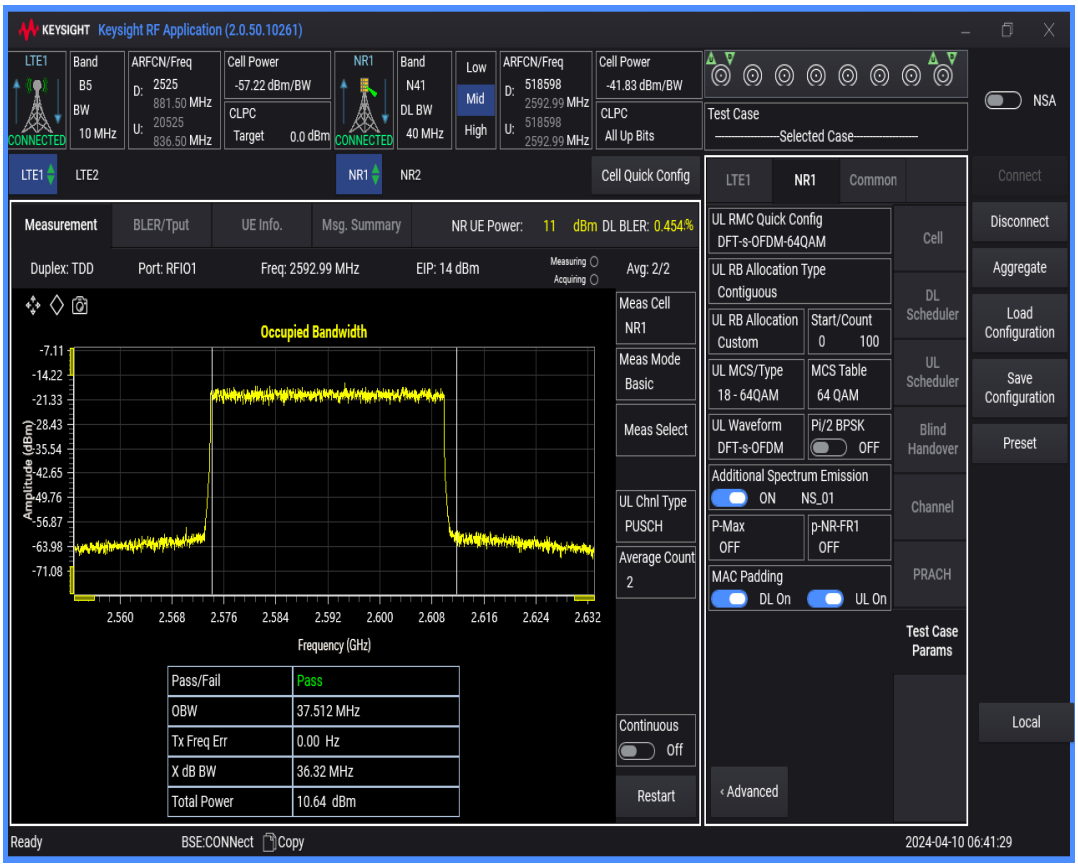
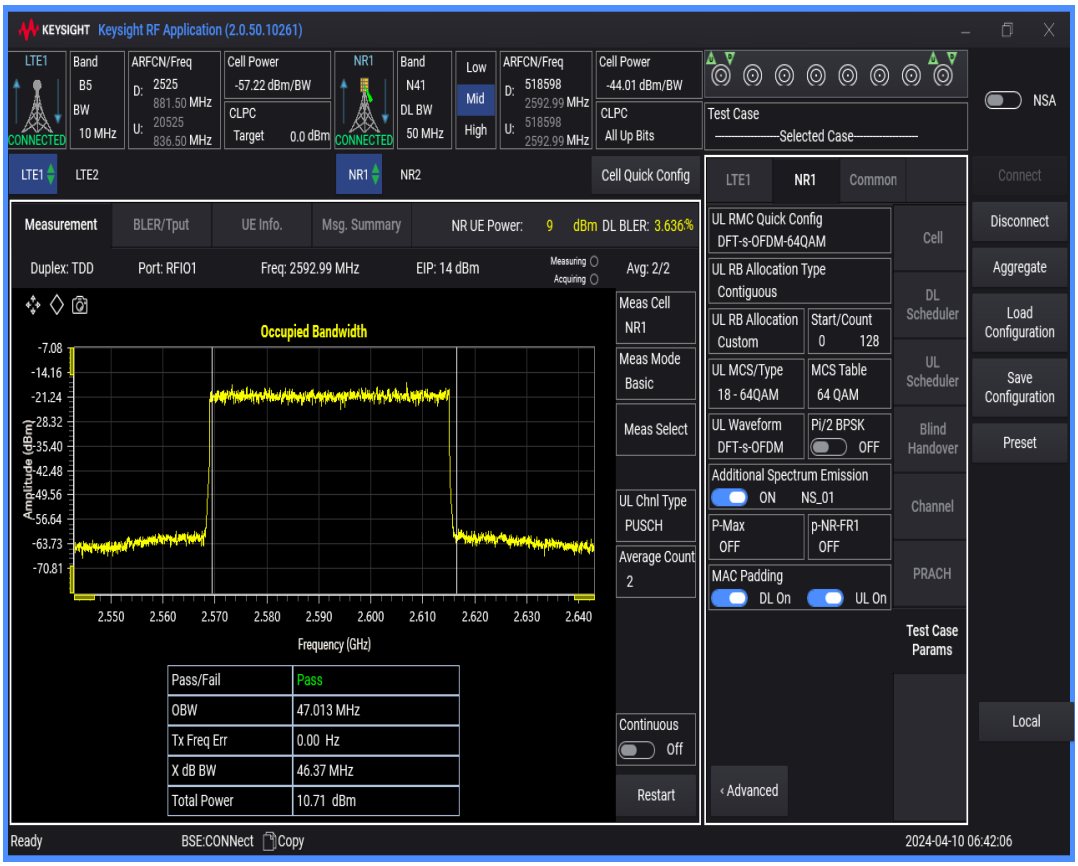
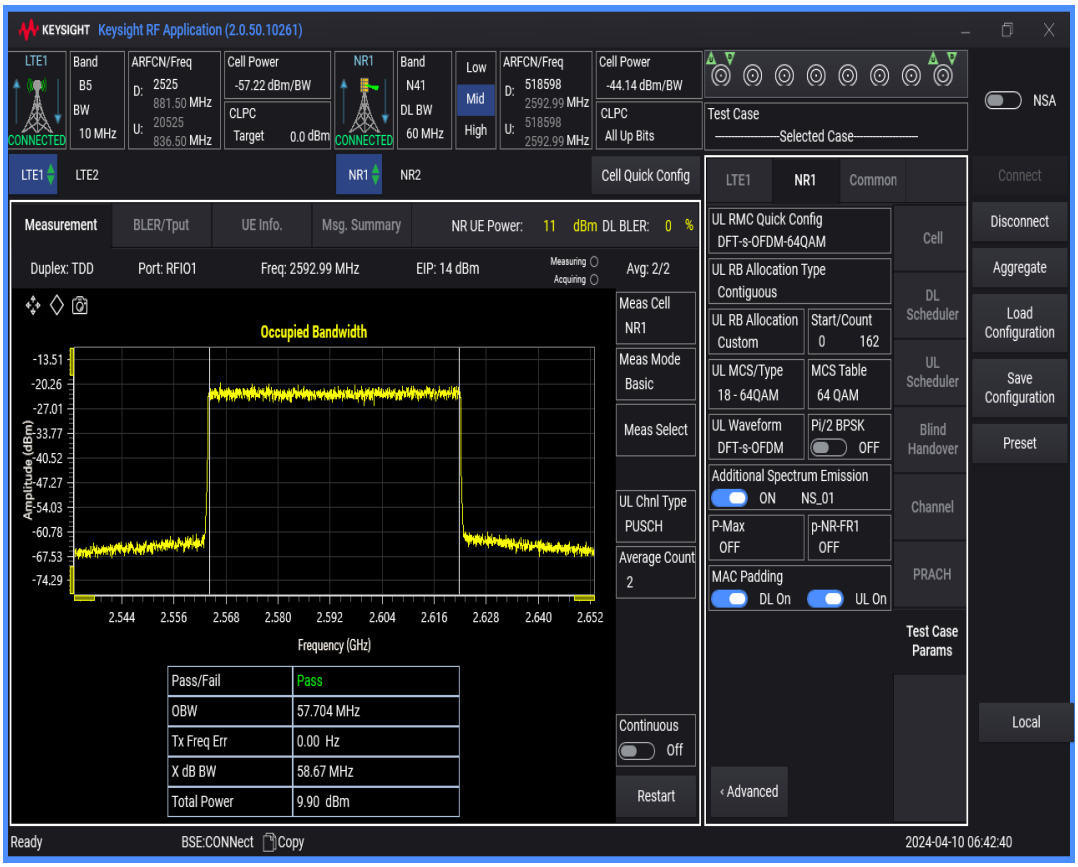


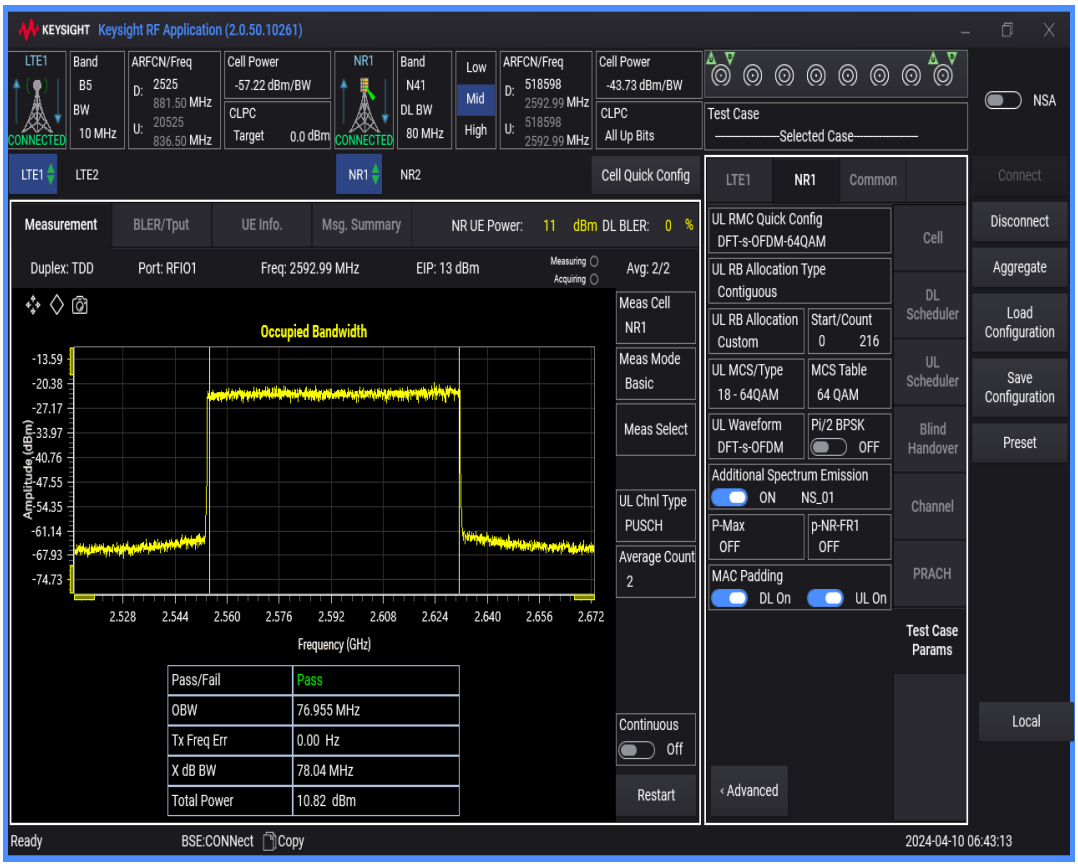
n41 SCS=30kHz DFT_QAM64 BW=50MHz Channel=518598 RB=128@0



n41 SCS=30kHz DFT_QAM64 BW=60MHz Channel=518598 RB=162@0

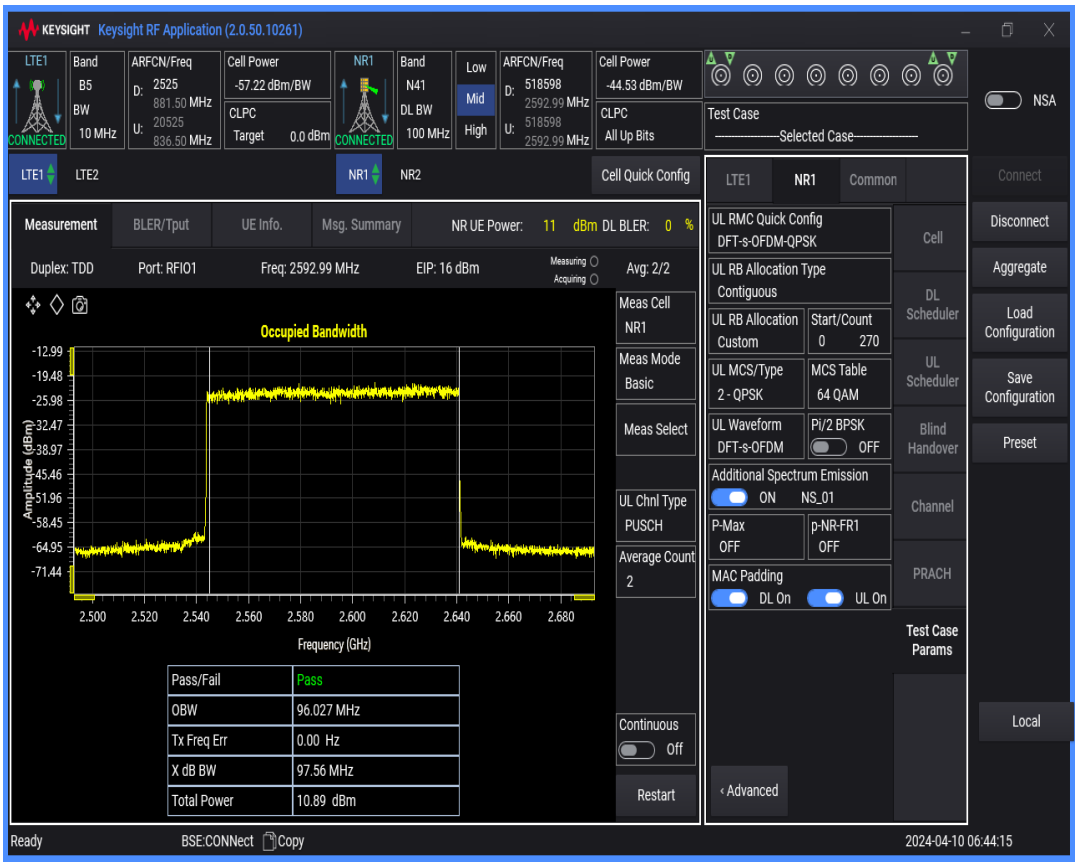


n41 SCS=30kHz DFT_QAM64 BW=80MHz Channel=518598 RB=216@0



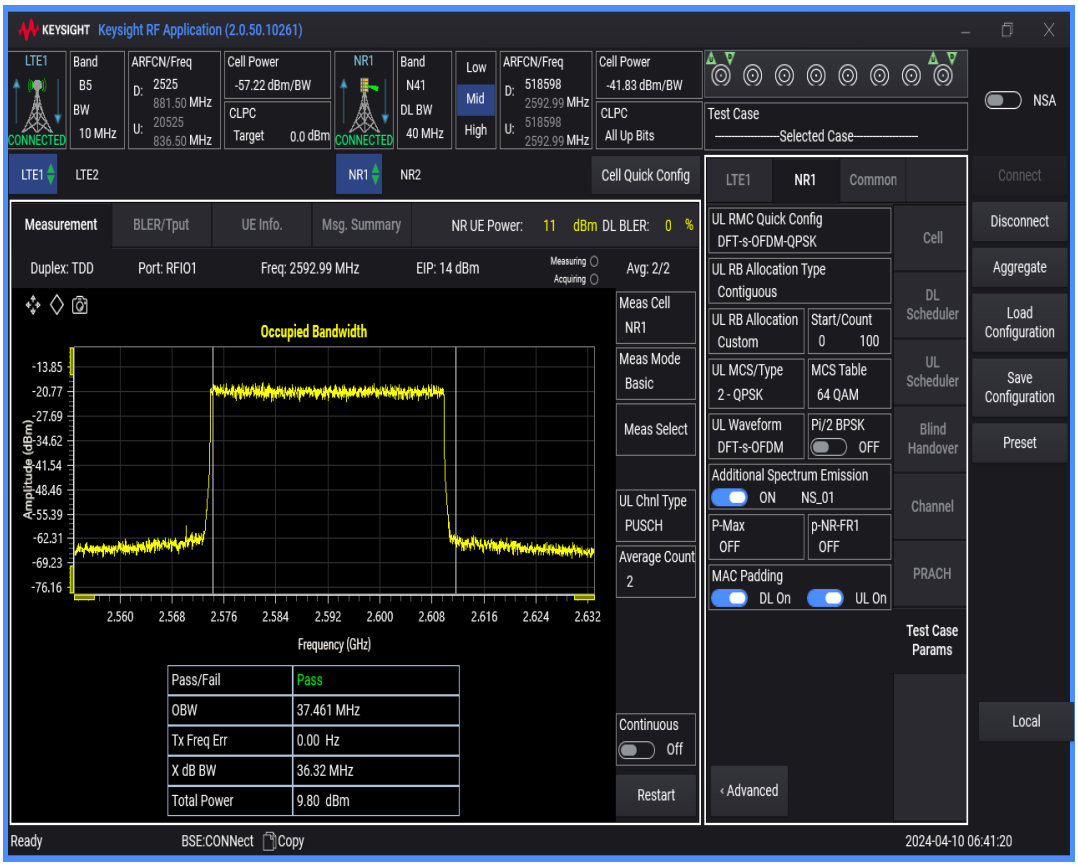
n41 SCS=30kHz DFT_QAM64 BW=90MHz Channel=518598 RB=240@0

