Appendix for Test report

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1Appendix_A: Output Power Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
GSM850	GSM/TM1	LCH	32.46	30.15	38.5	PASS
		MCH	32.55	30.29	38.5	PASS
		HCH	32.58	30.13	38.5	PASS
	GSM/TM2	LCH	25.09	22.59	38.5	PASS
		MCH	25.15	22.88	38.5	PASS
		HCH	25.17	22.71	38.5	PASS
WCDMA850	UMTS/TM1	LCH	23.07	20.55	38..5	PASS
		MCH	23.19	20.95	38.5	PASS
		HCH	22.85	20.35	38.5	PASS

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
GSM1900	GSM/TM1	LCH	29.84	31.31	33	PASS
		MCH	29.86	31.35	33	PASS
		HCH	29.89	31.55	33	PASS

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Test Band	Test Mode	Test Channel	Conducted Power [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
	GSM/TM2	LCH	24.33	25.81	33	PASS
		MCH	24.41	26.08	33	PASS
		HCH	24.49	26.02	33	PASS
WCDM1900	UMTS/TM1	LCH	22.60	24.29	33	PASS
		MCH	22.45	24.01	33	PASS
		HCH	22.75	24.22	33	PASS

Note1: a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b, SGP=Signal Generator Level

Note2: RBW > emission bandwidth, VBW > 3 x RBW.

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2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM1900	GSM/TM1	LCH	0.13	13	PASS
		MCH	0.13	13	PASS
		HCH	0.13	13	PASS
	GSM/TM2	LCH	3.19	13	PASS
		MCH	3.19	13	PASS
		HCH	3.22	13	PASS
Test Band	**Test Mode**	**Test Channel**	**Measured[dB]**	**Limit [dB]**	**Verdict**
WCDMA1900	UMTS/TM1	LCH	3.07	13	PASS
		MCH	3.14	13	PASS
		HCH	2.9	13	PASS

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3Appendix_C: Modulation Characteristics

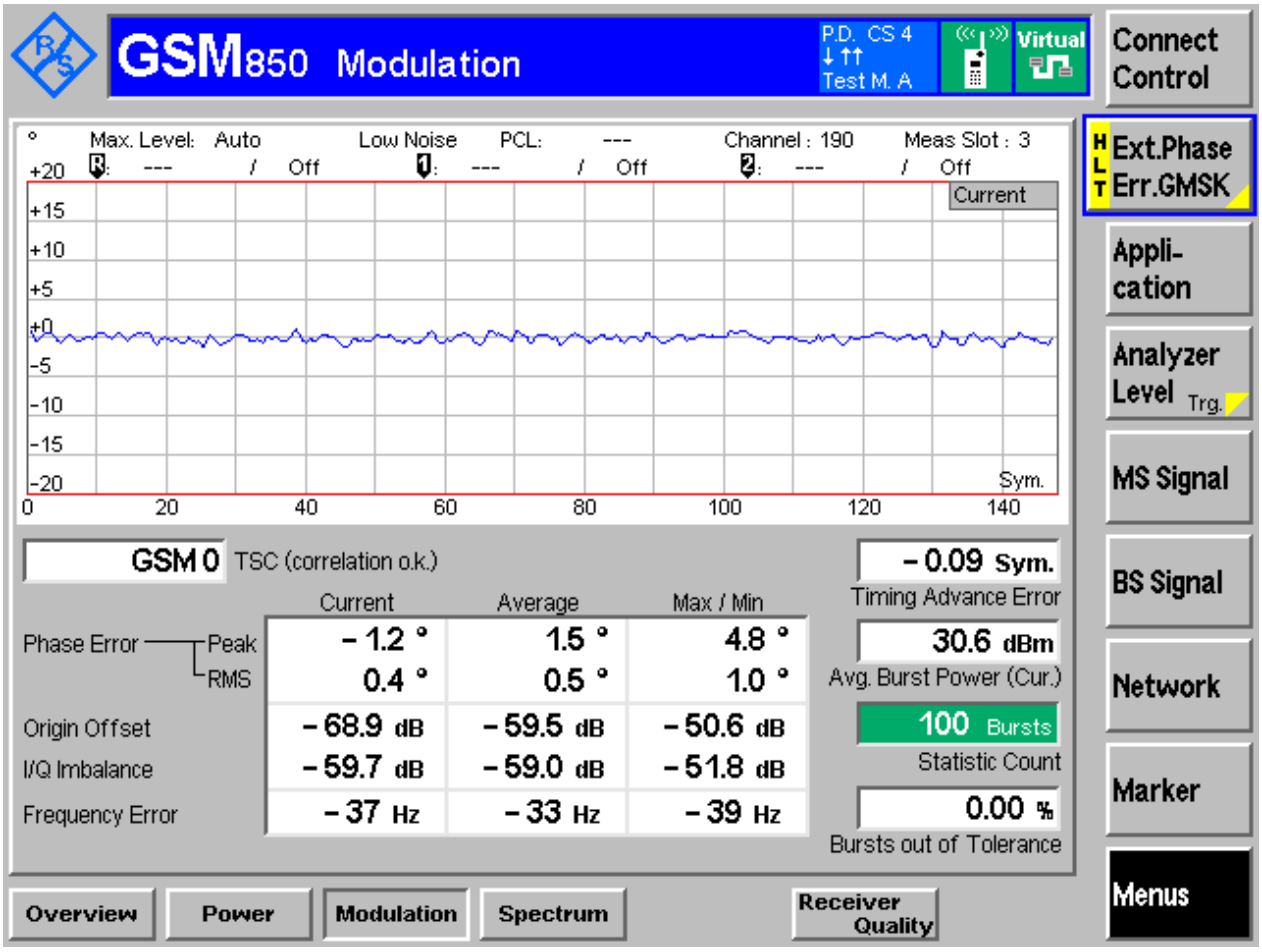
Part I - Test Plots

3.1 For GSM

3.1.1 Test Band = GSM850

3.1.1.1 Test Mode = GSM/TM1

3.1.1.1.1 Test Channel = MCH



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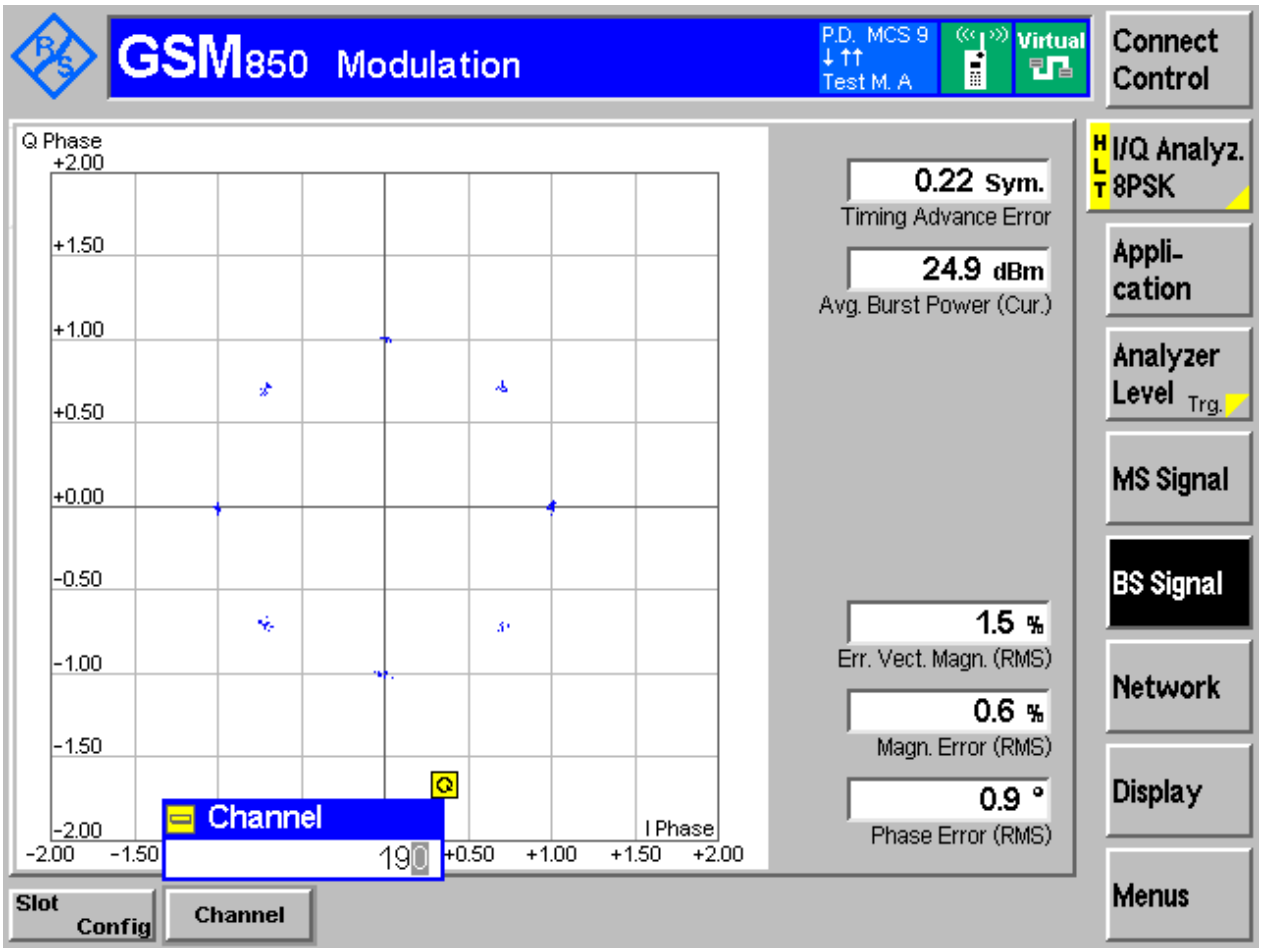
3.1.1.2 Test Mode = GSM/TM2

3.1.1.2.1 Test Channel = MCH



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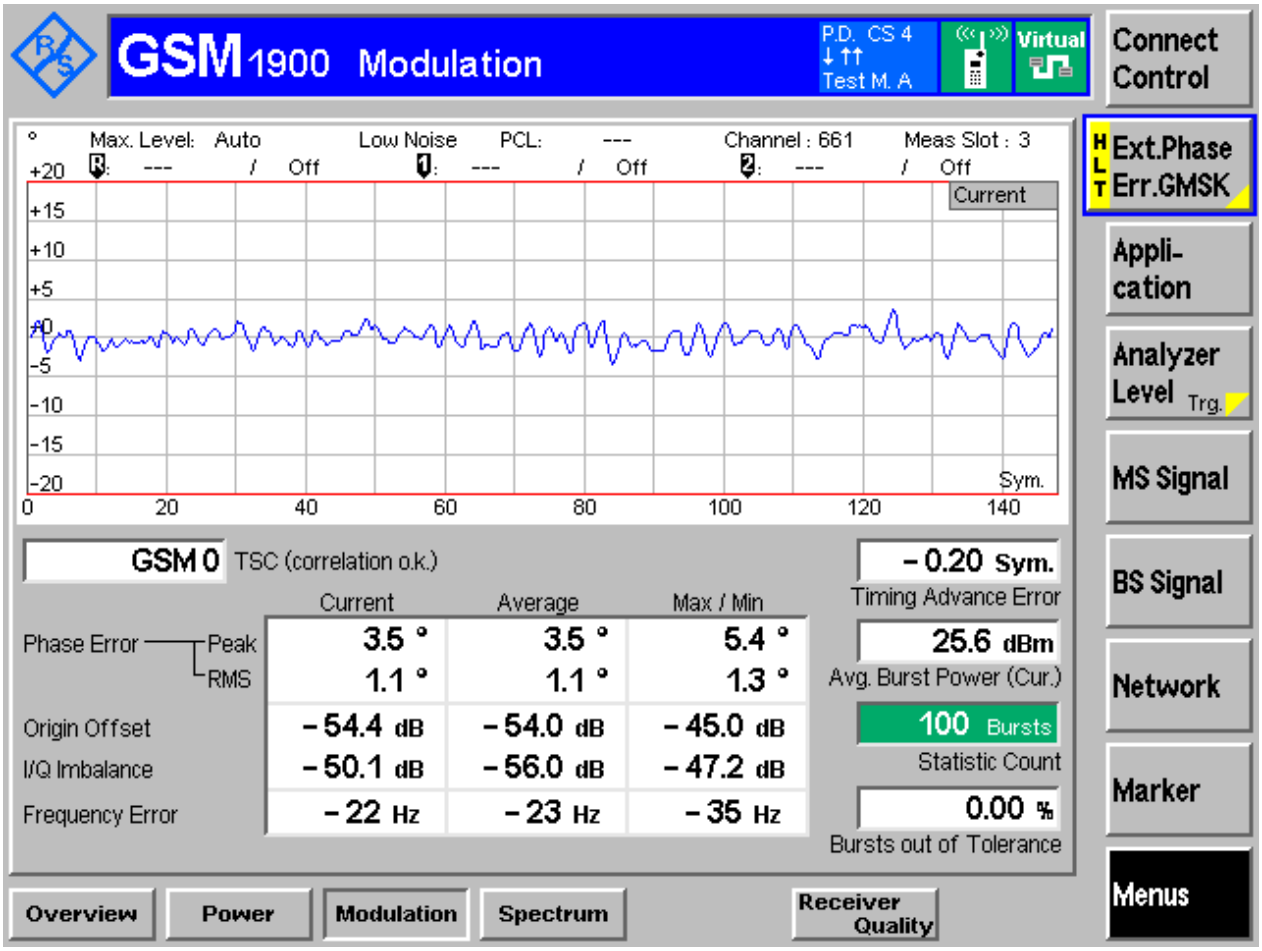
3.1.2 Test Band = GSM1900

3.1.2.1 Test Mode = GSM/TM1

3.1.2.1.1 Test Channel = MCH



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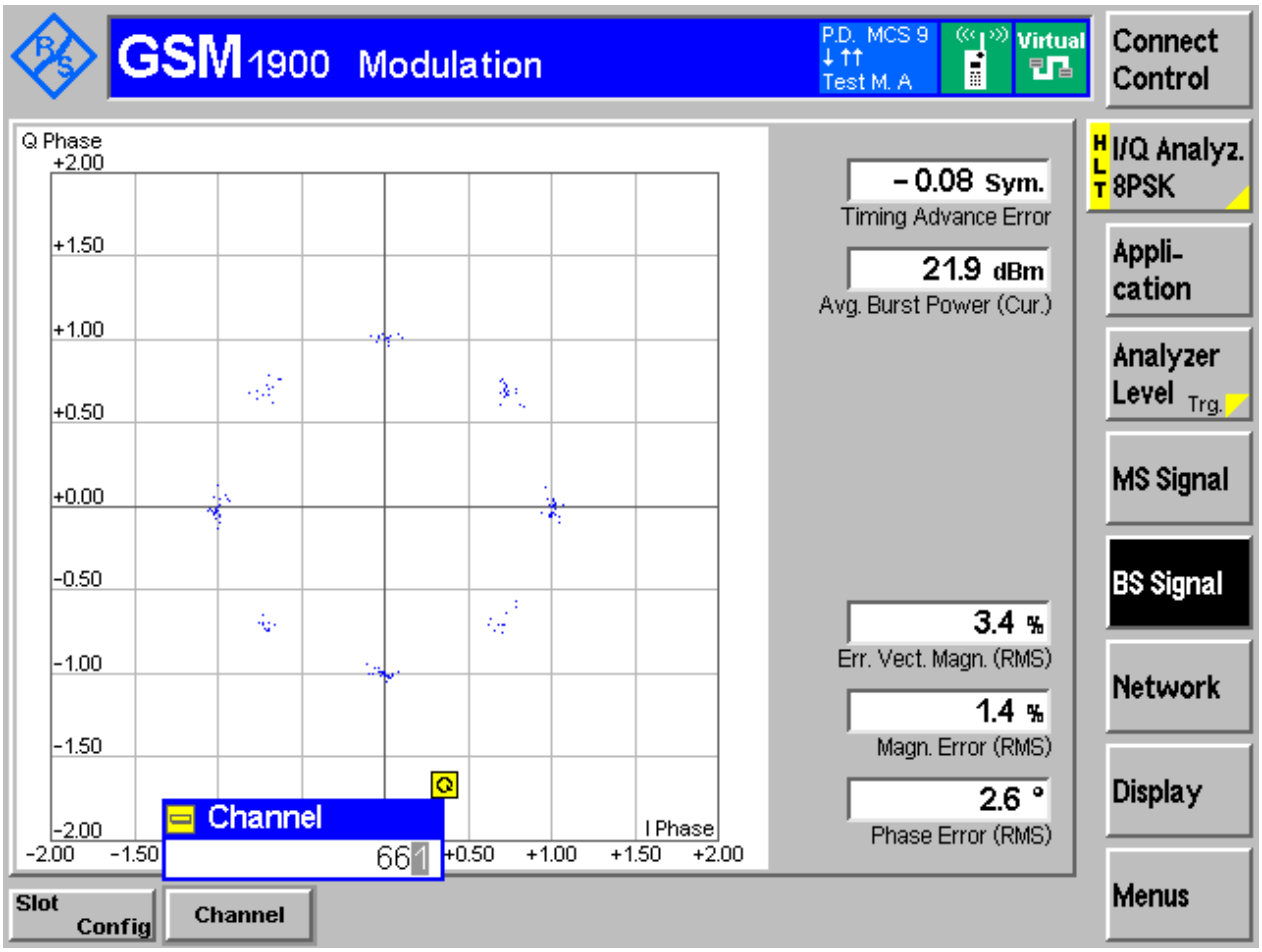
3.1.2.2 Test Mode = GSM/TM2

3.1.2.2.1 Test Channel = MCH



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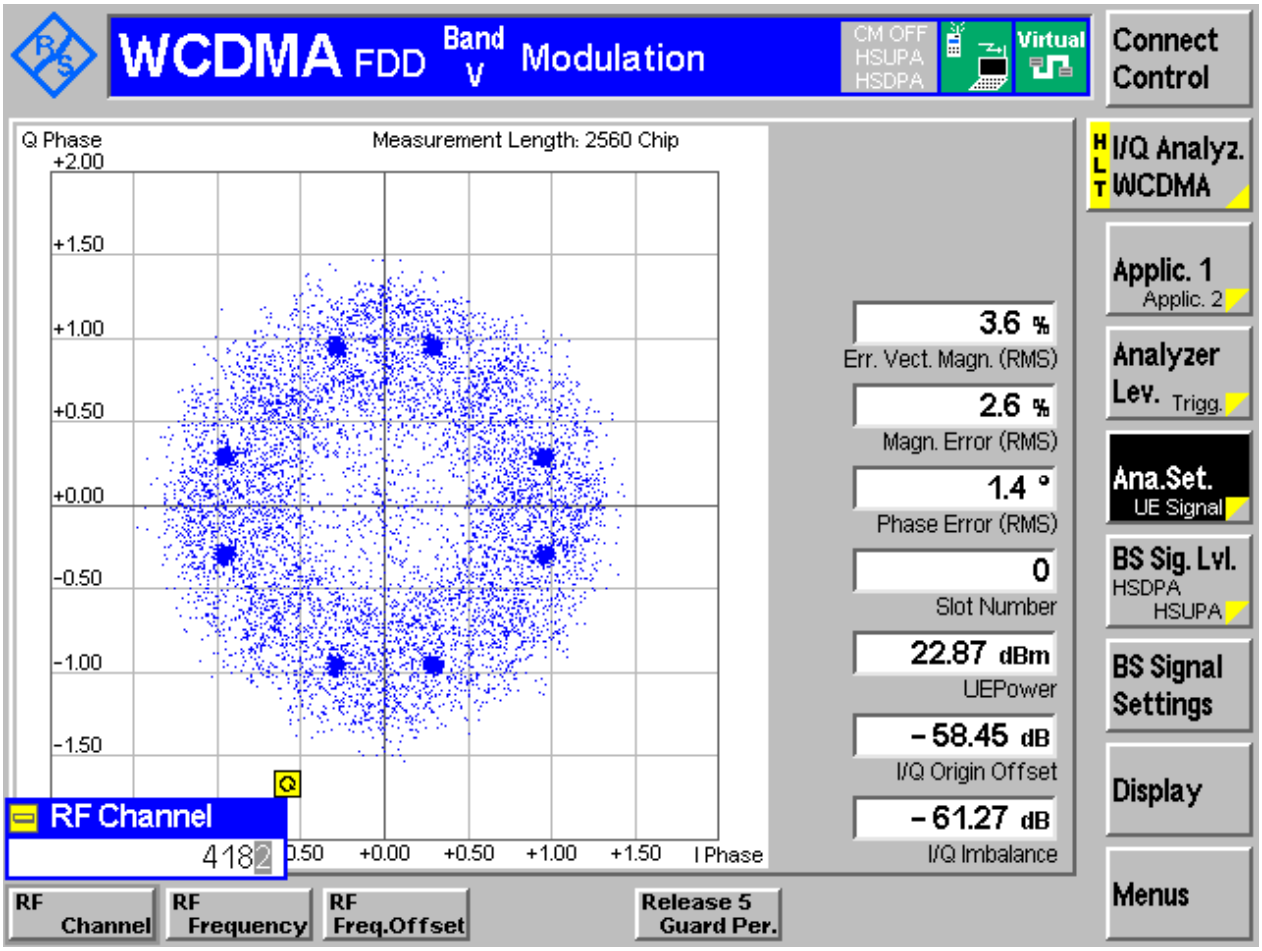
3.2 For UMTS

3.2.1 Test Band = WCDMA850

3.2.1.1 Test Mode = UMTS/TM1

3.2.1.1.1 Test Channel = MCH



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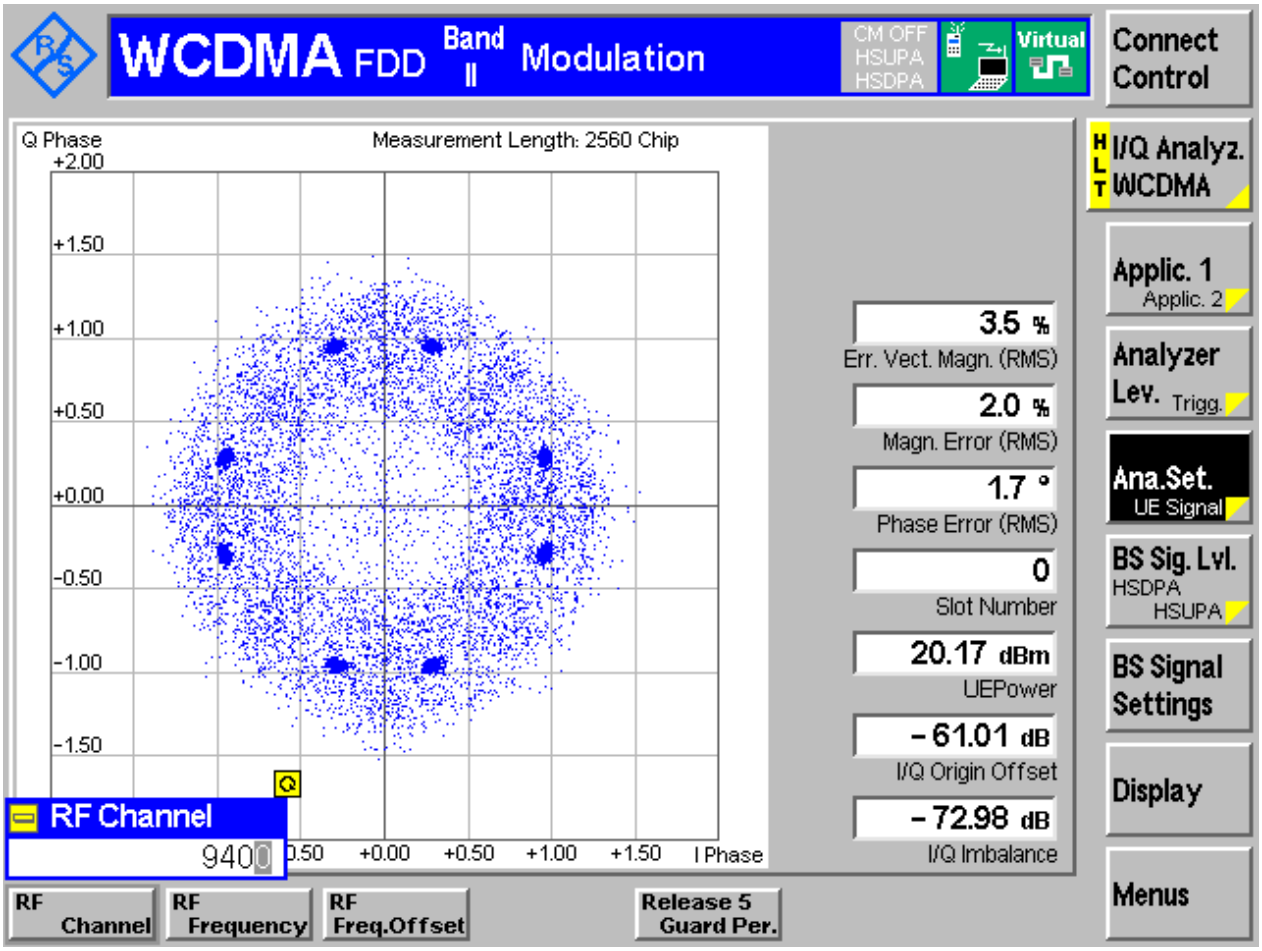
3.2.2 Test Band = WCDMA1900

3.2.2.1 Test Mode = UMTS/TM1

3.2.2.1.1 Test Channel = MCH



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [kHz]	Verdict
GSM850	GSM/TM1	LCH	245.72	320.00	Pass
		MCH	243.98	313.82	Pass
		HCH	246.34	314.08	Pass
	GSM/TM2	LCH	244.15	314.71	Pass
		MCH	246.19	308.11	Pass
		HCH	243.94	308.69	Pass
GSM1900	GSM/TM1	LCH	244.88	313.18	Pass
		MCH	242.14	323.12	Pass
		HCH	240.67	315.48	Pass
	GSM/TM2	LCH	243.95	320.20	Pass
		MCH	245.01	314.20	Pass
		HCH	238.96	311.21	Pass
Test Band	**Test Mode**	**Test Channel**	**Occupied Bandwidth [MHz]**	**Emission Bandwidth [MHz]**	**Verdict**
WCDMA850	UMTS/TM1	LCH	4.16	4.67	Pass
		MCH	4.16	4.69	Pass
		HCH	4.17	4.70	Pass
WCDMA1900	UMTS/TM1	LCH	4.16	4.67	Pass
		MCH	4.16	4.68	Pass
		HCH	4.15	4.68	Pass

