

FCC LTE NB-IOT Band17 Test Data

General Description of EUT	
Product Name:	AirSuite Sense LTE
Test Model:	SSCM860
Sample ID:	202303-0011-01-02#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202303-0011-101 . The report only show the worst case data.	

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1: Conducted Power Output Data for NB1

1.1 Test Result

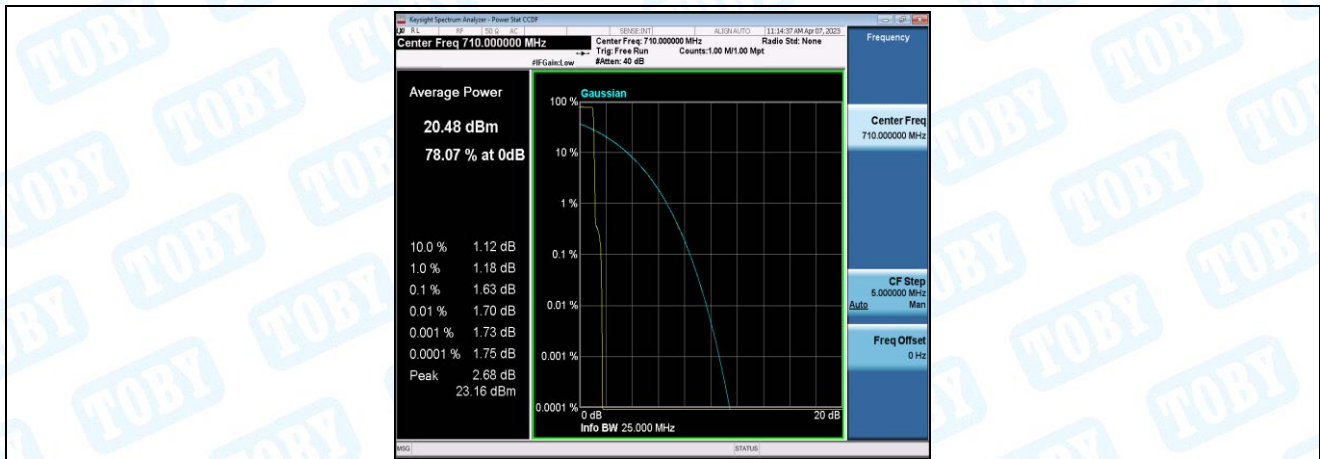
Band	OpMode	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band17	Stand-Alone	3.75kHz	BPSK	23749	1@0	23.61	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23749	1@47	23.69	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23790	1@0	23.66	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23790	1@47	23.60	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23831	1@0	23.56	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23831	1@47	23.51	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	23.64	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	23.62	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	23.67	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	23.61	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@0	23.48	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	23.52	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	23.67	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	23.69	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	3@3	23.61	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	23.78	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	23.77	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	3@3	23.53	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	23.49	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	23.47	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	3@3	23.54	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	1@0	22.90	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	1@11	23.69	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	3@3	23.54	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	23.59	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	23.71	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	3@3	23.52	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	1@0	23.51	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	1@11	23.51	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	3@3	23.44	PASS

2: Peak-to-Average Ratio(CCDF) for NB1

2.1 Test Result

Band	OpMode	BW	Modu	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band17	Stand-Alone	3.75kHz	BPSK	23790	1@0	1.63	<=13	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23790	1@47	1.89	<=13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	2.5	<=13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	3.35	<=13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	3.49	<=13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	3.28	<=13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	3@3	11.43	<=13	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	2.78	<=13	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	7.89	<=13	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	3@3	11.76	<=13	PASS

2.2 Test Graphs



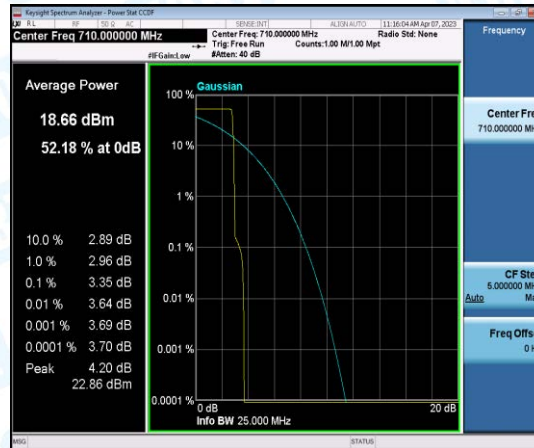
Band17-Stand-Alone-NaN-BPSK-23790-1@0-3.75kHz-1.63-<=13-PASS



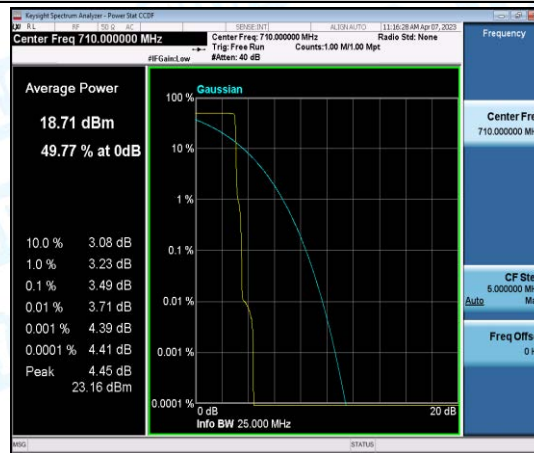
Band17-Stand-Alone-NaN-BPSK-23790-1@47-3.75kHz-1.89-<=13-PASS



Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-2.5-<=13-PASS



Band17-Stand-Alone-NaN-QPSK-23790-1@47-3.75kHz-3.35-<=13-PASS



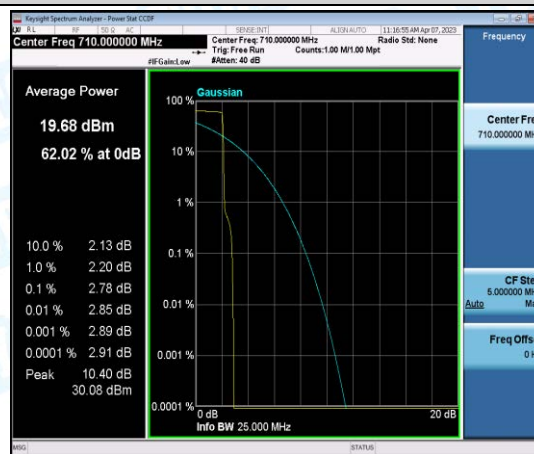
Band17-Stand-Alone-NaN-BPSK-23790-1@0-15kHz-3.49-<=13-PASS



Band17-Stand-Alone-NaN-BPSK-23790-1@11-15kHz-3.28-<=13-PASS



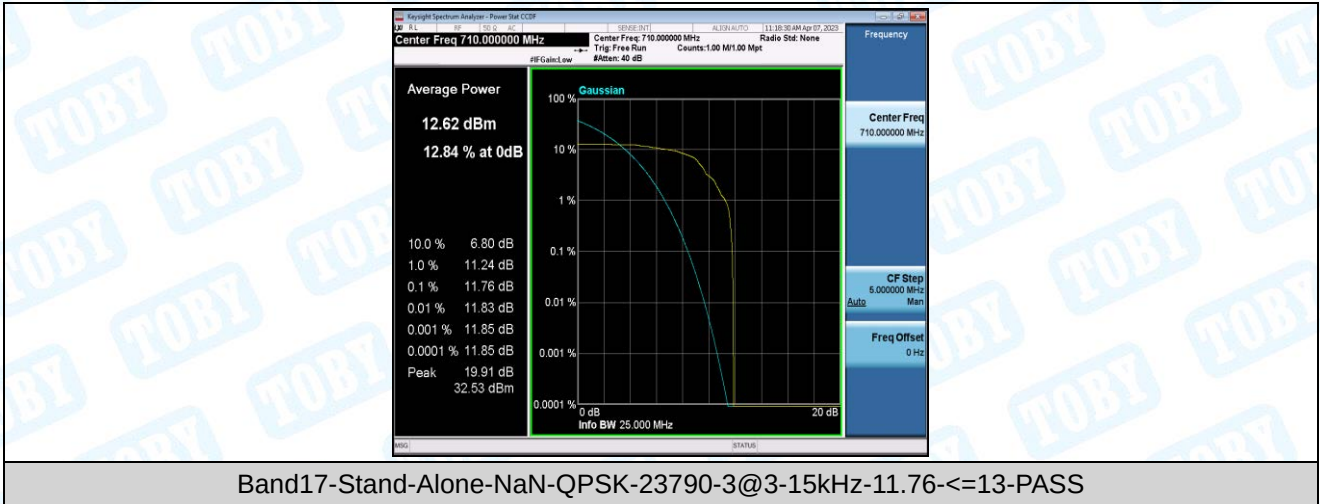
Band17-Stand-Alone-NaNBPSK-23790-3@3-15kHz-11.43-<=13-PASS



Band17-Stand-Alone-NaNBPSK-23790-1@0-15kHz-2.78-<=13-PASS



Band17-Stand-Alone-NaNBPSK-23790-1@11-15kHz-7.89-<=13-PASS



3: Emission Bandwidth for NB1

3.1 Test Result

Band	OpMode	BW	Modu	Channel	Tones	Occupied Bandwidth (MHz)	Result (MHz)	Verdict
Band17	Stand-Alone	3.75kHz	BPSK	23749	1@0	0.0714	0.0500	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23790	1@0	0.0717	0.0507	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23831	1@0	0.0721	0.0508	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	0.0879	0.0536	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	0.0881	0.0543	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@0	0.0811	0.0534	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	0.1342	0.1299	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	12@0	0.1895	0.2834	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	0.1354	0.1249	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	12@0	0.1857	0.2791	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	0.1337	0.1243	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	12@0	0.1851	0.2701	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	1@0	0.1412	0.1452	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	0.1852	0.2862	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	0.1442	0.1450	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	12@0	0.1861	0.2844	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	1@0	0.1408	0.1447	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	0.1859	0.2987	PASS

3.2 Test Graphs



Band17-Stand-Alone-NaN-BPSK-23749-1@0-3.75kHz-0.0500-PASS



Band17-Stand-Alone-NaN-BPSK-23790-1@0-3.75kHz-0.0507-PASS



Band17-Stand-Alone-NaN-BPSK-23831-1@0-3.75kHz-0.0508-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz-0.0536-PASS



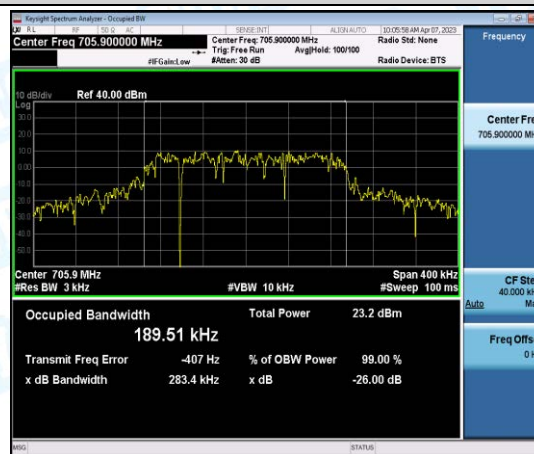
Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-0.0543-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz-0.0534-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz-0.1299-PASS



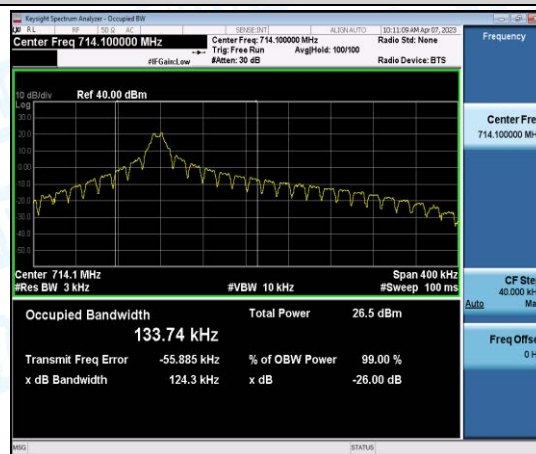
Band17-Stand-Alone-NaN-BPSK-23749-12@0-15kHz-0.2834-PASS



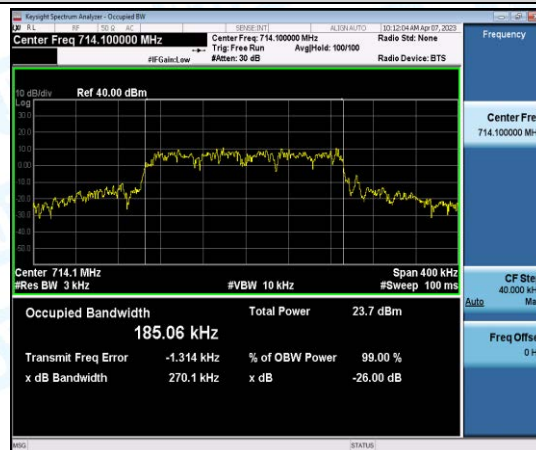
Band17-Stand-Alone-NaN-BPSK-23790-1@0-15kHz-0.1249-PASS



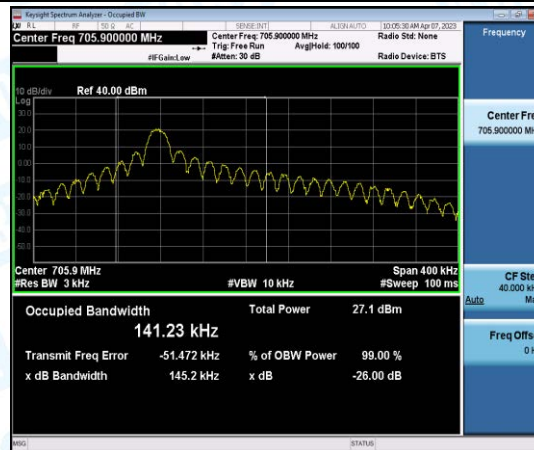
Band17-Stand-Alone-NaN-BPSK-23790-12@0-15kHz-0.2791-PASS



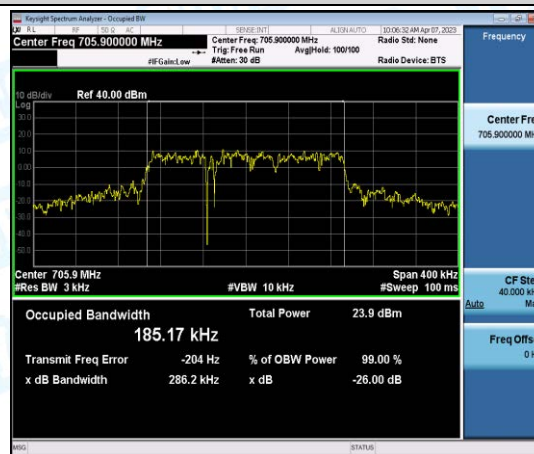
Band17-Stand-Alone-NaN-BPSK-23831-1@0-15kHz-0.1243-PASS



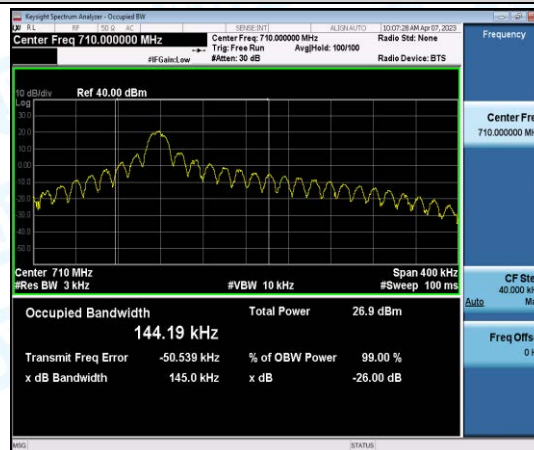
Band17-Stand-Alone-NaN-BPSK-23831-12@0-15kHz-0.2701-PASS



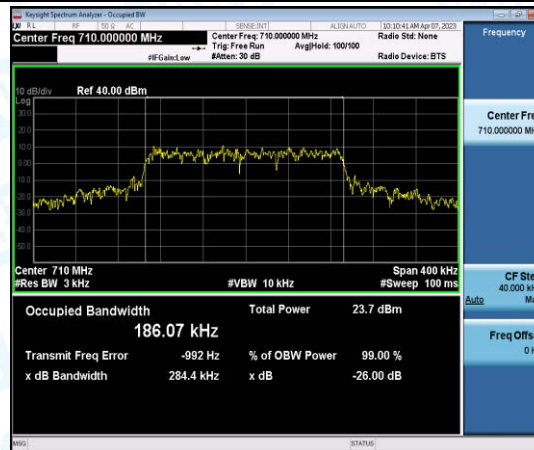
Band17-Stand-Alone-NaN-QPSK-23749-1@0-15kHz-0.1452-PASS



