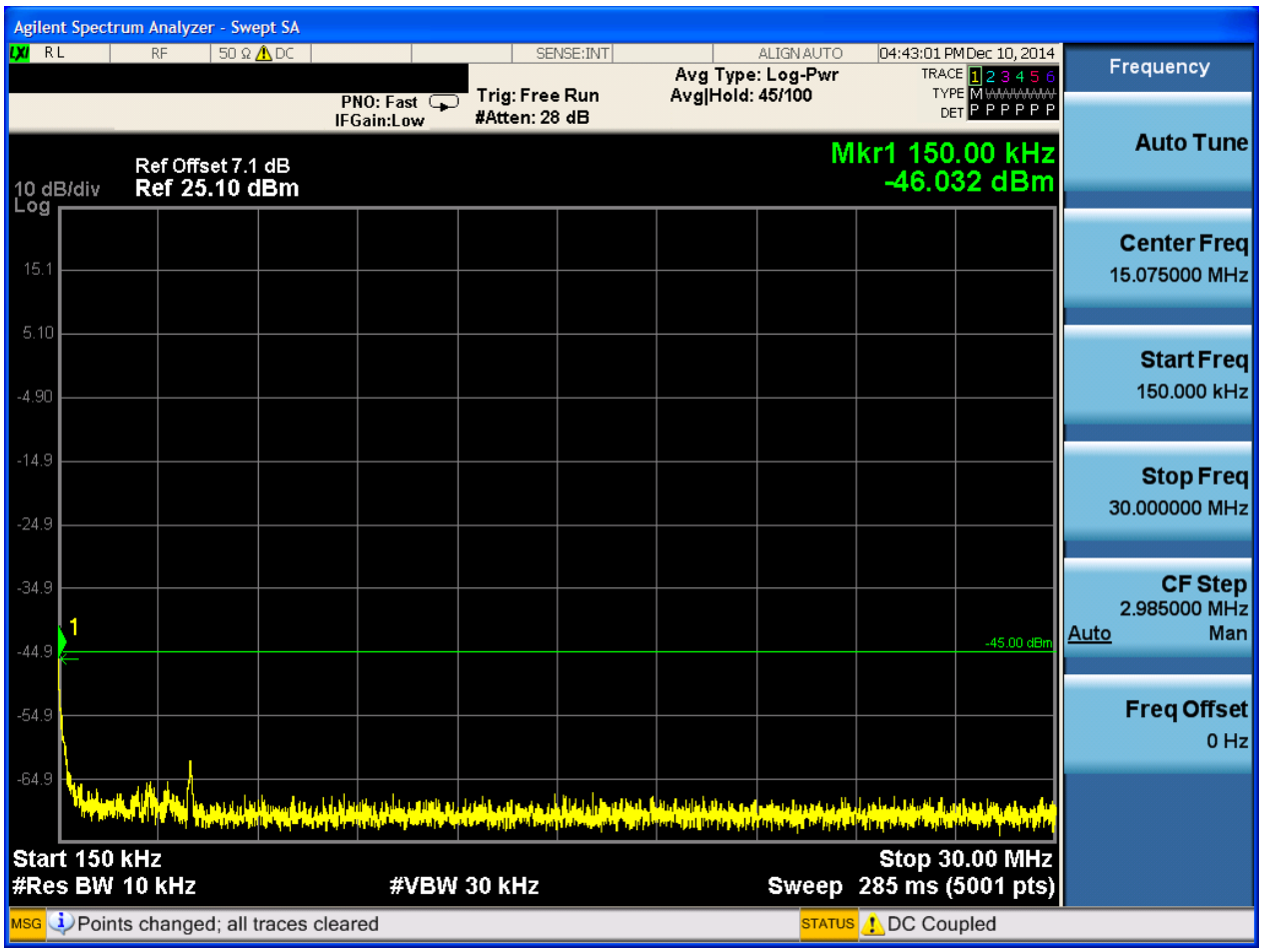

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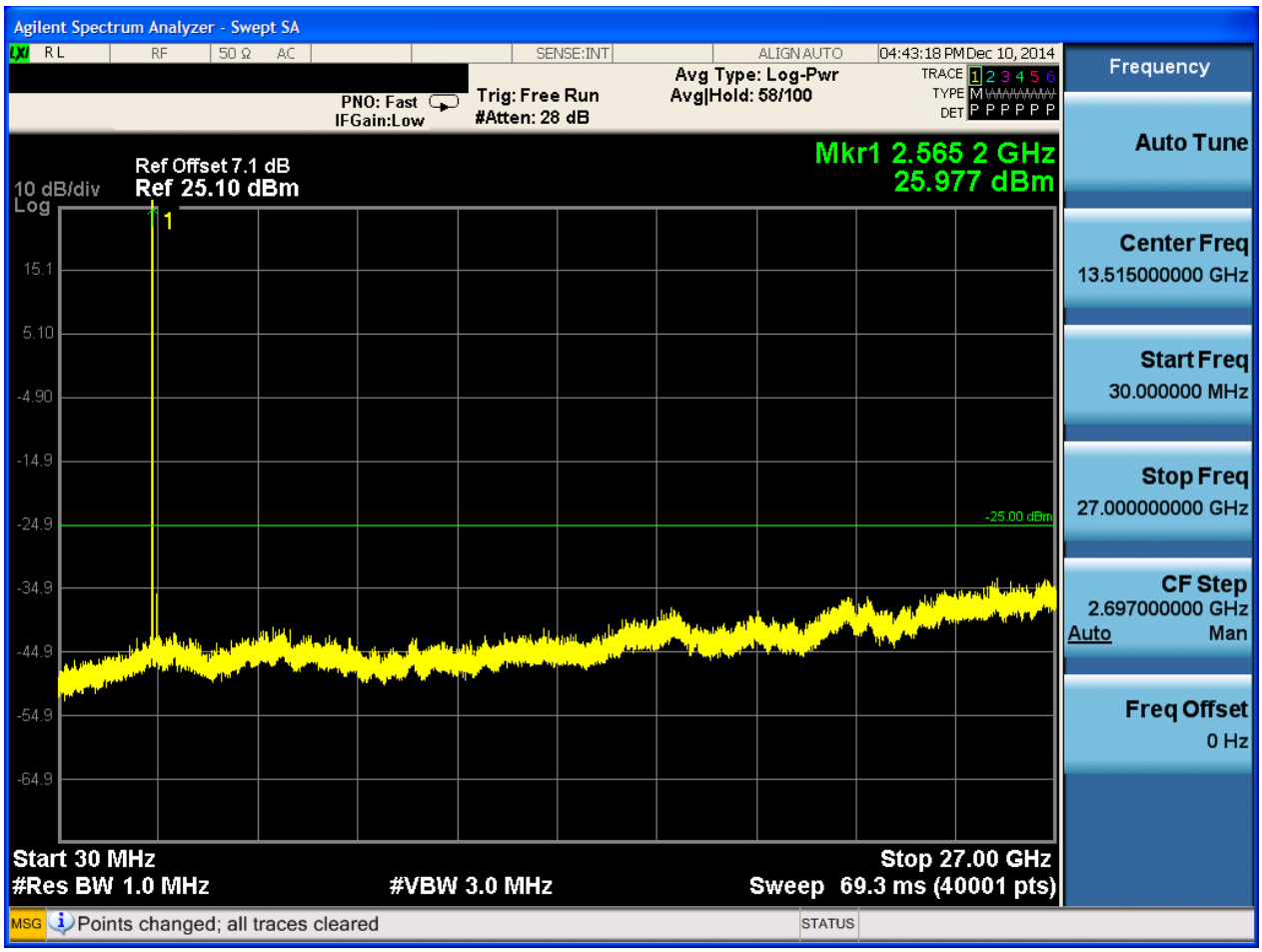

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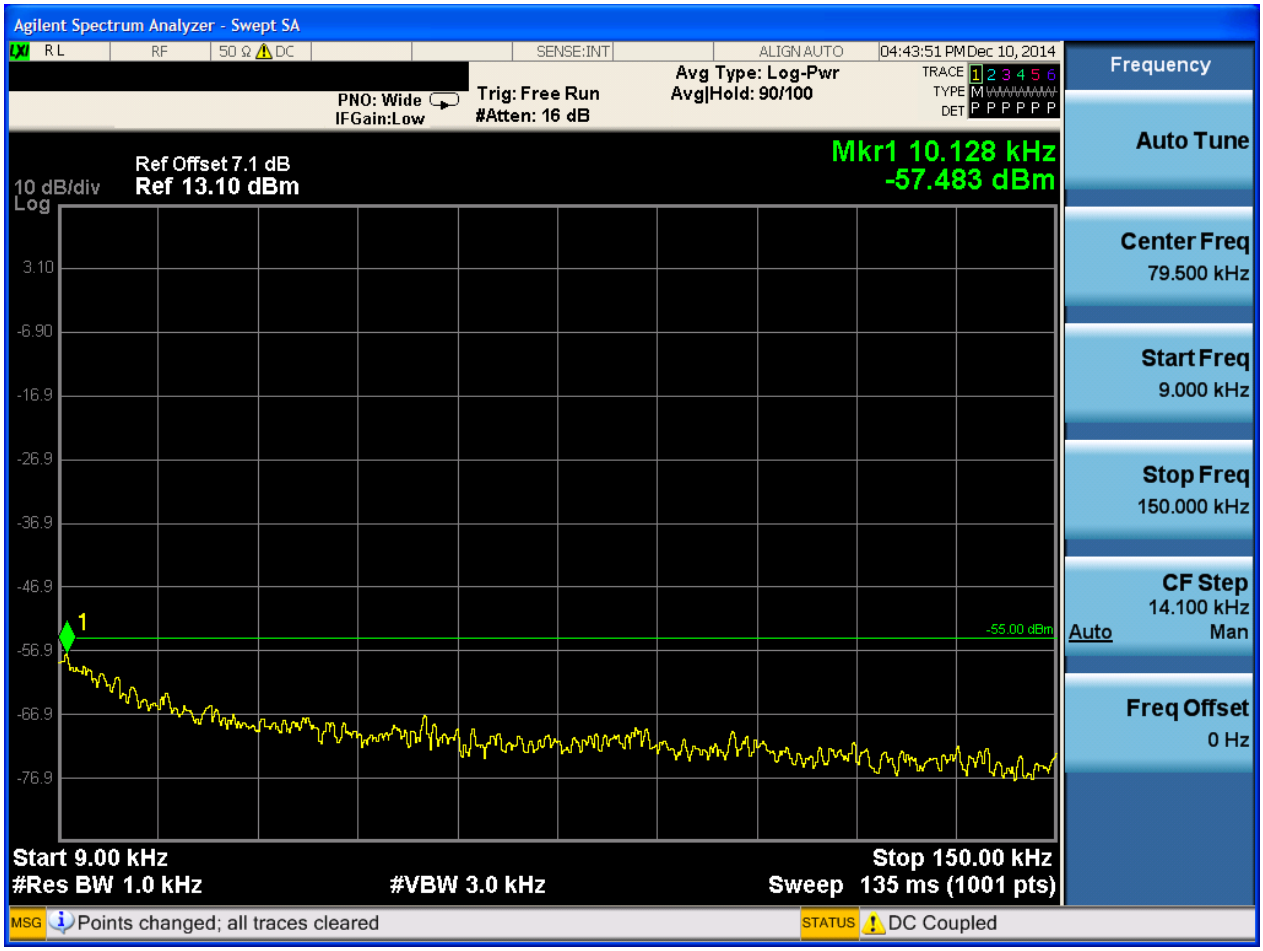
6.2.1.1.2 Test Bandwidth = 10

6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0



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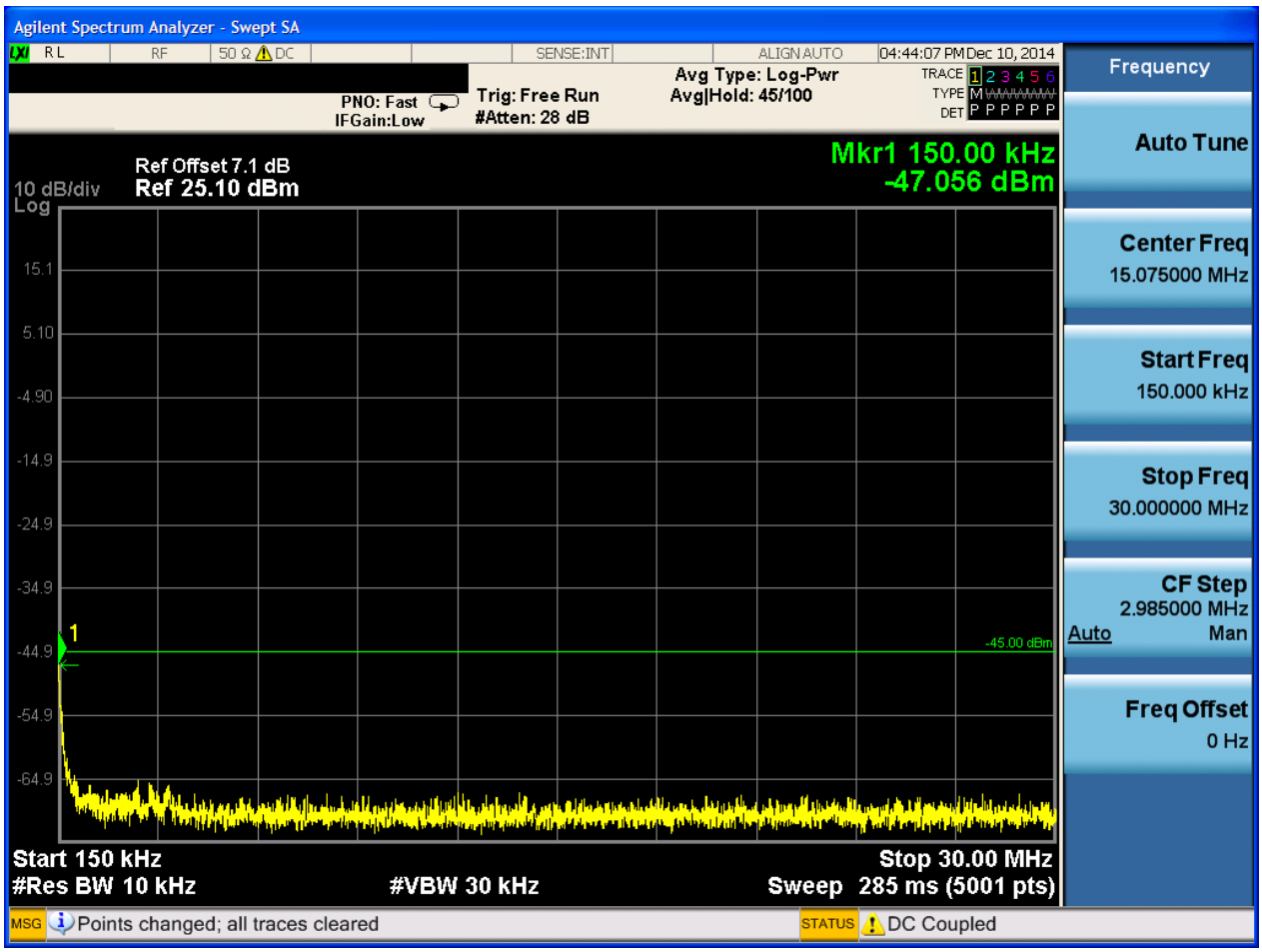

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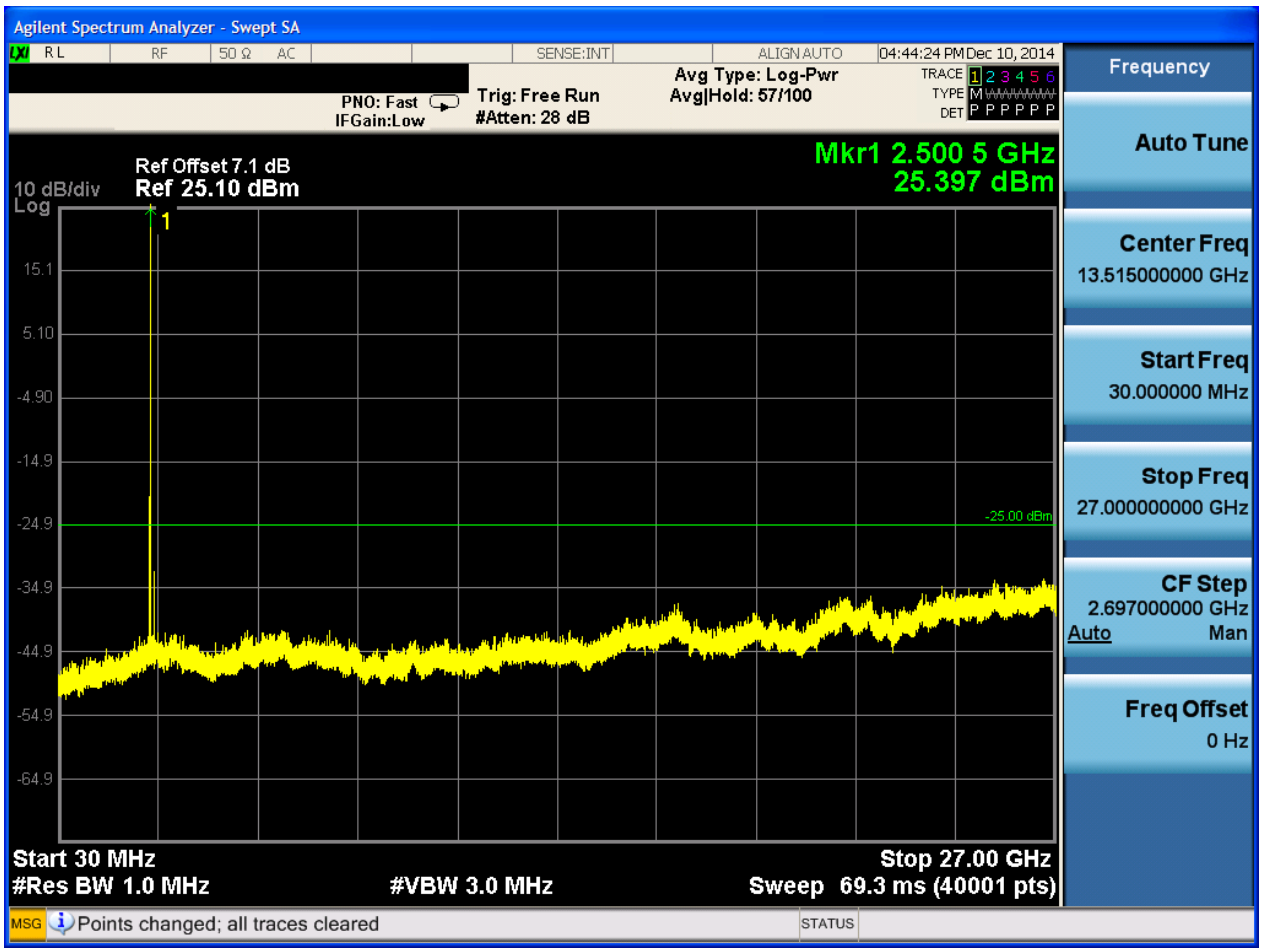

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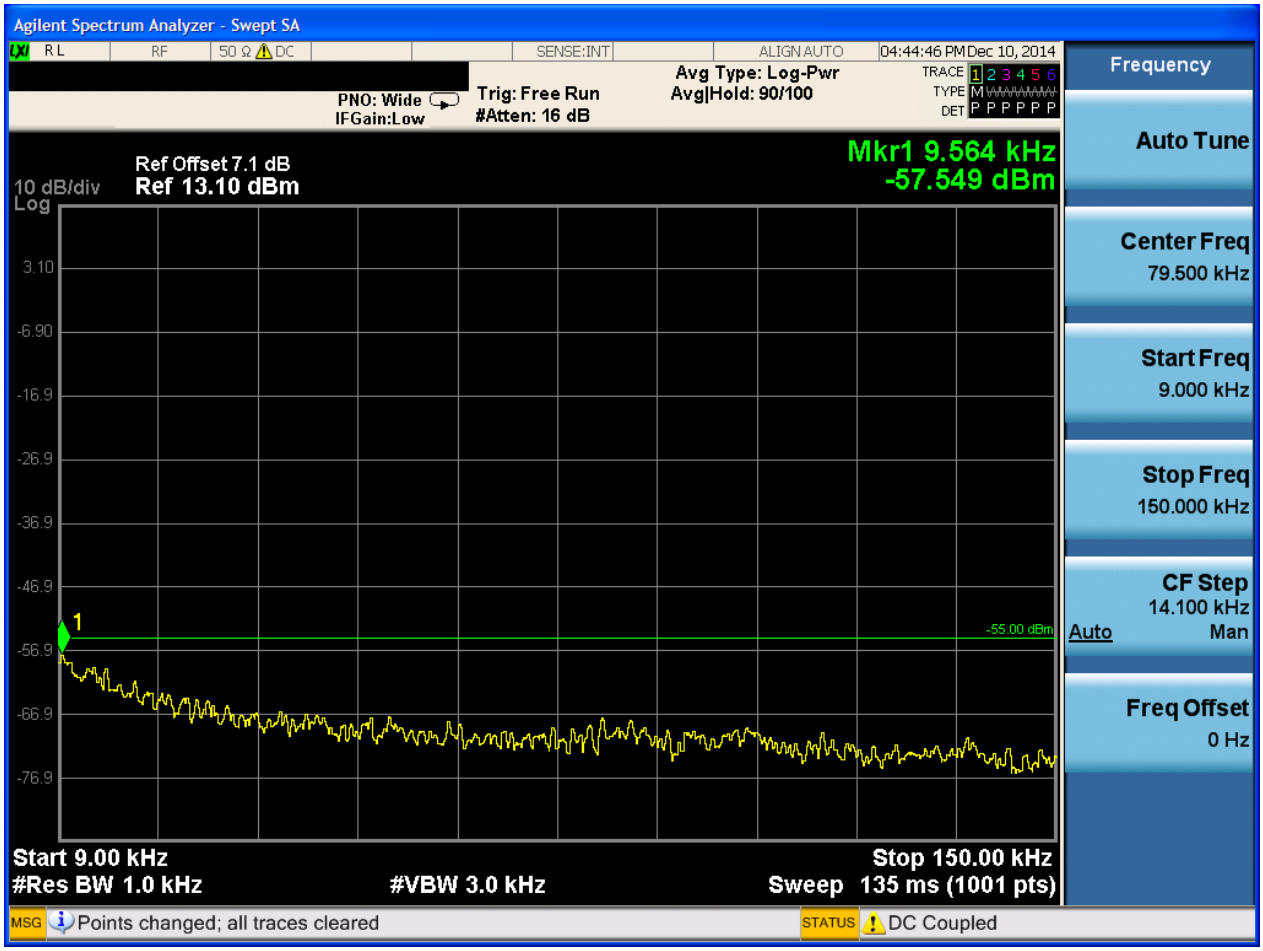
6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0



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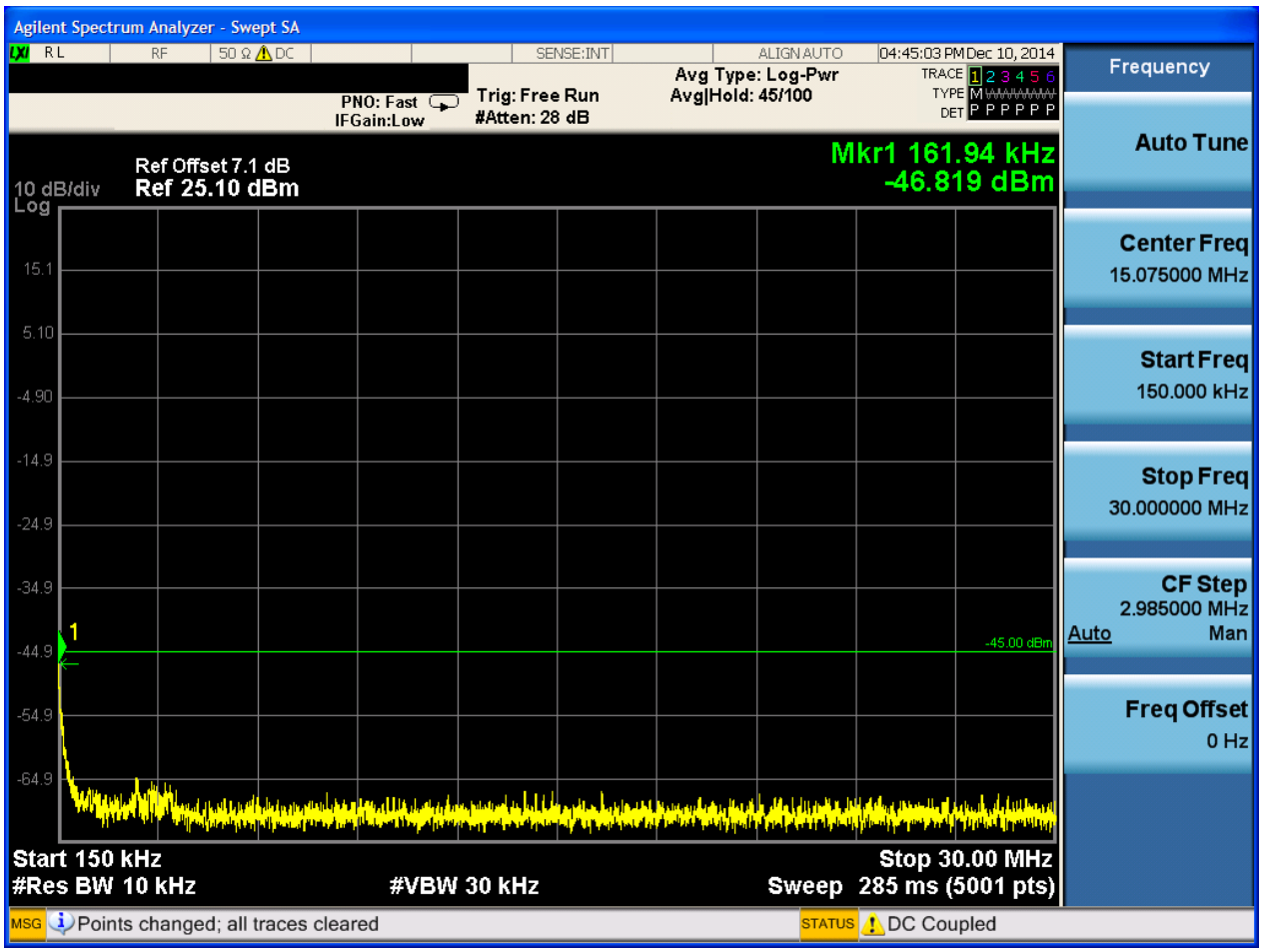

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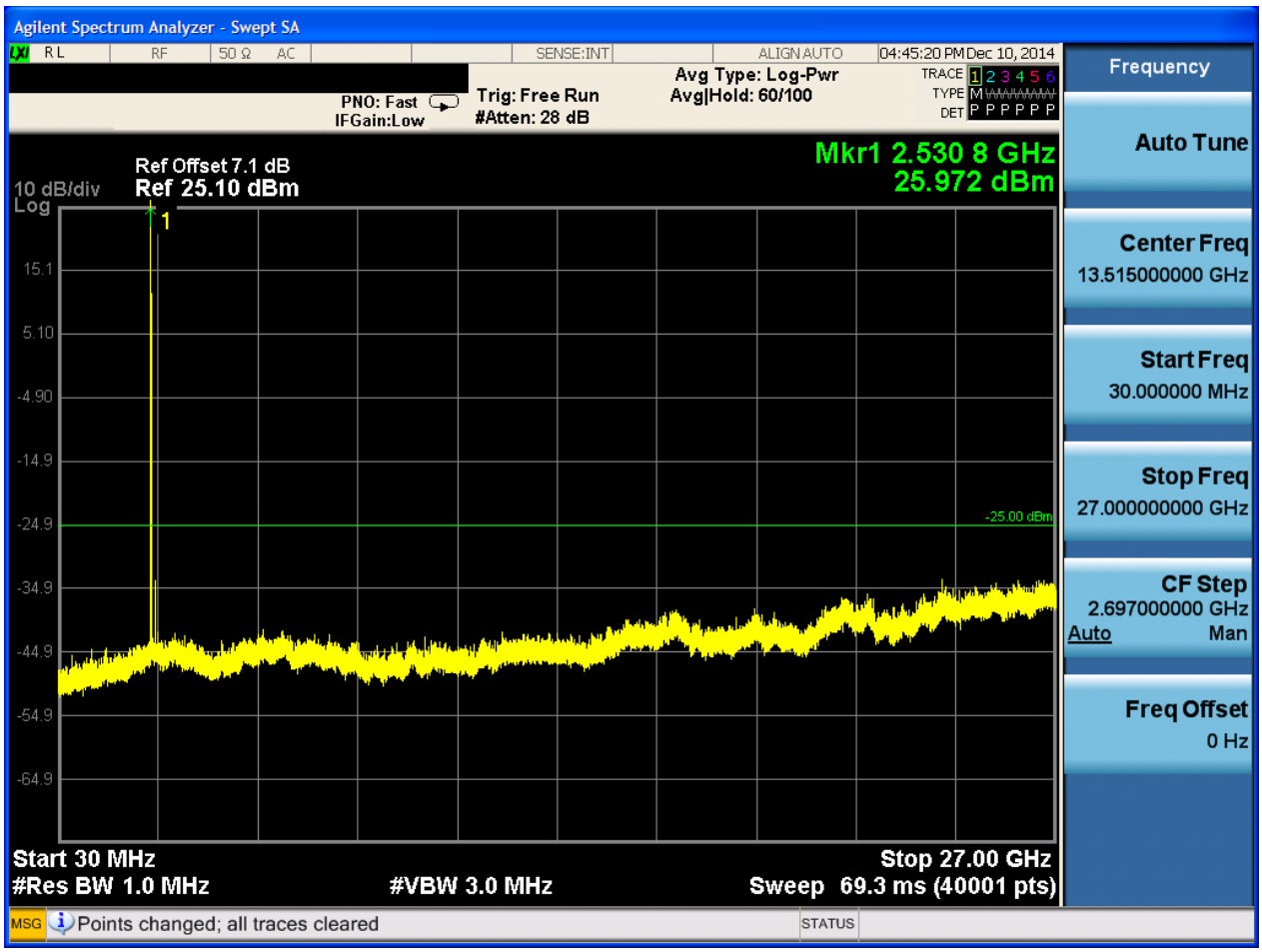

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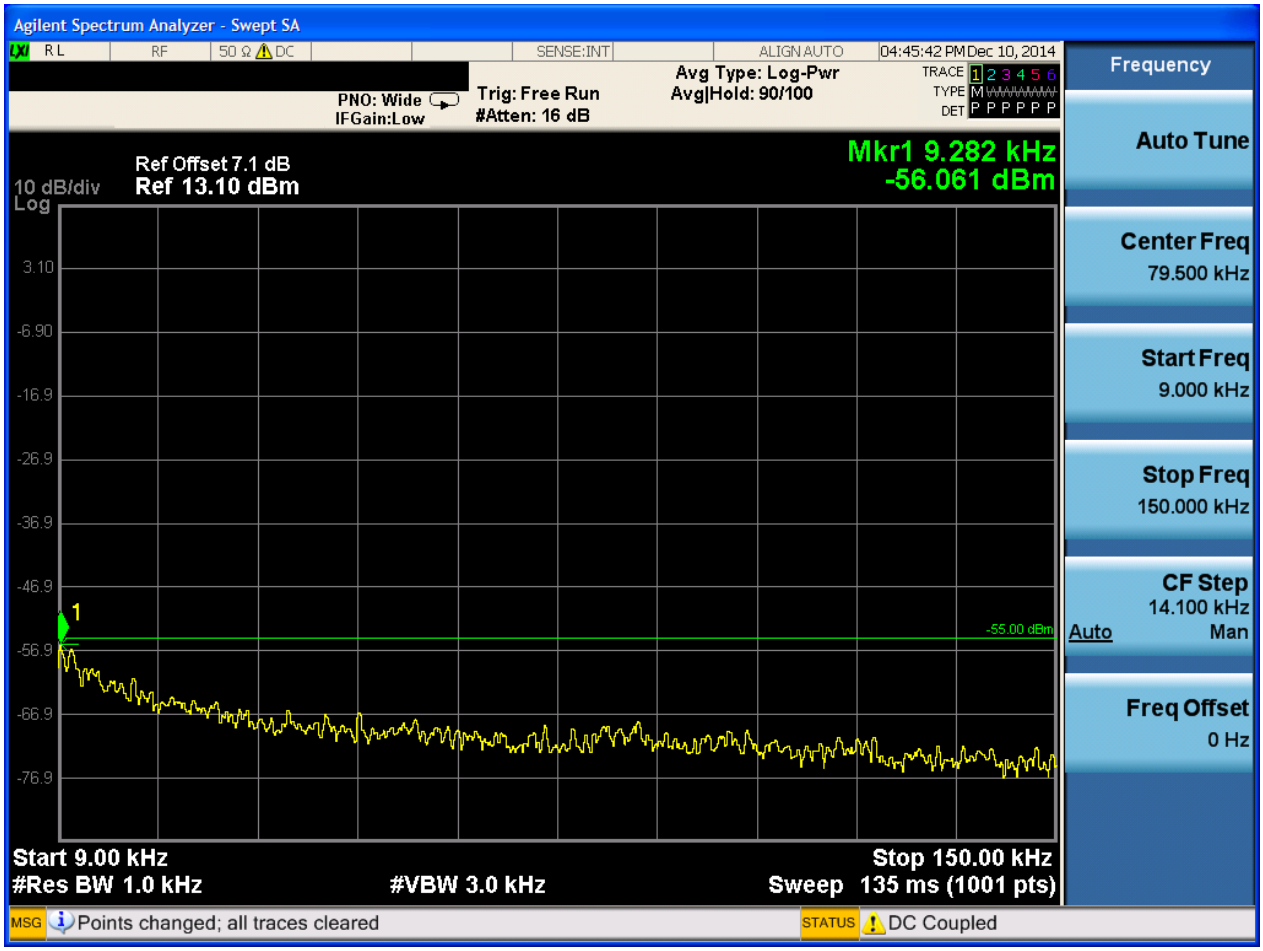
6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0



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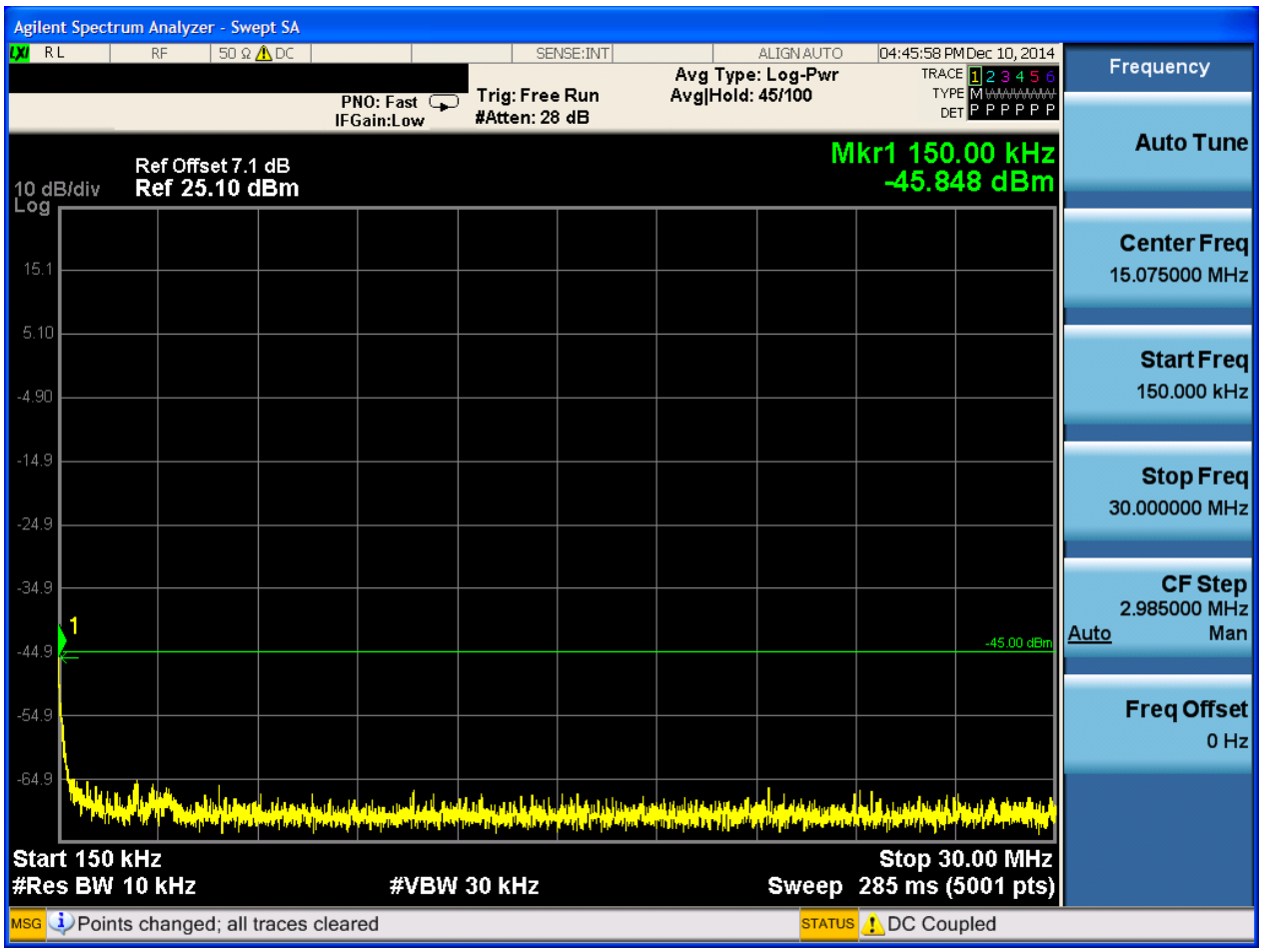

