

# 1 Conducted output power for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Power (dBm)	Gain (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
n78(3450-3550)	30	70	632334	90@45	DFT_BPSK	27.18	-2.3	24.88	30	PASS
n78(3450-3550)	30	70	632334	1@1	DFT_BPSK	26.69	-2.3	24.39	30	PASS
n78(3450-3550)	30	70	632334	1@187	DFT_BPSK	26.40	-2.3	24.10	30	PASS
n78(3450-3550)	30	70	632334	90@45	DFT_QPSK	27.13	-2.3	24.83	30	PASS
n78(3450-3550)	30	70	632334	1@1	DFT_QPSK	26.42	-2.3	24.12	30	PASS
n78(3450-3550)	30	70	632334	1@187	DFT_QPSK	26.26	-2.3	23.96	30	PASS
n78(3450-3550)	30	70	632334	90@45	DFT_QAM16	26.10	-2.3	23.80	30	PASS
n78(3450-3550)	30	70	632334	1@1	DFT_QAM16	26.01	-2.3	23.71	30	PASS
n78(3450-3550)	30	70	632334	1@187	DFT_QAM16	25.77	-2.3	23.47	30	PASS
n78(3450-3550)	30	70	632334	90@45	DFT_QAM64	24.73	-2.3	22.43	30	PASS
n78(3450-3550)	30	70	632334	1@1	DFT_QAM64	24.41	-2.3	22.11	30	PASS
n78(3450-3550)	30	70	632334	1@187	DFT_QAM64	24.16	-2.3	21.86	30	PASS
n78(3450-3550)	30	70	632334	95@47	CP_QPSK	25.48	-2.3	23.18	30	PASS
n78(3450-3550)	30	70	632334	1@1	CP_QPSK	24.97	-2.3	22.67	30	PASS
n78(3450-3550)	30	70	632334	1@187	CP_QPSK	24.75	-2.3	22.45	30	PASS
n78(3450-3550)	30	70	632334	95@47	CP_QAM16	25.08	-2.3	22.78	30	PASS
n78(3450-3550)	30	70	632334	1@1	CP_QAM16	24.44	-2.3	22.14	30	PASS
n78(3450-3550)	30	70	632334	1@187	CP_QAM16	24.26	-2.3	21.96	30	PASS
n78(3450-3550)	30	70	632334	95@47	CP_QAM64	23.63	-2.3	21.33	30	PASS
n78(3450-3550)	30	70	632334	1@1	CP_QAM64	23.66	-2.3	21.36	30	PASS
n78(3450-3550)	30	70	632334	1@187	CP_QAM64	23.46	-2.3	21.16	30	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	27.06	-2.3	24.76	30	PASS
n78(3450-3550)	30	70	633334	1@1	DFT_BPSK	26.57	-2.3	24.27	30	PASS
n78(3450-3550)	30	70	633334	1@187	DFT_BPSK	26.35	-2.3	24.05	30	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	26.90	-2.3	24.60	30	PASS
n78(3450-3550)	30	70	633334	1@1	DFT_QPSK	26.37	-2.3	24.07	30	PASS
n78(3450-3550)	30	70	633334	1@187	DFT_QPSK	26.25	-2.3	23.95	30	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QAM16	25.90	-2.3	23.60	30	PASS
n78(3450-3550)	30	70	633334	1@1	DFT_QAM16	25.61	-2.3	23.31	30	PASS
n78(3450-3550)	30	70	633334	1@187	DFT_QAM16	25.34	-2.3	23.04	30	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QAM64	24.49	-2.3	22.19	30	PASS
n78(3450-3550)	30	70	633334	1@1	DFT_QAM64	24.29	-2.3	21.99	30	PASS
n78(3450-3550)	30	70	633334	1@187	DFT_QAM64	24.03	-2.3	21.73	30	PASS
n78(3450-3550)	30	70	633334	95@47	CP_QPSK	25.31	-2.3	23.01	30	PASS
n78(3450-3550)	30	70	633334	1@1	CP_QPSK	25.14	-2.3	22.84	30	PASS
n78(3450-3550)	30	70	633334	1@187	CP_QPSK	24.96	-2.3	22.66	30	PASS
n78(3450-3550)	30	70	633334	95@47	CP_QAM16	24.87	-2.3	22.57	30	PASS

n78(3450-3550)	30	70	633334	1@1	CP_QAM16	24.36	-2.3	22.06	30	PASS
n78(3450-3550)	30	70	633334	1@187	CP_QAM16	24.24	-2.3	21.94	30	PASS
n78(3450-3550)	30	70	633334	95@47	CP_QAM64	23.47	-2.3	21.17	30	PASS
n78(3450-3550)	30	70	633334	1@1	CP_QAM64	22.94	-2.3	20.64	30	PASS
n78(3450-3550)	30	70	633334	1@187	CP_QAM64	22.87	-2.3	20.57	30	PASS
n78(3450-3550)	30	70	634332	90@45	DFT_BPSK	26.85	-2.3	24.55	30	PASS
n78(3450-3550)	30	70	634332	1@1	DFT_BPSK	26.74	-2.3	24.44	30	PASS
n78(3450-3550)	30	70	634332	1@187	DFT_BPSK	26.56	-2.3	24.26	30	PASS
n78(3450-3550)	30	70	634332	90@45	DFT_QPSK	26.78	-2.3	24.48	30	PASS
n78(3450-3550)	30	70	634332	1@1	DFT_QPSK	26.61	-2.3	24.31	30	PASS
n78(3450-3550)	30	70	634332	1@187	DFT_QPSK	26.46	-2.3	24.16	30	PASS
n78(3450-3550)	30	70	634332	90@45	DFT_QAM16	25.81	-2.3	23.51	30	PASS
n78(3450-3550)	30	70	634332	1@1	DFT_QAM16	25.69	-2.3	23.39	30	PASS
n78(3450-3550)	30	70	634332	1@187	DFT_QAM16	25.58	-2.3	23.28	30	PASS
n78(3450-3550)	30	70	634332	90@45	DFT_QAM64	24.38	-2.3	22.08	30	PASS
n78(3450-3550)	30	70	634332	1@1	DFT_QAM64	24.48	-2.3	22.18	30	PASS
n78(3450-3550)	30	70	634332	1@187	DFT_QAM64	24.21	-2.3	21.91	30	PASS
n78(3450-3550)	30	70	634332	95@47	CP_QPSK	25.24	-2.3	22.94	30	PASS
n78(3450-3550)	30	70	634332	1@1	CP_QPSK	25.20	-2.3	22.90	30	PASS
n78(3450-3550)	30	70	634332	1@187	CP_QPSK	25.10	-2.3	22.80	30	PASS
n78(3450-3550)	30	70	634332	95@47	CP_QAM16	24.81	-2.3	22.51	30	PASS
n78(3450-3550)	30	70	634332	1@1	CP_QAM16	24.70	-2.3	22.40	30	PASS
n78(3450-3550)	30	70	634332	1@187	CP_QAM16	24.82	-2.3	22.52	30	PASS
n78(3450-3550)	30	70	634332	95@47	CP_QAM64	23.28	-2.3	20.98	30	PASS
n78(3450-3550)	30	70	634332	1@1	CP_QAM64	23.48	-2.3	21.18	30	PASS
n78(3450-3550)	30	70	634332	1@187	CP_QAM64	23.48	-2.3	21.18	30	PASS

## 2 Frequency stability for NR FR1

**NT:**

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Voltage (Vdc)	Result(Hz)	Result (ppm)	Limit (ppm)	Verdict
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	3.87	-32.95	-0.01	Within authorized band for 5G NR n78	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	3.45	-27.38	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	4.45	-30.55	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	3.87	-33.07	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	3.45	-29.80	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	4.45	-31.04	-0.01		PASS

Note: Only the worst case shown in the report.

**NV:**

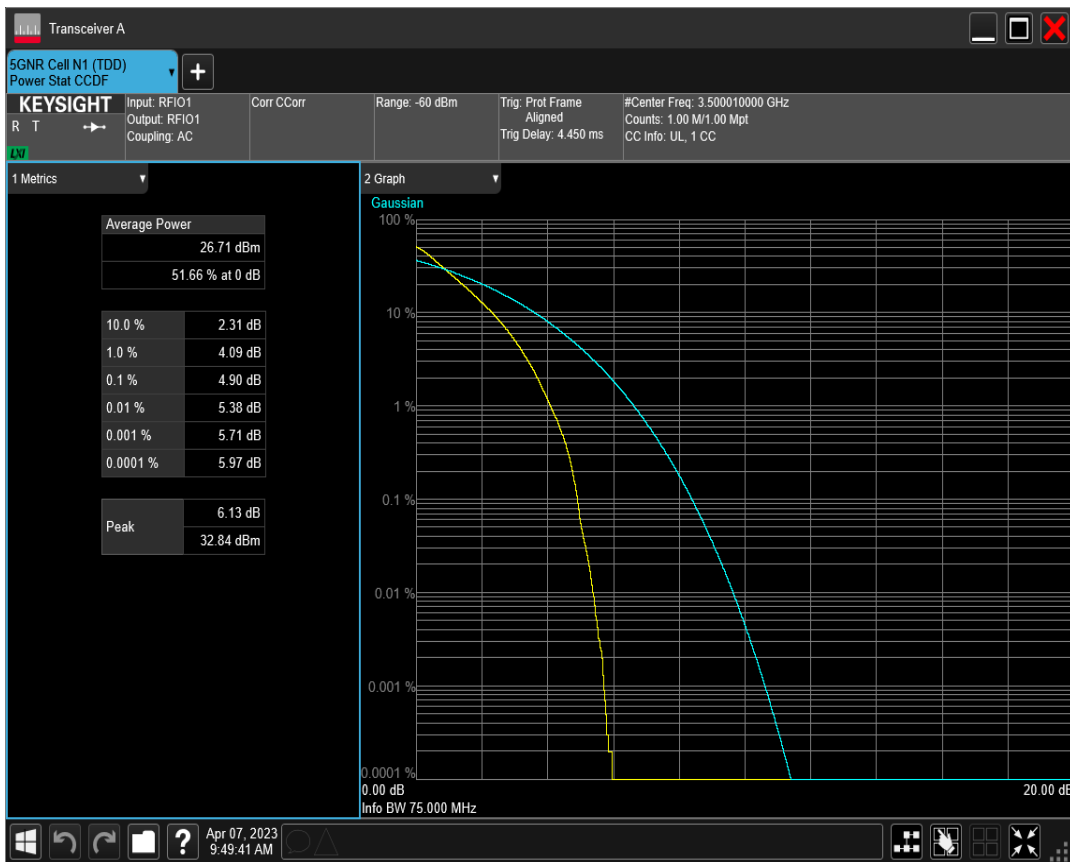
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Voltage (Vdc)	Result(Hz)	Result (ppm)	Limit (ppm)	Verdict
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	-30	-32.9	-0.01	Within authorized band for 5G NR n78	PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	-20	-27.58	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	-10	-30.21	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	0	-32.79	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	10	-29.35	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	20	-31.44	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	30	-33.28	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	40	-27.69	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	50	-30.71	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	-30	-33.19	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	-20	-29.68	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	-10	-33.16	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	0	-27.86	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	10	-30.43	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	20	-33.14	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	30	-29.24	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	40	-33.24	-0.01		PASS
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	50	-27.64	-0.01		PASS

Note: Only the worst case shown in the report.

