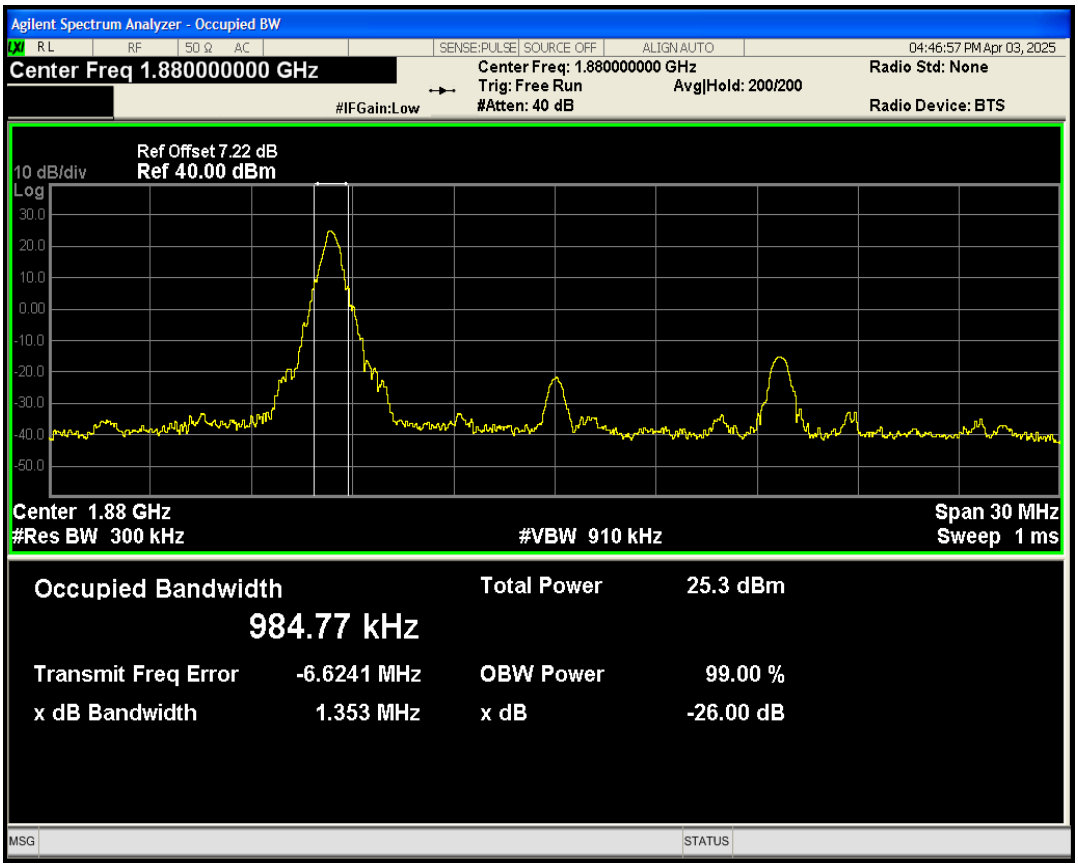
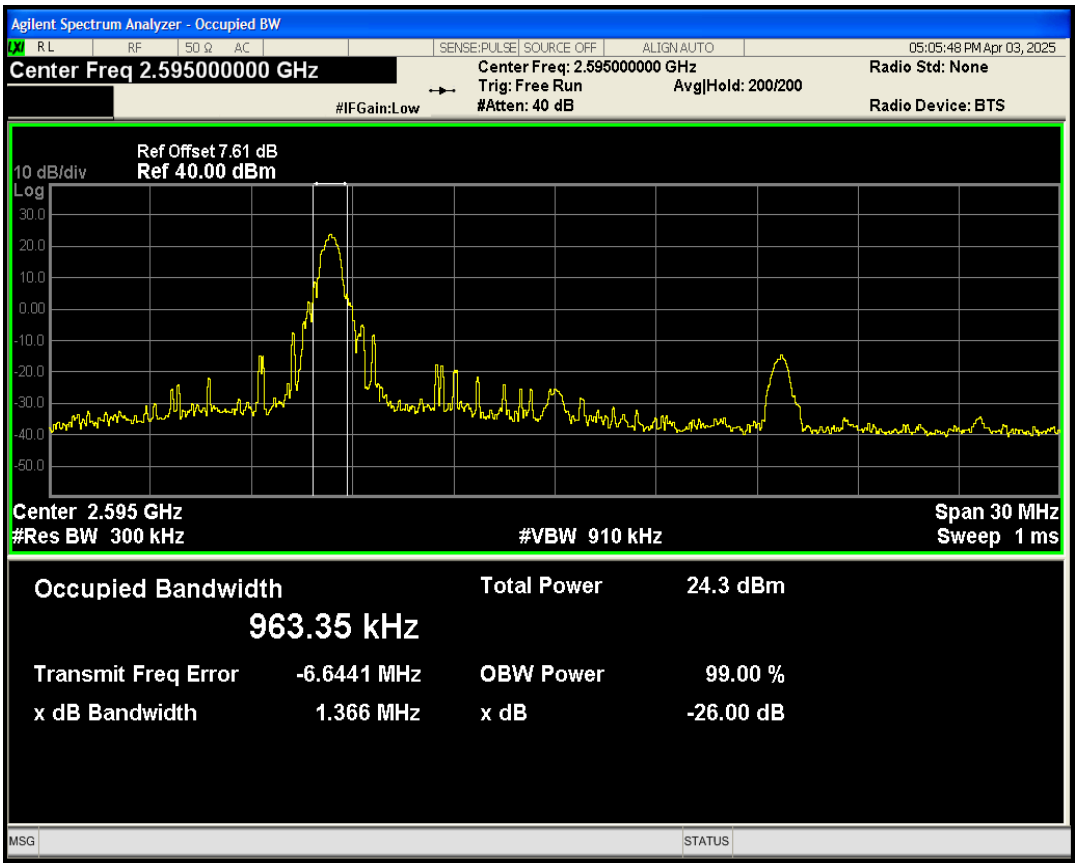
4 Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band2	15	18900	1	#0	QAM16	0.985	1.353	PASS
Band38	15	38000	1	#0	QAM16	0.963	1.366	PASS
Band4	15	20175	1	#0	QAM16	1.018	1.331	PASS
Band41	15	40620	1	#0	QAM16	0.999	1.300	PASS
Band66	15	132322	1	#0	QAM16	1.011	1.400	PASS
Band7	15	21100	1	#0	QAM16	0.998	1.449	PASS

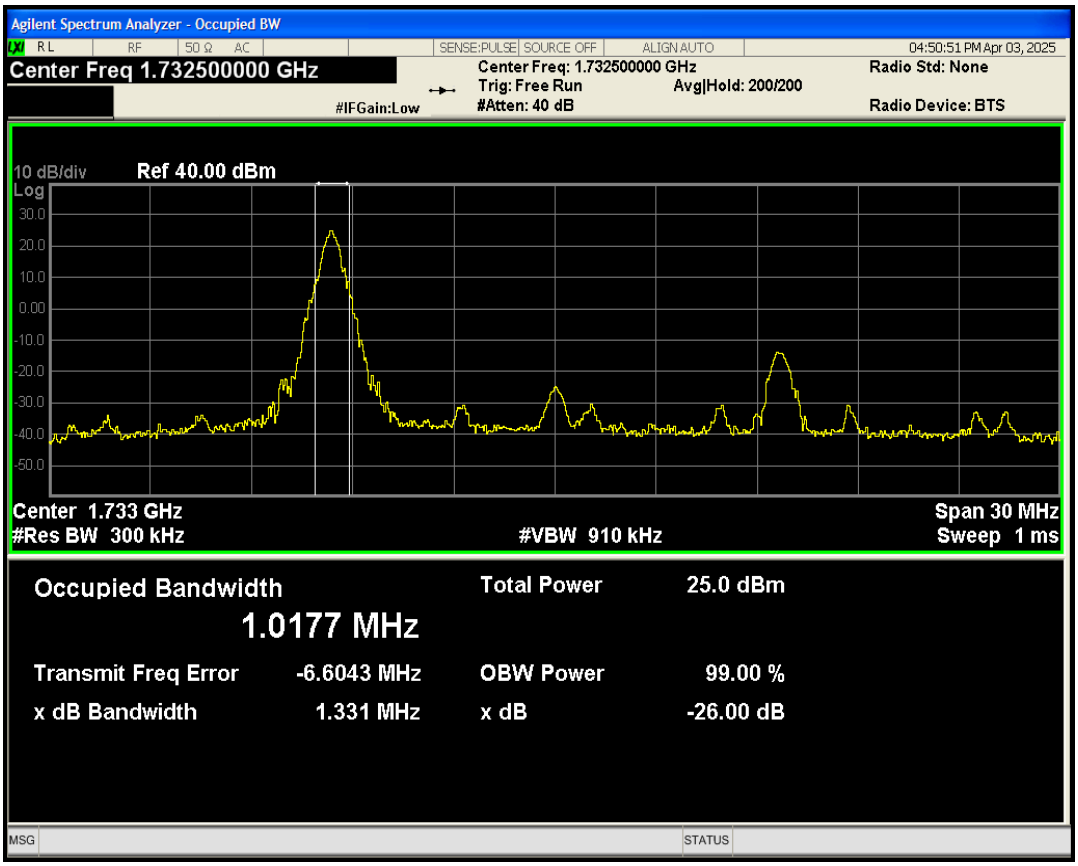
Band2 QAM16 BW=15MHz Channel=18900 RB Size=1 Position=#0



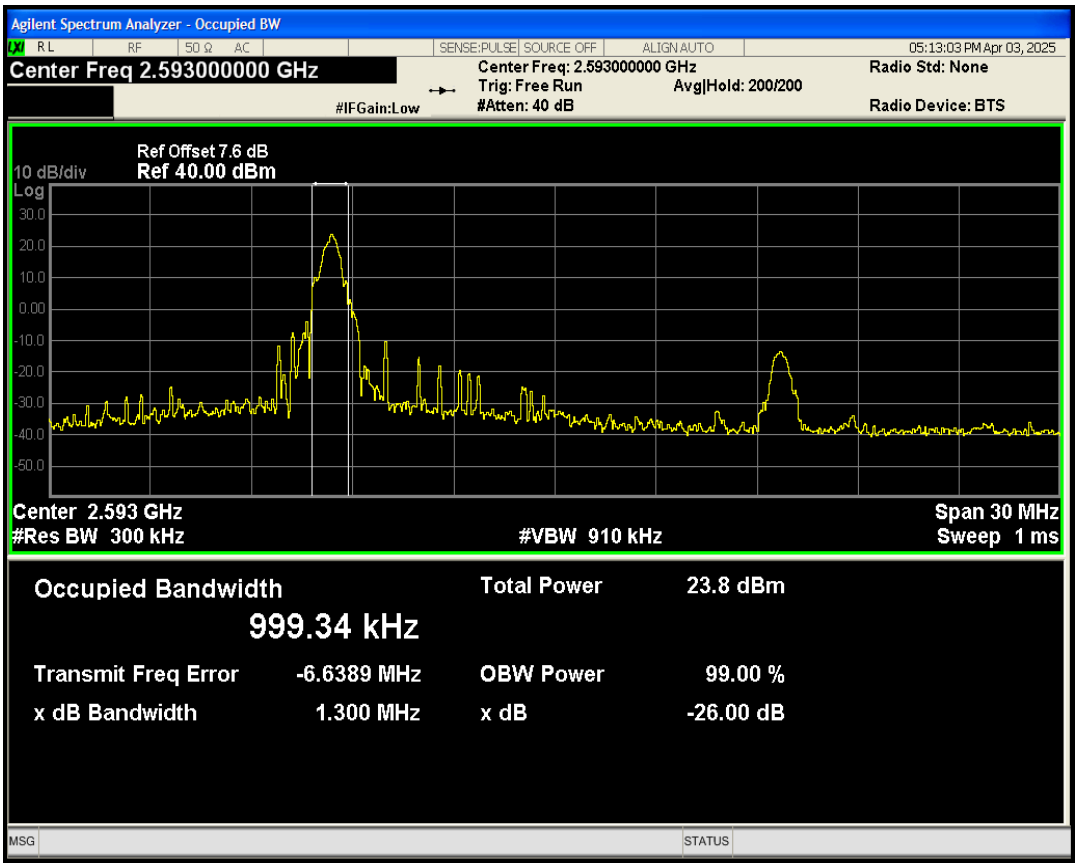
Band38 QAM16 BW=15MHz Channel=38000 RB Size=1 Position=#0



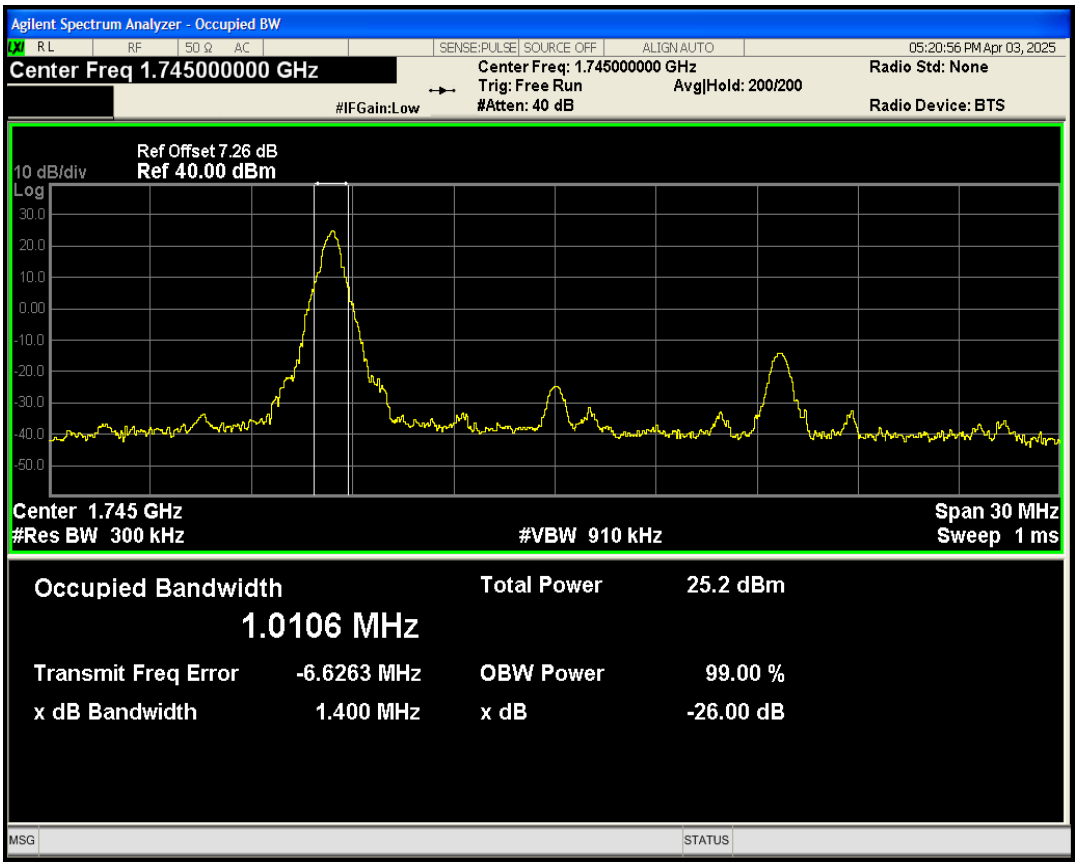
Band4 QAM16 BW=15MHz Channel=20175 RB Size=1 Position=#0



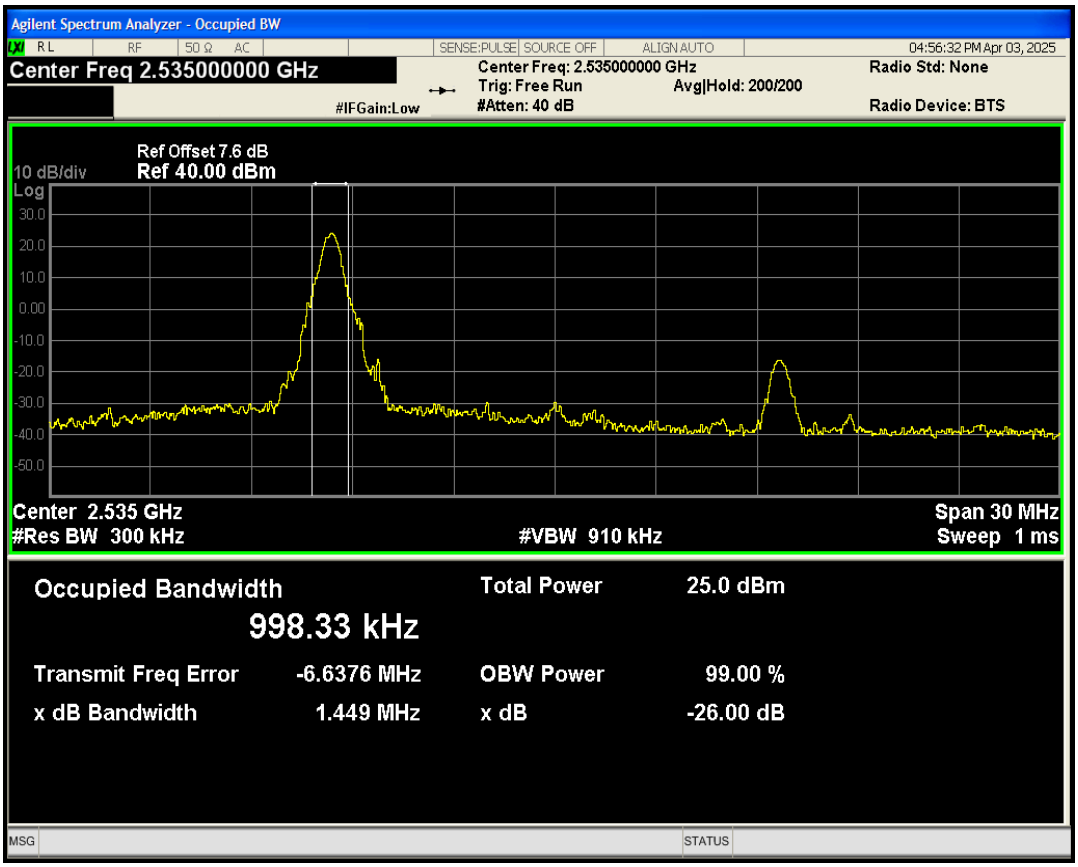
Band41 QAM16 BW=15MHz Channel=40620 RB Size=1 Position=#0



Band66 QAM16 BW=15MHz Channel=132322 RB Size=1 Position=#0



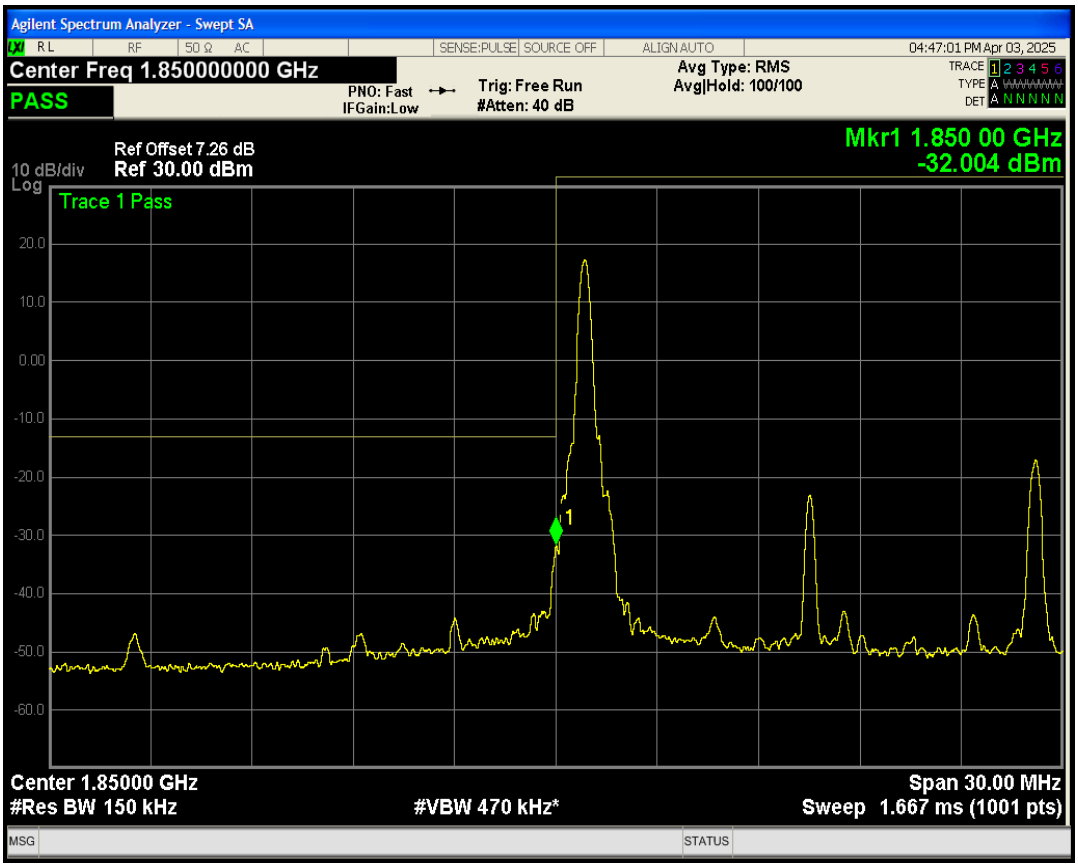
Band7 QAM16 BW=15MHz Channel=21100 RB Size=1 Position=#0



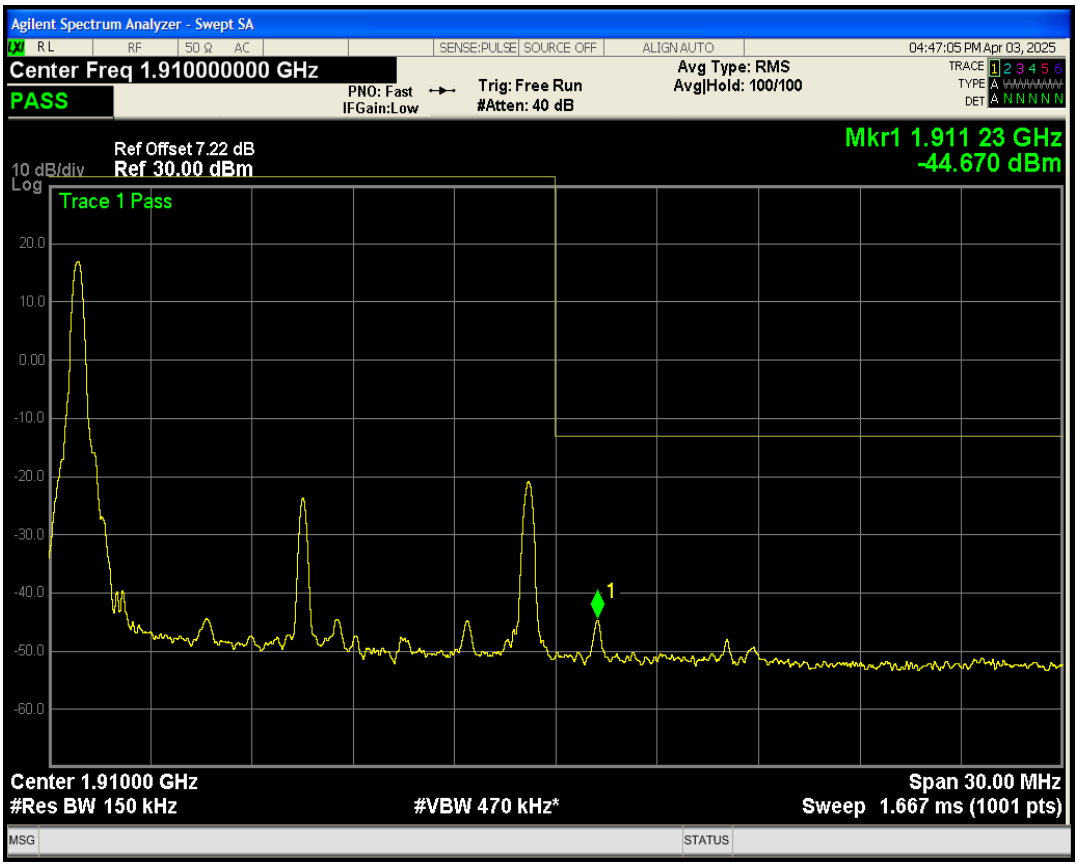
5 Band edge

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band2	15	18675	1	#0	QAM16	1850.00	-32.00	-13	PASS
Band2	15	19125	1	#0	QAM16	1911.23	-44.67	-13	PASS
Band38	15	37825	1	#0	QAM16	2551.31	-41.54	-25	PASS
Band38	15	38175	1	#0	QAM16	2636.30	-40.85	-25	PASS
Band4	15	20025	1	#0	QAM16	1710.00	-33.74	-13	PASS
Band4	15	20325	1	#0	QAM16	1767.42	-37.40	-13	PASS
Band41	15	39725	1	#0	QAM16	2479.78	-41.23	-25	PASS
Band41	15	41515	1	#0	QAM16	2706.21	-41.14	-25	PASS
Band66	15	132047	1	#0	QAM16	1710.00	-33.35	-13	PASS
Band66	15	132597	1	#0	QAM16	1792.48	-36.67	-13	PASS
Band7	15	20825	1	#0	QAM16	2498.98	-26.00	-10	PASS
Band7	15	21375	1	#0	QAM16	2594.53	-41.20	-25	PASS