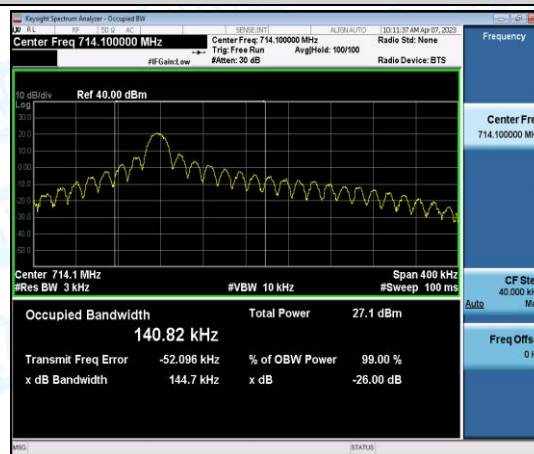
Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz-0.2862-PASS



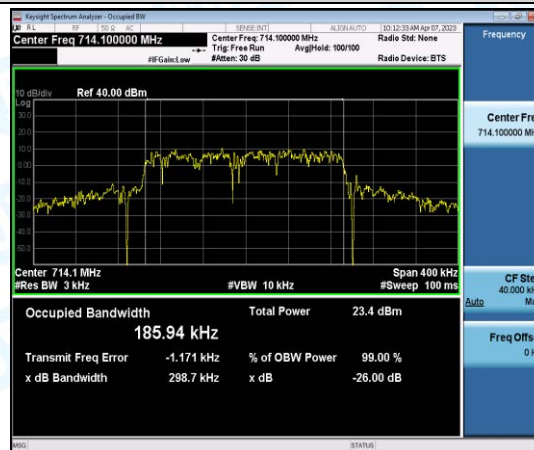
Band17-Stand-Alone-NaN-QPSK-23790-1@0-15kHz-0.1450-PASS



Band17-Stand-Alone-NaN-QPSK-23790-12@0-15kHz-0.2844-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-15kHz-0.1447-PASS



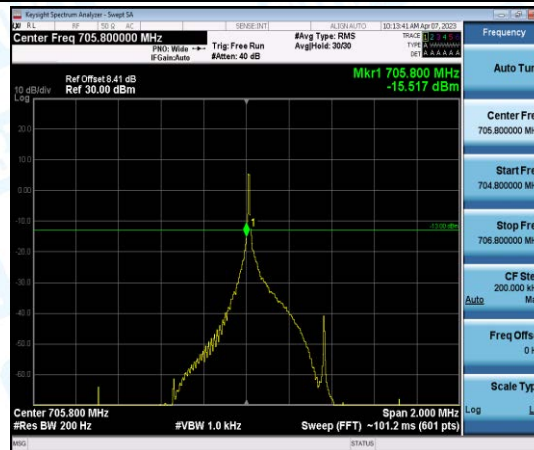
Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz-0.2987-PASS

4: Band Edge for NB1

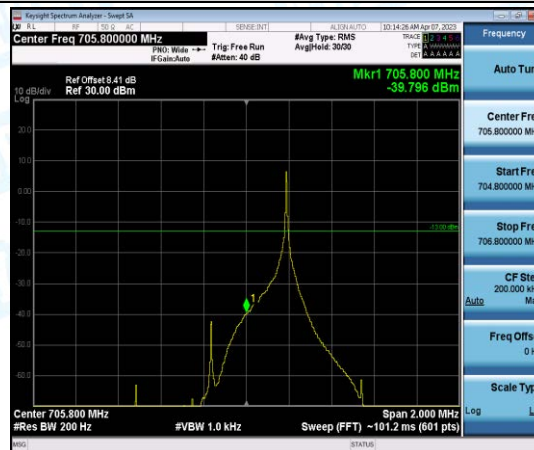
4.1 Test Result

Band	OpMode	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band17	Stand-Alone	3.75kHz	BPSK	23749	1@0	-15.52	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23749	1@47	-39.80	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23831	1@0	-40.15	PASS
Band17	Stand-Alone	3.75kHz	BPSK	23831	1@47	-15.74	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	-16.22	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	-39.43	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@0	-40.31	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	-16.05	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	-13.62	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	-34.92	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	12@0	-38.63	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	-33.83	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	-13.83	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	12@0	-36.87	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	1@0	-15.11	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	1@11	-33.17	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	-37.23	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	1@0	-34.93	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	1@11	-15.50	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	-35.68	PASS

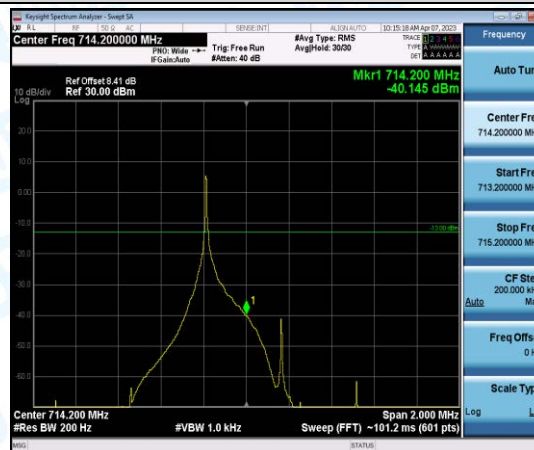
4.2 Test Graphs



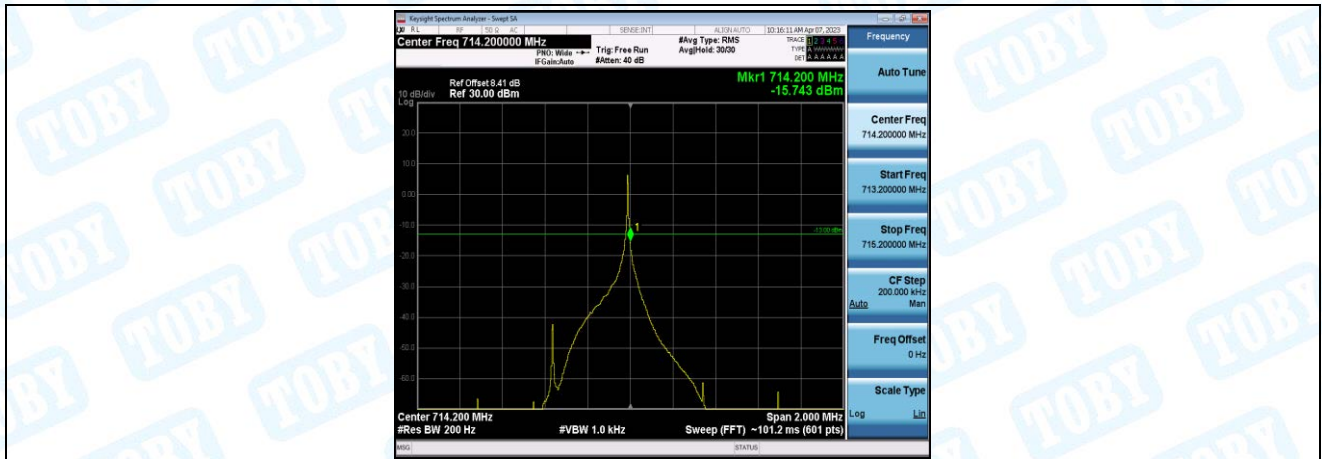
Band17-Stand-Alone-NaN-BPSK-23749-1@0-3.75kHz--15.52-PASS



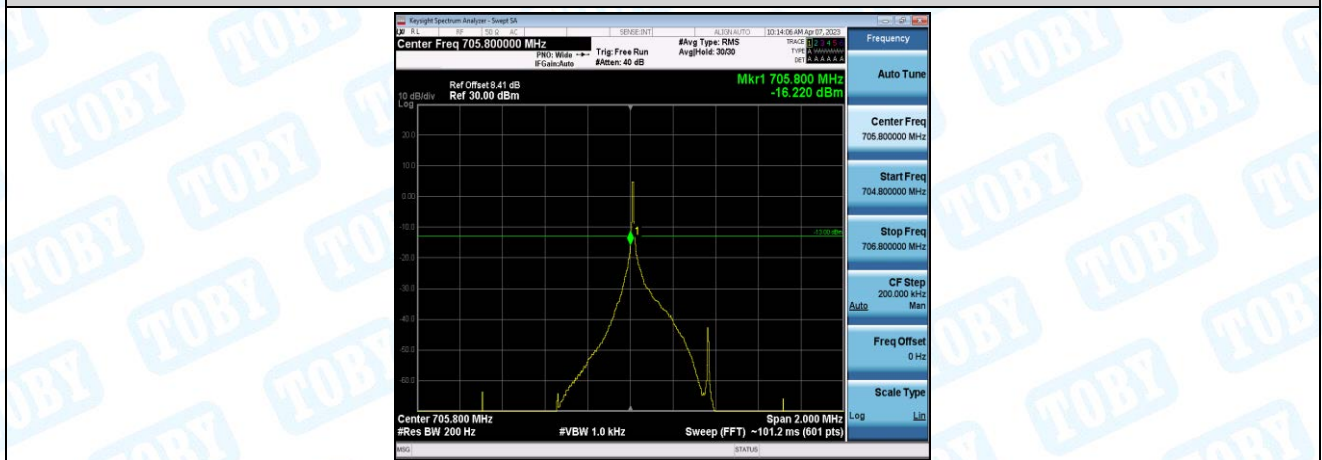
Band17-Stand-Alone-NaN-BPSK-23749-1@47-3.75kHz--39.80-PASS



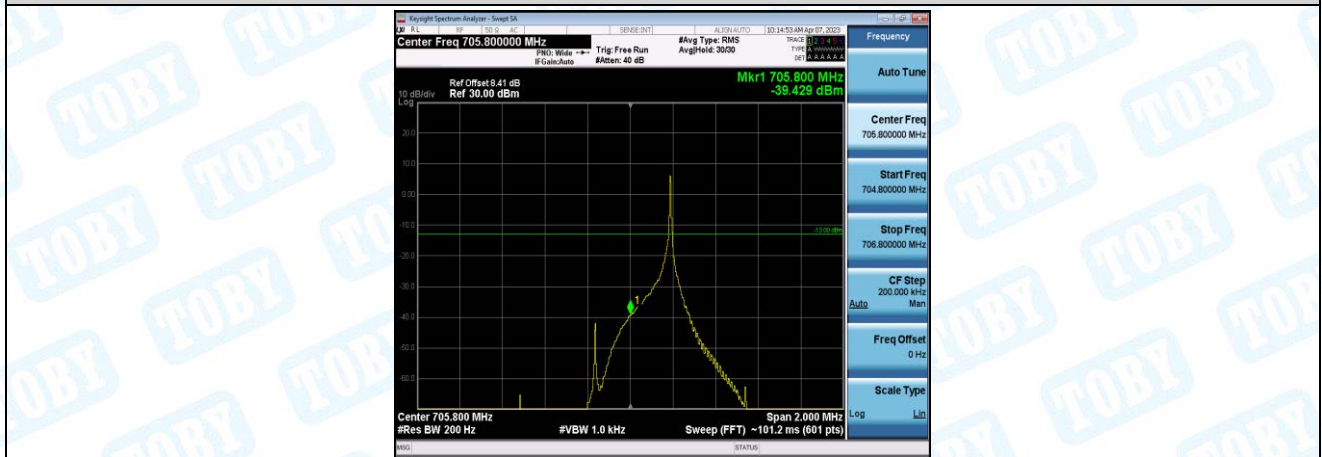
Band17-Stand-Alone-NaN-BPSK-23831-1@0-3.75kHz--40.15-PASS



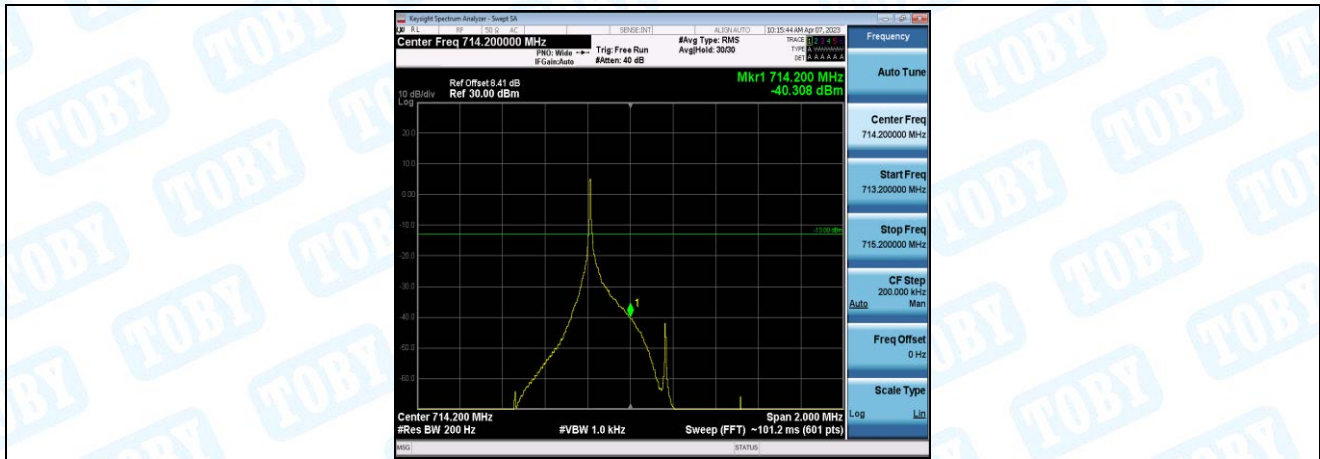
Band17-Stand-Alone-NaN-BPSK-23831-1@47-3.75kHz--15.74-PASS



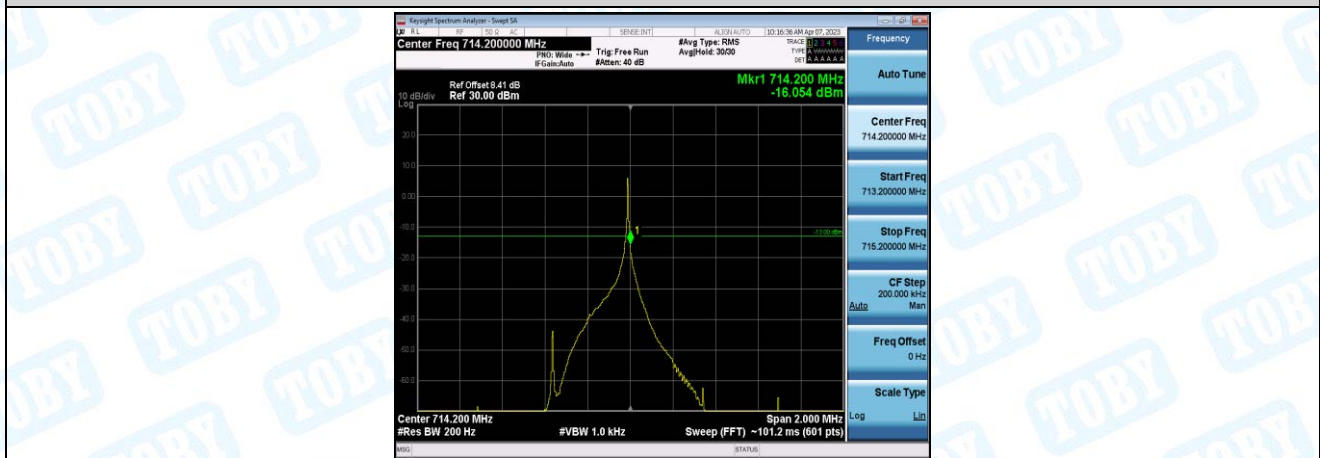
Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz--16.22-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@47-3.75kHz--39.43-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz--40.31-PASS