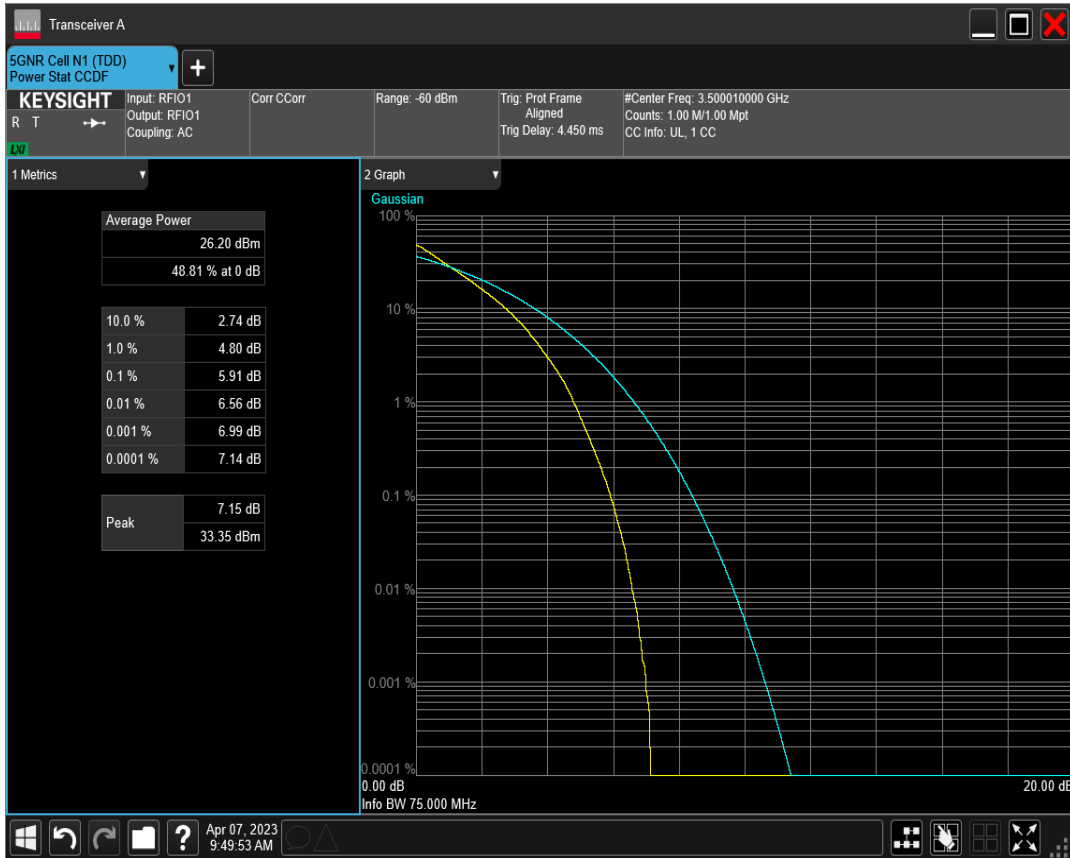
### 3 Peak-to-Average Ratio for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Result (dB)	high Limit (dB)	Verdict
n78(3450-3550)	30	70	633334	180@0	DFT_BPSK	4.90	13	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QPSK	5.91	13	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QAM16	6.66	13	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QAM64	6.88	13	PASS

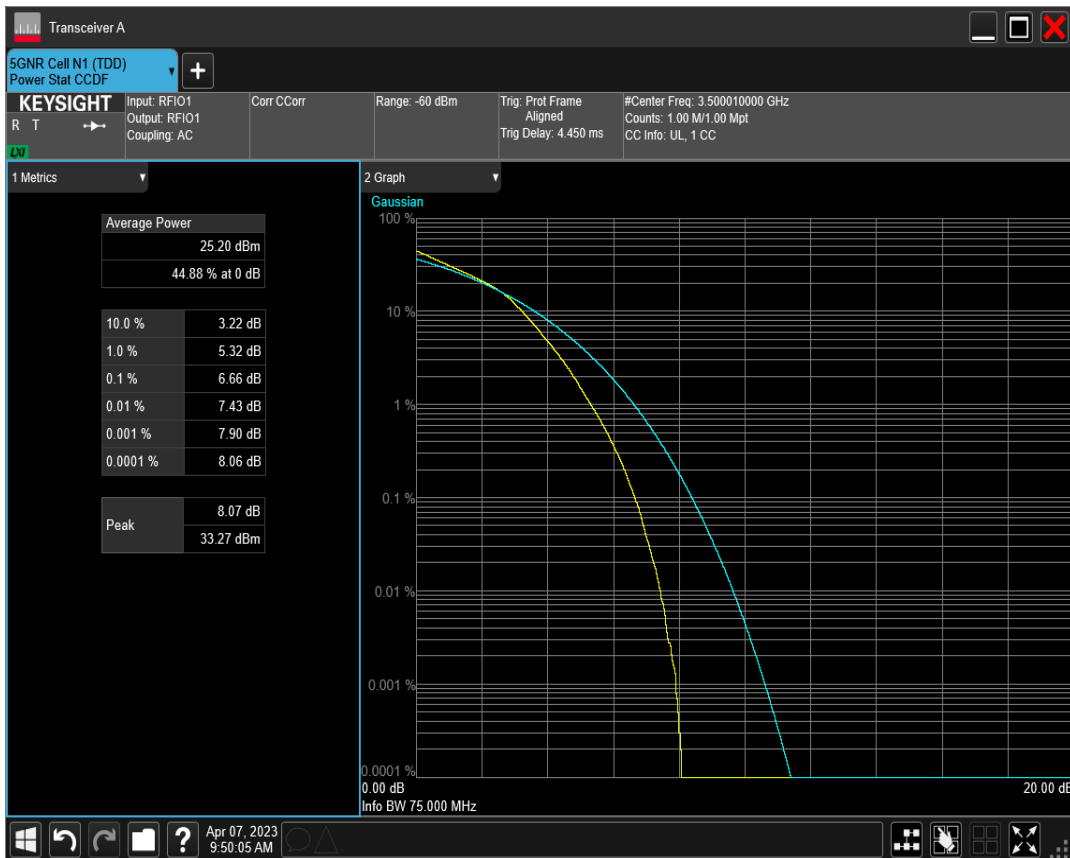
n78(3450-3550) SCS=30kHz DFT\_BPSK BW=70MHz Channel=633334 RB=180@0



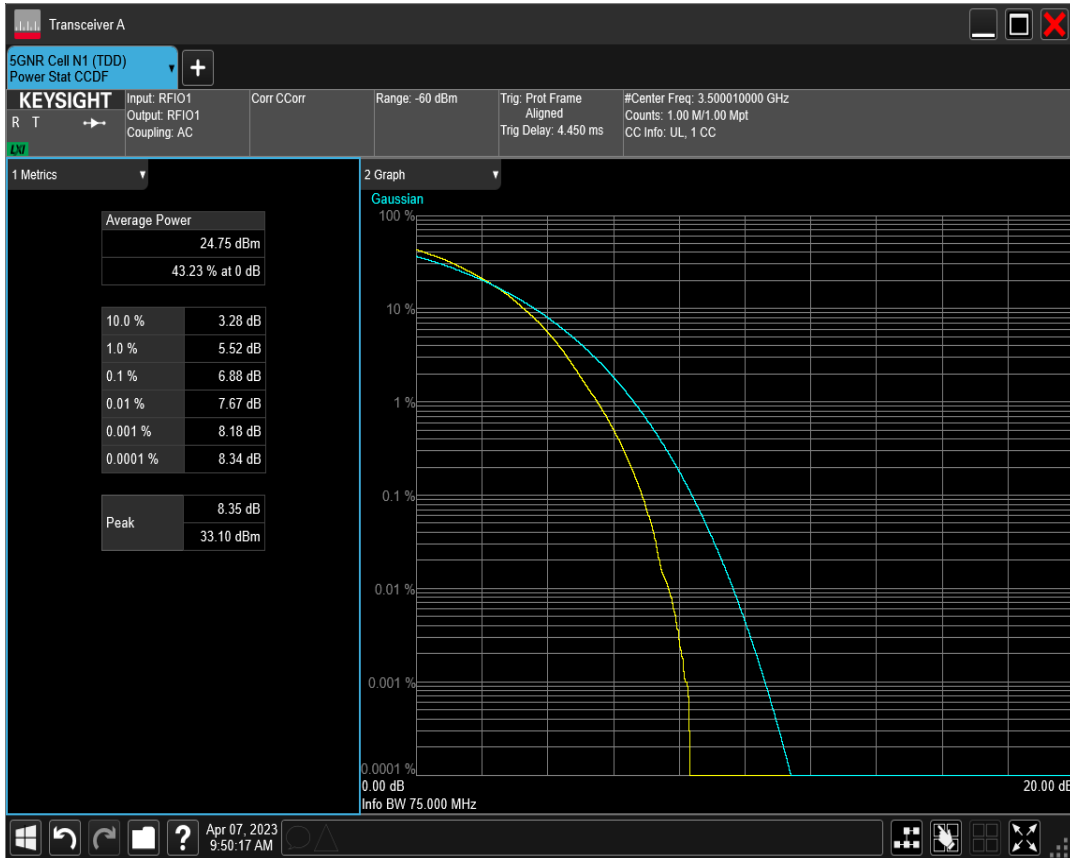
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=633334 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QAM16 BW=70MHz Channel=633334 RB=180@0