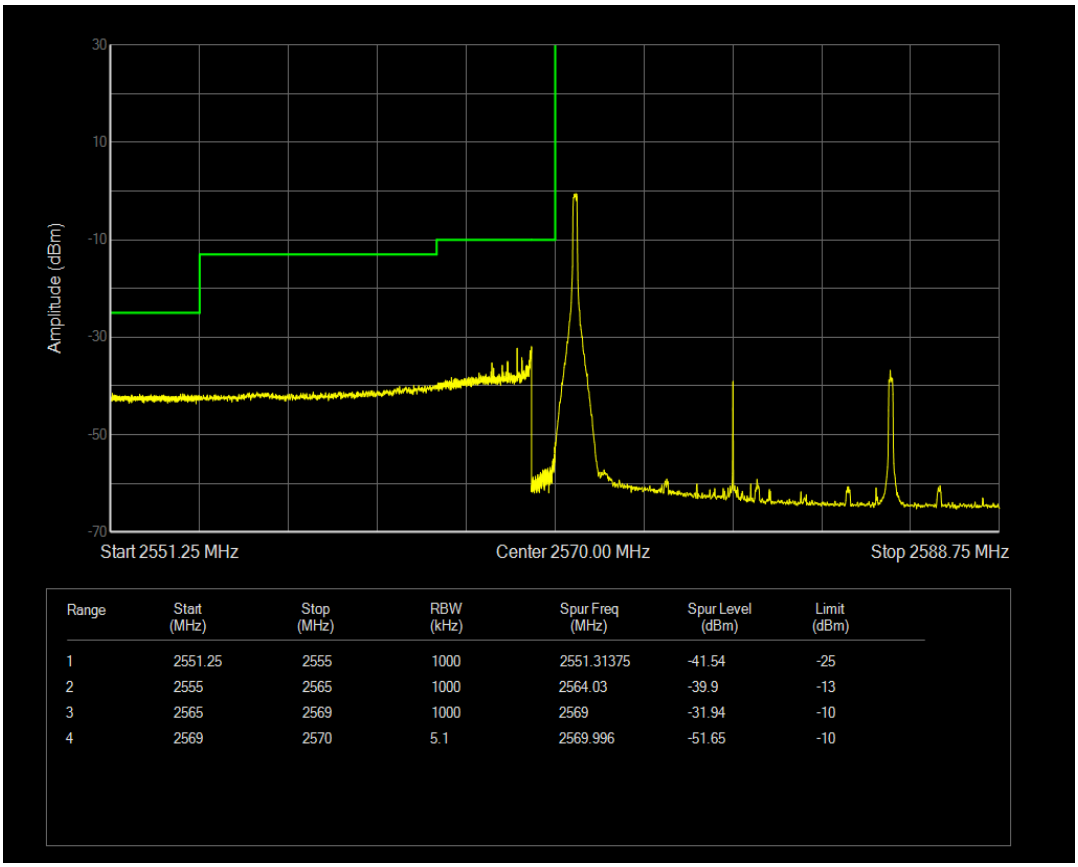
Band2 QAM16 BW=15MHz Channel=18675 RB Size=1 Position=#0



Band2 QAM16 BW=15MHz Channel=19125 RB Size=1 Position=#0

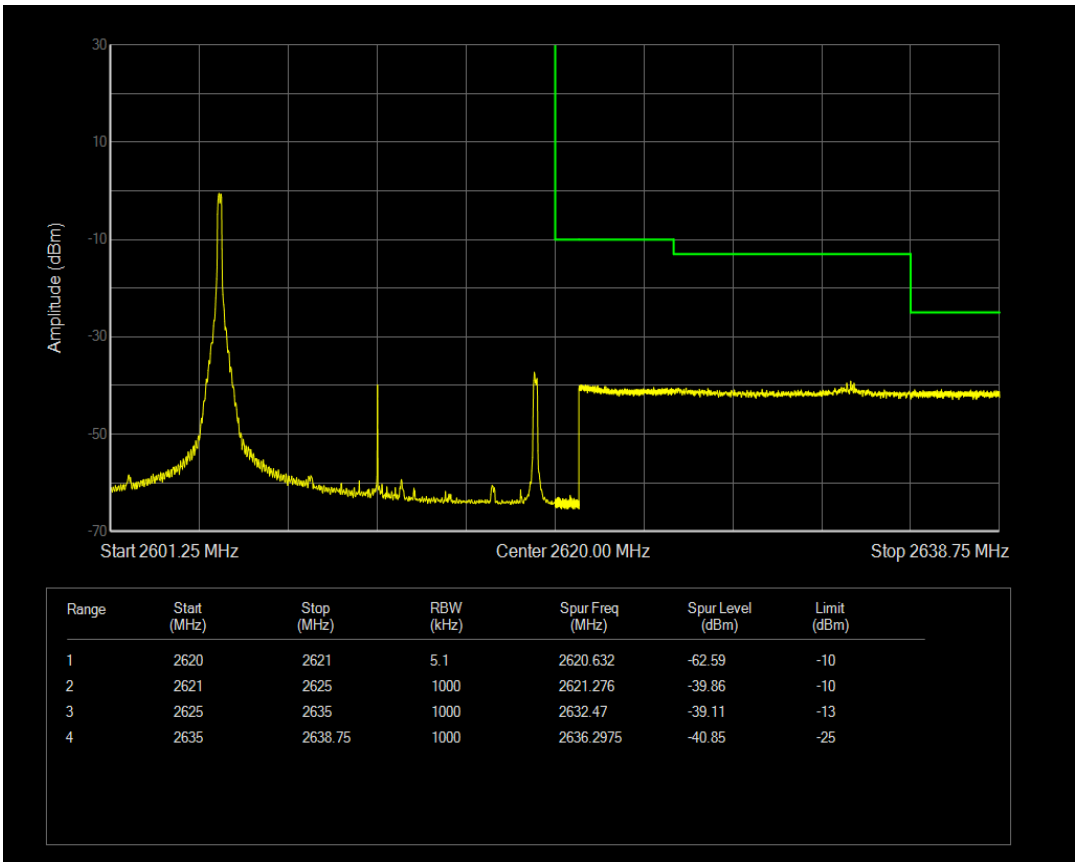


Band38 QAM16 BW=15MHz Channel=37825 RB Size=1 Position=#0



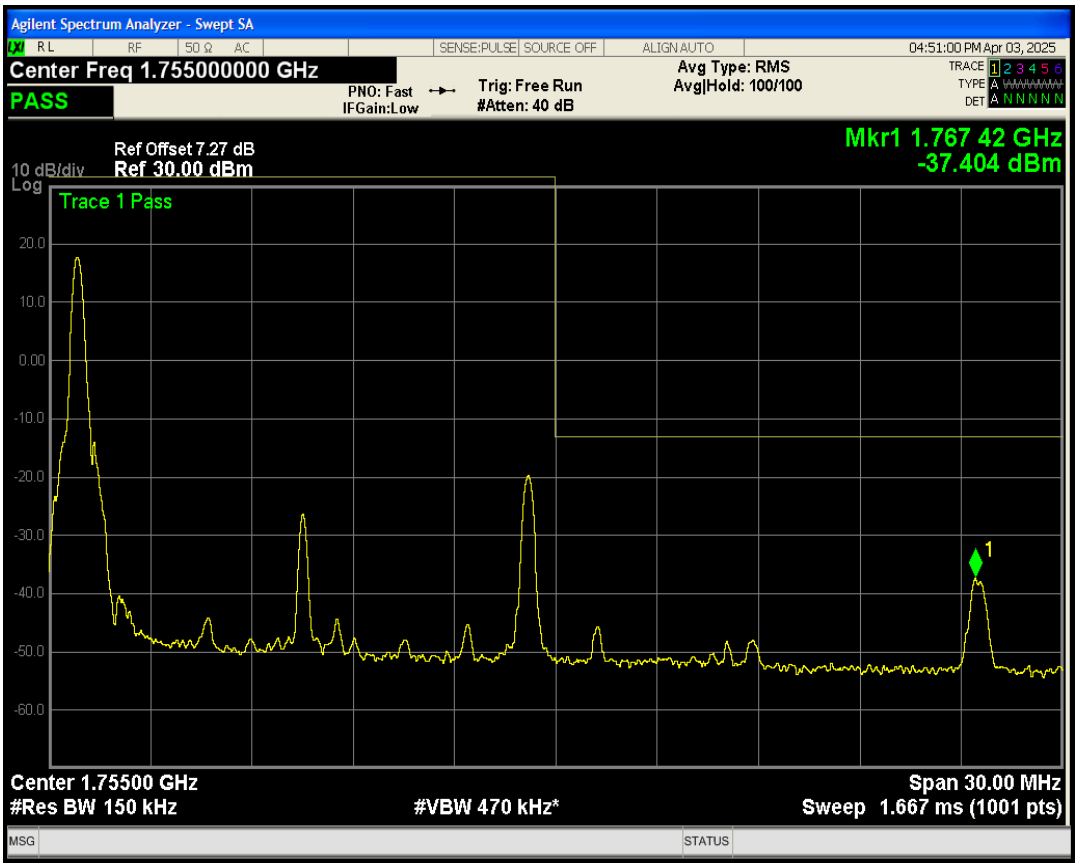
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2551.25	2555	1000	2551.31375	-41.54	-25
2	2555	2565	1000	2564.03	-39.9	-13
3	2565	2569	1000	2569	-31.94	-10
4	2569	2570	5.1	2569.996	-51.65	-10

Band38 QAM16 BW=15MHz Channel=38175 RB Size=1 Position=#0

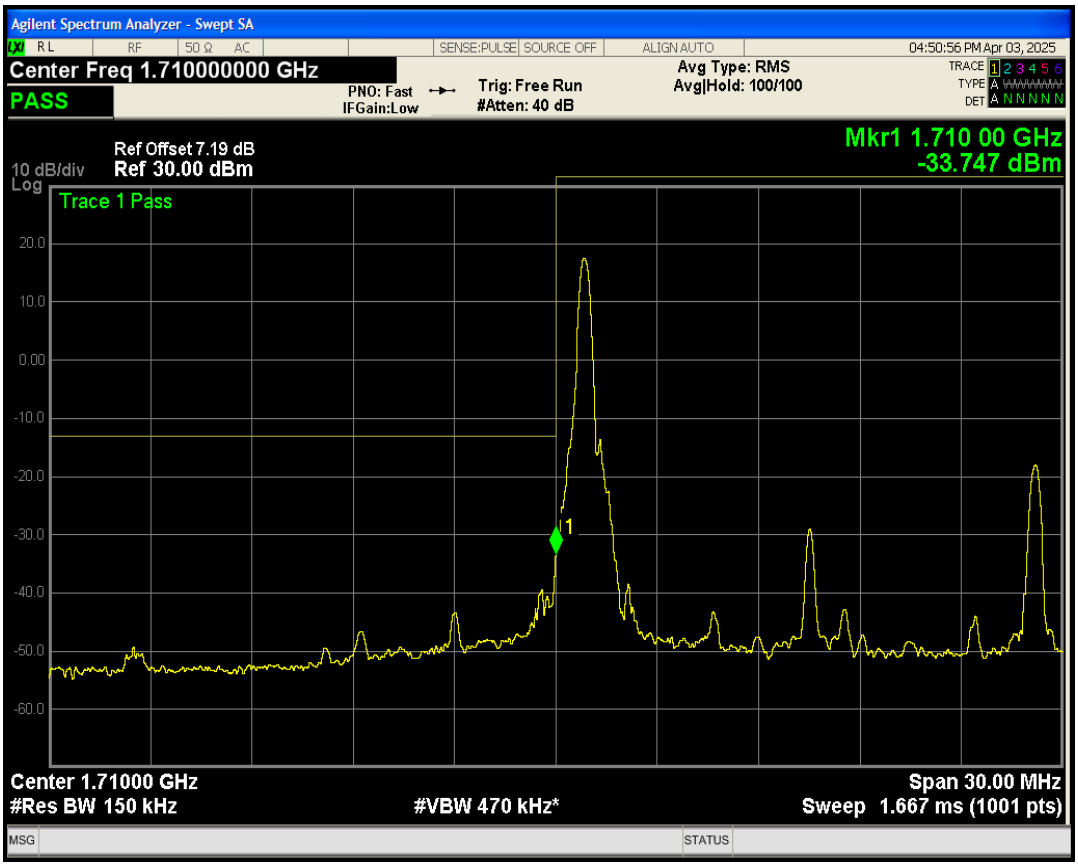


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2620	2621	5.1	2620.632	-62.59	-10
2	2621	2625	1000	2621.276	-39.86	-10
3	2625	2635	1000	2632.47	-39.11	-13
4	2635	2638.75	1000	2636.2975	-40.85	-25

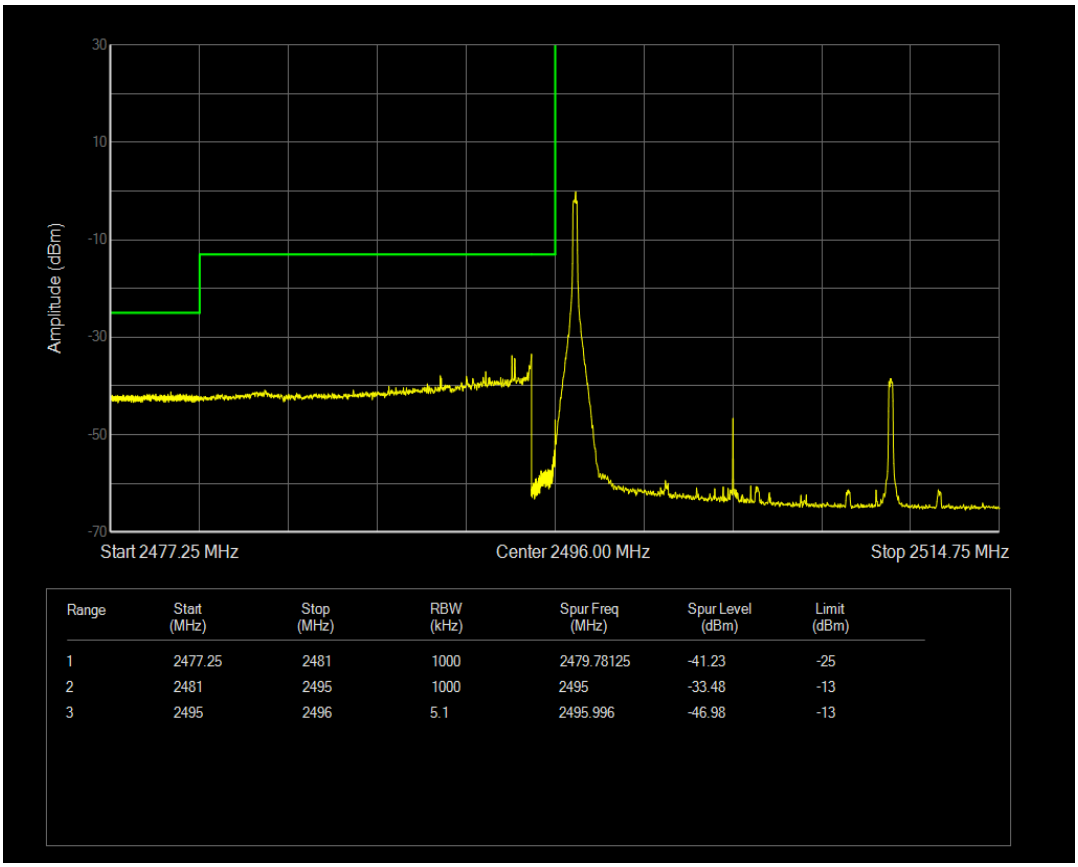
Band4 QAM16 BW=15MHz Channel=20325 RB Size=1 Position=#0



Band4 QAM16 BW=15MHz Channel=20025 RB Size=1 Position=#0

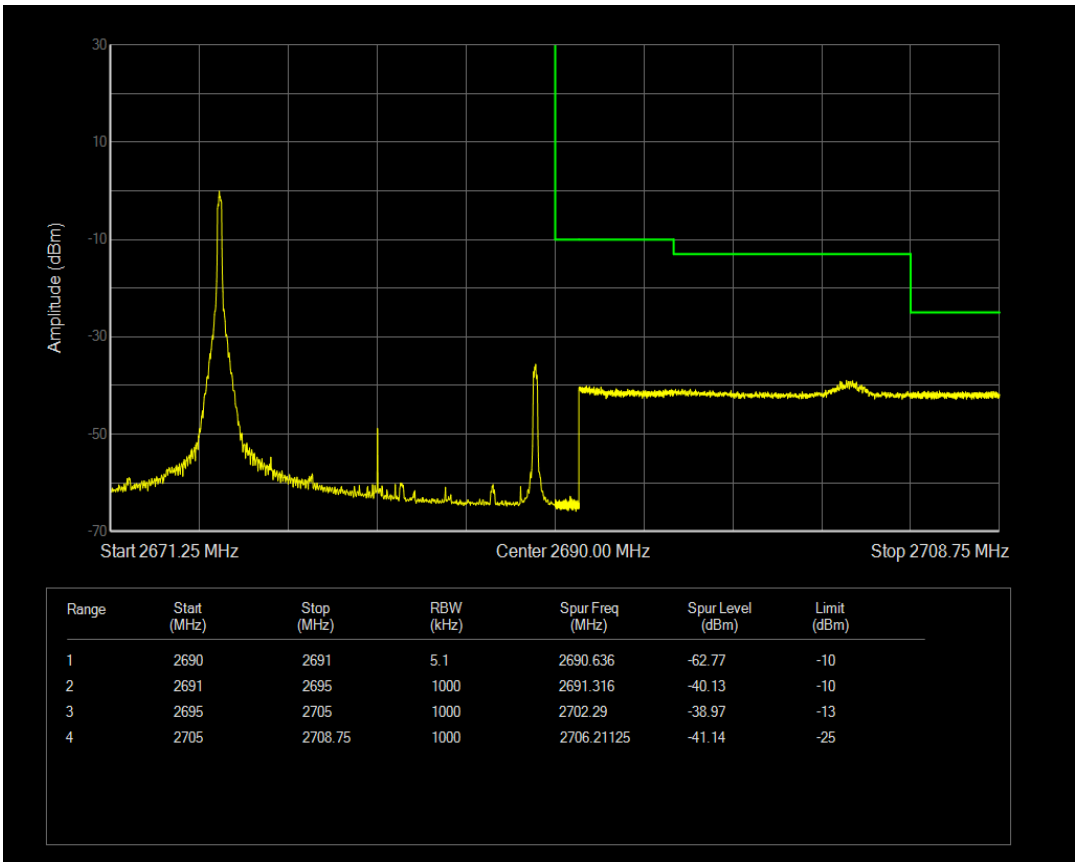


Band41 QAM16 BW=15MHz Channel=39725 RB Size=1 Position=#0



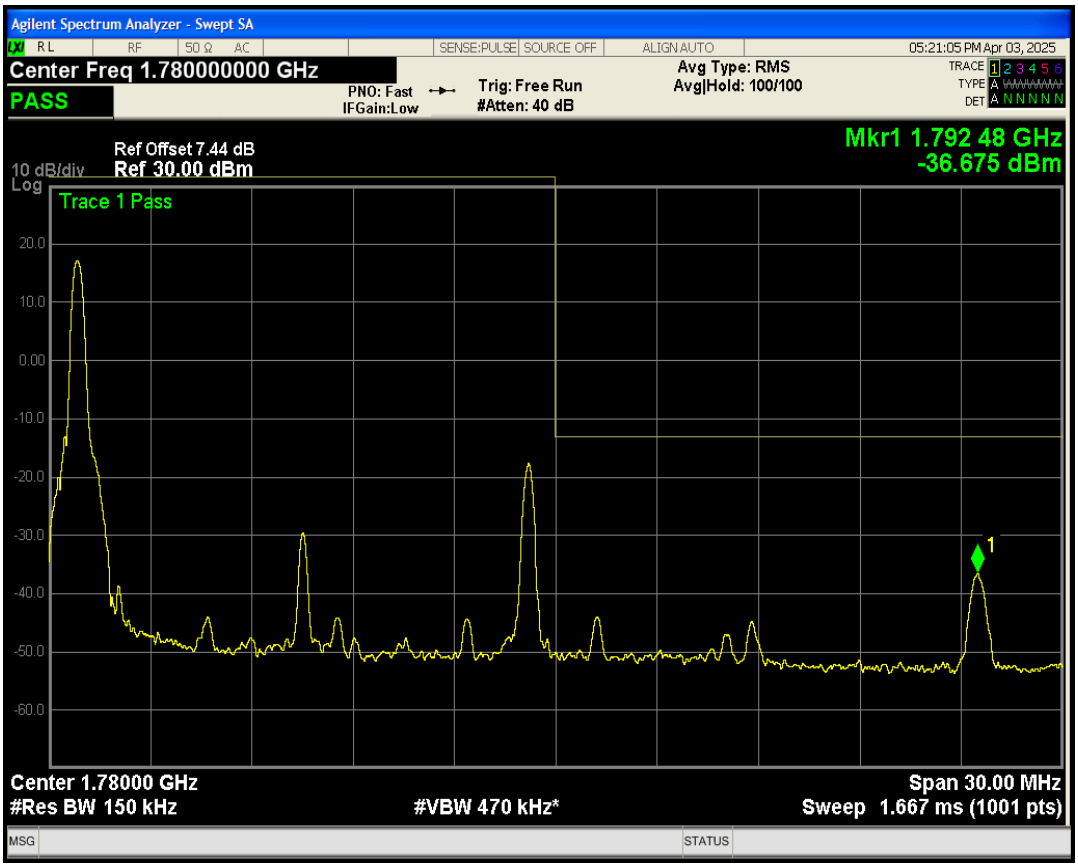
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2477.25	2481	1000	2479.78125	-41.23	-25
2	2481	2495	1000	2495	-33.48	-13
3	2495	2496	5.1	2495.996	-46.98	-13

