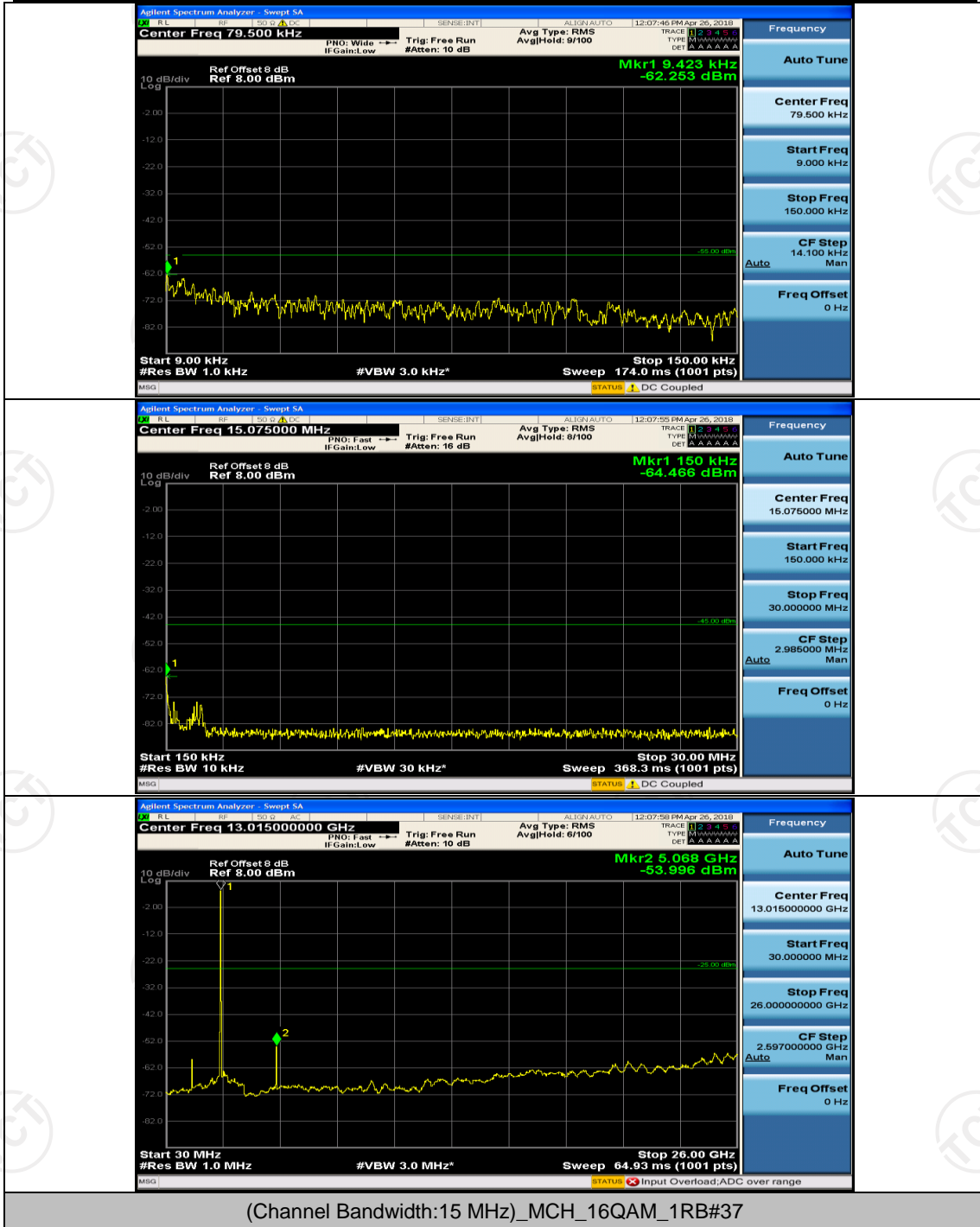
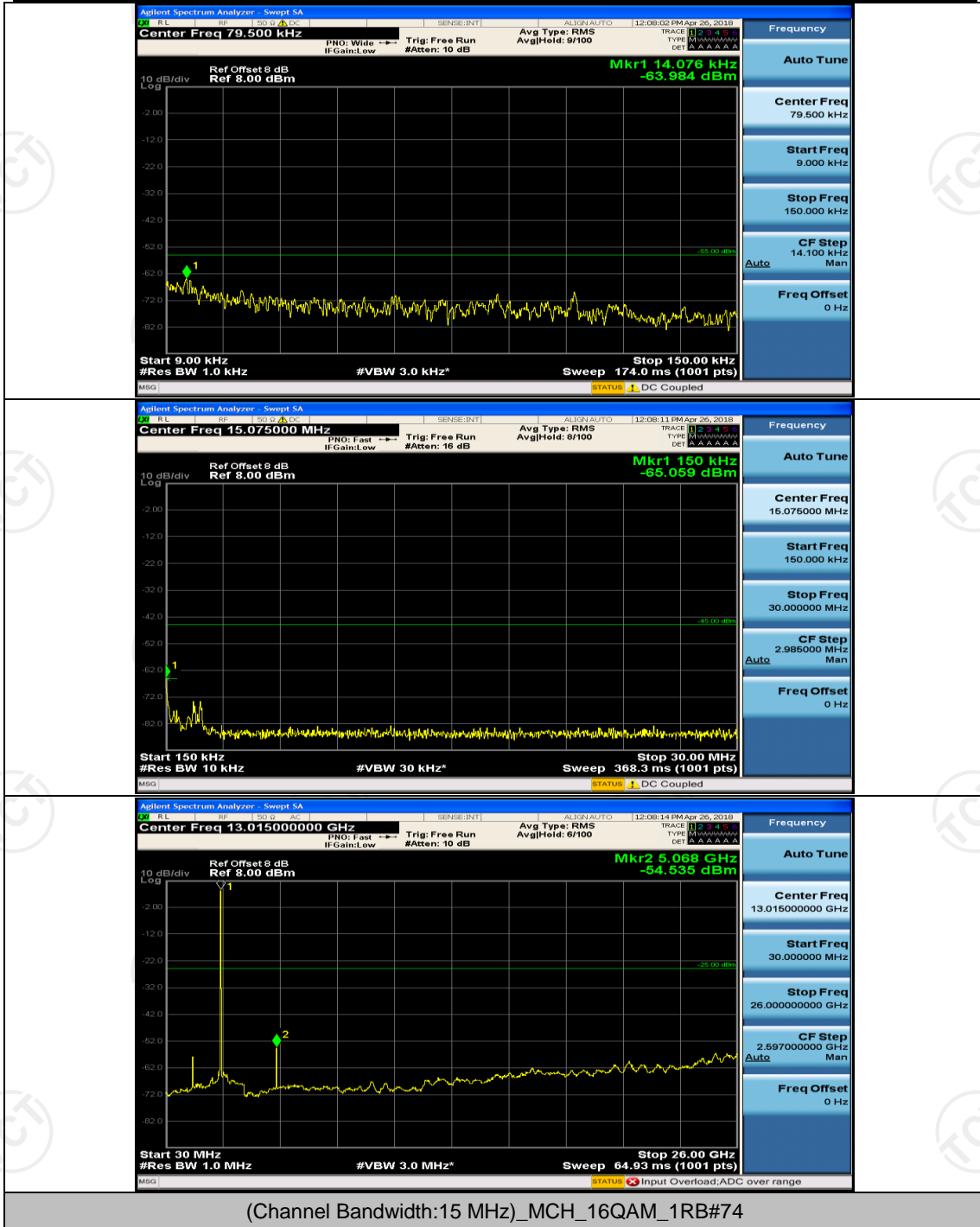
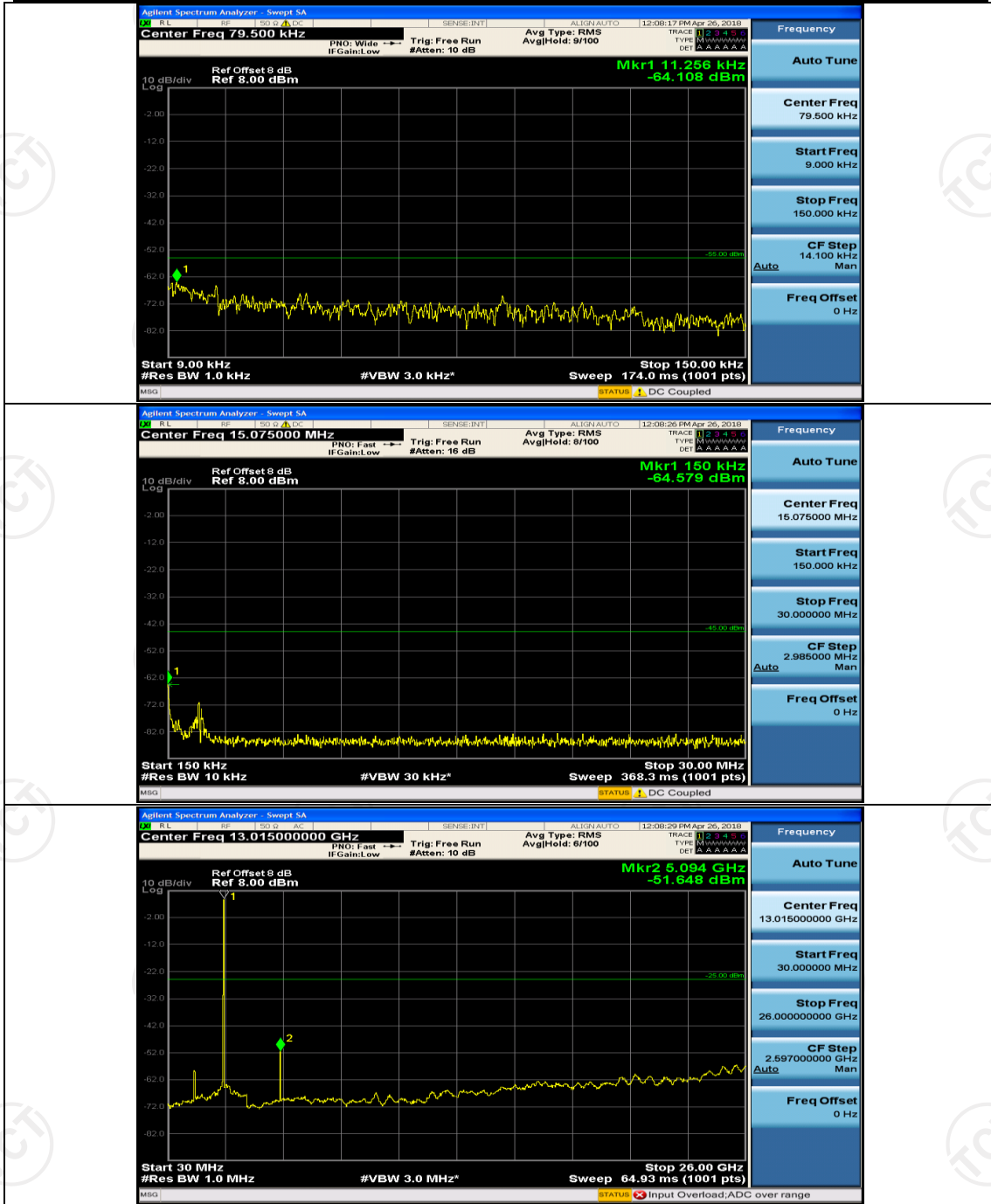


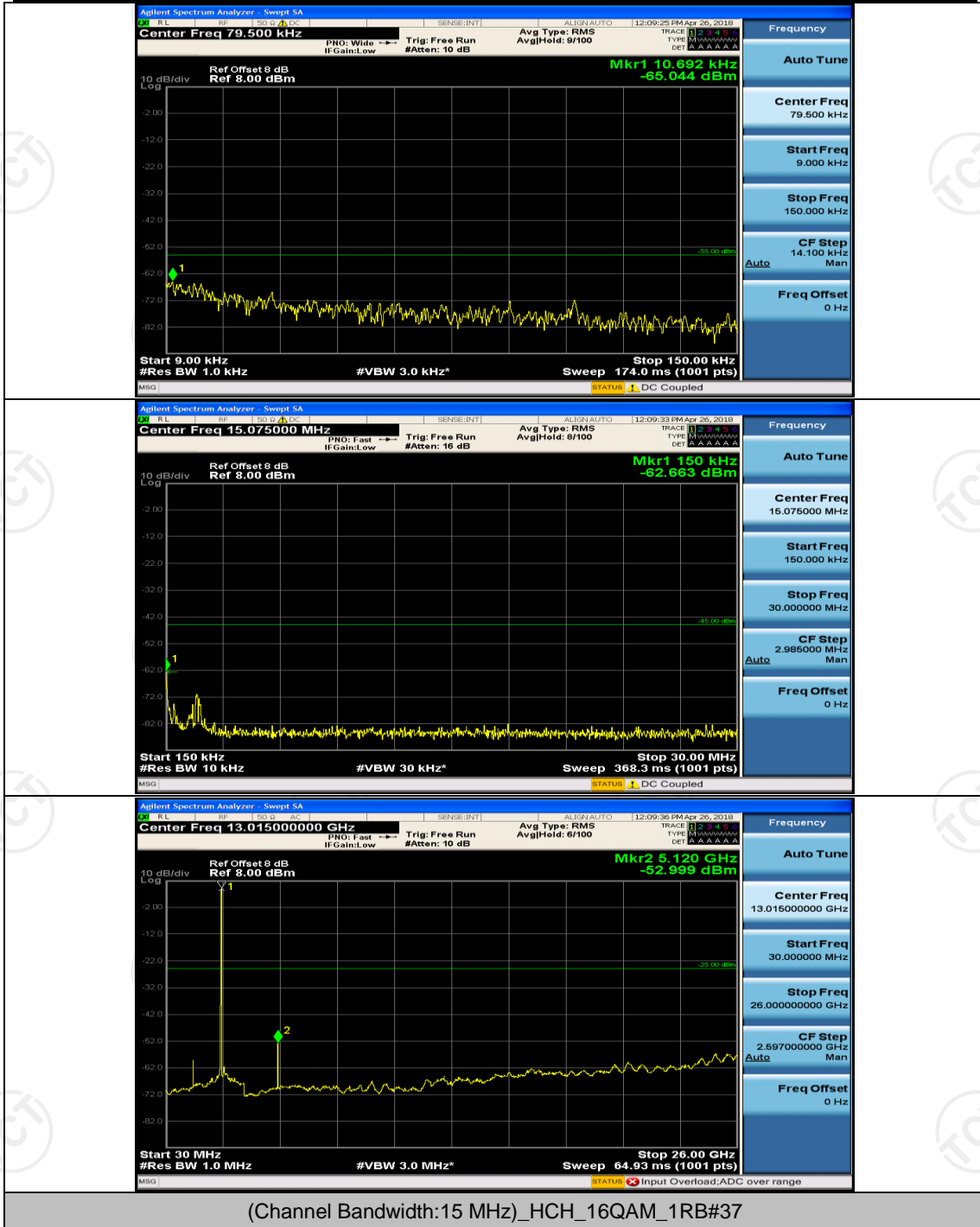
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

