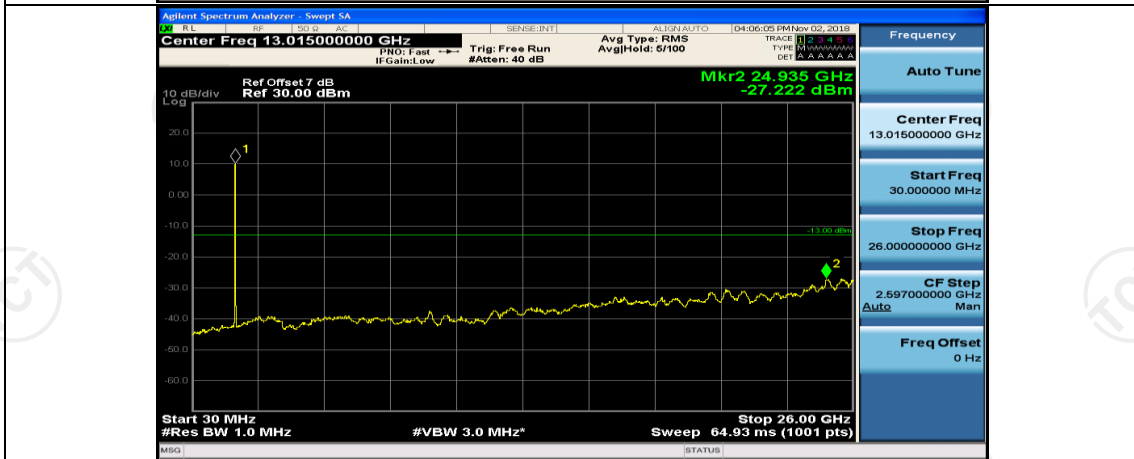
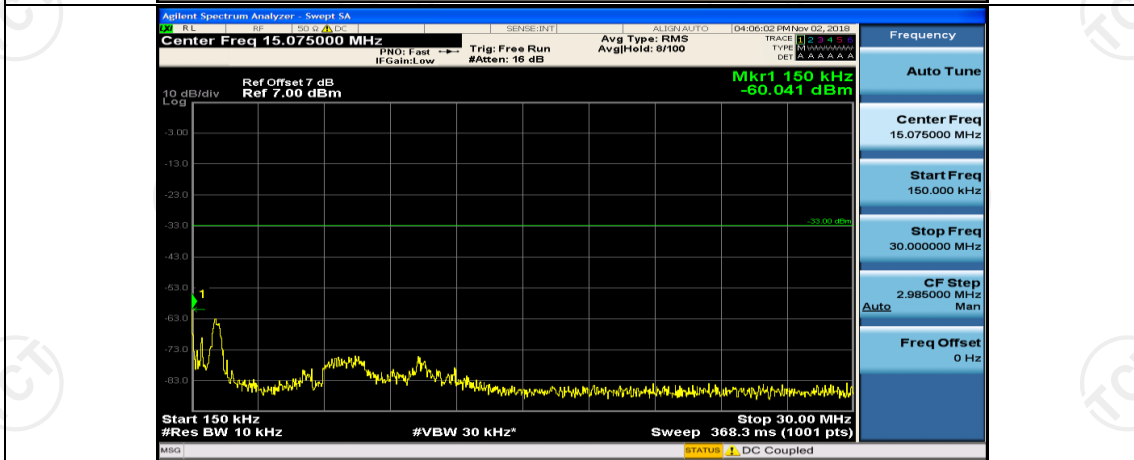
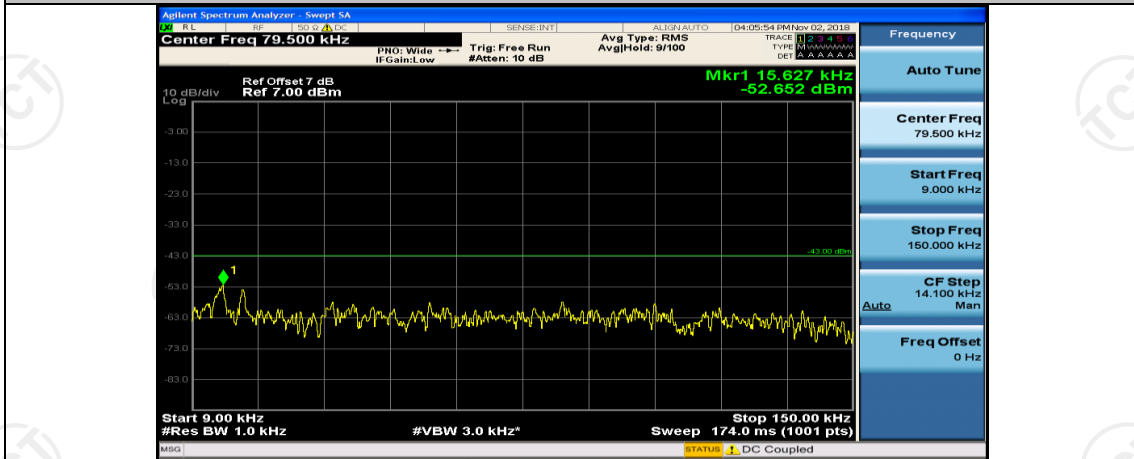
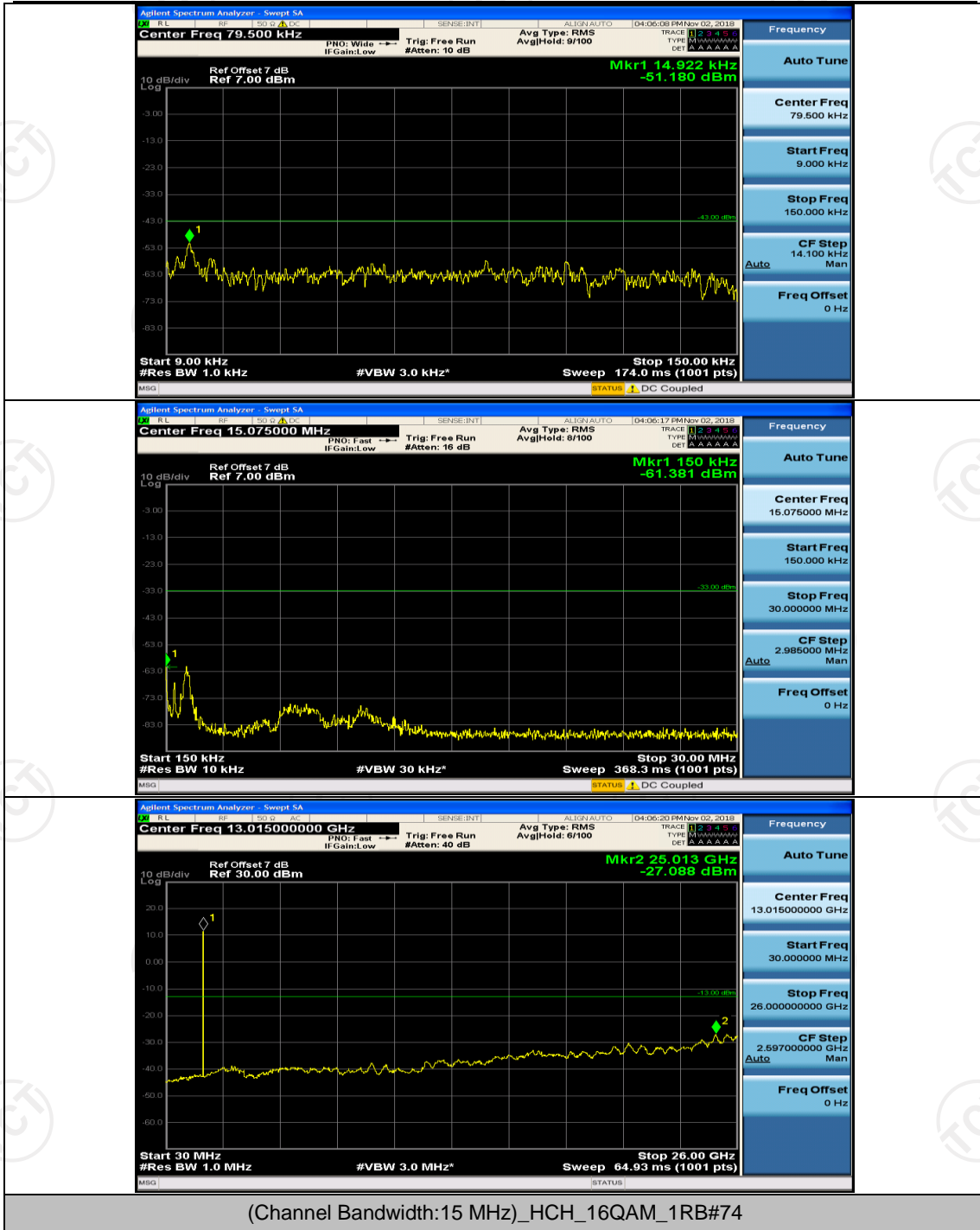
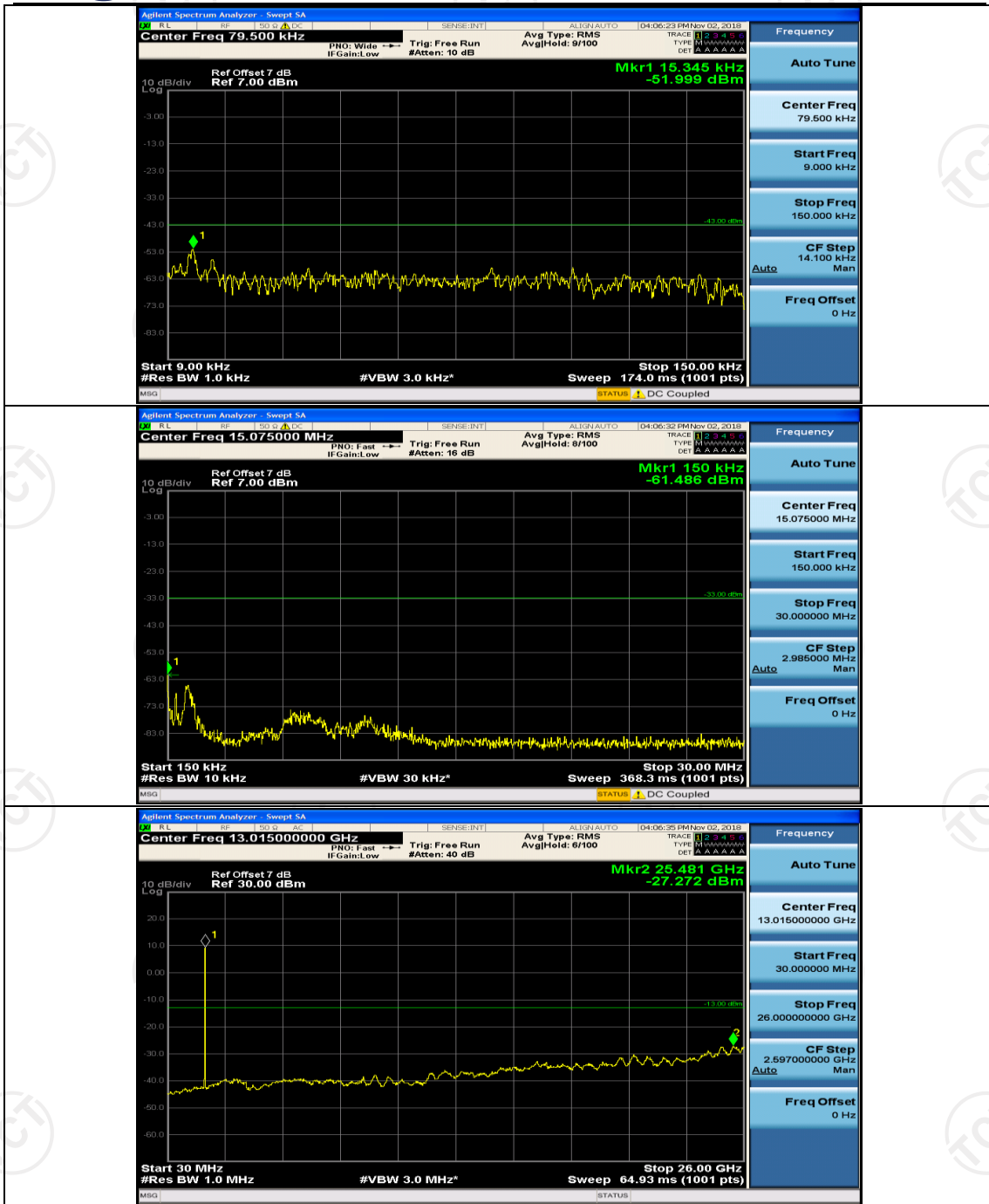


