

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:03:37 PM Jan 24, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide Trig: Free Run
IFGain:Low #Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-38.250 dBm

10 dB/div
Log

Center 1.850000 GHz
#Res BW 150 kHz
#VBW 470 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency
Auto Tune
Center Freq
1.850000000 GHz
Start Freq
1.849000000 GHz
Stop Freq
1.851000000 GHz
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz



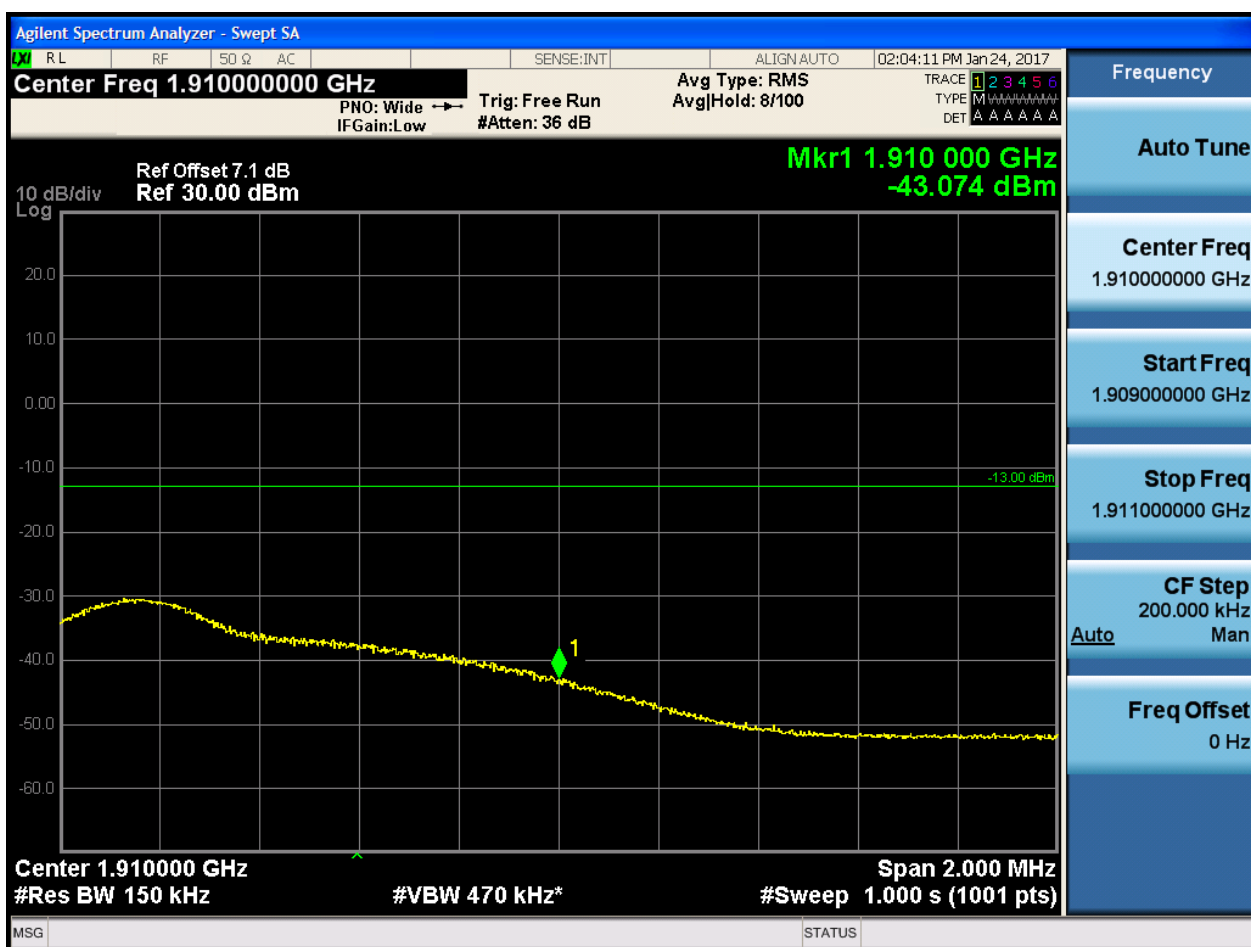
5.1.1.2.3.1.4 Test RB = RB75#0

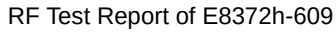




5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:04:25 PM Jan 24, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 010 GHz
-22.915 dBm

10 dB/div
Log

-13.00 dBm

Center 1.910000 GHz
#Res BW 150 kHz

#VBW 470 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

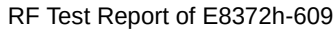
MSG STATUS

Frequency
Auto Tune
Center Freq 1.910000000 GHz
Start Freq 1.909000000 GHz
Stop Freq 1.911000000 GHz
CF Step 200.000 kHz Auto Man
Freq Offset 0 Hz



5.1.1.2.3.2.3 Test RB = RB36#18





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:04:53 PM Jan 24, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-32.567 dBm

10 dB/div
Log

20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

-13.00 dBm

1

Center 1.910000 GHz
#Res BW 150 kHz

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

#VBW 470 kHz*

Frequency

Auto Tune

Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

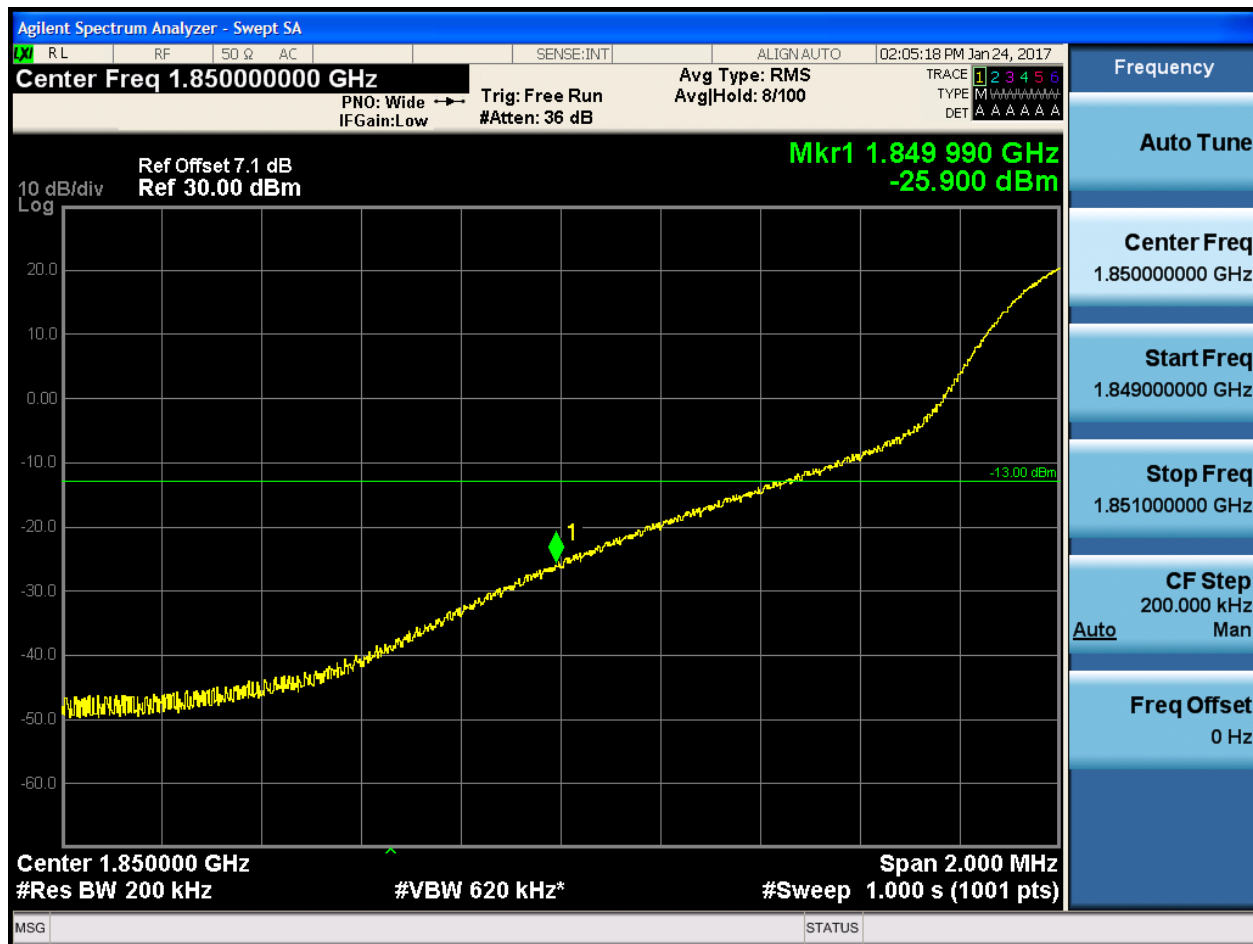
Freq Offset
0 Hz

MSG STATUS

5.1.1.2.4 Test Bandwidth = 20

5.1.1.2.4.1 Test Channel = LCH

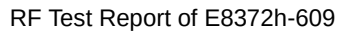
5.1.1.2.4.1.1 Test RB = RB1#0





5.1.1.2.4.1.2 Test RB = RB1#99





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:05:46 PM Jan 24, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide Trig: Free Run AvgHold: 8/100
IFGain:Low #Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A

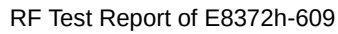
Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.849 970 GHz
-41.605 dBm

10 dB/div
Log

Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:06:03 PM Jan 24, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

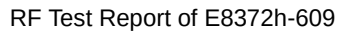
Mkr1 1.850 000 GHz
-36.775 dBm

10 dB/div
Log

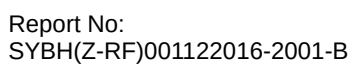
Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

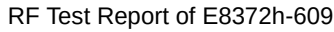
MSG STATUS

Frequency
Auto Tune
Center Freq
1.850000000 GHz
Start Freq
1.849000000 GHz
Stop Freq
1.851000000 GHz
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz



5.1.1.2.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:06:40 PM Jan 24, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 010 GHz
-26.845 dBm

10 dB/div
Log

20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

-13.00 dBm

1

Center 1.910000 GHz
#Res BW 200 kHz

#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

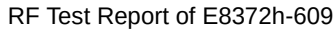
Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:06:55 PM Jan 24, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 040 GHz
-38.817 dBm

10 dB/div
Log

Center 1.910000 GHz
#Res BW 200 kHz
#VBW 620 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

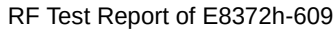
Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:07:09 PM Jan 24, 2017

Center Freq 1.91000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-34.450 dBm

10 dB/div
Log

-13.00 dBm

1

Center 1.910000 GHz Span 2.000 MHz
#Res BW 200 kHz #VBW 620 kHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
1.91000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

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

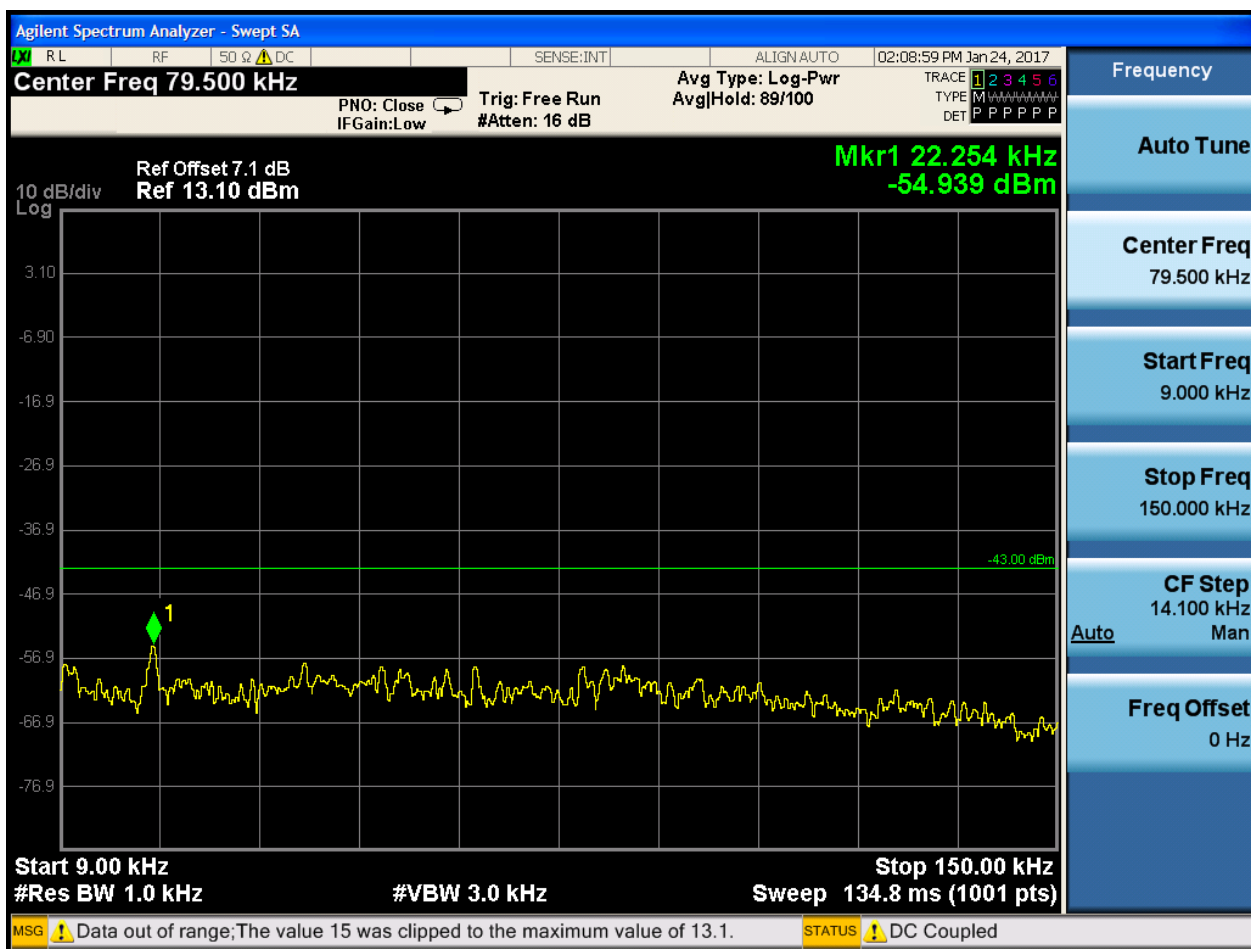
6.1.1 Test Band = BAND2

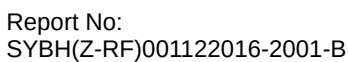
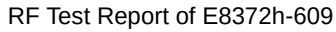
6.1.1.1 Test Mode = LTE/TM1

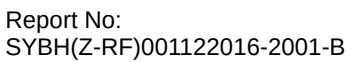
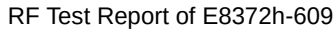
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

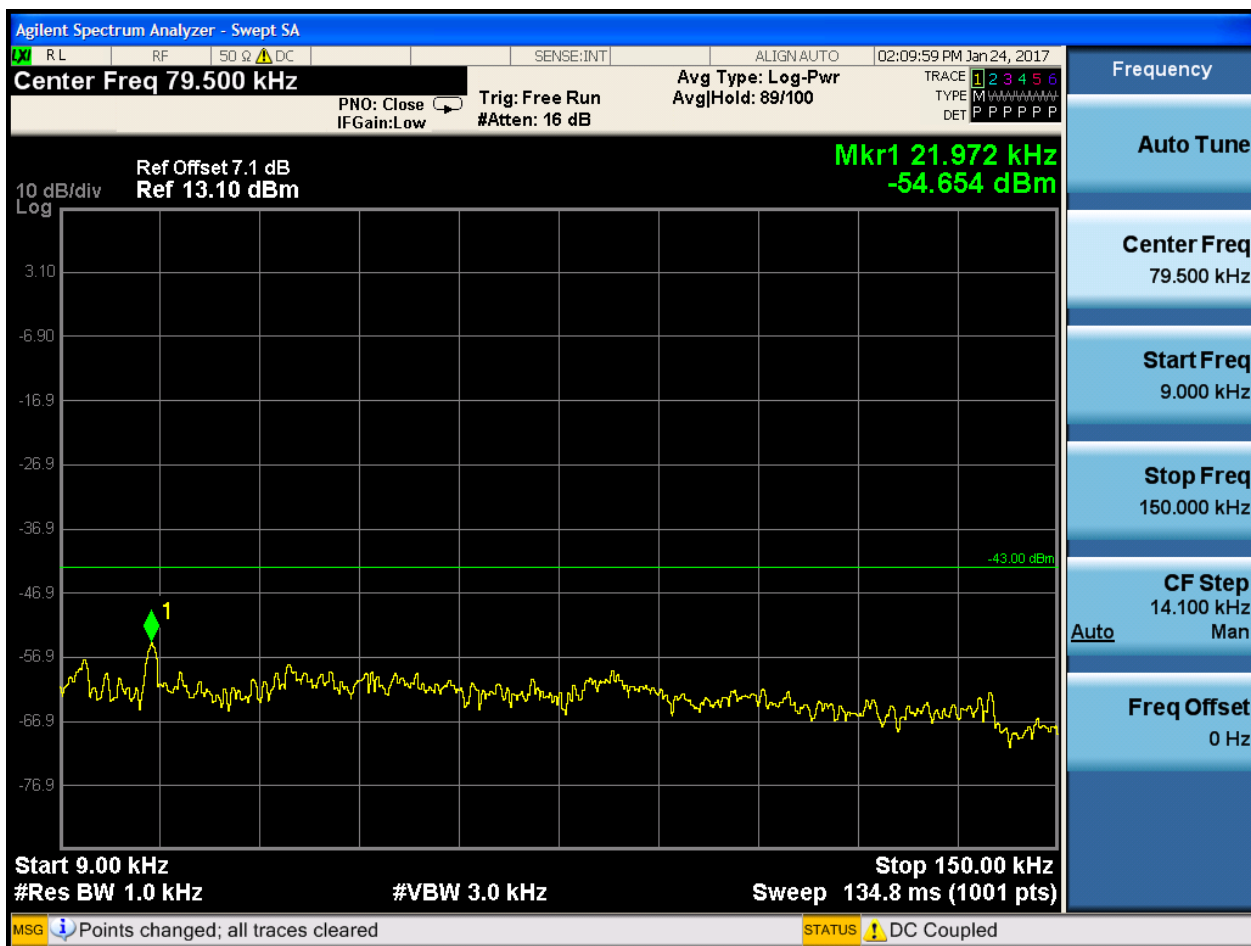


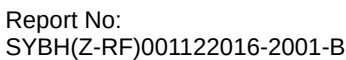
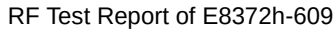


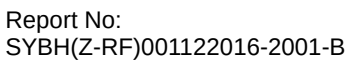
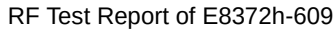


