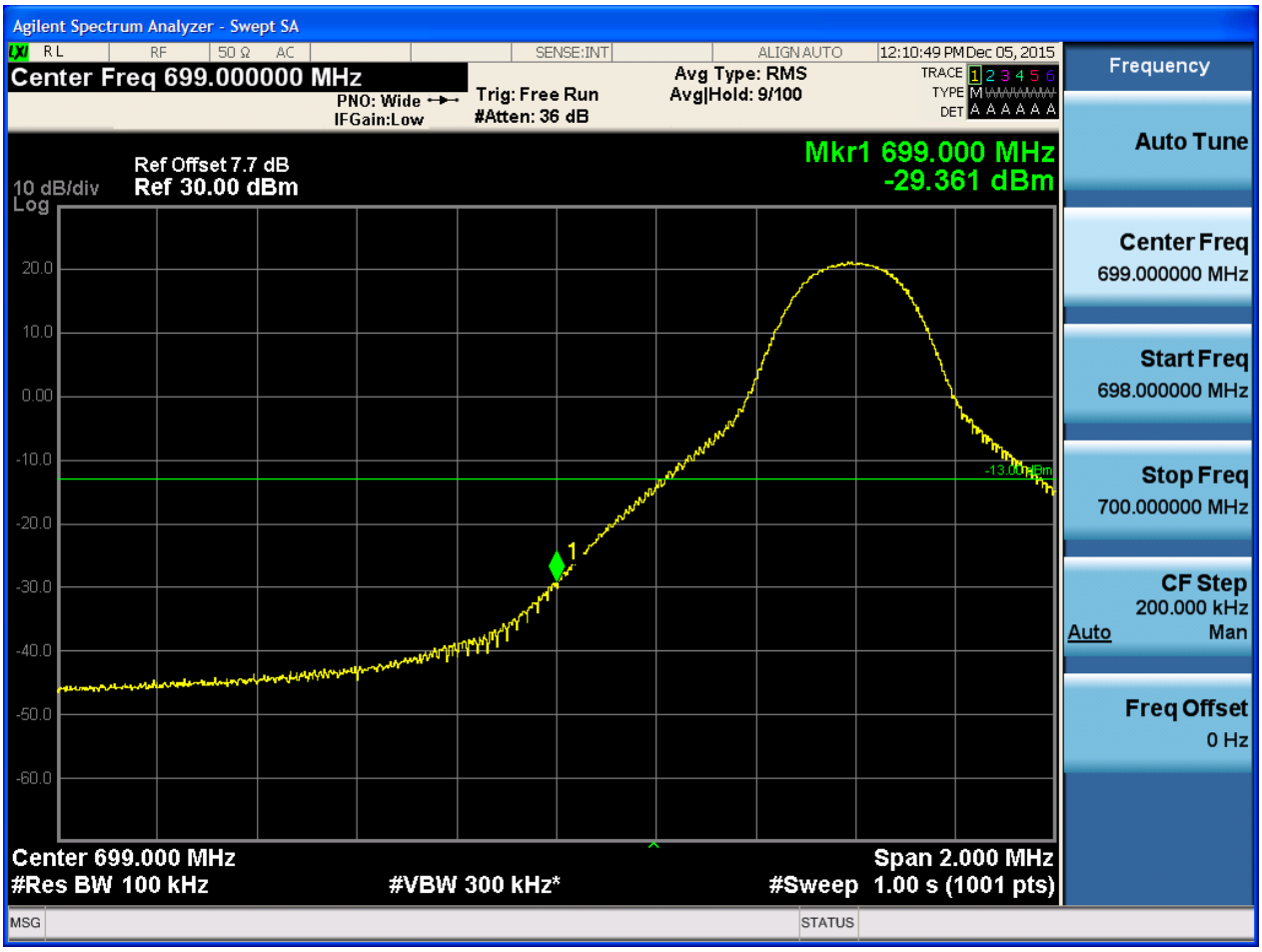
5.1.1.2.4 Test Bandwidth = 10

5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



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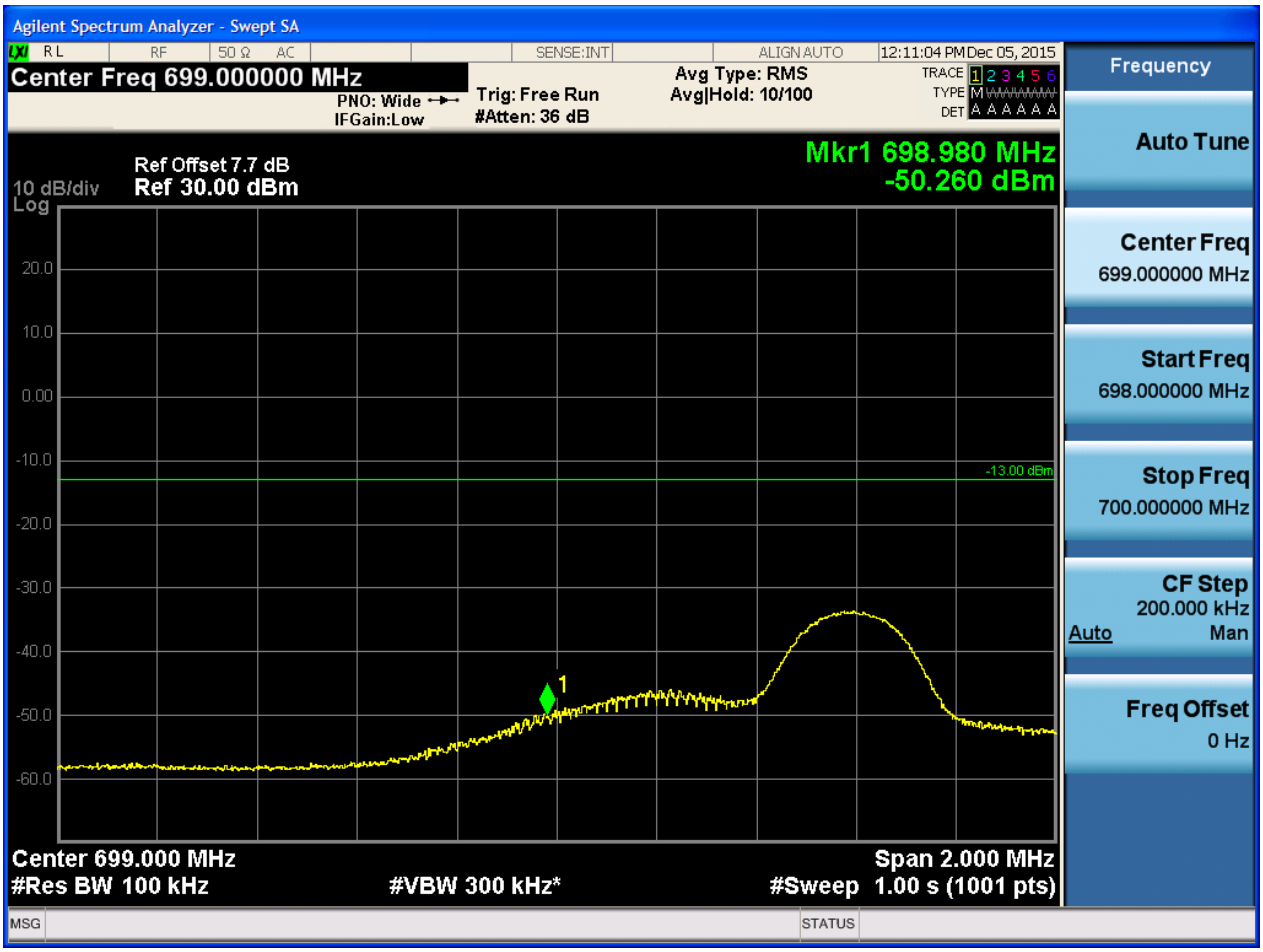
5.1.1.2.4.1.2 Test RB = RB1#49



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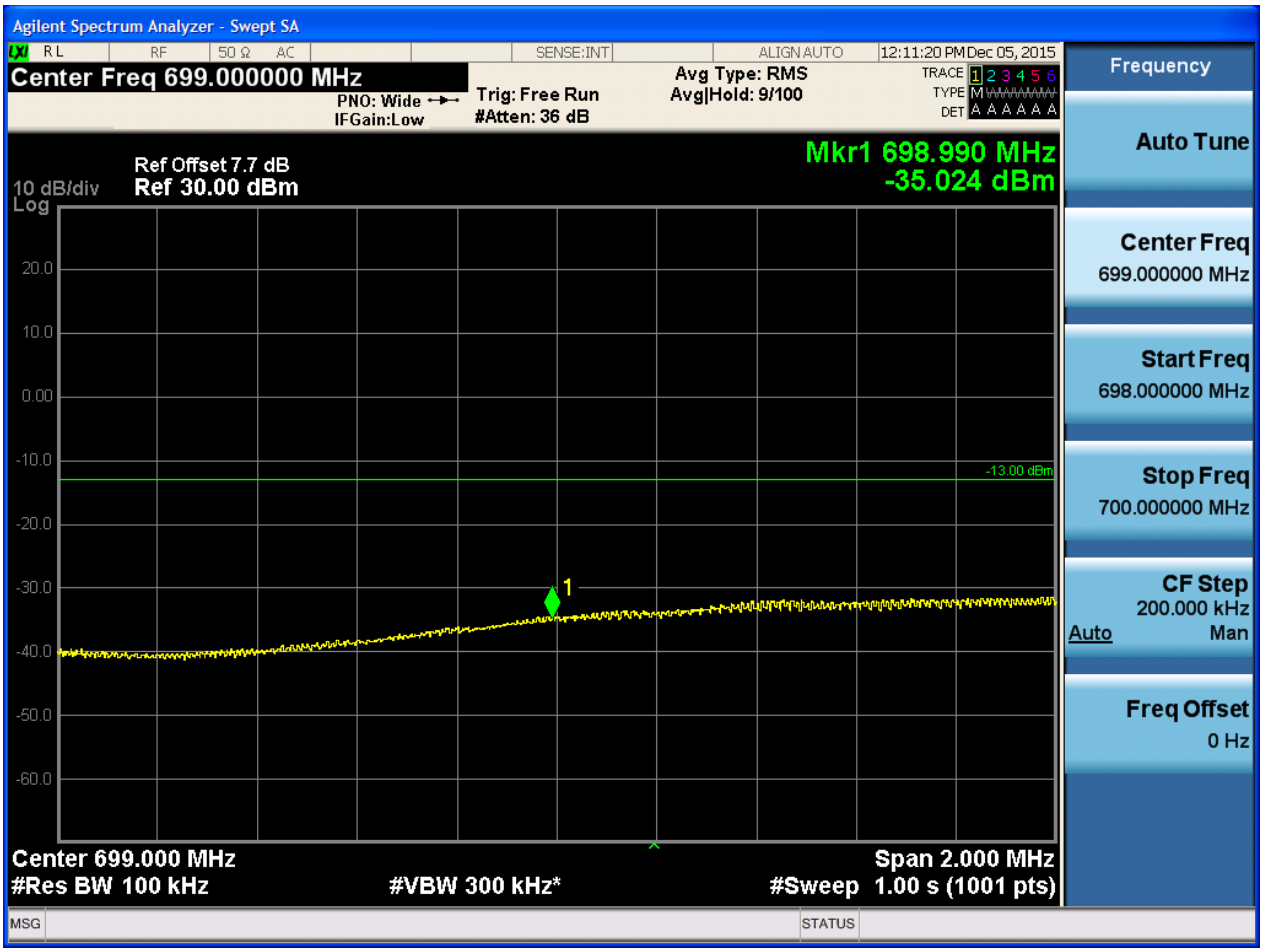
5.1.1.2.4.1.3 Test RB = RB25#13



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5.1.1.2.4.1.4 Test RB = RB50#0

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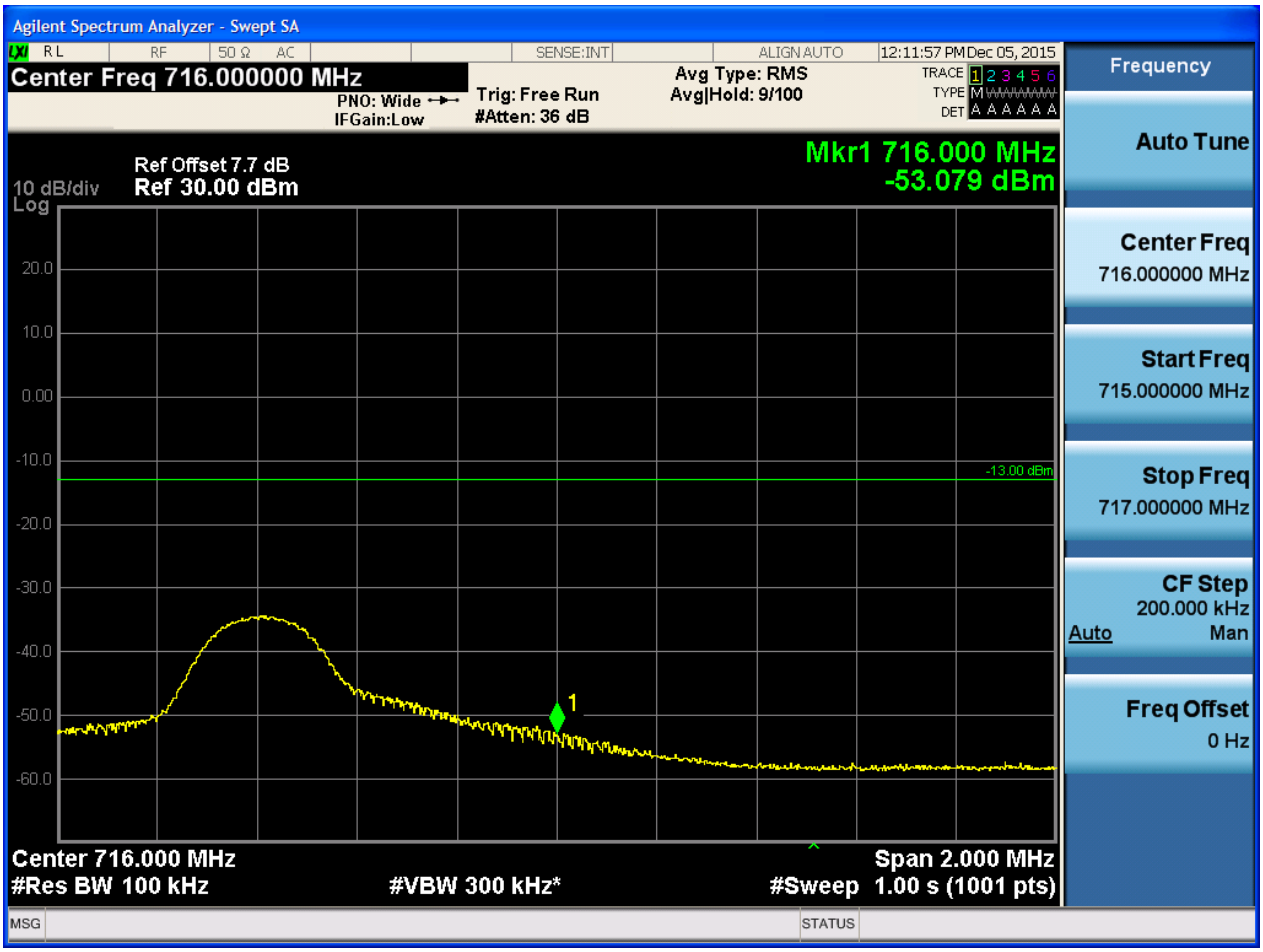
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0



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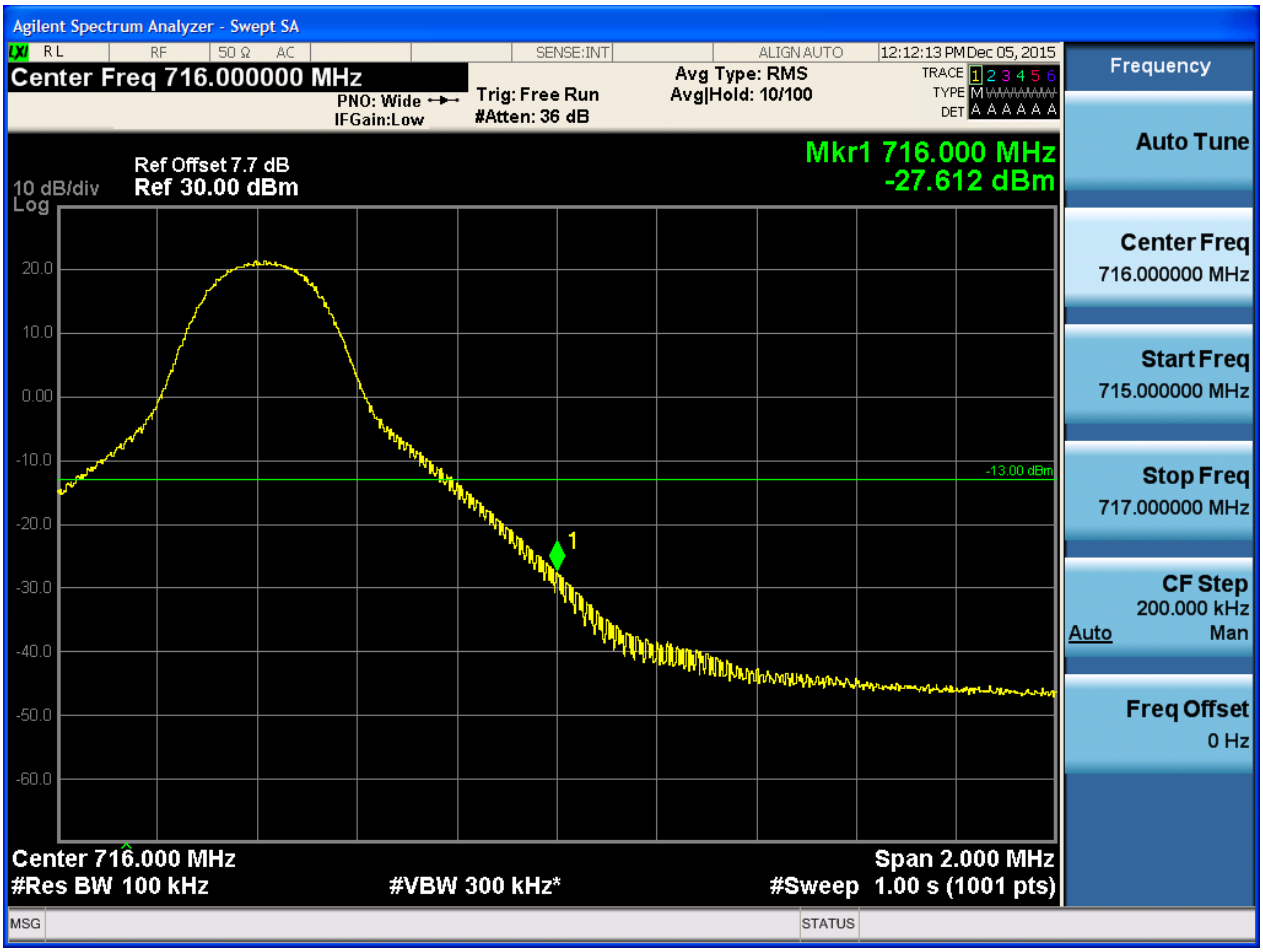
5.1.1.2.4.2.2 Test RB = RB1#49



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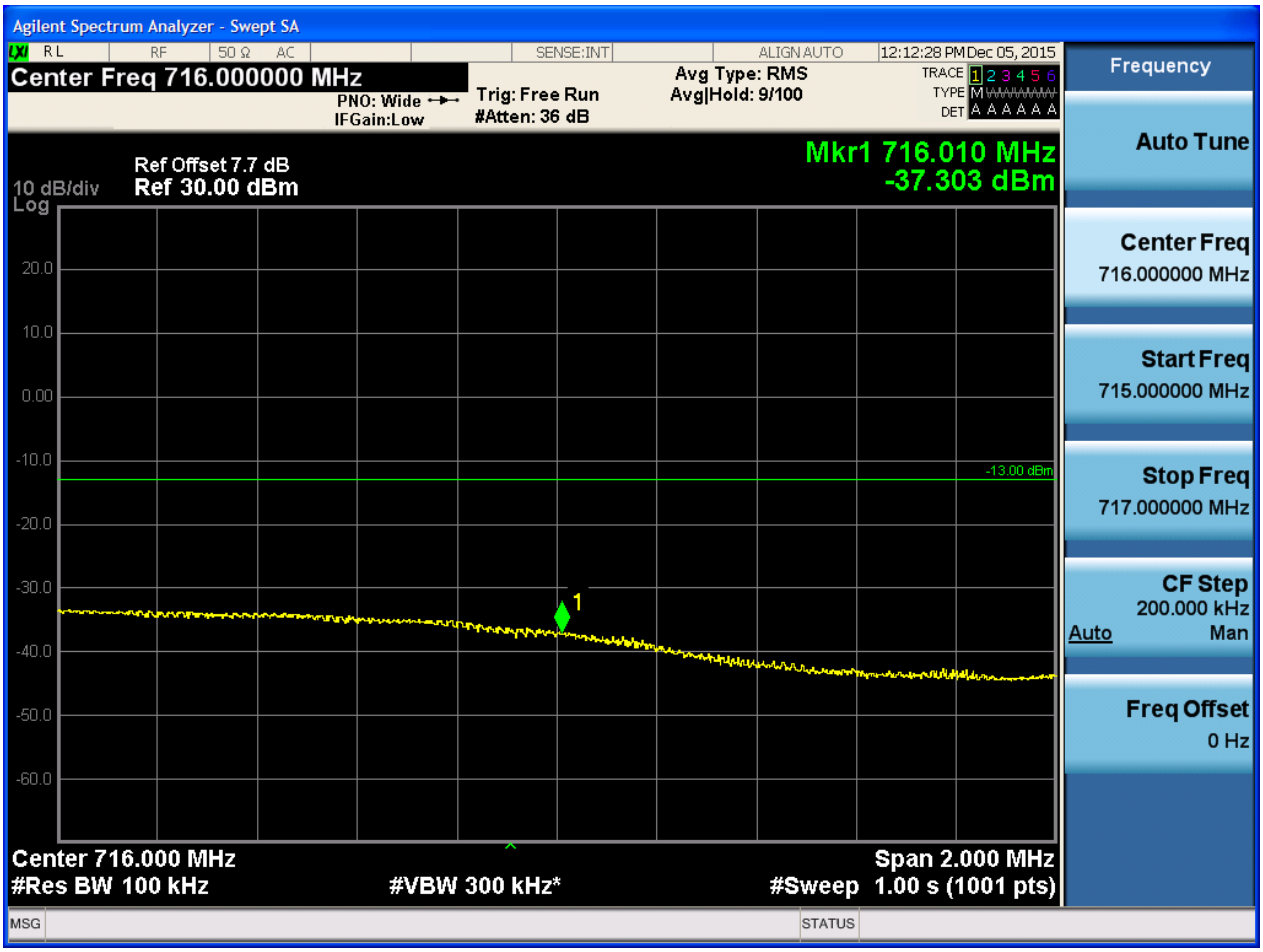
5.1.1.2.4.2.3 Test RB = RB25#13



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5.1.1.2.4.2.4 Test RB = RB50#0

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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 = BAND12

6.1.1.1 Test Mode = LTE/TM1

6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

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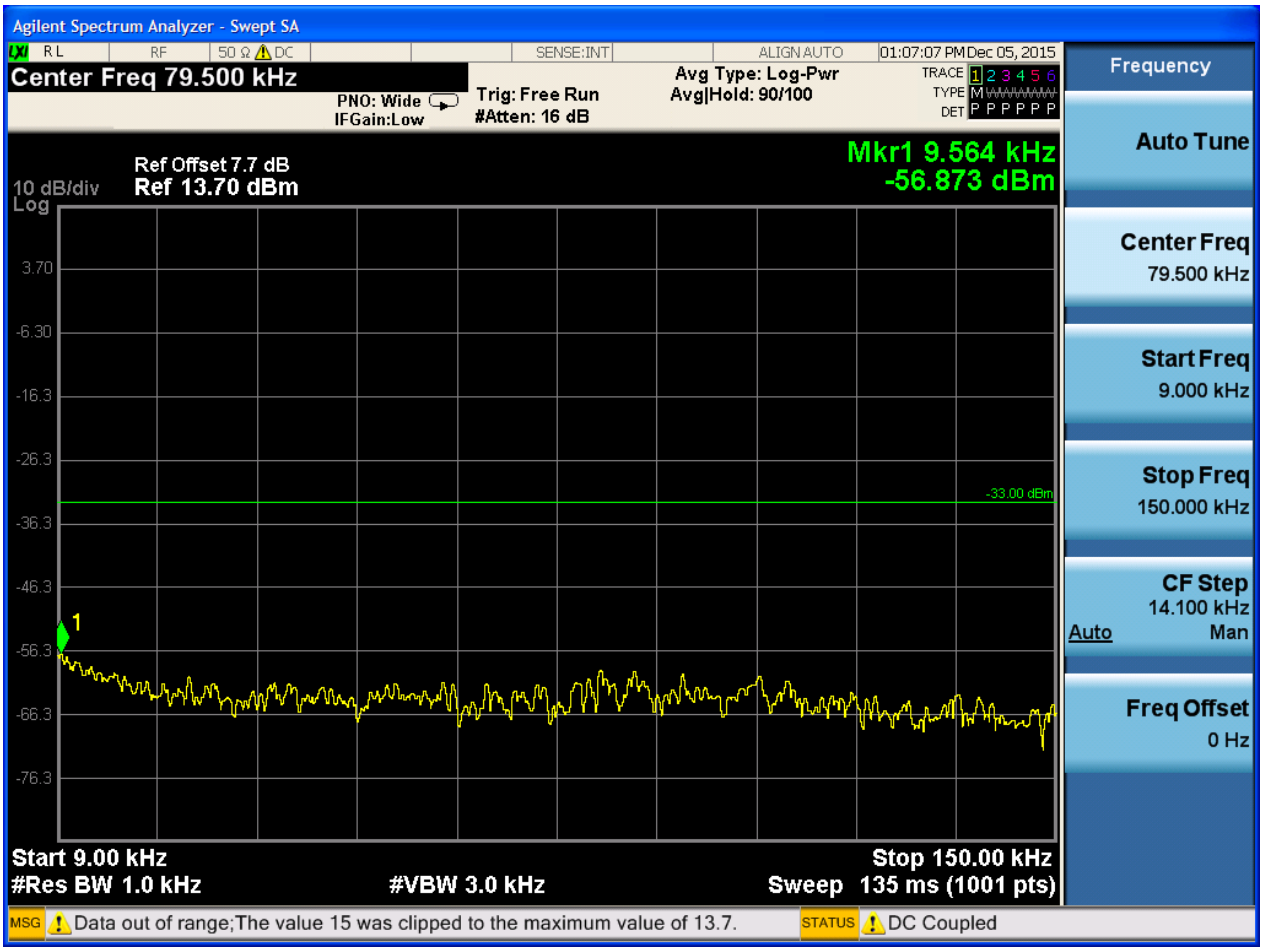

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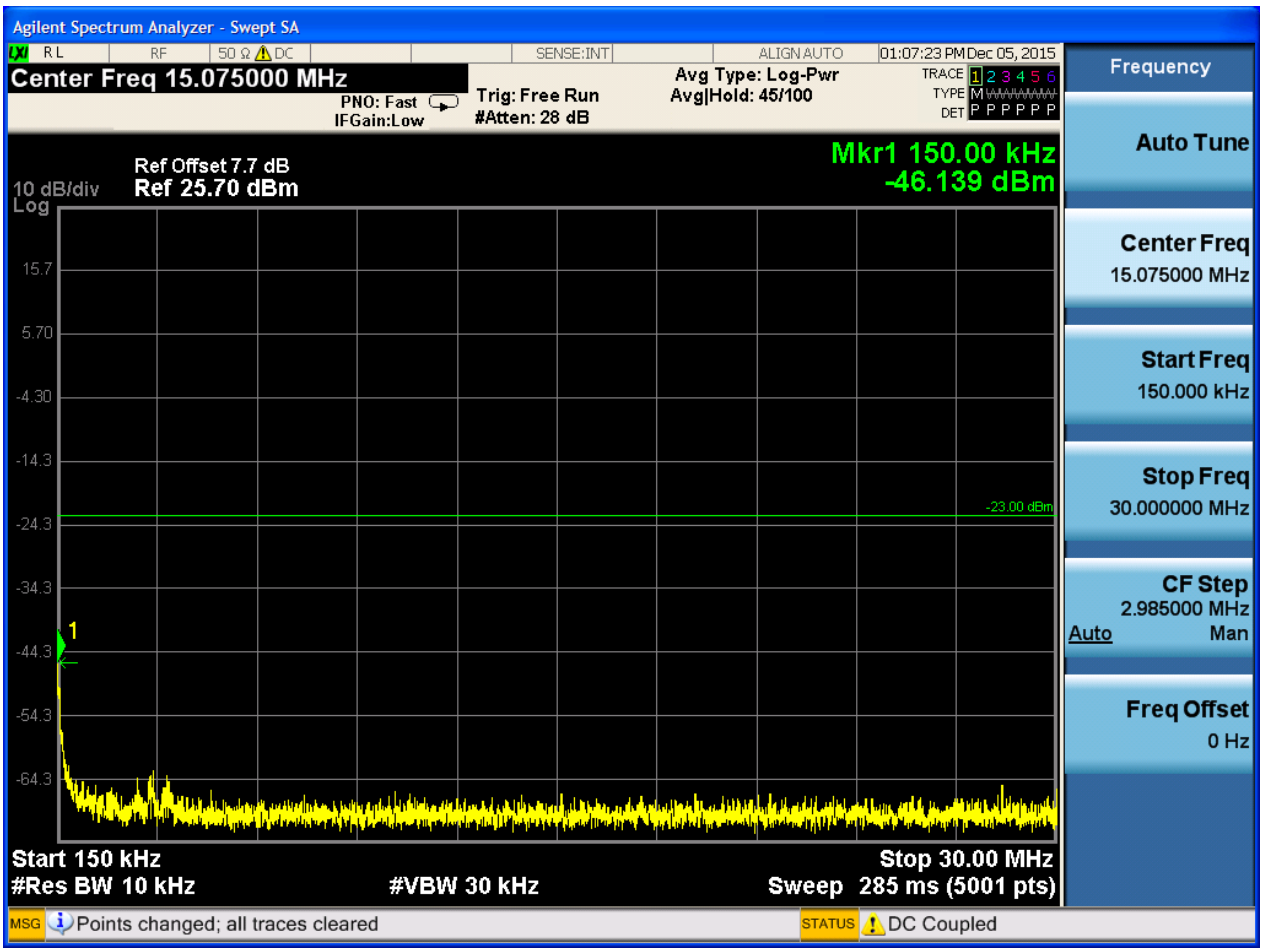

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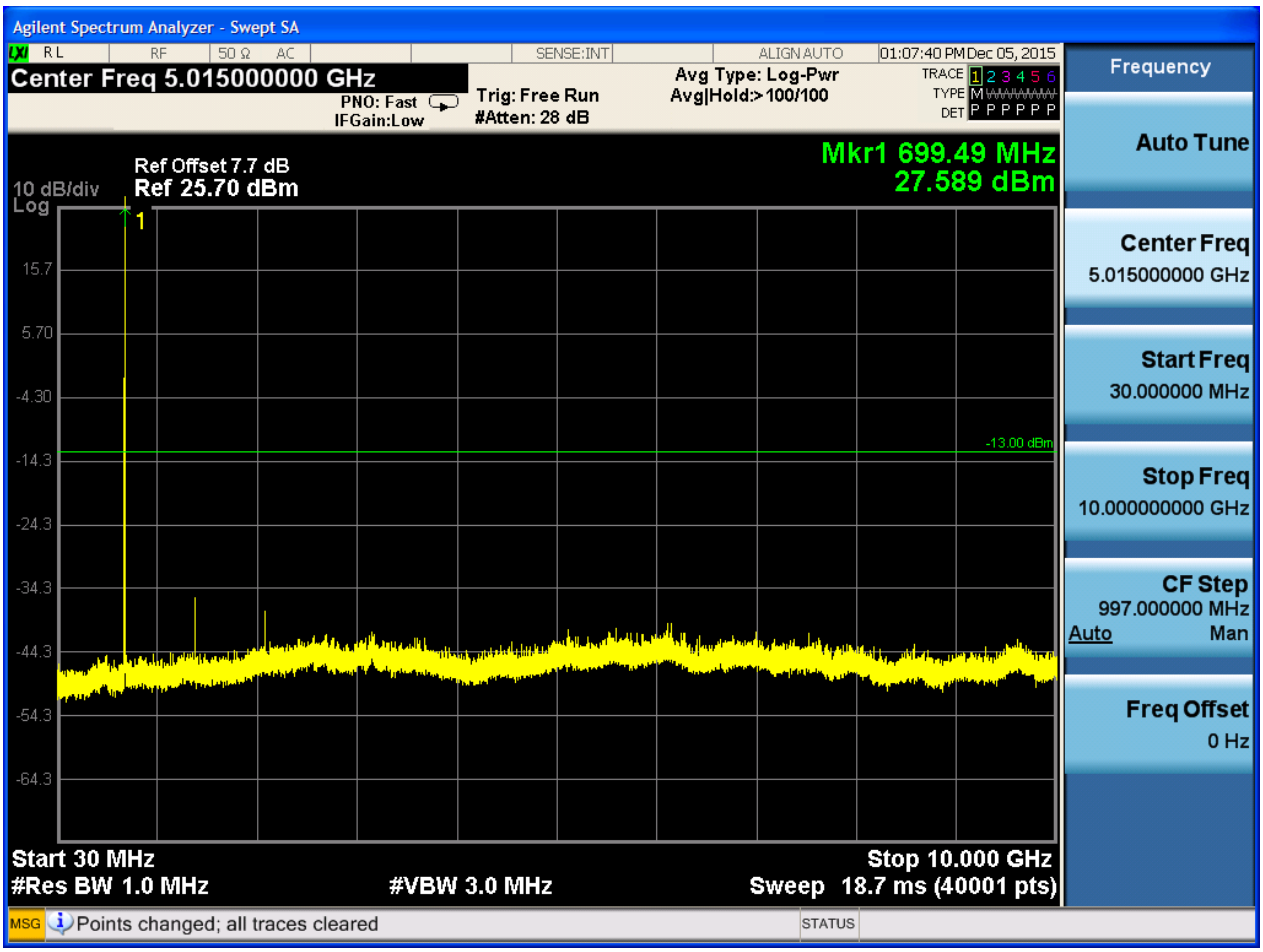

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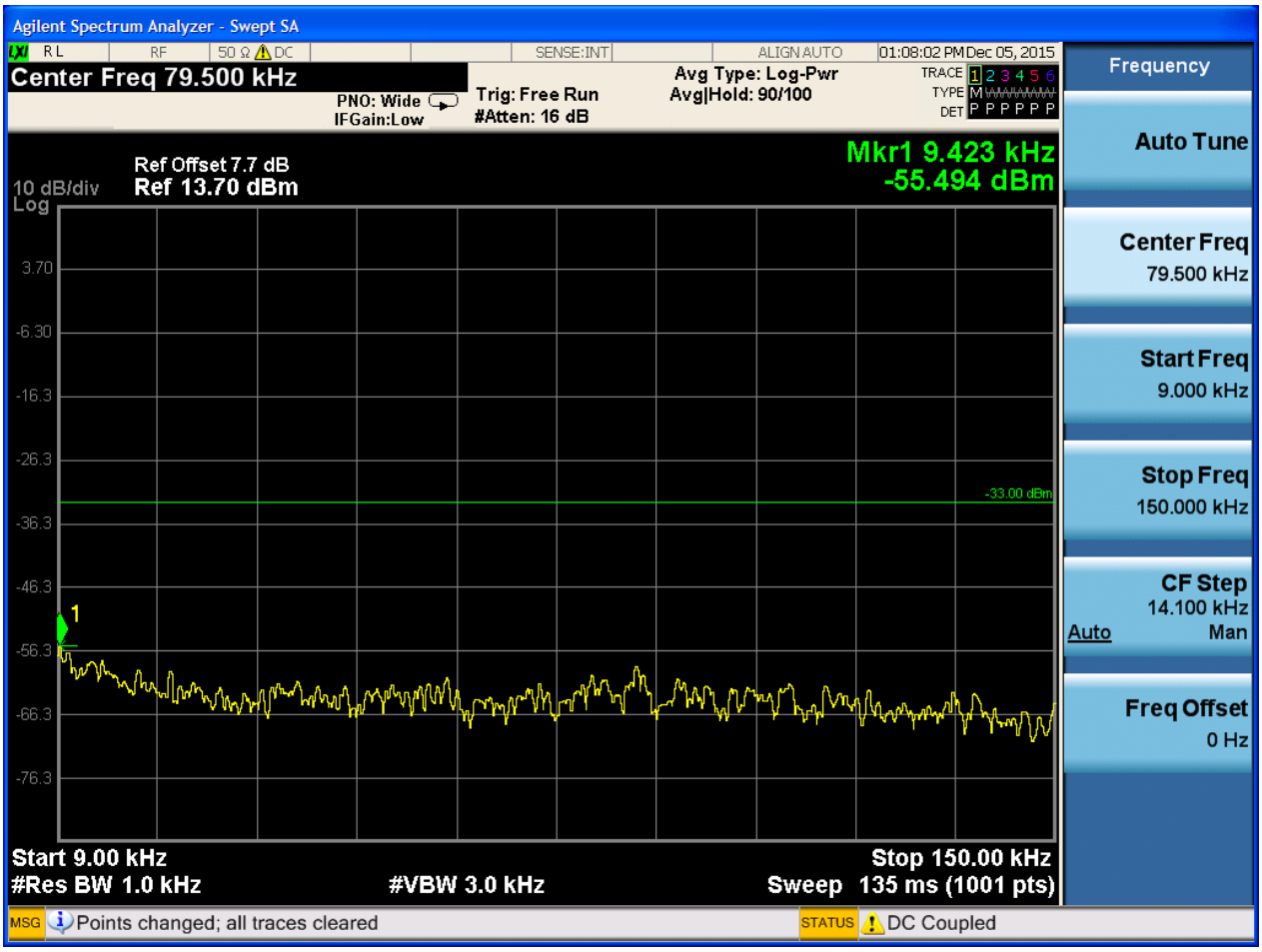
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



