



Appendix for test report

1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
BAND17	LTE/TM1	5	LCH	RB1#0	22.59	20.07	34.7	PASS
				RB1#13	22.51	20.18	34.7	PASS
				RB1#24	22.41	19.84	34.7	PASS
				RB12#0	21.84	19.29	34.7	PASS
				RB12#6	21.9	19.27	34.7	PASS
				RB12#13	21.78	19.38	34.7	PASS
				RB25#0	21.81	19.17	34.7	PASS
			MCH	RB1#0	22.28	19.79	34.7	PASS
				RB1#13	22.95	20.60	34.7	PASS
				RB1#24	22.69	20.39	34.7	PASS
				RB12#0	21.78	19.47	34.7	PASS
				RB12#6	22.01	19.40	34.7	PASS
				RB12#13	21.95	19.42	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.82	19.46	34.7	PASS
			HCH	RB1#0	22.75	20.31	34.7	PASS
				RB1#13	22.66	20.22	34.7	PASS
				RB1#24	22.07	19.63	34.7	PASS
				RB12#0	22.05	19.56	34.7	PASS
				RB12#6	22.02	19.40	34.7	PASS
				RB12#13	21.74	19.07	34.7	PASS
				RB25#0	21.75	19.36	34.7	PASS
		10	LCH	RB1#0	22.18	19.77	34.7	PASS
				RB1#25	22.74	20.40	34.7	PASS
				RB1#49	22.4	19.96	34.7	PASS
				RB25#0	21.73	19.22	34.7	PASS
				RB25#13	21.84	19.56	34.7	PASS
				RB25#25	21.78	19.50	34.7	PASS
				RB50#0	21.75	19.37	34.7	PASS
			MCH	RB1#0	21.99	19.40	34.7	PASS
				RB1#25	22.88	20.33	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	22.1	19.47	34.7	PASS
				RB25#0	21.61	19.17	34.7	PASS
				RB25#13	21.83	19.28	34.7	PASS
				RB25#25	21.75	19.14	34.7	PASS
				RB50#0	21.66	19.11	34.7	PASS
			HCH	RB1#0	22	19.37	34.7	PASS
				RB1#25	22.9	20.61	34.7	PASS
				RB1#49	21.91	19.54	34.7	PASS
				RB25#0	21.62	18.95	34.7	PASS
				RB25#13	21.88	19.30	34.7	PASS
				RB25#25	21.66	19.10	34.7	PASS
				RB50#0	21.61	19.00	34.7	PASS
	LTE/TM2	5	LCH	RB1#0	21.79	19.18	34.7	PASS
				RB1#13	21.96	19.35	34.7	PASS
				RB1#24	21.78	19.49	34.7	PASS
				RB12#0	20.7	18.10	34.7	PASS
				RB12#6	20.72	18.25	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB12#13	20.61	18.30	34.7	PASS
				RB25#0	20.65	18.35	34.7	PASS
			MCH	RB1#0	21.67	19.37	34.7	PASS
				RB1#13	22.28	19.68	34.7	PASS
				RB1#24	21.98	19.32	34.7	PASS
				RB12#0	20.63	18.07	34.7	PASS
				RB12#6	20.86	18.26	34.7	PASS
				RB12#13	20.81	18.49	34.7	PASS
				RB25#0	20.66	18.04	34.7	PASS
			HCH	RB1#0	21.96	19.43	34.7	PASS
				RB1#13	22.16	19.58	34.7	PASS
				RB1#24	21.35	19.05	34.7	PASS
				RB12#0	20.9	18.47	34.7	PASS
				RB12#6	20.88	18.34	34.7	PASS
				RB12#13	20.61	17.98	34.7	PASS
				RB25#0	20.59	18.15	34.7	PASS
		10	LCH	RB1#0	21.72	19.44	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#25	22.14	19.59	34.7	PASS
				RB1#49	21.81	19.34	34.7	PASS
				RB25#0	20.56	18.00	34.7	PASS
				RB25#13	20.69	18.27	34.7	PASS
				RB25#25	20.65	18.11	34.7	PASS
				RB50#0	20.59	18.21	34.7	PASS
			MCH	RB1#0	21.39	19.09	34.7	PASS
				RB1#25	22.2	19.63	34.7	PASS
				RB1#49	21.53	19.04	34.7	PASS
				RB25#0	20.42	17.82	34.7	PASS
				RB25#13	20.65	18.32	34.7	PASS
				RB25#25	20.59	18.15	34.7	PASS
				RB50#0	20.48	18.16	34.7	PASS
			HCH	RB1#0	21.46	18.81	34.7	PASS
				RB1#25	22.25	19.78	34.7	PASS
				RB1#49	21.23	18.62	34.7	PASS
				RB25#0	20.45	18.09	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#13	20.71	18.31	34.7	PASS
				RB25#25	20.5	17.99	34.7	PASS
				RB50#0	20.45	18.08	34.7	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

Note2:

SET Span=1.5*OBW

SET RBW=1%of the OBW,not to wxceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
BAND17	LTE/TM1	5	LCH	RB1#0	4.66	13	PASS
				RB1#13	4.51	13	PASS
				RB1#24	4.77	13	PASS
				RB12#0	5.55	13	PASS
				RB12#6	5.49	13	PASS
				RB12#13	5.72	13	PASS
				RB25#0	5.71	13	PASS
			MCH	RB1#0	4.55	13	PASS
				RB1#13	4.59	13	PASS
				RB1#24	4.66	13	PASS
				RB12#0	5.83	13	PASS
				RB12#6	5.75	13	PASS
				RB12#13	5.88	13	PASS
				RB25#0	5.79	13	PASS
			HCH	RB1#0	5.31	13	PASS
				RB1#13	5.02	13	PASS
				RB1#24	5.18	13	PASS
				RB12#0	5.76	13	PASS
				RB12#6	5.49	13	PASS
				RB12#13	5.48	13	PASS
				RB25#0	5.74	13	PASS
		10	LCH	RB1#0	4.8	13	PASS
				RB1#25	4.74	13	PASS
				RB1#49	4.82	13	PASS
				RB25#0	5.79	13	PASS
				RB25#13	5.84	13	PASS
				RB25#25	6.04	13	PASS
				RB50#0	6.13	13	PASS
			MCH	RB1#0	4.53	13	PASS
				RB1#25	4.72	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	4.58	13	PASS
				RB25#0	6.14	13	PASS
				RB25#13	6.13	13	PASS
				RB25#25	6.2	13	PASS
				RB50#0	6.03	13	PASS
			HCH	RB1#0	4.69	13	PASS
				RB1#25	4.83	13	PASS
				RB1#49	4.86	13	PASS
				RB25#0	5.98	13	PASS
				RB25#13	5.8	13	PASS
				RB25#25	5.89	13	PASS
				RB50#0	6.04	13	PASS
	LTE/TM2	5	LCH	RB1#0	5.93	13	PASS
				RB1#13	6.03	13	PASS
				RB1#24	6.23	13	PASS
				RB12#0	6.12	13	PASS
				RB12#6	6.04	13	PASS
				RB12#13	6.3	13	PASS
				RB25#0	6.36	13	PASS
			MCH	RB1#0	6.25	13	PASS
				RB1#13	6.4	13	PASS
				RB1#24	6.53	13	PASS
				RB12#0	6.64	13	PASS
				RB12#6	6.46	13	PASS
				RB12#13	6.8	13	PASS
				RB25#0	6.7	13	PASS
			HCH	RB1#0	6.46	13	PASS
				RB1#13	6.05	13	PASS
				RB1#24	5.96	13	PASS
				RB12#0	6.46	13	PASS
				RB12#6	6.24	13	PASS
				RB12#13	6.12	13	PASS
				RB25#0	6.31	13	PASS
		10	LCH	RB1#0	5.88	13	PASS
				RB1#25	6.24	13	PASS
				RB1#49	6.28	13	PASS
				RB25#0	6.51	13	PASS
				RB25#13	6.62	13	PASS
				RB25#25	6.83	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB50#0	6.71	13	PASS
				RB1#0	5.69	13	PASS
			MCH	RB1#25	6.09	13	PASS
				RB1#49	5.83	13	PASS
				RB25#0	6.67	13	PASS
				RB25#13	6.66	13	PASS
				RB25#25	6.73	13	PASS
				RB50#0	6.54	13	PASS
			HCH	RB1#0	5.78	13	PASS
				RB1#25	6.13	13	PASS
				RB1#49	5.77	13	PASS
				RB25#0	6.74	13	PASS
				RB25#13	6.59	13	PASS
				RB25#25	6.58	13	PASS
				RB50#0	6.33	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

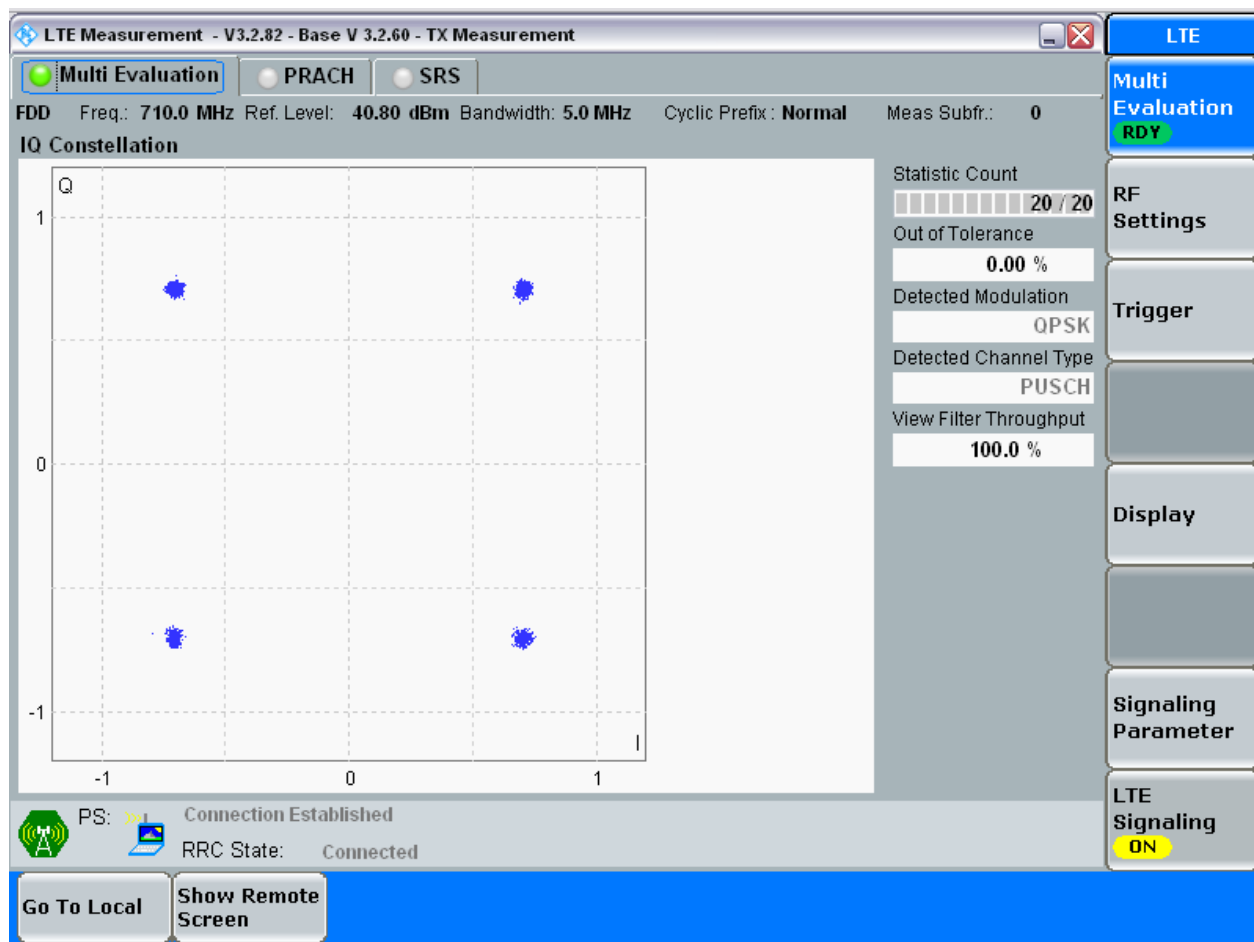
3.1.1 Test Band = BAND17

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 5

3.1.1.1.1.1 Test Channel = MCH

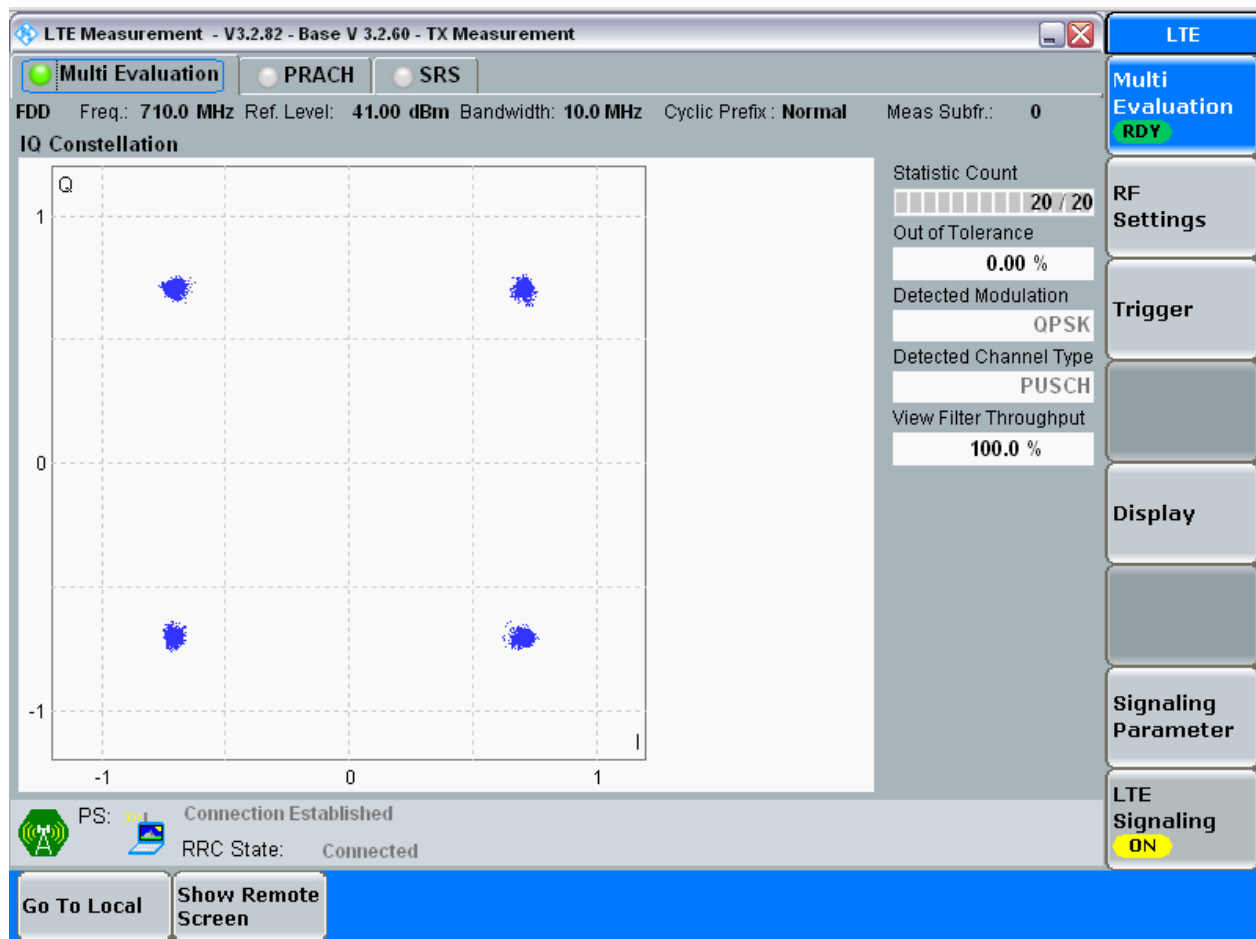
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

3.1.1.1.2.1.1 Test RB = RB50#0

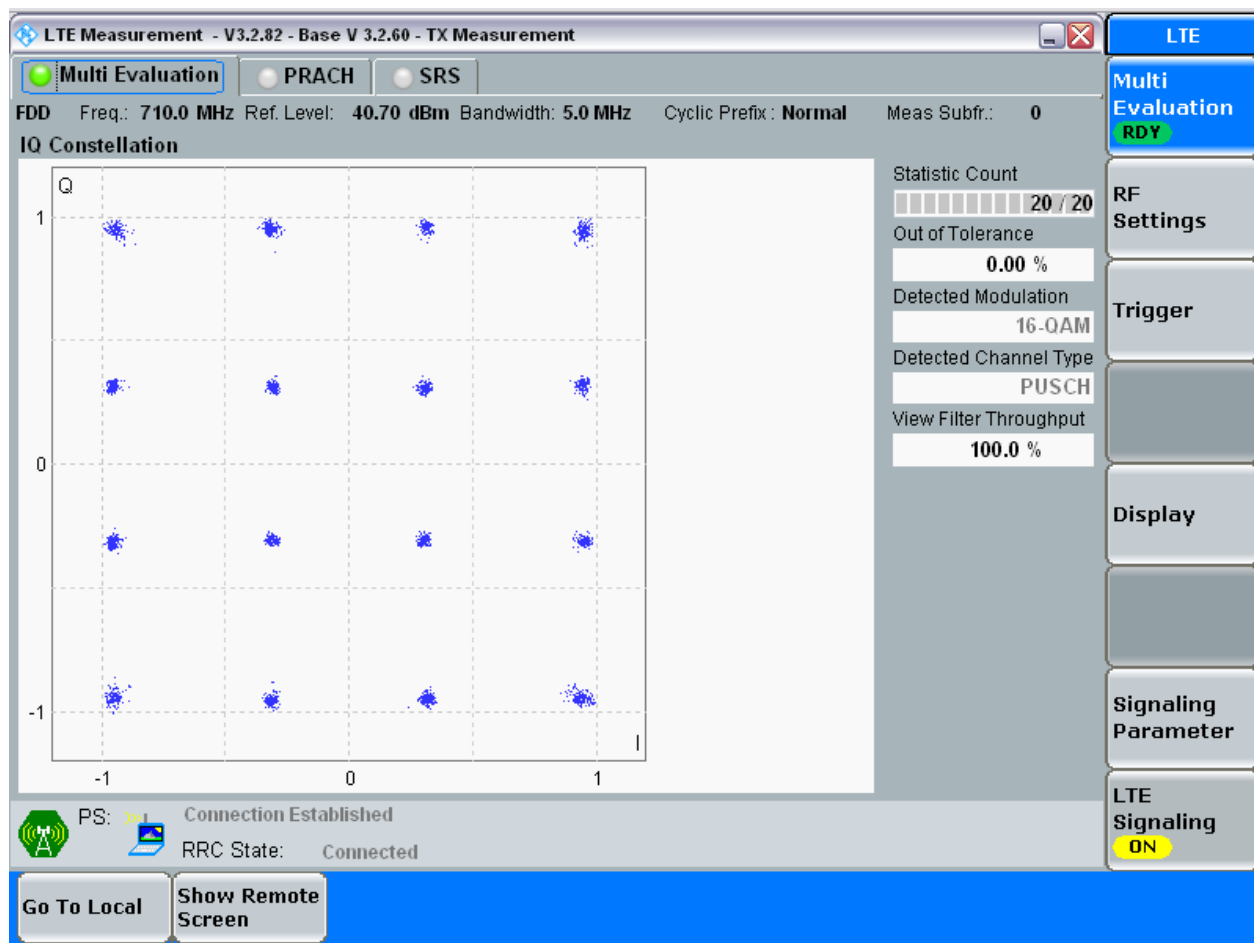


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

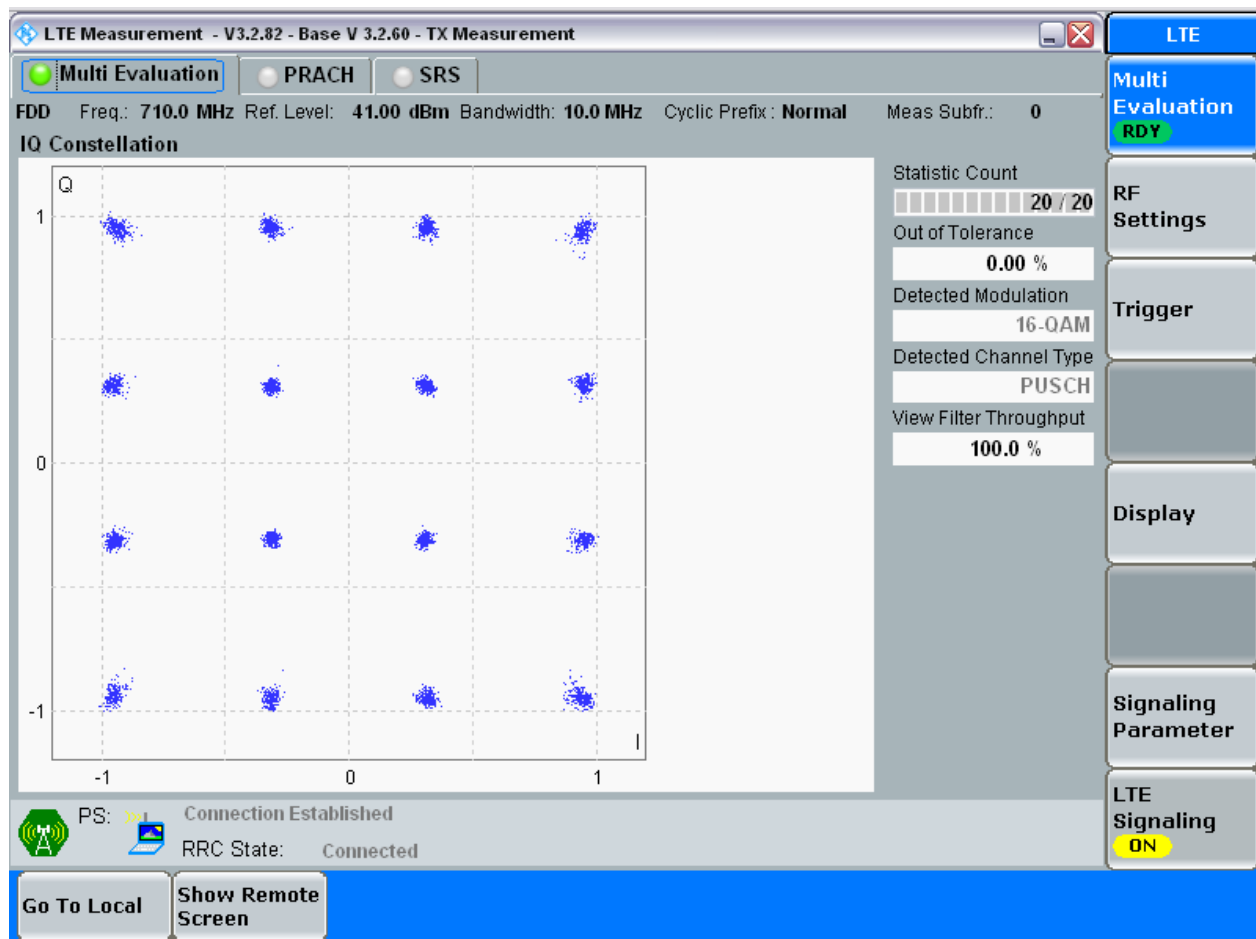
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

3.1.1.2.2.1.1 Test RB = RB50#0



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BAND17	LTE/TM1	5	LCH	RB25#0	4.50	4.86	Pass
			MCH	RB25#0	4.50	4.87	Pass
			HCH	RB25#0	4.50	4.88	Pass
		10	LCH	RB50#0	9.00	9.65	Pass
			MCH	RB50#0	8.99	9.62	Pass
			HCH	RB50#0	8.99	9.61	Pass
	LTE/TM2	5	LCH	RB25#0	4.49	4.88	Pass
			MCH	RB25#0	4.50	4.89	Pass
			HCH	RB25#0	4.50	4.84	Pass
		10	LCH	RB50#0	9.00	9.65	Pass
			MCH	RB50#0	8.98	9.73	Pass
			HCH	RB50#0	8.98	9.60	Pass