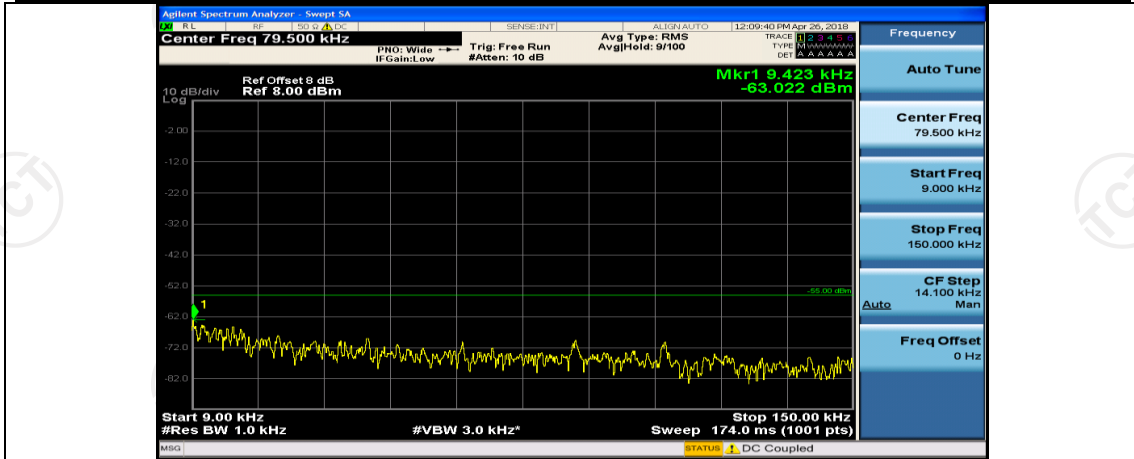




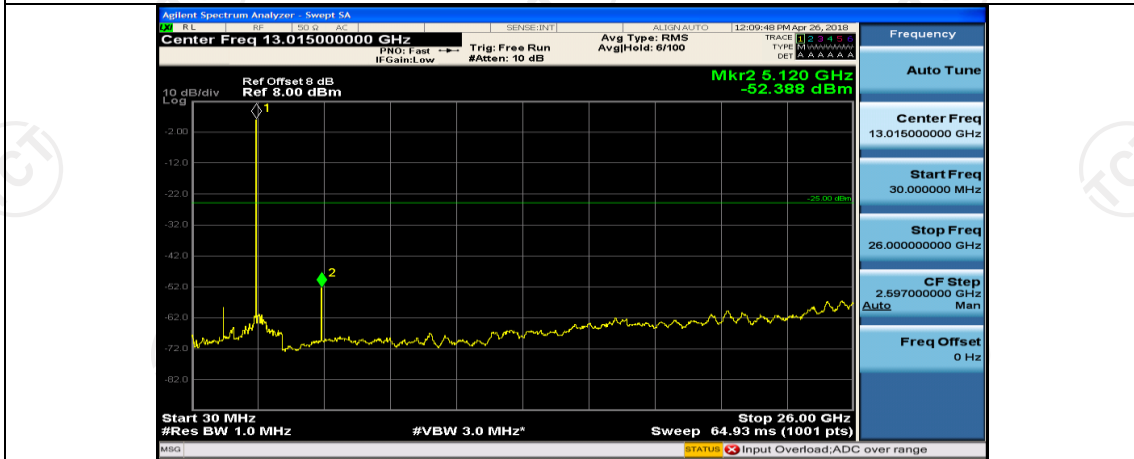


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

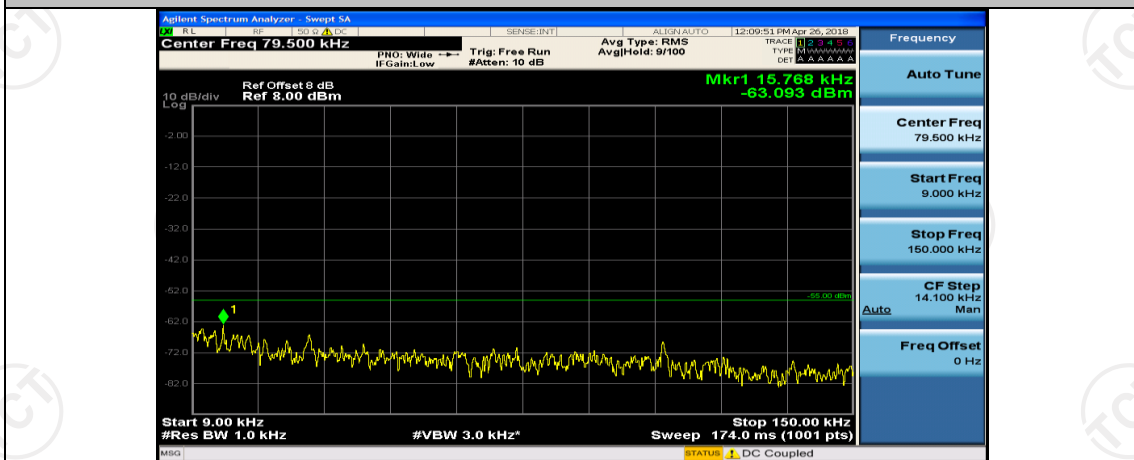


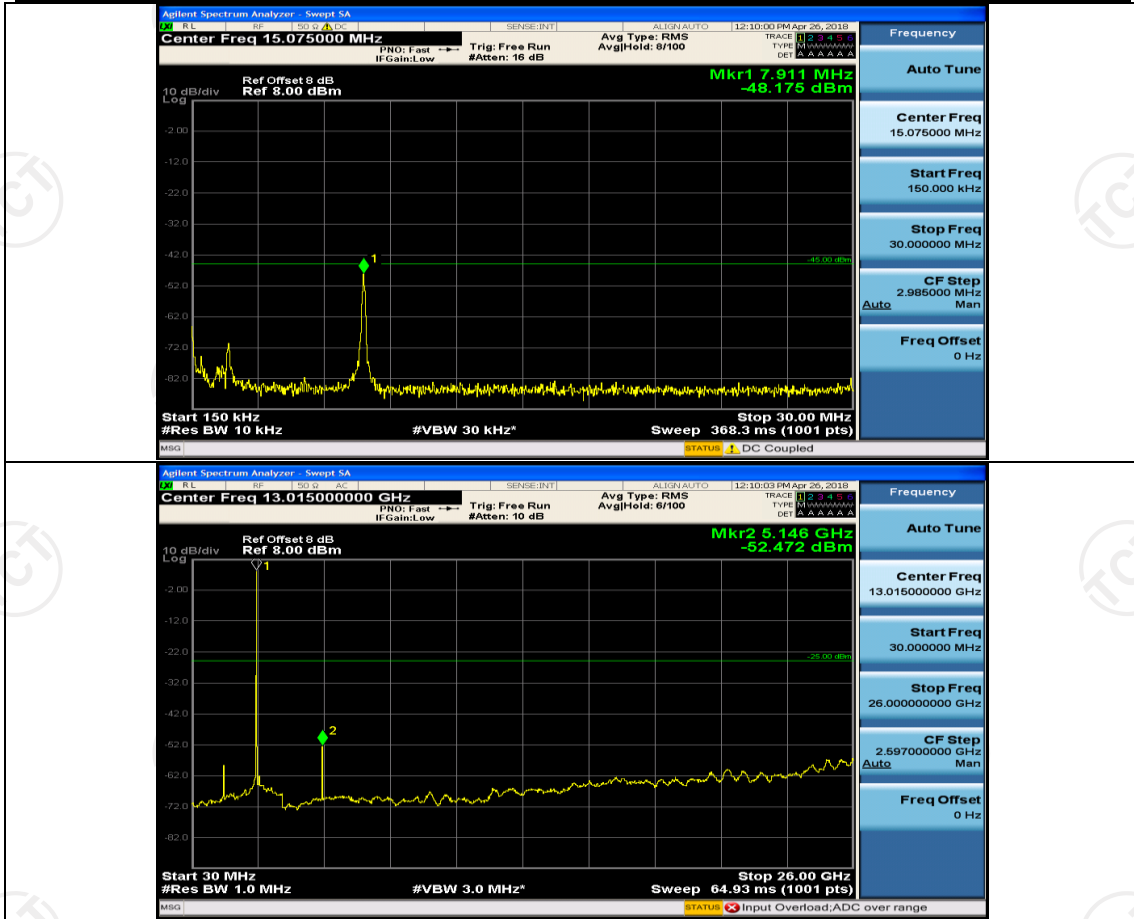


#Img-16QAM-H-15-1-M-CSE-2

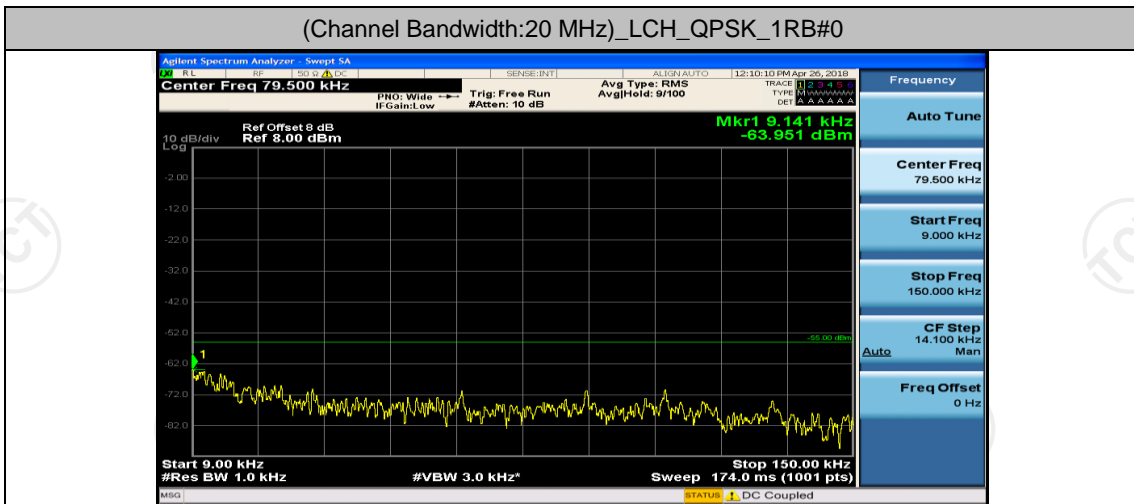


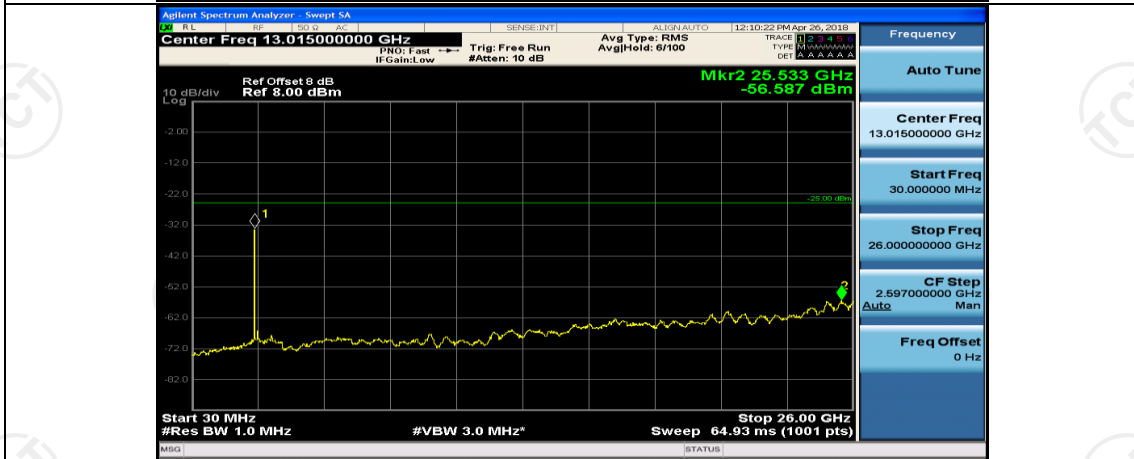
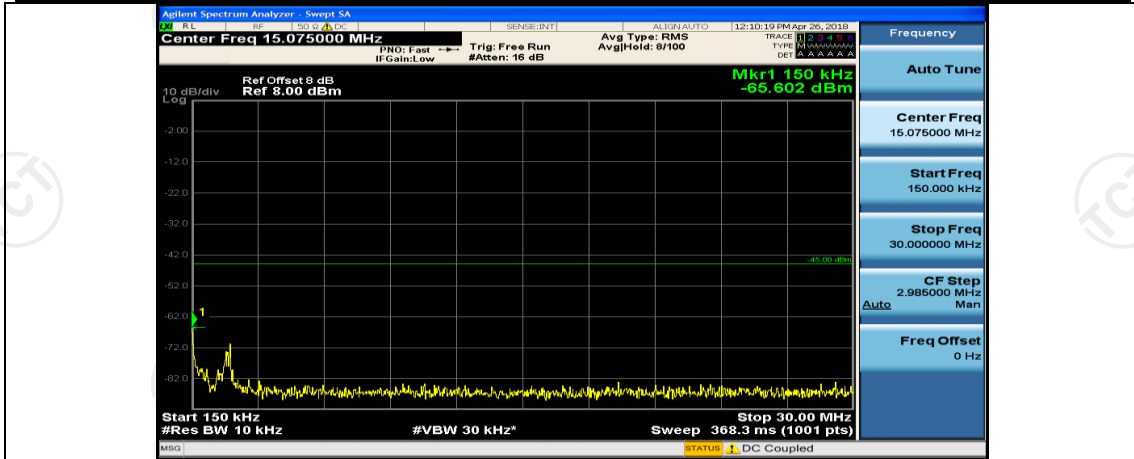
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74



