

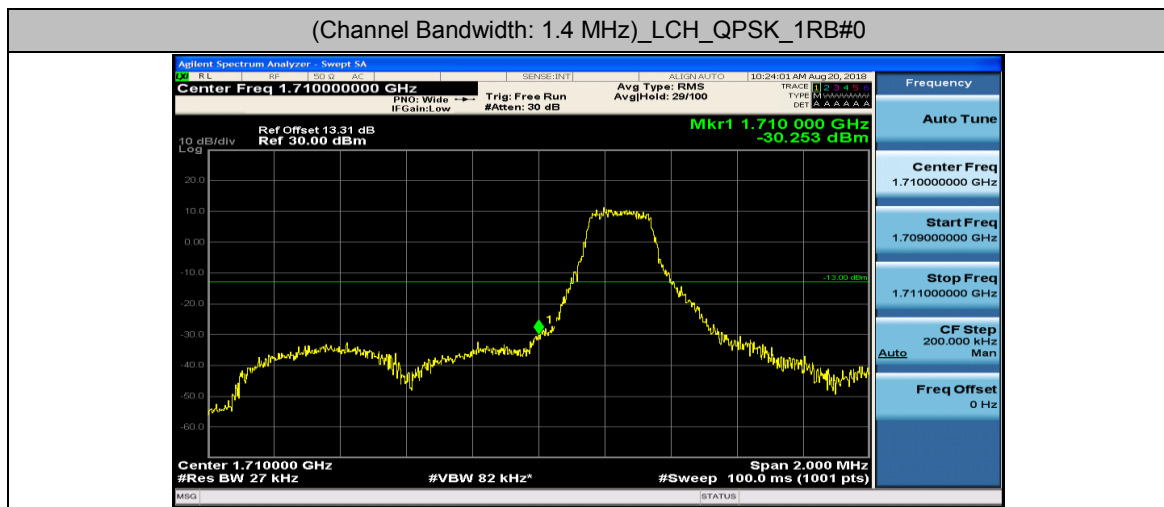


Appendix D: Band Edge

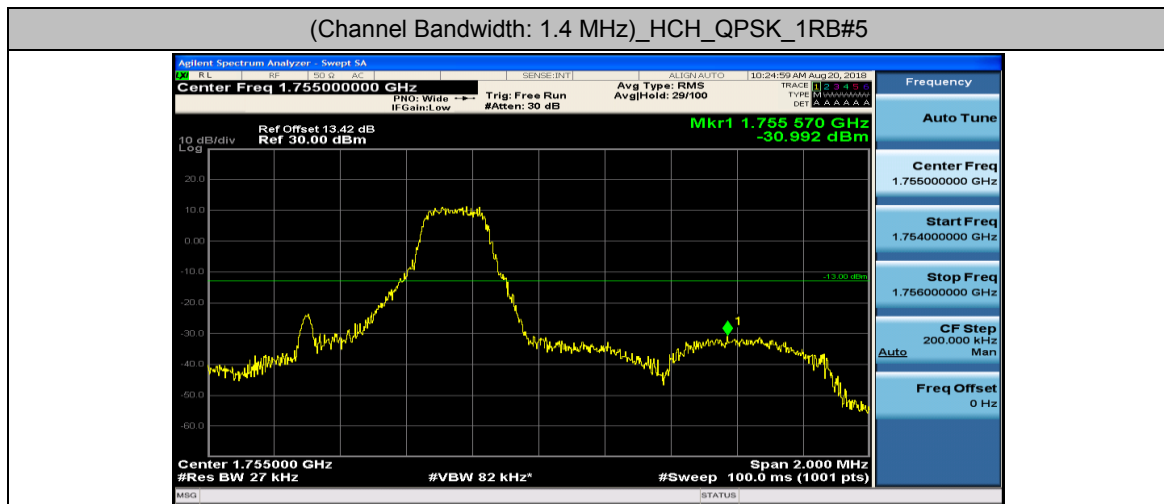
Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

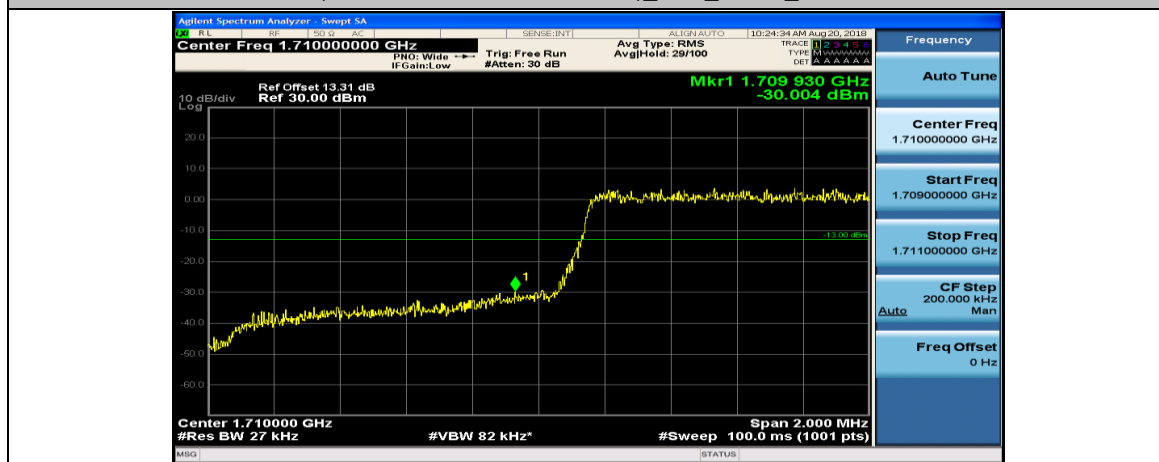


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

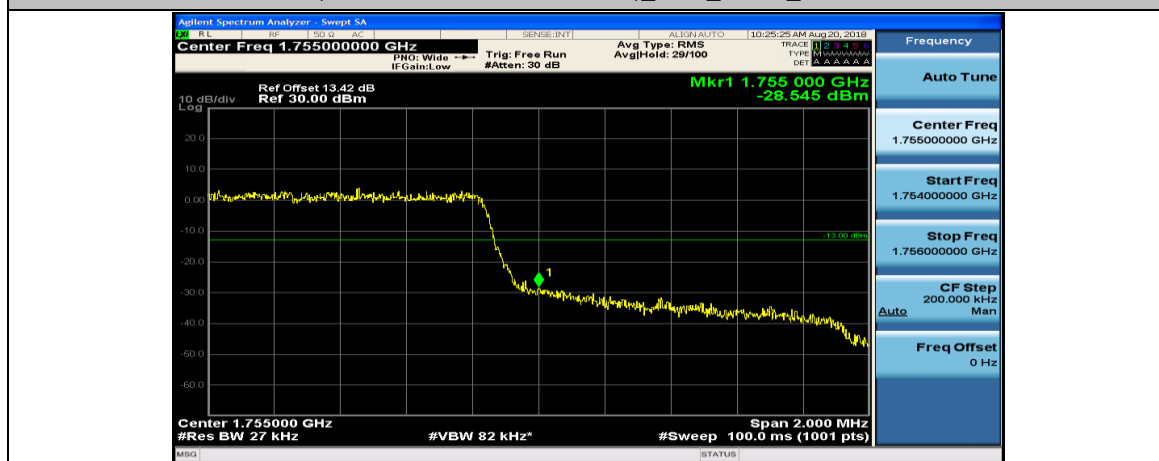




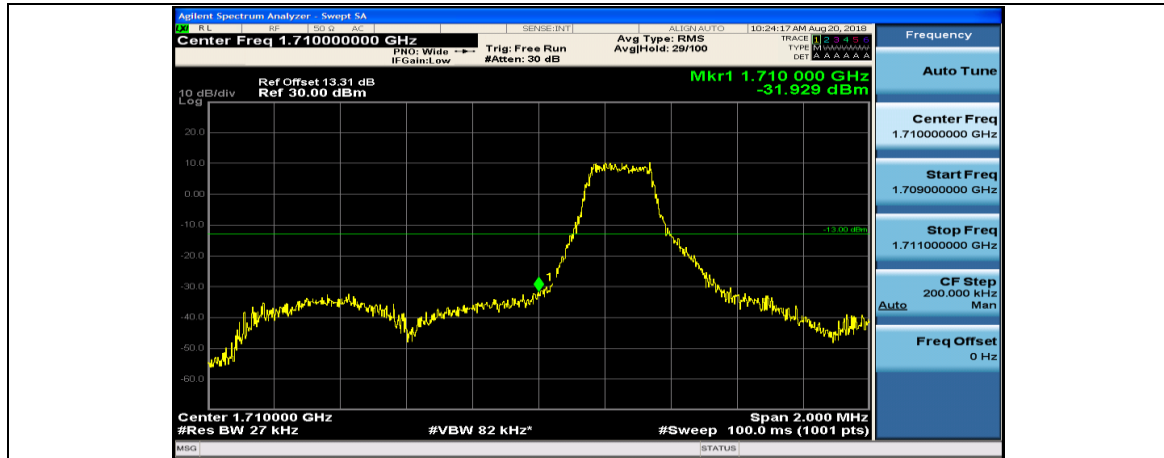
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_6RB#0



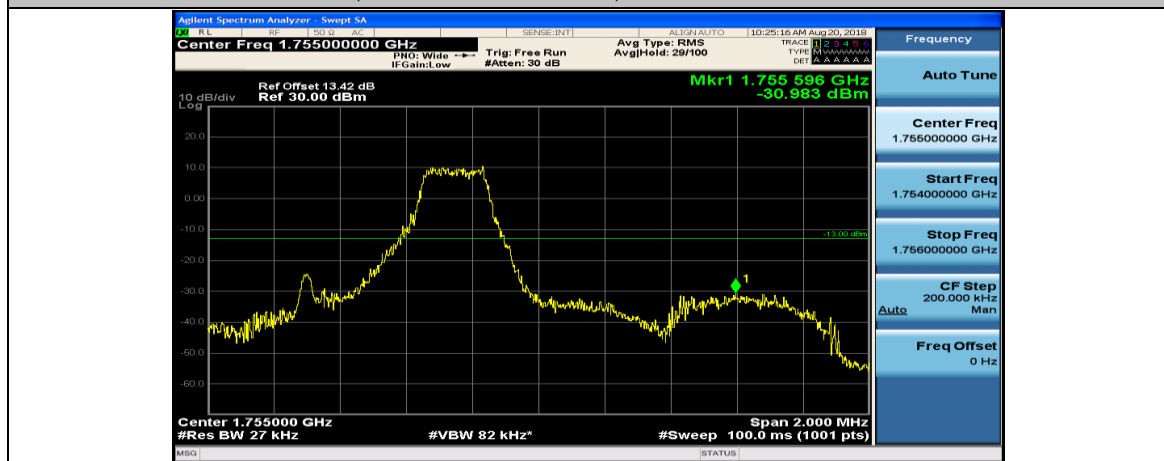
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0



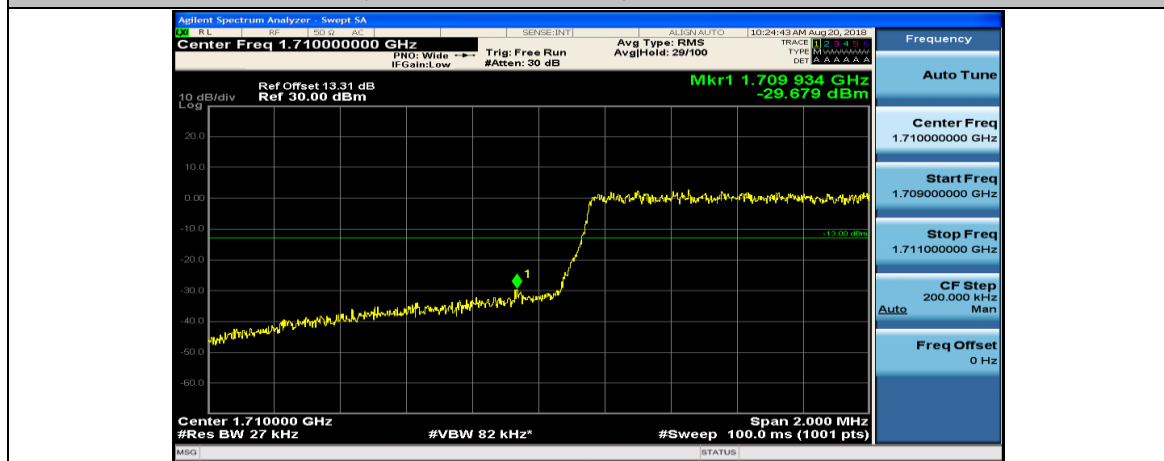
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