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

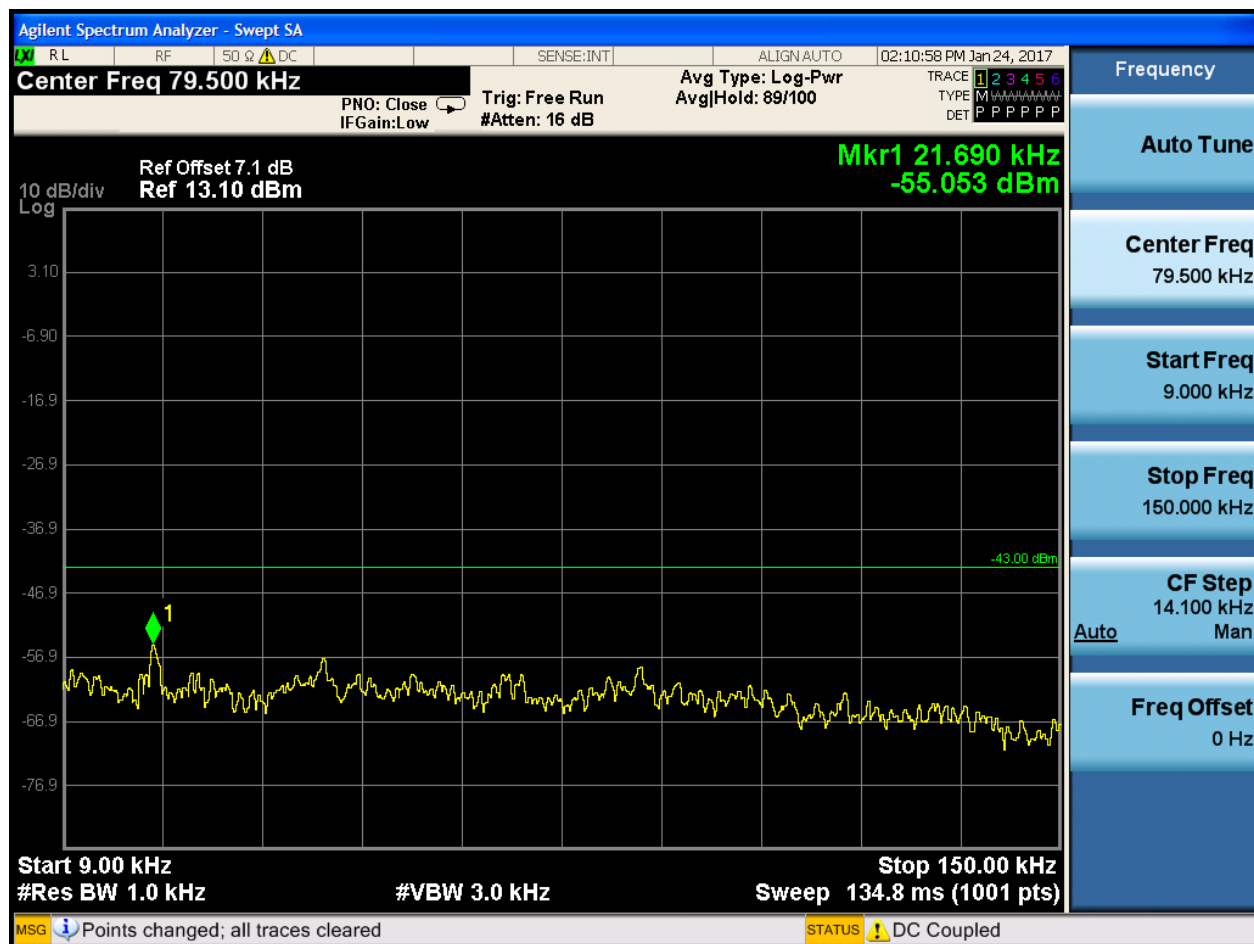


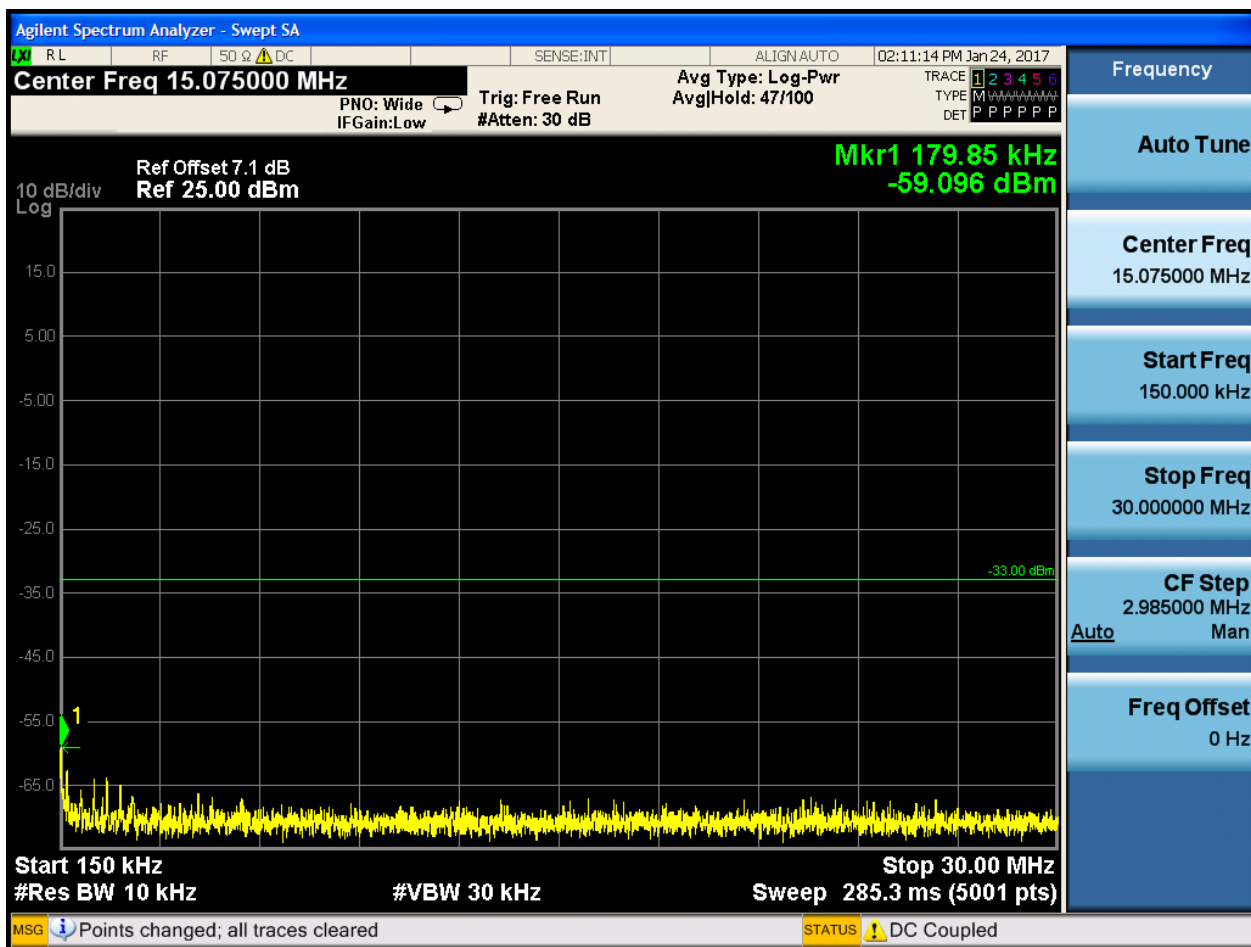


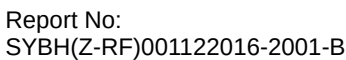
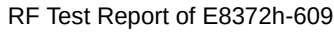


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0



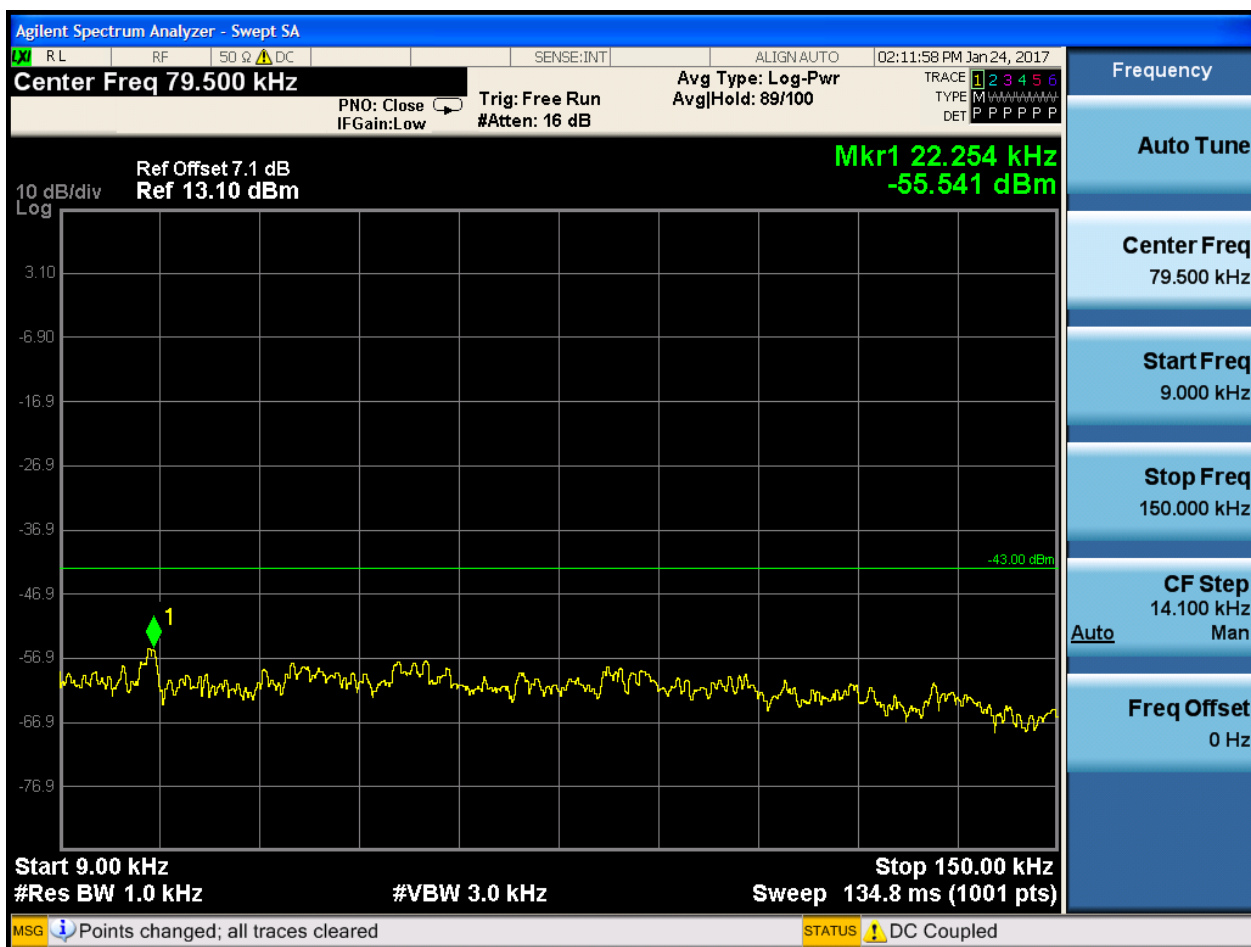


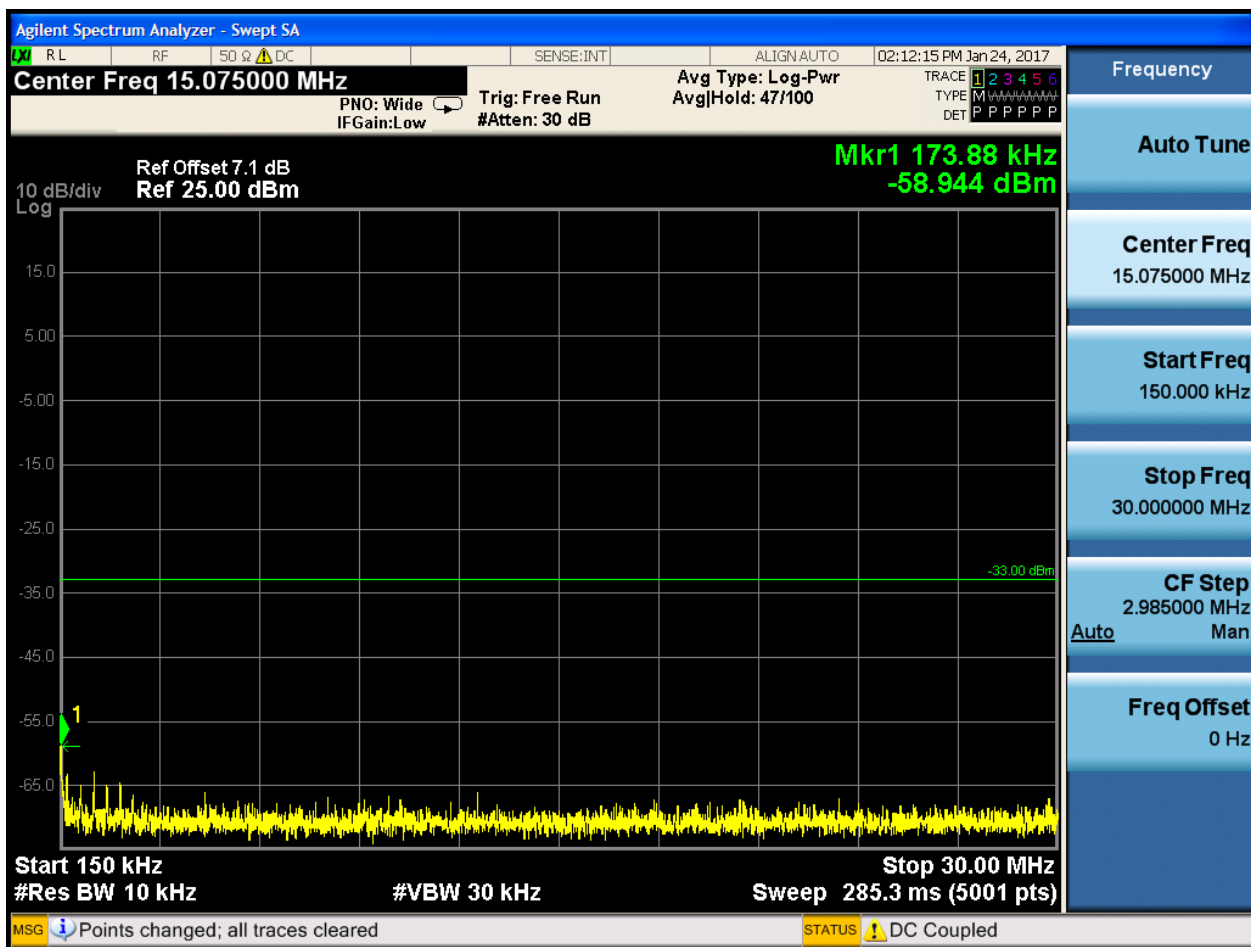


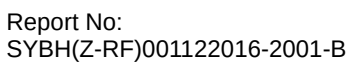
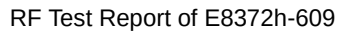
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

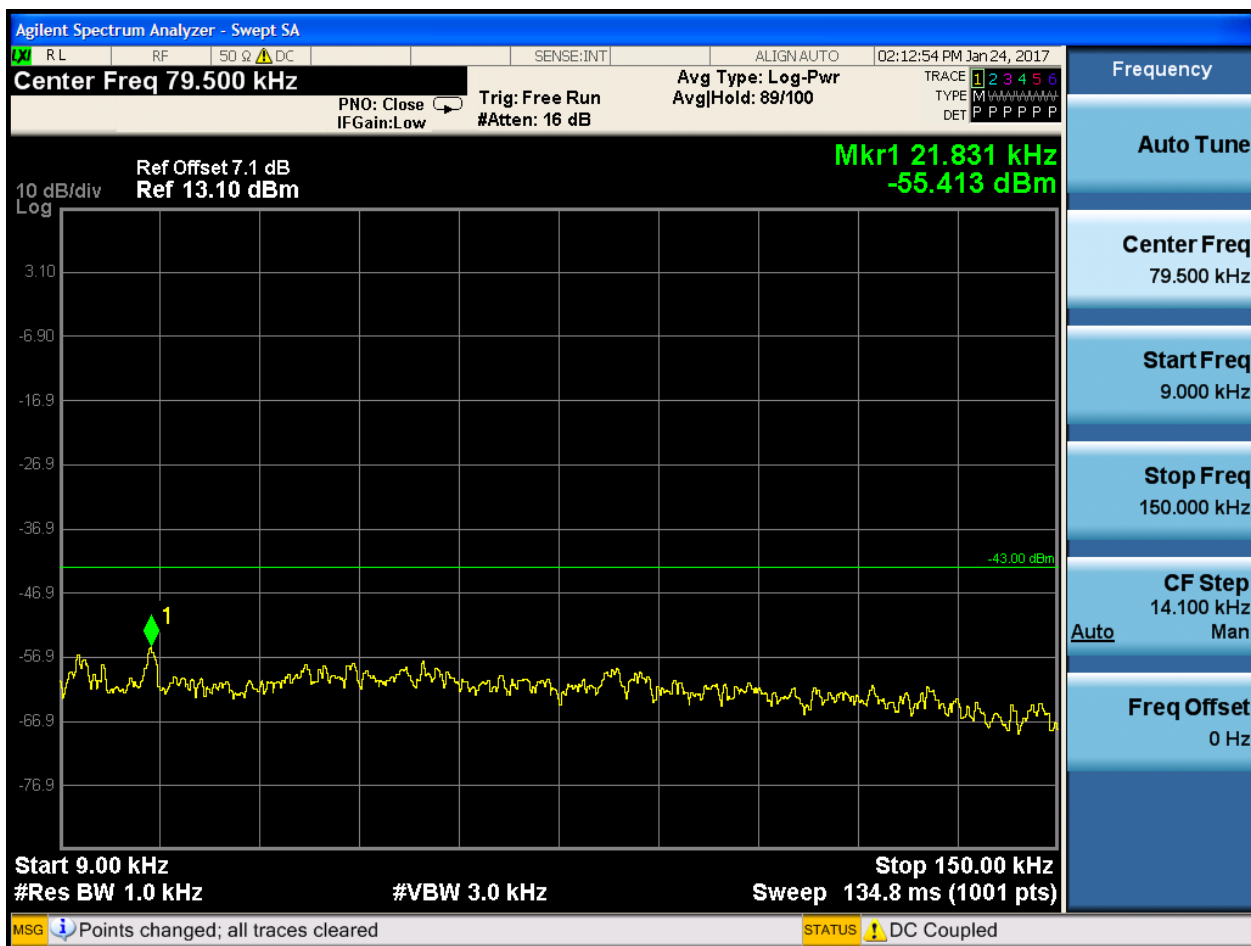


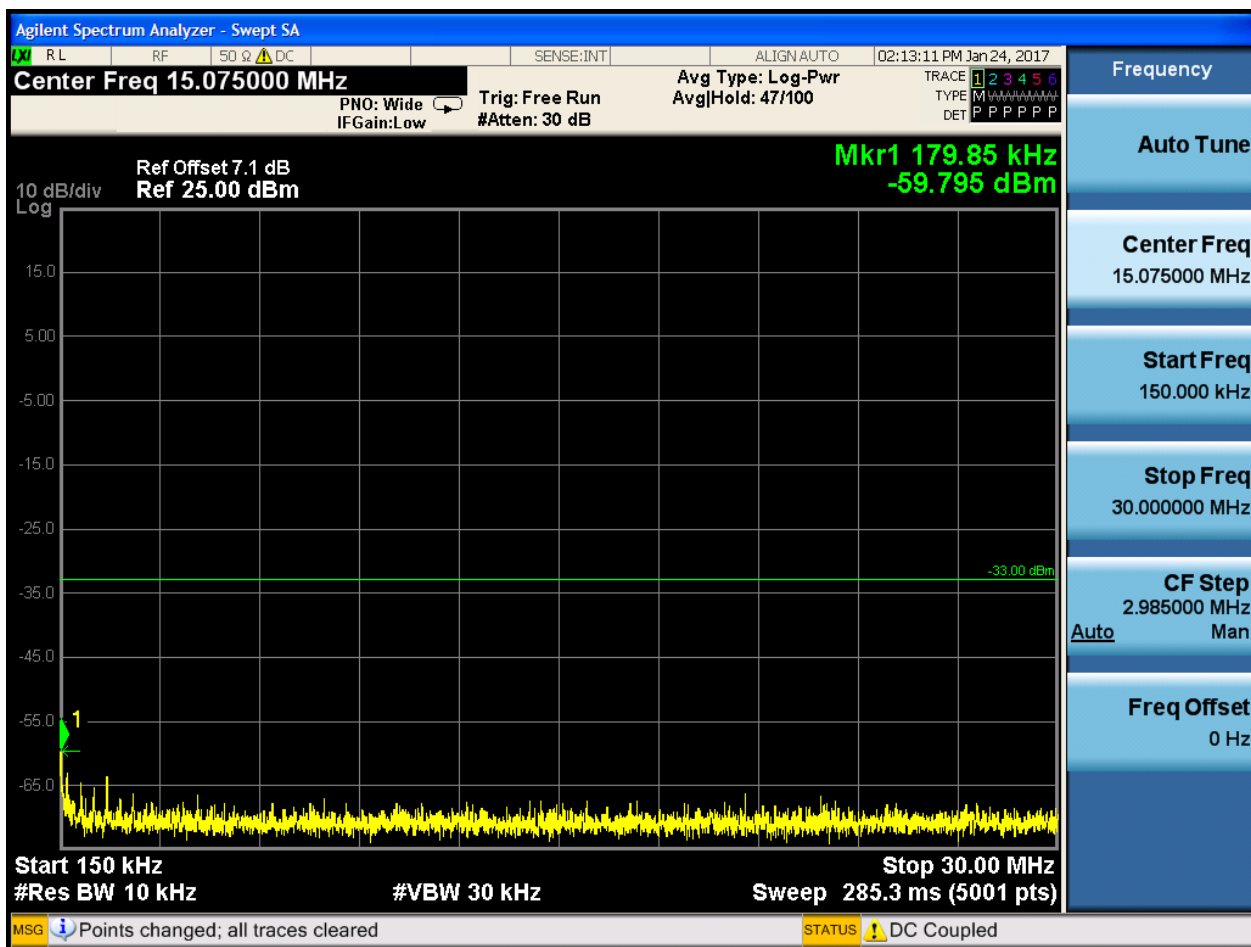


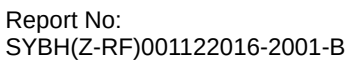
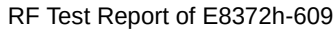


