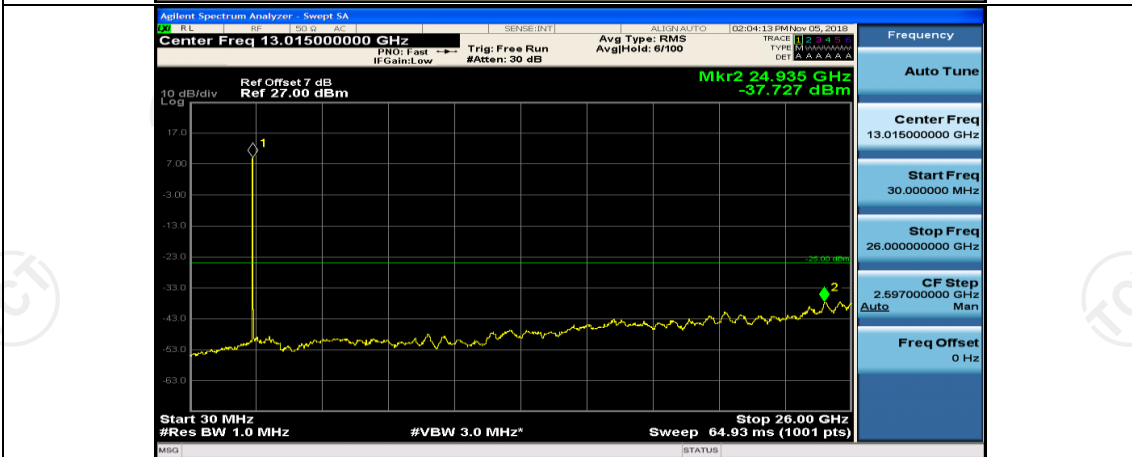
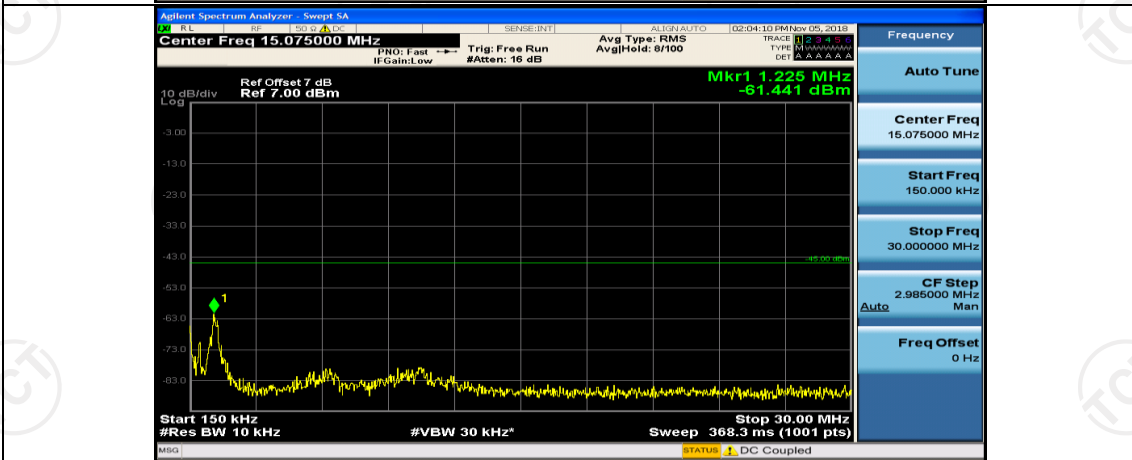
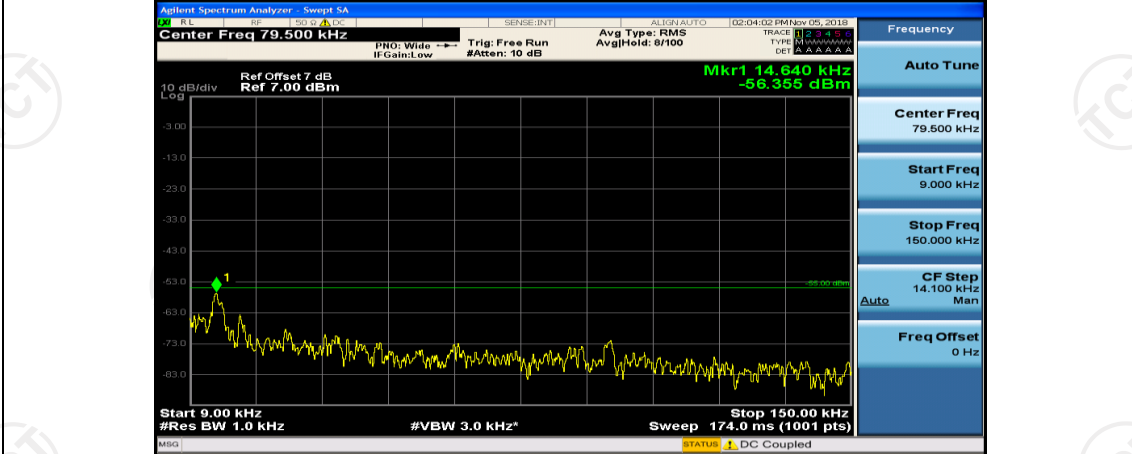
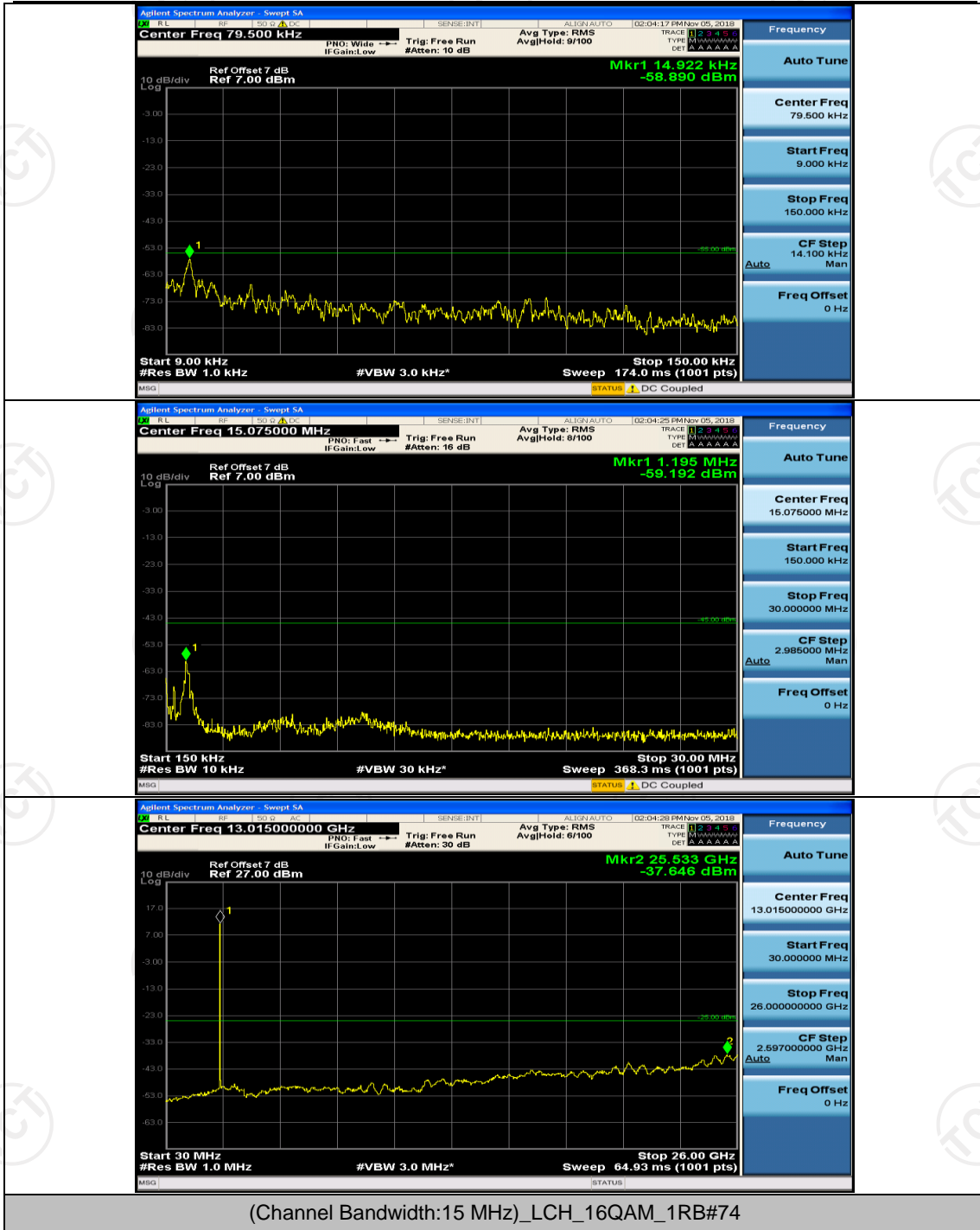
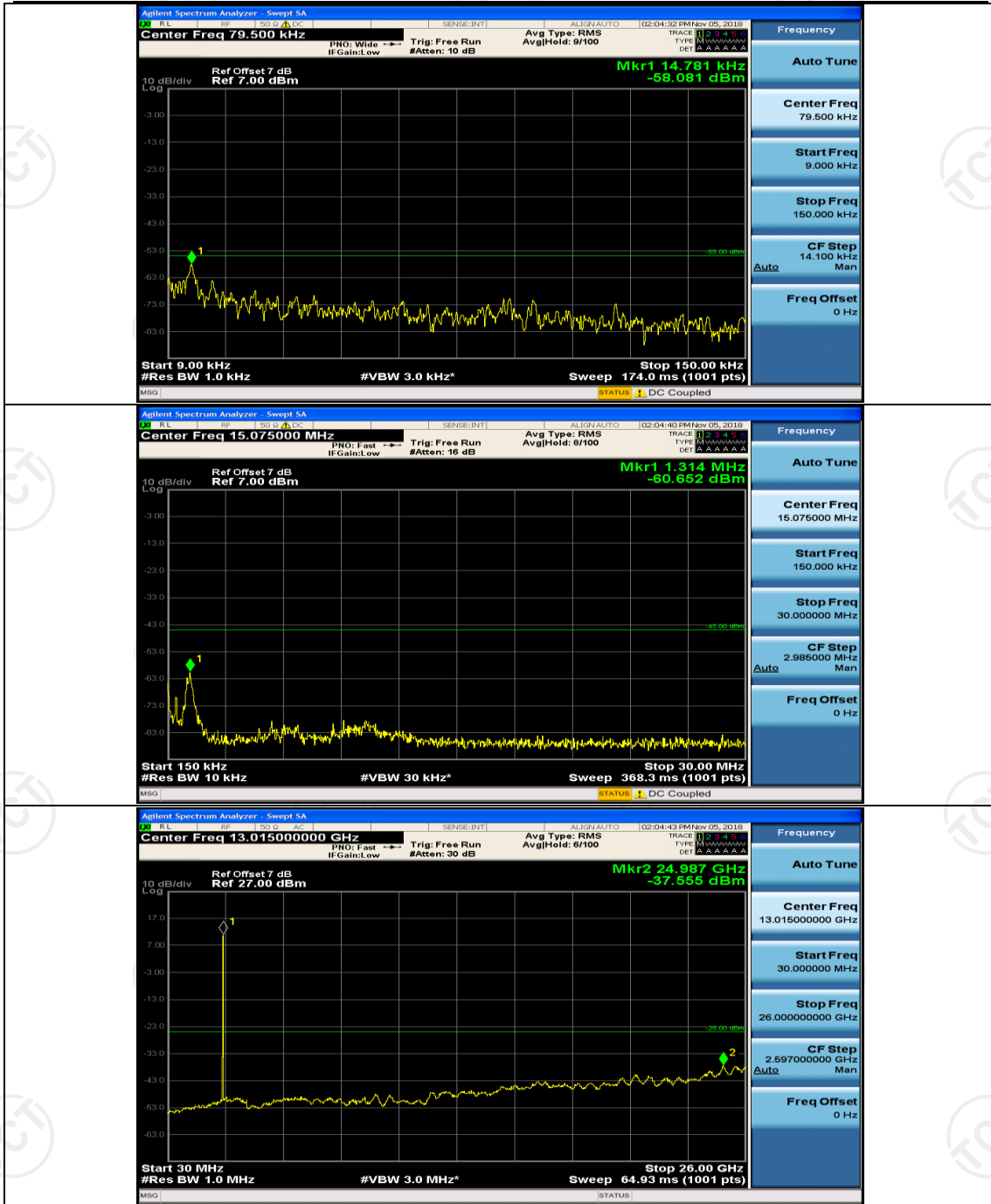


