

Appendix C

Test Data of LTE BAND7

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1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 7

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	5M	LCH	RB1#0	20.62	20.04	33.00	PASS
				RB1#13	20.67	20.42	33.00	PASS
				RB1#24	20.85	21.04	33.00	PASS
				RB12#0	20.68	20.18	33.00	PASS
				RB12#6	21.07	20.92	33.00	PASS
				RB12#13	20.82	21.29	33.00	PASS
				RB25#0	20.85	20.40	33.00	PASS
			MCH	RB1#0	20.54	20.65	33.00	PASS
				RB1#13	20.68	21.21	33.00	PASS
				RB1#24	20.86	20.19	33.00	PASS
				RB12#0	20.94	20.08	33.00	PASS
				RB12#6	21.02	20.29	33.00	PASS
				RB12#13	20.92	20.71	33.00	PASS
				RB25#0	20.86	20.49	33.00	PASS
			HCH	RB1#0	21.03	21.39	33.00	PASS
				RB1#13	20.73	20.84	33.00	PASS
				RB1#24	21.07	20.53	33.00	PASS
				RB12#0	20.97	20.18	33.00	PASS
				RB12#6	20.88	20.54	33.00	PASS
				RB12#13	20.85	21.10	33.00	PASS
				RB25#0	20.72	20.43	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	5M	LCH	RB1#0	20.76	21.47	33.00	PASS
				RB1#13	20.66	20.09	33.00	PASS
				RB1#24	20.62	21.23	33.00	PASS
				RB12#0	20.91	20.33	33.00	PASS
				RB12#6	20.87	20.75	33.00	PASS
				RB12#13	20.80	20.24	33.00	PASS
				RB25#0	20.80	21.49	33.00	PASS
			MCH	RB1#0	20.89	20.14	33.00	PASS
				RB1#13	20.90	20.24	33.00	PASS
				RB1#24	20.50	21.13	33.00	PASS
				RB12#0	20.95	20.08	33.00	PASS
				RB12#6	20.89	20.65	33.00	PASS
				RB12#13	21.00	20.02	33.00	PASS
				RB25#0	20.68	20.33	33.00	PASS
			HCH	RB1#0	20.84	20.85	33.00	PASS
				RB1#13	20.96	21.23	33.00	PASS
				RB1#24	20.89	21.09	33.00	PASS
				RB12#0	20.37	21.07	33.00	PASS
				RB12#6	20.34	20.98	33.00	PASS
				RB12#13	20.74	21.30	33.00	PASS
				RB25#0	20.84	20.91	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	10M	LCH	RB1#0	20.87	20.94	33.00	PASS
				RB1#25	20.87	20.32	33.00	PASS
				RB1#49	21.07	20.07	33.00	PASS
				RB25#0	20.81	20.28	33.00	PASS
				RB25#13	20.89	20.13	33.00	PASS
				RB25#25	20.93	21.48	33.00	PASS
				RB50#0	21.06	20.39	33.00	PASS
			MCH	RB1#0	20.63	21.18	33.00	PASS
				RB1#25	20.71	20.52	33.00	PASS
				RB1#49	20.99	21.06	33.00	PASS
				RB25#0	20.64	21.46	33.00	PASS
				RB25#13	20.85	20.13	33.00	PASS
				RB25#25	20.78	20.87	33.00	PASS
				RB50#0	20.83	20.33	33.00	PASS
			HCH	RB1#0	20.92	20.50	33.00	PASS
				RB1#25	21.03	21.19	33.00	PASS
				RB1#49	20.91	21.38	33.00	PASS
				RB25#0	20.85	20.92	33.00	PASS
				RB25#13	20.72	20.87	33.00	PASS
				RB25#25	20.99	20.27	33.00	PASS
				RB50#0	20.61	21.22	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	10M	LCH	RB1#0	20.65	20.62	33.00	PASS
				RB1#25	20.60	20.22	33.00	PASS
				RB1#49	21.02	21.24	33.00	PASS
				RB25#0	20.61	20.79	33.00	PASS
				RB25#13	20.86	20.43	33.00	PASS
				RB25#25	20.93	21.18	33.00	PASS
				RB50#0	21.01	21.01	33.00	PASS
			MCH	RB1#0	20.85	21.14	33.00	PASS
				RB1#25	21.06	21.03	33.00	PASS
				RB1#49	20.83	20.17	33.00	PASS
				RB25#0	20.94	20.20	33.00	PASS
				RB25#13	20.85	20.51	33.00	PASS
				RB25#25	20.98	20.70	33.00	PASS
				RB50#0	20.87	20.22	33.00	PASS
			HCH	RB1#0	20.98	21.49	33.00	PASS
				RB1#25	20.98	21.04	33.00	PASS
				RB1#49	20.69	20.84	33.00	PASS
				RB25#0	20.81	20.89	33.00	PASS
				RB25#13	20.92	20.33	33.00	PASS
				RB25#25	20.97	21.33	33.00	PASS
				RB50#0	20.88	20.87	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	15M	LCH	RB1#0	20.88	21.50	33.00	PASS
				RB1#38	20.86	20.20	33.00	PASS
				RB1#74	20.73	20.89	33.00	PASS
				RB36#0	20.96	20.23	33.00	PASS
				RB36#18	20.61	20.74	33.00	PASS
				RB36#39	20.73	20.78	33.00	PASS
				RB75#0	20.87	20.09	33.00	PASS
			MCH	RB1#0	20.62	21.39	33.00	PASS
				RB1#38	20.91	20.06	33.00	PASS
				RB1#74	20.91	21.19	33.00	PASS
				RB36#0	20.81	20.14	33.00	PASS
				RB36#18	20.82	20.73	33.00	PASS
				RB36#39	20.85	21.36	33.00	PASS
				RB75#0	20.93	21.21	33.00	PASS
			HCH	RB1#0	20.92	20.96	33.00	PASS
				RB1#38	20.82	21.16	33.00	PASS
				RB1#74	20.83	21.29	33.00	PASS
				RB36#0	20.97	20.58	33.00	PASS
				RB36#18	20.94	20.37	33.00	PASS
				RB36#39	20.68	20.75	33.00	PASS
				RB75#0	20.63	20.92	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	15M	LCH	RB1#0	20.73	20.98	33.00	PASS
				RB1#38	20.76	20.06	33.00	PASS
				RB1#74	20.79	21.23	33.00	PASS
				RB36#0	20.66	21.44	33.00	PASS
				RB36#18	20.68	20.29	33.00	PASS
				RB36#39	20.67	20.83	33.00	PASS
				RB75#0	20.76	21.22	33.00	PASS
			MCH	RB1#0	21.08	20.58	33.00	PASS
				RB1#38	20.95	20.39	33.00	PASS
				RB1#74	20.87	20.11	33.00	PASS
				RB36#0	20.85	21.04	33.00	PASS
				RB36#18	20.82	21.49	33.00	PASS
				RB36#39	20.61	20.82	33.00	PASS
				RB75#0	20.74	20.38	33.00	PASS
			HCH	RB1#0	20.93	21.06	33.00	PASS
				RB1#38	21.06	21.16	33.00	PASS
				RB1#74	21.03	21.29	33.00	PASS
				RB36#0	20.81	21.34	33.00	PASS
				RB36#18	20.90	21.46	33.00	PASS
				RB36#39	20.99	21.25	33.00	PASS
				RB75#0	20.65	20.15	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	20M	LCH	RB1#0	20.85	21.47	33.00	PASS
				RB1#50	20.99	21.46	33.00	PASS
				RB1#99	20.84	20.15	33.00	PASS
				RB50#0	20.69	20.94	33.00	PASS
				RB50#25	20.82	20.03	33.00	PASS
				RB50#50	20.99	20.12	33.00	PASS
				RB100#0	20.64	21.49	33.00	PASS
			MCH	RB1#0	20.76	21.39	33.00	PASS
				RB1#50	20.64	20.88	33.00	PASS
				RB1#99	21.09	20.90	33.00	PASS
				RB50#0	20.84	21.45	33.00	PASS
				RB50#25	20.75	21.44	33.00	PASS
				RB50#50	21.04	21.46	33.00	PASS
				RB100#0	20.95	20.15	33.00	PASS
			HCH	RB1#0	20.96	21.47	33.00	PASS
				RB1#50	20.95	20.91	33.00	PASS
				RB1#99	20.79	20.93	33.00	PASS
				RB50#0	20.82	21.47	33.00	PASS
				RB50#25	20.80	20.69	33.00	PASS
				RB50#50	20.62	20.96	33.00	PASS
				RB100#0	20.90	20.44	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	20M	LCH	RB1#0	20.84	20.26	33.00	PASS
				RB1#50	20.97	20.36	33.00	PASS
				RB1#99	20.92	20.94	33.00	PASS
				RB50#0	20.89	20.74	33.00	PASS
				RB50#25	20.92	21.27	33.00	PASS
				RB50#50	20.87	20.05	33.00	PASS
				RB100#0	20.74	20.67	33.00	PASS
			MCH	RB1#0	20.83	21.13	33.00	PASS
				RB1#50	20.96	21.27	33.00	PASS
				RB1#99	20.88	21.41	33.00	PASS
				RB50#0	20.87	20.44	33.00	PASS
				RB50#25	20.79	20.92	33.00	PASS
				RB50#50	20.99	20.84	33.00	PASS
				RB100#0	20.64	21.48	33.00	PASS
			HCH	RB1#0	20.79	21.36	33.00	PASS
				RB1#50	20.64	20.91	33.00	PASS
				RB1#99	20.87	21.05	33.00	PASS
				RB50#0	20.77	21.12	33.00	PASS
				RB50#25	20.71	20.74	33.00	PASS
				RB50#50	20.80	21.15	33.00	PASS
				RB100#0	20.87	20.83	33.00	PASS

Note:

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

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level

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

Detector: RMS

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
Band 7	TM1/20M	LCH	4.32	13	PASS
		MCH	4.52	13	PASS
		HCH	4.46	13	PASS
	TM2/20M	LCH	5.36	13	PASS
		MCH	5.68	13	PASS
		HCH	5.45	13	PASS

3 Modulation Characteristics

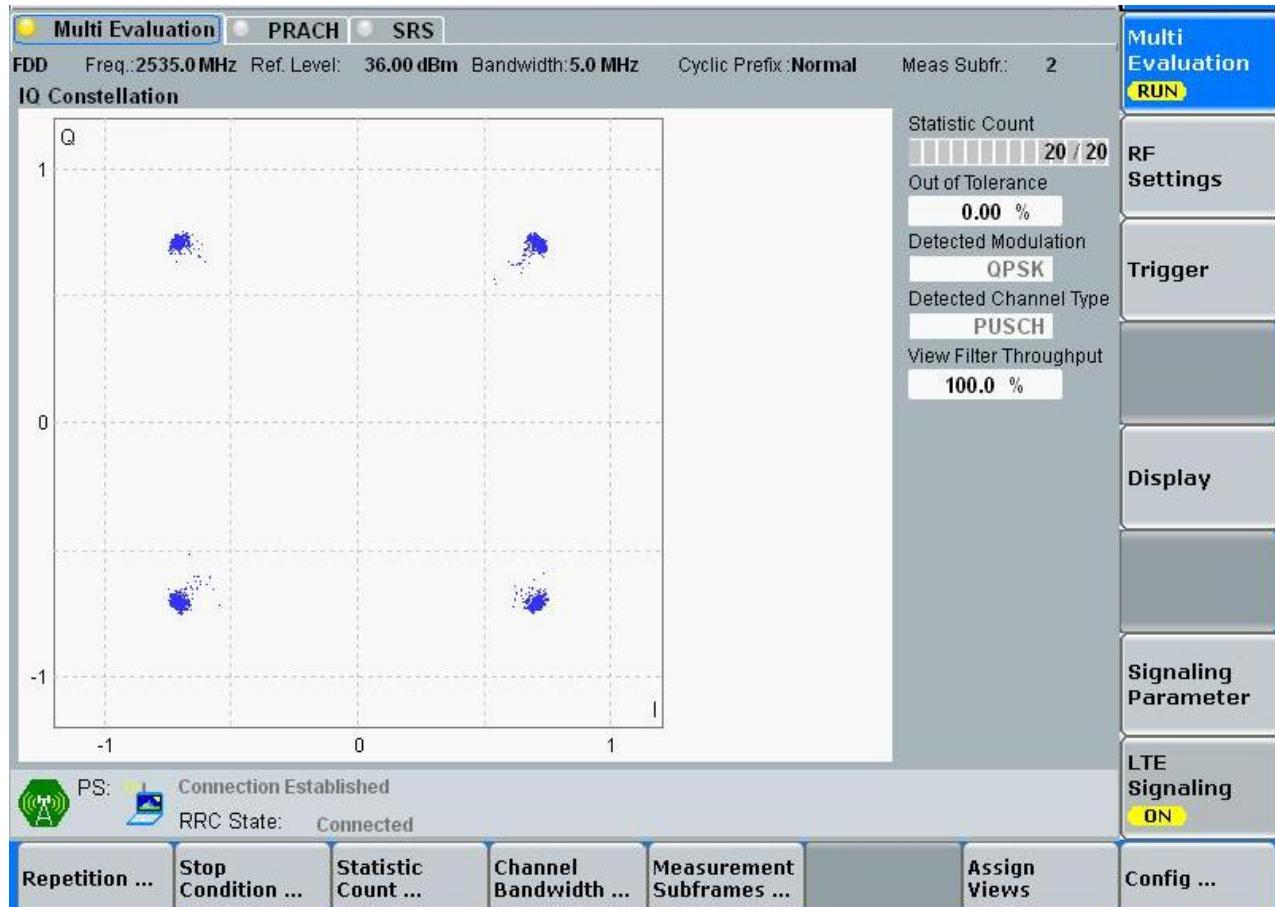
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band7