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

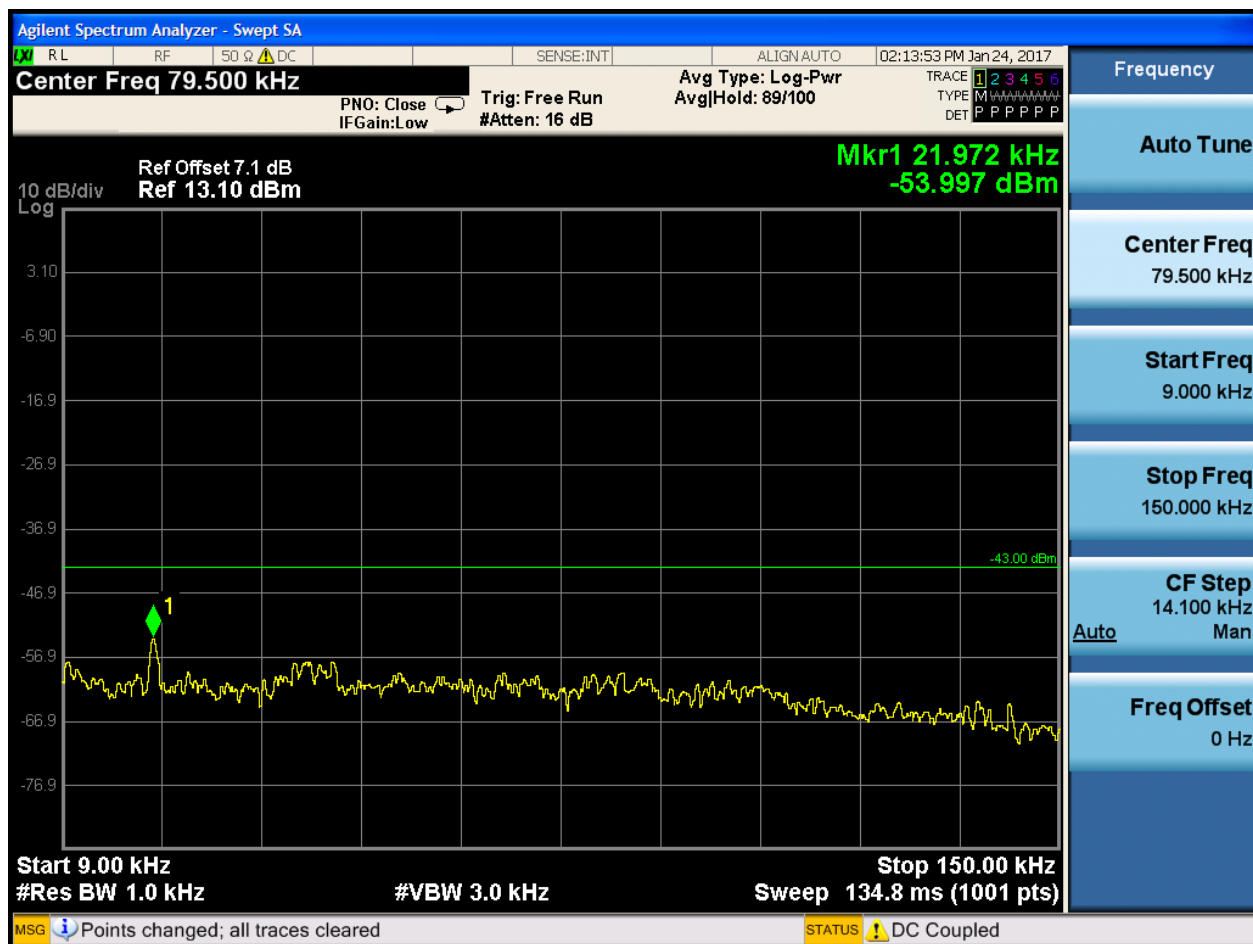


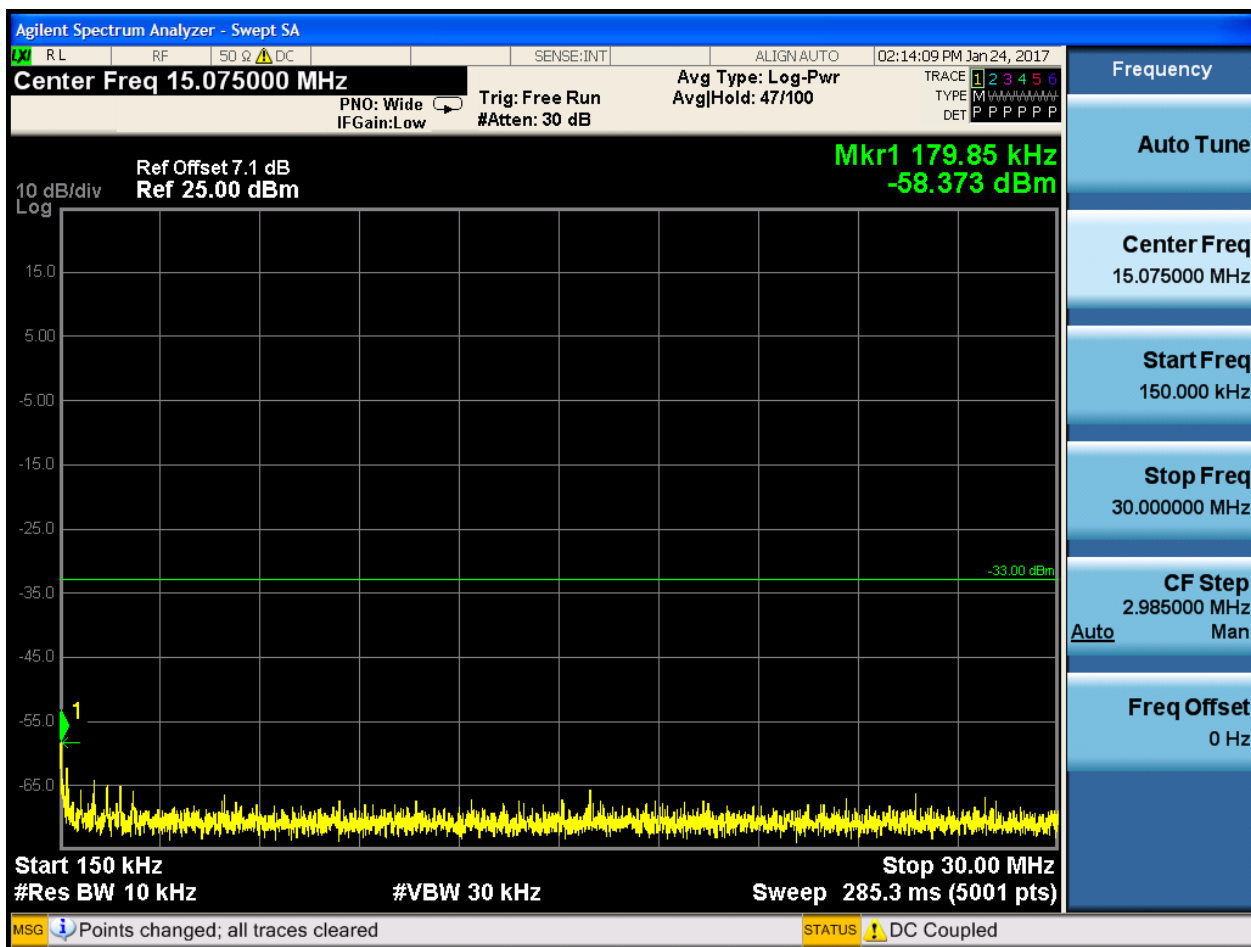


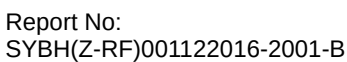
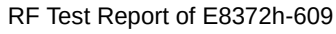


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0



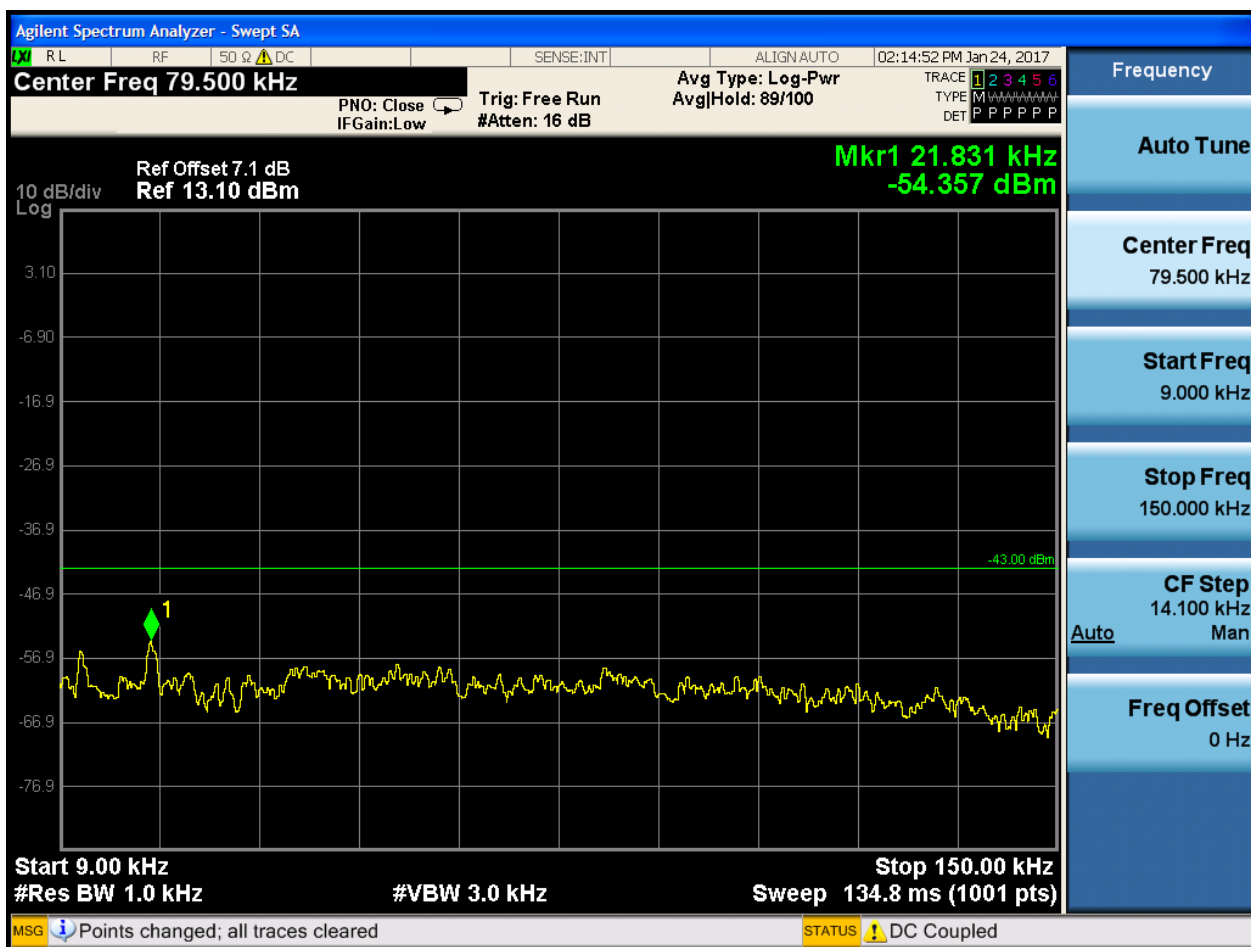


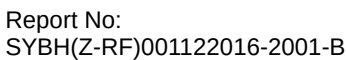
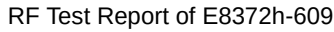


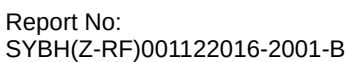
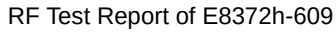
6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0

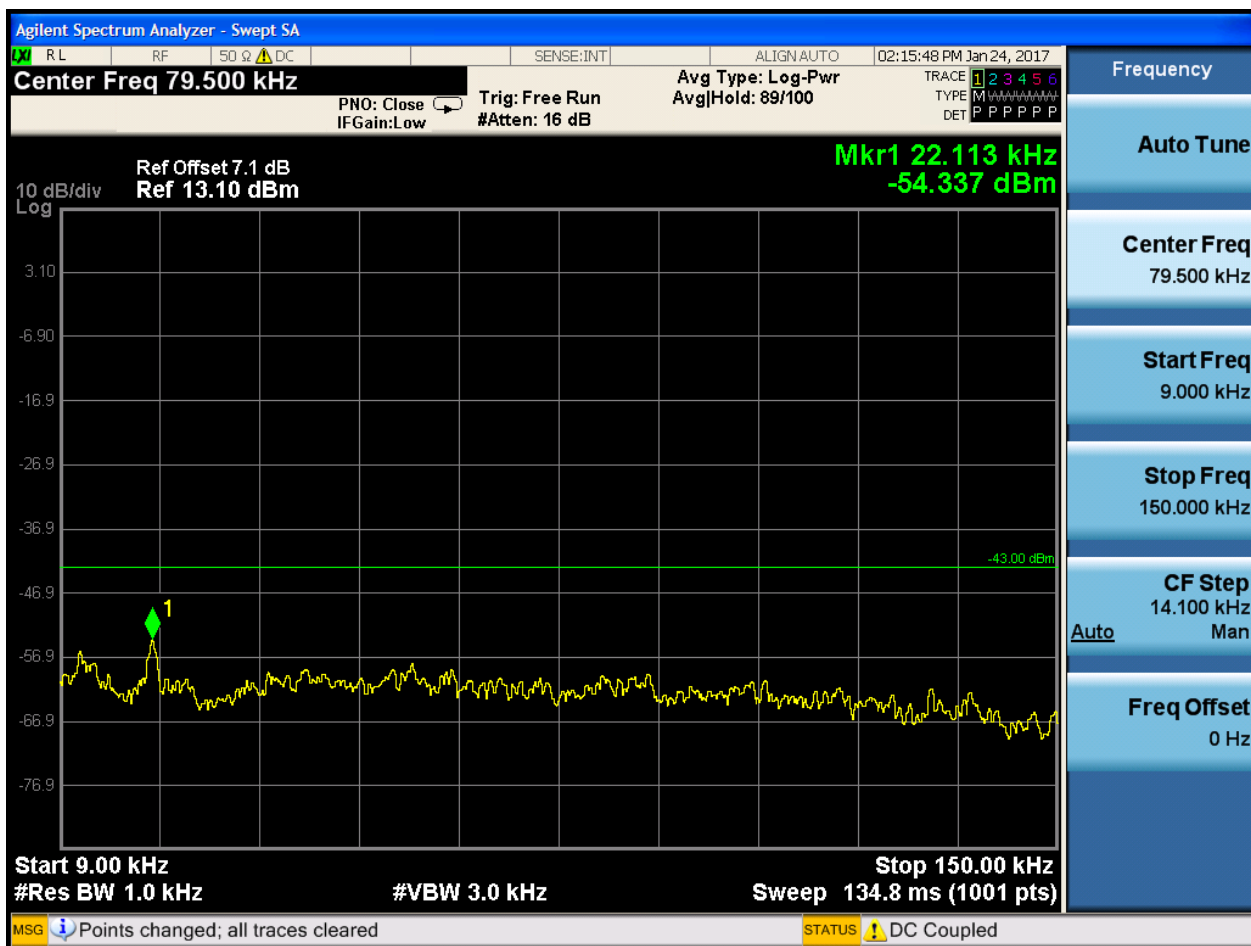


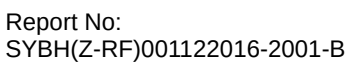
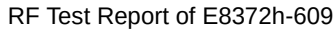


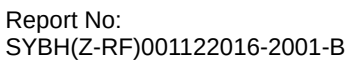
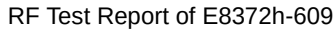


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

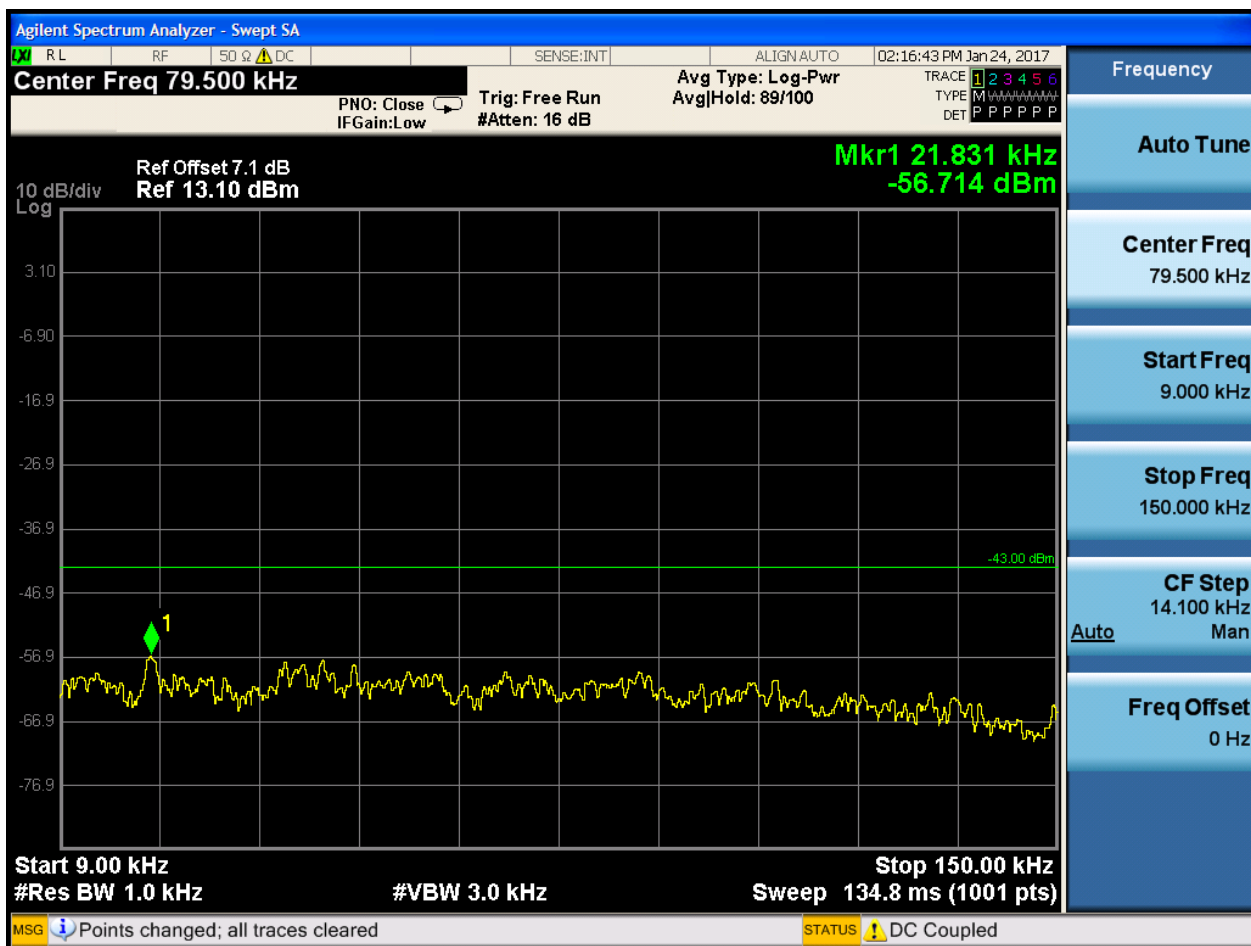


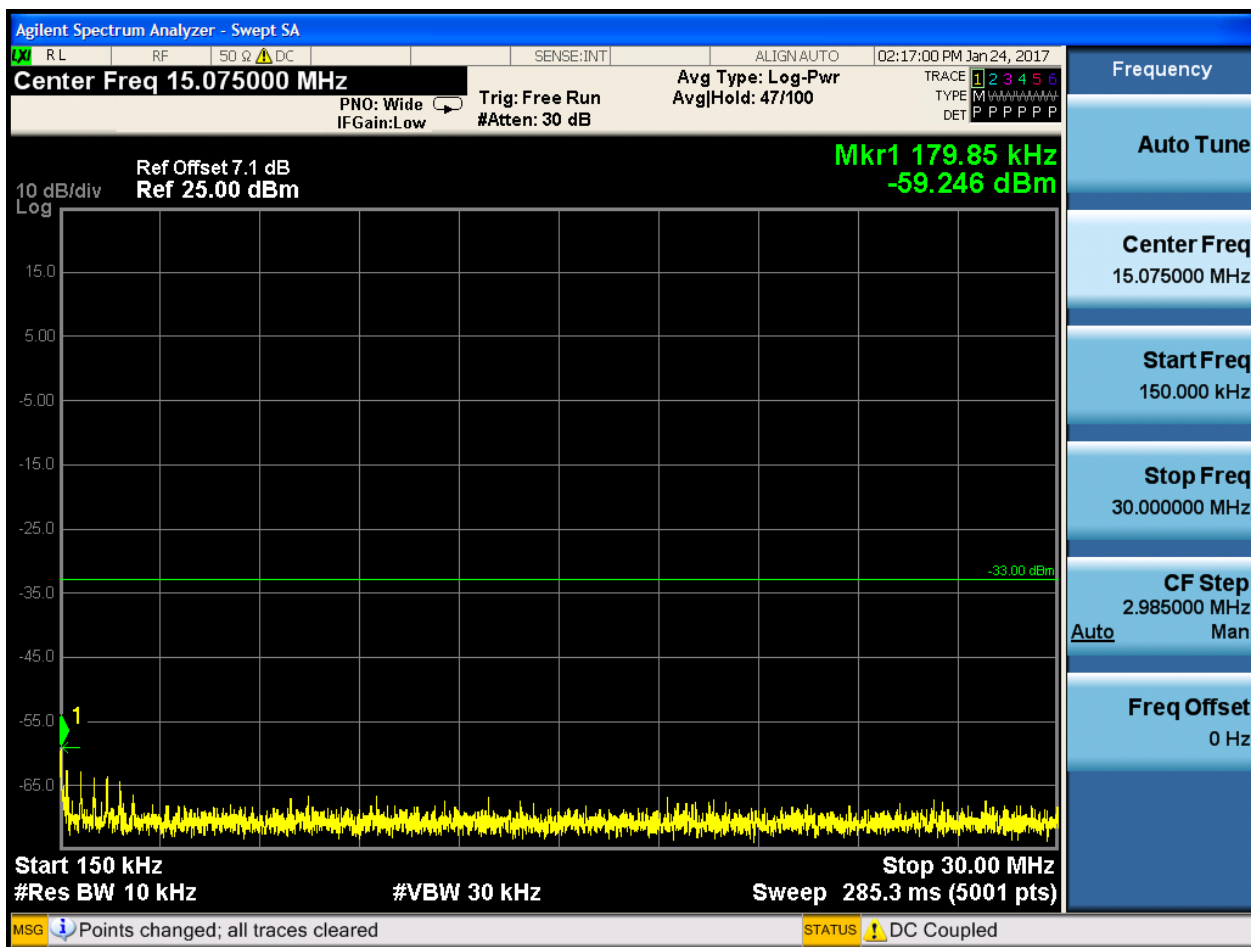


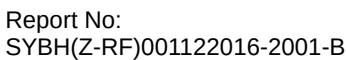
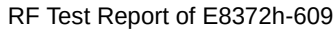