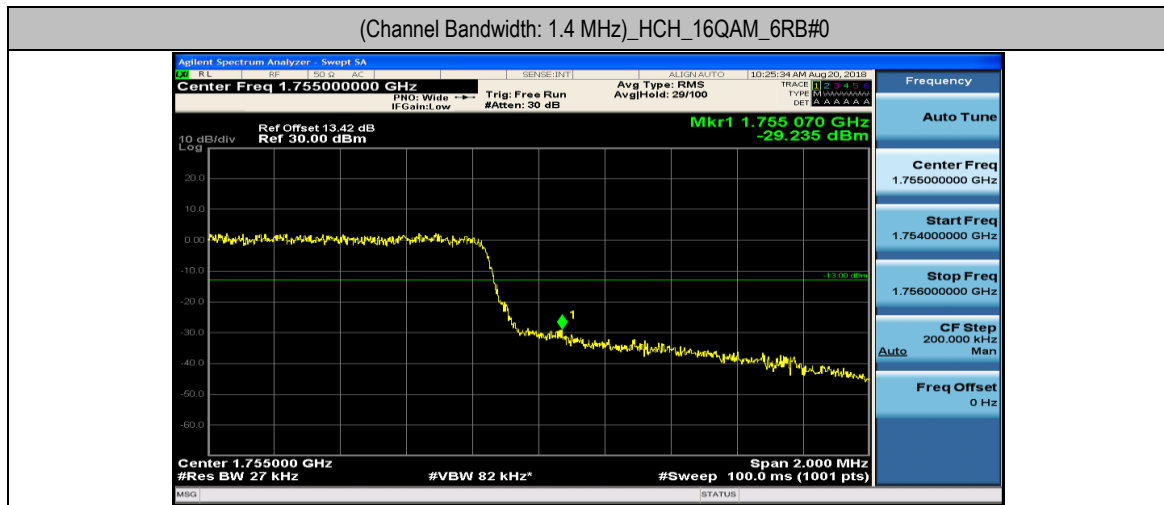


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_6RB#0



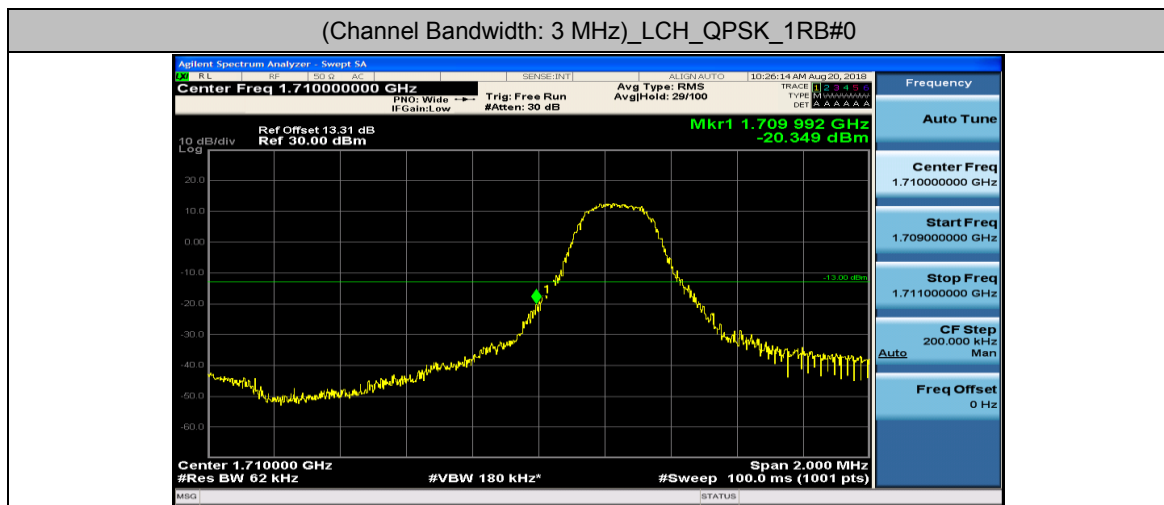


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0

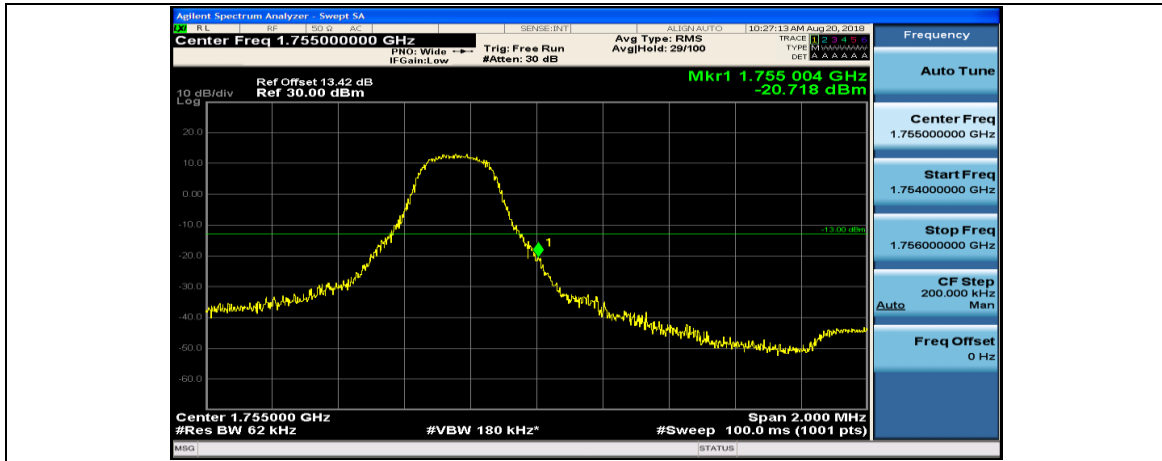


Channel Bandwidth: 3 MHz

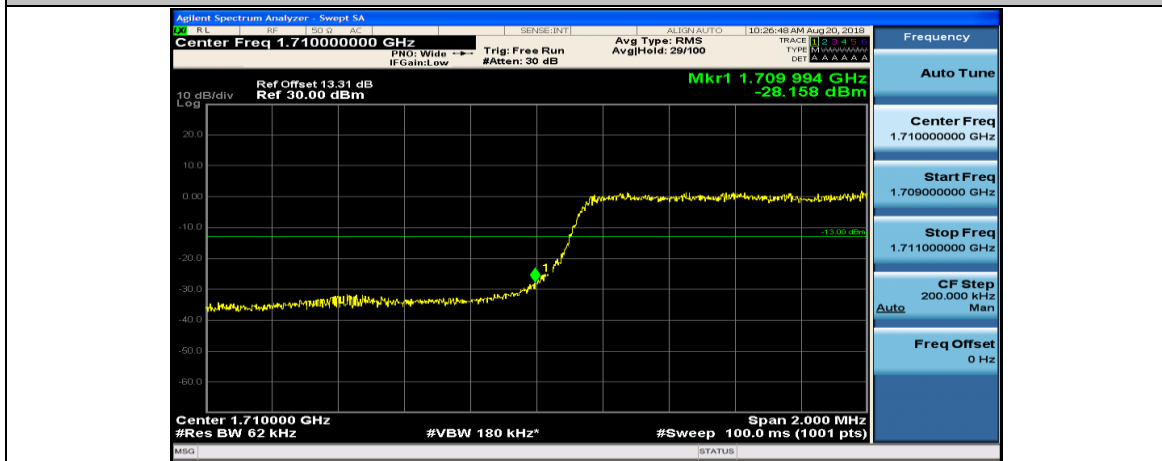
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



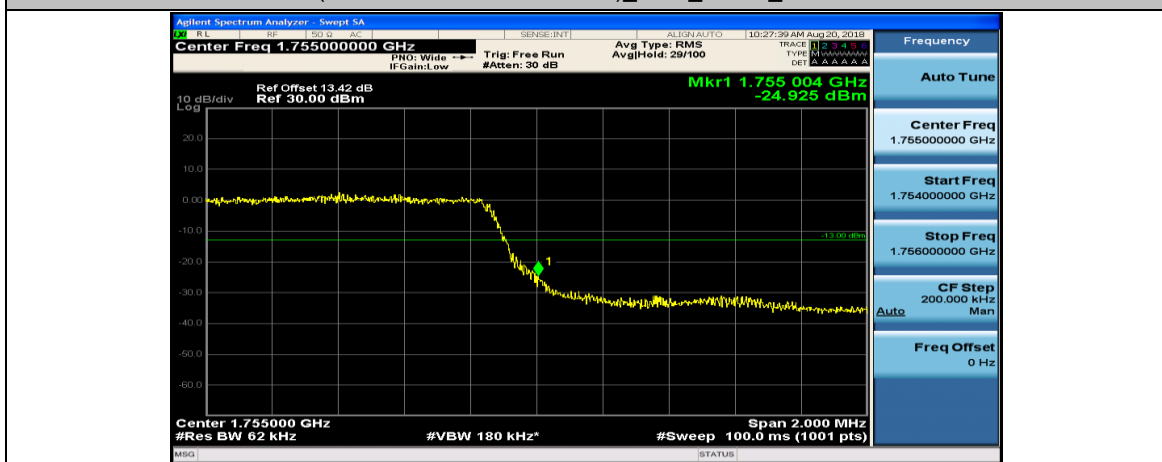
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14



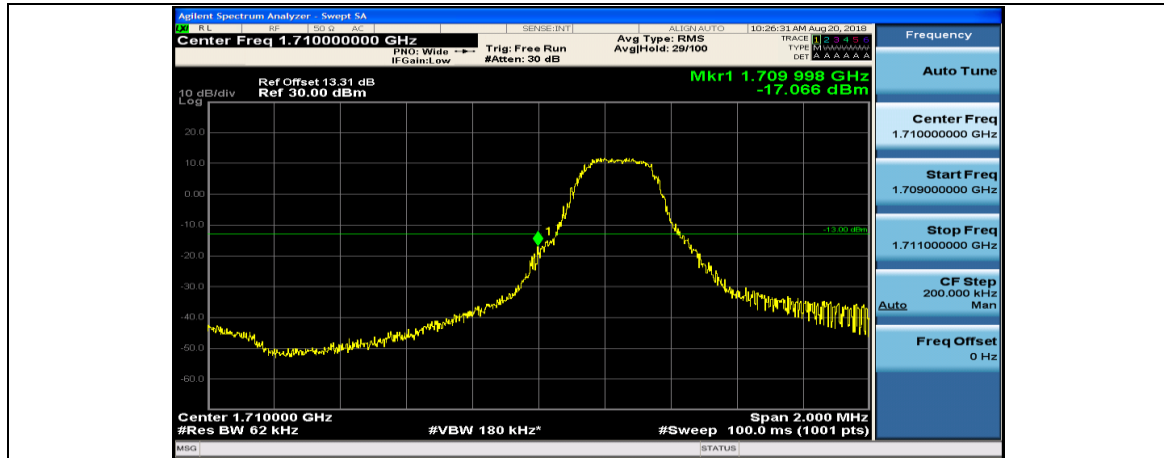
(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0



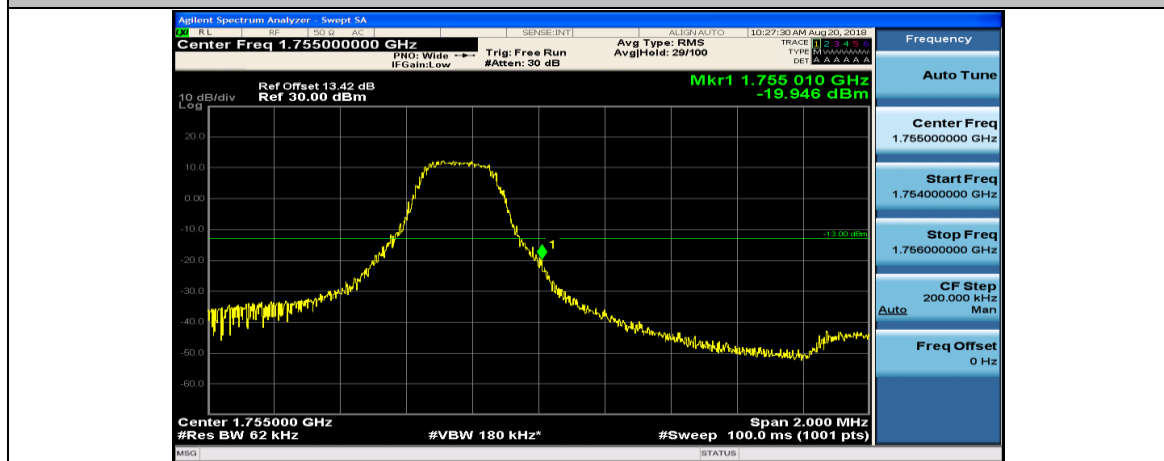
(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0



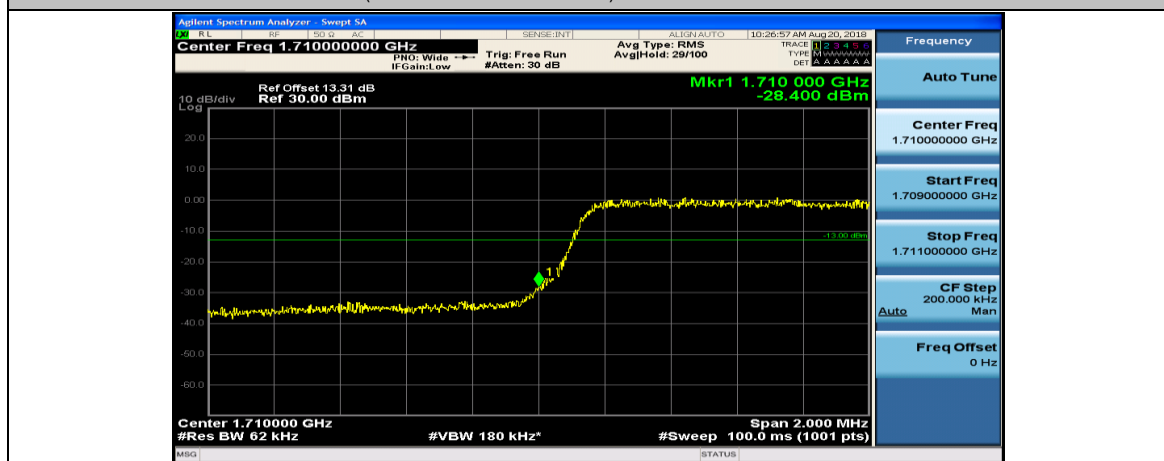
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#14

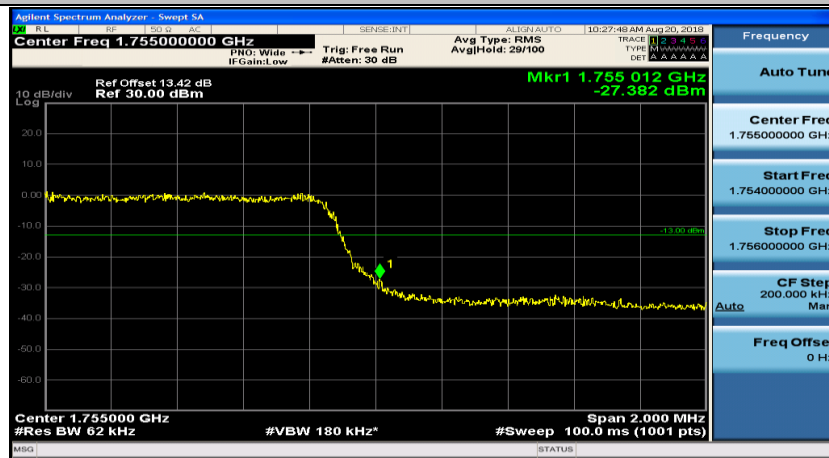


(Channel Bandwidth: 3 MHz)_LCH_16QAM_15RB#0



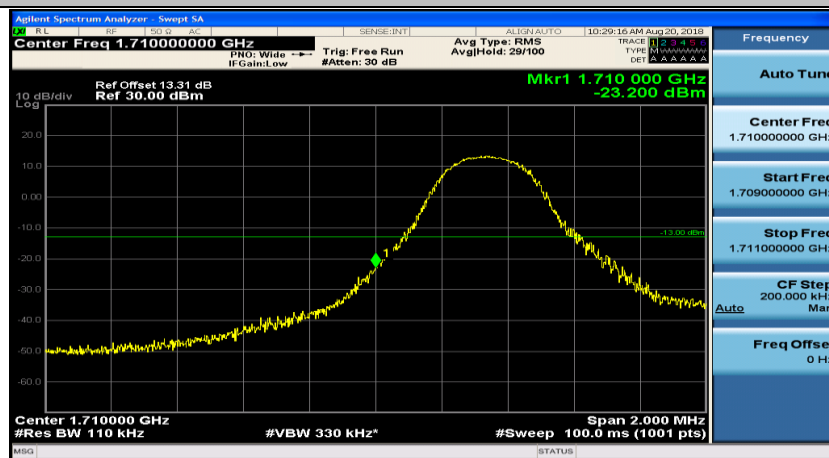


(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0

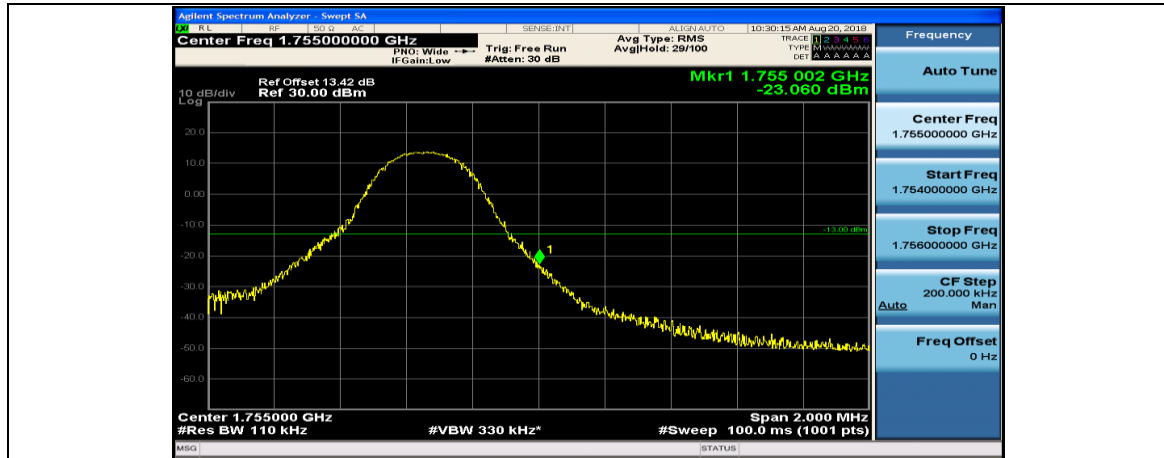


Channel Bandwidth: 5 MHz

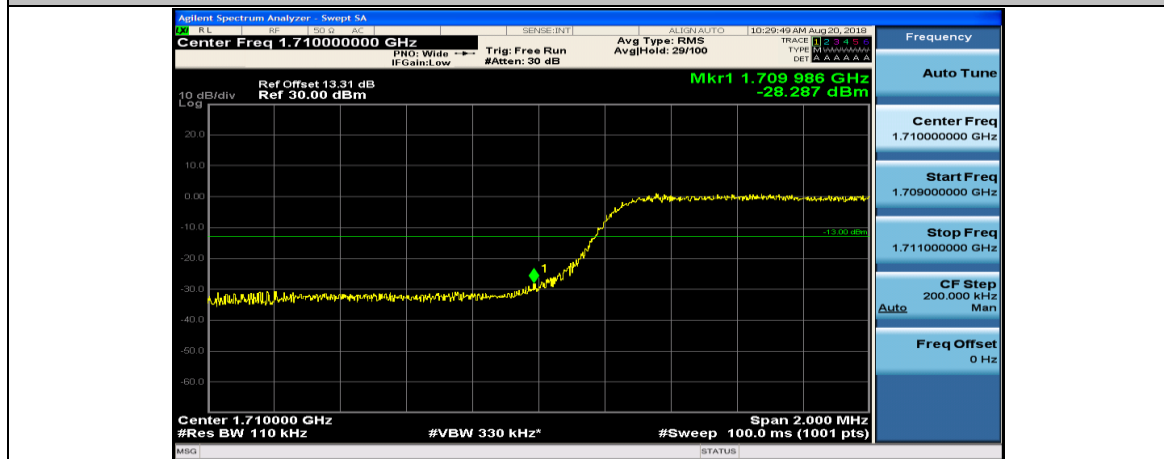
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