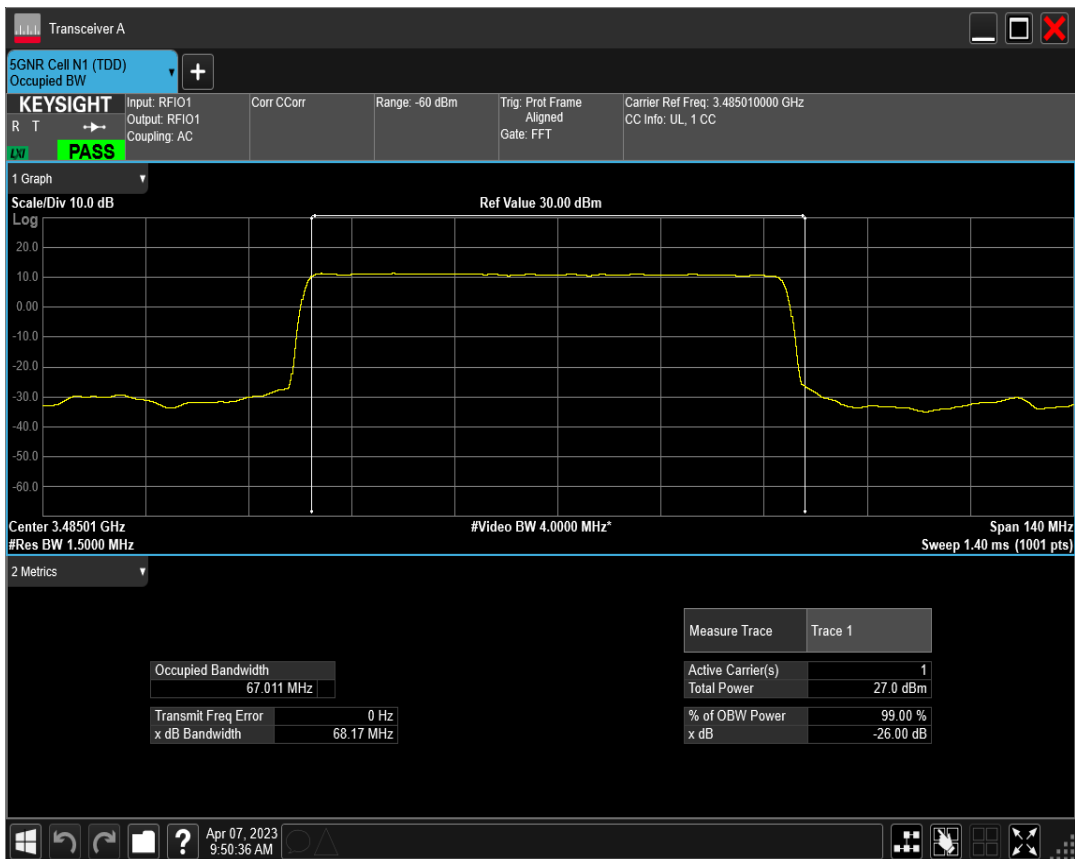
n78(3450-3550) SCS=30kHz DFT\_QAM64 BW=70MHz Channel=633334 RB=180@0



### 4 Occupied bandwidth for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
n78(3450-3550)	30	70	632334	180@0	DFT_BPSK	67.010	68.170	PASS
n78(3450-3550)	30	70	632334	180@0	DFT_QPSK	67.030	68.170	PASS
n78(3450-3550)	30	70	632334	180@0	DFT_QAM16	66.980	68.180	PASS
n78(3450-3550)	30	70	632334	180@0	DFT_QAM64	66.980	68.180	PASS
n78(3450-3550)	30	70	632334	189@0	CP_QPSK	67.790	71.420	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_BPSK	67.030	68.180	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QPSK	67.230	68.170	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QAM16	67.060	68.200	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QAM64	67.220	68.170	PASS
n78(3450-3550)	30	70	633334	189@0	CP_QPSK	67.800	71.430	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_BPSK	67.030	68.170	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_QPSK	67.210	68.170	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_QAM16	67.060	68.200	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_QAM64	67.020	68.180	PASS
n78(3450-3550)	30	70	634332	189@0	CP_QPSK	67.820	71.430	PASS

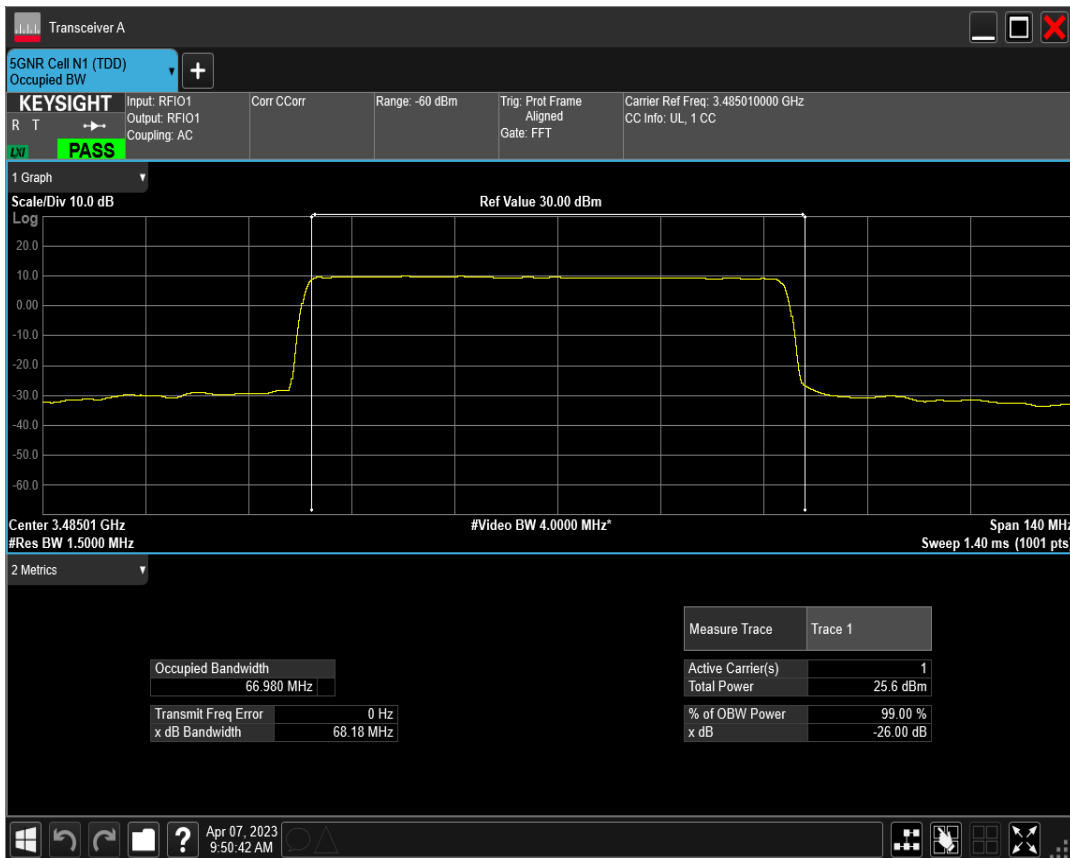
n78(3450-3550) SCS=30kHz DFT\_BPSK BW=70MHz Channel=632334 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QAM16 BW=70MHz Channel=632334 RB=180@0

