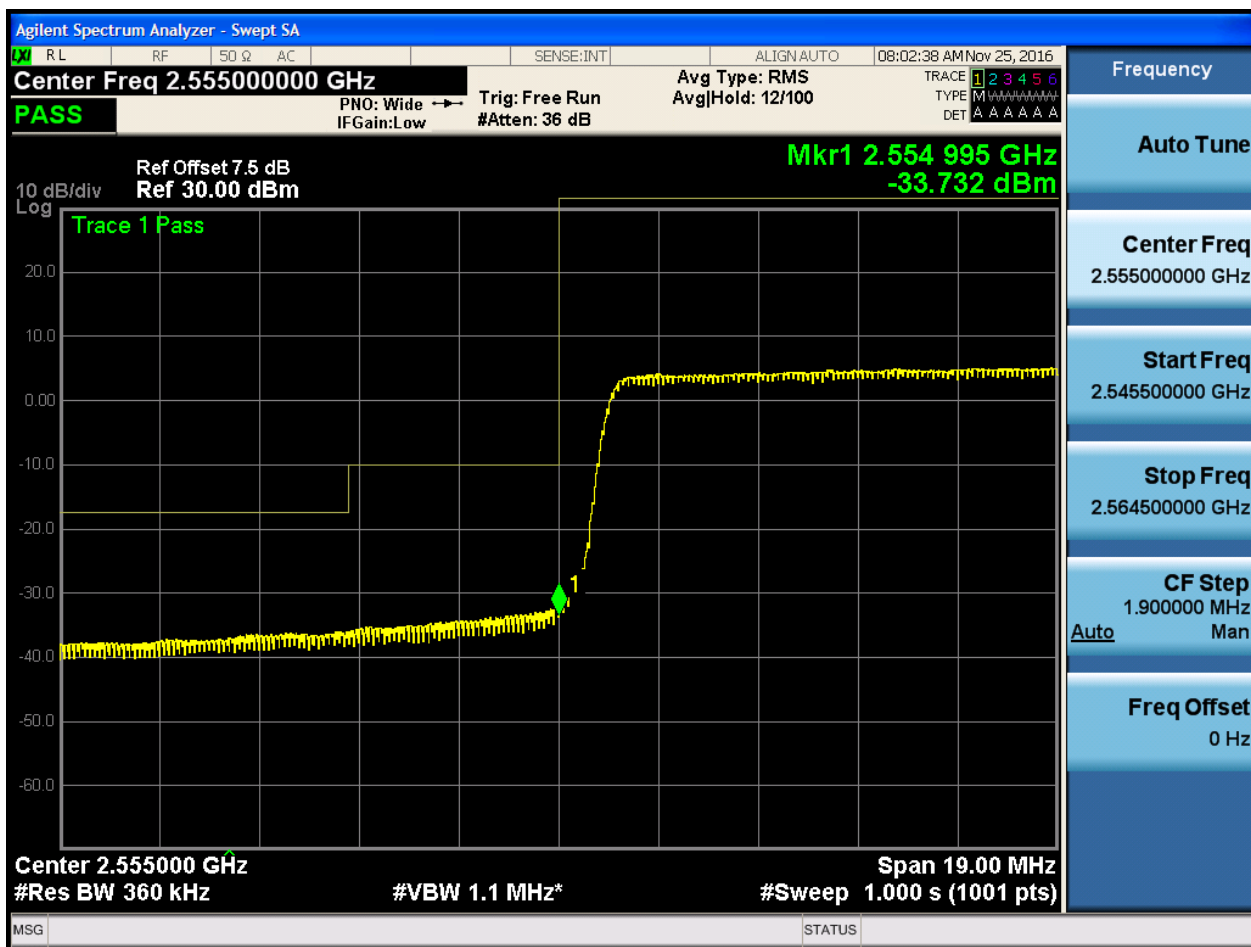




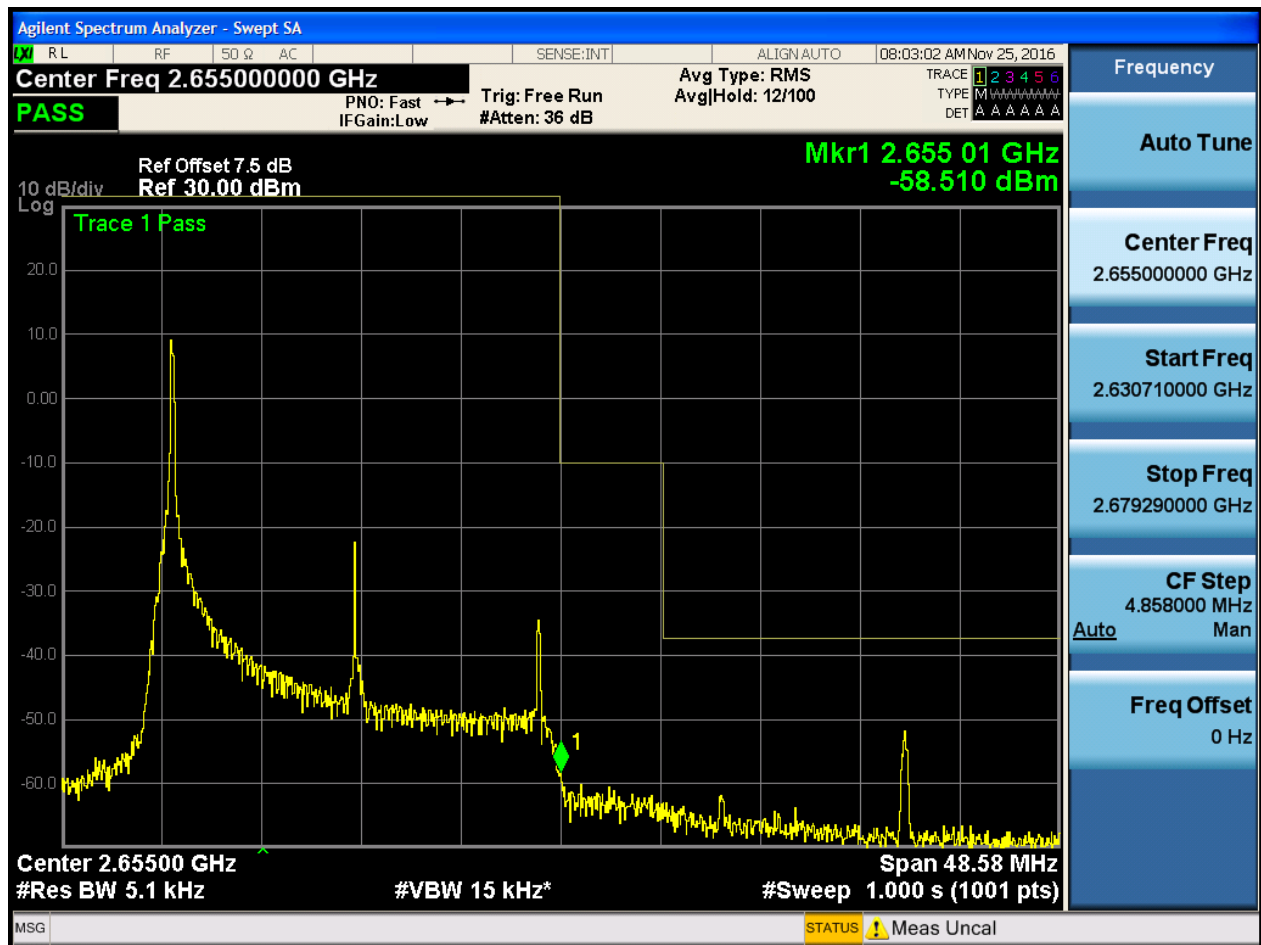
5.1.1.2.4.1.4 Test RB = RB100#0



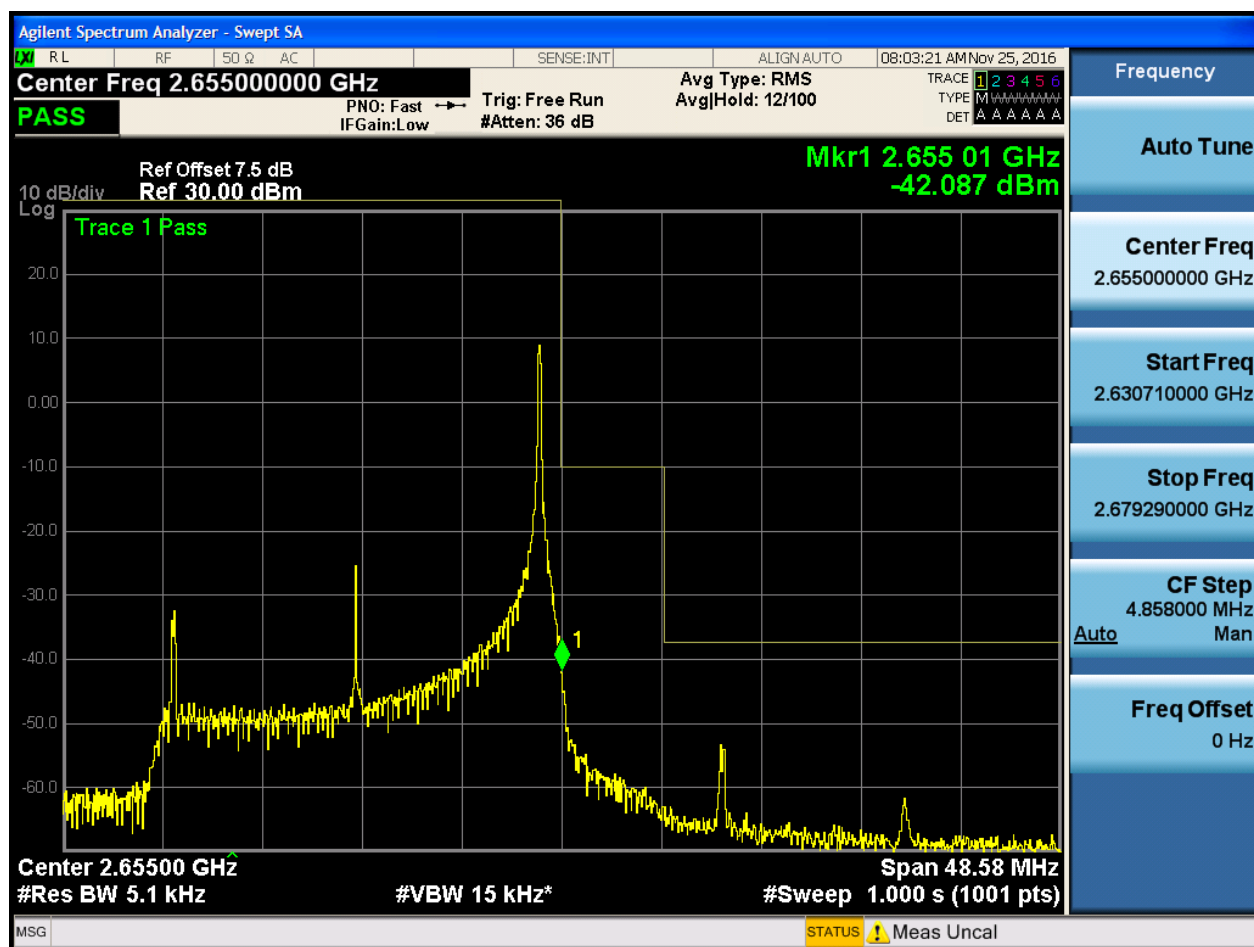


5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

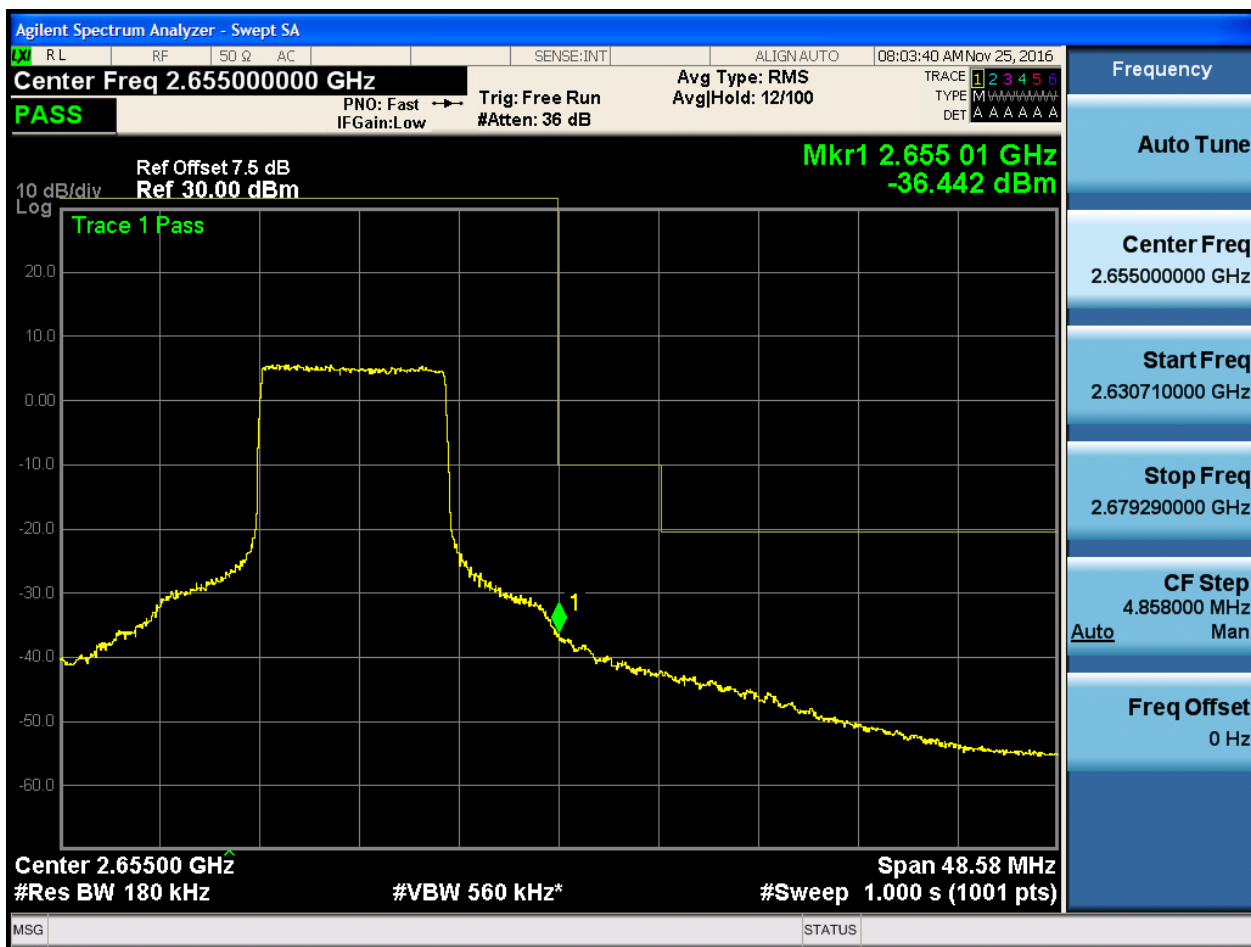


5.1.1.2.4.2.2 Test RB = RB1#99





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 $< RBW/2$ 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

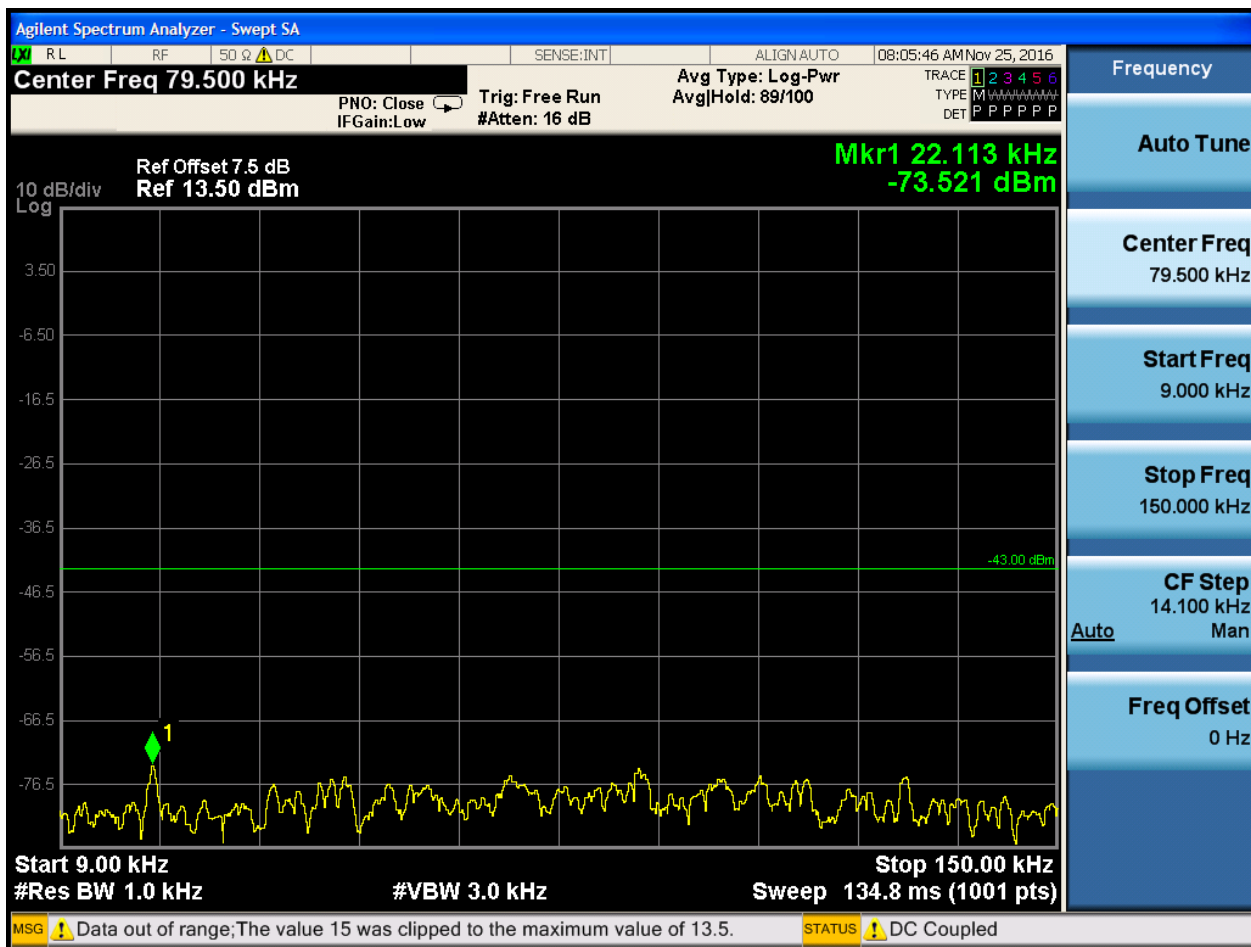
6.1.1 Test Band = BAND41

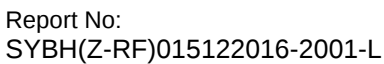
6.1.1.1 Test Mode = LTE/TM1

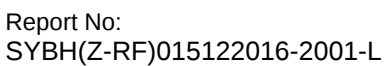
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

