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## 1. Radiated Power

### 1.1 Test Datas

#### Channel Bandwidth: 1.4 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	22.04	PASS
	MCH	22.06	PASS
	HCH	22.62	PASS
16QAM	LCH	23.24	PASS
	MCH	23.14	PASS
	HCH	23.43	PASS

#### Channel Bandwidth: 3 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	23.87	PASS
	MCH	21.42	PASS
	HCH	23.74	PASS
16QAM	LCH	21.71	PASS
	MCH	22.11	PASS
	HCH	21.45	PASS

#### Channel Bandwidth: 5 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	23.74	PASS
	MCH	23.63	PASS
	HCH	23.01	PASS
16QAM	LCH	21.85	PASS
	MCH	21.17	PASS
	HCH	21.64	PASS

#### Channel Bandwidth: 10 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	21.47	PASS
	MCH	22.82	PASS
	HCH	22.56	PASS
16QAM	LCH	23.15	PASS
	MCH	21.89	PASS
	HCH	22.61	PASS

#### Channel Bandwidth: 15 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	22.52	PASS
	MCH	21.51	PASS
	HCH	21.03	PASS
16QAM	LCH	22.30	PASS
	MCH	23.66	PASS
	HCH	23.64	PASS

#### Channel Bandwidth: 20 MHz

Modulation	Channel	E.i.r.p [dBm]	Verdict
QPSK	LCH	23.76	PASS
	MCH	22.01	PASS

Appendix A  
**50064681 005**



**Produkte**  
*Products*

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16QAM	HCH	23.88	PASS
	LCH	21.26	PASS
	MCH	21.07	PASS
	HCH	21.85	PASS

## 2. Occupied Bandwidth

### 2.1 Test Datas

#### Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0775	1.217	PASS
	MCH	6	0	1.0742	1.213	PASS
	HCH	6	0	1.0780	1.226	PASS
16QAM	LCH	6	0	1.0825	1.219	PASS
	MCH	6	0	1.0804	1.226	PASS
	HCH	6	0	1.0774	1.221	PASS

#### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6834	2.868	PASS
	MCH	15	0	2.6825	2.863	PASS
	HCH	15	0	2.6828	2.885	PASS
16QAM	LCH	15	0	2.6834	2.856	PASS
	MCH	15	0	2.6861	2.887	PASS
	HCH	15	0	2.6827	2.895	PASS

#### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4789	4.800	PASS
	MCH	25	0	4.4767	4.801	PASS
	HCH	25	0	4.4796	4.853	PASS
16QAM	LCH	25	0	4.4859	4.834	PASS
	MCH	25	0	4.4793	4.827	PASS
	HCH	25	0	4.4908	4.827	PASS

#### Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9362	9.439	PASS
	MCH	50	0	8.9355	9.502	PASS
	HCH	50	0	8.9326	9.426	PASS
16QAM	LCH	50	0	8.9251	9.415	PASS
	MCH	50	0	8.9345	9.462	PASS
	HCH	50	0	8.9406	9.426	PASS

#### Channel Bandwidth: 15 MHz

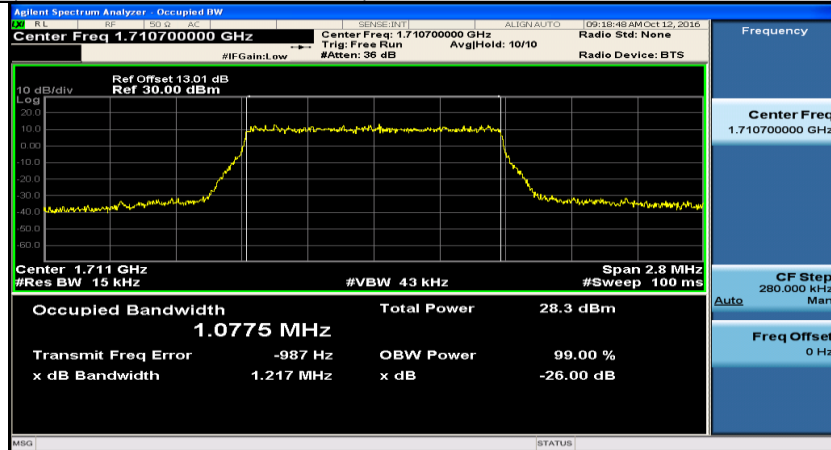
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.399	14.04	PASS
	MCH	75	0	13.388	14.08	PASS
	HCH	75	0	13.394	13.94	PASS
16QAM	LCH	75	0	13.403	14.06	PASS
	MCH	75	0	13.399	14.00	PASS
	HCH	75	0	13.385	13.99	PASS

#### Channel Bandwidth: 20 MHz

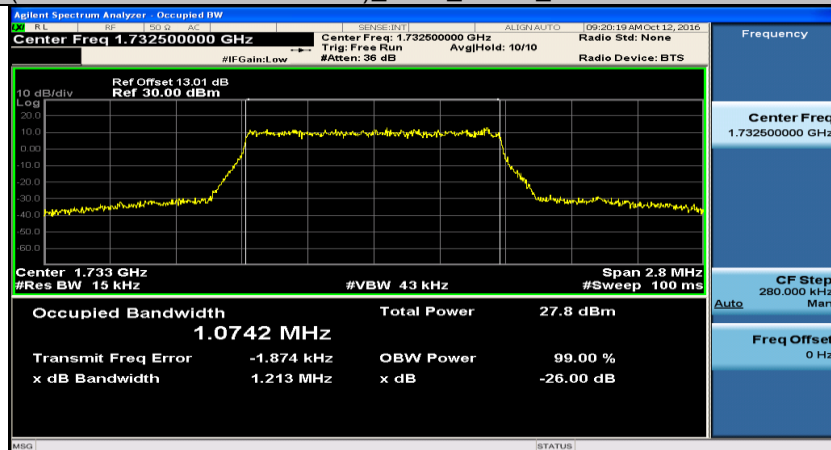
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.894	18.64	PASS
	MCH	100	0	17.856	18.62	PASS
	HCH	100	0	17.825	18.55	PASS
16QAM	LCH	100	0	17.911	18.56	PASS
	MCH	100	0	17.863	18.59	PASS
	HCH	100	0	17.803	18.52	PASS

## 2.2 Test Graphs

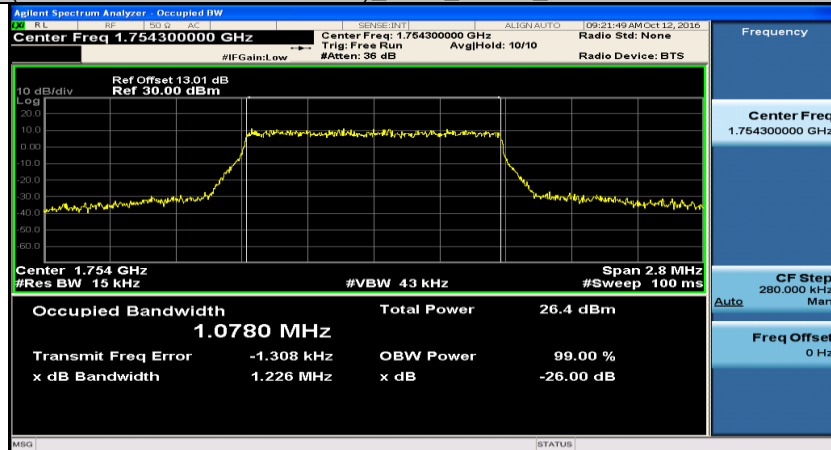
(Channel Bandwidth: 1.4 MHz) \_LCH\_QPSK\_6RB#0



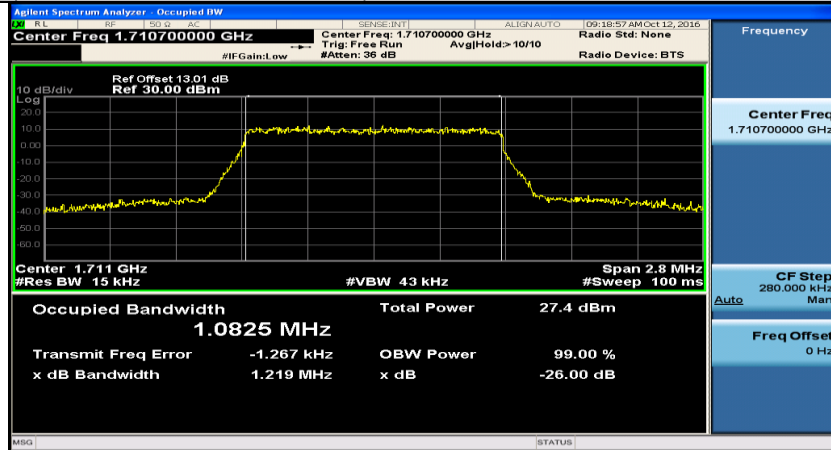
(Channel Bandwidth: 1.4 MHz) \_MCH\_QPSK\_6RB#0



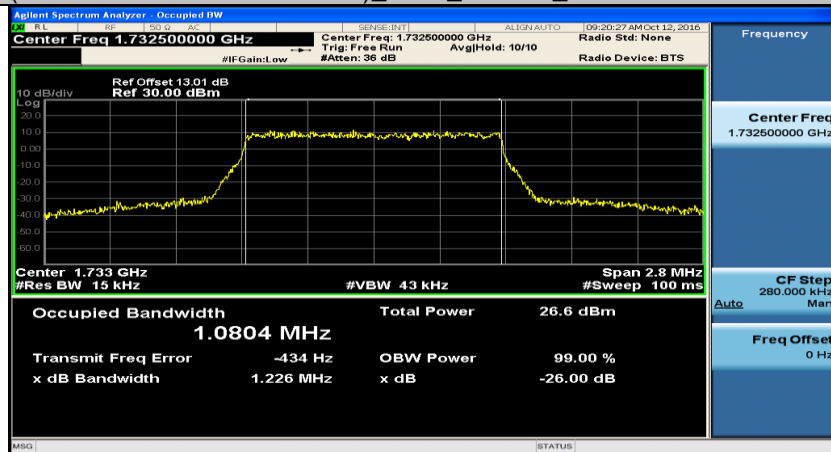
(Channel Bandwidth: 1.4 MHz) \_HCH\_QPSK\_6RB#0