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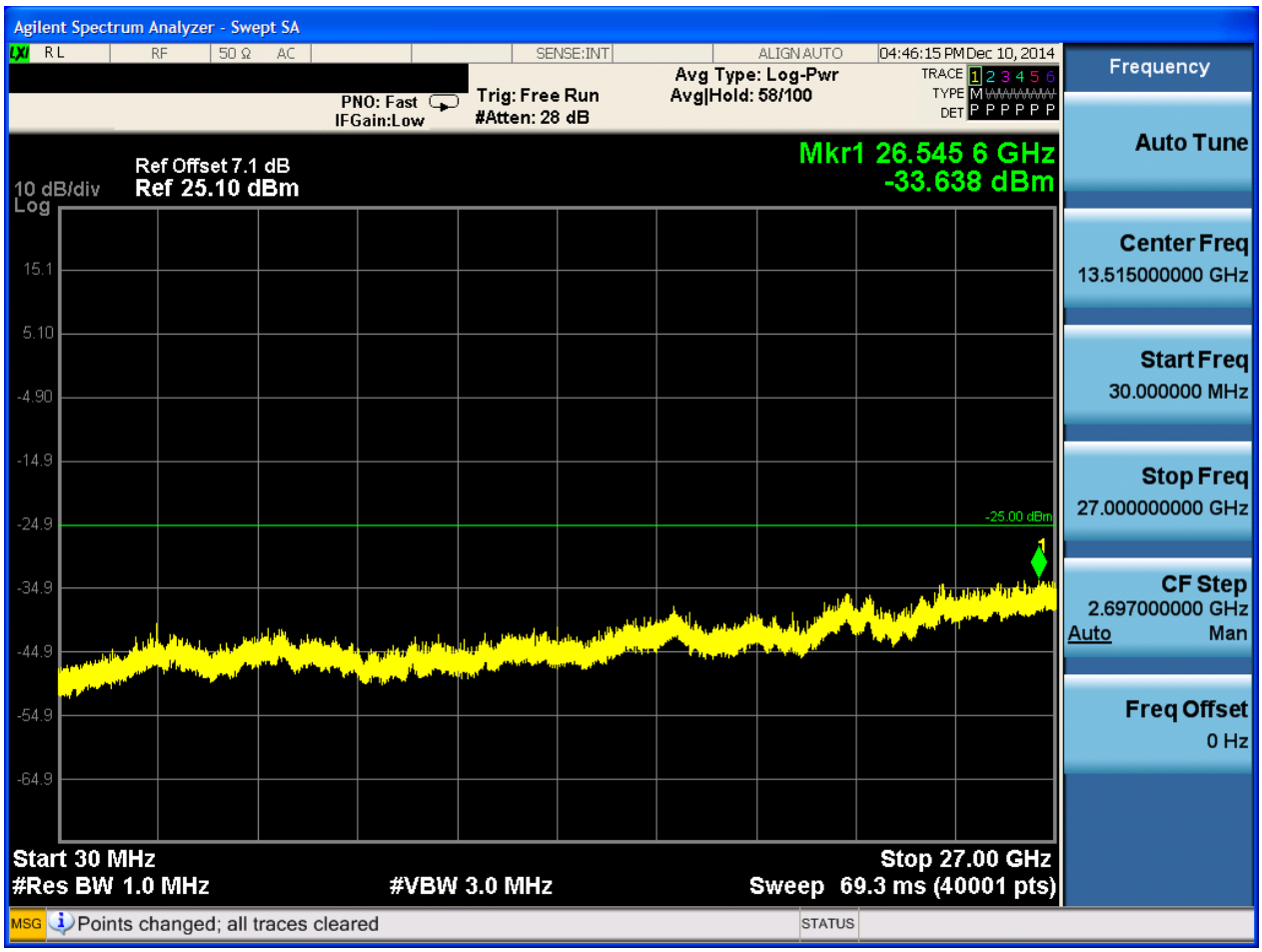

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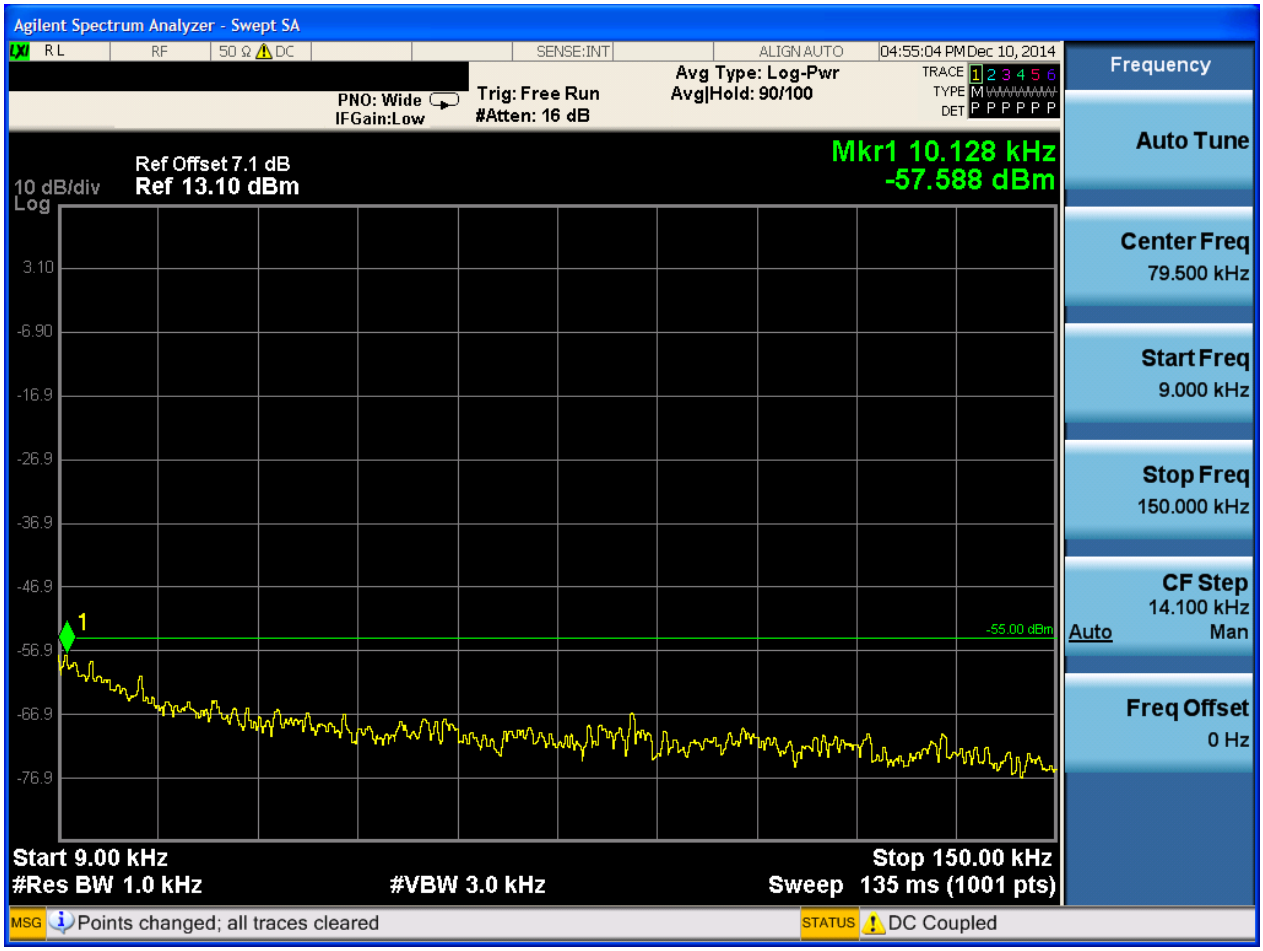
6.2.1.1.3 Test Bandwidth = 15

6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0



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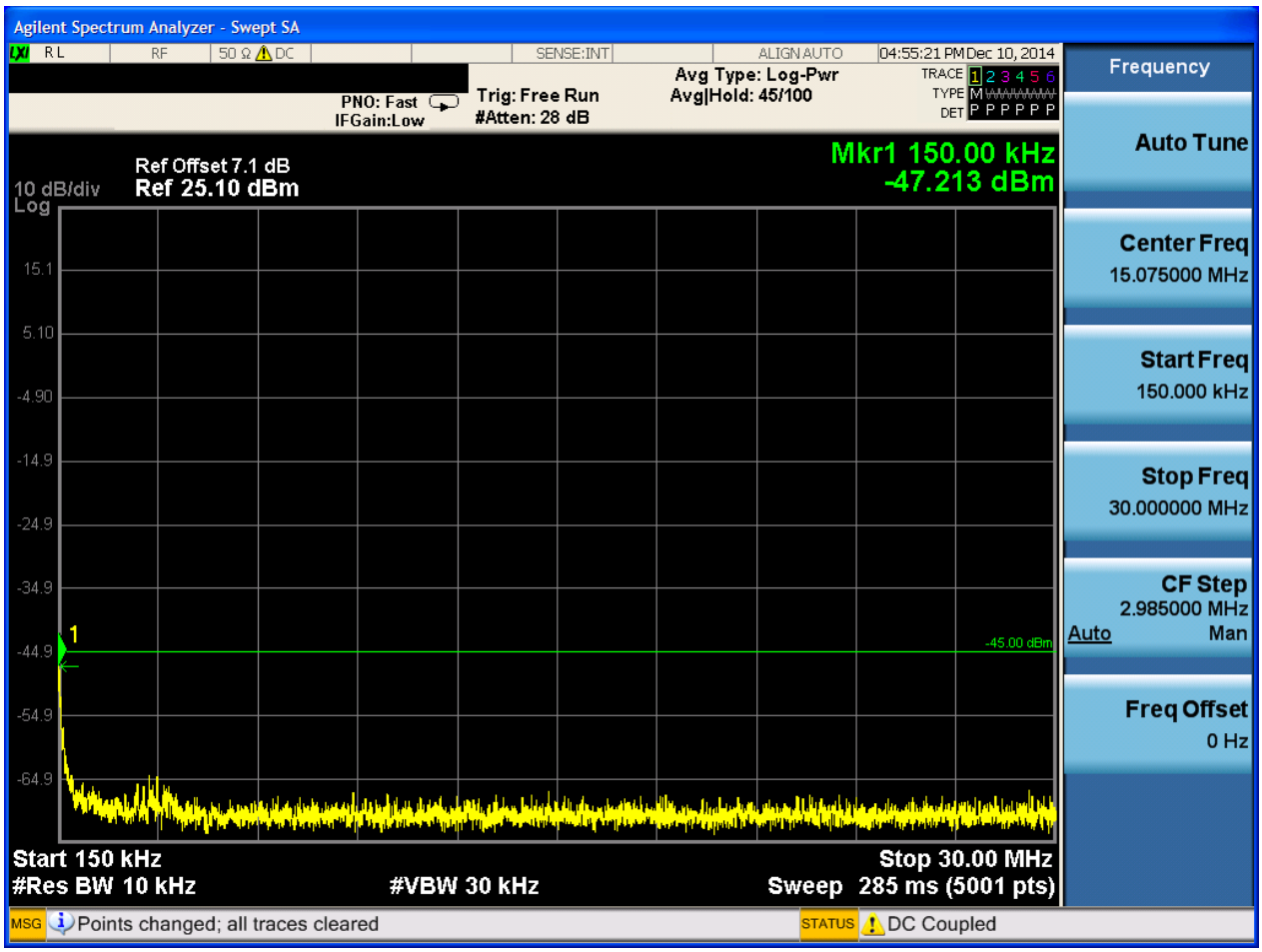

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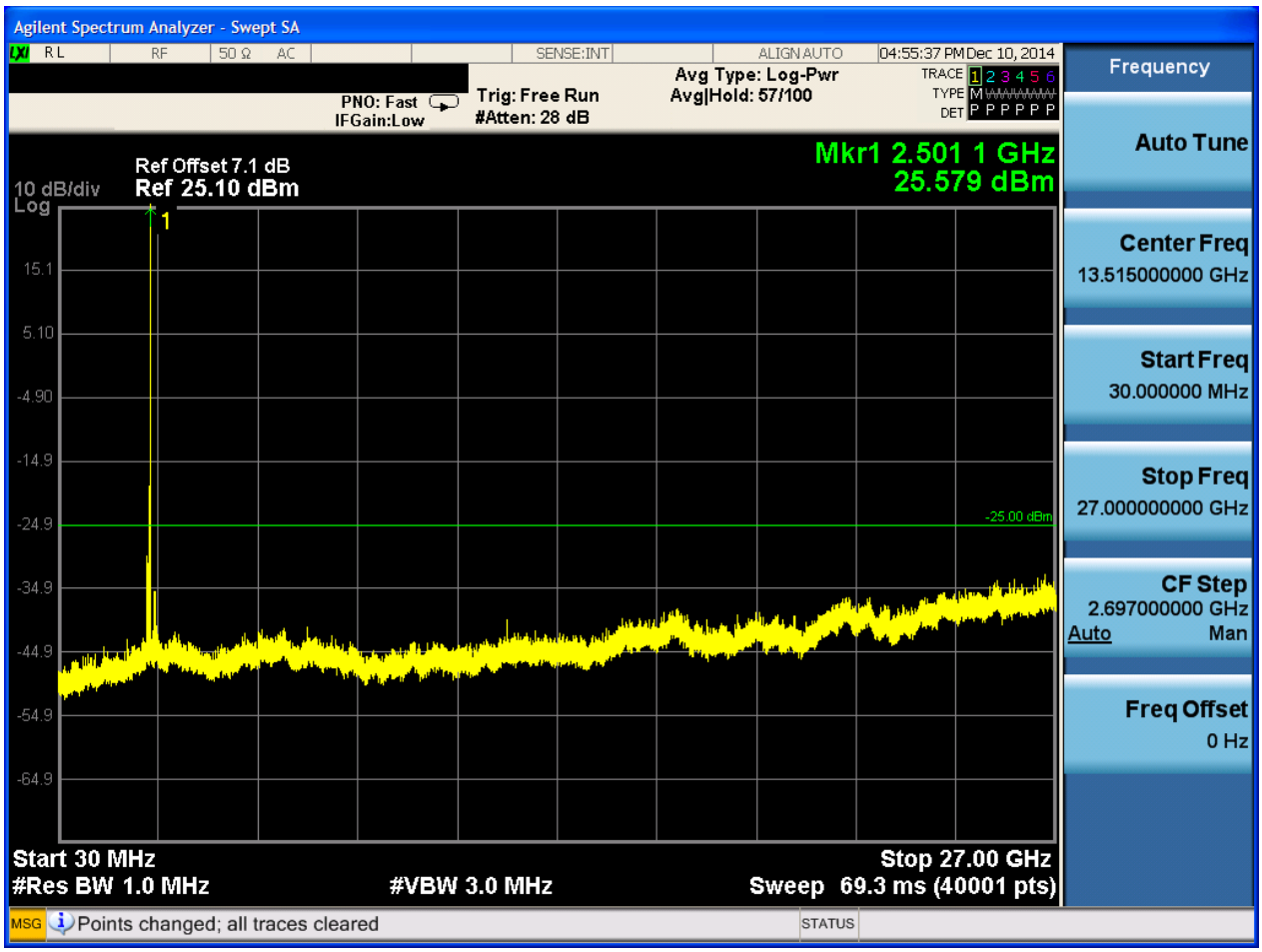

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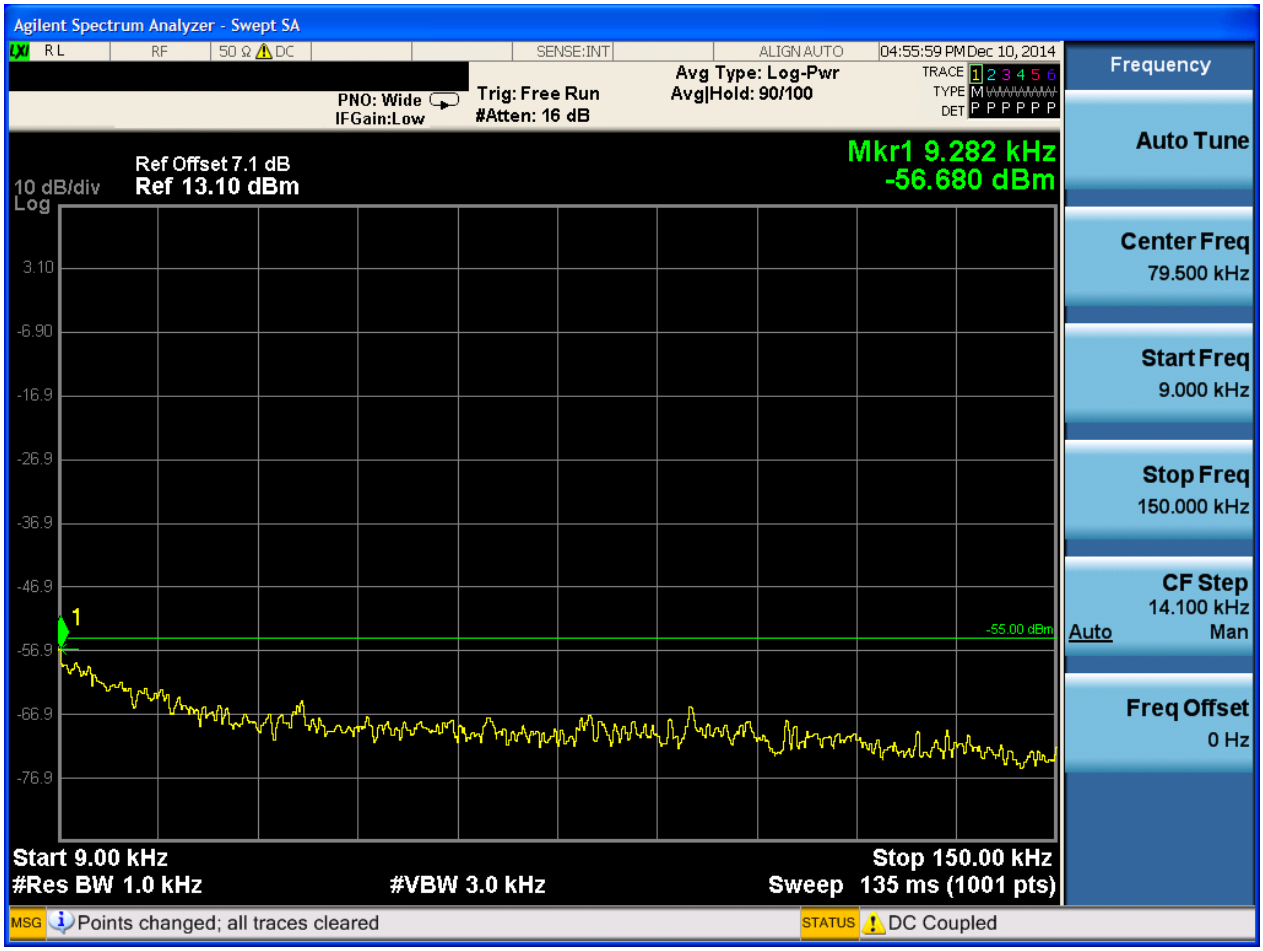
6.2.1.1.3.2 Test Channel = MCH

6.2.1.1.3.2.1 Test RB = RB1#0



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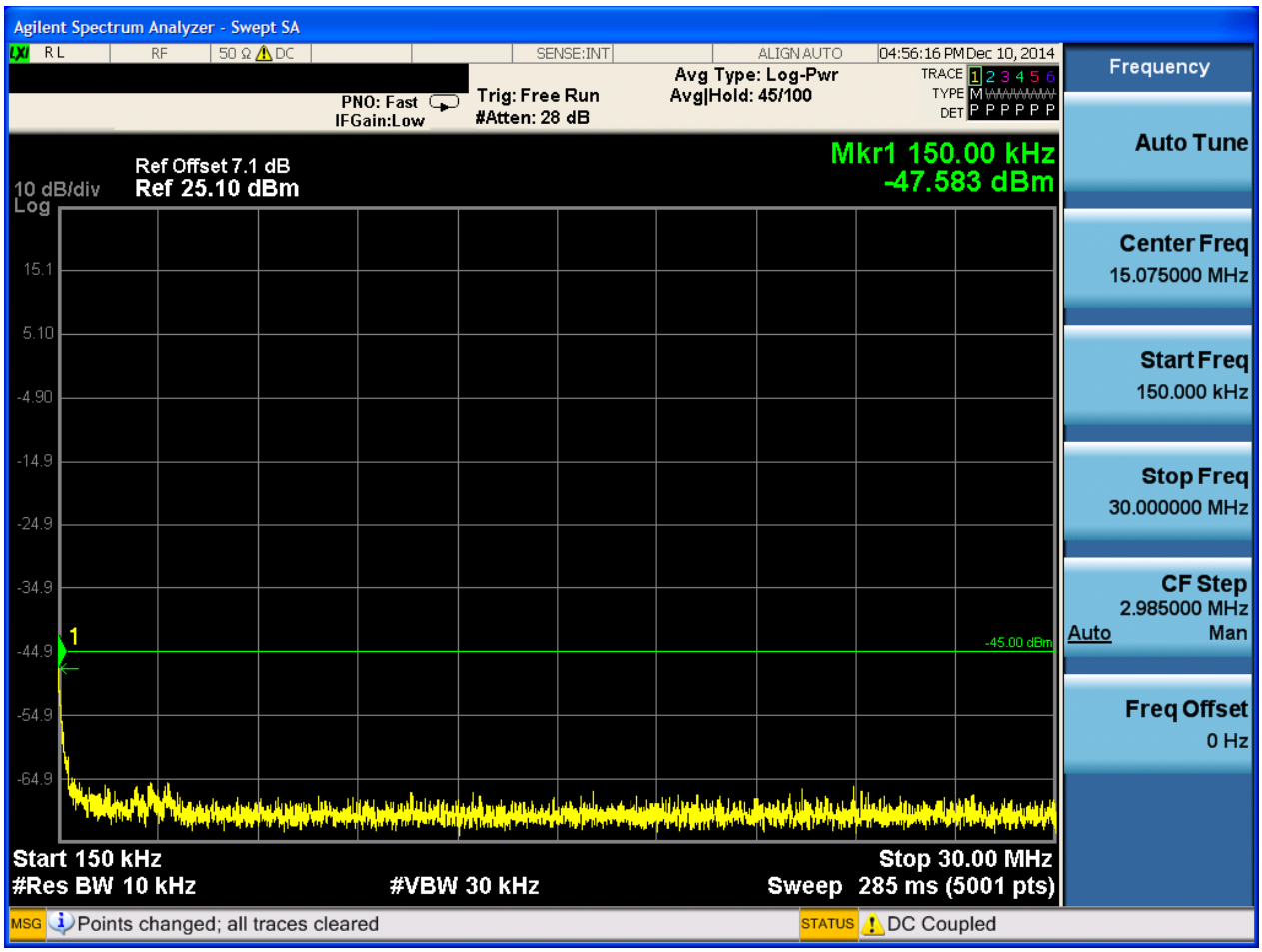

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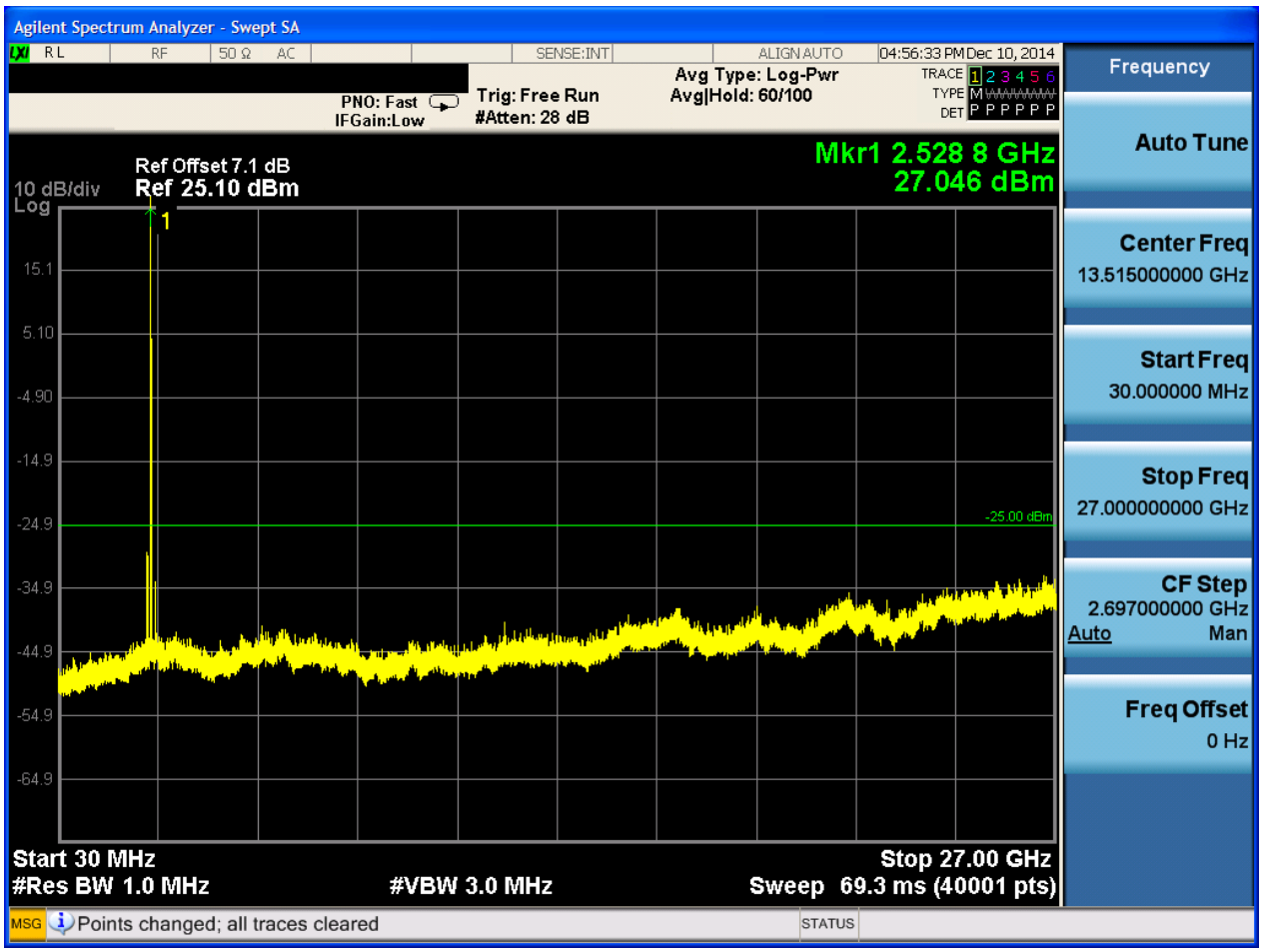

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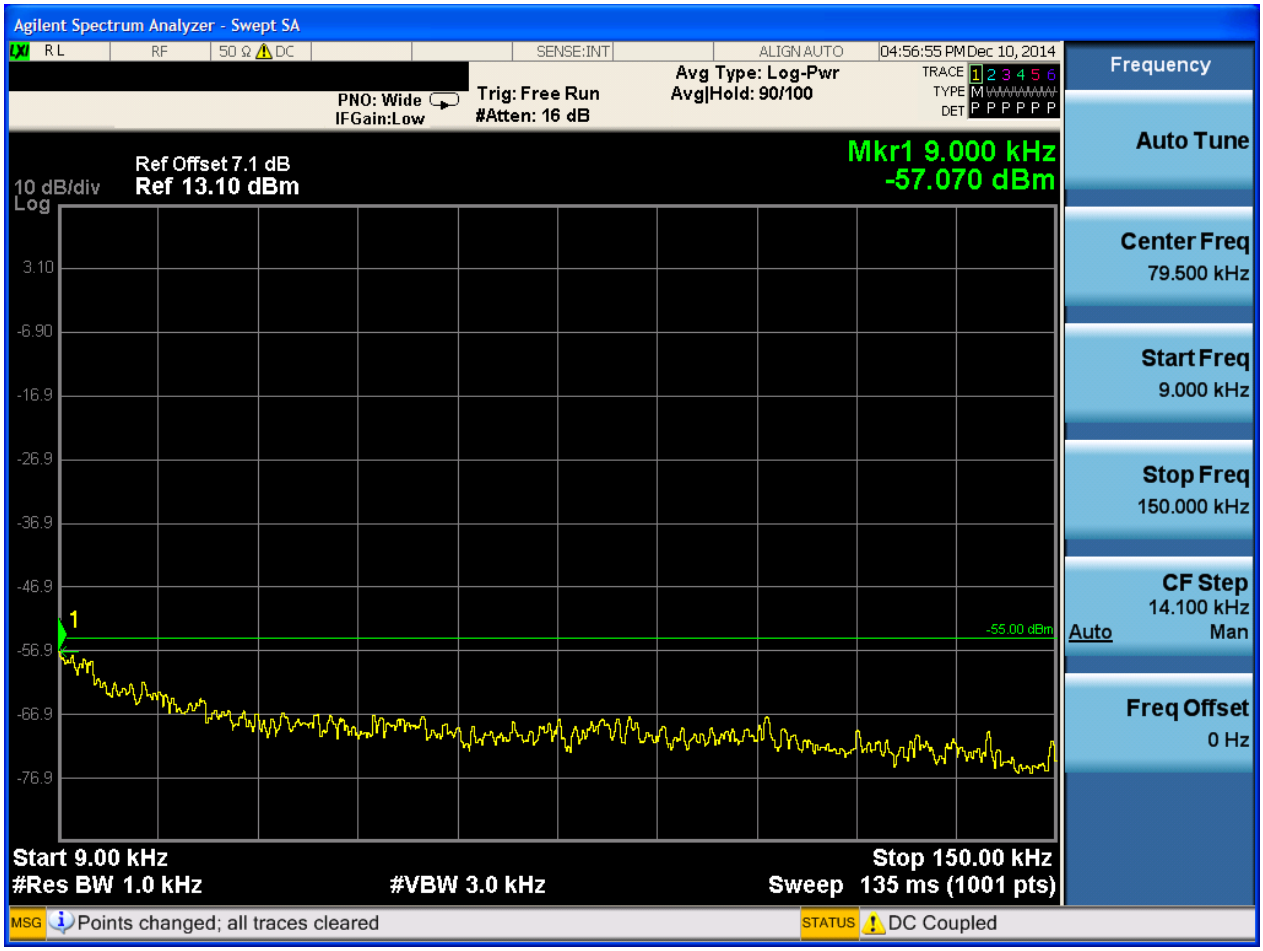
6.2.1.1.3.3 Test Channel = HCH

6.2.1.1.3.3.1 Test RB = RB1#0



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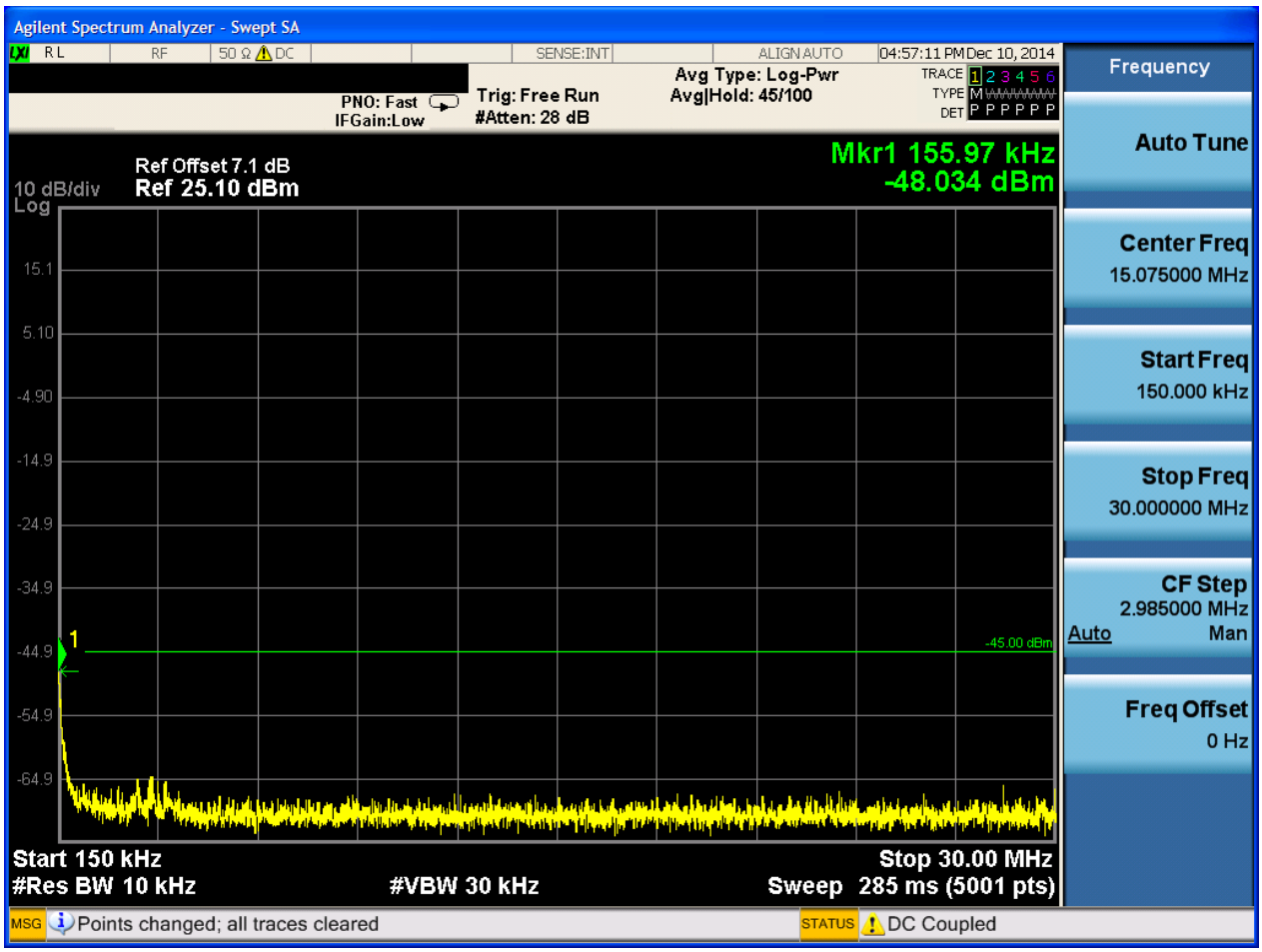

