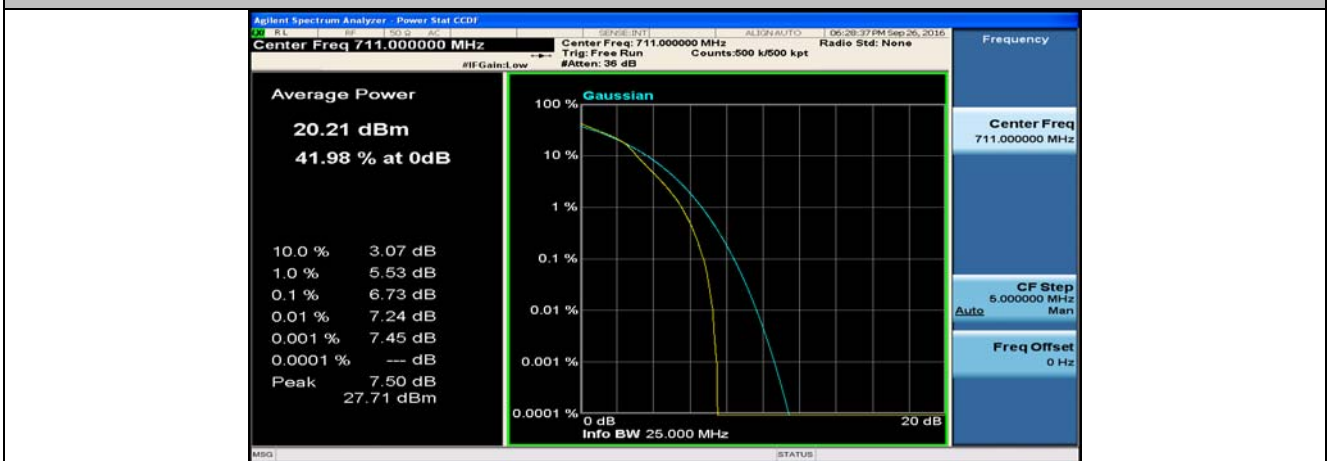
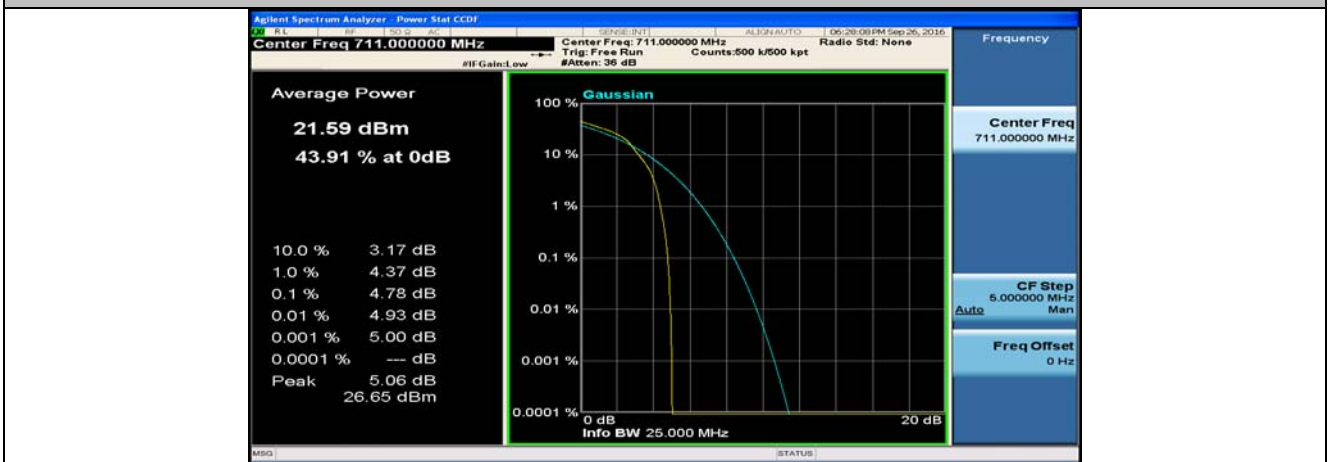
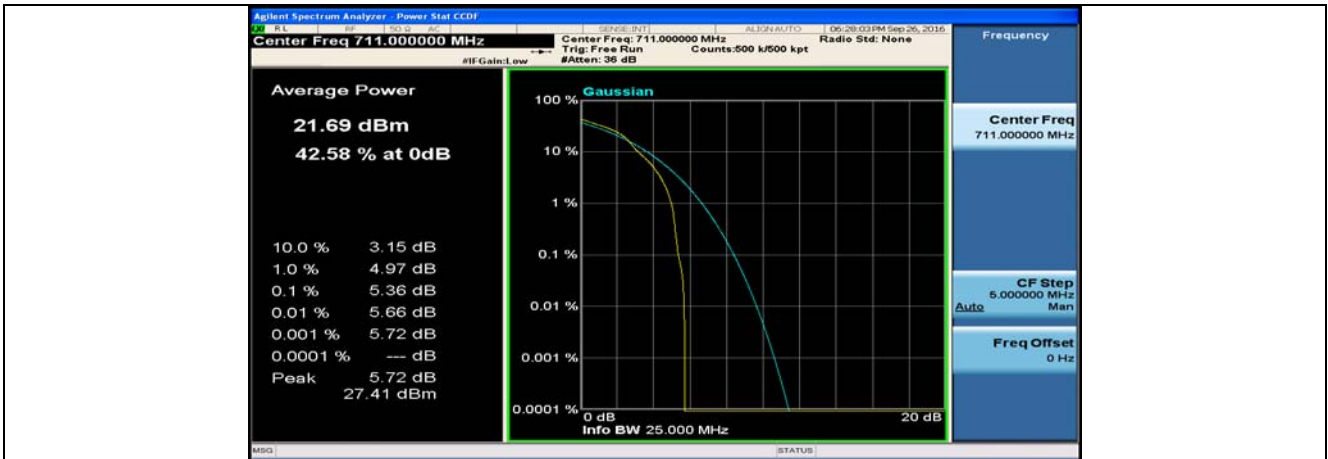
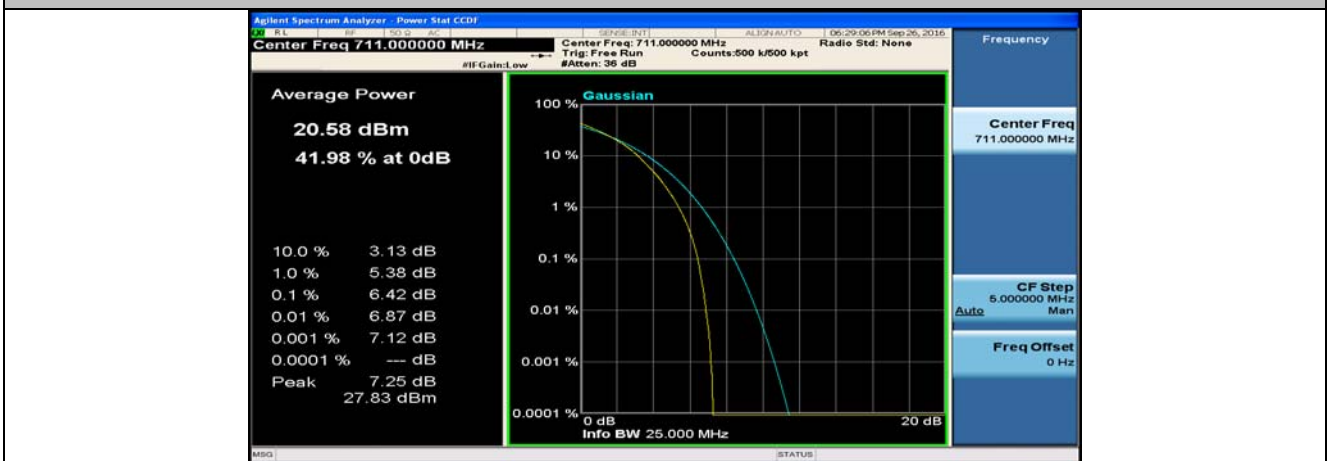
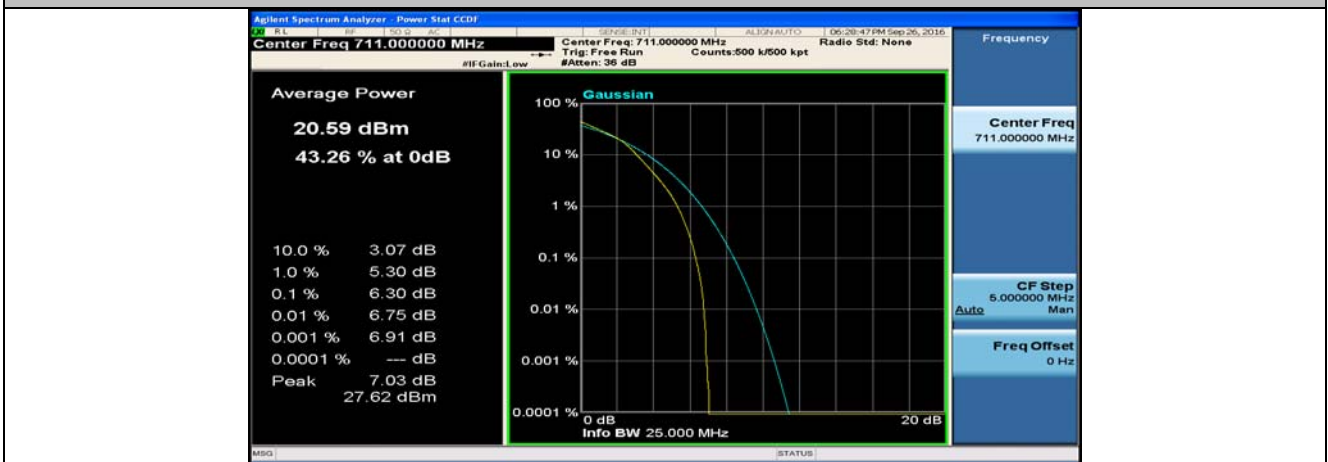
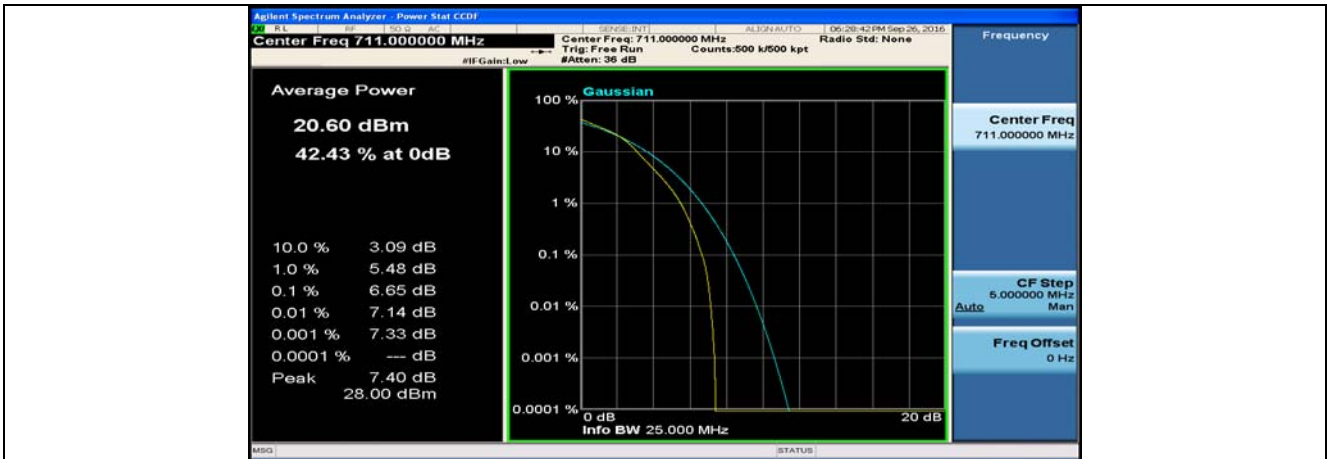


Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#24





## 26dB Bandwidth and Occupied Bandwidth

### Test Result

#### Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	4.4905	4.846	PASS
	MCH	15	0	4.4860	4.809	PASS
	HCH	15	0	4.4905	4.825	PASS
16QAM	LCH	15	0	4.4907	4.822	PASS
	MCH	15	0	4.4918	4.830	PASS
	HCH	15	0	4.4840	4.849	PASS

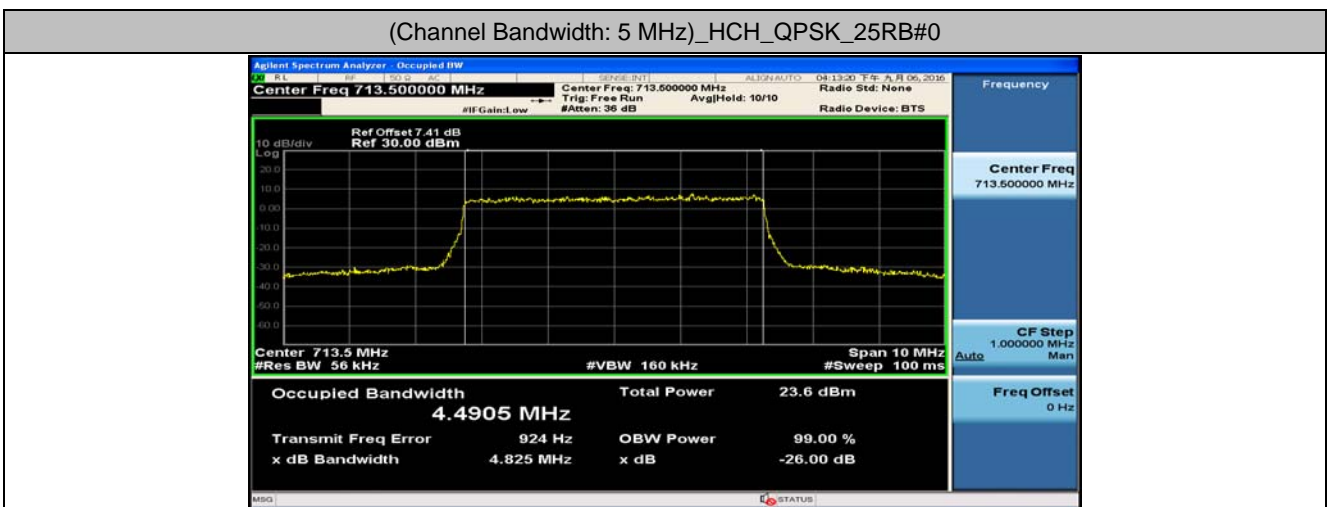
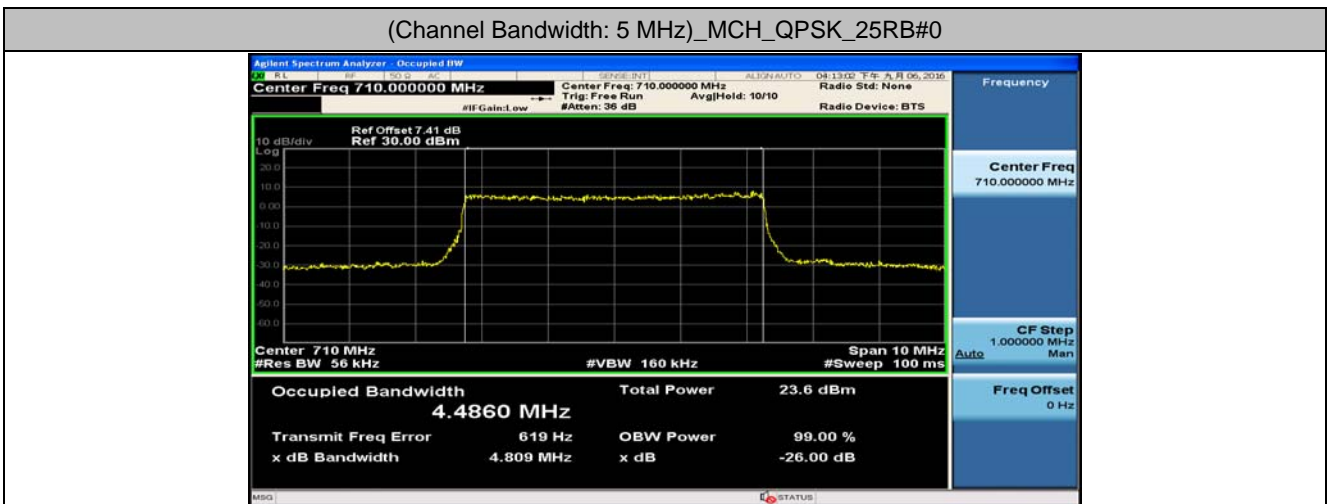
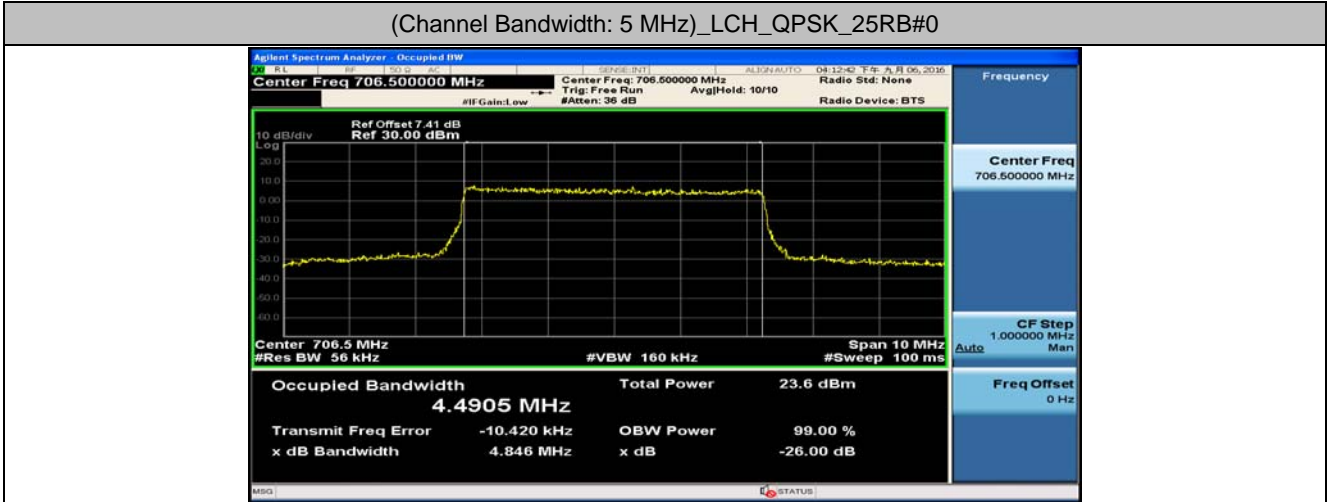
#### Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9740	9.488	PASS
	MCH	50	0	8.9770	9.591	PASS
	HCH	50	0	8.9513	9.473	PASS
16QAM	LCH	50	0	8.9716	9.560	PASS
	MCH	50	0	8.9662	9.494	PASS
	HCH	50	0	8.9608	9.410	PASS

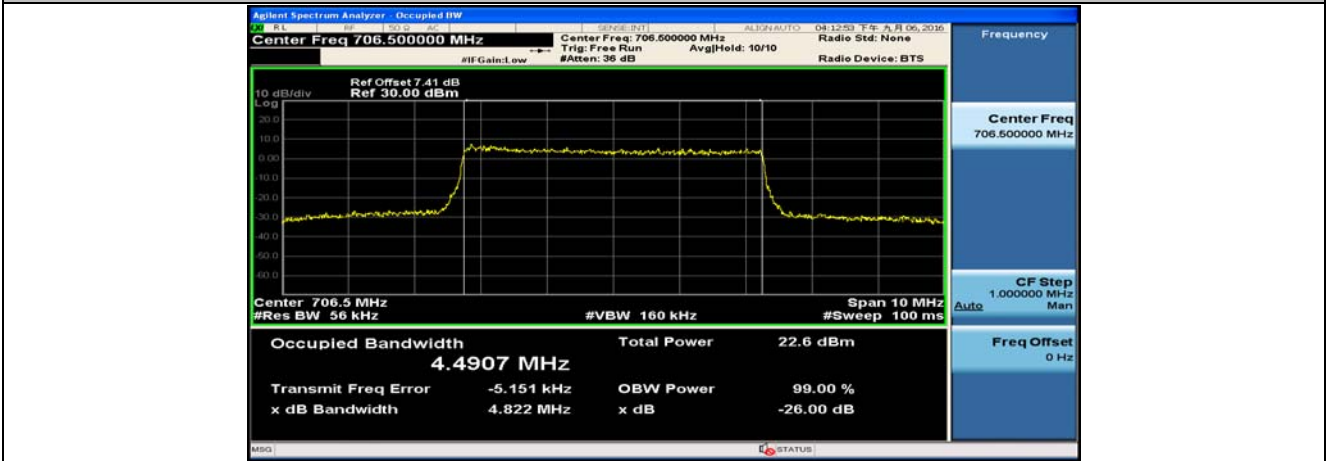


Test Graphs

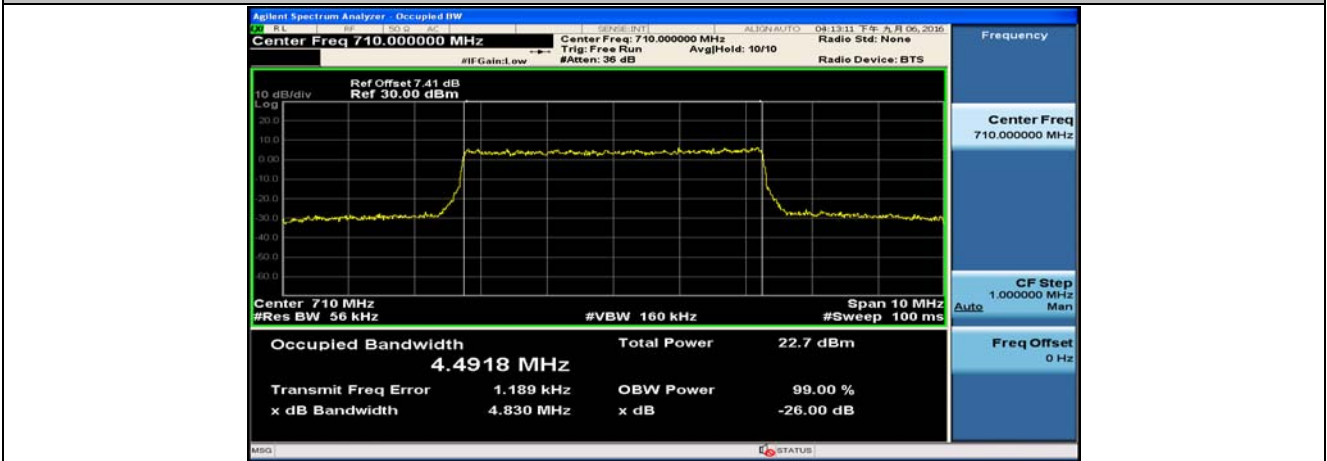
Channel Bandwidth: 5 MHz



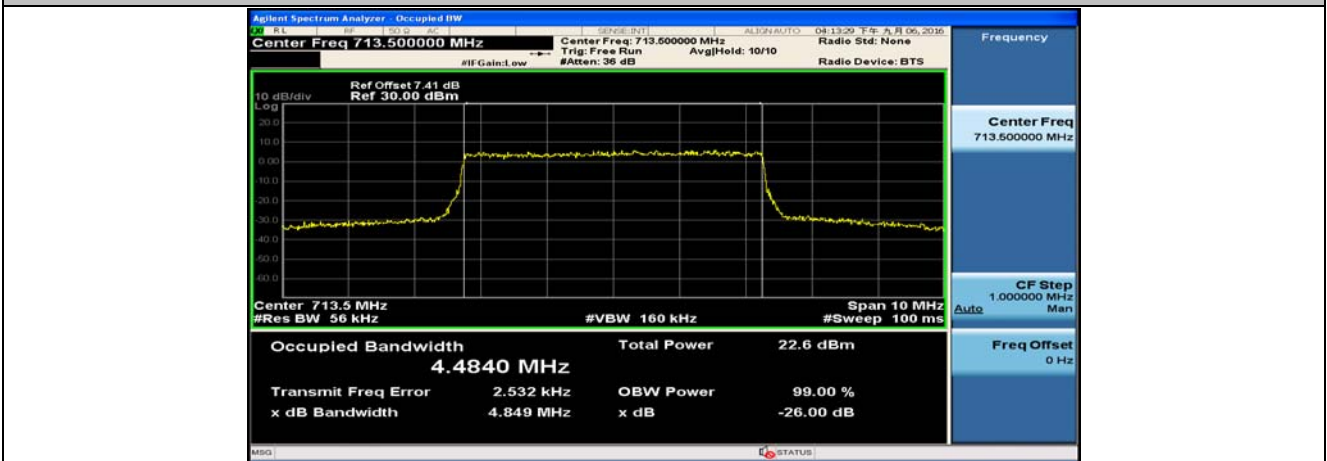
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_25RB#0