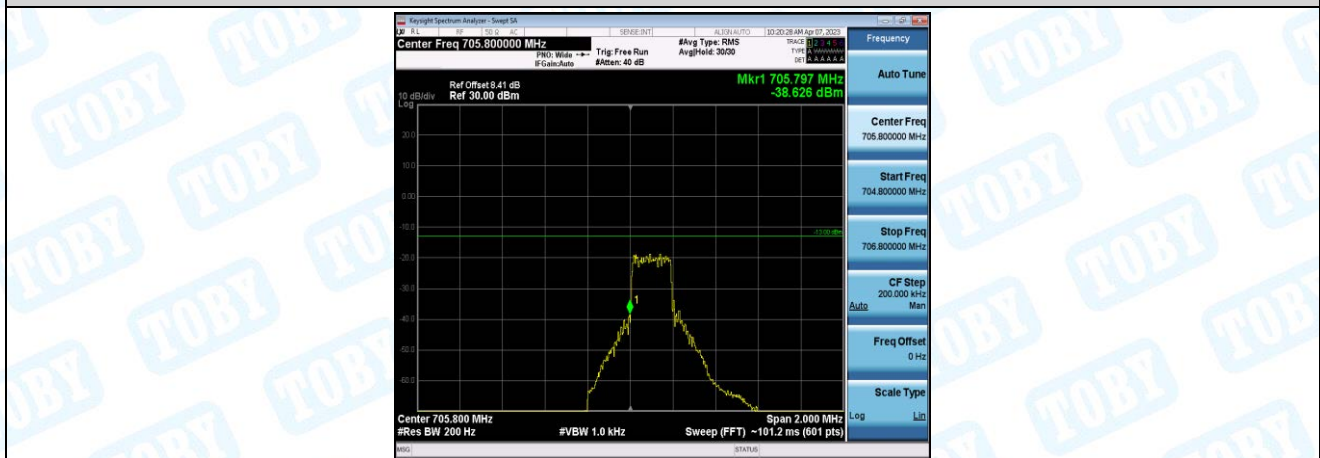
Band17-Stand-Alone-NaN-QPSK-23831-1@47-3.75kHz--16.05-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz--13.62-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@11-15kHz--34.92-PASS



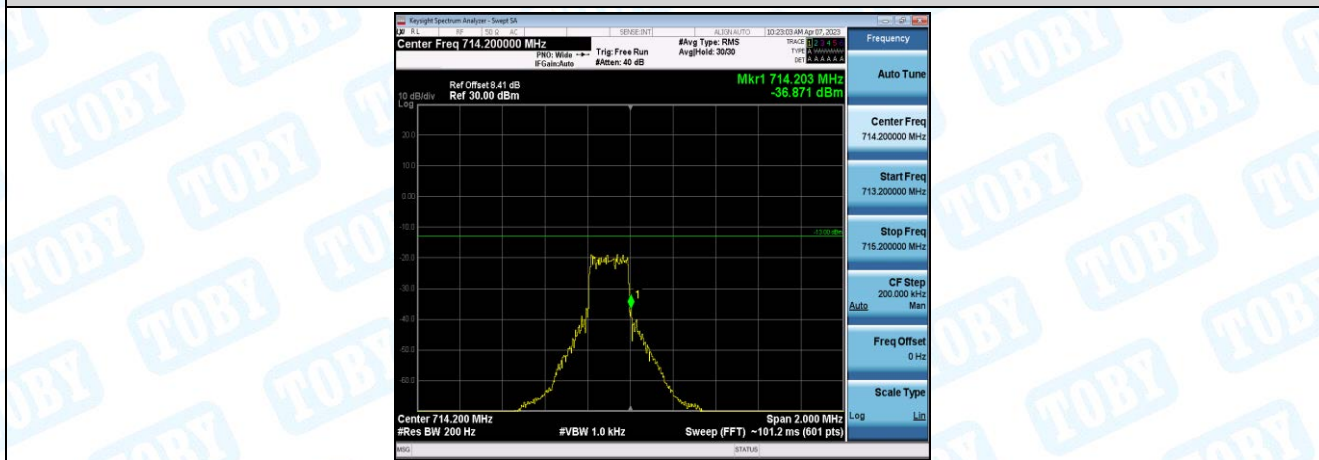
Band17-Stand-Alone-NaN-BPSK-23749-12@0-15kHz--38.63-PASS



Band17-Stand-Alone-NaN-BPSK-23831-1@0-15kHz--33.83-PASS



Band17-Stand-Alone-NaN-BPSK-23831-1@11-15kHz--13.83-PASS



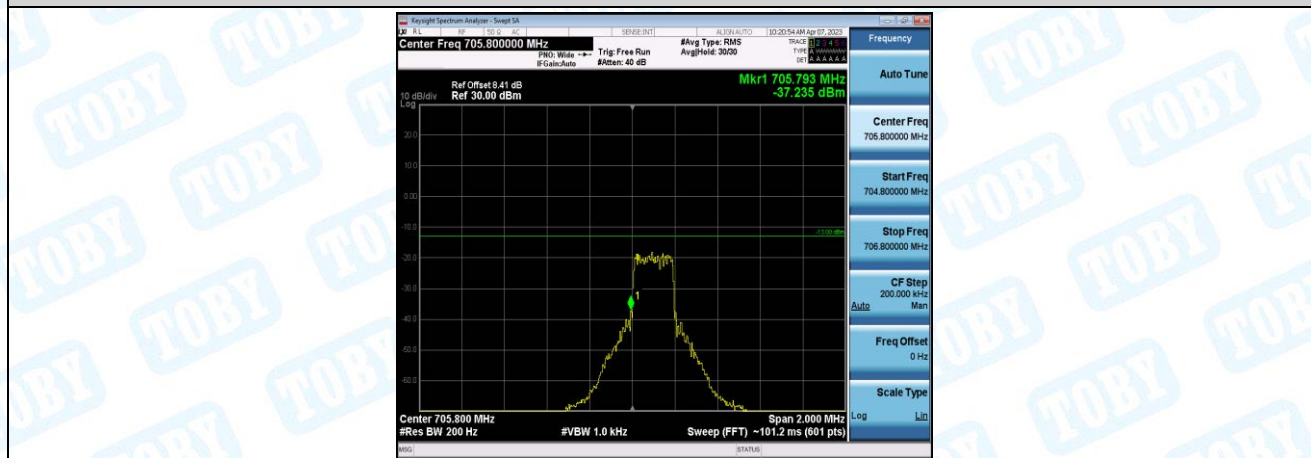
Band17-Stand-Alone-NaN-BPSK-23831-12@0-15kHz--36.87-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@0-15kHz--15.11-PASS



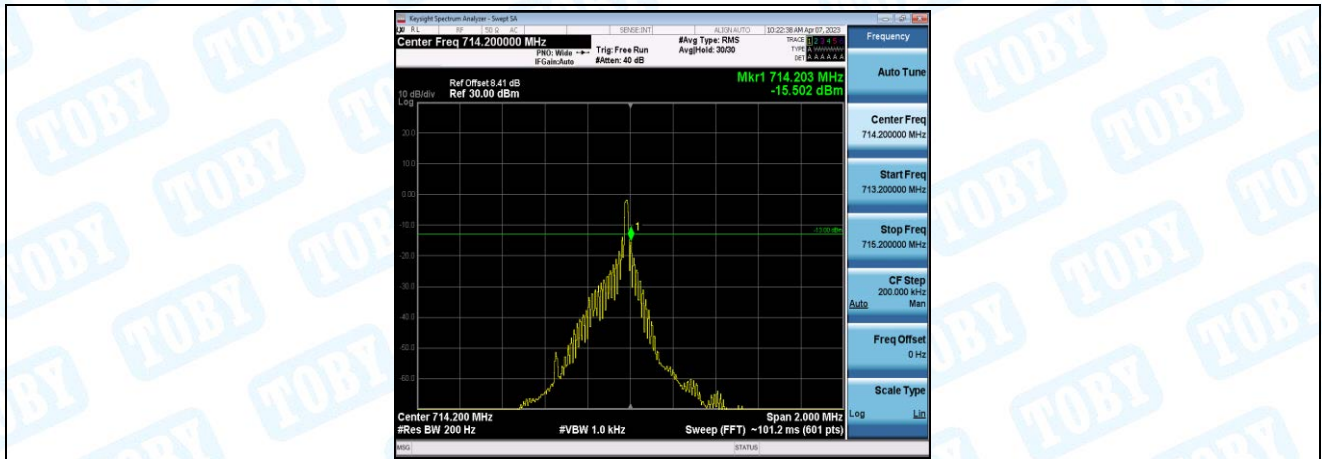
Band17-Stand-Alone-NaN-QPSK-23749-1@11-15kHz--33.17-PASS



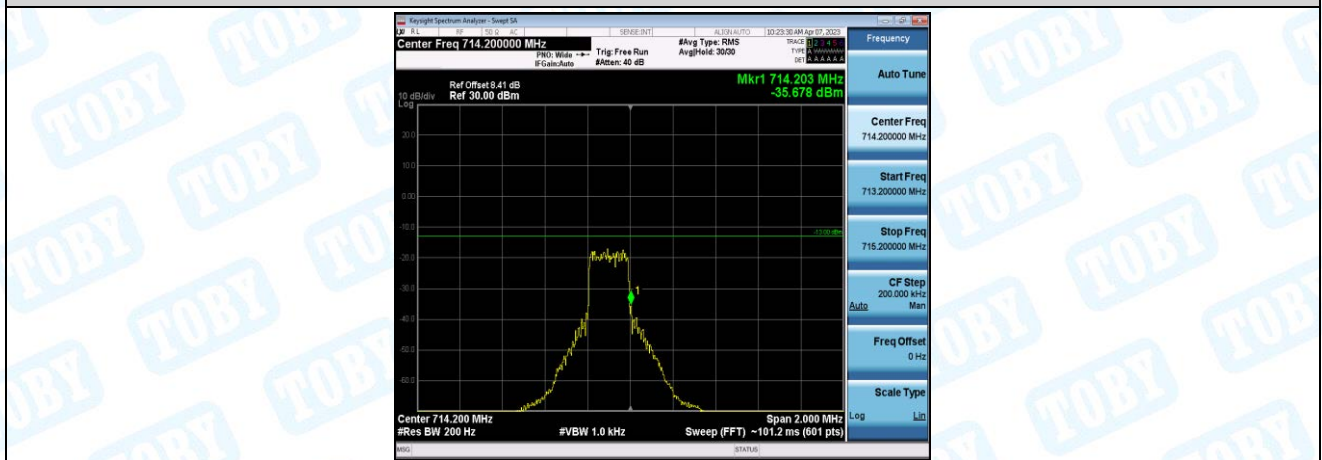
Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz--37.23-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-15kHz--34.93-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@11-15kHz--15.50-PASS



Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz--35.68-PASS

5: Conducted Spurious Emission for NB1

5.1 Test Result

Band	OpMode	BW	Modu	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Result (dBm)	Limit (dBm)	Verdict
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	0.009	0.15	0.009~0.15MHz @-64.99dBm	-33	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	0.15	30	0.15~30MHz @-66.89dBm	-23	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	30	1000	30~1000MHz @-59.56dBm	-13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@0	1000	10000	1000~10000MHz @-47.82dBm	-13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	0.009	0.15	0.009~0.15MHz @-62.12dBm	-33	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	0.15	30	0.15~30MHz @-69.6dBm	-23	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	30	1000	30~1000MHz @-59.48dBm	-13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23749	1@47	1000	10000	1000~10000MHz @-47.6dBm	-13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	0.009	0.15	0.009~0.15MHz @-63.96dBm	-33	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	0.15	30	0.15~30MHz	-23	PASS

								@-66.9 4dBm		
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@0	30	1000	30~100 0MHz @-59.7 5dBm	-13	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@0	1000	1000 0	1000~1 0000M Hz@-4 7.63dB m	-13	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@47	0.009	0.15	0.009~ 0.15MH z@-64. 06dBm	-33	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@47	0.15	30	0.15~3 0MHz @-67.8 dBm	-23	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@47	30	1000	30~100 0MHz @-59.4 8dBm	-13	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23790	1@47	1000	1000 0	1000~1 0000M Hz@-4 7.73dB m	-13	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23831	1@0	0.009	0.15	0.009~ 0.15MH z@-61. 84dBm	-33	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23831	1@0	0.15	30	0.15~3 0MHz @-68.4 2dBm	-23	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23831	1@0	30	1000	30~100 0MHz @-59.2 1dBm	-13	PASS
Band17	Stand-Alo ne	3.75kHz	QPSK	23831	1@0	1000	1000 0	1000~1 0000M Hz@-4 7.52dB m	-13	PASS

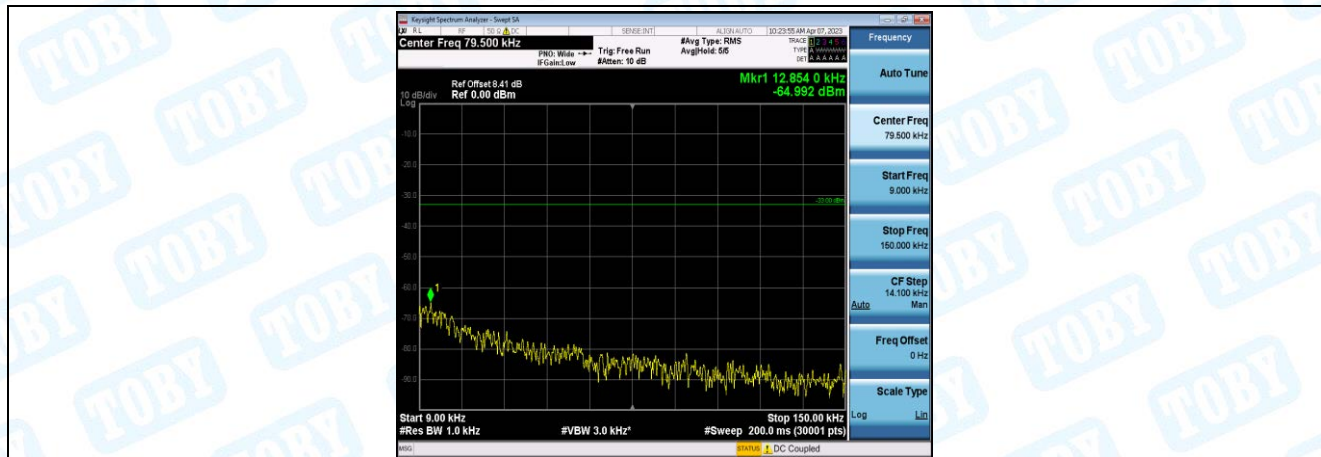
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	0.009	0.15	0.009~0.15MHz@-62.79dBm	-33	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	0.15	30	0.15~30MHz@-66.7dBm	-23	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	30	1000	30~1000MHz@-59.52dBm	-13	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23831	1@47	1000	10000	1000~10000MHz@-47.34dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	0.009	0.15	0.009~0.15MHz@-64.08dBm	-33	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	0.15	30	0.15~30MHz@-66.69dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	30	1000	30~1000MHz@-59.25dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@0	1000	10000	1000~10000MHz@-47.74dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	0.009	0.15	0.009~0.15MHz@-62.41dBm	-33	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	0.15	30	0.15~30MHz@-66.04dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	30	1000	30~1000MHz@-59.6	-13	PASS

								dBm		
Band17	Stand-Alone	15kHz	BPSK	23749	1@11	1000	10000	1000~10000MHz@-47.37dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	0.009	0.15	0.009~0.15MHz@-61.16dBm	-33	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	0.15	30	0.15~30MHz@-65.16dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	30	1000	30~1000MHz@-59.26dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@0	1000	10000	1000~10000MHz@-47.84dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	0.009	0.15	0.009~0.15MHz@-63.65dBm	-33	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	0.15	30	0.15~30MHz@-67.06dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	30	1000	30~1000MHz@-59.49dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23790	1@11	1000	10000	1000~10000MHz@-47.7dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	0.009	0.15	0.009~0.15MHz@-63.29dBm	-33	PASS

