



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 11:49:09 AM Jan 05, 2018

Center Freq 2.57000000 GHz Avg Type: RMS
PASS PNO: Wide Trig: Free Run Avg/Hold: 12/100
IFGain:Low #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 7.5 dB
Ref 30.00 dBm

Mkr1 2.570 005 GHz
-30.583 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 200 kHz
#VBW 620 kHz*
Span 29.74 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency
Auto Tune
Center Freq
2.57000000 GHz
Start Freq
2.555130000 GHz
Stop Freq
2.584870000 GHz
CF Step
2.974000 MHz
Auto Man
Freq Offset
0 Hz



5.1.1.2.2.4 Test RB = RB50#0

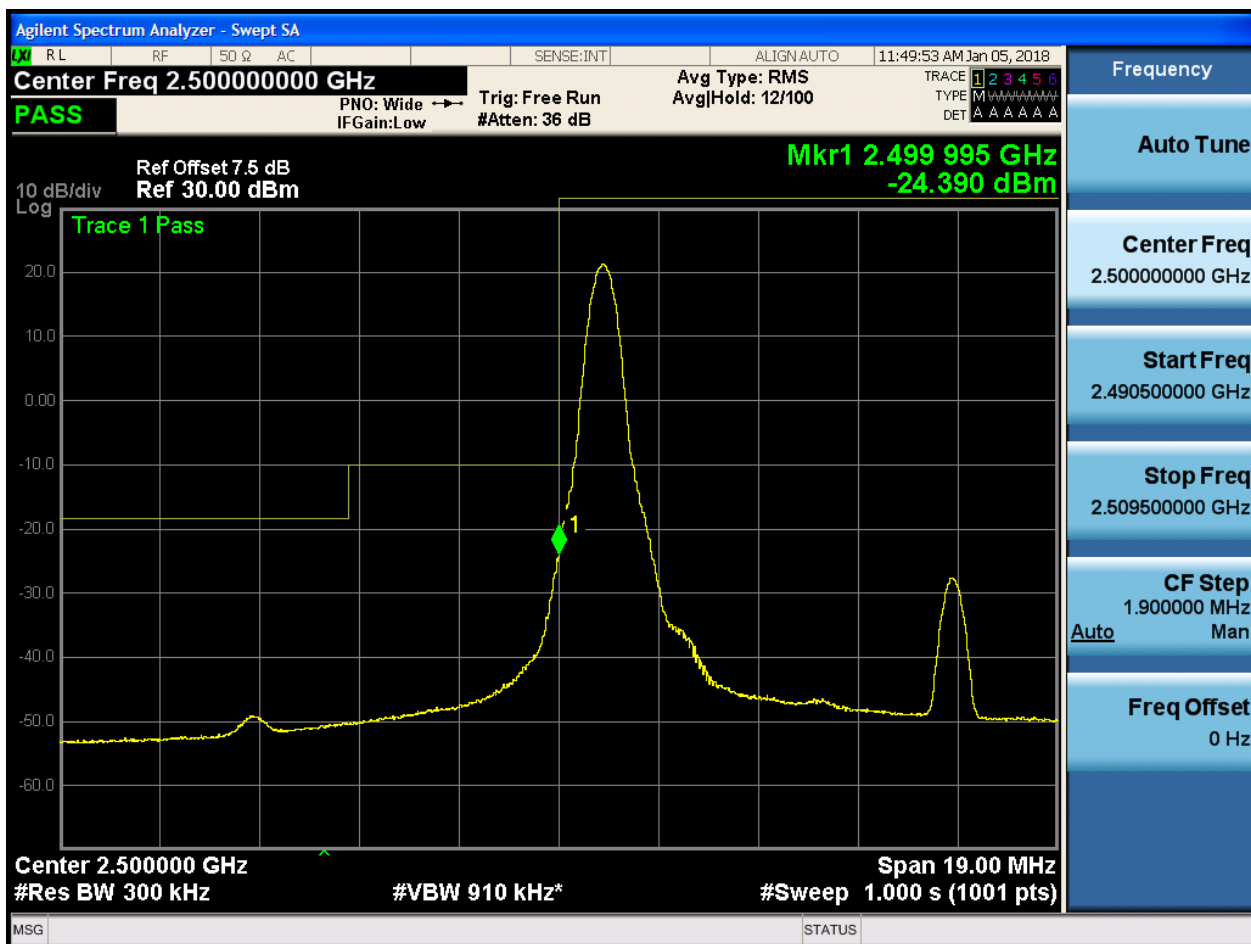




5.1.1.2.3 Test Bandwidth = 15

5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 11:50:12 AM Jan 05, 2018

Center Freq 2.500000000 GHz Avg Type: RMS
#Res BW 300 kHz IFGain:Low Trig: Free Run AvgHold: 12/100
PNO: Wide Trace 1 2 3 4 5 6
IFGain:Low #Atten: 36 dB TYPE M A A A A A A
DET A A A A A A

PASS

Ref Offset 7.5 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-49.454 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 300 kHz #VBW 910 kHz #Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

PASS

Ref Offset 7.5 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-30.490 dBm

Trace 1 Pass

Center 2.500000 GHz
#Res BW 300 kHz
#VBW 910 kHz*
Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.49050000 GHz

Stop Freq
2.50950000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 11:50:49 AM Jan 05, 2018

Center Freq 2.50000000 GHz Avg Type: RMS
PASS 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
DET A A A A A A

Ref Offset 7.5 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-29.673 dBm

10 dB/div
Log

Trace 1 Pass

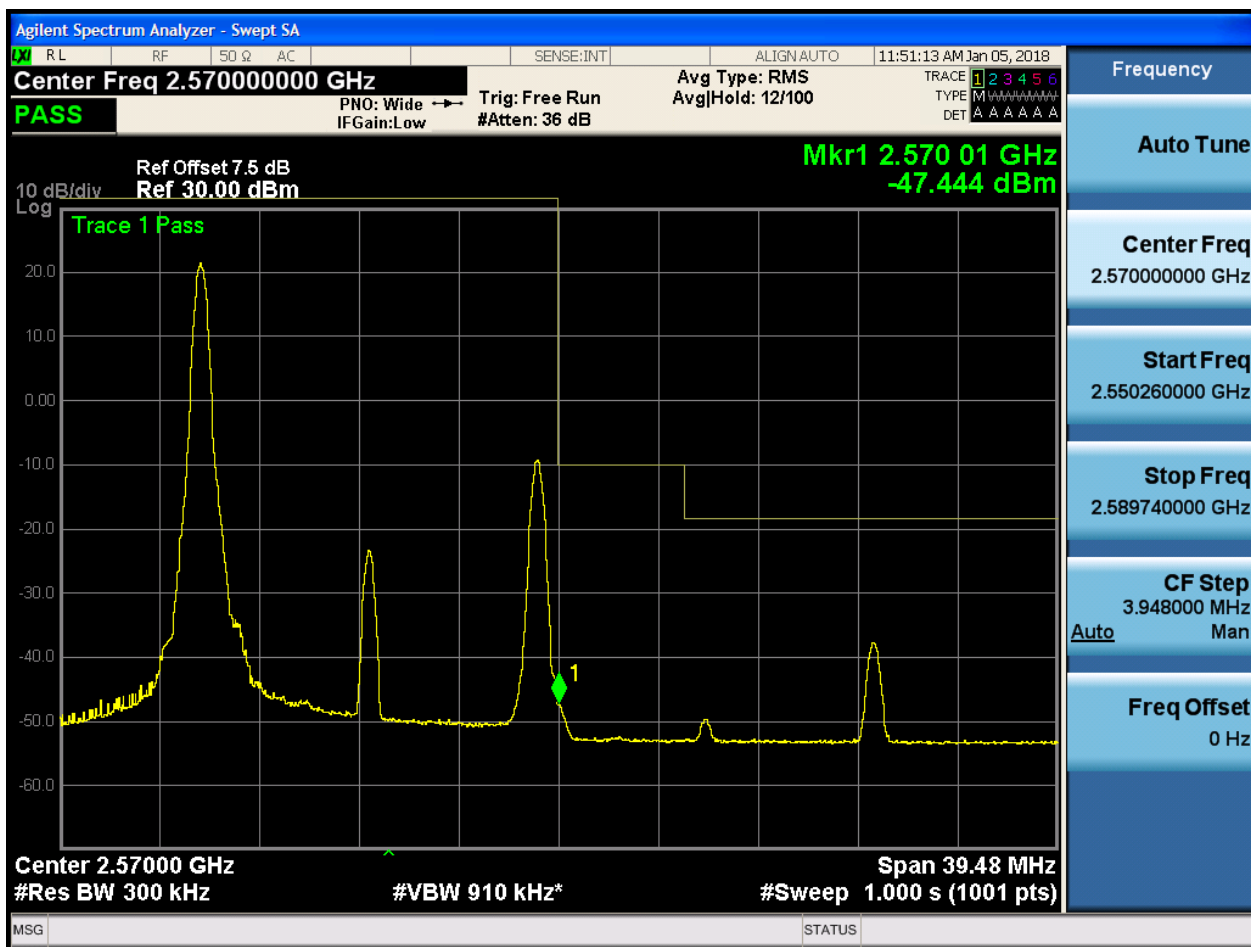
Center 2.500000 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



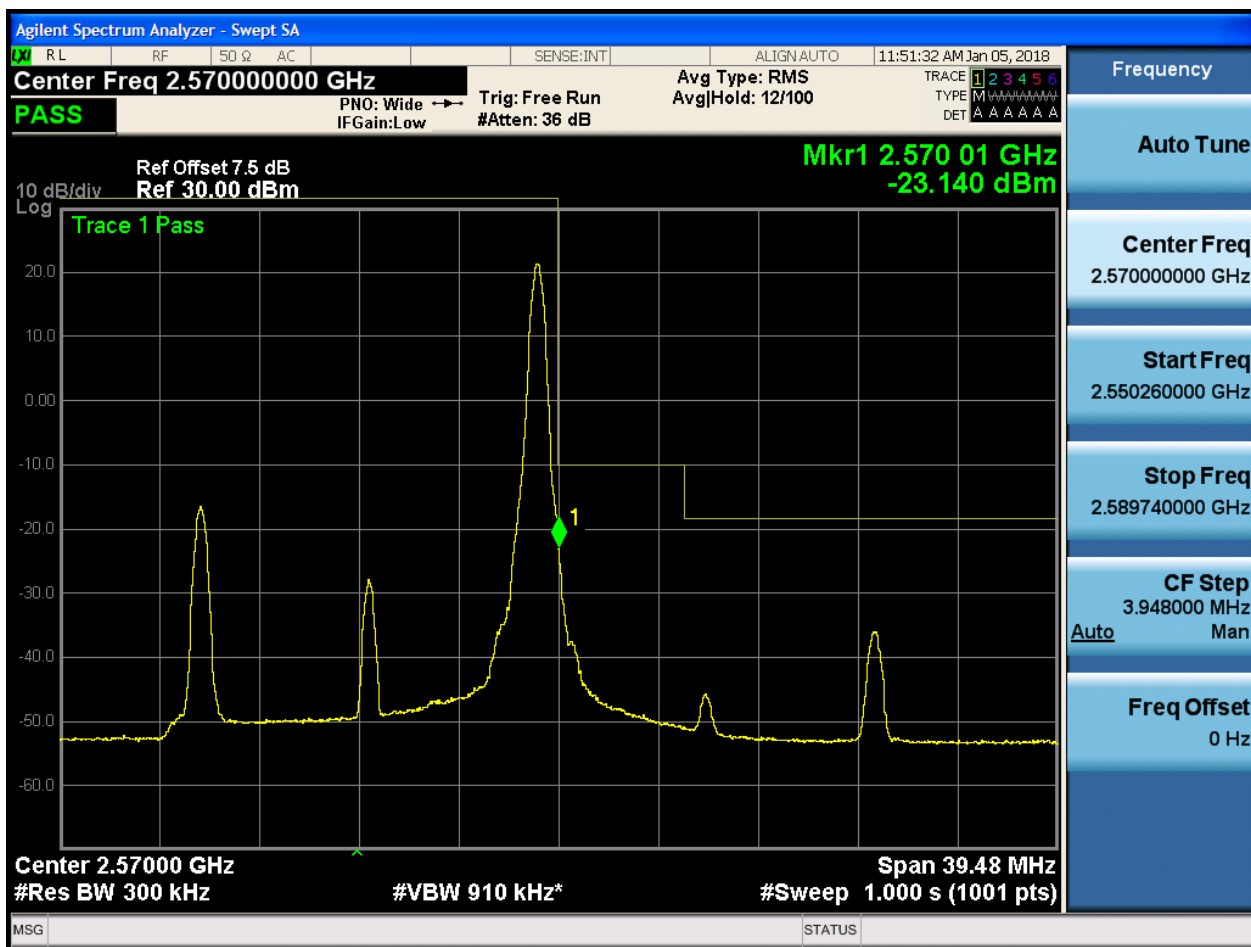
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0



