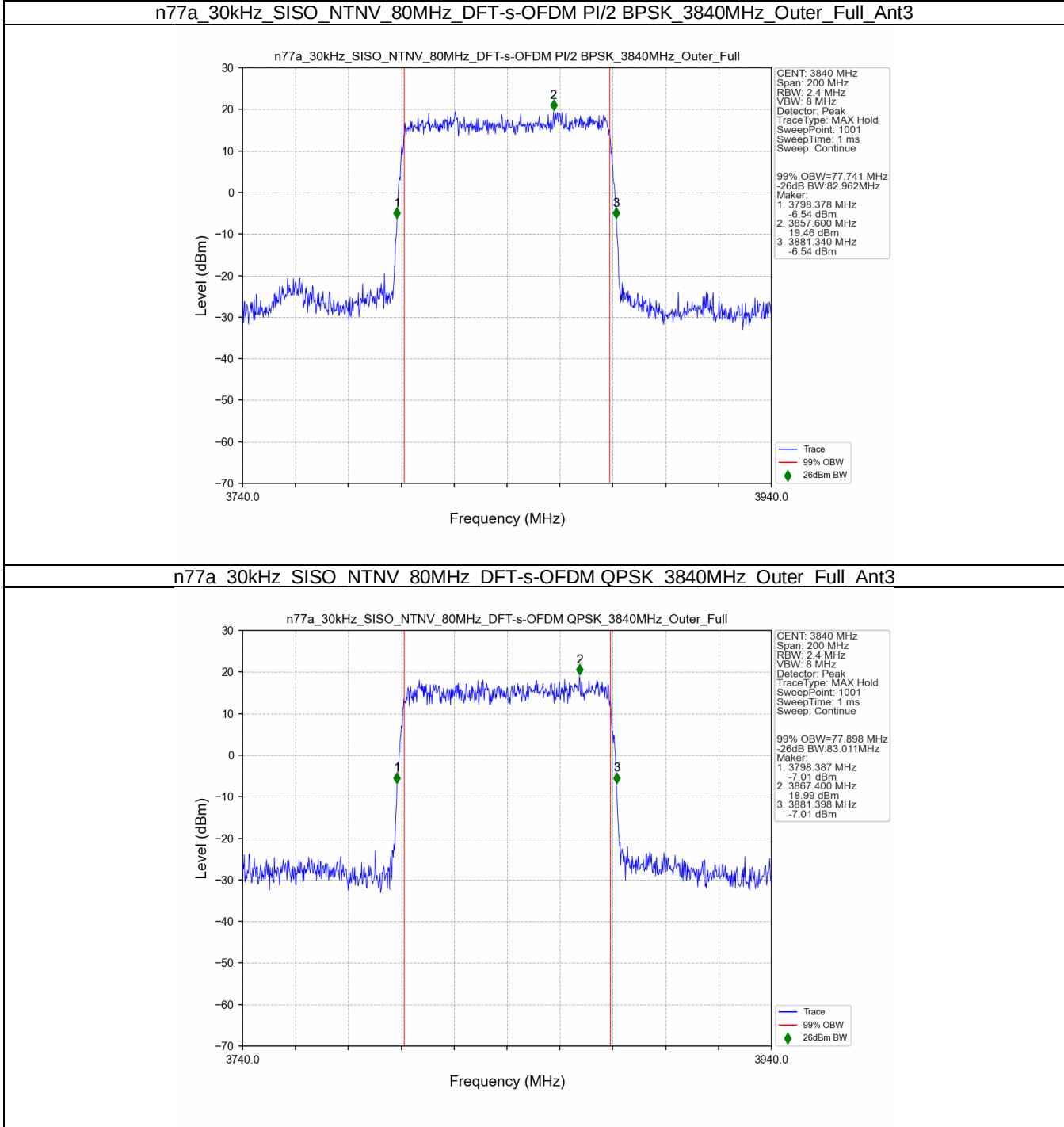
n77a_30kHz_SISO_NTNV_70MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



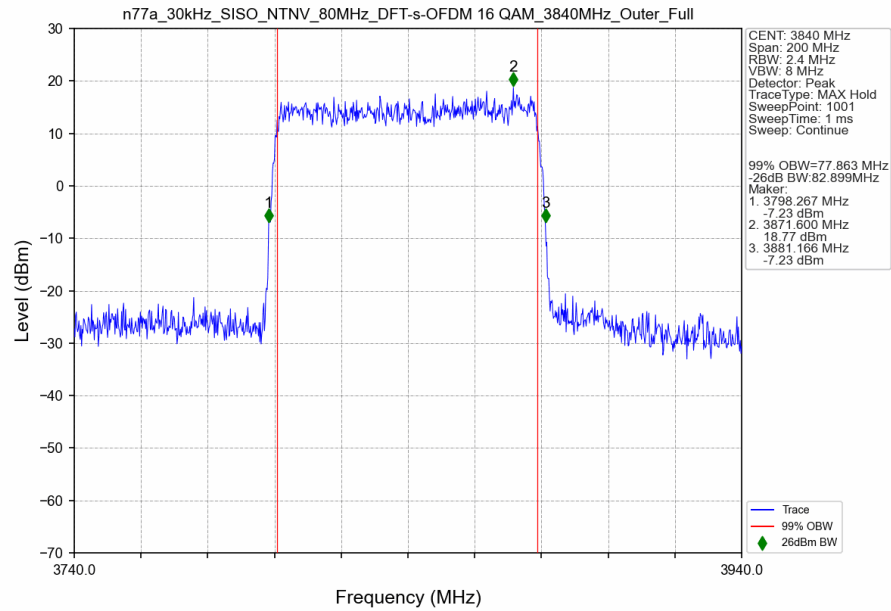
n77a_30kHz_SISO_NTNV_70MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



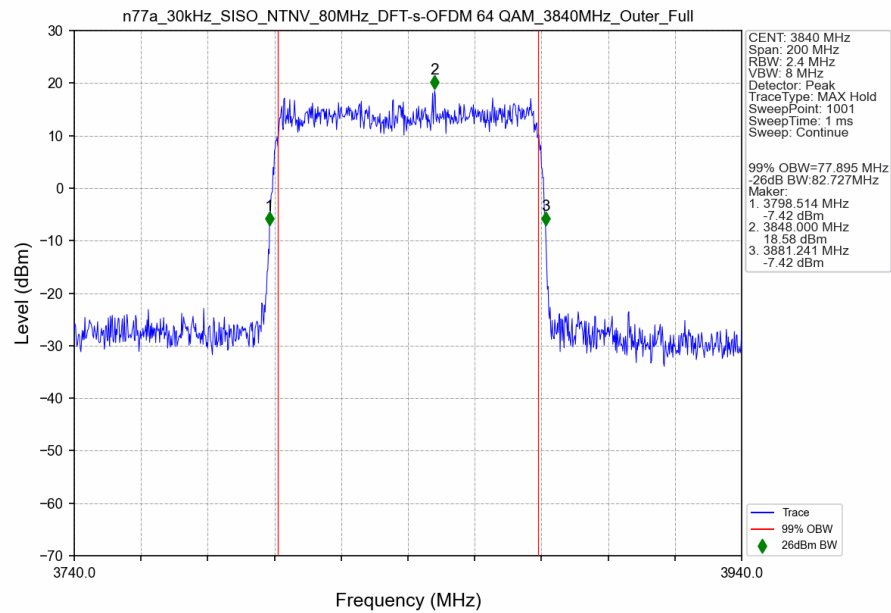
3.2.8 30k_SISO_80MHz_NTNV



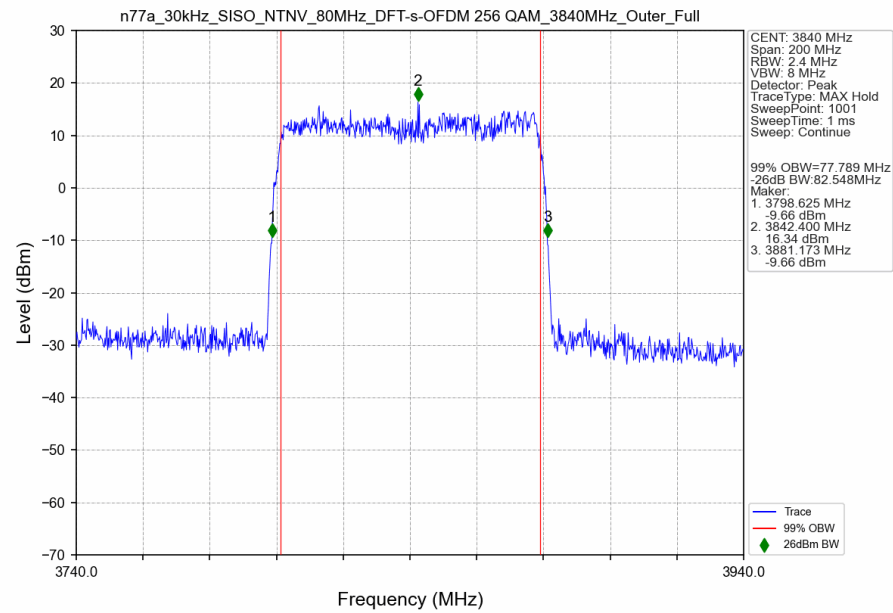
n77a_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



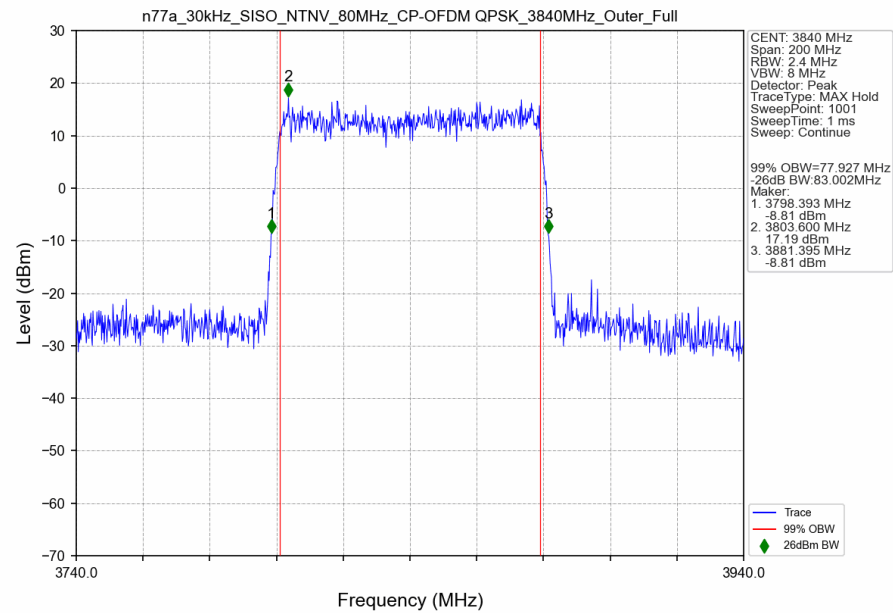
n77a_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