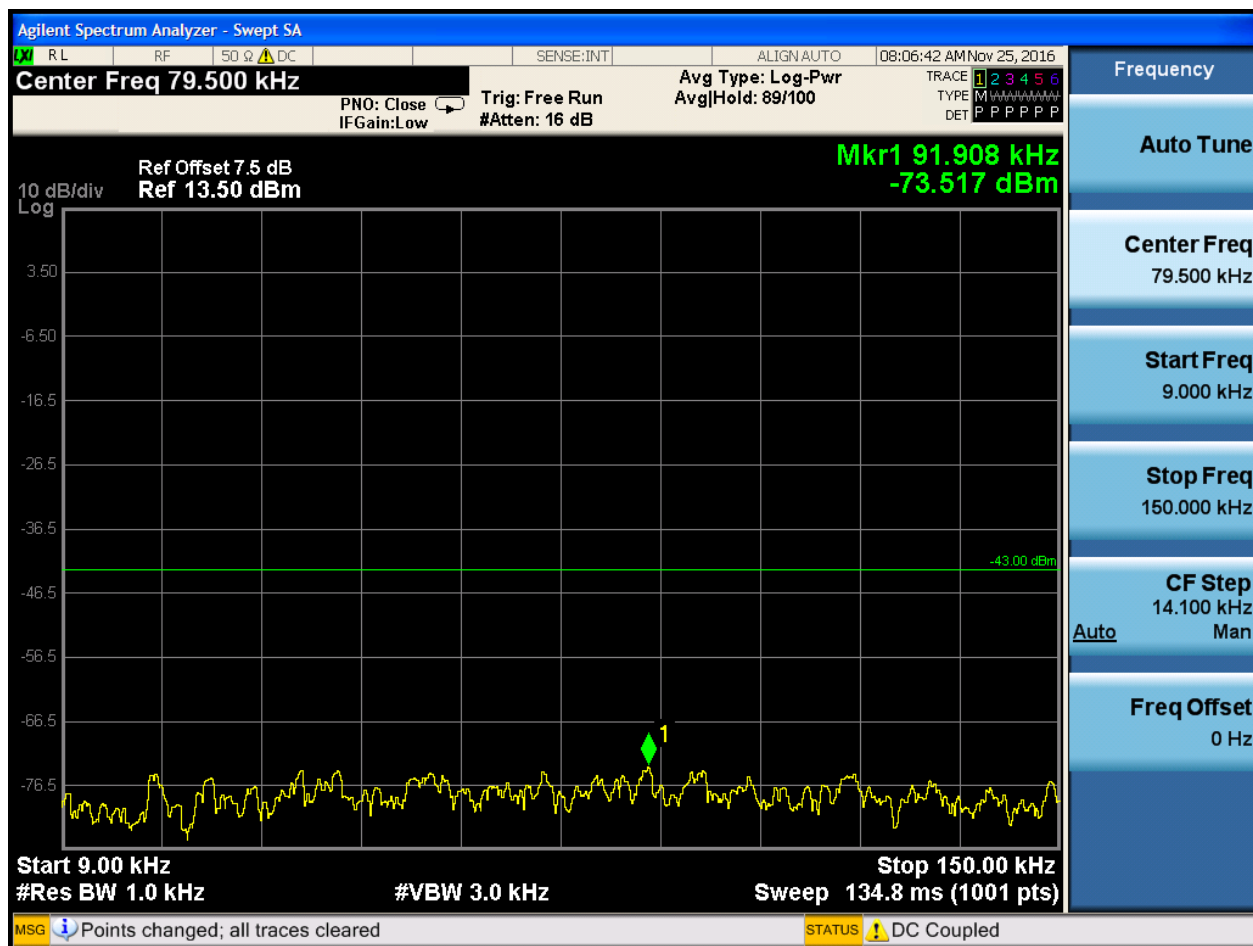


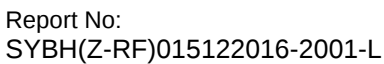


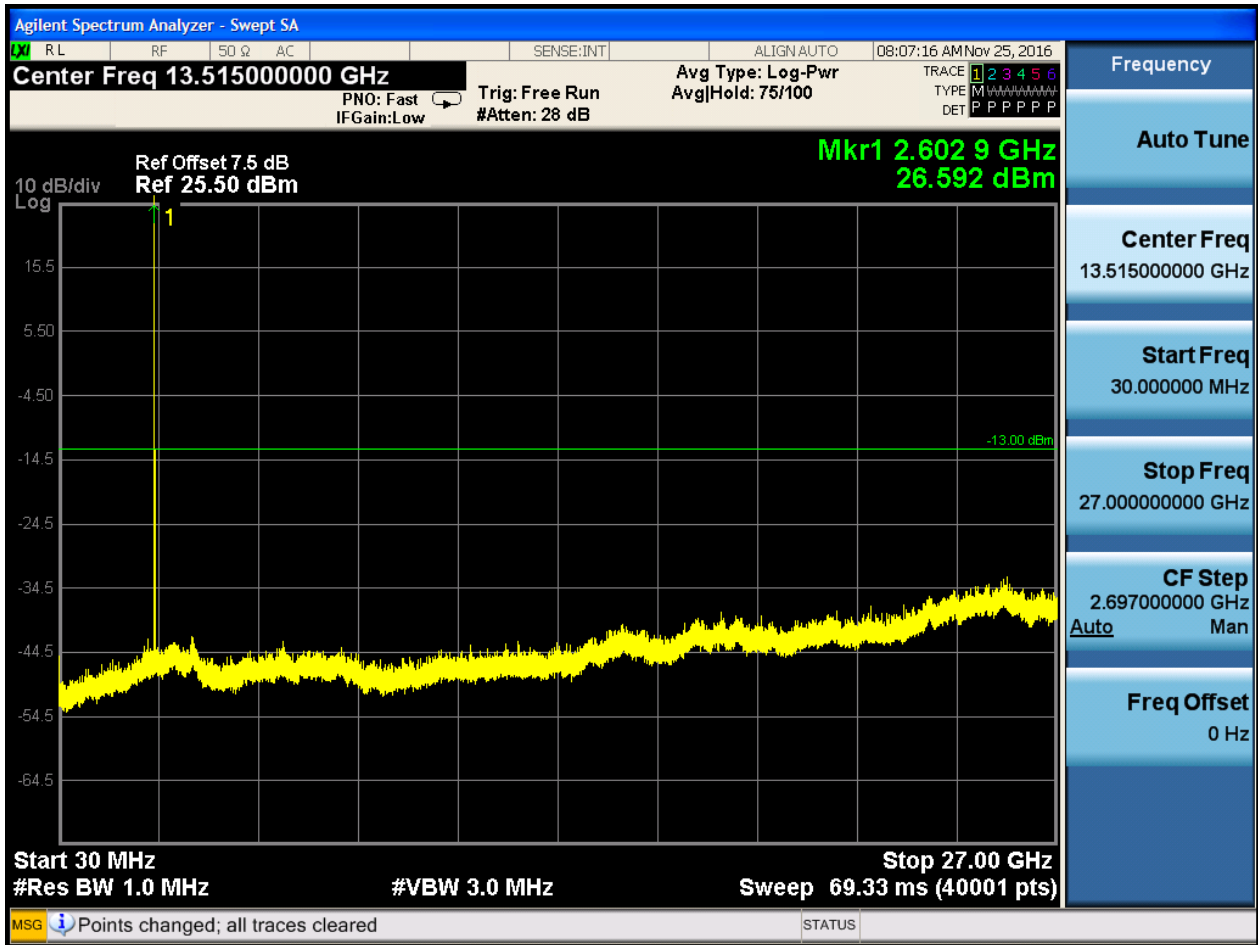


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

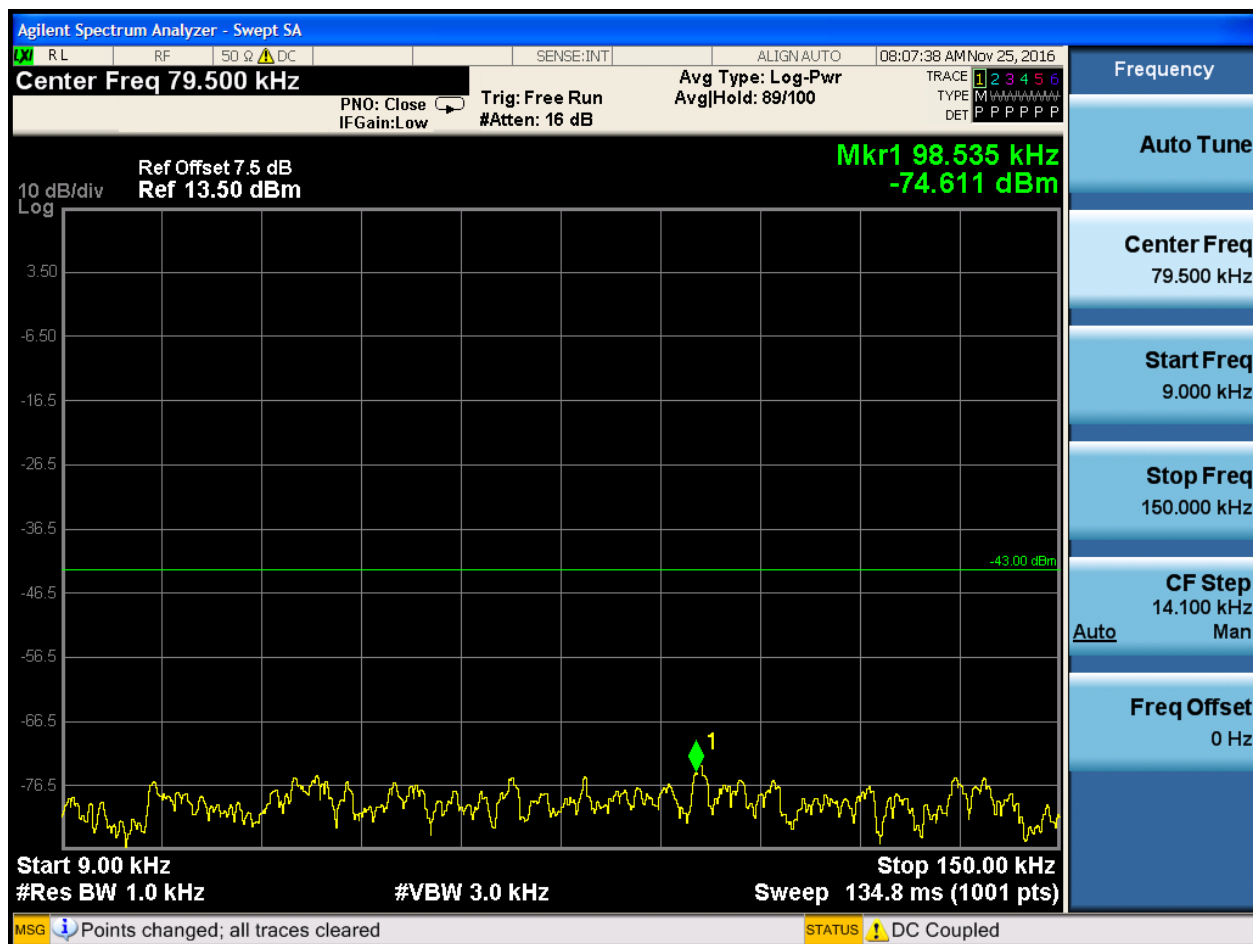




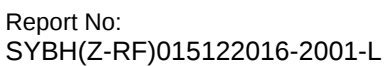


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





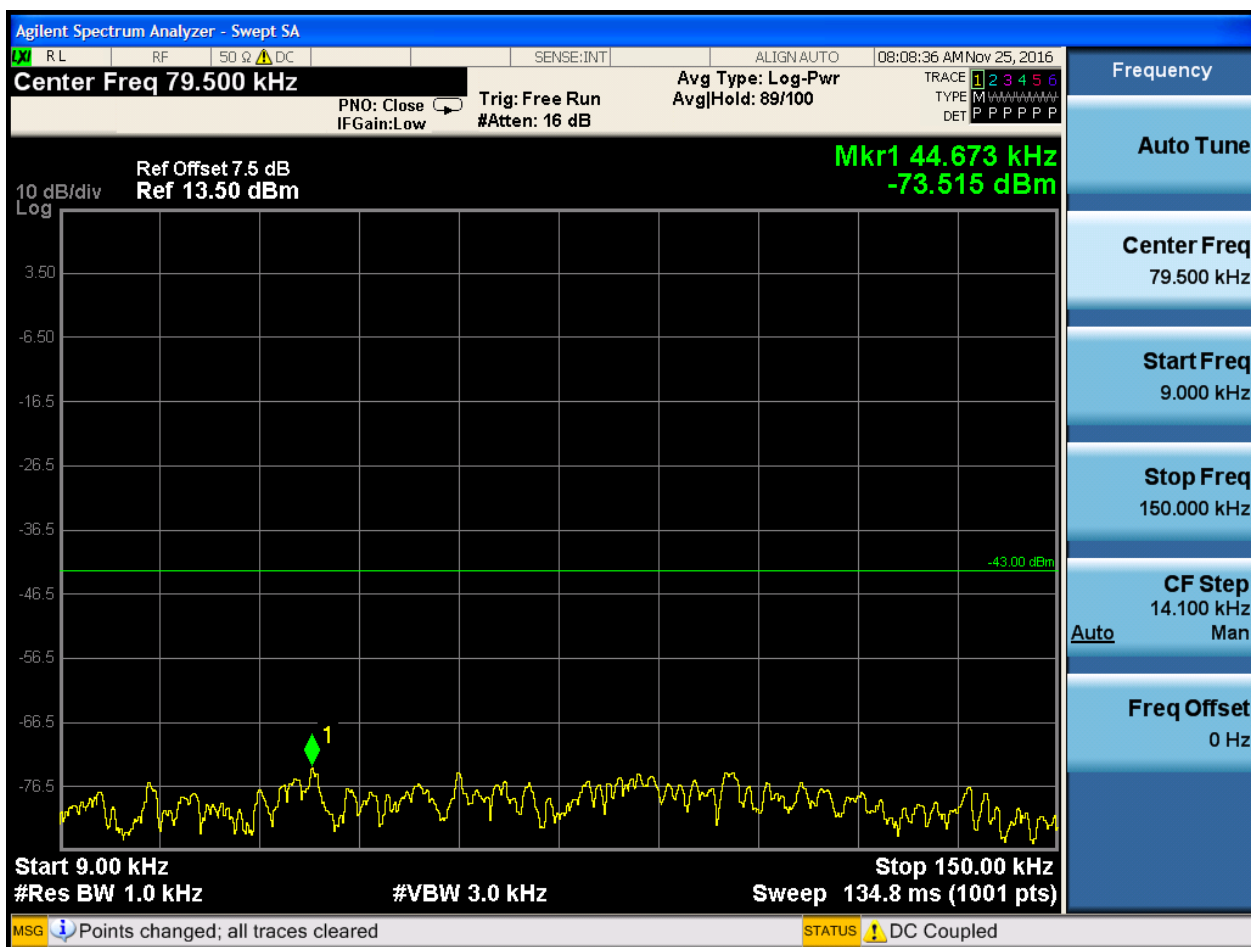


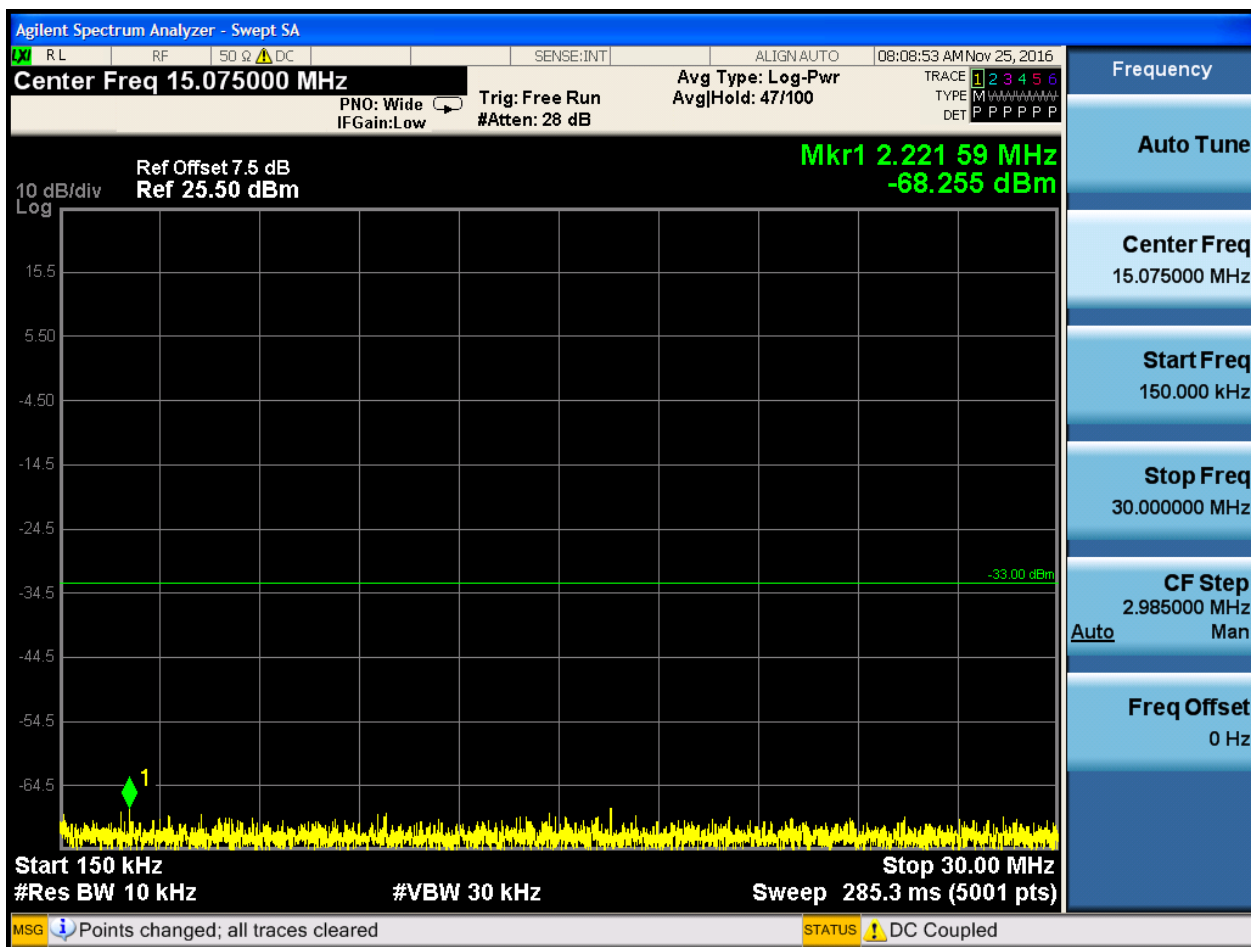


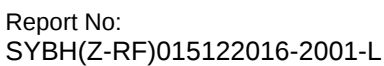
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