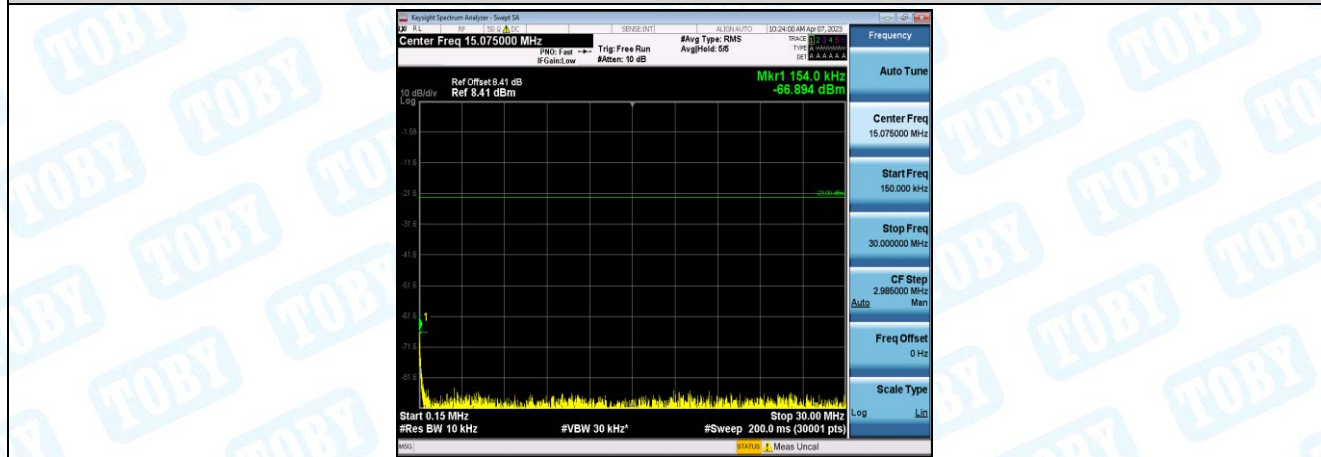
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	0.15	30	0.15~30MHz @-69.89dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	30	1000	30~1000MHz @-58.8dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@0	1000	10000	1000~10000MHz @-47.57dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	0.009	0.15	0.009~0.15MHz @-60.81dBm	-33	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	0.15	30	0.15~30MHz @-65.41dBm	-23	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	30	1000	30~1000MHz @-59.36dBm	-13	PASS
Band17	Stand-Alone	15kHz	BPSK	23831	1@11	1000	10000	1000~10000MHz @-47.69dBm	-13	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	0.009	0.15	0.009~0.15MHz @-63.44dBm	-33	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	0.15	30	0.15~30MHz @-66.49dBm	-23	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	30	1000	30~1000MHz @-58.78dBm	-13	PASS
Band17	Stand-Alone	15kHz	QPSK	23749	12@0	1000	10000	1000~10000MHz @-4	-13	PASS

								7.86dBm		
Band17	Stand-Alone	15kHz	QPSK	23790	12@0	0.009	0.15	0.009~0.15MHz @-63.59dBm	-33	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	12@0	0.15	30	0.15~30MHz @-67.41dBm	-23	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	12@0	30	1000	30~1000MHz @-59.25dBm	-13	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	12@0	1000	10000	1000~10000MHz @-47.55dBm	-13	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	0.009	0.15	0.009~0.15MHz @-62.41dBm	-33	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	0.15	30	0.15~30MHz @-68.67dBm	-23	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	30	1000	30~1000MHz @-58.86dBm	-13	PASS
Band17	Stand-Alone	15kHz	QPSK	23831	12@0	1000	10000	1000~10000MHz @-47.19dBm	-13	PASS

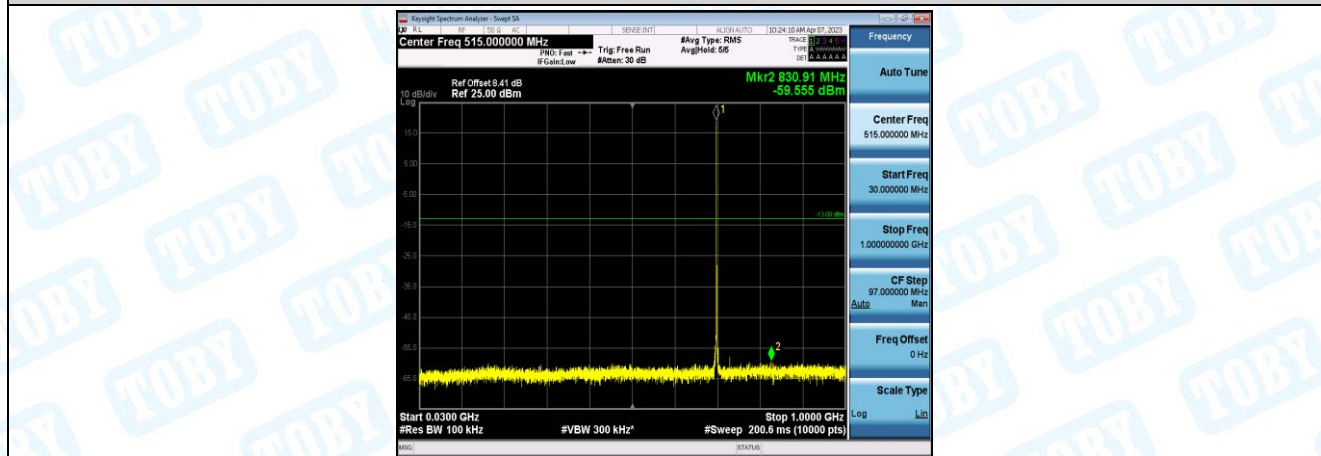
5.2 Test Graphs



Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz-0.009-0.15-0.009~0.15MHz@-64.99dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz-0.15-30-0.15~30MHz@-66.89dBm--23-PASS

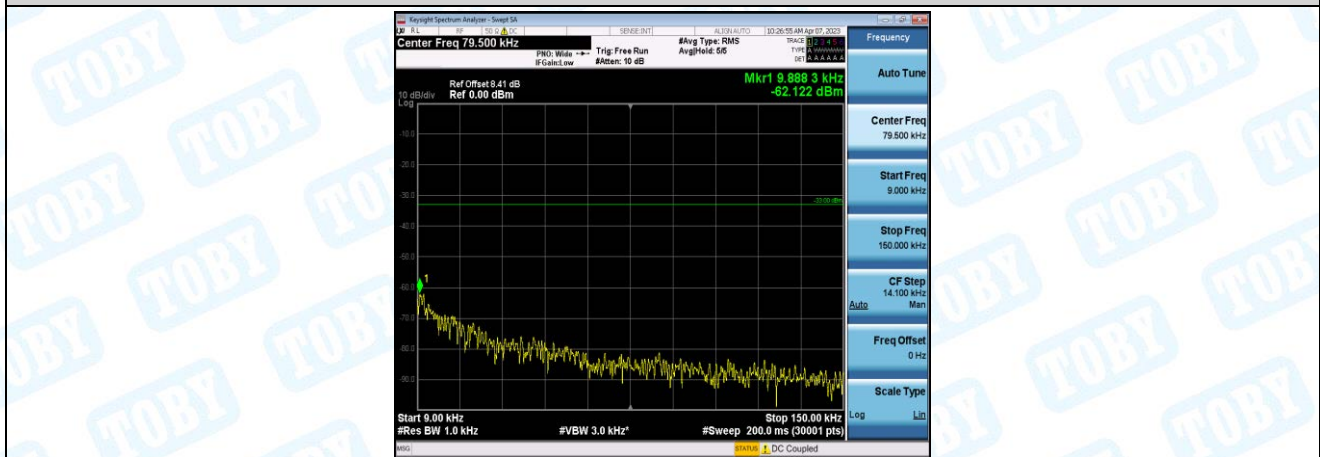


Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz-30-1000-30~1000MHz@-59.56dBm--13-PASS

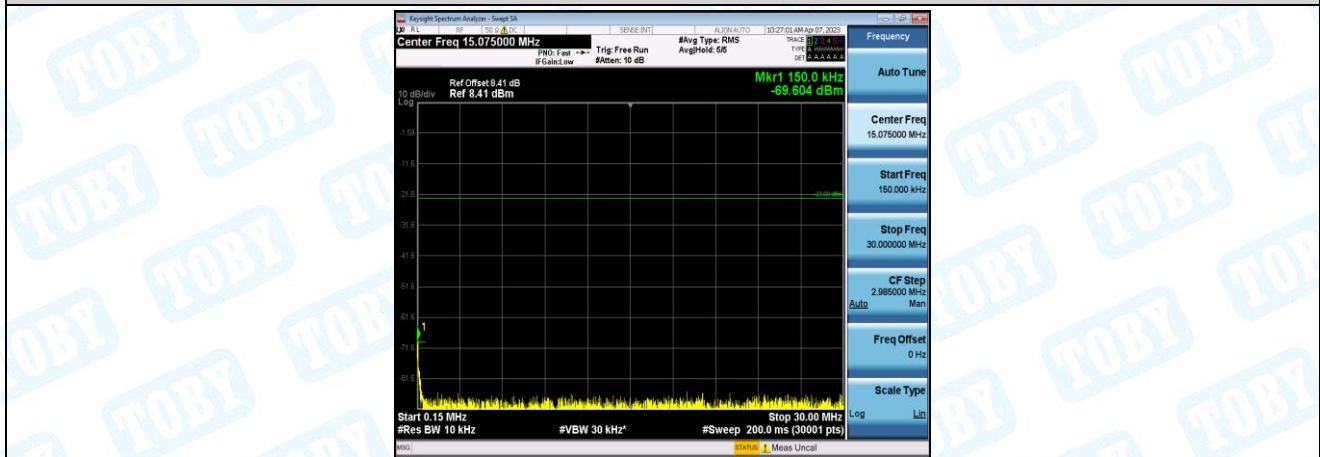


Band17-Stand-Alone-NaN-QPSK-23749-1@0-3.75kHz-1000-10000-1000~10000MHz@-47.82dBm--13-PAS

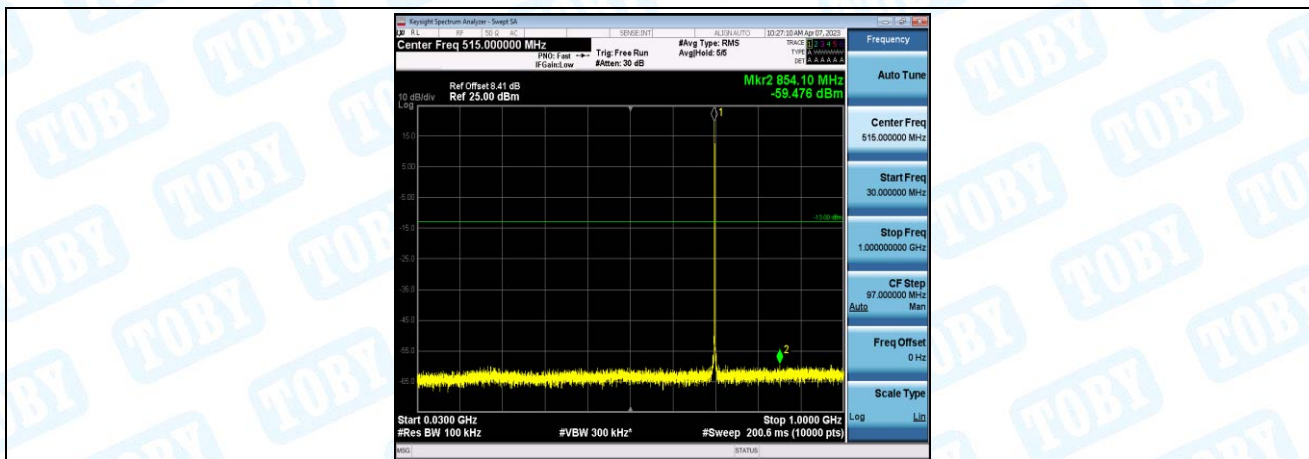
S



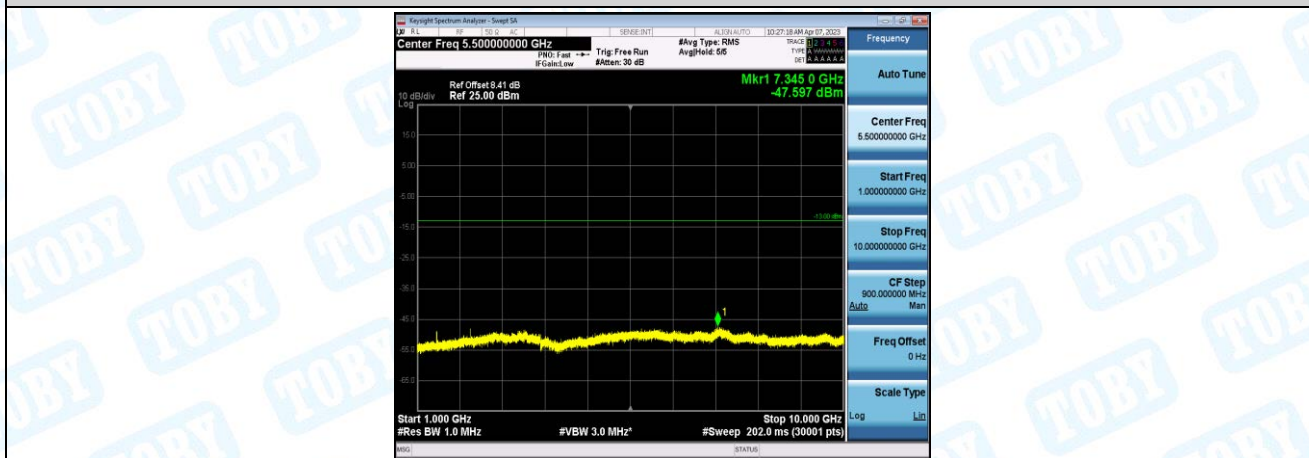
Band17-Stand-Alone-NaN-QPSK-23749-1@47-3.75kHz-0.009-0.15-0.009~0.15MHz@-62.12dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@47-3.75kHz-0.15-30-0.15~30MHz@-69.6dBm--23-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@47-3.75kHz-30-1000-30~1000MHz@-59.48dBm--13-PASS



Band17-Stand-Alone-NaN-QPSK-23749-1@47-3.75kHz-1000-10000-1000~10000MHz@-47.6dBm--13-PAS

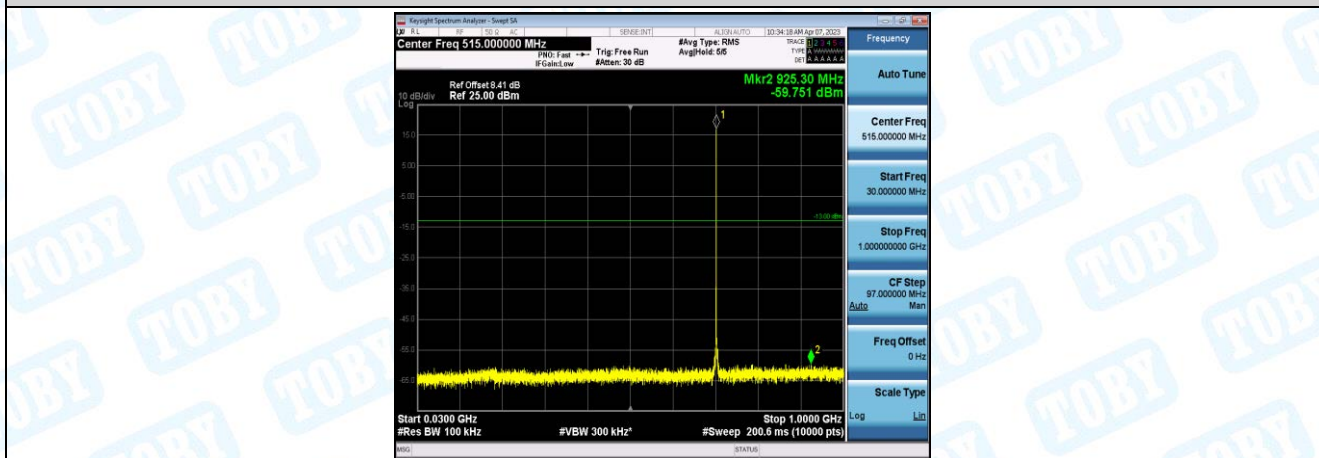
S



Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-0.009-0.15-0.009~0.15MHz@-63.96dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-0.15-30-0.15~30MHz@-66.94dBm--23-PASS