(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#0

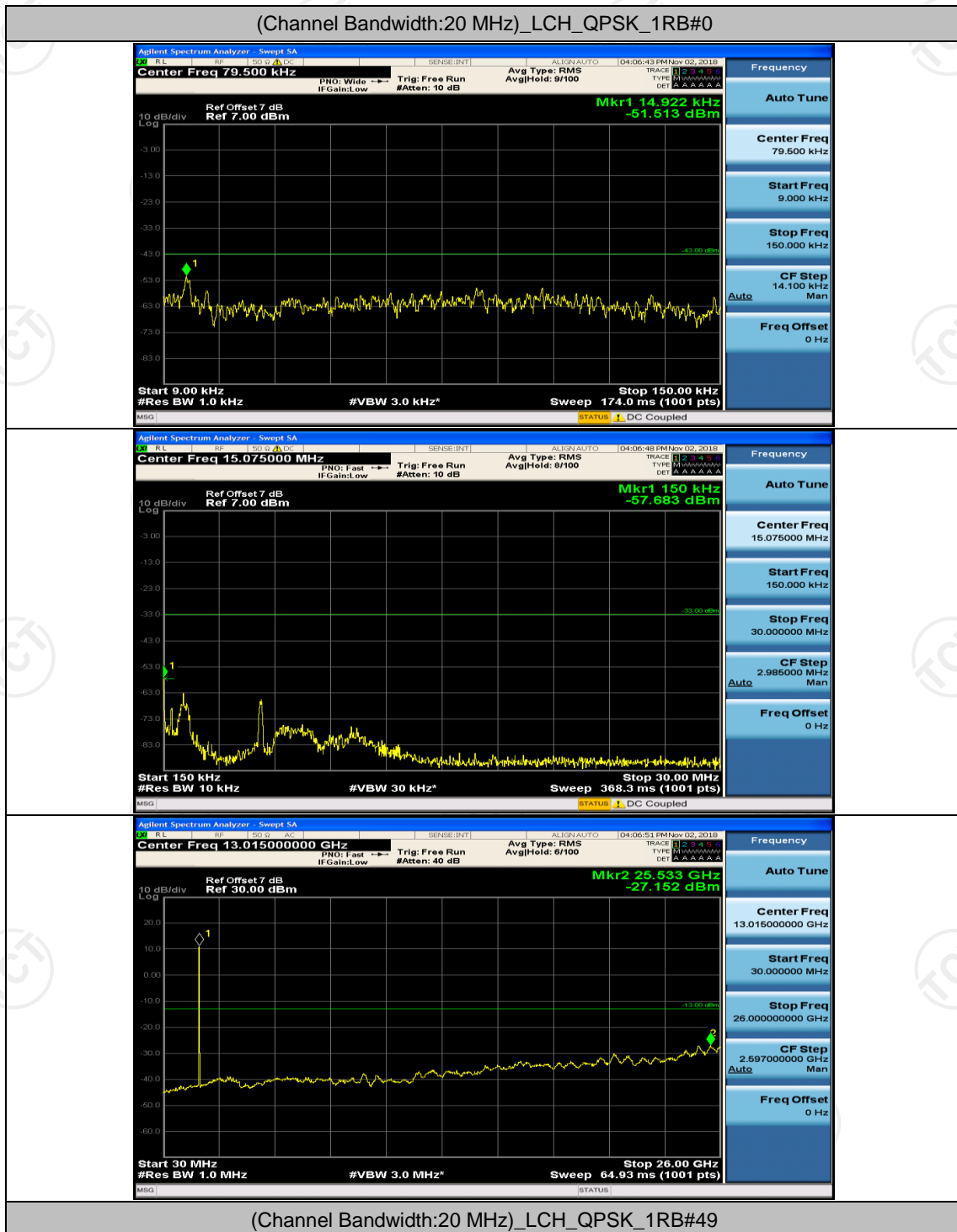


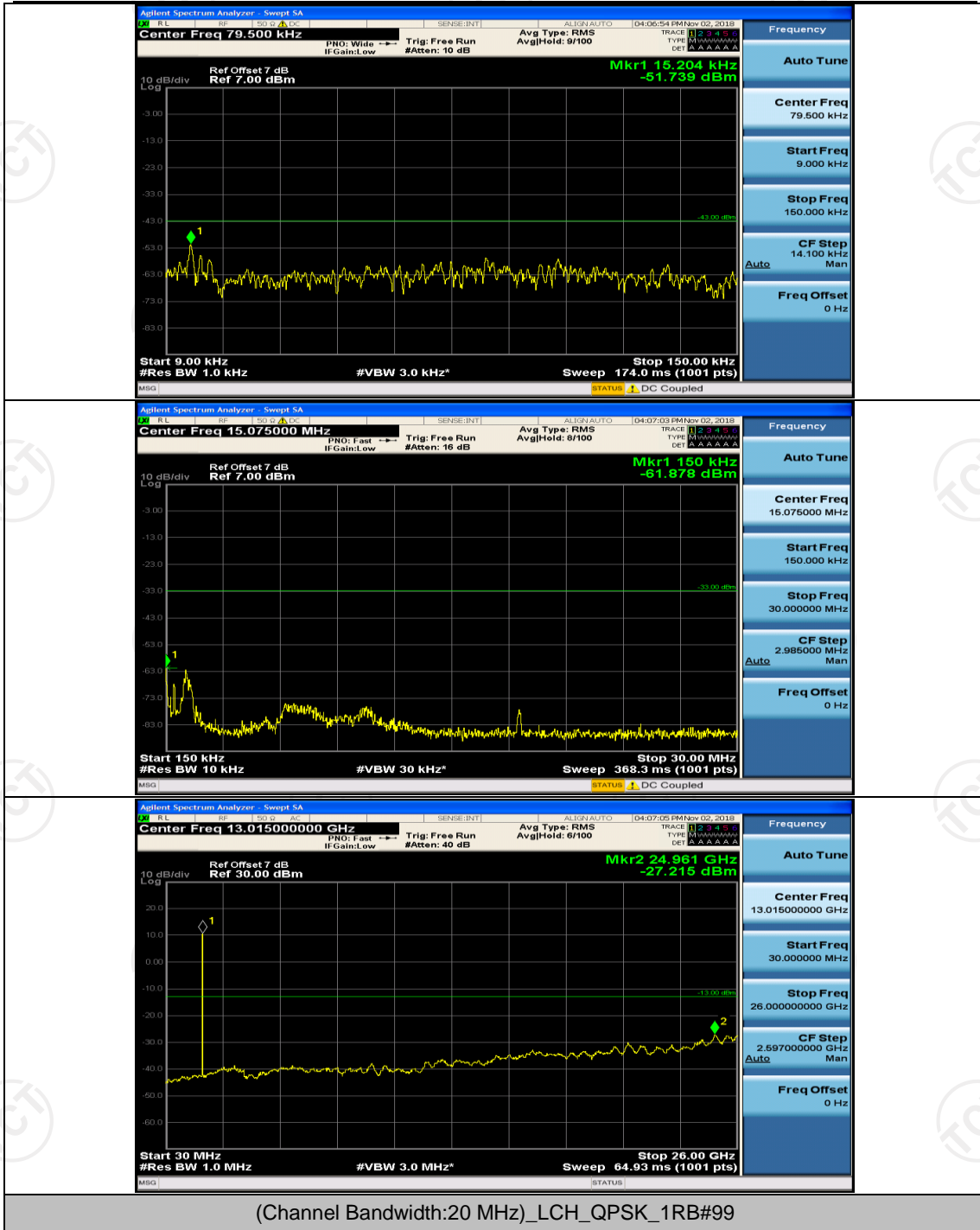
(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#37