Part II - Test Plots

4.1 For LTE

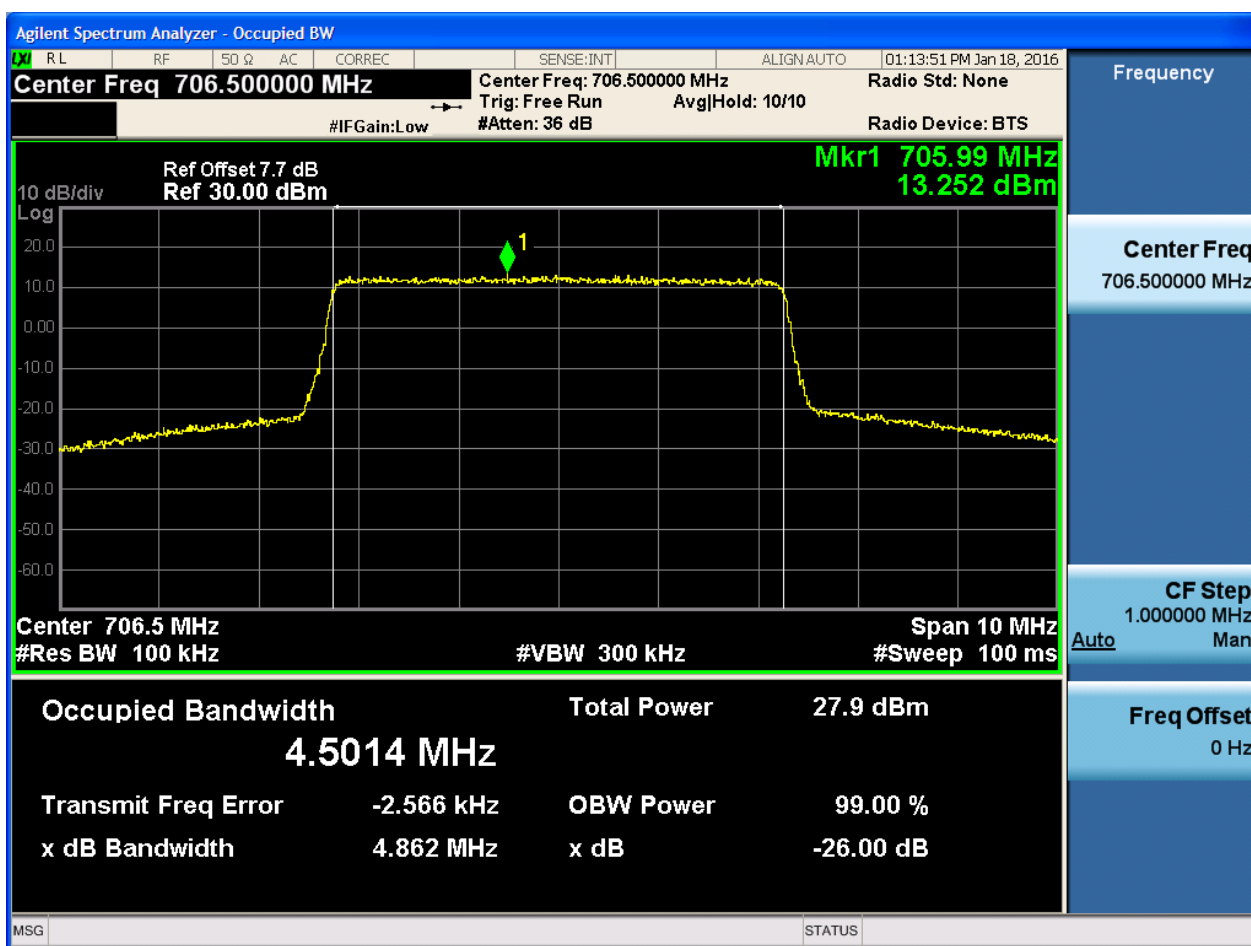
4.1.1 Test Band = BAND17

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 5

4.1.1.1.1.1 Test Channel = LCH

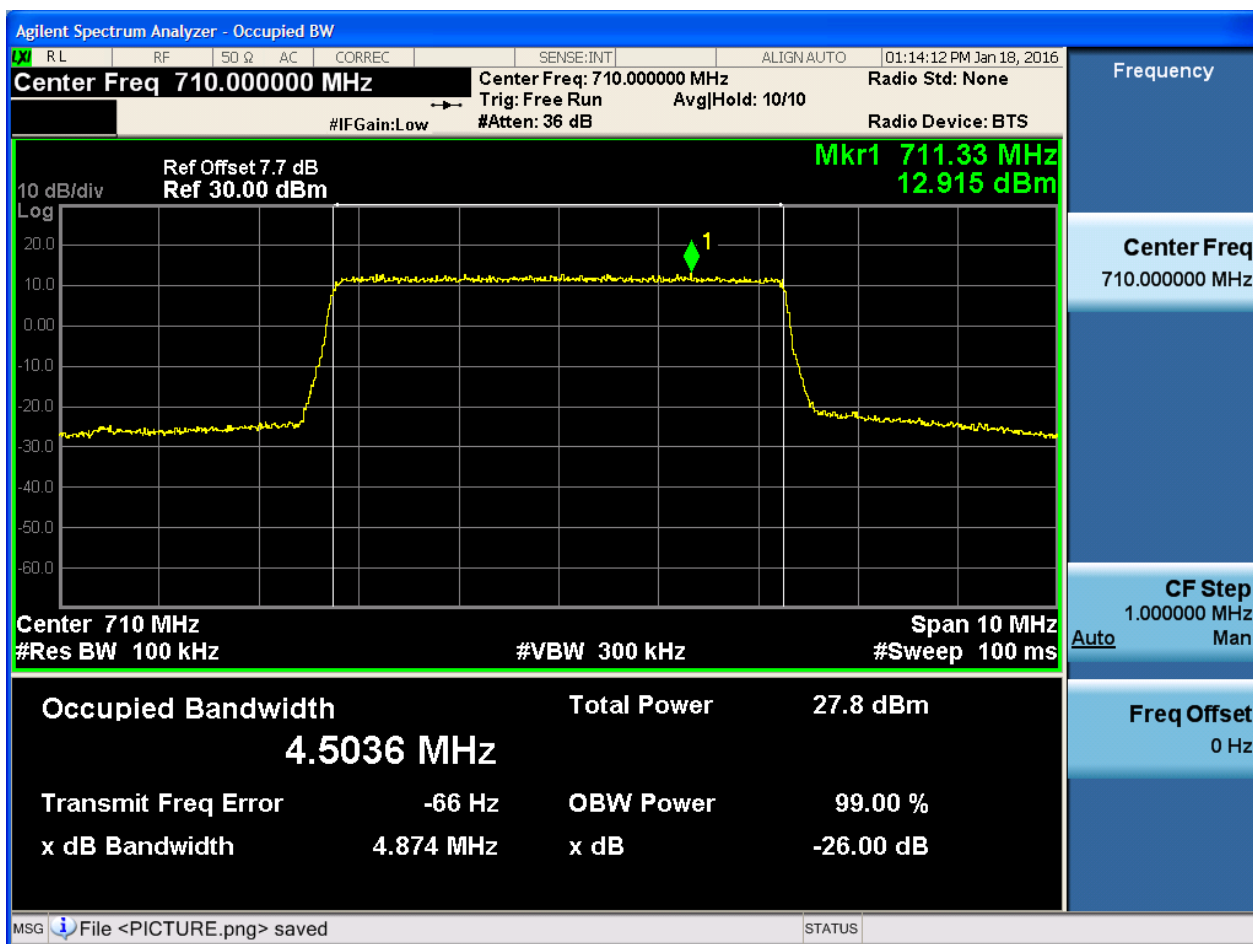
4.1.1.1.1.1.1 Test RB = RB25#0





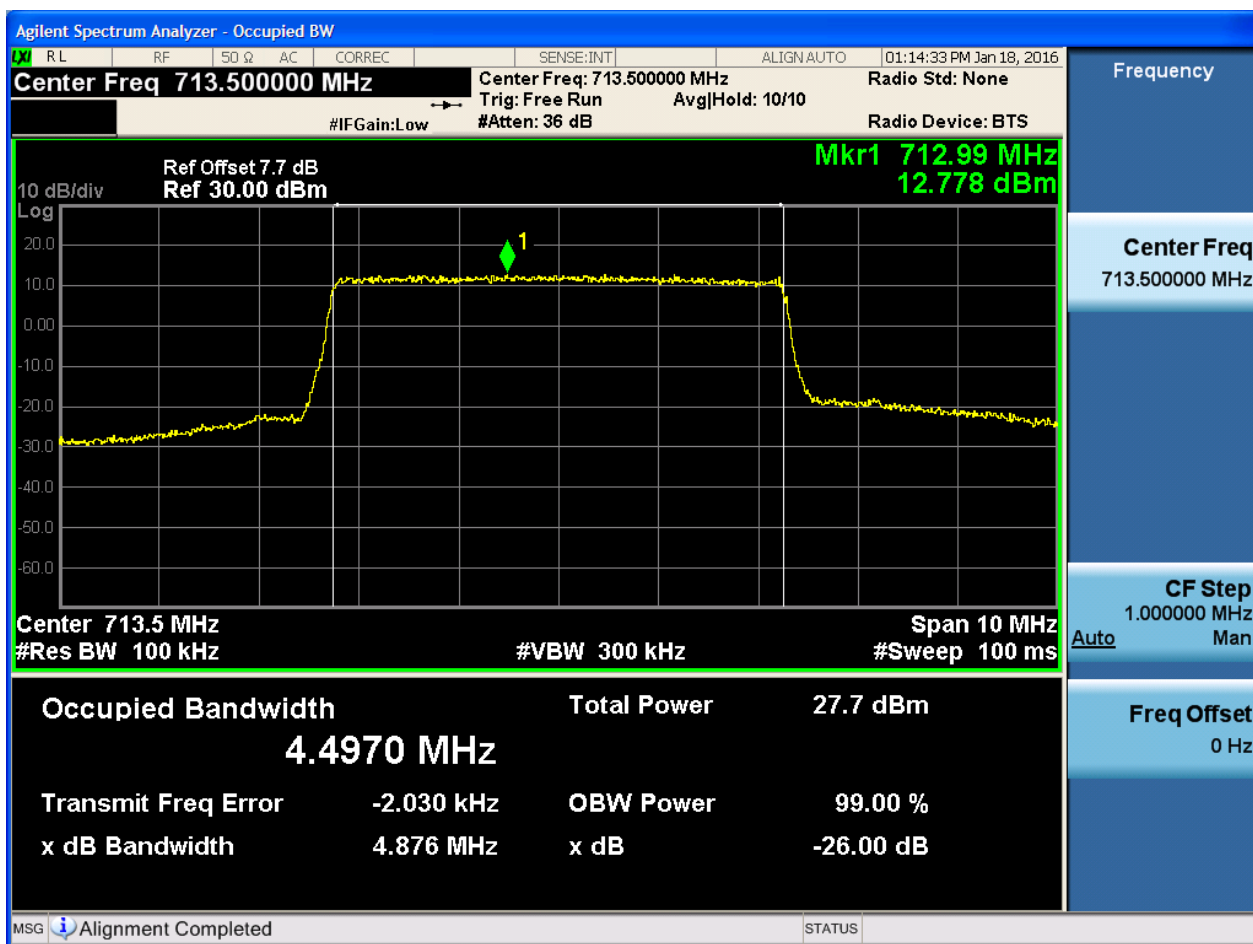
4.1.1.1.1.2 Test Channel = MCH

4.1.1.1.1.2.1 Test RB = RB25#0



4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

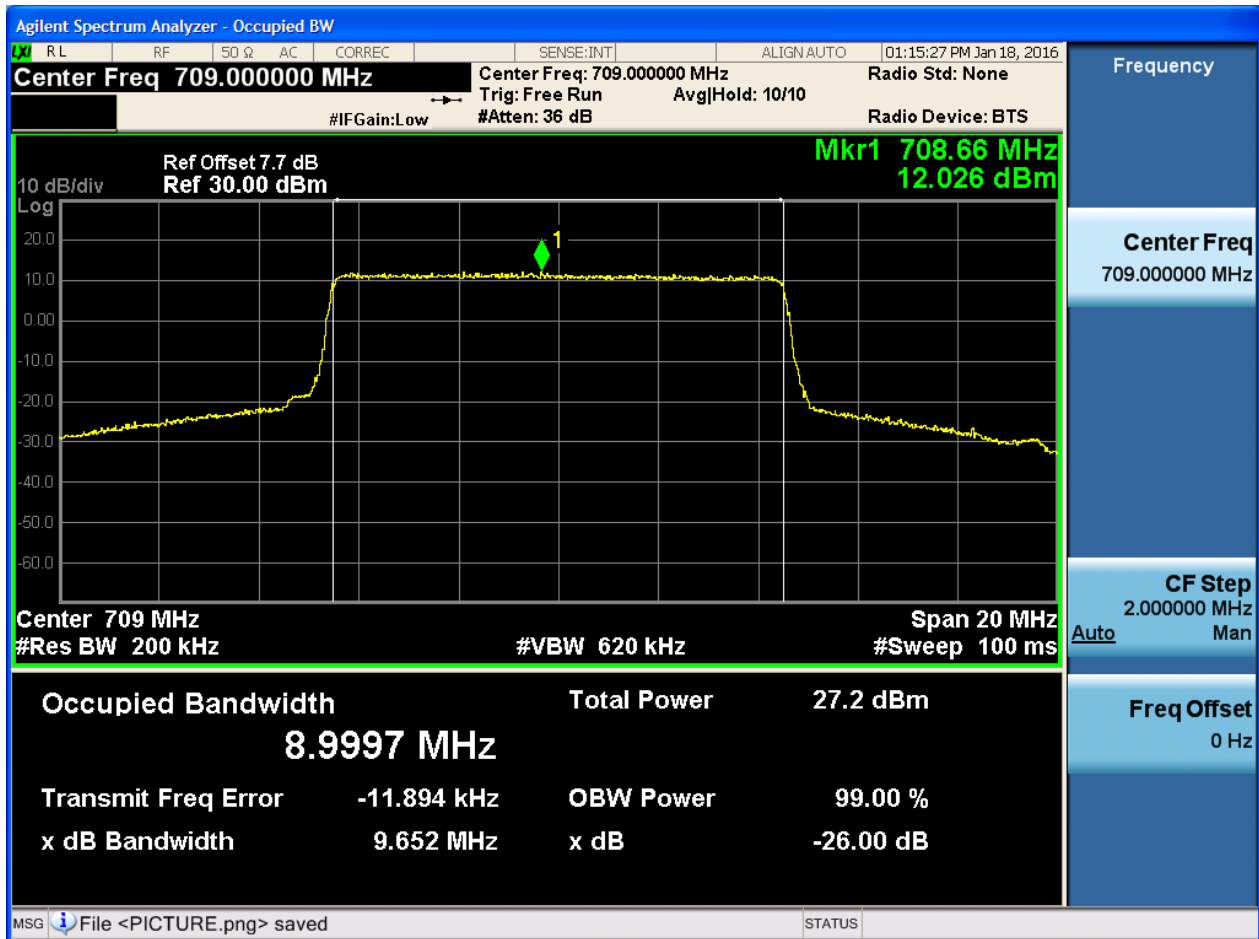




4.1.1.1.2 Test Bandwidth = 10

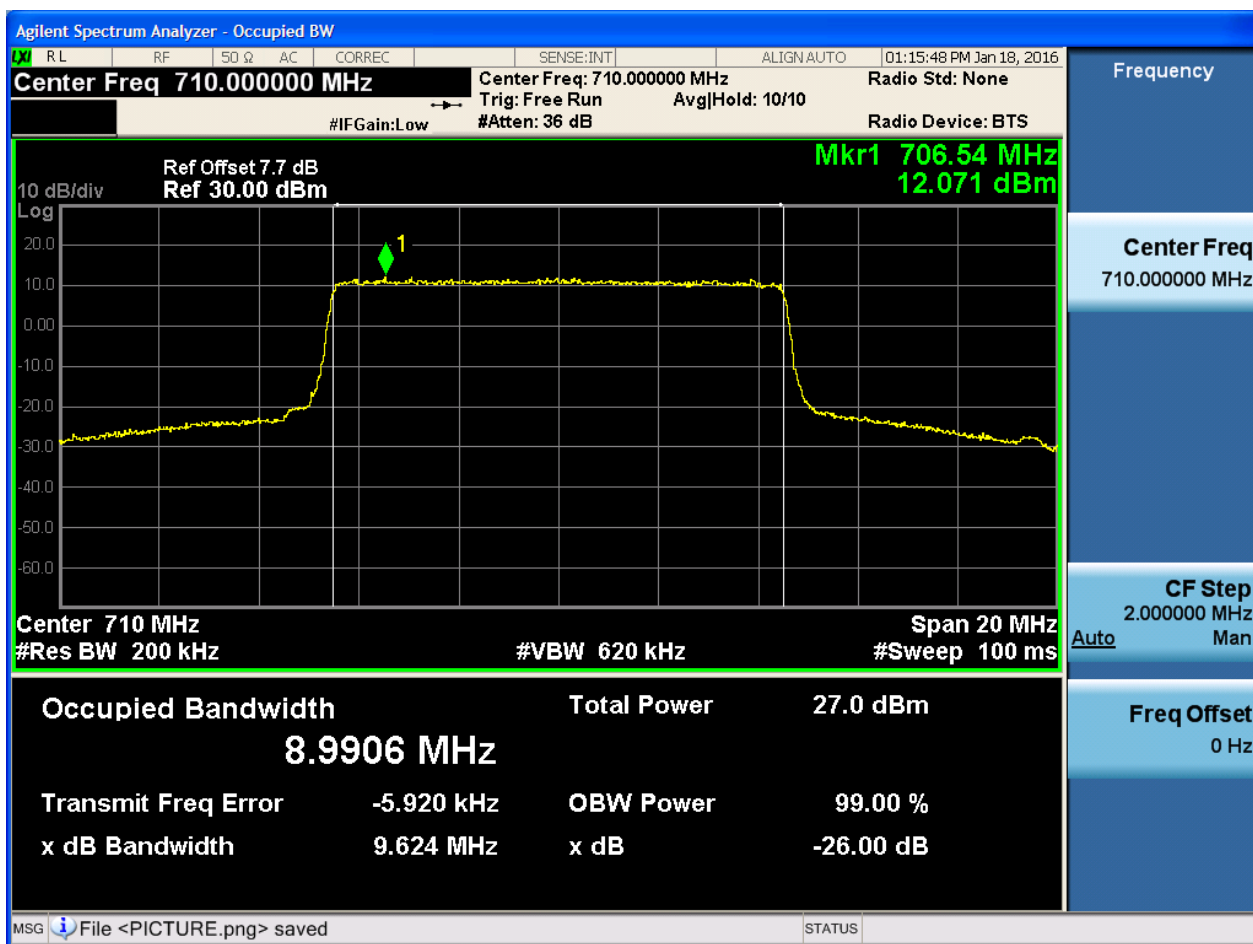
4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 Test RB = RB50#0



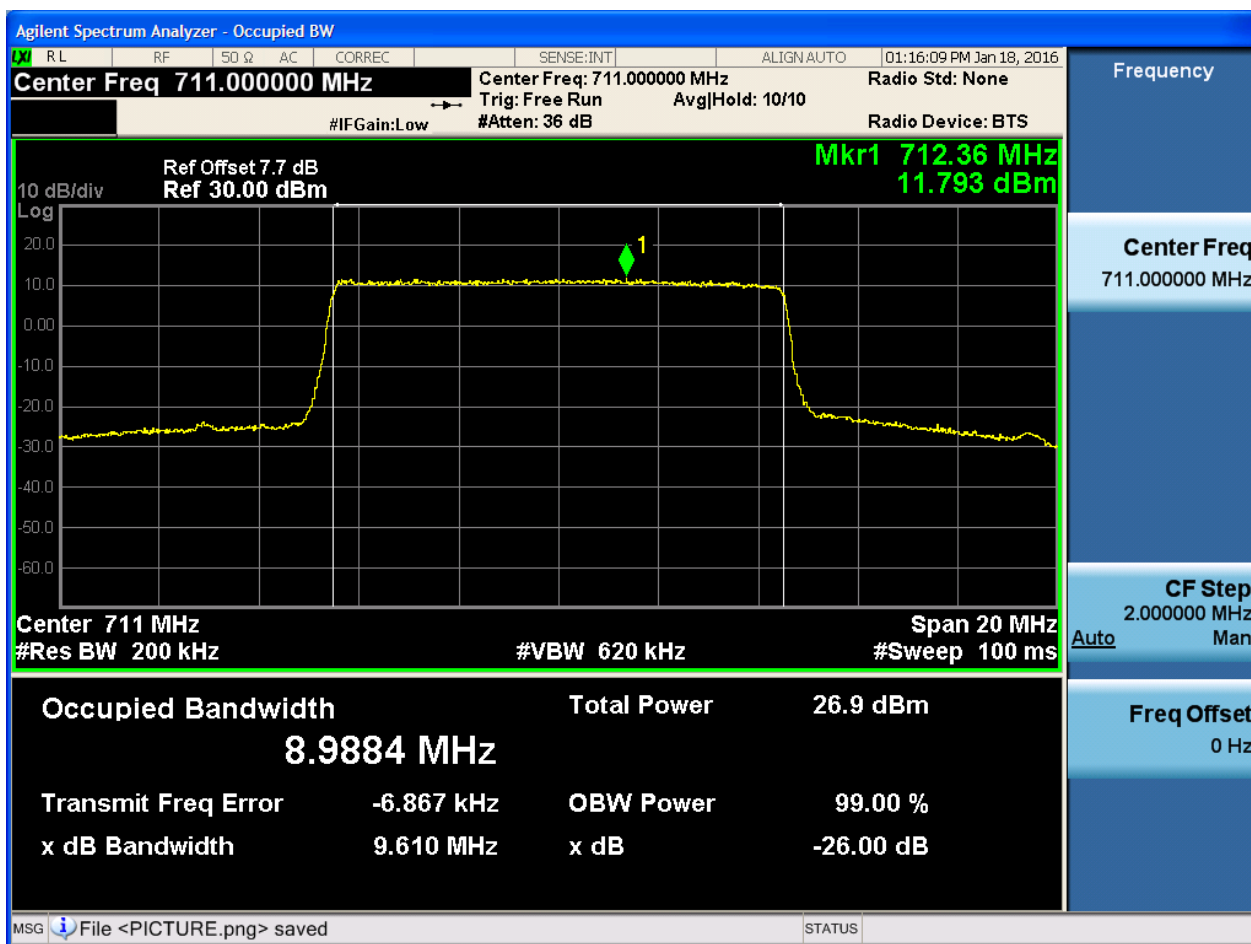
4.1.1.1.2.2 Test Channel = MCH

4.1.1.1.2.2.1 Test RB = RB50#0



4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0



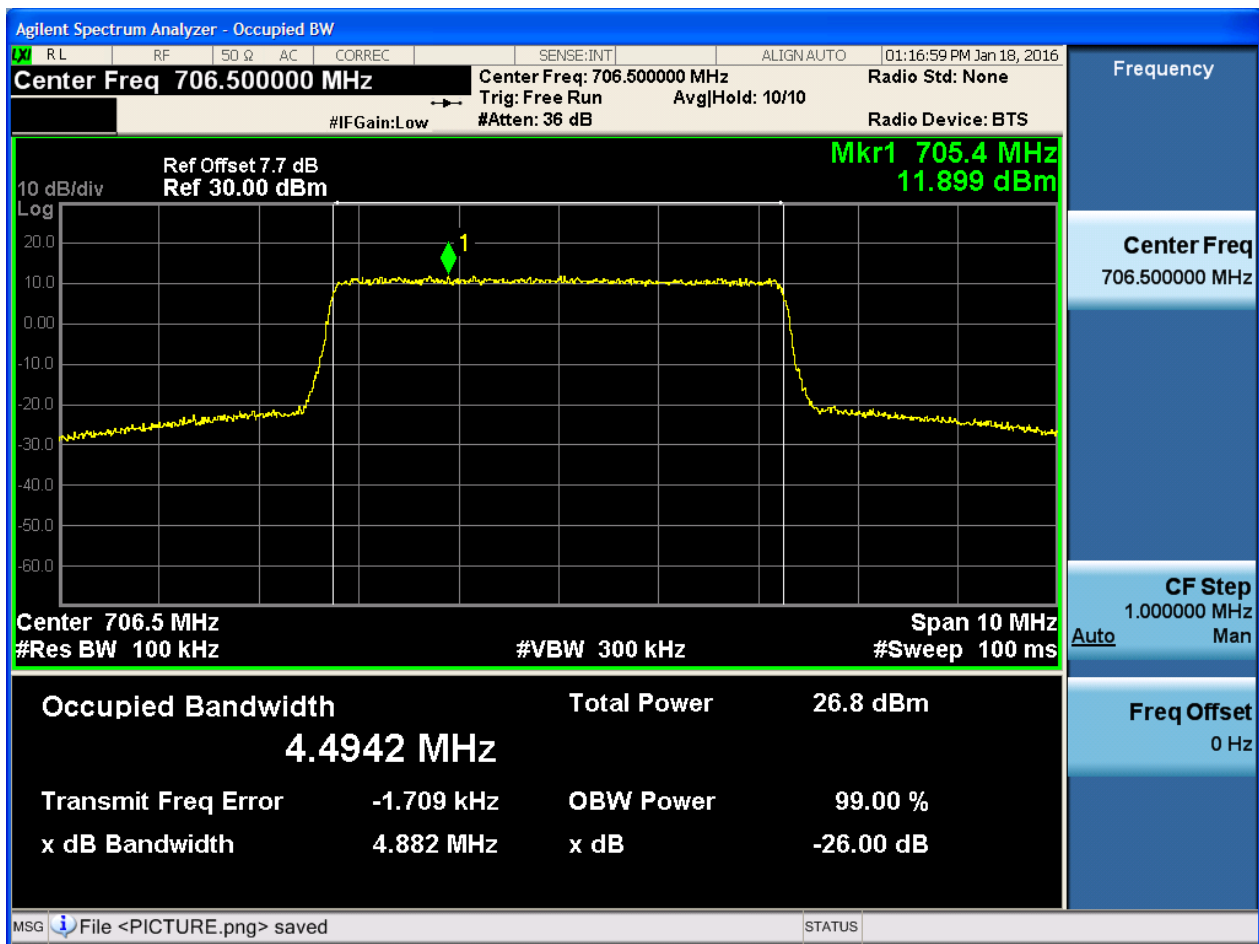


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

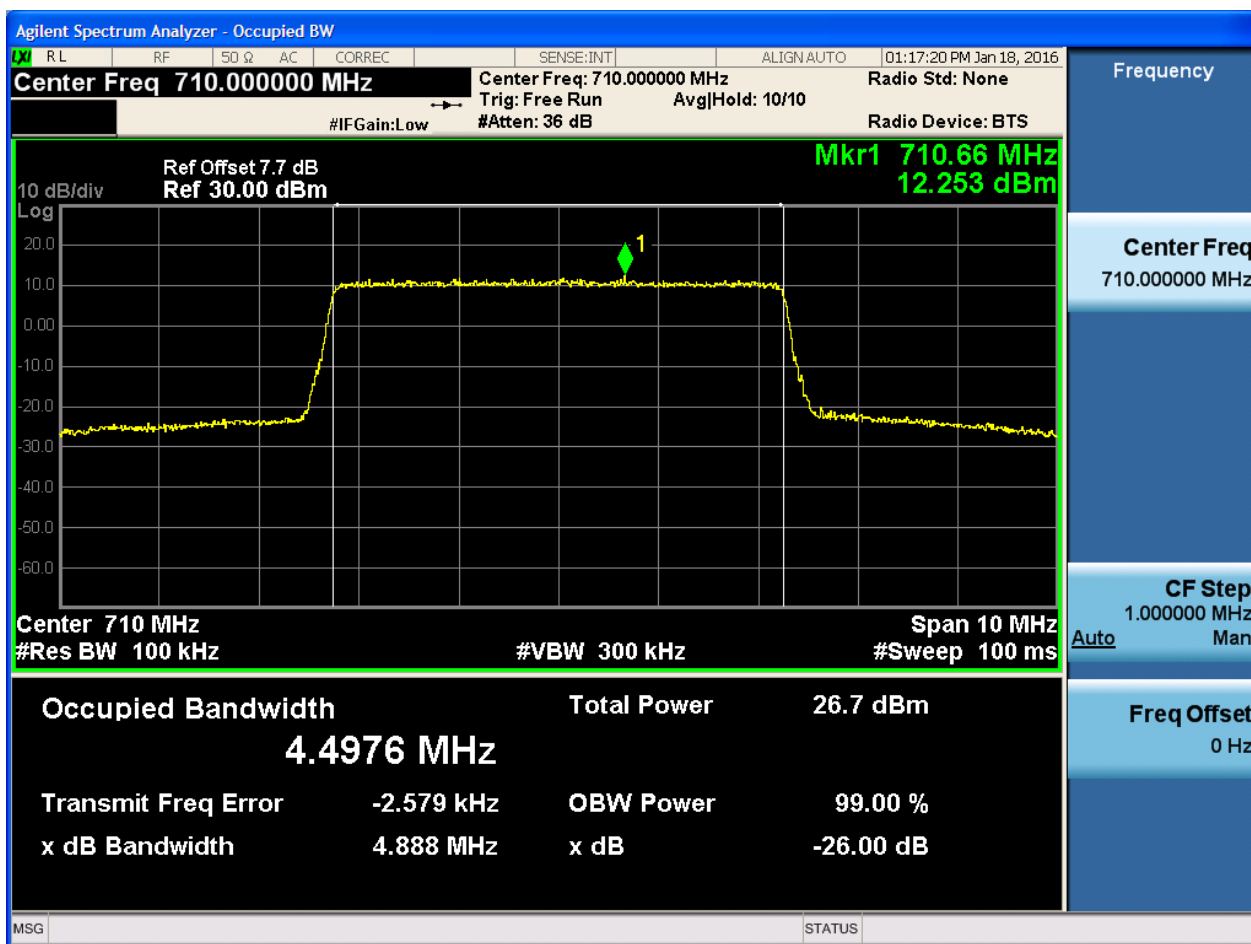
4.1.1.2.1.1 Test Channel = LCH

4.1.1.2.1.1.1 Test RB = RB25#0



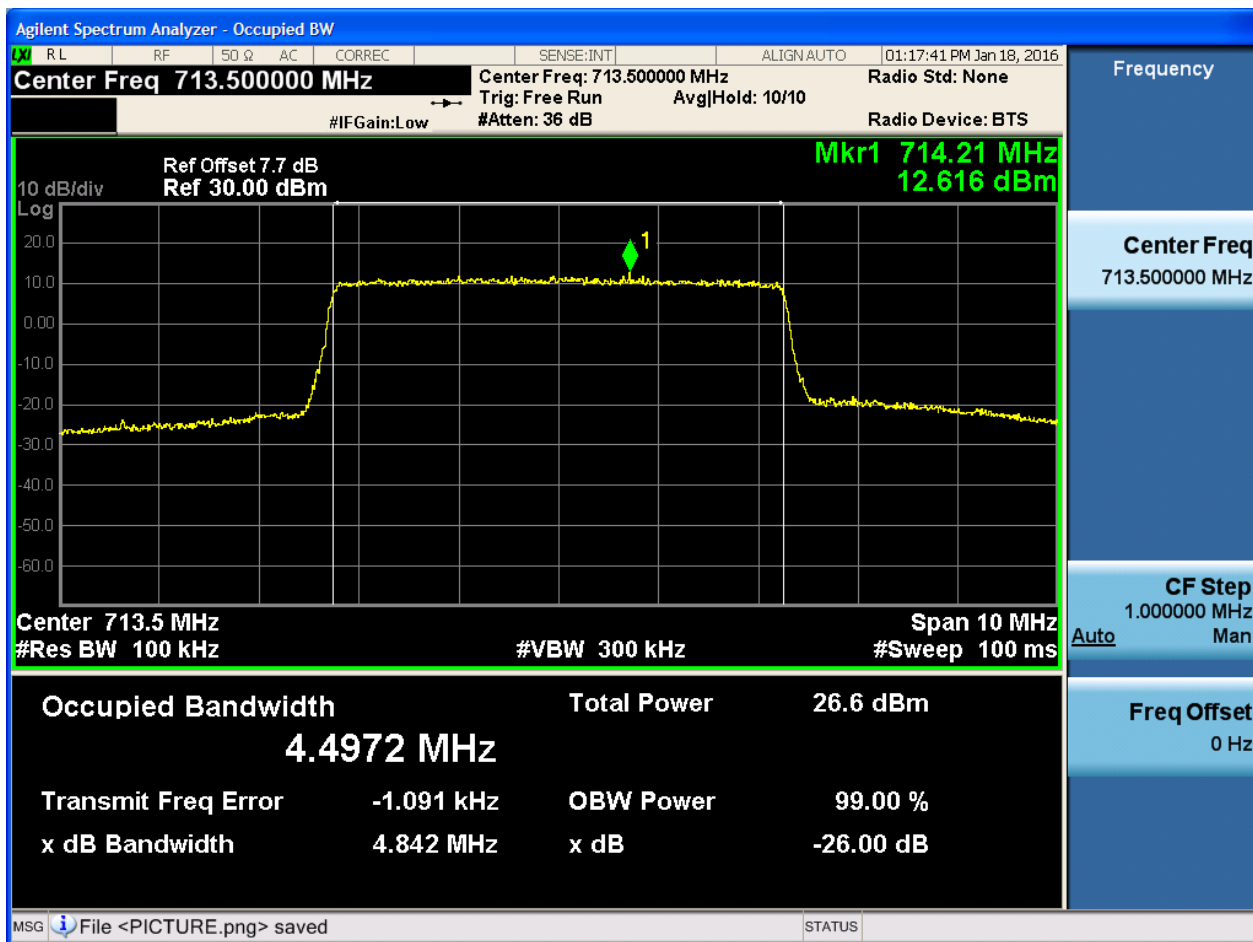
4.1.1.2.1.2 Test Channel = MCH

4.1.1.2.1.2.1 Test RB = RB25#0



4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

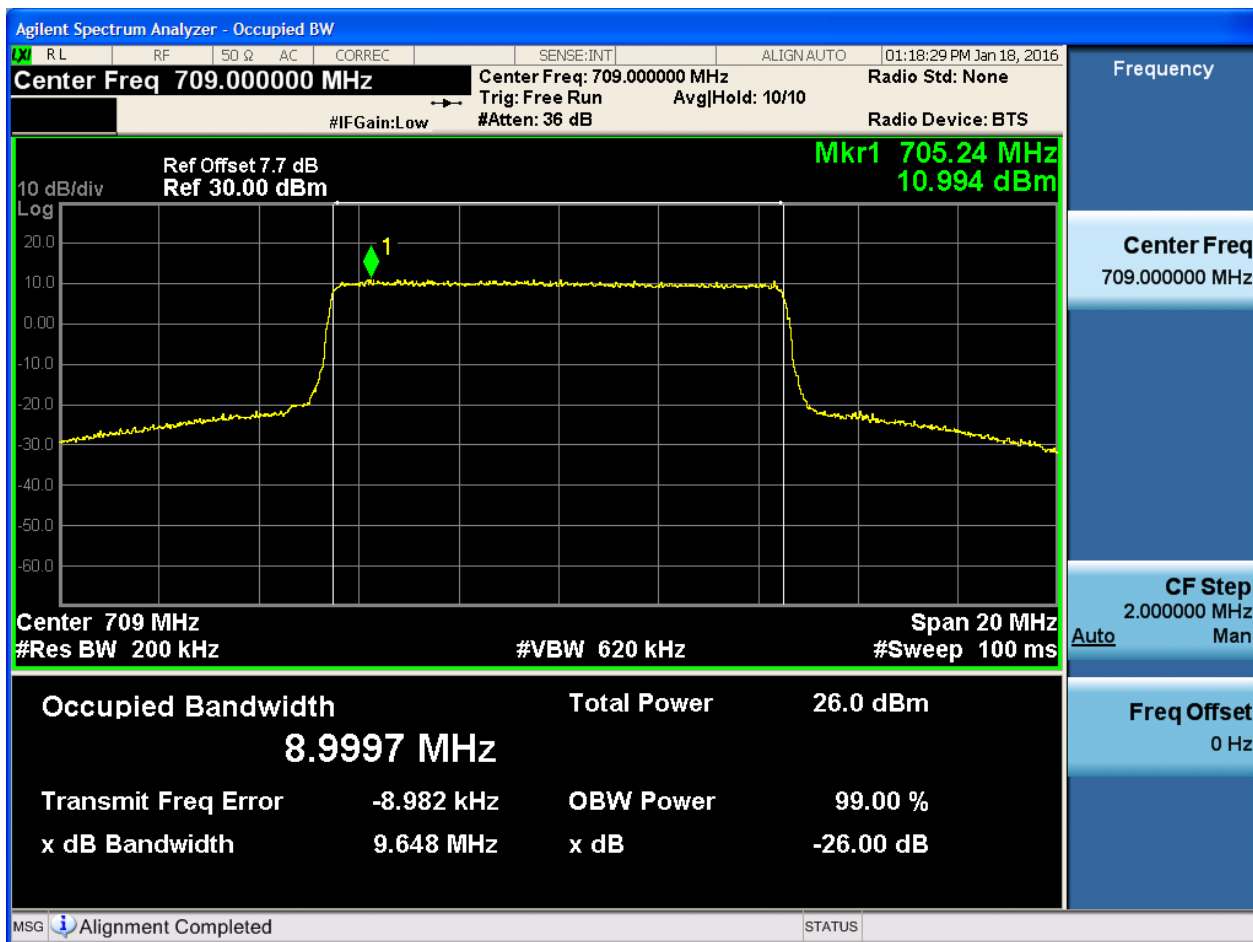




4.1.1.2.2 Test Bandwidth = 10

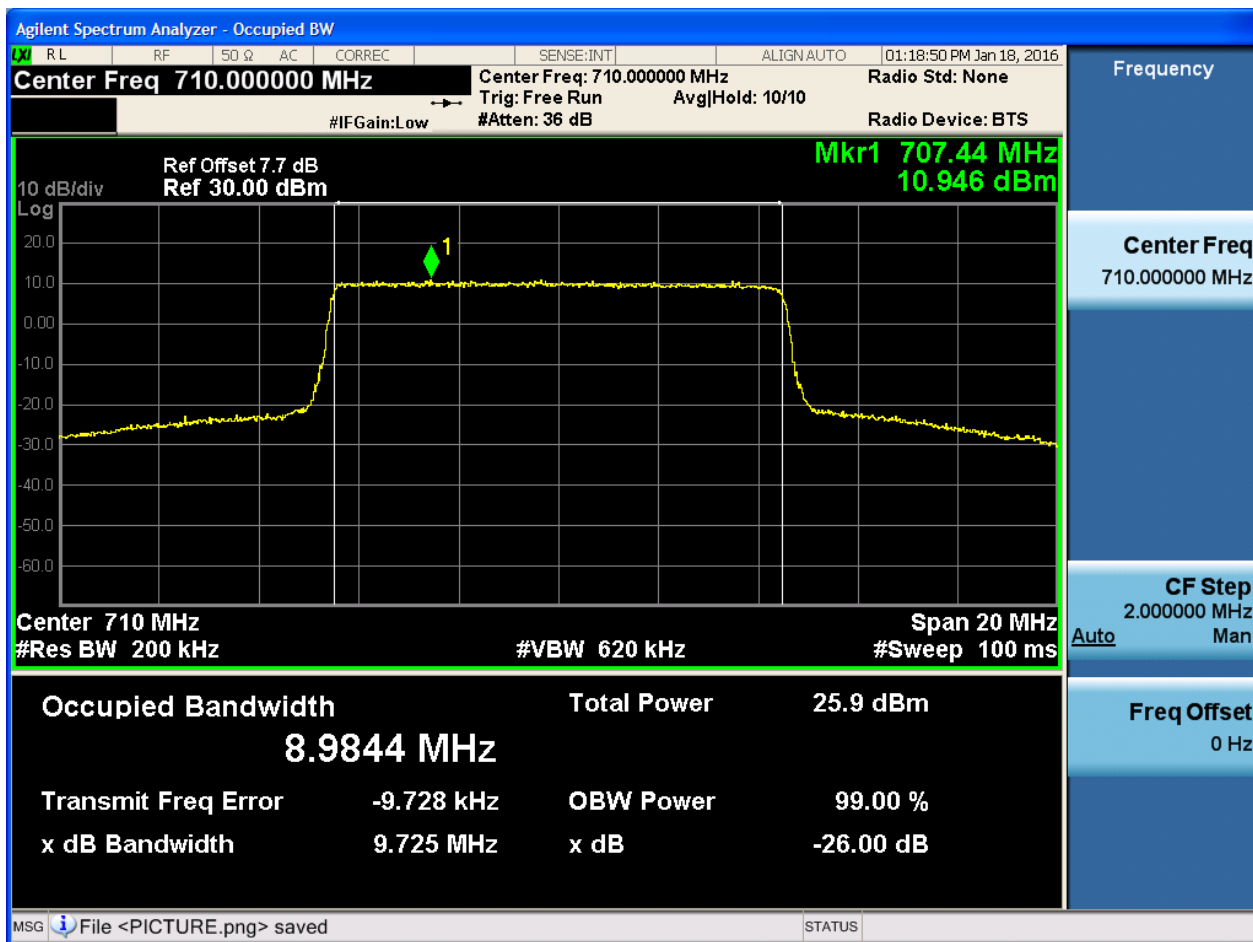
4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB50#0