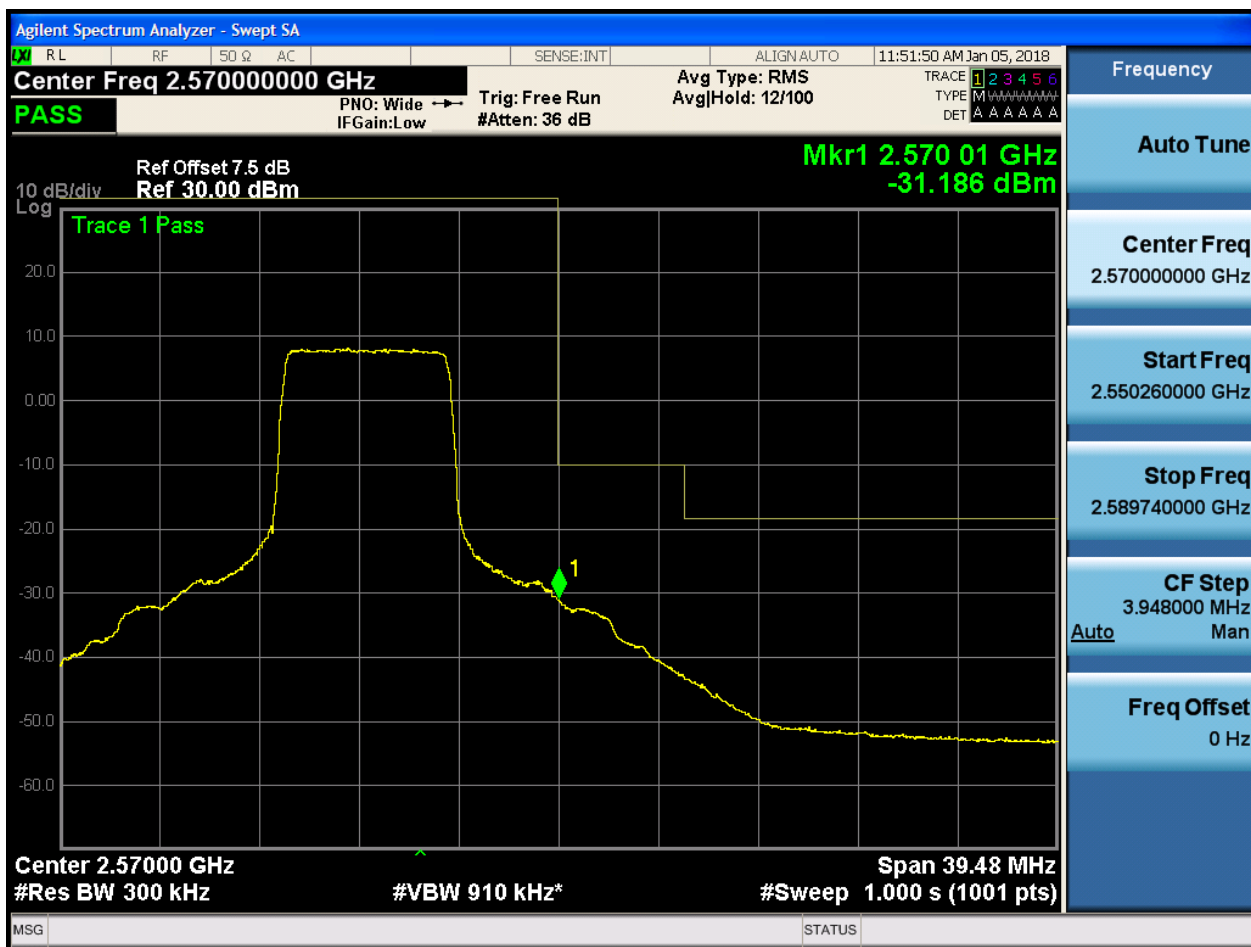


5.1.1.2.3.2.2 Test RB = RB1#74





5.1.1.2.3.2.3 Test RB = RB38#19





5.1.1.2.3.2.4 Test RB = RB75#0

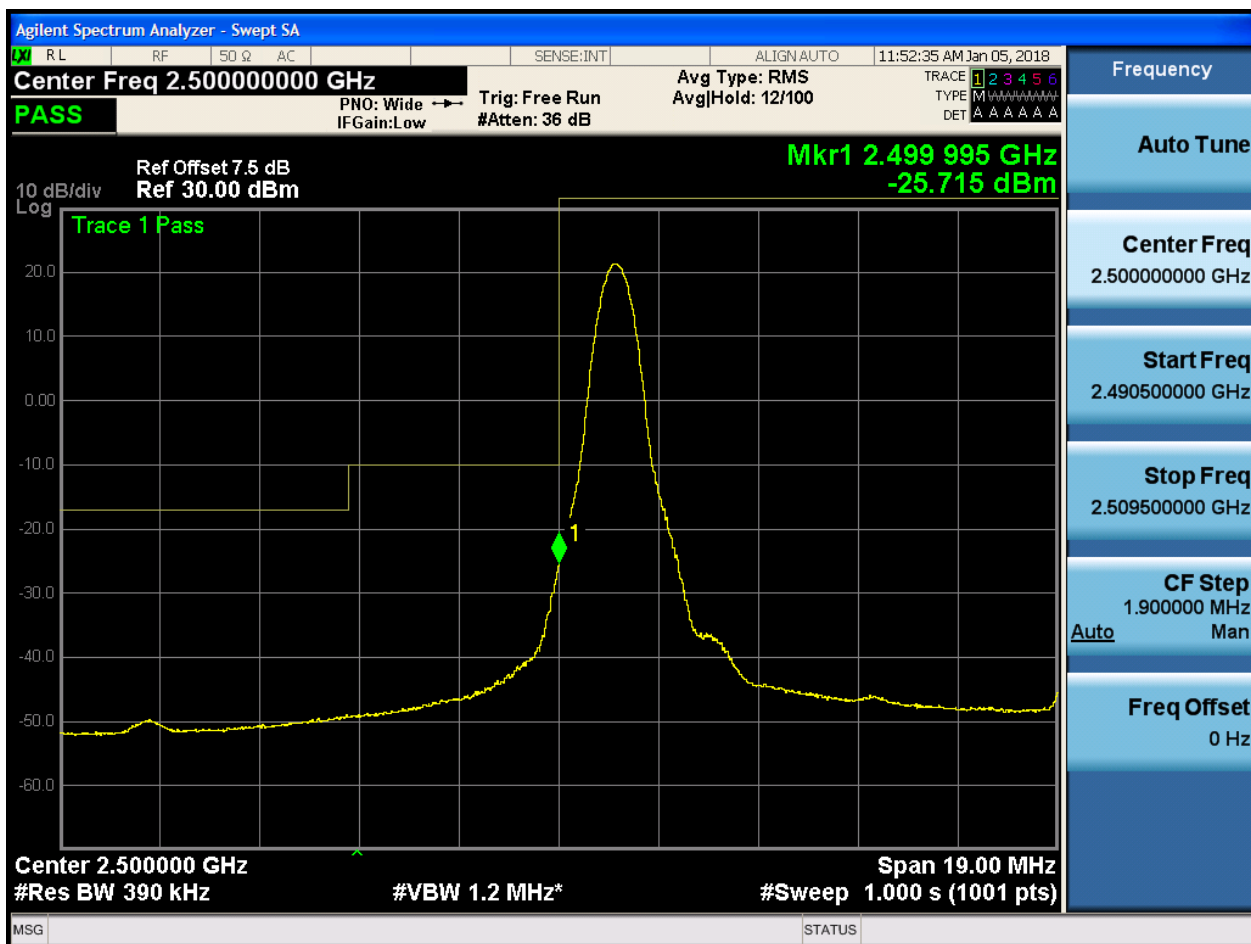




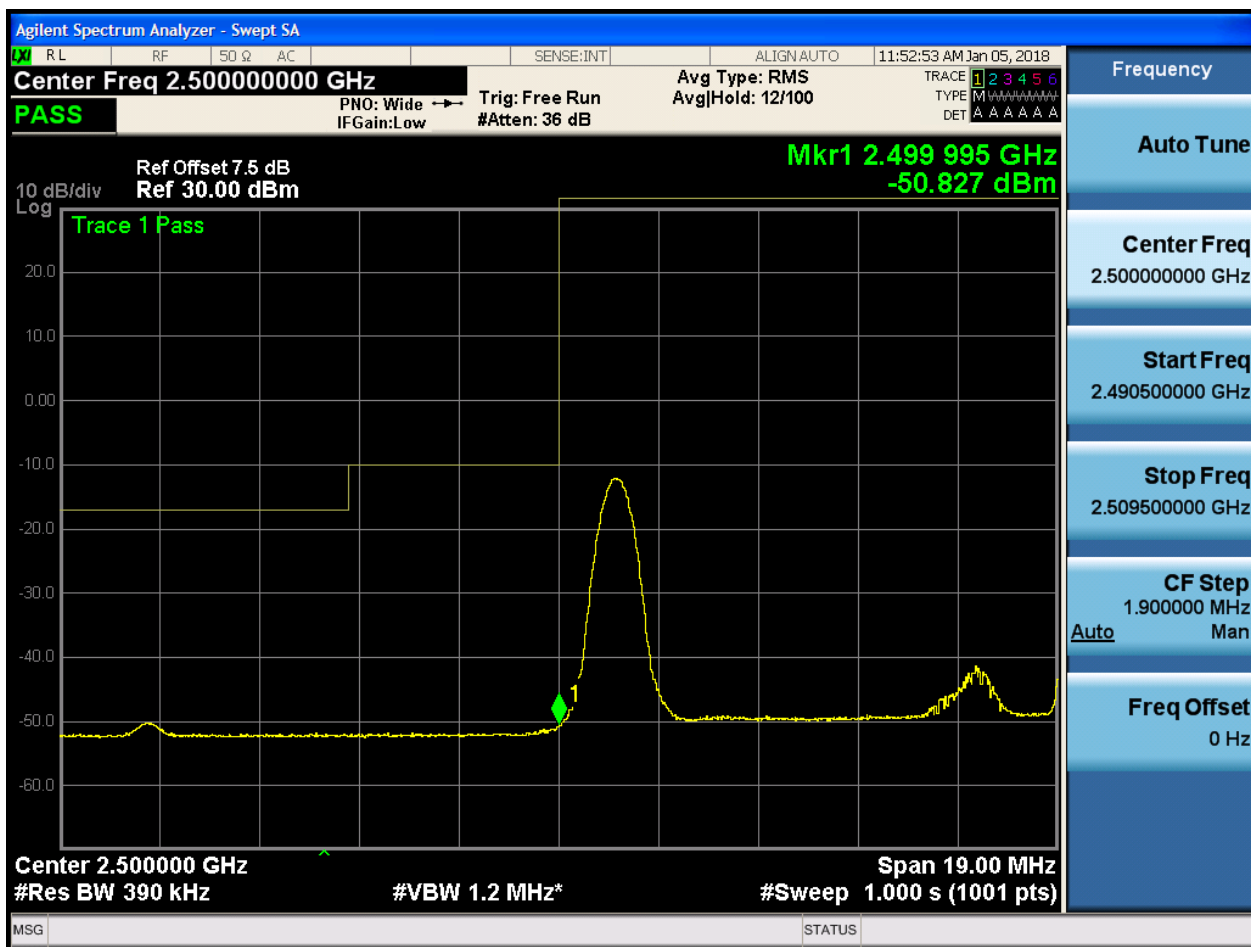
5.1.1.2.4 Test Bandwidth = 20

5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0

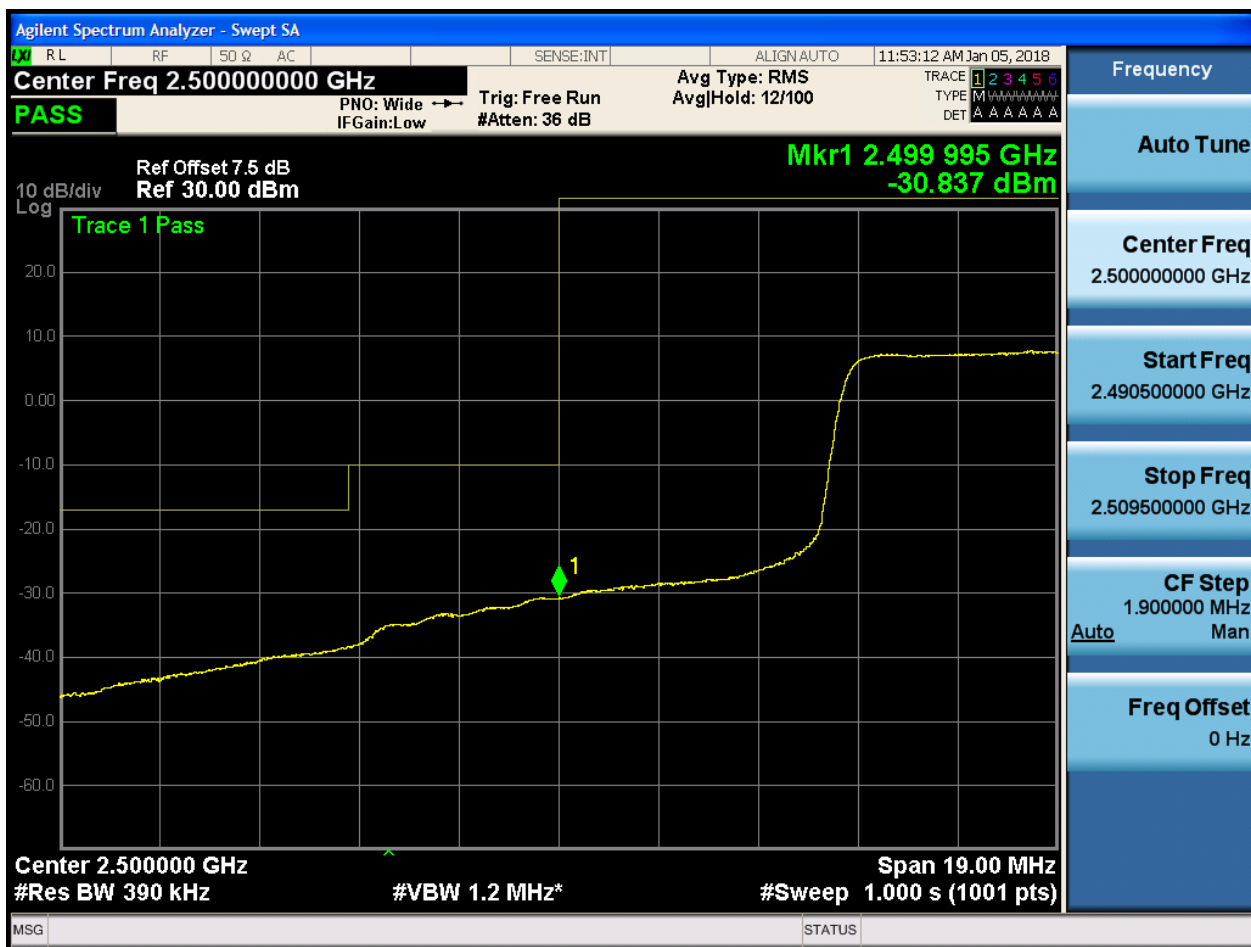


5.1.1.2.4.1.2 Test RB = RB1#99





5.1.1.2.4.1.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 11:53:30 AM Jan 05, 2018

Center Freq 2.500000000 GHz Avg Type: RMS
PASS PNO: Wide Trig: Free Run AvgHold: 12/100
IFGain:Low #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 7.5 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-29.110 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 390 kHz #VBW 1.2 MHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

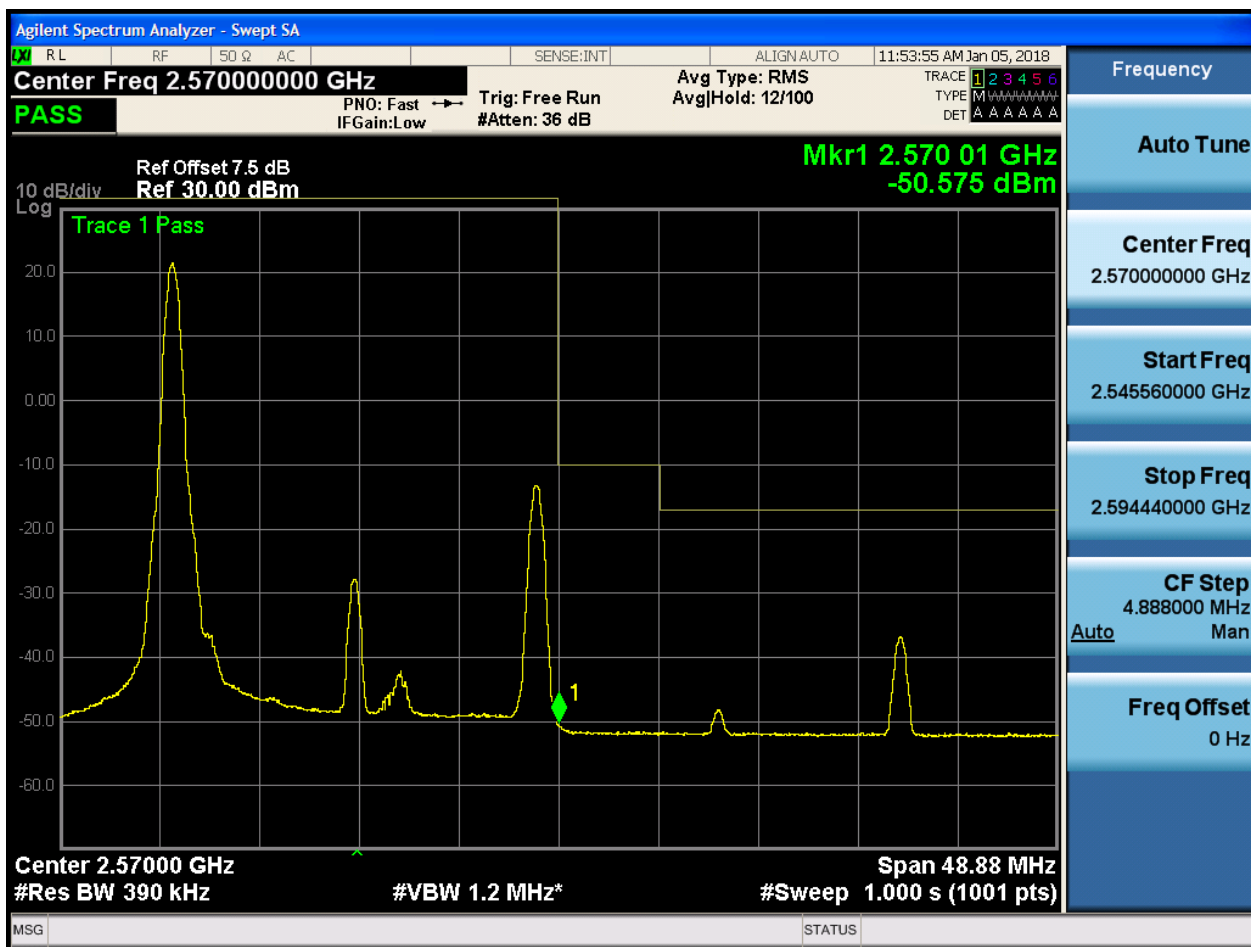
CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

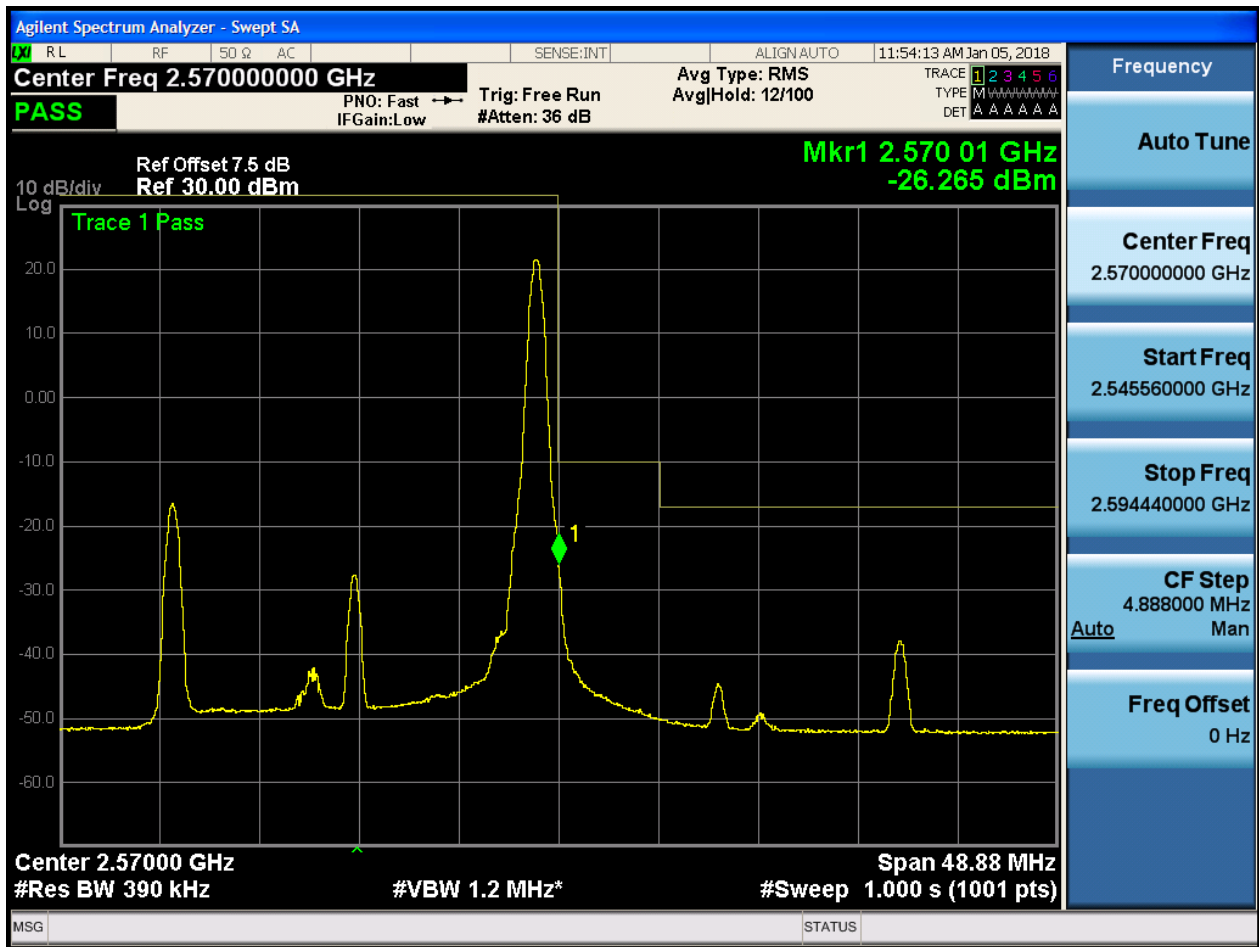


5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

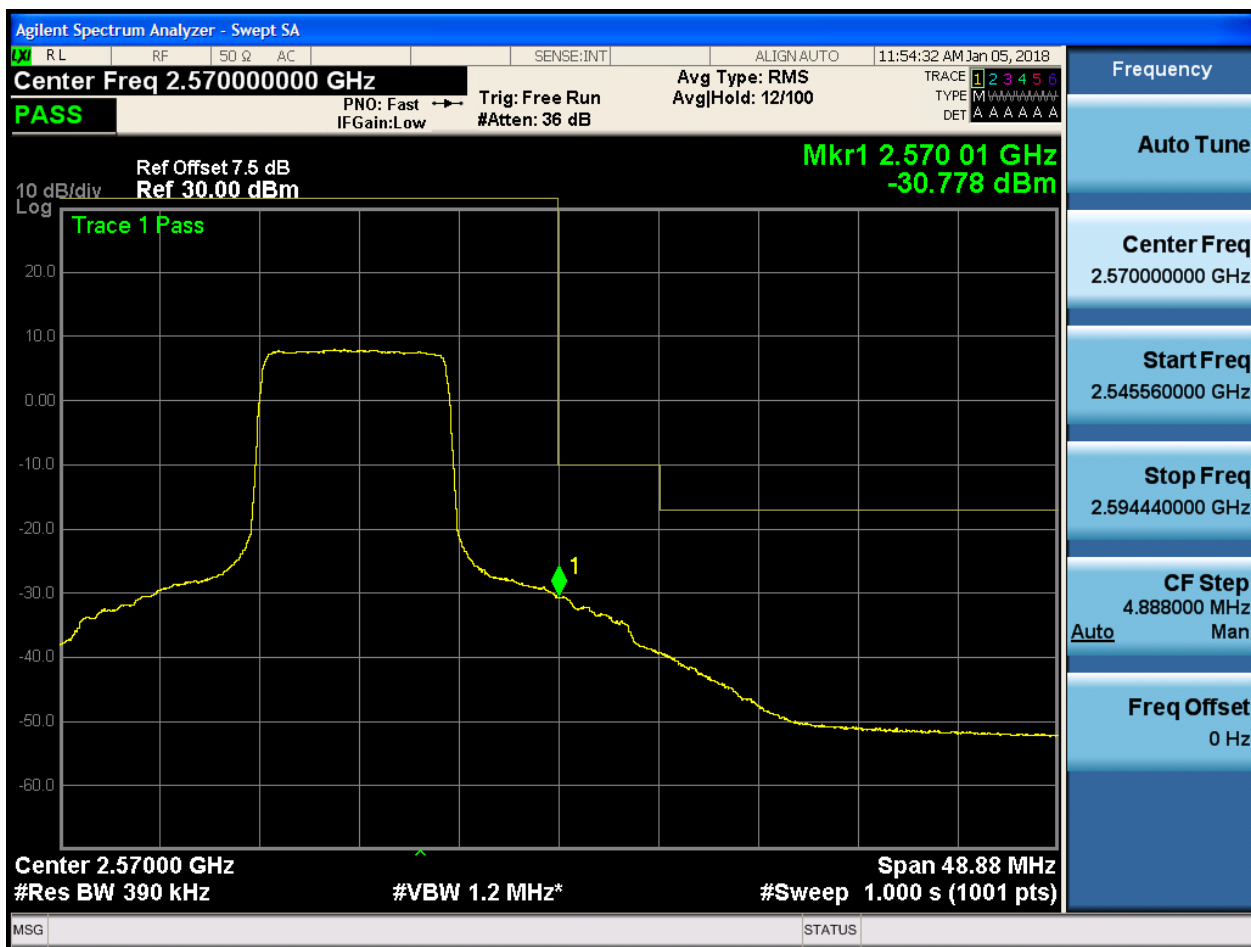


5.1.1.2.4.2.2 Test RB = RB1#99





5.1.1.2.4.2.3 Test RB = RB50#25





5.1.1.2.4.2.4 Test RB = RB100#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 $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / \text{RBW})$ " 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

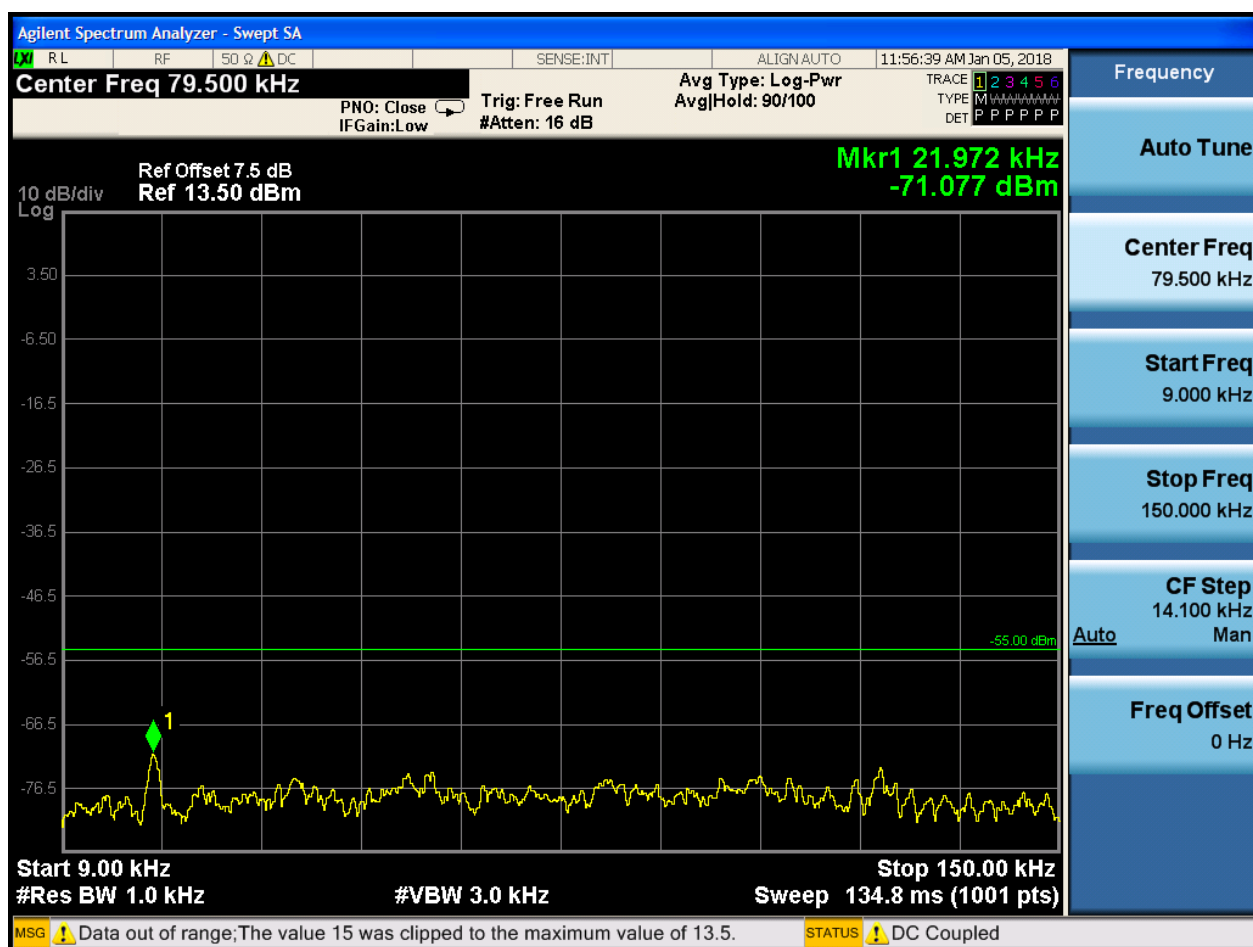
6.1.1 Test Band = BAND7

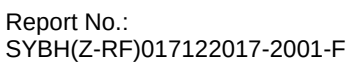
6.1.1.1 Test Mode = LTE/TM1

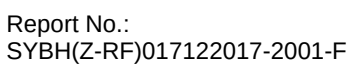
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