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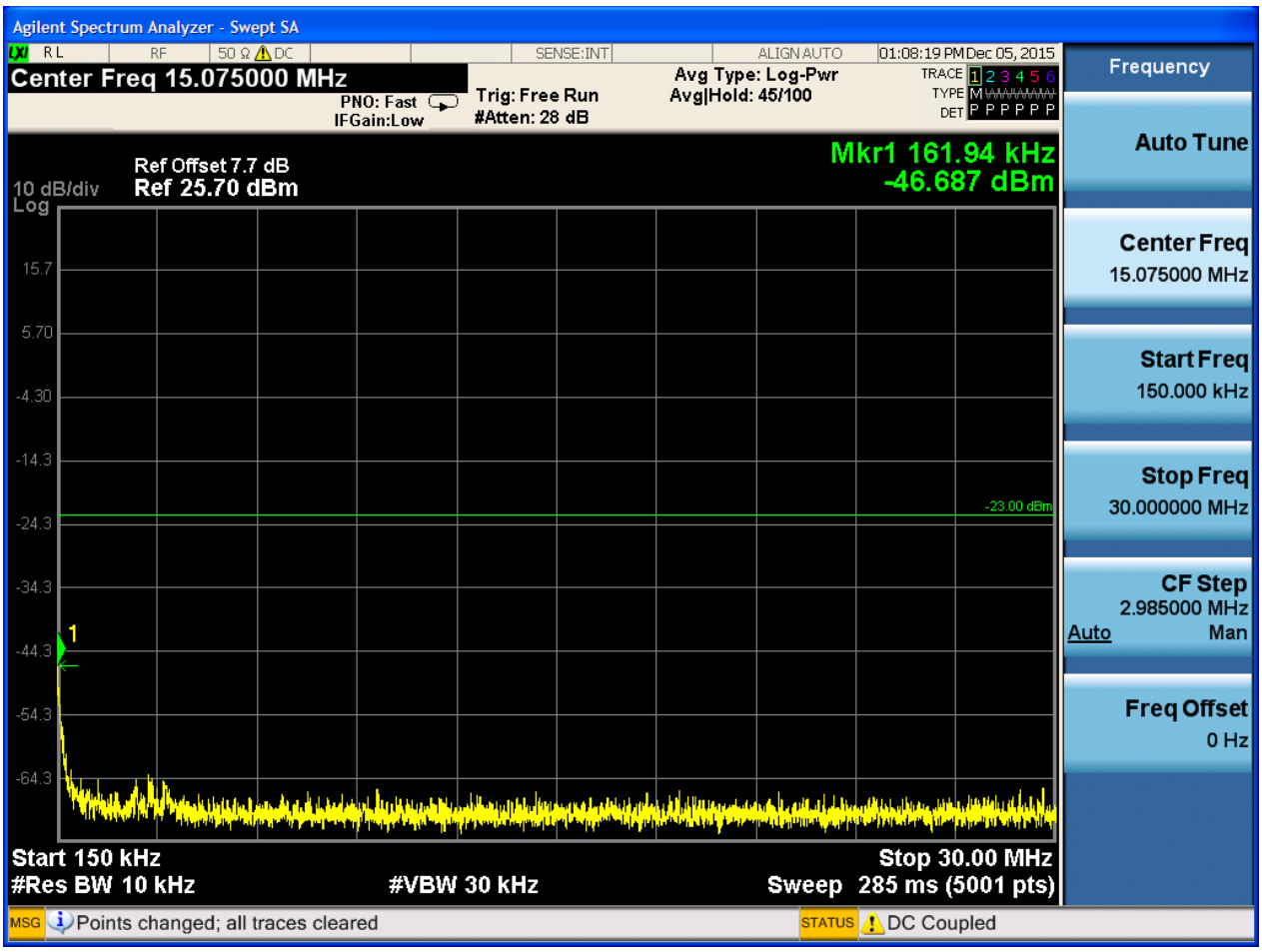

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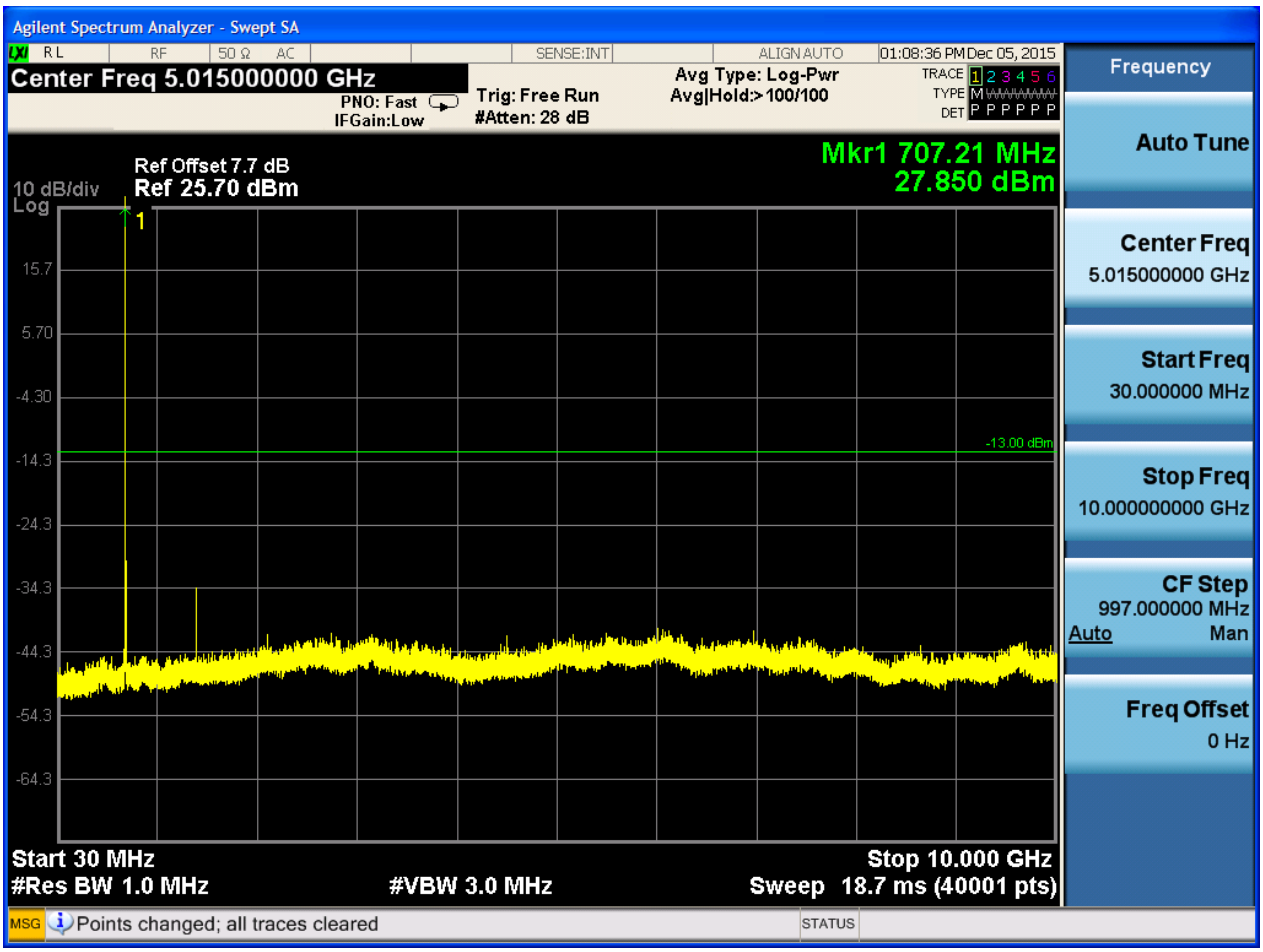

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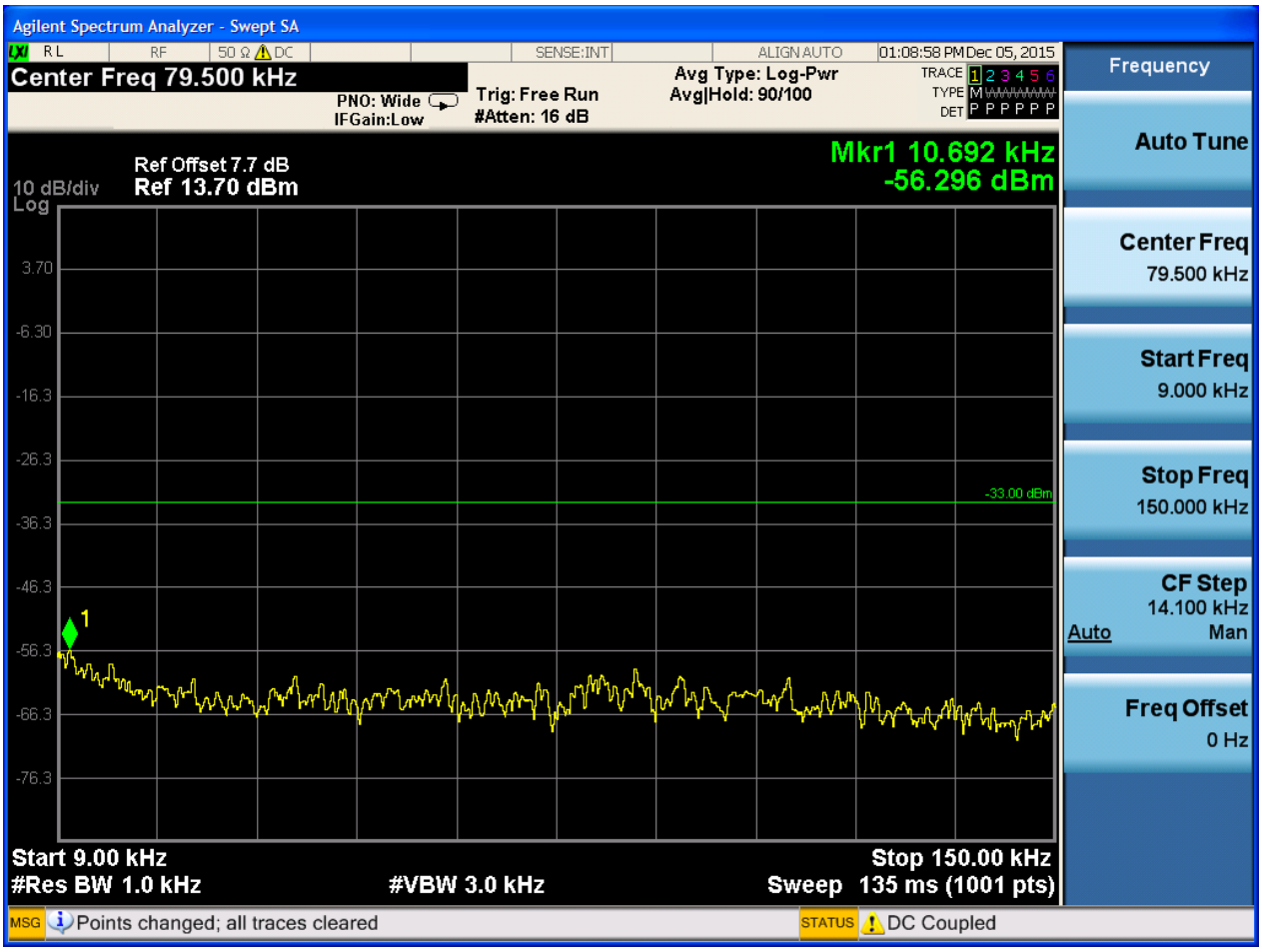
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0



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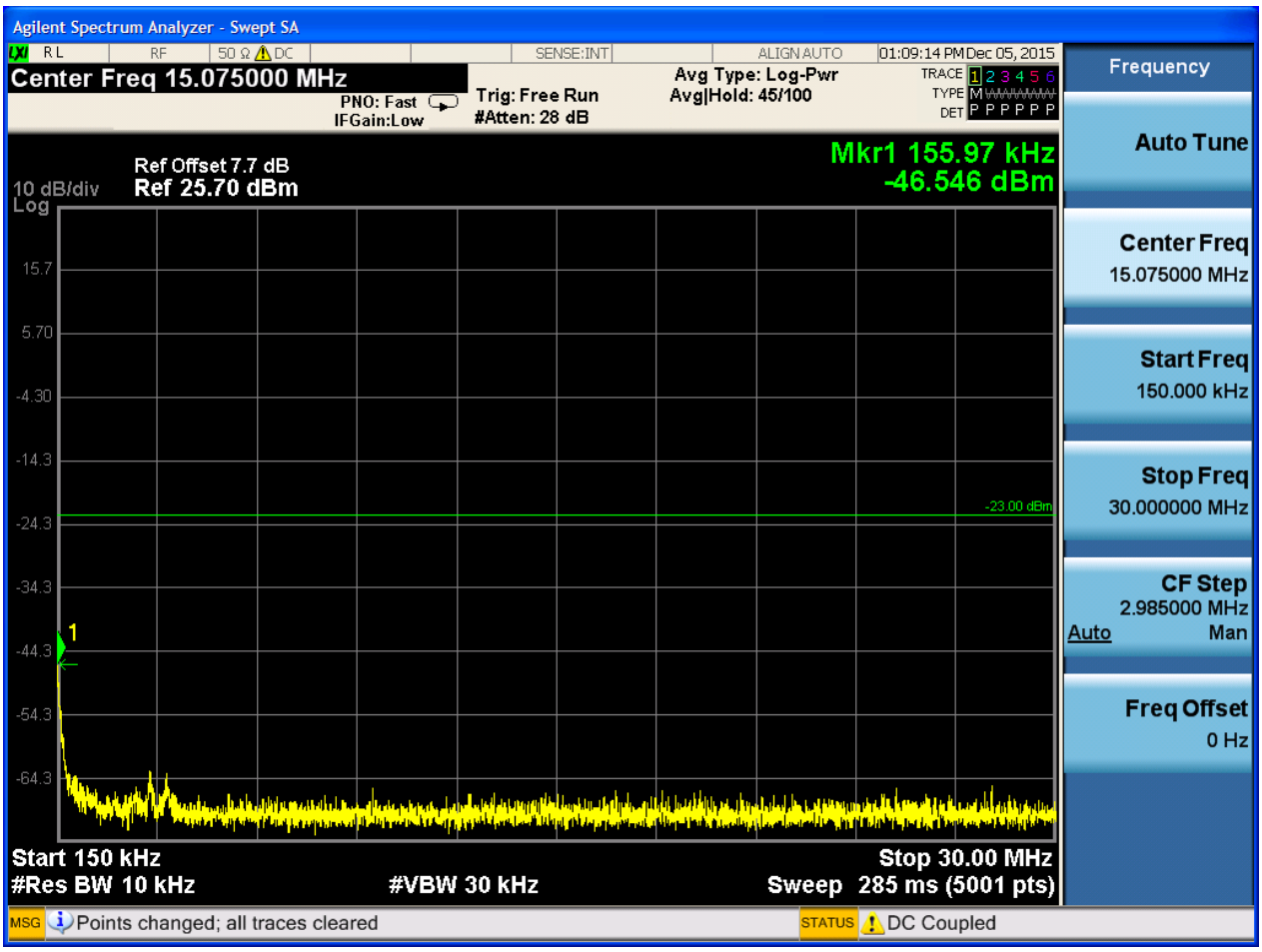

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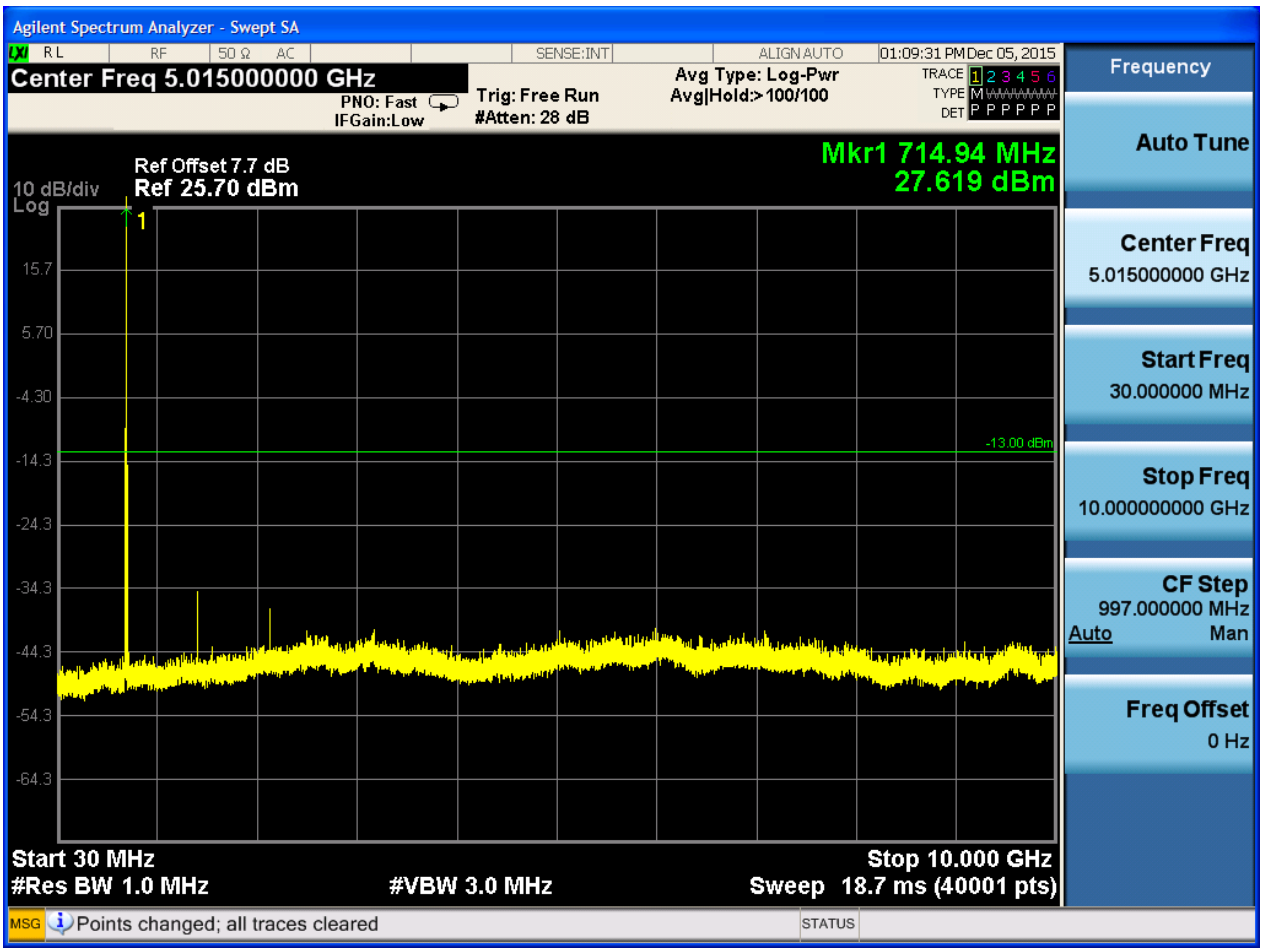

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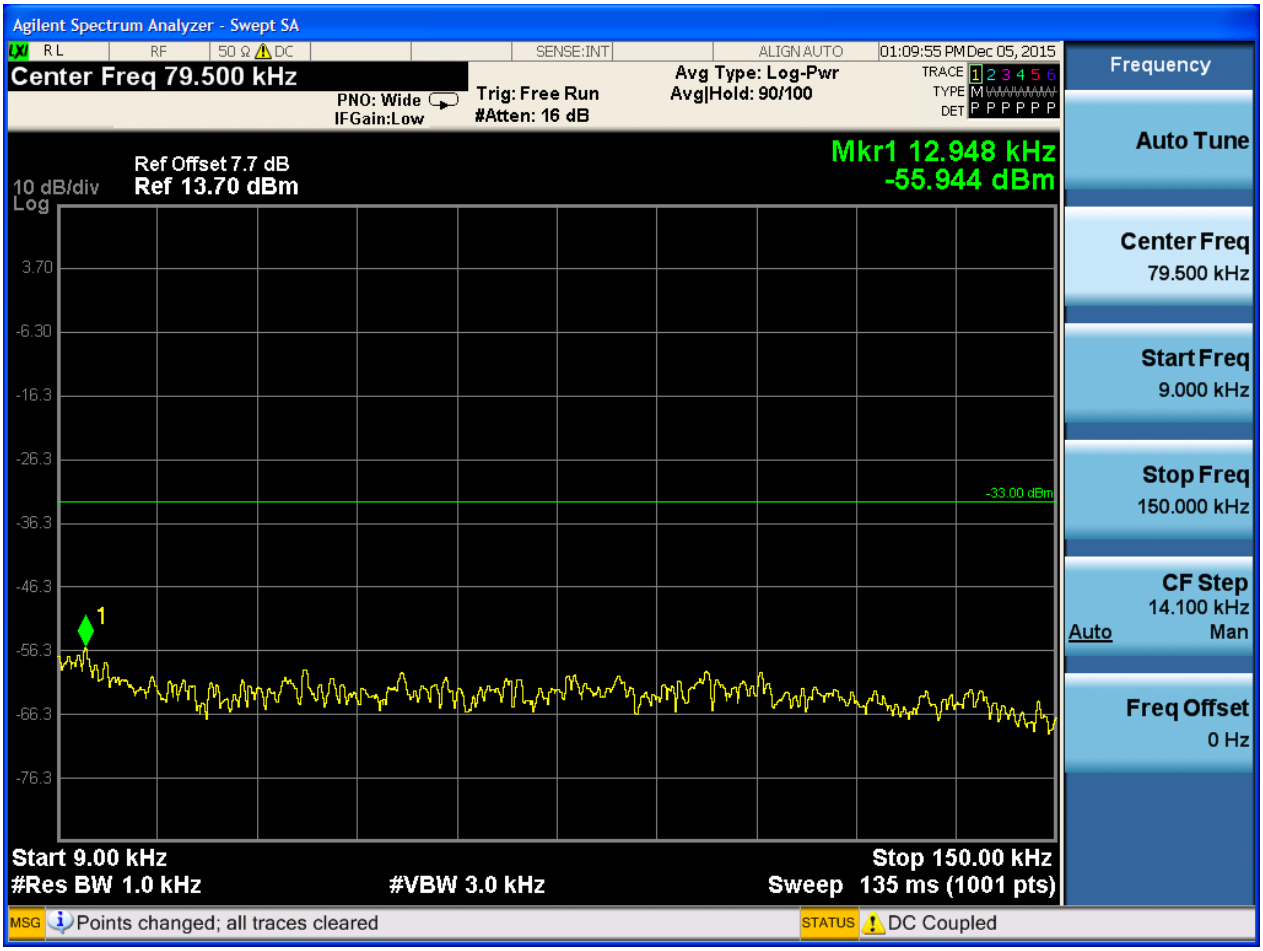
6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



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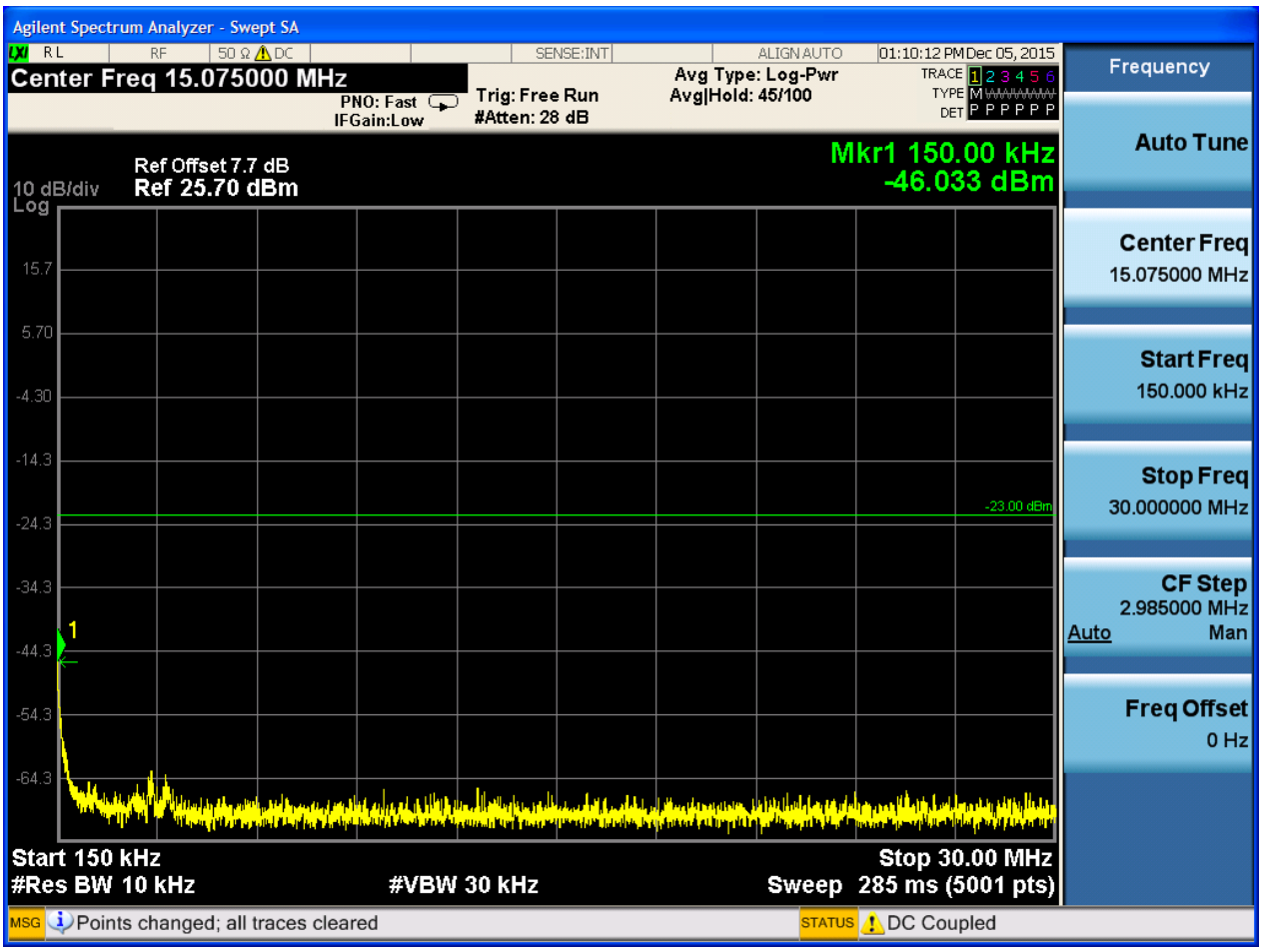

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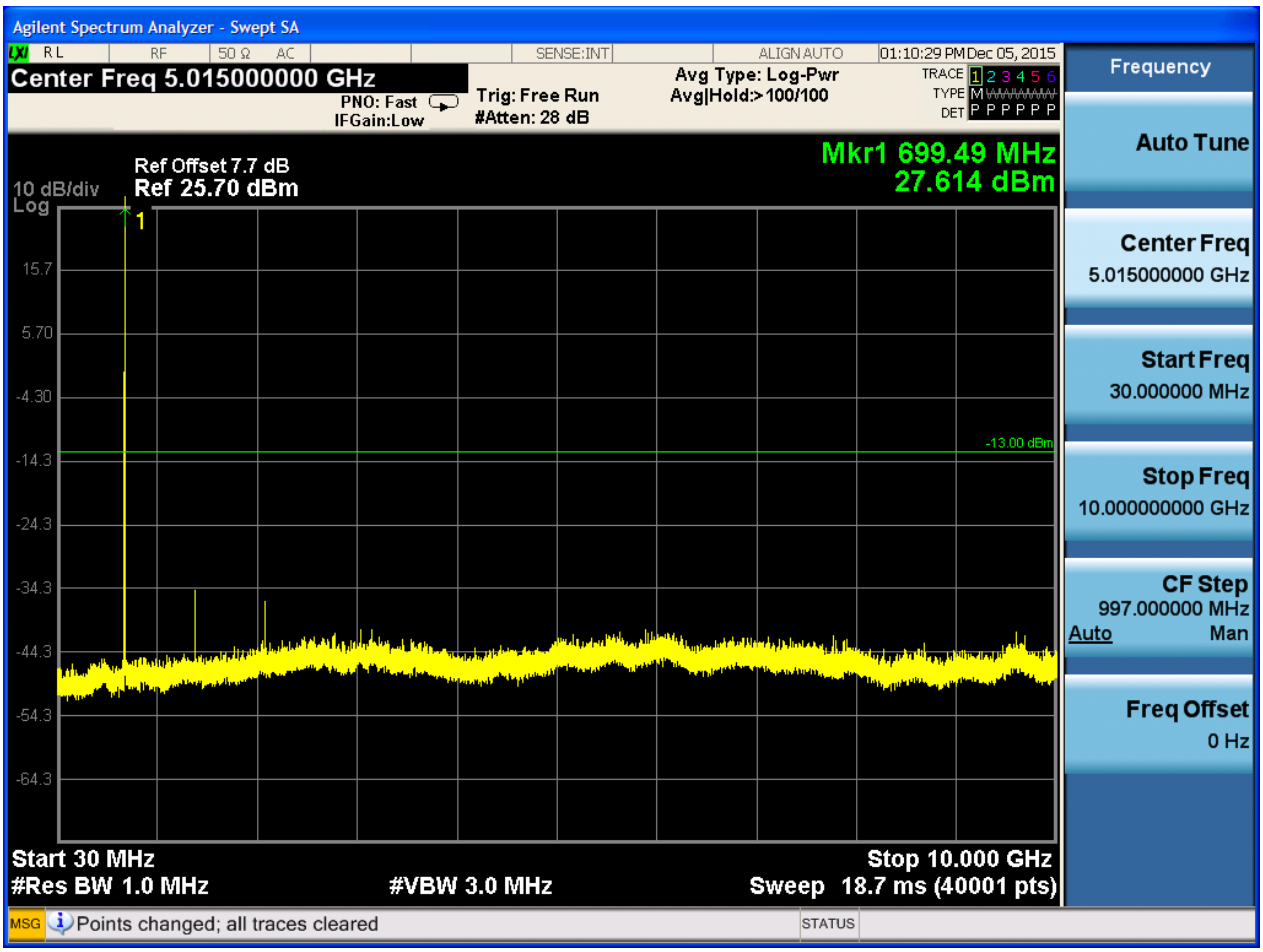

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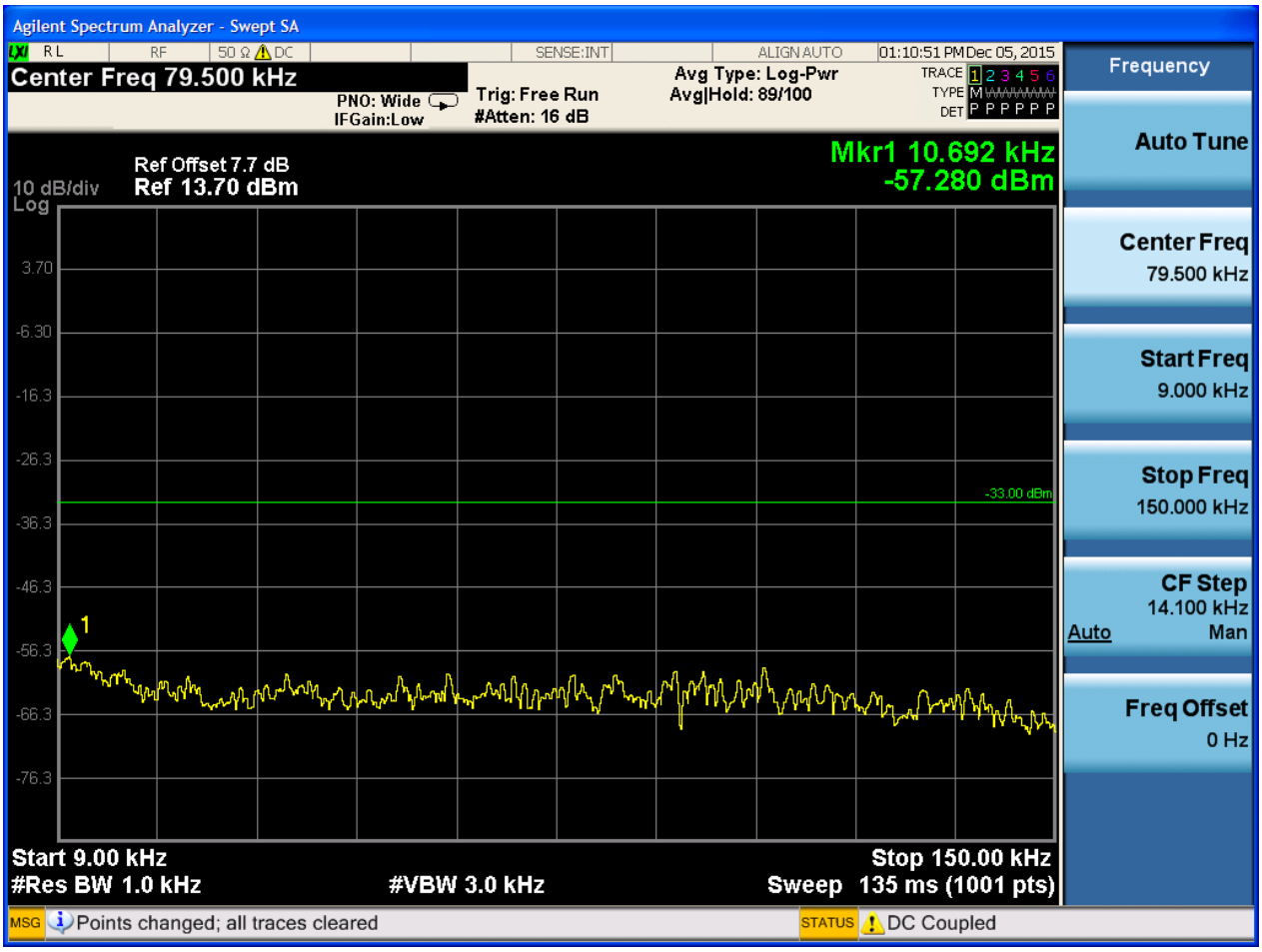
6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



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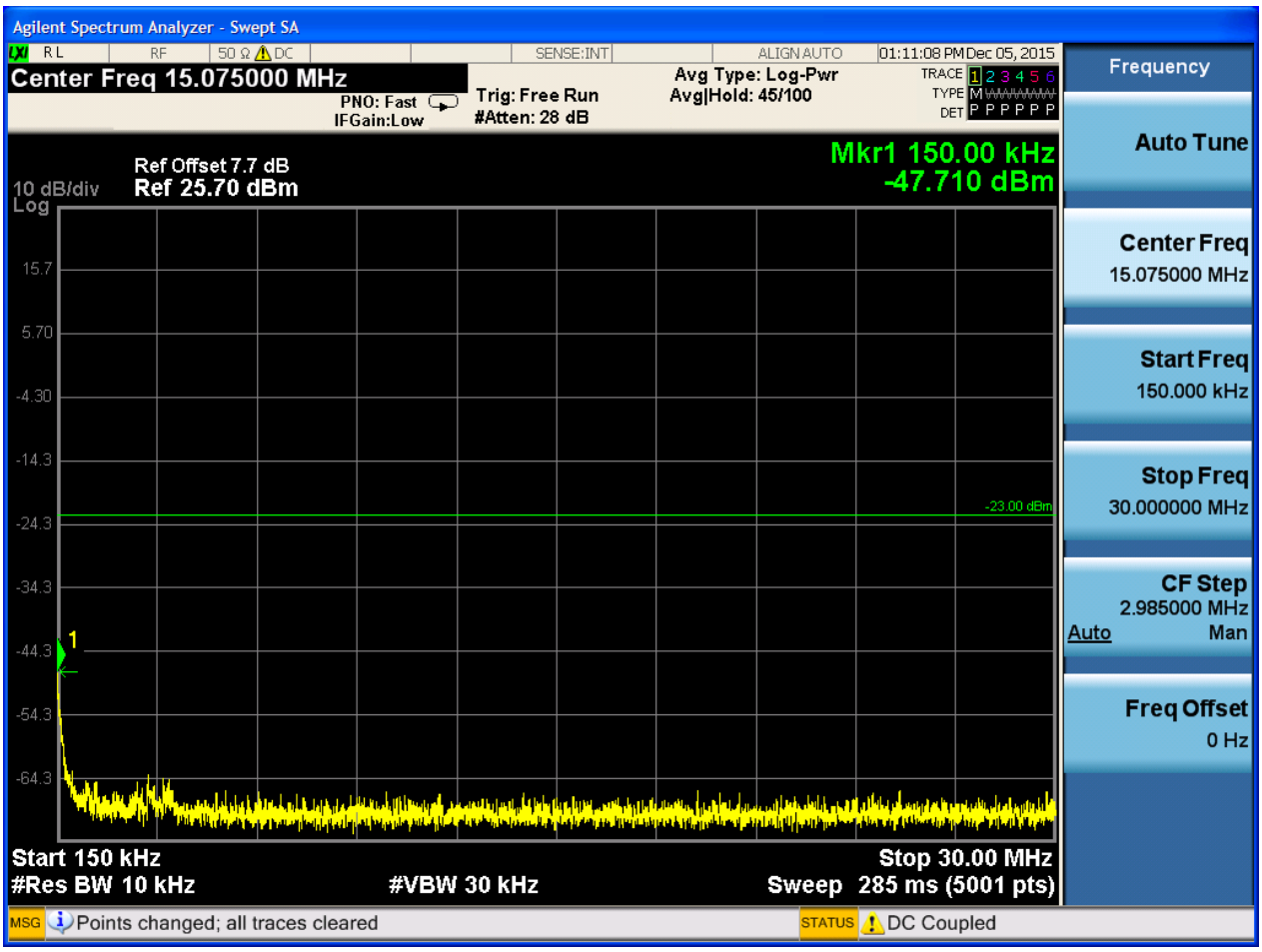

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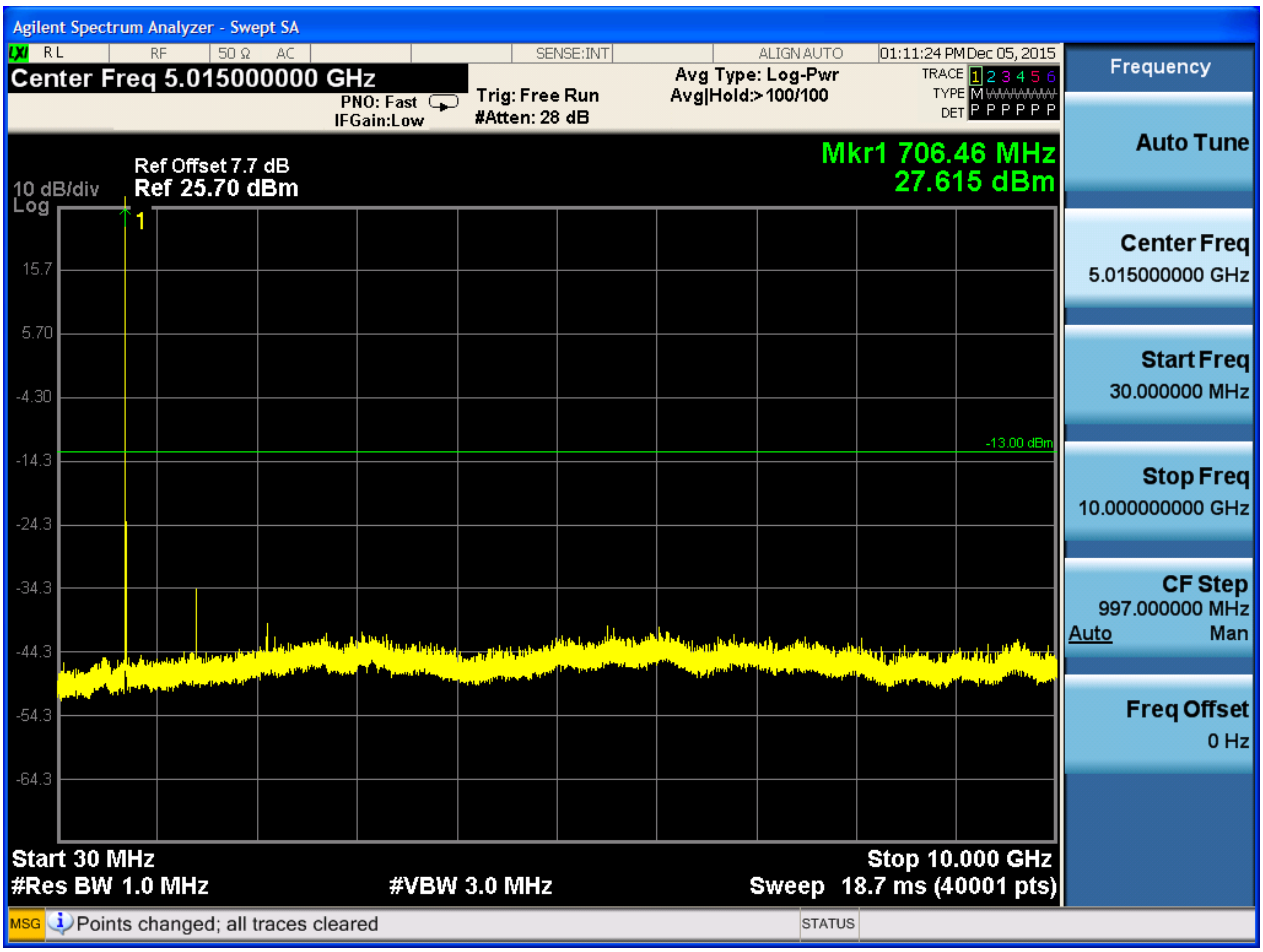

