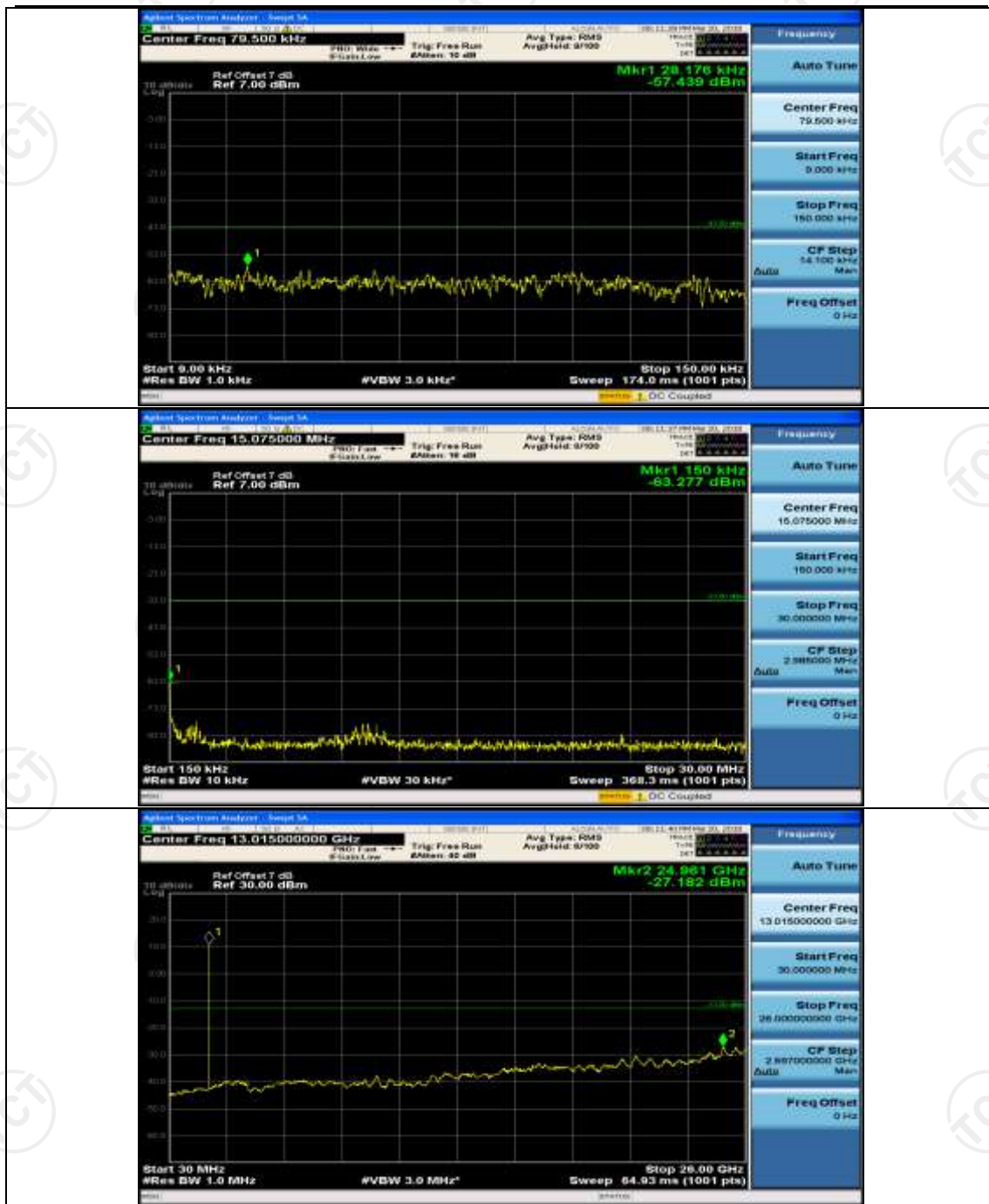
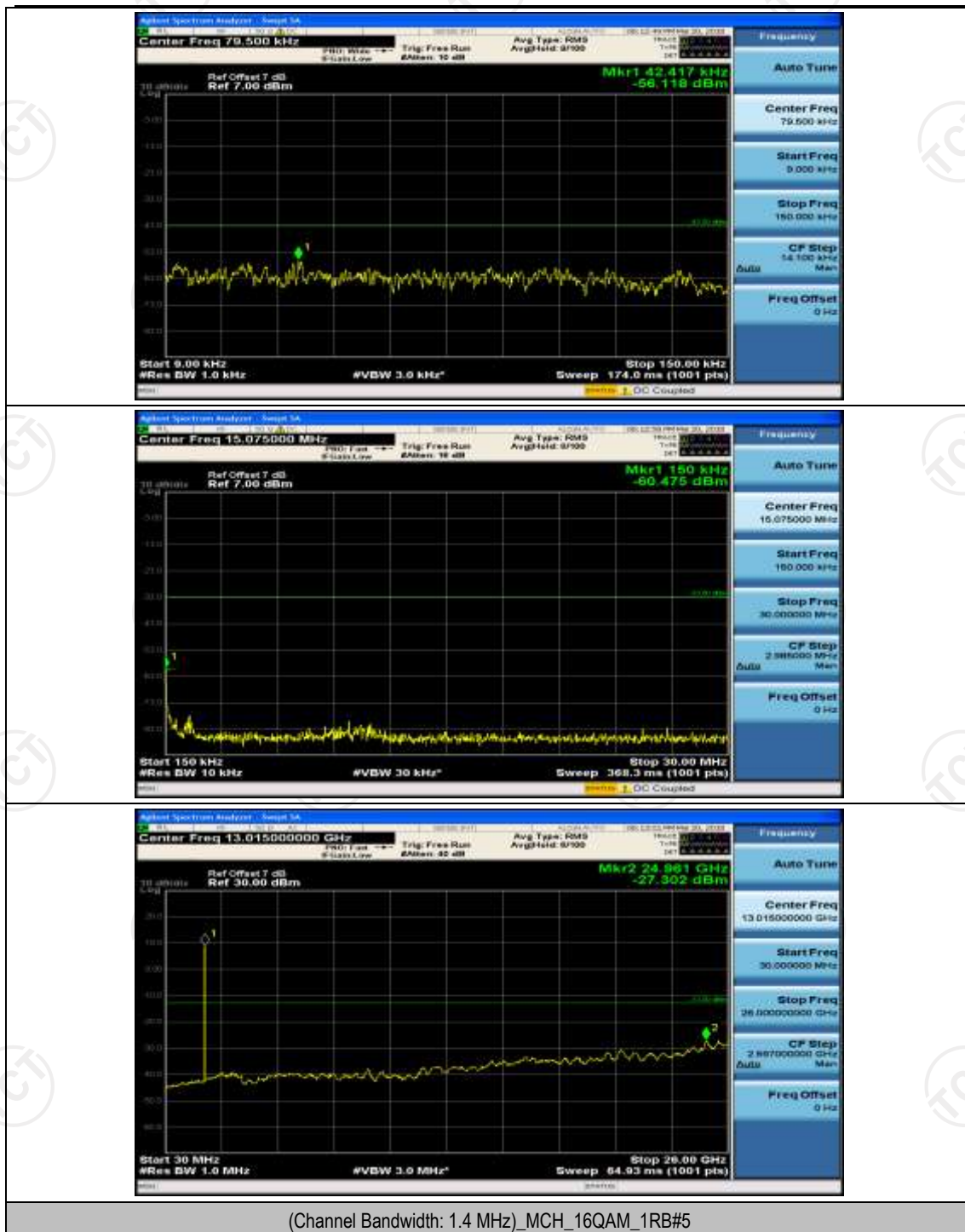


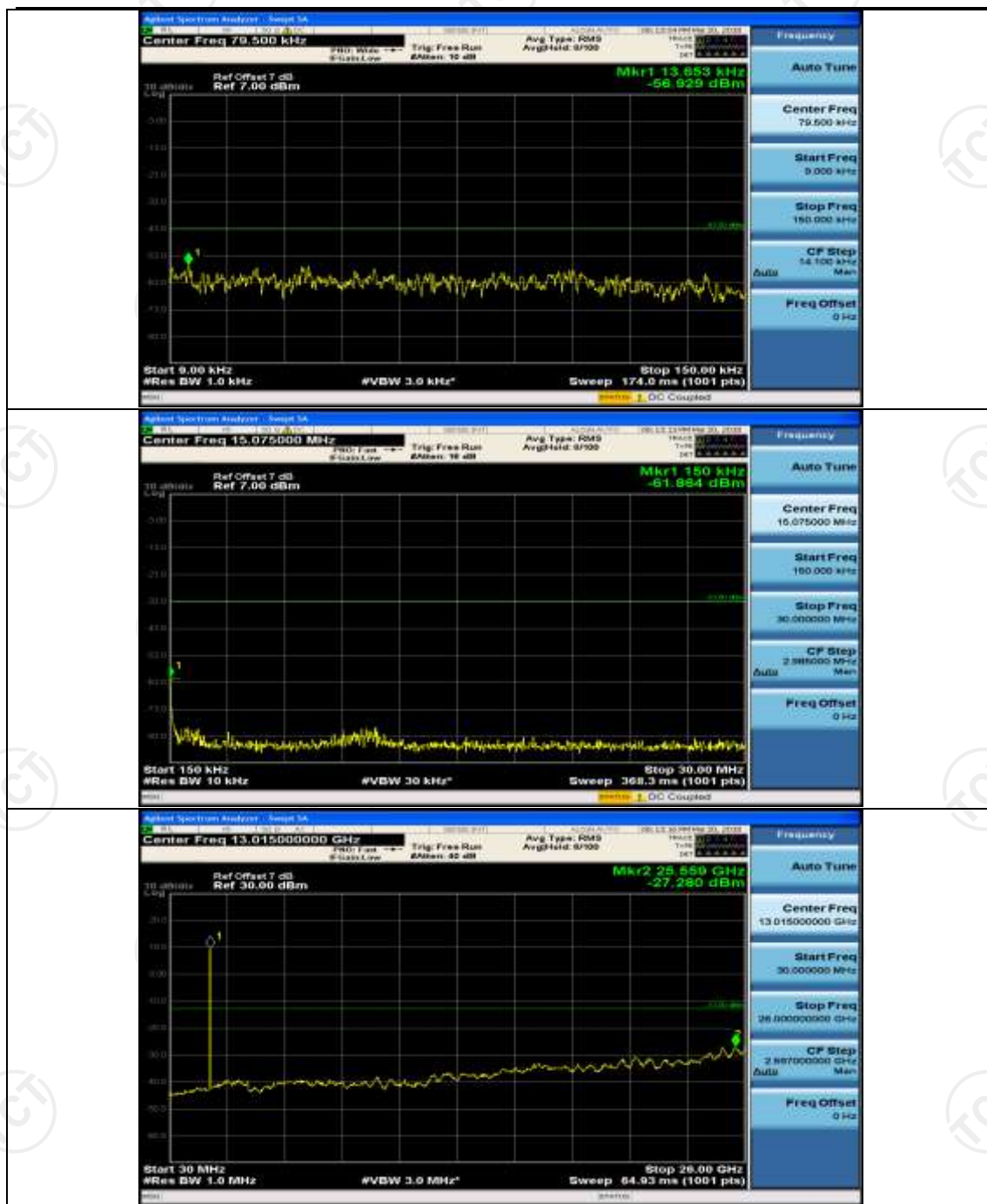


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

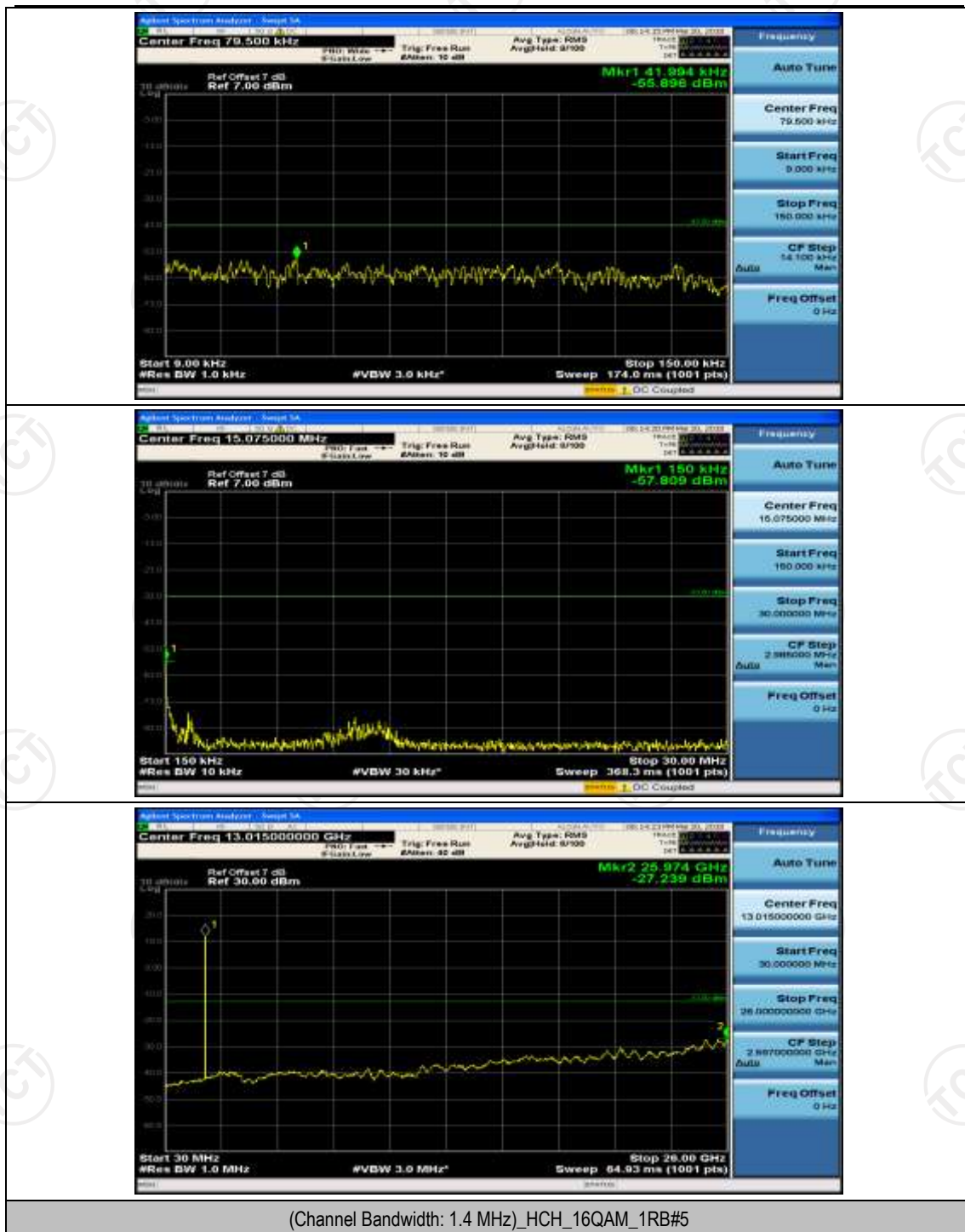


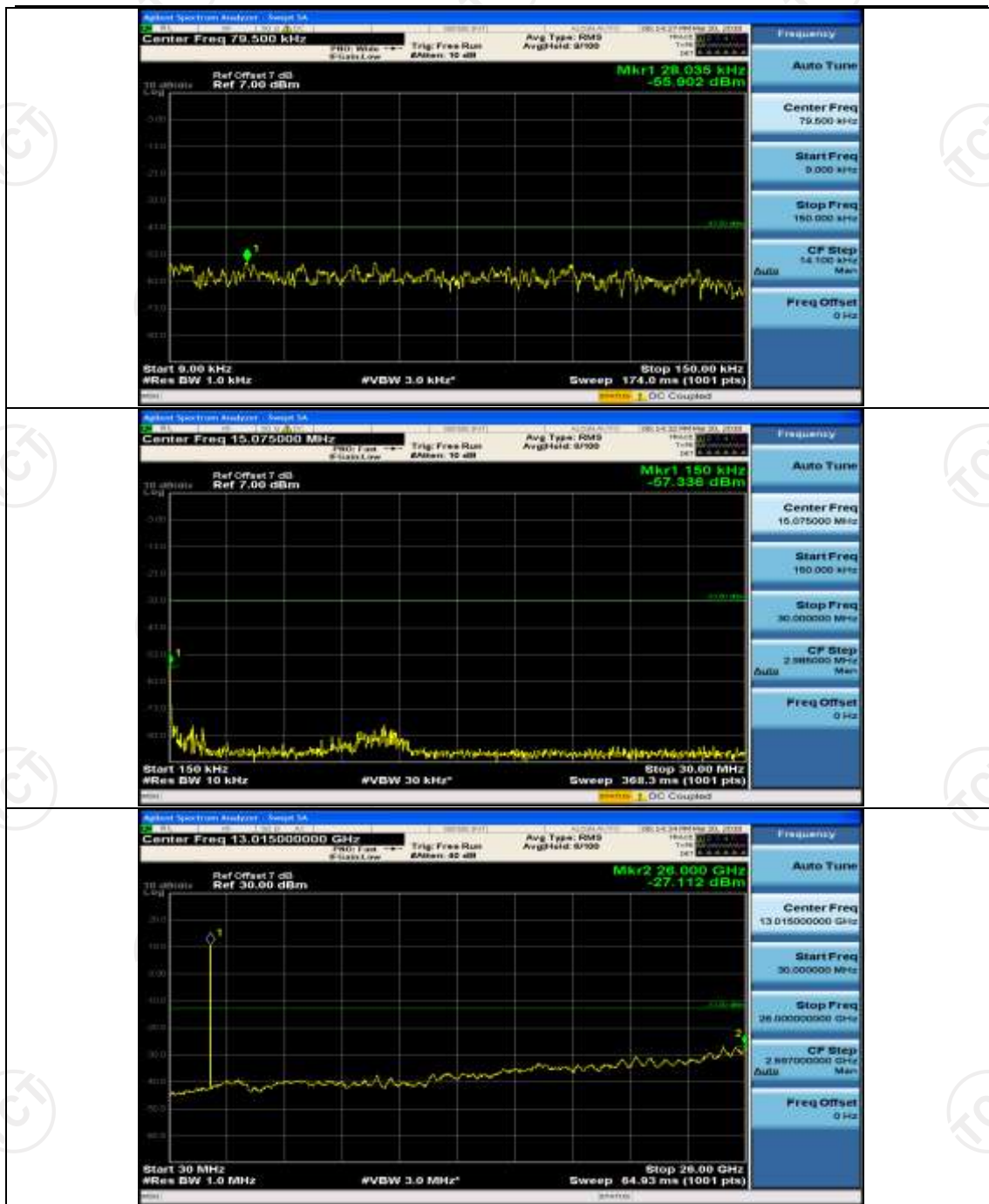


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



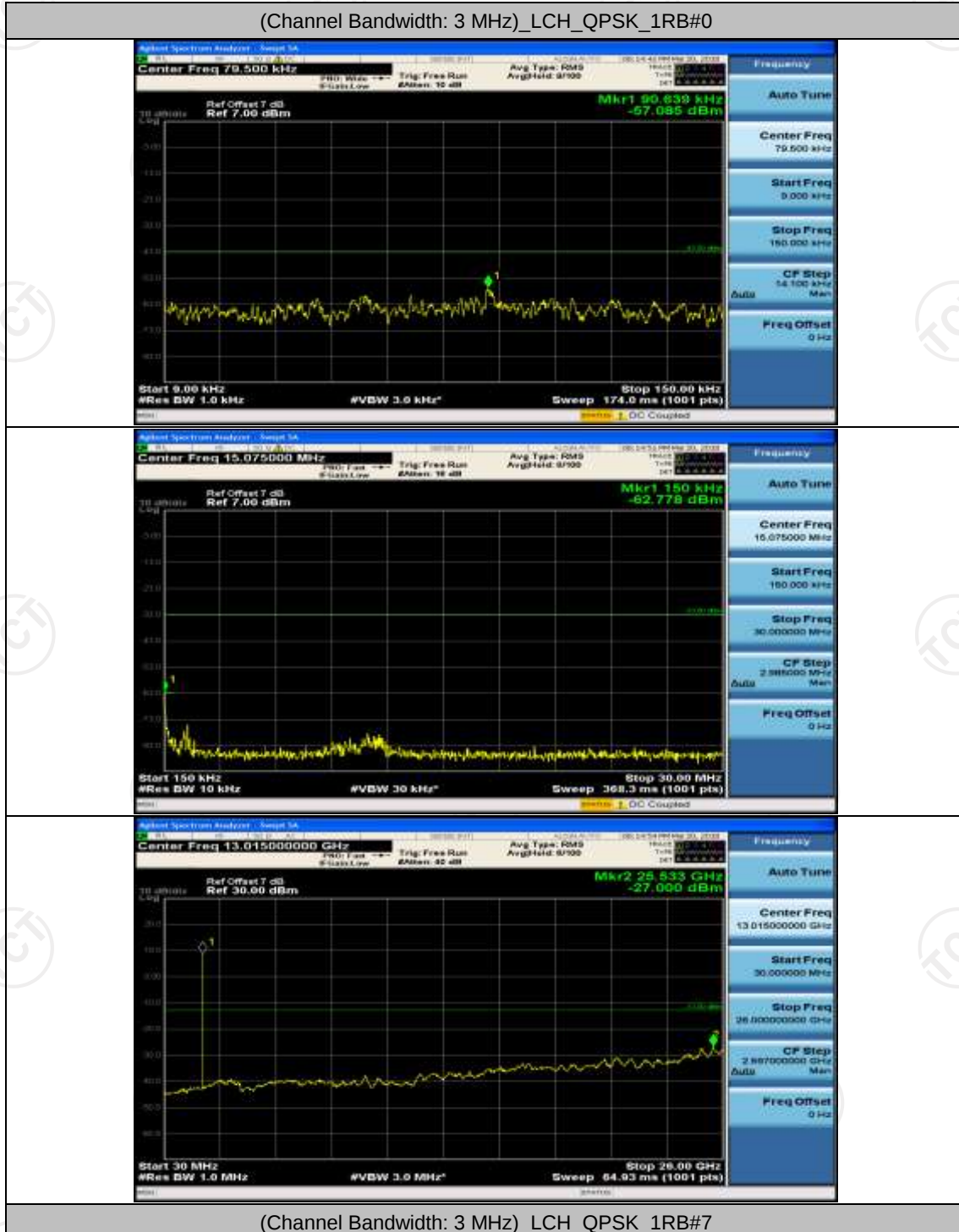
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



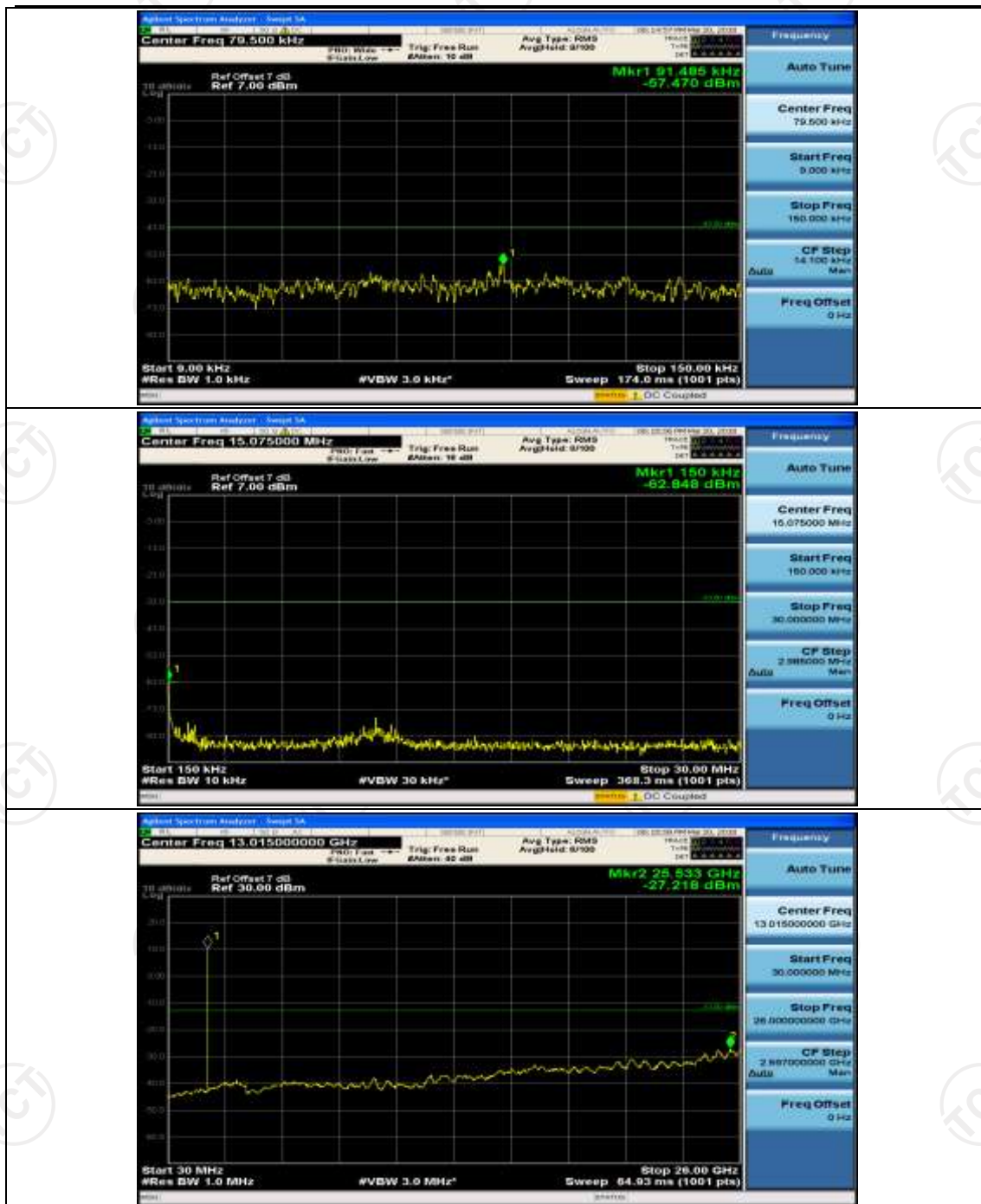


Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



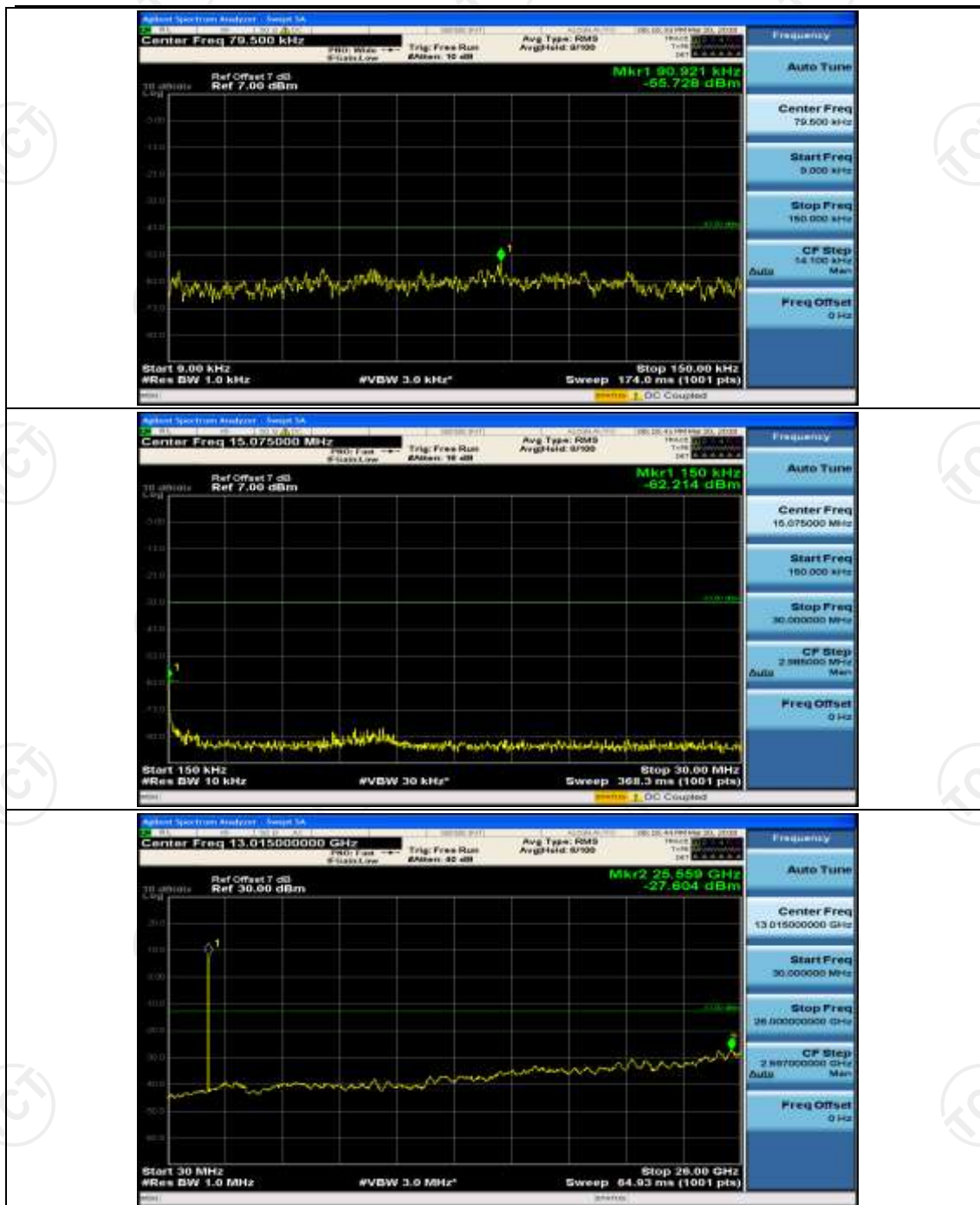
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