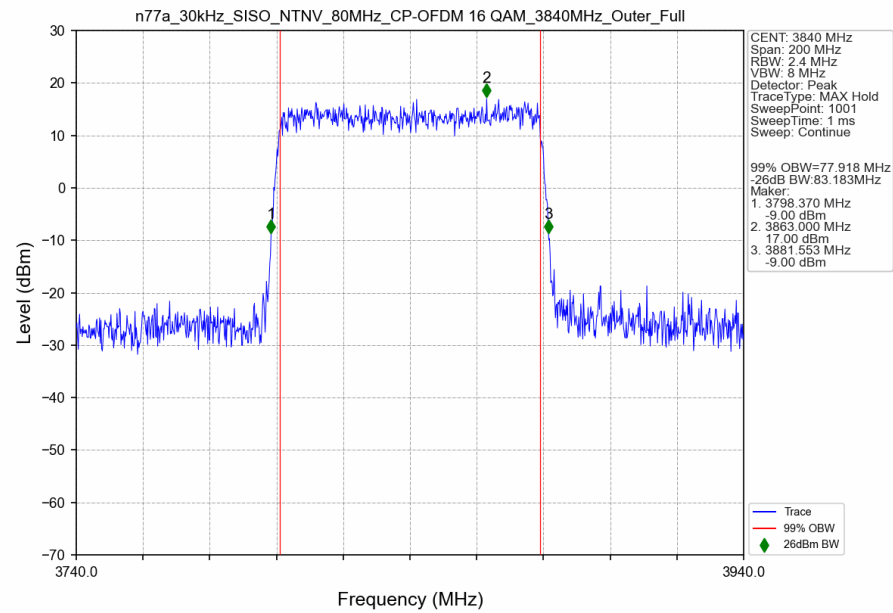
n77a_30kHz_SISO_NTNV_80MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



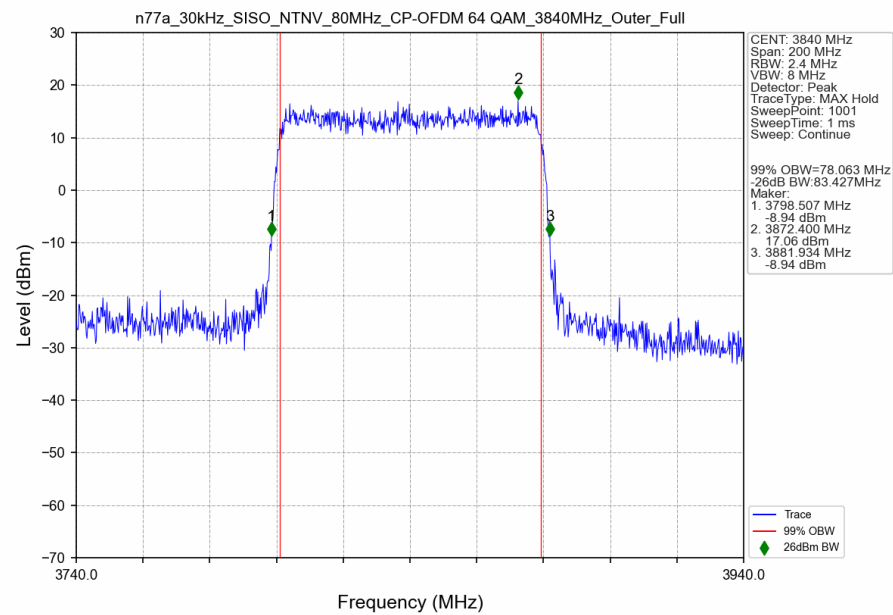
n77a_30kHz_SISO_NTNV_80MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



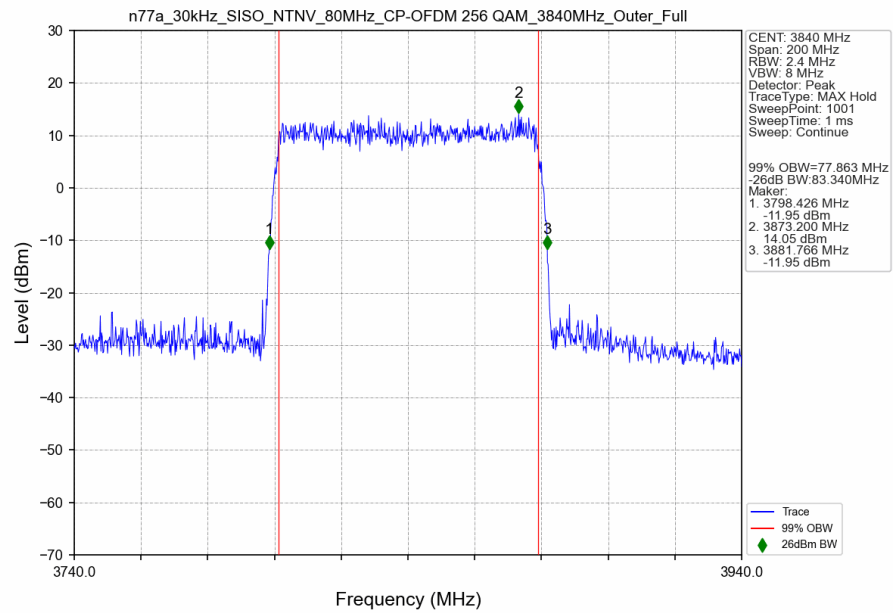
n77a_30kHz_SISO_NTNV_80MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



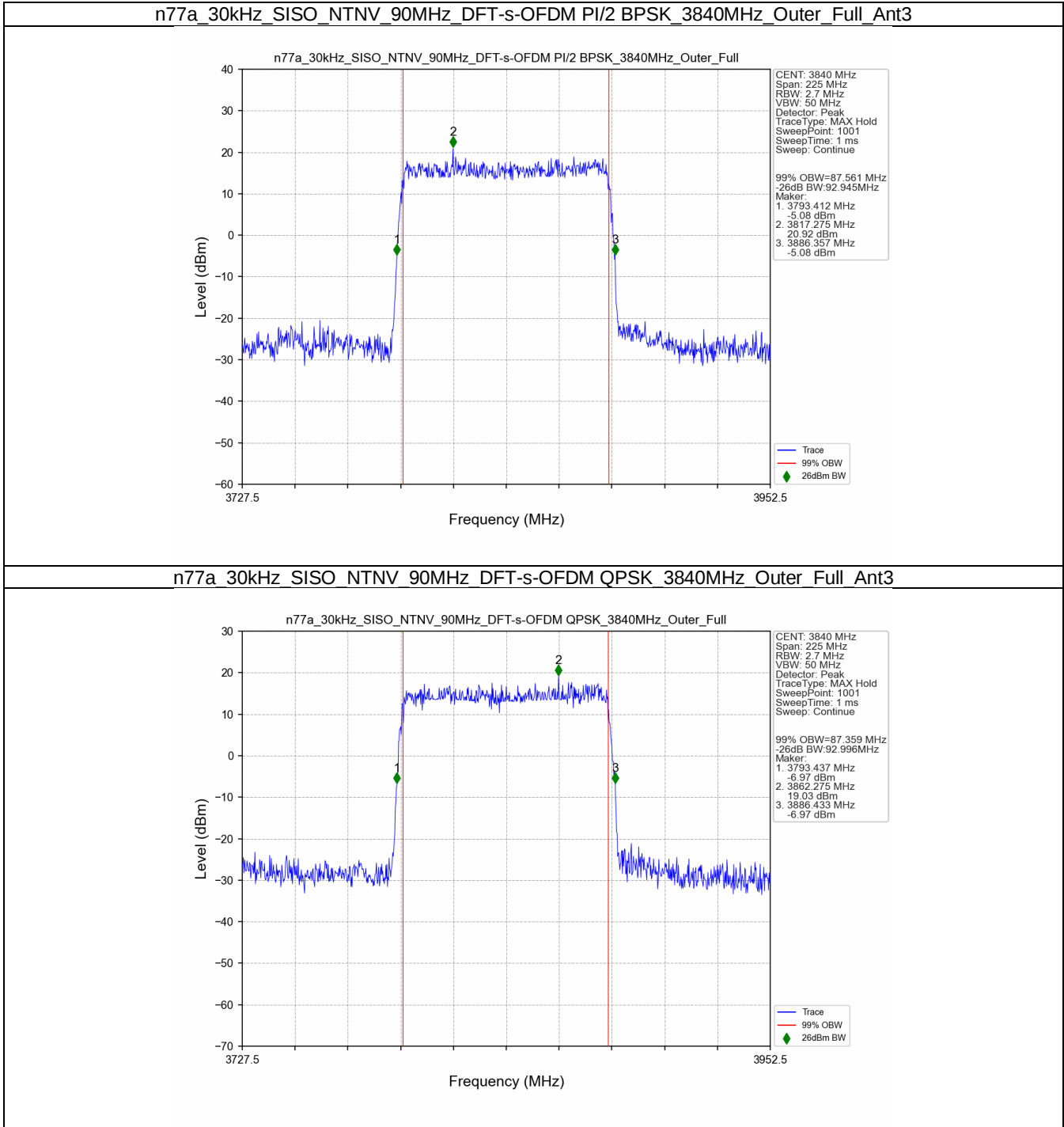
n77a_30kHz_SISO_NTNV_80MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