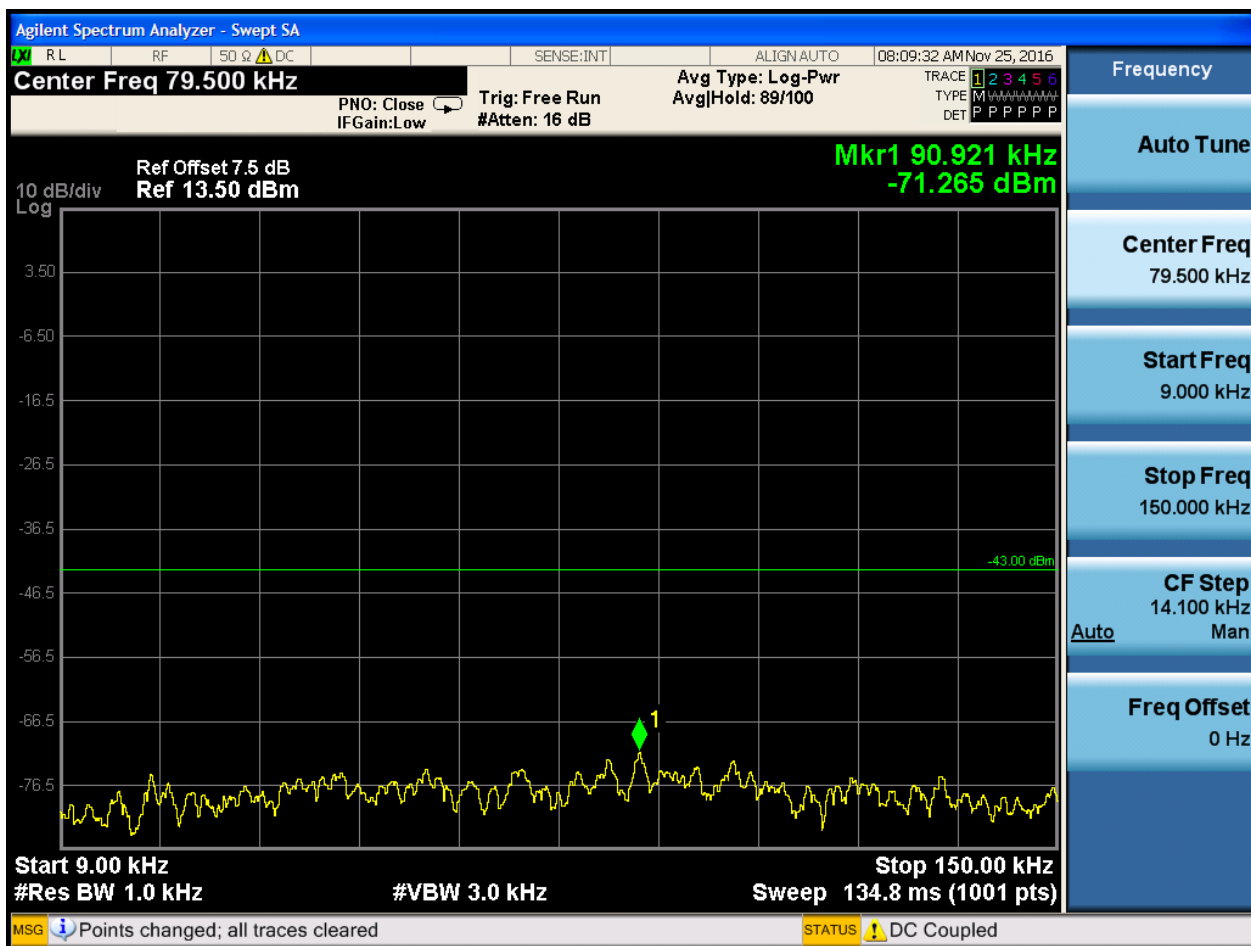


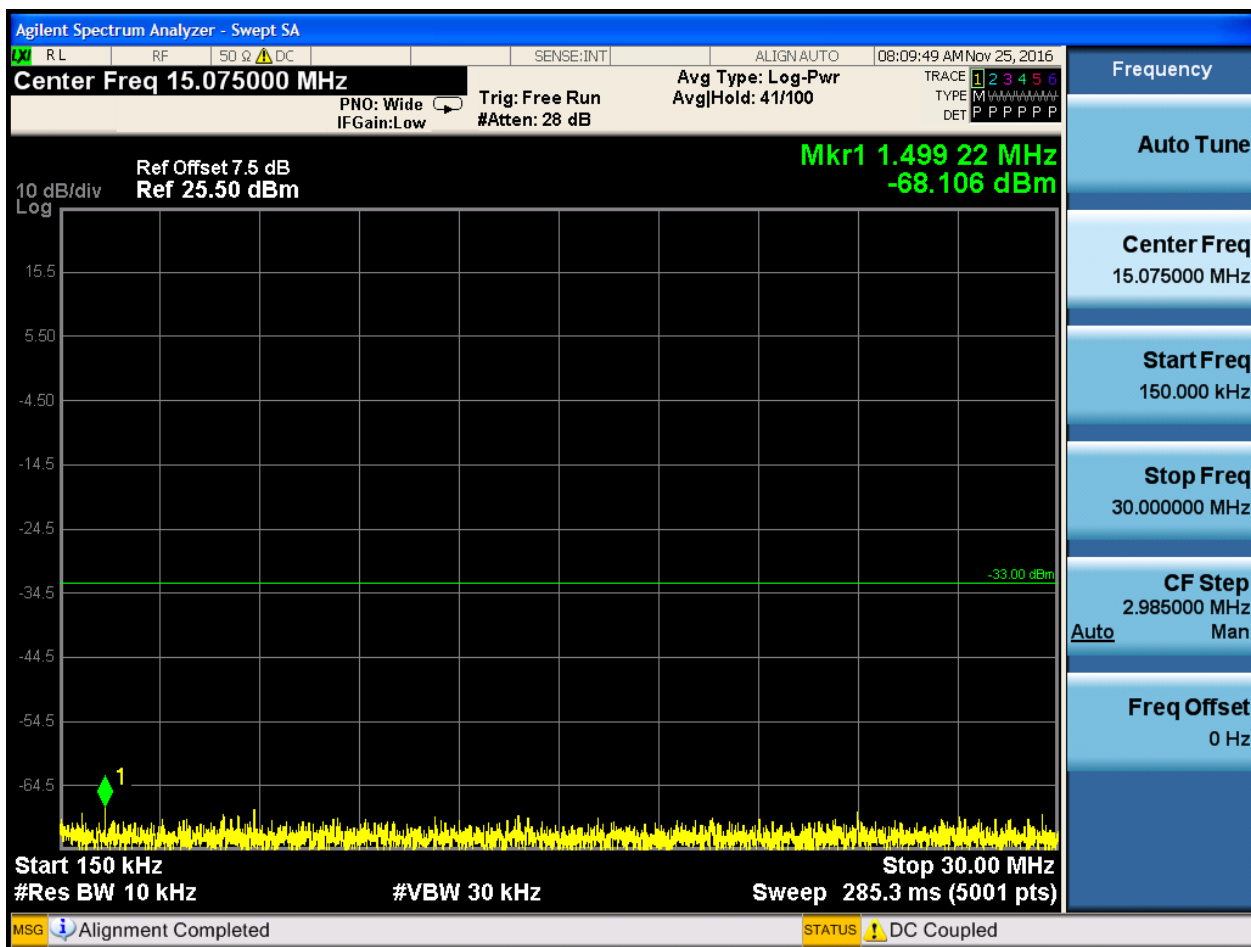


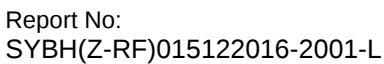


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



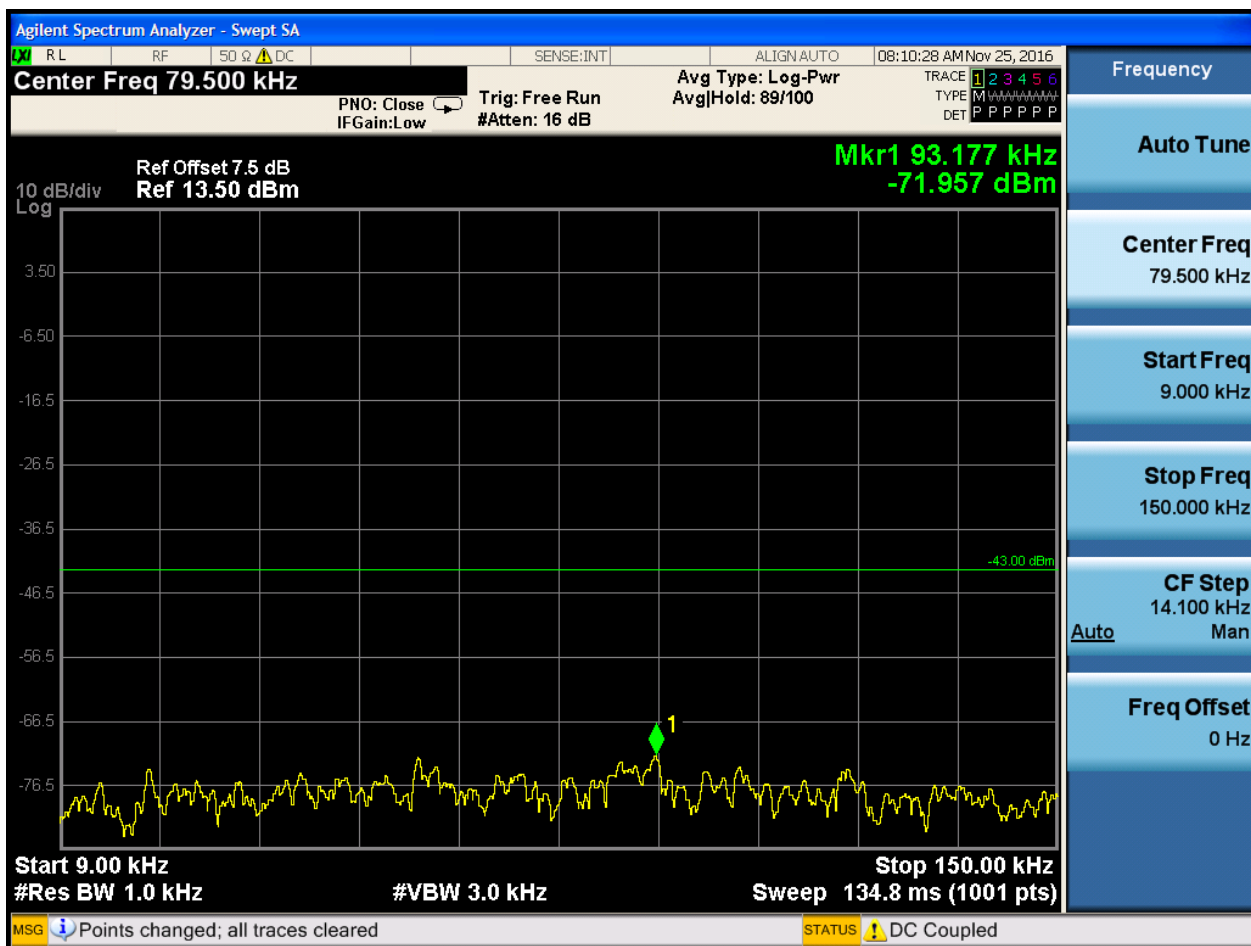


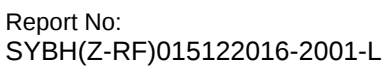


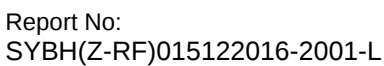


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0



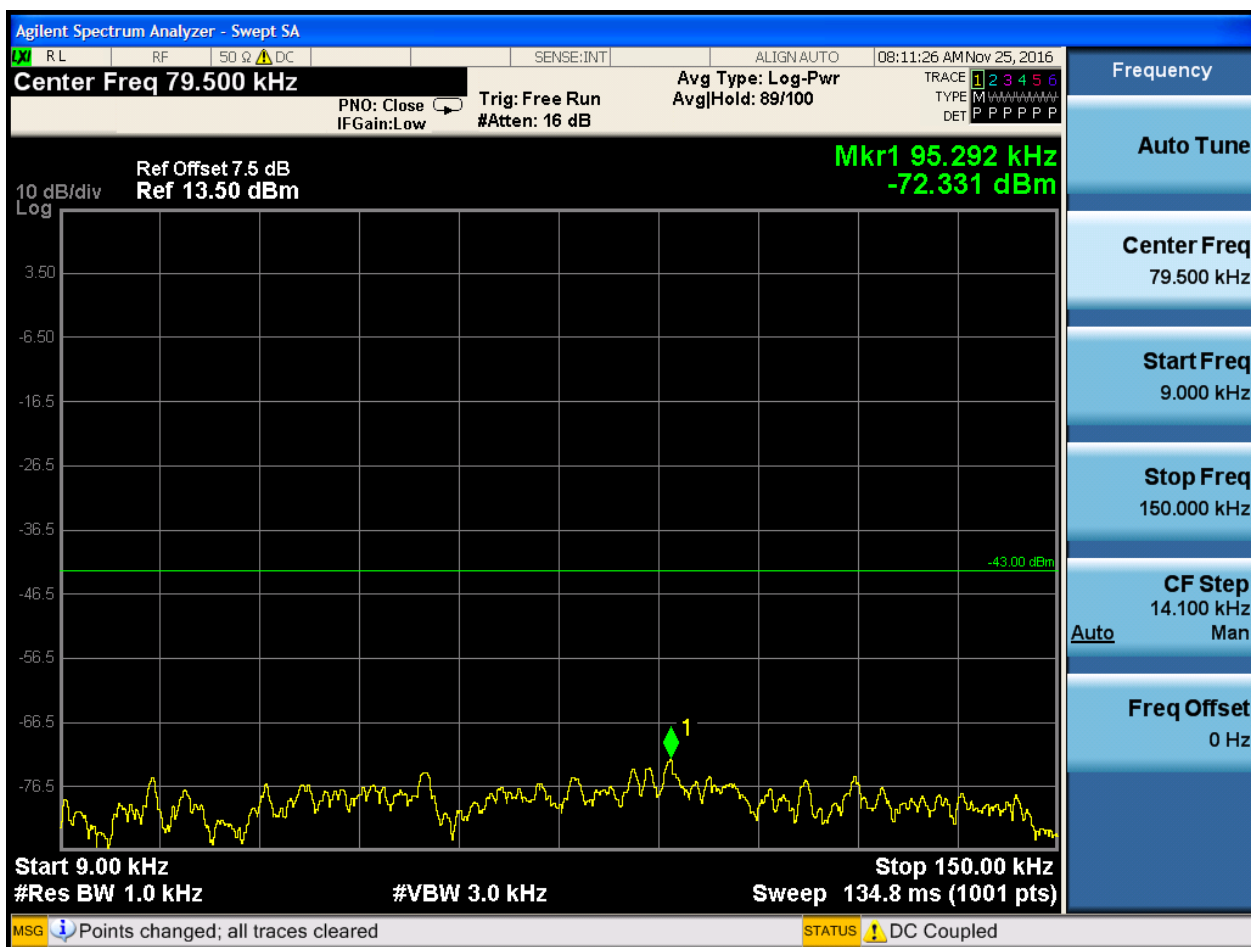


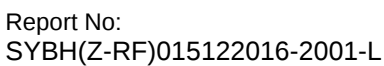


6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

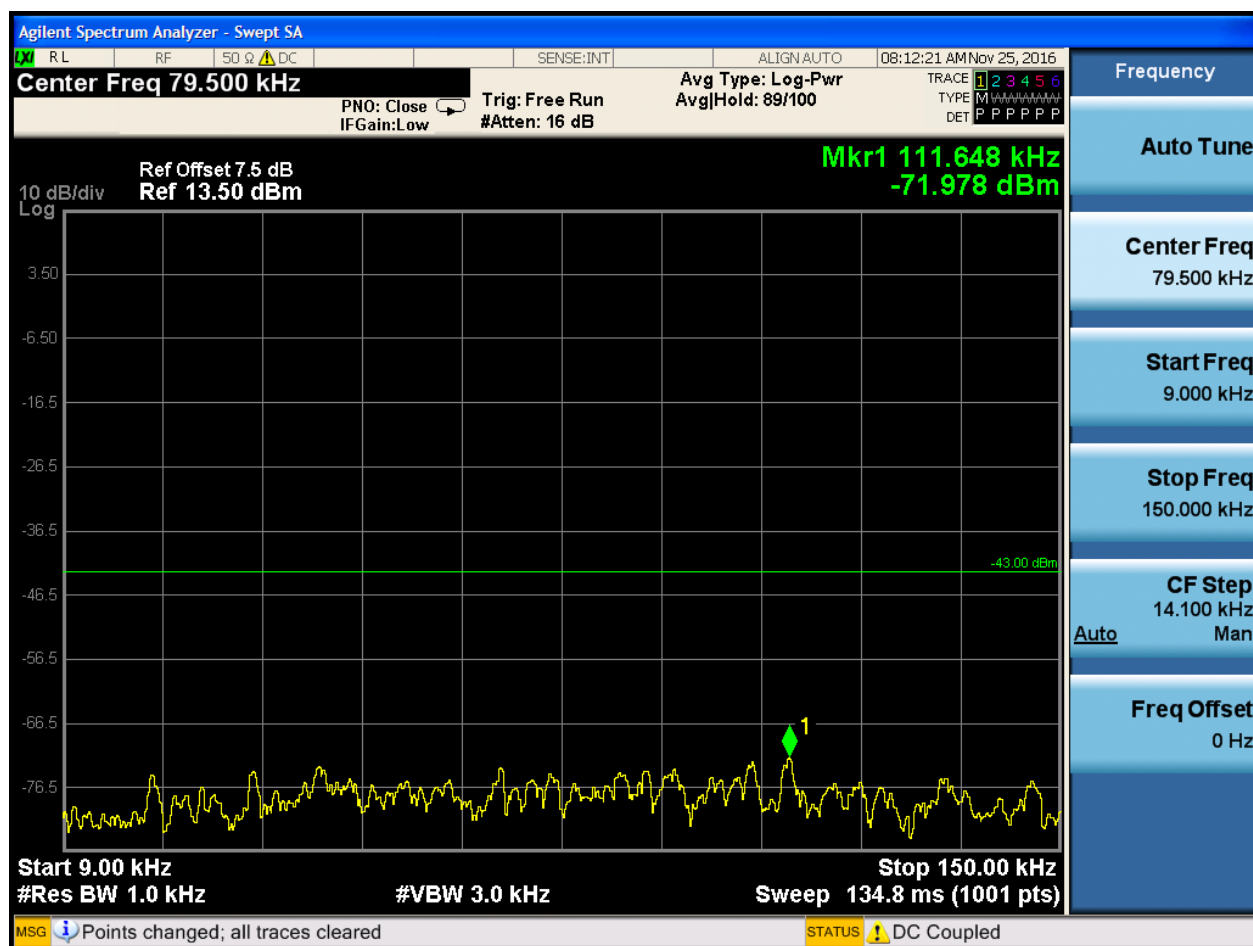
6.1.1.1.3.1.1 Test RB = RB1#0

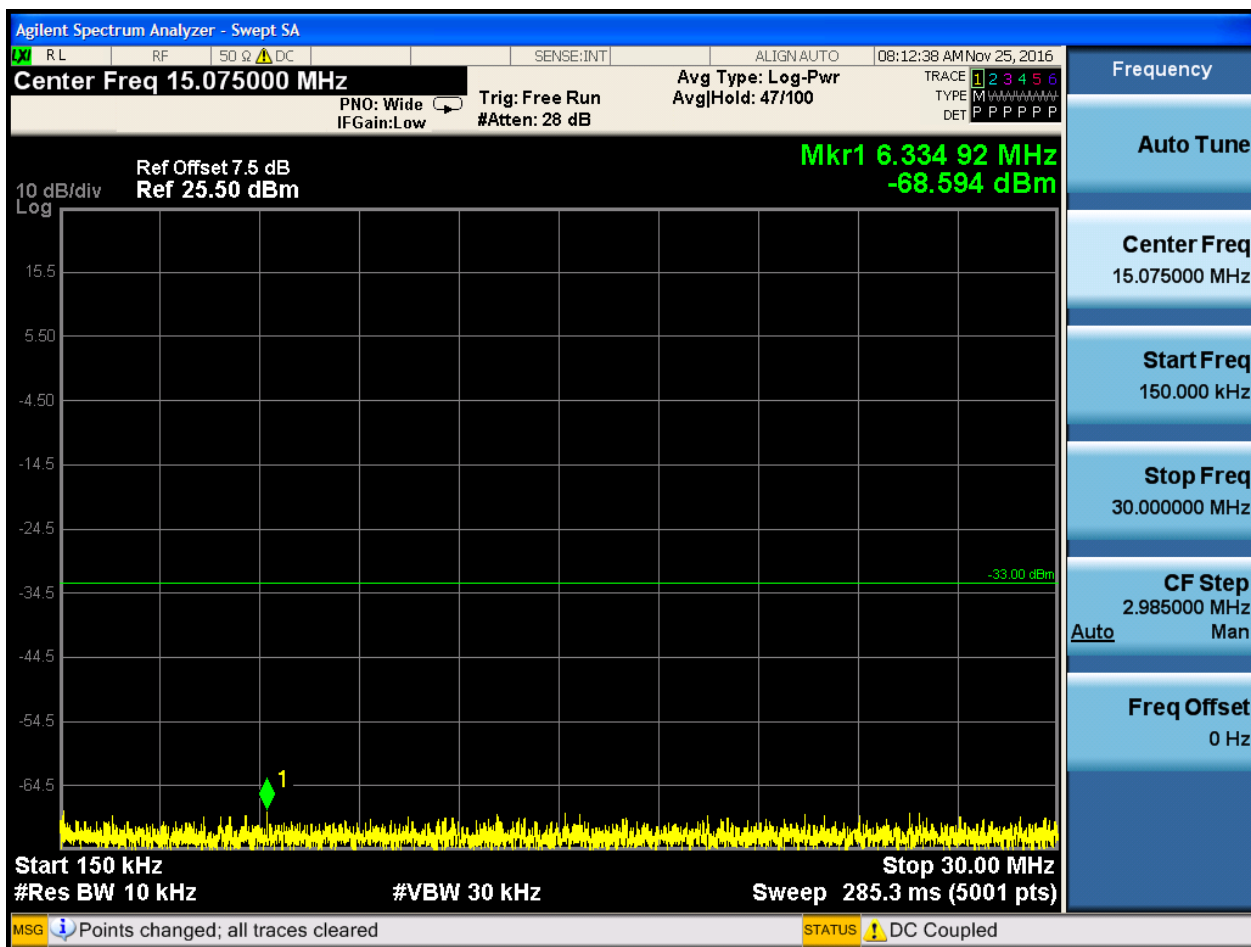


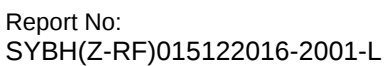


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

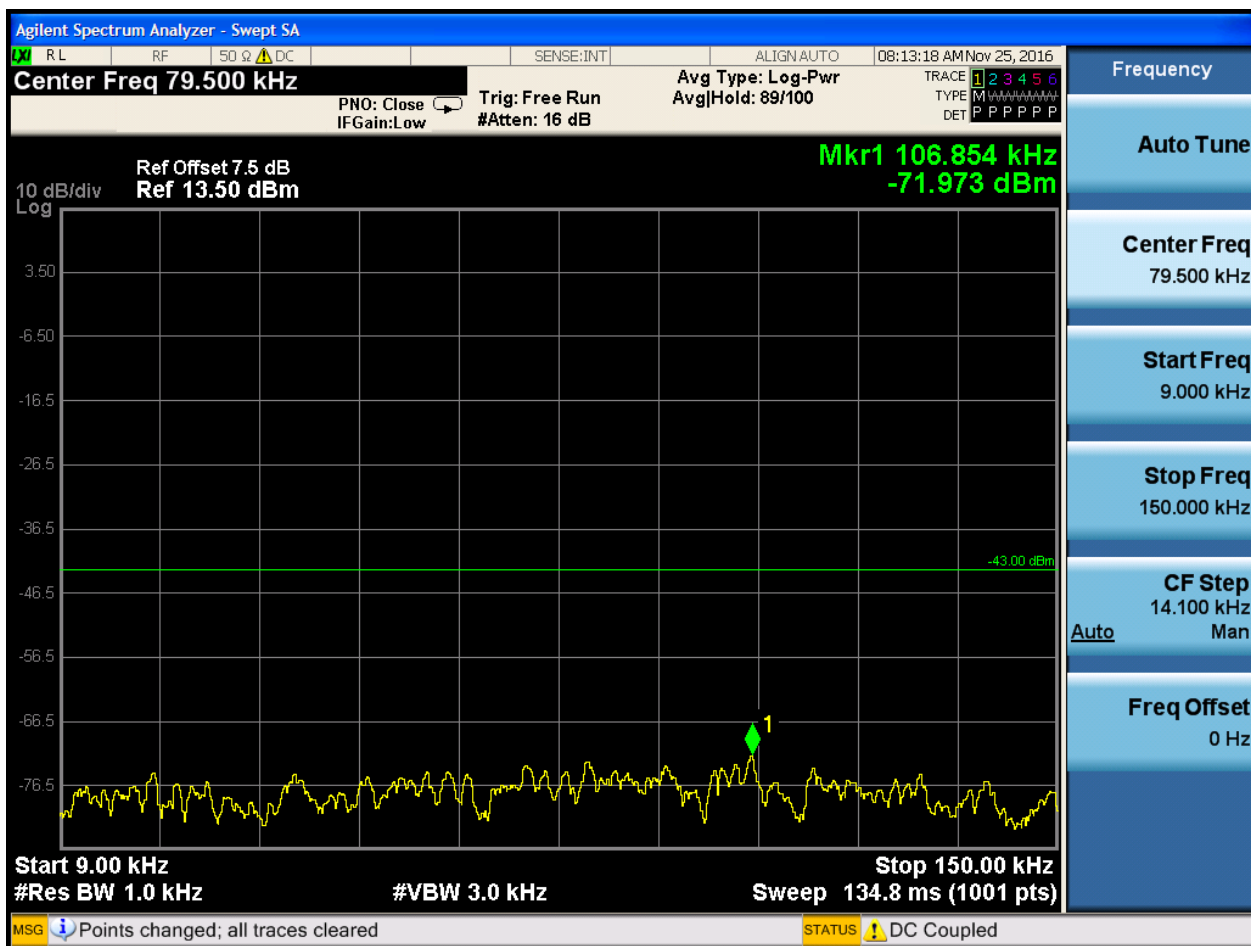


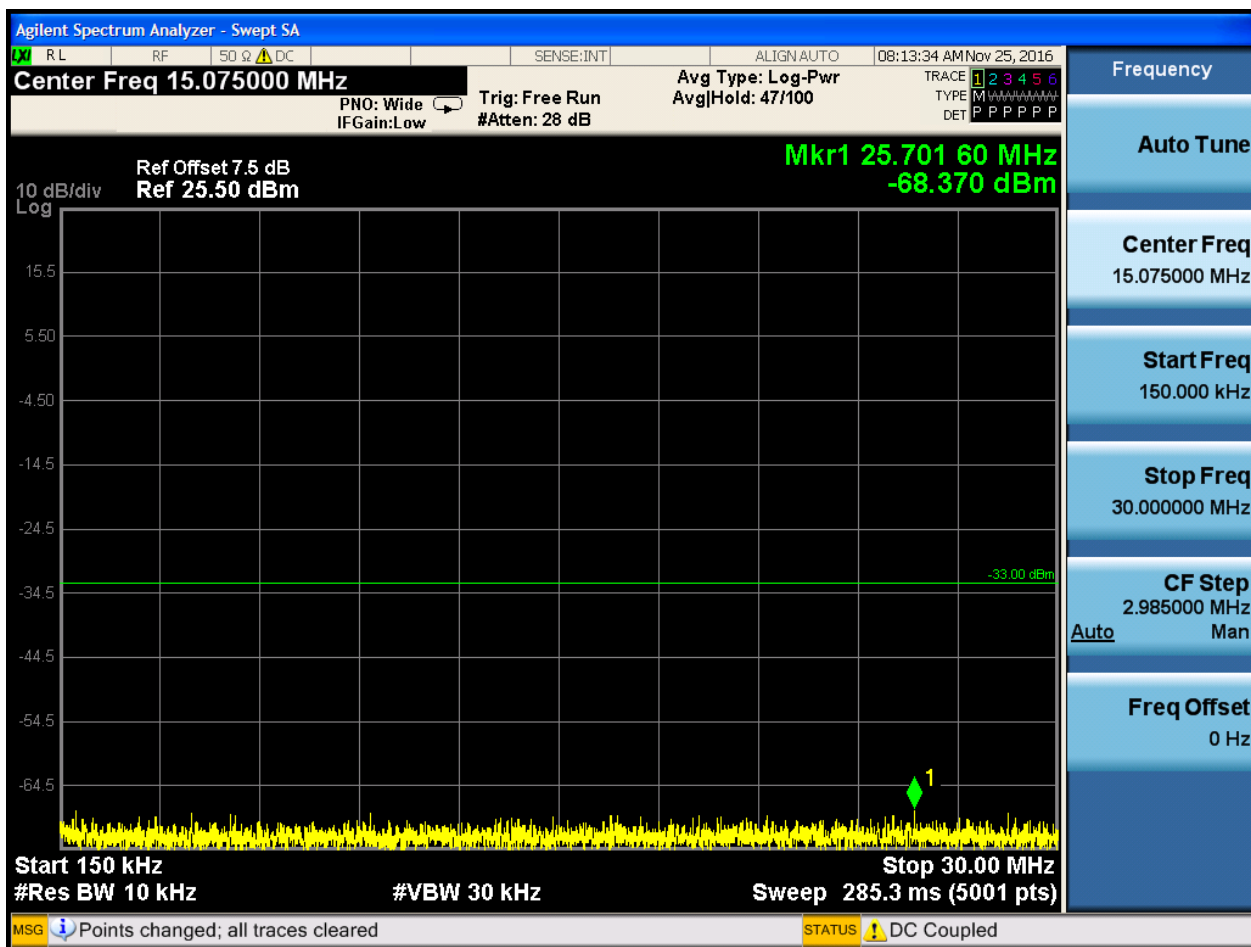


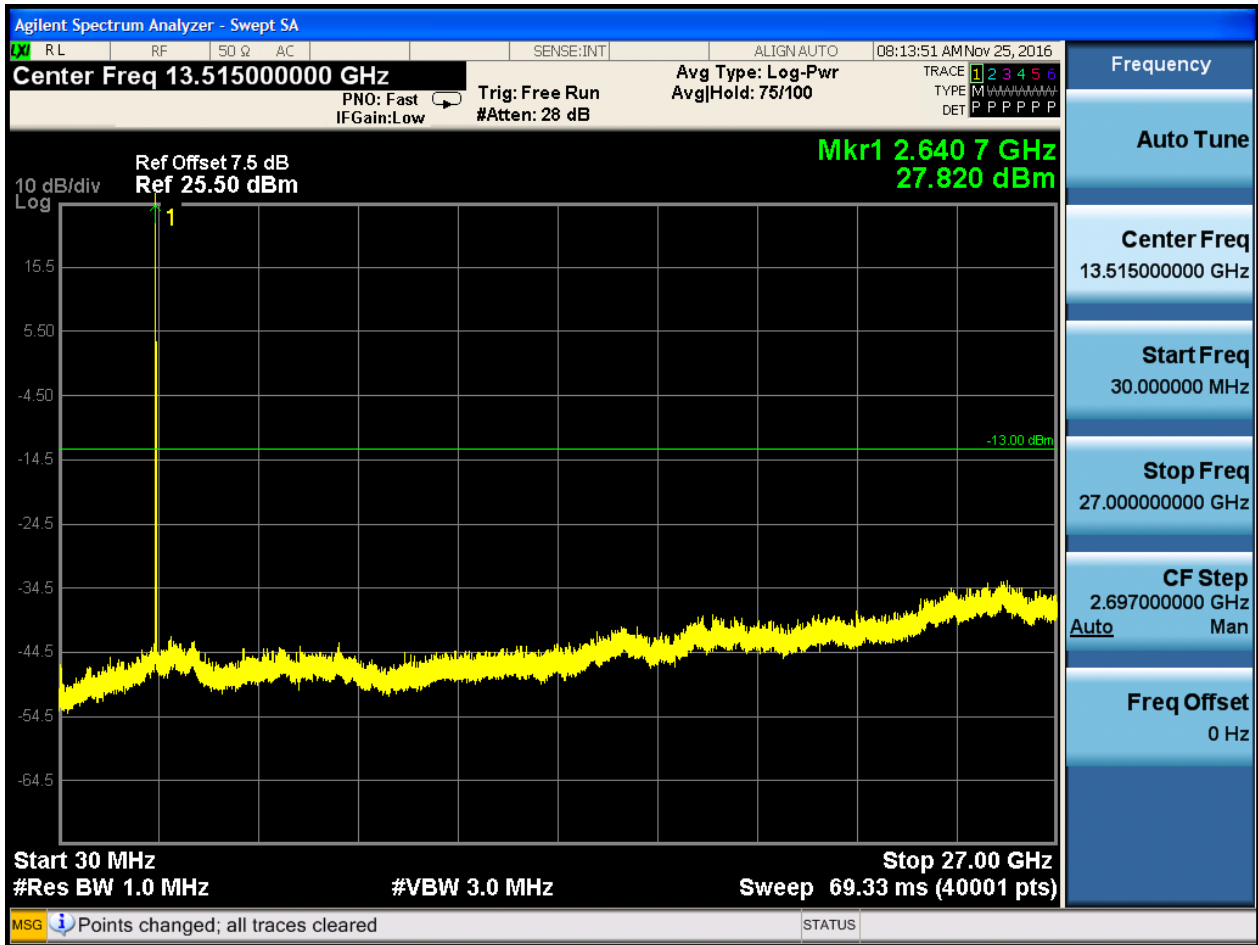


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0



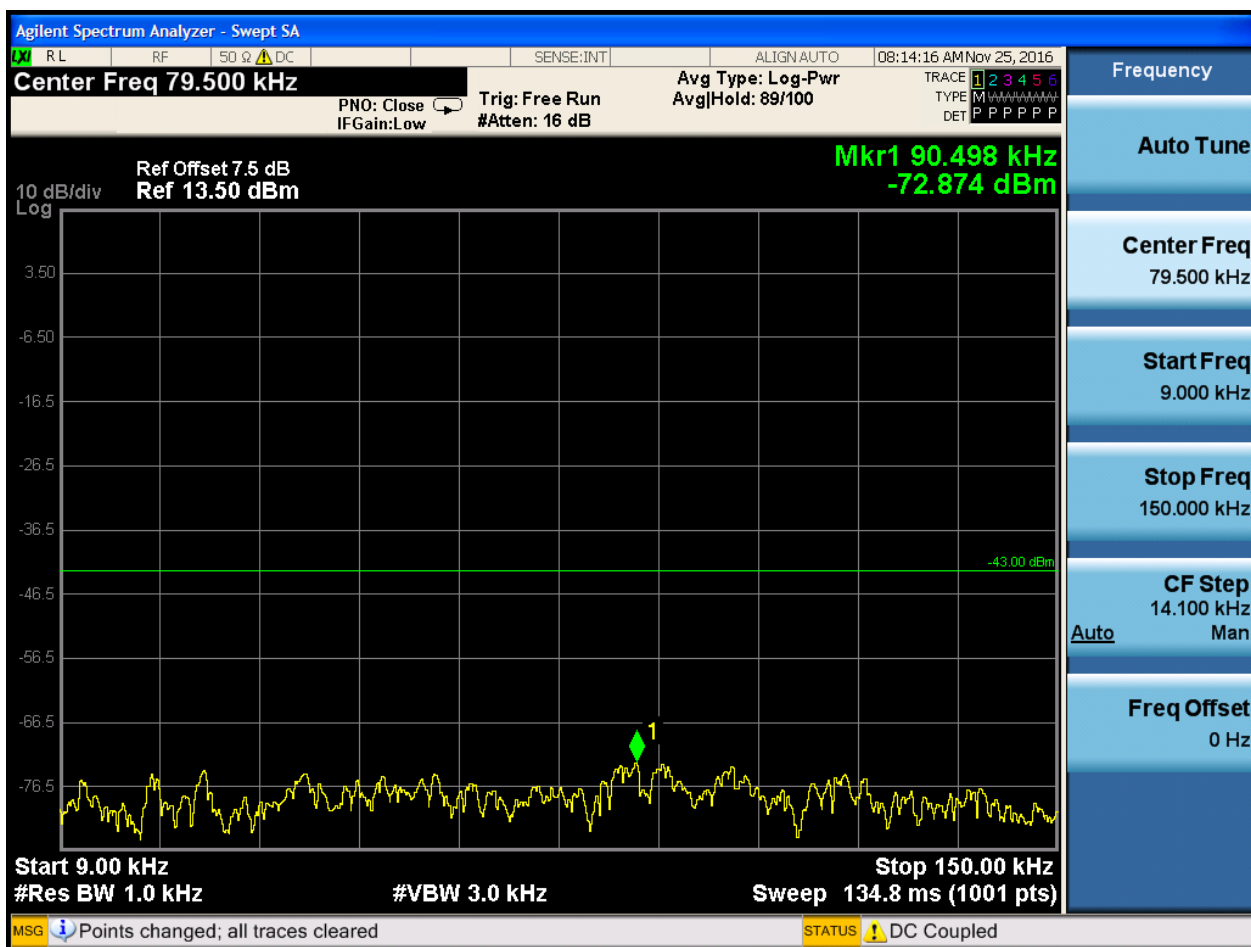


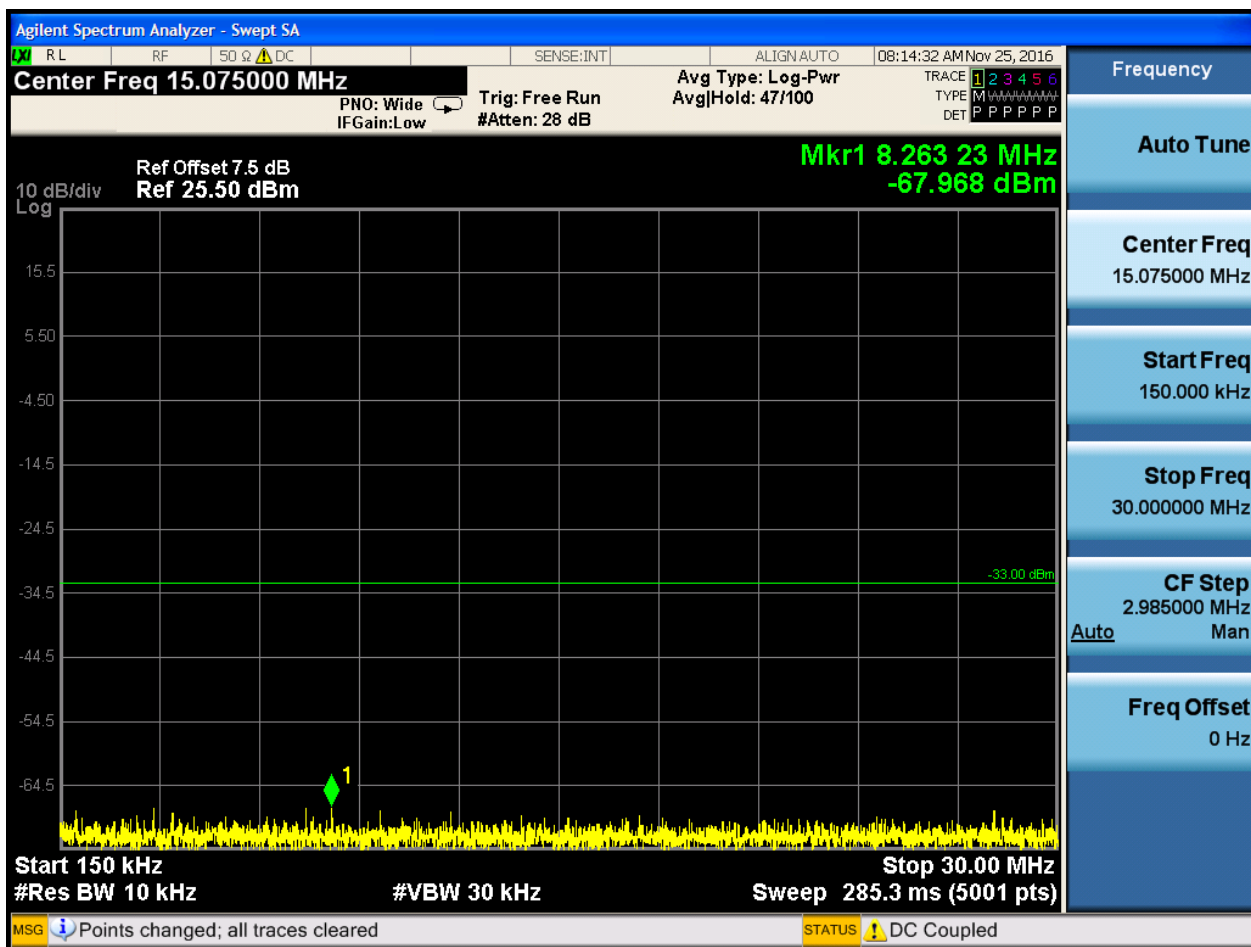


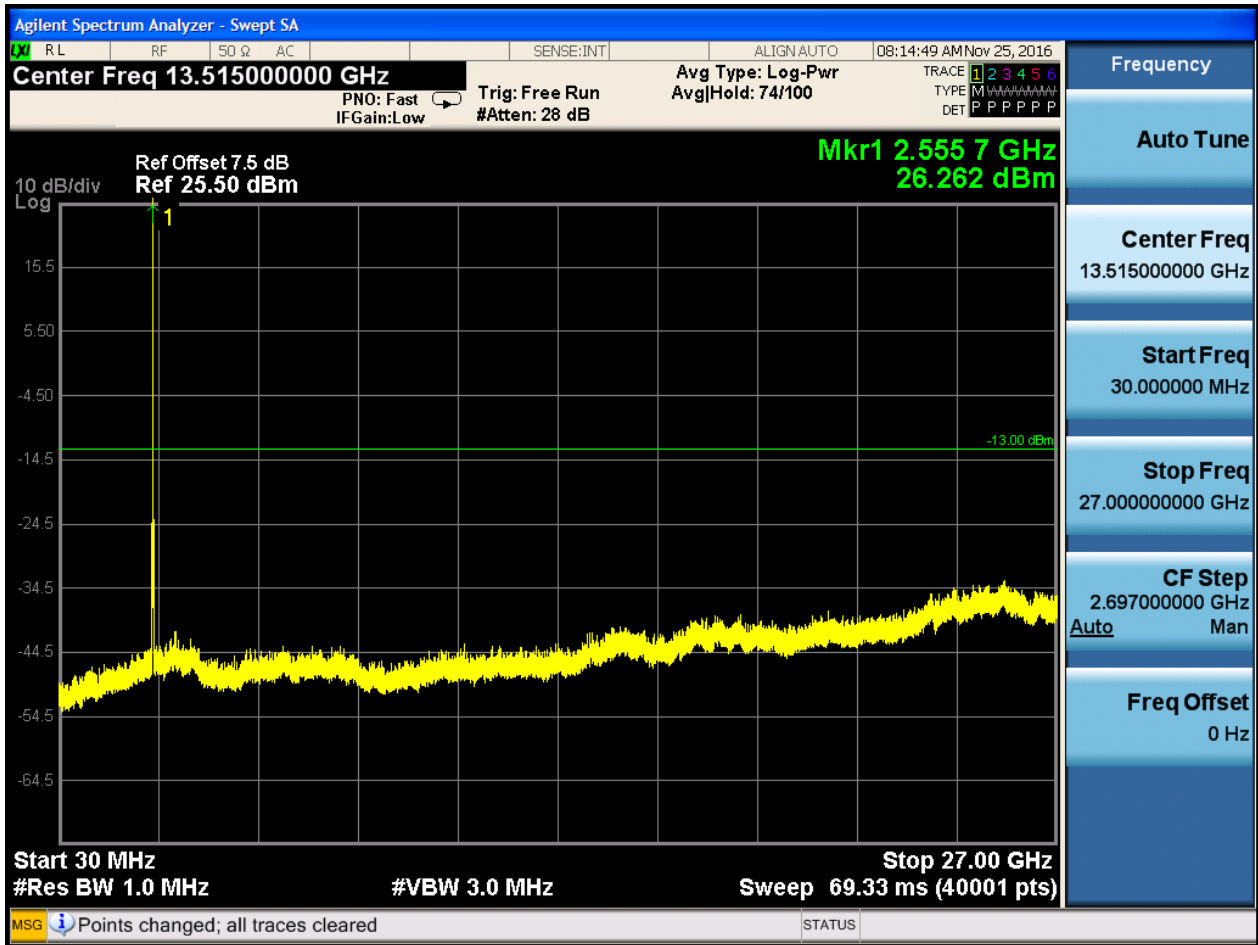
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