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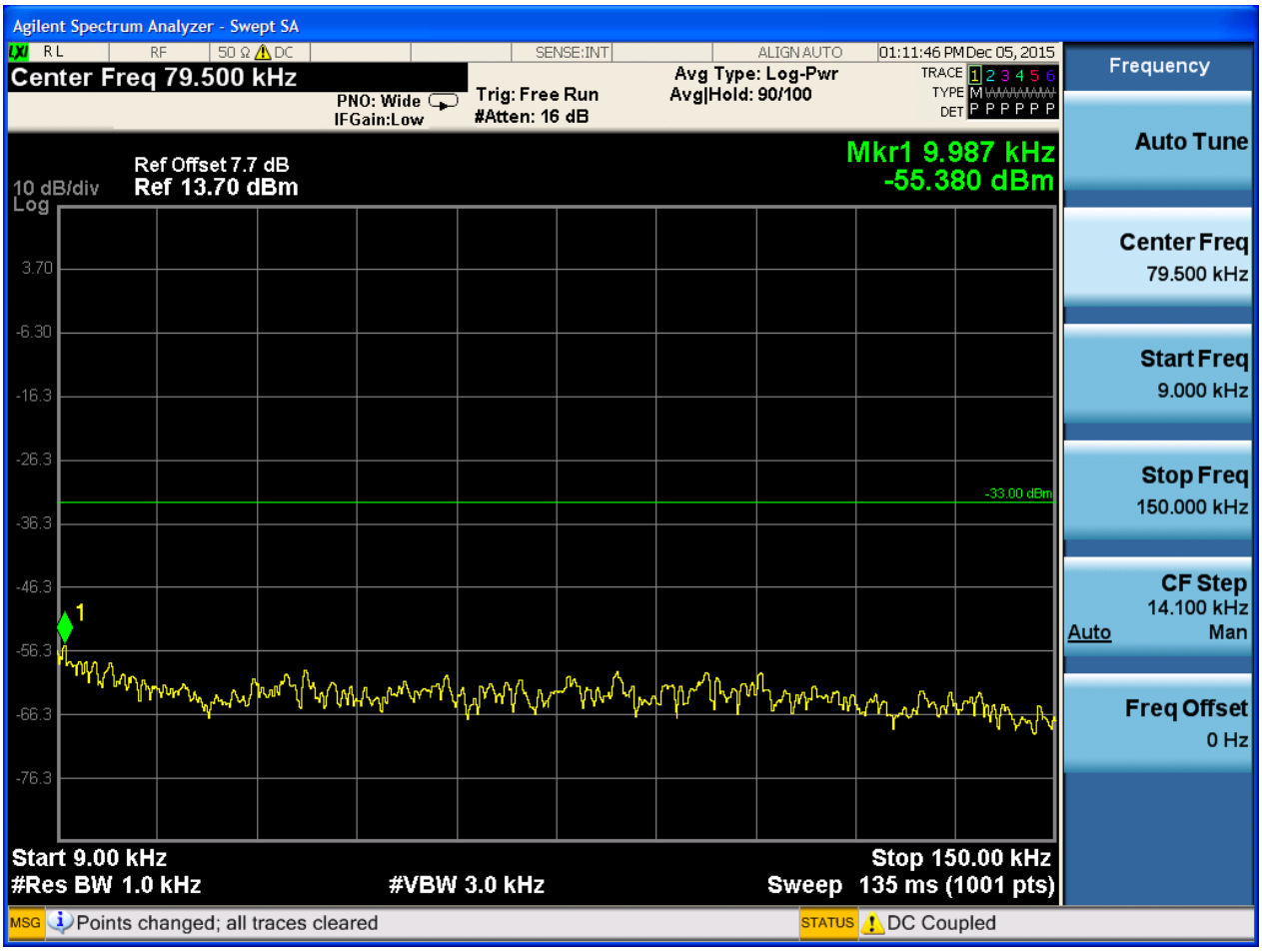
6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0



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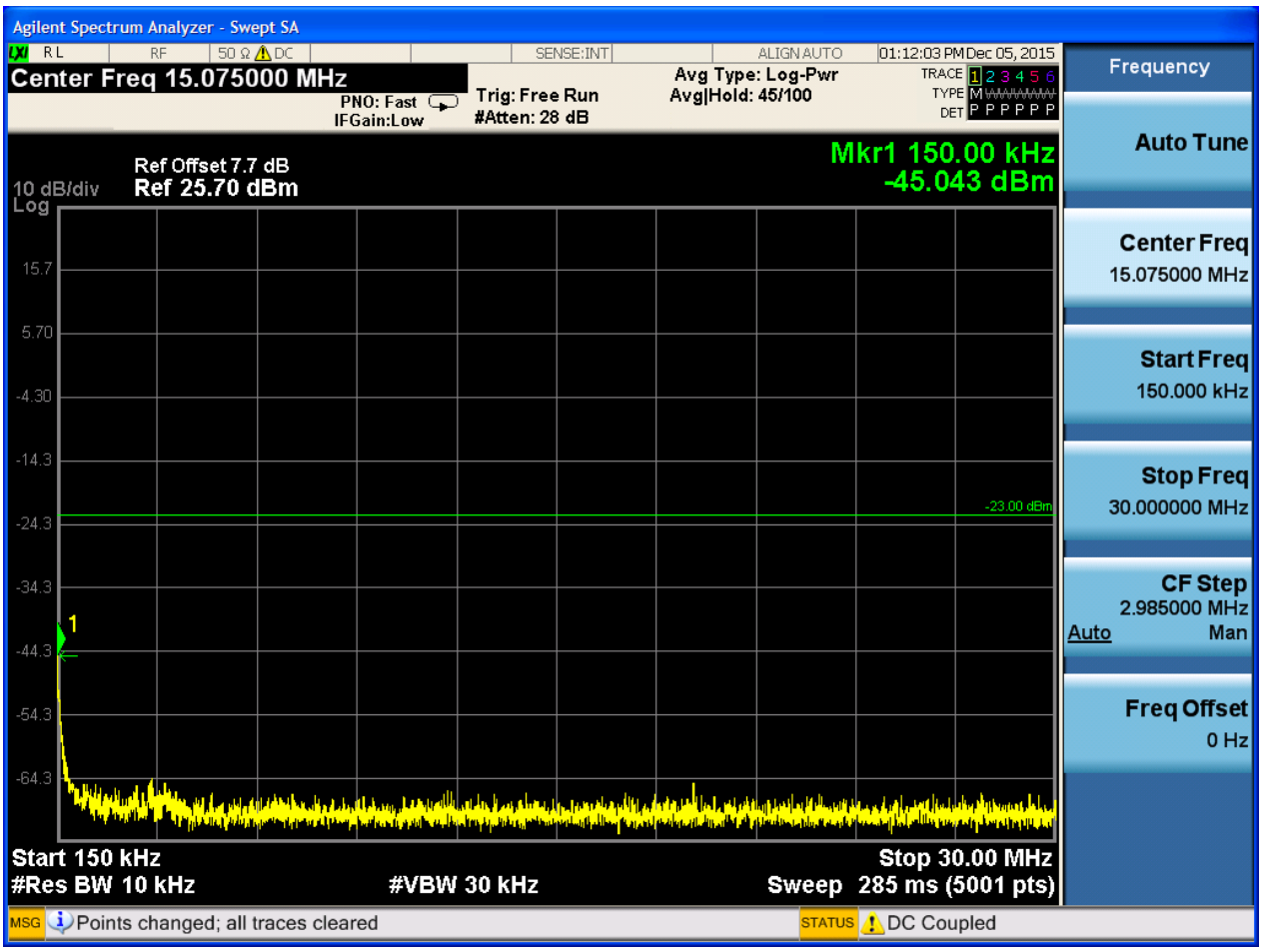

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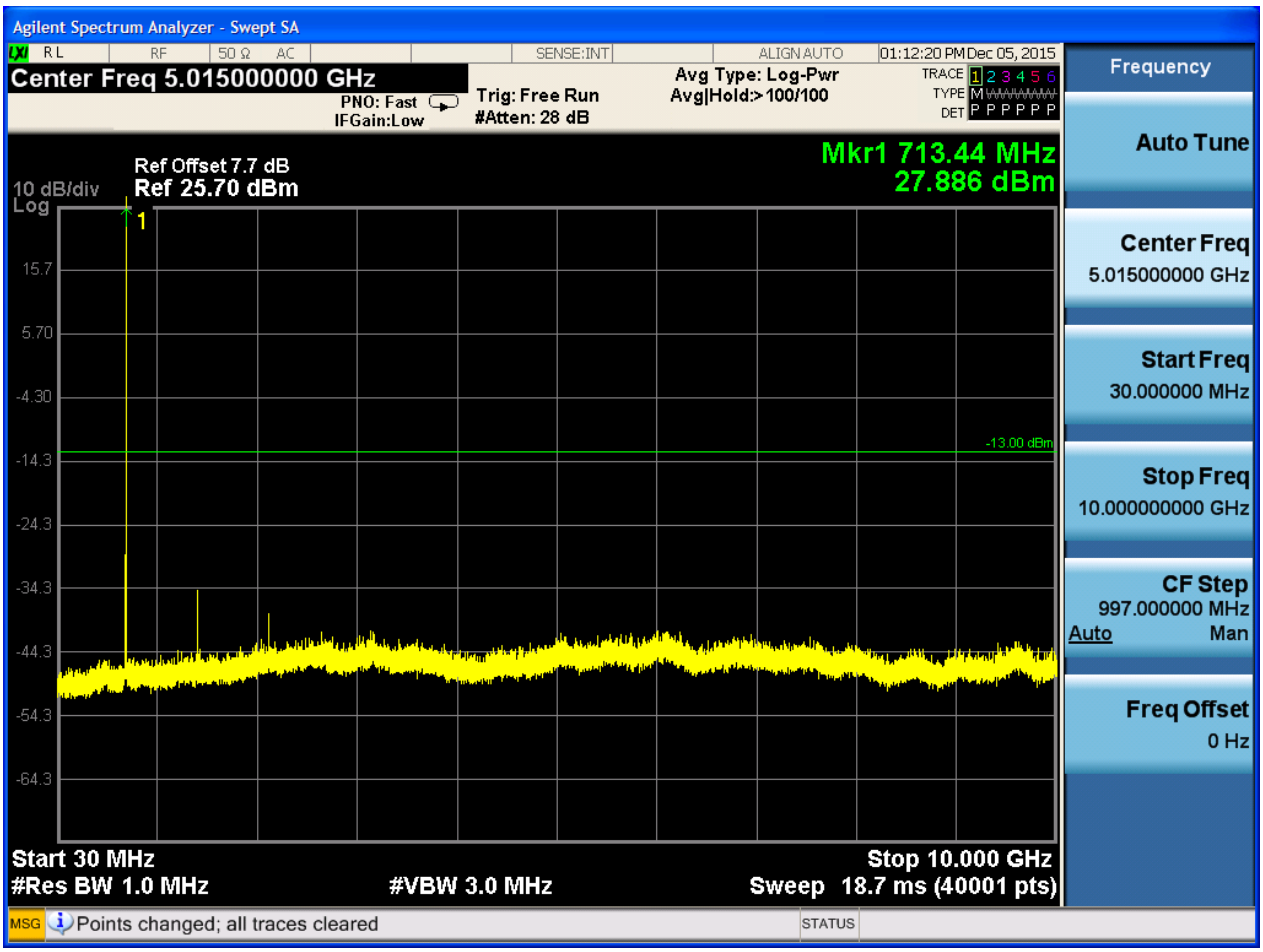

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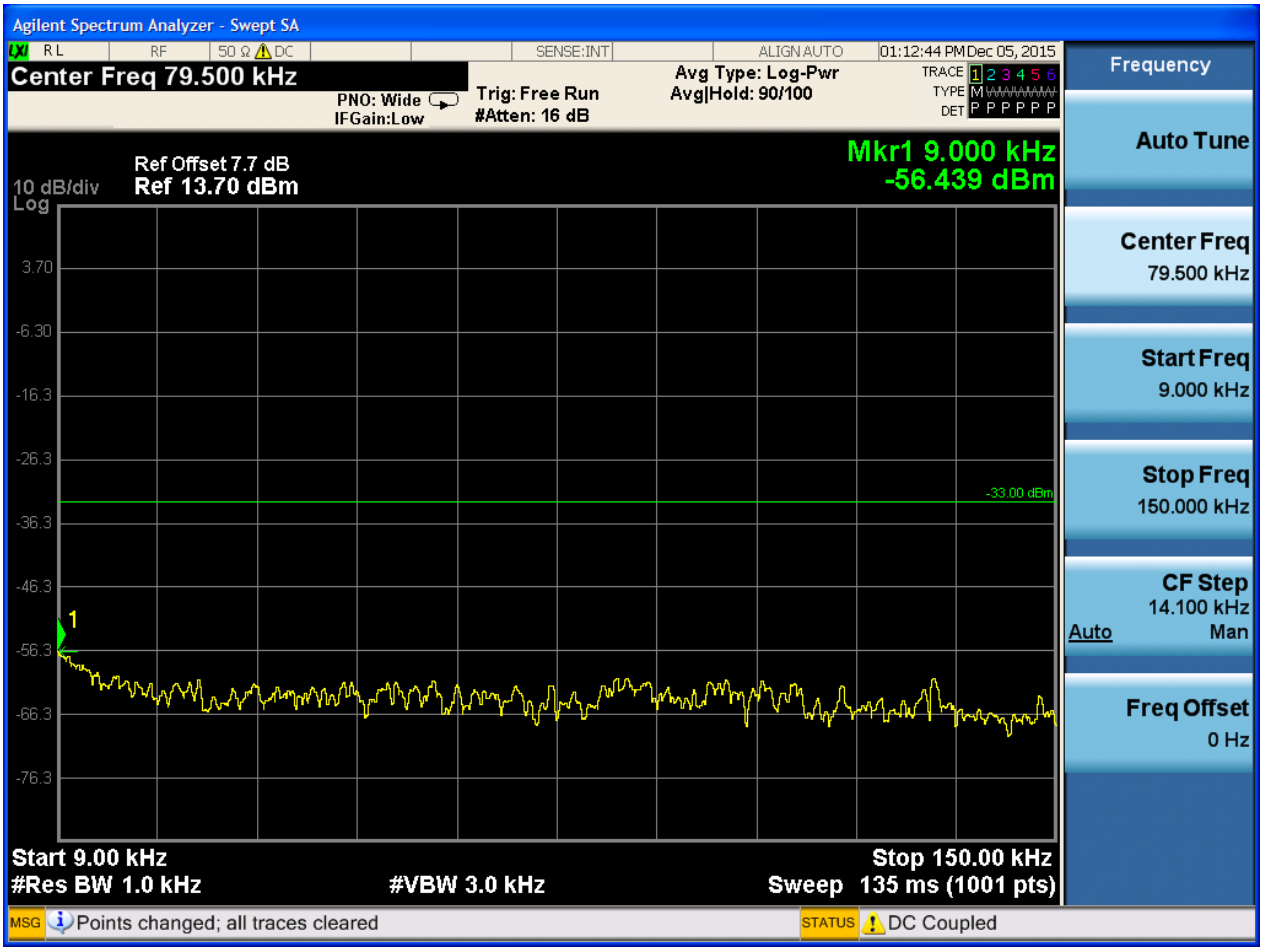
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



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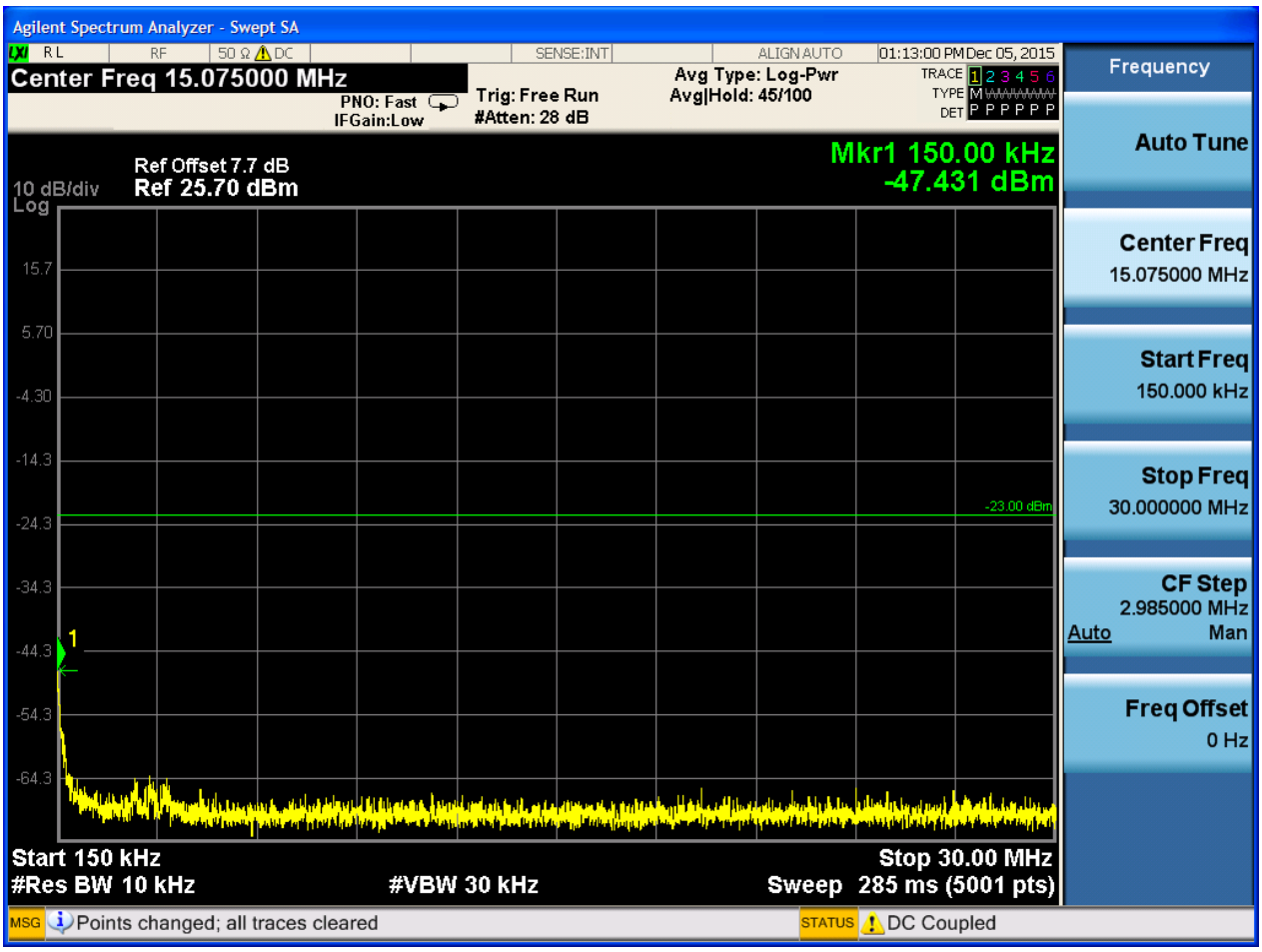

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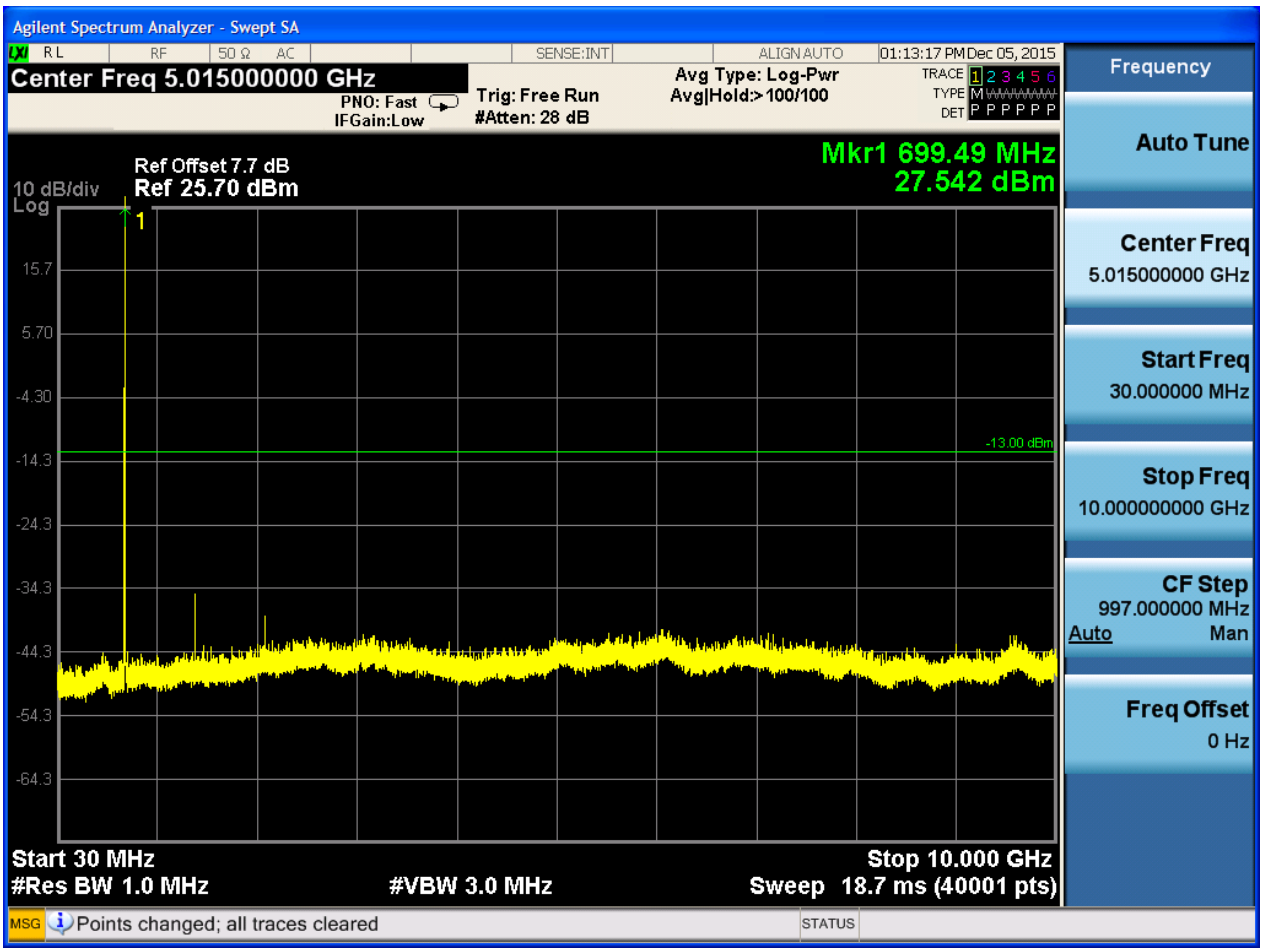

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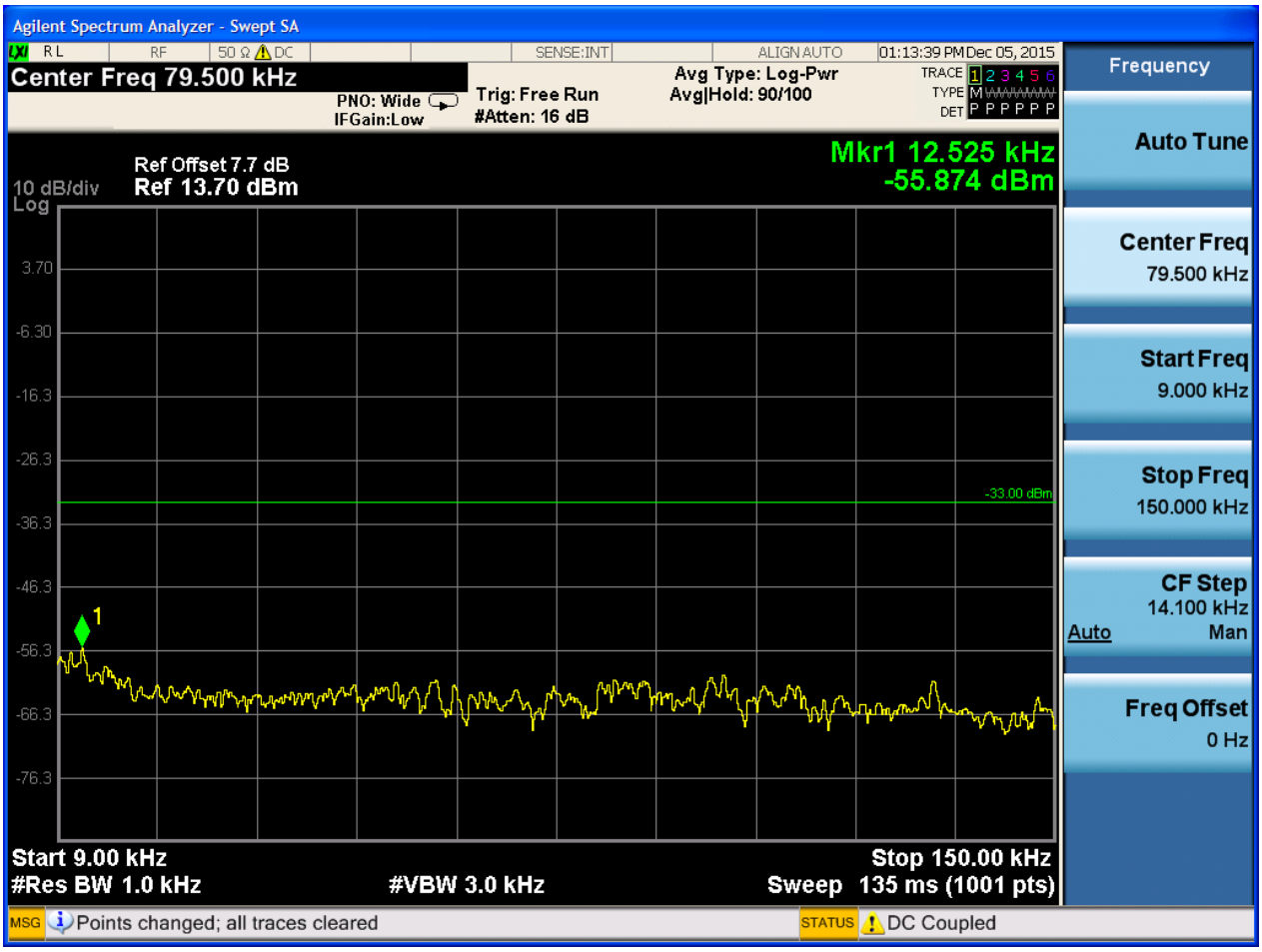
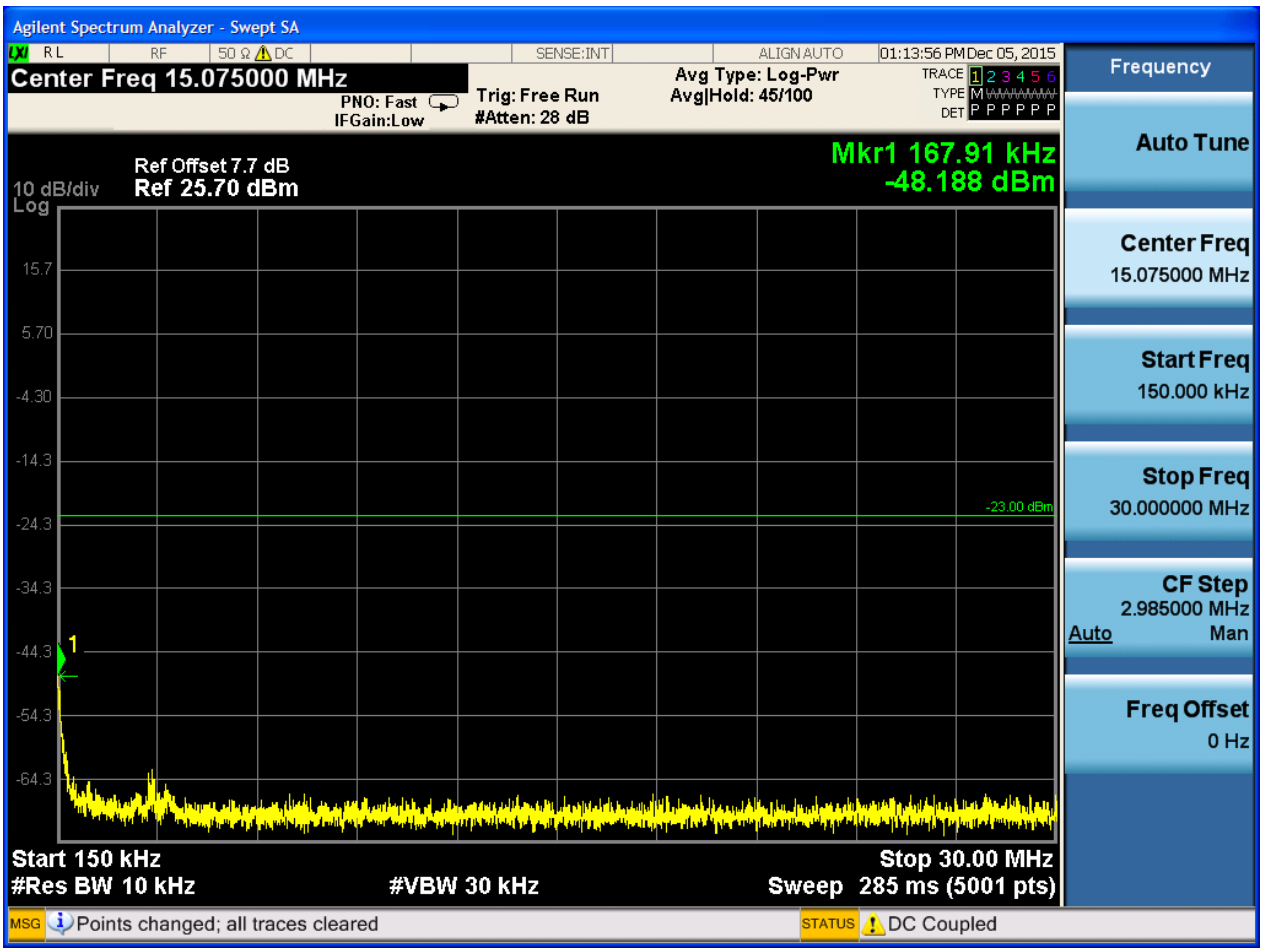
6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0





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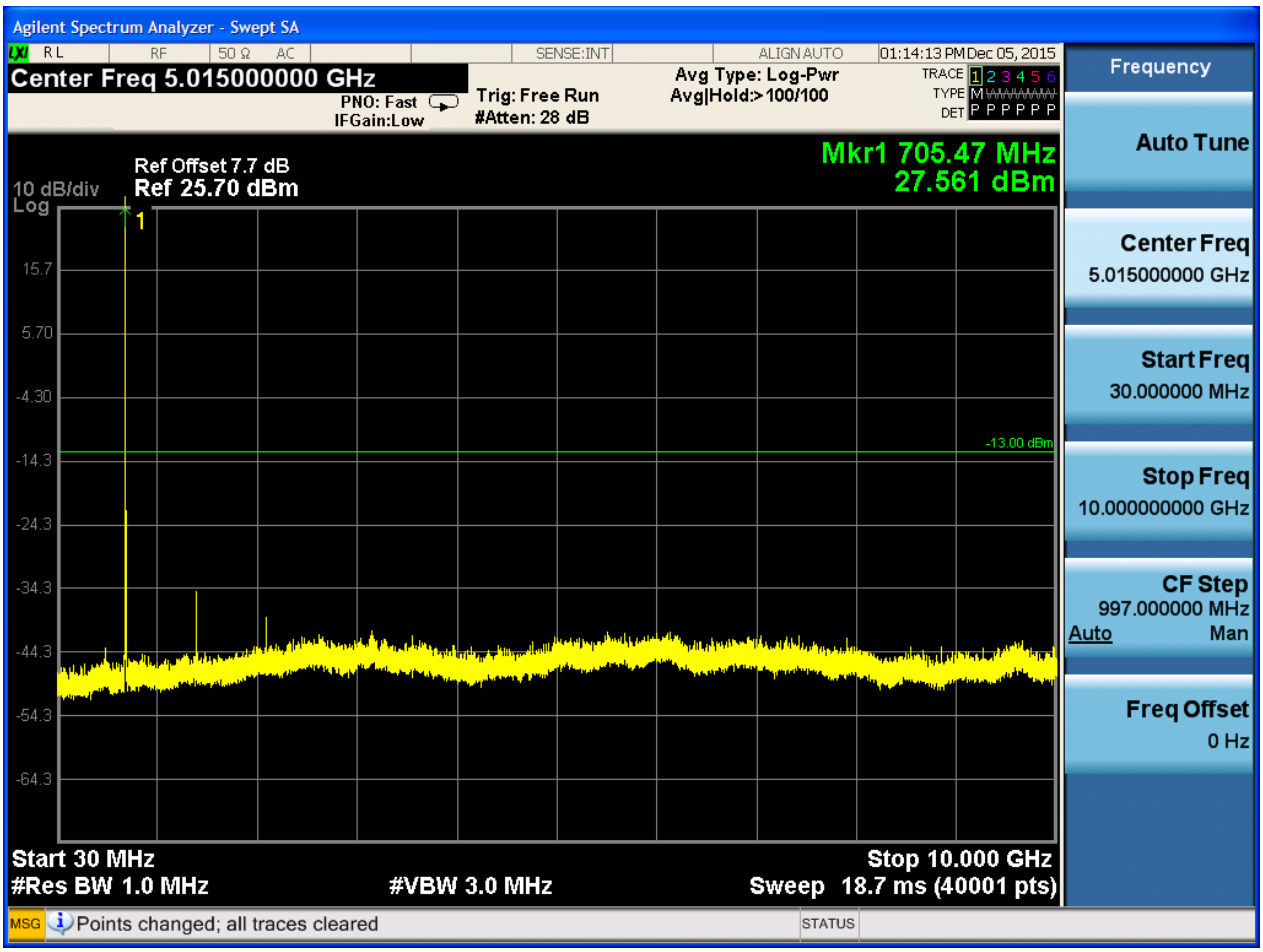

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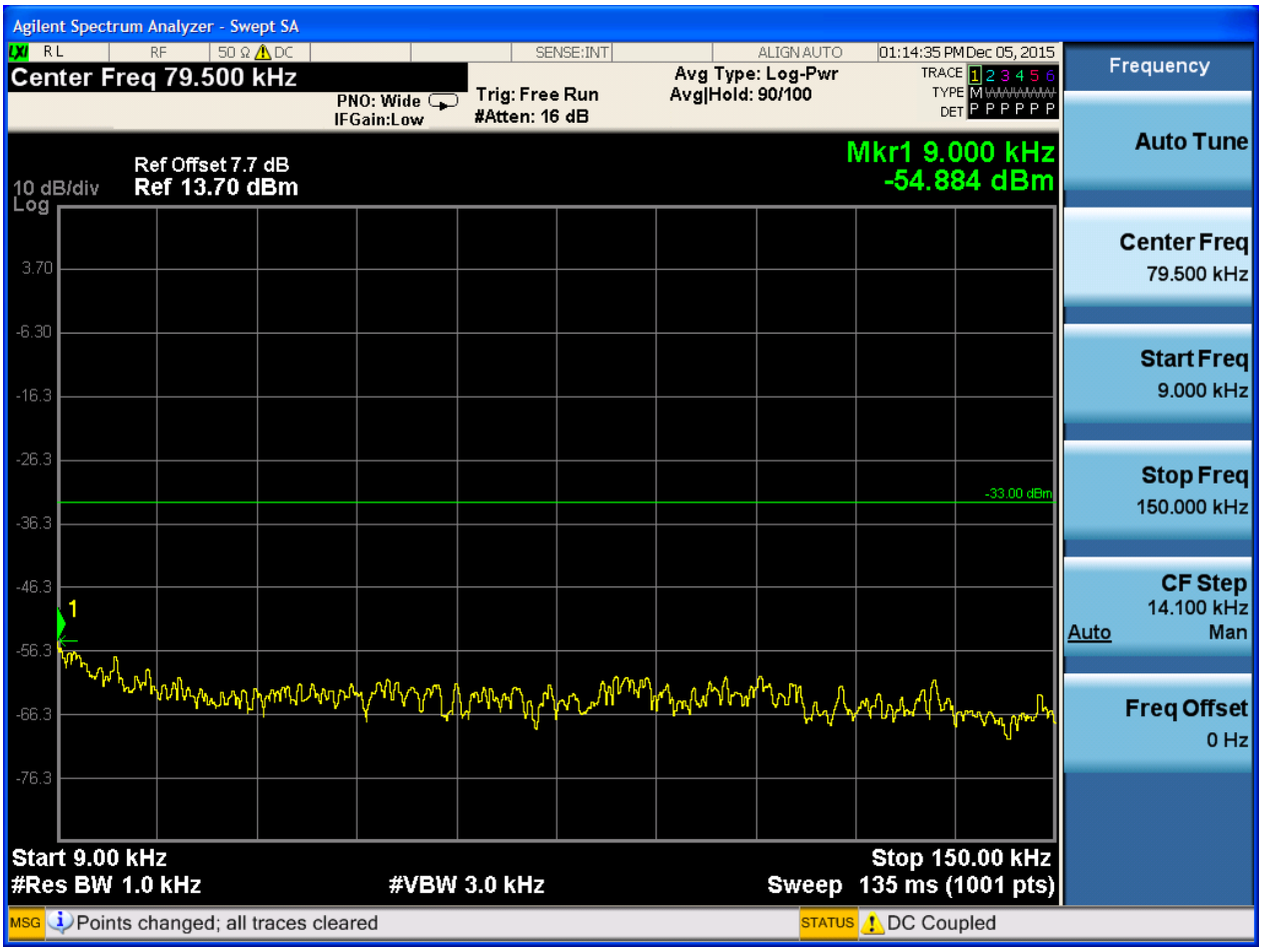
6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0