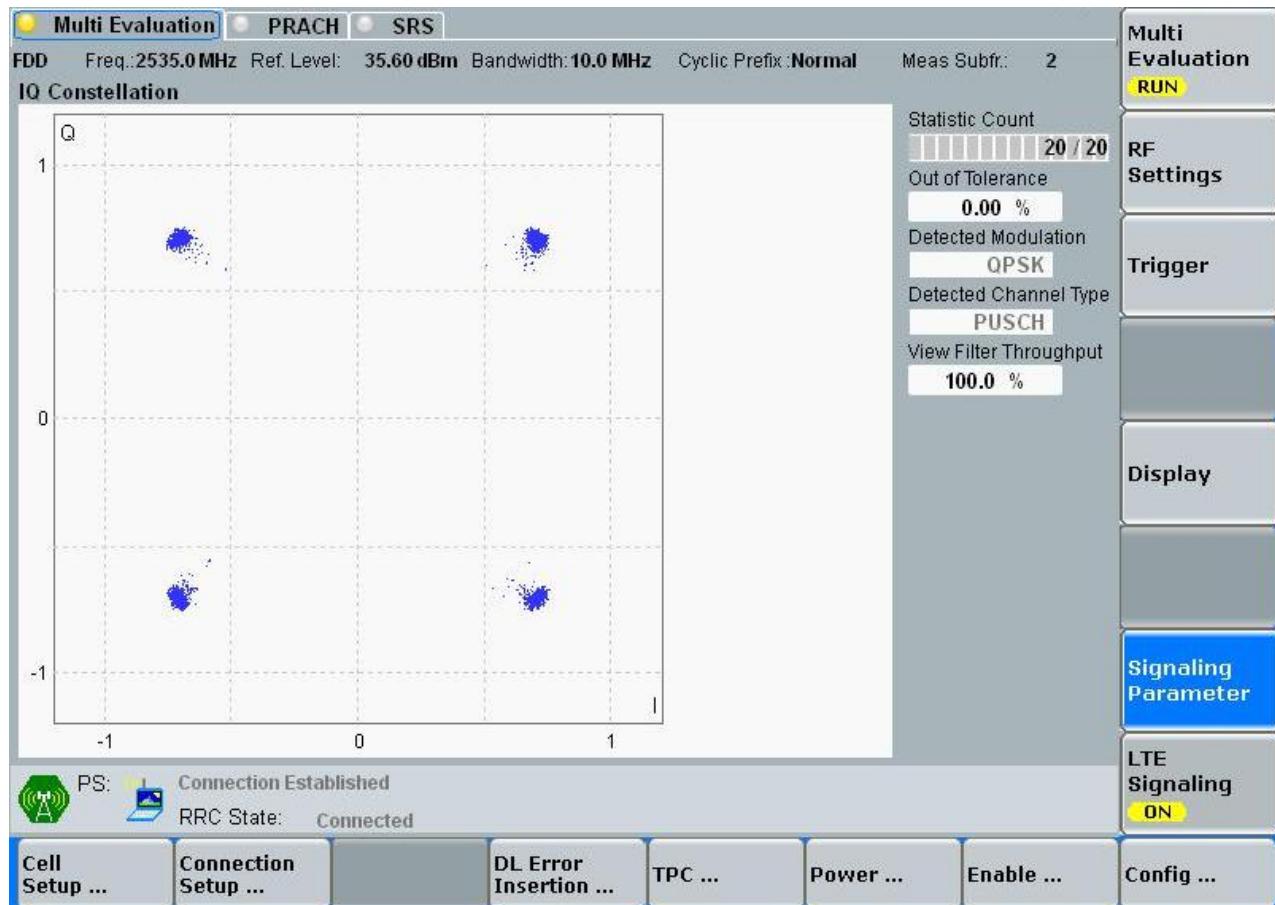
3.1.1.1 Test Mode = LTE /TM1 5MHz

3.1.1.1.1 Test Channel = MCH



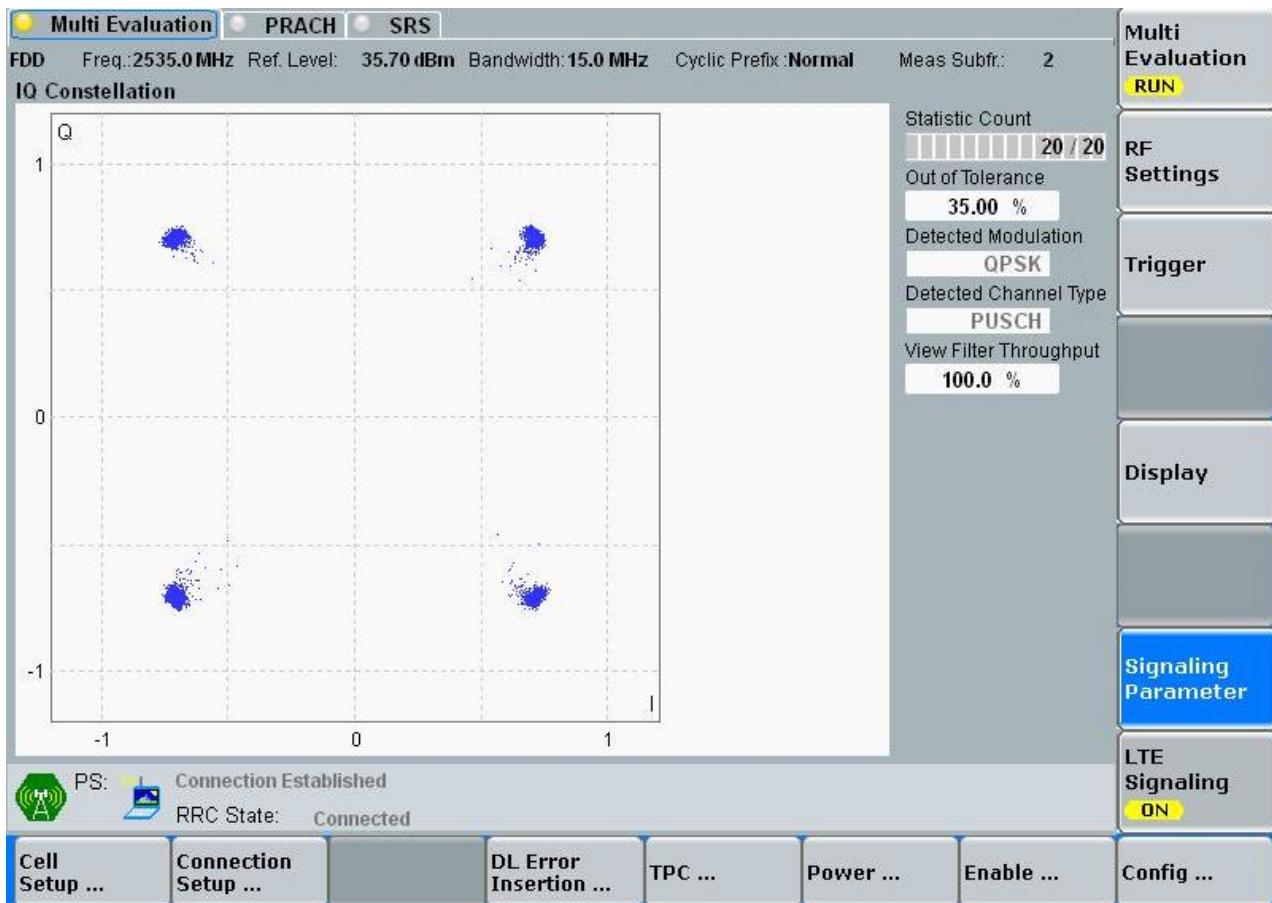
3.1.1.2 Test Mode = LTE /TM1 10MHz

3.1.1.2.1 Test Channel = MCH



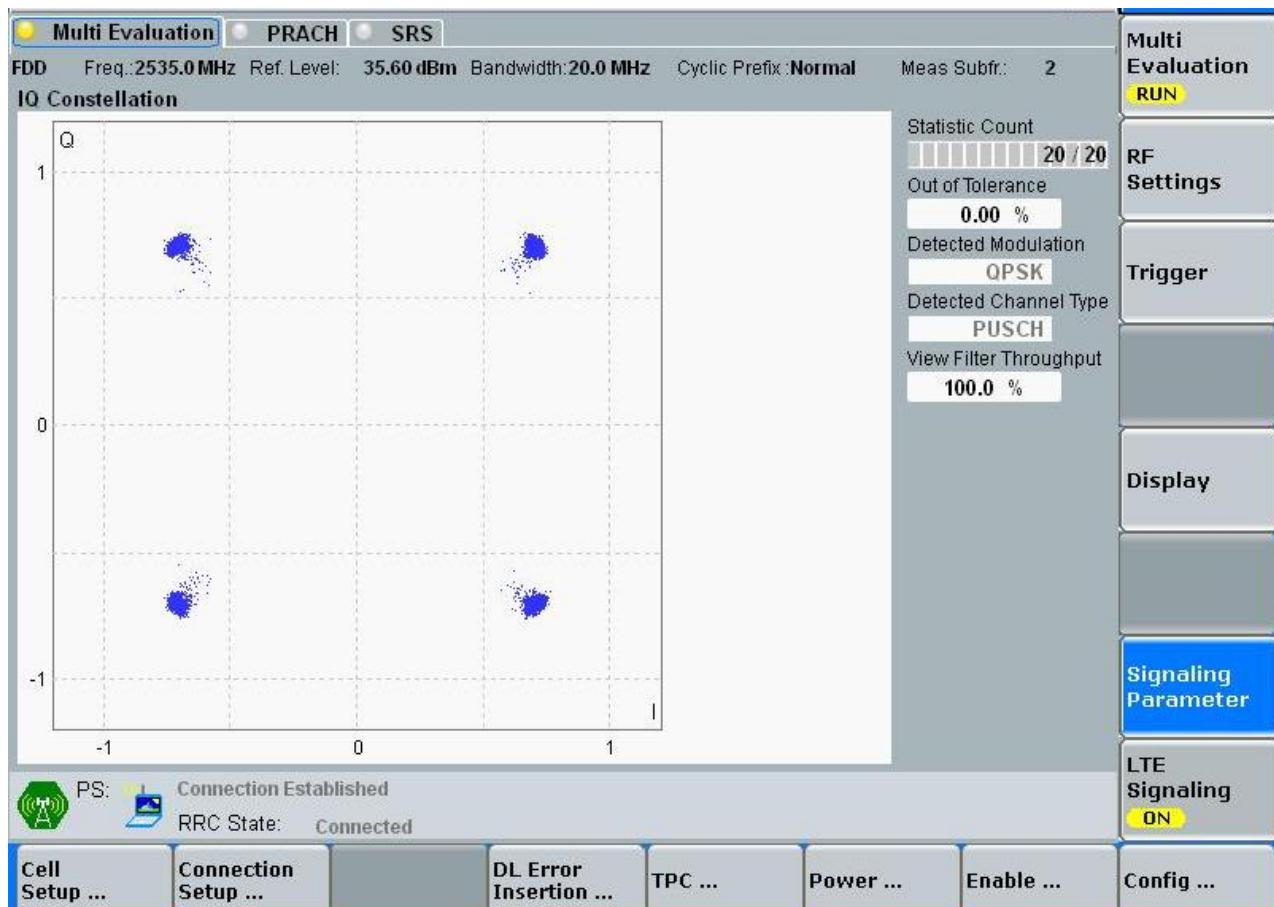
3.1.1.3 Test Mode = LTE /TM1 15MHz

3.1.1.3.1 Test Channel = MCH



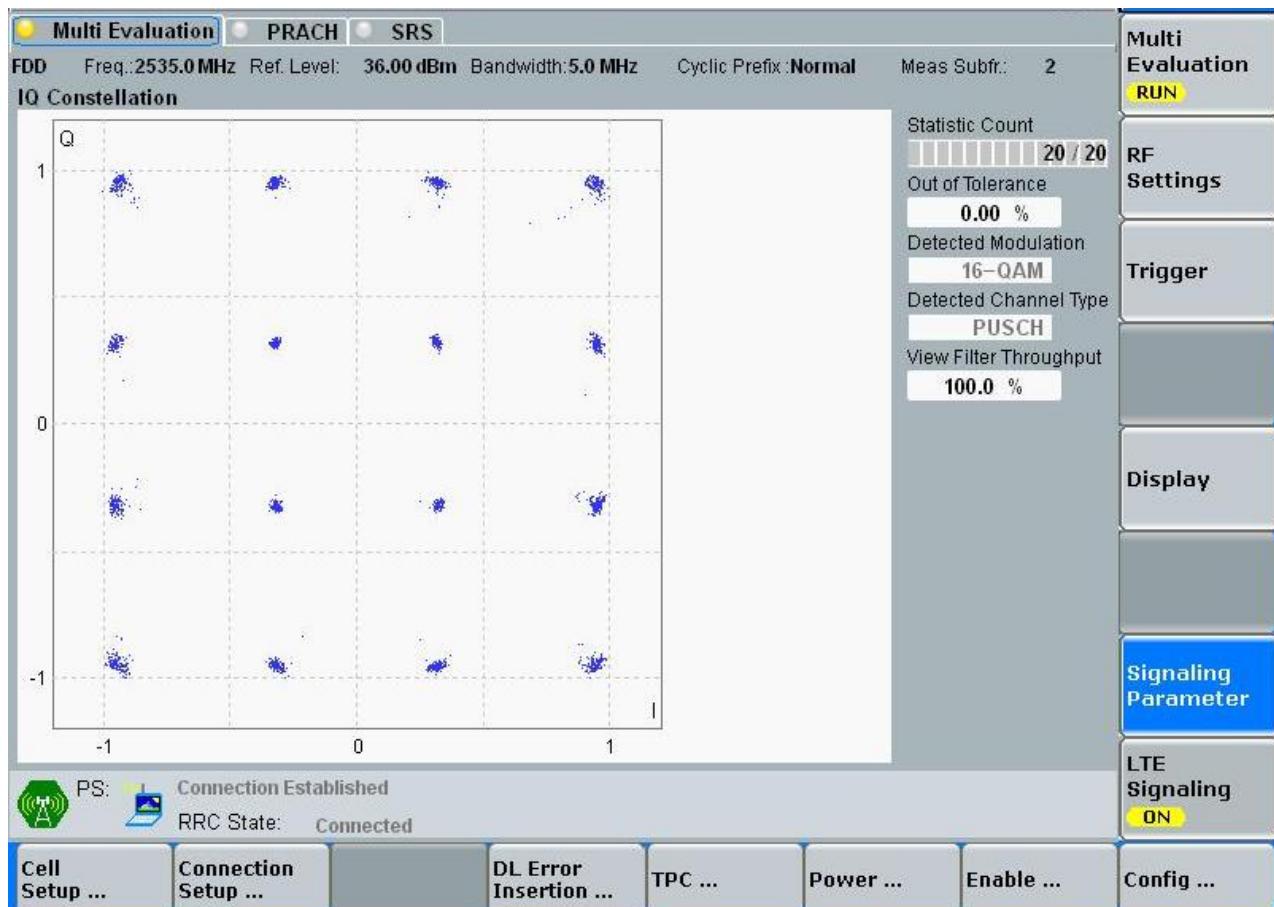
3.1.1.4 Test Mode = LTE /TM1 20MHz

3.1.1.4.1 Test Channel = MCH



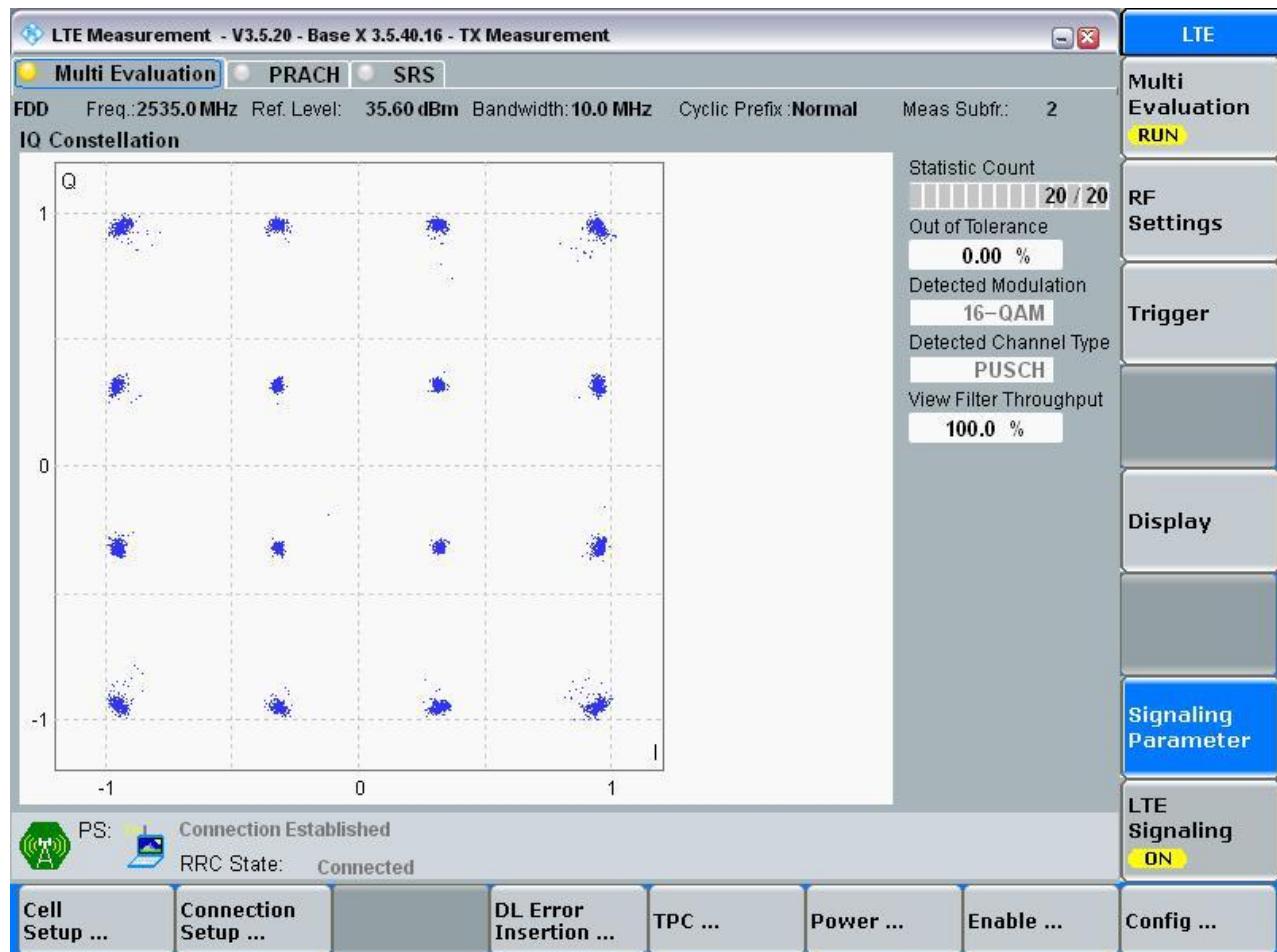
3.1.1.5 Test Mode = LTE /TM2 5MHz

3.1.1.5.1 Test Channel = MCH



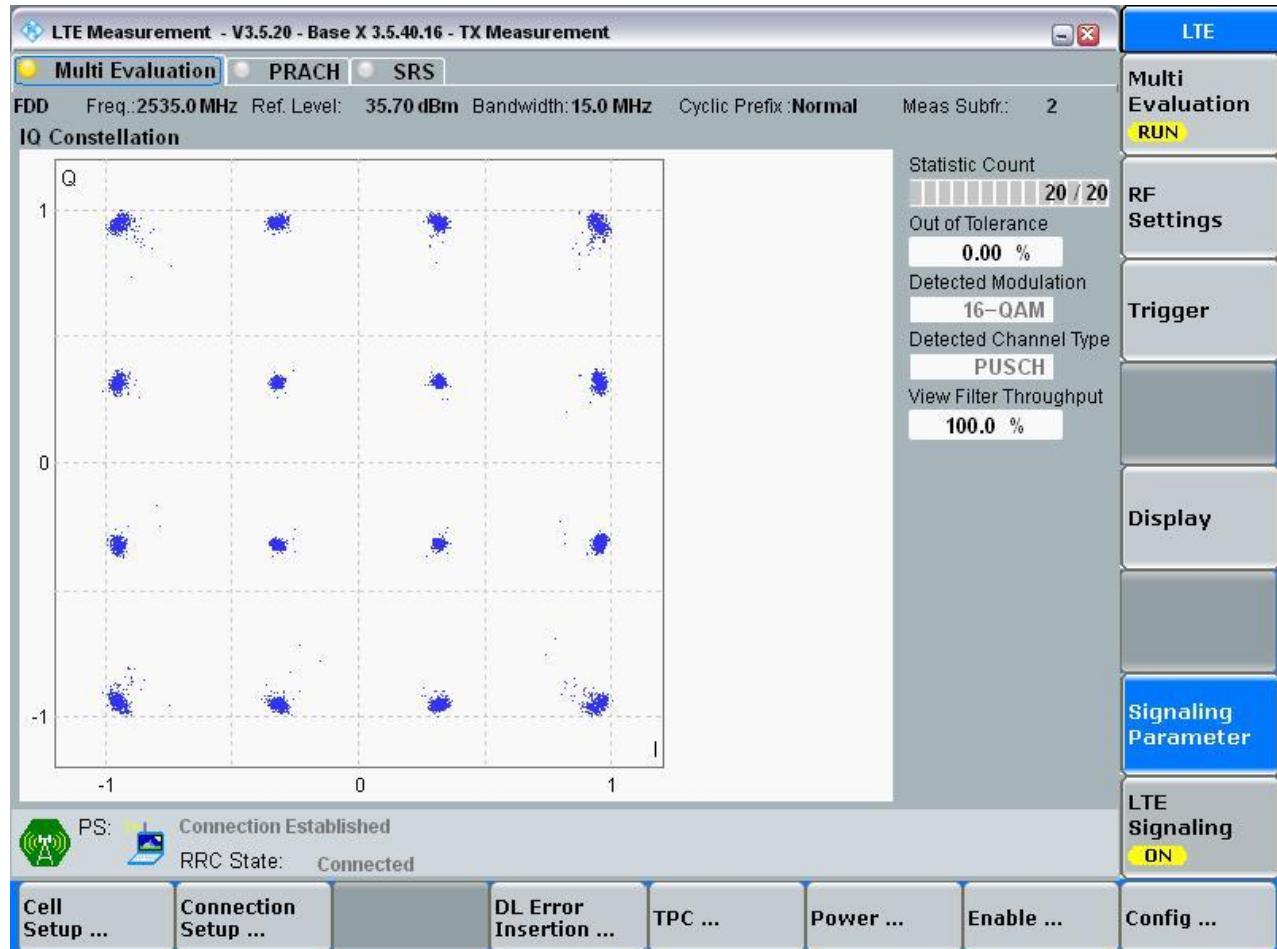
3.1.1.6 Test Mode = LTE /TM2 10MHz

3.1.1.6.1 Test Channel = MCH



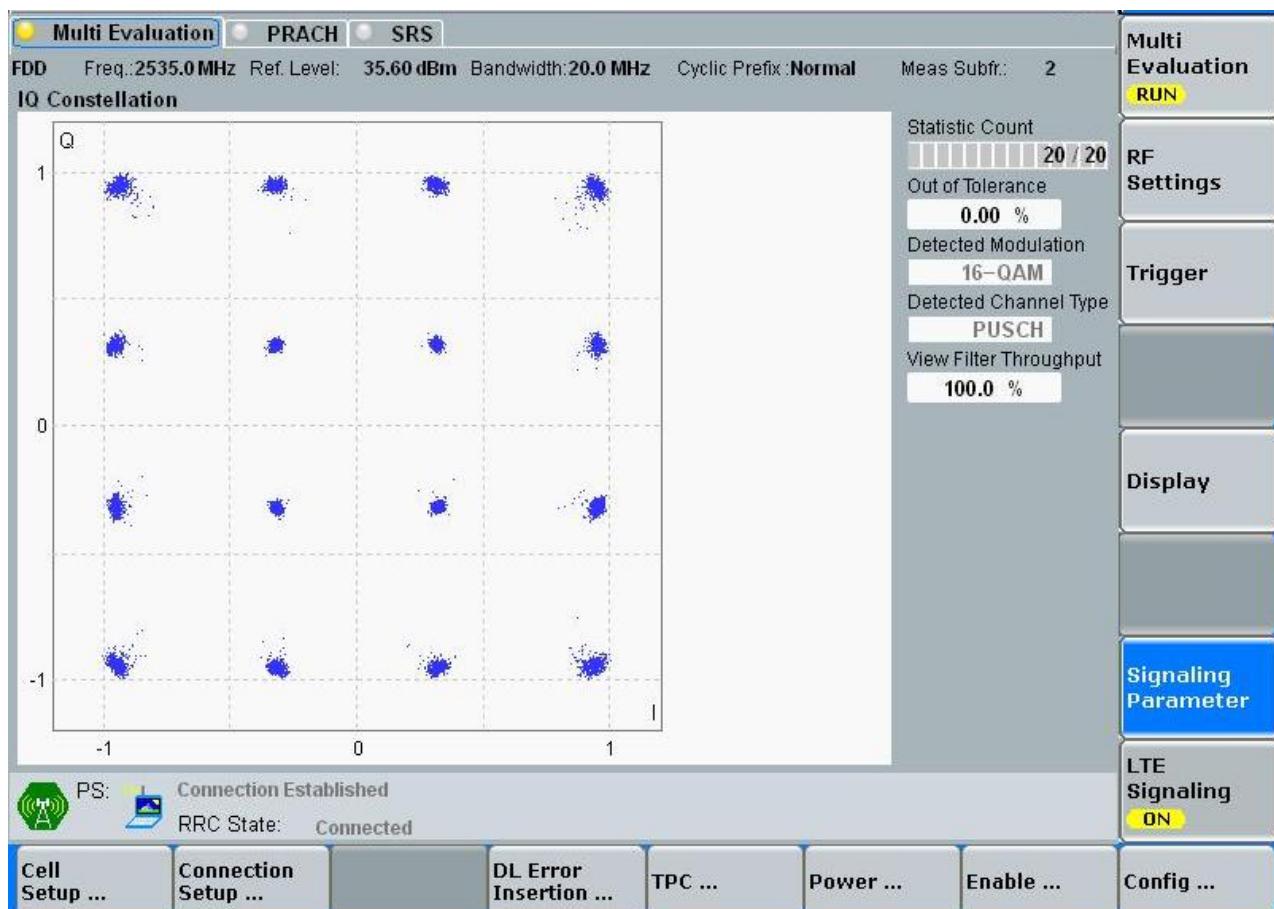
3.1.1.7 Test Mode = LTE /TM2 15MHz

3.1.1.7.1 Test Channel = MCH



3.1.1.8 Test Mode = LTE /TM2 20MHz

3.1.1.8.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

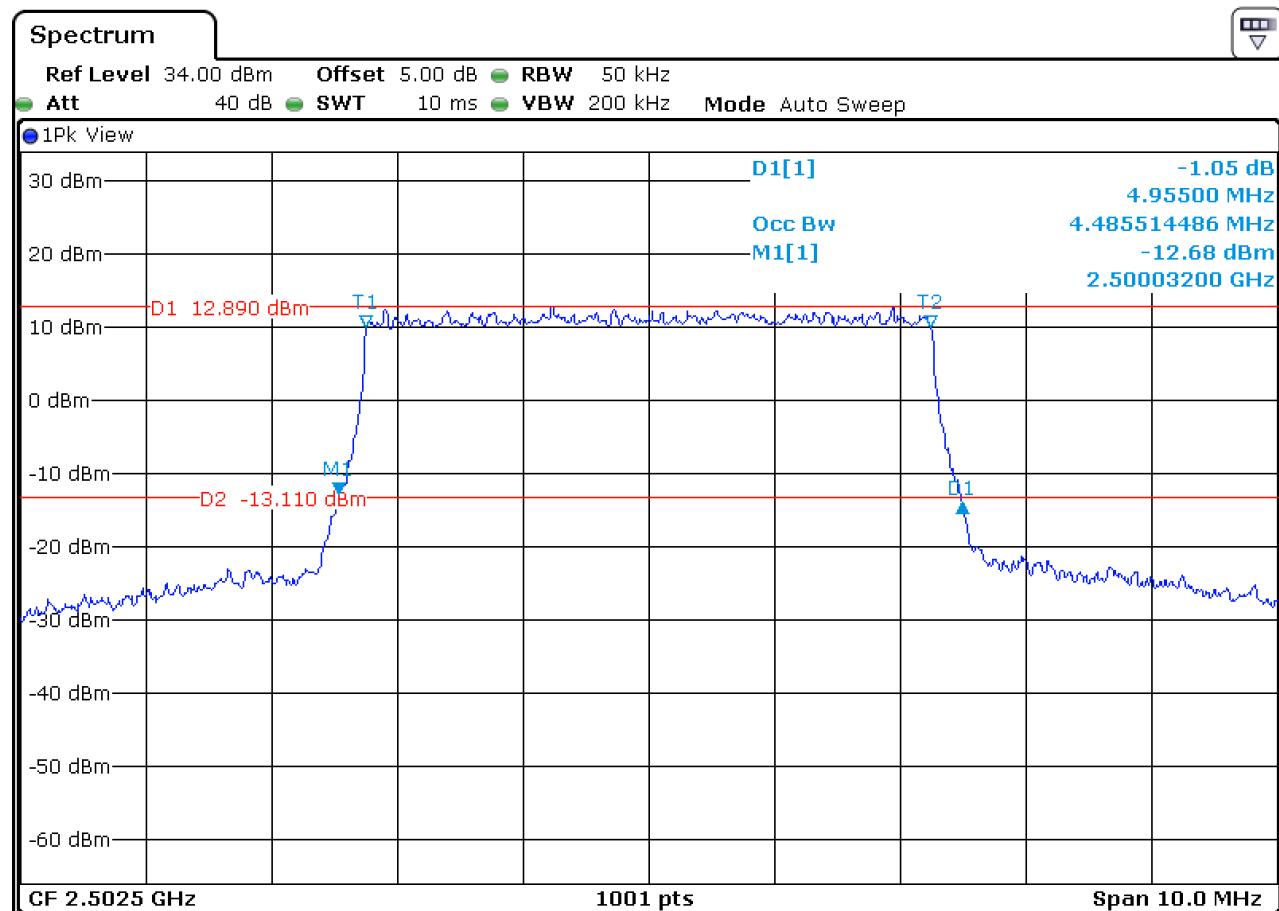
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 7	TM1/ 5MHz	LCH	4.49	4.96	PASS
		MCH	4.50	4.95	PASS
		HCH	4.47	4.93	PASS
	TM2/ 5MHz	LCH	4.49	4.97	PASS
		MCH	4.48	4.91	PASS
		HCH	4.48	4.96	PASS
	TM1/10MHz	LCH	8.93	9.75	PASS
		MCH	8.95	9.81	PASS
		HCH	8.93	9.75	PASS
	TM2/ 10MHz	LCH	8.93	9.73	PASS
		MCH	8.93	9.63	PASS
		HCH	8.93	9.73	PASS
	TM1/ 15MHz	LCH	13.40	14.84	PASS
		MCH	13.52	14.93	PASS
		HCH	13.49	14.87	PASS
	TM2/ 15MHz	LCH	13.46	14.78	PASS
		MCH	13.49	14.78	PASS
		HCH	13.49	14.87	PASS
	TM1/ 20MHz	LCH	17.86	19.26	PASS
		MCH	17.90	19.30	PASS
		HCH	17.90	19.58	PASS
	TM2/ 20MHz	LCH	17.86	19.46	PASS
		MCH	17.90	19.50	PASS
		HCH	17.86	19.38	PASS

4.1 For LTE

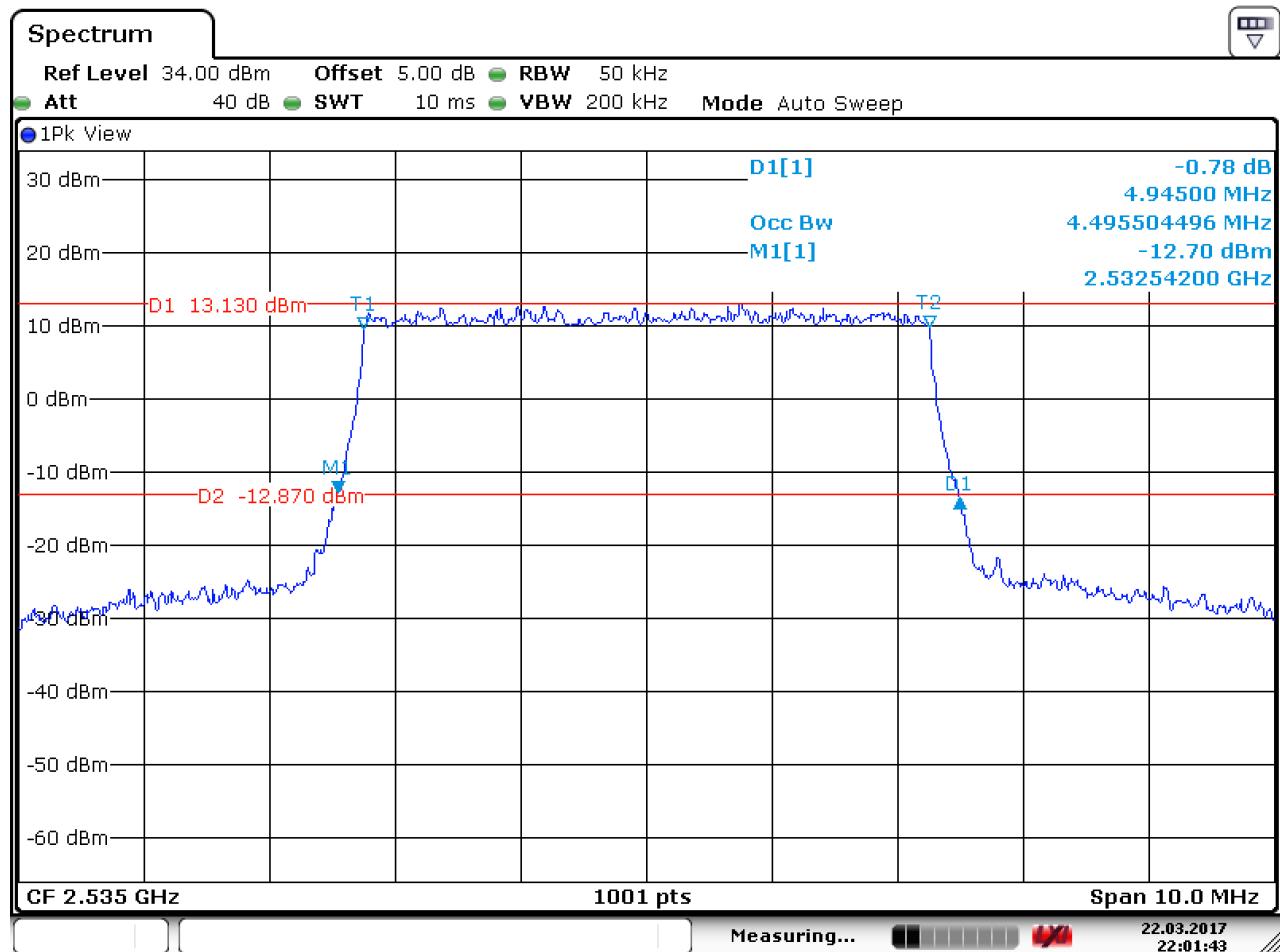
4.1.1 Test Band = LTE band7

4.1.1.1 Test Mode = LTE/TM1 5MHz

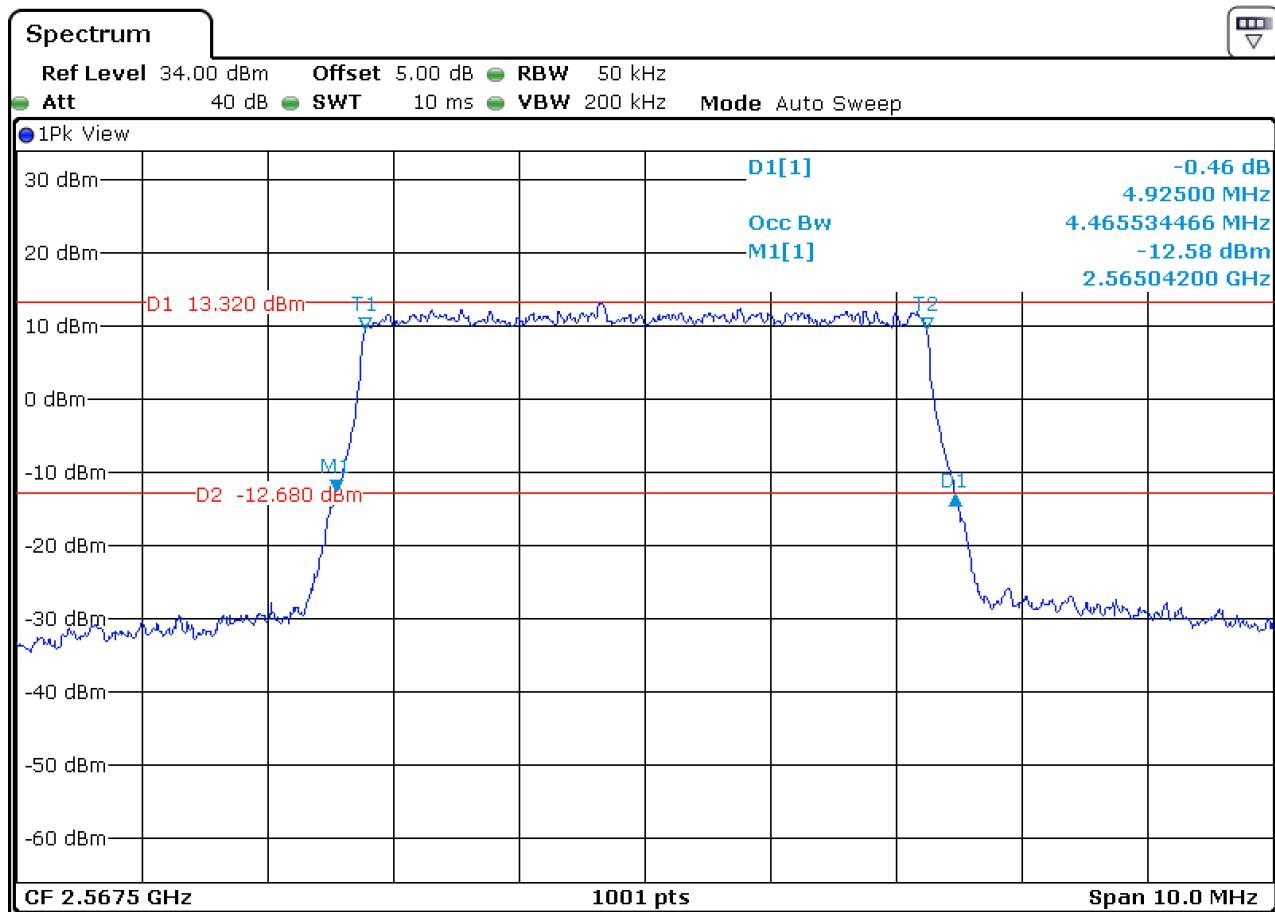
4.1.1.1.1 Test Channel = LCH



4.1.1.1.2 Test Channel = MCH



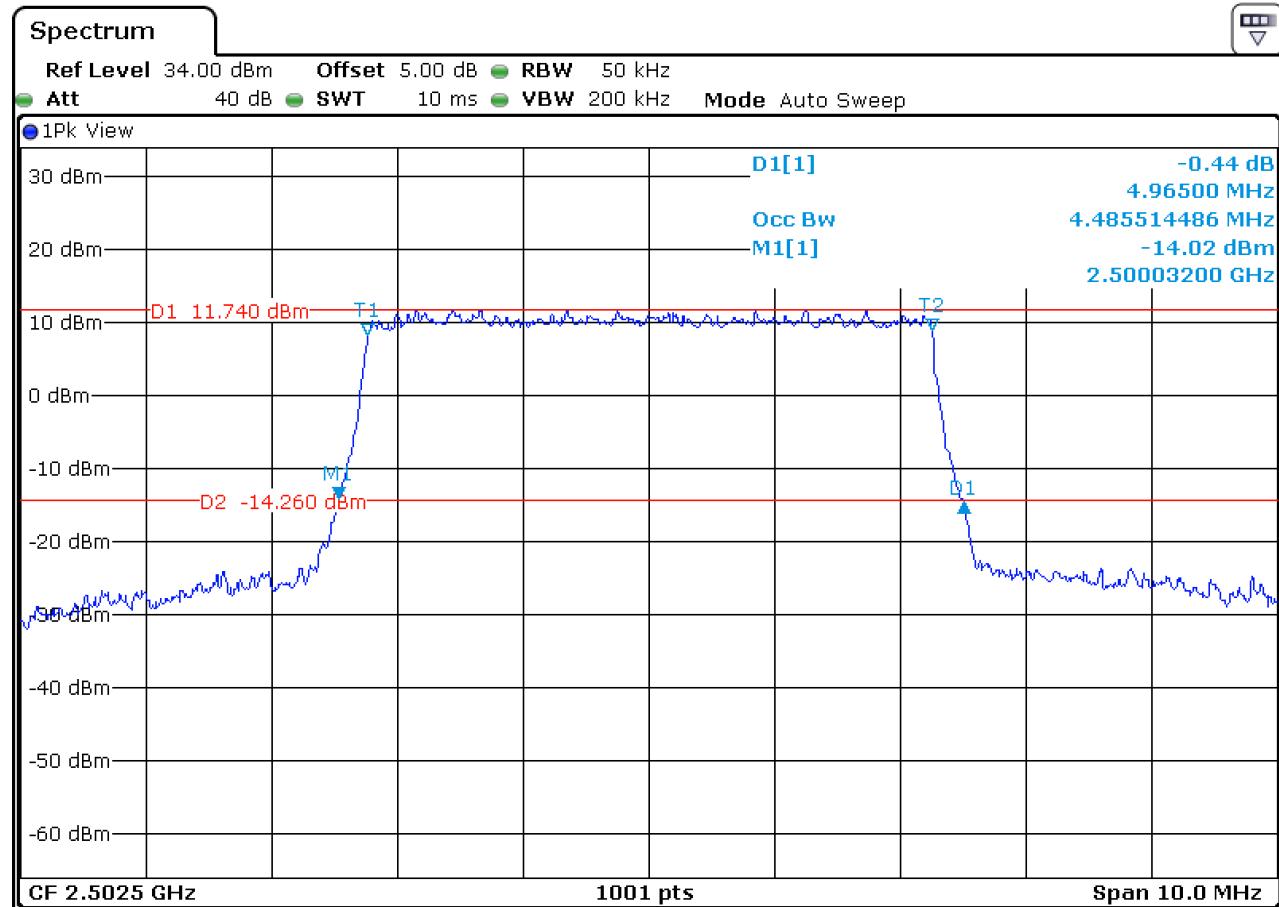
4.1.1.1.3 Test Channel = HCH



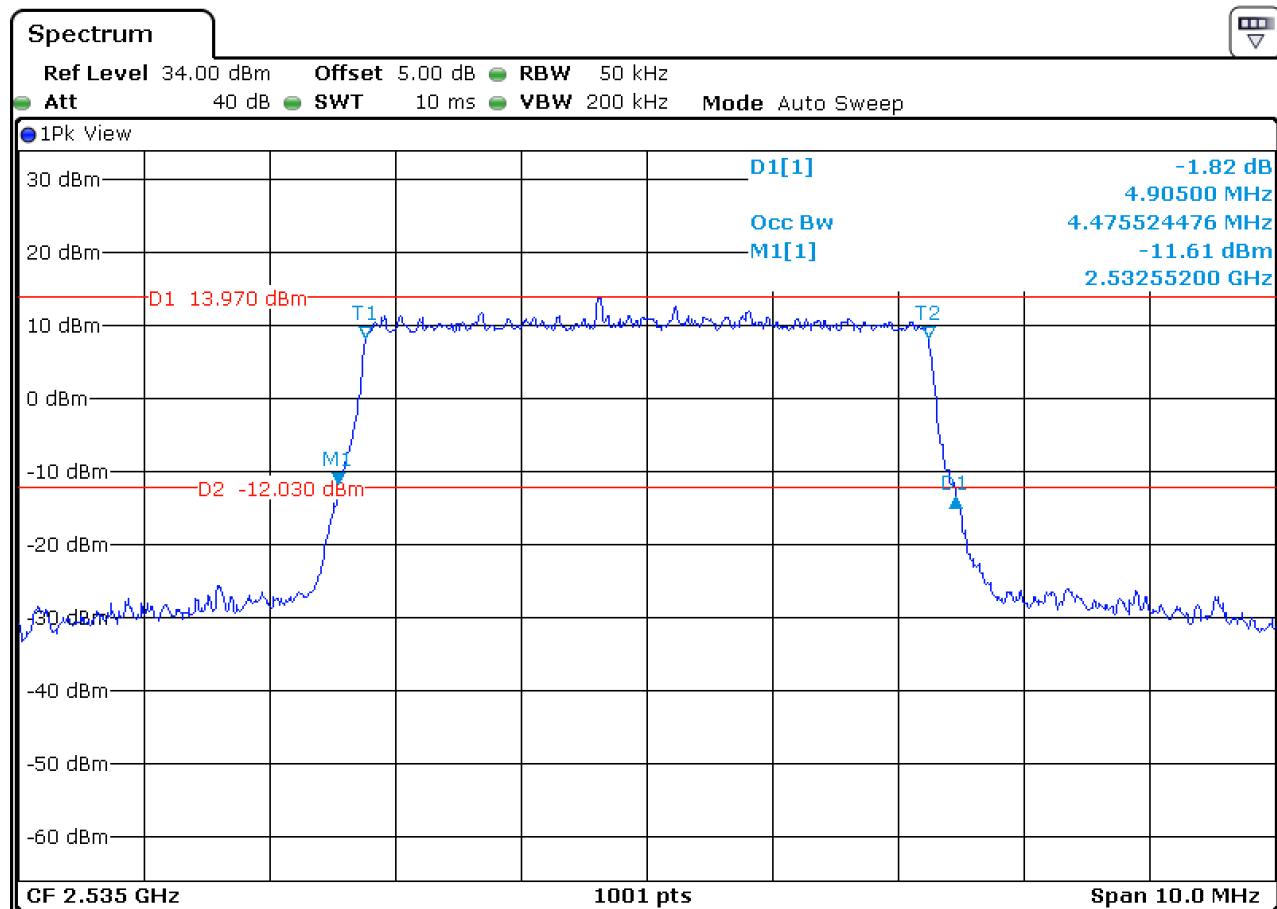
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4.1.1.2 Test Mode = LTE/TM2 5MHz