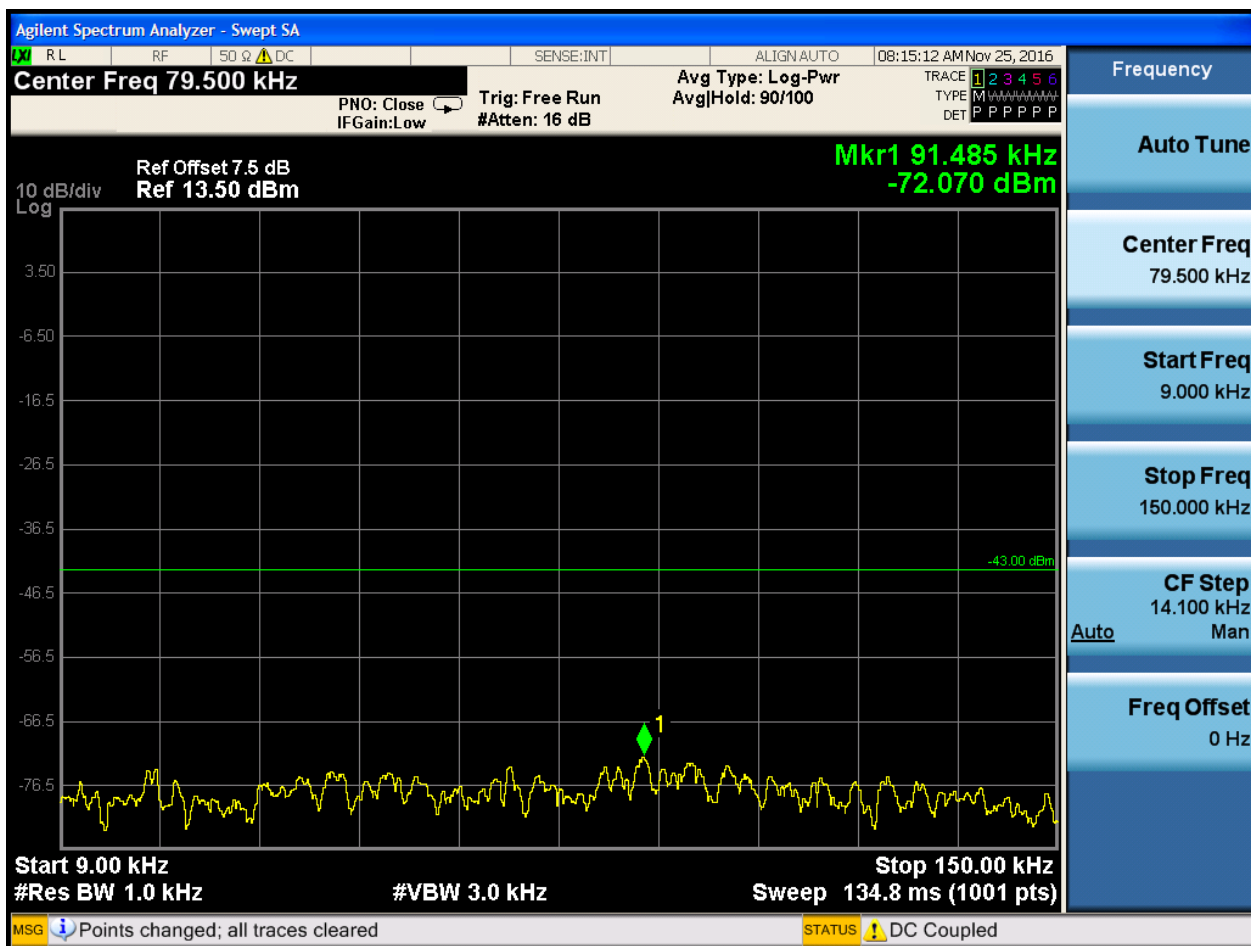




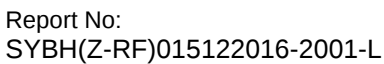


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



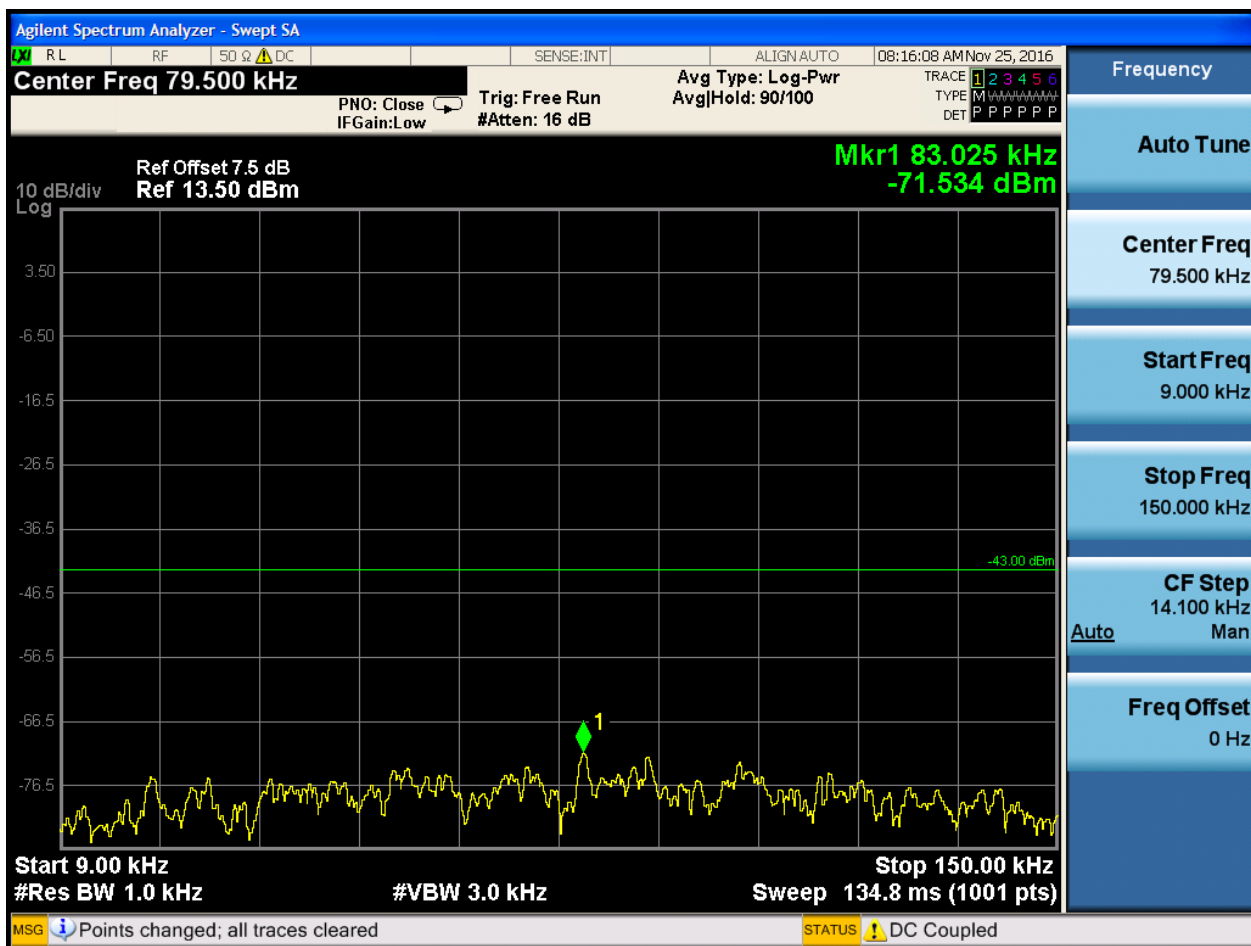


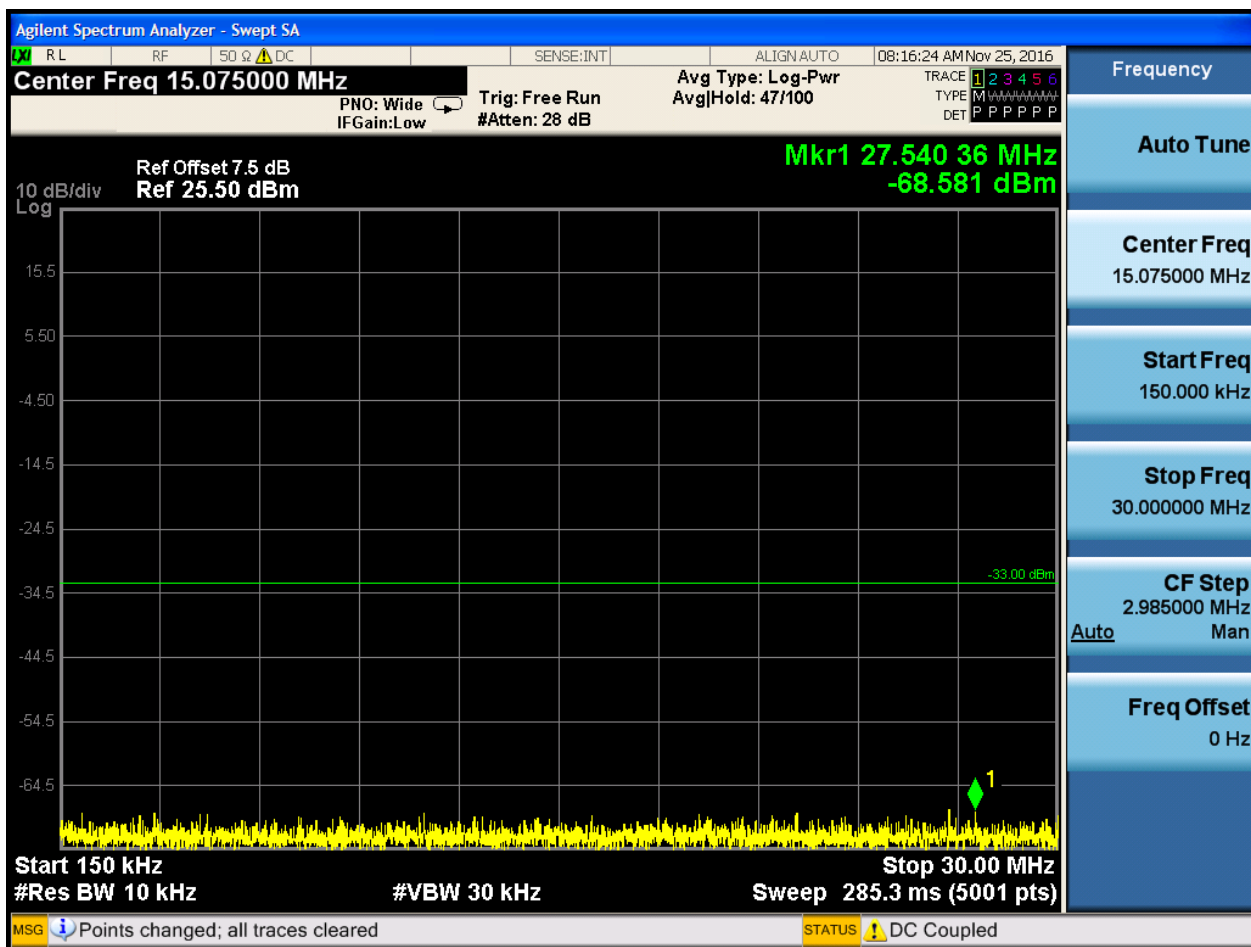


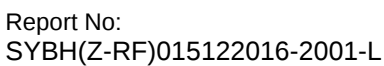


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







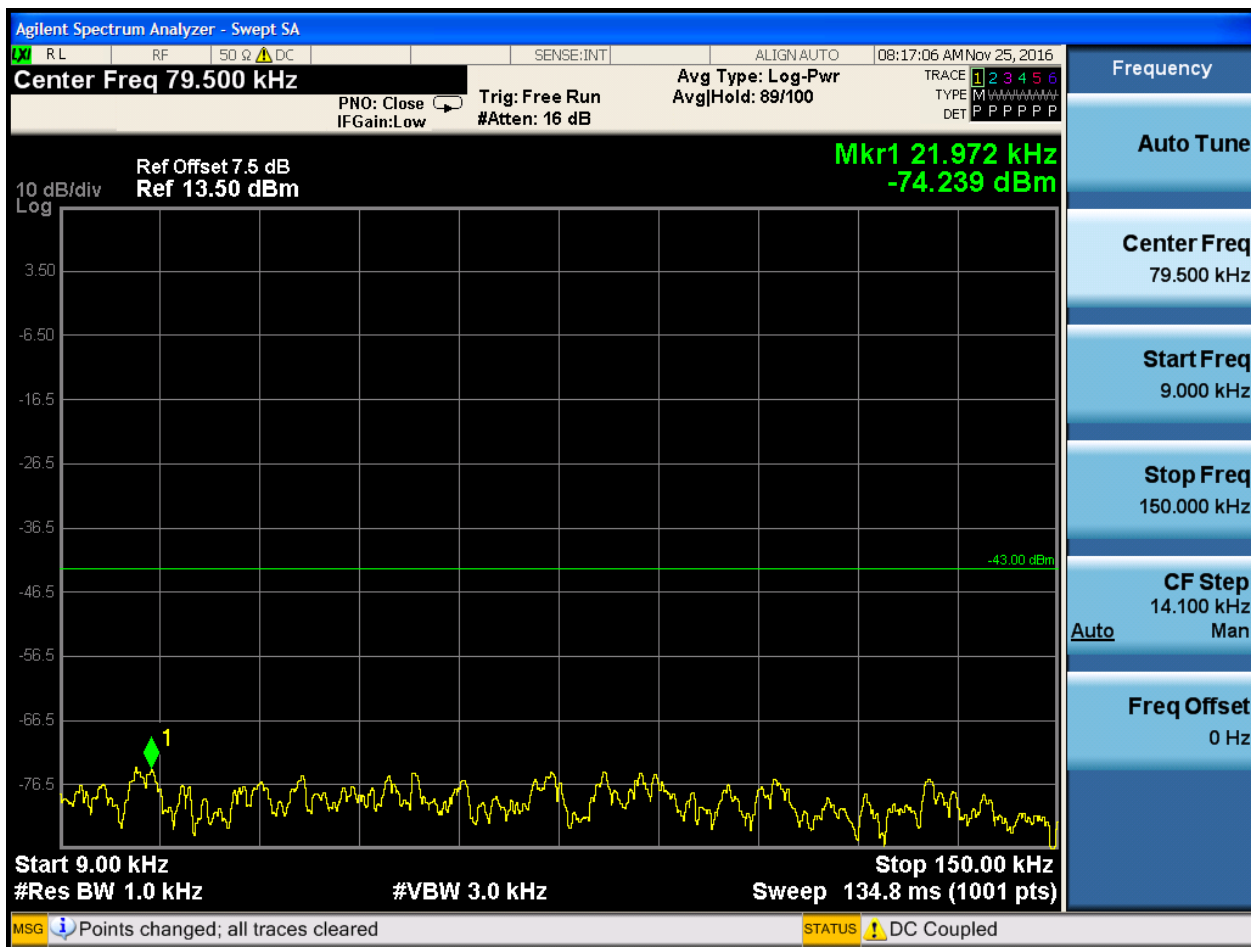


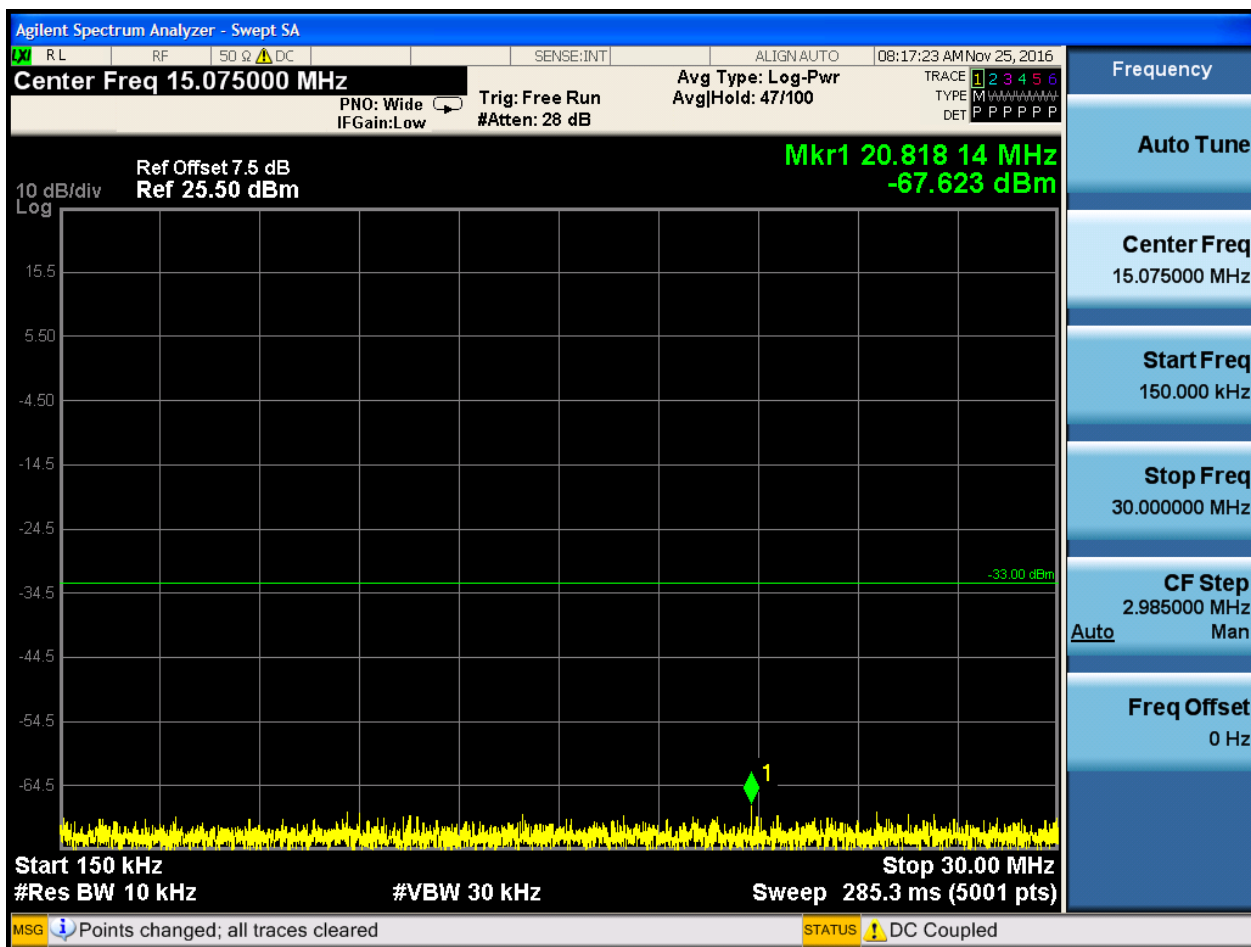
6.1.1.2 Test Mode = LTE/TM2

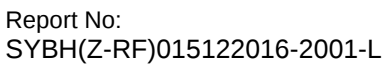
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0

