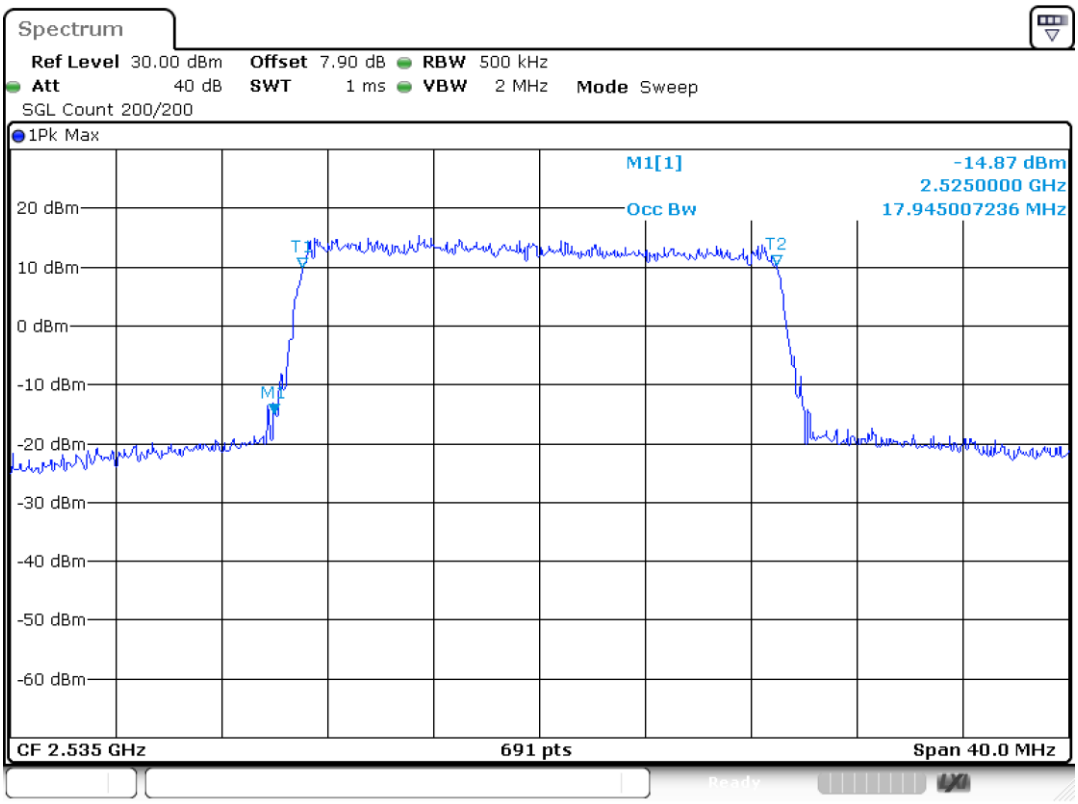
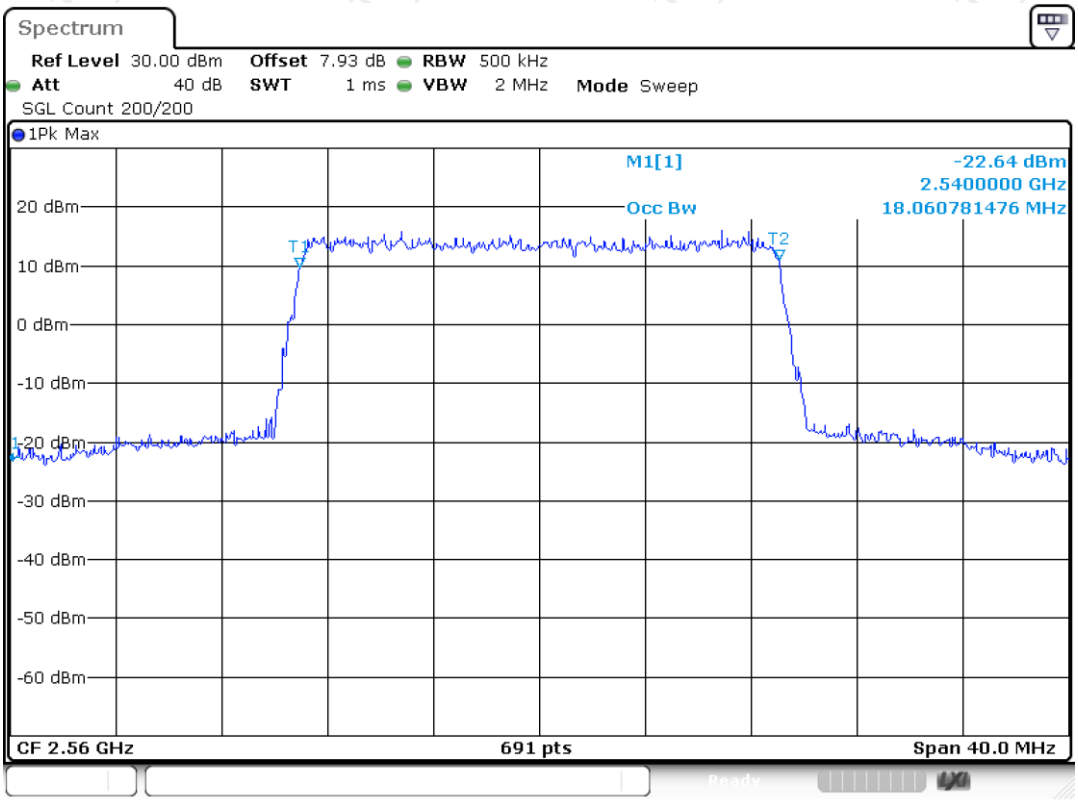


Date: 27.NOV.2024 10:09:17

Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0



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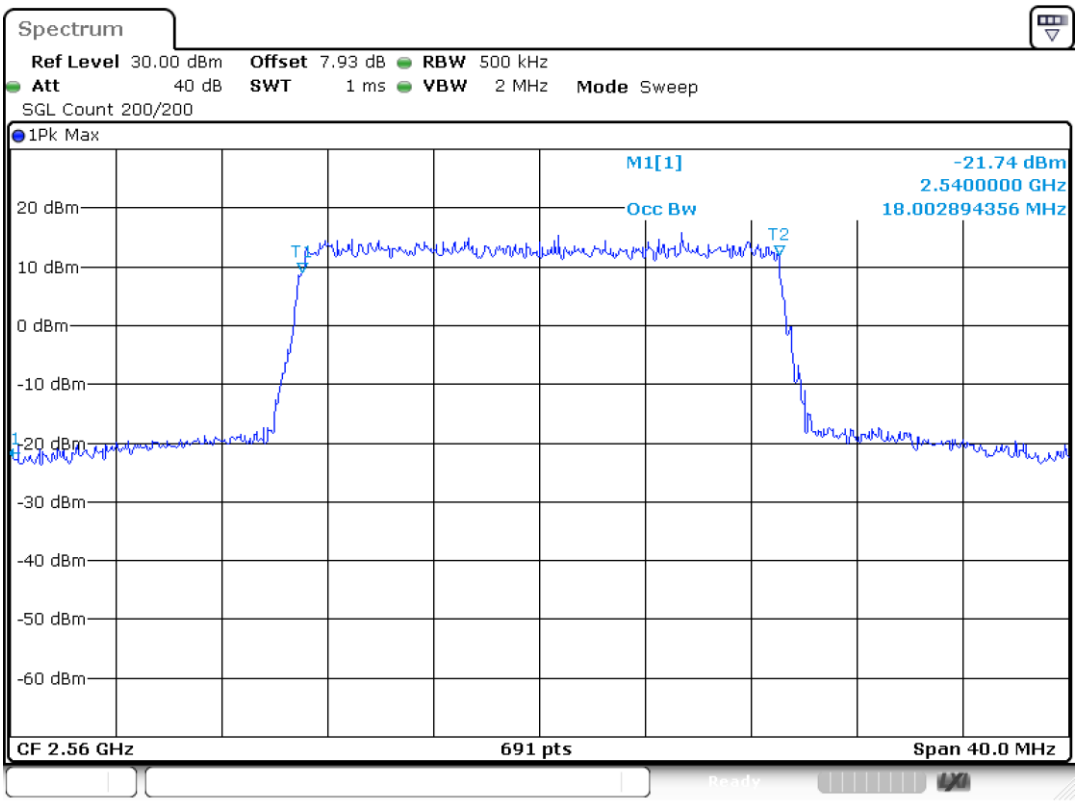
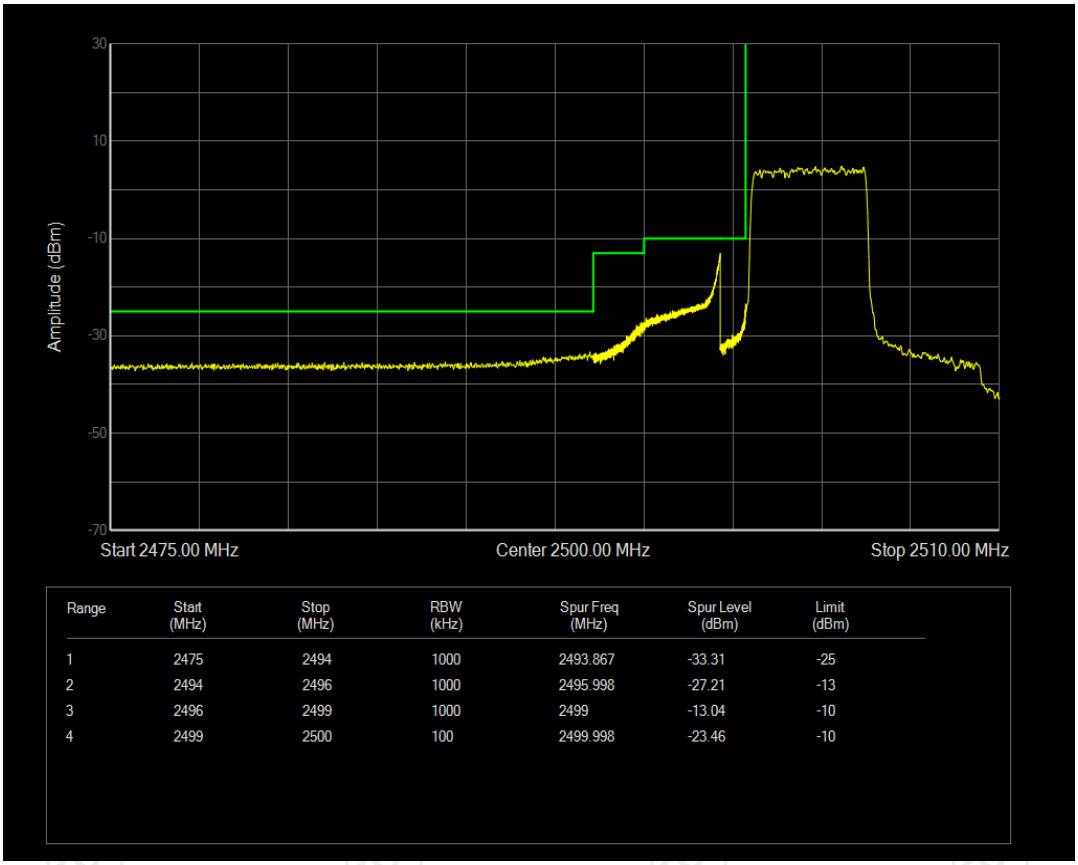
Band7 QAM16 BW=20MHz Channel=21350 RB Size=100 Position=#0



5 Band edge

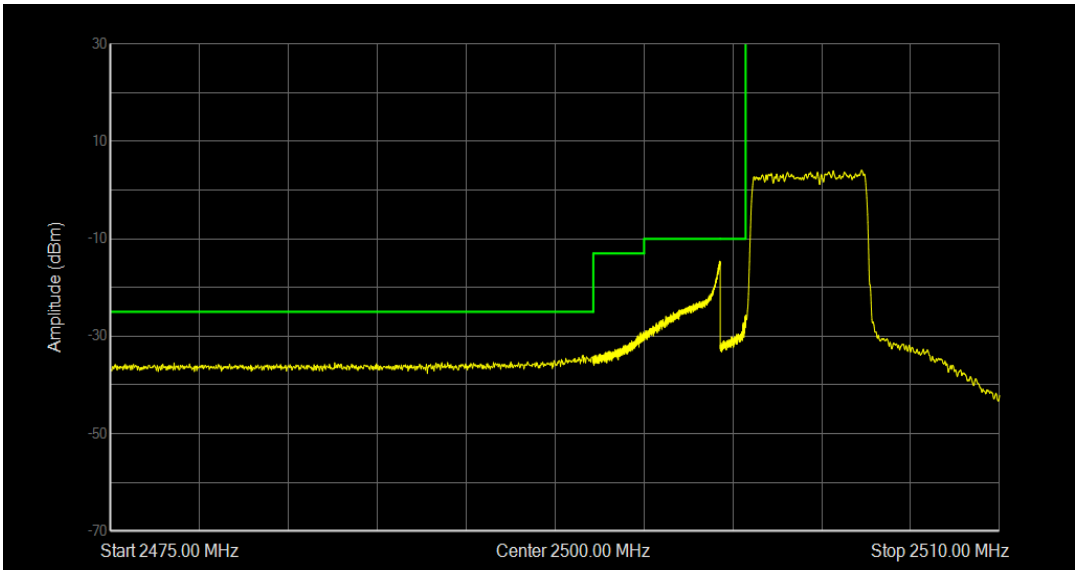
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band7	5	20775	25	#0	QPSK	2499.00	-13.04	-10	PASS
Band7	5	20775	25	#0	QAM16	2498.99	-14.59	-10	PASS
Band7	5	21425	25	#0	QPSK	2571.00	-11.47	-10	PASS
Band7	5	21425	25	#0	QAM16	2571.01	-12.14	-10	PASS
Band7	10	20800	50	#0	QPSK	2489.85	-34.19	-25	PASS
Band7	10	20800	50	#0	QAM16	2489.96	-34.18	-25	PASS
Band7	10	21400	50	#0	QPSK	2580.33	-31.99	-25	PASS
Band7	10	21400	50	#0	QAM16	2580.48	-32.74	-25	PASS
Band7	15	20825	75	#0	QPSK	2484.39	-35.01	-25	PASS
Band7	15	20825	75	#0	QAM16	2484.01	-35.01	-25	PASS
Band7	15	21375	75	#0	QPSK	2585.03	-34.08	-25	PASS
Band7	15	21375	75	#0	QAM16	2585.01	-34.27	-25	PASS
Band7	20	20850	100	#0	QPSK	2479.58	-35.21	-25	PASS
Band7	20	20850	100	#0	QAM16	2477.82	-35.34	-25	PASS
Band7	20	21350	100	#0	QPSK	2593.13	-34.83	-25	PASS
Band7	20	21350	100	#0	QAM16	2590.56	-34.68	-25	PASS