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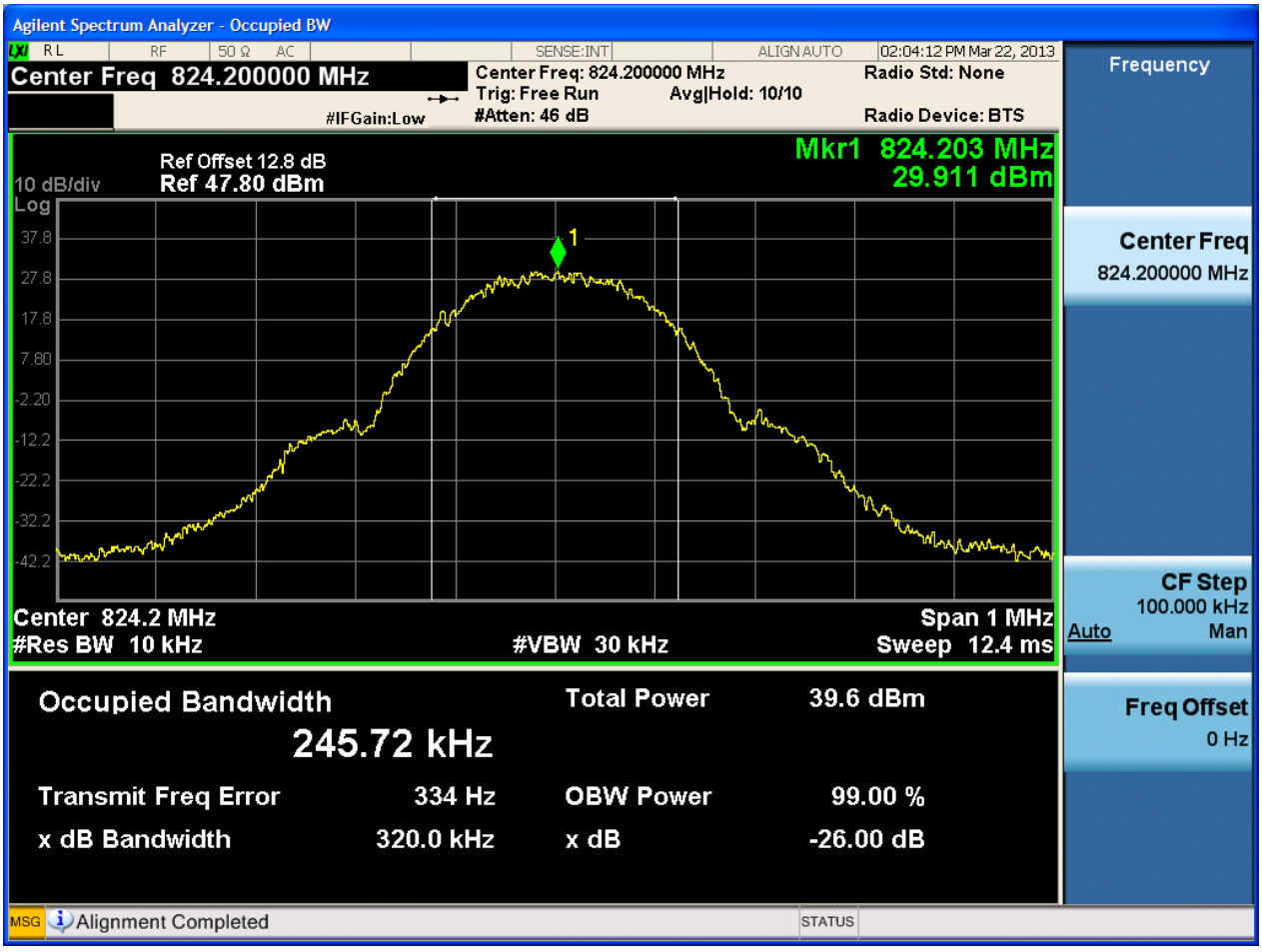
Part II - Test Plots

4.1 For GSM

4.1.1 Test Band = GSM850

4.1.1.1 Test Mode = GSM/TM1

4.1.1.1.1 Test Channel = LCH



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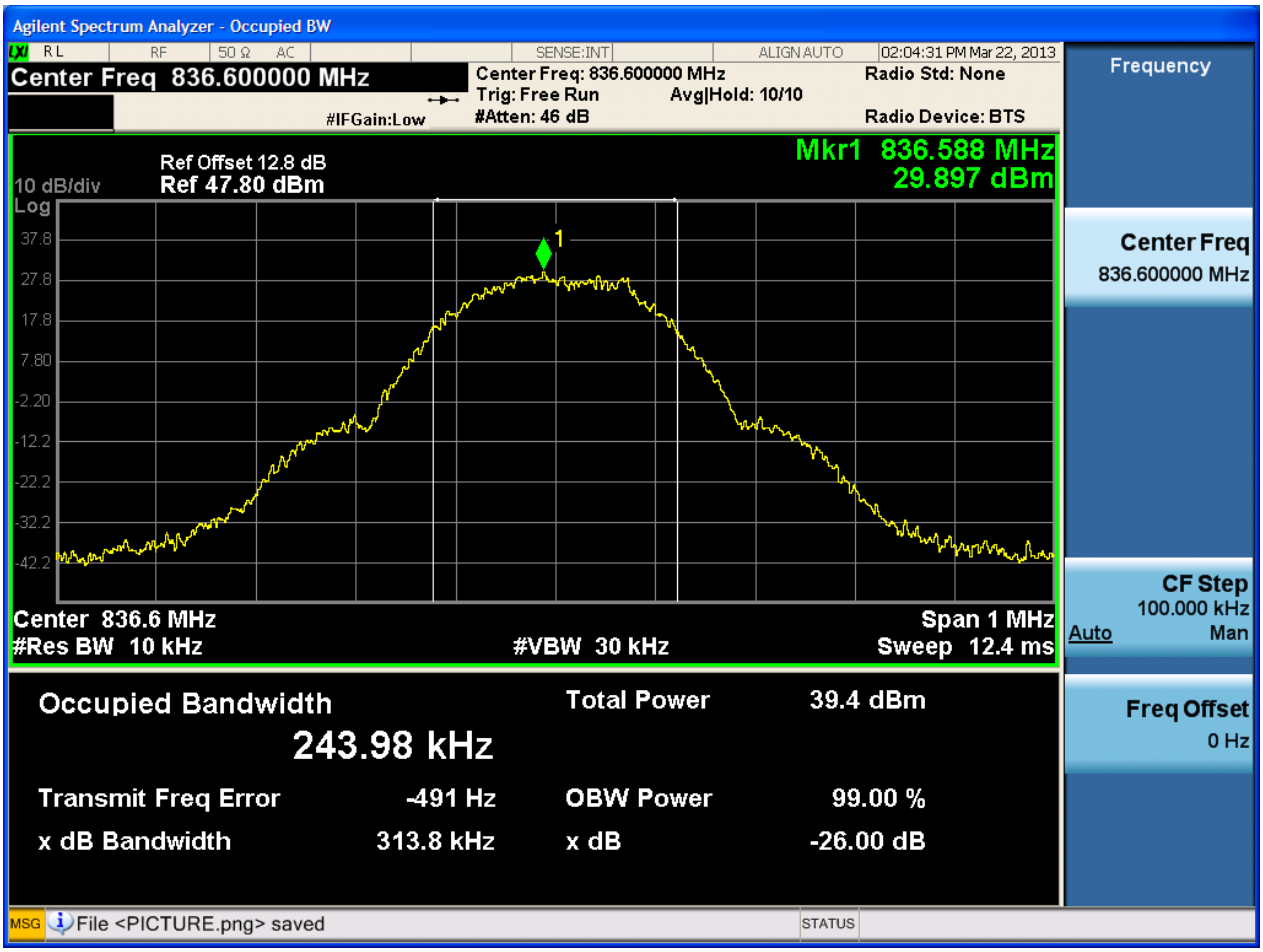
4.1.1.1.2 Test Channel = MCH



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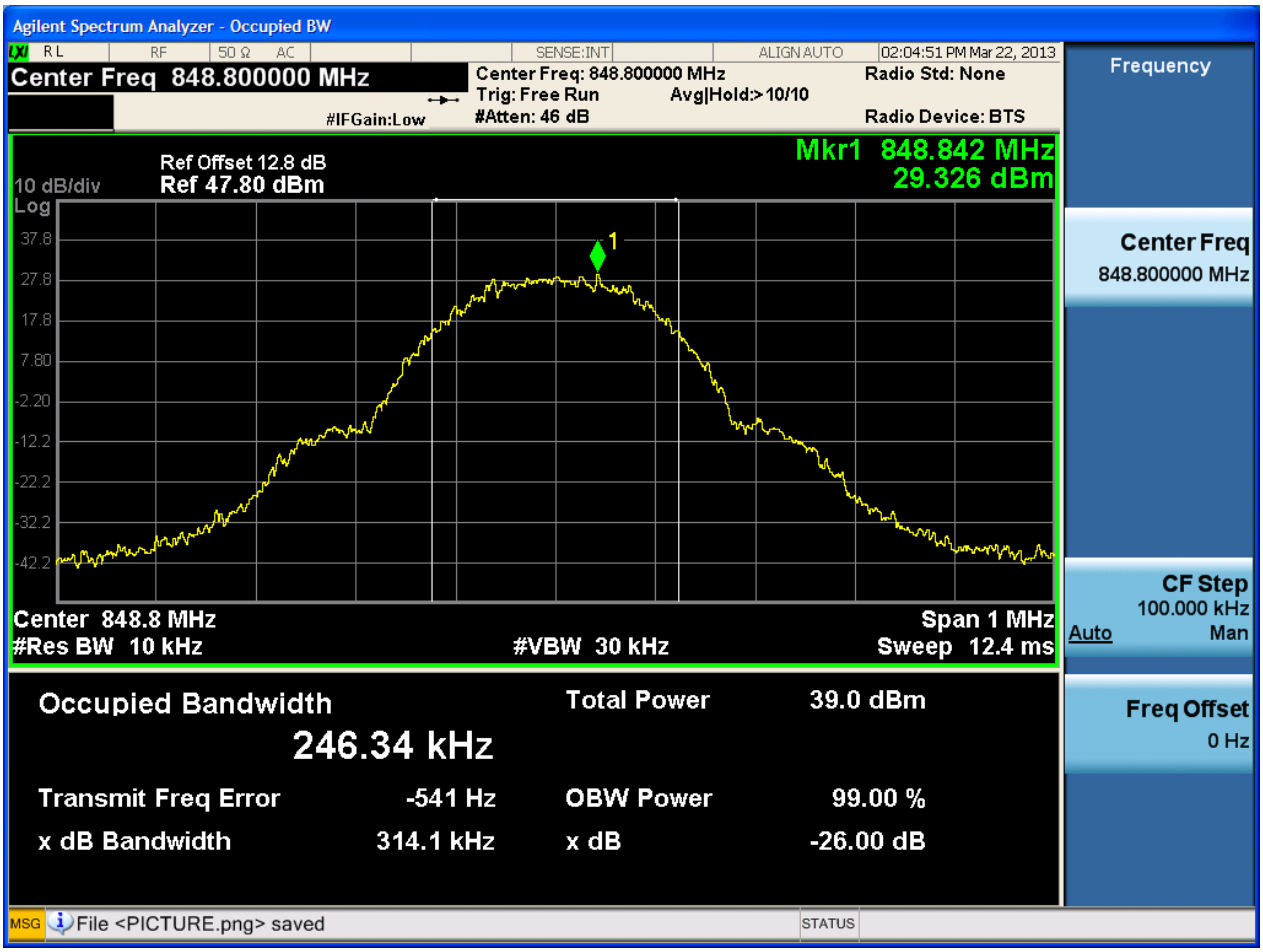
4.1.1.1.3 Test Channel = HCH



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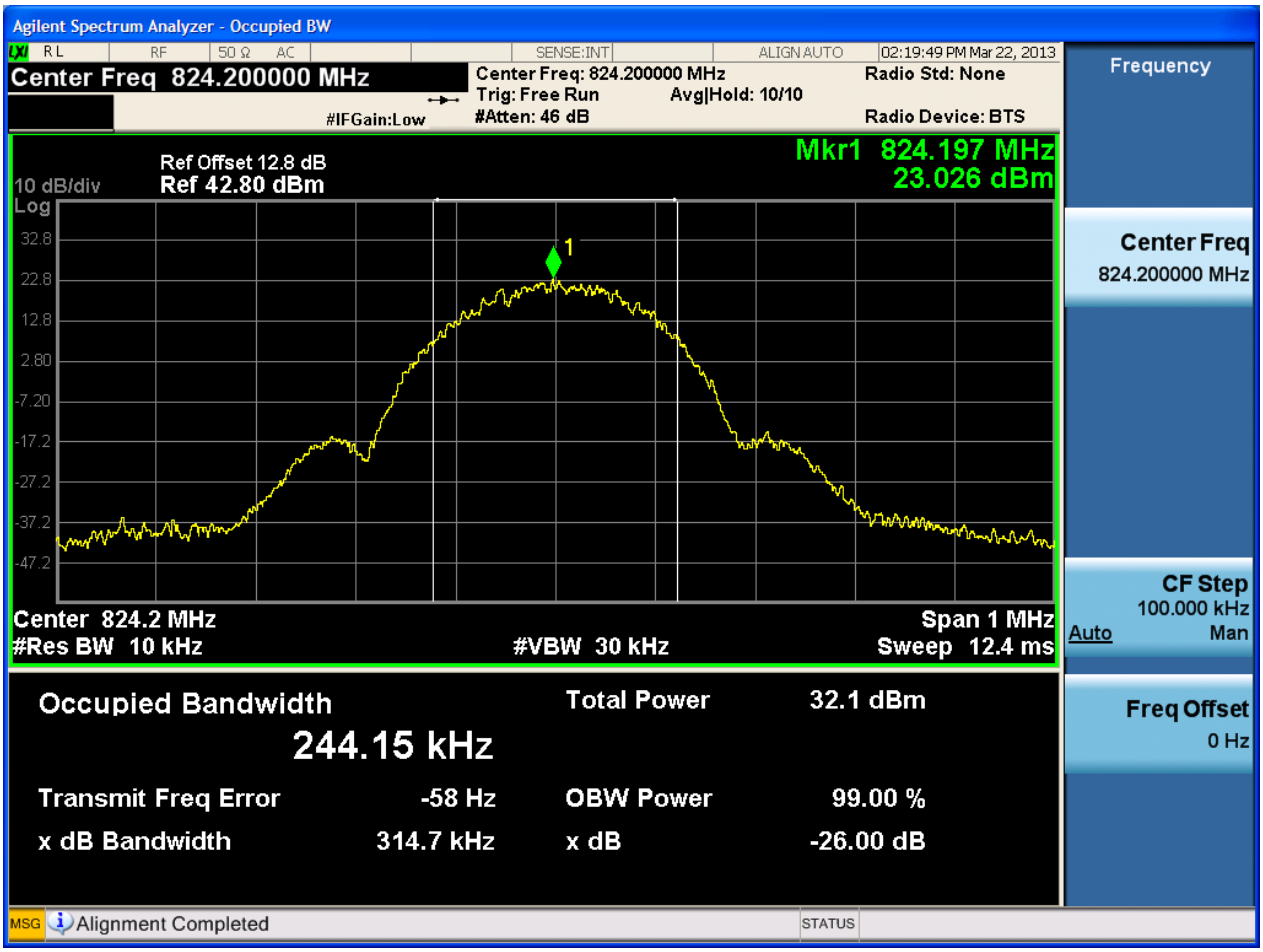
4.1.1.2 Test Mode = GSM/TM2

4.1.1.2.1 Test Channel = LCH



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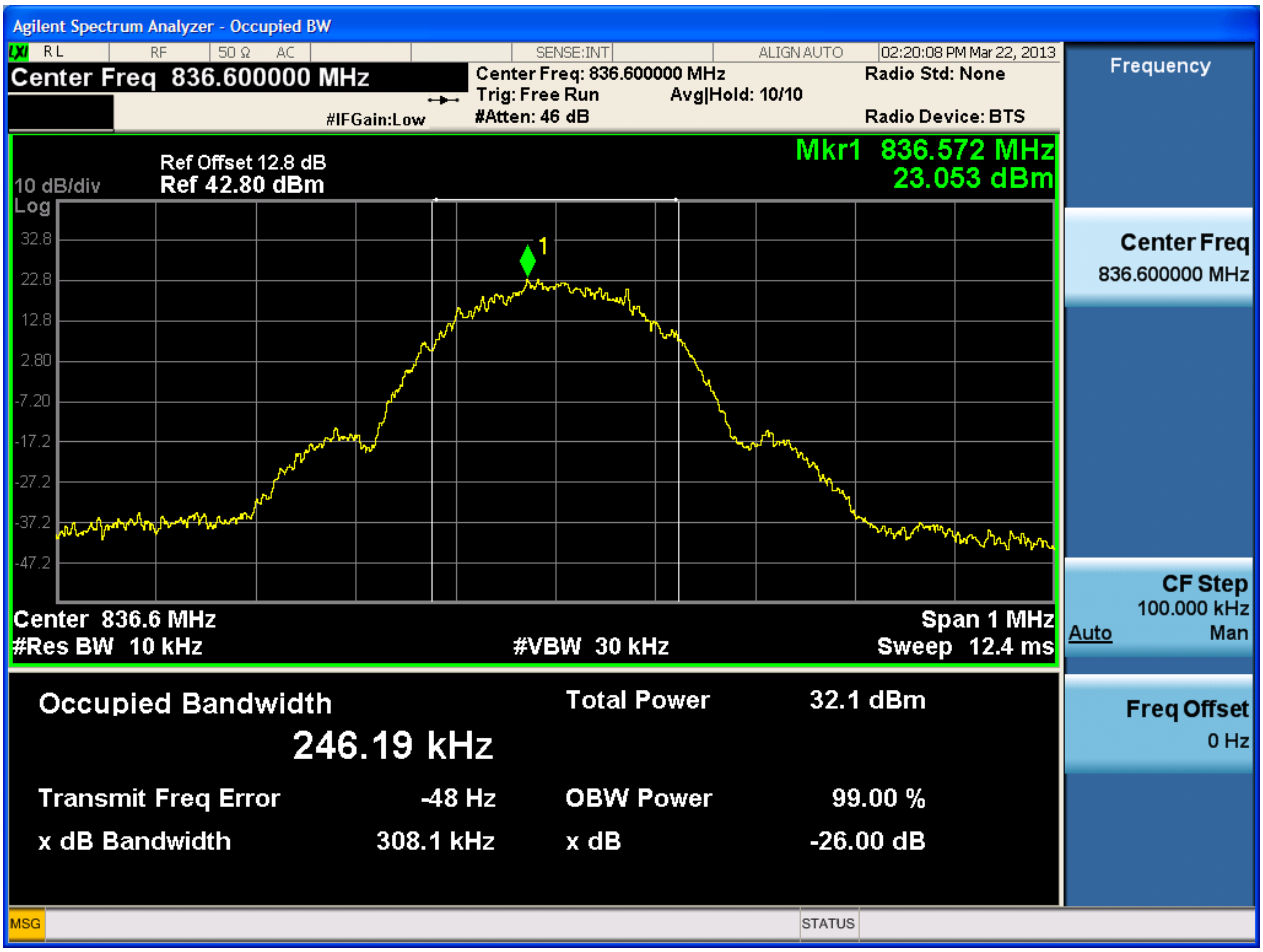
4.1.1.2.2 Test Channel = MCH



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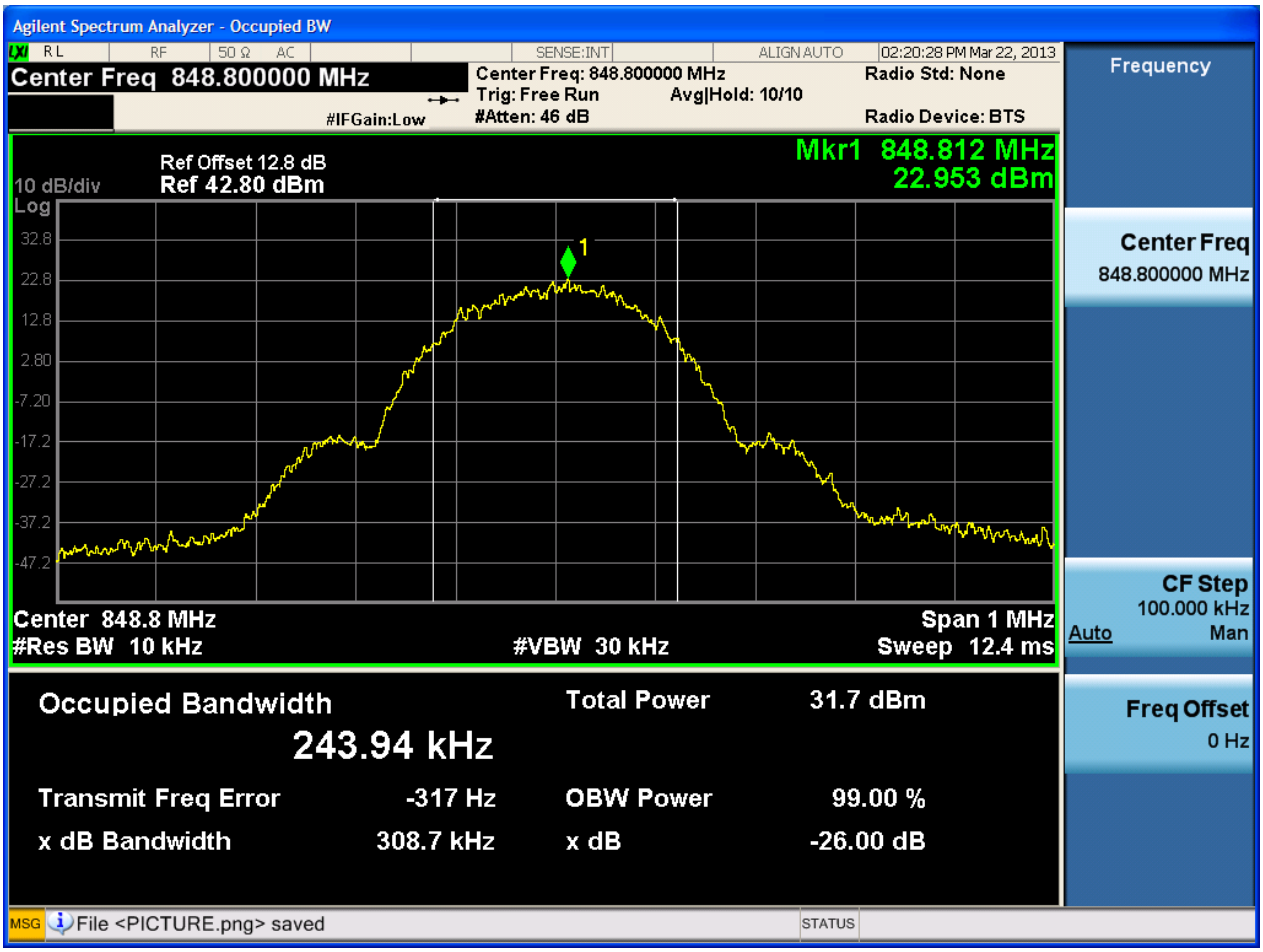
4.1.1.2.3 Test Channel = HCH



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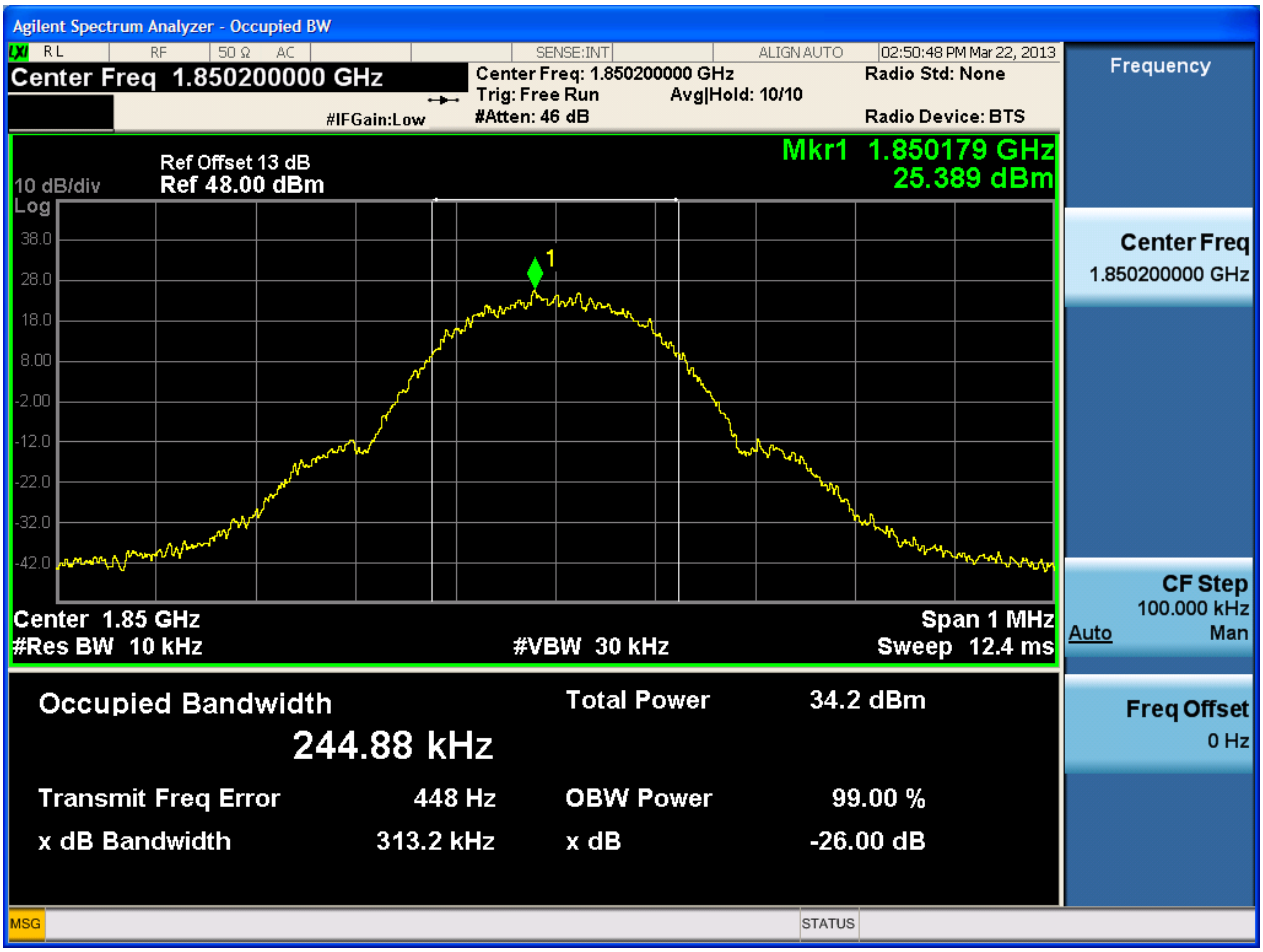
4.1.2 Test Band = GSM1900

4.1.2.1 Test Mode = GSM/TM1

4.1.2.1.1 Test Channel = LCH



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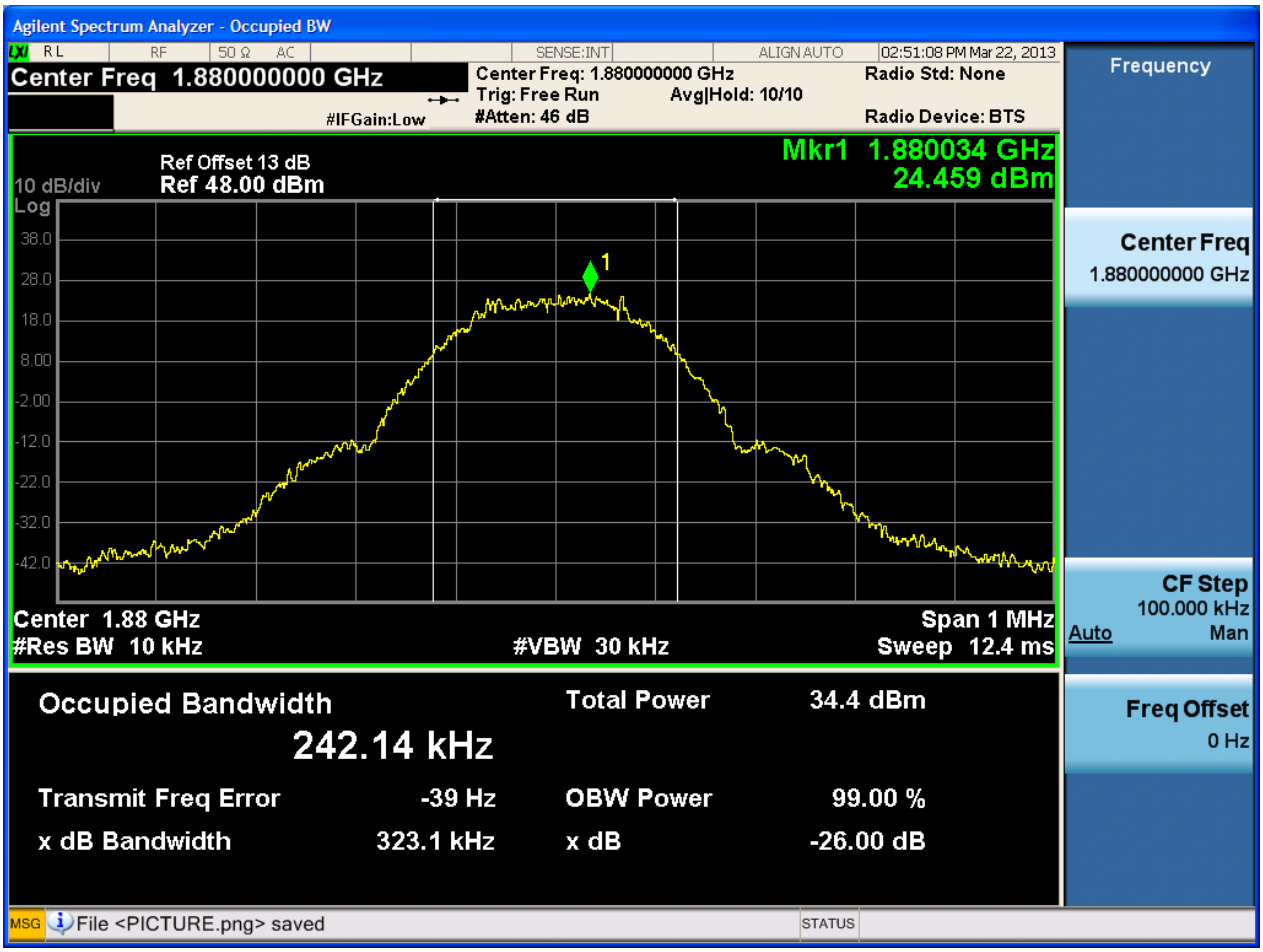
4.1.2.1.2 Test Channel = MCH