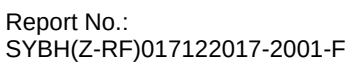


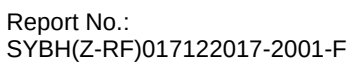


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



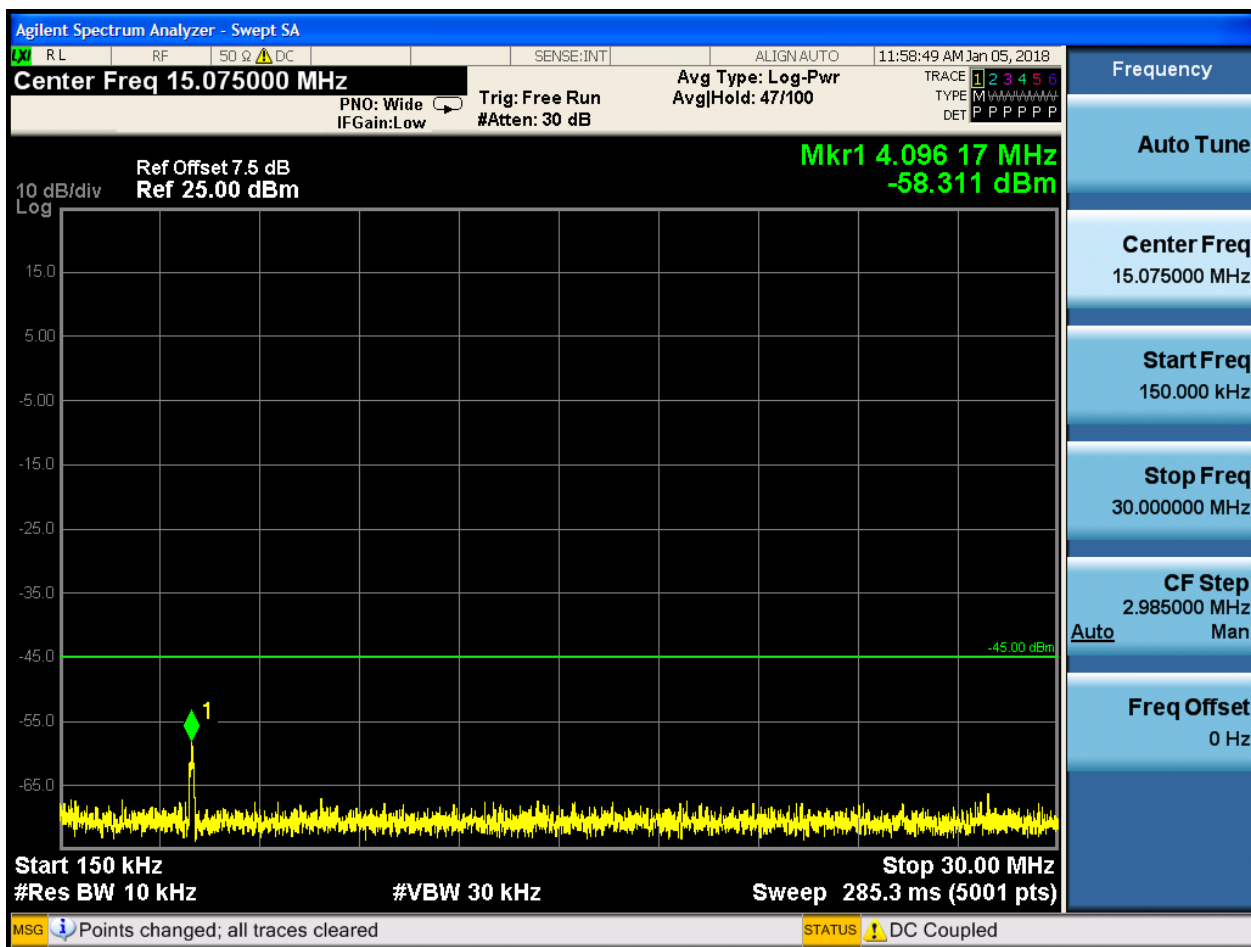


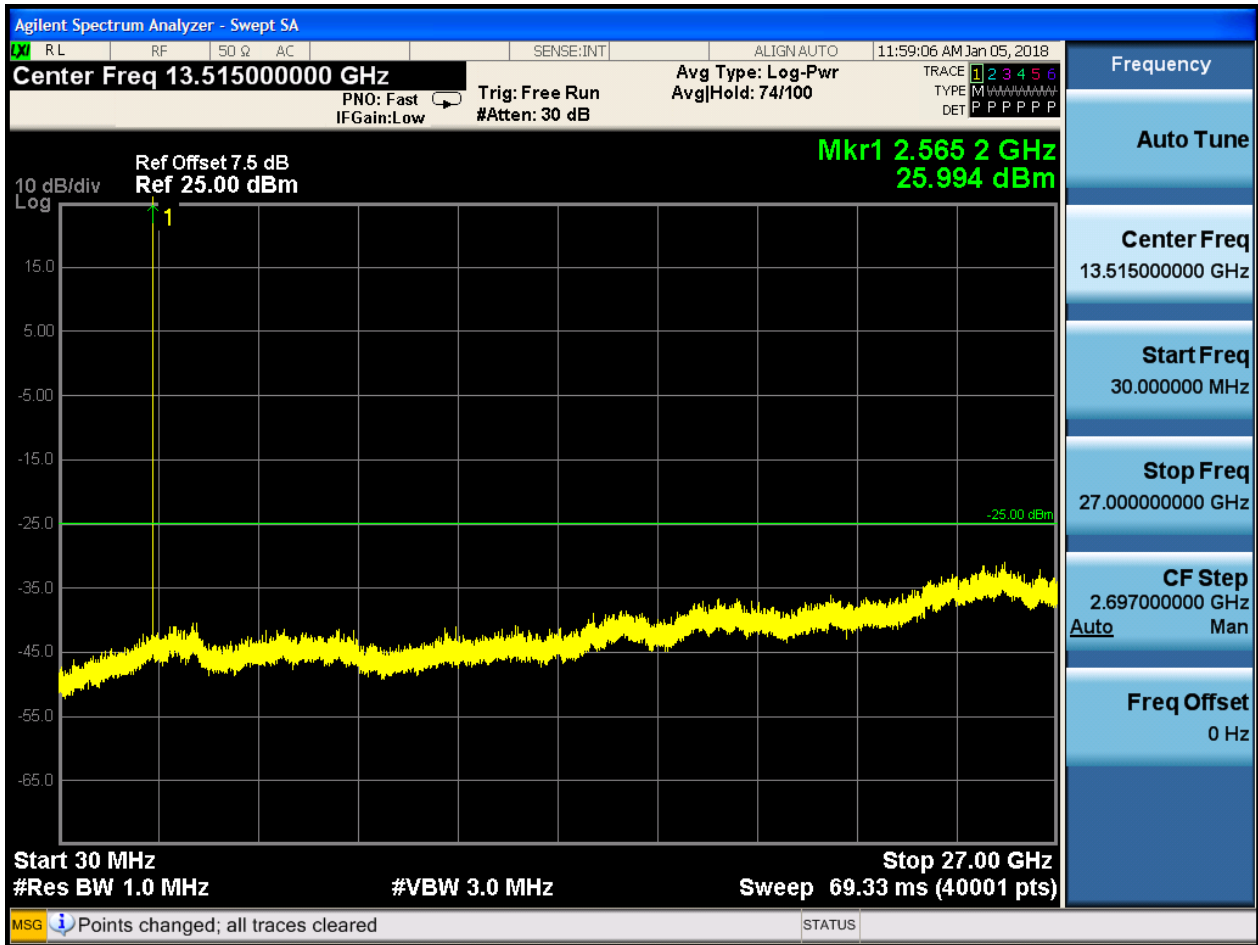


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0

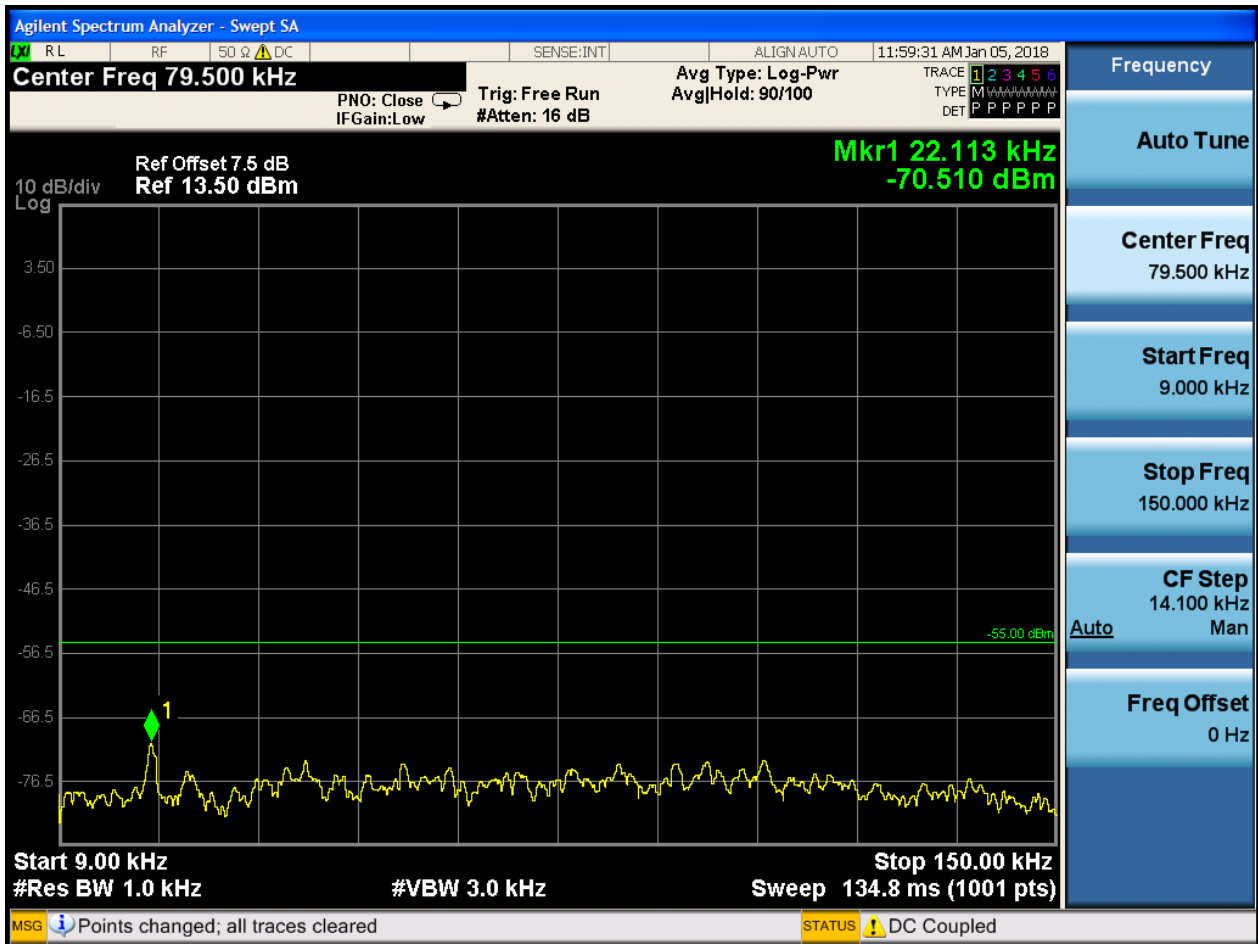


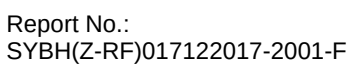


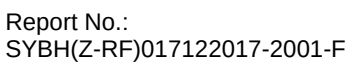




6.1.1.1.2.1.1 Test RB = RB1#0

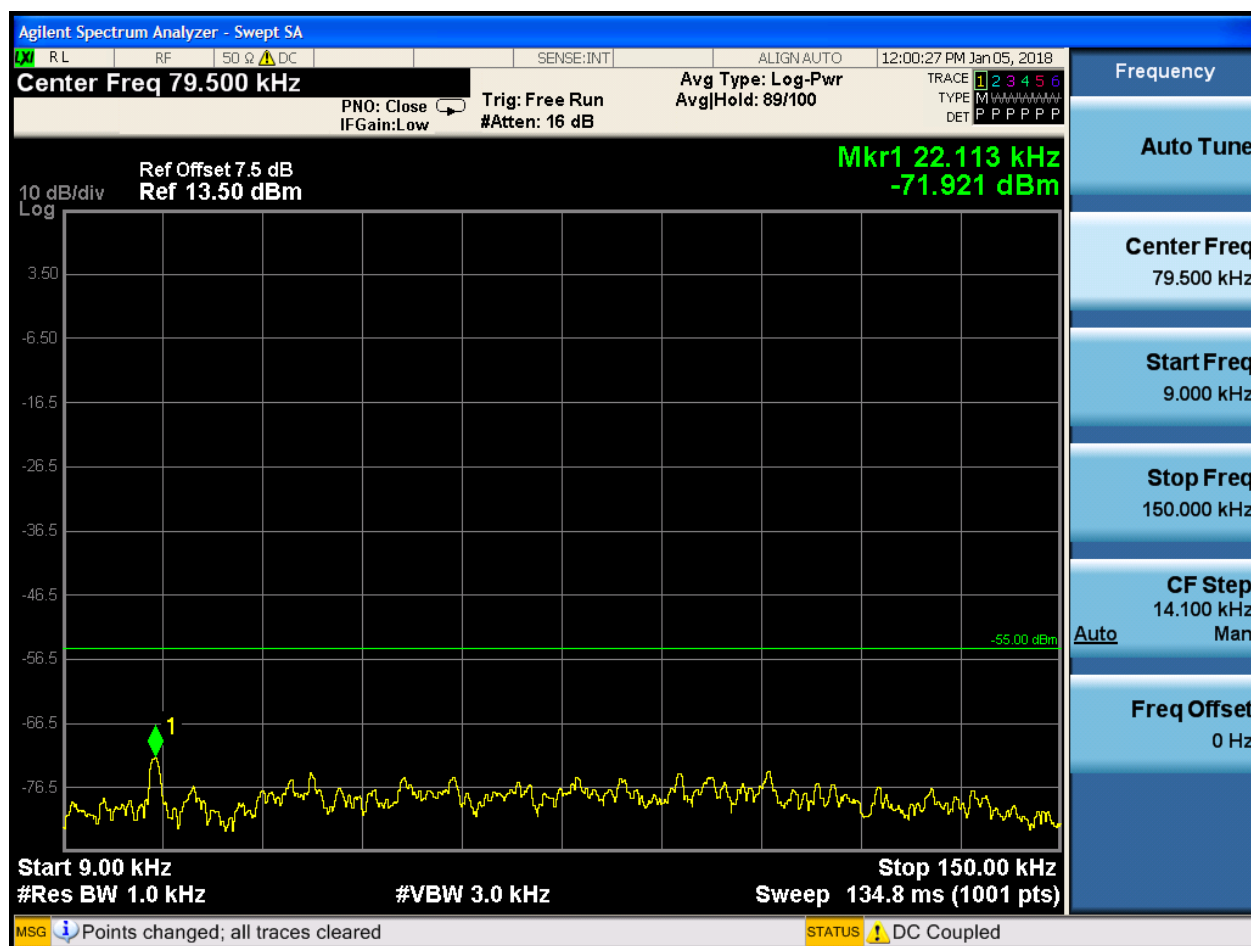


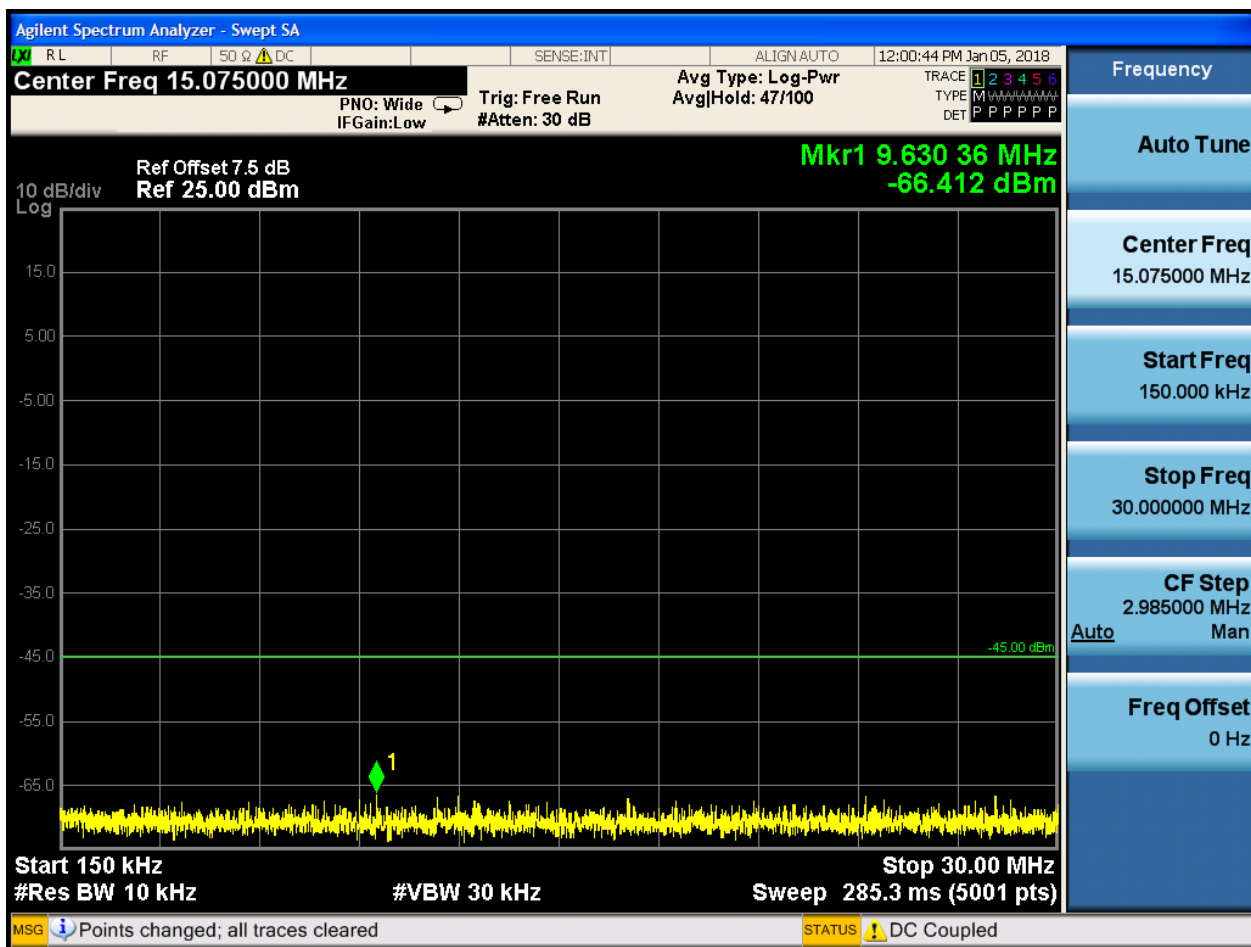


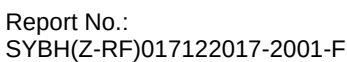


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



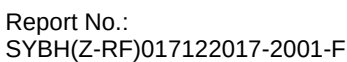


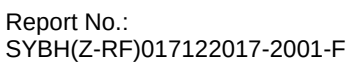


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0



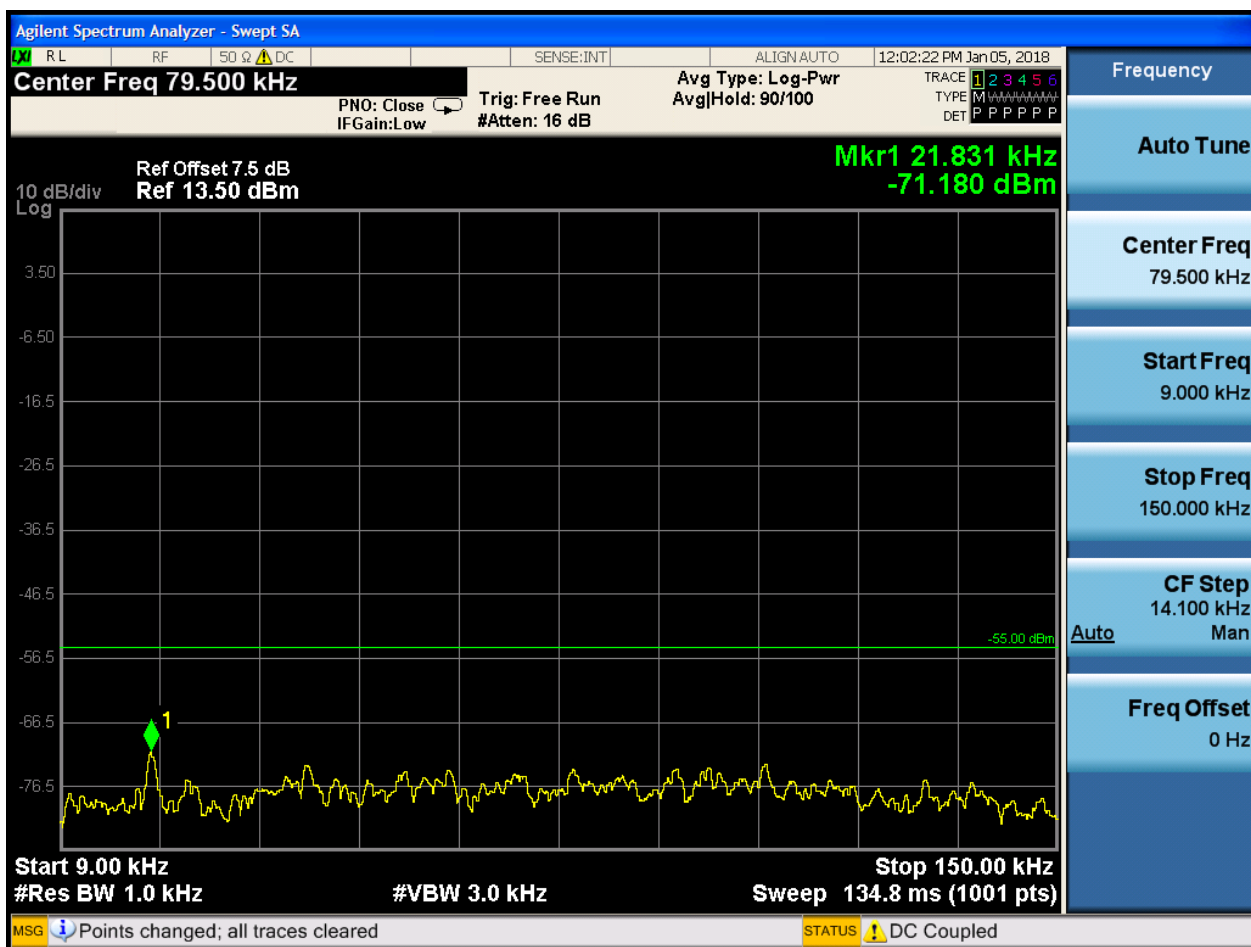


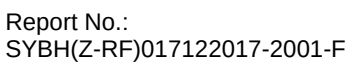


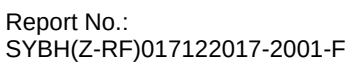
6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0

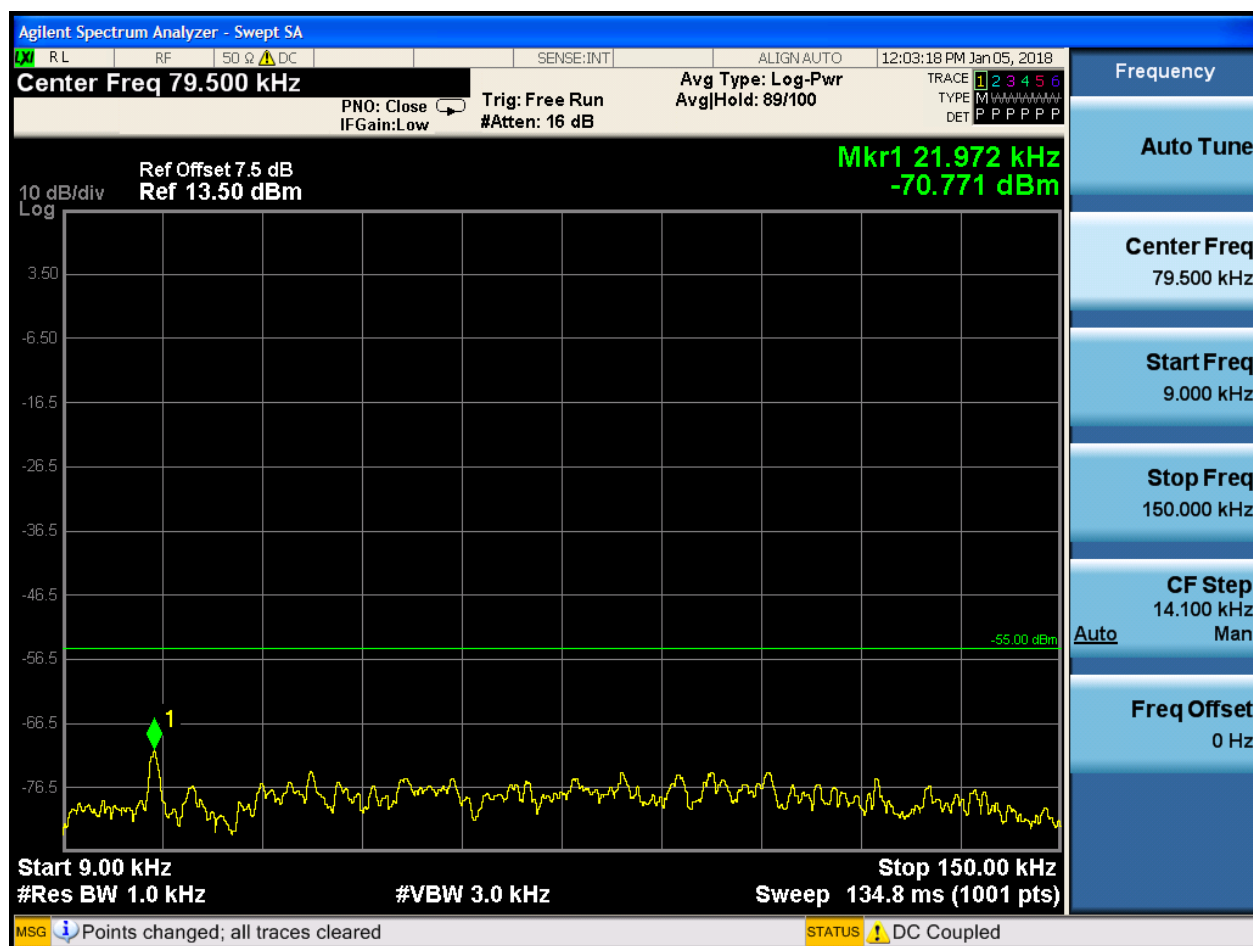




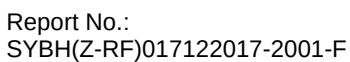


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

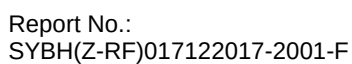


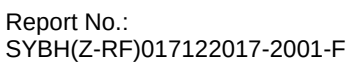


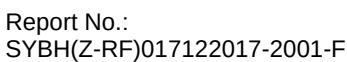




6.1.1.1.3.3.1 Test RB = RB1#0





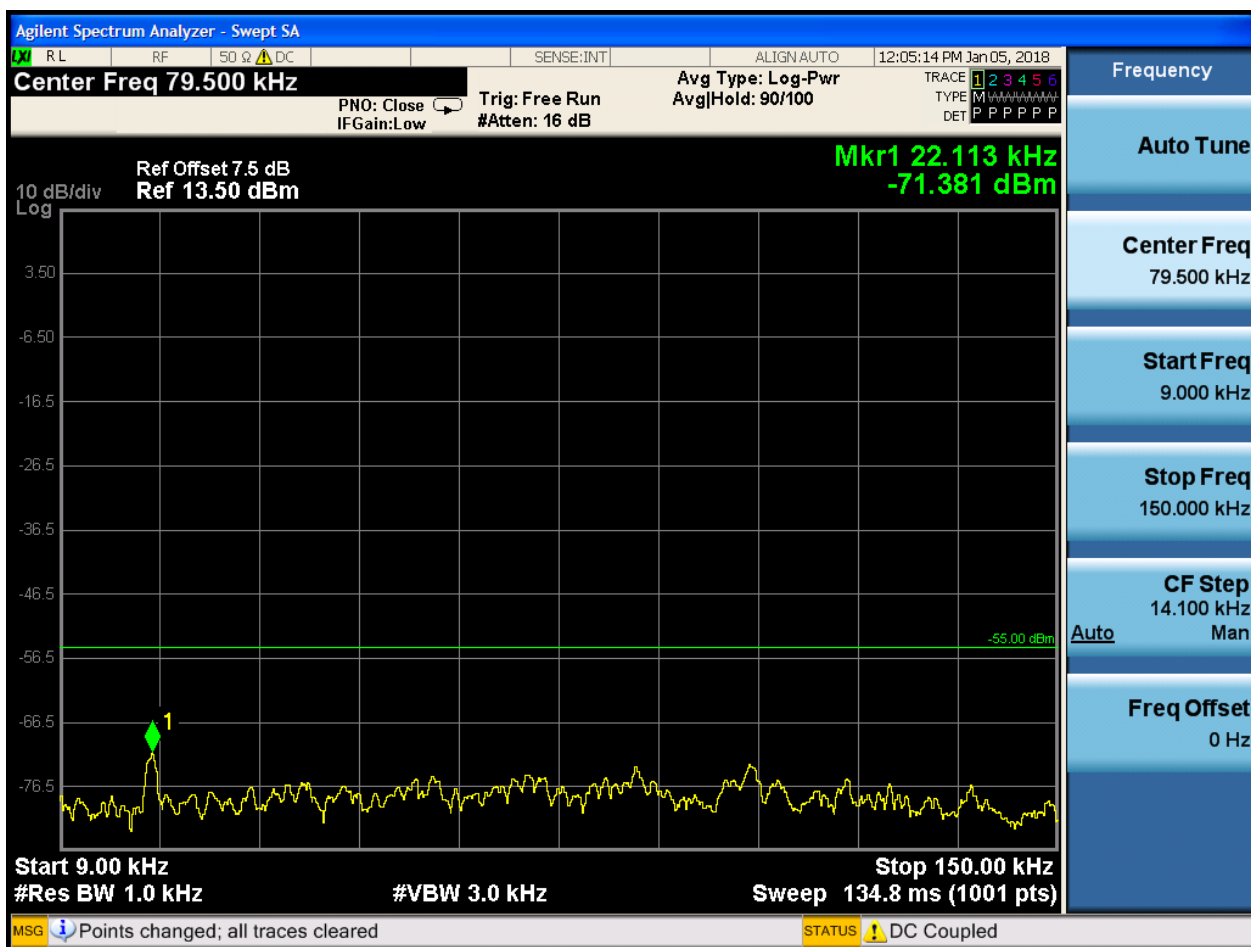




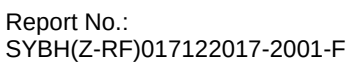
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