Band7 QPSK BW=5MHz Channel=20775 RB Size=25 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2494	1000	2493.867	-33.31	-25
2	2494	2496	1000	2495.998	-27.21	-13
3	2496	2499	1000	2499	-13.04	-10
4	2499	2500	100	2499.998	-23.46	-10

Band7 QAM16 BW=5MHz Channel=20775 RB Size=25 Position=#0

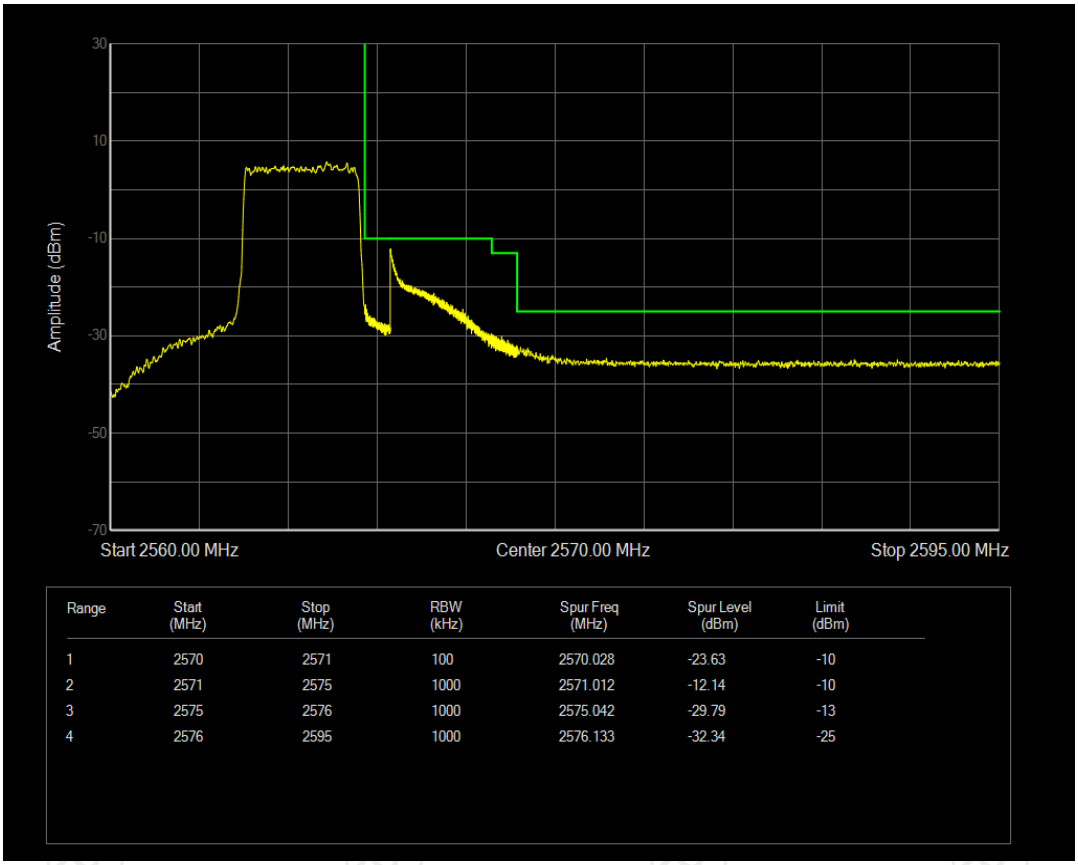


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2494	1000	2493.601	-33.95	-25
2	2494	2496	1000	2495.972	-29.19	-13
3	2496	2499	1000	2498.988	-14.59	-10
4	2499	2500	100	2499.98	-25.94	-10

Band7 QPSK BW=5MHz Channel=21425 RB Size=25 Position=#0

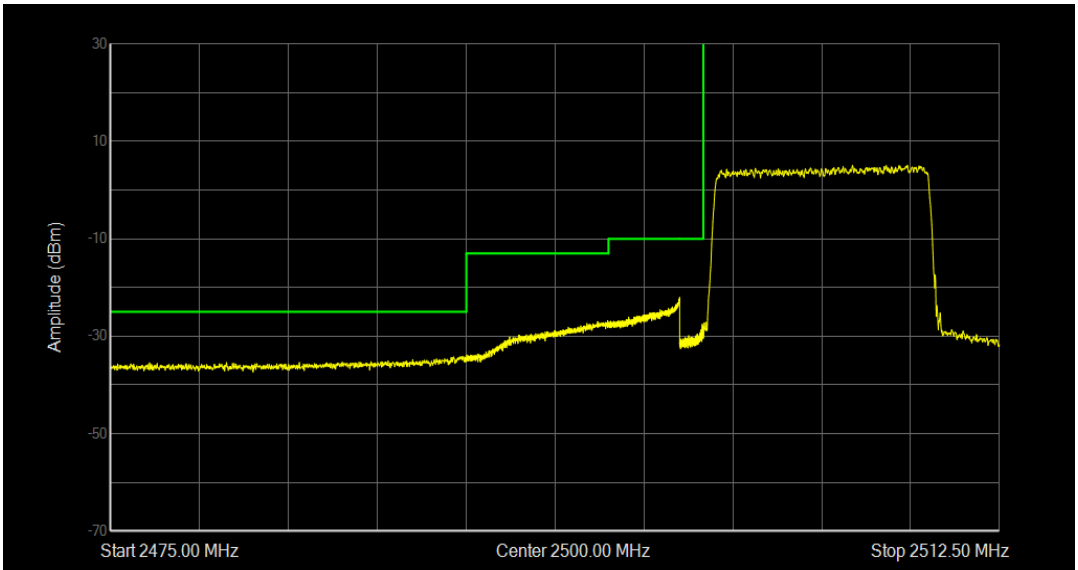
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	100	2570.007	-21.84	-10
2	2571	2575	1000	2571.004	-11.47	-10
3	2575	2576	1000	2575.033	-28.21	-13
4	2576	2595	1000	2576.057	-31.73	-25

Band7 QAM16 BW=5MHz Channel=21425 RB Size=25 Position=#0



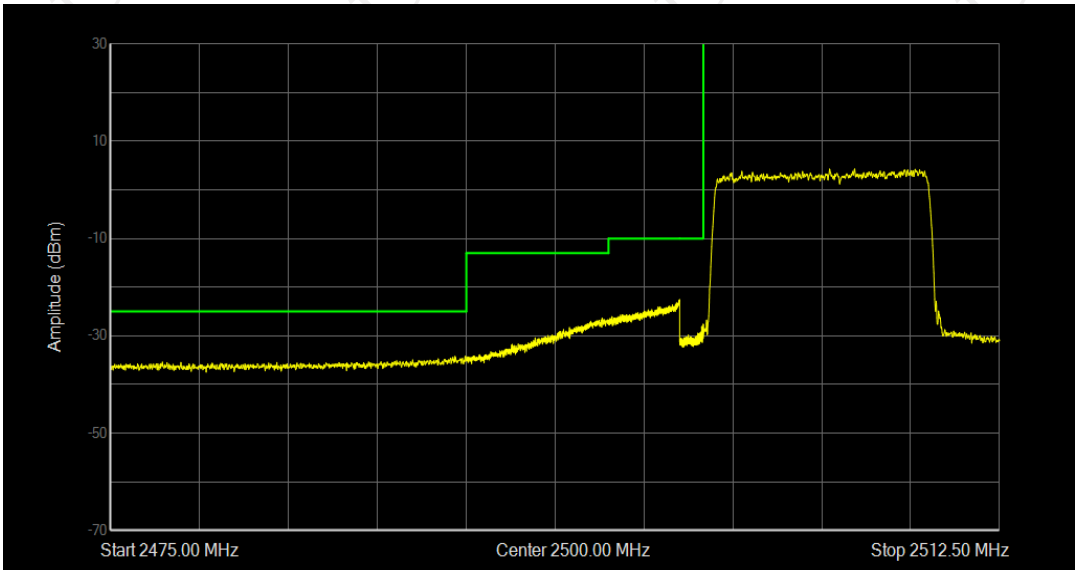
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	100	2570.028	-23.63	-10
2	2571	2575	1000	2571.012	-12.14	-10
3	2575	2576	1000	2575.042	-29.79	-13
4	2576	2595	1000	2576.133	-32.34	-25

Band7 QPSK BW=10MHz Channel=20800 RB Size=50 Position=#0



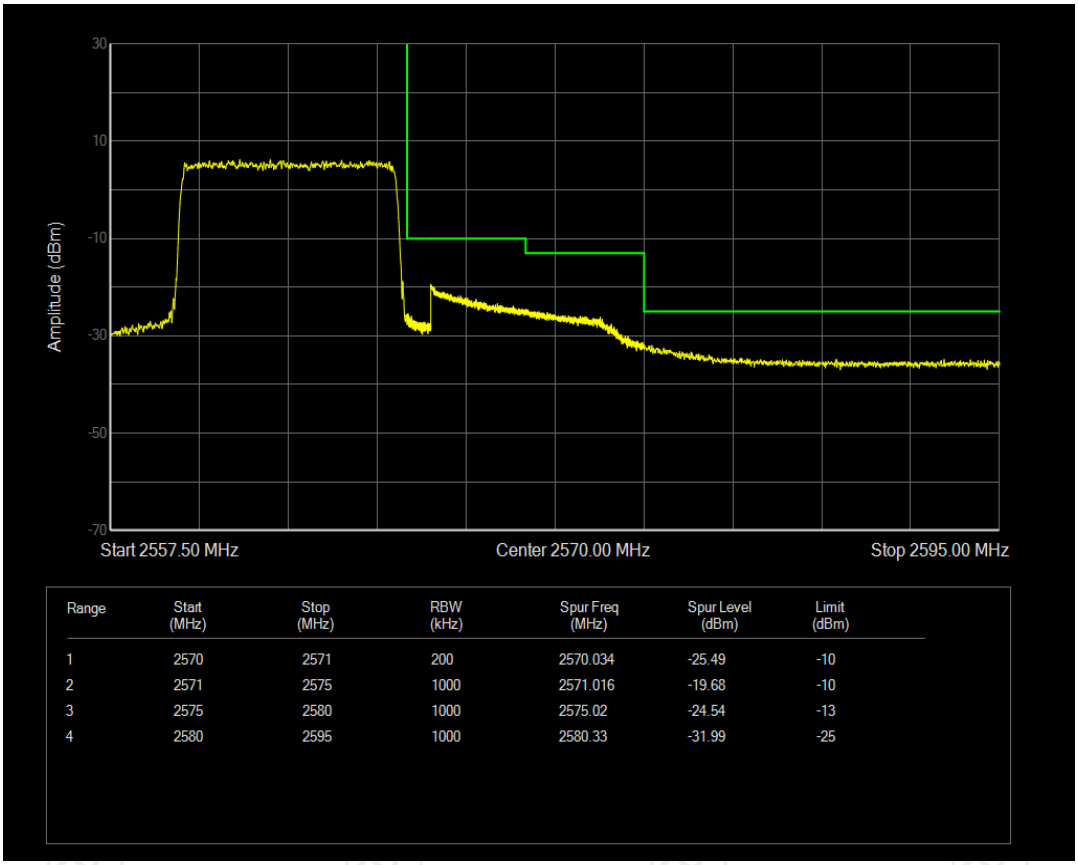
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2490	1000	2489.85	-34.19	-25
2	2490	2496	1000	2495.964	-26.81	-13
3	2496	2499	1000	2498.997	-22.03	-10
4	2499	2500	200	2499.955	-27.53	-10

Band7 QAM16 BW=10MHz Channel=20800 RB Size=50 Position=#0



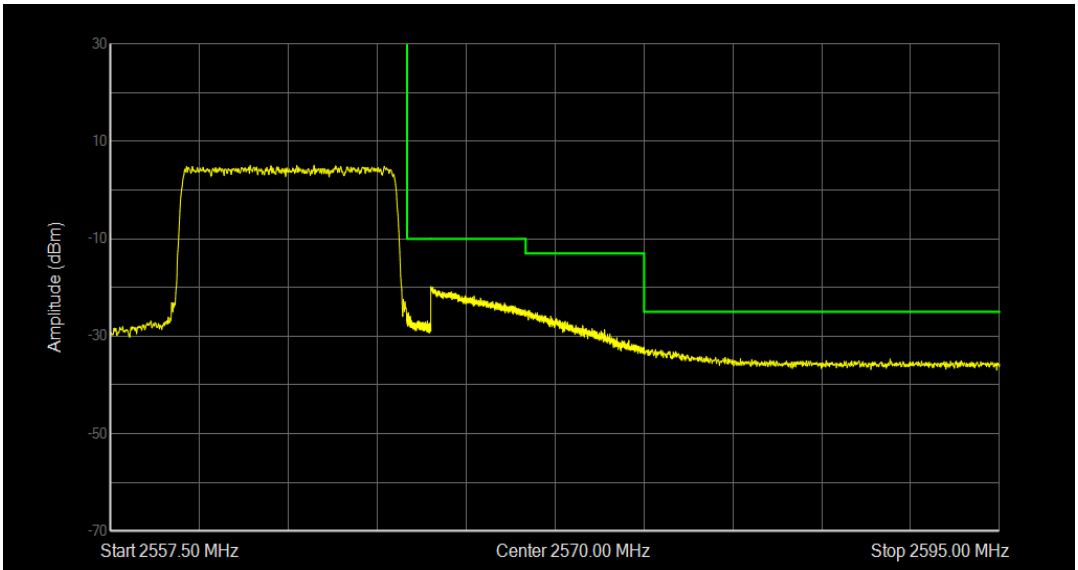
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2490	1000	2489.955	-34.18	-25
2	2490	2496	1000	2495.73	-26.34	-13
3	2496	2499	1000	2498.997	-22.58	-10
4	2499	2500	200	2499.998	-27.59	-10