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

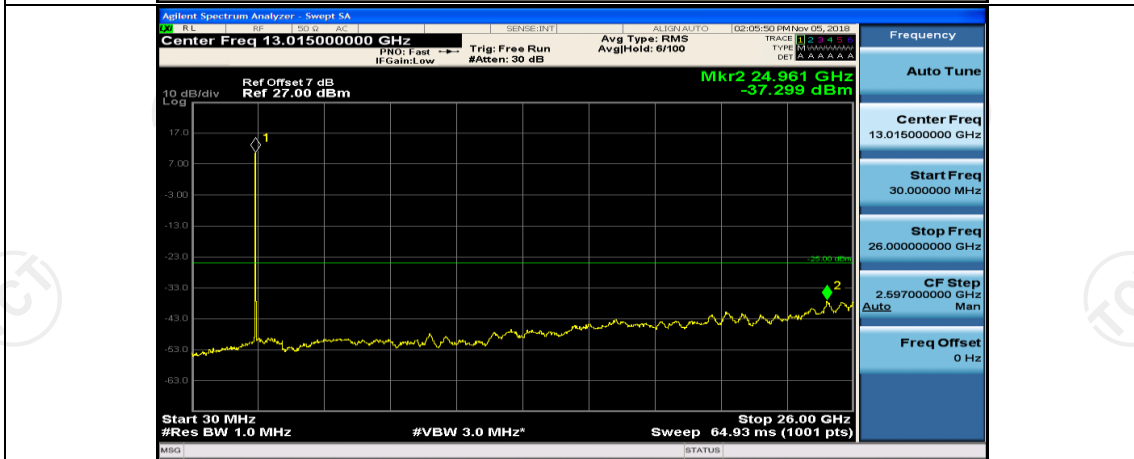
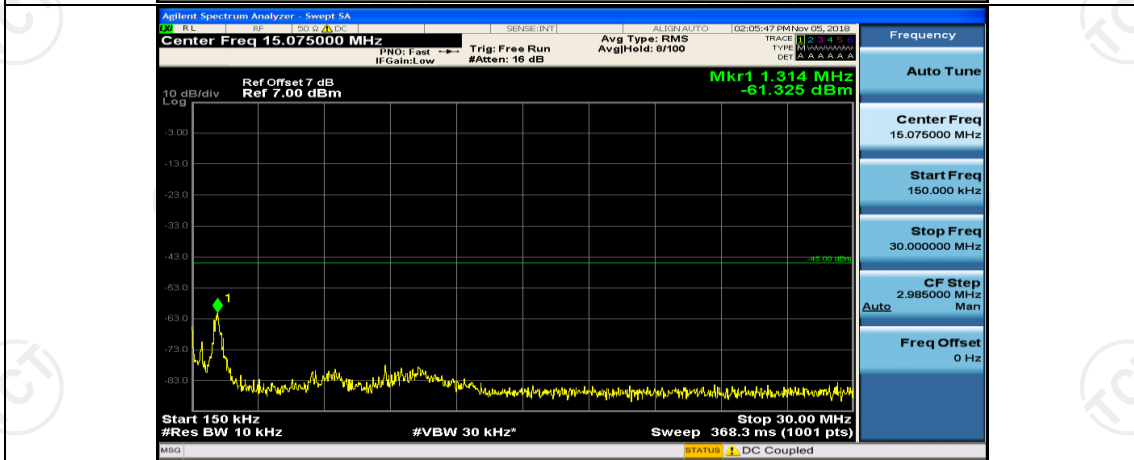
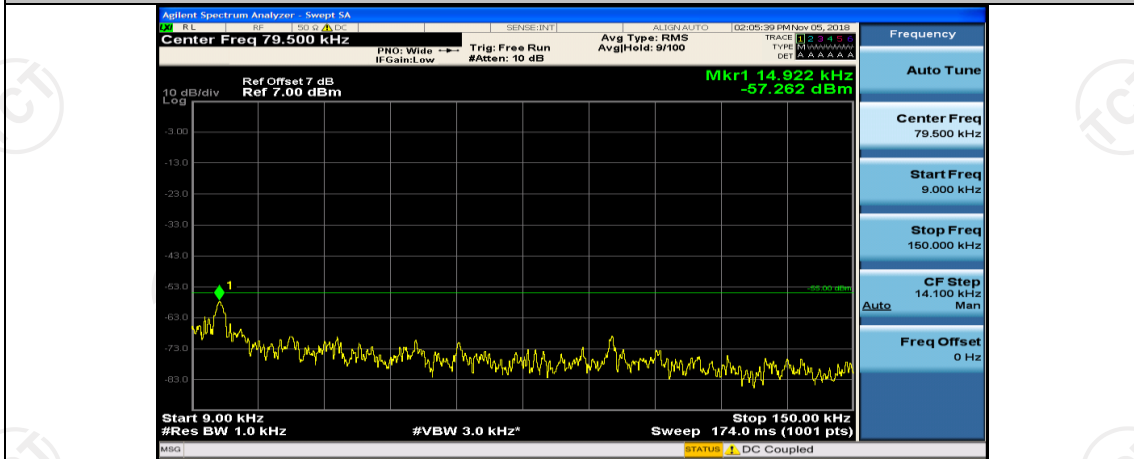


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

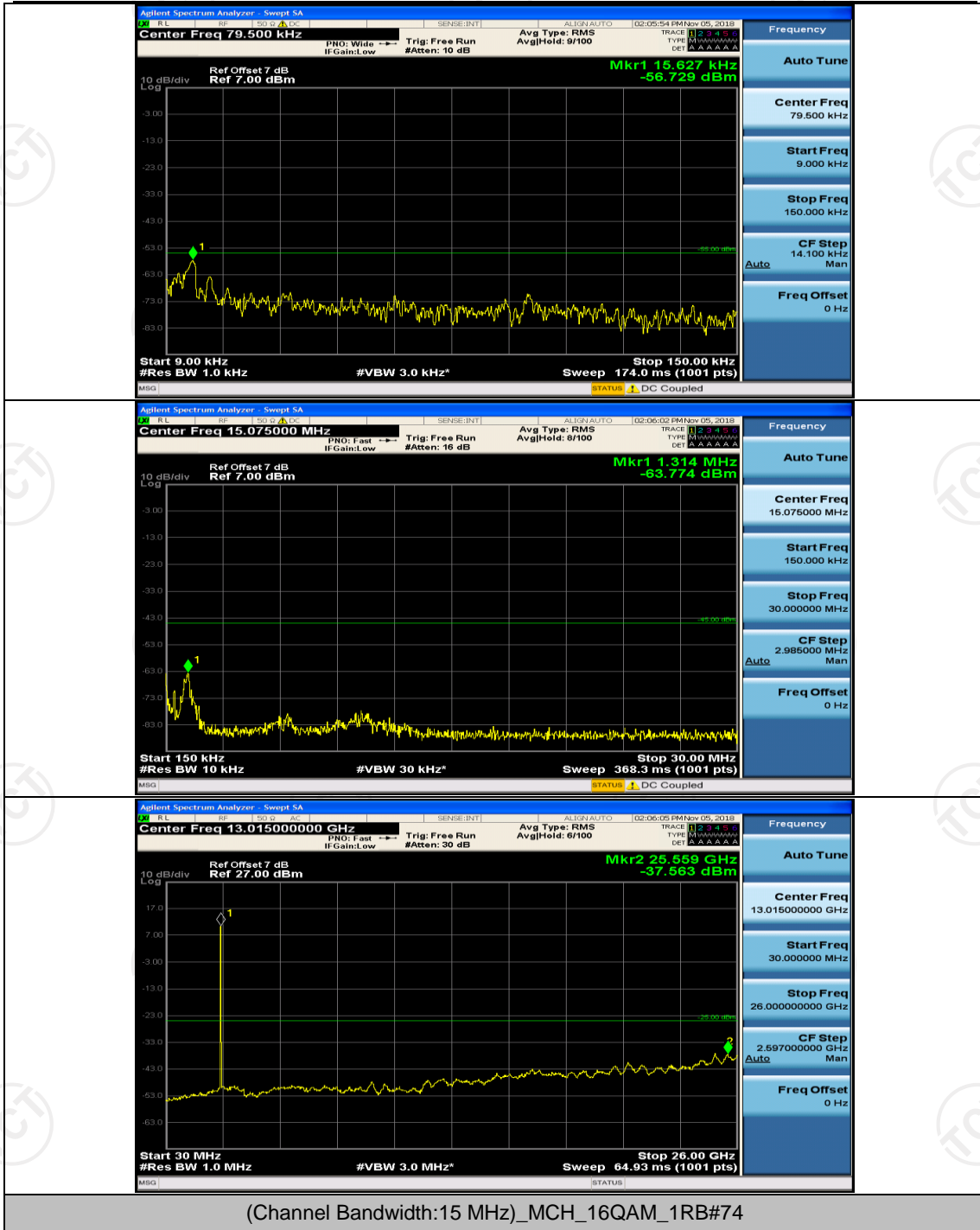


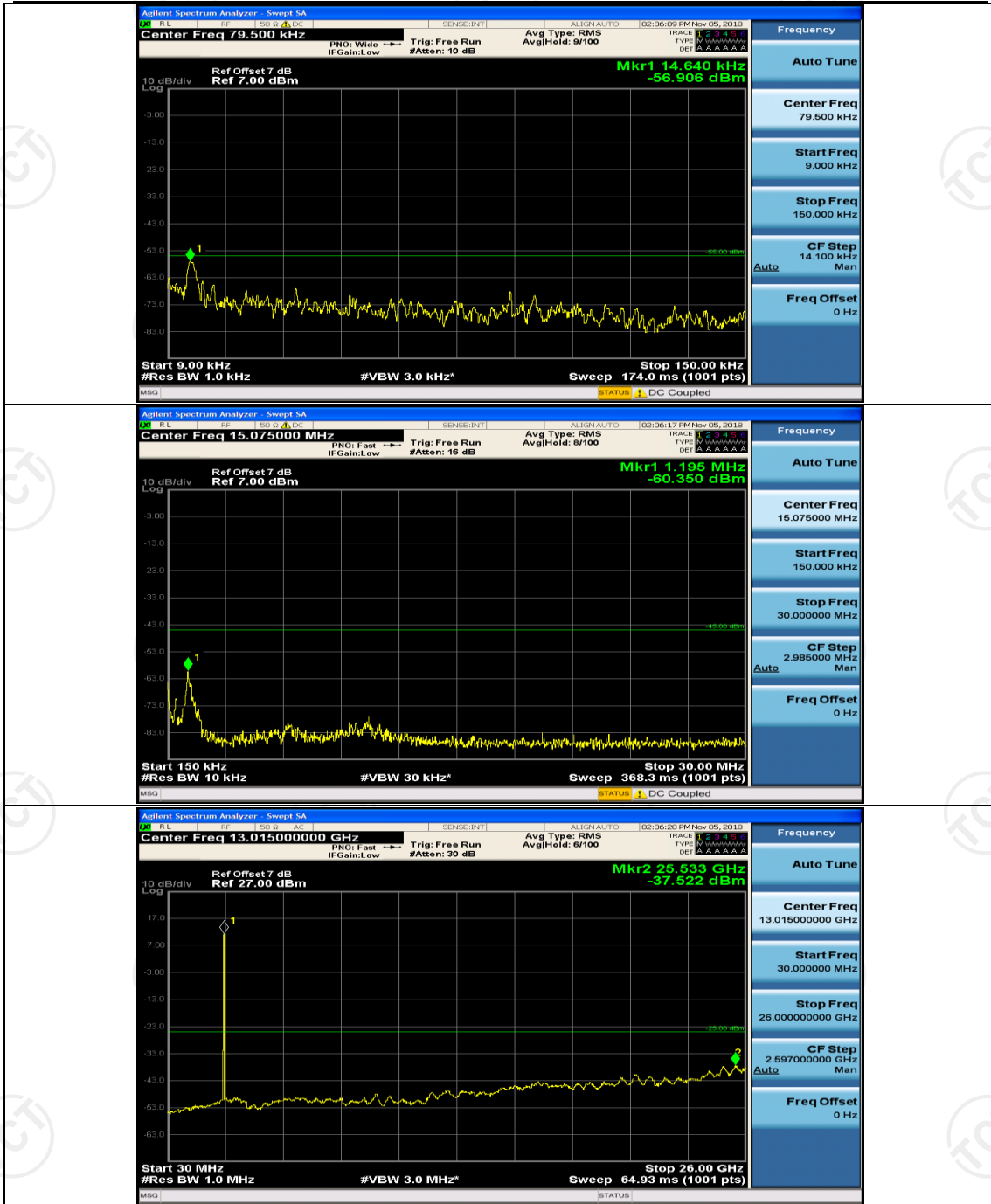


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

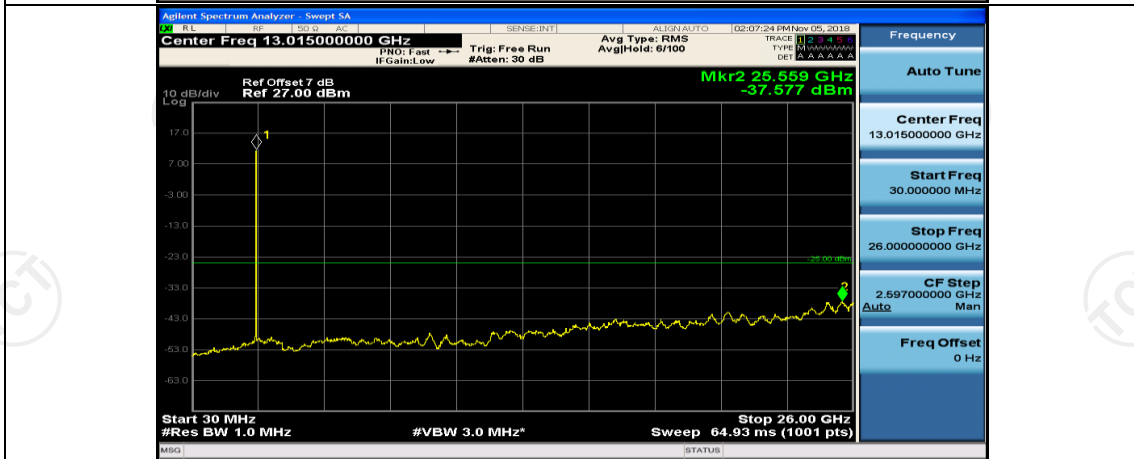
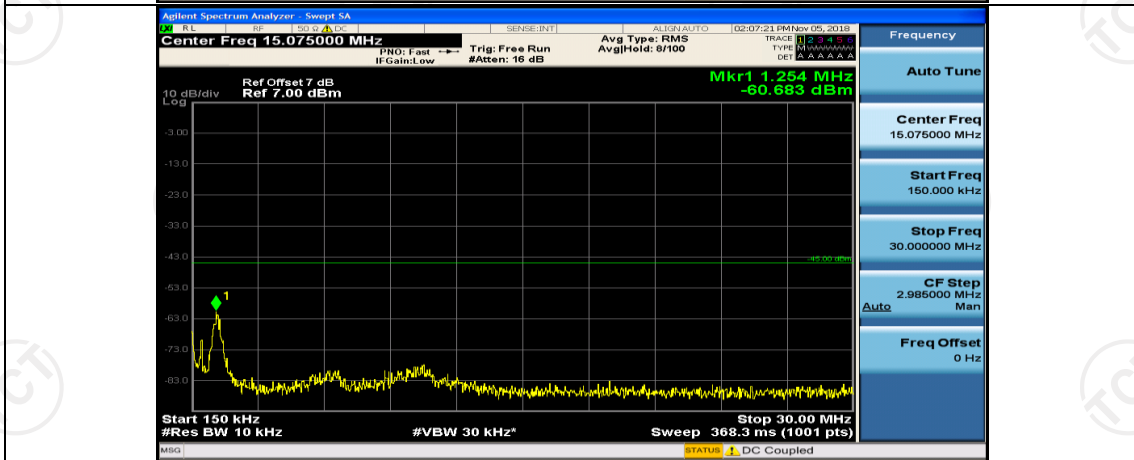
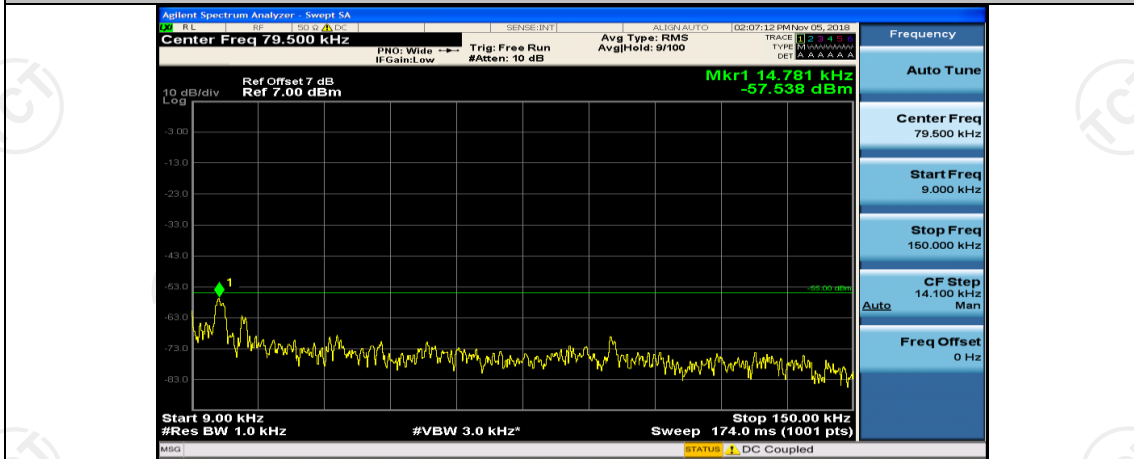