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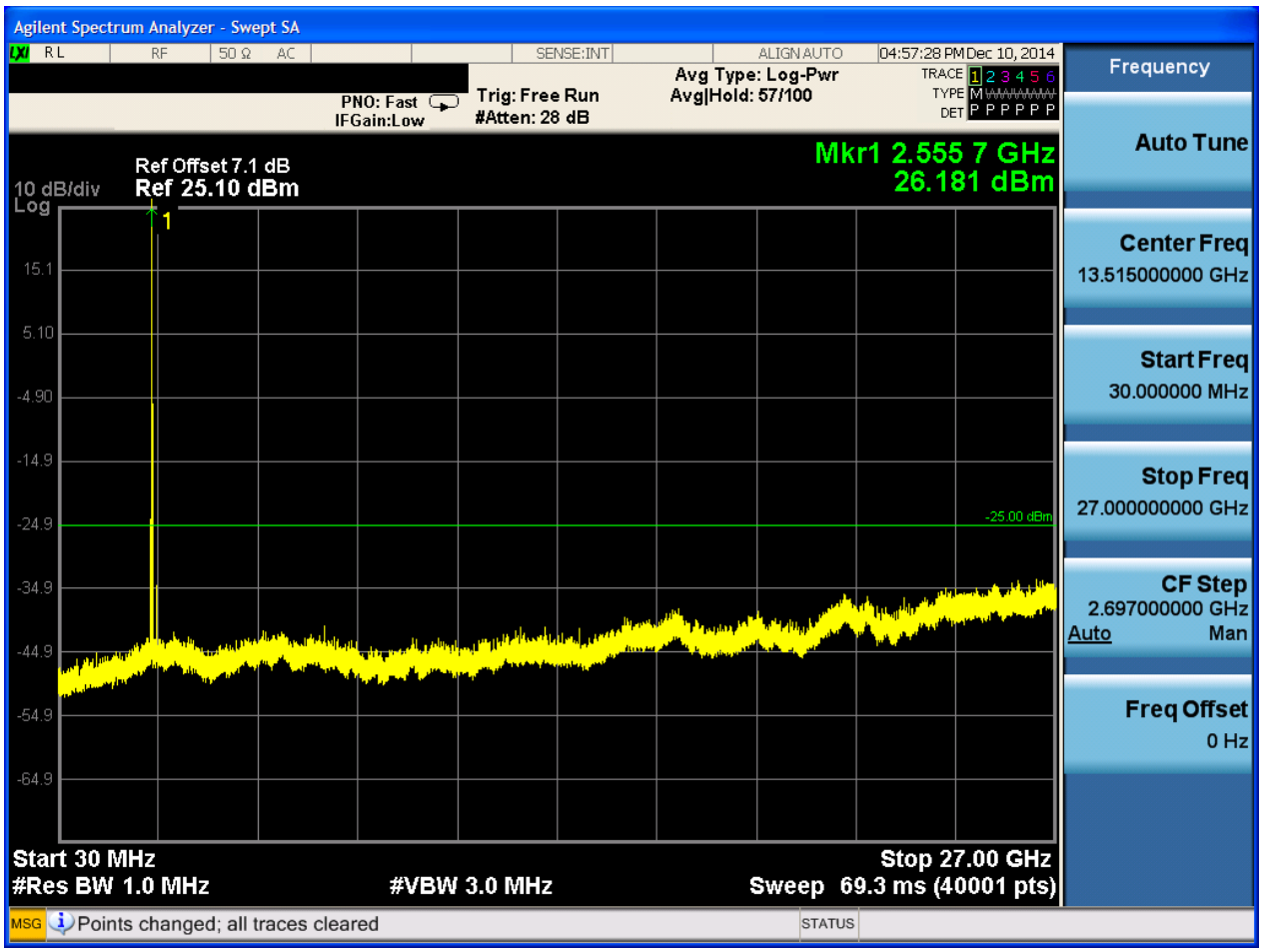

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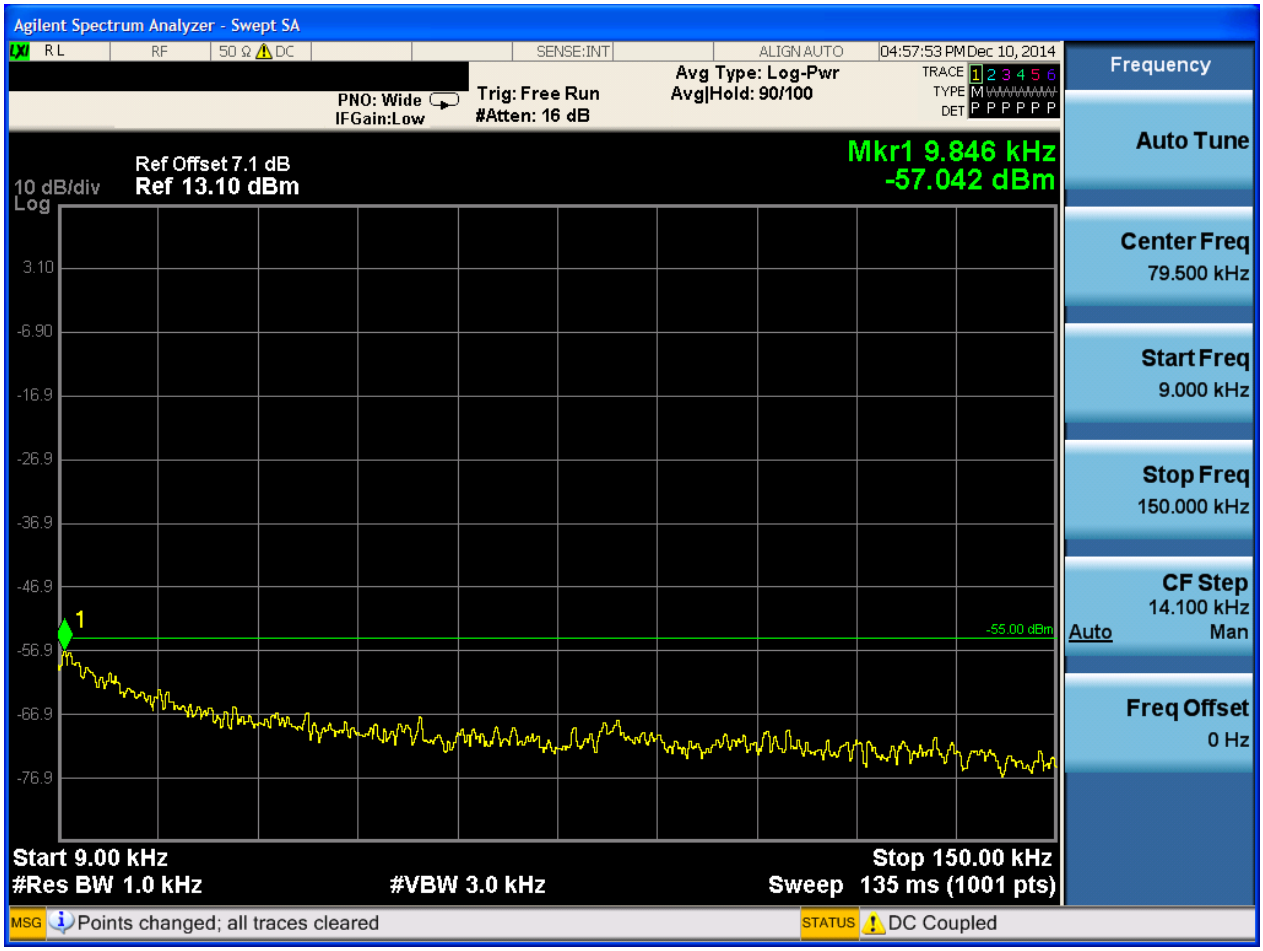
6.2.1.1.4 Test Bandwidth = 20

6.2.1.1.4.1 Test Channel = LCH

6.2.1.1.4.1.1 Test RB = RB1#0



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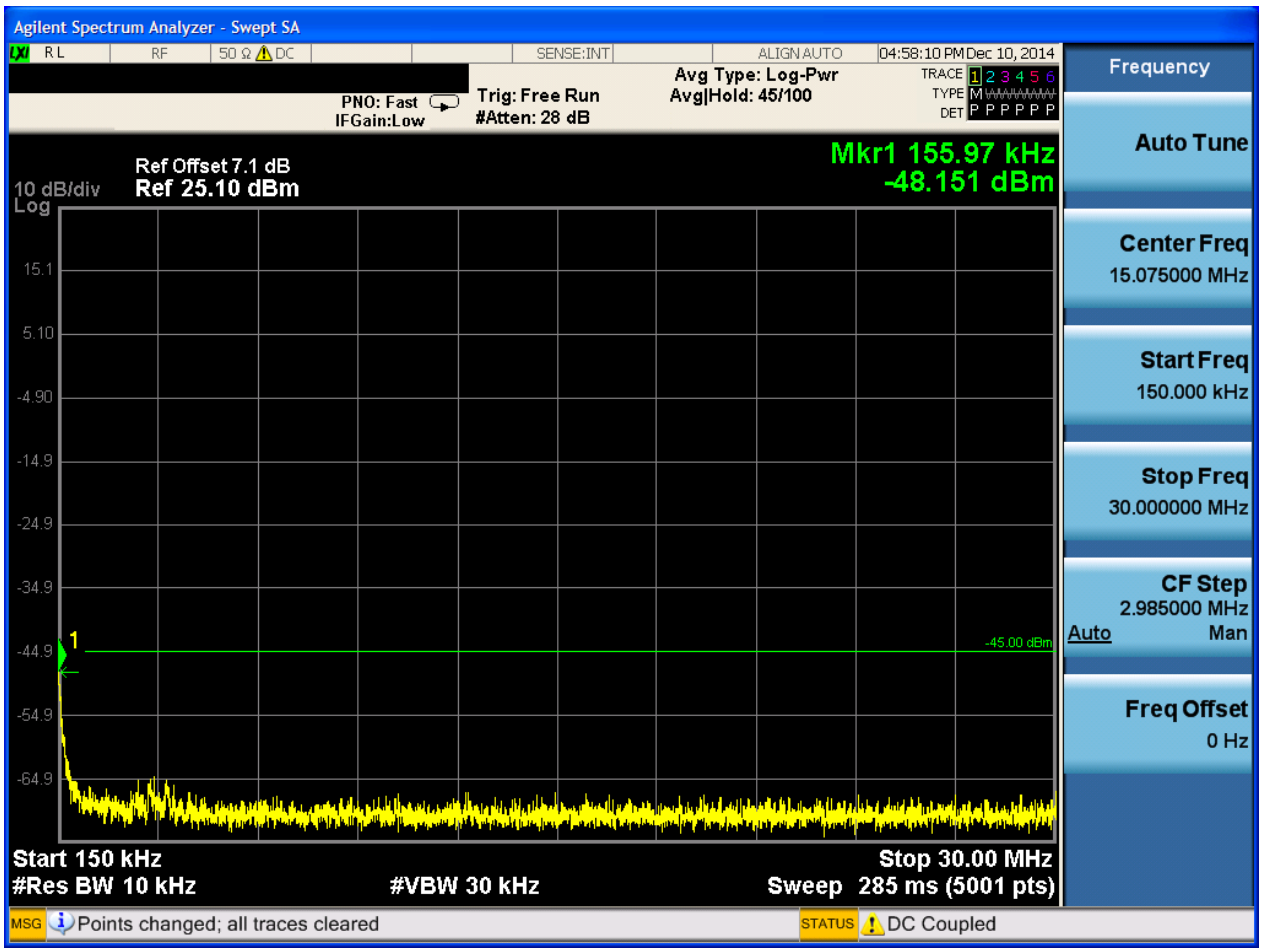

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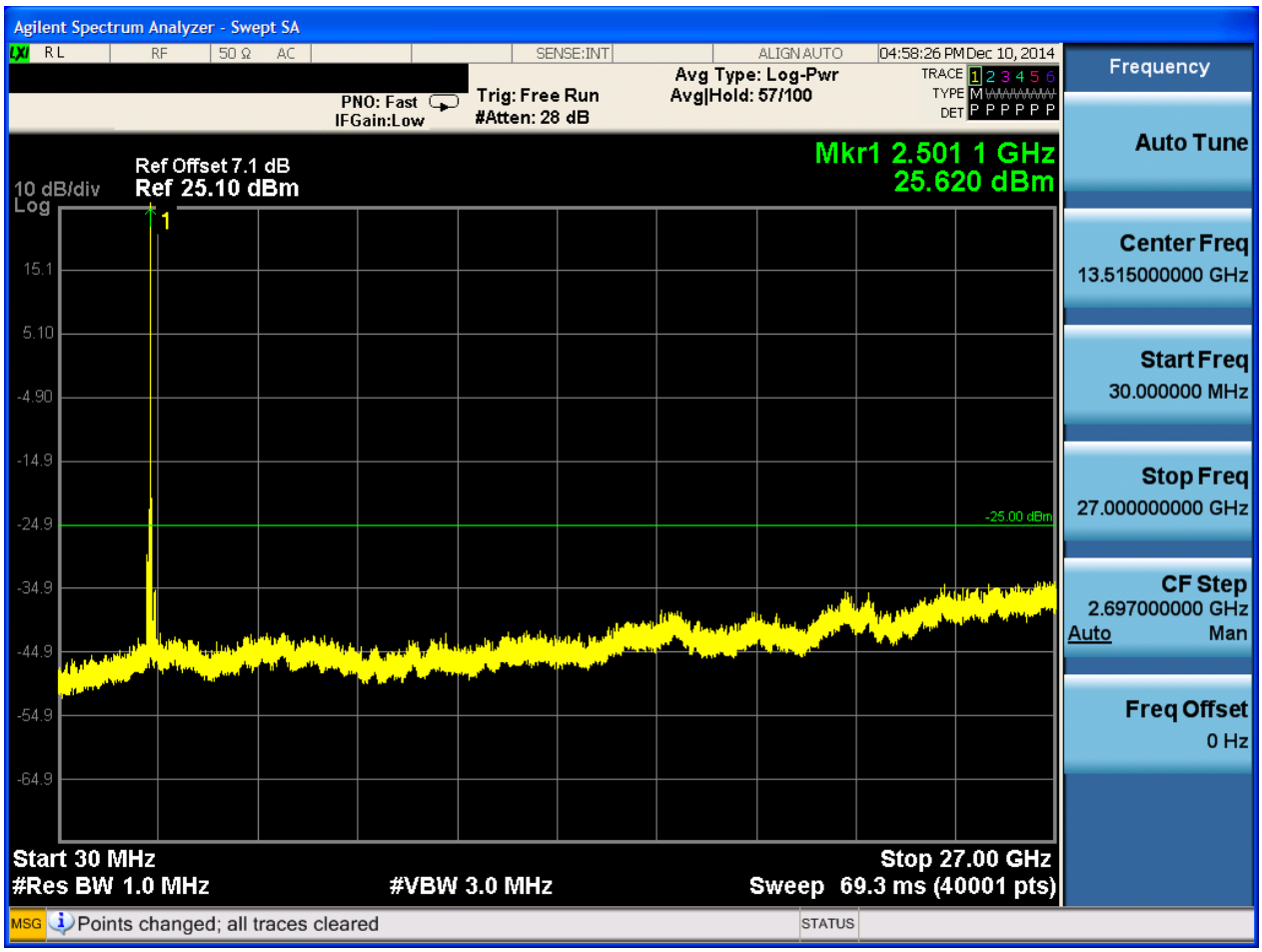

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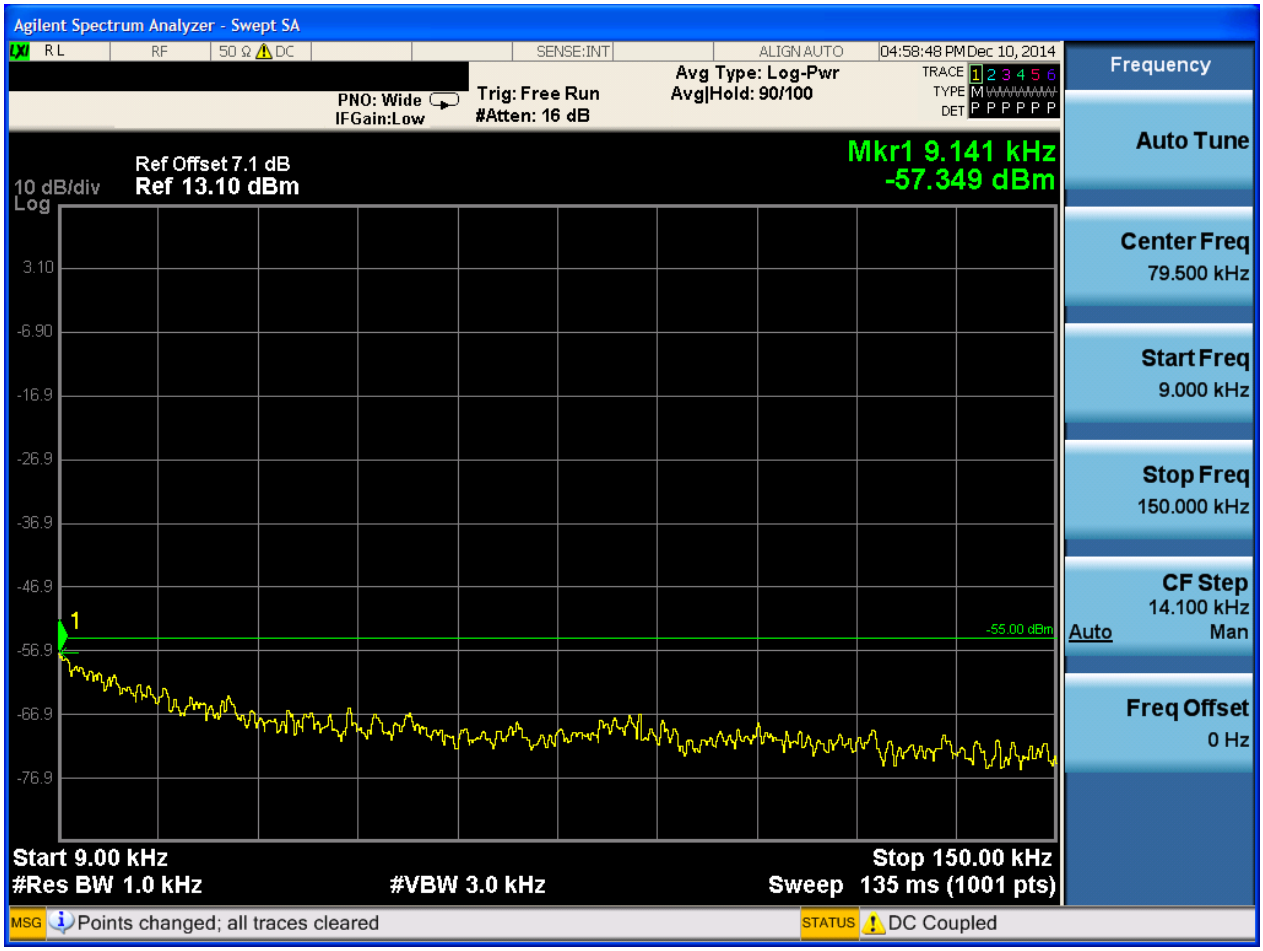
6.2.1.1.4.2 Test Channel = MCH

6.2.1.1.4.2.1 Test RB = RB1#0



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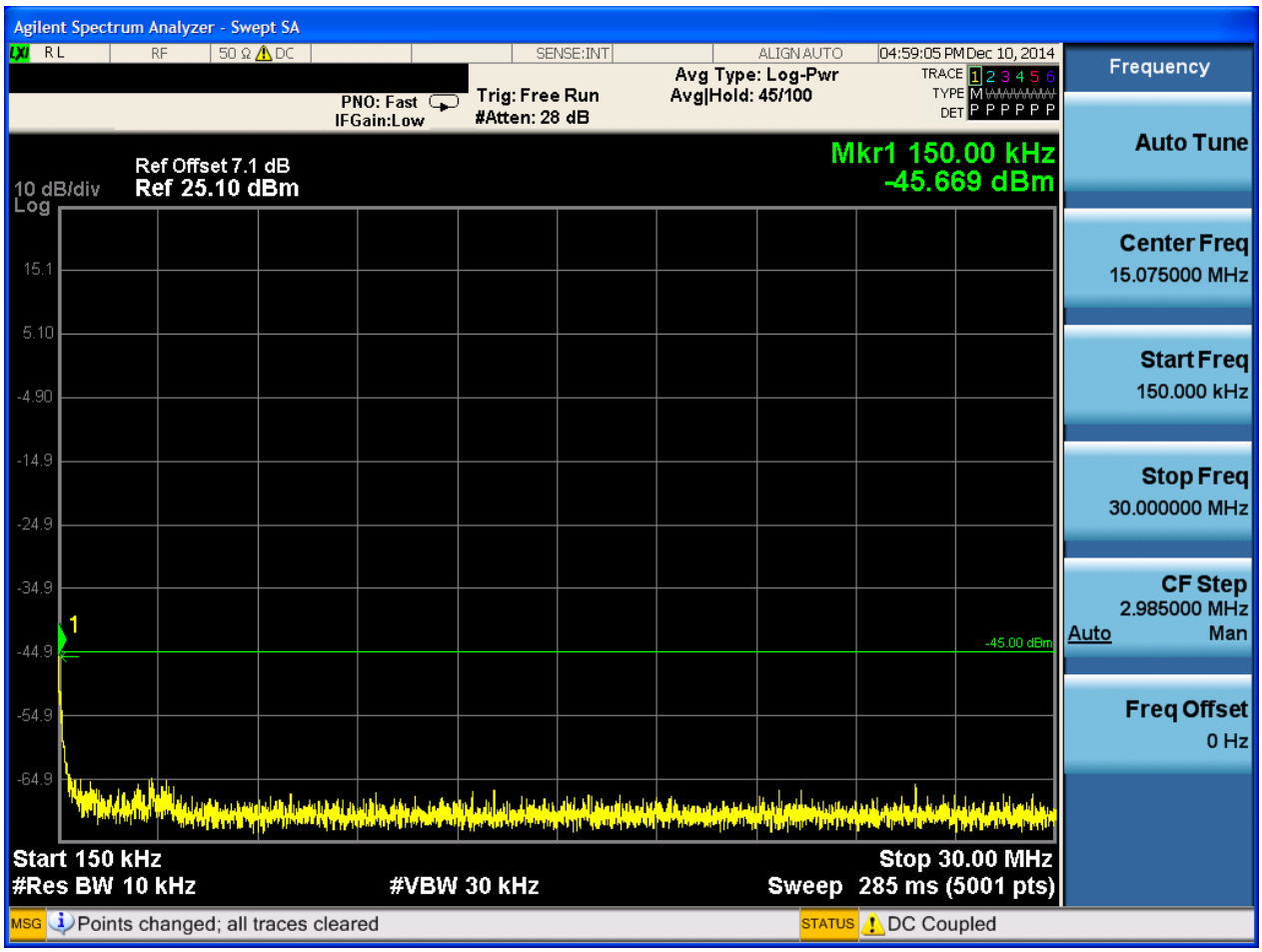

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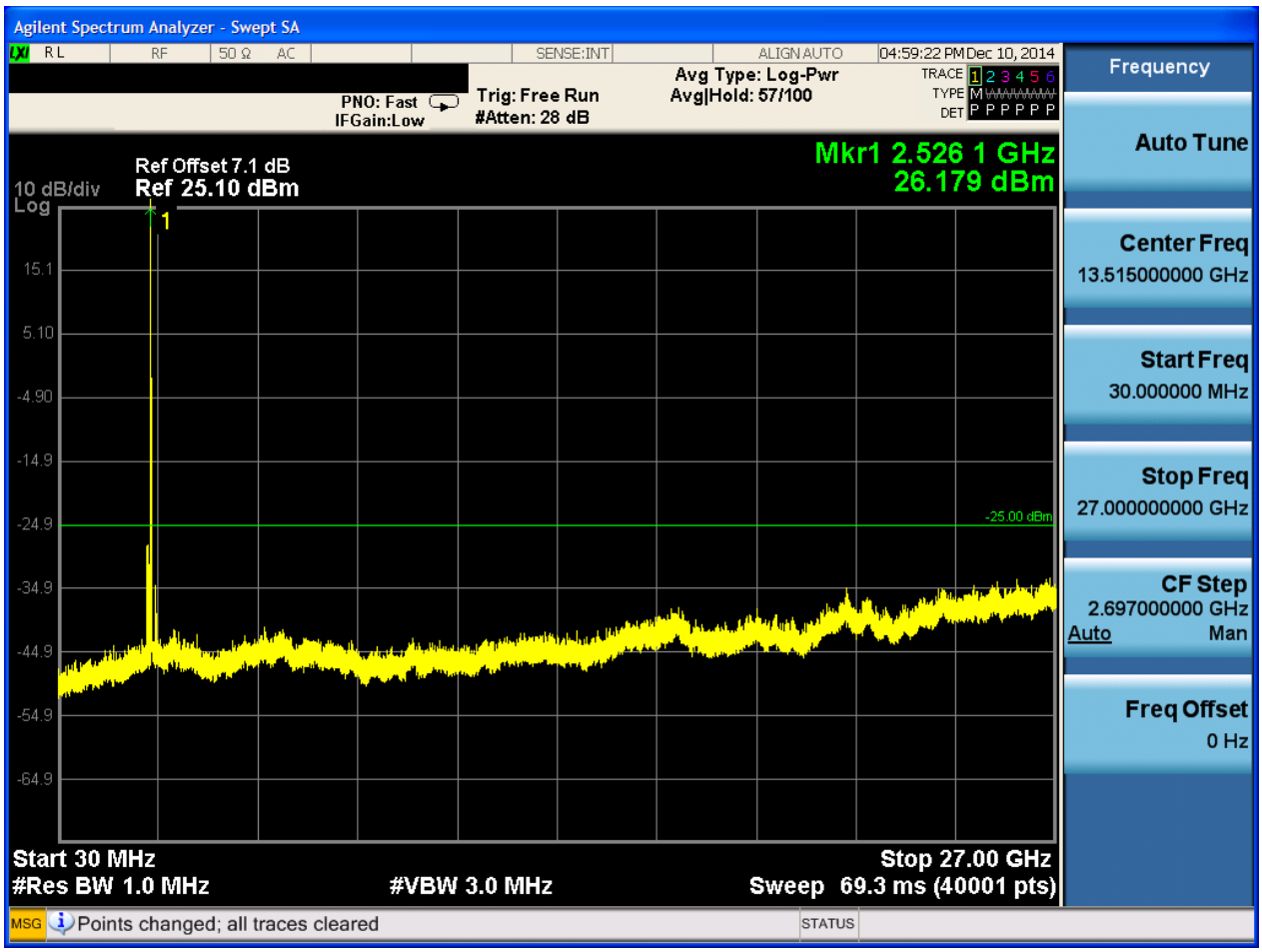

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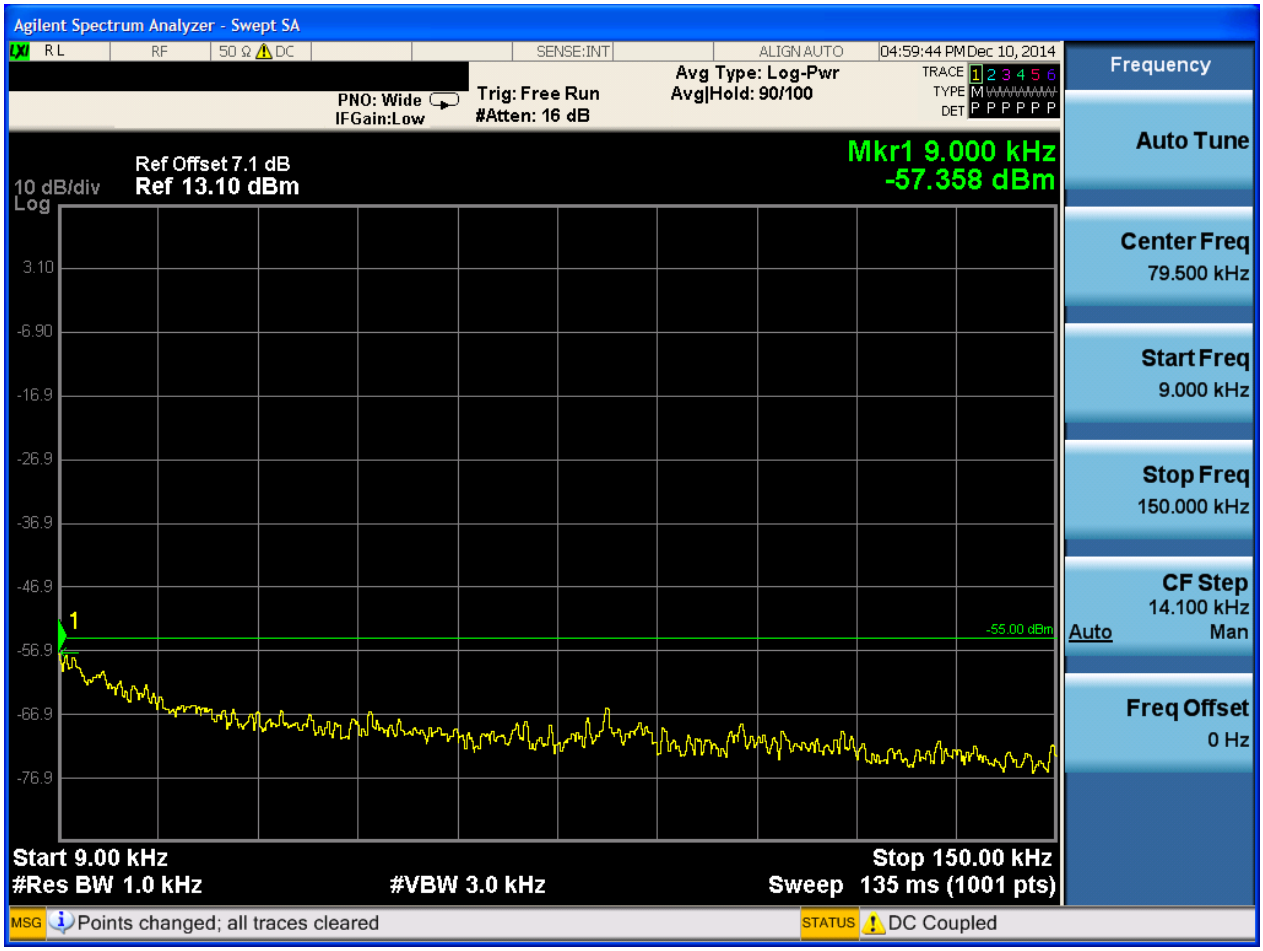
6.2.1.1.4.3 Test Channel = HCH

6.2.1.1.4.3.1 Test RB = RB1#0



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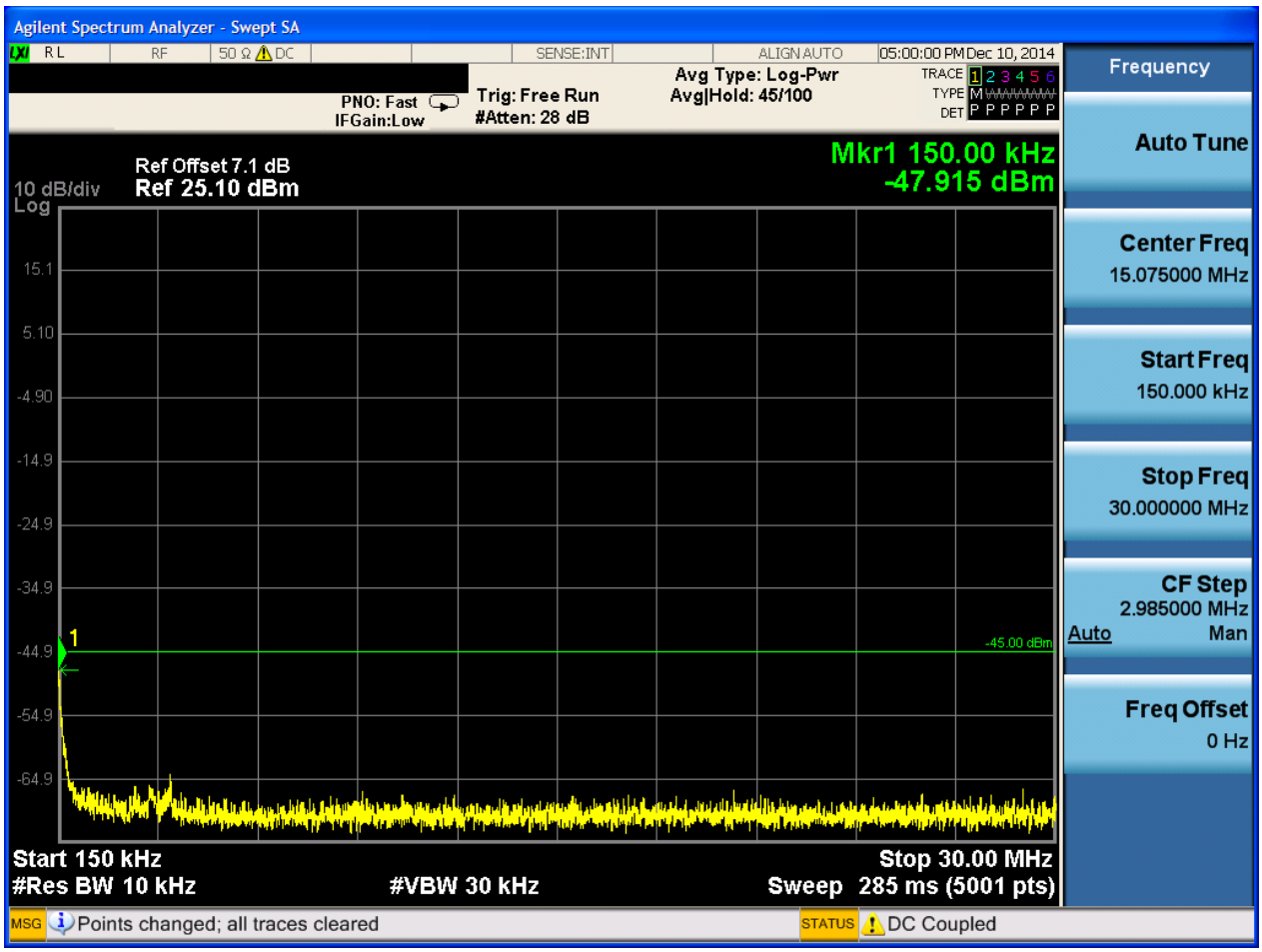

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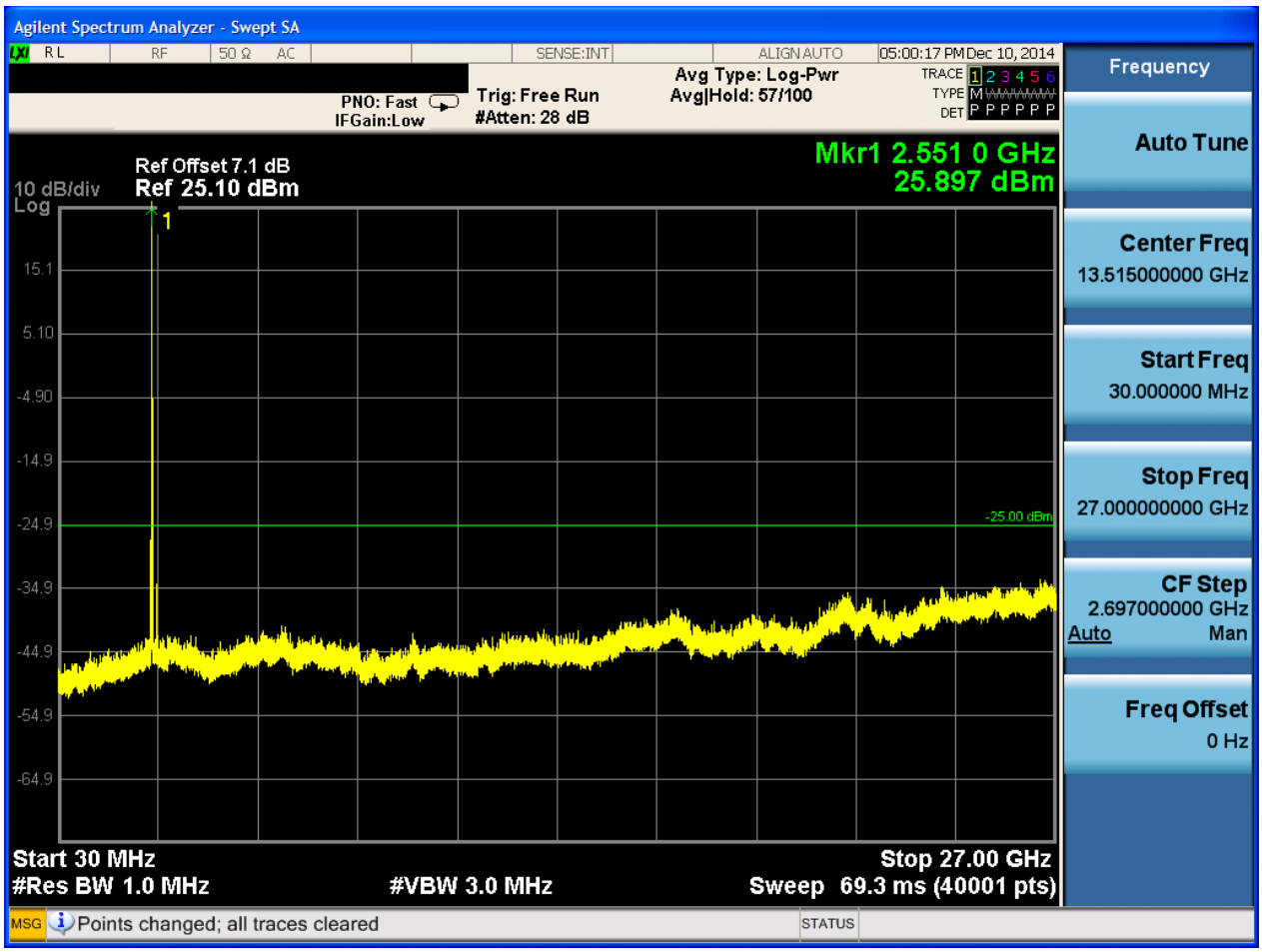