Band41 QAM16 BW=15MHz Channel=41515 RB Size=1 Position=#0

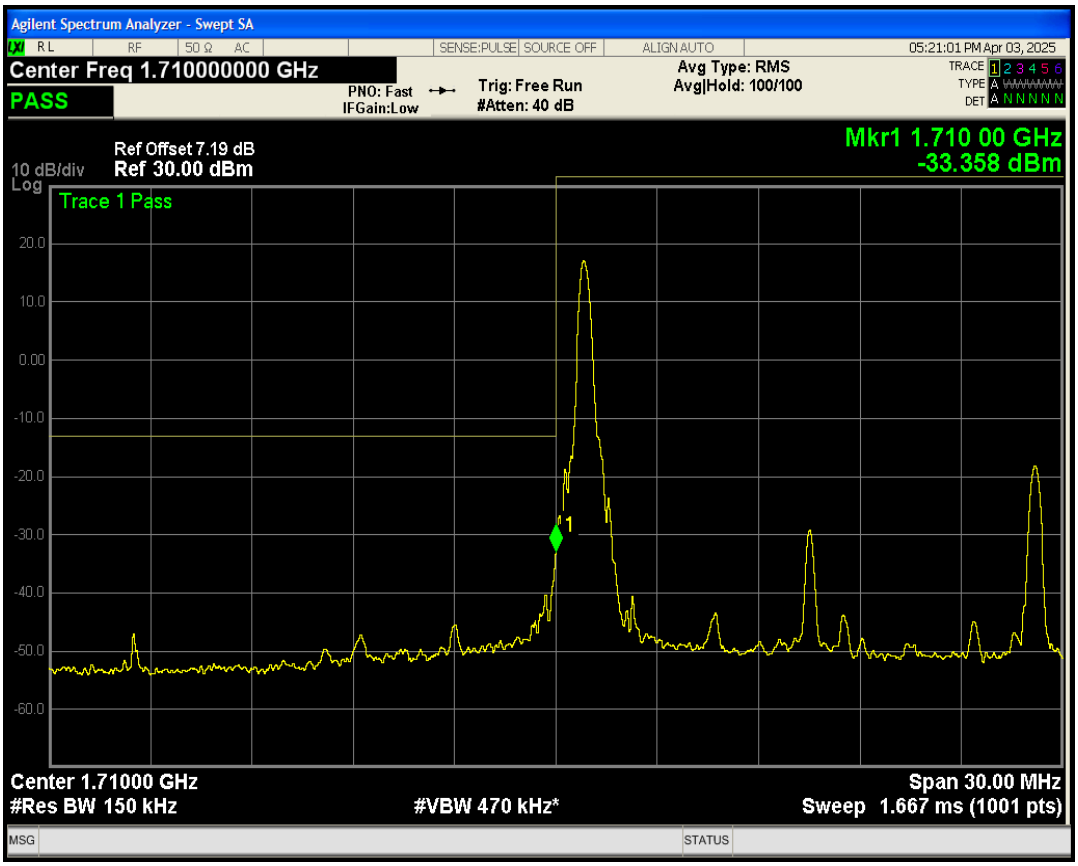


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	5.1	2690.636	-62.77	-10
2	2691	2695	1000	2691.316	-40.13	-10
3	2695	2705	1000	2702.29	-38.97	-13
4	2705	2708.75	1000	2706.21125	-41.14	-25

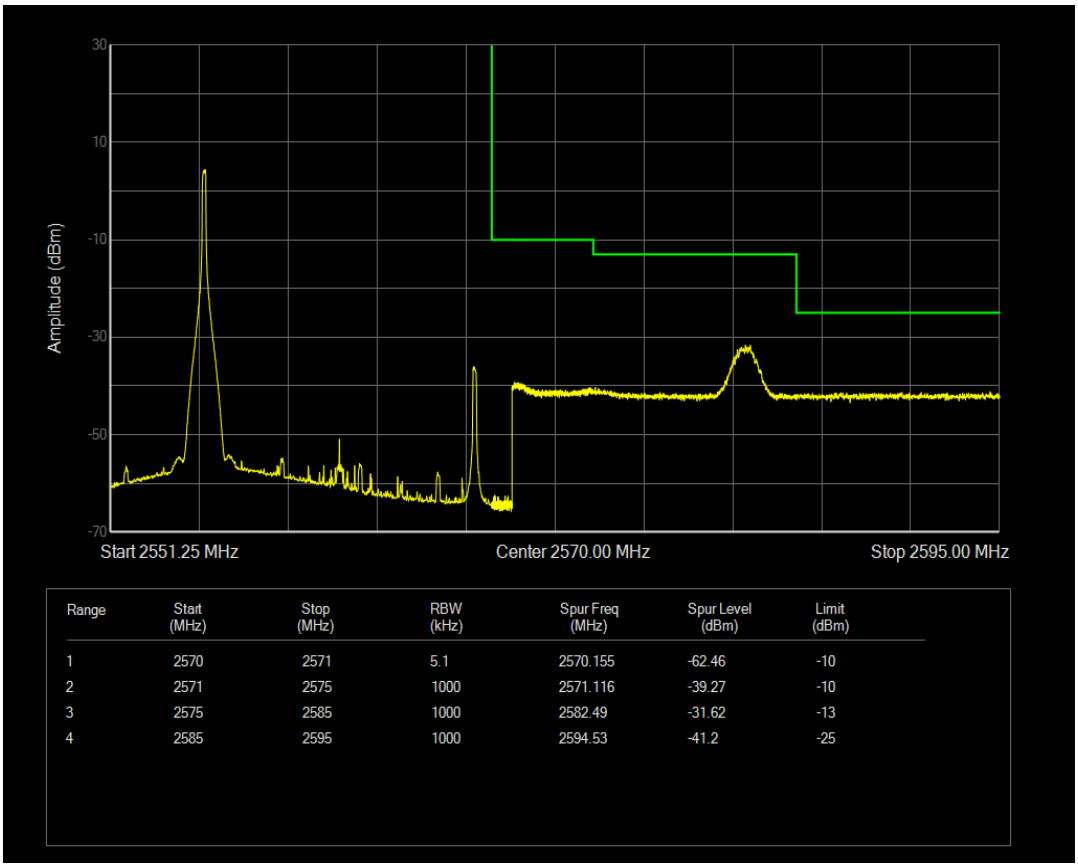
Band66 QAM16 BW=15MHz Channel=132597 RB Size=1 Position=#0



Band66 QAM16 BW=15MHz Channel=132047 RB Size=1 Position=#0

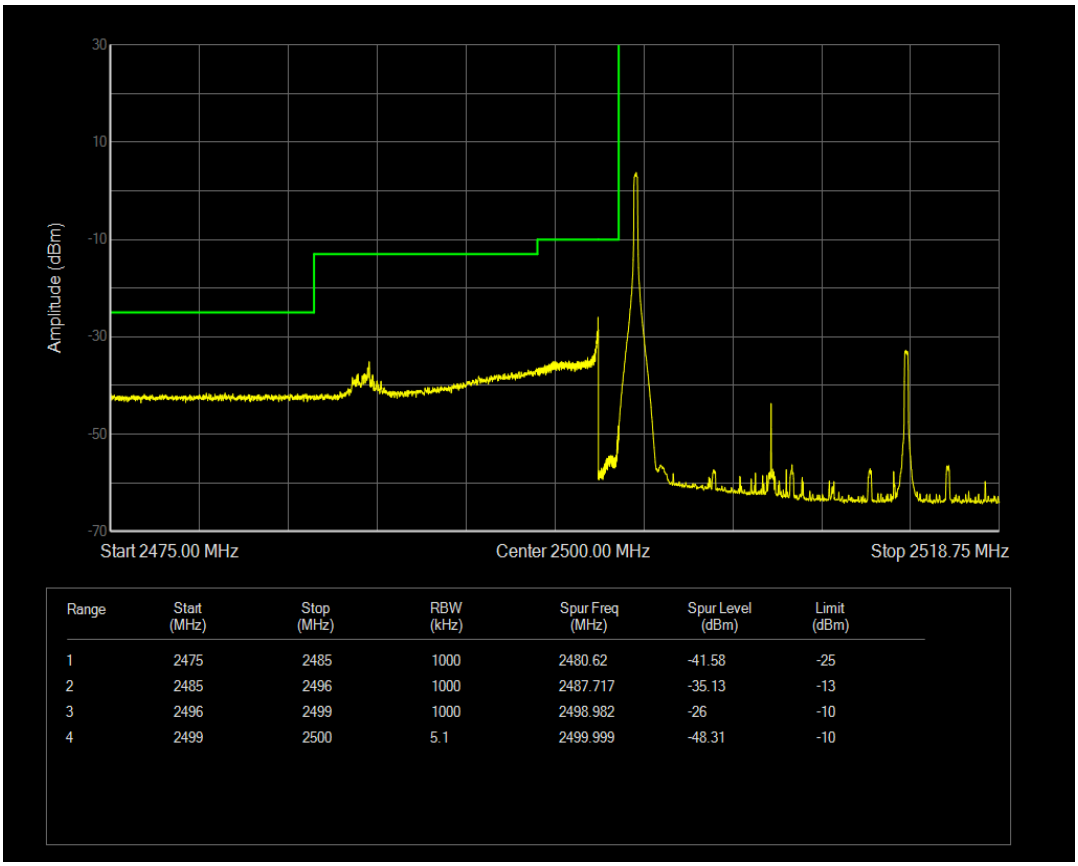


Band7 QAM16 BW=15MHz Channel=21375 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	5.1	2570.155	-62.46	-10
2	2571	2575	1000	2571.116	-39.27	-10
3	2575	2585	1000	2582.49	-31.62	-13
4	2585	2595	1000	2594.53	-41.2	-25

Band7 QAM16 BW=15MHz Channel=20825 RB Size=1 Position=#0

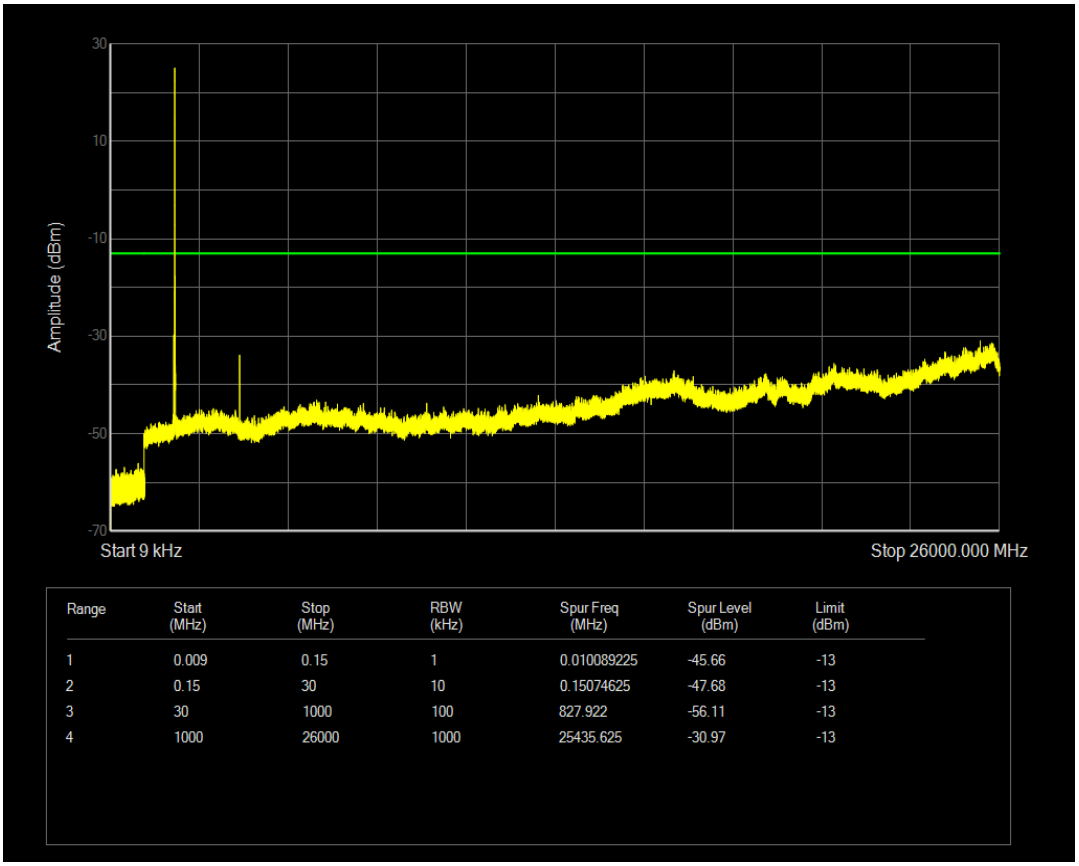


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2485	1000	2480.62	-41.58	-25
2	2485	2496	1000	2487.717	-35.13	-13
3	2496	2499	1000	2498.982	-26	-10
4	2499	2500	5.1	2499.999	-48.31	-10

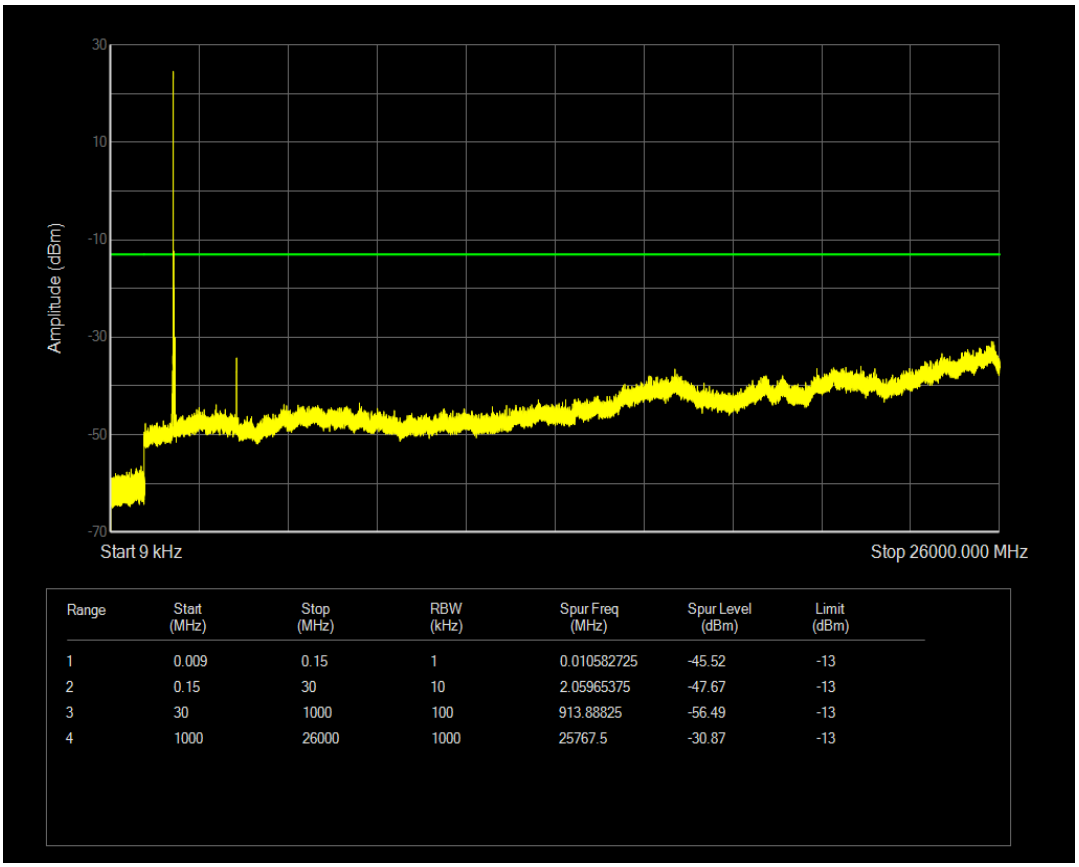
6 Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band2	15	18675	1	#0	QAM16	25767.50	-30.87	-13	PASS
Band2	15	19125	1	#0	QAM16	25435.63	-30.97	-13	PASS
Band38	15	37825	1	#0	QAM16	25893.13	-30.88	-25	PASS
Band38	15	38175	1	#0	QAM16	25766.25	-30.75	-25	PASS
Band4	15	20025	1	#0	QAM16	25781.25	-31.40	-13	PASS
Band4	15	20325	1	#0	QAM16	25764.38	-30.63	-13	PASS
Band41	15	39725	1	#0	QAM16	25801.25	-30.24	-25	PASS
Band41	15	41515	1	#0	QAM16	25781.88	-30.65	-25	PASS
Band66	15	132047	1	#0	QAM16	25435.63	-31.43	-13	PASS
Band66	15	132597	1	#0	QAM16	25818.13	-30.75	-13	PASS
Band7	15	20825	1	#0	QAM16	25814.38	-30.84	-25	PASS
Band7	15	21375	1	#0	QAM16	25631.25	-31.08	-25	PASS

Band2 QAM16 BW=15MHz Channel=19125 RB Size=1 Position=#0

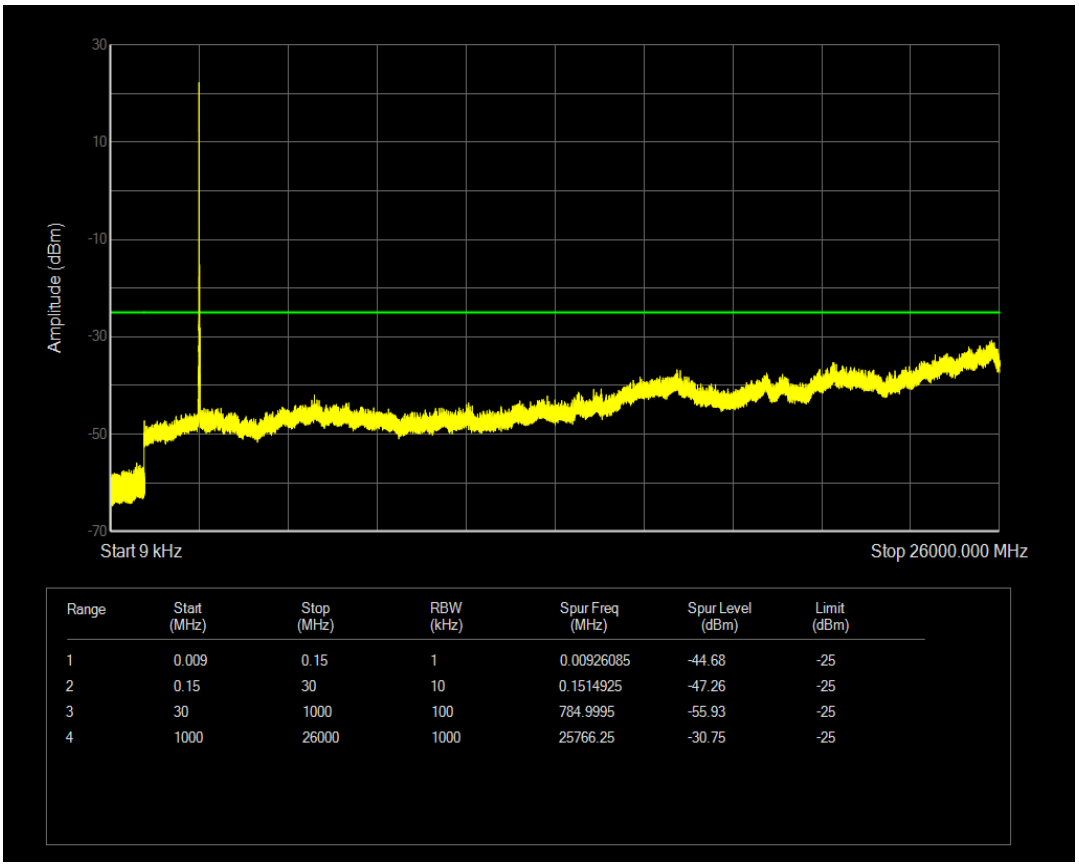


Band2 QAM16 BW=15MHz Channel=18675 RB Size=1 Position=#0



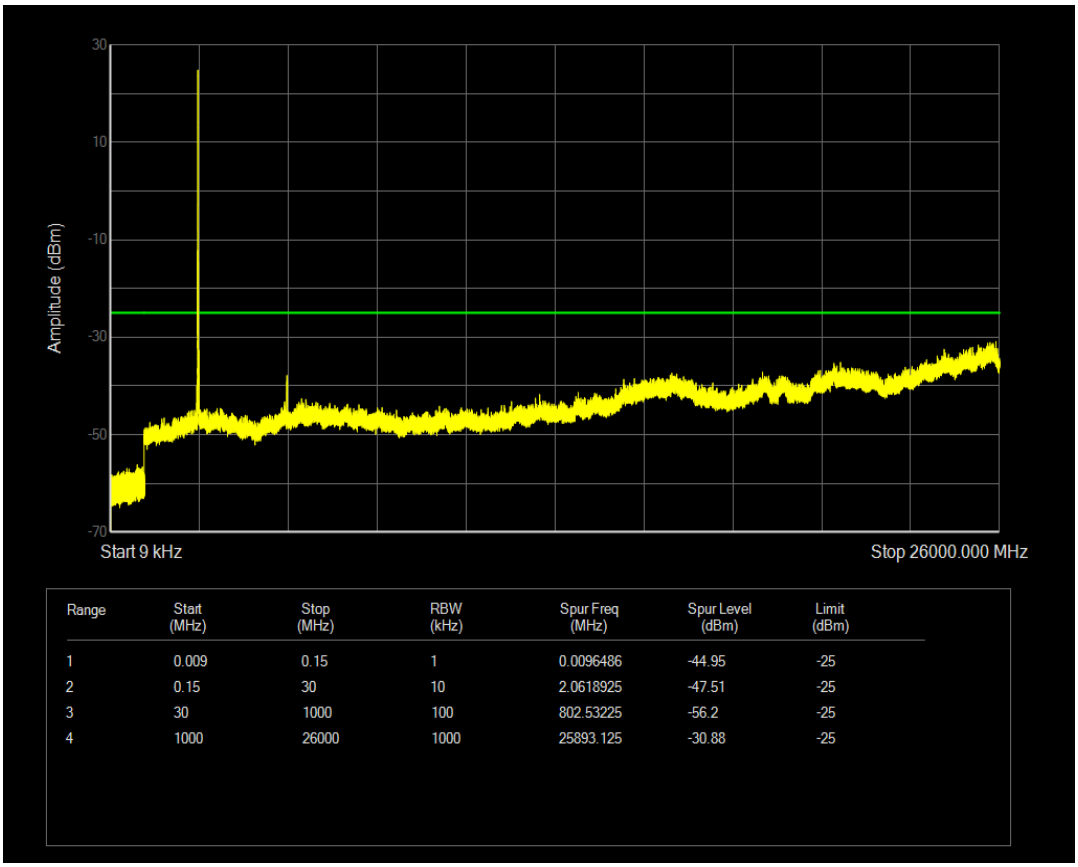
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010582725	-45.52	-13
2	0.15	30	10	2.05965375	-47.67	-13
3	30	1000	100	913.88825	-56.49	-13
4	1000	26000	1000	25767.5	-30.87	-13

Band38 QAM16 BW=15MHz Channel=38175 RB Size=1 Position=#0



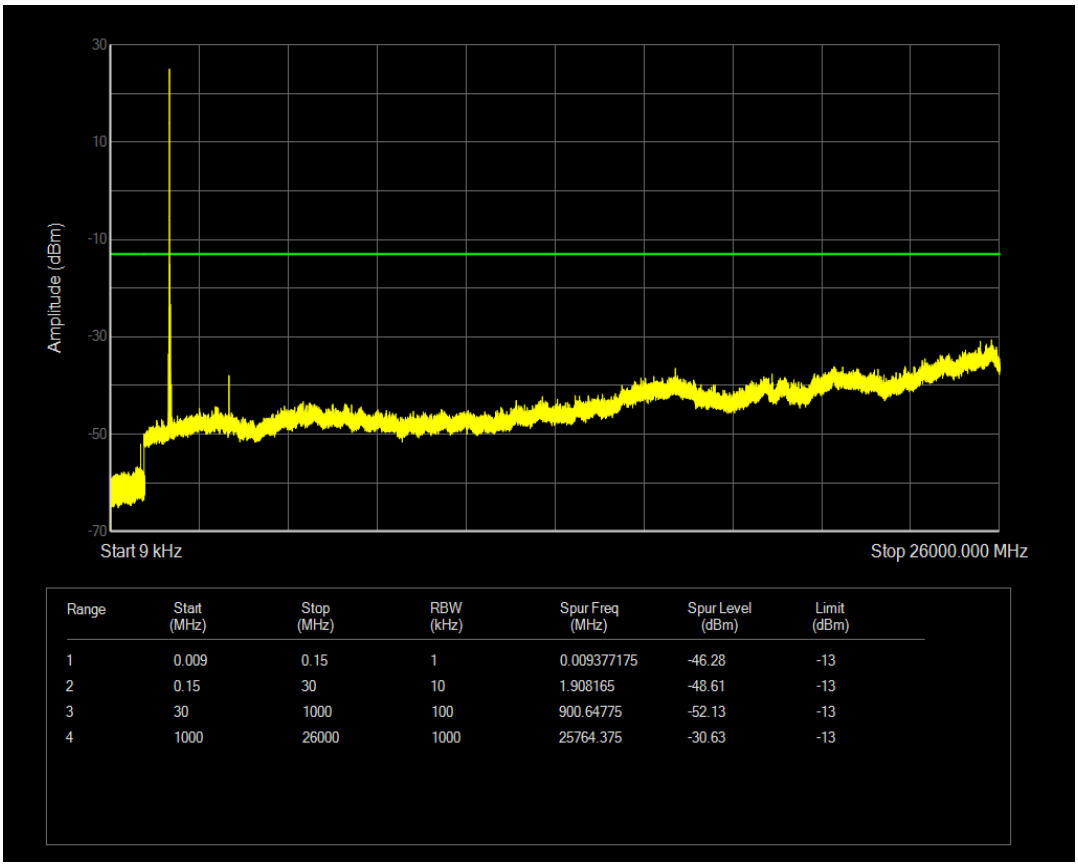
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00926085	-44.68	-25
2	0.15	30	10	0.1514925	-47.26	-25
3	30	1000	100	784.9995	-55.93	-25
4	1000	26000	1000	25766.25	-30.75	-25