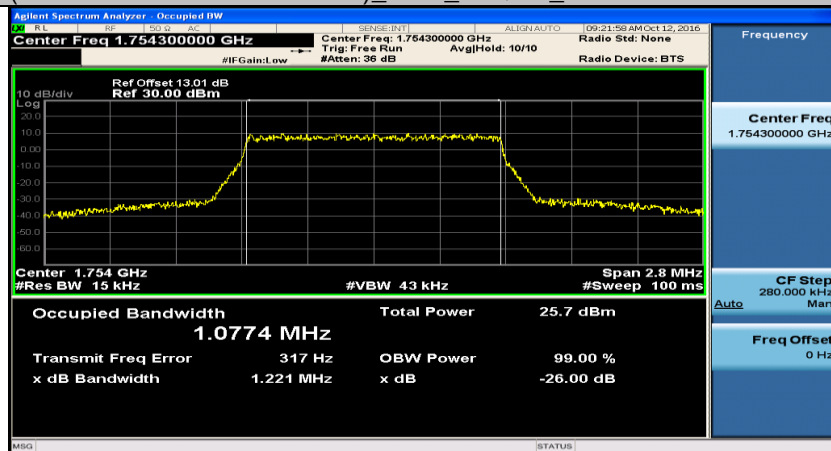
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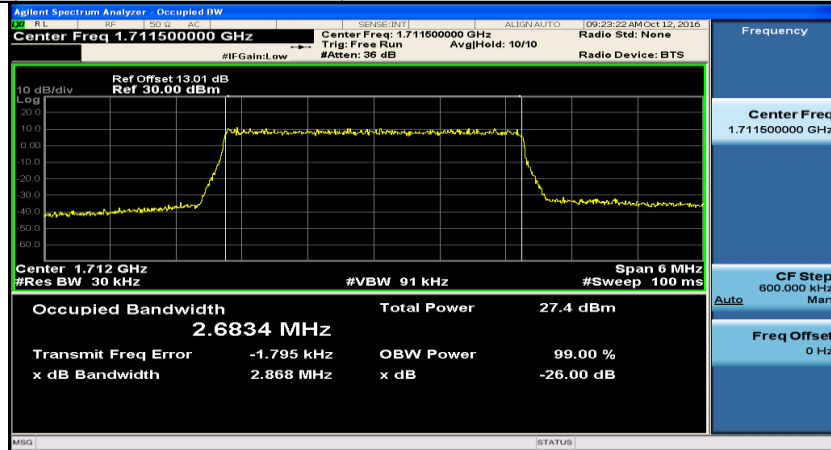
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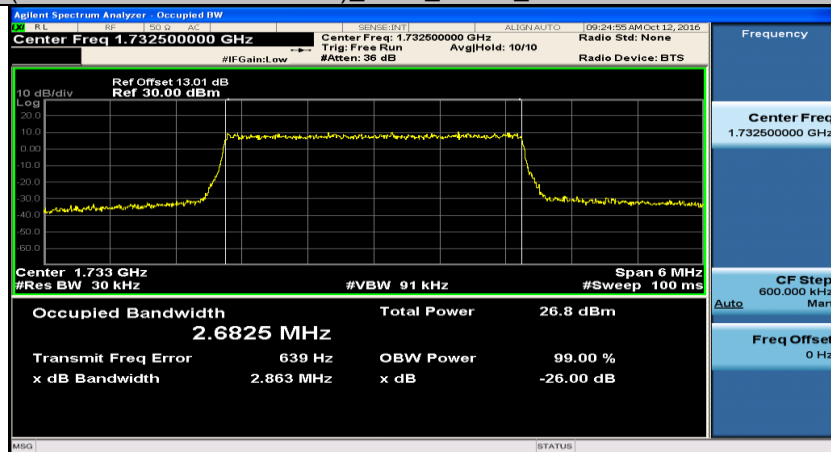
(Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM\_6RB#0



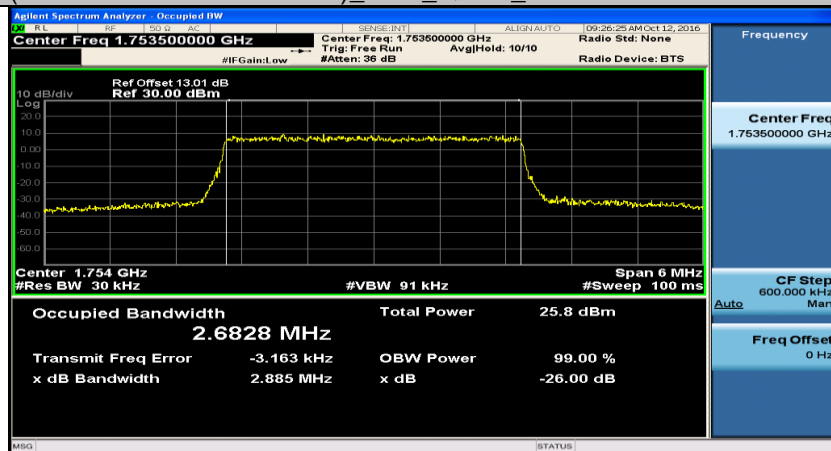
(Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_15RB#0



(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_15RB#0

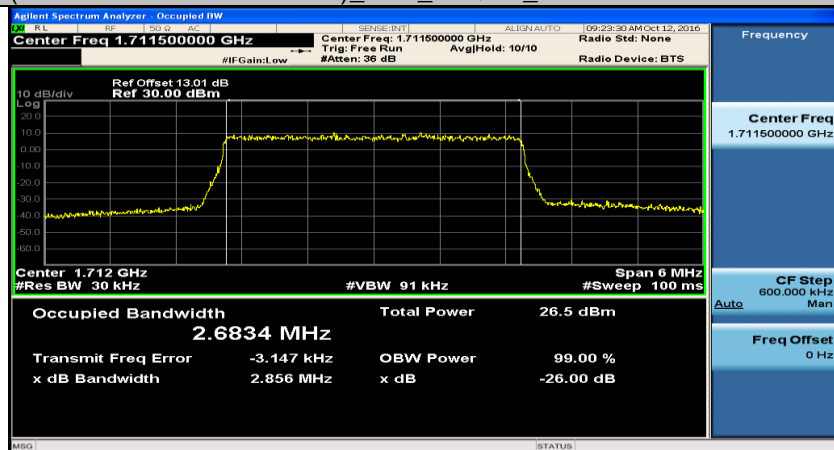


(Channel Bandwidth: 3 MHz)\_HCH\_QPSK\_15RB#0

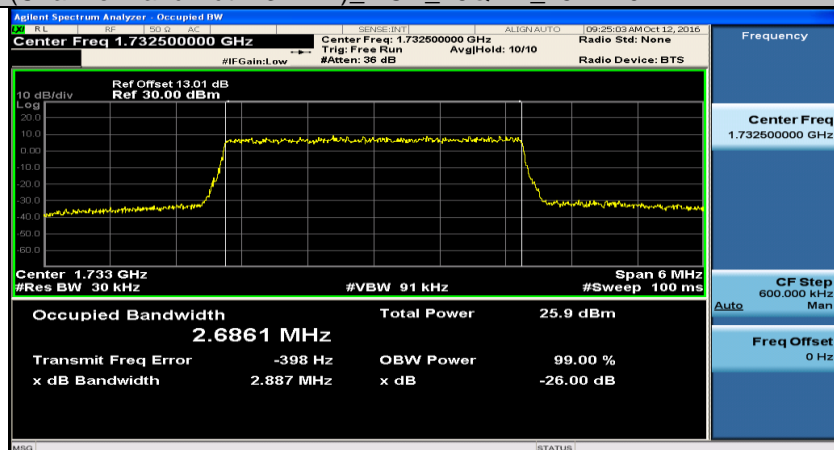




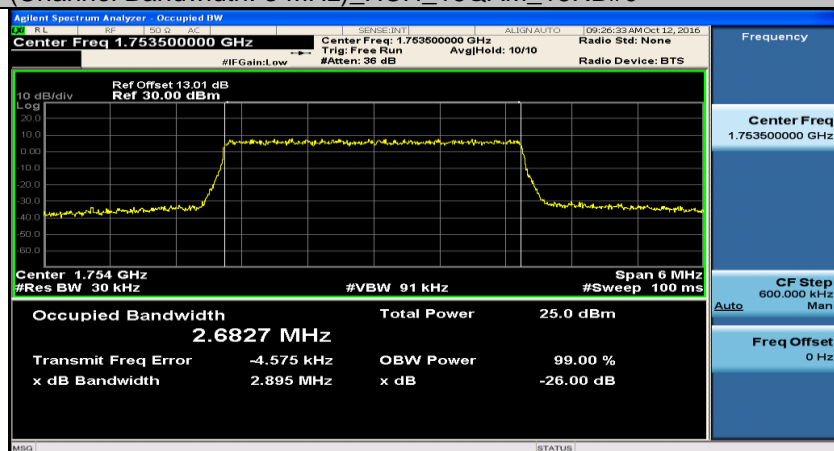
(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_15RB#0



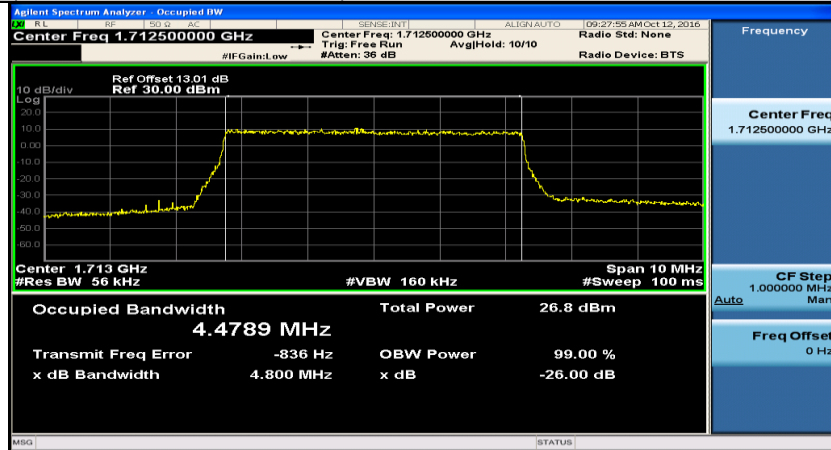
(Channel Bandwidth: 3 MHz) MCH\_16QAM\_15RB#0



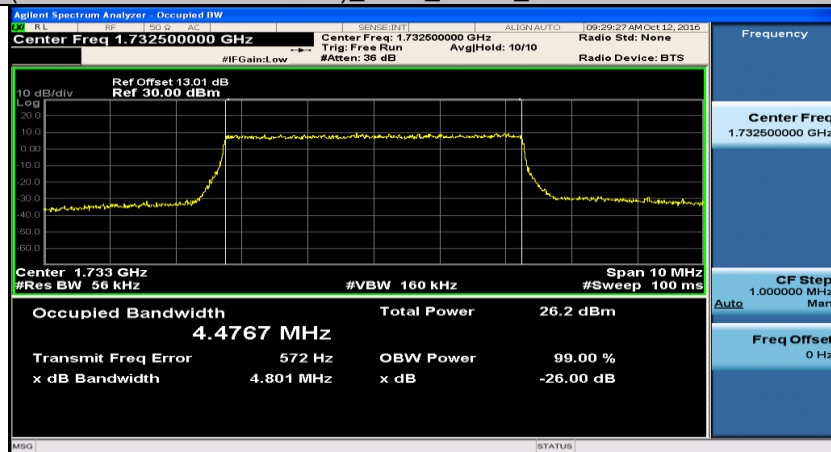
(Channel Bandwidth: 3 MHz) HCH 16QAM 15RB#0



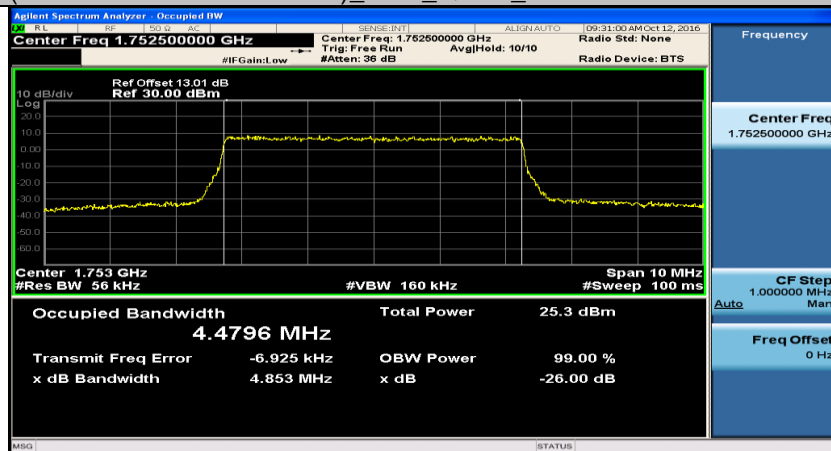
(Channel Bandwidth: 5 MHz) \_LCH\_QPSK\_25RB#0