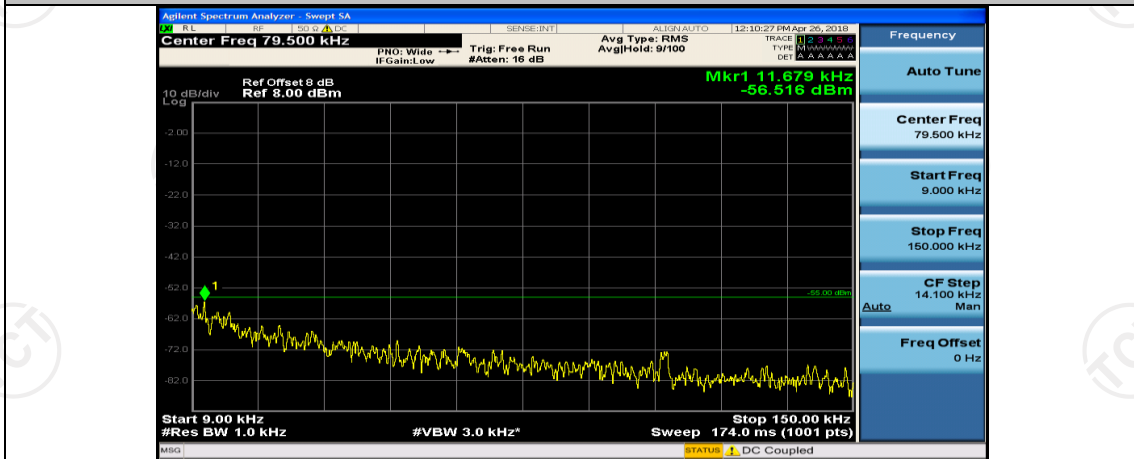


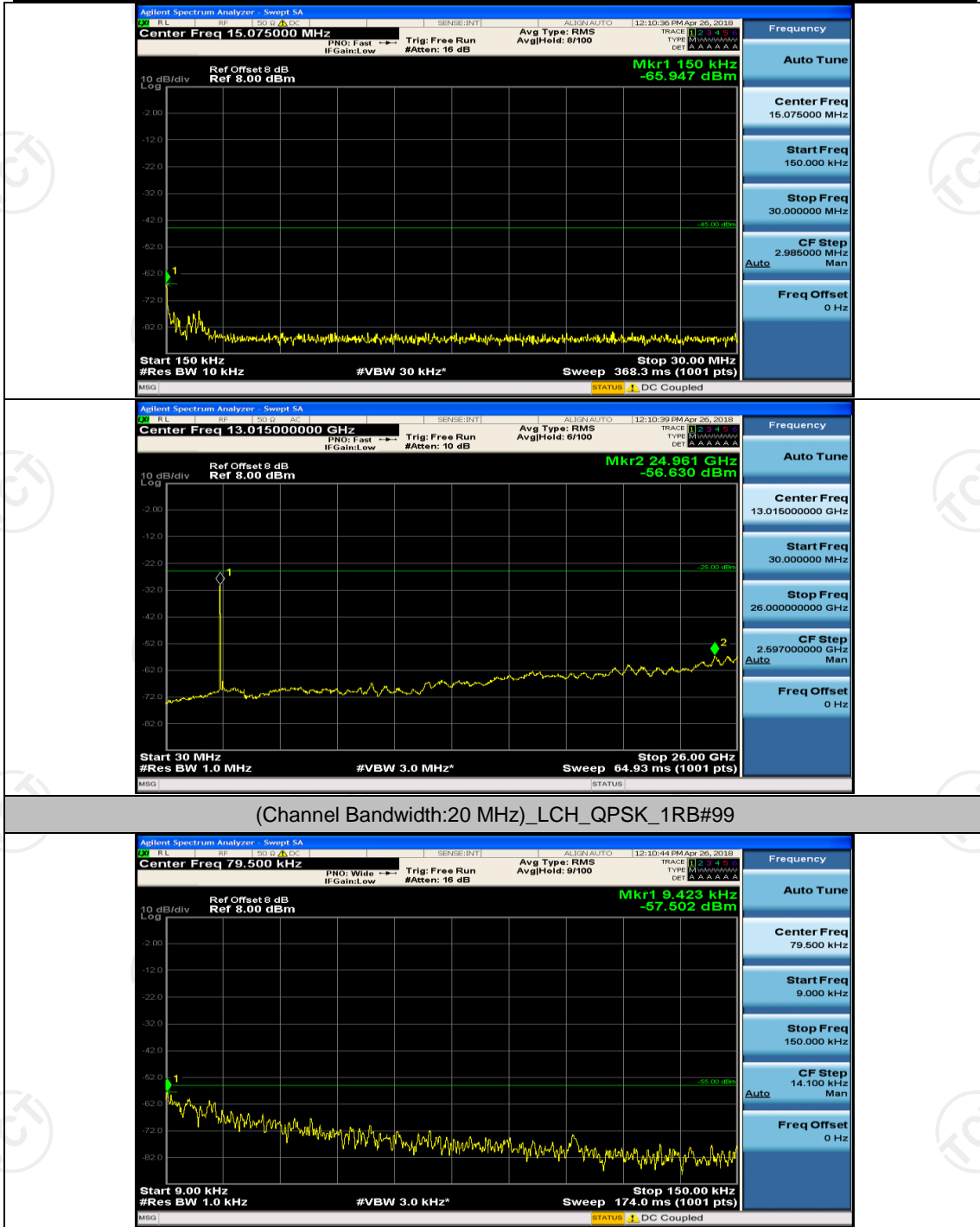
Channel Bandwidth: 20 MHz

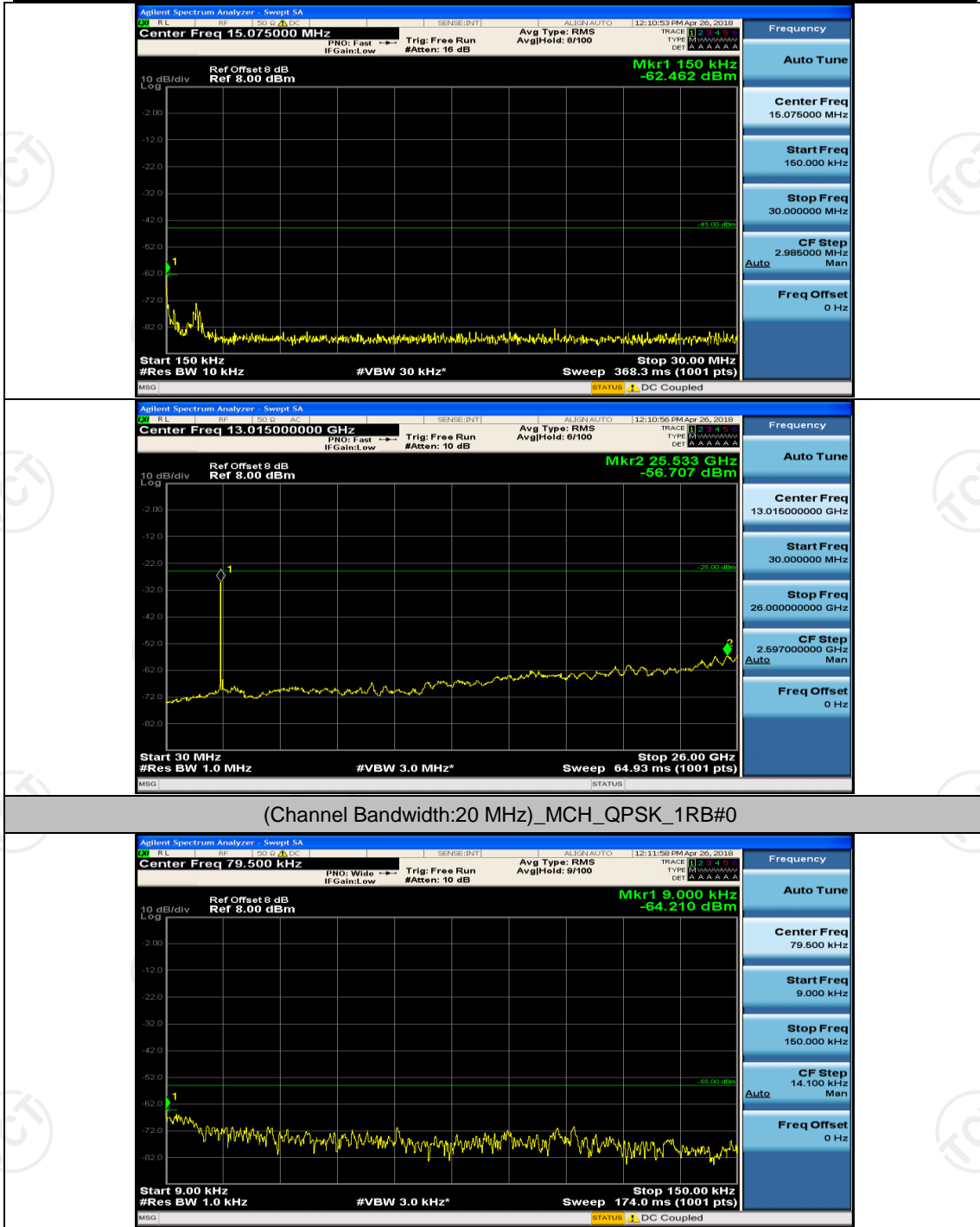


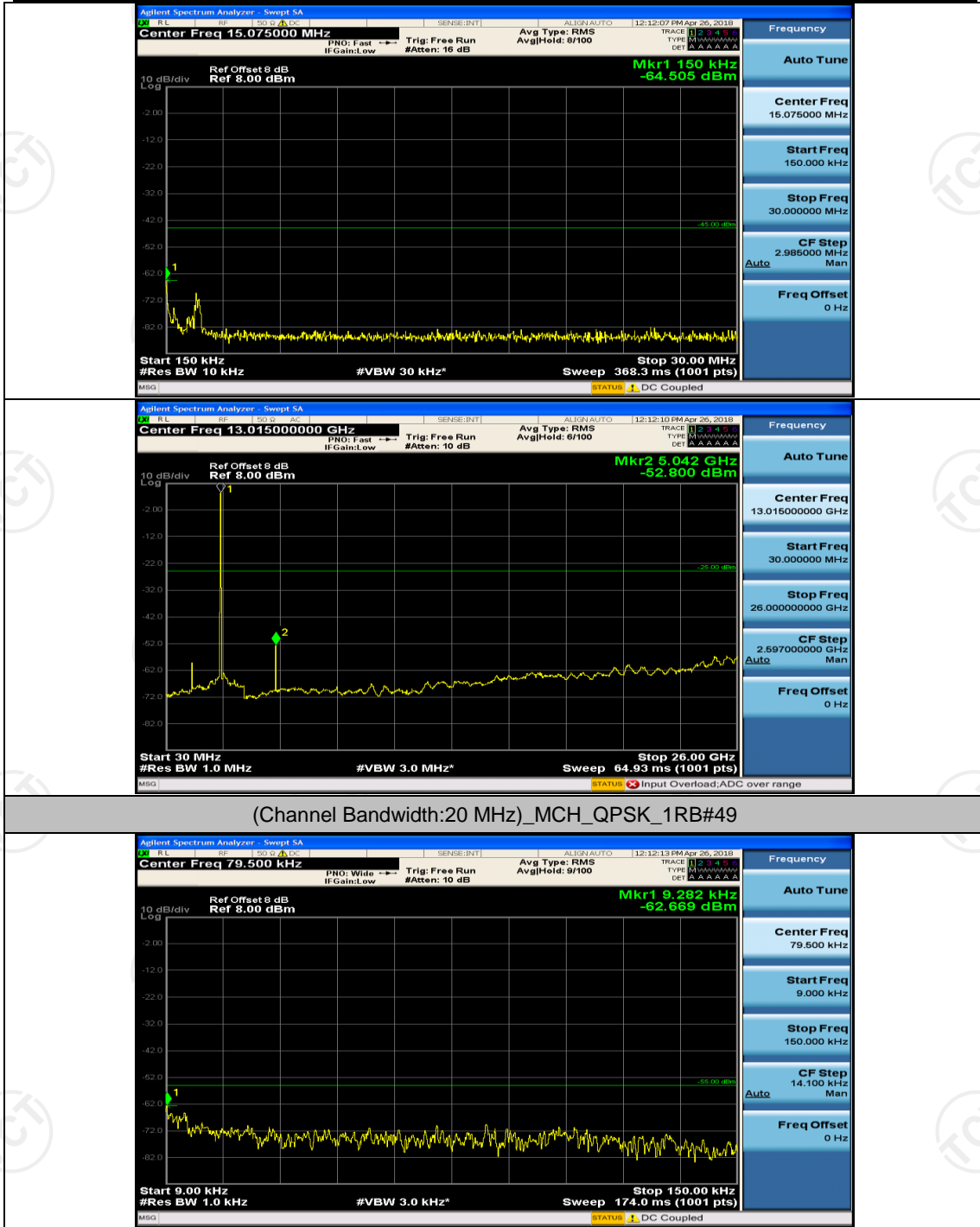