Band7 QPSK BW=10MHz Channel=21400 RB Size=50 Position=#0



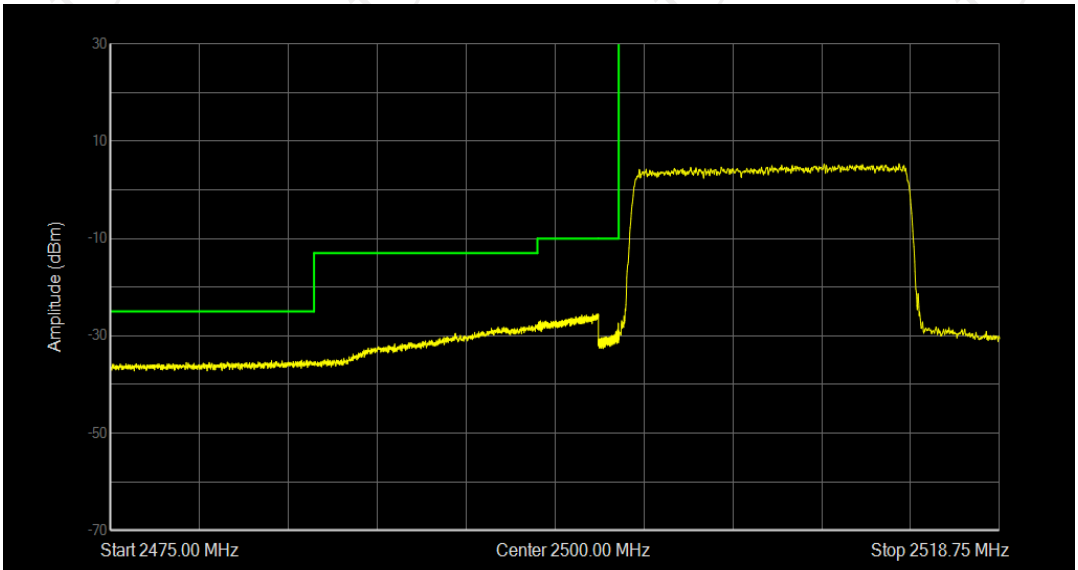
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	200	2570.034	-25.49	-10
2	2571	2575	1000	2571.016	-19.68	-10
3	2575	2580	1000	2575.02	-24.54	-13
4	2580	2595	1000	2580.33	-31.99	-25

Band7 QAM16 BW=10MHz Channel=21400 RB Size=50 Position=#0



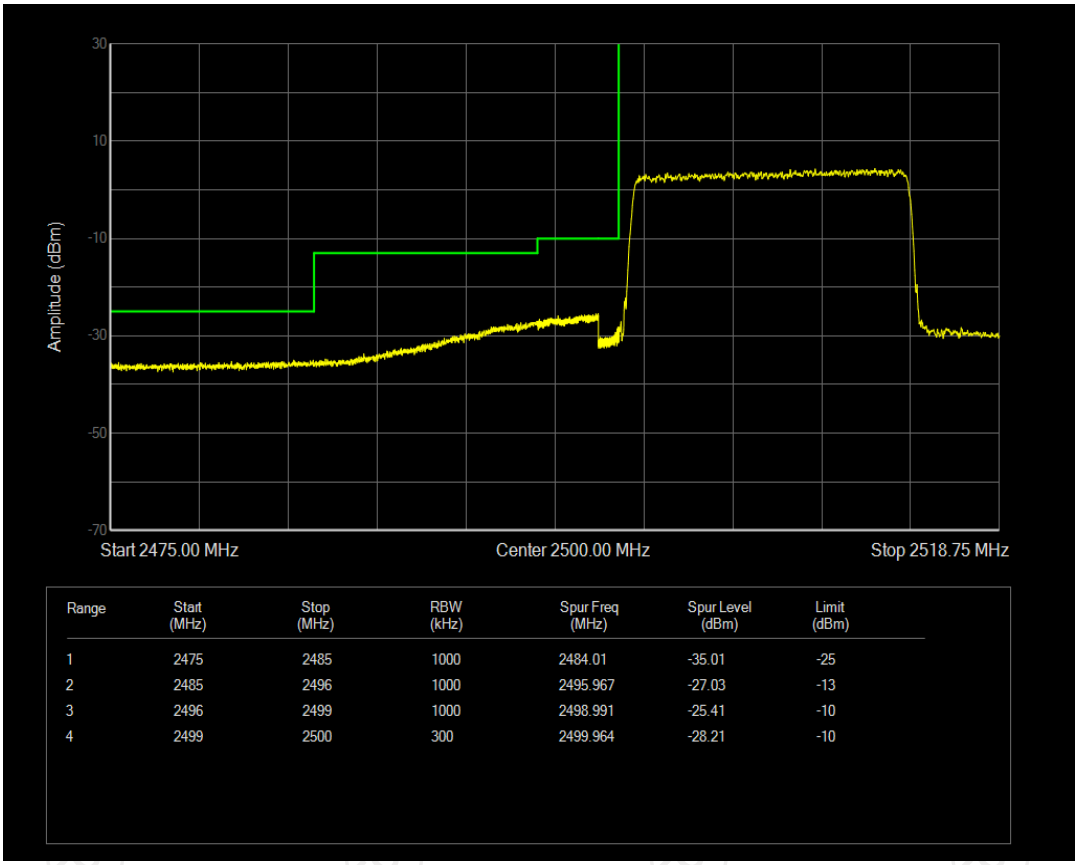
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	200	2570.053	-25.16	-10
2	2571	2575	1000	2571.004	-19.84	-10
3	2575	2580	1000	2575.155	-24.68	-13
4	2580	2595	1000	2580.48	-32.74	-25

Band7 QPSK BW=15MHz Channel=20825 RB Size=75 Position=#0



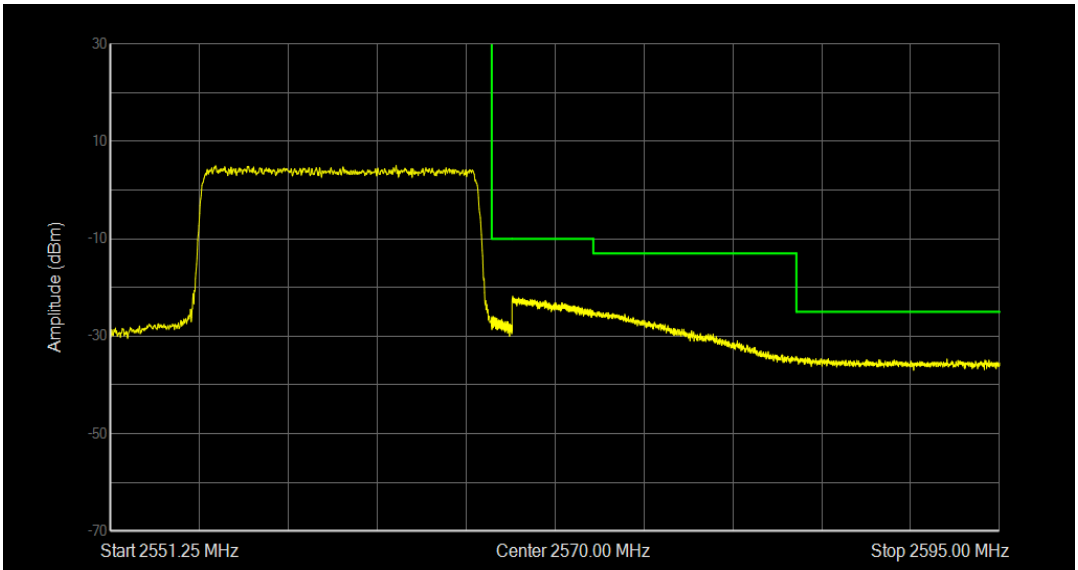
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2485	1000	2484.39	-35.01	-25
2	2485	2496	1000	2495.923	-27.82	-13
3	2496	2499	1000	2498.997	-25.52	-10
4	2499	2500	300	2499.978	-27.39	-10

Band7 QAM16 BW=15MHz Channel=20825 RB Size=75 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2485	1000	2484.01	-35.01	-25
2	2485	2496	1000	2495.967	-27.03	-13
3	2496	2499	1000	2498.991	-25.41	-10
4	2499	2500	300	2499.964	-28.21	-10

Band7 QAM16 BW=15MHz Channel=21375 RB Size=75 Position=#0

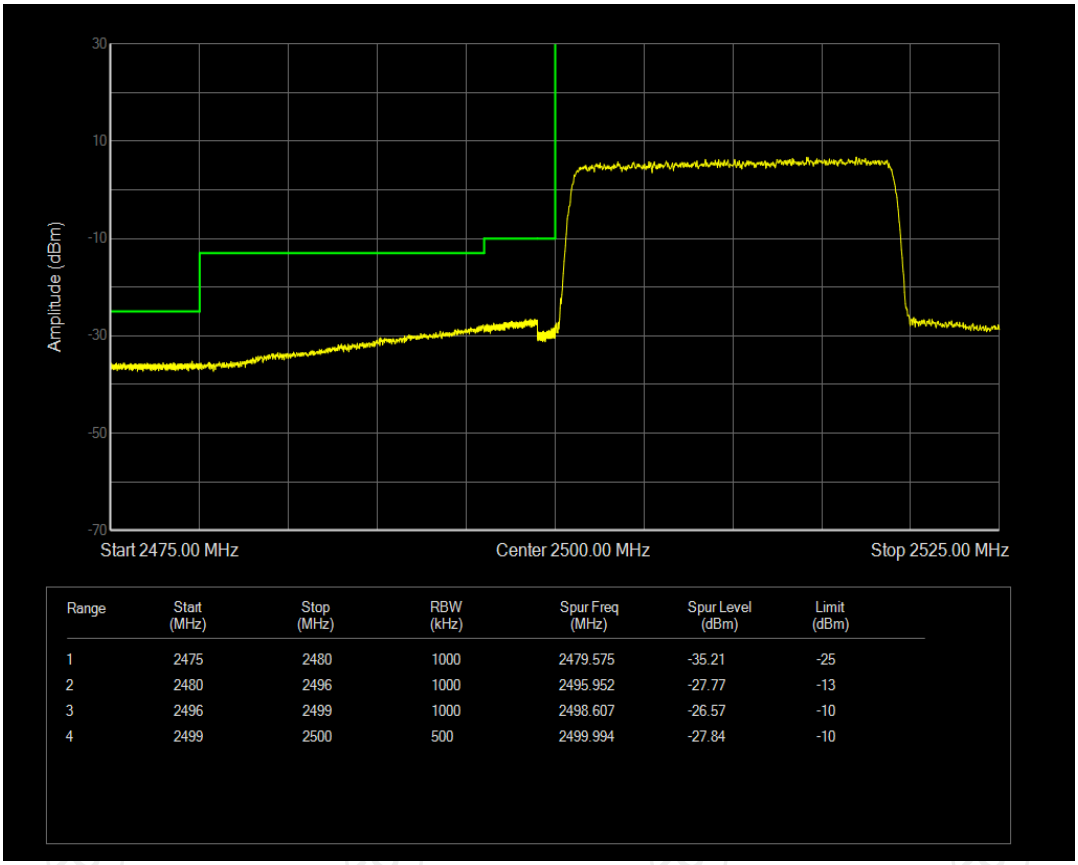


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	300	2570.077	-25.97	-10
2	2571	2575	1000	2571.032	-21.82	-10
3	2575	2585	1000	2575.29	-25.02	-13
4	2585	2595	1000	2585.01	-34.27	-25

Band7 QPSK BW=15MHz Channel=21375 RB Size=75 Position=#0

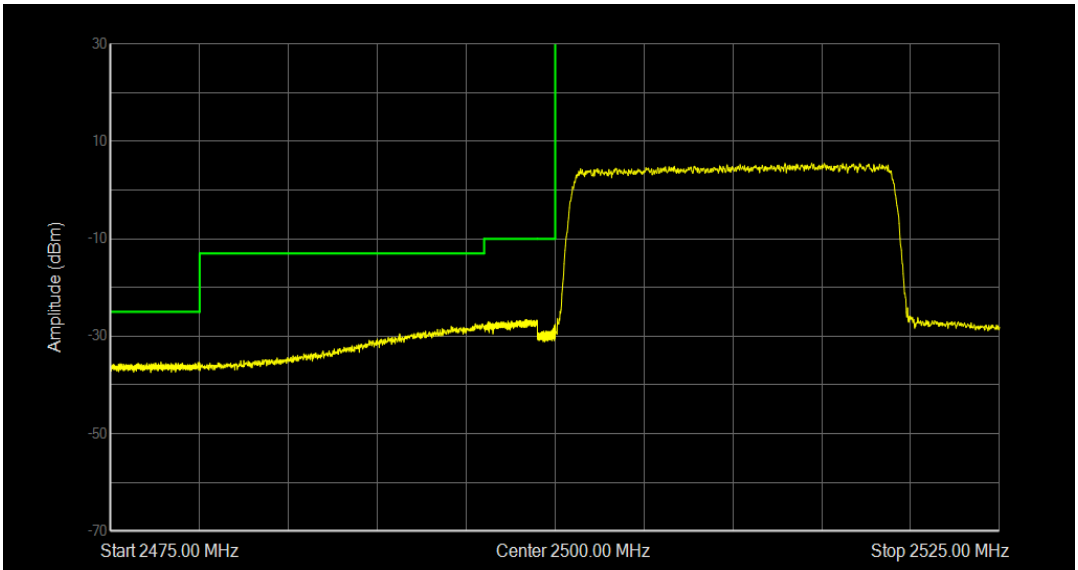
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	300	2570.03	-25.88	-10
2	2571	2575	1000	2571.048	-22.01	-10
3	2575	2585	1000	2575.01	-25.35	-13
4	2585	2595	1000	2585.03	-34.08	-25