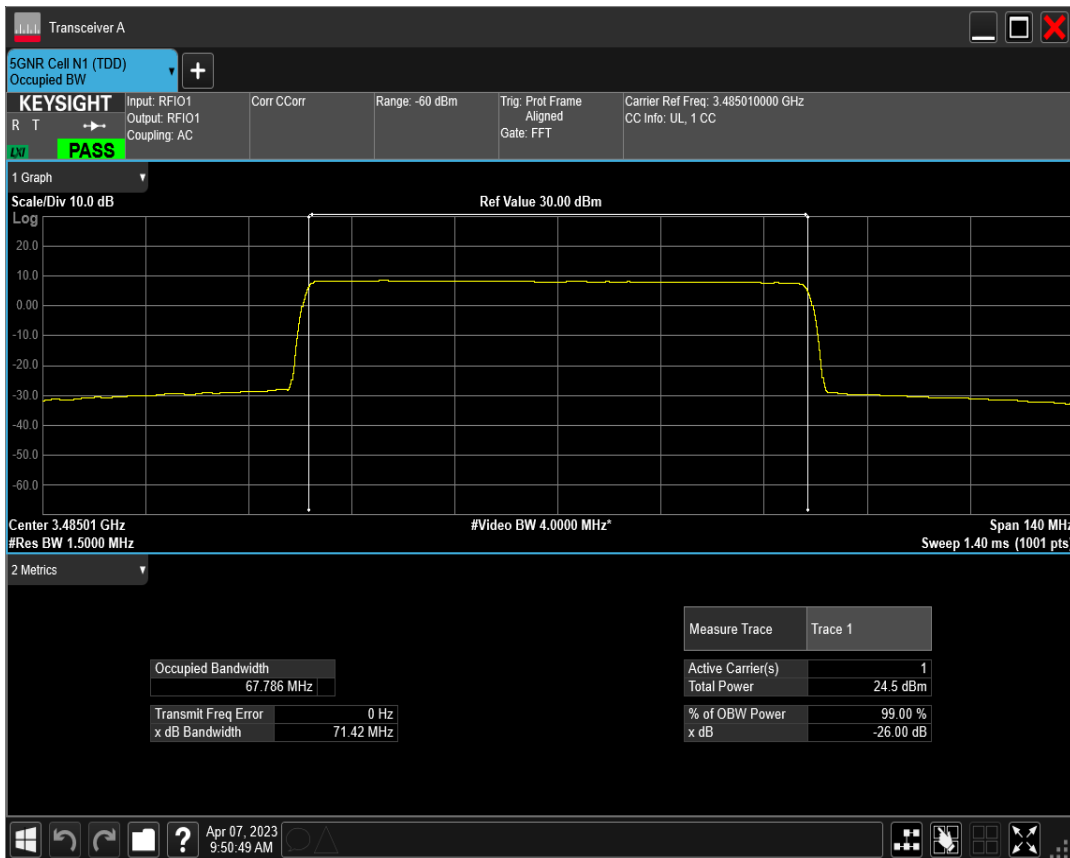


n78(3450-3550) SCS=30kHz DFT\_QAM64 BW=70MHz Channel=632334 RB=180@0





n78(3450-3550) SCS=30kHz CP\_QPSK BW=70MHz Channel=632334 RB=189@0



n78(3450-3550) SCS=30kHz DFT\_BPSK BW=70MHz Channel=633334 RB=180@0



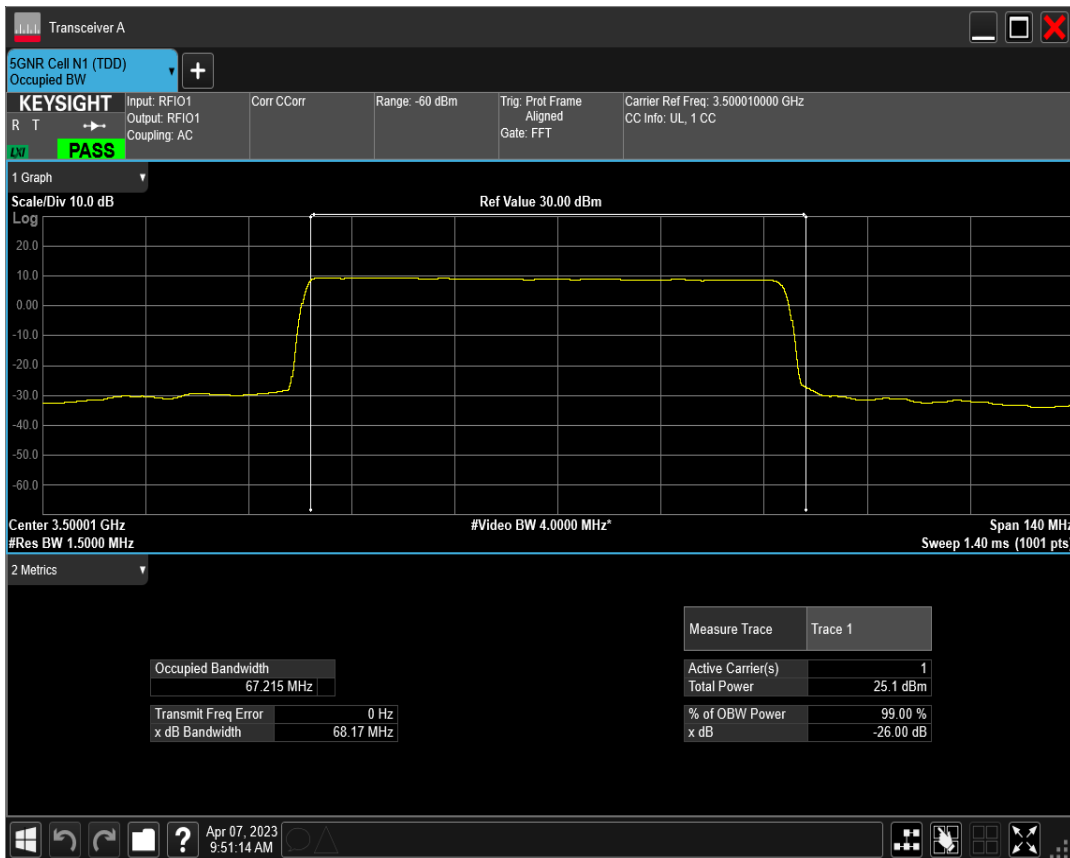
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=633334 RB=180@0



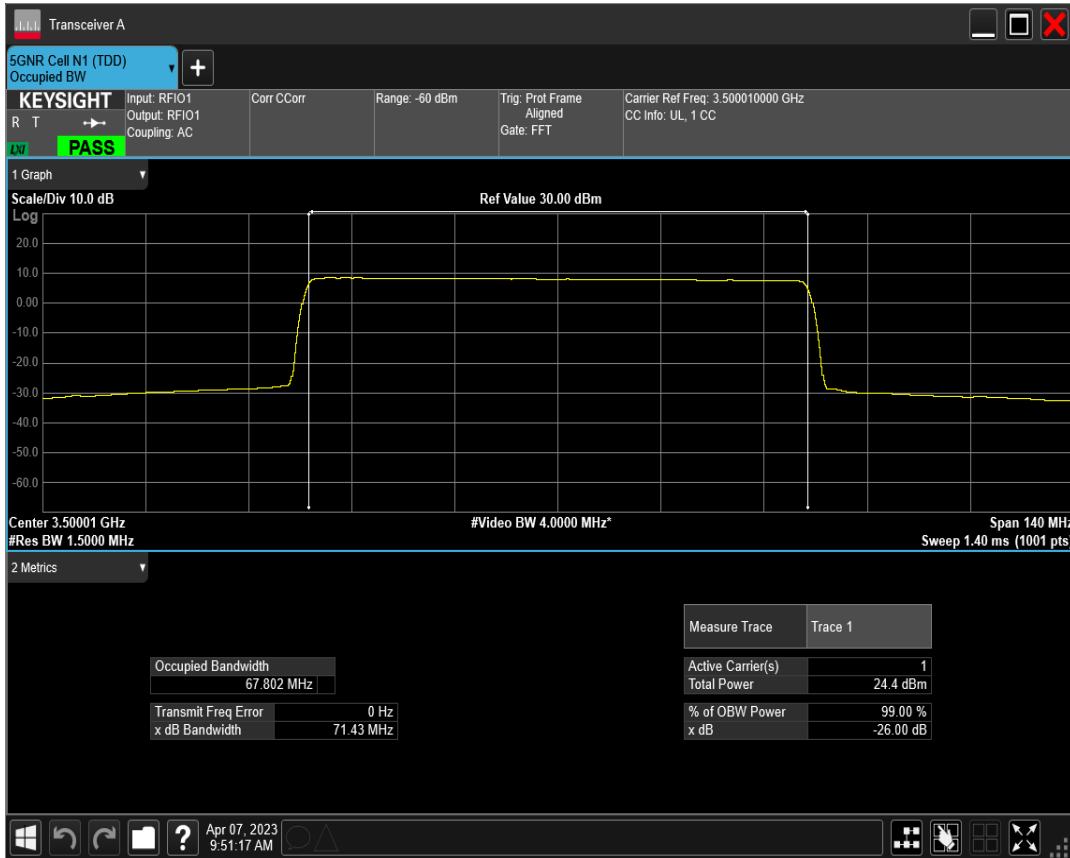
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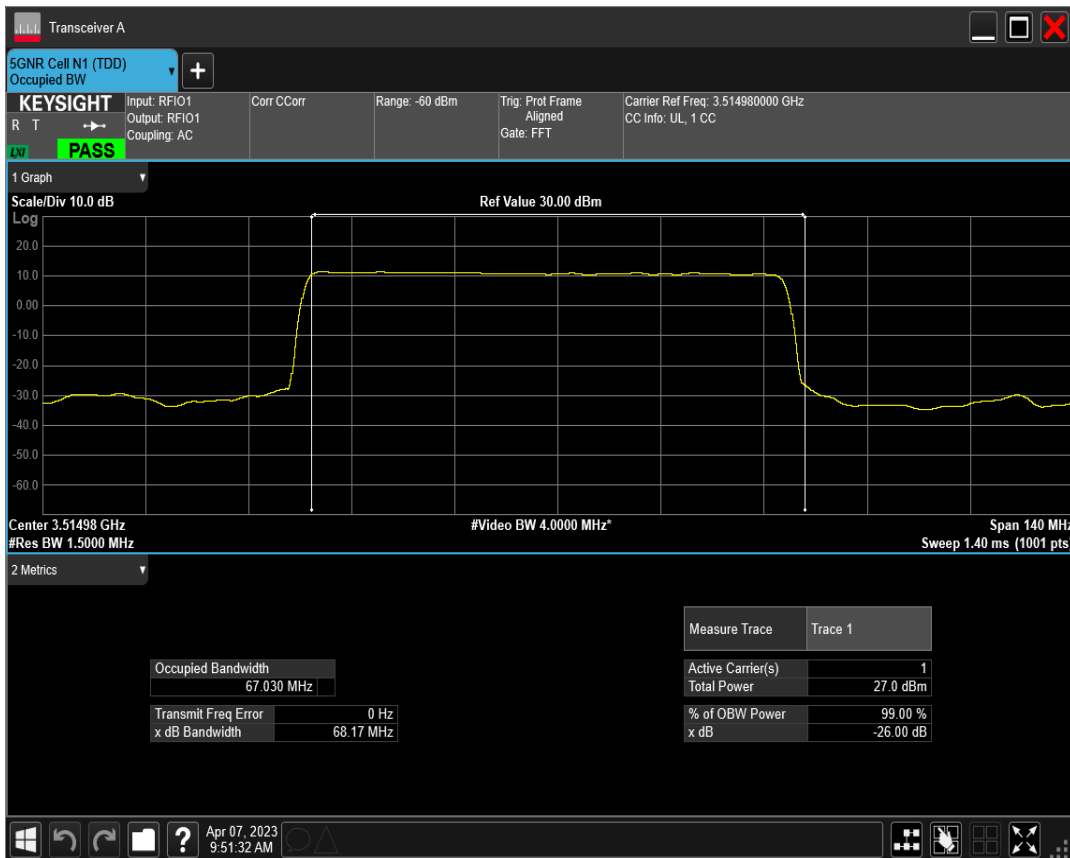
n78(3450-3550) SCS=30kHz DFT\_QAM64 BW=70MHz Channel=633334 RB=180@0



n78(3450-3550) SCS=30kHz CP\_QPSK BW=70MHz Channel=633334 RB=189@0



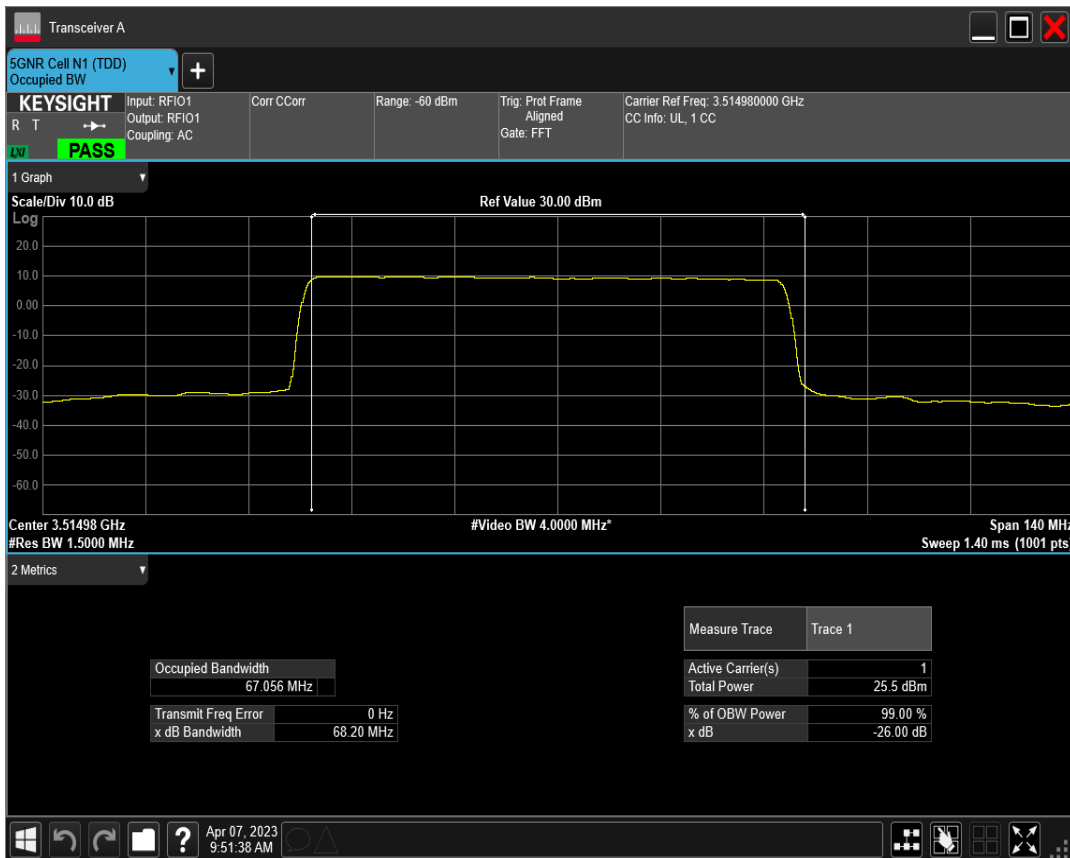
n78(3450-3550) SCS=30kHz DFT\_BPSK BW=70MHz Channel=634332 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=180@0