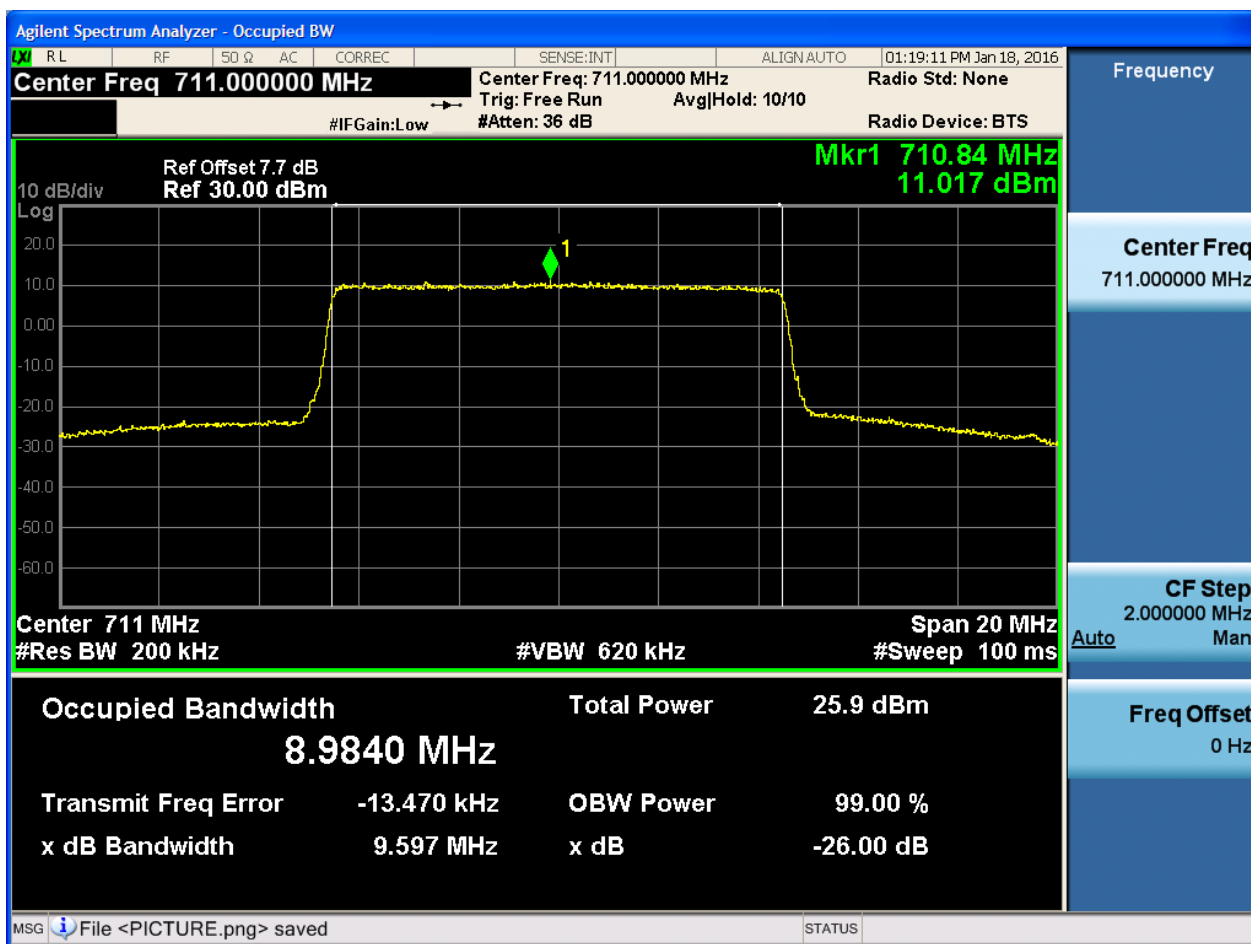
4.1.1.2.2.2 Test Channel = MCH

4.1.1.2.2.2.1 Test RB = RB50#0



4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

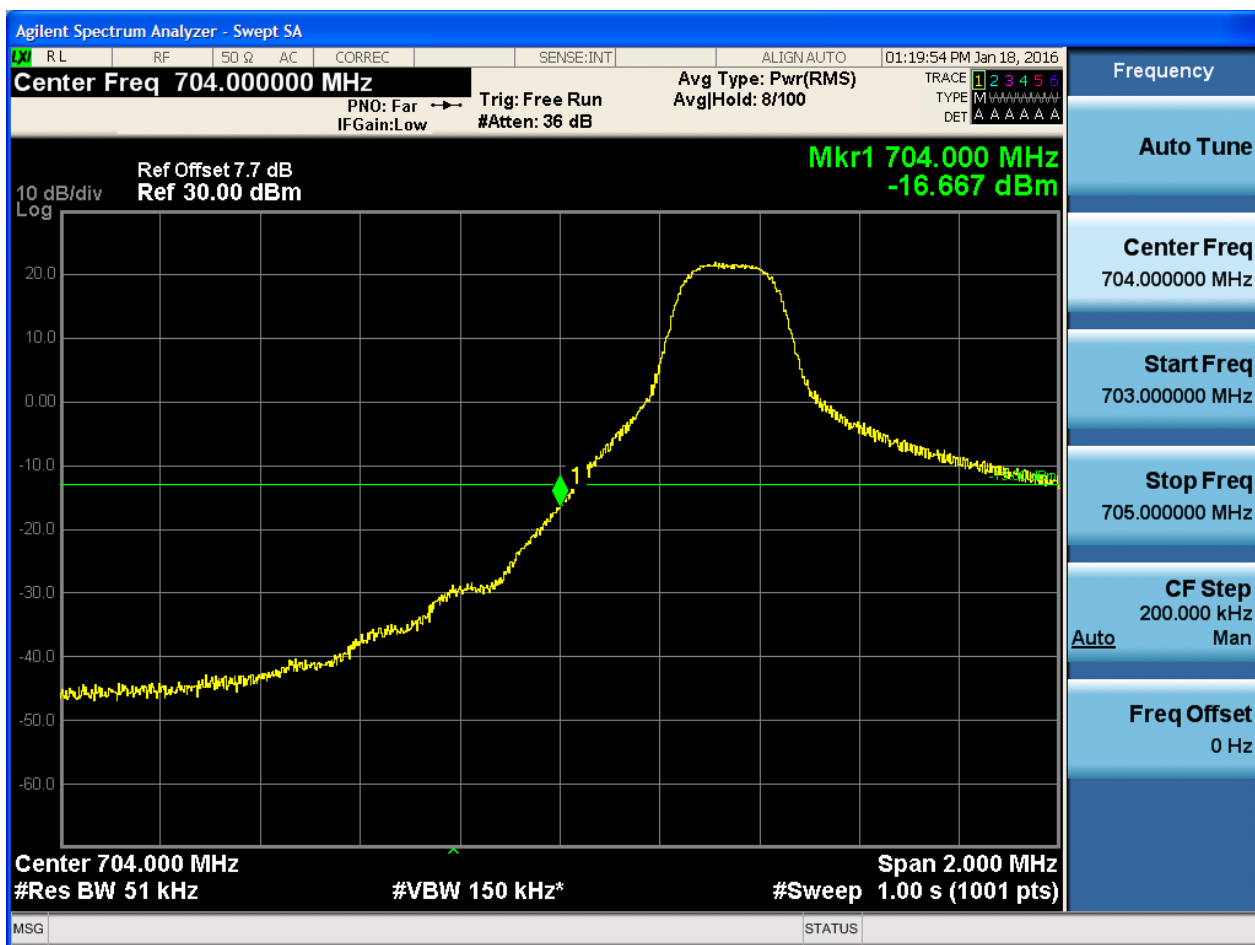
5.1.1 Test Band = BAND17

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

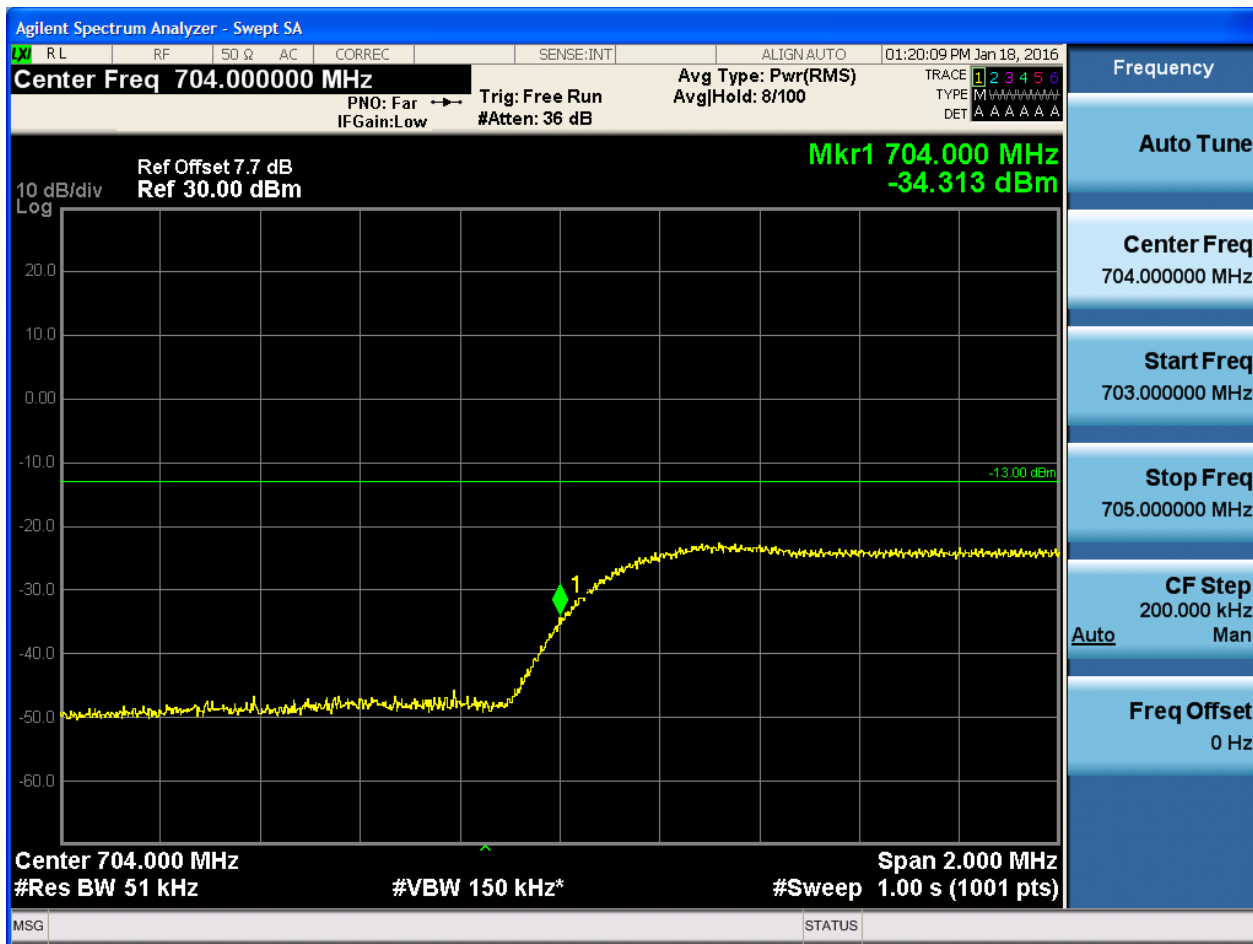
5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0





5.1.1.1.1.2 Test RB = RB1#24



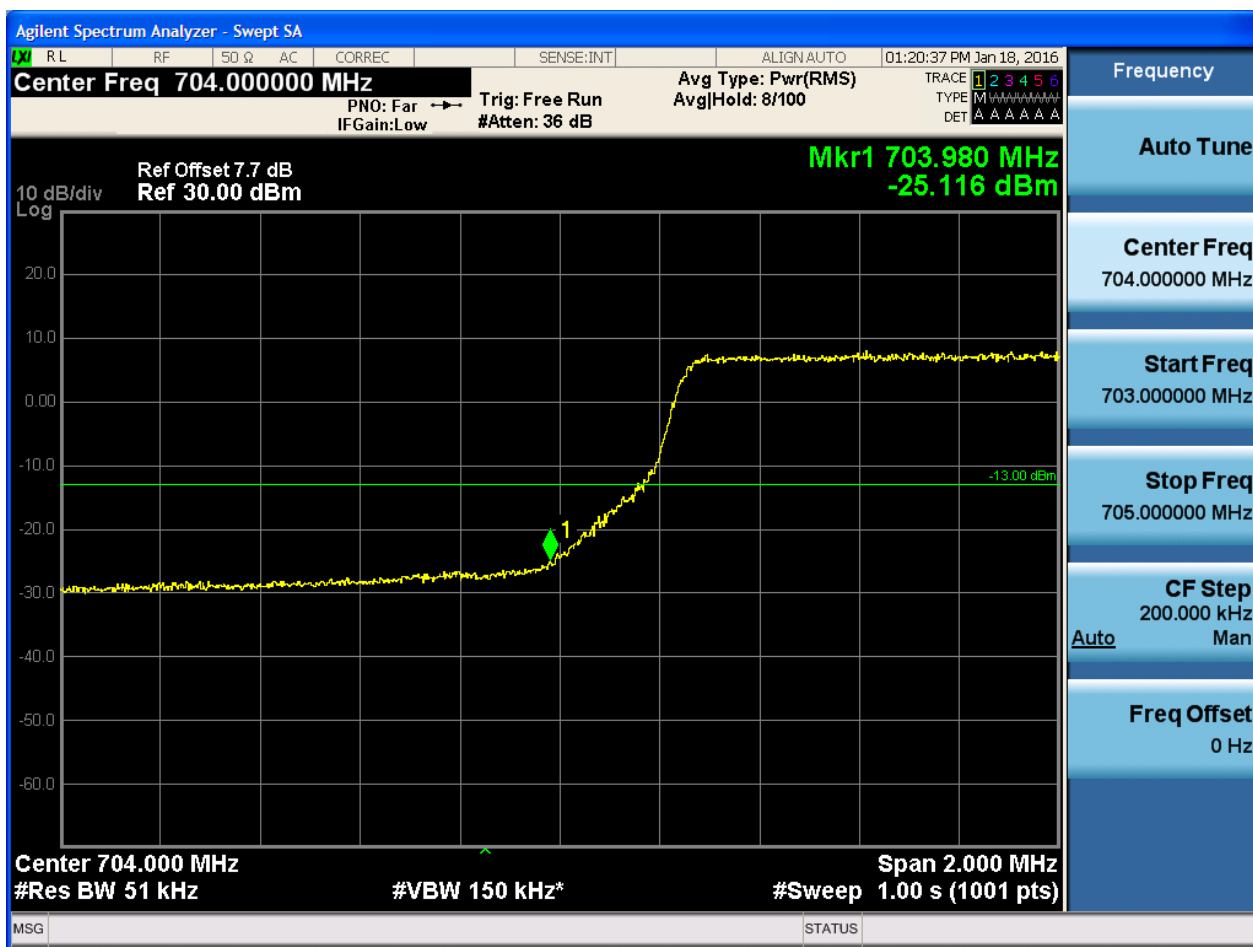


5.1.1.1.1.3 Test RB = RB12#6





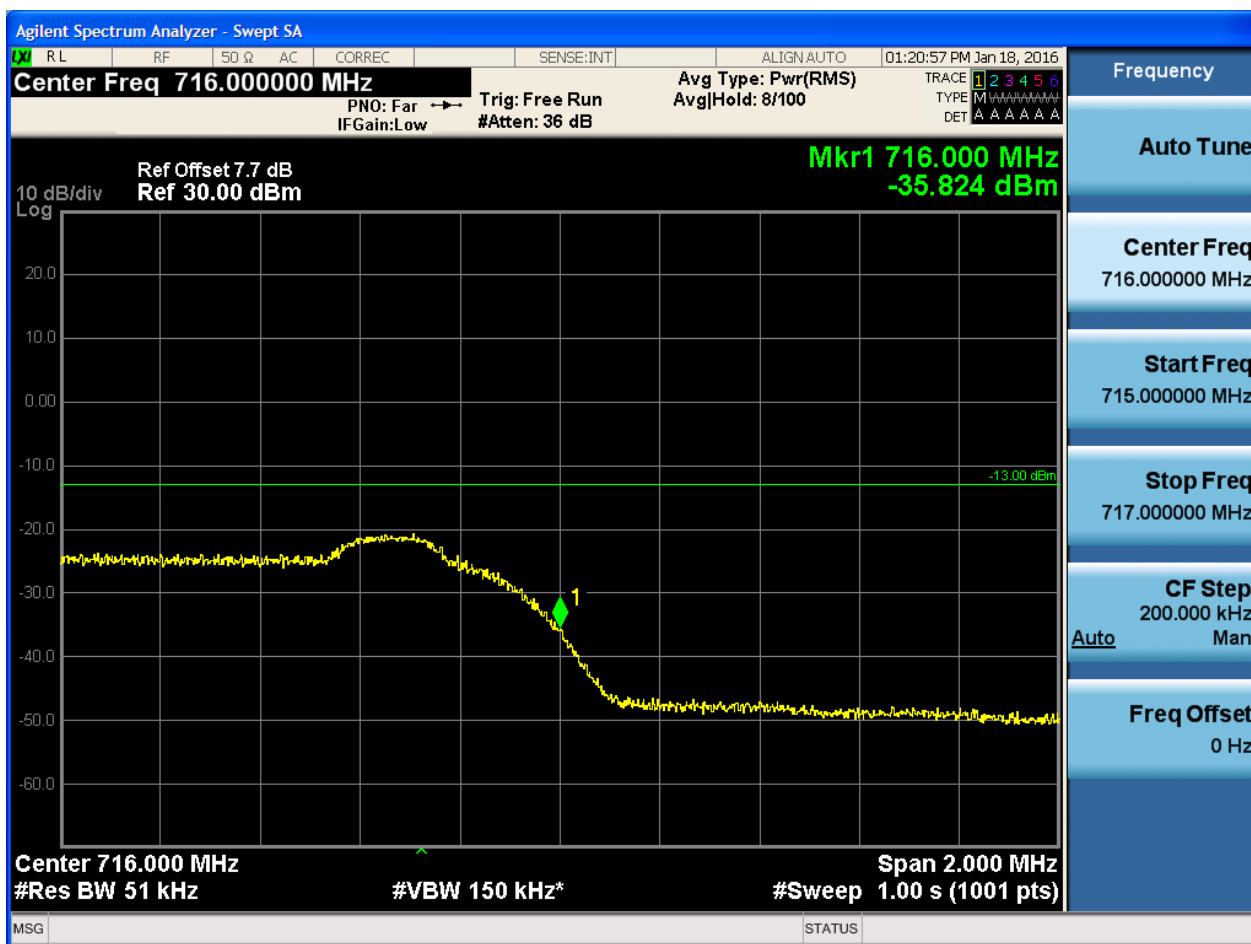
5.1.1.1.1.4 Test RB = RB25#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-17.157 dBm

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

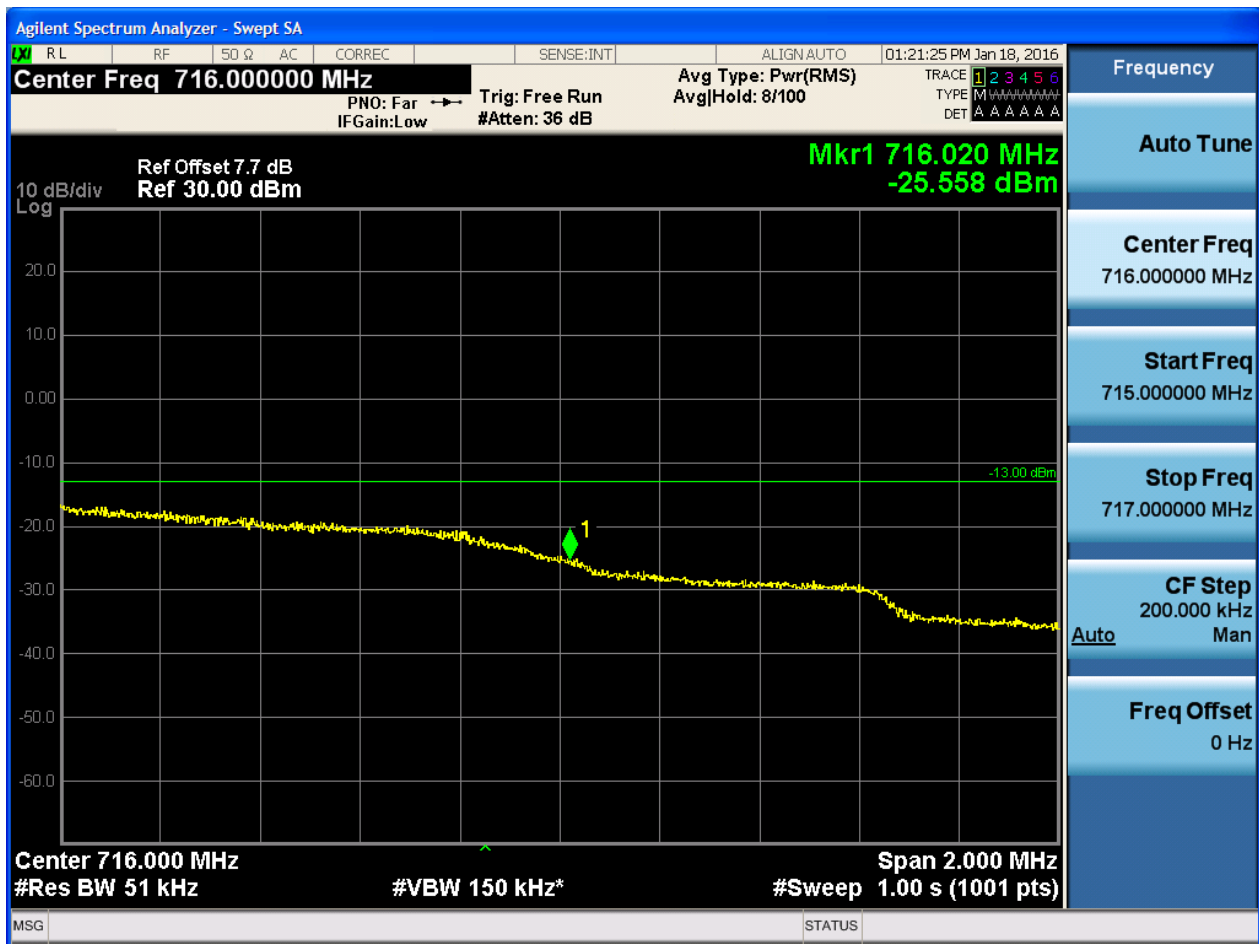
CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz



5.1.1.1.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-22.494 dBm

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-22.494 dBm

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

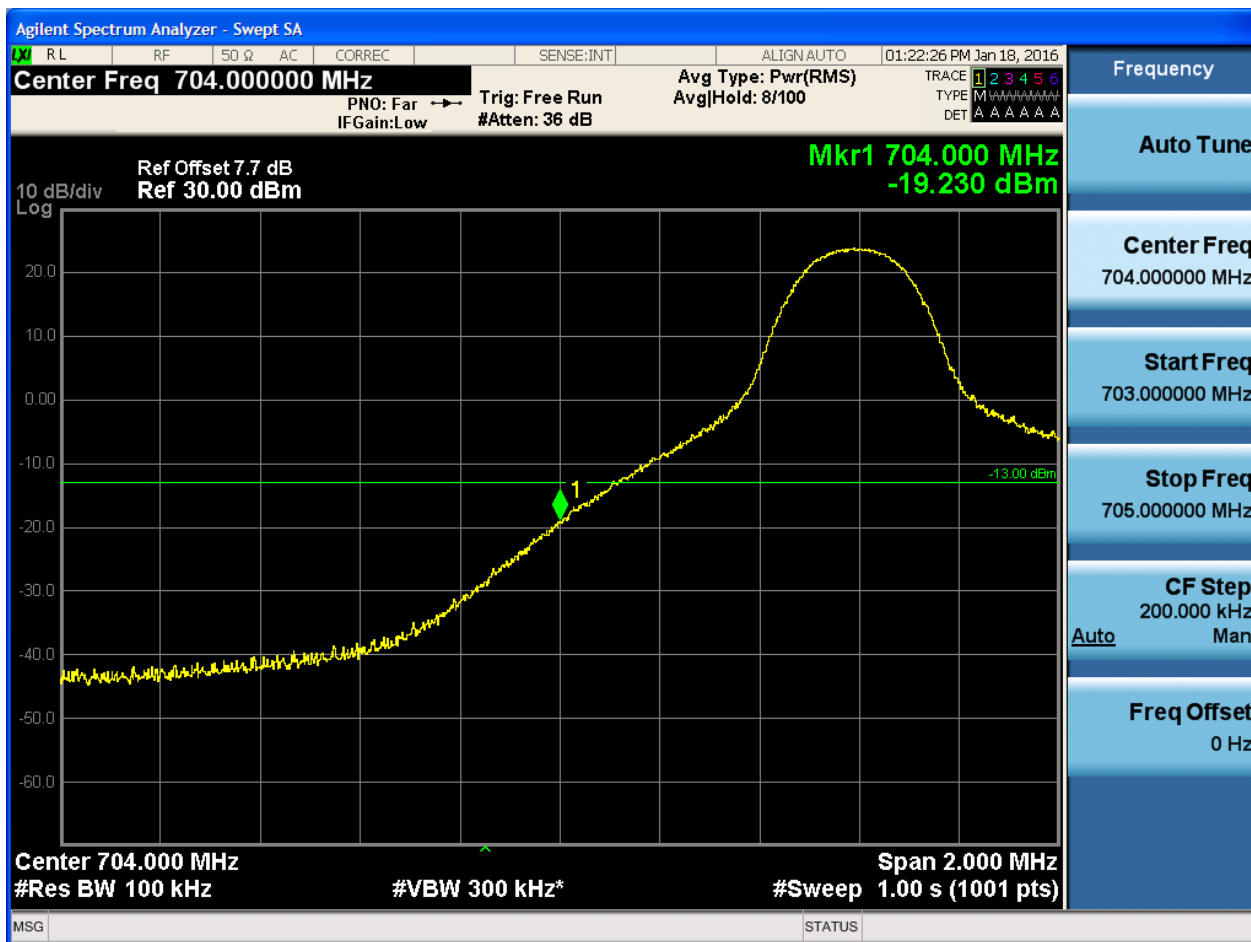
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

5.1.1.1.2 Test Bandwidth = 10

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 704.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 703.990 MHz
-38.583 dBm

Center 704.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

Stop Freq
705.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 704.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 704.000 MHz
-29.690 dBm

Center 704.000 MHz
#Res BW 100 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

Stop Freq
705.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 704.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 703.990 MHz
-23.878 dBm

Center 704.000 MHz
#Res BW 100 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

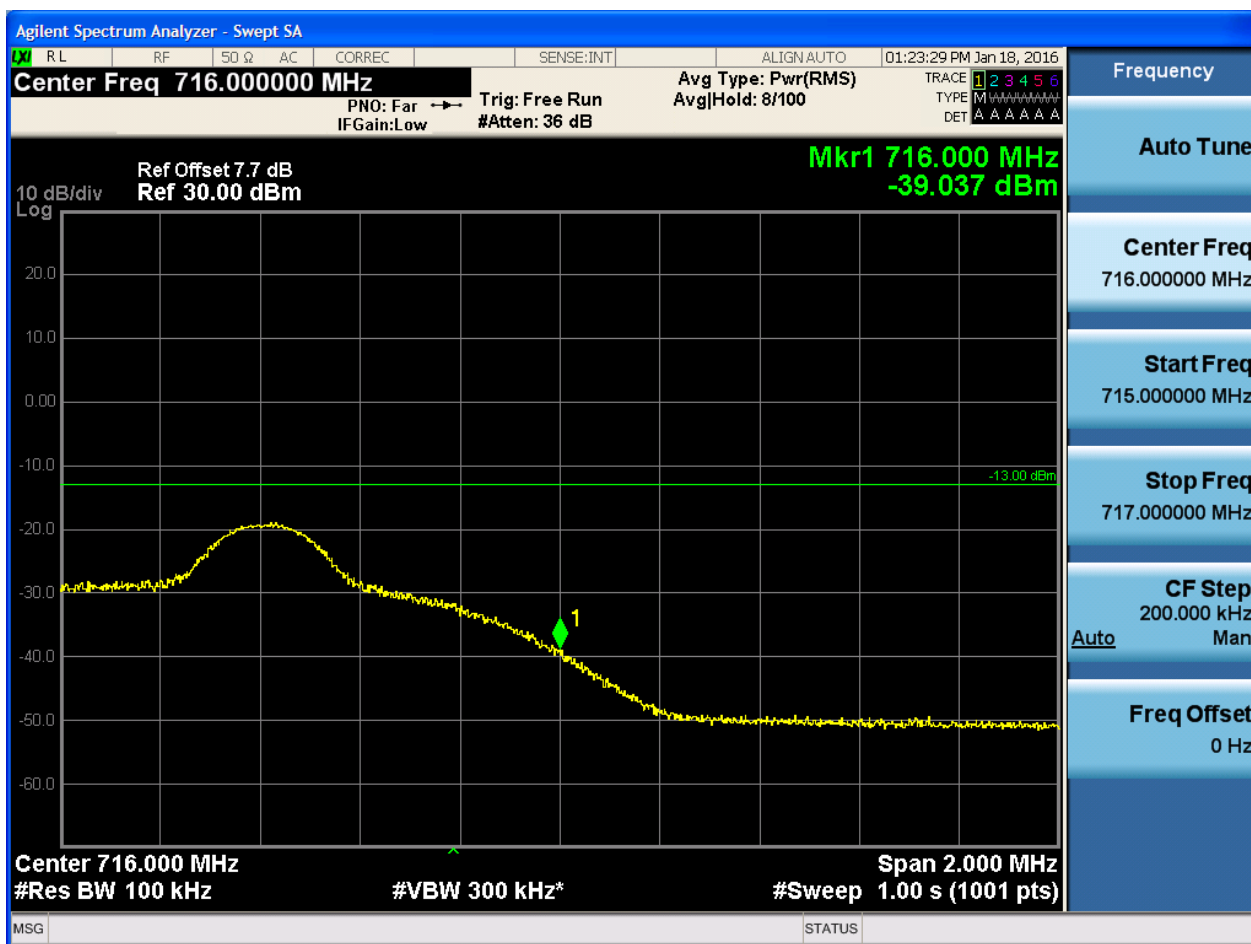
Stop Freq
705.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

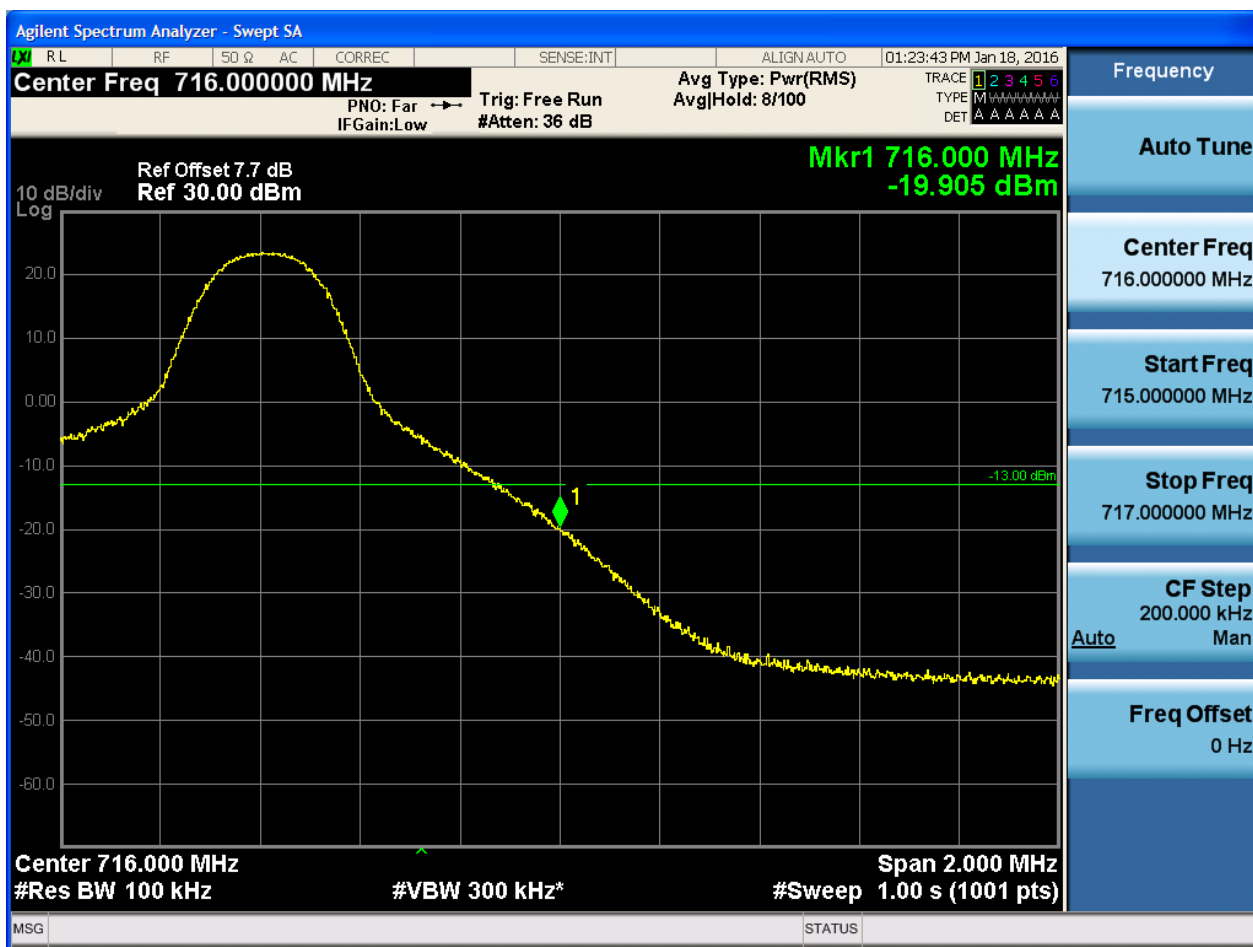
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0





5.1.1.1.2.2.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.200 MHz
-28.457 dBm