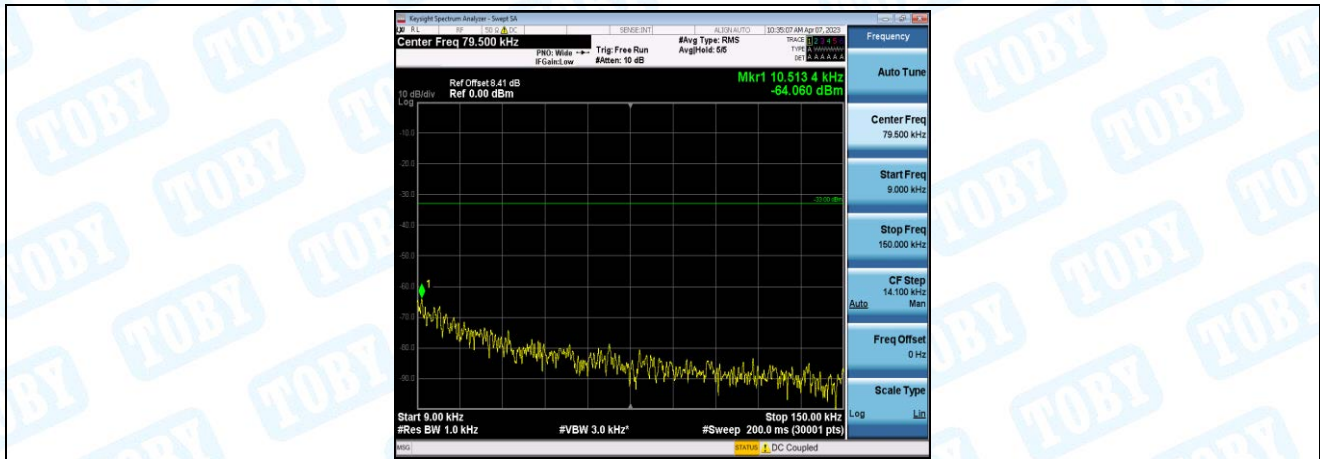


Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-30-1000-30~1000MHz@-59.75dBm--13-PASS

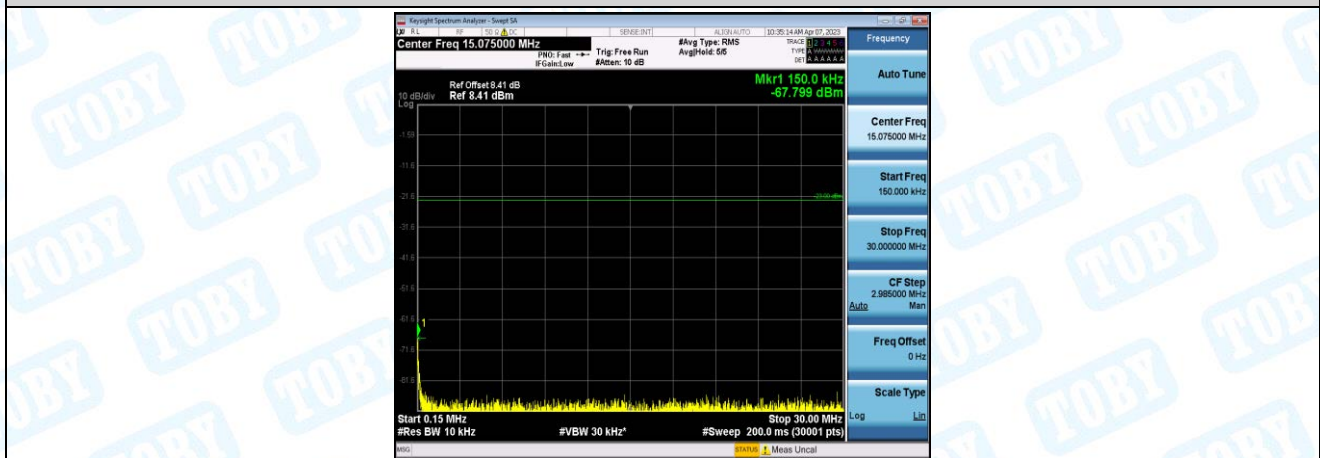


Band17-Stand-Alone-NaN-QPSK-23790-1@0-3.75kHz-1000-10000-1000~10000MHz@-47.63dBm--13-PAS

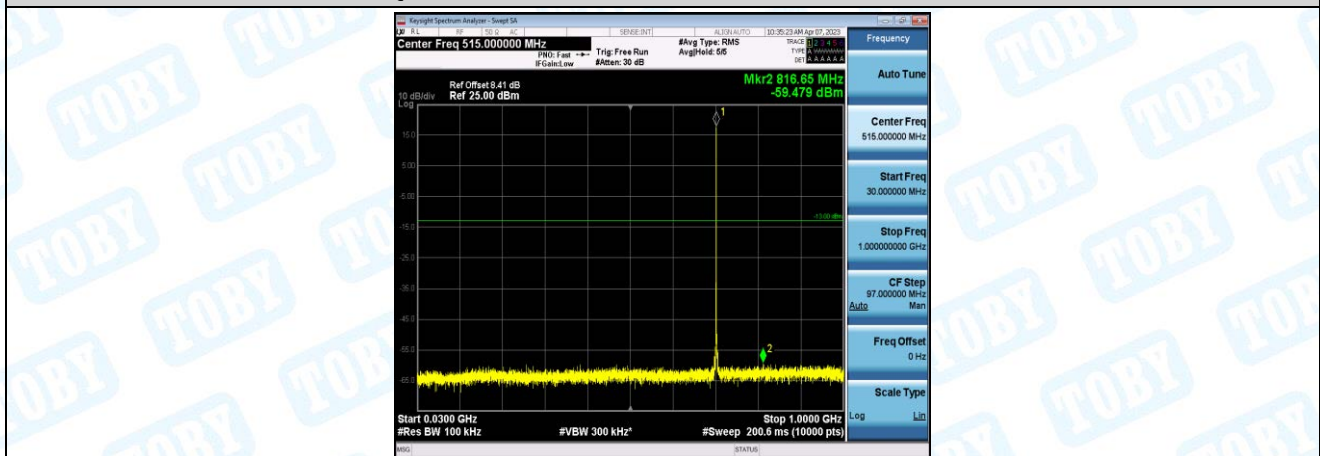
S



Band17-Stand-Alone-NaN-QPSK-23790-1@47-3.75kHz-0.009-0.15-0.009~0.15MHz@-64.06dBm--33-PASS



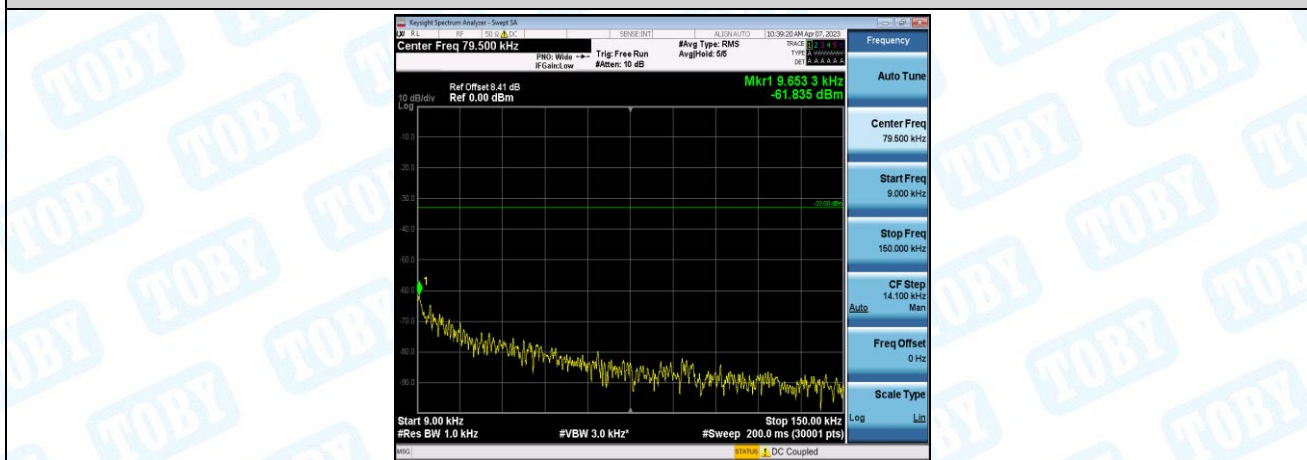
Band17-Stand-Alone-NaN-QPSK-23790-1@47-3.75kHz-0.15-30-0.15~30MHz@-67.8dBm--23-PASS



Band17-Stand-Alone-NaN-QPSK-23790-1@47-3.75kHz-30-1000-30~1000MHz@-59.48dBm--13-PASS



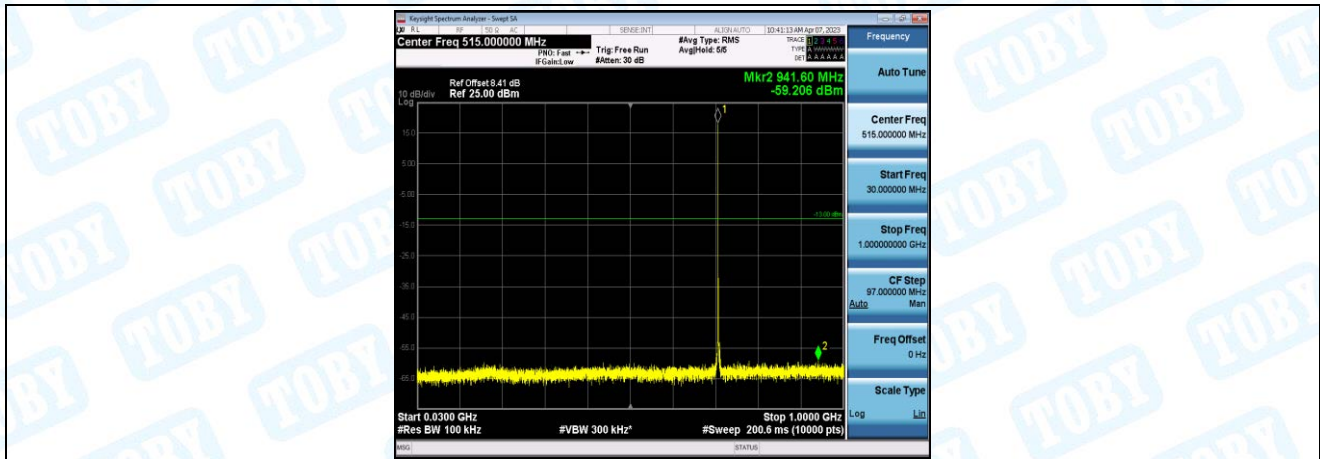
Band17-Stand-Alone-NaN-QPSK-23790-1@47-3.75kHz-1000-10000-1000~10000MHz@-47.73dBm--13-PA
SS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz-0.009-0.15-0.009~0.15MHz@-61.84dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz-0.15-30-0.15~30MHz@-68.42dBm--23-PASS

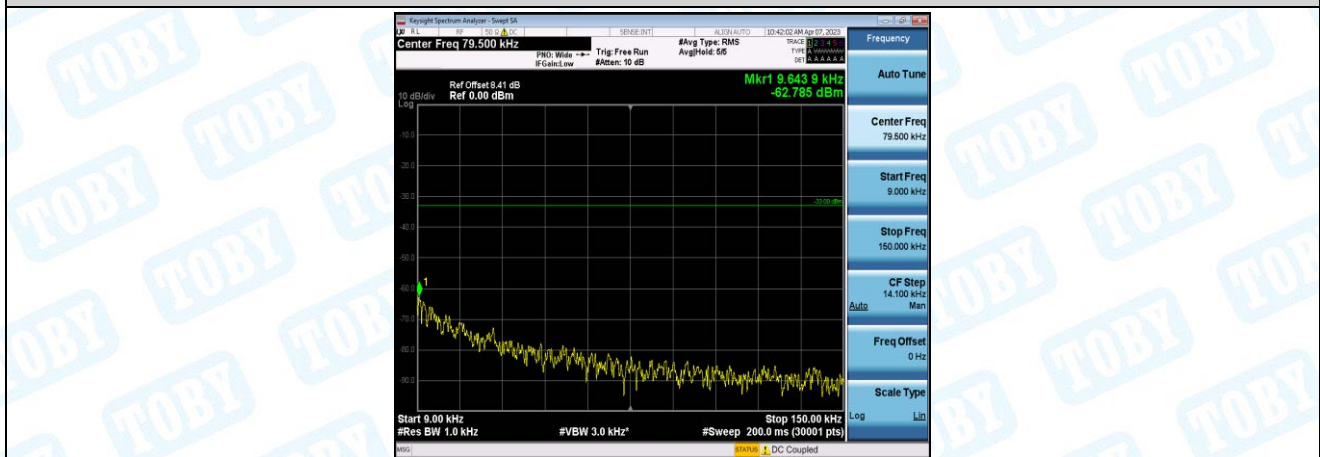


Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz-30-1000-30~1000MHz@-59.21dBm--13-PASS

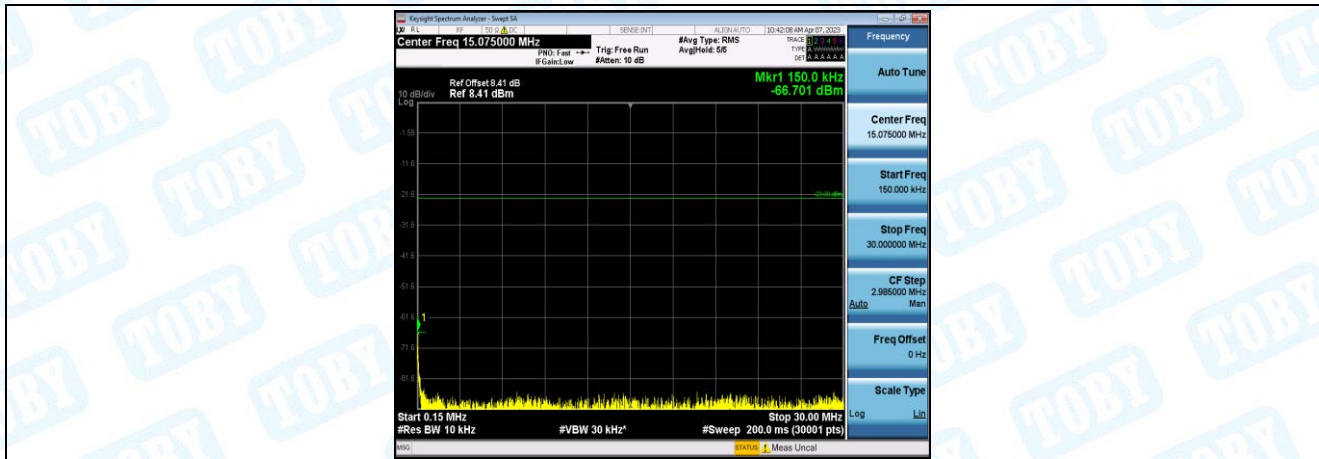


Band17-Stand-Alone-NaN-QPSK-23831-1@0-3.75kHz-1000-10000-1000~10000MHz@-47.52dBm--13-PAS

