

1 Conducted output power

Band	UL Channel	Modulation	nTones	Spacing	Power (dBm)	Low Limit (dBm)	high Limit (dBm)	Verdict
Band5	20401	BPSK	1@0	15kHz	22.31	0	37	PASS
Band5	20401	BPSK	1@11	15kHz	22.31	0	37	PASS
Band5	20401	QPSK	1@0	15kHz	22.29	0	37	PASS
Band5	20401	QPSK	1@11	15kHz	22.30	0	37	PASS
Band5	20401	QPSK	12@0	15kHz	20.65	0	37	PASS
Band5	20401	BPSK	1@0	3.75kHz	22.61	0	37	PASS
Band5	20401	BPSK	1@47	3.75kHz	22.65	0	37	PASS
Band5	20401	QPSK	1@0	3.75kHz	22.69	0	37	PASS
Band5	20401	QPSK	1@47	3.75kHz	22.62	0	37	PASS
Band5	20525	BPSK	1@0	15kHz	23.02	0	37	PASS
Band5	20525	BPSK	1@11	15kHz	23.00	0	37	PASS
Band5	20525	QPSK	1@0	15kHz	22.99	0	37	PASS
Band5	20525	QPSK	1@11	15kHz	22.99	0	37	PASS
Band5	20525	QPSK	12@0	15kHz	21.43	0	37	PASS
Band5	20525	BPSK	1@0	3.75kHz	22.95	0	37	PASS
Band5	20525	BPSK	1@47	3.75kHz	22.62	0	37	PASS
Band5	20525	QPSK	1@0	3.75kHz	22.73	0	37	PASS
Band5	20525	QPSK	1@47	3.75kHz	22.62	0	37	PASS
Band5	20649	BPSK	1@0	15kHz	22.78	0	37	PASS
Band5	20649	BPSK	1@11	15kHz	22.75	0	37	PASS
Band5	20649	QPSK	1@0	15kHz	22.74	0	37	PASS
Band5	20649	QPSK	1@11	15kHz	22.74	0	37	PASS
Band5	20649	QPSK	12@0	15kHz	21.30	0	37	PASS
Band5	20649	BPSK	1@0	3.75kHz	22.62	0	37	PASS
Band5	20649	BPSK	1@47	3.75kHz	22.79	0	37	PASS
Band5	20649	QPSK	1@0	3.75kHz	22.65	0	37	PASS
Band5	20649	QPSK	1@47	3.75kHz	22.77	0	37	PASS

2 Frequency stability

Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BPSK	LCH	VL	TN	-0.79	-0.000958	± 2.5	PASS
		VN	TN	4.56	0.005529	± 2.5	PASS
		VH	TN	-0.45	-0.000546	± 2.5	PASS
	MCH	VL	TN	0.93	0.001112	± 2.5	PASS
		VN	TN	4.87	0.005822	± 2.5	PASS
		VH	TN	0.3	0.000359	± 2.5	PASS
	HCH	VL	TN	2.07	0.002440	± 2.5	PASS
		VN	TN	0.73	0.000861	± 2.5	PASS
		VH	TN	2.26	0.002664	± 2.5	PASS
QPSK	LCH	VL	TN	0.42	0.000509	± 2.5	PASS
		VN	TN	-0.25	-0.000303	± 2.5	PASS
		VH	TN	3.46	0.004195	± 2.5	PASS
	MCH	VL	TN	1.43	0.001710	± 2.5	PASS
		VN	TN	-1.33	-0.001590	± 2.5	PASS
		VH	TN	-0.99	-0.001184	± 2.5	PASS
	HCH	VL	TN	3.47	0.004091	± 2.5	PASS
		VN	TN	2.37	0.002794	± 2.5	PASS
		VH	TN	4.3	0.005069	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BPSK	LCH	VN	-30	3.15	0.003820	± 2.5	PASS
		VN	-20	0.31	0.000376	± 2.5	PASS
		VN	-10	2.23	0.002704	± 2.5	PASS
		VN	0	1.53	0.001855	± 2.5	PASS
		VN	10	2.98	0.003613	± 2.5	PASS
		VN	20	4.44	0.005384	± 2.5	PASS
		VN	30	1.63	0.001976	± 2.5	PASS
		VN	40	4.27	0.005178	± 2.5	PASS
		VN	50	2.51	0.003044	± 2.5	PASS
	MCH	VN	-30	-1.1	-0.001315	± 2.5	PASS

		VN	-20	3.82	0.004567	± 2.5	PASS
		VN	-10	-0.8	-0.000956	± 2.5	PASS
		VN	0	4.11	0.004913	± 2.5	PASS
		VN	10	4.14	0.004949	± 2.5	PASS
		VN	20	4.13	0.004937	± 2.5	PASS
		VN	30	-0.81	-0.000968	± 2.5	PASS
		VN	40	-1.19	-0.001423	± 2.5	PASS
		VN	50	4.55	0.005439	± 2.5	PASS
	HCH	VN	-30	2.79	0.003289	± 2.5	PASS
		VN	-20	-0.81	-0.000955	± 2.5	PASS
		VN	-10	-1.34	-0.001580	± 2.5	PASS
		VN	0	-1.31	-0.001544	± 2.5	PASS
		VN	10	4.83	0.005694	± 2.5	PASS
		VN	20	0.36	0.000424	± 2.5	PASS
		VN	30	4.24	0.004998	± 2.5	PASS
		VN	40	4.8	0.005658	± 2.5	PASS
		VN	50	4.1	0.004833	± 2.5	PASS
QPSK	LCH	VN	-30	-0.07	-0.000085	± 2.5	PASS
		VN	-20	0.5	0.000606	± 2.5	PASS
		VN	-10	-0.66	-0.000800	± 2.5	PASS
		VN	0	2.99	0.003626	± 2.5	PASS
		VN	10	3.84	0.004656	± 2.5	PASS
		VN	20	4.82	0.005845	± 2.5	PASS
		VN	30	-1.81	-0.002195	± 2.5	PASS
		VN	40	4.34	0.005263	± 2.5	PASS
		VN	50	0.83	0.001006	± 2.5	PASS
	MCH	VN	-30	0.31	0.000365	± 2.5	PASS
		VN	-20	3.53	0.004161	± 2.5	PASS
		VN	-10	4.93	0.005812	± 2.5	PASS
		VN	0	0.92	0.001085	± 2.5	PASS
		VN	10	4	0.004715	± 2.5	PASS
		VN	20	-0.65	-0.000766	± 2.5	PASS
		VN	30	2.22	0.002617	± 2.5	PASS
		VN	40	0.91	0.001073	± 2.5	PASS
		VN	50	2.21	0.002605	± 2.5	PASS
	HCH	VN	-30	3.06	0.003607	± 2.5	PASS
		VN	-20	3.29	0.003878	± 2.5	PASS

		VN	-10	-0.44	-0.000519	± 2.5	PASS
		VN	0	1.99	0.002346	± 2.5	PASS
		VN	10	2.57	0.003030	± 2.5	PASS
		VN	20	0.7	0.000825	± 2.5	PASS
		VN	30	0.7	0.000825	± 2.5	PASS
		VN	40	-1.63	-0.001921	± 2.5	PASS
		VN	50	4.39	0.005175	± 2.5	PASS

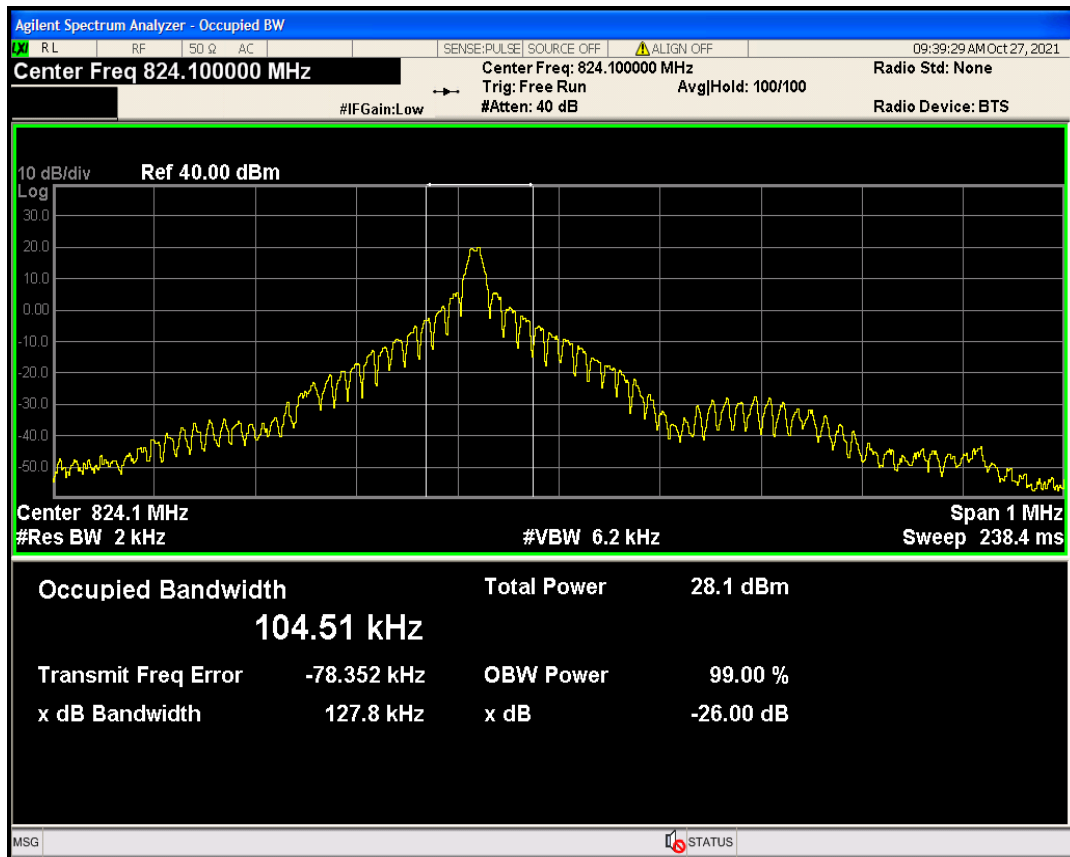
3 Peak-to-Average Ratio

Band	UL Channel	Modulation	nTones	Spacing	Result (dB)	high Limit (dB)	Verdict
Band5	20401	BPSK	1@0	15kHz	4.52	13	PASS
Band5	20401	QPSK	1@0	15kHz	4.53	13	PASS
Band5	20525	BPSK	1@0	15kHz	4.51	13	PASS
Band5	20525	QPSK	1@0	15kHz	4.44	13	PASS
Band5	20649	BPSK	1@0	15kHz	4.49	13	PASS
Band5	20649	QPSK	1@0	15kHz	4.45	13	PASS
Band5	20401	BPSK	1@0	3.75kHz	4.49	13	PASS
Band5	20401	QPSK	1@0	3.75kHz	4.48	13	PASS
Band5	20525	BPSK	1@0	3.75kHz	4.40	13	PASS
Band5	20525	QPSK	1@0	3.75kHz	4.47	13	PASS
Band5	20649	BPSK	1@0	3.75kHz	4.34	13	PASS
Band5	20649	QPSK	1@0	3.75kHz	4.37	13	PASS

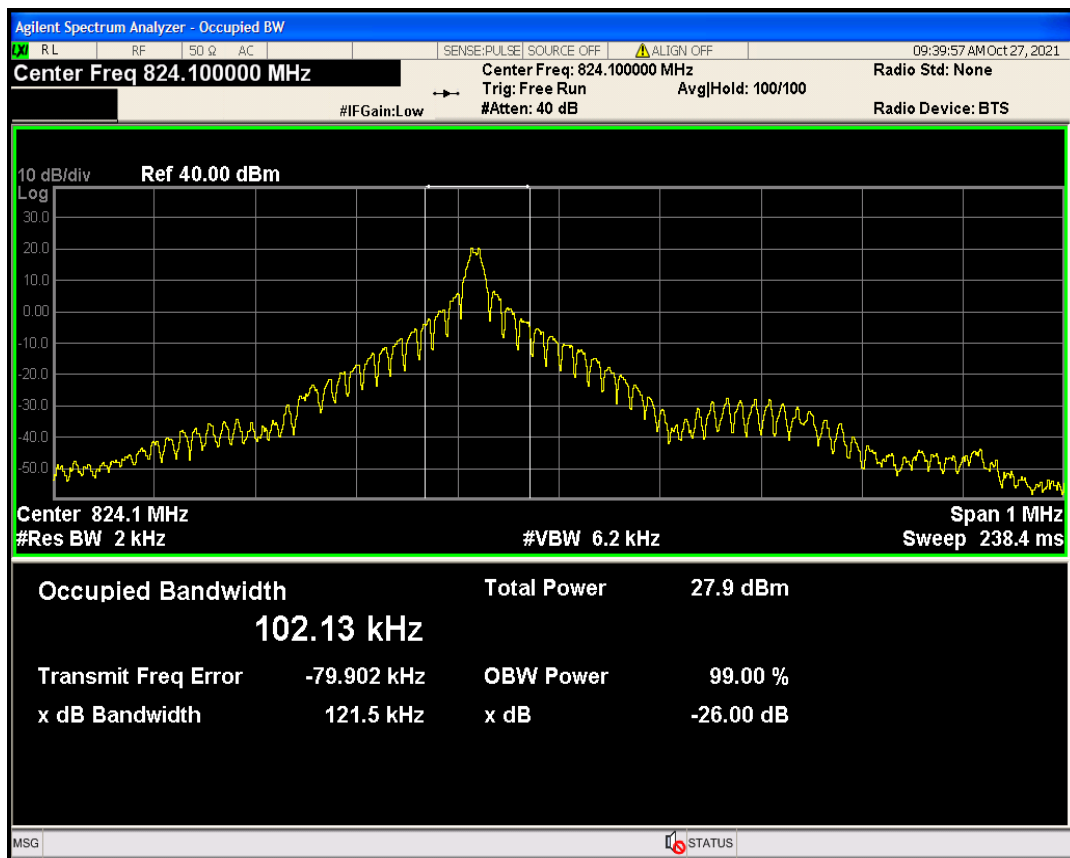
4 Occupied bandwidth

Band	UL Channel	Modulation	nTones	Spacing	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band5	20401	BPSK	1@0	15kHz	0.105	0.128	PASS
Band5	20401	QPSK	1@0	15kHz	0.102	0.122	PASS
Band5	20401	QPSK	12@0	15kHz	0.175	0.209	PASS
Band5	20525	BPSK	1@0	15kHz	0.103	0.113	PASS
Band5	20525	QPSK	1@0	15kHz	0.107	0.124	PASS
Band5	20525	QPSK	12@0	15kHz	0.177	0.213	PASS
Band5	20649	BPSK	1@0	15kHz	0.099	0.105	PASS
Band5	20649	QPSK	1@0	15kHz	0.106	0.115	PASS
Band5	20649	QPSK	12@0	15kHz	0.176	0.216	PASS
Band5	20401	BPSK	1@0	3.75kHz	0.086	0.048	PASS
Band5	20401	QPSK	1@0	3.75kHz	0.085	0.048	PASS
Band5	20525	BPSK	1@0	3.75kHz	0.086	0.049	PASS
Band5	20525	QPSK	1@0	3.75kHz	0.086	0.048	PASS
Band5	20649	BPSK	1@0	3.75kHz	0.087	0.049	PASS
Band5	20649	QPSK	1@0	3.75kHz	0.086	0.048	PASS