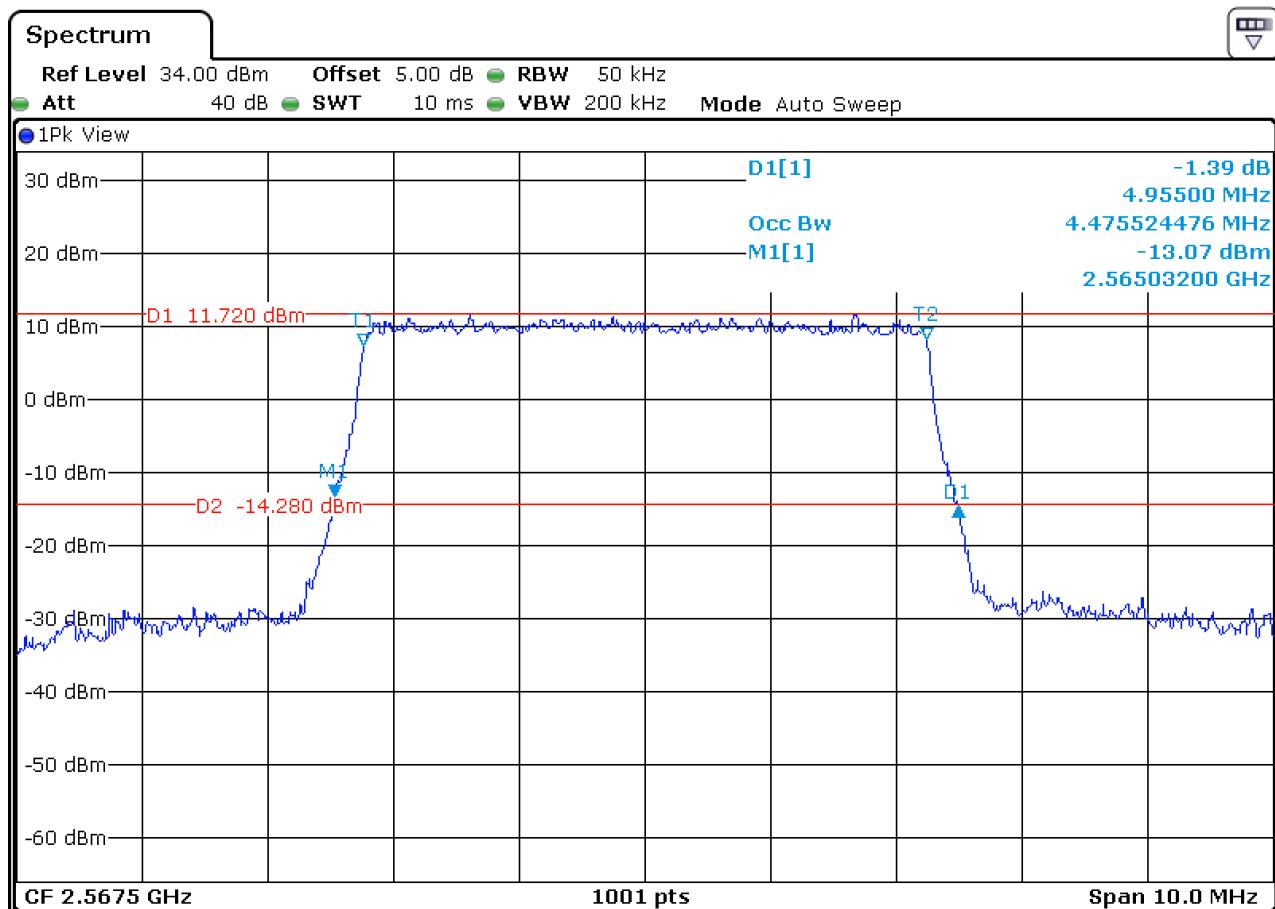
4.1.1.2.1 Test Channel = LCH



4.1.1.2.2 Test Channel = MCH

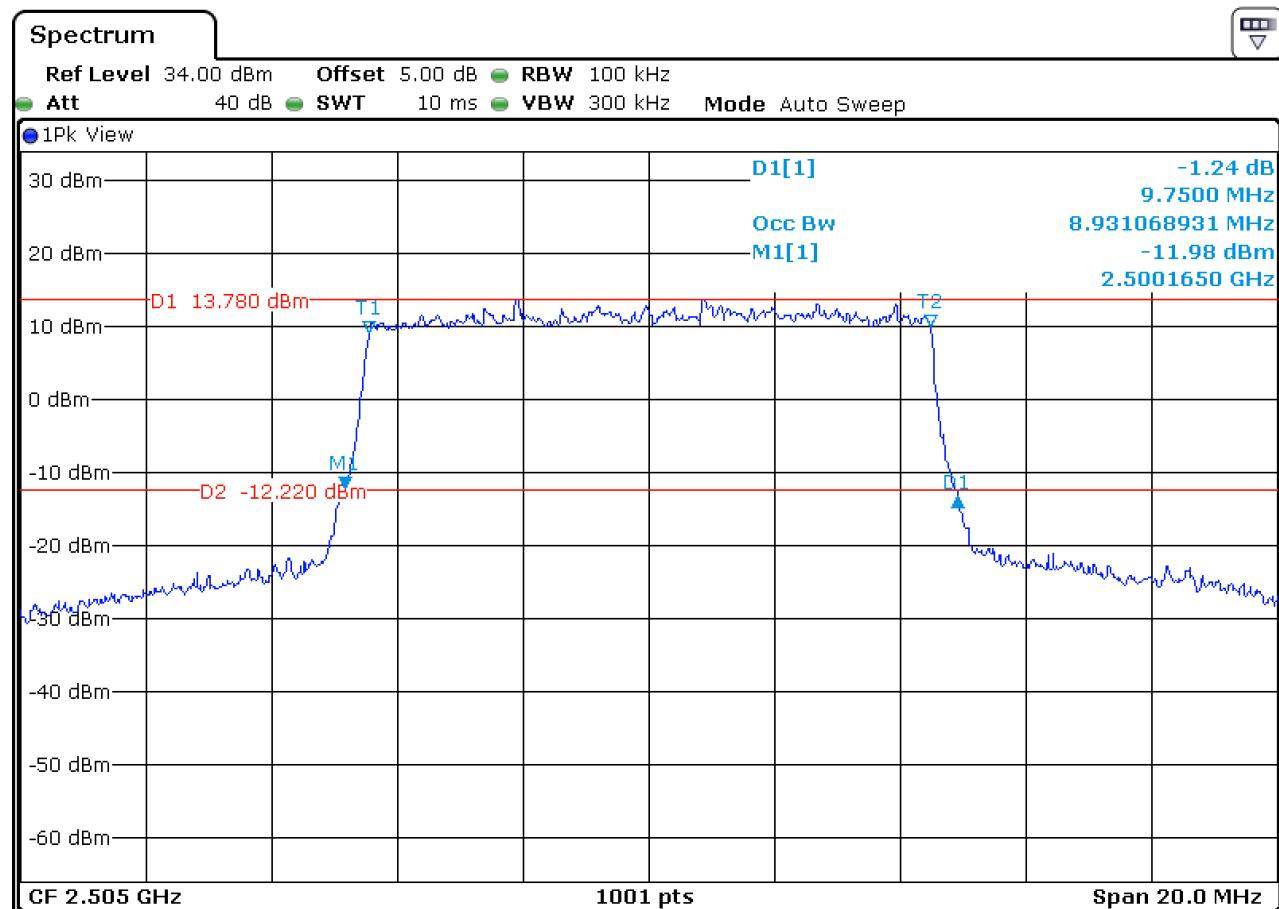


4.1.1.2.3 Test Channel = HCH

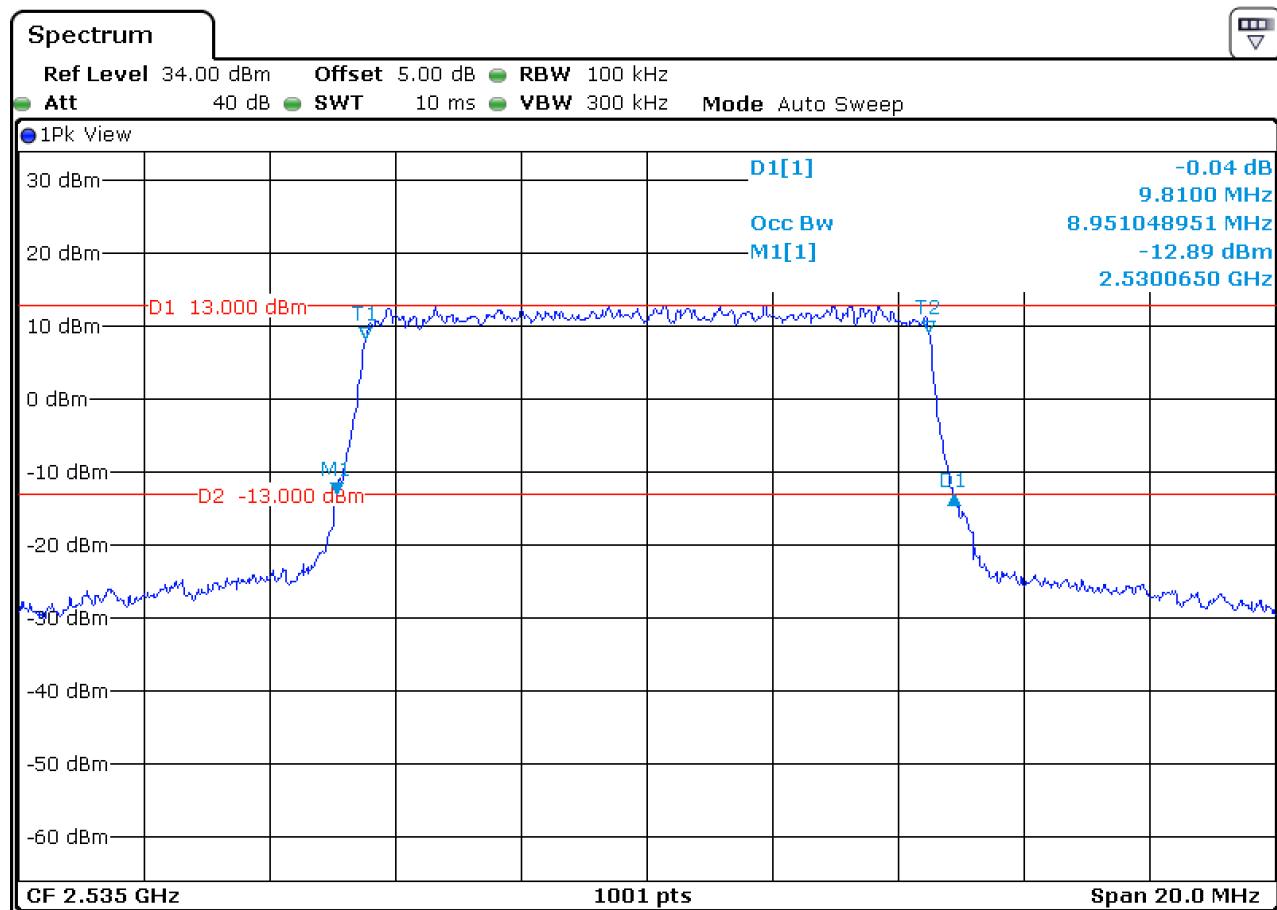


4.1.1.3 Test Mode = LTE/TM1 10MHz

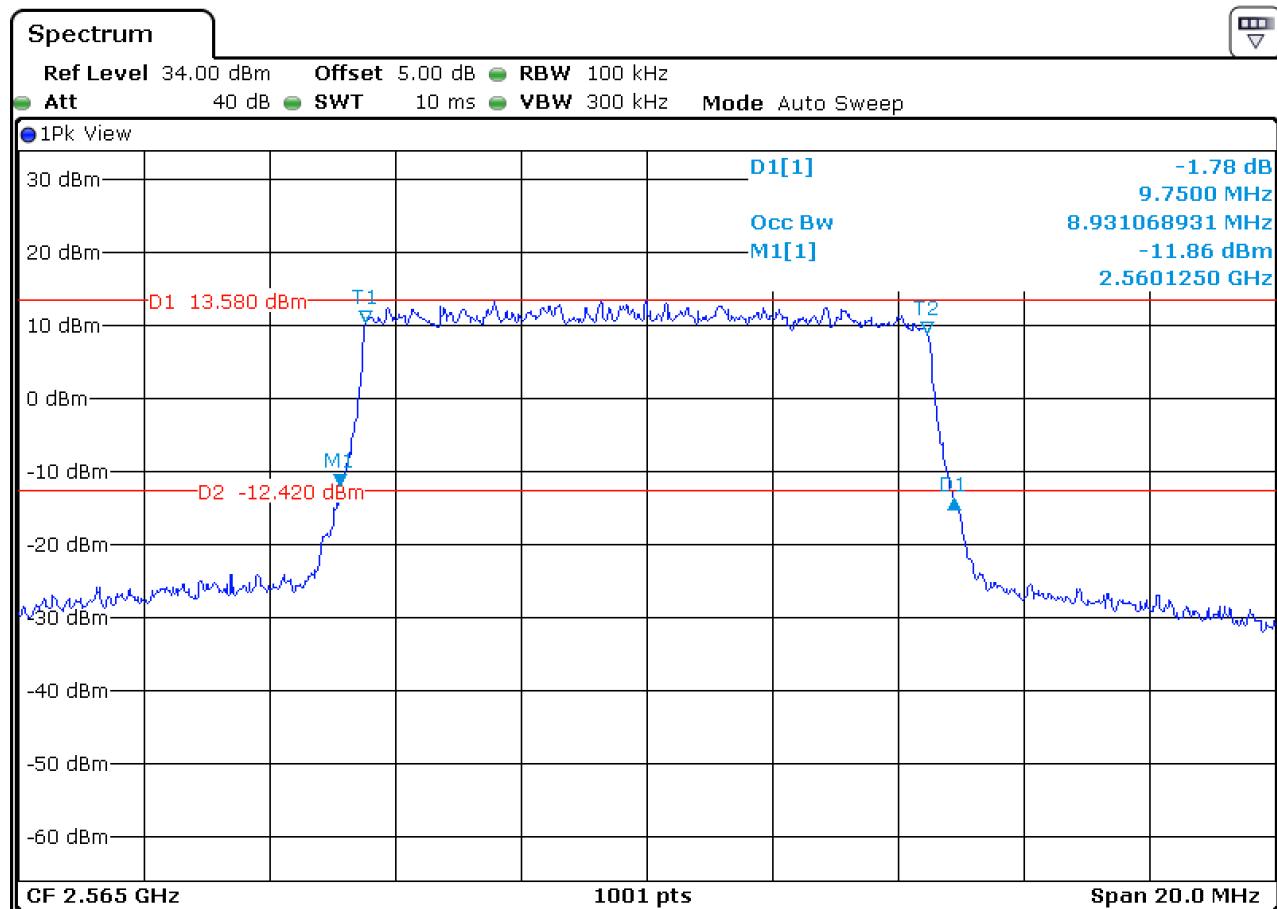
4.1.1.3.1 Test Channel = LCH



4.1.1.3.2 Test Channel = MCH

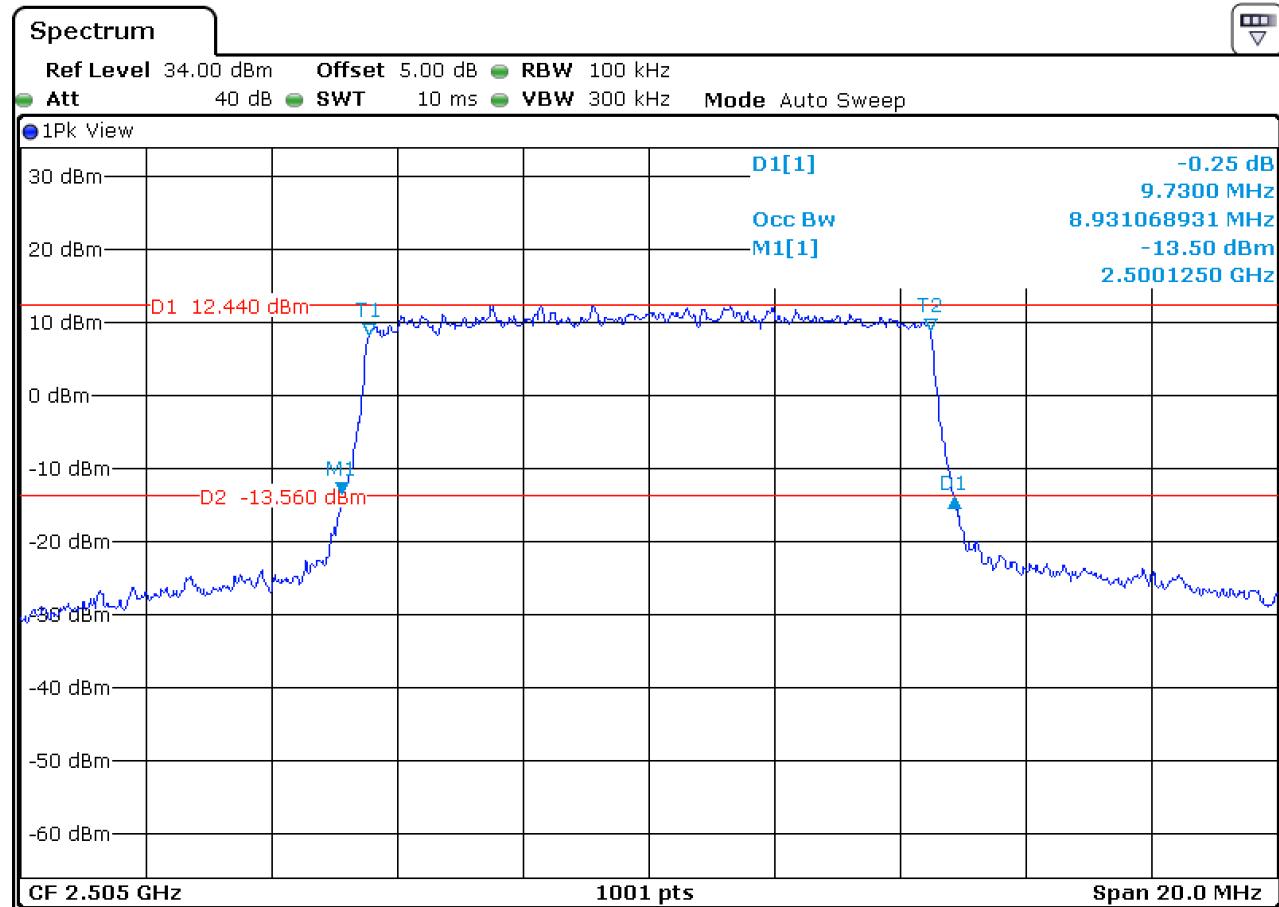


4.1.1.3.3 Test Channel = HCH

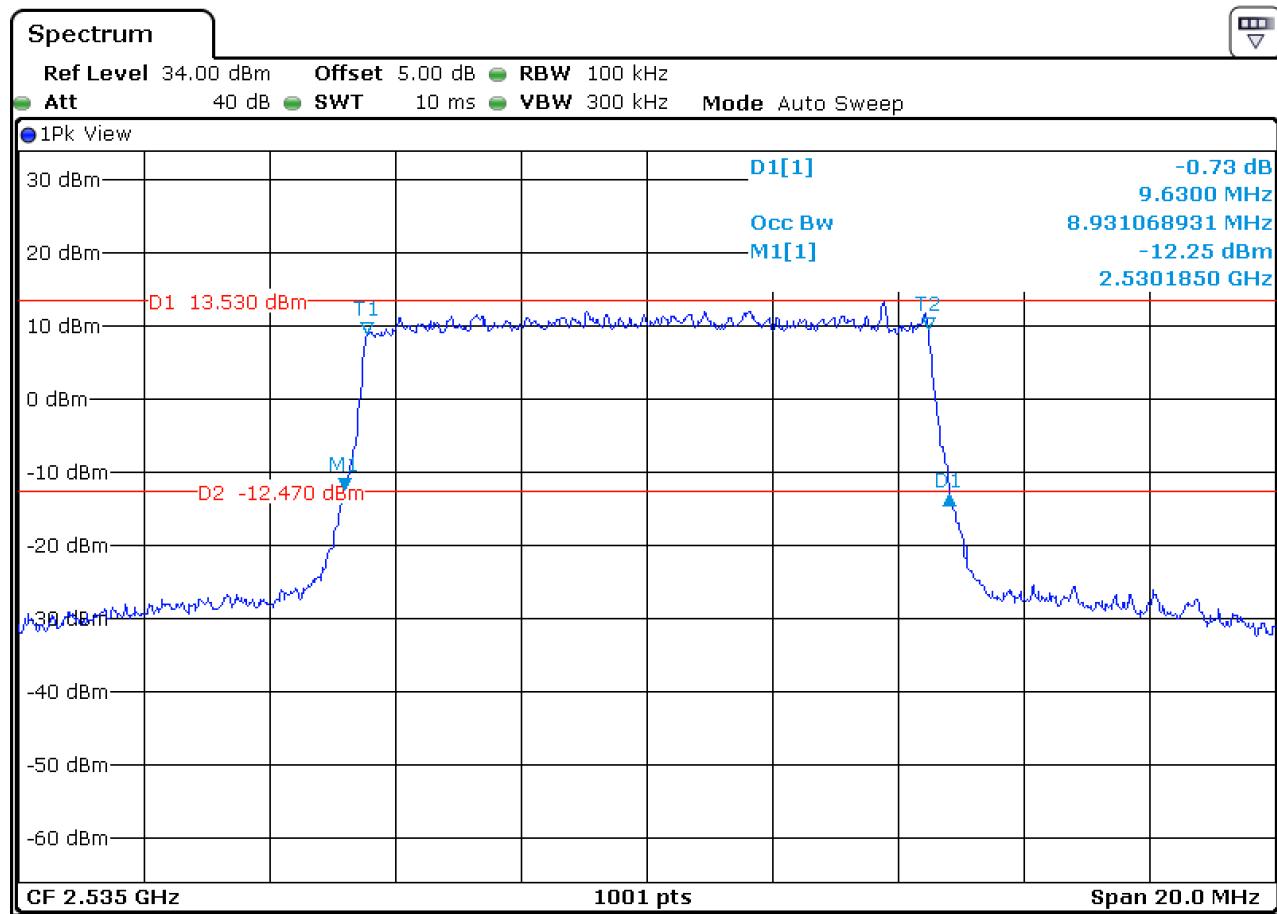


4.1.1.4 Test Mode = LTE/TM2 10MHz

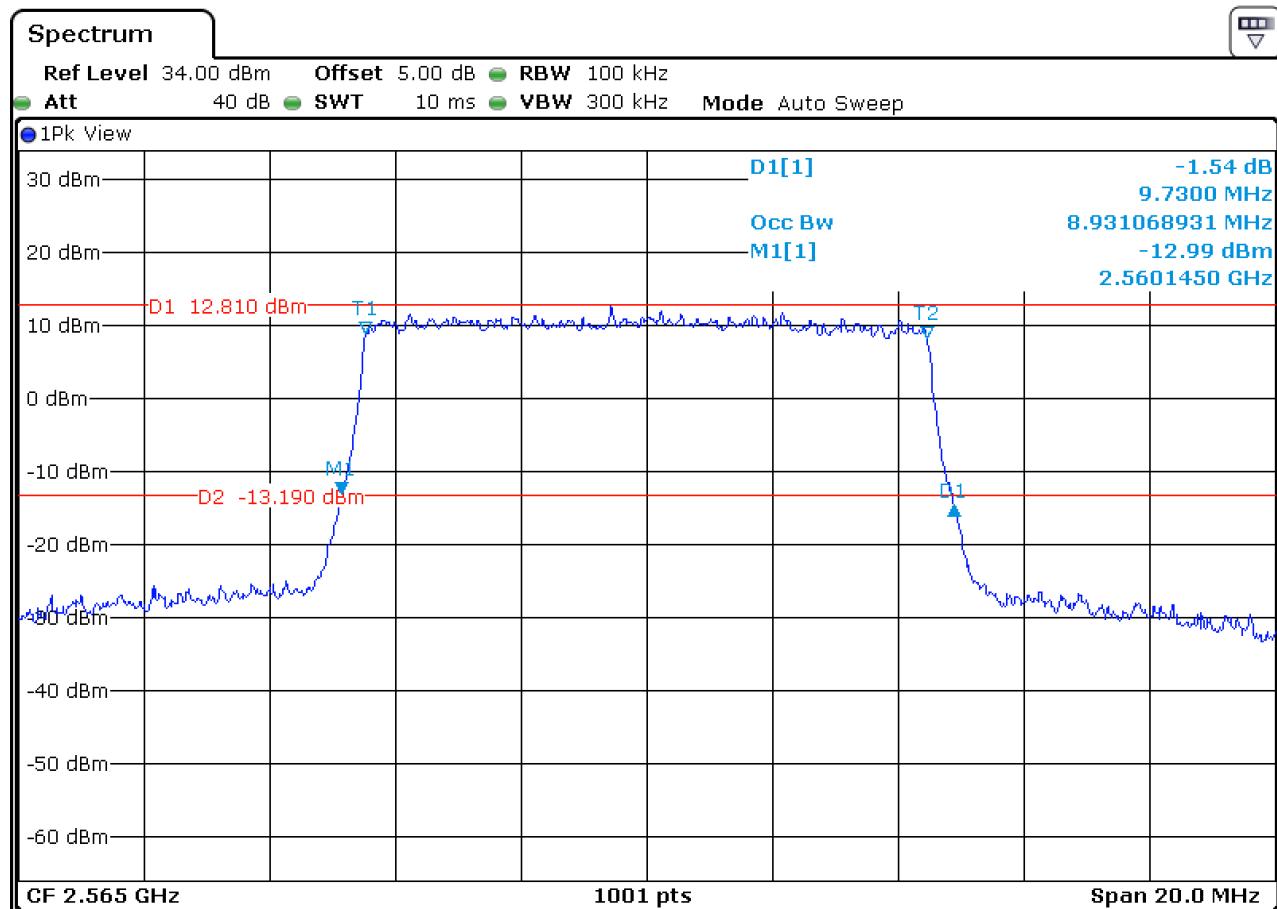
4.1.1.4.1 Test Channel = LCH



4.1.1.4.2 Test Channel = MCH

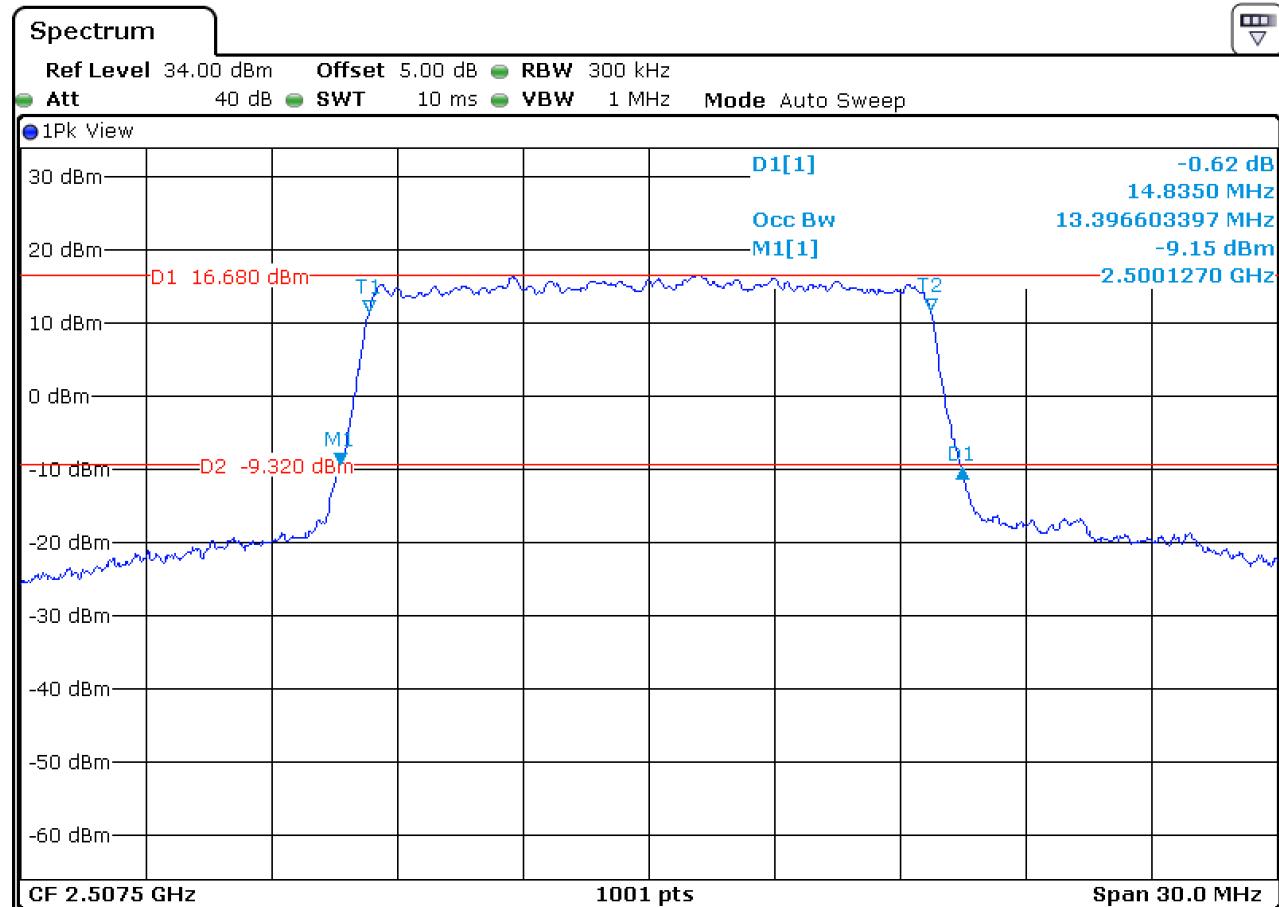


4.1.1.4.3 Test Channel = HCH

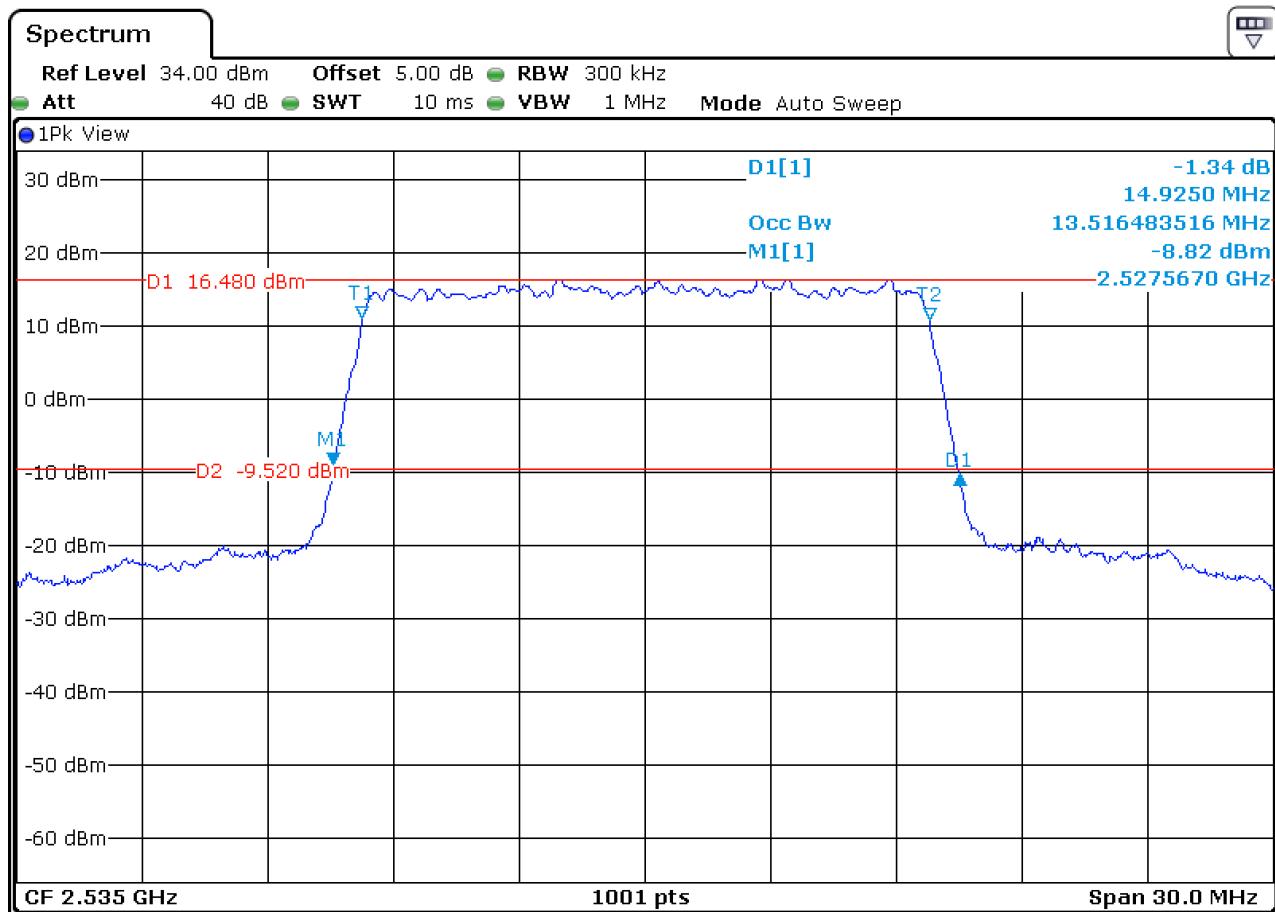


4.1.1.5 Test Mode = LTE/TM1 15MHz