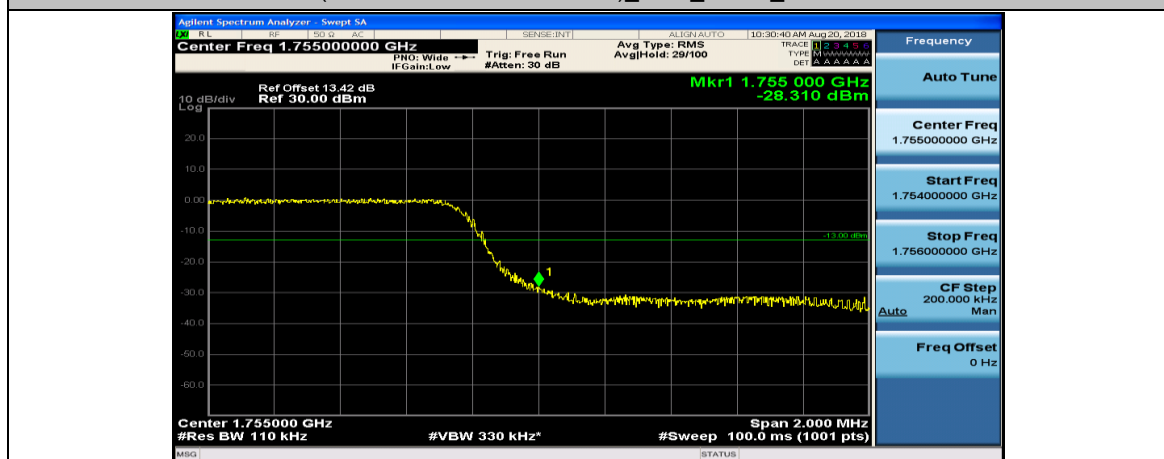
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24



(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0

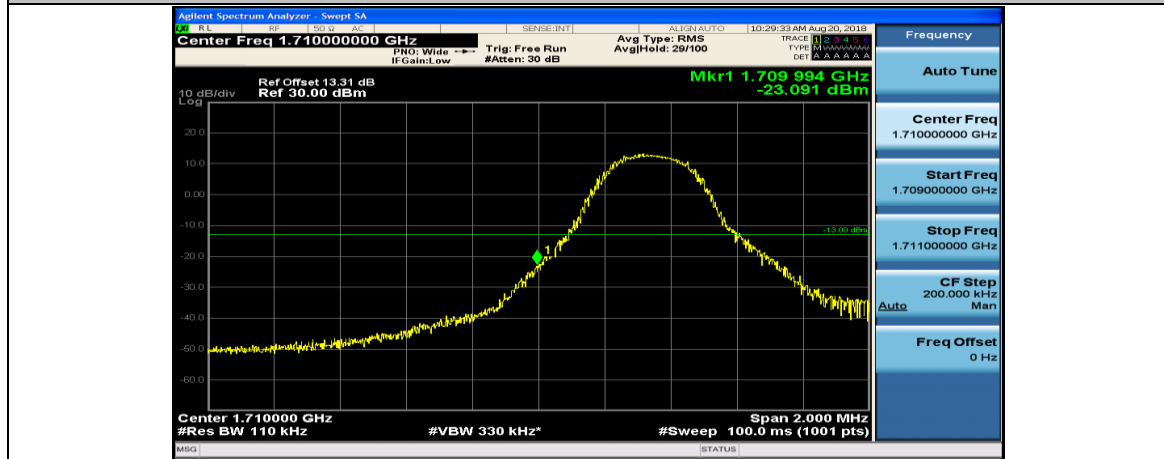


(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

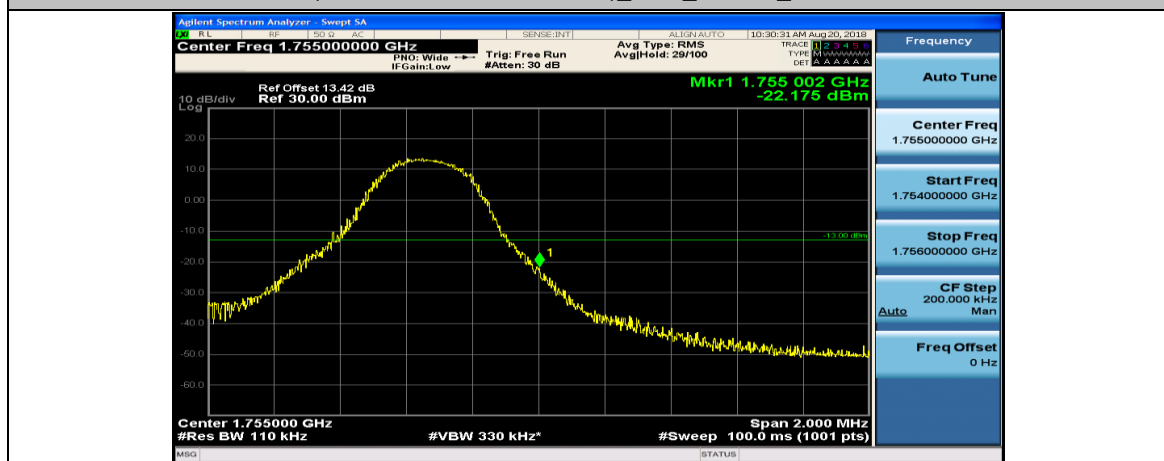




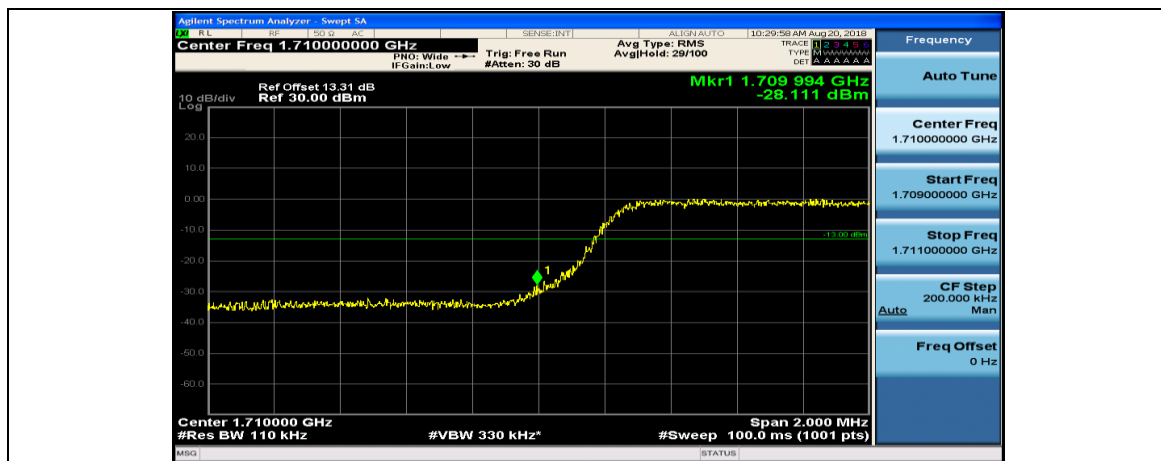
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



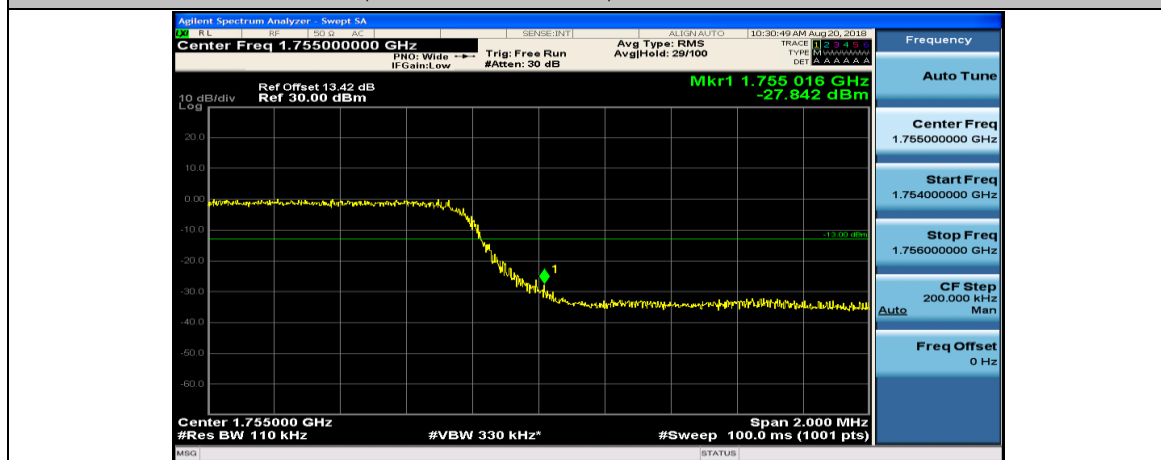
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0

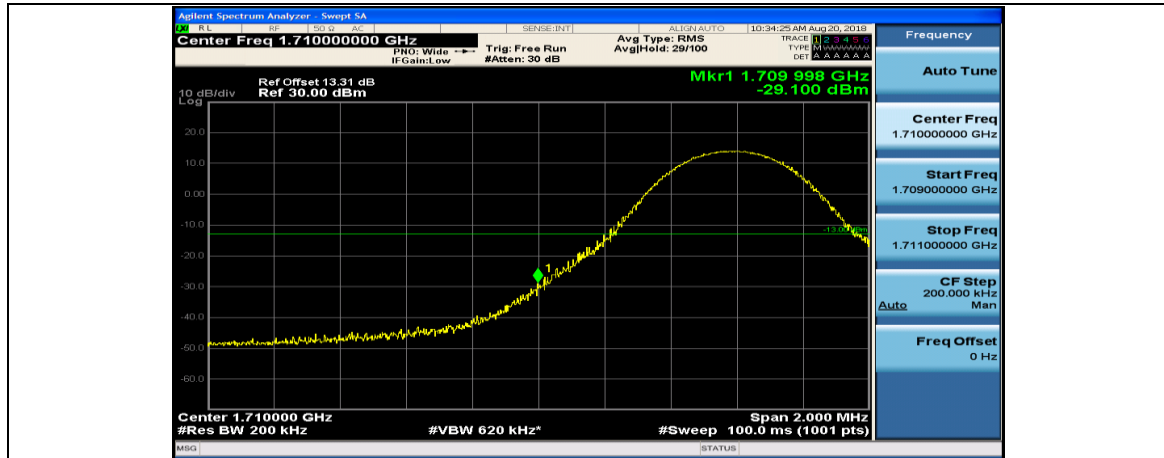


(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0

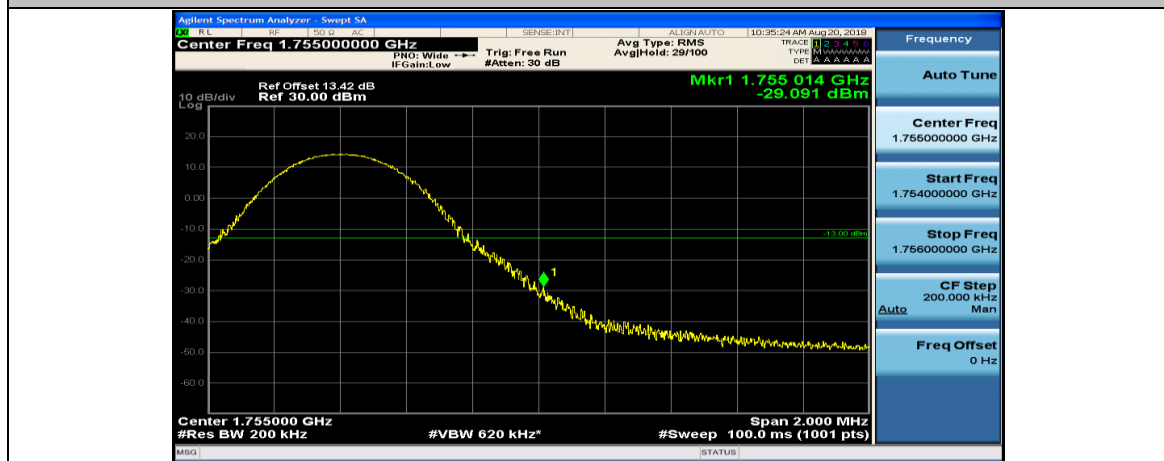


Channel Bandwidth: 10 MHz

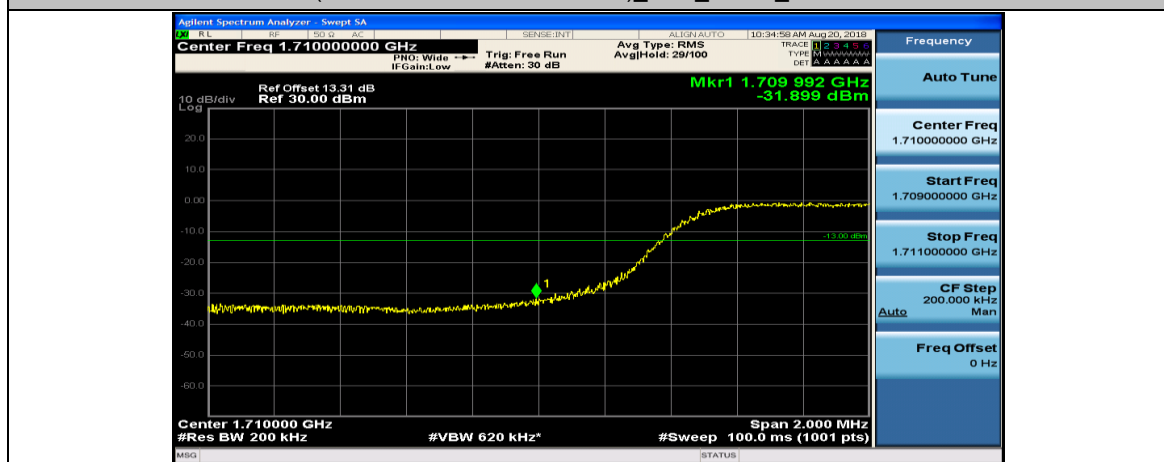
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