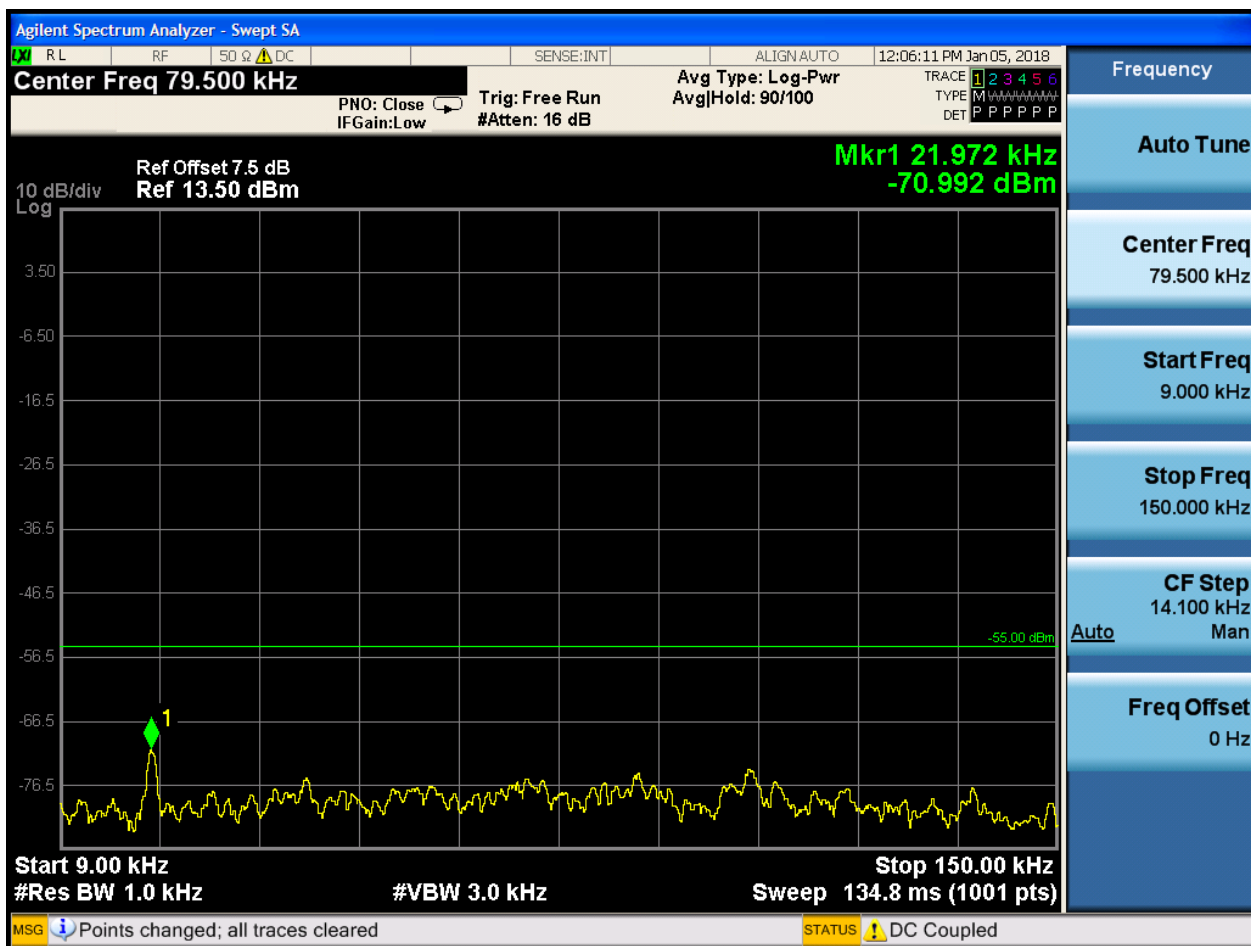


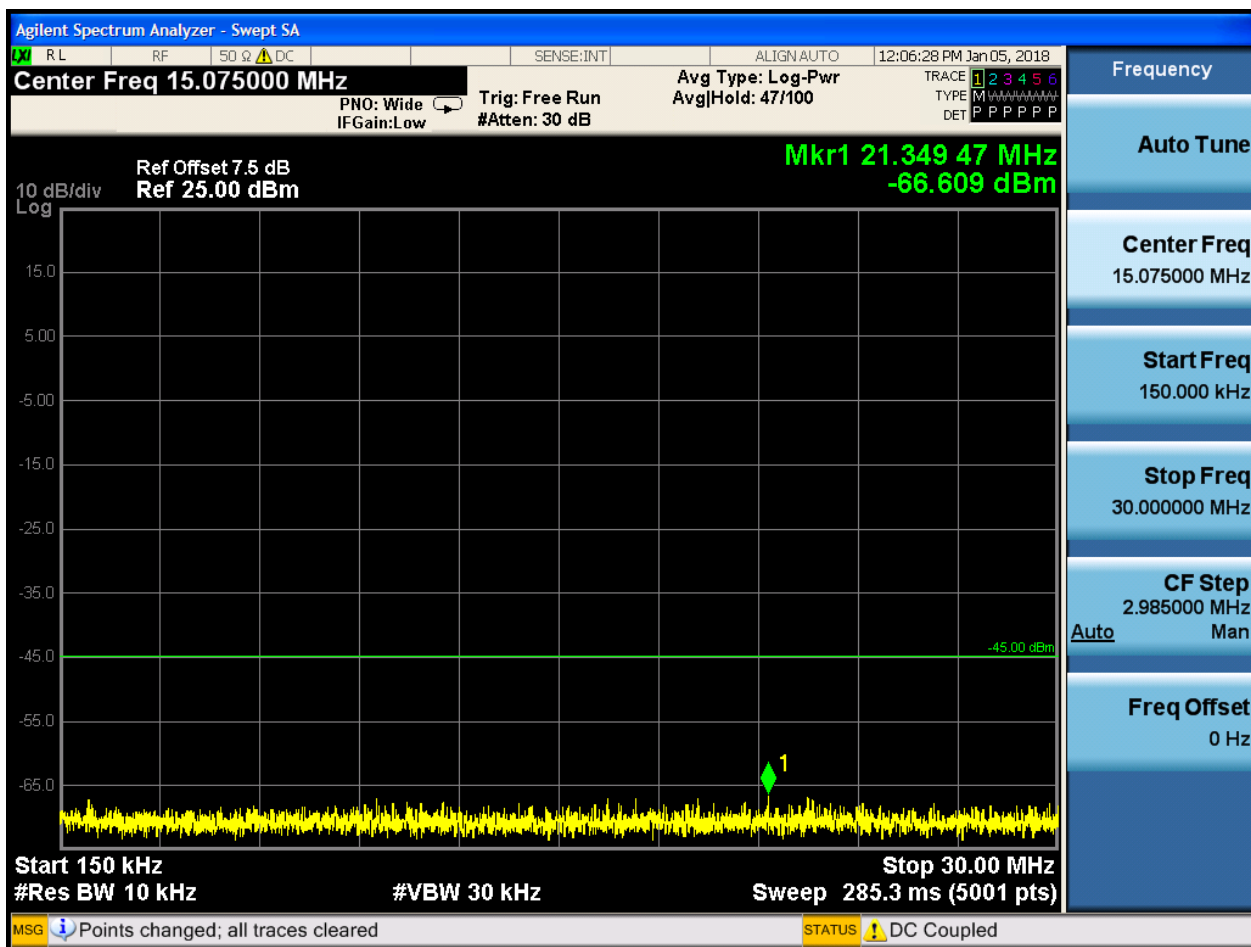


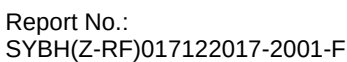


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0

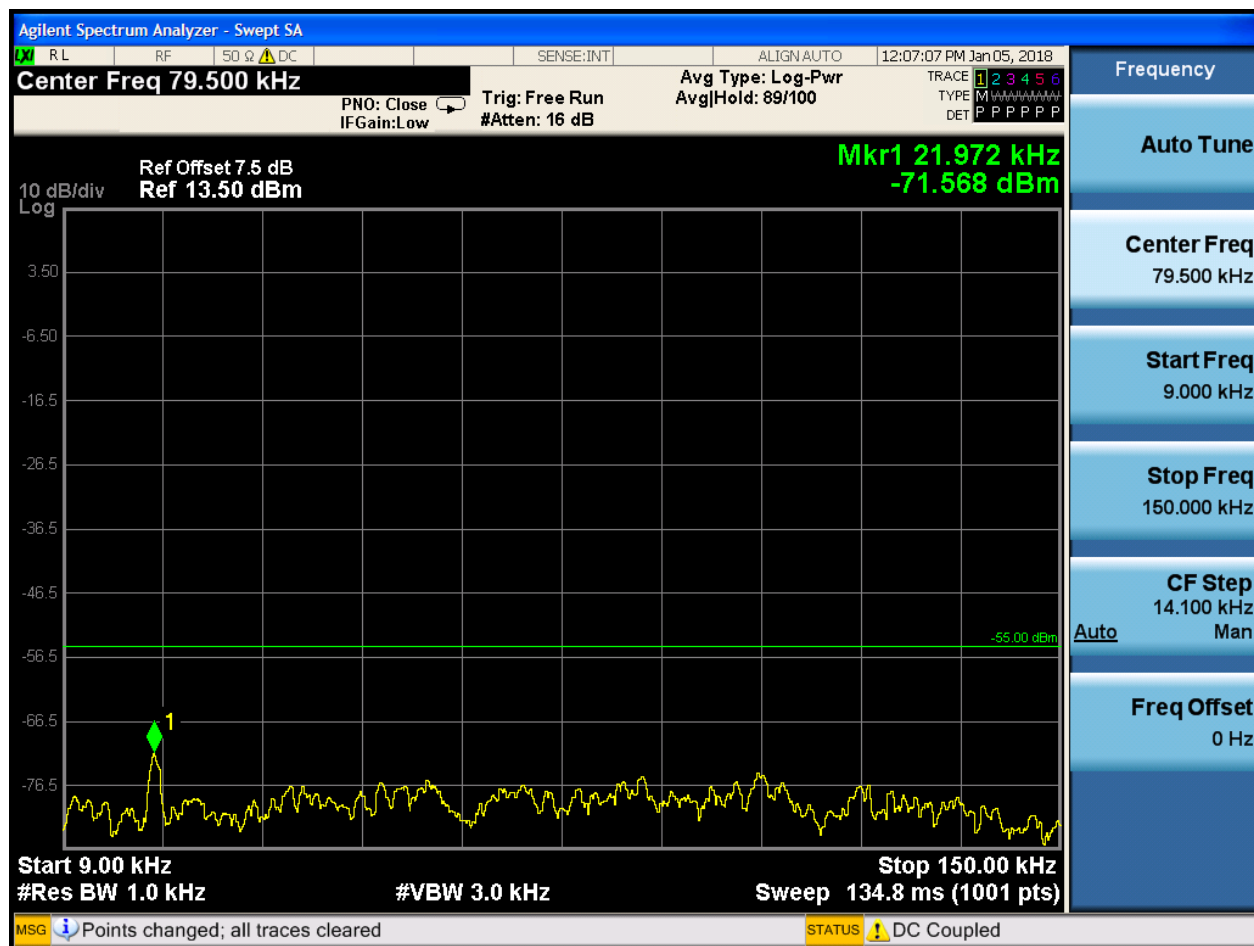


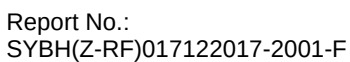


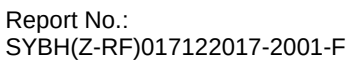


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







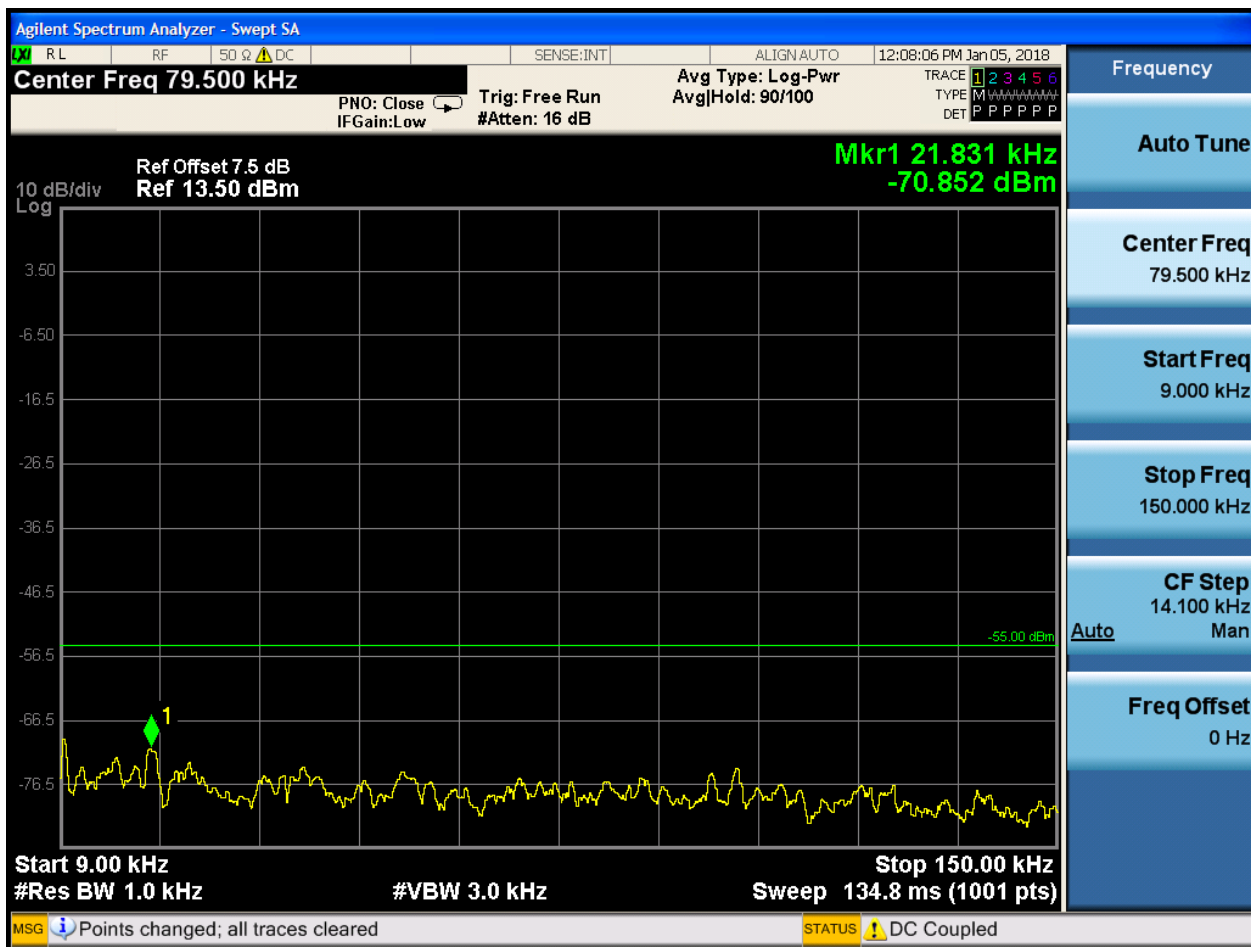


6.1.1.2 Test Mode = LTE/TM2

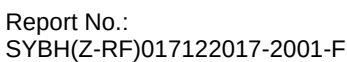
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0