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

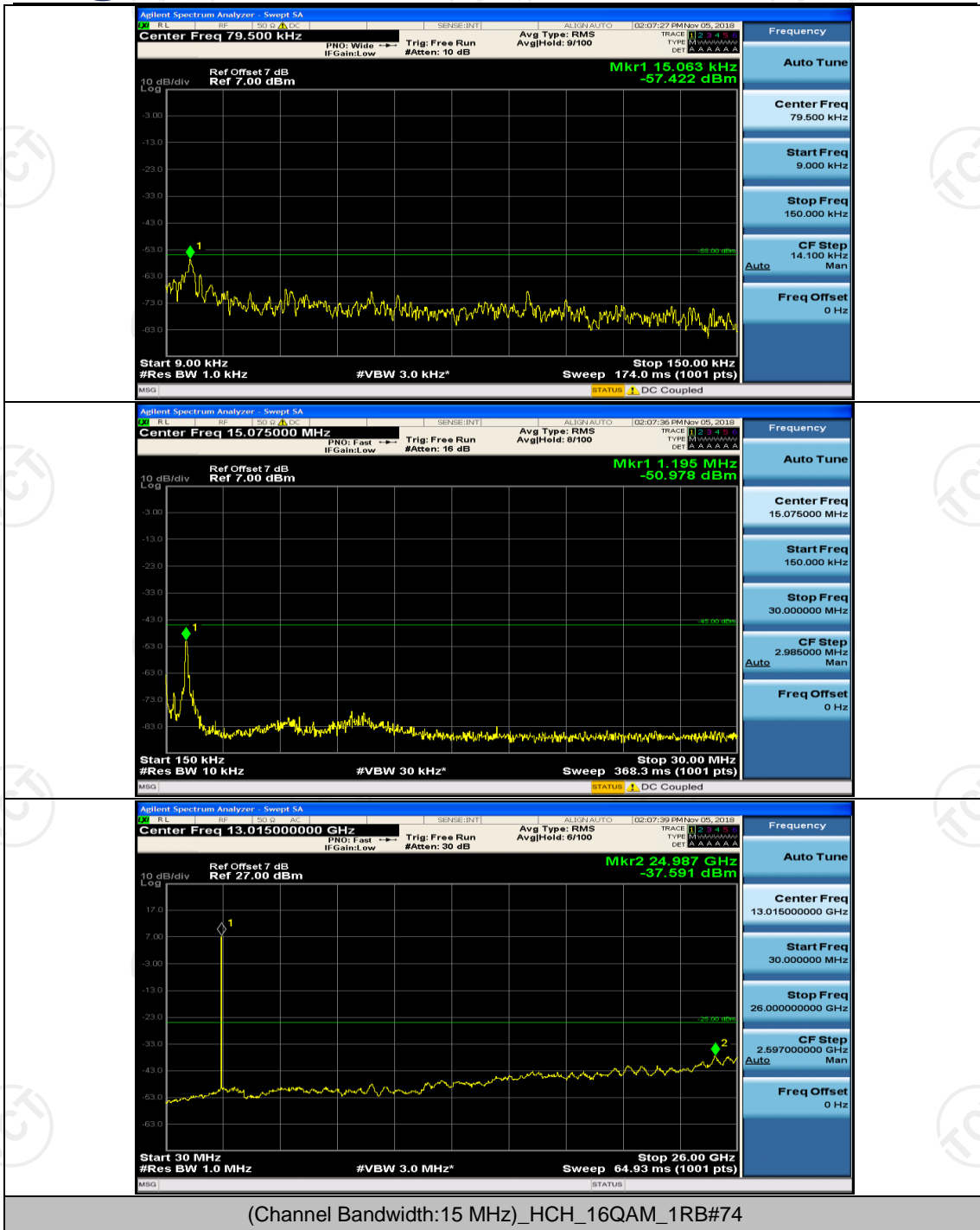


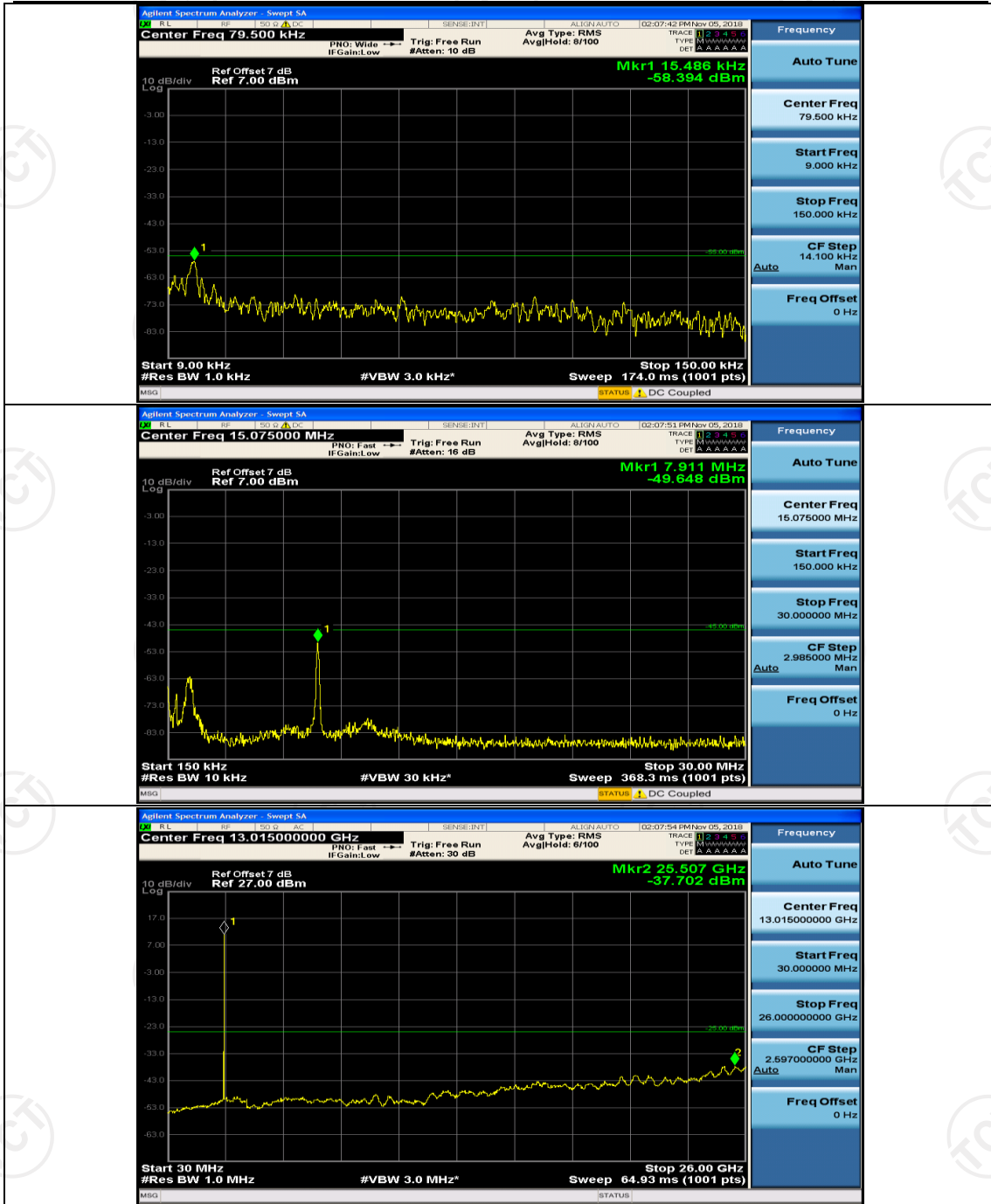


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

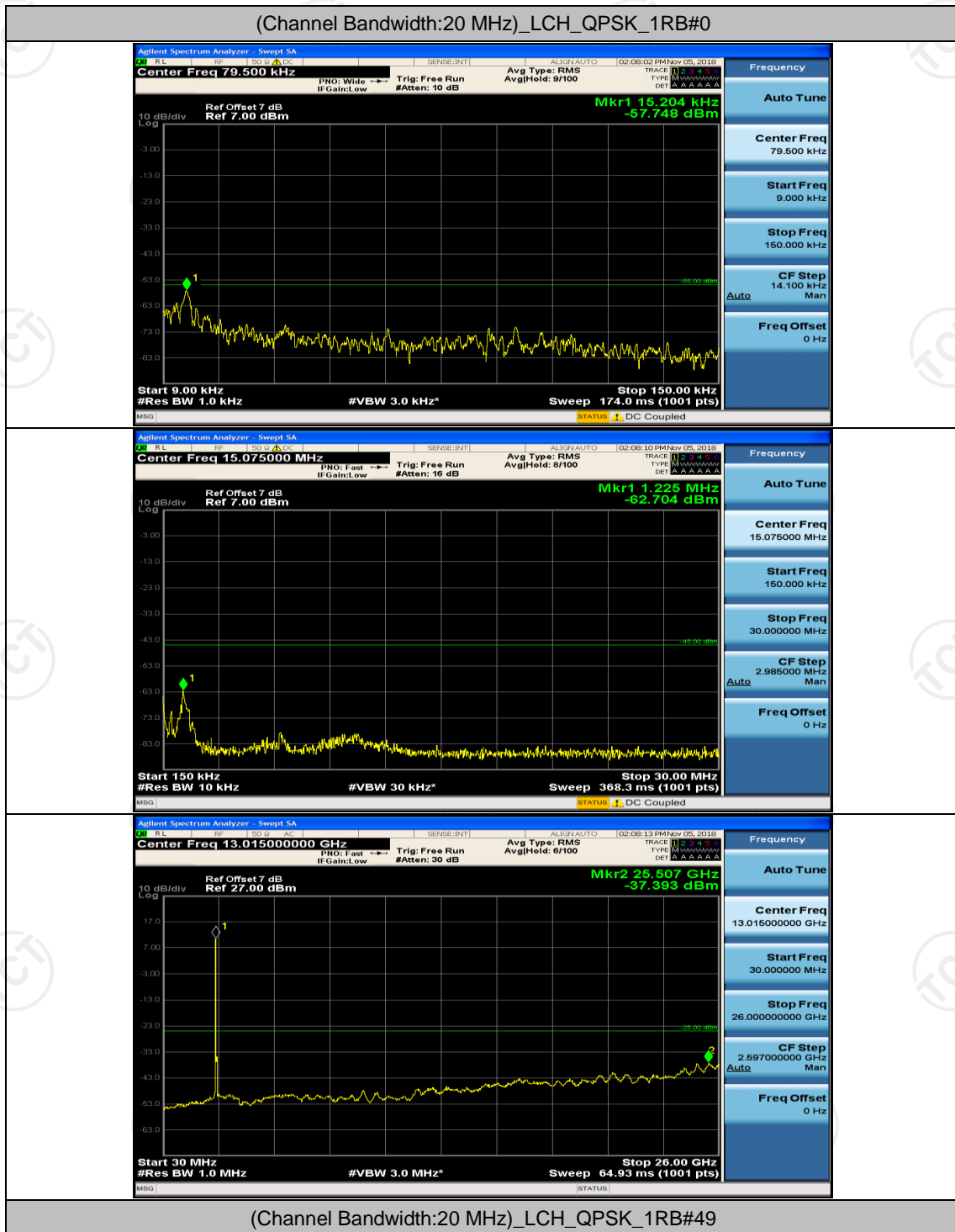


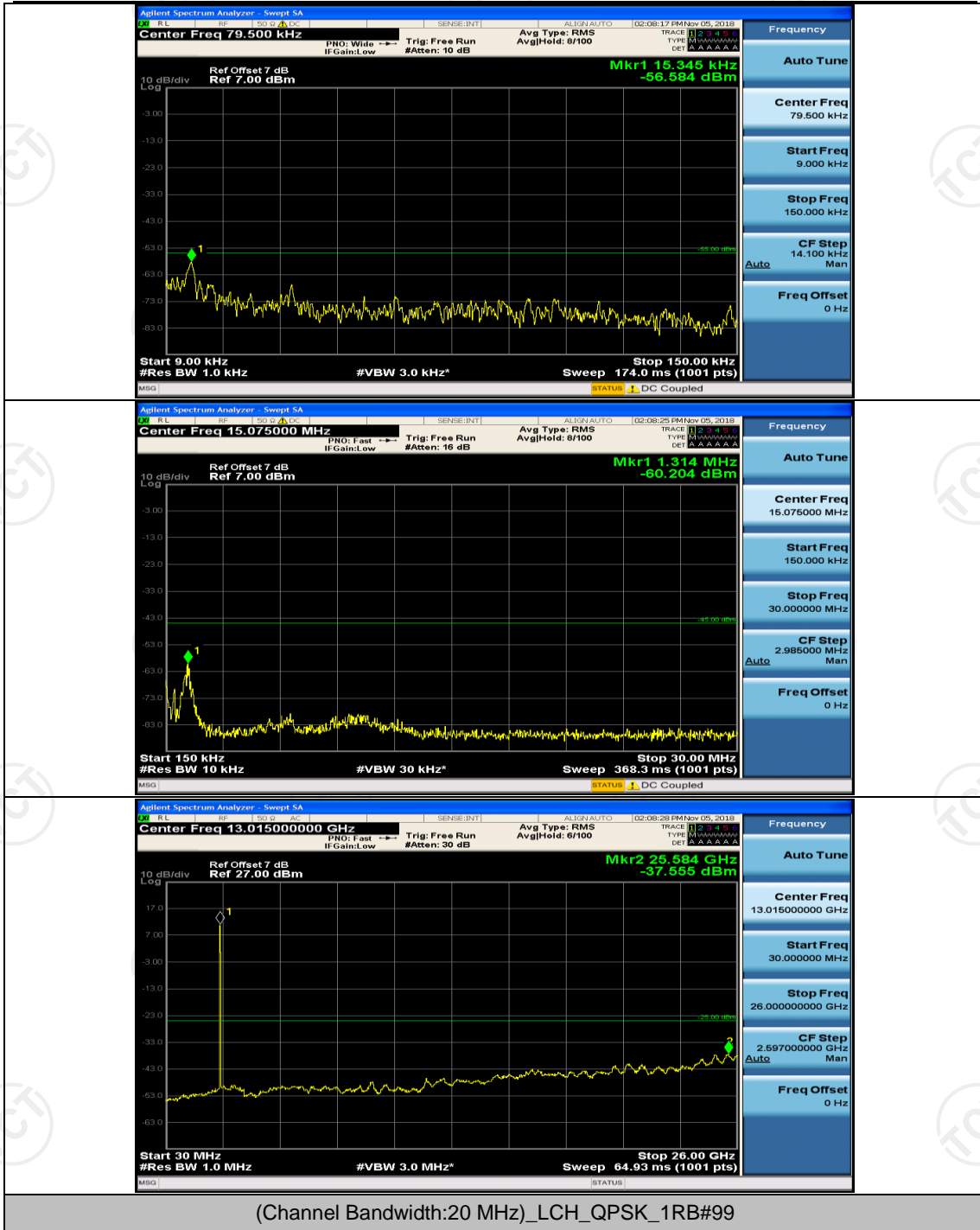
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