Band7 QPSK BW=20MHz Channel=20850 RB Size=100 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2480	1000	2479.575	-35.21	-25
2	2480	2496	1000	2495.952	-27.77	-13
3	2496	2499	1000	2498.607	-26.57	-10
4	2499	2500	500	2499.994	-27.84	-10

Band7 QAM16 BW=20MHz Channel=20850 RB Size=100 Position=#0

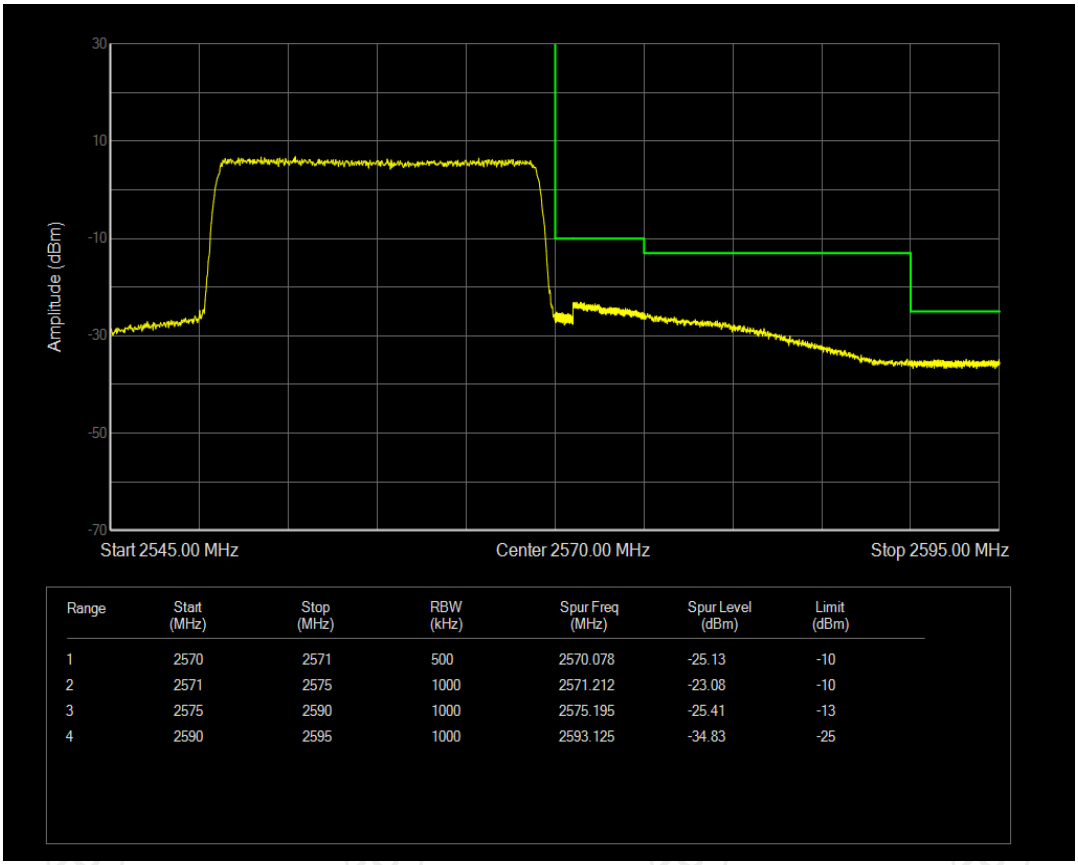


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2480	1000	2477.82	-35.34	-25
2	2480	2496	1000	2495.504	-27.43	-13
3	2496	2499	1000	2498.394	-26.57	-10
4	2499	2500	500	2499.938	-27.81	-10

Band7 QAM16 BW=20MHz Channel=21350 RB Size=100 Position=#0

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	500	2570.047	-24.6	-10
2	2571	2575	1000	2571.216	-22.8	-10
3	2575	2590	1000	2575.06	-25.01	-13
4	2590	2595	1000	2590.555	-34.68	-25

Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0

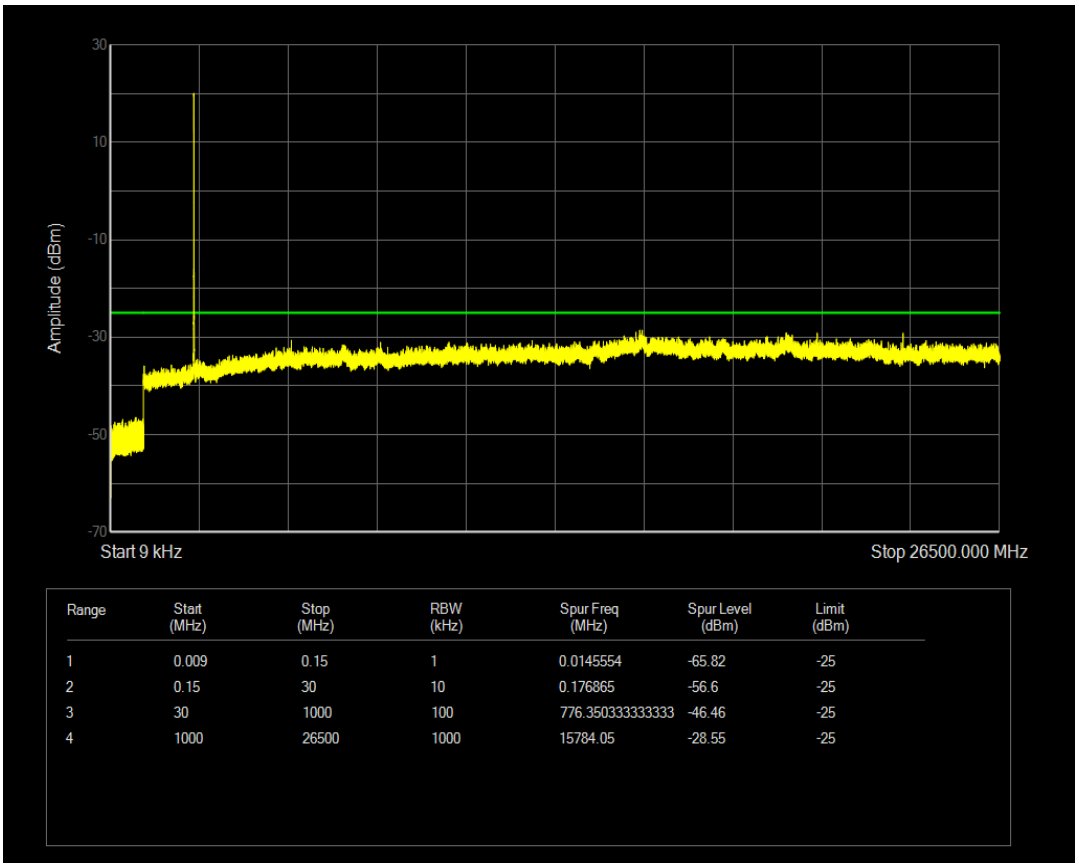


6 Out-of-band emissions

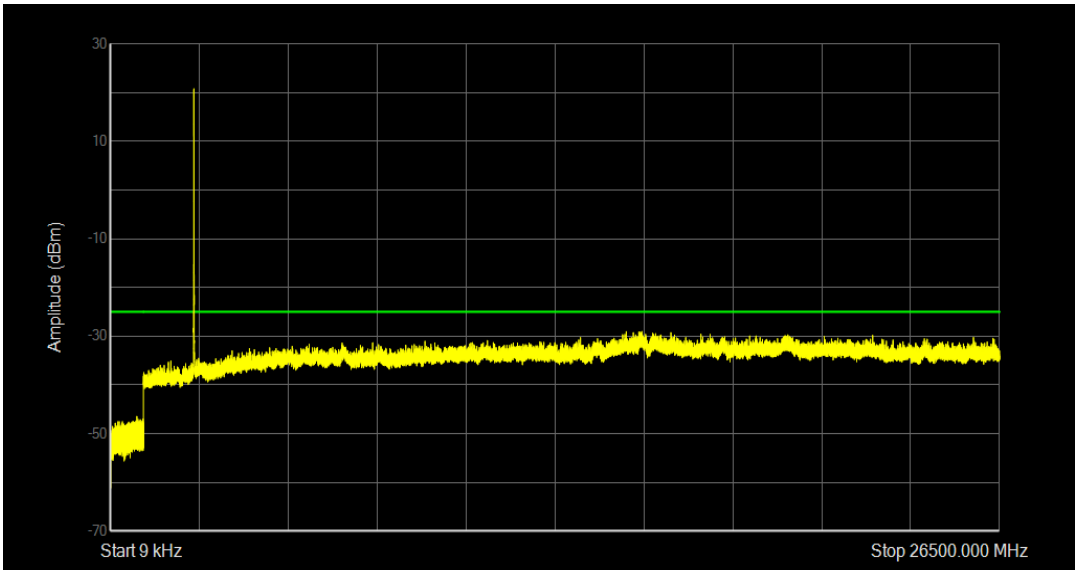
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band7	5	20775	25	#0	QPSK	15784.05	-28.55	-25	PASS
Band7	5	20775	25	#0	QAM16	15846.10	-29.02	-25	PASS
Band7	5	21100	25	#0	QPSK	16131.70	-28.16	-25	PASS
Band7	5	21100	25	#0	QAM16	15795.10	-28.58	-25	PASS
Band7	5	21425	25	#0	QPSK	20283.95	-28.74	-25	PASS
Band7	5	21425	25	#0	QAM16	15845.25	-28.87	-25	PASS
Band7	10	20800	50	#0	QPSK	20153.05	-28.60	-25	PASS
Band7	10	20800	50	#0	QAM16	15794.25	-28.93	-25	PASS
Band7	10	21100	50	#0	QPSK	15815.50	-28.39	-25	PASS
Band7	10	21100	50	#0	QAM16	16164.00	-28.93	-25	PASS
Band7	10	21400	50	#0	QPSK	15883.50	-28.68	-25	PASS
Band7	10	21400	50	#0	QAM16	20124.15	-27.86	-25	PASS
Band7	15	20825	75	#0	QPSK	15868.20	-28.57	-25	PASS
Band7	15	20825	75	#0	QAM16	15880.95	-28.87	-25	PASS
Band7	15	21100	75	#0	QPSK	16511.65	-28.82	-25	PASS
Band7	15	21100	75	#0	QAM16	16794.70	-28.65	-25	PASS
Band7	15	21375	75	#0	QPSK	18259.25	-28.23	-25	PASS

Band7	15	21375	75	#0	QAM16	20213.40	-28.68	-25	PASS
Band7	20	20850	100	#0	QPSK	15795.10	-28.38	-25	PASS
Band7	20	20850	100	#0	QAM16	19962.65	-28.80	-25	PASS
Band7	20	21100	100	#0	QPSK	16309.35	-28.72	-25	PASS
Band7	20	21100	100	#0	QAM16	15778.10	-28.39	-25	PASS
Band7	20	21350	100	#0	QPSK	20108.00	-28.17	-25	PASS
Band7	20	21350	100	#0	QAM16	15896.25	-28.66	-25	PASS