n41 SCS=30kHz DFT_QPSK BW=100MHz Channel=518598 RB=270@0



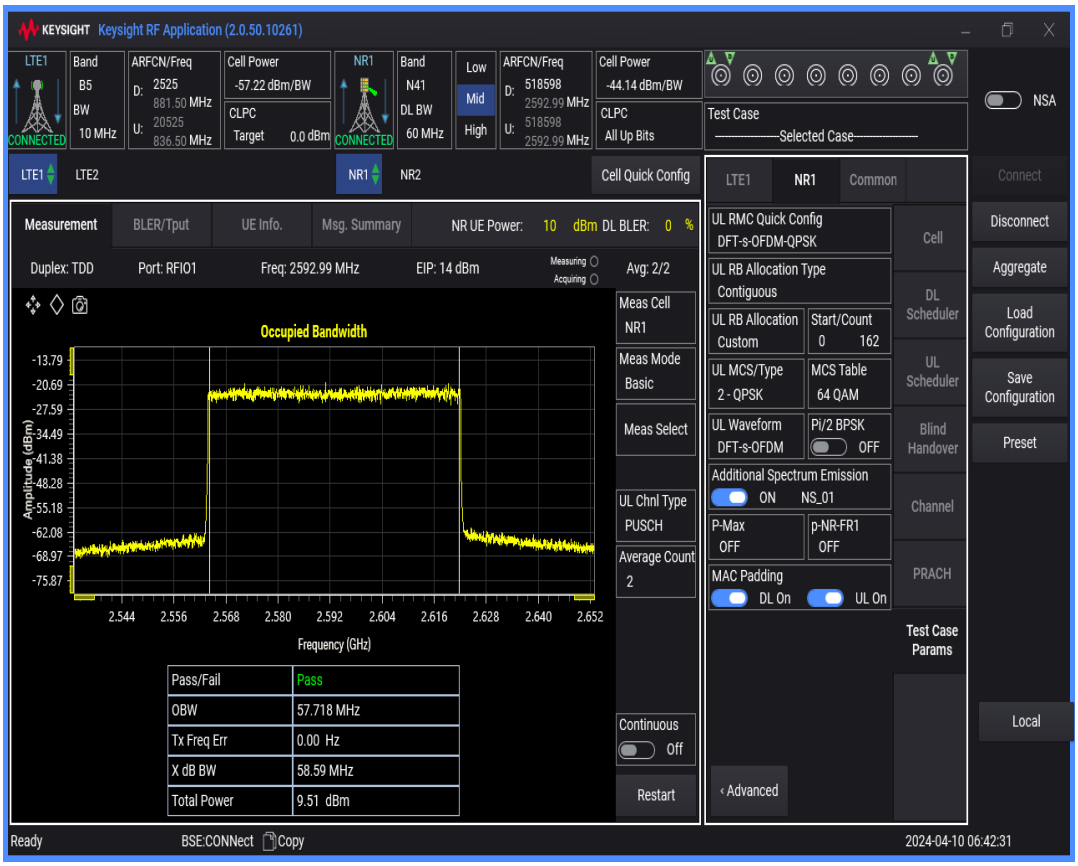
n41 SCS=30kHz DFT_QPSK BW=20MHz Channel=518598 RB=50@0

n41 SCS=30kHz DFT_QPSK BW=40MHz Channel=518598 RB=100@0

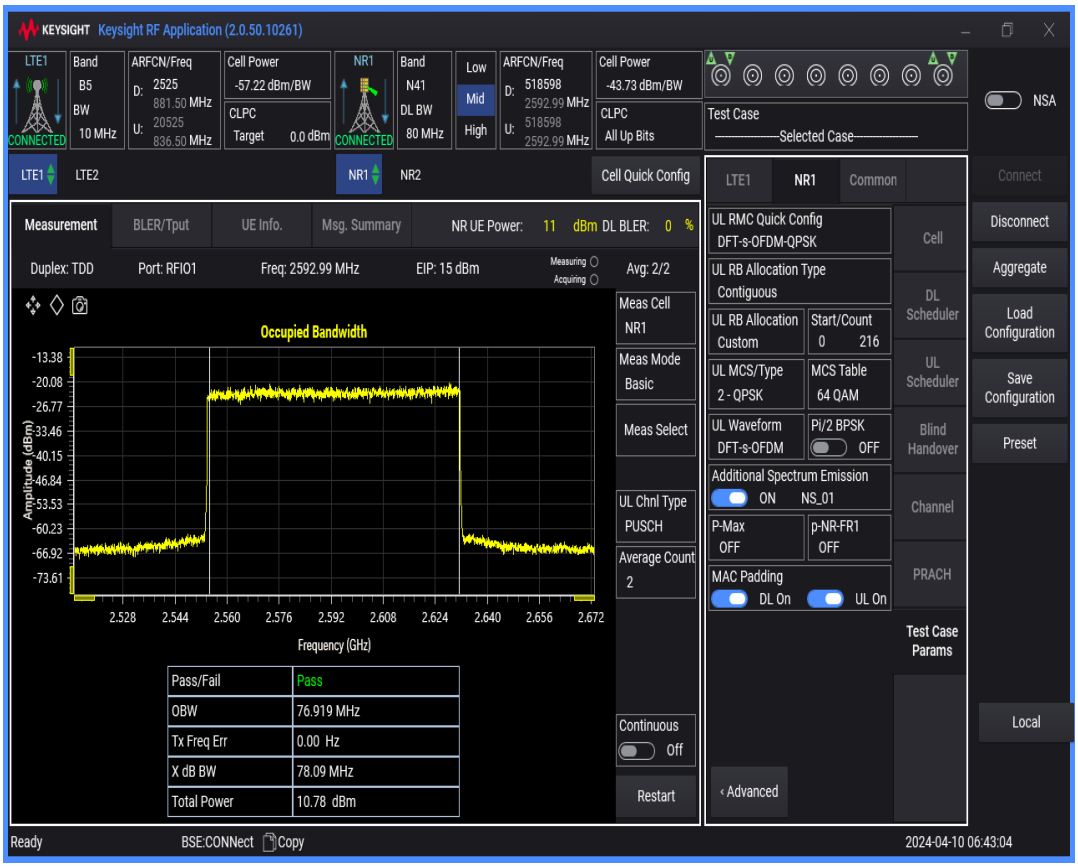


n41 SCS=30kHz DFT_QPSK BW=50MHz Channel=518598 RB=128@0

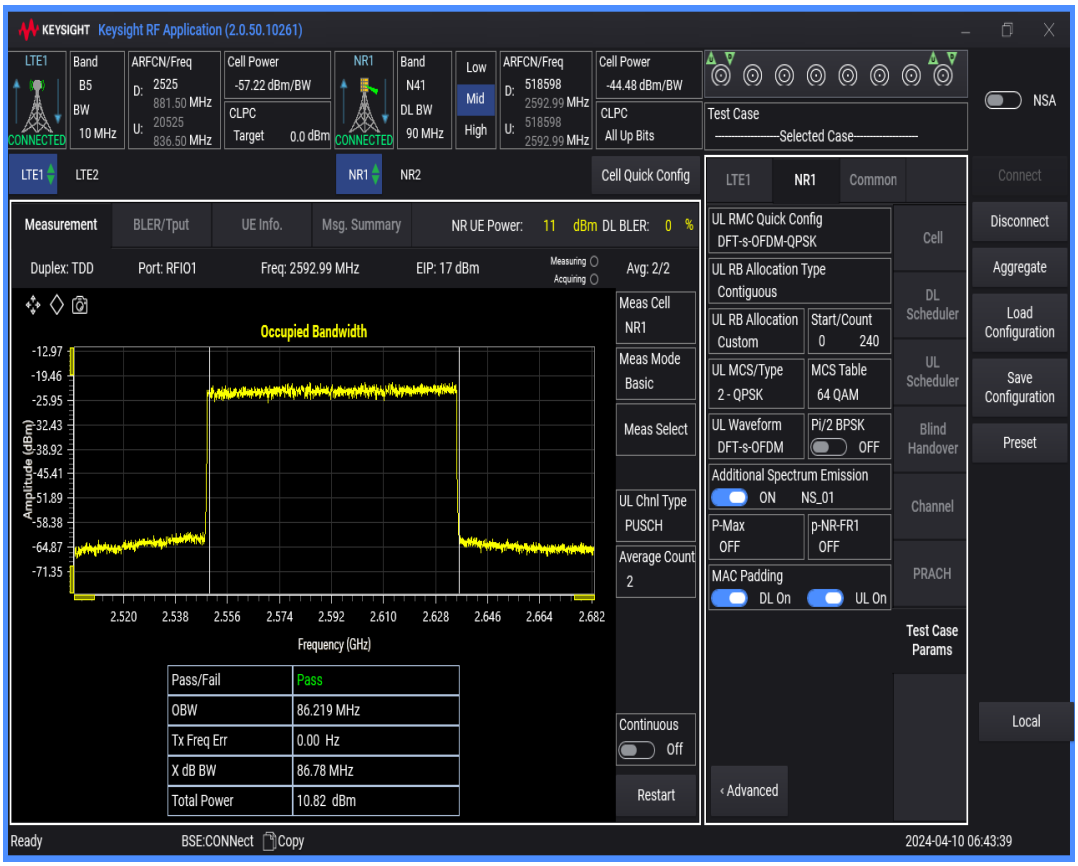
n41 SCS=30kHz DFT_QPSK BW=60MHz Channel=518598 RB=162@0



n41 SCS=30kHz DFT_QPSK BW=80MHz Channel=518598 RB=216@0



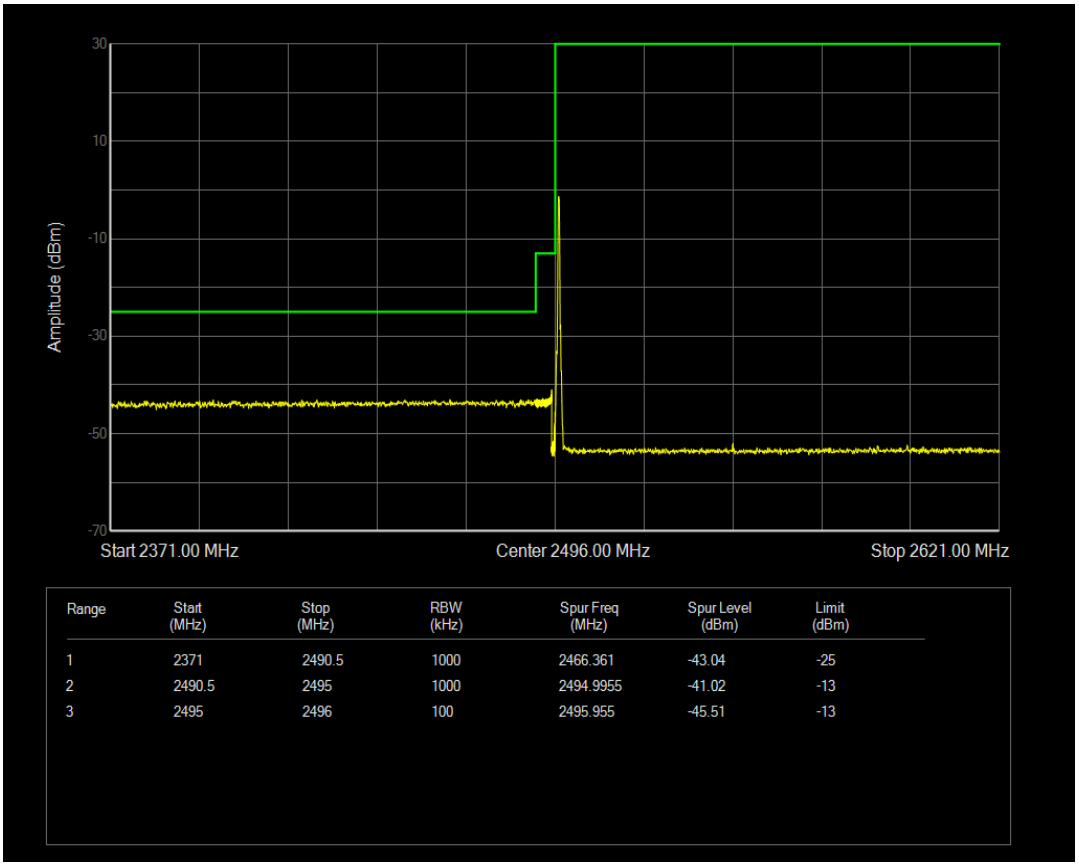
n41 SCS=30kHz DFT_QPSK BW=90MHz Channel=518598 RB=240@0



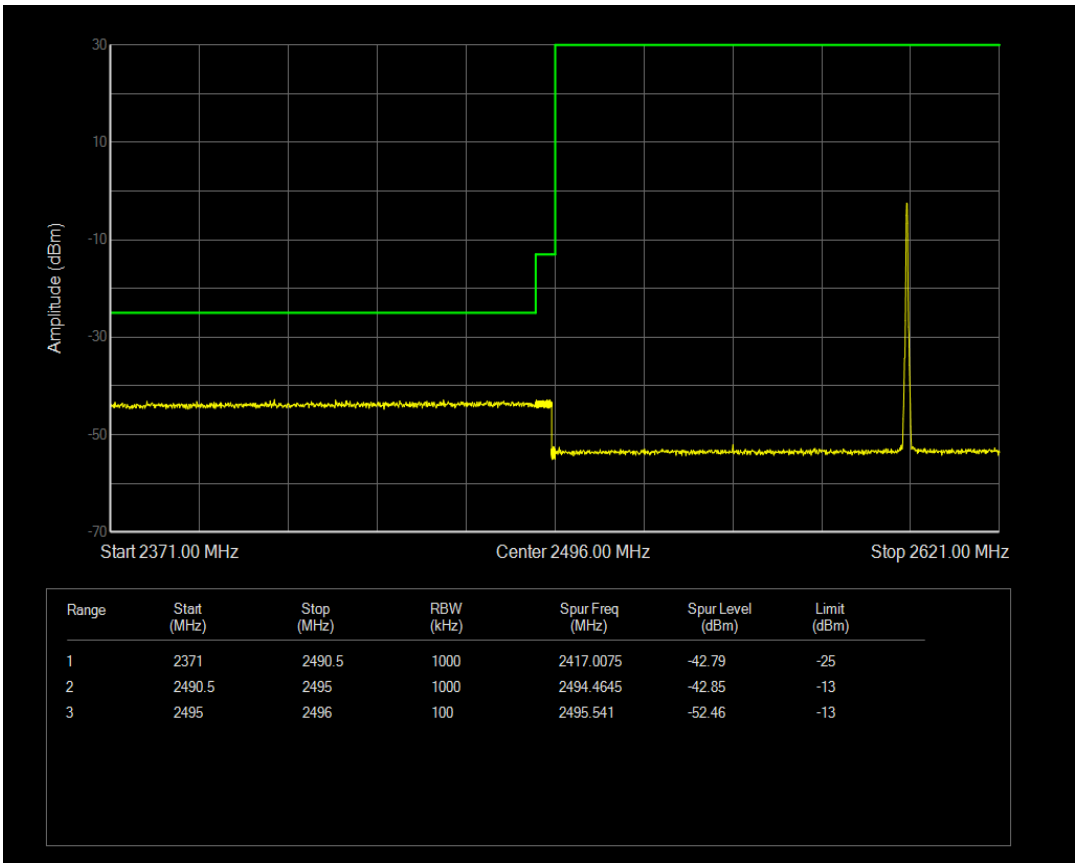
5 Band edge for EN-DC

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	30	20	501204	51@0	CP_QPSK	2489.53	-41.21	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	2487.65	-42.80	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	2475.11	-42.74	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	2710.84	-42.59	-25	PASS
n41	30	20	535998	1@0	CP_QPSK	2711.30	-42.79	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	2710.09	-42.62	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	2489.76	-42.27	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	2463.54	-42.76	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	2438.46	-42.95	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	2746.45	-42.87	-25	PASS
n41	30	50	532998	1@0	CP_QPSK	2743.05	-42.52	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	2752.00	-42.79	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	2489.66	-42.87	-25	PASS
n41	30	100	509202	1@0	CP_QPSK	2466.36	-43.04	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	2417.01	-42.79	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	2814.45	-42.81	-25	PASS
n41	30	100	528000	1@0	CP_QPSK	2797.93	-42.90	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	2793.33	-42.94	-25	PASS