Band38 QAM16 BW=15MHz Channel=37825 RB Size=1 Position=#0



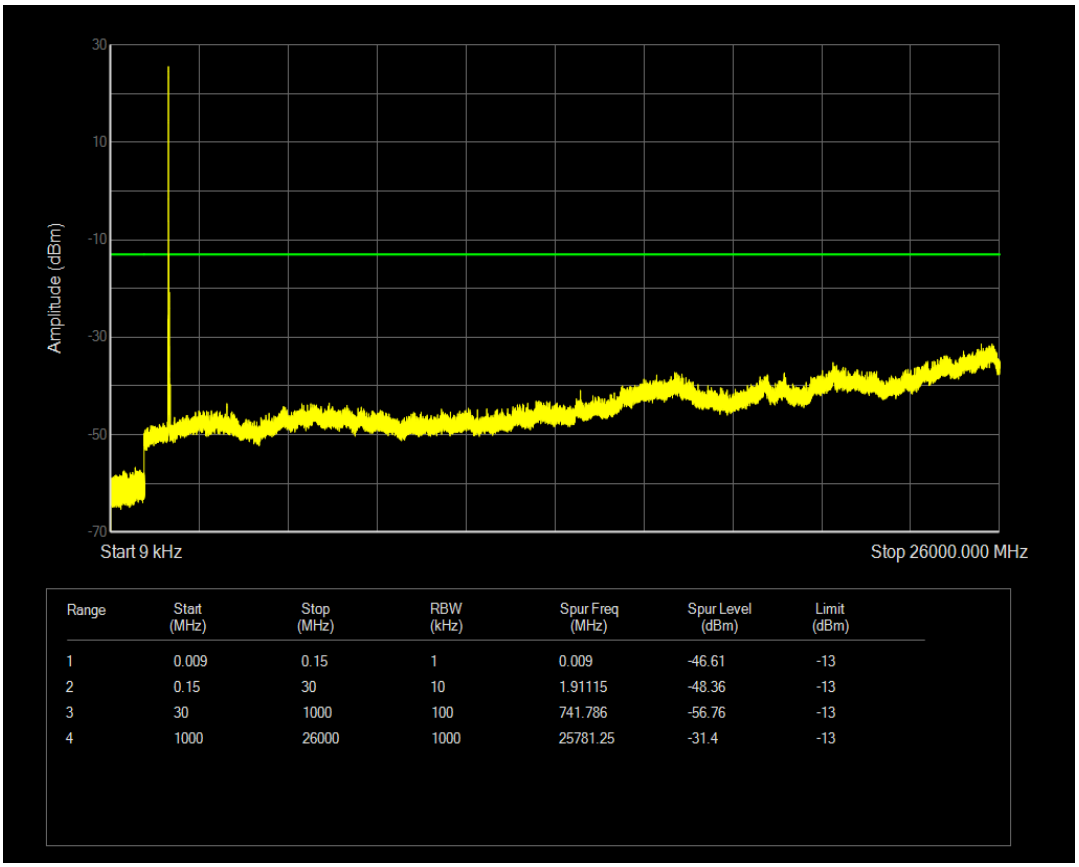
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0096486	-44.95	-25
2	0.15	30	10	2.0618925	-47.51	-25
3	30	1000	100	802.53225	-56.2	-25
4	1000	26000	1000	25893.125	-30.88	-25

Band4 QAM16 BW=15MHz Channel=20325 RB Size=1 Position=#0



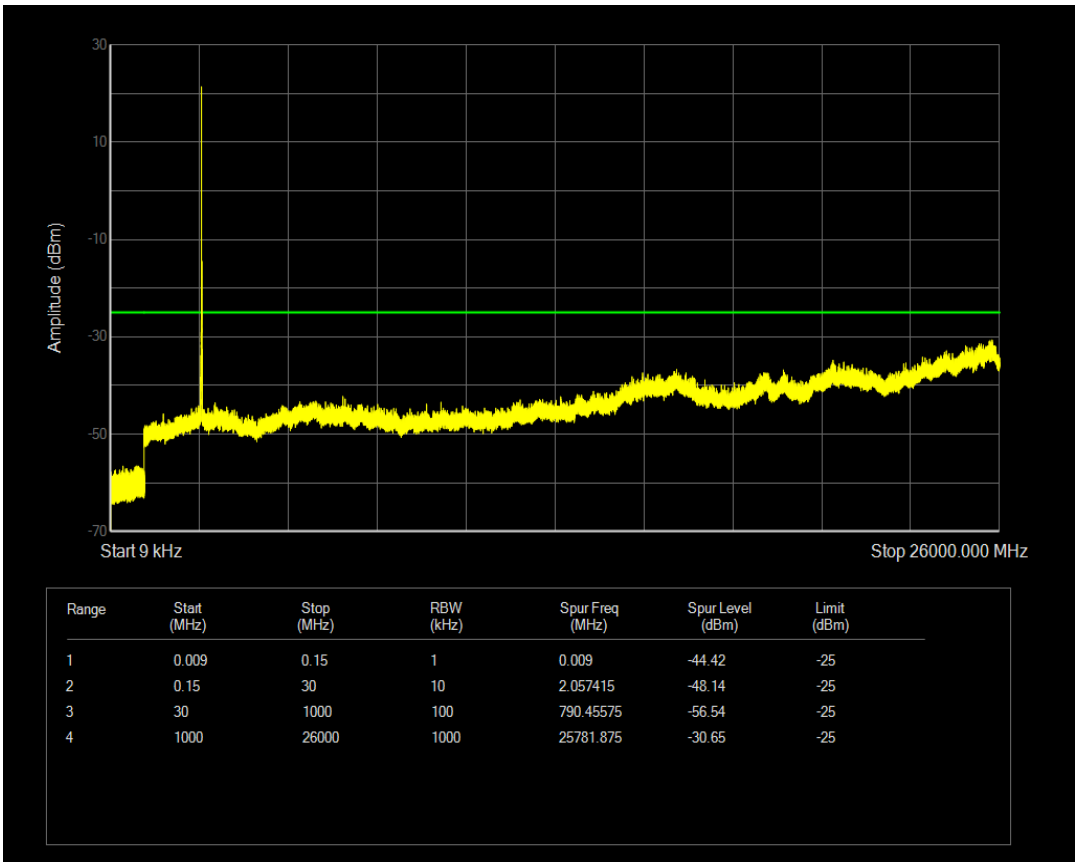
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009377175	-46.28	-13
2	0.15	30	10	1.908165	-48.61	-13
3	30	1000	100	900.64775	-52.13	-13
4	1000	26000	1000	25764.375	-30.63	-13

Band4 QAM16 BW=15MHz Channel=20025 RB Size=1 Position=#0



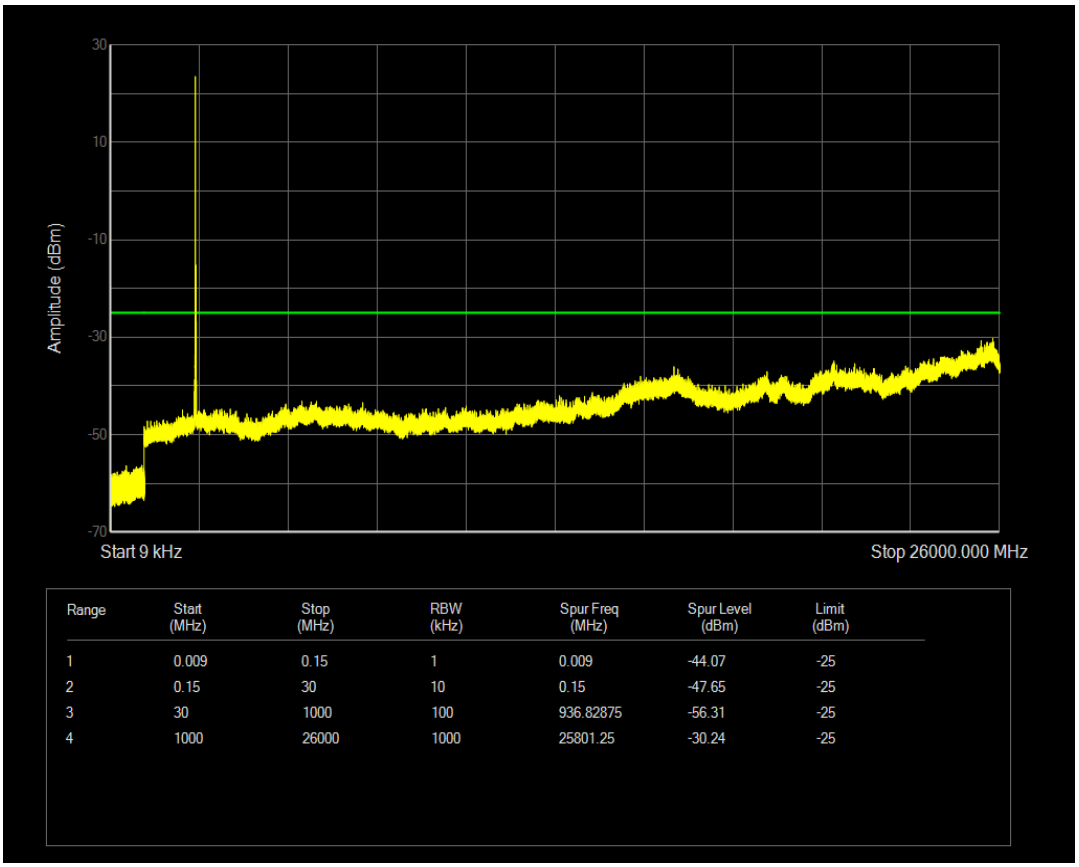
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-46.61	-13
2	0.15	30	10	1.91115	-48.36	-13
3	30	1000	100	741.786	-56.76	-13
4	1000	26000	1000	25781.25	-31.4	-13

Band41 QAM16 BW=15MHz Channel=41515 RB Size=1 Position=#0



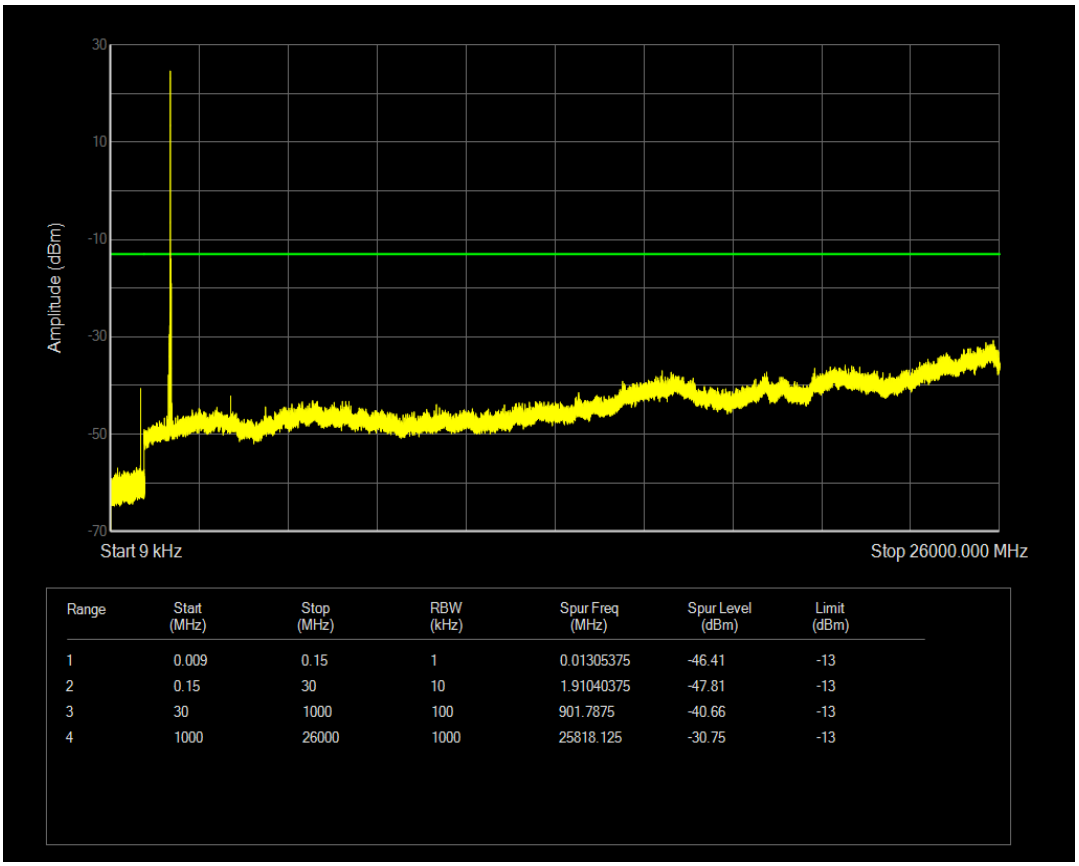
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-44.42	-25
2	0.15	30	10	2.057415	-48.14	-25
3	30	1000	100	790.45575	-56.54	-25
4	1000	26000	1000	25781.875	-30.65	-25

Band41 QAM16 BW=15MHz Channel=39725 RB Size=1 Position=#0



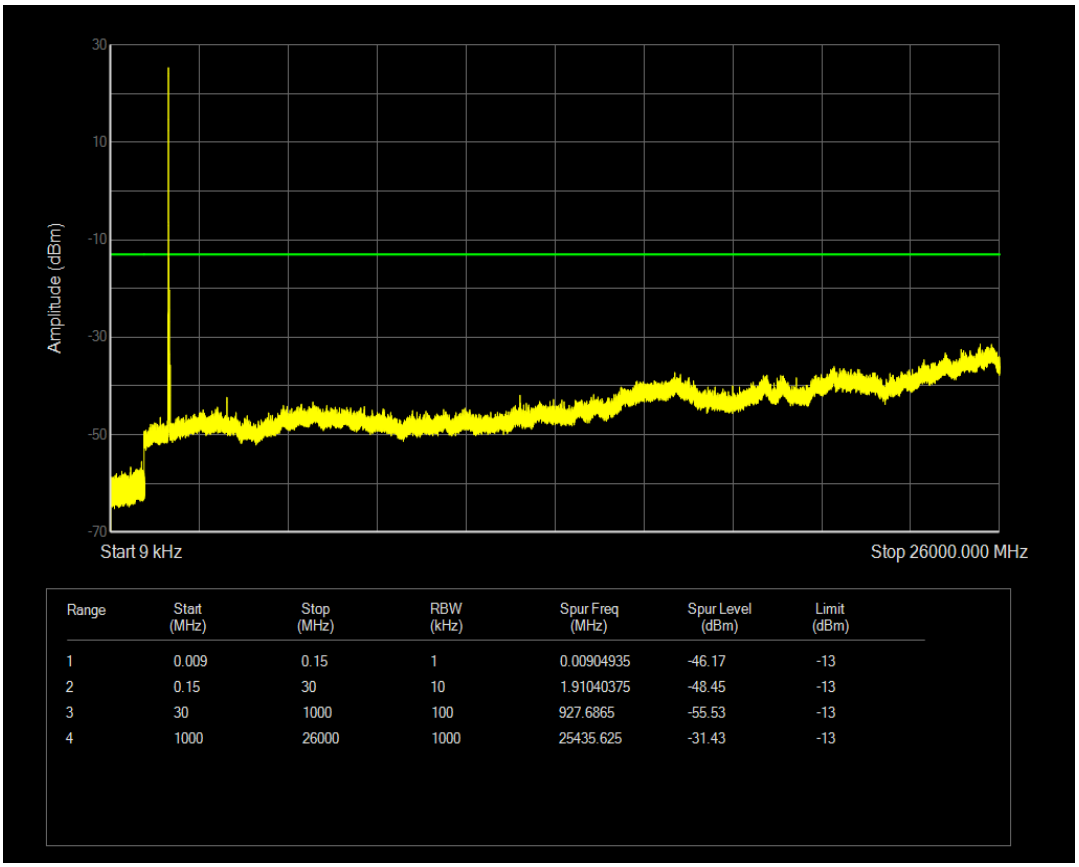
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-44.07	-25
2	0.15	30	10	0.15	-47.65	-25
3	30	1000	100	936.82875	-56.31	-25
4	1000	26000	1000	25801.25	-30.24	-25

Band66 QAM16 BW=15MHz Channel=132597 RB Size=1 Position=#0



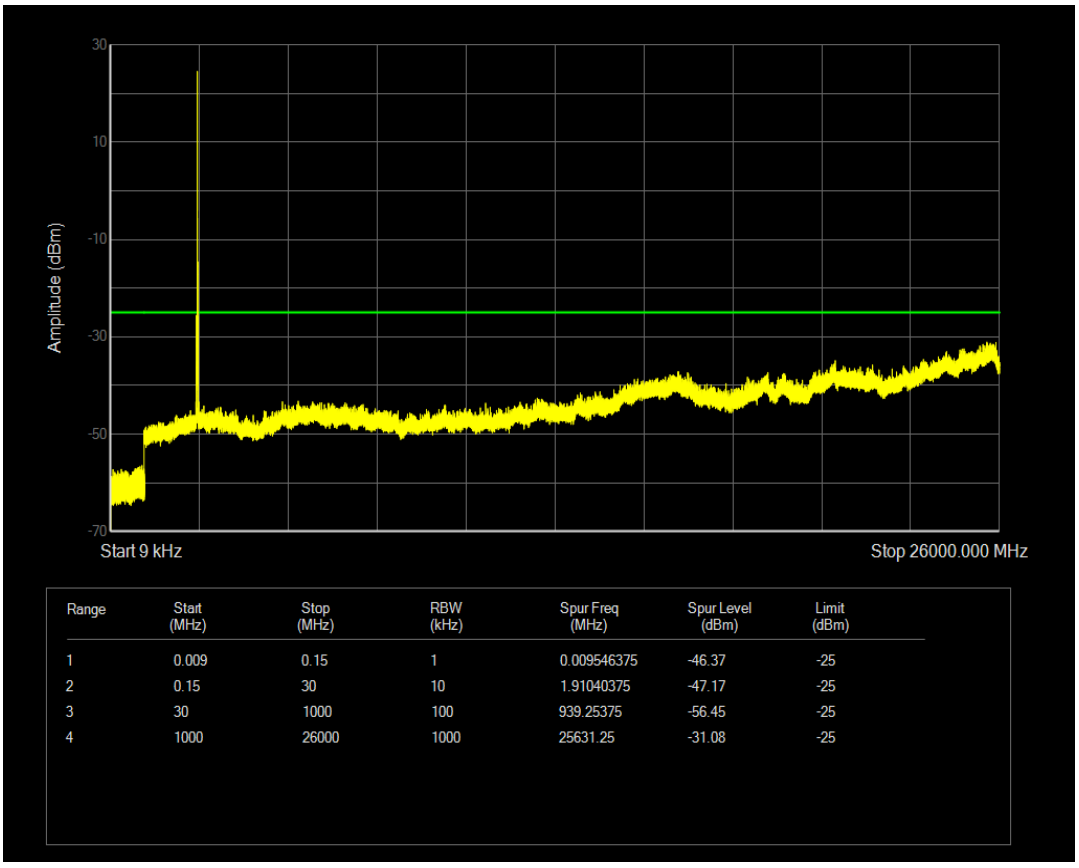
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01305375	-46.41	-13
2	0.15	30	10	1.91040375	-47.81	-13
3	30	1000	100	901.7875	-40.66	-13
4	1000	26000	1000	25818.125	-30.75	-13

Band66 QAM16 BW=15MHz Channel=132047 RB Size=1 Position=#0



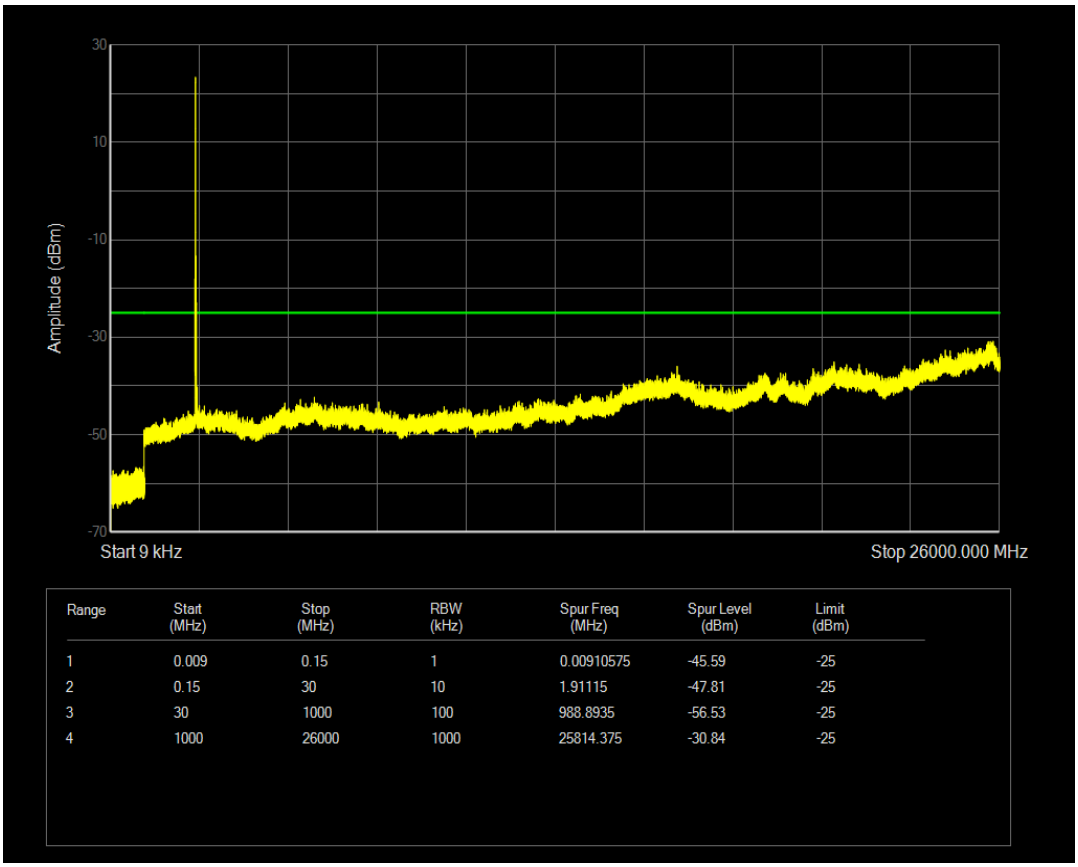
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00904935	-46.17	-13
2	0.15	30	10	1.91040375	-48.45	-13
3	30	1000	100	927.6865	-55.53	-13
4	1000	26000	1000	25435.625	-31.43	-13