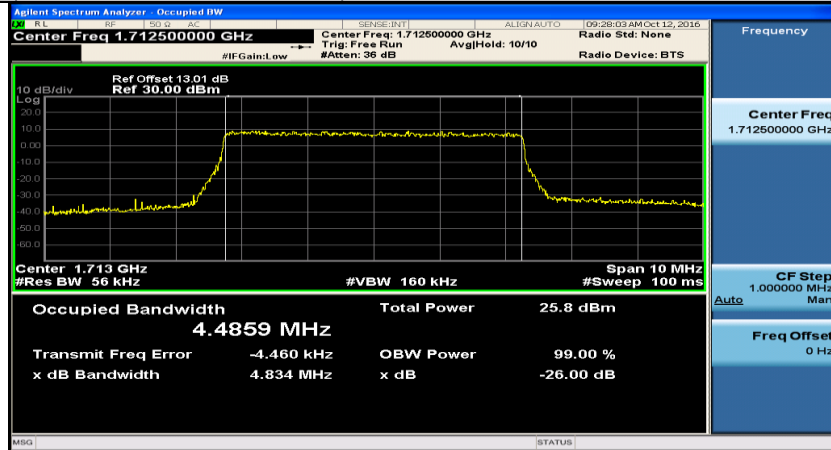
(Channel Bandwidth: 5 MHz) \_MCH\_QPSK\_25RB#0



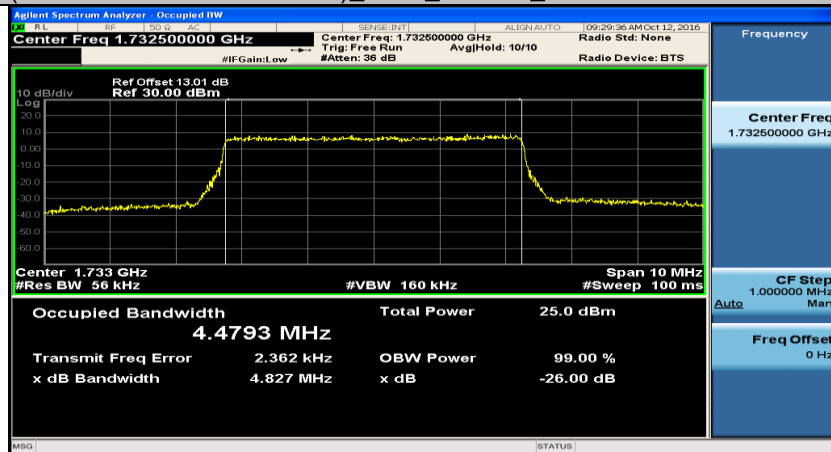
(Channel Bandwidth: 5 MHz) \_HCH\_QPSK\_25RB#0



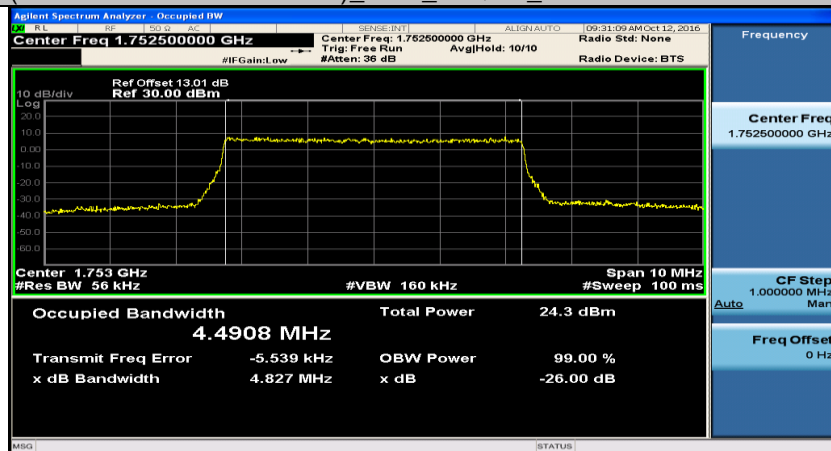
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_25RB#0



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



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



Agilent Spectrum Analyzer: Occupied BW

Center Freq 1.715000000 GHz

Ref Offset 19.01 dB  
Ref 30.00 dBm

10 dB/div  
Log

Center 1.715 GHz  
#Res BW 110 kHz

#VBW 330 kHz

Span 20 MHz  
#Sweep 100 ms

Occupied Bandwidth	Total Power	26.2 dBm
8.9362 MHz		
Transmit Freq Error	-19.602 kHz	OBW Power 99.00 %
x dB Bandwidth	9.439 MHz	x dB -26.00 dB

Frequency

Center Freq 1.715000000 GHz

CF Step 2.000000 MHz

Auto Man

Freq Offset 0 Hz

MSG STATUS

Agilent Spectrum Analyzer: Occupied BW

Center Freq 1.732500000 GHz

Ref Offset 13.01 dB  
Ref 30.00 dBm

10 dB/div  
Log

Center: 1.733 GHz  
#Res BW 110 kHz

#VBW 330 kHz

Span 20 MHz  
#Sweep 100 ns

Occupied Bandwidth		Total Power	
8.9355 MHz		25.5 dBm	
Transmit Freq Error	8.934 kHz	OBW Power	99.00 %
x dB Bandwidth	9.502 MHz	x dB	-26.00 dB

MSO STATUS

Agilent Spectrum Analyzer: Occupied BW

RTN 1000000000 Hz SENSE INT ALIGN AUTO [09:35:37 AM Oct 12, 2016]

Center Freq 1.750000000 GHz Center Freq: 1.750000000 GHz Radio Std: None  
 Trig: Free Run Avg/Hold: 10/10  
 #IF Gain: low #atten: 36 dB Radio Device: BTS

Frequency

Center Freq 1.750000000 GHz

10 dB/div  
 Log  
 Ref Offset 13.01 dB  
 Ref 30.00 dBm

Center: 1.75 GHz Span 20 MHz  
 #Res BW 110 kHz #VBW 330 kHz #Sweep 100 ns

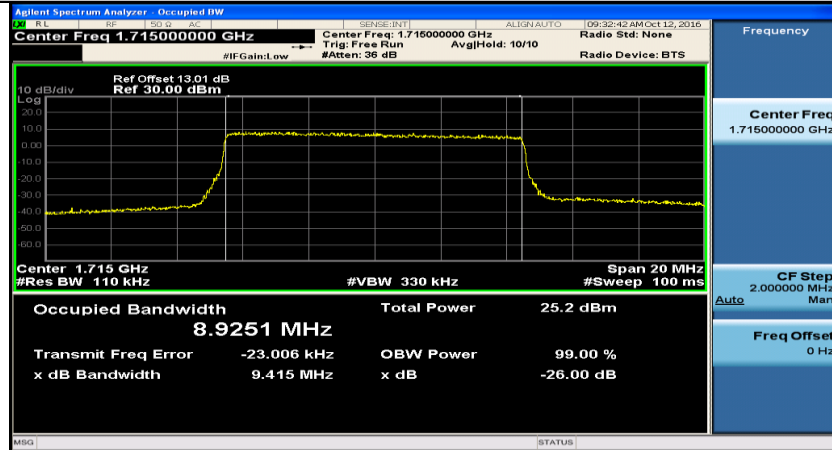
Occupied Bandwidth	Total Power	24.9 dBm
8.9326 MHz		
Transmit Freq Error	-12.064 kHz	OBW Power 99.00 %
x dB Bandwidth	9.426 MHz	x dB -26.00 dB

CF Stop 2.000000 MHz Man  
 Auto

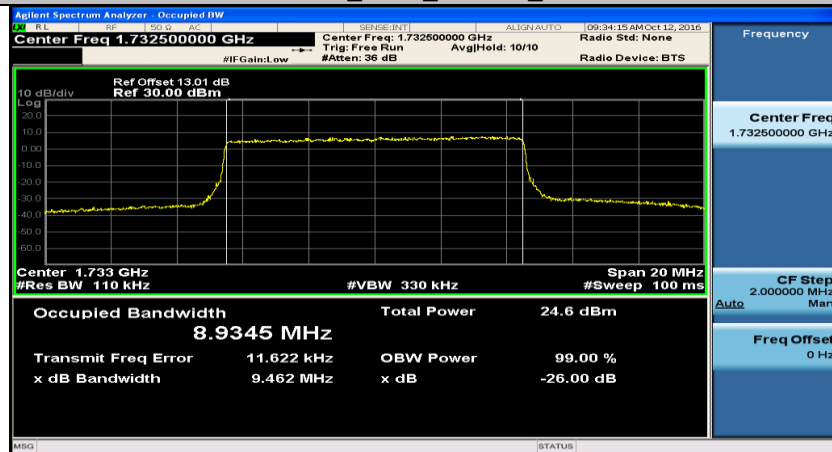
Freq Offset 0 Hz

MSG STATUS

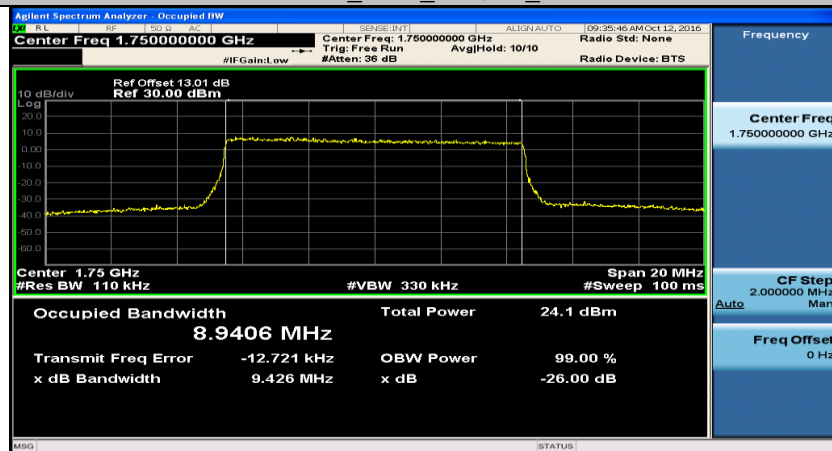
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_50RB#0