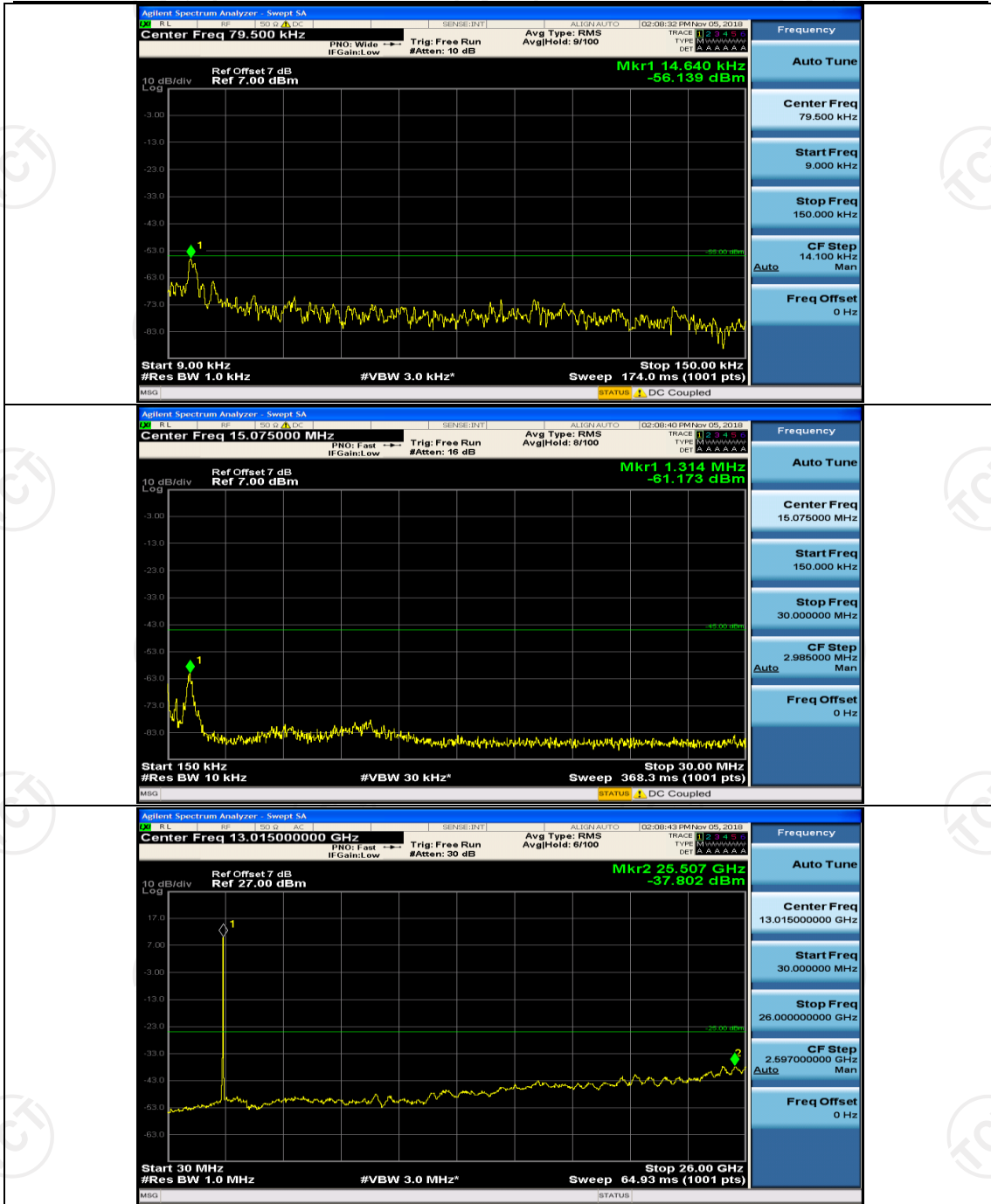




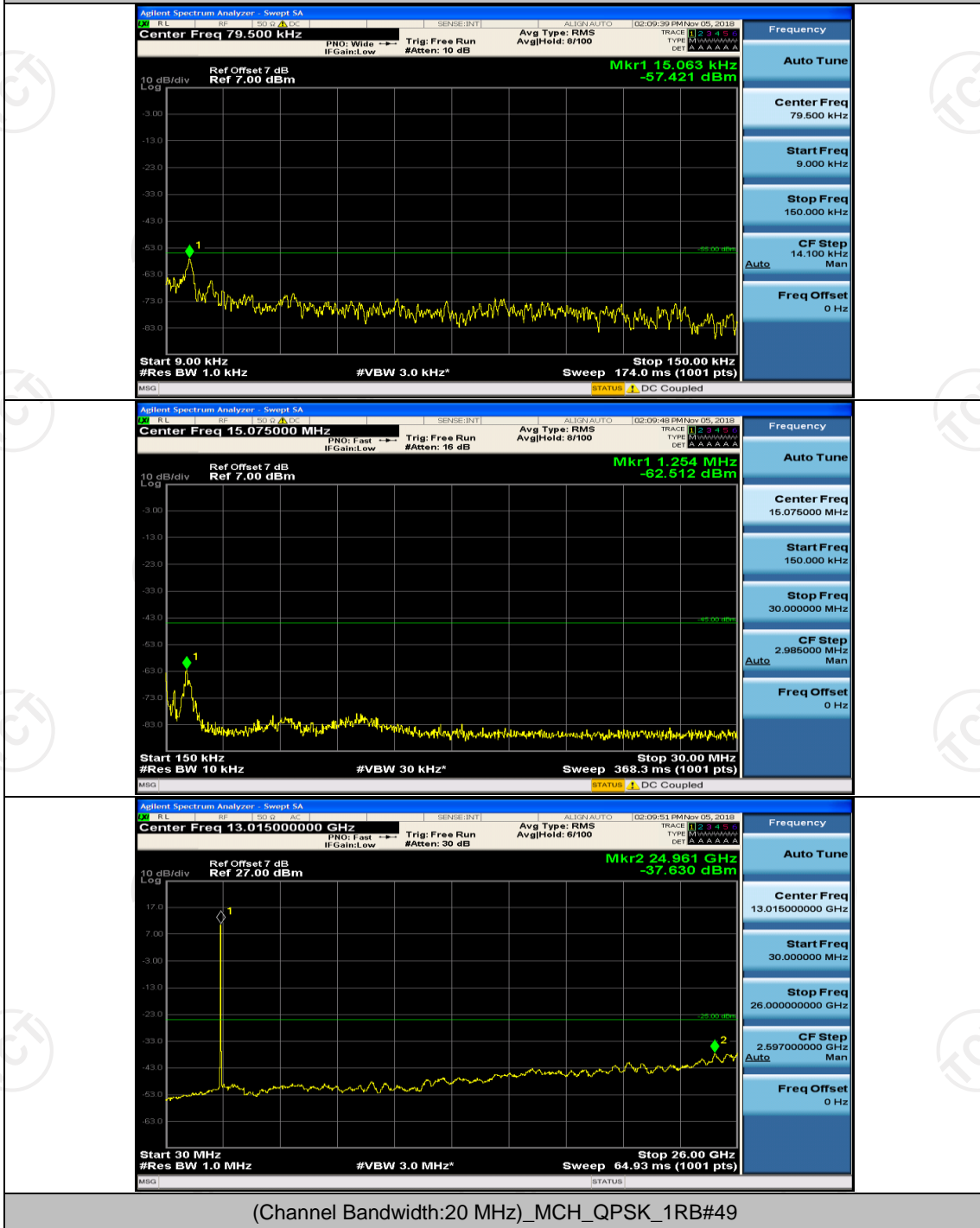
Channel Bandwidth: 20 MHz



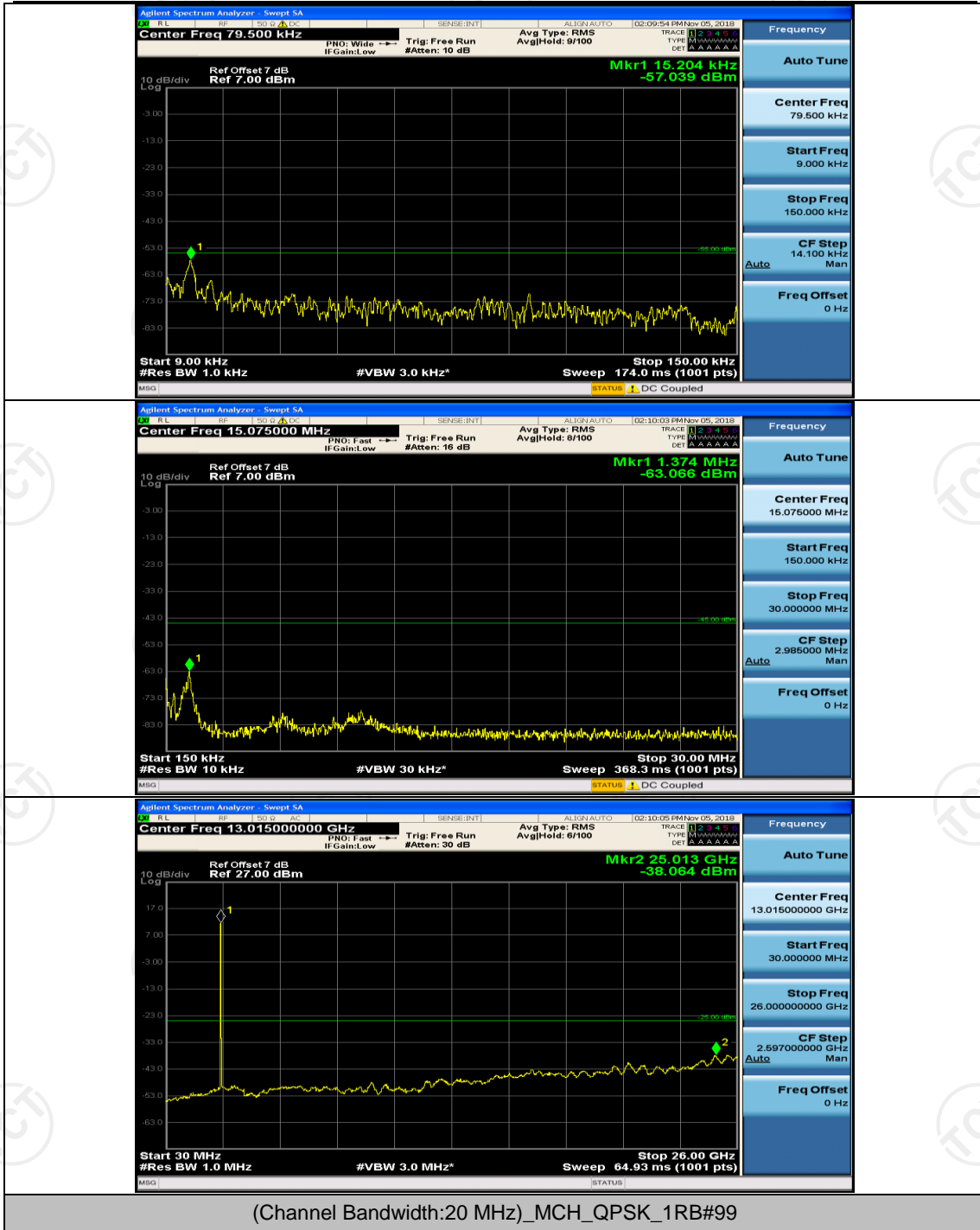


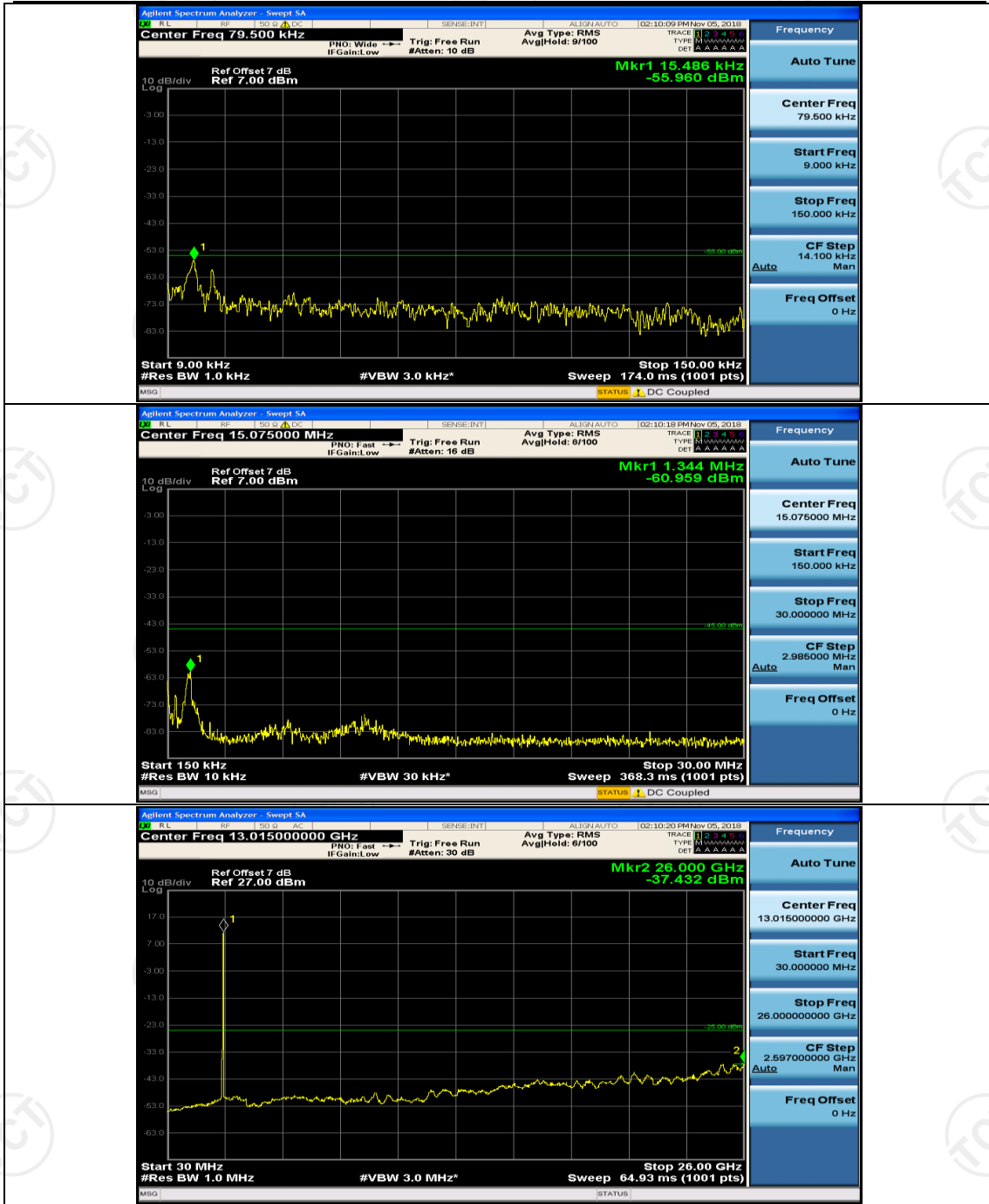


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

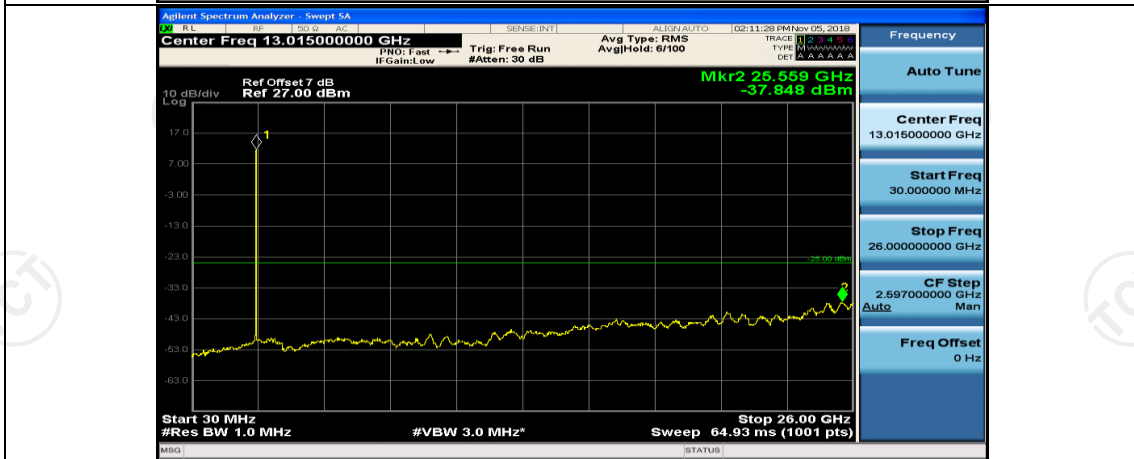
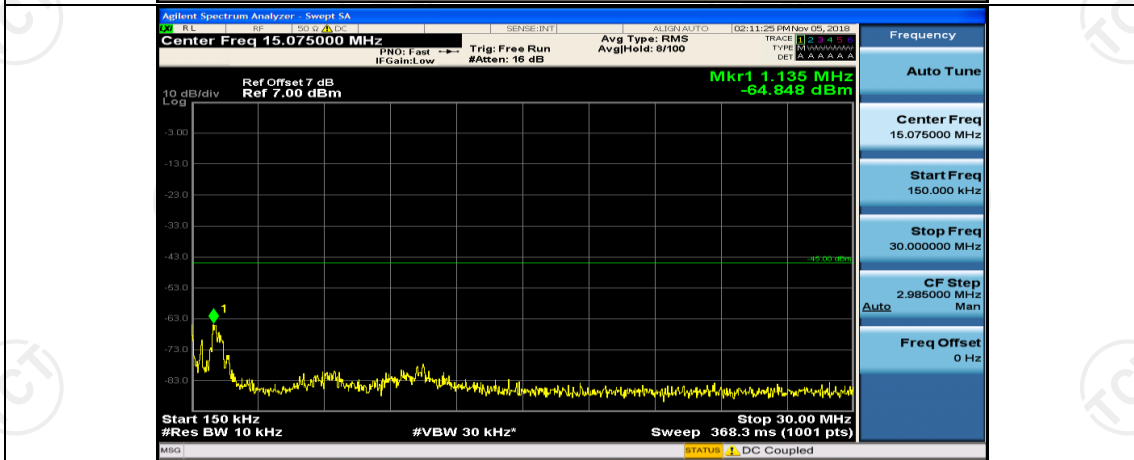
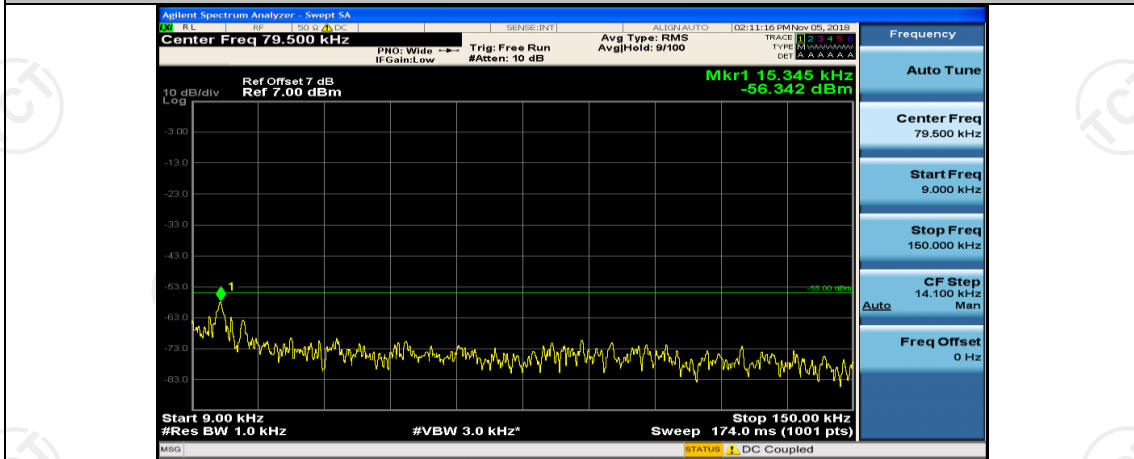