Band7 QAM16 BW=15MHz Channel=21375 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009546375	-46.37	-25
2	0.15	30	10	1.91040375	-47.17	-25
3	30	1000	100	939.25375	-56.45	-25
4	1000	26000	1000	25631.25	-31.08	-25

Band7 QAM16 BW=15MHz Channel=20825 RB Size=1 Position=#0

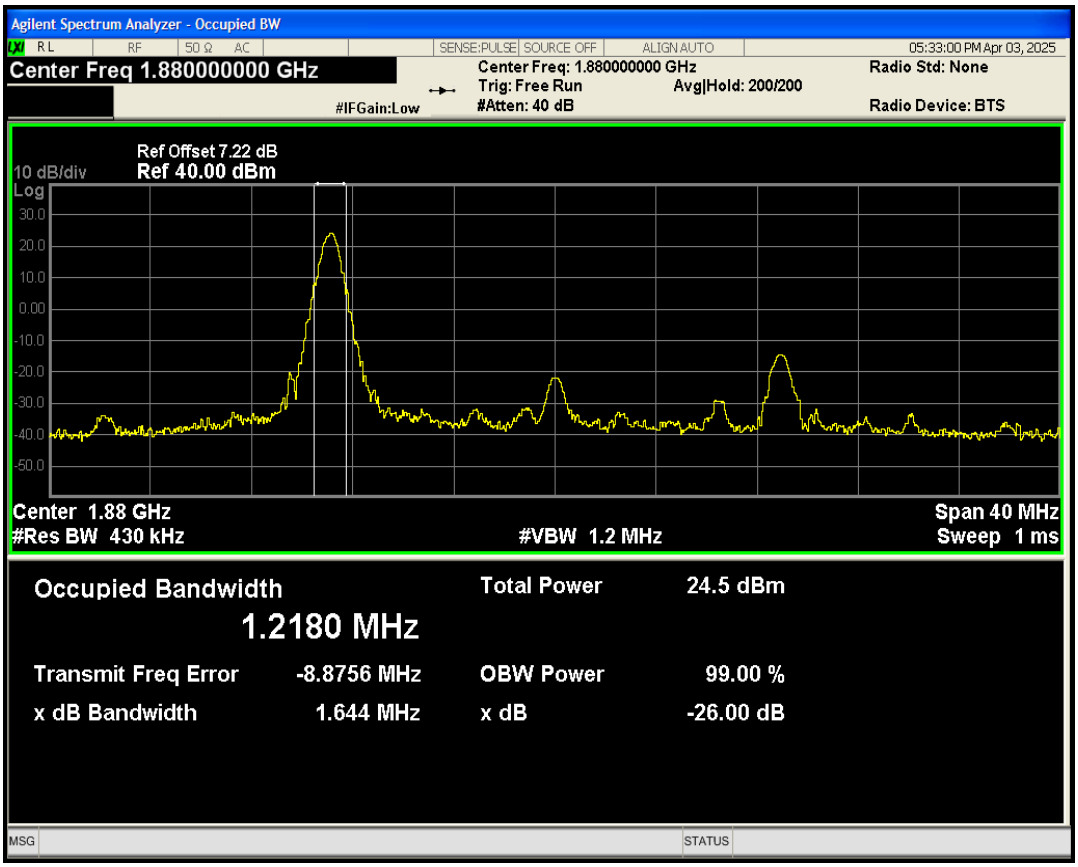


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00910575	-45.59	-25
2	0.15	30	10	1.91115	-47.81	-25
3	30	1000	100	988.8935	-56.53	-25
4	1000	26000	1000	25814.375	-30.84	-25

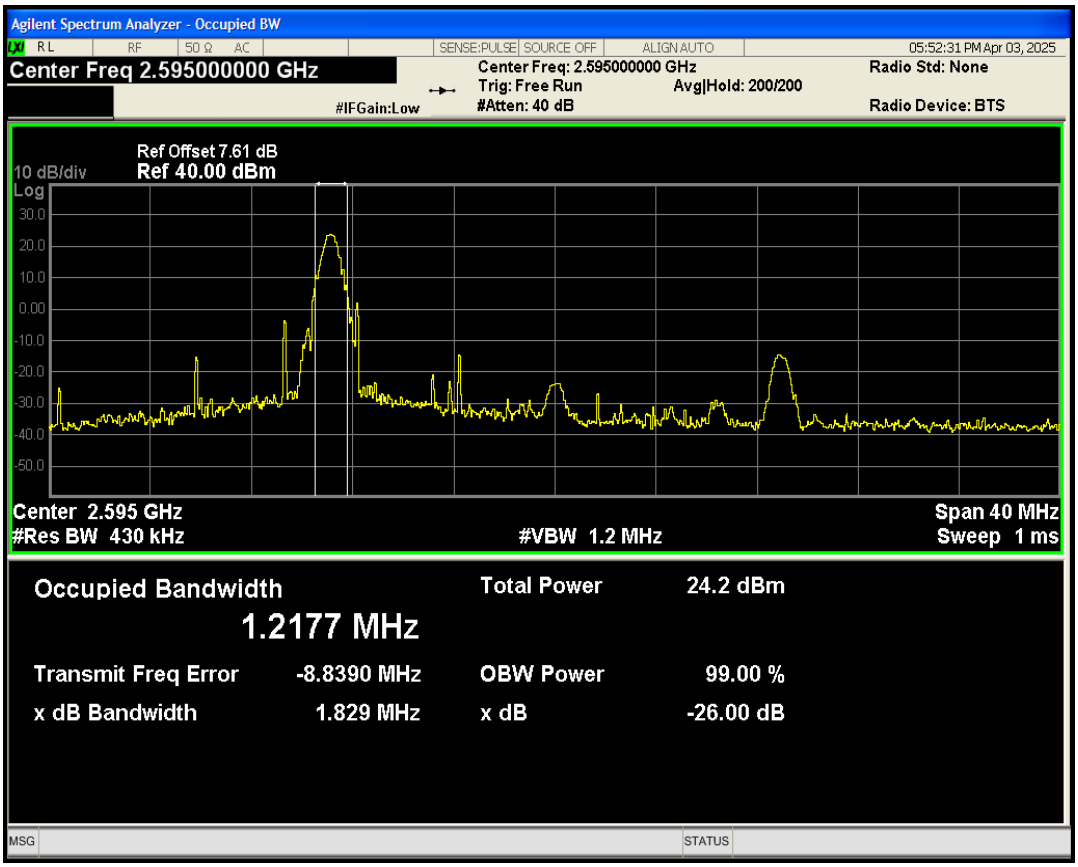
4 Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band2	20	18900	1	#0	QAM16	1.218	1.644	PASS
Band38	20	38000	1	#0	QAM16	1.218	1.829	PASS
Band4	20	20175	1	#0	QAM16	1.201	1.682	PASS
Band41	20	40620	1	#0	QAM16	1.237	2.278	PASS
Band66	20	132322	1	#0	QAM16	1.230	1.672	PASS
Band7	20	21100	1	#0	QAM16	1.220	1.608	PASS

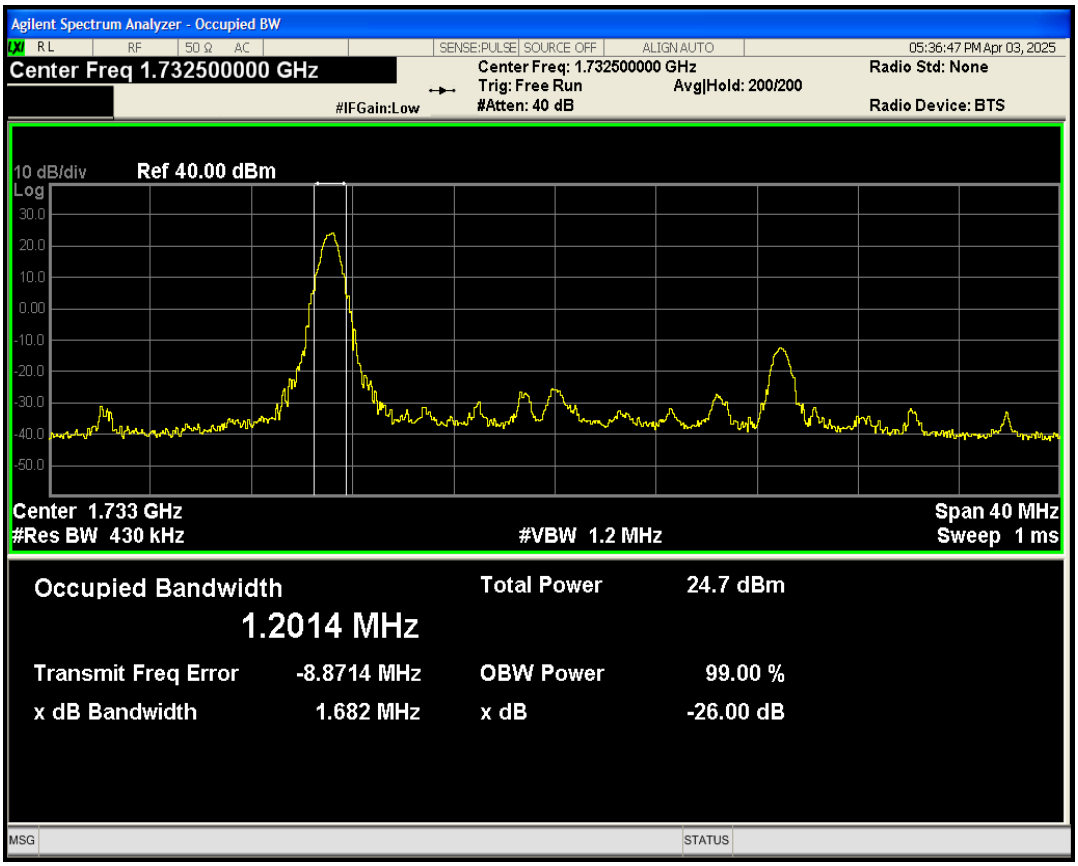
Band2 QAM16 BW=20MHz Channel=18900 RB Size=1 Position=#0



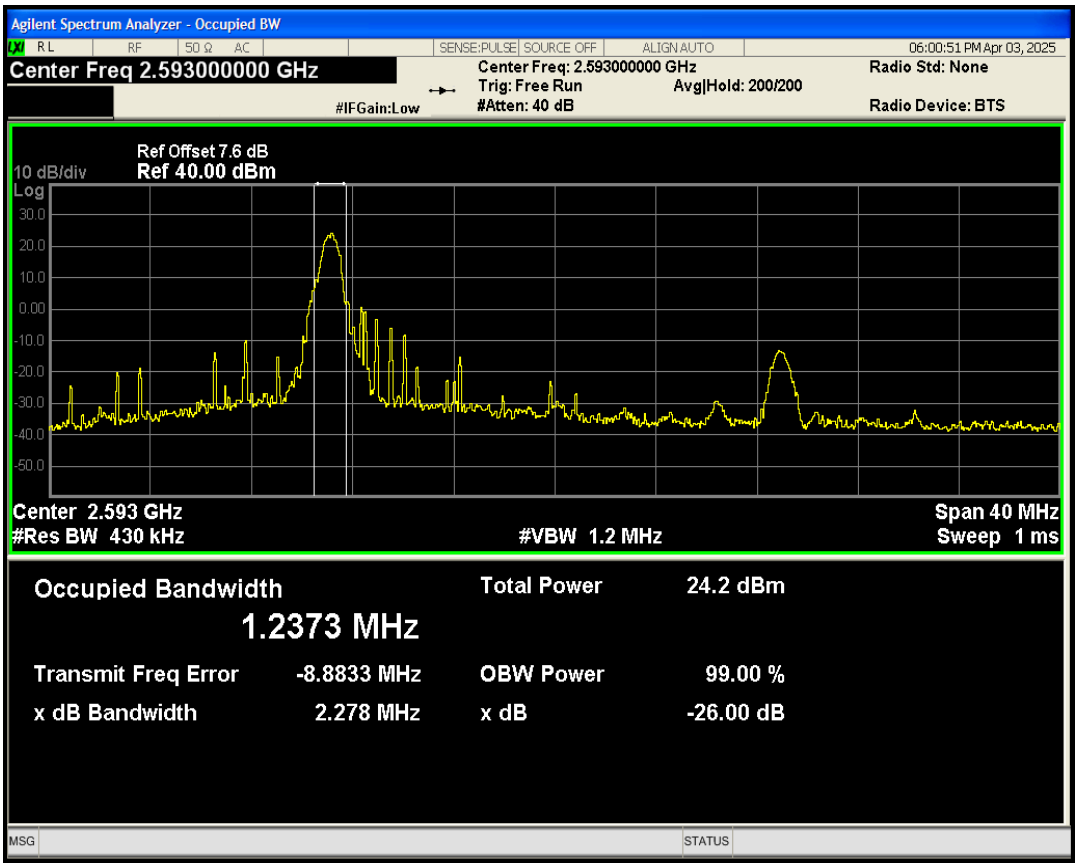
Band38 QAM16 BW=20MHz Channel=38000 RB Size=1 Position=#0



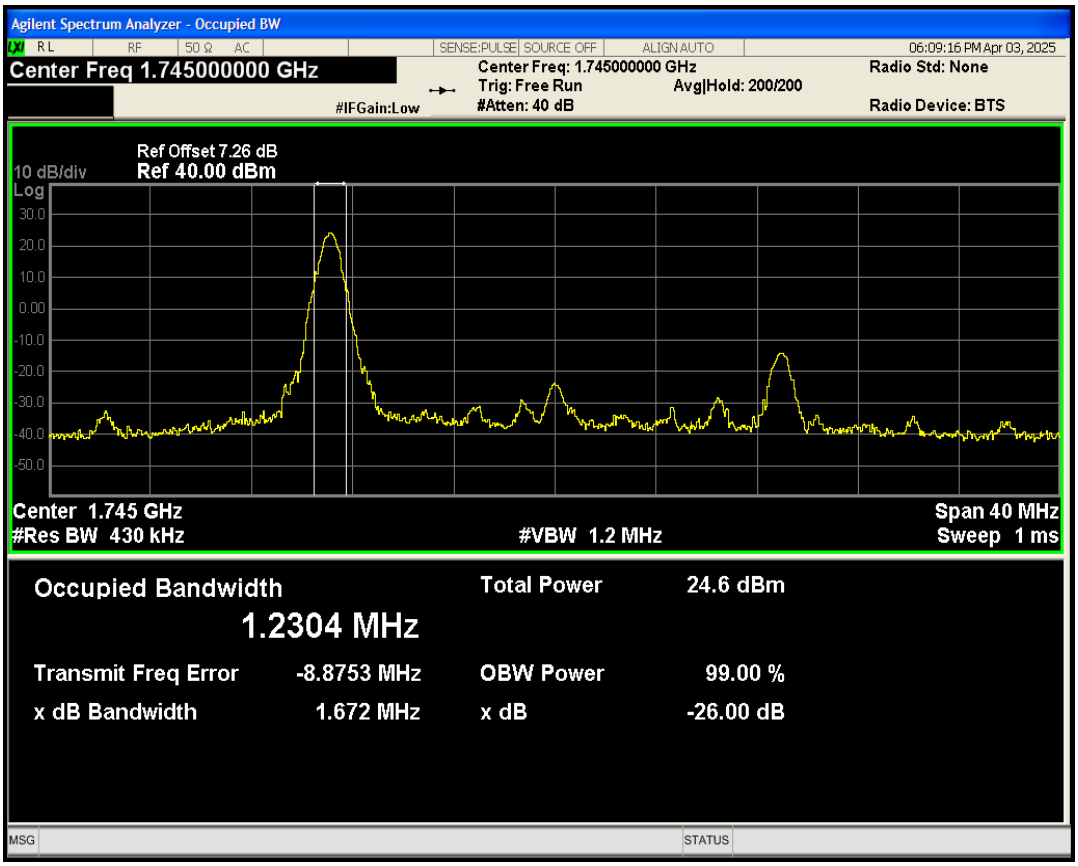
Band4 QAM16 BW=20MHz Channel=20175 RB Size=1 Position=#0



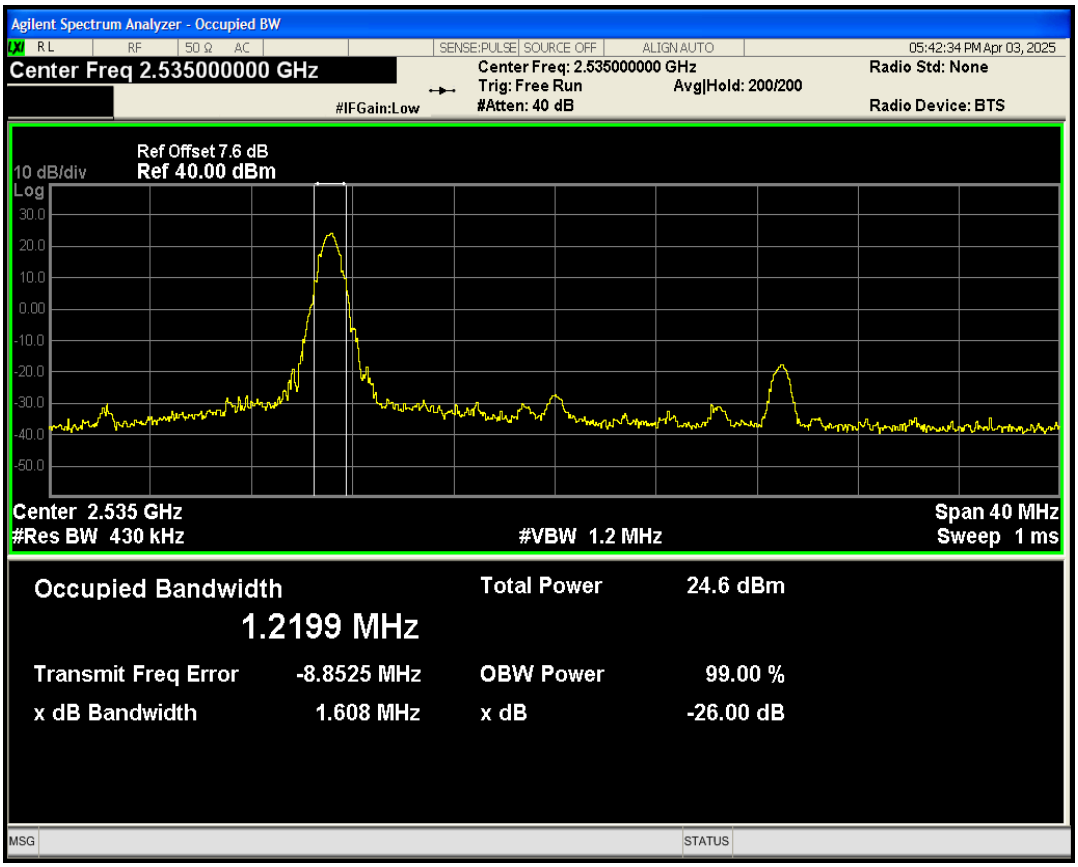
Band41 QAM16 BW=20MHz Channel=40620 RB Size=1 Position=#0



Band66 QAM16 BW=20MHz Channel=132322 RB Size=1 Position=#0



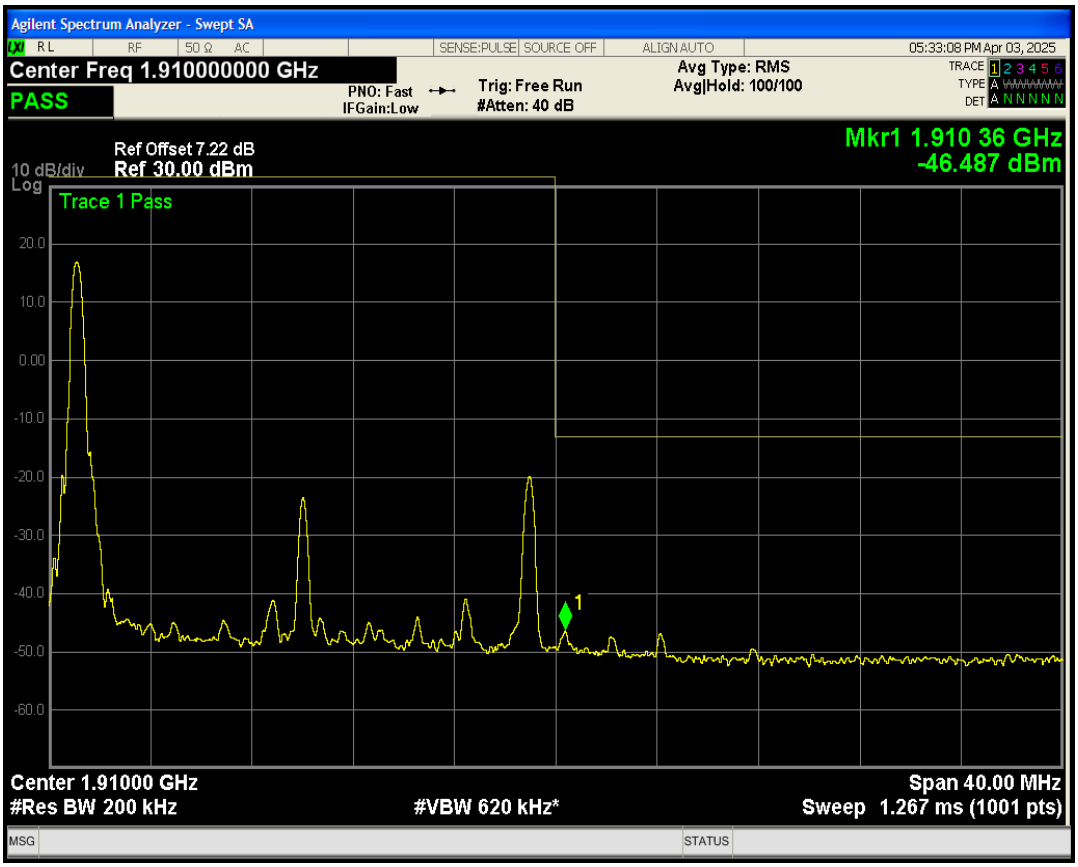
Band7 QAM16 BW=20MHz Channel=21100 RB Size=1 Position=#0



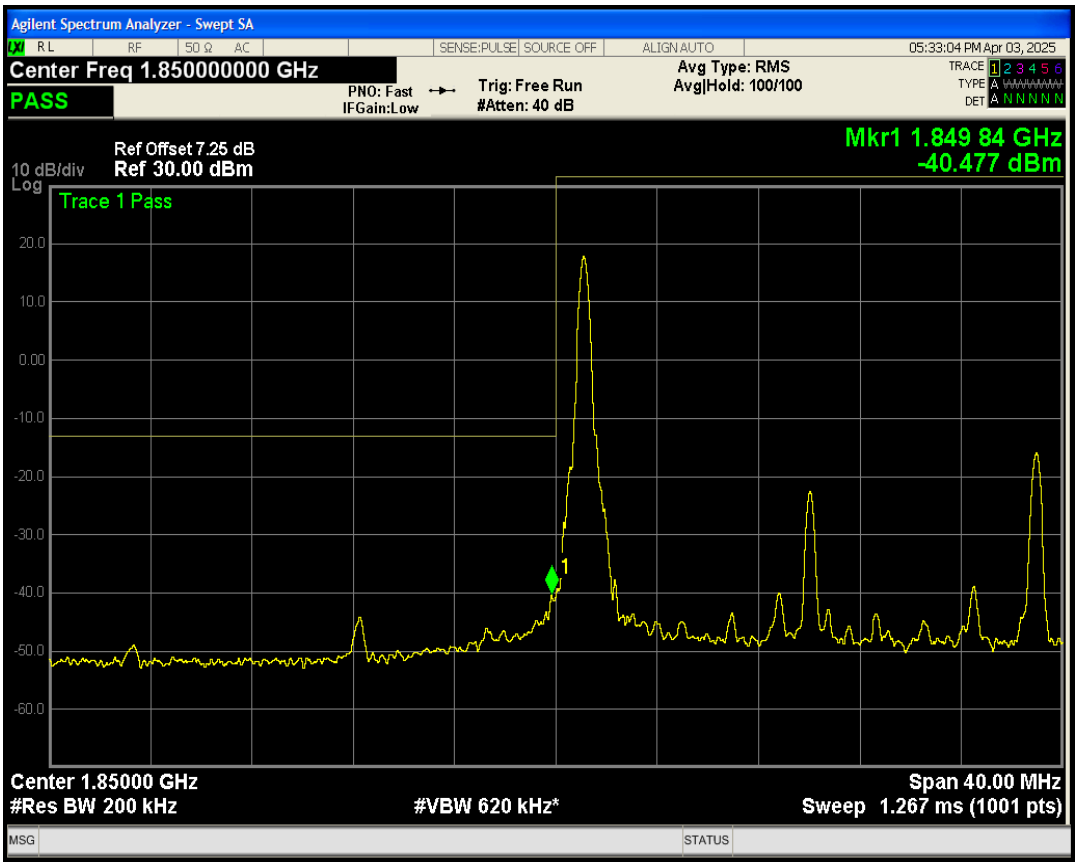
5 Band edge

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band2	20	18700	1	#0	QAM16	1849.84	-40.47	-13	PASS
Band2	20	19100	1	#0	QAM16	1910.36	-46.48	-13	PASS
Band38	20	37850	1	#0	QAM16	2568.69	-24.49	-10	PASS
Band38	20	38150	1	#0	QAM16	2643.52	-40.97	-25	PASS
Band4	20	20050	1	#0	QAM16	1709.88	-42.44	-13	PASS
Band4	20	20300	1	#0	QAM16	1771.80	-36.45	-13	PASS
Band41	20	39750	1	#0	QAM16	2494.28	-24.56	-13	PASS
Band41	20	41490	1	#0	QAM16	2710.72	-41.07	-25	PASS
Band66	20	132072	1	#0	QAM16	1709.56	-43.45	-13	PASS
Band66	20	132572	1	#0	QAM16	1796.80	-35.25	-13	PASS
Band7	20	20850	1	#0	QAM16	2477.92	-41.74	-25	PASS
Band7	20	21350	1	#0	QAM16	2586.67	-28.84	-13	PASS