Center 716.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz



5.1.1.1.2.2.4 Test RB = RB50#0



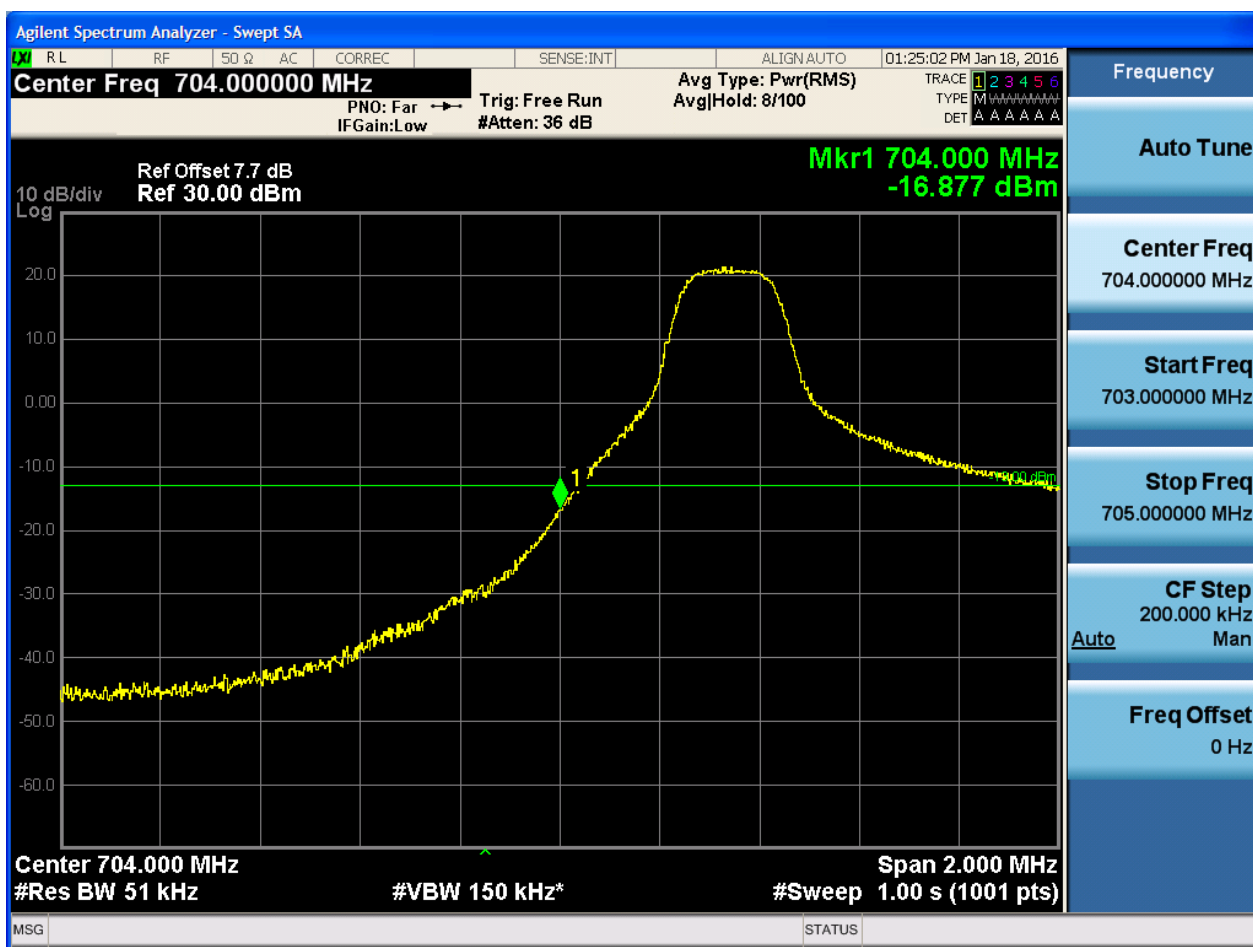


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

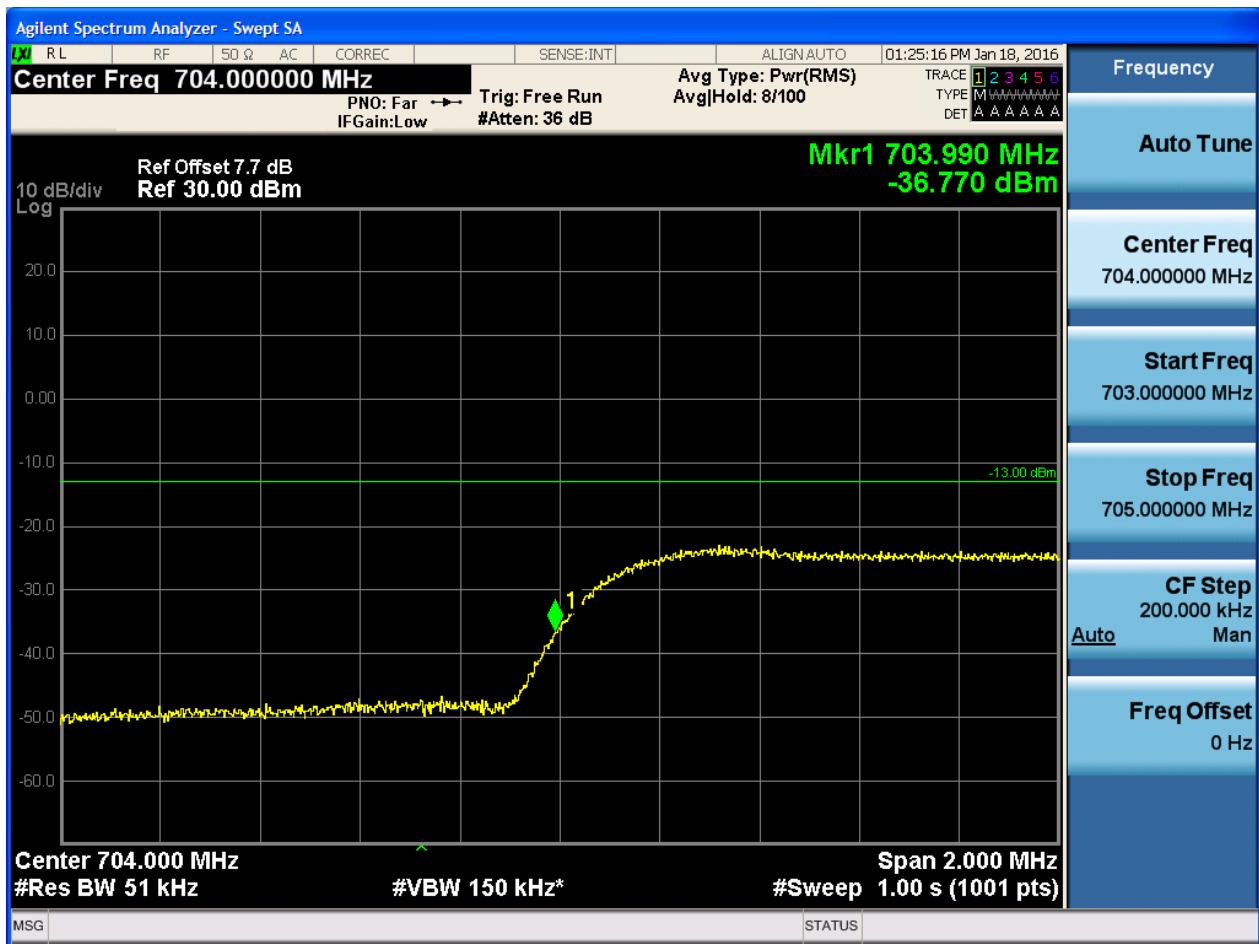
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0





5.1.1.2.1.2 Test RB = RB1#24

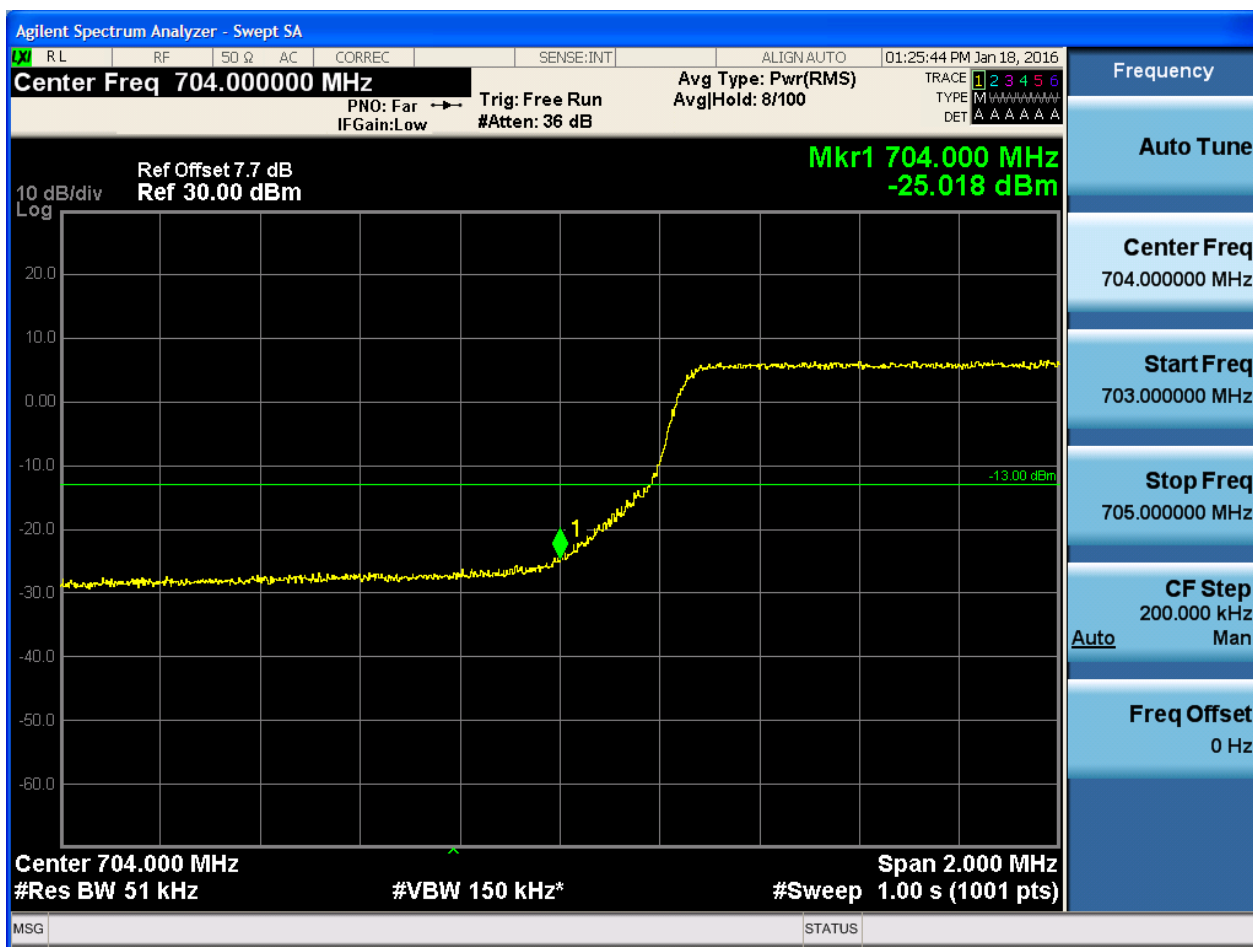


5.1.1.2.1.1.3 Test RB = RB12#6





5.1.1.2.1.1.4 Test RB = RB25#0



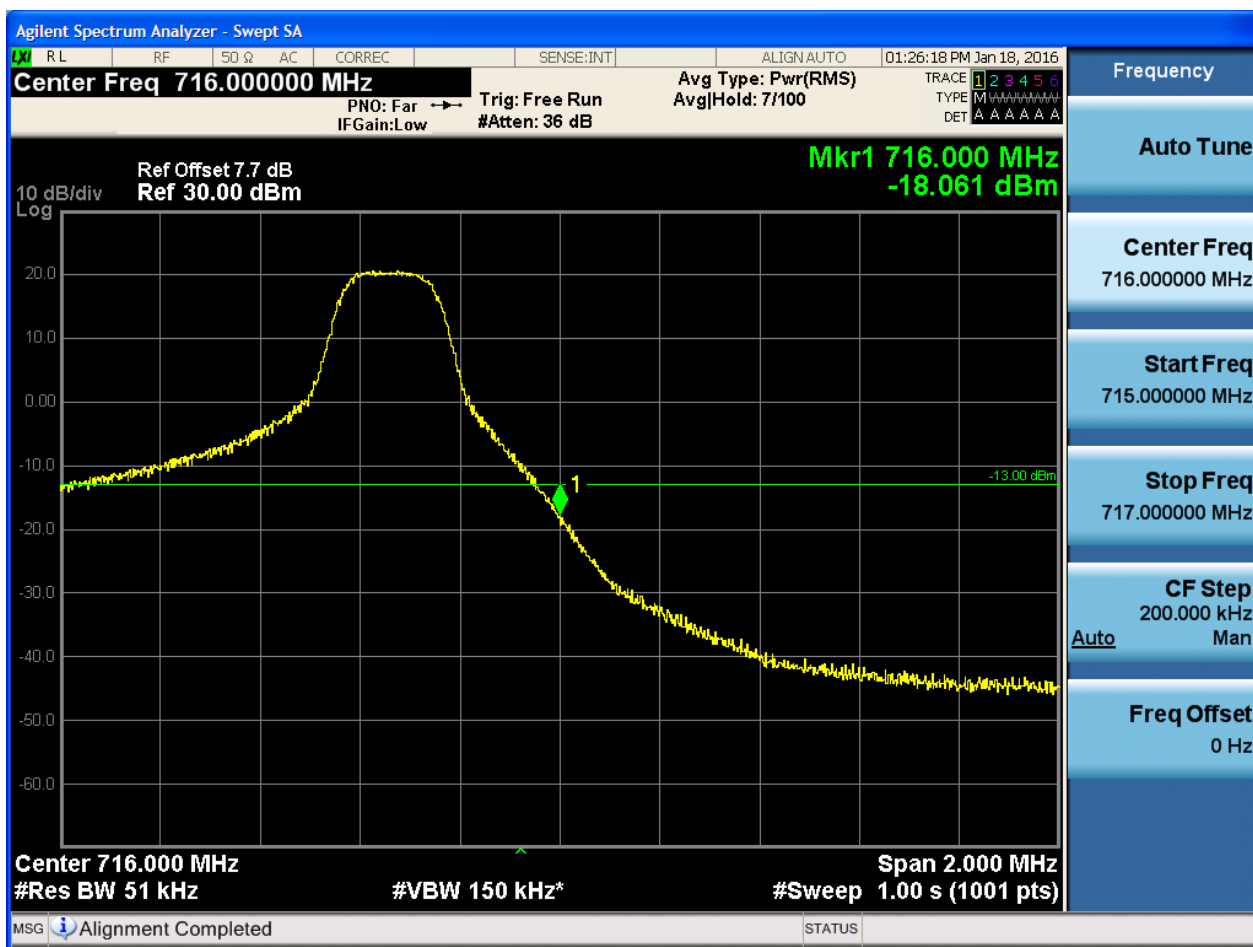
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#24





5.1.1.2.1.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.060 MHz
-23.800 dBm

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

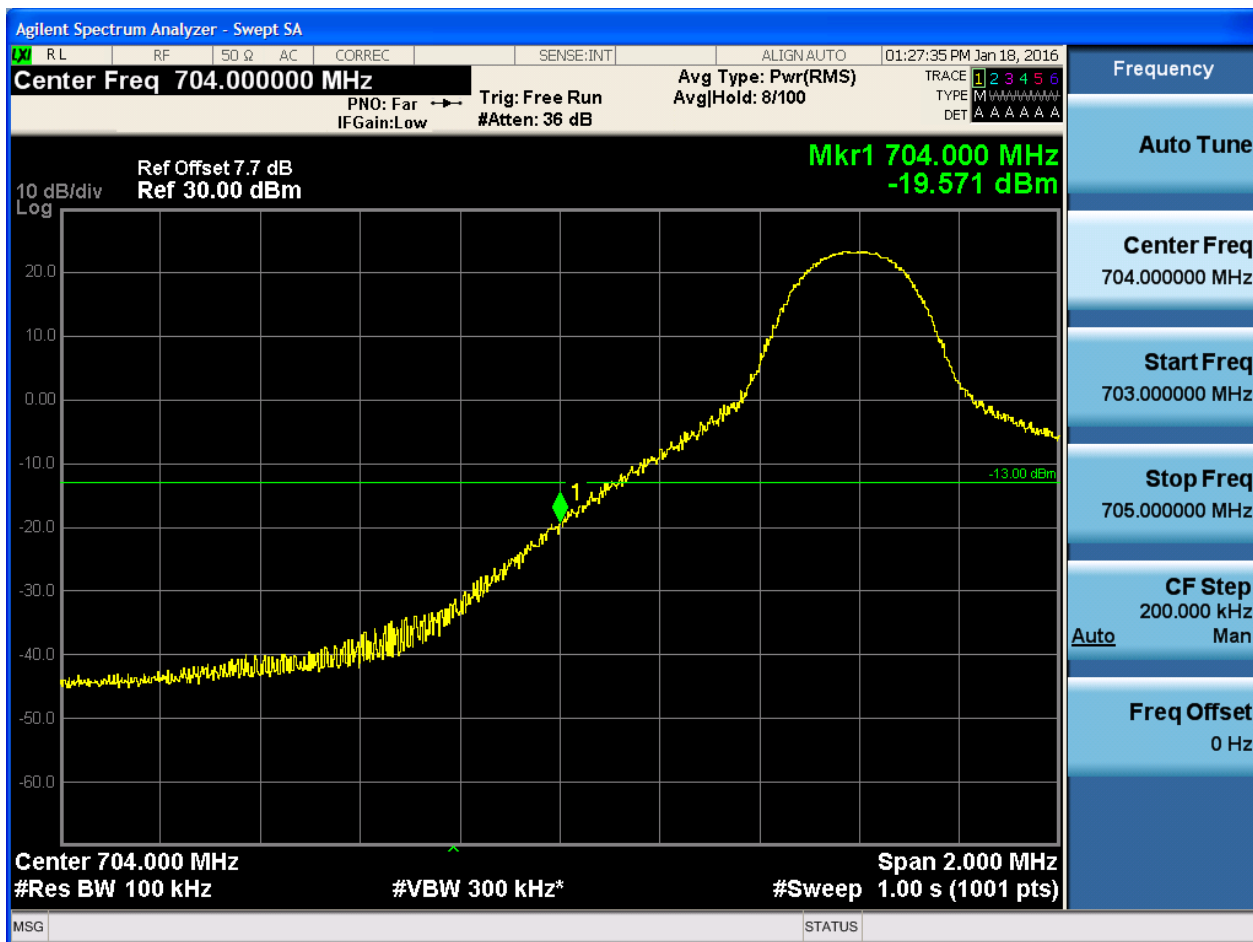
Freq Offset
0 Hz



5.1.1.2.2 Test Bandwidth = 10

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





5.1.1.2.2.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC CORREC SENSE:INT ALIGN:AUTO 01:28:03 PM Jan 18, 2016

Center Freq 704.000000 MHz Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
PNO: Far Trig: Free Run TYPE M
IFGain:Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.7 dB Mkr1 703.960 MHz
Ref 30.00 dBm -29.792 dBm

10 dB/div Log

-13.00 dBm

Center 704.000 MHz Span 2.000 MHz
#Res BW 100 kHz #VBW 300 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 704.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 704.000 MHz
-24.152 dBm

Center 704.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

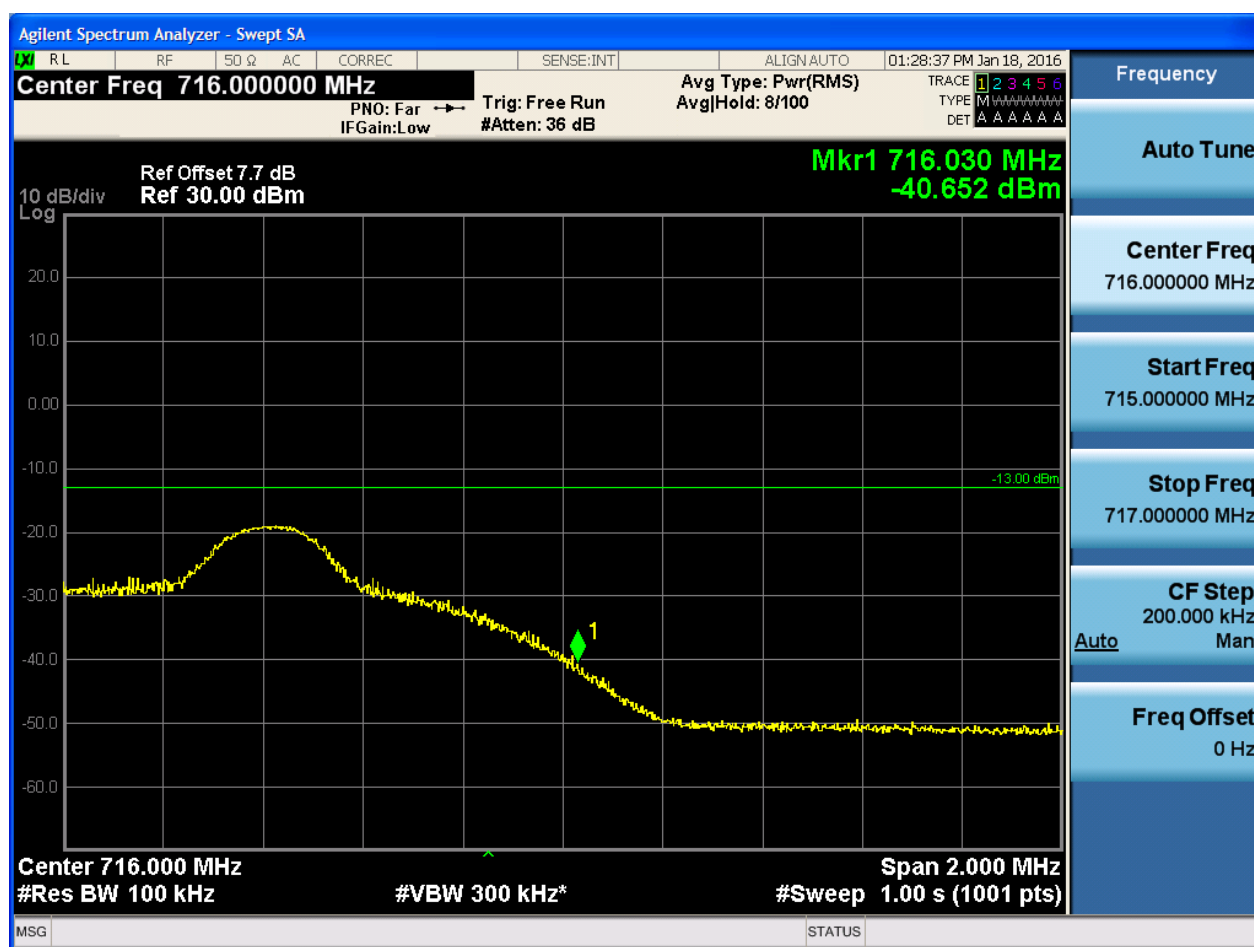
Stop Freq
705.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

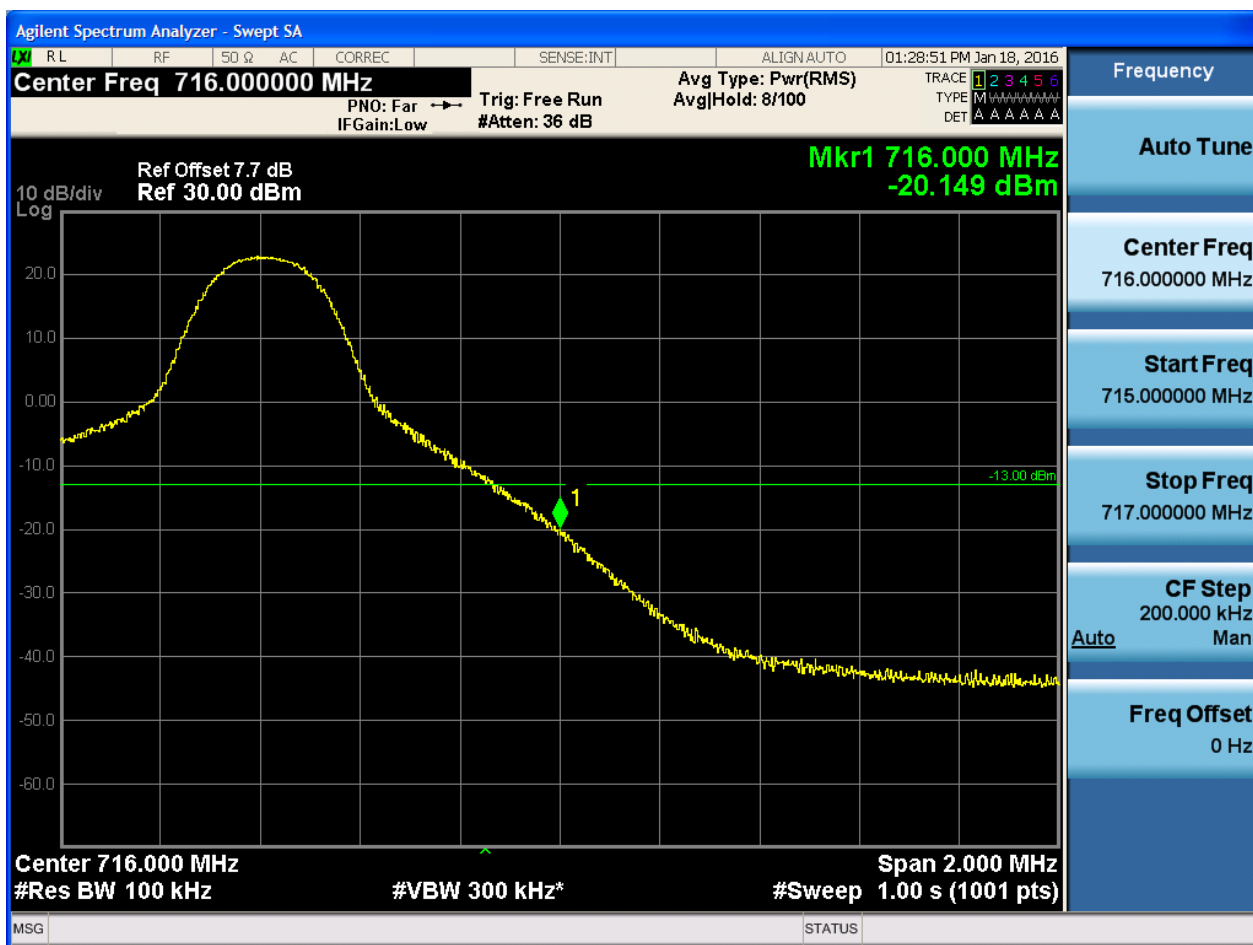
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-28.802 dBm

Center 716.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

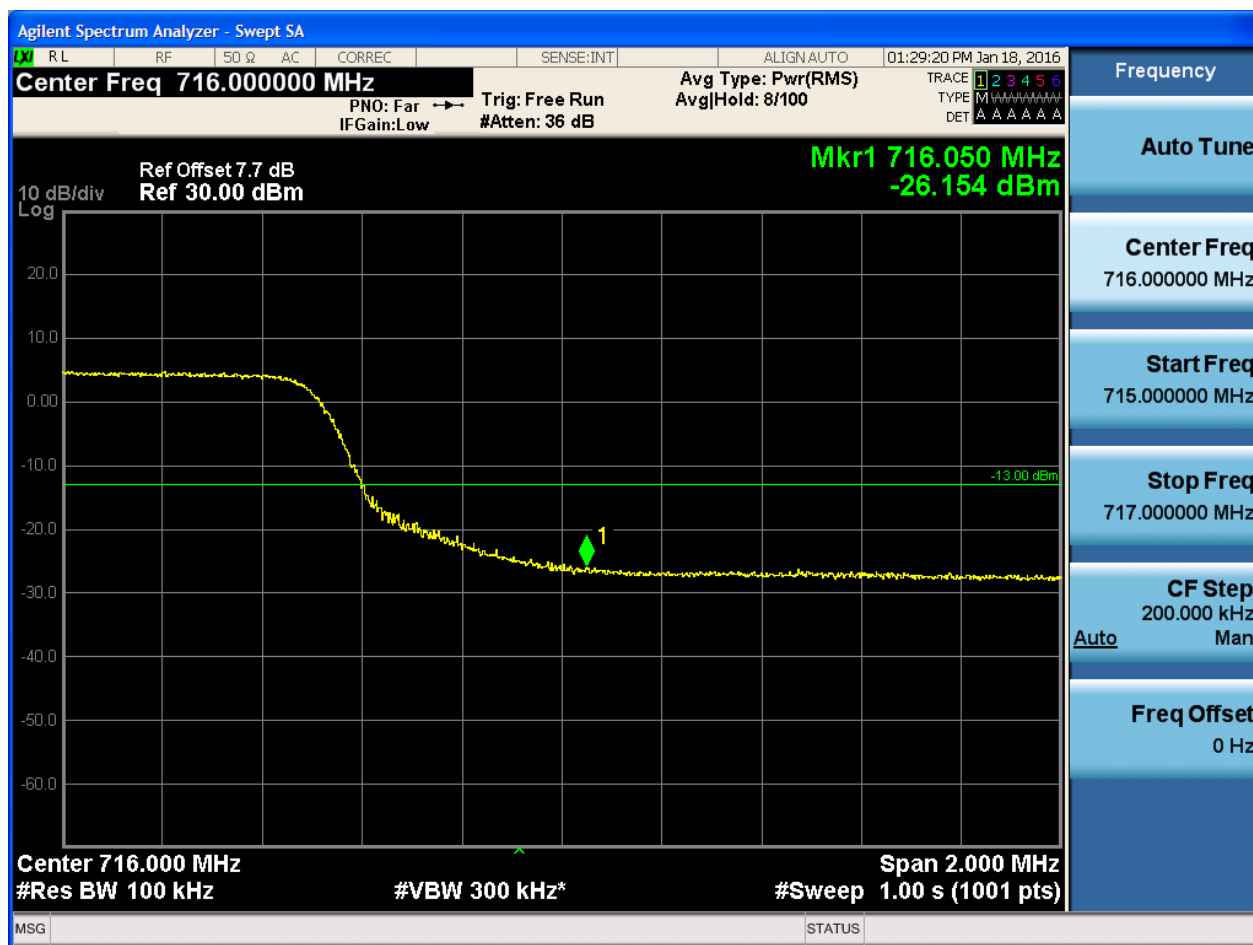
Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