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@0

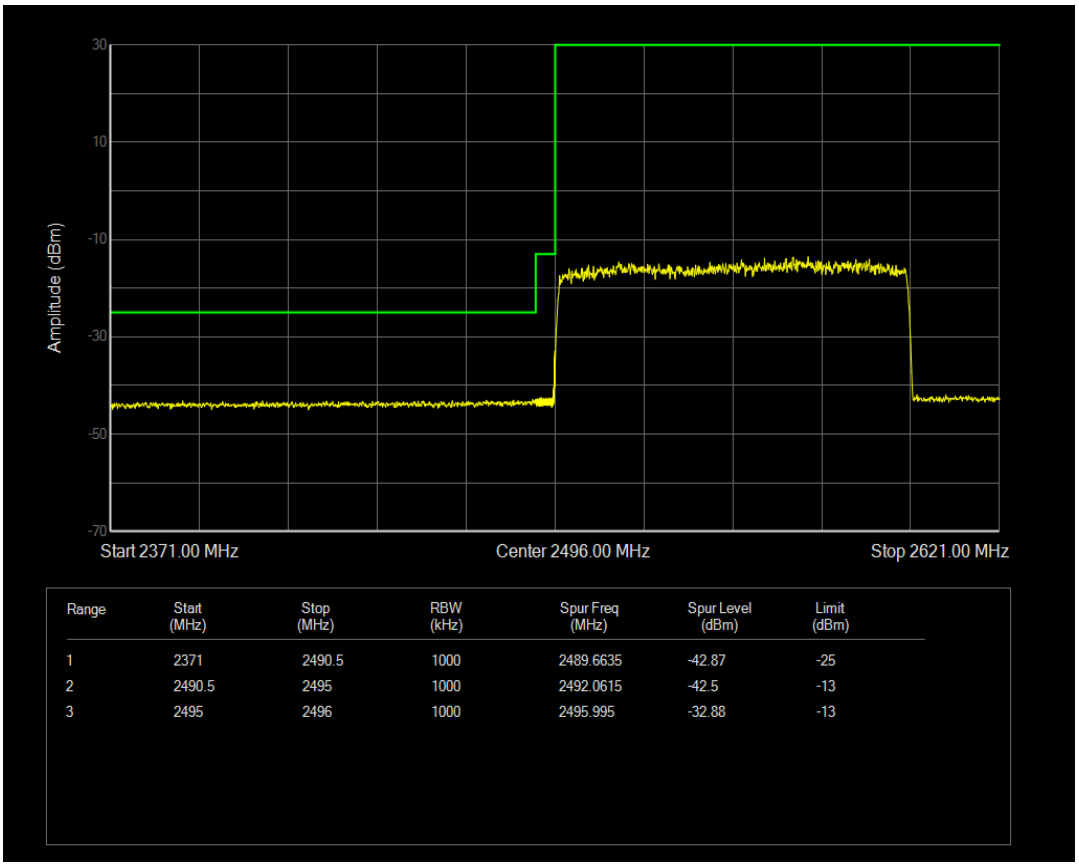


n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



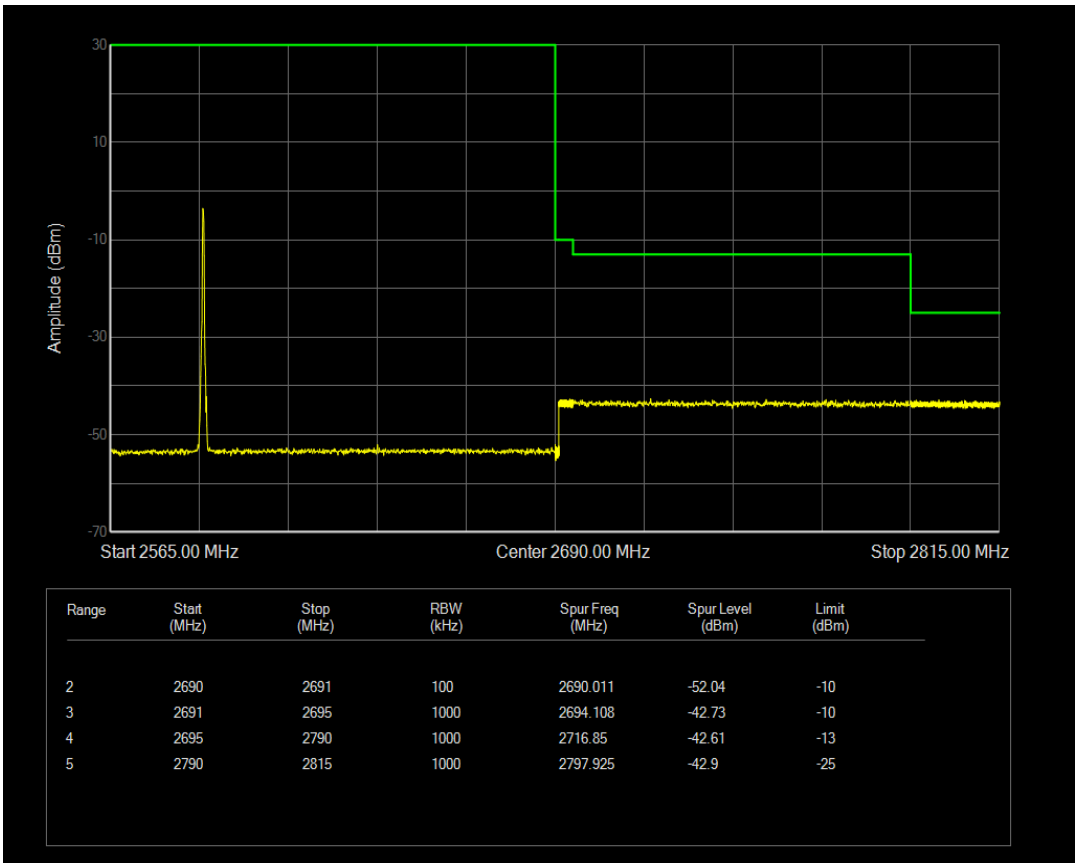
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2371	2490.5	1000	2417.0075	-42.79	-25
2	2490.5	2495	1000	2494.4645	-42.85	-13
3	2495	2496	100	2495.541	-52.46	-13

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=273@0



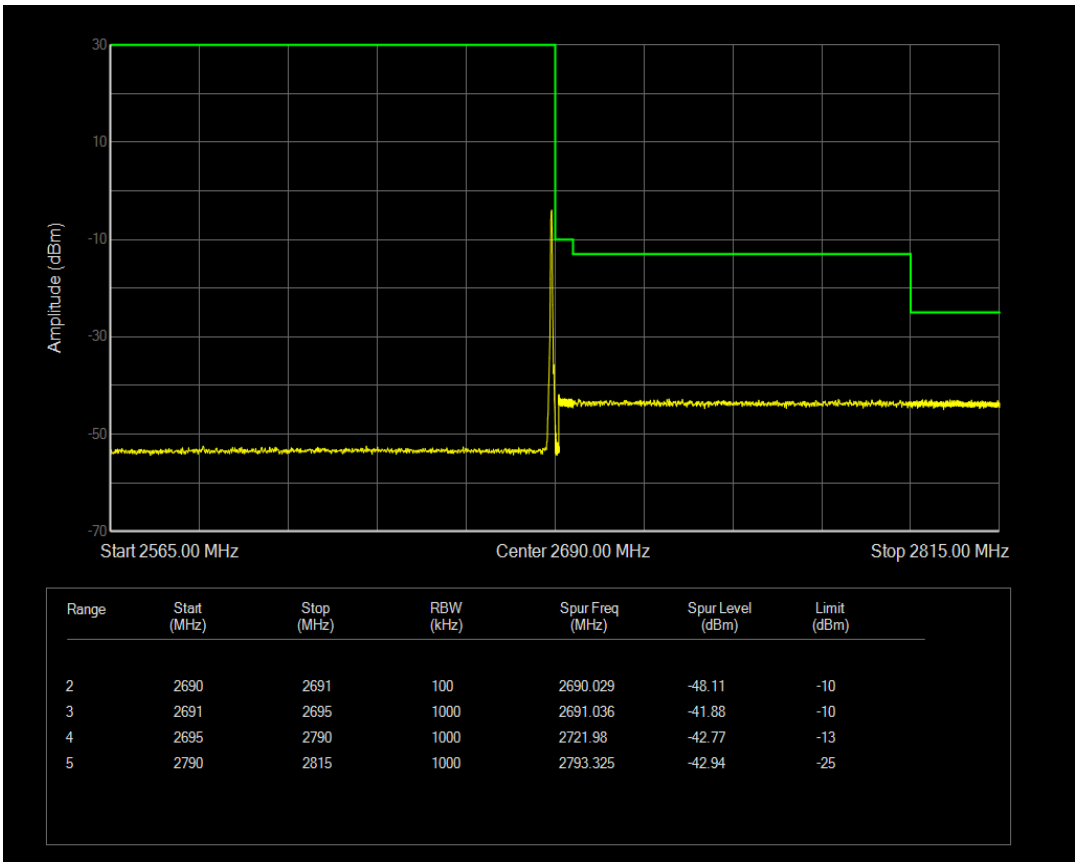
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2371	2490.5	1000	2489.6635	-42.87	-25
2	2490.5	2495	1000	2492.0615	-42.5	-13
3	2495	2496	1000	2495.995	-32.88	-13

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@0



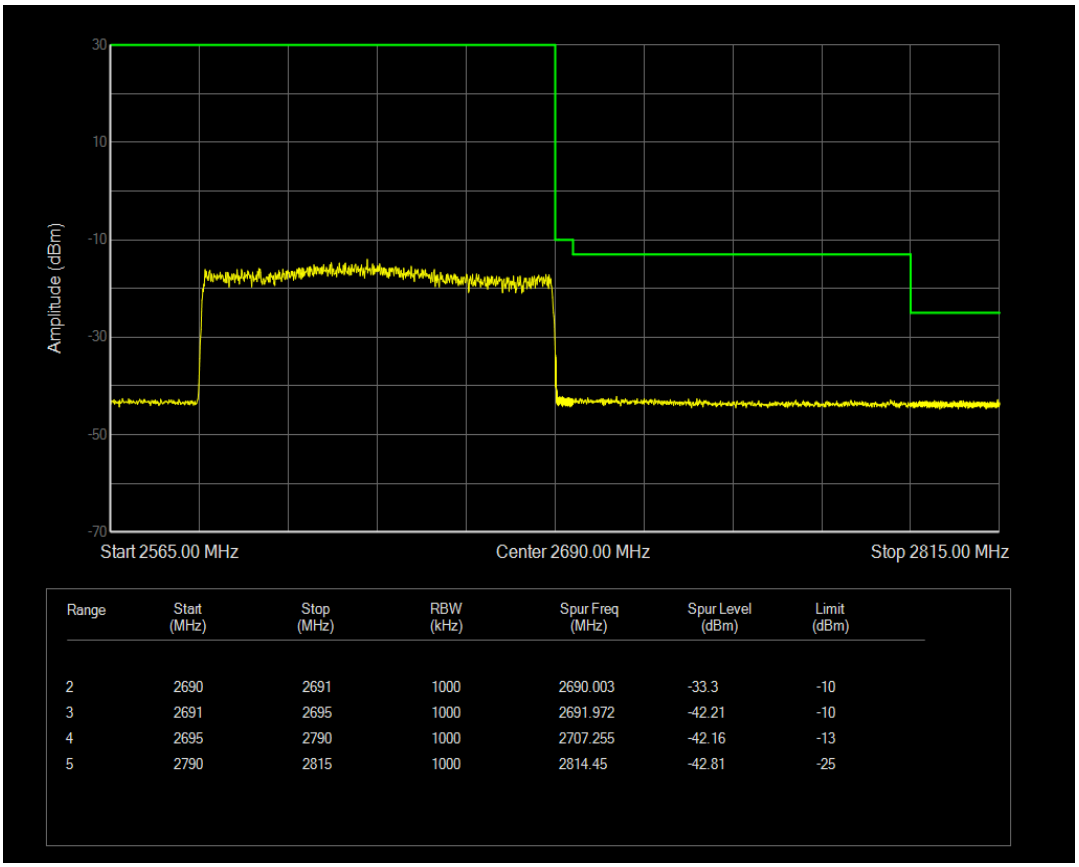
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.011	-52.04	-10
3	2691	2695	1000	2694.108	-42.73	-10
4	2695	2790	1000	2716.85	-42.61	-13
5	2790	2815	1000	2797.925	-42.9	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@272



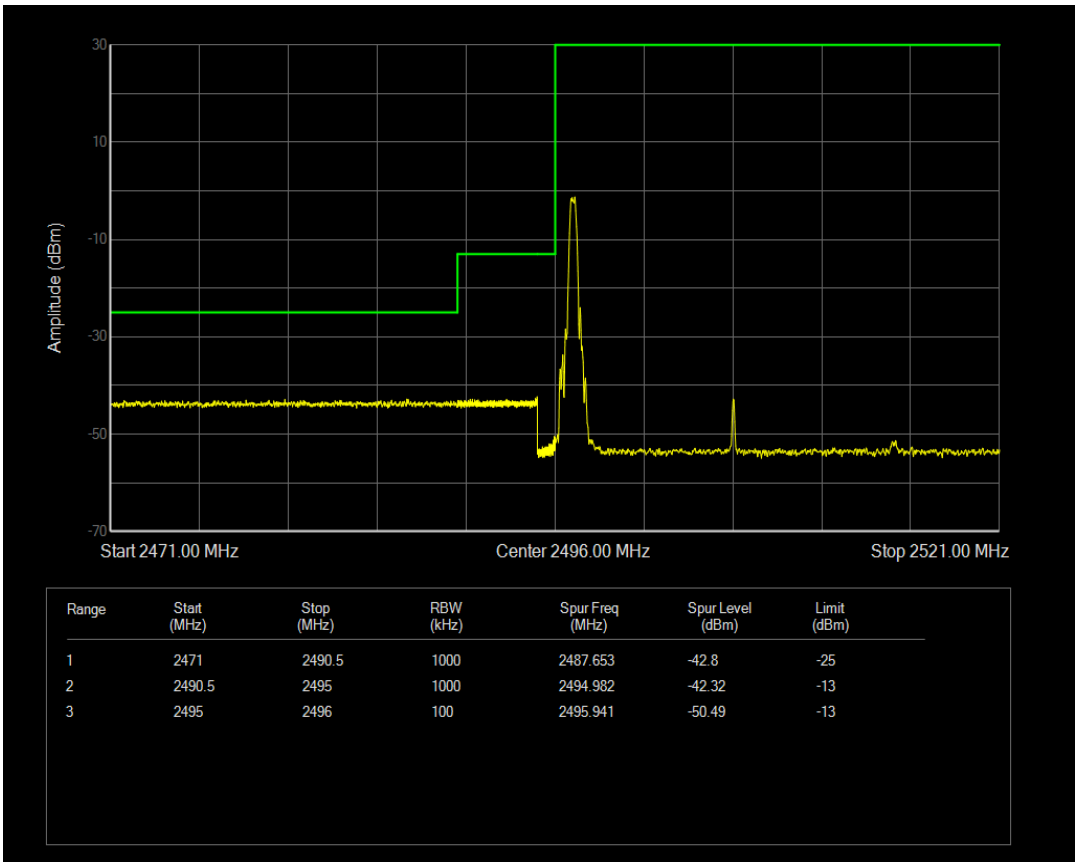
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.029	-48.11	-10
3	2691	2695	1000	2691.036	-41.88	-10
4	2695	2790	1000	2721.98	-42.77	-13
5	2790	2815	1000	2793.325	-42.94	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=273@0



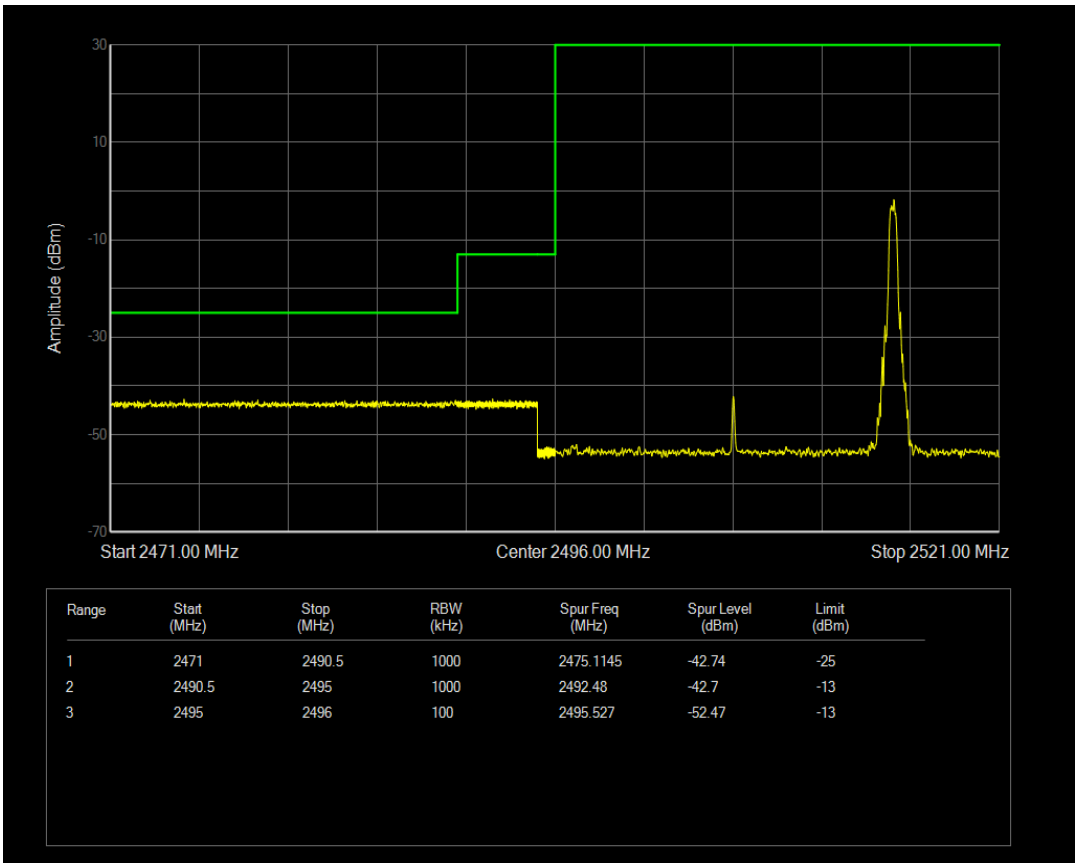
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	1000	2690.003	-33.3	-10
3	2691	2695	1000	2691.972	-42.21	-10
4	2695	2790	1000	2707.255	-42.16	-13
5	2790	2815	1000	2814.45	-42.81	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@0