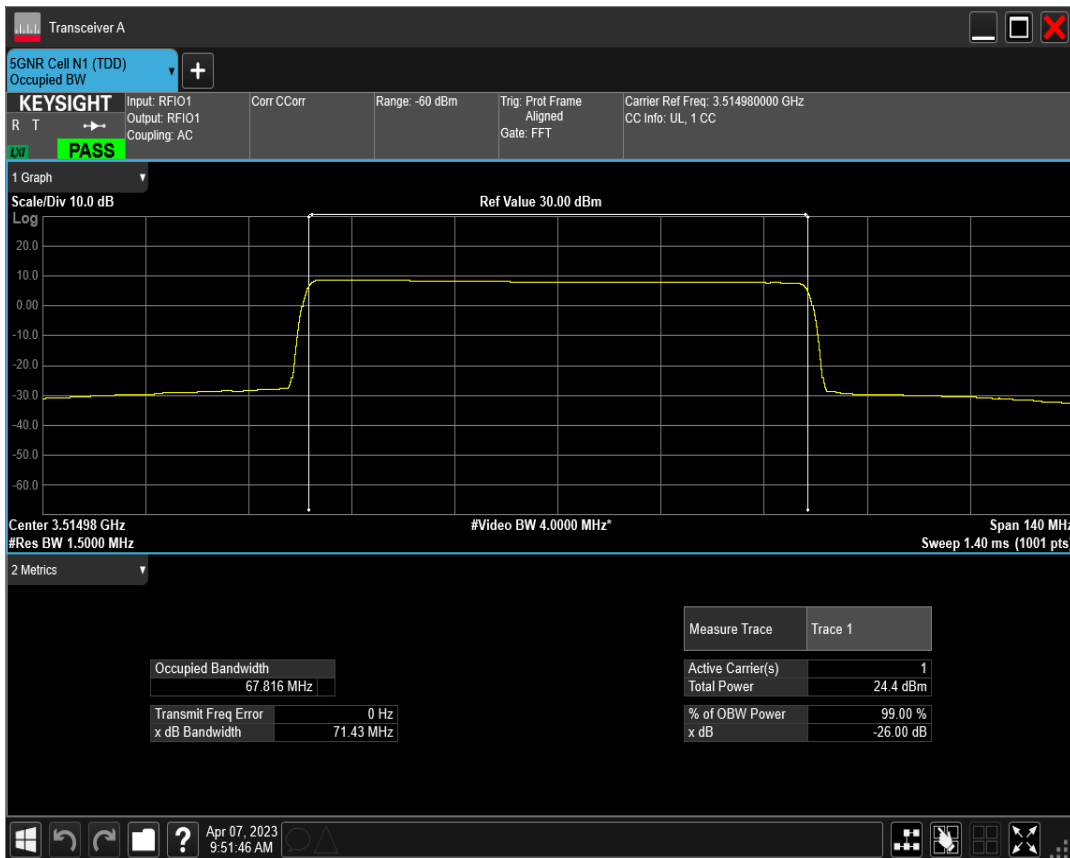
n78(3450-3550) SCS=30kHz DFT\_QAM16 BW=70MHz Channel=634332 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QAM64 BW=70MHz Channel=634332 RB=180@0



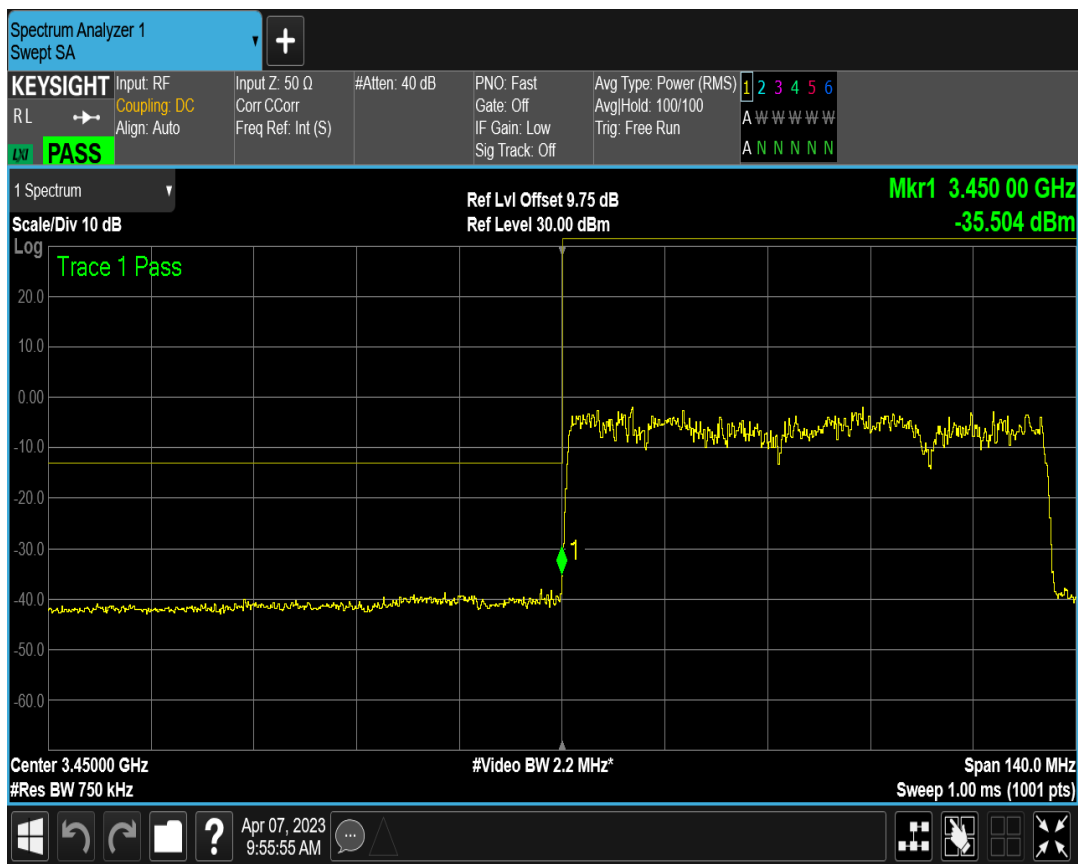
n78(3450-3550) SCS=30kHz CP\_QPSK BW=70MHz Channel=634332 RB=189@0



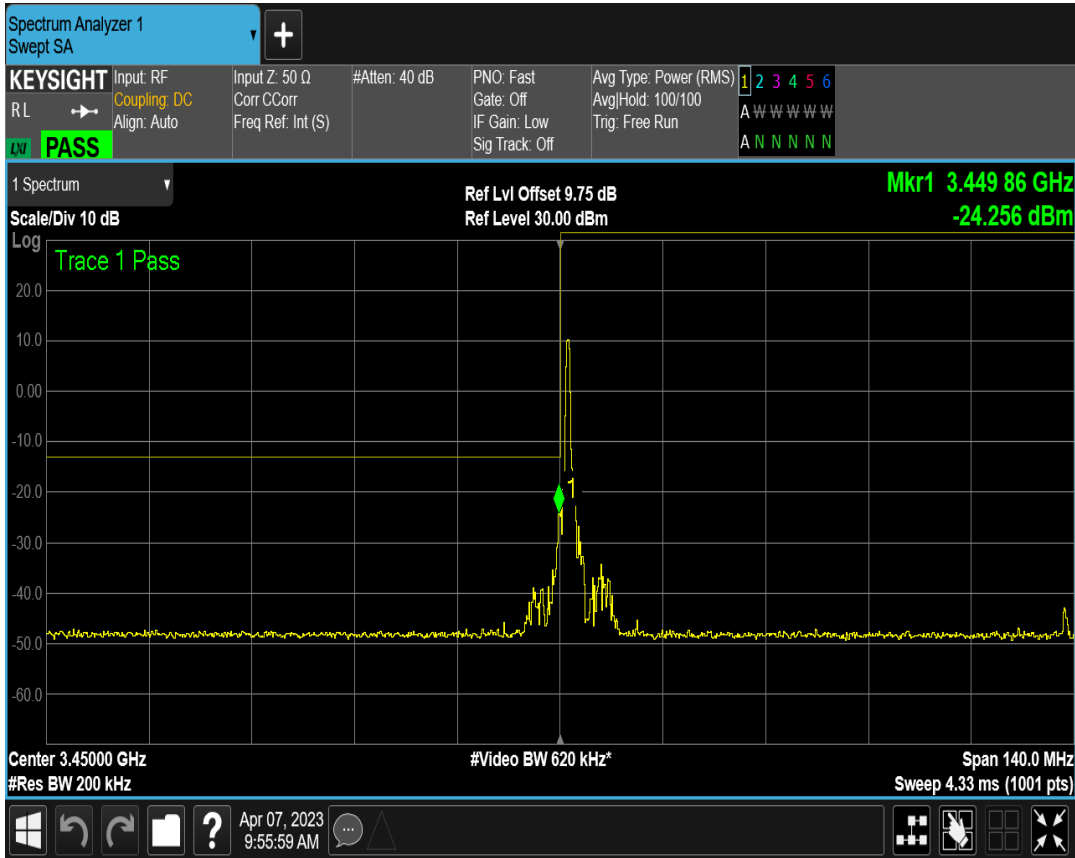
### 5 Band edge for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n78(3450-3550)	30	70	632334	180@0	DFT_QPSK	3450.00	-35.50	-13	PASS
n78(3450-3550)	30	70	632334	1@0	DFT_QPSK	3449.86	-24.25	-13	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_QPSK	3613.98	-37.80	-13	PASS
n78(3450-3550)	30	70	634332	1@188	DFT_QPSK	3550.14	-28.34	-13	PASS