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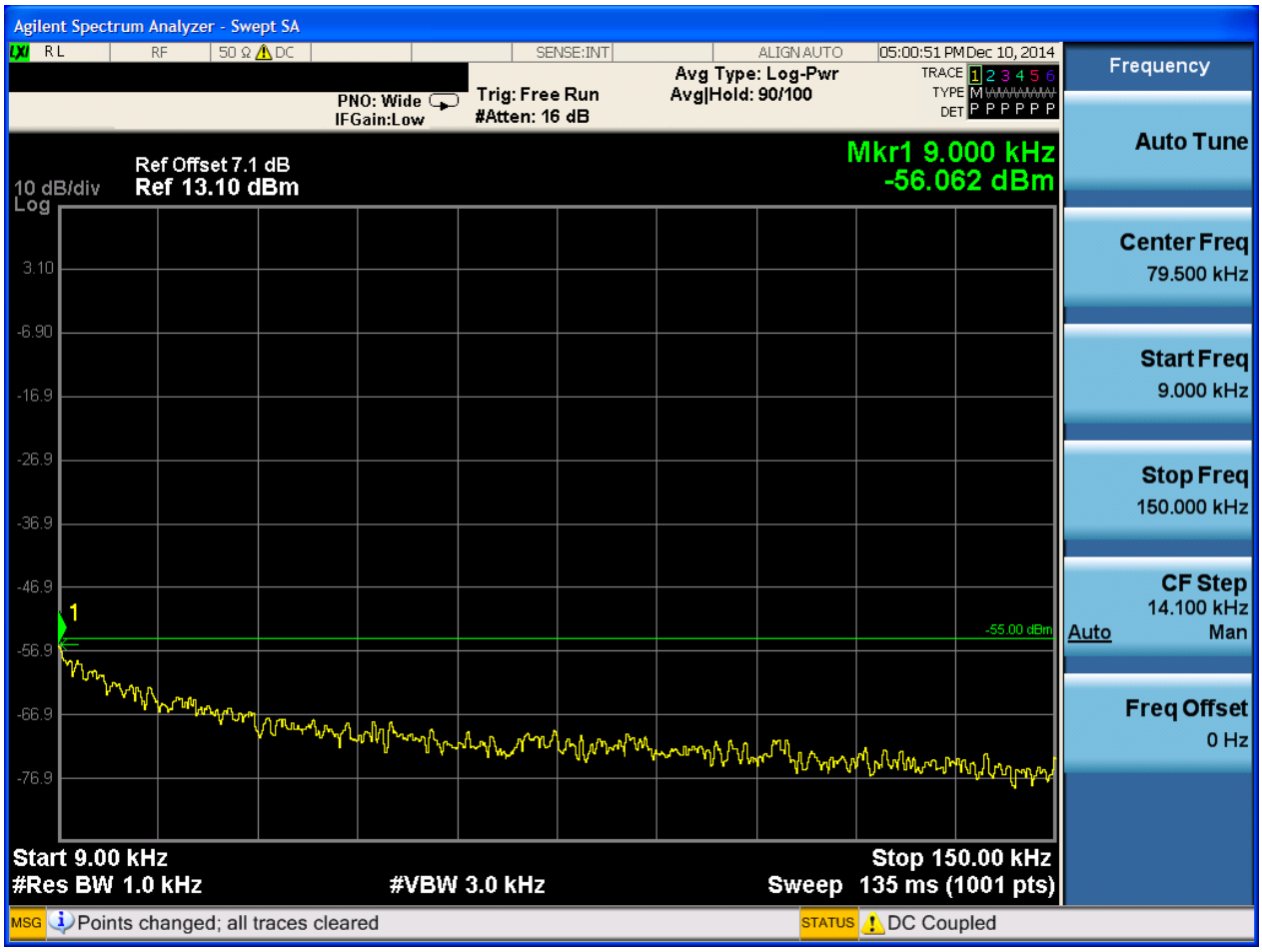
6.2.1.2 Test Mode = LTE/TM2

6.2.1.2.1 Test Bandwidth = 5

6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0



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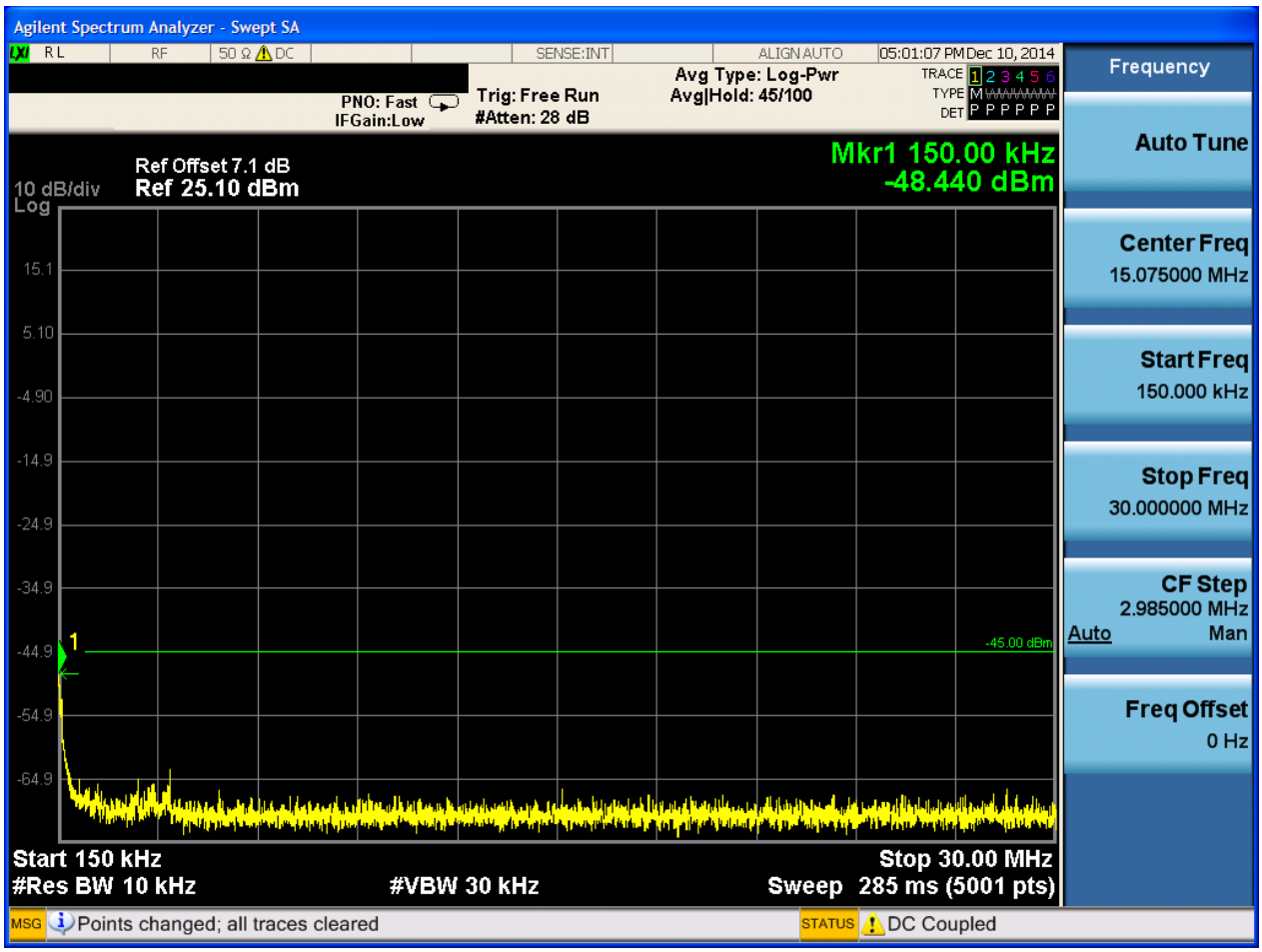

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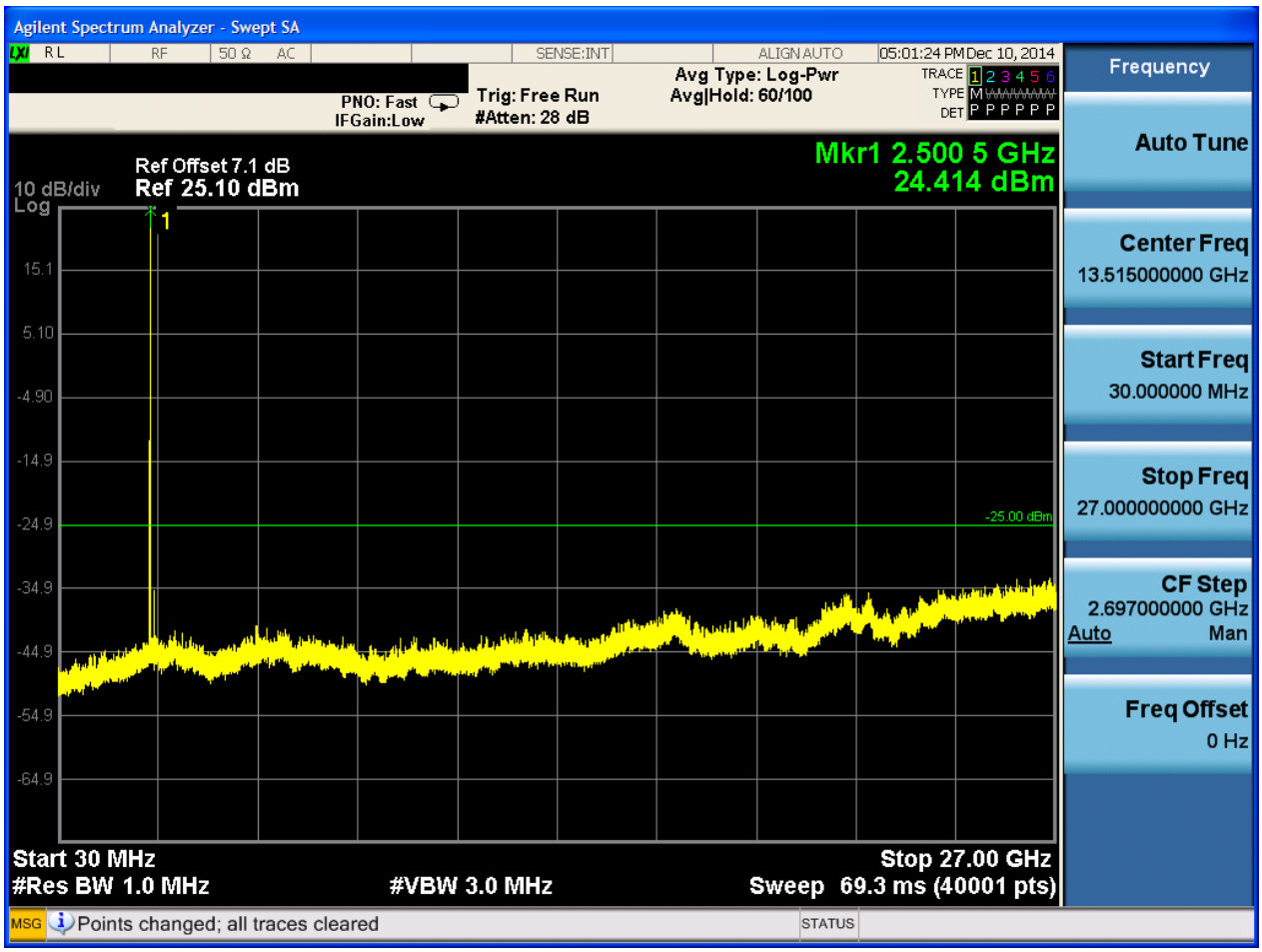

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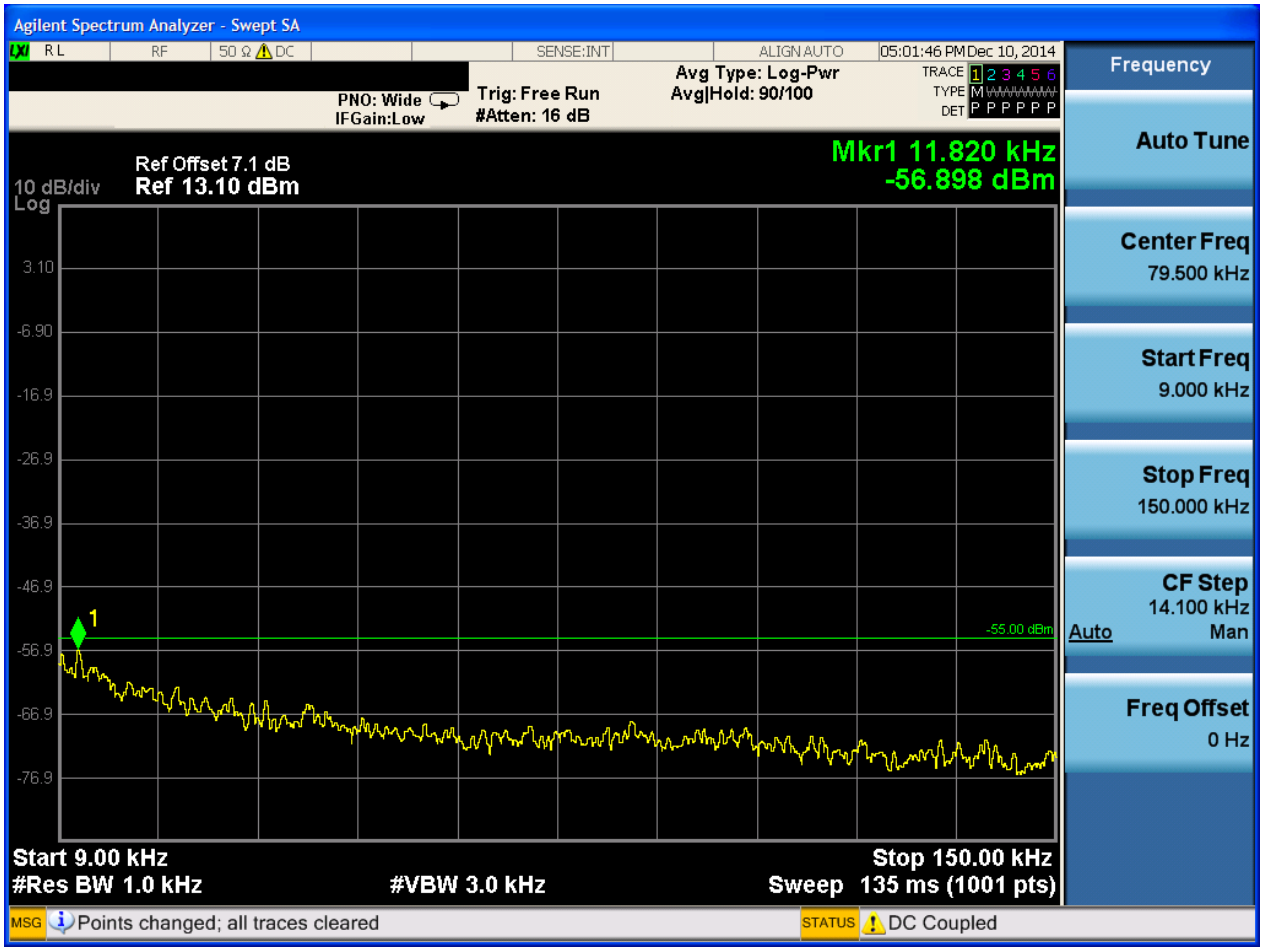
6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0



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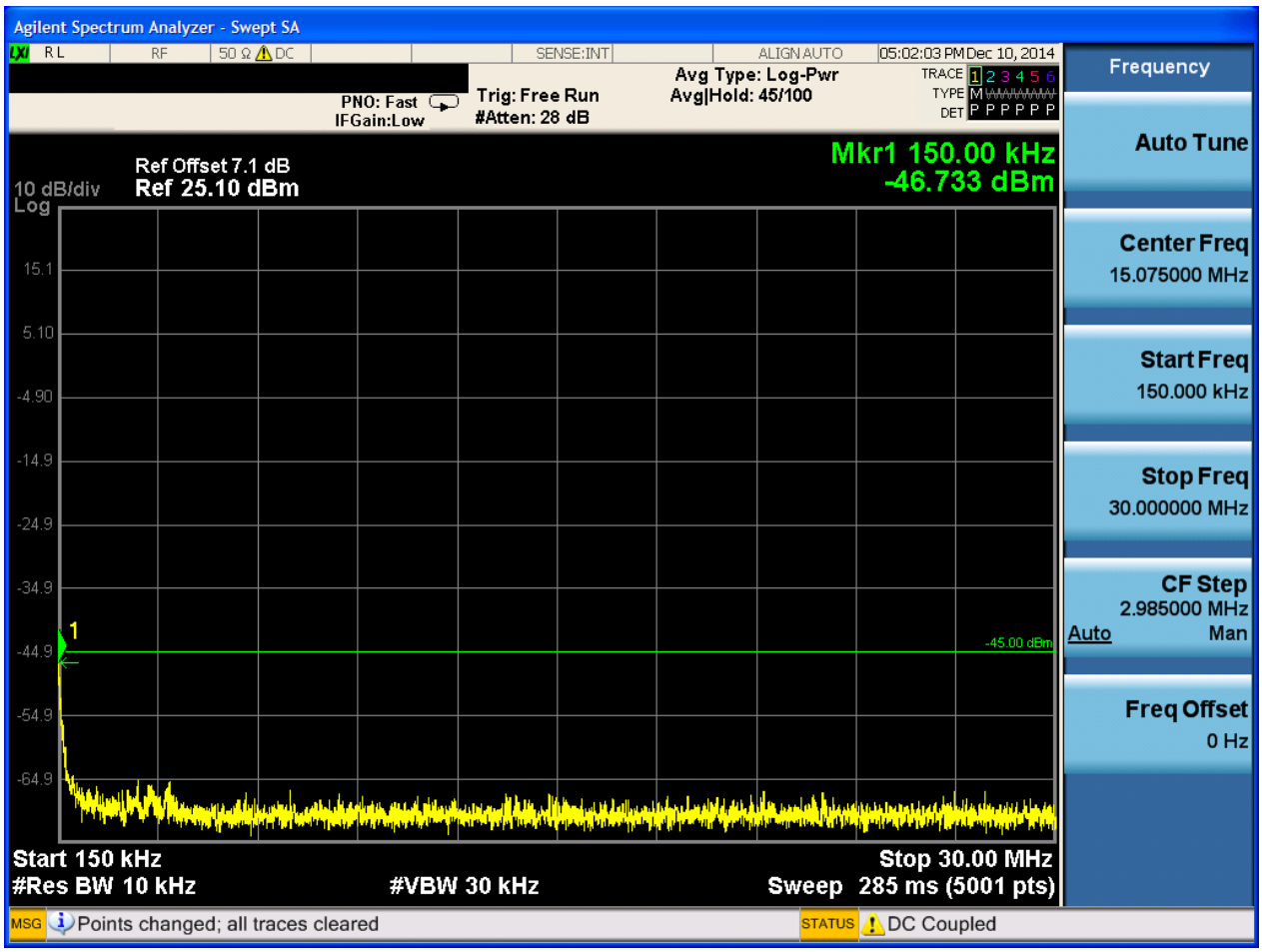

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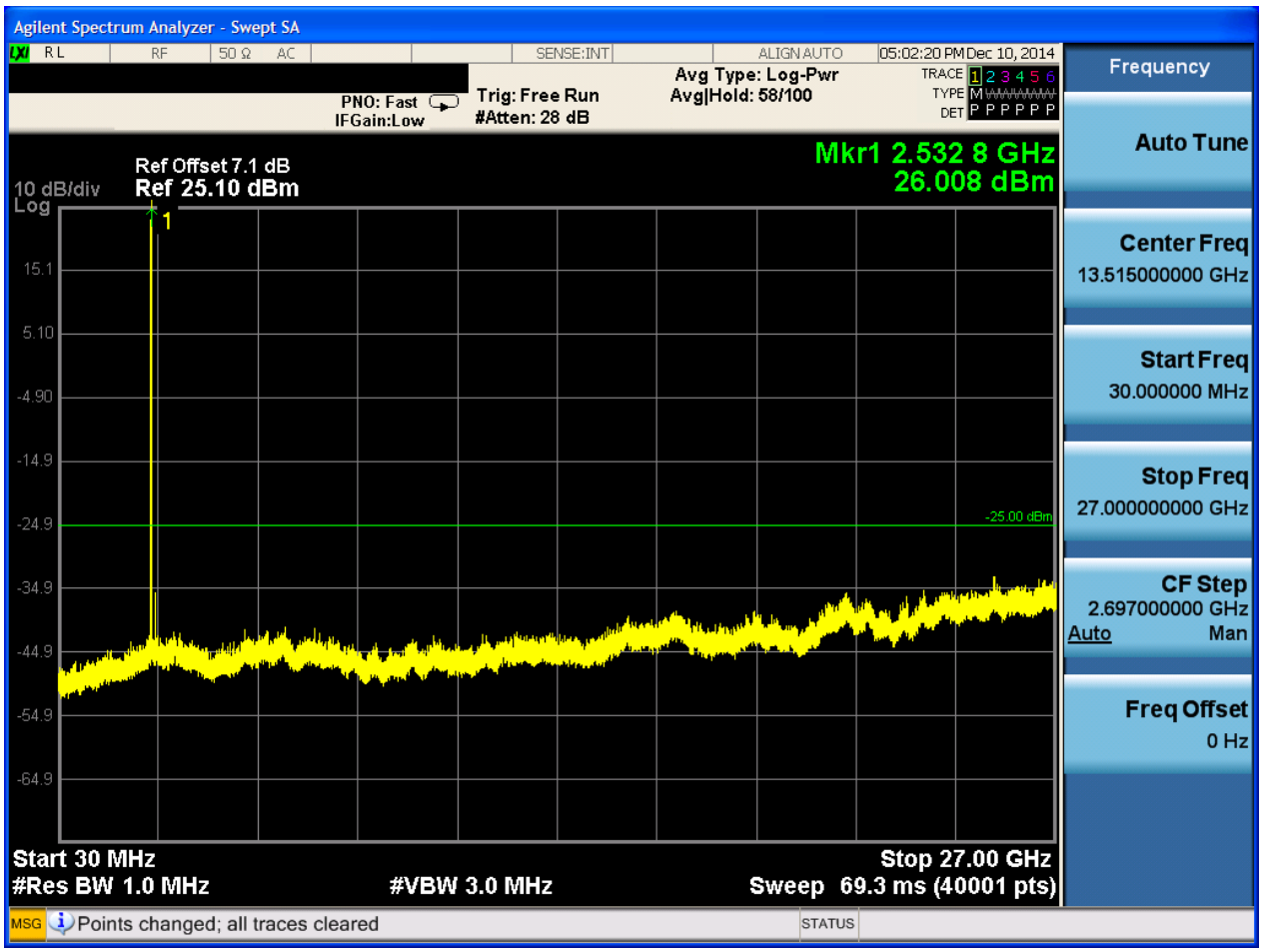

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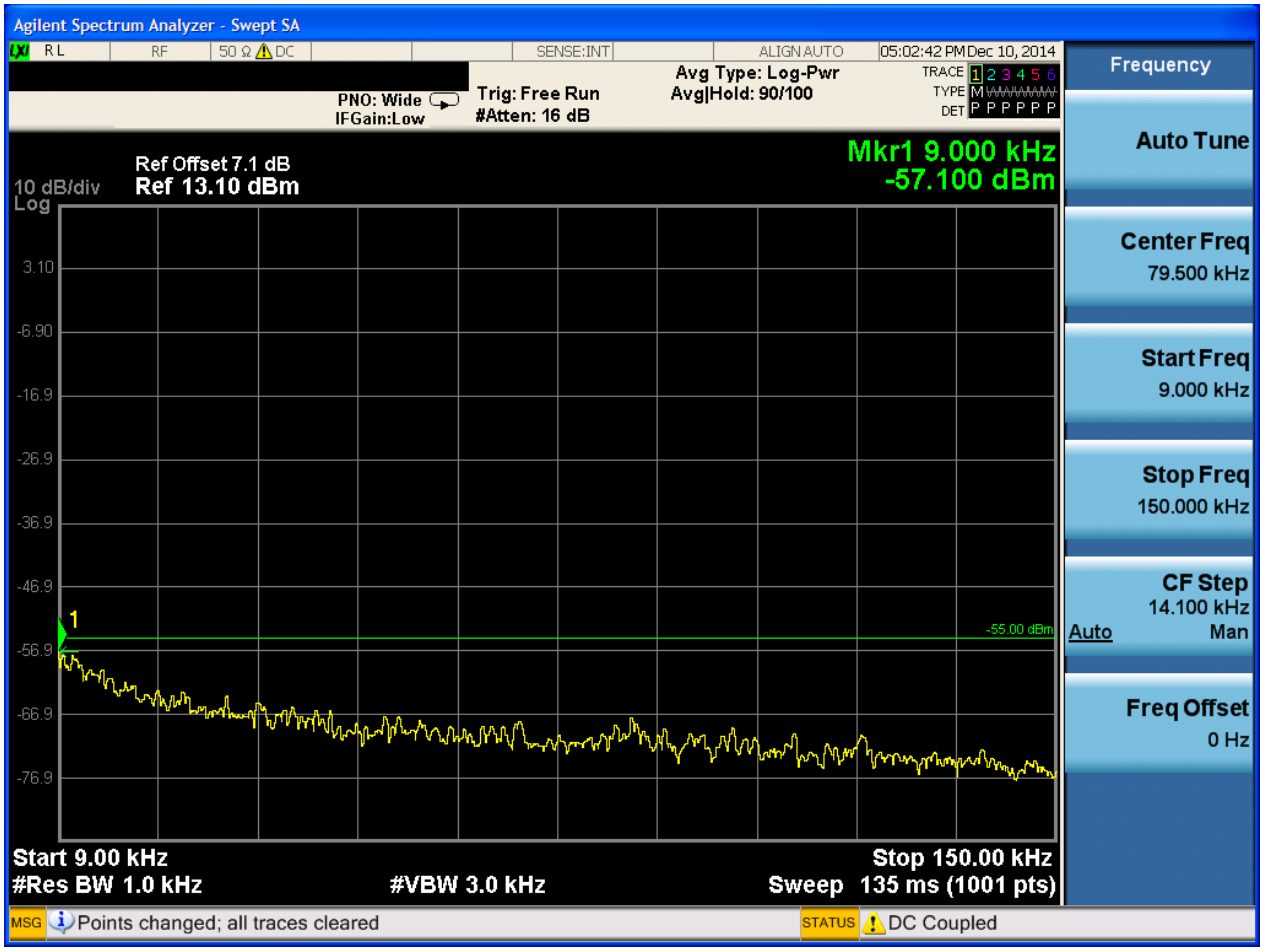
6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0



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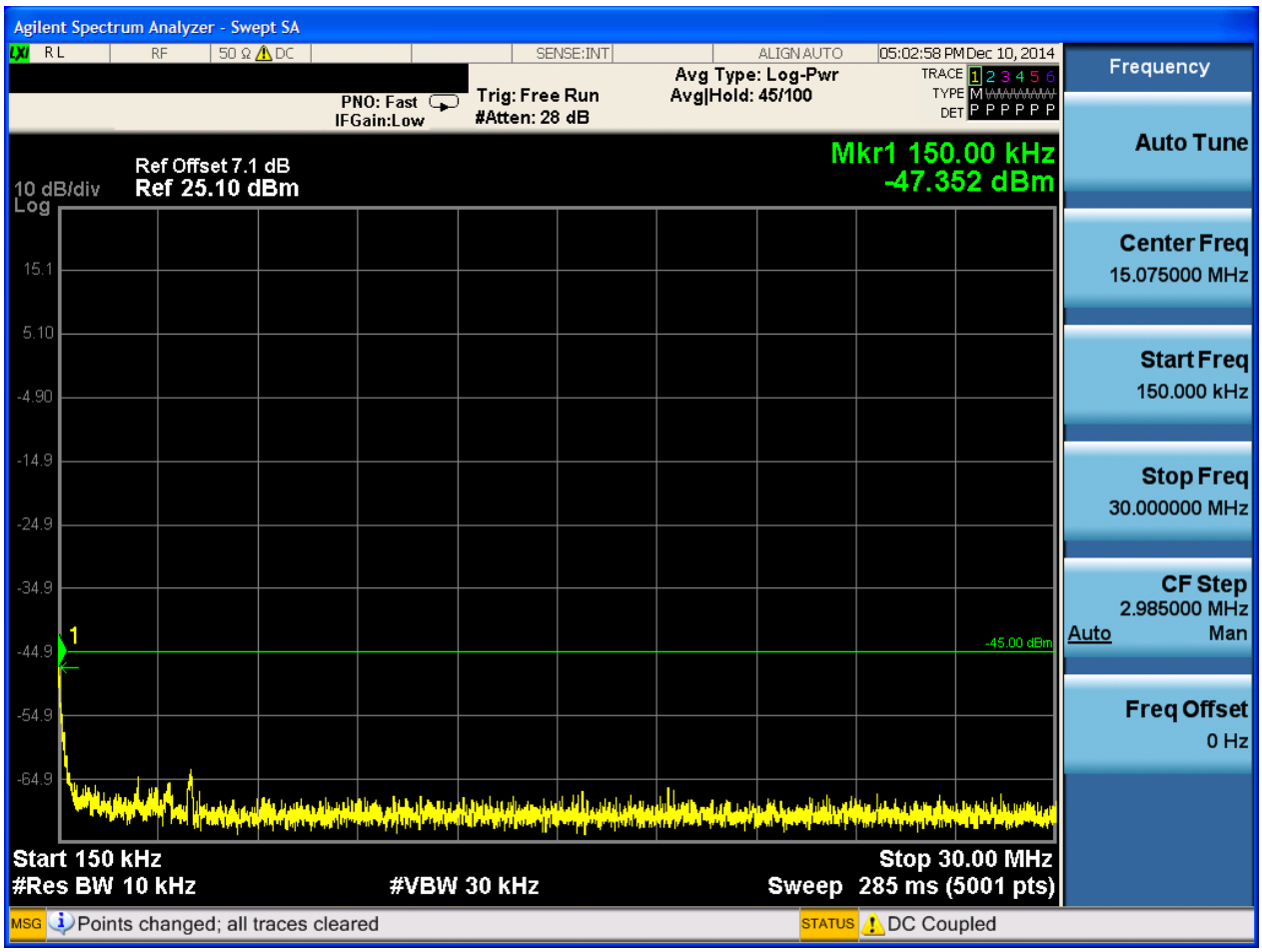

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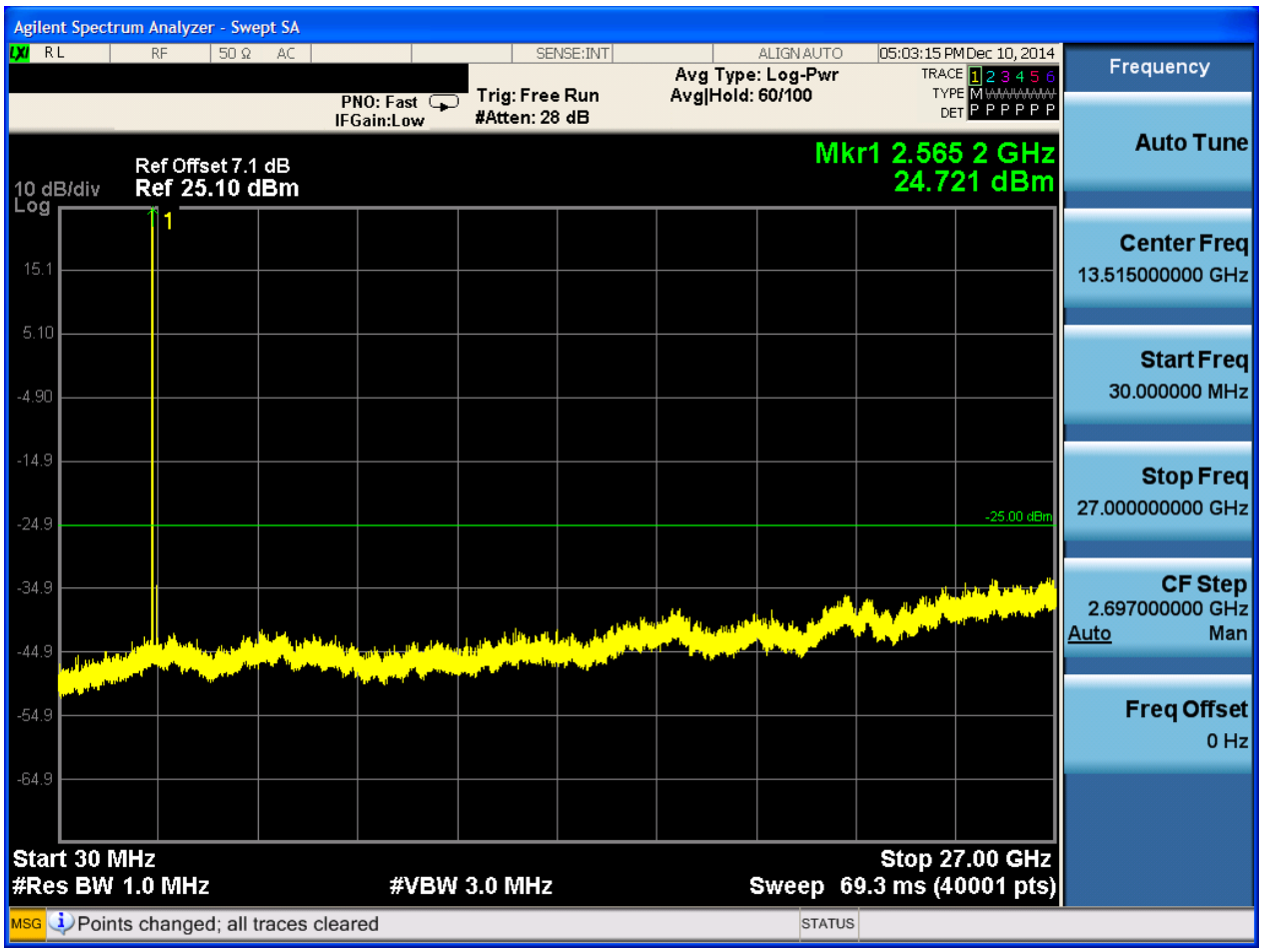