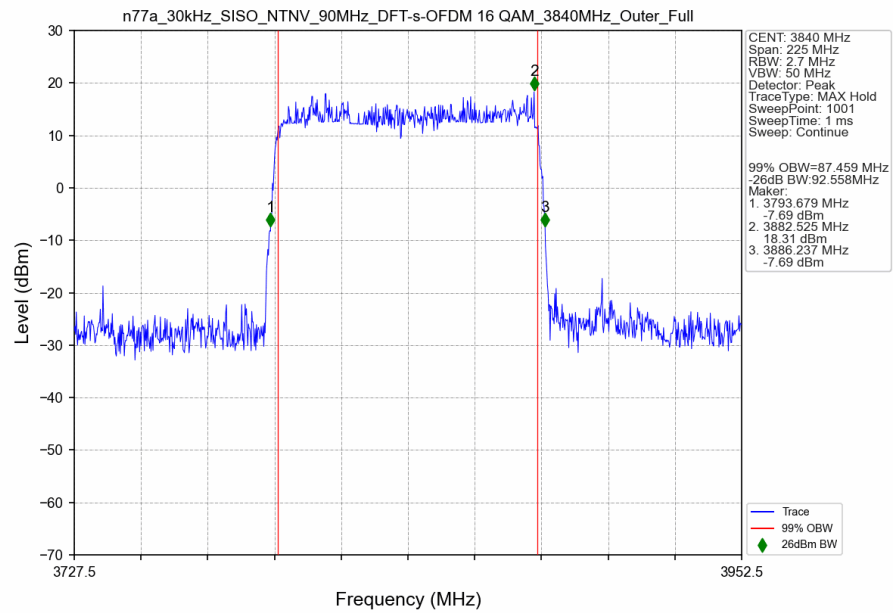
n77a_30kHz_SISO_NTNV_80MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



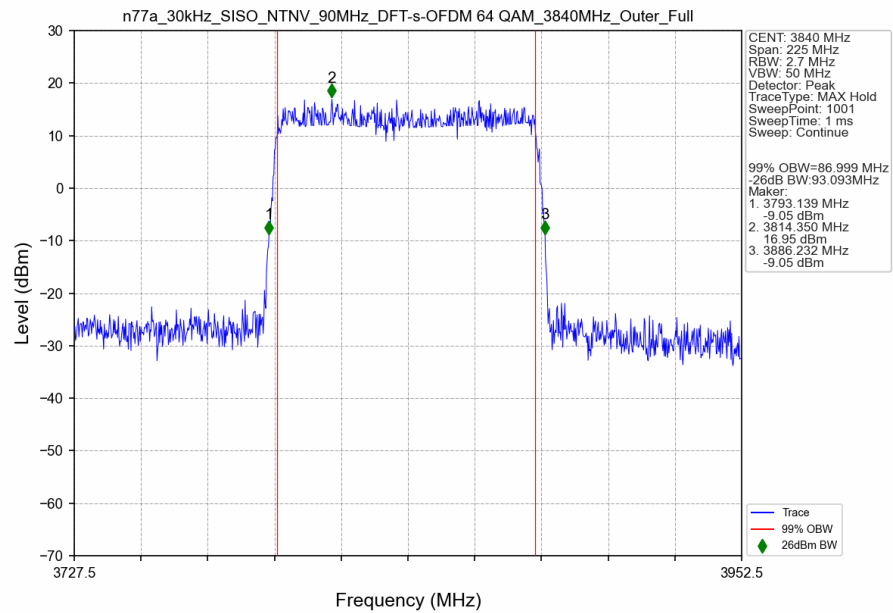
3.2.9 30k_SISO_90MHz_NTNV



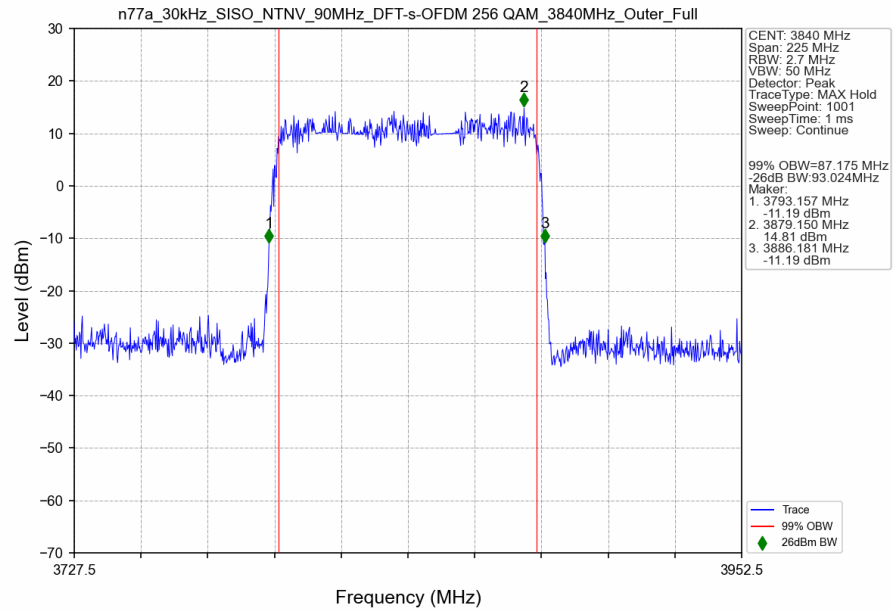
n77a_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



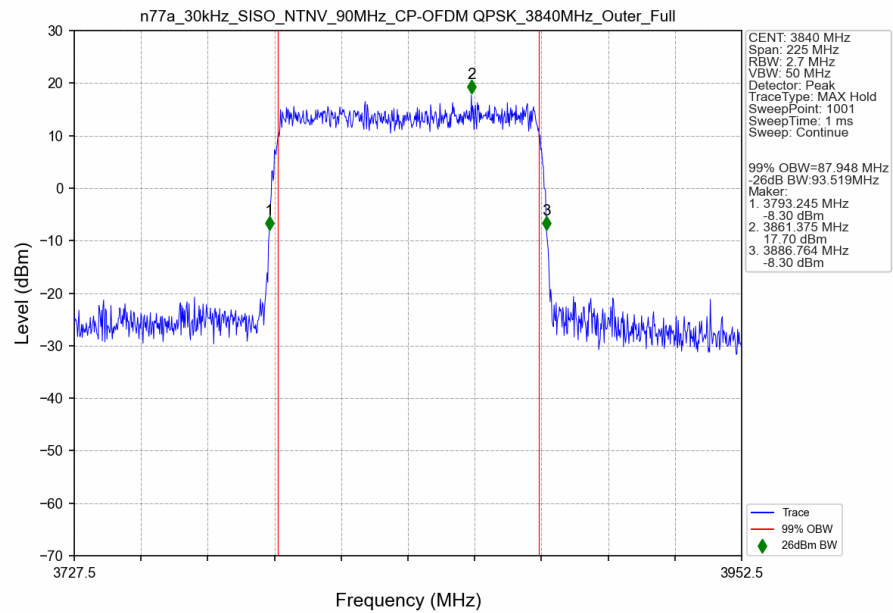
n77a_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



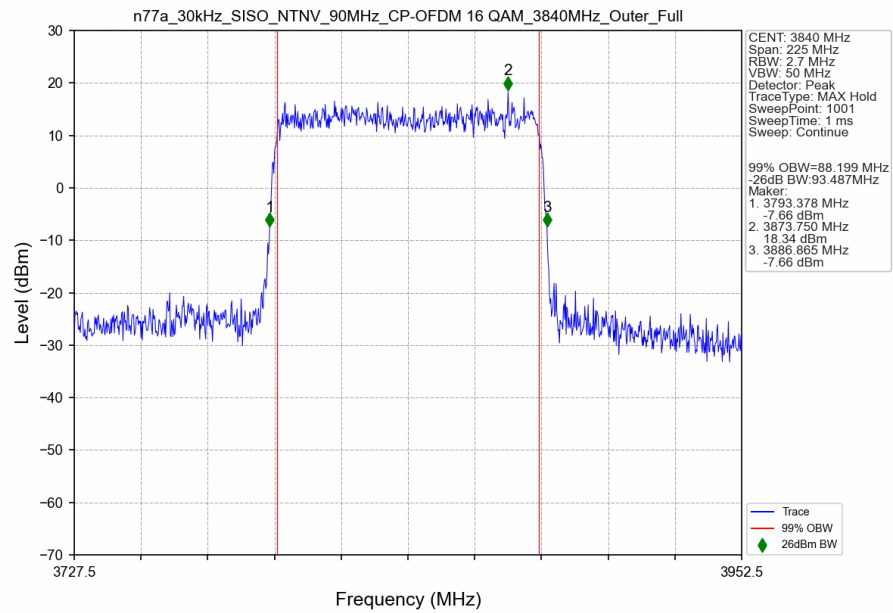
n77a_30kHz_SISO_NTNV_90MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



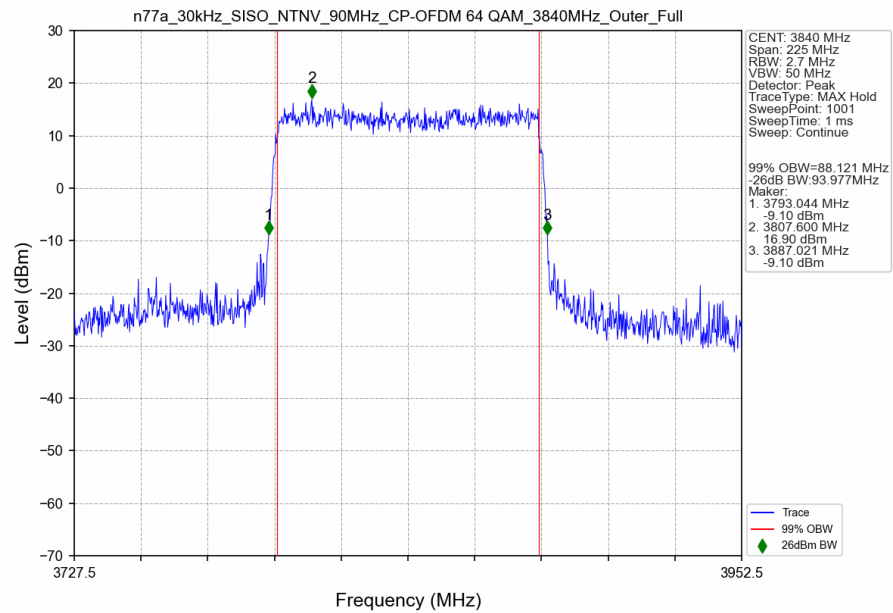
n77a_30kHz_SISO_NTNV_90MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