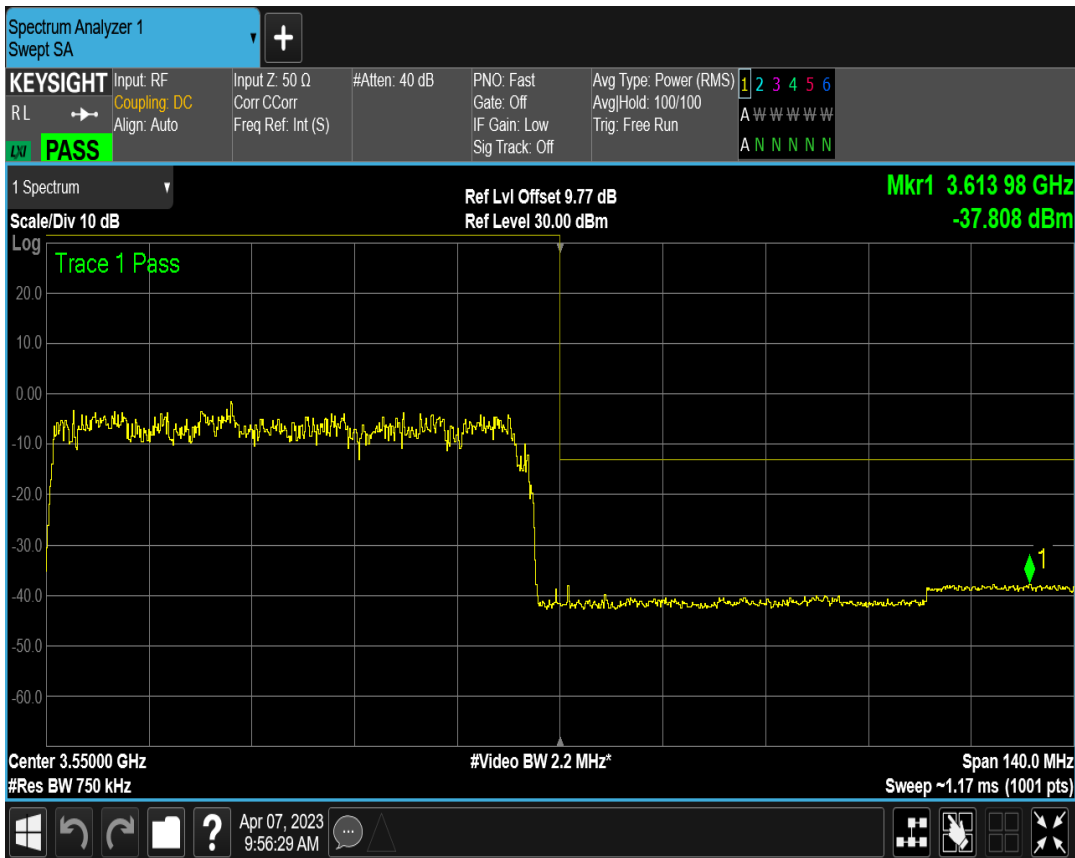
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=1@0