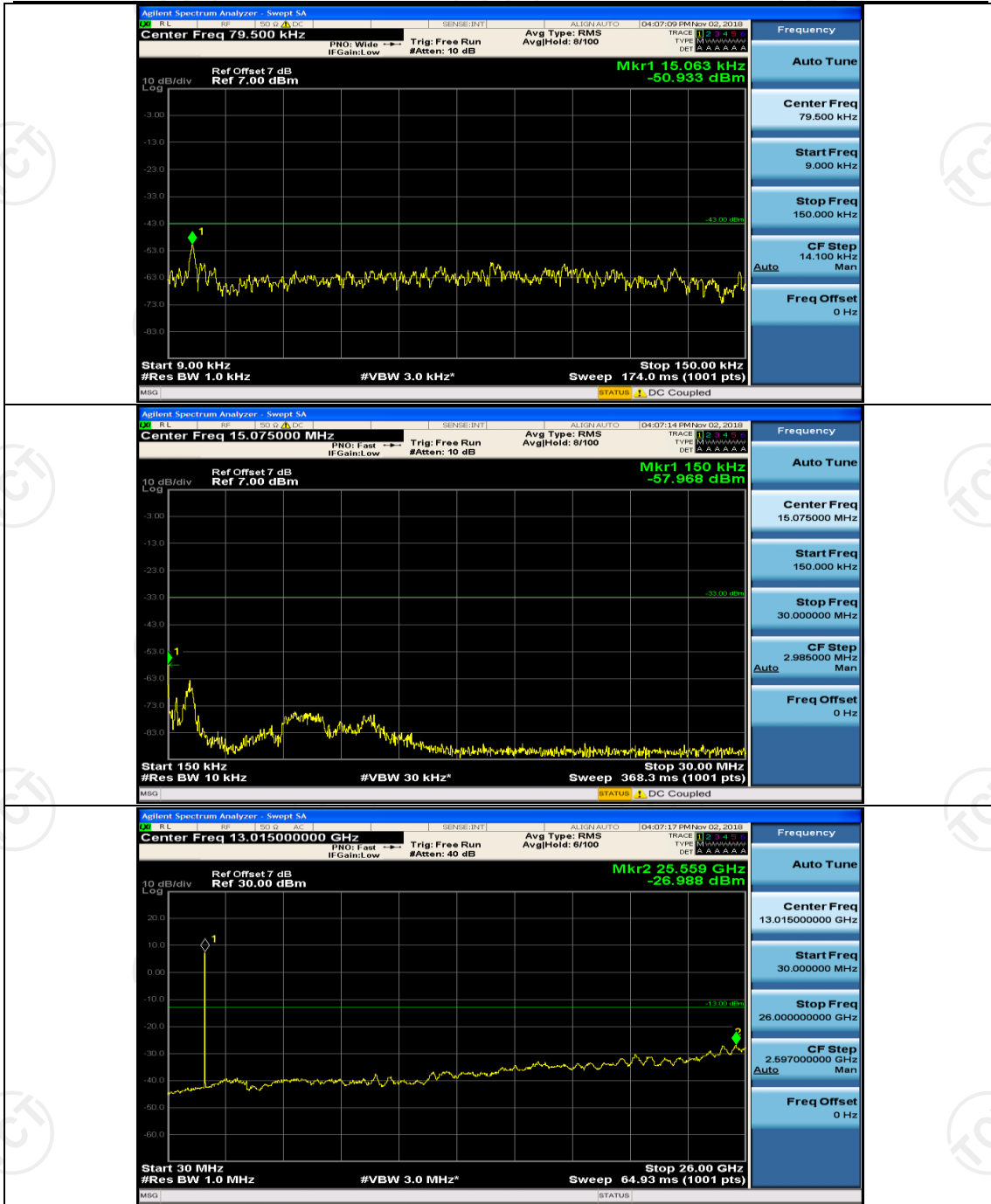




## Channel Bandwidth: 20 MHz

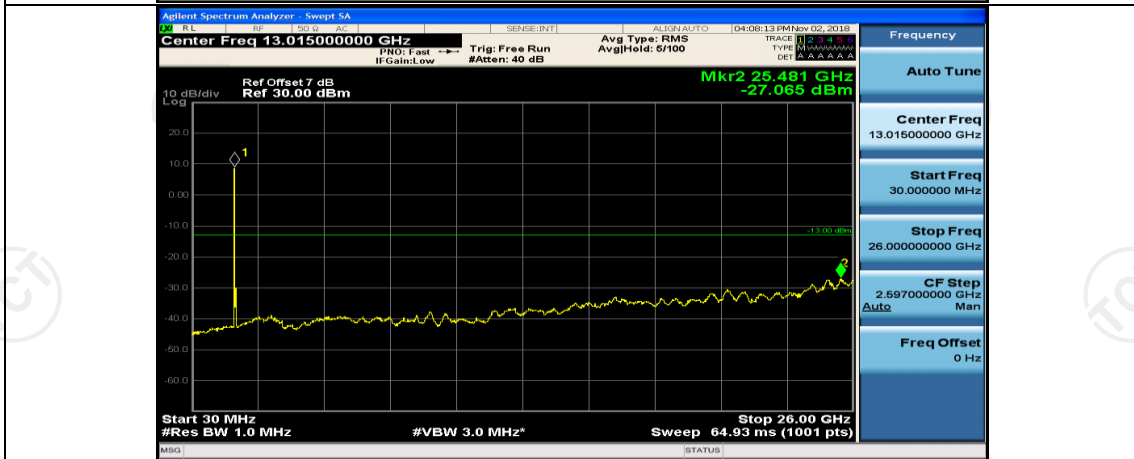
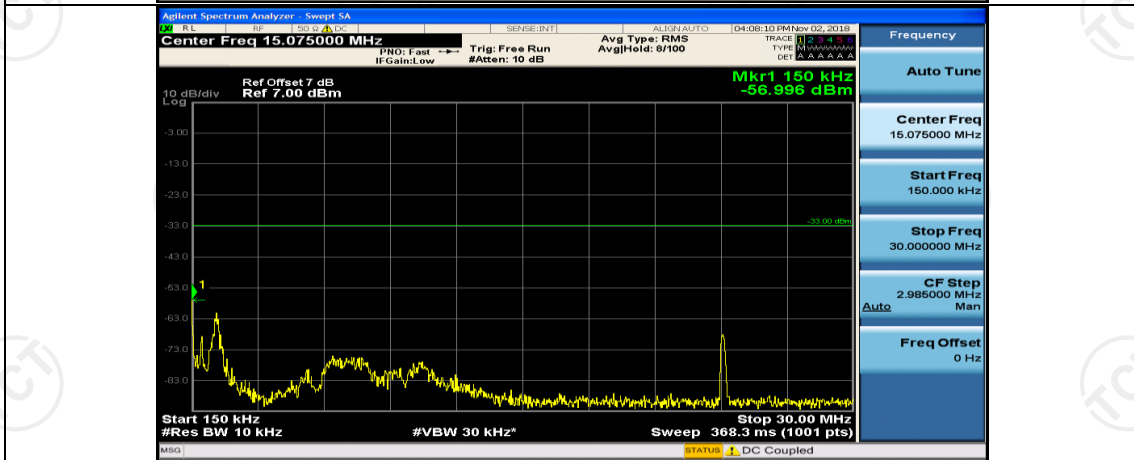
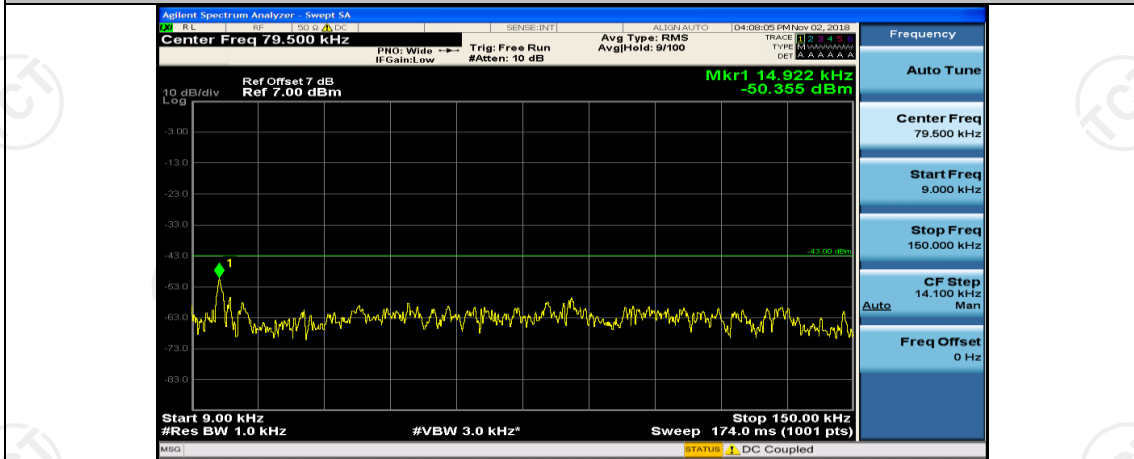