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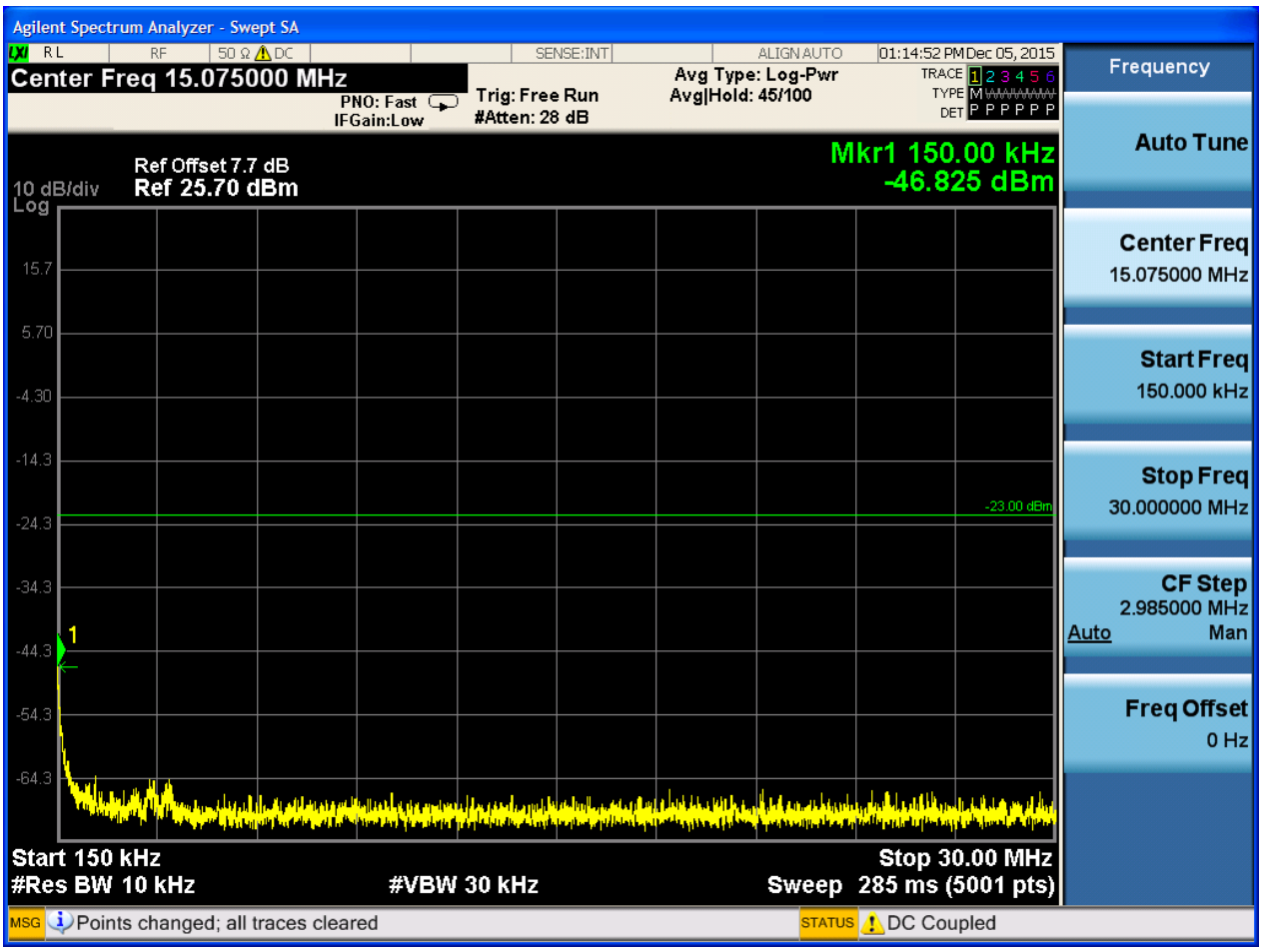

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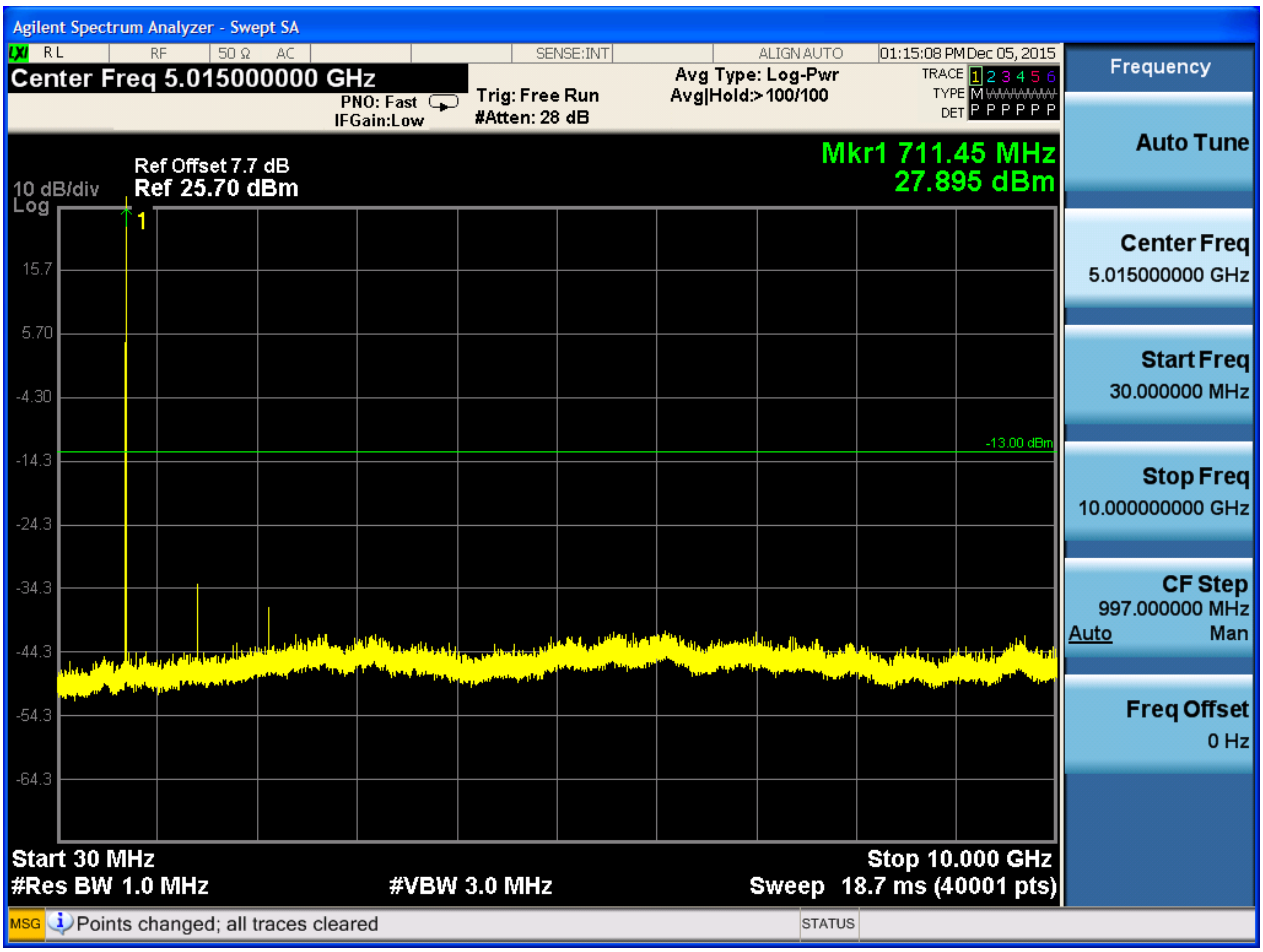

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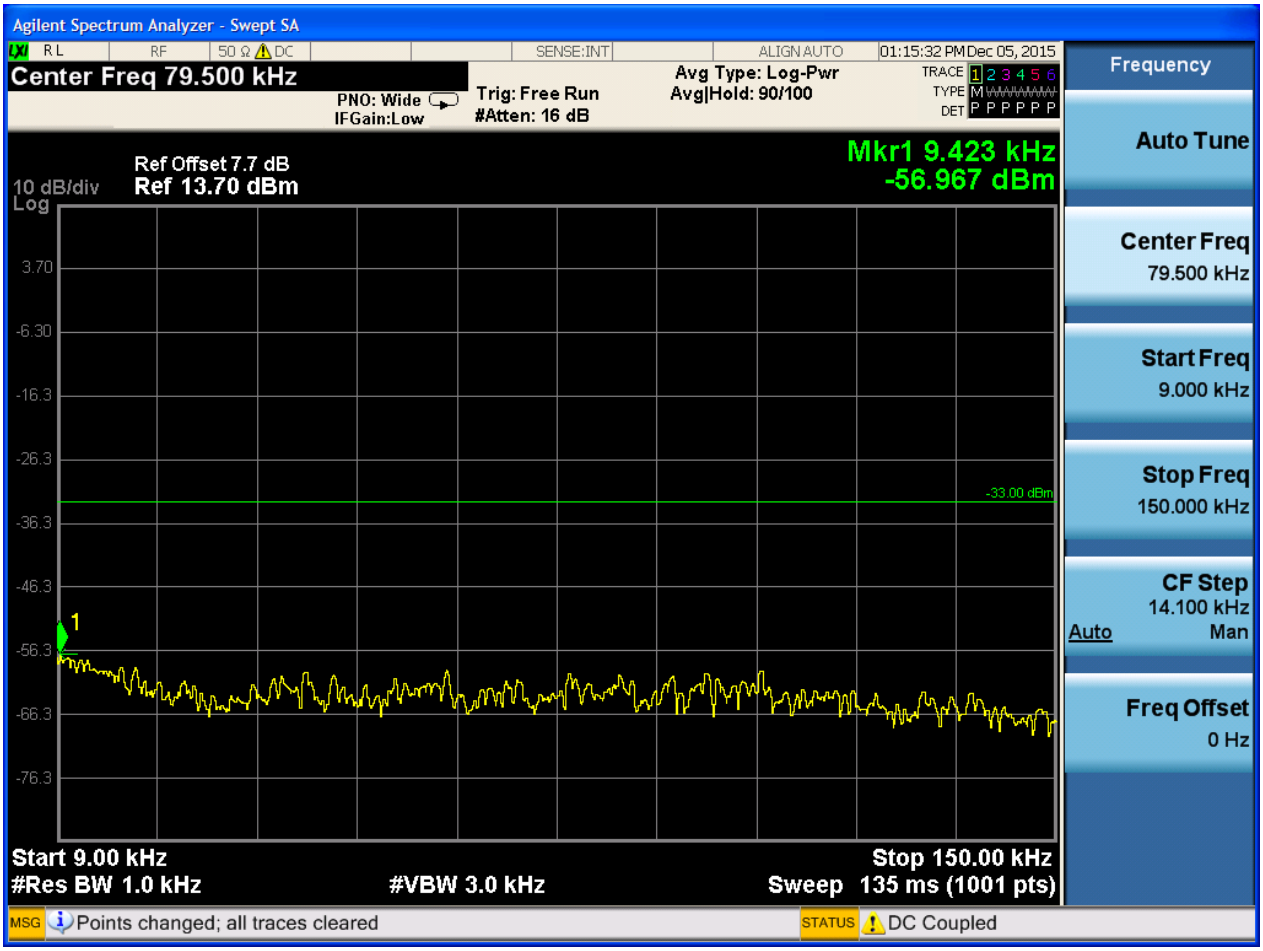
6.1.1.1.4 Test Bandwidth = 10

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



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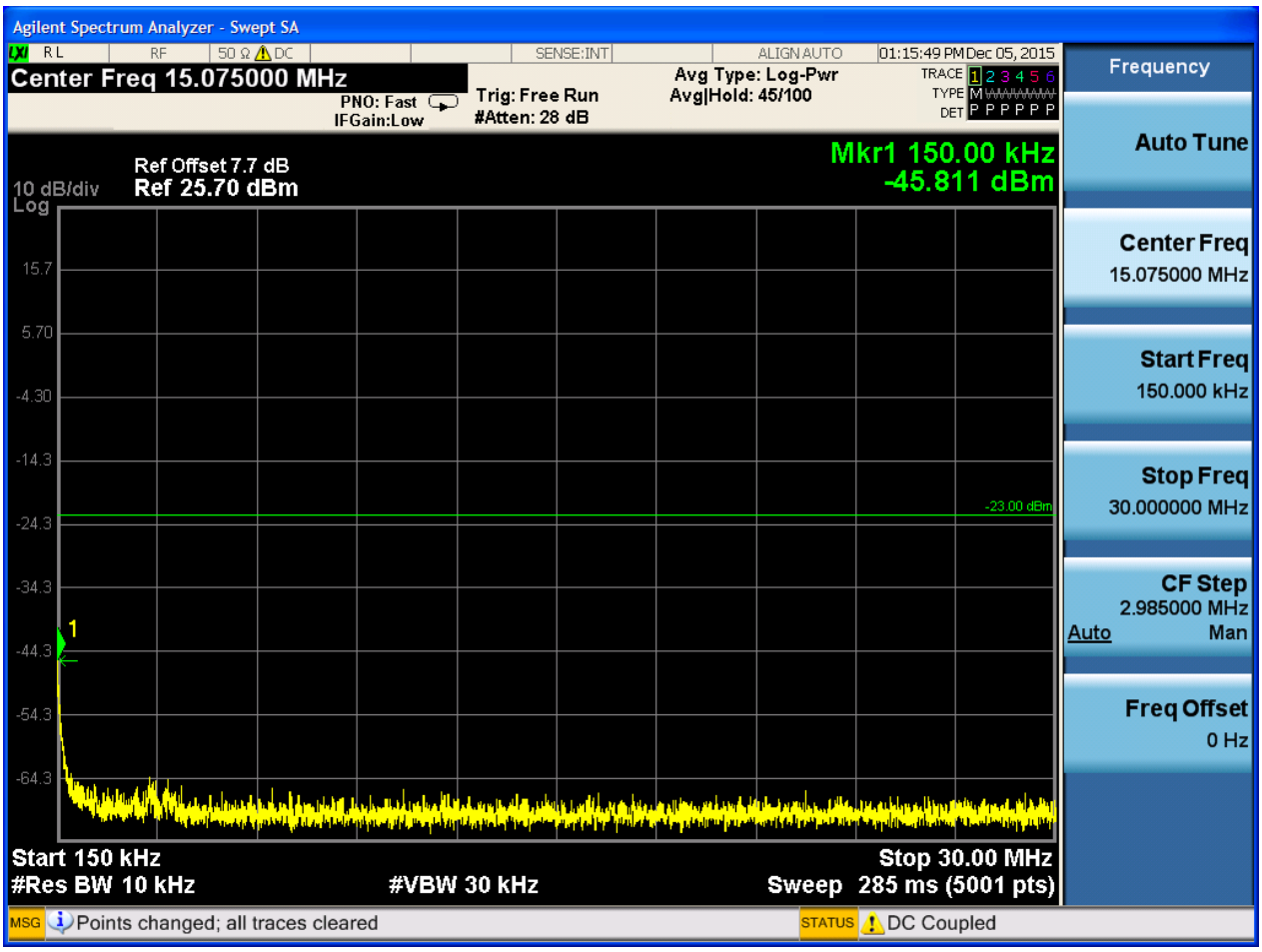

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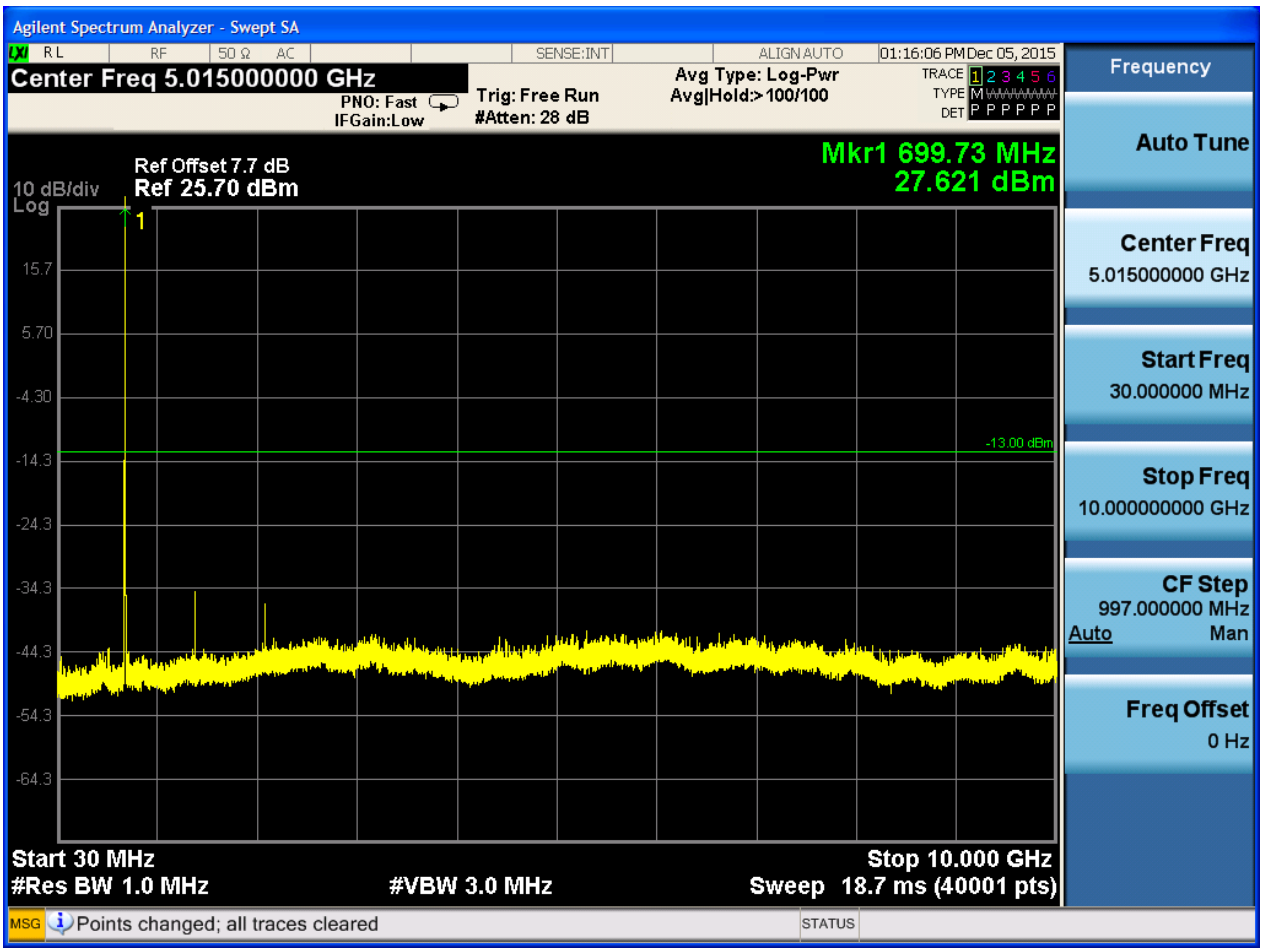

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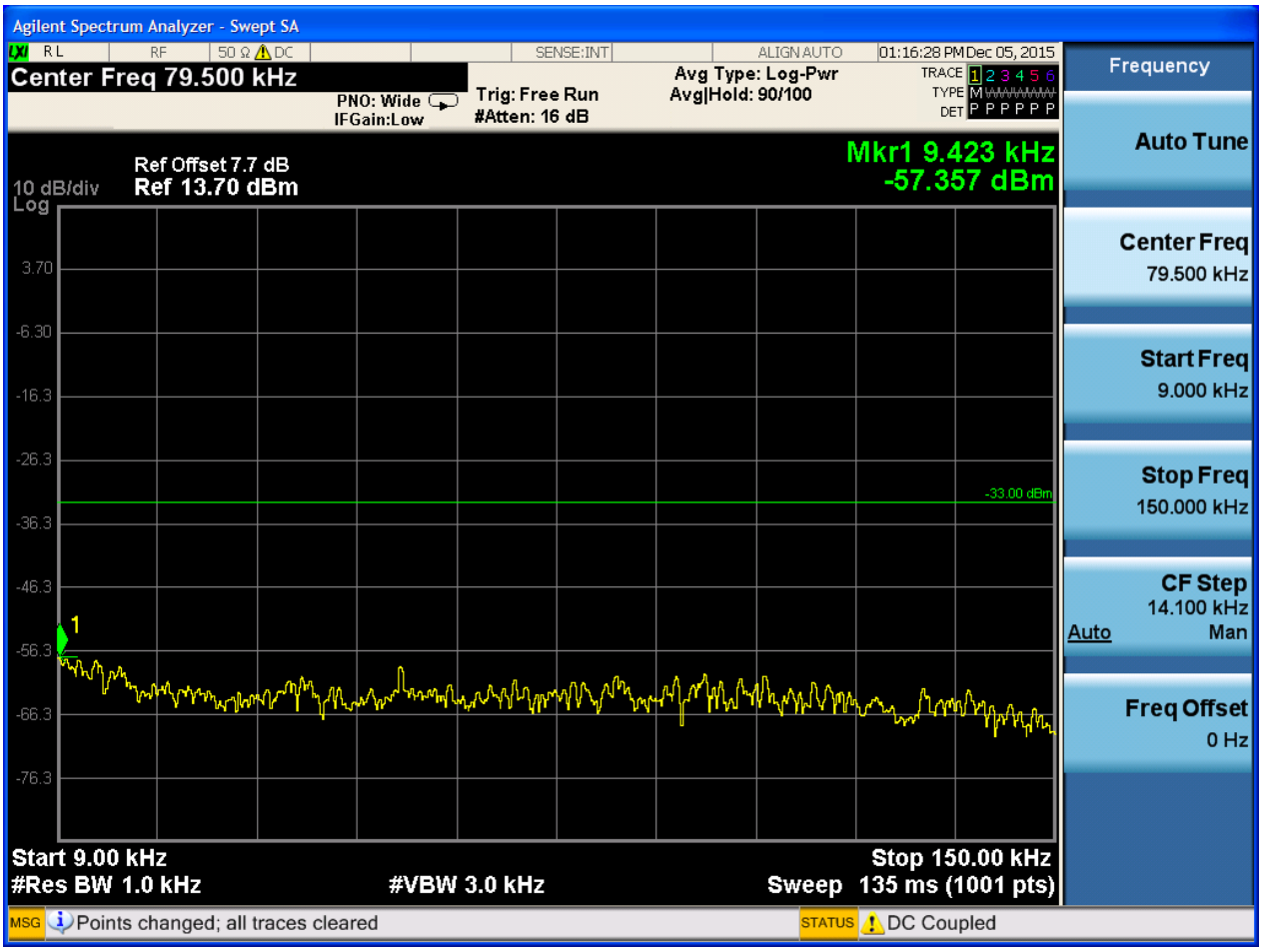
6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



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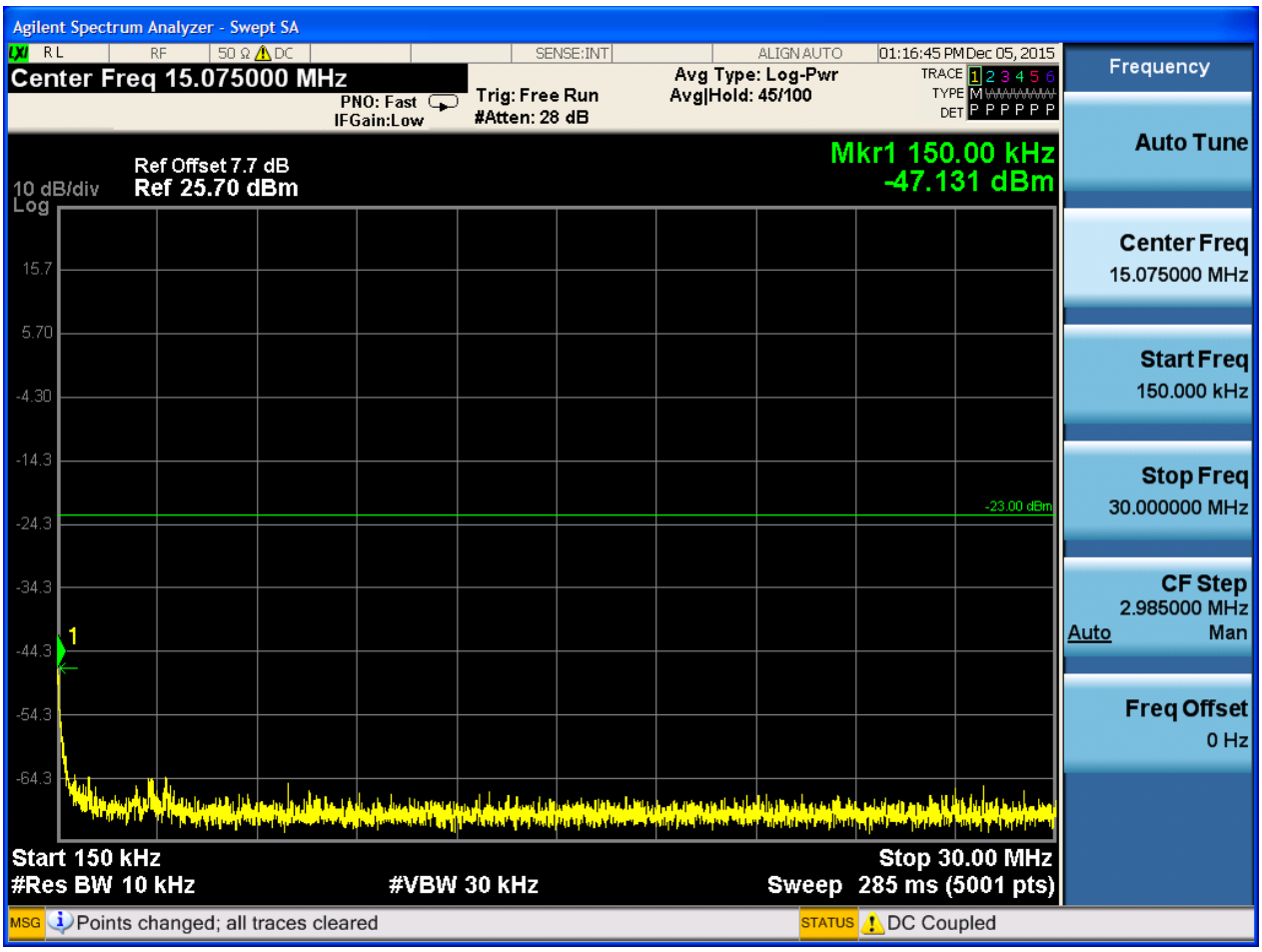

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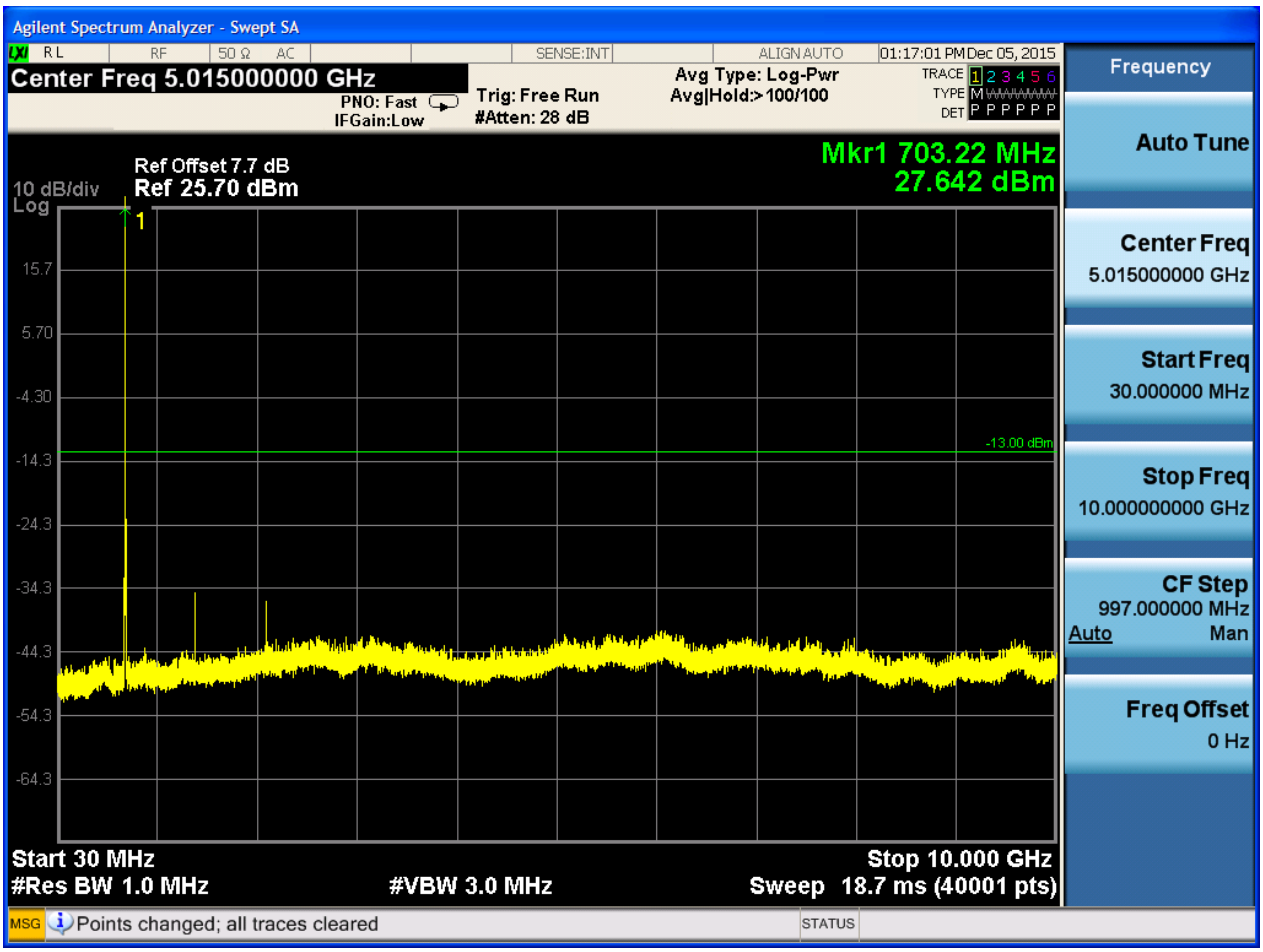

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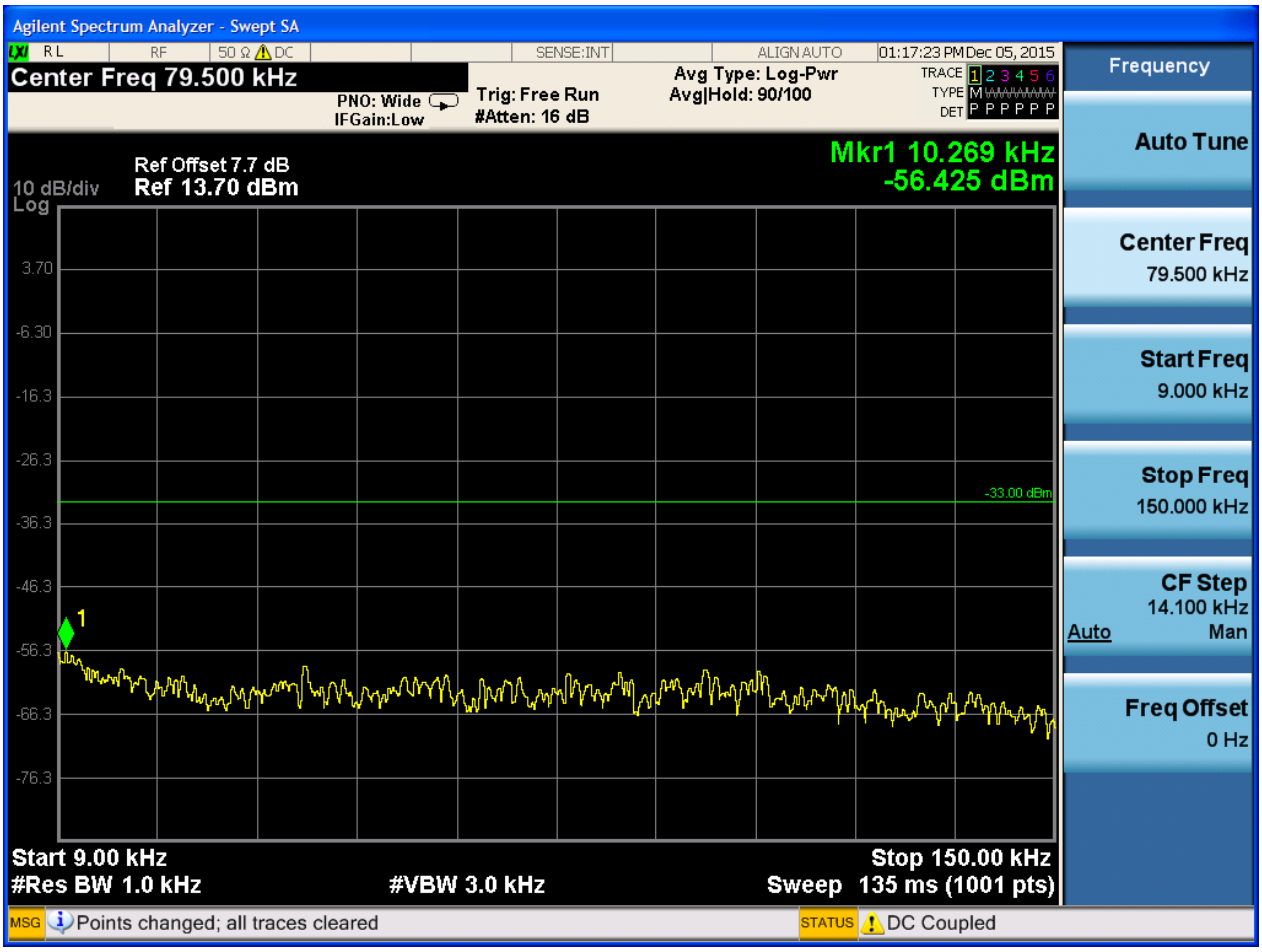
6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0



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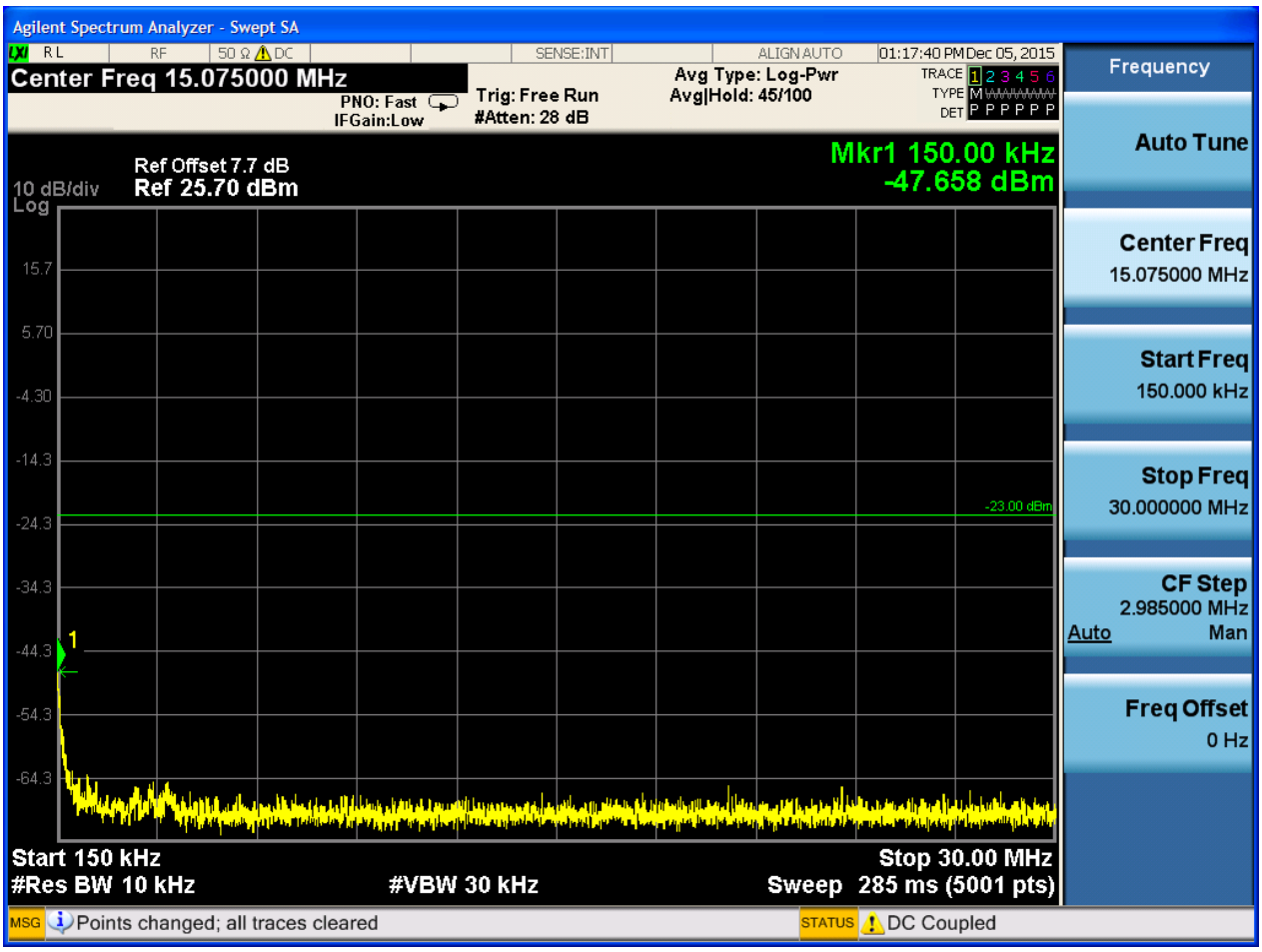

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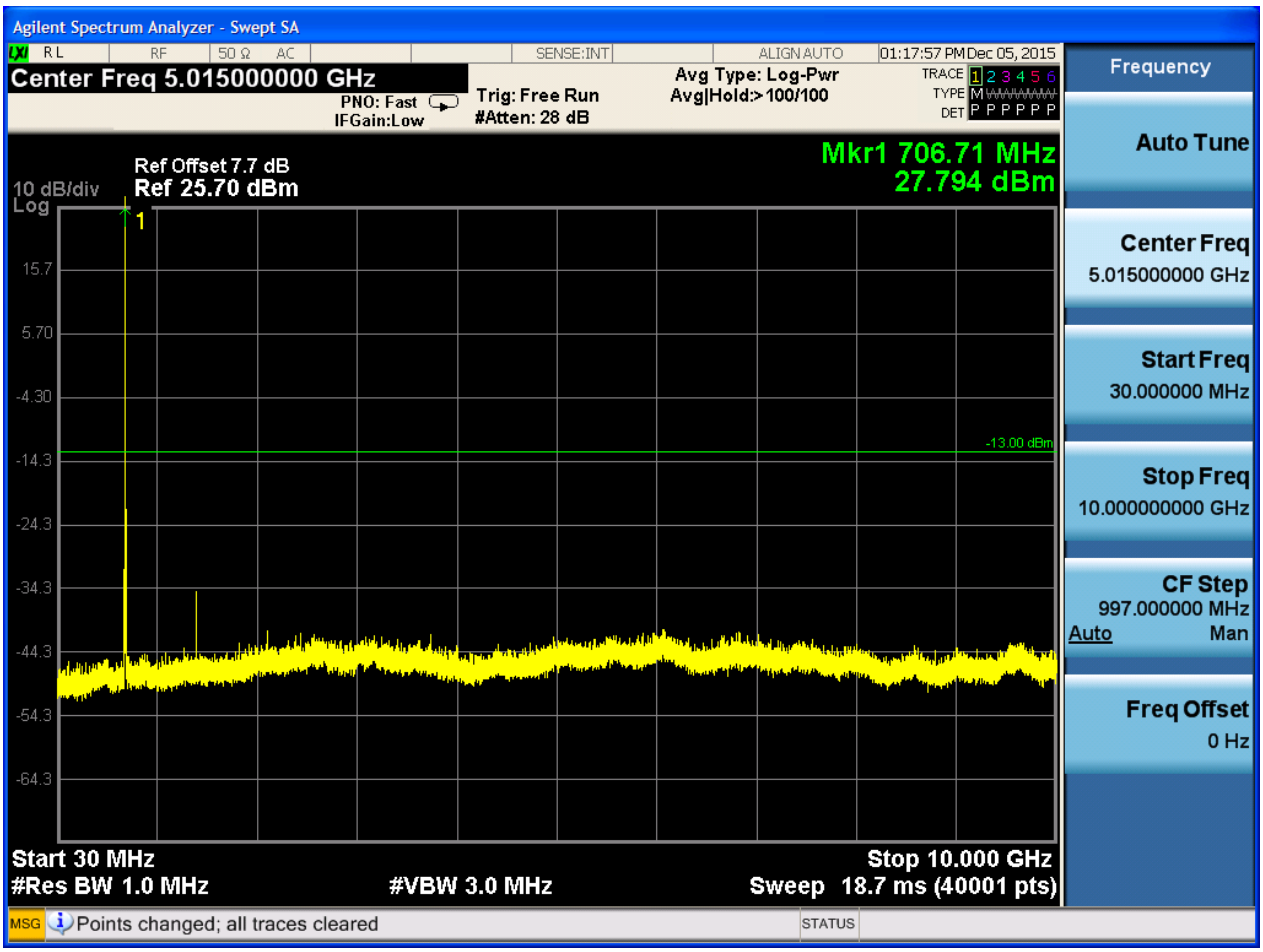