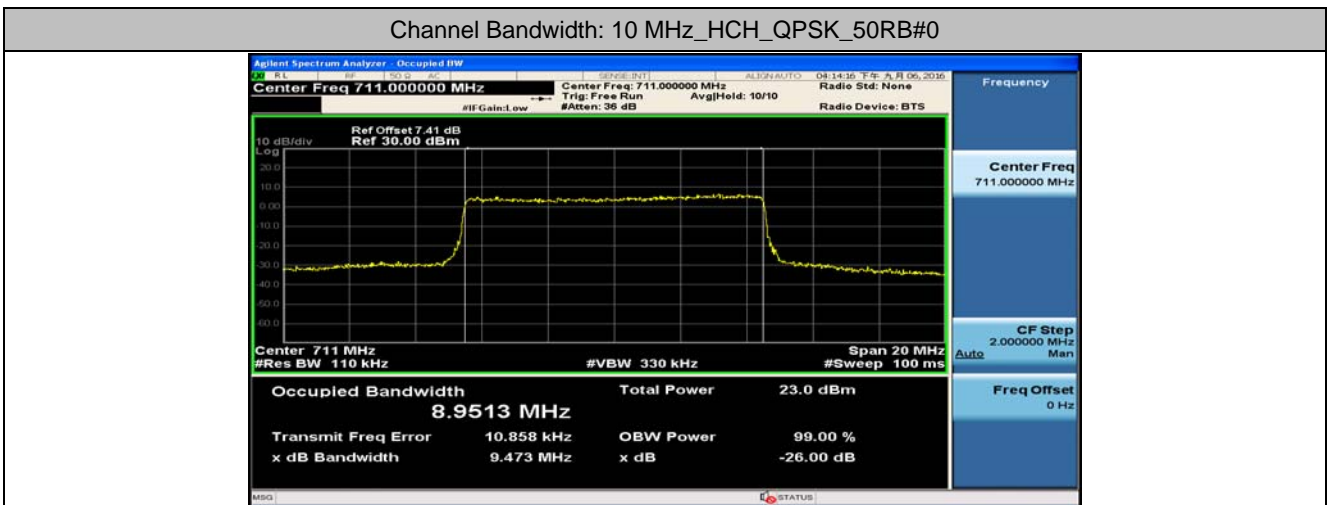
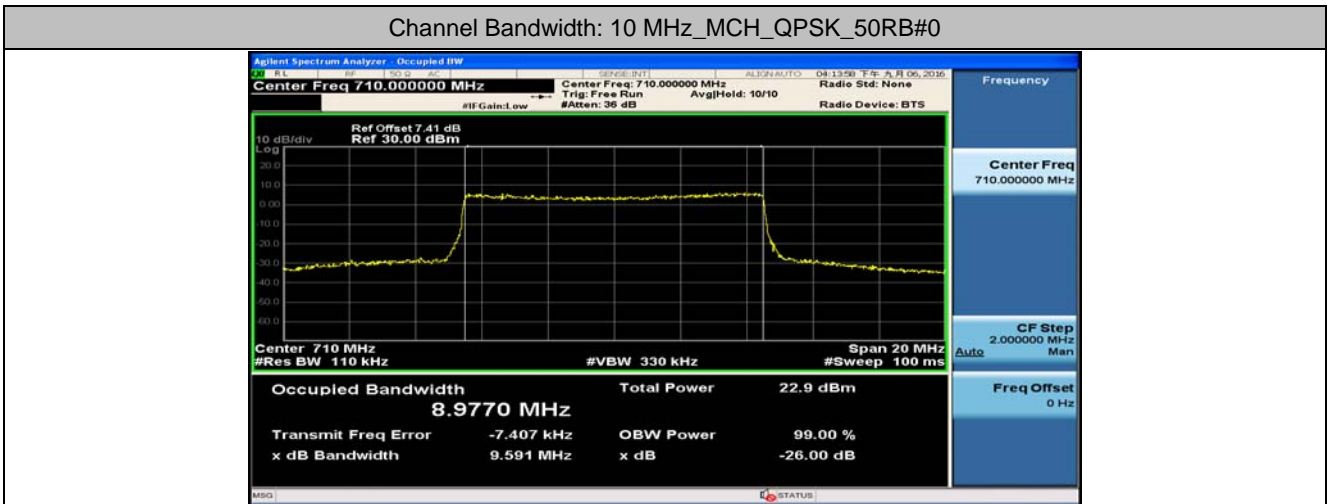
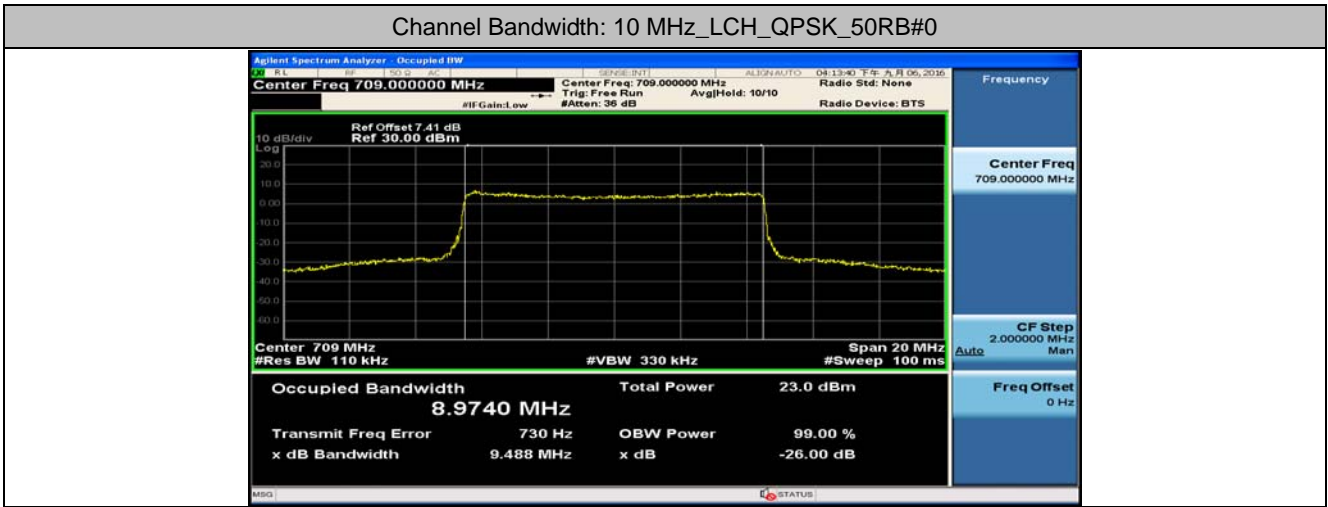
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_25RB#0