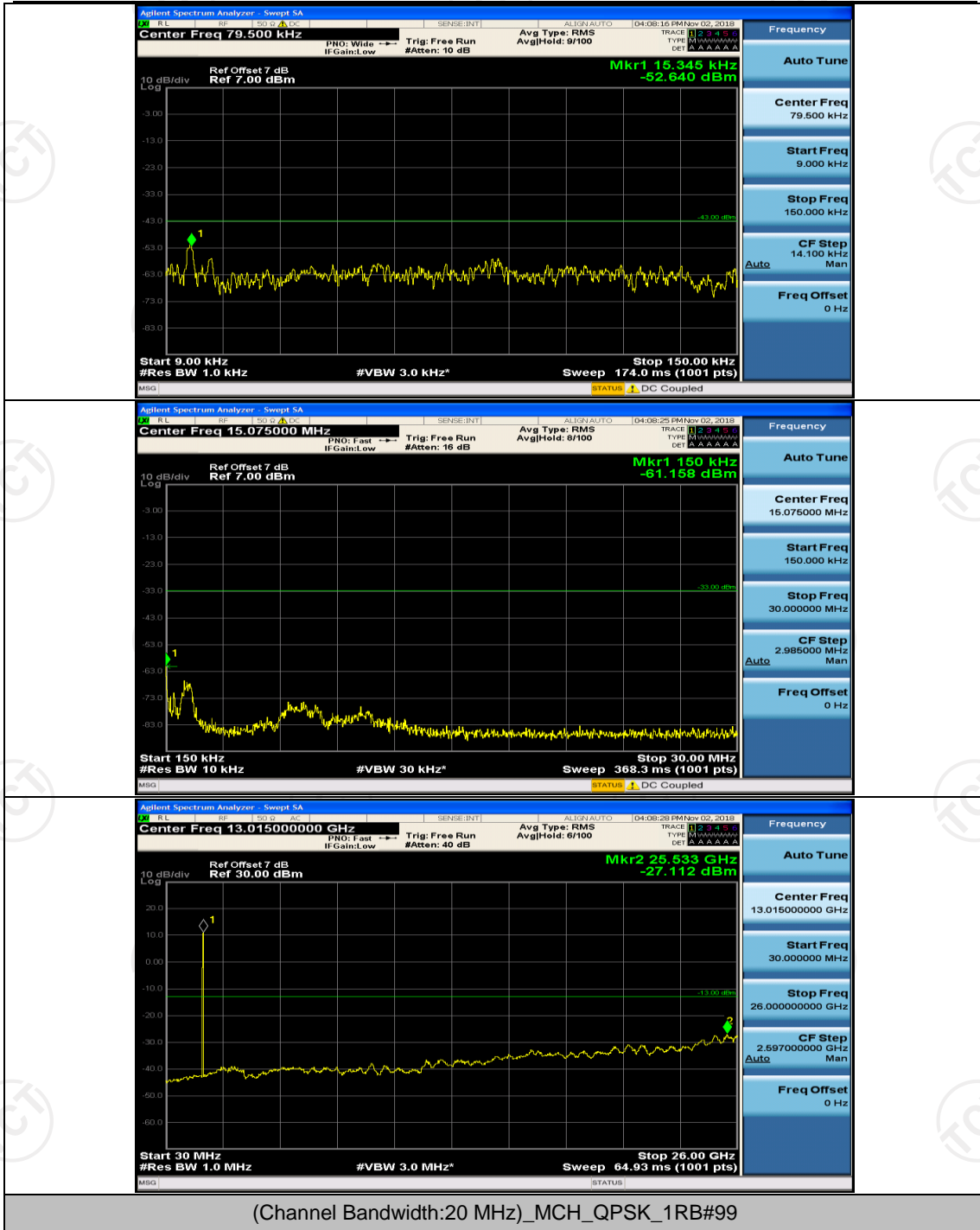


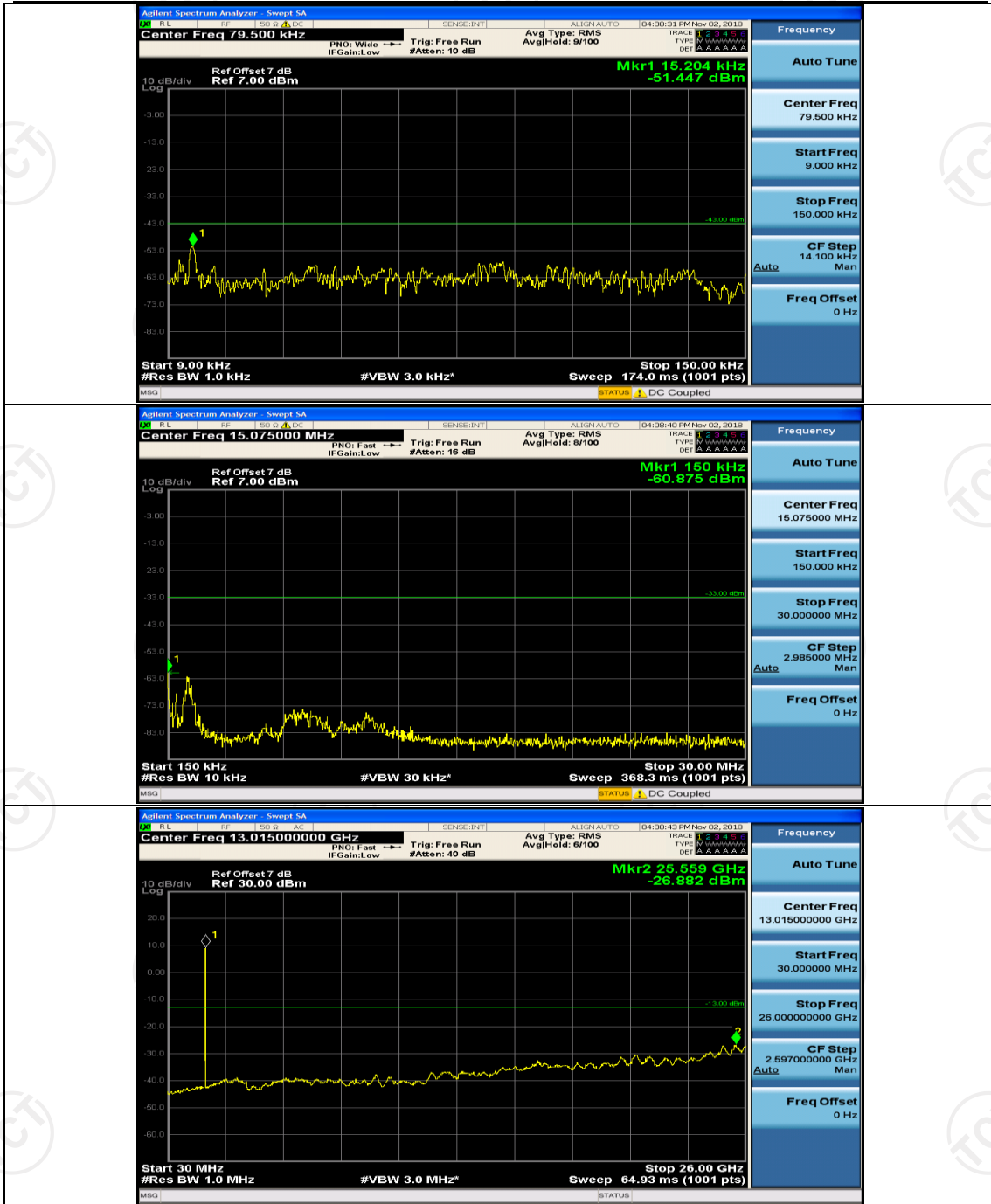
(Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#0



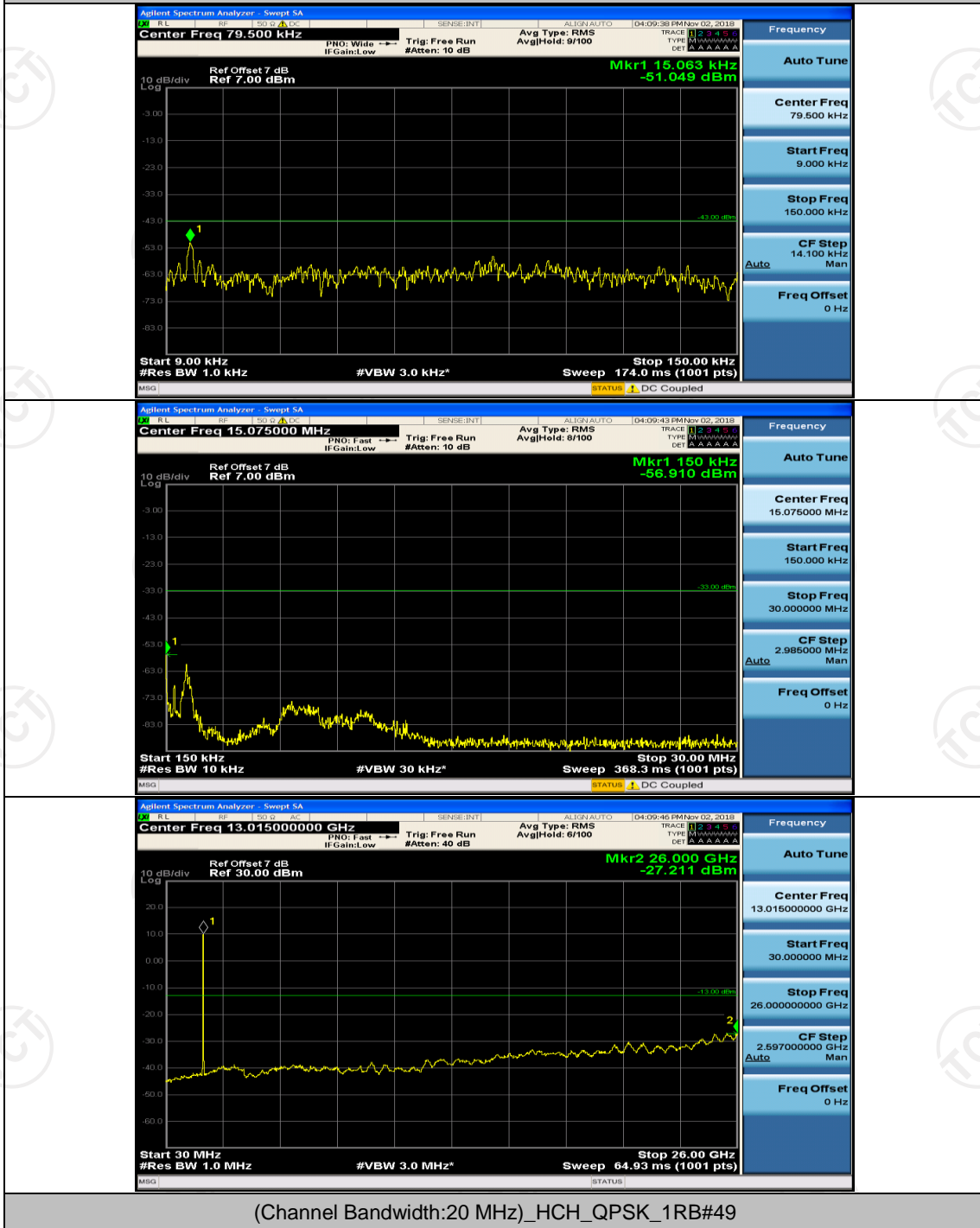
(Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#49