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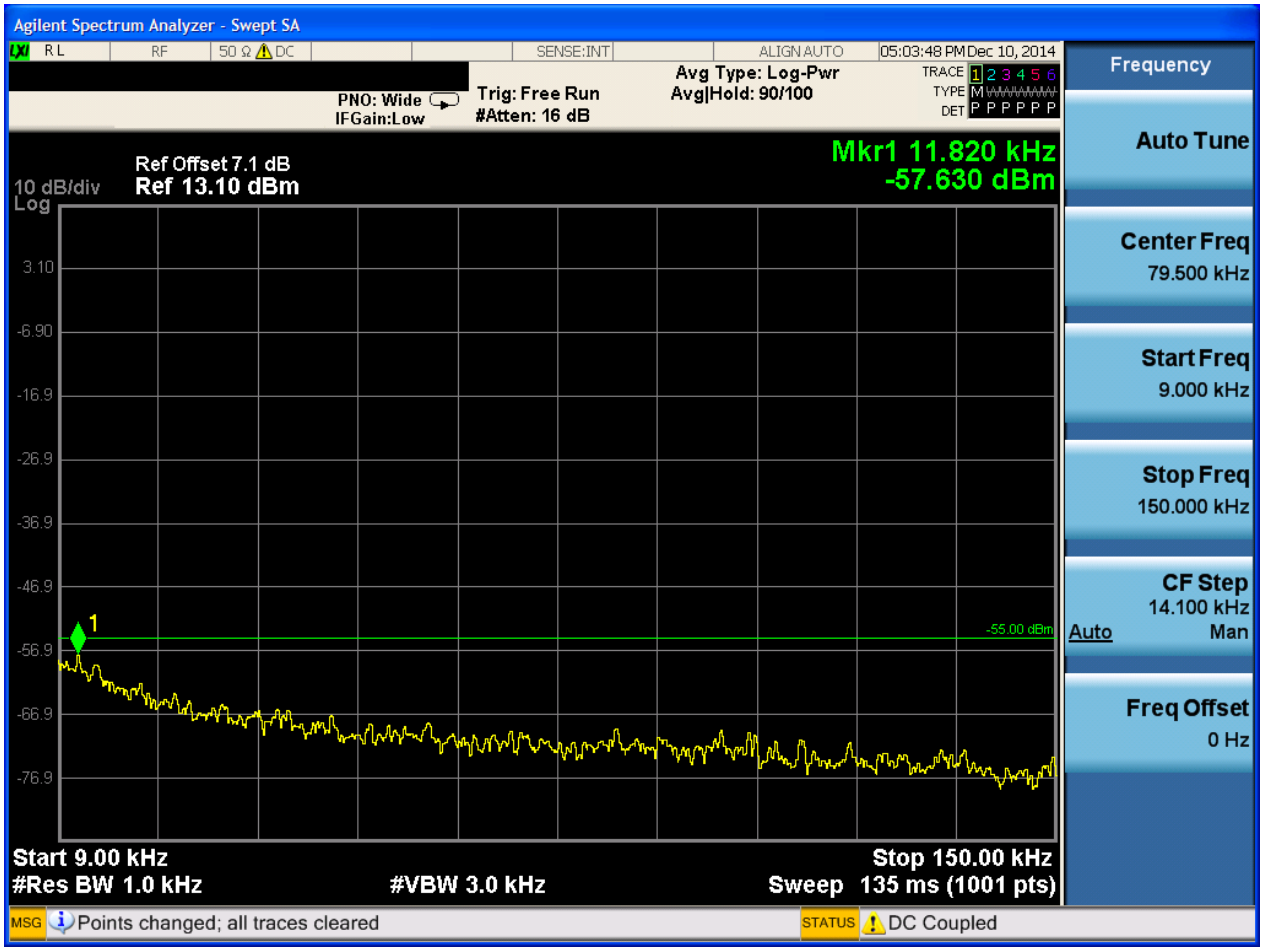
6.2.1.2.2 Test Bandwidth = 10

6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0



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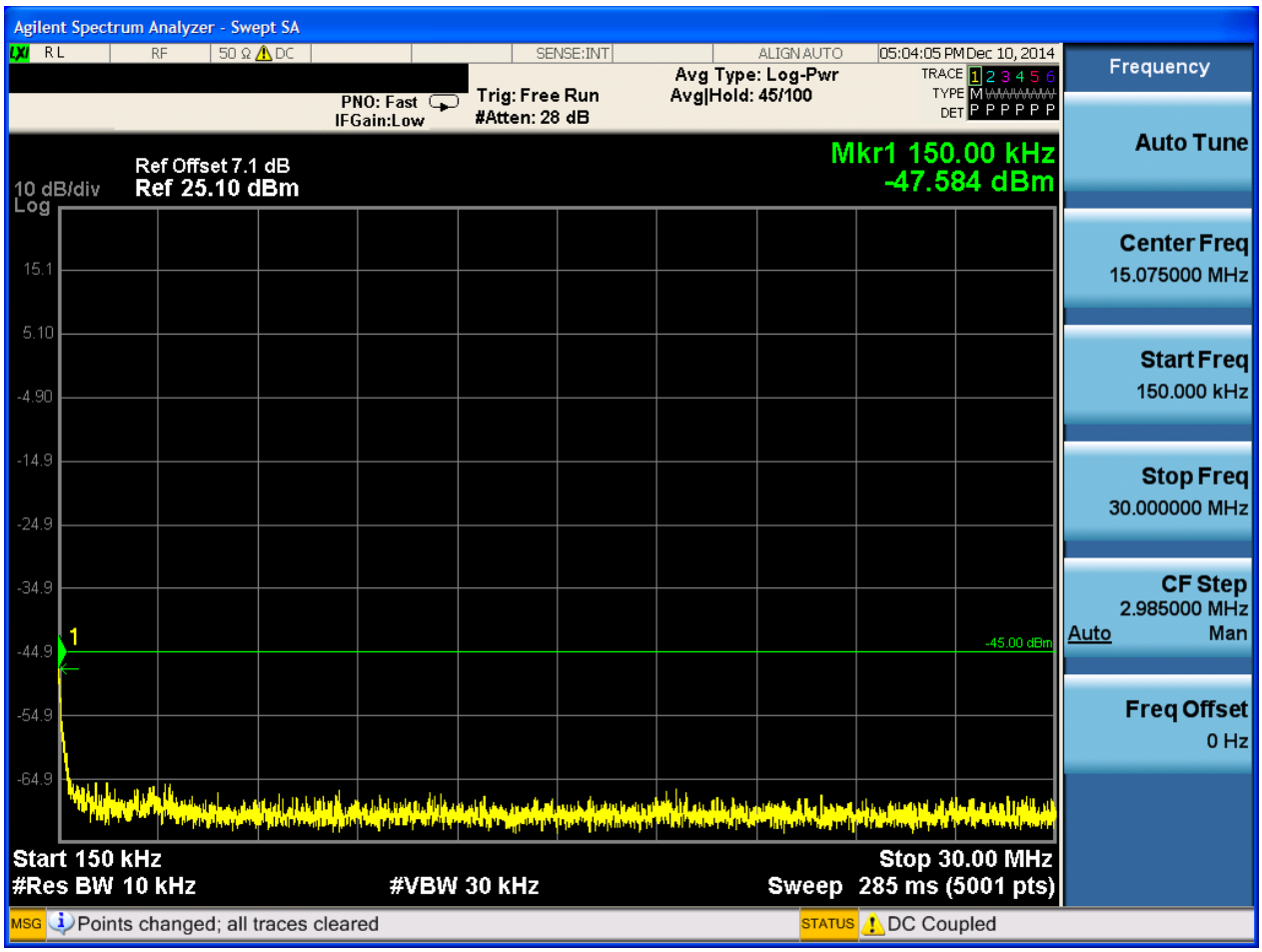

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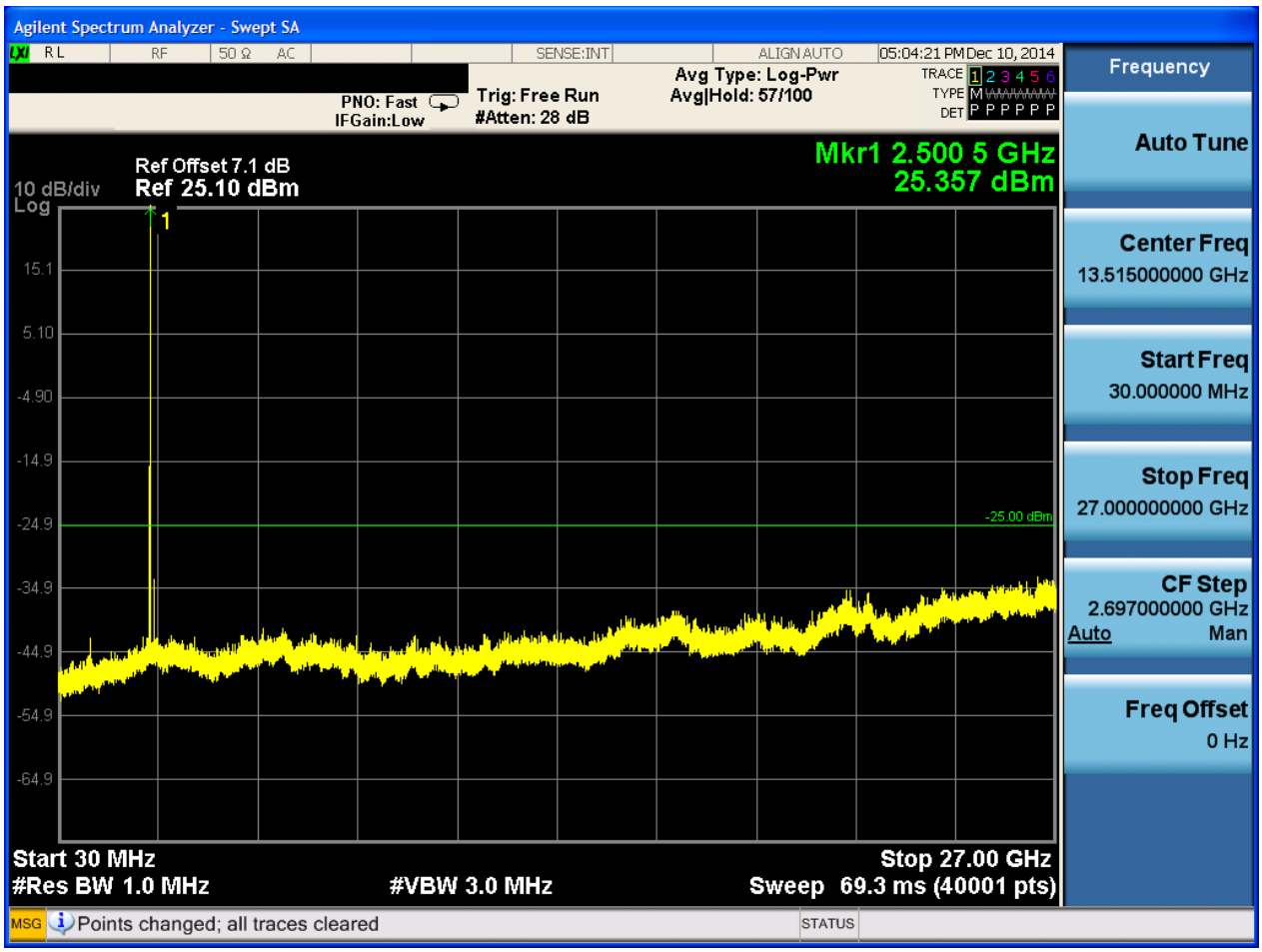

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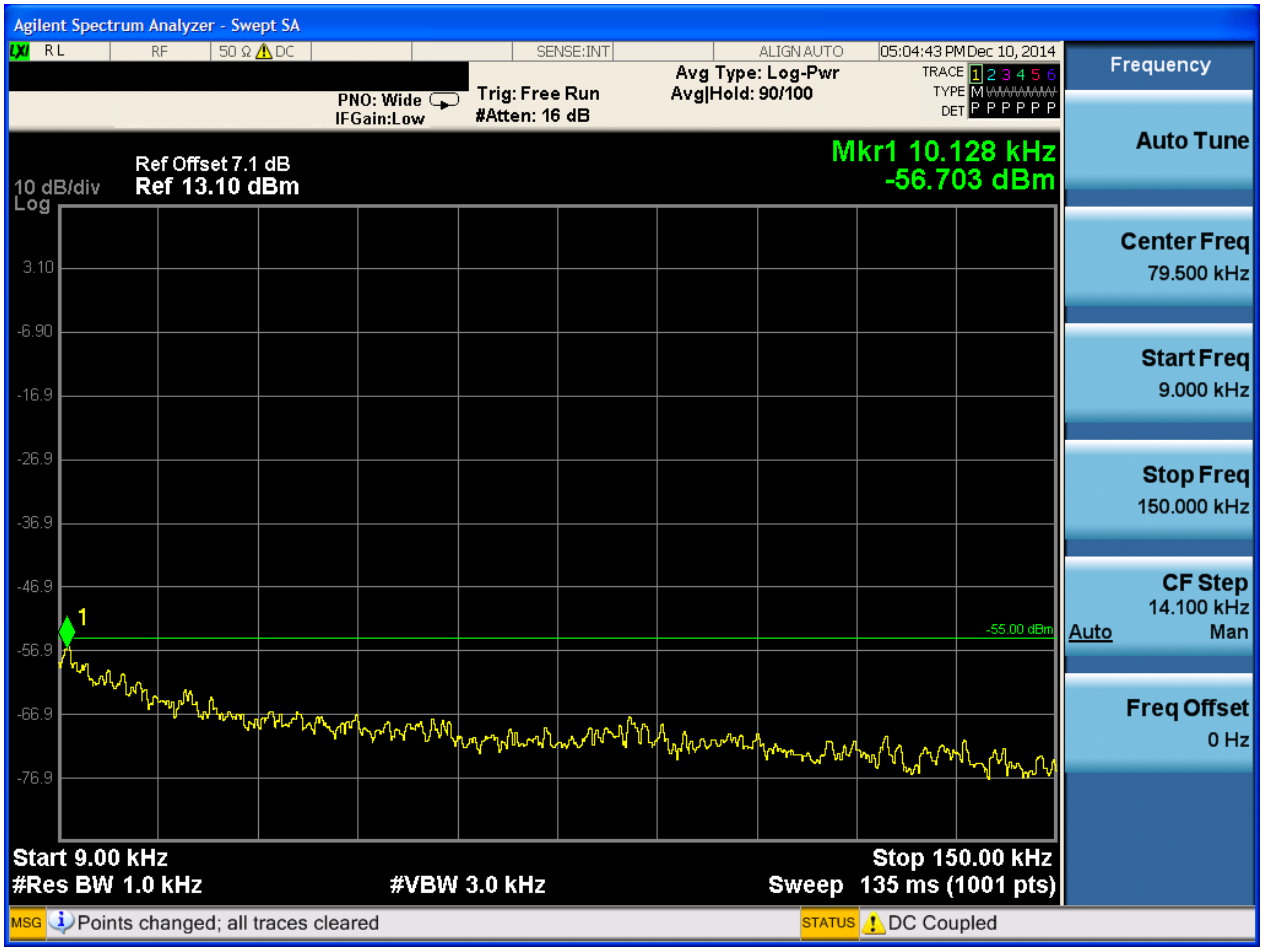
6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0



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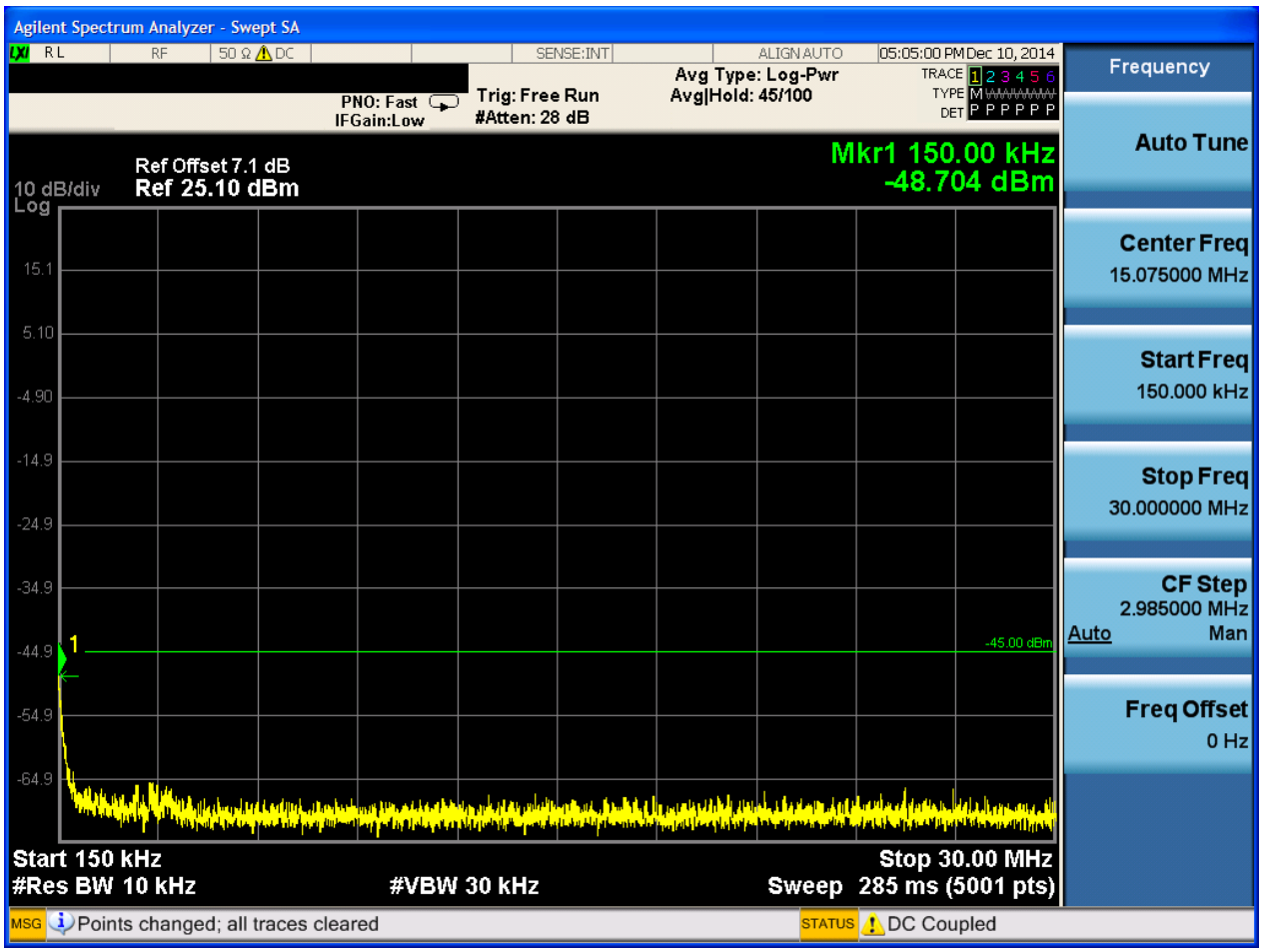

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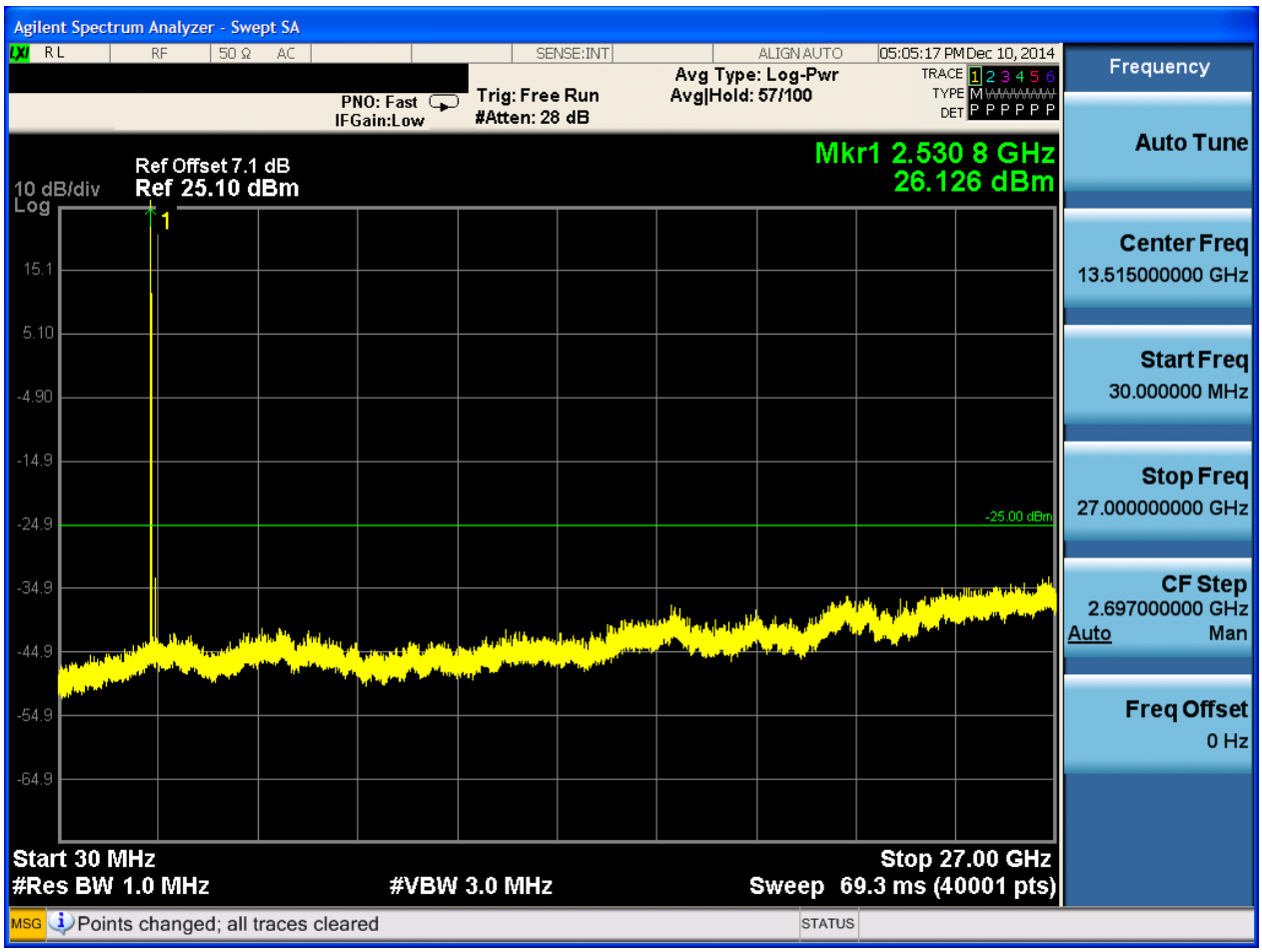

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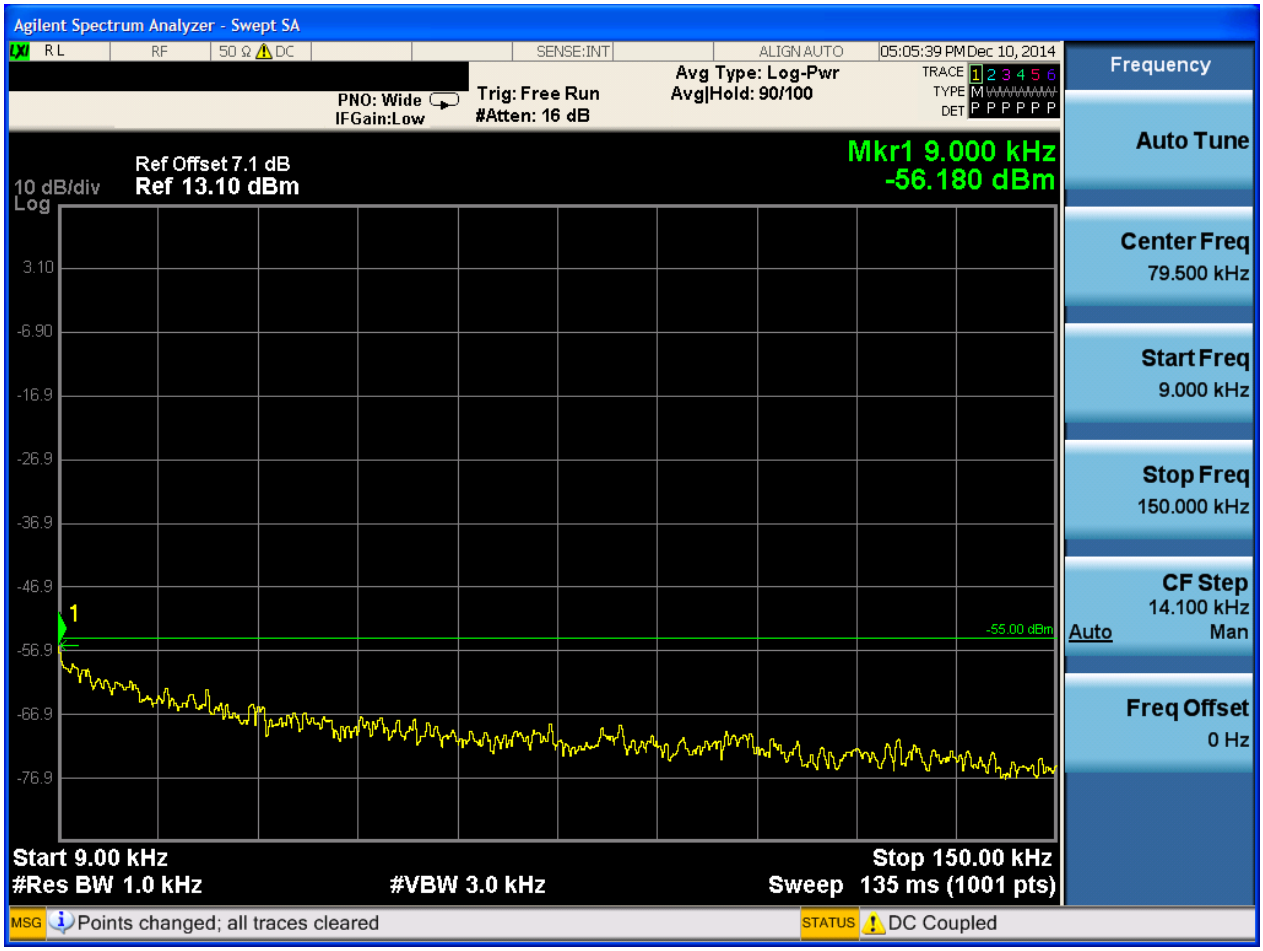
6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0



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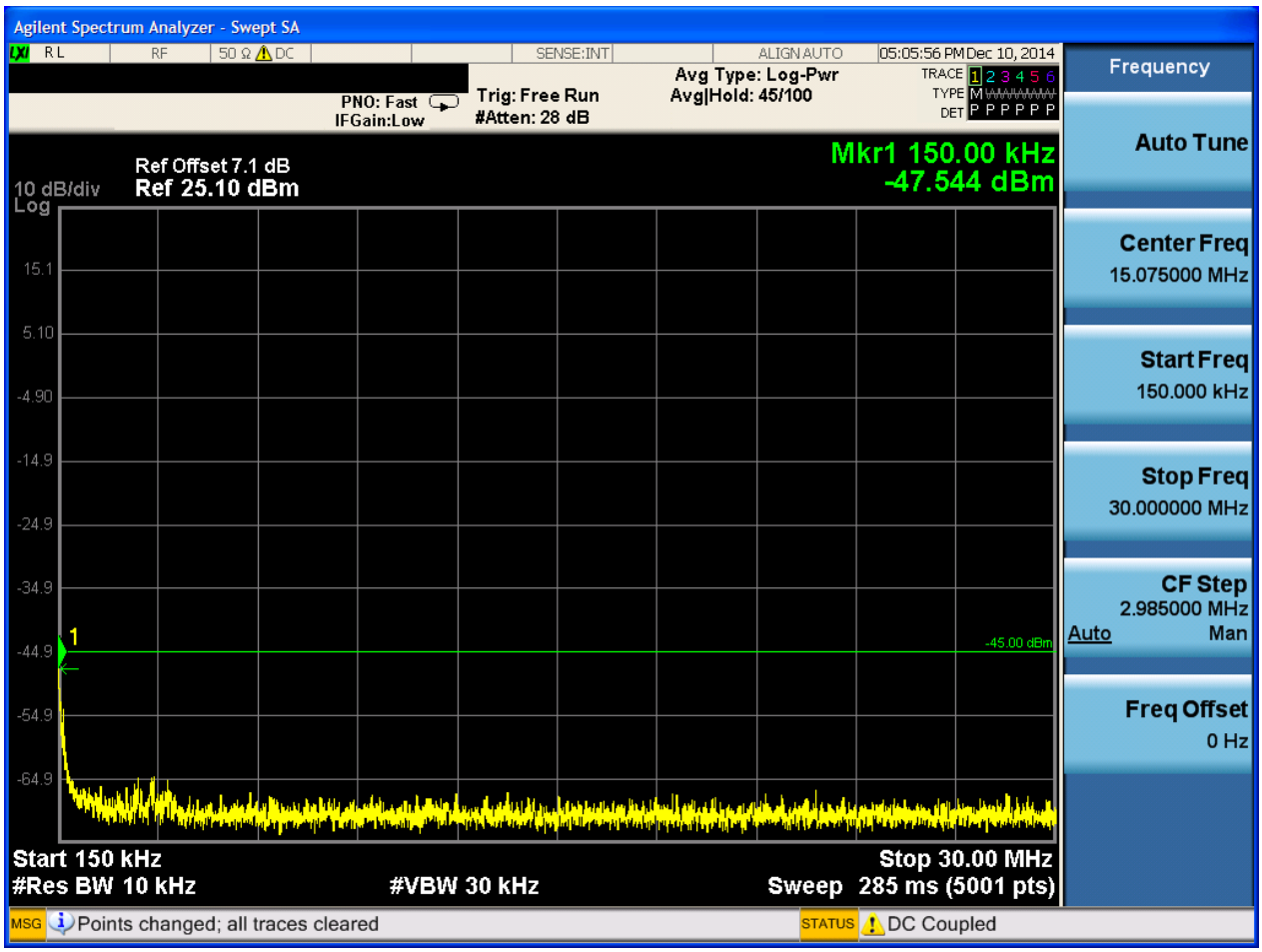

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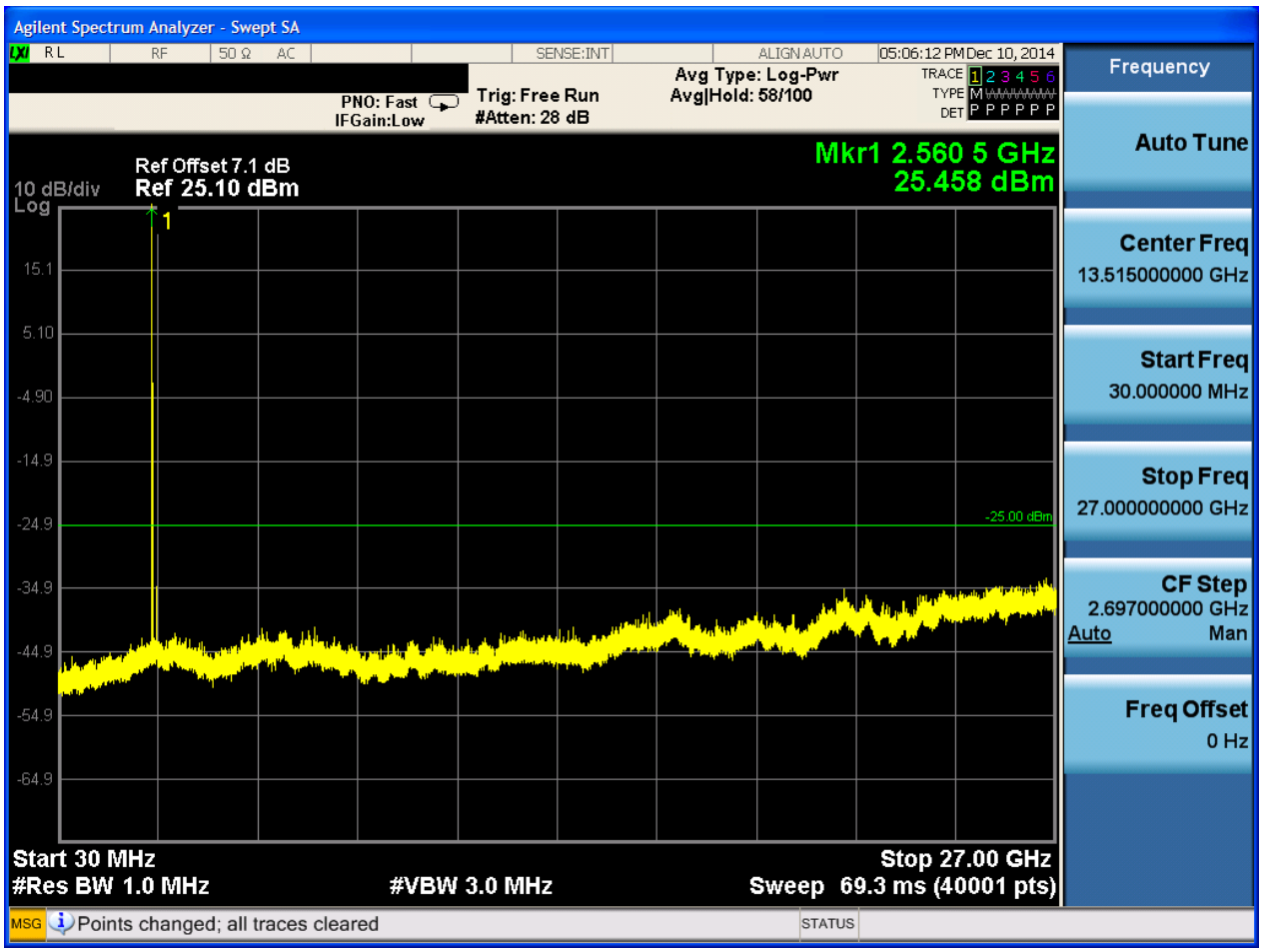

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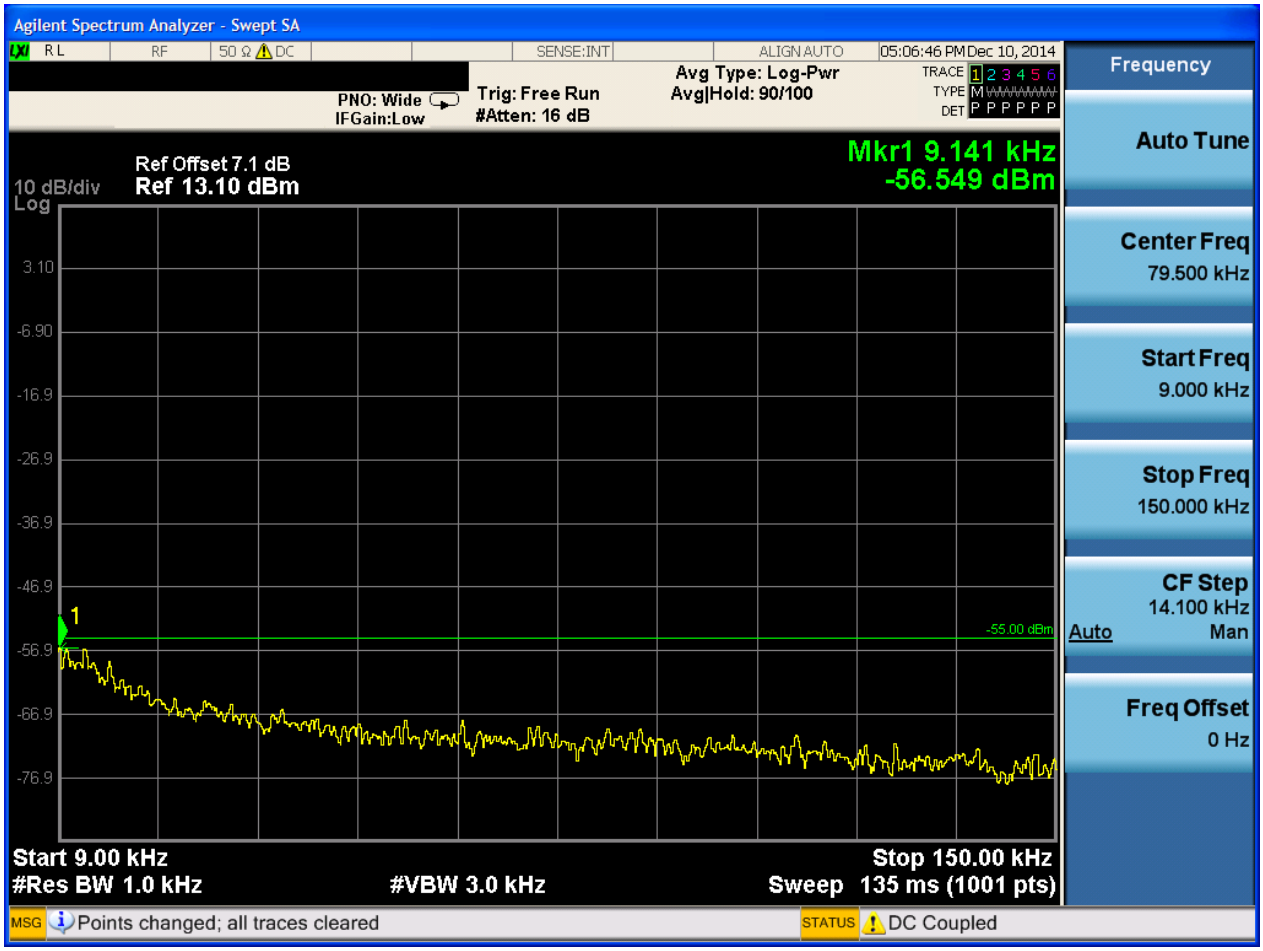
6.2.1.2.3 Test Bandwidth = 15