Band7 QPSK BW=5MHz Channel=20775 RB Size=25 Position=#0

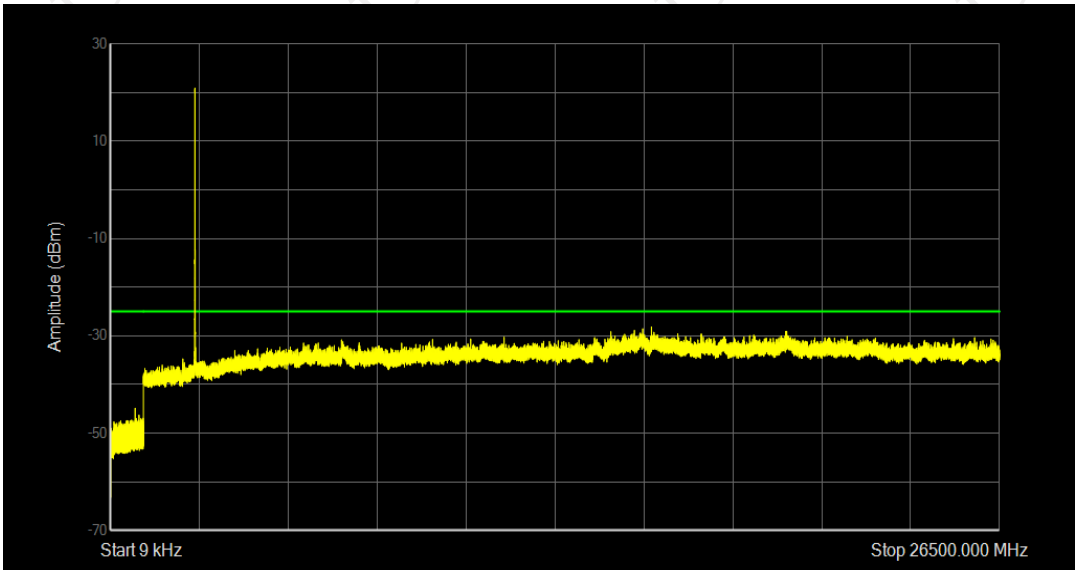


Band7 QAM16 BW=5MHz Channel=20775 RB Size=25 Position=#0



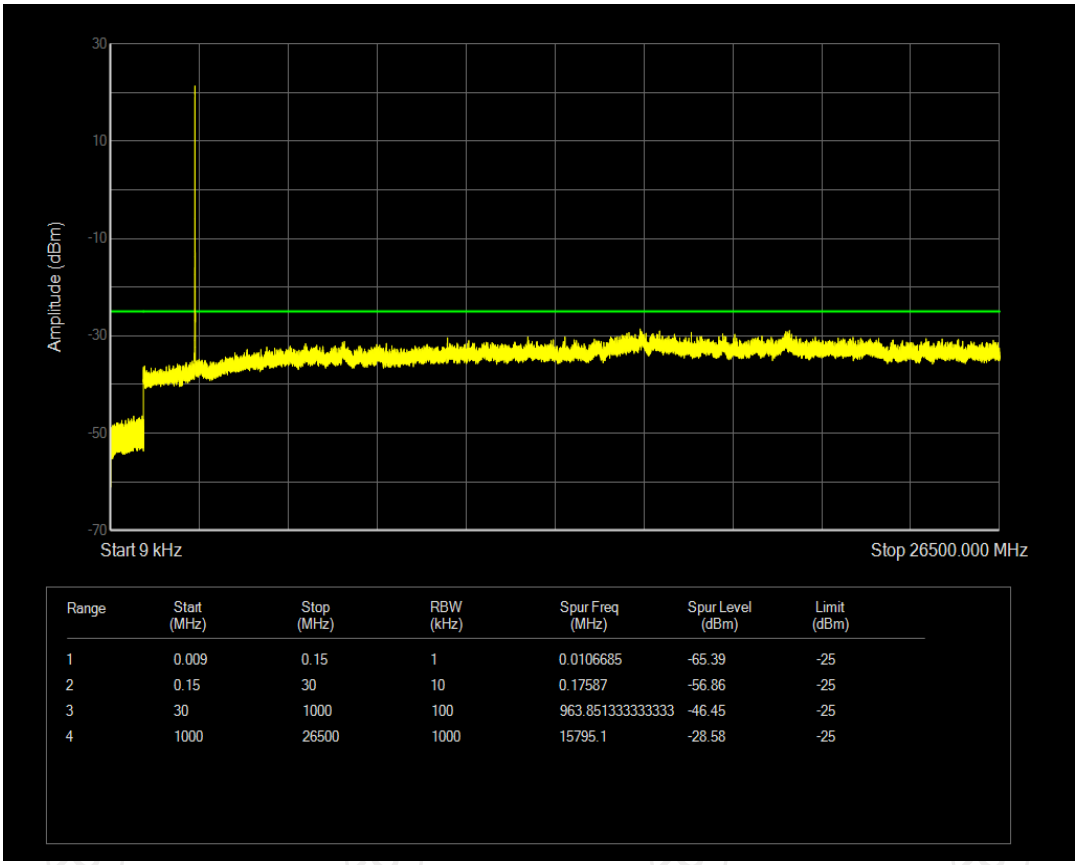
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0150301	-65.96	-25
2	0.15	30	10	0.17587	-56.65	-25
3	30	1000	100	803.672	-46.46	-25
4	1000	26500	1000	15846.1	-29.02	-25

Band7 QPSK BW=5MHz Channel=21100 RB Size=25 Position=#0



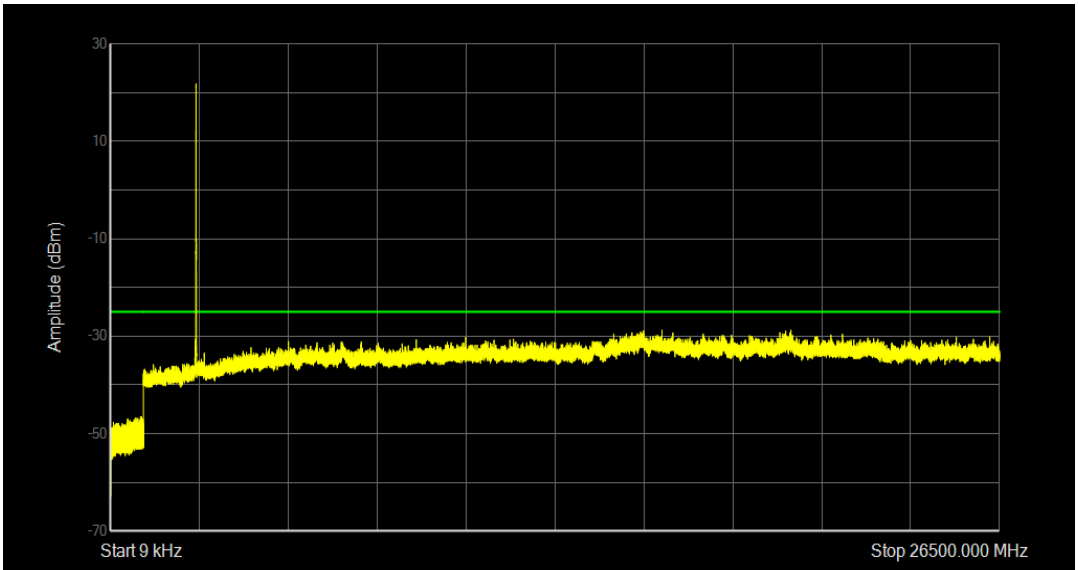
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0104664	-65.18	-25
2	0.15	30	10	0.17388	-56.35	-25
3	30	1000	100	754.331333333333	-44.89	-25
4	1000	26500	1000	16131.7	-28.16	-25

Band7 QAM16 BW=5MHz Channel=21100 RB Size=25 Position=#0



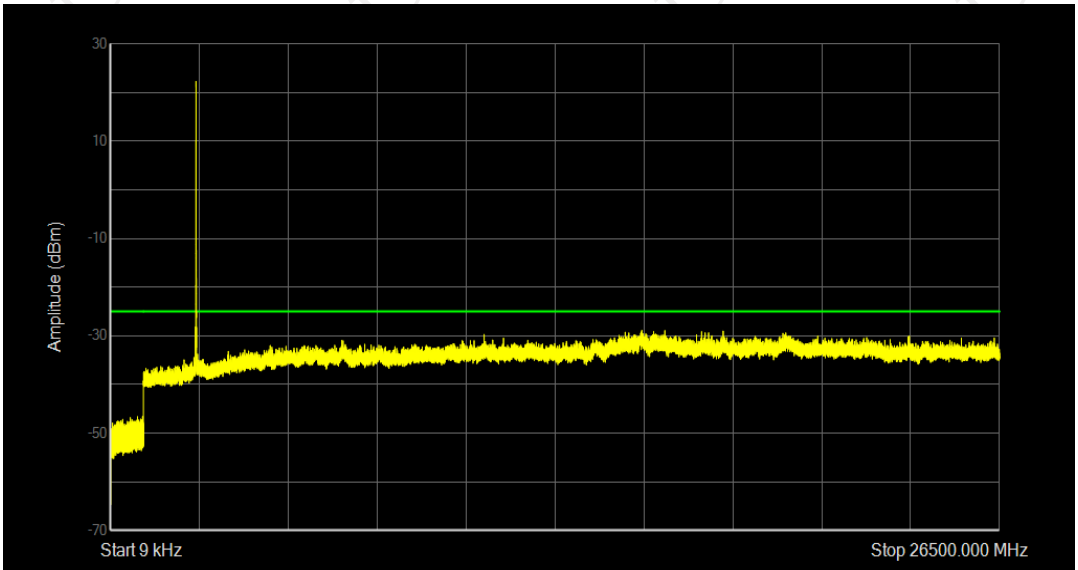
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0106685	-65.39	-25
2	0.15	30	10	0.17587	-56.86	-25
3	30	1000	100	963.851333333333	-46.45	-25
4	1000	26500	1000	15795.1	-28.58	-25

Band7 QPSK BW=5MHz Channel=21425 RB Size=25 Position=#0



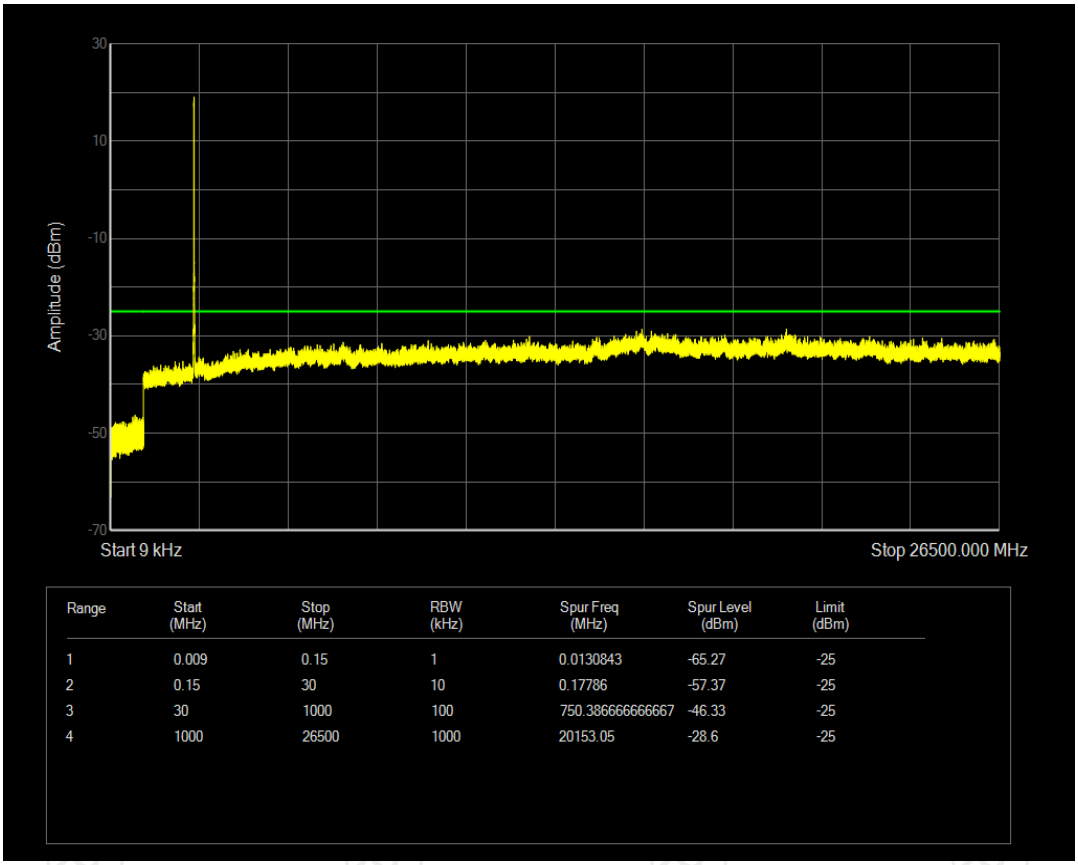
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-64.7	-25
2	0.15	30	10	0.172885	-56.15	-25
3	30	1000	100	911.471333333333	-46.56	-25
4	1000	26500	1000	20283.95	-28.74	-25

Band7 QAM16 BW=5MHz Channel=21425 RB Size=25 Position=#0



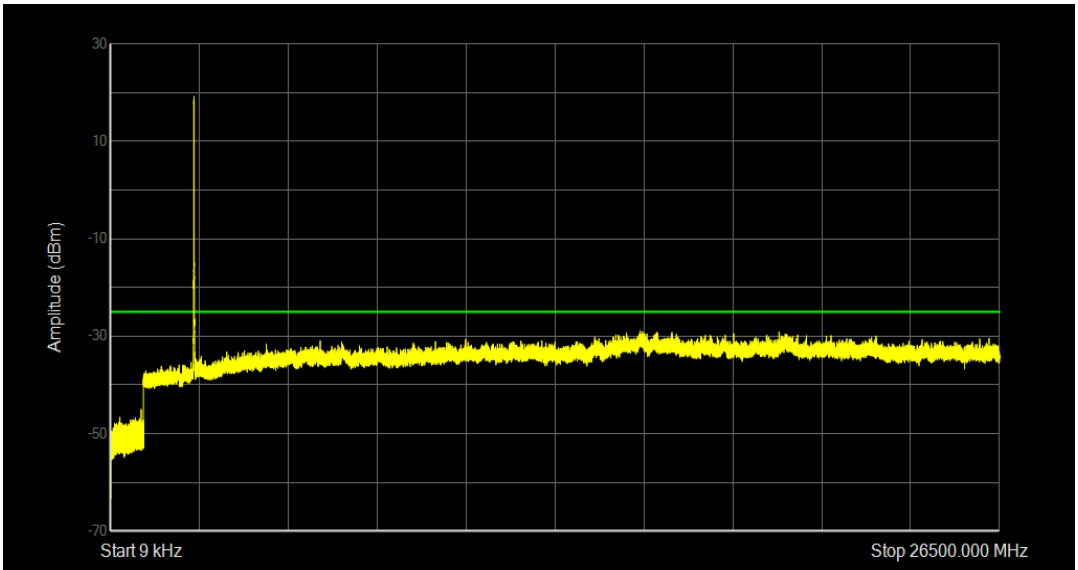
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.015439	-64.87	-25
2	0.15	30	10	0.17786	-56.18	-25
3	30	1000	100	975.459	-46.55	-25
4	1000	26500	1000	15845.25	-28.87	-25