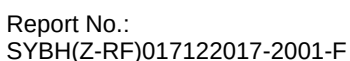


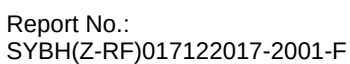


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



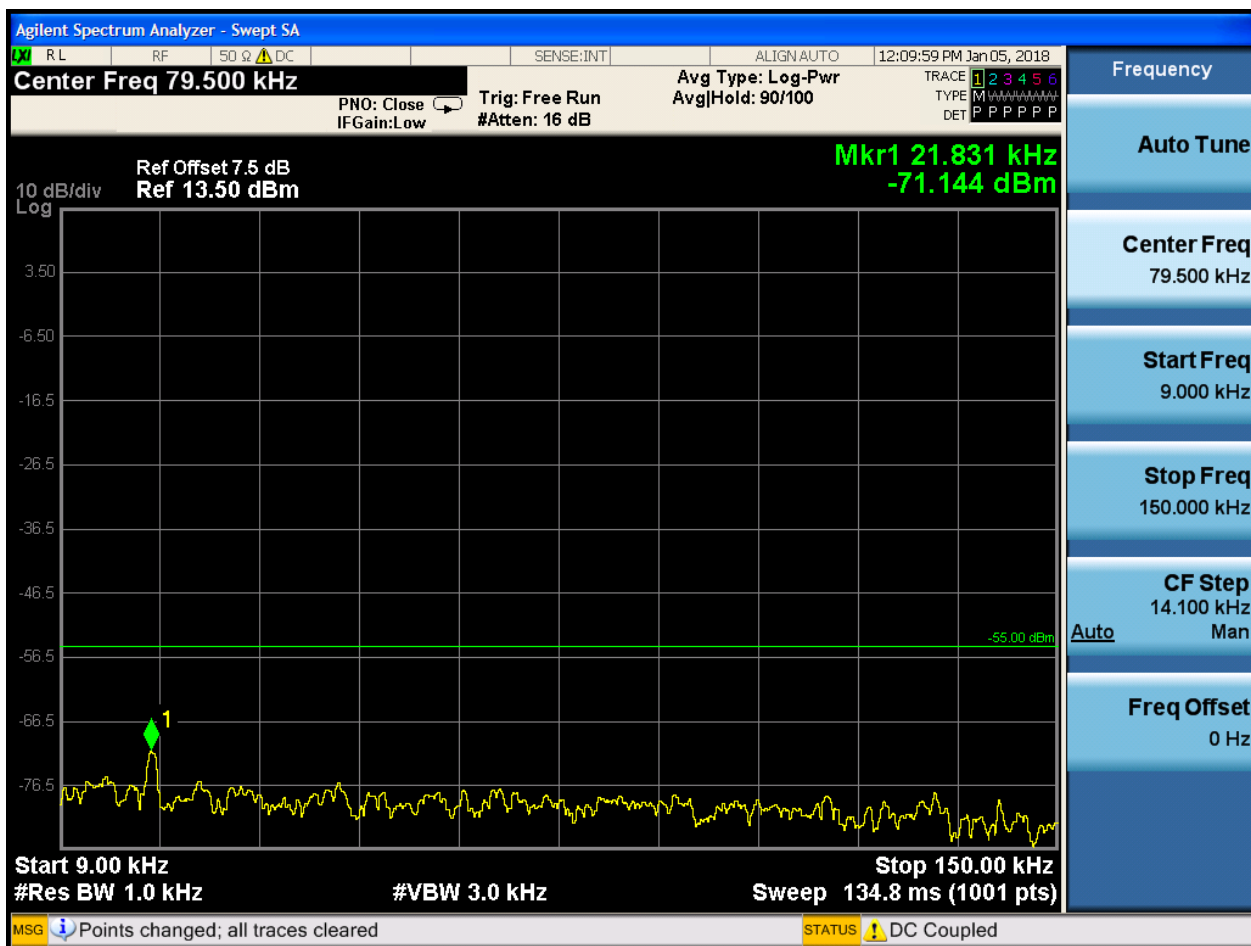


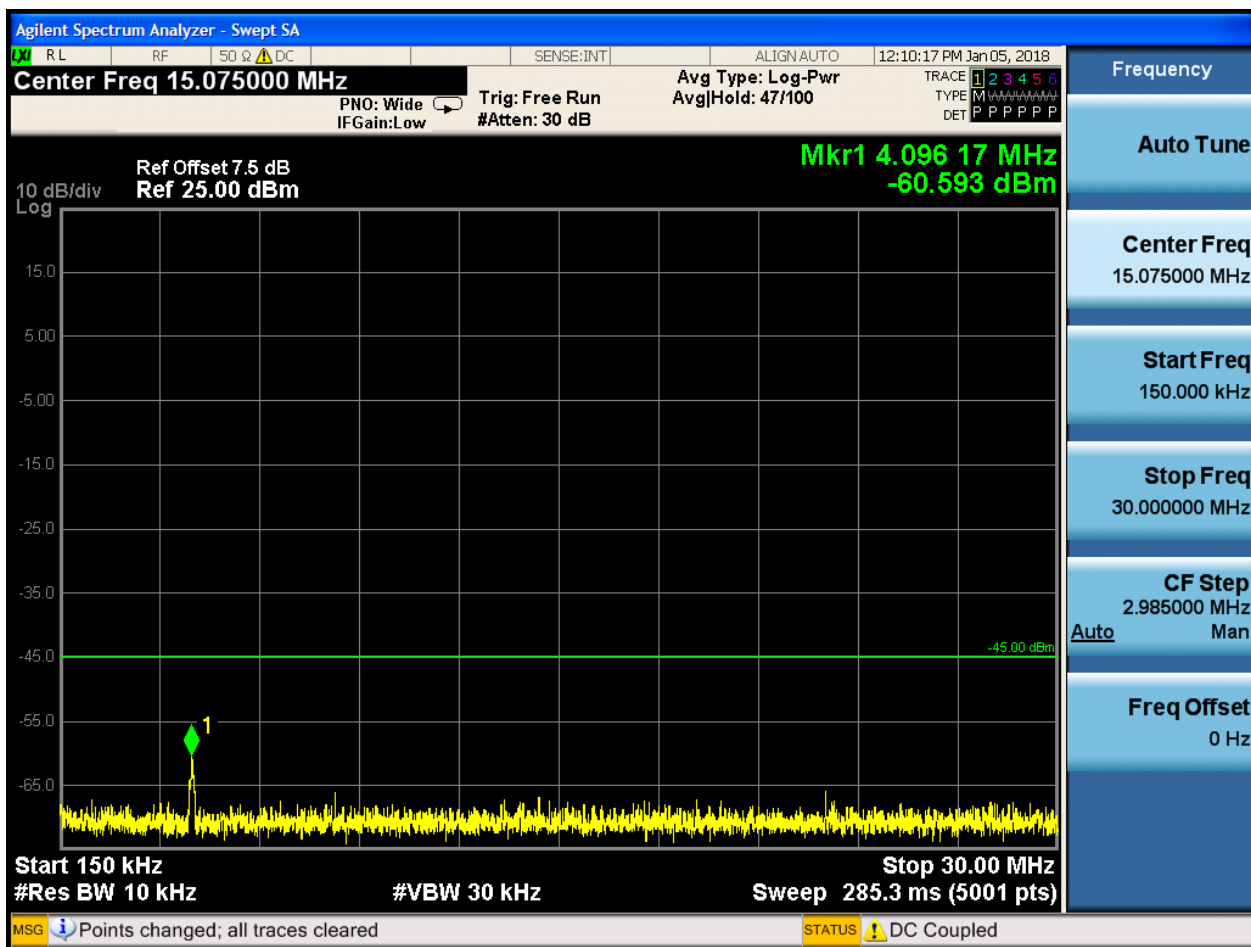


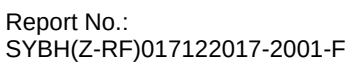


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





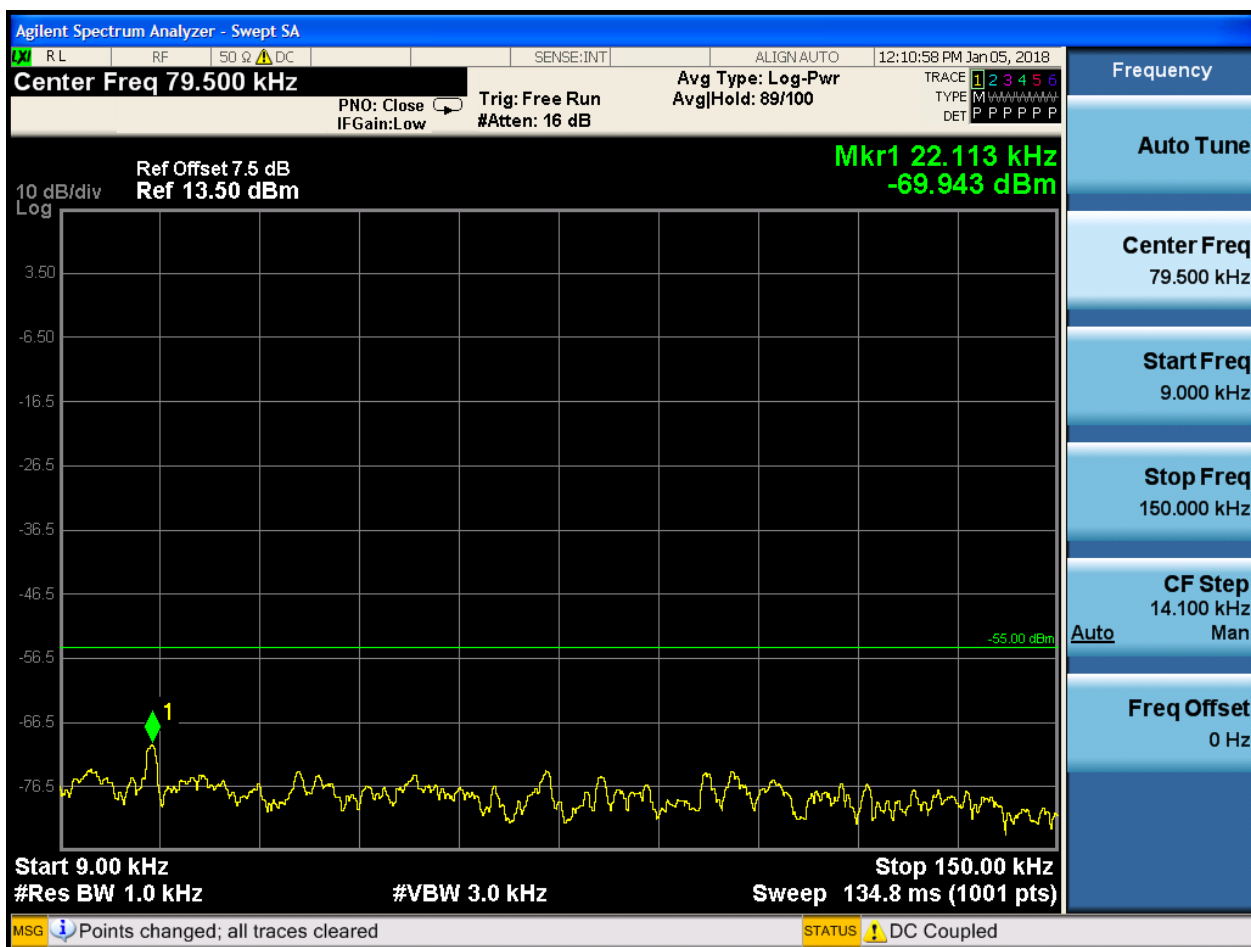


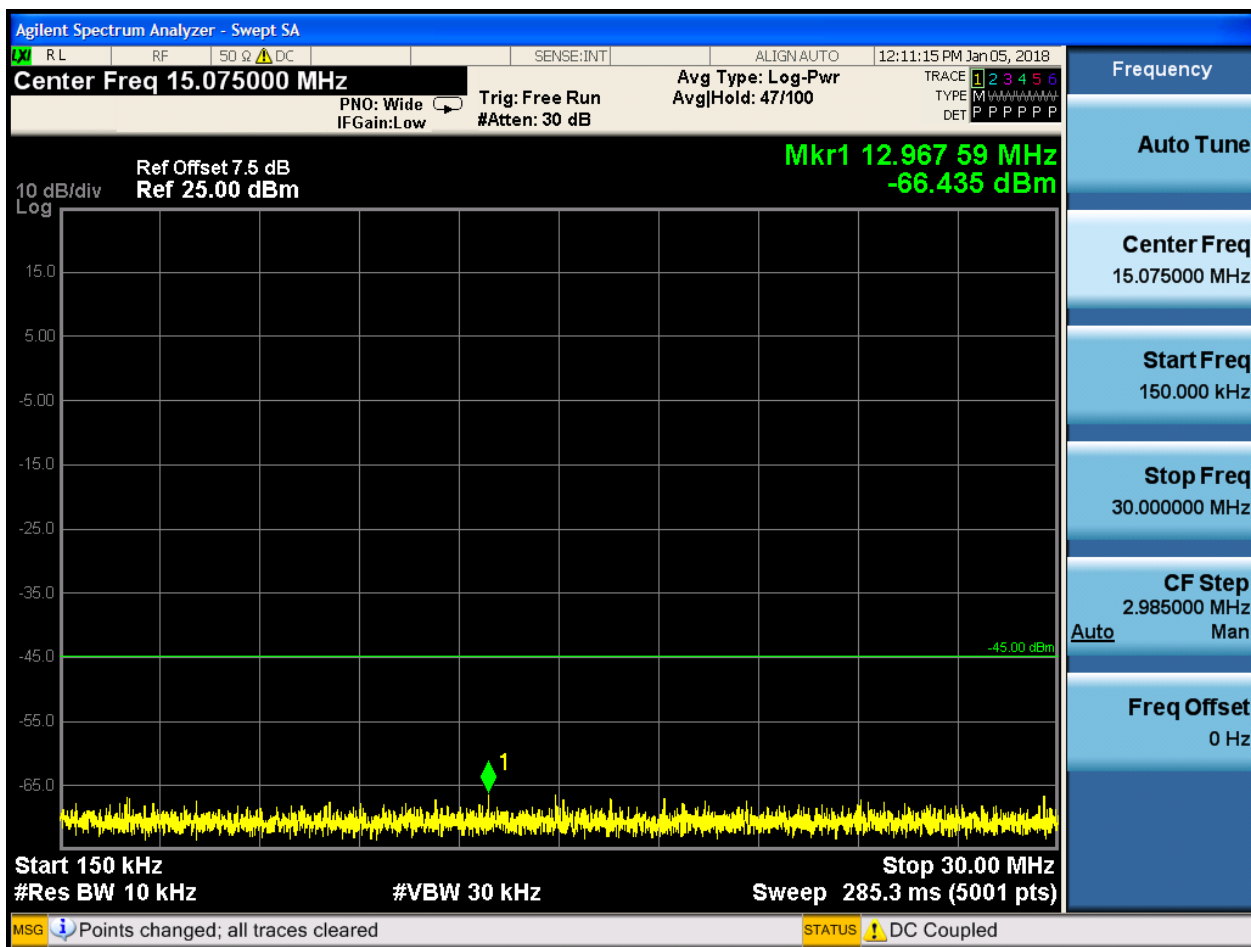


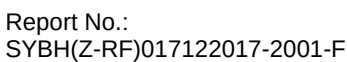
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0