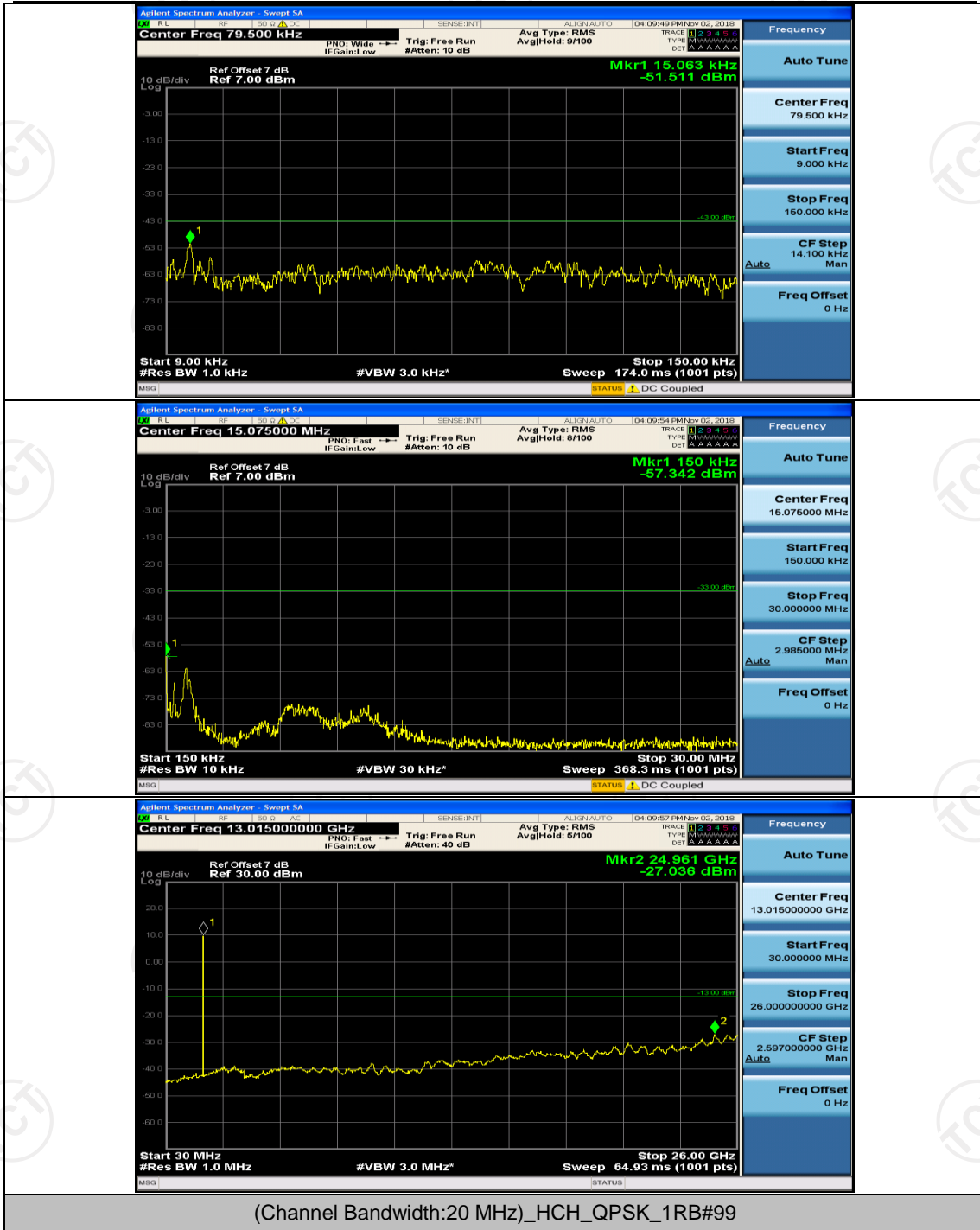


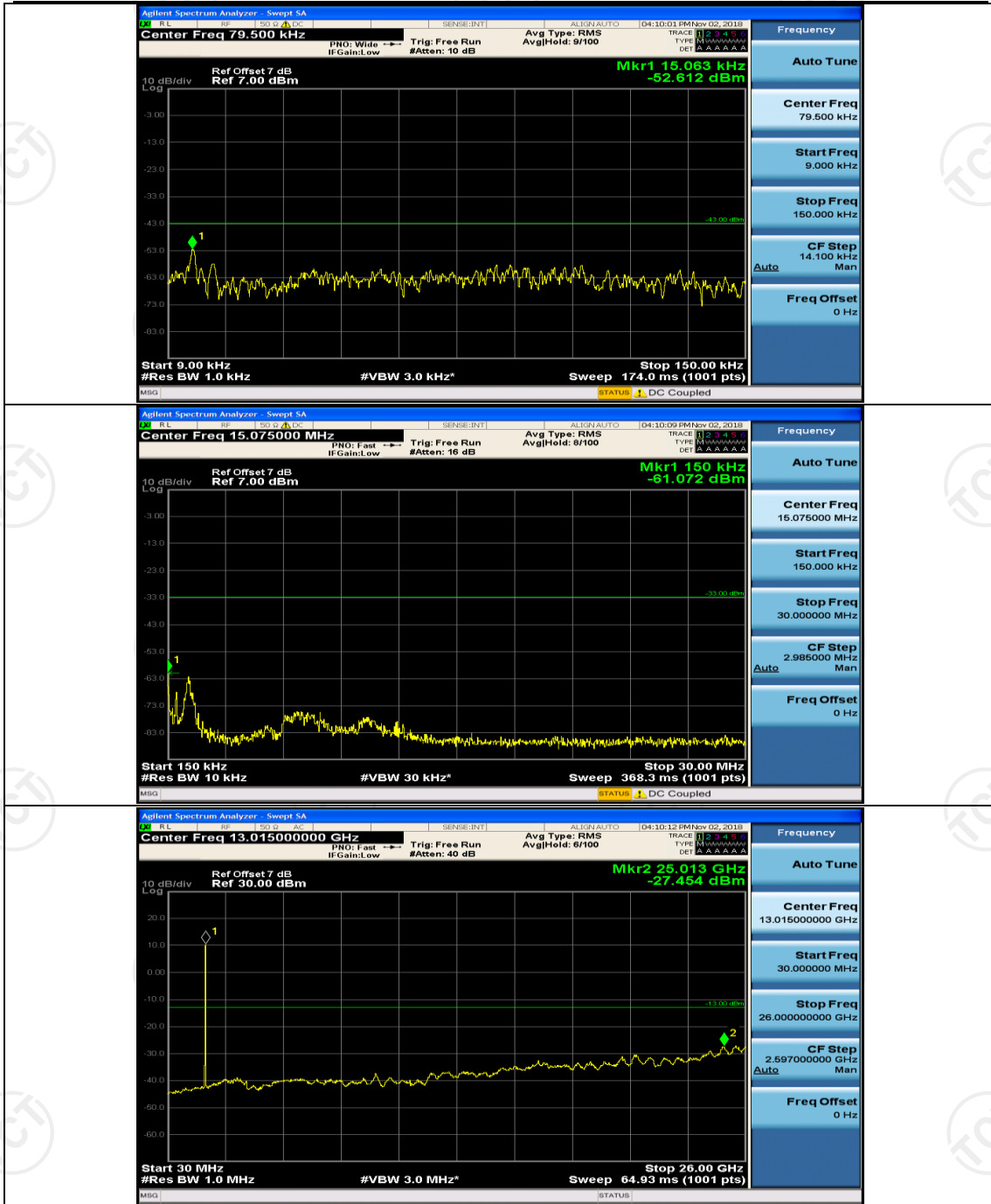


(Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#0

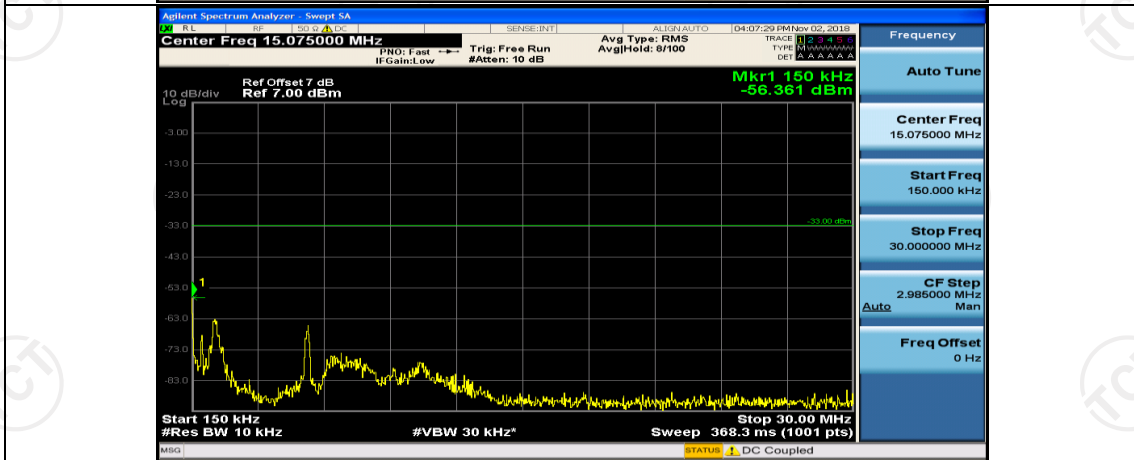
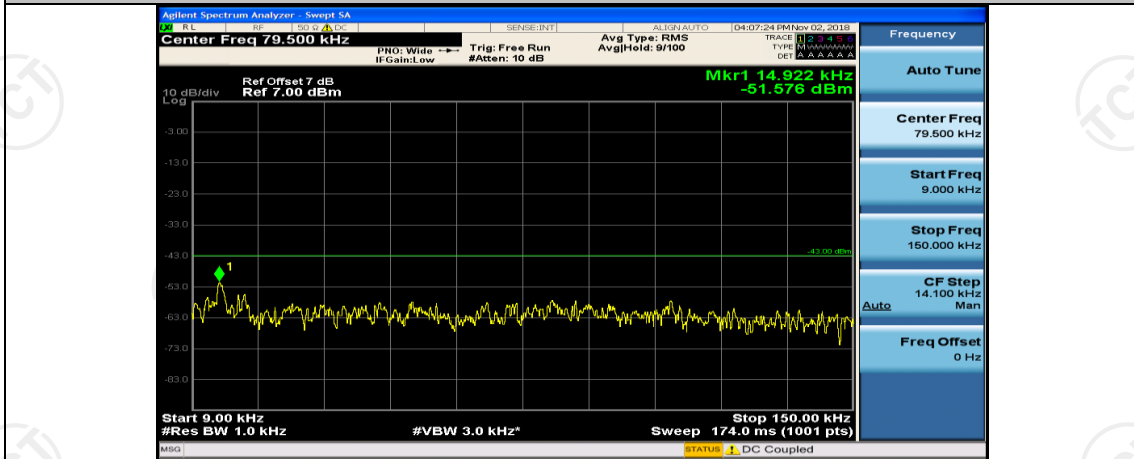


(Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#49

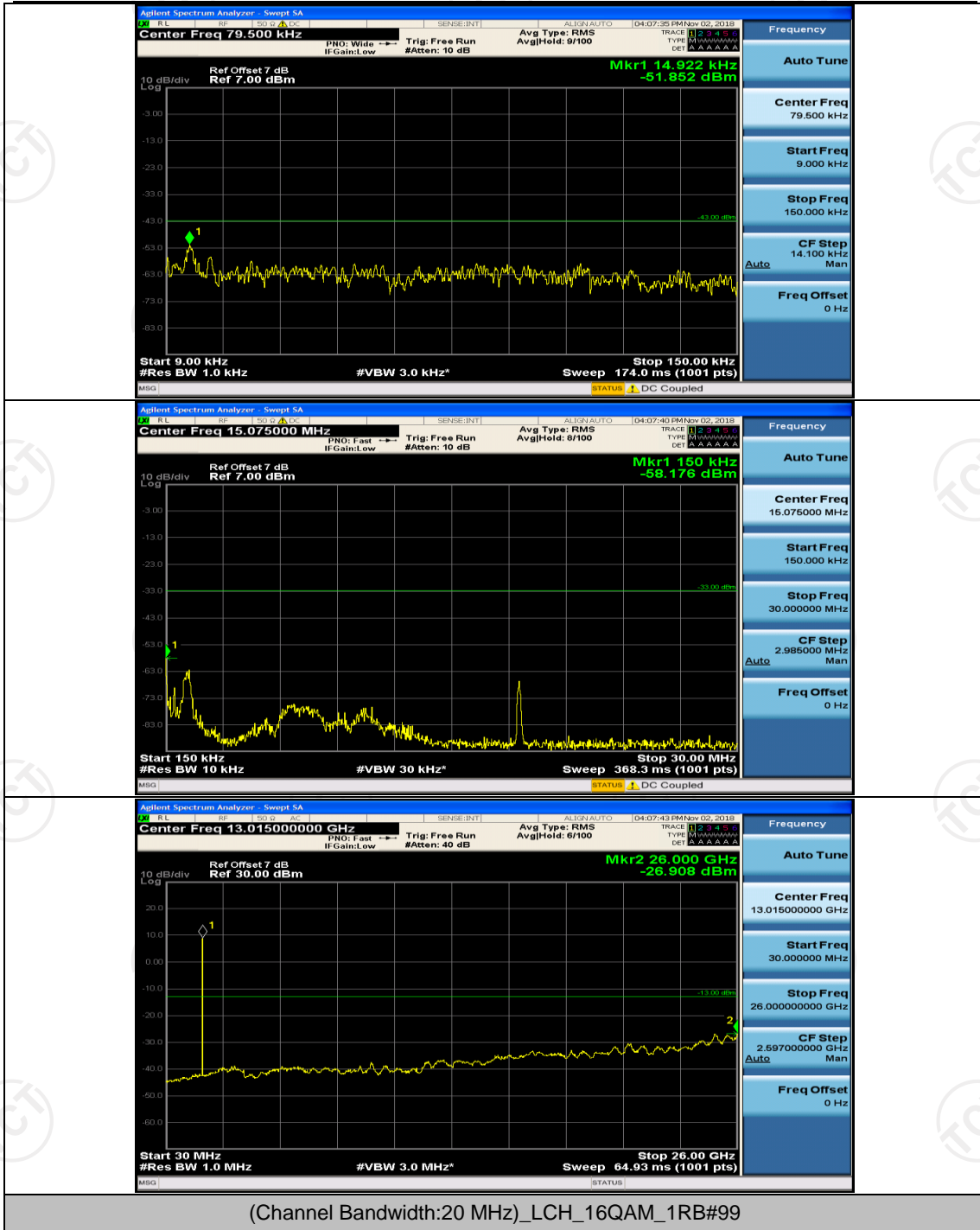




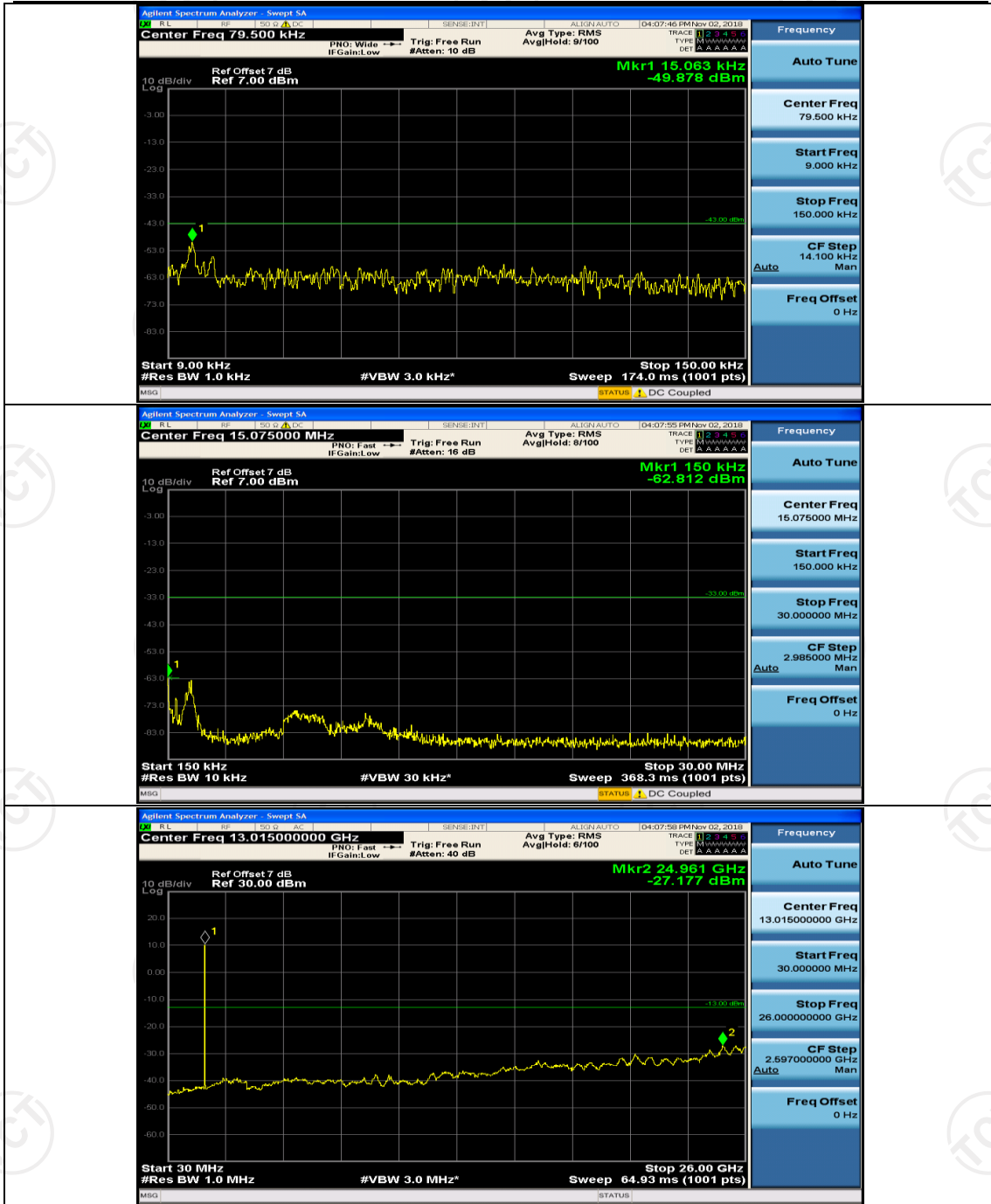
(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#0



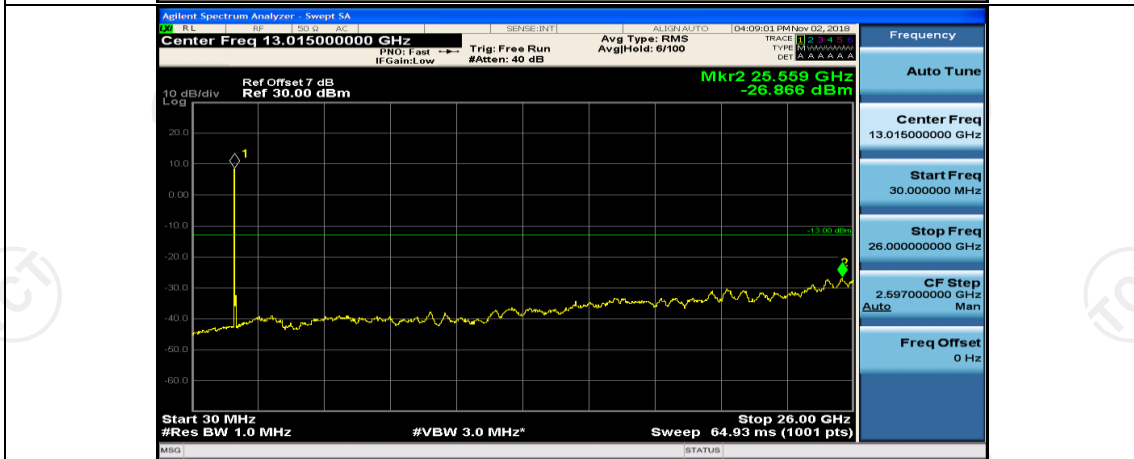
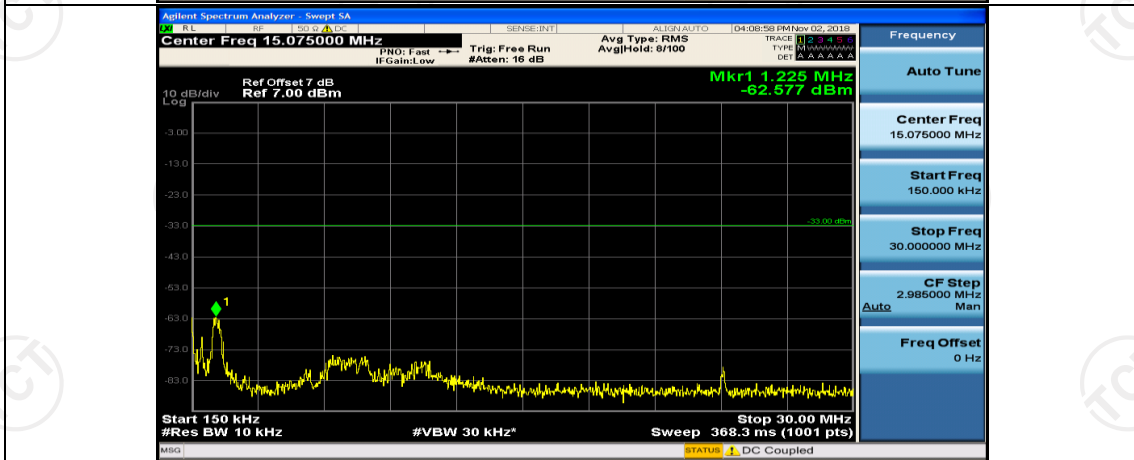
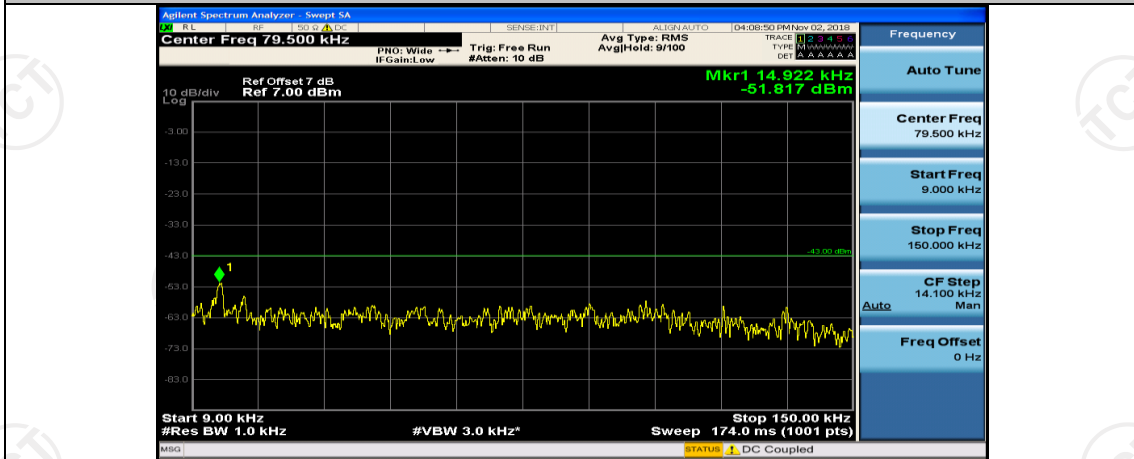
(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#49