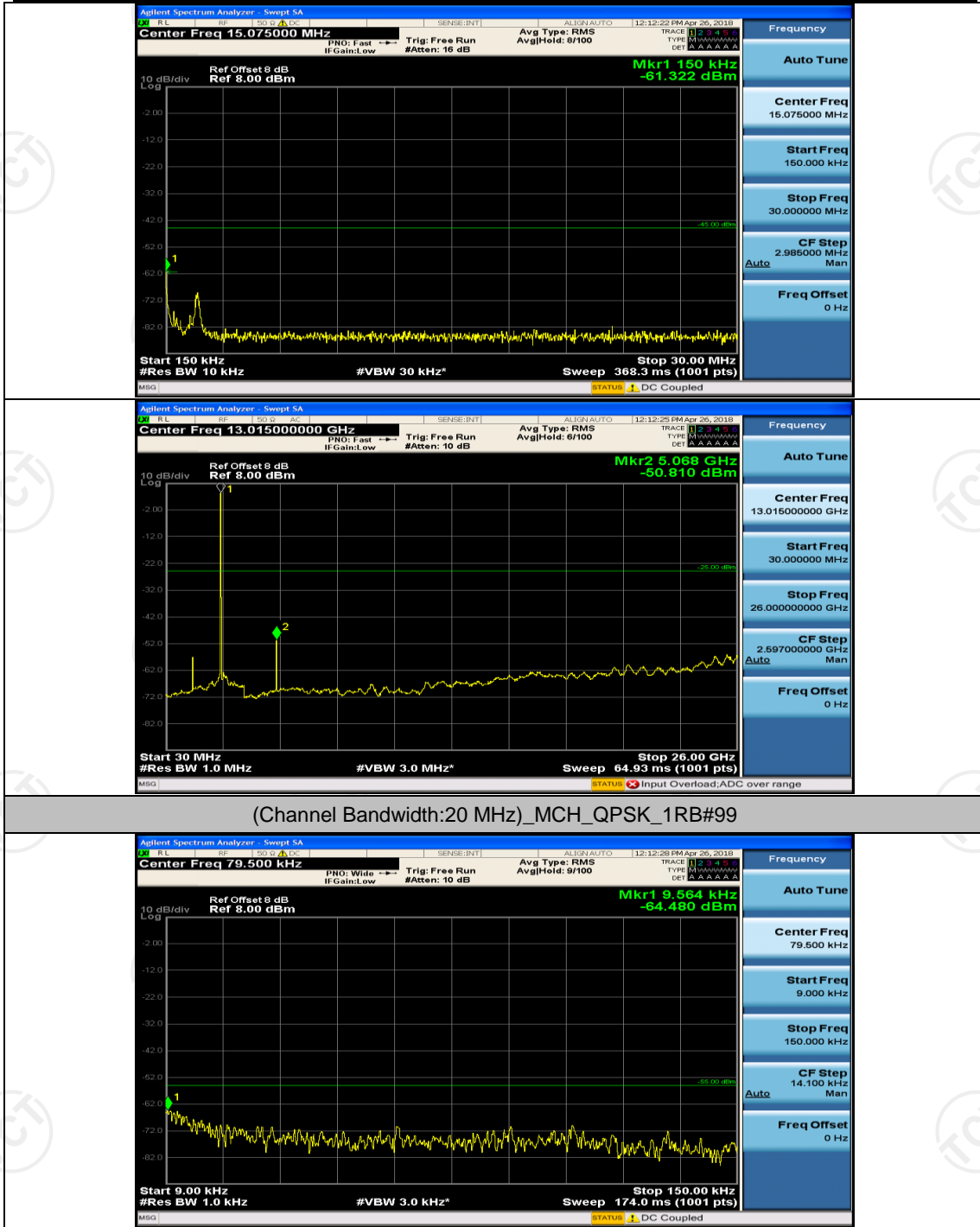
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49

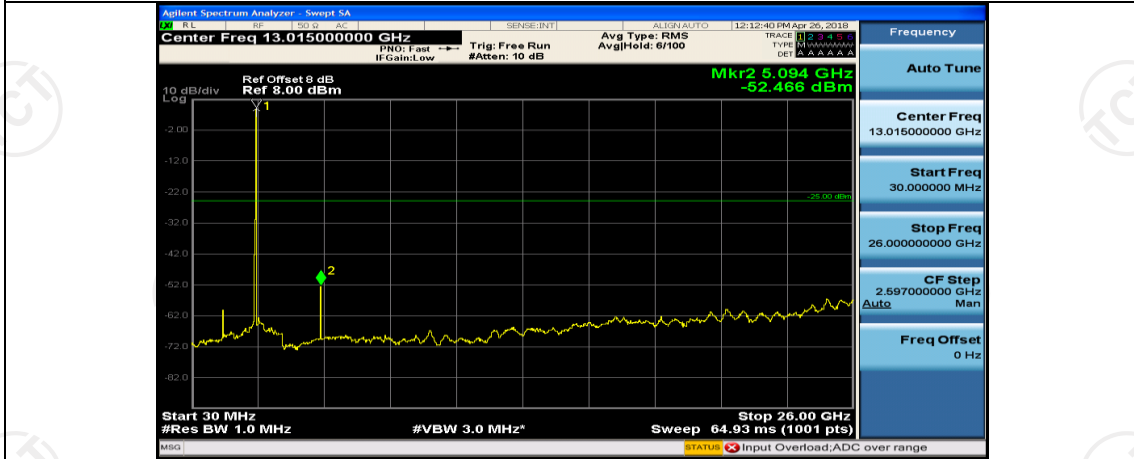
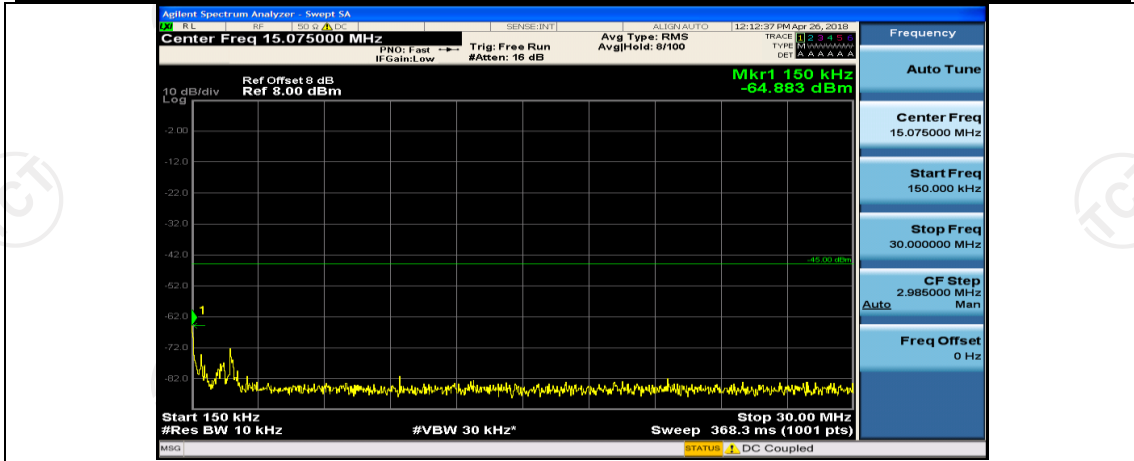