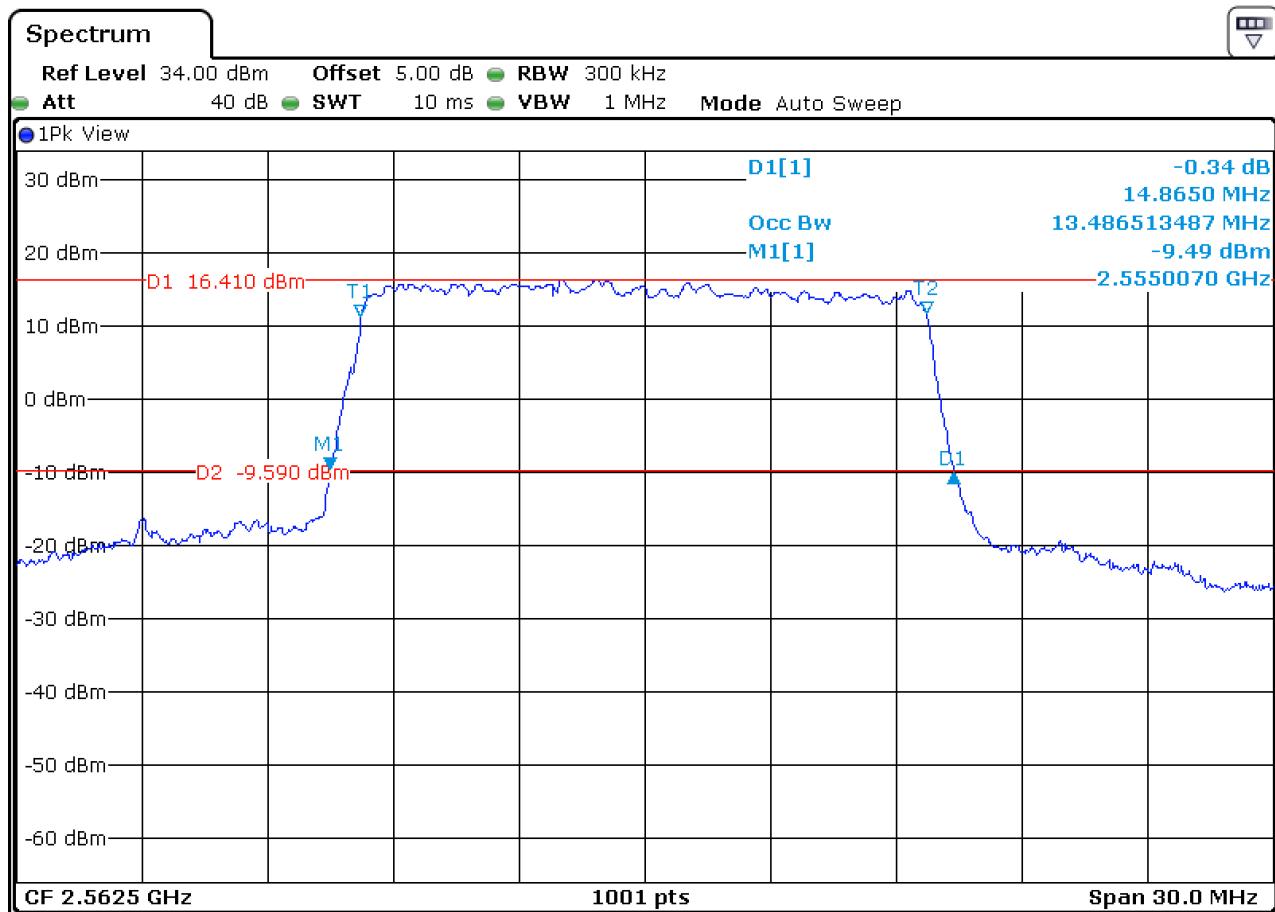
4.1.1.5.1 Test Channel = LCH



4.1.1.5.2 Test Channel = MCH

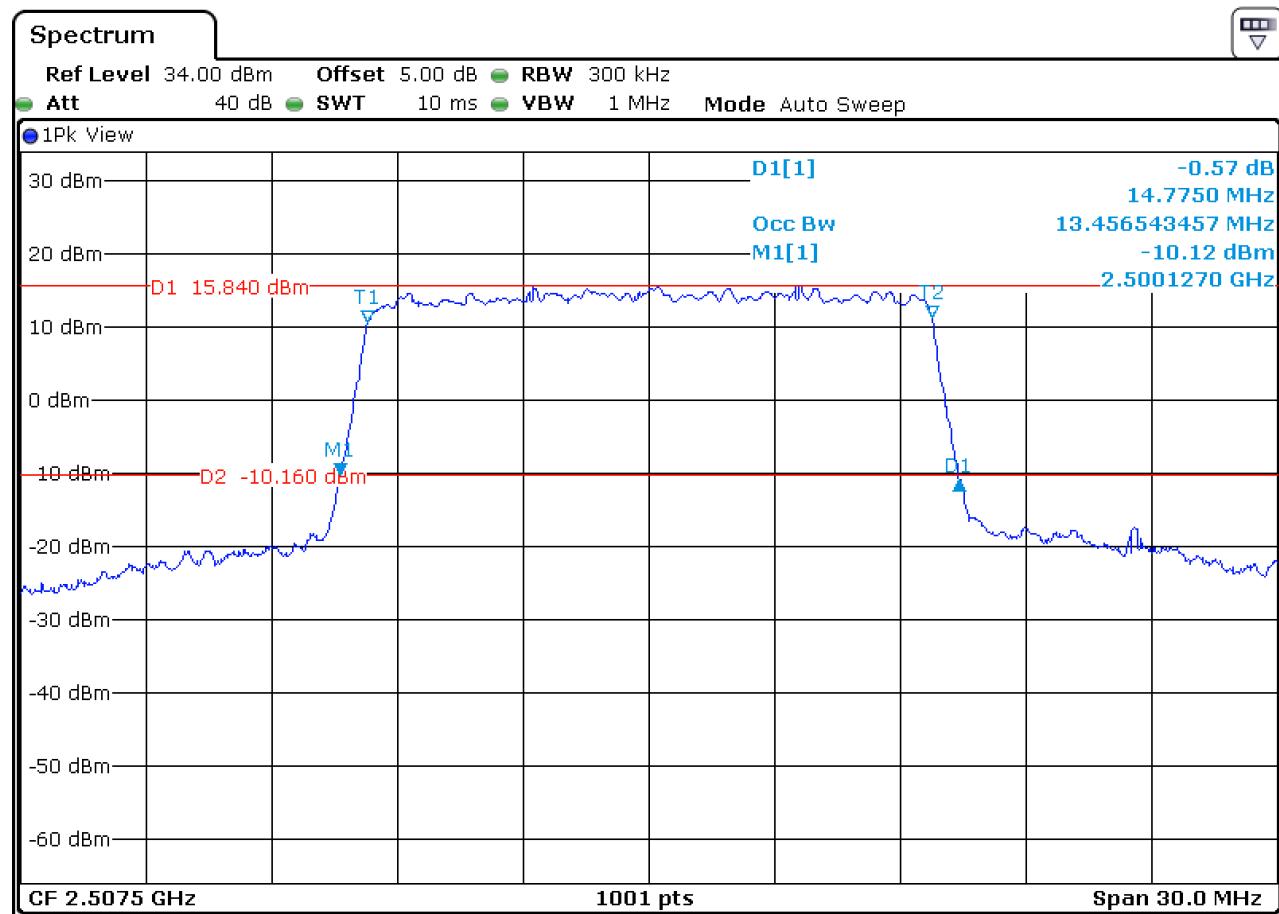


4.1.1.5.3 Test Channel = HCH

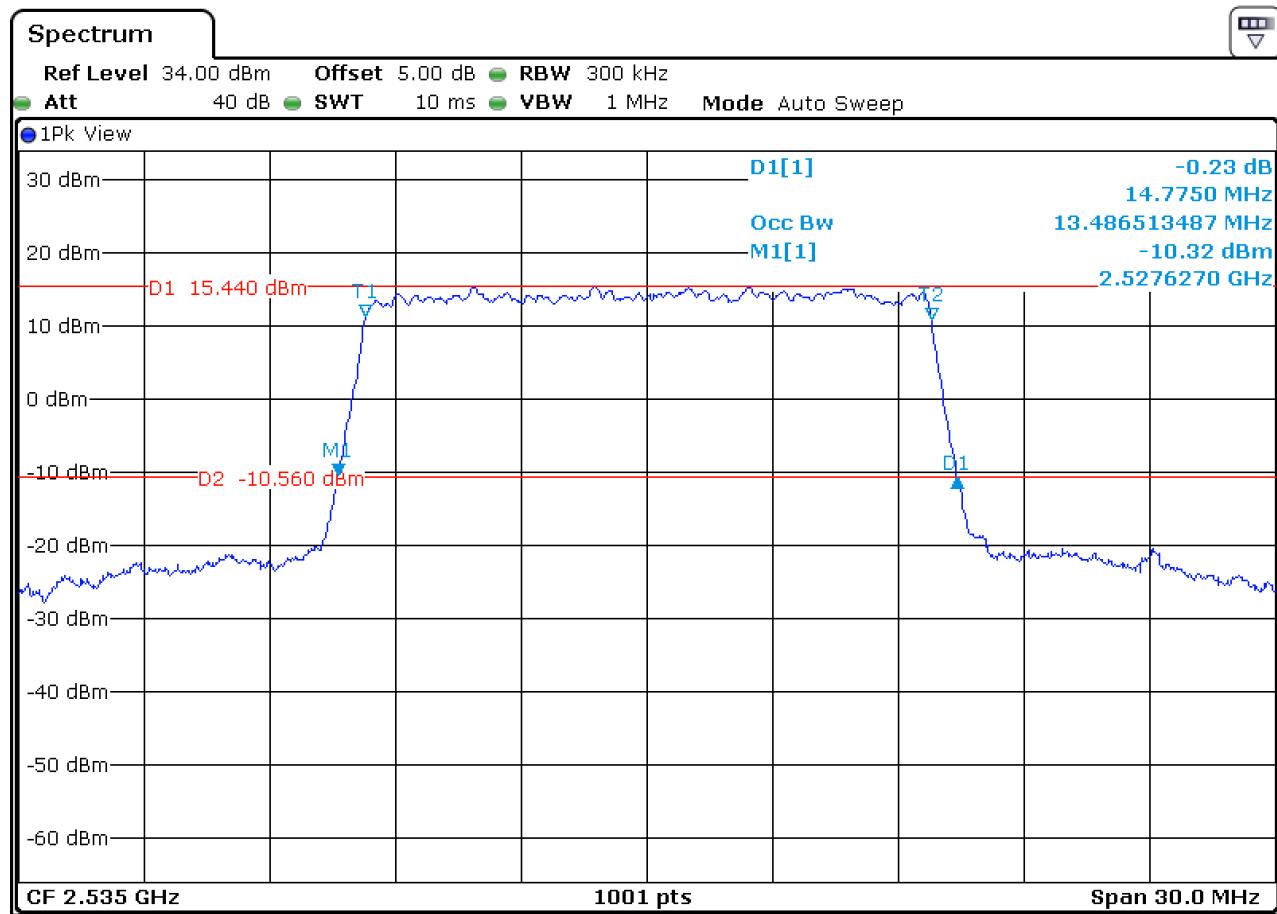


4.1.1.6 Test Mode = LTE/TM2 15MHz

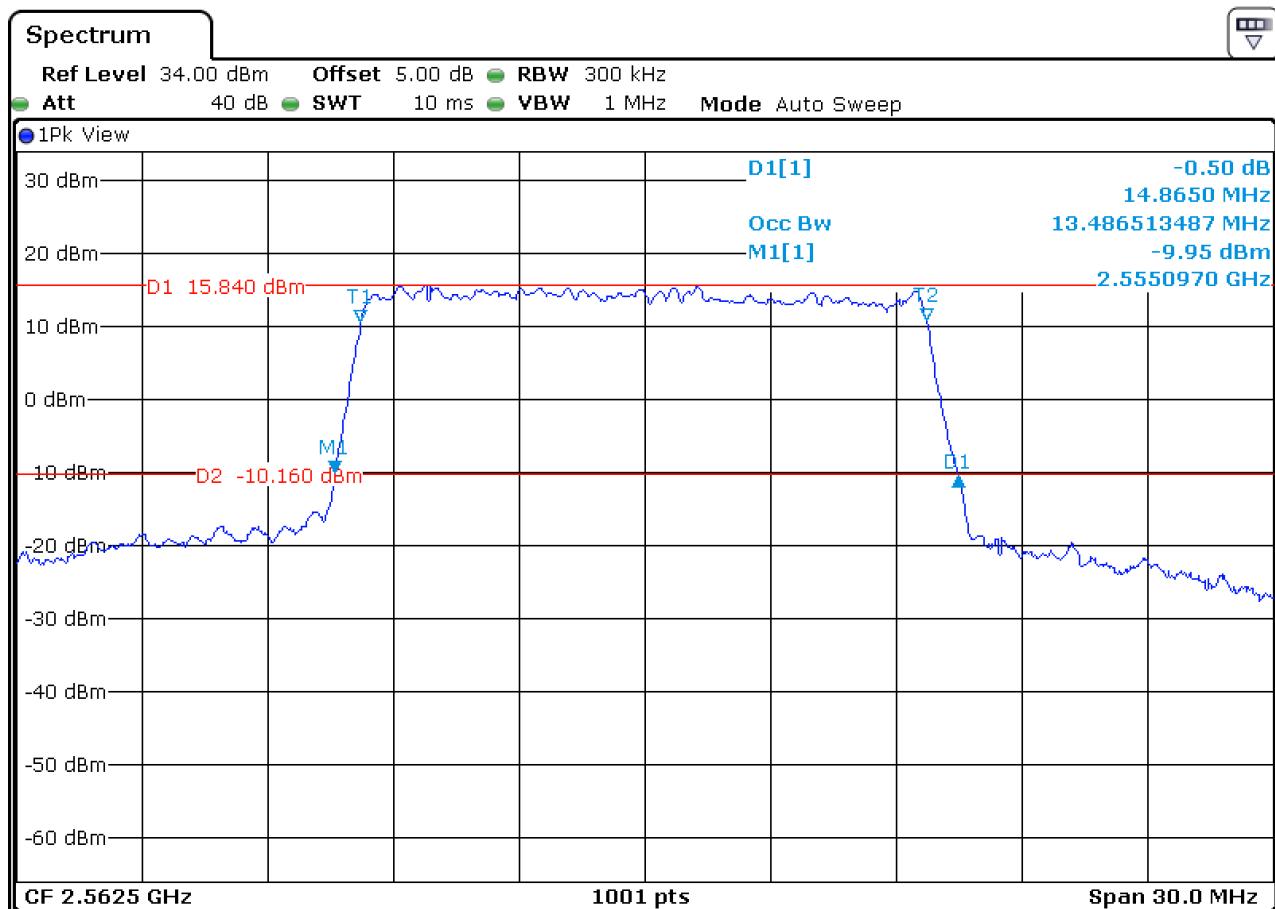
4.1.1.6.1 Test Channel = LCH



4.1.1.6.2 Test Channel = MCH

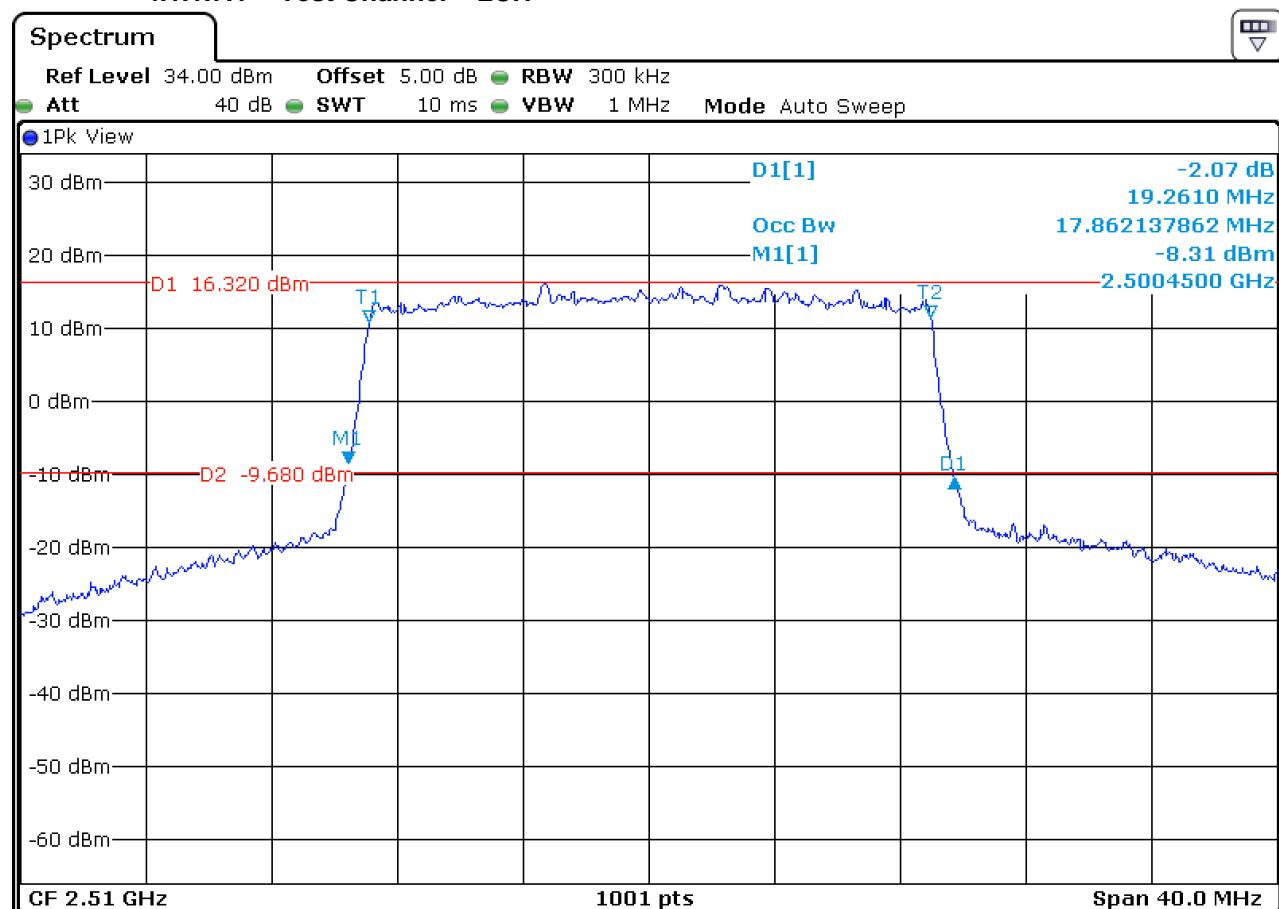


4.1.1.6.3 Test Channel = HCH

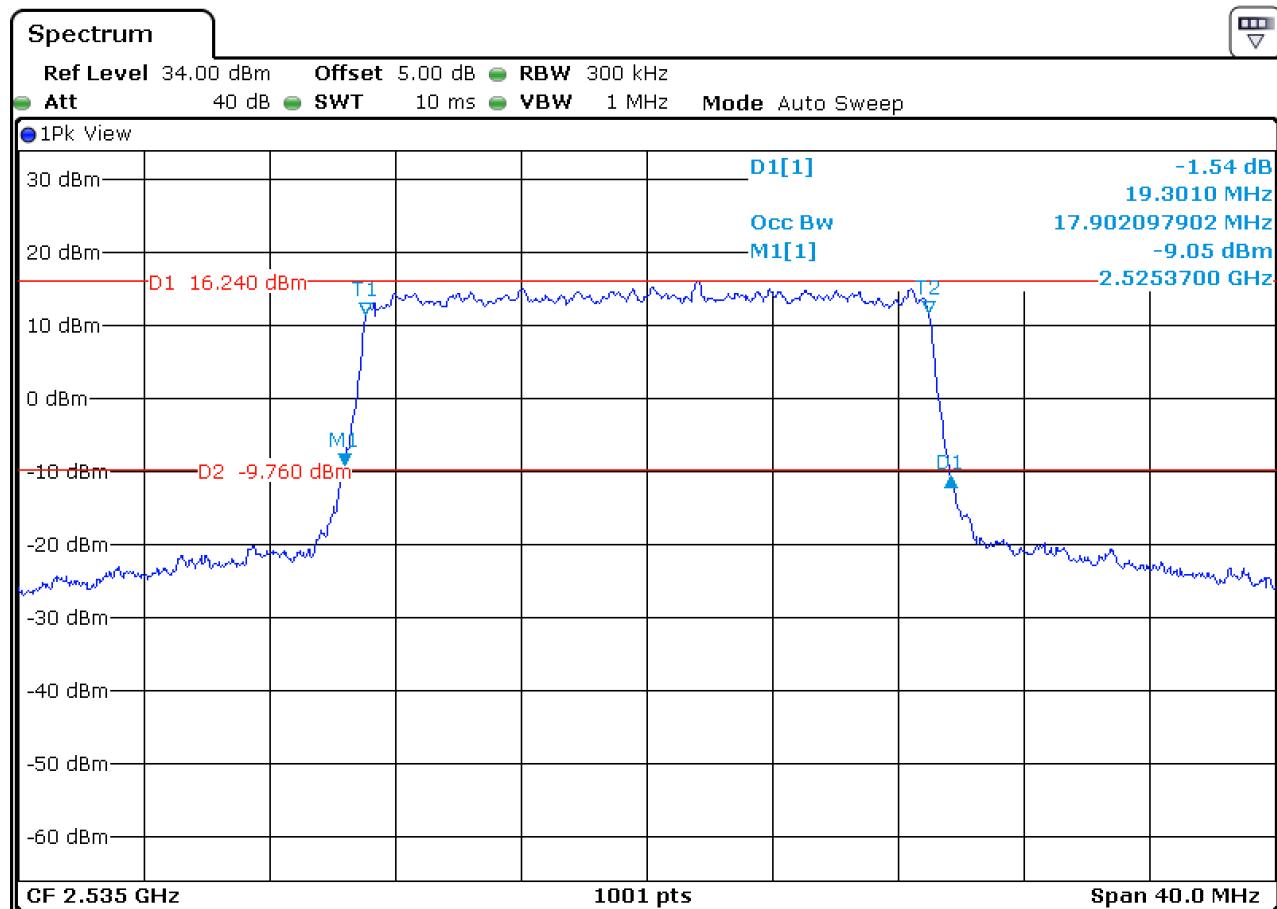


4.1.1.7 Test Mode = LTE/TM1 20MHz

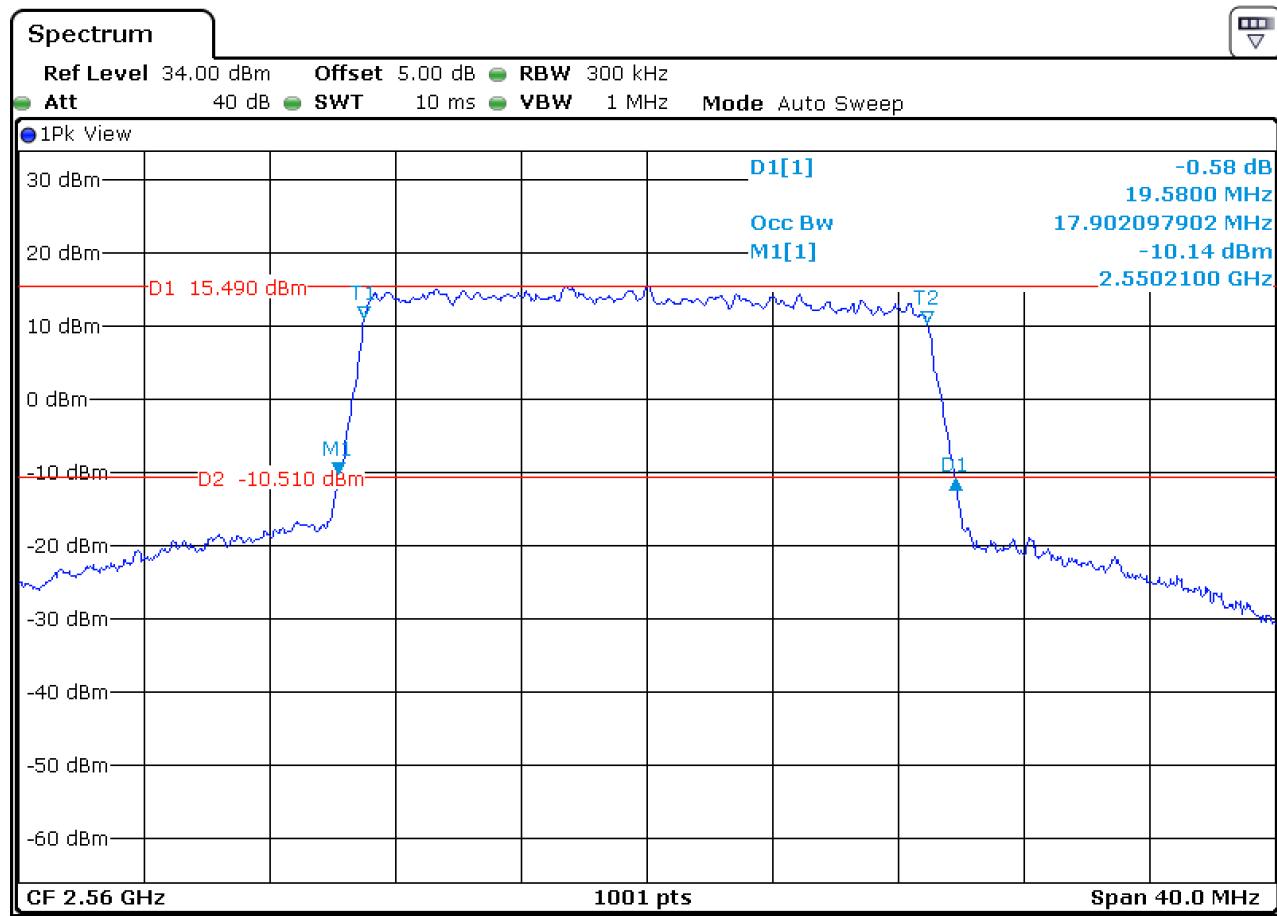
4.1.1.7.1 Test Channel = LCH



4.1.1.7.2 Test Channel = MCH

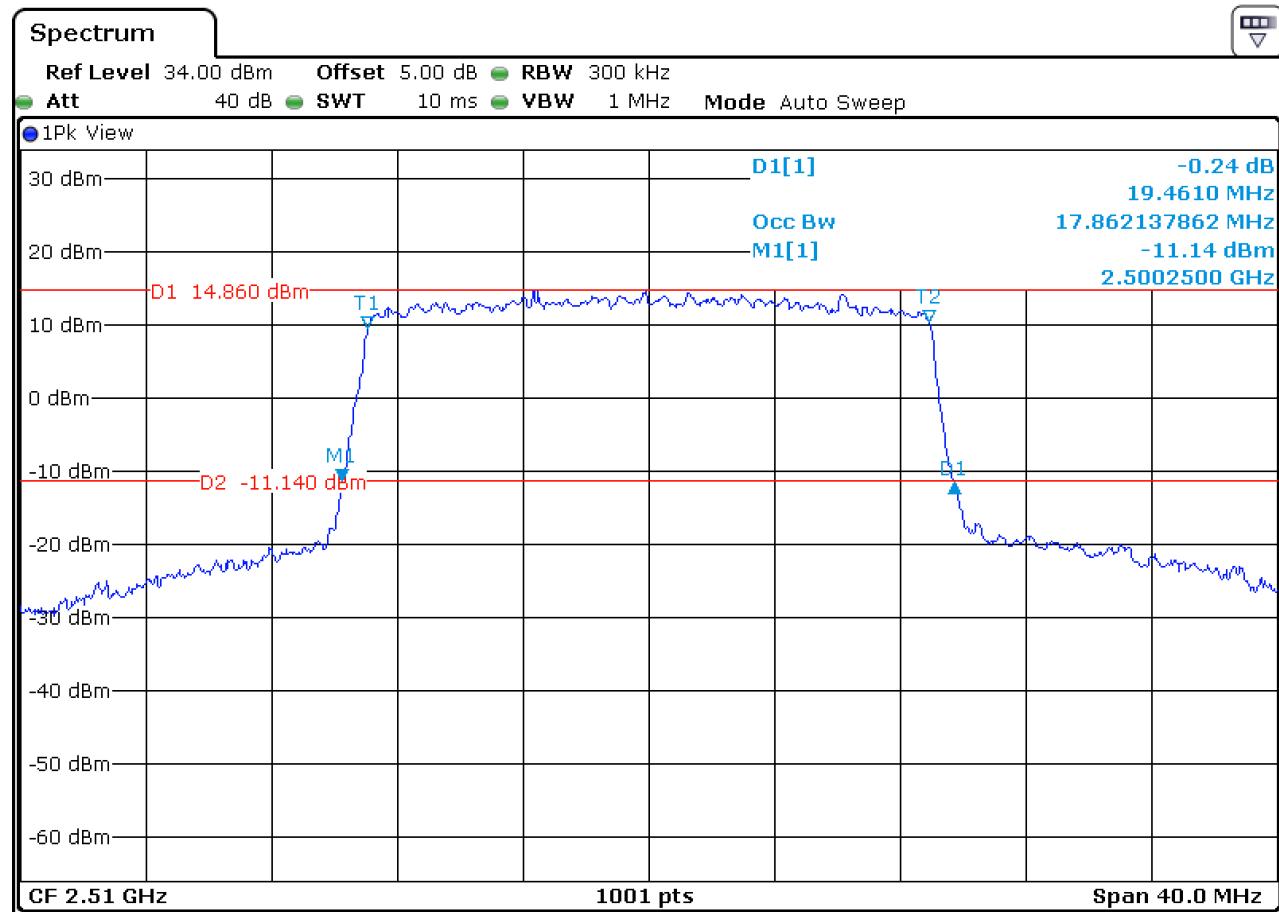


4.1.1.7.3 Test Channel = HCH

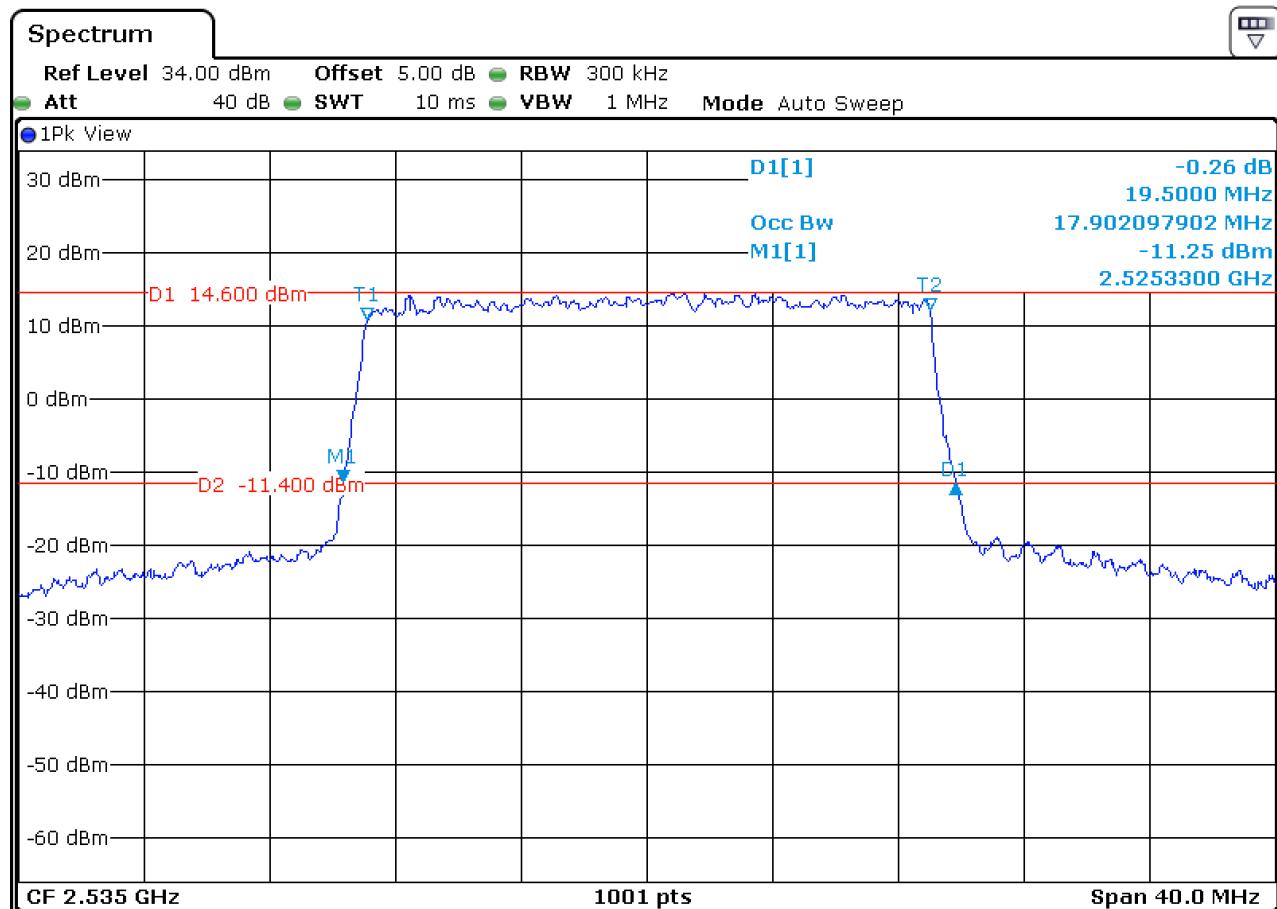


4.1.1.8 Test Mode = LTE/TM2 20MHz