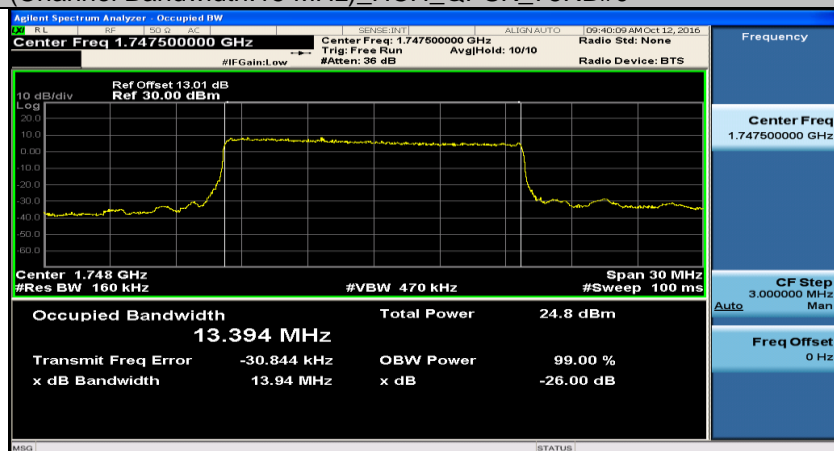
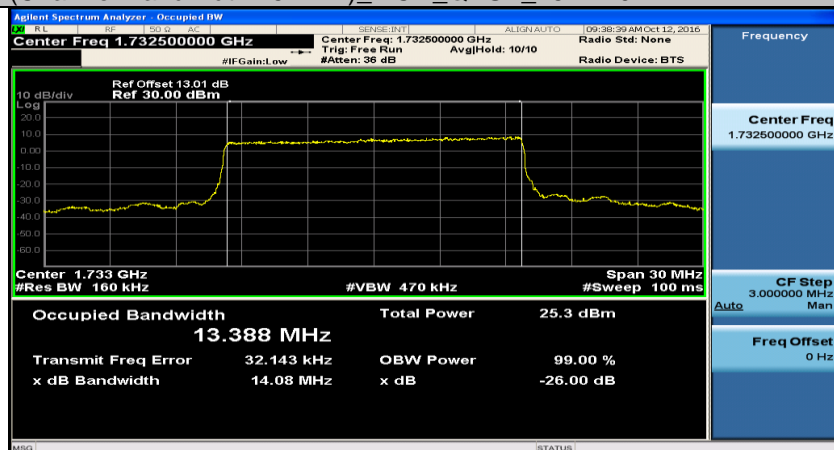
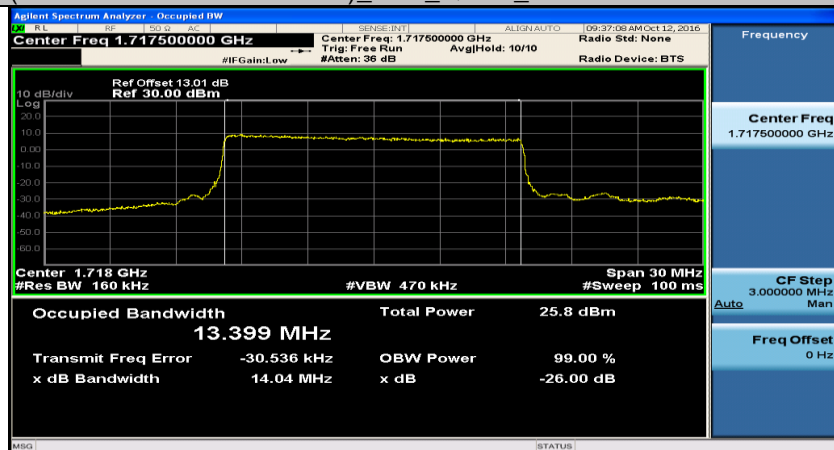


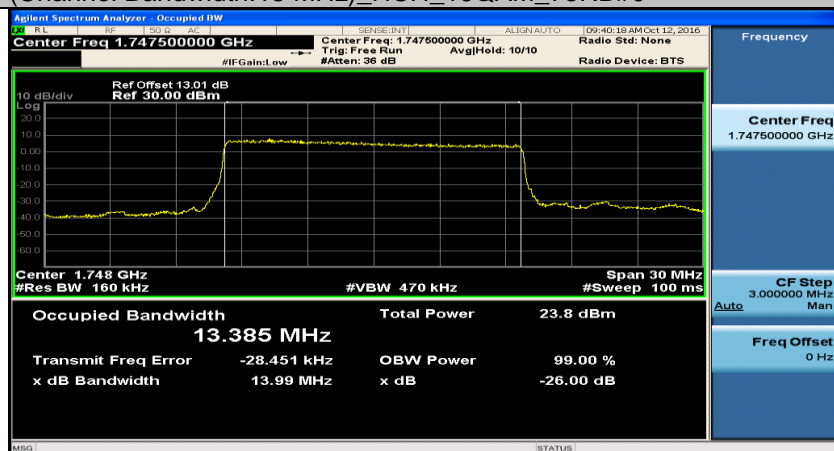
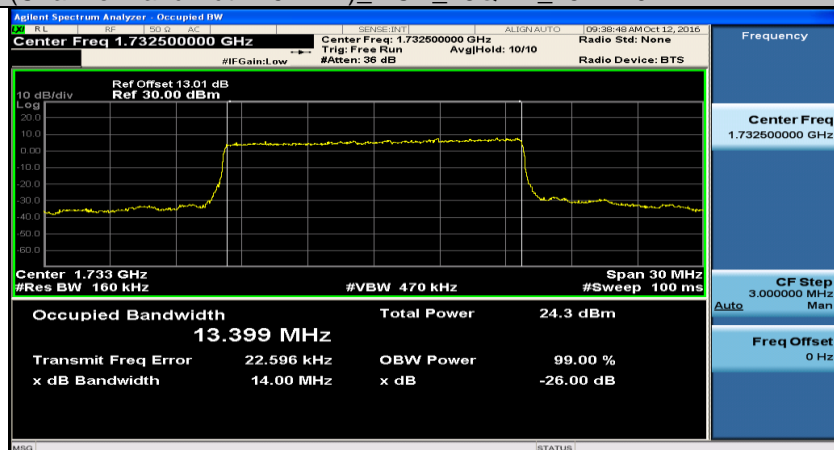
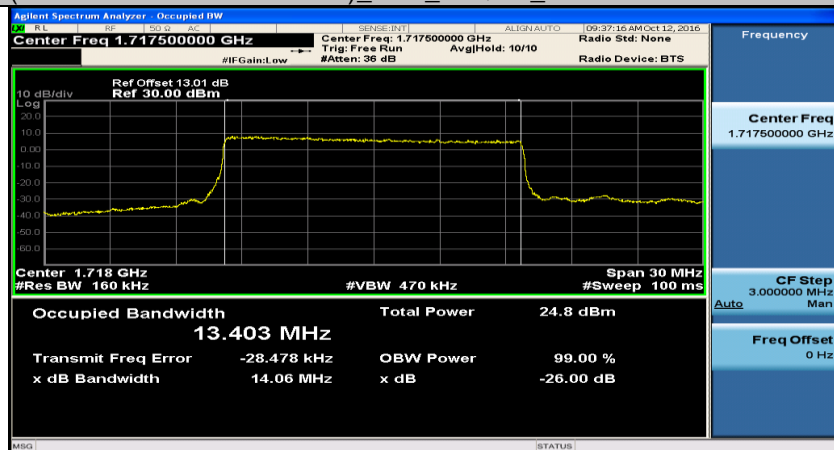
Channel Bandwidth: 10 MHz\_MCH\_16QAM\_50RB#0



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

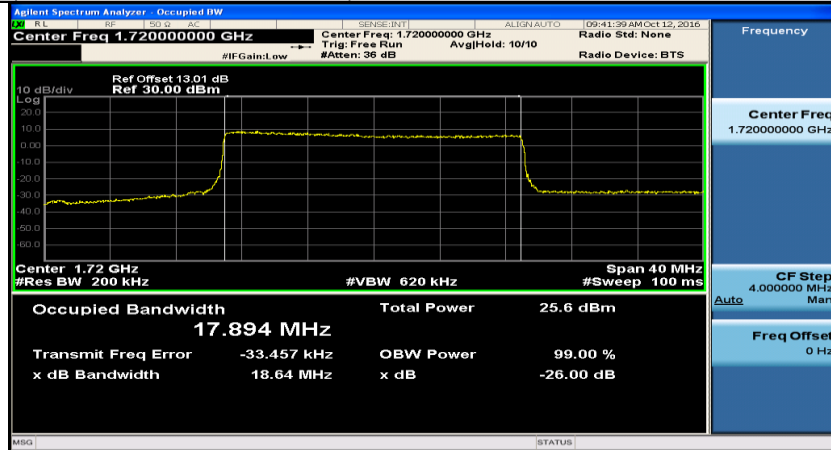




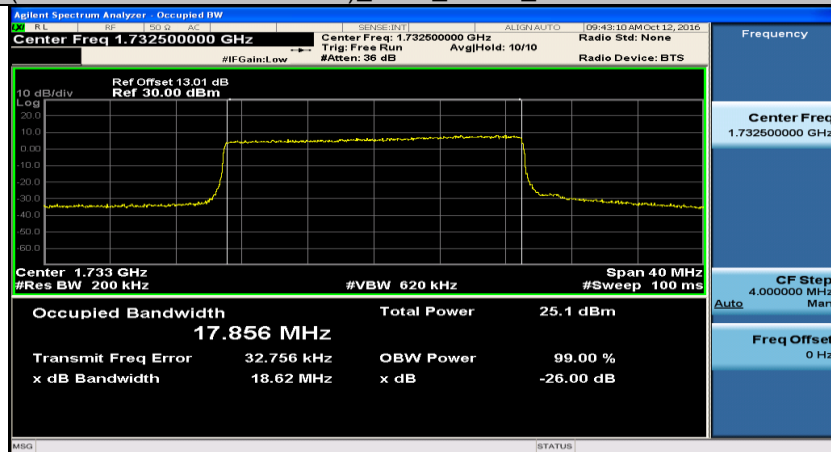




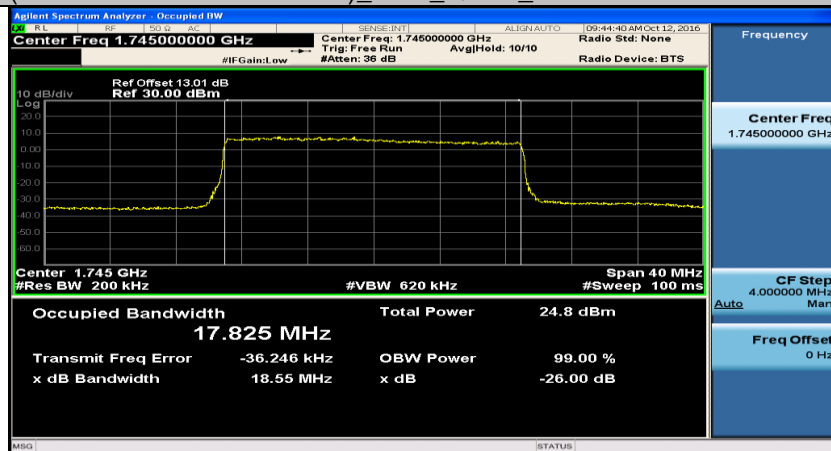
(Channel Bandwidth:20 MHz) \_LCH\_QPSK\_100RB#0