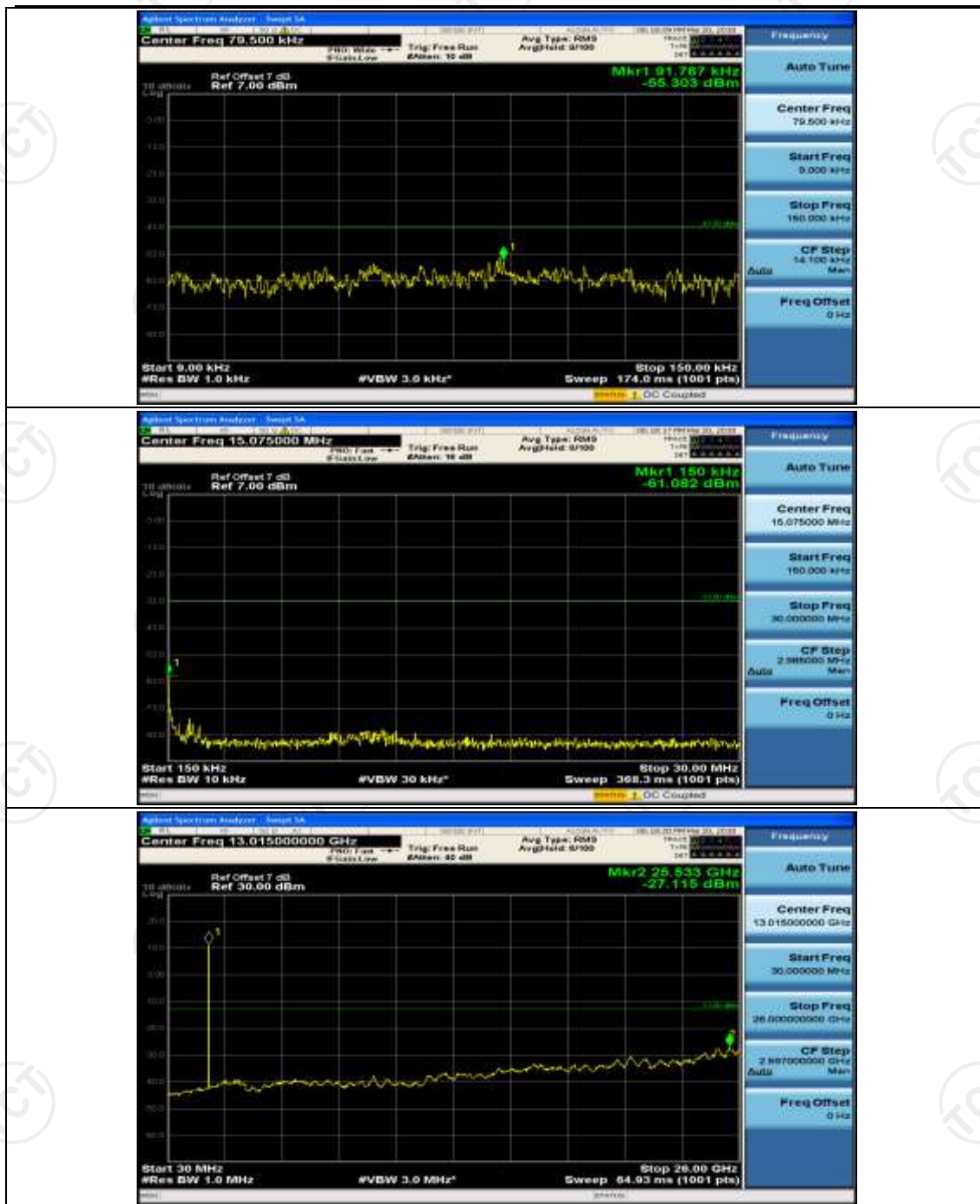
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



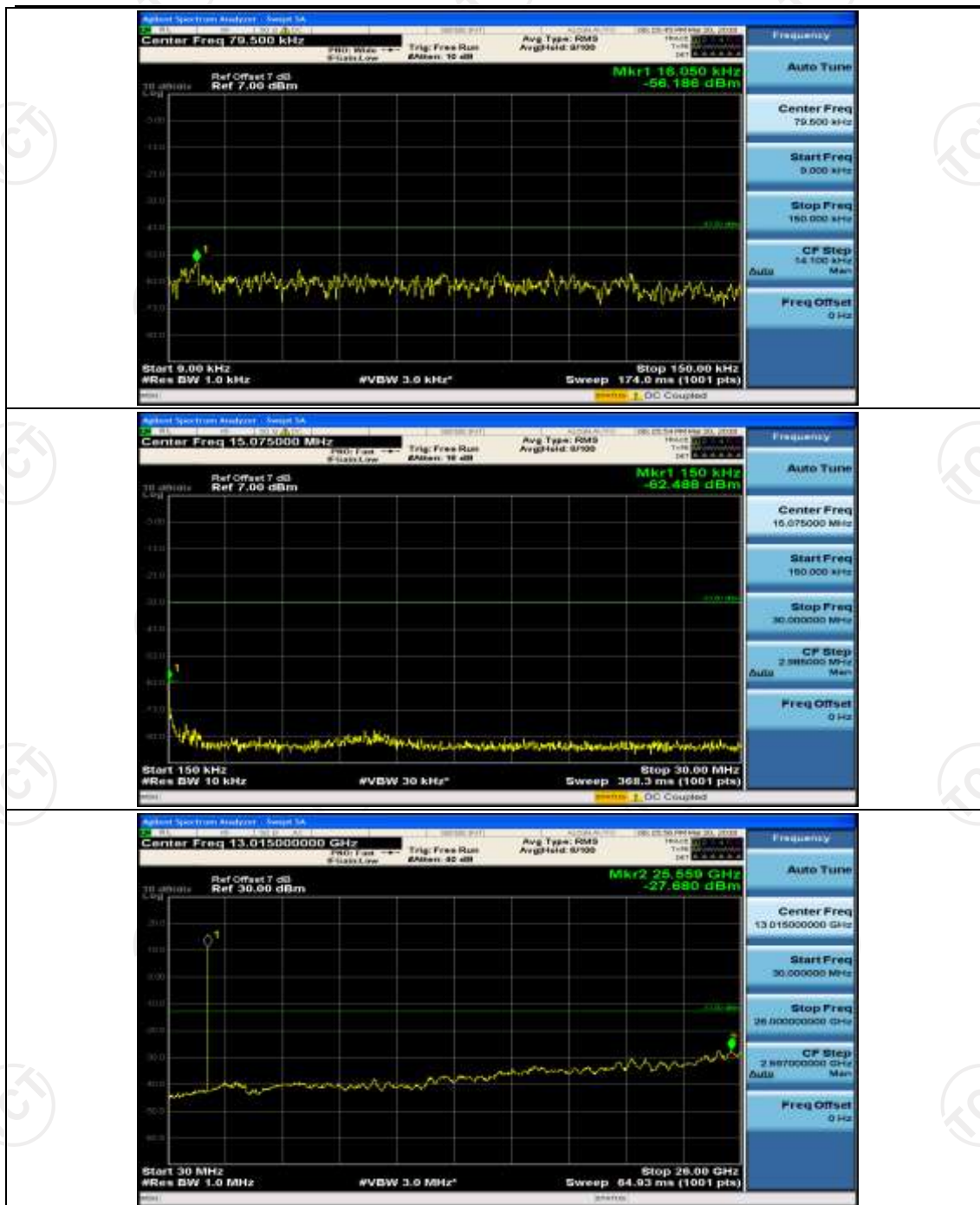
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



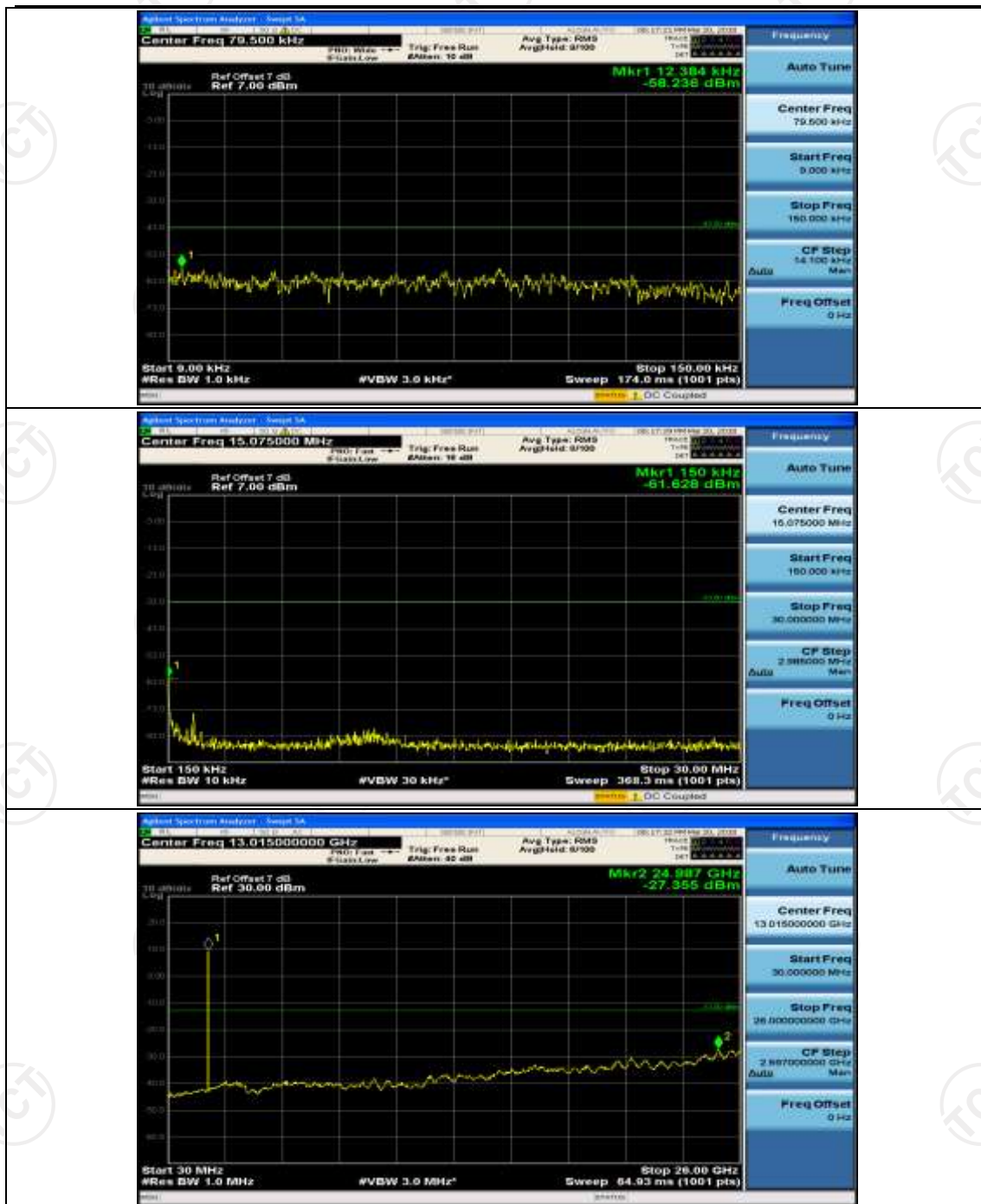
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



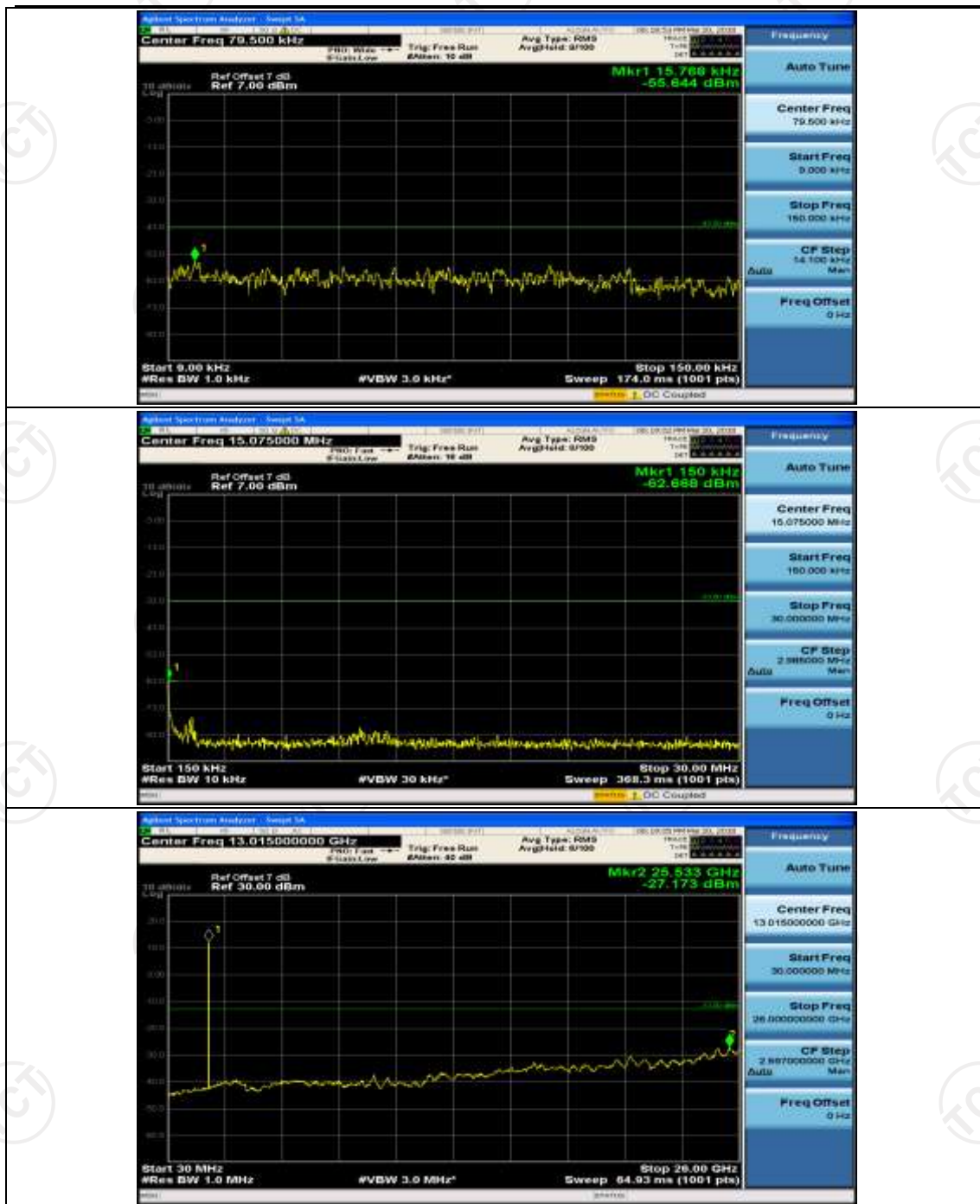
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

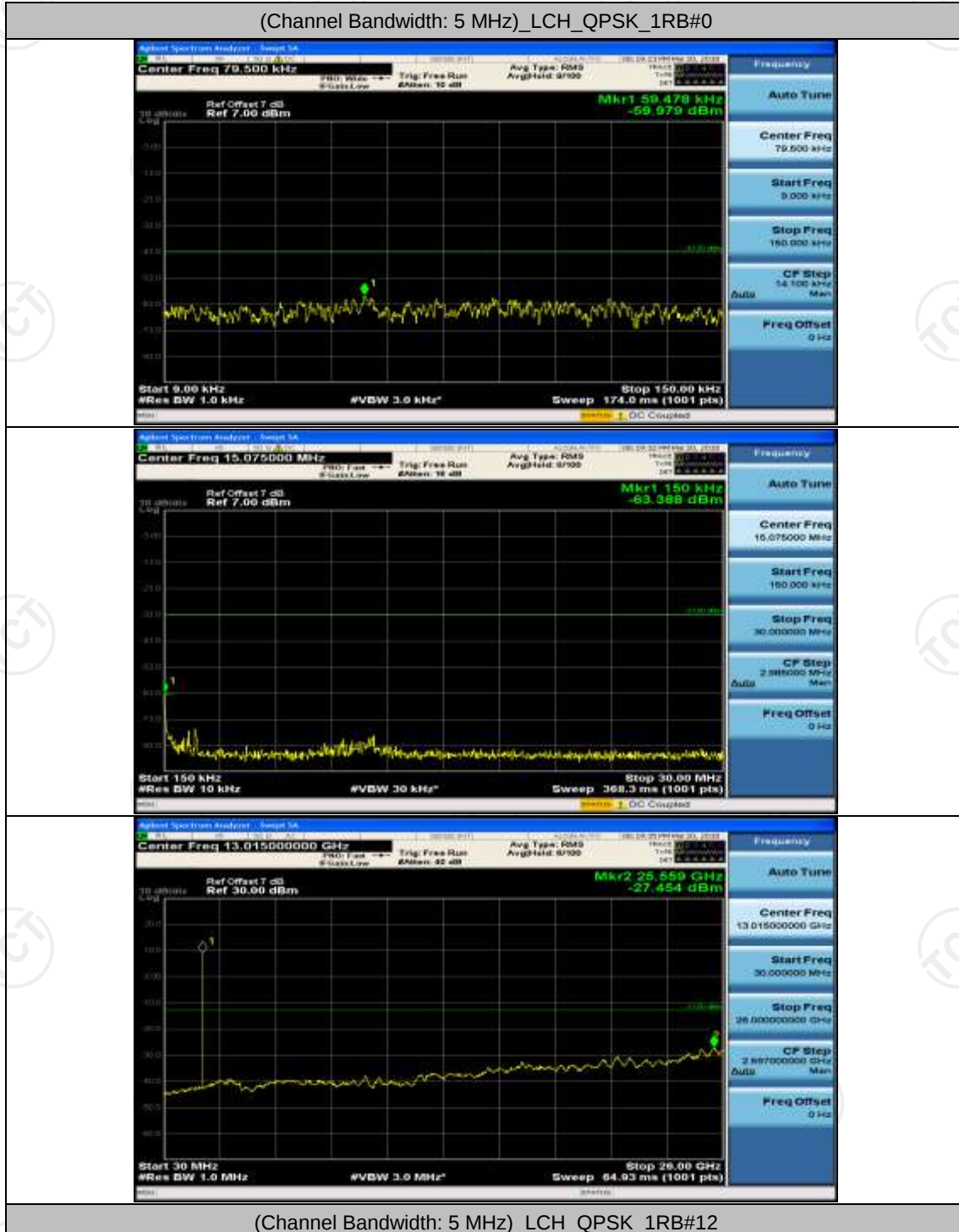


(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

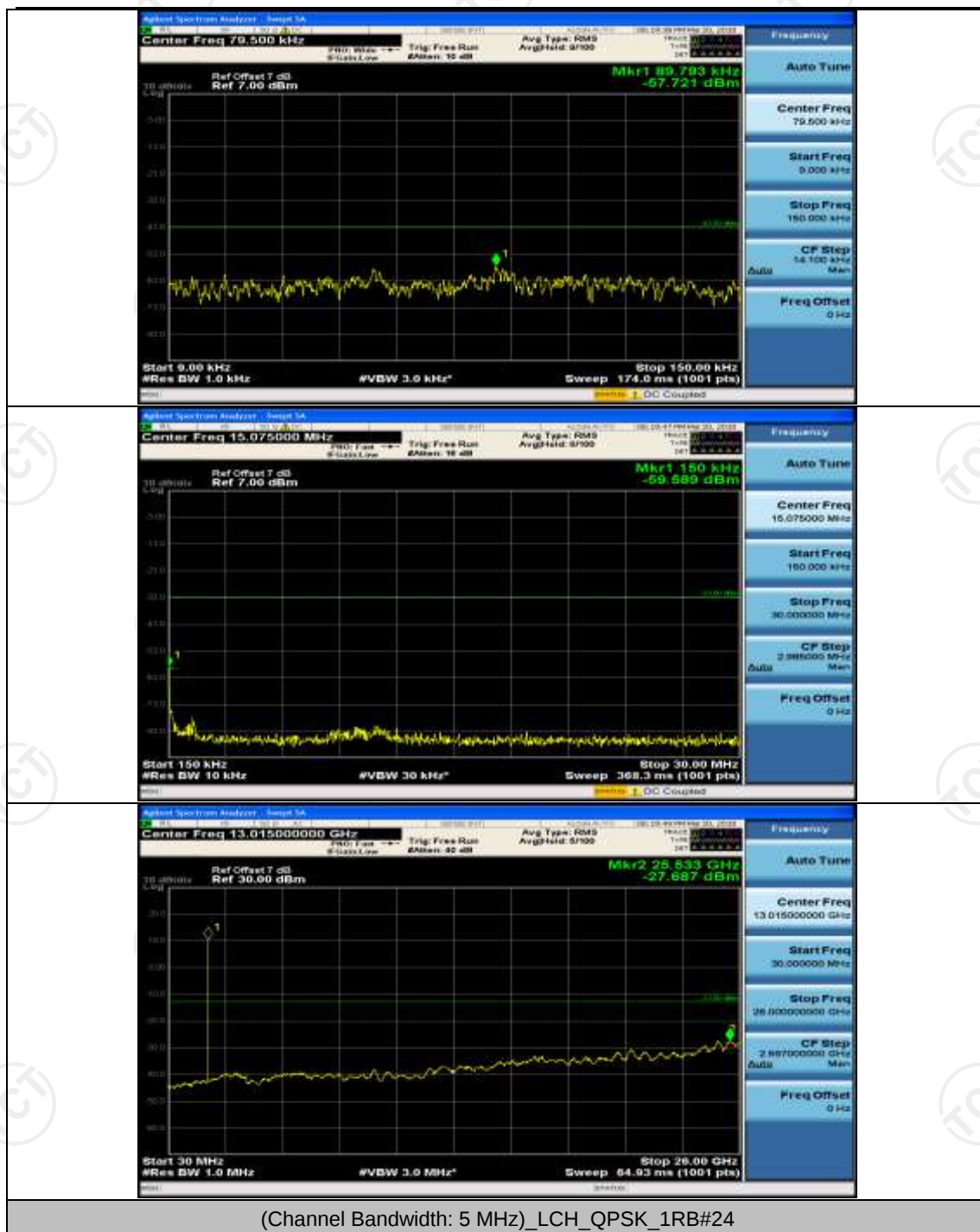


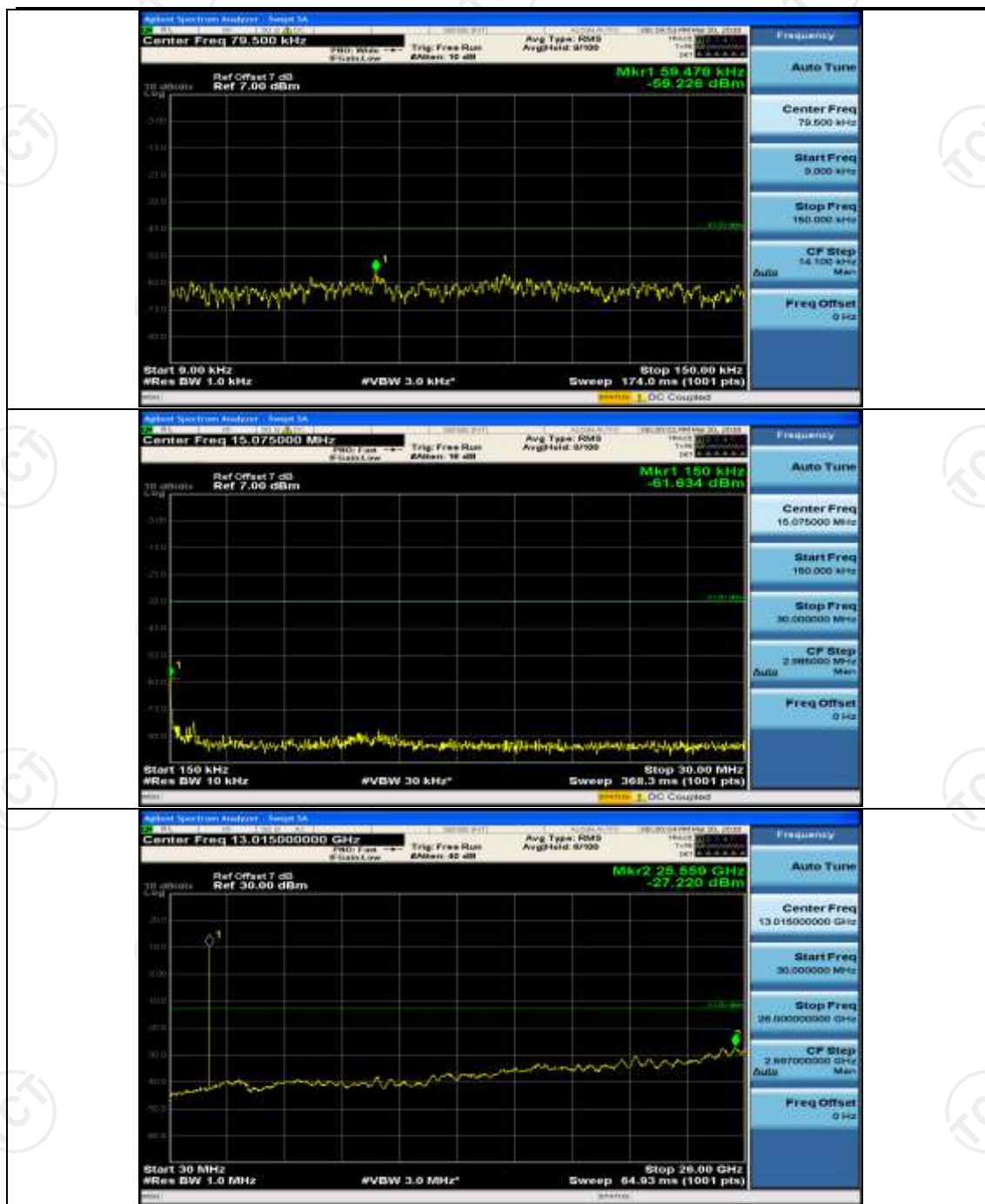
Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