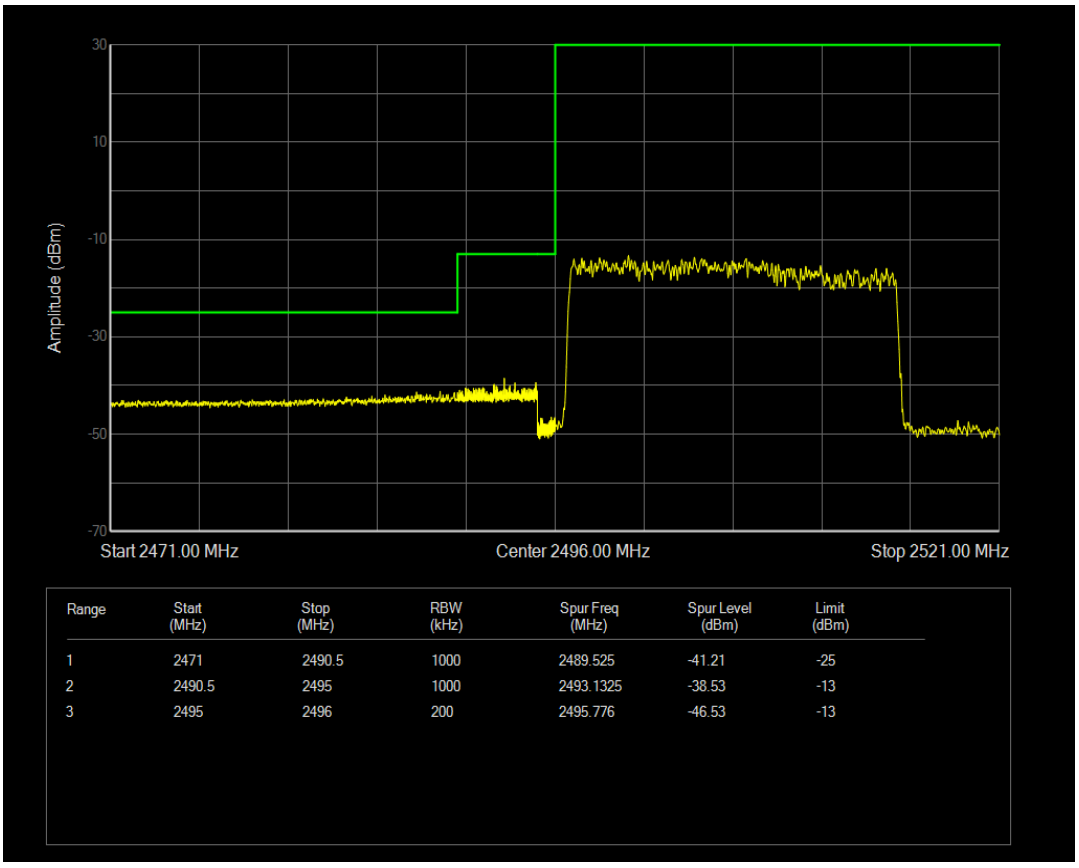
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2487.653	-42.8	-25
2	2490.5	2495	1000	2494.982	-42.32	-13
3	2495	2496	100	2495.941	-50.49	-13

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@50



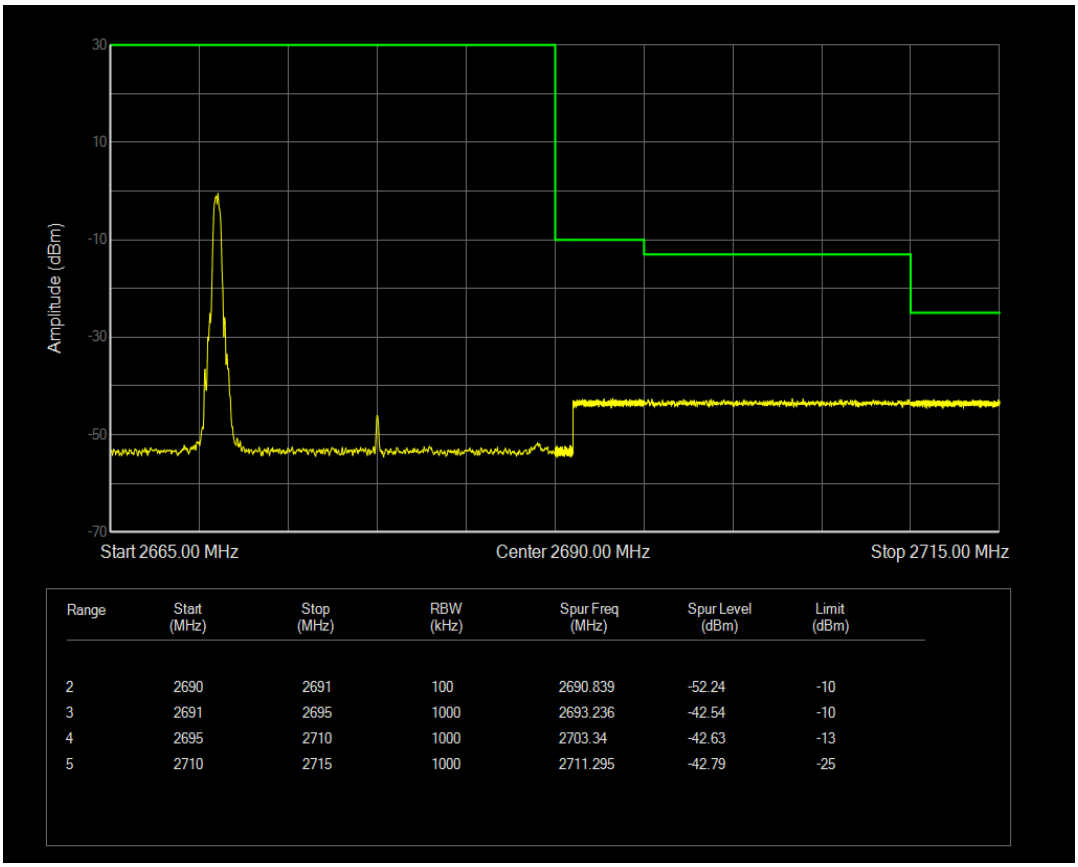
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2475.1145	-42.74	-25
2	2490.5	2495	1000	2492.48	-42.7	-13
3	2495	2496	100	2495.527	-52.47	-13

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=51@0



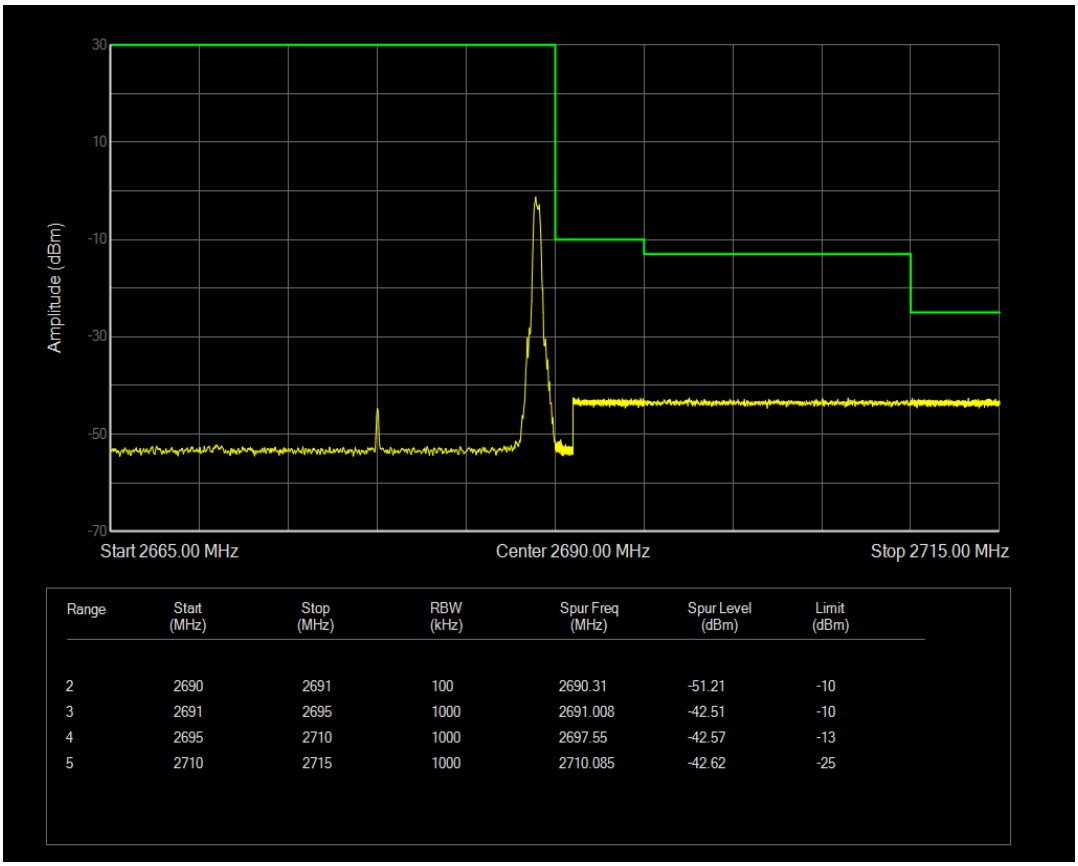
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2489.525	-41.21	-25
2	2490.5	2495	1000	2493.1325	-38.53	-13
3	2495	2496	200	2495.776	-46.53	-13

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@0



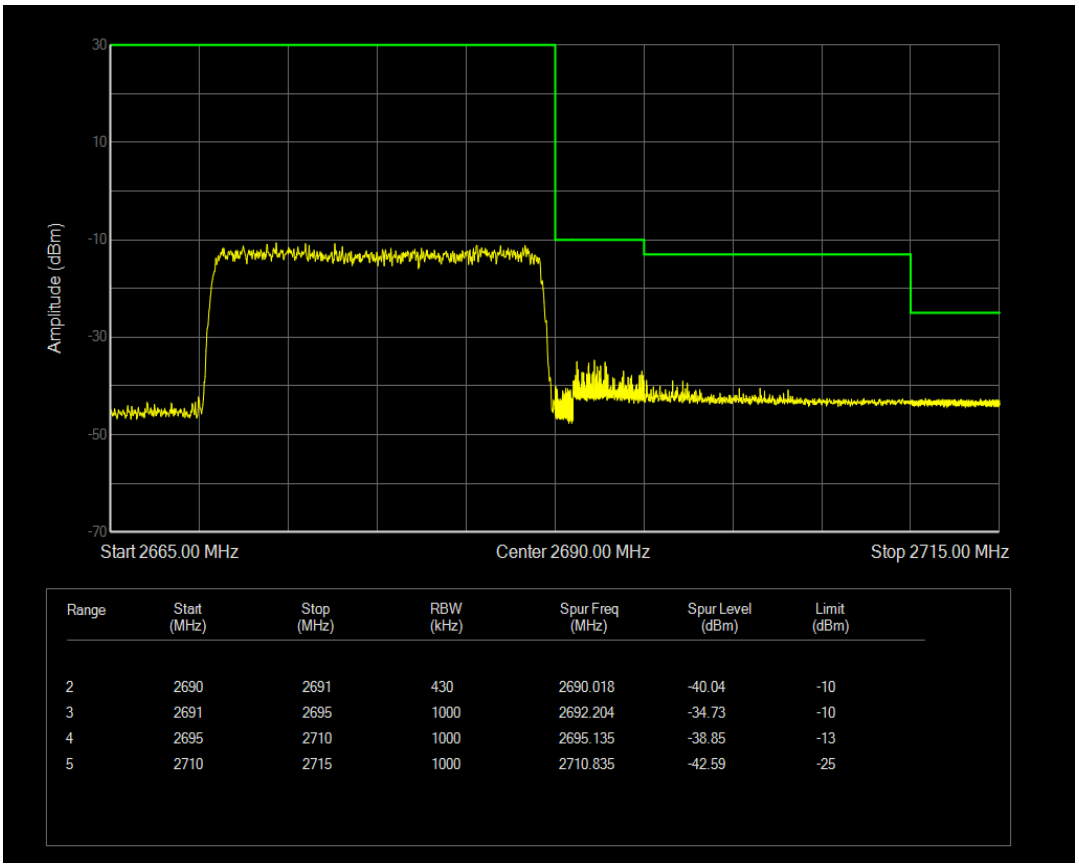
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.839	-52.24	-10
3	2691	2695	1000	2693.236	-42.54	-10
4	2695	2710	1000	2703.34	-42.63	-13
5	2710	2715	1000	2711.295	-42.79	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@50



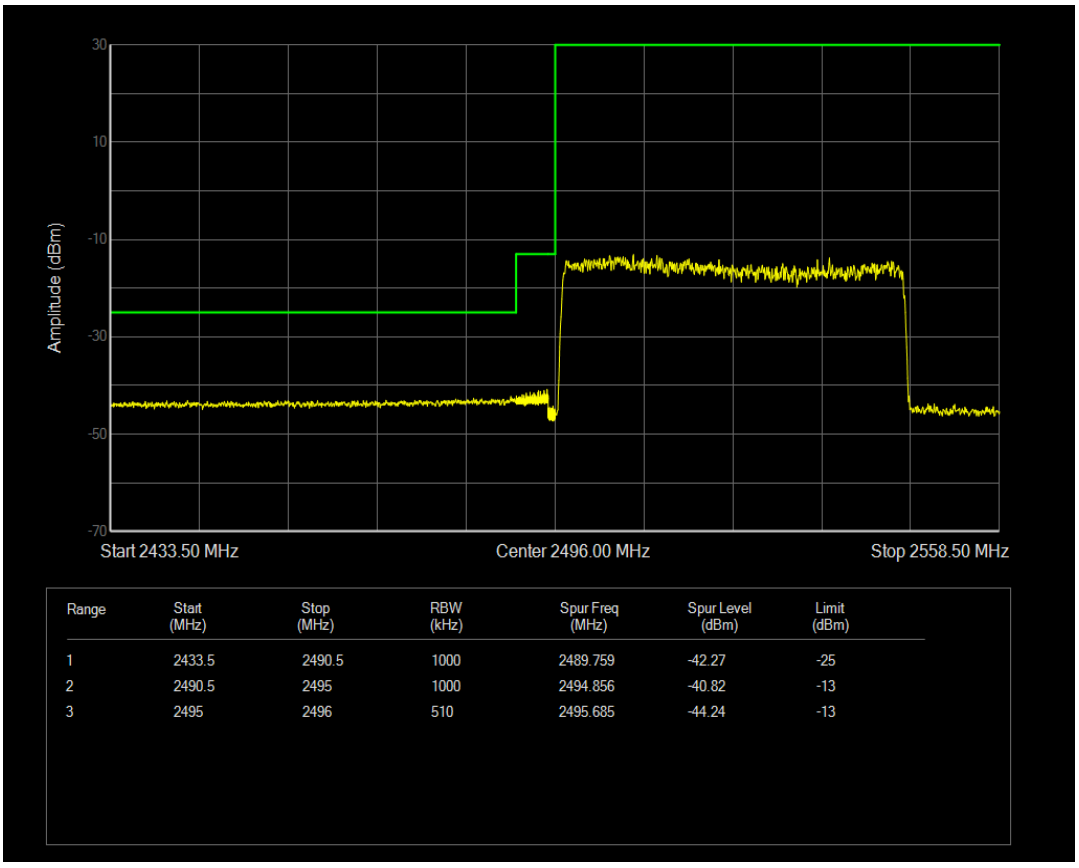
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.31	-51.21	-10
3	2691	2695	1000	2691.008	-42.51	-10
4	2695	2710	1000	2697.55	-42.57	-13
5	2710	2715	1000	2710.085	-42.62	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=51@0