5.1.1.2.2.2.4 Test RB = RB50#0



6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

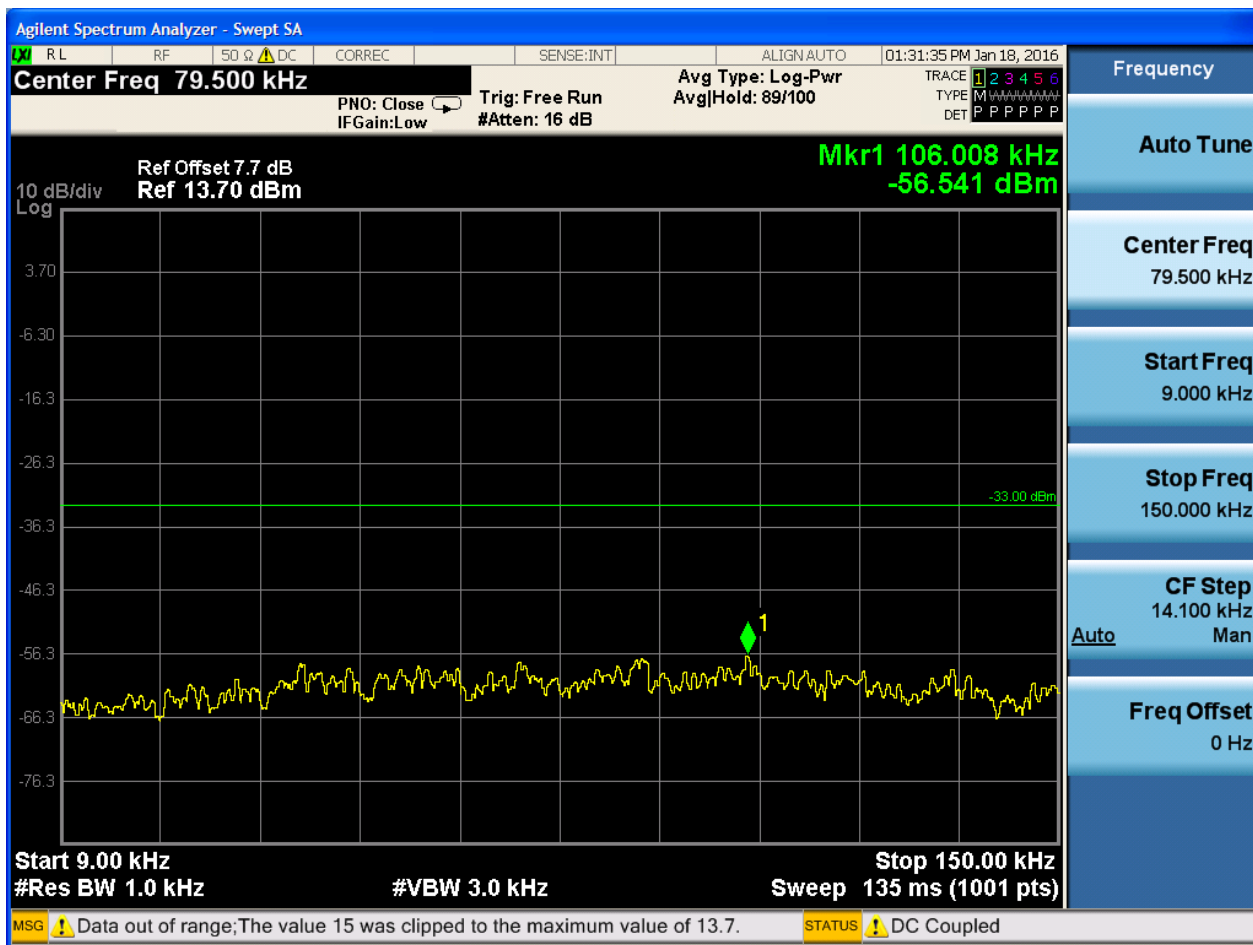
6.1.1 Test Band = BAND17

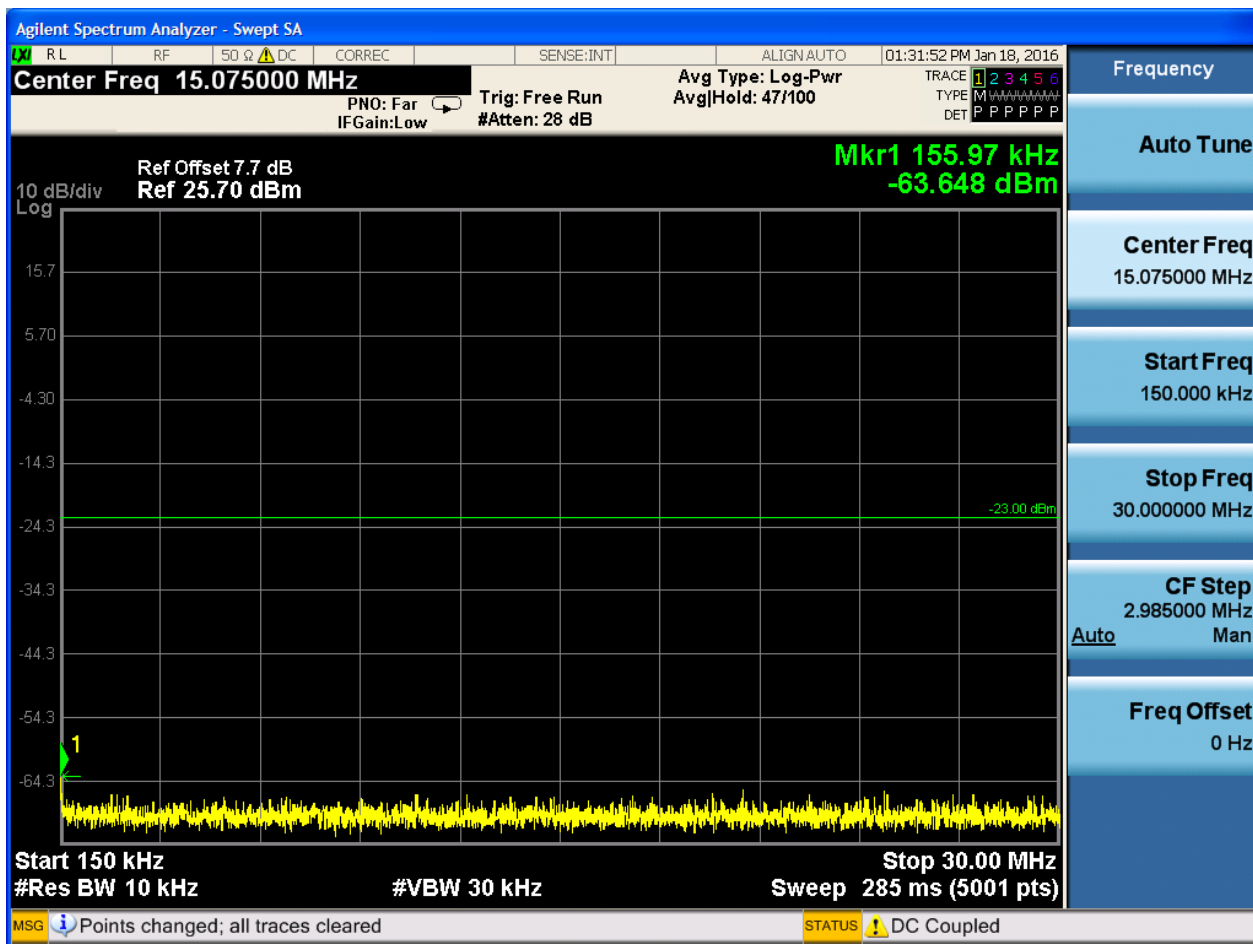
6.1.1.1 Test Mode = LTE/TM1

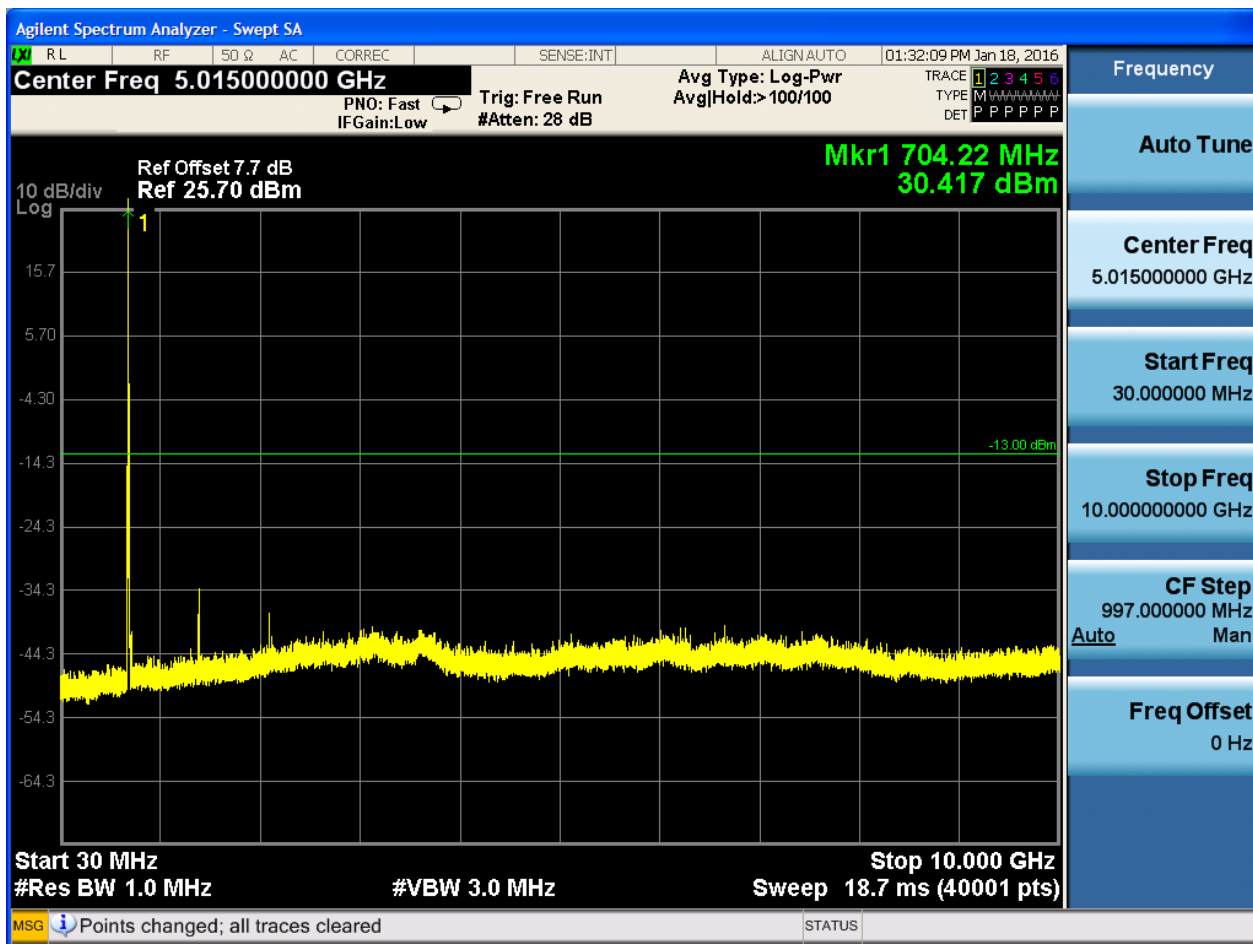
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

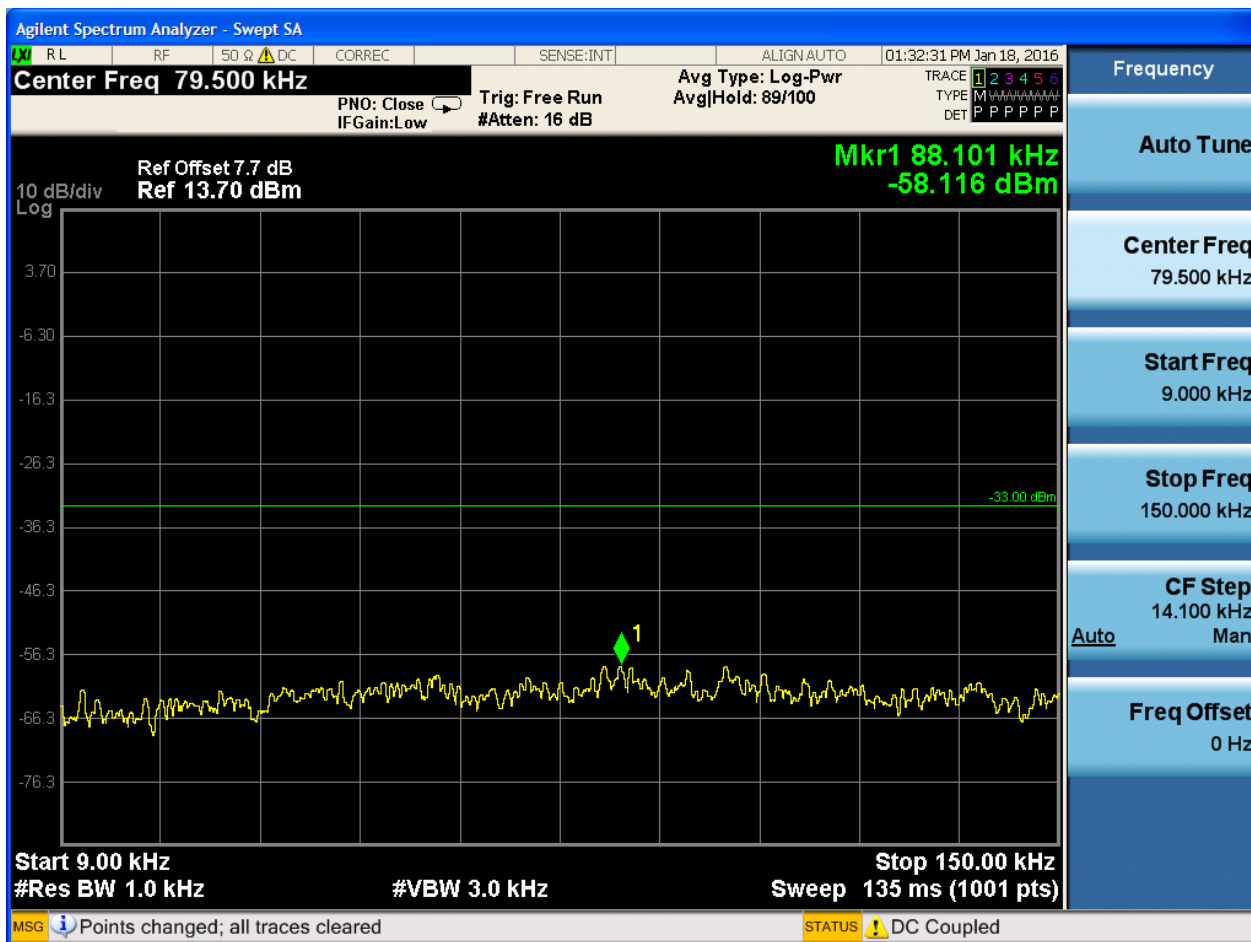


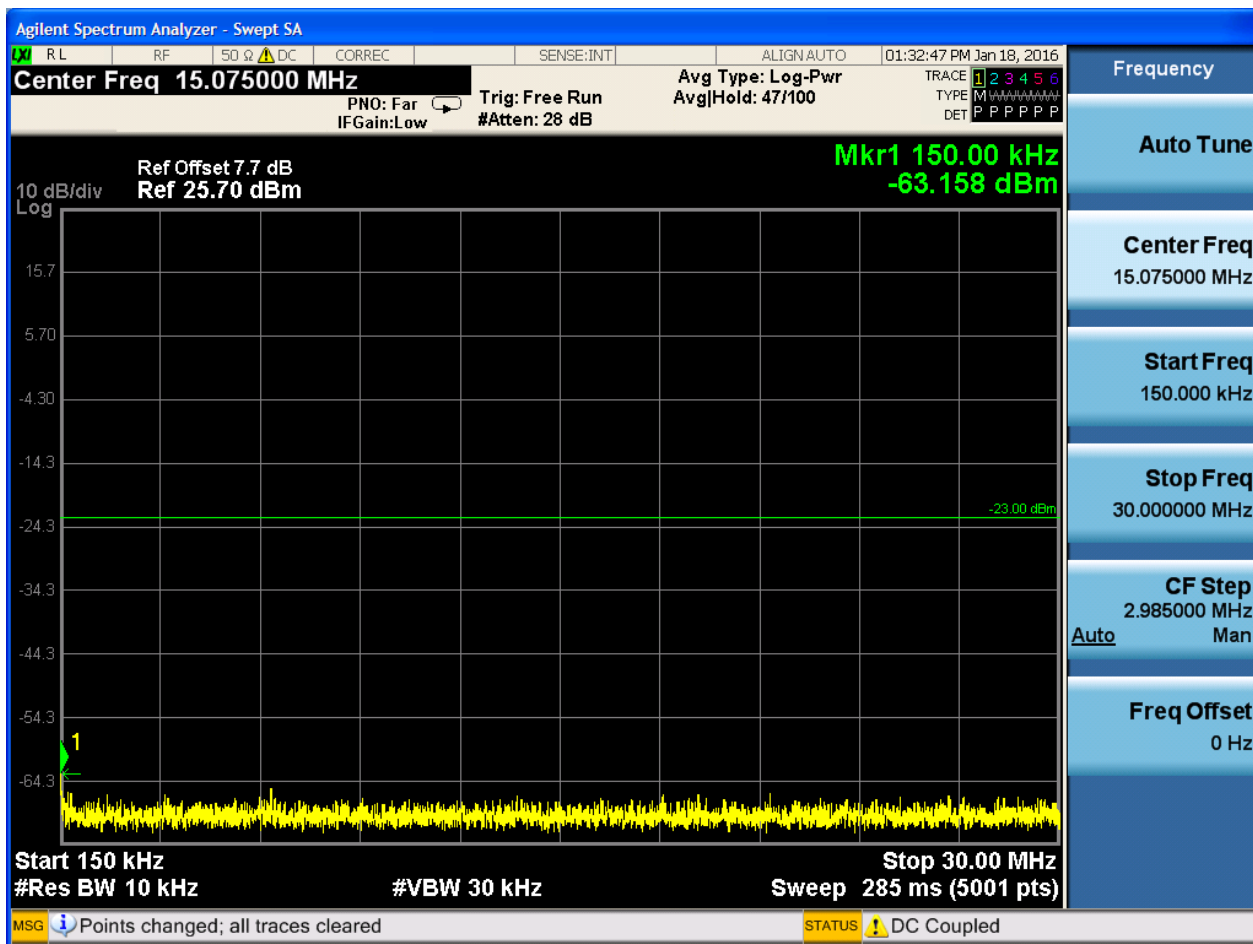


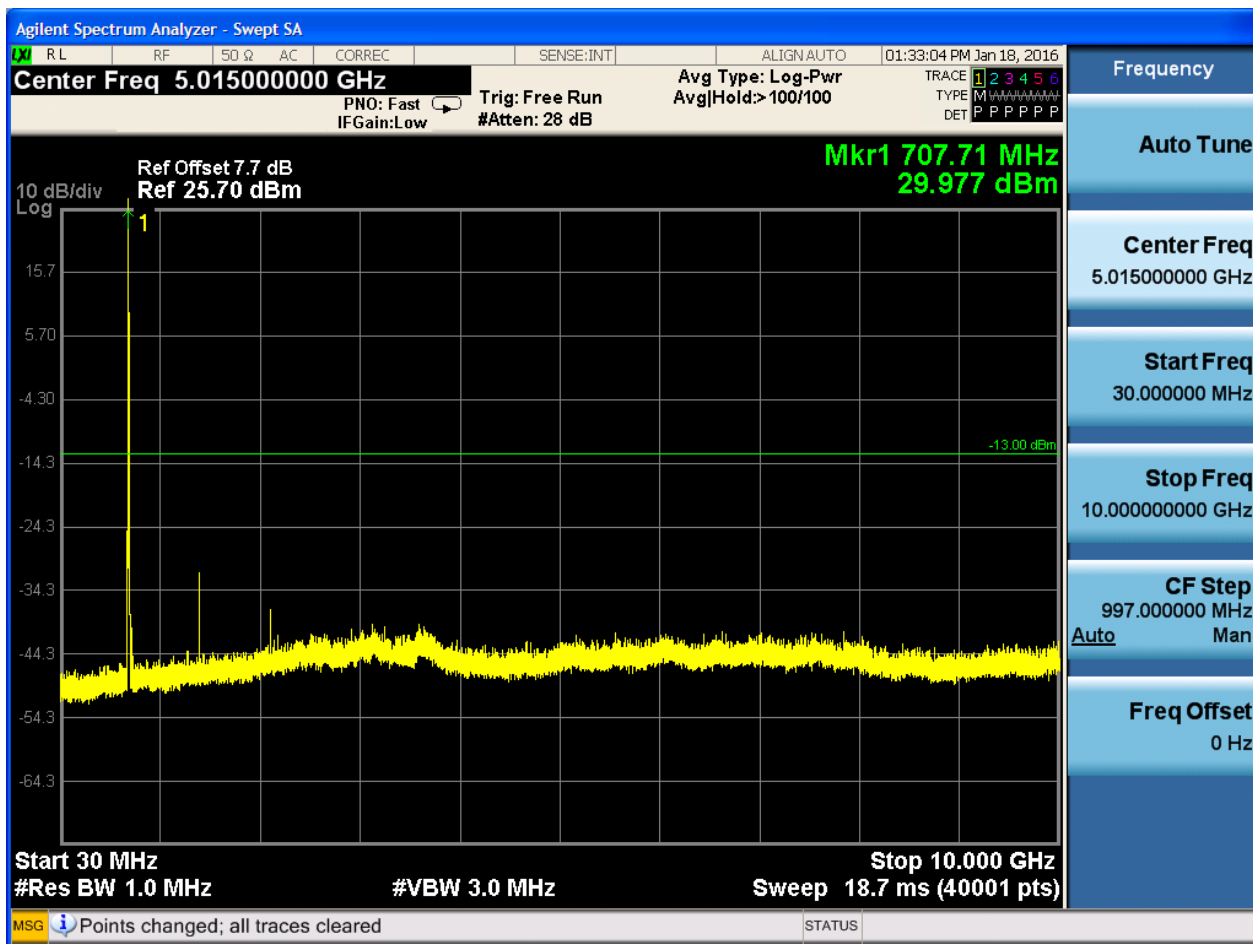


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

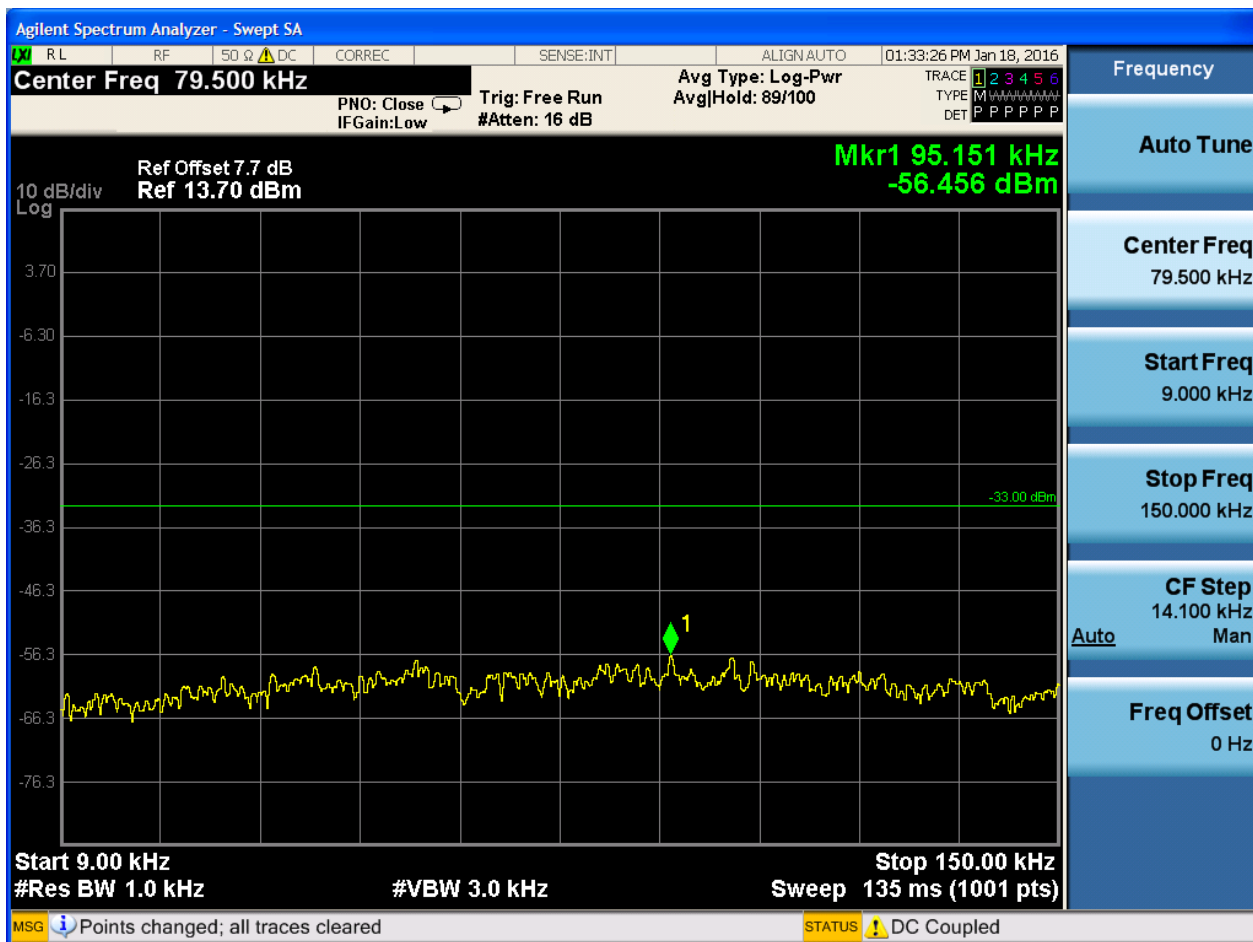


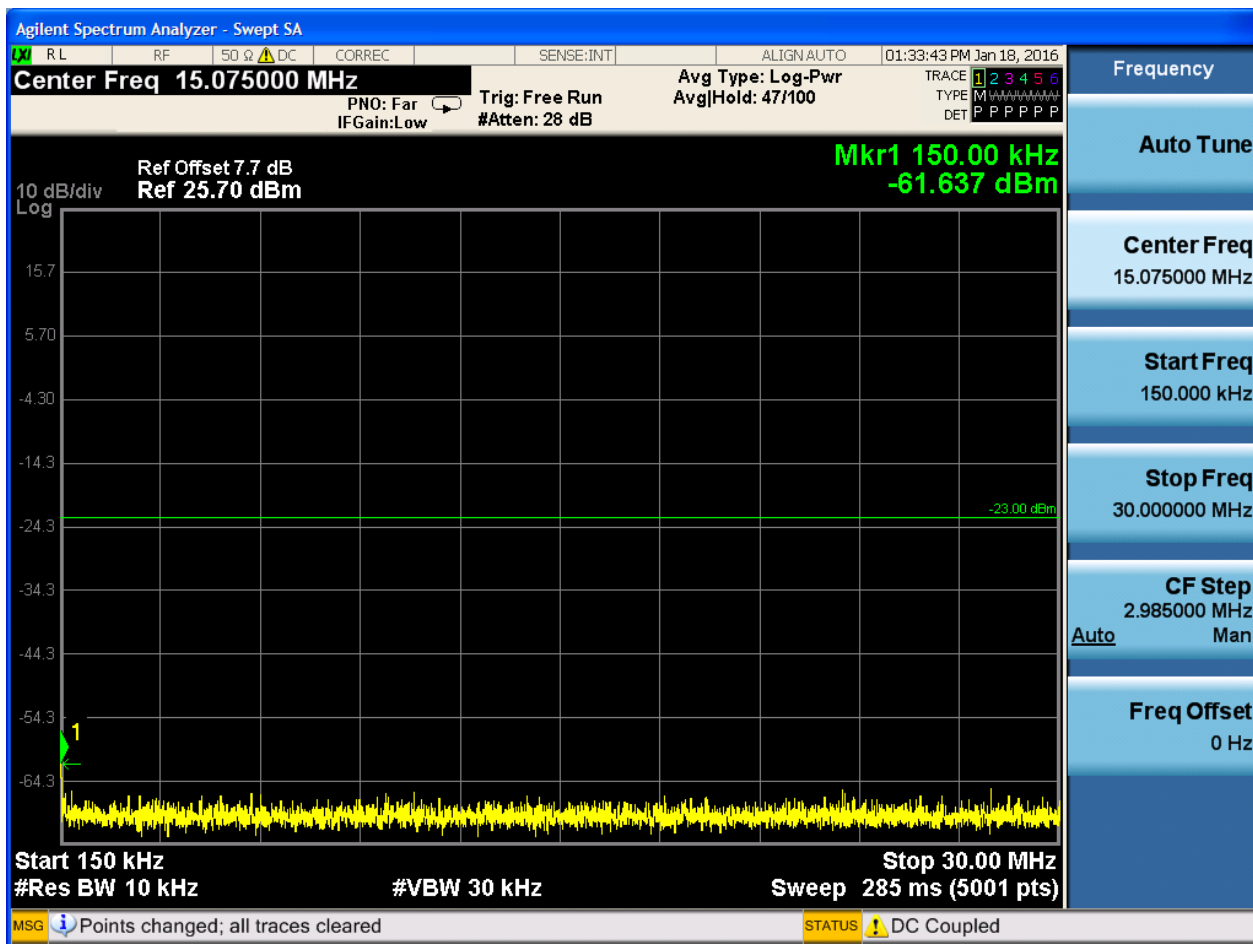


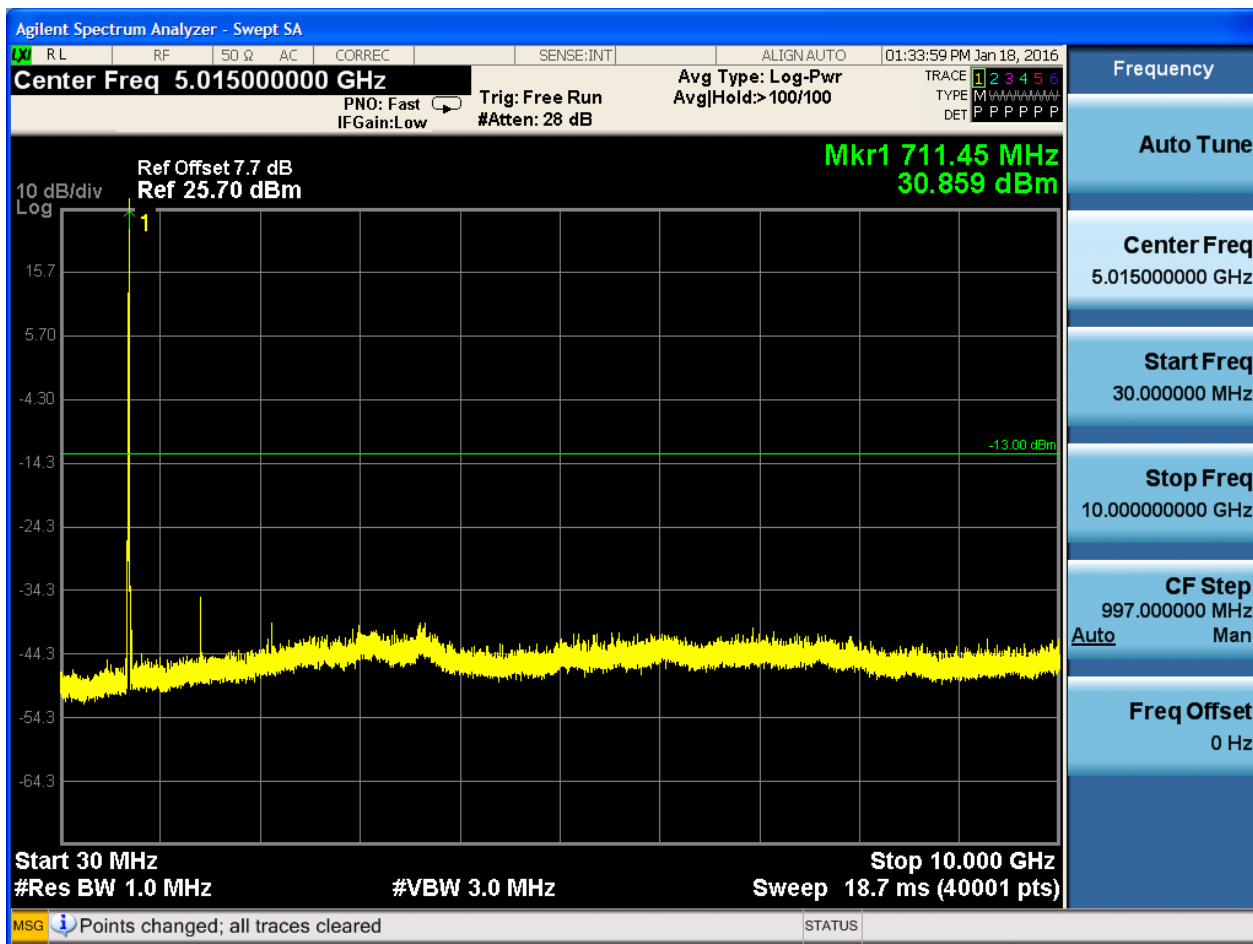


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





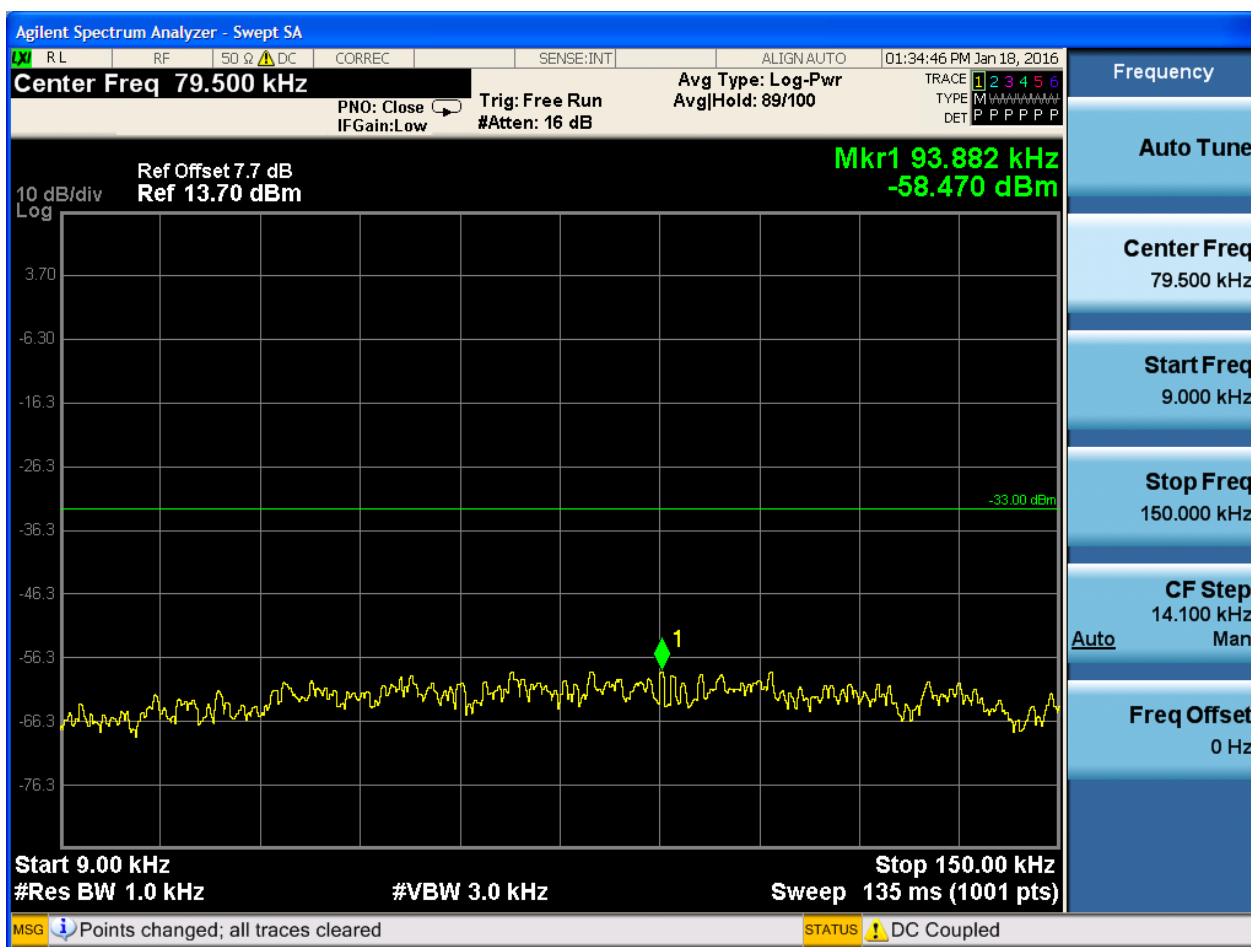




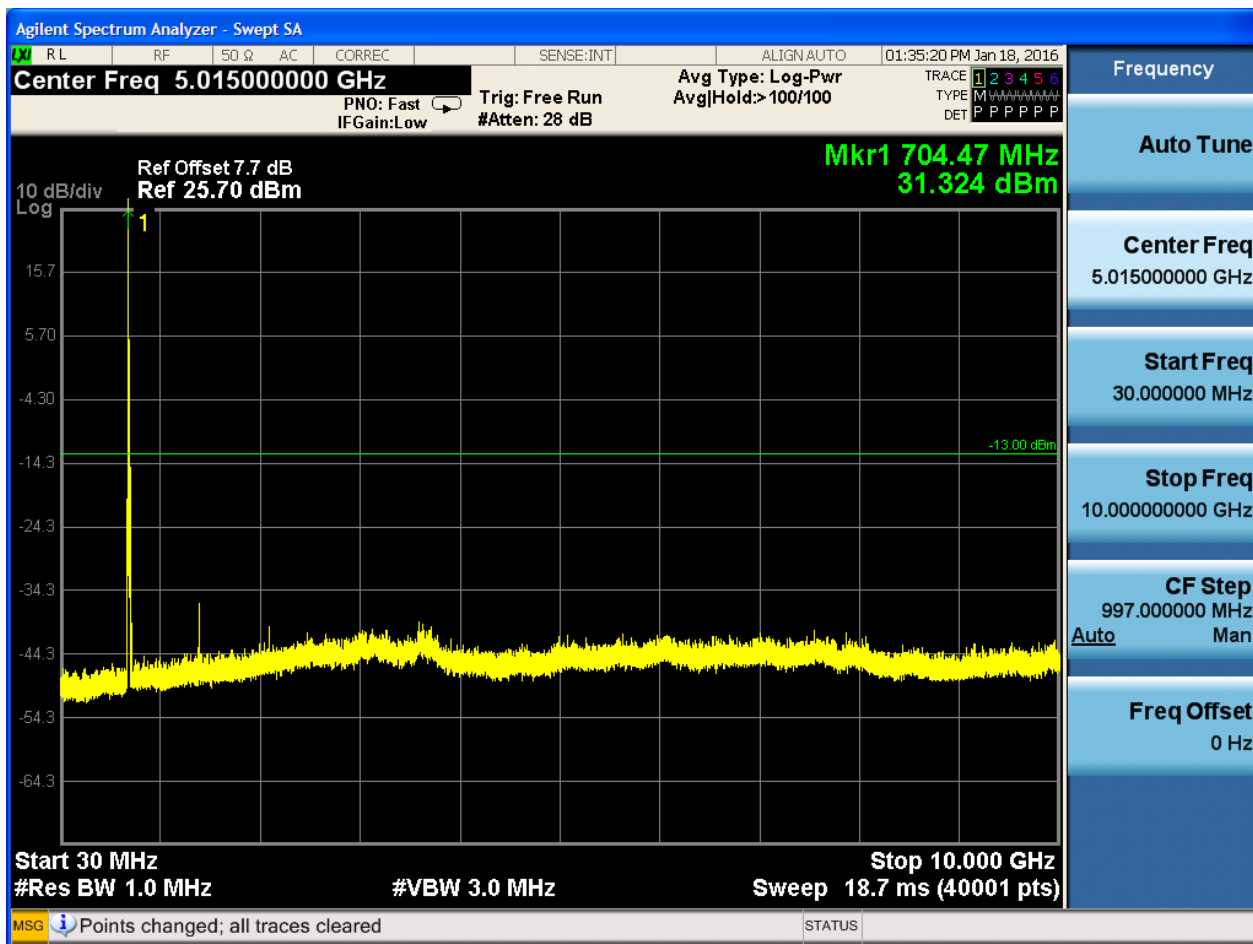
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