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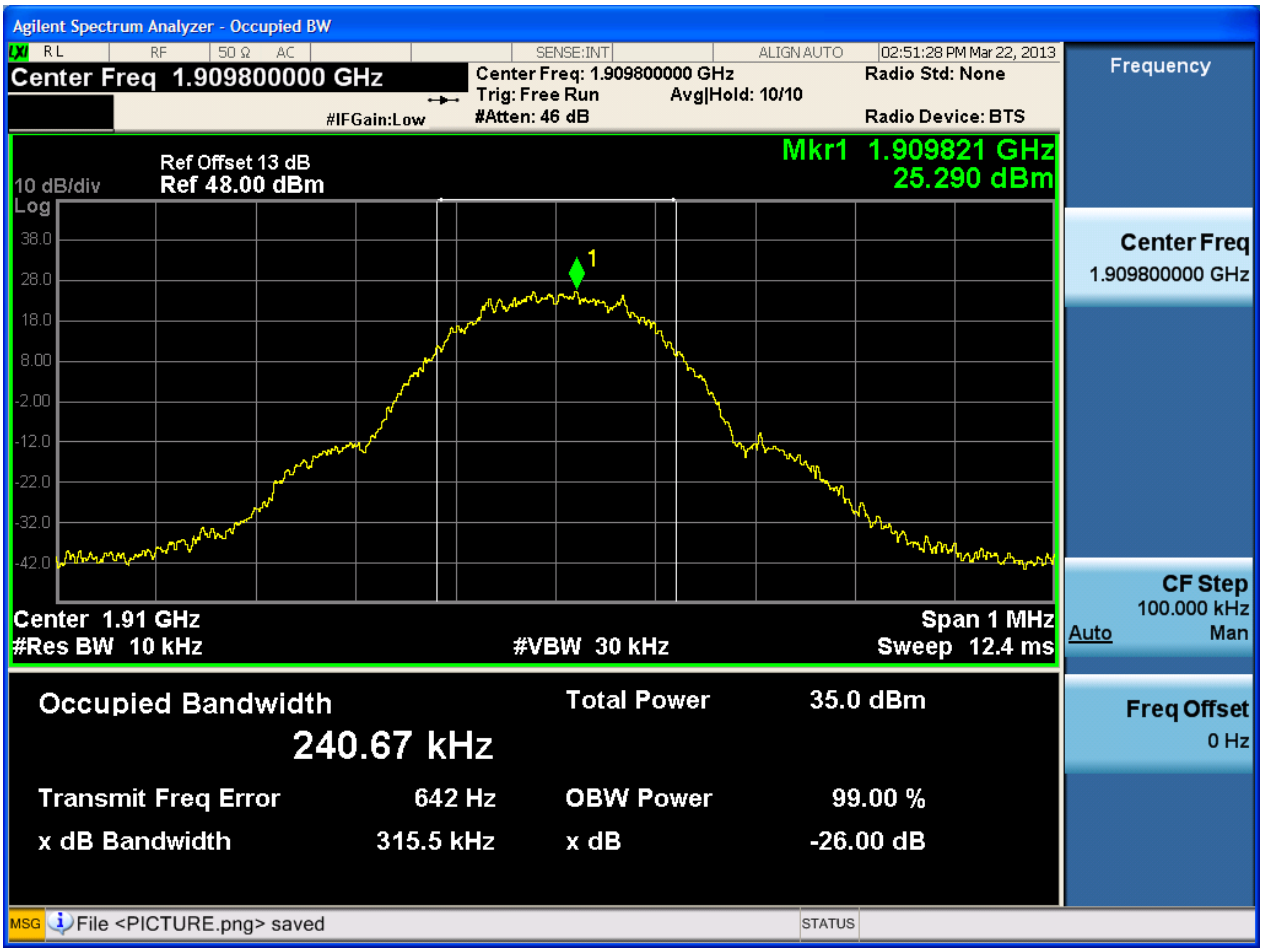
4.1.2.1.3 Test Channel = HCH



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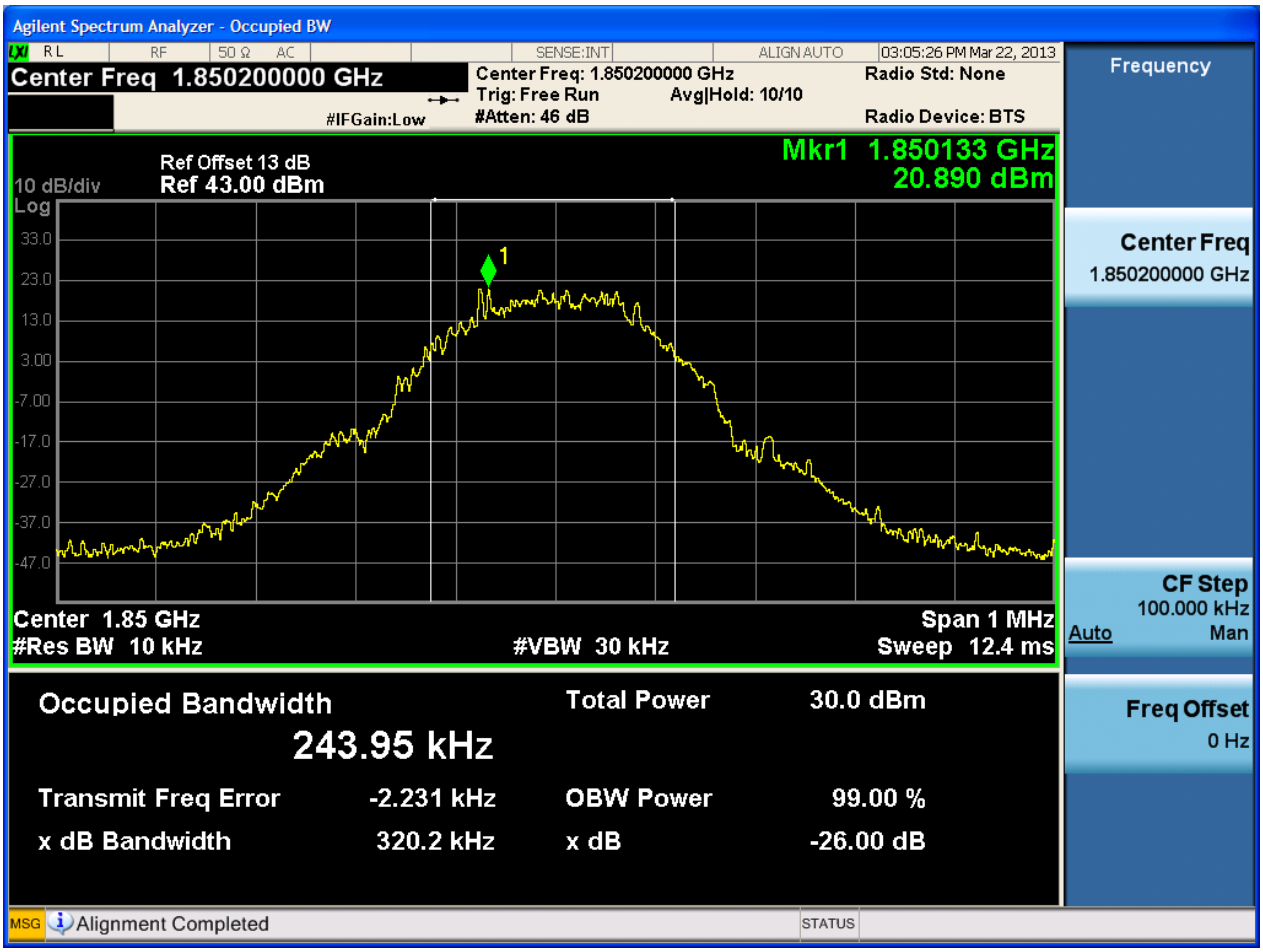
4.1.2.2 Test Mode = GSM/TM2

4.1.2.2.1 Test Channel = LCH



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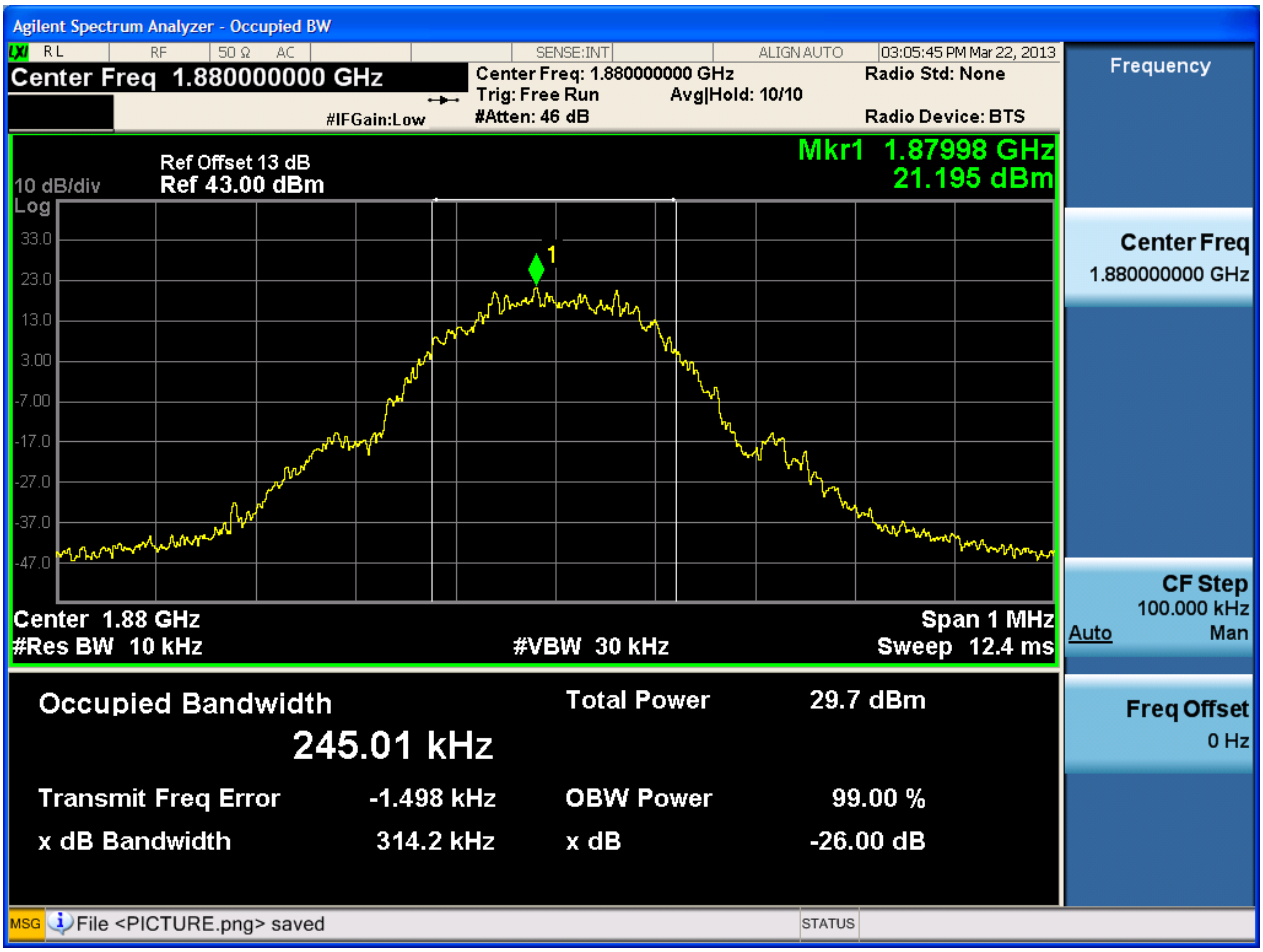
4.1.2.2.2 Test Channel = MCH



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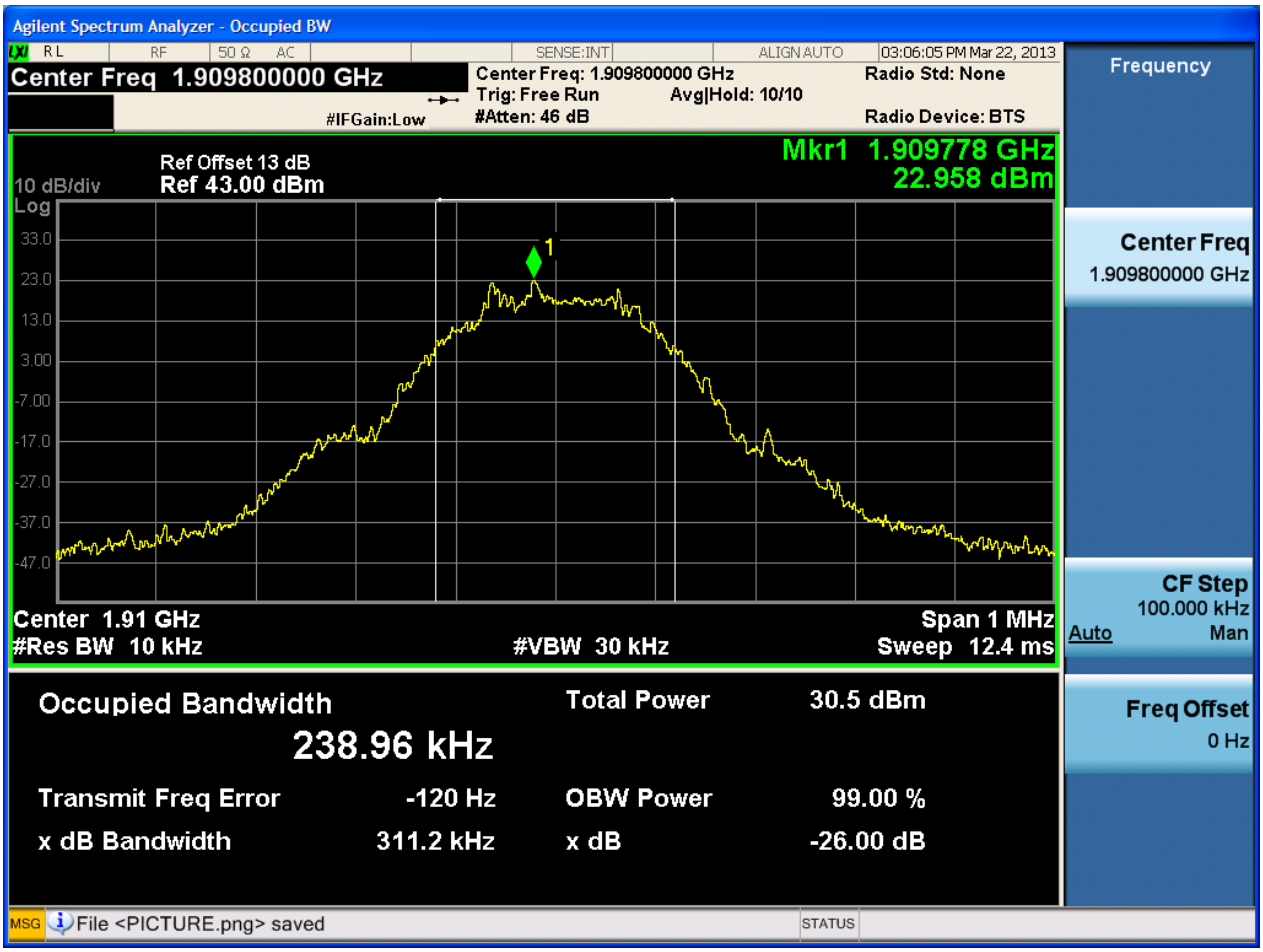
4.1.2.2.3 Test Channel = HCH



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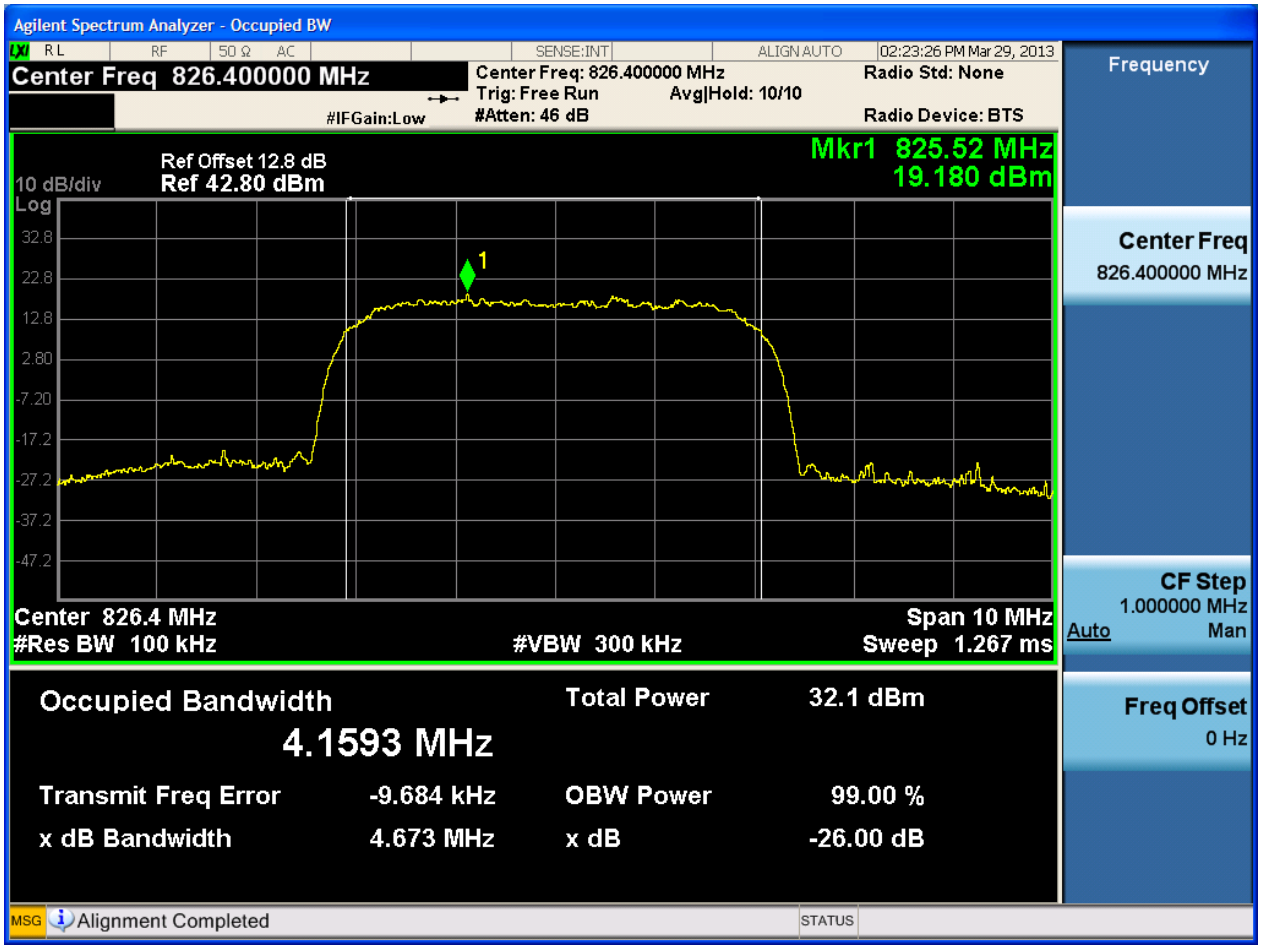
4.2 For UMTS

4.2.1 Test Band = WCDMA850

4.2.1.1 Test Mode = UMTS/TM1

4.2.1.1.1 Test Channel = LCH



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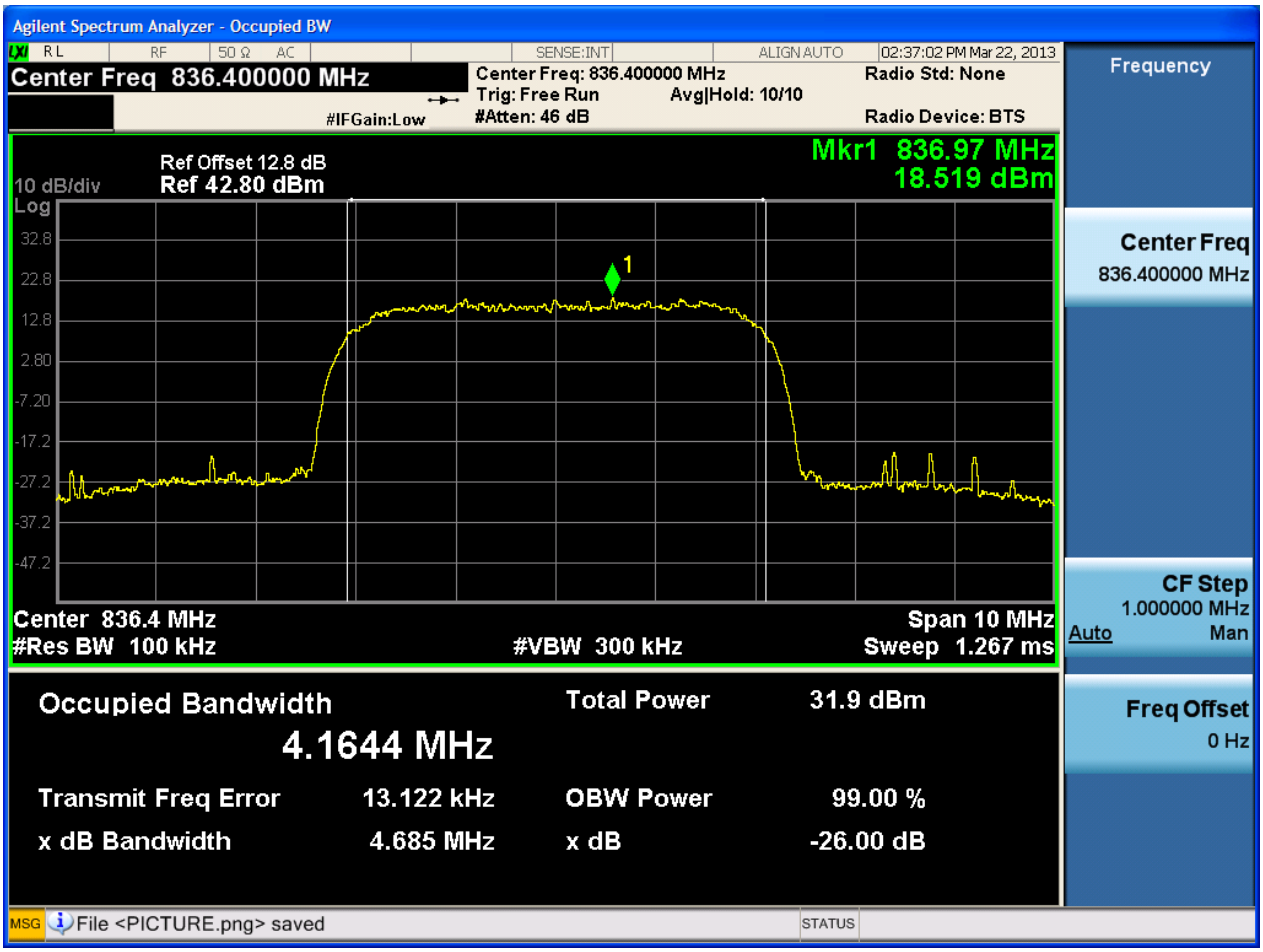
4.2.1.1.2 Test Channel = MCH



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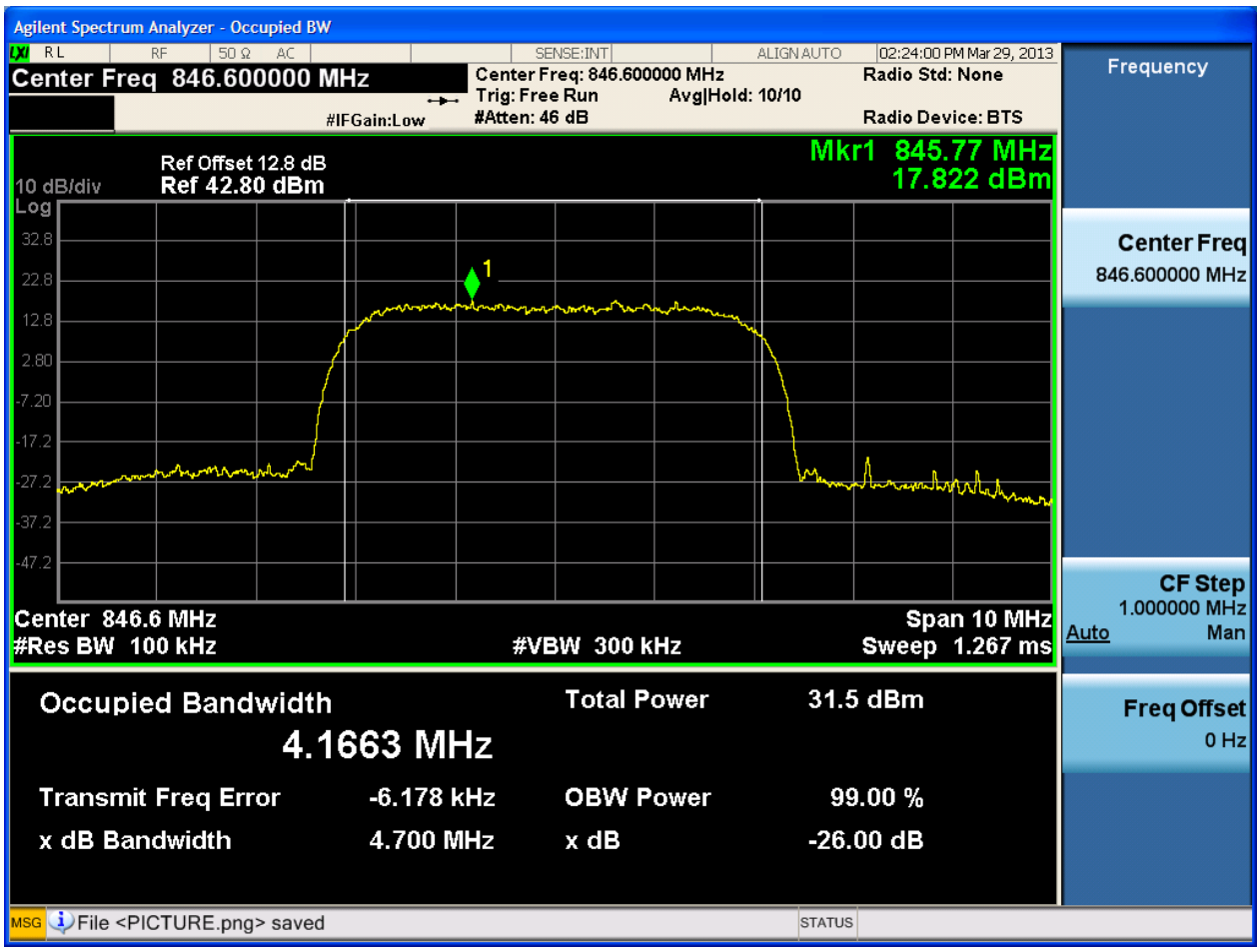
4.2.1.1.3 Test Channel = HCH