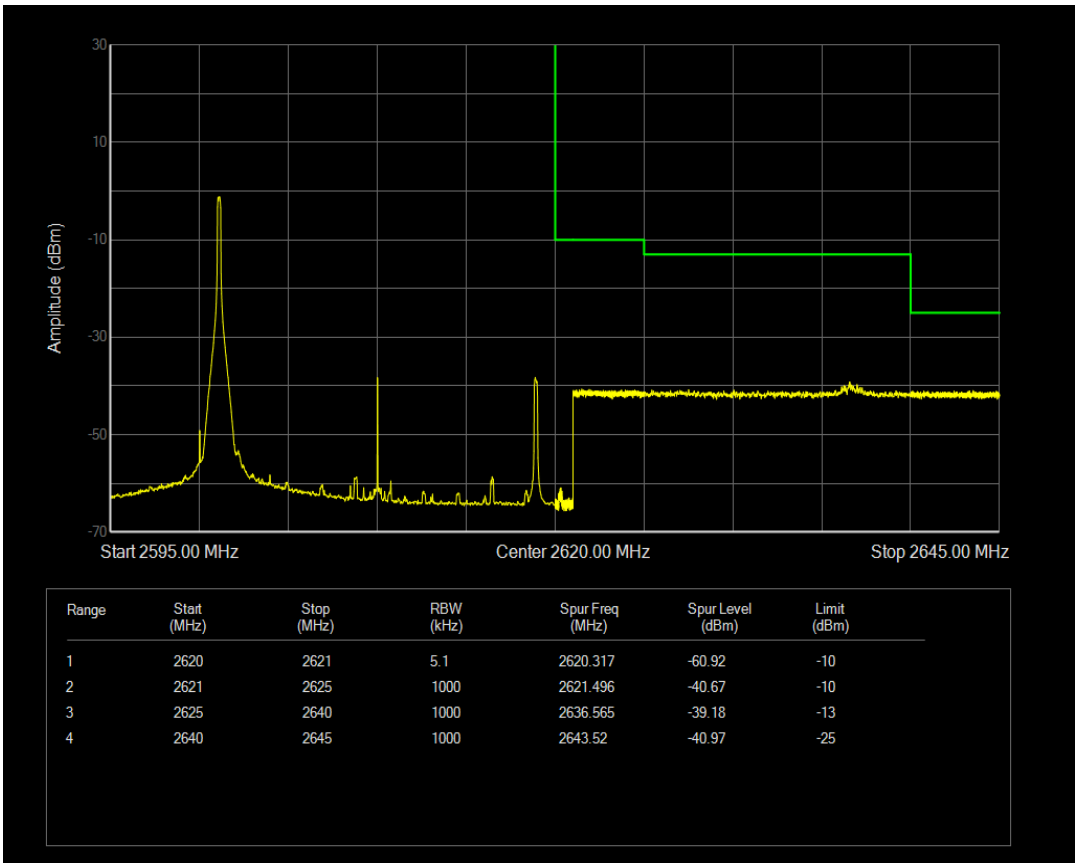
Band2 QAM16 BW=20MHz Channel=19100 RB Size=1 Position=#0



Band2 QAM16 BW=20MHz Channel=18700 RB Size=1 Position=#0

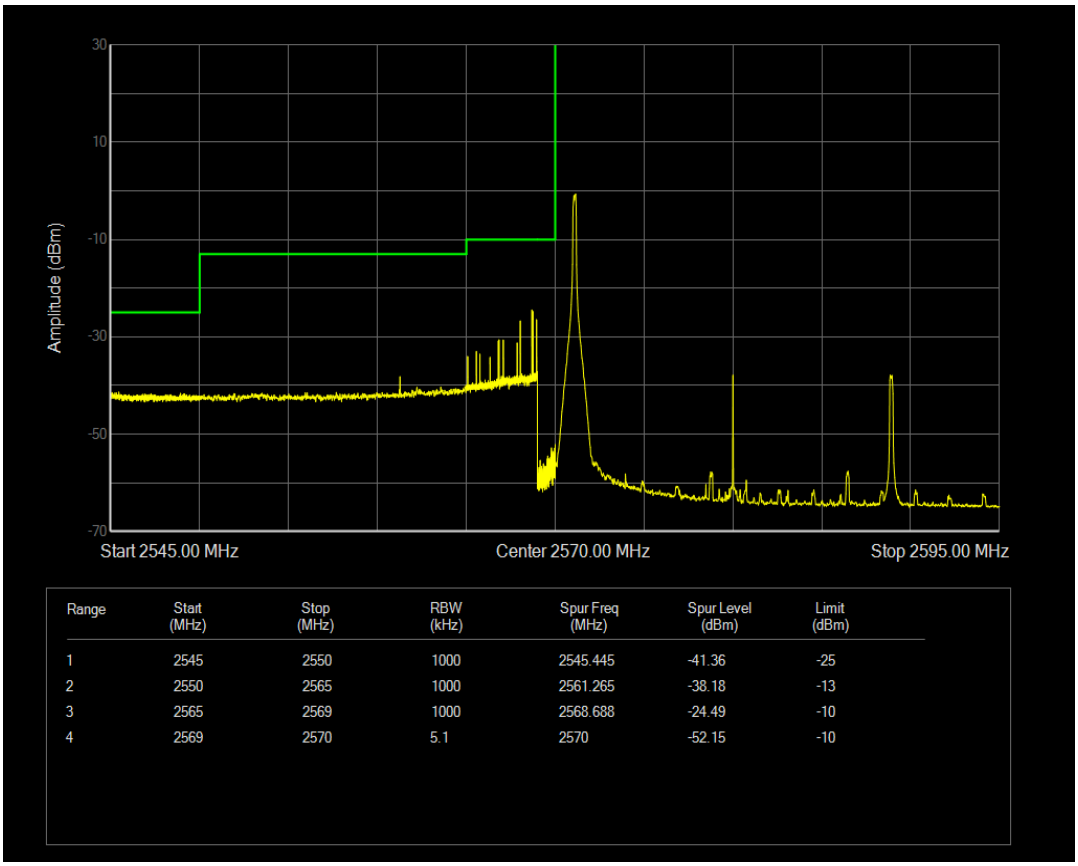


Band38 QAM16 BW=20MHz Channel=38150 RB Size=1 Position=#0



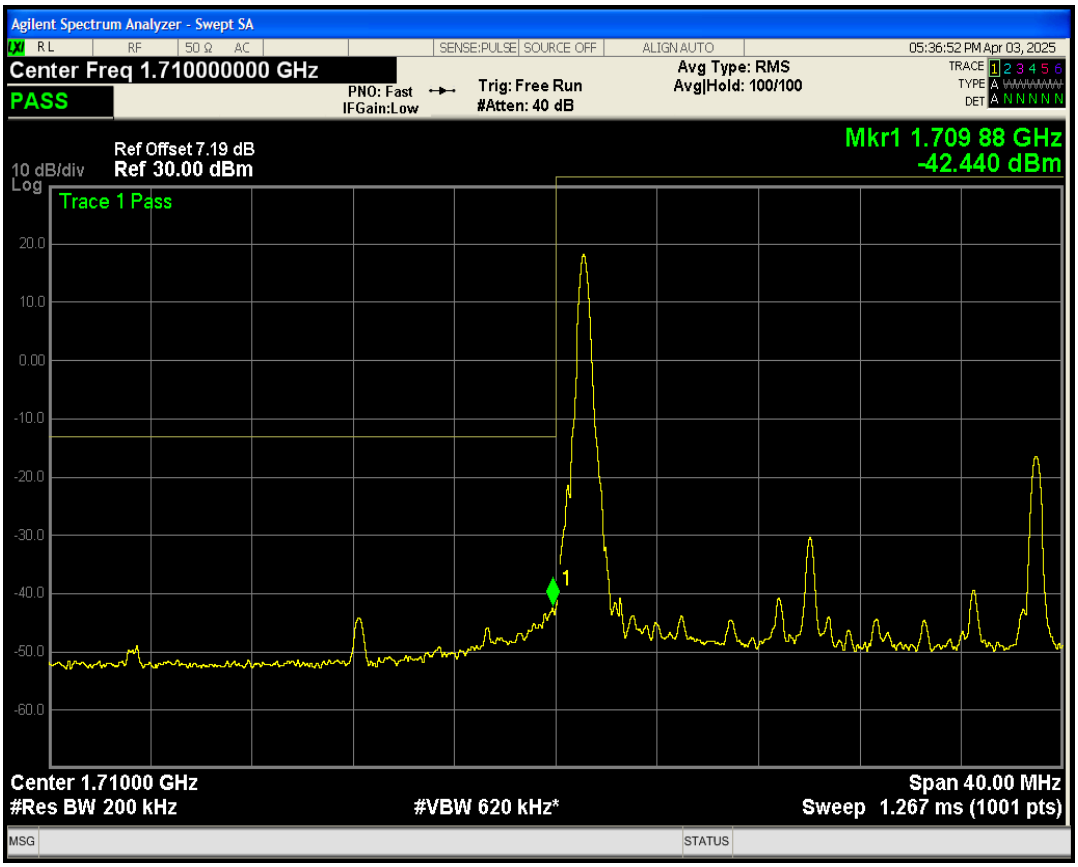
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2620	2621	5.1	2620.317	-60.92	-10
2	2621	2625	1000	2621.496	-40.67	-10
3	2625	2640	1000	2636.565	-39.18	-13
4	2640	2645	1000	2643.52	-40.97	-25

Band38 QAM16 BW=20MHz Channel=37850 RB Size=1 Position=#0

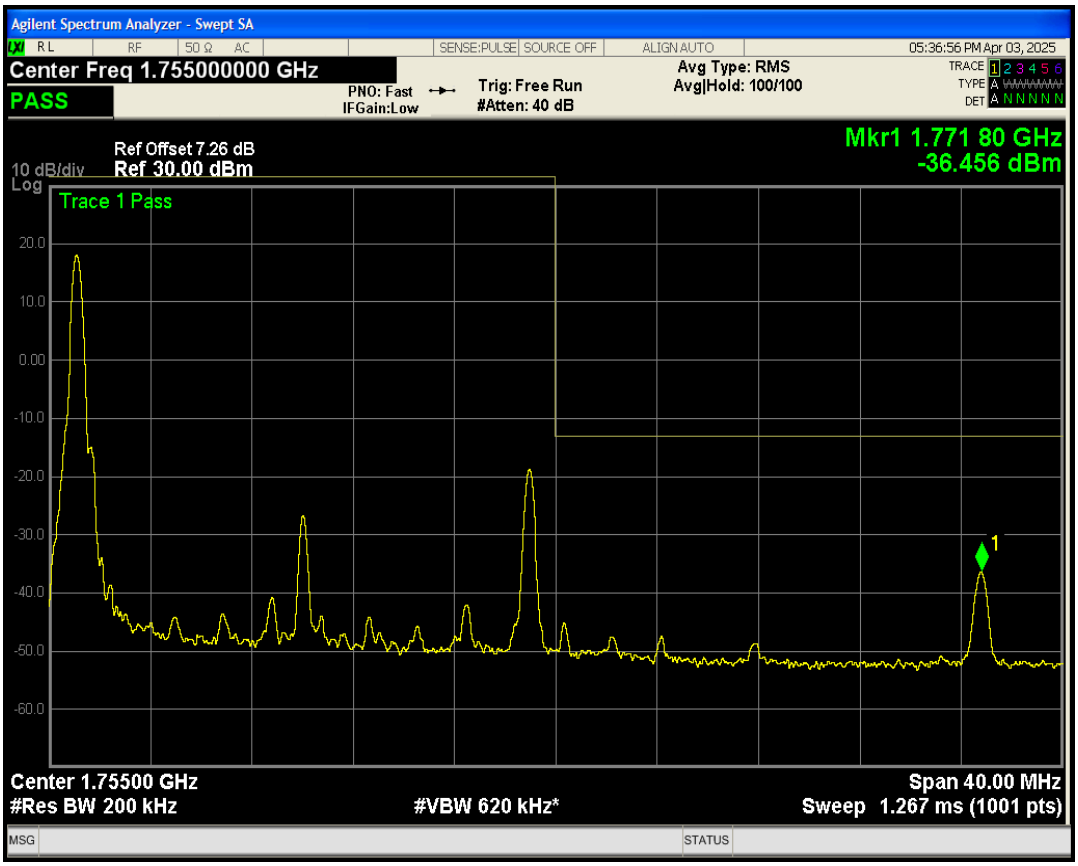


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2545	2550	1000	2545.445	-41.36	-25
2	2550	2565	1000	2561.265	-38.18	-13
3	2565	2569	1000	2568.688	-24.49	-10
4	2569	2570	5.1	2570	-52.15	-10

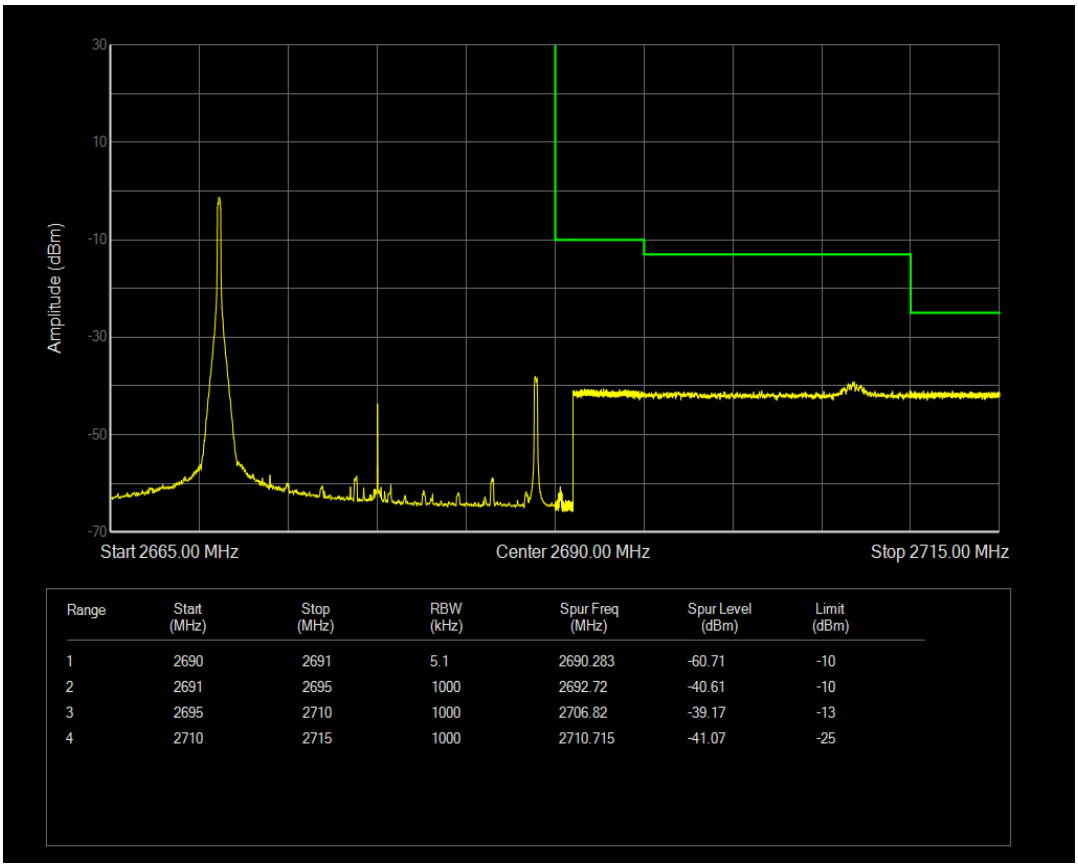
Band4 QAM16 BW=20MHz Channel=20050 RB Size=1 Position=#0



Band4 QAM16 BW=20MHz Channel=20300 RB Size=1 Position=#0

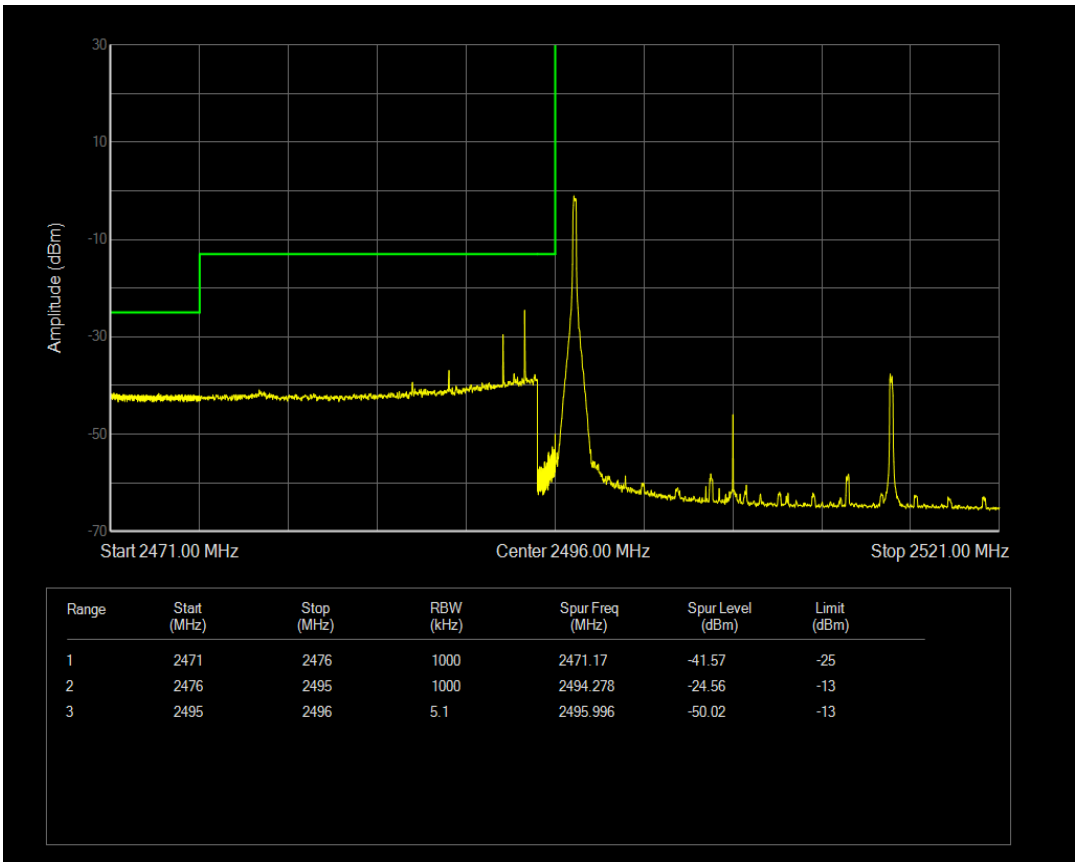


Band41 QAM16 BW=20MHz Channel=41490 RB Size=1 Position=#0



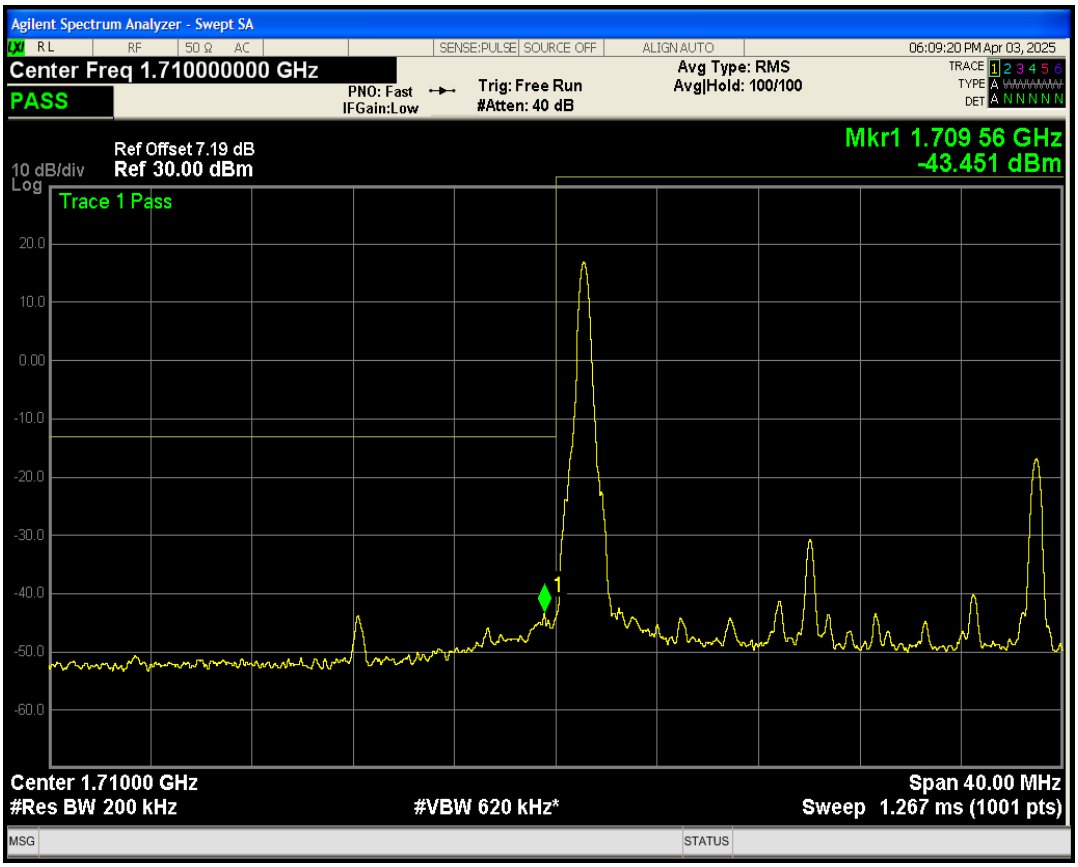
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	5.1	2690.283	-60.71	-10
2	2691	2695	1000	2692.72	-40.61	-10
3	2695	2710	1000	2706.82	-39.17	-13
4	2710	2715	1000	2710.715	-41.07	-25