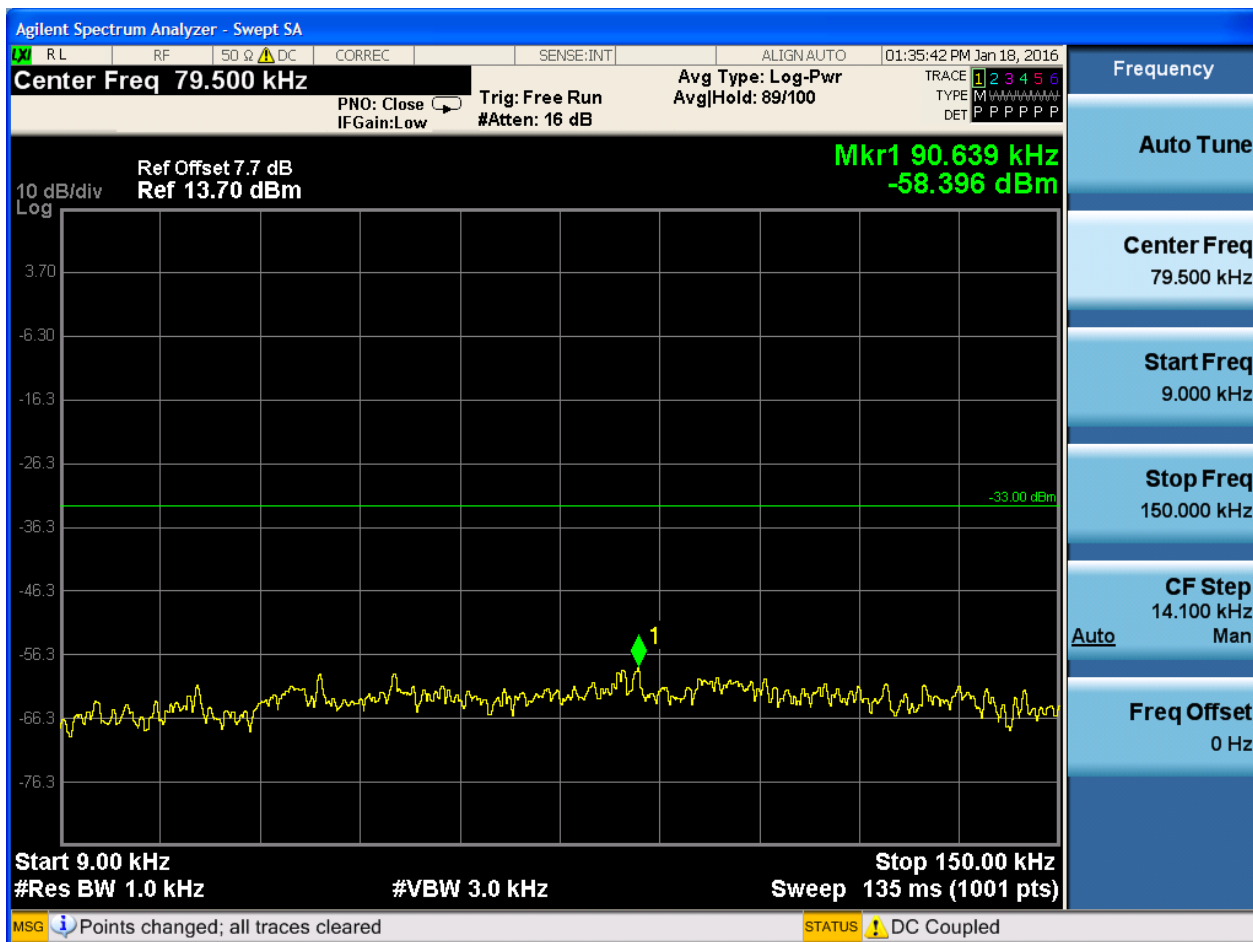


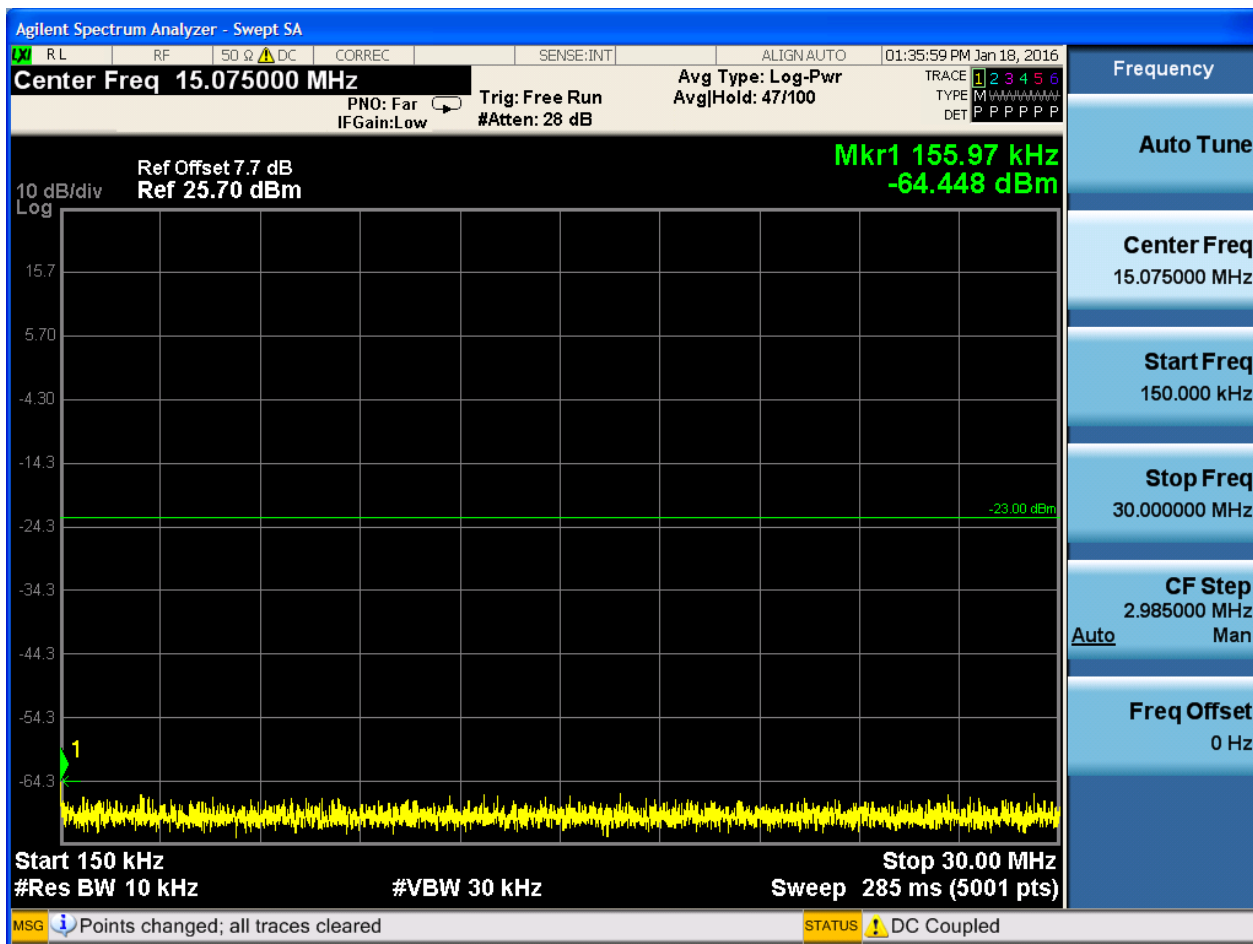


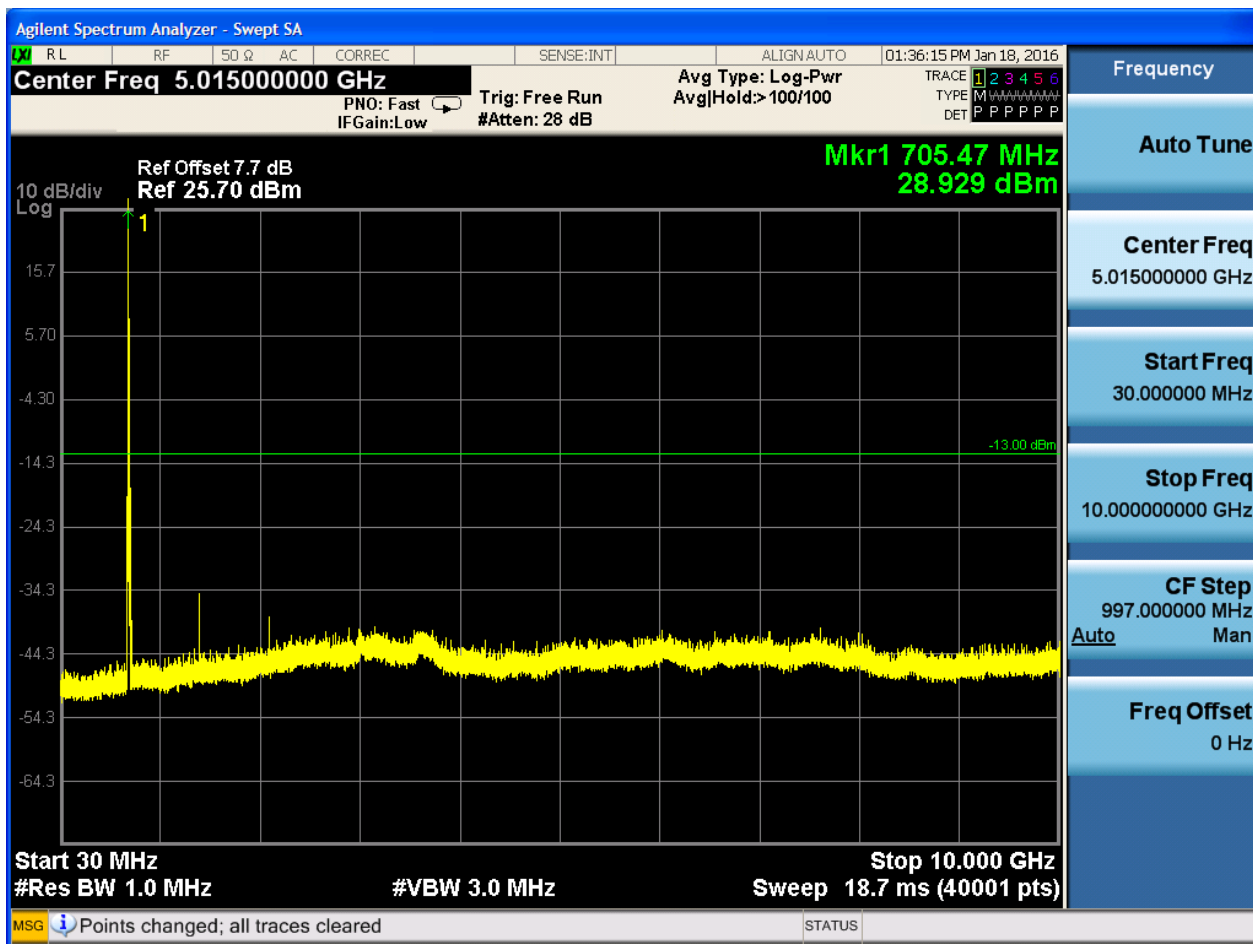


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

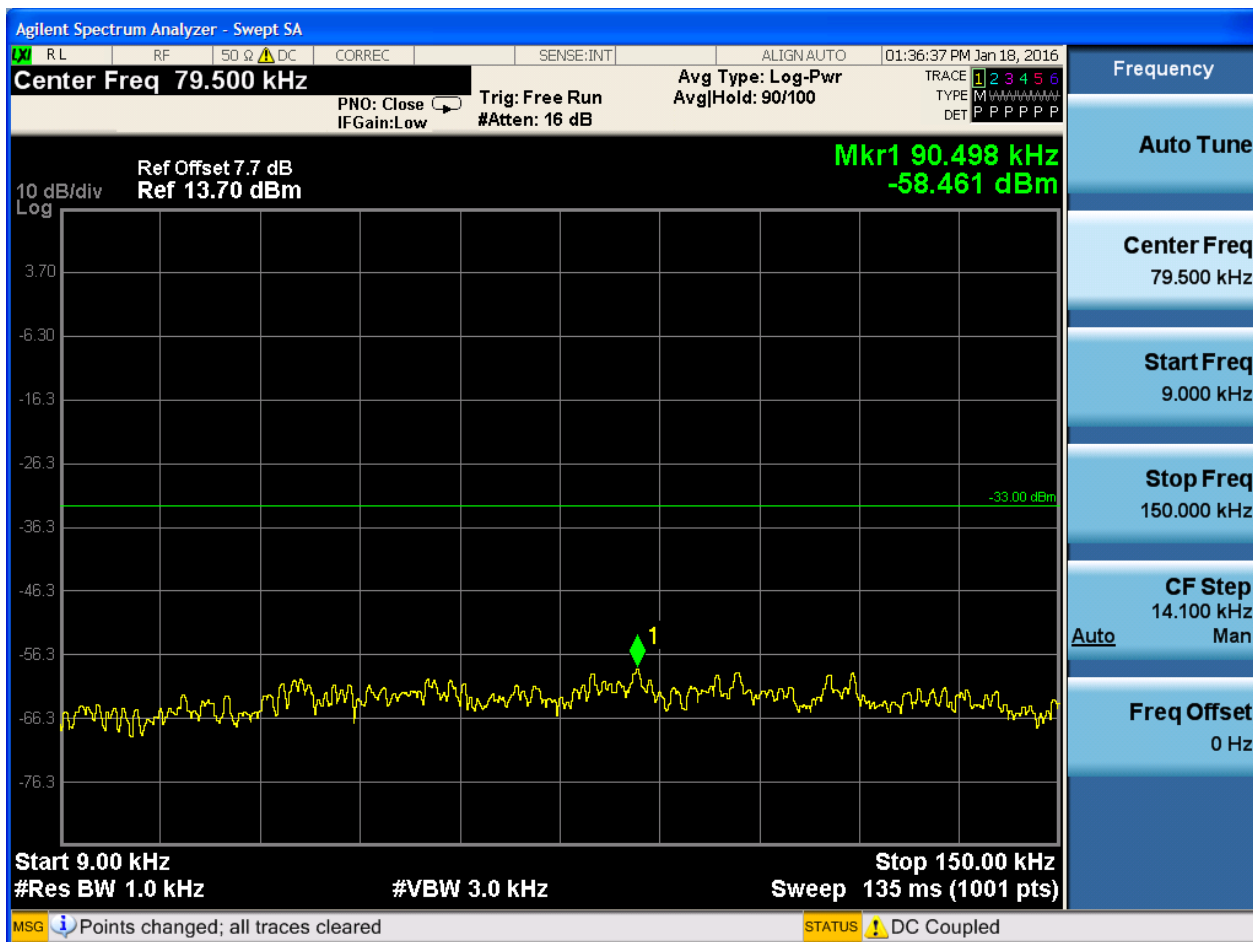


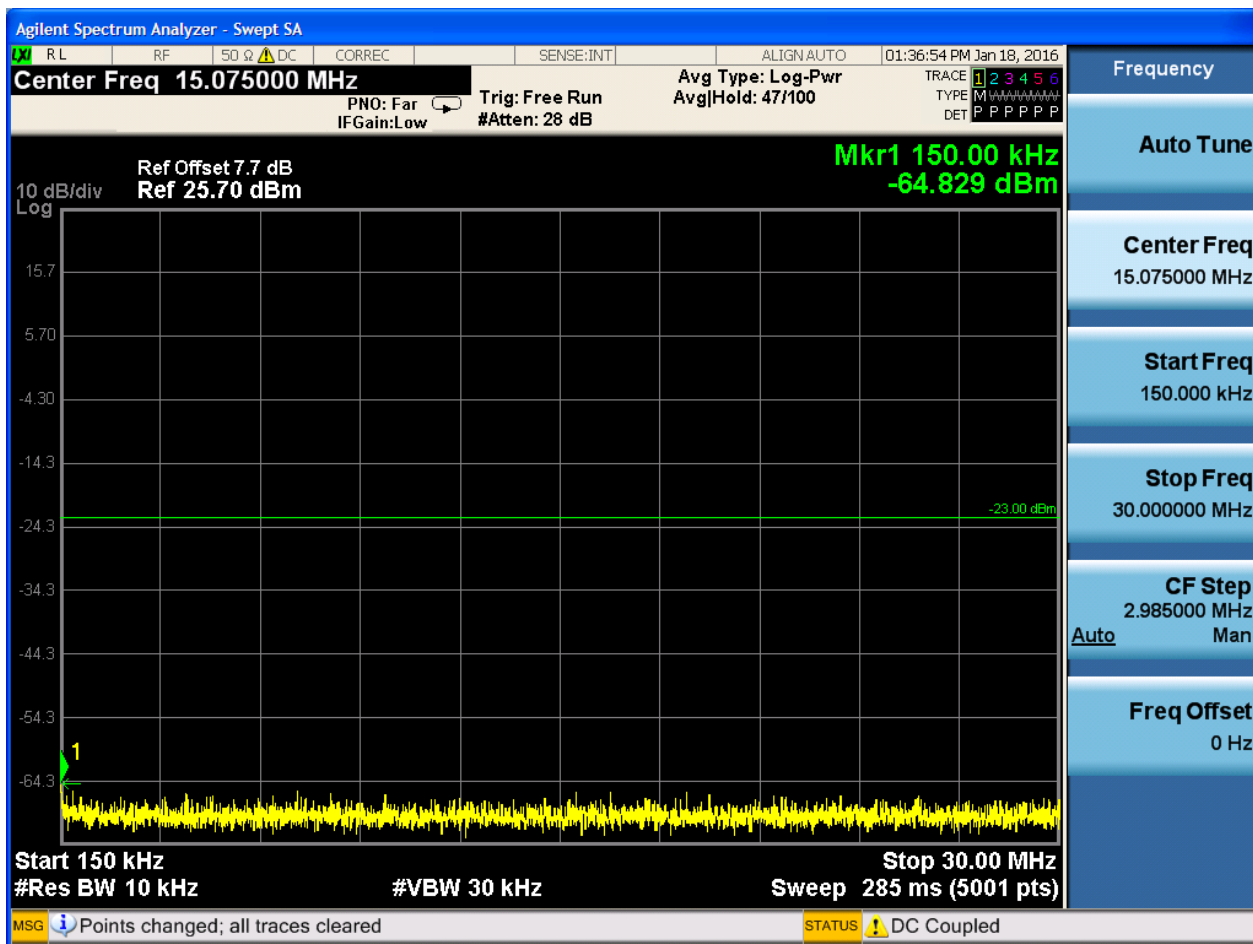


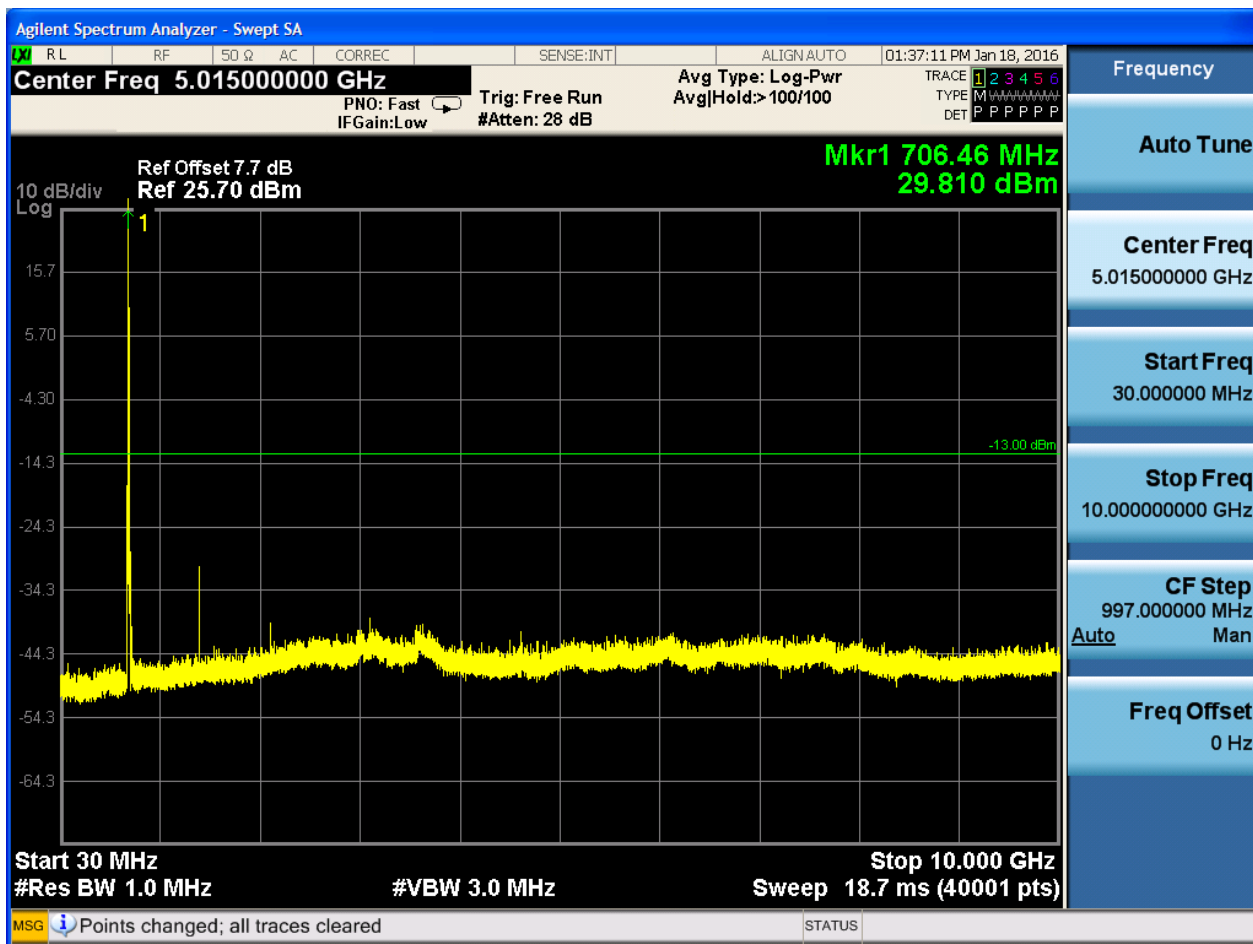


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0

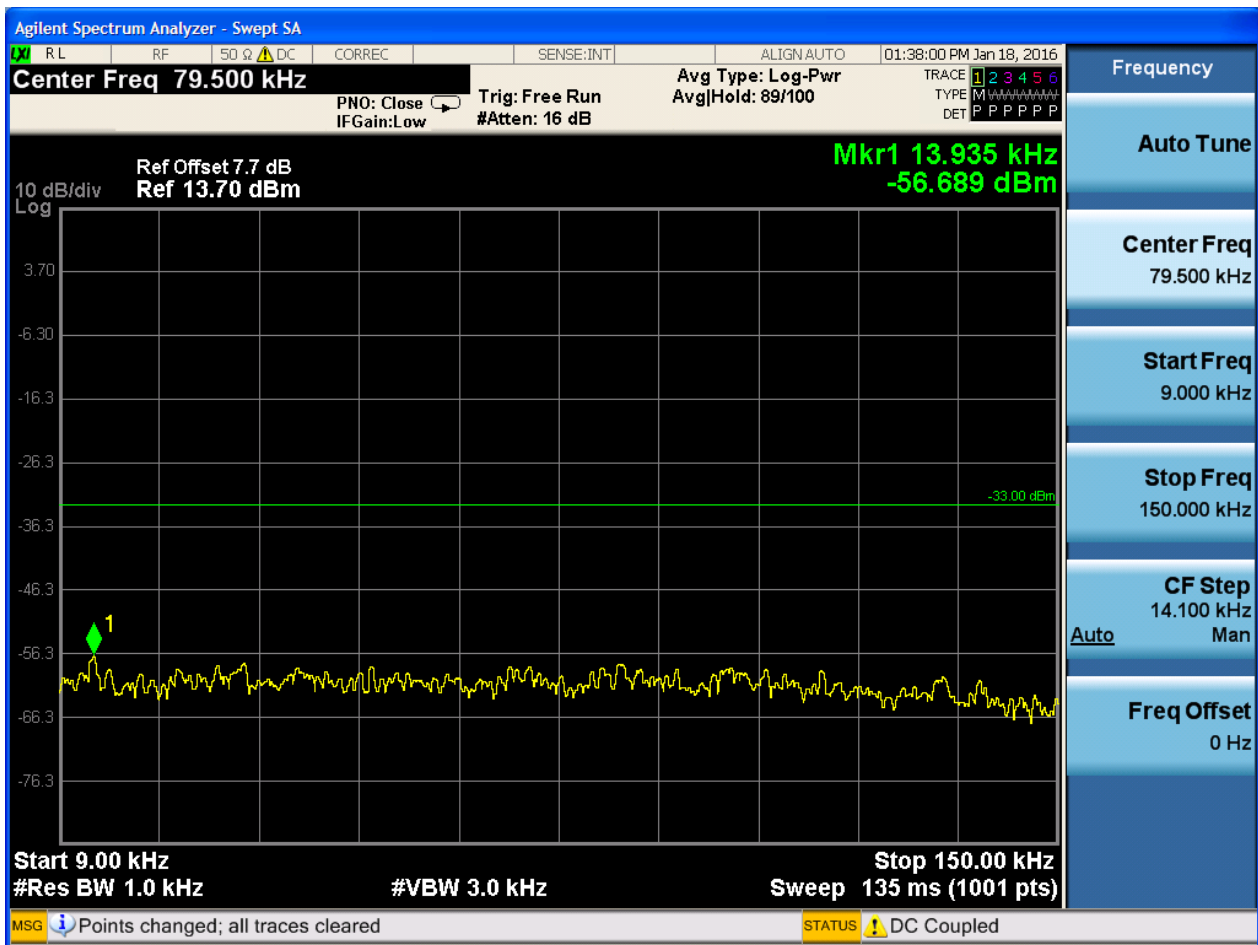


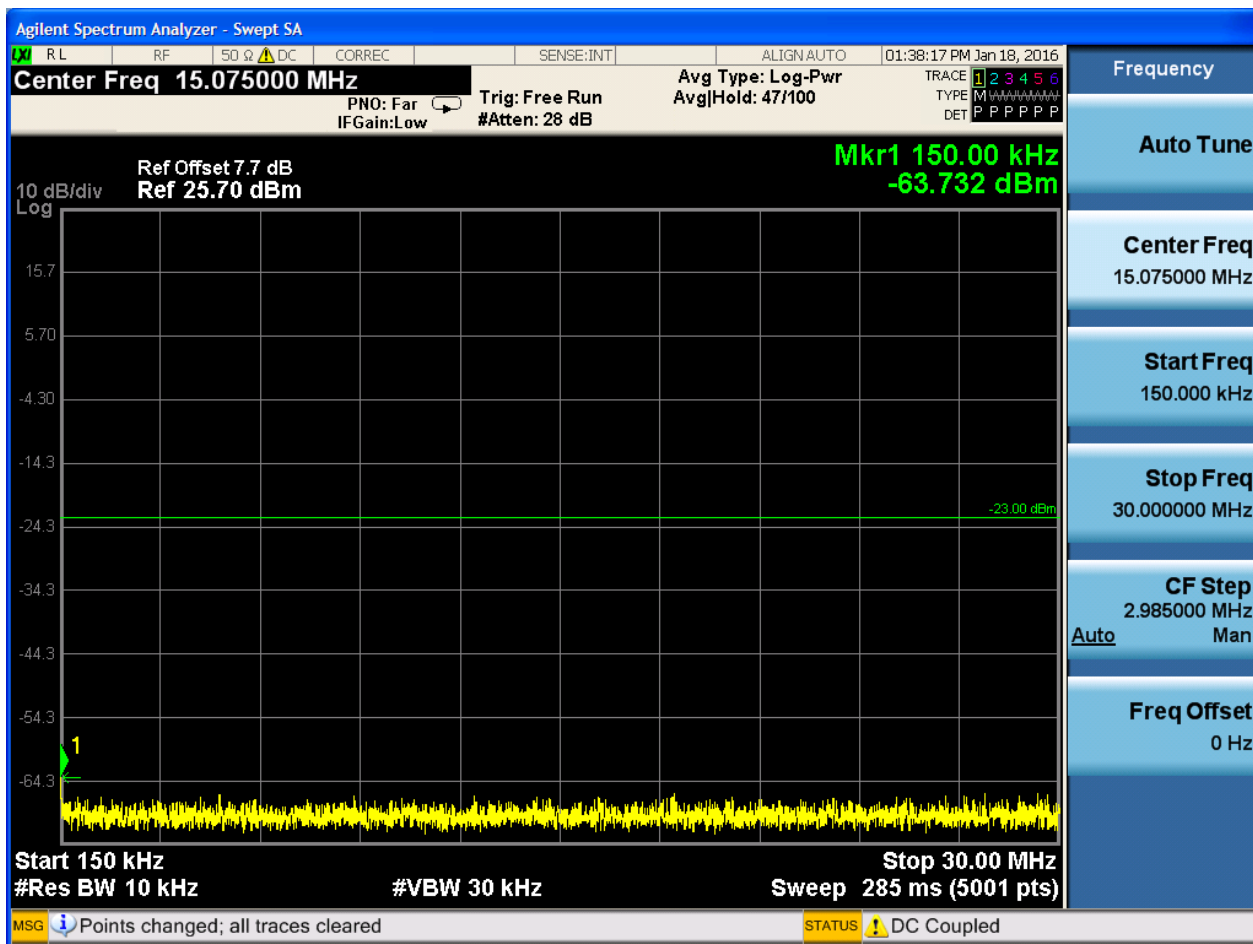