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0



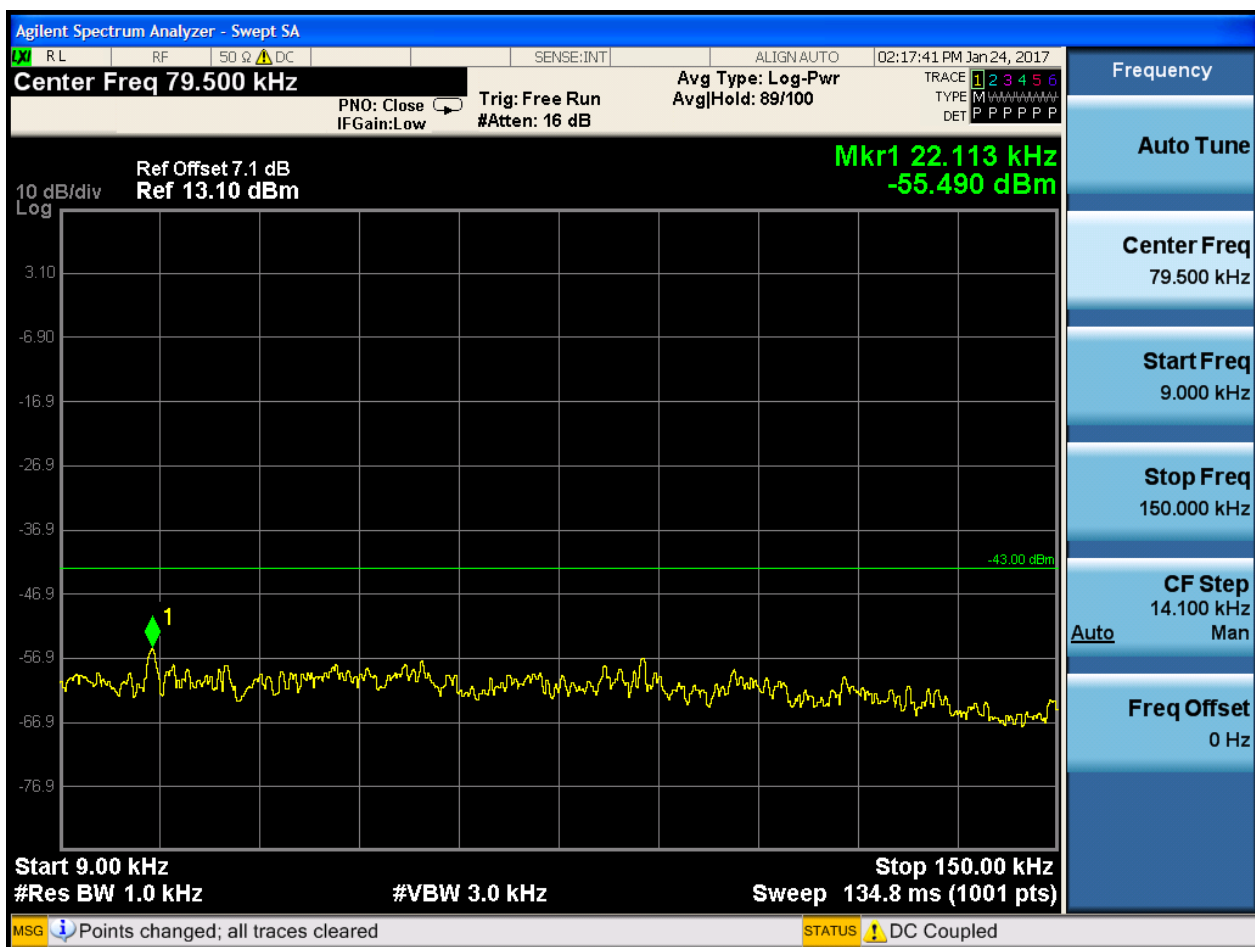


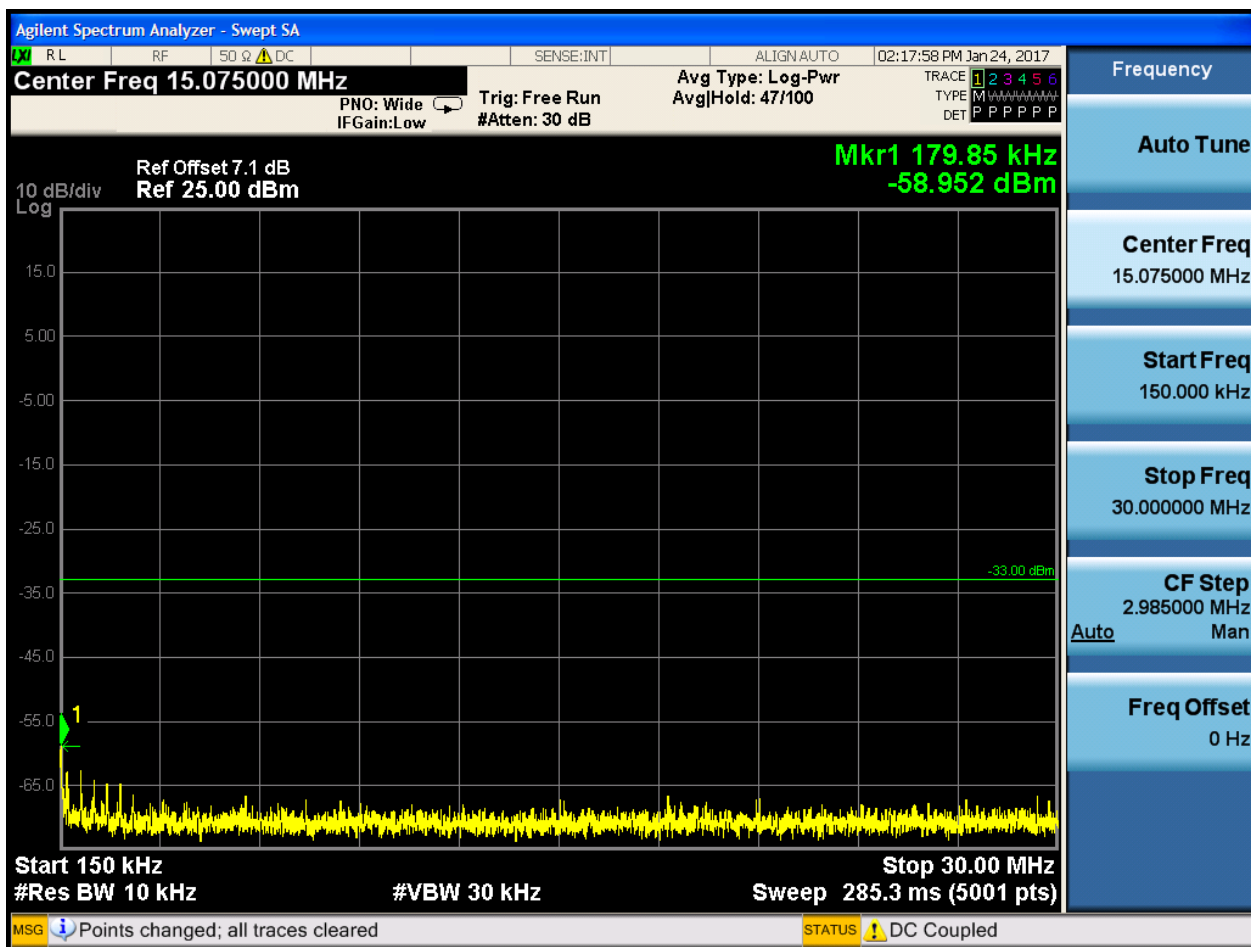


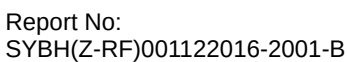
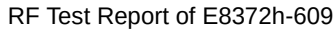
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0

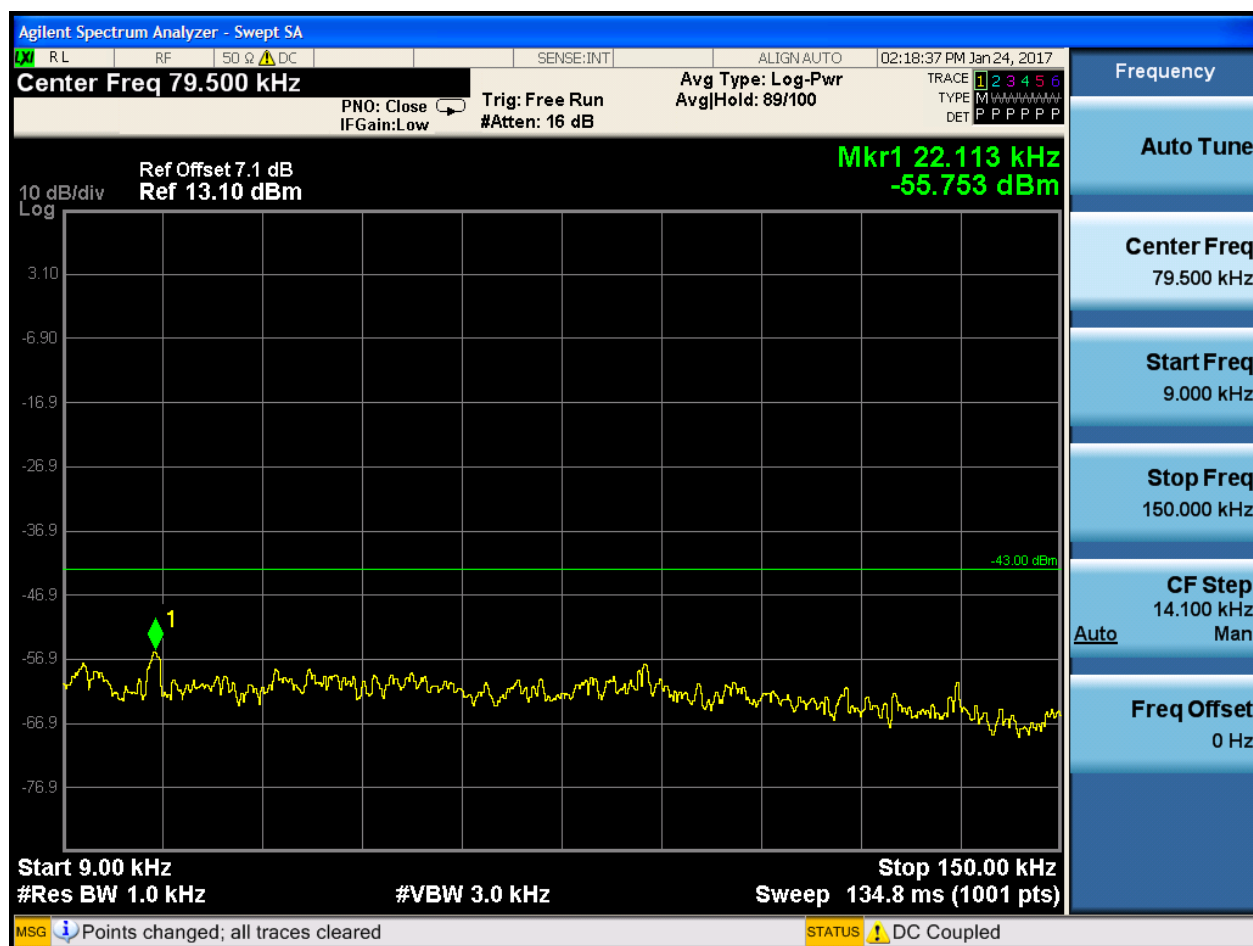


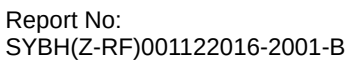
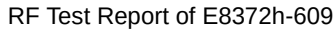


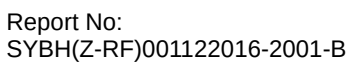
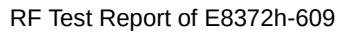


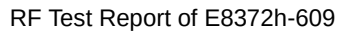
6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0

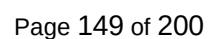


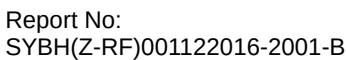
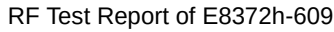


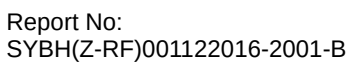
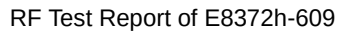




6.1.1.1.4.3.1 Test RB = RB1#0







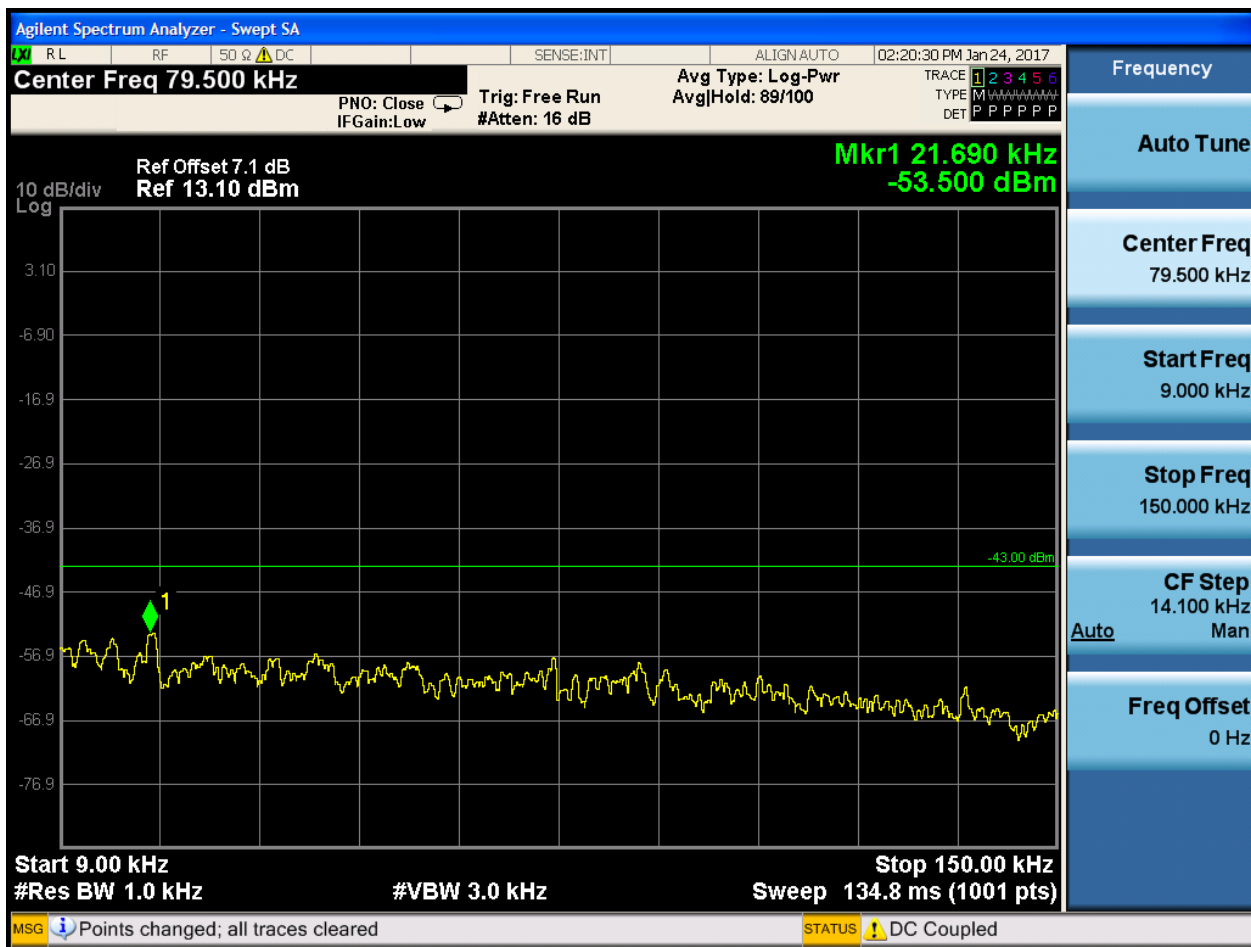


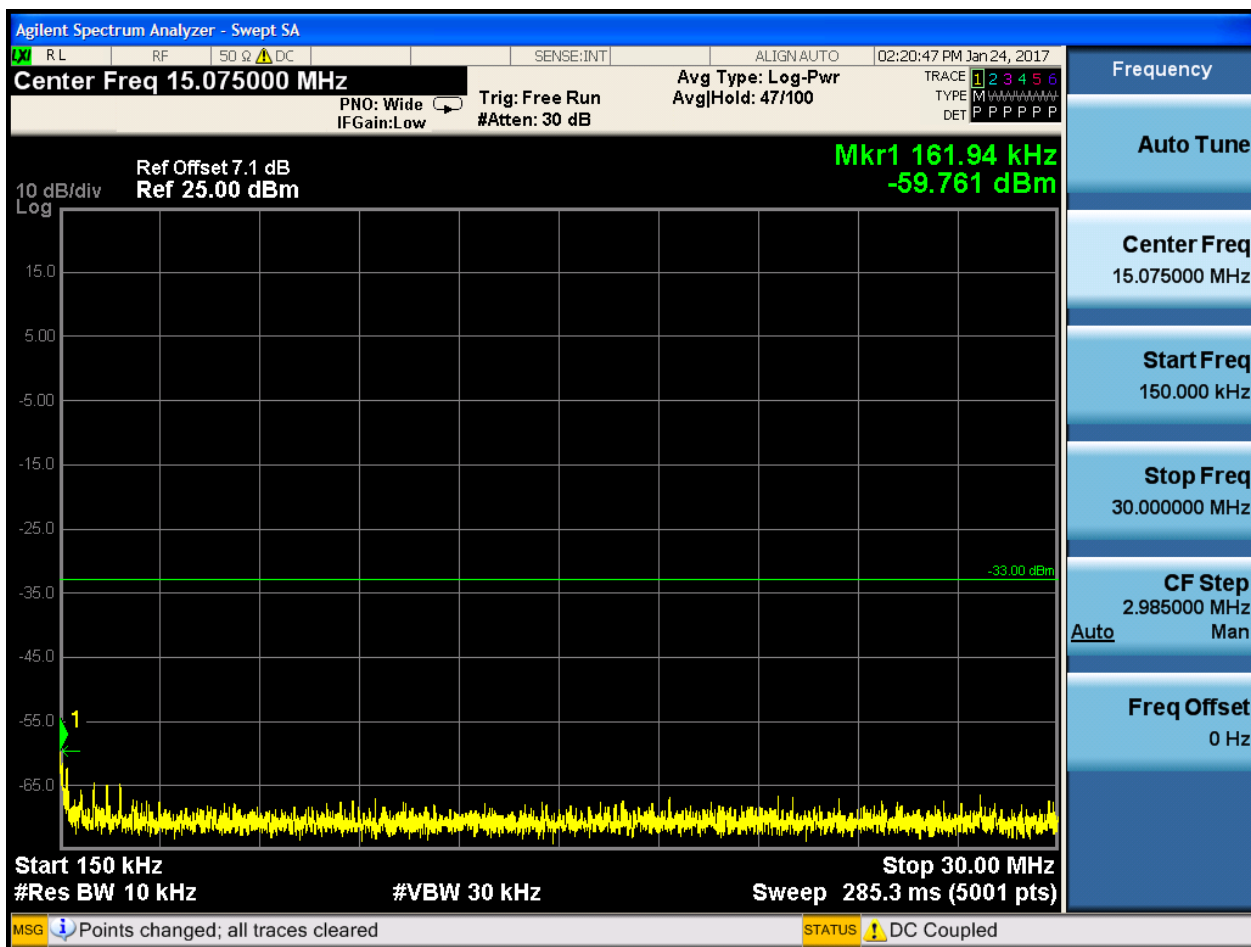
6.1.1.2 Test Mode = LTE/TM2

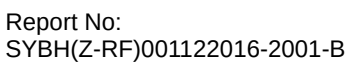
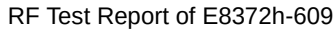
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0