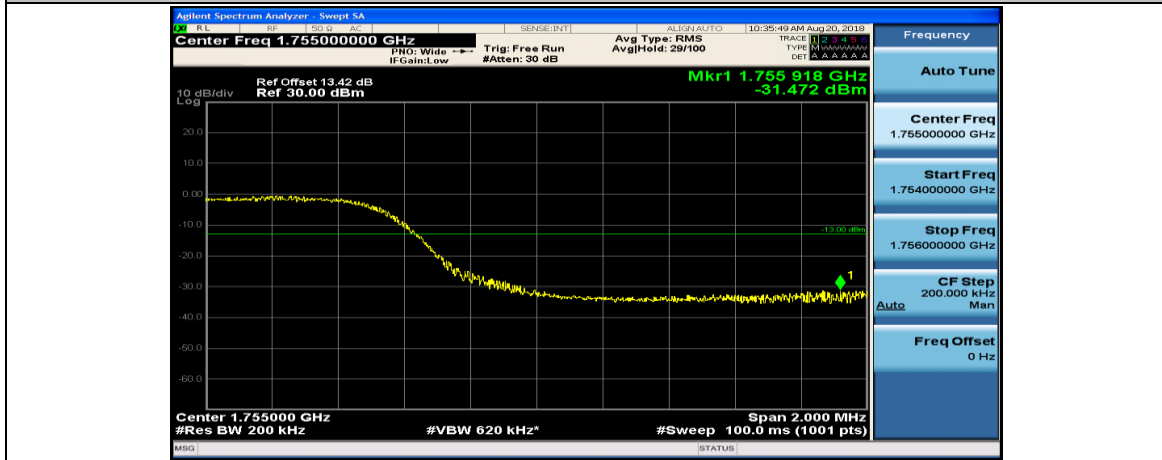


(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0

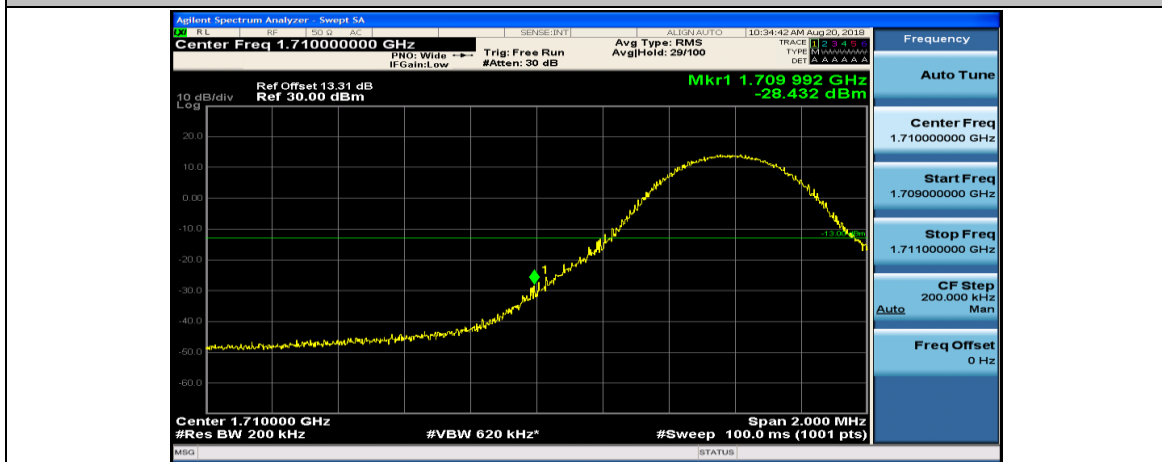




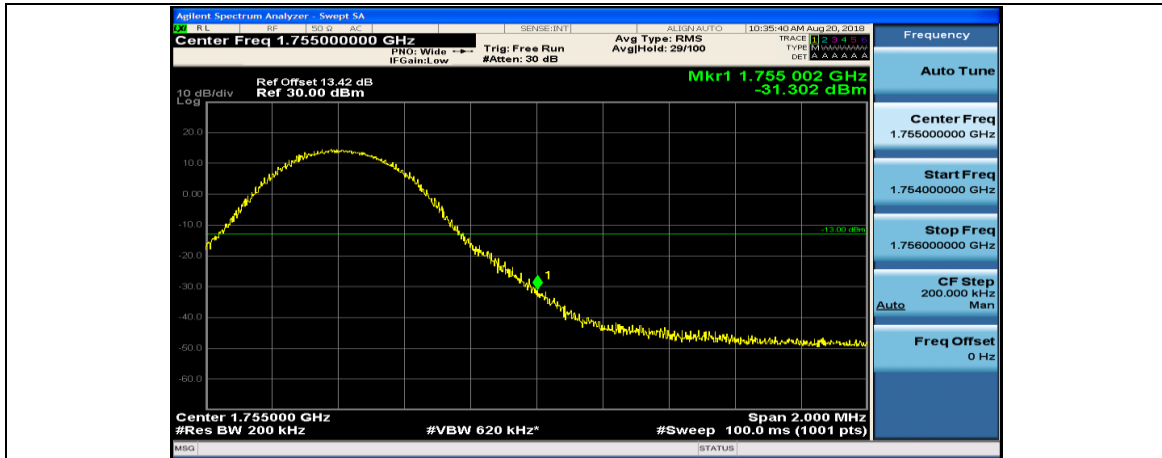
(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0



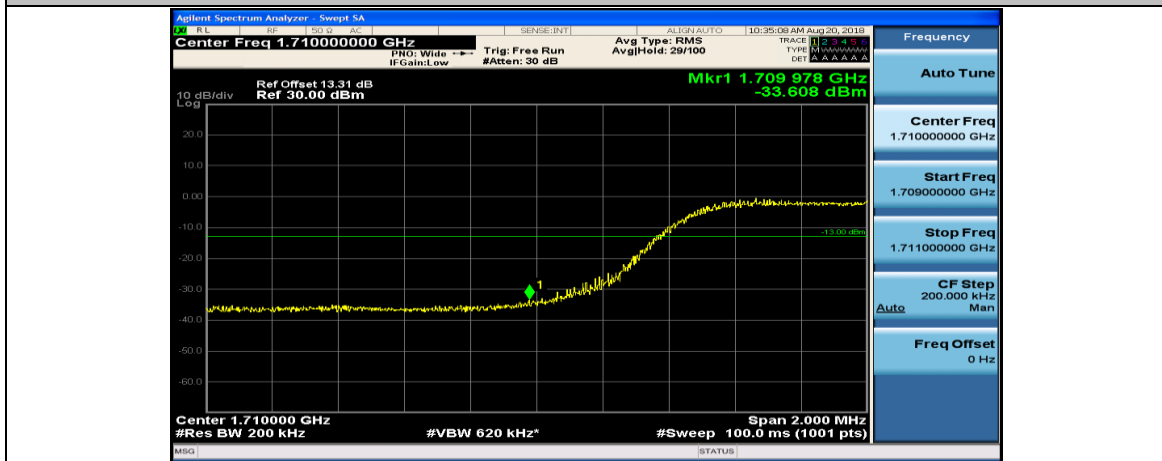
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



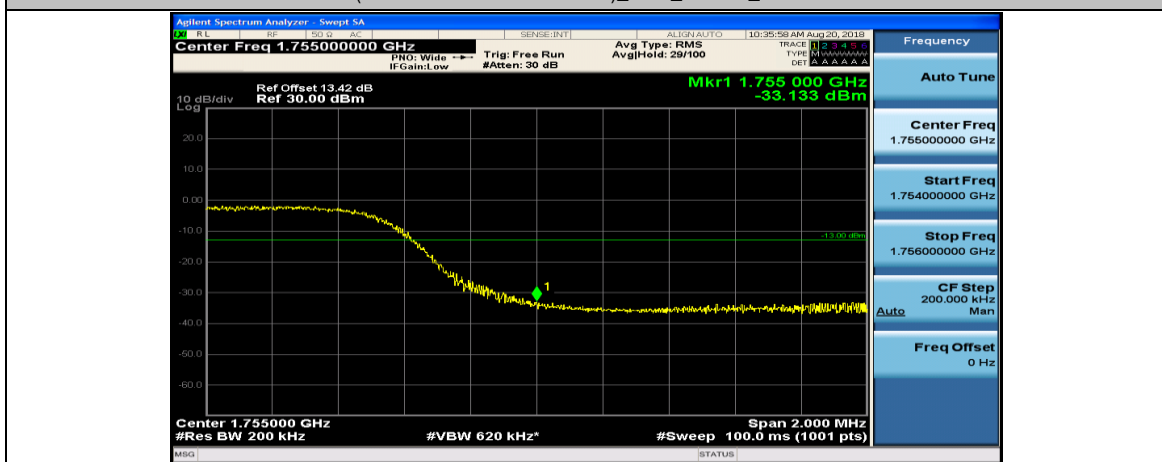
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49



(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0



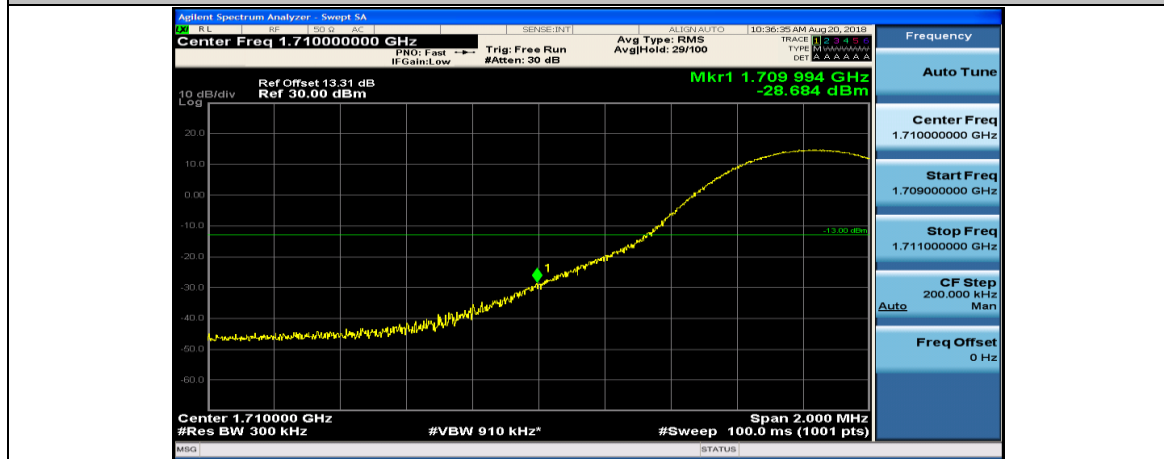
(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0



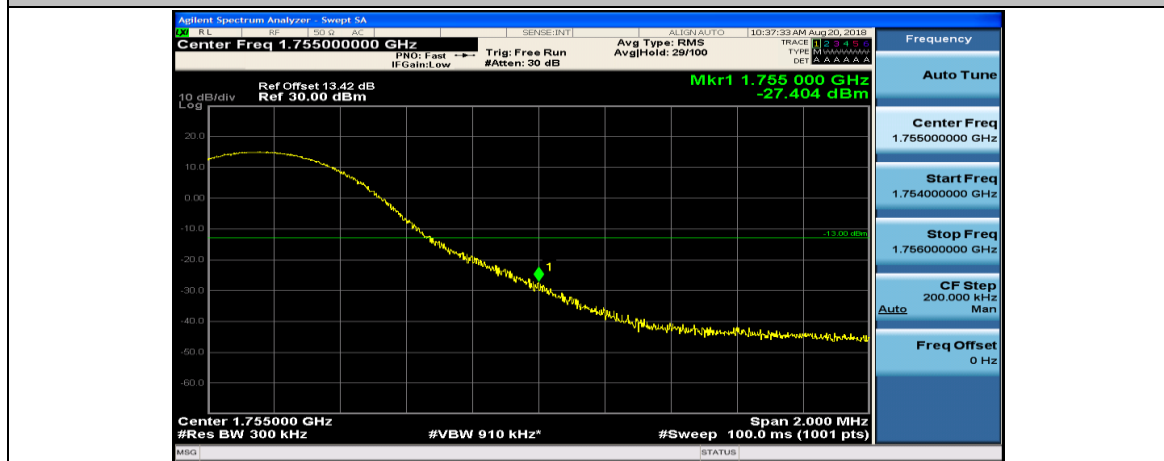


Channel Bandwidth: 15 MHz

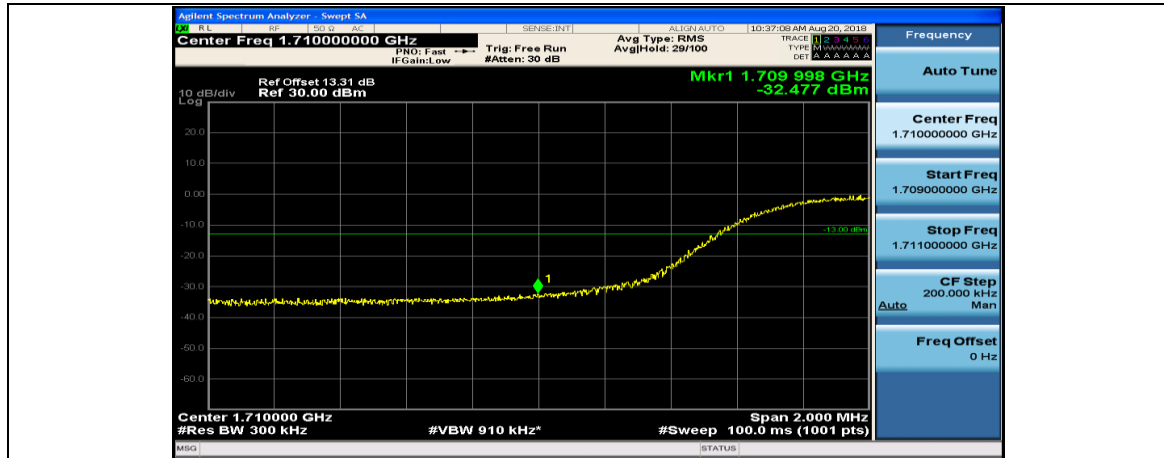
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0



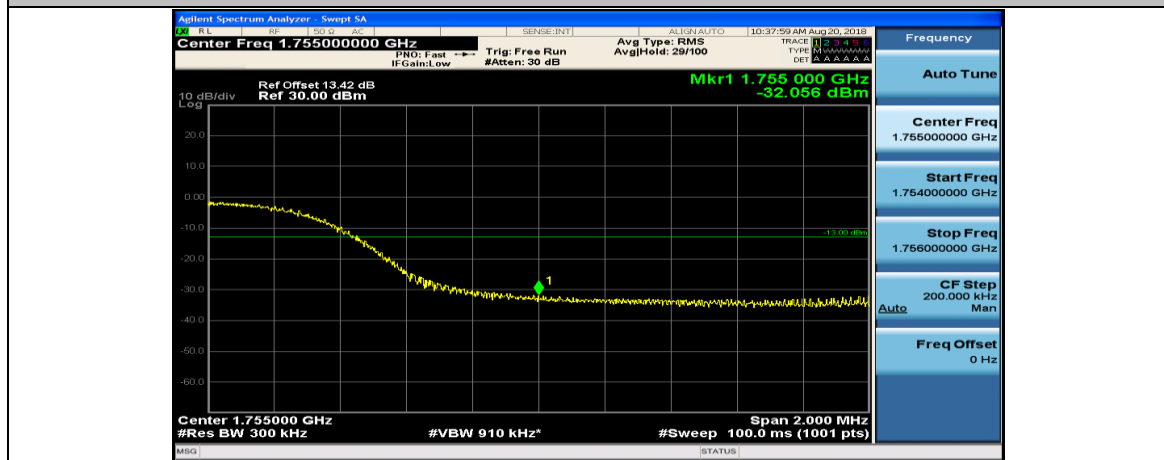
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74



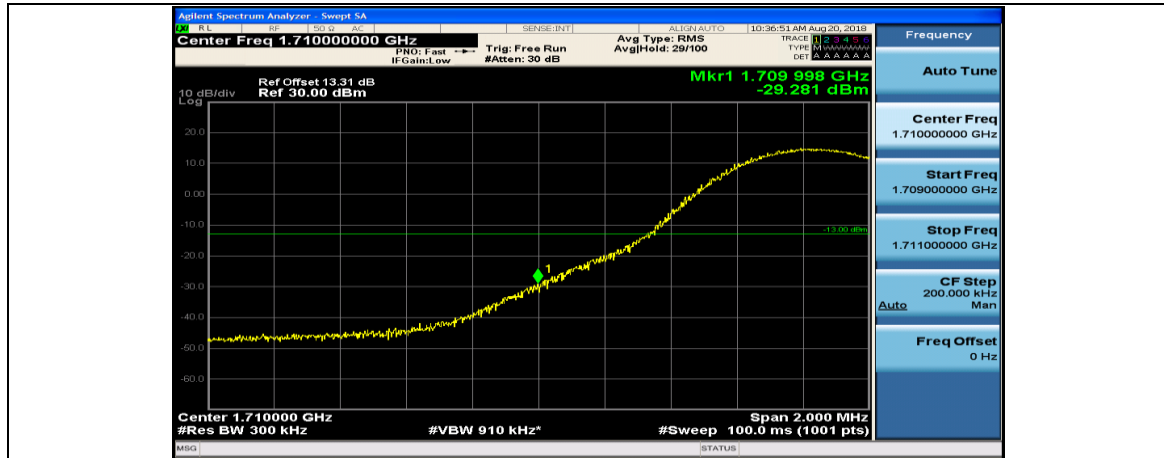
(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0