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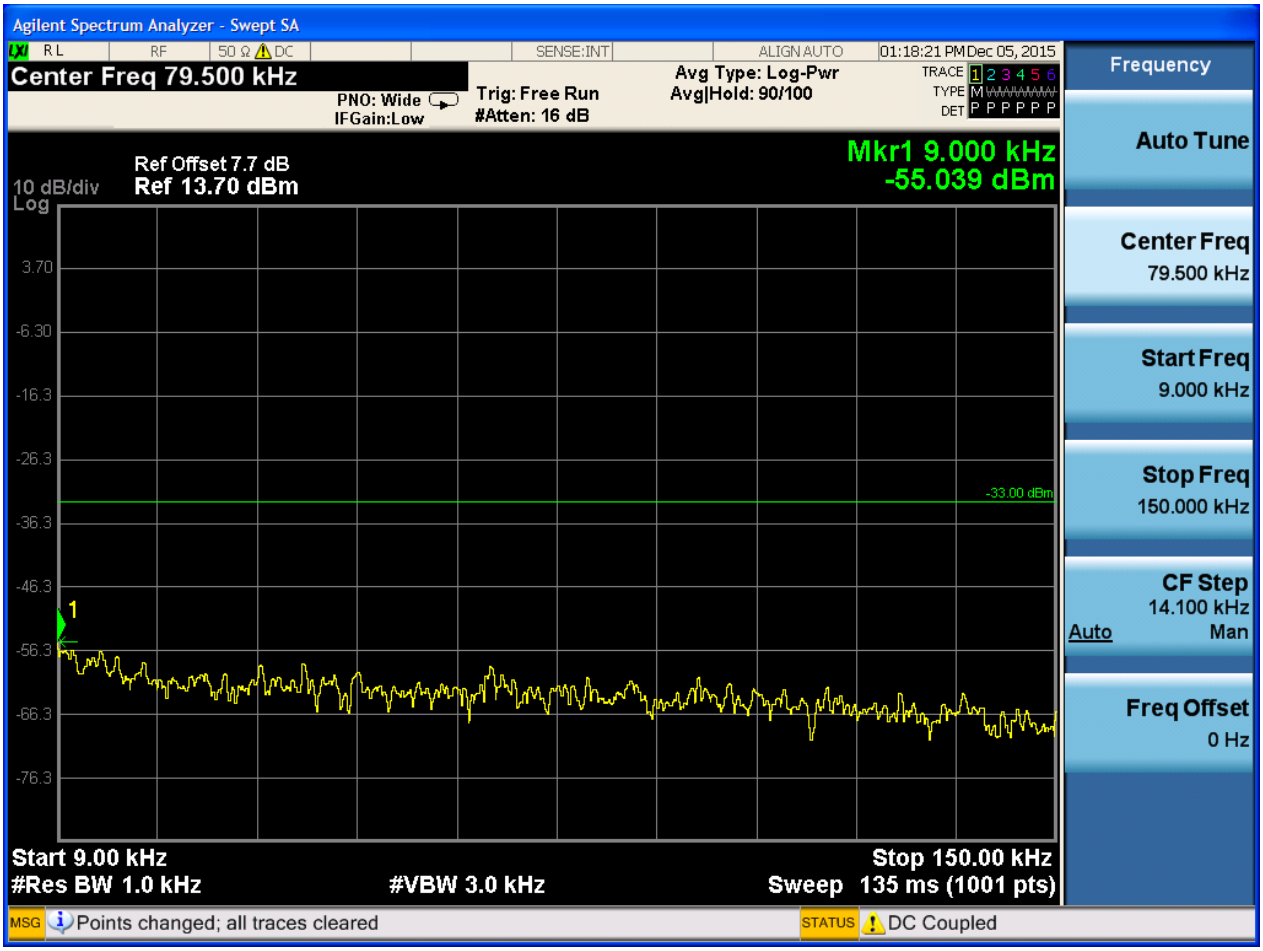
6.1.1.2 Test Mode = LTE/TM2

6.1.1.2.1 Test Bandwidth = 1.4

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



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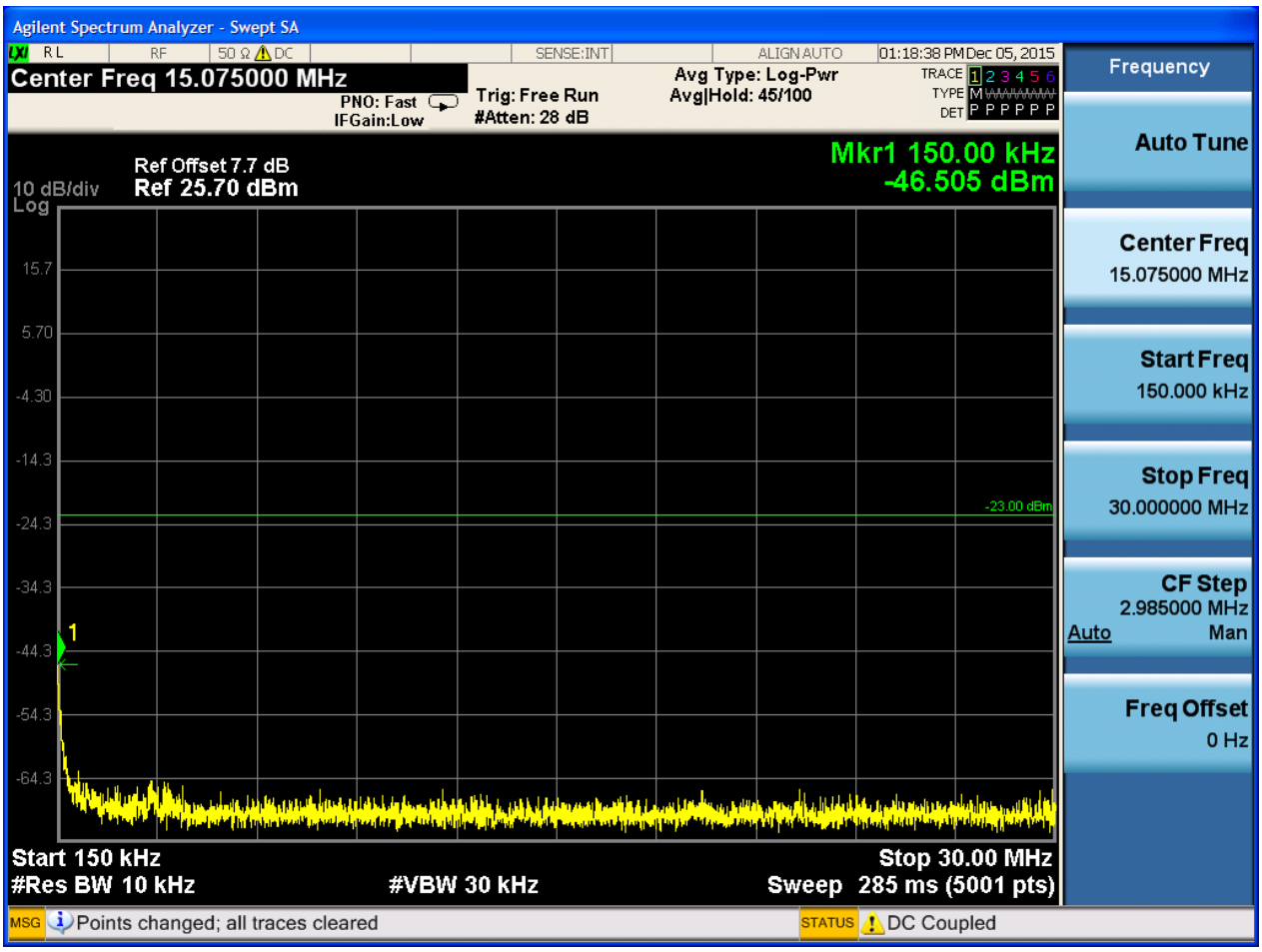

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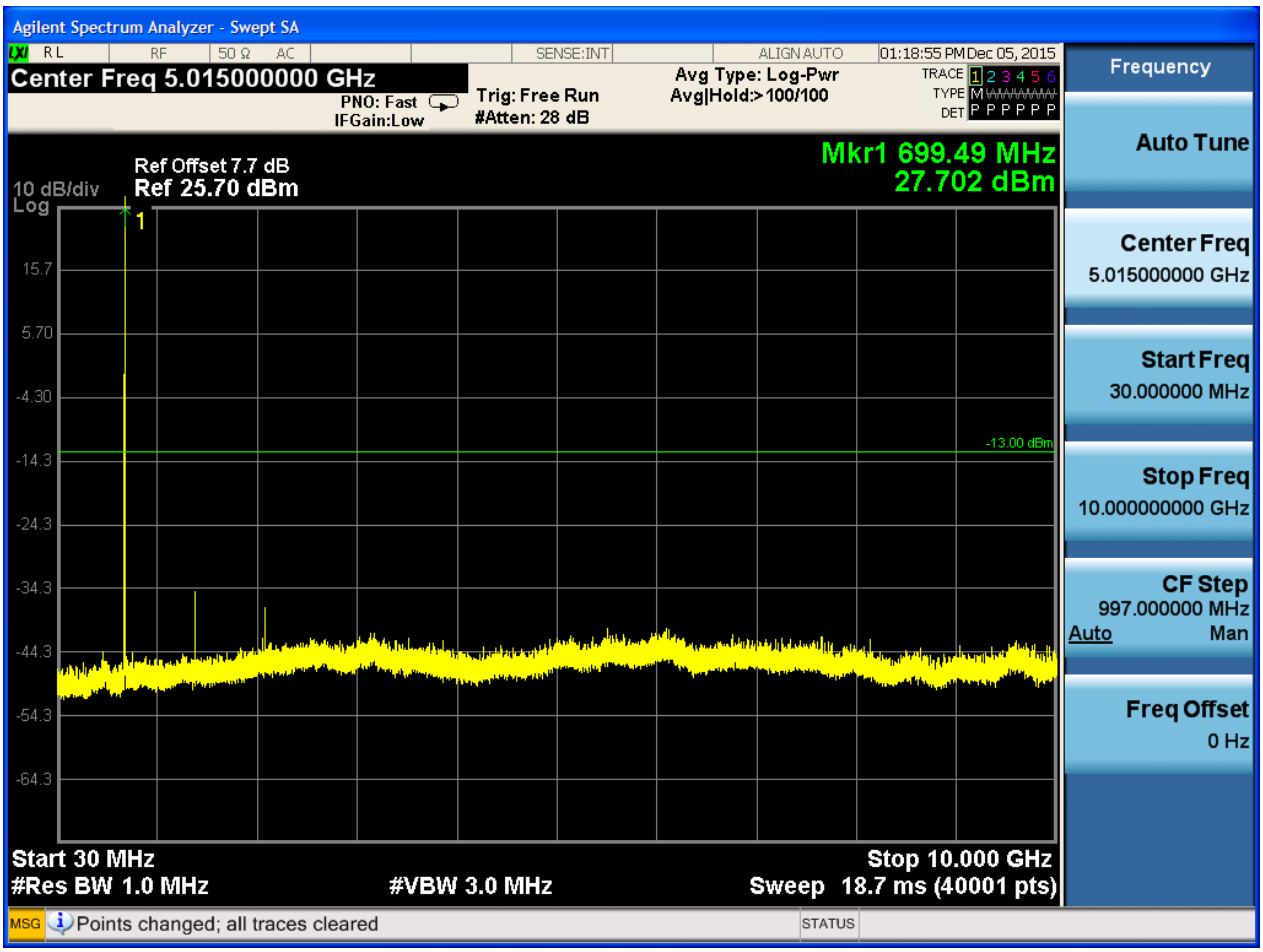

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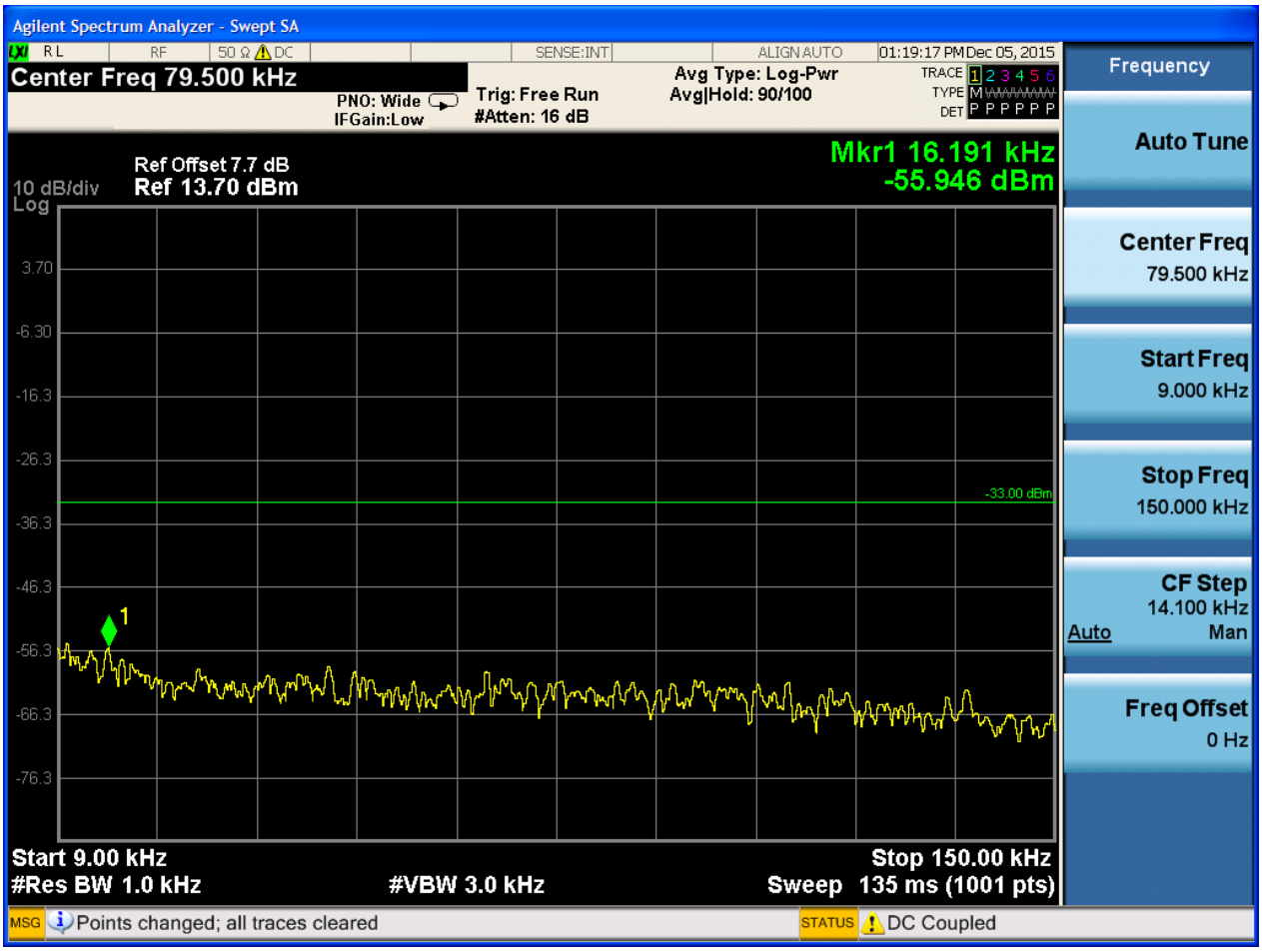
6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



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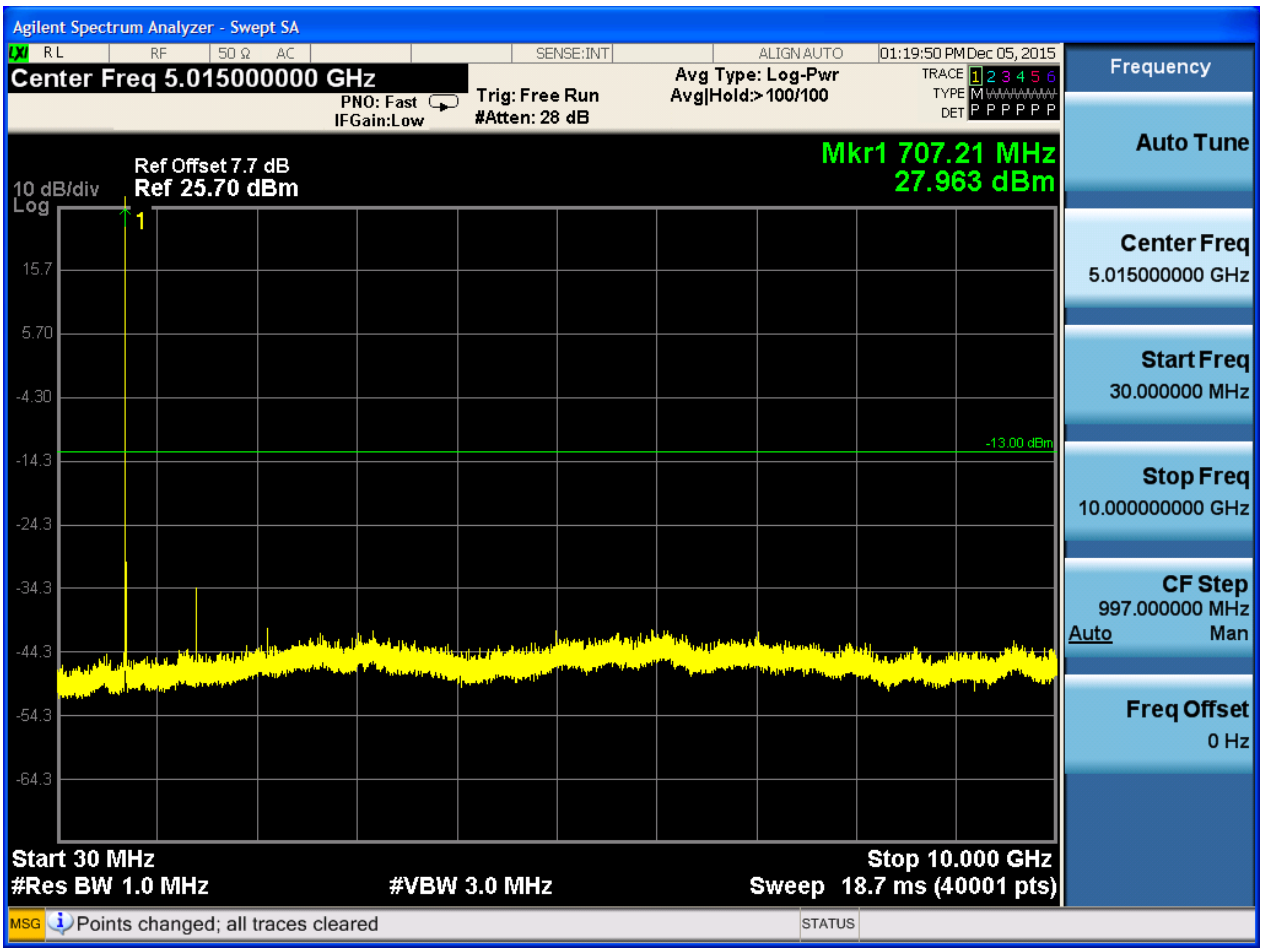

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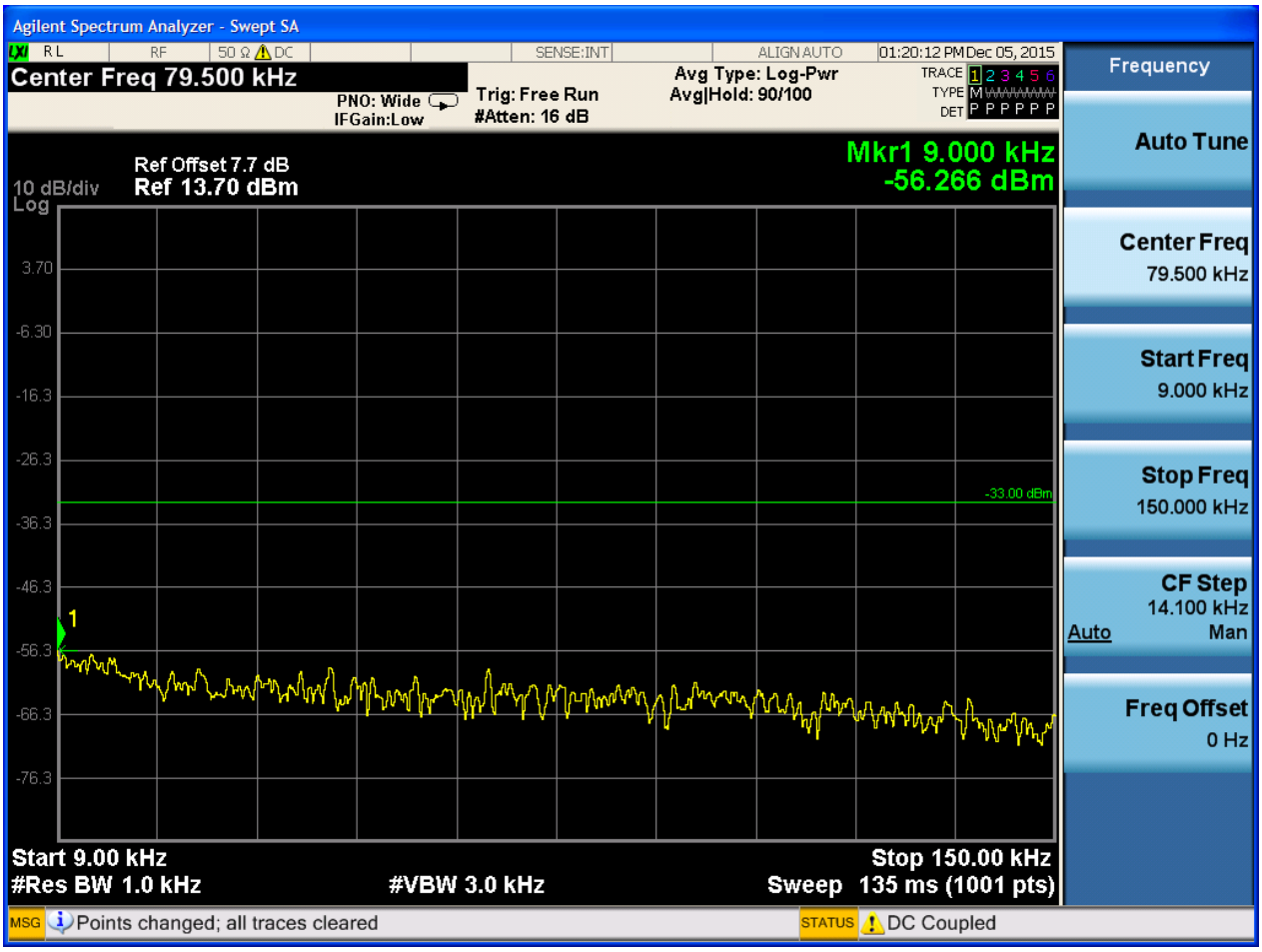
6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



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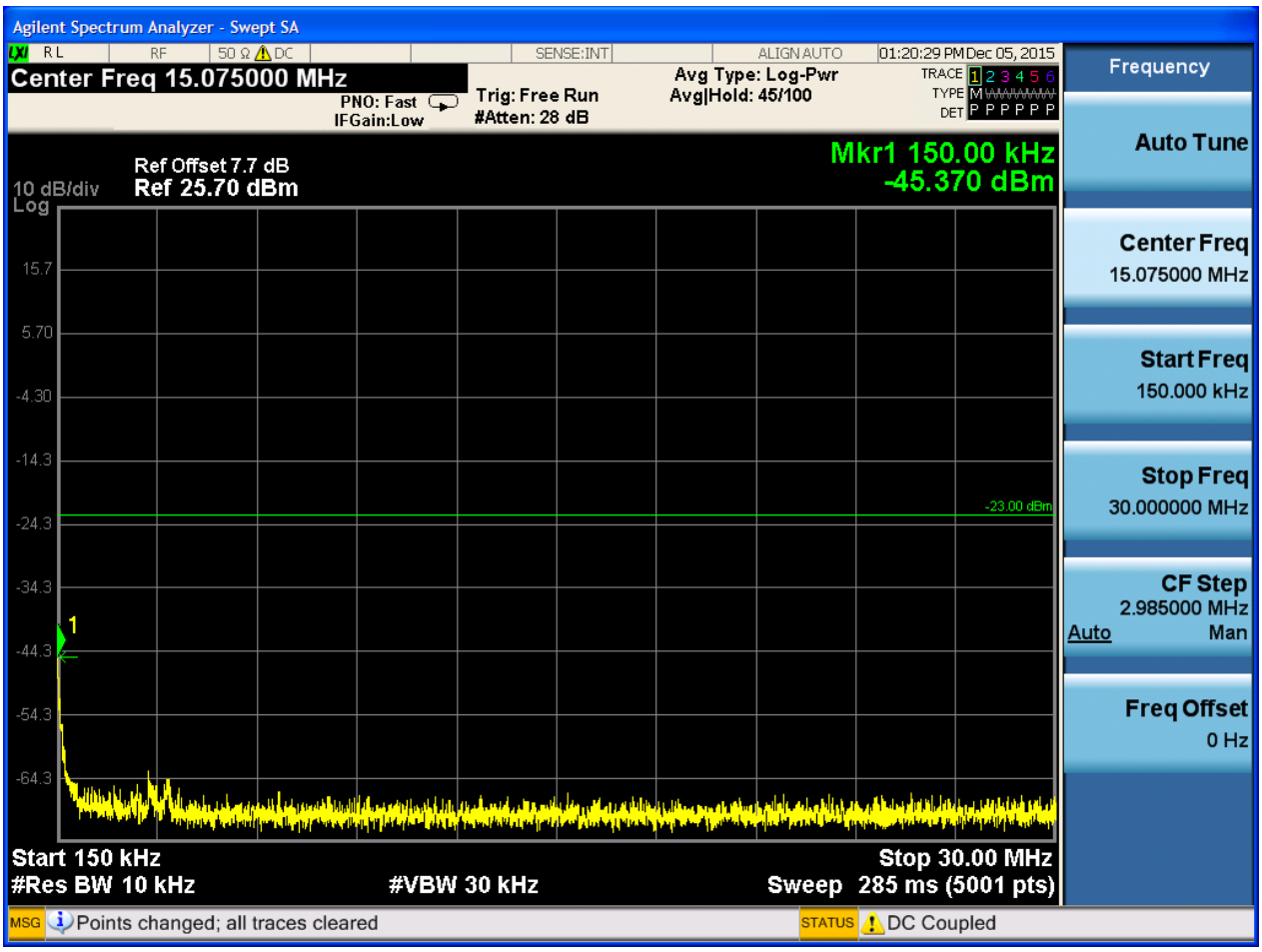

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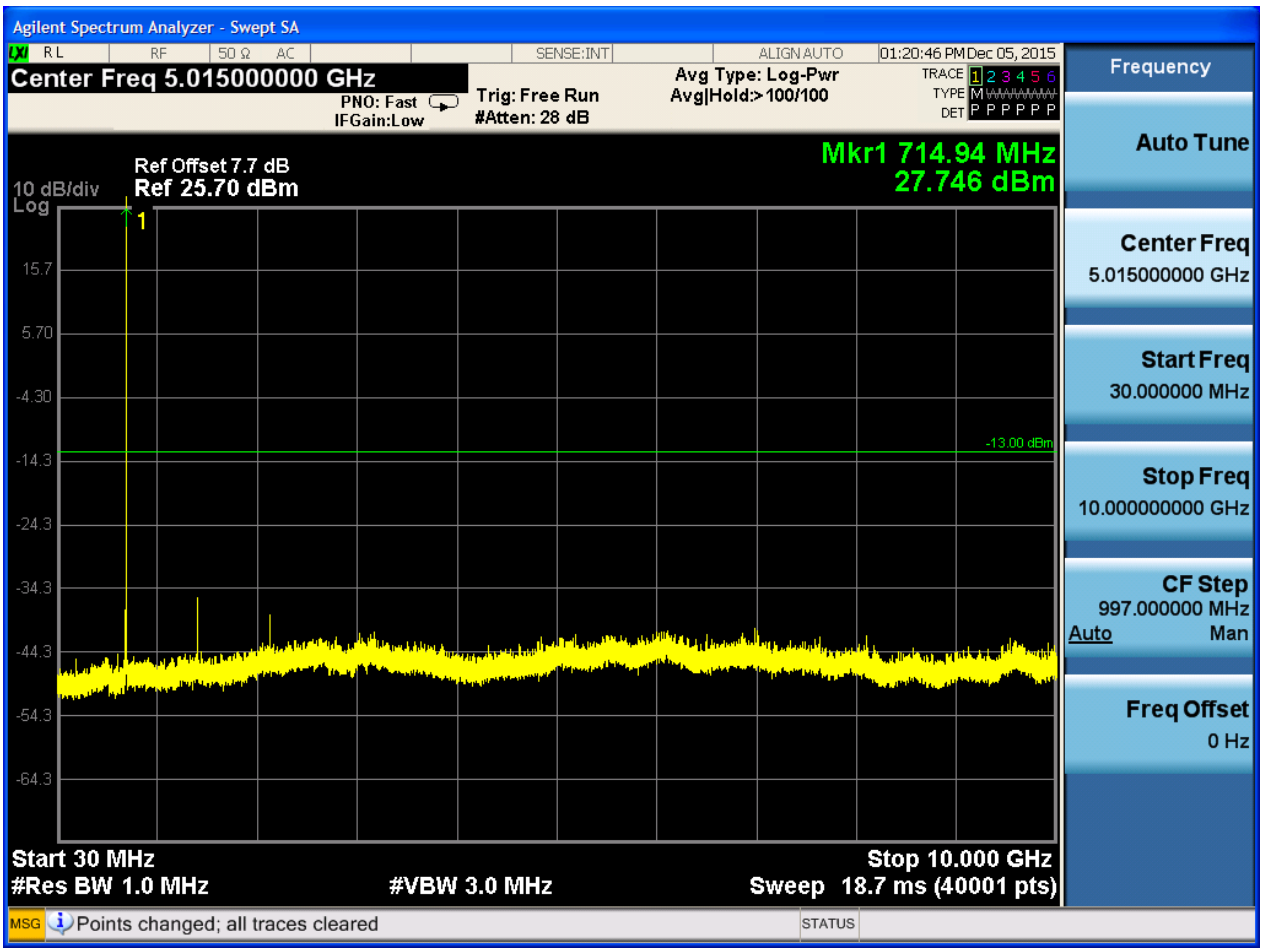

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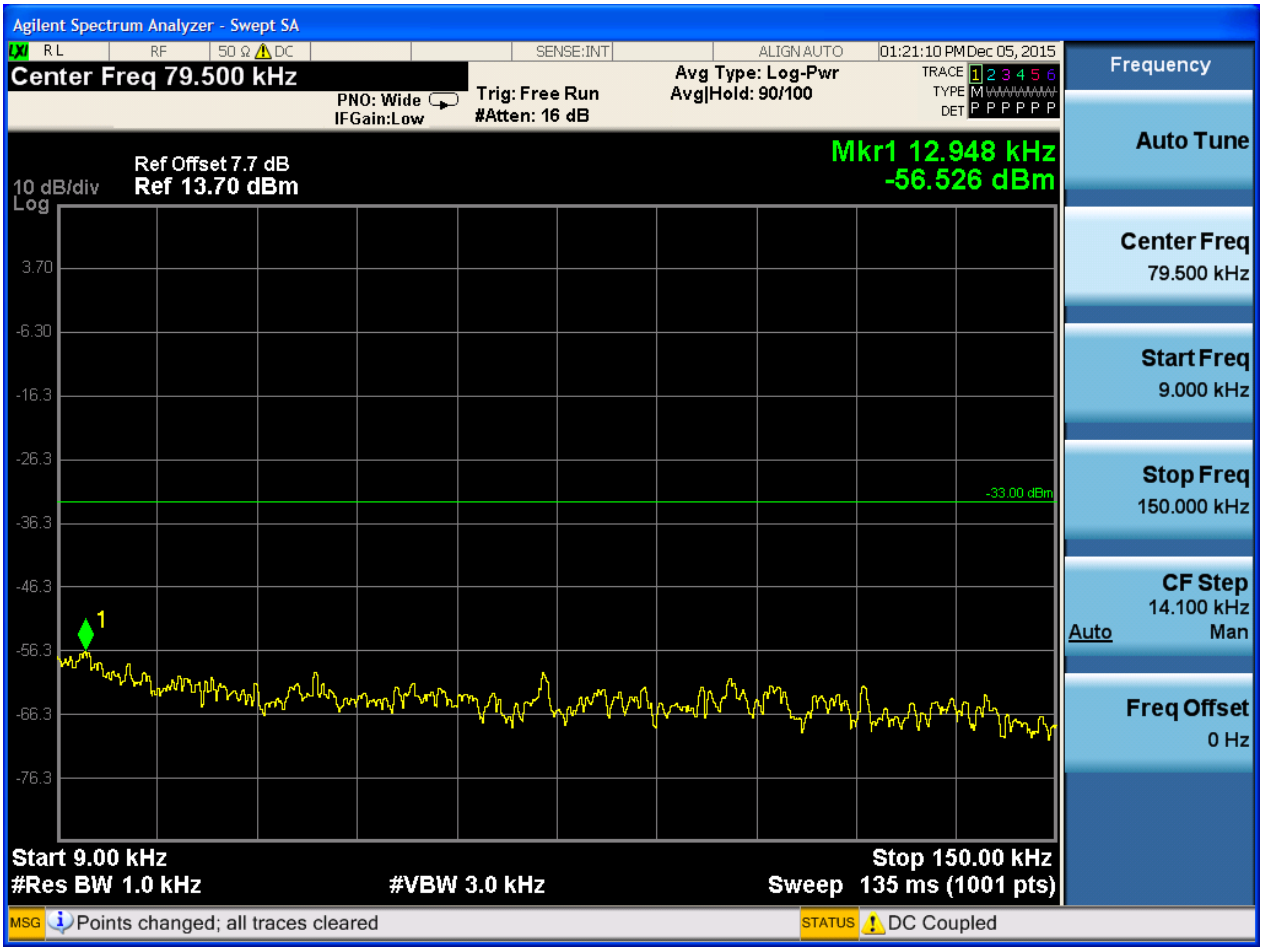
6.1.1.2.2 Test Bandwidth = 3

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



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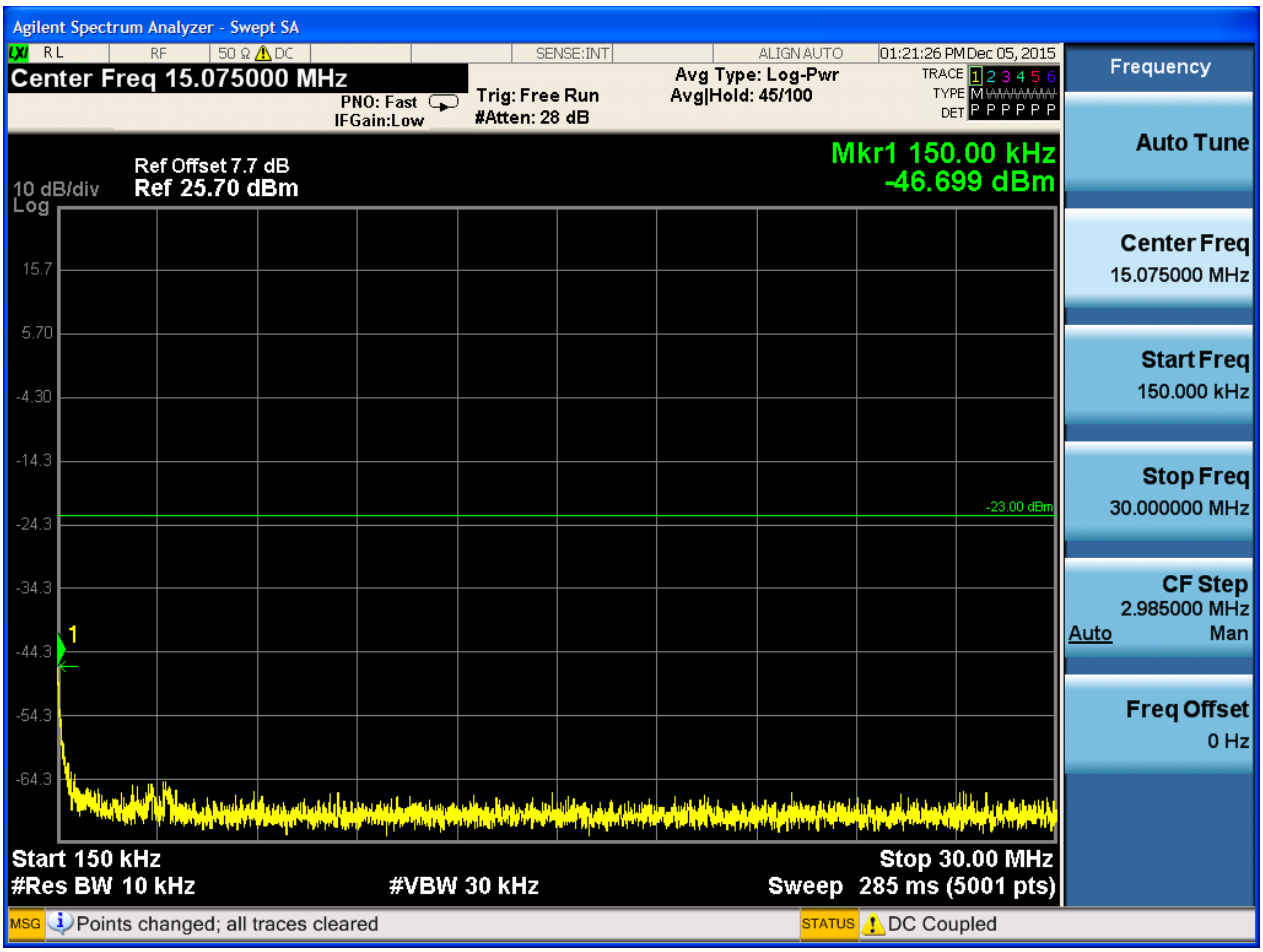