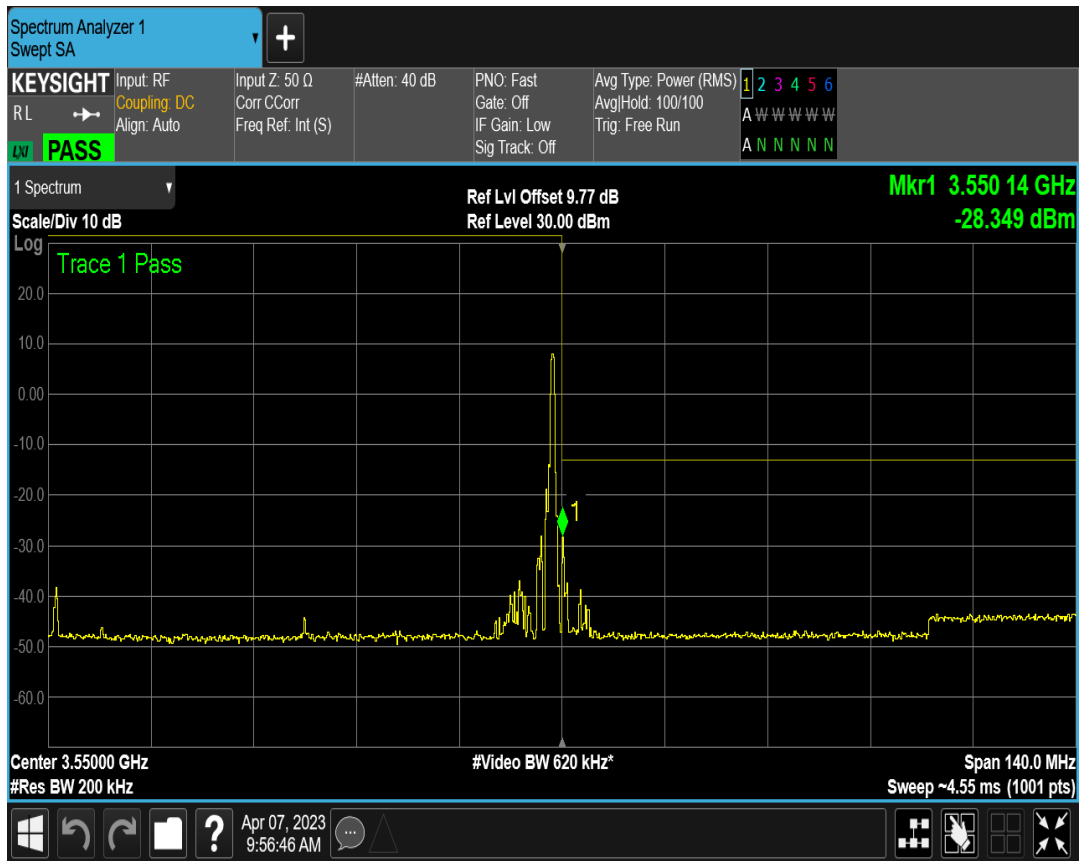


n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=1@188

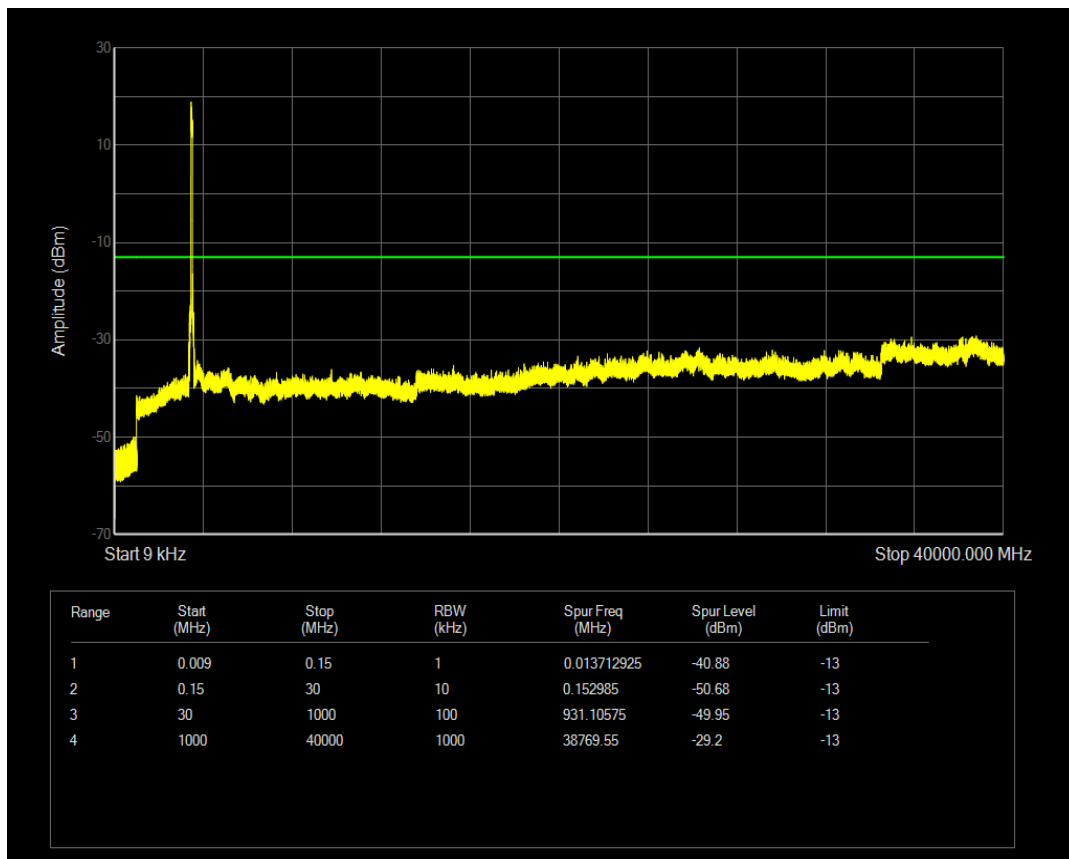




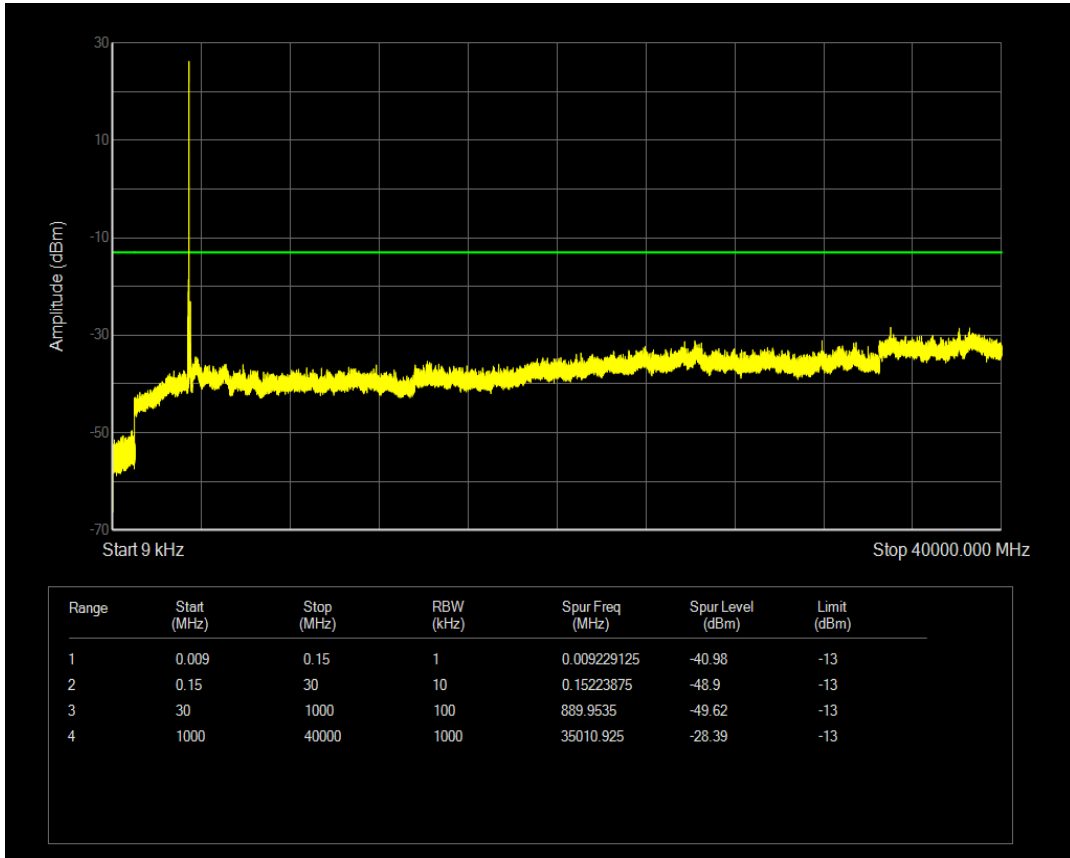
## 6 Out-of-band emissions for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n78(3450-3550)	30	70	632334	180@0	DFT_QPSK	38769.55	-29.20	-13	PASS
n78(3450-3550)	30	70	632334	1@0	DFT_QPSK	35010.93	-28.39	-13	PASS
n78(3450-3550)	30	70	632334	1@188	DFT_QPSK	38580.40	-28.00	-13	PASS
n78(3450-3550)	30	70	633334	180@0	DFT_QPSK	38744.20	-29.39	-13	PASS
n78(3450-3550)	30	70	633334	1@0	DFT_QPSK	38846.58	-28.79	-13	PASS
n78(3450-3550)	30	70	633334	1@188	DFT_QPSK	38888.50	-29.13	-13	PASS
n78(3450-3550)	30	70	634332	180@0	DFT_QPSK	38574.55	-28.47	-13	PASS
n78(3450-3550)	30	70	634332	1@0	DFT_QPSK	38635.00	-28.77	-13	PASS
n78(3450-3550)	30	70	634332	1@188	DFT_QPSK	38696.43	-28.84	-13	PASS

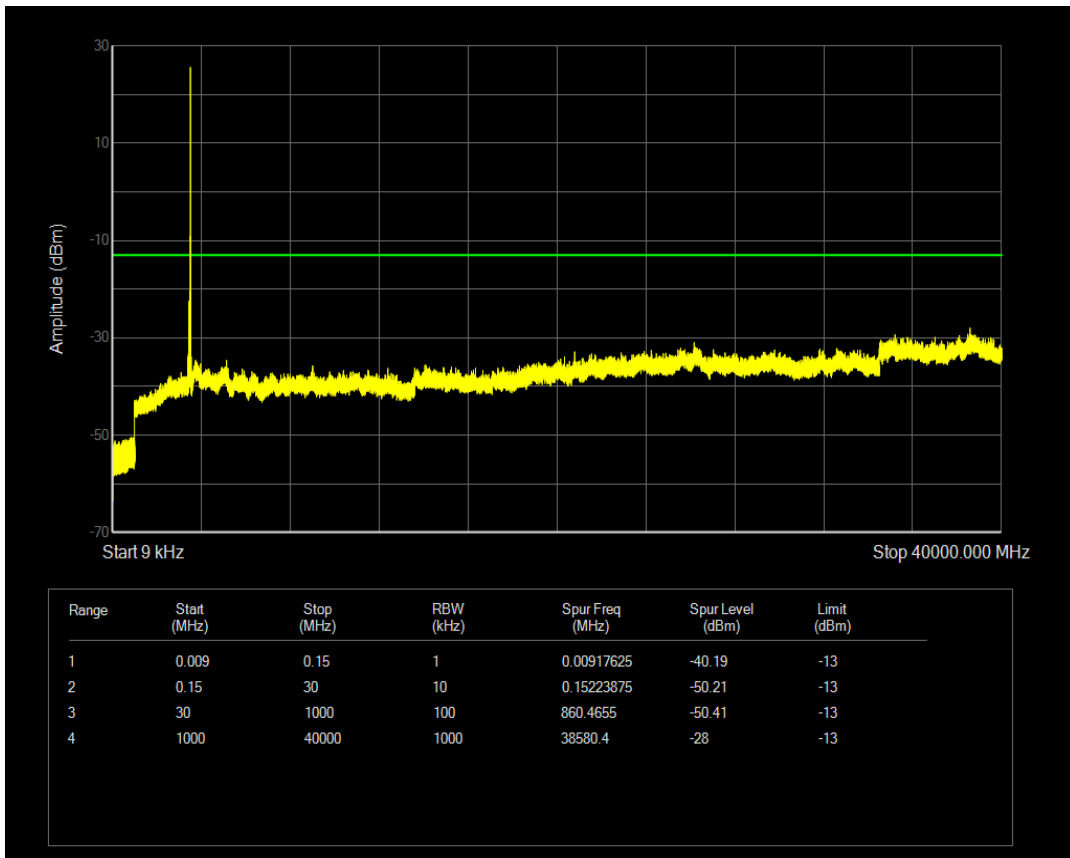
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=180@0



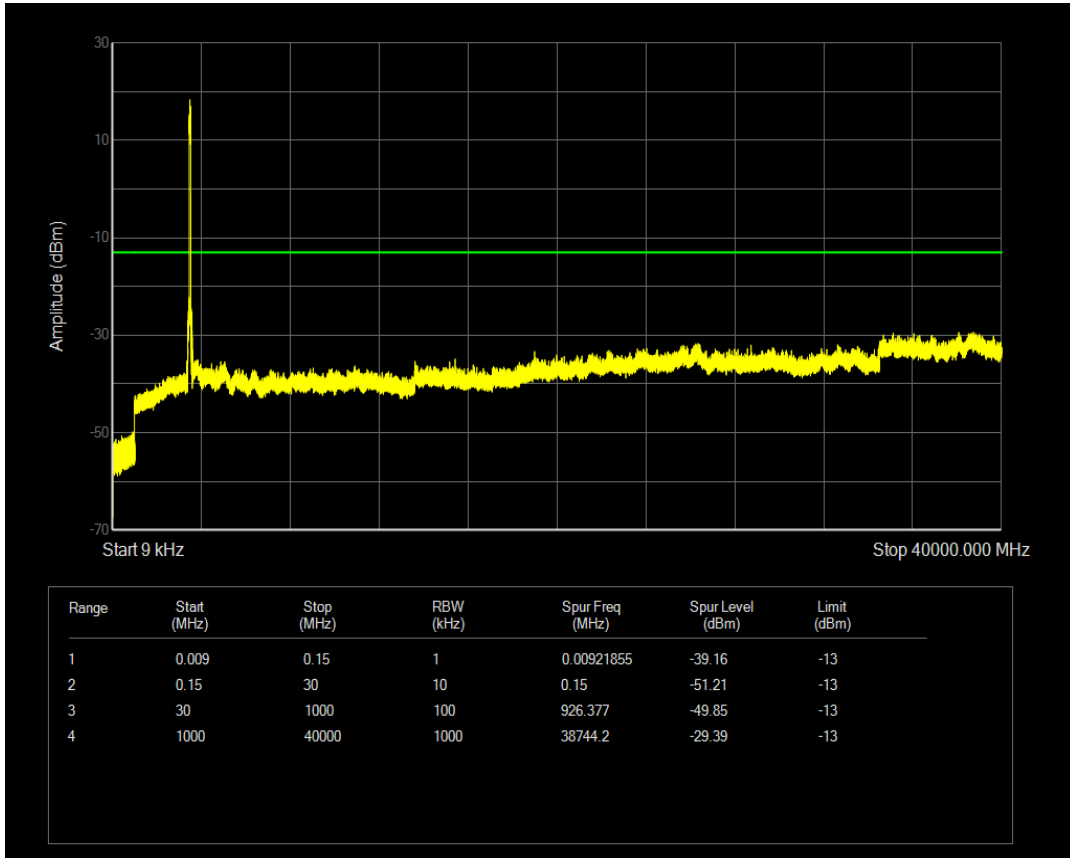
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=1@0



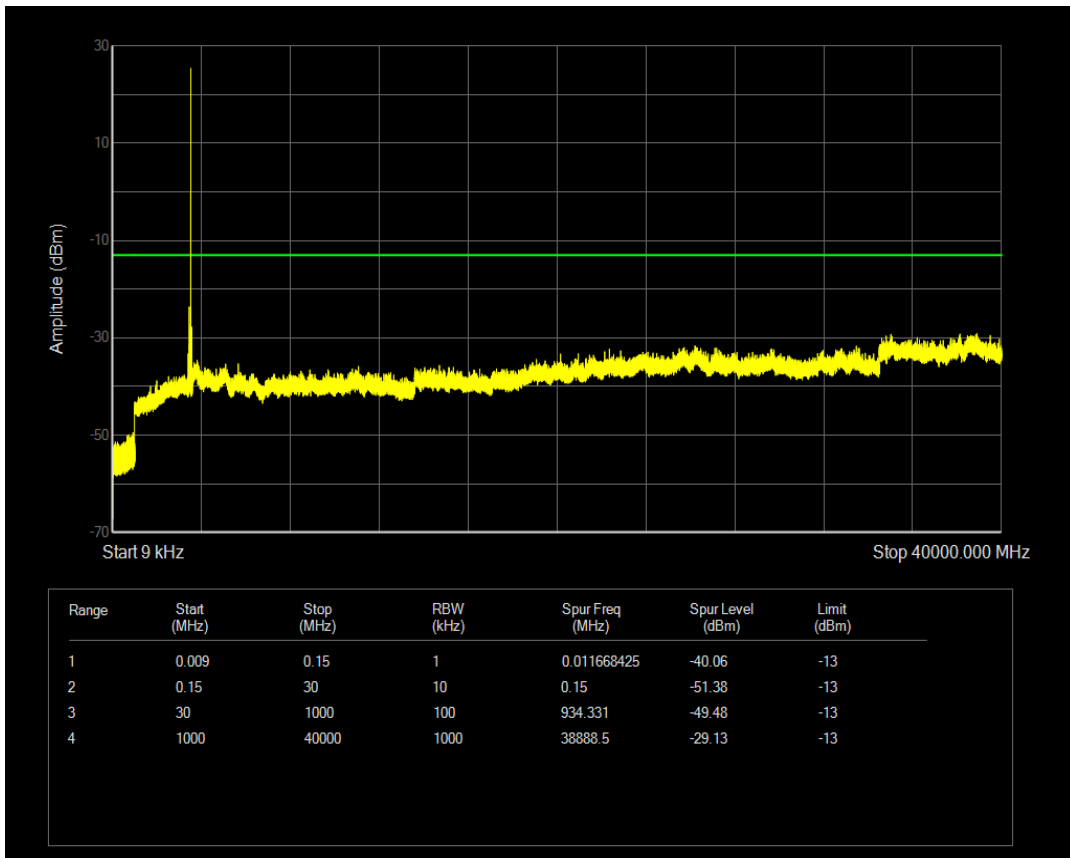
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=632334 RB=1@188