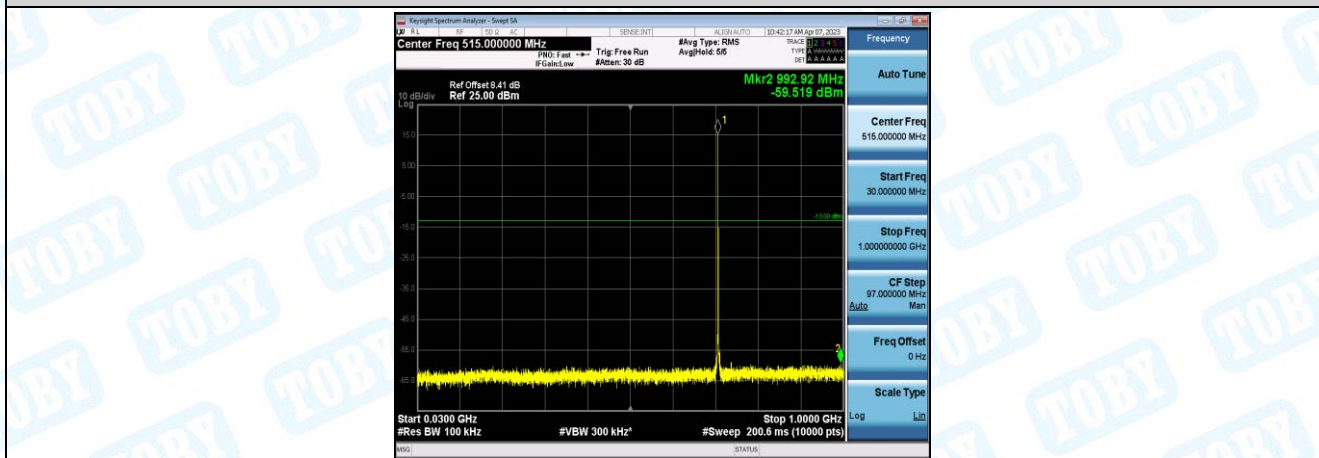
S



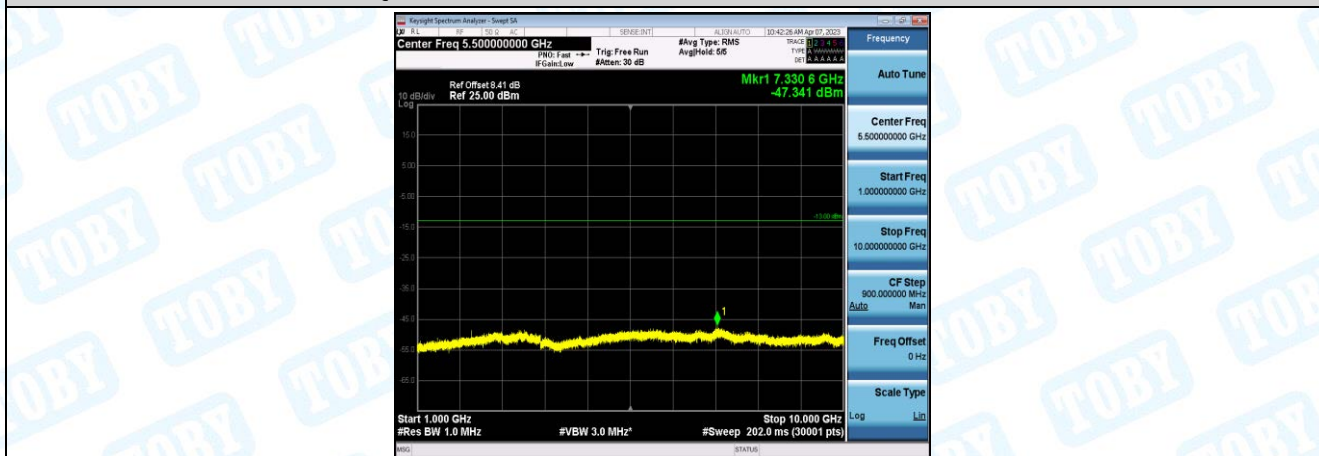
Band17-Stand-Alone-NaN-QPSK-23831-1@47-3.75kHz-0.009-0.15-0.009~0.15MHz@-62.79dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23831-1@47-3.75kHz-0.15-30-0.15~30MHz@-66.7dBm--23-PASS

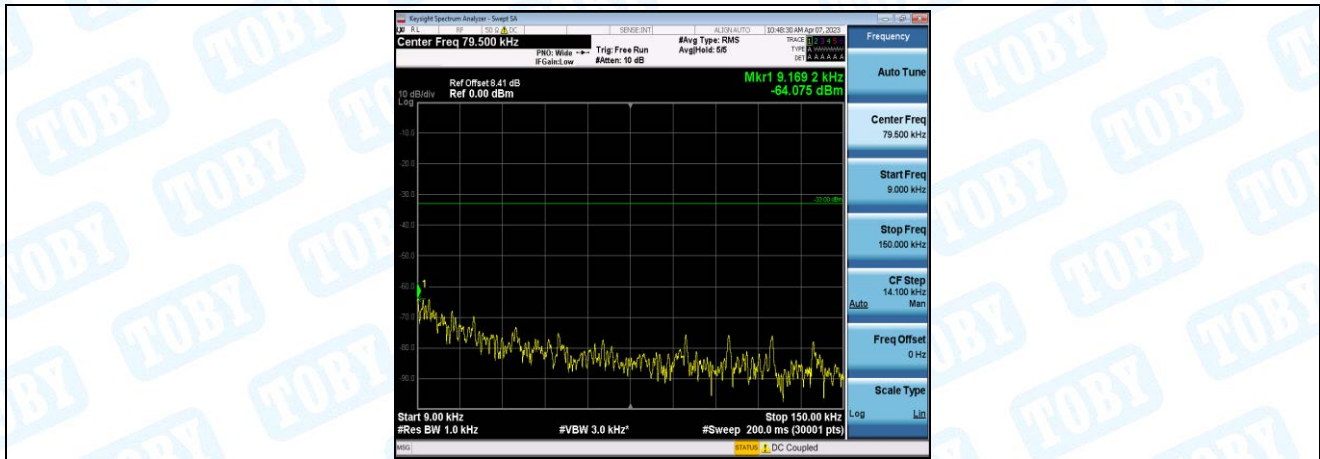


Band17-Stand-Alone-NaN-QPSK-23831-1@47-3.75kHz-30-1000-30~1000MHz@-59.52dBm--13-PASS

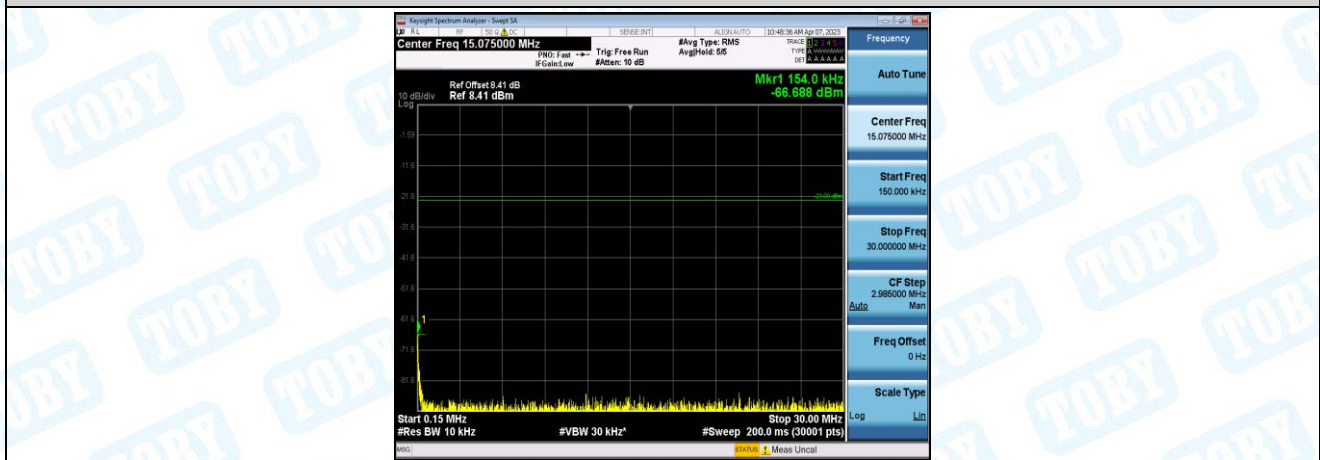


Band17-Stand-Alone-NaN-QPSK-23831-1@47-3.75kHz-1000-10000-1000~10000MHz@-47.34dBm--13-PA

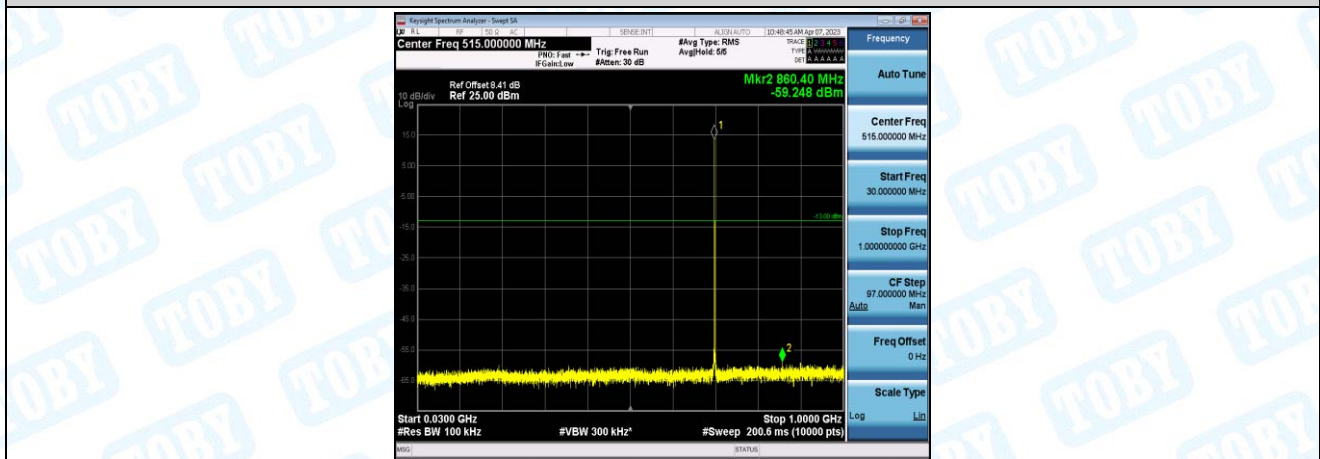
SS



Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz-0.009-0.15-0.009~0.15MHz@-64.08dBm--33-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz-0.15-30-0.15~30MHz@-66.69dBm--23-PASS



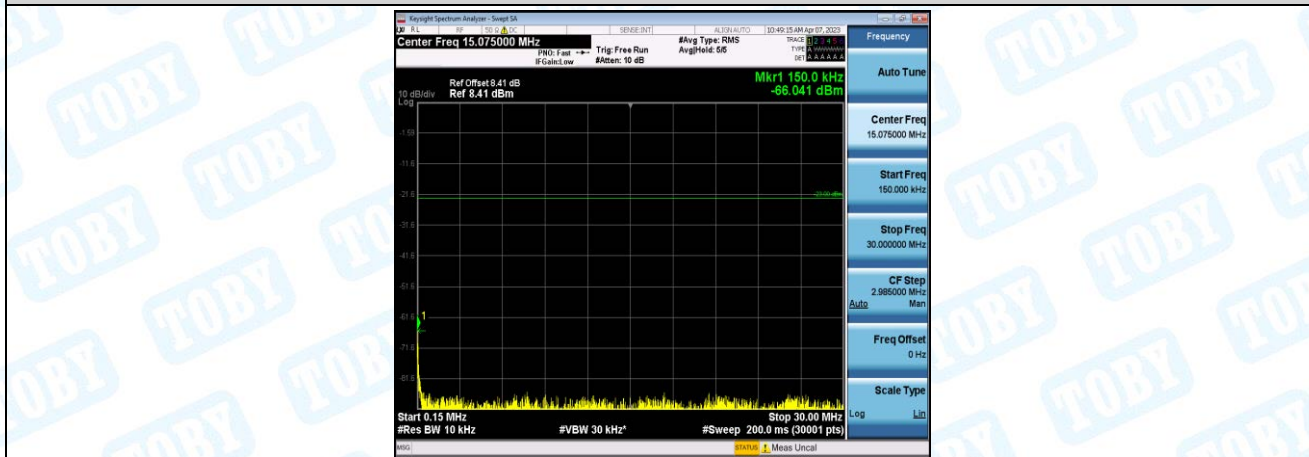
Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz-30-1000-30~1000MHz@-59.25dBm--13-PASS



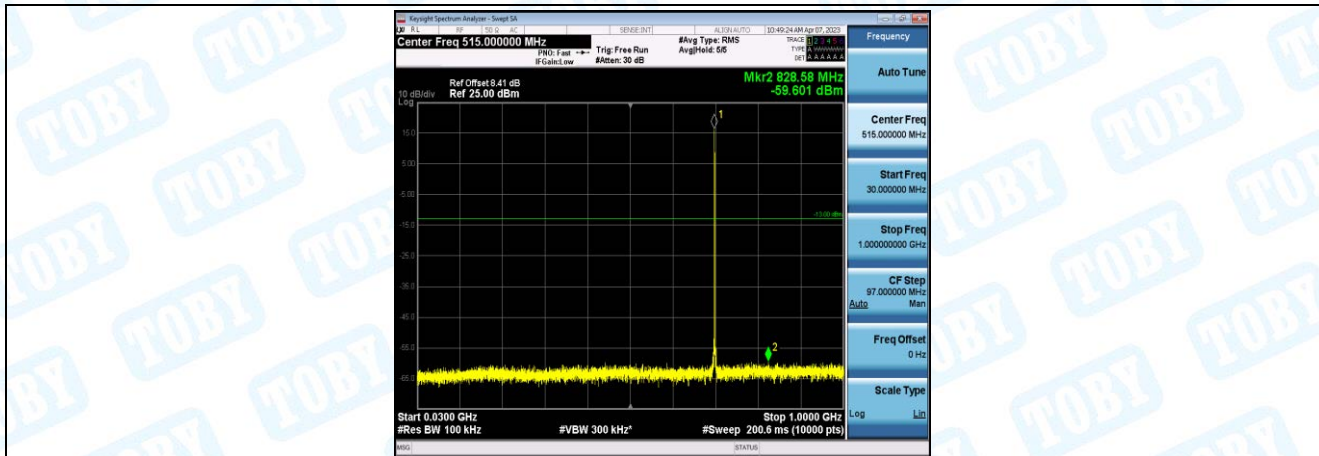
Band17-Stand-Alone-NaN-BPSK-23749-1@0-15kHz-1000-10000-1000~10000MHz@-47.74dBm--13-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@11-15kHz-0.009-0.15-0.009~0.15MHz@-62.41dBm--33-PASS



Band17-Stand-Alone-NaN-BPSK-23749-1@11-15kHz-0.15-30-0.15~30MHz@-66.04dBm--23-PASS



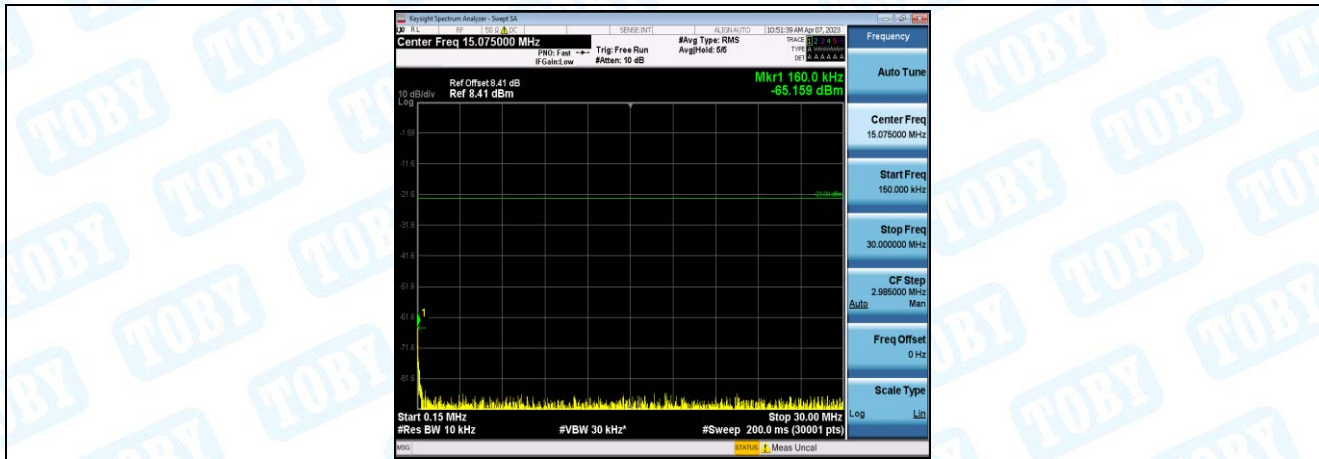
Band17-Stand-Alone-NaN-BPSK-23749-1@11-15kHz-30-1000-30~1000MHz@-59.6dBm--13-PASS



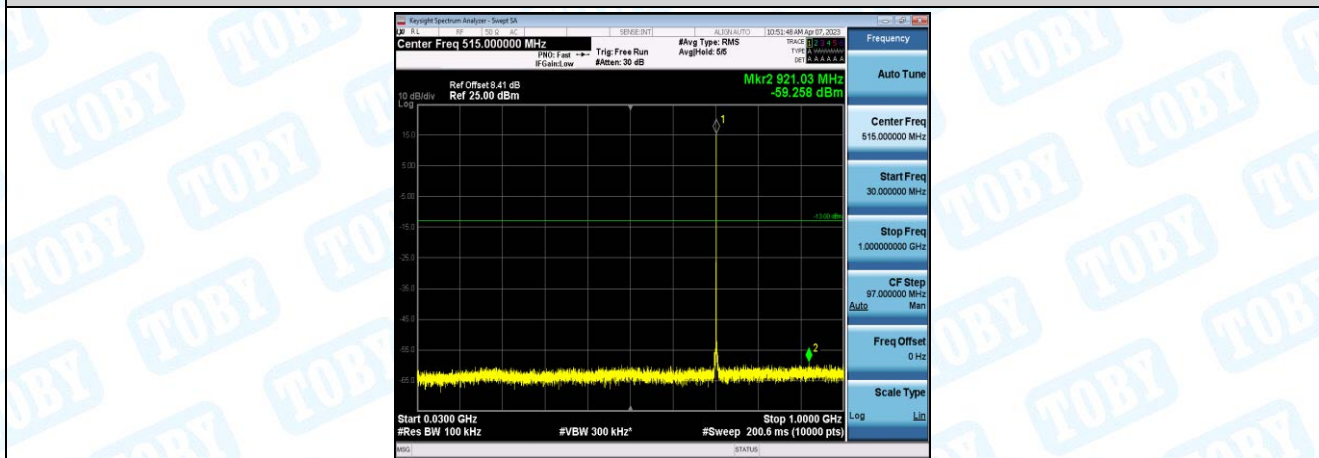
Band17-Stand-Alone-NaN-BPSK-23749-1@11-15kHz-1000-10000-1000~10000MHz@-47.37dBm--13-PASS