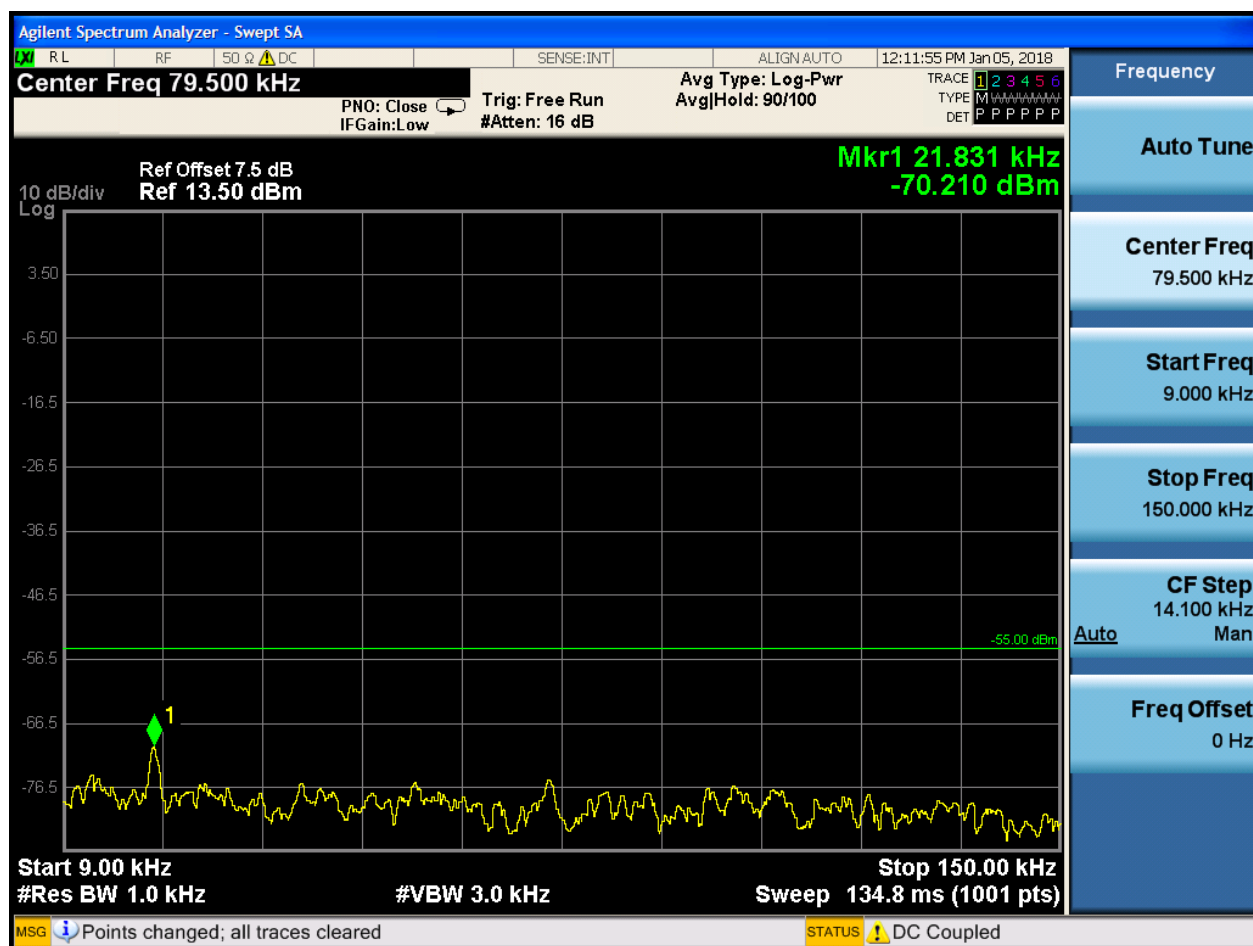




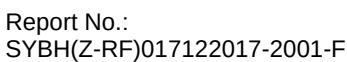


6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0

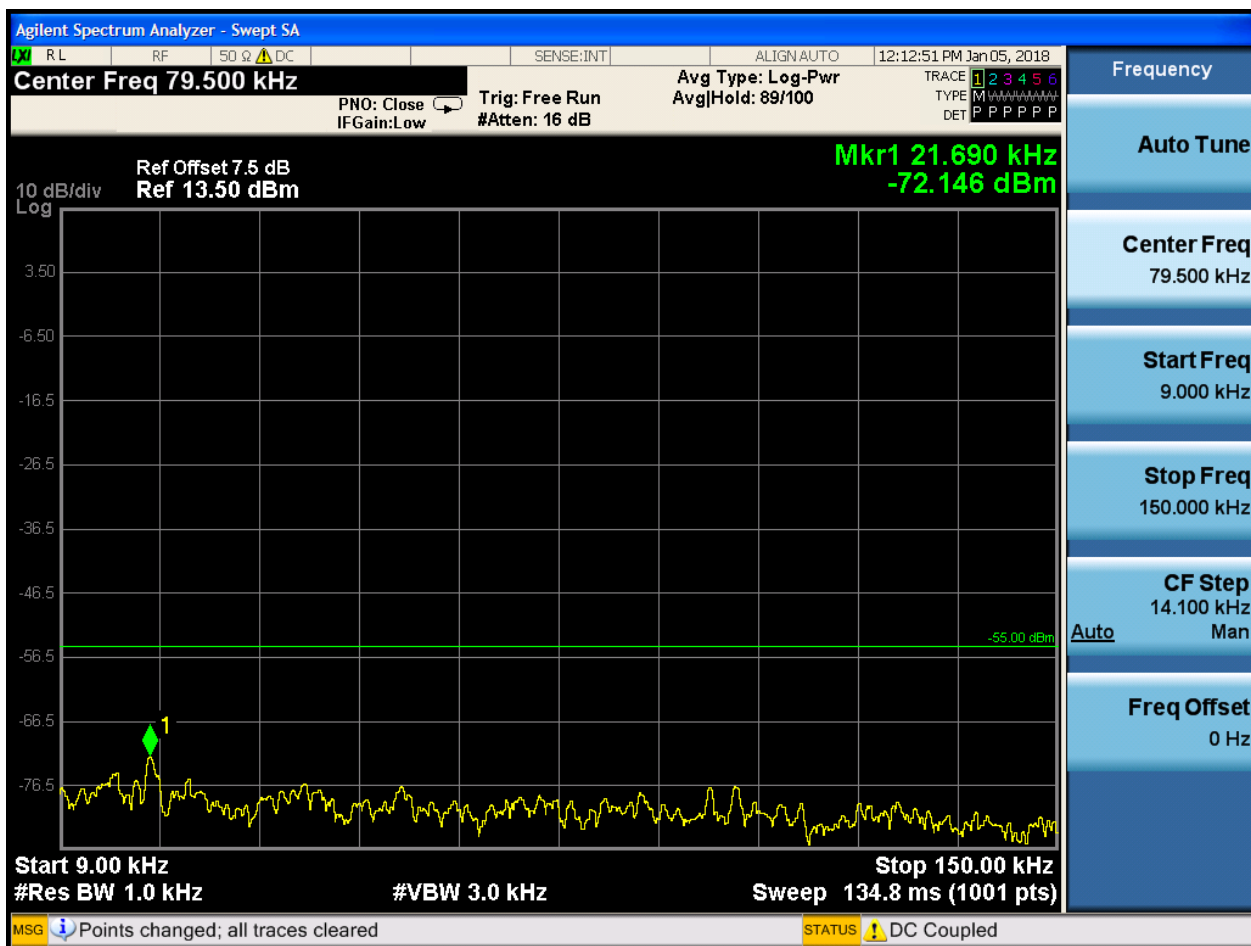


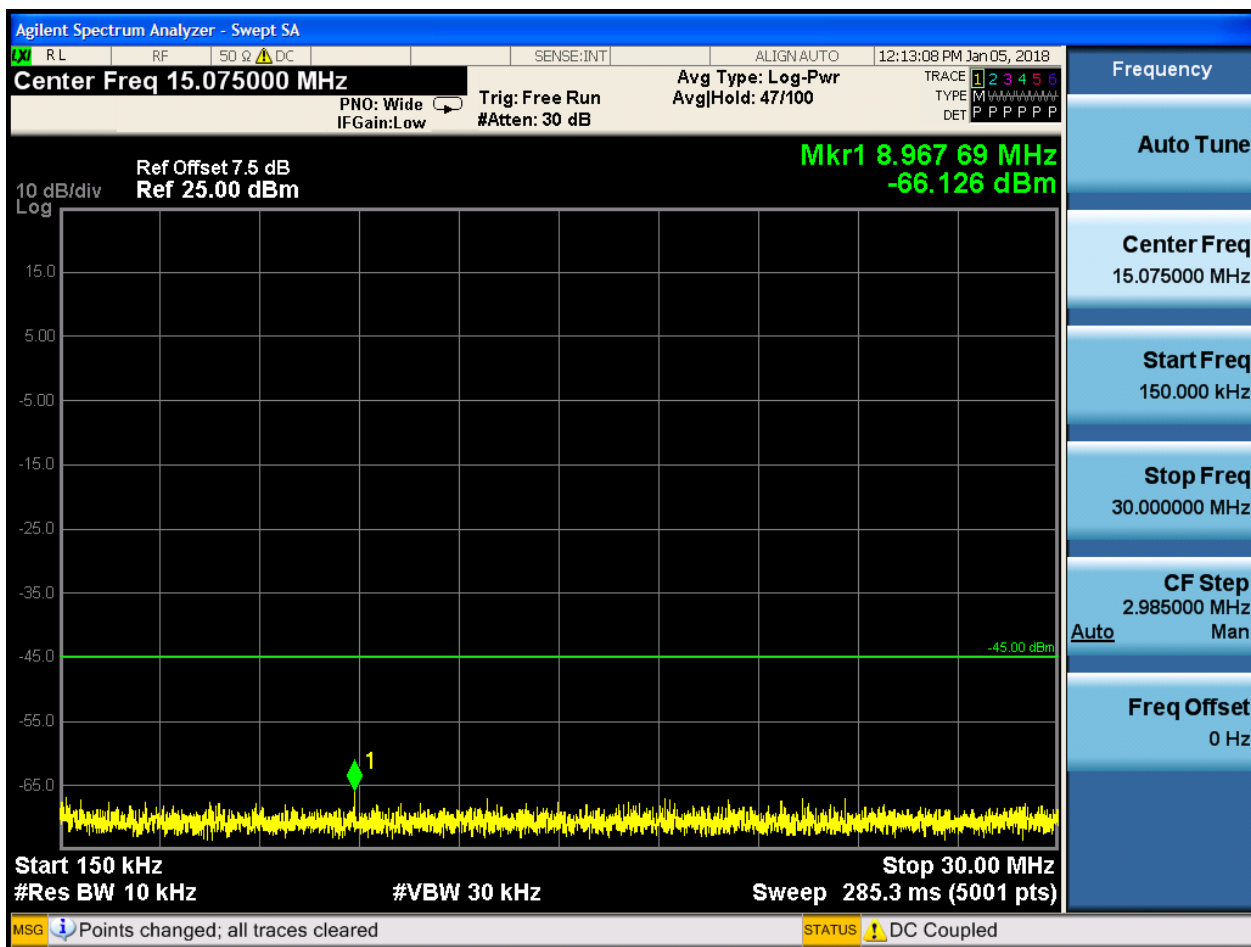


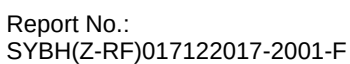


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





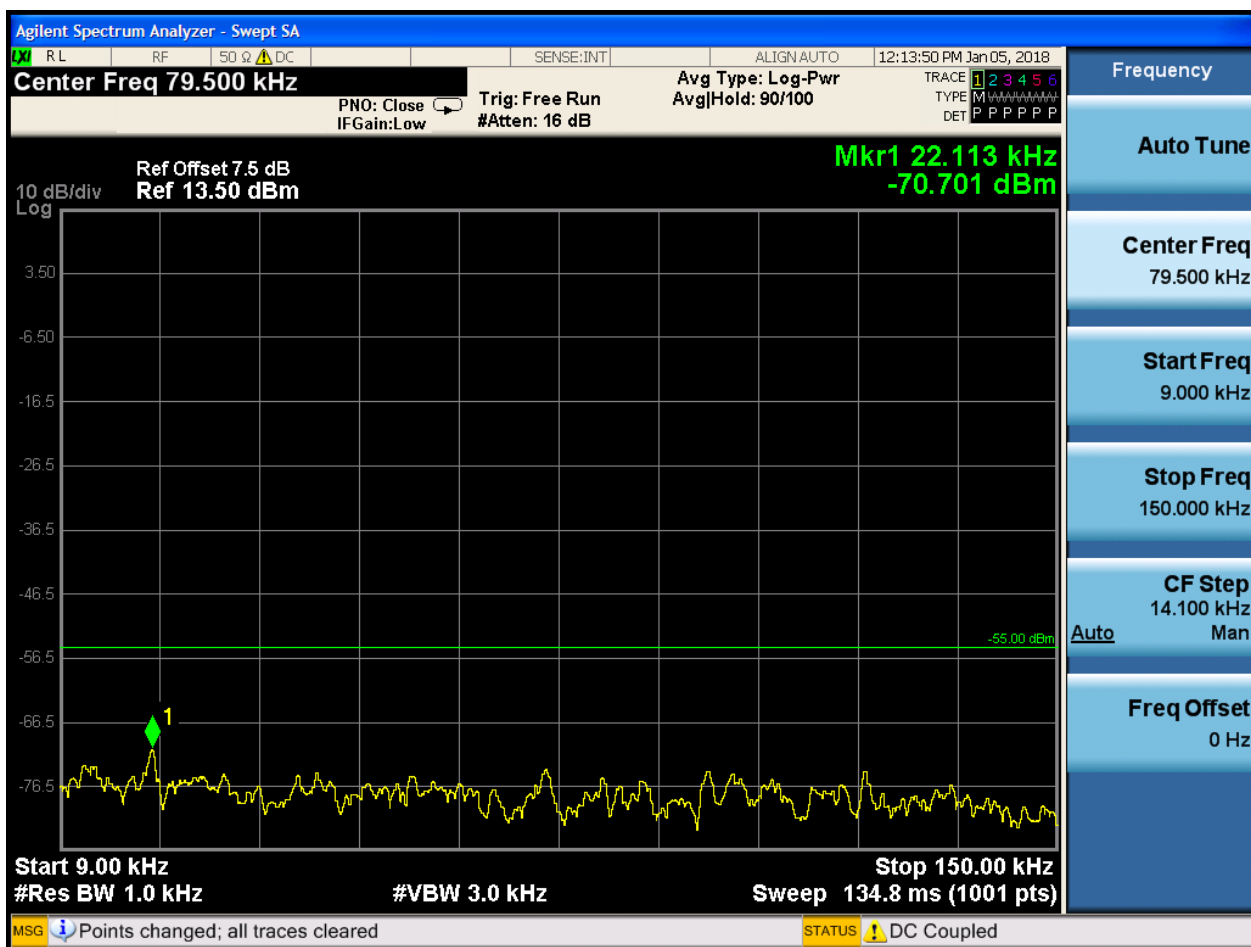


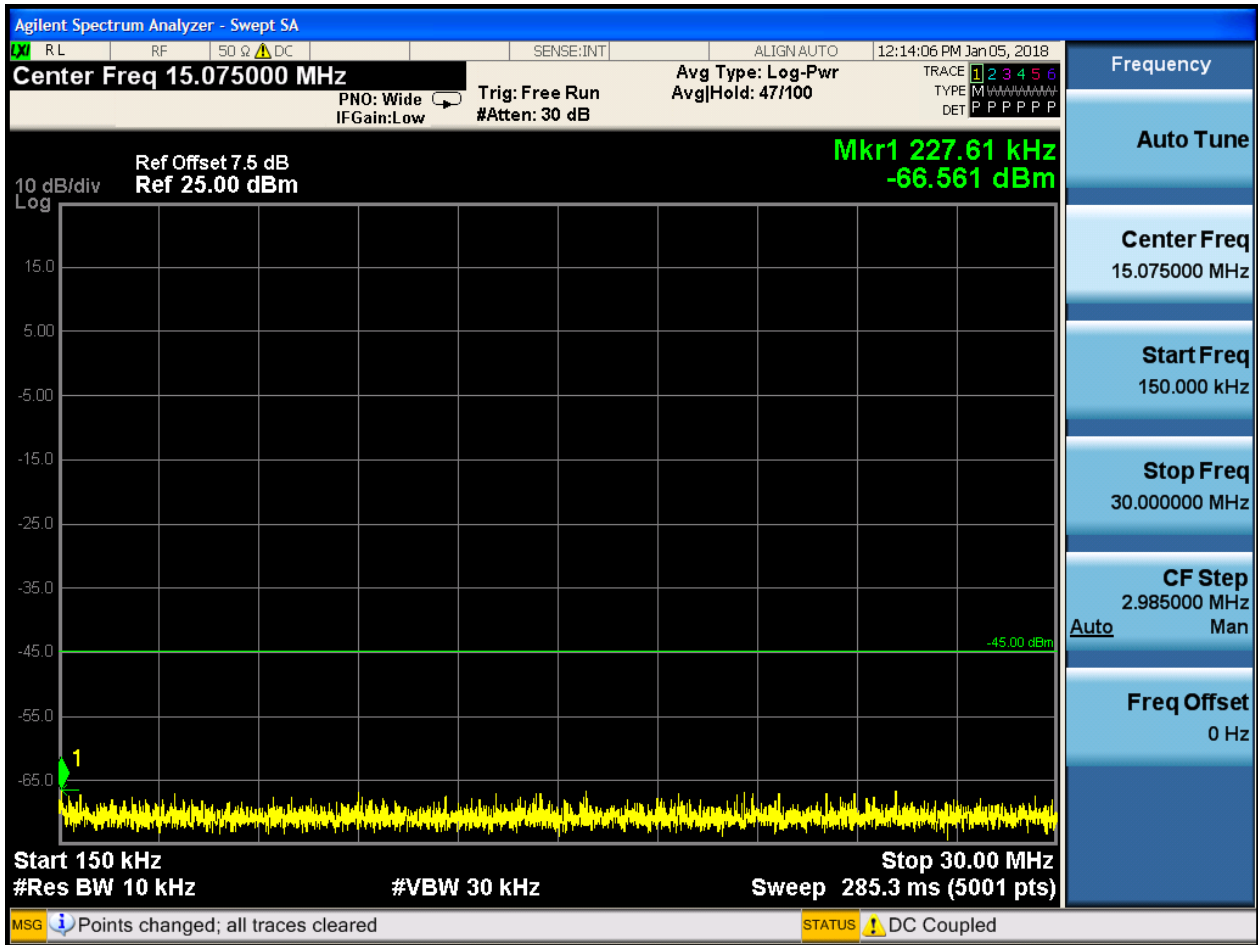


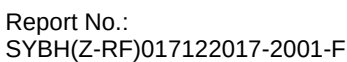
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0

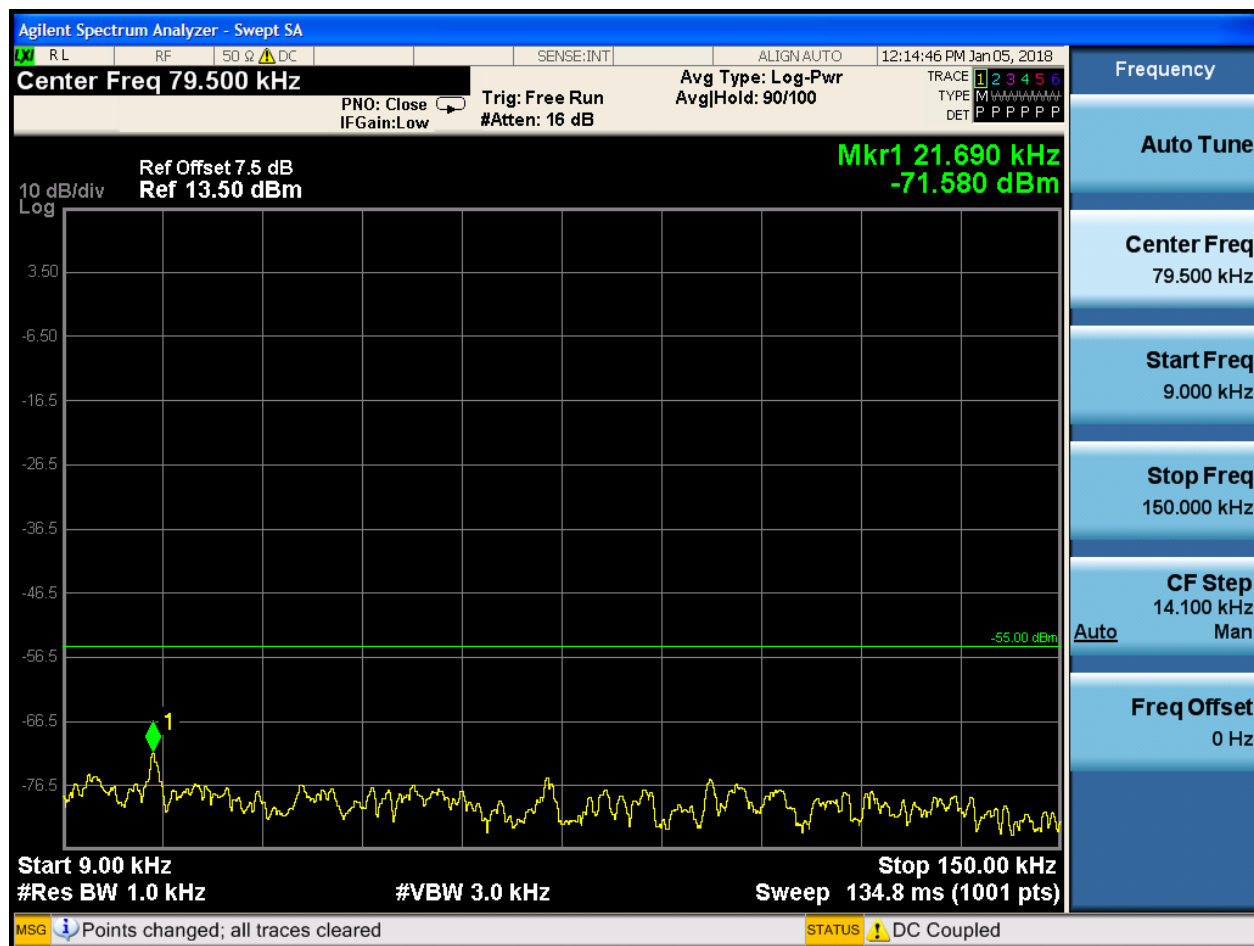


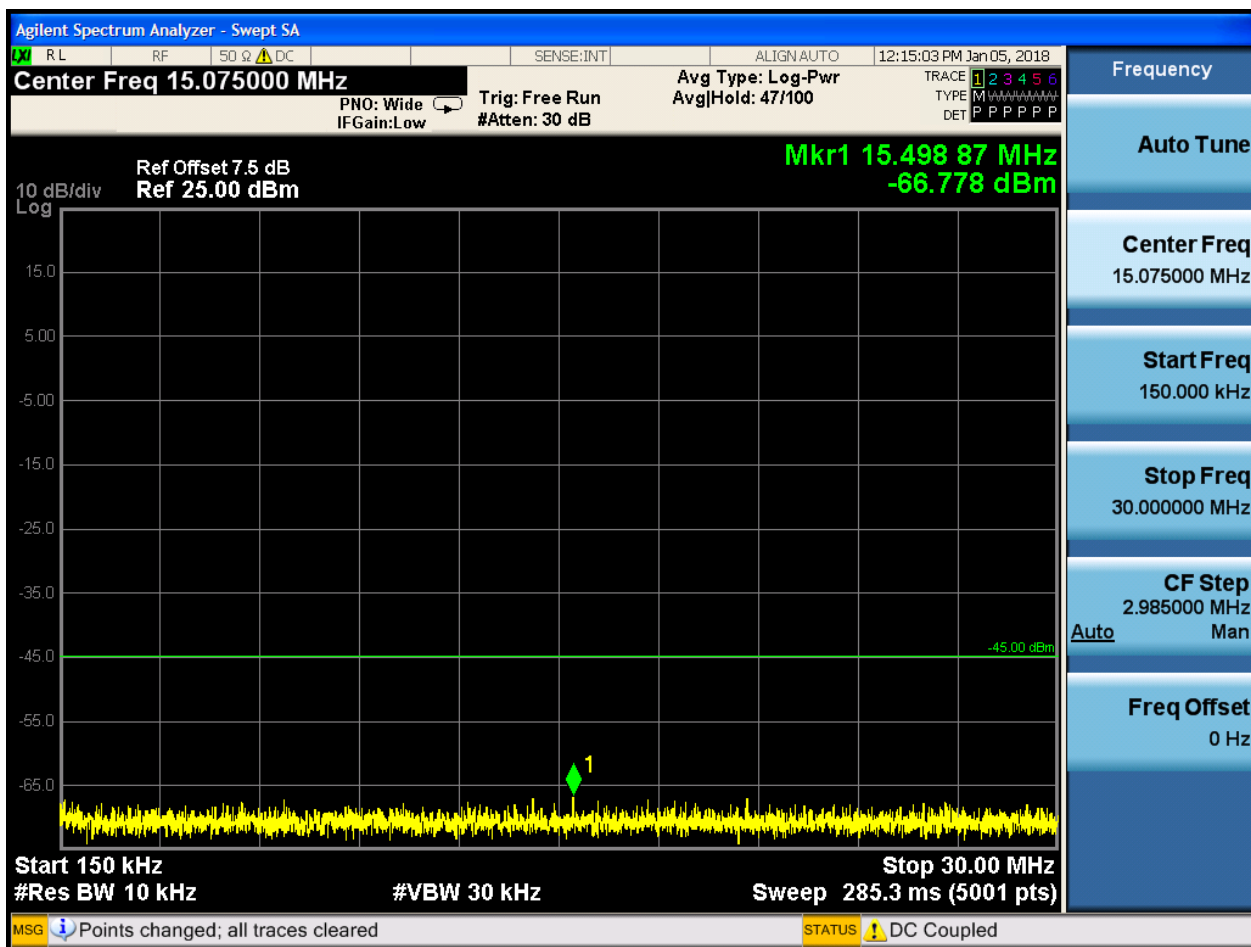


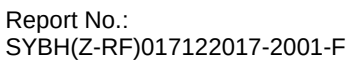


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0

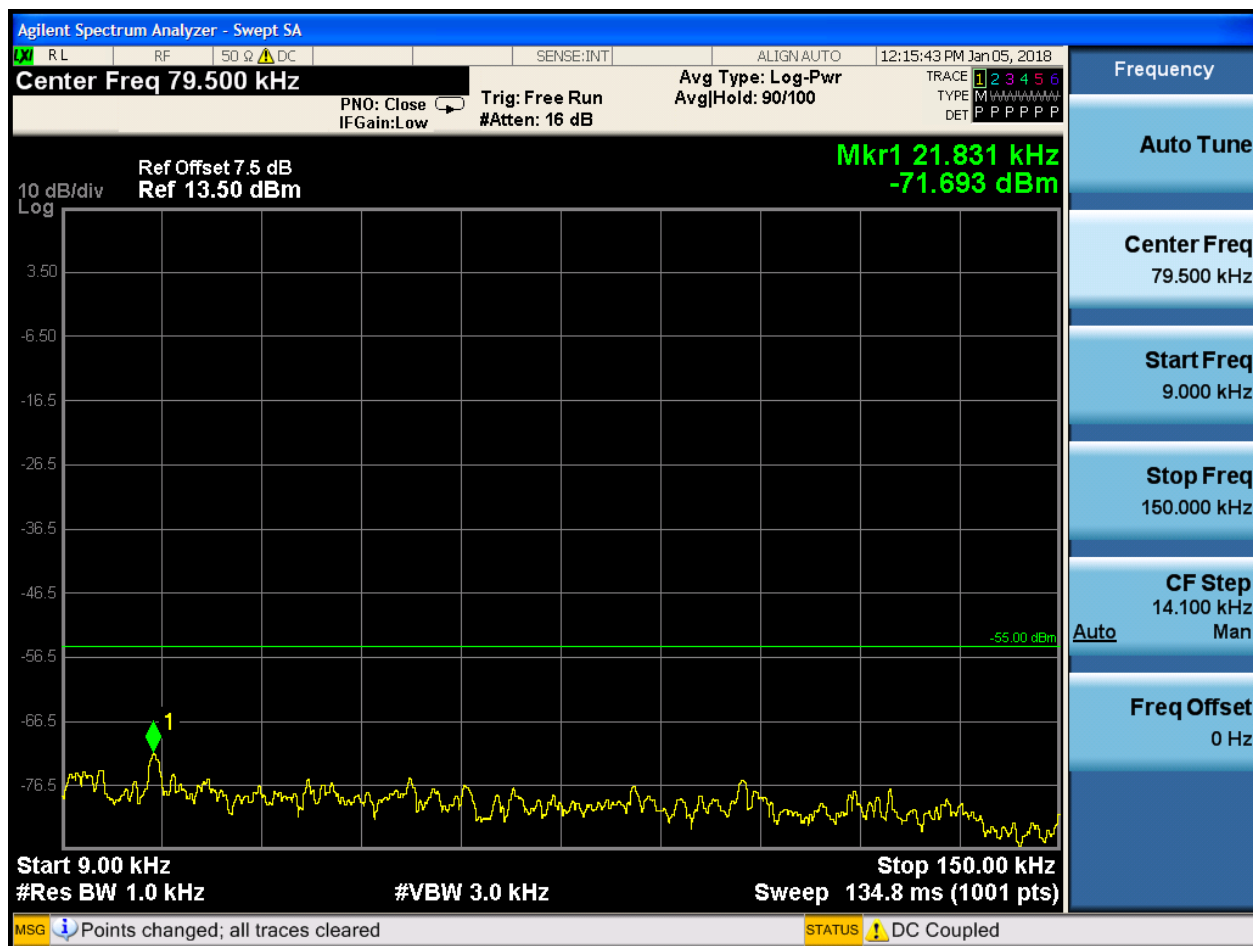


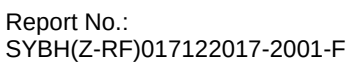


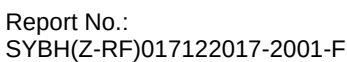


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





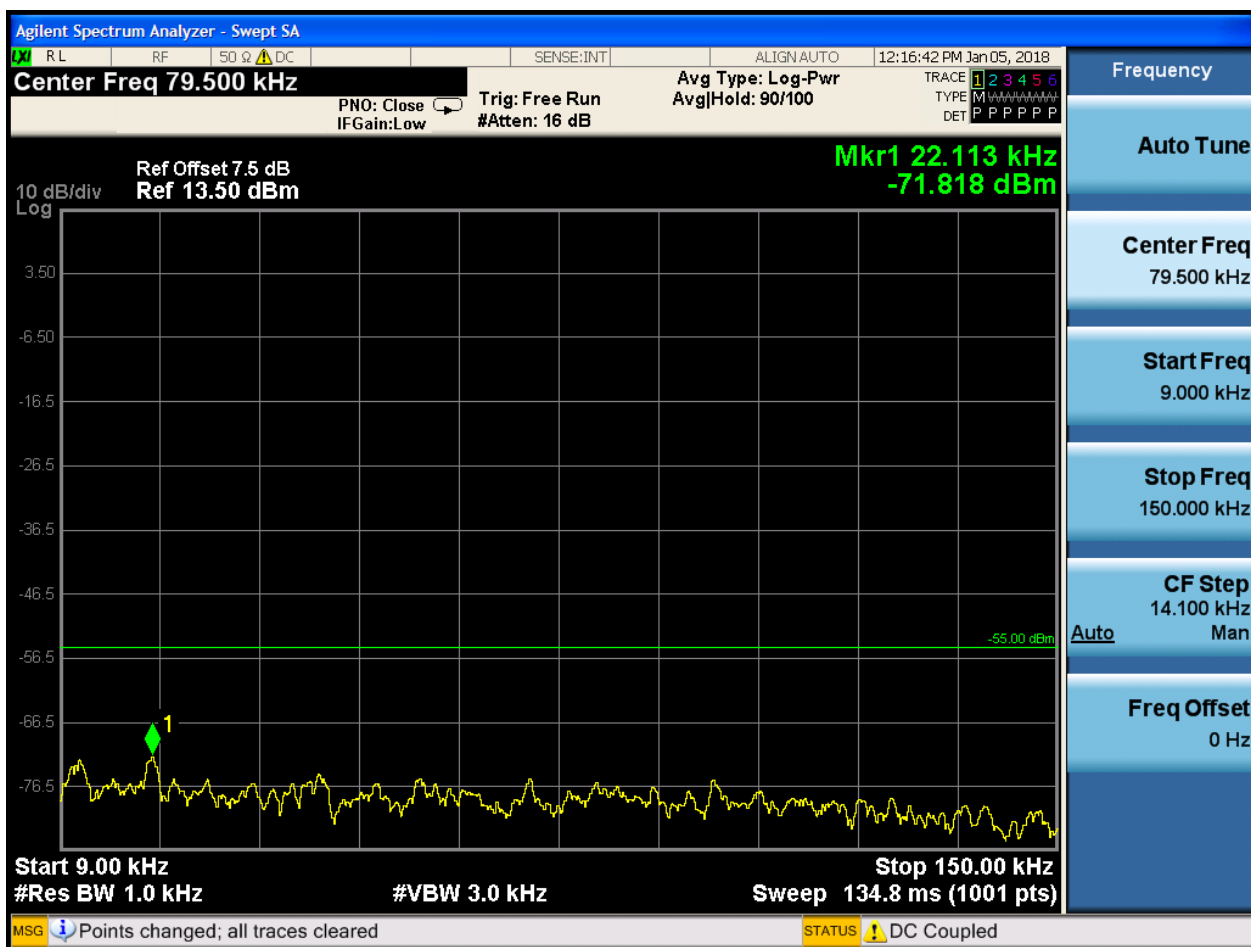


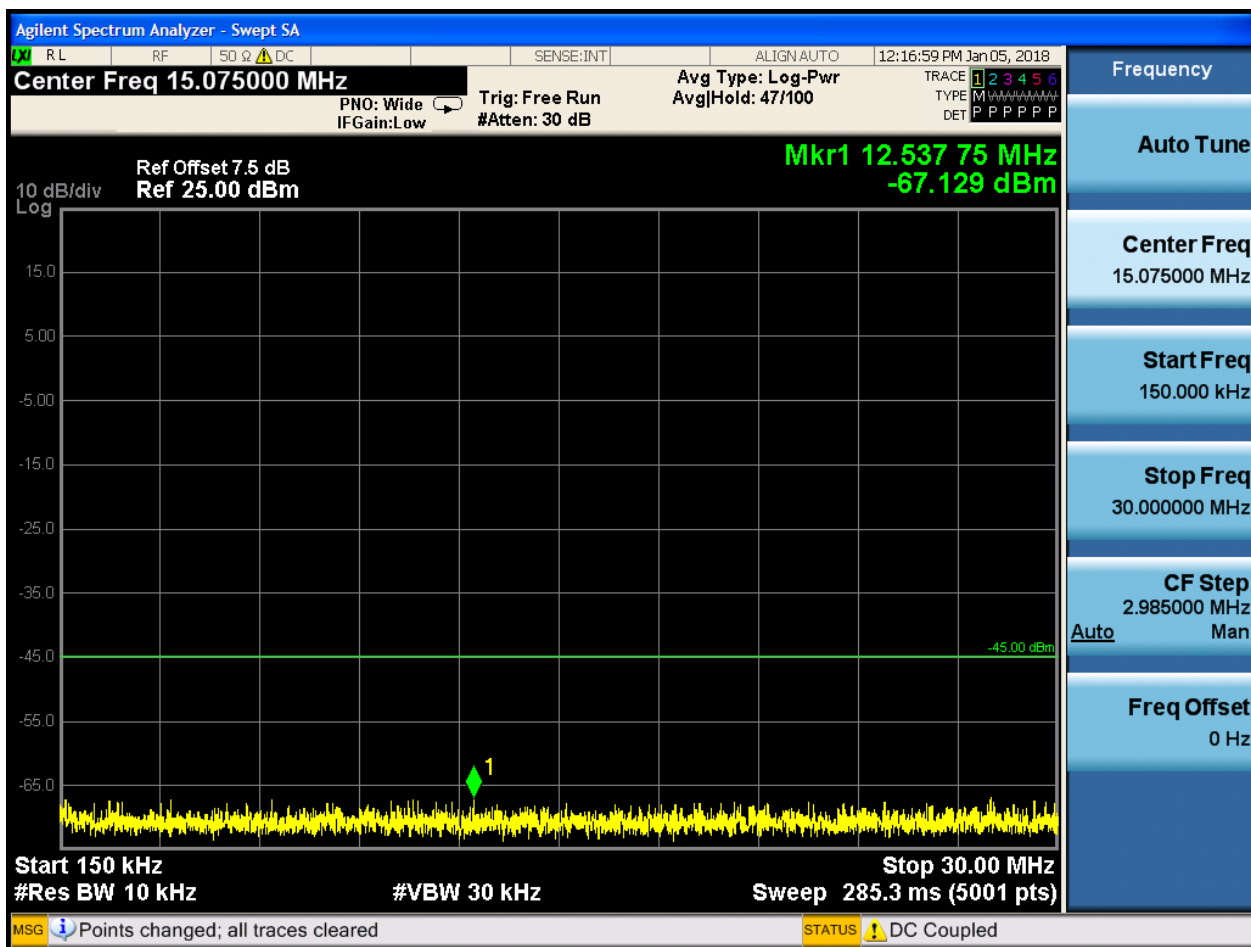


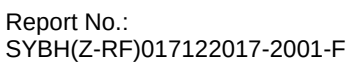
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0