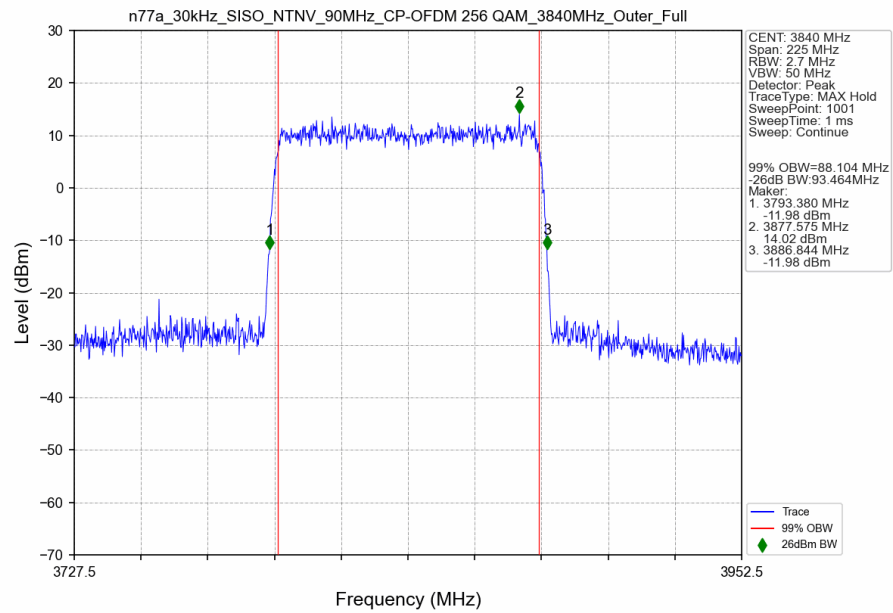
n77a_30kHz_SISO_NTNV_90MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



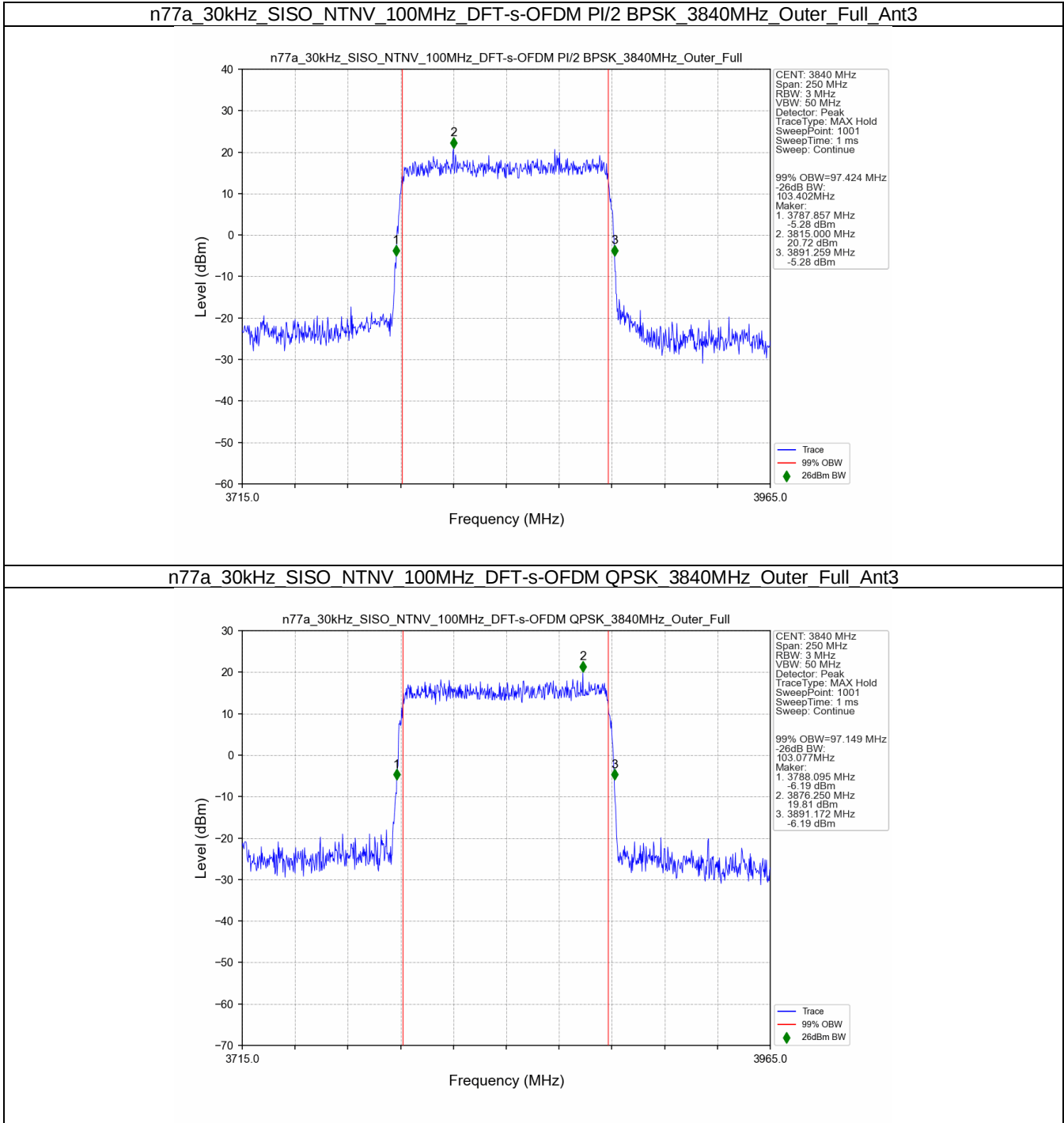
n77a_30kHz_SISO_NTNV_90MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



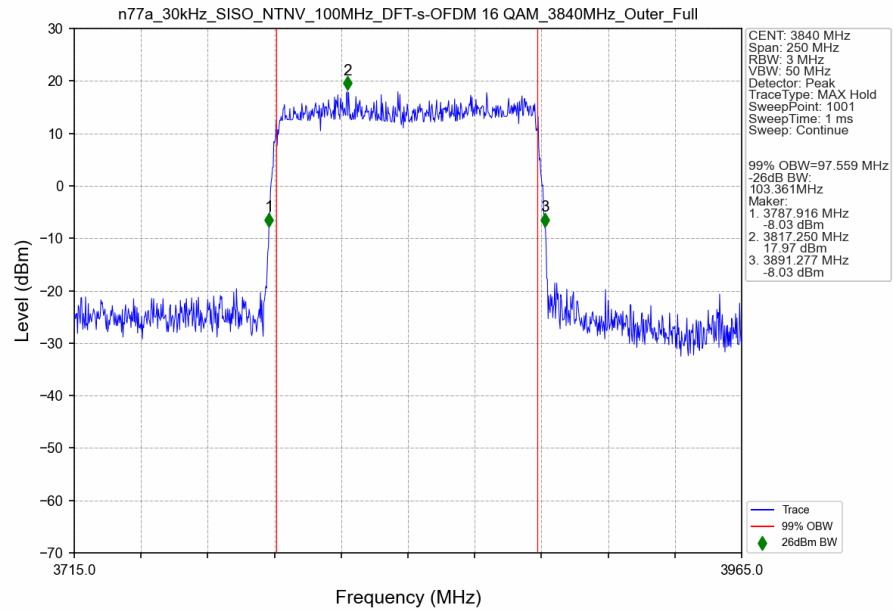
n77a_30kHz_SISO_NTNV_90MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



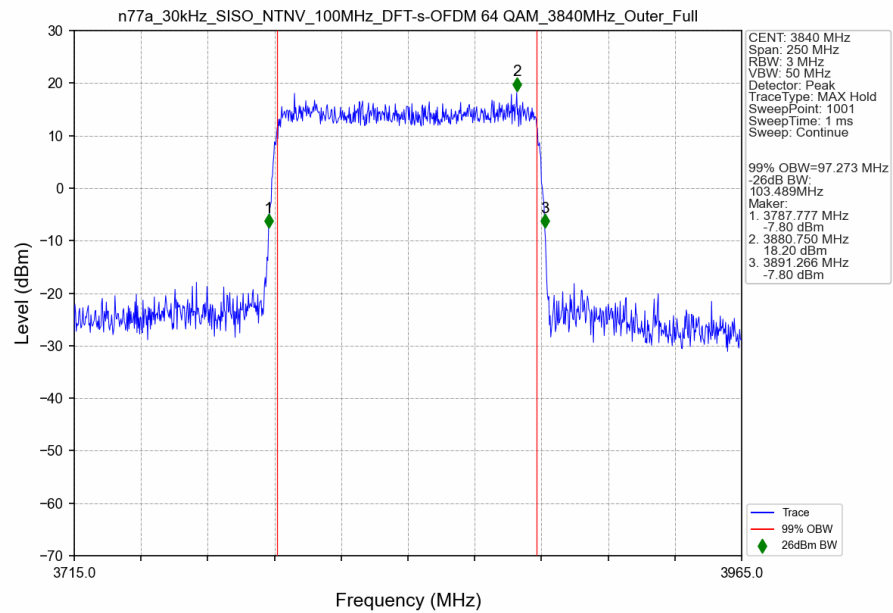
3.2.10 30k_SISO_100MHz_NTNV



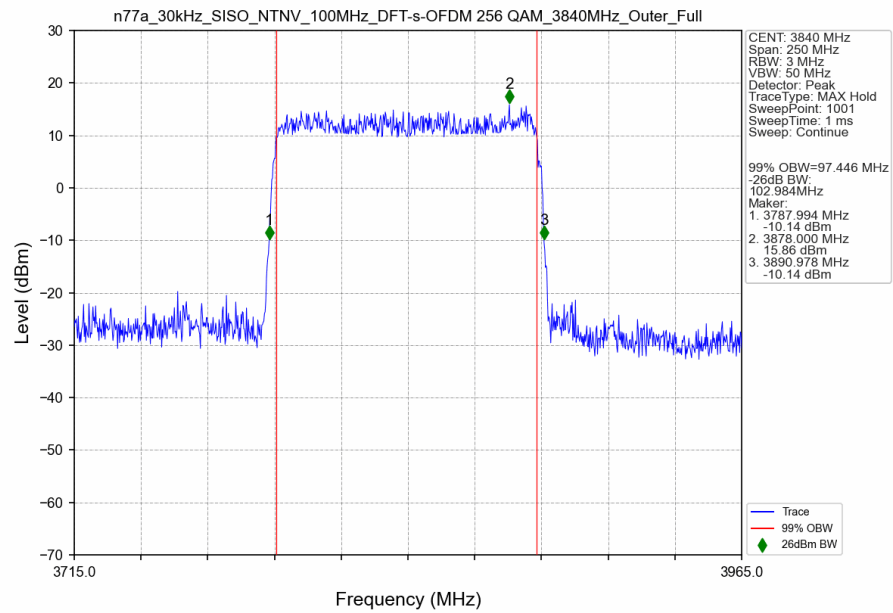
n77a_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