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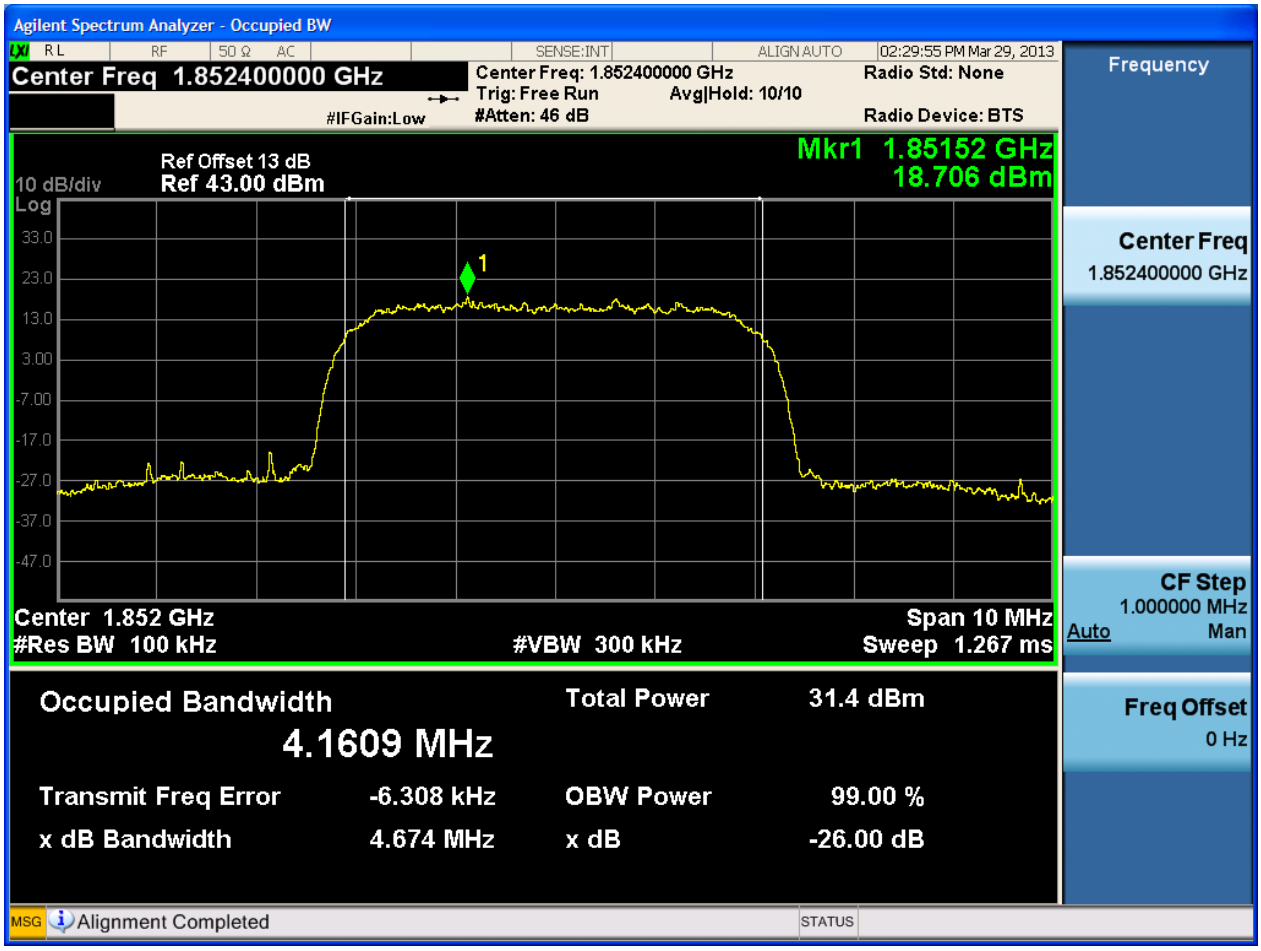
4.2.2 Test Band = WCDMA1900

4.2.2.1 Test Mode = UMTS/TM1

4.2.2.1.1 Test Channel = LCH



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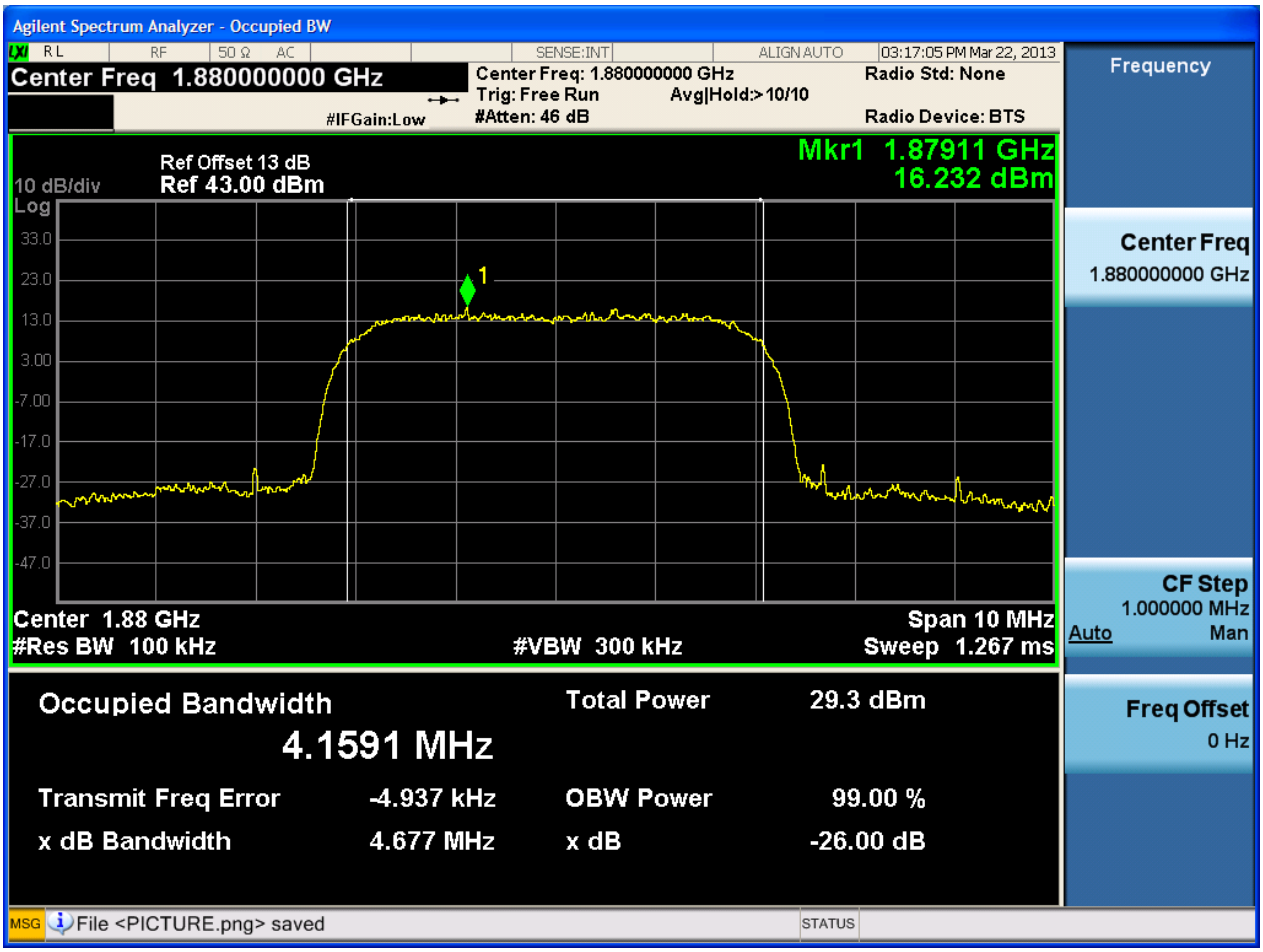
4.2.2.1.2 Test Channel = MCH



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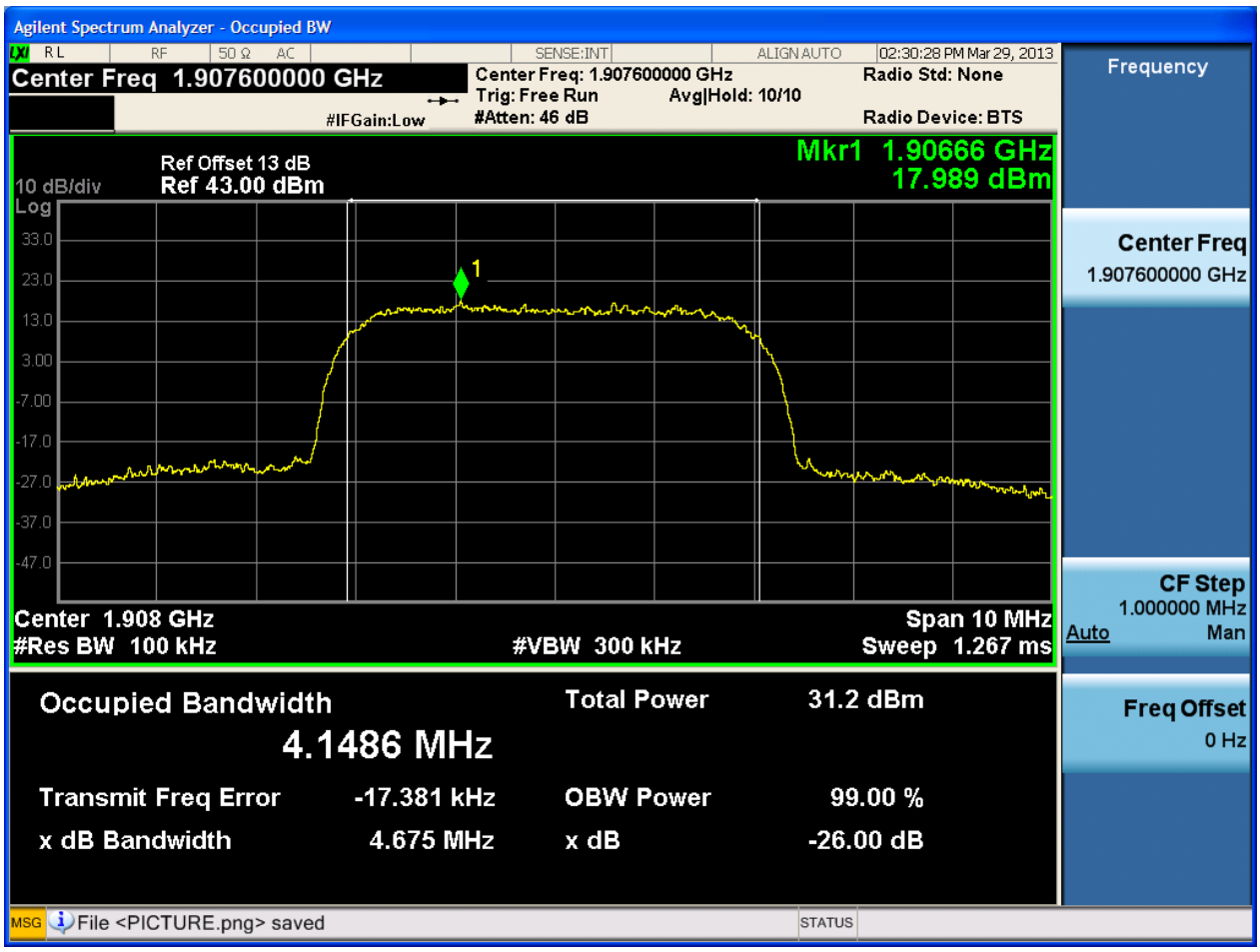
4.2.2.1.3 Test Channel = HCH



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5Appendix_E: Band Edges Compliance

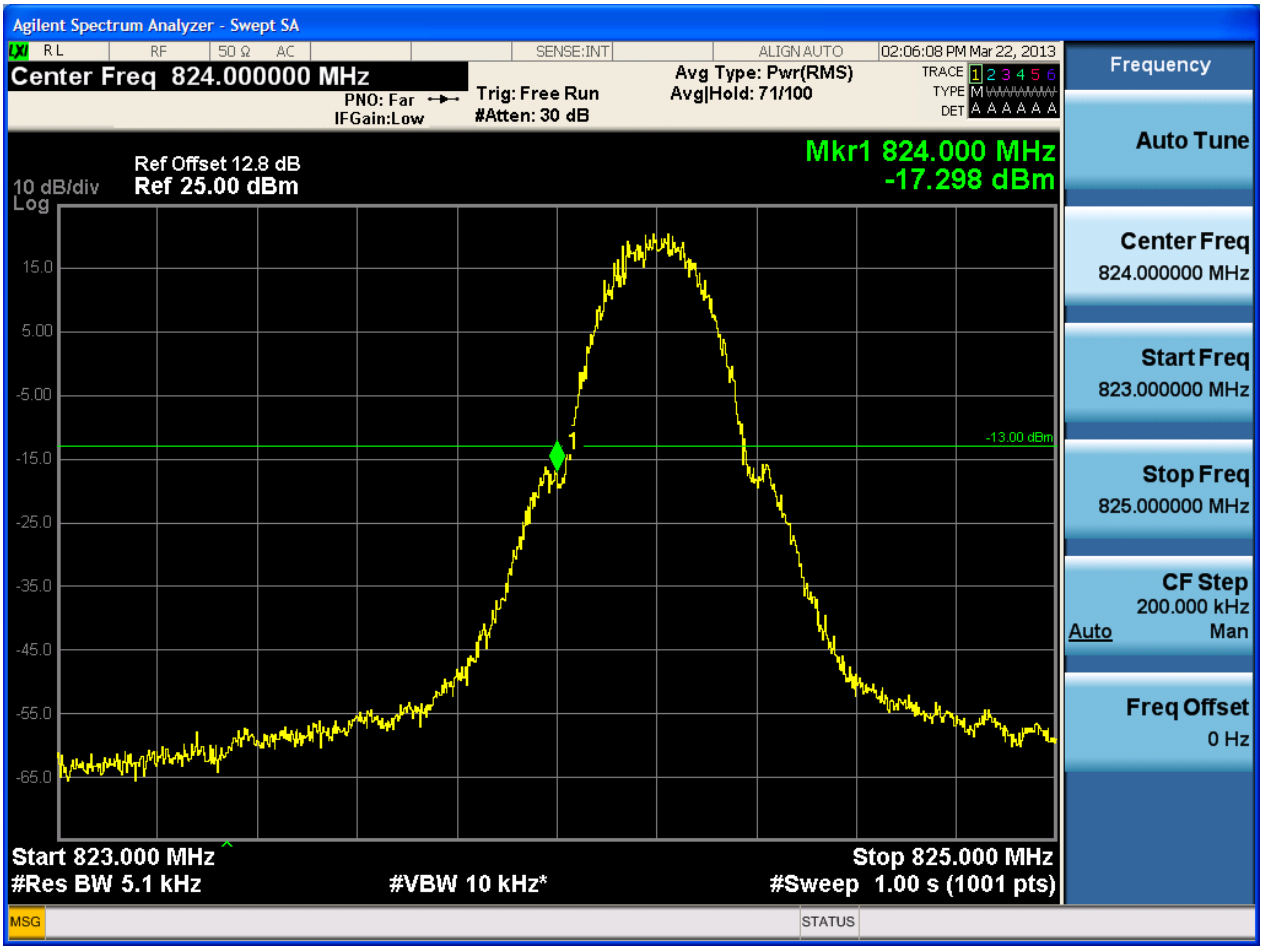
Part I - Test Plots

5.1 For GSM

5.1.1 Test Band = GSM850

5.1.1.1 Test Mode = GSM/TM1

5.1.1.1.1 Test Channel = LCH



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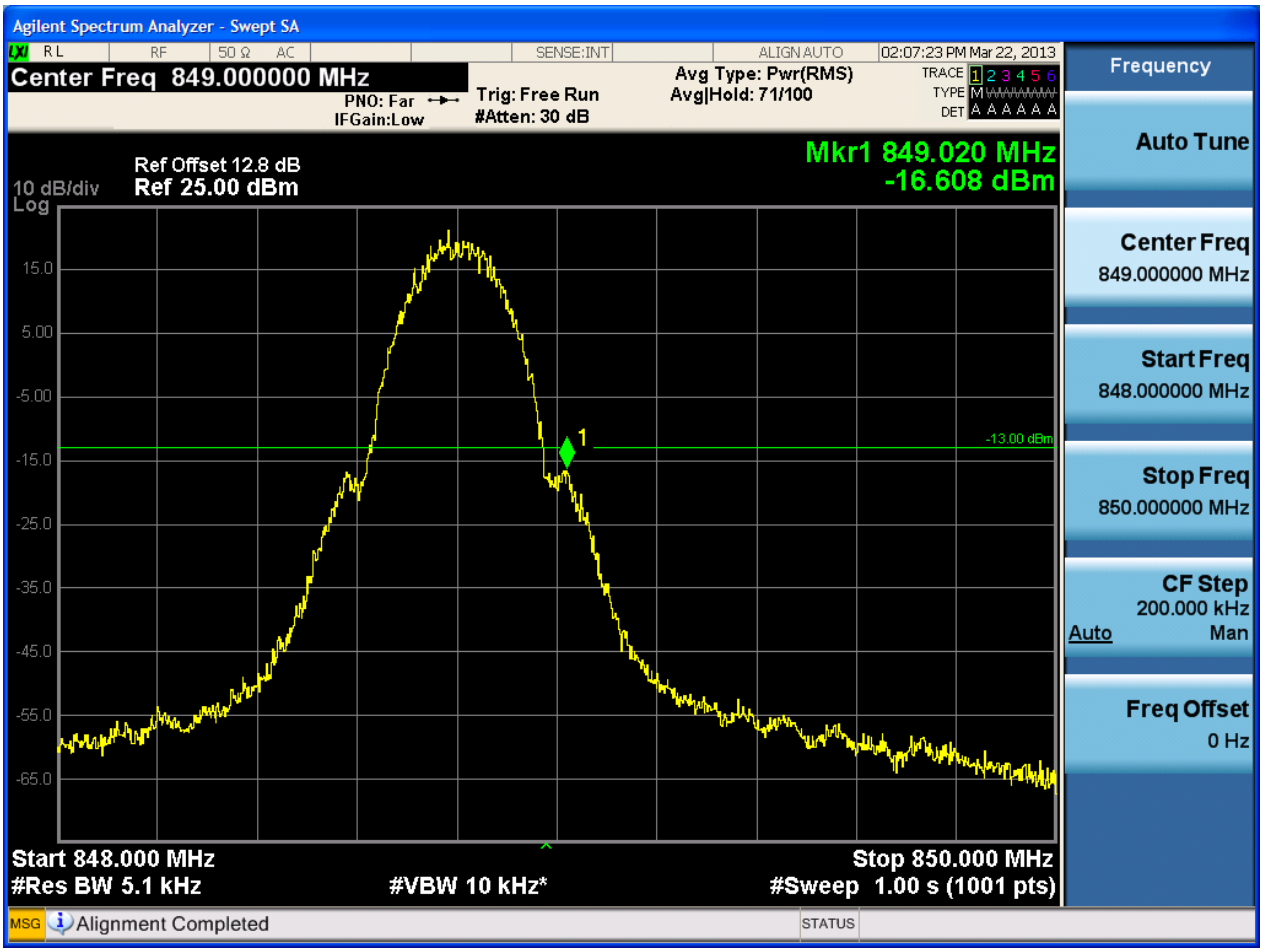
5.1.1.1.2 Test Channel = HCH



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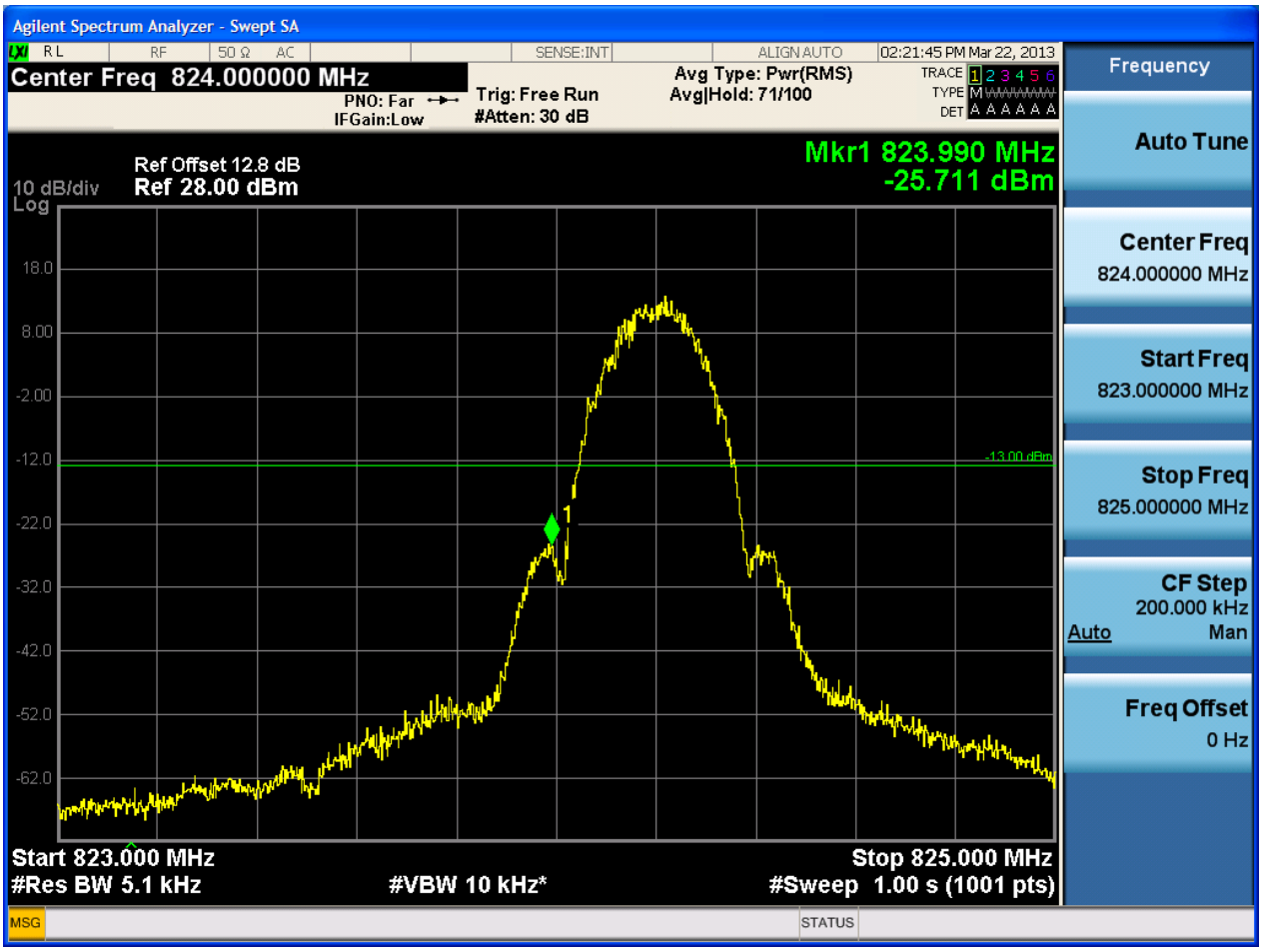
5.1.1.2 Test Mode = GSM/TM2

5.1.1.2.1 Test Channel = LCH



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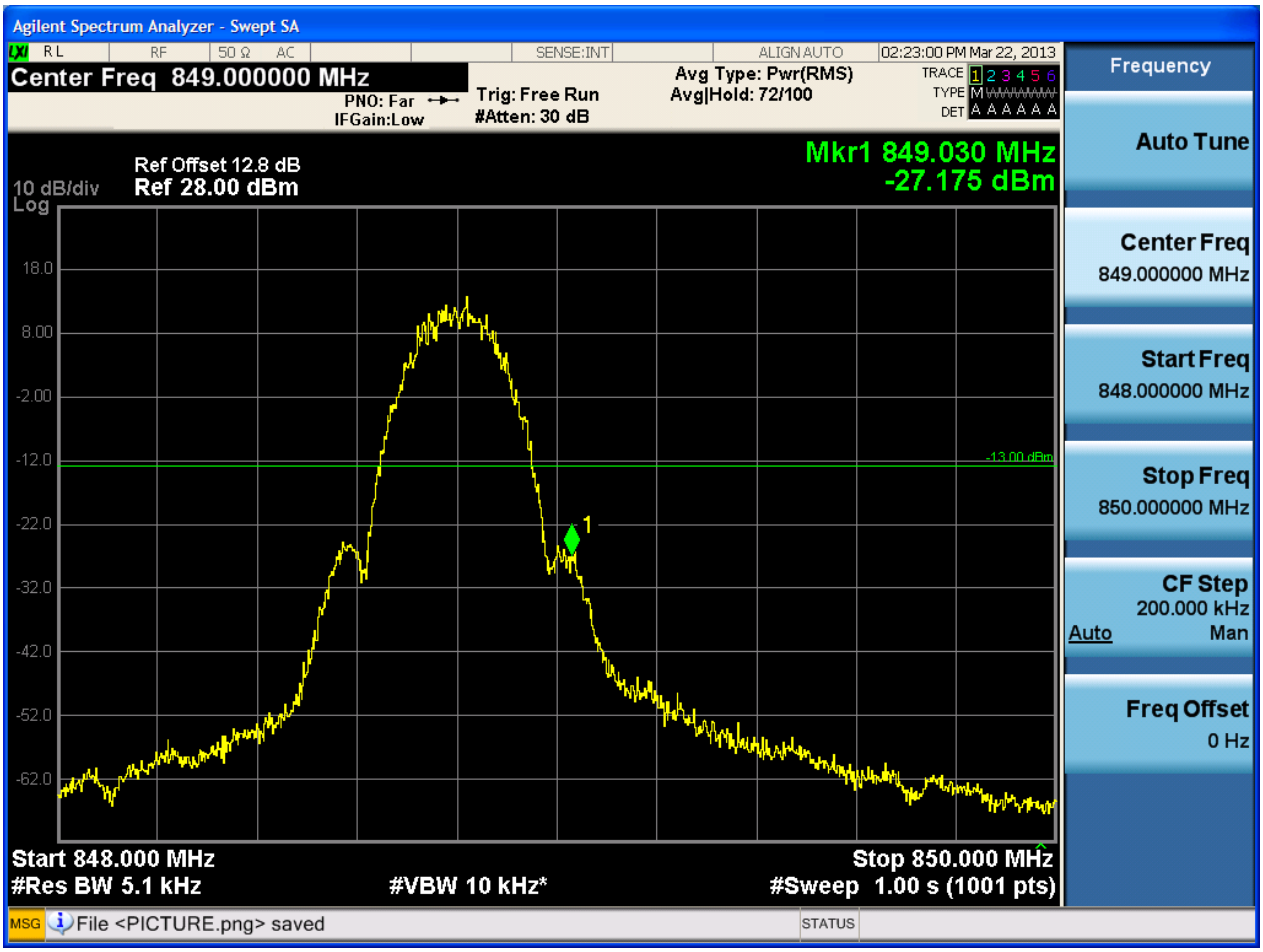
5.1.1.2.2 Test Channel = HCH