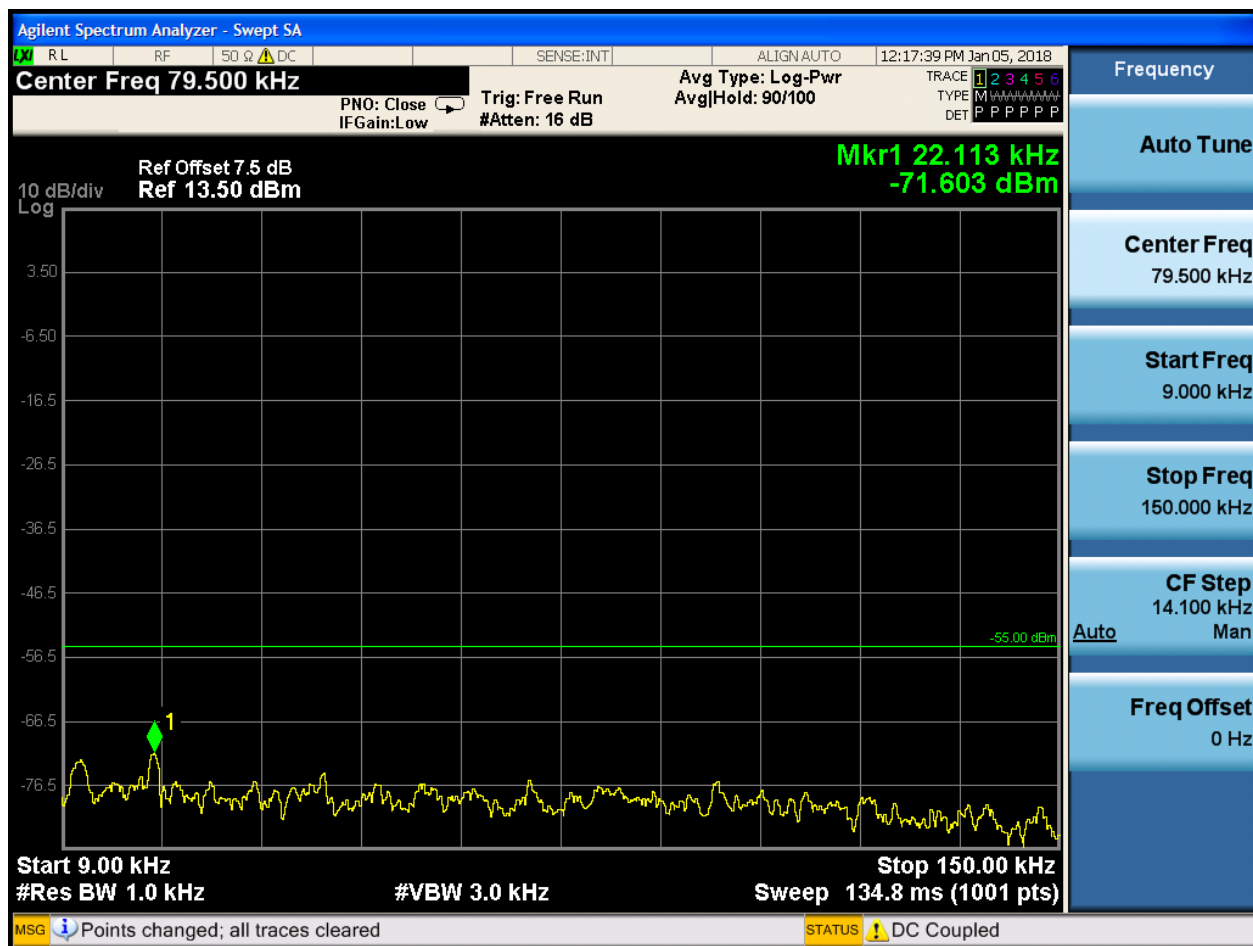


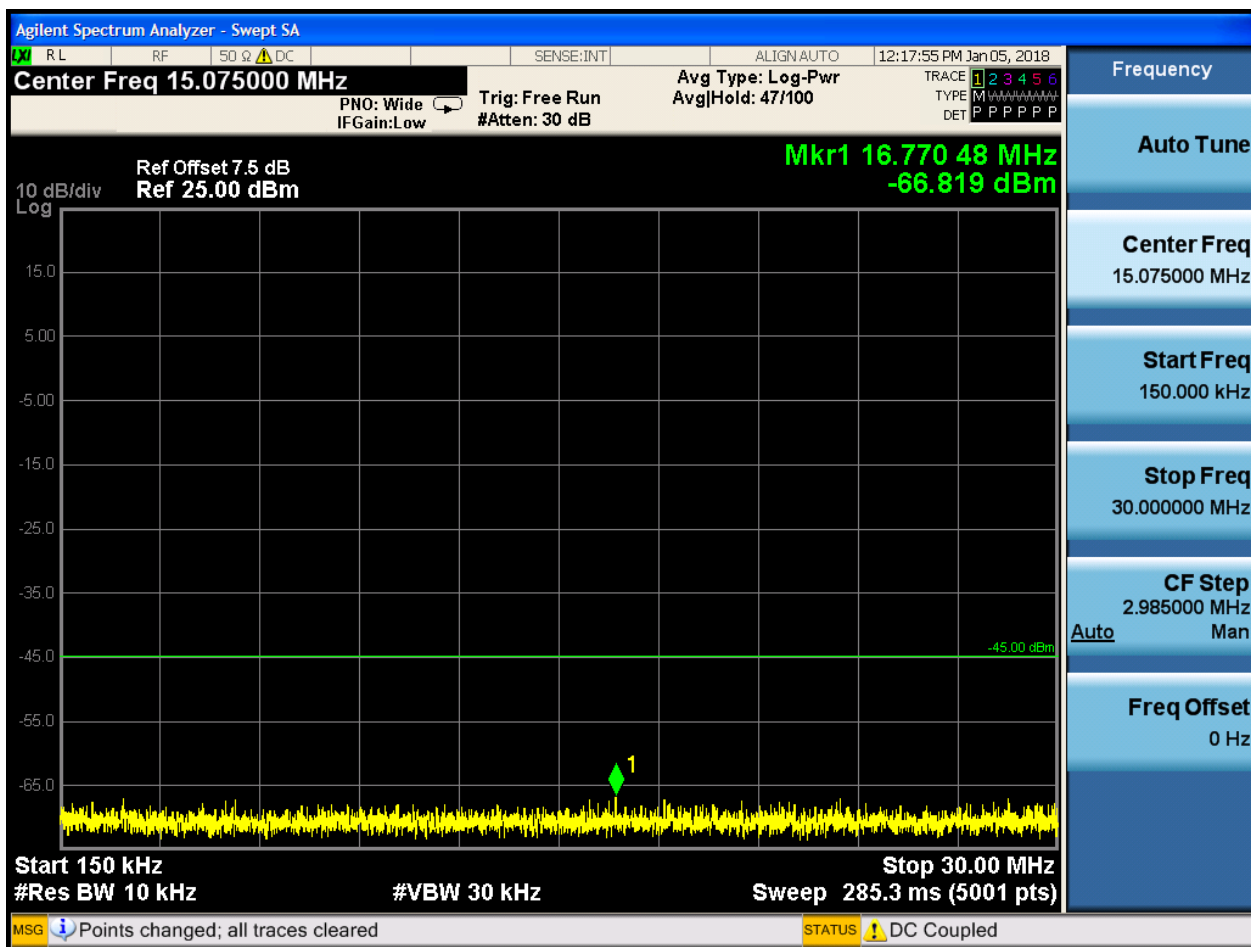


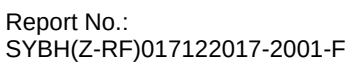


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0

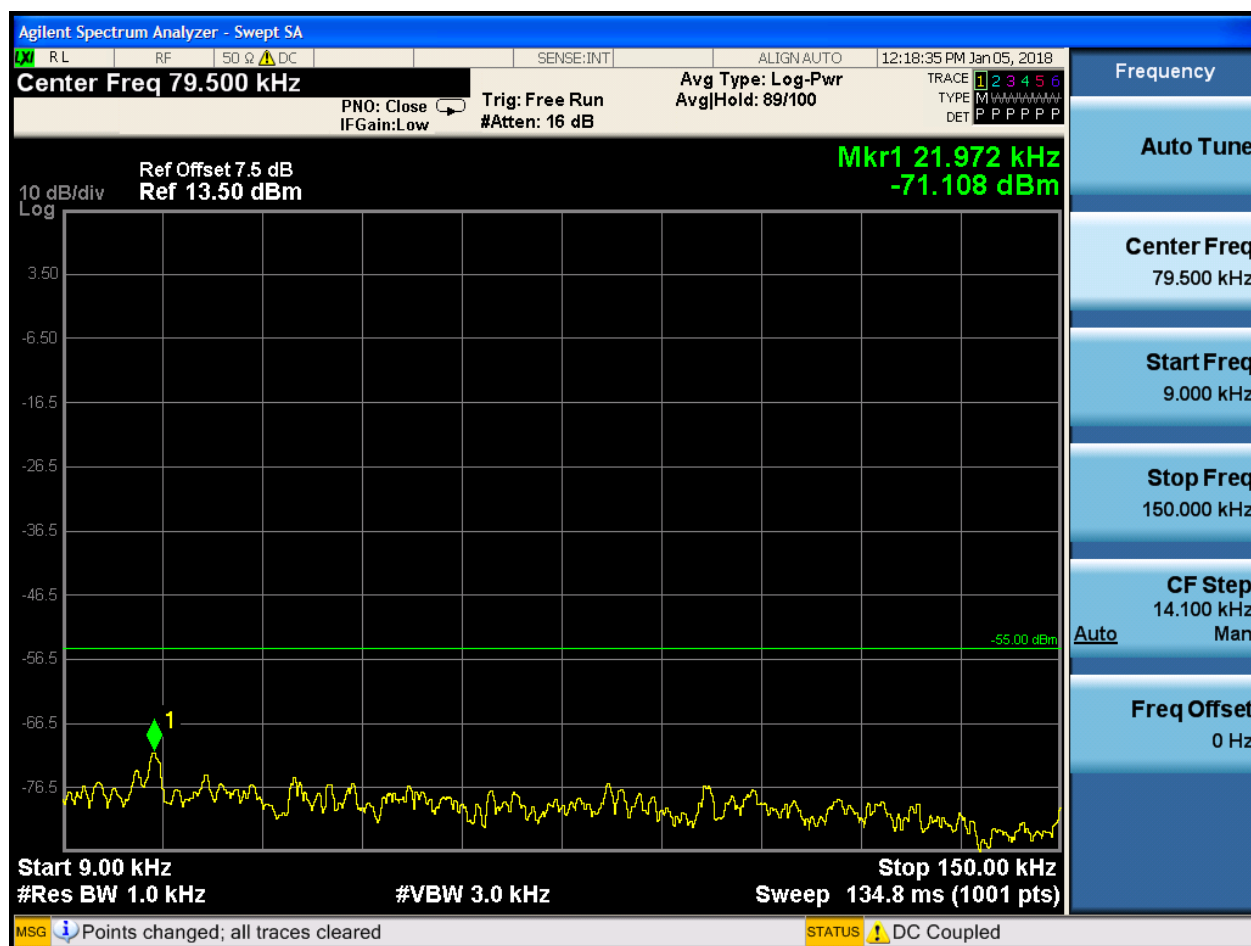


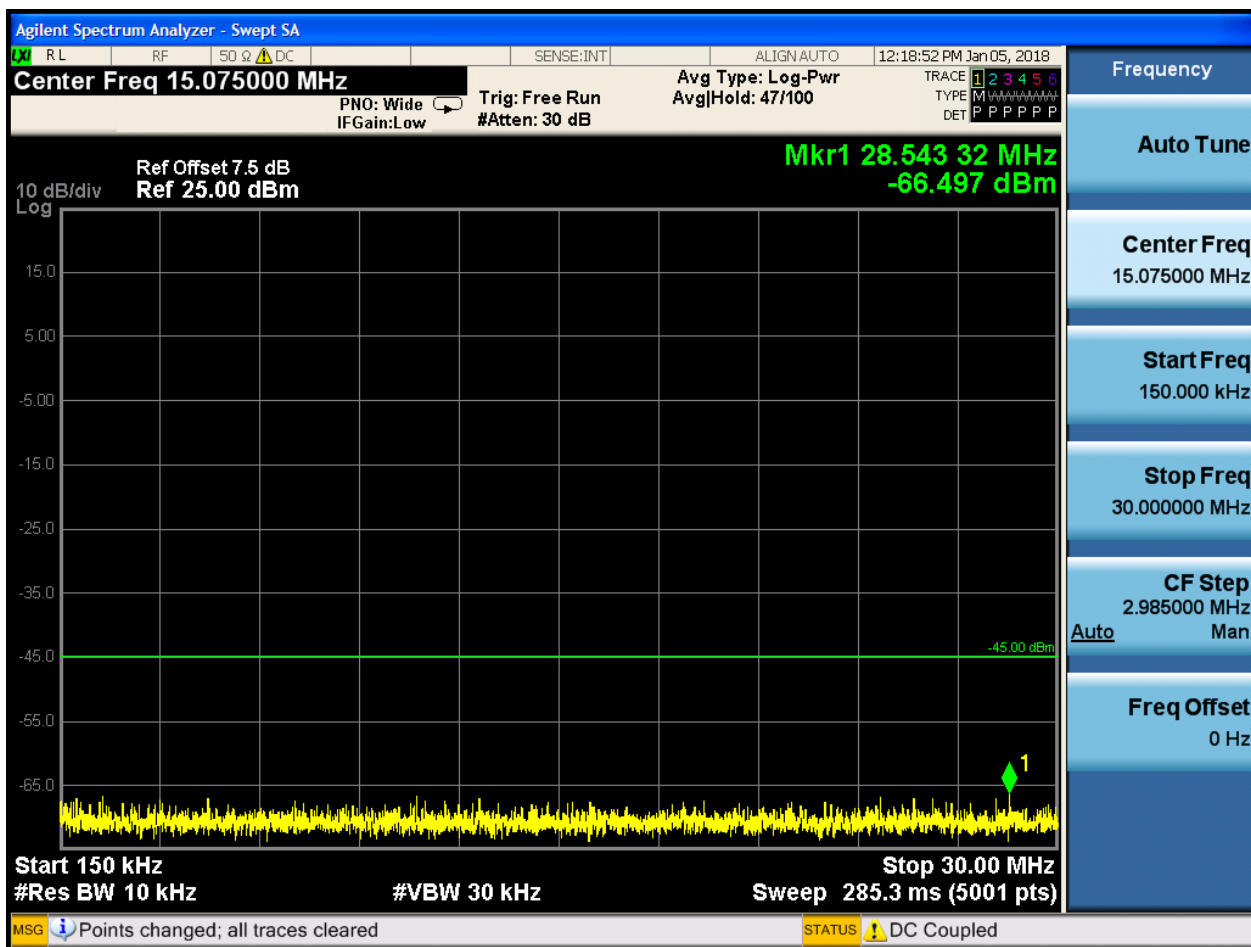


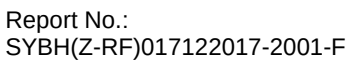


6.1.1.2.4.3 Test Channel = HCH

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, RBW = 200Hz, VBW = 600 Hz, Detector: PK

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

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

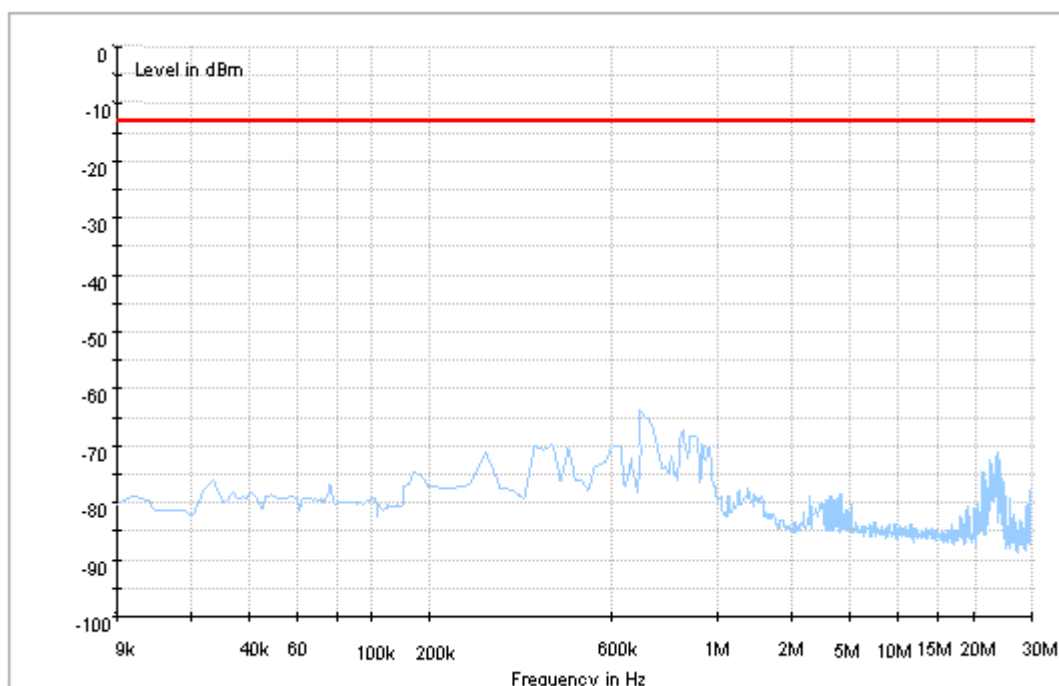
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