Band7 QPSK BW=10MHz Channel=20800 RB Size=50 Position=#0



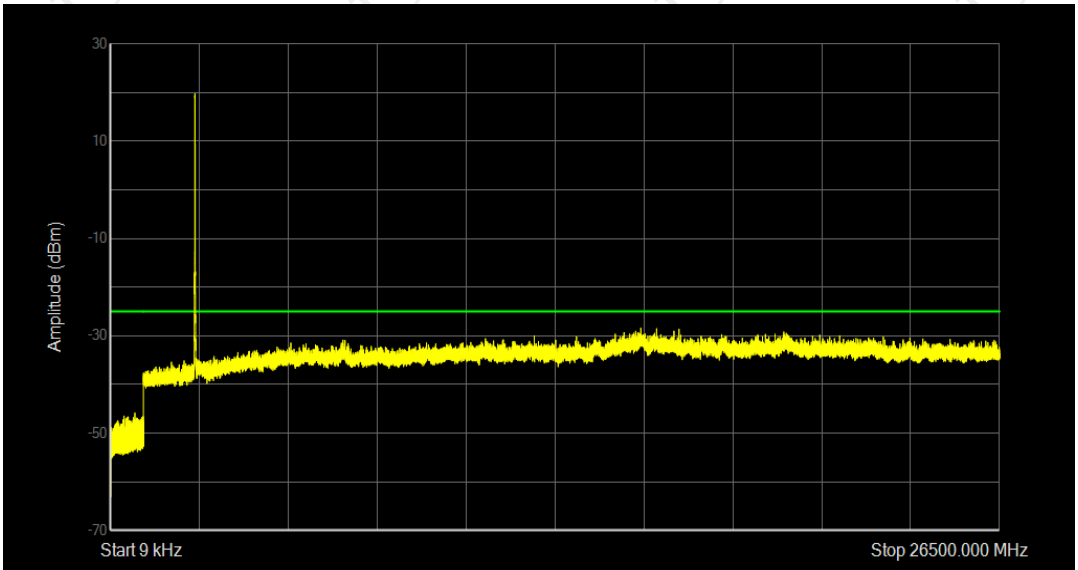
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0130843	-65.27	-25
2	0.15	30	10	0.17786	-57.37	-25
3	30	1000	100	750.386666666667	-46.33	-25
4	1000	26500	1000	20153.05	-28.6	-25

Band7 QAM16 BW=10MHz Channel=20800 RB Size=50 Position=#0



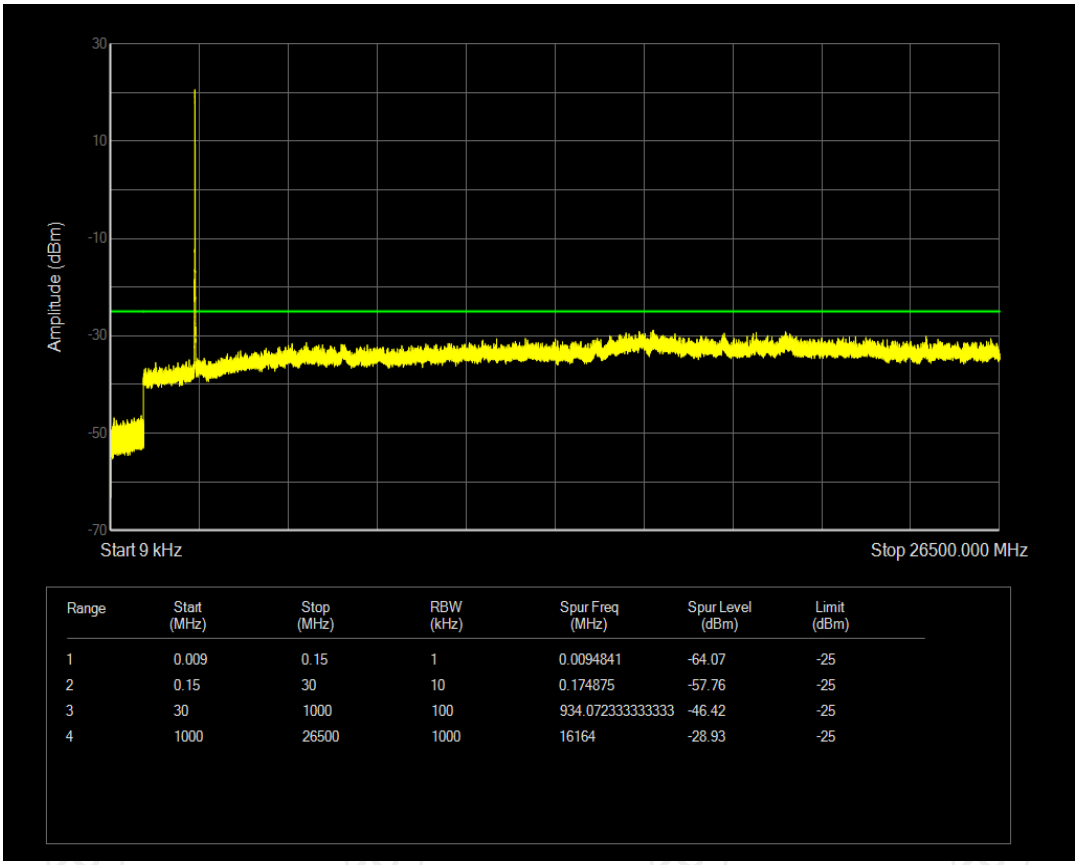
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0136953	-65.69	-25
2	0.15	30	10	0.17587	-57.45	-25
3	30	1000	100	931.647333333333	-45.03	-25
4	1000	26500	1000	15794.25	-28.93	-25

Band7 QPSK BW=10MHz Channel=21100 RB Size=50 Position=#0



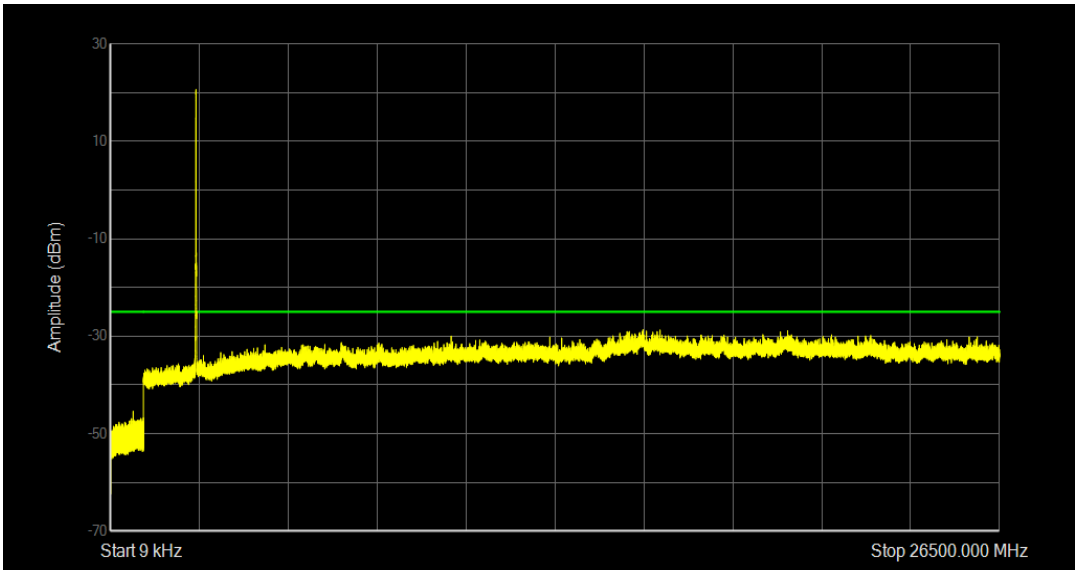
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0096439	-64.65	-25
2	0.15	30	10	4.260345	-56.64	-25
3	30	1000	100	744.243333333333	-45.88	-25
4	1000	26500	1000	15815.5	-28.39	-25

Band7 QAM16 BW=10MHz Channel=21100 RB Size=50 Position=#0



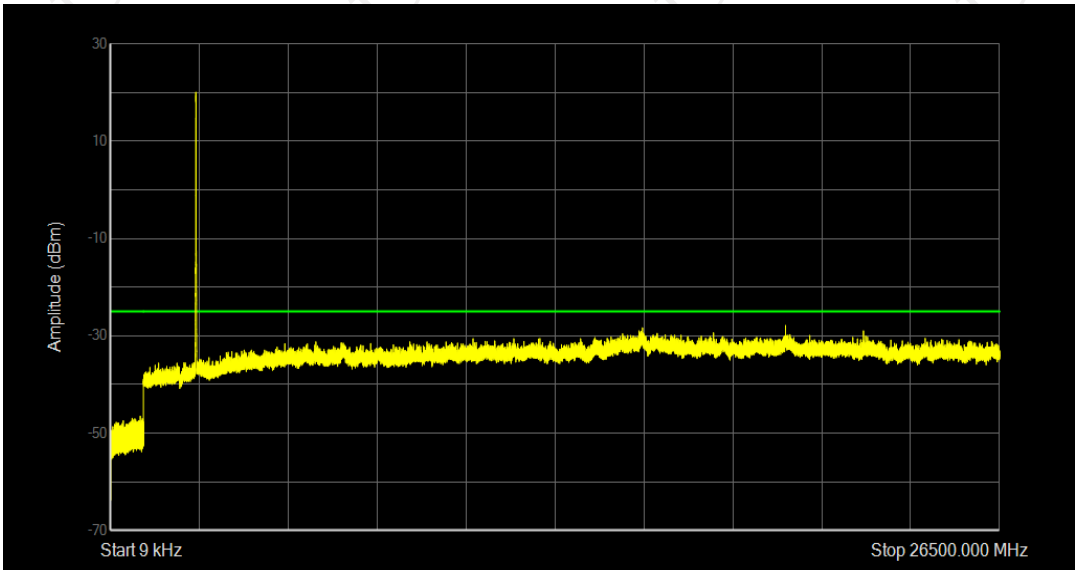
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0094841	-64.07	-25
2	0.15	30	10	0.174875	-57.76	-25
3	30	1000	100	934.072333333333	-46.42	-25
4	1000	26500	1000	16164	-28.93	-25

Band7 QPSK BW=10MHz Channel=21400 RB Size=50 Position=#0



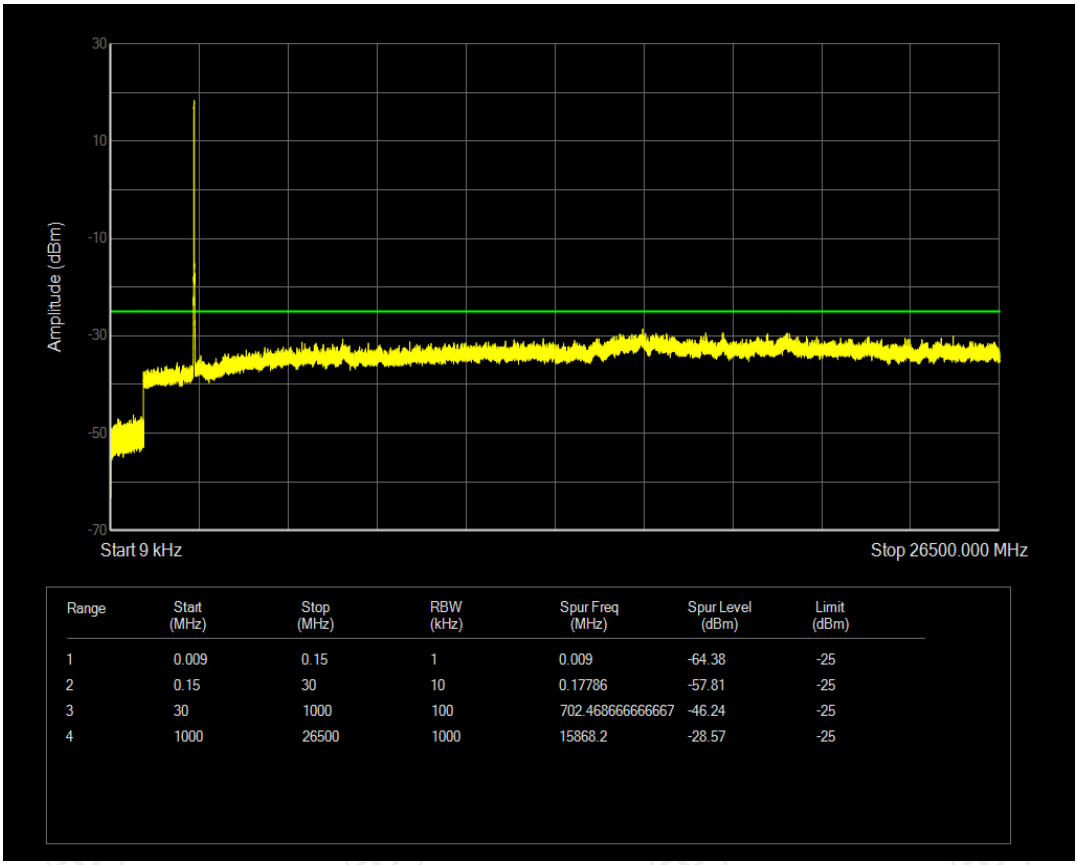
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0158526	-66.19	-25
2	0.15	30	10	4.256365	-56.88	-25
3	30	1000	100	693.641666666667	-45.44	-25
4	1000	26500	1000	15883.5	-28.68	-25