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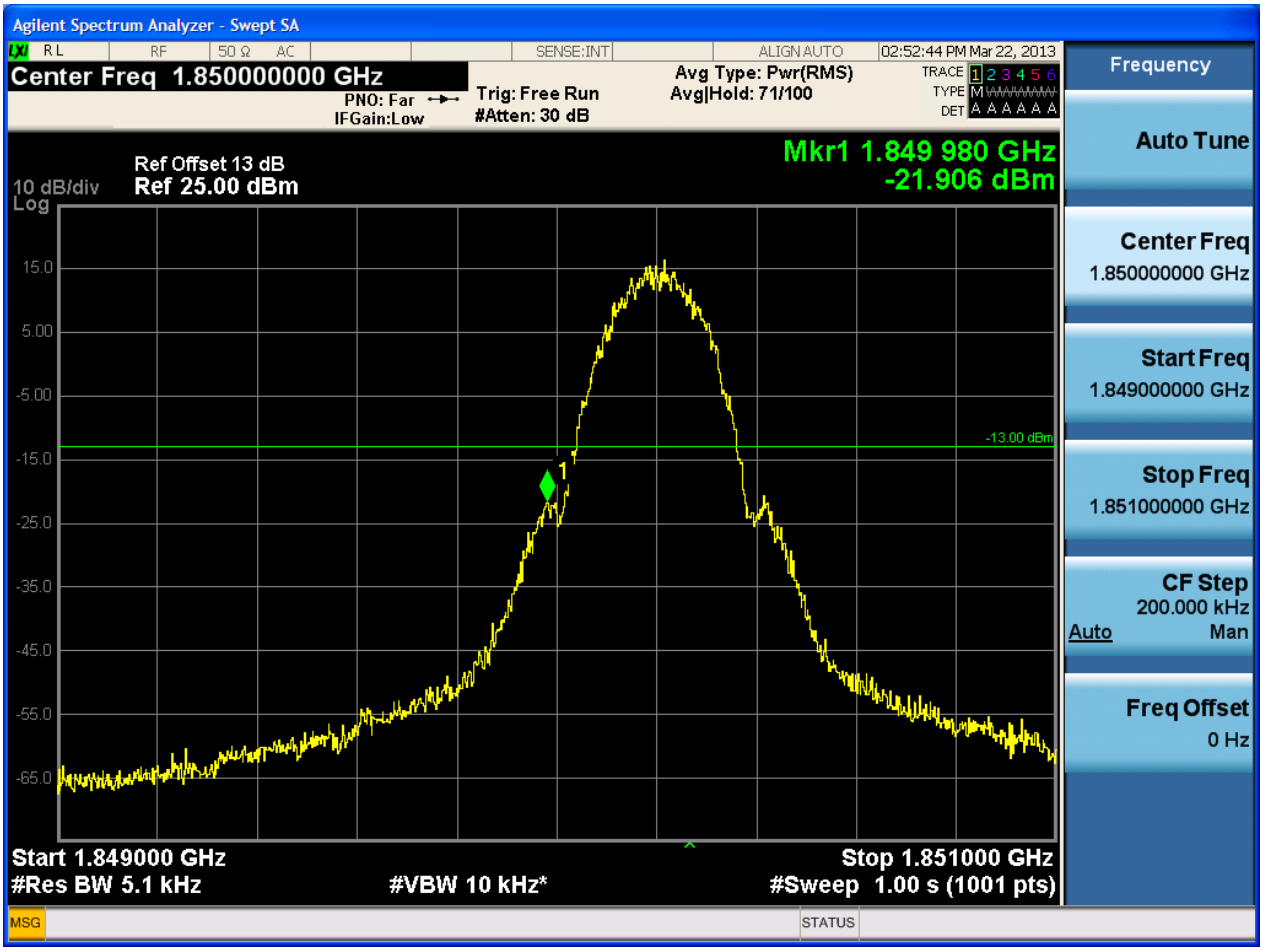
5.1.2 Test Band = GSM1900

5.1.2.1 Test Mode = GSM/TM1

5.1.2.1.1 Test Channel = LCH



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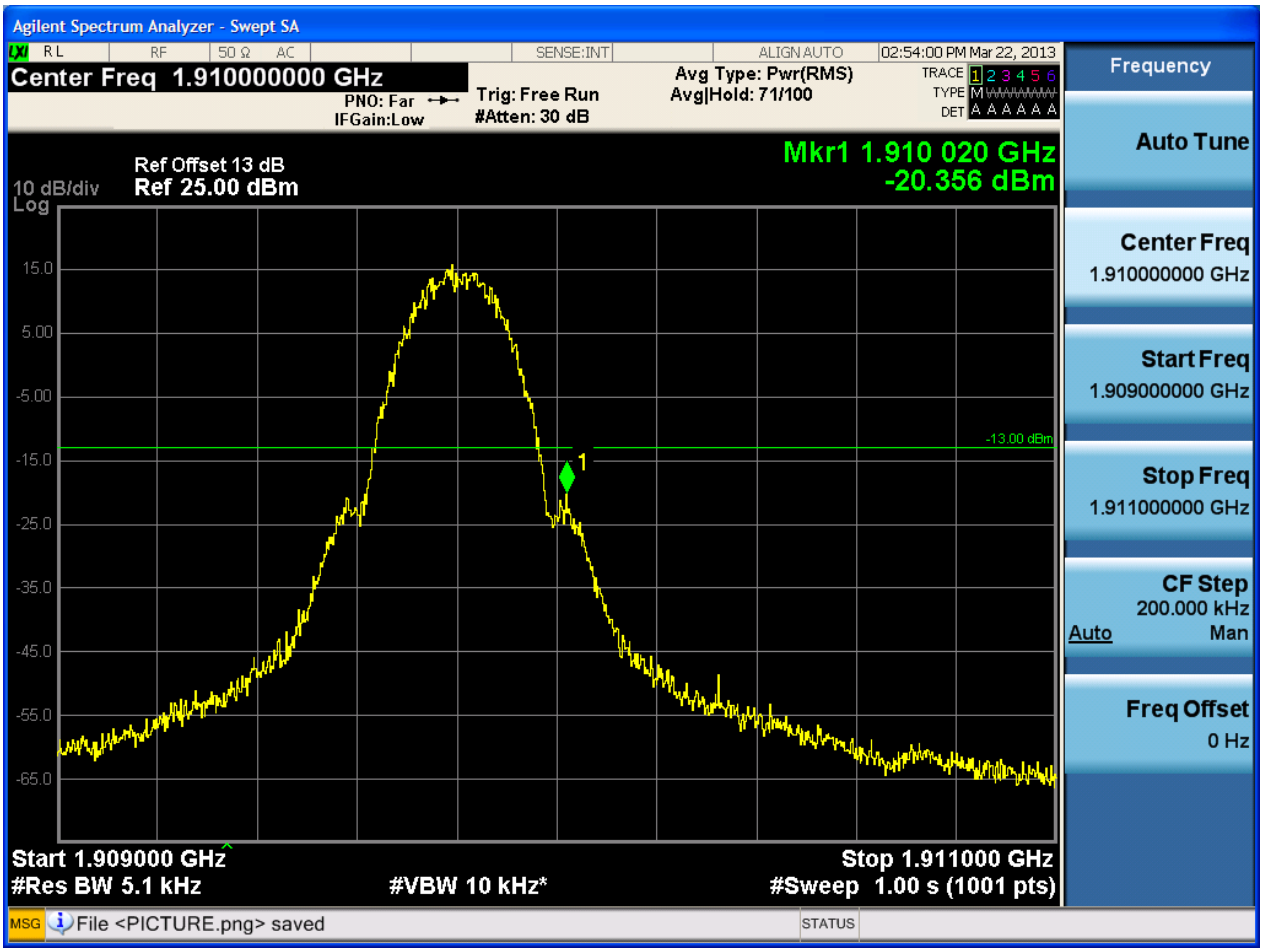
5.1.2.1.2 Test Channel = HCH



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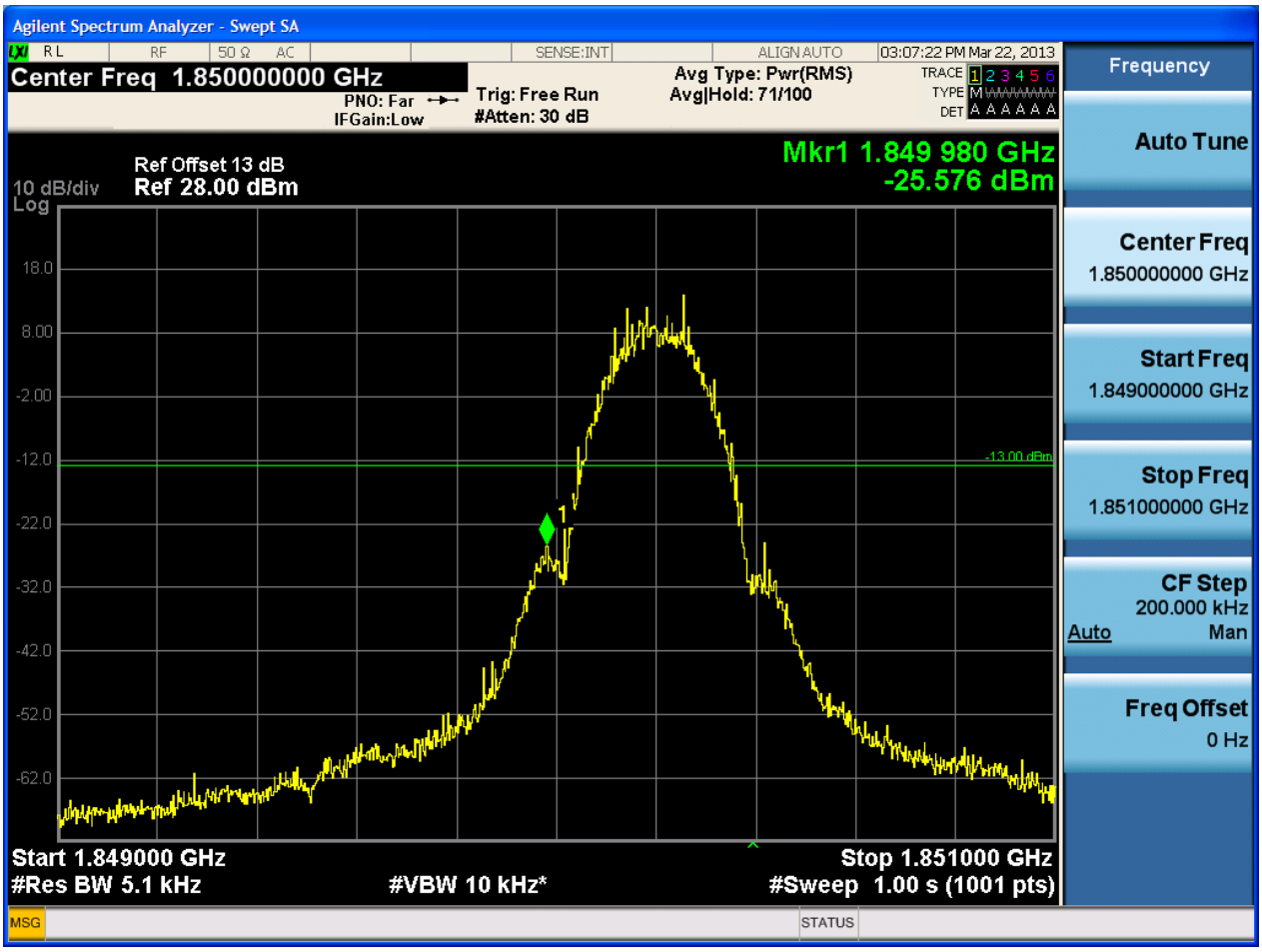
5.1.2.2 Test Mode = GSM/TM2

5.1.2.2.1 Test Channel = LCH



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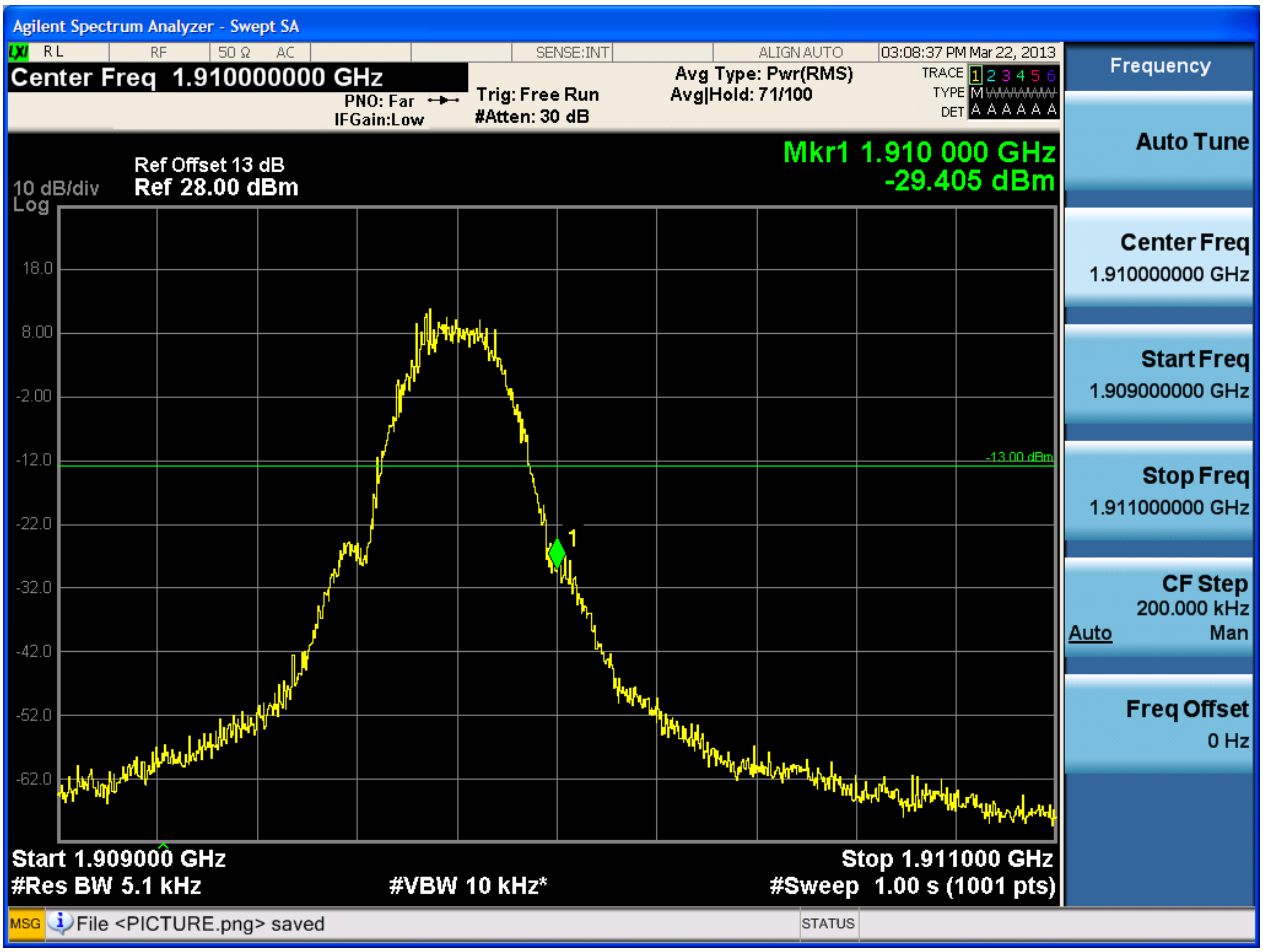
5.1.2.2.2 Test Channel = HCH



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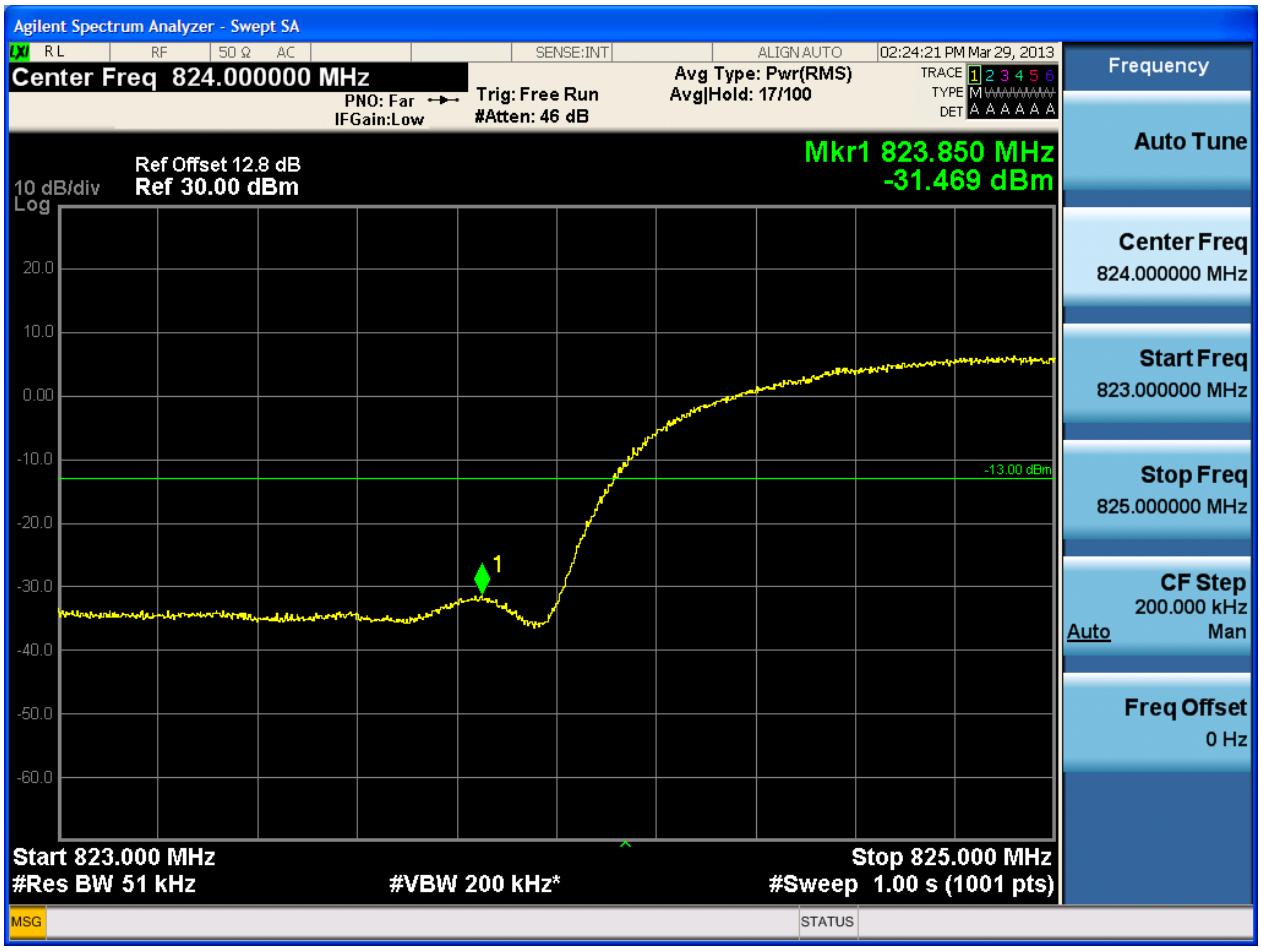
5.2 For UMTS

5.2.1 Test Band = WCDMA850

5.2.1.1 Test Mode = UMTS/TM1

5.2.1.1.1 Test Channel = LCH



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5.2.1.1.2 Test Channel = HCH

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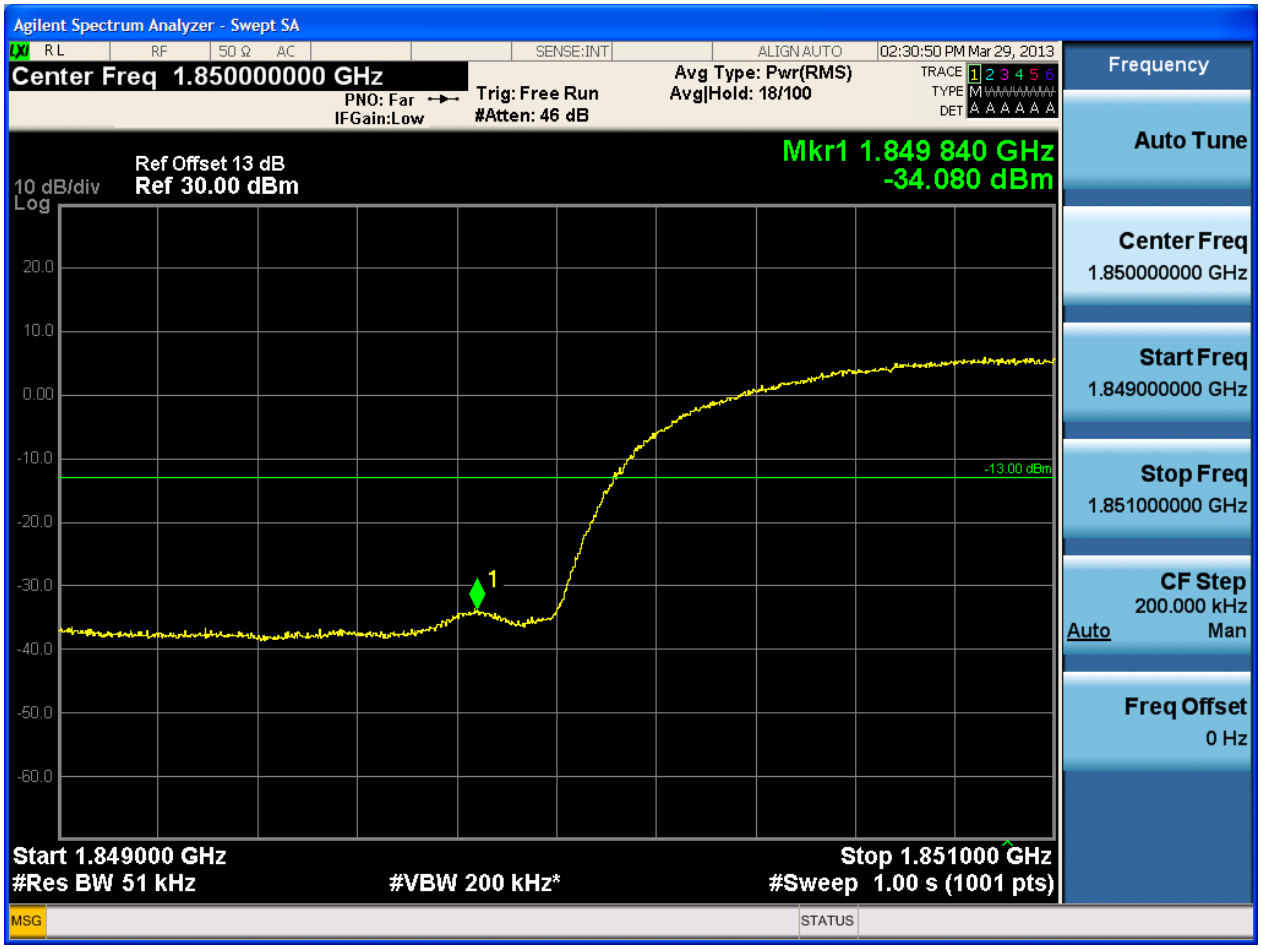
5.2.2 Test Band = WCDMA1900

5.2.2.1 Test Mode = UMTS/TM1

5.2.2.1.1 Test Channel = LCH



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5.2.2.1.2 Test Channel = HCH

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6Appendix_F: Spurious Emission at Antenna Terminals

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.

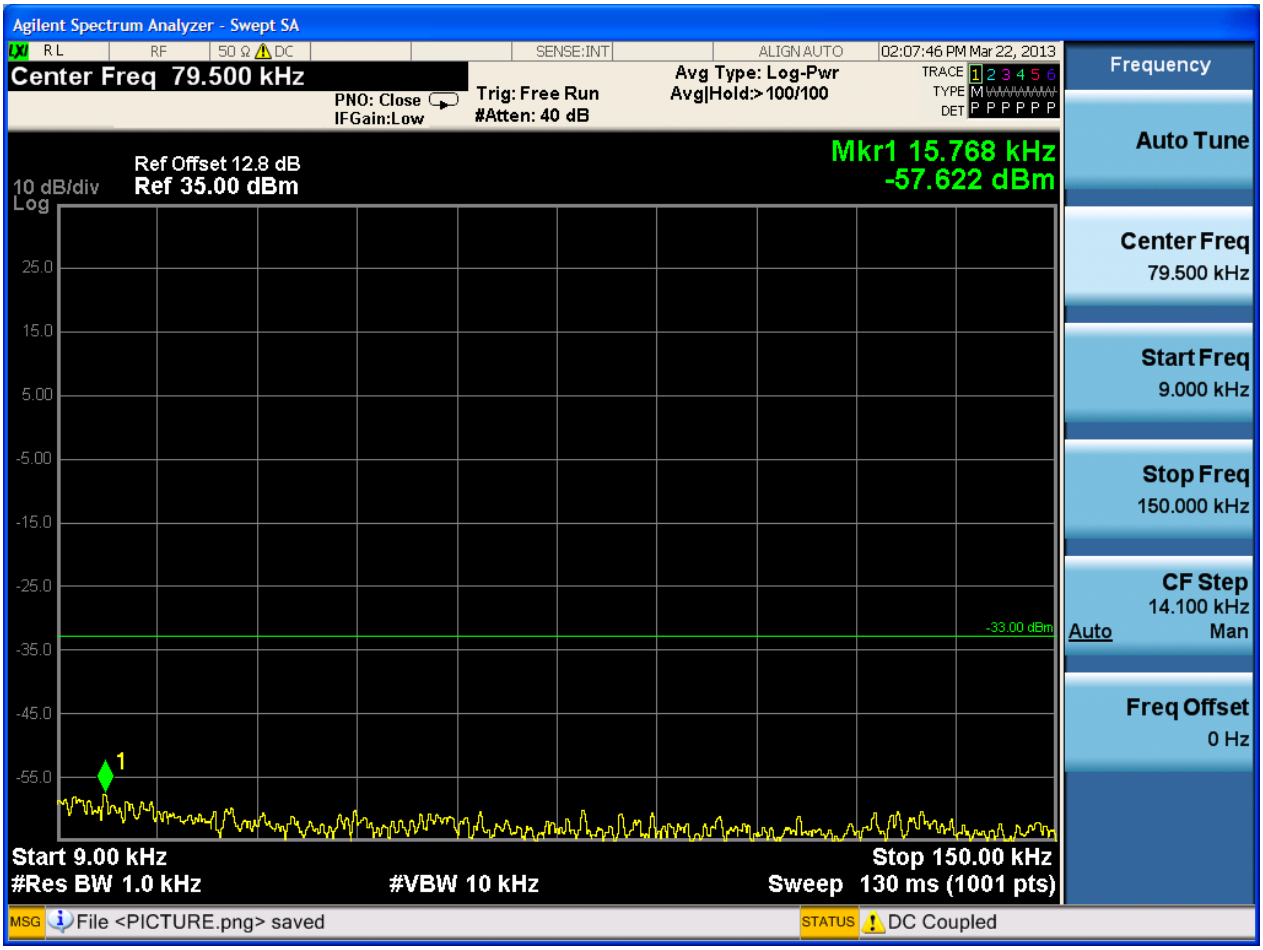
Part I - Test Plots

6.1 For GSM

6.1.1 Test Band = GSM850

6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH



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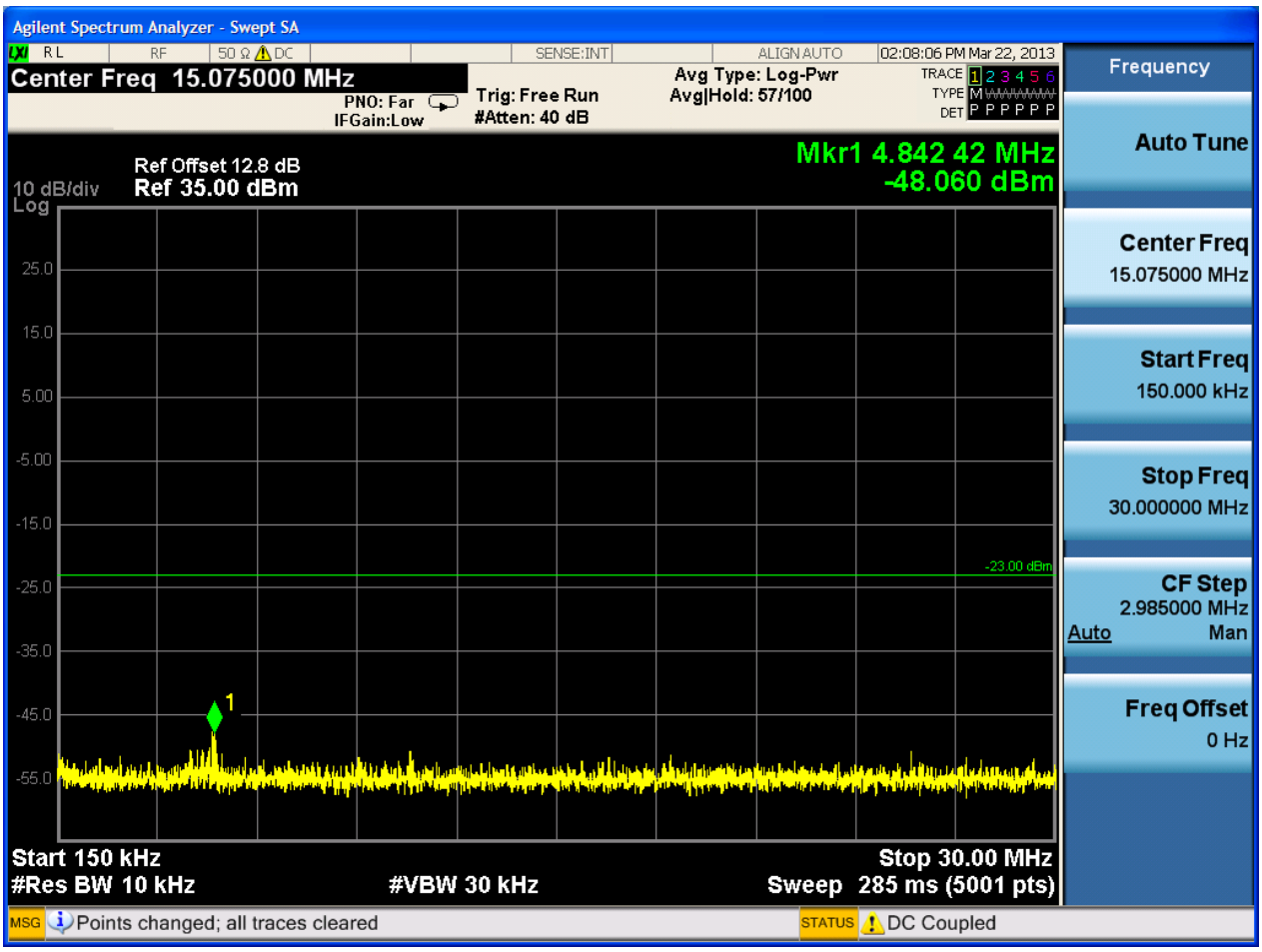