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

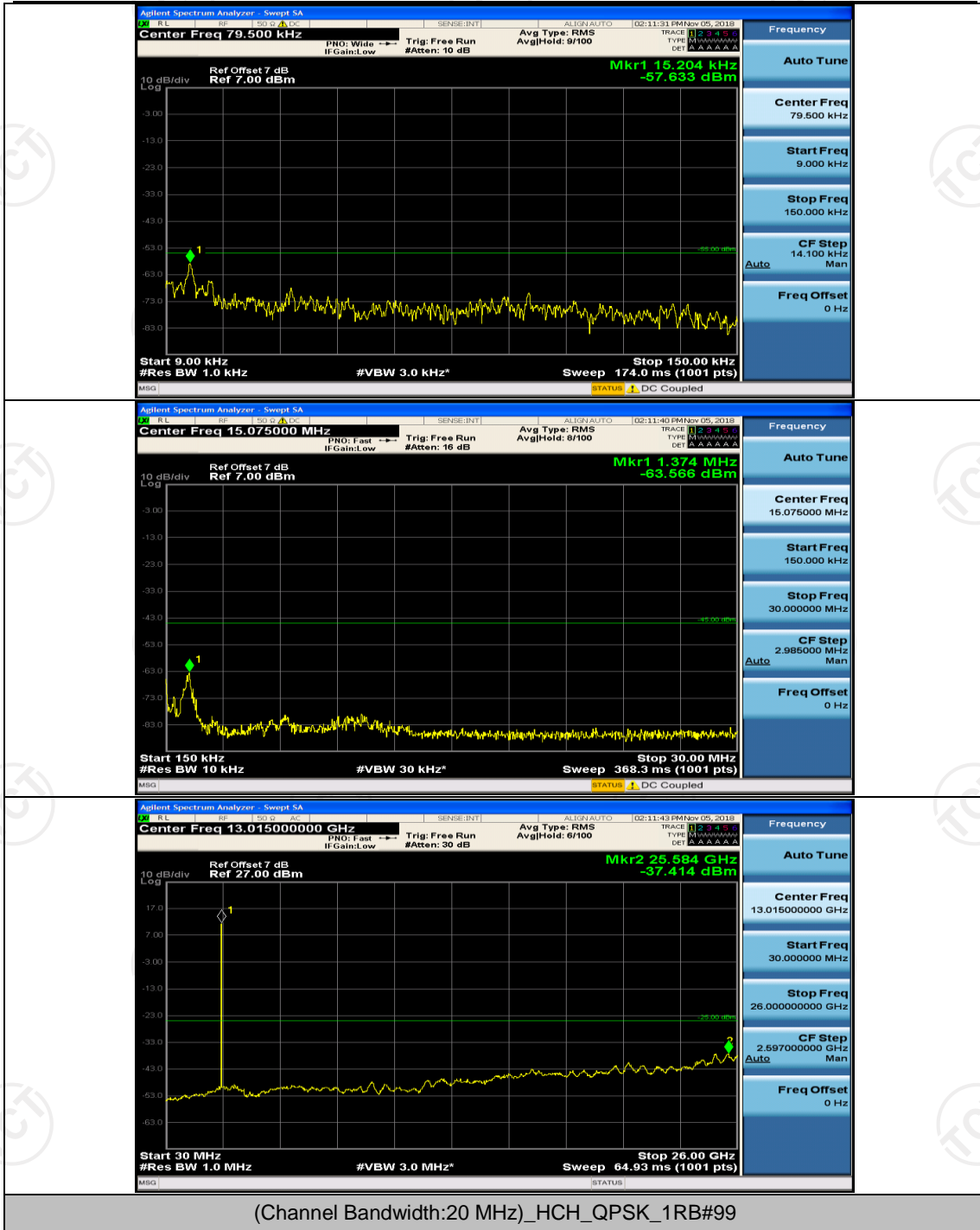


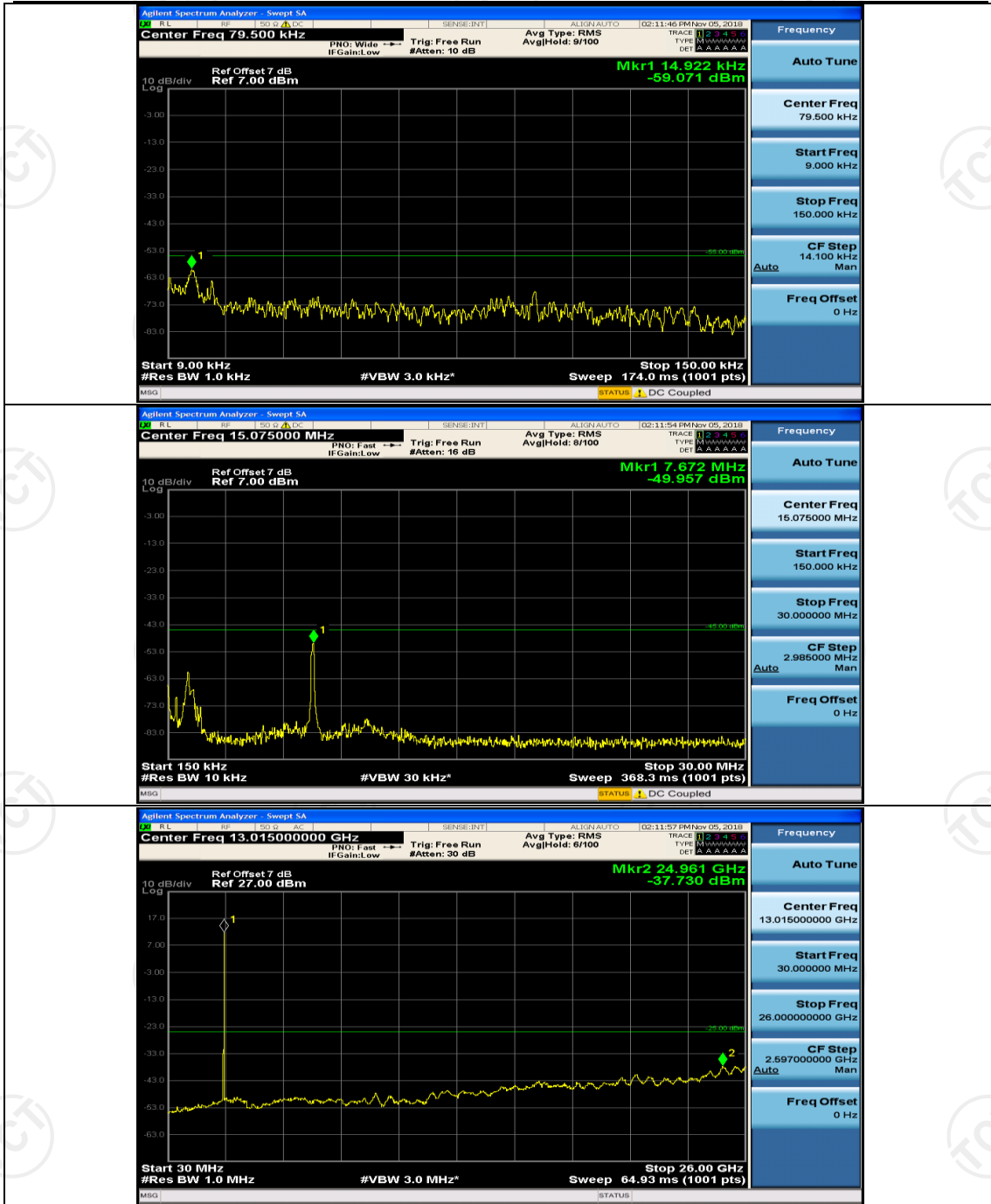


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

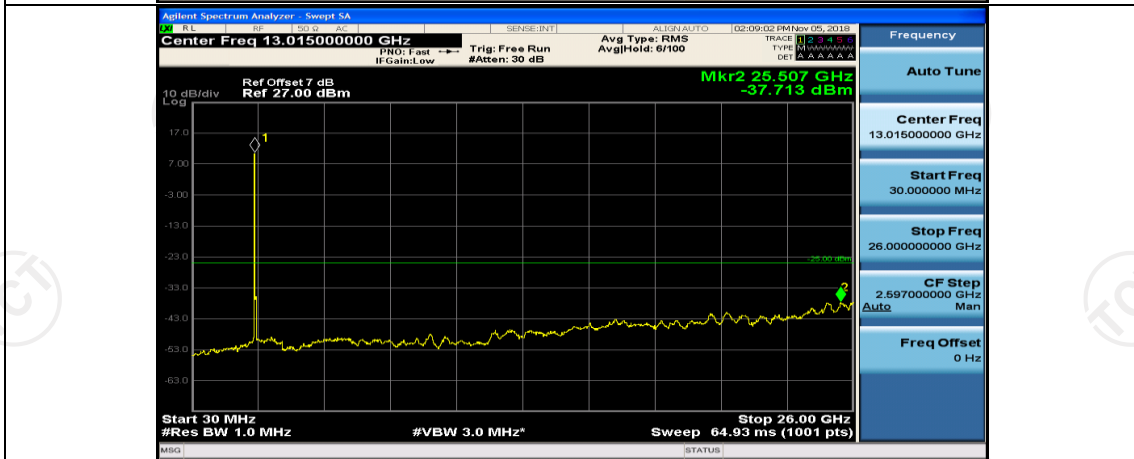
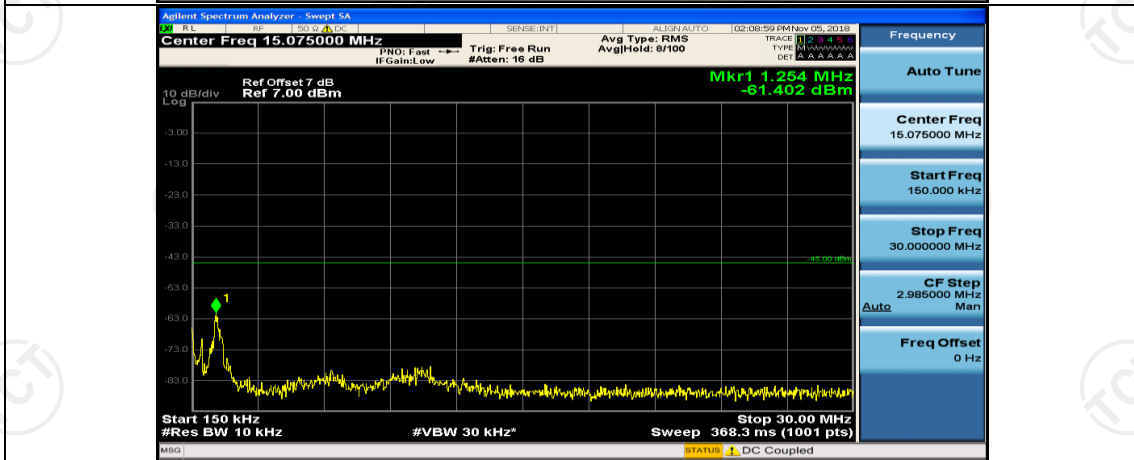
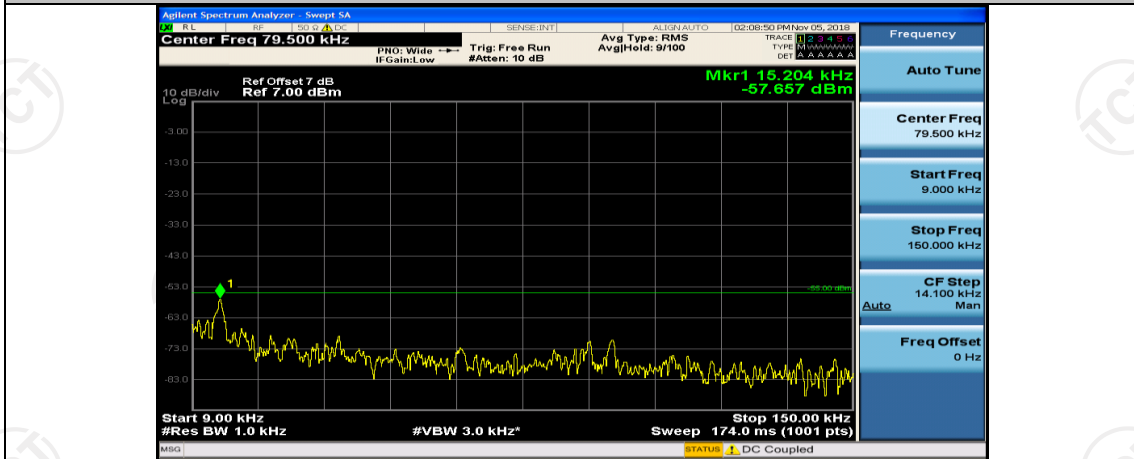