Band17-Stand-Alone-NaN-BPSK-23790-1@0-15kHz-0.009-0.15-0.009~0.15MHz@-61.16dBm--33-PASS



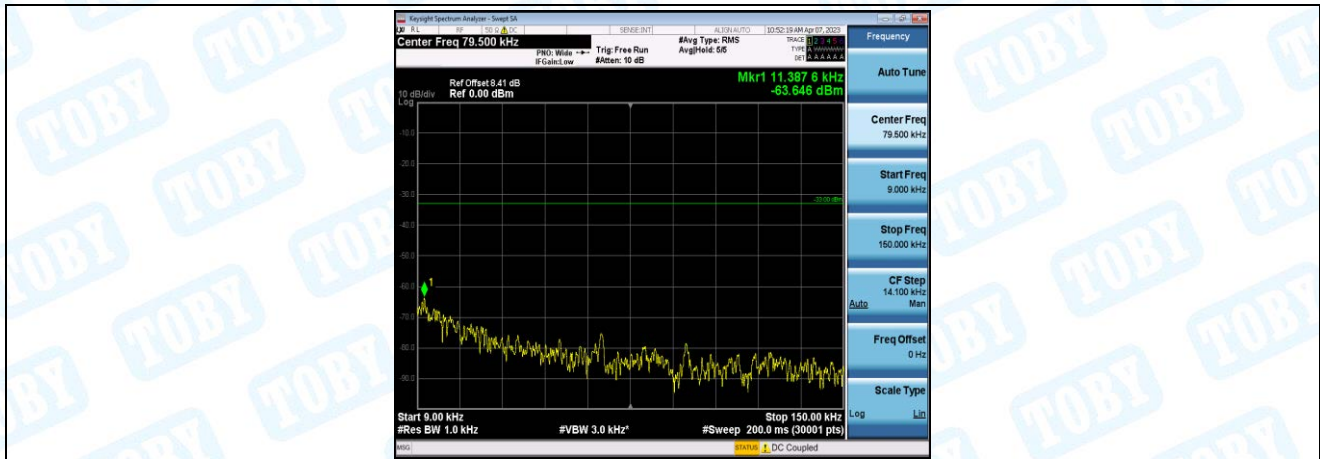
Band17-Stand-Alone-NaB-BPSK-23790-1@0-15kHz-0.15-30-0.15~30MHz@-65.16dBm--23-PASS



Band17-Stand-Alone-NaB-BPSK-23790-1@0-15kHz-30-1000-30~1000MHz@-59.26dBm--13-PASS



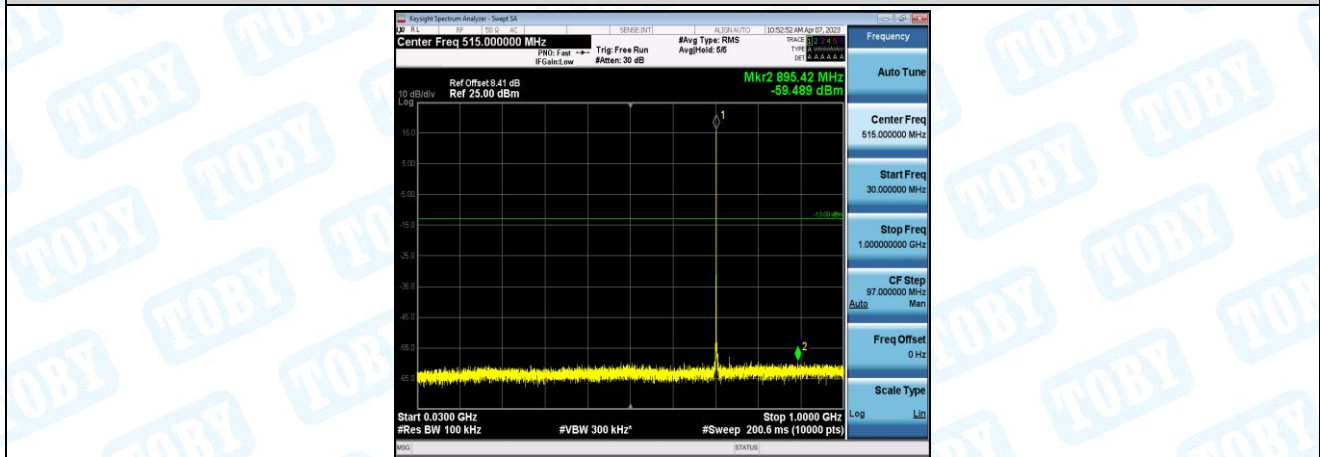
Band17-Stand-Alone-NaB-BPSK-23790-1@0-15kHz-1000-10000-1000~10000MHz@-47.84dBm--13-PASS



Band17-Stand-Alone-NaN-BPSK-23790-1@11-15kHz-0.009-0.15-0.009~0.15MHz@-63.65dBm--33-PASS



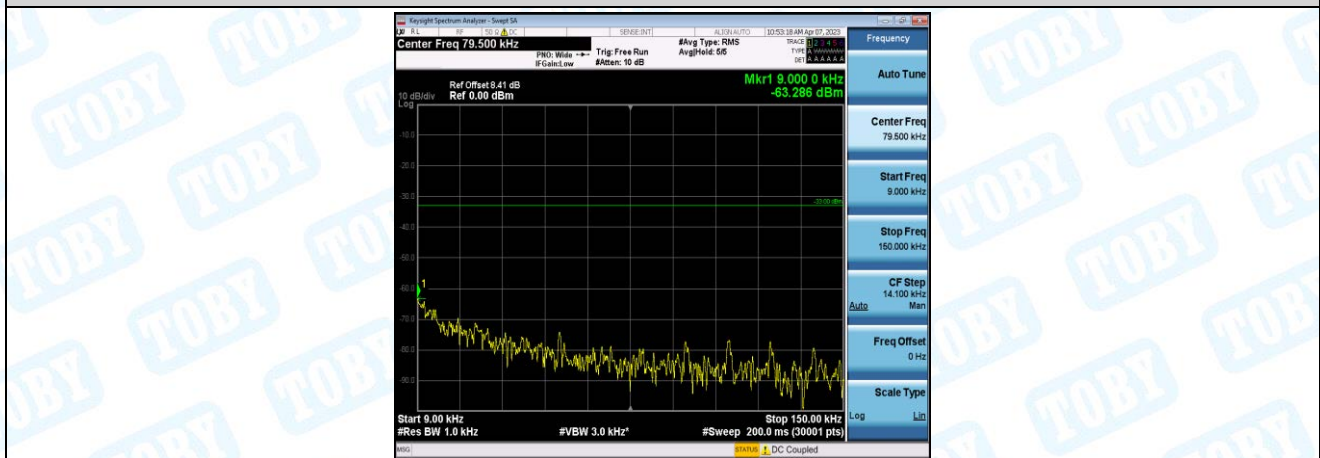
Band17-Stand-Alone-NaN-BPSK-23790-1@11-15kHz-0.15-30-0.15~30MHz@-67.06dBm--23-PASS



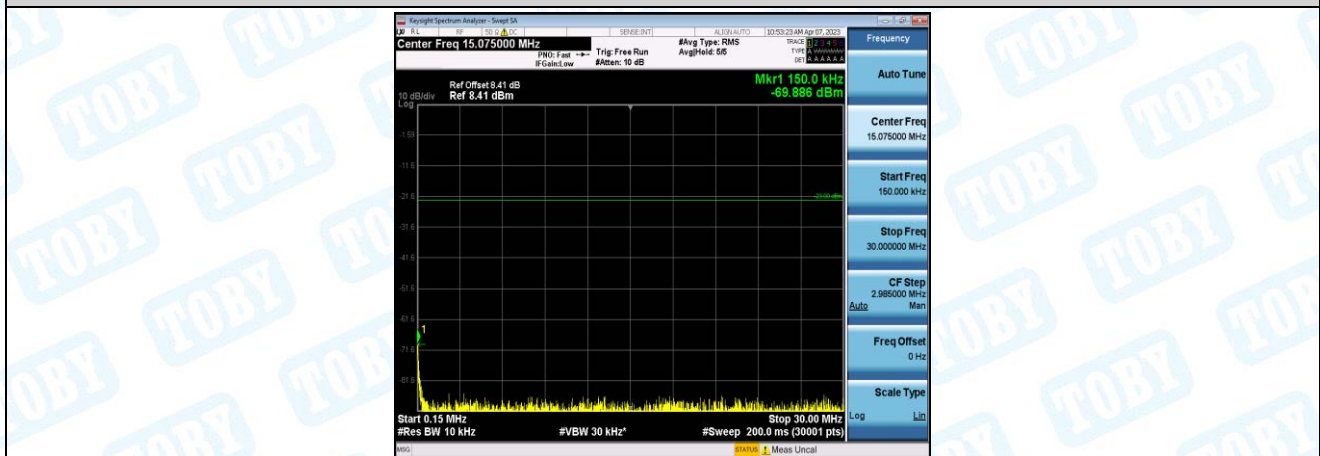
Band17-Stand-Alone-NaN-BPSK-23790-1@11-15kHz-30-1000-30~1000MHz@-59.49dBm--13-PASS



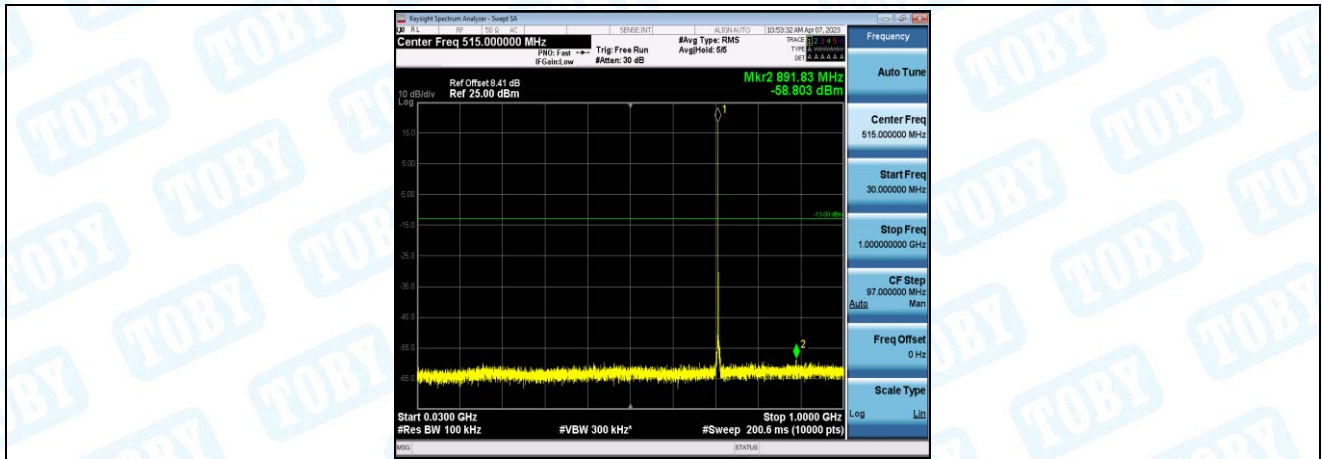
Band17-Stand-Alone-NaN-BPSK-23790-1@11-15kHz-1000-10000-1000~10000MHz@-47.7dBm--13-PASS



Band17-Stand-Alone-NaN-BPSK-23831-1@0-15kHz-0.009-0.15-0.009~0.15MHz@-63.29dBm--33-PASS



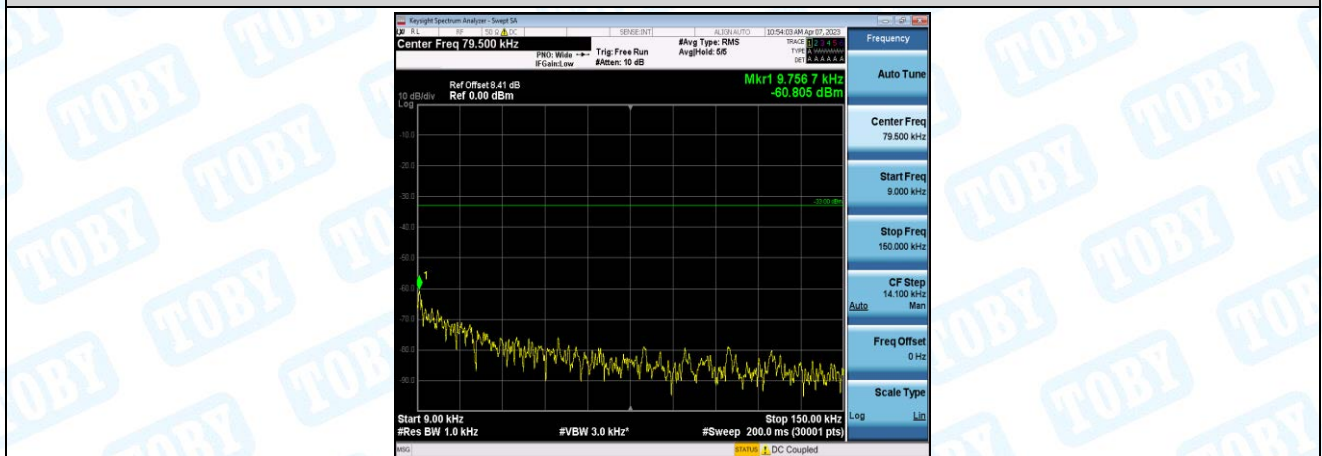
Band17-Stand-Alone-NaN-BPSK-23831-1@0-15kHz-0.15-30-0.15~30MHz@-69.89dBm--23-PASS



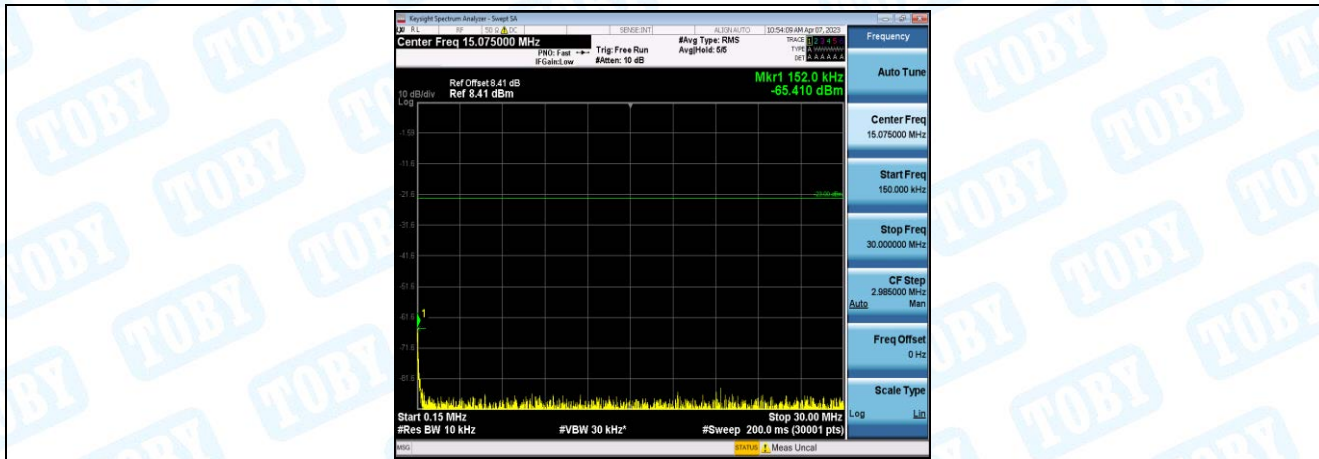
Band17-Stand-Alone-NaNBPSK-23831-1@0-15kHz-30-1000-30~1000MHz@-58.8dBm--13-PASS