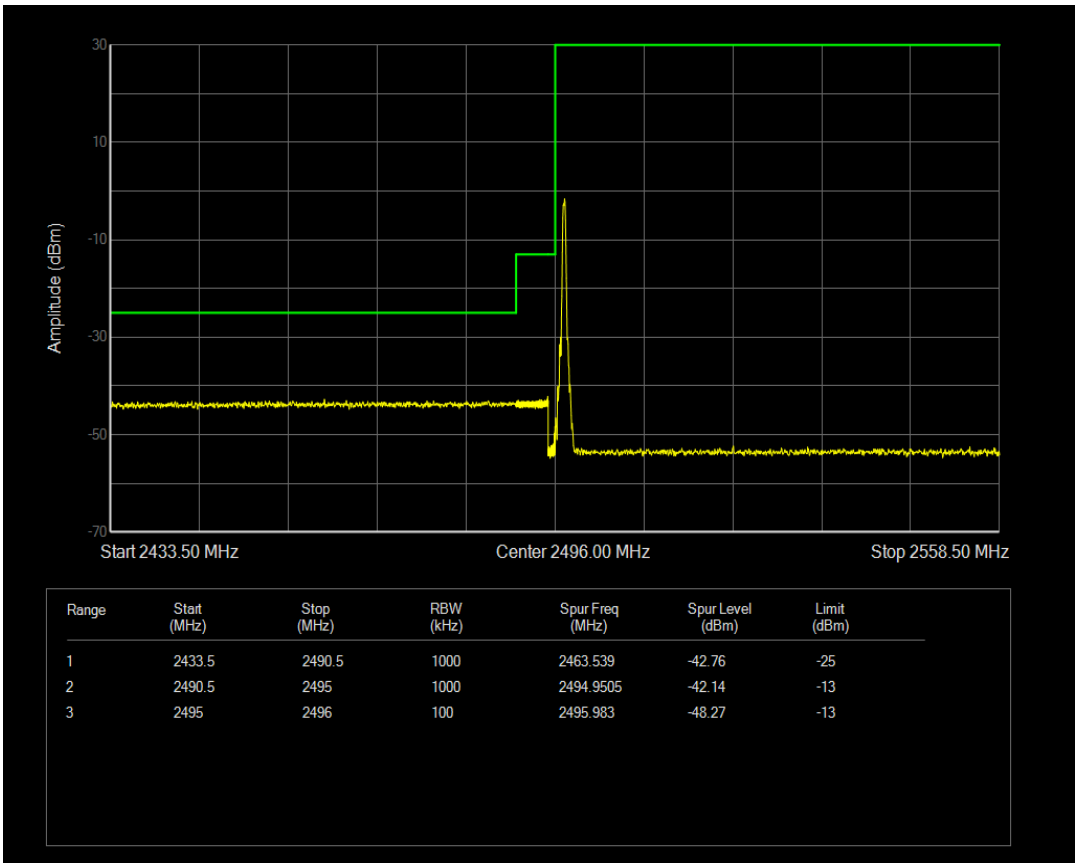
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	430	2690.018	-40.04	-10
3	2691	2695	1000	2692.204	-34.73	-10
4	2695	2710	1000	2695.135	-38.85	-13
5	2710	2715	1000	2710.835	-42.59	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=133@0



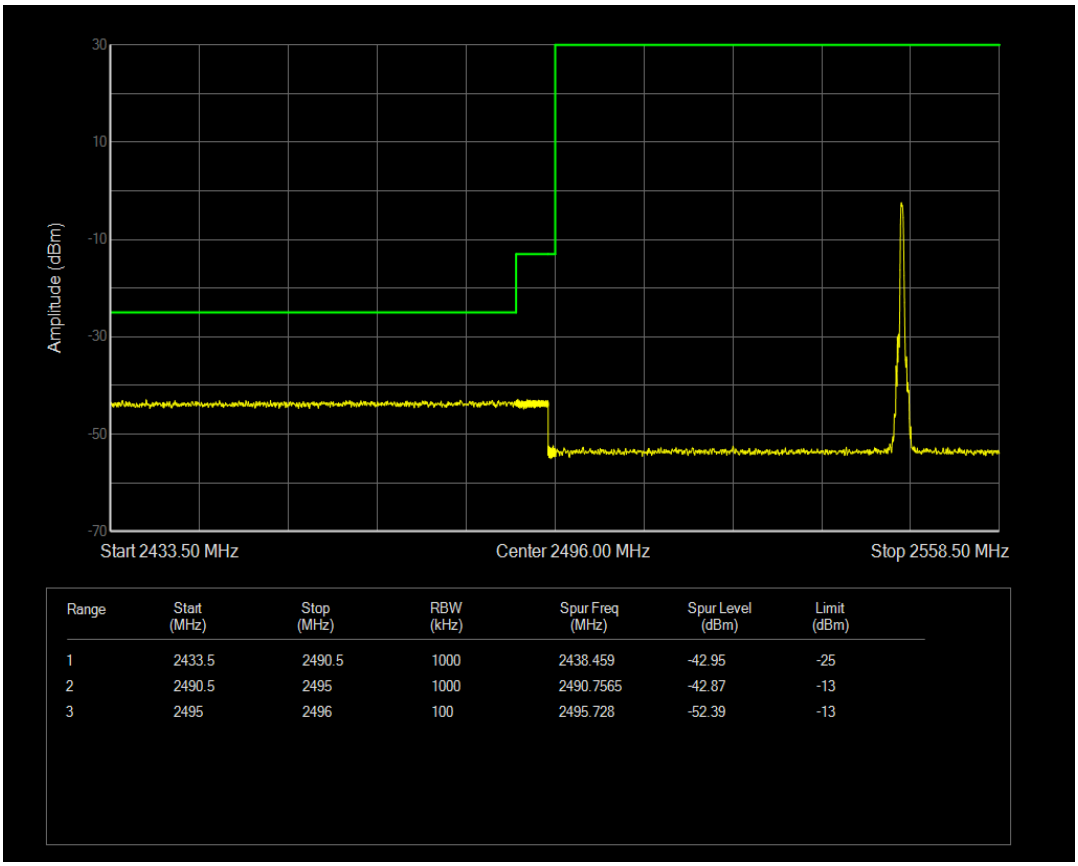
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2489.759	-42.27	-25
2	2490.5	2495	1000	2494.856	-40.82	-13
3	2495	2496	510	2495.685	-44.24	-13

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@0



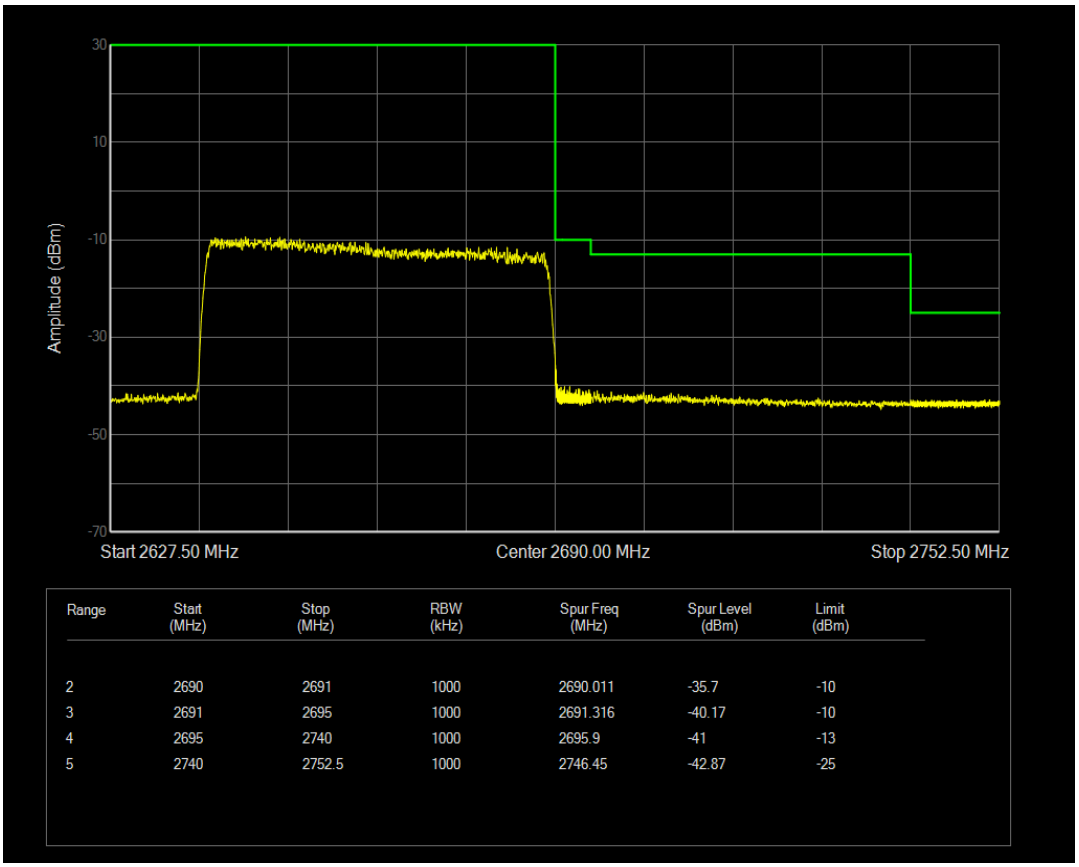
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2463.539	-42.76	-25
2	2490.5	2495	1000	2494.9505	-42.14	-13
3	2495	2496	100	2495.983	-48.27	-13

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@132



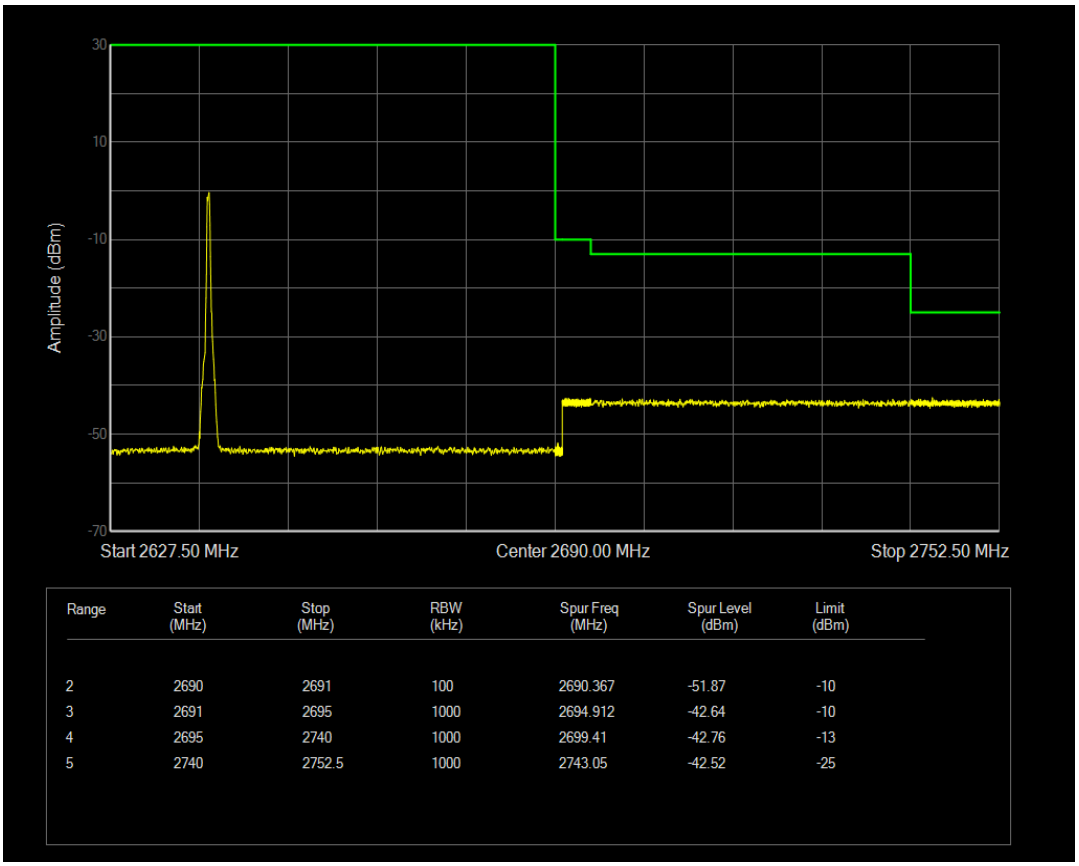
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2438.459	-42.95	-25
2	2490.5	2495	1000	2490.7565	-42.87	-13
3	2495	2496	100	2495.728	-52.39	-13

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=133@0



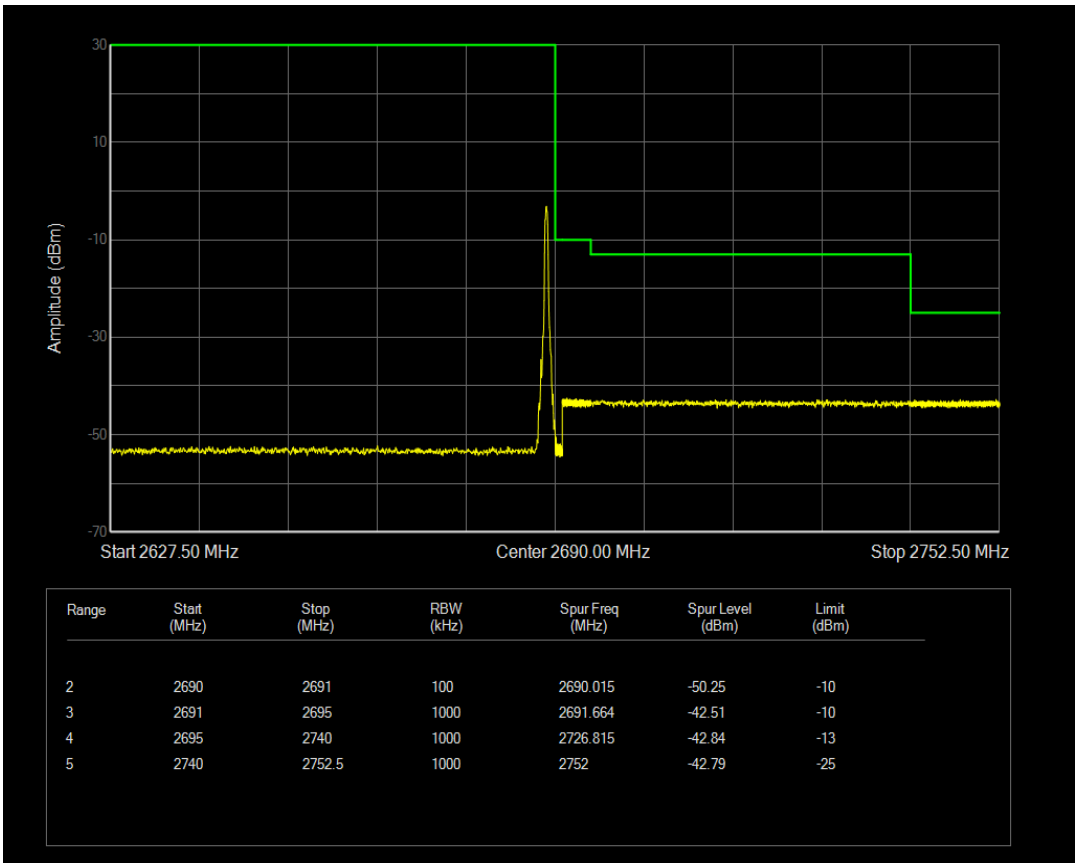
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	1000	2690.011	-35.7	-10
3	2691	2695	1000	2691.316	-40.17	-10
4	2695	2740	1000	2695.9	-41	-13
5	2740	2752.5	1000	2746.45	-42.87	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.367	-51.87	-10
3	2691	2695	1000	2694.912	-42.64	-10
4	2695	2740	1000	2699.41	-42.76	-13
5	2740	2752.5	1000	2743.05	-42.52	-25

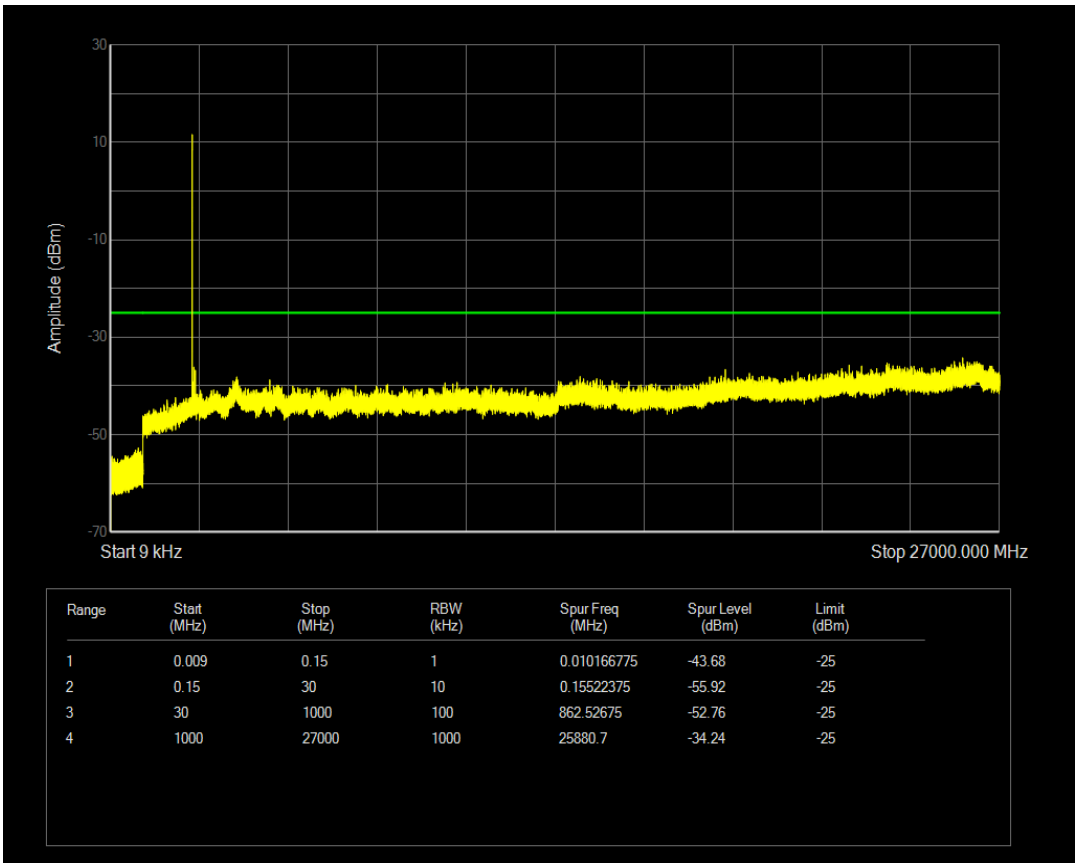
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@132