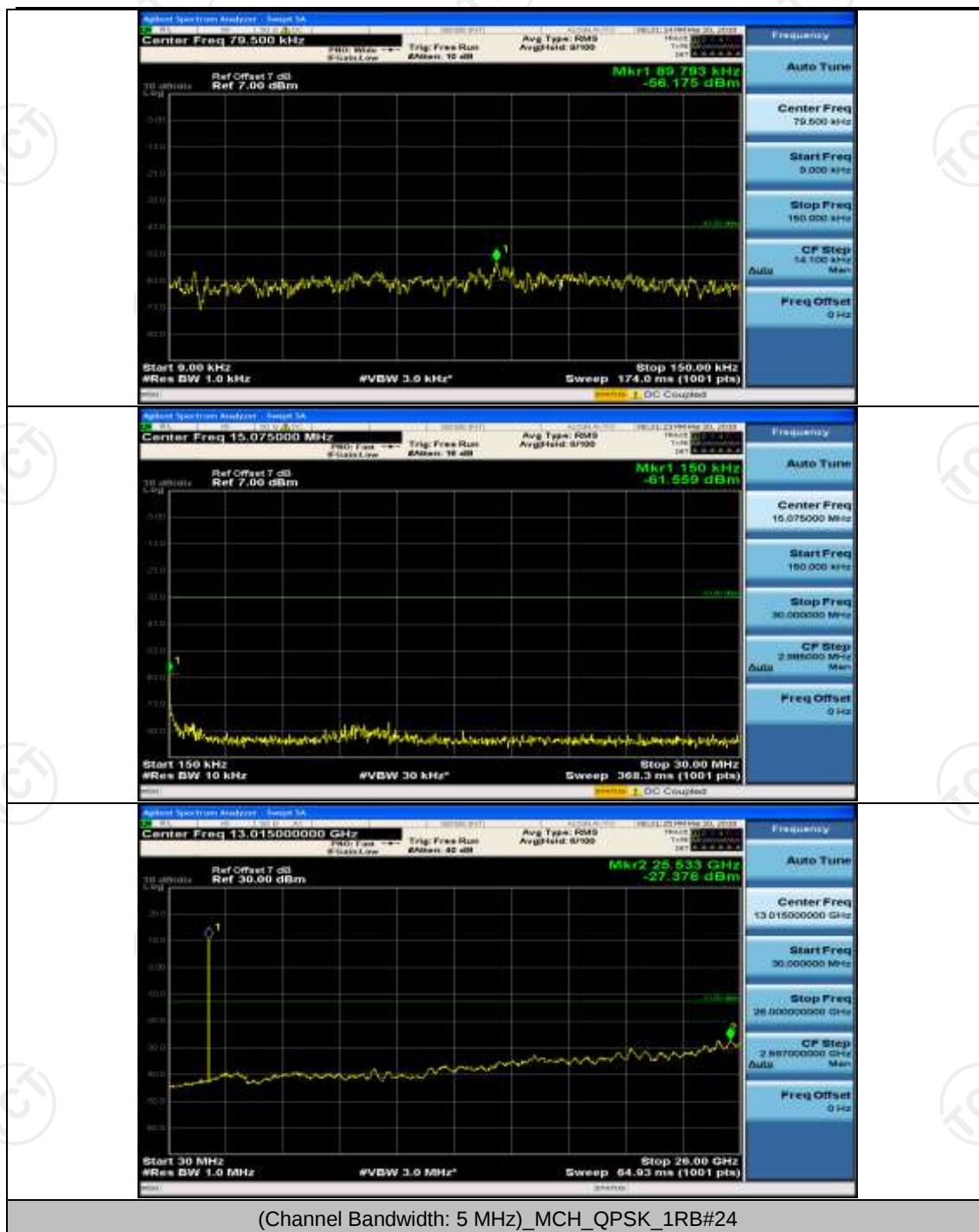


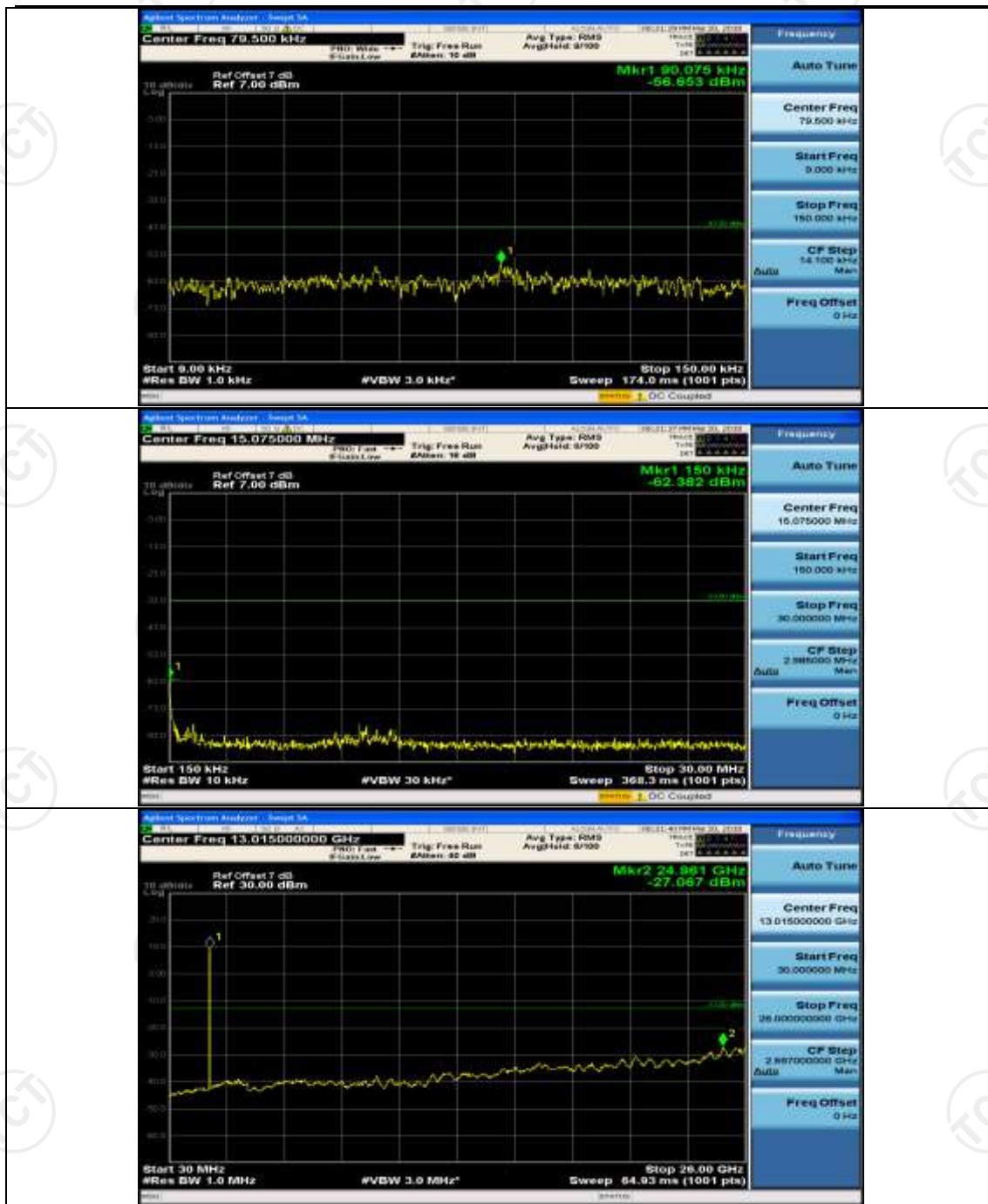


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

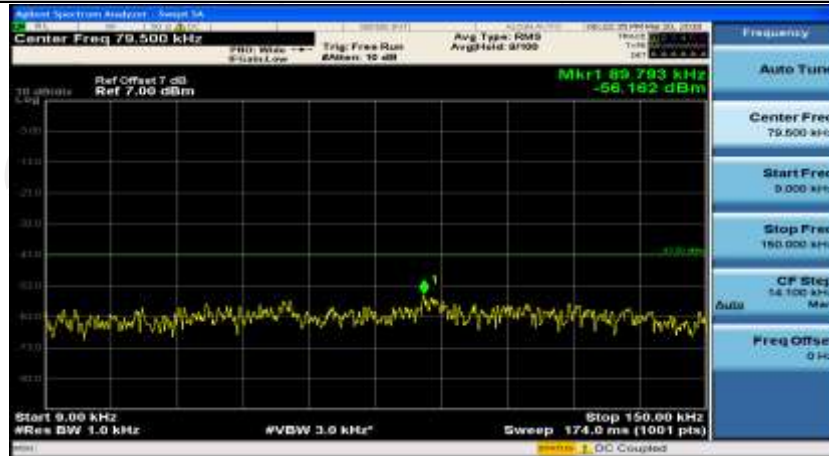


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

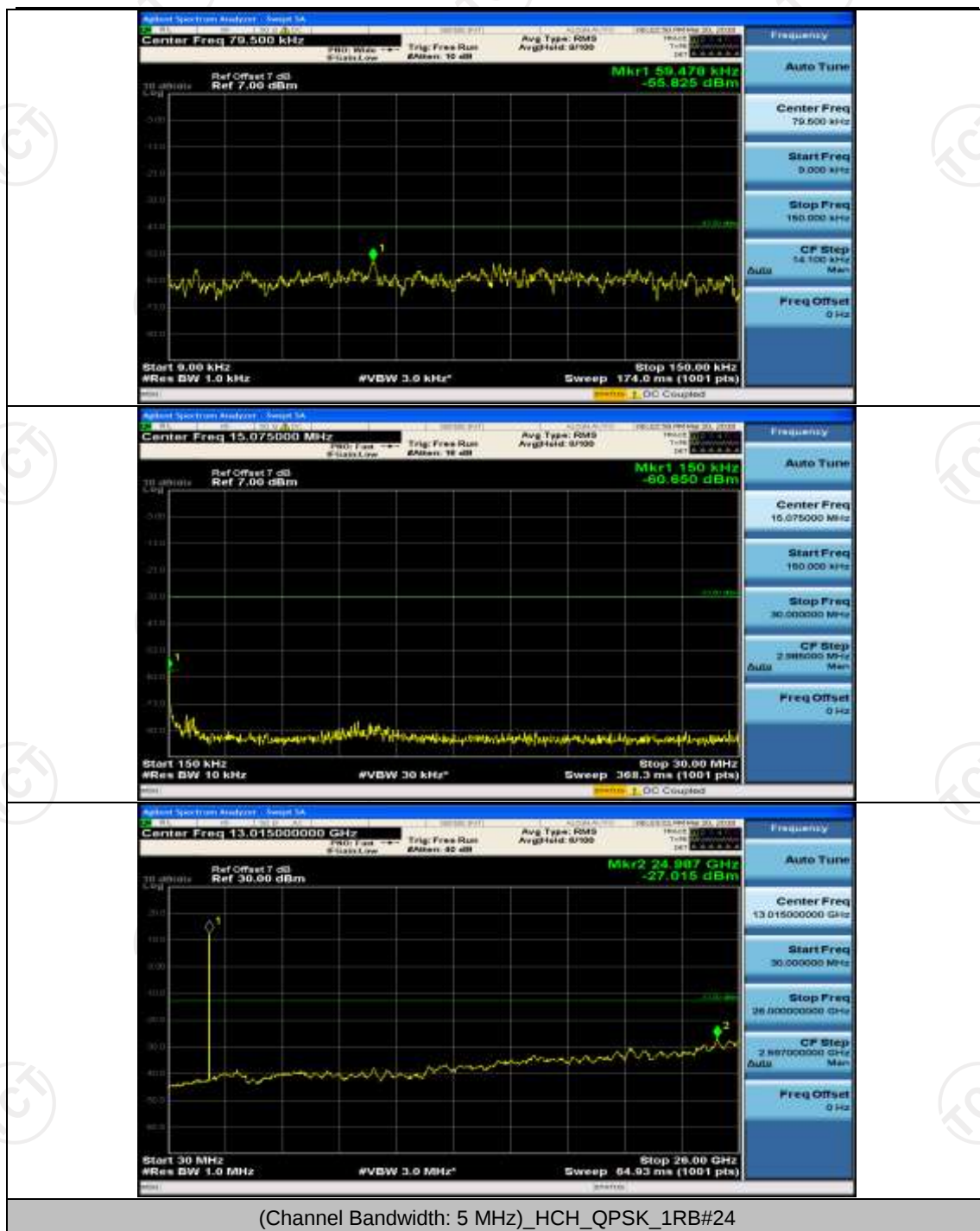


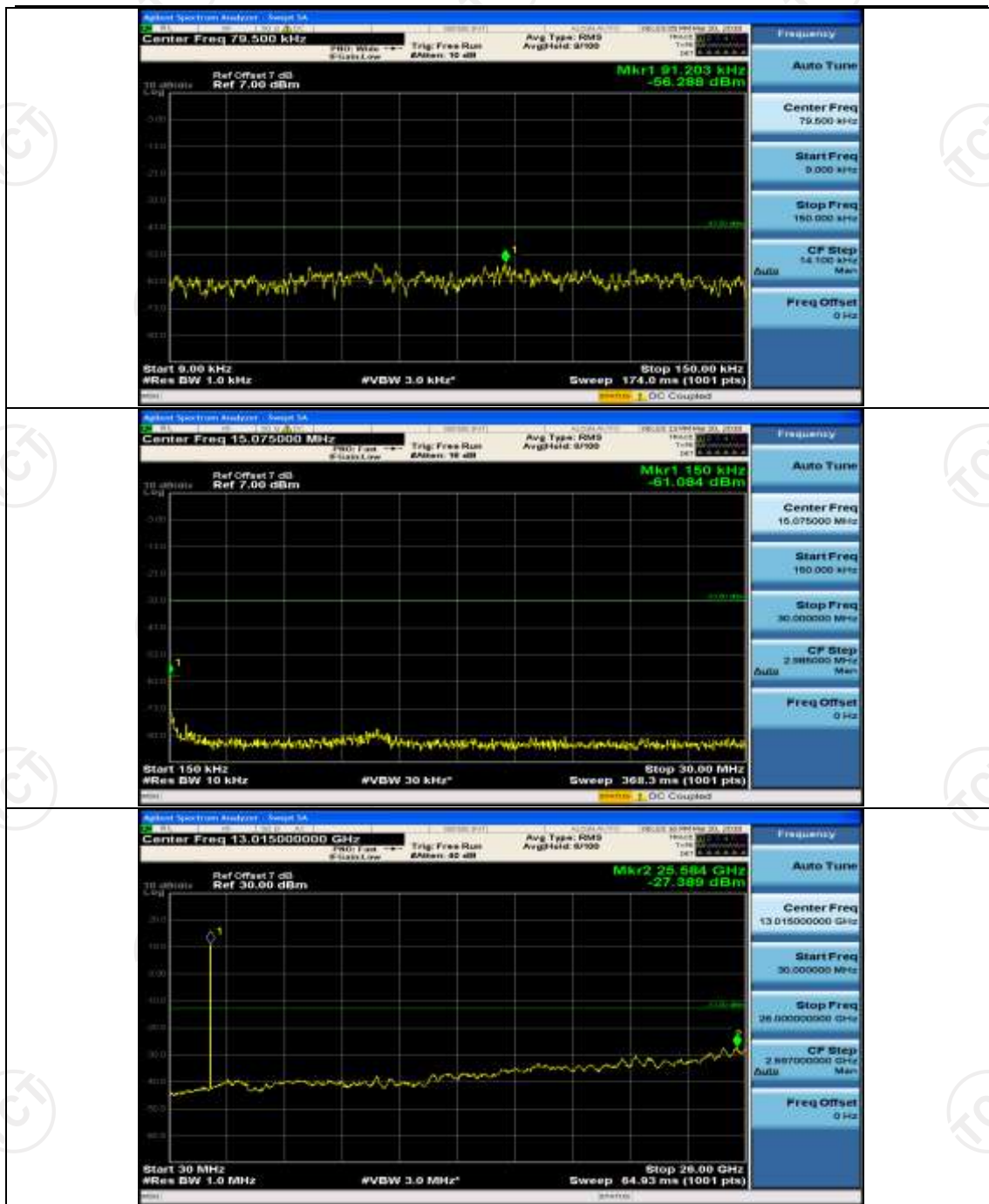


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

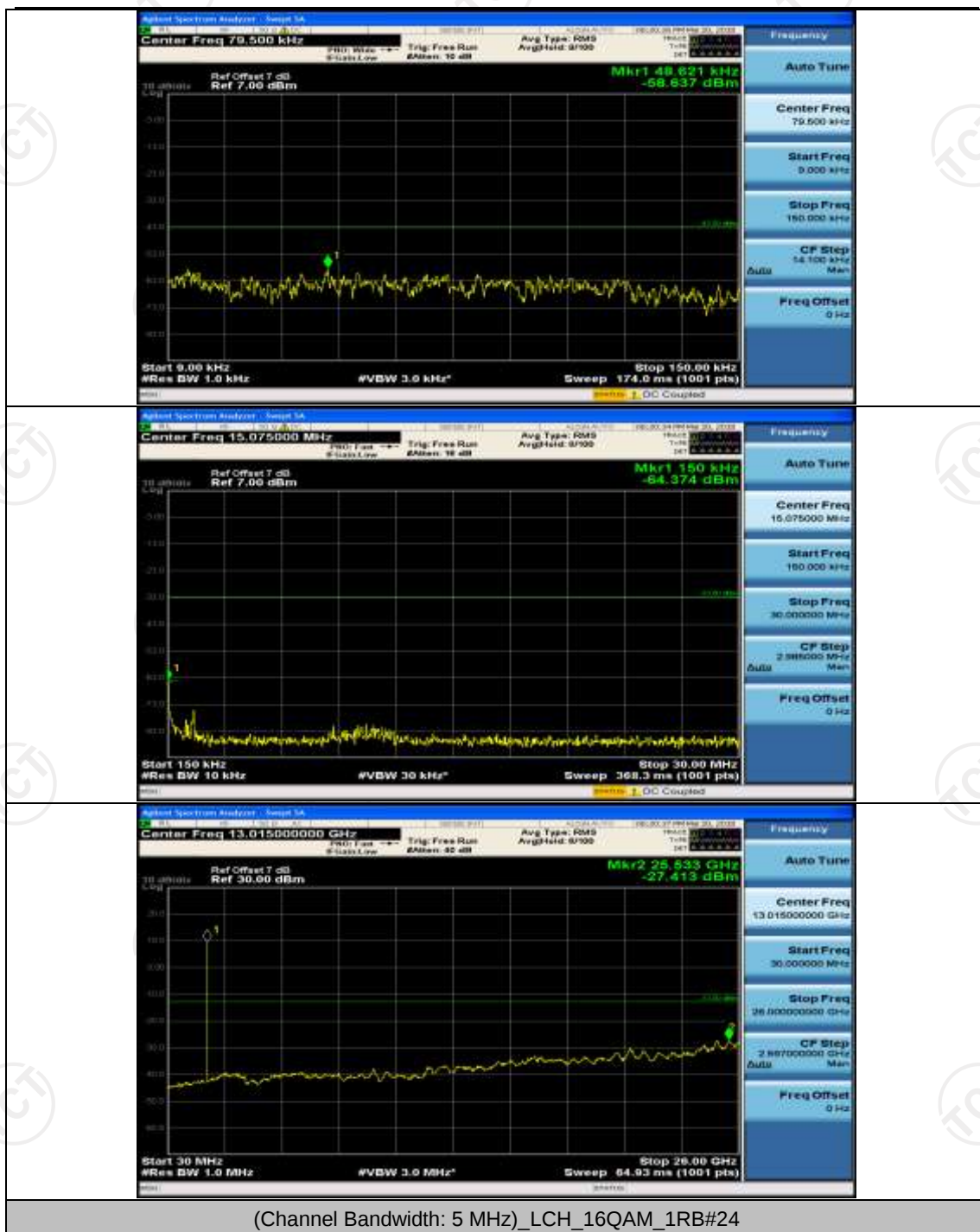


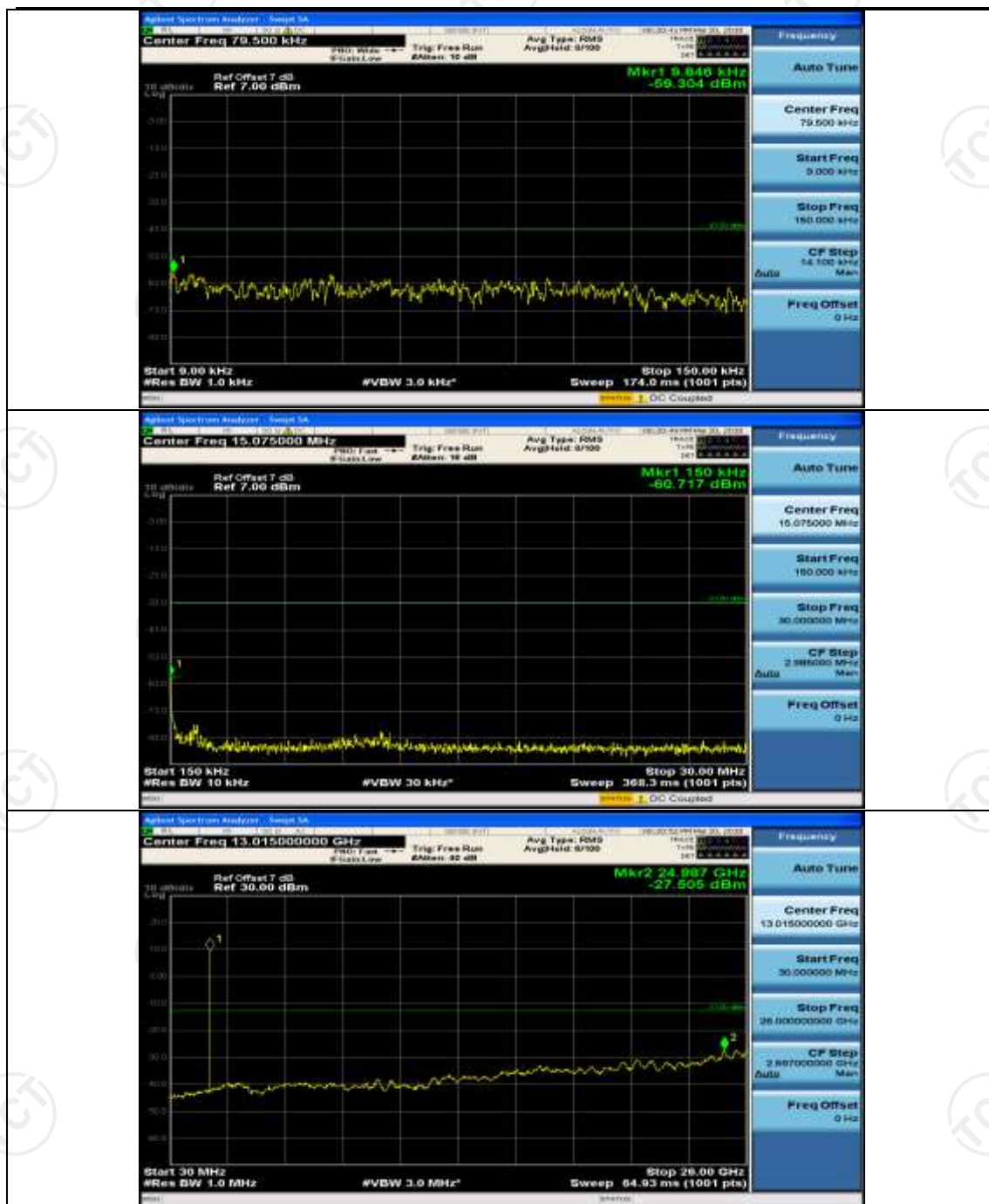


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

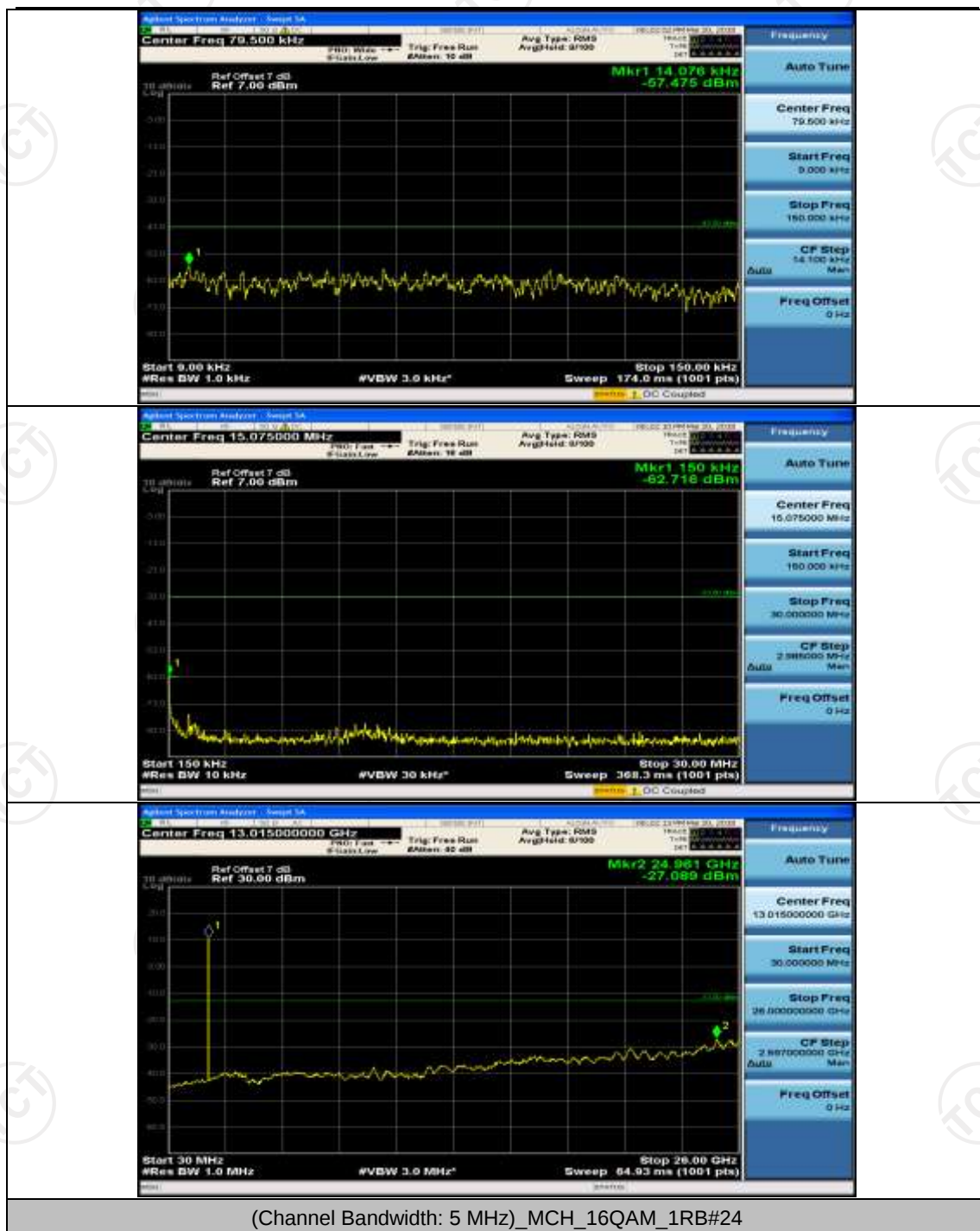


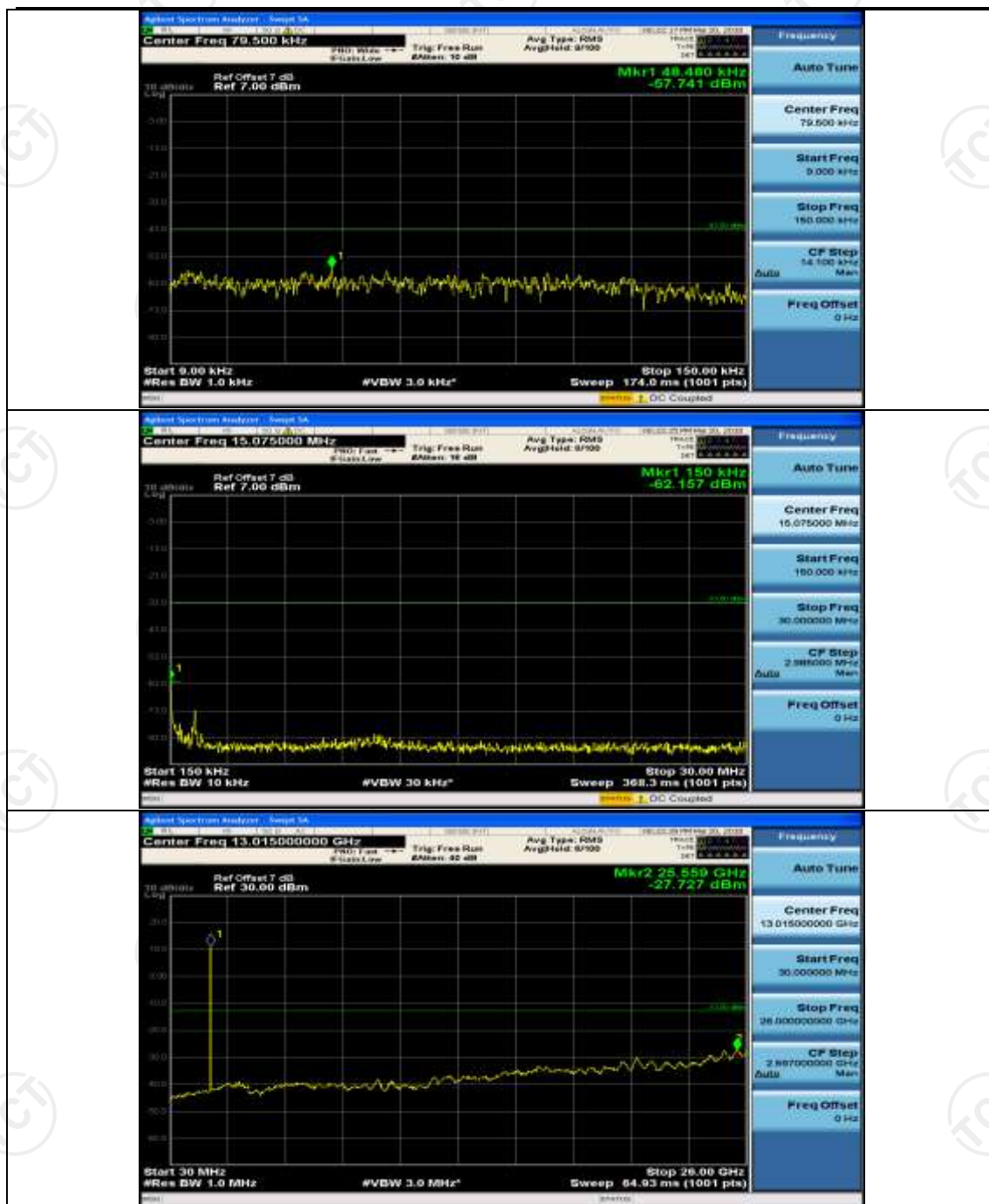


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

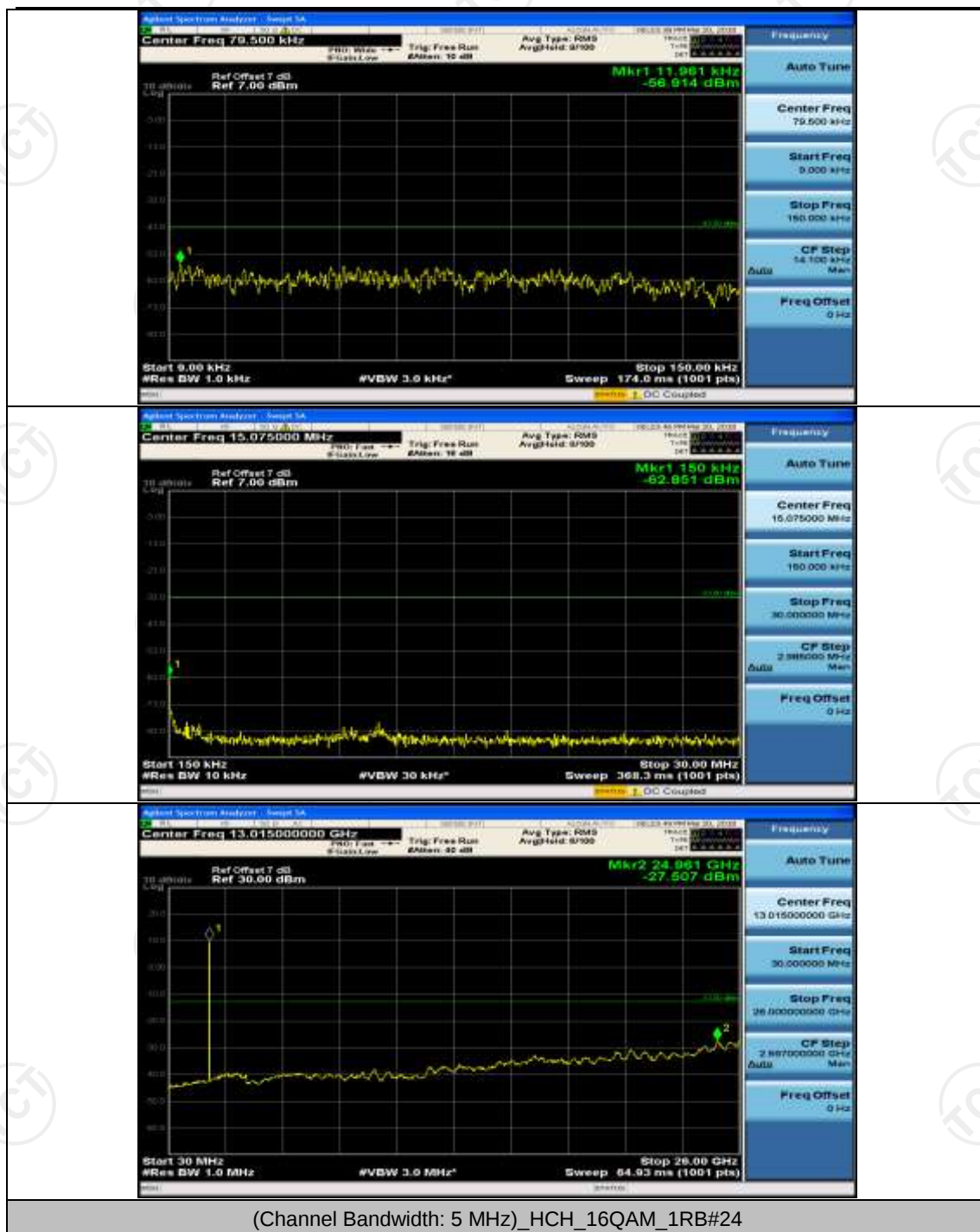


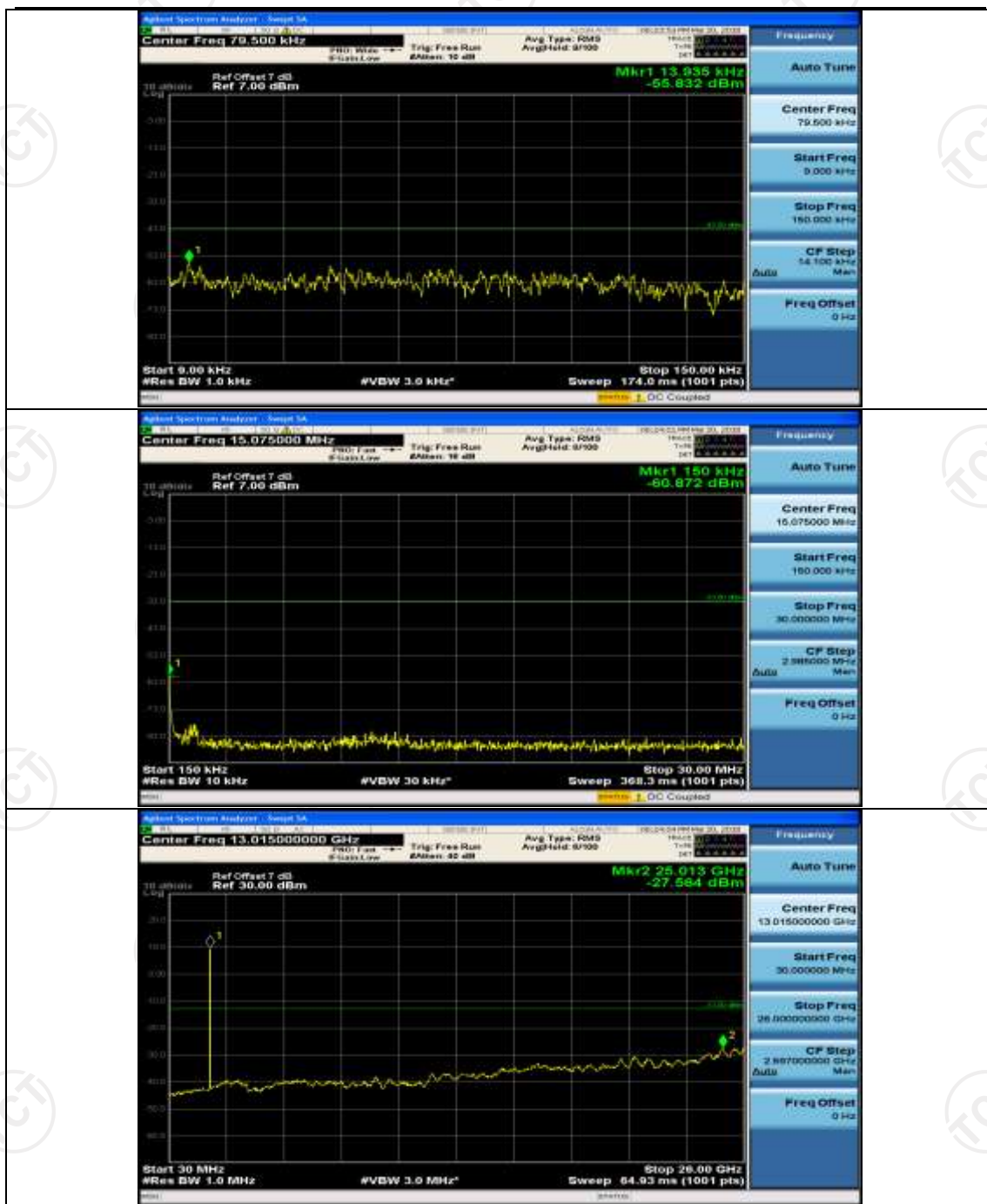


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

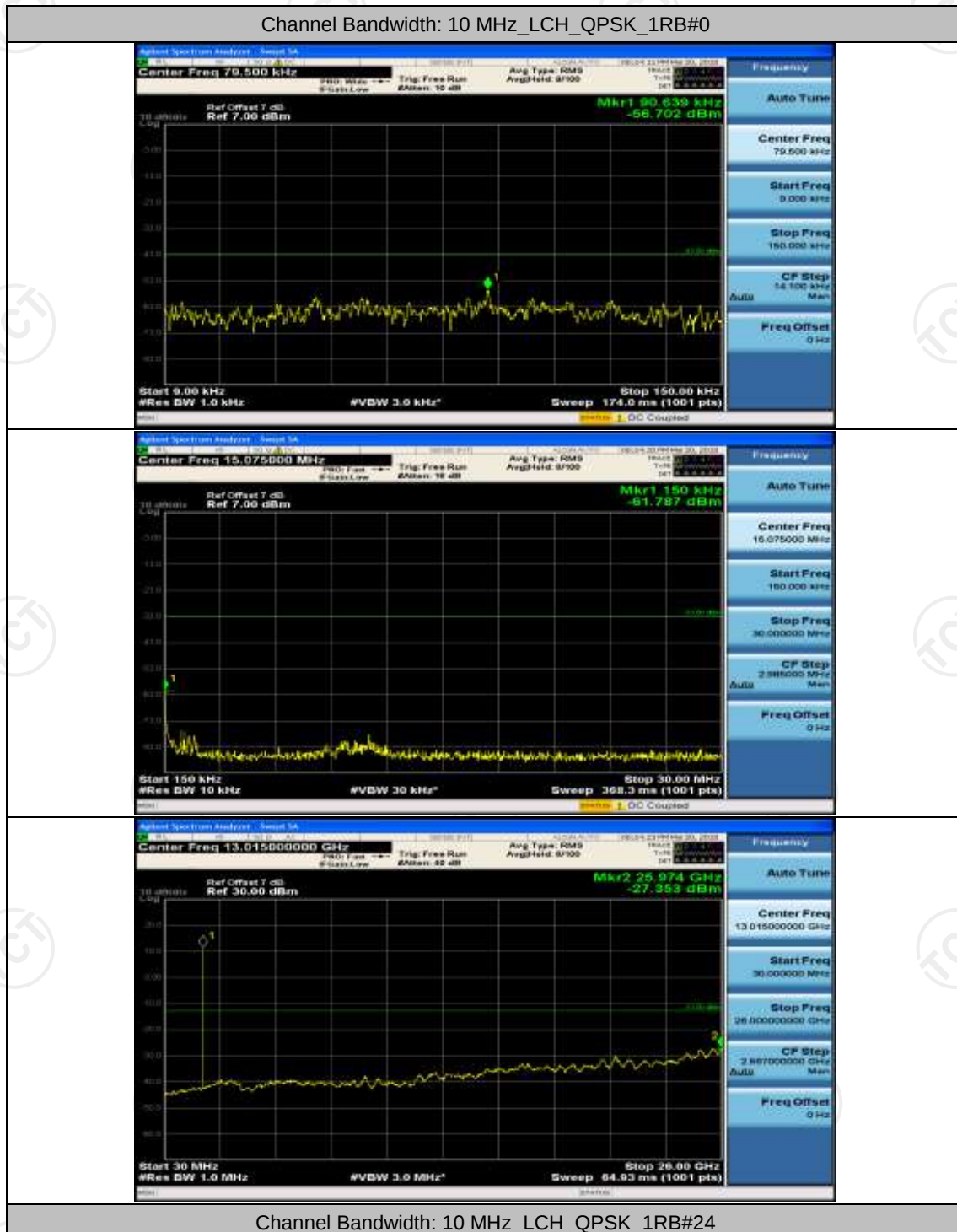


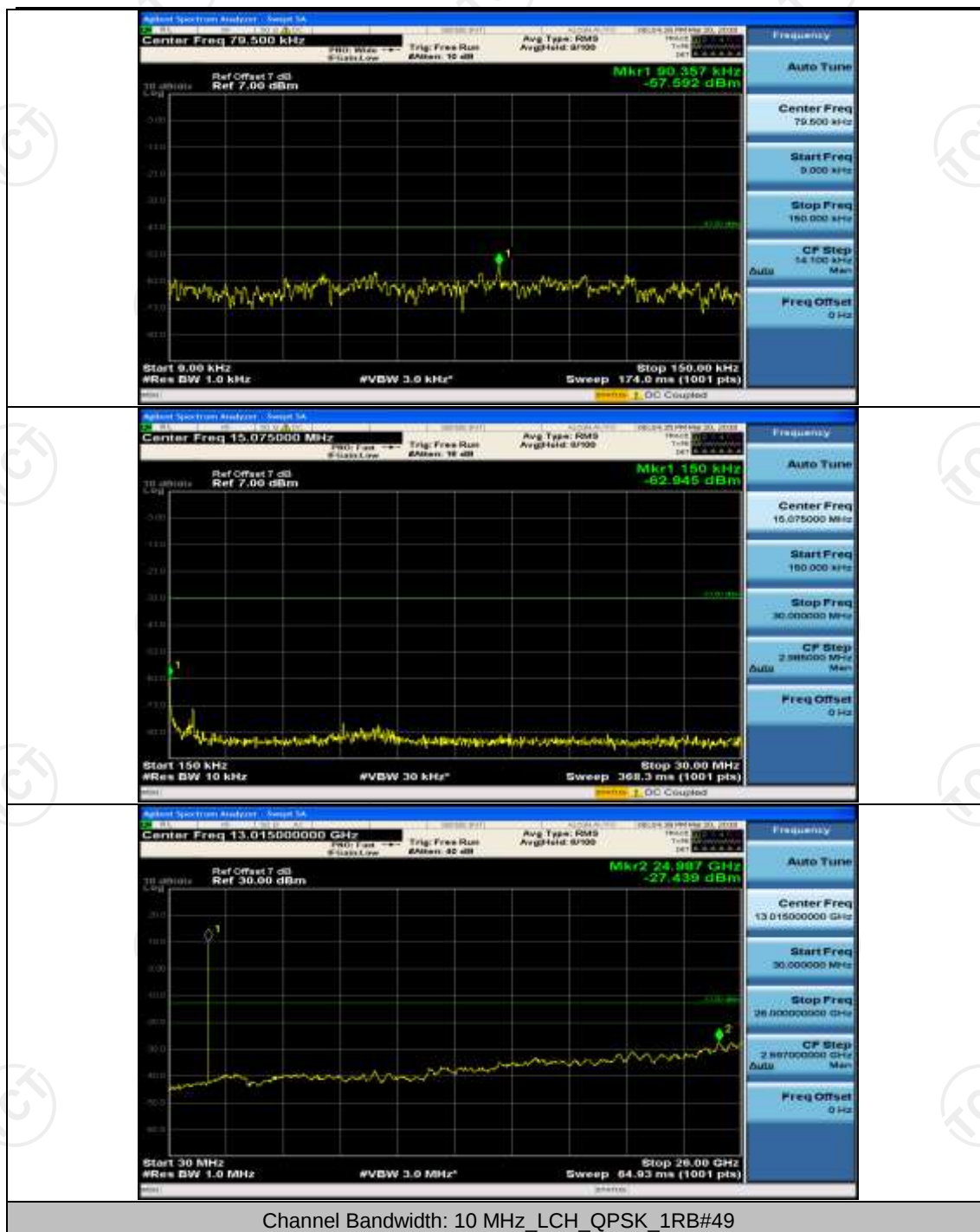
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