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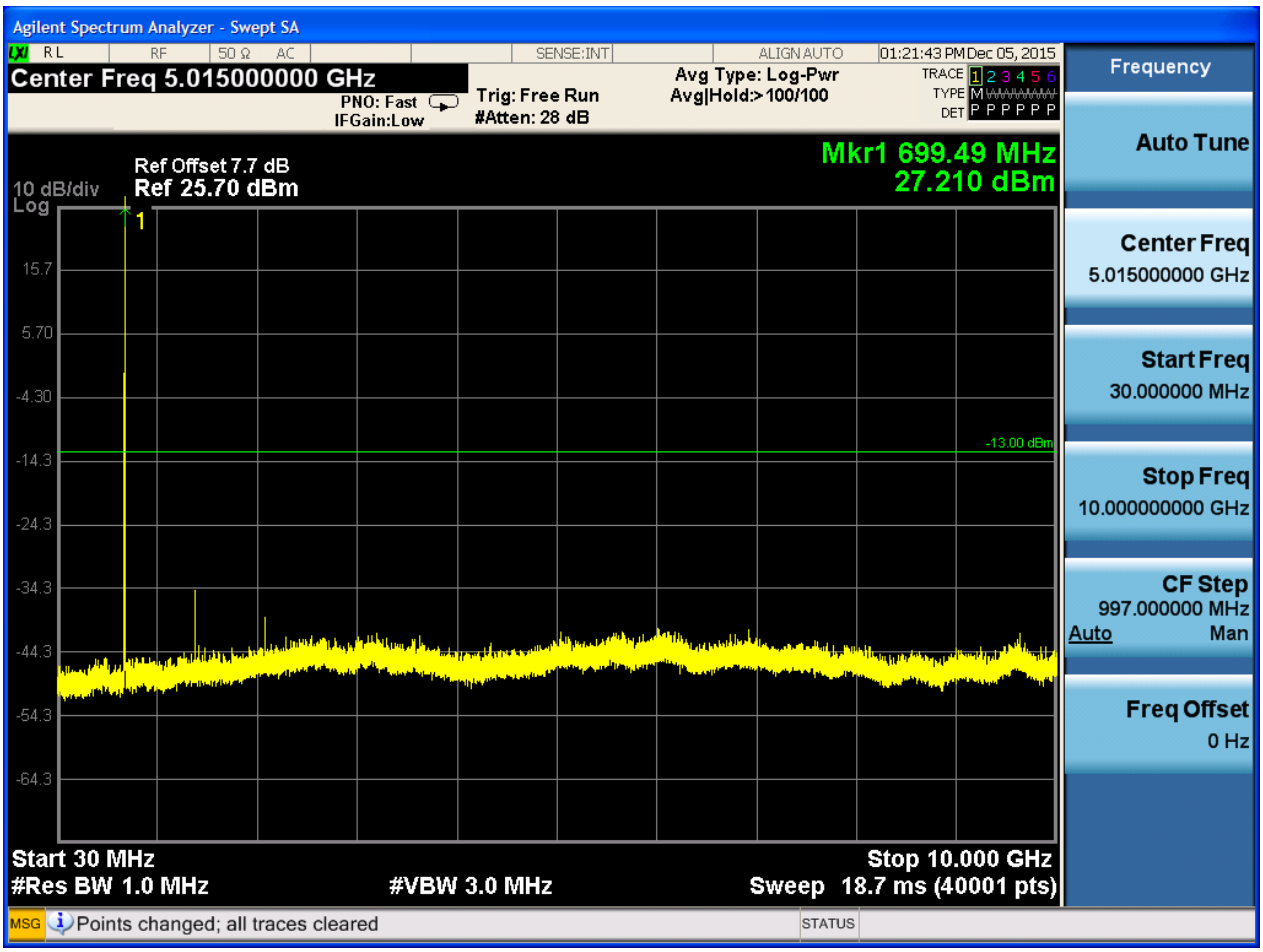

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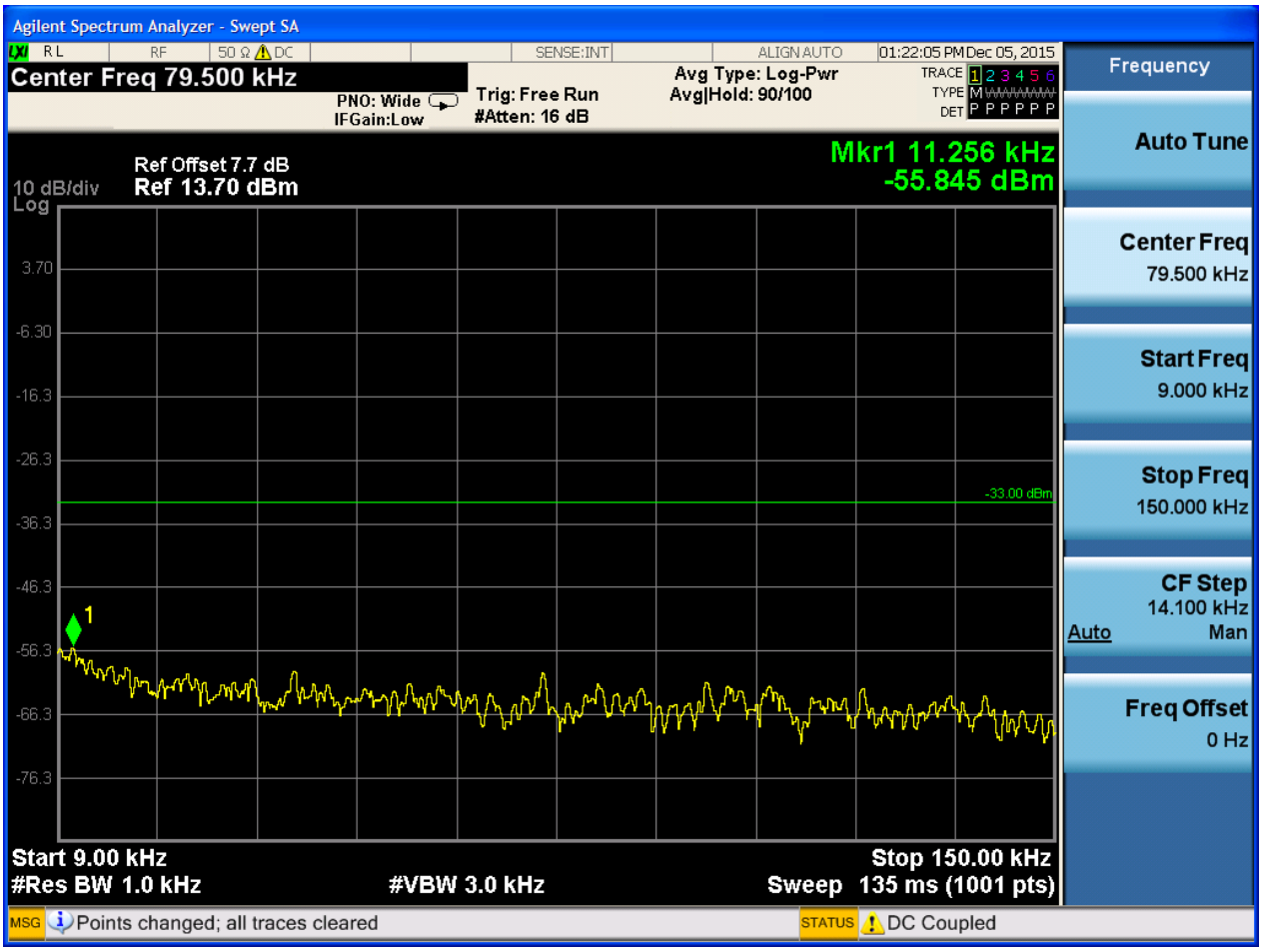
6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0



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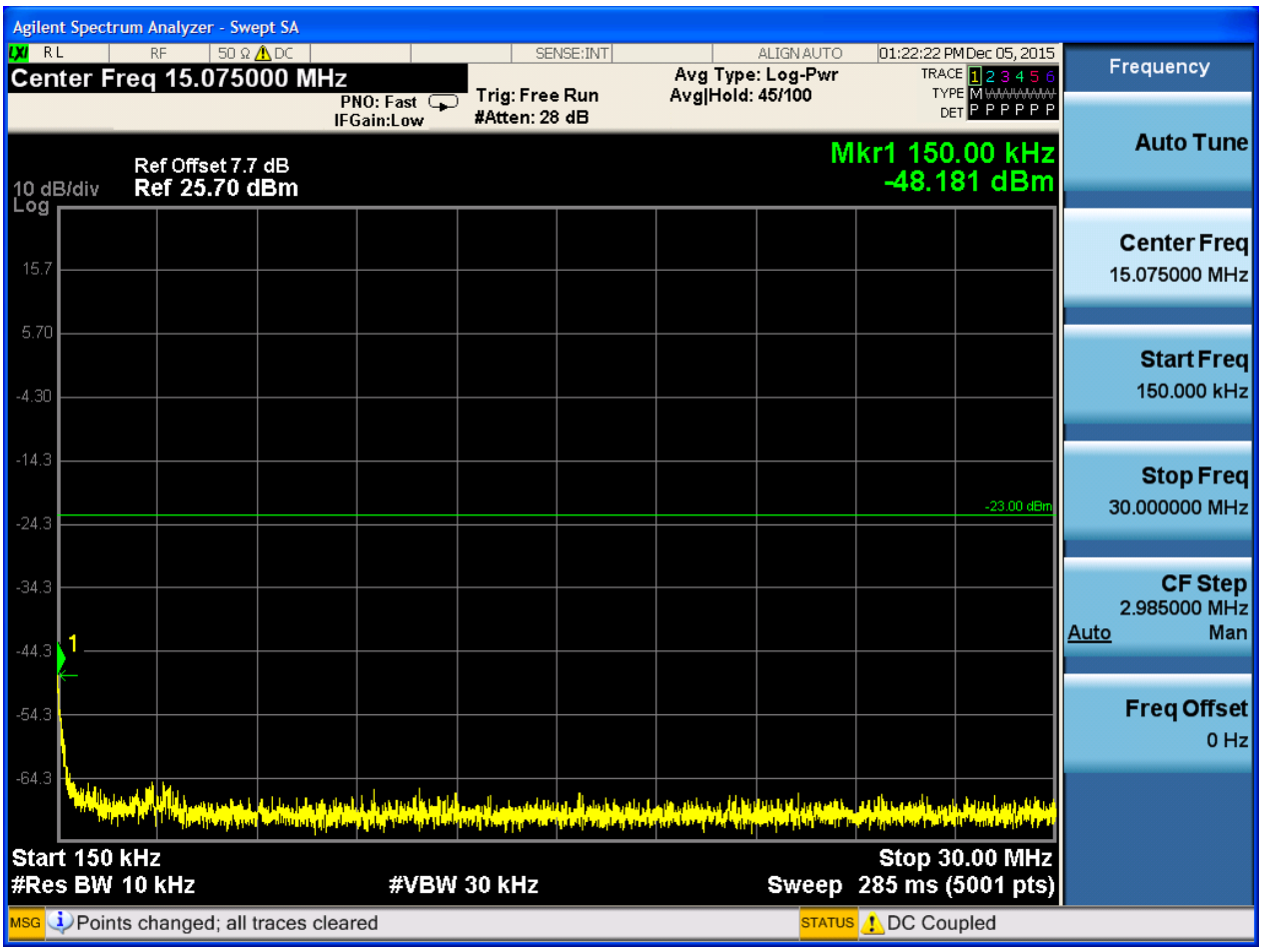

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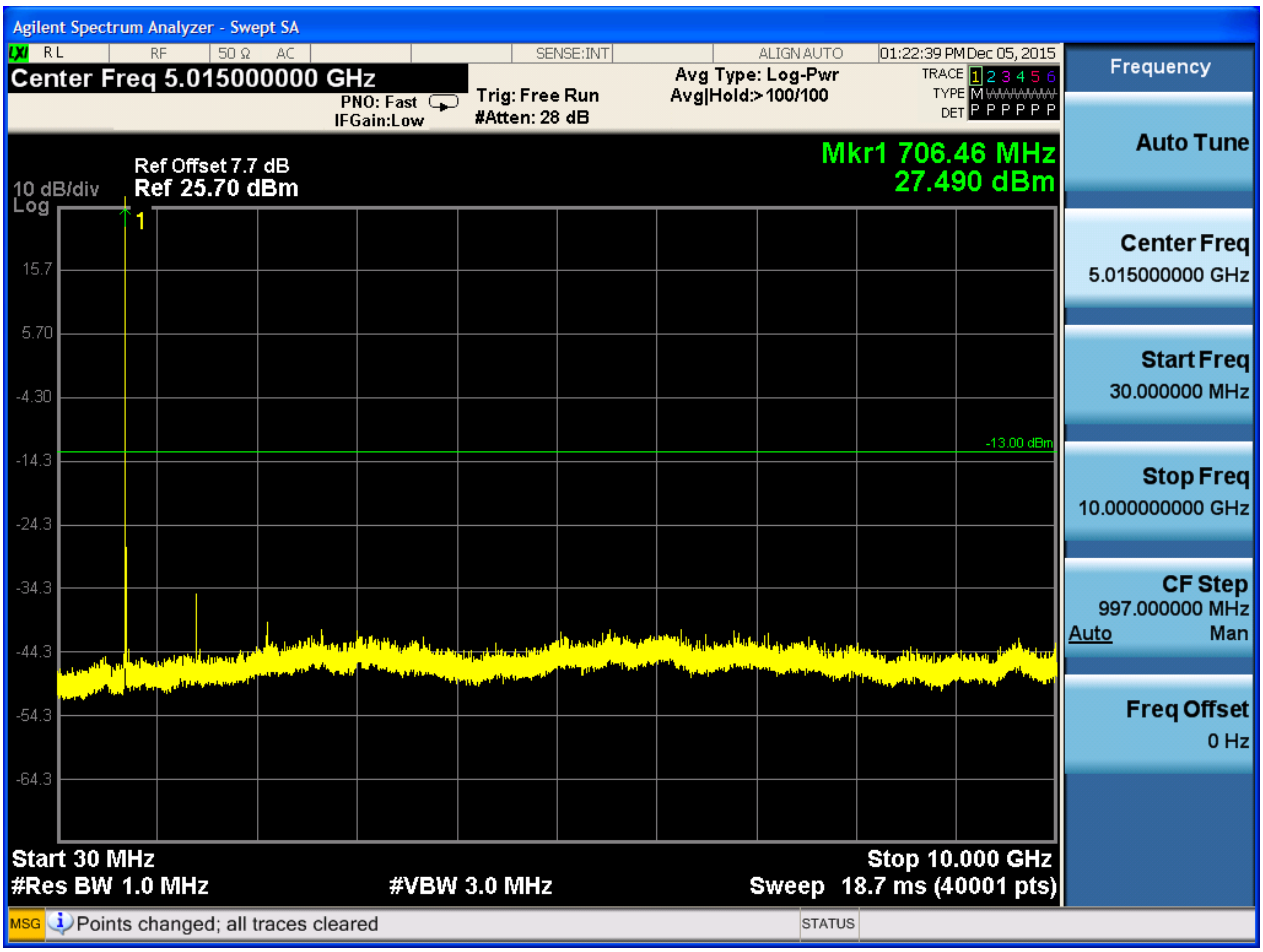

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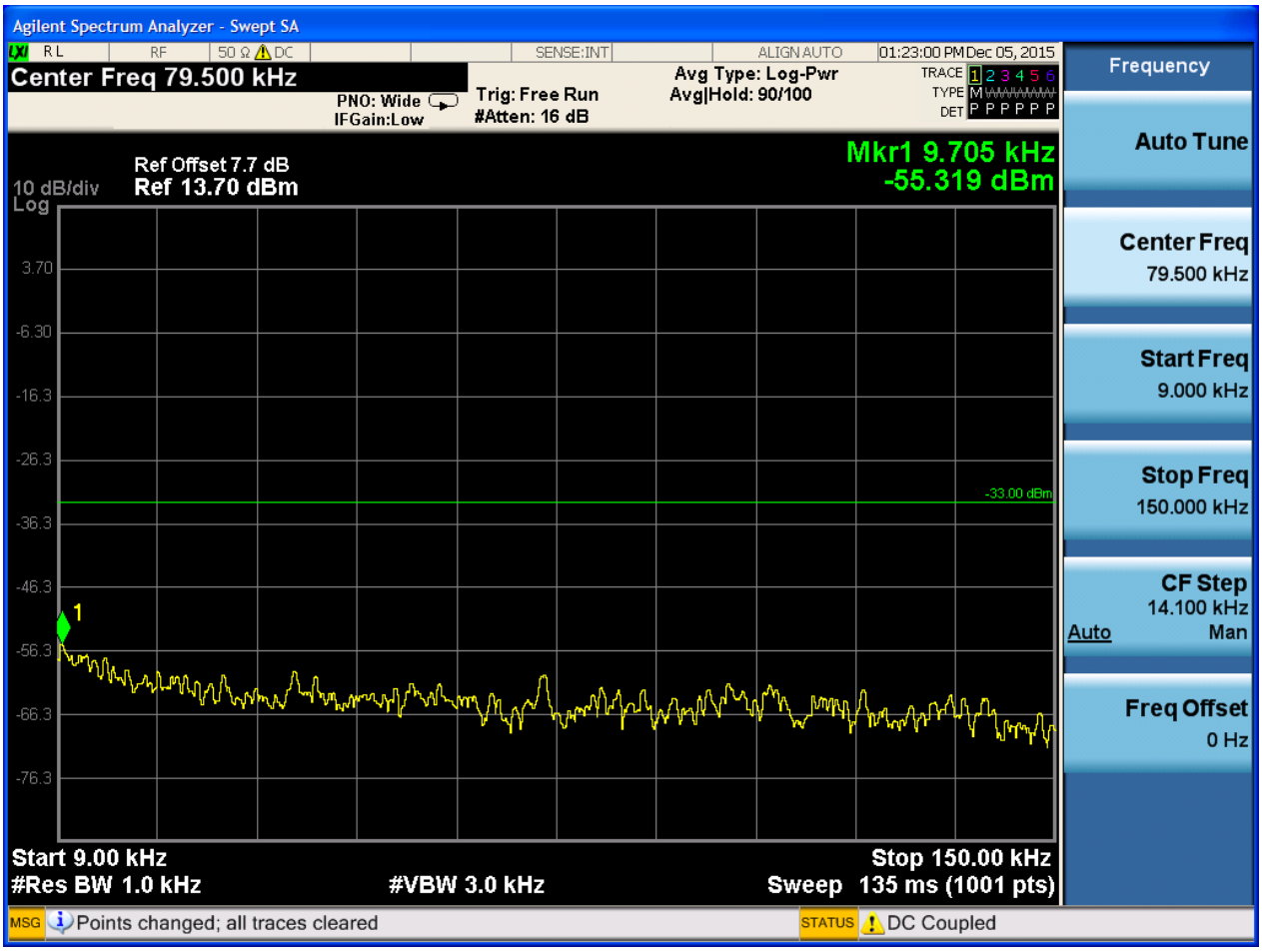
6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0



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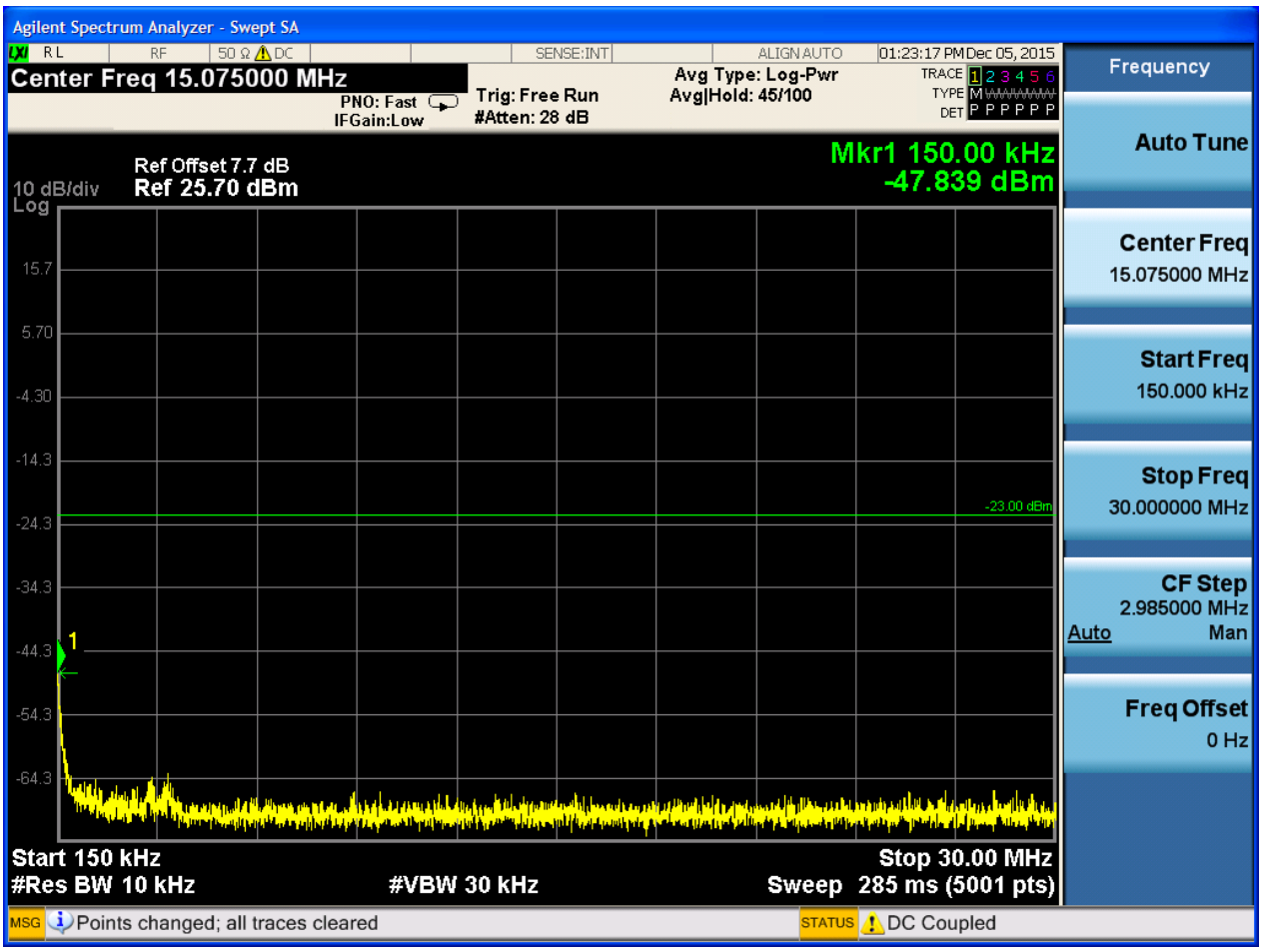

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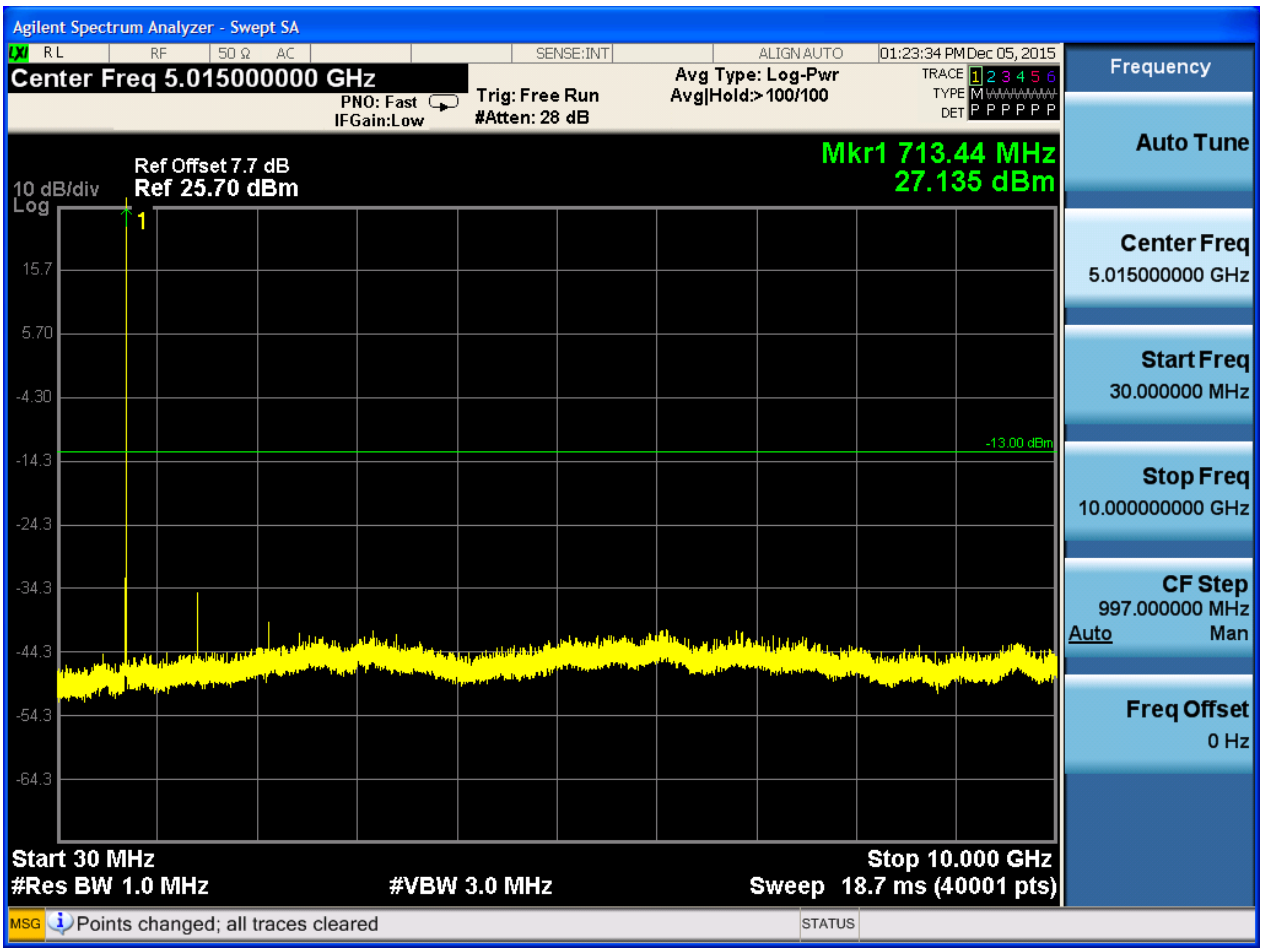

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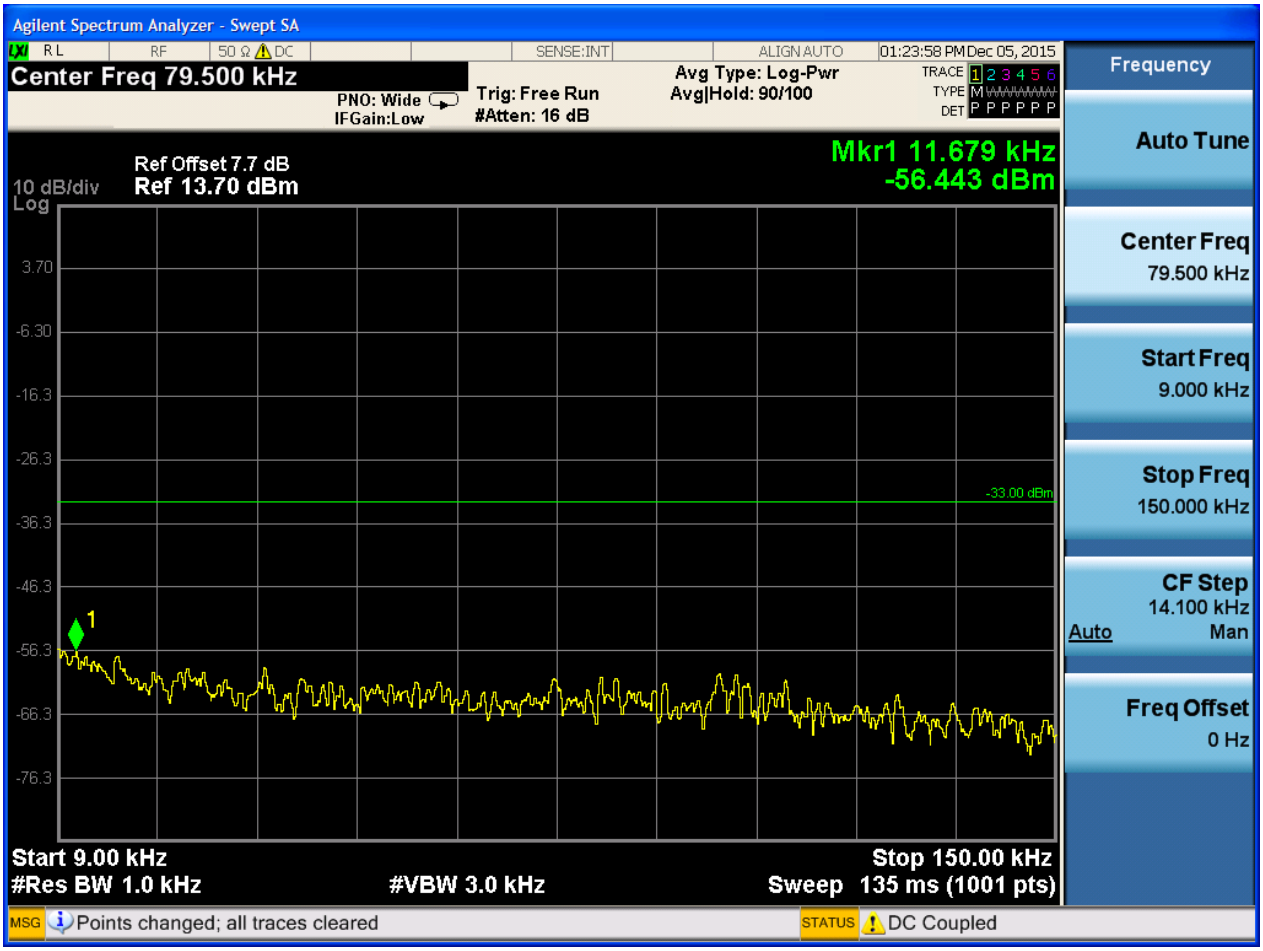
6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



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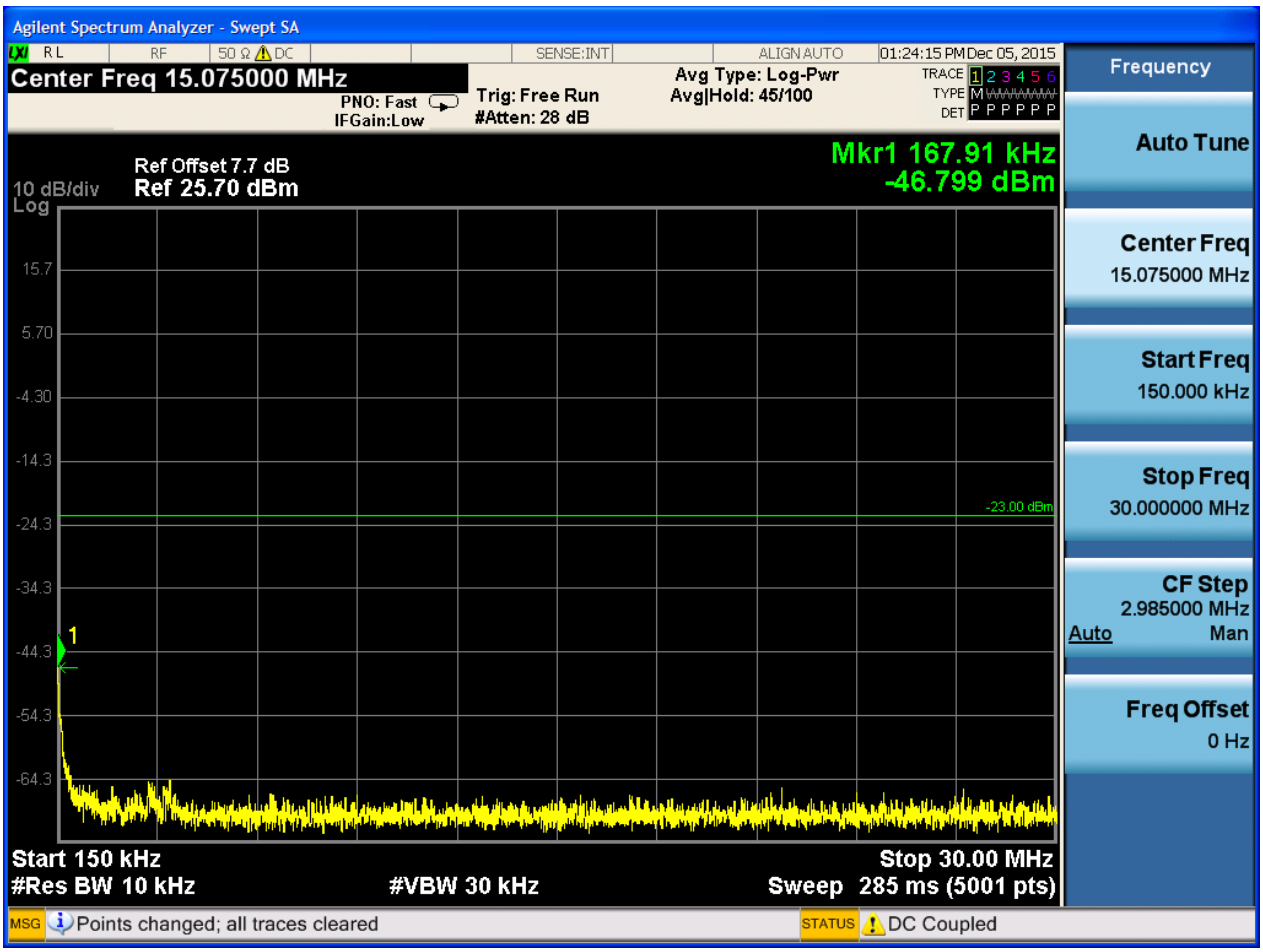

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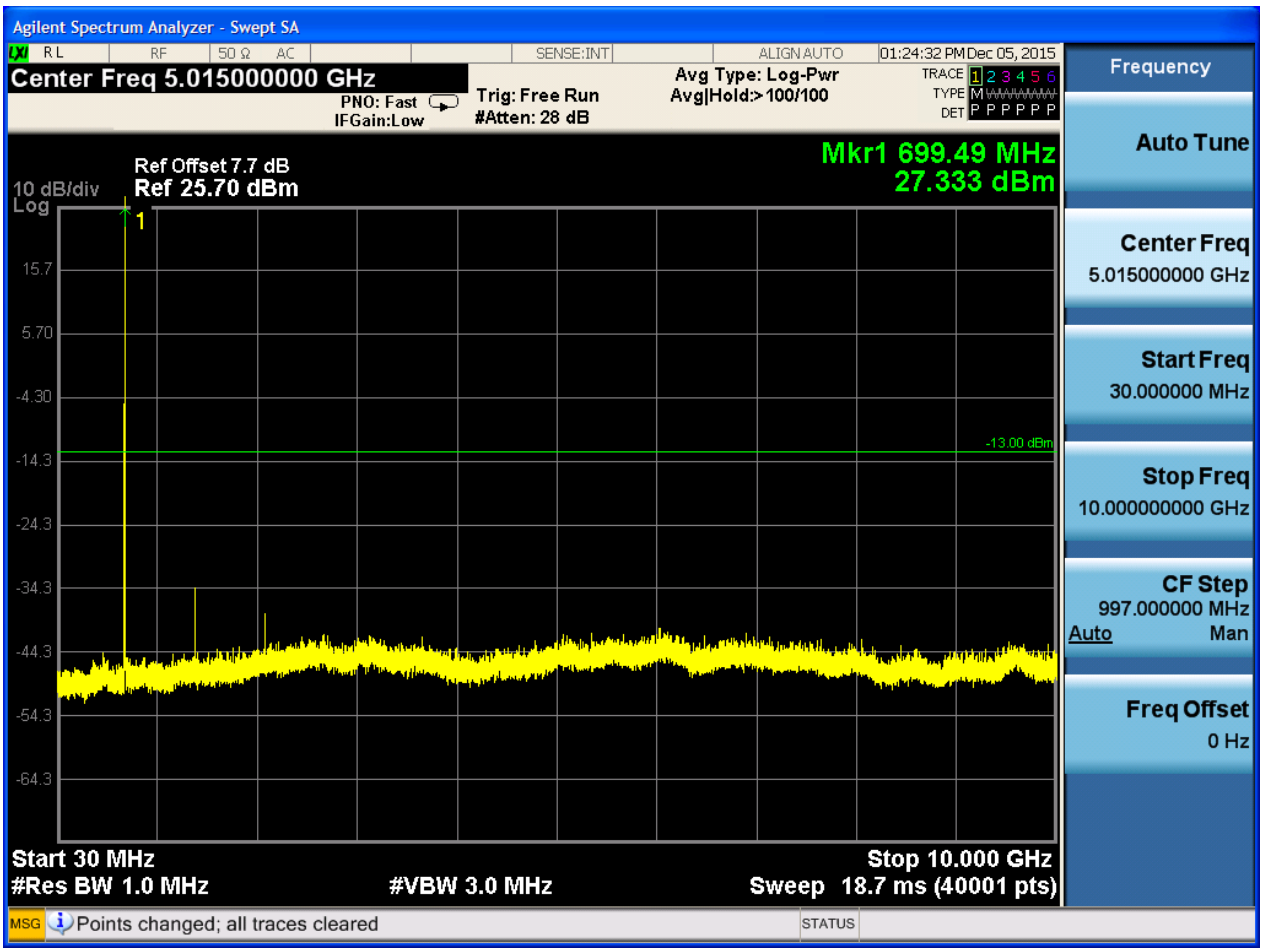