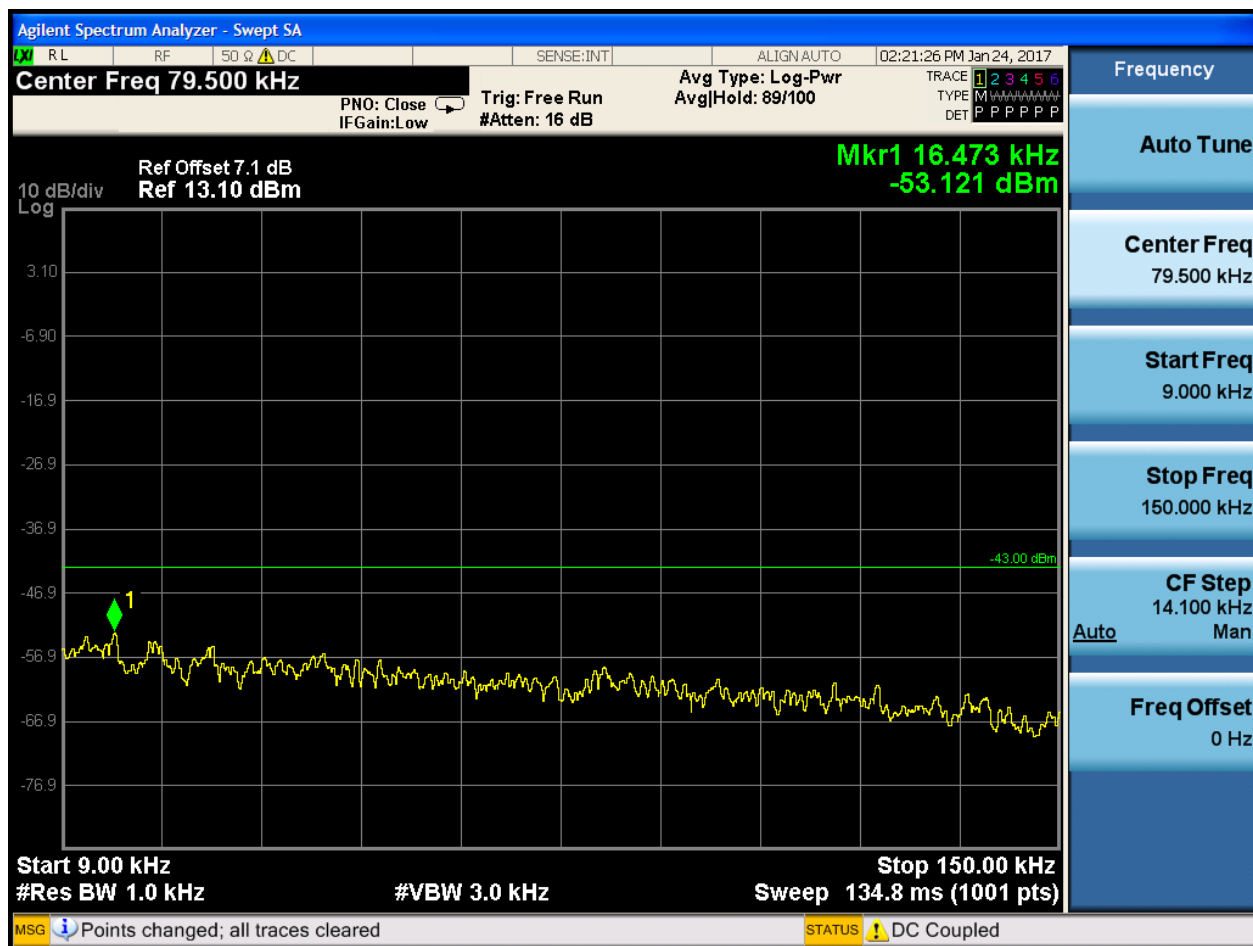


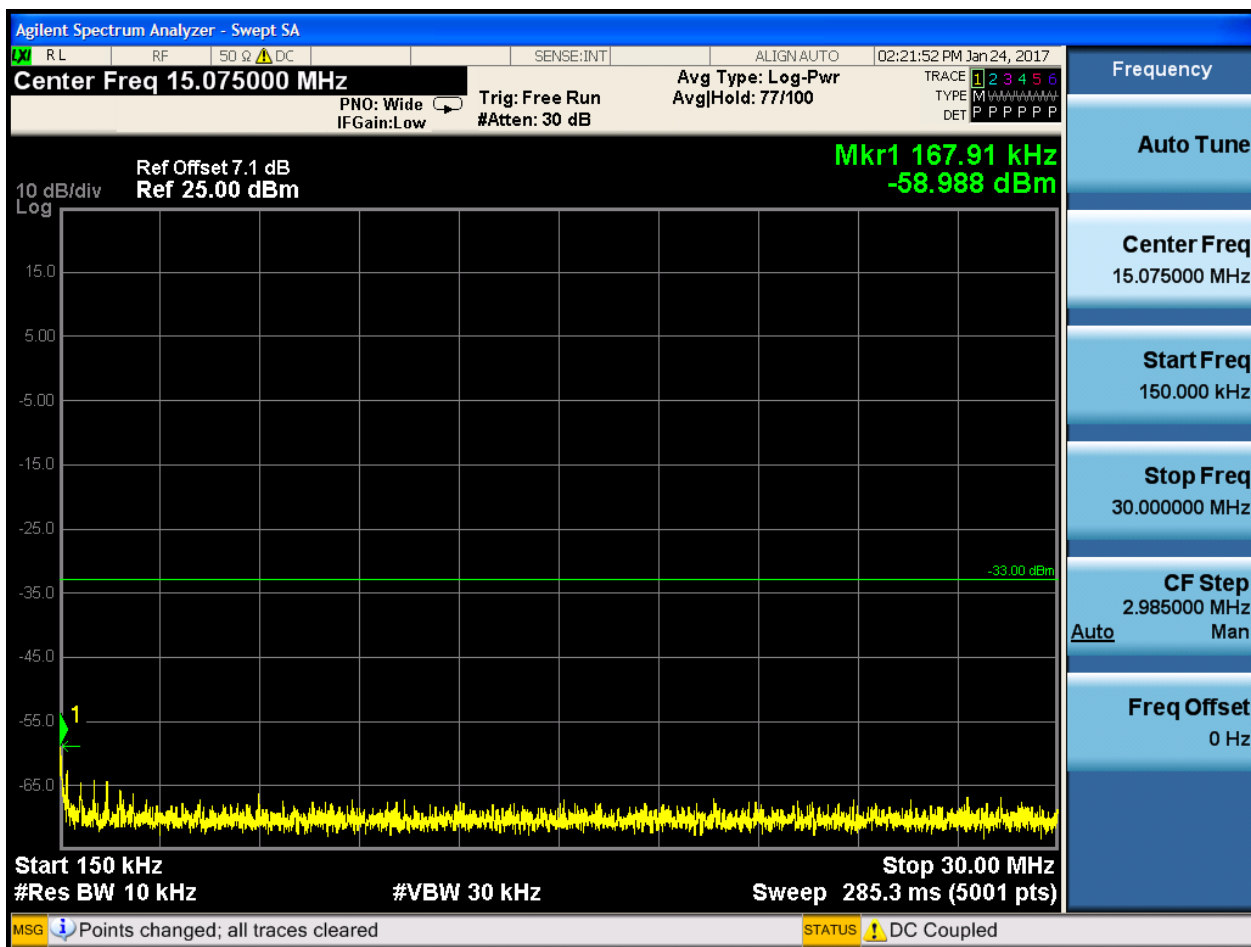


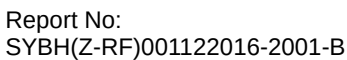
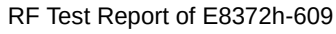


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0

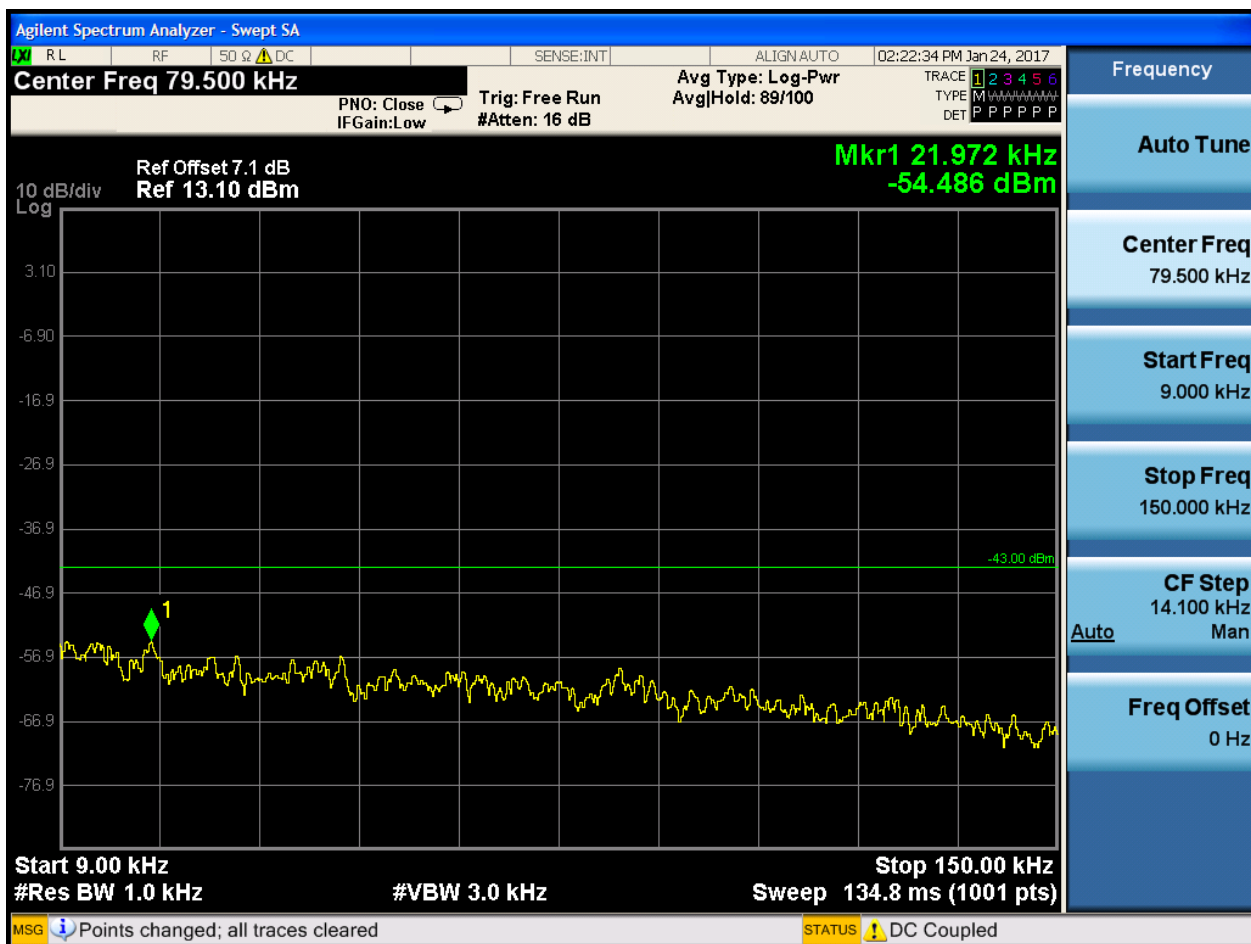


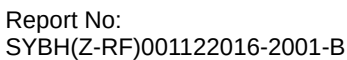
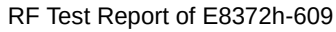


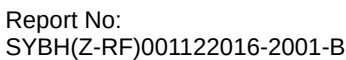
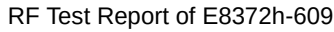


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



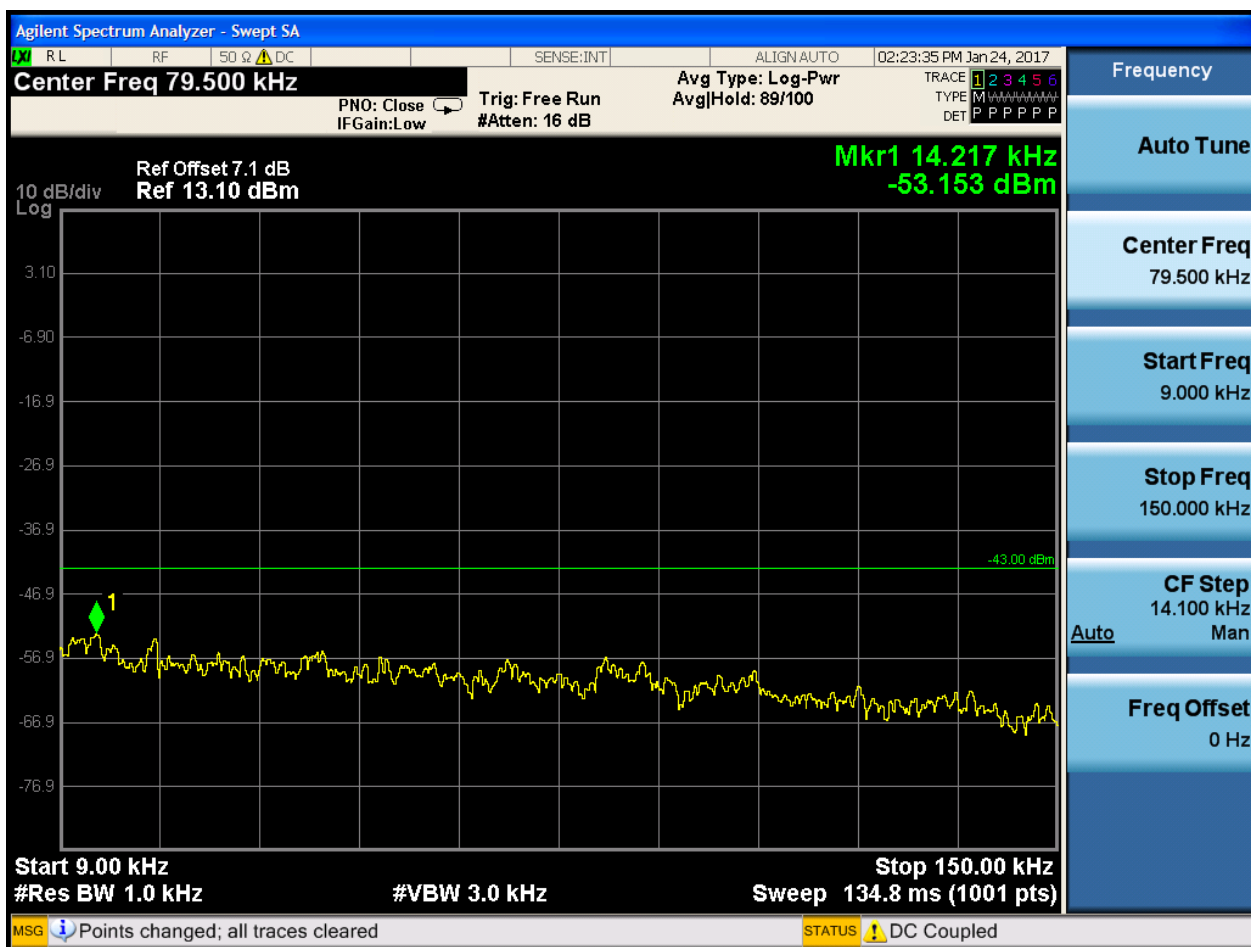


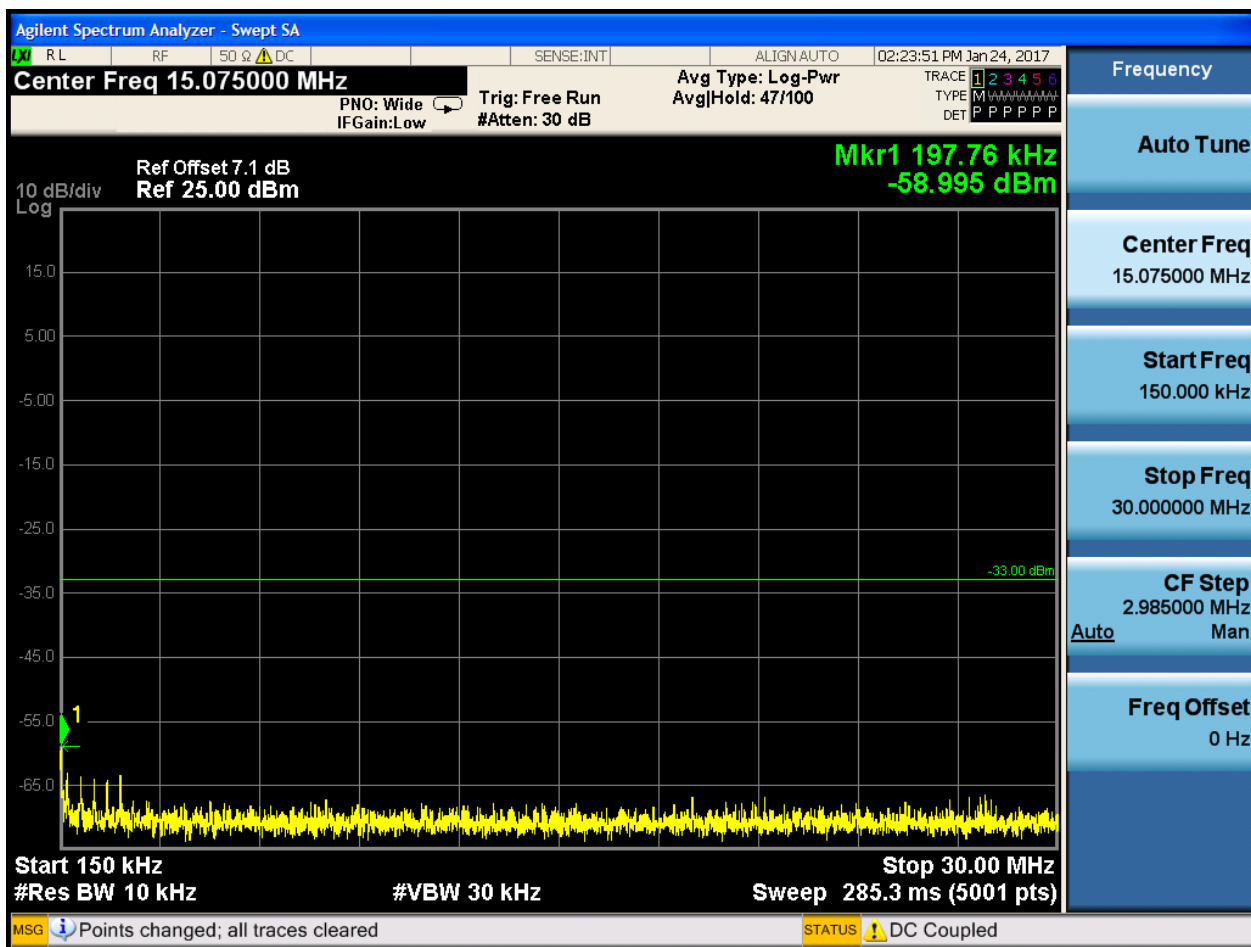


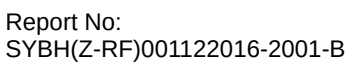
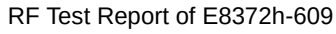
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



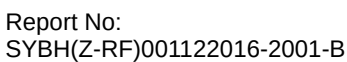
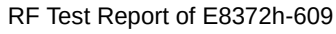


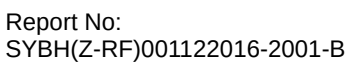
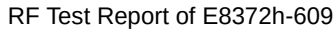