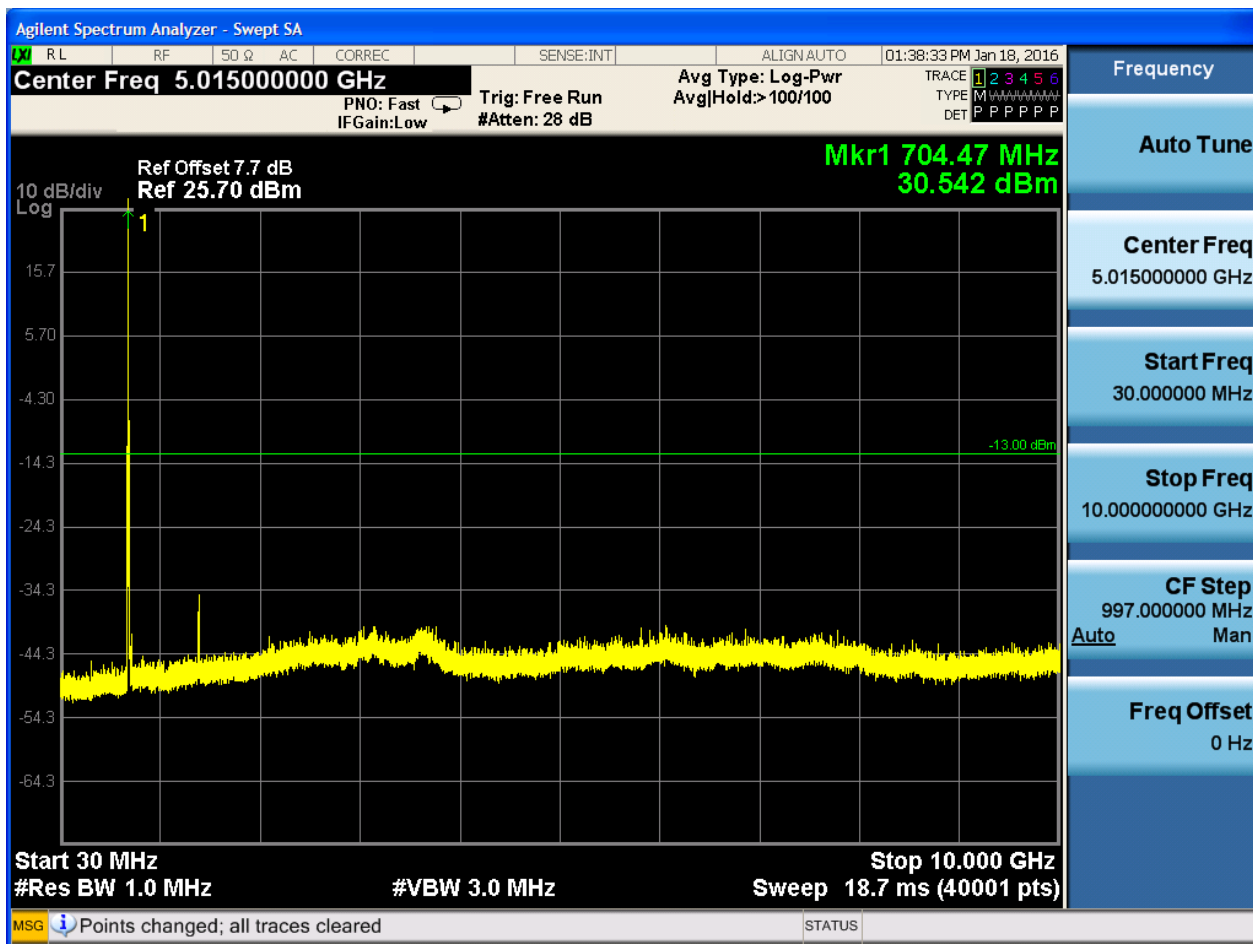




6.1.1.2.1.1.1 Test RB = RB1#0





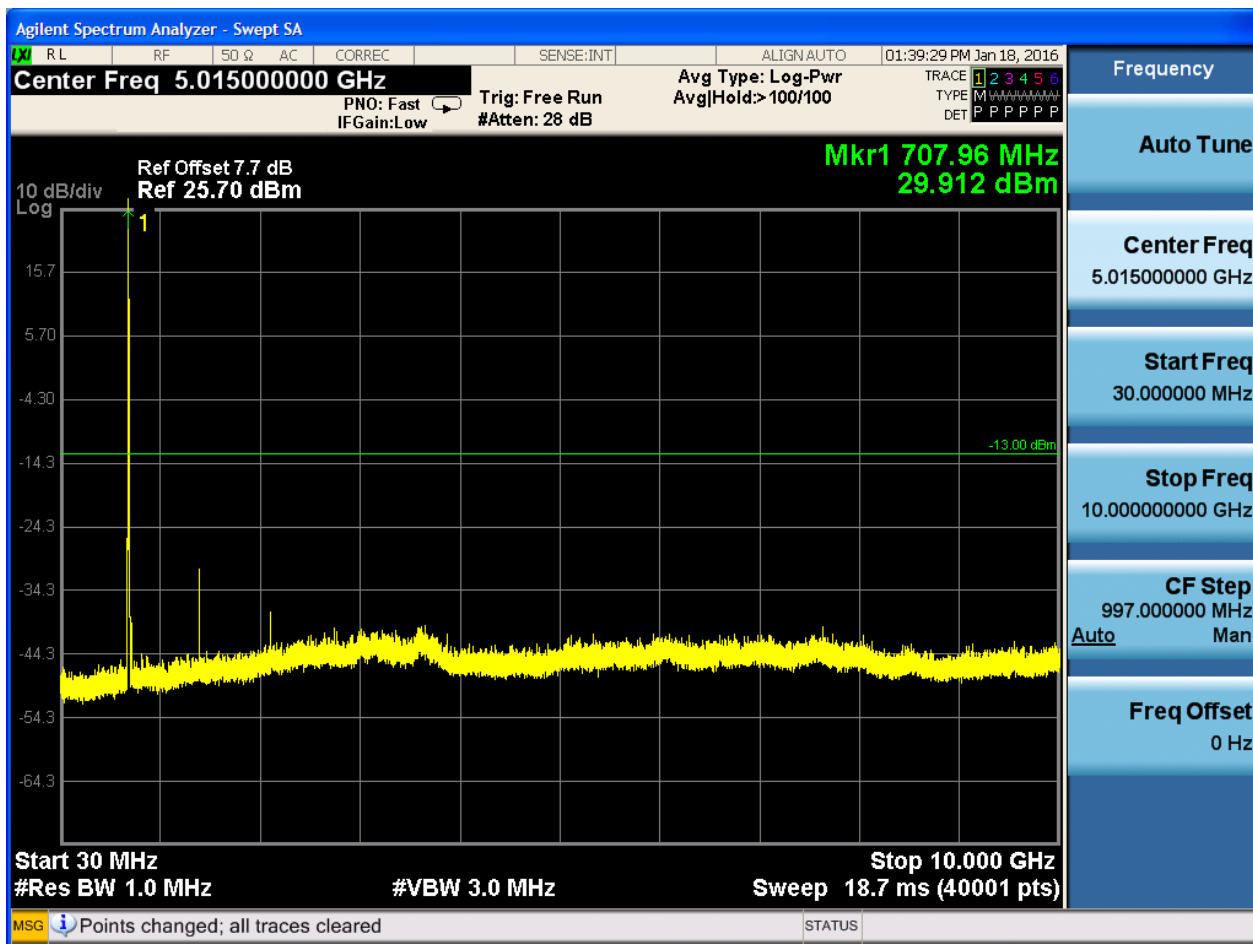


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



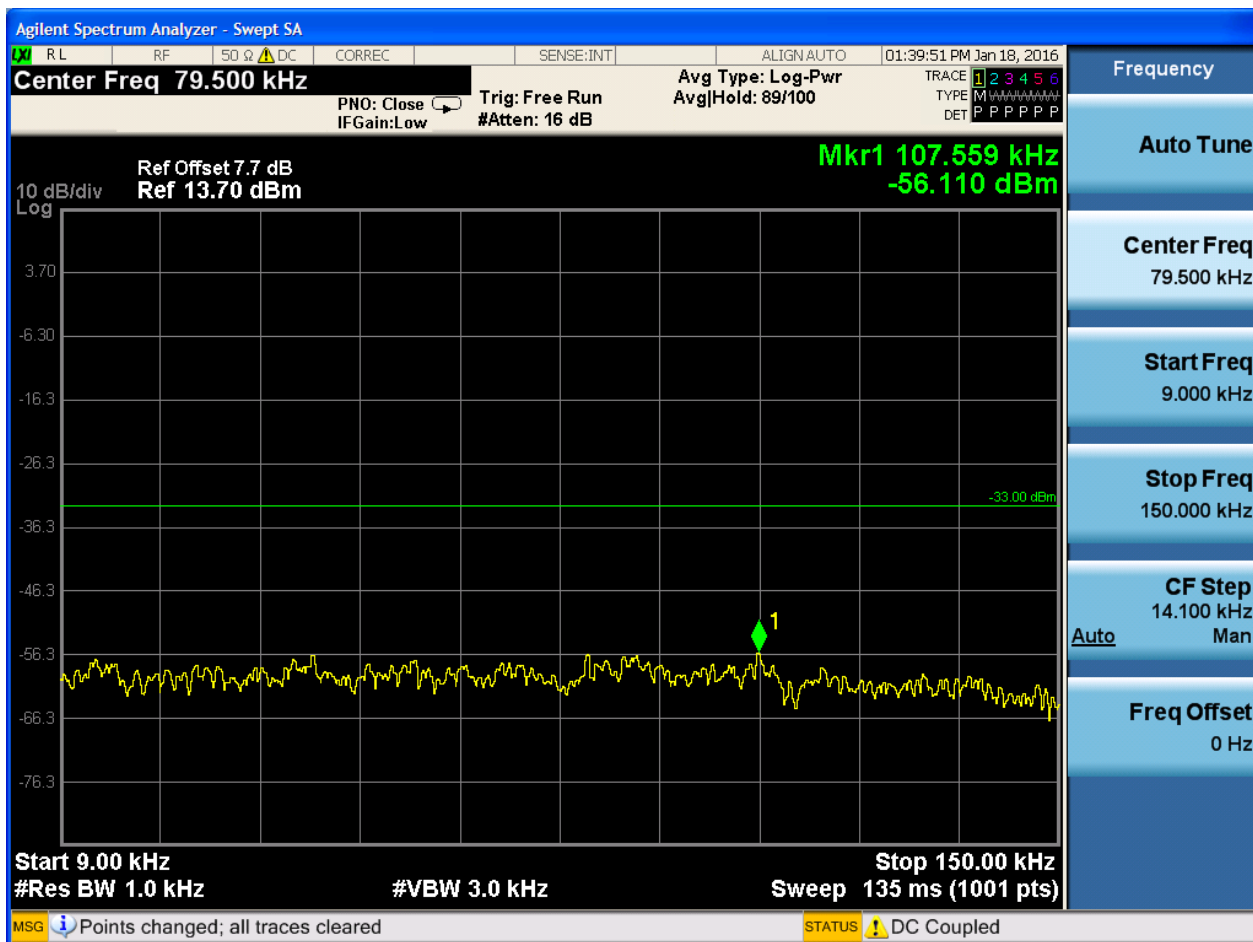




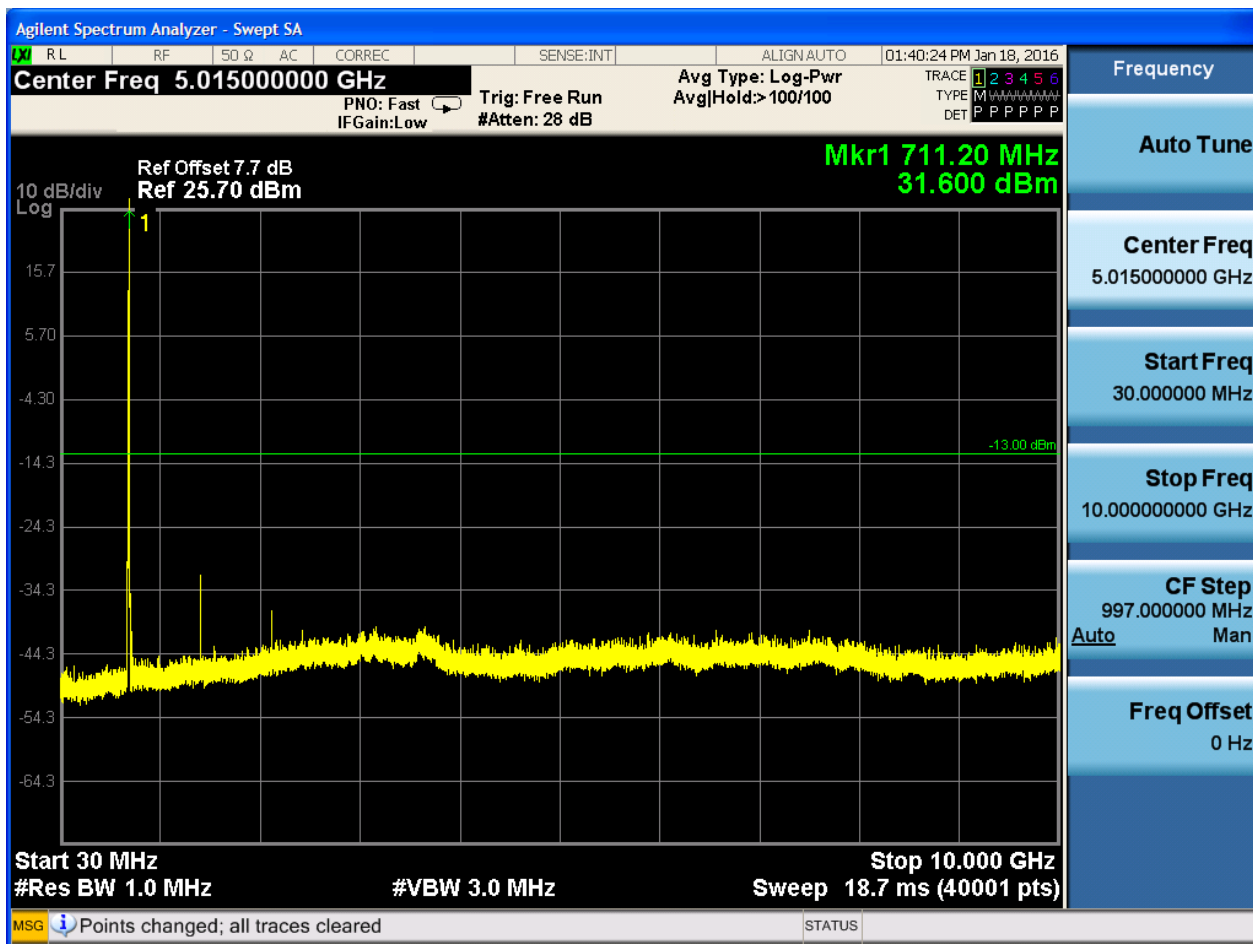


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





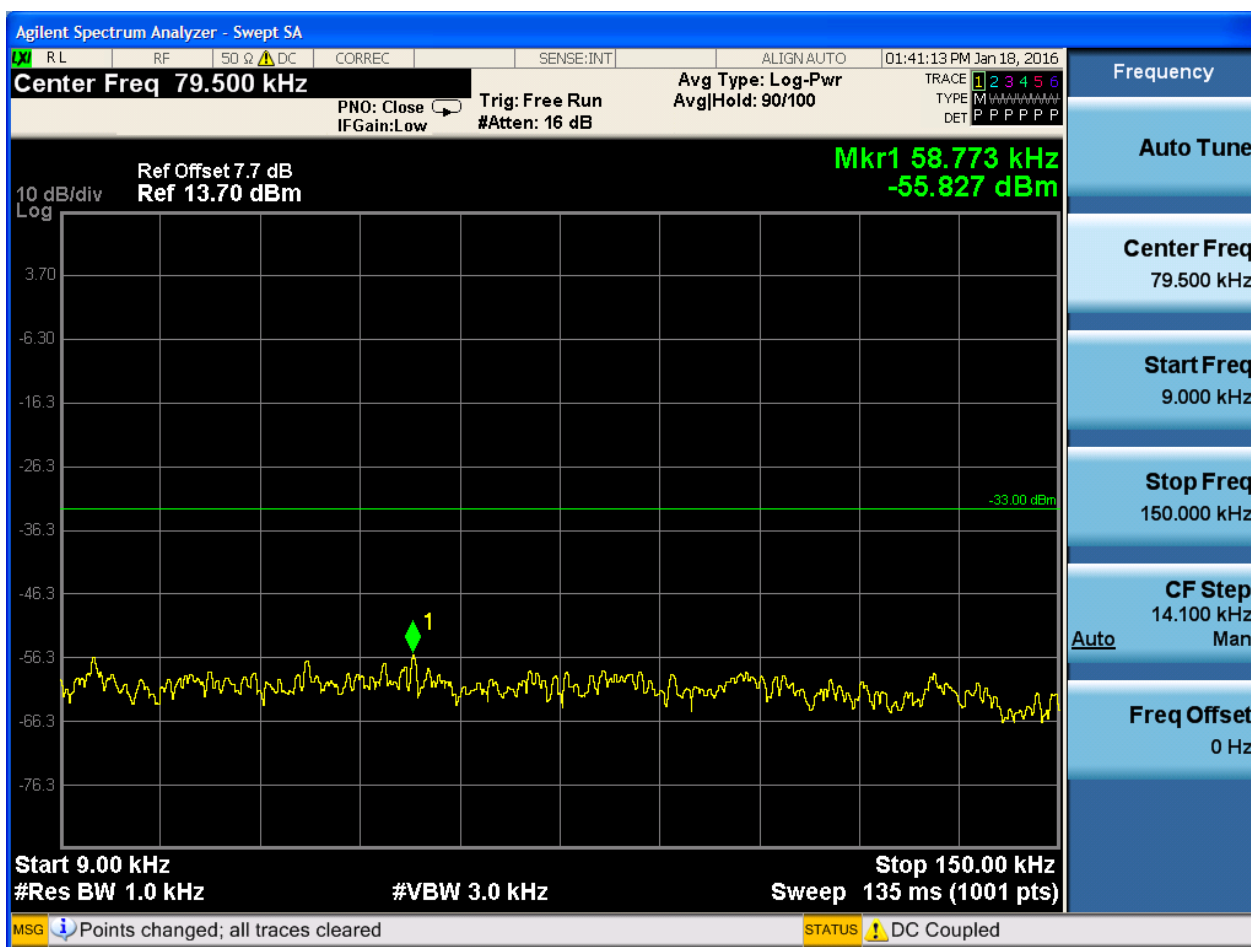




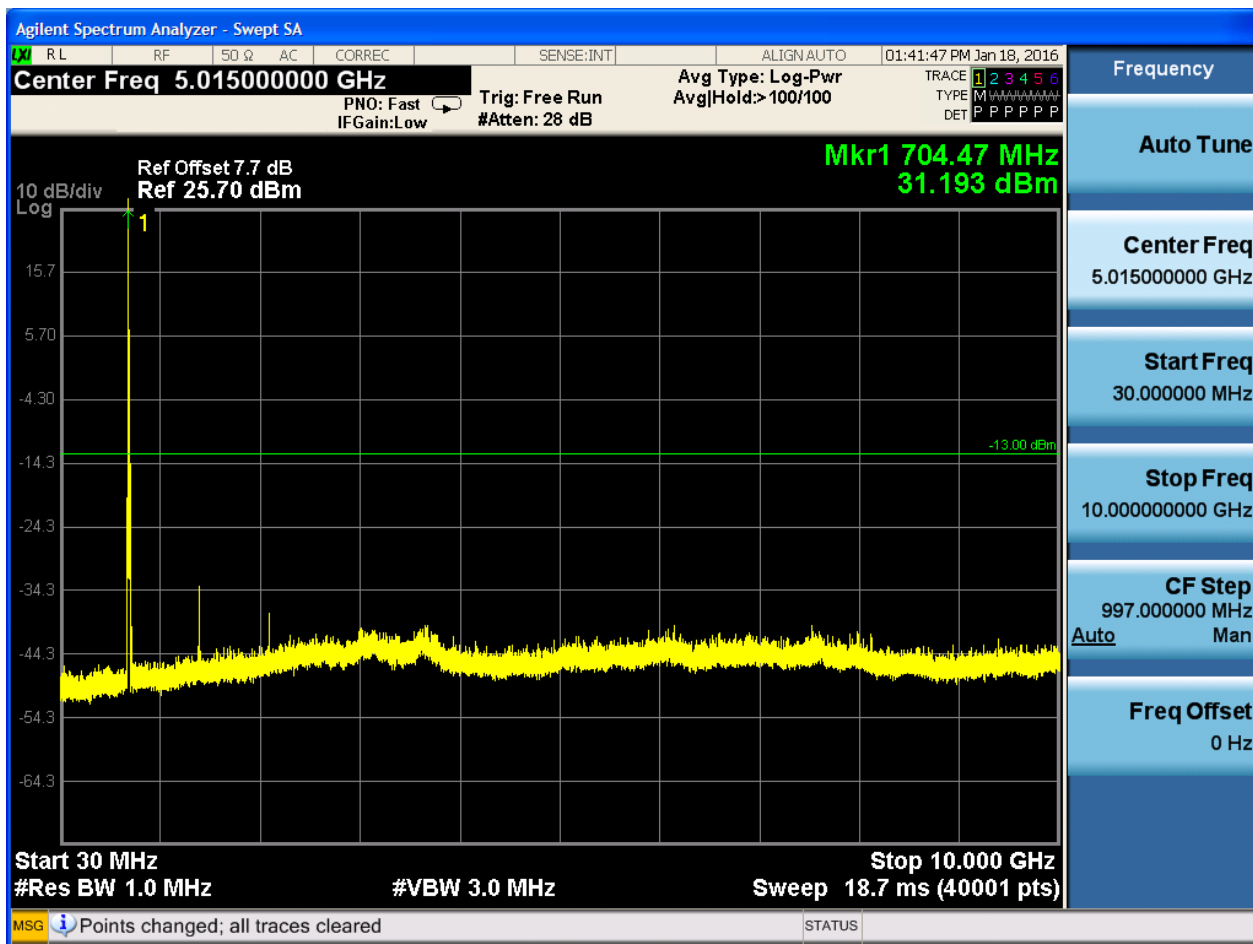
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0