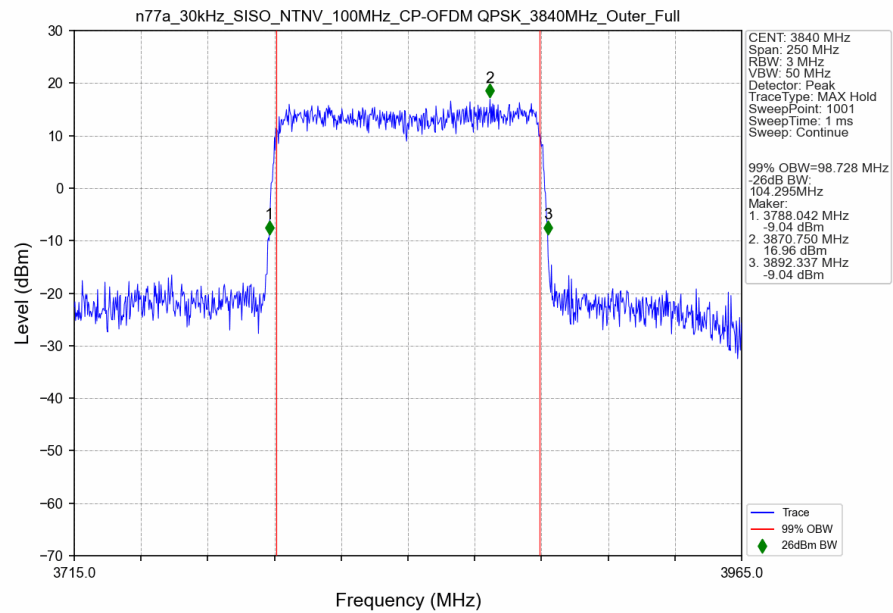
n77a_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



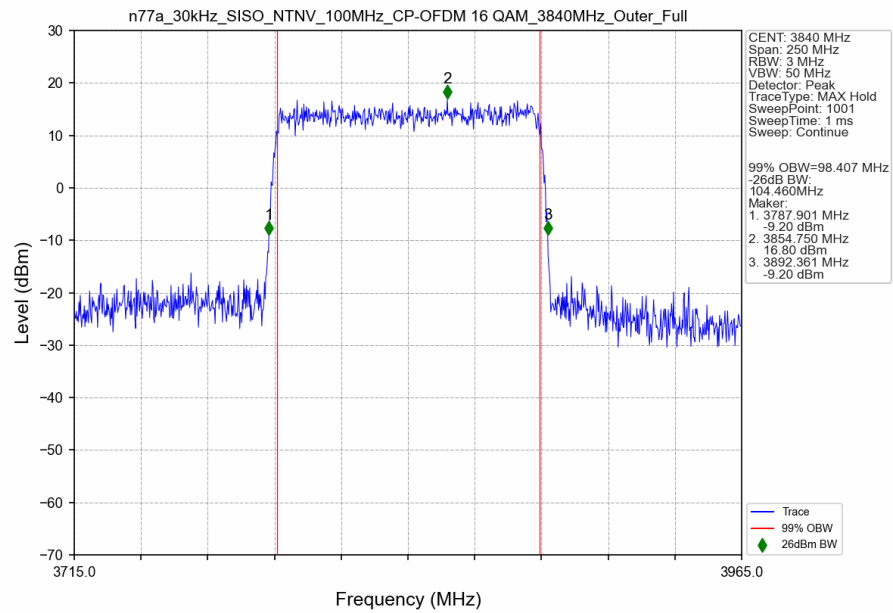
n77a_30kHz_SISO_NTNV_100MHz_DFT-s-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



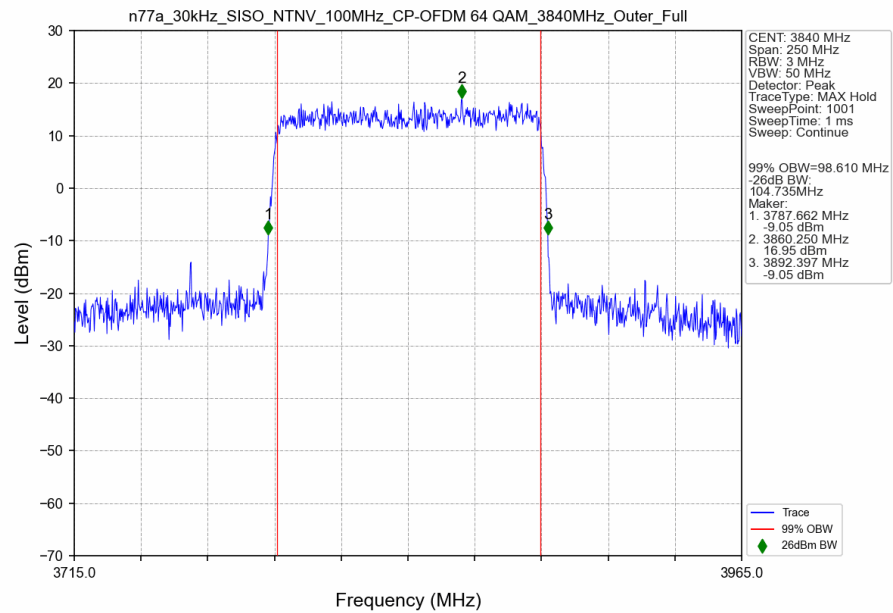
n77a_30kHz_SISO_NTNV_100MHz_CP-OFDM_QPSK_3840MHz_Outer_Full_Ant3



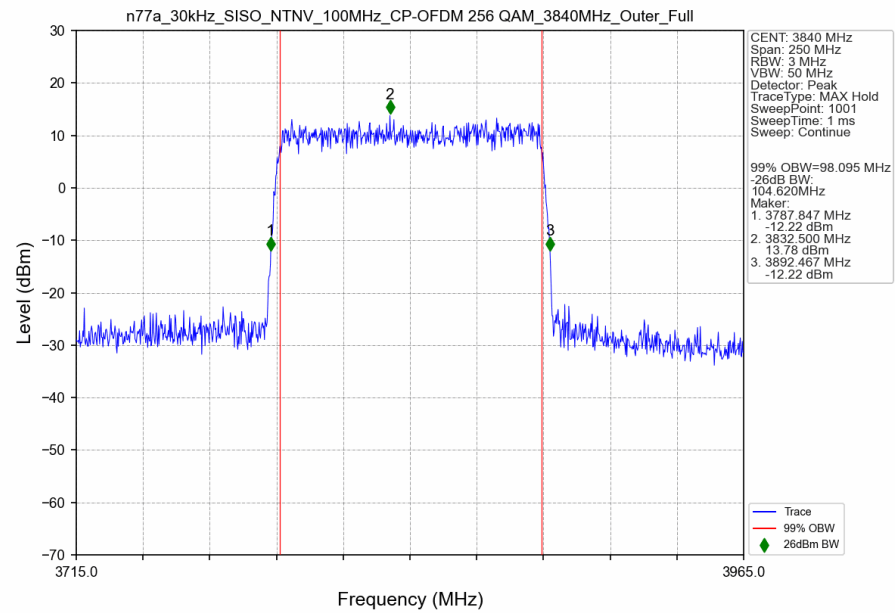
n77a_30kHz_SISO_NTNV_100MHz_CP-OFDM_16_QAM_3840MHz_Outer_Full_Ant3