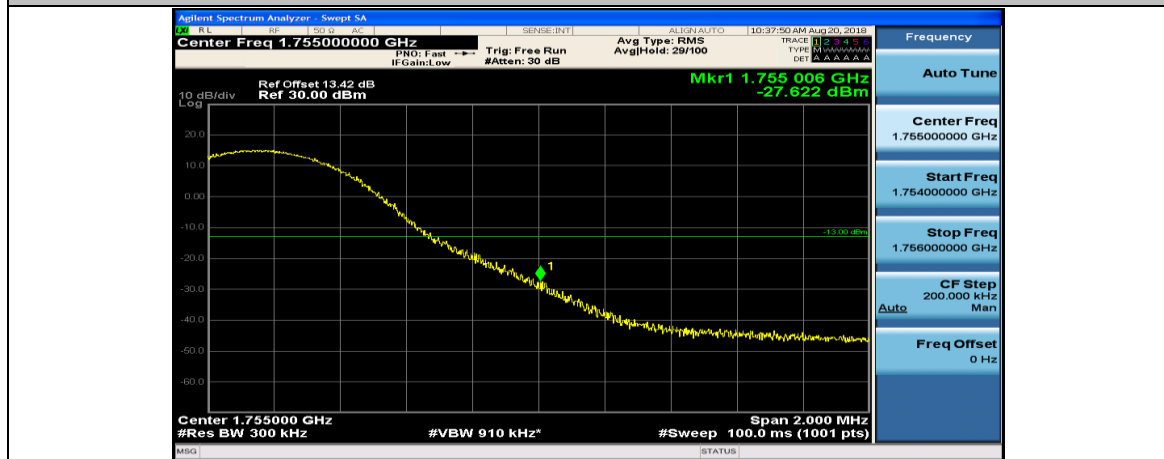
(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0



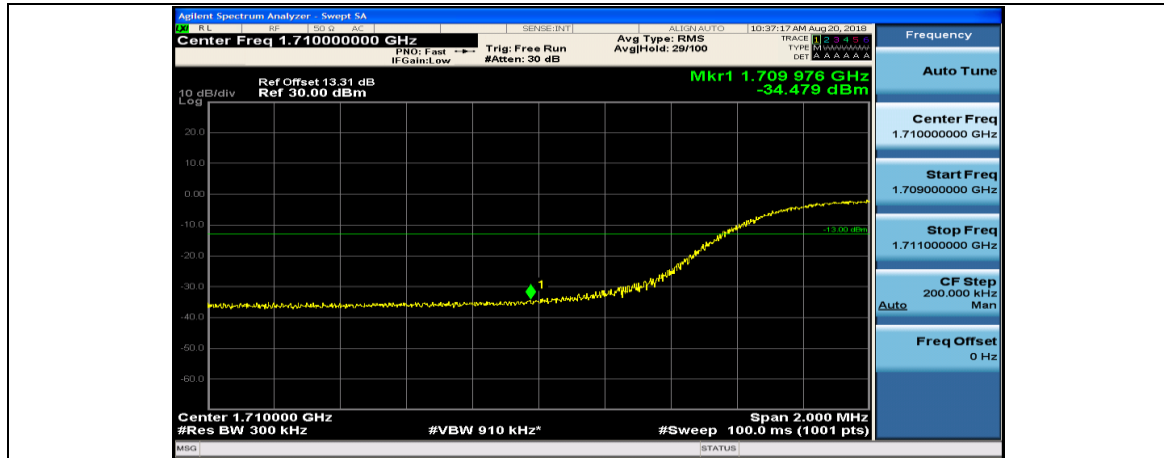
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0



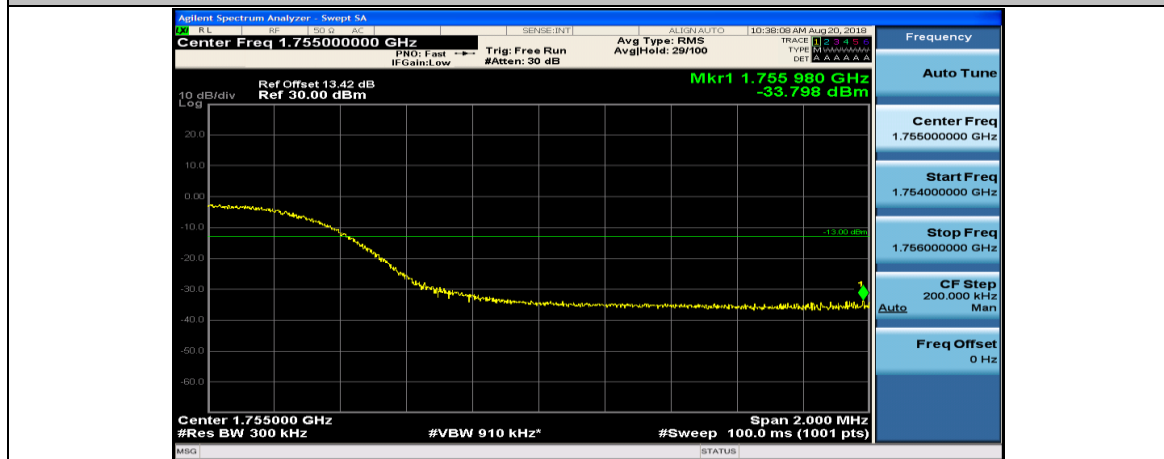
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74



(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0



(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0

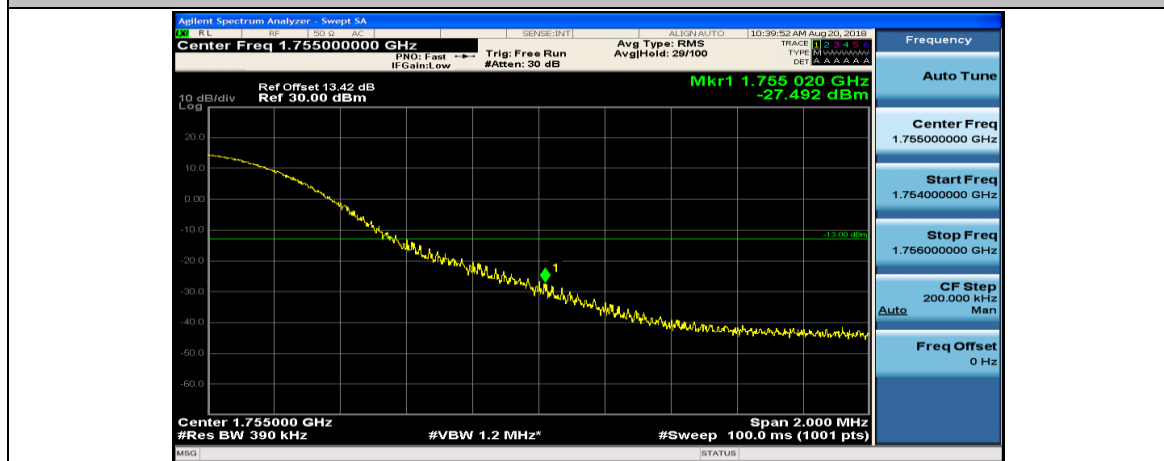


Channel Bandwidth: 20 MHz

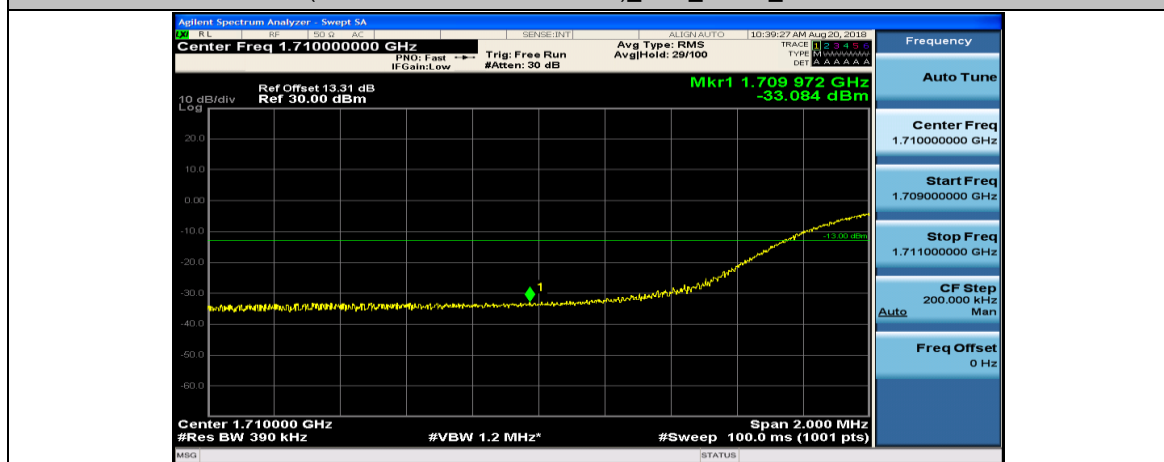
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99

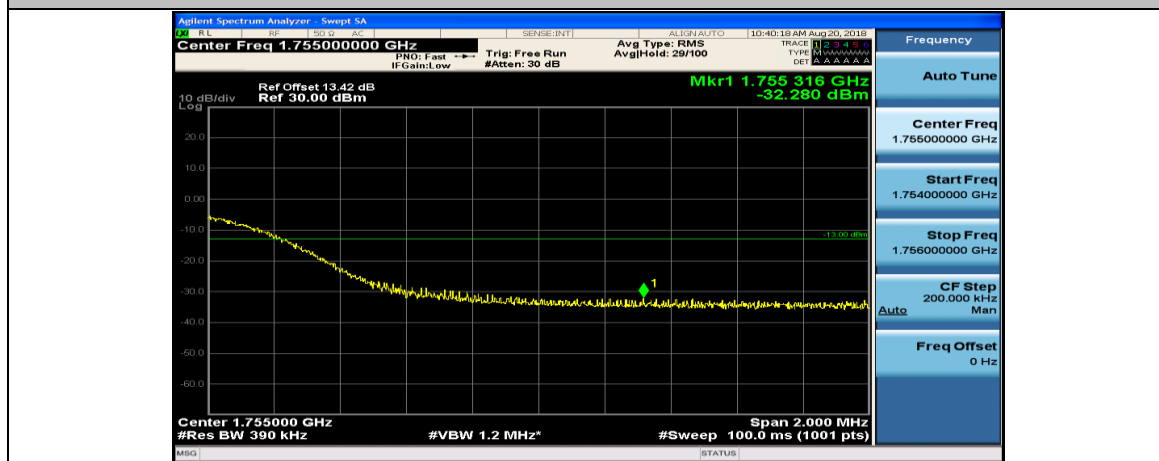


(Channel Bandwidth: 20 MHz)_LCH_QPSK_100RB#0

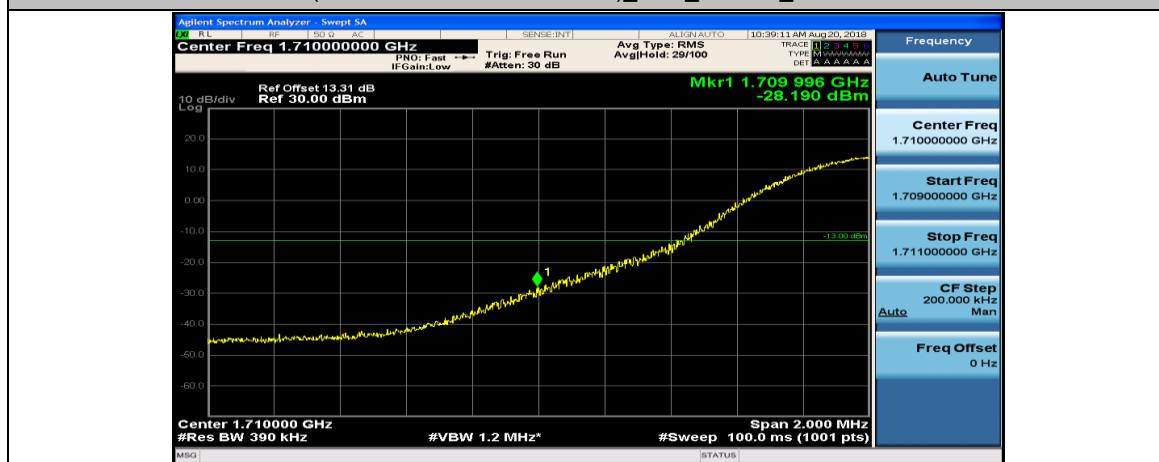




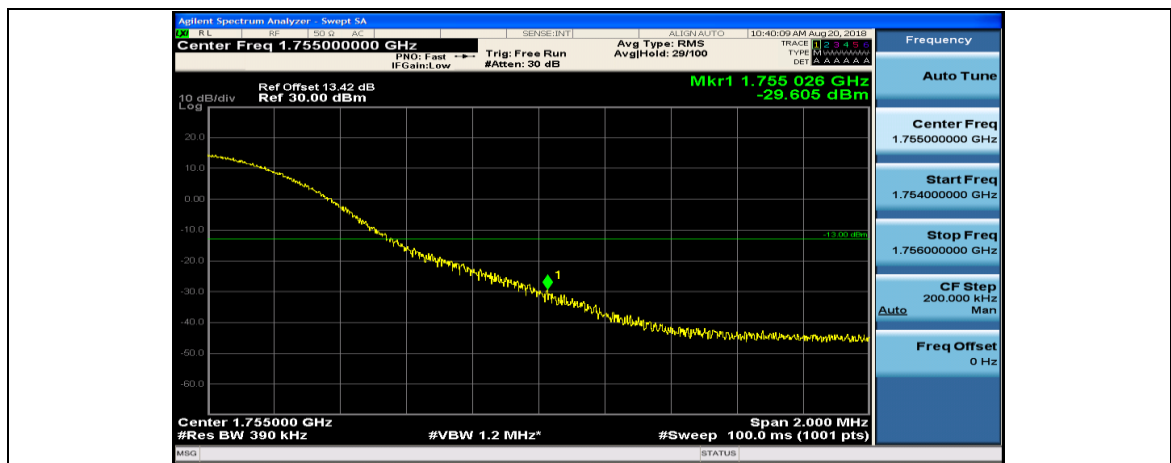
(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0



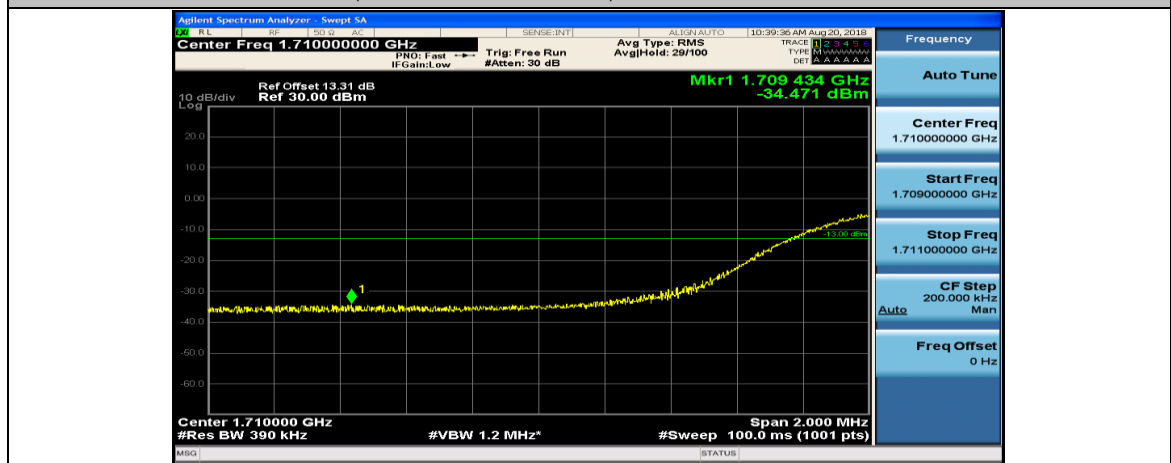
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0



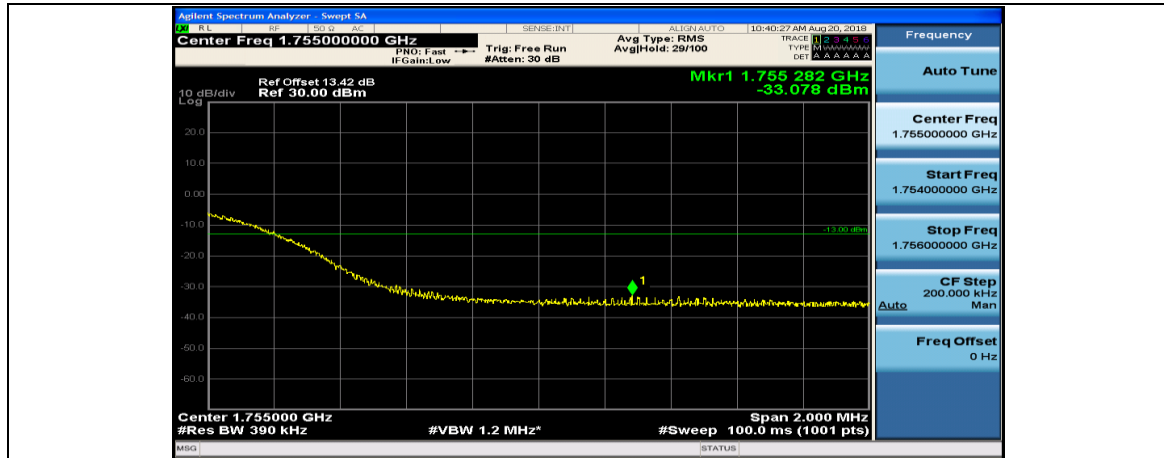
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#99