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

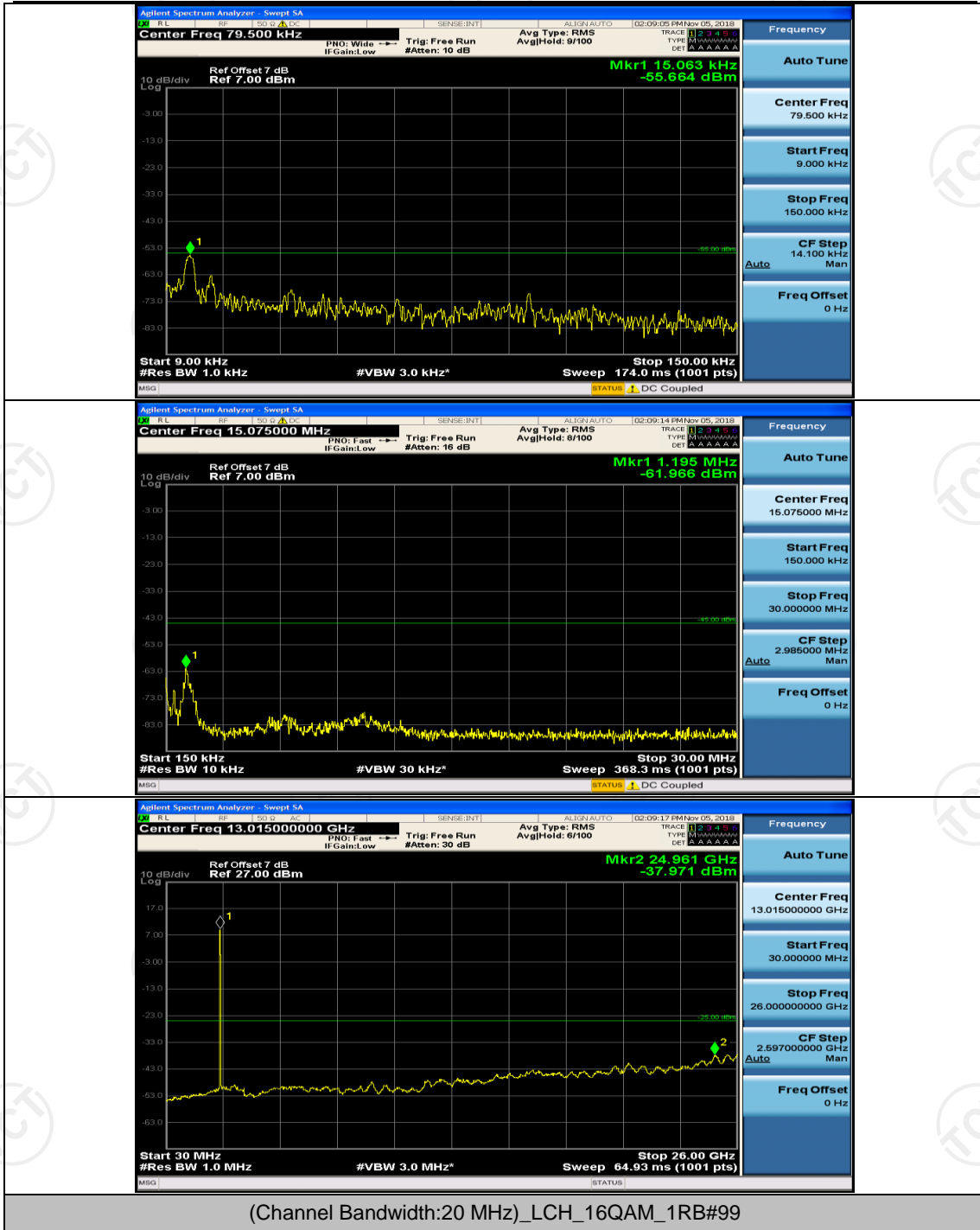


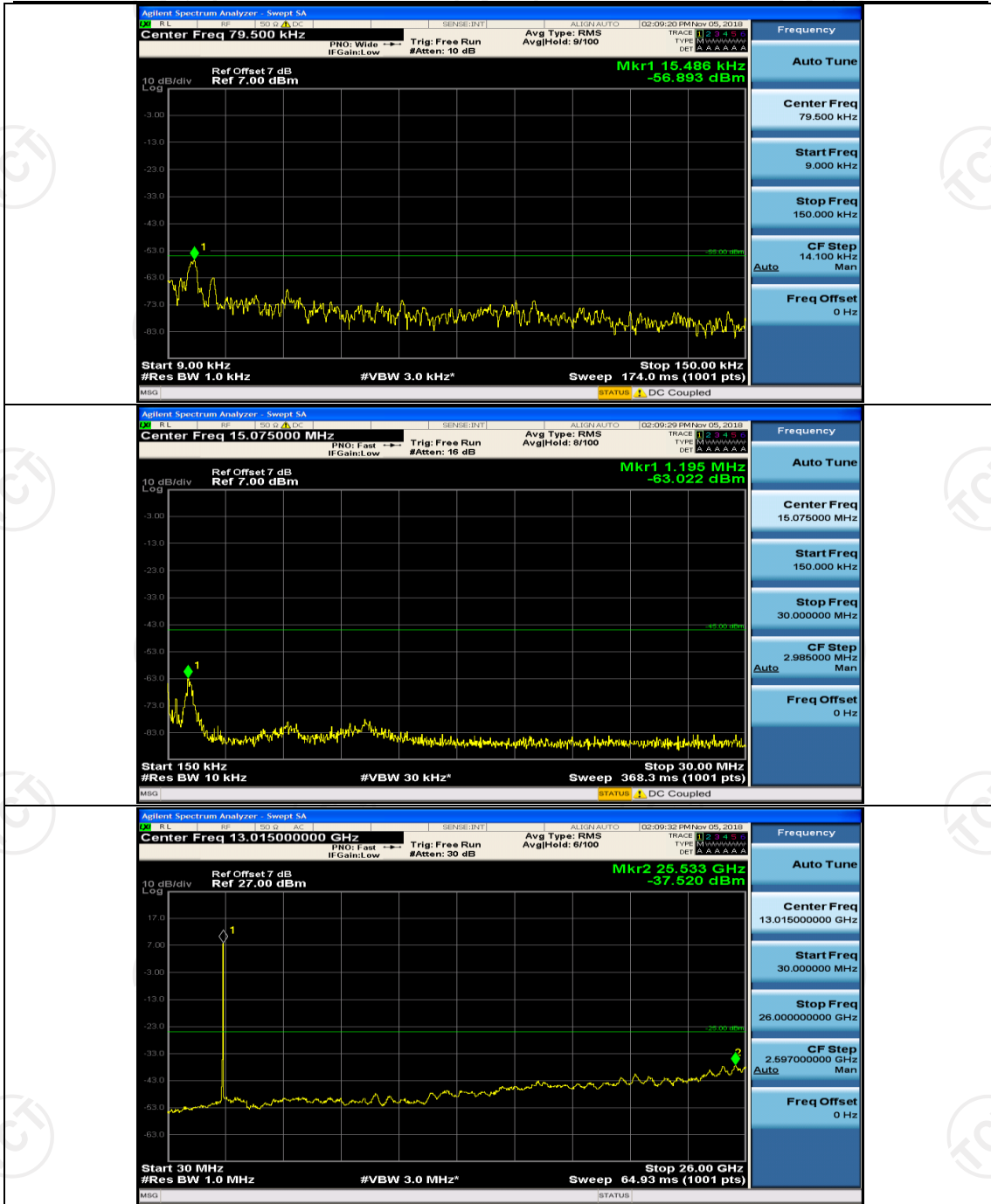


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

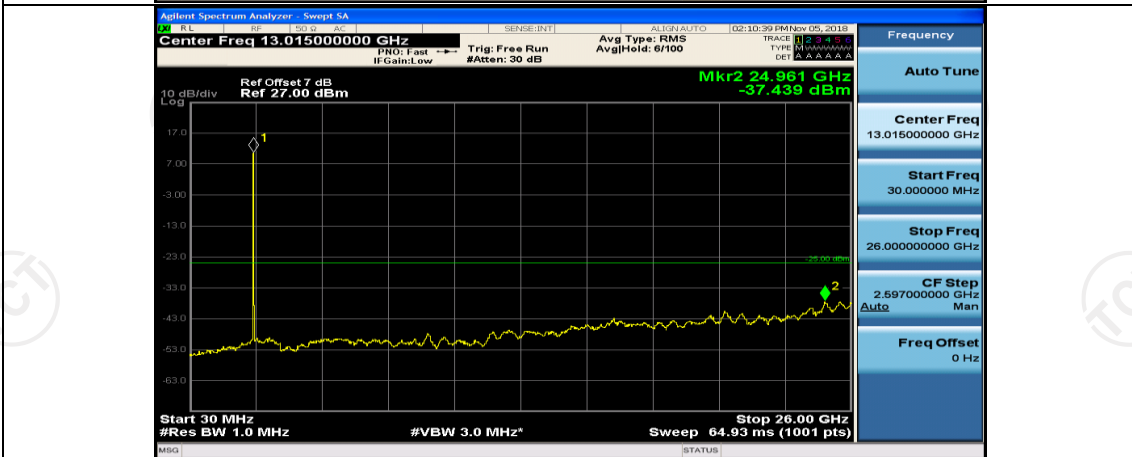
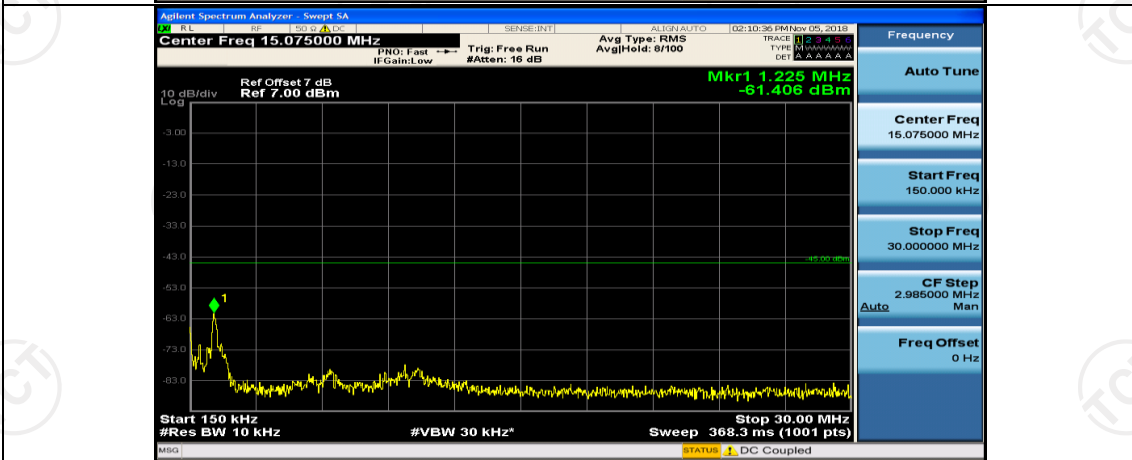
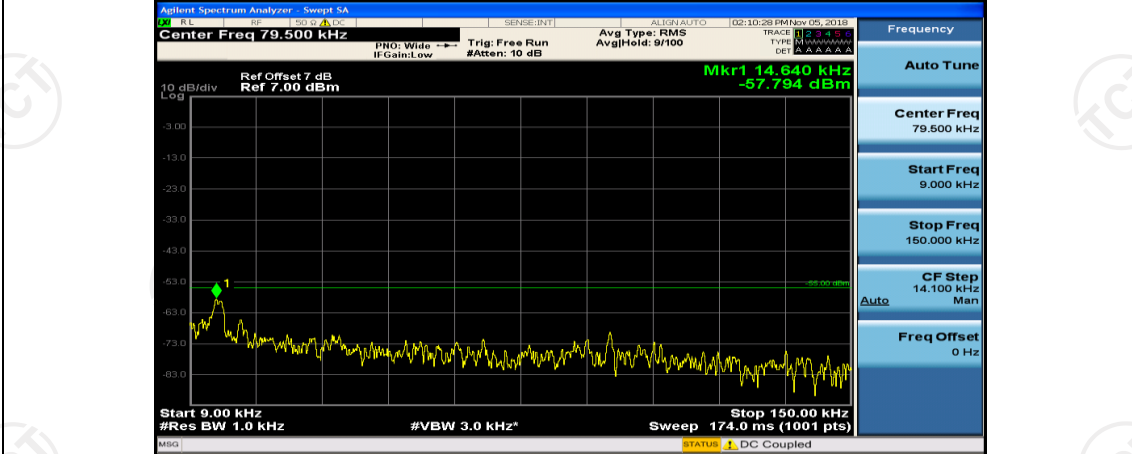


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