Band5 BPSK Channel=20401 nTones=1@0 Spacing=15kHz

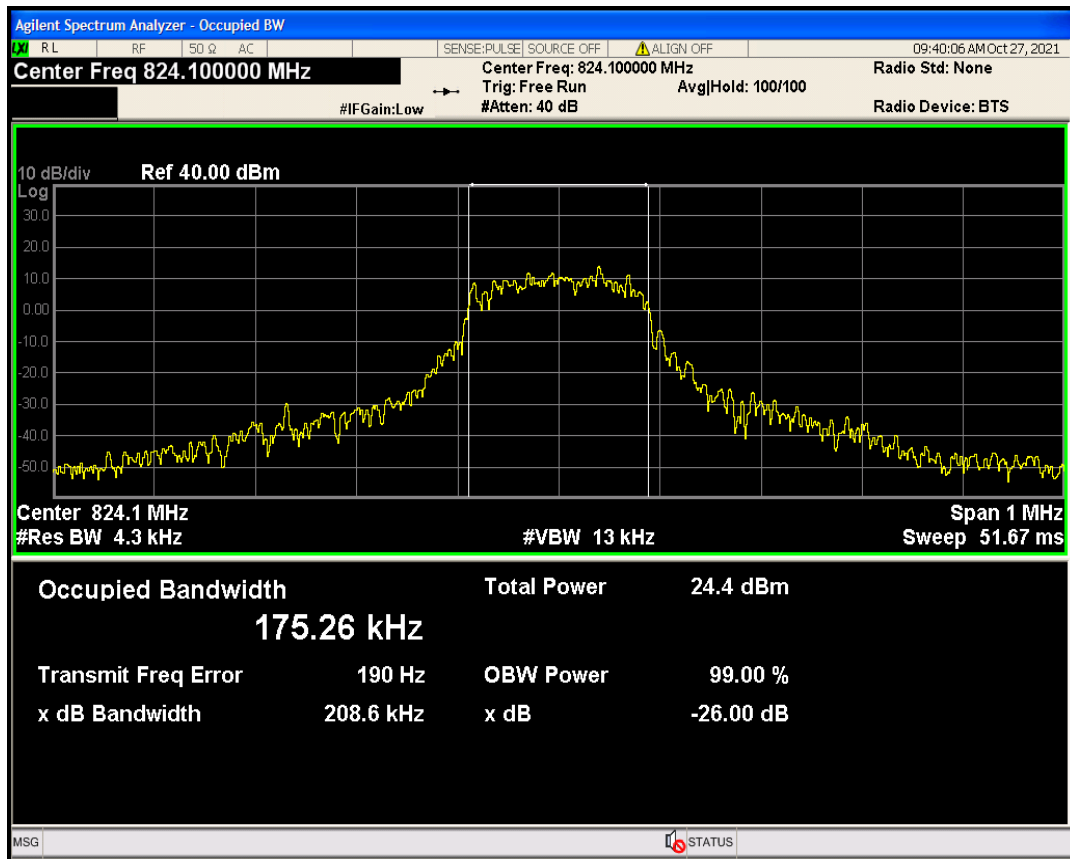


Band5 QPSK Channel=20401 nTones=1@0 Spacing=15kHz

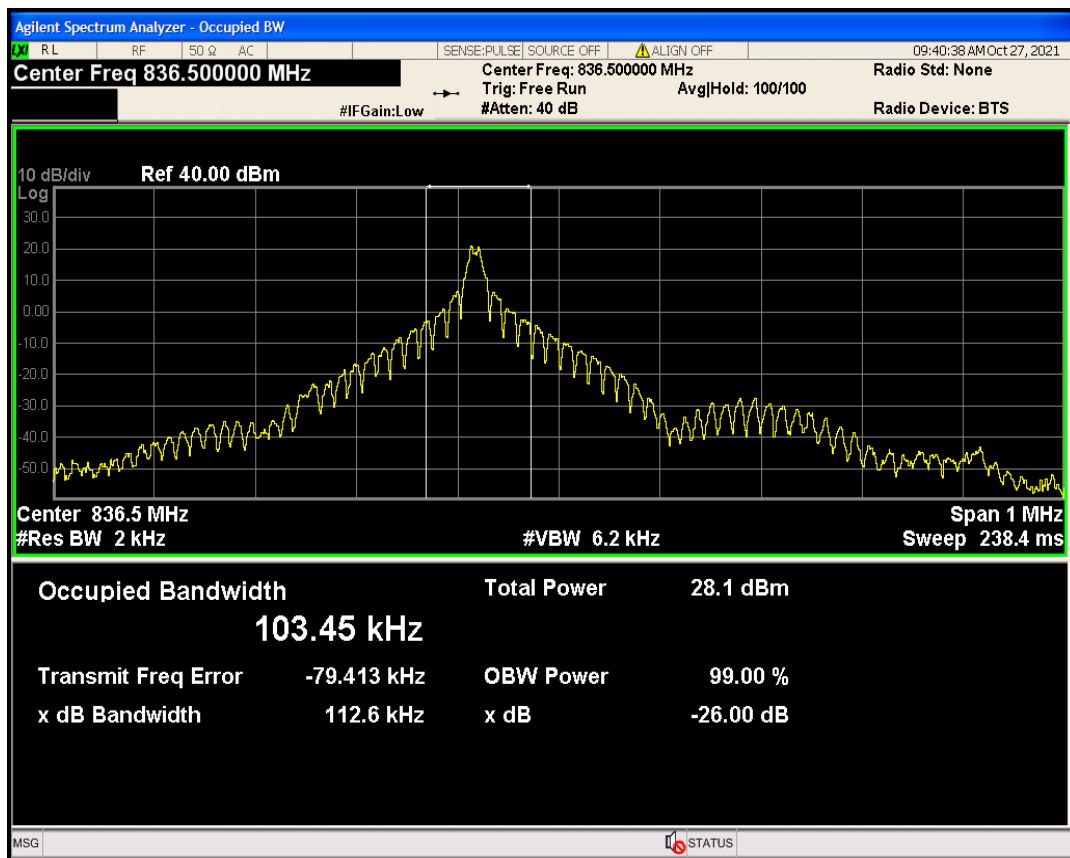


Band5 QPSK Channel=20401 nTones=12@0 Spacing=15kHz

Report

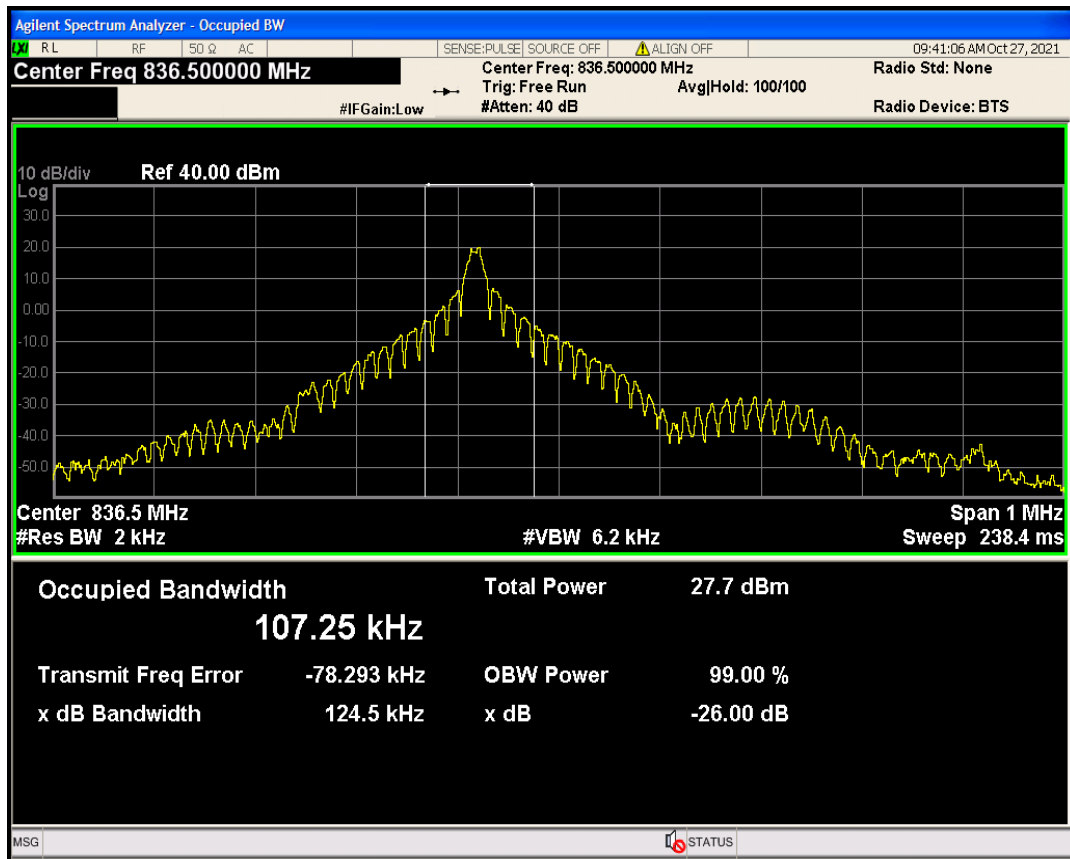


Band5 BPSK Channel=20525 nTones=1@0 Spacing=15kHz

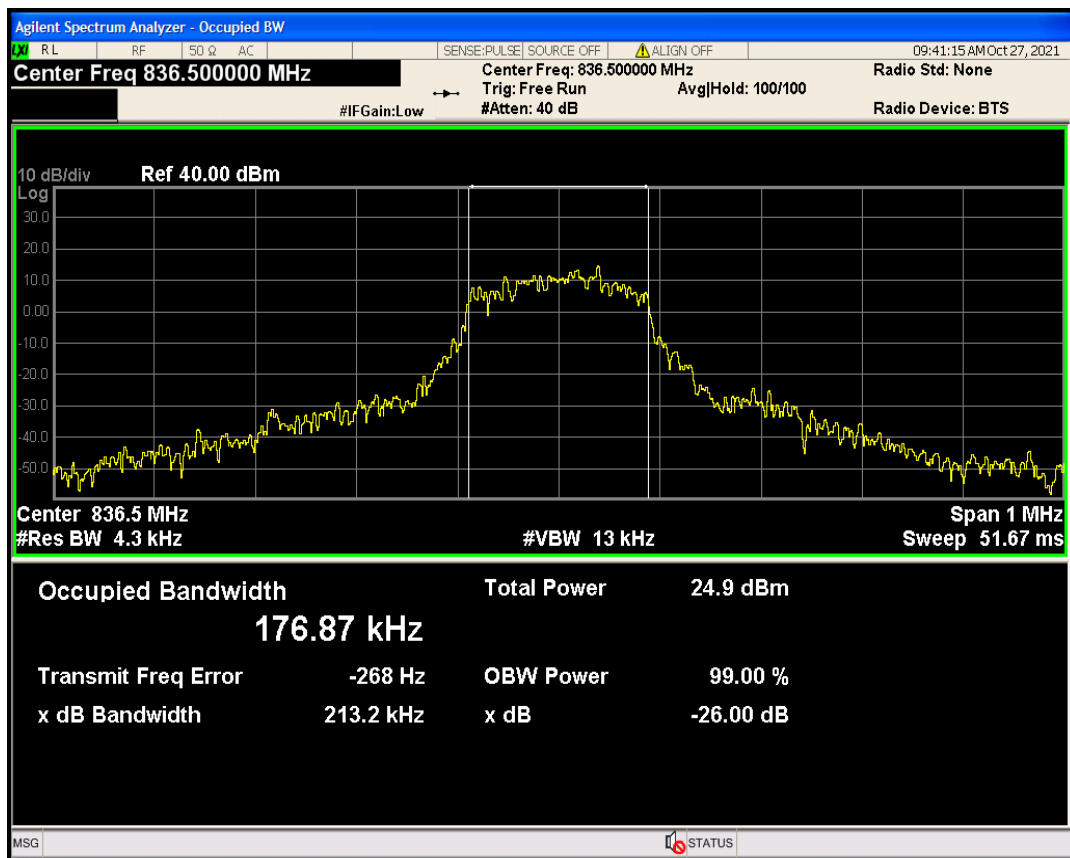