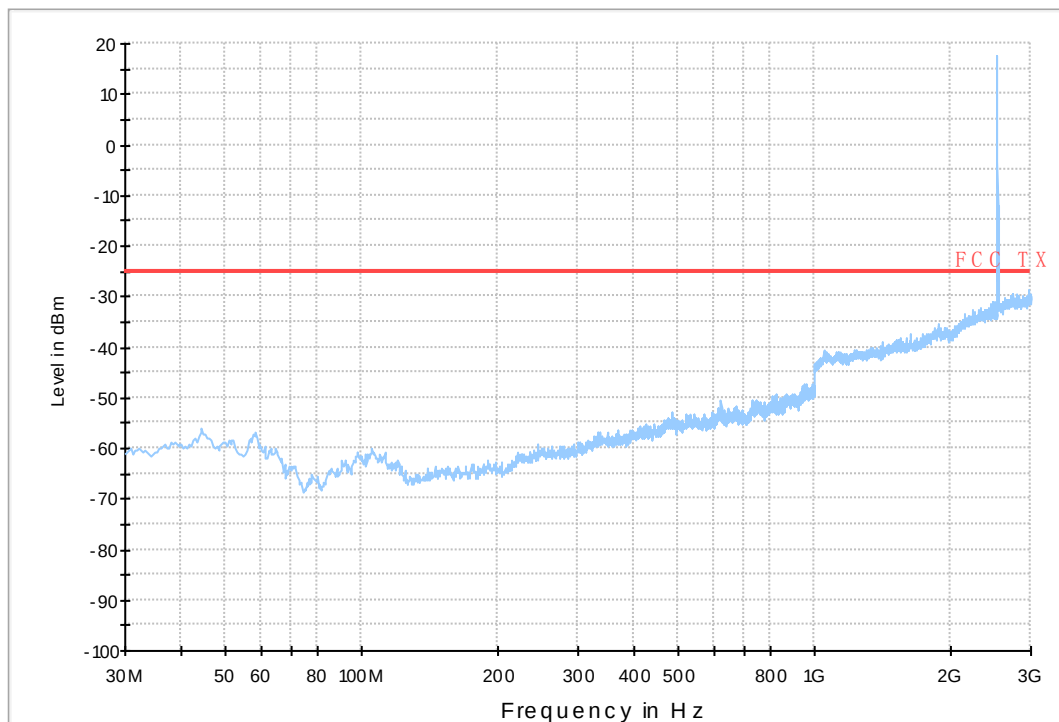
7.1 For LTE

7.1.1 Test Band = BAND7

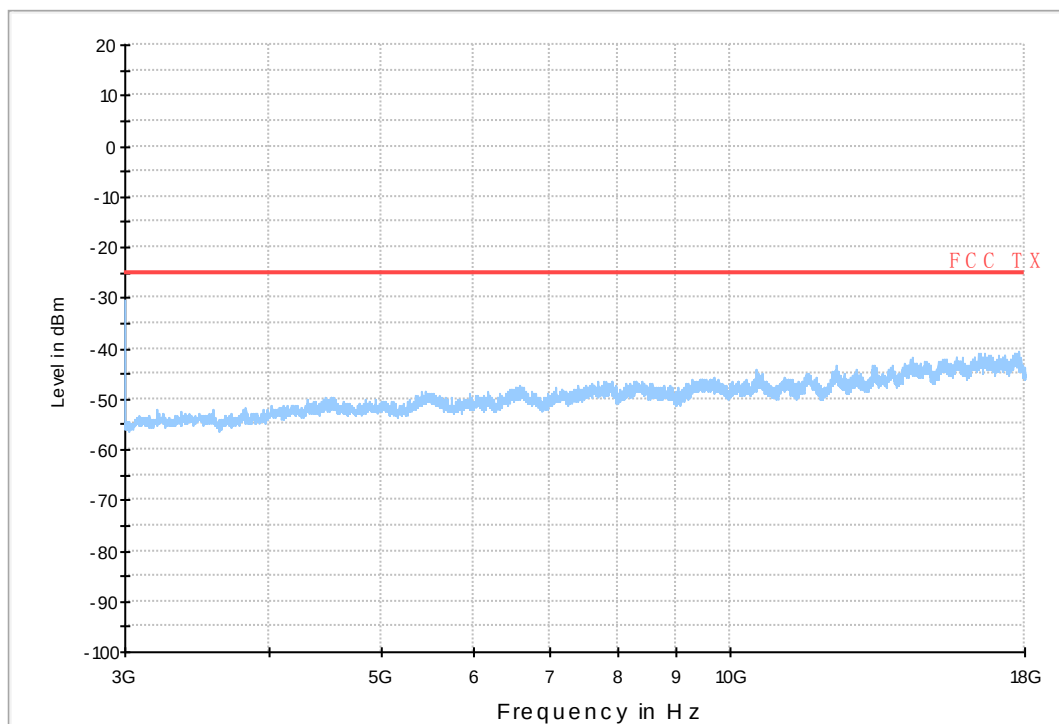
7.1.1.1 Test Bandwidth = 5

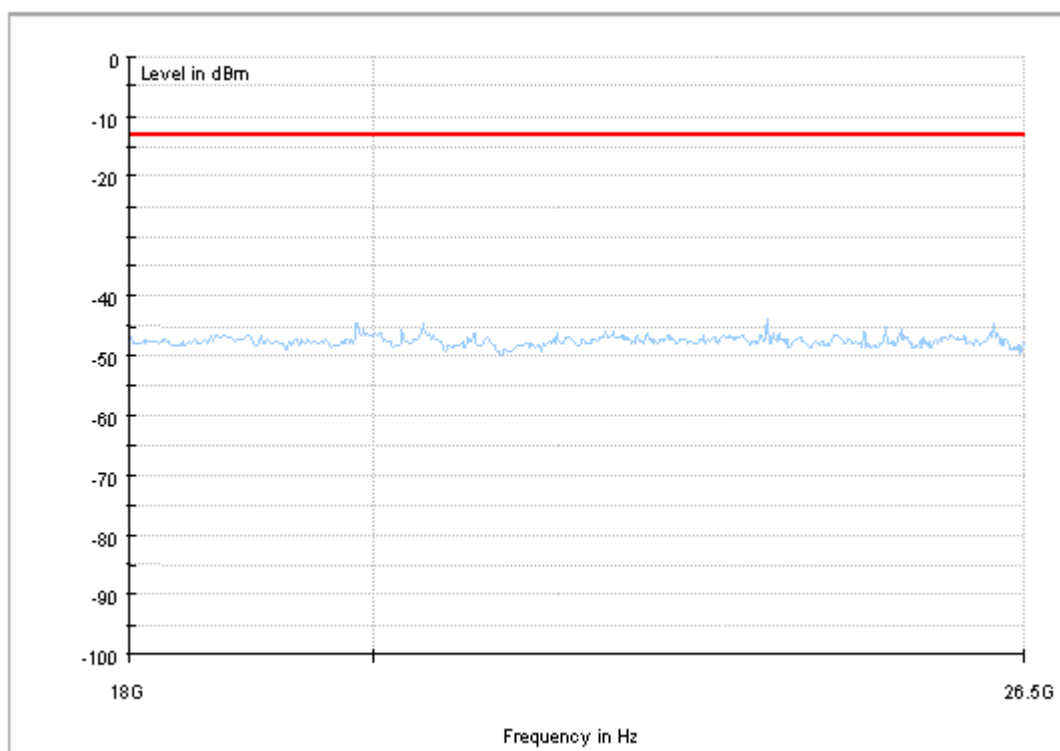


Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_L

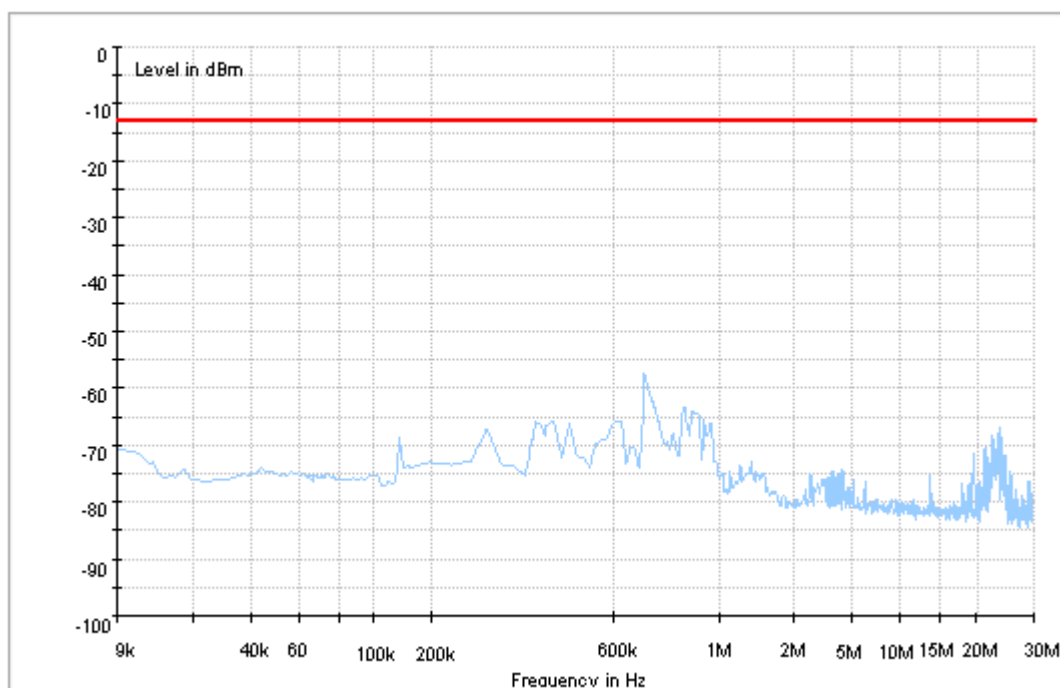


Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_H

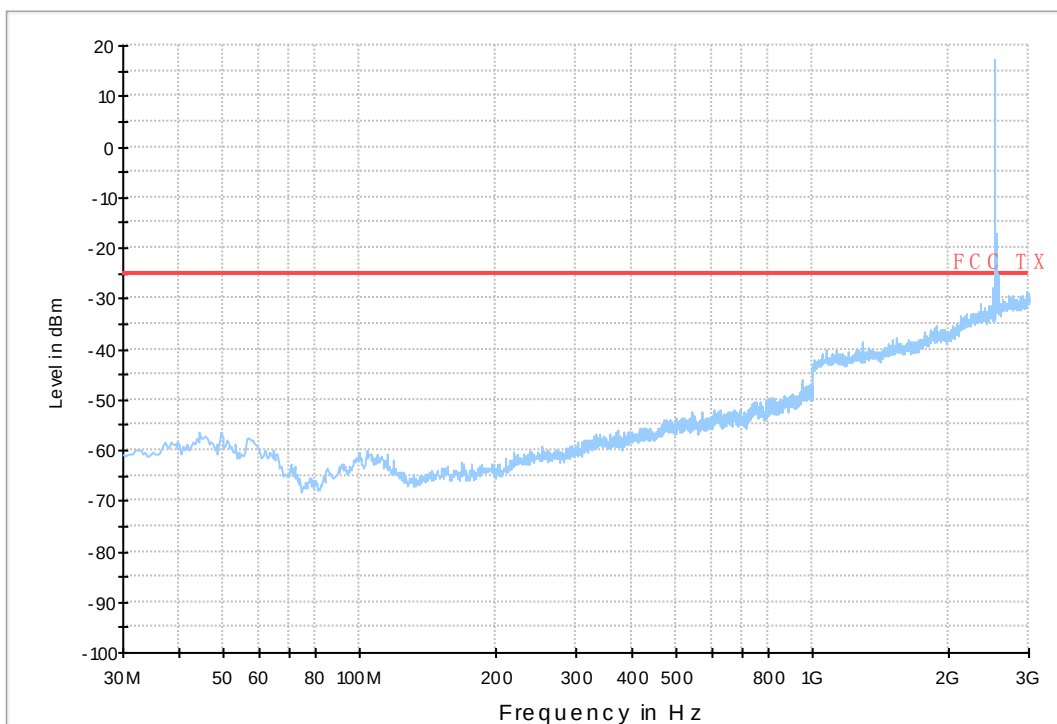




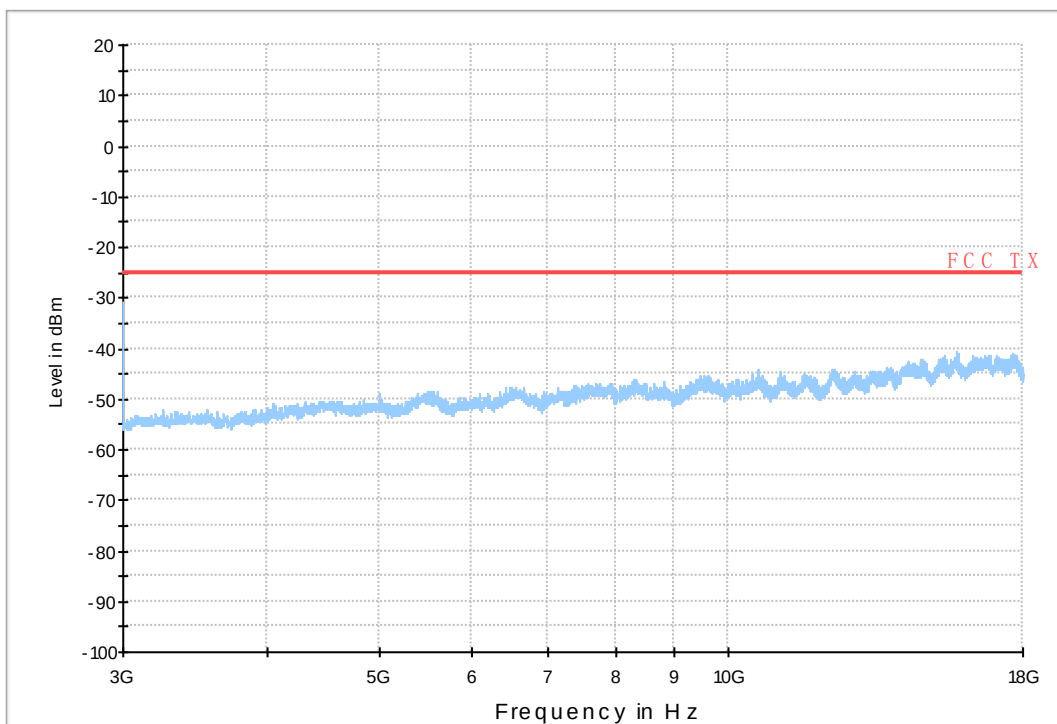
7.1.1.2 Test Bandwidth = 20

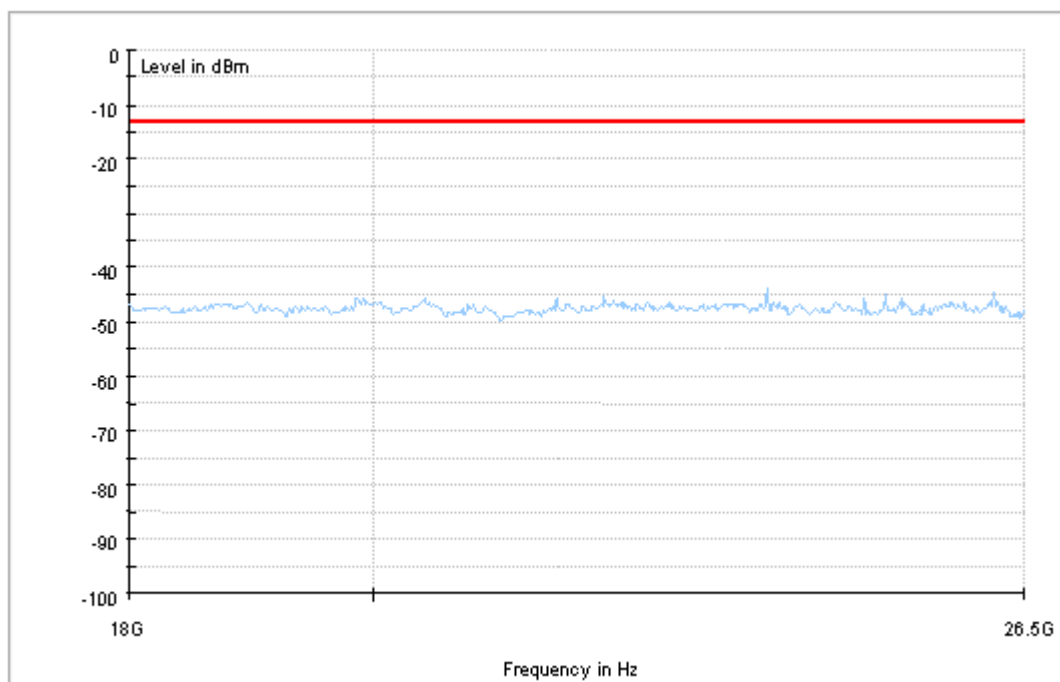


Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_L



Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_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
BAND7	LTE/TM1	5	LCH	TN	VL	5.35	0.00214	PASS
					VN	4.08	0.00163	PASS
					VH	5.25	0.0021	PASS
			MCH	TN	VL	-2.93	-0.00116	PASS
					VN	-2.35	-0.00093	PASS
					VH	-3.45	-0.00136	PASS
			HCH	TN	VL	0.49	0.00019	PASS
					VN	1.43	0.00056	PASS
					VH	0.86	0.00033	PASS
		10	LCH	TN	VL	-3.73	-0.00149	PASS
					VN	-3.19	-0.00127	PASS
					VH	-1.95	-0.00078	PASS
			MCH	TN	VL	-1.9	-0.00075	PASS
					VN	-2.65	-0.00105	PASS
					VH	-2.12	-0.00084	PASS
			HCH	TN	VL	-0.49	-0.00019	PASS
					VN	-0.23	-0.00009	PASS
					VH	-0.73	-0.00028	PASS
		15	LCH	TN	VL	-47.62	-0.01899	PASS
					VN	-46.66	-0.01861	PASS
					VH	-39.22	-0.01564	PASS
			MCH	TN	VL	-2.92	-0.00115	PASS
					VN	-2.92	-0.00115	PASS
					VH	-3.38	-0.00133	PASS
			HCH	TN	VL	1.56	0.00061	PASS
					VN	1.49	0.00058	PASS
					VH	1.99	0.00078	PASS
		20	LCH	TN	VL	1.16	0.00046	PASS
					VN	1.22	0.00049	PASS
					VH	1.97	0.00078	PASS
			MCH	TN	VL	-2.69	-0.00106	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2				VN	-3.98	-0.00157	PASS
					VH	-2.17	-0.00086	PASS
			HCH	TN	VL	-0.21	-0.00008	PASS
					VN	0.72	0.00028	PASS
					VH	-0.06	-0.00002	PASS
					VL	2.75	0.0011	PASS
		5	LCH	TN	VN	2.62	0.00105	PASS
					VH	2.86	0.00114	PASS
					VL	-2.39	-0.00094	PASS
			MCH	TN	VN	-3.25	-0.00128	PASS
					VH	-2.62	-0.00103	PASS
					VL	0.17	0.00007	PASS
			HCH	TN	VN	-0.34	-0.00013	PASS
					VH	-0.07	-0.00003	PASS
					VL	-3.25	-0.0013	PASS
		10	LCH	TN	VN	-3.59	-0.00143	PASS
					VH	-2.66	-0.00106	PASS
					VL	-2.69	-0.00106	PASS
			MCH	TN	VN	-4.01	-0.00158	PASS
					VH	-3.16	-0.00125	PASS
					VL	0.99	0.00039	PASS
			HCH	TN	VN	-0.41	-0.00016	PASS
					VH	-0.46	-0.00018	PASS
					VL	-22.02	-0.00878	PASS
		15	LCH	TN	VN	-23.05	-0.00919	PASS
					VH	-37.18	-0.01483	PASS
					VL	-4.79	-0.00189	PASS
			MCH	TN	VN	-6.81	-0.00269	PASS
					VH	-4.94	-0.00195	PASS
					VL	0.66	0.00026	PASS
			HCH	TN	VN	2.15	0.00084	PASS
					VH	2.23	0.00087	PASS
					VL	2.43	0.00097	PASS
		20	LCH	TN	VN	2.83	0.00113	PASS
					VH	1.34	0.00053	PASS
					VL	-3.96	-0.00156	PASS
			MCH	TN	VN	-3.99	-0.00157	PASS
					VH	-2.05	-0.00081	PASS
					VL	-0.17	-0.00007	PASS
			HCH	TN	VL	-0.17	-0.00007	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	0.33	0.00013	PASS
					VH	-0.83	-0.00032	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
BAND7	LTE/TM1	5	LCH	VN	-30	-0.07	-0.00003	PASS
					-20	-3.59	-0.00143	PASS
					-10	-0.66	-0.00026	PASS
					0	-1.52	-0.00061	PASS
					10	-2.05	-0.00082	PASS
					20	-0.36	-0.00014	PASS
					30	-0.83	-0.00033	PASS
					40	-1.96	-0.00078	PASS
					50	-2.95	-0.00118	PASS
			MCH	VN	-30	-3.79	-0.0015	PASS
					-20	-3.15	-0.00124	PASS
					-10	-1.85	-0.00073	PASS
					0	-2.95	-0.00116	PASS
					10	-4.41	-0.00174	PASS
					20	-3.95	-0.00156	PASS
					30	-4.23	-0.00167	PASS
					40	-2.68	-0.00106	PASS
					50	-2.86	-0.00113	PASS
			HCH	VN	-30	-0.11	-0.00004	PASS
					-20	-0.99	-0.00039	PASS
					-10	0.39	0.00015	PASS
					0	-0.1	-0.00004	PASS
					10	-0.79	-0.00031	PASS
					20	0.04	0.00002	PASS
					30	-0.93	-0.00036	PASS
					40	1.49	0.00058	PASS
					50	1.09	0.00042	PASS
		10	LCH	VN	-30	-3.56	-0.00142	PASS
					-20	-4.12	-0.00164	PASS
					-10	-2.72	-0.00109	PASS
					0	-2.7	-0.00108	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-2.82	-0.00113	PASS
					20	-3.16	-0.00126	PASS
					30	-3.25	-0.0013	PASS
					40	-2.03	-0.00081	PASS
					50	-3.48	-0.00139	PASS
			MCH	VN	-30	-3.78	-0.00149	PASS
					-20	-2.86	-0.00113	PASS
					-10	-3.92	-0.00155	PASS
					0	-3.71	-0.00146	PASS
					10	-4.06	-0.0016	PASS
					20	-5.15	-0.00203	PASS
					30	-3.16	-0.00125	PASS
					40	-3.46	-0.00136	PASS
					50	-2.65	-0.00105	PASS
			HCH	VN	-30	-2.35	-0.00092	PASS
					-20	-1.16	-0.00045	PASS
					-10	-1.76	-0.00069	PASS
					0	-0.73	-0.00028	PASS
					10	-1.57	-0.00061	PASS
					20	-1.77	-0.00069	PASS
					30	-0.74	-0.00029	PASS
					40	-0.46	-0.00018	PASS
					50	-1.7	-0.00066	PASS
		15	LCH	VN	-30	-4.71	-0.00188	PASS
					-20	-2.68	-0.00107	PASS
					-10	-14.93	-0.00595	PASS
					0	-15.32	-0.00611	PASS
					10	-19.58	-0.00781	PASS
					20	-22.16	-0.00884	PASS
					30	-22.69	-0.00905	PASS
					40	-24.76	-0.00987	PASS
					50	-27.21	-0.01085	PASS
			MCH	VN	-30	-4.58	-0.00181	PASS
					-20	-2.92	-0.00115	PASS
					-10	-4.19	-0.00165	PASS
					0	-2.78	-0.0011	PASS
					10	-3.91	-0.00154	PASS
					20	-2.6	-0.00103	PASS
					30	-3.86	-0.00152	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-3.42	-0.00135	PASS
					50	-3.73	-0.00147	PASS
			HCH	VN	-30	1.06	0.00041	PASS
					-20	1.12	0.00044	PASS
					-10	0.36	0.00014	PASS
					0	0.73	0.00028	PASS
					10	-0.24	-0.00009	PASS
					20	-1.67	-0.00065	PASS
					30	-0.99	-0.00039	PASS
					40	0.21	0.00008	PASS
					50	1.03	0.0004	PASS
		20	LCH	VN	-30	2.43	0.00097	PASS
					-20	1.96	0.00078	PASS
					-10	2	0.0008	PASS
					0	1.4	0.00056	PASS
					10	1.54	0.00061	PASS
					20	2.46	0.00098	PASS
					30	1.23	0.00049	PASS
					40	1.66	0.00066	PASS
					50	1.93	0.00077	PASS
			MCH	VN	-30	-4.26	-0.00168	PASS
					-20	-4.06	-0.0016	PASS
					-10	-3.5	-0.00138	PASS
					0	-4.72	-0.00186	PASS
					10	-3.48	-0.00137	PASS
					20	-5.76	-0.00227	PASS
					30	-3.76	-0.00148	PASS
					40	-6.02	-0.00237	PASS
					50	-4.42	-0.00174	PASS
			HCH	VN	-30	1.03	0.0004	PASS
					-20	0.59	0.00023	PASS
					-10	0.83	0.00032	PASS
					0	-0.5	-0.0002	PASS
					10	1.37	0.00054	PASS
					20	-0.17	-0.00007	PASS
					30	0.24	0.00009	PASS
					40	-1.03	-0.0004	PASS
					50	-0.37	-0.00014	PASS
	LTE/TM2	5	LCH	VN	-30	-0.4	-0.00016	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-0.36	-0.00014	PASS
					-10	-0.96	-0.00038	PASS
					0	-2.26	-0.0009	PASS
					10	-3.32	-0.00133	PASS
					20	-2.75	-0.0011	PASS
					30	-4.75	-0.0019	PASS
					40	-2.86	-0.00114	PASS
					50	-2.85	-0.00114	PASS
			MCH	VN	-30	-3.96	-0.00156	PASS
					-20	-3.4	-0.00134	PASS
					-10	-3.48	-0.00137	PASS
					0	-3.56	-0.0014	PASS
					10	-2.66	-0.00105	PASS
					20	-3.18	-0.00125	PASS
					30	-2.15	-0.00085	PASS
					40	-2.8	-0.0011	PASS
					50	-3.23	-0.00127	PASS
			HCH	VN	-30	0.54	0.00021	PASS
					-20	-0.01	0	PASS
					-10	-0.01	0	PASS
					0	0.34	0.00013	PASS
					10	1.27	0.00049	PASS
					20	-0.39	-0.00015	PASS
					30	1.7	0.00066	PASS
					40	-0.47	-0.00018	PASS
					50	0.01	0	PASS
		10	LCH	VN	-30	-2.32	-0.00093	PASS
					-20	-2.73	-0.00109	PASS
					-10	-3.39	-0.00135	PASS
					0	-2.13	-0.00085	PASS
					10	-2.26	-0.0009	PASS
					20	-1.87	-0.00075	PASS
					30	-1.12	-0.00045	PASS
					40	-1.95	-0.00078	PASS
					50	-2.86	-0.00114	PASS
			MCH	VN	-30	-2.56	-0.00101	PASS
					-20	-2.12	-0.00084	PASS
					-10	-1.6	-0.00063	PASS
					0	-2.32	-0.00092	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-3.1	-0.00122	PASS
					20	-2.82	-0.00111	PASS
					30	-2.72	-0.00107	PASS
					40	-2.82	-0.00111	PASS
					50	-3.56	-0.0014	PASS
			HCH	VN	-30	-1	-0.00039	PASS
					-20	-0.93	-0.00036	PASS
					-10	-1.62	-0.00063	PASS
					0	-1.12	-0.00044	PASS
					10	-0.46	-0.00018	PASS
					20	0.31	0.00012	PASS
					30	-0.97	-0.00038	PASS
					40	-2.32	-0.0009	PASS
					50	-1.8	-0.0007	PASS
		15	LCH	VN	-30	0.84	0.00033	PASS
					-20	-4.82	-0.00192	PASS
					-10	-5.66	-0.00226	PASS
					0	-3.75	-0.0015	PASS
					10	-3.48	-0.00139	PASS
					20	-9.31	-0.00371	PASS
					30	-11.69	-0.00466	PASS
					40	-10.56	-0.00421	PASS
					50	-13.42	-0.00535	PASS
			MCH	VN	-30	-8.63	-0.0034	PASS
					-20	-10.69	-0.00422	PASS
					-10	-7.4	-0.00292	PASS
					0	-10.96	-0.00432	PASS
					10	-10.16	-0.00401	PASS
					20	-9.48	-0.00374	PASS
					30	-11.57	-0.00456	PASS
					40	-8.27	-0.00326	PASS
					50	-8.33	-0.00329	PASS
			HCH	VN	-30	-0.13	-0.00005	PASS
					-20	0.09	0.00004	PASS
					-10	0.57	0.00022	PASS
					0	1.67	0.00065	PASS
					10	0.37	0.00014	PASS
					20	1.02	0.0004	PASS
					30	0.87	0.00034	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		20			40	-1.9	-0.00074	PASS
					50	-0.86	-0.00034	PASS
			LCH	VN	-30	1.16	0.00046	PASS
					-20	1.17	0.00047	PASS
					-10	2.22	0.00088	PASS
					0	2.43	0.00097	PASS
					10	1.12	0.00045	PASS
					20	1.49	0.00059	PASS
					30	1.26	0.0005	PASS
					40	1.33	0.00053	PASS
					50	2.22	0.00088	PASS
			MCH	VN	-30	-2.86	-0.00113	PASS
					-20	-3.81	-0.0015	PASS
					-10	-4.62	-0.00182	PASS
					0	-3.92	-0.00155	PASS
					10	-4.51	-0.00178	PASS
					20	-2.88	-0.00114	PASS
					30	-5.78	-0.00228	PASS
					40	-1.9	-0.00075	PASS
					50	-7.01	-0.00277	PASS
			HCH	VN	-30	0.14	0.00005	PASS
					-20	0.44	0.00017	PASS
					-10	-0.54	-0.00021	PASS
					0	-1.77	-0.00069	PASS
					10	0.16	0.00006	PASS
					20	-0.69	-0.00027	PASS
					30	-0.72	-0.00028	PASS
					40	-0.24	-0.00009	PASS
					50	-0.87	-0.00034	PASS

END