6.2.1.2.3.1 Test Channel = LCH

6.2.1.2.3.1.1 Test RB = RB1#0



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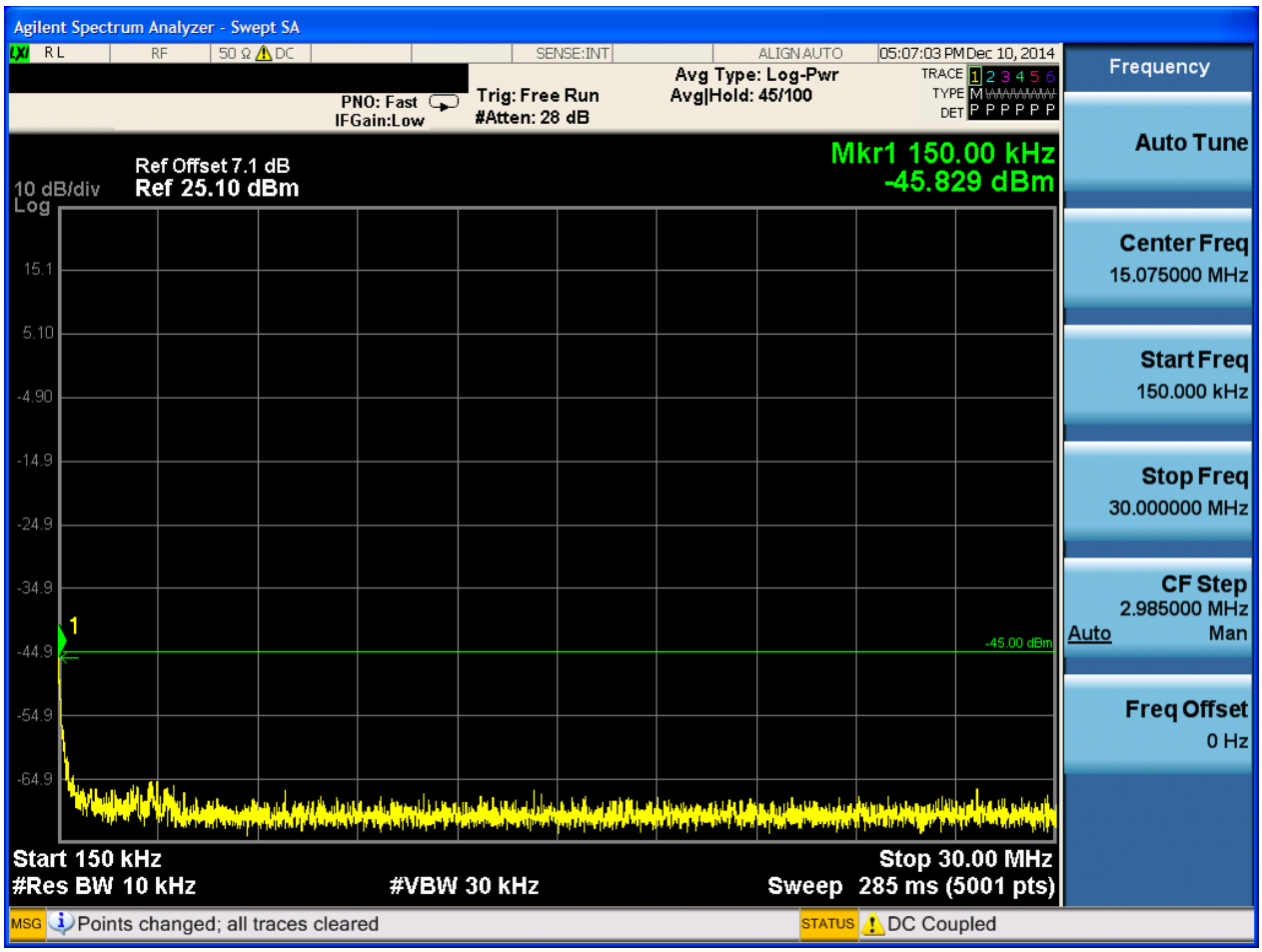

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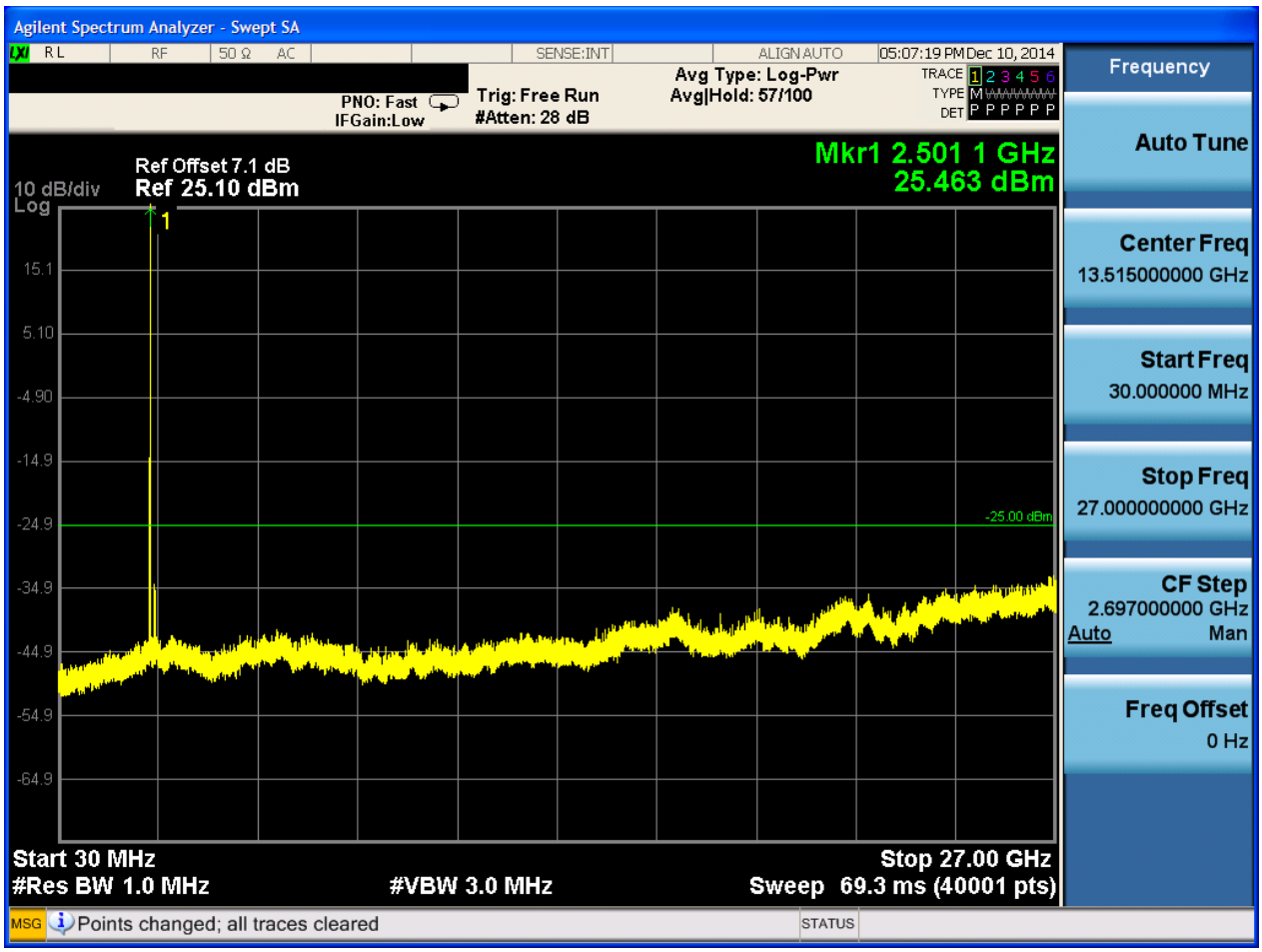

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6.2.1.2.3.2 Test Channel = MCH

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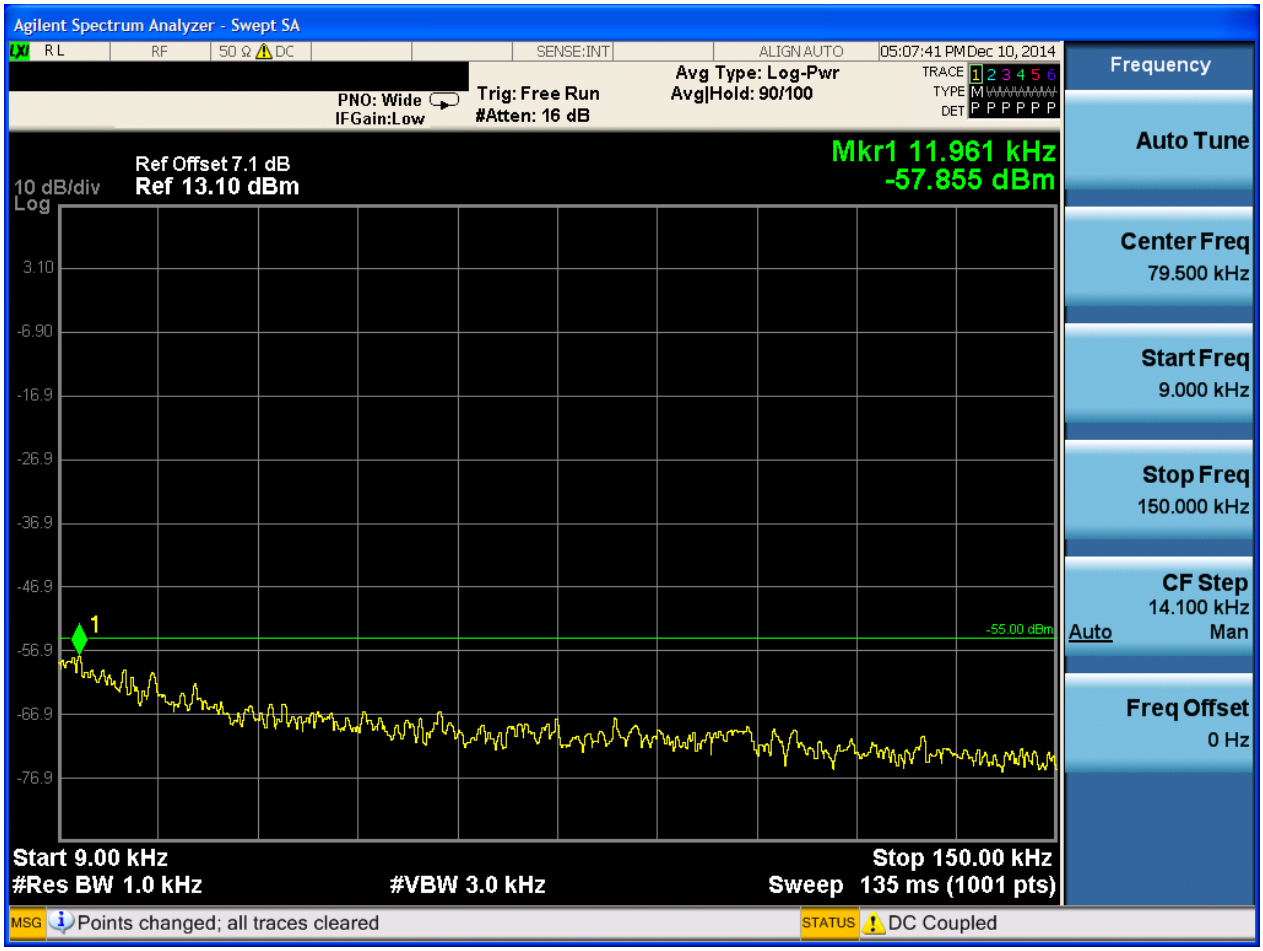

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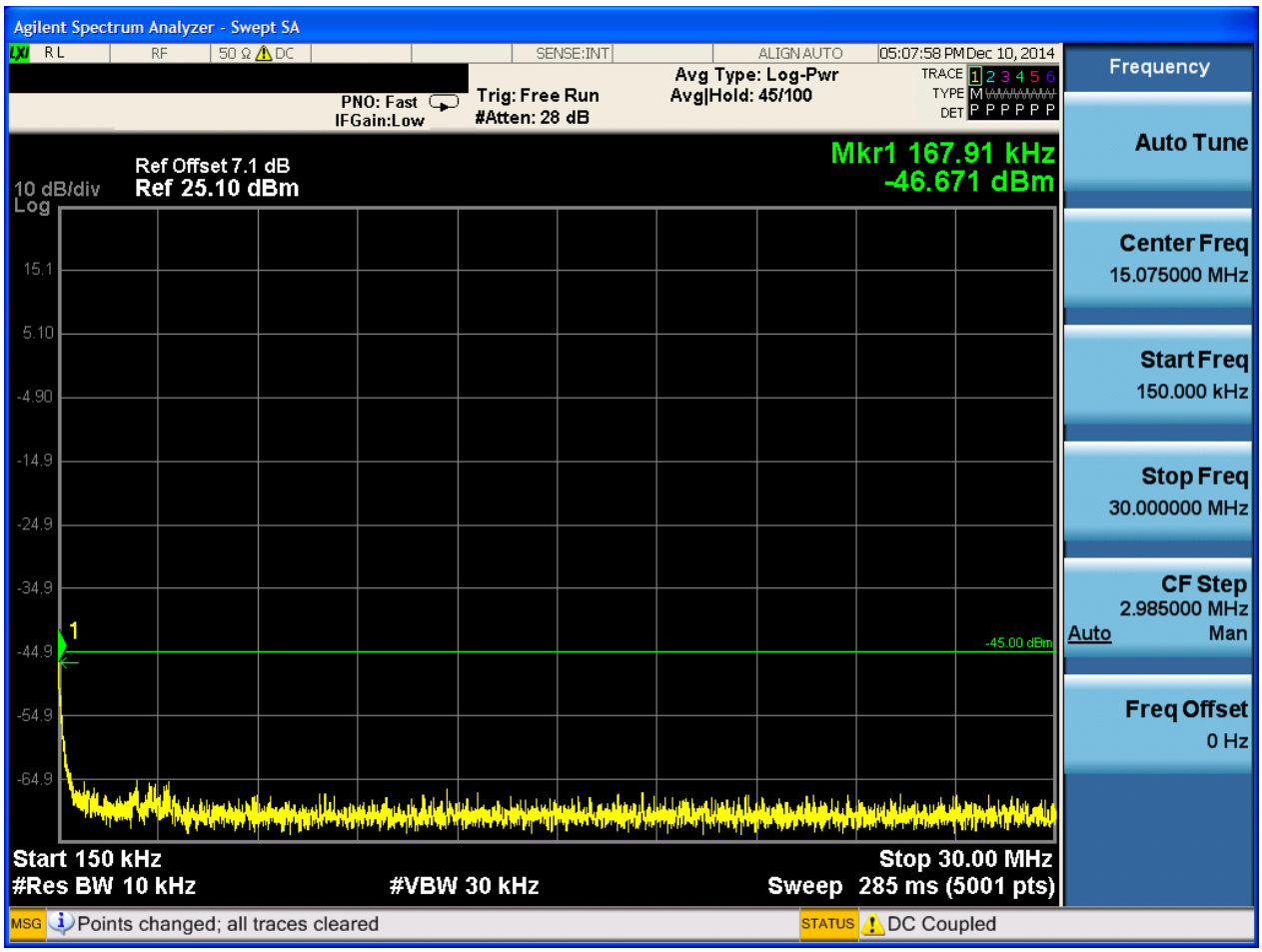

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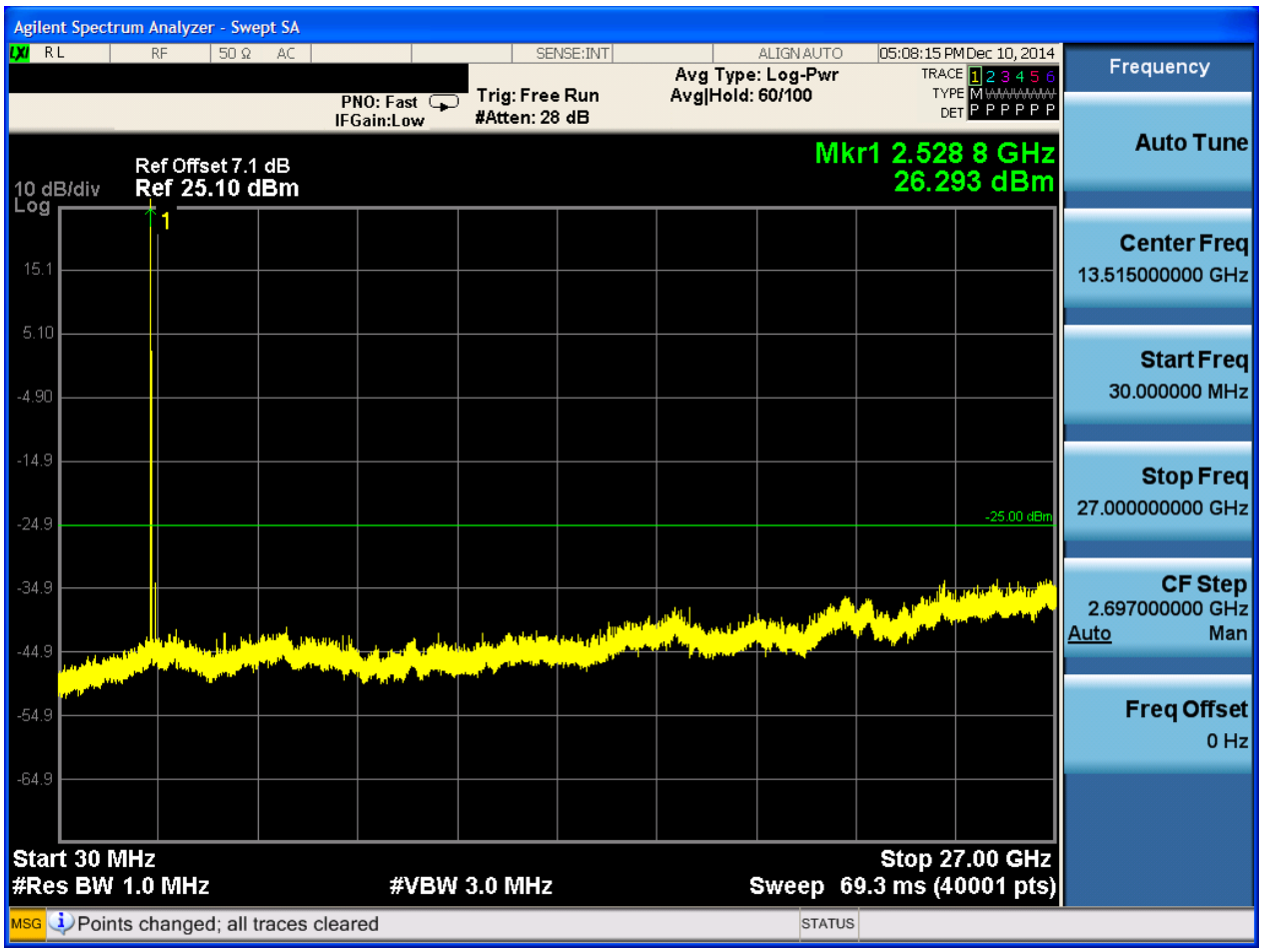

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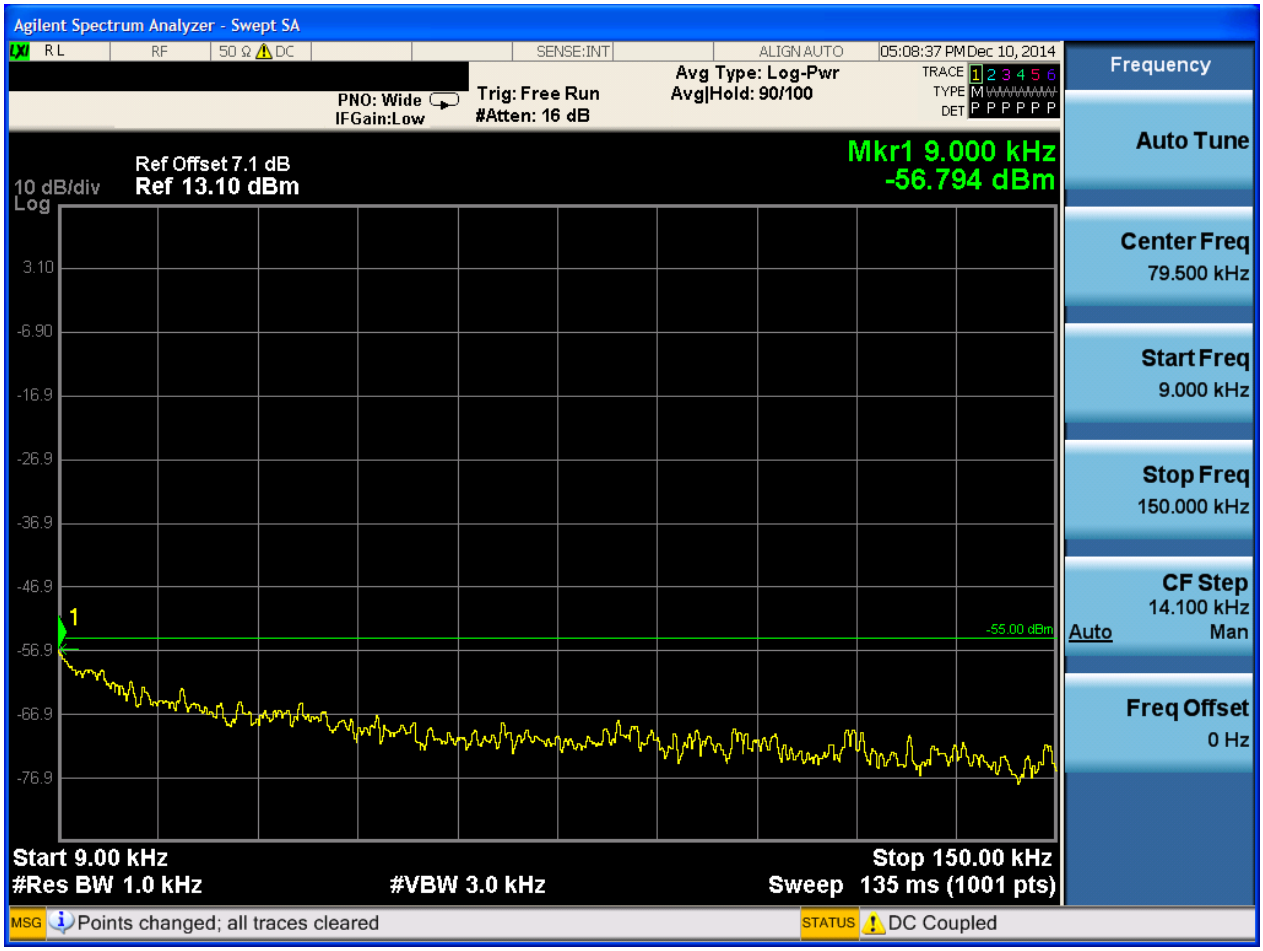
6.2.1.2.3.3 Test Channel = HCH

6.2.1.2.3.3.1 Test RB = RB1#0



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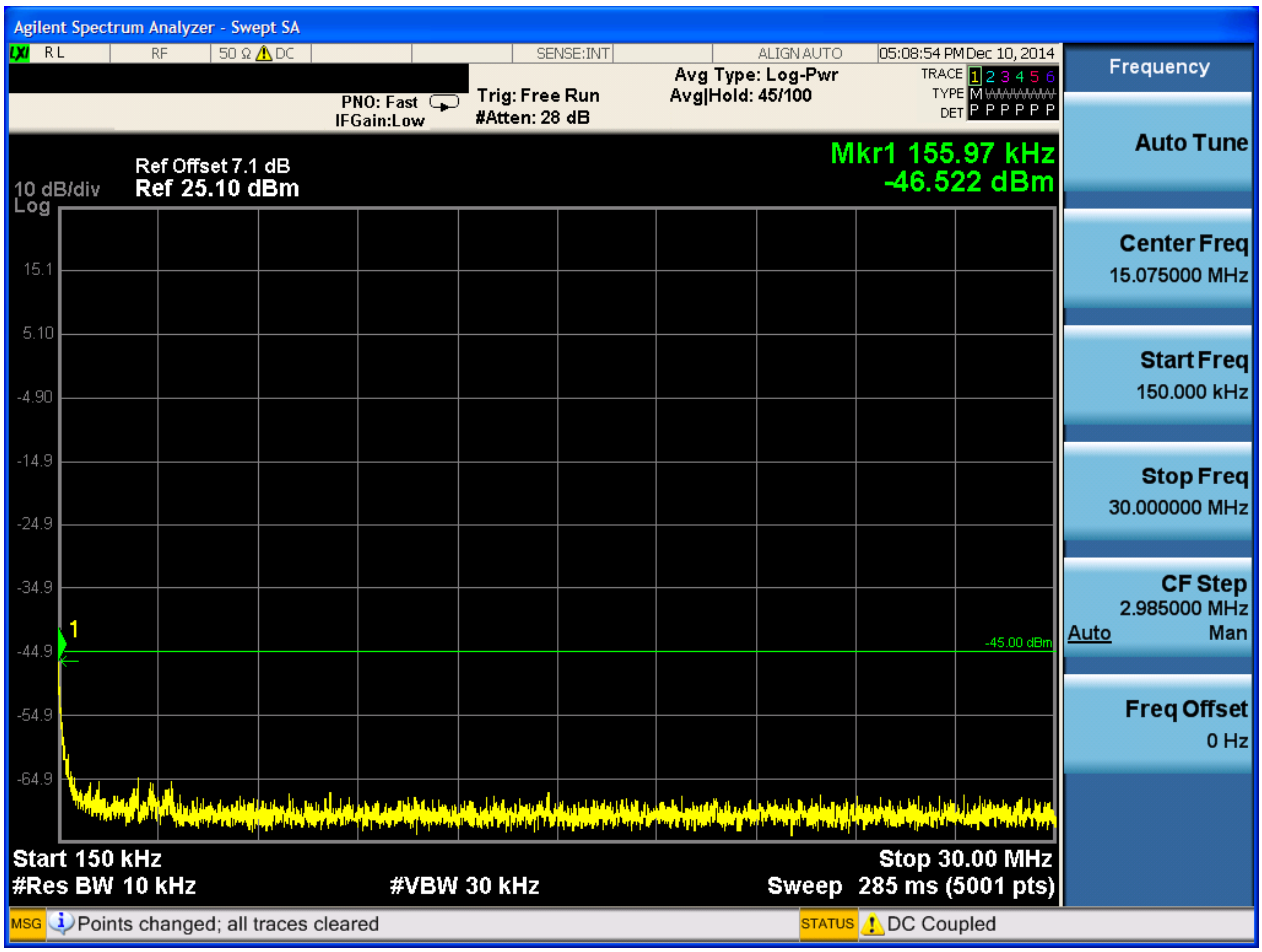

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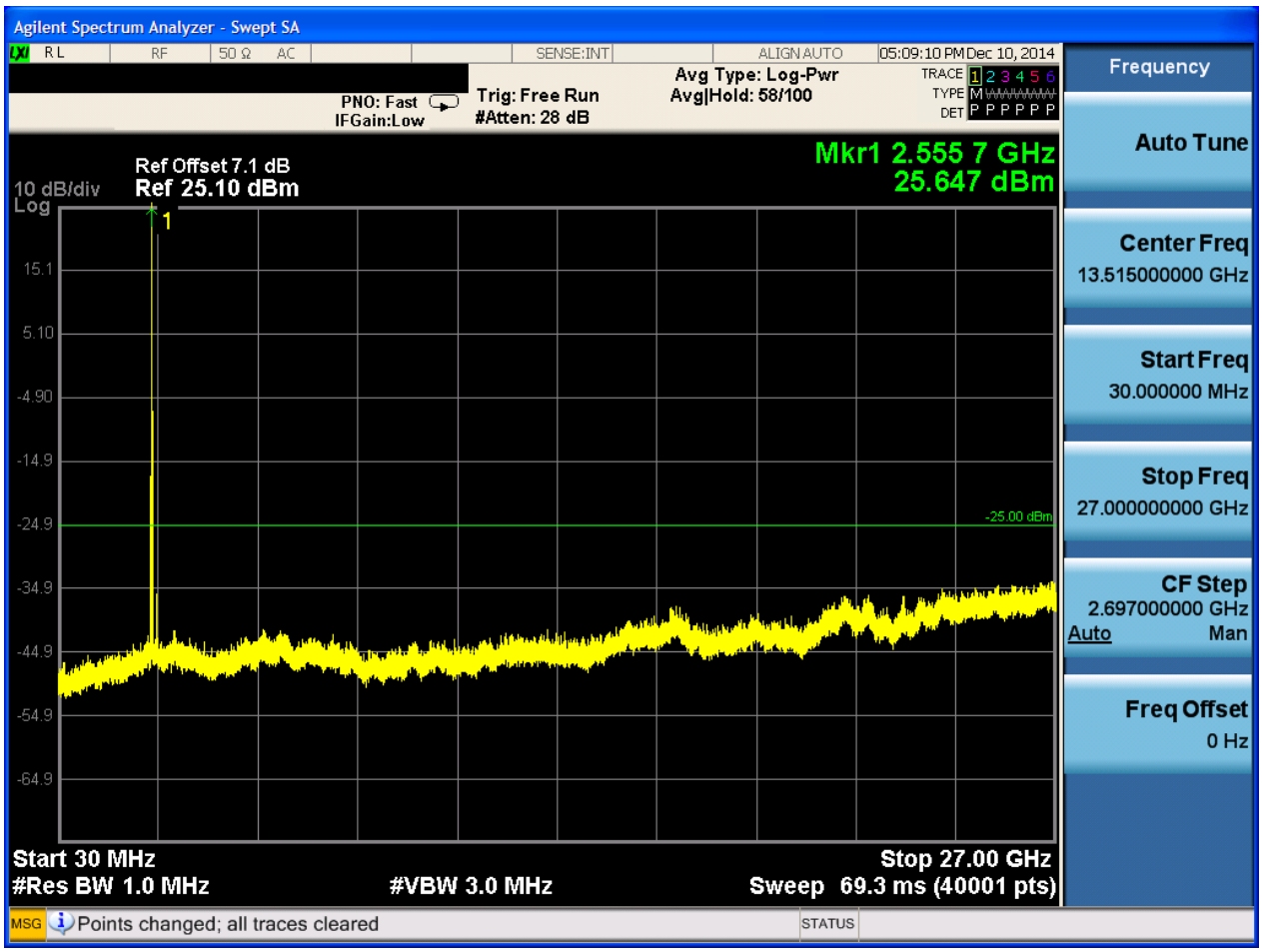

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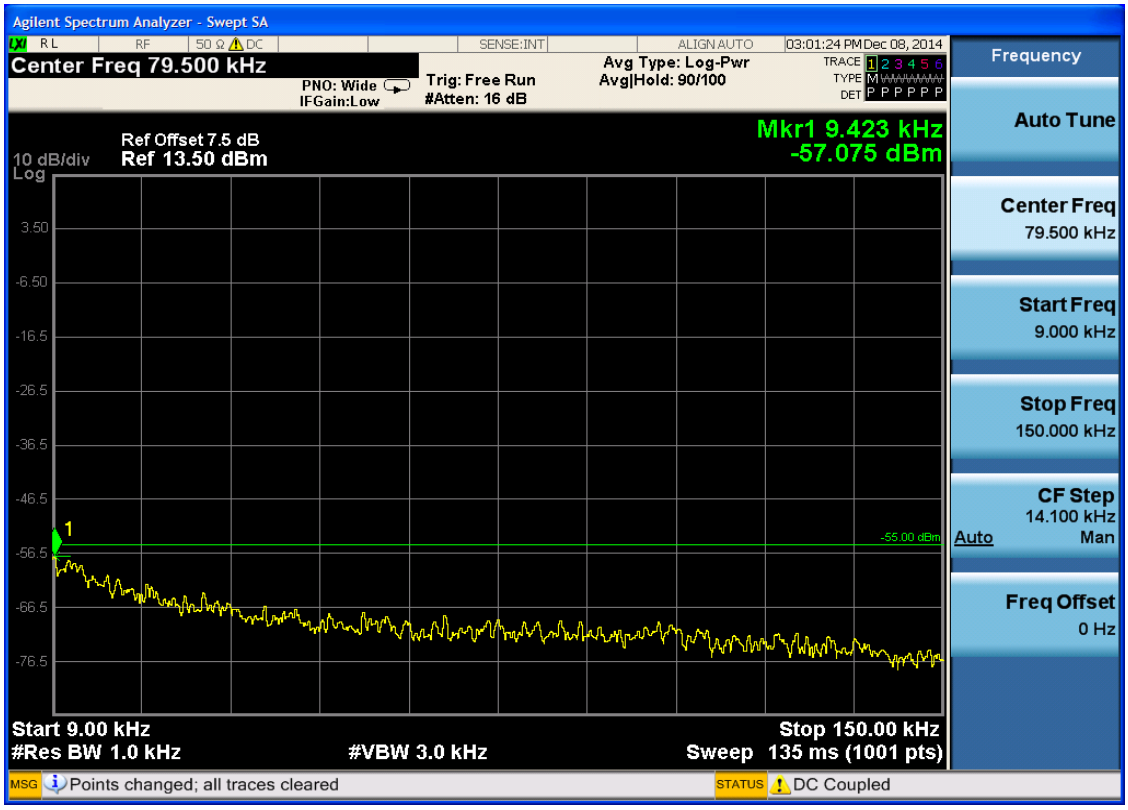
6.2.1.2.4 Test Bandwidth = 20