Band41 QAM16 BW=20MHz Channel=39750 RB Size=1 Position=#0

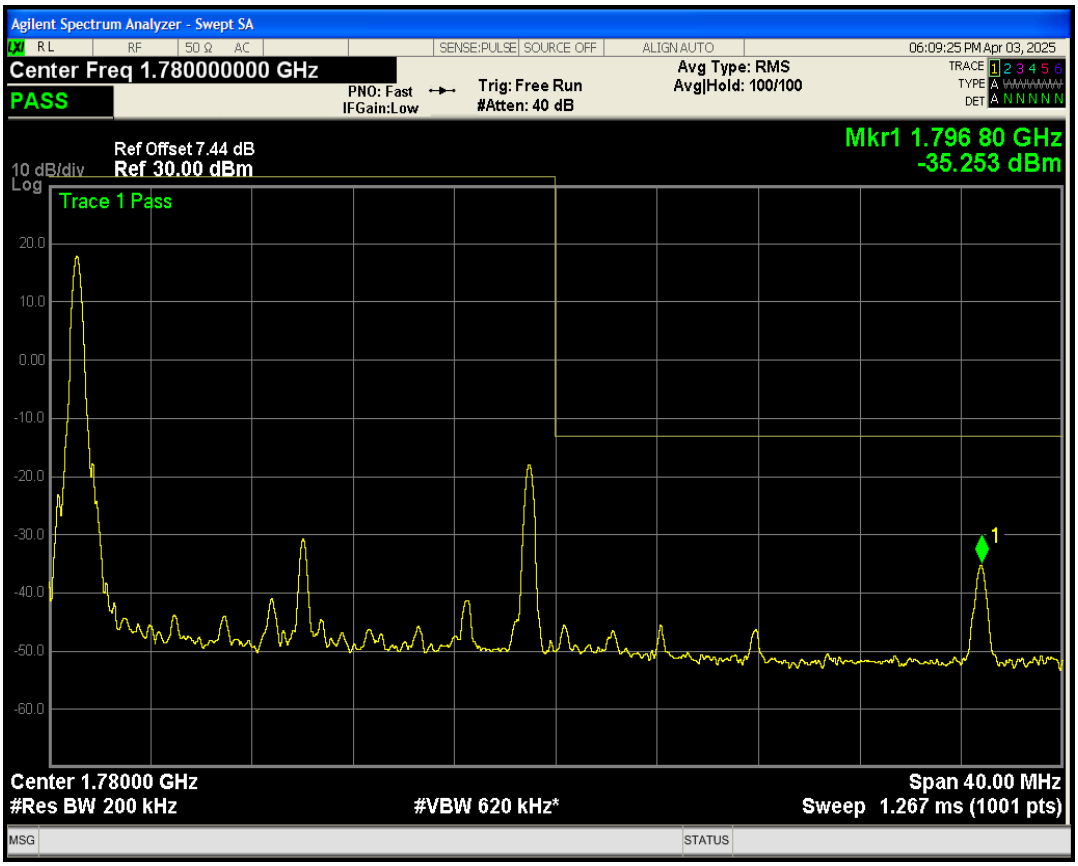


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2476	1000	2471.17	-41.57	-25
2	2476	2495	1000	2494.278	-24.56	-13
3	2495	2496	5.1	2495.996	-50.02	-13

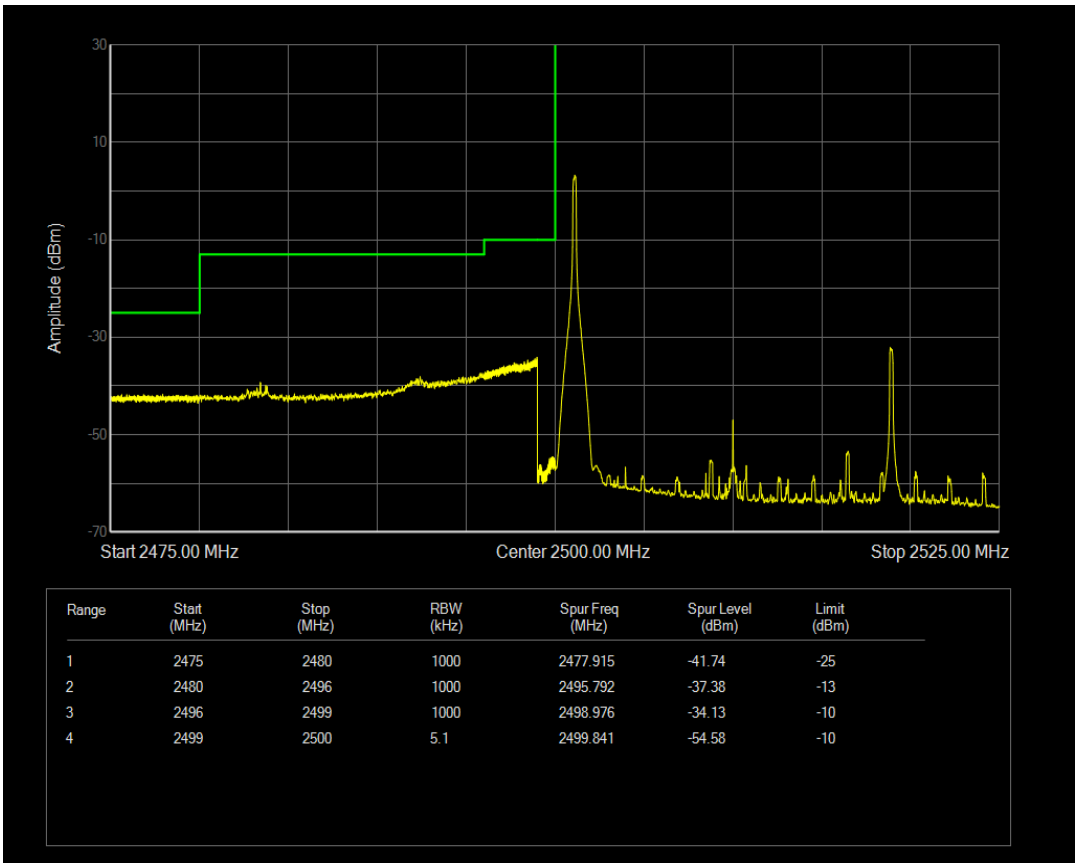
Band66 QAM16 BW=20MHz Channel=132072 RB Size=1 Position=#0



Band66 QAM16 BW=20MHz Channel=132572 RB Size=1 Position=#0

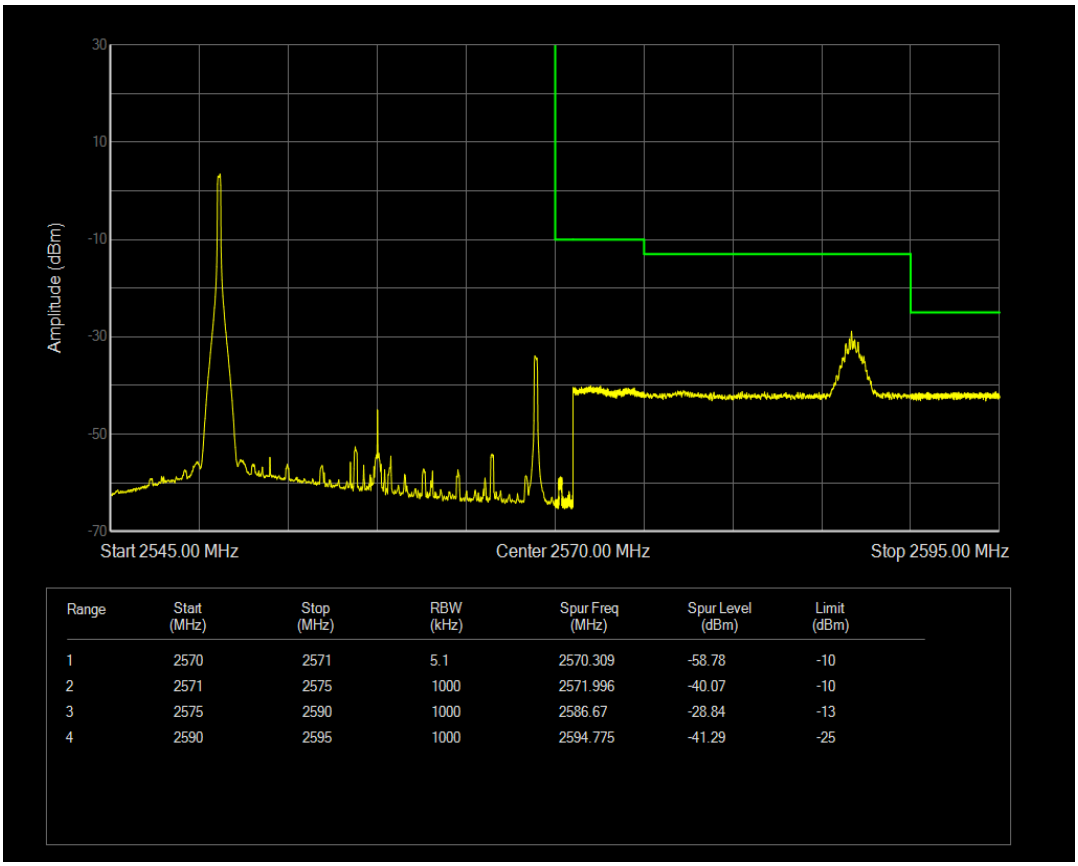


Band7 QAM16 BW=20MHz Channel=20850 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2475	2480	1000	2477.915	-41.74	-25
2	2480	2496	1000	2495.792	-37.38	-13
3	2496	2499	1000	2498.976	-34.13	-10
4	2499	2500	5.1	2499.841	-54.58	-10

Band7 QAM16 BW=20MHz Channel=21350 RB Size=1 Position=#0

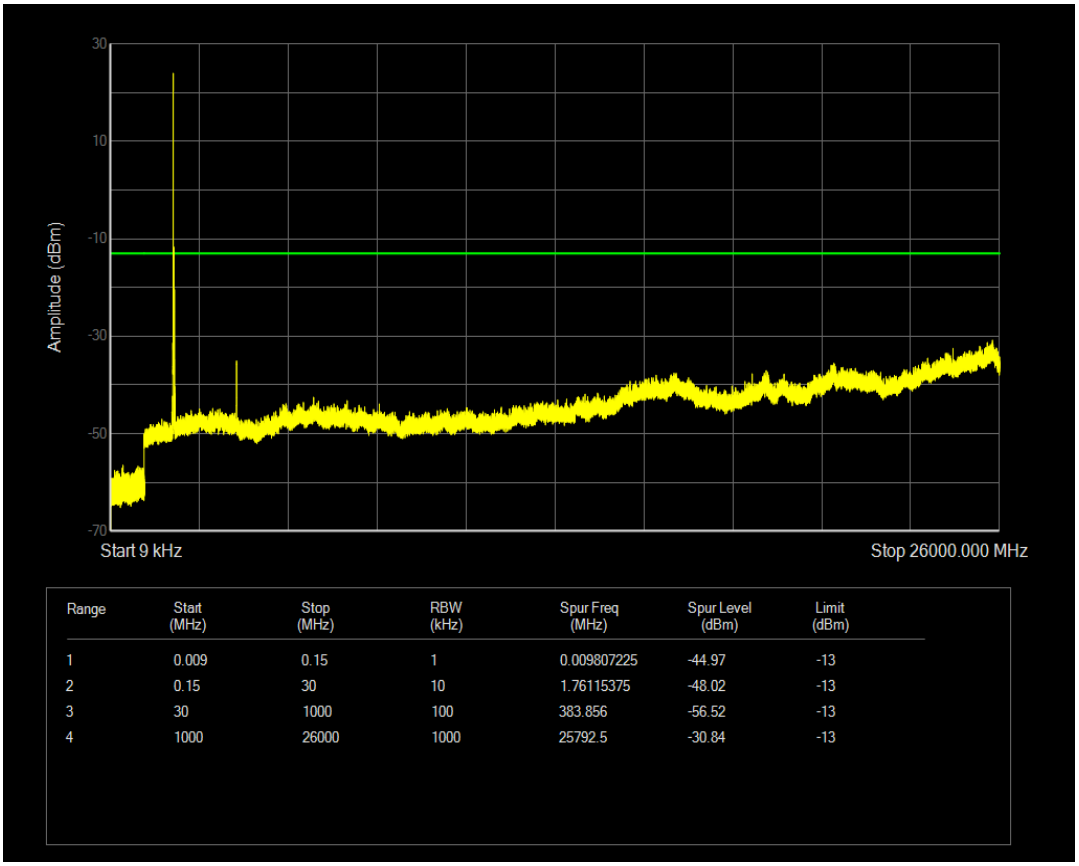


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	5.1	2570.309	-58.78	-10
2	2571	2575	1000	2571.996	-40.07	-10
3	2575	2590	1000	2586.67	-28.84	-13
4	2590	2595	1000	2594.775	-41.29	-25

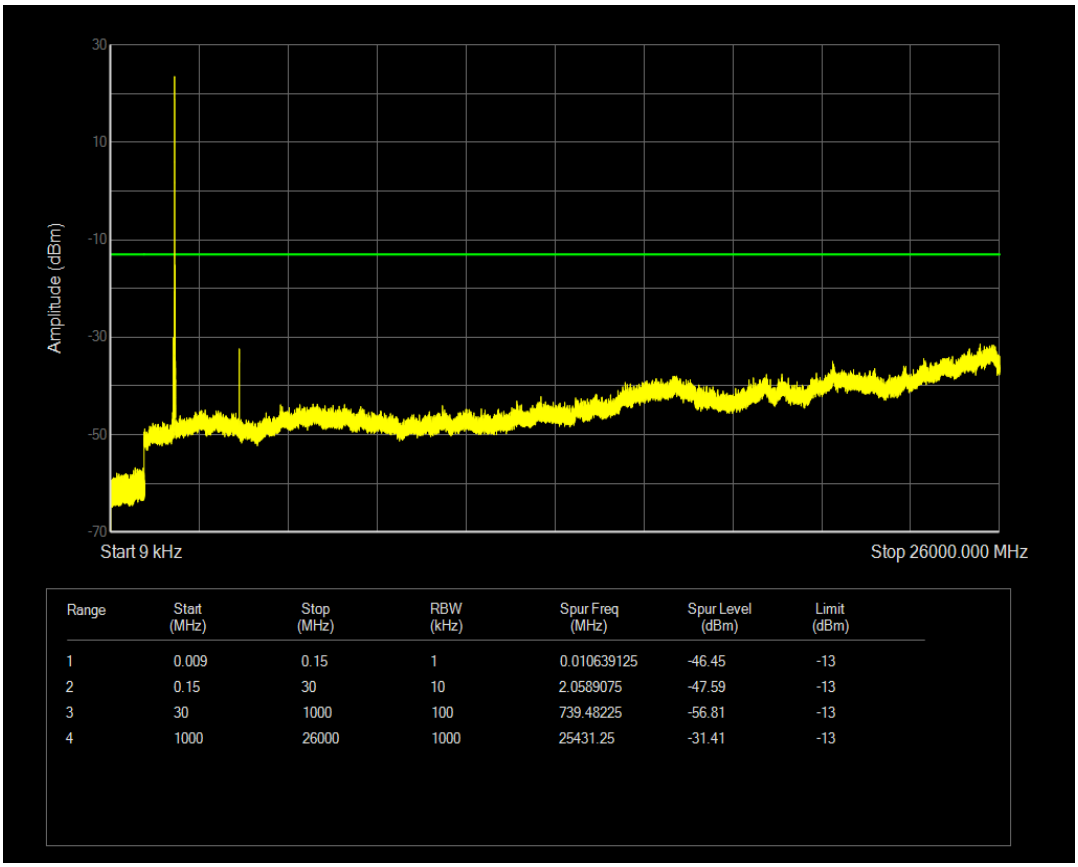
6 Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band2	20	18700	1	#0	QAM16	25792.50	-30.84	-13	PASS
Band2	20	19100	1	#0	QAM16	25431.25	-31.41	-13	PASS
Band38	20	37850	1	#0	QAM16	25658.13	-30.43	-25	PASS
Band38	20	38150	1	#0	QAM16	25781.88	-30.67	-25	PASS
Band4	20	20050	1	#0	QAM16	25787.50	-30.82	-13	PASS
Band4	20	20300	1	#0	QAM16	25814.38	-31.03	-13	PASS
Band41	20	39750	1	#0	QAM16	25730.63	-30.45	-25	PASS
Band41	20	41490	1	#0	QAM16	25804.38	-31.05	-25	PASS
Band66	20	132072	1	#0	QAM16	25796.88	-30.98	-13	PASS
Band66	20	132572	1	#0	QAM16	25809.38	-30.58	-13	PASS
Band7	20	20850	1	#0	QAM16	25728.75	-30.18	-25	PASS
Band7	20	21350	1	#0	QAM16	25436.25	-31.02	-25	PASS

Band2 QAM16 BW=20MHz Channel=18700 RB Size=1 Position=#0

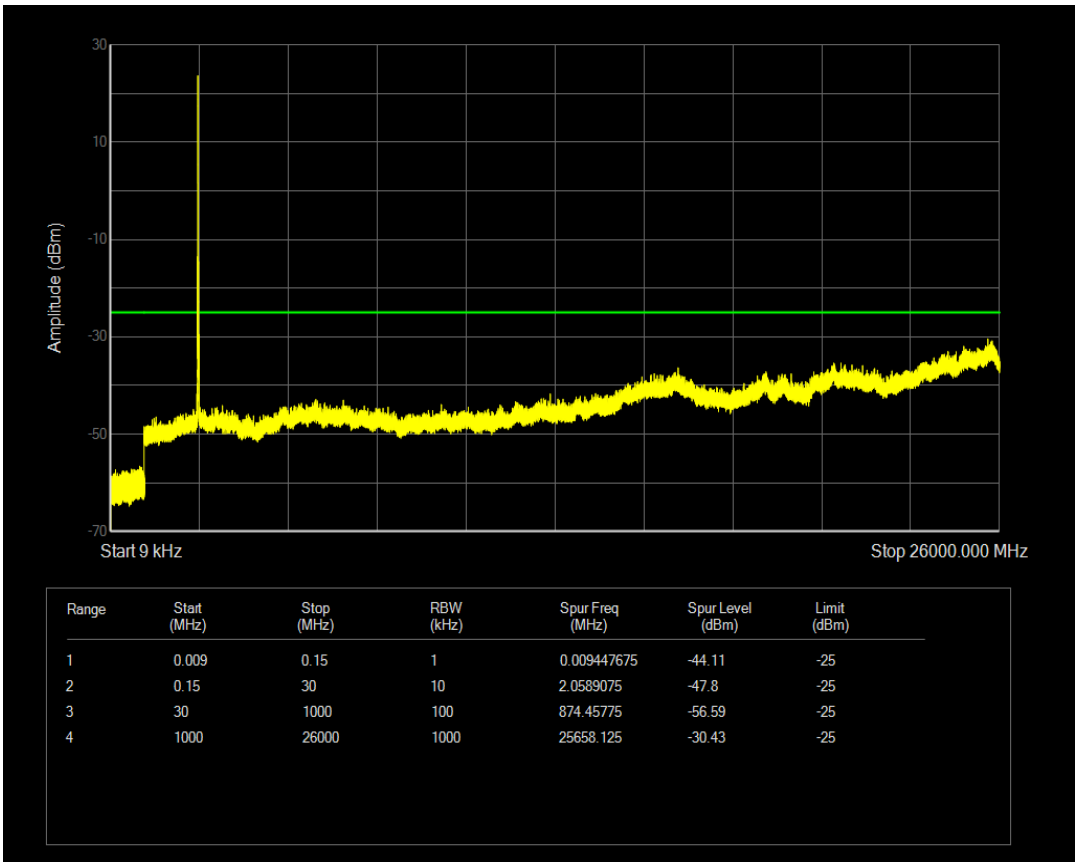


Band2 QAM16 BW=20MHz Channel=19100 RB Size=1 Position=#0



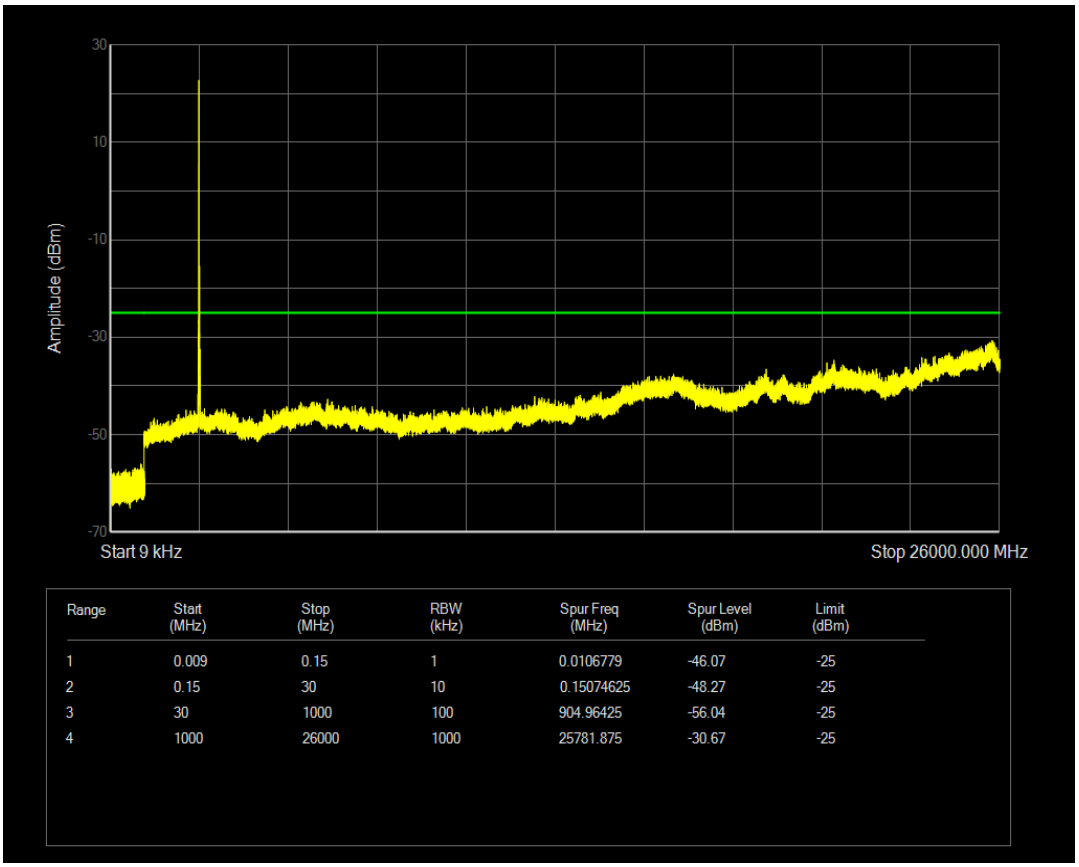
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010639125	-46.45	-13
2	0.15	30	10	2.0589075	-47.59	-13
3	30	1000	100	739.48225	-56.81	-13
4	1000	26000	1000	25431.25	-31.41	-13