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_25RB#0

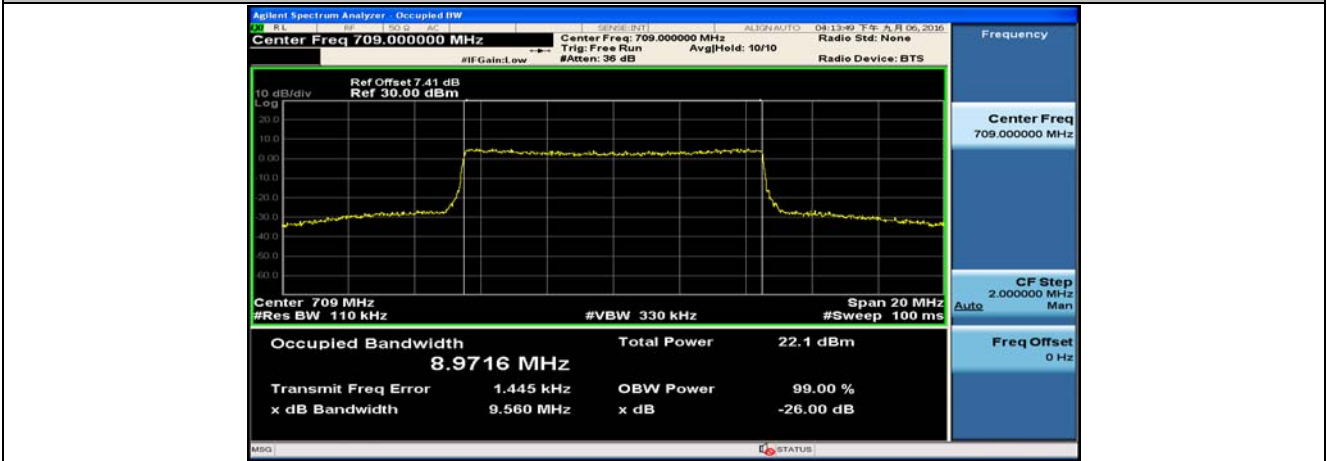


**Channel Bandwidth: 10 MHz**

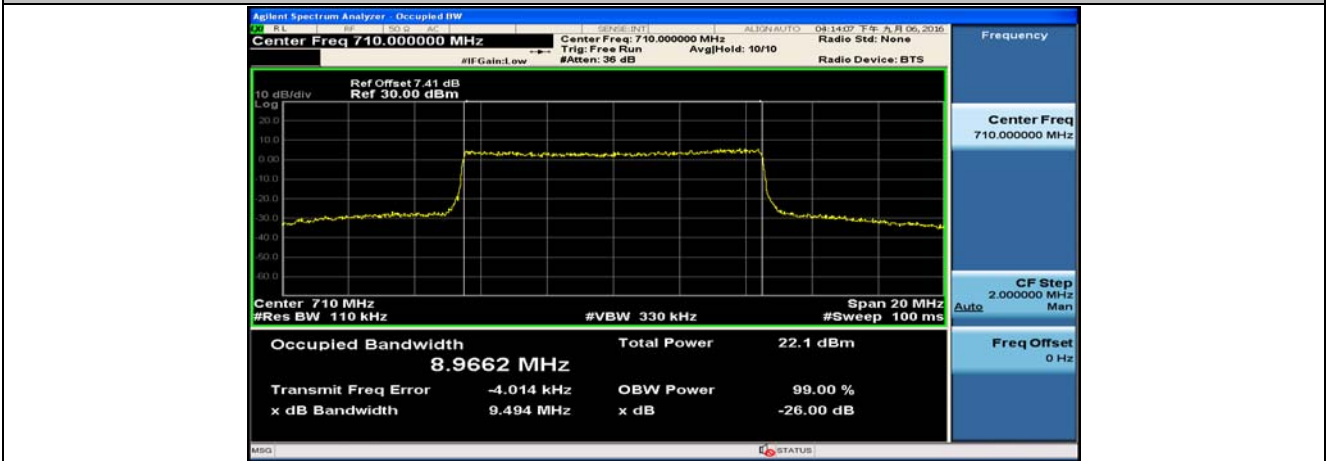




Channel Bandwidth: 10 MHz\_LCH\_16QAM\_50RB#0



Channel Bandwidth: 10 MHz\_MCH\_16QAM\_50RB#0



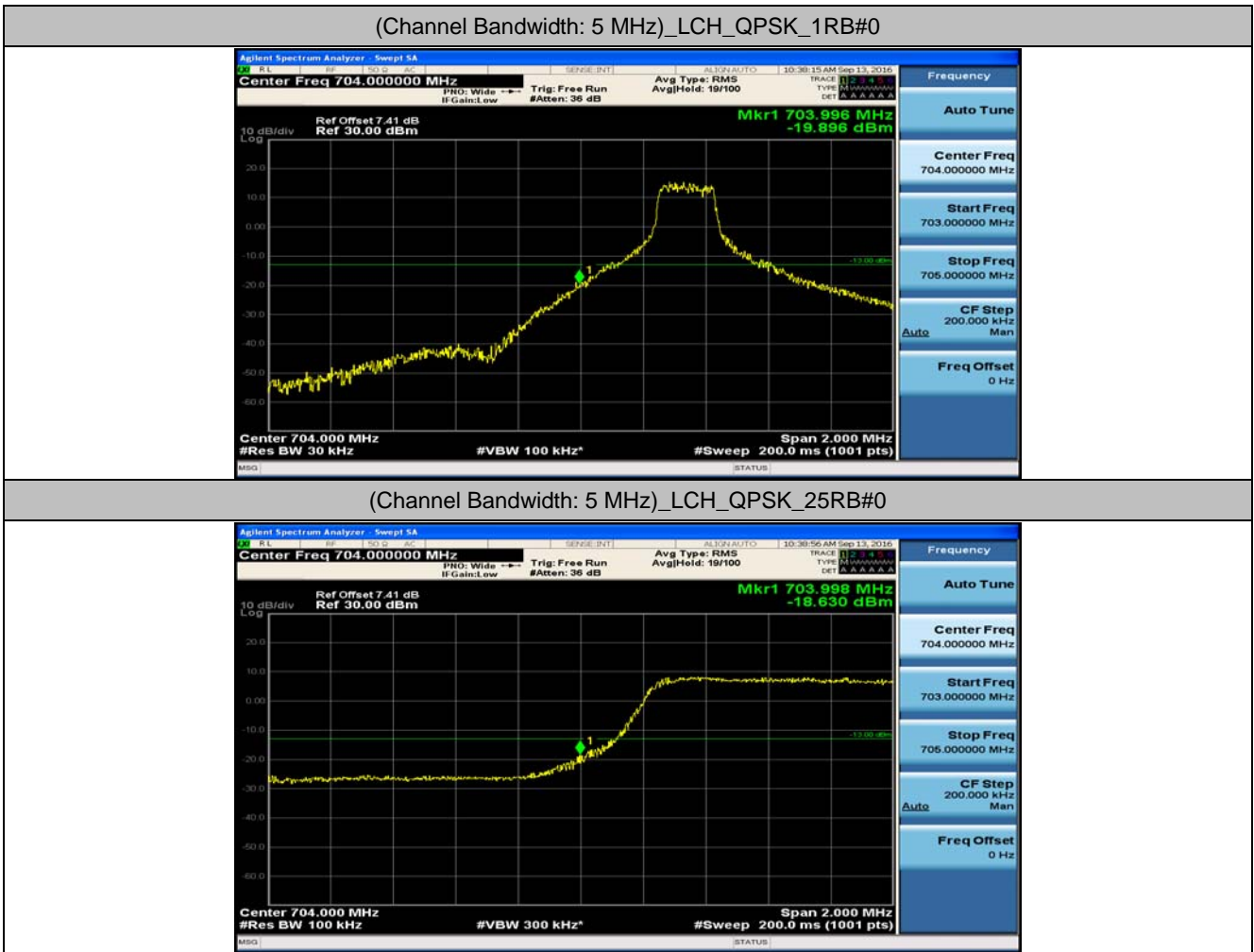
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_50RB#0



## Band Edge

### Test Graphs

Channel Bandwidth: 5 MHz



(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#24



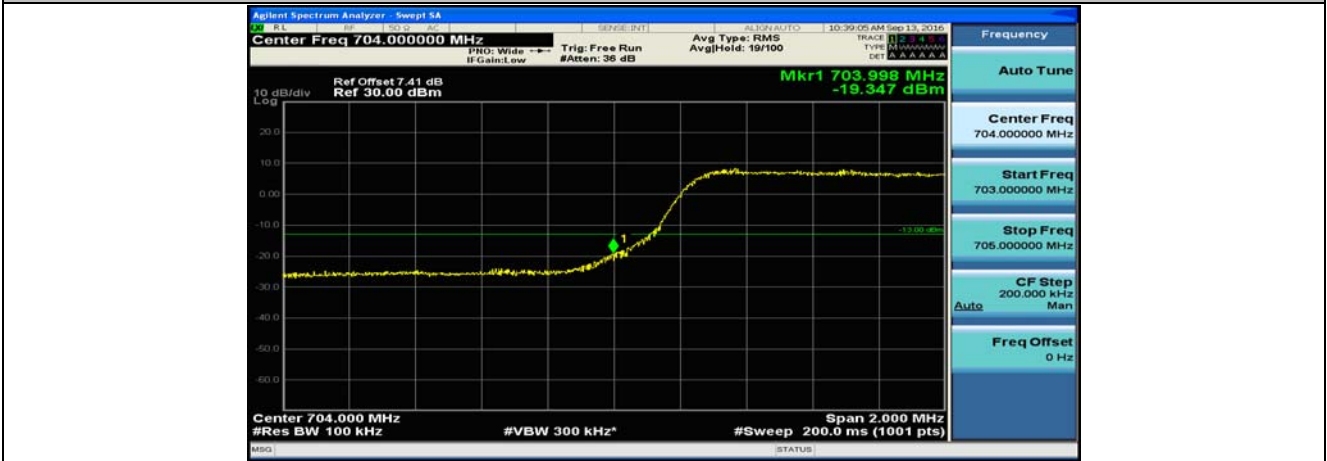
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_25RB#0



(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#0



(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_25RB#0



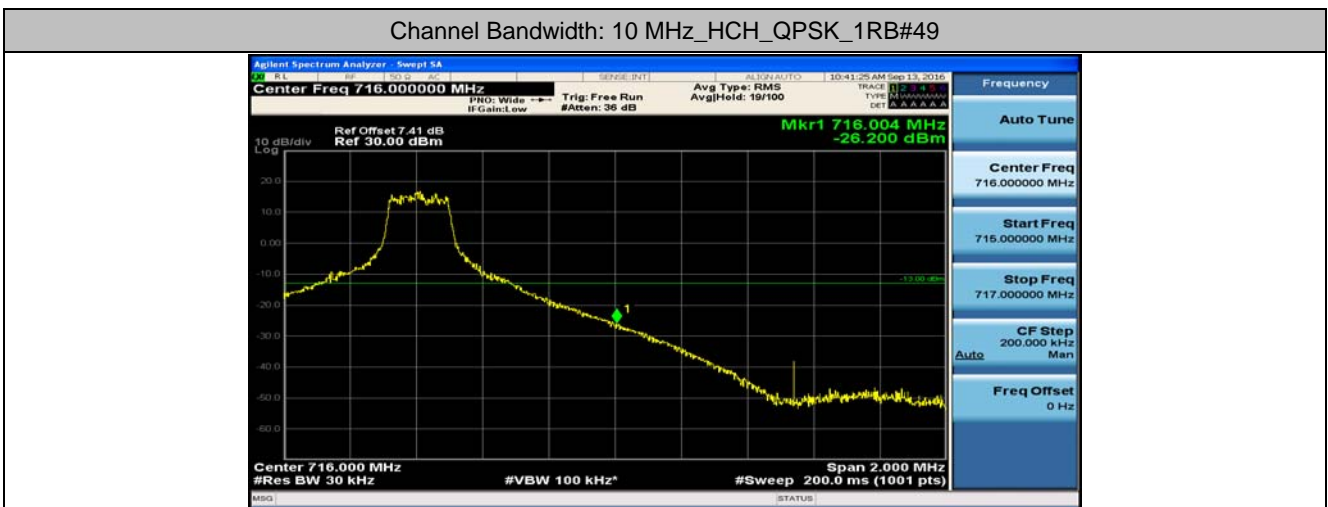
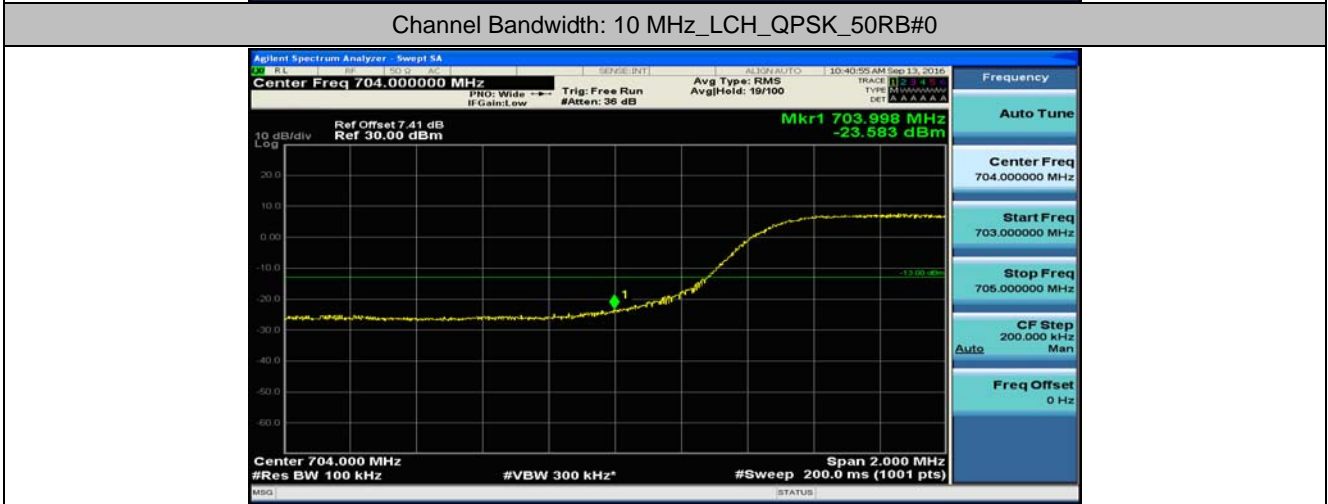
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#24



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_25RB#0



**Channel Bandwidth: 10 MHz**





Channel Bandwidth: 10 MHz\_HCH\_QPSK\_50RB#0



Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_LCH\_16QAM\_50RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#49