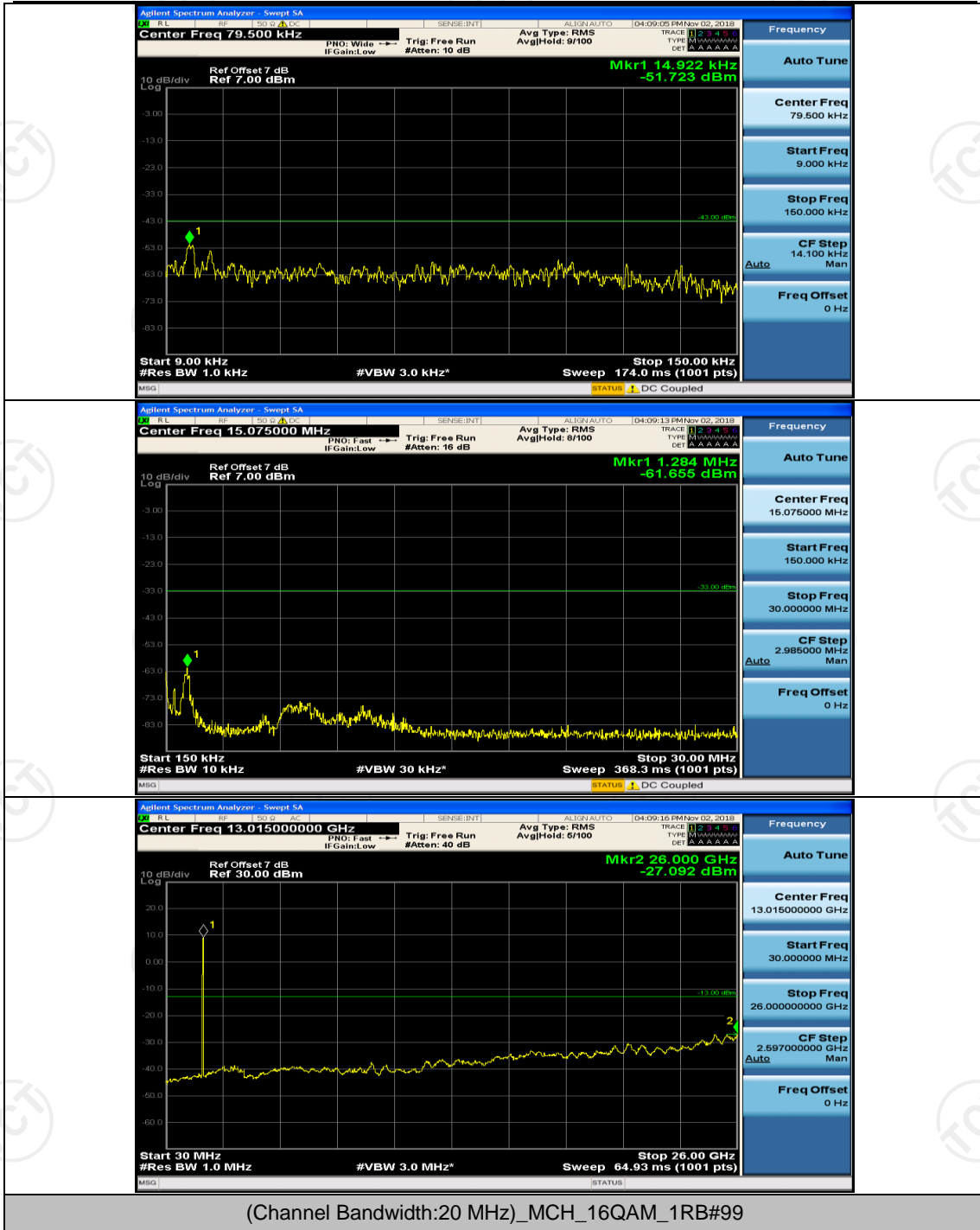


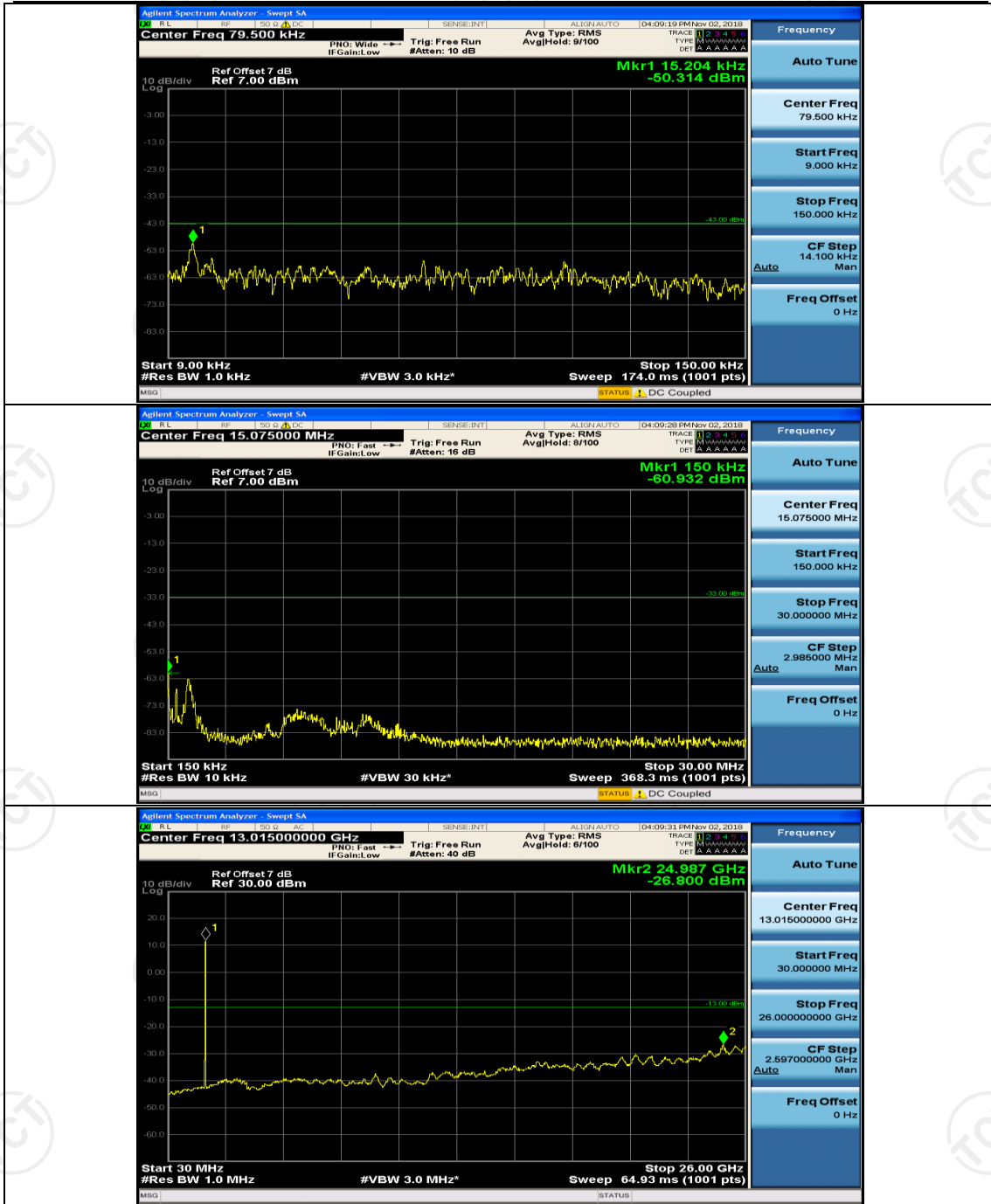


(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#0

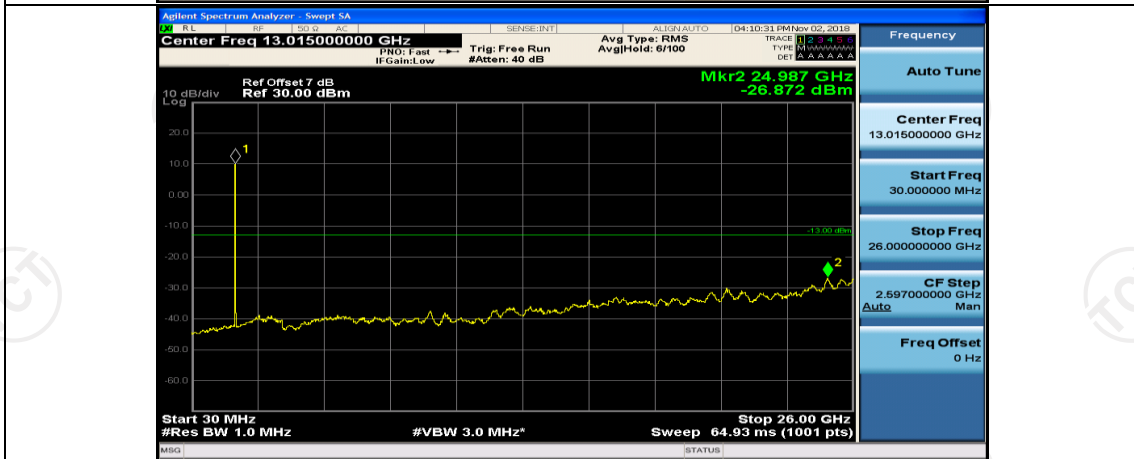
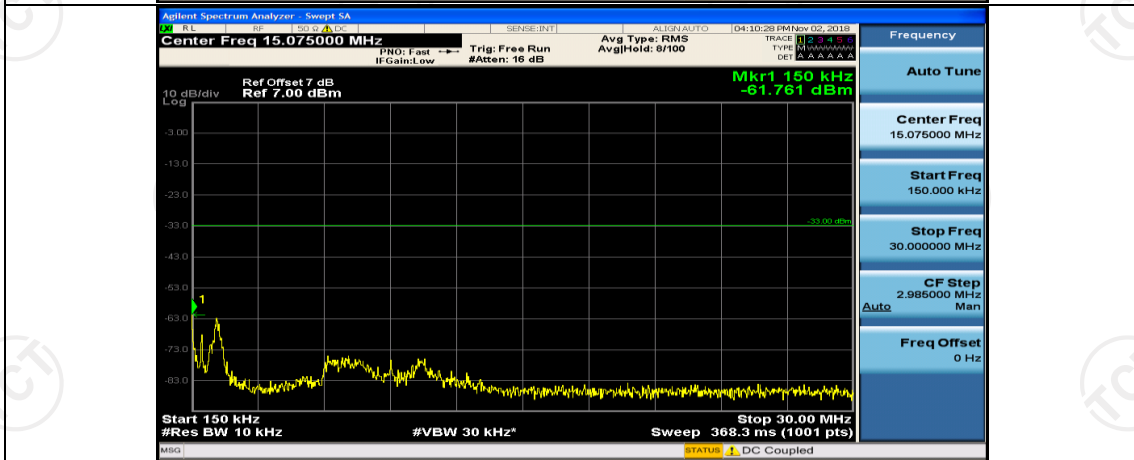
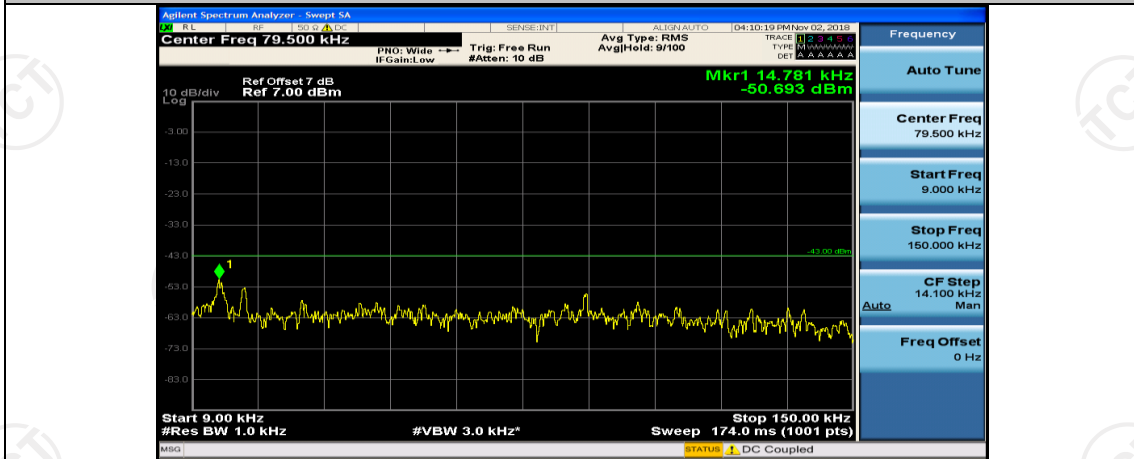