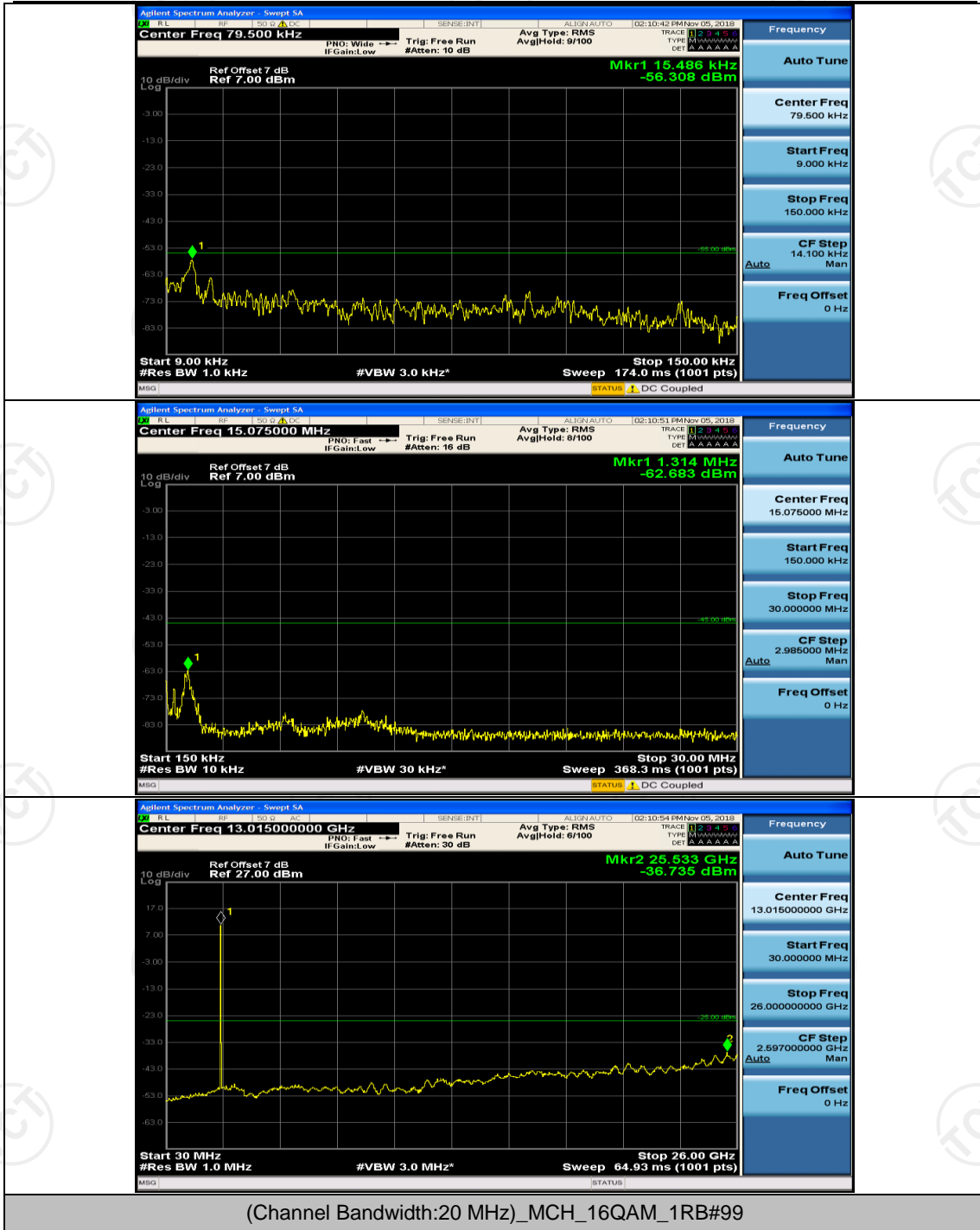




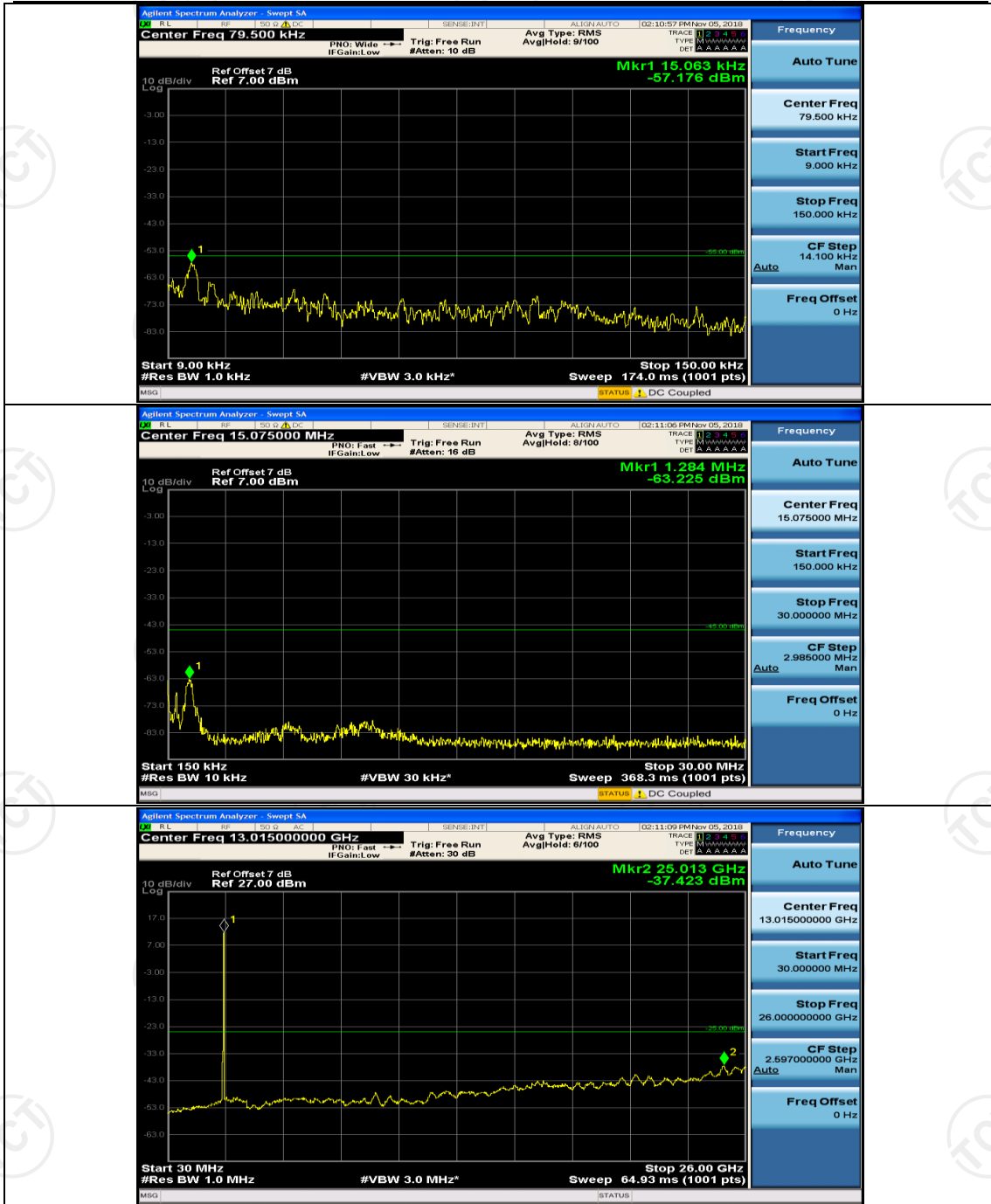
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0



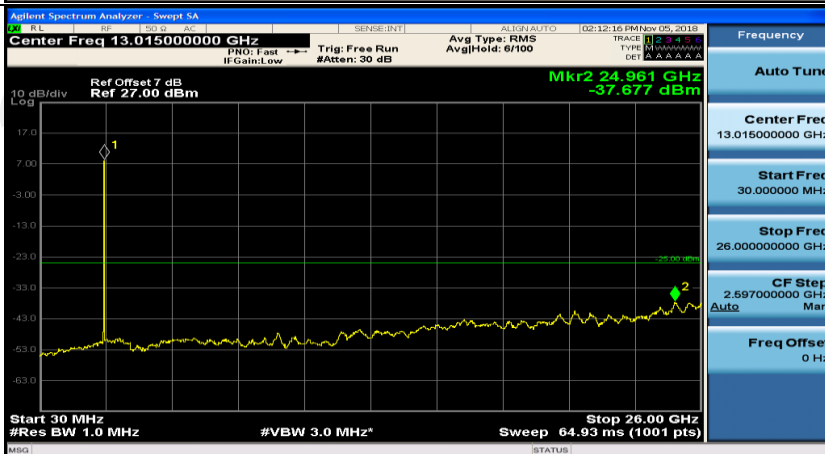
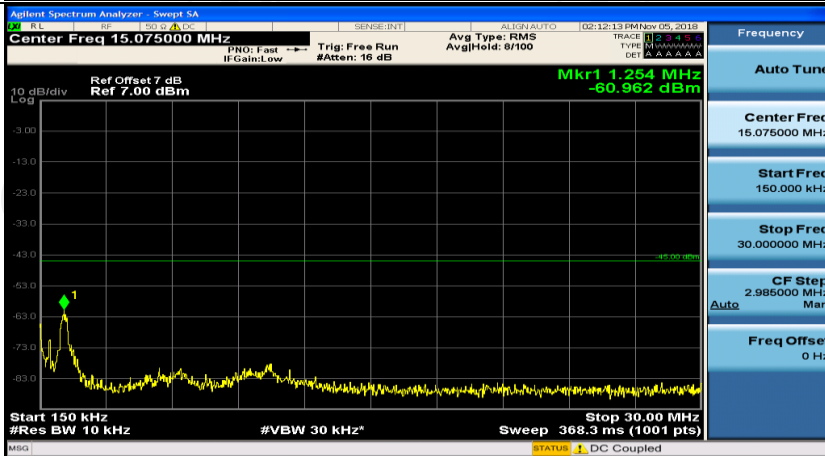
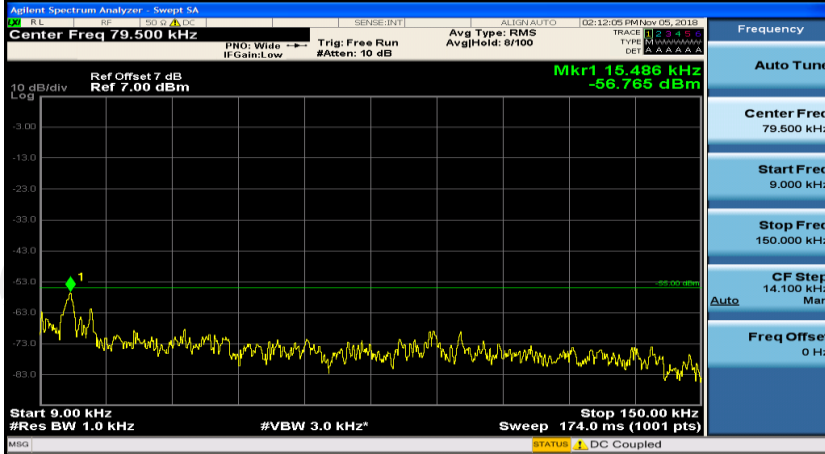
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49