Band7 QAM16 BW=10MHz Channel=21400 RB Size=50 Position=#0



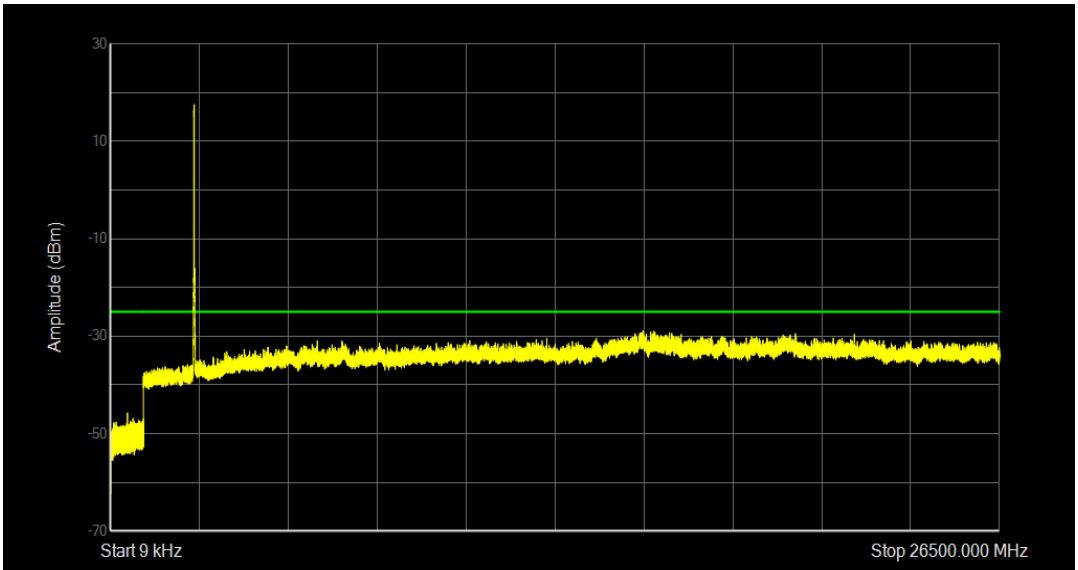
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0107907	-64.2	-25
2	0.15	30	10	0.174875	-58.08	-25
3	30	1000	100	905.198666666667	-46.54	-25
4	1000	26500	1000	20124.15	-27.86	-25

Band7 QPSK BW=15MHz Channel=20825 RB Size=75 Position=#0



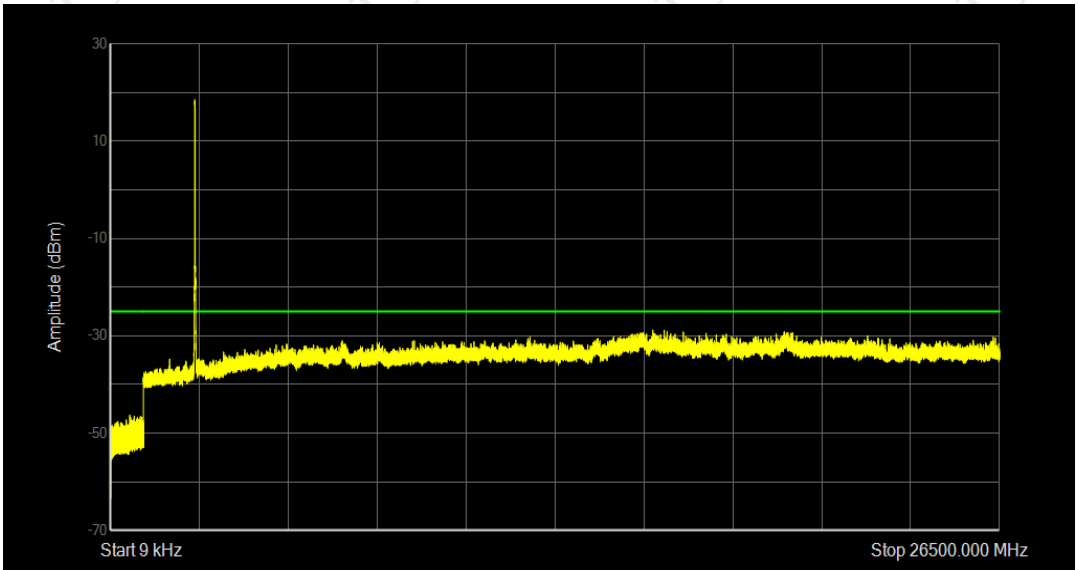
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-64.38	-25
2	0.15	30	10	0.17786	-57.81	-25
3	30	1000	100	702.468666666667	-46.24	-25
4	1000	26500	1000	15868.2	-28.57	-25

Band7 QAM16 BW=15MHz Channel=20825 RB Size=75 Position=#0



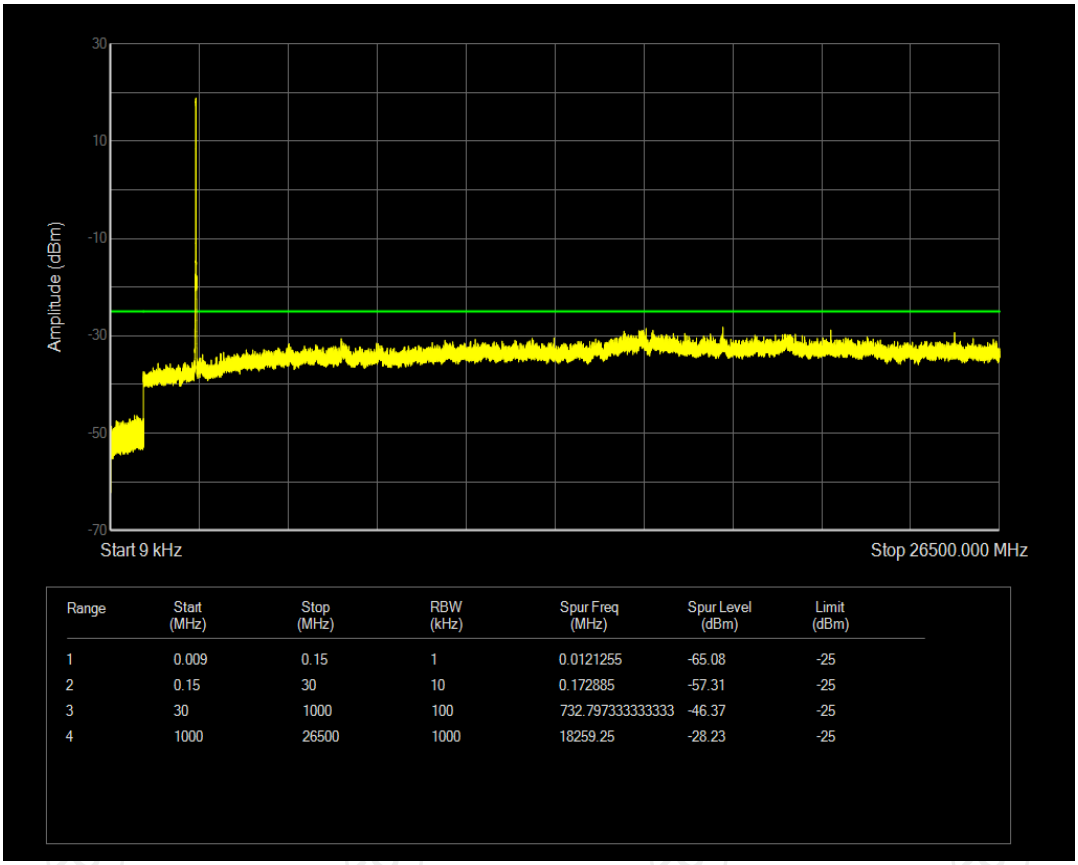
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0107484	-65.08	-25
2	0.15	30	10	7.06326	-58.65	-25
3	30	1000	100	523.697666666667	-45.75	-25
4	1000	26500	1000	15880.95	-28.87	-25

Band7 QPSK BW=15MHz Channel=21100 RB Size=75 Position=#0



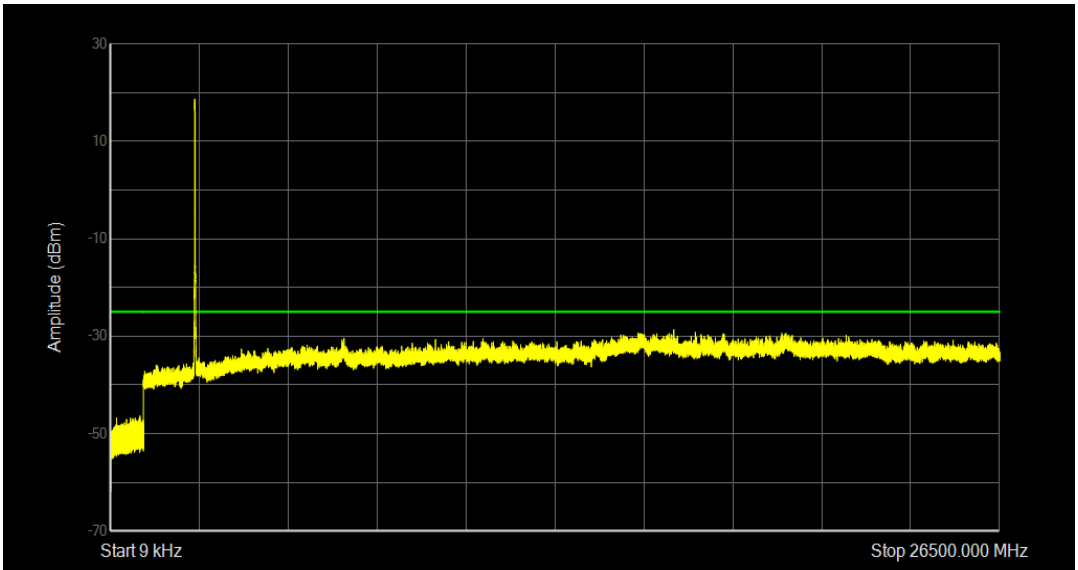
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-64.88	-25
2	0.15	30	10	6.881175	-57.1	-25
3	30	1000	100	593.149666666667	-46.3	-25
4	1000	26500	1000	16511.65	-28.82	-25

Band7 QPSK BW=15MHz Channel=21375 RB Size=75 Position=#0



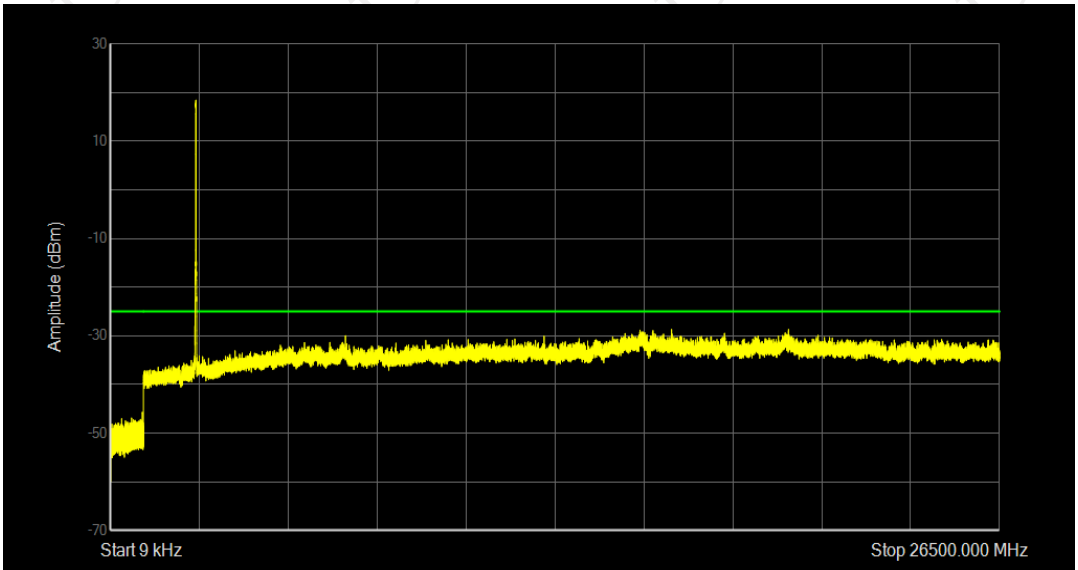
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0121255	-65.08	-25
2	0.15	30	10	0.172885	-57.31	-25
3	30	1000	100	732.797333333333	-46.37	-25
4	1000	26500	1000	18259.25	-28.23	-25

Band7 QAM16 BW=15MHz Channel=21100 RB Size=75 Position=#0



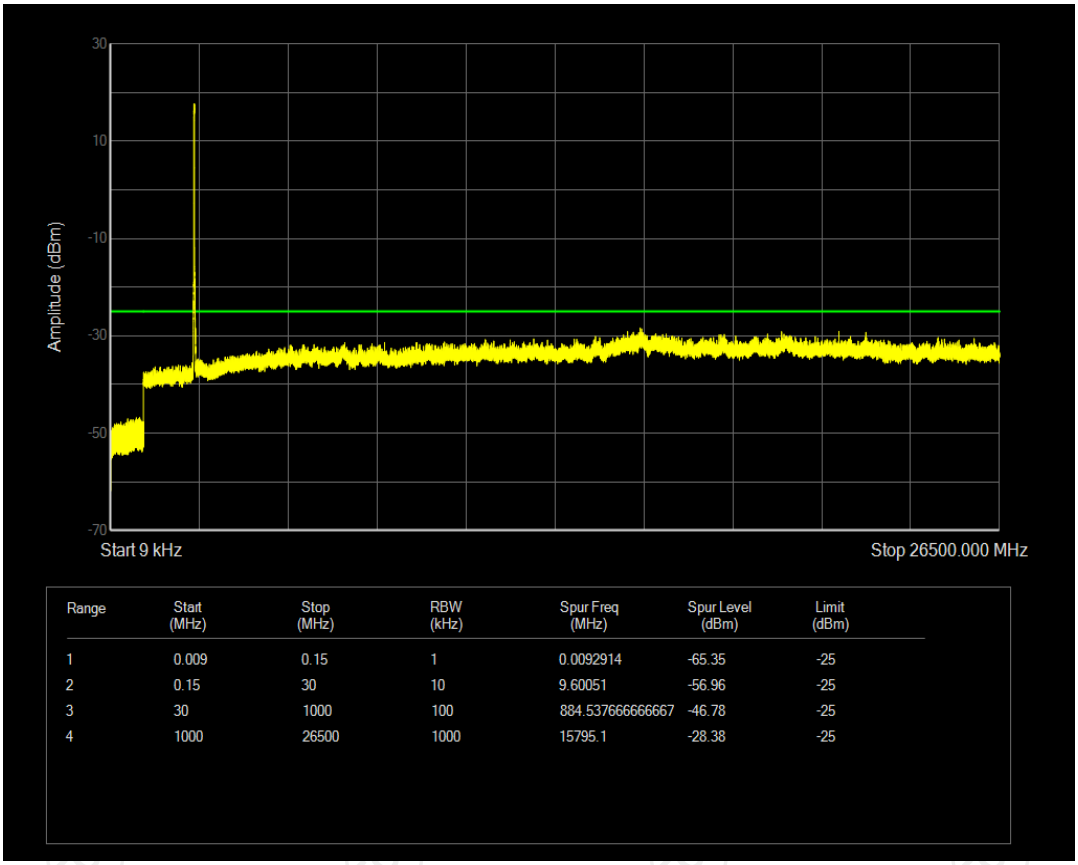
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0108847	-64.83	-25
2	0.15	30	10	6.417505	-57.39	-25
3	30	1000	100	894.043666666667	-46.36	-25
4	1000	26500	1000	16794.7	-28.65	-25