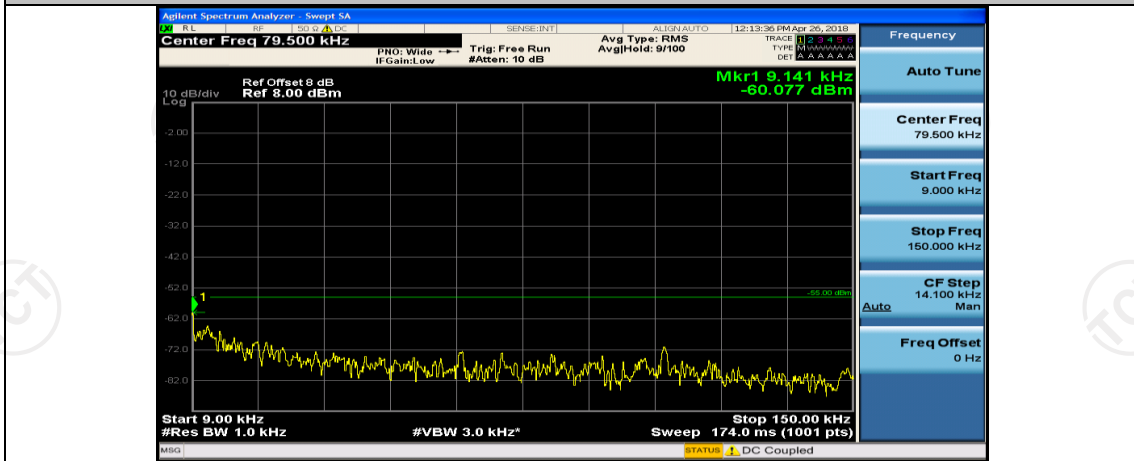


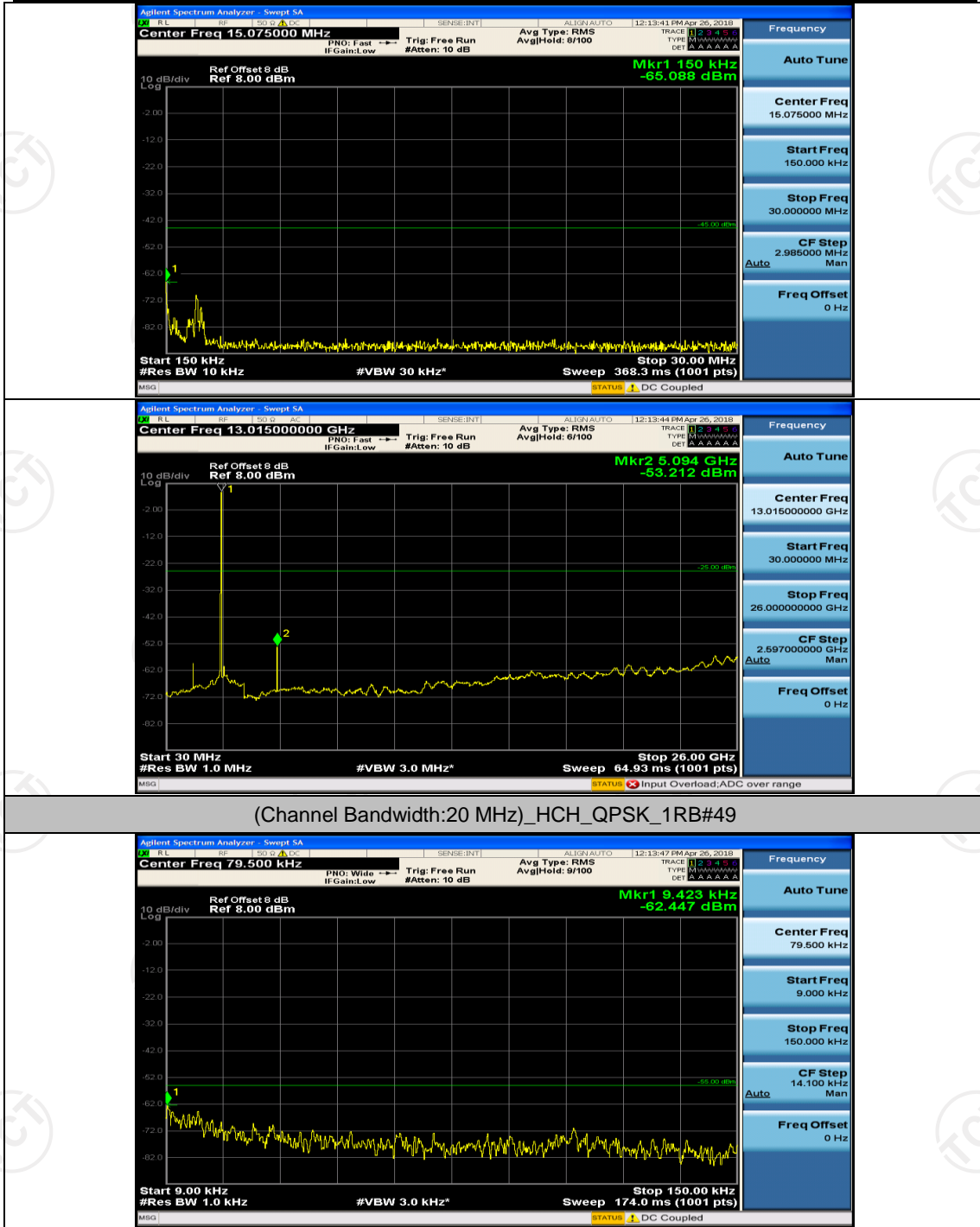




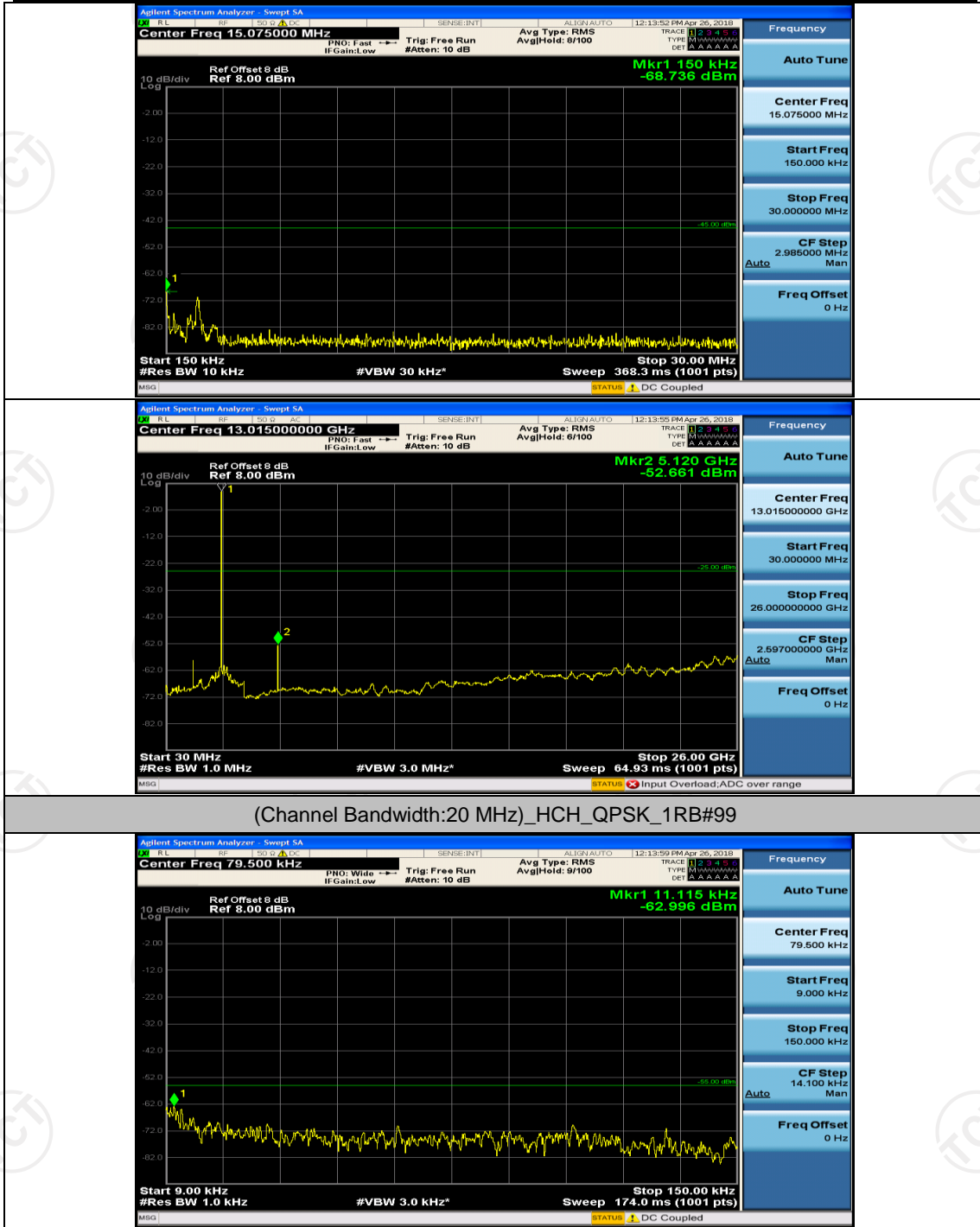


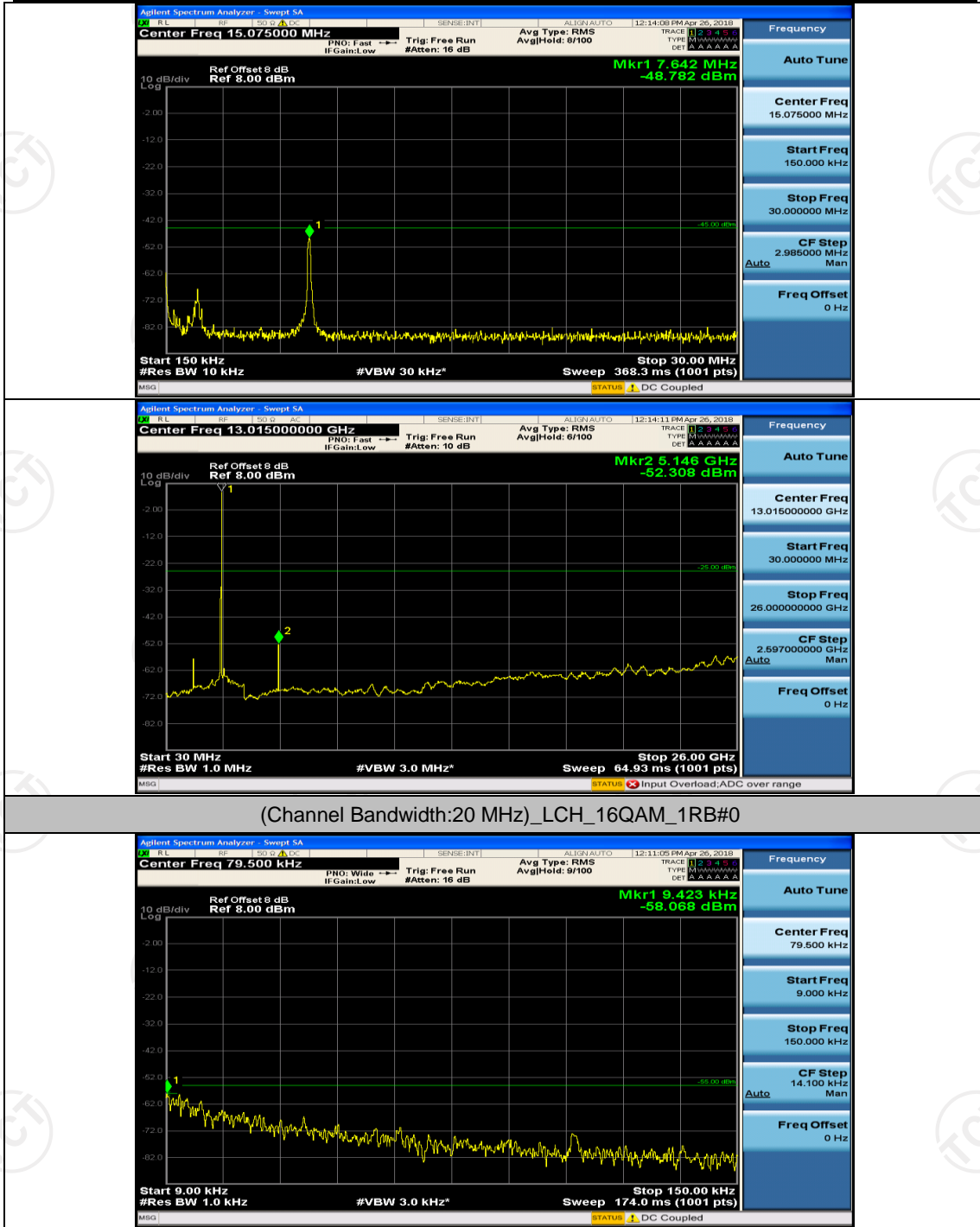
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

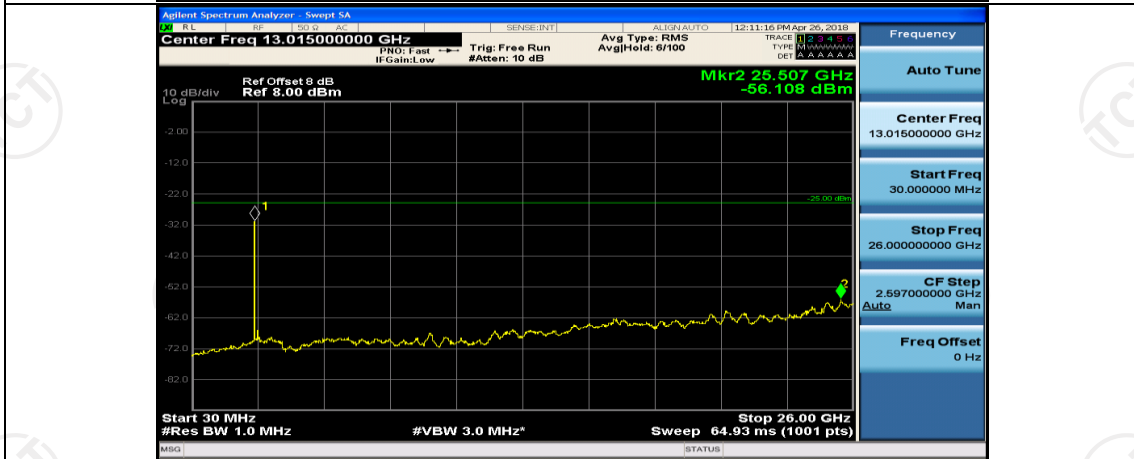
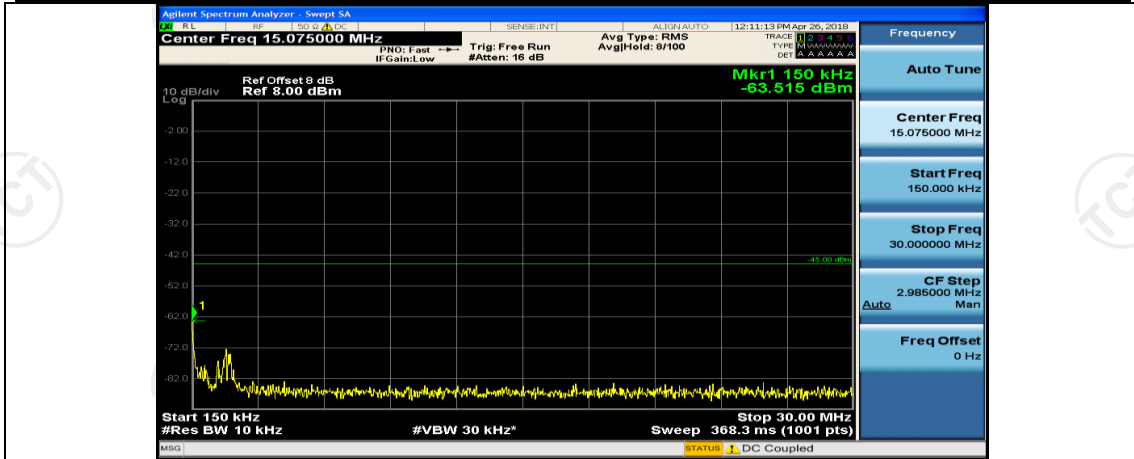




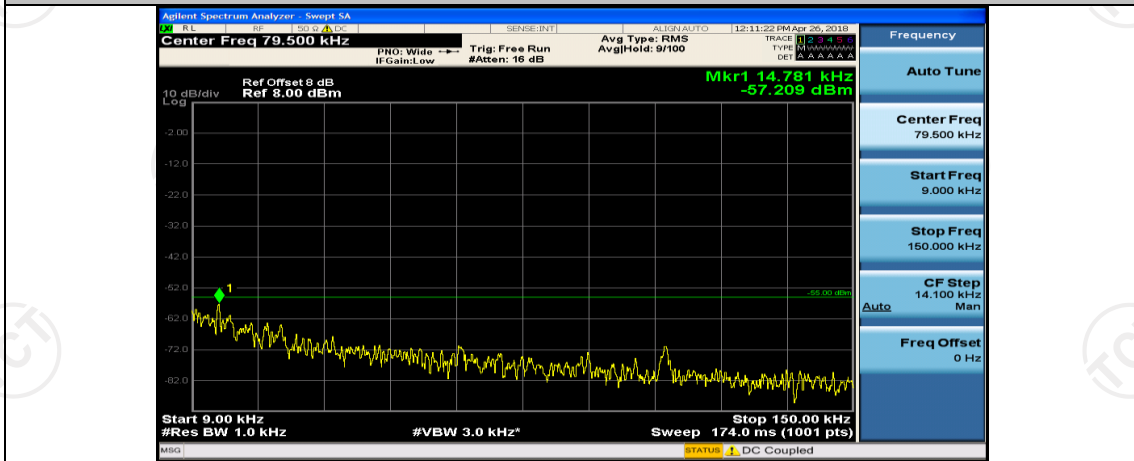
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