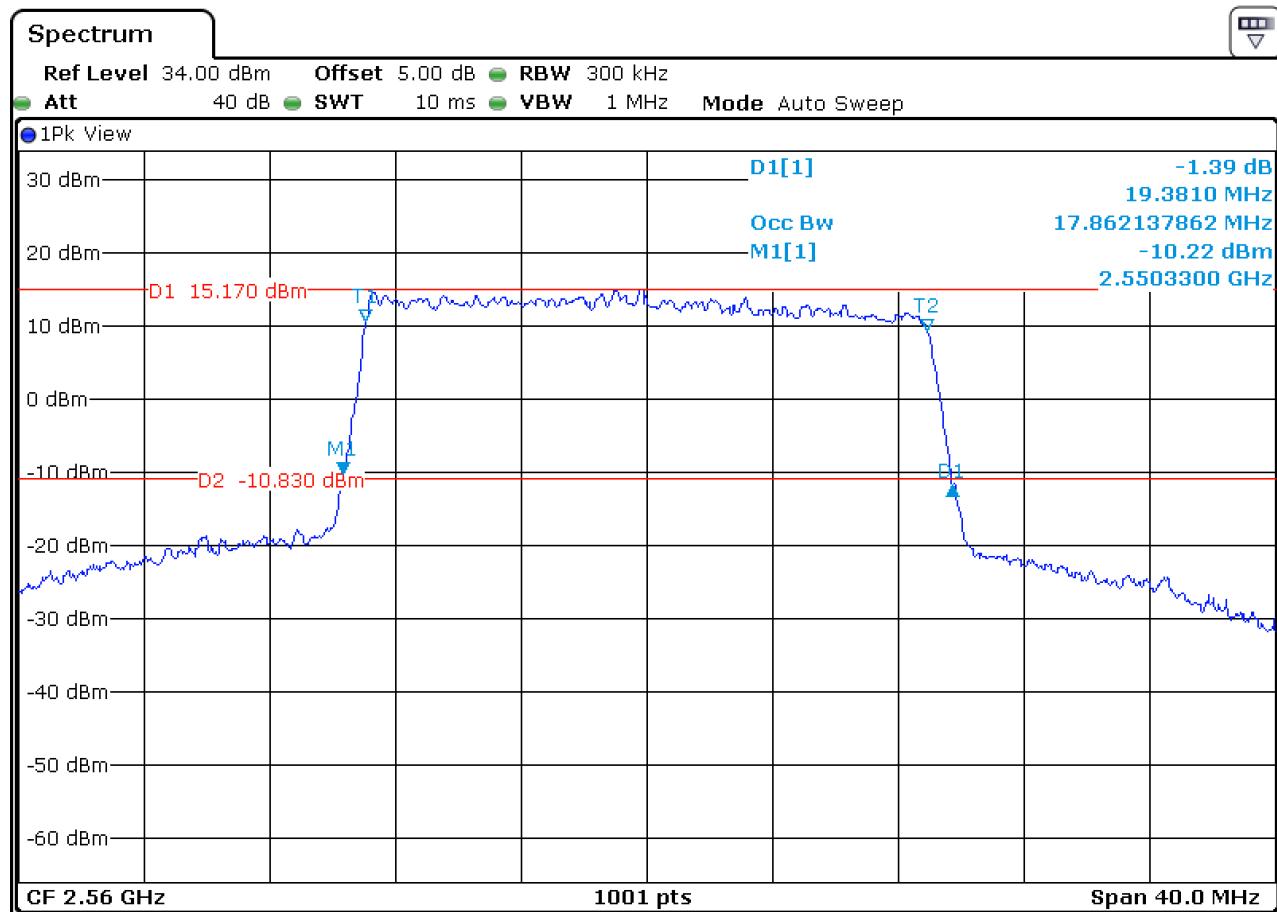
4.1.1.8.1 Test Channel = LCH



4.1.1.8.2 Test Channel = MCH



4.1.1.8.3 Test Channel = HCH



5 Band Edges Compliance

Part I –

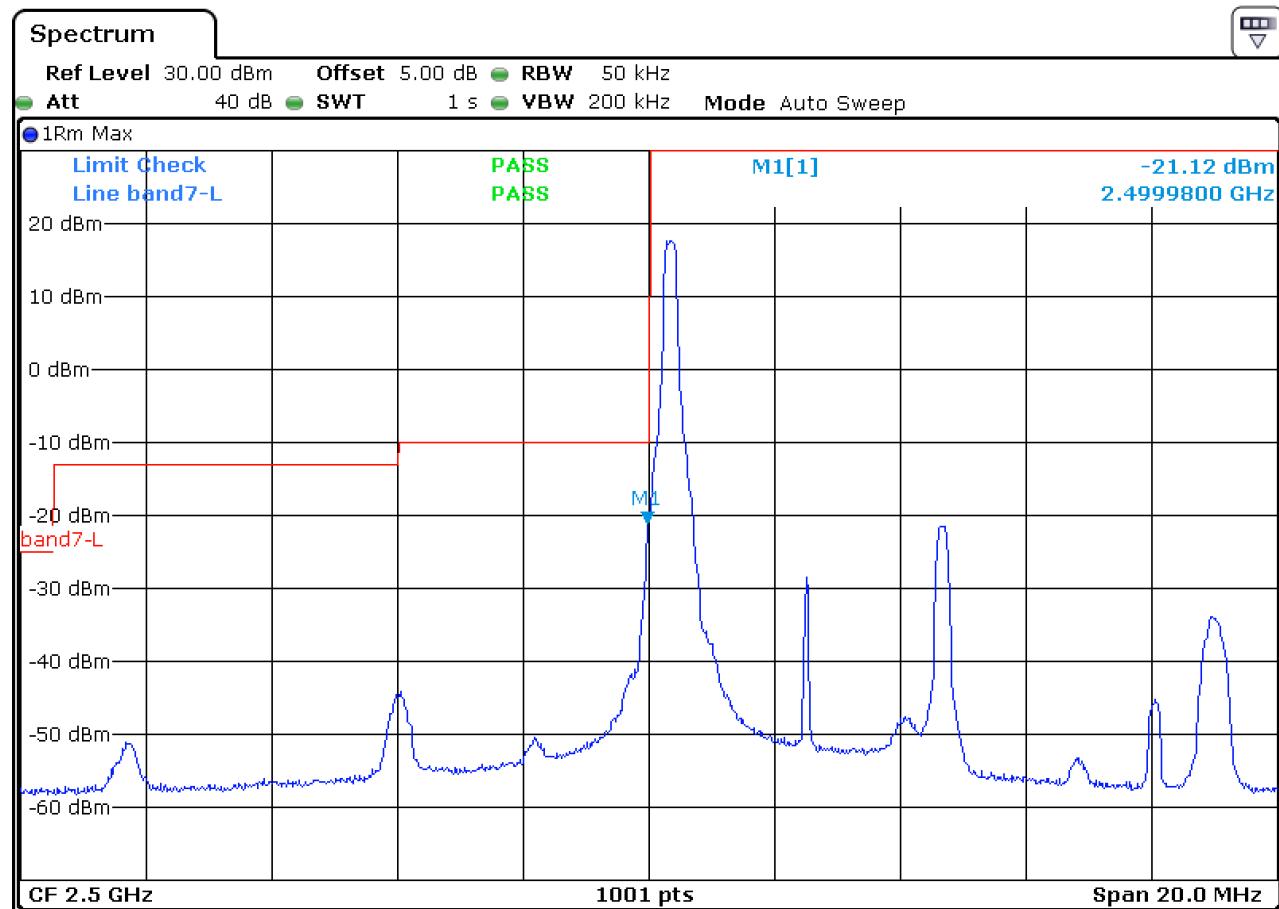
5.1 For LTE

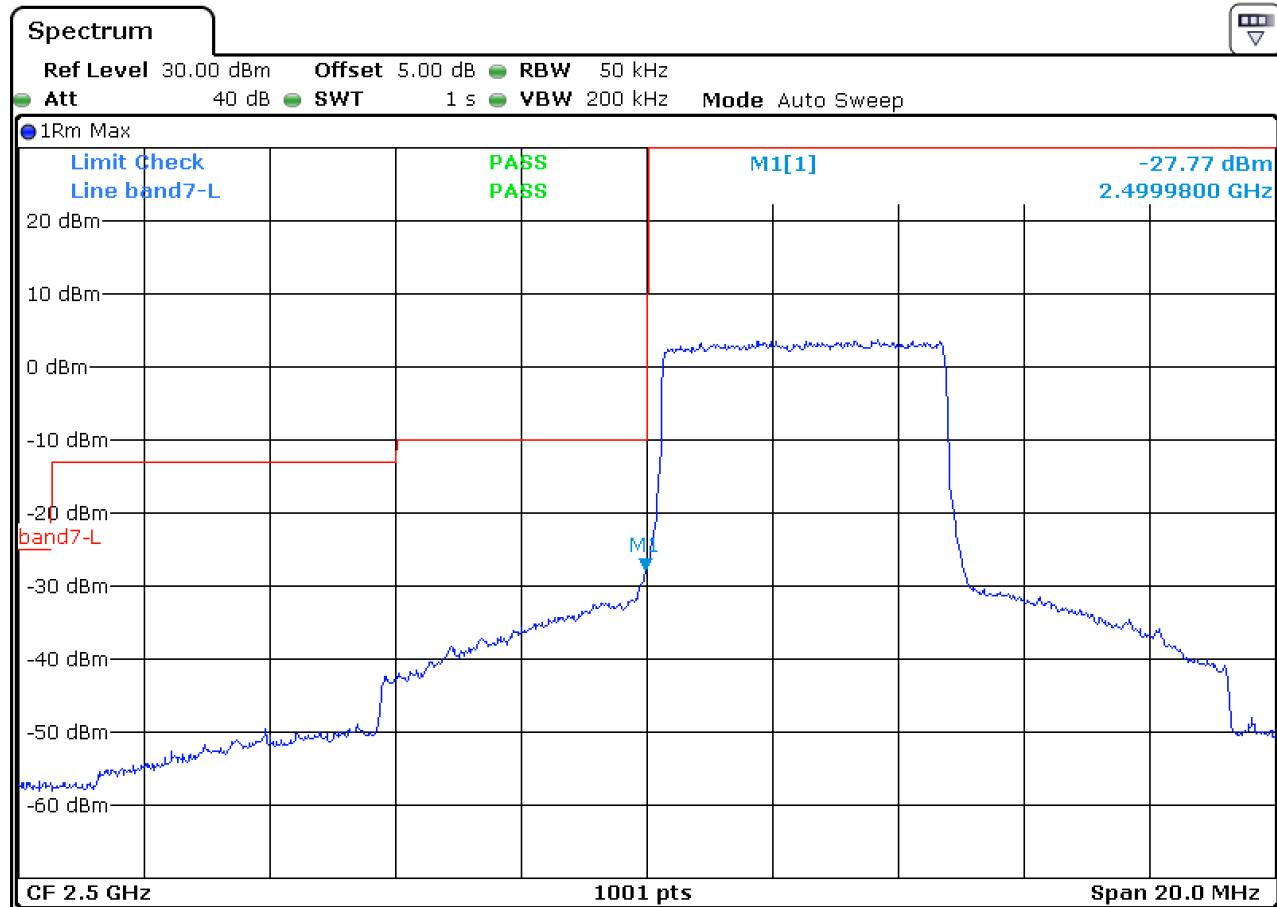
5.1.1 Test Band = LTE band7

5.1.1.1 Test Mode = LTE/TM1 5MHz

5.1.1.1.1 Test Channel = LCH

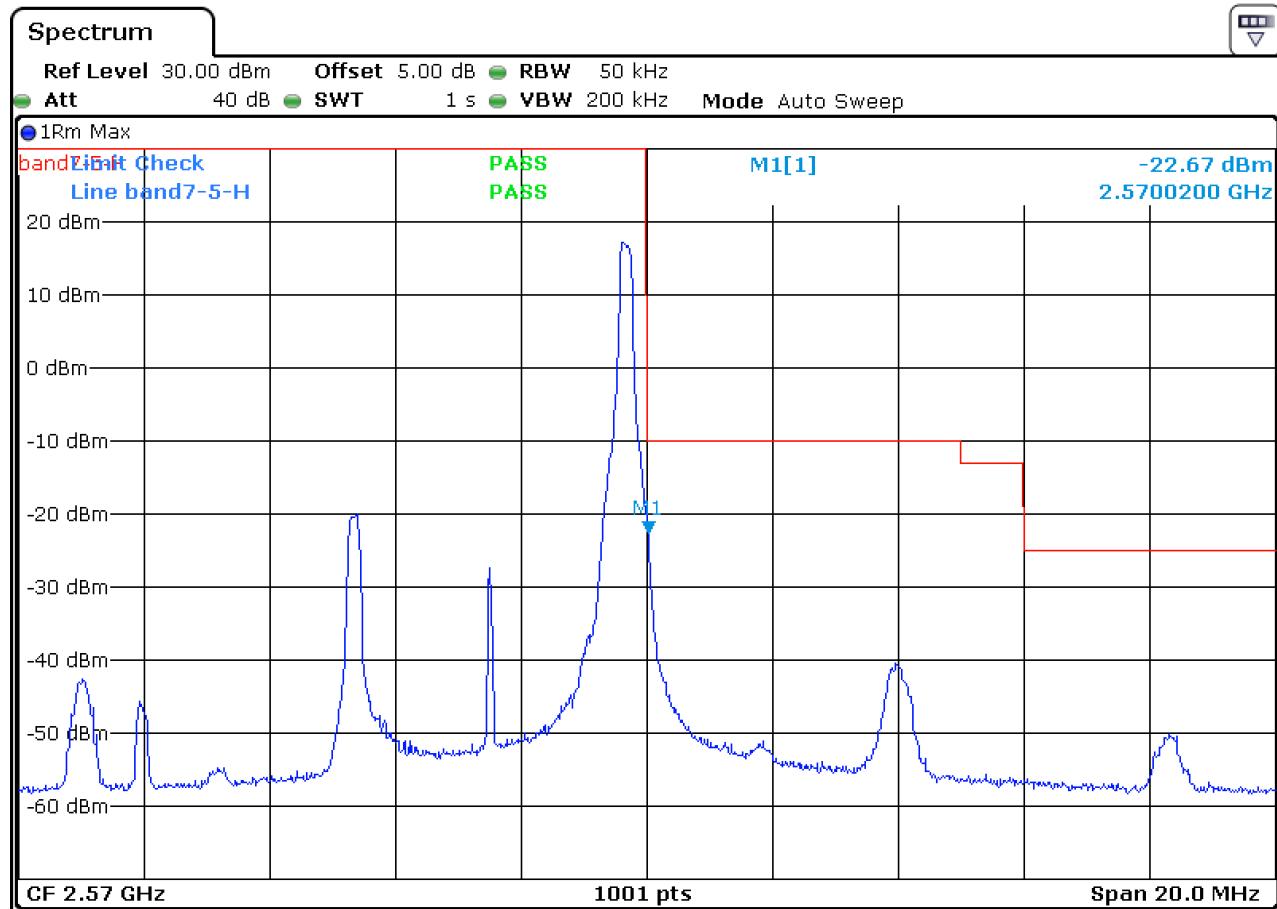
5.1.1.1.1.1 Test RB=1RB



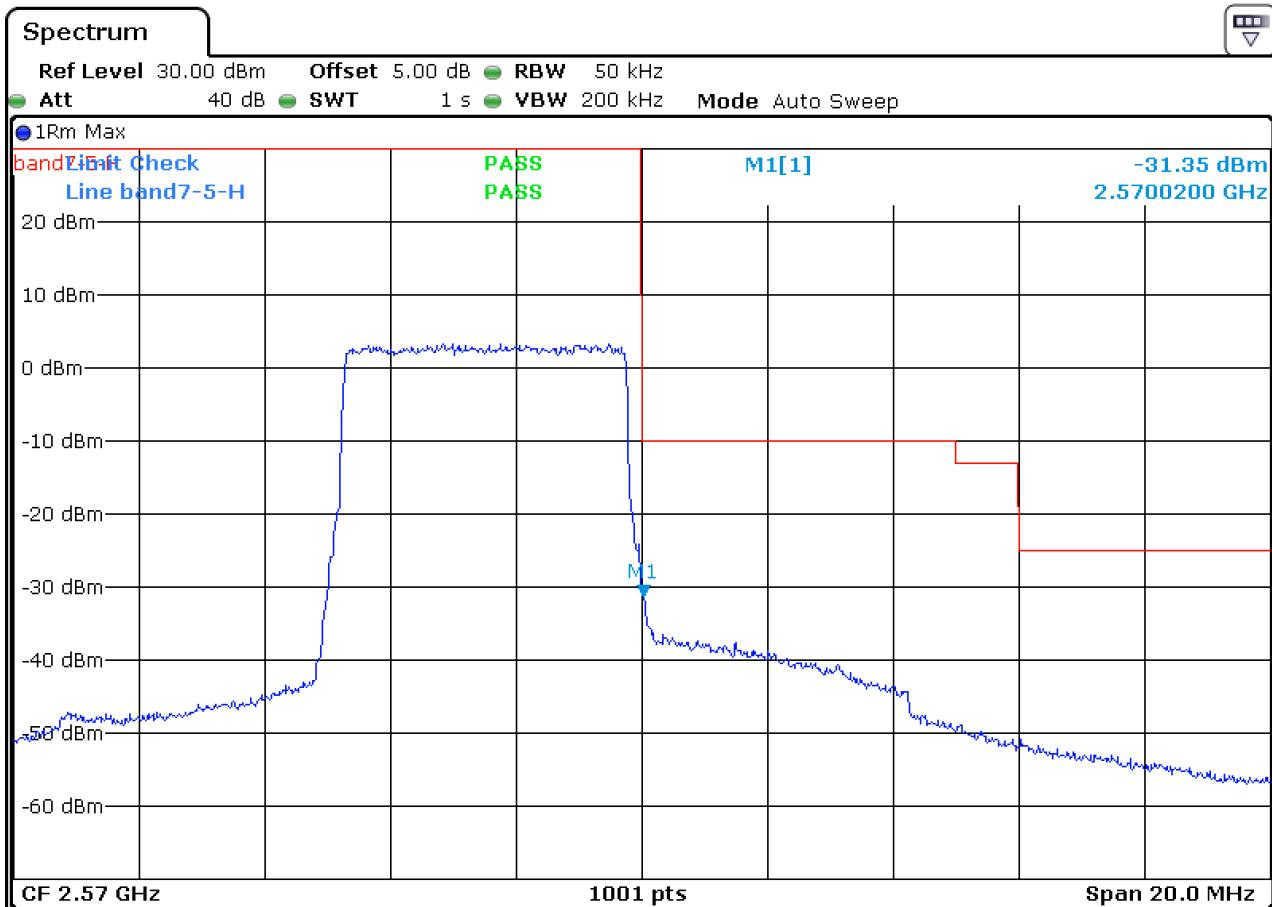
5.1.1.1.1.2 Test RB=25RB

5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB



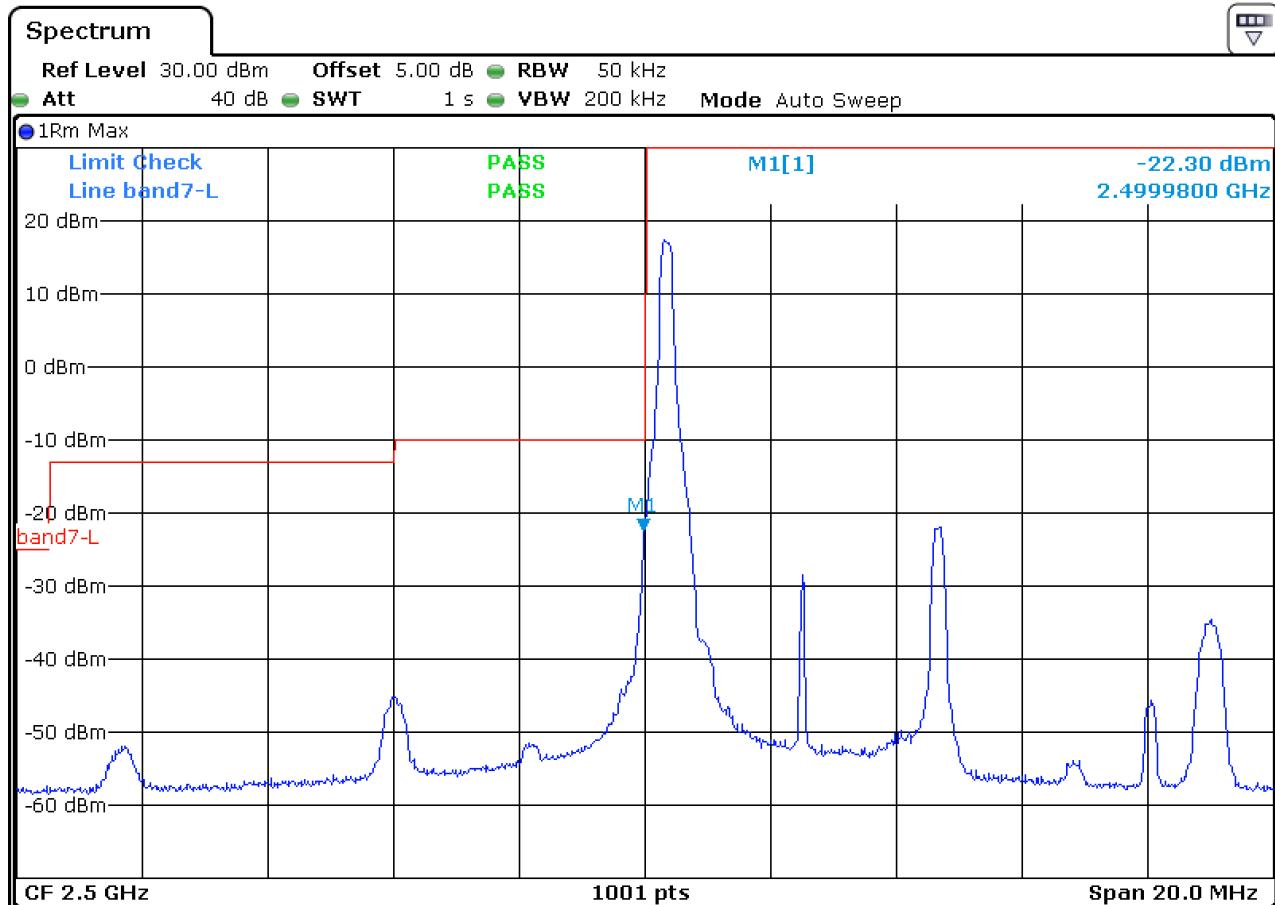
5.1.1.1.2.2 Test RB=25RB

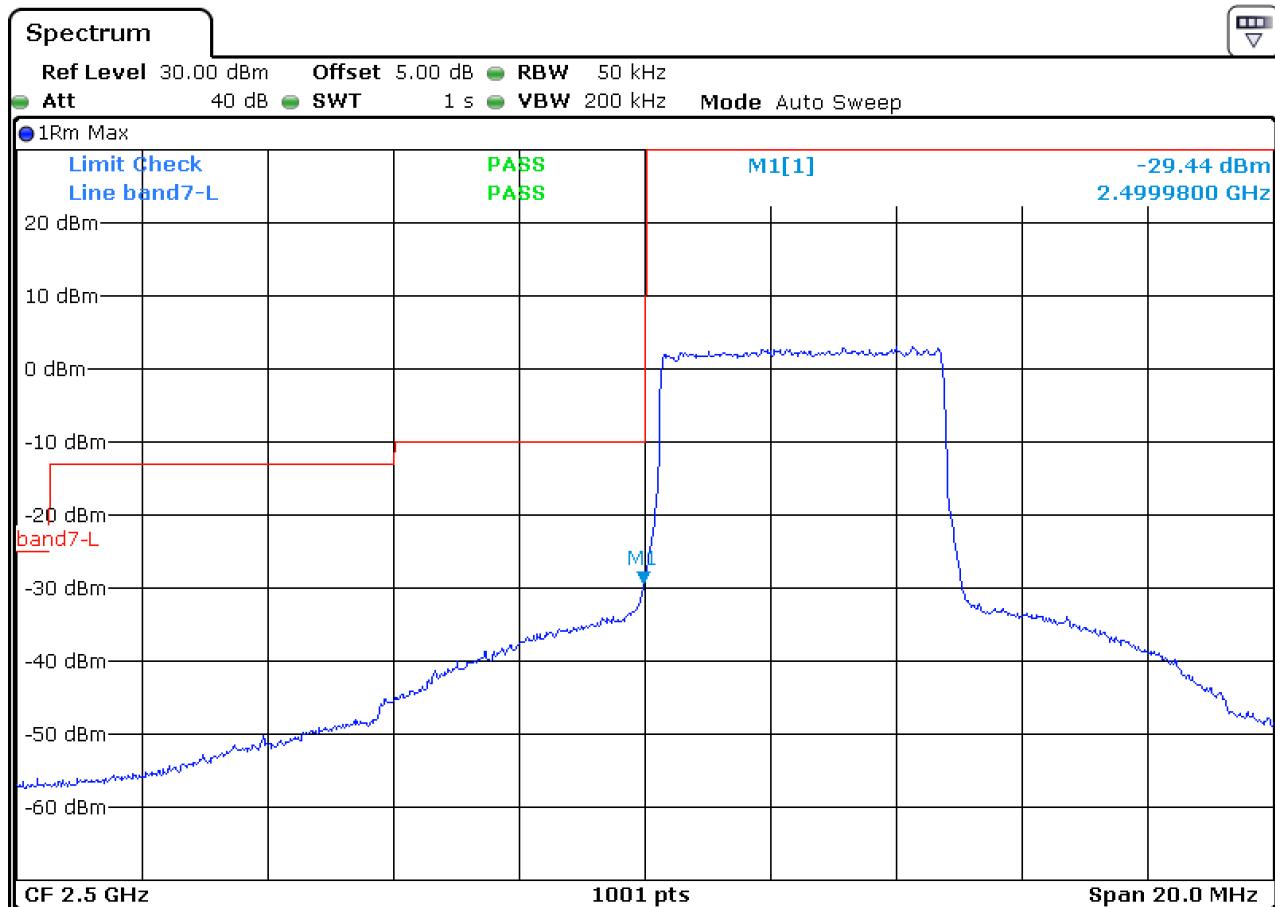


5.1.1.2 Test Mode = LTE/TM2 5MHz

5.1.1.2.1 Test Channel = LCH

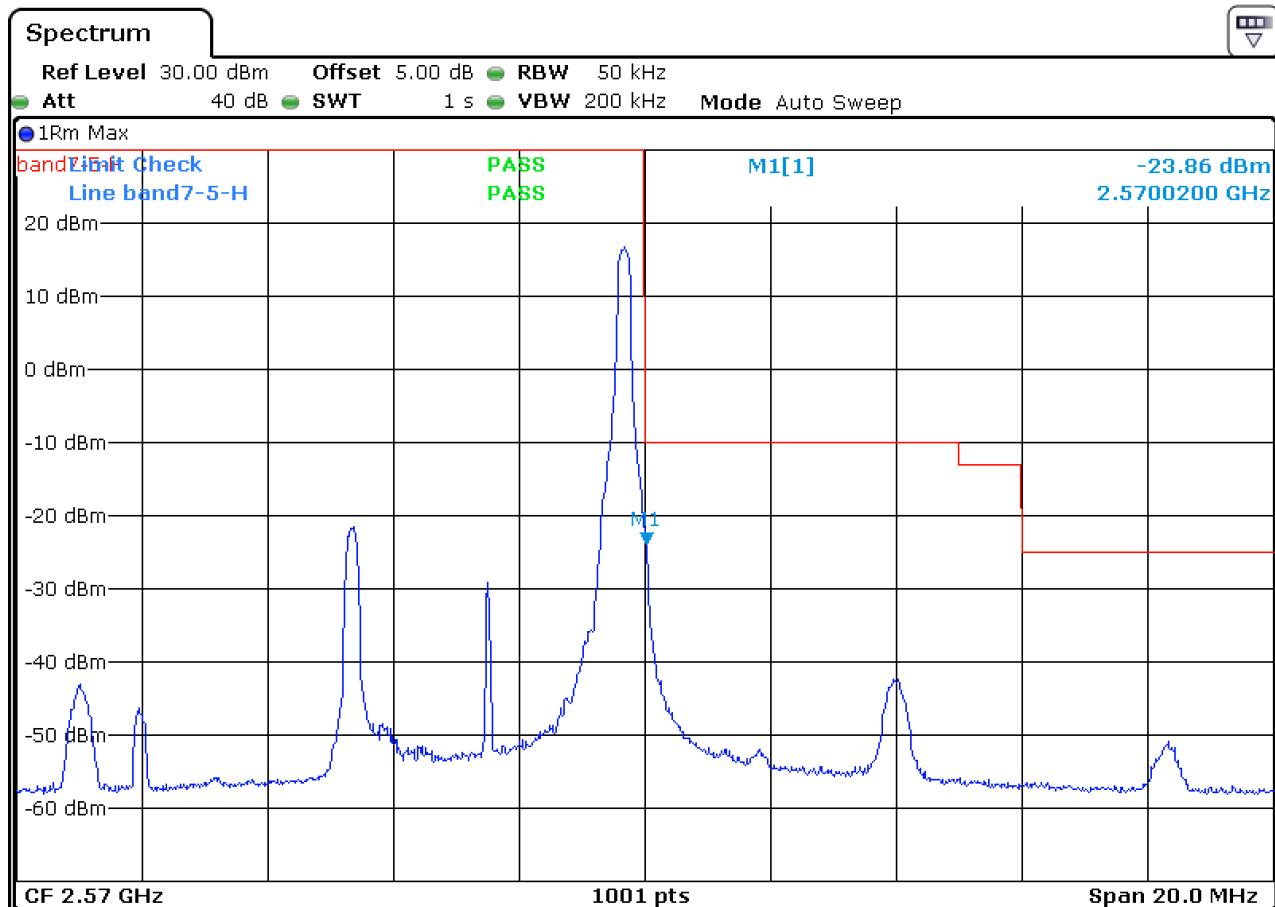