6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0

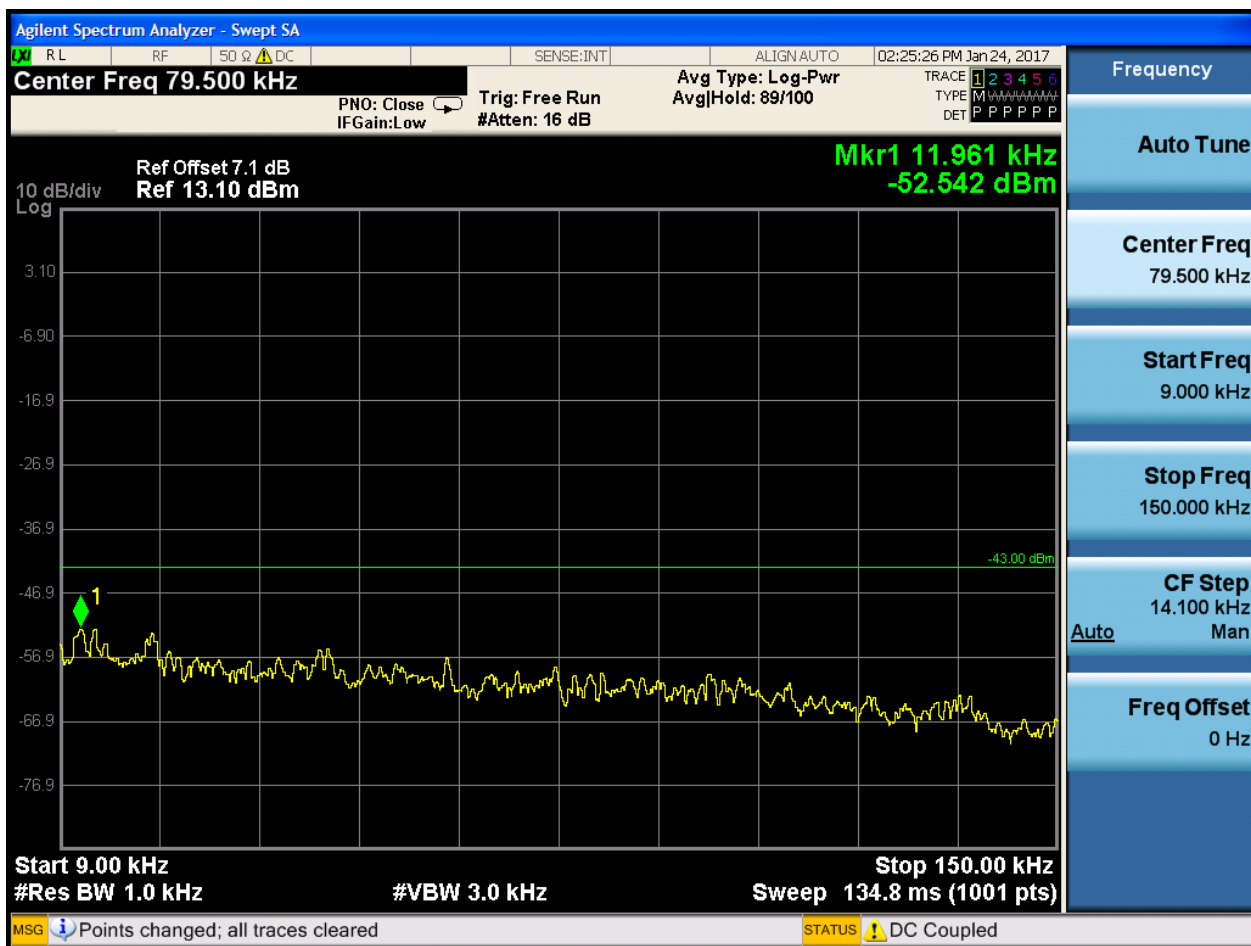


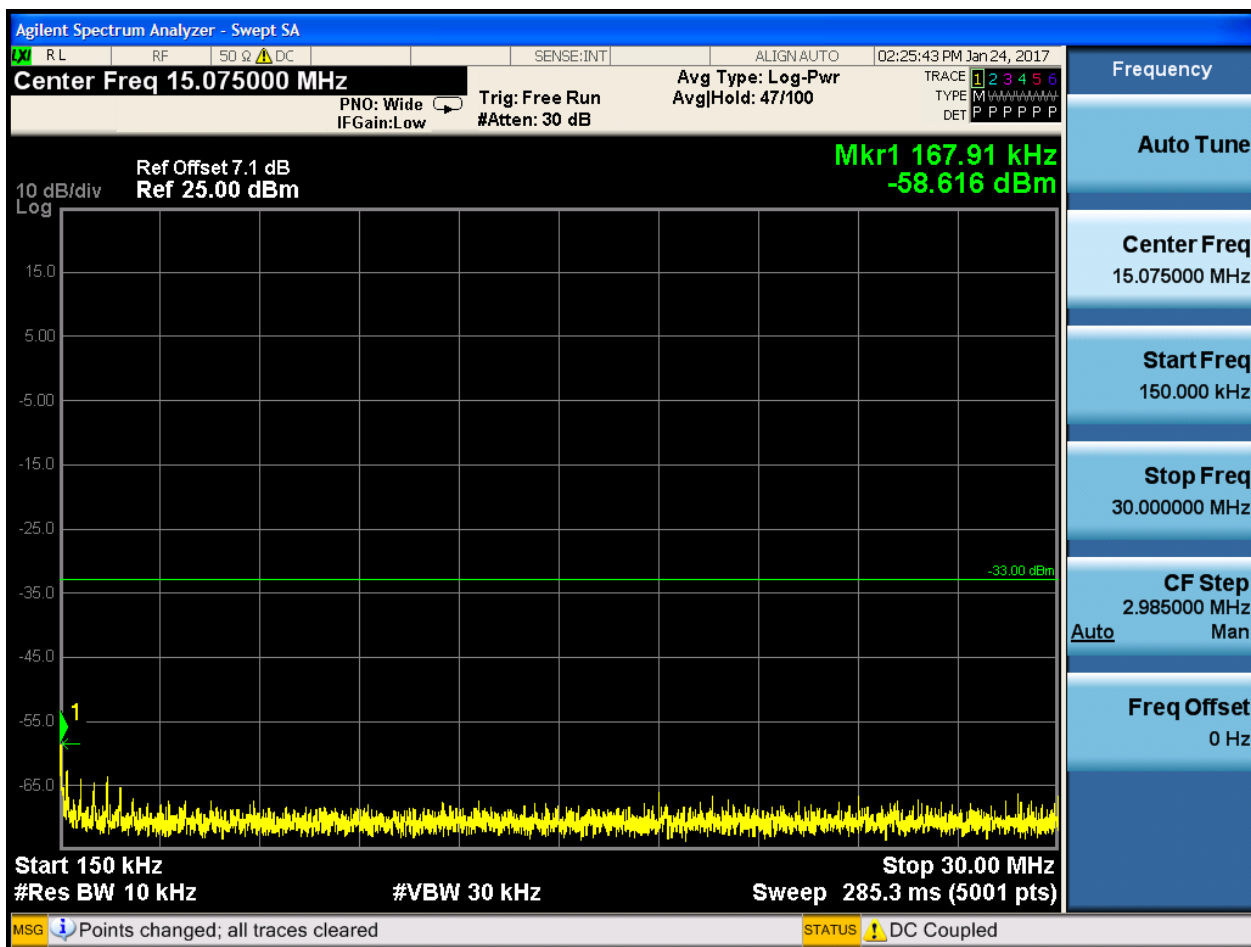


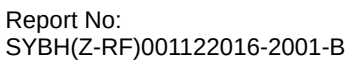
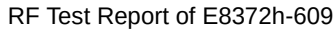


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





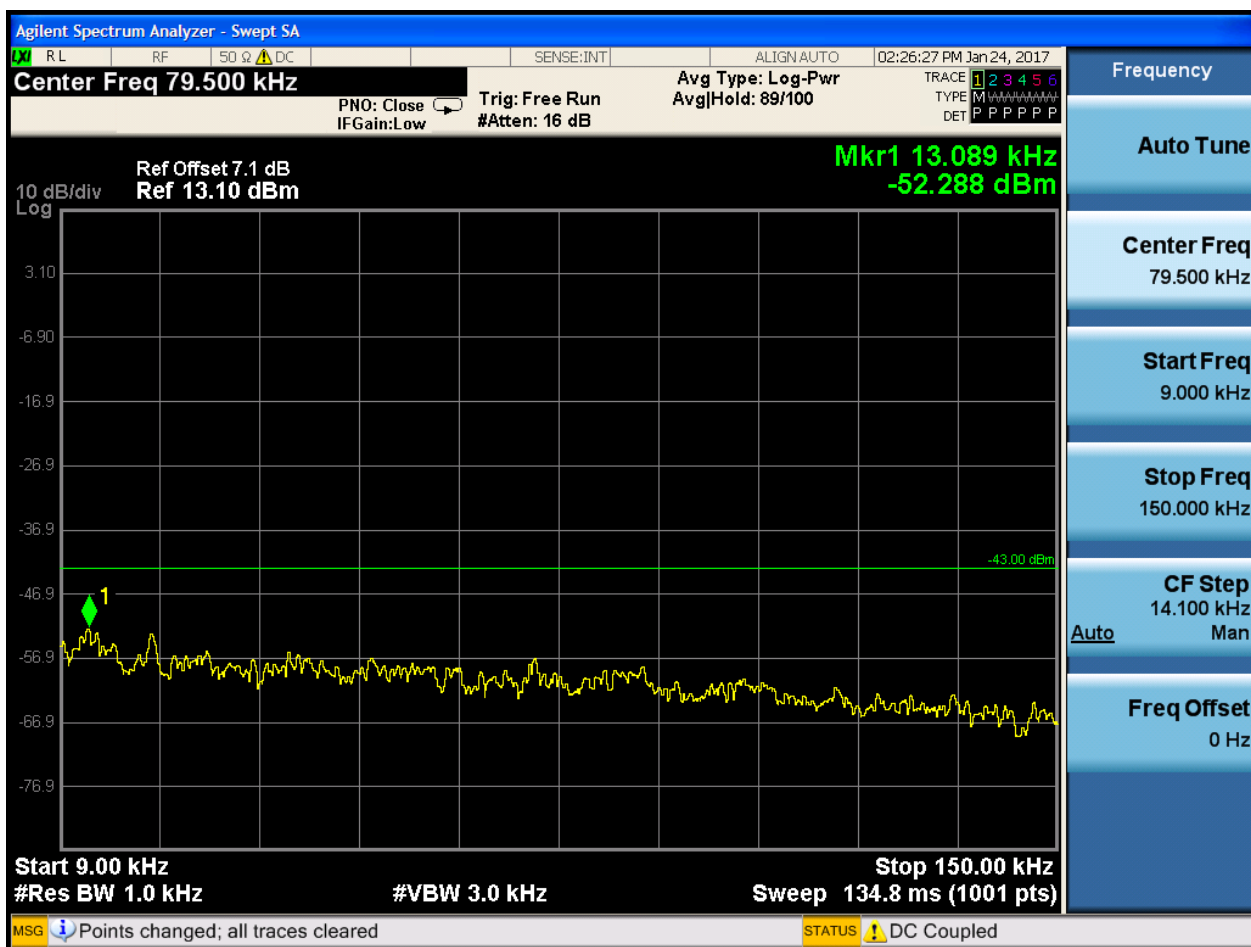




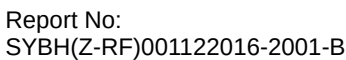
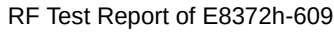
6.1.1.2.3 Test Bandwidth = 15

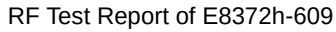
6.1.1.2.3.1 Test Channel = LCH

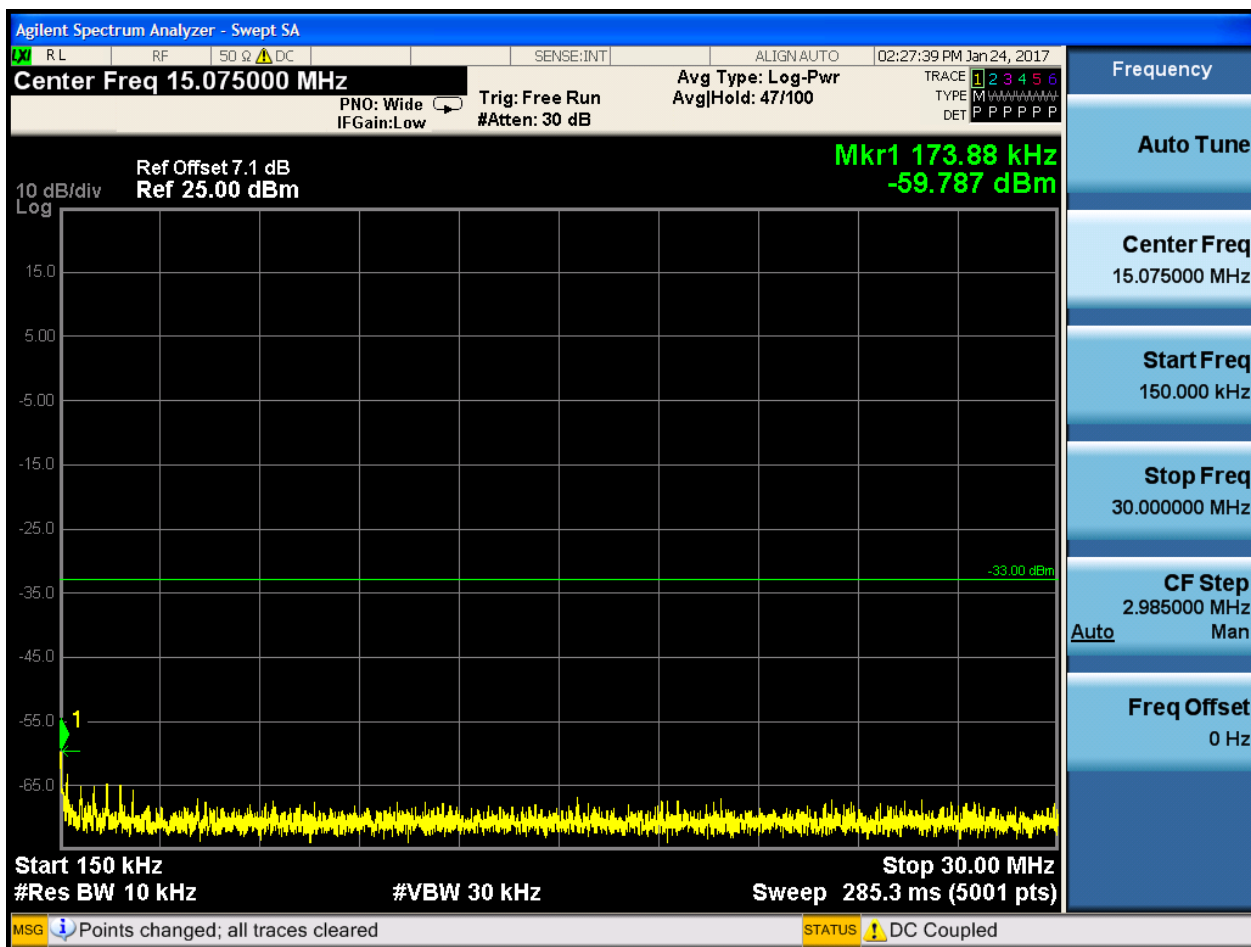
6.1.1.2.3.1.1 Test RB = RB1#0

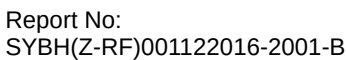
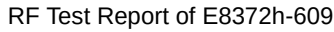


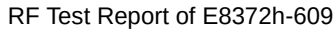


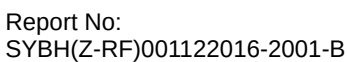
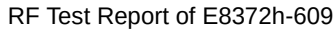


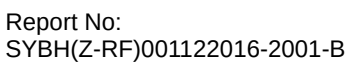
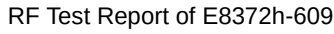








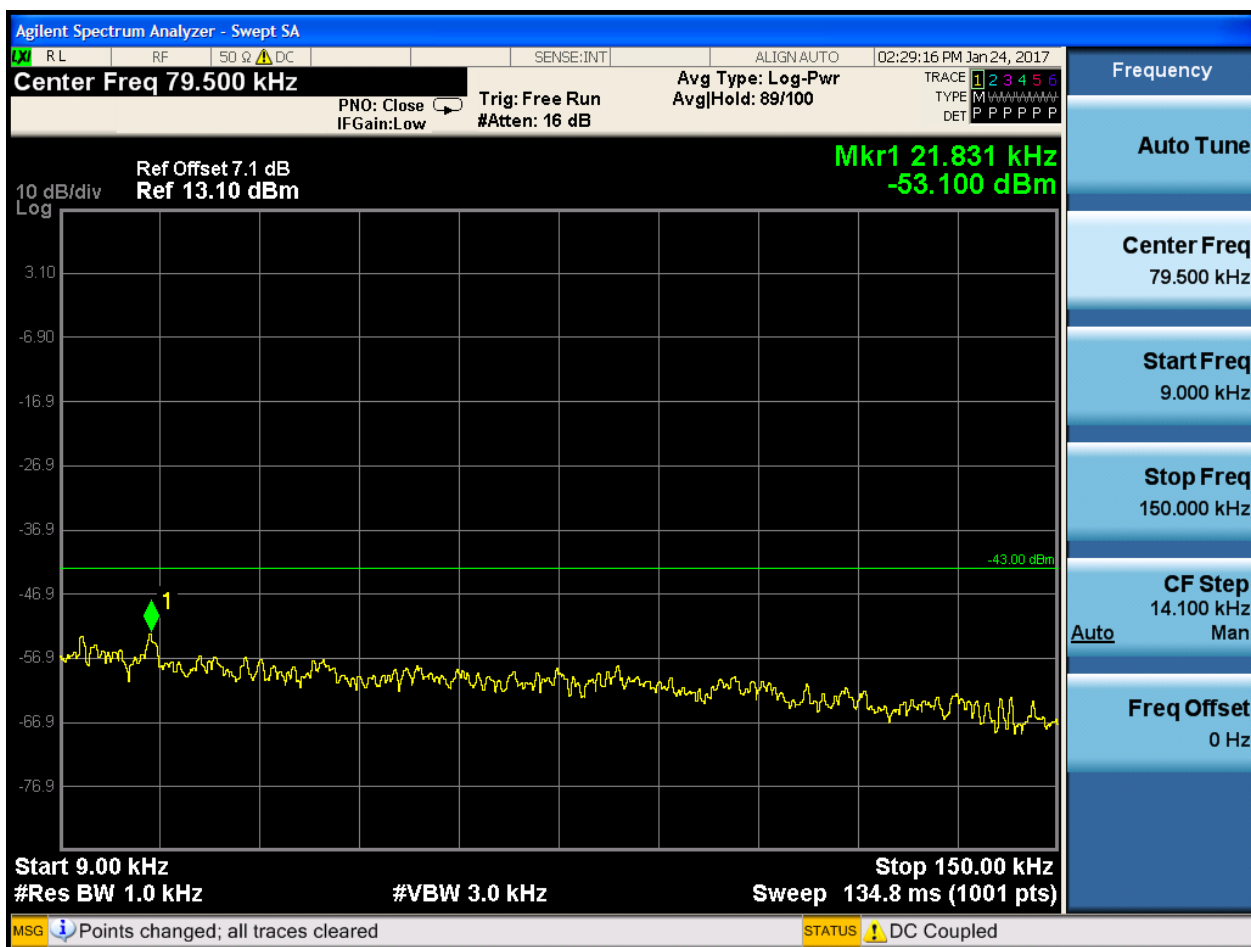


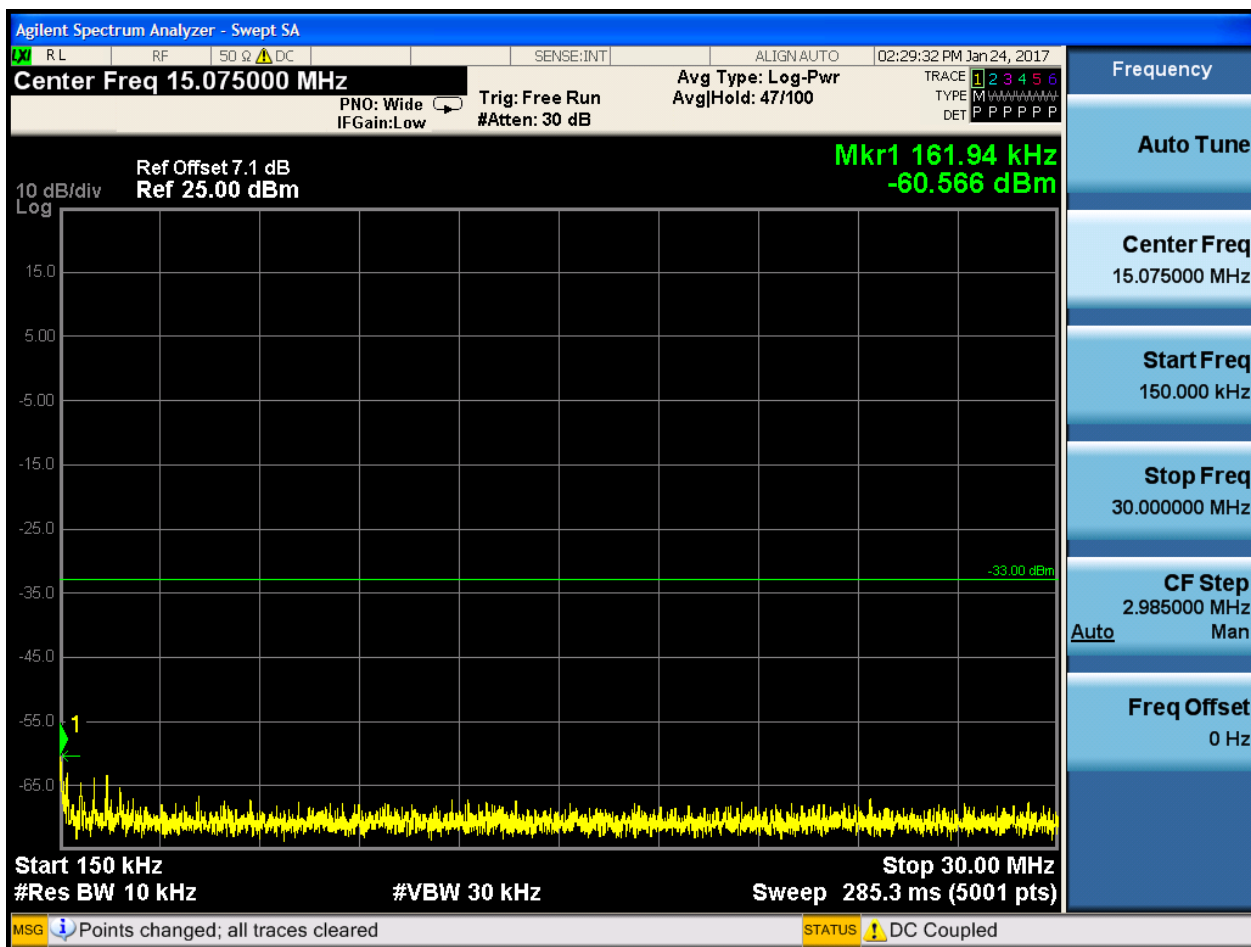


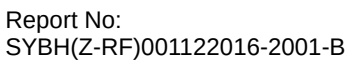
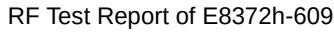
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