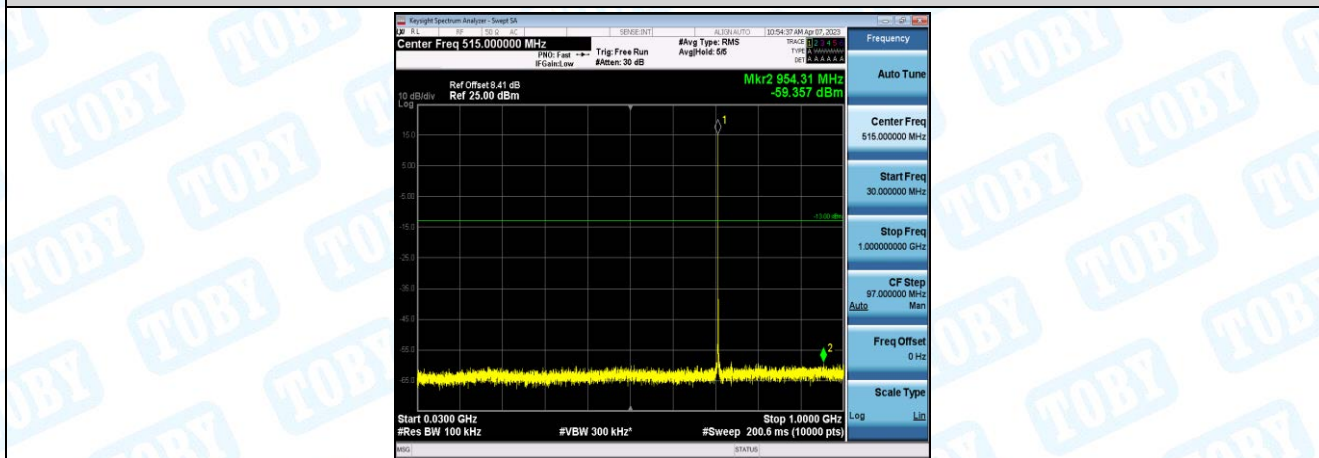
Band17-Stand-Alone-NaNBPSK-23831-1@0-15kHz-1000-10000-1000~1000MHz@-47.57dBm--13-PASS



Band17-Stand-Alone-NaNBPSK-23831-1@11-15kHz-0.009-0.15-0.009~0.15MHz@-60.81dBm--33-PASS



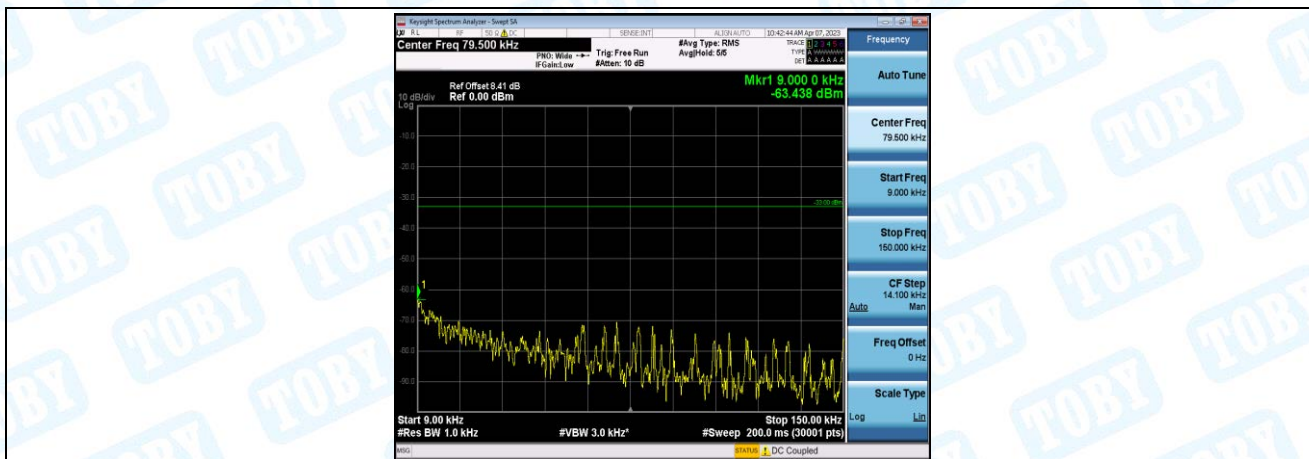
Band17-Stand-Alone-NaN-BPSK-23831-1@11-15kHz-0.15-30-0.15~30MHz@-65.41dBm--23-PASS



Band17-Stand-Alone-NaN-BPSK-23831-1@11-15kHz-30-1000-30~1000MHz@-59.36dBm--13-PASS



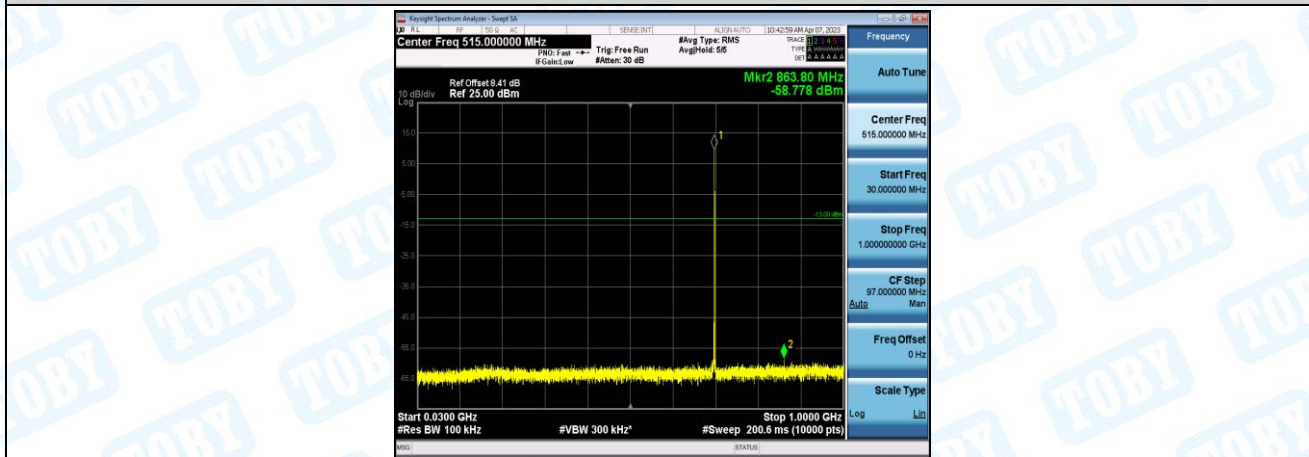
Band17-Stand-Alone-NaN-BPSK-23831-1@11-15kHz-1000-10000-1000~10000MHz@-47.69dBm--13-PASS



Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz-0.009-0.15-0.009~0.15MHz@-63.44dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz-0.15-30-0.15~30MHz@-66.49dBm--23-PASS



Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz-30-1000-30~1000MHz@-58.78dBm--13-PASS



Band17-Stand-Alone-NaN-QPSK-23749-12@0-15kHz-1000-10000-1000~10000MHz@-47.86dBm--13-PAS

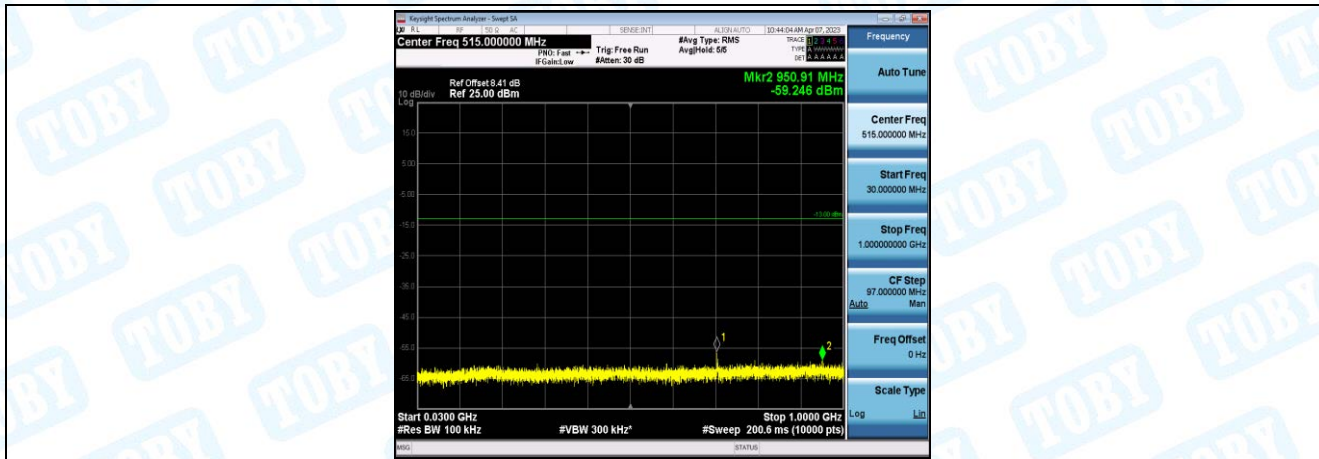
S



Band17-Stand-Alone-NaN-QPSK-23790-12@0-15kHz-0.009-0.15-0.009~0.15MHz@-63.59dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23790-12@0-15kHz-0.15-30-0.15~30MHz@-67.41dBm--23-PASS

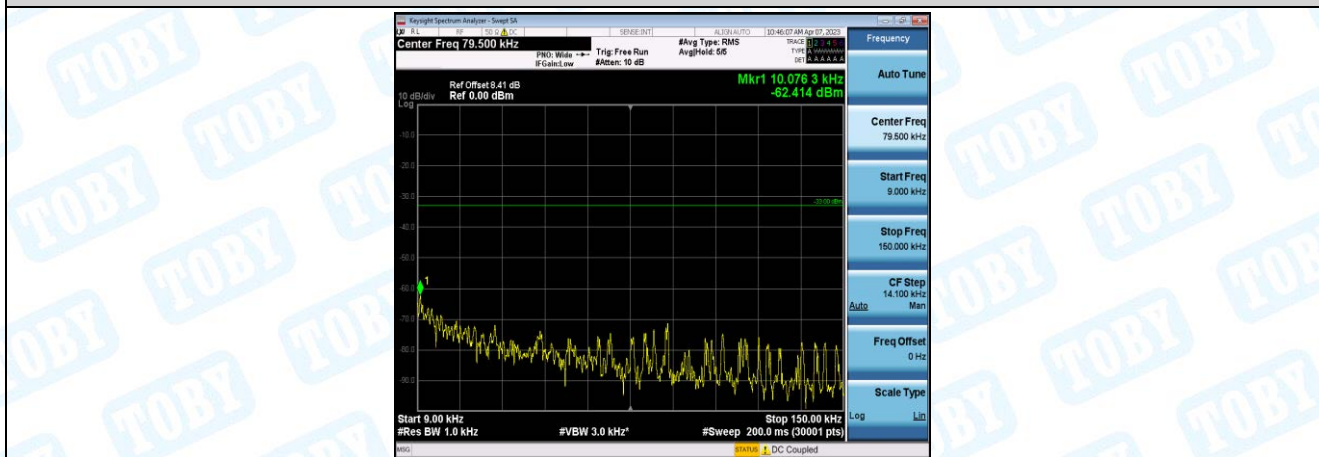


Band17-Stand-Alone-NaN-QPSK-23790-12@0-15kHz-30-1000-30~1000MHz@-59.25dBm--13-PASS



Band17-Stand-Alone-NaN-QPSK-23790-12@0-15kHz-1000-10000-1000~10000MHz@-47.55dBm--13-PAS

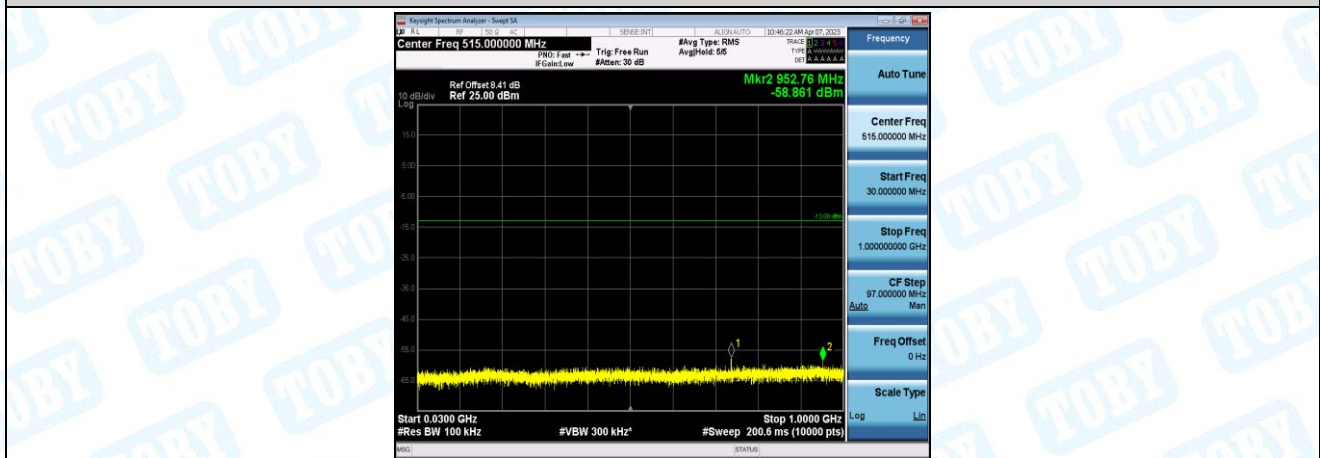
S



Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz-0.009-0.15-0.009~0.15MHz@-62.41dBm--33-PASS



Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz-0.15-30-0.15~30MHz@-68.67dBm--23-PASS



Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz-30-1000-30~1000MHz@-58.86dBm--13-PASS



Band17-Stand-Alone-NaN-QPSK-23831-12@0-15kHz-1000-10000-1000~10000MHz@-47.19dBm--13-PAS

S

6: Frequency Stability for NB1

6.1 Test Result

Band	OpMode	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	VH	NT	2.18	0.003070	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	VL	NT	1.69	0.002380	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	VN	NT	1.19	0.001676	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	VH	NT	5.32	0.007493	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	VL	NT	4.09	0.005761	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	VN	NT	2.64	0.003718	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	VH	NT	6.22	0.008761	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	VL	NT	5.78	0.008141	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	VN	NT	4.43	0.006239	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	VH	NT	-18.98	-0.026732	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	VL	NT	4.37	0.006155	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	VN	NT	3.81	0.005366	±2.5	PASS

Band	OpMode	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	60	-1.36	-0.001915	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	-20	3.91	0.005507	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	-10	4.85	0.006831	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	0	5.49	0.007732	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	10	5.44	0.007662	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	20	-4.36	-0.006141	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	30	-2.48	-0.003493	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	40	-1.78	-0.002507	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@0	NV	-30	2.28	0.003211	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	30	-12.05	-0.016972	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	20	6.91	0.009732	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	10	-13.39	-0.018859	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	0	-15.51	-0.021845	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	-10	-16.80	-0.023662	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	40	-10.66	-0.015014	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	-30	-3.42	-0.004817	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	60	-1.95	-0.002746	±2.5	PASS
Band17	Stand-Alone	3.75kHz	QPSK	23790	1@47	NV	-20	2.67	0.003761	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	60	-19.06	-0.026845	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	-20	-2.72	-0.003831	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	-10	5.07	0.007141	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	0	5.71	0.008042	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	10	5.93	0.008352	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	20	6.34	0.008930	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	30	-5.50	-0.007746	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	40	5.02	0.007070	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@0	NV	-30	6.33	0.008915	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	40	-3.04	-0.004282	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	30	-16.97	-0.023901	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	20	-16.97	-0.023901	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	10	-17.58	-0.024761	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	0	-18.09	-0.025479	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	-10	4.69	0.006606	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	-30	-18.96	-0.026704	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	60	5.46	0.007690	±2.5	PASS
Band17	Stand-Alone	15kHz	QPSK	23790	1@11	NV	-20	-4.88	-0.006873	±2.5	PASS

-----END OF THE REPORT-----