5.1.1.2.1.1 Test RB=1RB

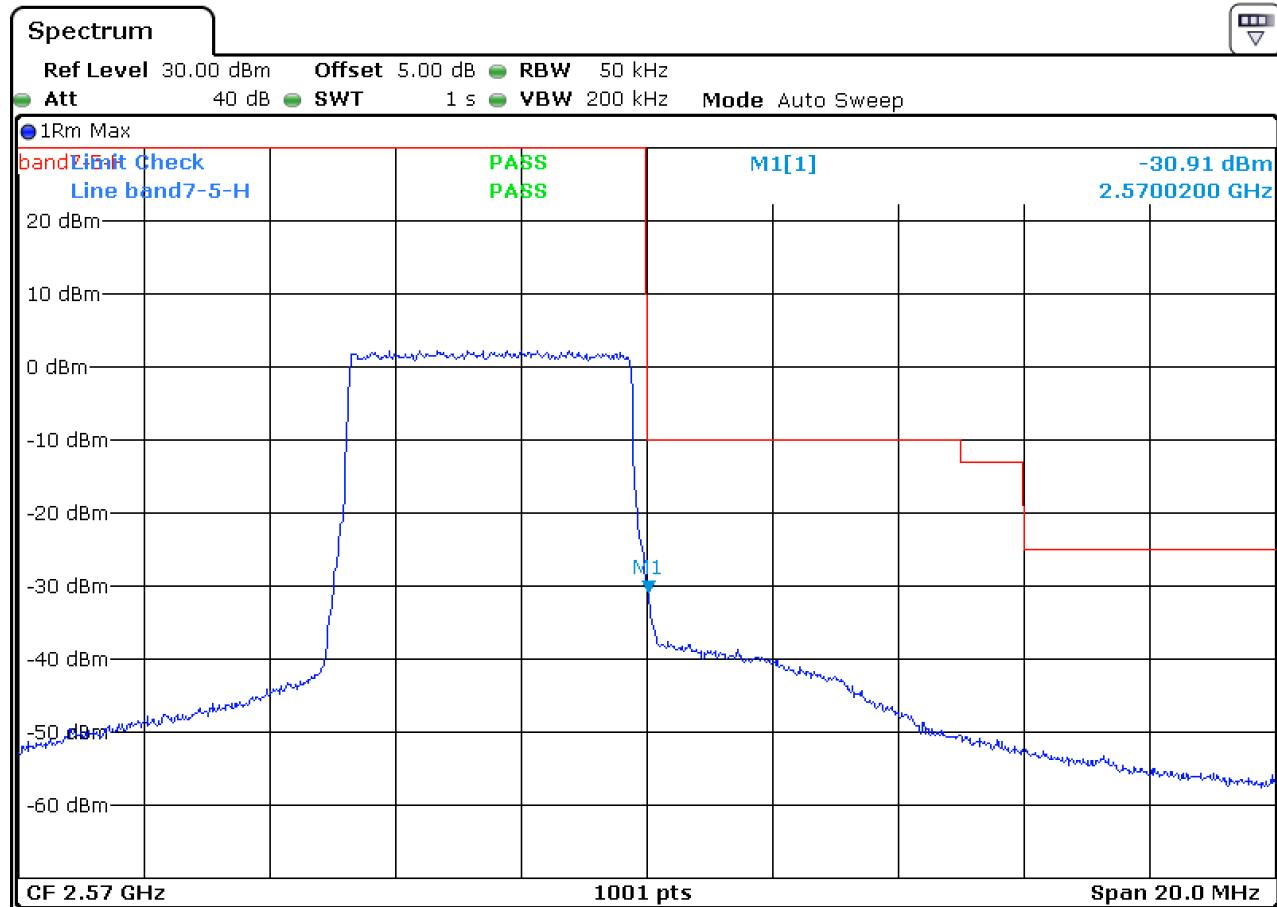


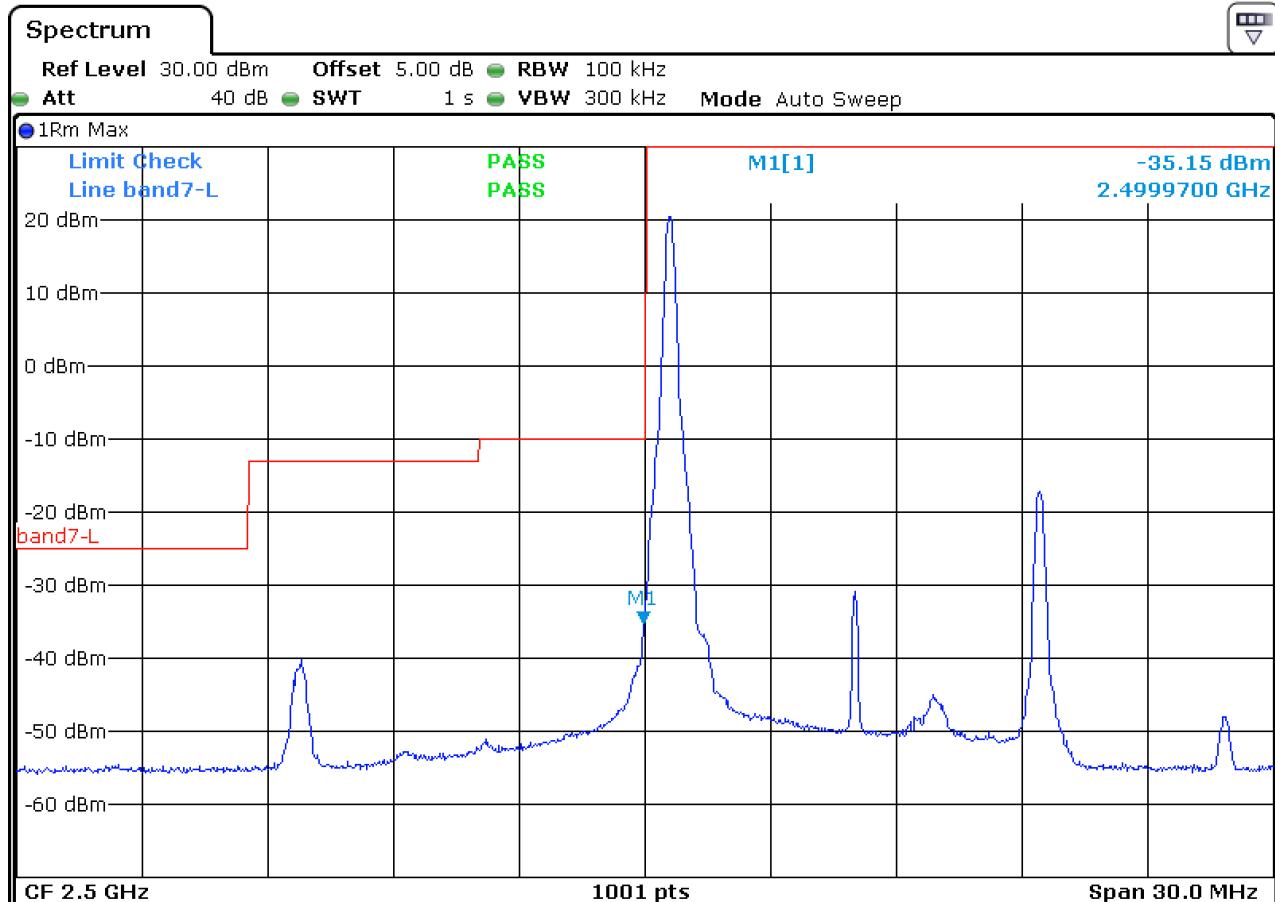
5.1.1.2.1.2 Test RB=25RB

5.1.1.2.2 Test Channel = HCH

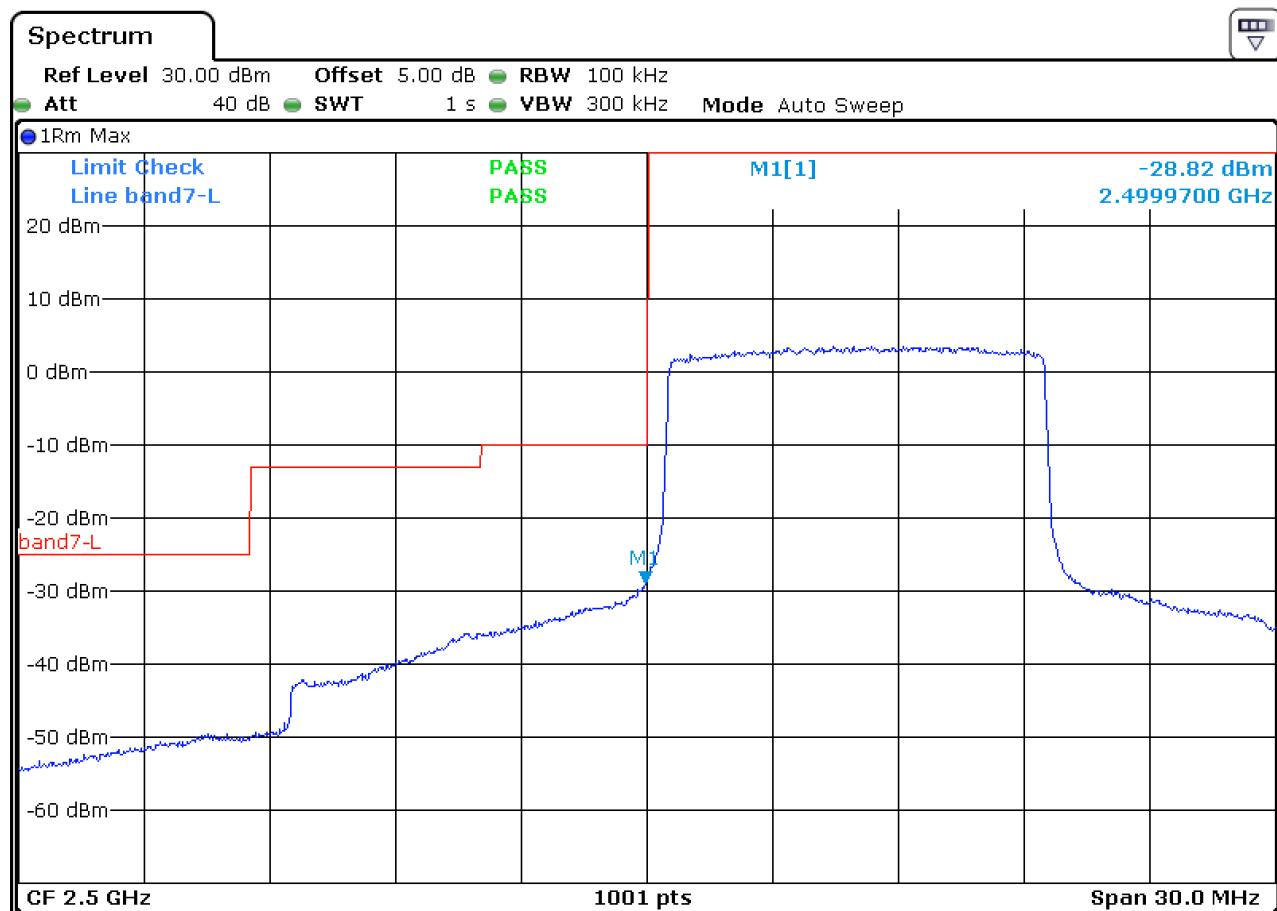
5.1.1.2.2.1 Test RB=1RB



5.1.1.2.2.2 Test RB=25RB

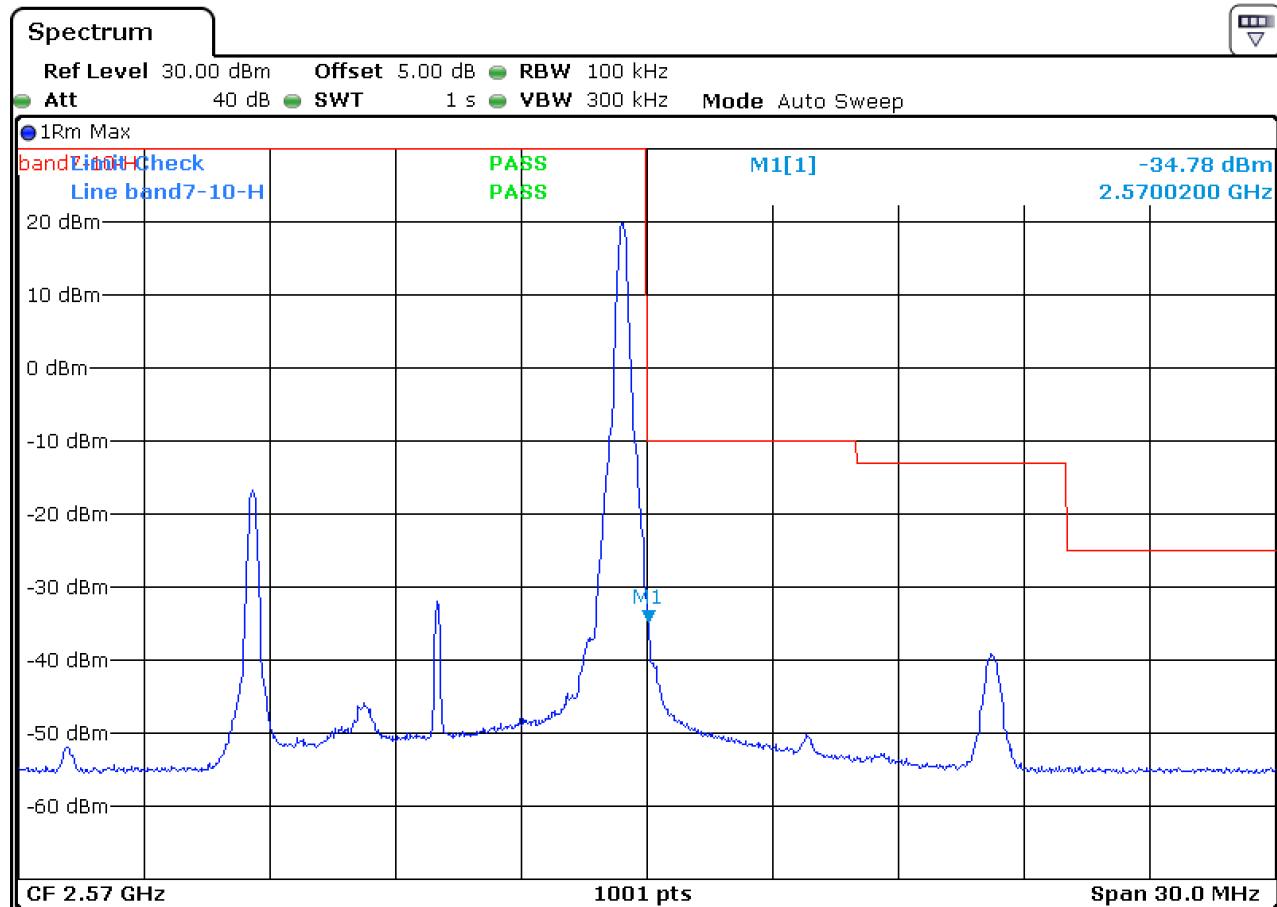
5.1.1.3 Test Mode = LTE/TM1 10MHz**5.1.1.3.1 Test Channel = LCH****5.1.1.3.1.1 Test RB=1RB**

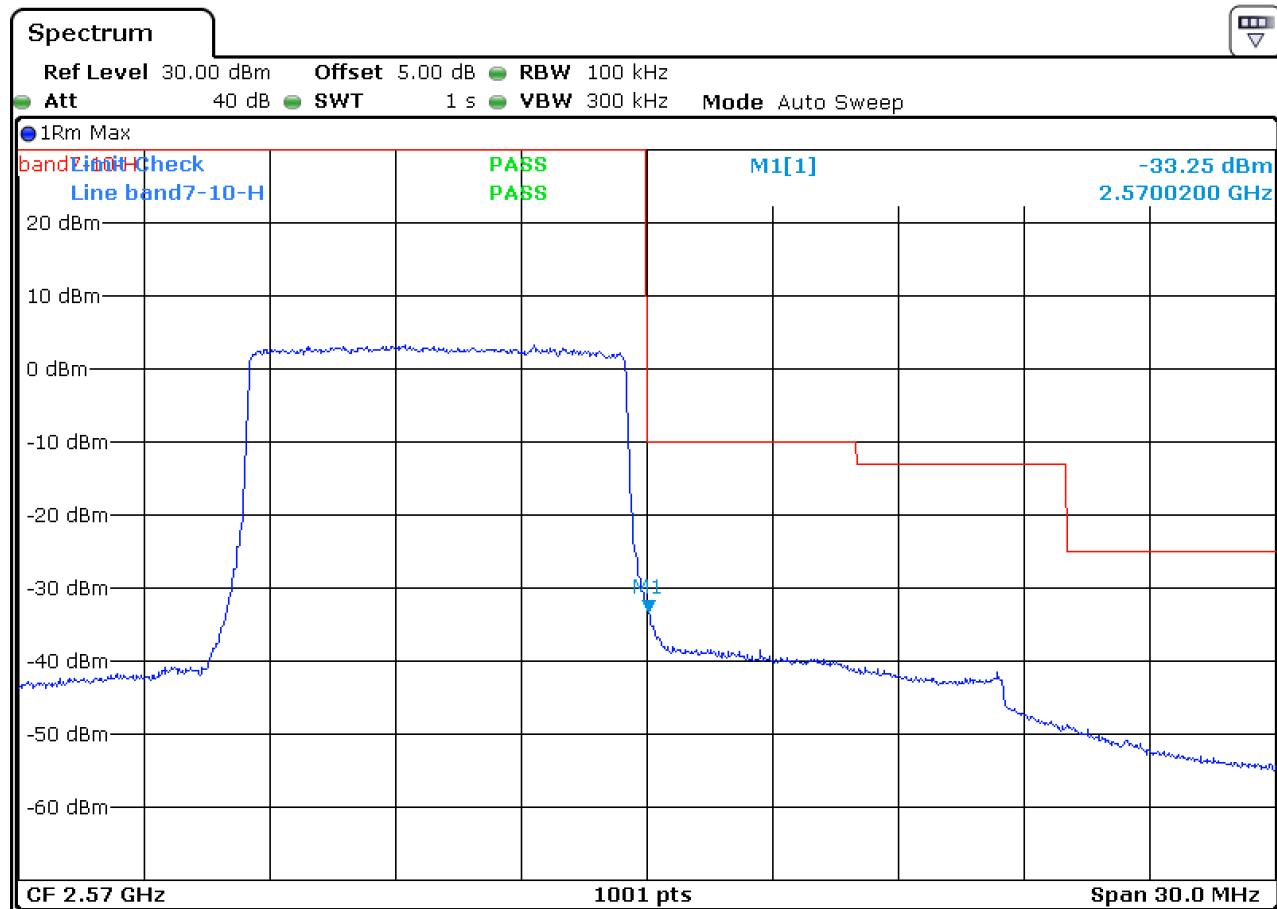
5.1.1.3.1.2 Test RB=50RB

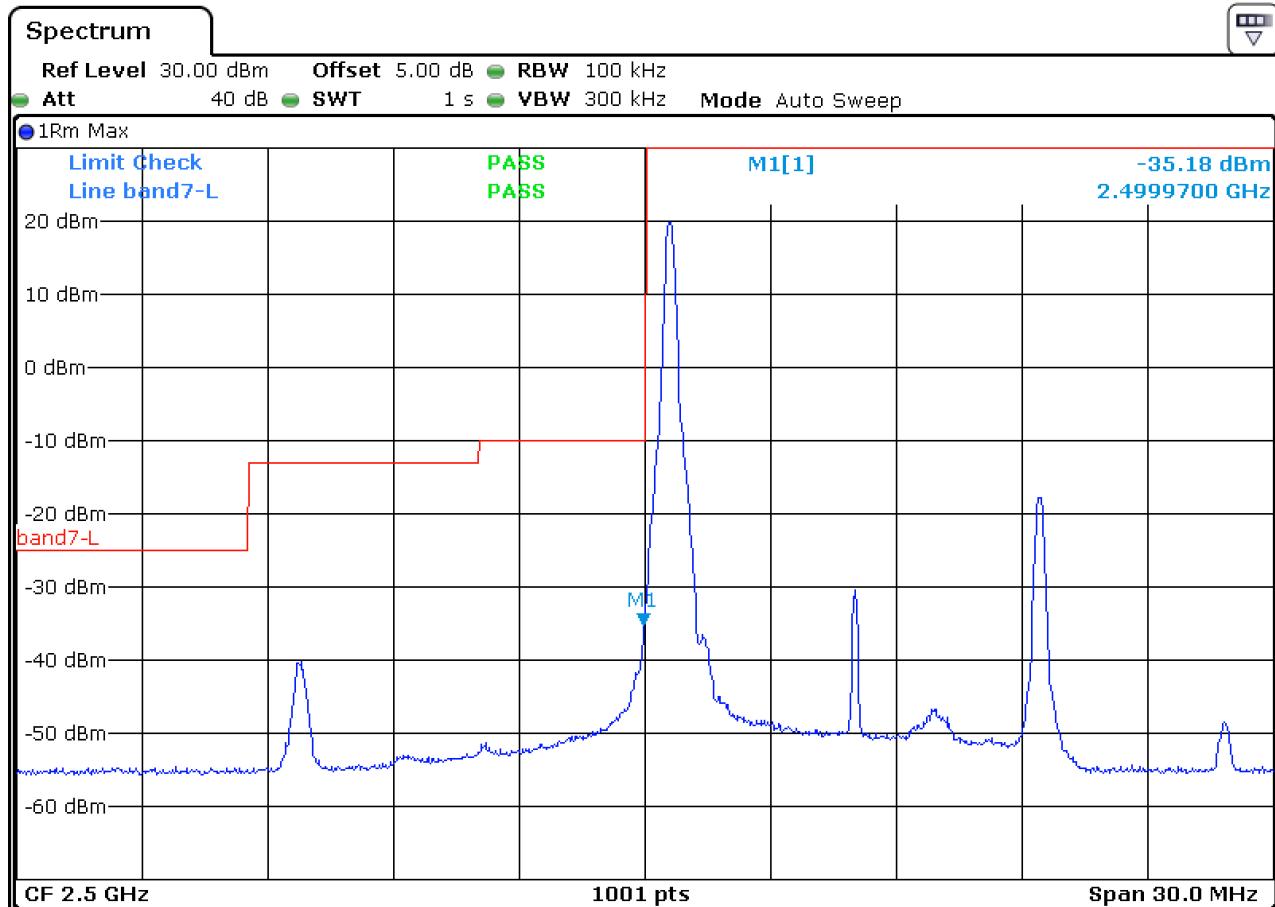


5.1.1.3.2 Test Channel = HCH

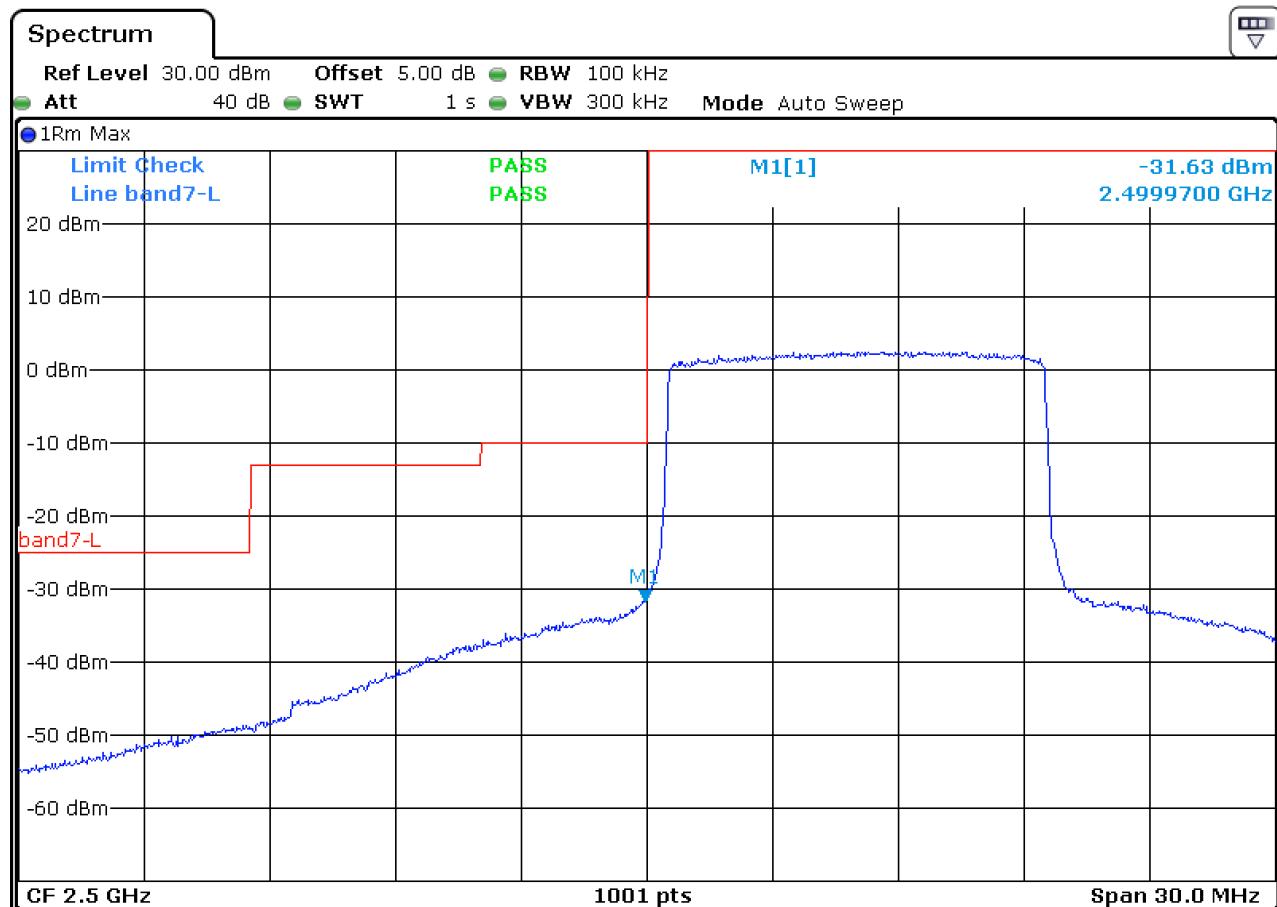
5.1.1.3.2.1 Test RB=1RB



5.1.1.3.2.2 Test RB=50RB

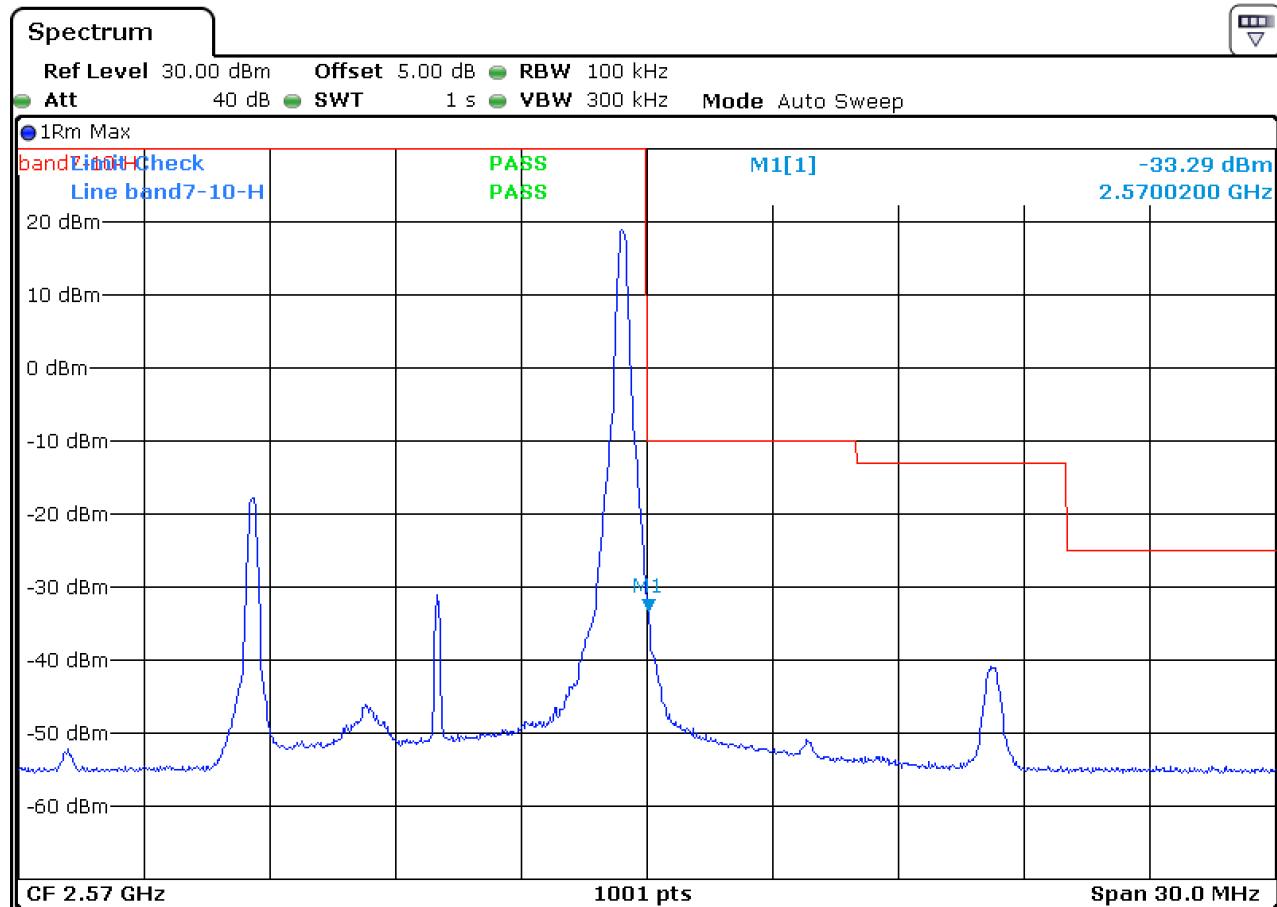
5.1.1.4 Test Mode = LTE/TM2 10MHz**5.1.1.4.1 Test Channel = LCH****5.1.1.4.1.1 Test RB=1RB**