(Channel Bandwidth: 20 MHz)_LCH_16QAM_100RB#0



(Channel Bandwidth: 20 MHz)_HCH_16QAM_100RB#0

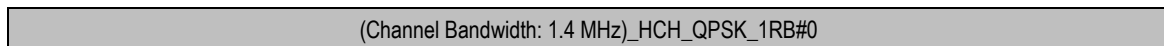
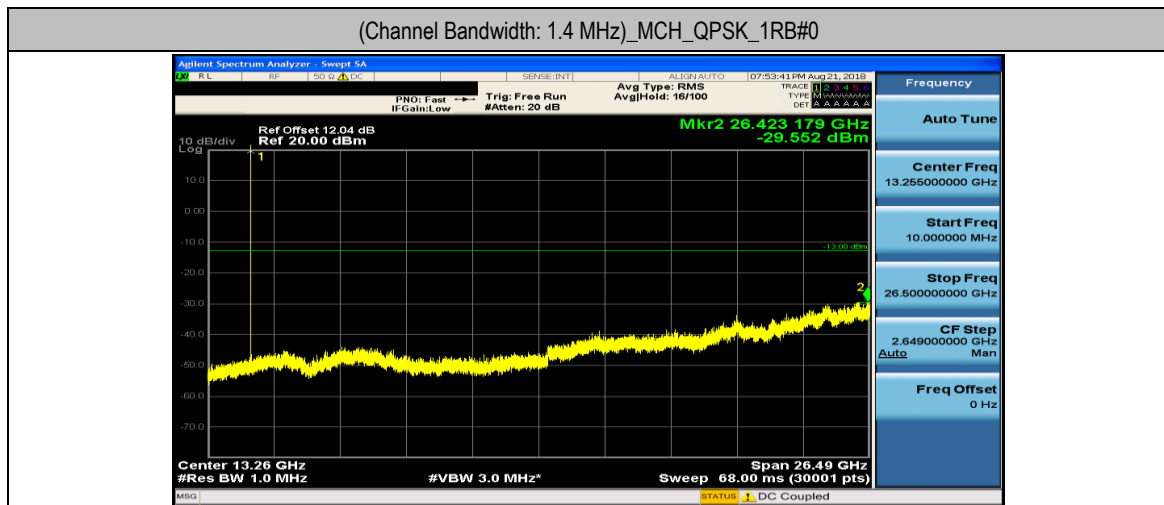
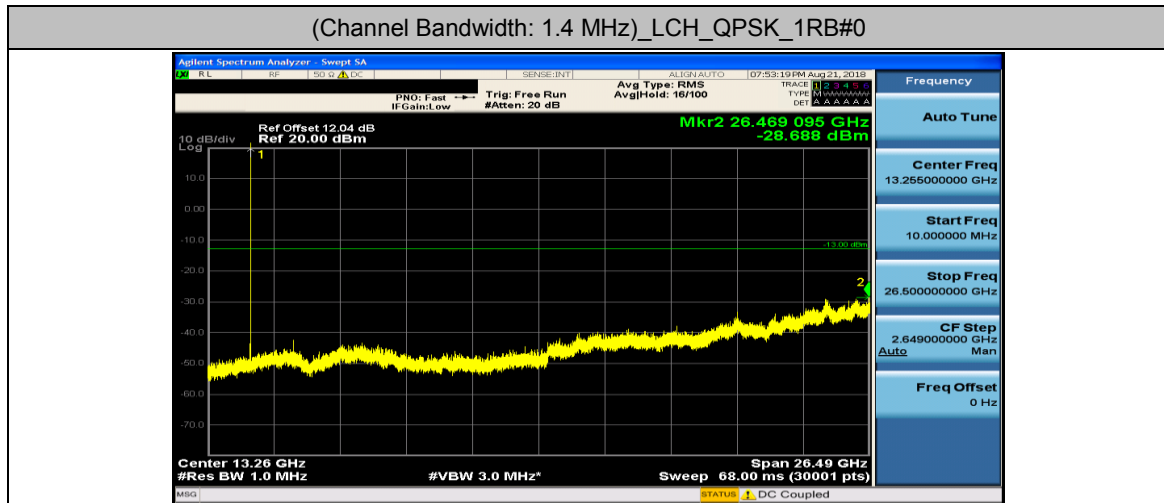


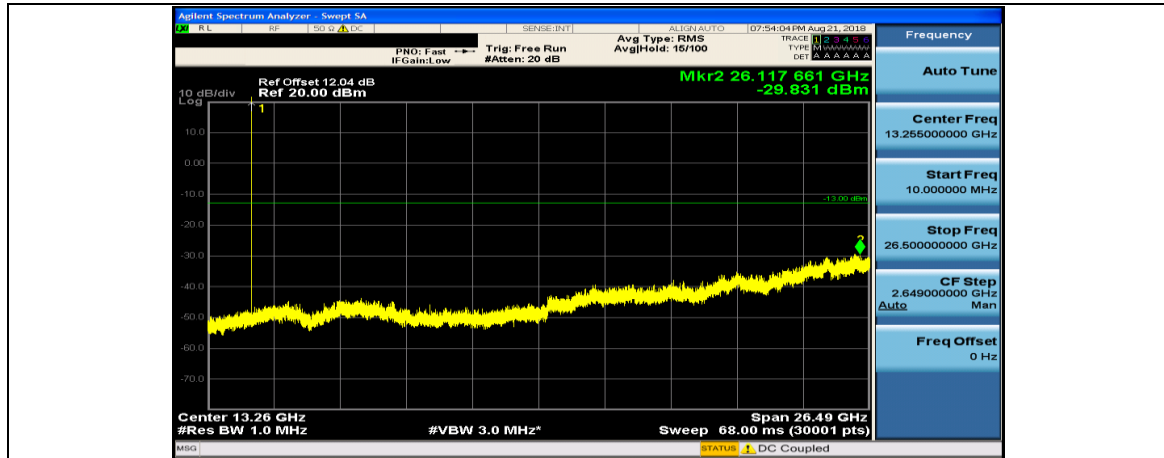


Appendix E: Conducted Spurious Emission

Test Graphs

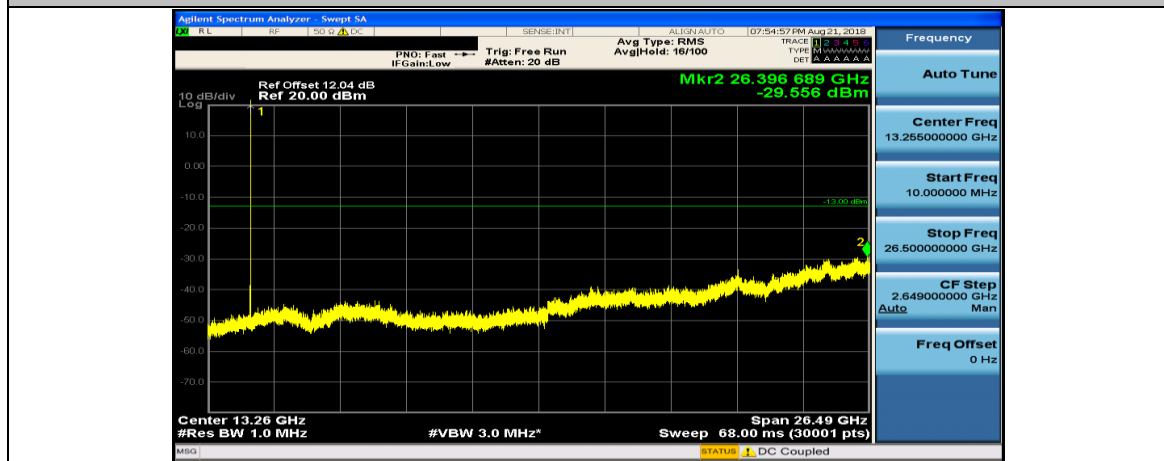
Channel Bandwidth: 1.4 MHz



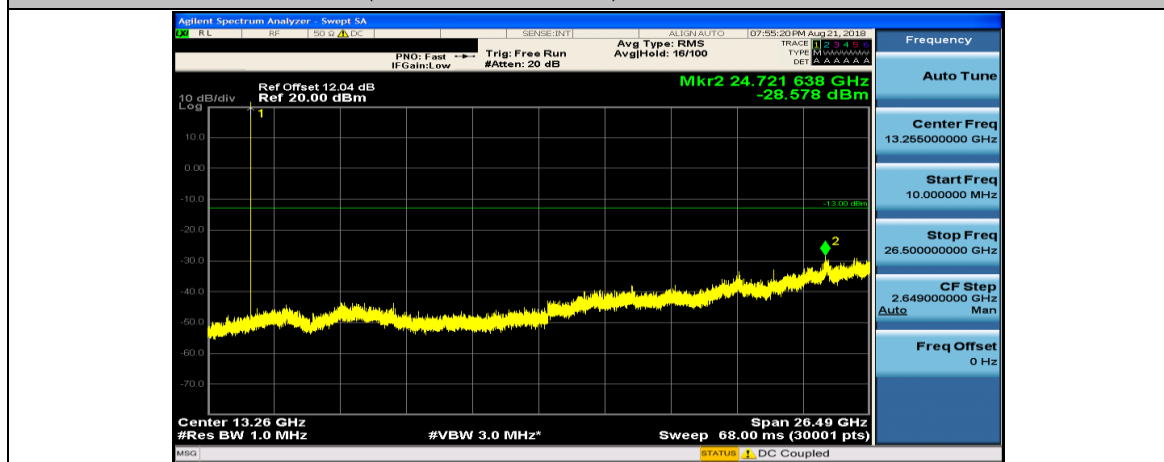


Channel Bandwidth: 3 MHz

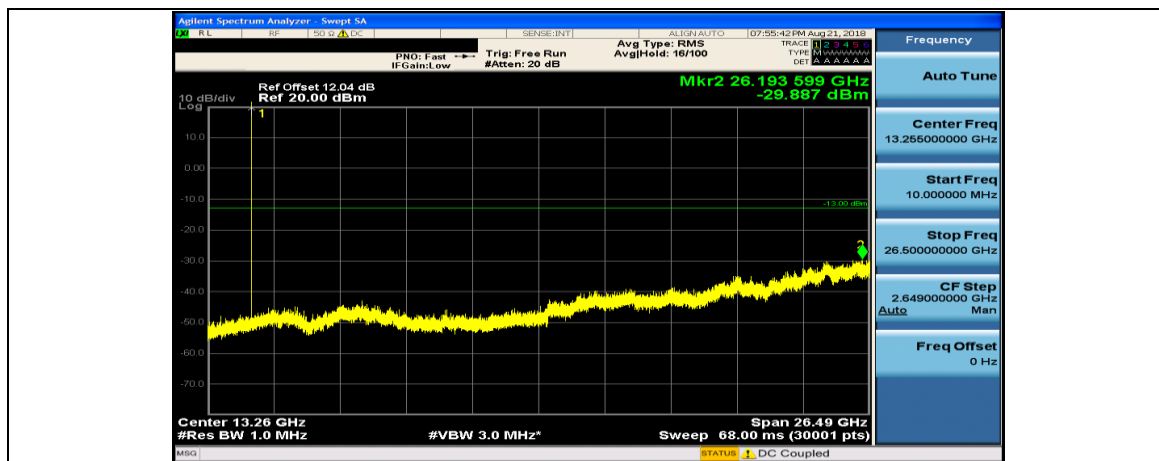
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



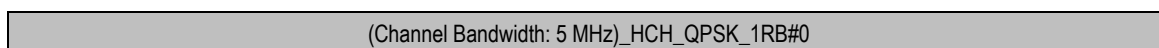
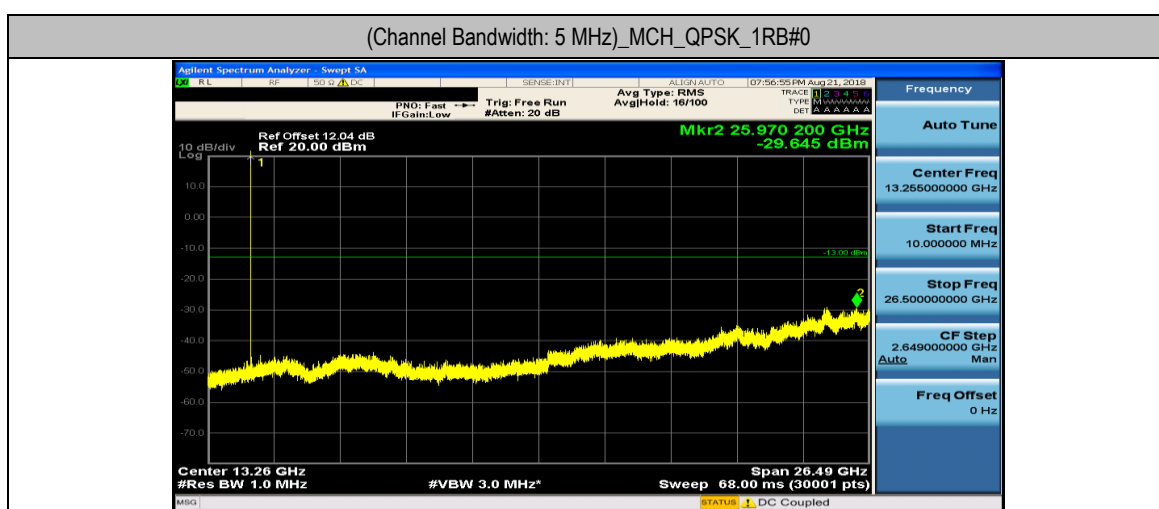
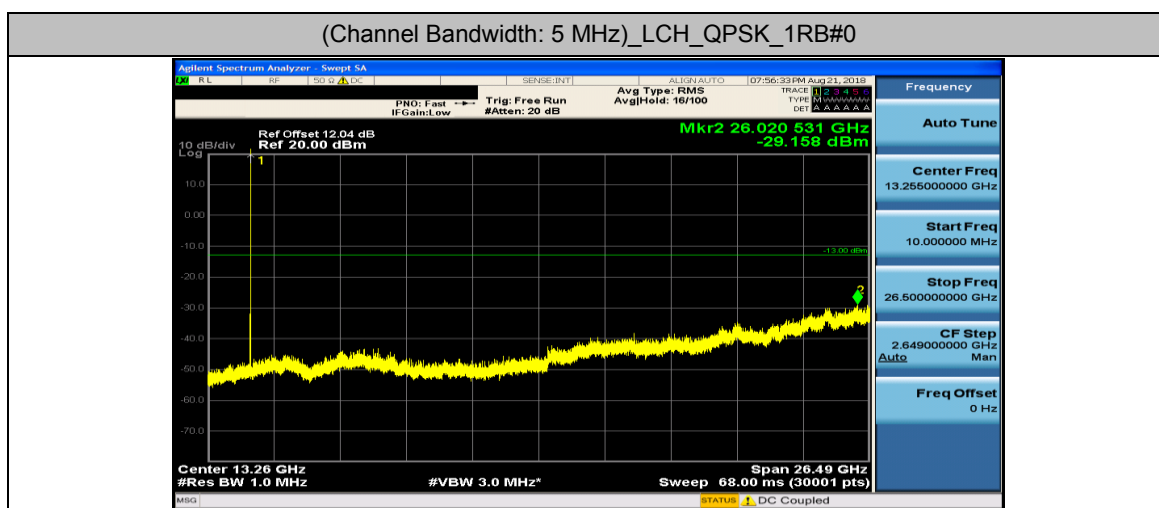
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