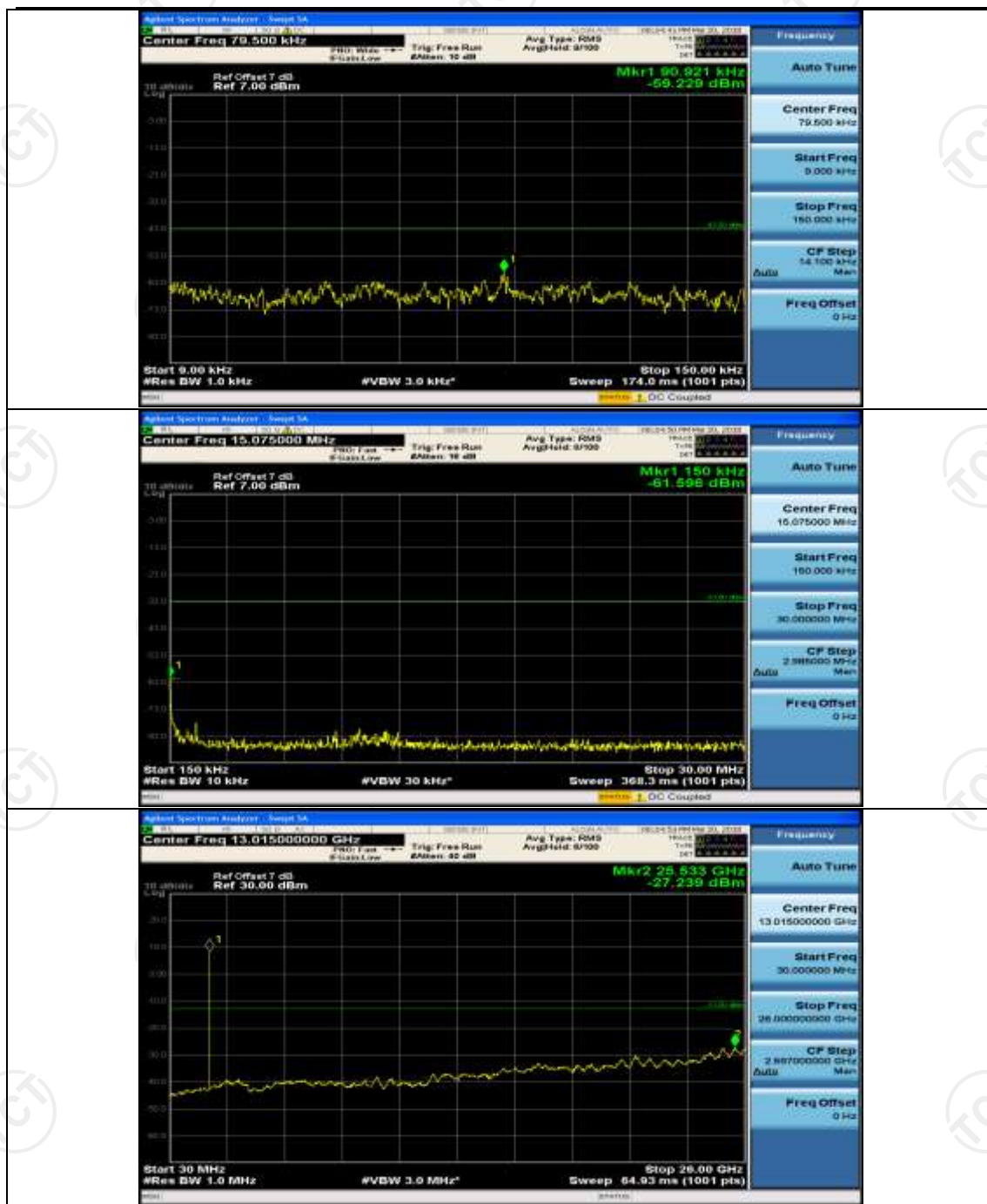




Channel Bandwidth: 10 MHz



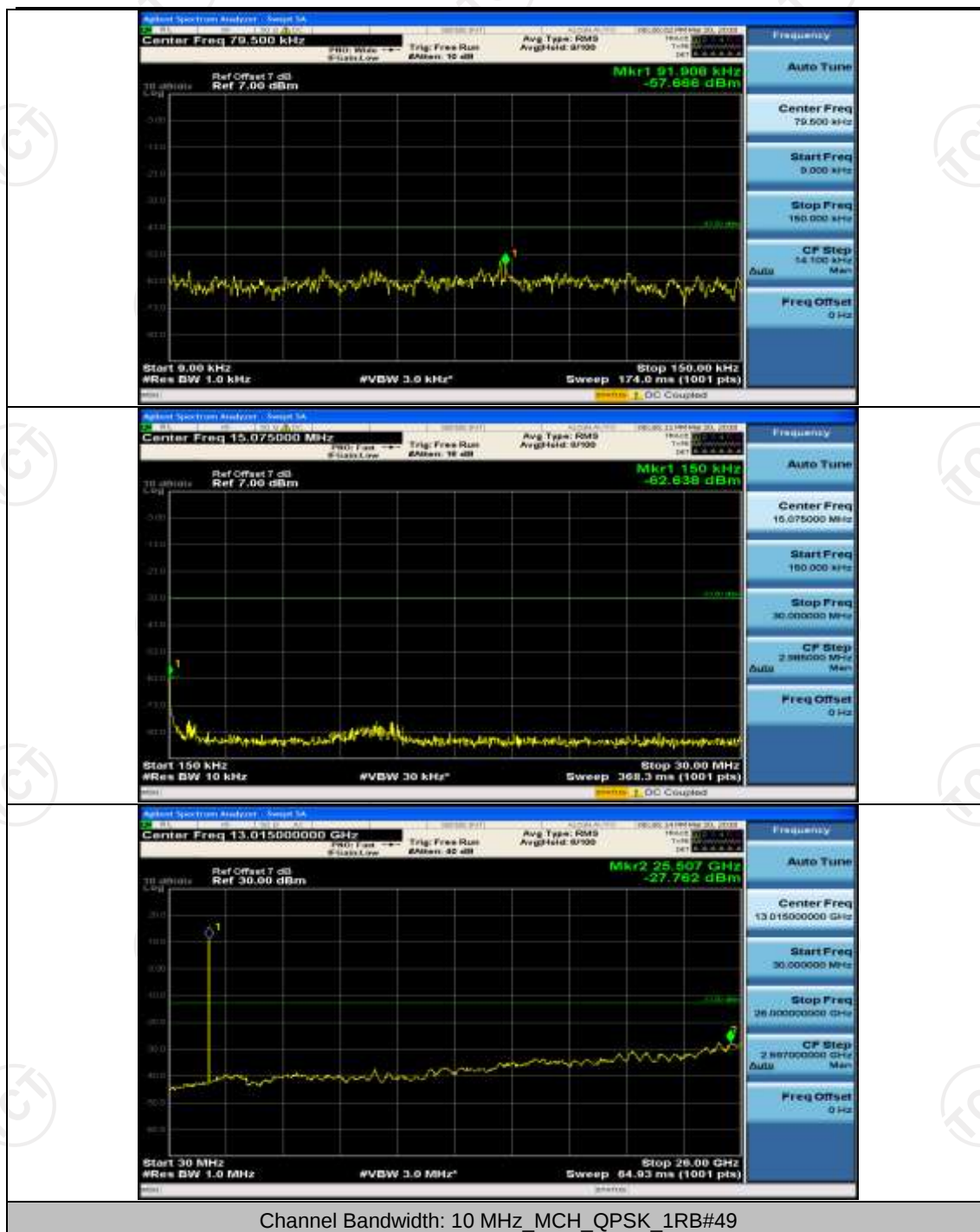


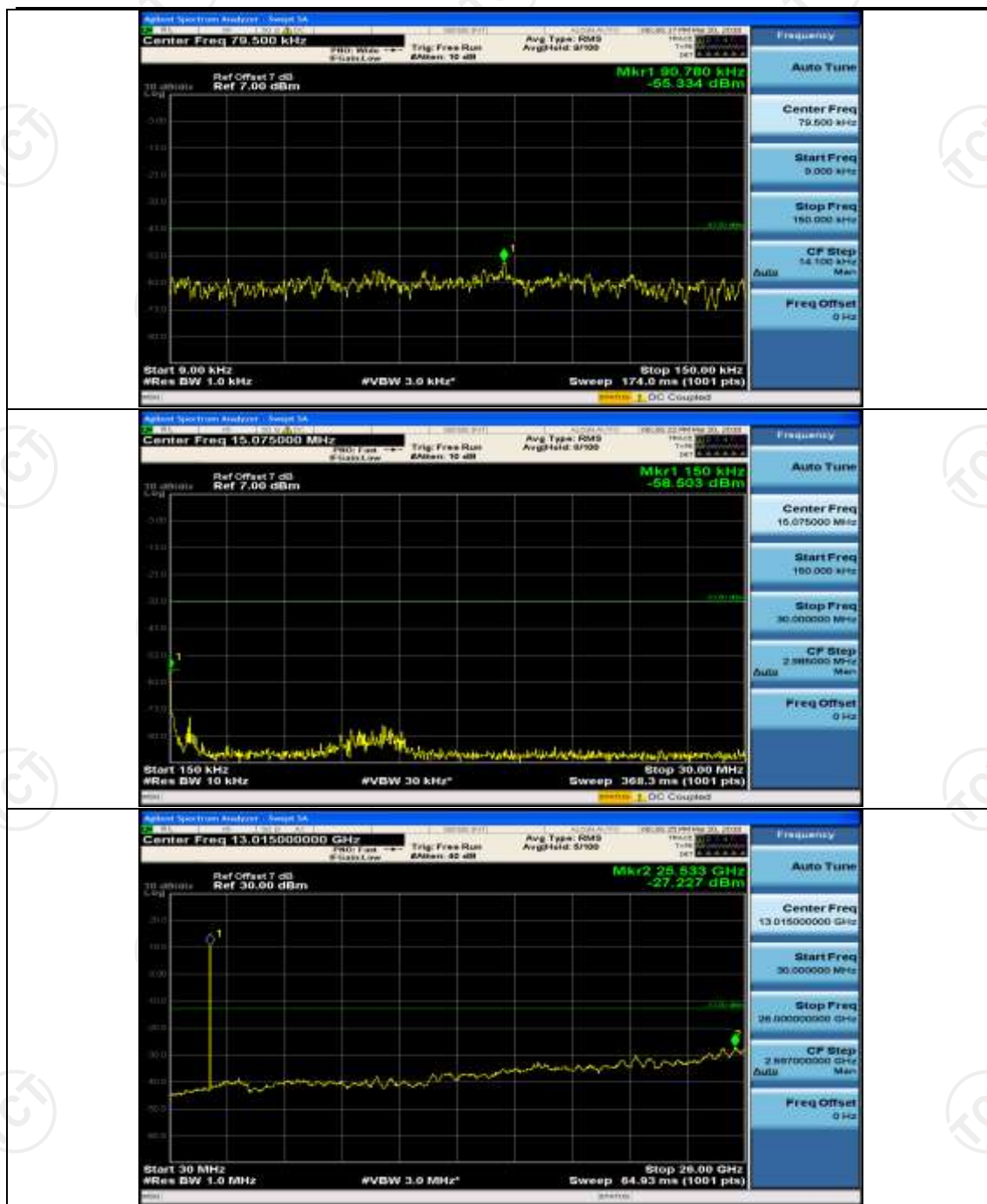


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

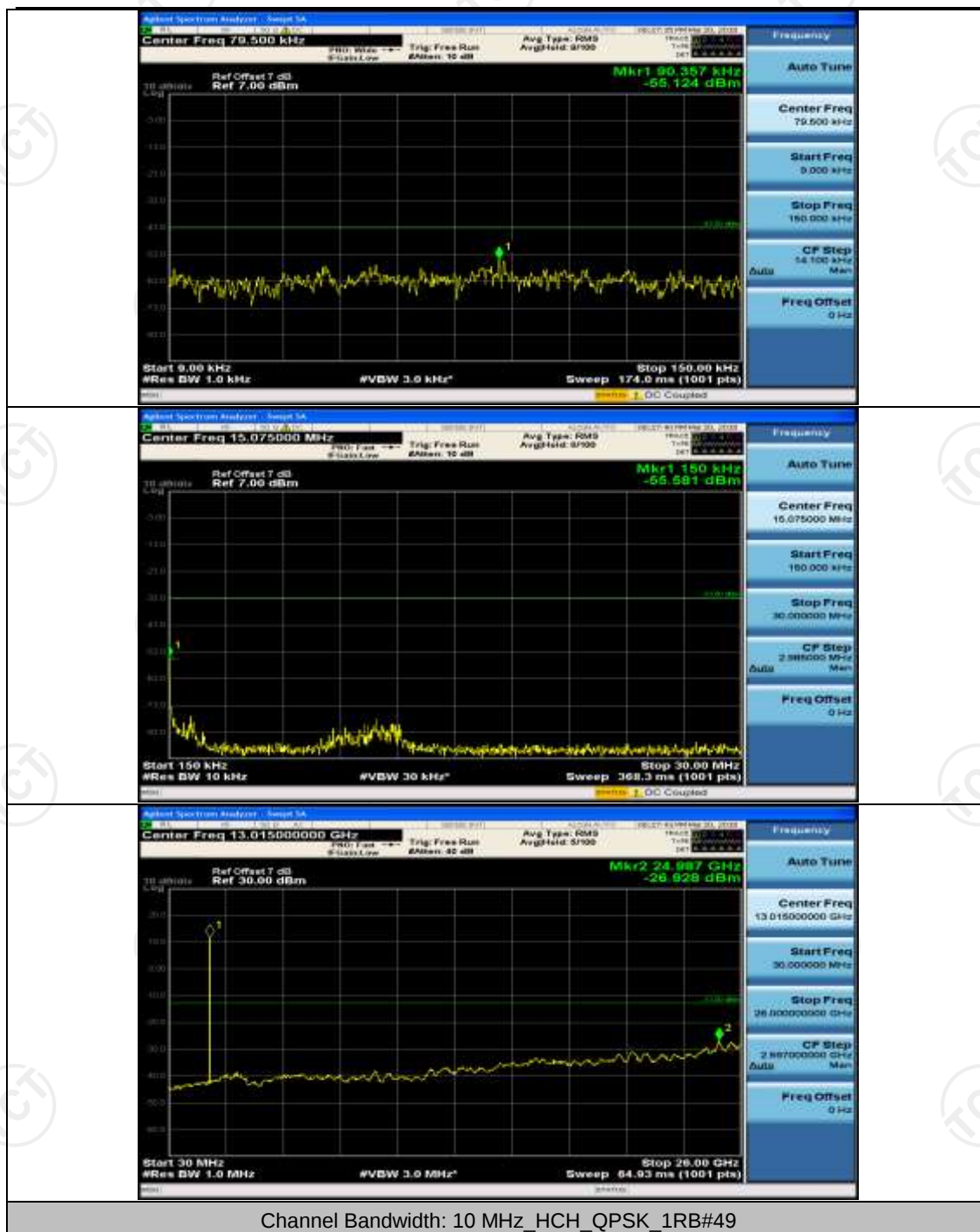


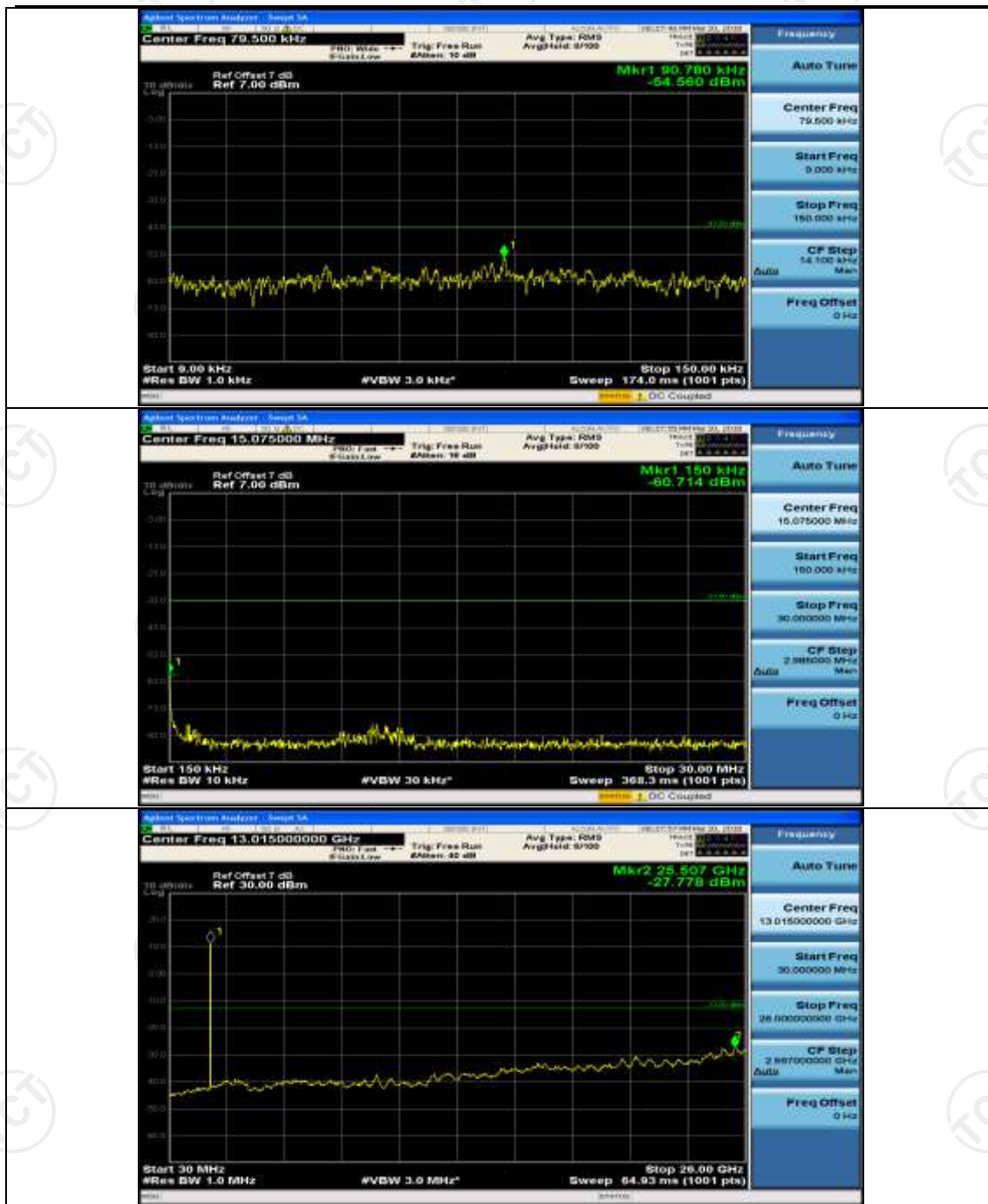


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

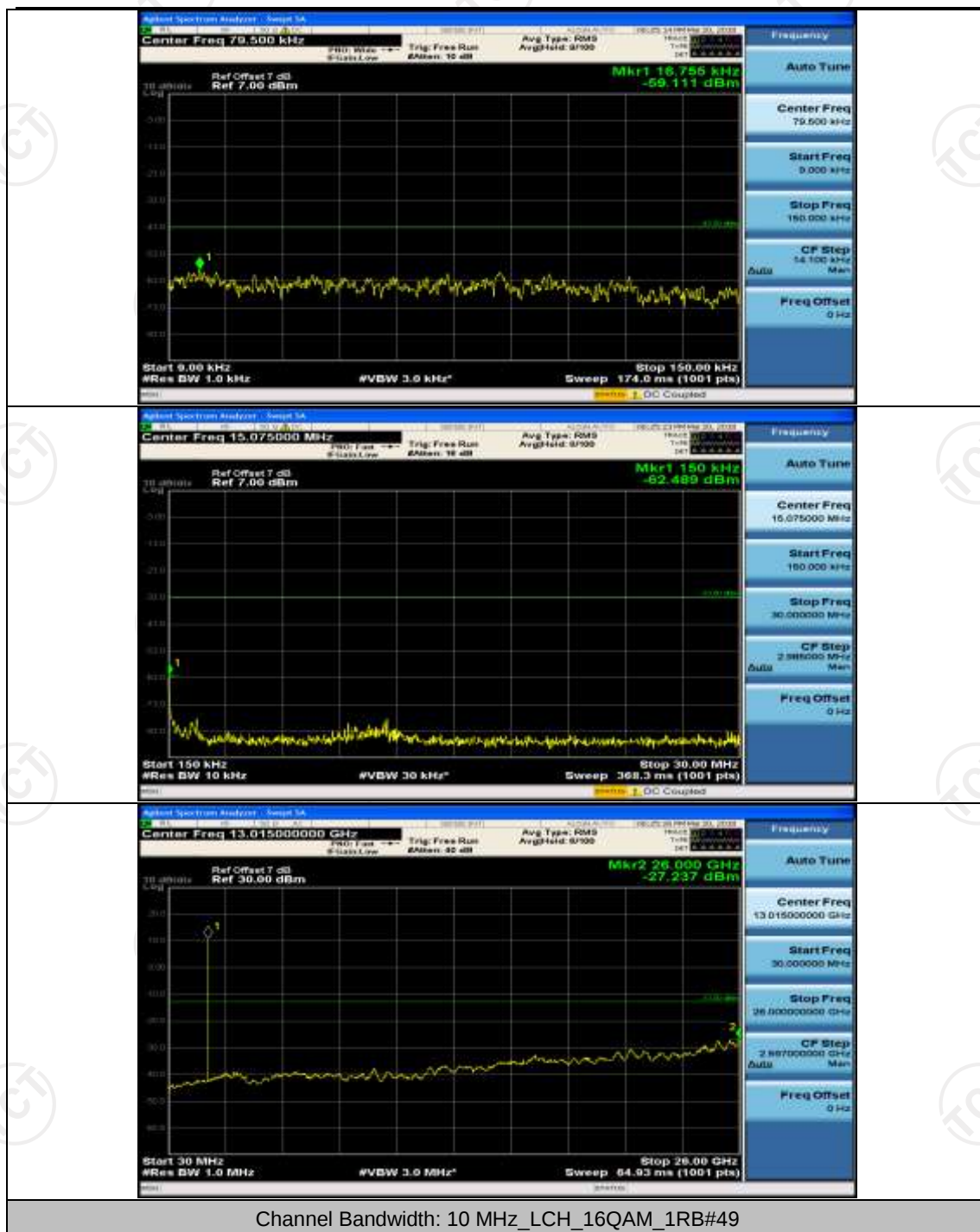


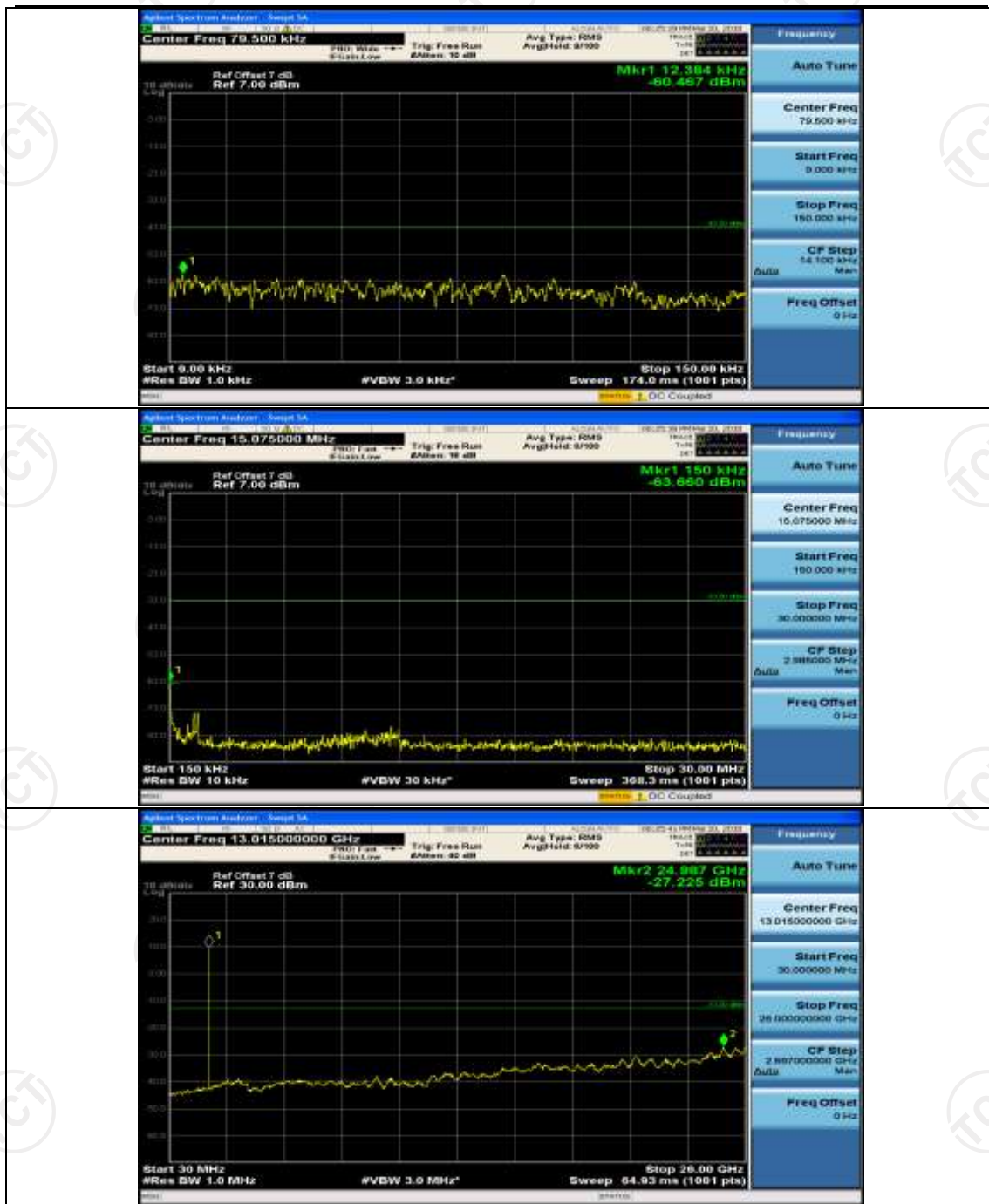


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

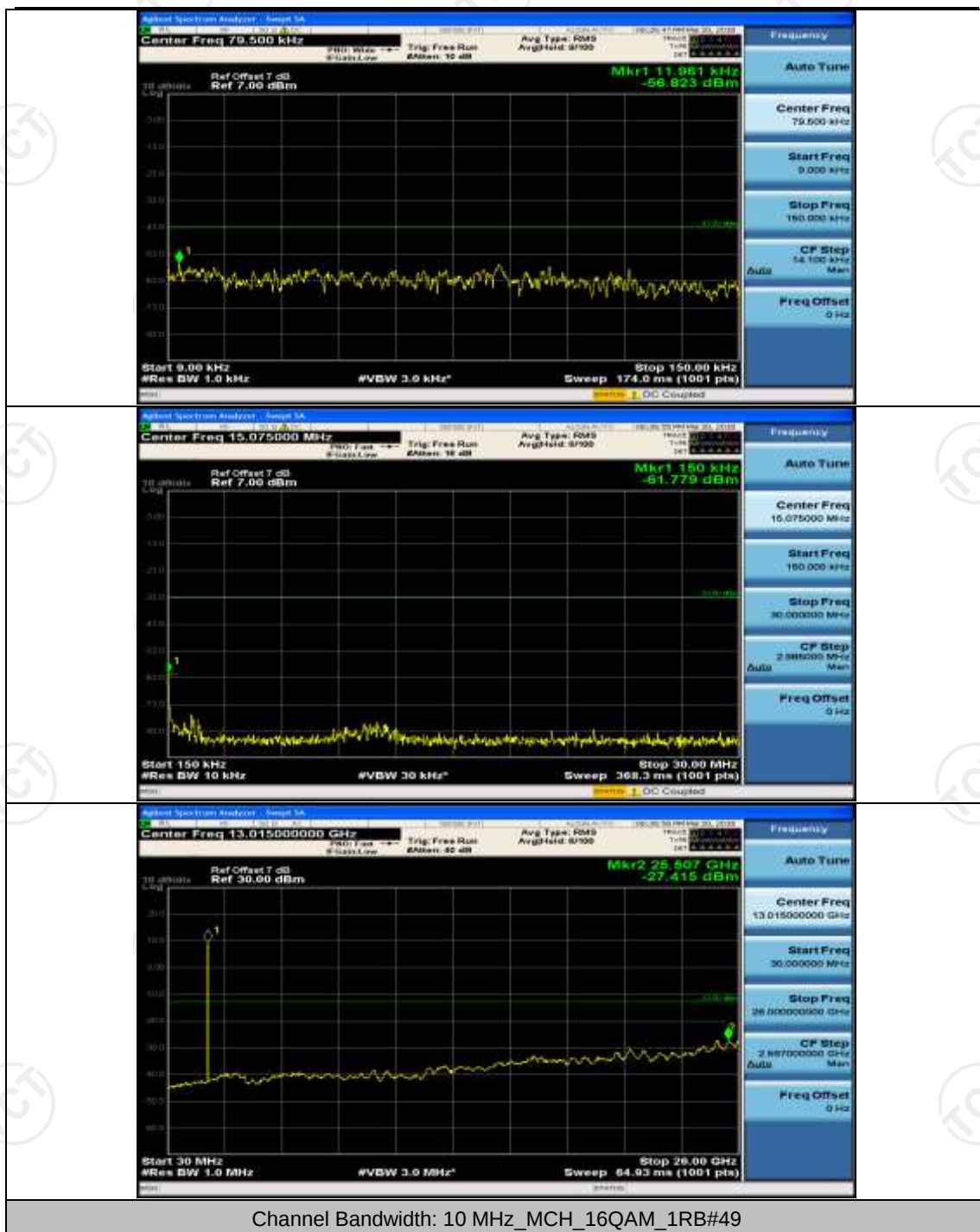


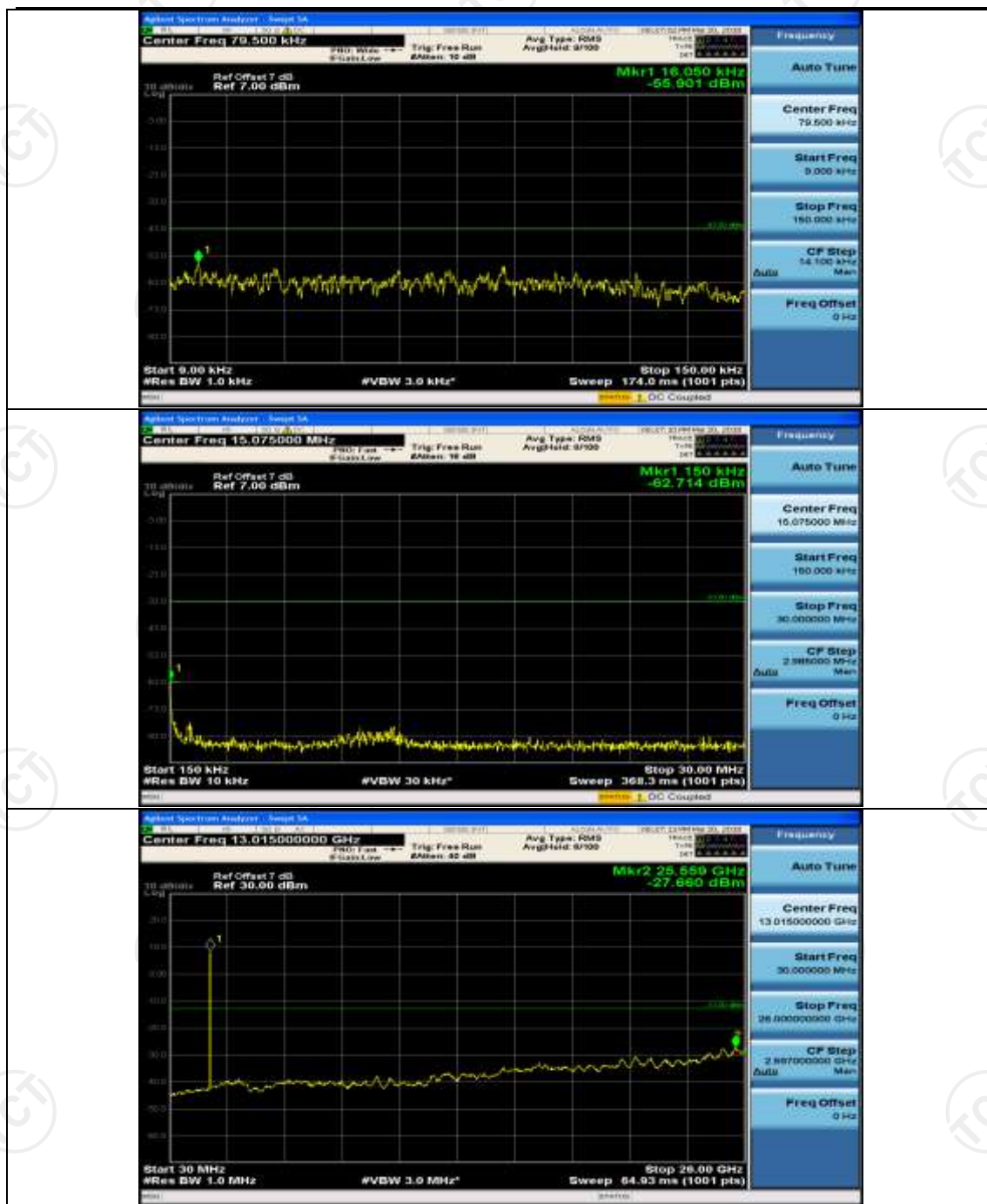


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

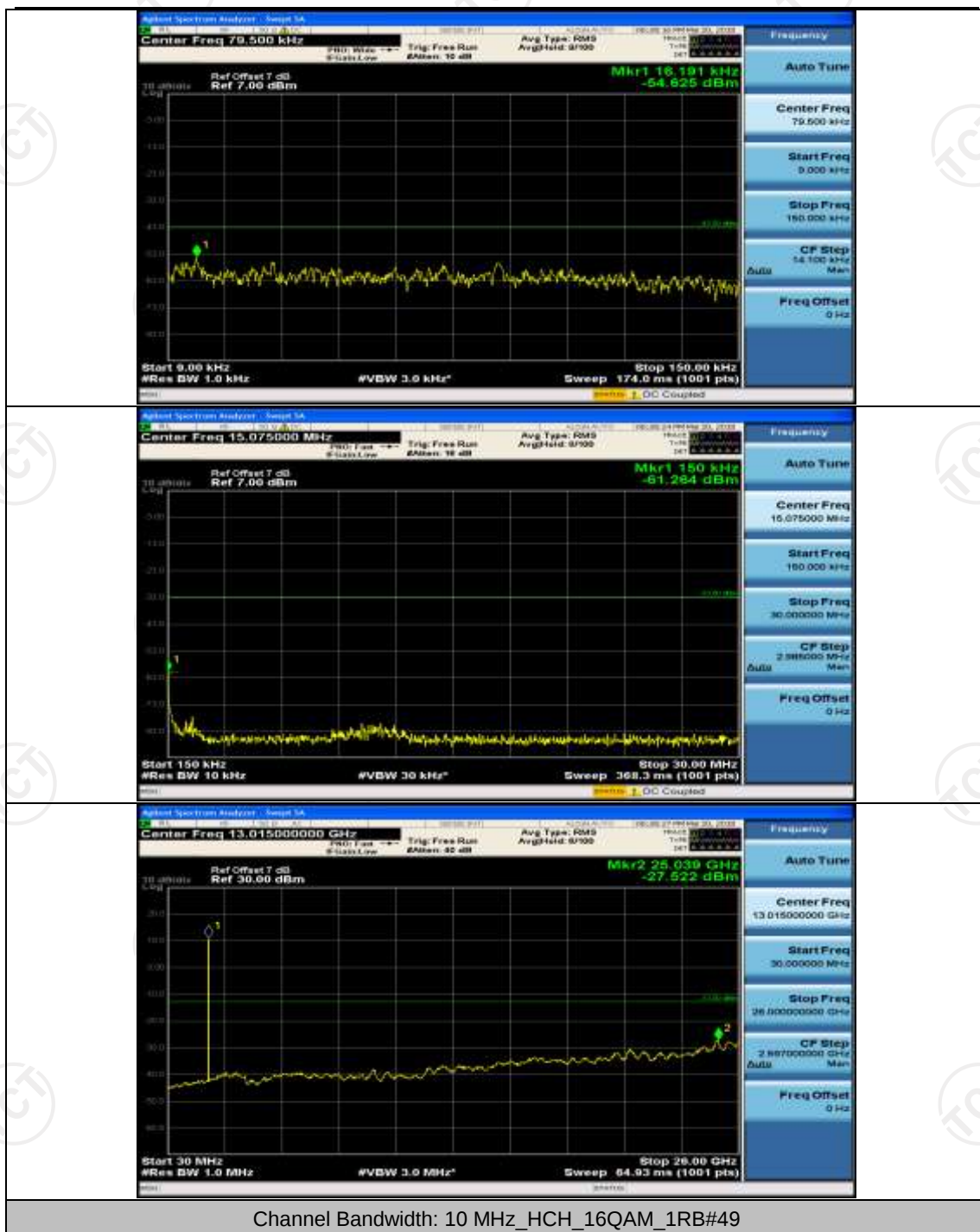


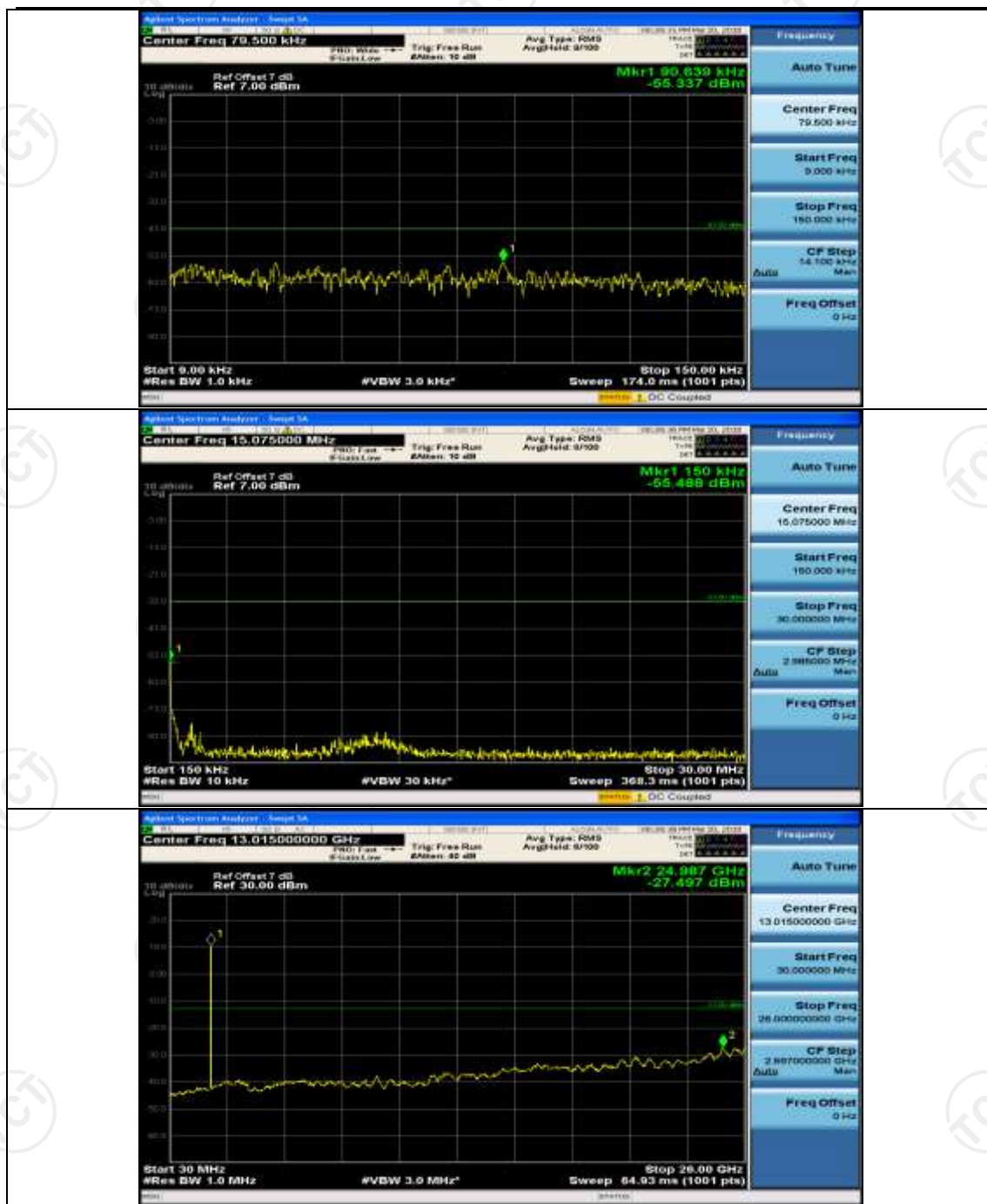


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



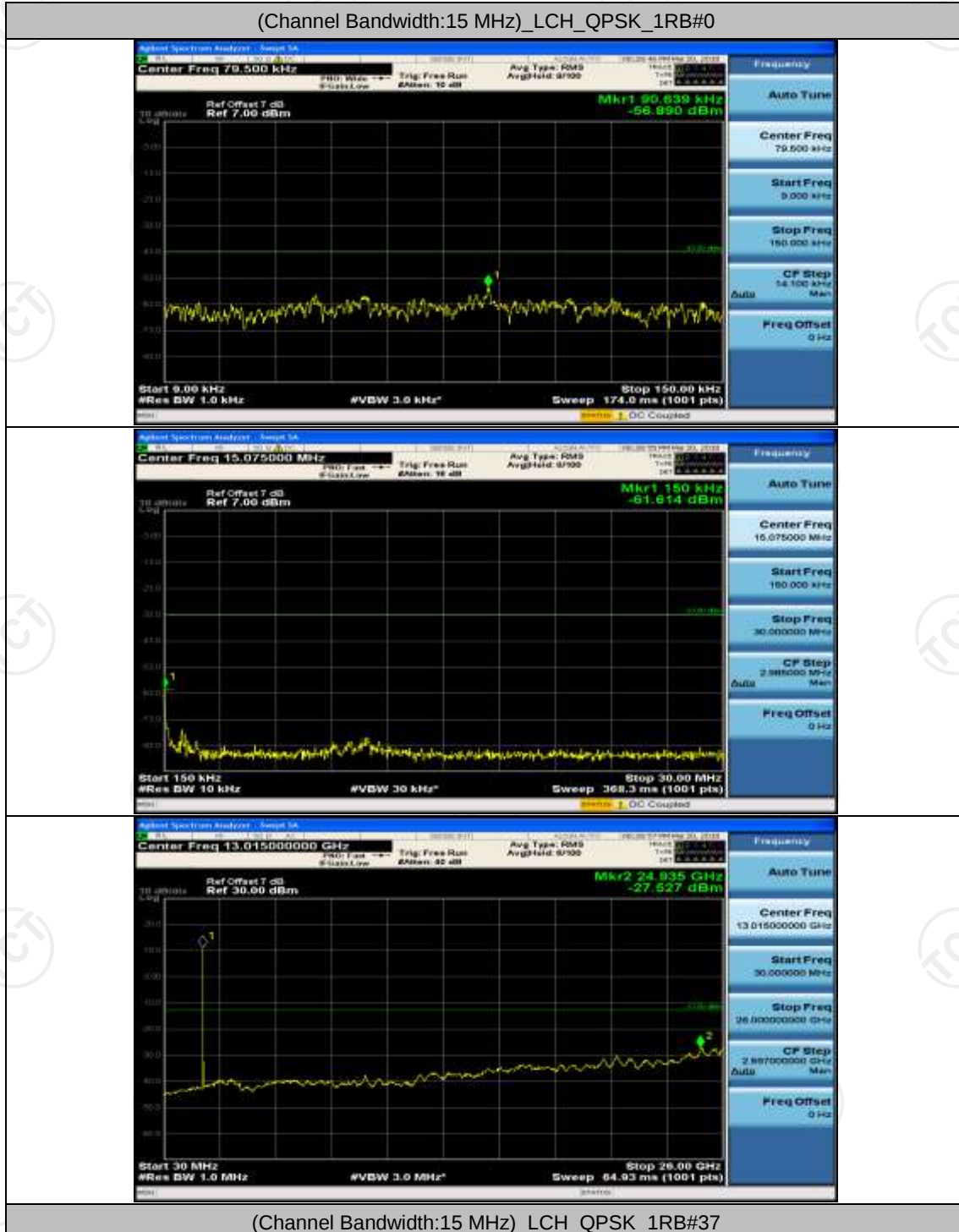
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24