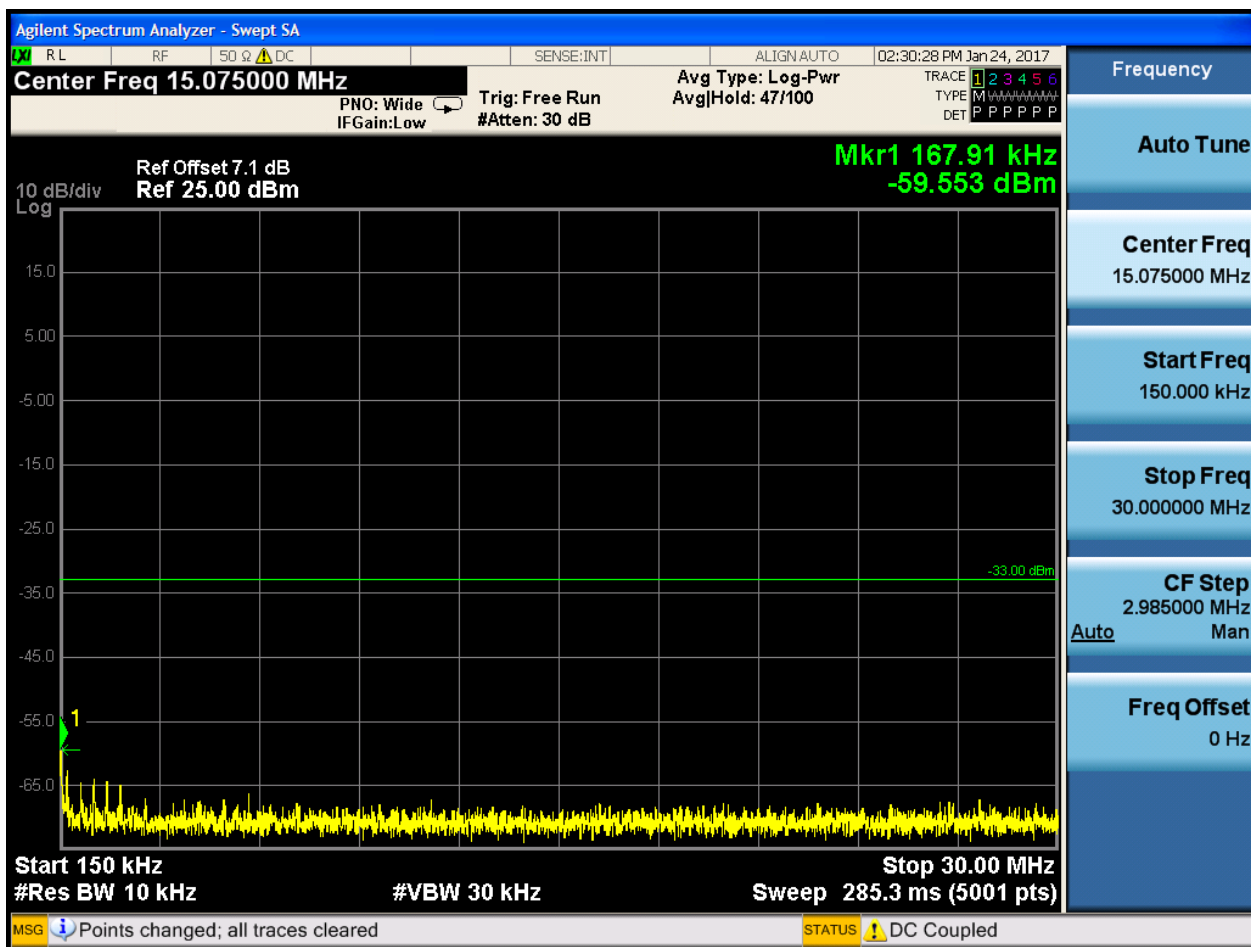


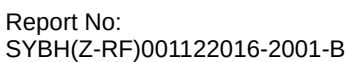
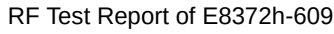


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0

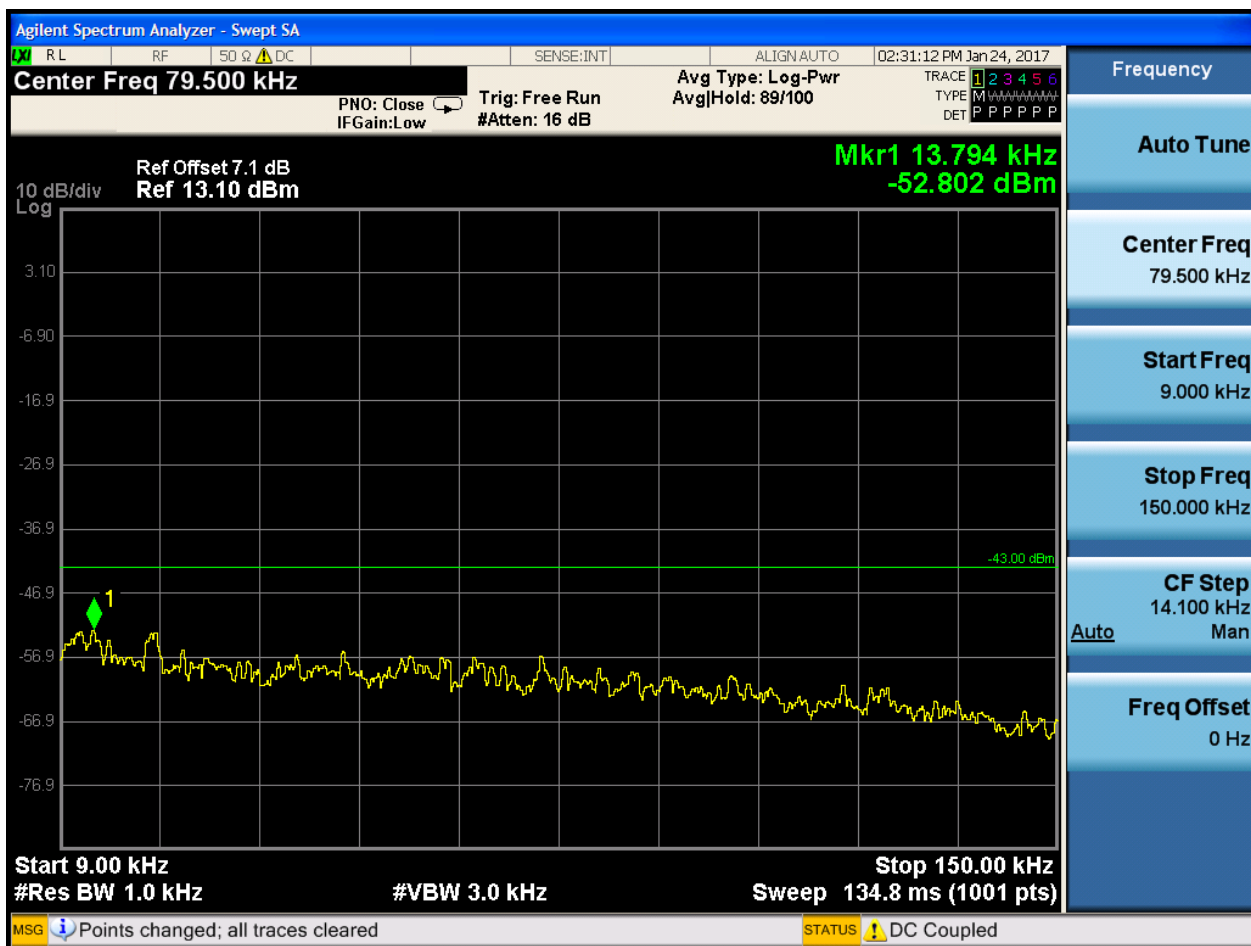


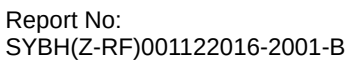
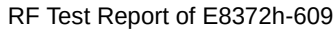


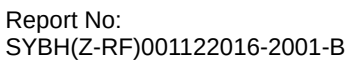
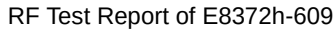


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0







7Appendix_G: Field Strength of Spurious Radiation

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

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

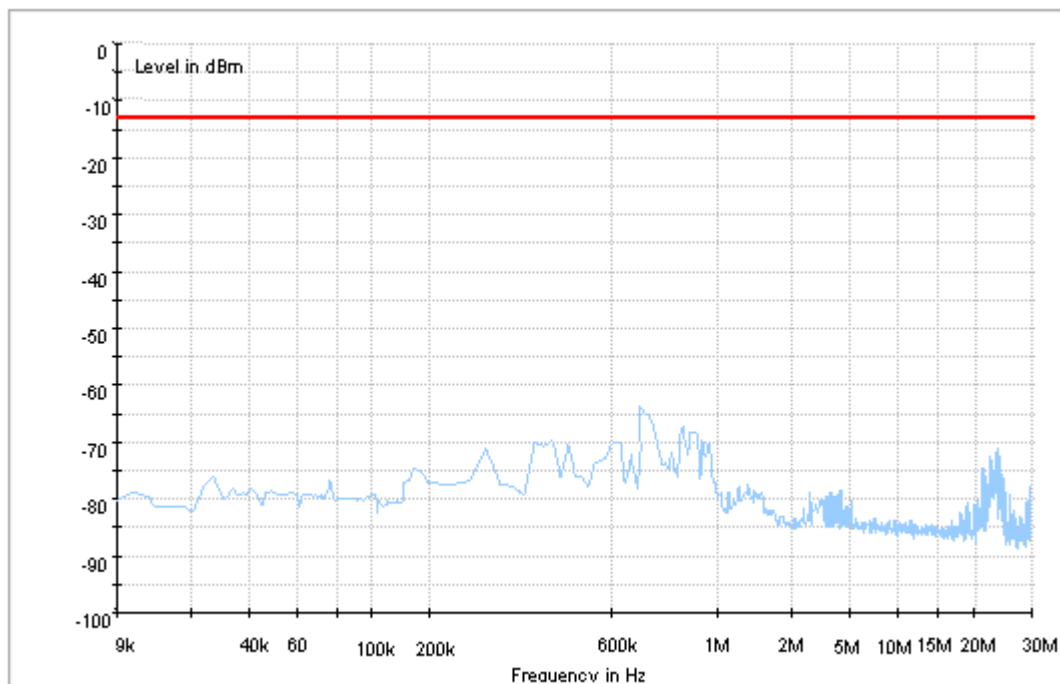
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