Band5 QPSK Channel=20525 nTones=1@0 Spacing=15kHz

Report

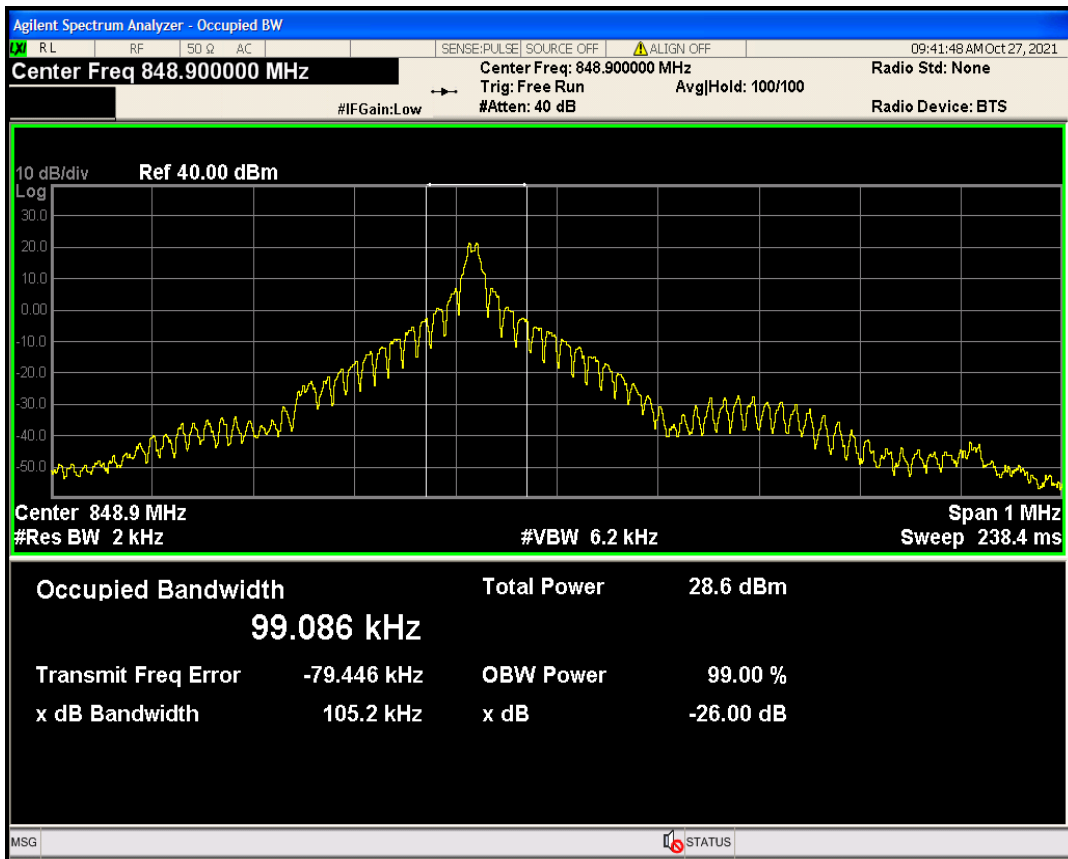


Band5 QPSK Channel=20525 nTones=12@0 Spacing=15kHz

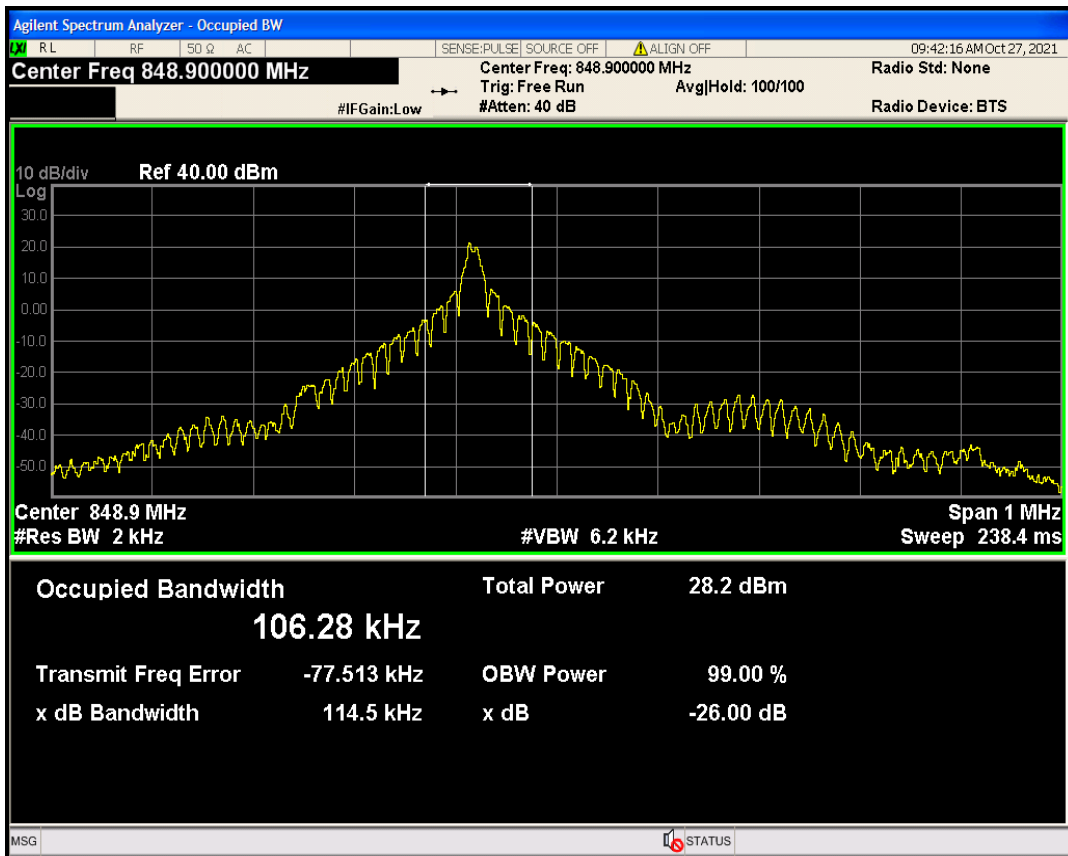


Band5 BPSK Channel=20649 nTones=1@0 Spacing=15kHz

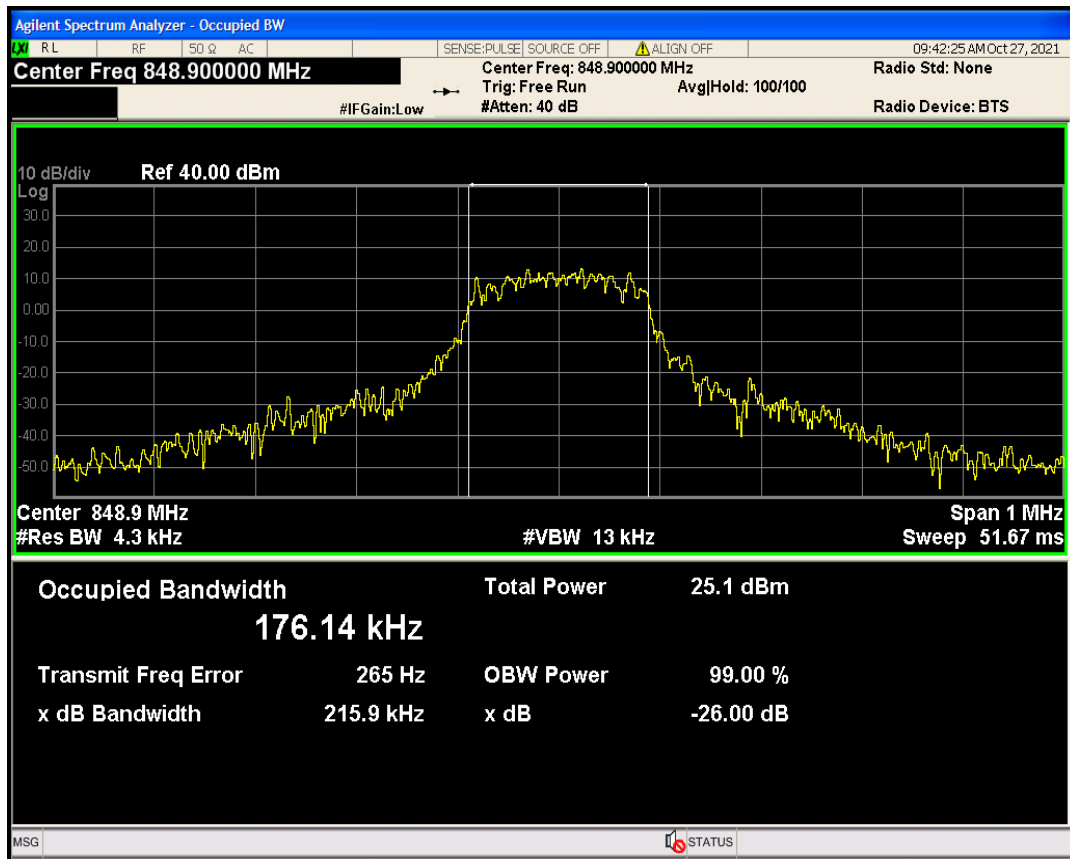
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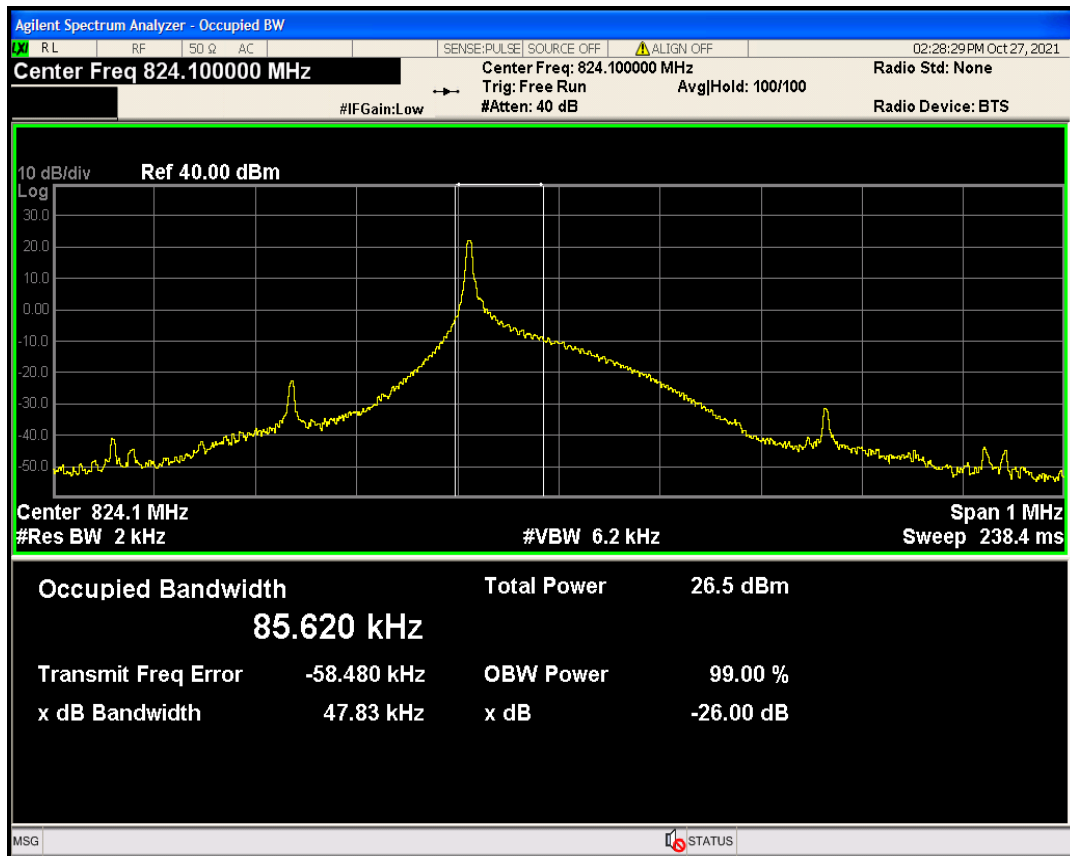
Band5 QPSK Channel=20649 nTones=1@0 Spacing=15kHz