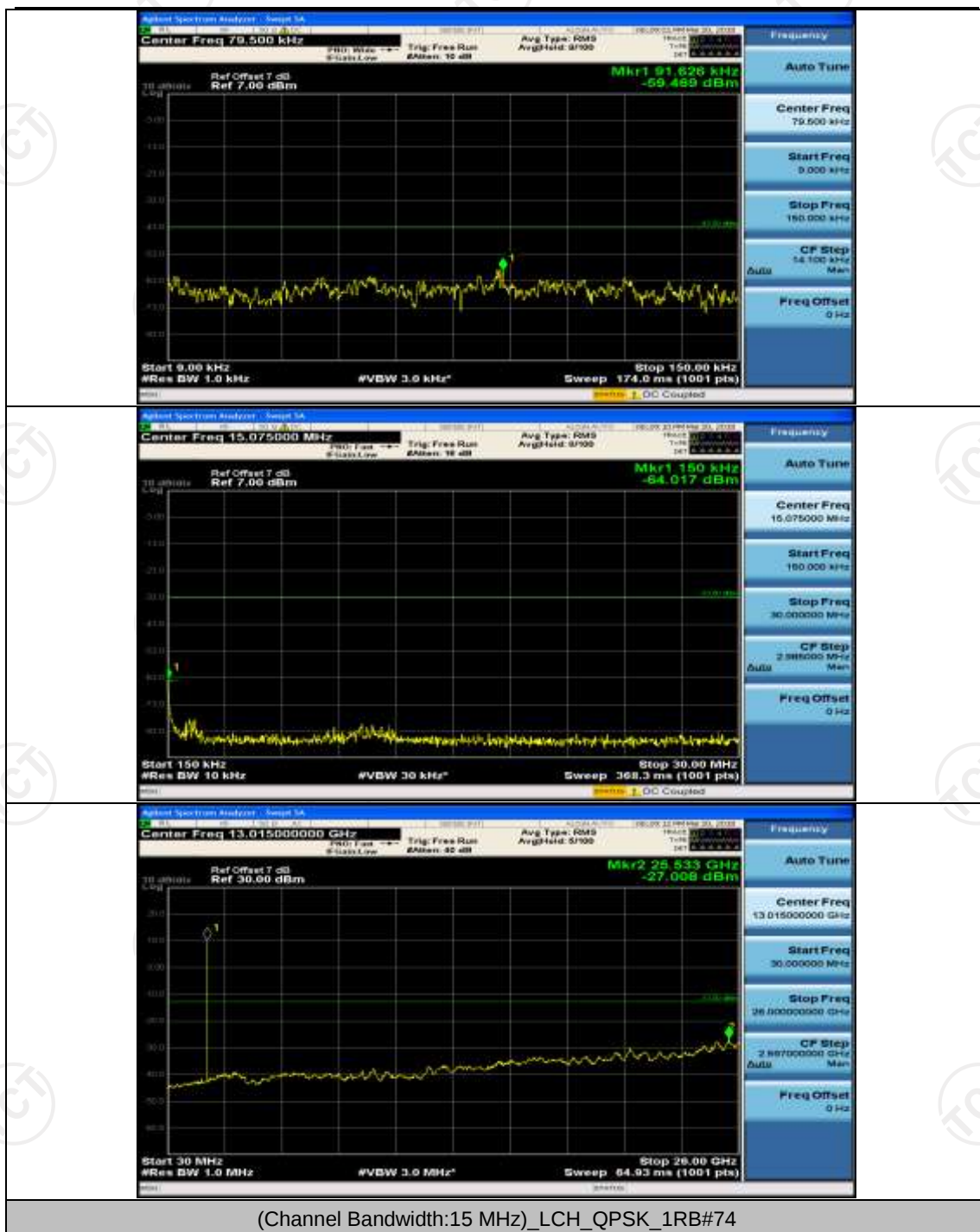


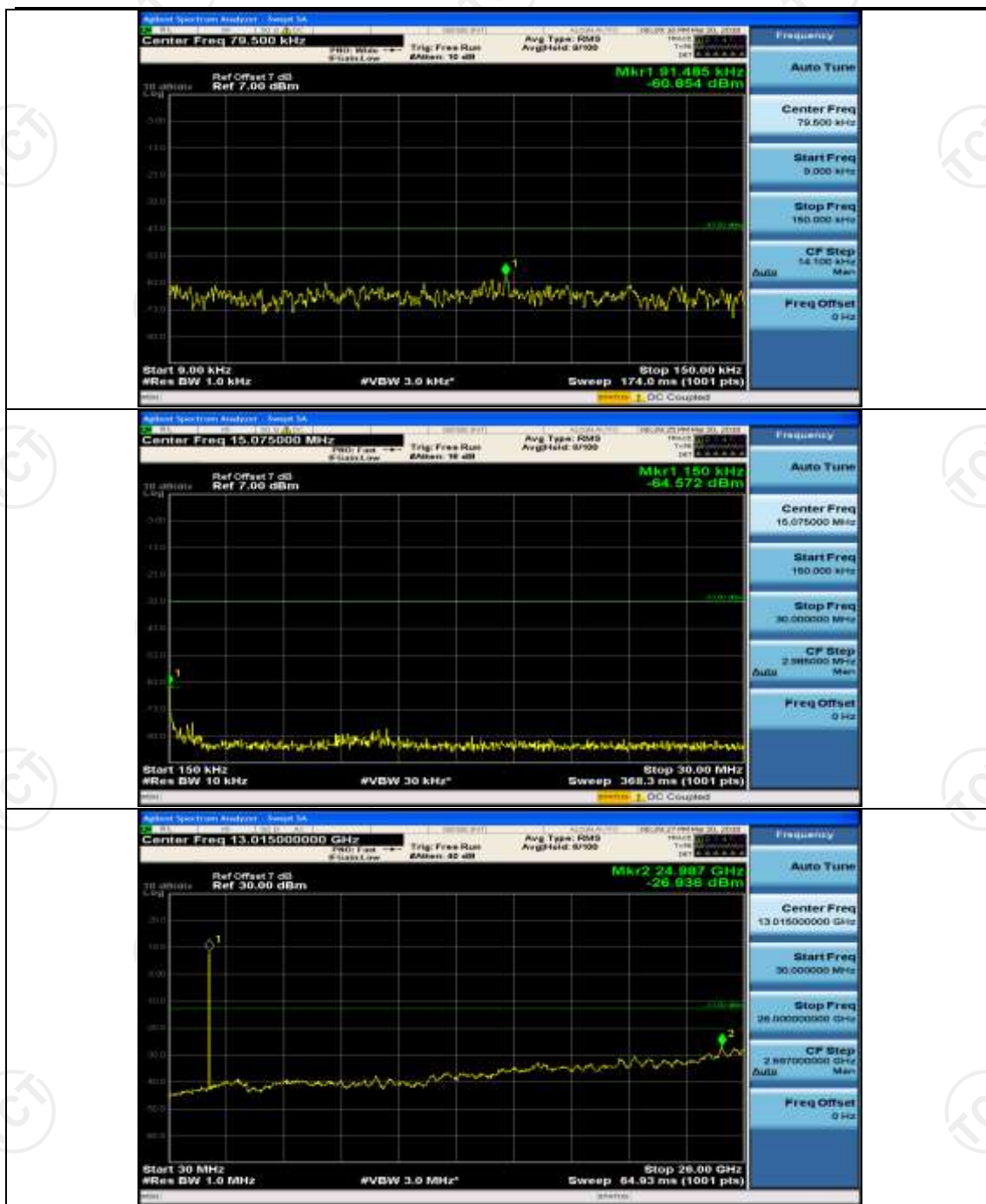
Channel Bandwidth: 15 MHz

(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0

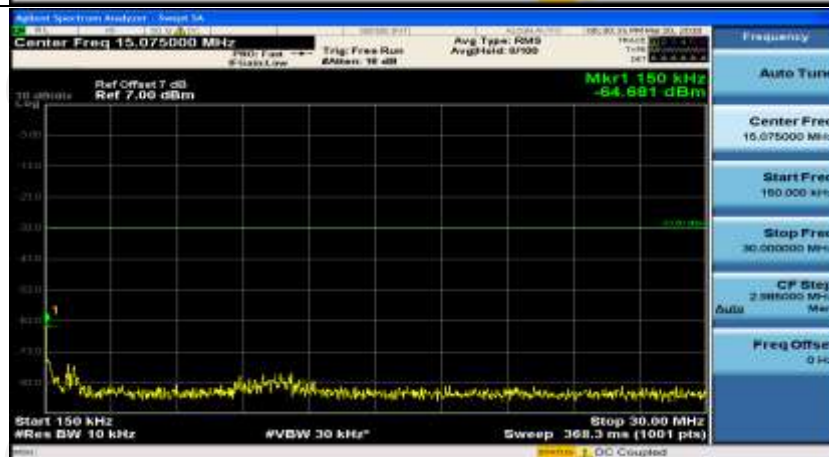


(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37

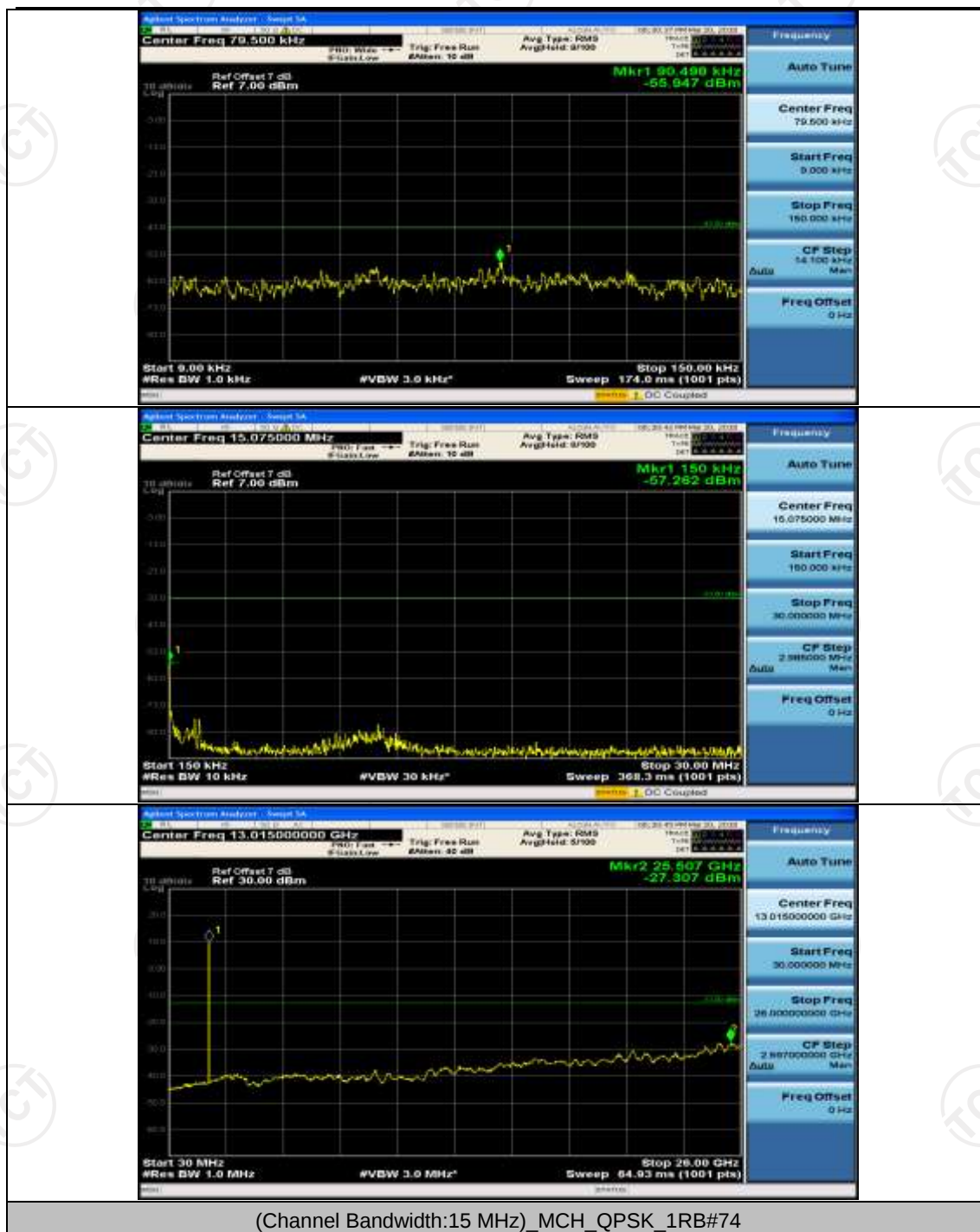


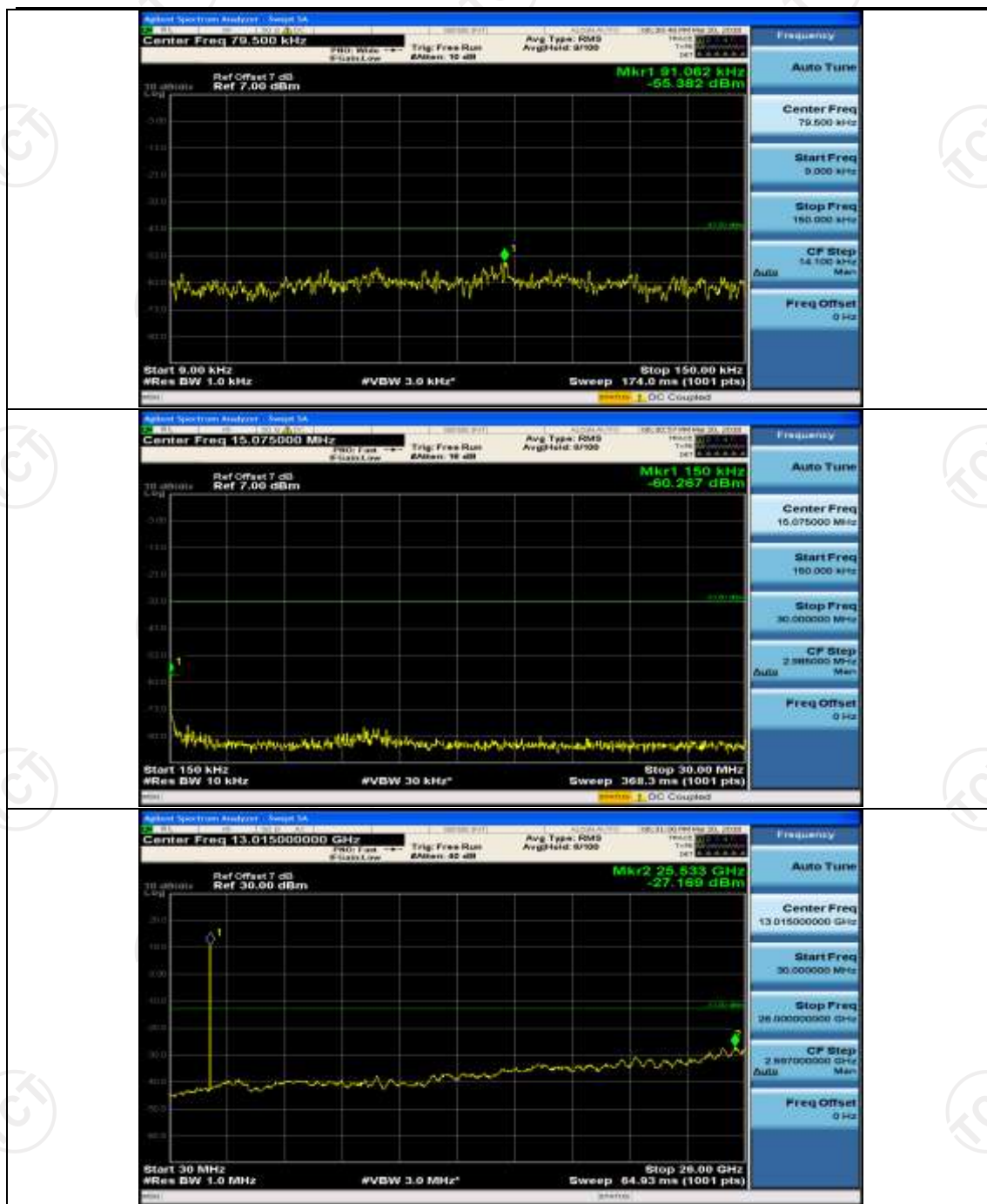


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

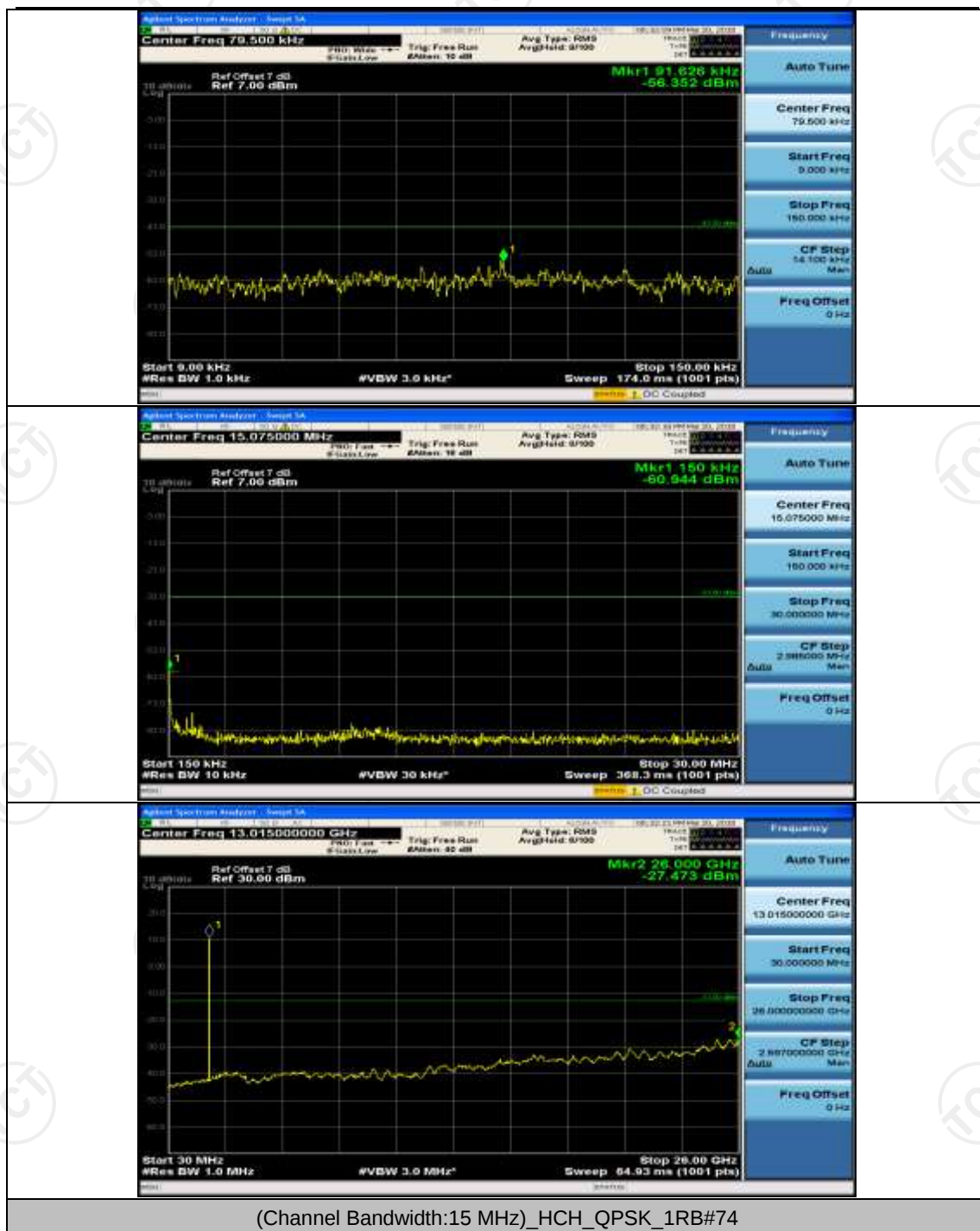


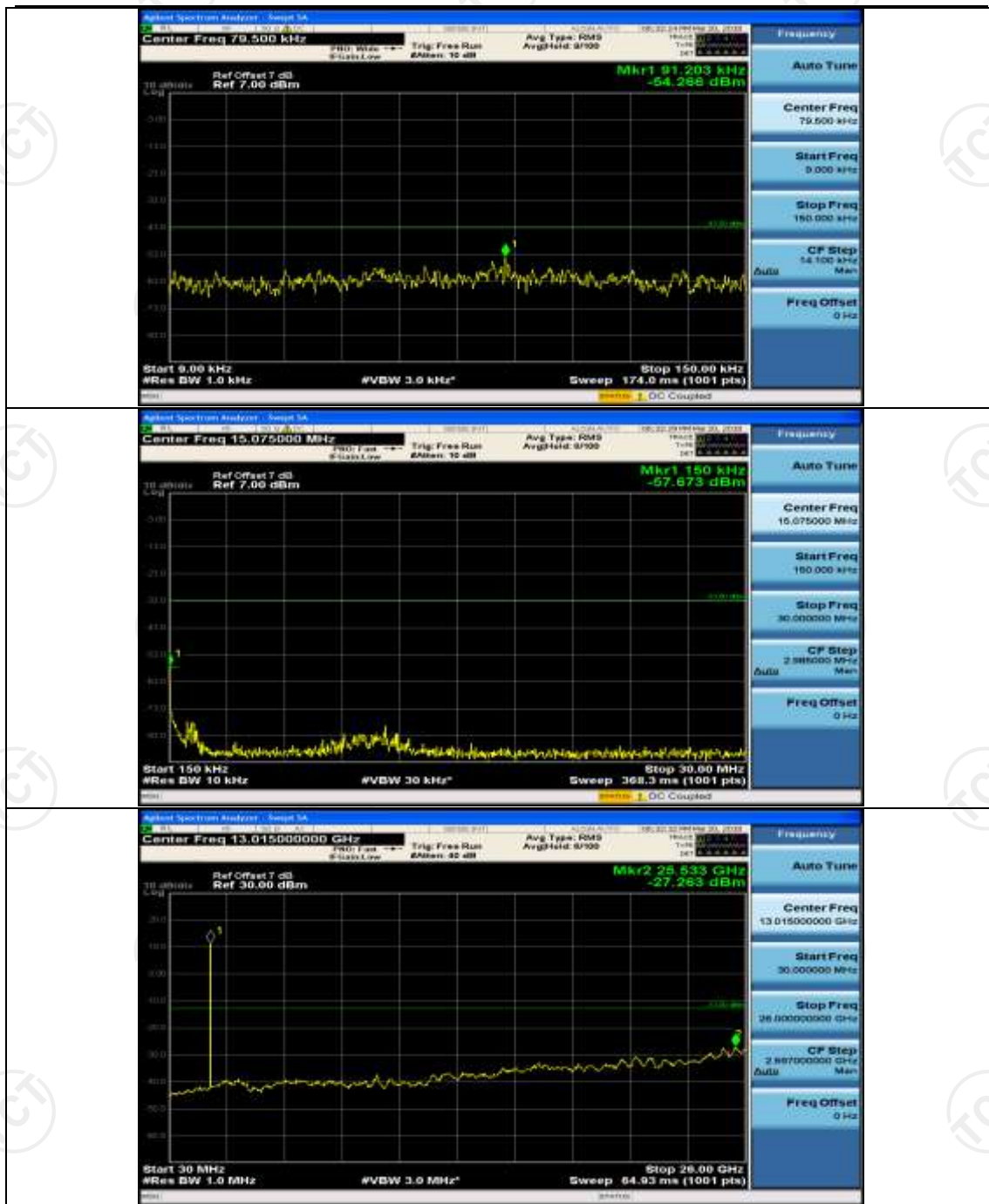


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