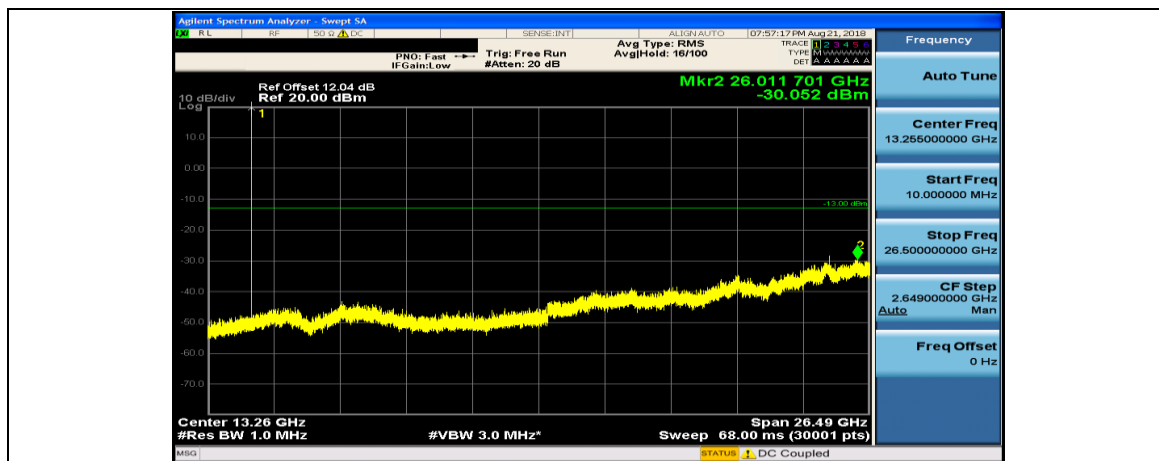


(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

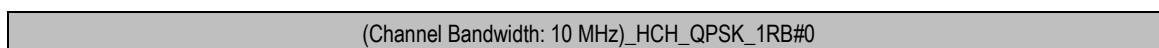
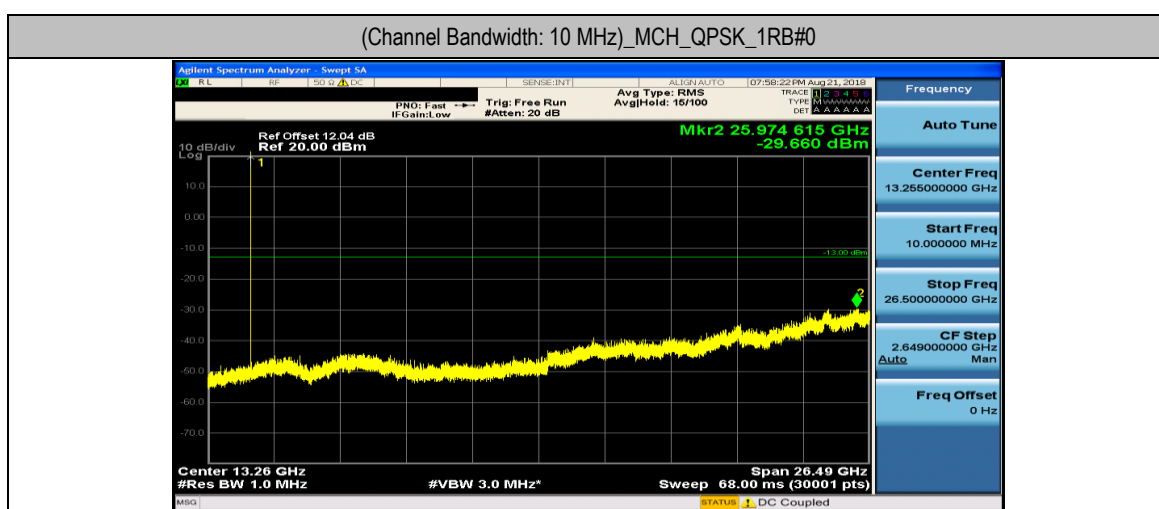
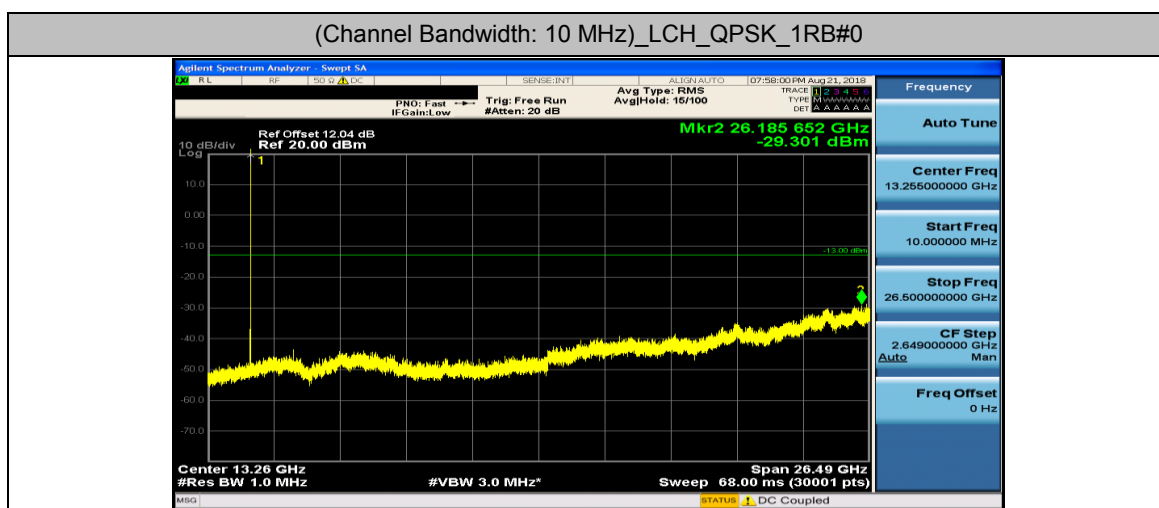


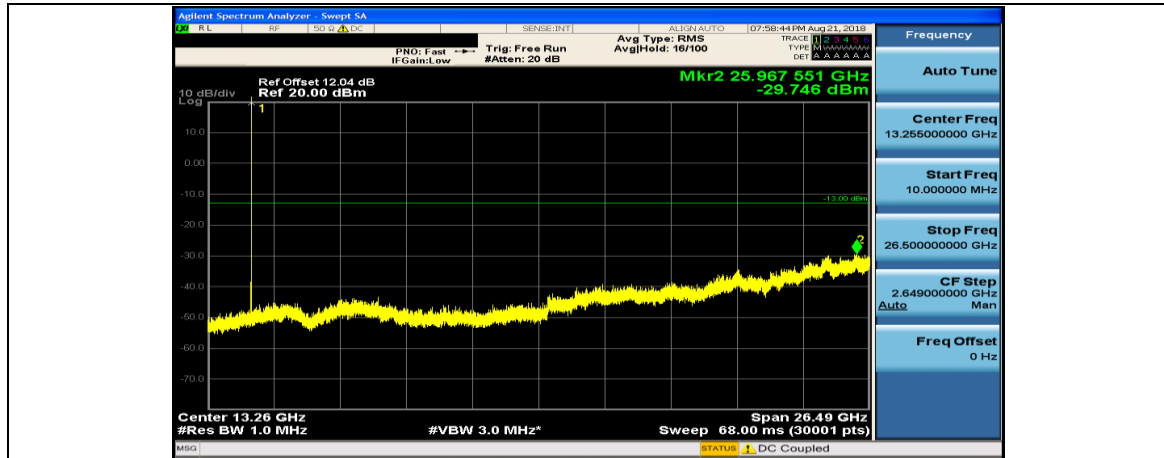
Channel Bandwidth: 5 MHz



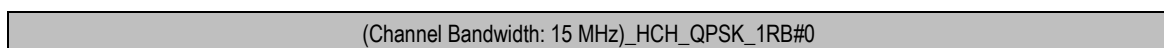
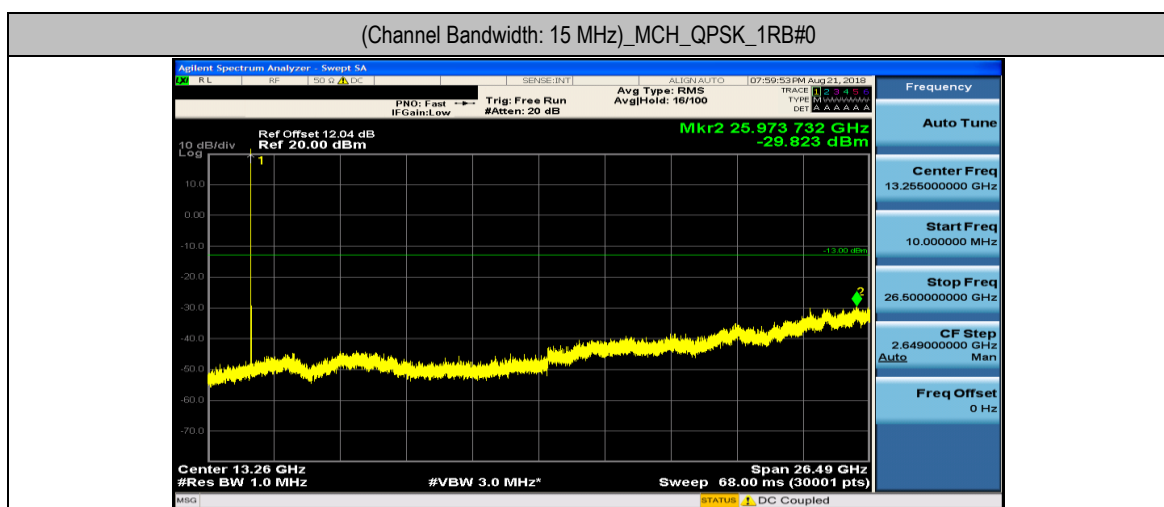
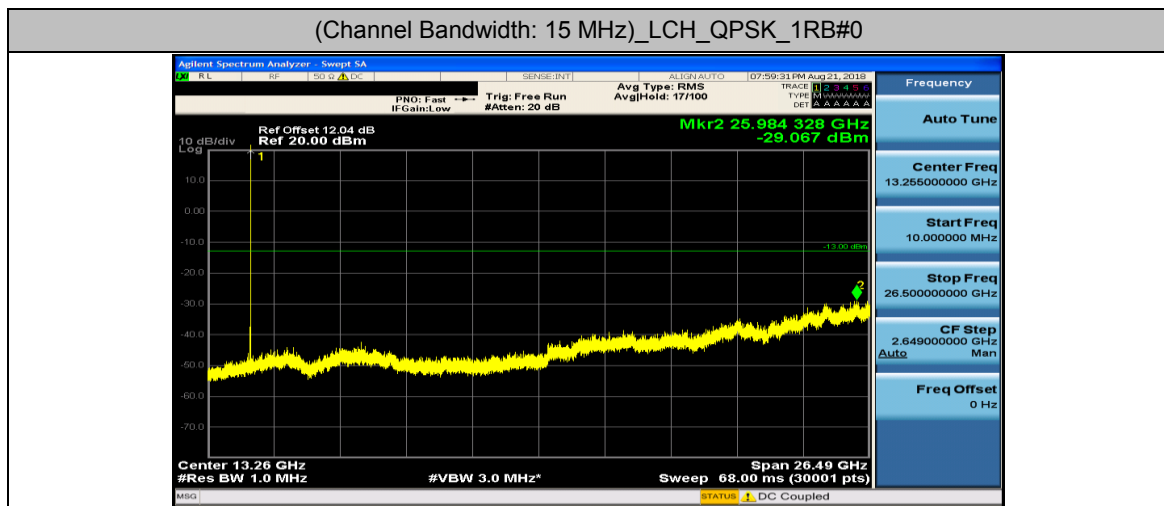