Band38 QAM16 BW=20MHz Channel=37850 RB Size=1 Position=#0



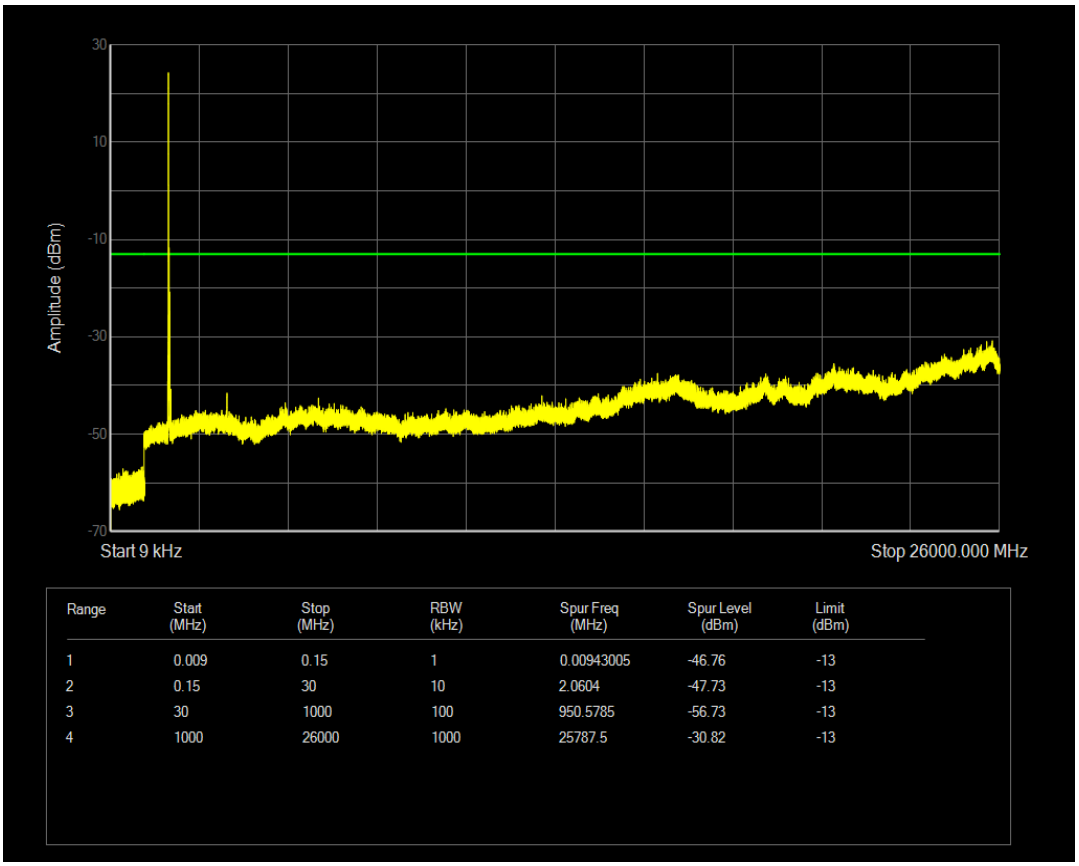
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009447675	-44.11	-25
2	0.15	30	10	2.0589075	-47.8	-25
3	30	1000	100	874.45775	-56.59	-25
4	1000	26000	1000	25658.125	-30.43	-25

Band38 QAM16 BW=20MHz Channel=38150 RB Size=1 Position=#0



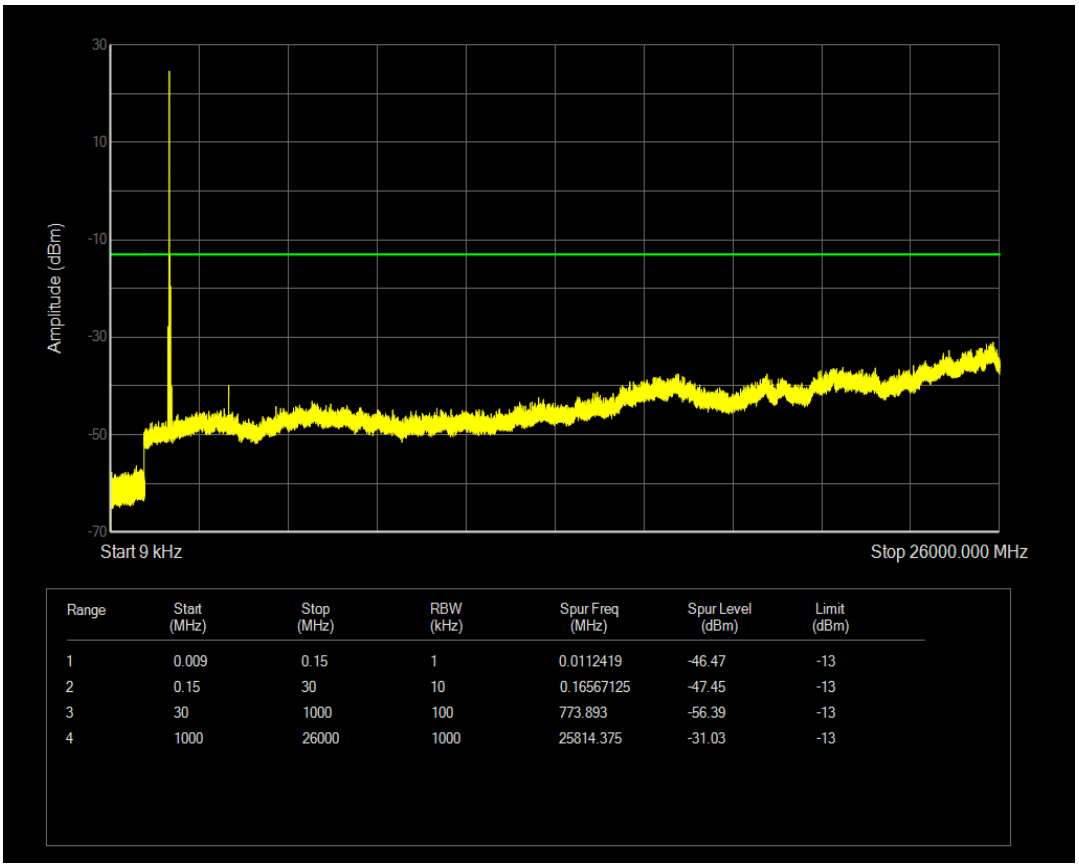
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0106779	-46.07	-25
2	0.15	30	10	0.15074625	-48.27	-25
3	30	1000	100	904.96425	-56.04	-25
4	1000	26000	1000	25781.875	-30.67	-25

Band4 QAM16 BW=20MHz Channel=20050 RB Size=1 Position=#0



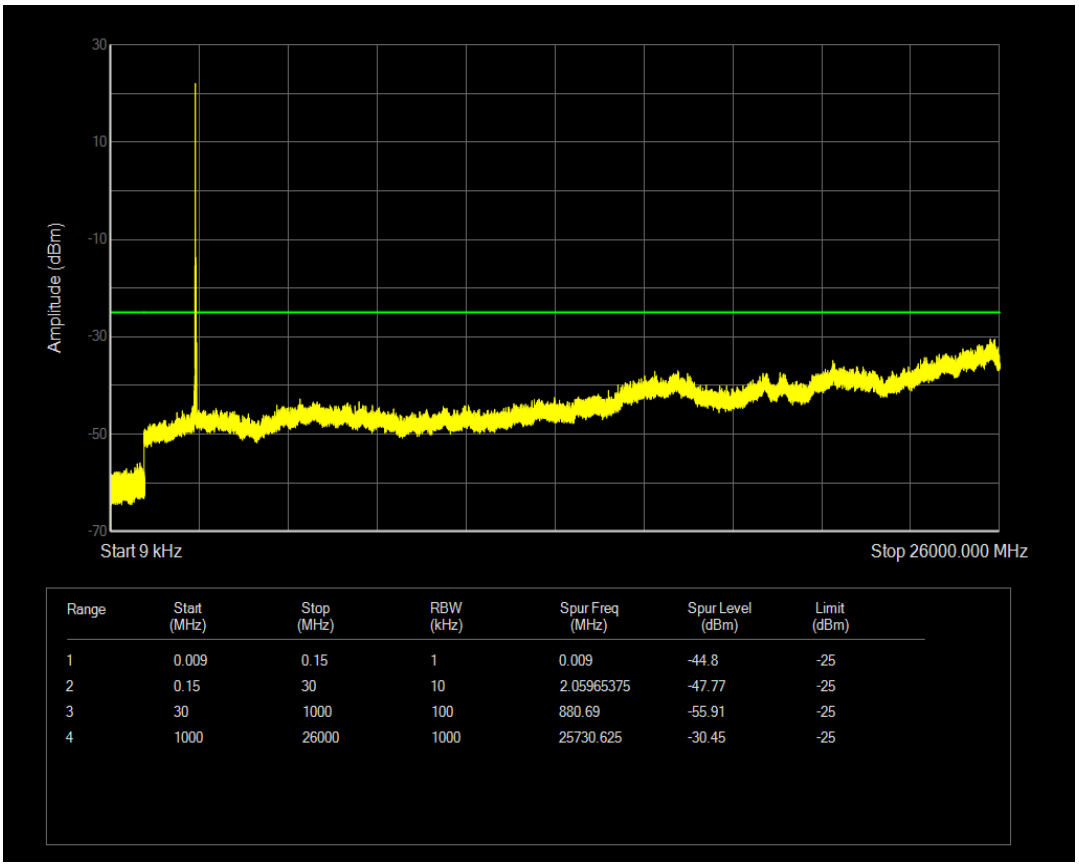
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00943005	-46.76	-13
2	0.15	30	10	2.0604	-47.73	-13
3	30	1000	100	950.5785	-56.73	-13
4	1000	26000	1000	25787.5	-30.82	-13

Band4 QAM16 BW=20MHz Channel=20300 RB Size=1 Position=#0



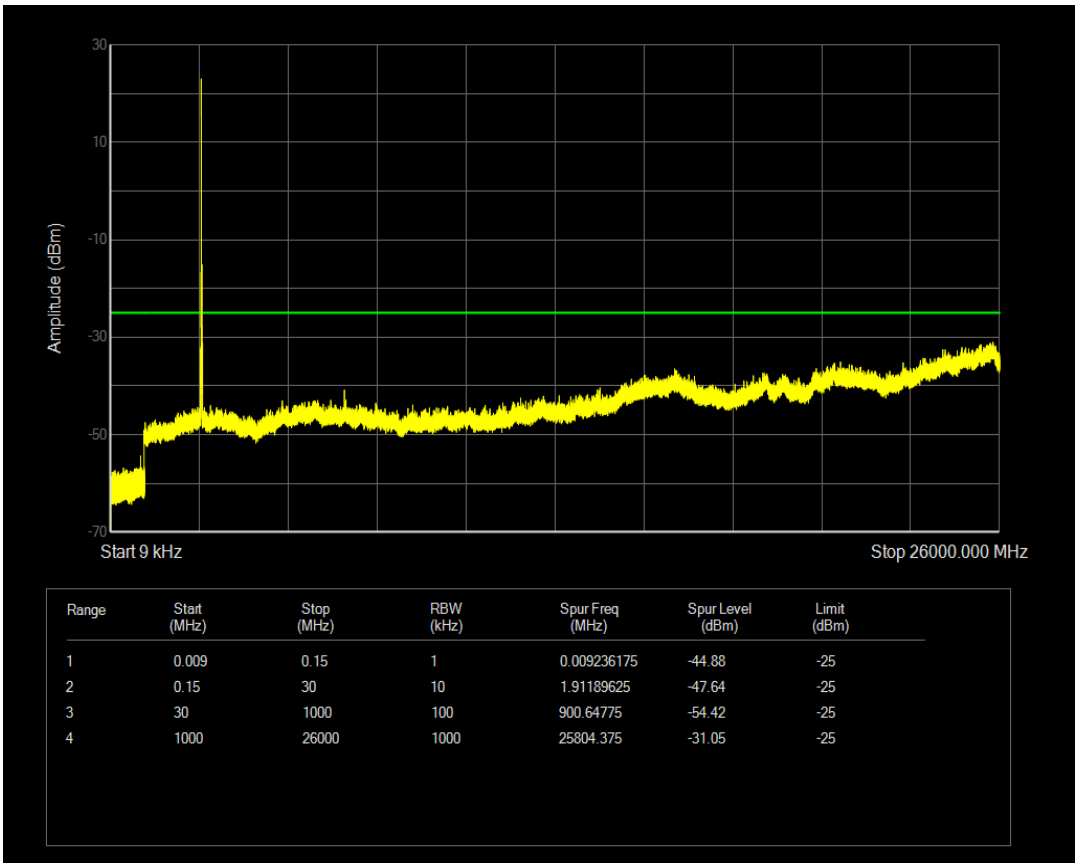
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0112419	-46.47	-13
2	0.15	30	10	0.16567125	-47.45	-13
3	30	1000	100	773.893	-56.39	-13
4	1000	26000	1000	25814.375	-31.03	-13

Band41 QAM16 BW=20MHz Channel=39750 RB Size=1 Position=#0



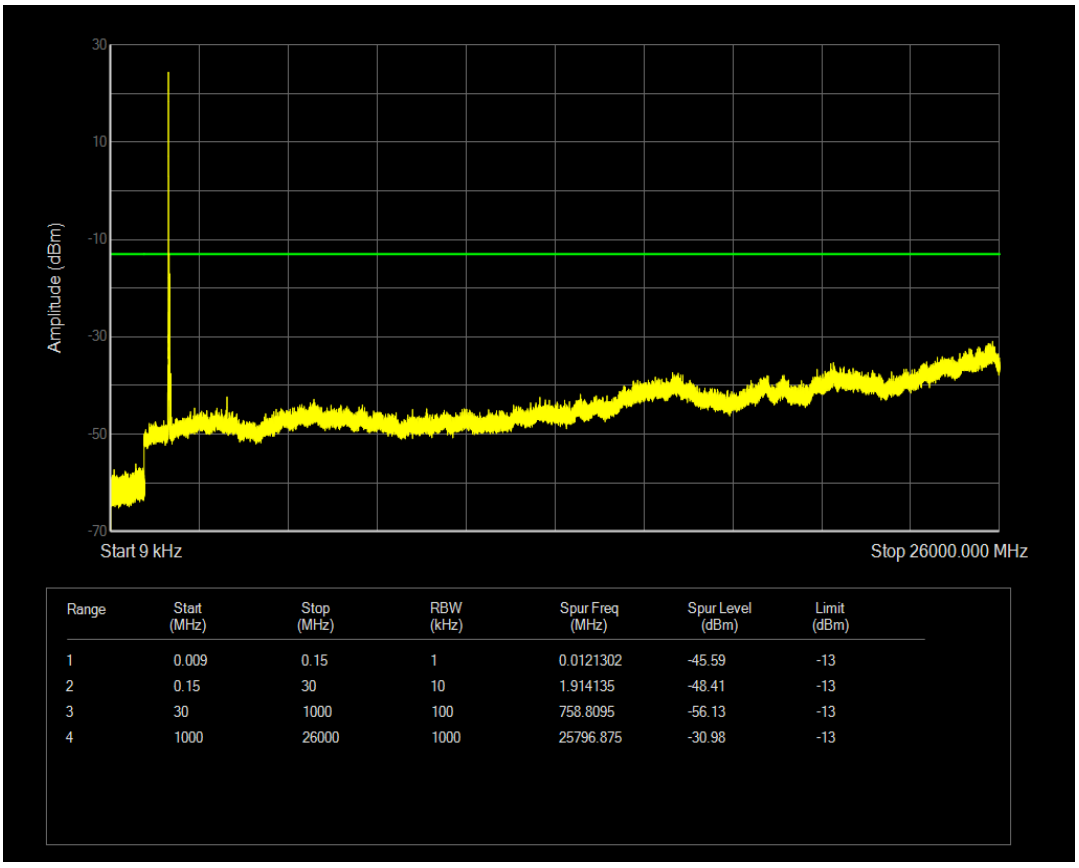
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-44.8	-25
2	0.15	30	10	2.05965375	-47.77	-25
3	30	1000	100	880.69	-55.91	-25
4	1000	26000	1000	25730.625	-30.45	-25

Band41 QAM16 BW=20MHz Channel=41490 RB Size=1 Position=#0



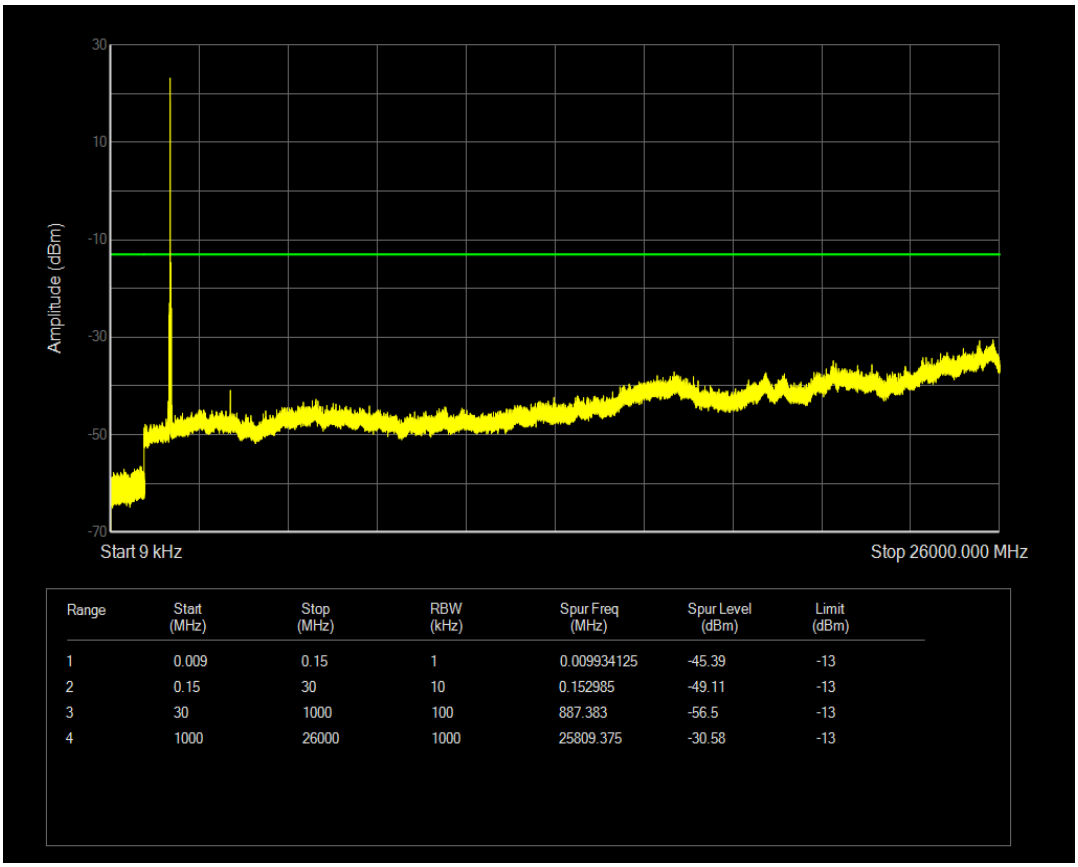
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009236175	-44.88	-25
2	0.15	30	10	1.91189625	-47.64	-25
3	30	1000	100	900.64775	-54.42	-25
4	1000	26000	1000	25804.375	-31.05	-25

Band66 QAM16 BW=20MHz Channel=132072 RB Size=1 Position=#0



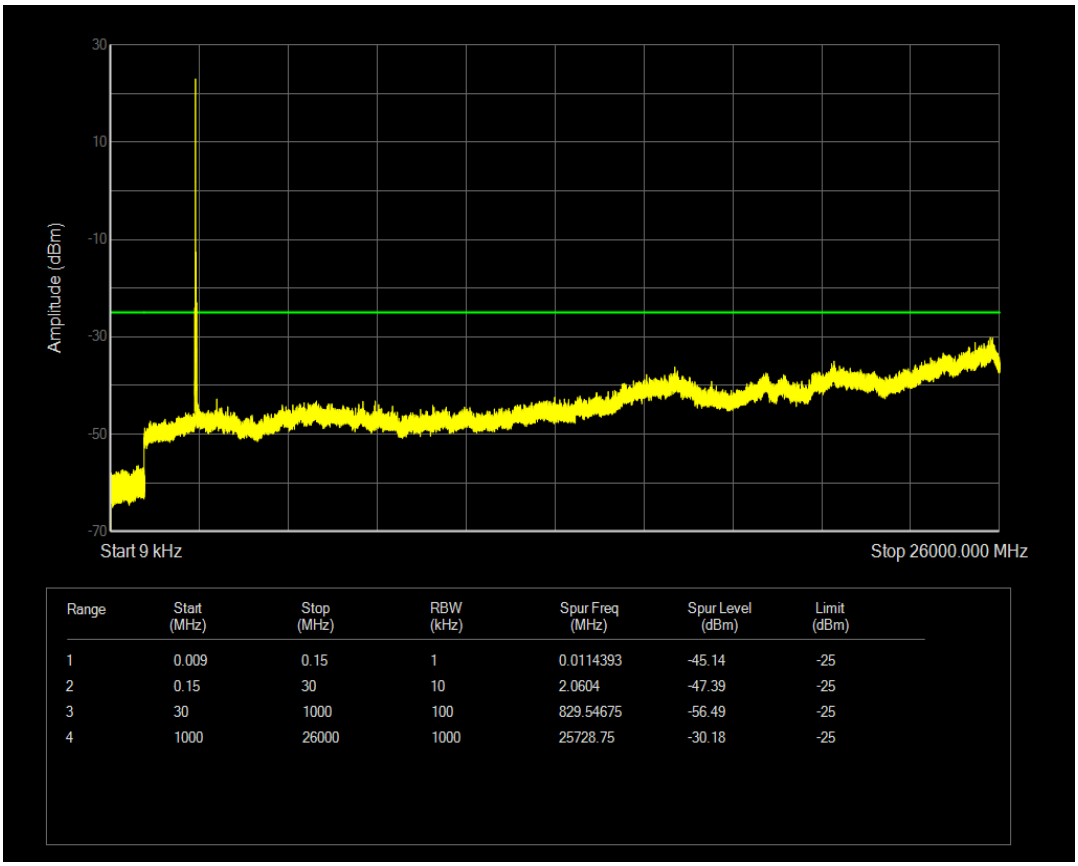
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0121302	-45.59	-13
2	0.15	30	10	1.914135	-48.41	-13
3	30	1000	100	758.8095	-56.13	-13
4	1000	26000	1000	25796.875	-30.98	-13

Band66 QAM16 BW=20MHz Channel=132572 RB Size=1 Position=#0



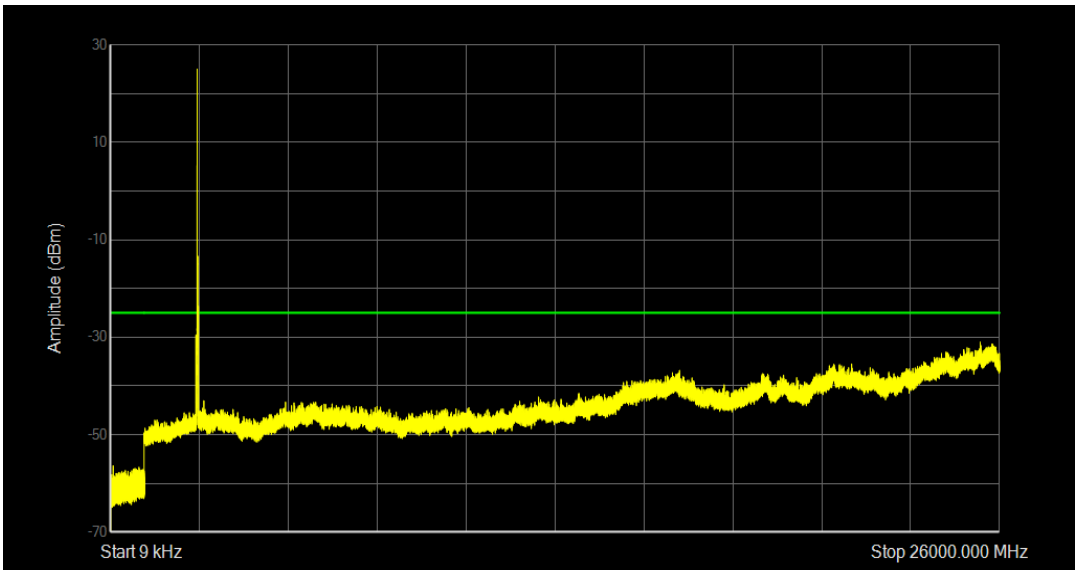
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009934125	-45.39	-13
2	0.15	30	10	0.152985	-49.11	-13
3	30	1000	100	887.383	-56.5	-13
4	1000	26000	1000	25809.375	-30.58	-13

Band7 QAM16 BW=20MHz Channel=20850 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0114393	-45.14	-25
2	0.15	30	10	2.0604	-47.39	-25
3	30	1000	100	829.54675	-56.49	-25
4	1000	26000	1000	25728.75	-30.18	-25

Band7 QAM16 BW=20MHz Channel=21350 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010519275	-45.4	-25
2	0.15	30	10	1.90891125	-47.76	-25
3	30	1000	100	96.03275	-56.42	-25
4	1000	26000	1000	25436.25	-31.02	-25