Band7 QAM16 BW=15MHz Channel=21375 RB Size=75 Position=#0



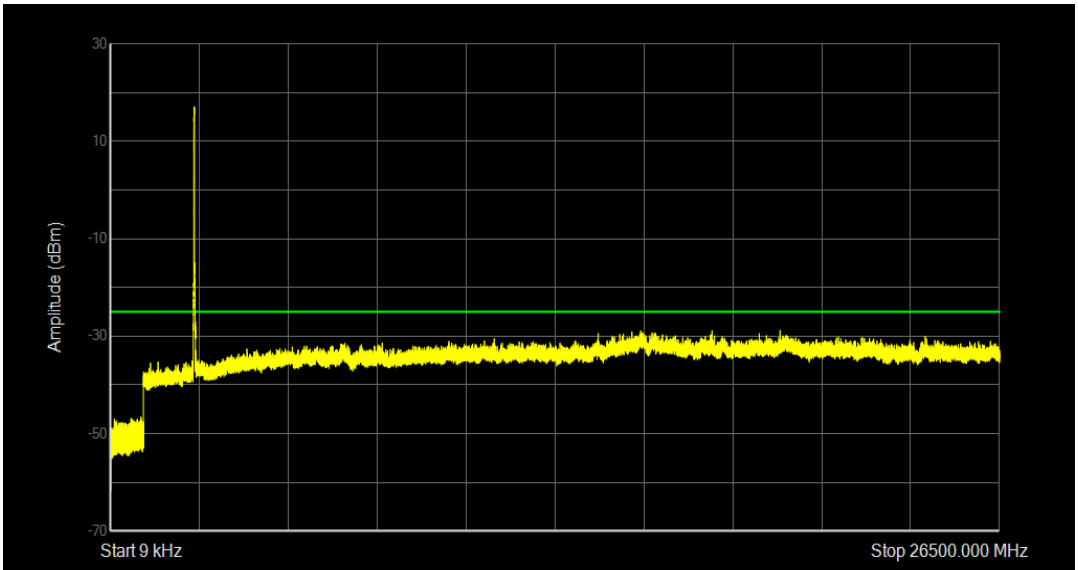
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0103395	-64.37	-25
2	0.15	30	10	0.172885	-58.37	-25
3	30	1000	100	966.632	-45.7	-25
4	1000	26500	1000	20213.4	-28.68	-25

Band7 QPSK BW=20MHz Channel=20850 RB Size=100 Position=#0



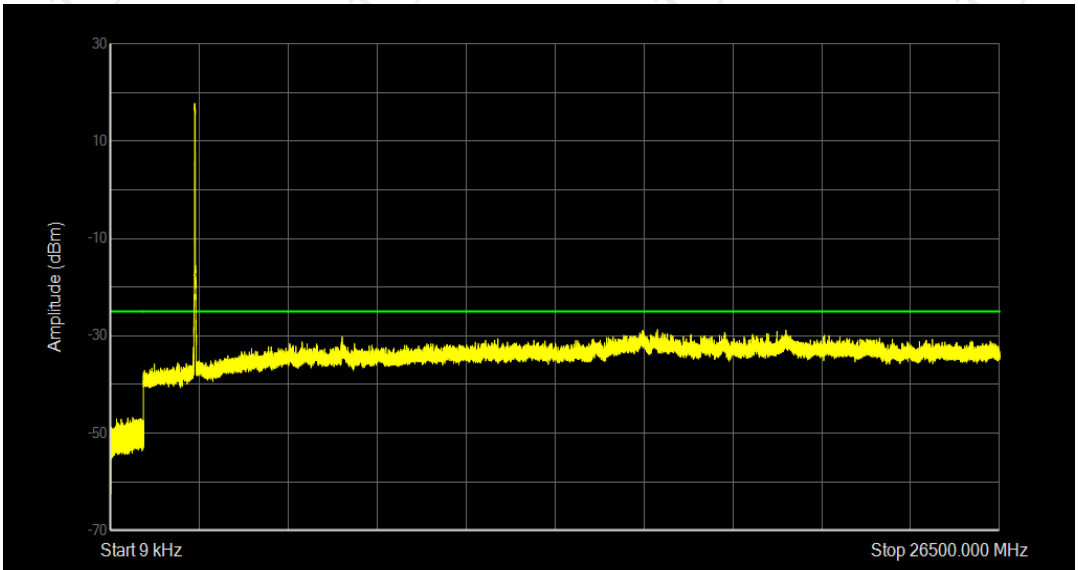
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0092914	-65.35	-25
2	0.15	30	10	9.60051	-56.96	-25
3	30	1000	100	884.537666666667	-46.78	-25
4	1000	26500	1000	15795.1	-28.38	-25

Band7 QAM16 BW=20MHz Channel=20850 RB Size=100 Position=#0



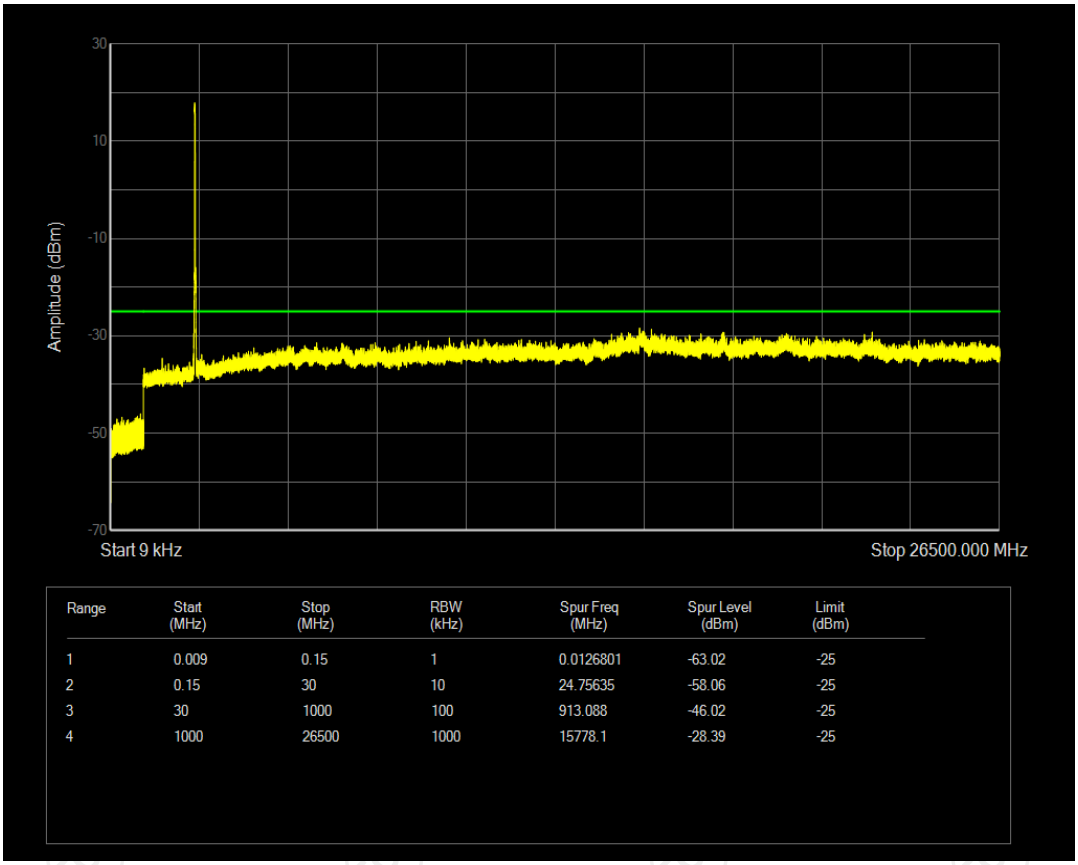
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0104664	-66.18	-25
2	0.15	30	10	0.15	-58.05	-25
3	30	1000	100	925.31	-46.58	-25
4	1000	26500	1000	19962.65	-28.8	-25

Band7 QPSK BW=20MHz Channel=21100 RB Size=100 Position=#0



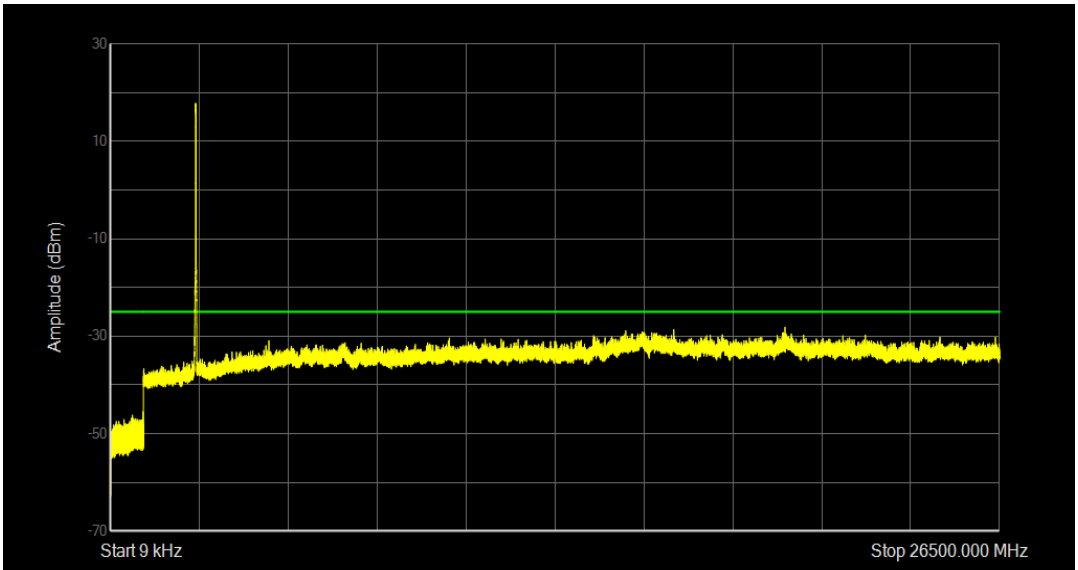
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0156646	-65.23	-25
2	0.15	30	10	8.294075	-58.64	-25
3	30	1000	100	681.904666666667	-46.83	-25
4	1000	26500	1000	16309.35	-28.72	-25

Band7 QAM16 BW=20MHz Channel=21100 RB Size=100 Position=#0



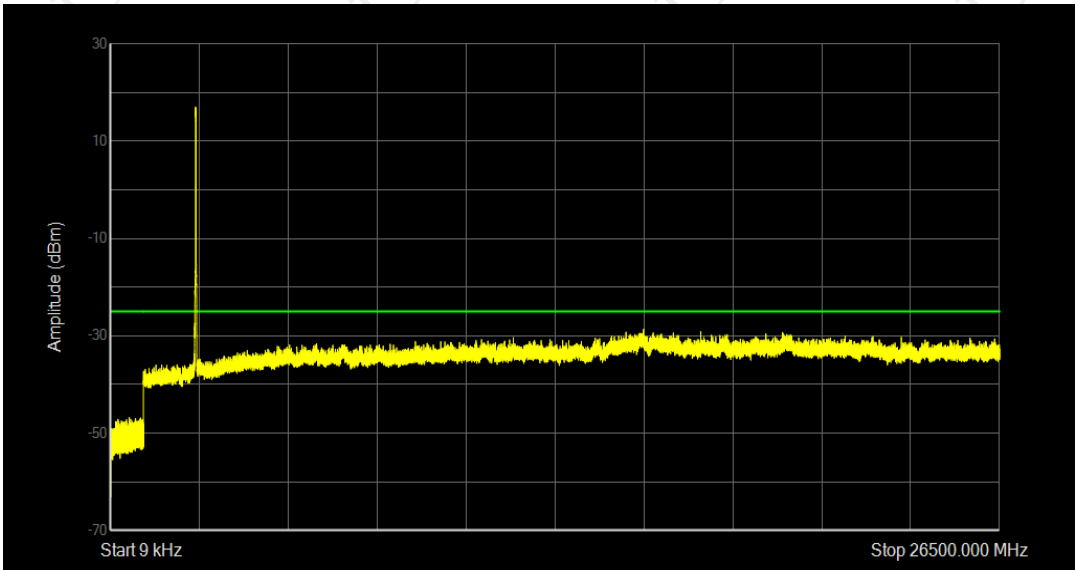
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0126801	-63.02	-25
2	0.15	30	10	24.75635	-58.06	-25
3	30	1000	100	913.088	-46.02	-25
4	1000	26500	1000	15778.1	-28.39	-25

Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0115427	-64.02	-25
2	0.15	30	10	9.179625	-56.39	-25
3	30	1000	100	985.870333333333	-45.51	-25
4	1000	26500	1000	20108	-28.17	-25

Band7 QAM16 BW=20MHz Channel=21350 RB Size=100 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0094042	-64.31	-25
2	0.15	30	10	8.292085	-58.66	-25
3	30	1000	100	579.537333333333	-46.8	-25
4	1000	26500	1000	15896.25	-28.66	-25