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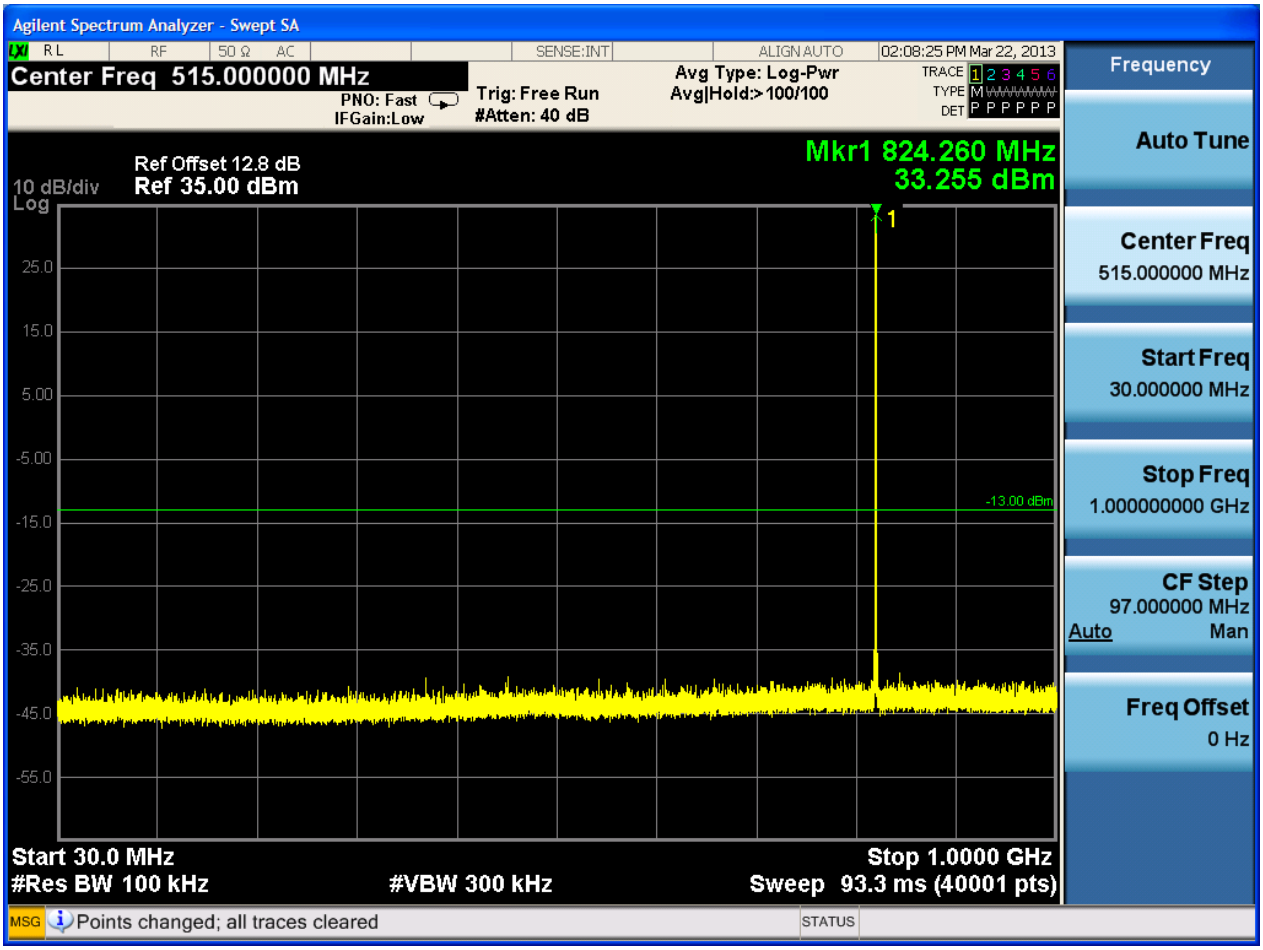

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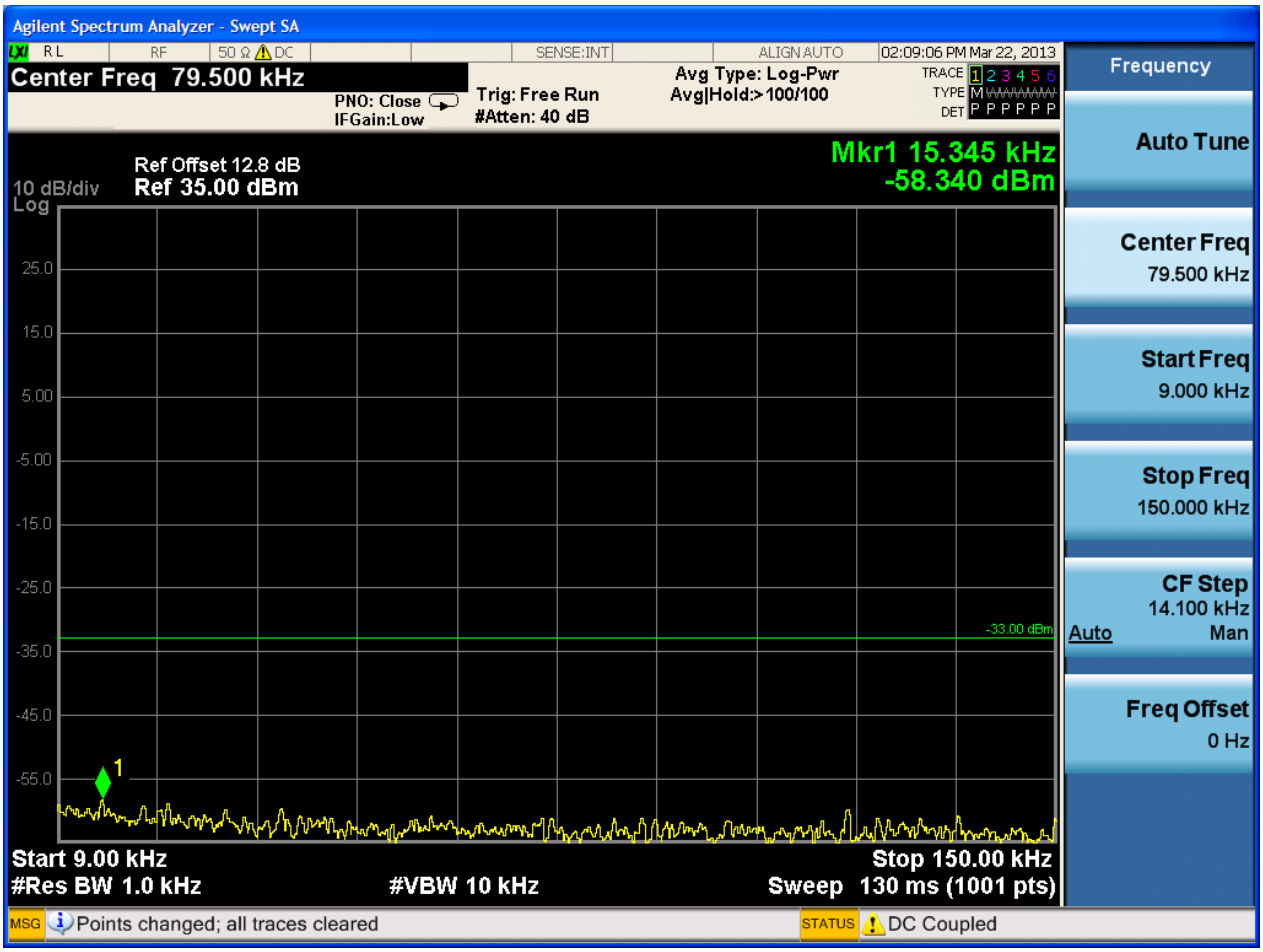
6.1.1.1.2 Test Channel = MCH



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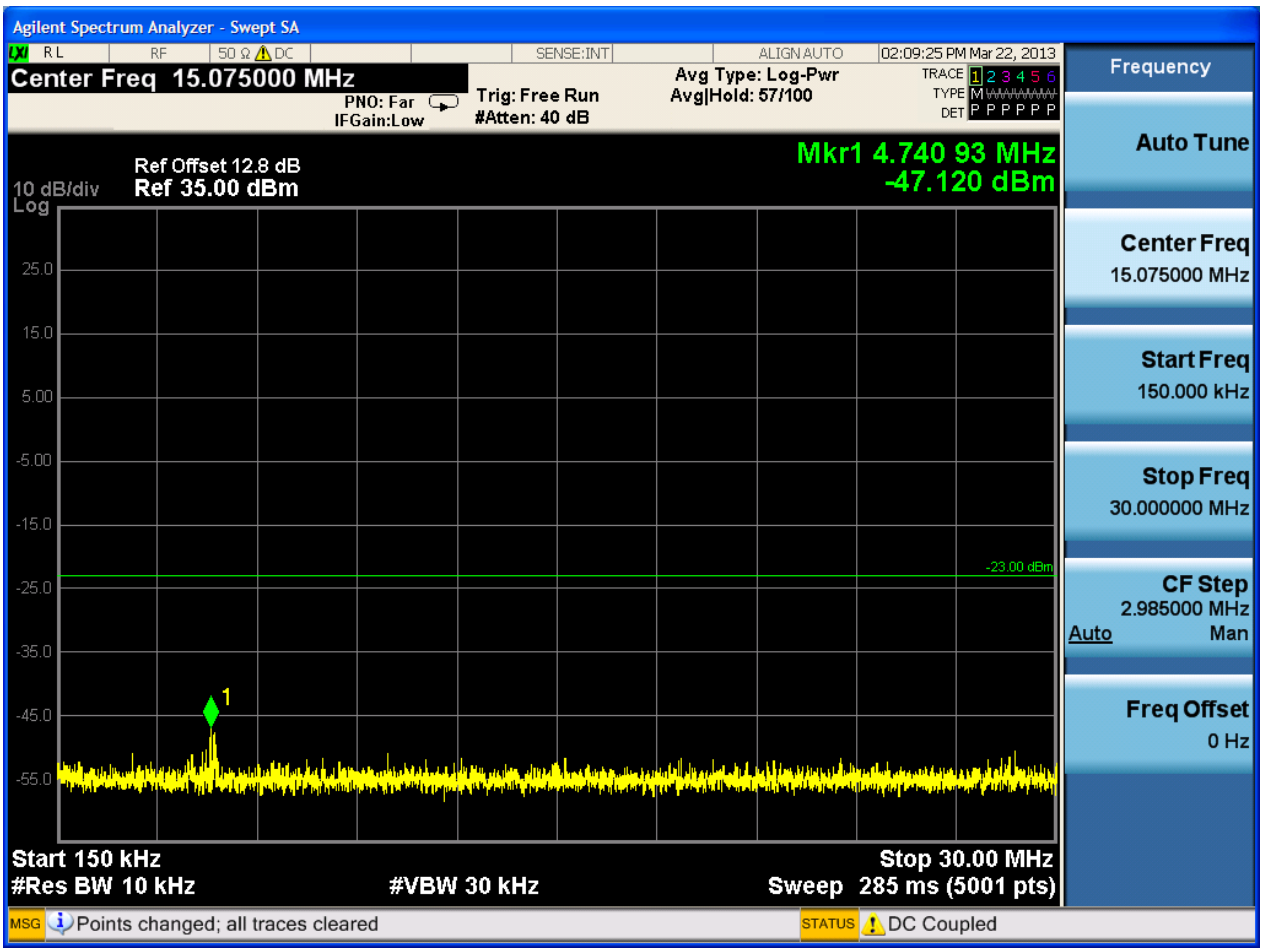

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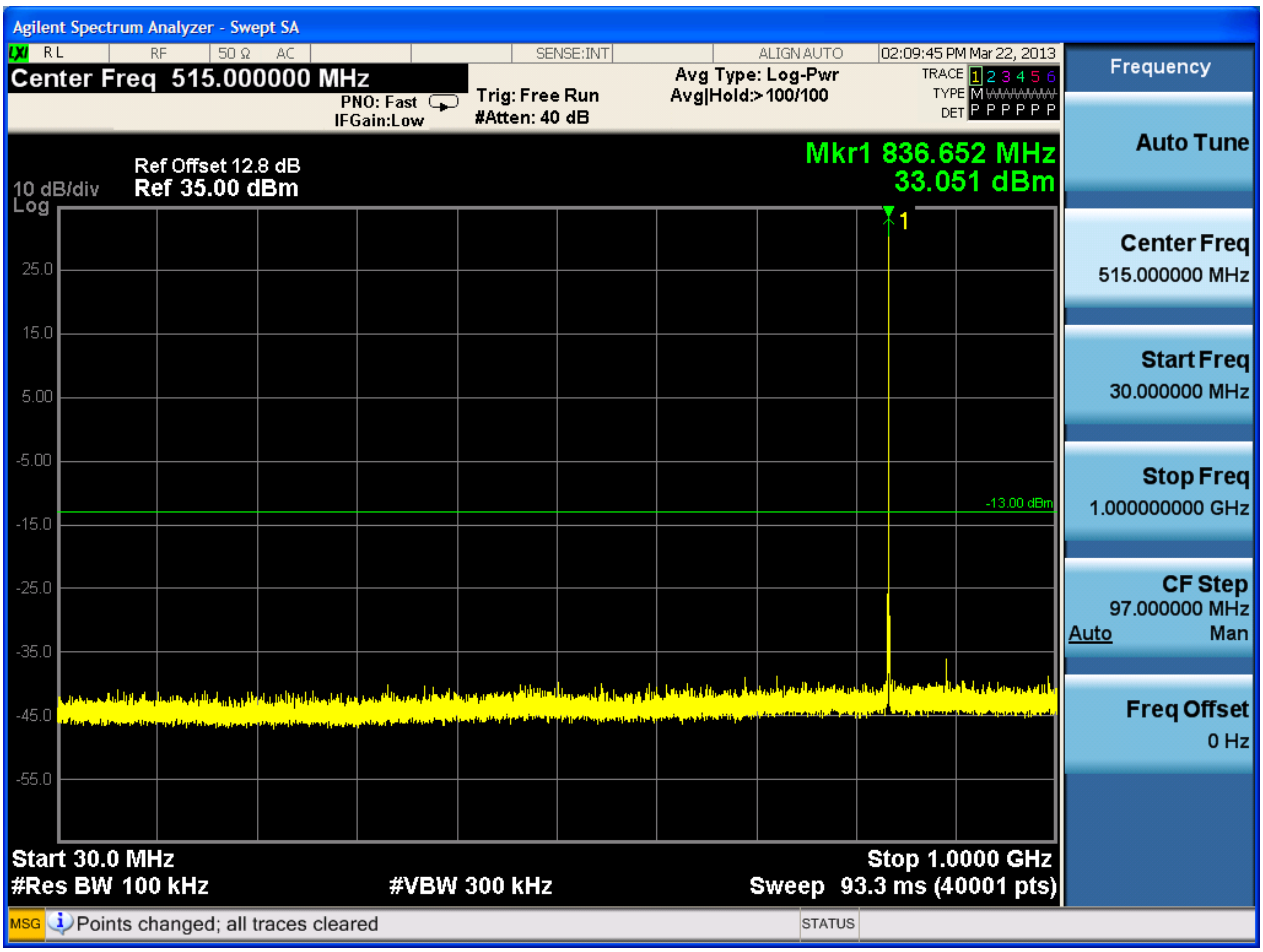

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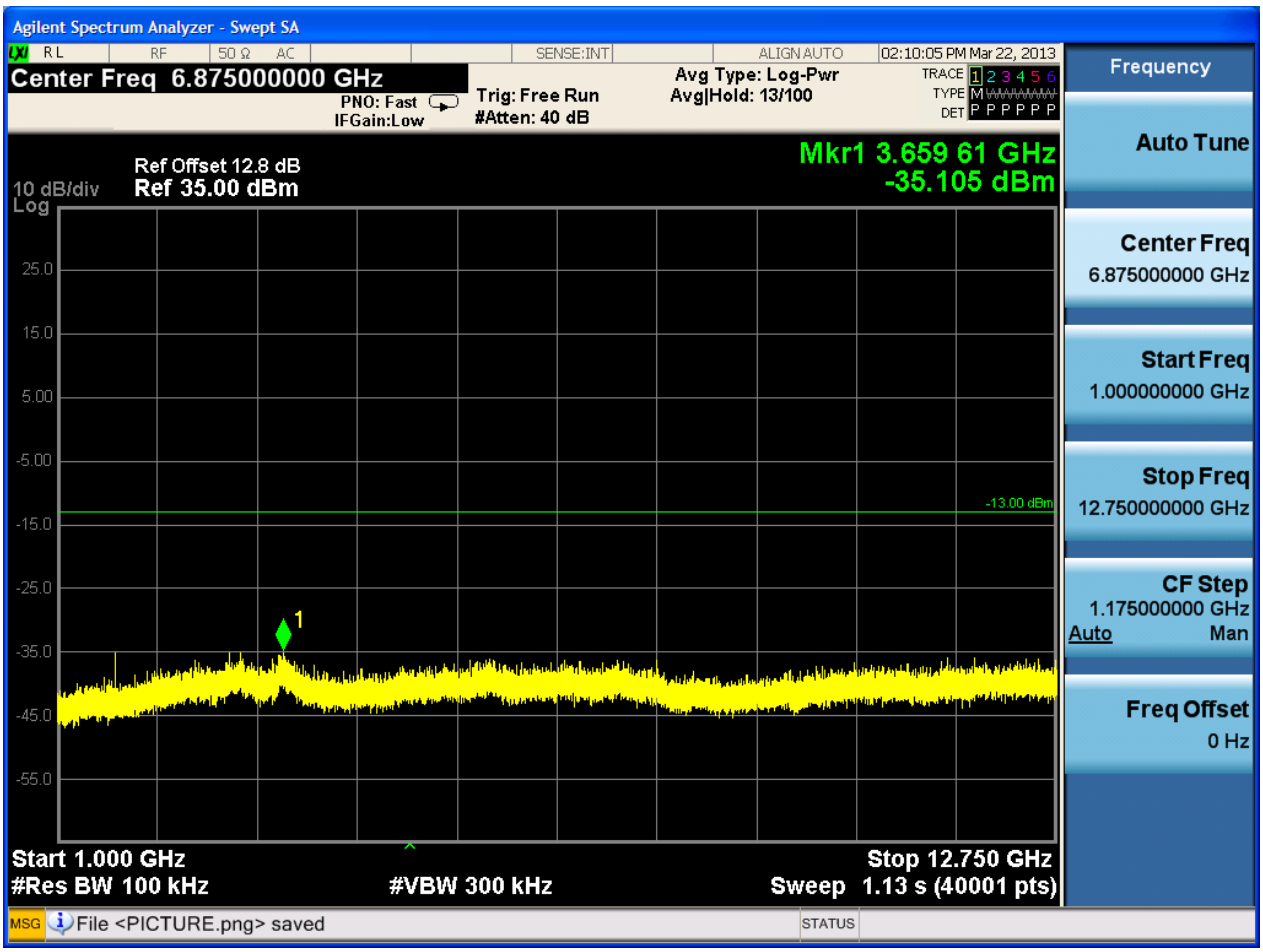

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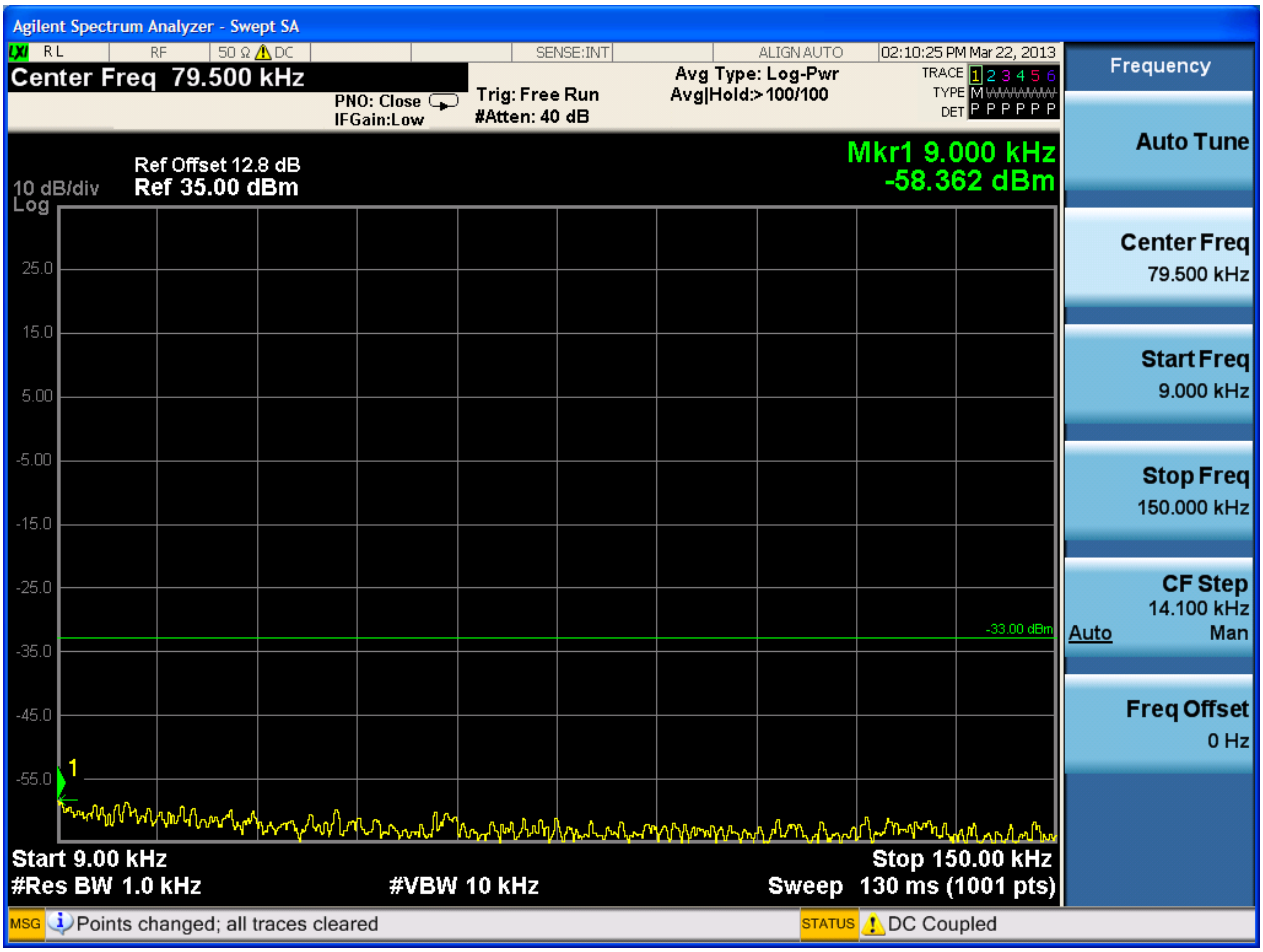
6.1.1.1.3 Test Channel = HCH



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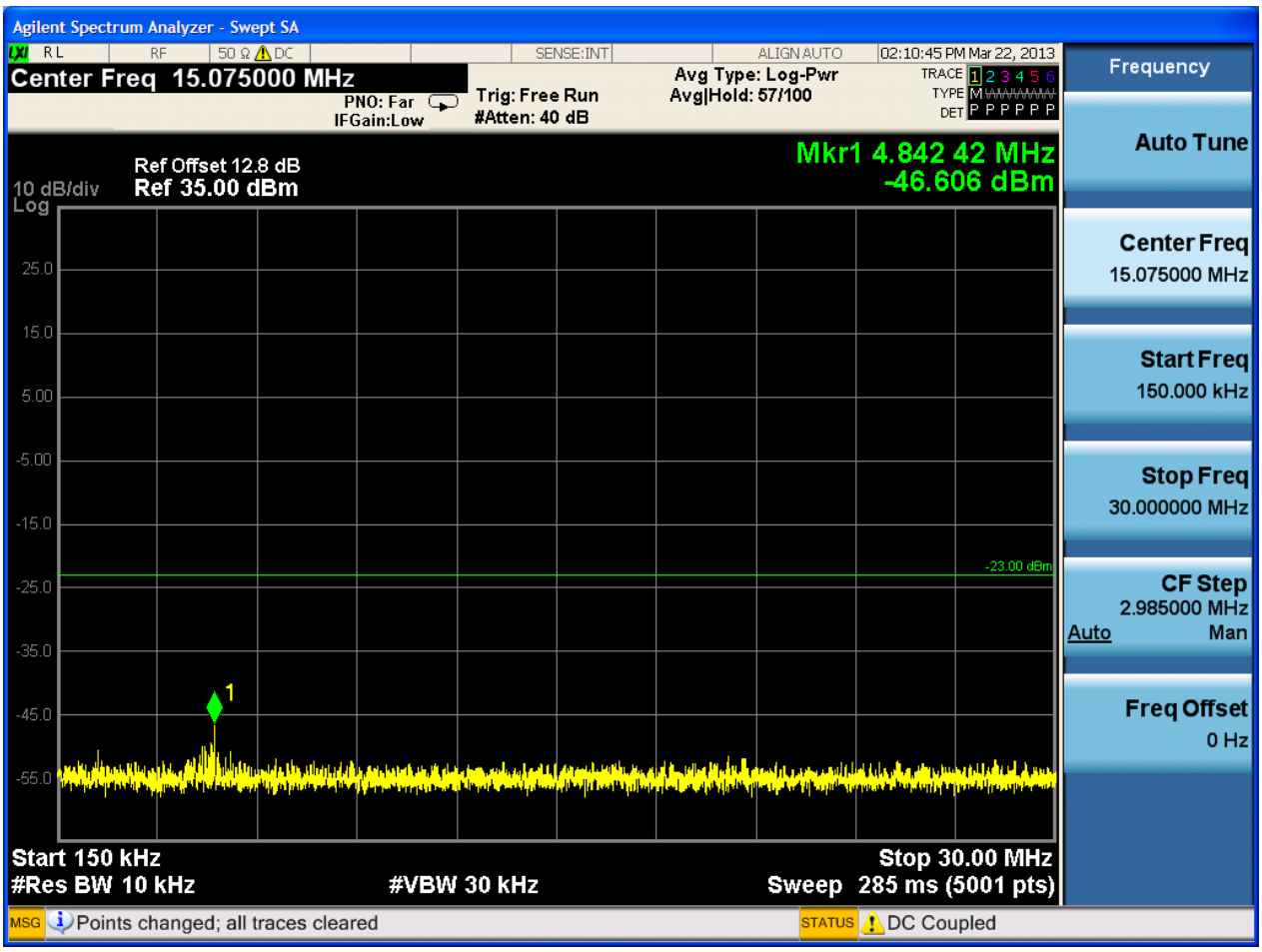