Band5 QPSK Channel=20649 nTones=12@0 Spacing=15kHz

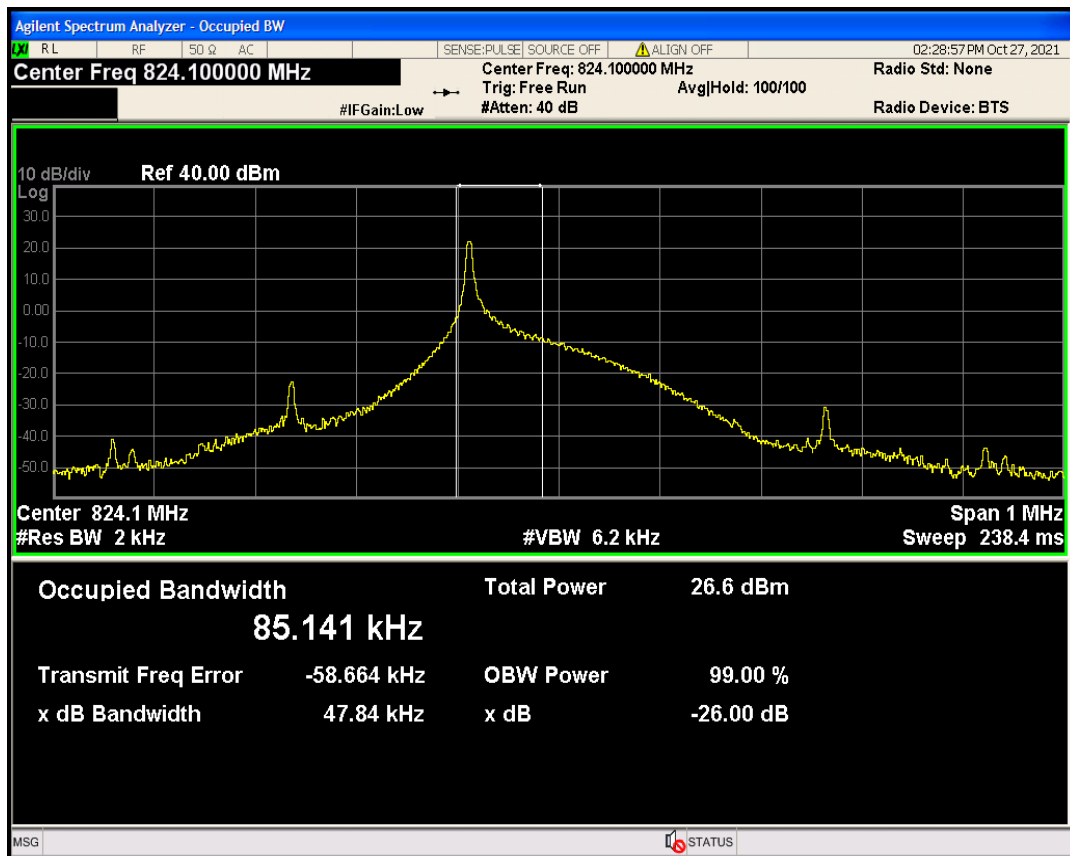


Band5 BPSK Channel=20401 nTones=1@0 Spacing=3.75kHz

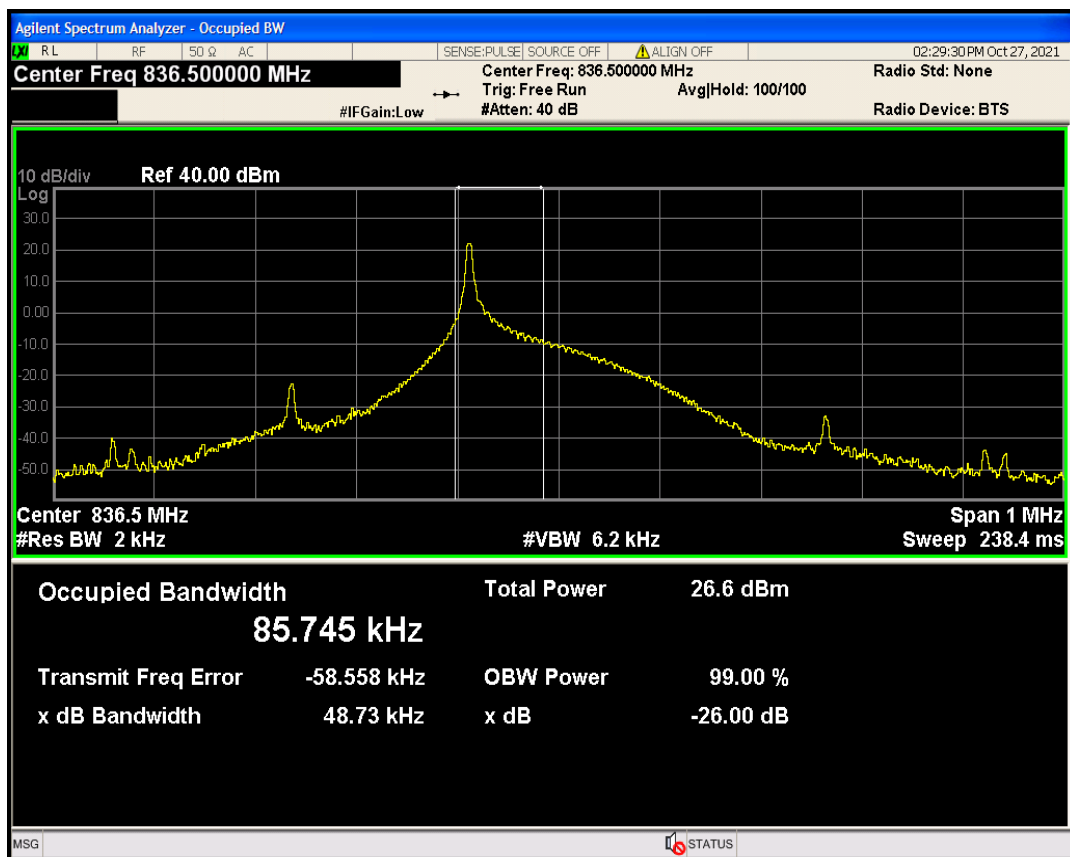


Report

Band5 QPSK Channel=20401 nTones=1@0 Spacing=3.75kHz

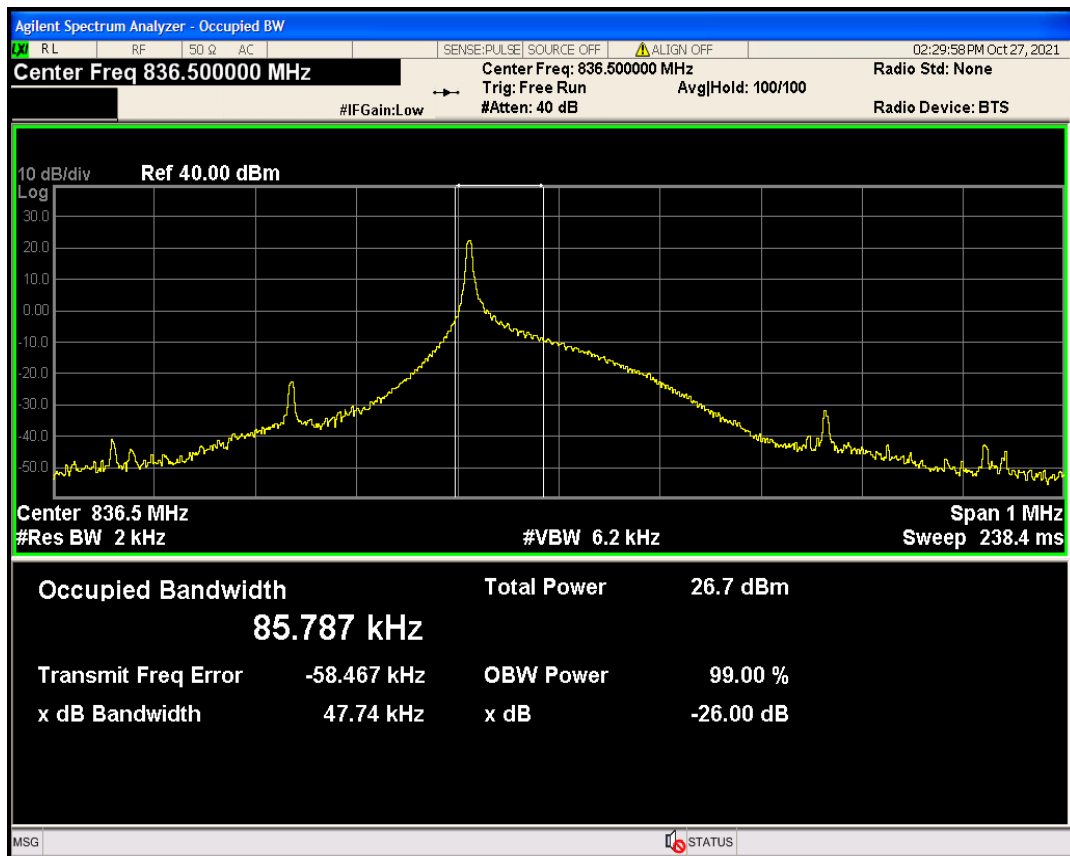


Band5 BPSK Channel=20525 nTones=1@0 Spacing=3.75kHz

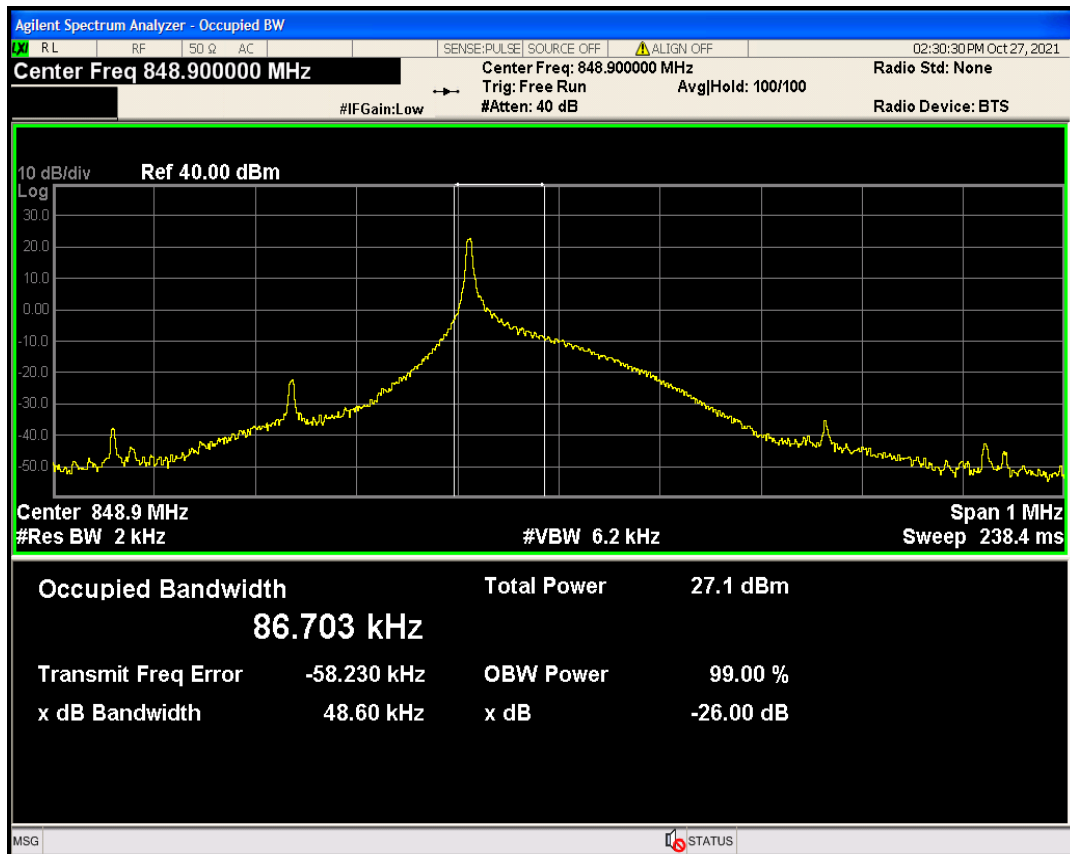


Report

Band5 QPSK Channel=20525 nTones=1@0 Spacing=3.75kHz

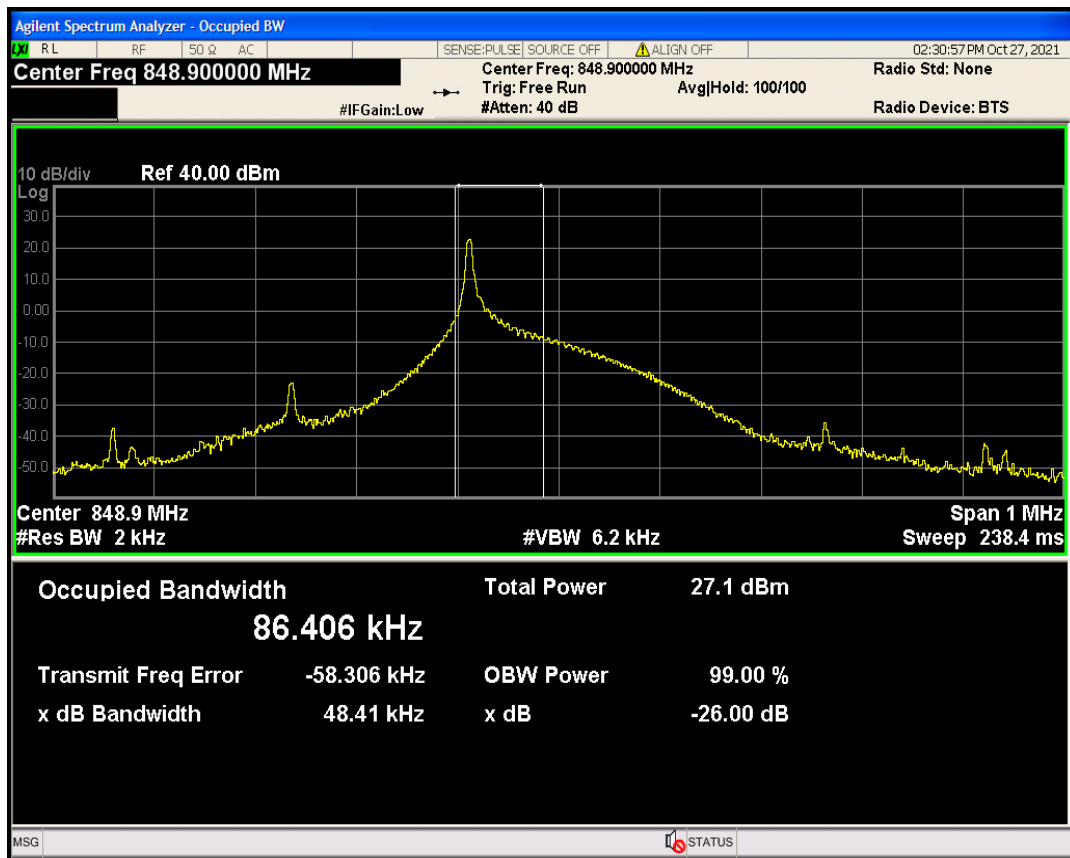


Band5 BPSK Channel=20649 nTones=1@0 Spacing=3.75kHz



Report

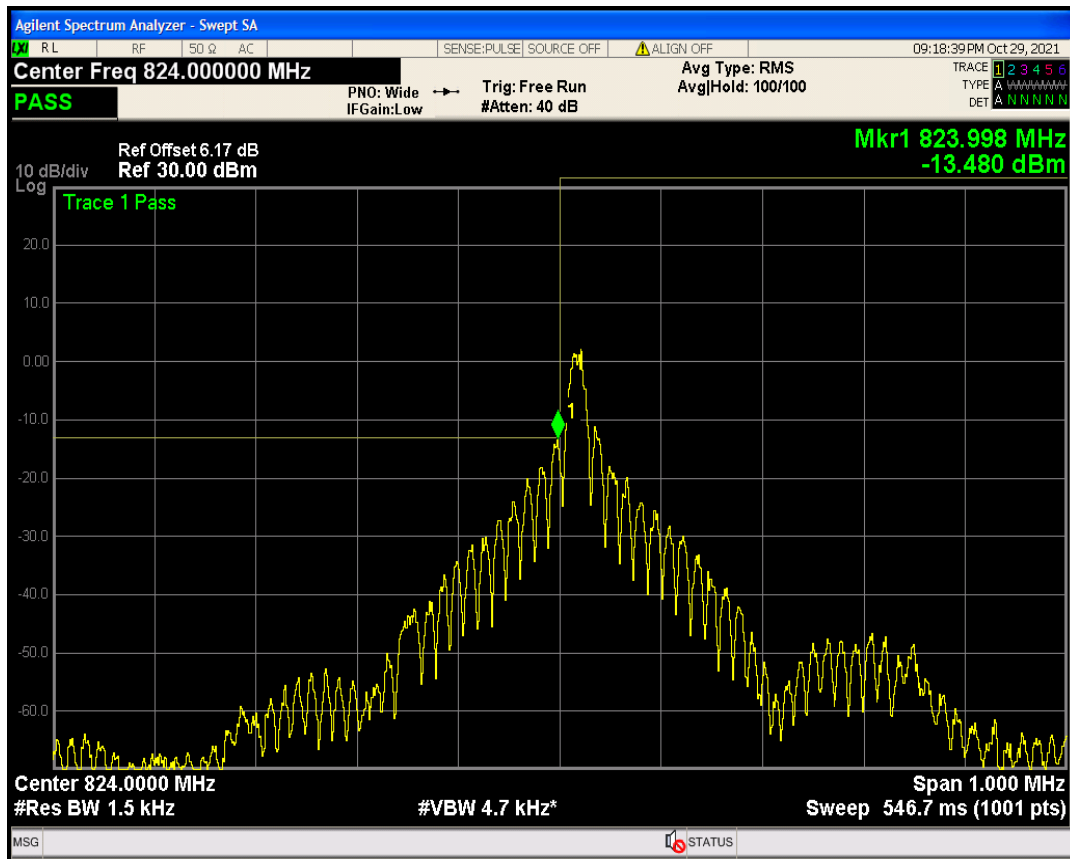
Band5 QPSK Channel=20649 nTones=1@0 Spacing=3.75kHz



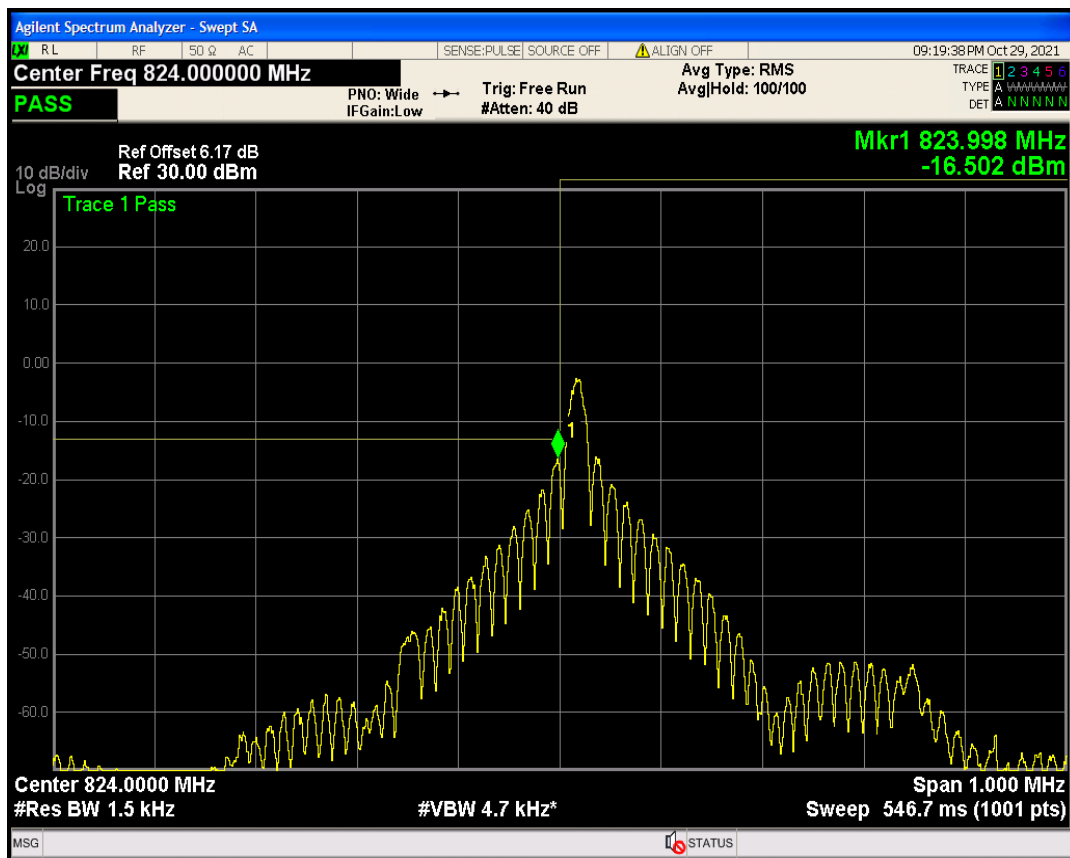
5 Band edge