6.2.1.2.4.1 Test Channel = LCH

6.3.4.2.4.1.1 Test RB = RB1#0



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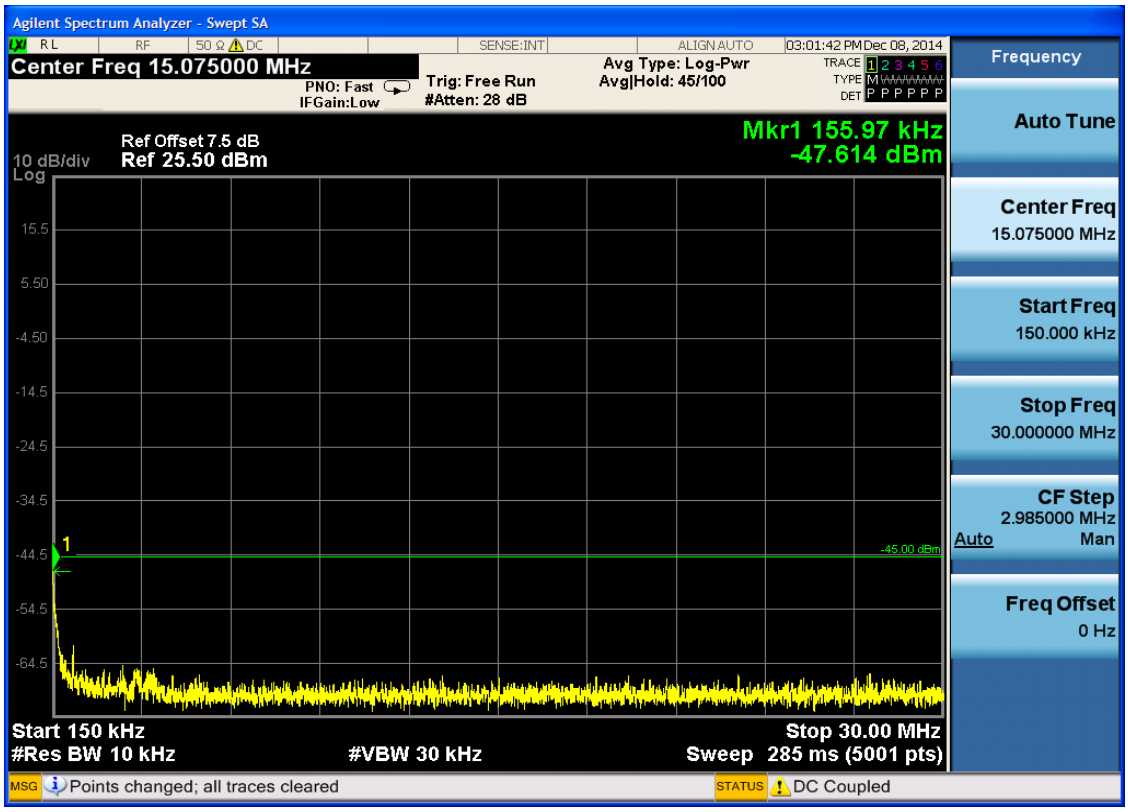

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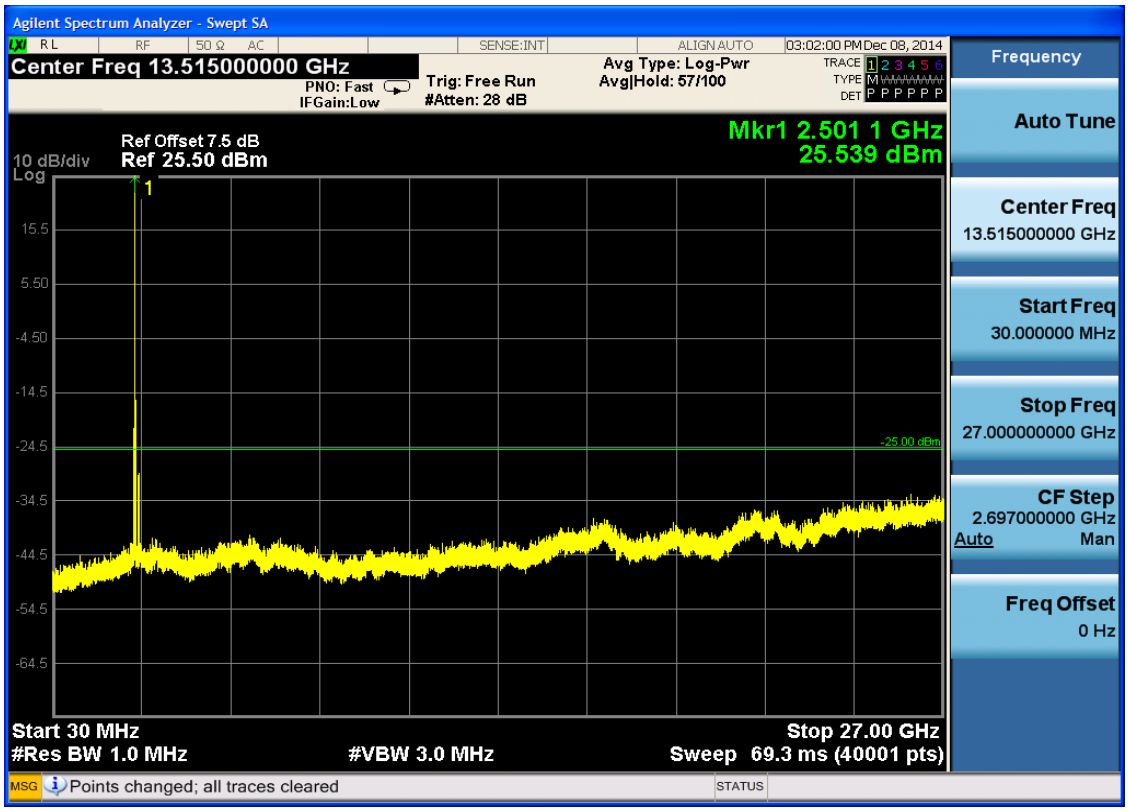

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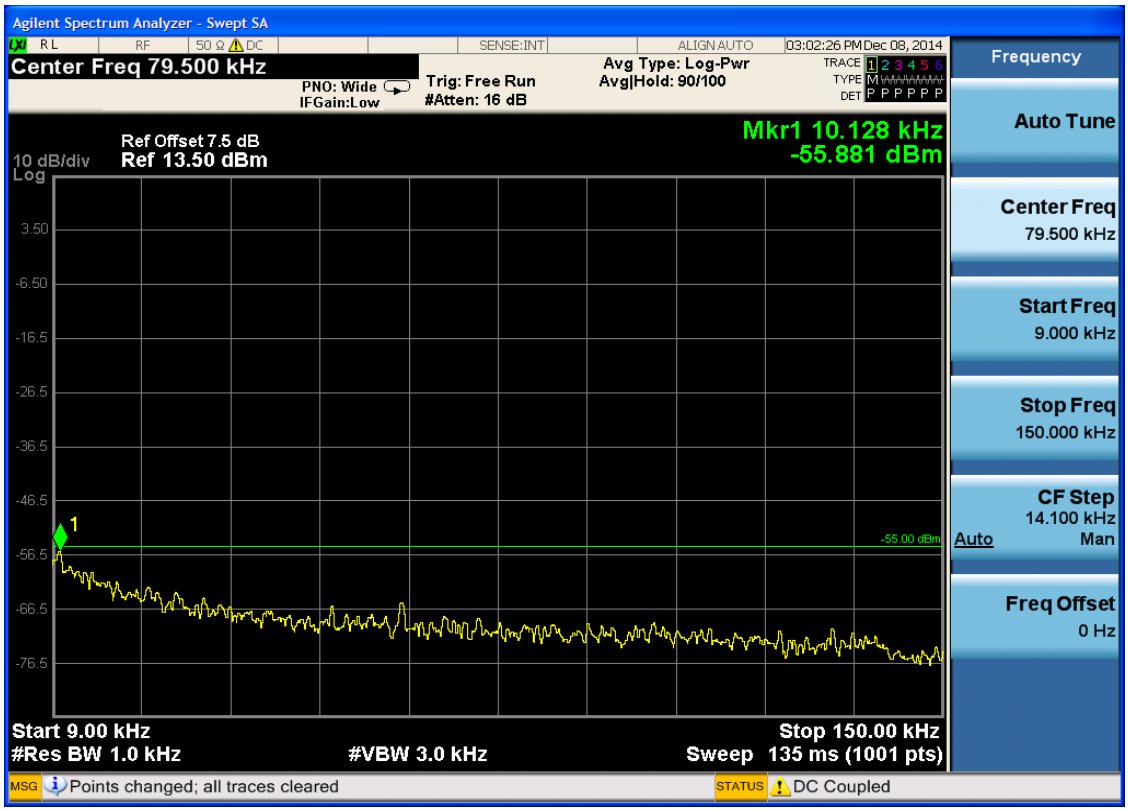
6.2.1.2.4.2 Test Channel = MCH

6.2.1.2.4.2.1 Test RB = RB1#0



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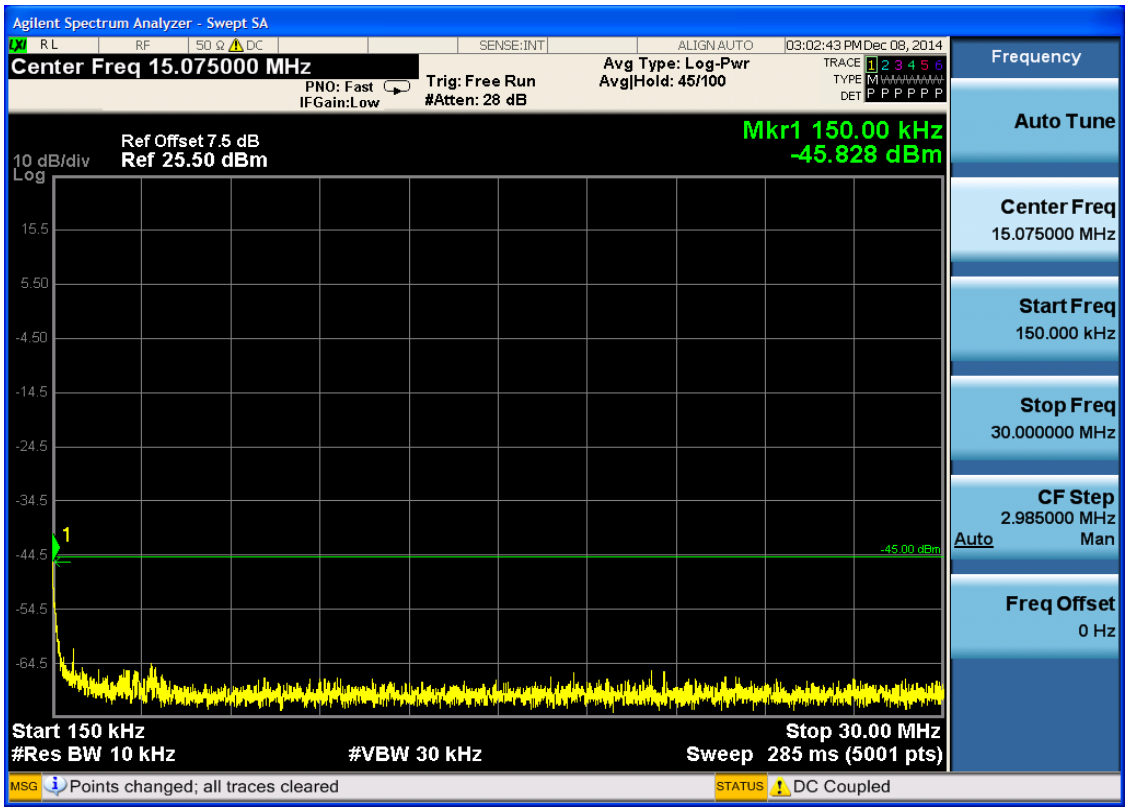

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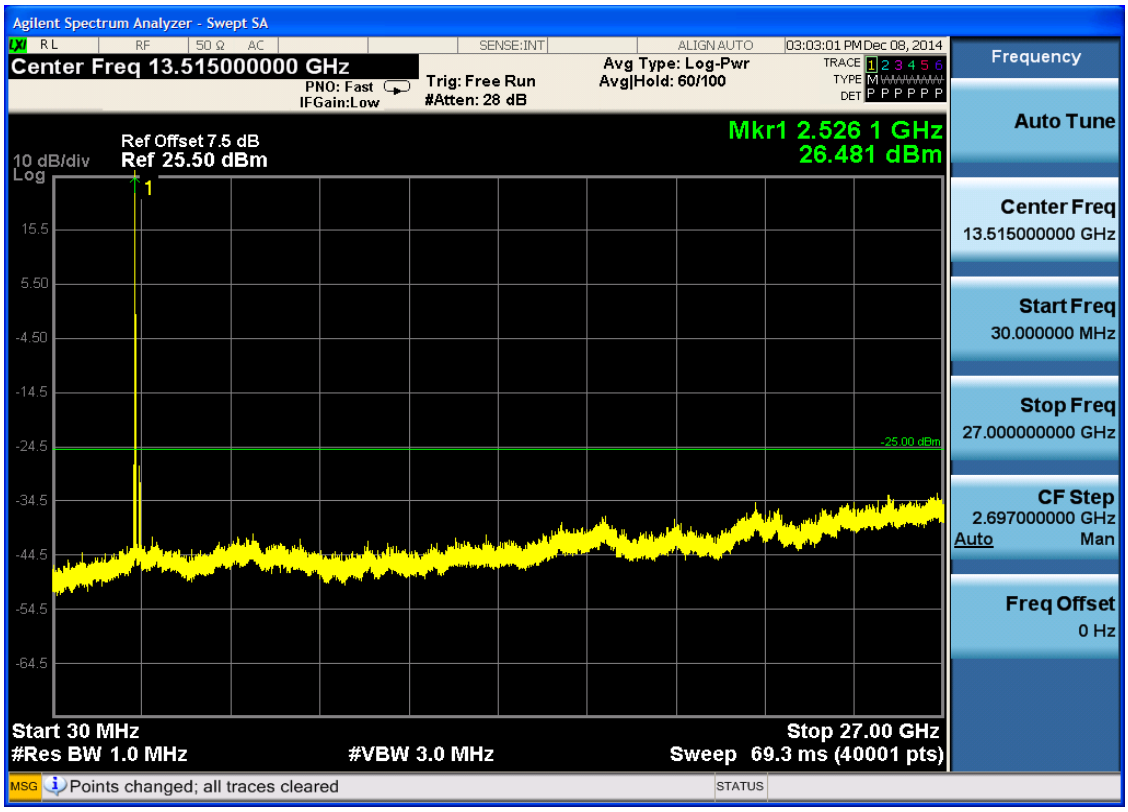

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6.2.1.2.4.3 Test Channel = HCH

6.2.1.2.4.3.1 Test RB = RB1#0

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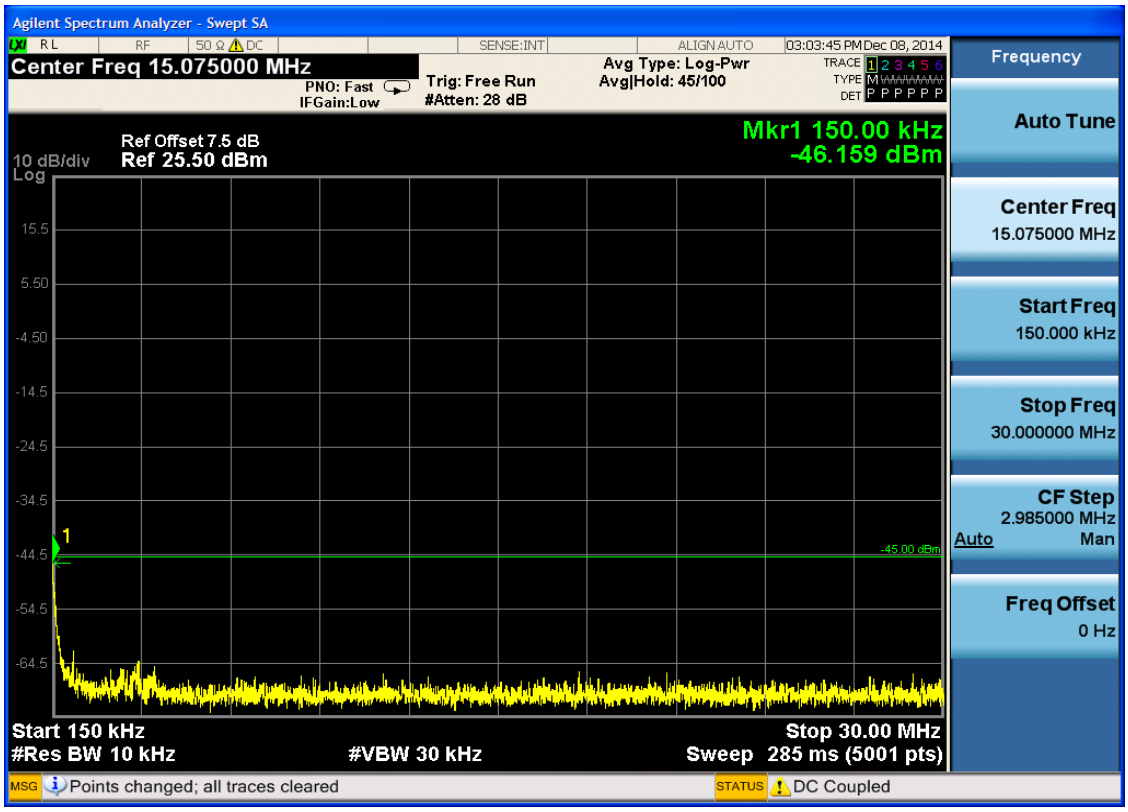

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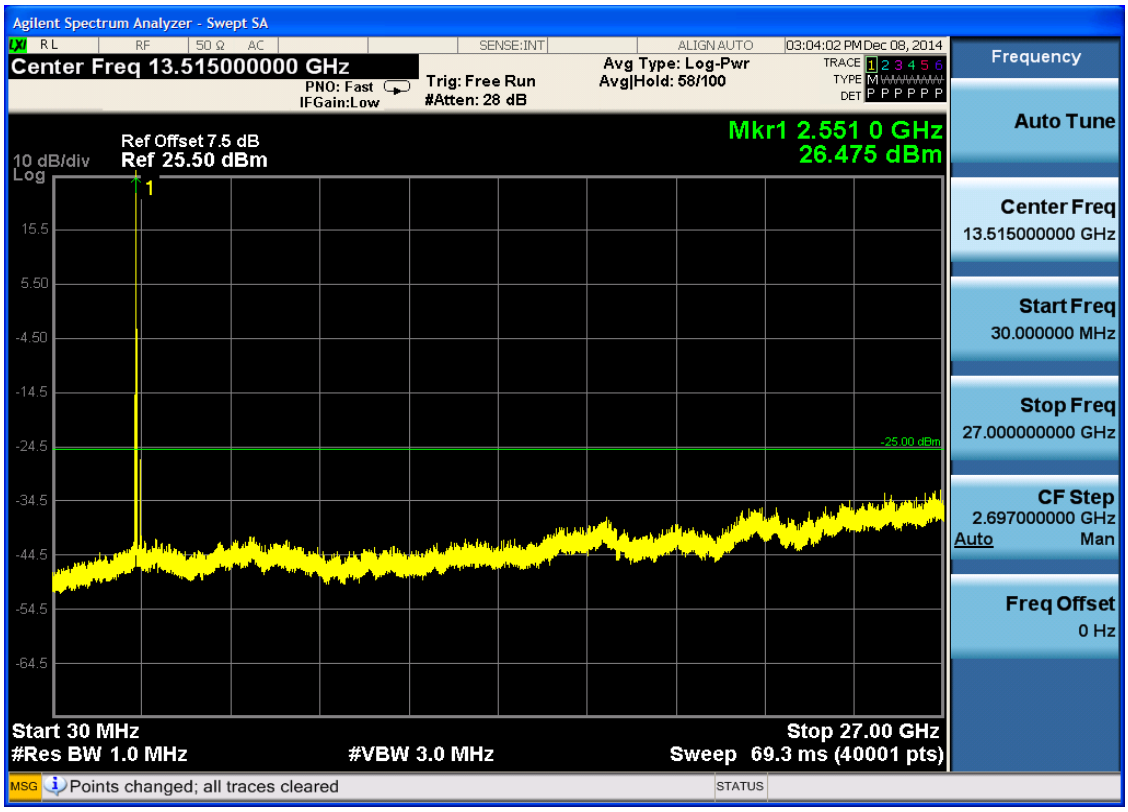

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7Appendix_G: Field Strength of Spurious Radiation

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

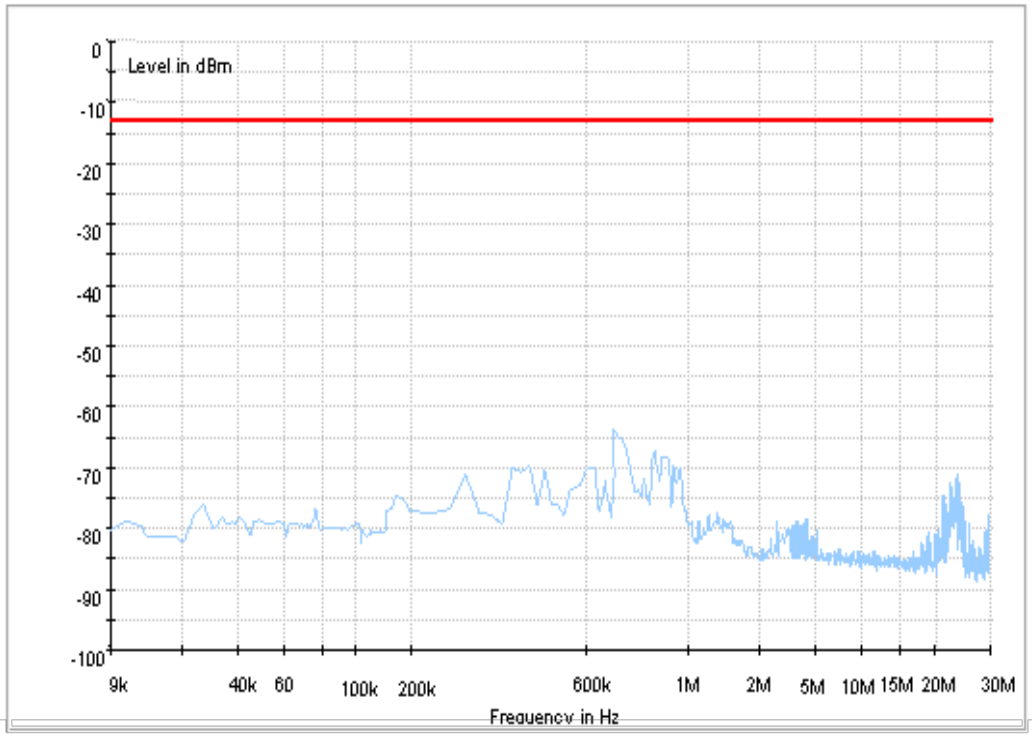
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

7.1 For LTE

7.1.1 Test Band = BAND5

7.1.1.1 Test Bandwidth = 3



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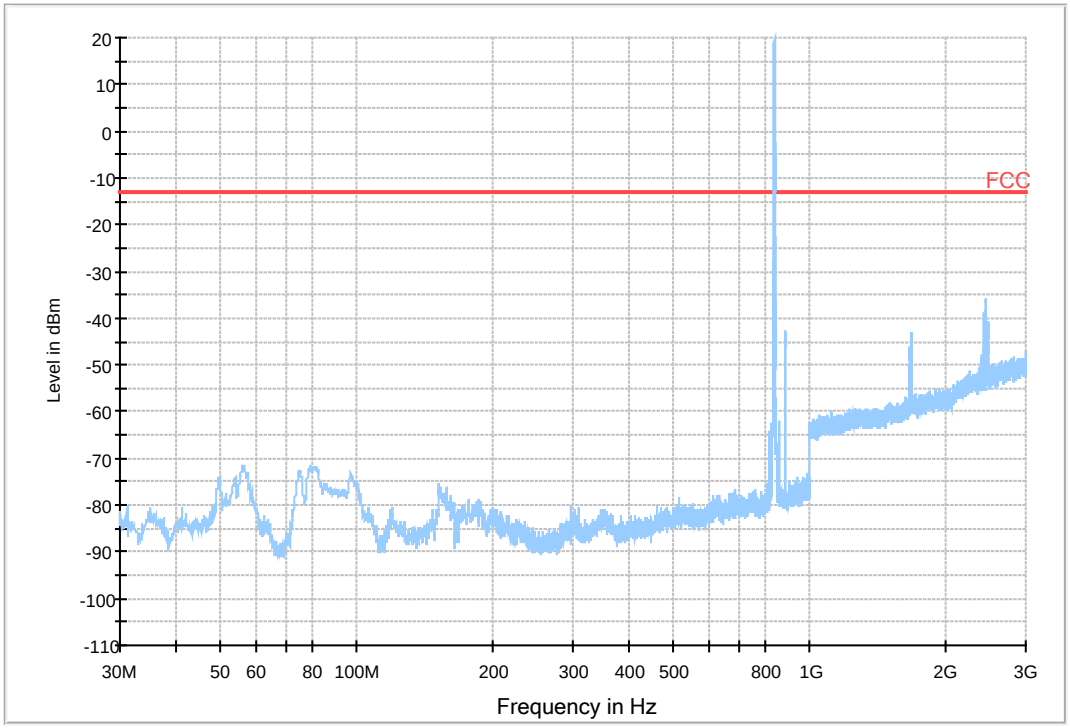
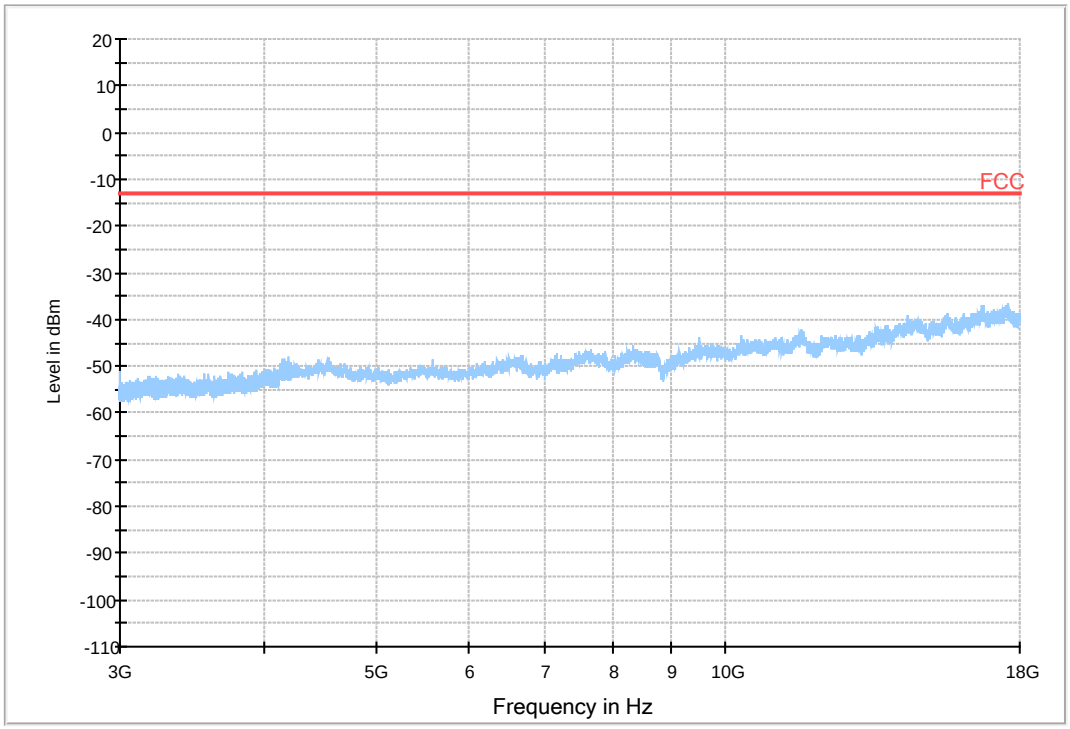
Copy of FCC PART22 LTE Band 5_L



Copy of FCC PART22 LTE Band 5_H



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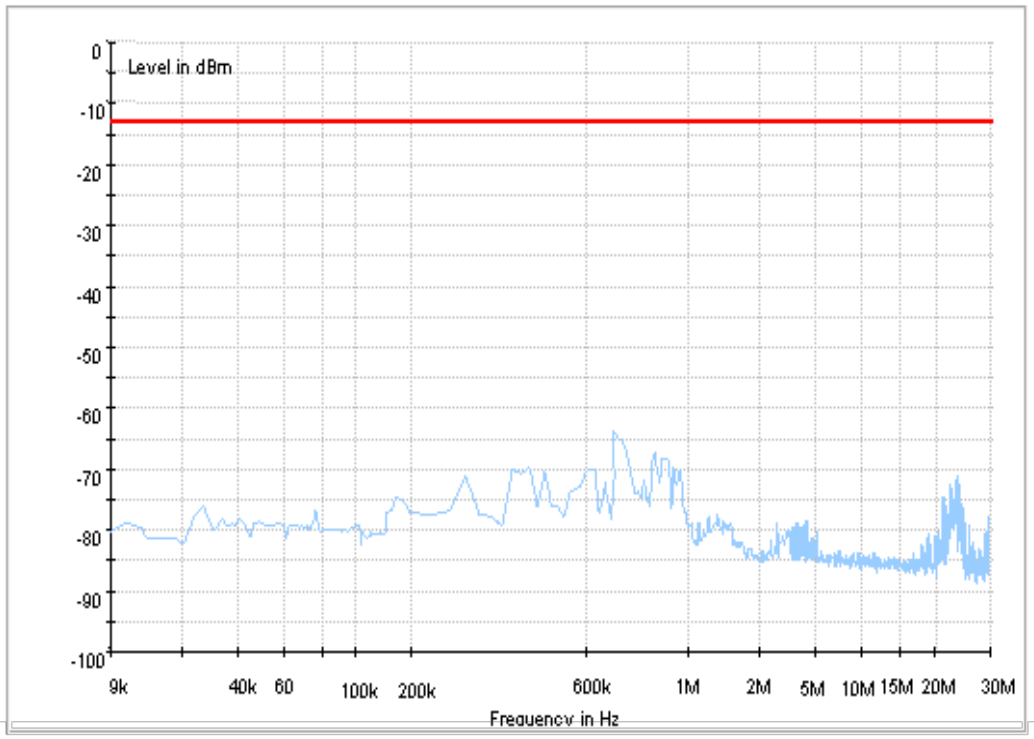
7.1.1.2 Test Bandwidth = 5



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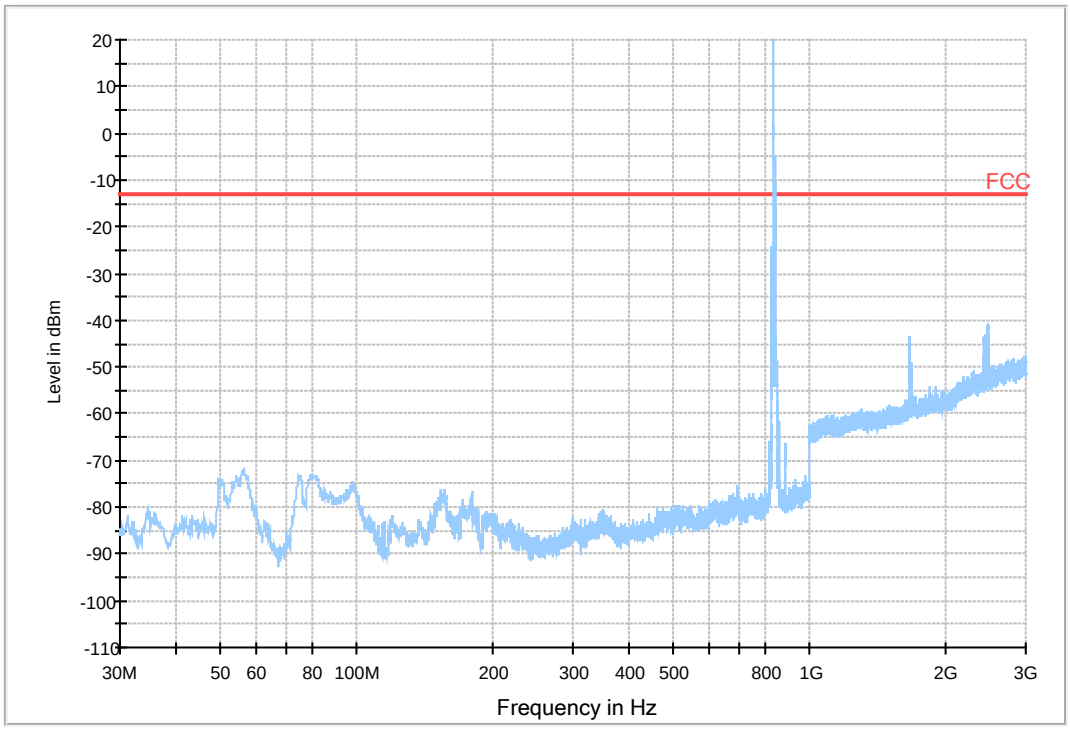

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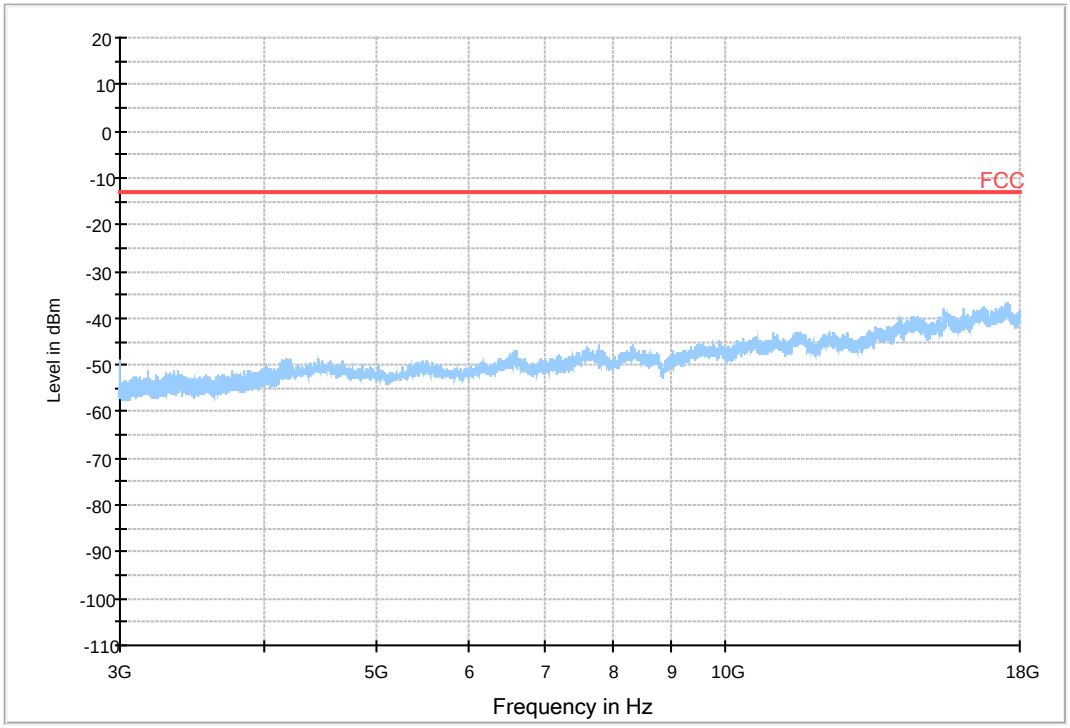
Copy of FCC PART22 LTE Band 5_H