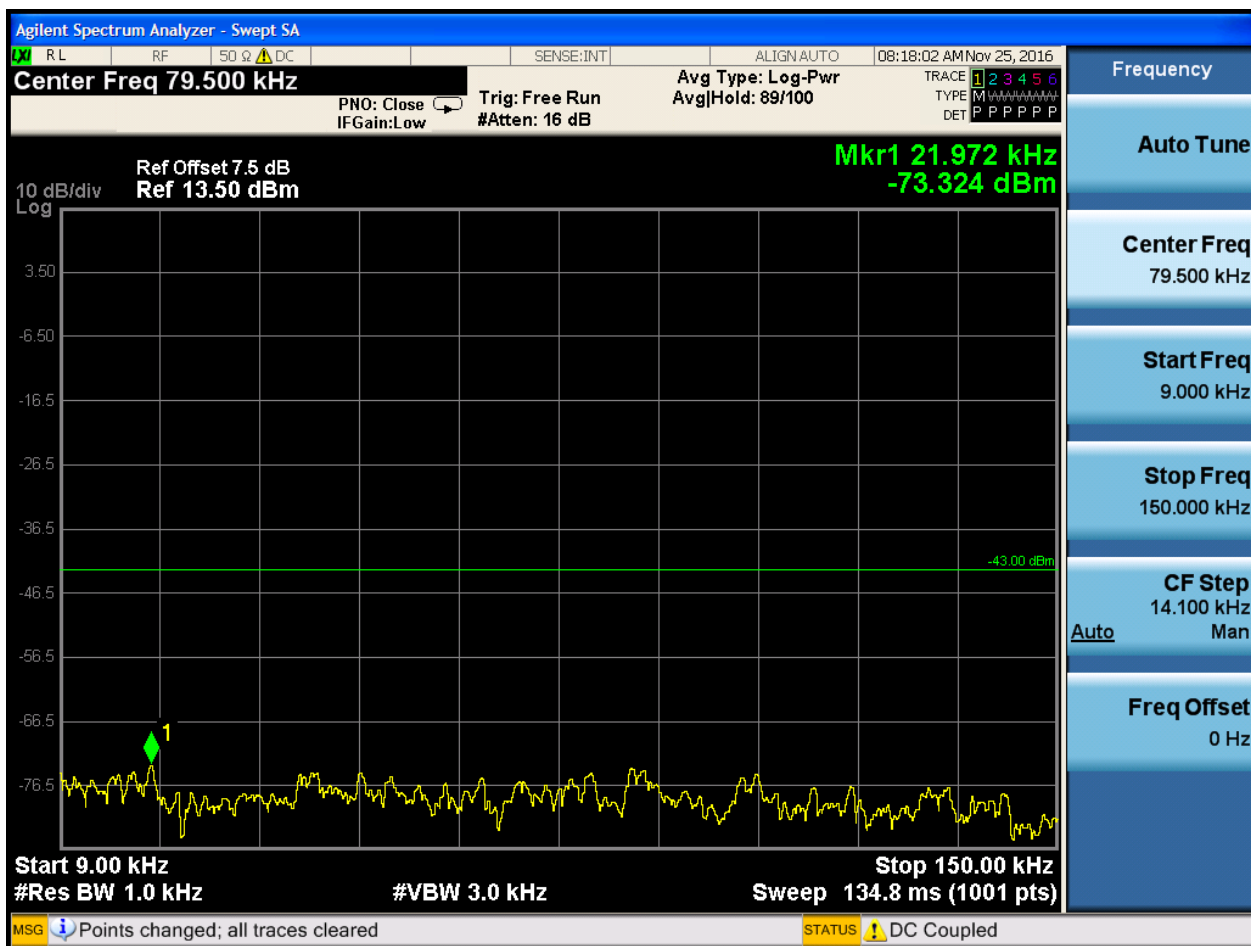




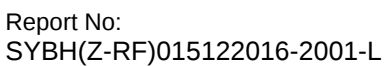


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0

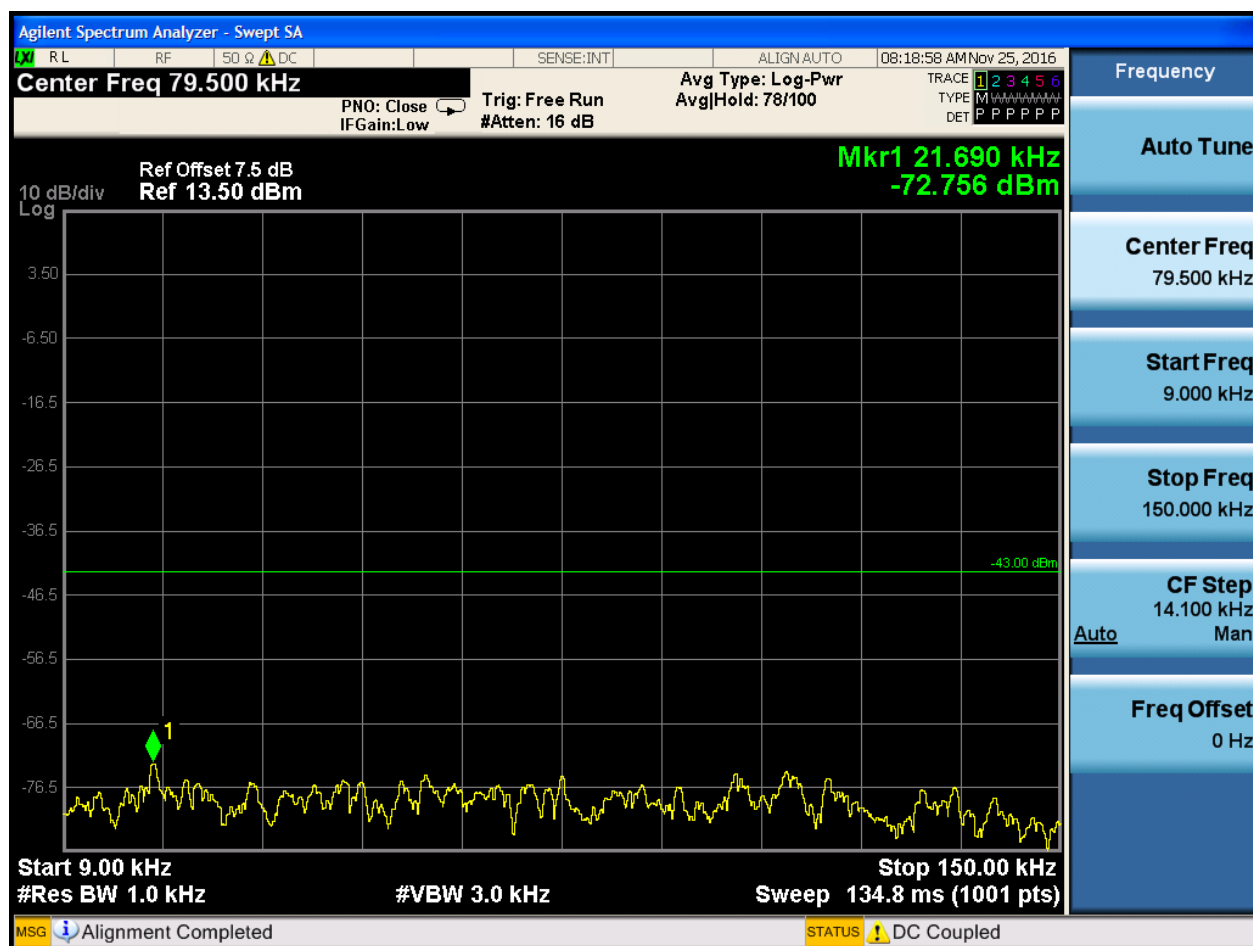


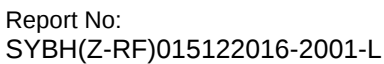


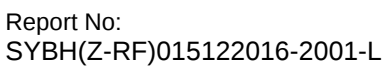


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



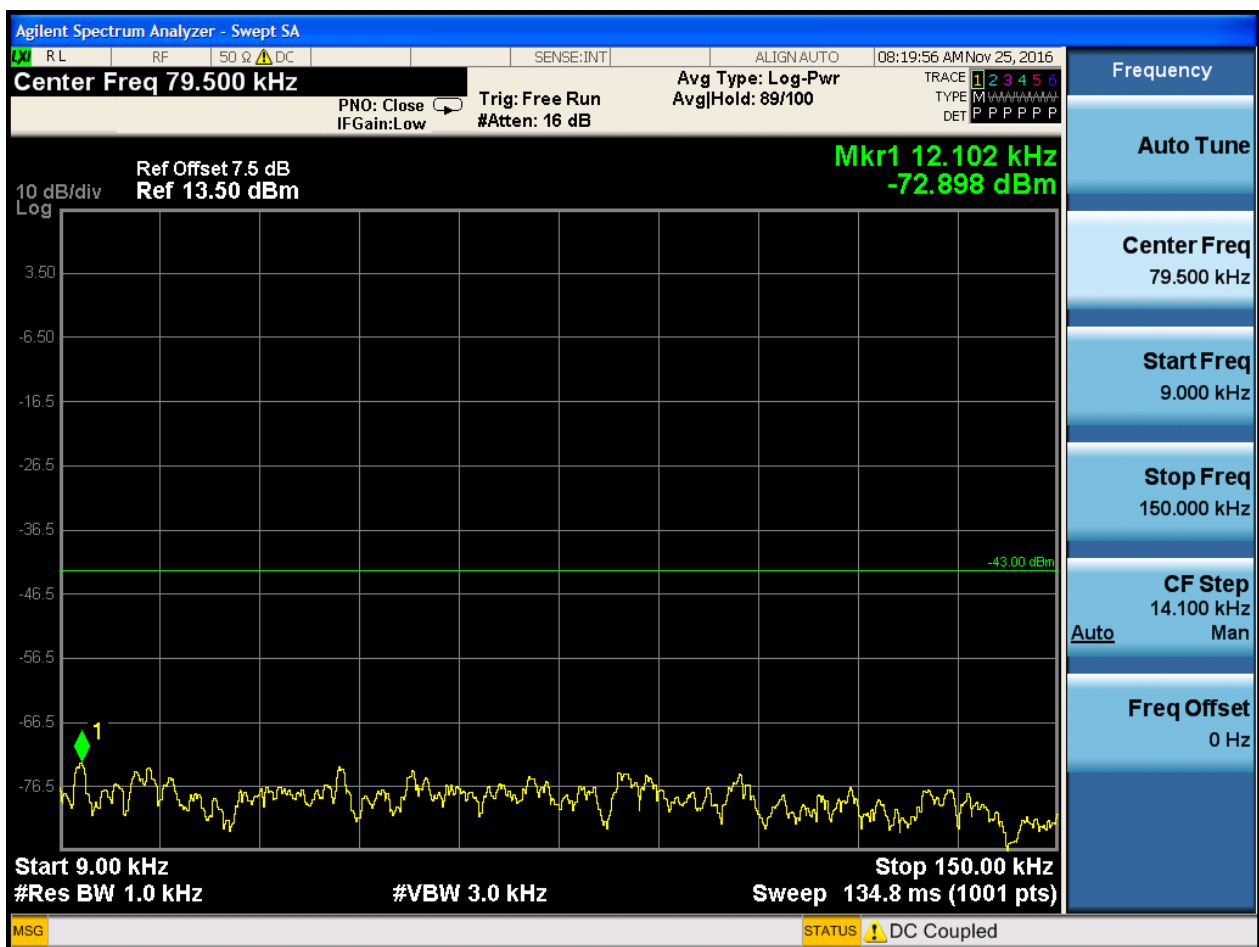


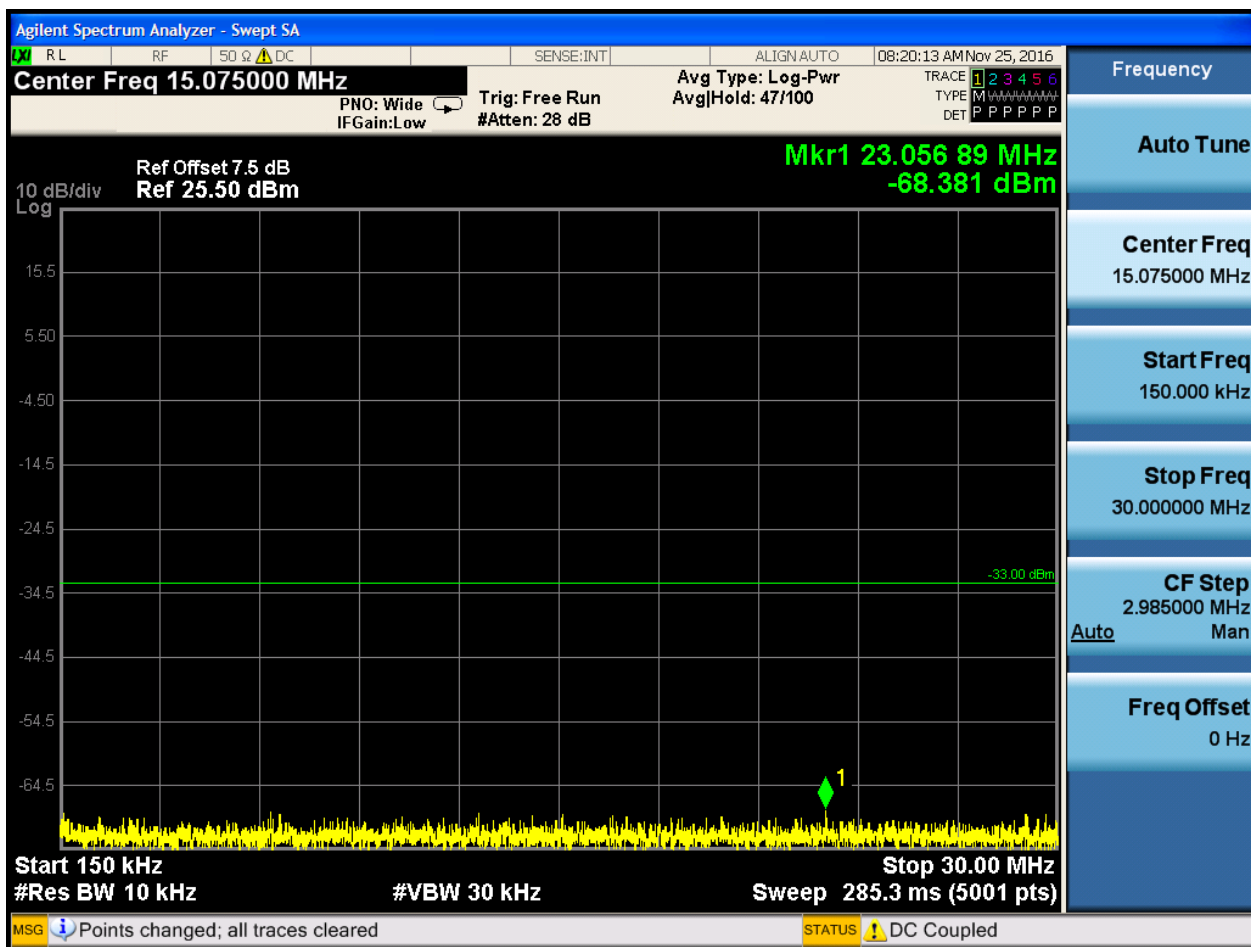


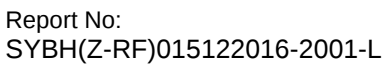
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0

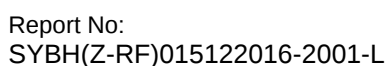


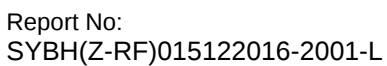


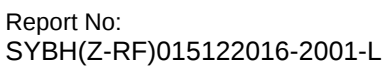




6.1.1.2.2.2.1 Test RB = RB1#0

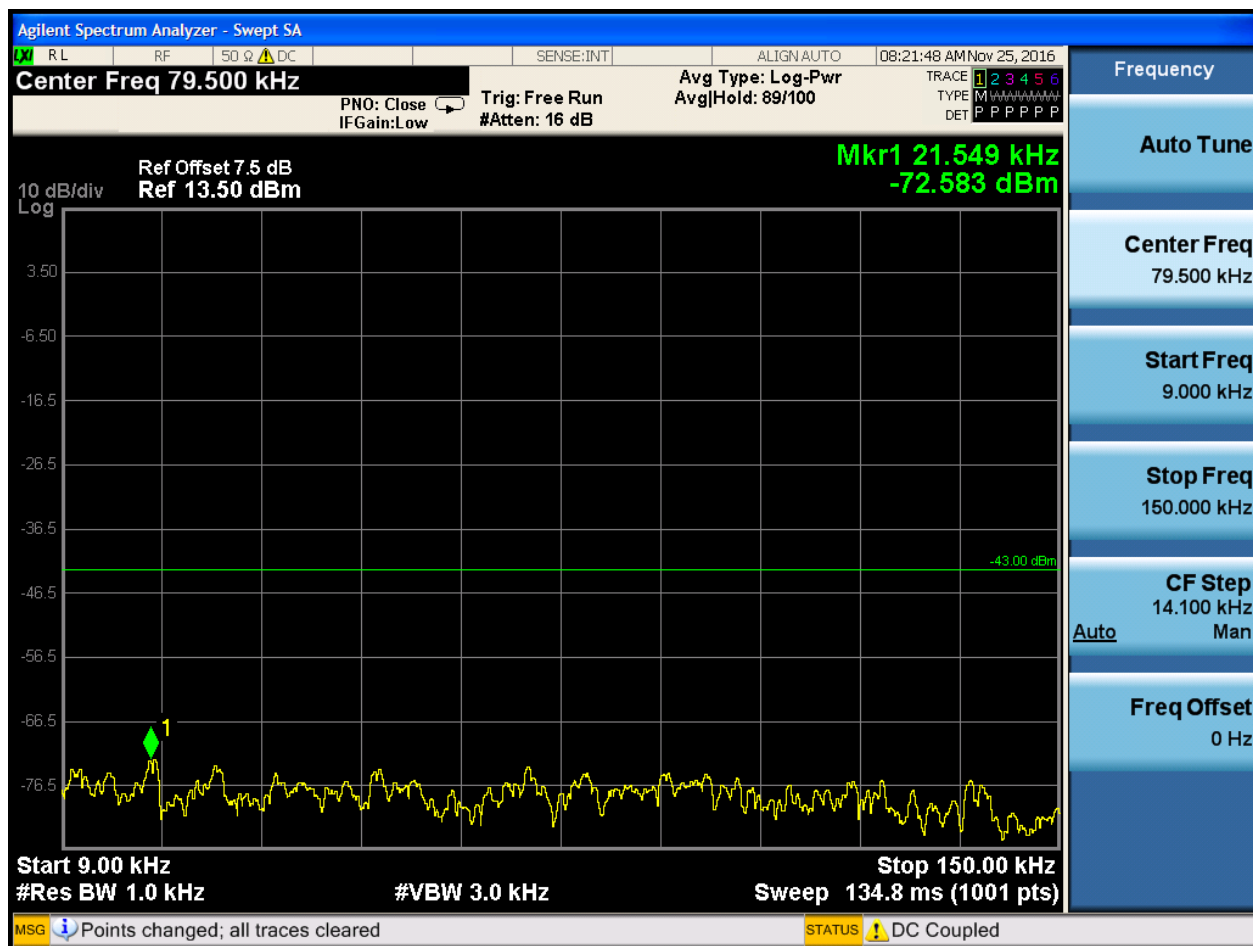


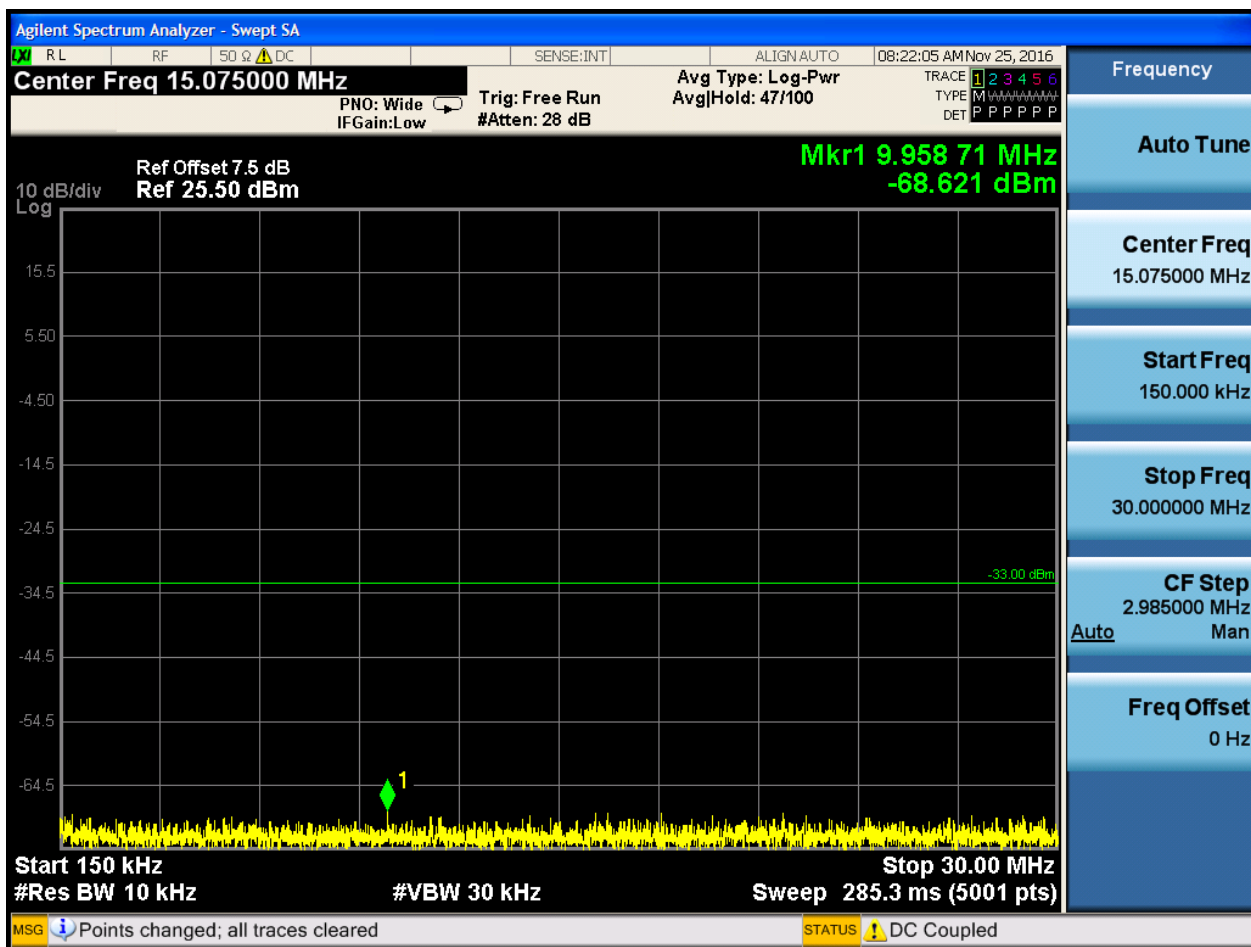


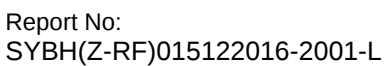


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0



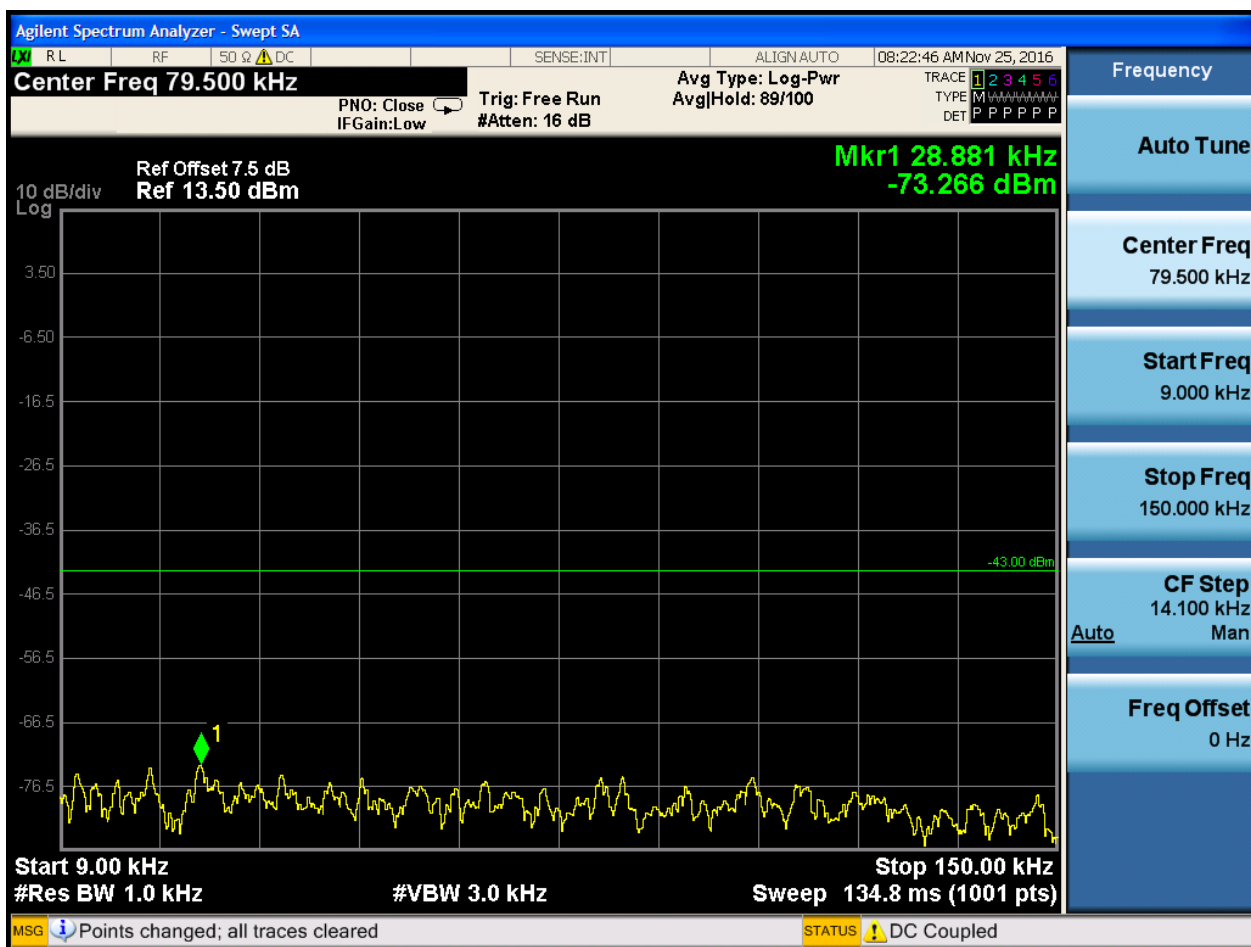


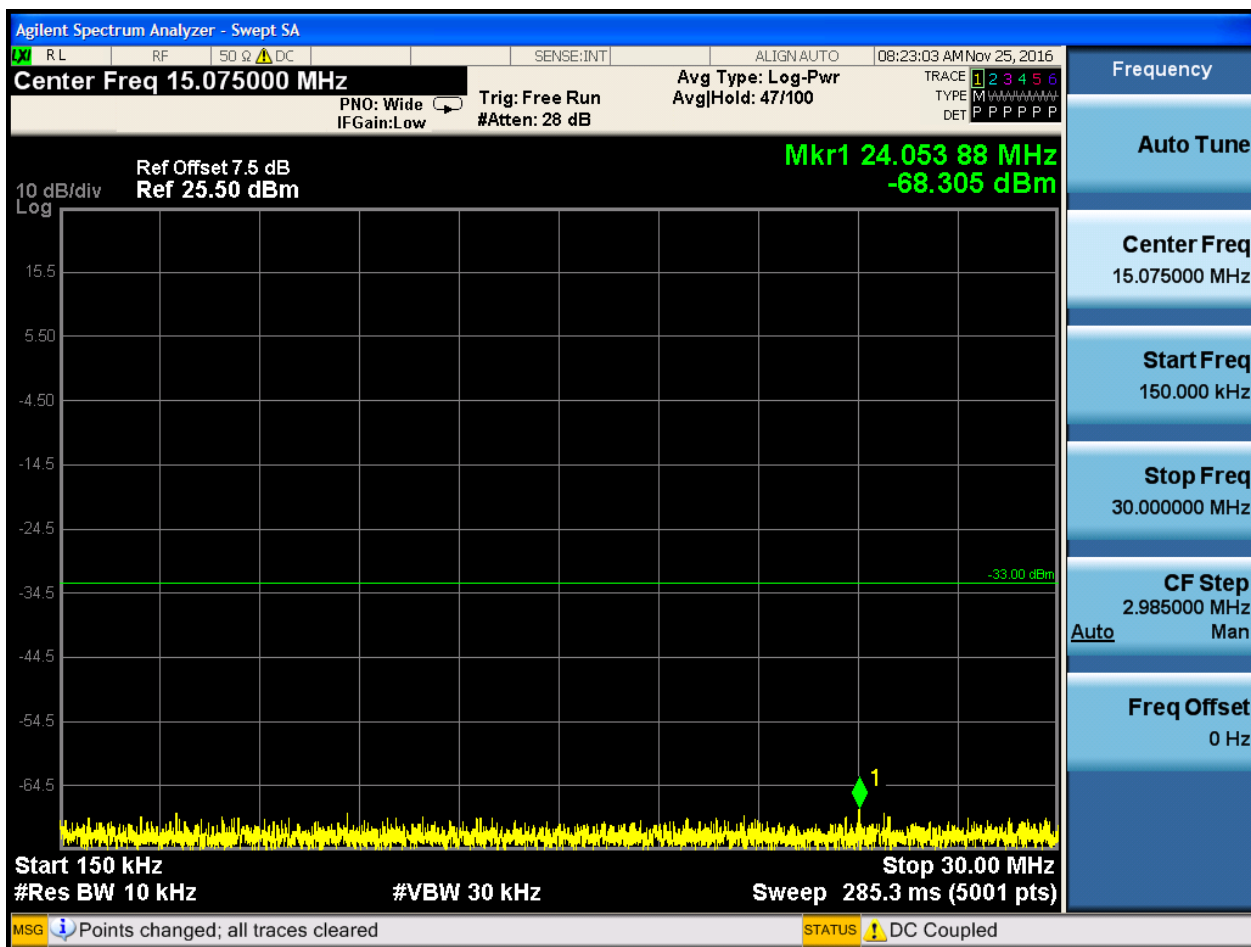


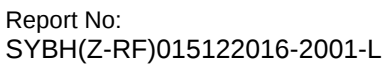
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