(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#49

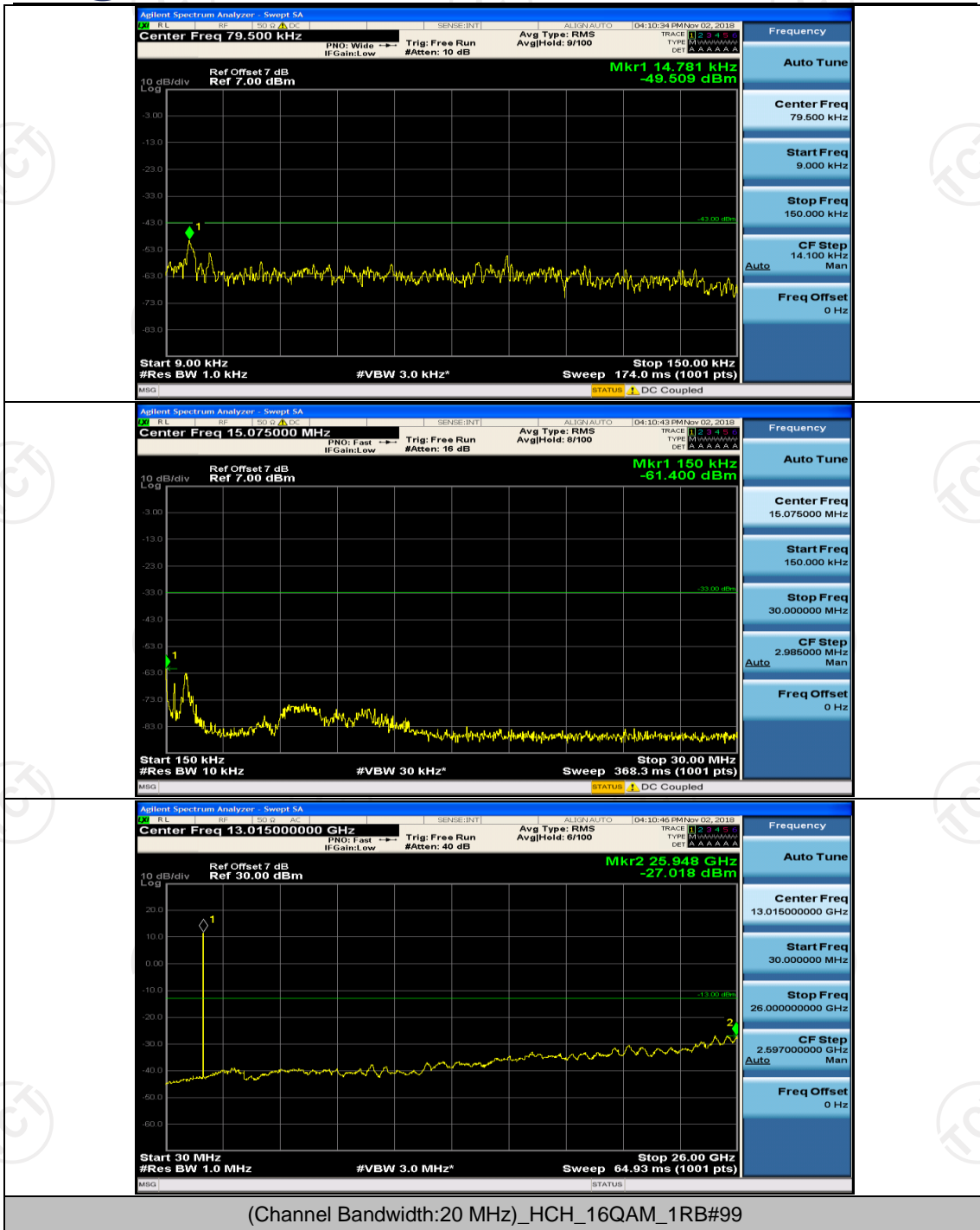


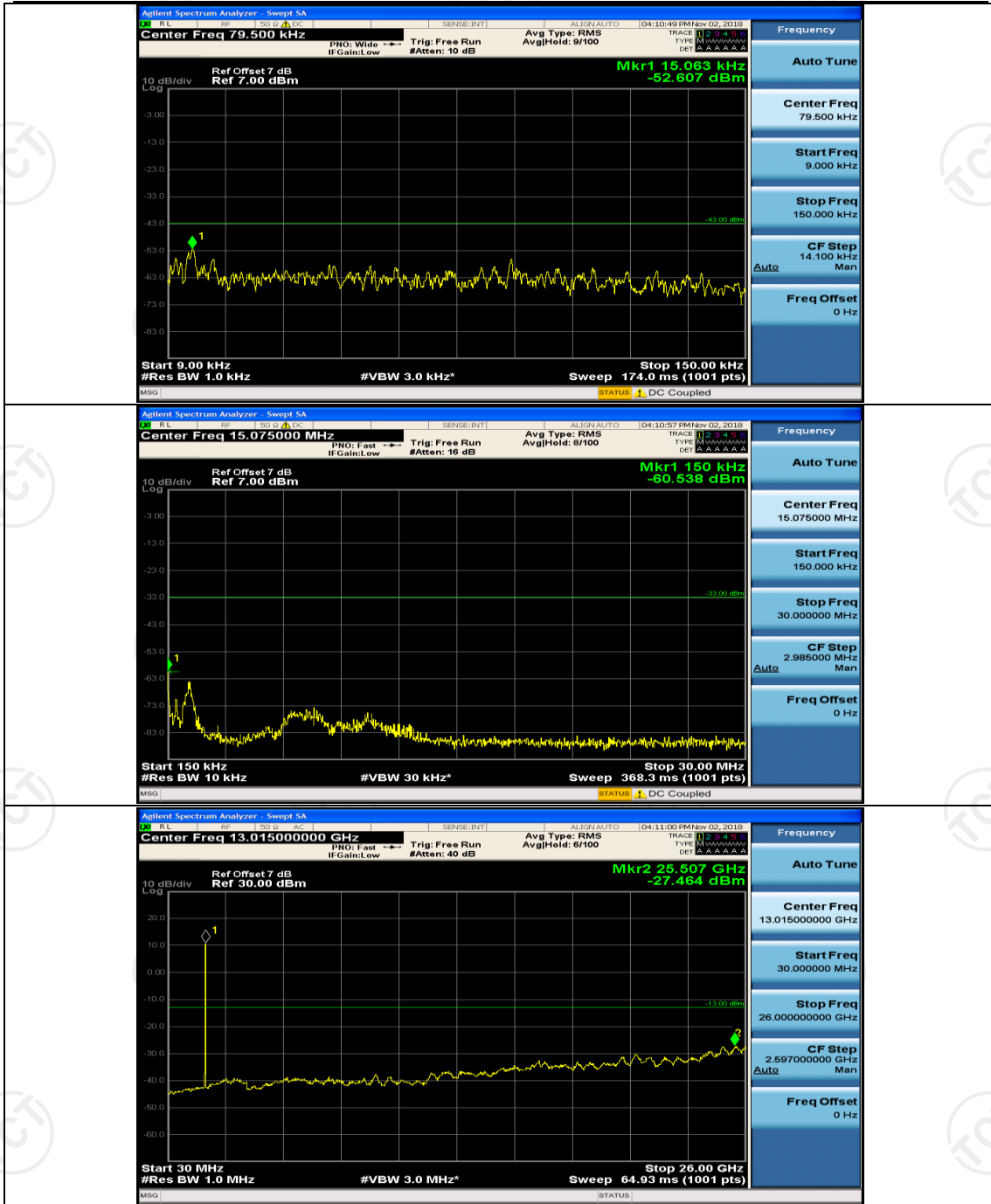


(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_1RB#0



(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	3.4	25	-0.000109	± 2.5	PASS
		3.85	25	0.000619	± 2.5	PASS
		4.5	25	0.000869	± 2.5	PASS
	MCH	3.4	25	0.000347	± 2.5	PASS
		3.85	25	0.000330	± 2.5	PASS
		4.5	25	0.001007	± 2.5	PASS
	HCH	3.4	25	0.000318	± 2.5	PASS
		3.85	25	0.001167	± 2.5	PASS
		4.5	25	-0.001241	± 2.5	PASS
16QAM	LCH	3.4	25	-0.000276	± 2.5	PASS
		3.85	25	0.001989	± 2.5	PASS
		4.5	25	0.001963	± 2.5	PASS
	MCH	3.4	25	-0.000553	± 2.5	PASS
		3.85	25	0.000702	± 2.5	PASS
		4.5	25	0.000471	± 2.5	PASS
	HCH	3.4	25	0.000090	± 2.5	PASS
		3.85	25	0.000718	± 2.5	PASS
		4.5	25	-0.001453	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.85	-30	-0.000301	± 2.5	PASS
		3.85	-20	-0.000159	± 2.5	PASS
		3.85	-10	-0.000569	± 2.5	PASS
		3.85	0	-0.001622	± 2.5	PASS
		3.85	10	0.001755	± 2.5	PASS
		3.85	20	0.000435	± 2.5	PASS
		3.85	30	0.001220	± 2.5	PASS
		3.85	40	0.001354	± 2.5	PASS
	MCH	3.85	50	0.001938	± 2.5	PASS
		3.85	-30	0.001577	± 2.5	PASS
		3.85	-20	-0.000306	± 2.5	PASS
		3.85	-10	0.001437	± 2.5	PASS
		3.85	0	0.001049	± 2.5	PASS
		3.85	10	0.000512	± 2.5	PASS
		3.85	20	0.001618	± 2.5	PASS
3.85	30	0.001635	± 2.5	PASS		

		3.85	40	0.001049	± 2.5	PASS
		3.85	50	0.001305	± 2.5	PASS
	HCH	3.85	-30	0.000767	± 2.5	PASS
		3.85	-20	0.000620	± 2.5	PASS
		3.85	-10	0.001036	± 2.5	PASS
		3.85	0	0.000506	± 2.5	PASS
		3.85	10	0.000604	± 2.5	PASS
		3.85	20	0.000489	± 2.5	PASS
		3.85	30	-0.001142	± 2.5	PASS
		3.85	40	0.001395	± 2.5	PASS
		3.85	50	-0.001404	± 2.5	PASS
16QAM		LCH	3.85	-30	-0.000828	± 2.5
	3.85		-20	-0.000452	± 2.5	PASS
	3.85		-10	0.000343	± 2.5	PASS
	3.85		0	0.000569	± 2.5	PASS
	3.85		10	0.001245	± 2.5	PASS
	3.85		20	0.001755	± 2.5	PASS
	3.85		30	0.001036	± 2.5	PASS
	3.85		40	0.001112	± 2.5	PASS
	3.85		50	0.000977	± 2.5	PASS
	MCH		3.85	-30	0.000974	± 2.5
		3.85	-20	-0.000132	± 2.5	PASS
		3.85	-10	0.000694	± 2.5	PASS
		3.85	0	-0.000215	± 2.5	PASS
		3.85	10	0.000528	± 2.5	PASS
		3.85	20	0.000471	± 2.5	PASS
		3.85	30	0.001090	± 2.5	PASS
		3.85	40	0.001767	± 2.5	PASS
		3.85	50	0.000644	± 2.5	PASS
		HCH	3.85	-30	0.000987	± 2.5
	3.85		-20	0.000799	± 2.5	PASS
	3.85		-10	0.001019	± 2.5	PASS
	3.85		0	0.001223	± 2.5	PASS
	3.85		10	0.000604	± 2.5	PASS
	3.85		20	0.000628	± 2.5	PASS
	3.85		30	0.000734	± 2.5	PASS
	3.85		40	-0.000514	± 2.5	PASS
	3.85		50	-0.001690	± 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

<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Lowest</b>
<b>Modulation:</b>	<b>QPSK</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.4	Vertical	-34.37	-13.00	PASS
5132.1	V	-46.56		
-	V	-		
3421.4	Horizontal	-35.98		
5132.1	H	-48.17		
-	H	-		
<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Middle</b>
<b>Modulation:</b>	<b>QPSK</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465	Vertical	-32.62	-13.00	PASS
5197.5	V	-44.37		
-	V	-		
3465	Horizontal	-34.21		
5197.5	H	-47.80		
-	H	-		
<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Highest</b>
<b>Modulation:</b>	<b>QPSK</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.6	Vertical	-33.75	-13.00	PASS
5262.9	V	-44.86		
-	V	-		
3508.6	Horizontal	-35.32		
5262.9	H	-46.40		
-	H	-		

-	H	-	
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<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Lowest</b>
<b>Modulation:</b>	<b>16QAM</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.4	Vertical	-33.21	-13.00	PASS
5132.1	V	-44.75		
-	V	-		
3421.4	Horizontal	-36.29		
5132.1	H	-49.62		
-	H	-		
<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Middle</b>
<b>Modulation:</b>	<b>16QAM</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465	Vertical	-34.19	-13.00	PASS
5197.5	V	-42.34		
-	V	-		
3465	Horizontal	-36.85		
5197.5	H	-46.44		
-	H	-		
<b>Bandwidth:</b>	<b>1.4M</b>		<b>Test channel:</b>	<b>Highest</b>
<b>Modulation:</b>	<b>16QAM</b>		<b>Temperature :</b>	<b>23~24°C</b>
<b>RB #:</b>	<b>1RB #0</b>		<b>Relative Humidity:</b>	<b>46~48%</b>
<b>Note:</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.6	Vertical	-33.65	-13.00	PASS
5262.9	V	-42.30		
-	V	-		
3508.6	Horizontal	-35.66		
5262.9	H	-47.87		
-	H	-		

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