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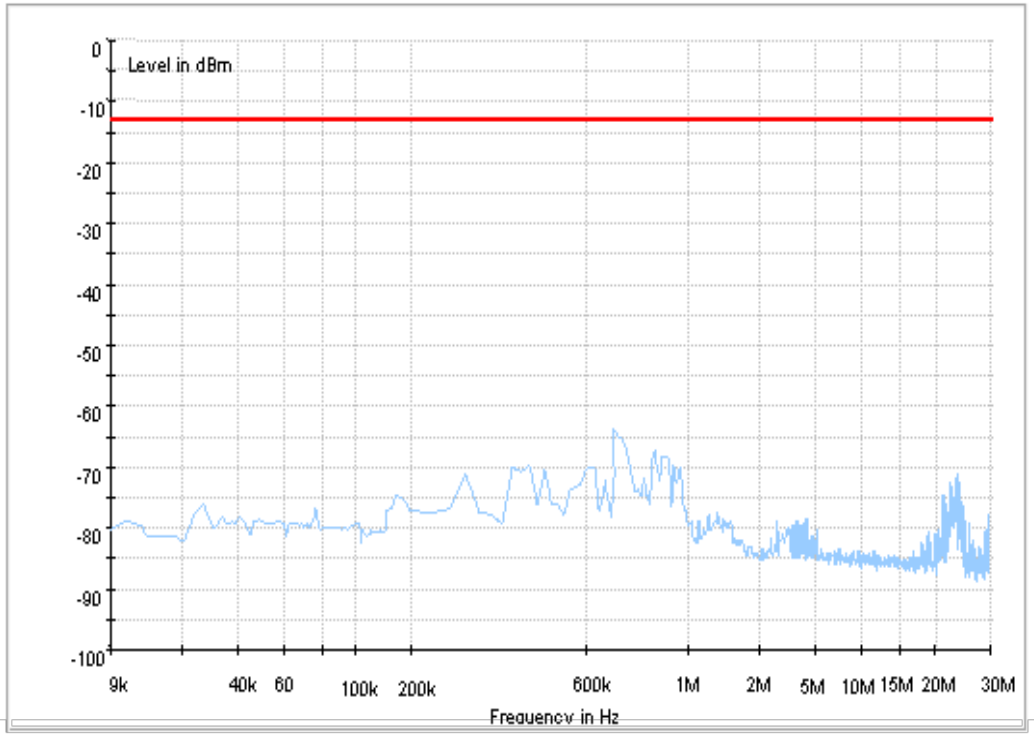
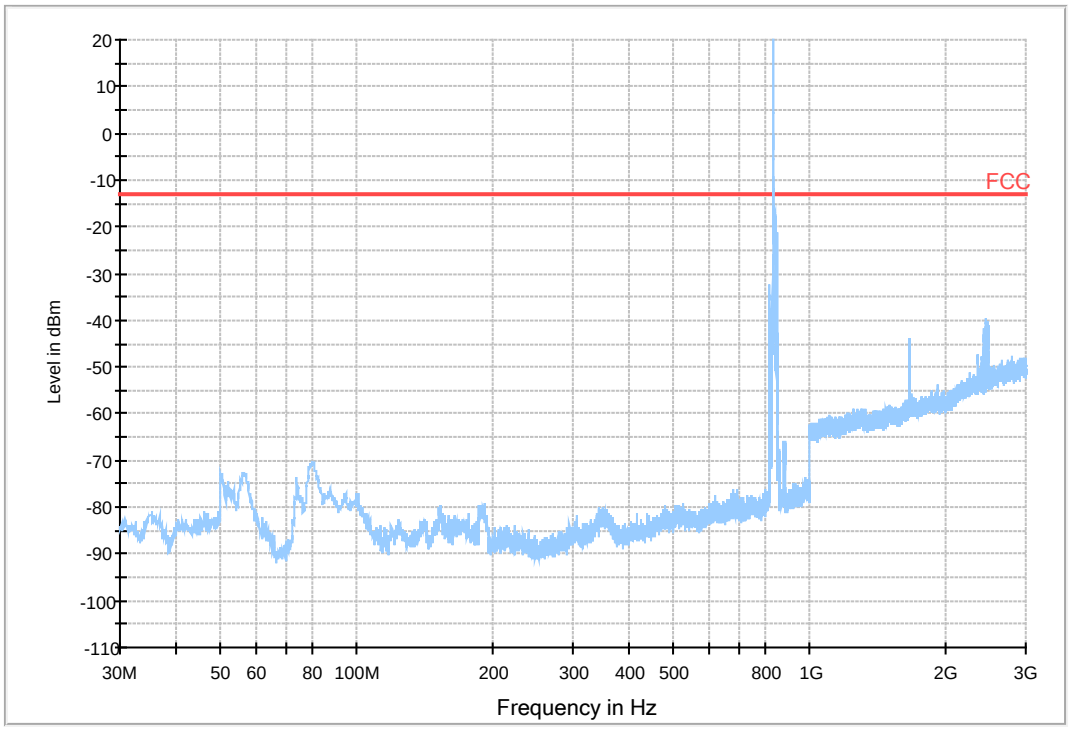
7.1.1.3 Test Bandwidth = 10



Copy of FCC PART22 LTE Band 5_L



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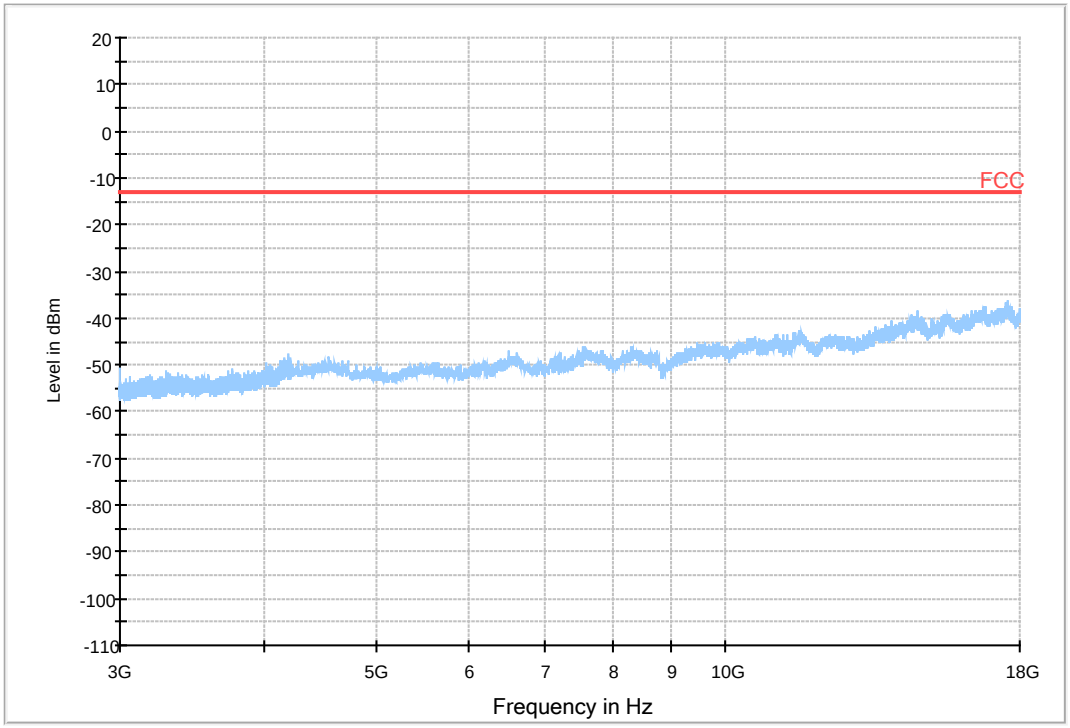
Copy of FCC PART22 LTE Band 5_H



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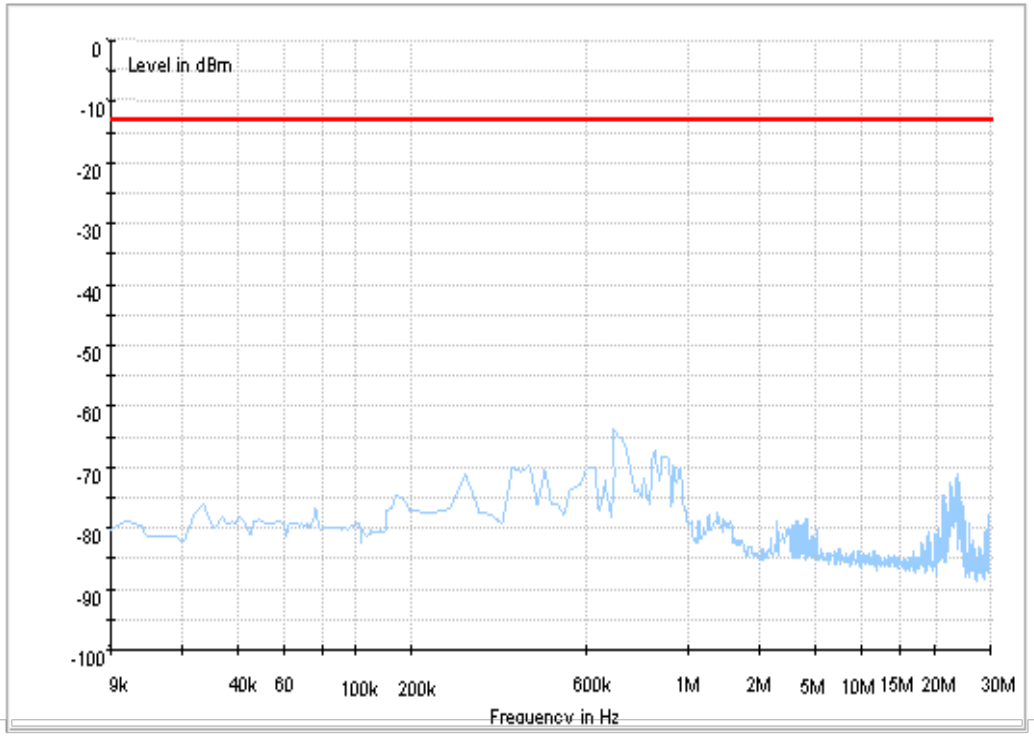
7.1.2 Test Band = BAND7

7.1.2.1 Test Bandwidth = 5



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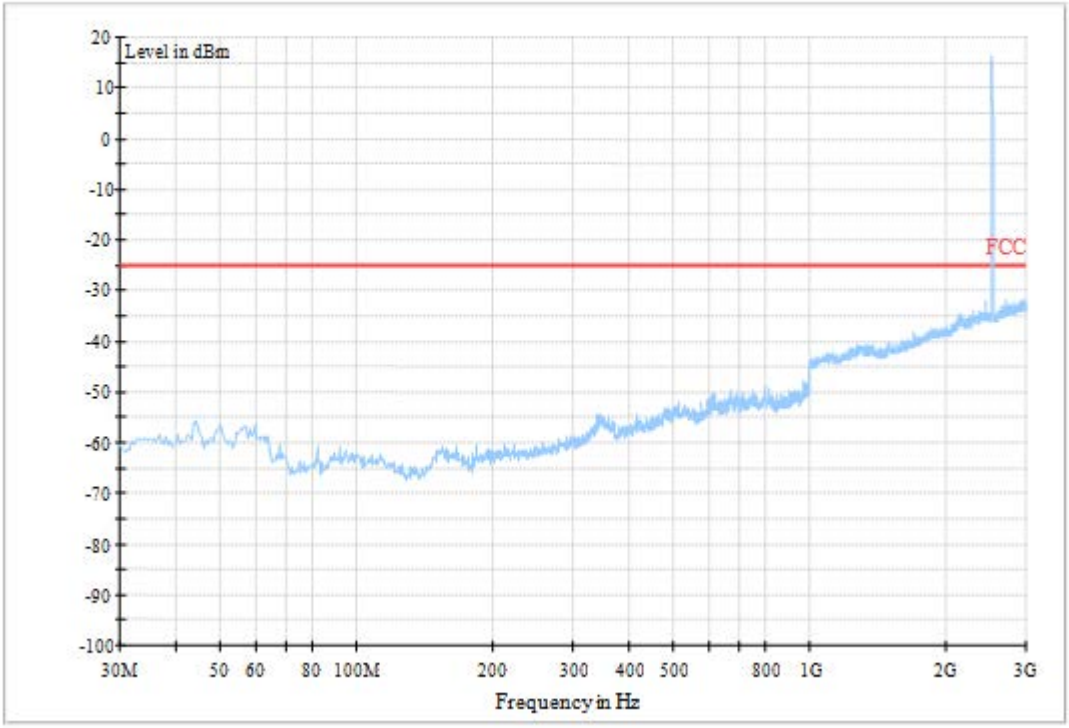
Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L



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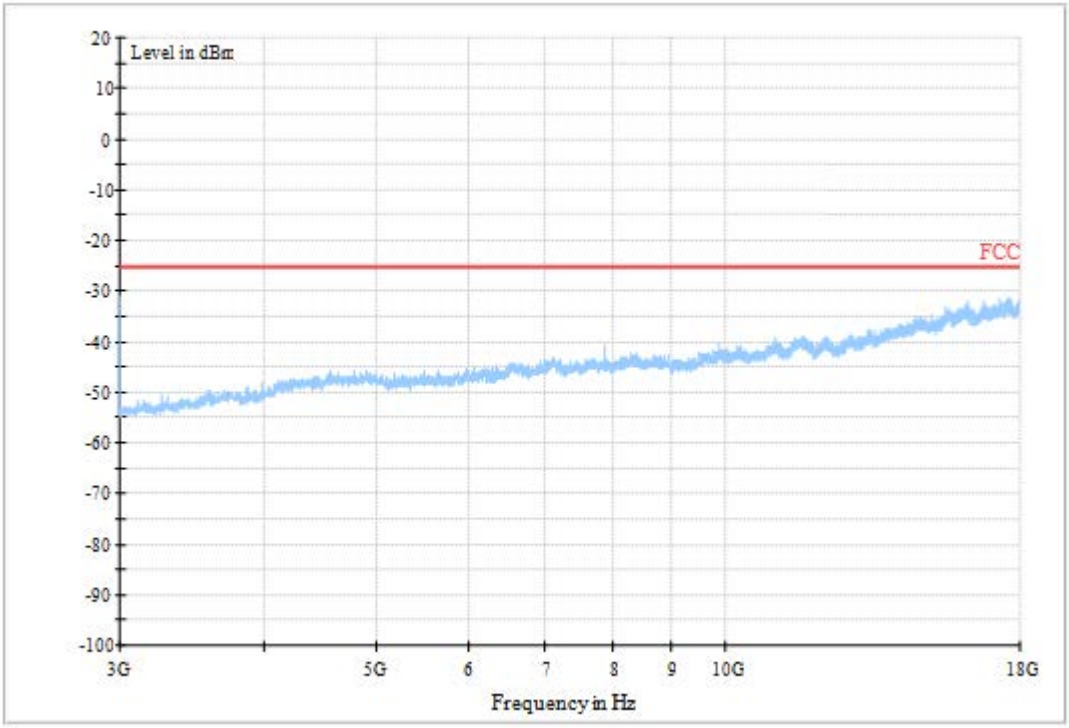

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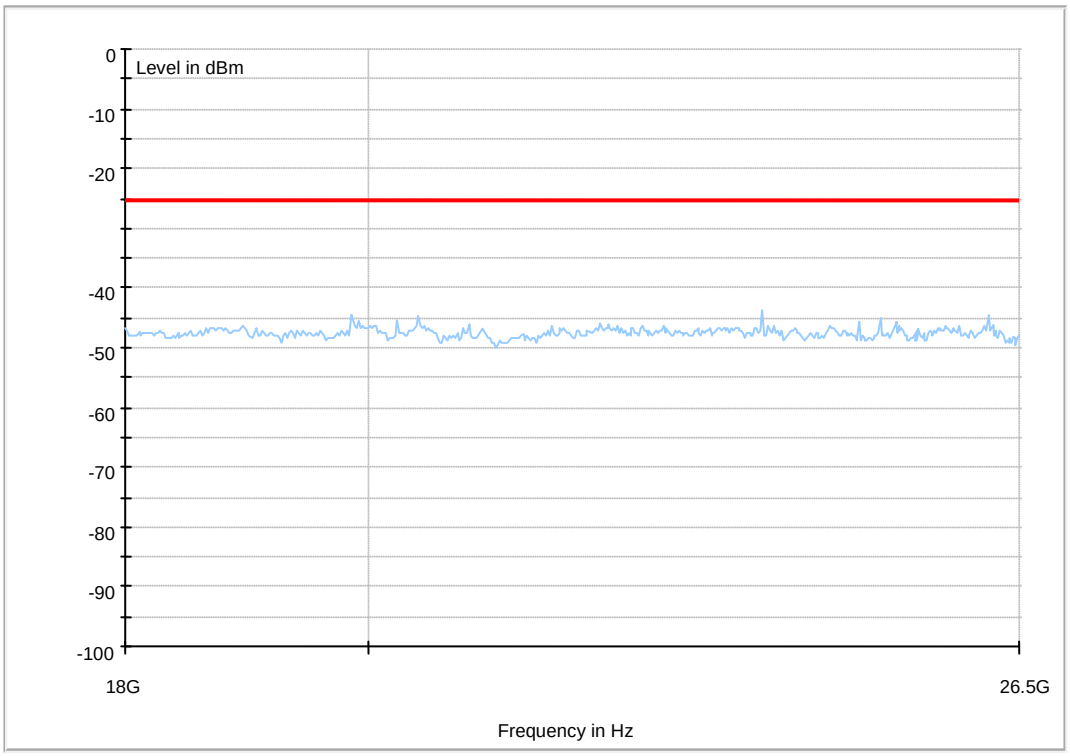

7.1.2.2 Test Bandwidth = 20

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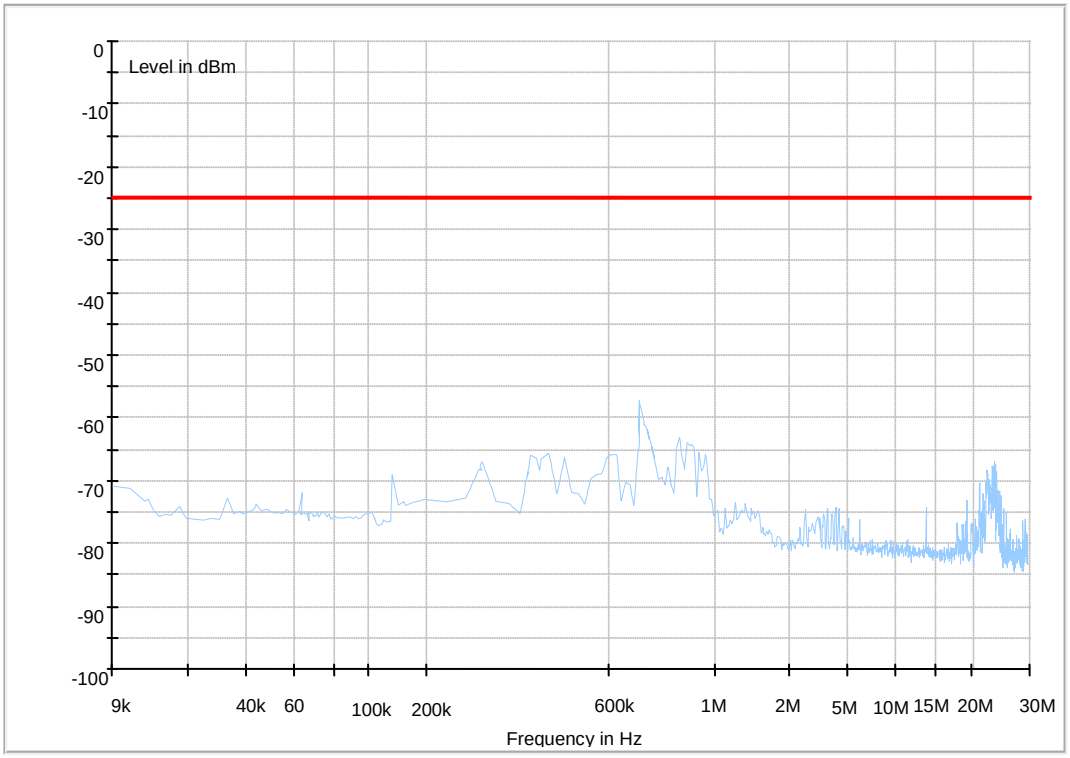

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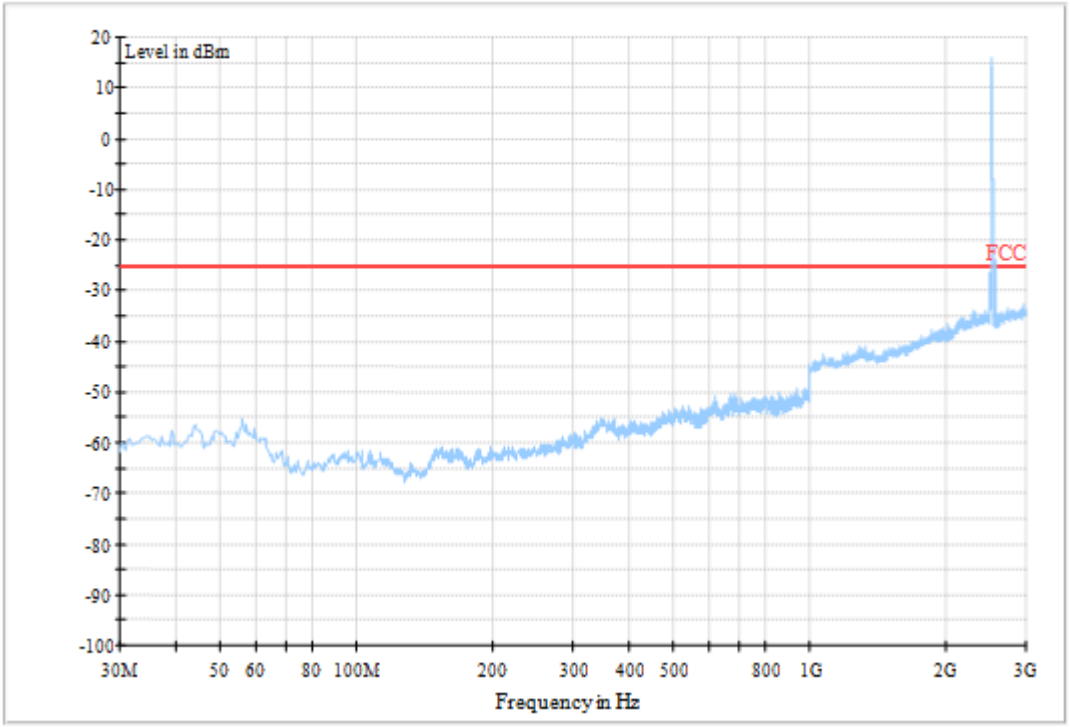

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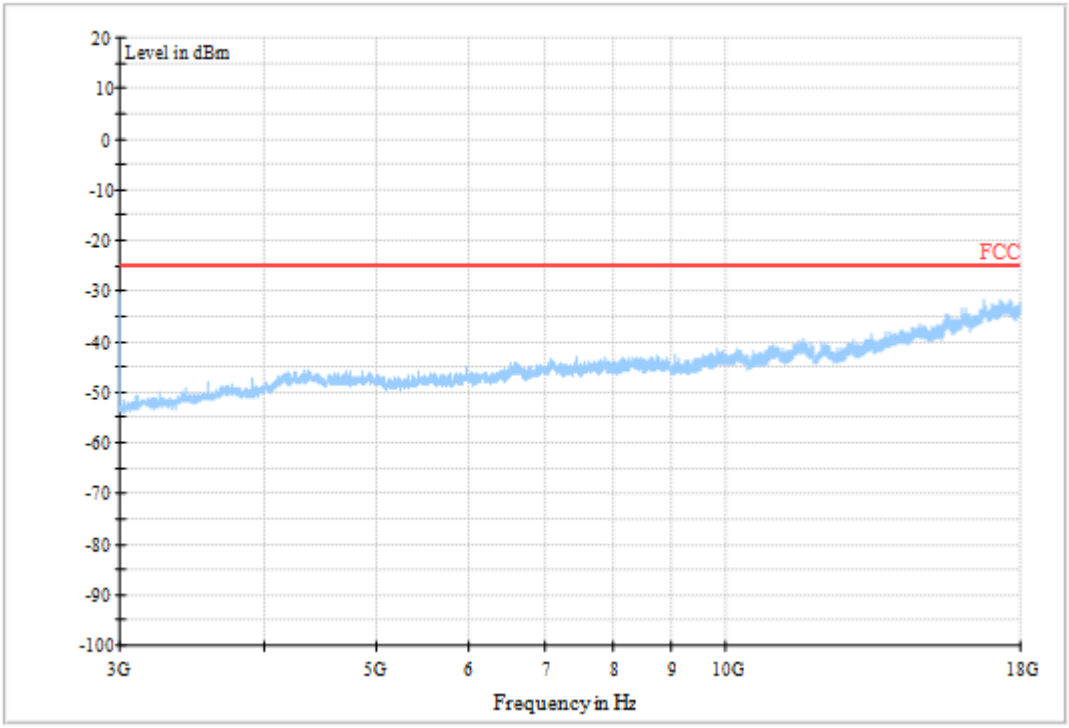
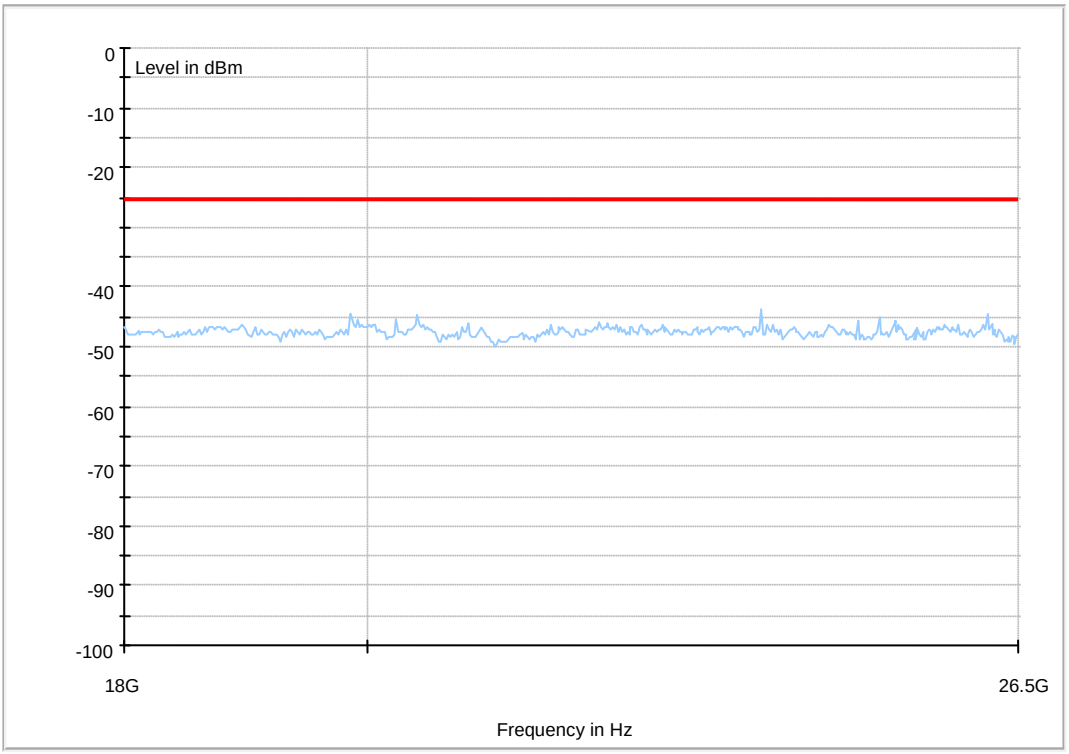
Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H





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8Appendix_H: Frequency Stability

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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
BAND5	LTE/TM1	3	LCH	TN	VL	-7.75	-0.00939	PASS
					VN	17.78	0.02154	PASS
					VH	-21.24	-0.02573	PASS
			MCH	TN	VL	1.77	0.00212	PASS
					VN	4.02	0.00481	PASS
					VH	0.90	0.00108	PASS
			HCH	TN	VL	0.79	0.00093	PASS
					VN	0.82	0.00097	PASS
					VH	-0.59	-0.0007	PASS
		5	LCH	TN	VL	-2.95	-0.00357	PASS
					VN	9.34	0.0113	PASS
					VH	-0.57	-0.00069	PASS
			MCH	TN	VL	1.12	0.00134	PASS
					VN	-2.43	-0.0029	PASS
					VH	-0.82	-0.00098	PASS
			HCH	TN	VL	-2.10	-0.00248	PASS
					VN	0.46	0.00054	PASS
					VH	-0.50	-0.00059	PASS
		10	LCH	TN	VL	1.85	0.00223	PASS
					VN	0.16	0.00019	PASS
					VH	-8.27	-0.00998	PASS
			MCH	TN	VL	-30.70	-0.0367	PASS
					VN	22.09	0.02641	PASS
					VH	-43.40	-0.05188	PASS
			HCH	TN	VL	0.43	0.00051	PASS
					VN	-0.69	-0.00082	PASS
					VH	-2.96	-0.00351	PASS
	LTE/TM2	3	LCH	TN	VL	23.16	0.02806	PASS
					VN	-0.04	-0.00005	PASS
					VH	-38.02	-0.04606	PASS
			MCH	TN	VL	0.90	0.00108	PASS
					VN	0.72	0.00086	PASS
					VH	0.57	0.00068	PASS
			HCH	TN	VL	0.19	0.00022	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	1.26	0.00149	PASS
					VH	2.68	0.00316	PASS
		5	LCH	TN	VL	0.21	0.00025	PASS
					VN	-3.20	-0.00387	PASS
					VH	0.46	0.00056	PASS
			MCH	TN	VL	0.79	0.00094	PASS
					VN	1.90	0.00227	PASS
					VH	-0.51	-0.00061	PASS
			HCH	TN	VL	0.24	0.00028	PASS
					VN	0.27	0.00032	PASS
					VH	-1.20	-0.00142	PASS
		10	LCH	TN	VL	-3.18	-0.00384	PASS
					VN	-1.46	-0.00176	PASS
					VH	15.41	0.01859	PASS
			MCH	TN	VL	-96.27	-0.11509	PASS
					VN	13.62	0.01628	PASS
					VH	9.64	0.01152	PASS
			HCH	TN	VL	-0.36	-0.00043	PASS
					VN	-1.50	-0.00178	PASS
					VH	-1.42	-0.00168	PASS

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	3.16	0.00126	PASS
					VN	3.65	0.00146	PASS
					VH	0.00	0	PASS
			MCH	TN	VL	-1.19	-0.00047	PASS
					VN	3.02	0.00119	PASS
					VH	-0.86	-0.00034	PASS
			HCH	TN	VL	-2.27	-0.00088	PASS
					VN	2.02	0.00079	PASS
					VH	2.07	0.00081	PASS
		10	LCH	TN	VL	5.11	0.00204	PASS
					VN	1.49	0.00059	PASS
					VH	-0.37	-0.00015	PASS
			MCH	TN	VL	-0.67	-0.00026	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	2.98	0.00118	PASS
					VH	-0.19	-0.00007	PASS
			HCH	TN	VL	6.34	0.00247	PASS
					VN	0.23	0.00009	PASS
					VH	2.59	0.00101	PASS
		15	LCH	TN	VL	5.09	0.00203	PASS
					VN	1.43	0.00057	PASS
					VH	3.35	0.00134	PASS
			MCH	TN	VL	0.50	0.0002	PASS
					VN	0.37	0.00015	PASS
					VH	1.75	0.00069	PASS
			HCH	TN	VL	3.95	0.00154	PASS
					VN	1.44	0.00056	PASS
					VH	-1.00	-0.00039	PASS
		20	LCH	TN	VL	1.65	0.00066	PASS
					VN	-0.33	-0.00013	PASS
					VH	2.02	0.0008	PASS
			MCH	TN	VL	-0.92	-0.00036	PASS
					VN	-2.78	-0.0011	PASS
					VH	-3.46	-0.00136	PASS
			HCH	TN	VL	-2.16	-0.00084	PASS
					VN	-1.06	-0.00041	PASS
					VH	-0.47	-0.00018	PASS
	LTE/TM2	5	LCH	TN	VL	1.95	0.00078	PASS
					VN	-5.22	-0.00209	PASS
					VH	-2.68	-0.00107	PASS
			MCH	TN	VL	-0.29	-0.00011	PASS
					VN	-3.72	-0.00147	PASS
					VH	0.00	0	PASS
			HCH	TN	VL	1.03	0.0004	PASS
					VN	-0.60	-0.00023	PASS
					VH	3.79	0.00148	PASS
		10	LCH	TN	VL	-3.88	-0.00155	PASS
					VN	0.72	0.00029	PASS
					VH	-1.03	-0.00041	PASS
			MCH	TN	VL	-4.33	-0.00171	PASS
					VN	-0.90	-0.00036	PASS
					VH	1.50	0.00059	PASS
			HCH	TN	VL	-0.84	-0.00033	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	1.22	0.00048	PASS
					VH	-0.73	-0.00028	PASS
		15	LCH	TN	VL	1.93	0.00077	PASS
					VN	0.06	0.00002	PASS
					VH	-0.99	-0.00039	PASS
			MCH	TN	VL	-0.34	-0.00013	PASS
					VN	1.66	0.00065	PASS
					VH	-0.74	-0.00029	PASS
			HCH	TN	VL	-1.09	-0.00043	PASS
					VN	1.42	0.00055	PASS
					VH	-4.56	-0.00178	PASS
		20	LCH	TN	VL	1.82	0.00073	PASS
					VN	0.07	0.00003	PASS
					VH	-0.13	-0.00005	PASS
			MCH	TN	VL	-0.33	-0.00013	PASS
					VN	-0.27	-0.00011	PASS
					VH	-1.32	-0.00052	PASS
			HCH	TN	VL	1.43	0.00056	PASS
					VN	1.49	0.00058	PASS
					VH	0.44	0.00017	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	LTE/TM1	3	LCH	VN	-30	7.42	0.00899	PASS
					-20	6.57	0.00796	PASS
					-10	-0.50	-0.00061	PASS
					0	1.07	0.0013	PASS
					10	0.26	0.00031	PASS
					20	-3.59	-0.00435	PASS
					30	-7.38	-0.00894	PASS
					40	-22.54	-0.0273	PASS
					50	8.10	0.00981	PASS
			MCH	VN	-30	-0.77	-0.00092	PASS
					-20	0.40	0.00048	PASS
					-10	-0.39	-0.00047	PASS
					0	-2.20	-0.00263	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-0.67	-0.0008	PASS
					20	-0.59	-0.00071	PASS
					30	-2.03	-0.00243	PASS
					40	0.54	0.00065	PASS
					50	0.04	0.00005	PASS
			HCH	VN	-30	0.46	0.00054	PASS
					-20	-2.17	-0.00256	PASS
					-10	0.17	0.0002	PASS
					0	-2.82	-0.00333	PASS
					10	-0.86	-0.00101	PASS
					20	-0.90	-0.00106	PASS
					30	-3.39	-0.004	PASS
					40	-1.63	-0.00192	PASS
					50	-2.90	-0.00342	PASS
		5	LCH	VN	-30	-0.90	-0.00109	PASS
					-20	-6.65	-0.00805	PASS
					-10	0.46	0.00056	PASS
					0	-4.75	-0.00575	PASS
					10	4.56	0.00552	PASS
					20	-5.02	-0.00607	PASS
					30	2.33	0.00282	PASS
					40	-8.64	-0.01045	PASS
					50	-0.04	-0.00005	PASS
			MCH	VN	-30	0.73	0.00087	PASS
					-20	-0.73	-0.00087	PASS
					-10	-2.13	-0.00255	PASS
					0	-1.06	-0.00127	PASS
					10	-1.65	-0.00197	PASS
					20	0.97	0.00116	PASS
					30	-0.07	-0.00008	PASS
					40	-0.27	-0.00032	PASS
					50	-1.17	-0.0014	PASS
			HCH	VN	-30	0.40	0.00047	PASS
					-20	-0.62	-0.00073	PASS
					-10	-0.86	-0.00102	PASS
					0	1.13	0.00133	PASS
					10	0.10	0.00012	PASS
					20	-0.37	-0.00044	PASS
					30	-0.46	-0.00054	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-0.72	-0.00085	PASS
					50	-1.37	-0.00162	PASS
		10	LCH	VN	-30	-29.51	-0.0356	PASS
					-20	8.68	0.01047	PASS
					-10	3.52	0.00425	PASS
					0	1.49	0.0018	PASS
					10	5.66	0.00683	PASS
					20	0.70	0.00084	PASS
					30	4.89	0.0059	PASS
					40	-0.14	-0.00017	PASS
					50	1.14	0.00138	PASS
			MCH	VN	-30	-28.81	-0.03444	PASS
					-20	-48.18	-0.0576	PASS
					-10	-76.45	-0.09139	PASS
					0	-15.39	-0.0184	PASS
					10	-20.34	-0.02432	PASS
					20	-2.55	-0.00305	PASS
					30	88.12	0.10534	PASS
					40	-36.01	-0.04305	PASS
					50	5.12	0.00612	PASS
			HCH	VN	-30	-1.65	-0.00195	PASS
					-20	-3.26	-0.00386	PASS
					-10	-4.81	-0.0057	PASS
					0	-5.15	-0.0061	PASS
					10	-0.23	-0.00027	PASS
					20	-6.22	-0.00737	PASS
					30	-5.82	-0.0069	PASS
					40	3.95	0.00468	PASS
					50	-0.53	-0.00063	PASS
	LTE/TM2	3	LCH	VN	-30	2.00	0.00242	PASS
					-20	-8.18	-0.00991	PASS
					-10	-23.69	-0.0287	PASS
					0	-11.14	-0.01349	PASS
					10	-3.36	-0.00407	PASS
					20	-13.66	-0.01655	PASS
					30	-11.03	-0.01336	PASS
					40	-18.53	-0.02245	PASS
					50	2.02	0.00245	PASS
			MCH	VN	-30	-0.93	-0.00111	PASS

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