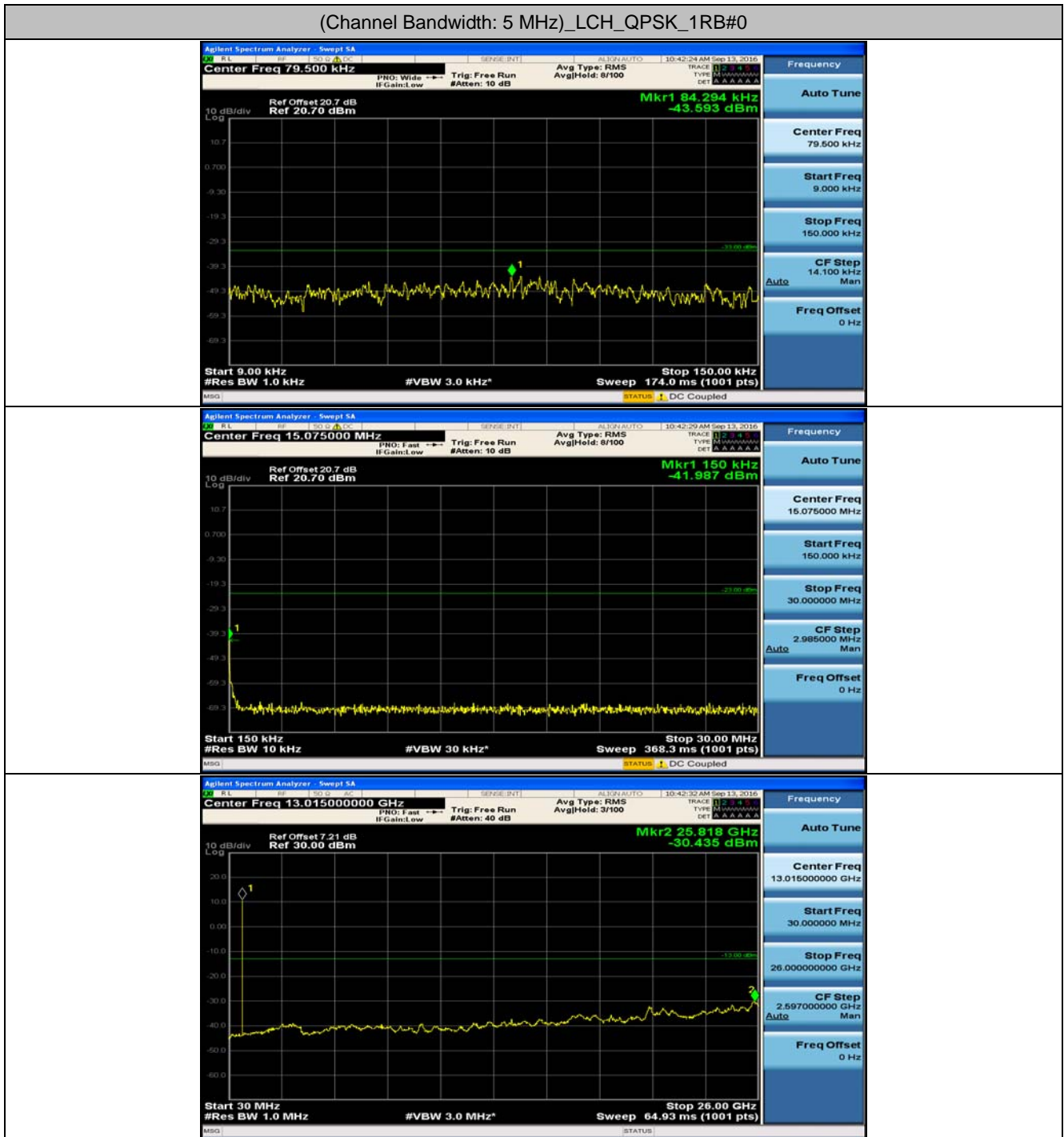
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_50RB#0



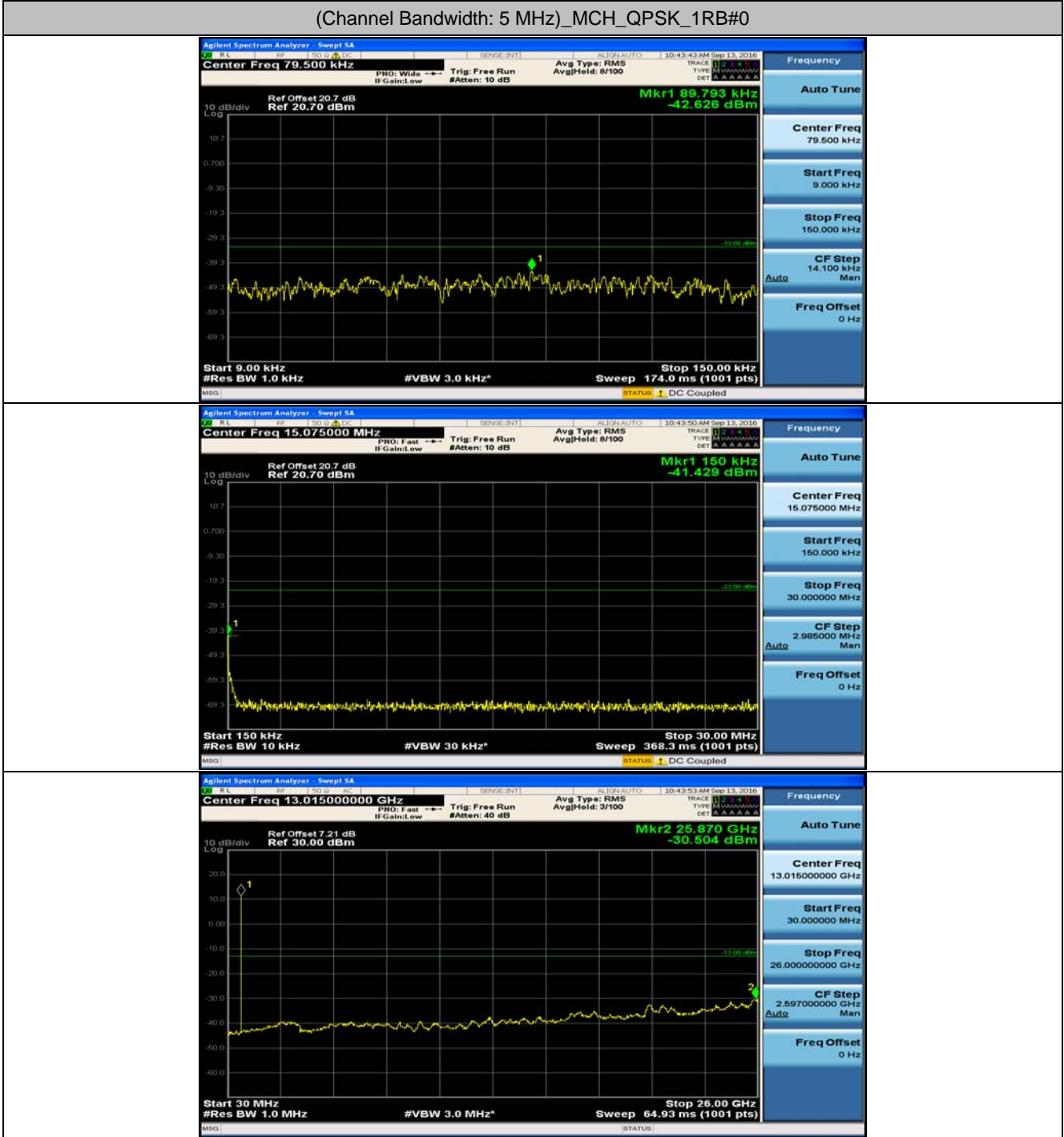
## Appendix E: Conducted Spurious Emission