Band	UL Channel	Modulation	nTones	Spacing	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	20401	BPSK	1@0	15kHz	824.00	-13.48	-13	PASS
Band5	20401	QPSK	1@0	15kHz	824.00	-16.50	-13	PASS
Band5	20401	QPSK	12@0	15kHz	823.99	-38.26	-13	PASS
Band5	20649	BPSK	1@11	15kHz	849.00	-16.01	-13	PASS
Band5	20649	QPSK	1@11	15kHz	849.00	-15.75	-13	PASS
Band5	20649	QPSK	12@0	15kHz	849.01	-36.83	-13	PASS
Band5	20401	BPSK	1@0	3.75kHz	824.00	-18.95	-13	PASS
Band5	20401	QPSK	1@0	3.75kHz	824.00	-23.30	-13	PASS
Band5	20649	BPSK	1@47	3.75kHz	849.00	-18.45	-13	PASS
Band5	20649	QPSK	1@47	3.75kHz	849.00	-18.88	-13	PASS

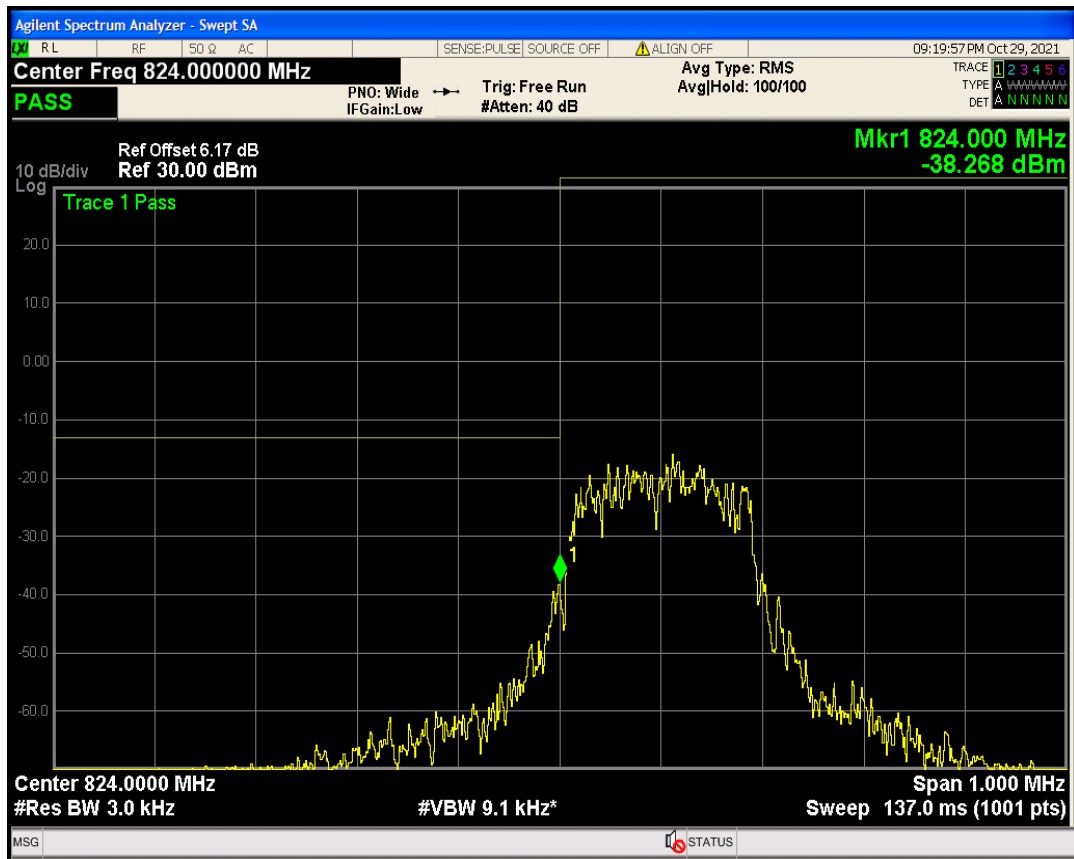
Band5 BPSK Channel=20401 nTones=1@0 Spacing=15kHz



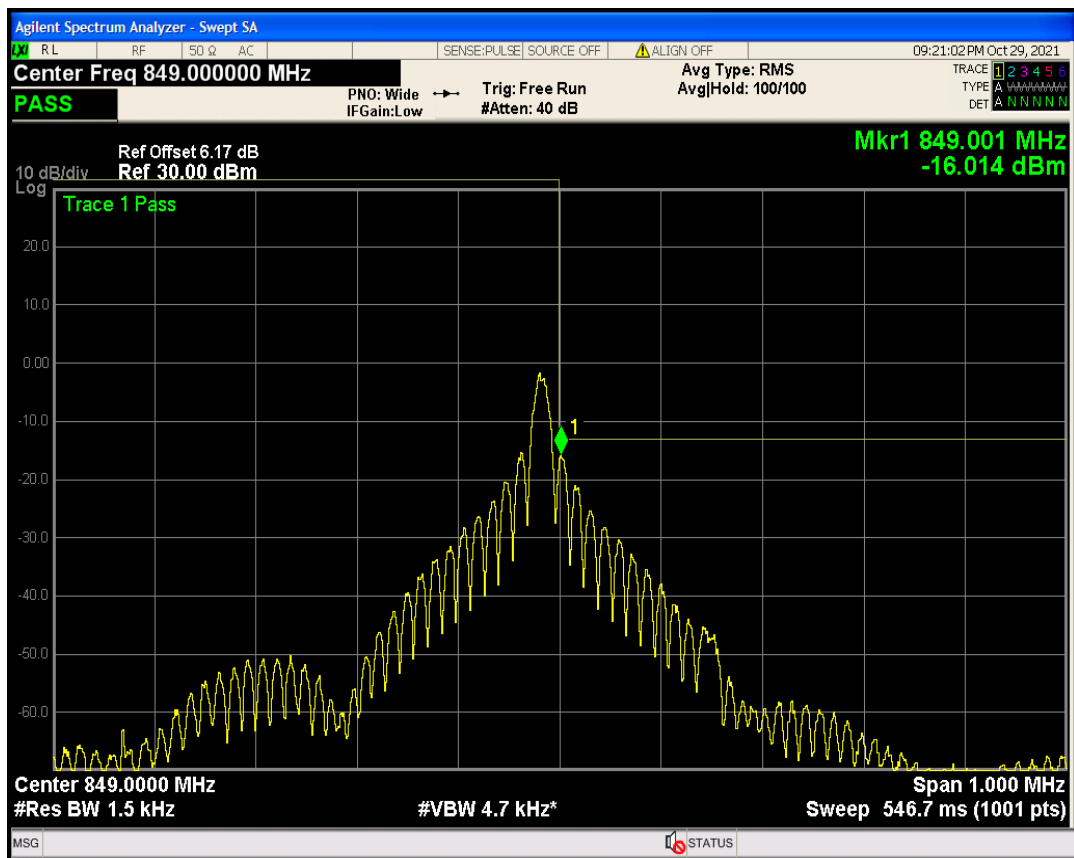
Band5 QPSK Channel=20401 nTones=1@0 Spacing=15kHz