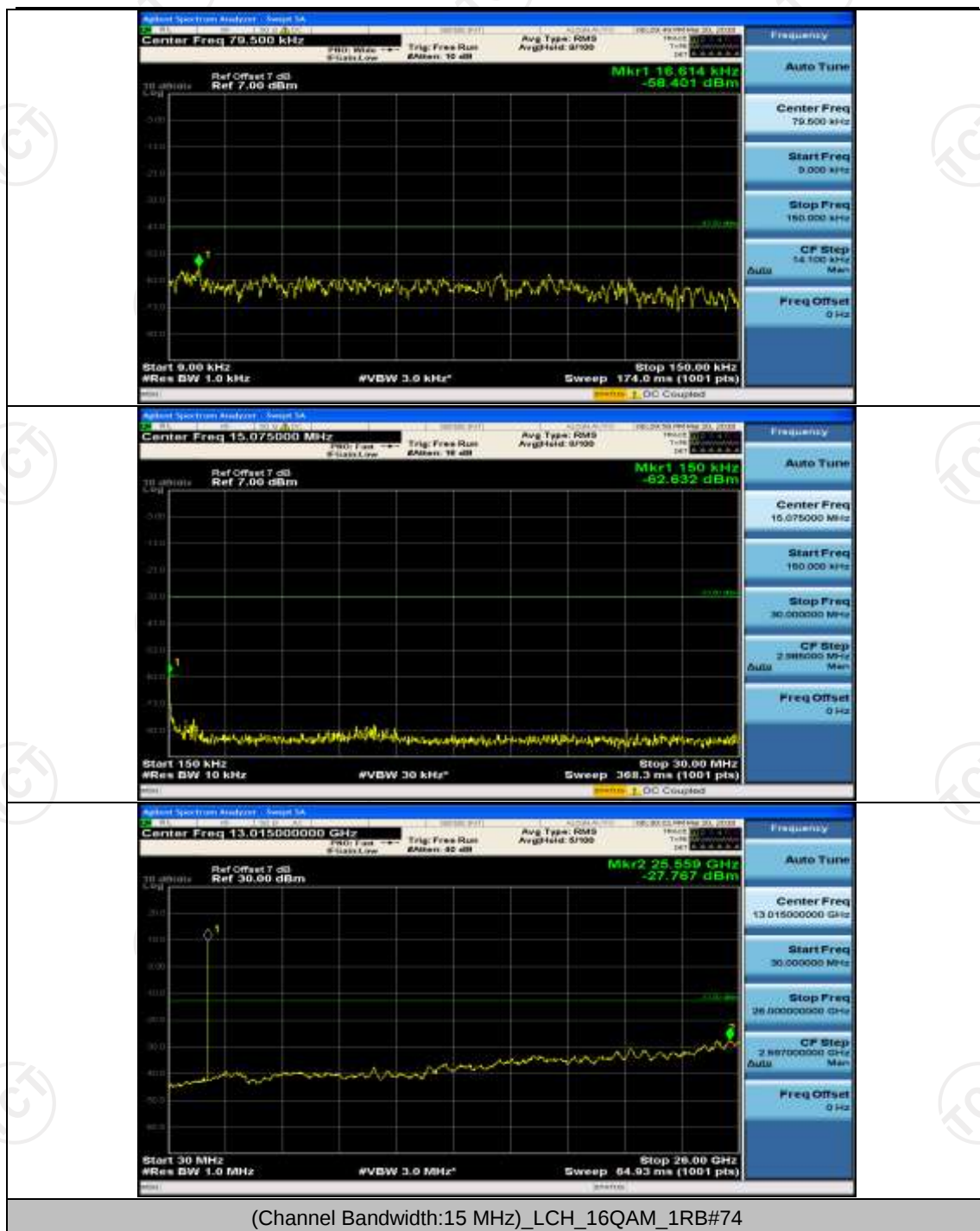


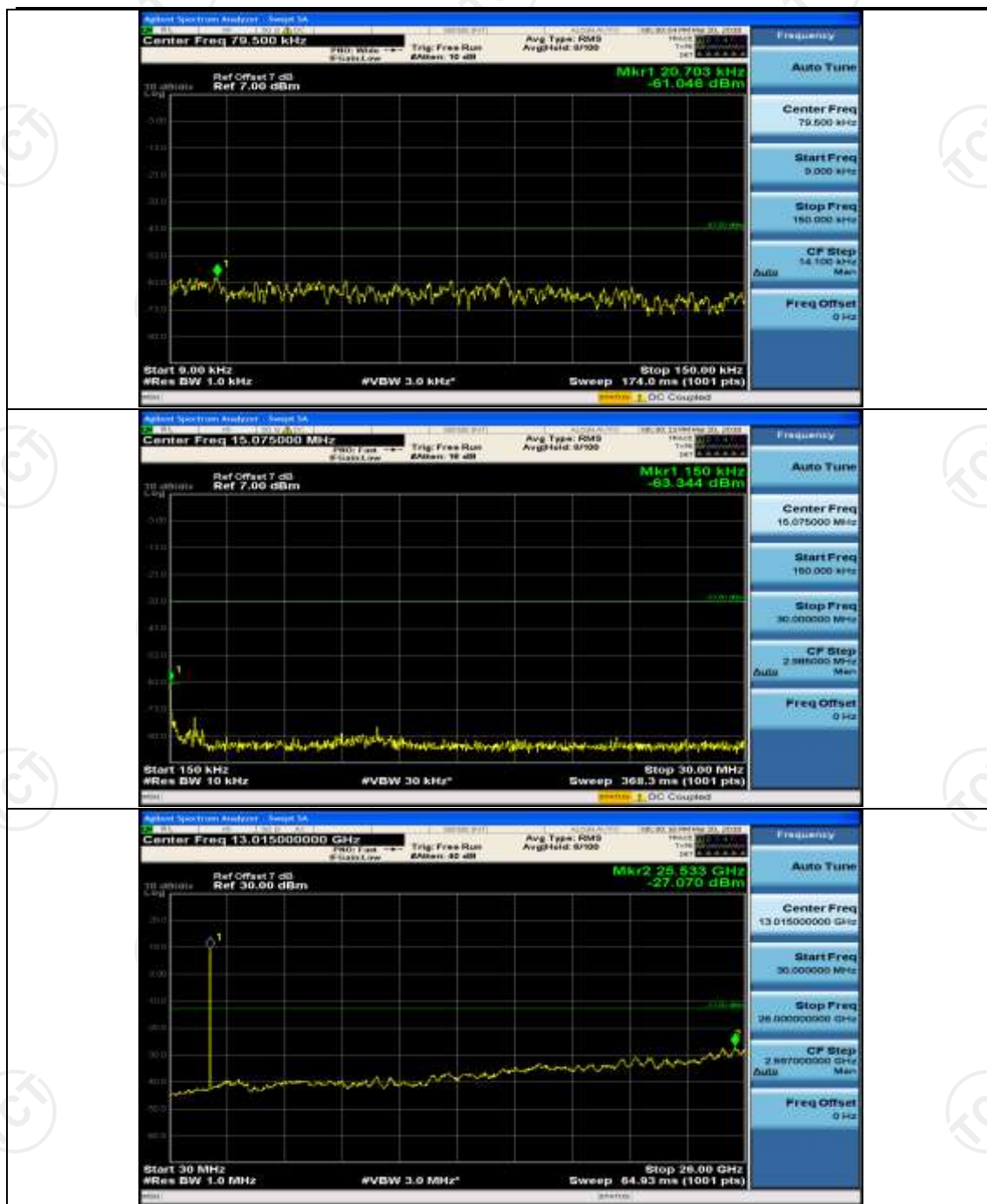


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

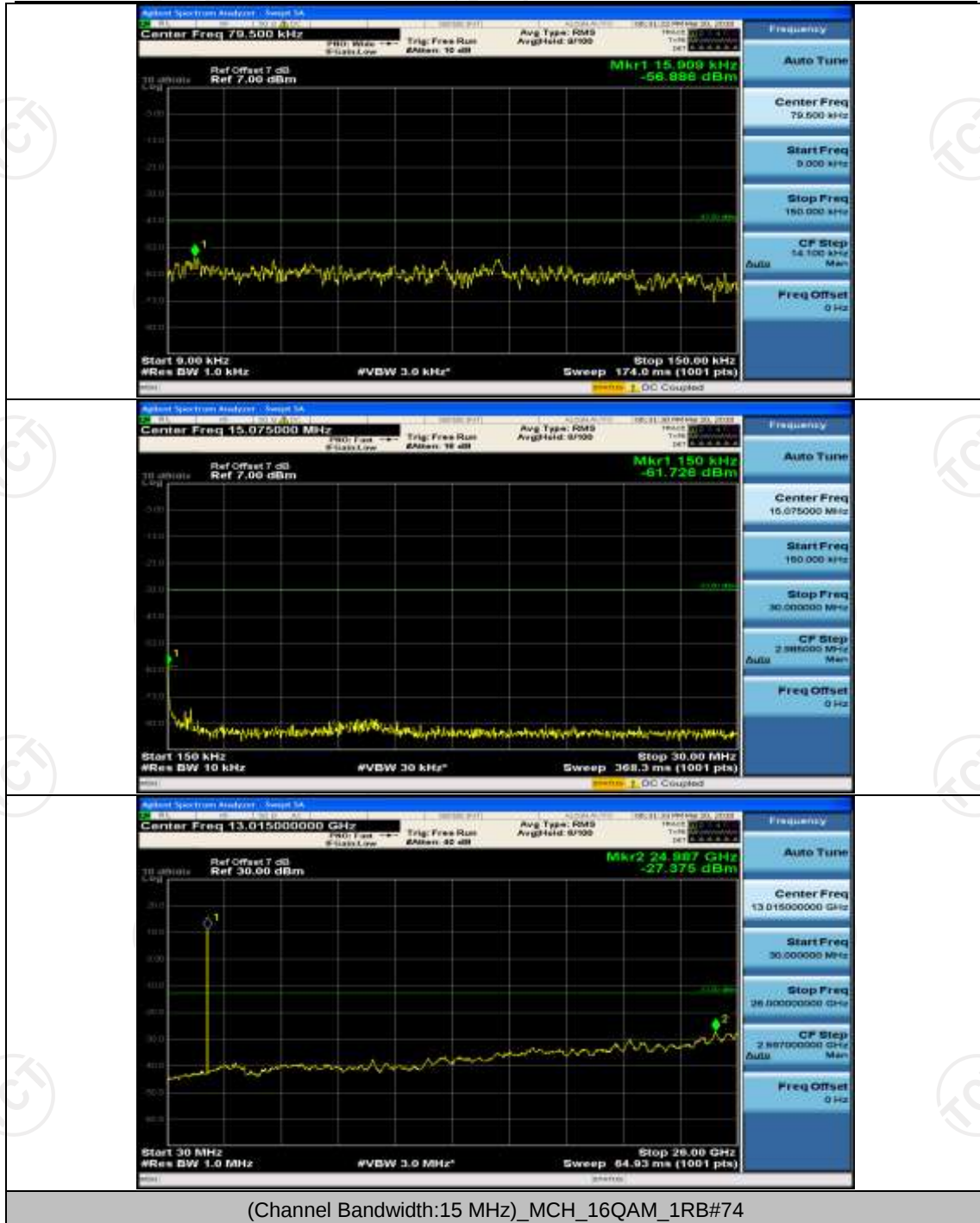


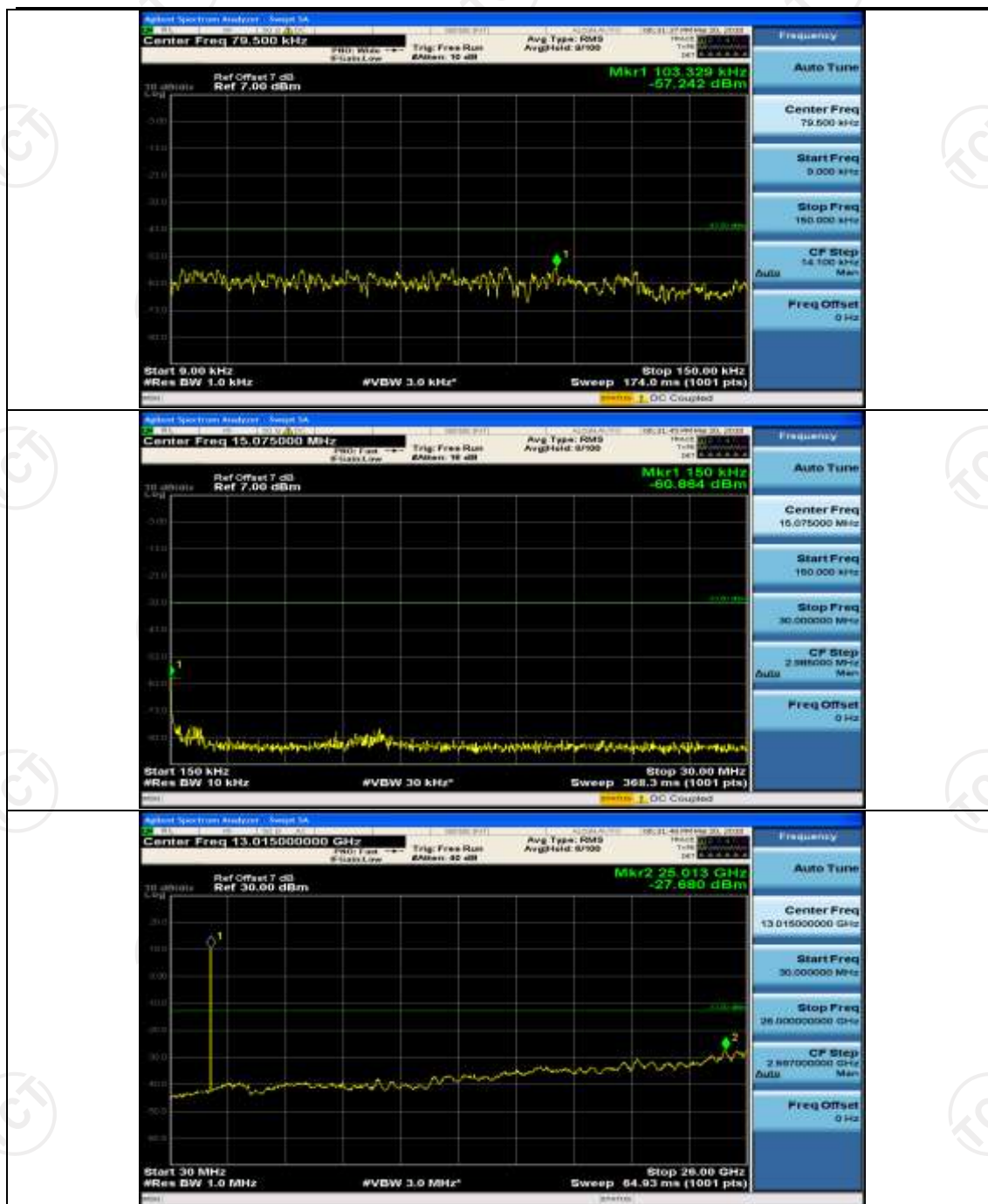


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

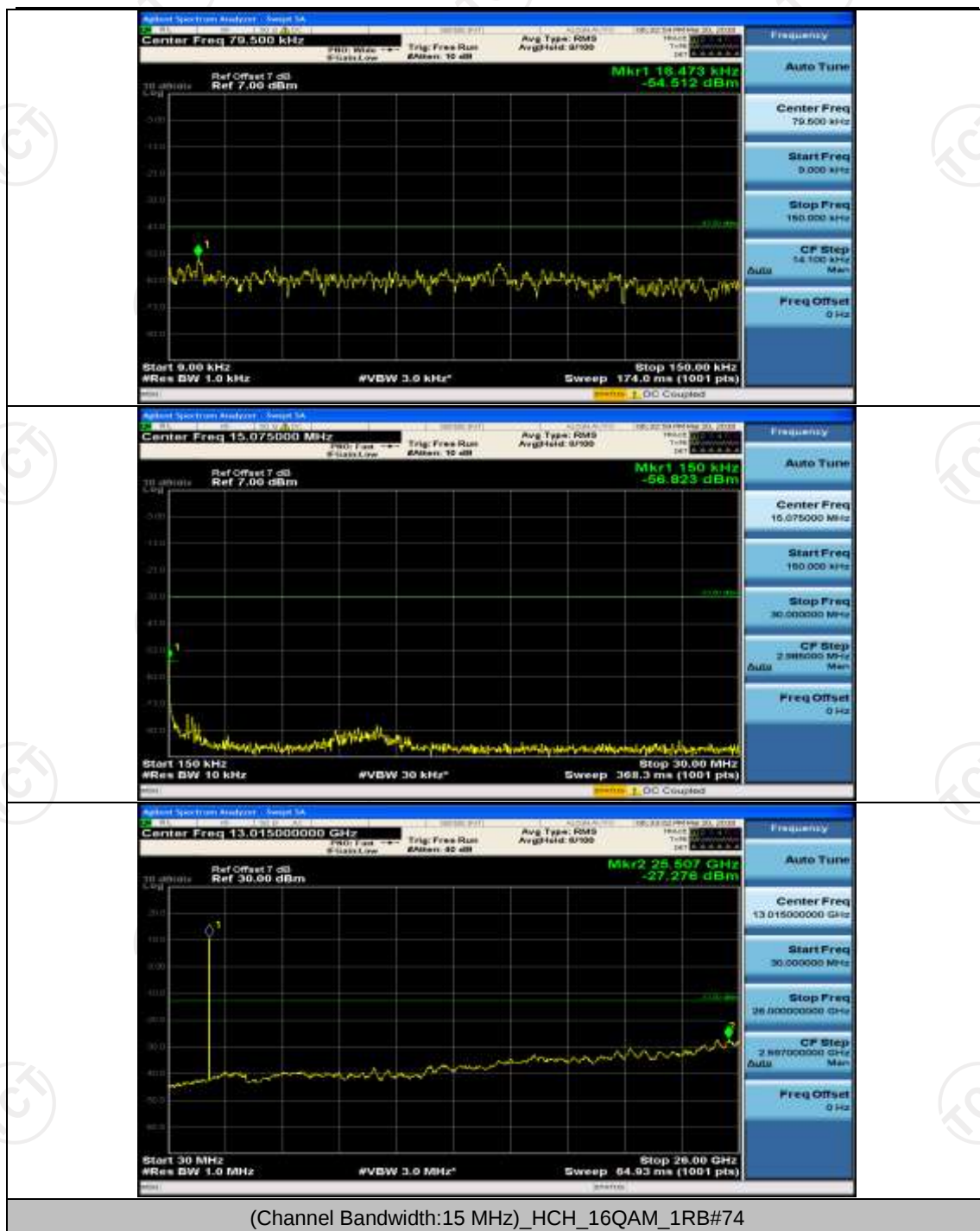


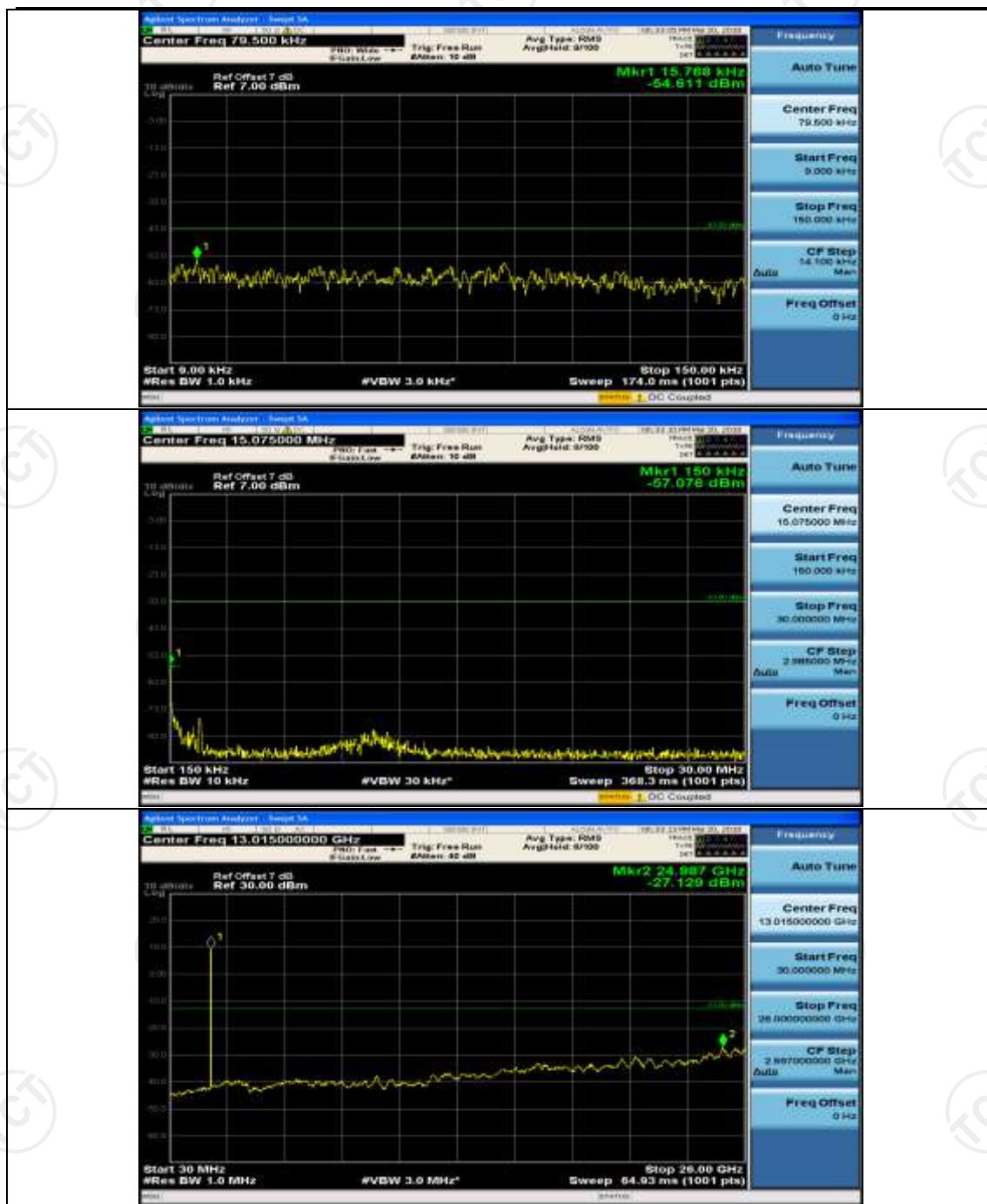


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0



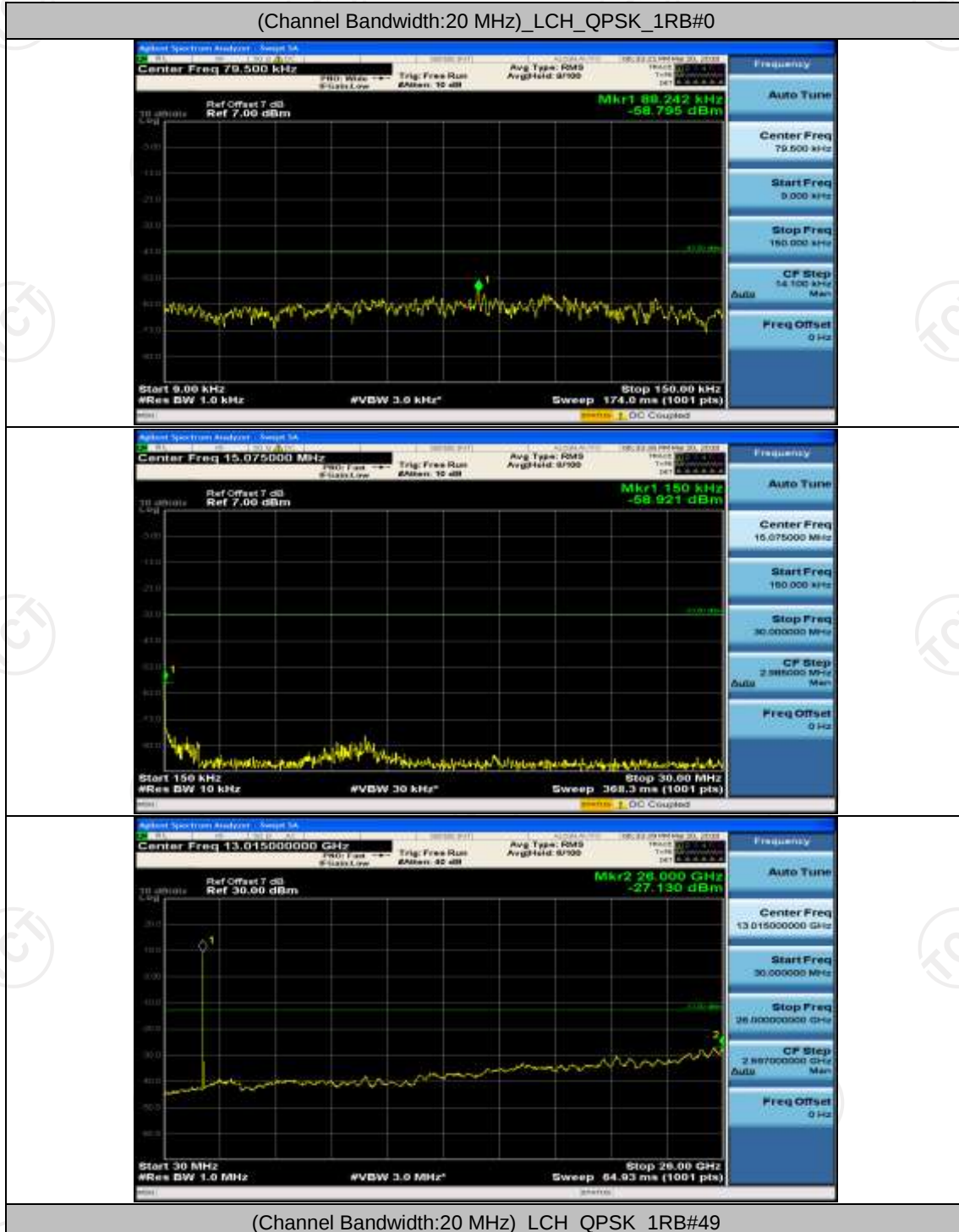
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