6 Out-of-band emissions for EN-DC

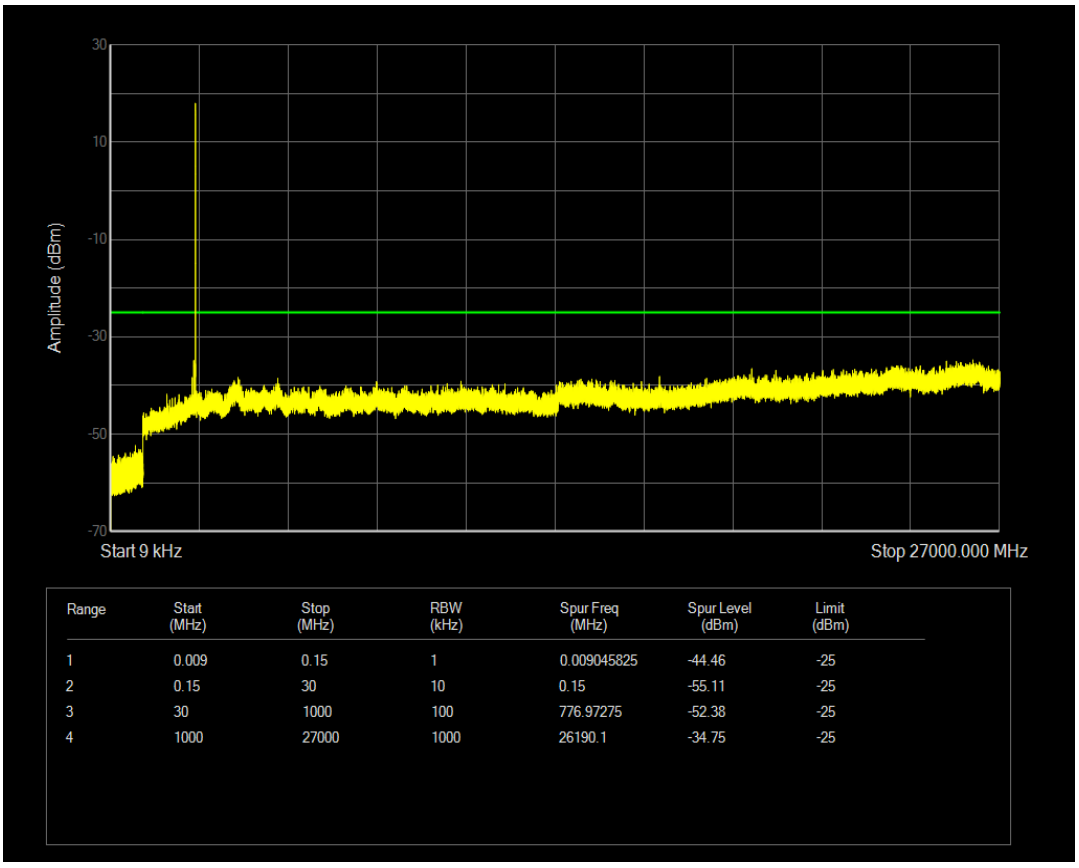
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	30	20	501204	51@0	CP_QPSK	26383.15	-34.78	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	26398.75	-34.62	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	25982.75	-34.50	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	26315.55	-34.12	-25	PASS
n41	30	20	535998	1@0	CP_QPSK	25908.00	-34.58	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	26045.80	-33.66	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	25801.40	-34.60	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	25732.50	-34.69	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	26385.10	-33.95	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	26489.75	-34.29	-25	PASS
n41	30	50	532998	1@0	CP_QPSK	25904.10	-34.65	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	26370.80	-34.30	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	26363.00	-34.99	-25	PASS
n41	30	100	509202	1@0	CP_QPSK	25880.70	-34.24	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	26190.10	-34.75	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	23964.50	-34.46	-25	PASS
n41	30	100	528000	1@0	CP_QPSK	23546.55	-33.89	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	26288.90	-34.53	-25	PASS

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@0



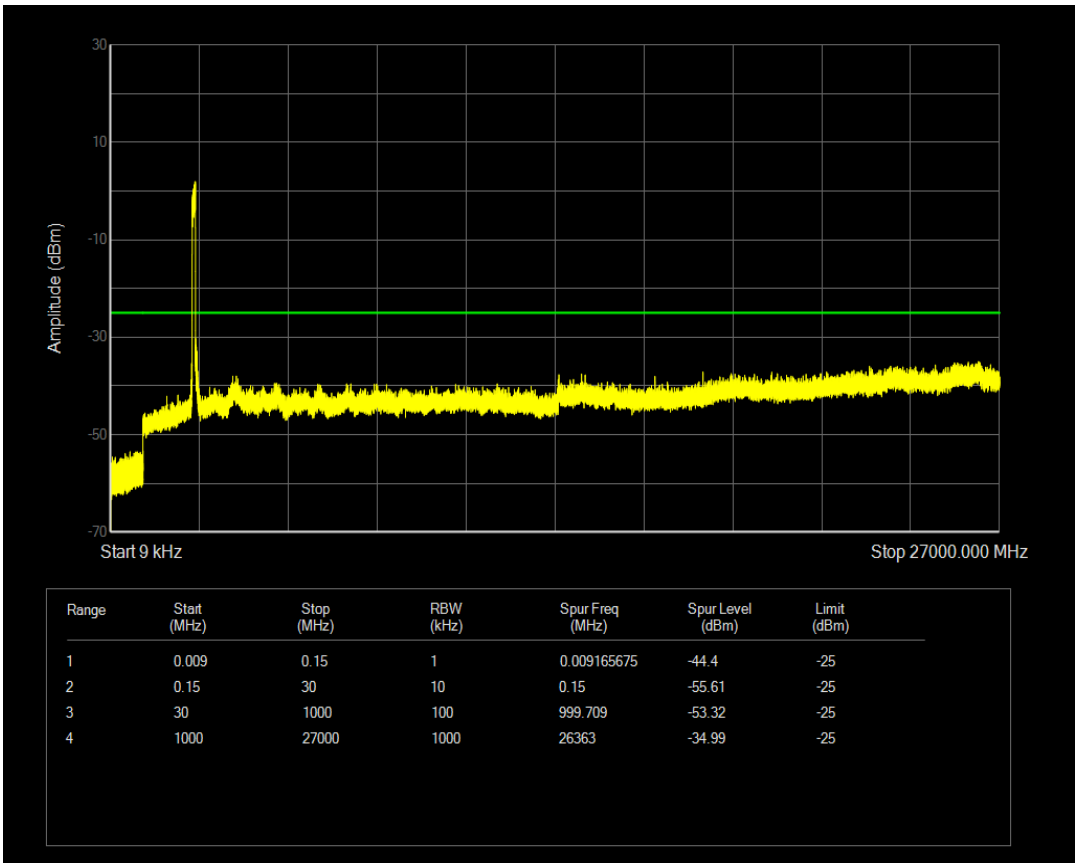
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010166775	-43.68	-25
2	0.15	30	10	0.15522375	-55.92	-25
3	30	1000	100	862.52675	-52.76	-25
4	1000	27000	1000	25880.7	-34.24	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



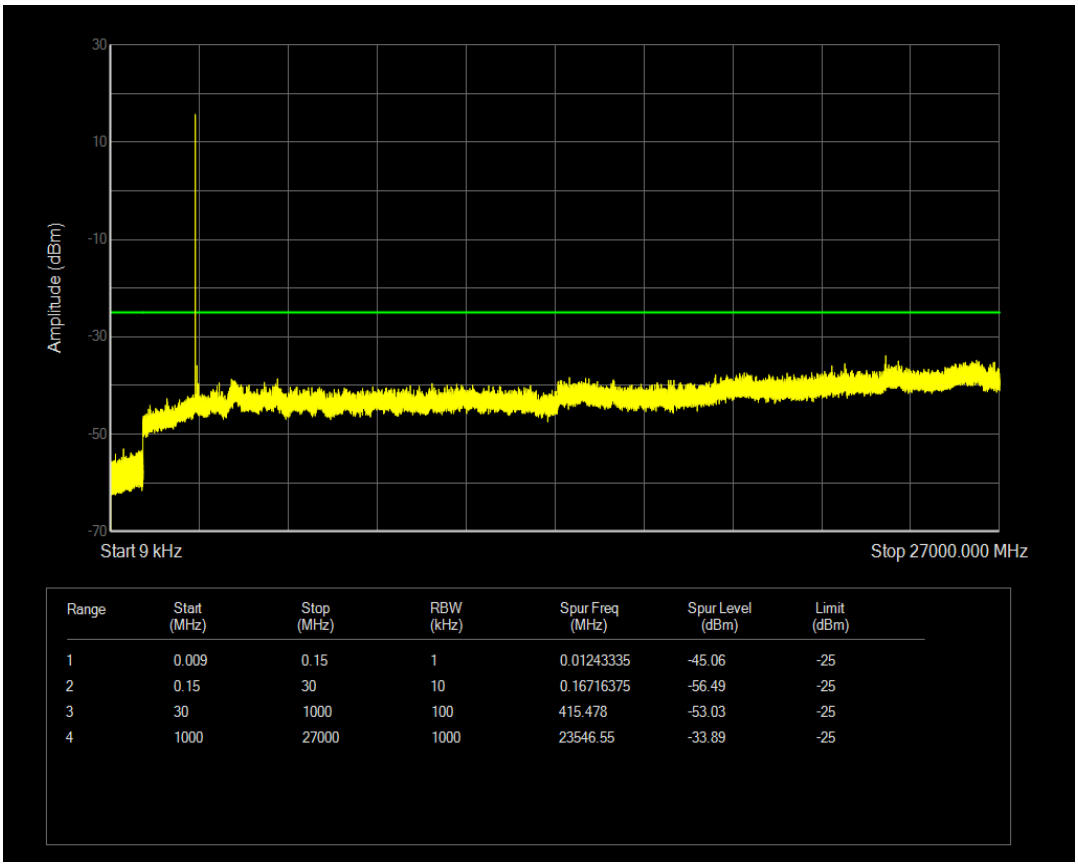
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009045825	-44.46	-25
2	0.15	30	10	0.15	-55.11	-25
3	30	1000	100	776.97275	-52.38	-25
4	1000	27000	1000	26190.1	-34.75	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=273@0



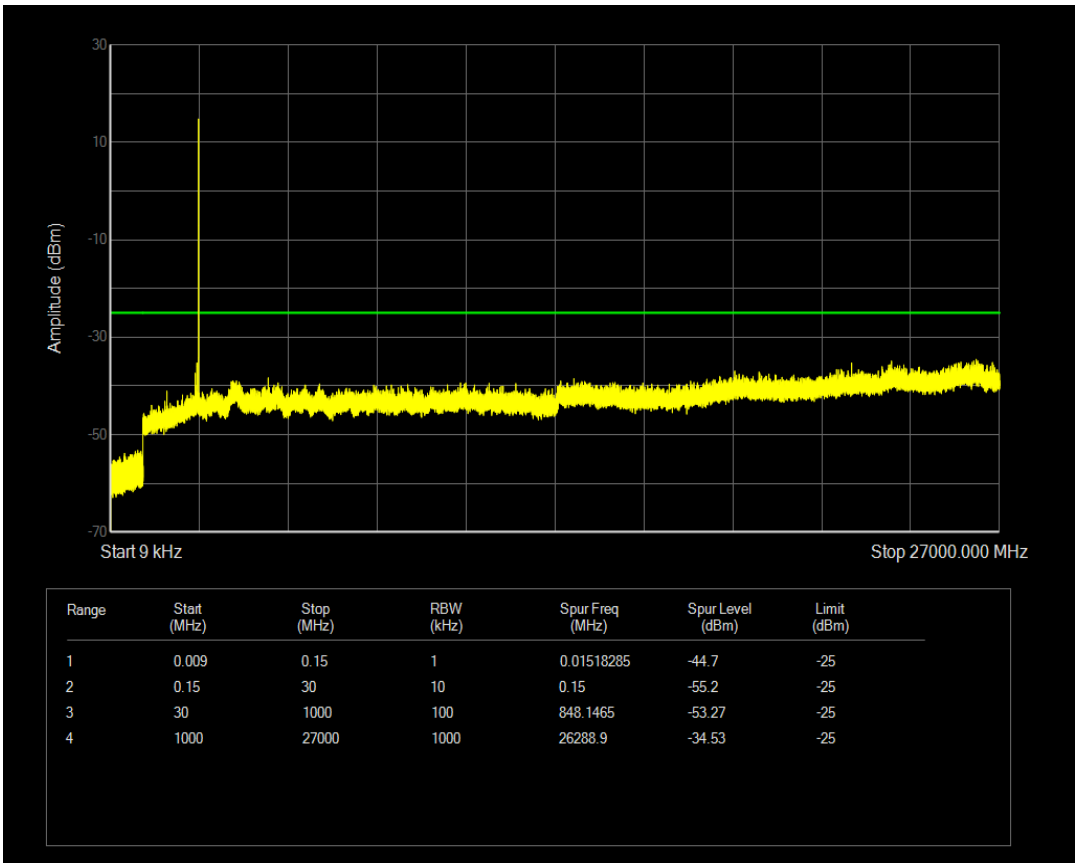
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009165675	-44.4	-25
2	0.15	30	10	0.15	-55.61	-25
3	30	1000	100	999.709	-53.32	-25
4	1000	27000	1000	26363	-34.99	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@0



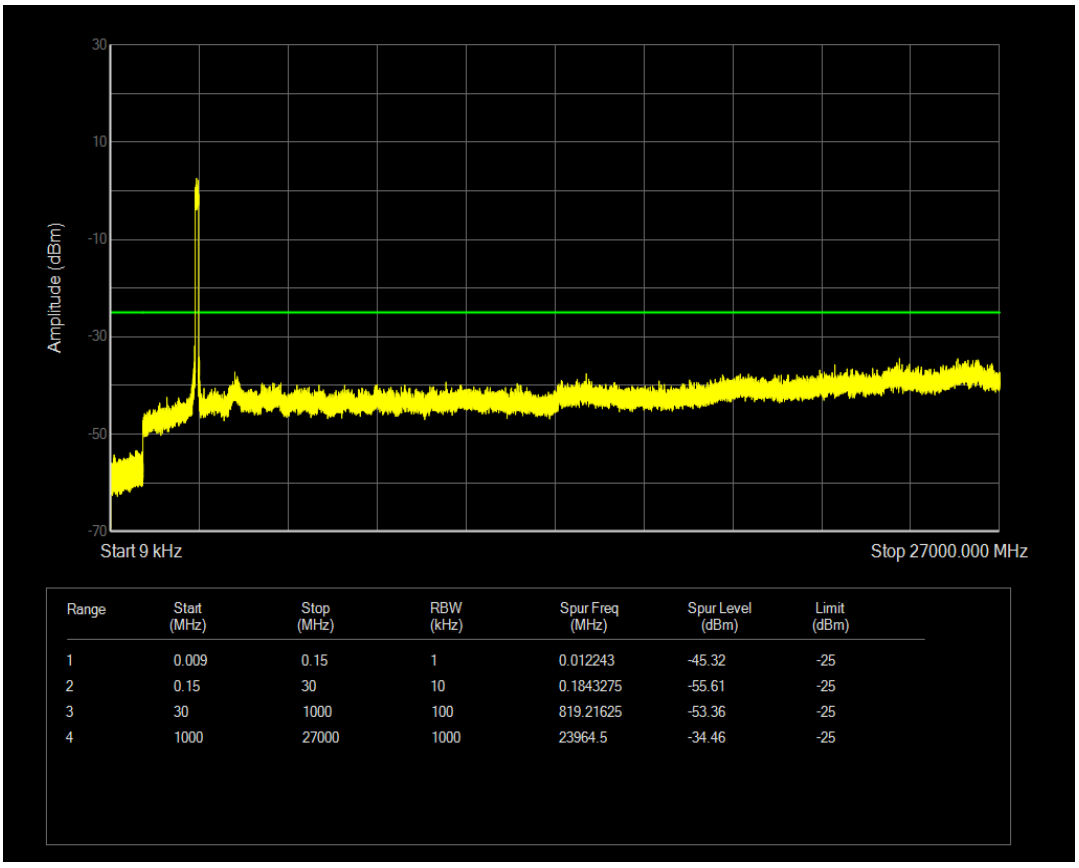
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01243335	-45.06	-25
2	0.15	30	10	0.16716375	-56.49	-25
3	30	1000	100	415.478	-53.03	-25
4	1000	27000	1000	23546.55	-33.89	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@272