Band5 QPSK Channel=20401 nTones=12@0 Spacing=15kHz

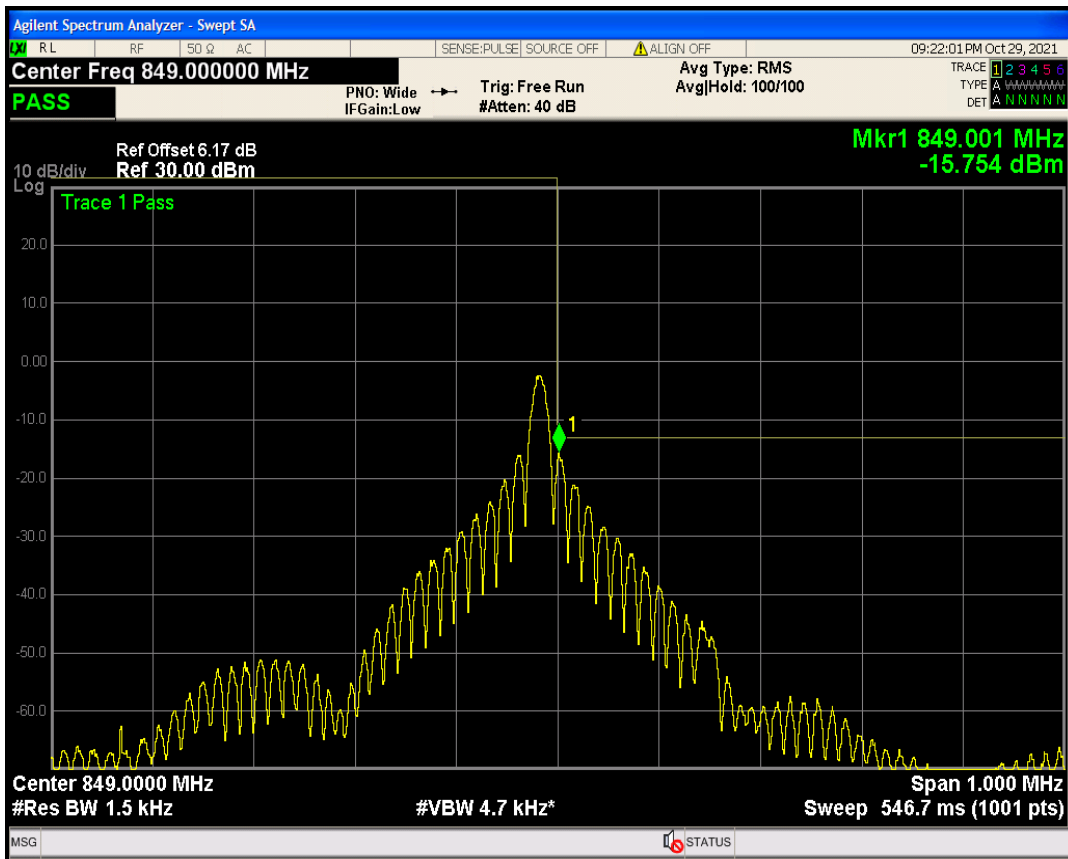


Band5 BPSK Channel=20649 nTones=1@11 Spacing=15kHz

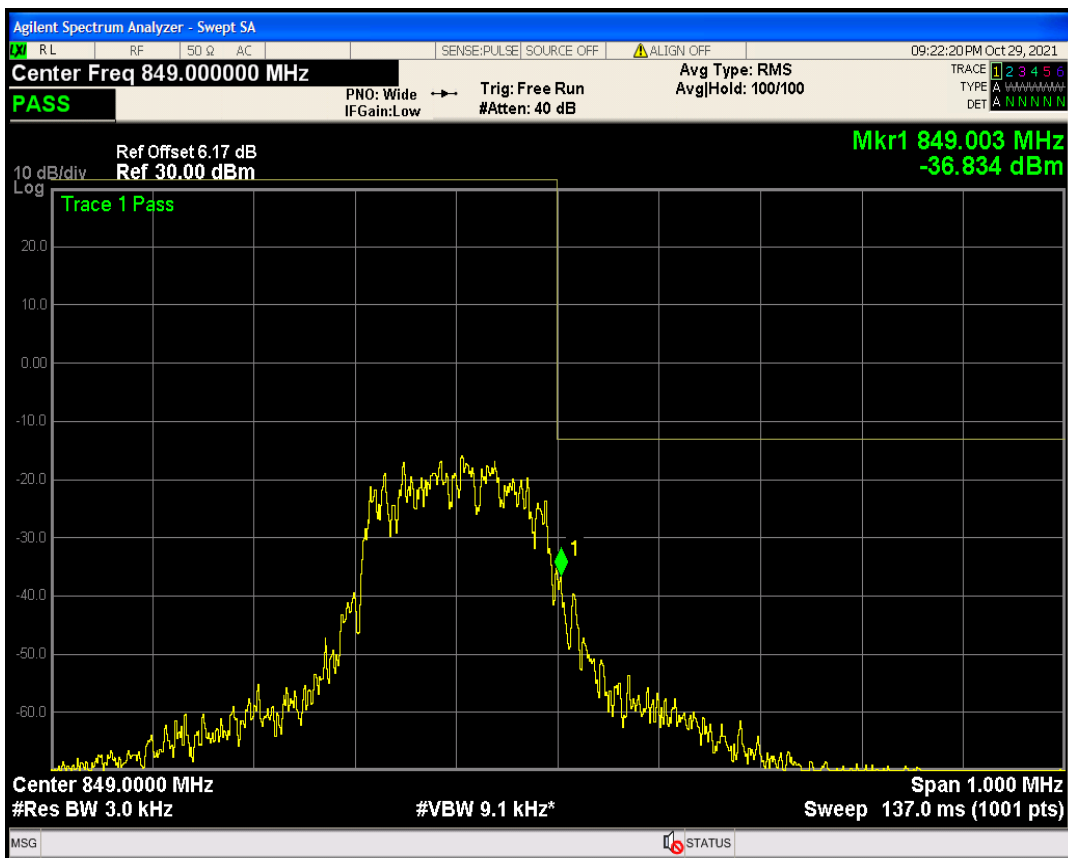


Band5 QPSK Channel=20649 nTones=1@11 Spacing=15kHz

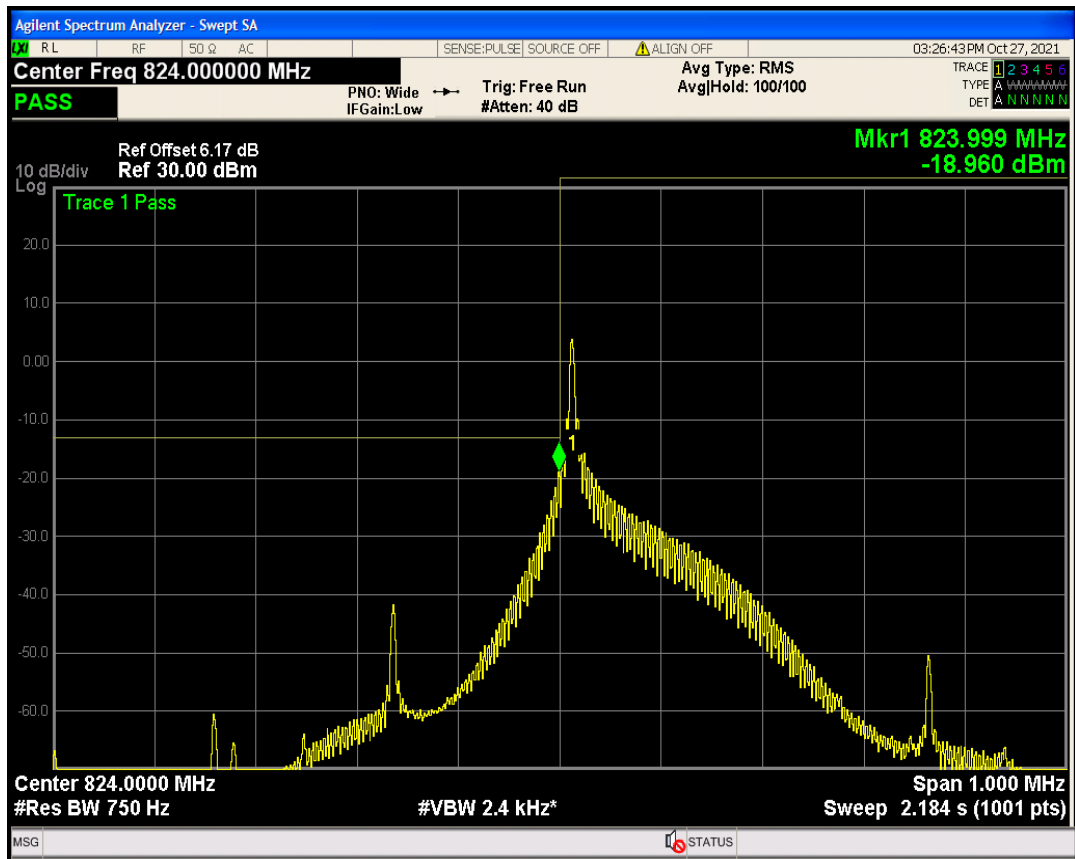
Report



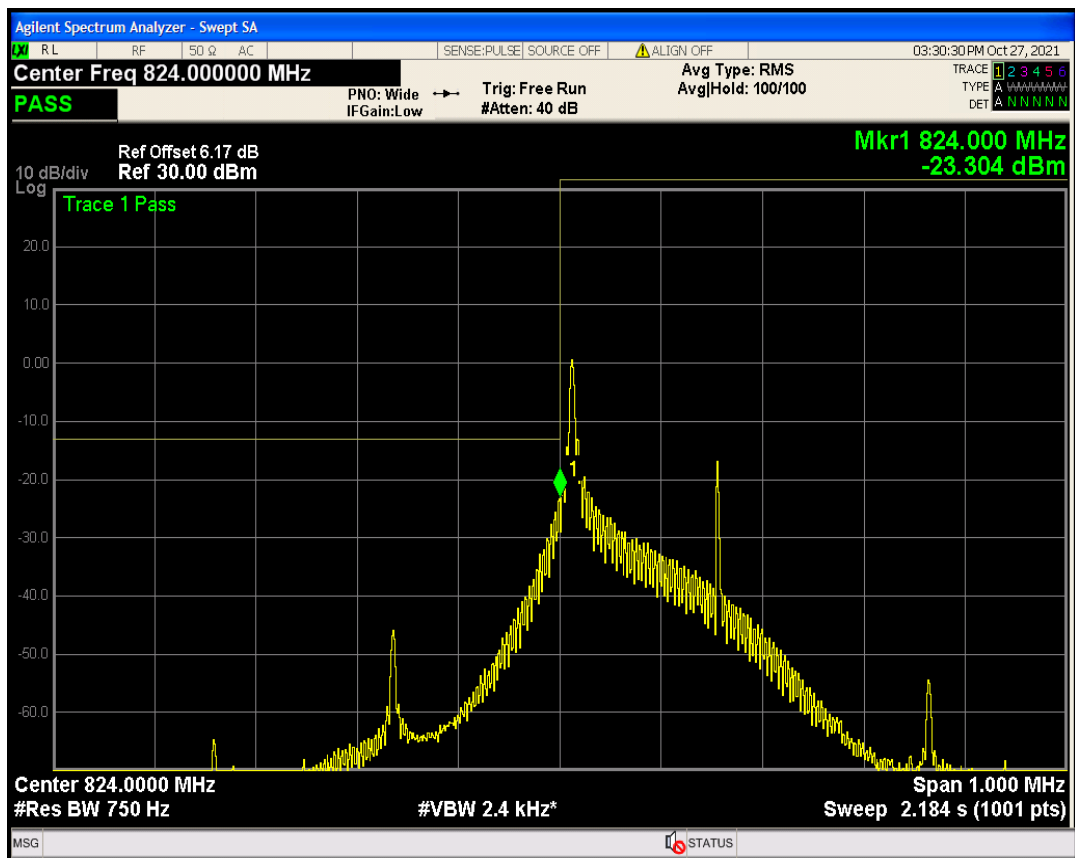
Band5 QPSK Channel=20649 nTones=12@0 Spacing=15kHz



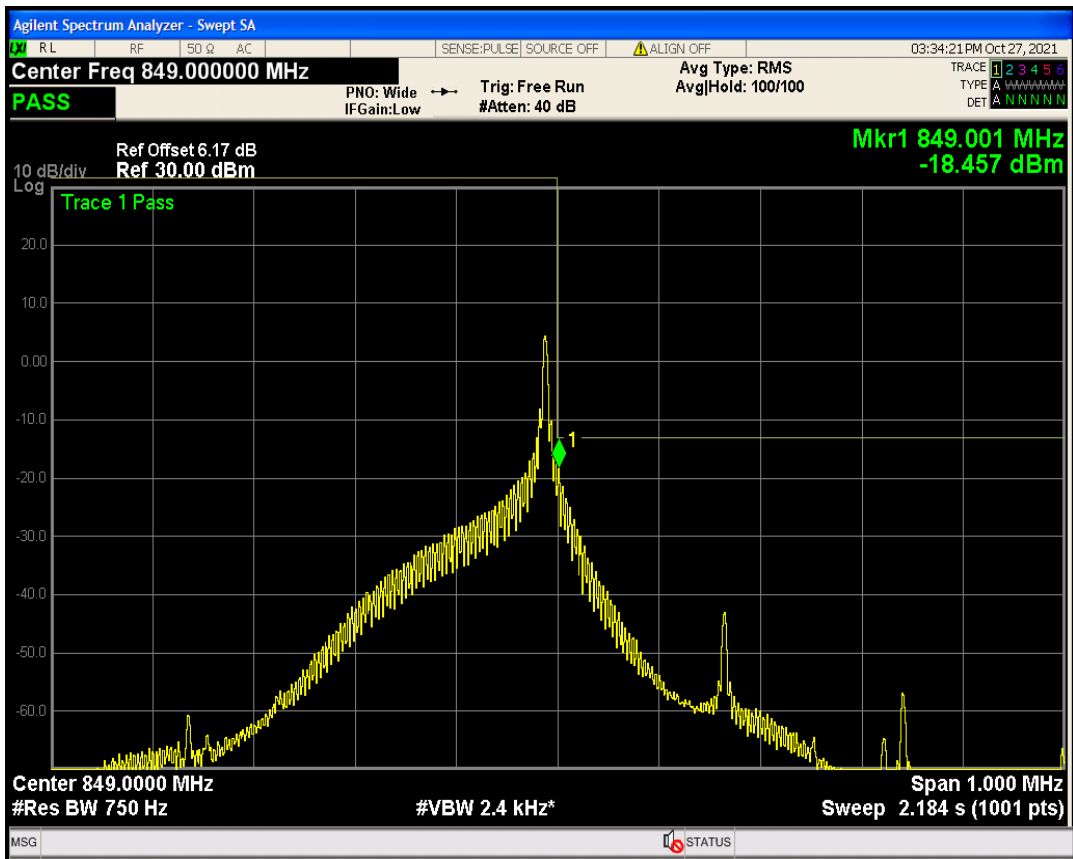
Band5 BPSK Channel=20401 nTones=1@0 Spacing=3.75kHz