n77a_30kHz_SISO_NTNV_100MHz_CP-OFDM_64_QAM_3840MHz_Outer_Full_Ant3



n77a_30kHz_SISO_NTNV_100MHz_CP-OFDM_256_QAM_3840MHz_Outer_Full_Ant3



4. Peak-Average Ratio

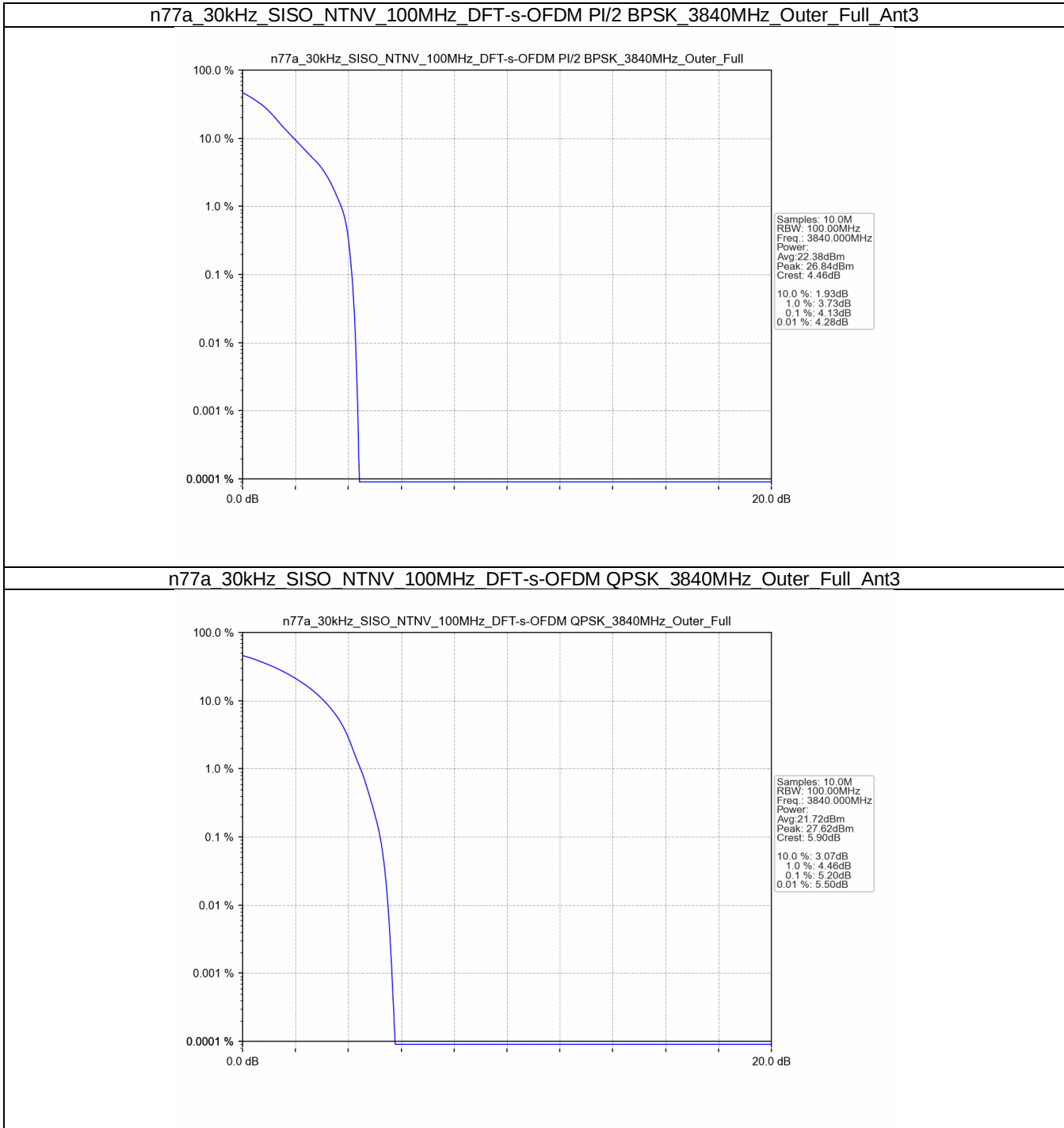
4.1 Test Result

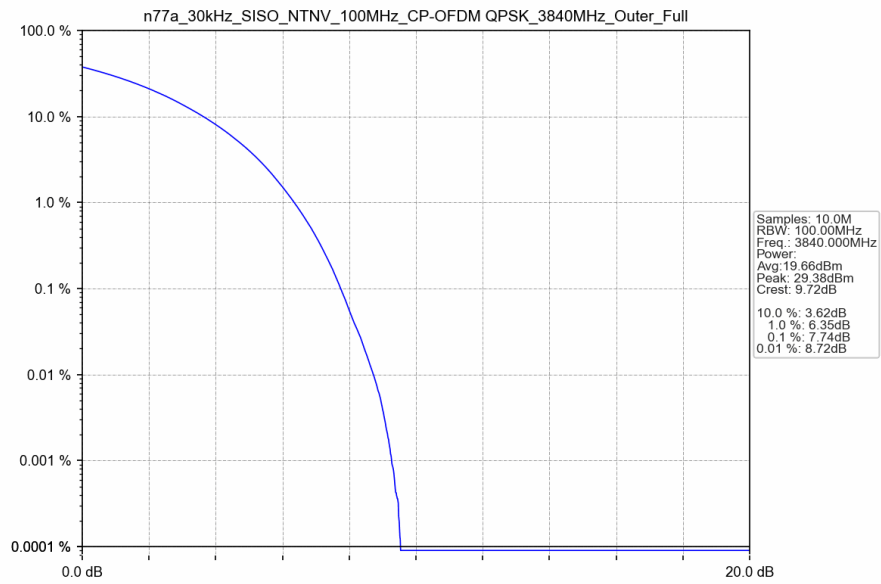
4.1.1 30k_SISO_100MHz_NTNV

5G NR n77a SCS=30kHz SISO 100MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant3	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	3840	Outer_Full	4.13	/	/	<=13	Pass
DFT-s-OFDM QPSK	3840	Outer_Full	5.20	/	/	<=13	Pass
CP-OFDM QPSK	3840	Outer_Full	7.74	/	/	<=13	Pass

4.2 Test Graph

4.2.1 30k_SISO_100MHz_NTNV





5. Spurious Emission

5.1 Test Result

5.1.1 30k_SISO_10MHz_NTNV

5G NR n77a SCS=30kHz SISO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant3	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	3705	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	3840	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	3975	Outer_Full	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM QPSK	3705	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	3840	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	3975	Outer_Full	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
CP-OFDM QPSK	3705	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	3840	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	3975	Outer_Full	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass

5.1.2 30k_SISO_70MHz_NTNV

5G NR n77a SCS=30kHz SISO 70MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant3	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	3735	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
	3840	Edge 1RB Left	Refer To Test Graph				Pass
		Edge 1RB Right	Refer To Test Graph				Pass
	3945	Outer Full	Refer To Test Graph				Pass
DFT-s-OFDM QPSK	3735	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
	3840	Edge 1RB Left	Refer To Test Graph				Pass
		Edge 1RB Right	Refer To Test Graph				Pass
	3945	Outer Full	Refer To Test Graph				Pass
CP-OFDM QPSK	3735	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass
	3840	Edge 1RB Left	Refer To Test Graph				Pass
		Edge 1RB Right	Refer To Test Graph				Pass
	3945	Outer Full	Refer To Test Graph				Pass

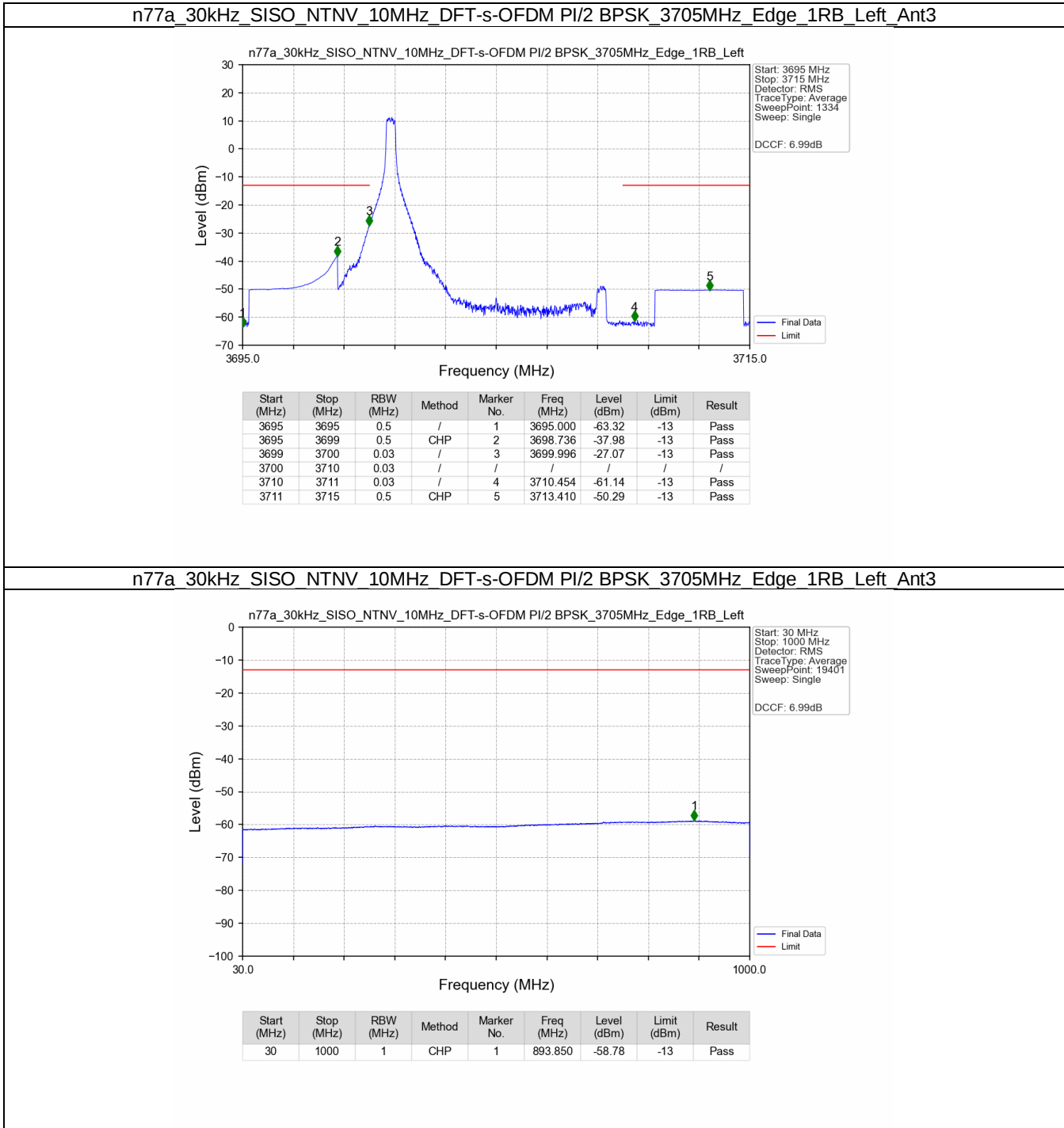
5.1.3 30k_SISO_100MHz_NTNV

5G NR n77a SCS=30kHz SISO 100MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant3	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	3750	Edge 1RB Left	Refer To Test Graph				Pass
		Outer Full	Refer To Test Graph				Pass