(Channel Bandwidth:20 MHz) \_MCH\_QPSK\_100RB#0

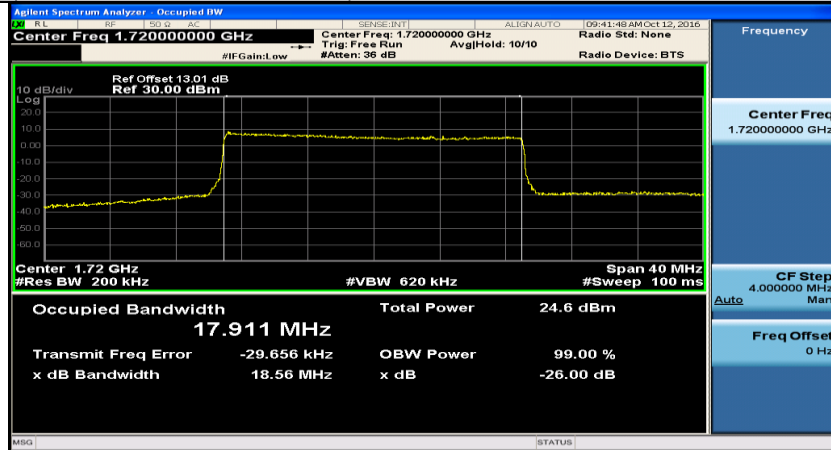


(Channel Bandwidth:20 MHz) \_HCH\_QPSK\_100RB#0

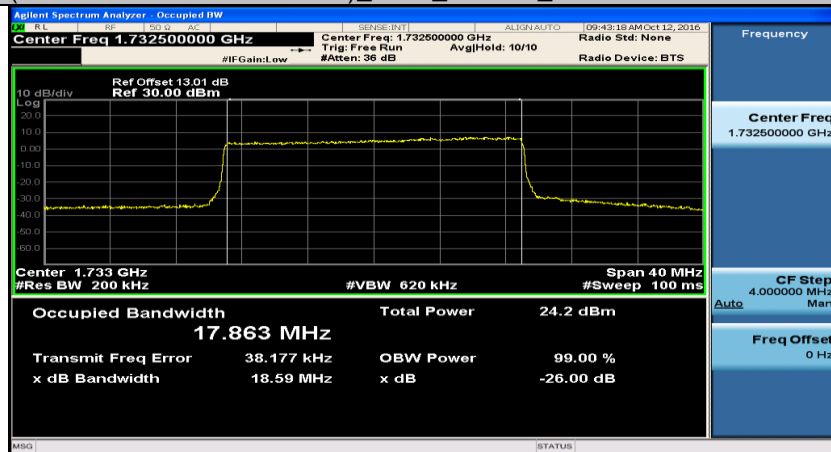




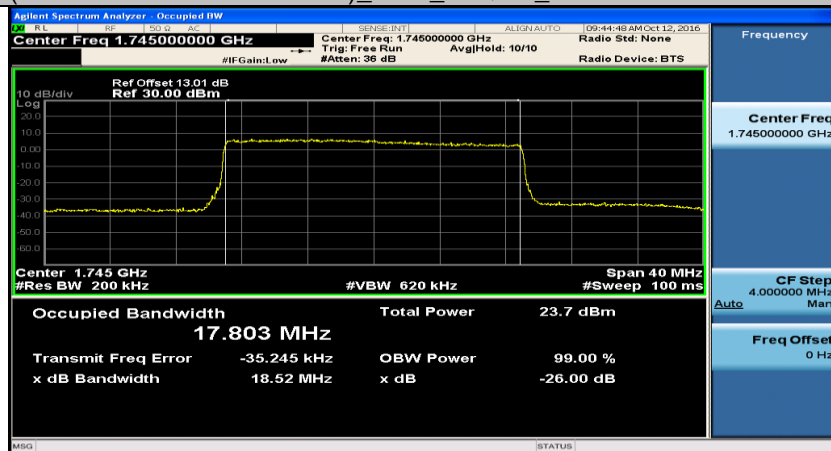
(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_100RB#0



(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_100RB#0



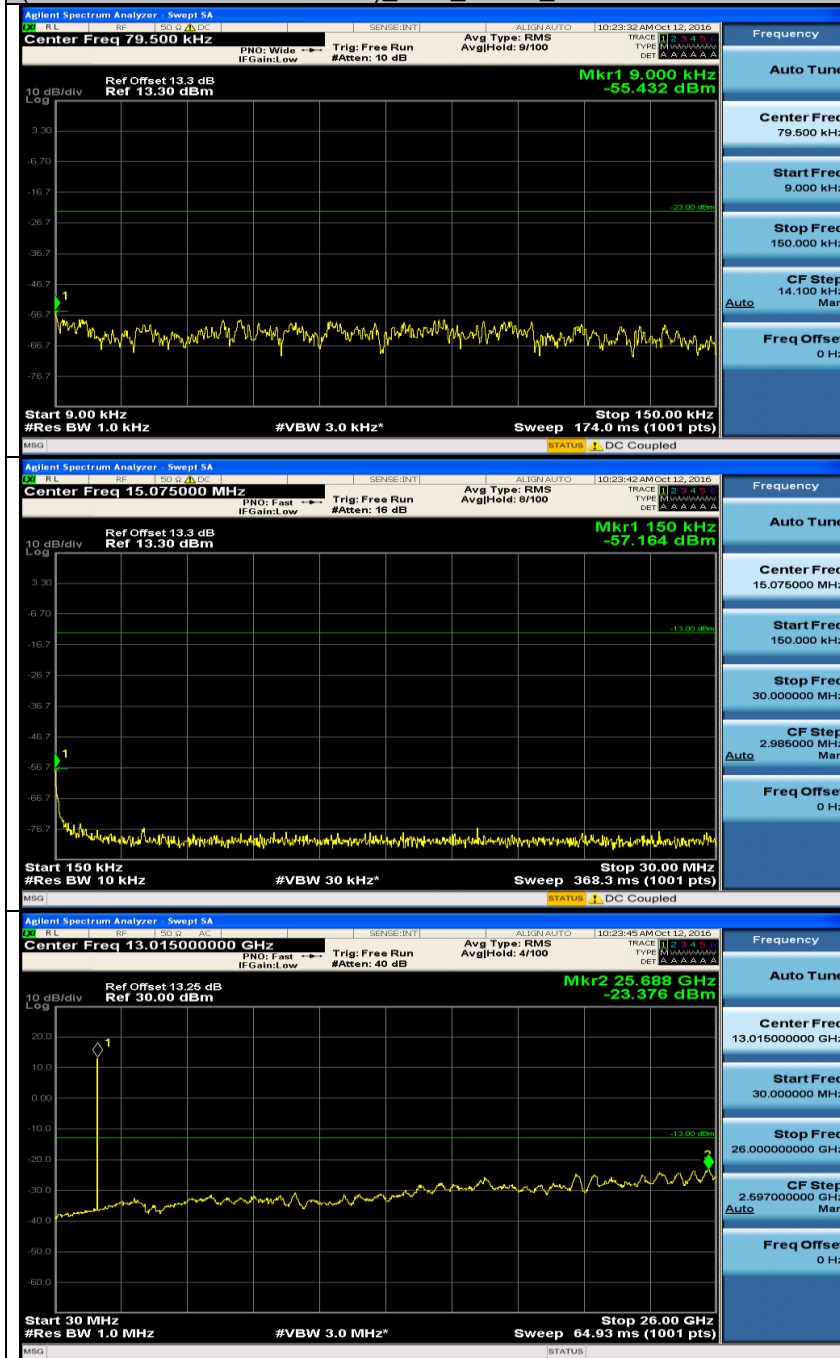
(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_100RB#0



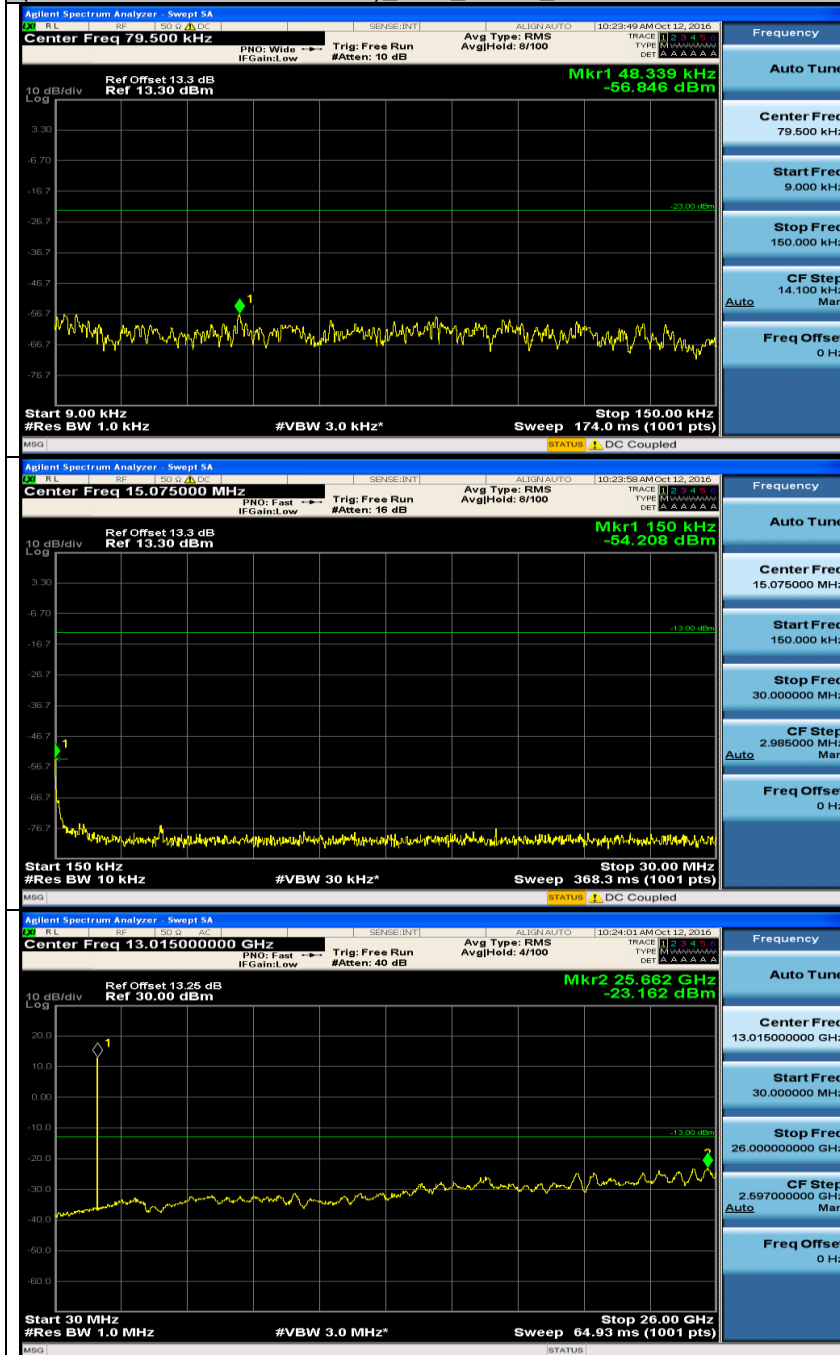
### 3. Spurious Emissions and Bandedge at Antenna Terminal