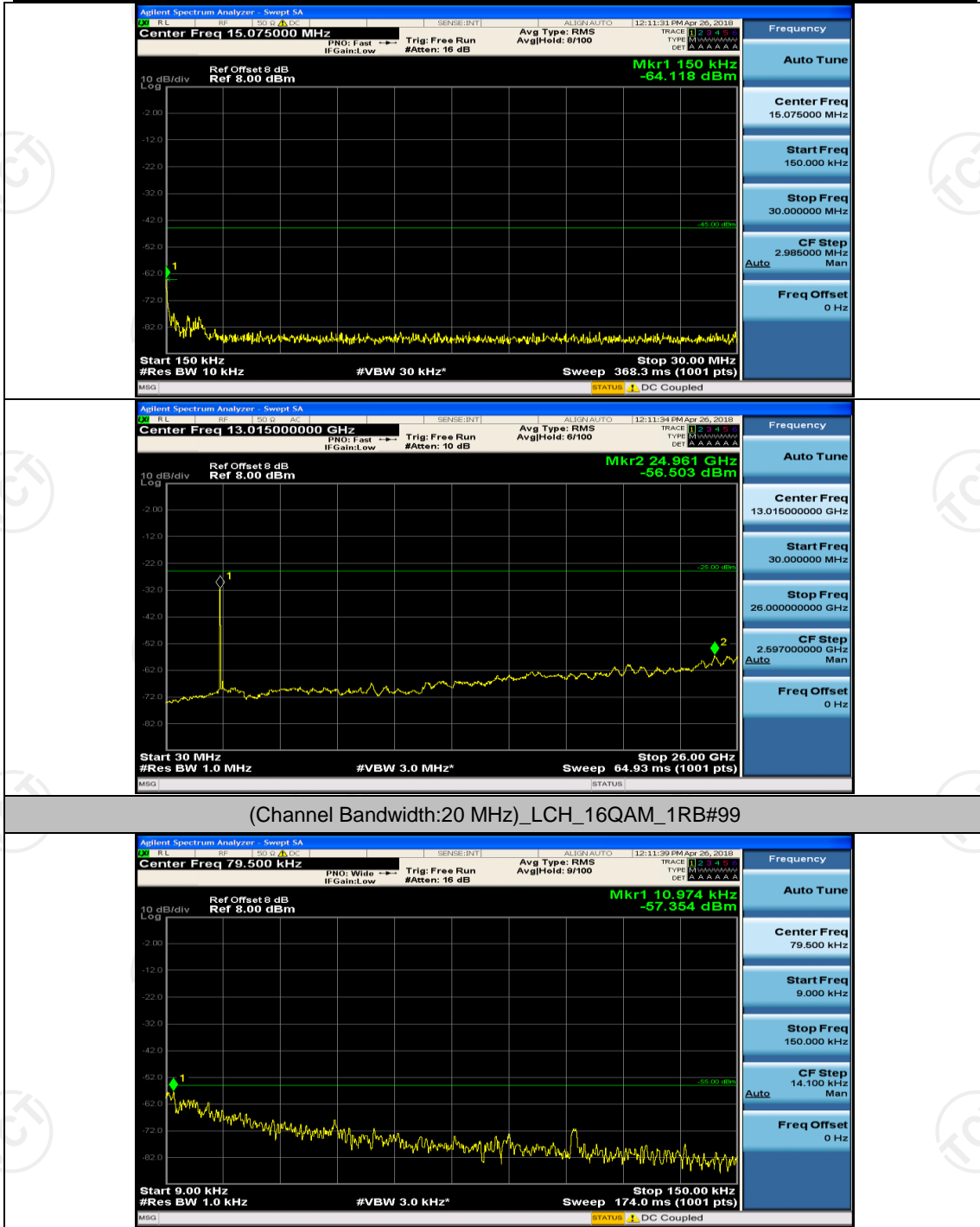


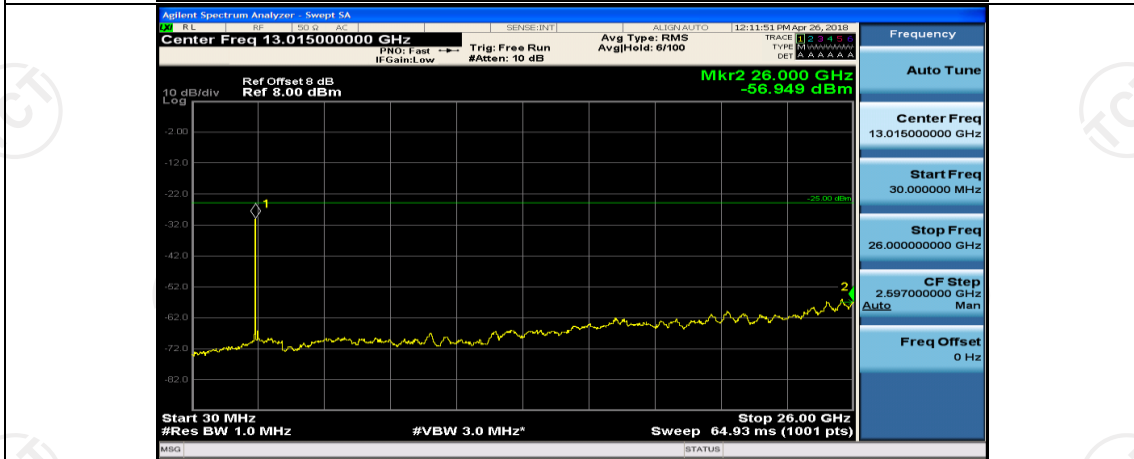
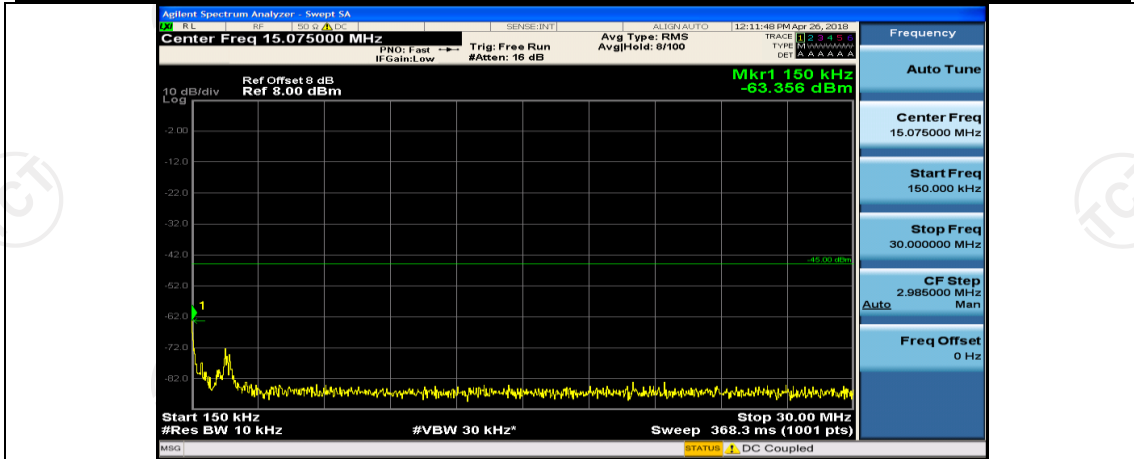




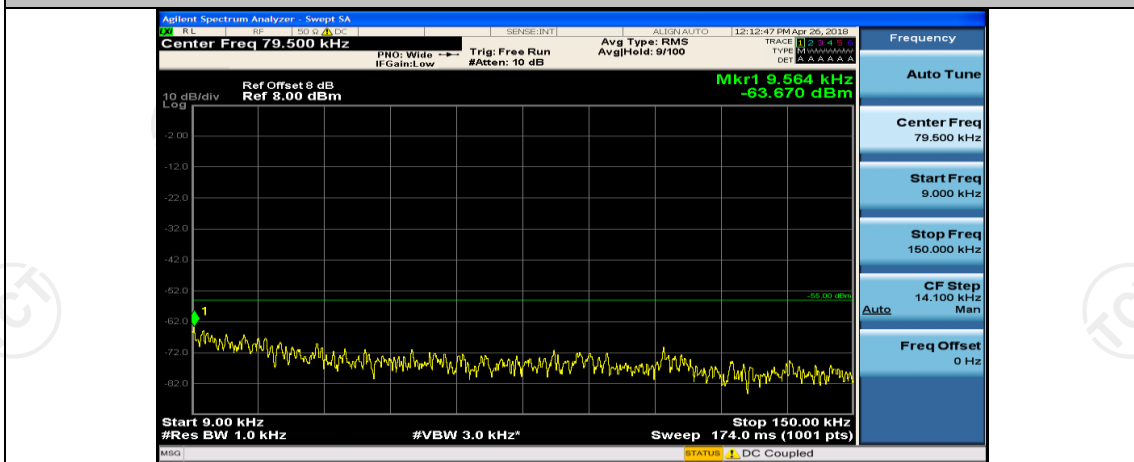
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

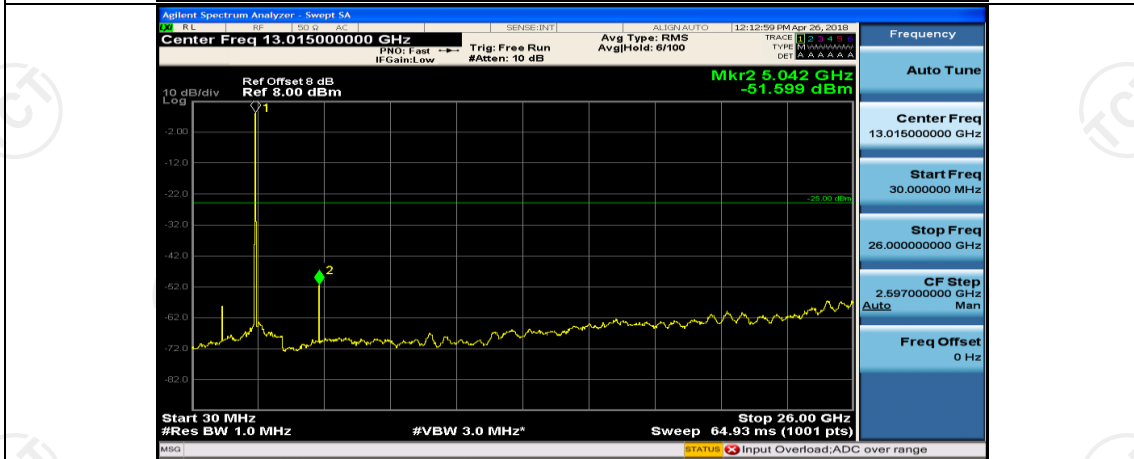
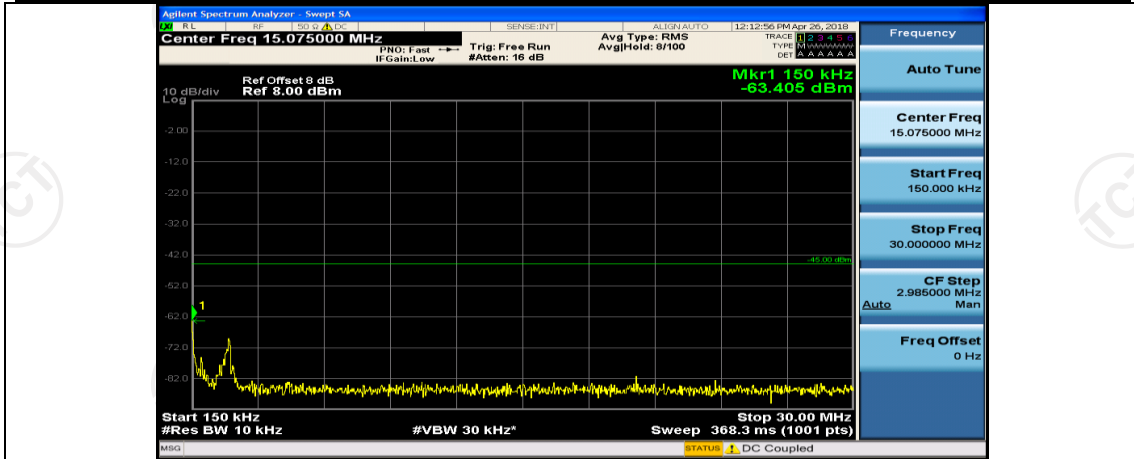