5.1.1.4.1.2 Test RB=50RB

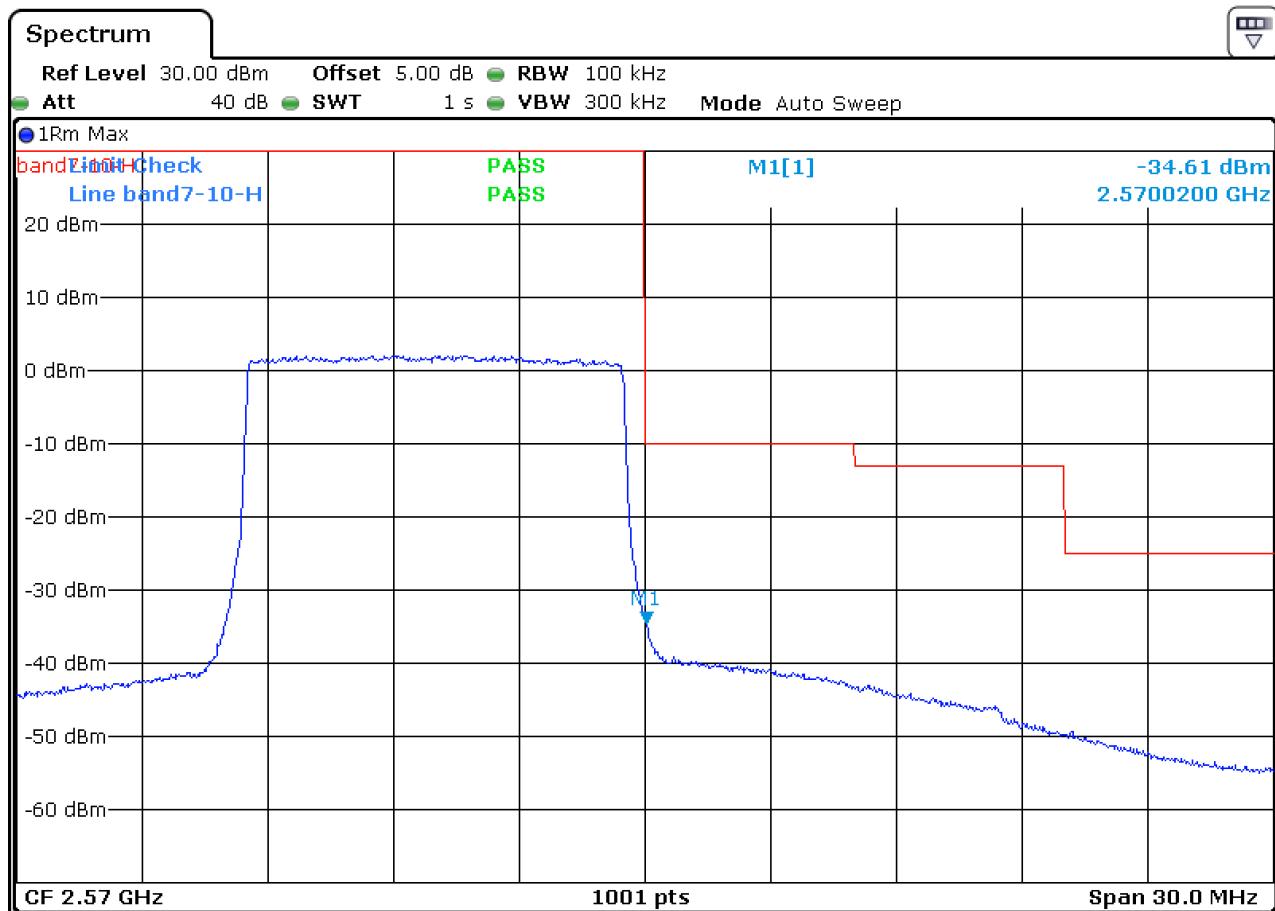


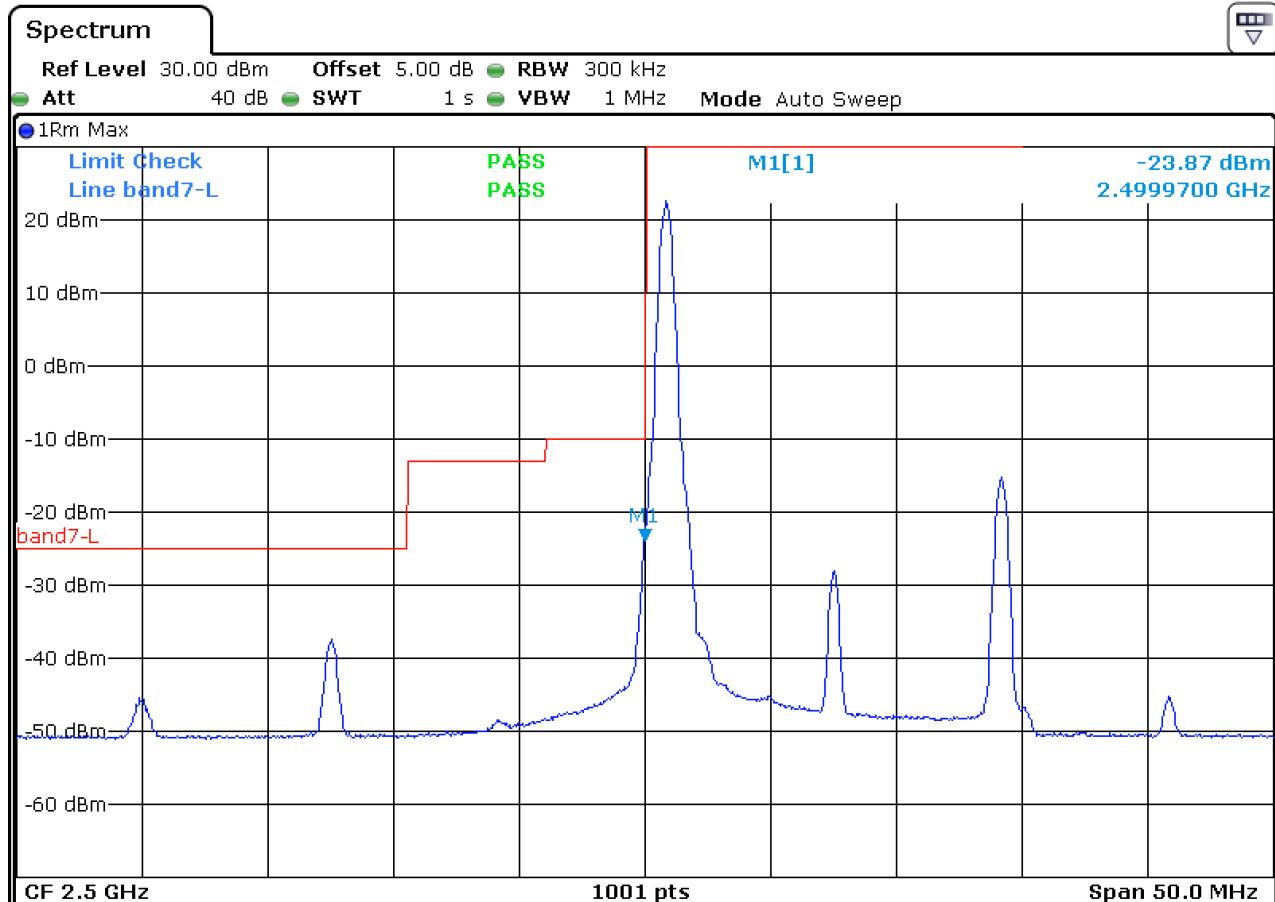
5.1.1.4.2 Test Channel = HCH

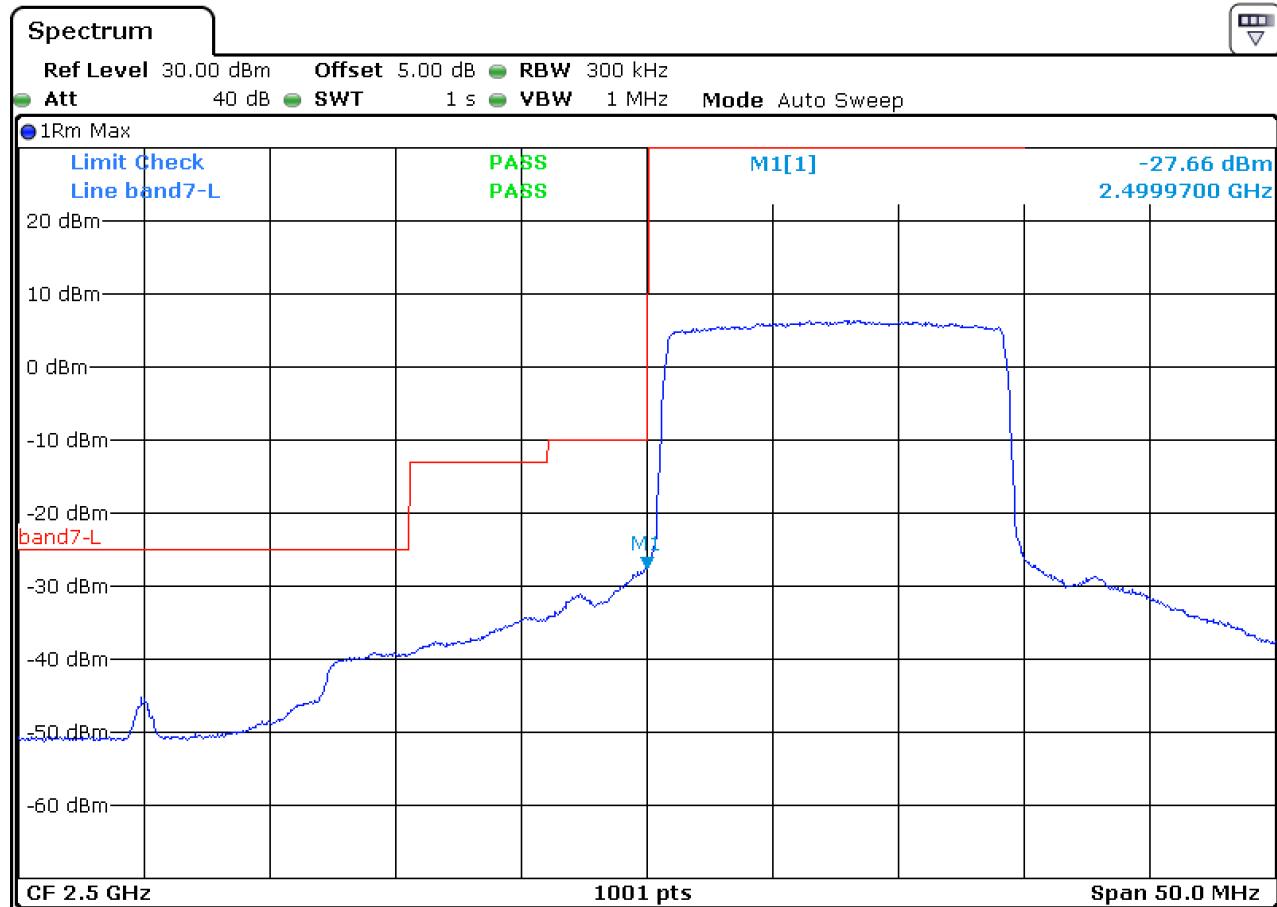
5.1.1.4.2.1 Test RB=1RB



5.1.1.4.2.2 Test RB=50RB

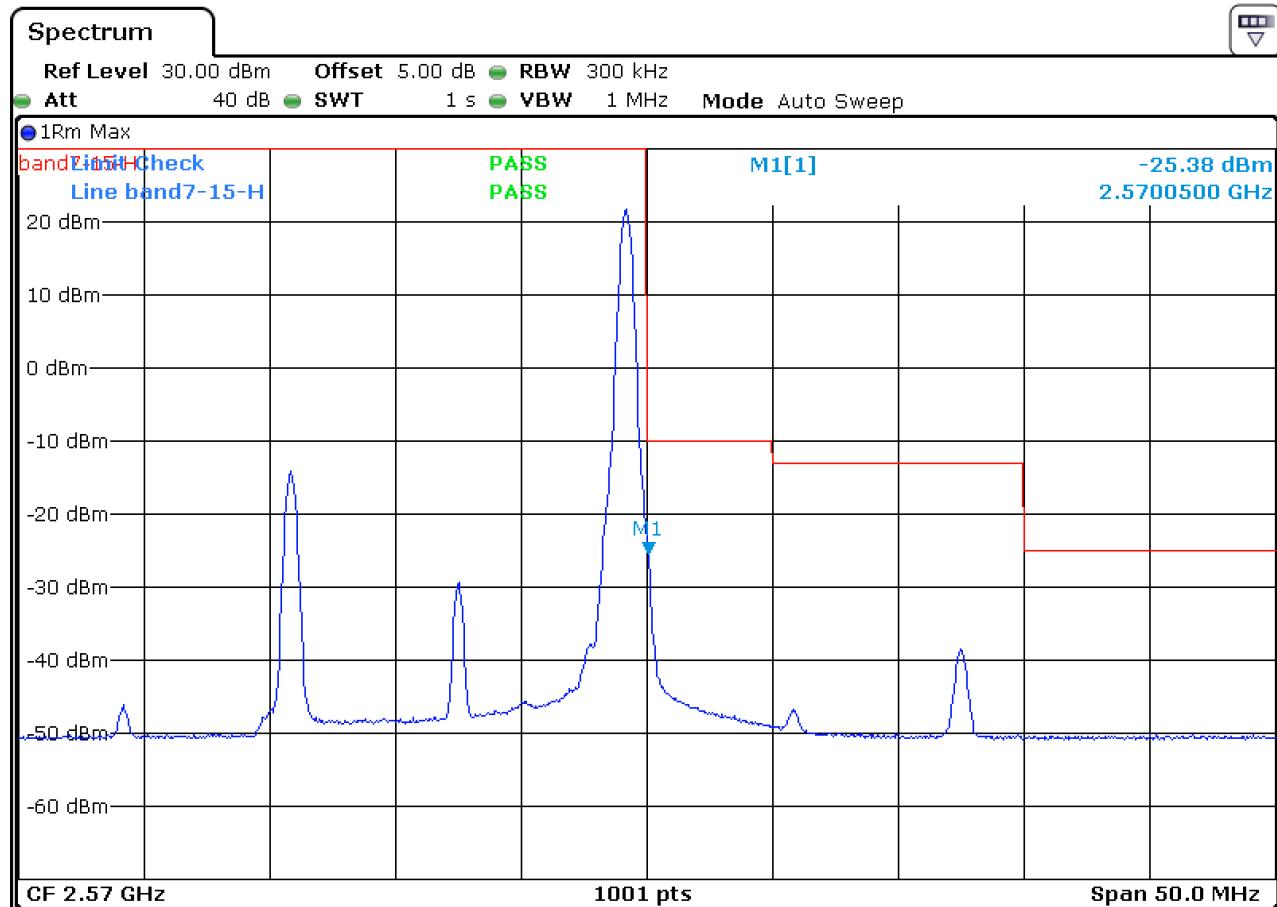


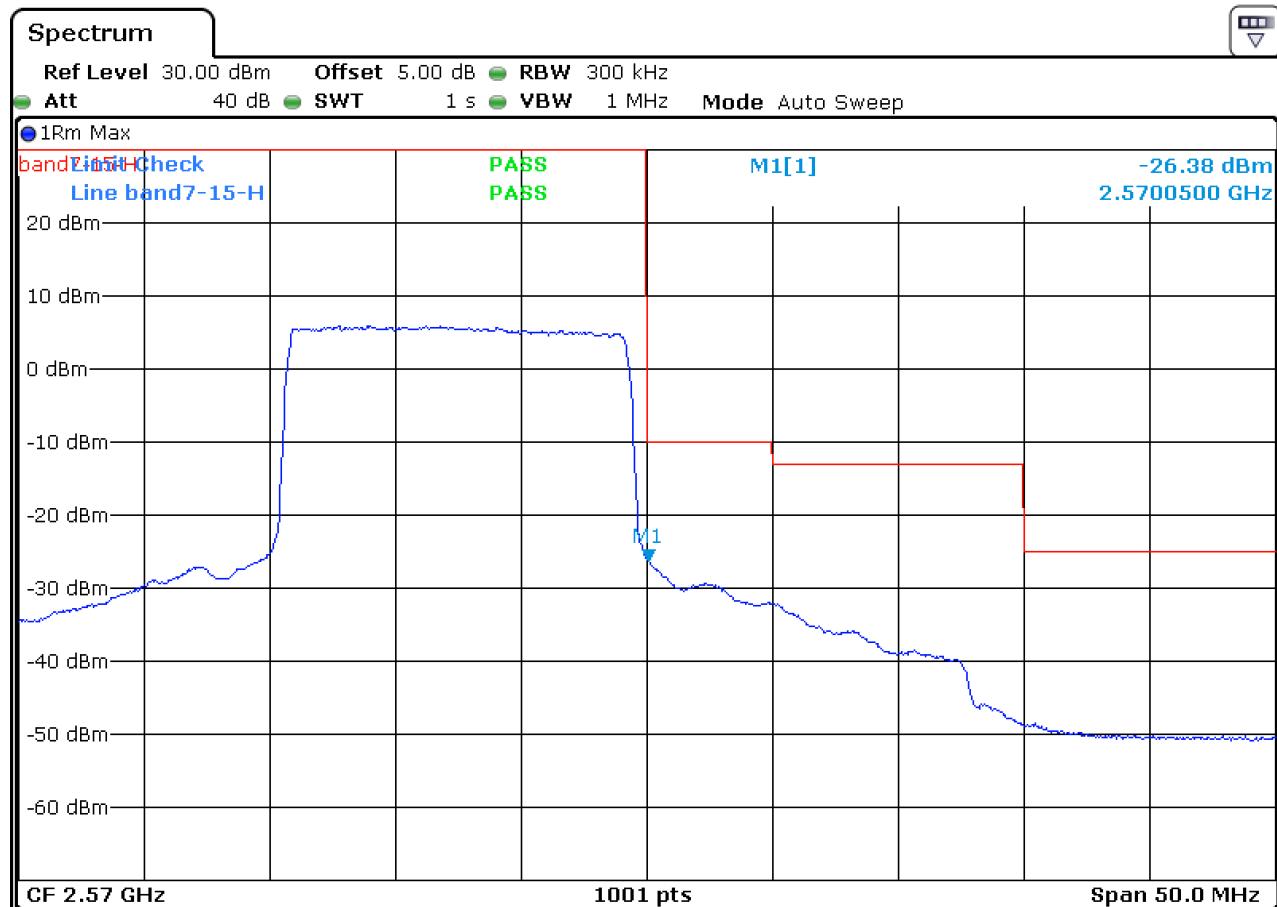
5.1.1.5 Test Mode = LTE/TM1 15MHz**5.1.1.5.1 Test Channel = LCH****5.1.1.5.1.1 Test RB=1RB**

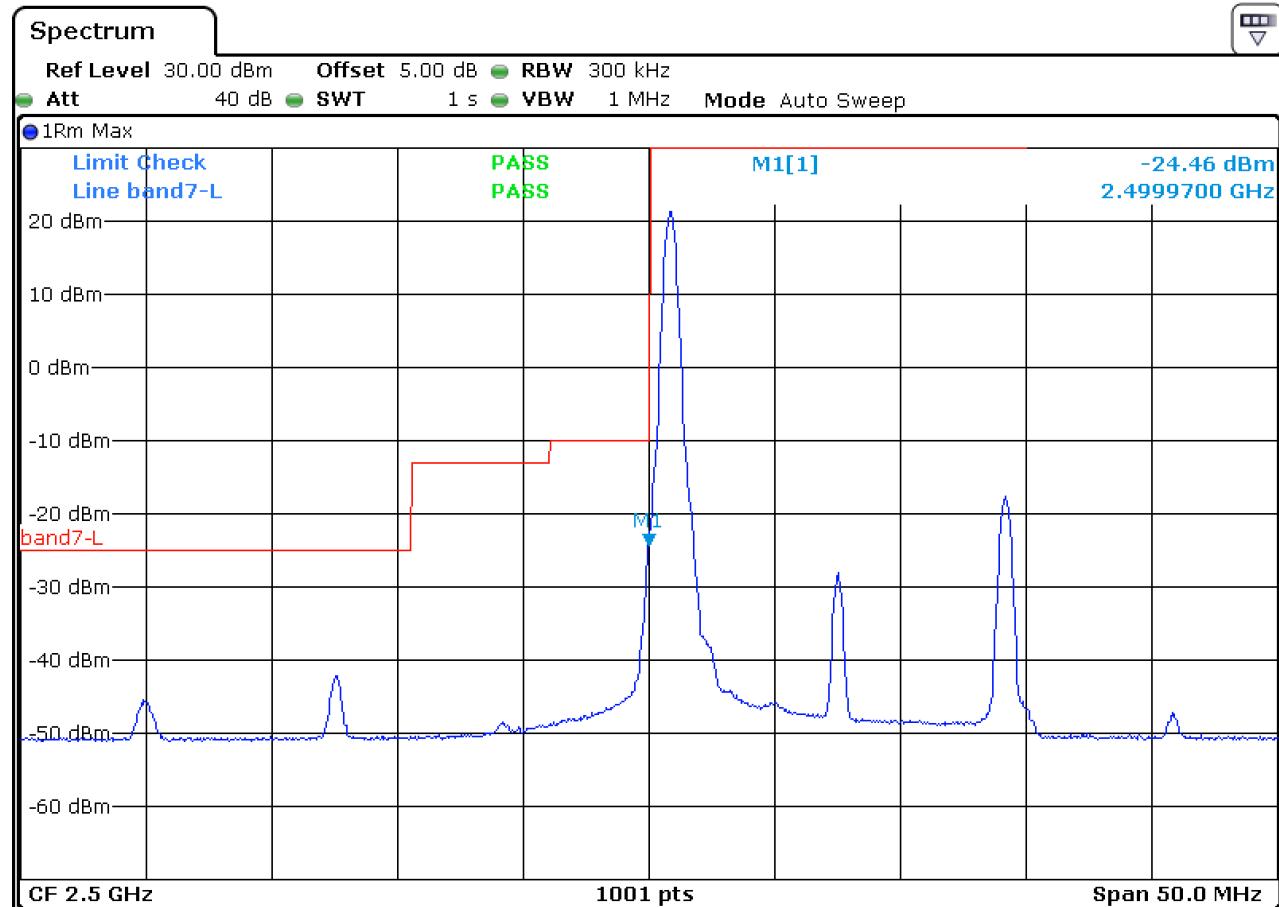
5.1.1.5.1.2 Test RB=75RB

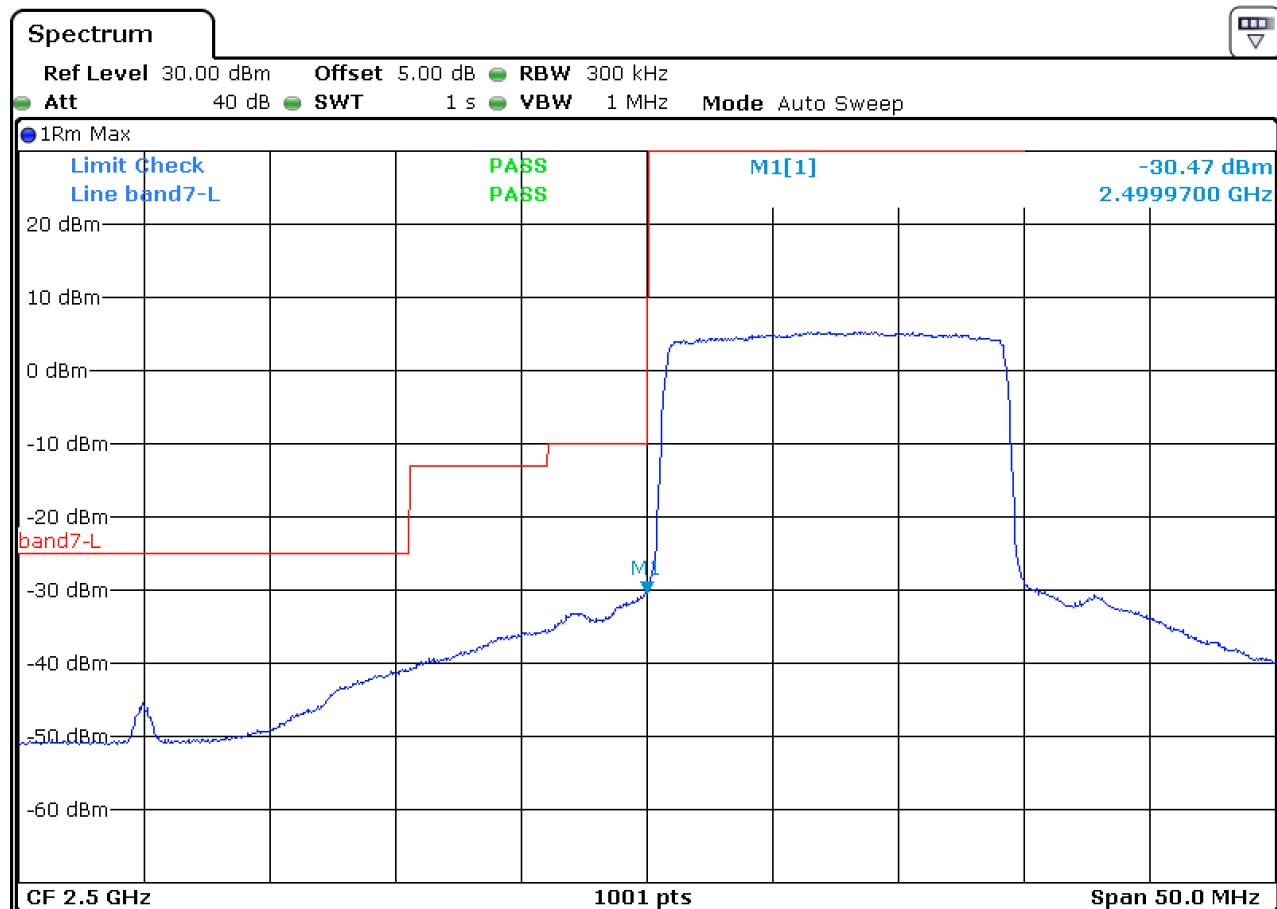
5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



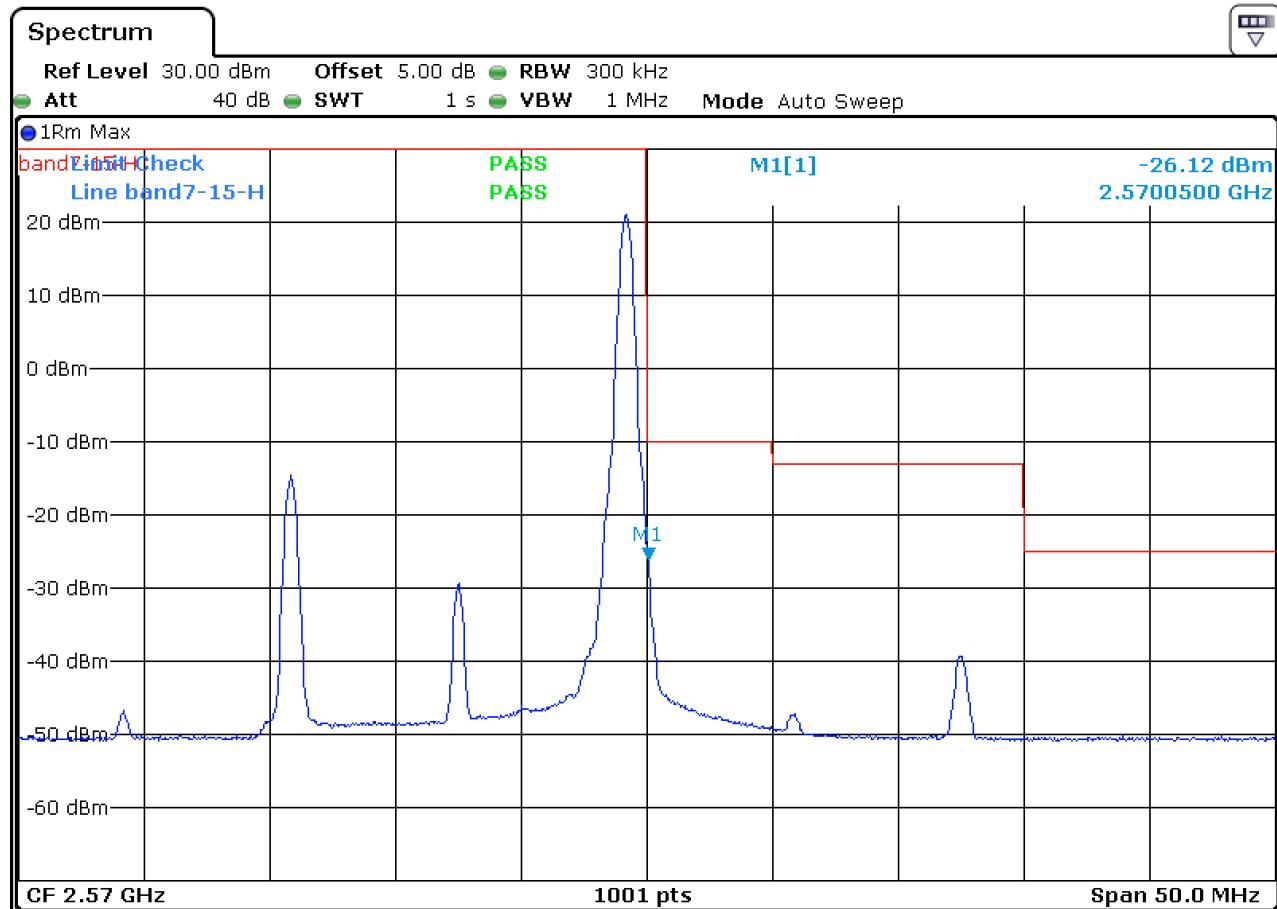
5.1.1.5.2.2 Test RB=75RB

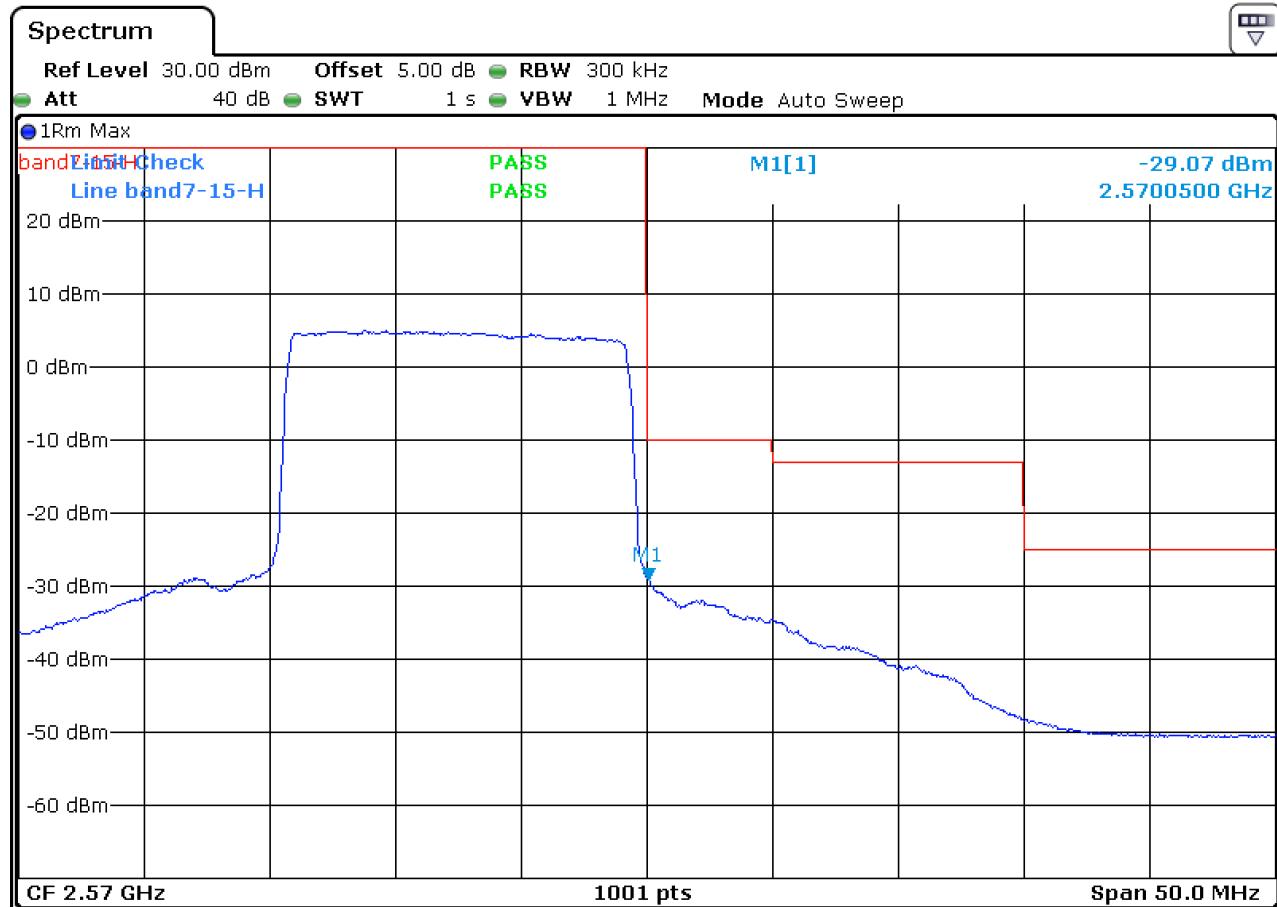
5.1.1.6 Test Mode = LTE/TM2 15MHz**5.1.1.6.1 Test Channel = LCH****5.1.1.6.1.1 Test RB=1RB**