#### 3.1 Test Datas

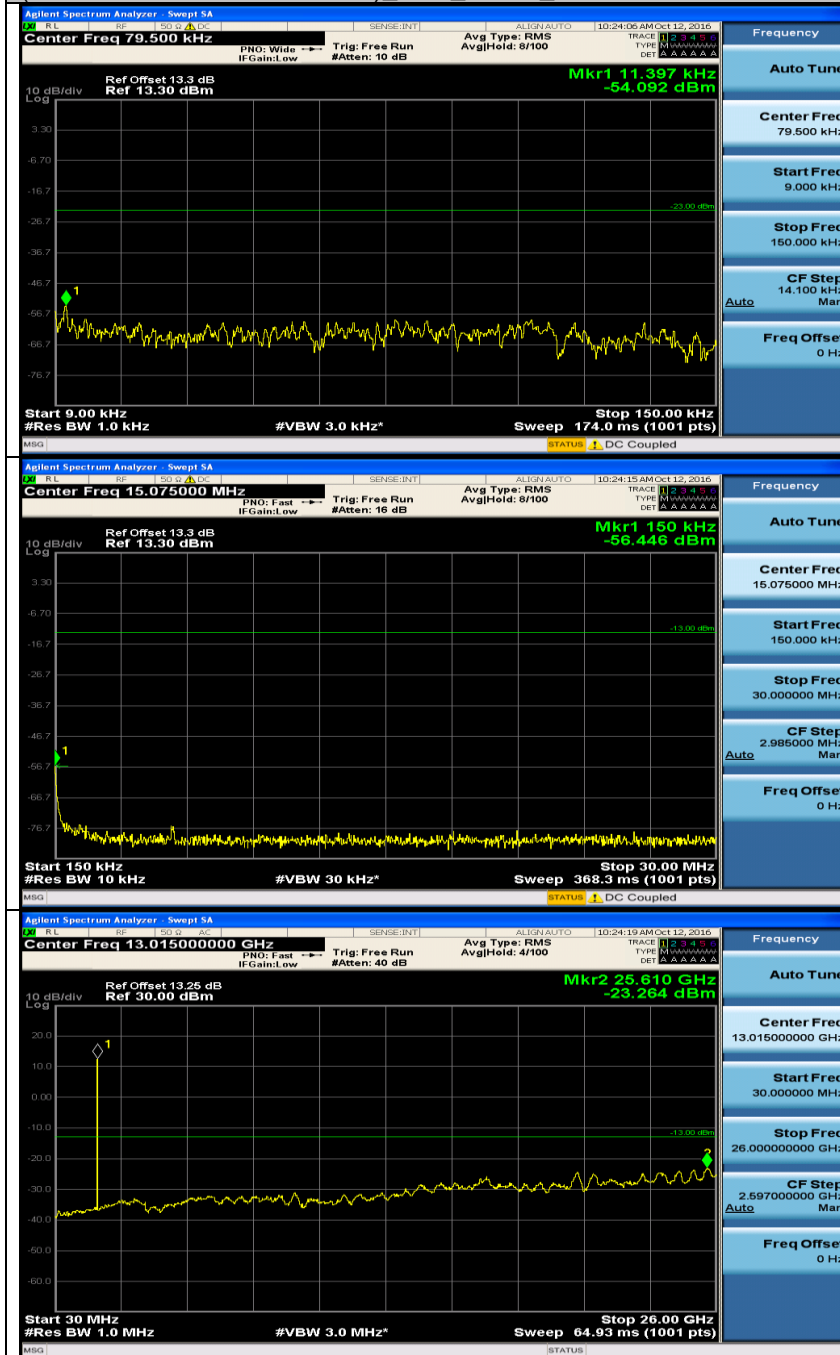
(Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_1RB#0



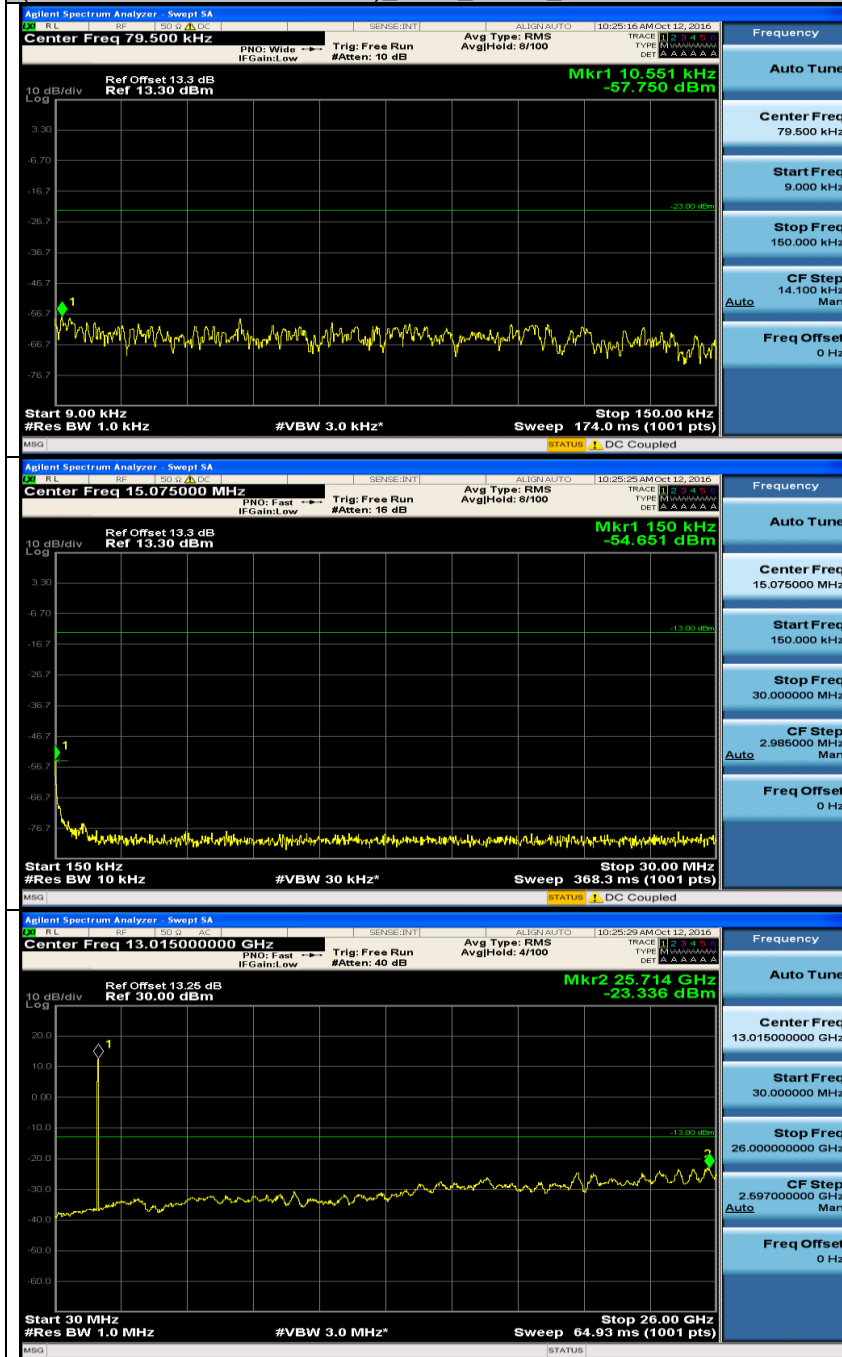
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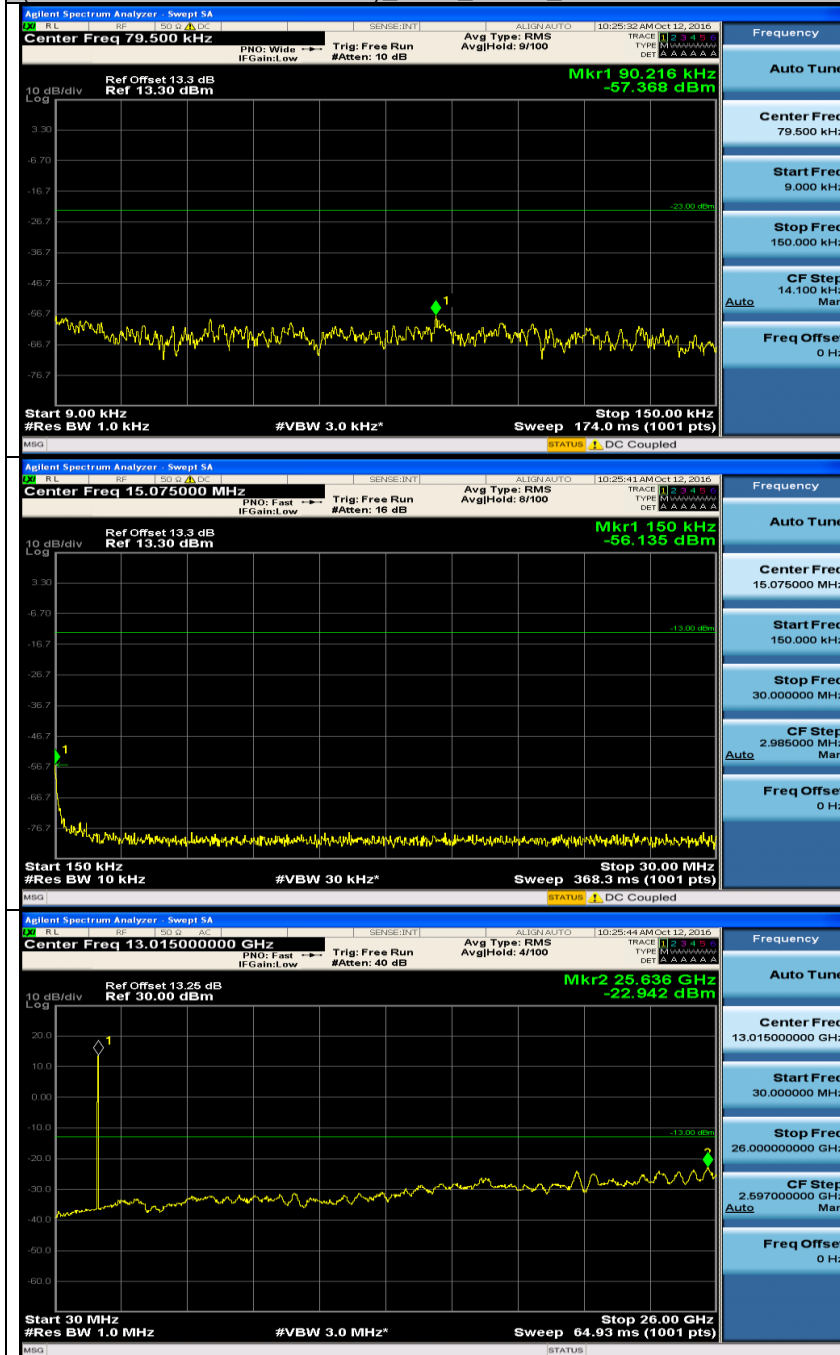
(Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_1RB#5



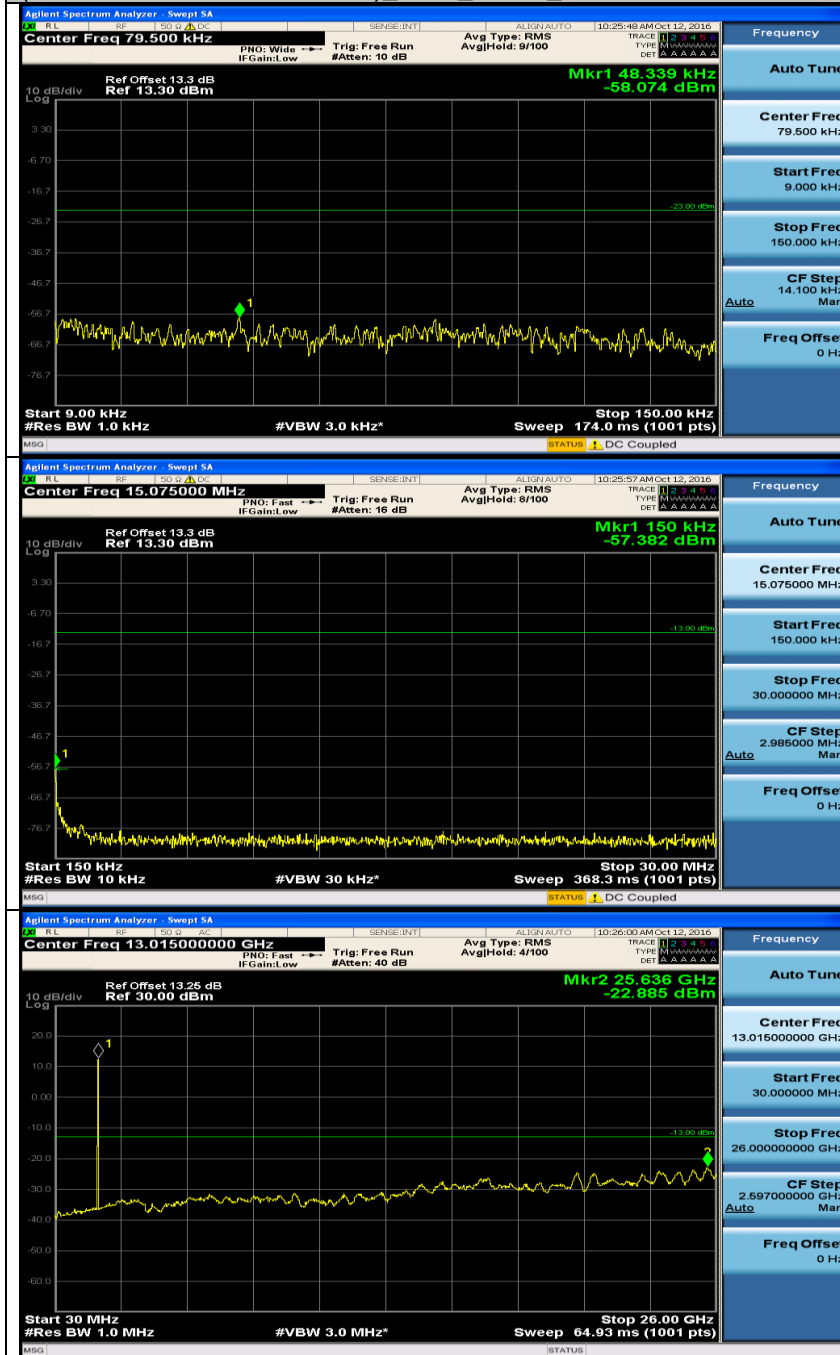
(Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK\_1RB#0