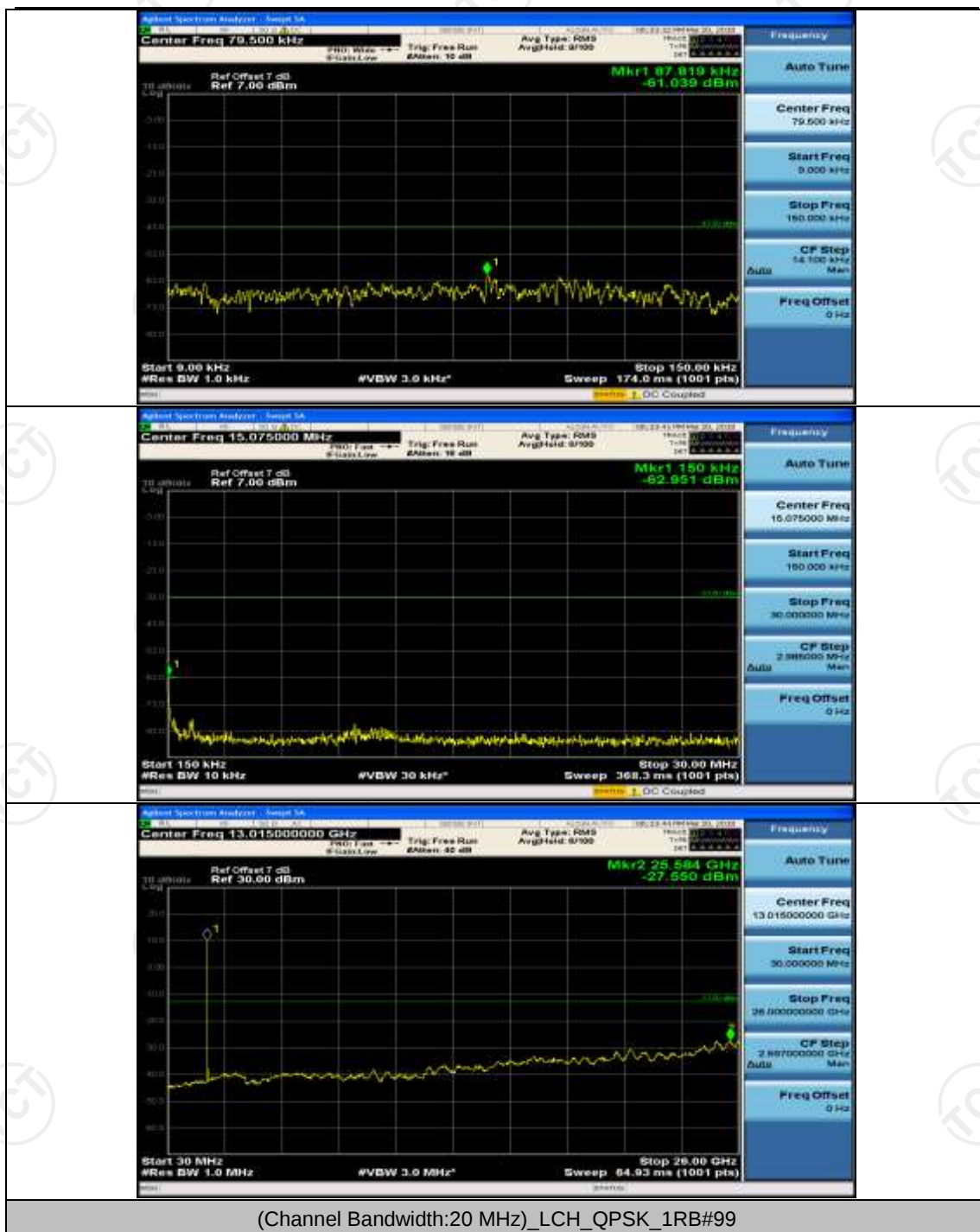


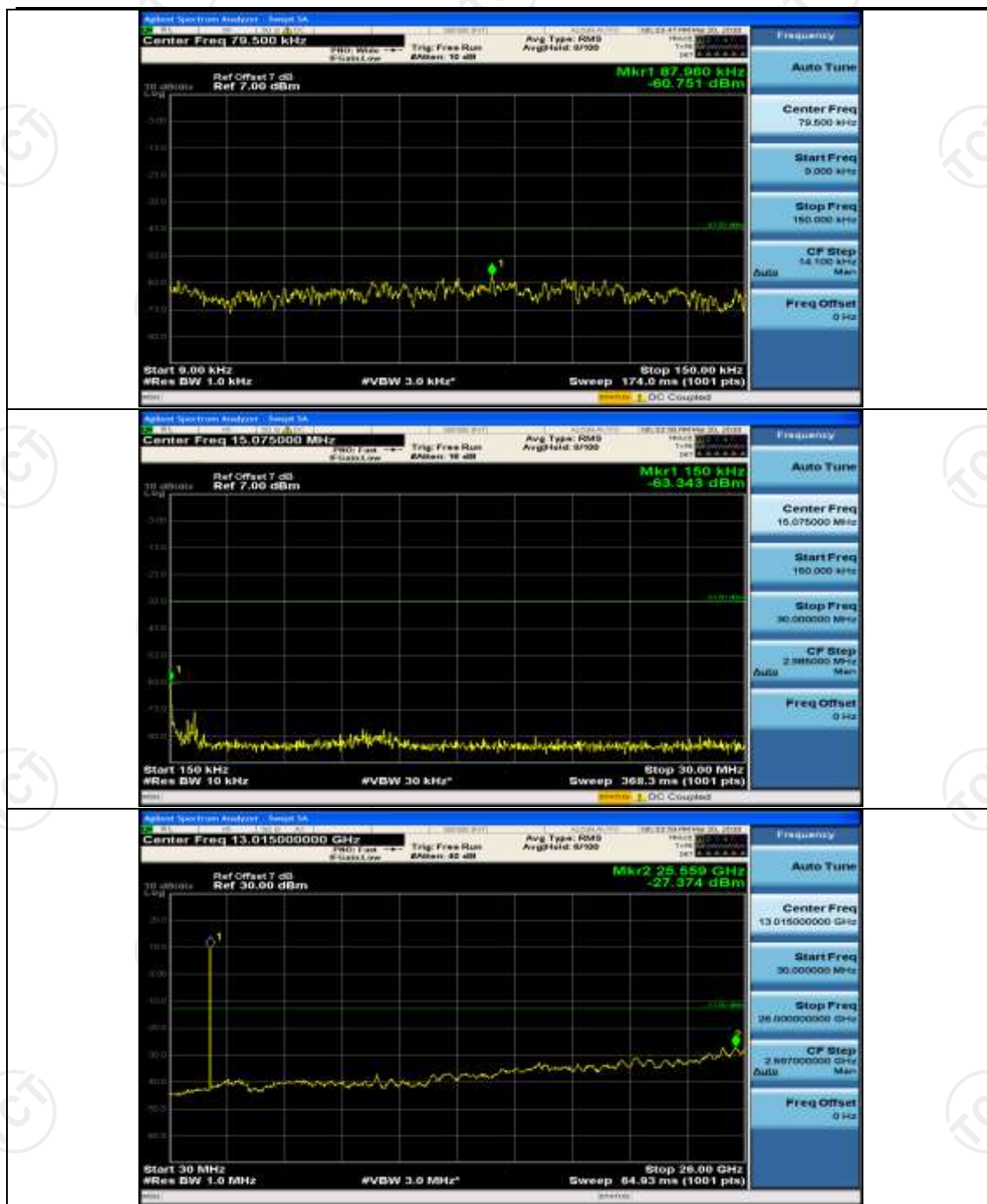


Channel Bandwidth: 20 MHz

(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0



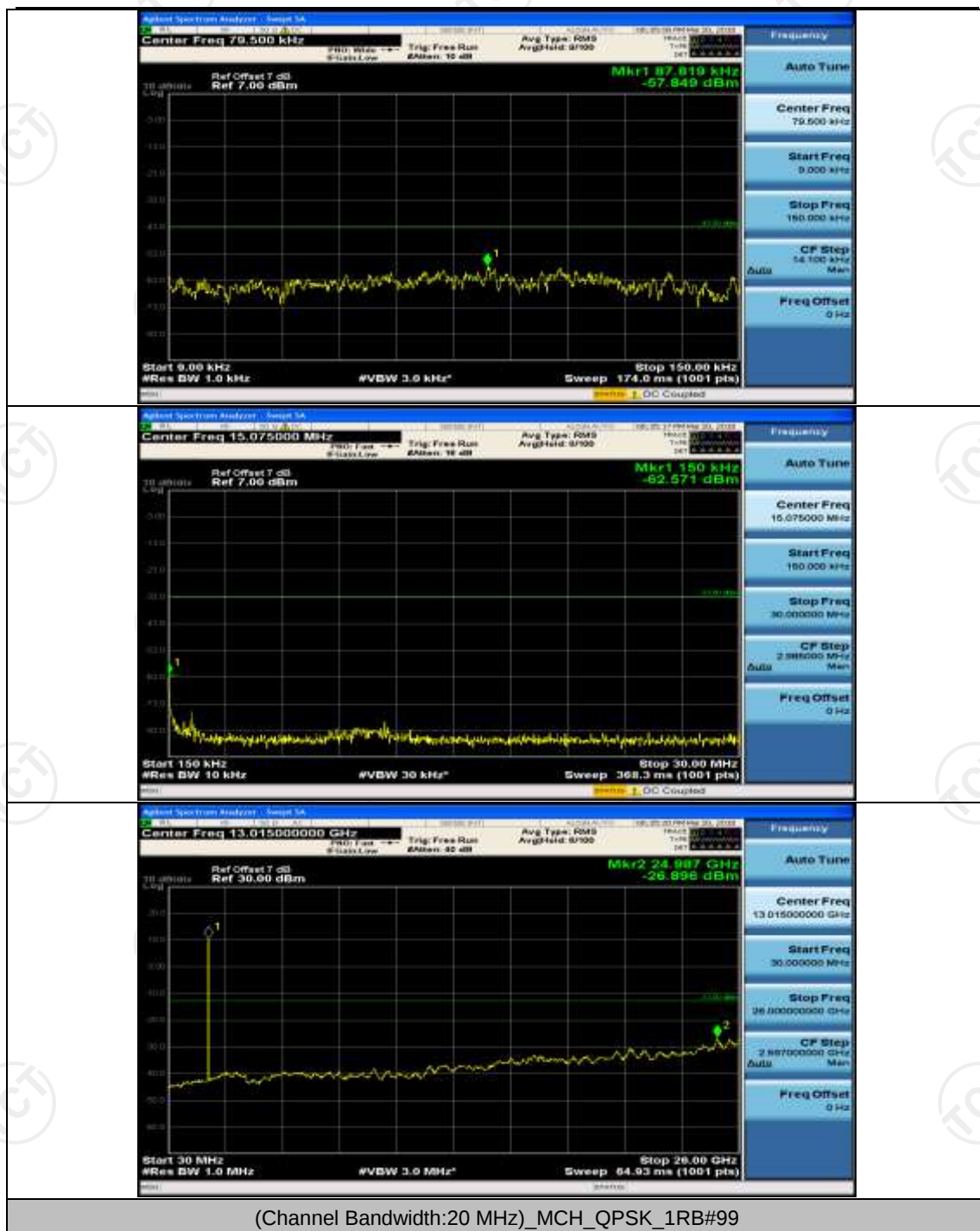


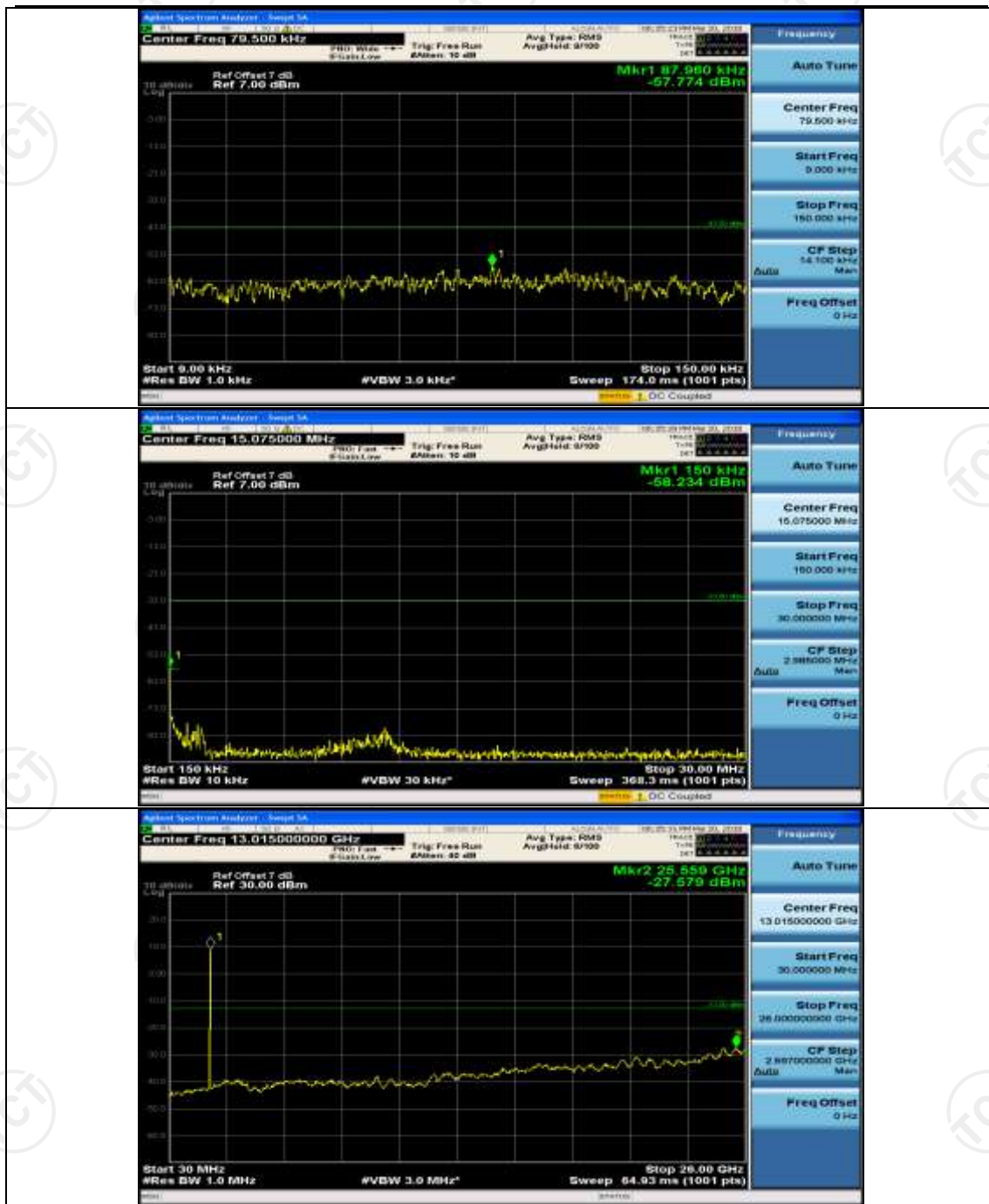


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

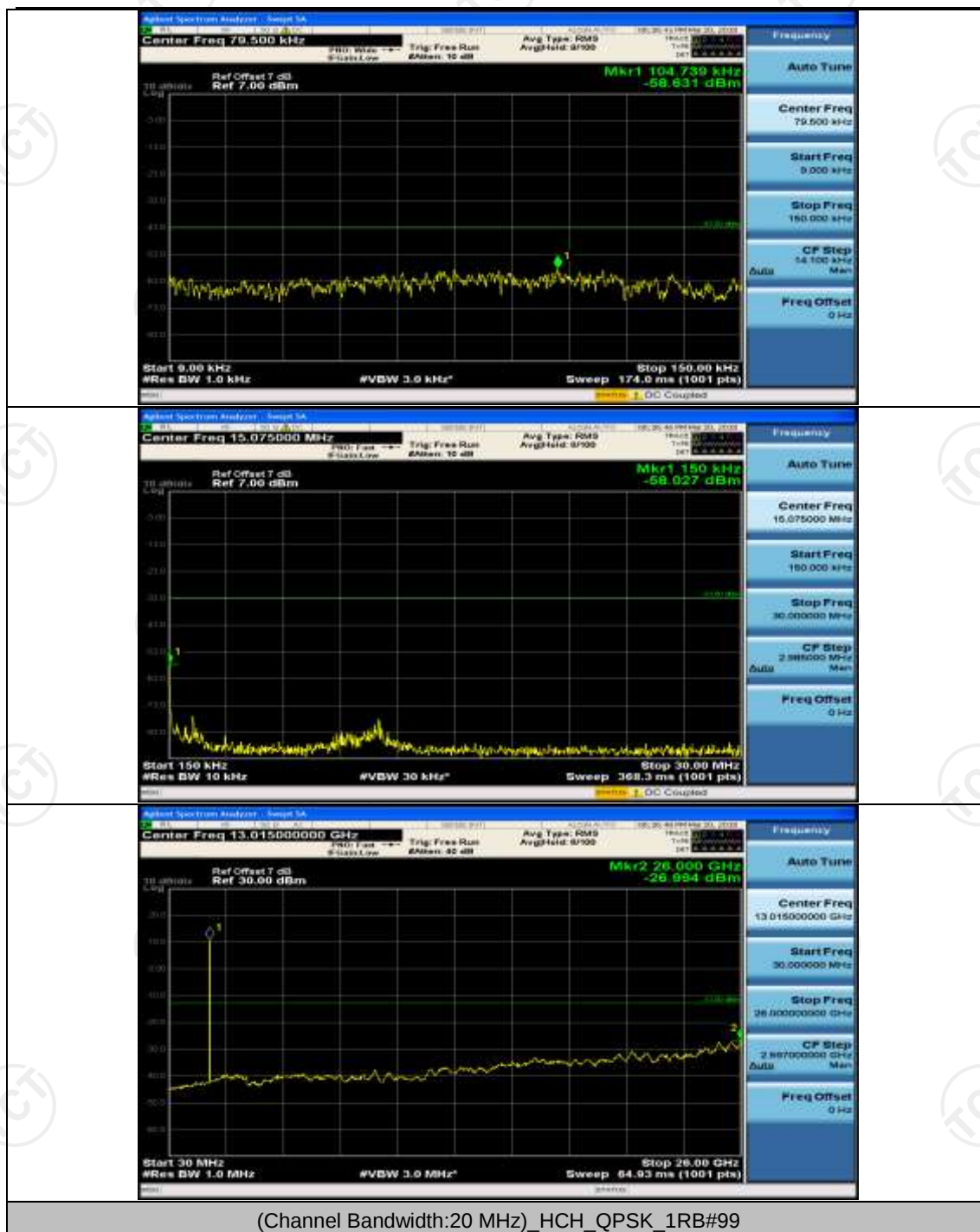


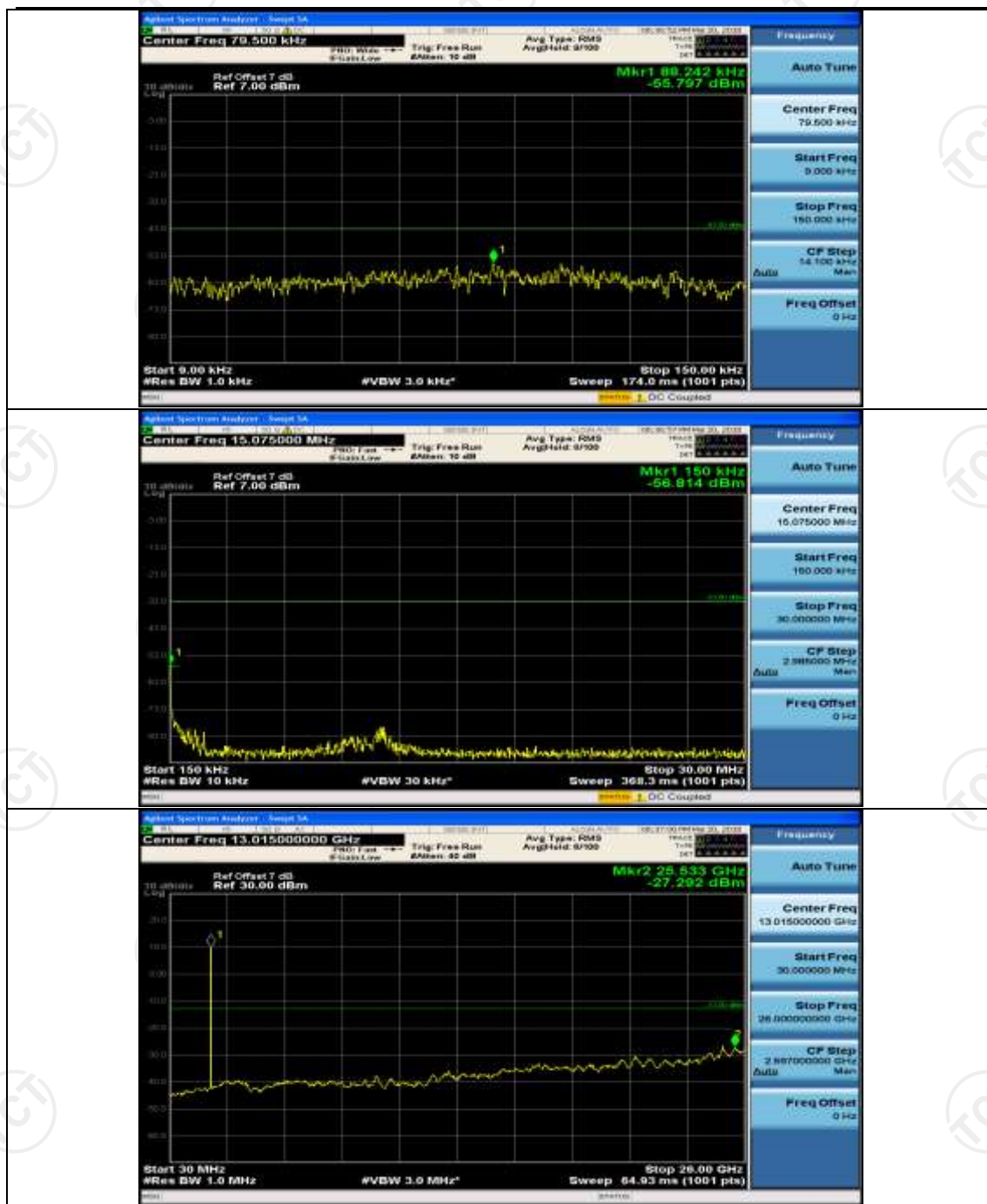


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

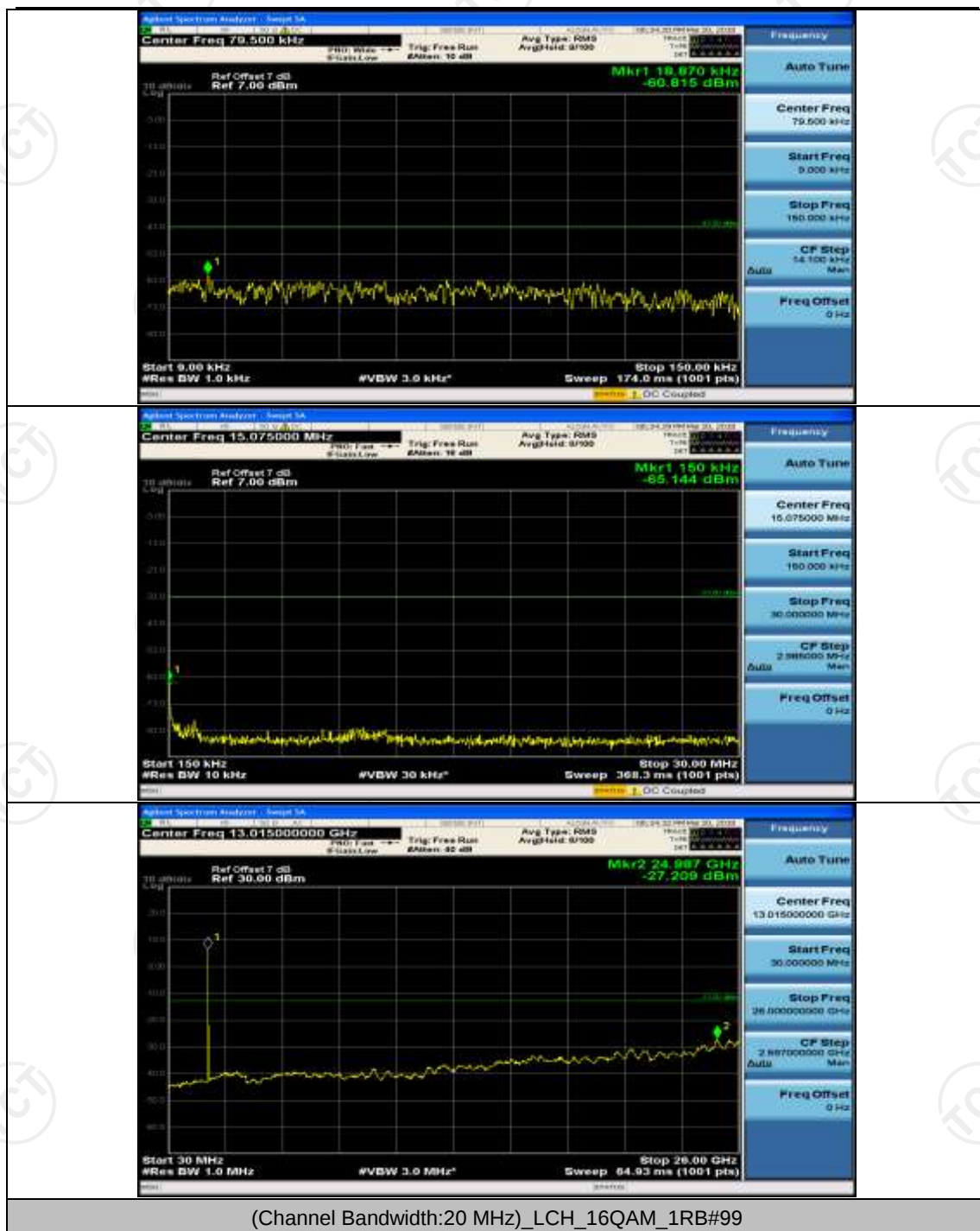


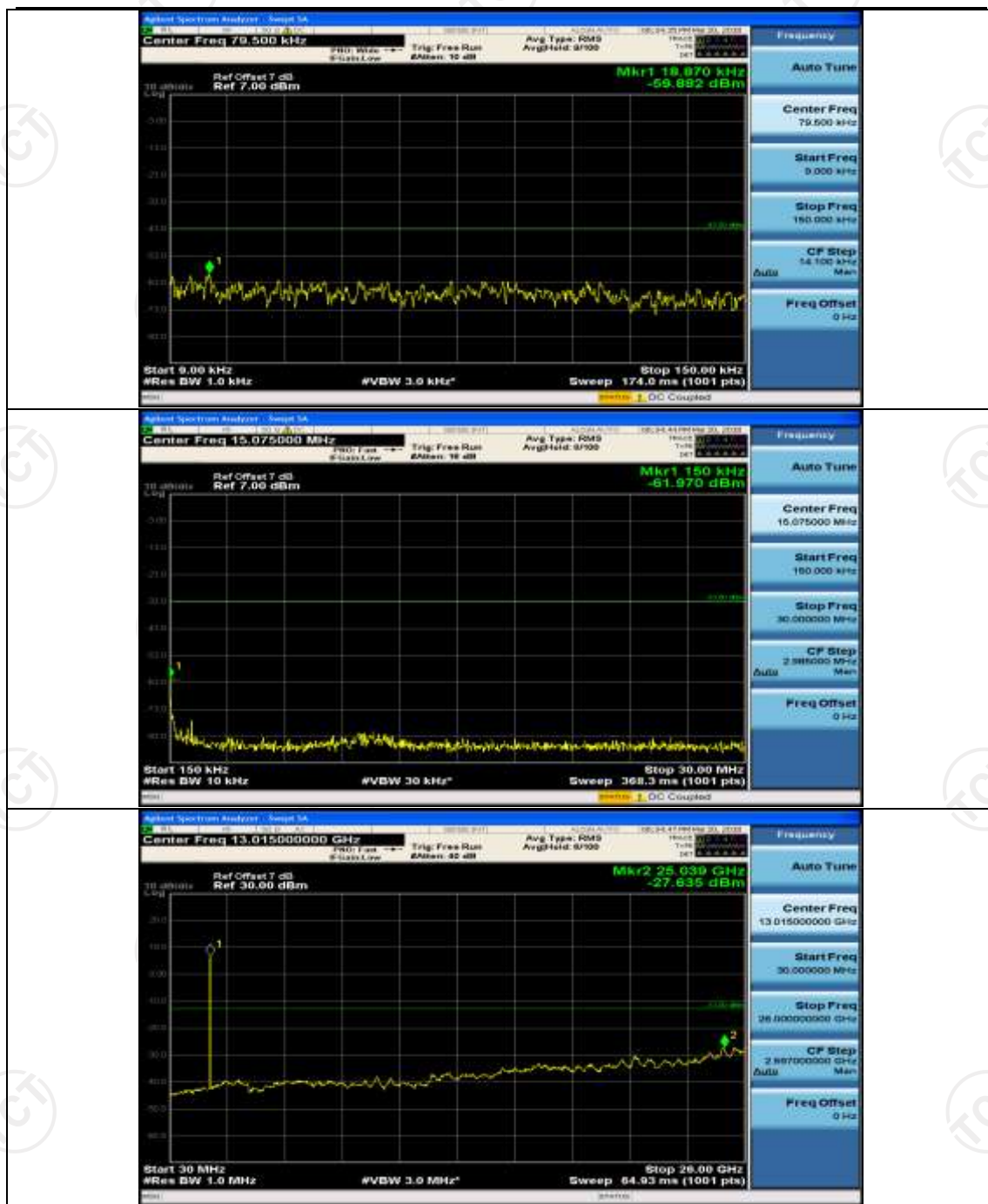


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

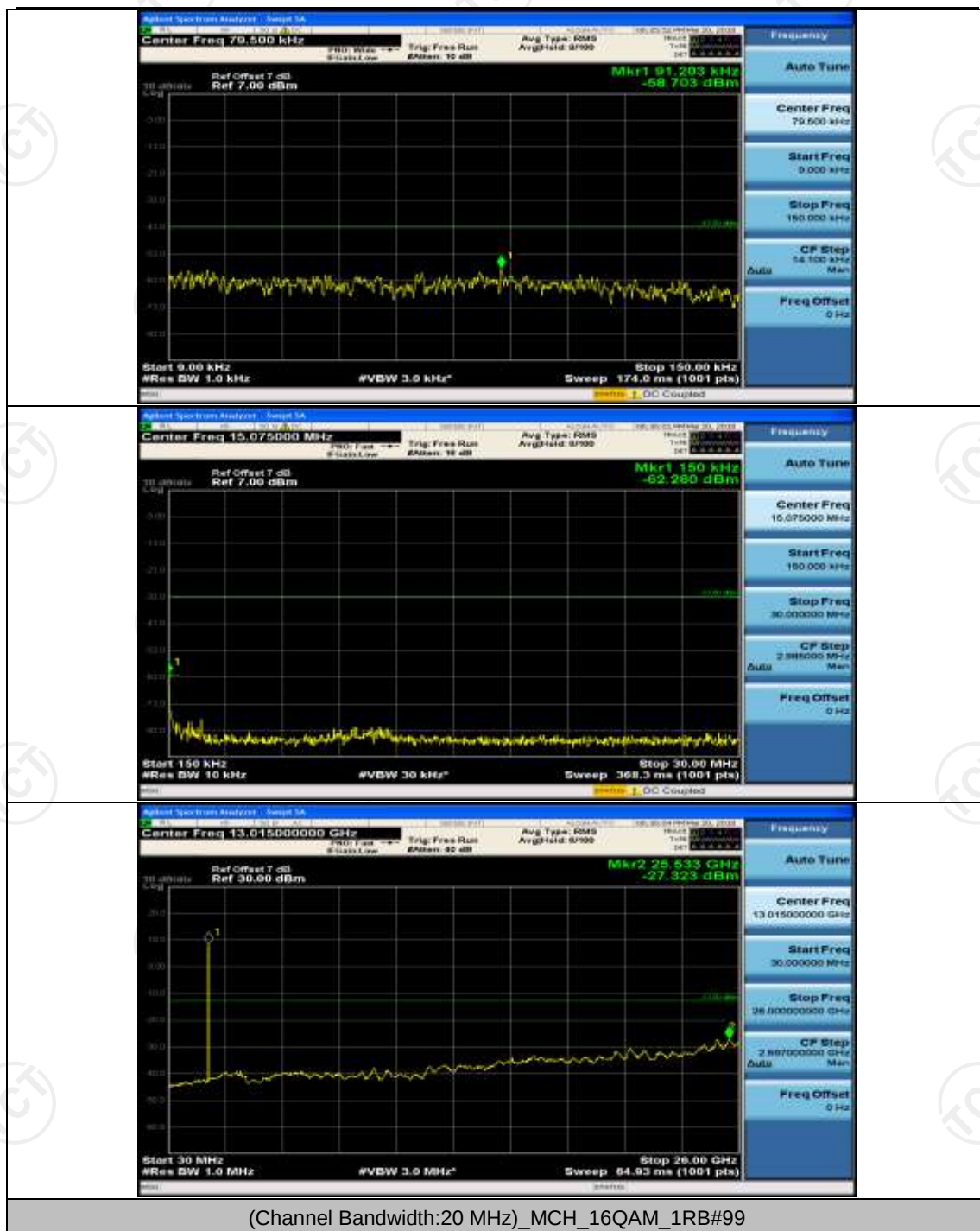


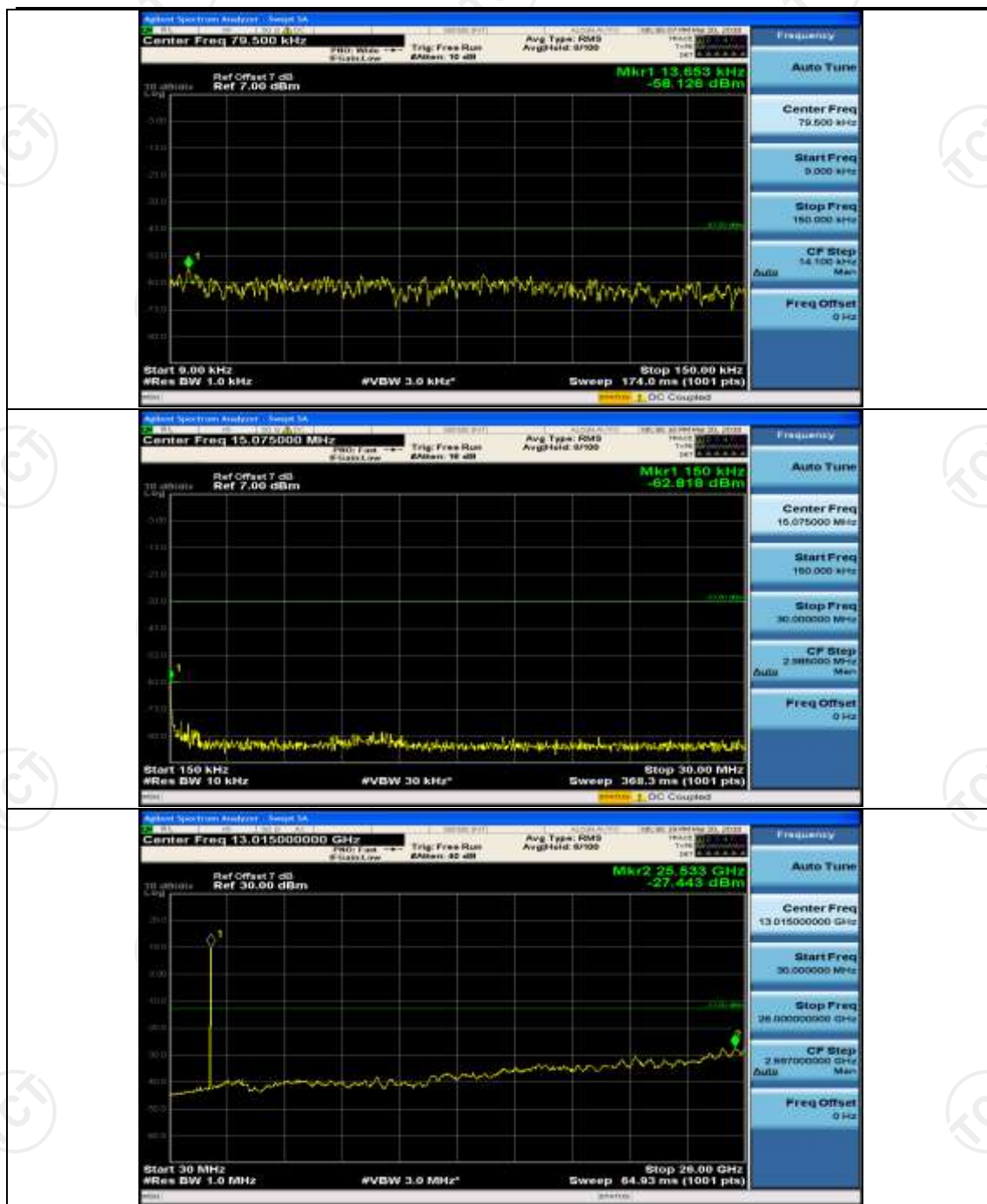


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

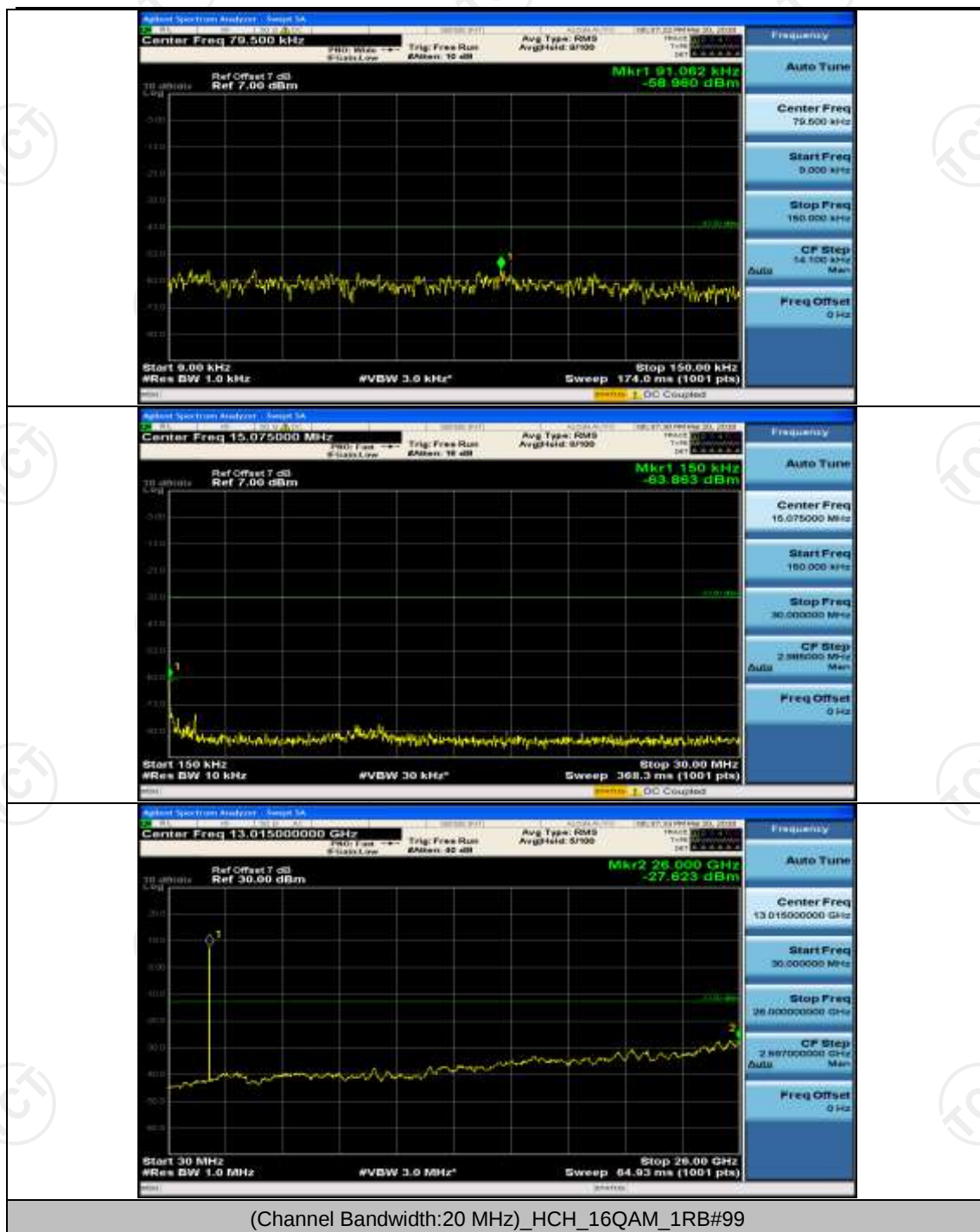


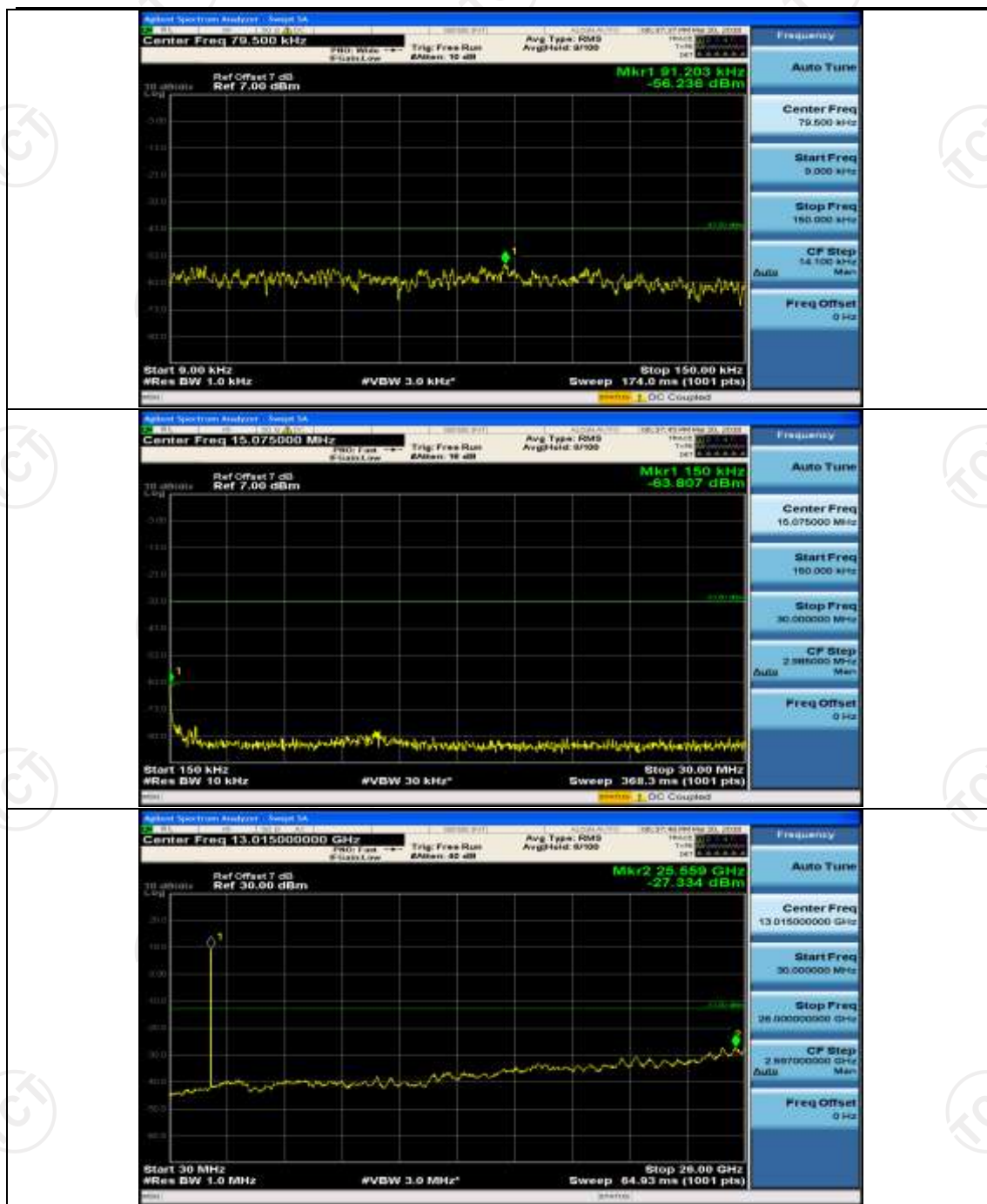


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49





Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Voltage						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.5	25	-0.001028	± 2.5	PASS
		3.7	25	-0.001113	± 2.5	PASS
		4.2	25	-0.000836	± 2.5	PASS
	MCH	3.5	25	-0.001192	± 2.5	PASS
		3.7	25	-0.002336	± 2.5	PASS
		4.2	25	0.001315	± 2.5	PASS
	HCH	3.5	25	0.000149	± 2.5	PASS
		3.7	25	0.000757	± 2.5	PASS
		4.2	25	0.000012	± 2.5	PASS
16QAM	LCH	3.5	25	-0.00772	± 2.5	PASS
		3.7	25	-0.001484	± 2.5	PASS
		4.2	25	-0.001063	± 2.5	PASS
	MCH	3.5	25	-0.000584	± 2.5	PASS
		3.7	25	-0.002222	± 2.5	PASS
		4.2	25	-0.002032	± 2.5	PASS
	HCH	3.5	25	-0.000478	± 2.5	PASS
		3.7	25	-0.000644	± 2.5	PASS
		4.2	25	-0.000491	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.7	-30	-0.000714	± 2.5	PASS
		3.7	-20	-0.001026	± 2.5	PASS
		3.7	-10	-0.000964	± 2.5	PASS
		3.7	0	-0.001084	± 2.5	PASS
		3.7	10	-0.000892	± 2.5	PASS
		3.7	20	-0.001523	± 2.5	PASS
		3.7	30	-0.002443	± 2.5	PASS
		3.7	40	-0.002025	± 2.5	PASS
		3.7	50	-0.003015	± 2.5	PASS
	MCH	3.7	-30	-0.001035	± 2.5	PASS
		3.7	-20	-0.001147	± 2.5	PASS
		3.7	-10	-0.001079	± 2.5	PASS
		3.7	0	-0.001297	± 2.5	PASS

		3.7	10	-0.000731	± 2.5	PASS
		3.7	20	-0.001742	± 2.5	PASS
		3.7	30	-0.001849	± 2.5	PASS
		3.7	40	-0.001864	± 2.5	PASS
		3.7	50	-0.001682	± 2.5	PASS
	HCH	3.7	-30	-0.000058	± 2.5	PASS
		3.7	-20	-0.000092	± 2.5	PASS
		3.7	-10	-0.000167	± 2.5	PASS