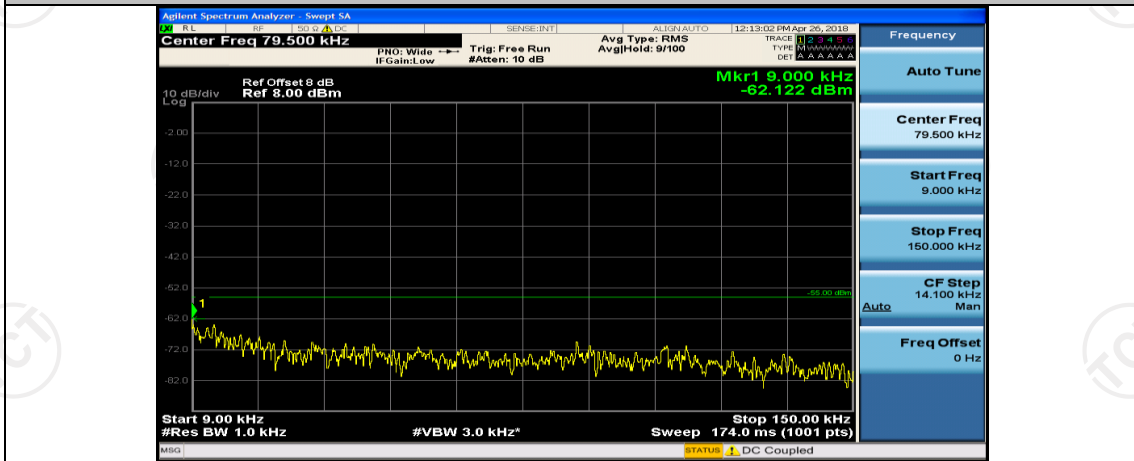


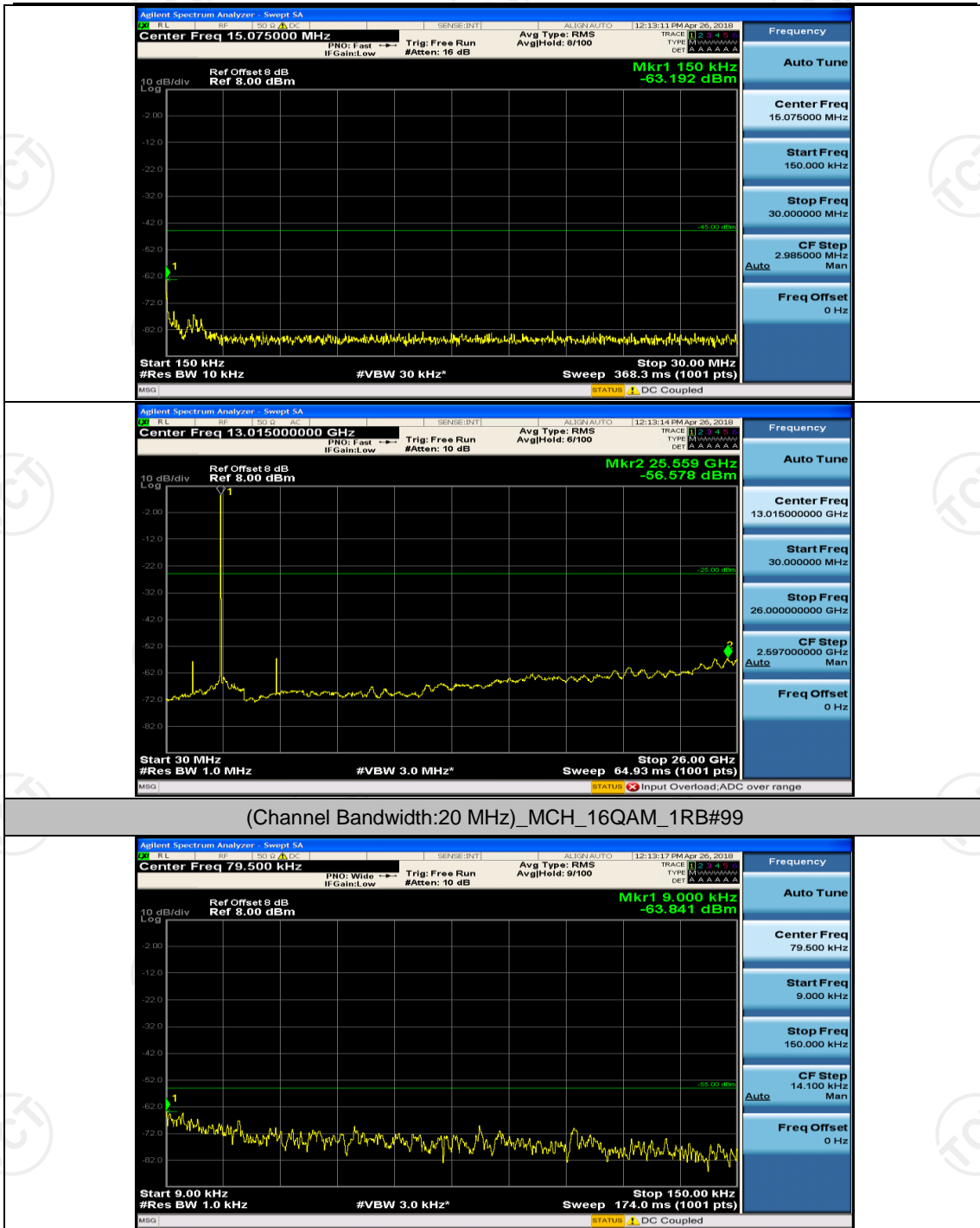
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

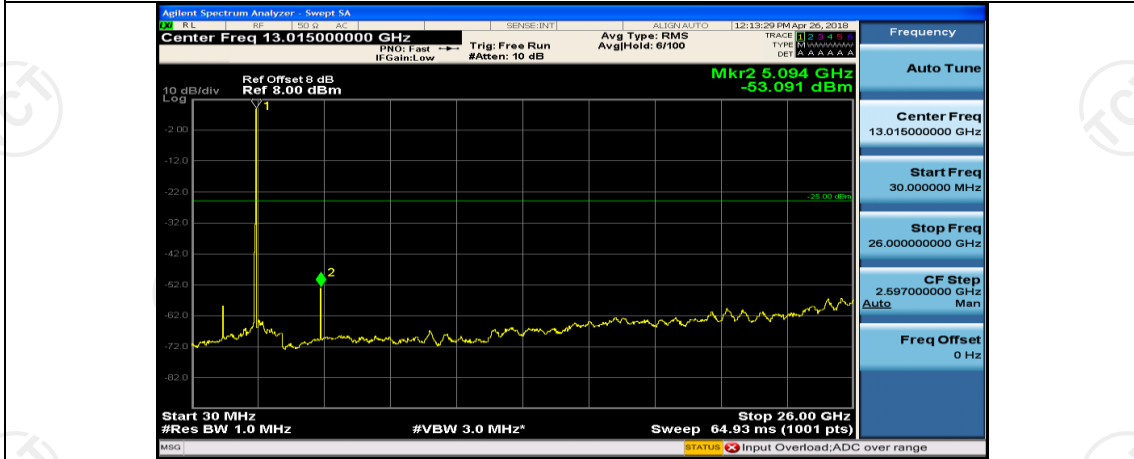
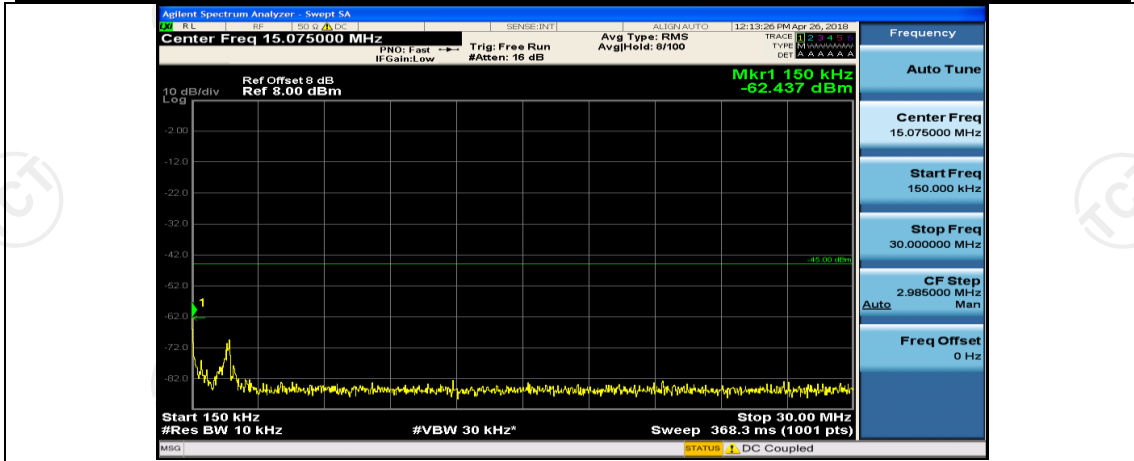




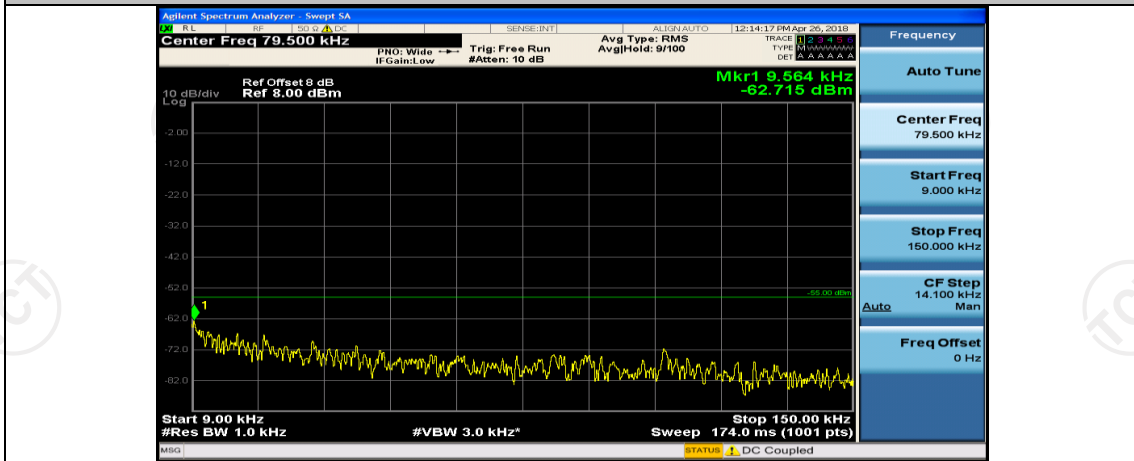
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

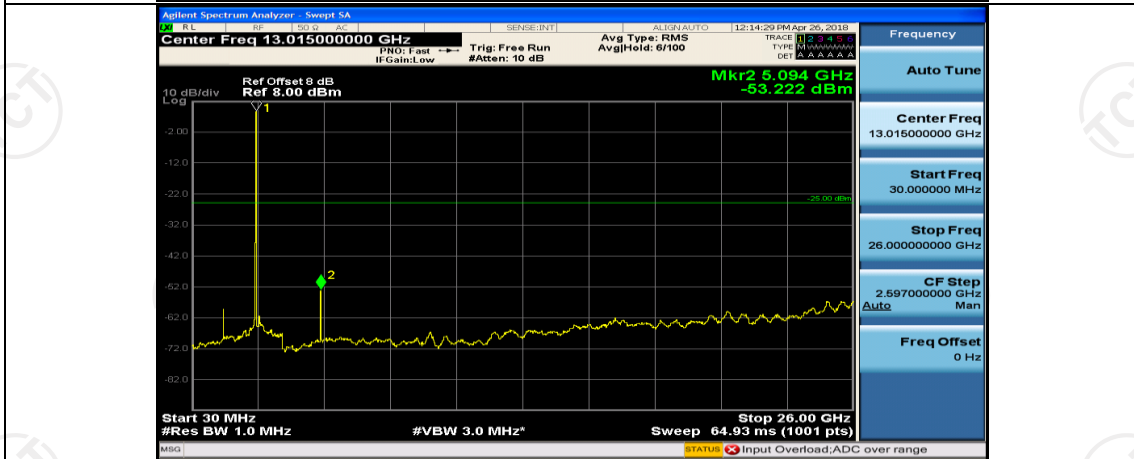
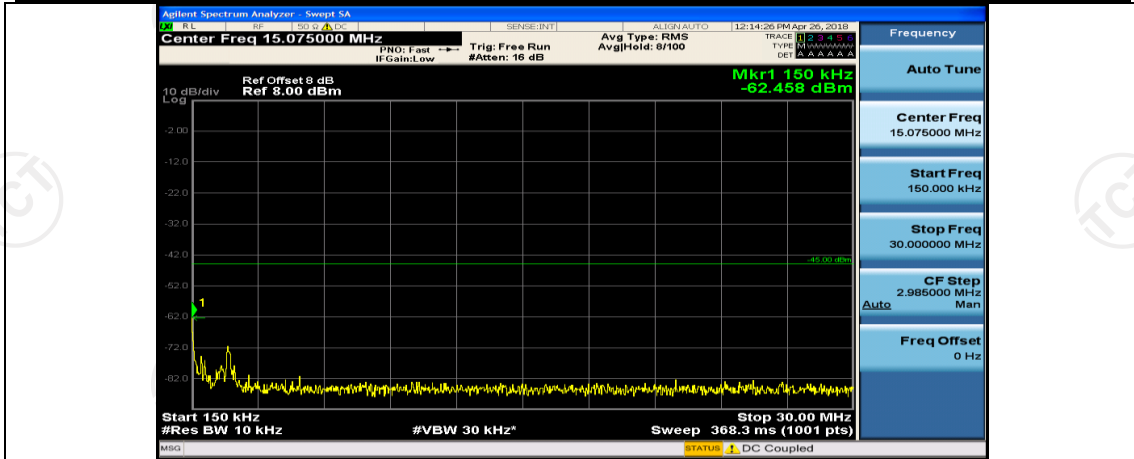