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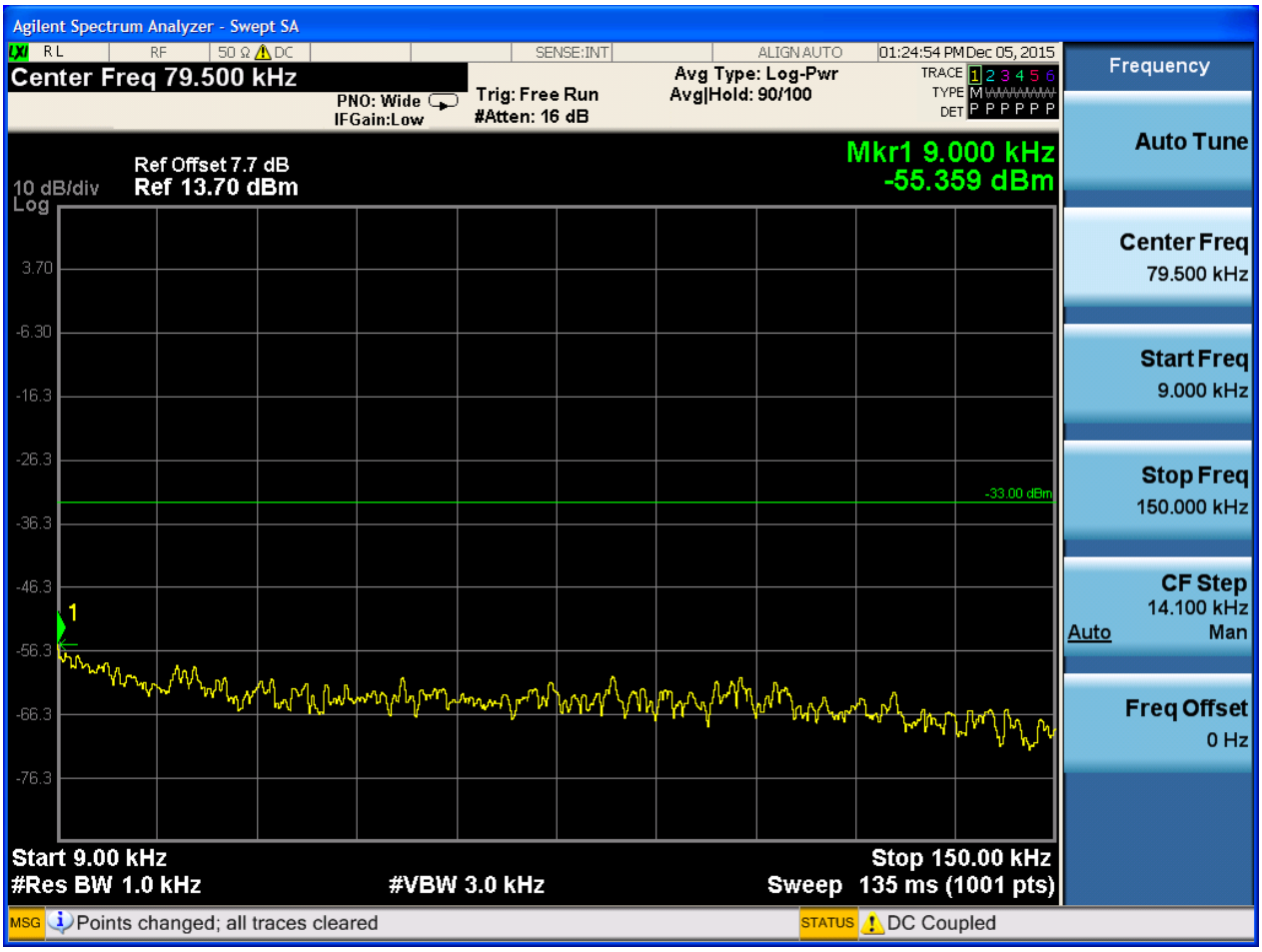
6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



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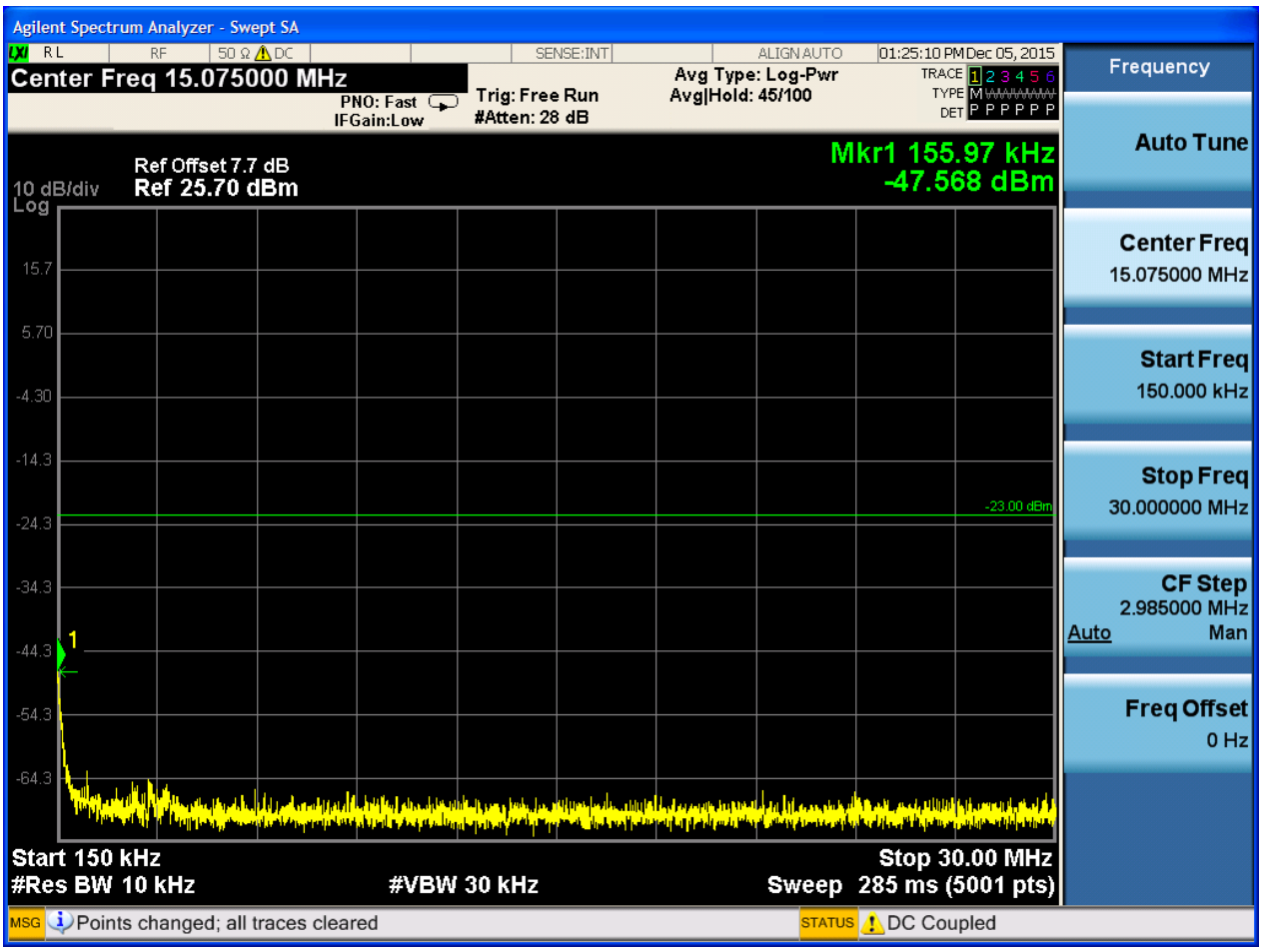

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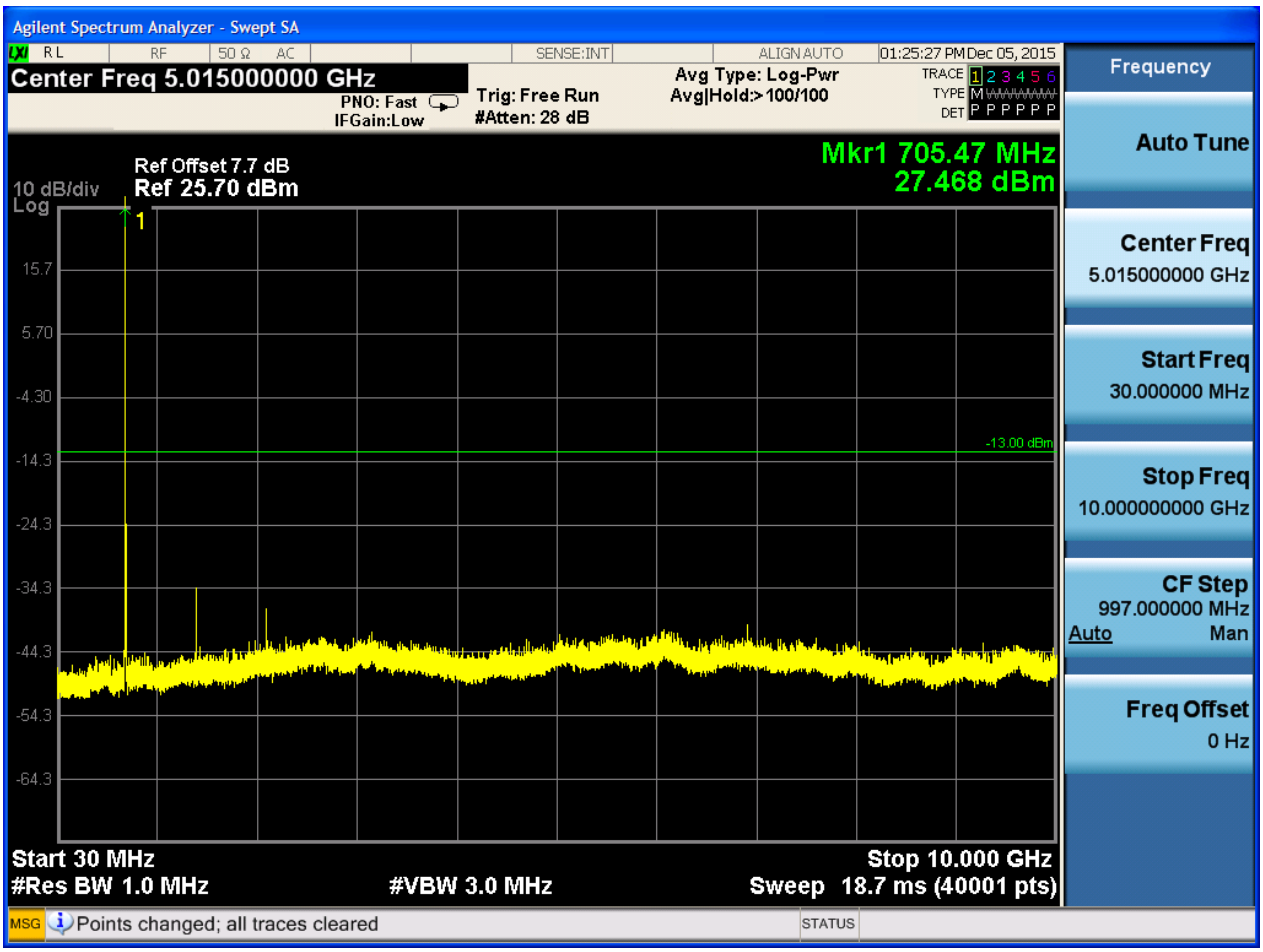

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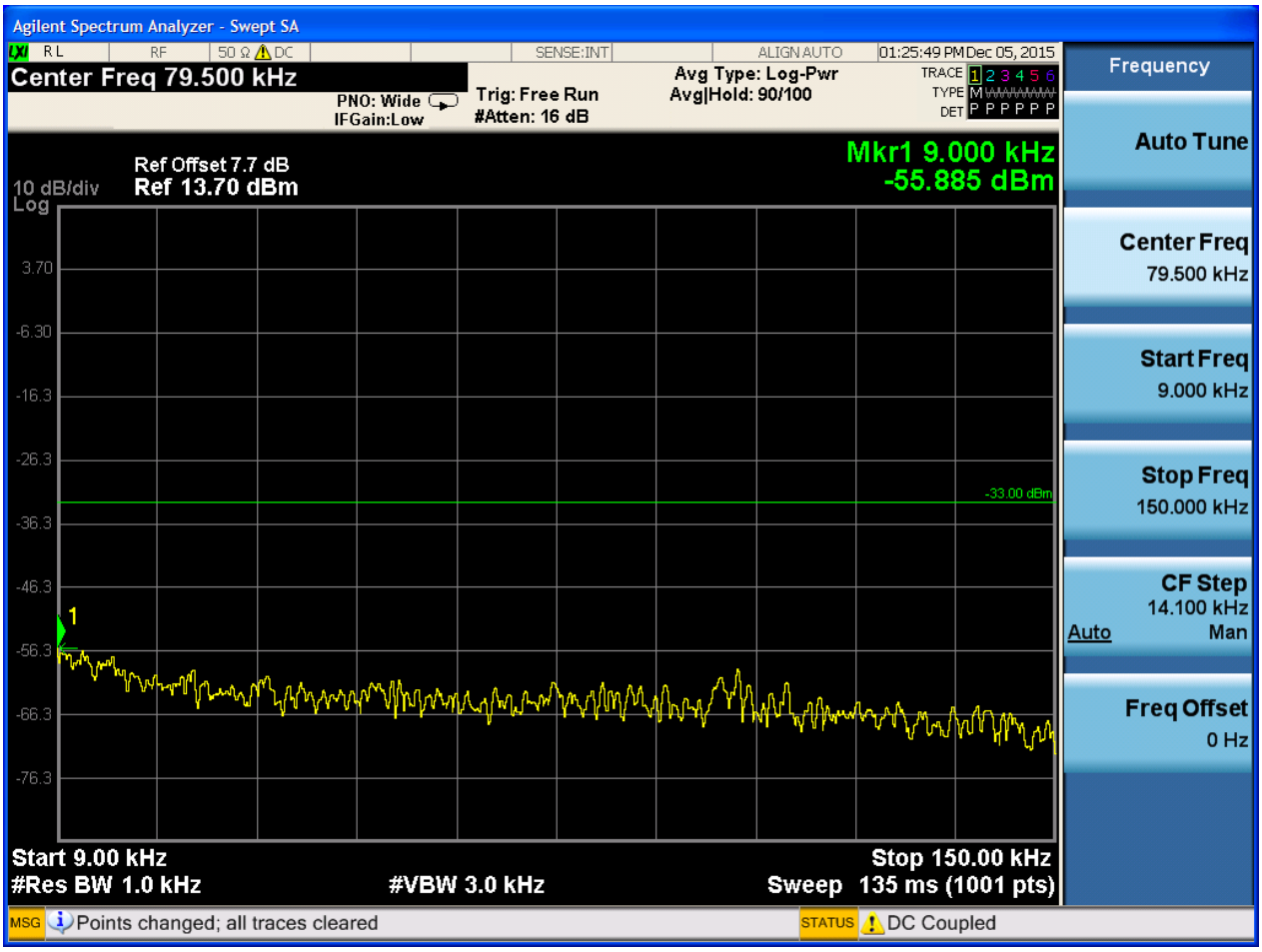
6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0



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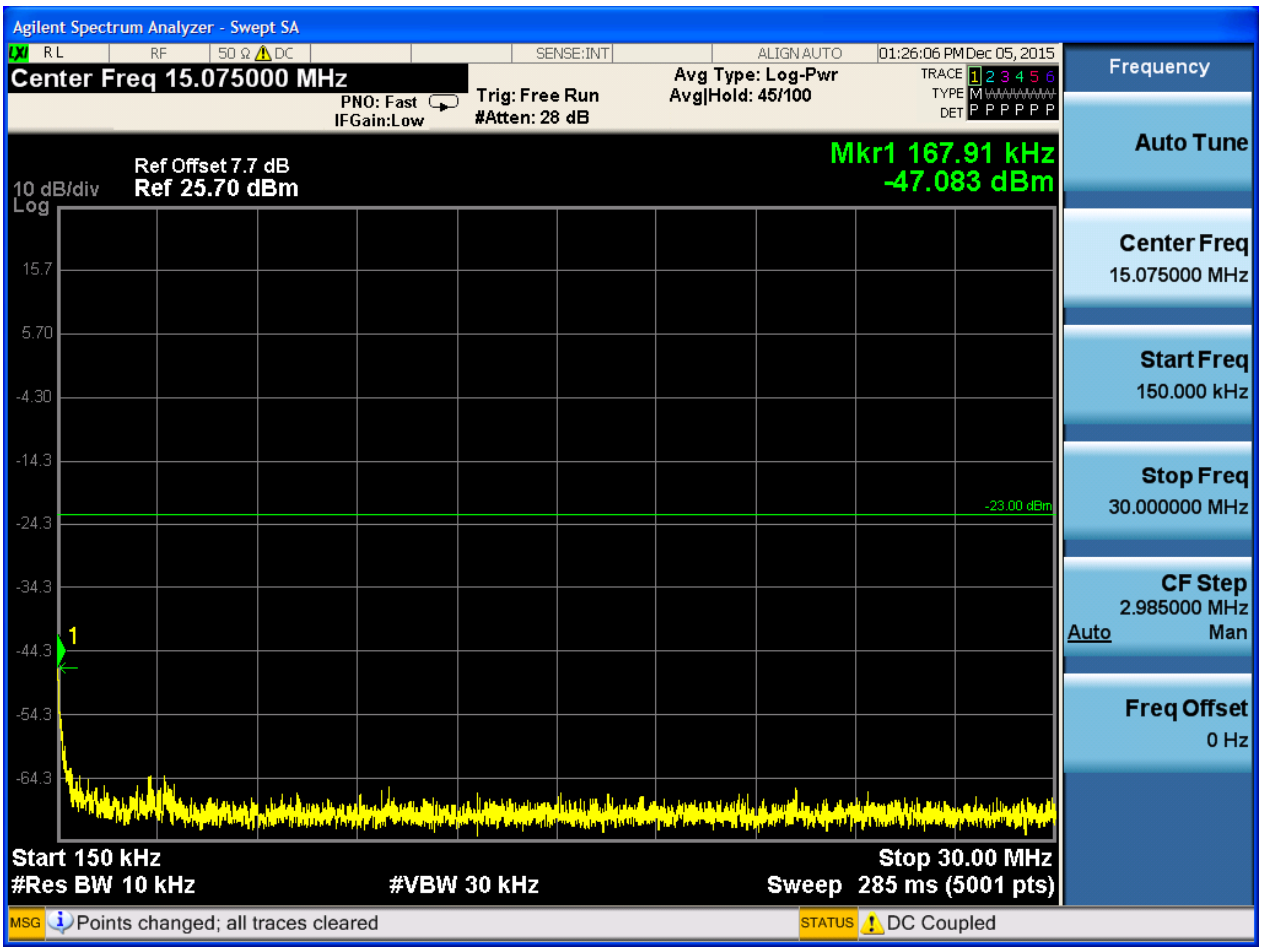

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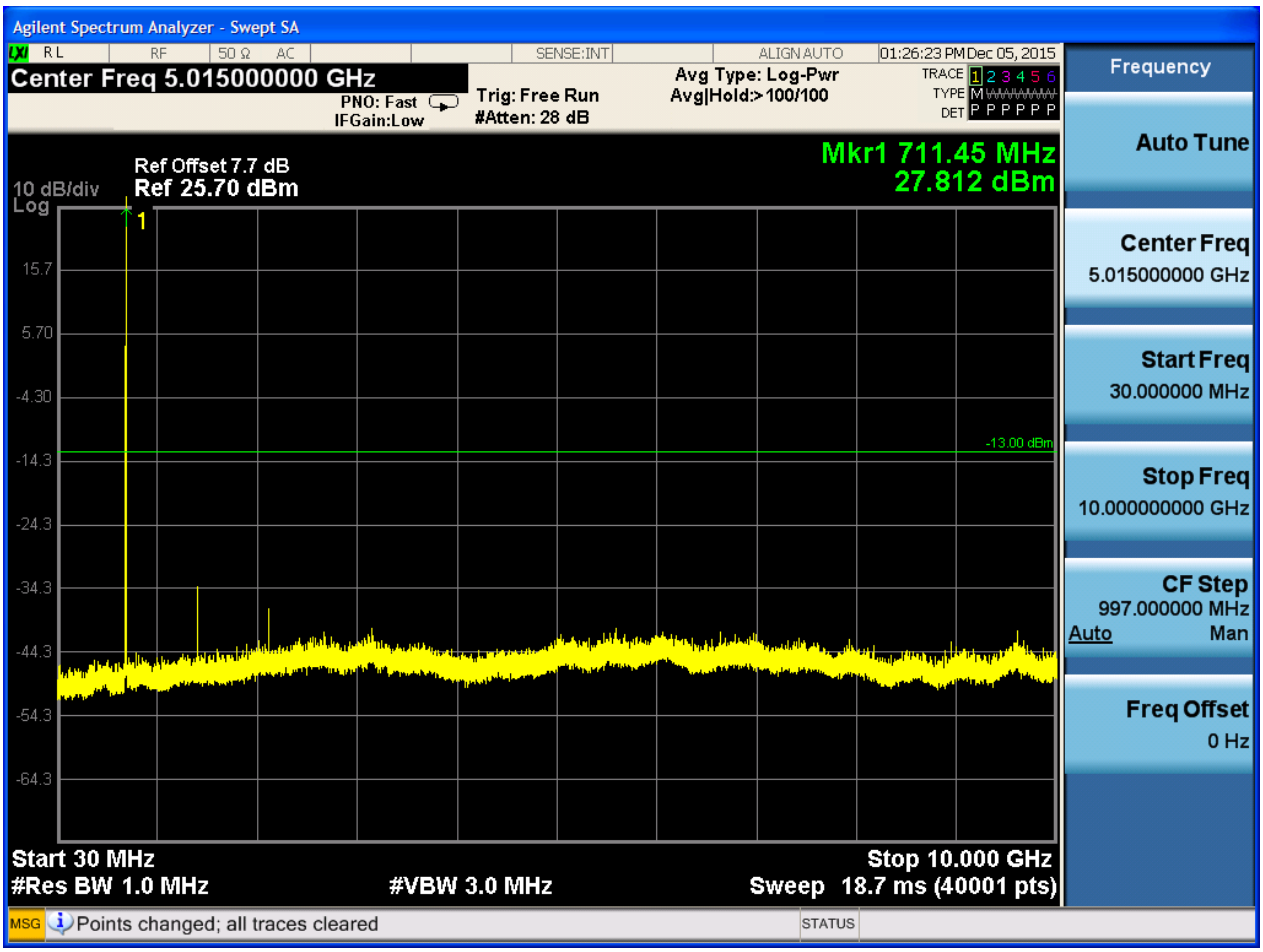

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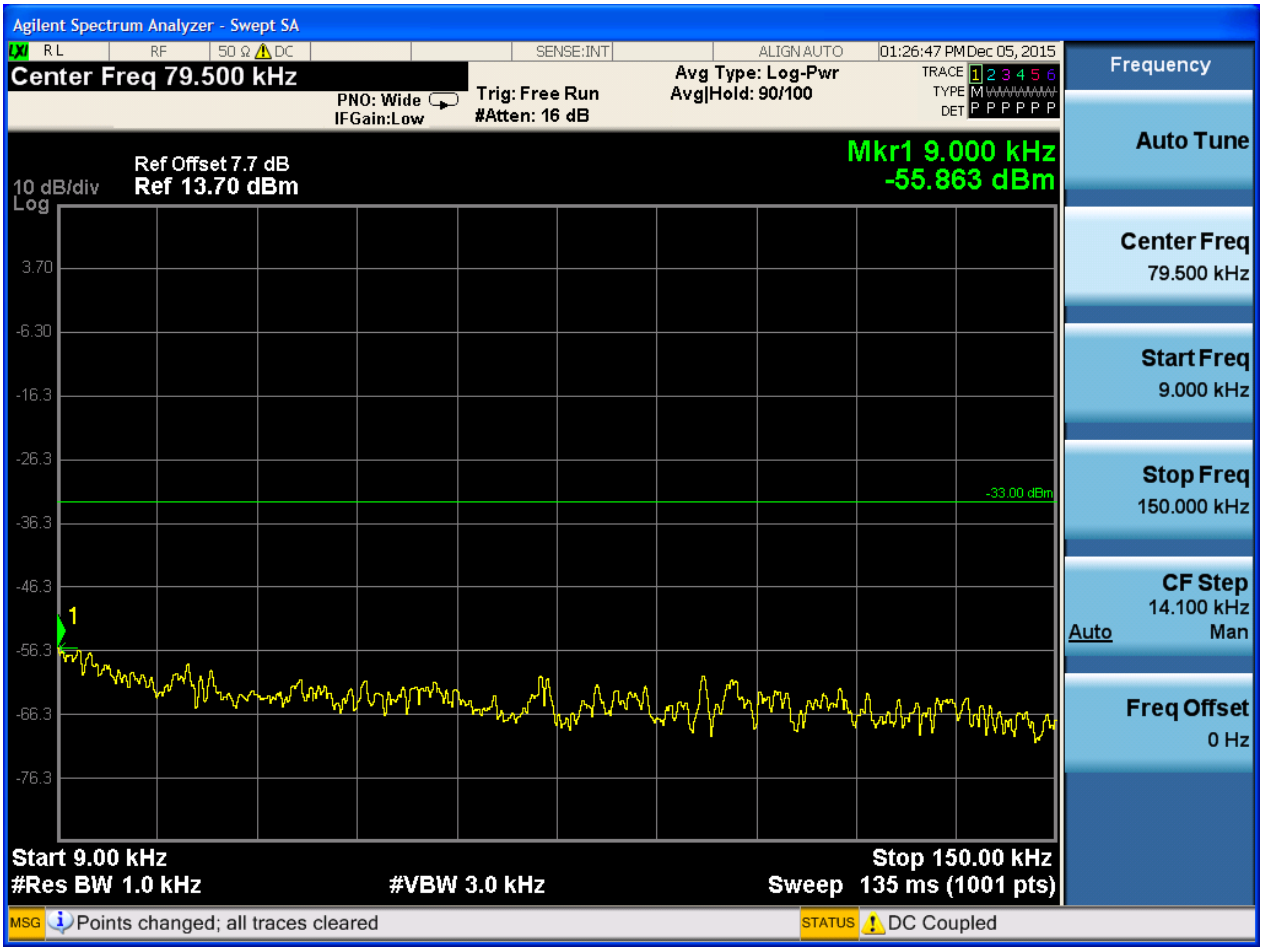
6.1.1.2.4 Test Bandwidth = 10

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



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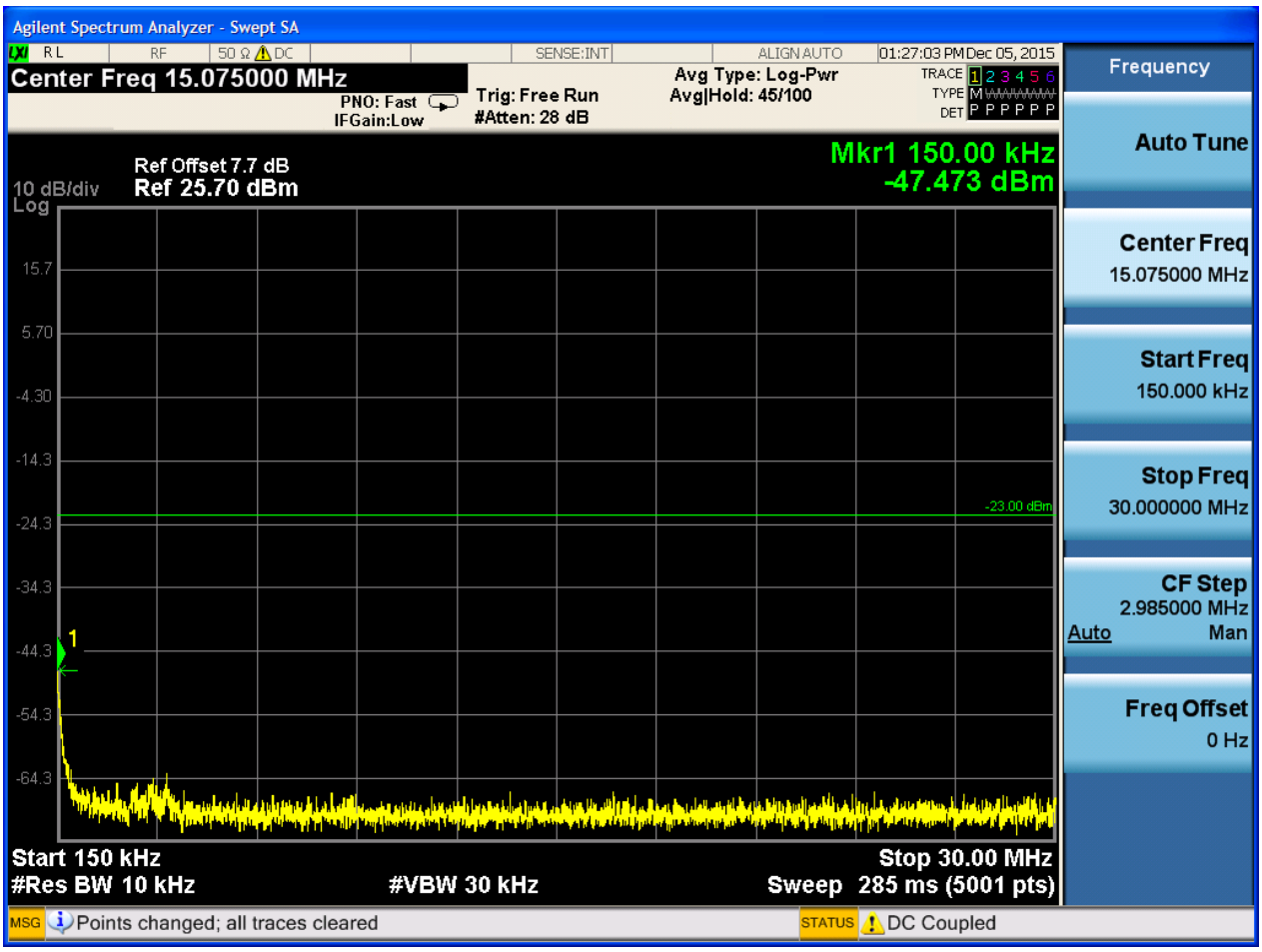

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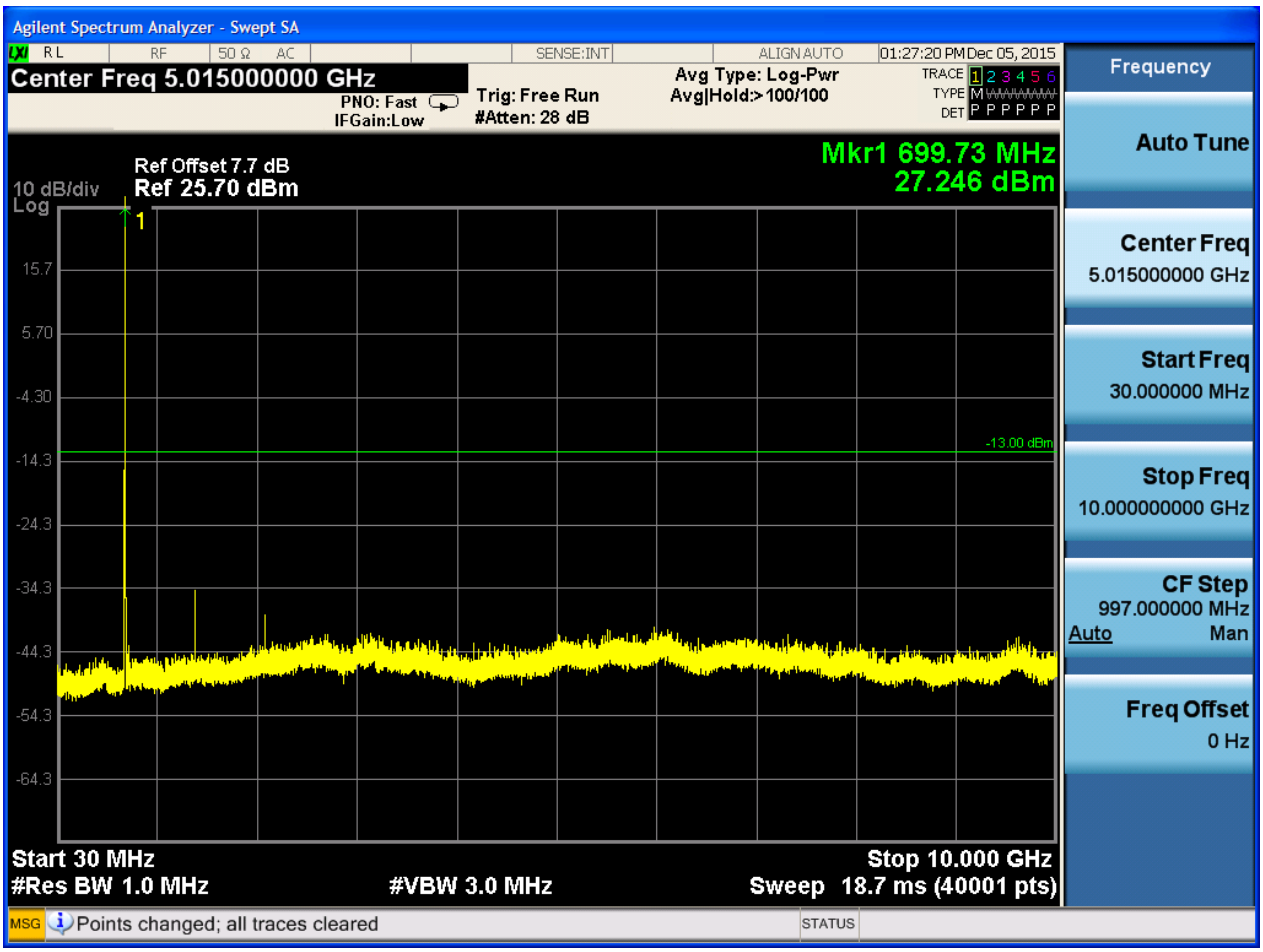

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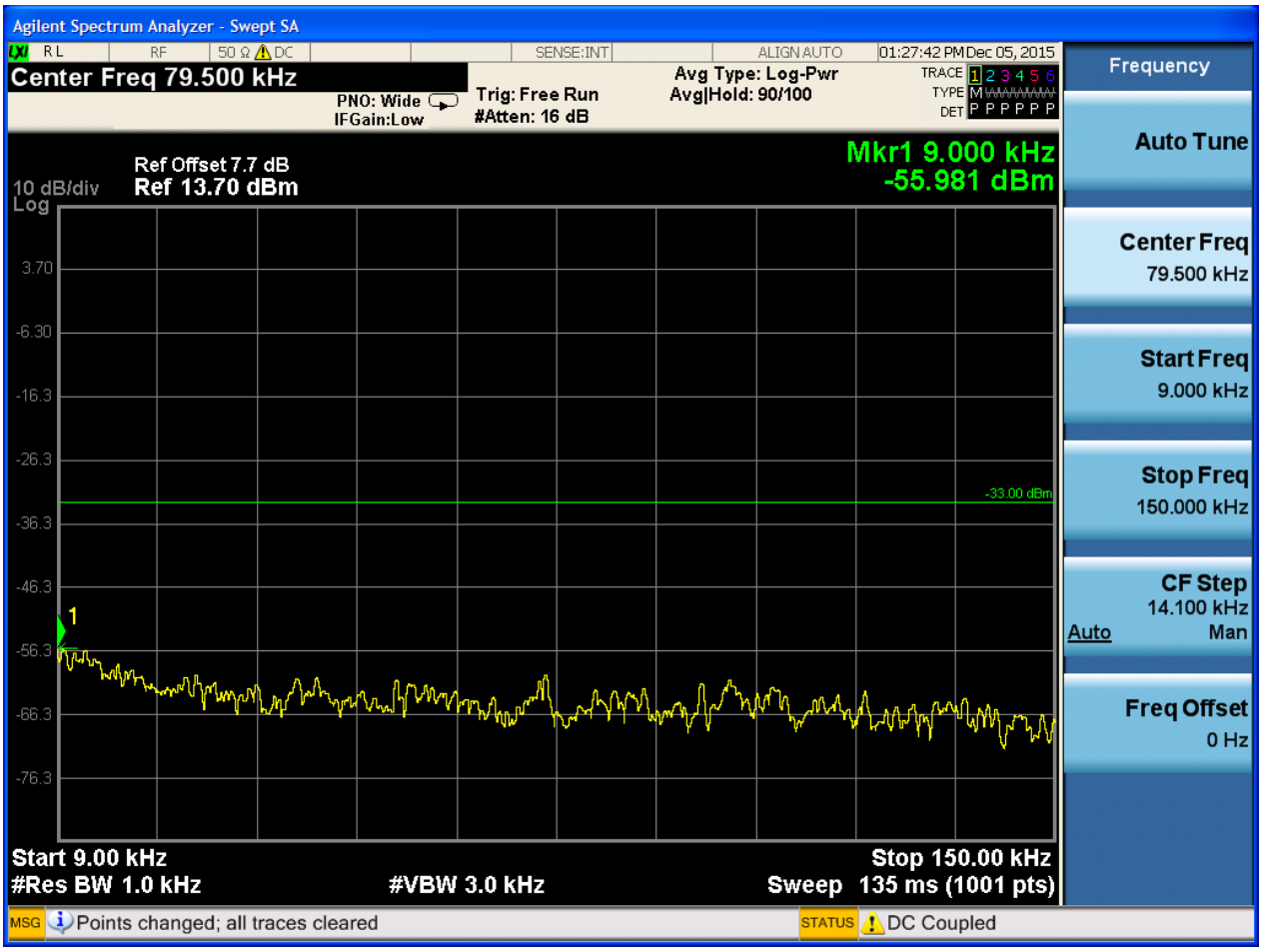
6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0



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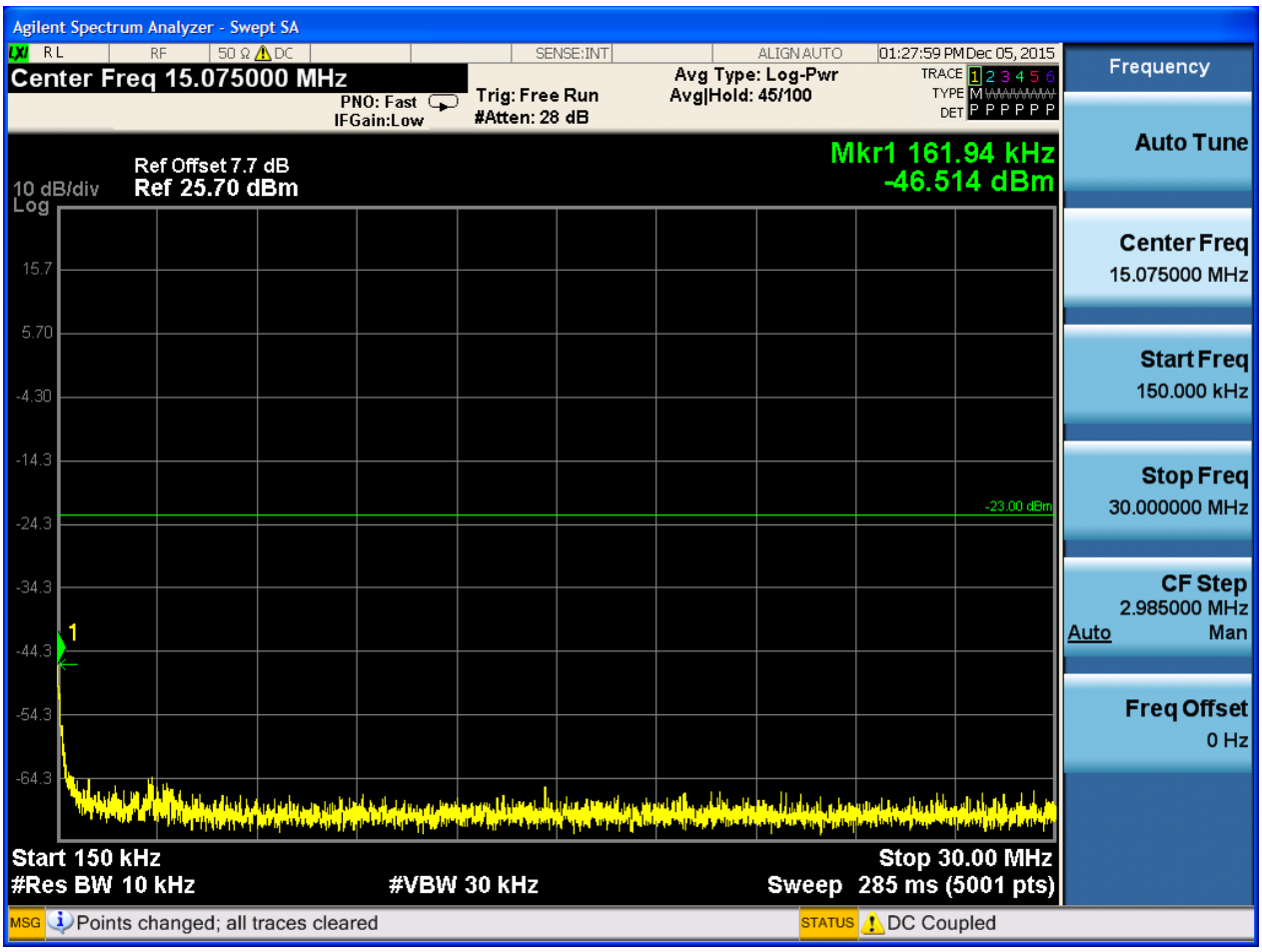