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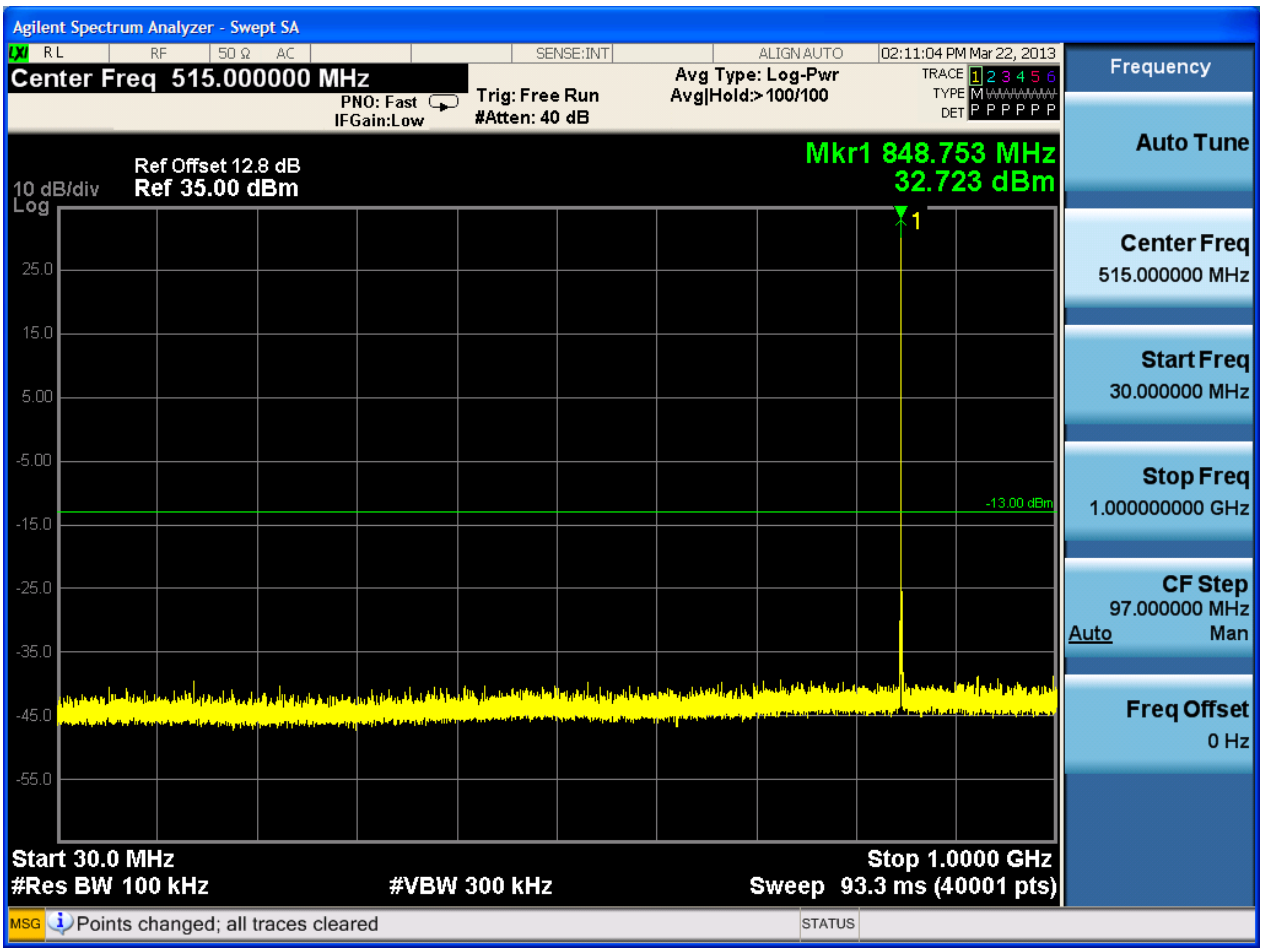

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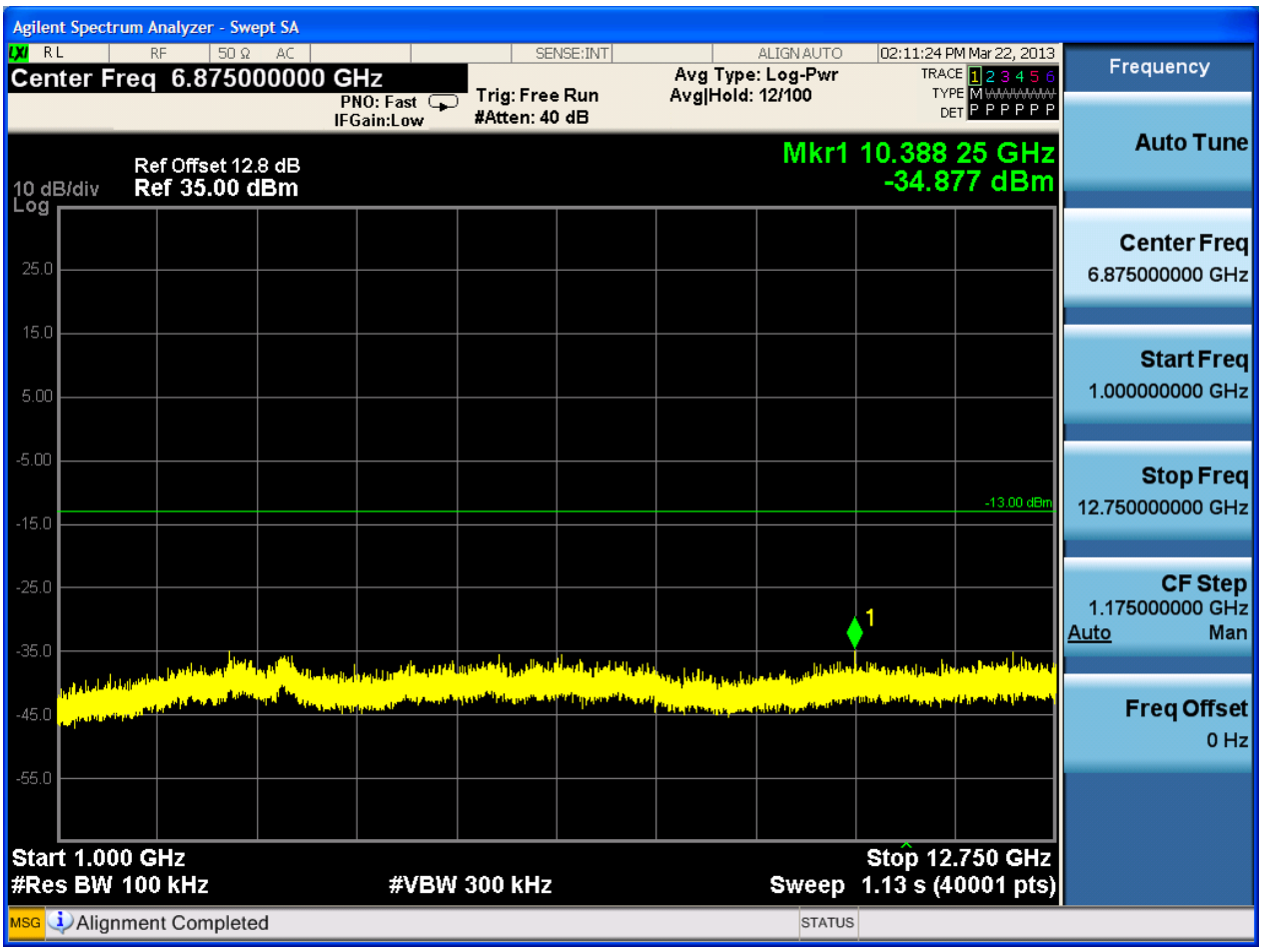

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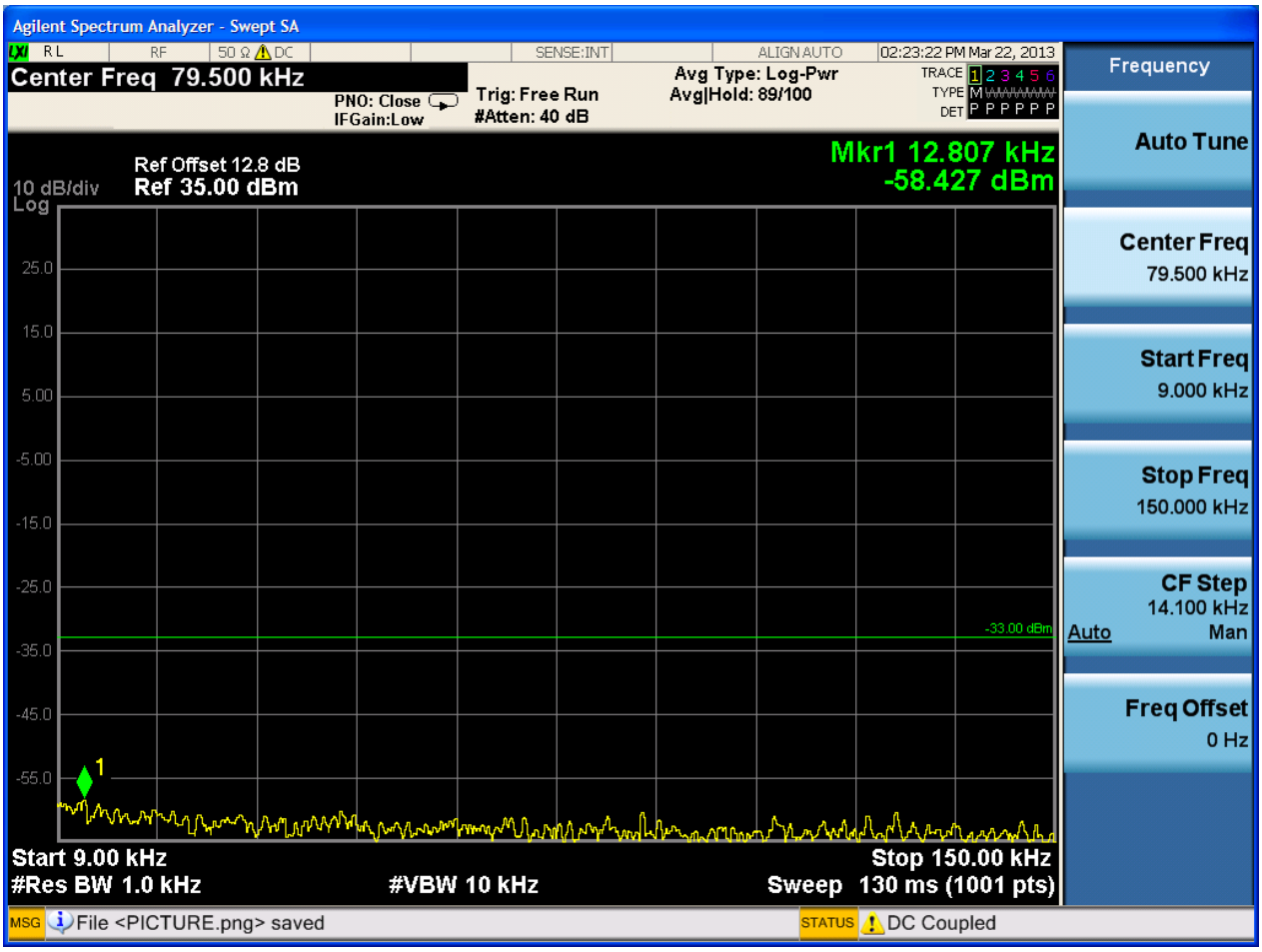
6.1.1.2 Test Mode = GSM/TM2

6.1.1.2.1 Test Channel = LCH



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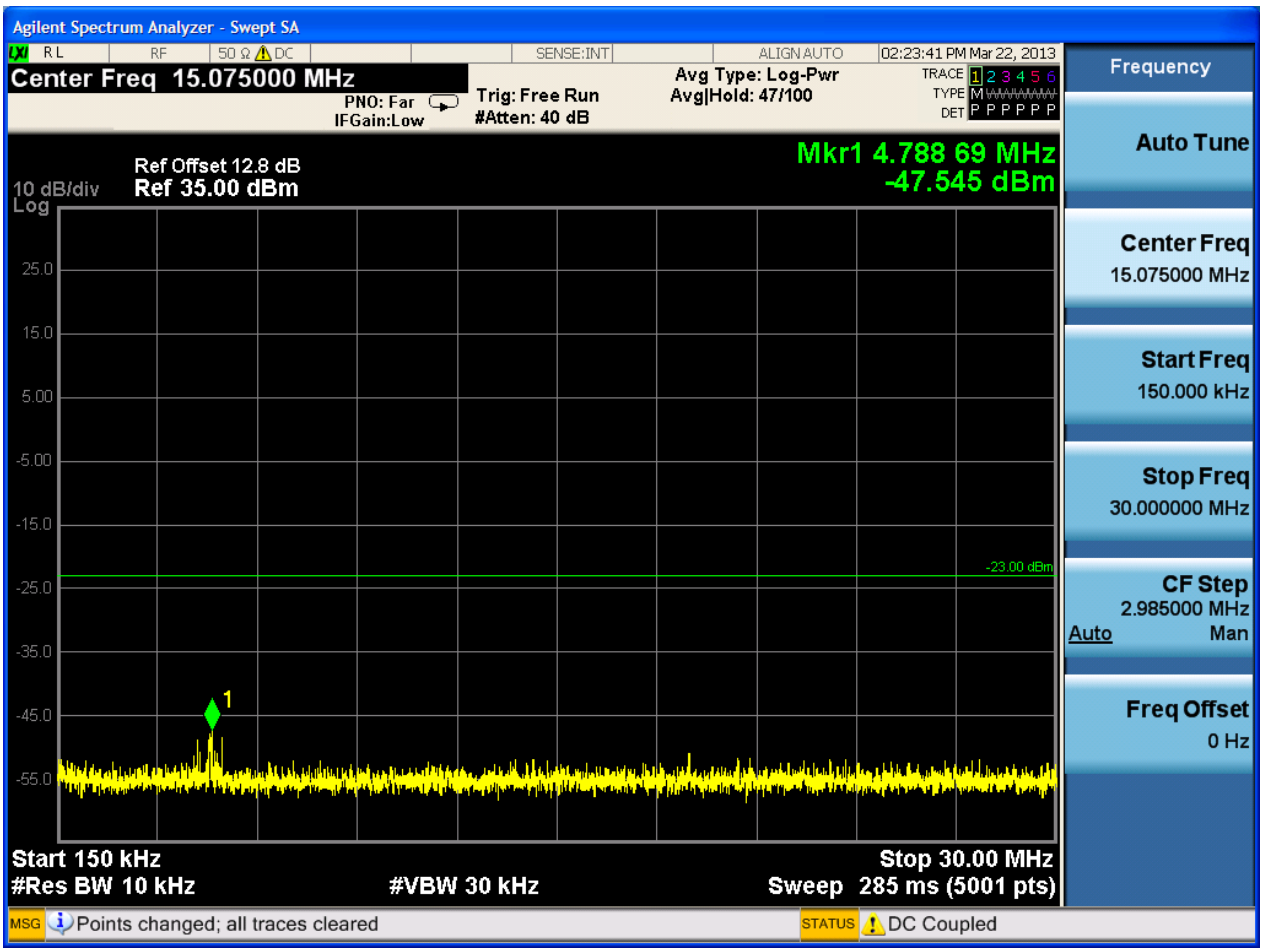

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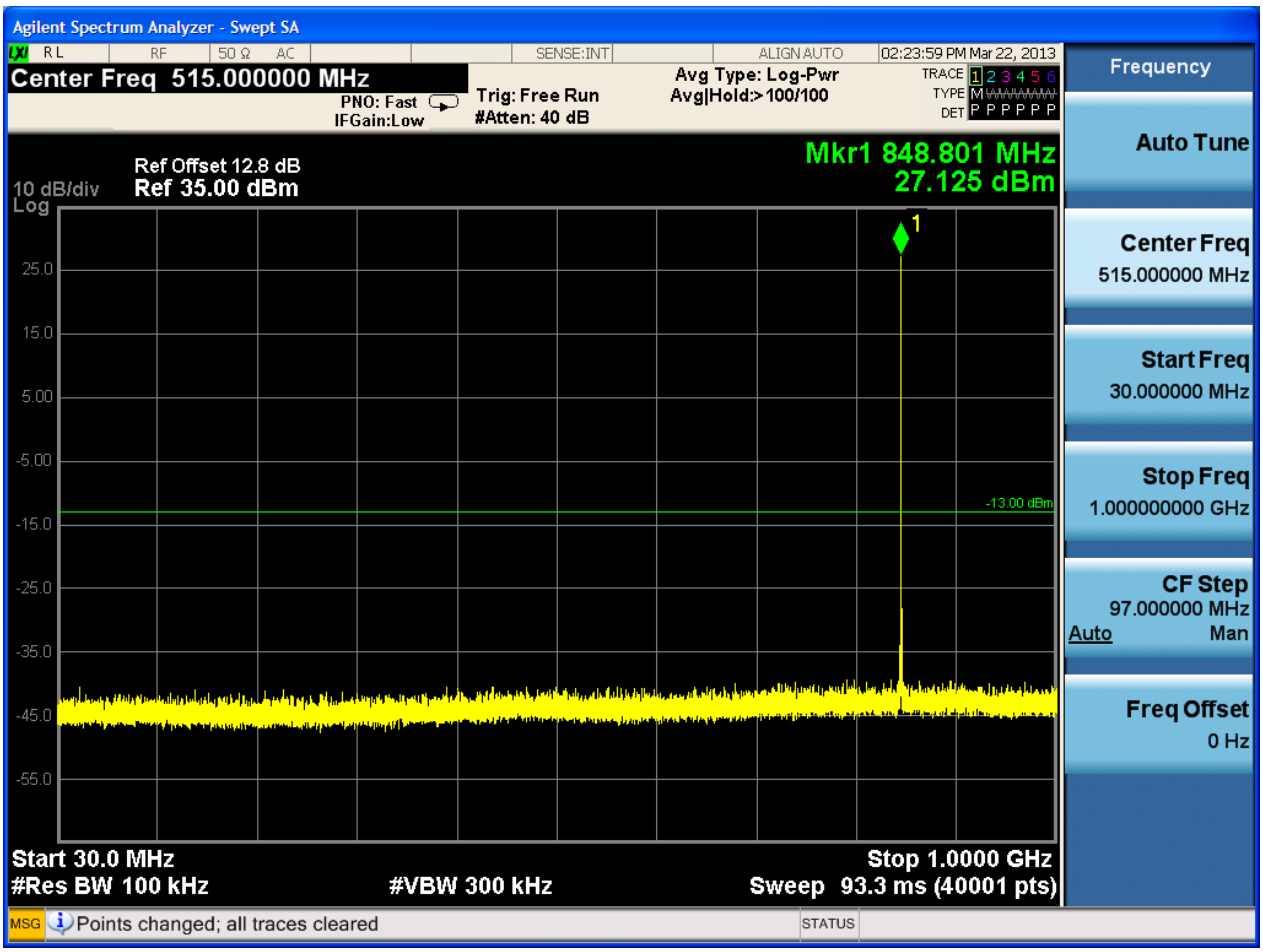

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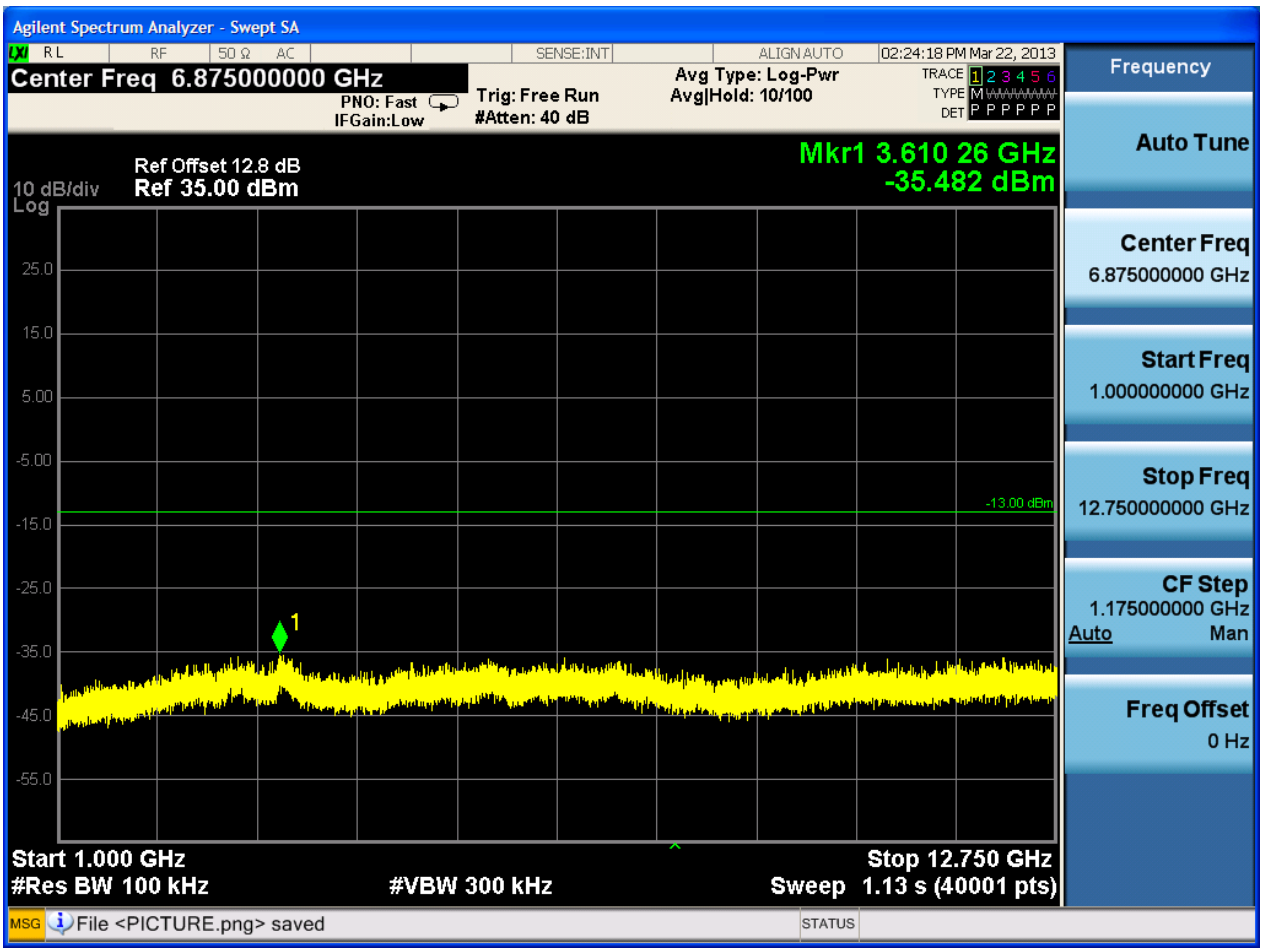

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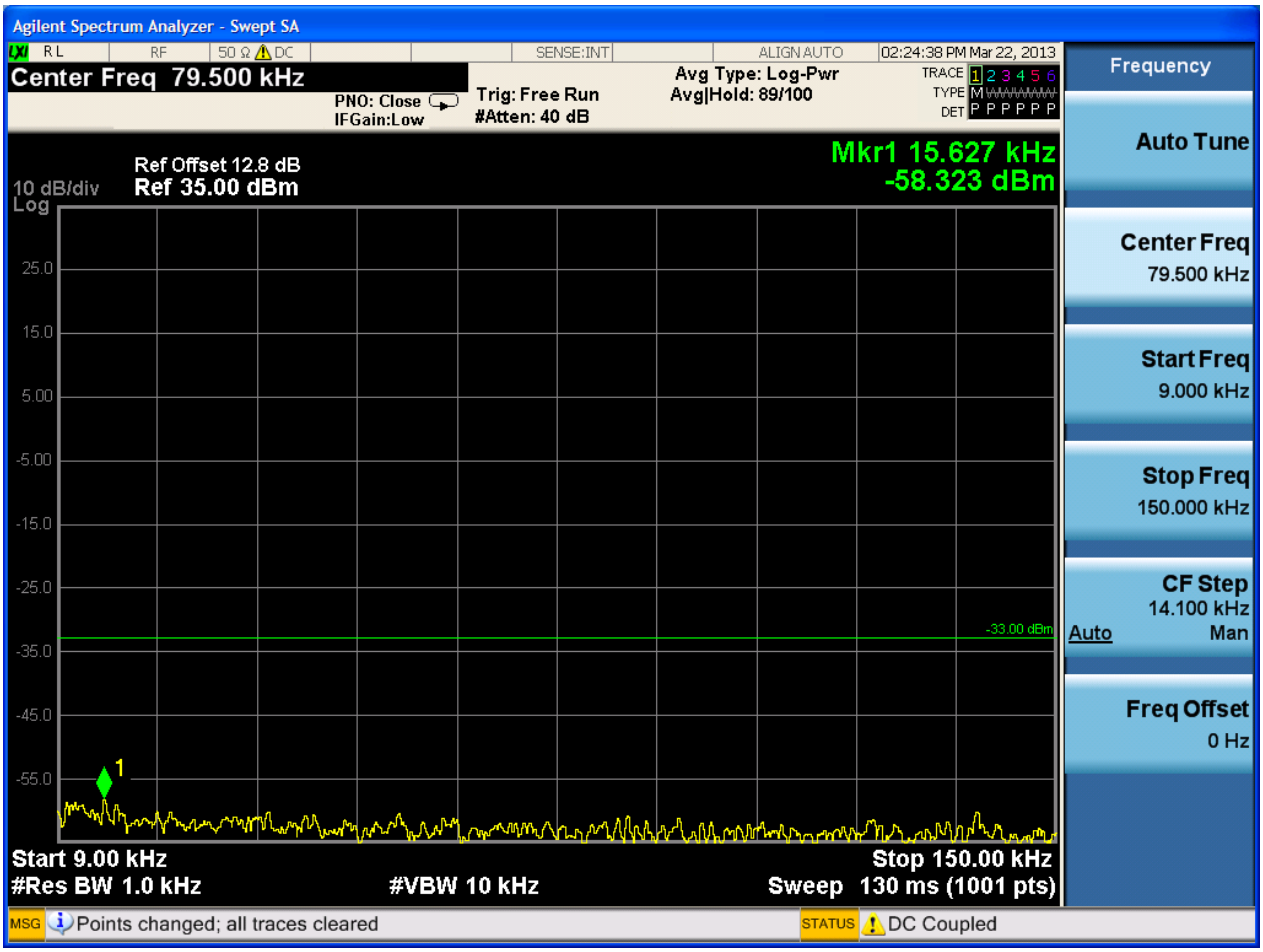
6.1.1.2.2 Test Channel = MCH



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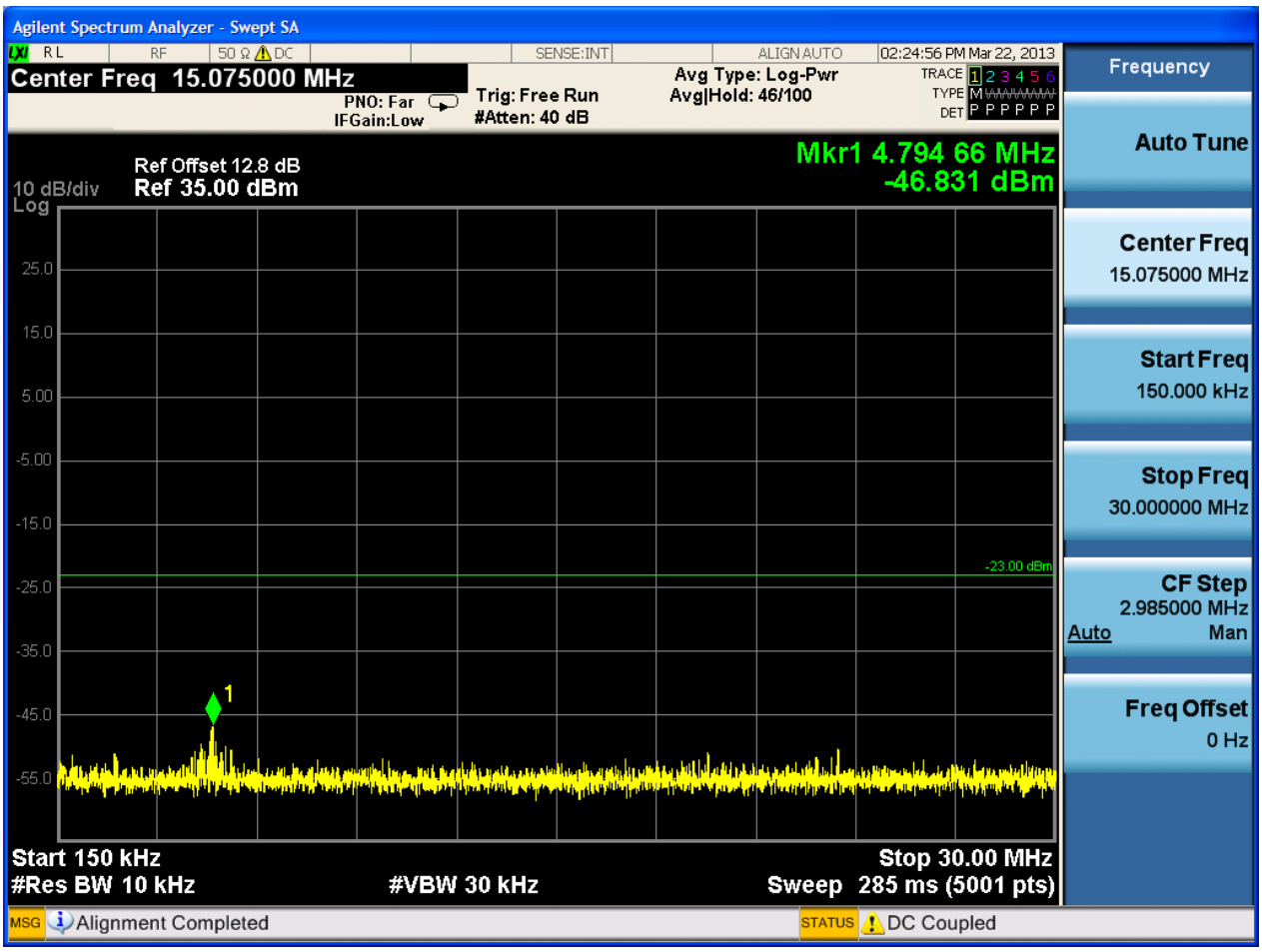