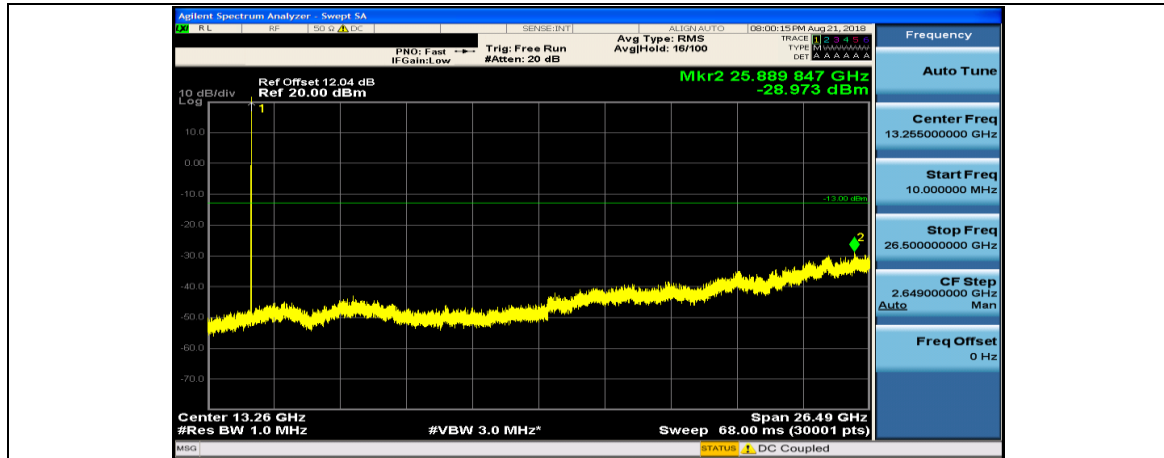
Channel Bandwidth: 10 MHz





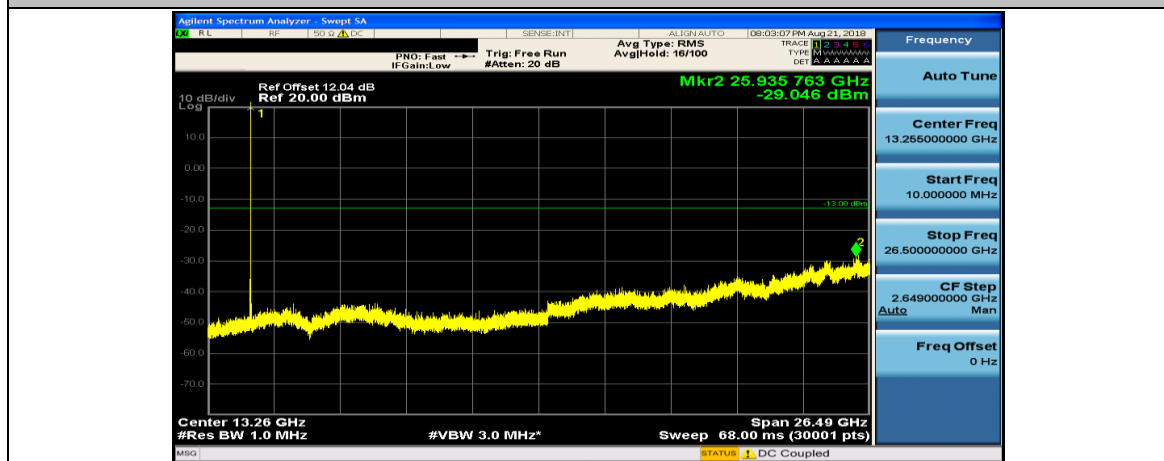
Channel Bandwidth: 15 MHz



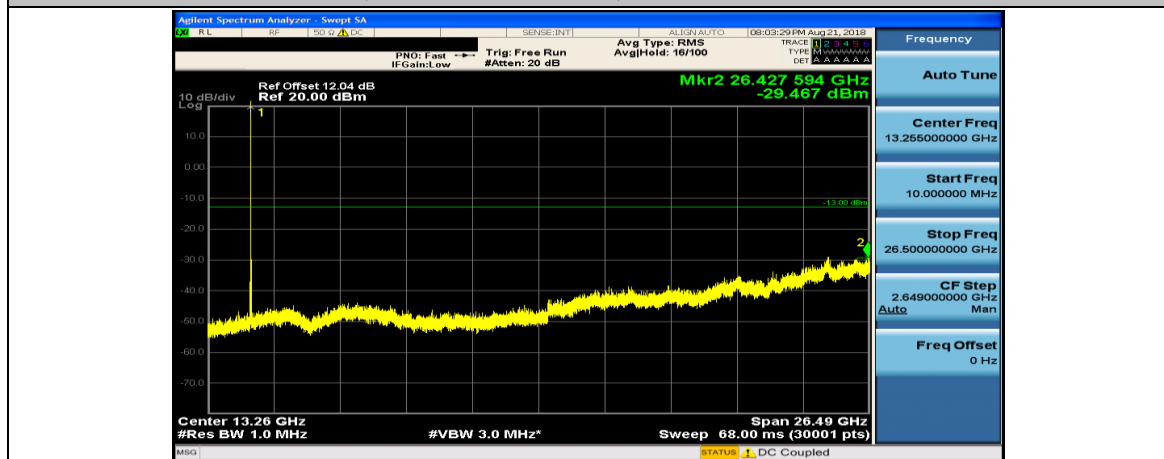


Channel Bandwidth: 20 MHz

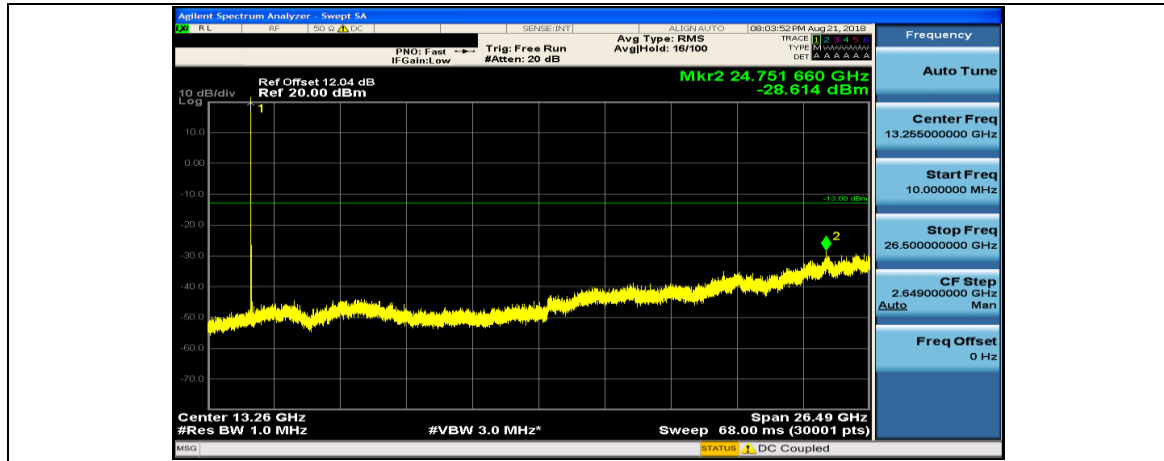
(Channel Bandwidth: 20 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 20 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 20 MHz)_HCH_QPSK_1RB#0



Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.80	0.001052	± 2.5	PASS
		VN	TN	0.80	0.000468	± 2.5	PASS
		VH	TN	0.40	0.000234	± 2.5	PASS
	MCH	VL	TN	1.20	0.000693	± 2.5	PASS
		VN	TN	0.30	0.000173	± 2.5	PASS
		VH	TN	-1.60	-0.000924	± 2.5	PASS
	HCH	VL	TN	-5.20	-0.002964	± 2.5	PASS
		VN	TN	-0.90	-0.000513	± 2.5	PASS
		VH	TN	-1.00	-0.000570	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.00	0.000000	± 2.5	PASS
		VN	-20	1.70	0.000994	± 2.5	PASS
		VN	-10	0.40	0.000234	± 2.5	PASS
		VN	0	1.40	0.000818	± 2.5	PASS
		VN	10	4.50	0.002631	± 2.5	PASS
		VN	20	-0.30	-0.000175	± 2.5	PASS
		VN	30	3.10	0.001812	± 2.5	PASS
		VN	40	3.80	0.002221	± 2.5	PASS
	MCH	VN	50	3.90	0.002280	± 2.5	PASS
		VN	-30	0.80	0.000462	± 2.5	PASS
		VN	-20	-1.10	-0.000635	± 2.5	PASS



		VN	-10	-0.10	-0.000058	± 2.5	PASS
		VN	0	2.40	0.001385	± 2.5	PASS
		VN	10	0.60	0.000346	± 2.5	PASS
		VN	20	-0.40	-0.000231	± 2.5	PASS
		VN	30	0.80	0.000462	± 2.5	PASS
		VN	40	-2.10	-0.001212	± 2.5	PASS
		VN	50	-0.80	-0.000462	± 2.5	PASS
	HCH	VN	-30	-4.30	-0.002451	± 2.5	PASS
		VN	-20	-4.20	-0.002394	± 2.5	PASS
		VN	-10	-3.20	-0.001824	± 2.5	PASS
		VN	0	-5.10	-0.002907	± 2.5	PASS
		VN	10	-4.30	-0.002451	± 2.5	PASS
		VN	20	-1.00	-0.000570	± 2.5	PASS
		VN	30	-3.20	-0.001824	± 2.5	PASS
		VN	40	-2.40	-0.001368	± 2.5	PASS
		VN	50	-4.50	-0.002565	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.20	-0.000701	± 2.5	PASS
		VN	TN	-1.90	-0.001110	± 2.5	PASS
		VH	TN	-0.50	-0.000292	± 2.5	PASS
	MCH	VL	TN	-0.50	-0.000289	± 2.5	PASS
		VN	TN	-0.50	-0.000289	± 2.5	PASS
		VH	TN	0.20	0.000115	± 2.5	PASS
	HCH	VL	TN	0.90	0.000513	± 2.5	PASS
		VN	TN	0.40	0.000228	± 2.5	PASS
		VH	TN	-0.70	-0.000399	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-2.60	-0.001519	± 2.5	PASS
		VN	-20	-1.70	-0.000993	± 2.5	PASS
		VN	-10	-0.70	-0.000409	± 2.5	PASS
		VN	0	-0.40	-0.000234	± 2.5	PASS
		VN	10	-1.00	-0.000584	± 2.5	PASS
		VN	20	-1.10	-0.000643	± 2.5	PASS
		VN	30	0.50	0.000292	± 2.5	PASS
		VN	40	-0.60	-0.000351	± 2.5	PASS
		VN	50	0.50	0.000292	± 2.5	PASS
	MCH	VN	-30	1.00	0.000577	± 2.5	PASS
		VN	-20	-2.20	-0.001270	± 2.5	PASS
		VN	-10	-2.50	-0.001443	± 2.5	PASS

		VN	0	-0.40	-0.000231	± 2.5	PASS
		VN	10	0.30	0.000173	± 2.5	PASS
		VN	20	-0.70	-0.000404	± 2.5	PASS
		VN	30	0.40	0.000231	± 2.5	PASS
		VN	40	-2.10	-0.001212	± 2.5	PASS
		VN	50	0.40	0.000231	± 2.5	PASS
	HCH	VN	-30	-0.60	-0.000342	± 2.5	PASS
		VN	-20	-1.90	-0.001084	± 2.5	PASS
		VN	-10	-1.80	-0.001027	± 2.5	PASS
		VN	0	1.00	0.000570	± 2.5	PASS
		VN	10	-2.00	-0.001141	± 2.5	PASS
		VN	20	-0.60	-0.000342	± 2.5	PASS
		VN	30	1.10	0.000627	± 2.5	PASS
		VN	40	0.30	0.000171	± 2.5	PASS
		VN	50	1.10	0.000627	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.90	0.000526	± 2.5	PASS
		VN	TN	-0.30	-0.000175	± 2.5	PASS
		VH	TN	-0.20	-0.000117	± 2.5	PASS
	MCH	VL	TN	2.60	0.001501	± 2.5	PASS
		VN	TN	1.80	0.001039	± 2.5	PASS
		VH	TN	1.40	0.000808	± 2.5	PASS
	HCH	VL	TN	-1.90	-0.001084	± 2.5	PASS
		VN	TN	-3.50	-0.001997	± 2.5	PASS
		VH	TN	0.10	0.000057	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.30	0.001343	± 2.5	PASS
		VN	-20	-0.40	-0.000234	± 2.5	PASS
		VN	-10	2.90	0.001693	± 2.5	PASS
		VN	0	-0.60	-0.000350	± 2.5	PASS
		VN	10	2.50	0.001460	± 2.5	PASS
		VN	20	3.40	0.001985	± 2.5	PASS
		VN	30	1.40	0.000818	± 2.5	PASS
		VN	40	0.40	0.000234	± 2.5	PASS
		VN	50	0.30	0.000175	± 2.5	PASS
	MCH	VN	-30	0.80	0.000462	± 2.5	PASS
		VN	-20	-0.50	-0.000289	± 2.5	PASS
		VN	-10	-1.70	-0.000981	± 2.5	PASS
		VN	0	1.30	0.000750	± 2.5	PASS



		VN	10	0.70	0.000404	± 2.5	PASS
		VN	20	-0.10	-0.000058	± 2.5	PASS
		VN	30	-0.70	-0.000404	± 2.5	PASS
		VN	40	1.20	0.000693	± 2.5	PASS
		VN	50	-1.40	-0.000808	± 2.5	PASS
	HCH	VN	-30	-2.90	-0.001655	± 2.5	PASS
		VN	-20	-3.50	-0.001997	± 2.5	PASS
		VN	-10	-0.70	-0.000399	± 2.5	PASS
		VN	0	-2.90	-0.001655	± 2.5	PASS
		VN	10	-4.30	-0.002454	± 2.5	PASS
		VN	20	-3.30	-0.001883	± 2.5	PASS
		VN	30	-5.20	-0.002967	± 2.5	PASS
		VN	40	-4.20	-0.002397	± 2.5	PASS
		VN	50	-1.30	-0.000742	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-4.40	-0.002566	± 2.5	PASS
		VN	TN	-3.70	-0.002157	± 2.5	PASS
		VH	TN	-3.00	-0.001749	± 2.5	PASS
	MCH	VL	TN	-1.20	-0.000693	± 2.5	PASS
		VN	TN	1.10	0.000635	± 2.5	PASS
		VH	TN	1.30	0.000750	± 2.5	PASS
	HCH	VL	TN	0.90	0.000514	± 2.5	PASS
		VN	TN	0.50	0.000286	± 2.5	PASS
		VH	TN	2.80	0.001600	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.70	-0.000991	± 2.5	PASS
		VN	-20	-4.10	-0.002391	± 2.5	PASS
		VN	-10	-2.00	-0.001166	± 2.5	PASS
		VN	0	-4.20	-0.002449	± 2.5	PASS
		VN	10	-4.60	-0.002682	± 2.5	PASS
		VN	20	-4.10	-0.002391	± 2.5	PASS
		VN	30	-3.80	-0.002216	± 2.5	PASS
		VN	40	-3.60	-0.002099	± 2.5	PASS
		VN	50	-4.00	-0.002332	± 2.5	PASS
	MCH	VN	-30	-0.70	-0.000404	± 2.5	PASS
		VN	-20	0.20	0.000115	± 2.5	PASS
		VN	-10	-0.40	-0.000231	± 2.5	PASS
		VN	0	0.70	0.000404	± 2.5	PASS
		VN	10	-1.90	-0.001097	± 2.5	PASS



		VN	20	0.50	0.000289	± 2.5	PASS
		VN	30	-1.50	-0.000866	± 2.5	PASS
		VN	40	1.60	0.000924	± 2.5	PASS
		VN	50	-0.80	-0.000462	± 2.5	PASS
	HCH	VN	-30	0.20	0.000114	± 2.5	PASS
		VN	-20	3.50	0.002000	± 2.5	PASS
		VN	-10	1.60	0.000914	± 2.5	PASS
		VN	0	4.20	0.002400	± 2.5	PASS
		VN	10	-0.10	-0.000057	± 2.5	PASS
		VN	20	0.30	0.000171	± 2.5	PASS
		VN	30	1.30	0.000743	± 2.5	PASS
		VN	40	1.80	0.001029	± 2.5	PASS
		VN	50	2.70	0.001543	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.40	0.000815	± 2.5	PASS
		VN	TN	3.60	0.002096	± 2.5	PASS
		VH	TN	-0.40	-0.000233	± 2.5	PASS
	MCH	VL	TN	0.20	0.000115	± 2.5	PASS
		VN	TN	4.80	0.002771	± 2.5	PASS
		VH	TN	-0.50	-0.000289	± 2.5	PASS
	HCH	VL	TN	1.70	0.000973	± 2.5	PASS
		VN	TN	2.30	0.001316	± 2.5	PASS
		VH	TN	0.00	0.000000	± 2.5	PASS

Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.50	-0.000291	± 2.5	PASS
		VN	-20	1.60	0.000932	± 2.5	PASS
		VN	-10	1.40	0.000815	± 2.5	PASS
		VN	0	0.50	0.000291	± 2.5	PASS
		VN	10	0.10	0.000058	± 2.5	PASS
		VN	20	-0.90	-0.000524	± 2.5	PASS
		VN	30	-0.90	-0.000524	± 2.5	PASS
		VN	40	-1.60	-0.000932	± 2.5	PASS
		VN	50	-0.20	-0.000116	± 2.5	PASS
	MCH	VN	-30	-0.40	-0.000231	± 2.5	PASS
		VN	-20	1.10	0.000635	± 2.5	PASS
		VN	-10	2.00	0.001154	± 2.5	PASS
		VN	0	3.20	0.001847	± 2.5	PASS
		VN	10	2.30	0.001328	± 2.5	PASS
		VN	20	2.40	0.001385	± 2.5	PASS



		VN	30	-1.30	-0.000750	± 2.5	PASS
		VN	40	-0.80	-0.000462	± 2.5	PASS
		VN	50	1.50	0.000866	± 2.5	PASS
	HCH	VN	-30	0.60	0.000343	± 2.5	PASS
		VN	-20	3.00	0.001717	± 2.5	PASS
		VN	-10	3.10	0.001774	± 2.5	PASS
		VN	0	1.80	0.001030	± 2.5	PASS
		VN	10	2.40	0.001373	± 2.5	PASS
		VN	20	1.50	0.000858	± 2.5	PASS
		VN	30	-0.80	-0.000458	± 2.5	PASS
		VN	40	2.80	0.001602	± 2.5	PASS
		VN	50	1.50	0.000858	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.00	0.000581	± 2.5	PASS
		VN	TN	3.00	0.001744	± 2.5	PASS
		VH	TN	2.10	0.001221	± 2.5	PASS
	MCH	VL	TN	-1.10	-0.000635	± 2.5	PASS
		VN	TN	4.50	0.002597	± 2.5	PASS
		VH	TN	2.10	0.001212	± 2.5	PASS
	HCH	VL	TN	-2.80	-0.001605	± 2.5	PASS
		VN	TN	6.10	0.003496	± 2.5	PASS
		VH	TN	-4.60	-0.002636	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.20	0.001279	± 2.5	PASS
		VN	-20	2.40	0.001395	± 2.5	PASS
		VN	-10	2.10	0.001221	± 2.5	PASS
		VN	0	2.10	0.001221	± 2.5	PASS
		VN	10	3.10	0.001802	± 2.5	PASS
		VN	20	4.40	0.002558	± 2.5	PASS
		VN	30	3.60	0.002093	± 2.5	PASS
		VN	40	1.10	0.000640	± 2.5	PASS
		VN	50	0.00	0.000000	± 2.5	PASS
	MCH	VN	-30	-0.90	-0.000519	± 2.5	PASS
		VN	-20	-1.40	-0.000808	± 2.5	PASS
		VN	-10	-0.70	-0.000404	± 2.5	PASS
		VN	0	-0.10	-0.000058	± 2.5	PASS
		VN	10	-0.30	-0.000173	± 2.5	PASS
		VN	20	1.20	0.000693	± 2.5	PASS
VN	30	-0.40	-0.000231	± 2.5	PASS		



		VN	40	-2.10	-0.001212	± 2.5	PASS
		VN	50	-0.80	-0.000462	± 2.5	PASS
	HCH	VN	-30	-0.10	-0.000057	± 2.5	PASS
		VN	-20	-5.40	-0.003095	± 2.5	PASS
		VN	-10	-1.90	-0.001089	± 2.5	PASS
		VN	0	-4.30	-0.002464	± 2.5	PASS
		VN	10	-0.30	-0.000172	± 2.5	PASS
		VN	20	0.20	0.000115	± 2.5	PASS
		VN	30	-3.60	-0.002063	± 2.5	PASS
		VN	40	-1.50	-0.000860	± 2.5	PASS
		VN	50	-4.20	-0.002407	± 2.5	PASS