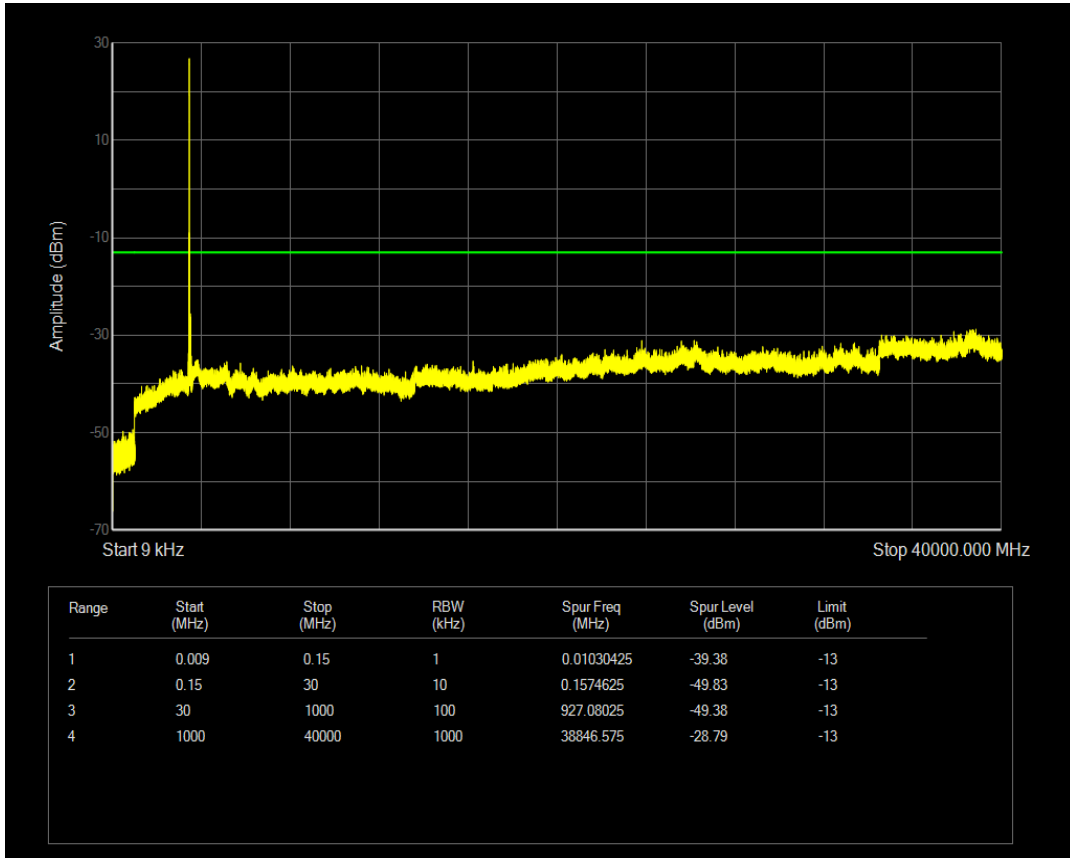
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=633334 RB=180@0



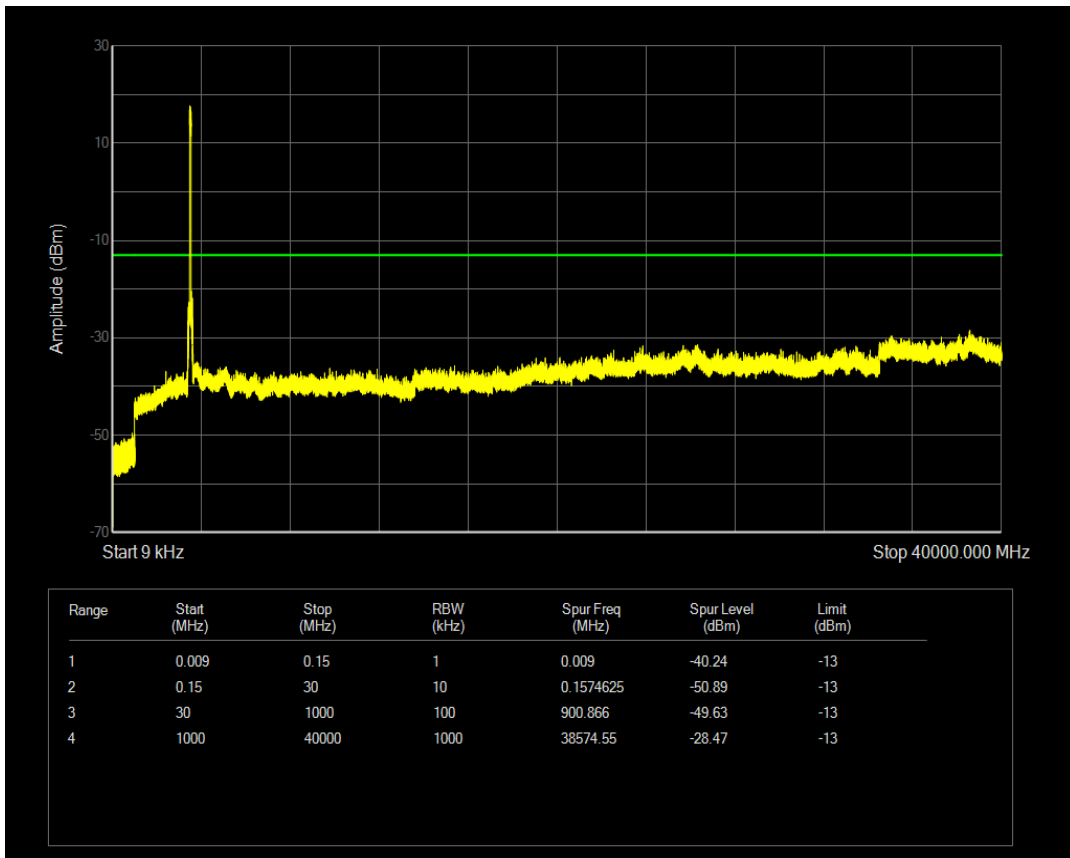
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=633334 RB=1@188



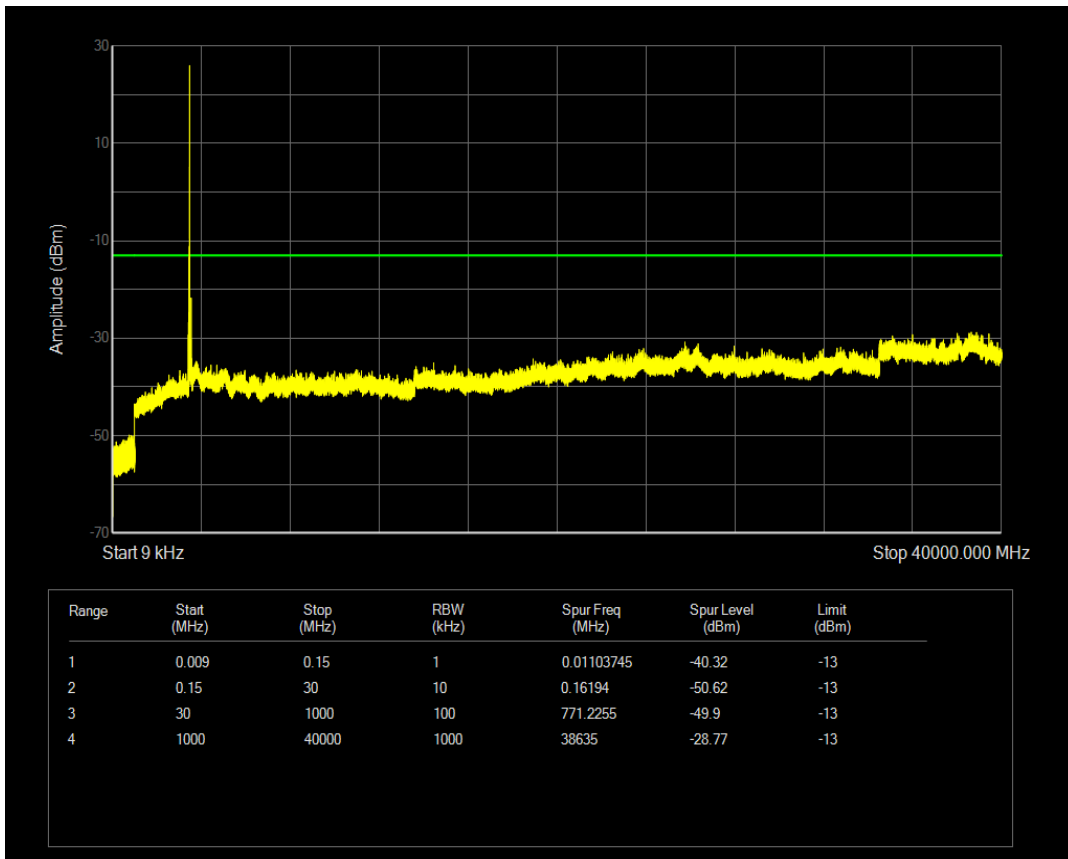
n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=633334 RB=1@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=180@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=1@0



n78(3450-3550) SCS=30kHz DFT\_QPSK BW=70MHz Channel=634332 RB=1@188