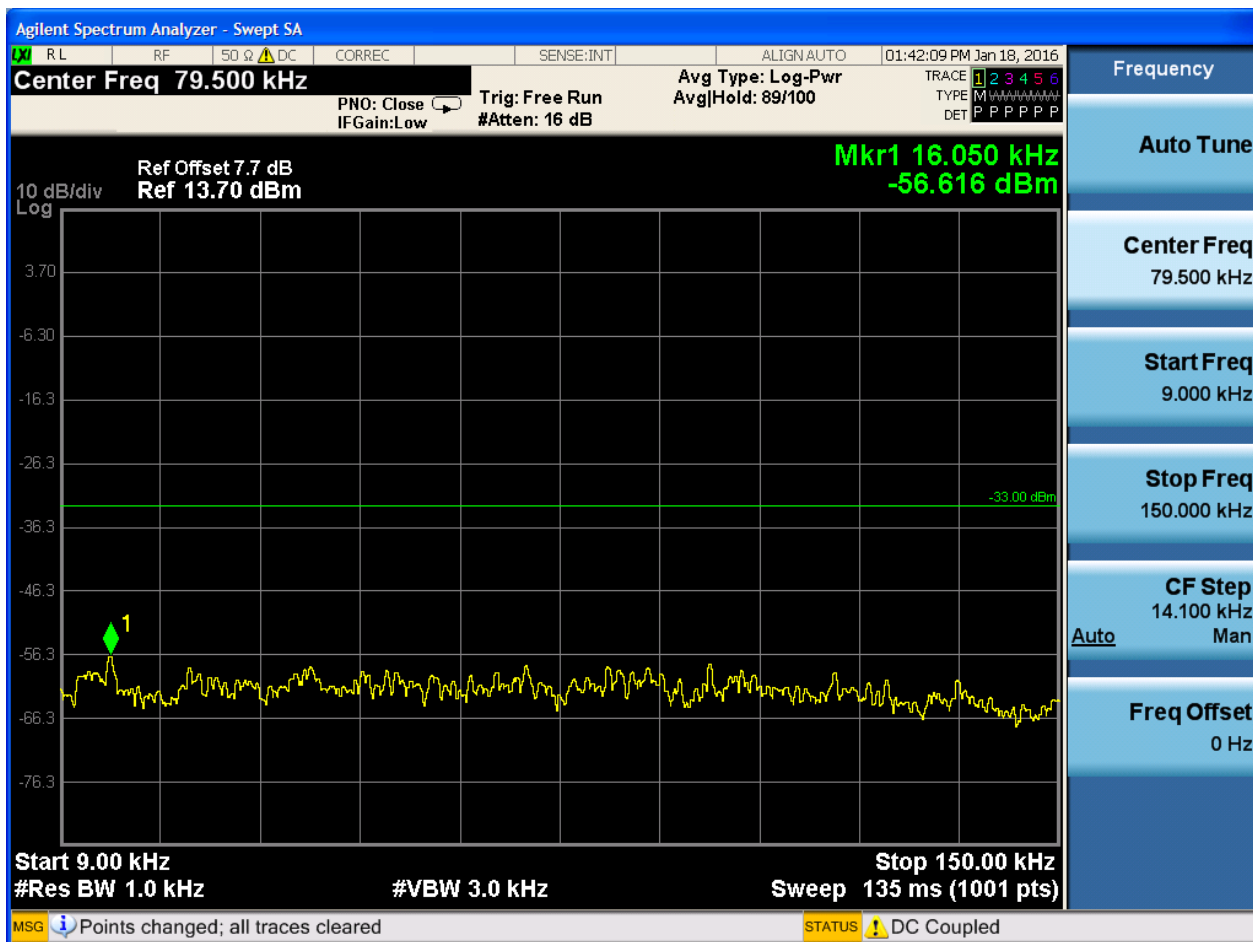


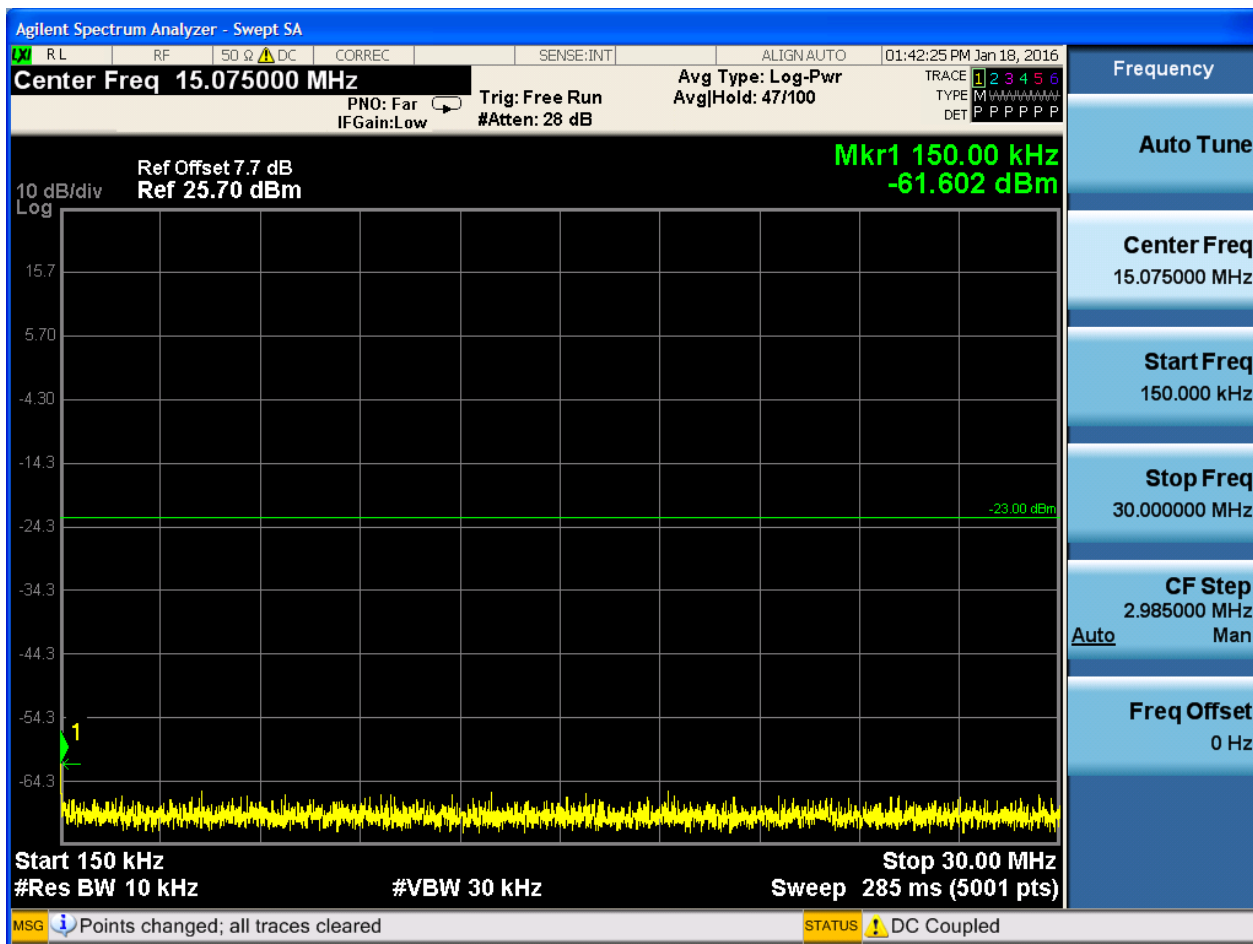


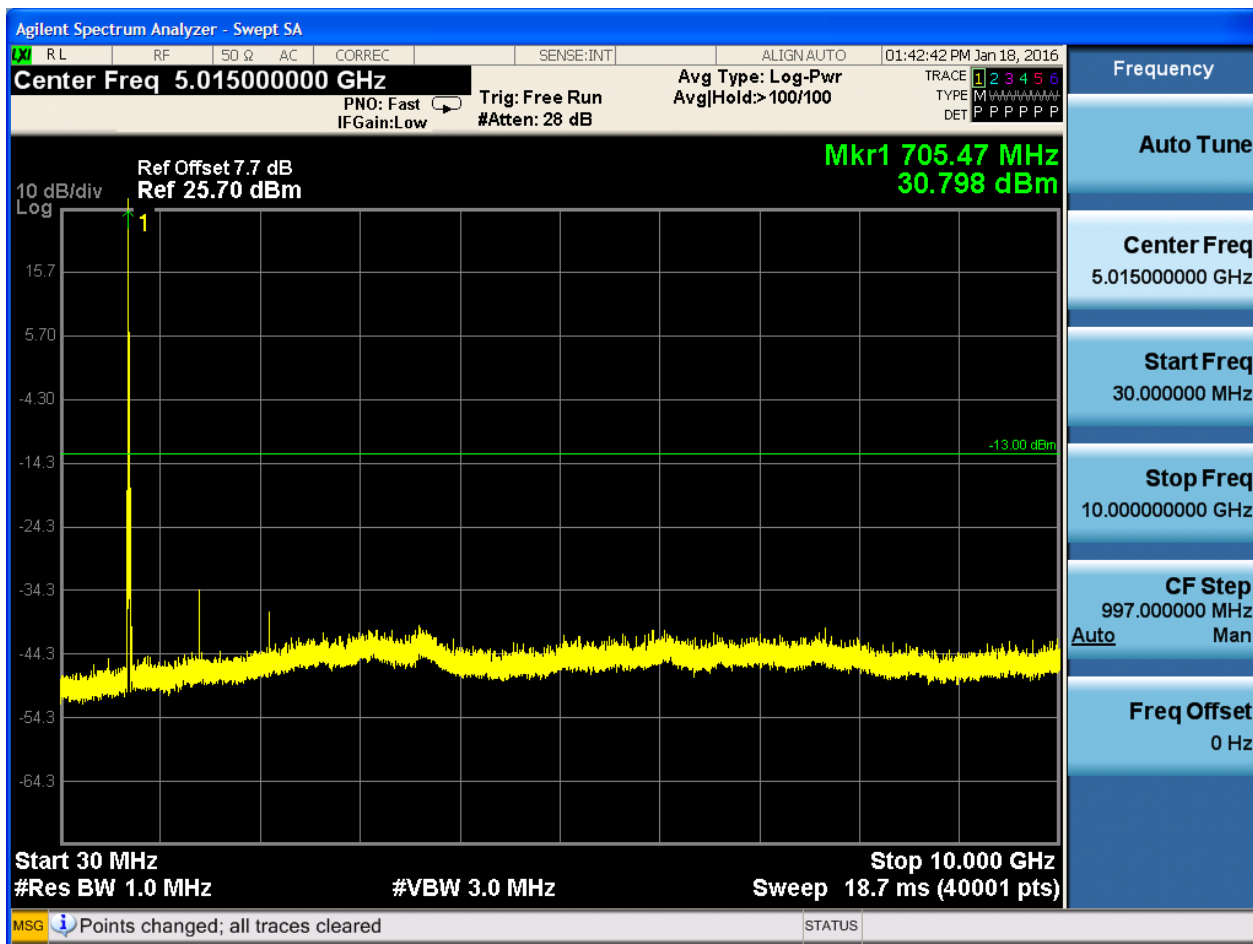


6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0

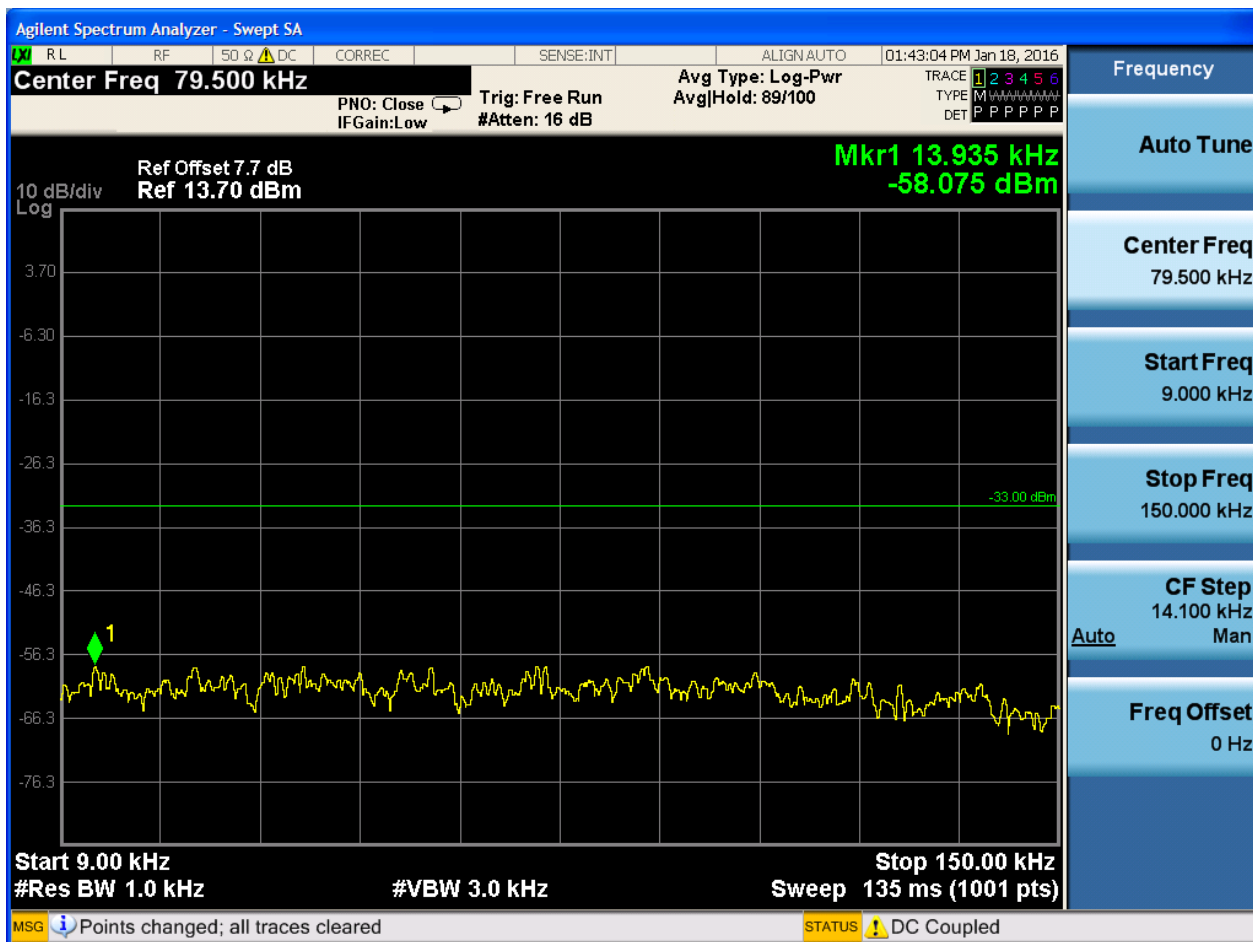


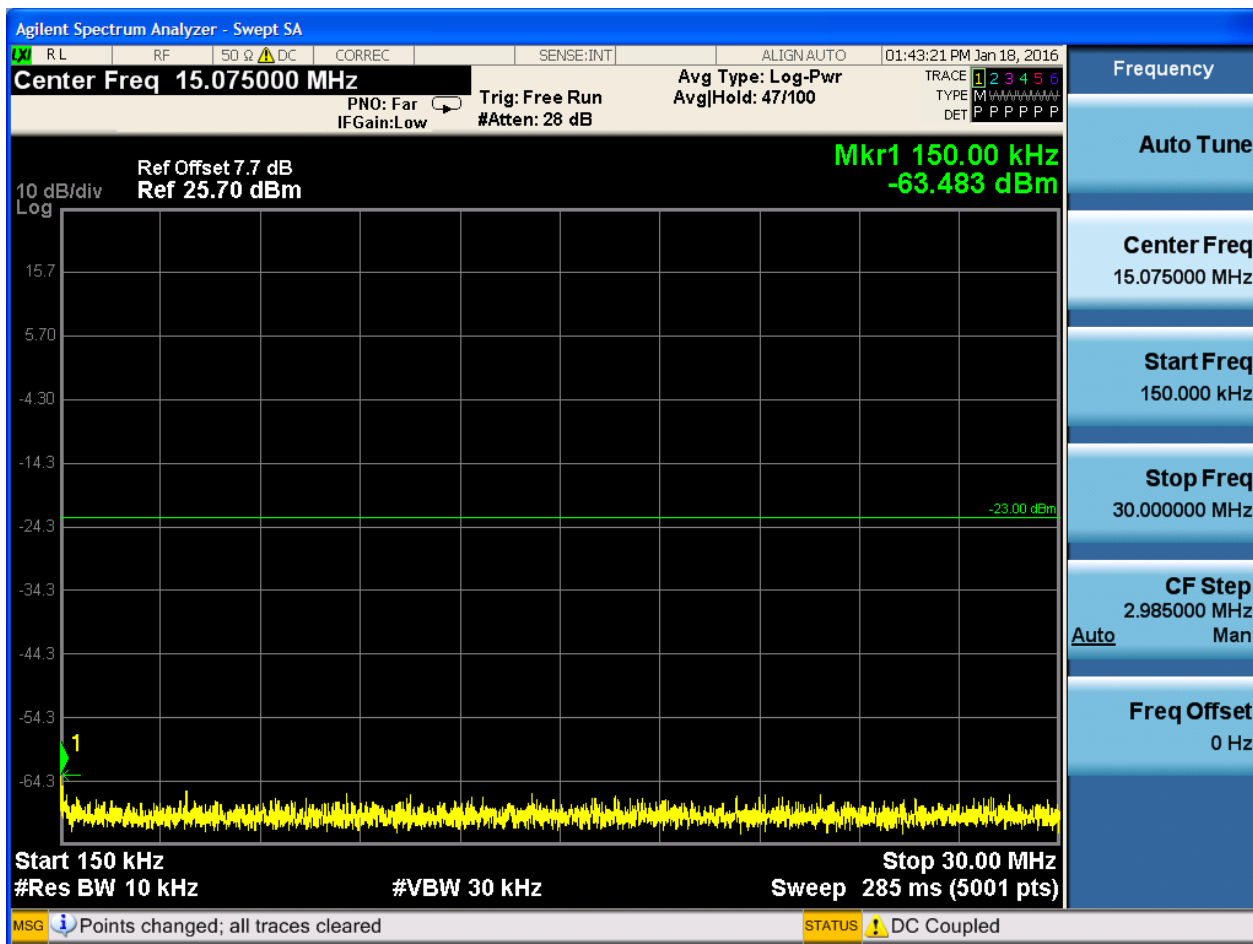


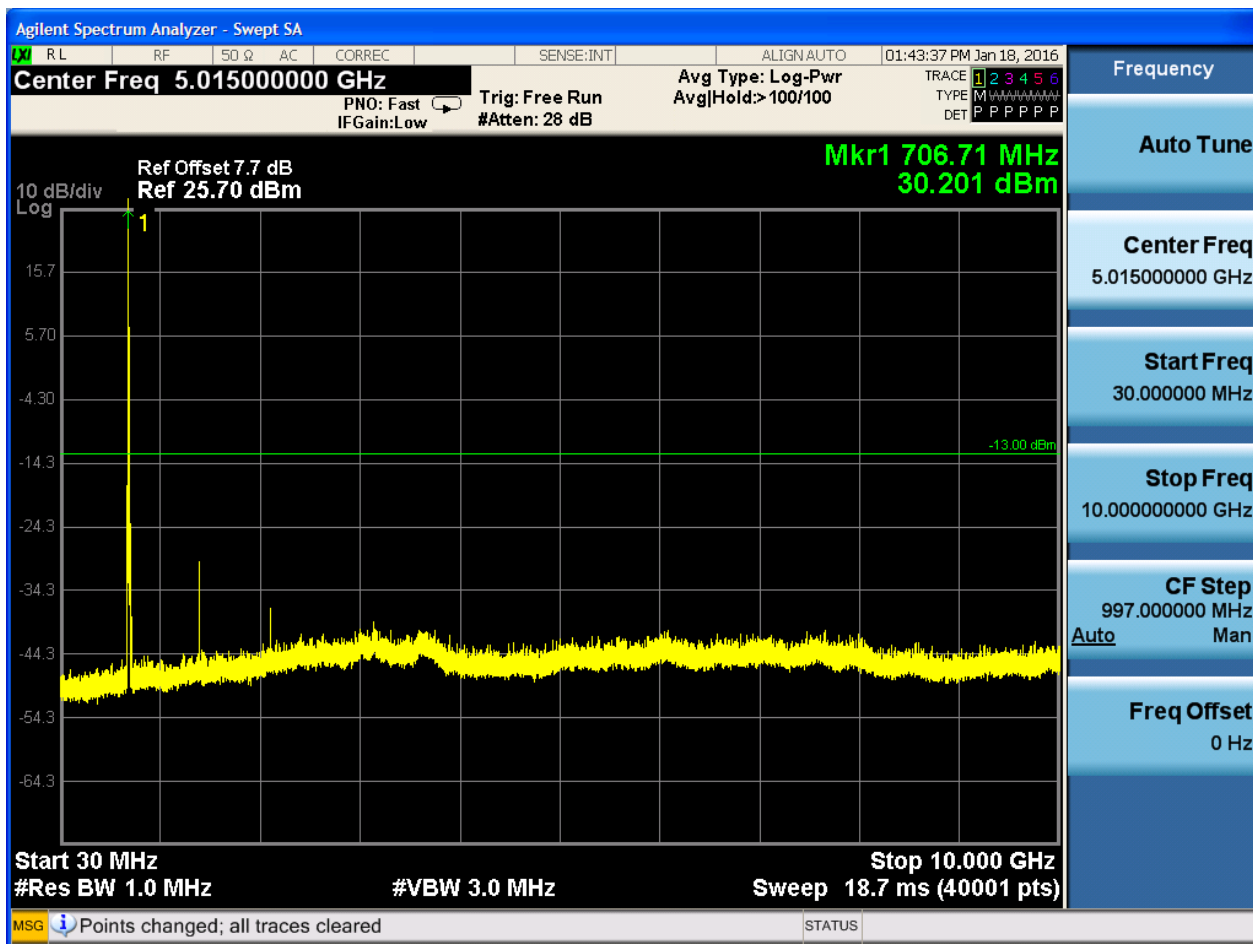


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0







7Appendix_G: Field Strength of Spurious Radiation

Note:

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

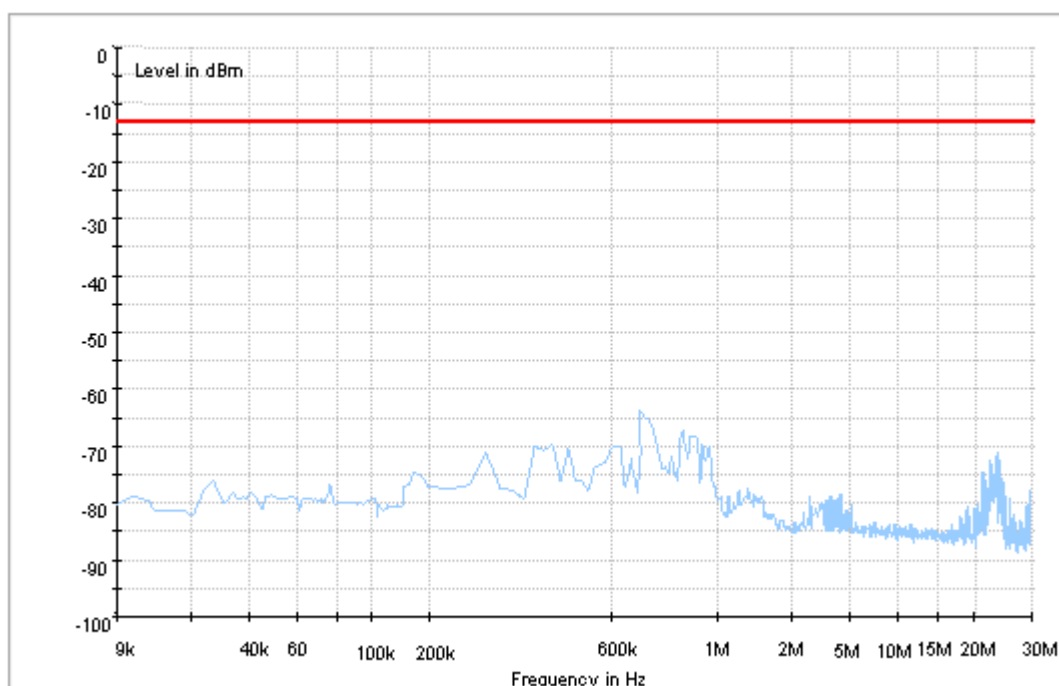
We tested all modes, but the data presented below is the worst case.

Part I - Test Plots

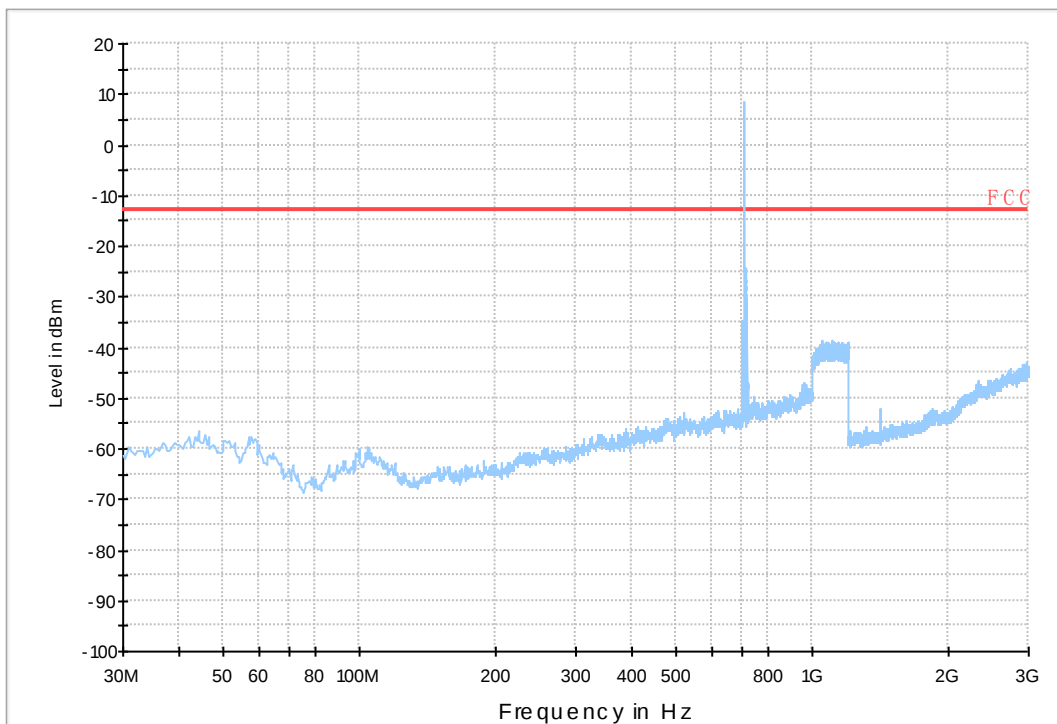
7.1 For LTE

7.1.1 Test Band = BAND17

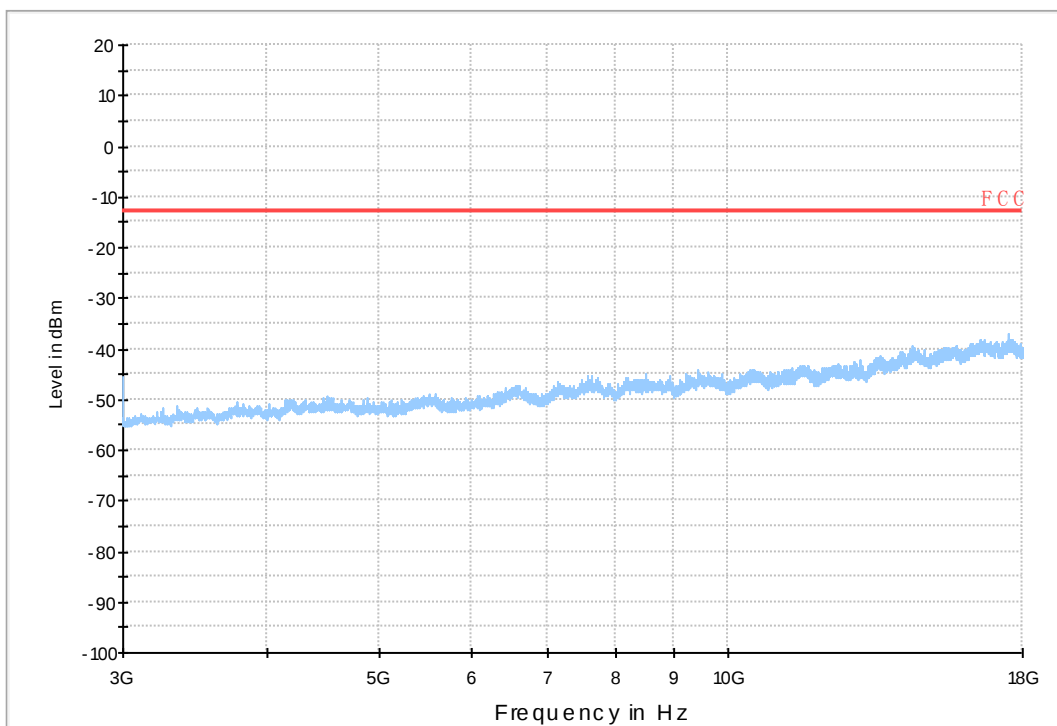
7.1.1.1 Test Bandwidth = 5



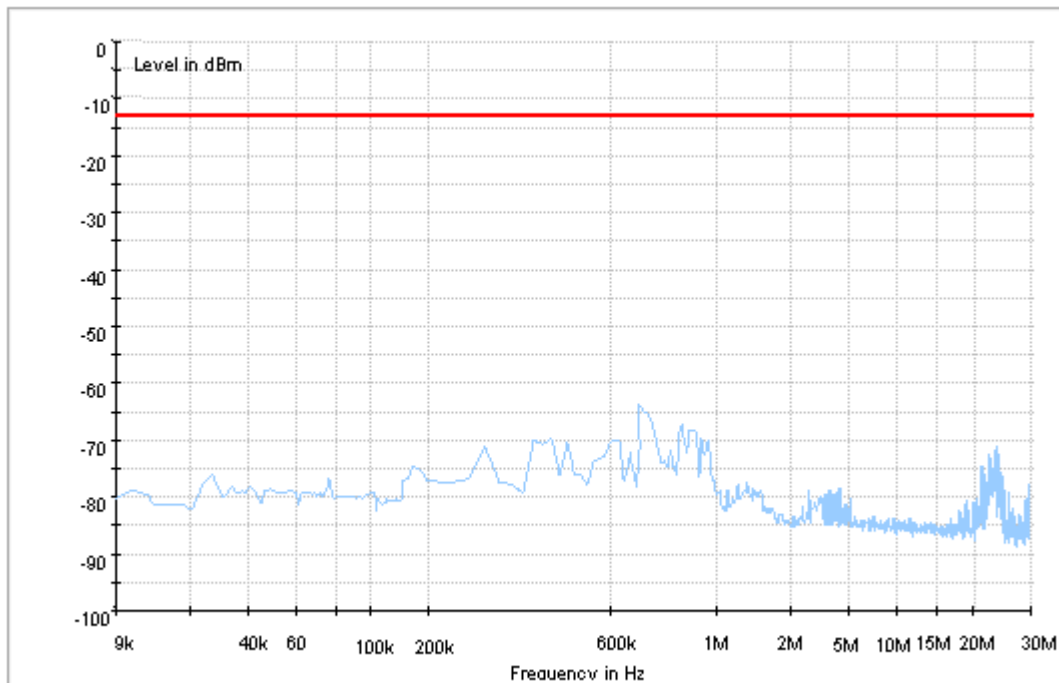
Copy of RSE-TX-DIRECTOR BELOW 1G_L



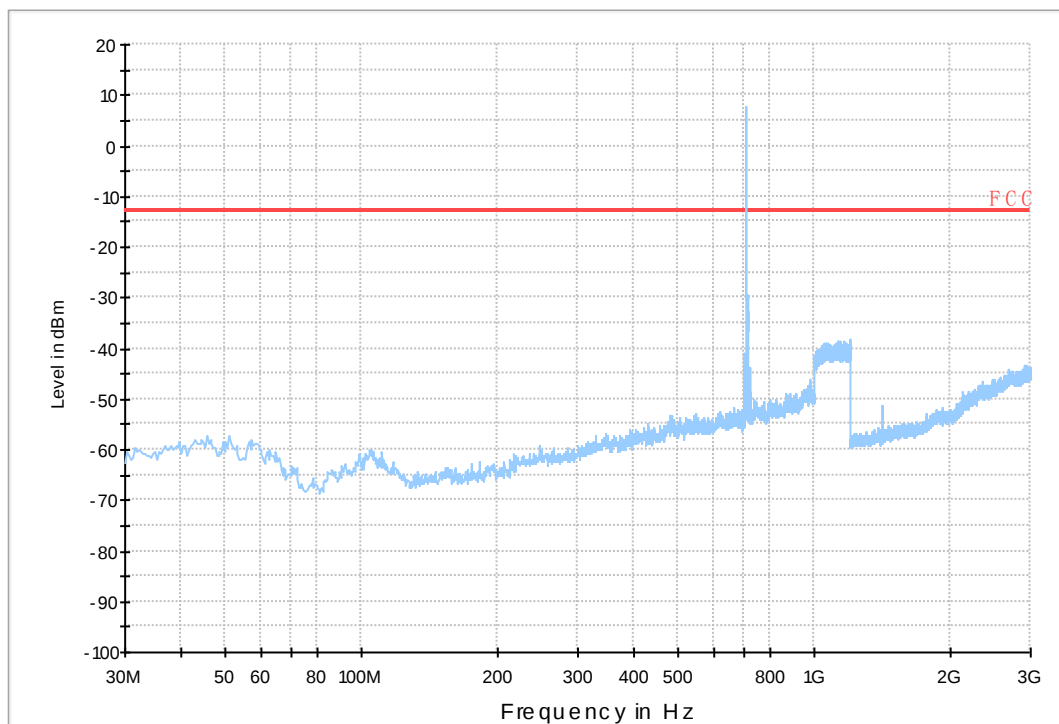
Copy of RSE-TX-DIRECTOR BELOW 1G_H



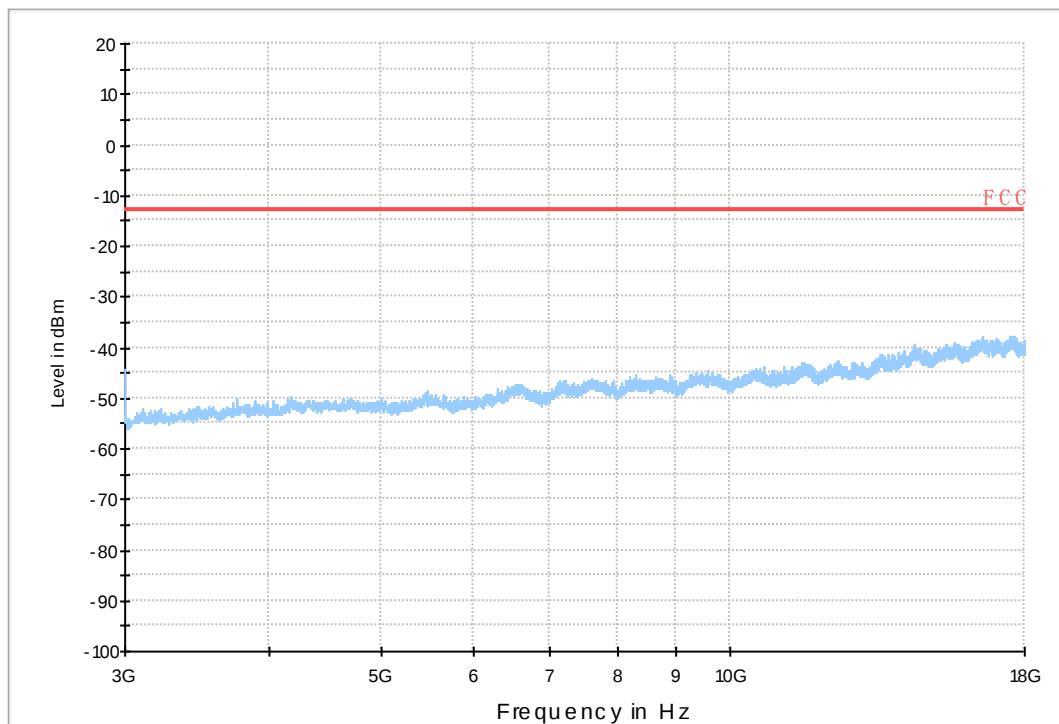
7.1.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND17	LTE/TM1	5	LCH	TN	VL	-10.2	-0.01444	PASS
					VN	-4.62	-0.00654	PASS
					VH	1.4	0.00198	PASS
			MCH	TN	VL	2.49	0.00351	PASS
					VN	2.63	0.0037	PASS
					VH	1.85	0.00261	PASS
			HCH	TN	VL	-6.35	-0.0089	PASS
					VN	0.2	0.00028	PASS
					VH	5.39	0.00755	PASS
		10	LCH	TN	VL	1.63	0.0023	PASS
					VN	0.43	0.00061	PASS
					VH	-0.31	-0.00044	PASS
			MCH	TN	VL	0.72	0.00101	PASS
					VN	-0.49	-0.00069	PASS
					VH	0.26	0.00037	PASS
			HCH	TN	VL	0.24	0.00034	PASS
					VN	-0.72	-0.00101	PASS
					VH	0.43	0.0006	PASS
	LTE/TM2	5	LCH	TN	VL	-0.84	-0.00119	PASS
					VN	3.65	0.00517	PASS
					VH	-8.15	-0.01154	PASS
			MCH	TN	VL	-0.09	-0.00013	PASS
					VN	-2.13	-0.003	PASS
					VH	-4.48	-0.00631	PASS
			HCH	TN	VL	3.81	0.00534	PASS
					VN	0.63	0.00088	PASS
					VH	-1.8	-0.00252	PASS
		10	LCH	TN	VL	0.99	0.0014	PASS
					VN	0.76	0.00107	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	TN	VH	0.47	0.00066	PASS
					VL	1.75	0.00246	PASS
					VN	0.67	0.00094	PASS
					VH	-0.27	-0.00038	PASS
			HCH	TN	VL	-0.41	-0.00058	PASS
					VN	-0.72	-0.00101	PASS
					VH	0.77	0.00108	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND17	LTE/TM1	5	LCH	VN	-30	5.74	0.00812	PASS
					-20	-5.31	-0.00752	PASS
					-10	-6.15	-0.0087	PASS
					0	-13.78	-0.0195	PASS
					10	-4.25	-0.00602	PASS
					20	0.29	0.00041	PASS
					30	-8.43	-0.01193	PASS
					40	4.99	0.00706	PASS
					50	-5.46	-0.00773	PASS
			MCH	VN	-30	-2.86	-0.00403	PASS
					-20	-7.42	-0.01045	PASS
					-10	-0.69	-0.00097	PASS
					0	-0.66	-0.00093	PASS
					10	0.51	0.00072	PASS
					20	-4.89	-0.00689	PASS
					30	0.64	0.0009	PASS
					40	-2.85	-0.00401	PASS
					50	0.4	0.00056	PASS
			HCH	VN	-30	-0.23	-0.00032	PASS
					-20	0.93	0.0013	PASS
					-10	2.82	0.00395	PASS
					0	-3.95	-0.00554	PASS
					10	1.72	0.00241	PASS
					20	0.69	0.00097	PASS
					30	1.9	0.00266	PASS
					40	6.57	0.00921	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		10	LCH	VN	50	-1.47	-0.00206	PASS
					-30	-3.96	-0.00559	PASS
					-20	-4.42	-0.00623	PASS
					-10	-4.76	-0.00671	PASS
					0	-6.12	-0.00863	PASS
					10	-6.02	-0.00849	PASS
					20	-5.01	-0.00707	PASS
					30	-5.38	-0.00759	PASS
					40	-5.14	-0.00725	PASS
					50	-4.45	-0.00628	PASS
			MCH	VN	-30	-1.4	-0.00197	PASS
					-20	-0.06	-0.00008	PASS
					-10	-1.65	-0.00232	PASS
					0	-1.82	-0.00256	PASS
					10	-0.87	-0.00123	PASS
					20	-4.36	-0.00614	PASS
					30	-3.73	-0.00525	PASS
					40	-5.06	-0.00713	PASS
					50	-0.69	-0.00097	PASS
			HCH	VN	-30	-0.17	-0.00024	PASS
					-20	-0.11	-0.00015	PASS
					-10	0.3	0.00042	PASS
					0	-0.8	-0.00113	PASS
					10	0.33	0.00046	PASS
					20	-2.03	-0.00286	PASS
					30	-2.99	-0.00421	PASS
					40	-0.74	-0.00104	PASS
					50	-0.57	-0.00008	PASS
	LTE/TM2	5	LCH	VN	-30	-3.19	-0.00452	PASS
					-20	5.94	0.00841	PASS
					-10	-1.14	-0.00161	PASS
					0	0.43	0.00061	PASS
					10	-4.95	-0.00701	PASS
					20	0.99	0.0014	PASS
					30	-1.17	-0.00166	PASS
					40	-3.19	-0.00452	PASS
					50	6.04	0.00855	PASS
			MCH	VN	-30	3.26	0.00459	PASS
					-20	-1.07	-0.00151	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-10	0.39	0.00055	PASS
					0	-7.01	-0.00987	PASS
					10	2.78	0.00392	PASS
					20	-2.32	-0.00327	PASS
					30	-0.94	-0.00132	PASS
					40	-2.86	-0.00403	PASS
					50	0.01	0.00001	PASS
			HCH	VN	-30	-1.32	-0.00185	PASS
					-20	5.35	0.0075	PASS
					-10	0.06	0.00008	PASS
					0	6.74	0.00945	PASS
					10	1.19	0.00167	PASS
					20	2.4	0.00336	PASS
					30	-2.49	-0.00349	PASS
					40	2.33	0.00327	PASS
					50	4.95	0.00694	PASS
		10	LCH	VN	-30	-3.22	-0.00454	PASS
					-20	-0.44	-0.00062	PASS
					-10	-1.4	-0.00197	PASS
					0	-0.11	-0.00016	PASS
					10	0.09	0.00013	PASS
					20	-0.19	-0.00027	PASS
					30	-0.64	-0.0009	PASS
					40	-0.73	-0.00103	PASS
					50	-0.34	-0.00048	PASS
			MCH	VN	-30	0.6	0.00085	PASS
					-20	-0.6	-0.00085	PASS
					-10	0.21	0.0003	PASS
					0	1.39	0.00196	PASS
					10	-1.85	-0.00261	PASS
					20	-0.21	-0.0003	PASS
					30	0.34	0.00048	PASS
					40	-0.93	-0.00131	PASS
					50	-0.67	-0.00094	PASS
			HCH	VN	-30	0.31	0.00044	PASS
					-20	1.54	0.00217	PASS
					-10	0.19	0.00027	PASS
					0	-1.14	-0.0016	PASS
					10	1.09	0.00153	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					20	0.54	0.00076	PASS
					30	1.07	0.0015	PASS
					40	1	0.00141	PASS
					50	1.09	0.00153	PASS

END