### Test Graphs

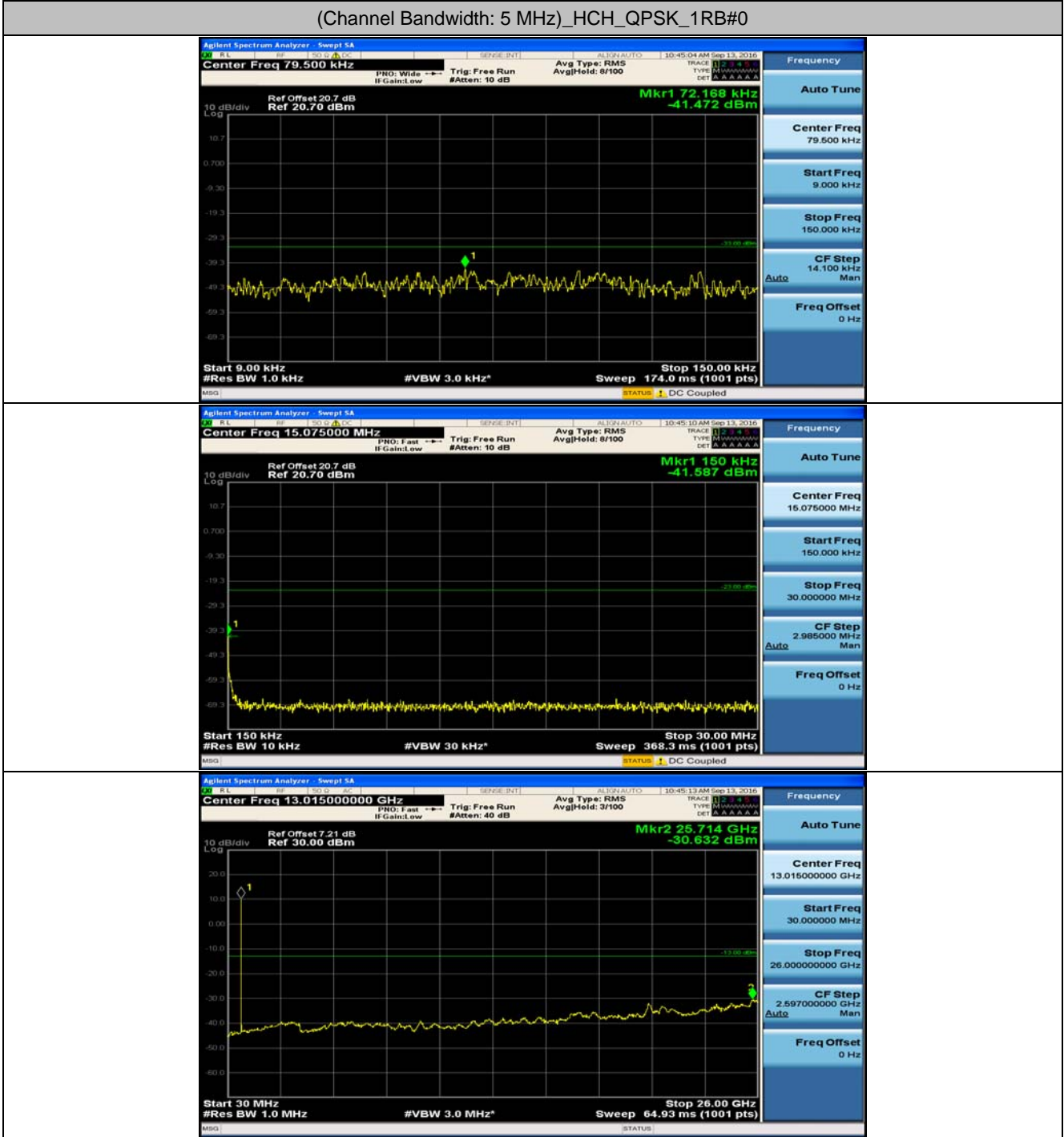
Channel Bandwidth: 5 MHz



(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#0

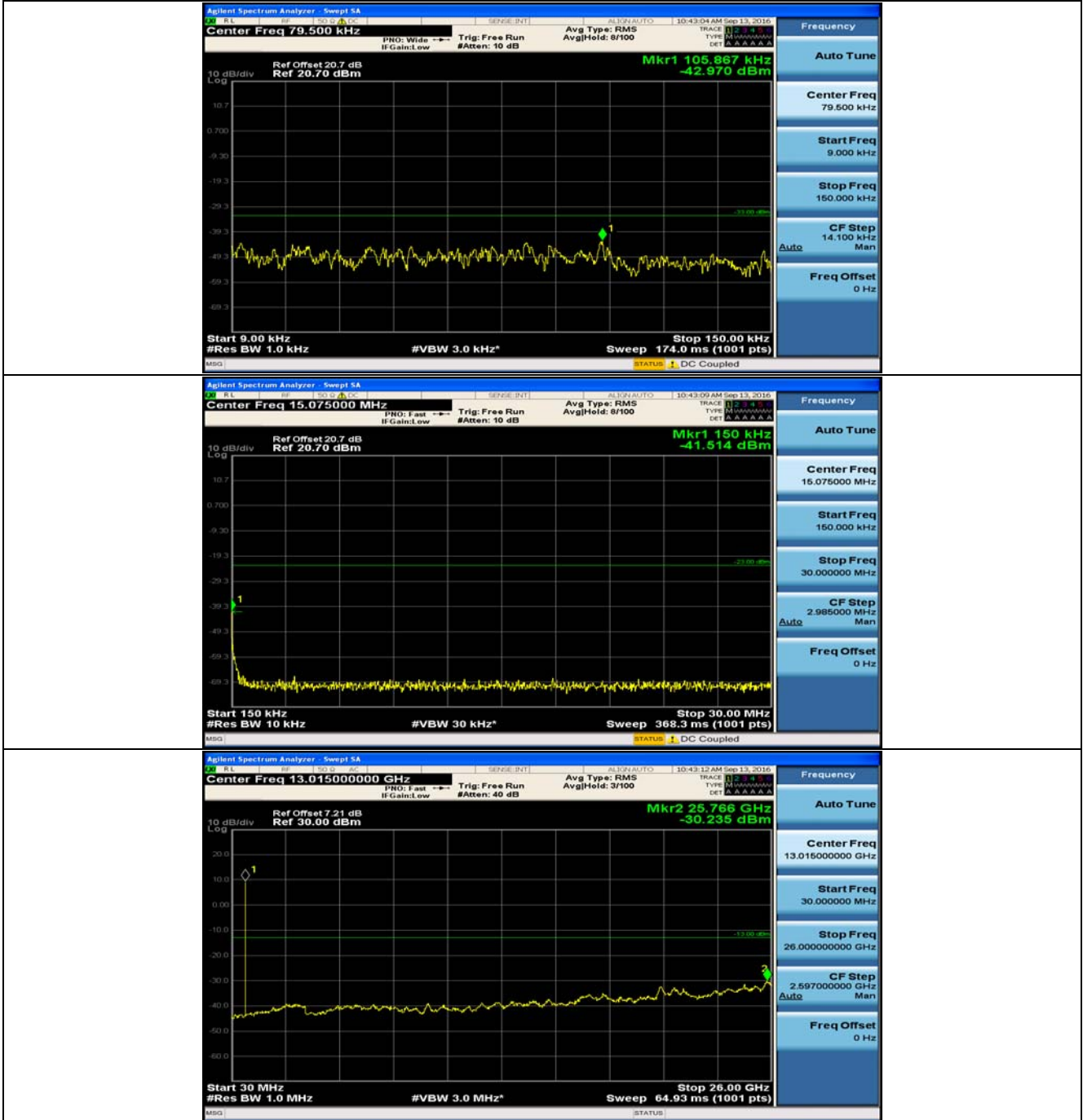


(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#0

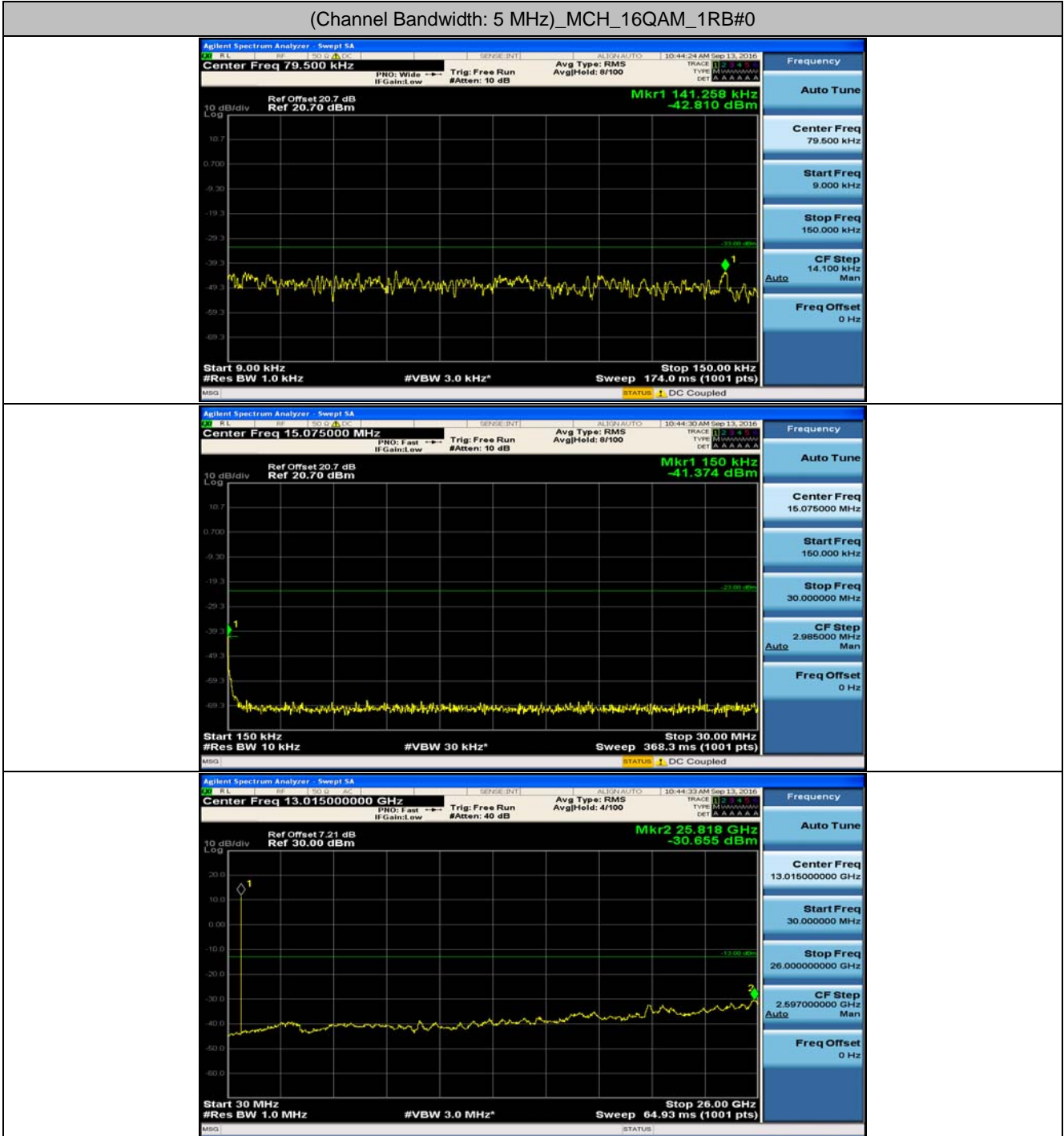




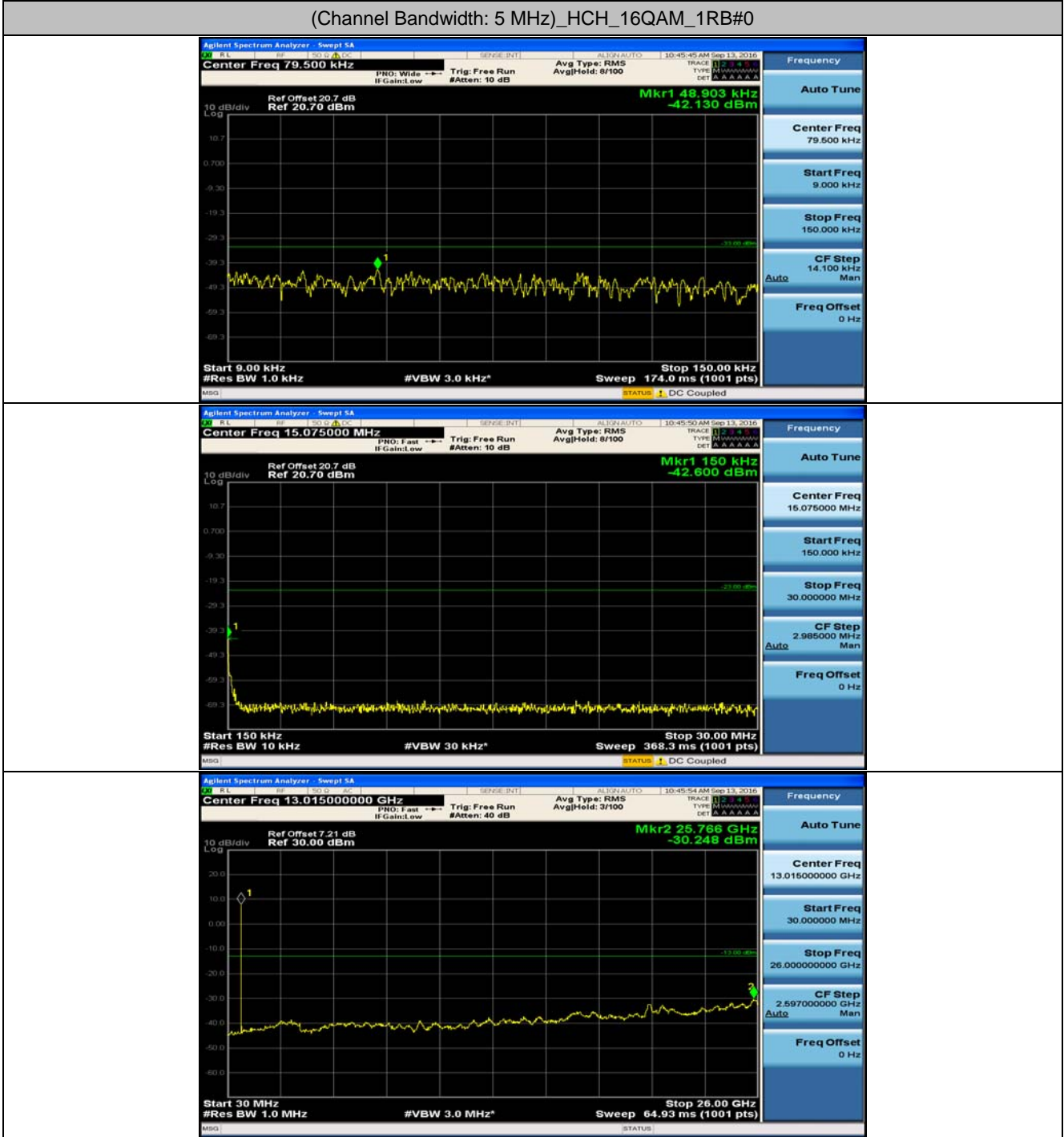
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#0