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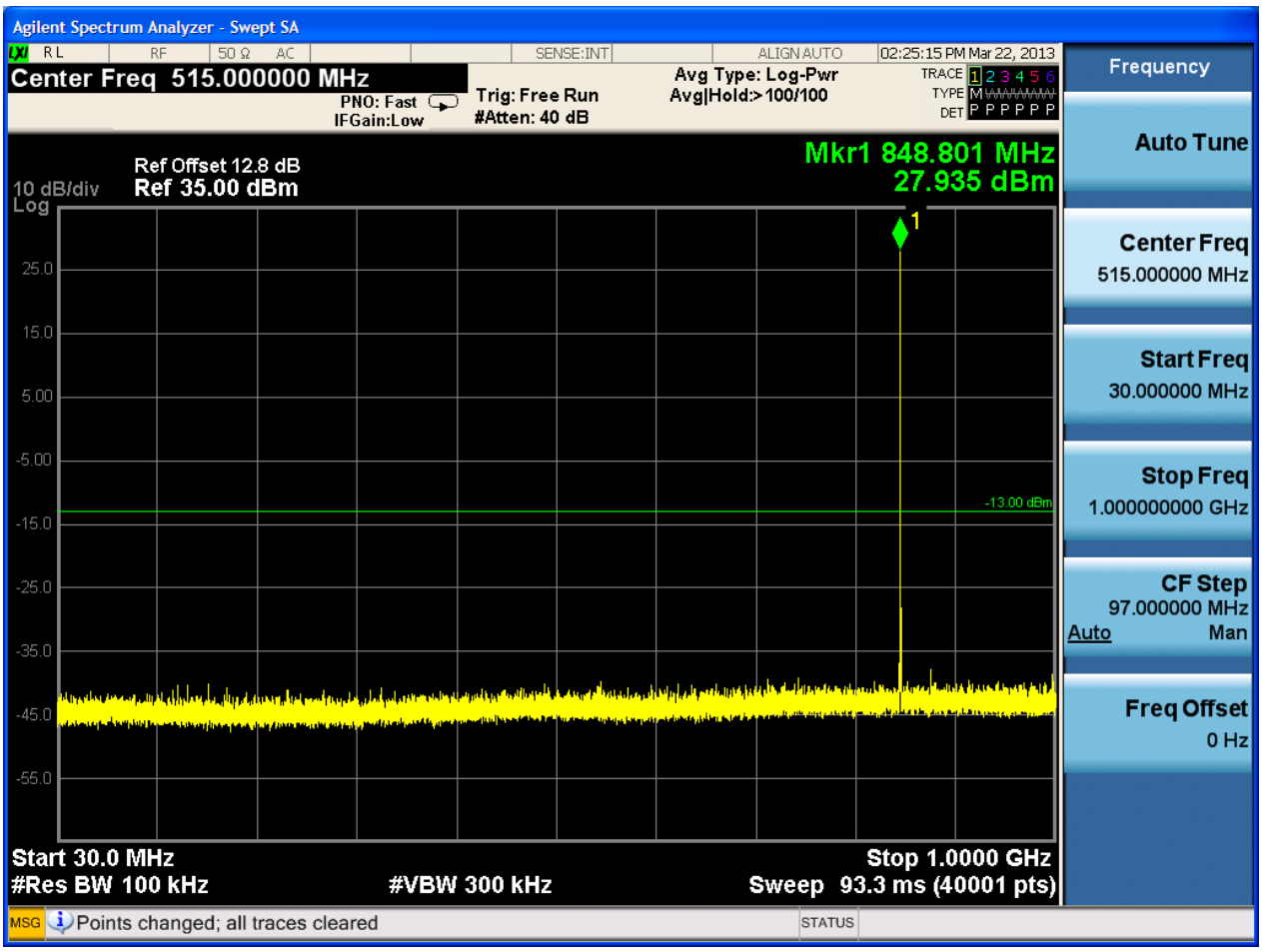

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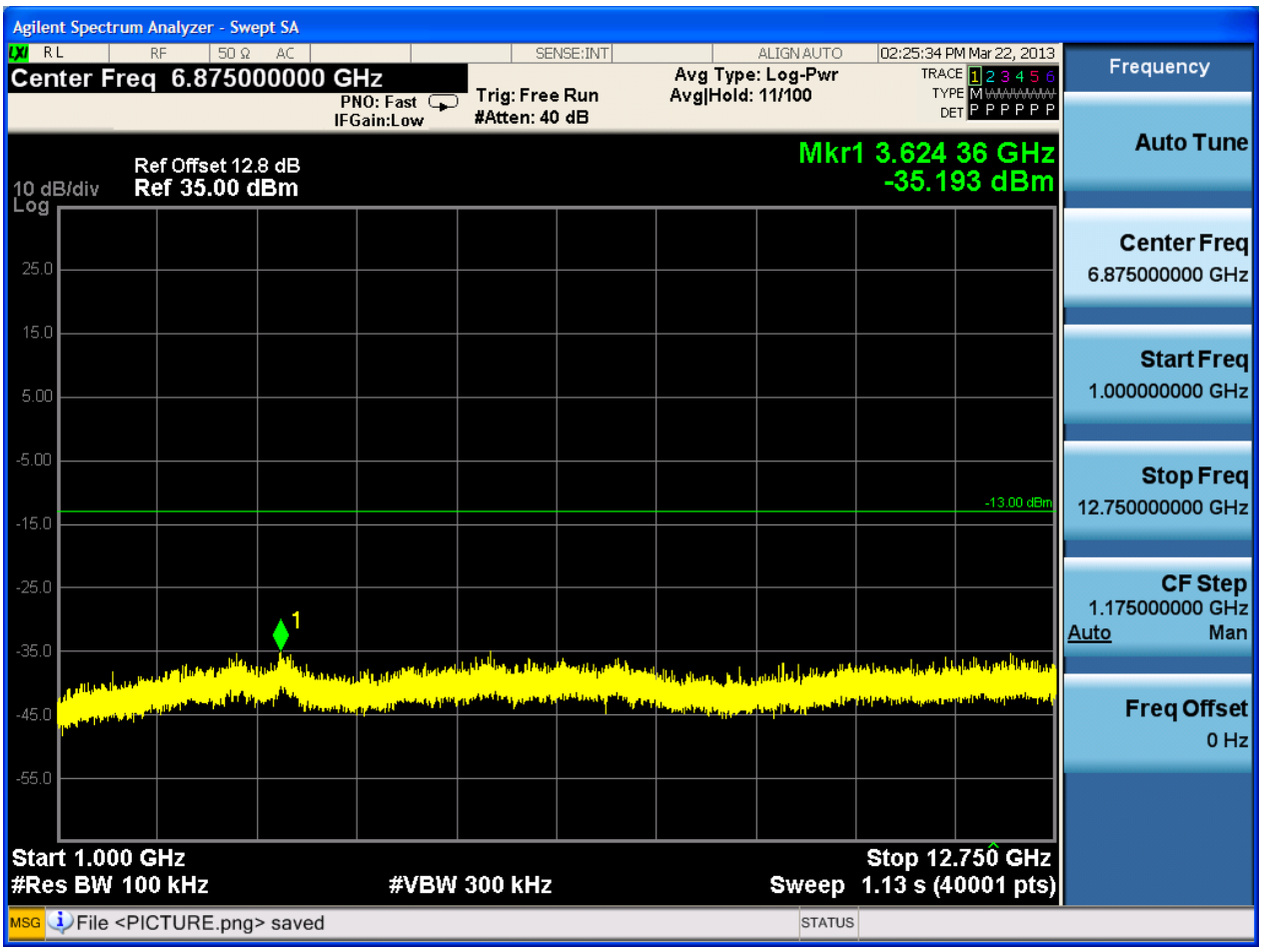

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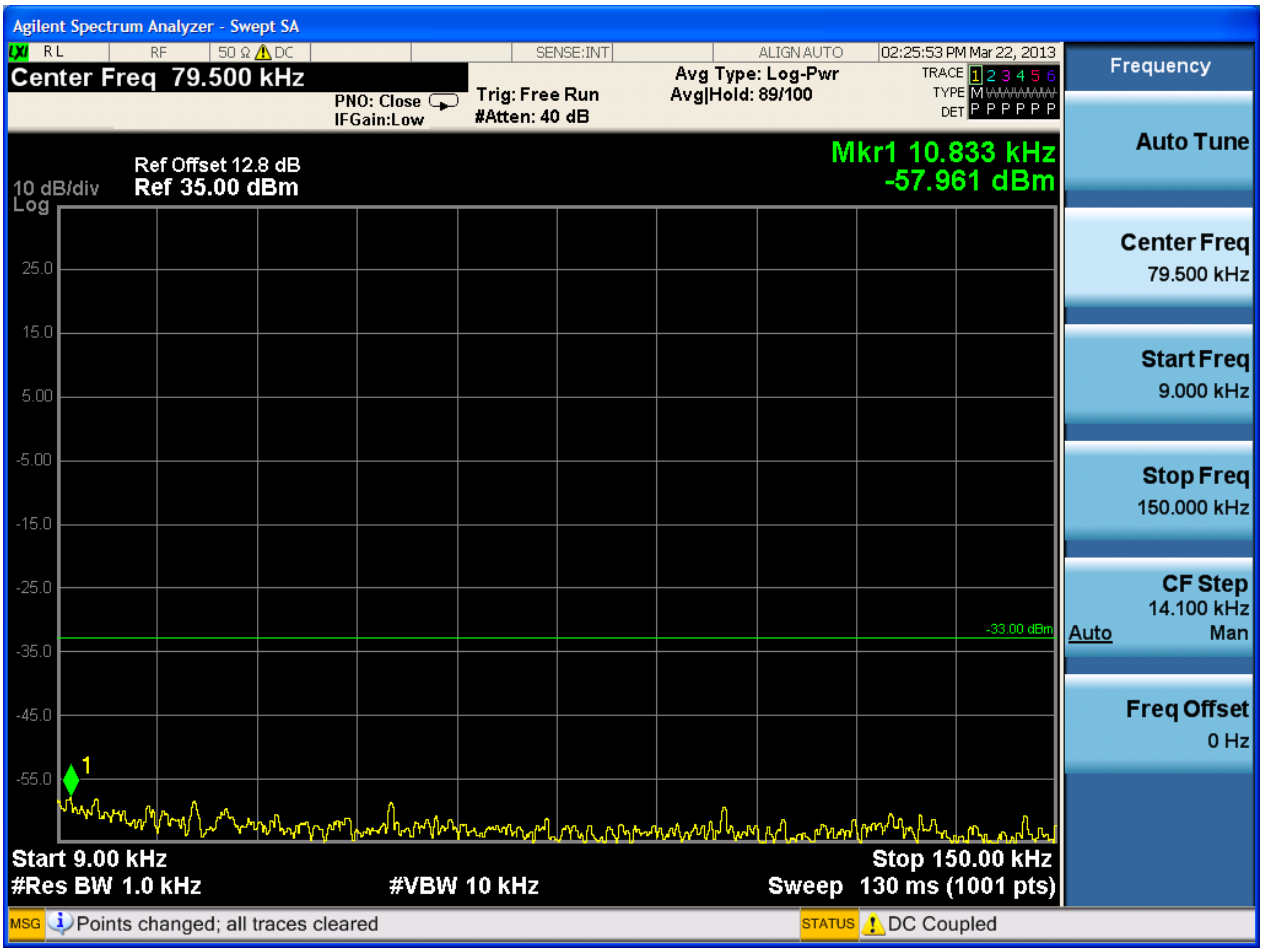
6.1.1.2.3 Test Channel = HCH



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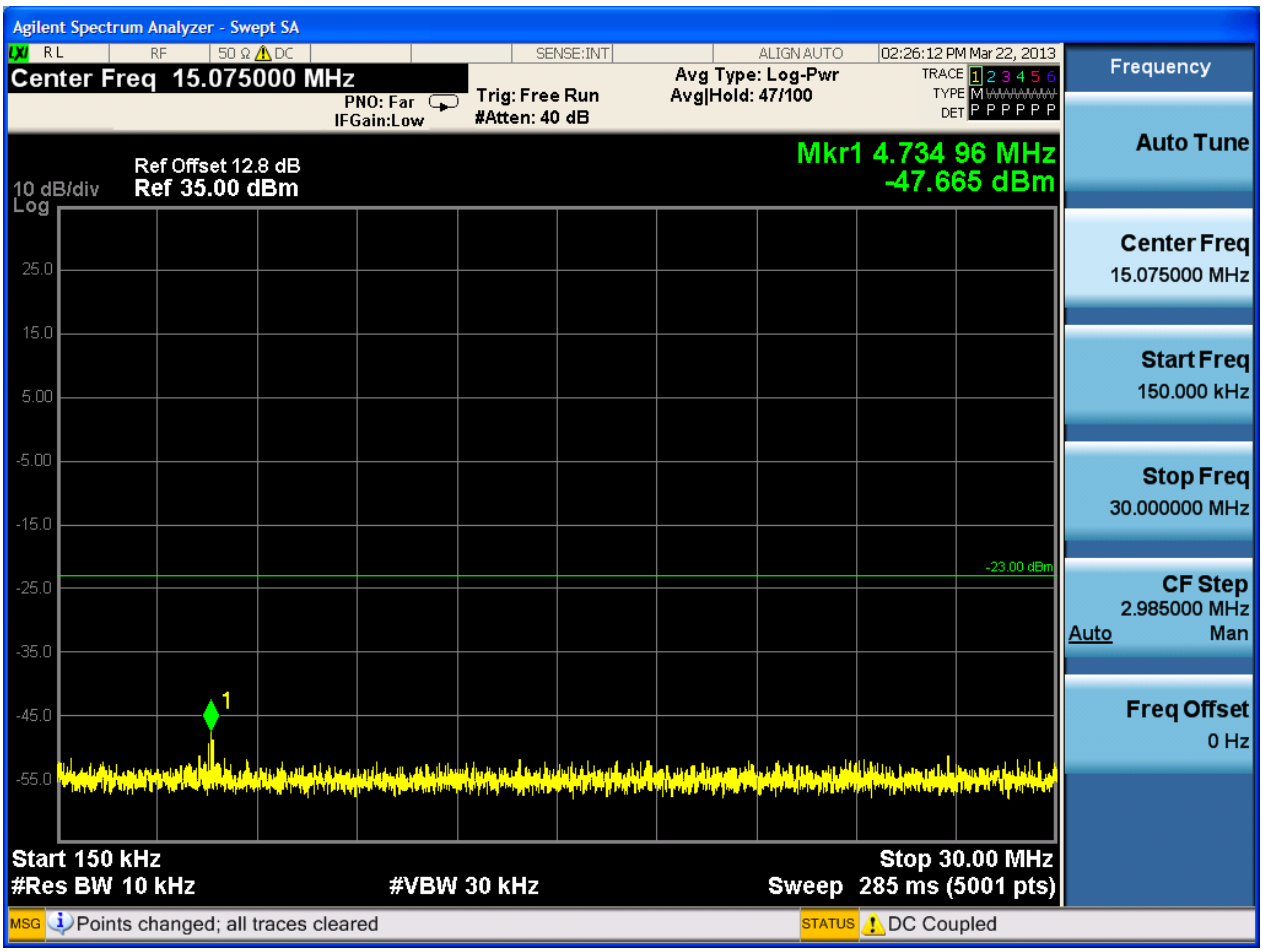

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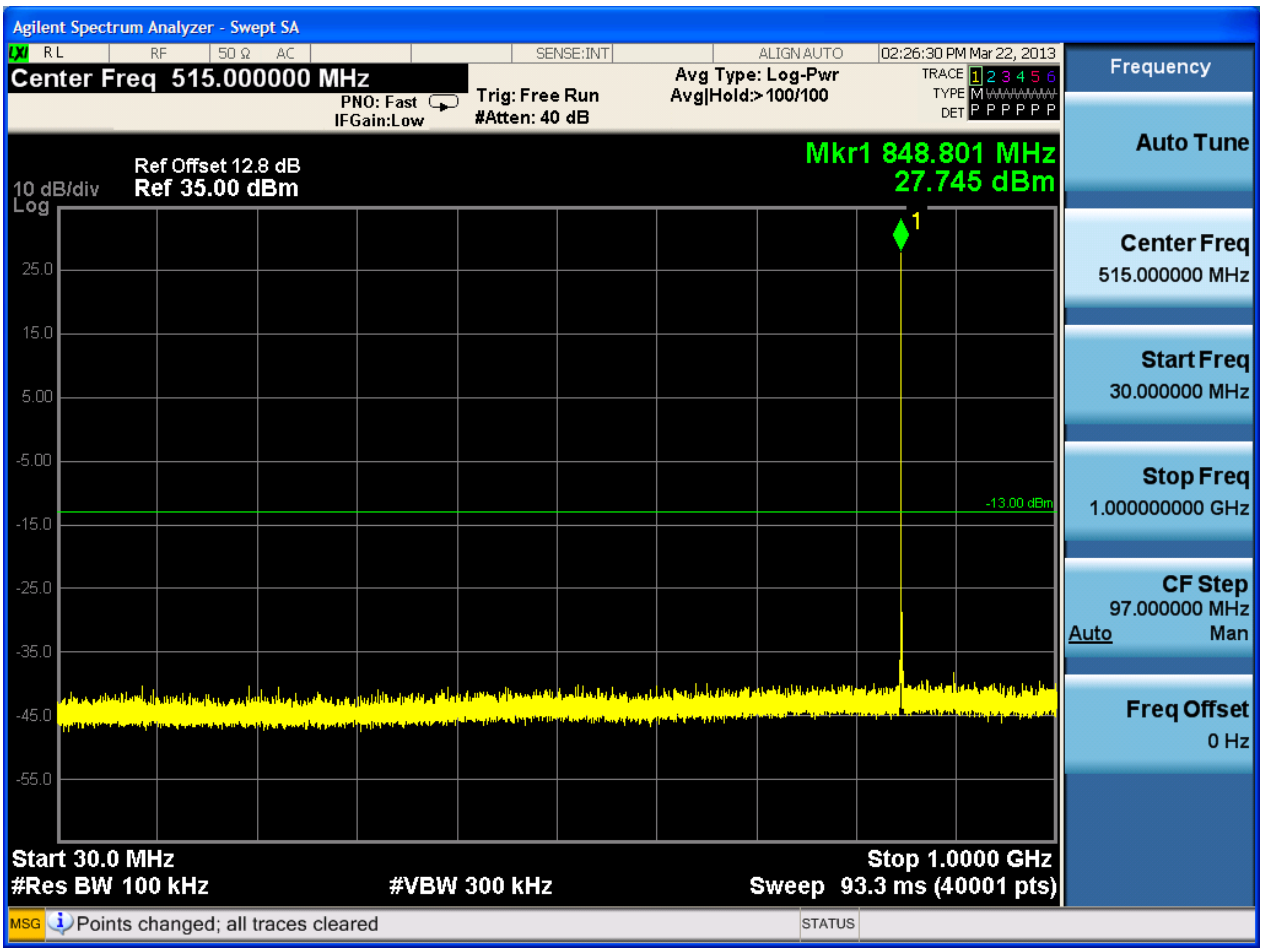

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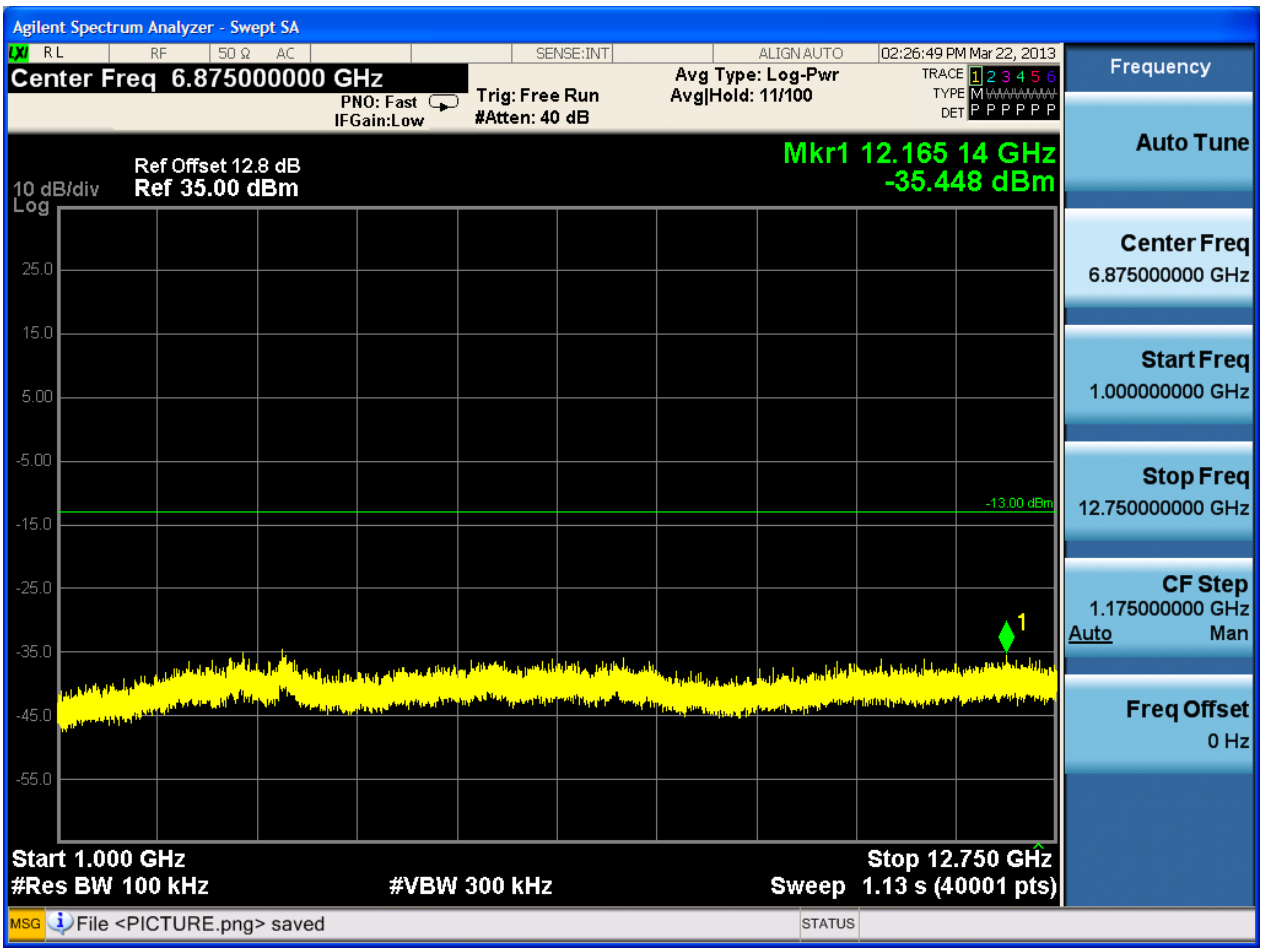

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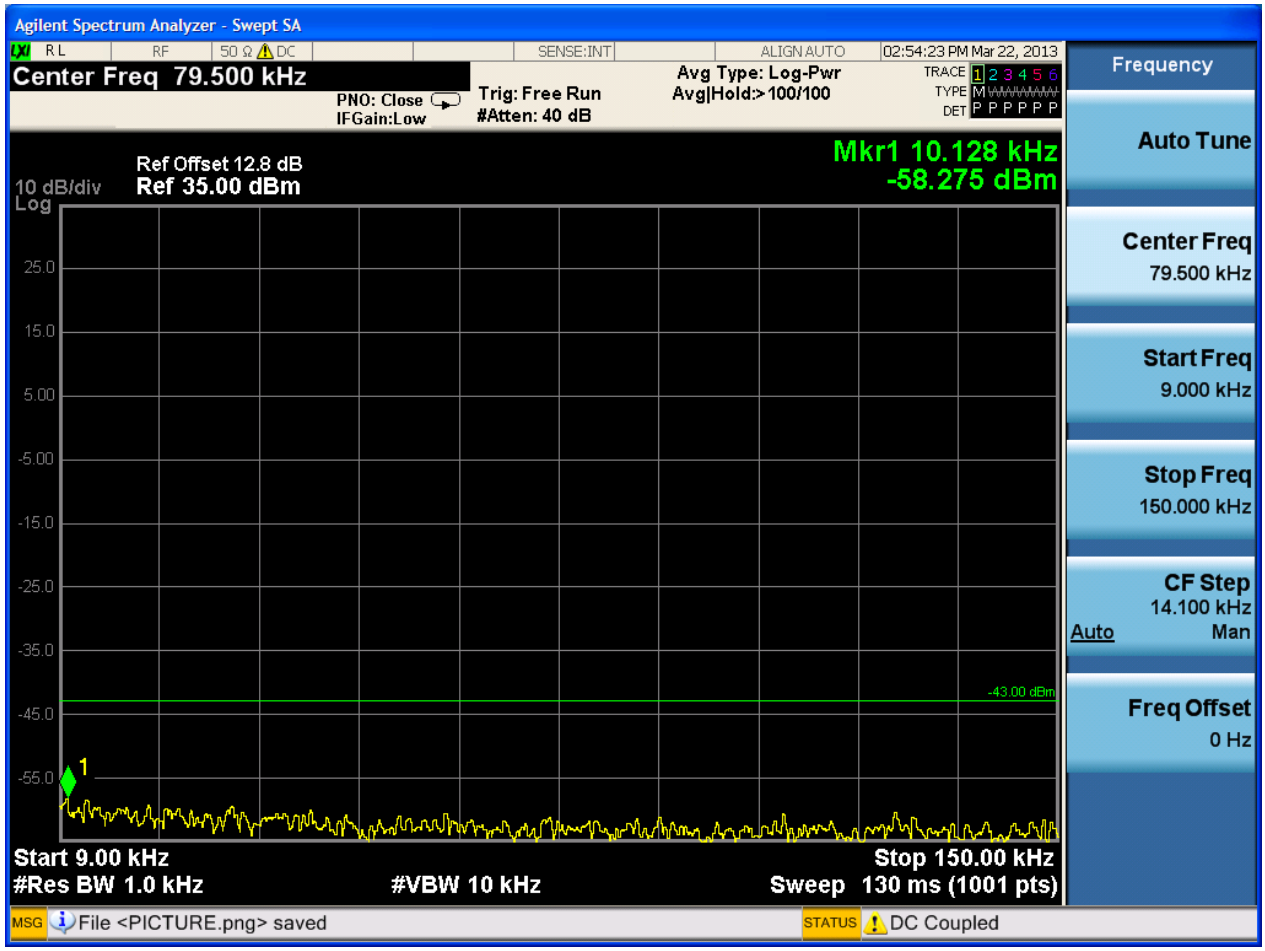
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

6.1.2.1.1 Test Channel = LCH



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