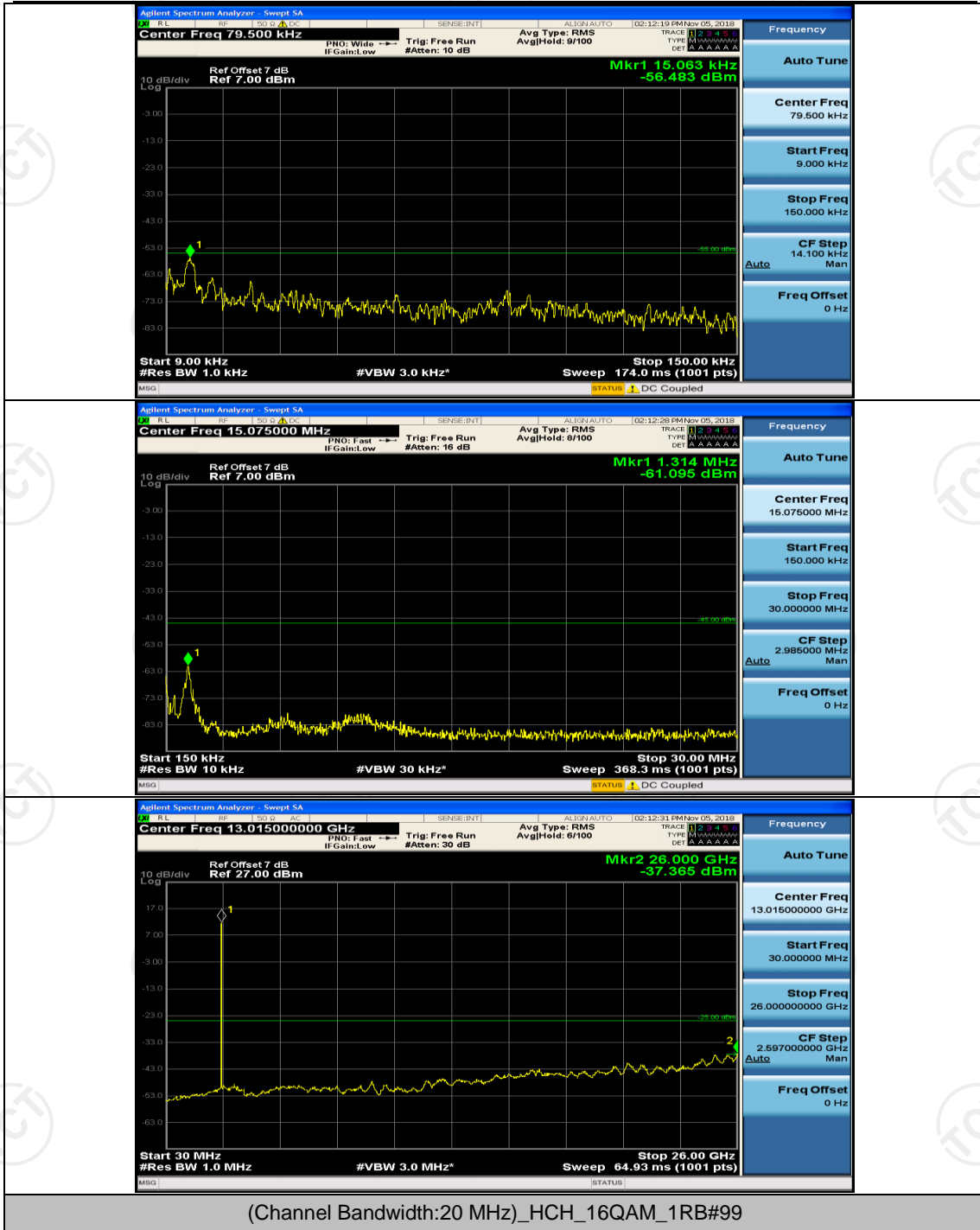
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99

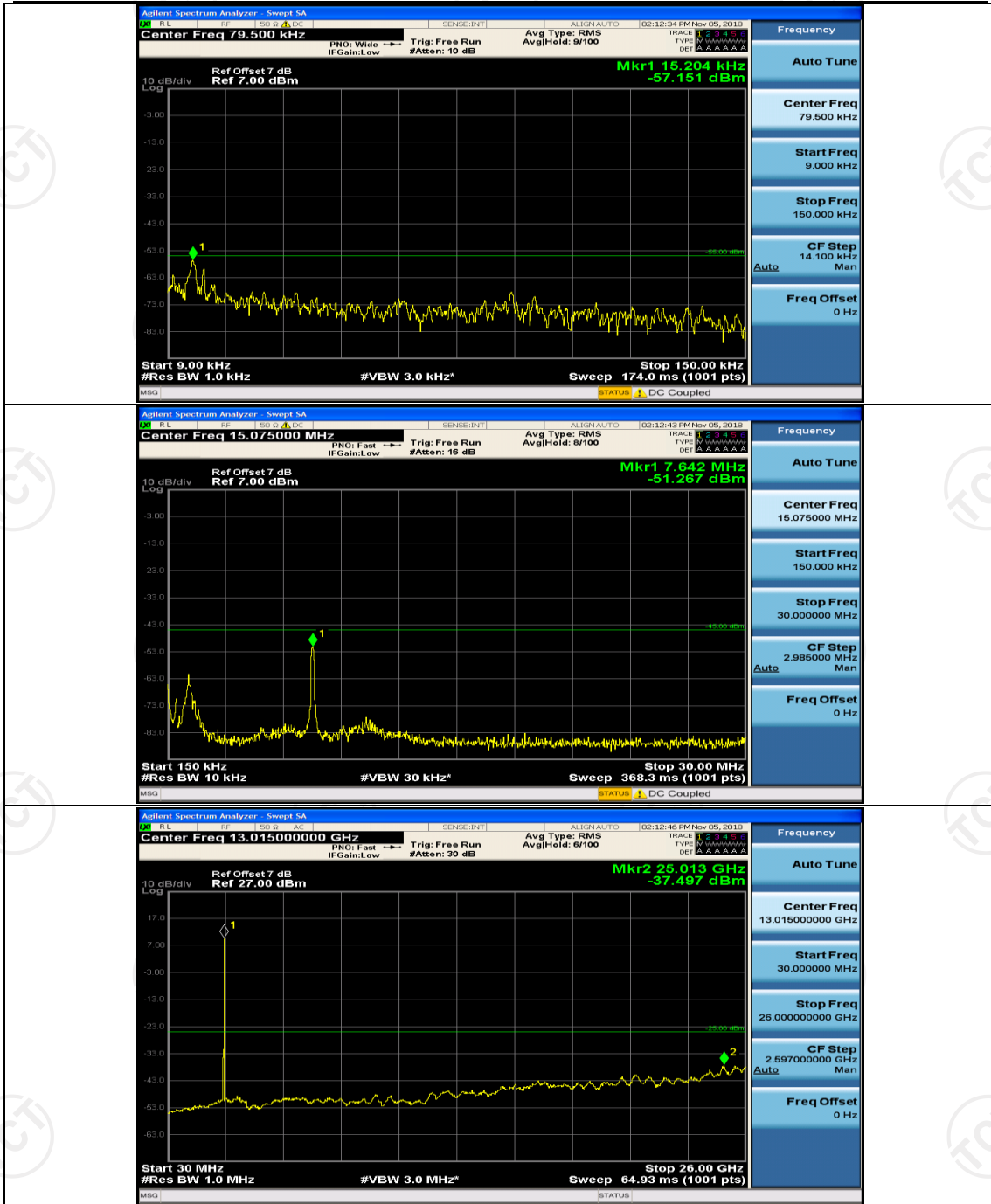


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49





Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Voltage						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.4	25	0.002281	± 2.5	PASS
		3.85	25	0.000547	± 2.5	PASS
		4.5	25	0.000657	± 2.5	PASS
	MCH	3.4	25	0.001212	± 2.5	PASS
		3.85	25	-0.001281	± 2.5	PASS
		4.5	25	0.000869	± 2.5	PASS
	HCH	3.4	25	0.000788	± 2.5	PASS
		3.85	25	0.000976	± 2.5	PASS
		4.5	25	0.000563	± 2.5	PASS
16QAM	LCH	3.4	25	0.000977	± 2.5	PASS
		3.85	25	0.001067	± 2.5	PASS
		4.5	25	0.000418	± 2.5	PASS
	MCH	3.4	25	0.001238	± 2.5	PASS
		3.85	25	0.000480	± 2.5	PASS
		4.5	25	0.000307	± 2.5	PASS
	HCH	3.4	25	0.000856	± 2.5	PASS
		3.85	25	0.000378	± 2.5	PASS
		4.5	25	-0.000123	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.85	-30	0.002207	± 2.5	PASS
		3.85	-20	0.002275	± 2.5	PASS
		3.85	-10	0.002166	± 2.5	PASS
		3.85	0	0.001583	± 2.5	PASS
		3.85	10	-0.000310	± 2.5	PASS
		3.85	20	-0.001552	± 2.5	PASS
		3.85	30	-0.001366	± 2.5	PASS
	MCH	3.85	40	0.000389	± 2.5	PASS
		3.85	50	0.000819	± 2.5	PASS
		3.85	-30	0.001304	± 2.5	PASS
		3.85	-20	0.000306	± 2.5	PASS
		3.85	-10	0.000708	± 2.5	PASS
		3.85	0	0.001561	± 2.5	PASS
		3.85	10	0.001401	± 2.5	PASS
		3.85	20	0.001646	± 2.5	PASS
		3.85	30	0.000823	± 2.5	PASS

		3.85	40	-0.001817	± 2.5	PASS
		3.85	50	-0.000344	± 2.5	PASS
	HCH	3.85	-30	-0.000372	± 2.5	PASS
		3.85	-20	-0.001405	± 2.5	PASS
		3.85	-10	0.000947	± 2.5	PASS
		3.85	0	-0.000128	± 2.5	PASS
		3.85	10	0.000228	± 2.5	PASS
		3.85	20	-0.000156	± 2.5	PASS
		3.85	30	0.000348	± 2.5	PASS
		3.85	40	0.001068	± 2.5	PASS
		3.85	50	0.000845	± 2.5	PASS
16QAM	LCH	3.85	-30	-0.000051	± 2.5	PASS
		3.85	-20	0.001343	± 2.5	PASS
		3.85	-10	0.002235	± 2.5	PASS
		3.85	0	0.002201	± 2.5	PASS
		3.85	10	0.001445	± 2.5	PASS
		3.85	20	0.001021	± 2.5	PASS
		3.85	30	-0.000017	± 2.5	PASS
		3.85	40	0.000753	± 2.5	PASS
		3.85	50	0.001071	± 2.5	PASS
	MCH	3.85	-30	0.000742	± 2.5	PASS
		3.85	-20	0.000725	± 2.5	PASS
		3.85	-10	0.000006	± 2.5	PASS
		3.85	0	-0.000931	± 2.5	PASS
		3.85	10	0.001174	± 2.5	PASS
		3.85	20	0.001174	± 2.5	PASS
		3.85	30	0.001659	± 2.5	PASS
		3.85	40	0.001704	± 2.5	PASS
		3.85	50	-0.000396	± 2.5	PASS
	HCH	3.85	-30	0.000591	± 2.5	PASS
		3.85	-20	0.000441	± 2.5	PASS
		3.85	-10	0.000229	± 2.5	PASS
		3.85	0	0.001324	± 2.5	PASS
		3.85	10	0.001392	± 2.5	PASS
		3.85	20	0.001175	± 2.5	PASS
		3.85	30	0.001575	± 2.5	PASS
		3.85	40	0.001174	± 2.5	PASS
		3.85	50	0.000830	± 2.5	PASS

Note: All bandwidth and modulation are tested, only the worst result is reported.

Appendix G :Field Strength of Spurious Radiation Measurement Test Result

Bandwidth:	5M		Test channel:	Lowest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.0	Vertical	-42.15	-13.00	PASS
7507.5	V	-49.48		
-	V	-		
5005.0	Horizontal	-44.09		
7507.5	H	-50.24		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.0	Vertical	-41.77	-13.00	PASS
7605.0	V	-49.26		
-	V	-		
5070.0	Horizontal	-43.43		
7605.0	H	-50.89		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.0	Vertical	-43.72	-13.00	PASS
7702.5	V	-51.04		
-	V	-		
5135.0	Horizontal	-41.43		
7702.5	H	-49.28		
-	H	-		

Bandwidth:	5M		Test channel:	Lowest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.0	Vertical	-42.53	-13.00	PASS
7507.5	V	-49.69		
-	V	-		
5005.0	Horizontal	-44.10		
7507.5	H	-51.33		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.0	Vertical	-43.21	-13.00	PASS
7605.0	V	-50.74		
-	V	-		
5070.0	Horizontal	-42.58		
7605.0	H	-49.03		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.0	Vertical	-44.16	-13.00	PASS
7702.5	V	-50.85		
-	V	-		
5135.0	Horizontal	-43.42		
7702.5	H	-49.08		
-	H	-		

Note: All bandwidth and modulation are tested, only the worst result is reported.