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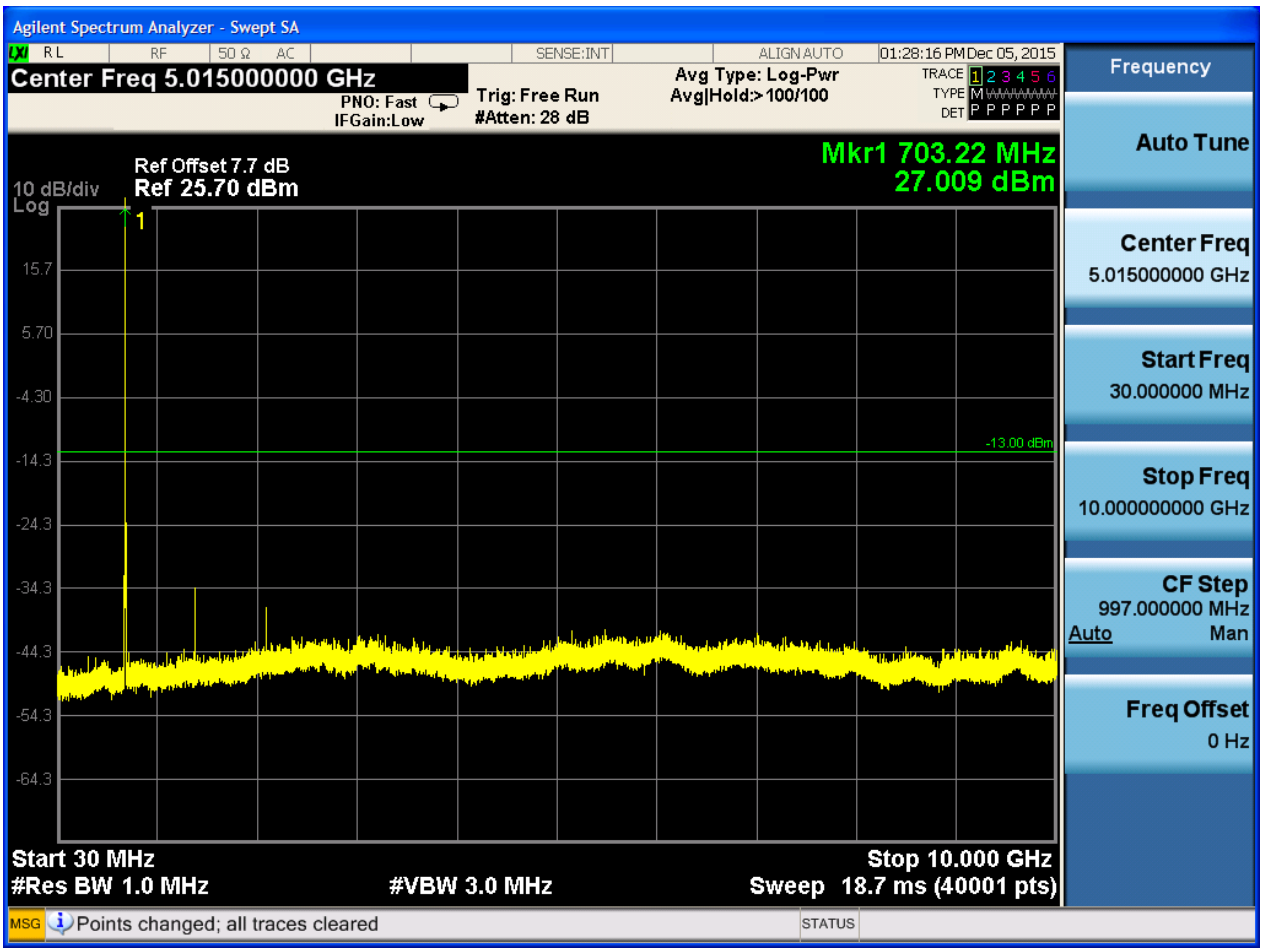

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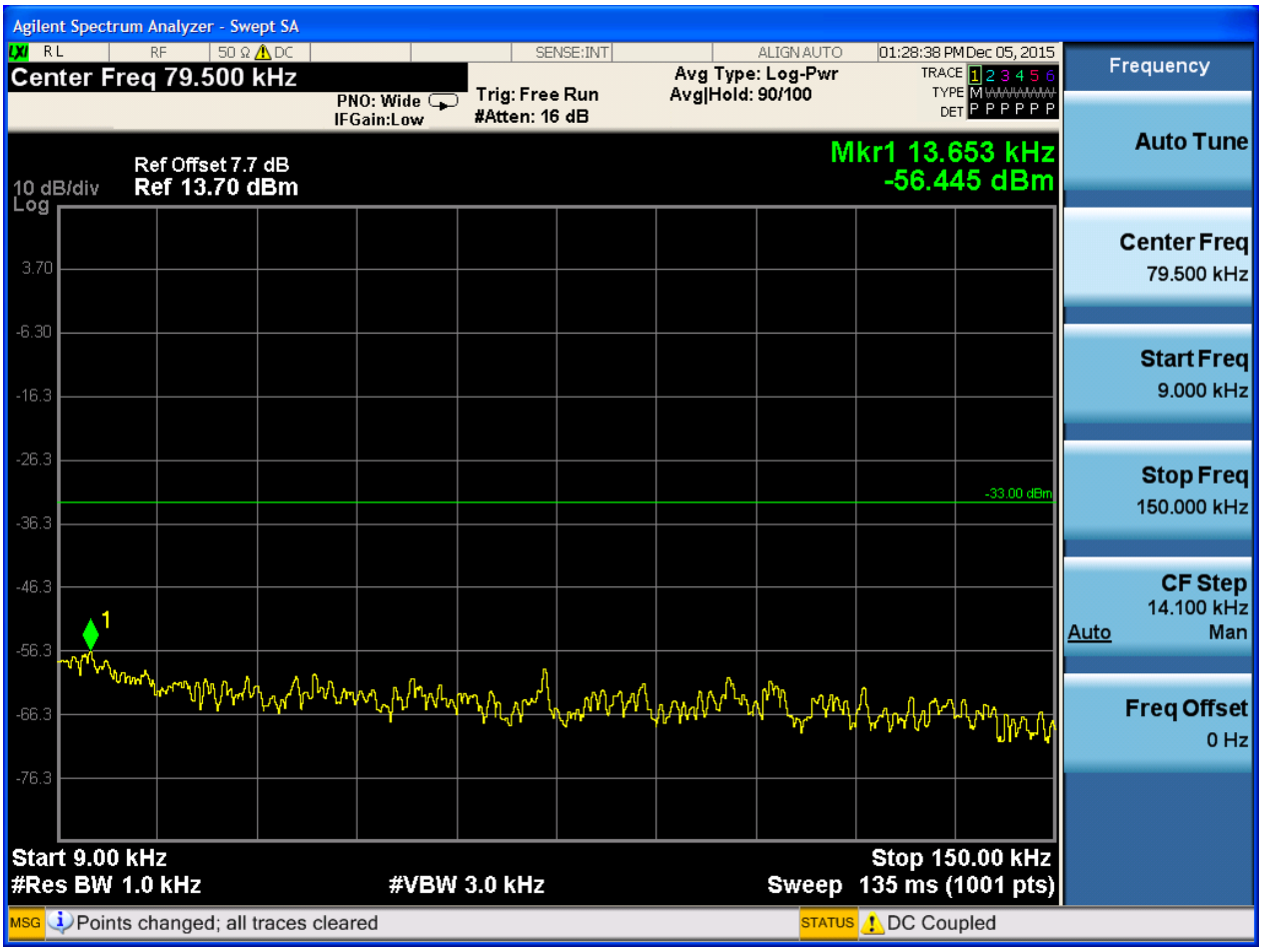
6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0



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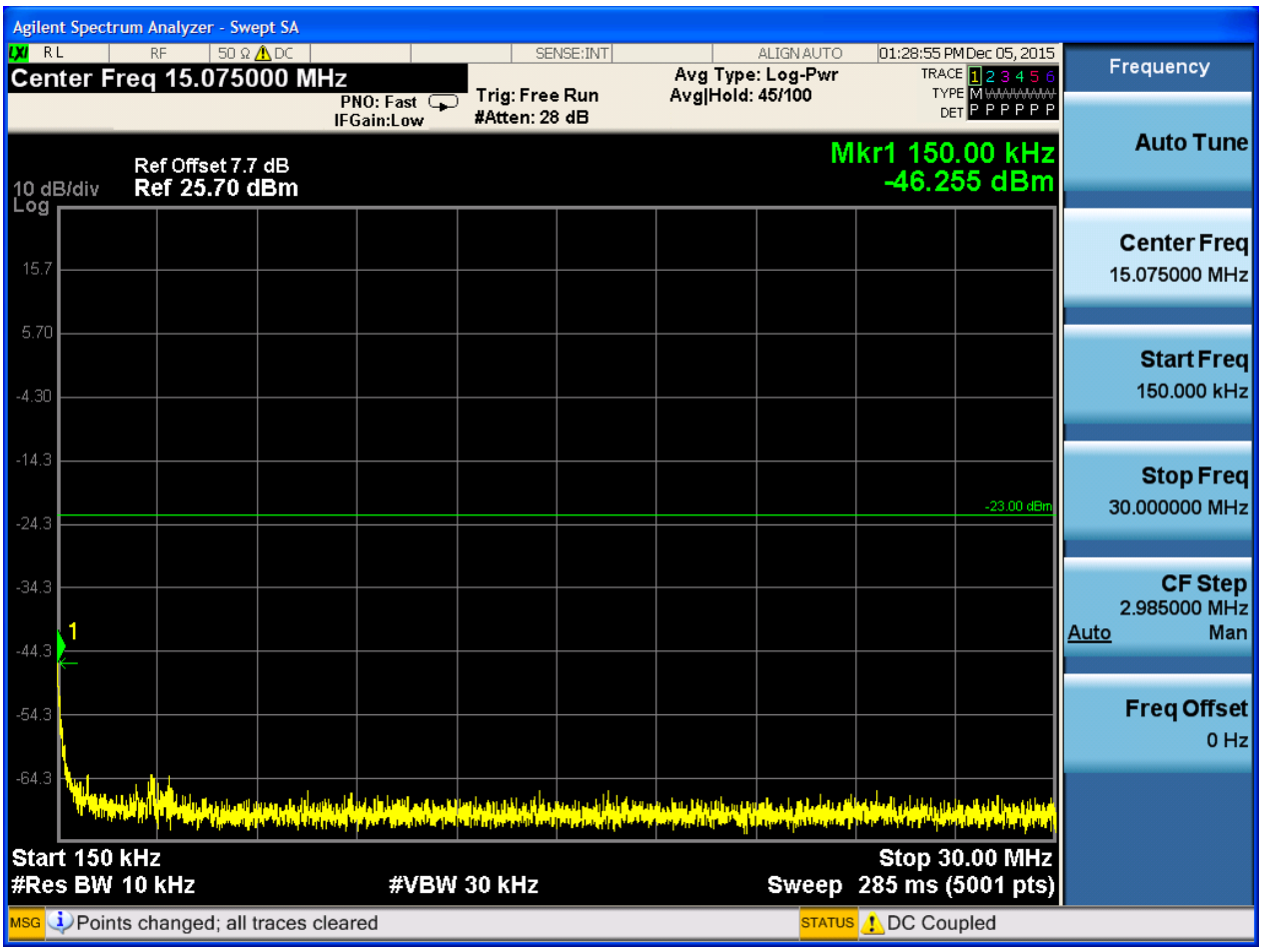

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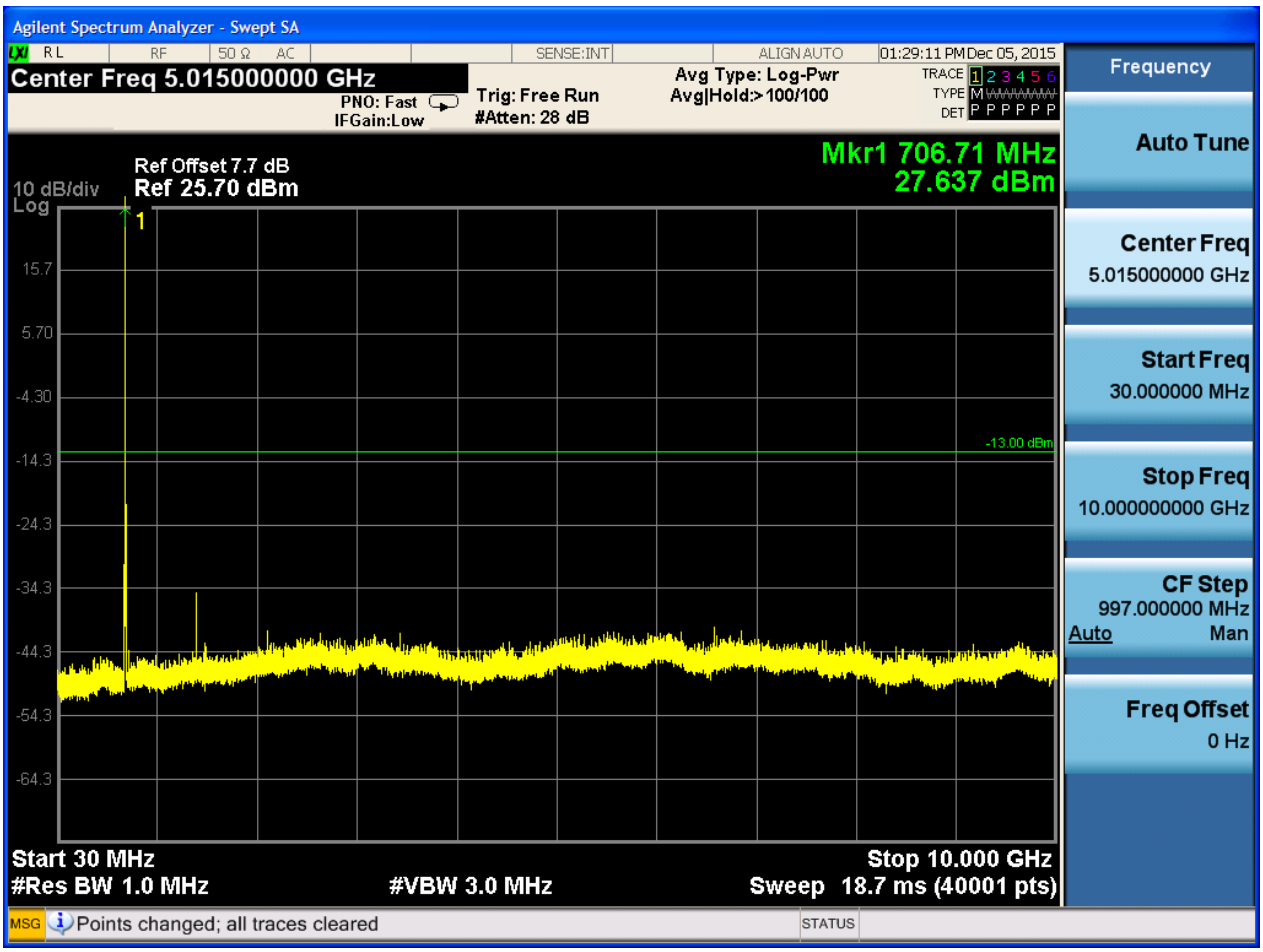

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7Appendix_G: Field Strength of Spurious Radiation

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

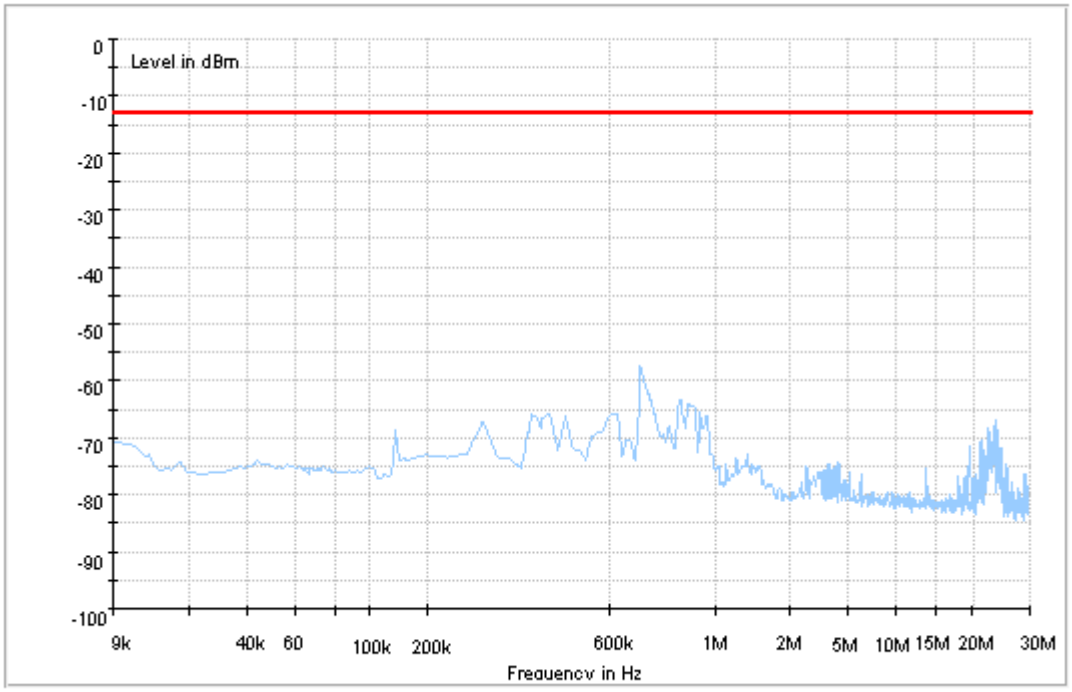
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

7.1 For LTE

7.1.1 Test Band = BAND12

7.1.1.1 Test Bandwidth = 1.4



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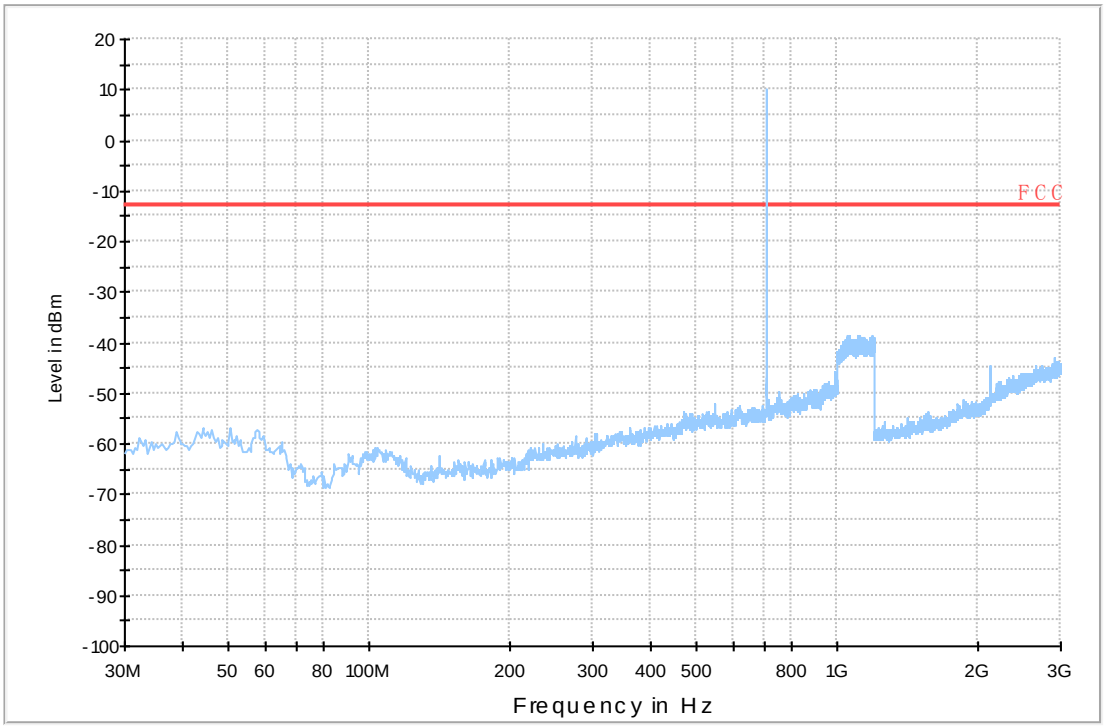
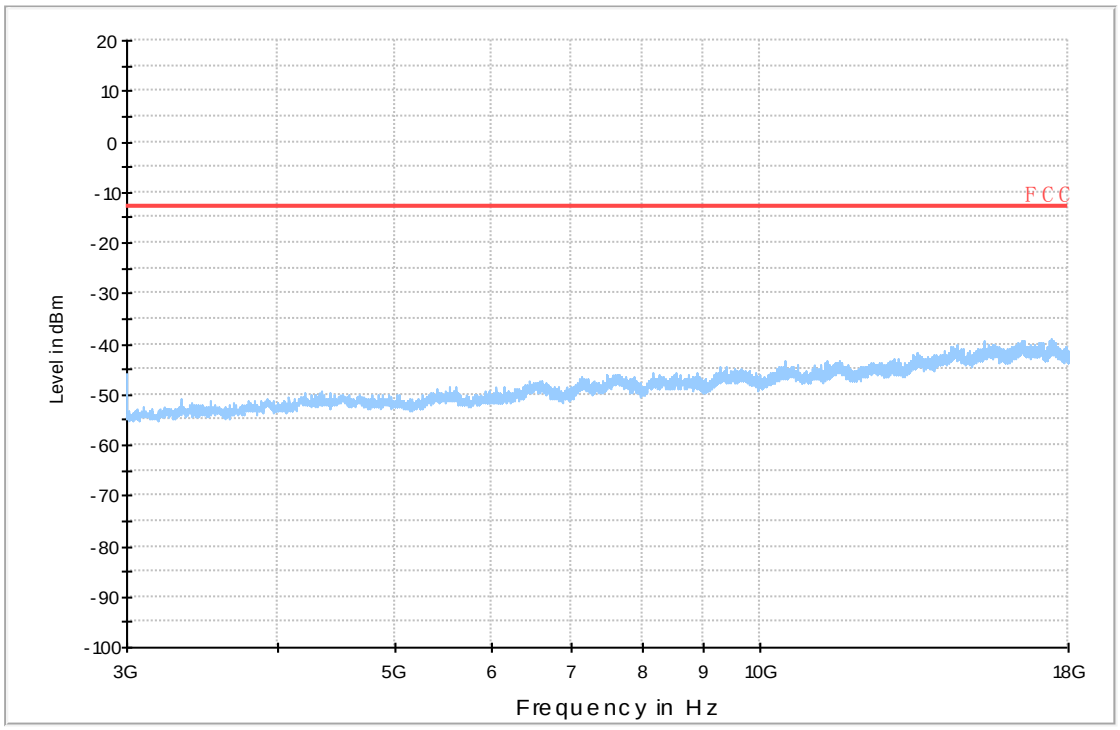
Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



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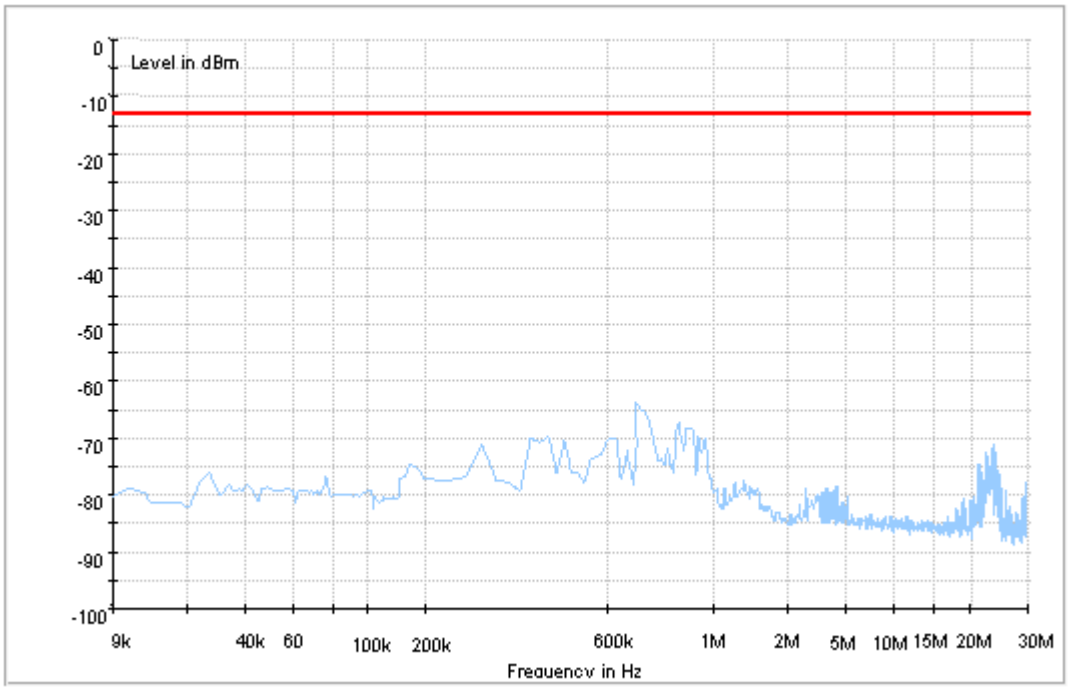
7.1.1.3 Test Bandwidth = 10



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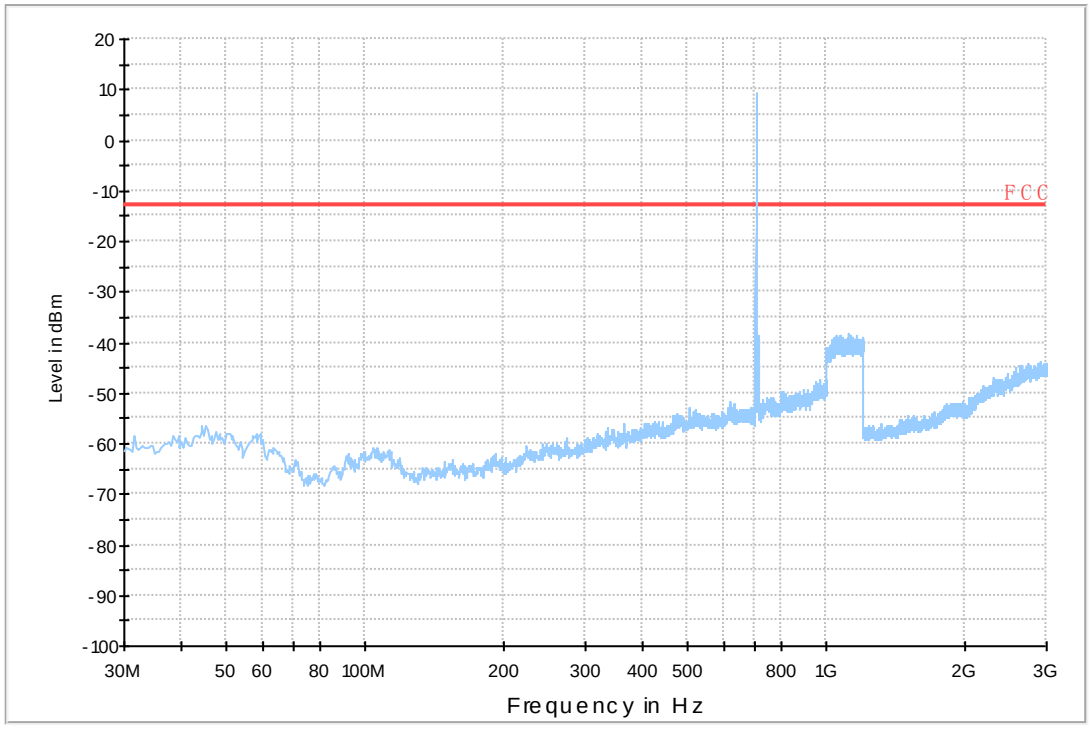

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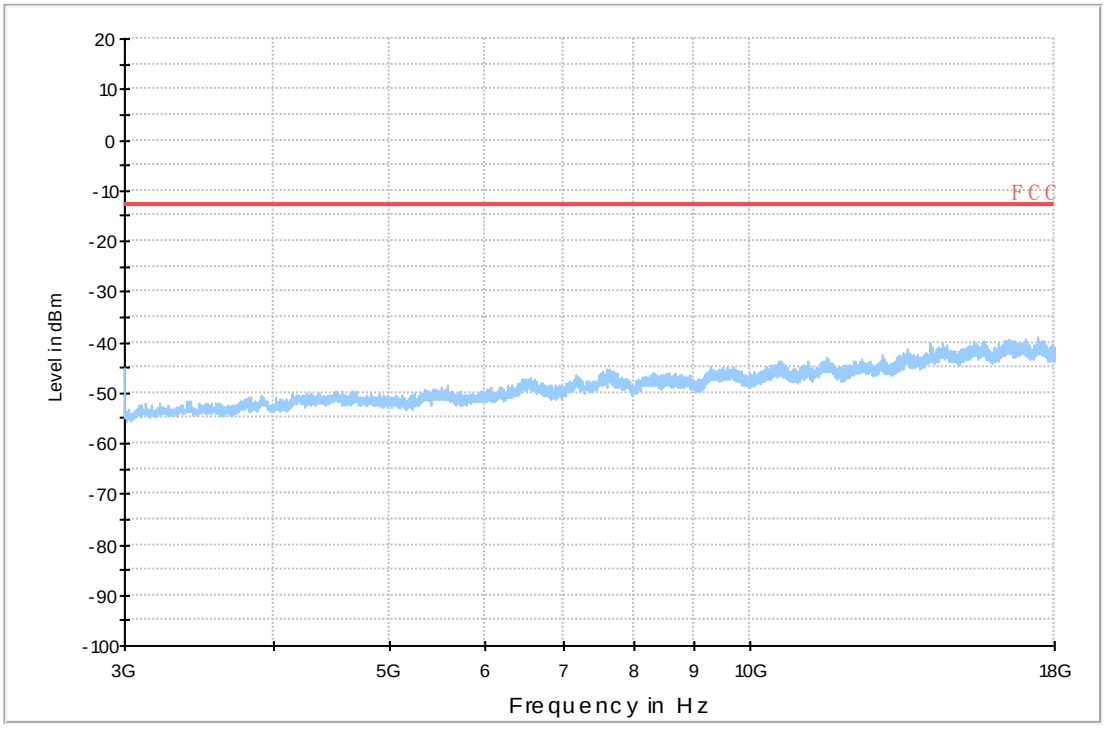
Copy of RSE-TX-DIRECTOR BELOW 1G_H



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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
BAND12	LTE/TM1	1.4	LCH	TN	VL	-0.11	-0.00016	PASS
					VN	-1.82	-0.0026	PASS
					VH	-1.47	-0.0021	PASS
			MCH	TN	VL	0.53	0.00075	PASS
					VN	-0.07	-0.0001	PASS
					VH	-1.00	-0.00141	PASS
			HCH	TN	VL	-0.94	-0.00131	PASS
					VN	0.01	0.00001	PASS
					VH	-0.97	-0.00136	PASS
		3	LCH	TN	VL	3.63	0.00518	PASS
					VN	2.16	0.00308	PASS
					VH	3.22	0.0046	PASS
			MCH	TN	VL	-0.21	-0.0003	PASS
					VN	-1.34	-0.00189	PASS
					VH	0.06	0.00008	PASS
			HCH	TN	VL	-0.09	-0.00013	PASS
					VN	-0.06	-0.00008	PASS
					VH	-0.39	-0.00055	PASS
		5	LCH	TN	VL	-1.04	-0.00148	PASS
					VN	-0.76	-0.00108	PASS
					VH	-1.22	-0.00174	PASS
			MCH	TN	VL	-1.69	-0.00239	PASS
					VN	-0.97	-0.00137	PASS
					VH	-1.50	-0.00212	PASS
			HCH	TN	VL	-0.83	-0.00116	PASS
					VN	-0.69	-0.00097	PASS
					VH	-0.87	-0.00122	PASS
		10	LCH	TN	VL	-0.41	-0.00058	PASS
					VN	-0.94	-0.00134	PASS
					VH	-0.26	-0.00037	PASS
			MCH	TN	VL	-2.55	-0.0036	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	-2.47	-0.00349	PASS
					VH	-3.65	-0.00516	PASS
			HCH	TN	VL	-6.97	-0.0098	PASS
					VN	-4.95	-0.00696	PASS
					VH	-5.76	-0.0081	PASS
	LTE/TM2	1.4	LCH	TN	VL	-2.16	-0.00309	PASS
					VN	-1.26	-0.0018	PASS
					VH	-1.40	-0.002	PASS
			MCH	TN	VL	-0.41	-0.00058	PASS
					VN	-0.27	-0.00038	PASS
					VH	-0.31	-0.00044	PASS
			HCH	TN	VL	-1.16	-0.00162	PASS
					VN	-0.96	-0.00134	PASS
					VH	-0.97	-0.00136	PASS
		3	LCH	TN	VL	1.52	0.00217	PASS
					VN	1.09	0.00156	PASS
					VH	1.73	0.00247	PASS
			MCH	TN	VL	-0.37	-0.00052	PASS
					VN	-0.49	-0.00069	PASS
					VH	-0.46	-0.00065	PASS
			HCH	TN	VL	0.11	0.00015	PASS
					VN	-0.30	-0.00042	PASS
					VH	-0.84	-0.00118	PASS
		5	LCH	TN	VL	0.19	0.00027	PASS
					VN	-0.04	-0.00006	PASS
					VH	-1.37	-0.00195	PASS
			MCH	TN	VL	-0.33	-0.00047	PASS
					VN	-1.83	-0.00259	PASS
					VH	-0.34	-0.00048	PASS
			HCH	TN	VL	-0.87	-0.00122	PASS
					VN	-1.12	-0.00157	PASS
					VH	-0.20	-0.00028	PASS
		10	LCH	TN	VL	0.00	0	PASS
					VN	-0.31	-0.00044	PASS
					VH	-1.30	-0.00185	PASS
			MCH	TN	VL	-0.03	-0.00004	PASS
					VN	-0.29	-0.00041	PASS
					VH	-0.14	-0.0002	PASS
			HCH	TN	VL	-1.92	-0.0027	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	-1.52	-0.00214	PASS
					VH	-1.86	-0.00262	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
BAND12	LTE/TM1	1.4	LCH	VN	-30	-1.89	-0.0027	PASS
					-20	-3.13	-0.00447	PASS
					-10	-2.23	-0.00319	PASS
					0	-1.40	-0.002	PASS
					10	-2.13	-0.00304	PASS
					20	-2.05	-0.00293	PASS
					30	-2.69	-0.00384	PASS
					40	-1.85	-0.00264	PASS
					50	-2.23	-0.00319	PASS
			MCH	VN	-30	-1.02	-0.00144	PASS
					-20	-0.06	-0.00008	PASS
					-10	-0.80	-0.00113	PASS
					0	-0.73	-0.00103	PASS
					10	-0.01	-0.00001	PASS
					20	-0.64	-0.0009	PASS
					30	0.63	0.00089	PASS
					40	-1.54	-0.00218	PASS
					50	-0.72	-0.00102	PASS
			HCH	VN	-30	-0.06	-0.00008	PASS
					-20	-1.77	-0.00247	PASS
					-10	-1.00	-0.0014	PASS
					0	-1.13	-0.00158	PASS
					10	-1.17	-0.00164	PASS
					20	-0.50	-0.0007	PASS
					30	-0.80	-0.00112	PASS
					40	-0.43	-0.0006	PASS
					50	-1.20	-0.00168	PASS
		3	LCH	VN	-30	1.19	0.0017	PASS
					-20	0.96	0.00137	PASS
					-10	0.04	0.00006	PASS
					0	1.24	0.00177	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	2.79	0.00398	PASS
					20	1.24	0.00177	PASS
					30	0.73	0.00104	PASS
					40	1.03	0.00147	PASS
					50	1.16	0.00166	PASS
			MCH	VN	-30	0.11	0.00016	PASS
					-20	-0.20	-0.00028	PASS
					-10	-1.13	-0.0016	PASS
					0	-0.36	-0.00051	PASS
					10	-1.36	-0.00192	PASS
					20	-0.36	-0.00051	PASS
					30	-0.21	-0.0003	PASS
					40	-0.67	-0.00095	PASS
					50	-0.94	-0.00133	PASS
			HCH	VN	-30	-1.00	-0.0014	PASS
					-20	0.31	0.00043	PASS
					-10	-0.21	-0.00029	PASS
					0	-0.50	-0.0007	PASS
					10	-0.67	-0.00094	PASS
					20	-0.44	-0.00062	PASS
					30	-0.66	-0.00092	PASS
					40	-0.97	-0.00136	PASS
					50	0.63	0.00088	PASS
		5	LCH	VN	-30	-0.40	-0.00057	PASS
					-20	-0.64	-0.00091	PASS
					-10	-0.34	-0.00048	PASS
					0	-0.70	-0.001	PASS
					10	-0.07	-0.0001	PASS
					20	0.01	0.00001	PASS
					30	-0.69	-0.00098	PASS
					40	-0.73	-0.00104	PASS
					50	-0.90	-0.00128	PASS
			MCH	VN	-30	-0.39	-0.00055	PASS
					-20	-0.79	-0.00112	PASS
					-10	-0.62	-0.00088	PASS
					0	-0.73	-0.00103	PASS
					10	-0.67	-0.00095	PASS
					20	0.06	0.00008	PASS
					30	-0.62	-0.00088	PASS

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Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	0.07	0.0001	PASS
					50	-0.80	-0.00113	PASS
			HCH	VN	-30	0.03	0.00004	PASS
					-20	0.13	0.00018	PASS
					-10	0.07	0.0001	PASS
					0	-0.92	-0.00129	PASS
					10	-0.44	-0.00062	PASS
					20	-0.23	-0.00032	PASS
					30	0.39	0.00055	PASS
					40	-0.37	-0.00052	PASS
					50	-1.13	-0.00158	PASS
		10	LCH	VN	-30	-0.94	-0.00134	PASS
					-20	-0.24	-0.00034	PASS
					-10	-0.64	-0.00091	PASS
					0	-1.36	-0.00193	PASS
					10	-0.77	-0.00109	PASS
					20	-2.37	-0.00337	PASS
					30	-0.70	-0.00099	PASS
					40	0.21	0.0003	PASS
					50	-0.82	-0.00116	PASS
			MCH	VN	-30	-2.95	-0.00417	PASS
					-20	-3.78	-0.00534	PASS
					-10	-3.15	-0.00445	PASS
					0	-3.85	-0.00544	PASS
					10	-3.19	-0.00451	PASS
					20	-3.38	-0.00478	PASS
					30	-1.93	-0.00273	PASS
					40	-3.48	-0.00492	PASS
					50	-2.93	-0.00414	PASS
			HCH	VN	-30	-7.54	-0.0106	PASS
					-20	-6.72	-0.00945	PASS
					-10	-5.78	-0.00813	PASS
					0	-5.52	-0.00776	PASS
					10	-5.18	-0.00729	PASS
					20	-6.54	-0.0092	PASS
					30	-6.37	-0.00896	PASS
					40	-6.17	-0.00868	PASS
					50	-6.61	-0.0093	PASS
	LTE/TM2	1.4	LCH	VN	-30	-0.43	-0.00061	PASS

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