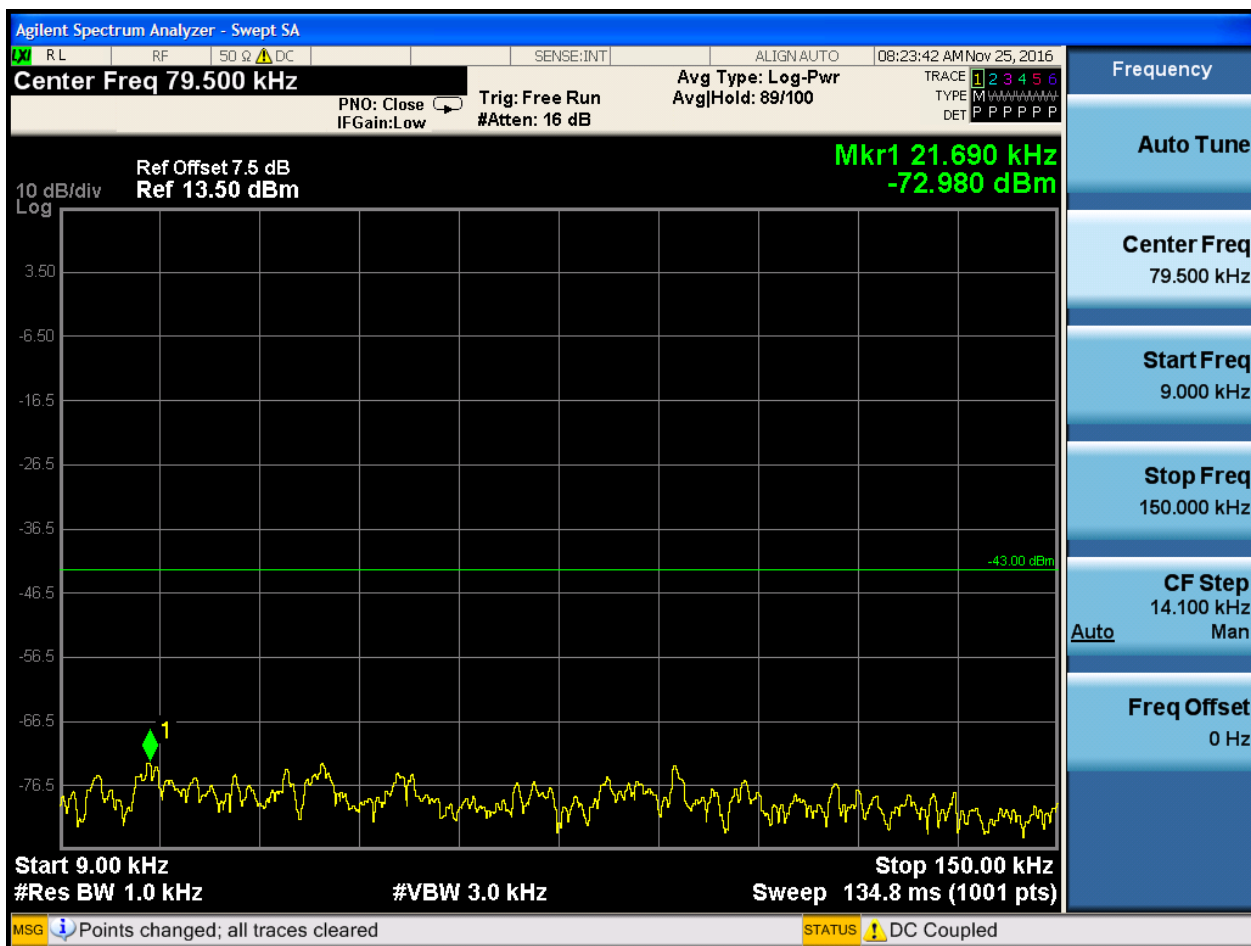




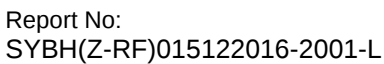


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0

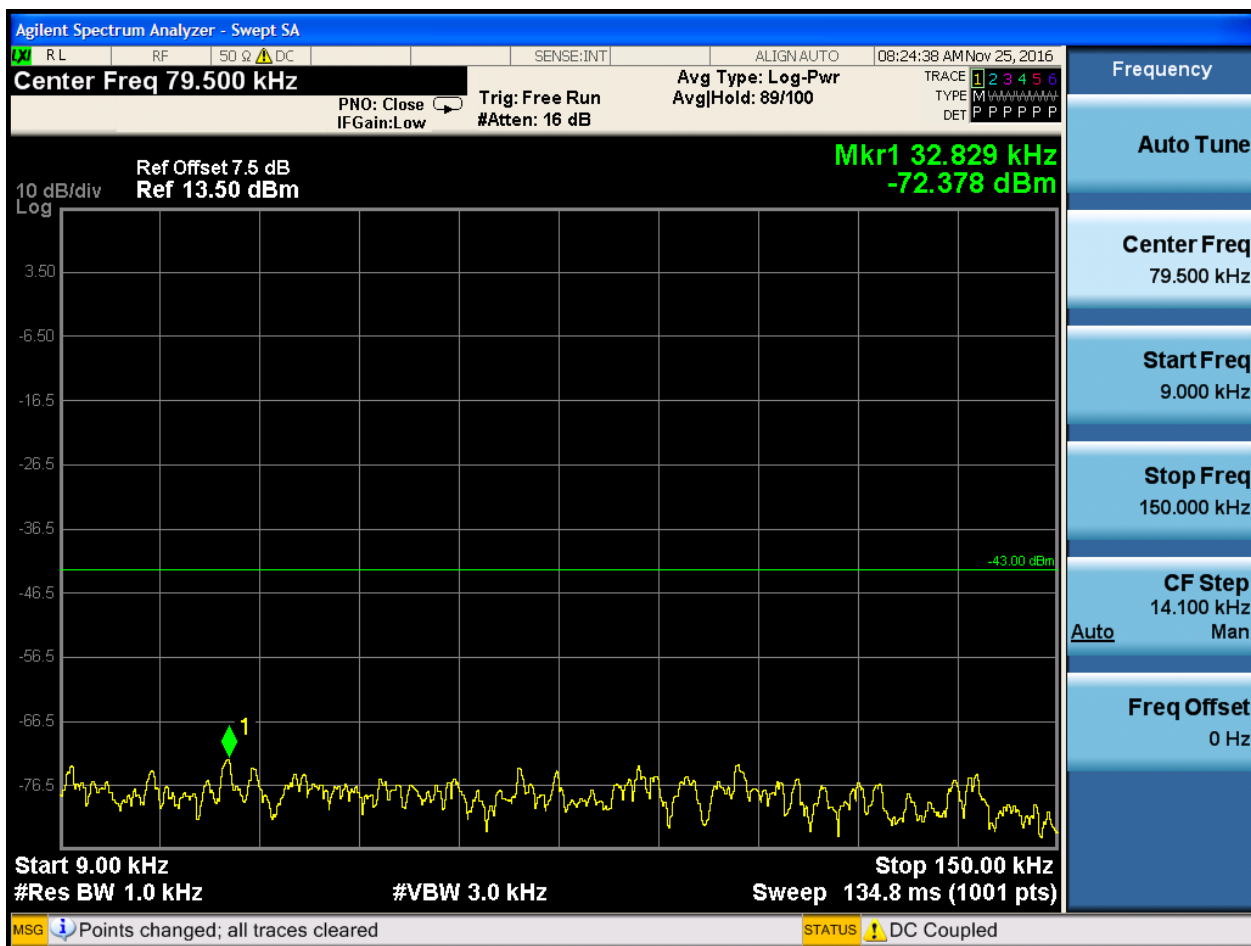


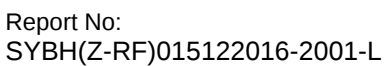


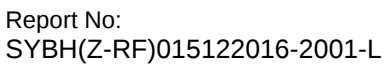


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





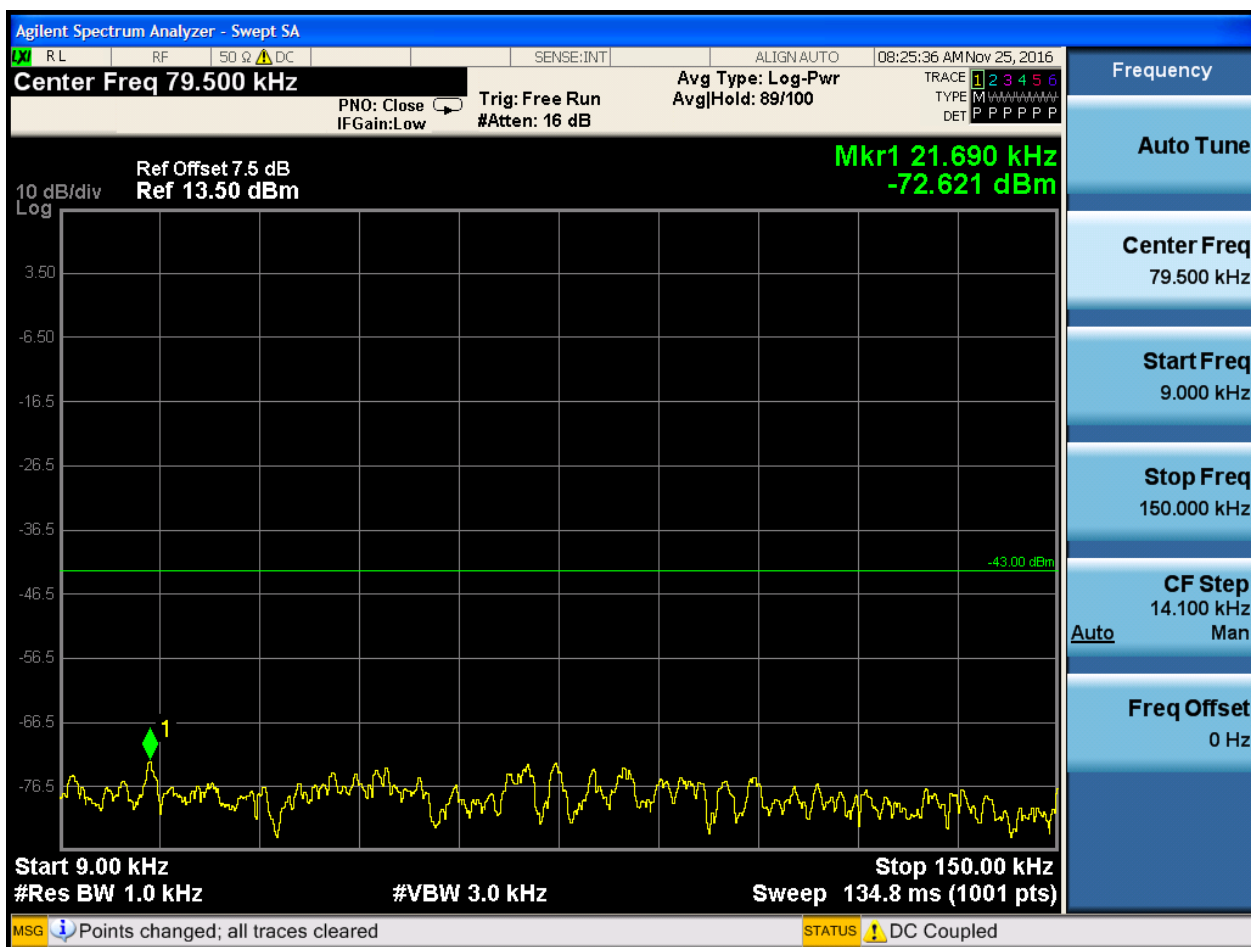


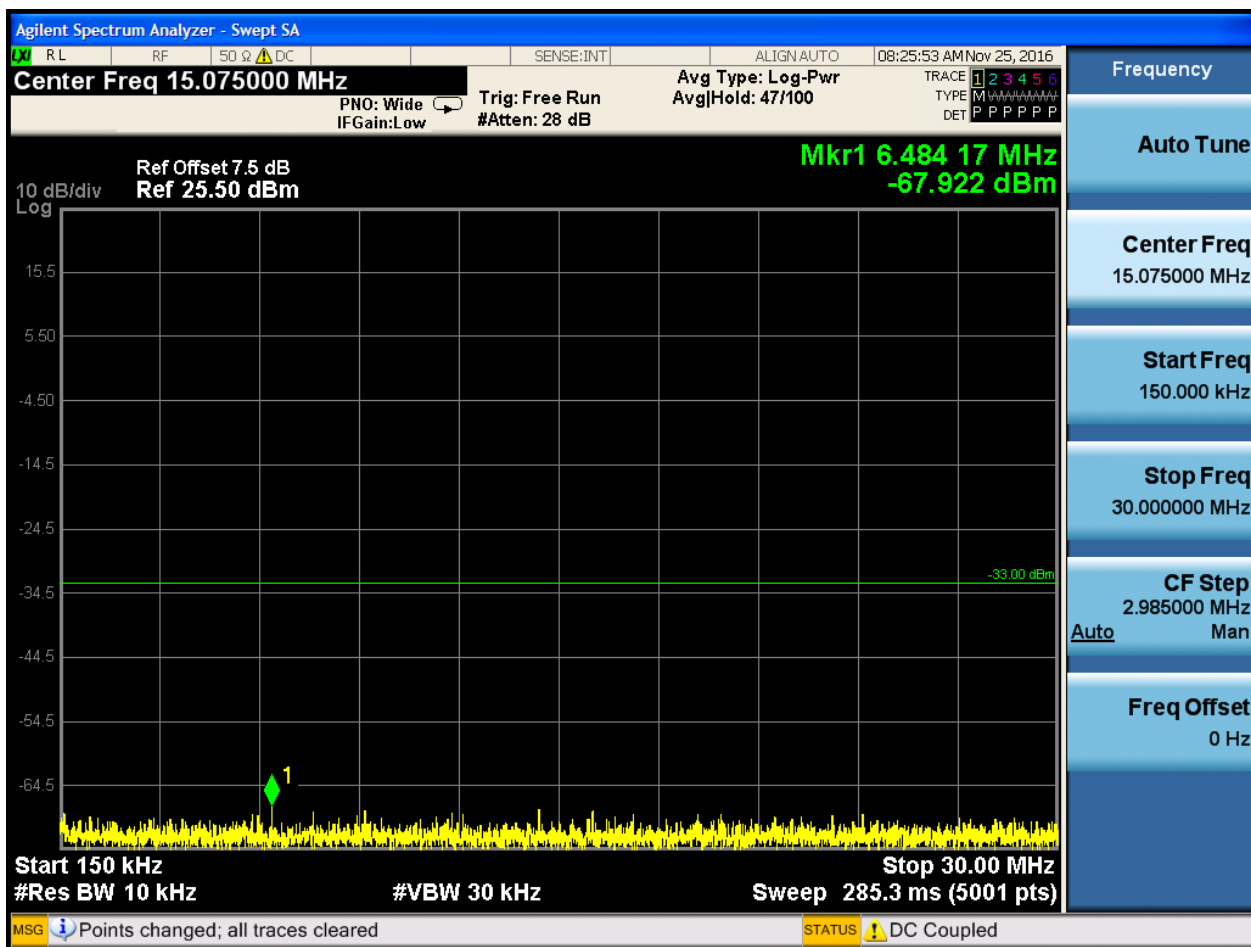


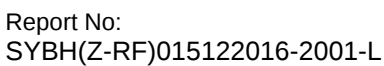
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



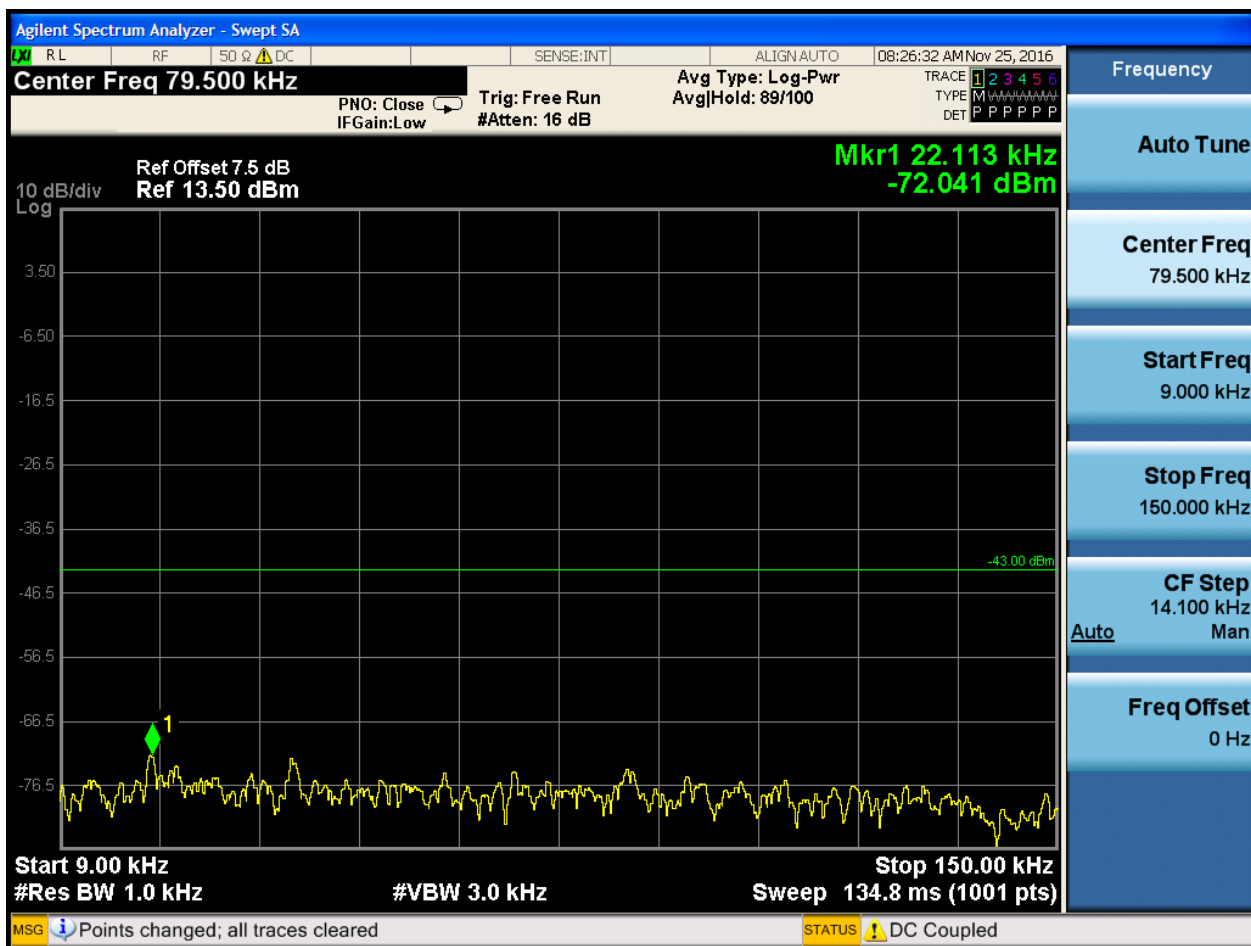


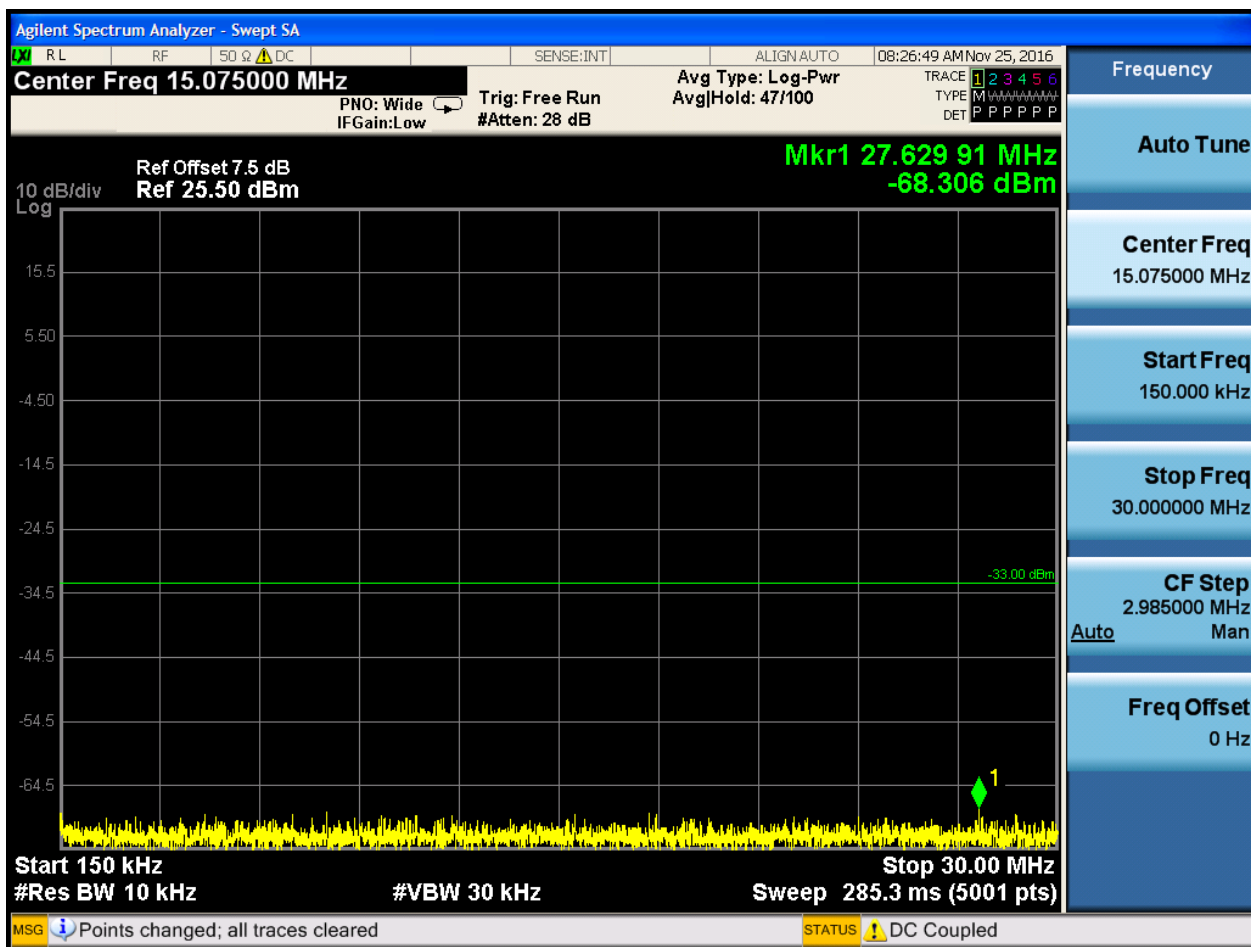


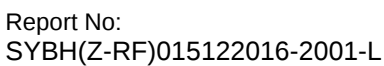


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0

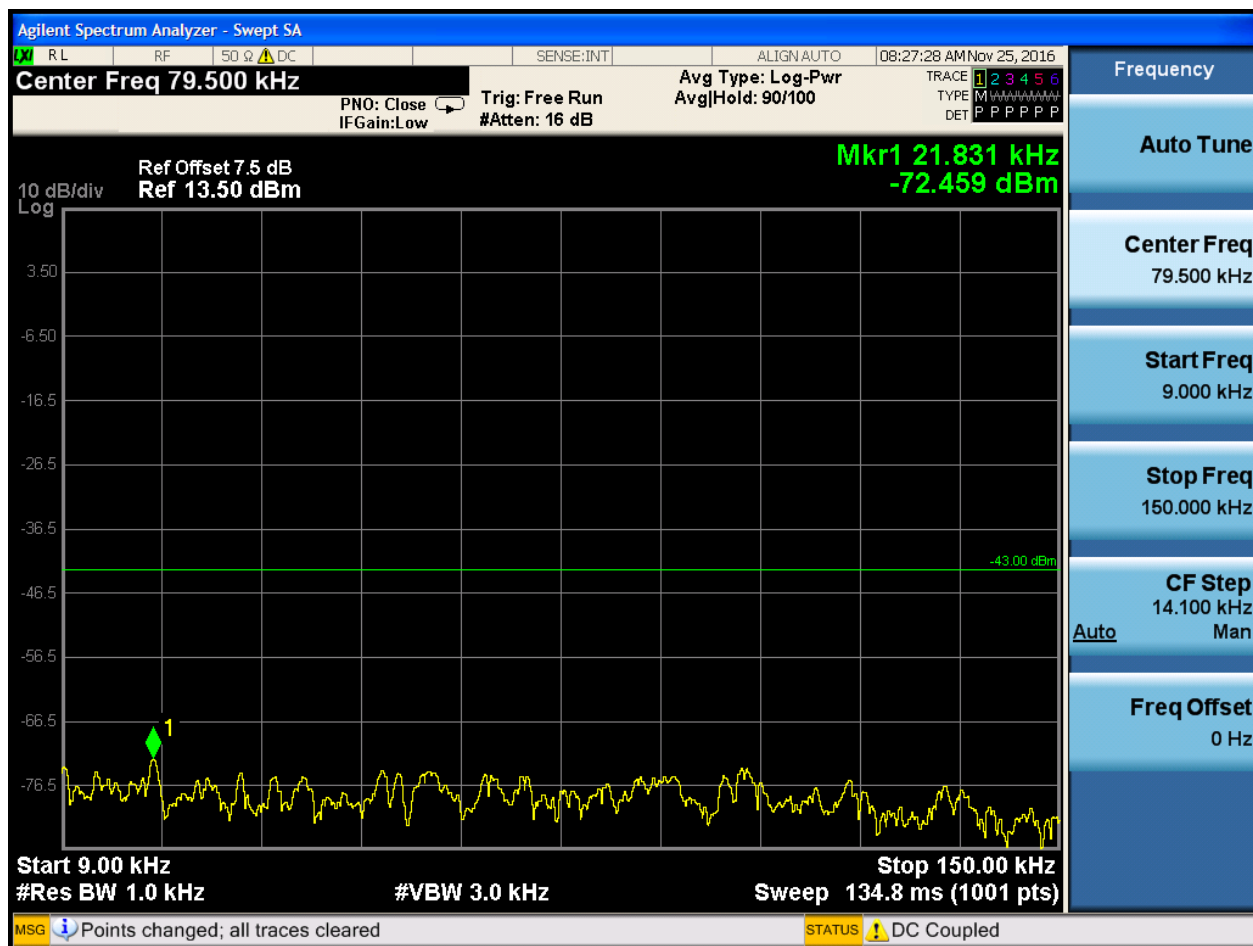




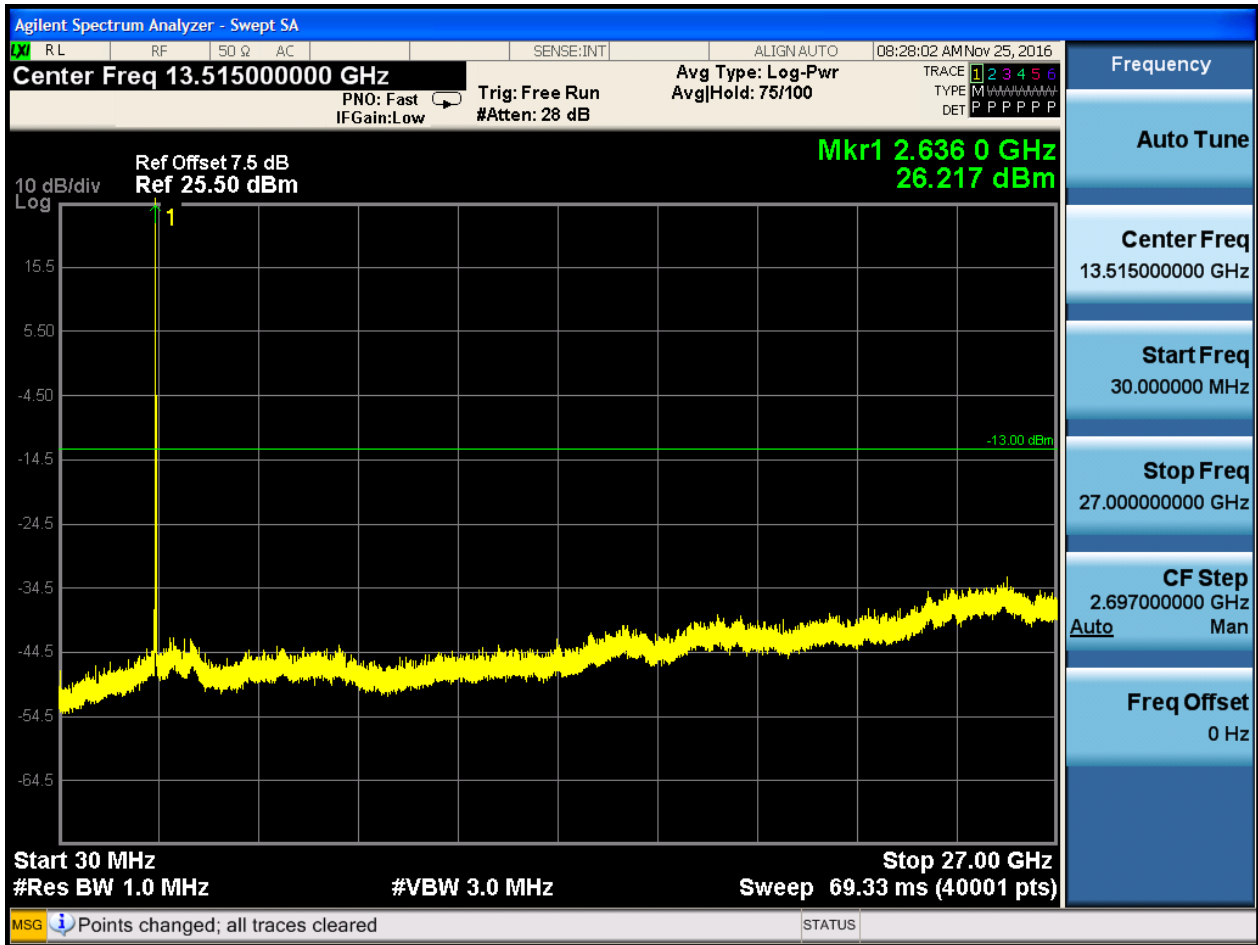


6.1.1.2.4.3 Test Channel = HCH

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, 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