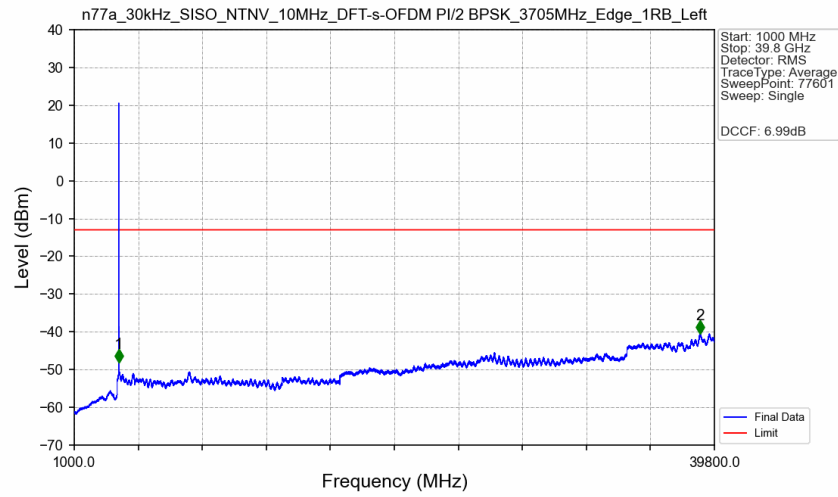
	3840	Edge_1RB_Left	Refer To Test Graph	Pass
	3930	Edge_1RB_Right	Refer To Test Graph	Pass
		Outer_Full	Refer To Test Graph	Pass
DFT-s-OFDM QPSK	3750	Edge_1RB_Left	Refer To Test Graph	Pass
		Outer_Full	Refer To Test Graph	Pass
	3840	Edge_1RB_Left	Refer To Test Graph	Pass
	3930	Edge_1RB_Right	Refer To Test Graph	Pass
		Outer_Full	Refer To Test Graph	Pass
CP-OFDM QPSK	3750	Edge_1RB_Left	Refer To Test Graph	Pass
		Outer_Full	Refer To Test Graph	Pass
	3840	Edge_1RB_Left	Refer To Test Graph	Pass
	3930	Edge_1RB_Right	Refer To Test Graph	Pass
		Outer_Full	Refer To Test Graph	Pass

5.2 Test Graph

5.2.1 30k_SISO_10MHz_NTNV

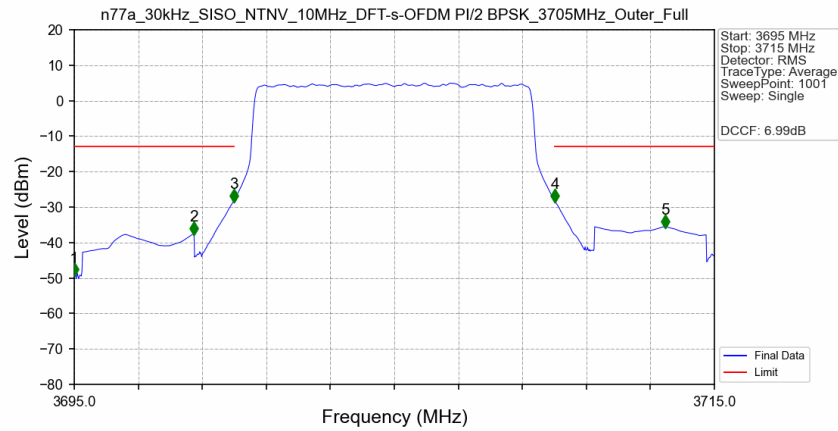


n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3705MHz_Edge_1RB_Left Ant3



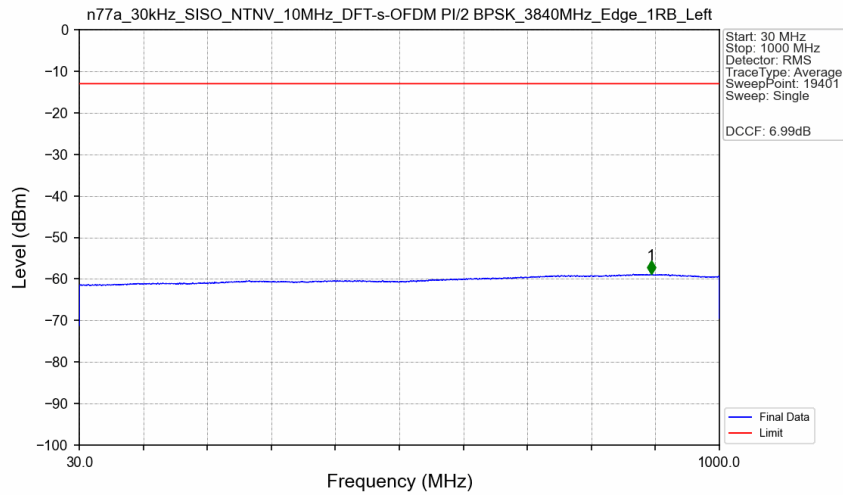
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3695	1	/	1	3693.500	-48.19	-13	Pass
3695	3715	1	/	/	/	/	/	/
3715	39800	1	/	2	38939.500	-40.42	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3705MHz_Outer_Full Ant3



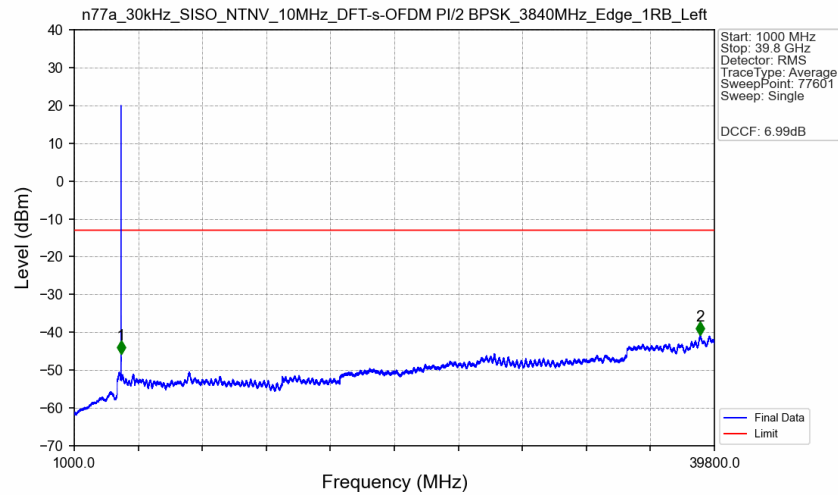
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3695	3695	0.5	/	1	3695.000	-49.12	-13	Pass
3695	3699	0.5	CHP	2	3698.740	-37.50	-13	Pass
3699	3700	0.10242	CHP	3	3699.980	-28.31	-13	Pass
3700	3710	0.10242	CHP	/	/	/	/	/
3710	3711	0.10242	CHP	4	3710.020	-28.31	-13	Pass
3711	3715	0.5	CHP	5	3713.460	-35.54	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3840MHz_Edge_1RB_Left_Ant3



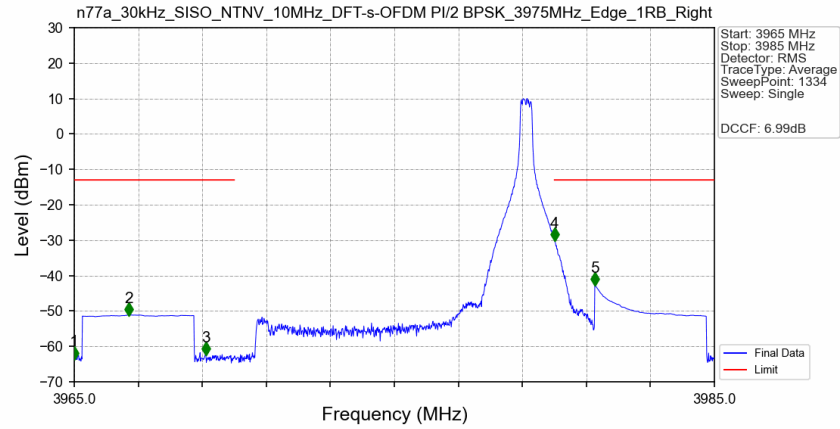
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	896.500	-58.82	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3840MHz_Edge_1RB_Left_Ant3



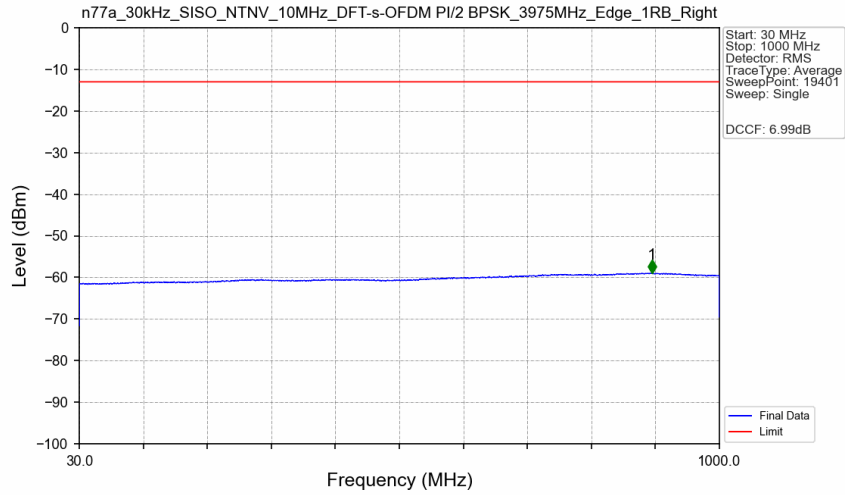
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3830	1	/	1	3828.500	-45.61	-13	Pass
3830	3850	1	/	/	/	/	/	/
3850	39800	1	/	2	38930.500	-40.74	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3975MHz_Edge_1RB_Right_Ant3