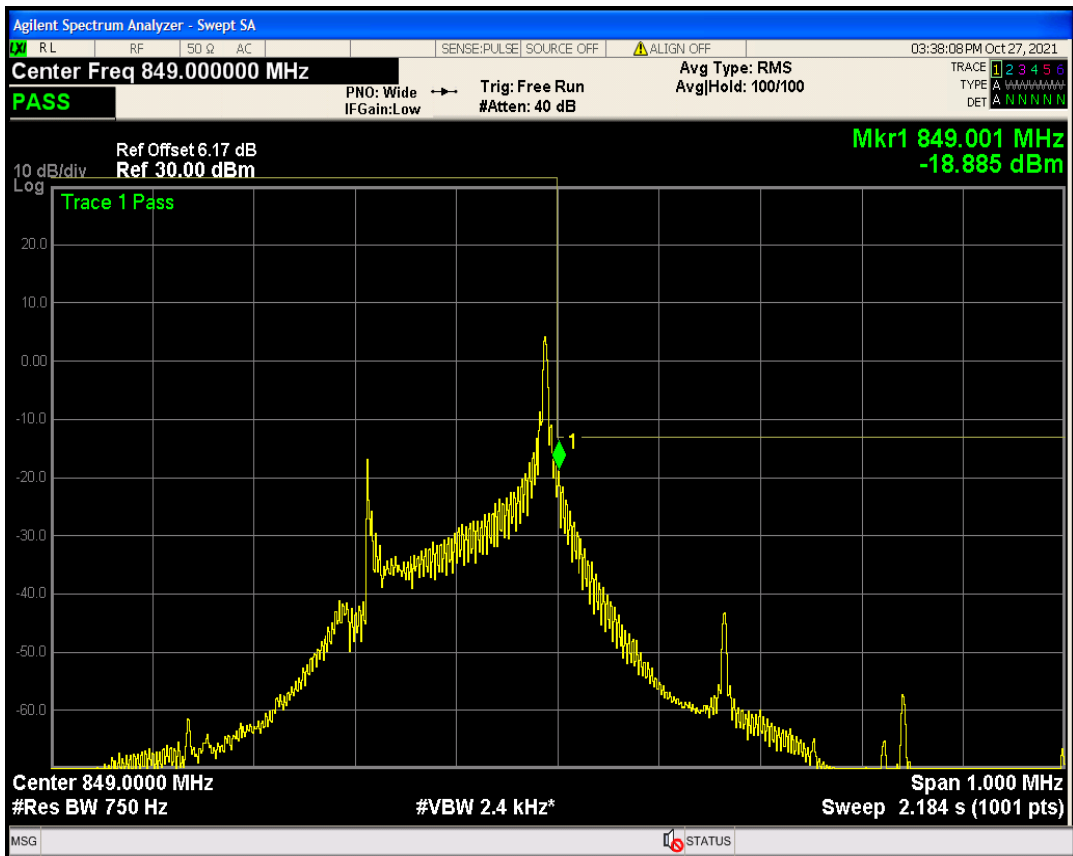
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Band5 BPSK Channel=20649 nTones=1@47 Spacing=3.75kHz



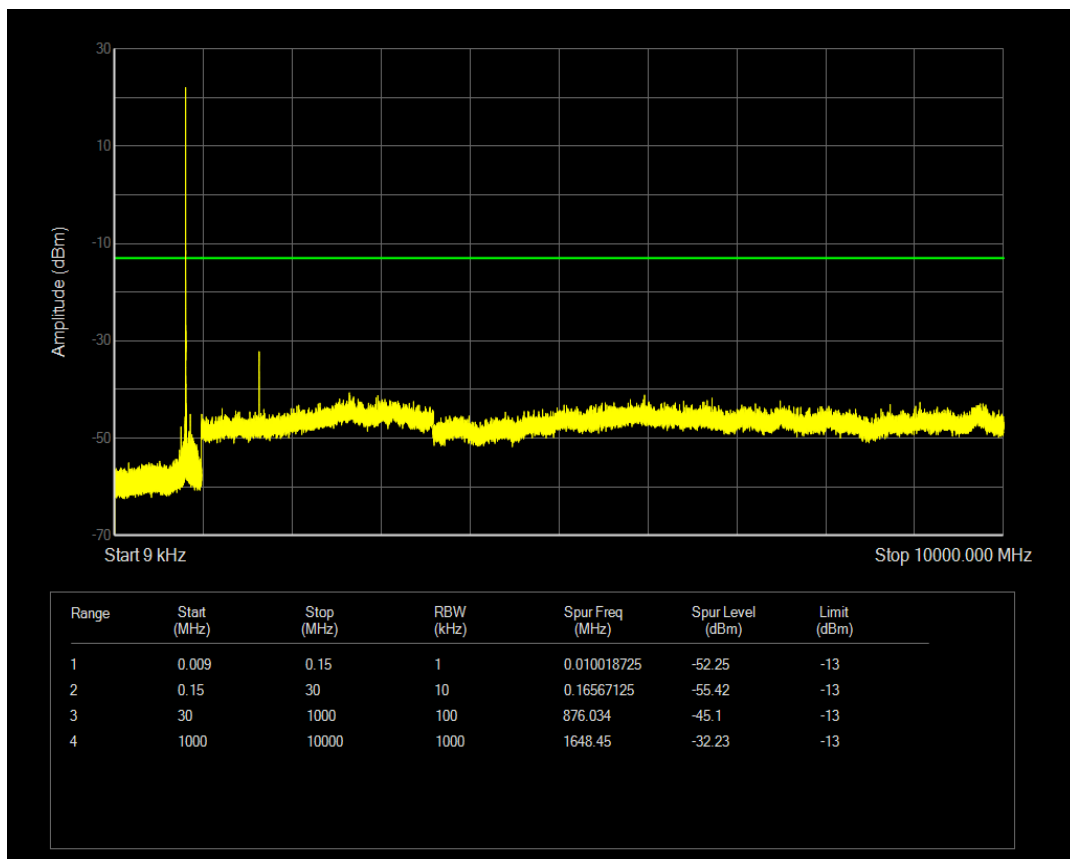
Band5 QPSK Channel=20649 nTones=1@47 Spacing=3.75kHz



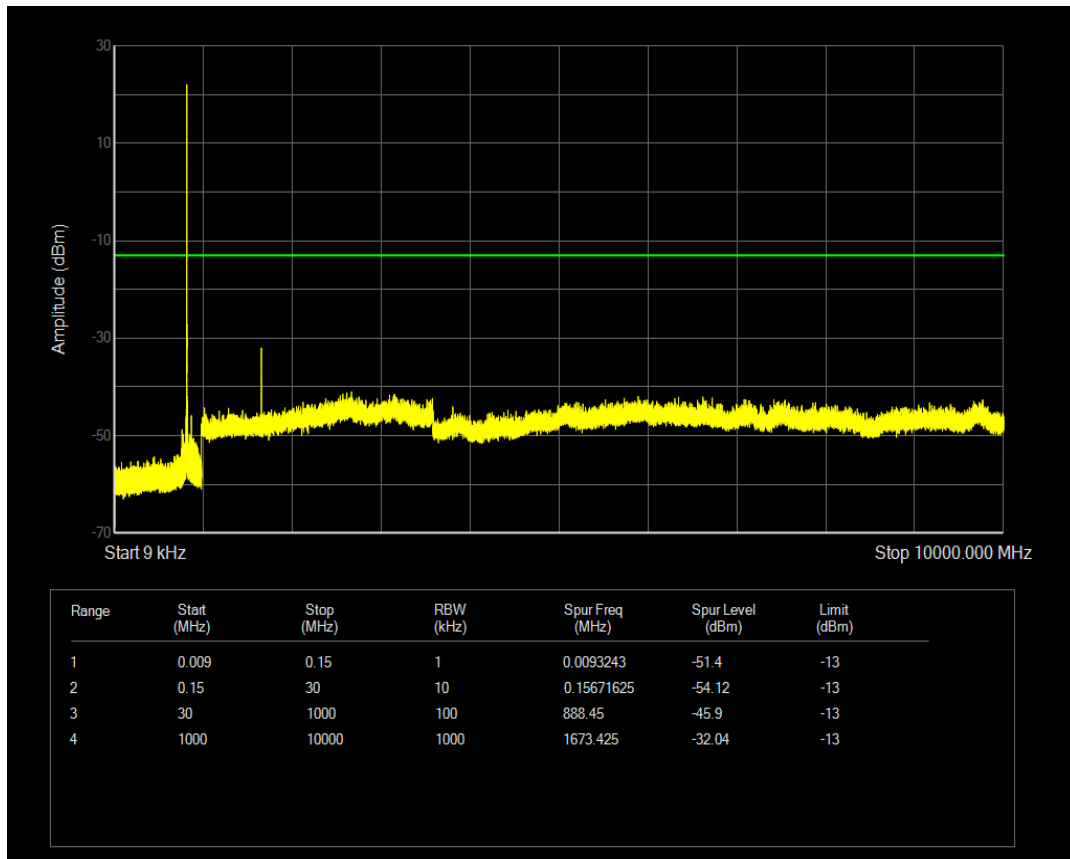
6 Out-of-band emissions

Band	UL Channel	Modulation	nTones	Spacing	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	20401	QPSK	1@0	15kHz	1648.45	-32.23	-13	PASS
Band5	20525	QPSK	1@0	15kHz	1673.43	-32.04	-13	PASS
Band5	20649	QPSK	1@0	15kHz	1698.18	-34.83	-13	PASS
Band5	20401	BPSK	1@0	3.75kHz	1648.68	-32.42	-13	PASS
Band5	20401	QPSK	1@47	3.75kHz	1648.90	-32.58	-13	PASS
Band5	20525	BPSK	1@0	3.75kHz	1673.43	-31.68	-13	PASS
Band5	20525	QPSK	1@47	3.75kHz	1673.88	-32.48	-13	PASS
Band5	20649	BPSK	1@0	3.75kHz	1698.40	-36.66	-13	PASS
Band5	20649	QPSK	1@47	3.75kHz	1698.63	-36.68	-13	PASS

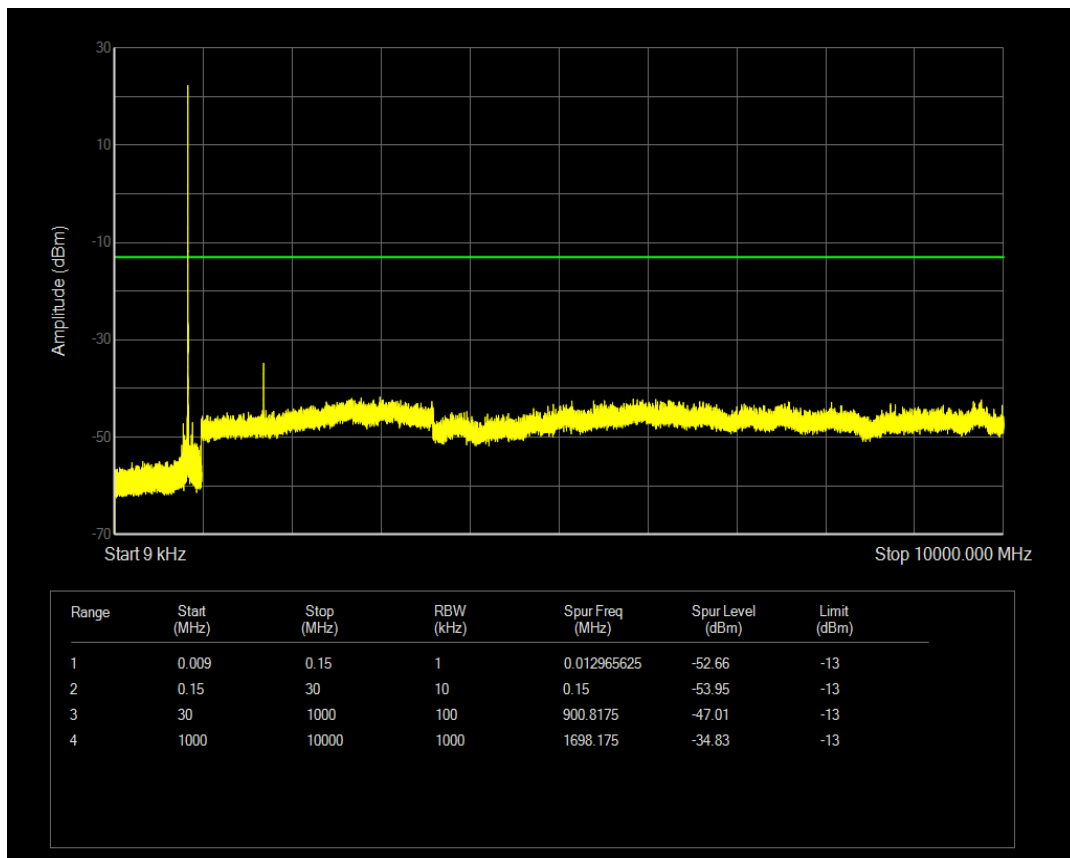
Band5 QPSK Channel=20401 nTones=1@0 Spacing=15kHz