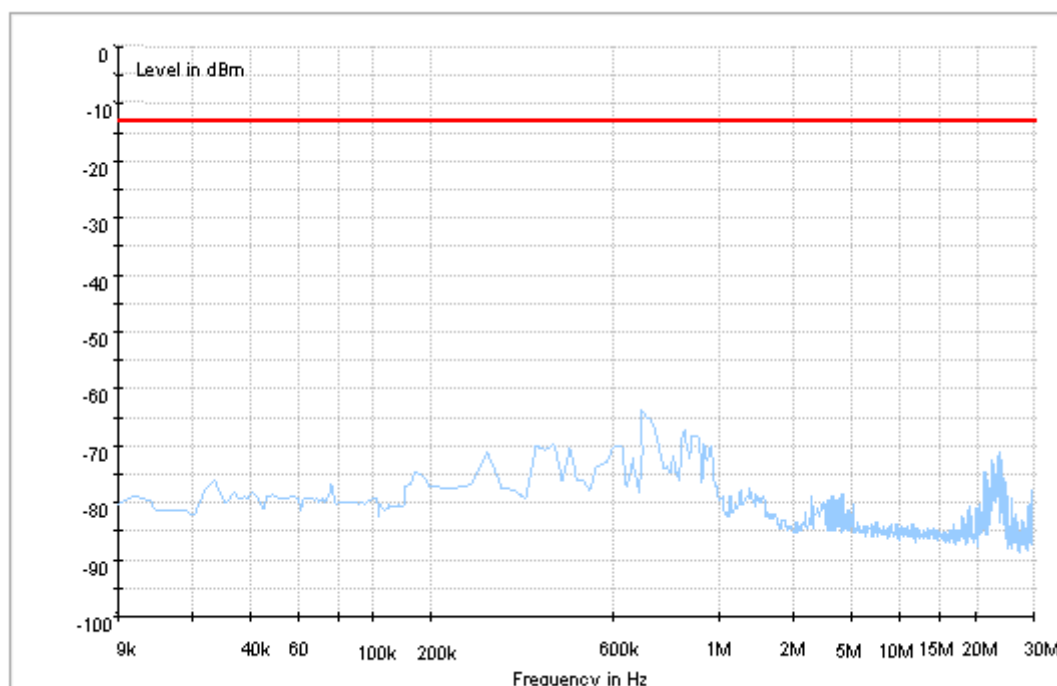
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

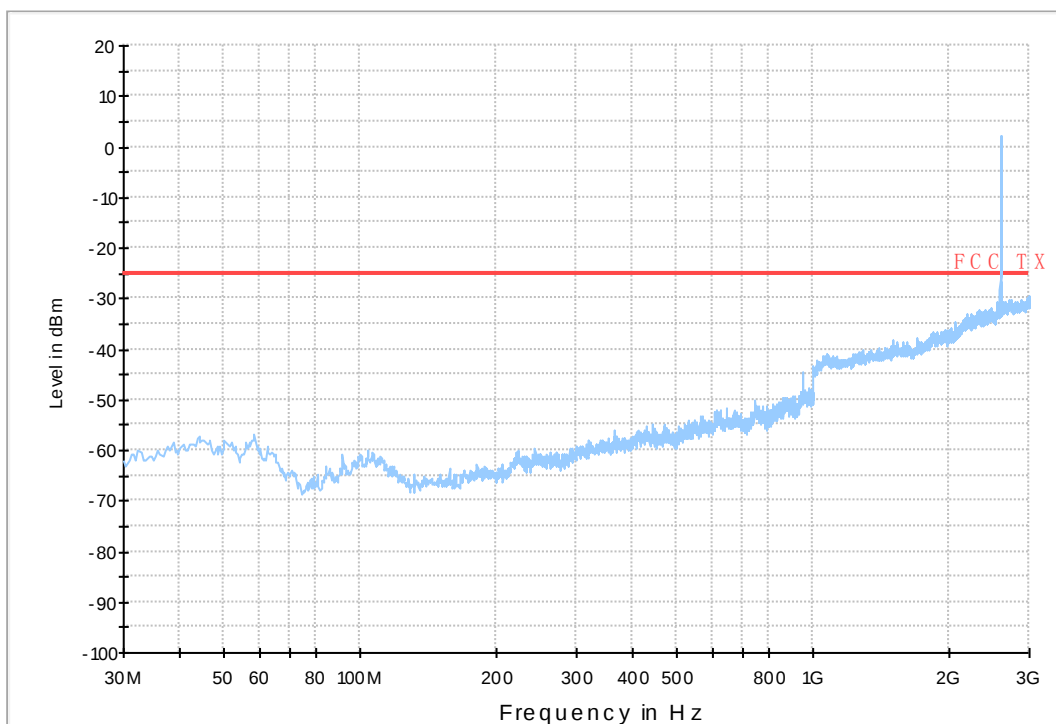
7.1 For LTE

7.1.1 Test Band = BAND41_Ant1

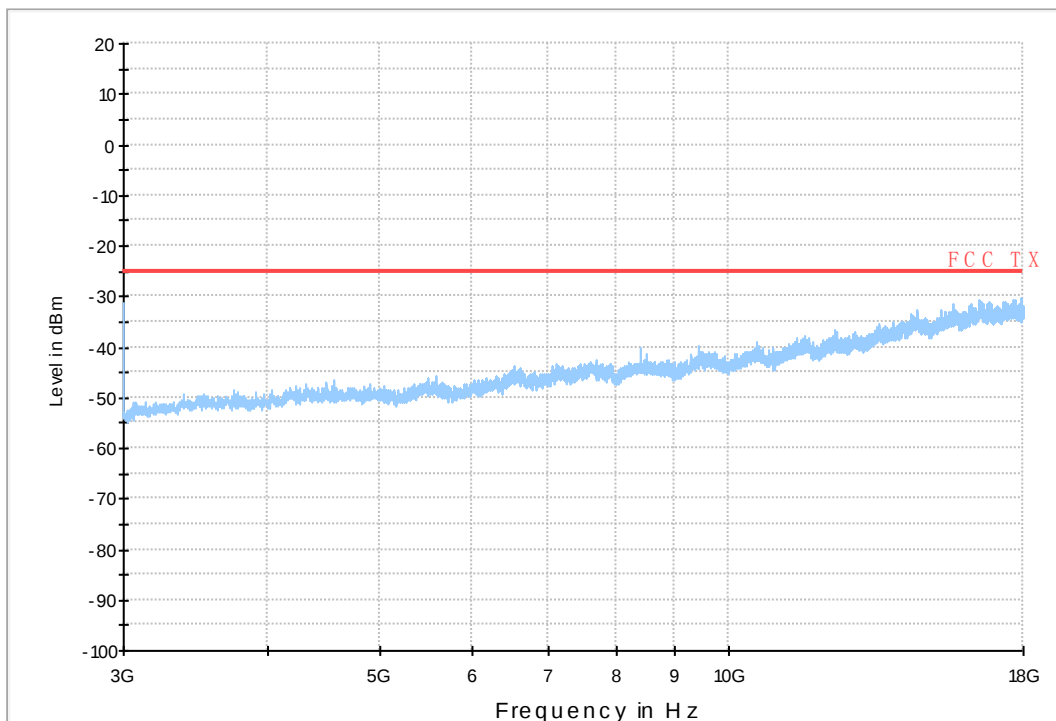
7.1.1.1 Test Bandwidth = 5

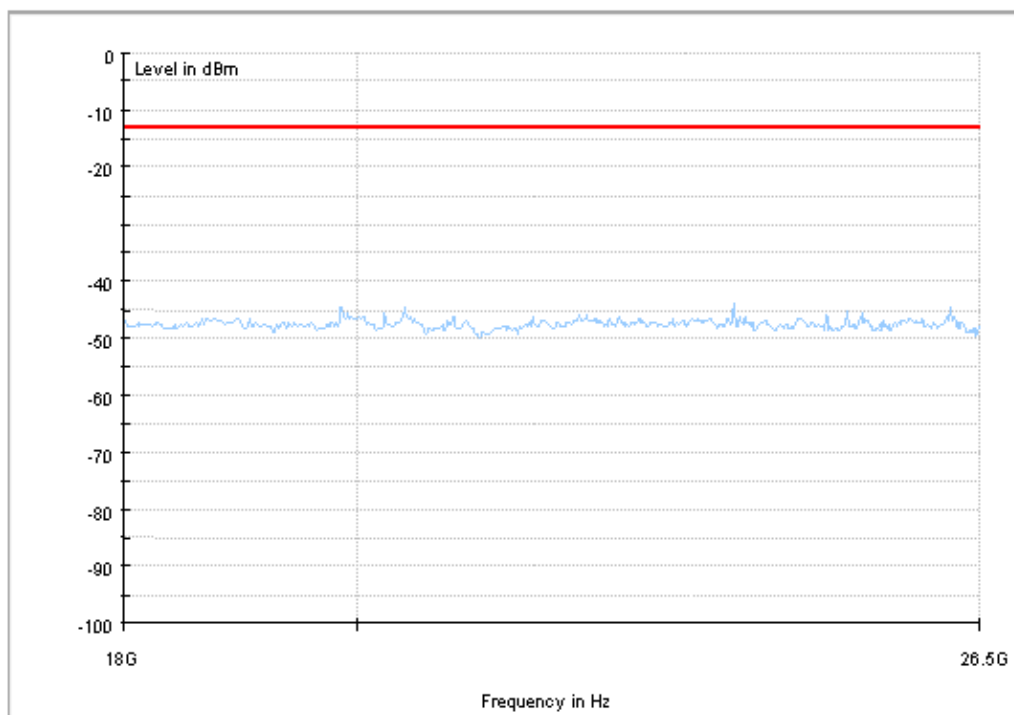


RSE-TX-DIRECTOR LTE 7 38 41_L

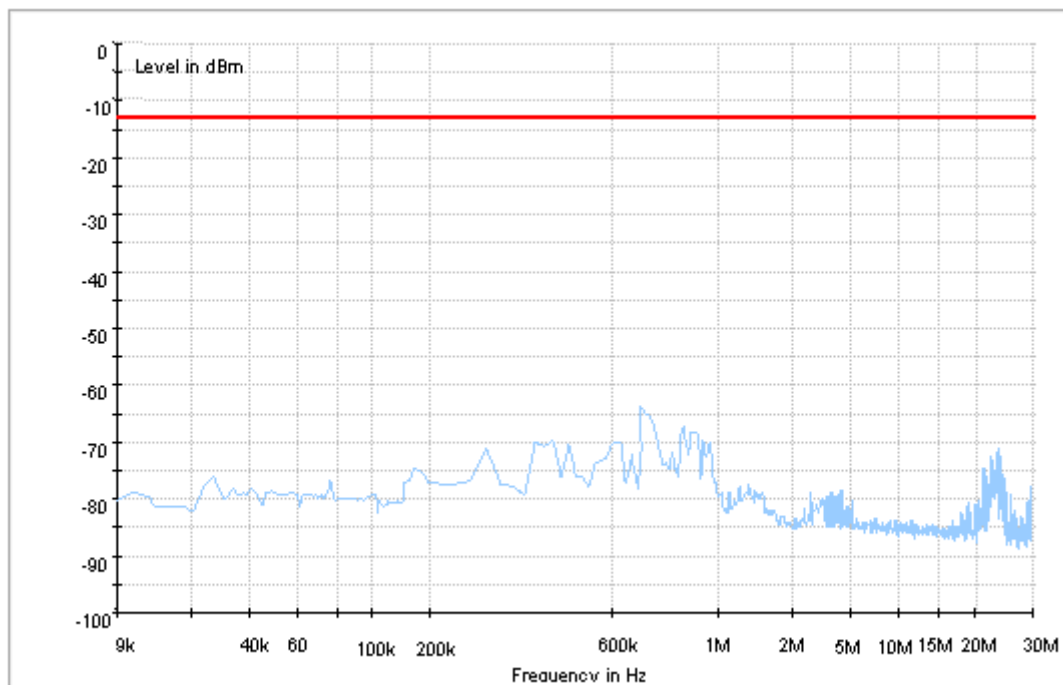


RSE-TX-DIRECTOR LTE7 38 41_H

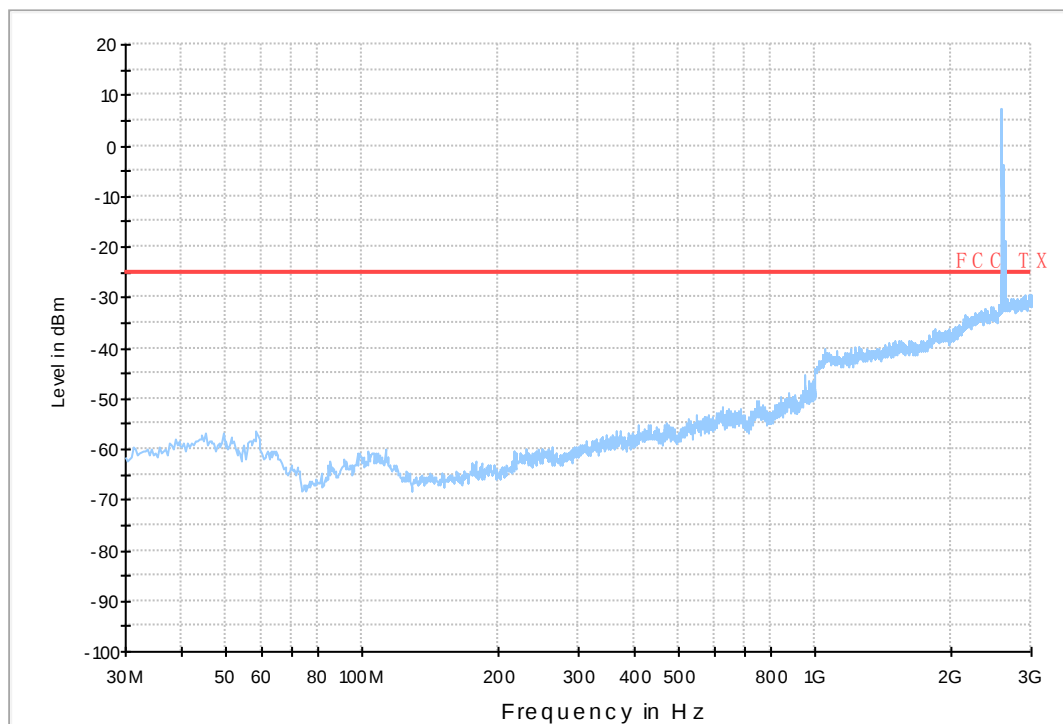




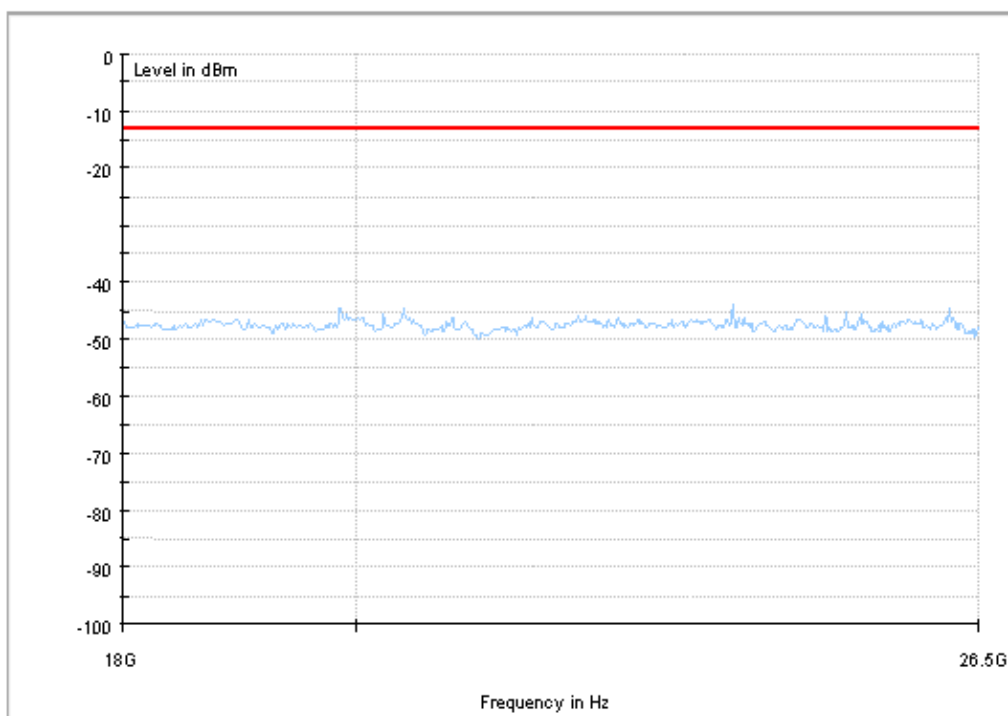
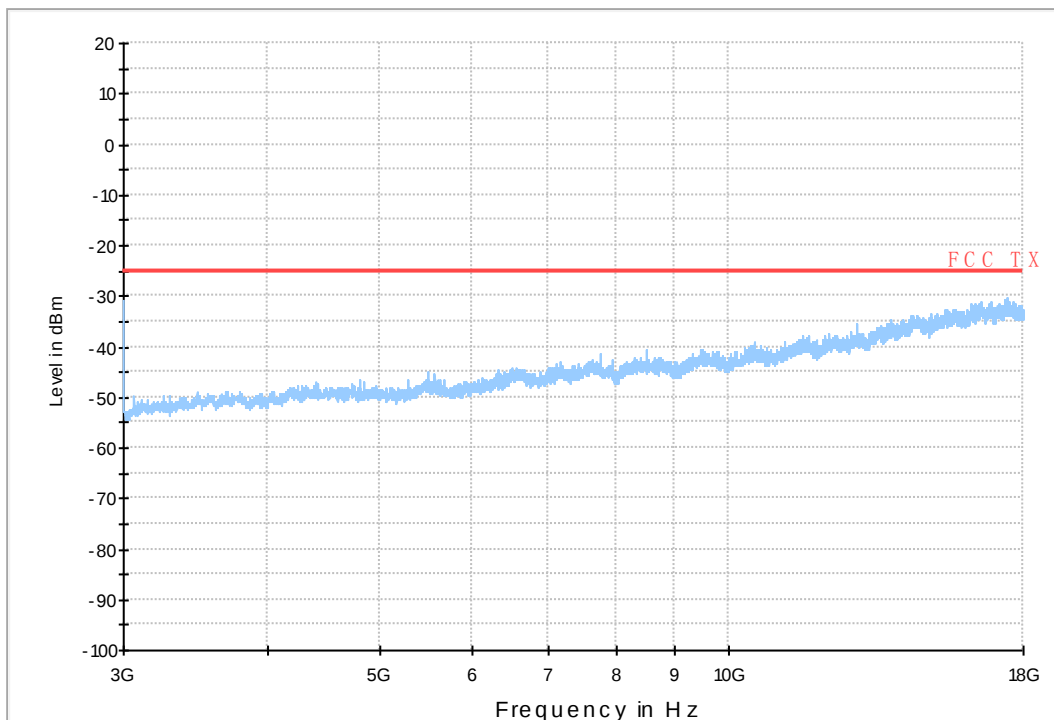
7.1.1.2 Test Bandwidth = 20



RSE-TX-DIRECTOR LTE 7 38 41_L

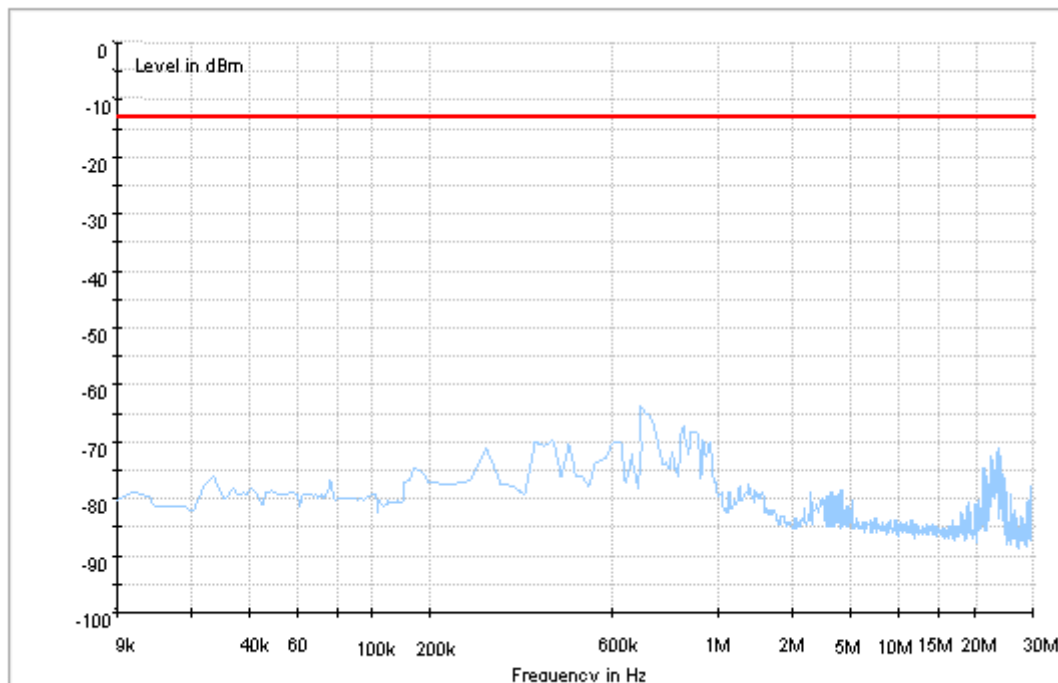


RSE-TX-DIRECTOR LTE7 38 41_H

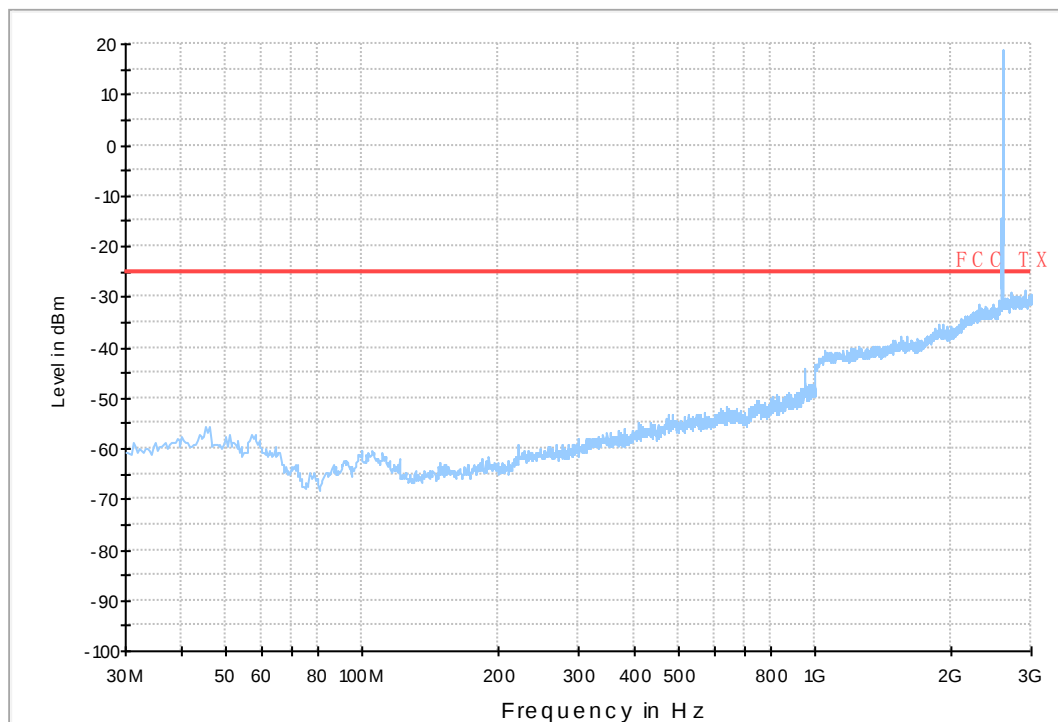


7.1.2 Test Band = BAND41_Ant2

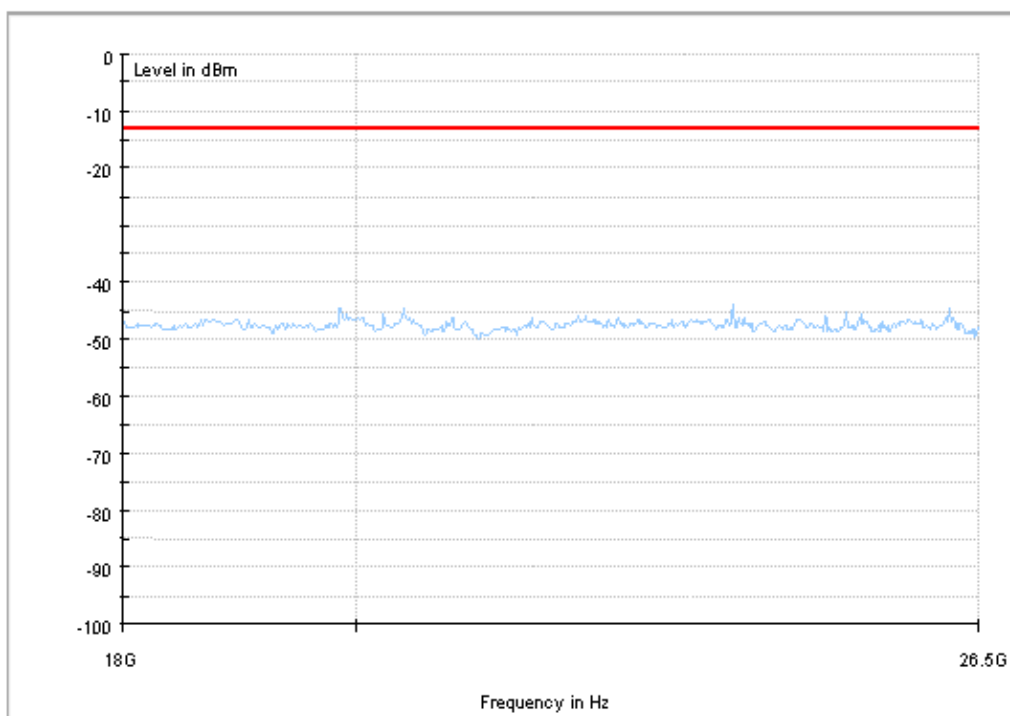
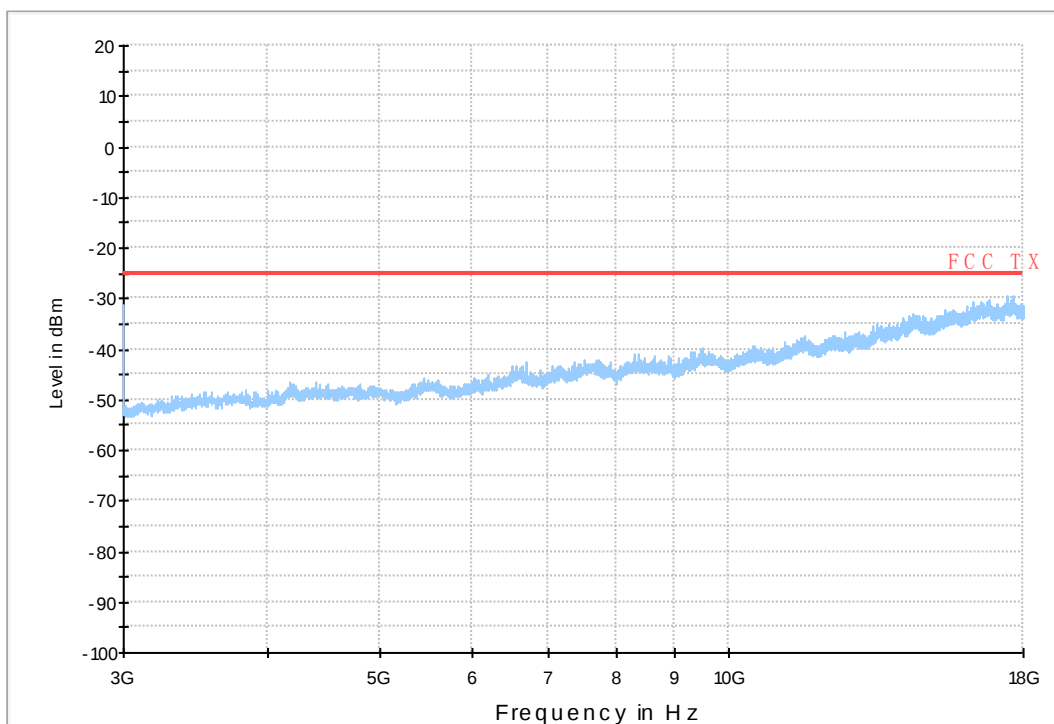
7.1.2.1 Test Bandwidth = 5