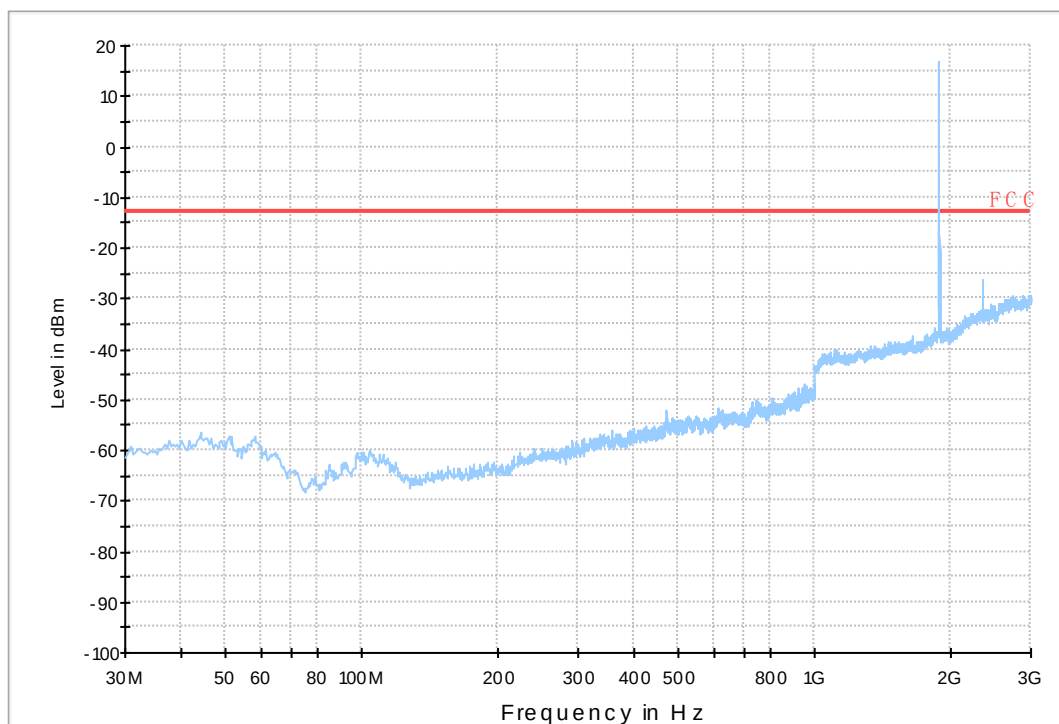
7.1 For LTE

7.1.1 Test Band = BAND2

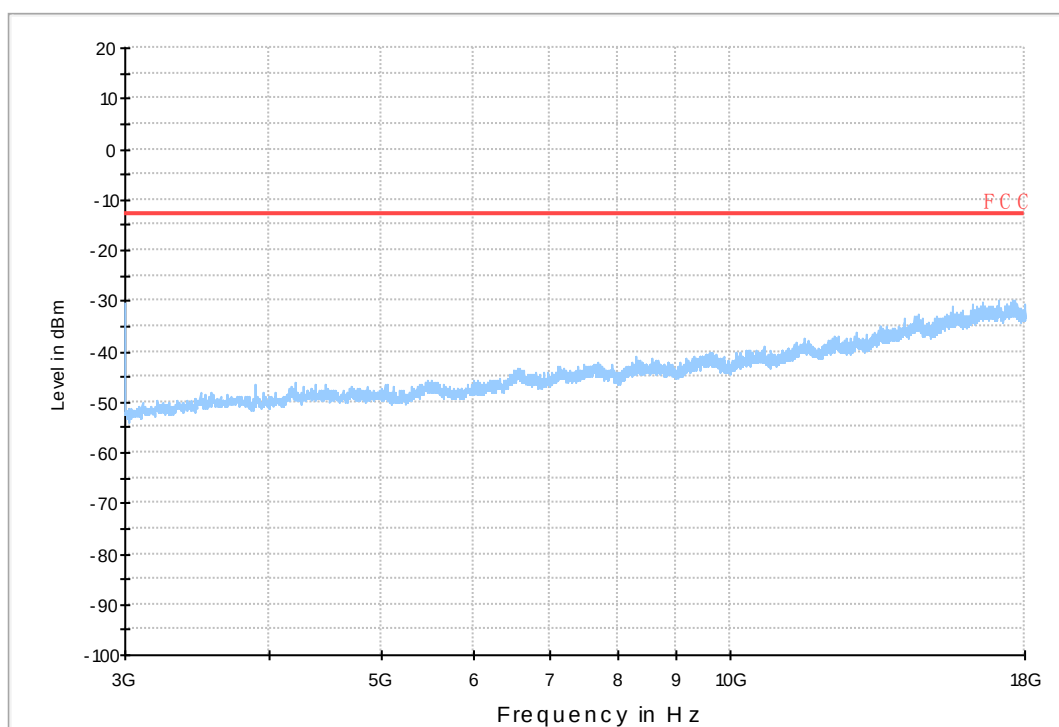
7.1.1.1 Test Bandwidth = 5

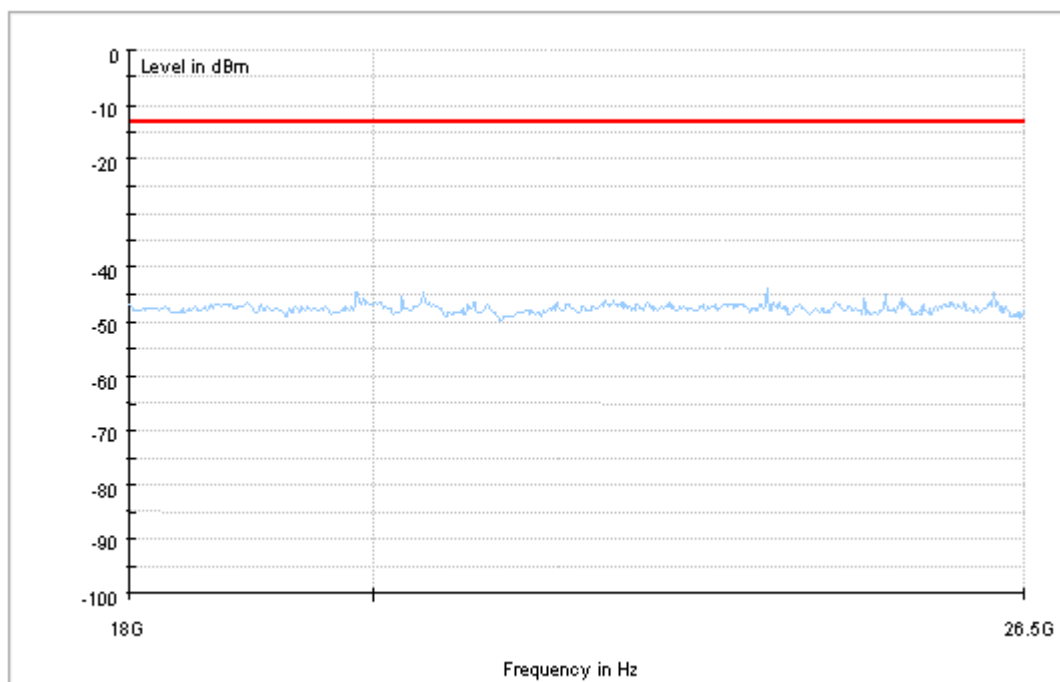


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L

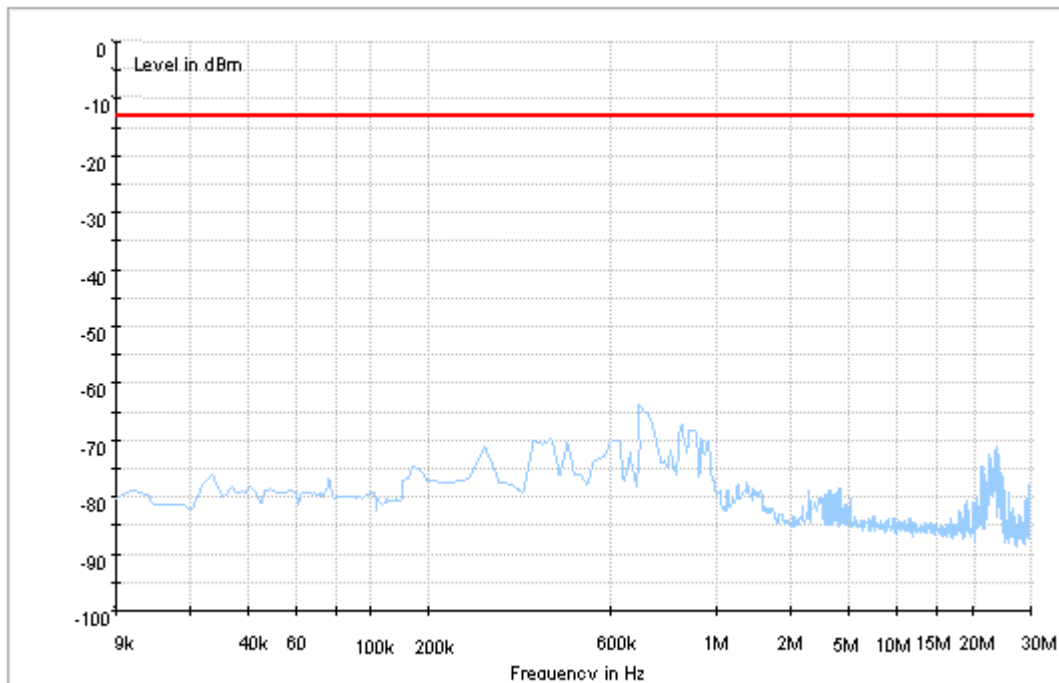


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H

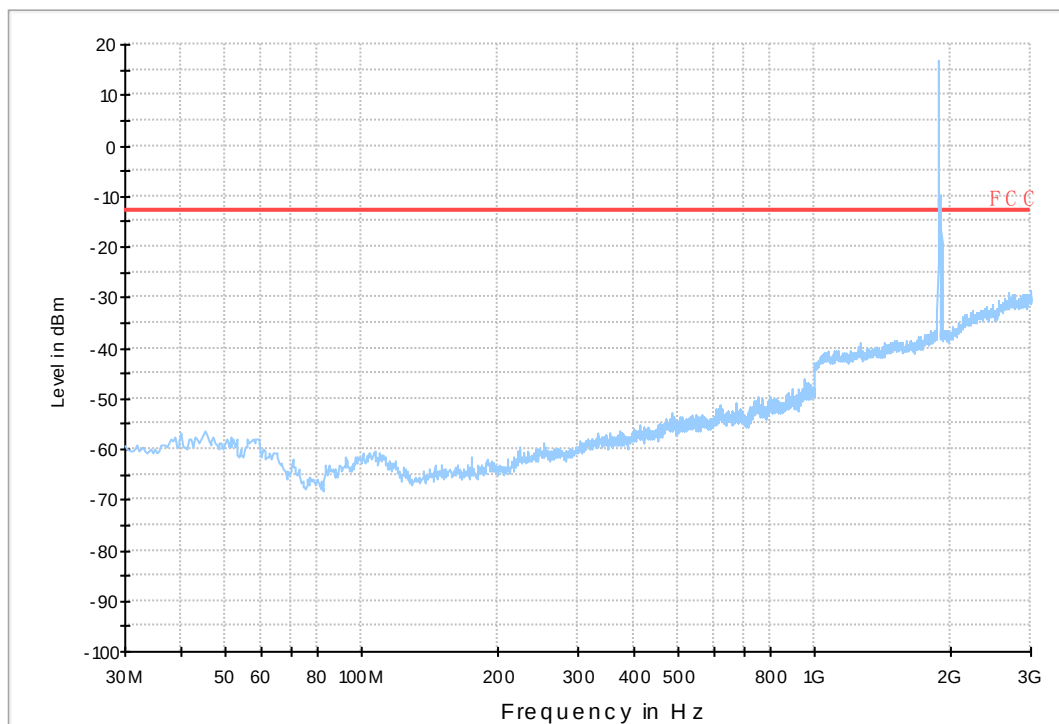




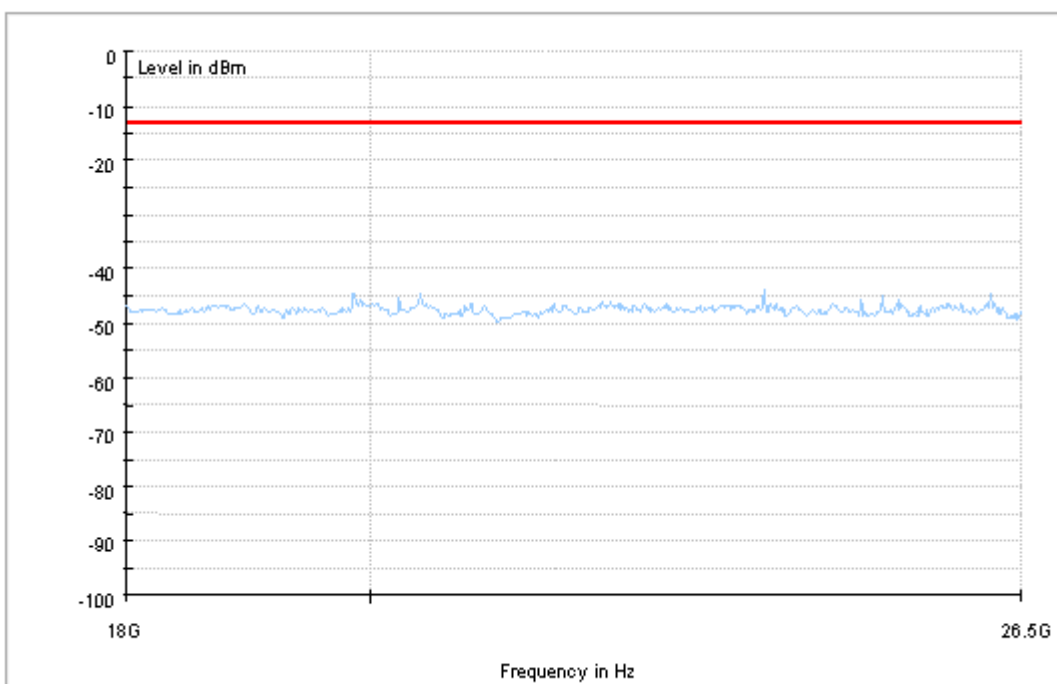
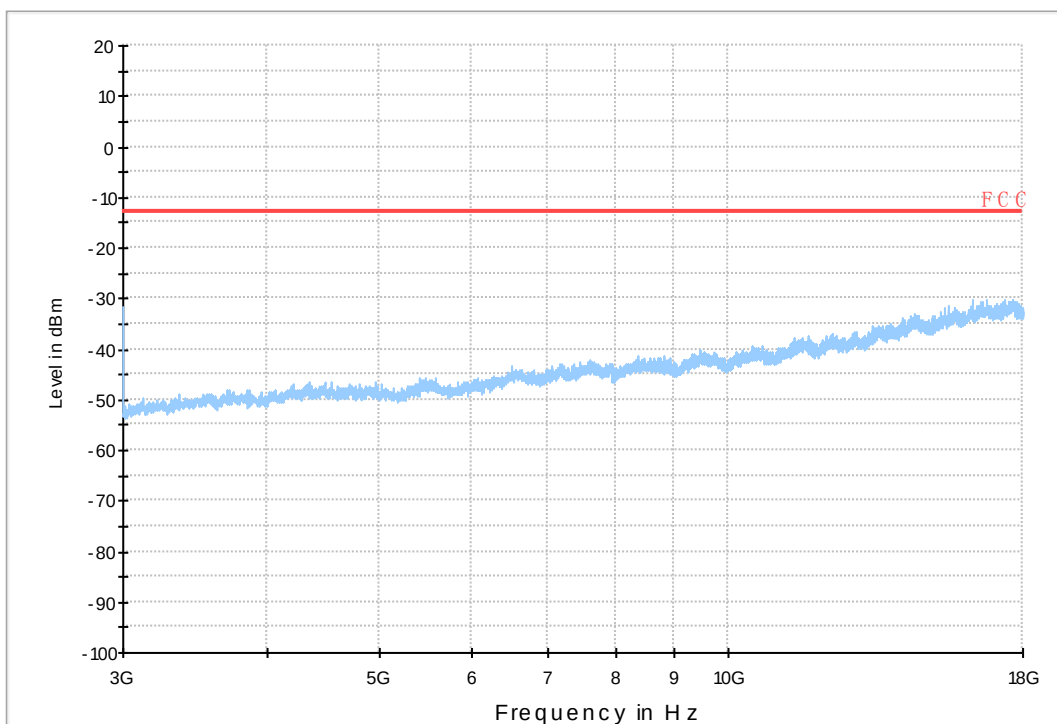
7.1.1.2 Test Bandwidth = 20



Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L



Copy of RSE-TX-DIRECTOR ABOVE 1.5G_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
BAND2	LTE/TM1	5	LCH	TN	VL	2.52	0.00136	PASS
					VN	0.26	0.00014	PASS
					VH	-0.59	-0.00032	PASS
			MCH	TN	VL	-31.39	-0.0167	PASS
					VN	-13.96	-0.00743	PASS
					VH	-0.10	-0.00005	PASS
			HCH	TN	VL	-41.14	-0.02157	PASS
					VN	-0.40	-0.00021	PASS
					VH	-9.28	-0.00487	PASS
		10	LCH	TN	VL	-1.23	-0.00066	PASS
					VN	-0.06	-0.00003	PASS
					VH	-3.13	-0.00169	PASS
			MCH	TN	VL	-0.79	-0.00042	PASS
					VN	-3.73	-0.00198	PASS
					VH	-2.88	-0.00153	PASS
			HCH	TN	VL	-0.54	-0.00028	PASS
					VN	-0.41	-0.00022	PASS
					VH	-2.95	-0.00155	PASS
		15	LCH	TN	VL	-1.49	-0.0008	PASS
					VN	-1.52	-0.00082	PASS
					VH	-0.51	-0.00027	PASS
			MCH	TN	VL	0.21	0.00011	PASS
					VN	-2.25	-0.0012	PASS
					VH	-2.56	-0.00136	PASS
			HCH	TN	VL	-1.92	-0.00101	PASS
					VN	0.72	0.00038	PASS
					VH	-0.27	-0.00014	PASS
		20	LCH	TN	VL	-0.51	-0.00027	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-0.30	-0.00016	PASS
					VH	-0.69	-0.00037	PASS
					VL	-1.19	-0.00063	PASS
					VN	-2.72	-0.00145	PASS
			MCH	TN	VH	-0.80	-0.00043	PASS
					VL	-1.02	-0.00054	PASS
					VN	-0.16	-0.00008	PASS
					VH	-1.00	-0.00053	PASS
	LTE/TM2	5	LCH	TN	VL	-14.98	-0.00809	PASS
					VN	0.47	0.00025	PASS
					VH	3.65	0.00197	PASS
			MCH	TN	VL	-1.13	-0.0006	PASS
					VN	-0.72	-0.00038	PASS
					VH	-16.89	-0.00898	PASS
			HCH	TN	VL	-2.35	-0.00123	PASS
					VN	1.27	0.00067	PASS
					VH	-0.93	-0.00049	PASS
		10	LCH	TN	VL	-1.53	-0.00082	PASS
					VN	1.56	0.00084	PASS
					VH	2.69	0.00145	PASS
			MCH	TN	VL	0.14	0.00007	PASS
					VN	-3.20	-0.0017	PASS
					VH	-0.56	-0.0003	PASS
			HCH	TN	VL	-1.14	-0.0006	PASS
					VN	1.20	0.00063	PASS
					VH	0.69	0.00036	PASS
		15	LCH	TN	VL	1.04	0.00056	PASS
					VN	-3.06	-0.00165	PASS
					VH	0.39	0.00021	PASS
			MCH	TN	VL	-3.95	-0.0021	PASS
					VN	-1.27	-0.00068	PASS
					VH	0.47	0.00025	PASS
			HCH	TN	VL	-2.70	-0.00142	PASS
					VN	-0.11	-0.00006	PASS
					VH	-2.30	-0.00121	PASS
		20	LCH	TN	VL	0.09	0.00005	PASS
					VN	-1.12	-0.0006	PASS
					VH	-1.23	-0.00066	PASS
			MCH	TN	VL	-3.03	-0.00161	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	TN	VN	-0.99	-0.00053	PASS
					VH	-1.65	-0.00088	PASS
					VL	-1.65	-0.00087	PASS
					VN	-2.47	-0.0013	PASS
					VH	-1.13	-0.00059	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
BAND2	LTE/TM1	5	LCH	VN	-30	0.03	0.00002	PASS
					-20	2.83	0.00153	PASS
					-10	-0.79	-0.00043	PASS
					0	0.20	0.00011	PASS
					10	-1.17	-0.00063	PASS
					20	-8.37	-0.00452	PASS
					30	0.56	0.0003	PASS
					40	-2.07	-0.00112	PASS
					50	0.36	0.00019	PASS
			MCH	VN	-30	0.01	0.00001	PASS
					-20	-0.92	-0.00049	PASS
					-10	-0.67	-0.00036	PASS
					0	-1.90	-0.00101	PASS
					10	-3.35	-0.00178	PASS
					20	-2.09	-0.00111	PASS
					30	-8.74	-0.00465	PASS
					40	-3.56	-0.00189	PASS
					50	0.54	0.00029	PASS
			HCH	VN	-30	-1.03	-0.00054	PASS
					-20	0.93	0.00049	PASS
					-10	-1.90	-0.001	PASS
					0	-1.72	-0.0009	PASS
					10	-7.20	-0.00377	PASS
					20	-1.43	-0.00075	PASS
					30	-3.38	-0.00177	PASS
					40	-1.73	-0.00091	PASS
					50	-3.85	-0.00202	PASS
		10	LCH	VN	-30	0.56	0.0003	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	1.80	0.00097	PASS
					-10	0.94	0.00051	PASS
					0	2.66	0.00143	PASS
					10	-0.39	-0.00021	PASS
					20	3.75	0.00202	PASS
					30	-2.39	-0.00129	PASS
					40	-1.32	-0.00071	PASS
					50	-0.84	-0.00045	PASS
			MCH	VN	-30	0.49	0.00026	PASS
					-20	0.19	0.0001	PASS
					-10	-2.55	-0.00136	PASS
					0	-6.64	-0.00353	PASS
					10	-4.55	-0.00242	PASS
					20	-0.19	-0.0001	PASS
					30	-0.13	-0.00007	PASS
					40	-1.63	-0.00087	PASS
					50	-2.50	-0.00133	PASS
			HCH	VN	-30	-2.68	-0.00141	PASS
					-20	0.24	0.00013	PASS
					-10	-3.93	-0.00206	PASS
					0	0.66	0.00035	PASS
					10	0.62	0.00033	PASS
					20	-2.30	-0.00121	PASS
					30	-0.29	-0.00015	PASS
					40	-1.89	-0.00099	PASS
					50	2.42	0.00127	PASS
		15	LCH	VN	-30	-1.56	-0.00084	PASS
					-20	-2.69	-0.00145	PASS
					-10	0.39	0.00021	PASS
					0	-0.26	-0.00014	PASS
					10	-0.54	-0.00029	PASS
					20	1.30	0.0007	PASS
					30	0.06	0.00003	PASS
					40	-1.34	-0.00072	PASS
					50	-1.16	-0.00062	PASS
			MCH	VN	-30	0.01	0.00001	PASS
					-20	0.30	0.00016	PASS
					-10	-1.14	-0.00061	PASS
					0	-3.58	-0.0019	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-1.49	-0.00079	PASS
					20	-2.53	-0.00135	PASS
					30	-1.09	-0.00058	PASS
					40	0.33	0.00018	PASS
					50	-1.14	-0.00061	PASS
			HCH	VN	-30	-0.09	-0.00005	PASS
					-20	-3.28	-0.00172	PASS
					-10	-2.05	-0.00108	PASS
					0	-2.43	-0.00128	PASS
					10	-2.07	-0.00109	PASS
					20	1.42	0.00075	PASS
					30	-0.47	-0.00025	PASS
					40	-1.40	-0.00074	PASS
					50	-1.26	-0.00066	PASS
		20	LCH	VN	-30	7.07	0.0038	PASS
					-20	2.06	0.00111	PASS
					-10	4.63	0.00249	PASS
					0	2.85	0.00153	PASS
					10	2.68	0.00144	PASS
					20	4.91	0.00264	PASS
					30	4.01	0.00216	PASS
					40	5.32	0.00286	PASS
					50	2.99	0.00161	PASS
			MCH	VN	-30	-1.09	-0.00058	PASS
					-20	-0.70	-0.00037	PASS
					-10	-3.10	-0.00165	PASS
					0	-3.91	-0.00208	PASS
					10	-0.29	-0.00015	PASS
					20	-2.17	-0.00115	PASS
					30	-3.08	-0.00164	PASS
					40	-1.49	-0.00079	PASS
					50	-2.23	-0.00119	PASS
			HCH	VN	-30	-0.06	-0.00003	PASS
					-20	-0.19	-0.00001	PASS
					-10	-1.22	-0.00064	PASS
					0	-2.03	-0.00107	PASS
					10	-3.73	-0.00196	PASS
					20	0.72	0.00038	PASS
					30	-2.29	-0.00121	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	5			40	1.23	0.00065	PASS
					50	-0.39	-0.00021	PASS
			LCH	VN	-30	12.20	0.00659	PASS
					-20	-0.37	-0.0002	PASS
					-10	-0.09	-0.00005	PASS
					0	-3.49	-0.00189	PASS
					10	-1.20	-0.00065	PASS
					20	-4.32	-0.00233	PASS
					30	8.81	0.00476	PASS
					40	-0.54	-0.00029	PASS
					50	1.50	0.00081	PASS
			MCH	VN	-30	-3.89	-0.00207	PASS
					-20	-4.13	-0.0022	PASS
					-10	-0.14	-0.00007	PASS
					0	-3.98	-0.00212	PASS
					10	9.37	0.00498	PASS
					20	-21.87	-0.01163	PASS
					30	-5.31	-0.00282	PASS
					40	-5.01	-0.00266	PASS
					50	29.83	0.01587	PASS
			HCH	VN	-30	-3.08	-0.00161	PASS
					-20	12.10	0.00634	PASS
					-10	-8.35	-0.00437	PASS
					0	-13.38	-0.00701	PASS
					10	-6.61	-0.00346	PASS
					20	-13.93	-0.0073	PASS
					30	4.03	0.00211	PASS
					40	-1.90	-0.001	PASS
					50	-3.25	-0.0017	PASS
		10	LCH	VN	-30	1.65	0.00089	PASS
					-20	-0.87	-0.00047	PASS
					-10	2.93	0.00158	PASS
					0	1.85	0.001	PASS
					10	-0.56	-0.0003	PASS
					20	3.86	0.00208	PASS
					30	1.16	0.00063	PASS
					40	6.47	0.00349	PASS
					50	1.70	0.00092	PASS
			MCH	VN	-30	-2.37	-0.00126	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	0.21	0.00011	PASS
					-10	1.14	0.00061	PASS
					0	-4.26	-0.00227	PASS
					10	-1.02	-0.00054	PASS
					20	-4.59	-0.00244	PASS
					30	-2.46	-0.00131	PASS
					40	-2.52	-0.00134	PASS
					50	-1.22	-0.00065	PASS
			HCH	VN	-30	-1.27	-0.00067	PASS
					-20	-0.92	-0.00048	PASS
					-10	-0.77	-0.0004	PASS
					0	-2.17	-0.00114	PASS
					10	-0.70	-0.00037	PASS
					20	2.27	0.00119	PASS
					30	-0.64	-0.00034	PASS
					40	-0.49	-0.00026	PASS
					50	-3.12	-0.00164	PASS
		15	LCH	VN	-30	-0.63	-0.00034	PASS
					-20	-0.57	-0.00031	PASS
					-10	-2.19	-0.00118	PASS
					0	-0.34	-0.00018	PASS
					10	1.50	0.00081	PASS
					20	1.63	0.00088	PASS
					30	-3.71	-0.002	PASS
					40	-0.11	-0.00006	PASS
					50	-2.05	-0.0011	PASS
			MCH	VN	-30	-0.31	-0.00016	PASS
					-20	-2.32	-0.00123	PASS
					-10	-1.49	-0.00079	PASS
					0	-3.19	-0.0017	PASS
					10	-2.00	-0.00106	PASS
					20	-2.10	-0.00112	PASS
					30	-1.72	-0.00091	PASS
					40	0.73	0.00039	PASS
					50	-2.99	-0.00159	PASS
			HCH	VN	-30	-1.02	-0.00054	PASS
					-20	-3.63	-0.00191	PASS
					-10	-2.33	-0.00122	PASS
					0	-1.47	-0.00077	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-1.00	-0.00053	PASS
					20	-0.79	-0.00042	PASS
					30	-3.06	-0.00161	PASS
					40	-1.99	-0.00105	PASS
					50	-3.72	-0.00196	PASS
		20	LCH	VN	-30	0.27	0.00015	PASS
					-20	0.74	0.0004	PASS
					-10	-0.07	-0.00004	PASS
					0	1.56	0.00084	PASS
					10	-1.66	-0.00089	PASS
					20	0.57	0.00031	PASS
					30	-1.20	-0.00065	PASS
					40	1.30	0.0007	PASS
					50	-0.04	-0.00002	PASS
			MCH	VN	-30	-0.93	-0.00049	PASS
					-20	-0.59	-0.00031	PASS
					-10	-1.70	-0.0009	PASS
					0	-1.53	-0.00081	PASS
					10	-1.46	-0.00078	PASS
					20	-2.90	-0.00154	PASS
					30	-2.35	-0.00125	PASS
					40	-3.55	-0.00189	PASS
					50	-2.16	-0.00115	PASS
			HCH	VN	-30	-0.49	-0.00026	PASS
					-20	-2.19	-0.00115	PASS
					-10	-0.77	-0.00041	PASS
					0	-0.23	-0.00012	PASS
					10	-2.78	-0.00146	PASS
					20	-1.47	-0.00077	PASS
					30	-1.17	-0.00062	PASS
					40	-0.66	-0.00035	PASS
					50	-0.44	-0.00023	PASS

END