		3.7	0	0.000181	± 2.5	PASS
		3.7	10	0.000136	± 2.5	PASS
		3.7	20	0.001049	± 2.5	PASS
		3.7	30	0.000030	± 2.5	PASS
		3.7	40	-0.000285	± 2.5	PASS
		3.7	50	0.000345	± 2.5	PASS
		3.7	-30	-0.001022	± 2.5	PASS
16QAM	LCH	3.7	-20	-0.000140	± 2.5	PASS
		3.7	-10	-0.001854	± 2.5	PASS
		3.7	0	-0.000055	± 2.5	PASS
		3.7	10	-0.001340	± 2.5	PASS
		3.7	20	-0.001561	± 2.5	PASS
		3.7	30	-0.001353	± 2.5	PASS
		3.7	40	-0.002211	± 2.5	PASS
		3.7	50	-0.001670	± 2.5	PASS
	MCH	3.7	-30	-0.001643	± 2.5	PASS
		3.7	-20	-0.001655	± 2.5	PASS
		3.7	-10	-0.000543	± 2.5	PASS
		3.7	0	-0.001181	± 2.5	PASS
		3.7	10	-0.000562	± 2.5	PASS
		3.7	20	-0.001781	± 2.5	PASS
		3.7	30	-0.002054	± 2.5	PASS
		3.7	40	-0.002800	± 2.5	PASS
		3.7	50	-0.002739	± 2.5	PASS
	HCH	3.7	-30	-0.000521	± 2.5	PASS
		3.7	-20	-0.000274	± 2.5	PASS
		3.7	-10	-0.000726	± 2.5	PASS
		3.7	0	-0.000337	± 2.5	PASS
		3.7	10	-0.000541	± 2.5	PASS
		3.7	20	-0.001094	± 2.5	PASS
		3.7	30	-0.000749	± 2.5	PASS
		3.7	40	-0.000607	± 2.5	PASS
		3.7	50	-0.000142	± 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:	1.4M		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)		
3701.4	Vertical	-39.31	-13.00	PASS
5552.1	V	-42.50		
-	V	-		
3701.4	Horizontal	-38.98		
5552.1	H	-40.24		
-	H	-		
Bandwidth:	1.4M		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)		
3760	Vertical	-41.35	-13.00	PASS
5640	V	-47.02		
-	V	-		
3760	Horizontal	-40.71		
5640	H	-44.43		
-	H	-		
Bandwidth:	1.4M		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)		
3818.6	Vertical	-41.51	-13.00	PASS
5727.9	V	-46.87		
-	V	-		
3818.6	Horizontal	-42.30		
5727.9	H	-47.72		

-	H	-		
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Bandwidth:	1.4M		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)		
3701.4	Vertical	-43.61	-13.00	PASS
5552.1	V	-47.81		
-	V	-		
3701.4	Horizontal	-42.56		
5552.1	H	-48.71		
Bandwidth:	1.4M		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)		
3760	Vertical	-40.01	-13.00	PASS
5640	V	-45.23		
-	V	-		
3760	Horizontal	-42.47		
5640	H	-44.34		
-	H	-		
Bandwidth:	1.4M		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)		
3818.6	Vertical	-41.21	-13.00	PASS
5727.9	V	-44.68		
-	V	-		
3818.6	Horizontal	-40.14		
5727.9	H	-45.72		
-	H	-		

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