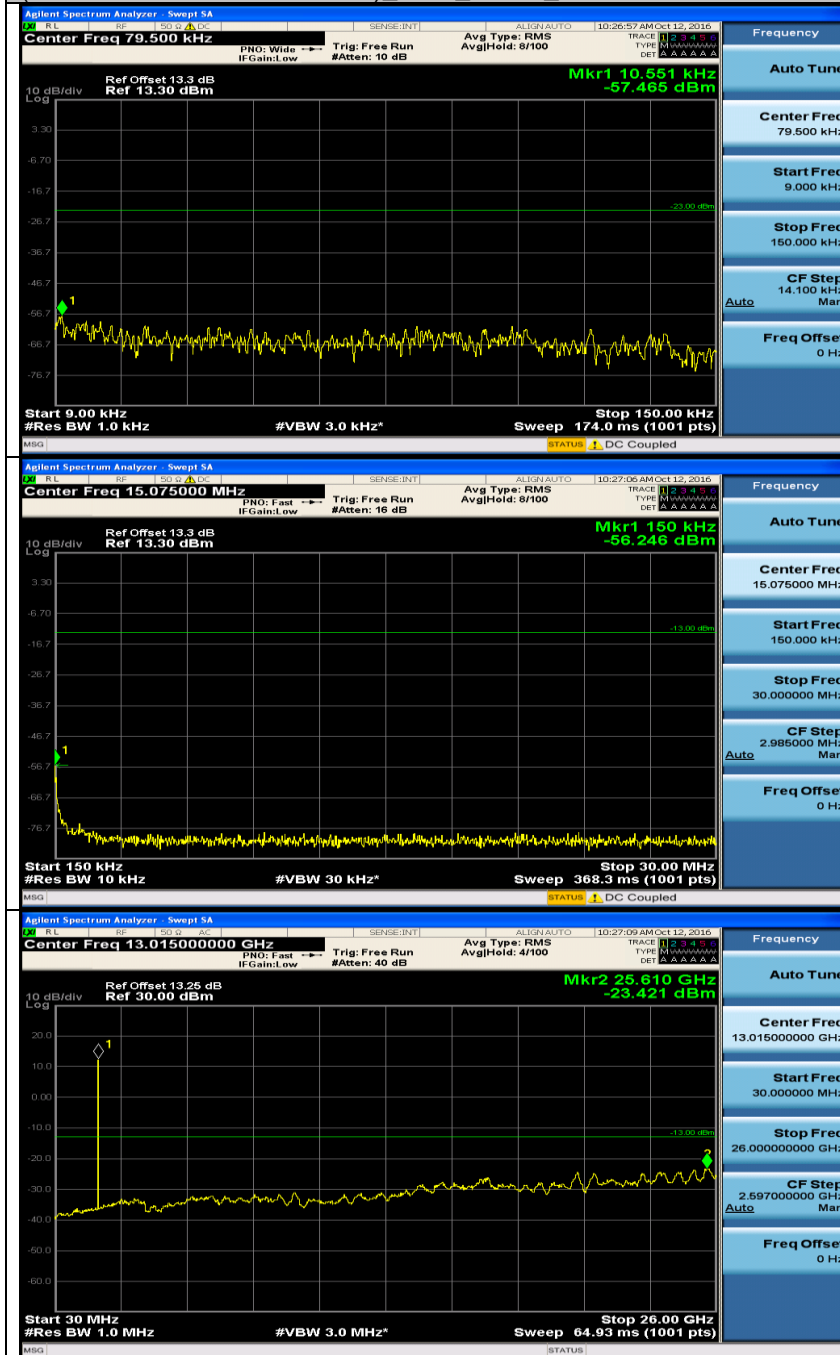
(Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK\_1RB#3



(Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK\_1RB#5

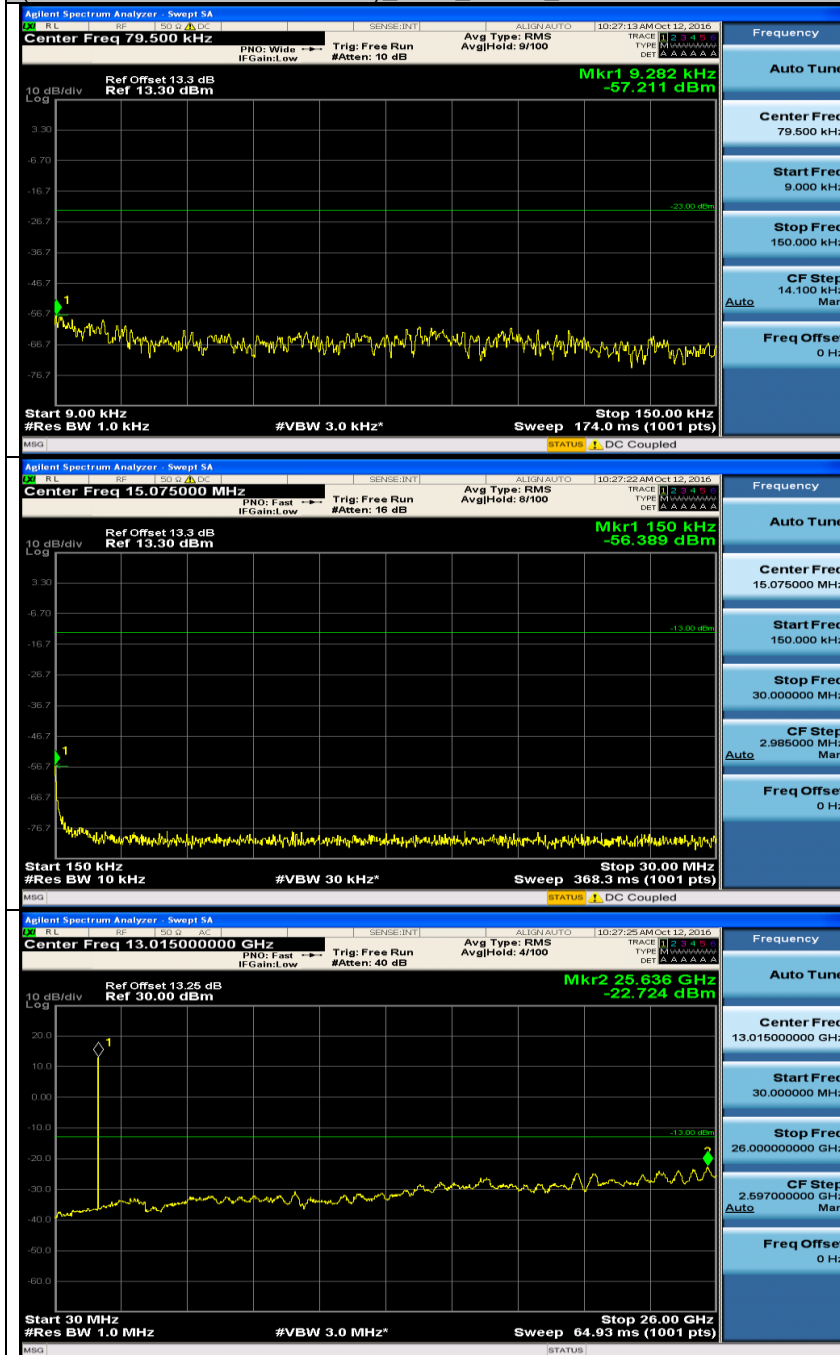


(Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK\_1RB#0

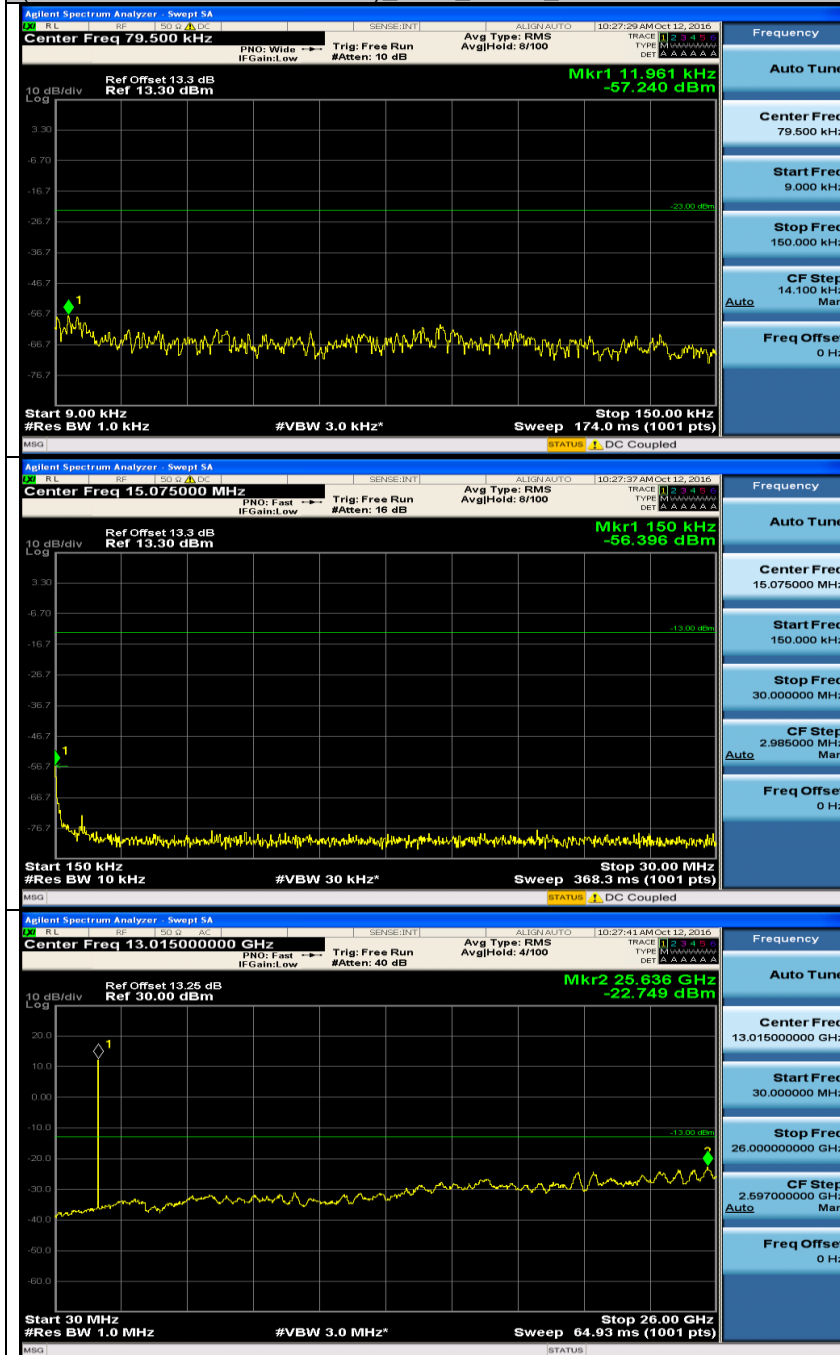




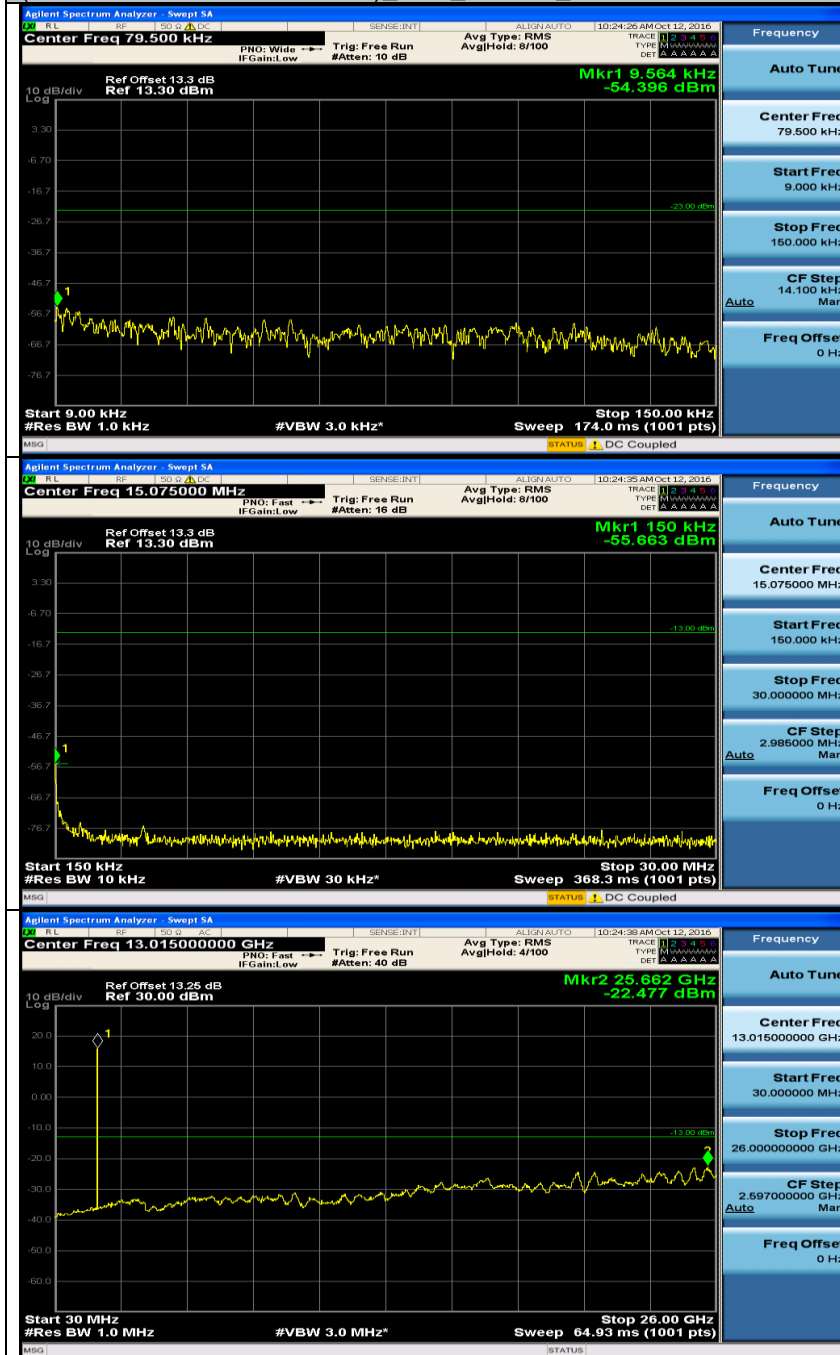
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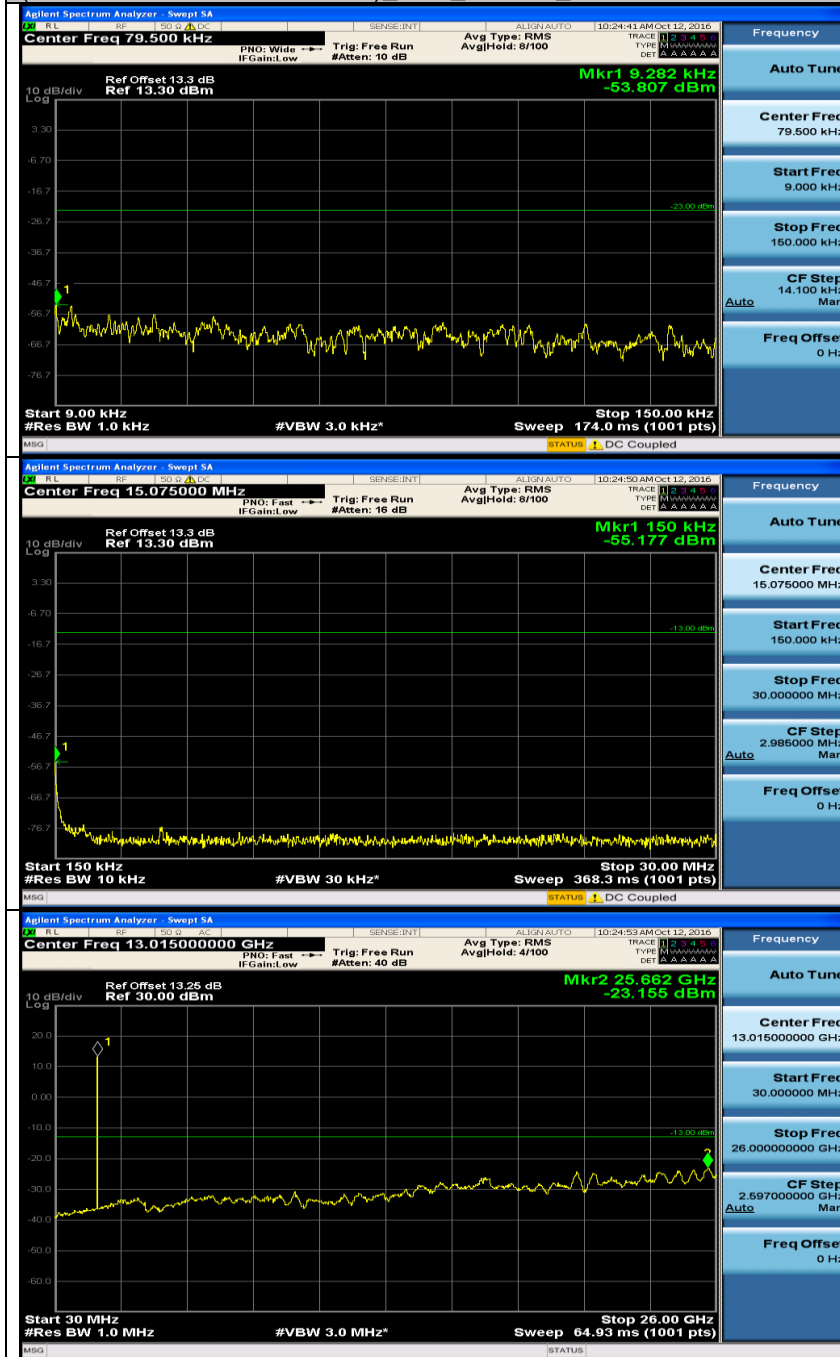
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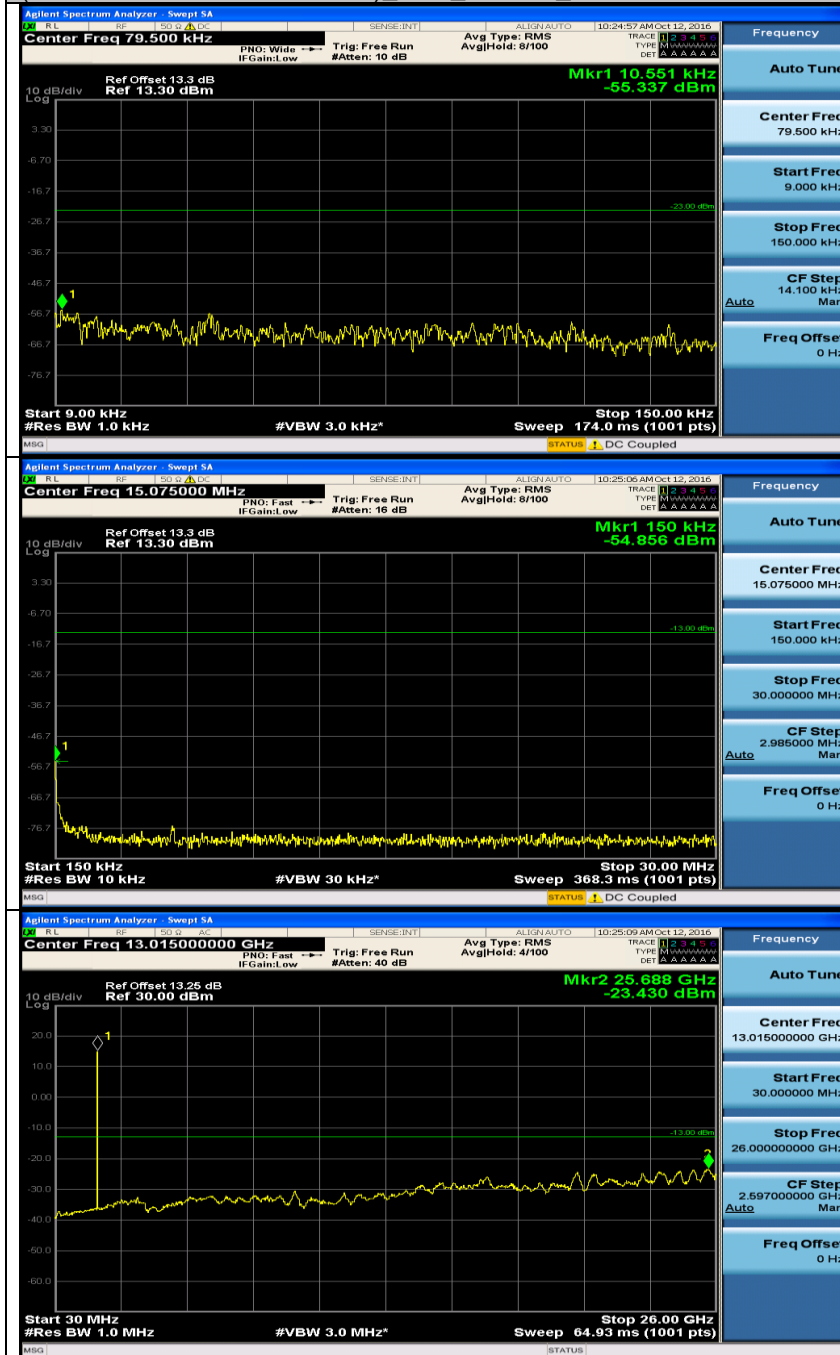
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(Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_1RB#3



(Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_1RB#5



(Channel Bandwidth: 1.4 MHz)\_MCH\_16QAM\_1RB#0