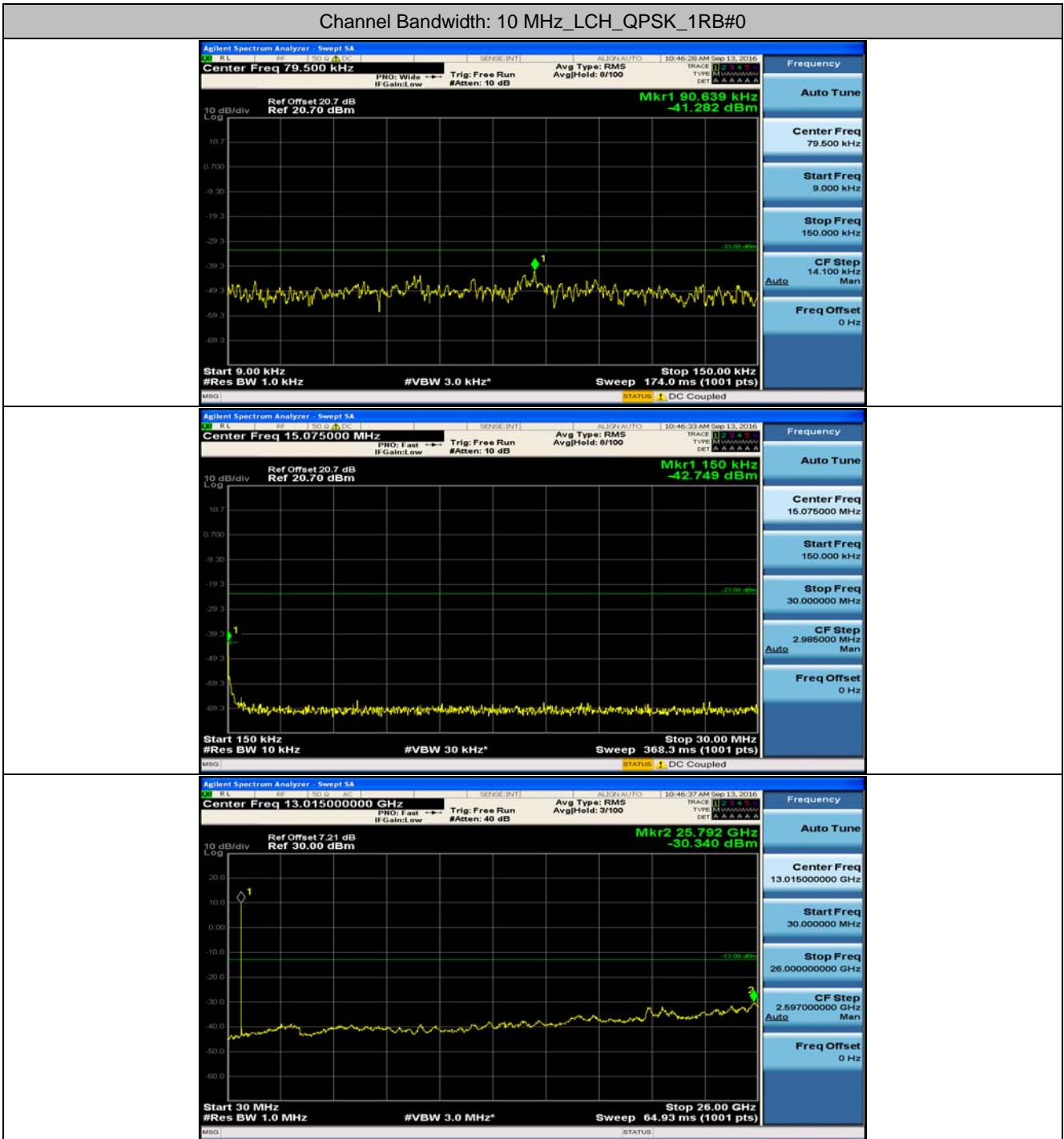
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#0



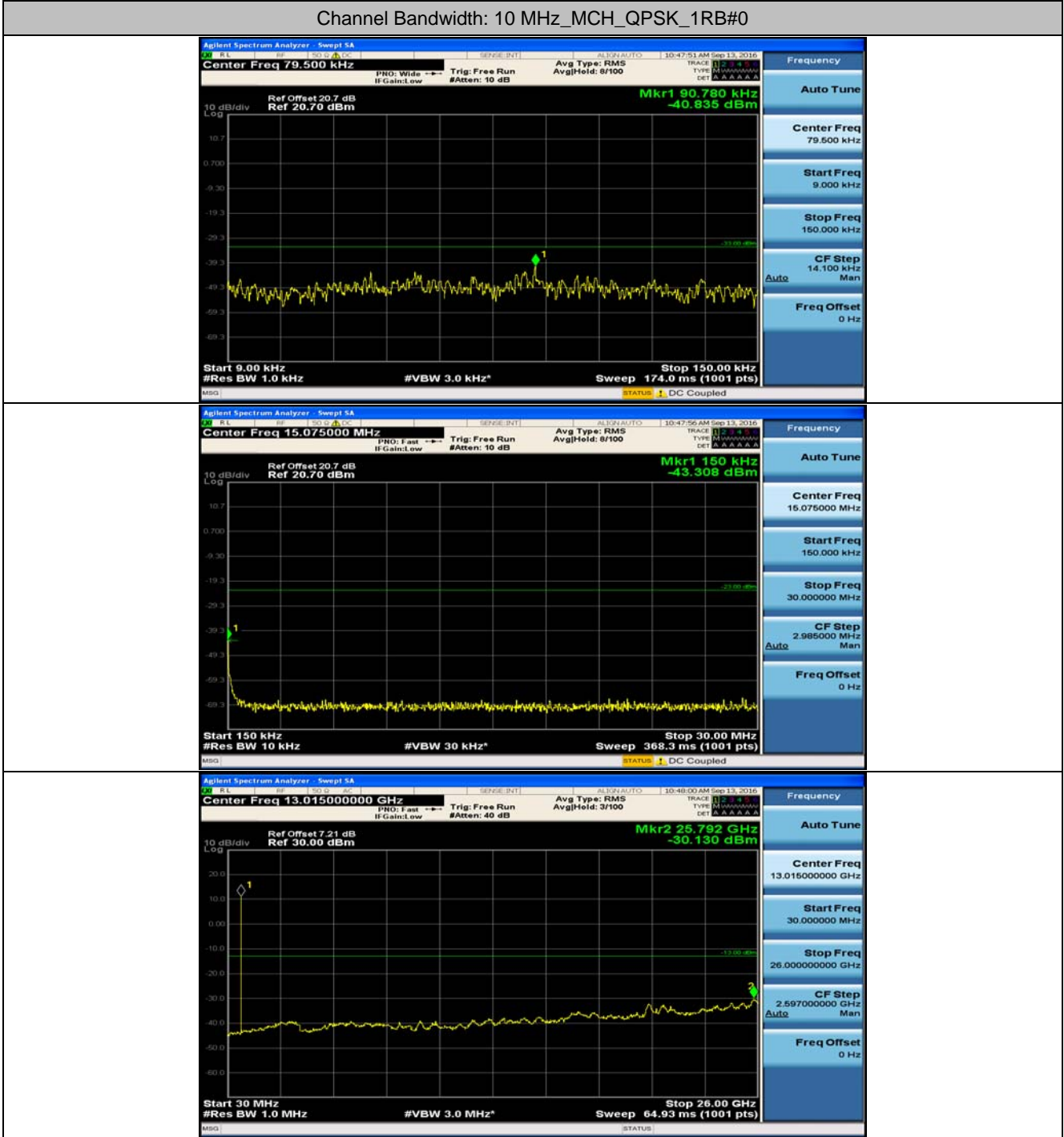
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#0