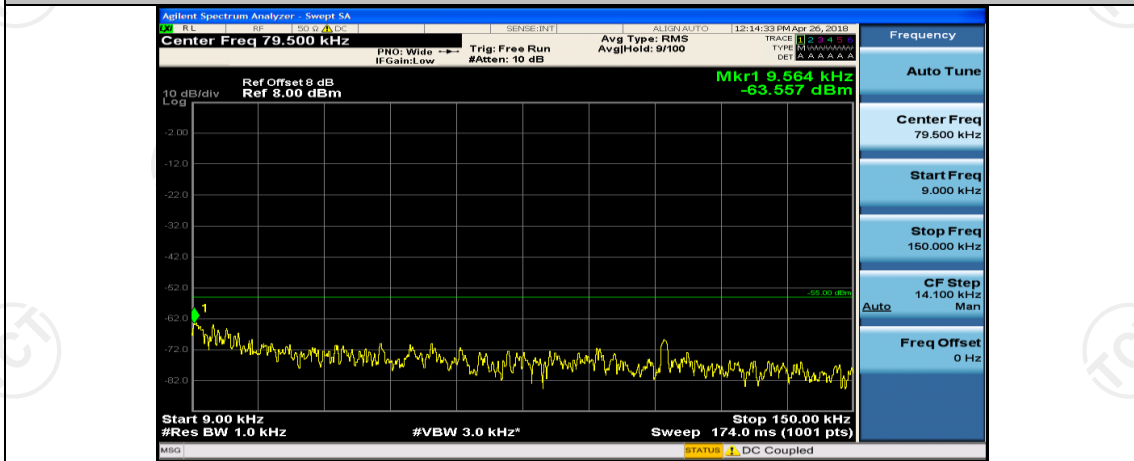


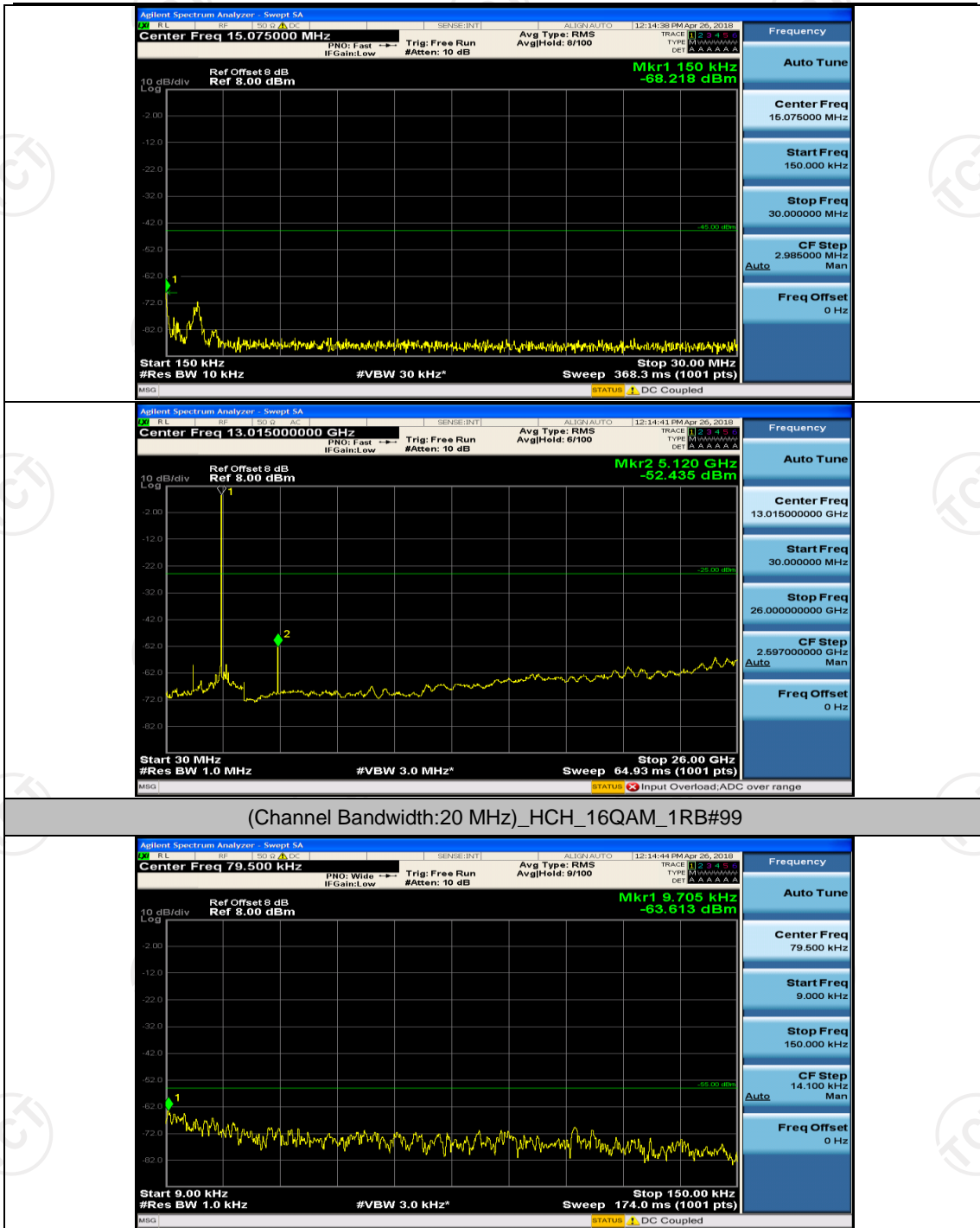
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0

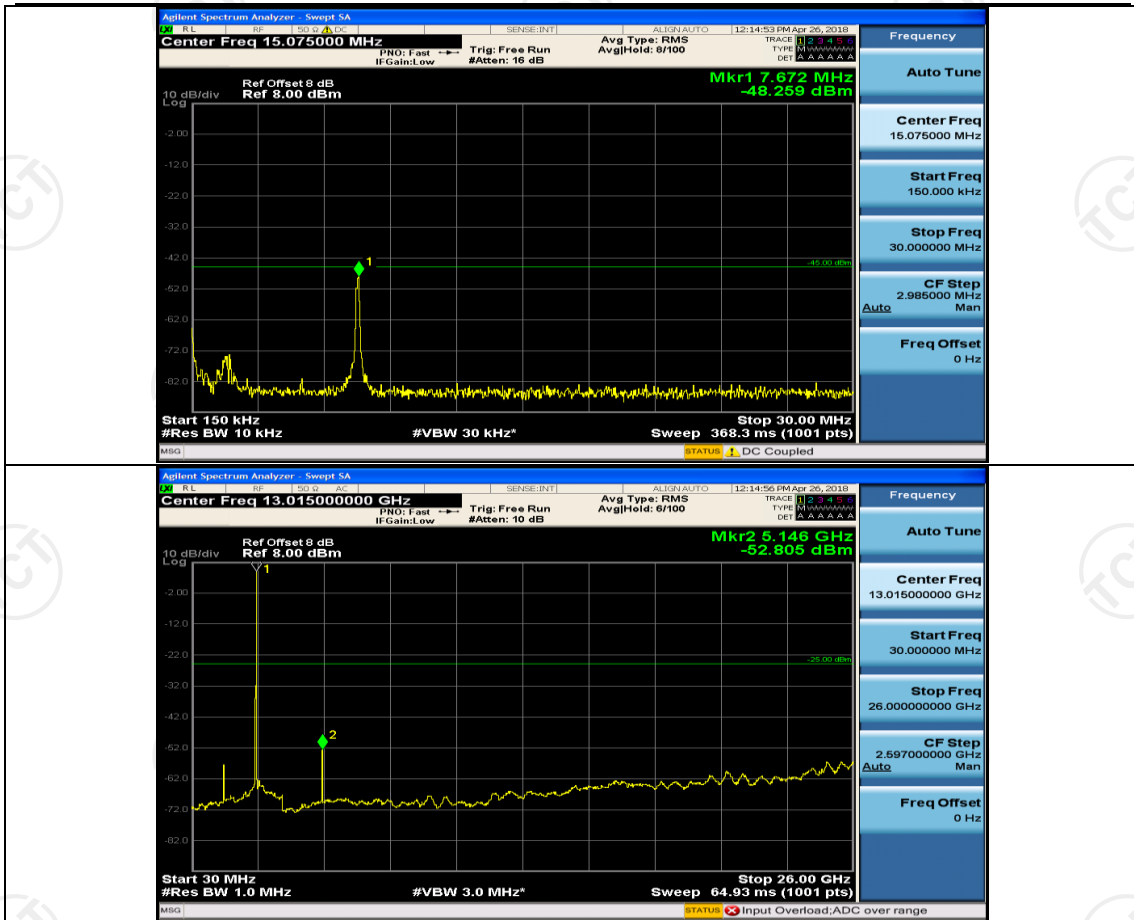




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49







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	TN	0.001012	± 2.5	PASS
		3.8	TN	0.000981	± 2.5	PASS
		4.35	TN	0.001027	± 2.5	PASS
	MCH	3.4	TN	0.001234	± 2.5	PASS
		3.8	TN	0.001125	± 2.5	PASS
		4.35	TN	0.001294	± 2.5	PASS
	HCH	3.4	TN	-0.001402	± 2.5	PASS
		3.8	TN	-0.001398	± 2.5	PASS
		4.35	TN	-0.001413	± 2.5	PASS
16QAM	LCH	3.4	TN	0.000933	± 2.5	PASS
		3.8	TN	0.000894	± 2.5	PASS
		4.35	TN	0.000912	± 2.5	PASS
	MCH	3.4	TN	0.000735	± 2.5	PASS
		3.8	TN	0.000729	± 2.5	PASS
		4.35	TN	0.000740	± 2.5	PASS
	HCH	3.4	TN	-0.001128	± 2.5	PASS
		3.8	TN	-0.001106	± 2.5	PASS
		4.35	TN	-0.001134	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	0	0.001005	± 2.5	PASS
		VN	10	0.000923	± 2.5	PASS
		VN	20	0.000862	± 2.5	PASS
		VN	30	0.001136	± 2.5	PASS
		VN	40	0.001129	± 2.5	PASS
	MCH	VN	0	-0.000810	± 2.5	PASS
		VN	10	-0.000635	± 2.5	PASS
		VN	20	-0.000546	± 2.5	PASS
		VN	30	0.000736	± 2.5	PASS
		VN	40	-0.000889	± 2.5	PASS
	HCH	VN	0	-0.001154	± 2.5	PASS
		VN	10	-0.001134	± 2.5	PASS
		VN	20	-0.001103	± 2.5	PASS
		VN	30	-0.001139	± 2.5	PASS
		VN	40	-0.001142	± 2.5	PASS
16QAM	LCH	VN	0	-0.000881	± 2.5	PASS
		VN	10	-0.000718	± 2.5	PASS

	VN	20	-0.000689	± 2.5	PASS	
		30	-0.000778	± 2.5	PASS	
		40	-0.000863	± 2.5	PASS	
	MCH	VN	0	0.000886	± 2.5	PASS
		VN	10	0.000735	± 2.5	PASS
		VN	20	0.000651	± 2.5	PASS
		VN	30	0.000741	± 2.5	PASS
	HCH	VN	40	0.000880	± 2.5	PASS
		VN	0	-0.000884	± 2.5	PASS
		VN	10	-0.000713	± 2.5	PASS
		VN	20	-0.000679	± 2.5	PASS
		VN	30	-0.000713	± 2.5	PASS
		VN	40	-0.000902	± 2.5	PASS

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

Field Strength of Spurious Radiation Measurement

Test Result

Bandwidth:	5M		Test channel:	Lowest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1		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	-52.07	-13.00	PASS
7507.5	V	-56.28		
-	V	-		
5005.0	Horizontal	-53.41		
7507.5	H	-57.58		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1		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	-52.80	-13.00	PASS
7605.0	V	-56.37		
-	V	-		
5070.0	Horizontal	-51.22		
7605.0	H	-55.93		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1		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	-52.64	-13.00	PASS
7702.5	V	-56.49		
-	V	-		
5135.0	Horizontal	-53.17		
7702.5	H	-56.90		
-	H	-		

-	H	-	
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Bandwidth:	5M		Test channel:	Lowest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1		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	-52.06	-13.00	PASS
7507.5	V	-56.73		
-	V	-		
5005.0	Horizontal	-53.48		
7507.5	H	-57.55		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1		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	-52.49	-13.00	PASS
7605.0	V	-56.91		
-	V	-		
5070.0	Horizontal	-53.02		
7605.0	H	-57.30		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1		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	-52.41	-13.00	PASS
7702.5	V	-56.96		
-	V	-		
5135.0	Horizontal	-53.11		
7702.5	H	-56.50		
-	H	-		

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