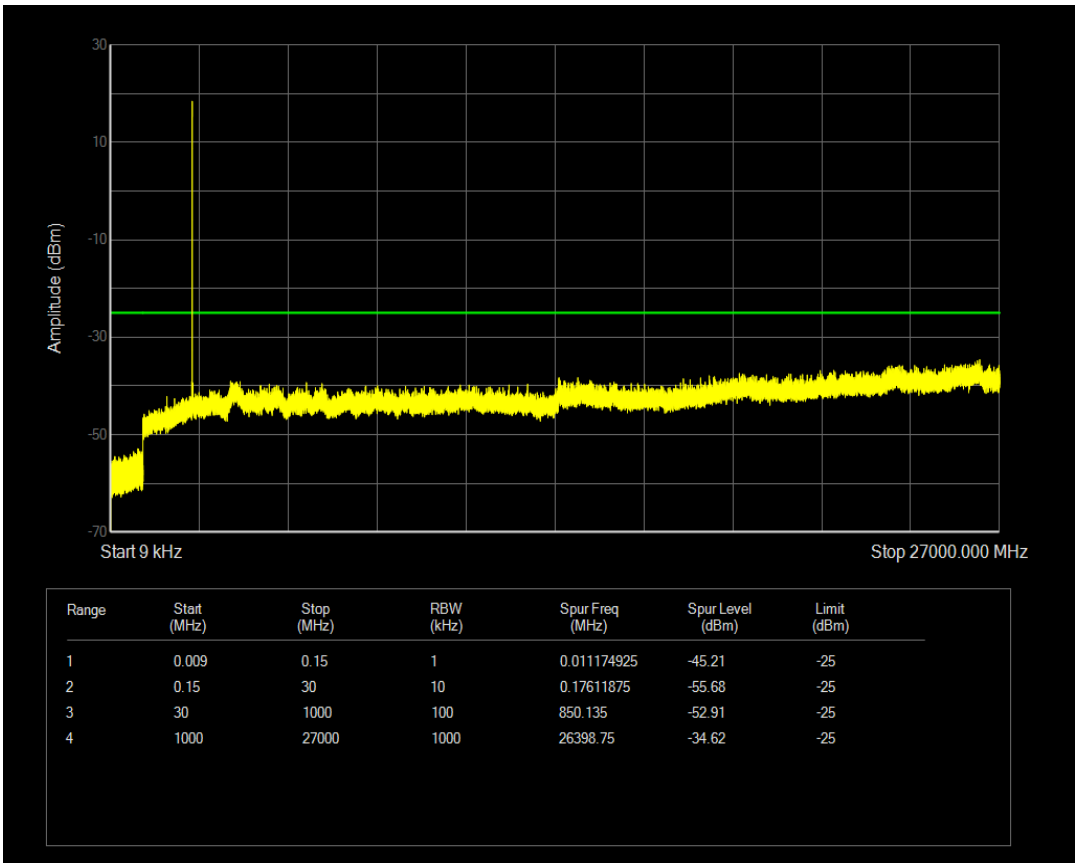
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01518285	-44.7	-25
2	0.15	30	10	0.15	-55.2	-25
3	30	1000	100	848.1465	-53.27	-25
4	1000	27000	1000	26288.9	-34.53	-25

n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=273@0



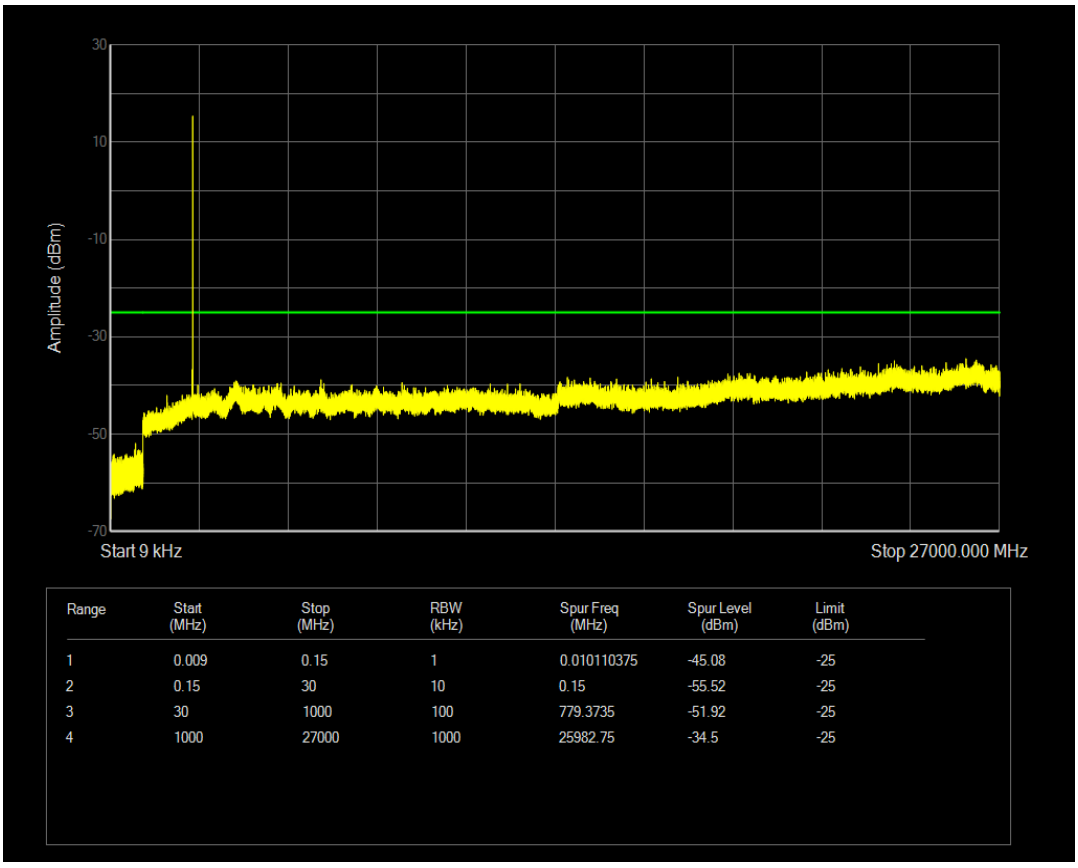
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.012243	-45.32	-25
2	0.15	30	10	0.1843275	-55.61	-25
3	30	1000	100	819.21625	-53.36	-25
4	1000	27000	1000	23964.5	-34.46	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@0



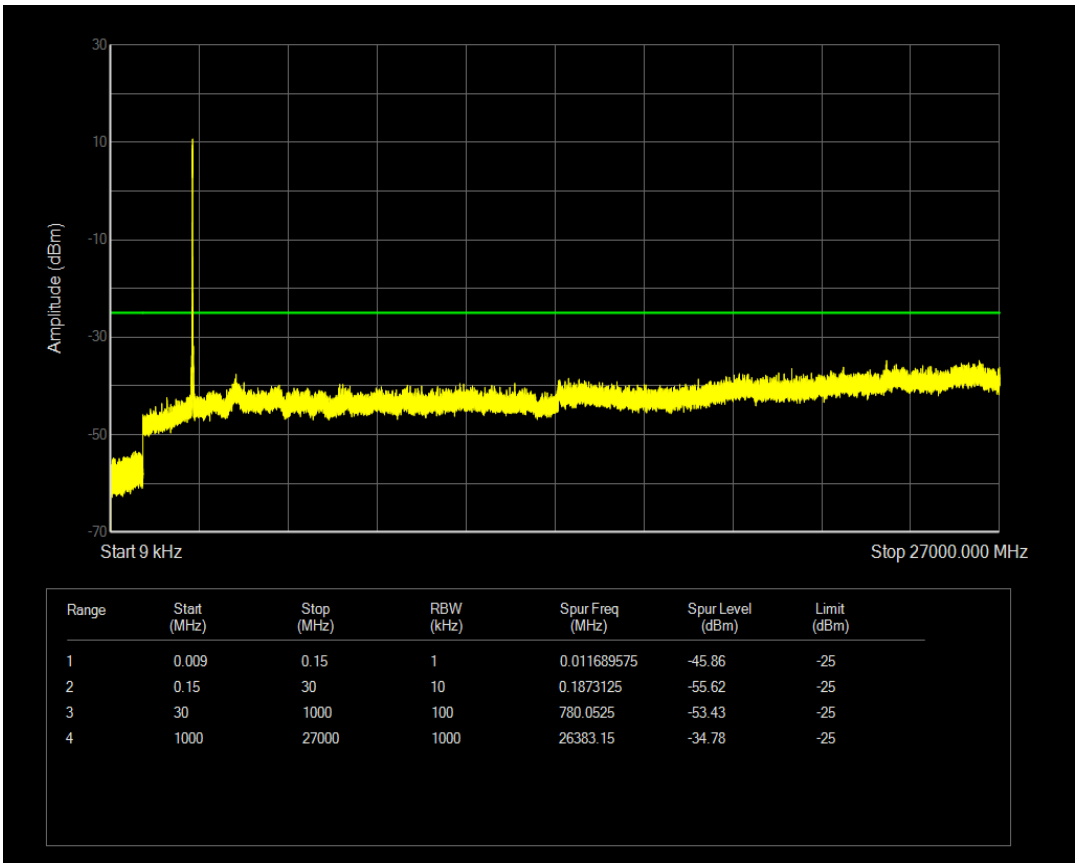
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011174925	-45.21	-25
2	0.15	30	10	0.17611875	-55.68	-25
3	30	1000	100	850.135	-52.91	-25
4	1000	27000	1000	26398.75	-34.62	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@50



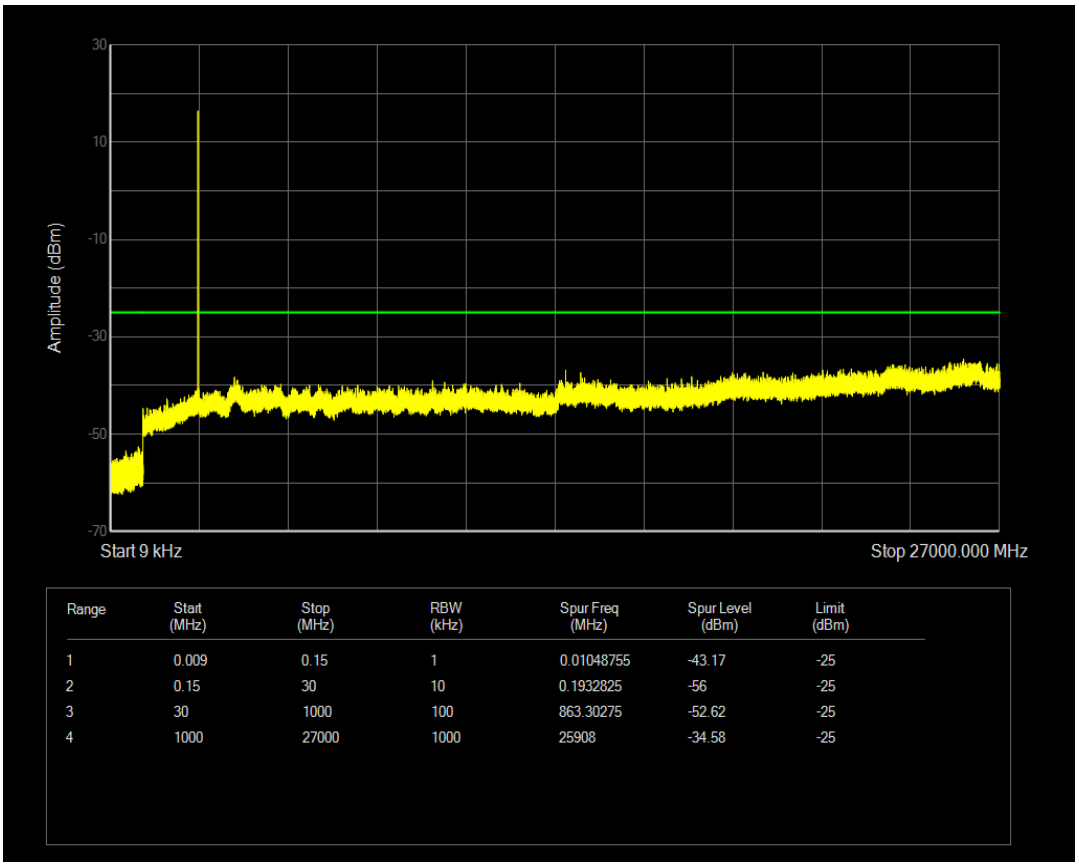
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010110375	-45.08	-25
2	0.15	30	10	0.15	-55.52	-25
3	30	1000	100	779.3735	-51.92	-25
4	1000	27000	1000	25982.75	-34.5	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=51@0



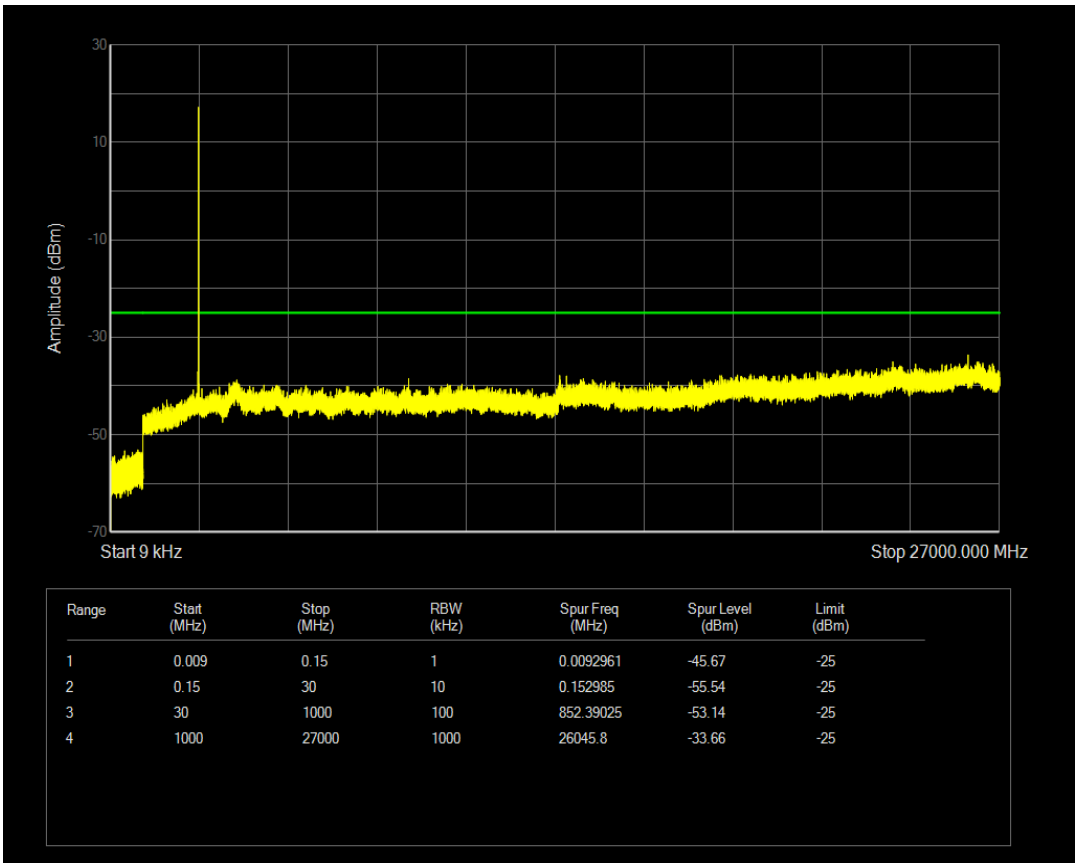
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011689575	-45.86	-25
2	0.15	30	10	0.1873125	-55.62	-25
3	30	1000	100	780.0525	-53.43	-25
4	1000	27000	1000	26383.15	-34.78	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@0



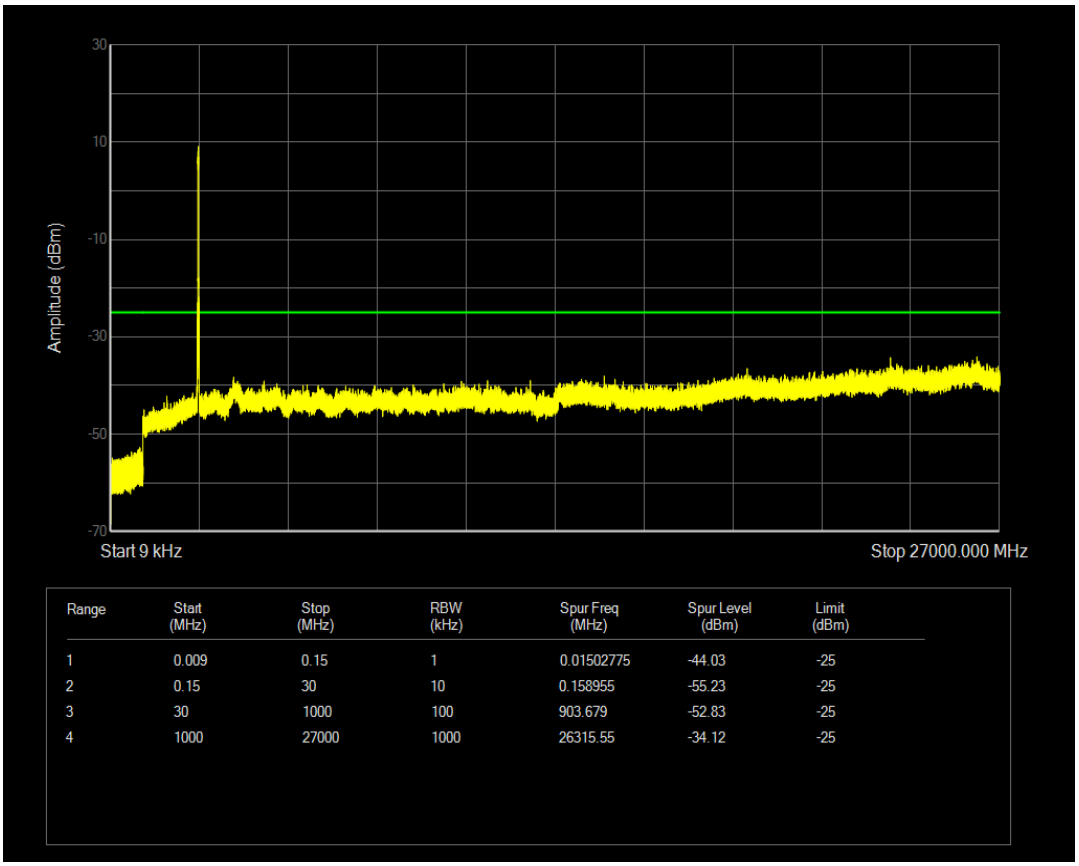
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01048755	-43.17	-25
2	0.15	30	10	0.1932825	-56	-25
3	30	1000	100	863.30275	-52.62	-25
4	1000	27000	1000	25908	-34.58	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@50