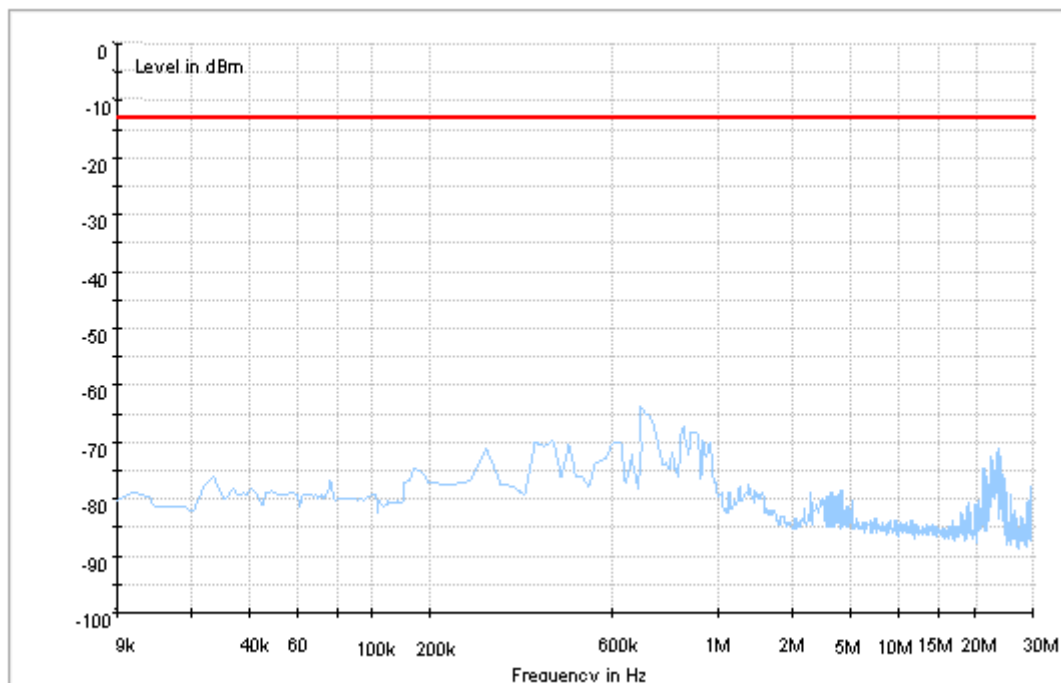
RSE-TX-DIRECTOR LTE 7 38 41_L



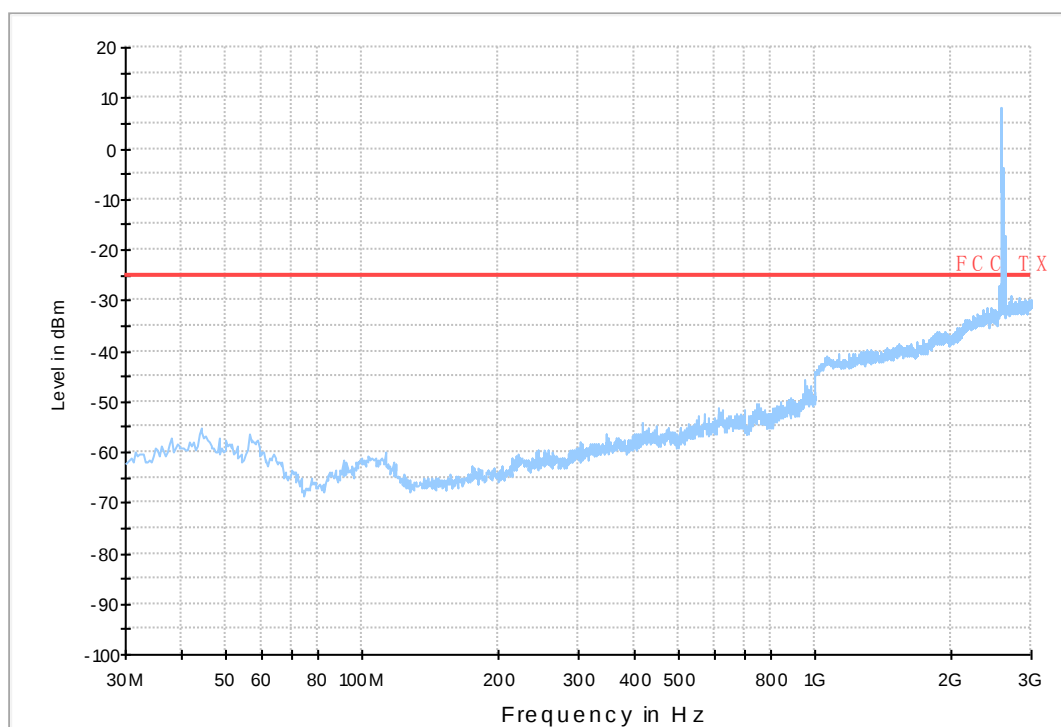
RSE-TX-DIRECTOR LTE7 38 41_H



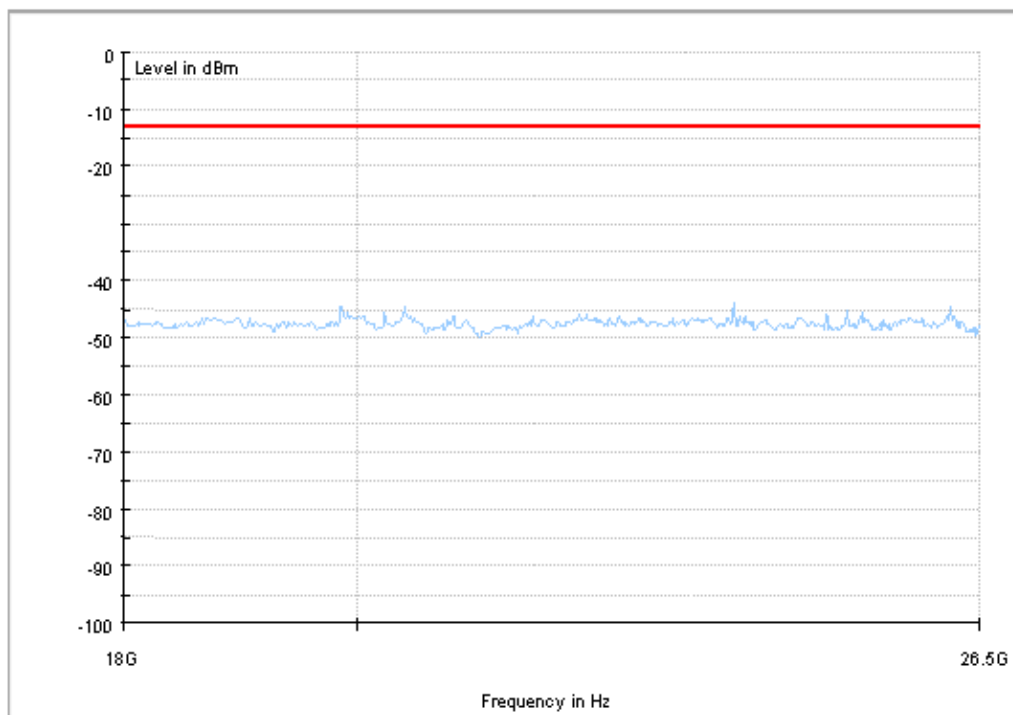
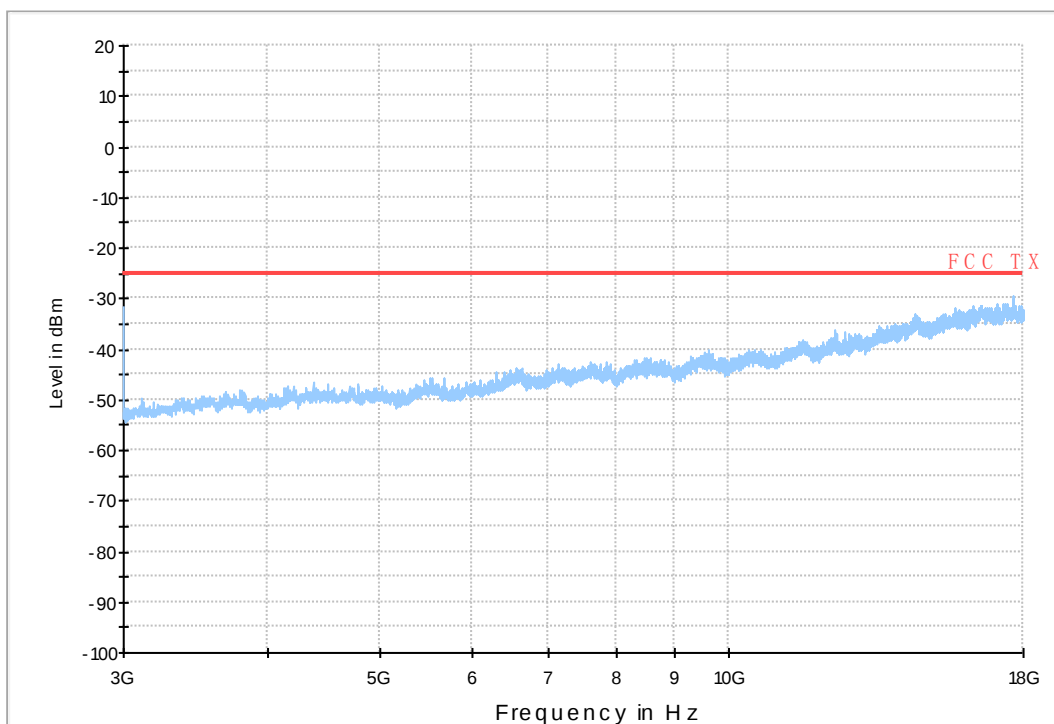
7.1.2.2 Test Bandwidth = 20



RSE-TX-DIRECTOR LTE 7 38 41_L



RSE-TX-DIRECTOR LTE7 38 41_H



8.1 For LTE

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND41	LTE/TM1	5	LCH	TN	VL	-3.19	-0.00125	PASS
					VN	-5.89	-0.0023	PASS
					VH	-7.15	-0.0028	PASS
			MCH	TN	VL	-3.33	-0.00128	PASS
					VN	-3.45	-0.00132	PASS
					VH	10.77	0.00413	PASS
			HCH	TN	VL	-7.10	-0.00268	PASS
					VN	-6.32	-0.00238	PASS
					VH	-11.80	-0.00445	PASS
		10	LCH	TN	VL	-1.97	-0.00077	PASS
					VN	-1.67	-0.00065	PASS
					VH	-3.95	-0.00154	PASS
			MCH	TN	VL	3.35	0.00129	PASS
					VN	-8.08	-0.0031	PASS
					VH	-1.56	-0.0006	PASS
			HCH	TN	VL	-8.00	-0.00302	PASS
					VN	-5.66	-0.00214	PASS
					VH	-4.94	-0.00186	PASS
		15	LCH	TN	VL	24.09	0.0094	PASS
					VN	30.27	0.01181	PASS
					VH	50.17	0.01958	PASS
			MCH	TN	VL	0.46	0.00018	PASS
					VN	2.42	0.00093	PASS
					VH	-1.96	-0.00075	PASS
			HCH	TN	VL	-7.54	-0.00285	PASS
					VN	-5.87	-0.00222	PASS
					VH	-6.41	-0.00242	PASS
		20	LCH	TN	VL	-33.22	-0.01295	PASS
					VN	-28.70	-0.01119	PASS
					VH	-32.22	-0.01256	PASS
			MCH	TN	VL	-2.12	-0.00081	PASS
					VN	-0.57	-0.00022	PASS
					VH	-2.89	-0.00111	PASS
			HCH	TN	VL	-7.78	-0.00294	PASS
					VN	-5.82	-0.0022	PASS
					VH	-5.82	-0.0022	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	5	LCH	TN	VH	-7.78	-0.00294	PASS
					VL	-5.74	-0.00224	PASS
					VN	-2.23	-0.00087	PASS
					VH	-3.20	-0.00125	PASS
			MCH	TN	VL	-4.96	-0.0019	PASS
					VN	0.80	0.00031	PASS
					VH	-9.20	-0.00353	PASS
			HCH	TN	VL	-4.65	-0.00175	PASS
					VN	-2.82	-0.00106	PASS
					VH	-3.50	-0.00132	PASS
			LCH	TN	VL	-3.72	-0.00145	PASS
					VN	-1.33	-0.00052	PASS
					VH	-1.29	-0.0005	PASS
		10	MCH	TN	VL	3.96	0.00152	PASS
					VN	3.56	0.00137	PASS
					VH	-3.86	-0.00148	PASS
			HCH	TN	VL	-5.19	-0.00196	PASS
					VN	-2.16	-0.00082	PASS
					VH	-3.28	-0.00124	PASS
			LCH	TN	VL	-12.92	-0.00504	PASS
					VN	-7.40	-0.00289	PASS
					VH	-12.30	-0.0048	PASS
			MCH	TN	VL	-11.14	-0.00428	PASS
					VN	-4.73	-0.00182	PASS
					VH	-5.48	-0.0021	PASS
		15	HCH	TN	VL	-3.88	-0.00147	PASS
					VN	-2.88	-0.00109	PASS
					VH	-3.83	-0.00145	PASS
			LCH	TN	VL	-10.61	-0.00414	PASS
					VN	-7.38	-0.00288	PASS
					VH	-8.28	-0.00323	PASS
		20	MCH	TN	VL	-6.22	-0.00239	PASS
					VN	-3.79	-0.00145	PASS
					VH	-8.07	-0.0031	PASS
			HCH	TN	VL	-9.17	-0.00347	PASS
					VN	-4.51	-0.00171	PASS
					VH	-3.18	-0.0012	PASS

8.1.2Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND41	LTE/TM1	5	LCH	VN	-30	-7.32	-0.00286	PASS
					-20	-4.22	-0.00165	PASS
					-10	-9.24	-0.00361	PASS
					0	-7.44	-0.00291	PASS
					10	-6.71	-0.00262	PASS
					20	-7.52	-0.00294	PASS
					30	-1.50	-0.00059	PASS
					40	-4.08	-0.0016	PASS
					50	-6.45	-0.00252	PASS
			MCH	VN	-30	-10.26	-0.00394	PASS
					-20	0.24	0.00009	PASS
					-10	-4.61	-0.00177	PASS
					0	-4.82	-0.00185	PASS
					10	-3.56	-0.00137	PASS
					20	-12.42	-0.00477	PASS
					30	1.57	0.0006	PASS
					40	-5.22	-0.002	PASS
					50	-7.24	-0.00278	PASS
			HCH	VN	-30	-10.74	-0.00405	PASS
					-20	-4.95	-0.00187	PASS
					-10	-9.93	-0.00374	PASS
					0	-5.78	-0.00218	PASS
					10	-6.29	-0.00237	PASS
					20	-4.82	-0.00182	PASS
					30	-8.27	-0.00312	PASS
					40	-4.38	-0.00165	PASS
					50	-5.36	-0.00202	PASS
		10	LCH	VN	-30	-4.19	-0.00164	PASS
					-20	-8.14	-0.00318	PASS
					-10	-5.69	-0.00222	PASS
					0	-6.24	-0.00244	PASS
					10	-5.79	-0.00226	PASS
					20	-4.28	-0.00167	PASS
					30	-1.82	-0.00071	PASS
					40	-21.97	-0.00858	PASS
					50	-4.94	-0.00193	PASS
			MCH	VN	-30	0.07	0.00003	PASS
					-20	-1.70	-0.00065	PASS
					-10	-3.29	-0.00126	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					0	-9.01	-0.00346	PASS
					10	-13.43	-0.00516	PASS
					20	-1.72	-0.00066	PASS
					30	-1.95	-0.00075	PASS
					40	-12.63	-0.00485	PASS
					50	-2.00	-0.00077	PASS
			HCH	VN	-30	-4.68	-0.00177	PASS
					-20	-6.77	-0.00255	PASS
					-10	-5.74	-0.00217	PASS
					0	-1.70	-0.00064	PASS
					10	-6.42	-0.00242	PASS
					20	-8.51	-0.00321	PASS
					30	-4.22	-0.00159	PASS
					40	-3.66	-0.00138	PASS
					50	-3.55	-0.00134	PASS
		15	LCH	VN	-30	-25.45	-0.00993	PASS
					-20	-29.60	-0.01155	PASS
					-10	-27.82	-0.01086	PASS
					0	-27.28	-0.01065	PASS
					10	-28.52	-0.01113	PASS
					20	-29.64	-0.01157	PASS
					30	-32.22	-0.01257	PASS
					40	-30.26	-0.01181	PASS
					50	-30.33	-0.01184	PASS
			MCH	VN	-30	-7.48	-0.00287	PASS
					-20	-6.90	-0.00265	PASS
					-10	-9.26	-0.00355	PASS
					0	-5.84	-0.00224	PASS
					10	-8.97	-0.00344	PASS
					20	-1.77	-0.00068	PASS
					30	-6.59	-0.00253	PASS
					40	-7.55	-0.0029	PASS
					50	-5.34	-0.00205	PASS
			HCH	VN	-30	-8.54	-0.00323	PASS
					-20	-9.23	-0.00349	PASS
					-10	-6.97	-0.00263	PASS
					0	-9.47	-0.00358	PASS
					10	-1.63	-0.00062	PASS
					20	-6.98	-0.00264	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	-3.22	-0.00122	PASS
					40	-5.29	-0.002	PASS
					50	-3.69	-0.00139	PASS
		20	LCH	VN	-30	11.94	0.00465	PASS
					-20	16.89	0.00658	PASS
					-10	6.90	0.00269	PASS
					0	8.77	0.00342	PASS
					10	8.84	0.00345	PASS
					20	9.50	0.0037	PASS
					30	7.55	0.00294	PASS
					40	4.52	0.00176	PASS
					50	5.55	0.00216	PASS
			MCH	VN	-30	-5.71	-0.00219	PASS
					-20	-14.19	-0.00545	PASS
					-10	-3.55	-0.00136	PASS
					0	-8.33	-0.0032	PASS
					10	-5.26	-0.00202	PASS
					20	-2.29	-0.00088	PASS
					30	-6.72	-0.00258	PASS
					40	-4.35	-0.00167	PASS
					50	-1.92	-0.00074	PASS
			HCH	VN	-30	-7.97	-0.00301	PASS
					-20	-6.87	-0.0026	PASS
					-10	-5.99	-0.00226	PASS
					0	-5.62	-0.00212	PASS
					10	-5.36	-0.00203	PASS
					20	-3.86	-0.00146	PASS
					30	-3.08	-0.00116	PASS
					40	-4.18	-0.00158	PASS
					50	-3.81	-0.00144	PASS
	LTE/TM2	5	LCH	VN	-30	2.59	0.00101	PASS
					-20	-2.33	-0.00091	PASS
					-10	-0.99	-0.00039	PASS
					0	-7.28	-0.00285	PASS
					10	-1.72	-0.00067	PASS
					20	3.66	0.00143	PASS
					30	-2.95	-0.00115	PASS
					40	-0.11	-0.00004	PASS
					50	-3.71	-0.00145	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	-30	-7.24	-0.00278	PASS
					-20	-3.19	-0.00122	PASS
					-10	-8.67	-0.00333	PASS
					0	-8.78	-0.00337	PASS
					10	-18.84	-0.00723	PASS
					20	-4.48	-0.00172	PASS
					30	-3.29	-0.00126	PASS
					40	-10.67	-0.0041	PASS
					50	-4.53	-0.00174	PASS
			HCH	VN	-30	-8.43	-0.00318	PASS
					-20	-7.11	-0.00268	PASS
					-10	-2.43	-0.00092	PASS
					0	-9.37	-0.00353	PASS
					10	-0.13	-0.00005	PASS
					20	-4.02	-0.00152	PASS
					30	-5.66	-0.00213	PASS
					40	-6.59	-0.00248	PASS
					50	-2.82	-0.00106	PASS
		10	LCH	VN	-30	-5.01	-0.00196	PASS
					-20	-6.01	-0.00235	PASS
					-10	-2.27	-0.00089	PASS
					0	-4.58	-0.00179	PASS
					10	-5.95	-0.00232	PASS
					20	-1.54	-0.0006	PASS
					30	-4.39	-0.00171	PASS
					40	-13.72	-0.00536	PASS
					50	-5.51	-0.00215	PASS
			MCH	VN	-30	1.65	0.00063	PASS
					-20	-6.69	-0.00257	PASS
					-10	-3.72	-0.00143	PASS
					0	-4.22	-0.00162	PASS
					10	-4.66	-0.00179	PASS
					20	-8.43	-0.00324	PASS
					30	-4.71	-0.00181	PASS
					40	-12.52	-0.00481	PASS
					50	-6.41	-0.00246	PASS
			HCH	VN	-30	-6.31	-0.00238	PASS
					-20	-5.14	-0.00194	PASS
					-10	-6.54	-0.00247	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					0	-8.03	-0.00303	PASS
					10	-5.56	-0.0021	PASS
					20	-5.56	-0.0021	PASS
					30	-2.80	-0.00106	PASS
					40	-8.25	-0.00311	PASS
					50	-8.44	-0.00318	PASS
		15	LCH	VN	-30	-5.84	-0.00228	PASS
					-20	-6.29	-0.00245	PASS
					-10	-5.59	-0.00218	PASS
					0	-4.43	-0.00173	PASS
					10	-4.98	-0.00194	PASS
					20	-2.66	-0.00104	PASS
					30	-2.26	-0.00088	PASS
					40	-1.47	-0.00057	PASS
					50	-1.29	-0.0005	PASS
			MCH	VN	-30	-3.72	-0.00143	PASS
					-20	-3.98	-0.00153	PASS
					-10	-2.36	-0.00091	PASS
					0	1.06	0.00041	PASS
					10	-2.16	-0.00083	PASS
					20	-1.73	-0.00066	PASS
					30	-3.85	-0.00148	PASS
					40	-1.60	-0.00061	PASS
					50	-3.78	-0.00145	PASS
			HCH	VN	-30	-6.22	-0.00235	PASS
					-20	-4.09	-0.00154	PASS
					-10	-5.36	-0.00202	PASS
					0	-7.82	-0.00295	PASS
					10	-3.23	-0.00122	PASS
					20	-6.24	-0.00236	PASS
					30	-5.41	-0.00204	PASS
					40	-2.32	-0.00088	PASS
					50	-4.78	-0.00181	PASS
		20	LCH	VN	-30	-9.63	-0.00375	PASS
					-20	-11.24	-0.00438	PASS
					-10	-7.20	-0.00281	PASS
					0	-9.28	-0.00362	PASS
					10	-6.37	-0.00248	PASS
					20	-4.79	-0.00187	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	-8.94	-0.00349	PASS
					40	-6.01	-0.00234	PASS
					50	-8.38	-0.00327	PASS
			MCH	VN	-30	-4.05	-0.00155	PASS
					-20	-3.16	-0.00121	PASS
					-10	-4.56	-0.00175	PASS
					0	-2.68	-0.00103	PASS
					10	-4.21	-0.00162	PASS
					20	-3.73	-0.00143	PASS
					30	-1.76	-0.00068	PASS
					40	0	0	PASS
					50	1.89	0.00073	PASS
			HCH	VN	-30	-5.28	-0.002	PASS
					-20	-7.34	-0.00278	PASS
					-10	-4.53	-0.00171	PASS
					0	-5.34	-0.00202	PASS
					10	-4.42	-0.00167	PASS
					20	-3.89	-0.00147	PASS
					30	-6.27	-0.00237	PASS
					40	-7.27	-0.00275	PASS
					50	-4.16	-0.00157	PASS

END