**Channel Bandwidth: 10 MHz**

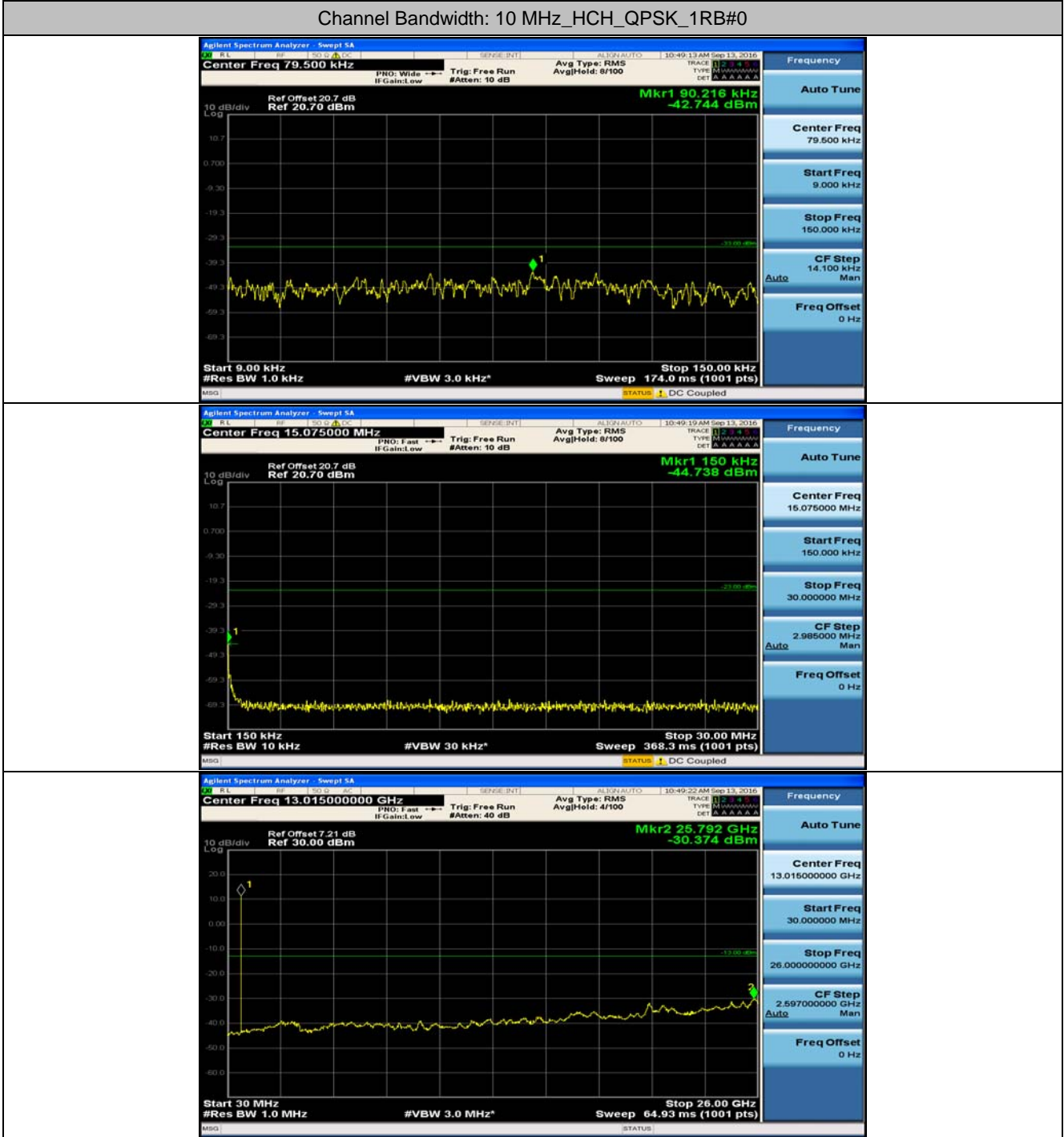


Channel Bandwidth: 10 MHz\_MCH\_QPSK\_1RB#0

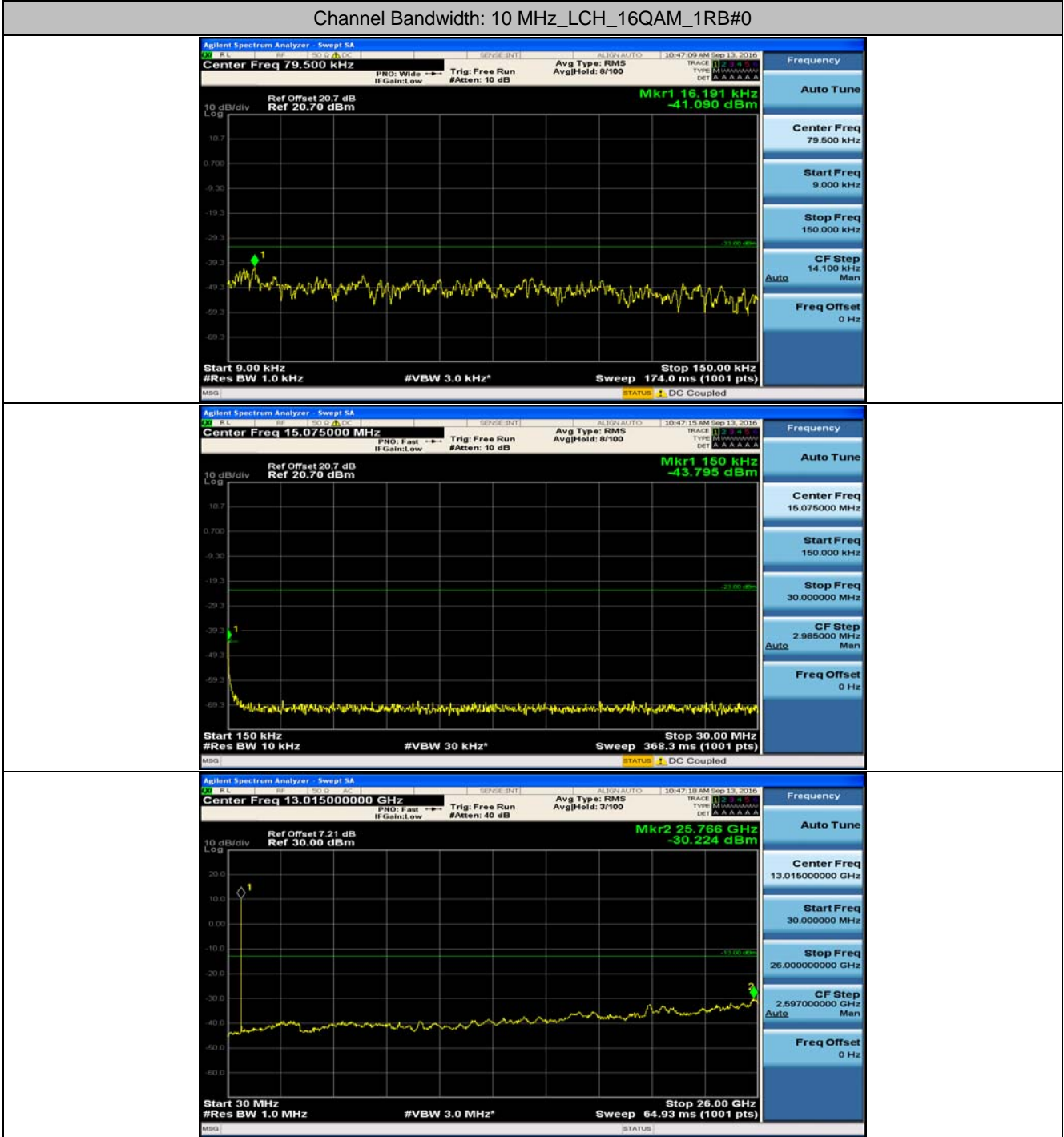




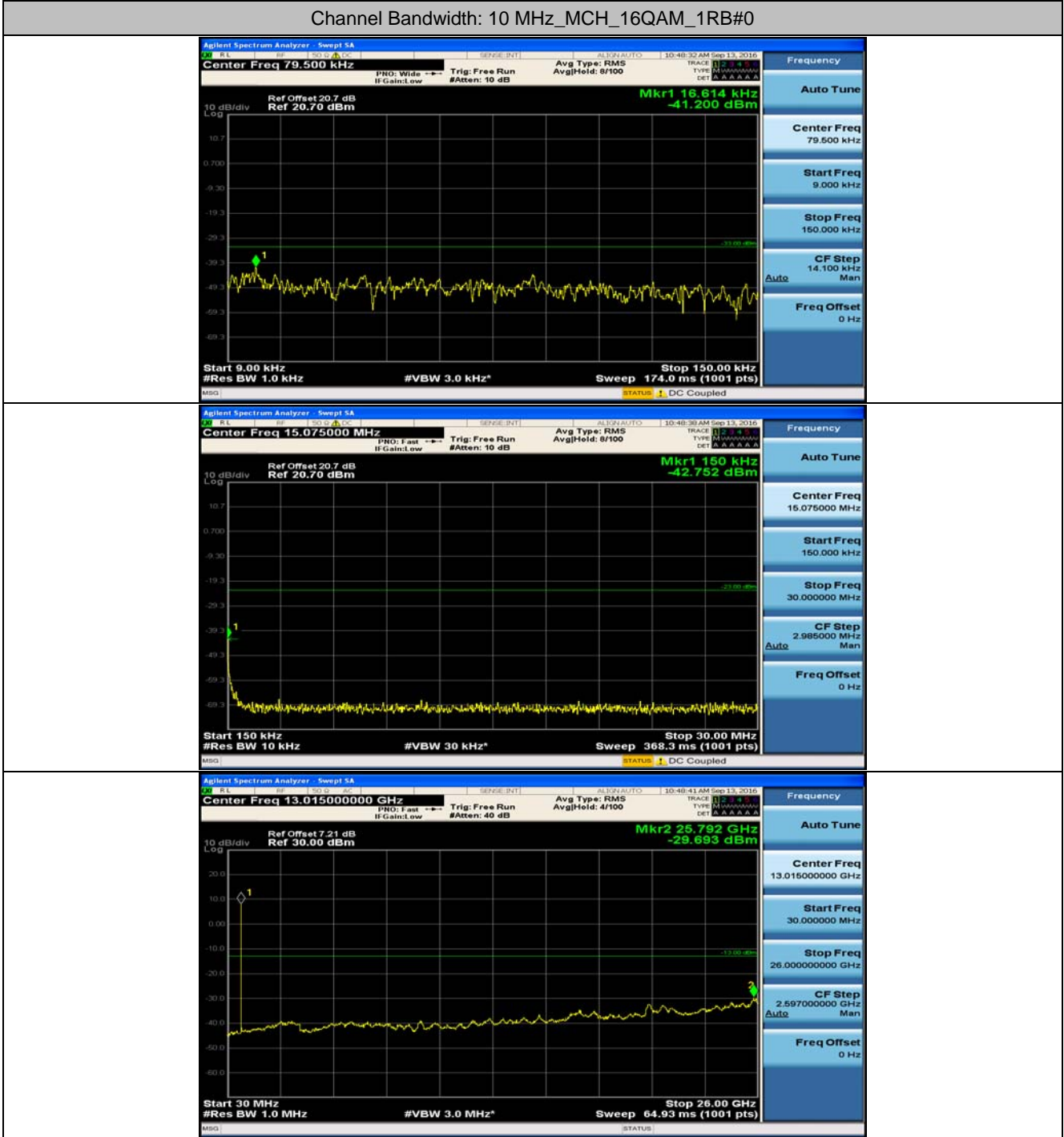
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#0



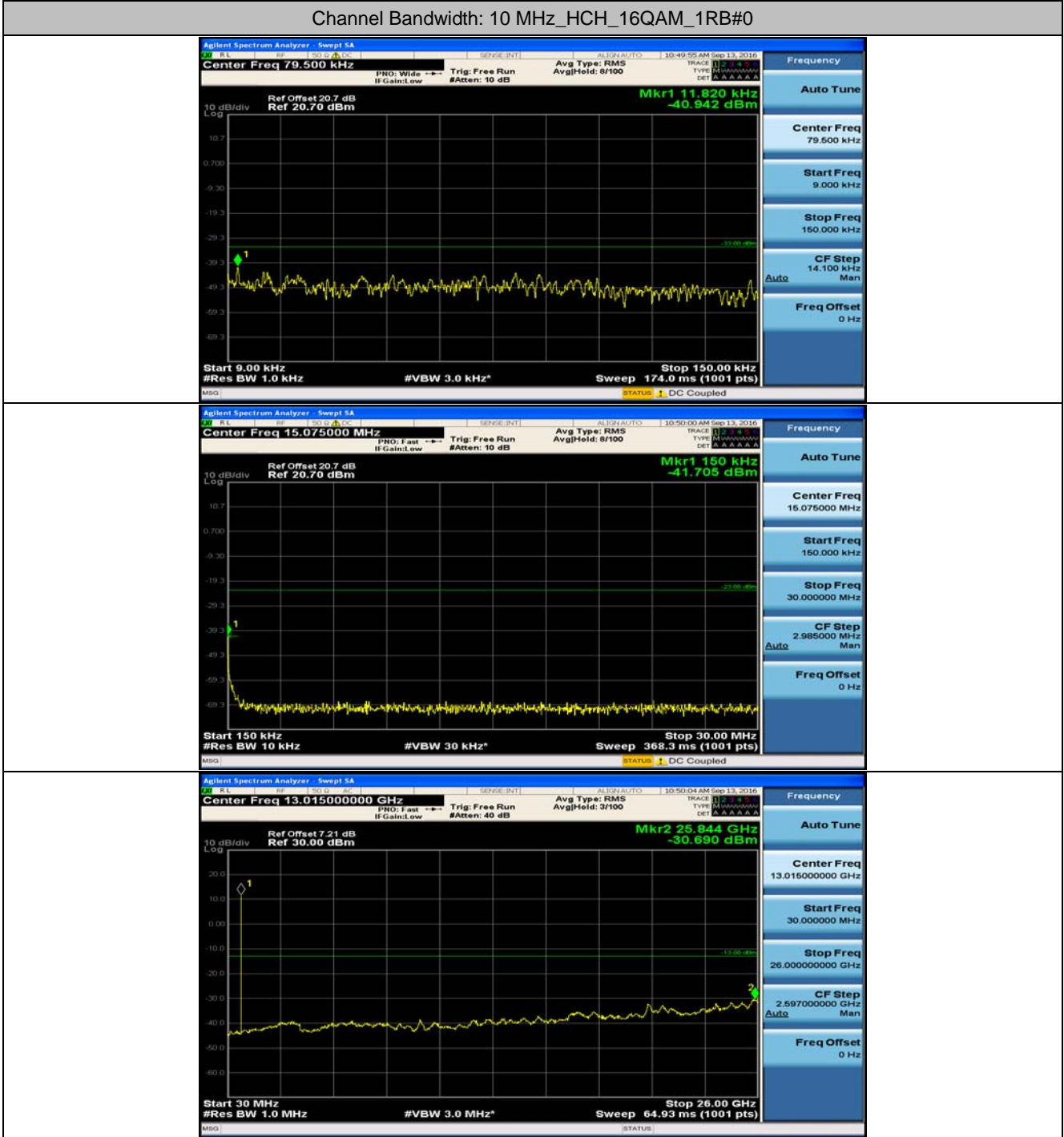
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0



## Frequency Stability

### Test Result

Bandwidth (MHz) :		10MHz	RB #:	Full
Limit (ppm) :		2.5ppm	Channel:	MCH
Temperature (°C)	Voltage (V)	Modulation		Result
		QPSK	16QAM	
		Deviation (ppm)	Deviation (ppm)	
50	3.7	+0.033	+0.036	PASS
40	3.7	+0.031	+0.032	
30	3.7	-0.022	-0.026	
20	3.7	+0.016	+0.019	
10	3.7	-0.017	-0.023	
0	3.7	+0.023	+0.027	
-10	3.7	+0.028	+0.031	
-20	3.7	-0.034	-0.033	
-30	3.7	+0.037	+0.037	
20	4.2	-0.021	-0.024	
20	3.5	+0.024	+0.028	PASS



## Field Strength of Spurious Radiation Measurement

### Test Result

<b>Bandwidth:</b>	<b>5M</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>1</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)		
1413.0	Vertical	-53.66	-13.00	PASS
2119.5	V	-57.41		
-	V	-		
1413.0	Horizontal	-54.06		
2119.5	H	-58.38		
-	H	-		
<b>Bandwidth:</b>	<b>5M</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>1</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)		
1420.0	Vertical	-53.44	-13.00	PASS
2130.0	V	-57.82		
-	V	-		
1420.0	Horizontal	-52.71		
2130.0	H	-56.39		
-	H	-		
<b>Bandwidth:</b>	<b>5M</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>1</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)		
1427.0	Vertical	-52.90	-13.00	PASS
2140.5	V	-57.11		
-	V	-		
1427.0	Horizontal	-53.89		
2140.5	H	-57.57		
-	H	-		

<b>Bandwidth:</b>	<b>5M</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>1</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)		
1413.0	Vertical	-52.66	-13.00	PASS
2119.5	V	-56.80		
-	V	-		
1413.0	Horizontal	-53.05		
2119.5	H	-57.39		
-	H	-		
<b>Bandwidth:</b>	<b>5M</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>1</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)		
1420.0	Vertical	-52.85	-13.00	PASS
2130.0	V	-57.12		
-	V	-		
1420.0	Horizontal	-53.61		
2130.0	H	-57.90		
-	H	-		
<b>Bandwidth:</b>	<b>5M</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>1</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)		
1427.0	Vertical	-52.15	-13.00	PASS
2140.5	V	-57.28		
-	V	-		
1427.0	Horizontal	-53.40		
2140.5	H	-57.77		
-	H	-		

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