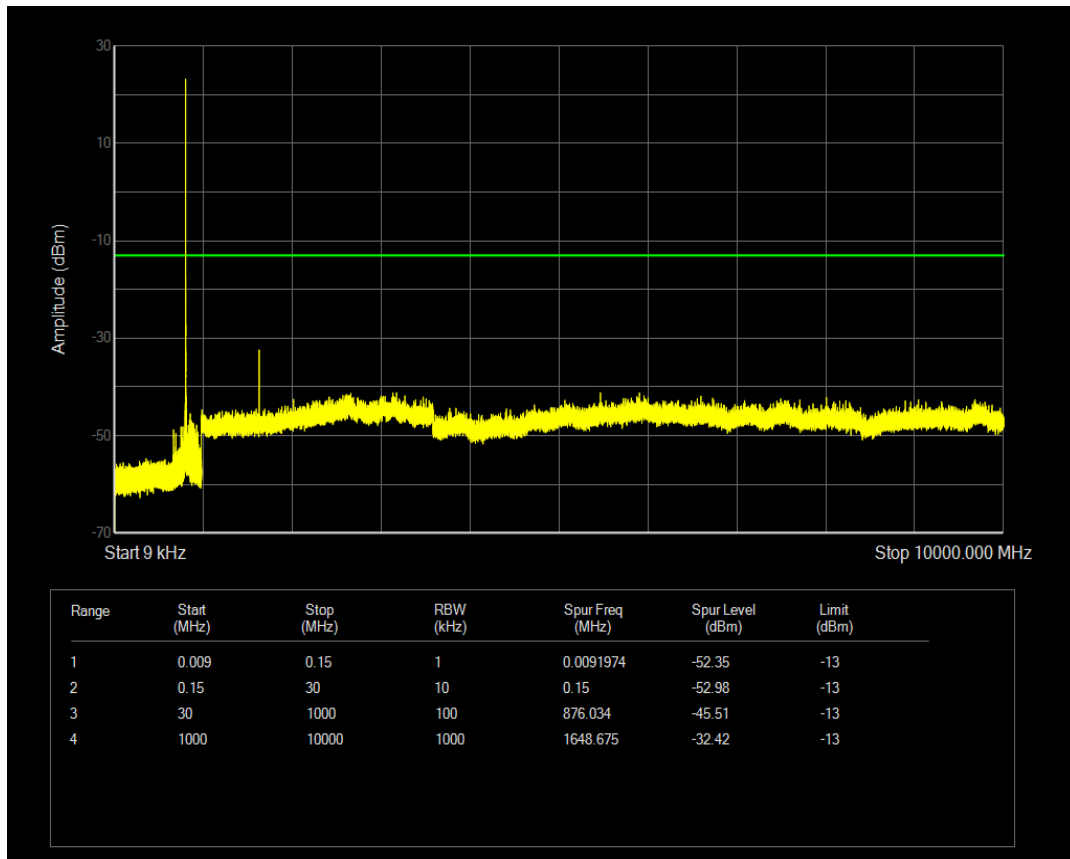
Band5 QPSK Channel=20525 nTones=1@0 Spacing=15kHz



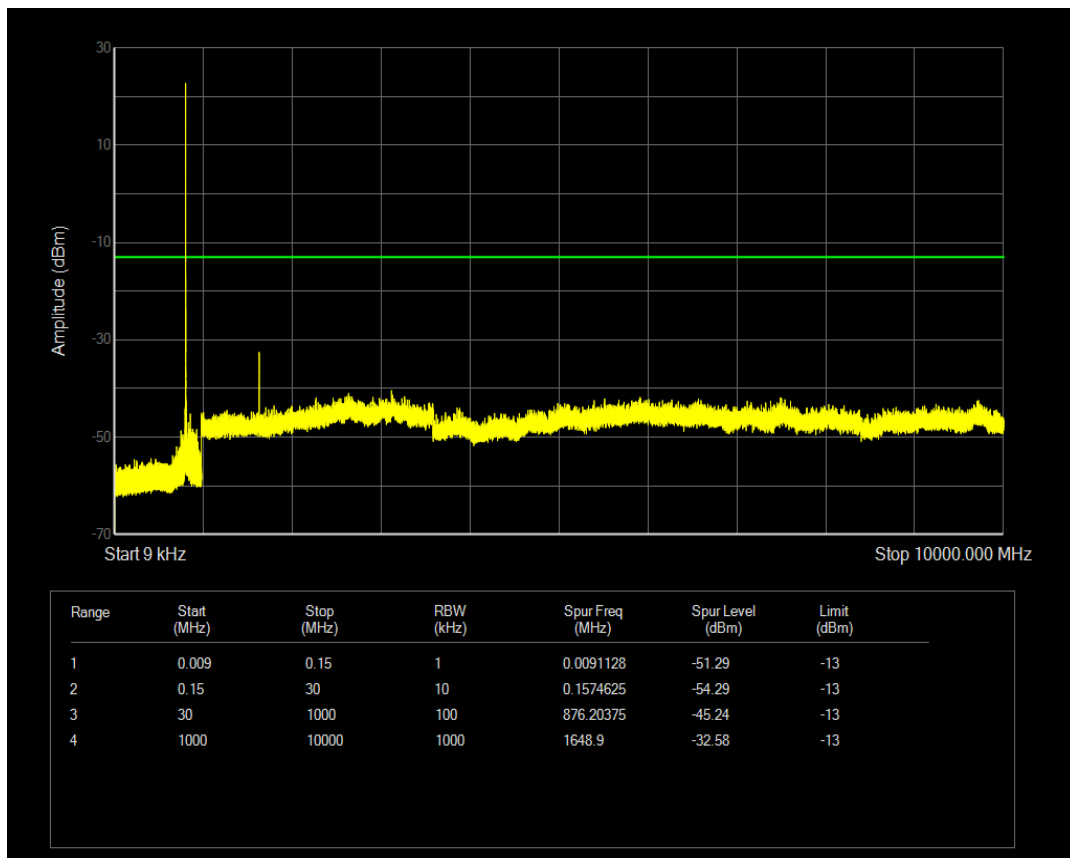
Band5 QPSK Channel=20649 nTones=1@0 Spacing=15kHz



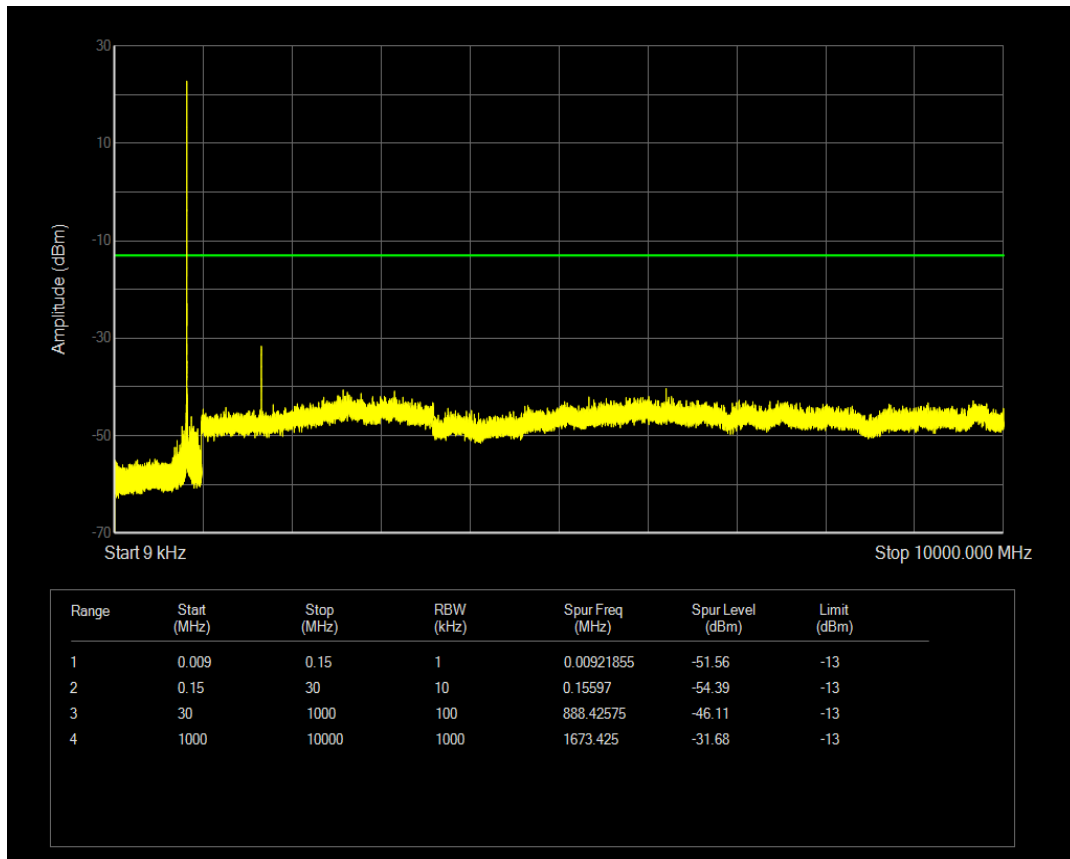
Band5 BPSK Channel=20401 nTones=1@0 Spacing=3.75kHz



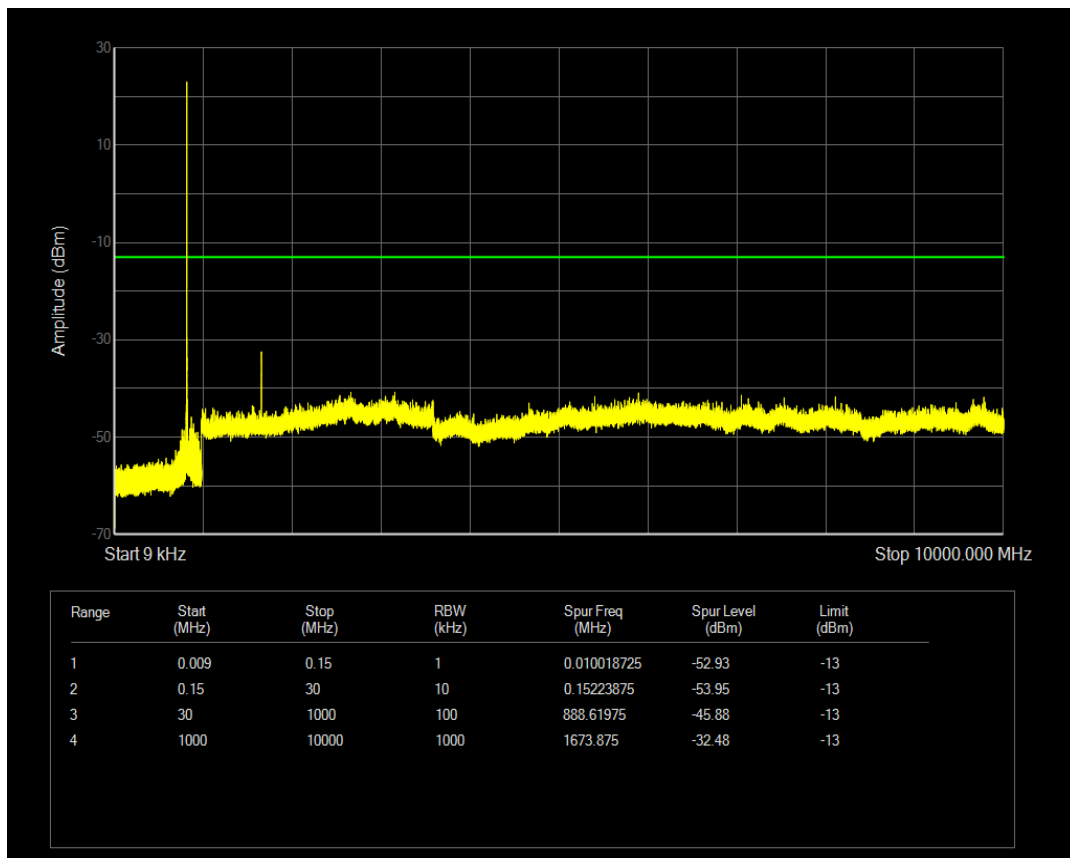
Band5 QPSK Channel=20401 nTones=1@47 Spacing=3.75kHz



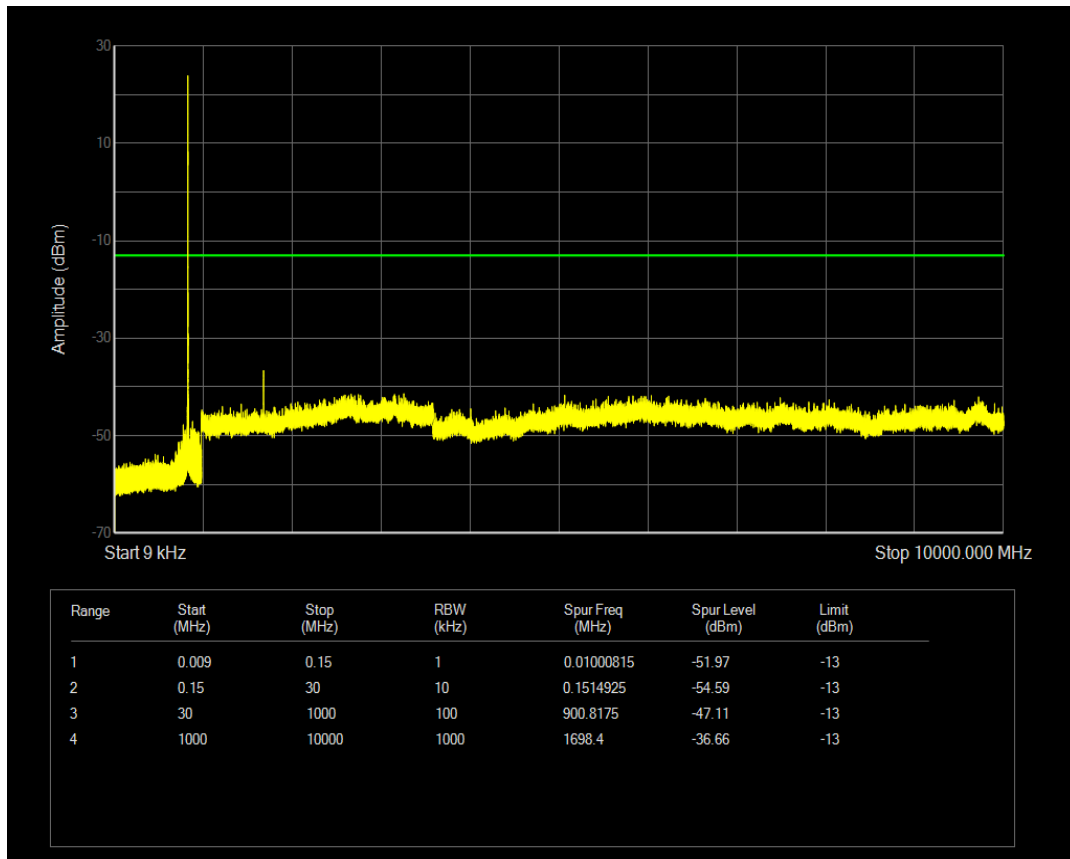
Band5 BPSK Channel=20525 nTones=1@0 Spacing=3.75kHz



Band5 QPSK Channel=20525 nTones=1@47 Spacing=3.75kHz



Band5 BPSK Channel=20649 nTones=1@0 Spacing=3.75kHz



Band5 QPSK Channel=20649 nTones=1@47 Spacing=3.75kHz