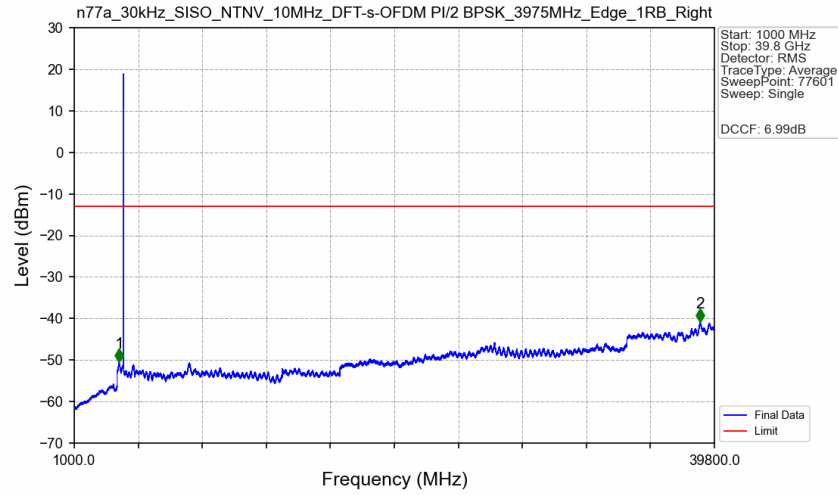
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3965	3965	0.5	/	1	3965.000	-63.37	-13	Pass
3965	3969	0.5	CHP	2	3966.710	-51.10	-13	Pass
3969	3970	0.03	/	3	3969.111	-62.26	-13	Pass
3970	3980	0.03	/	/	/	/	/	/
3980	3981	0.03	/	4	3980.004	-29.95	-13	Pass
3981	3985	0.5	CHP	5	3981.264	-42.54	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3975MHz_Edge_1RB_Right_Ant3



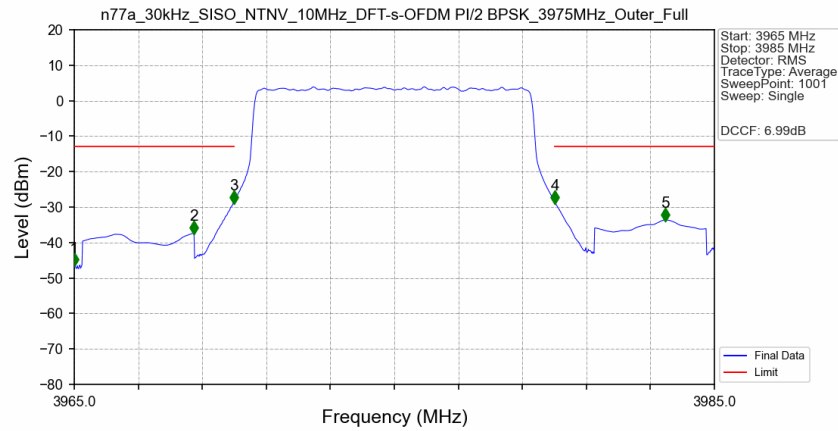
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	897.400	-58.94	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3975MHz_Edge_1RB_Right_Ant3



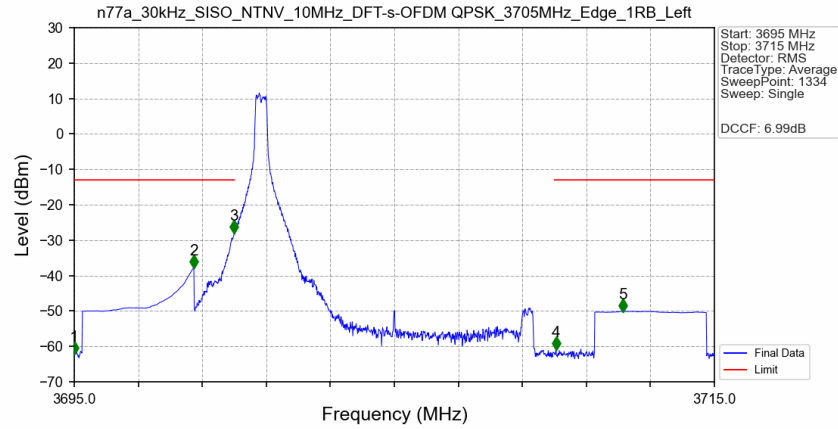
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3965	1	/	1	3725.500	-50.48	-13	Pass
3965	3985	1	/	/	/	/	/	/
3985	39800	1	/	2	38946.000	-40.85	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_PI/2_BPSK_3975MHz_Outer_Full_Ant3



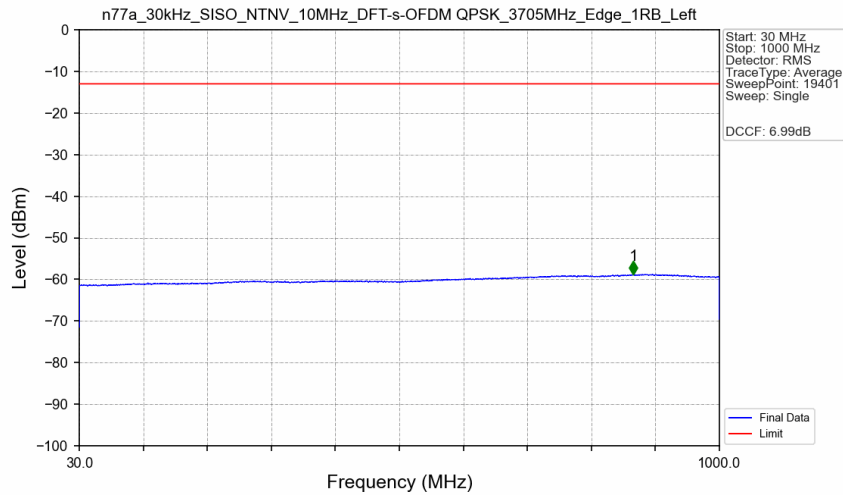
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3965	3965	0.5	/	1	3965.000	-46.41	-13	Pass
3965	3969	0.5	CHP	2	3968.740	-37.27	-13	Pass
3969	3970	0.10269	CHP	3	3969.980	-28.71	-13	Pass
3970	3980	0.10269	CHP	/	/	/	/	/
3980	3981	0.10269	CHP	4	3980.020	-28.72	-13	Pass
3981	3985	0.5	CHP	5	3983.460	-33.64	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_QPSK_3705MHz_Edge_1RB_Left_Ant3



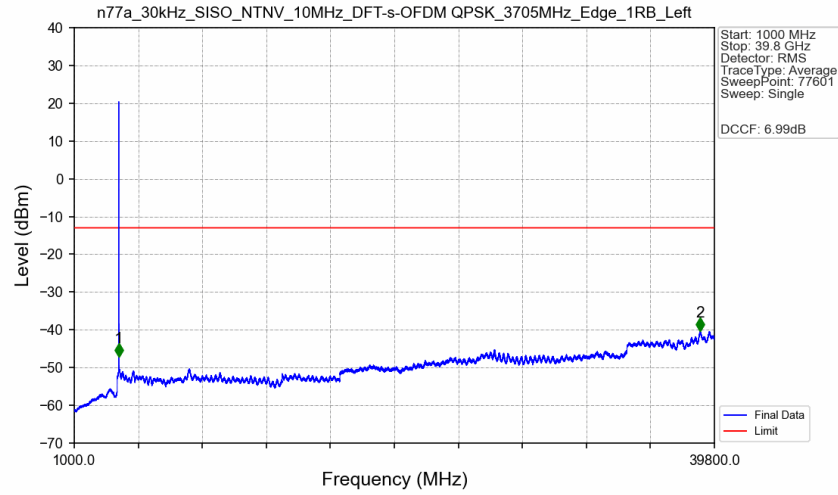
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3695	3695	0.5	/	1	3695.000	-61.93	-13	Pass
3695	3699	0.5	CHP	2	3698.736	-37.66	-13	Pass
3699	3700	0.03	/	3	3699.996	-27.80	-13	Pass
3700	3710	0.03	/	/	/	/	/	/
3710	3711	0.03	/	4	3710.049	-60.66	-13	Pass
3711	3715	0.5	CHP	5	3712.134	-50.09	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_QPSK_3705MHz_Edge_1RB_Left_Ant3



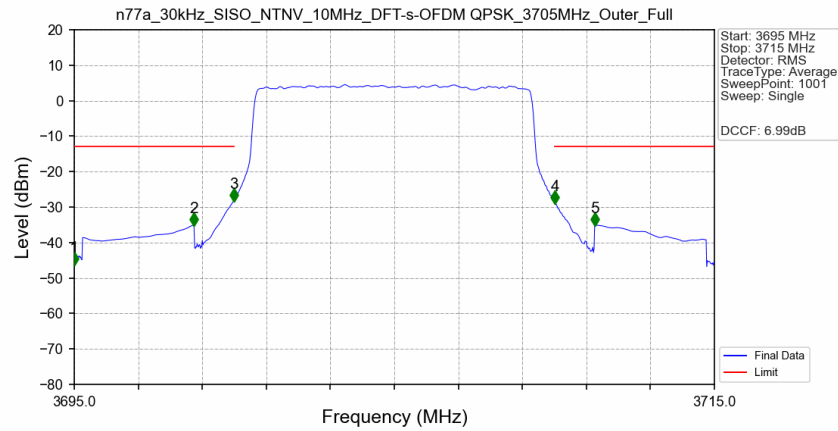
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	1000	1	CHP	1	869.550	-58.76	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_QPSK_3705MHz_Edge_1RB_Left_Ant3



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	3695	1	/	1	3693.000	-47.05	-13	Pass
3695	3715	1	/	/	/	/	/	/
3715	39800	1	/	2	38931.500	-40.35	-13	Pass

n77a_30kHz_SISO_NTNV_10MHz_DFT-s-OFDM_QPSK_3705MHz_Outer_Full_Ant3



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
3695	3695	0.5	/	1	3695.000	-46.14	-13	Pass
3695	3699	0.5	CHP	2	3698.740	-34.98	-13	Pass
3699	3700	0.10269	CHP	3	3699.980	-28.16	-13	Pass
3700	3710	0.10269	CHP	/	/	/	/	/
3710	3711	0.10269	CHP	4	3710.020	-28.85	-13	Pass
3711	3715	0.5	CHP	5	3711.260	-35.03	-13	Pass