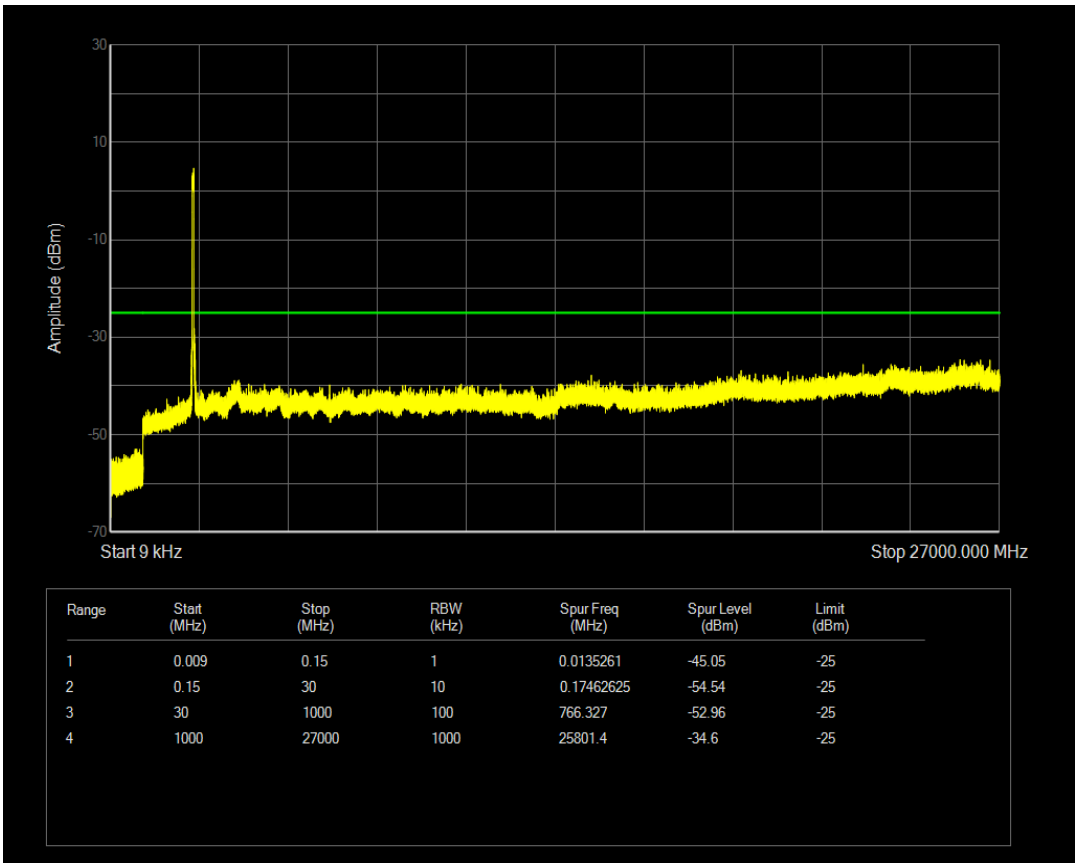
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0092961	-45.67	-25
2	0.15	30	10	0.152985	-55.54	-25
3	30	1000	100	852.39025	-53.14	-25
4	1000	27000	1000	26045.8	-33.66	-25

n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=51@0



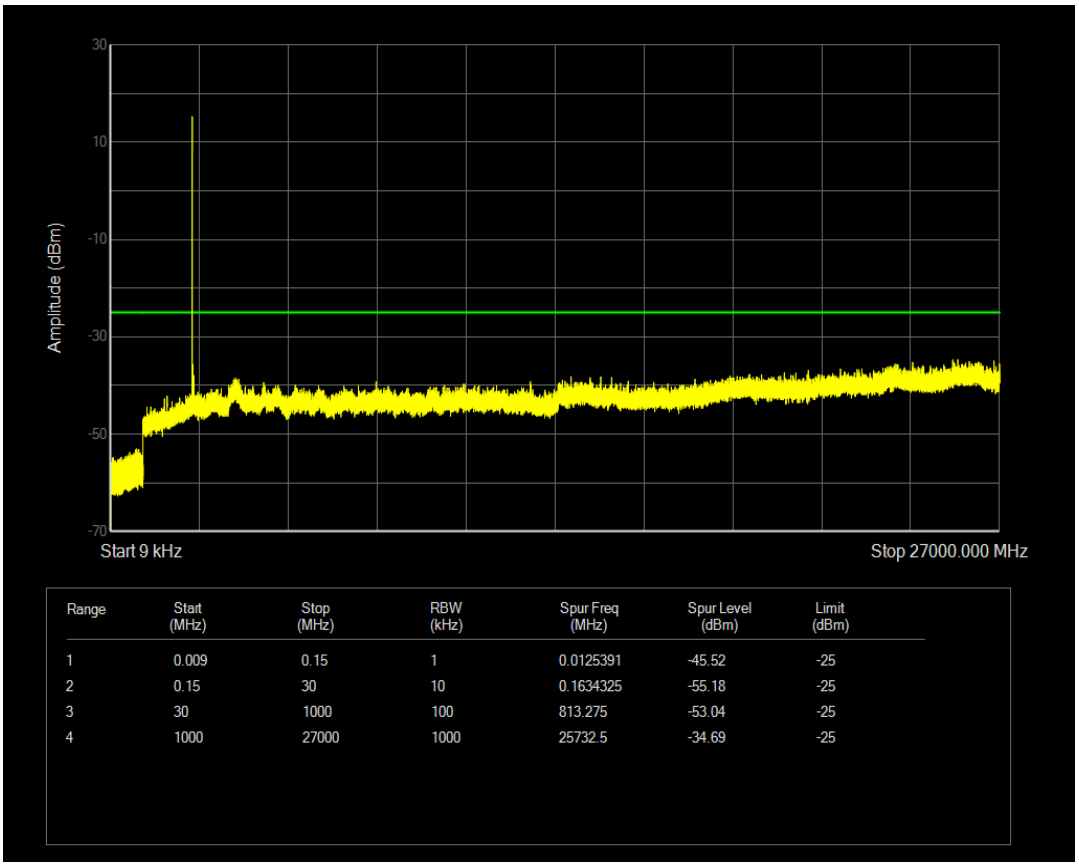
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01502775	-44.03	-25
2	0.15	30	10	0.158955	-55.23	-25
3	30	1000	100	903.679	-52.83	-25
4	1000	27000	1000	26315.55	-34.12	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=133@0



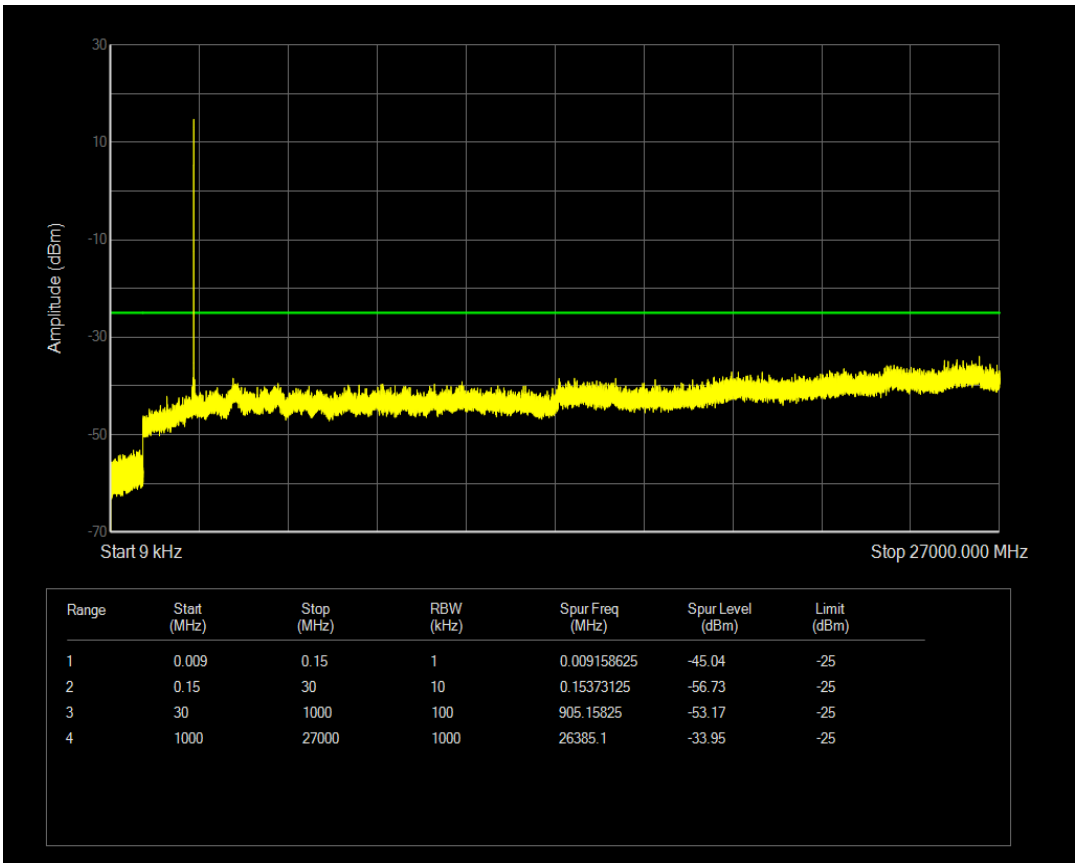
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0135261	-45.05	-25
2	0.15	30	10	0.17462625	-54.54	-25
3	30	1000	100	766.327	-52.96	-25
4	1000	27000	1000	25801.4	-34.6	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@0



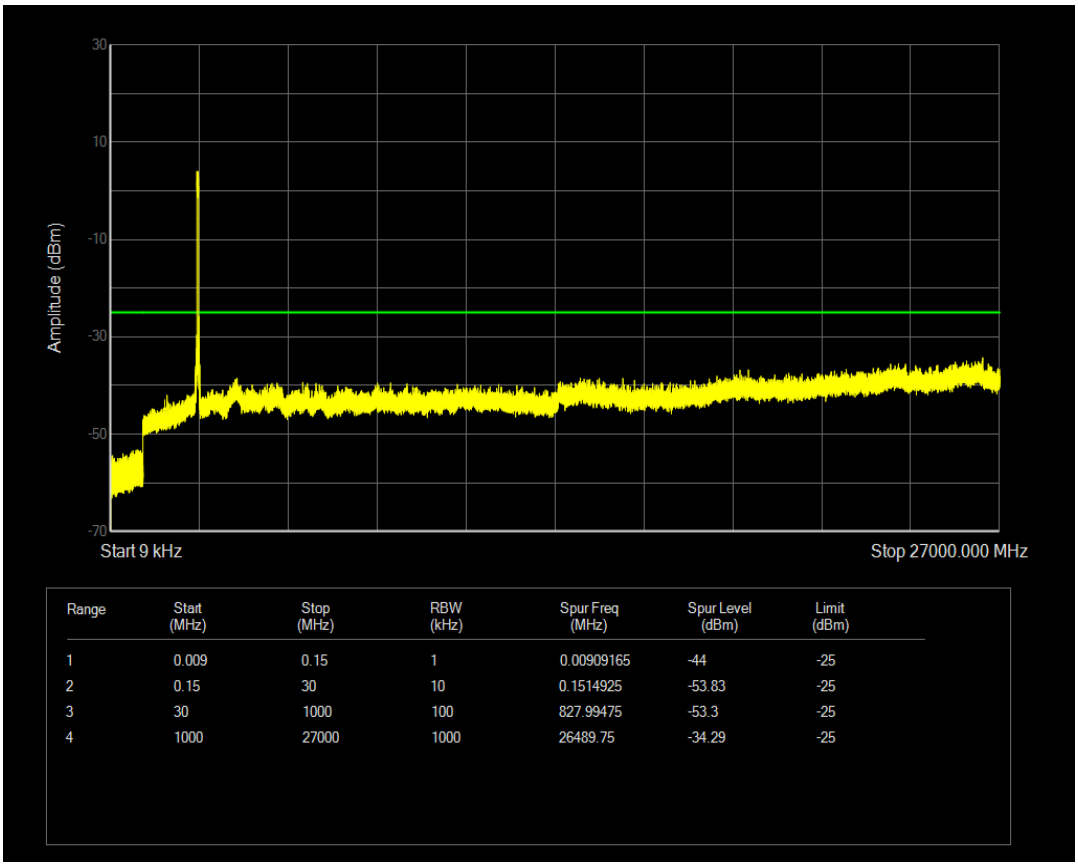
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0125391	-45.52	-25
2	0.15	30	10	0.1634325	-55.18	-25
3	30	1000	100	813.275	-53.04	-25
4	1000	27000	1000	25732.5	-34.69	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@132



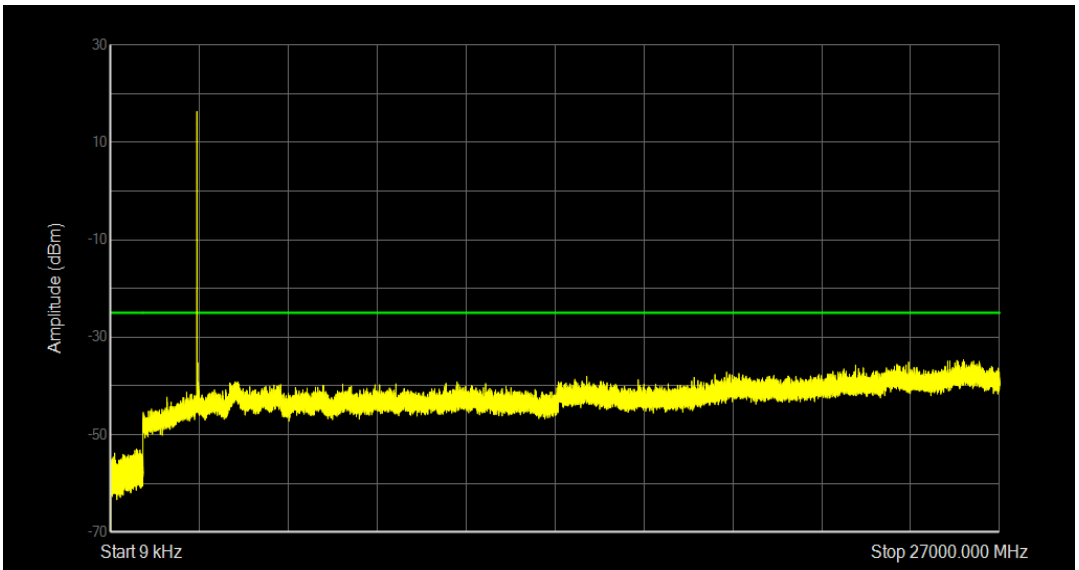
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009158625	-45.04	-25
2	0.15	30	10	0.15373125	-56.73	-25
3	30	1000	100	905.15825	-53.17	-25
4	1000	27000	1000	26385.1	-33.95	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=133@0



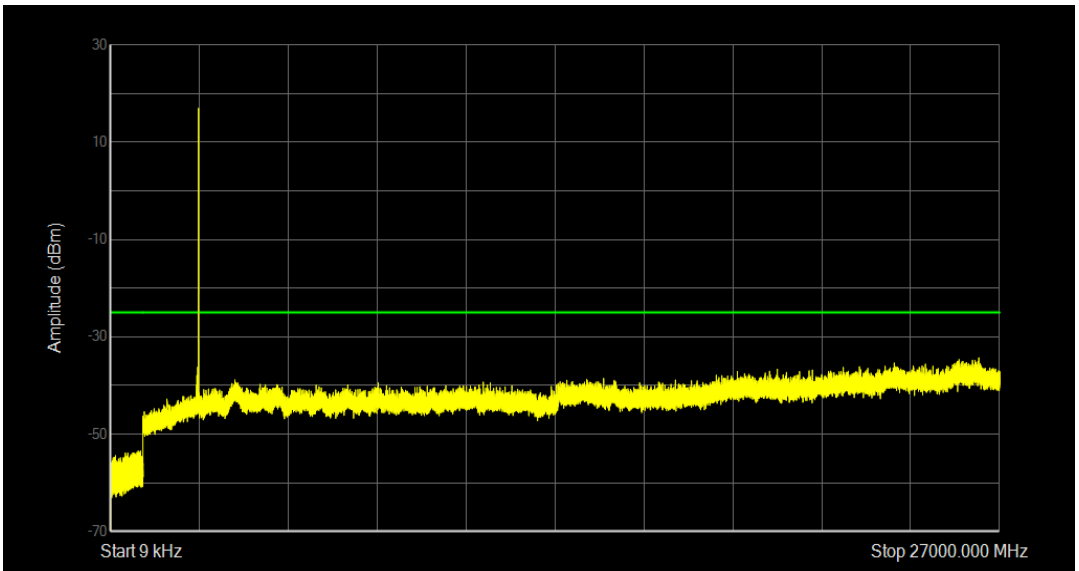
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00909165	-44	-25
2	0.15	30	10	0.1514925	-53.83	-25
3	30	1000	100	827.99475	-53.3	-25
4	1000	27000	1000	26489.75	-34.29	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0098601	-43.06	-25
2	0.15	30	10	0.170895	-56.22	-25
3	30	1000	100	806	-52.97	-25
4	1000	27000	1000	25904.1	-34.65	-25

n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@132



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010575675	-44.31	-25
2	0.15	30	10	0.16268625	-55.31	-25
3	30	1000	100	931.78475	-53.46	-25
4	1000	27000	1000	26370.8	-34.3	-25