5.1.1.6.1.2 Test RB=75RB

5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB

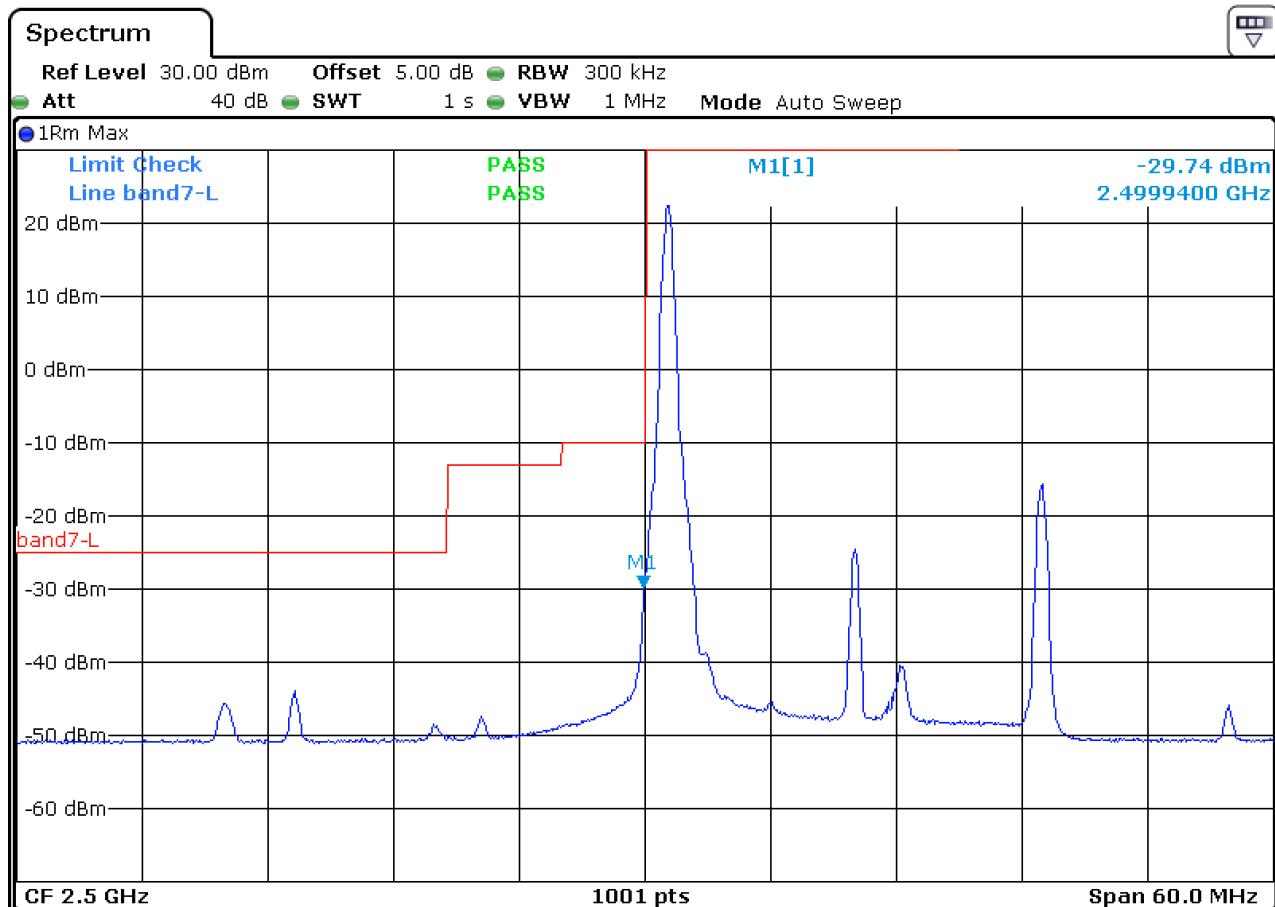


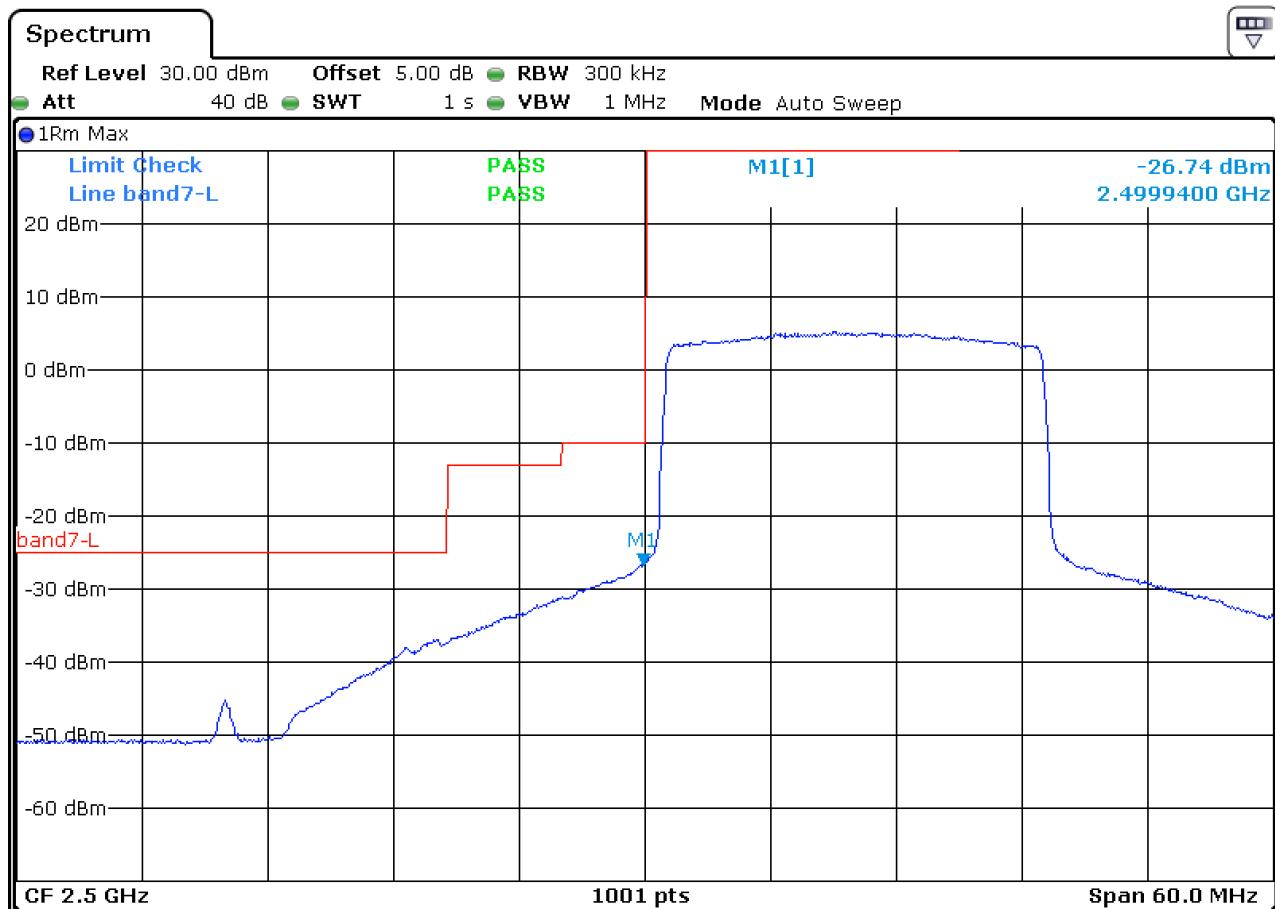
5.1.1.6.2.2 Test RB=75RB

5.1.1.7 Test Mode = LTE/TM1 20MHz

5.1.1.7.1 Test Channel = LCH

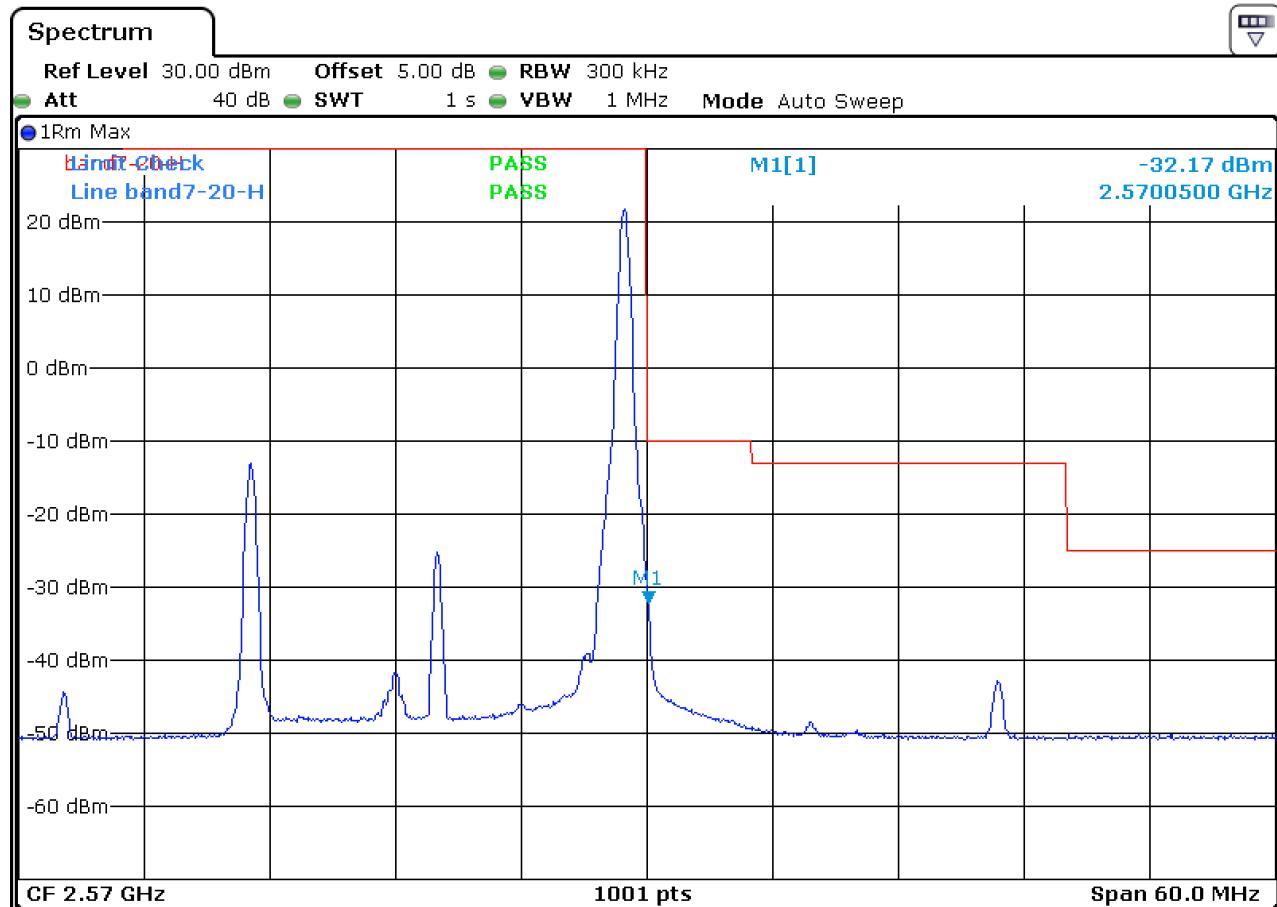
5.1.1.7.1.1 Test RB=1RB

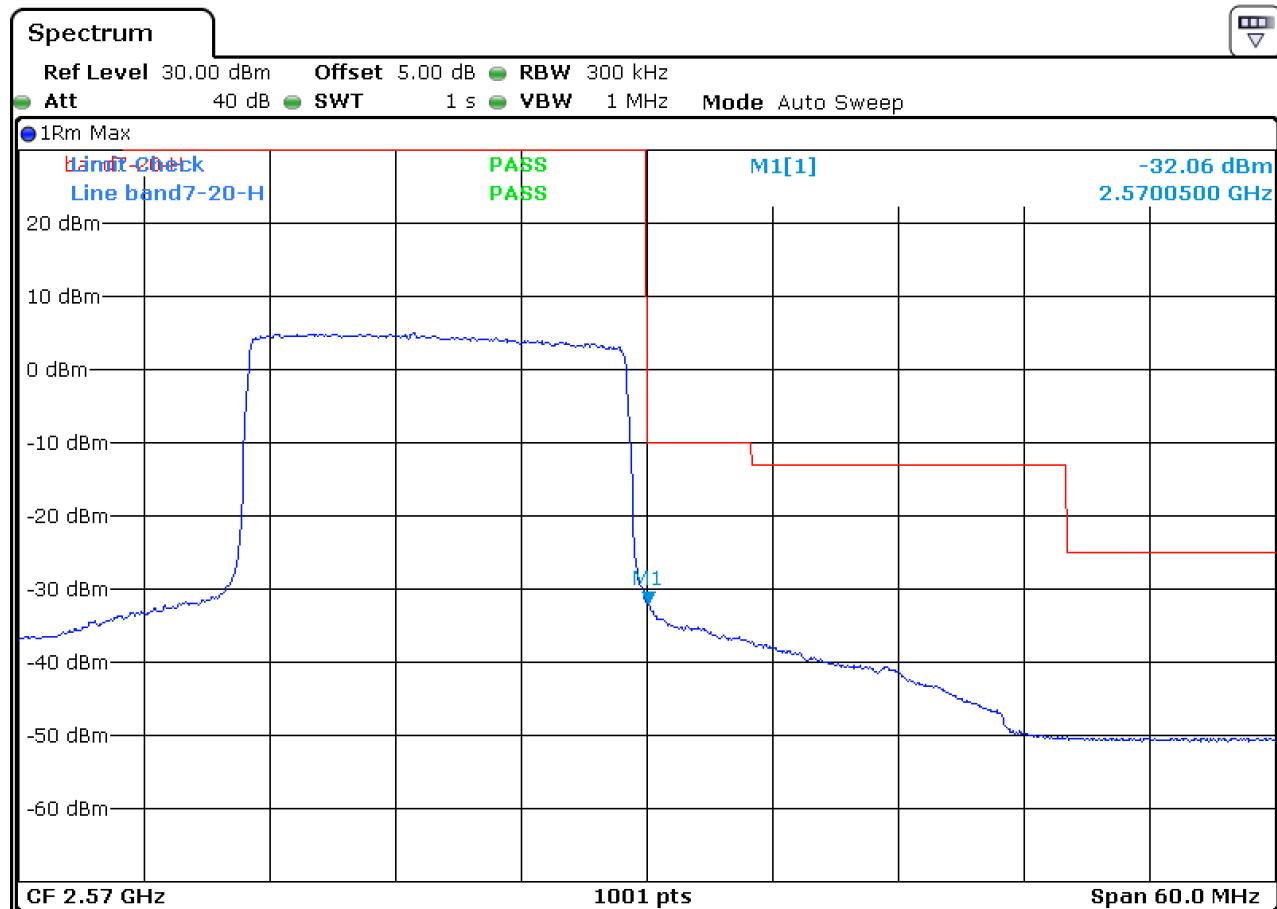


5.1.1.7.1.2 Test RB=100RB

5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB

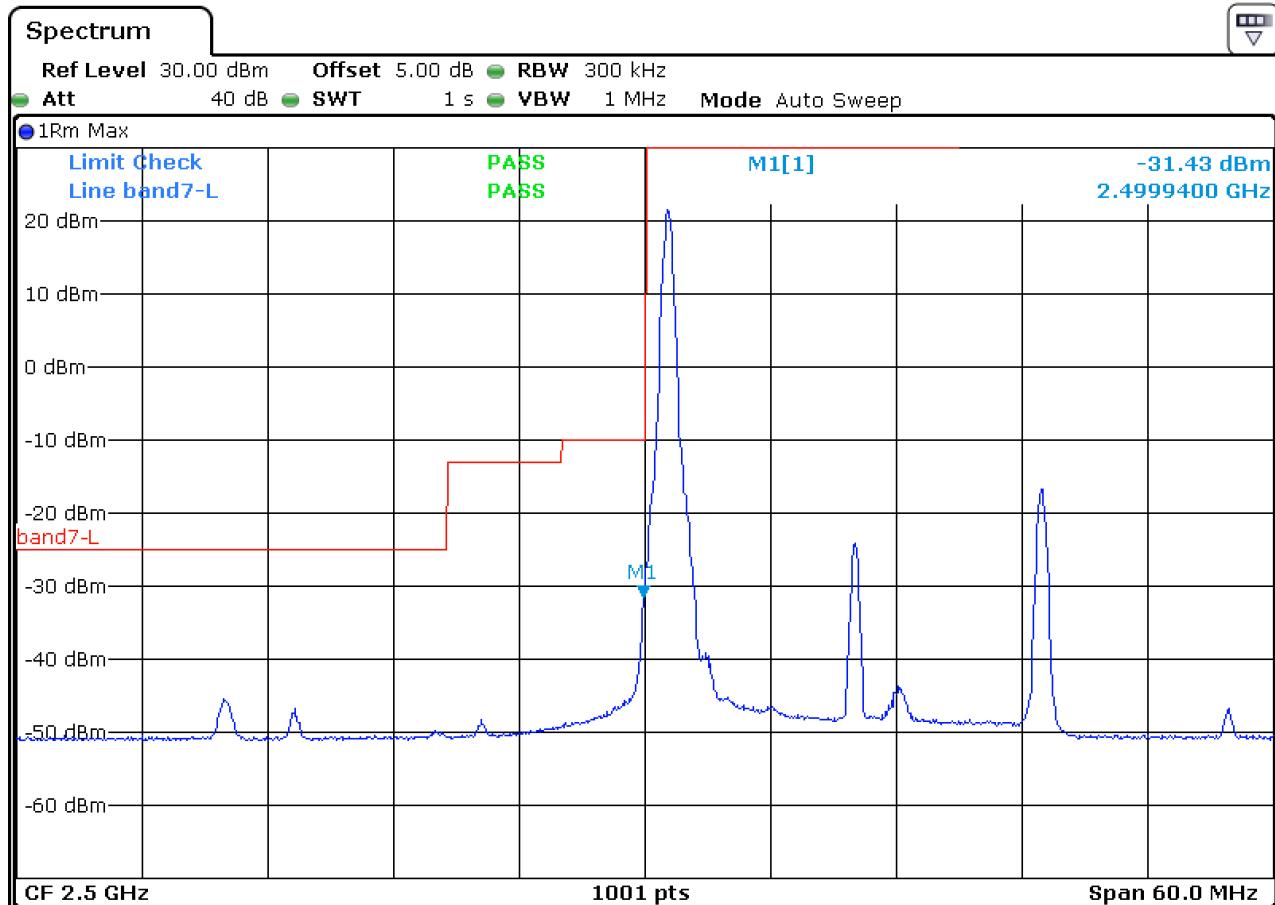


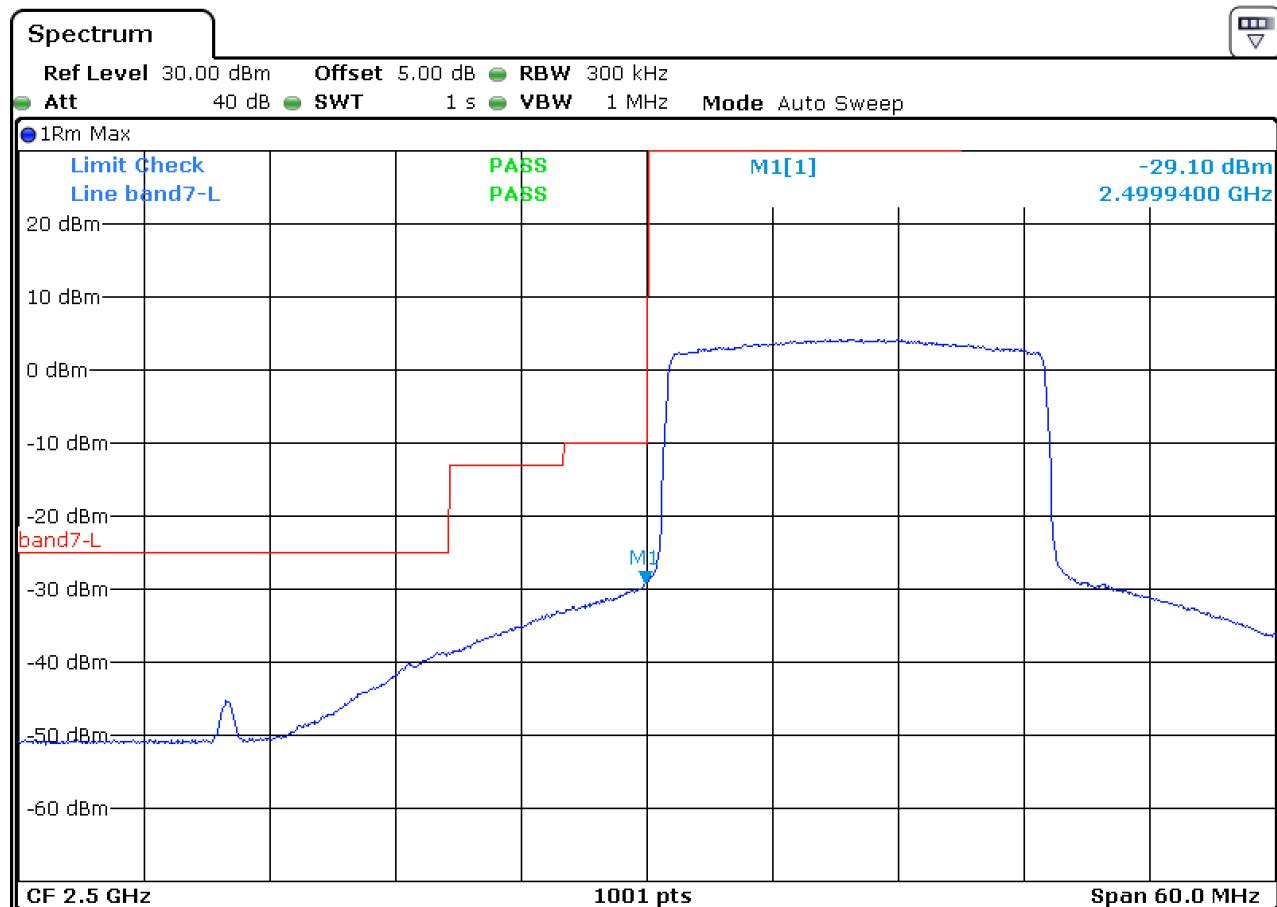
5.1.1.7.2.2 Test RB=100RB

5.1.1.8 Test Mode = LTE/TM2 20MHz

5.1.1.8.1 Test Channel = LCH

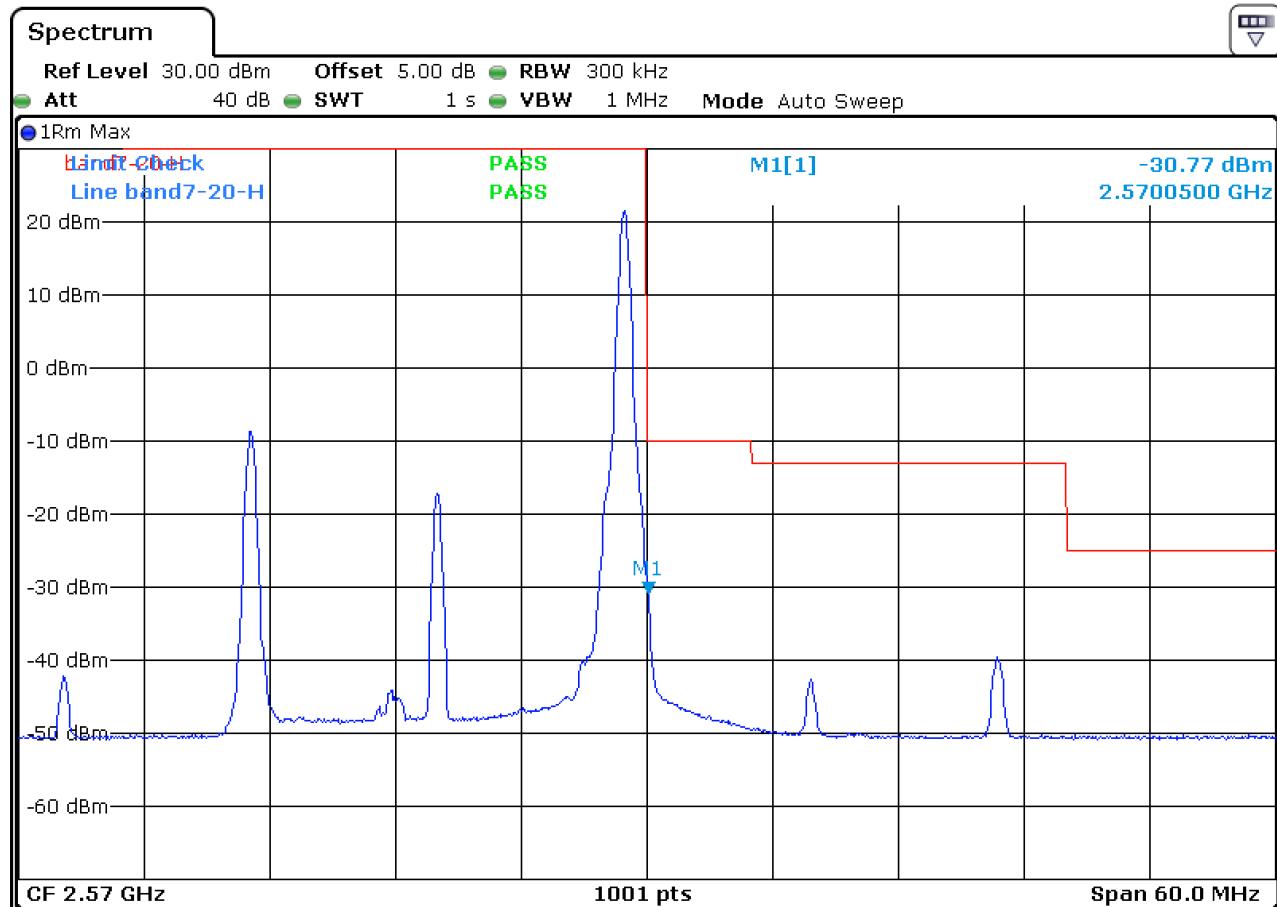
5.1.1.8.1.1 Test RB=1RB

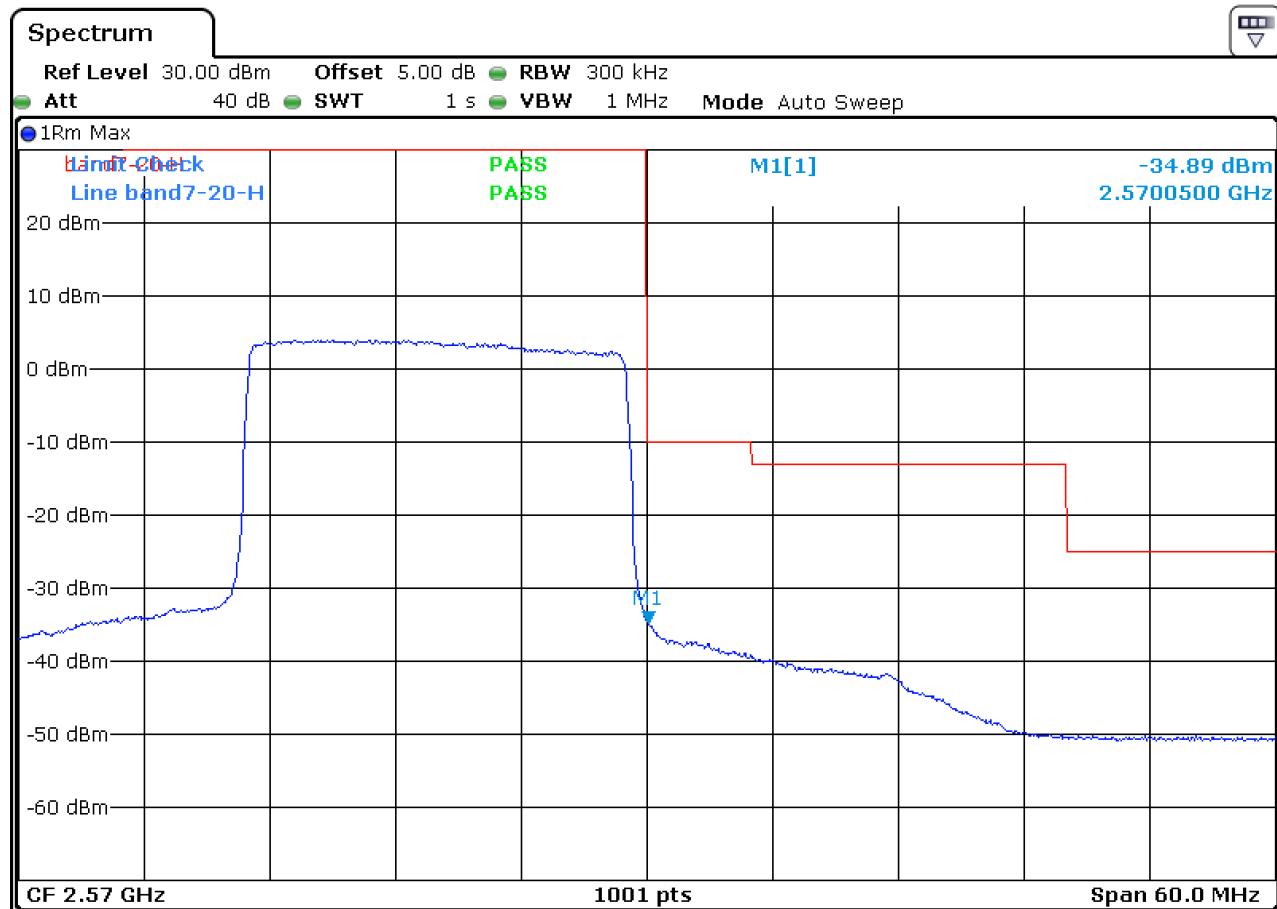


5.1.1.8.1.2 Test RB=100RB

5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



5.1.1.8.2.2 Test RB=100RB

6 Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / \text{RBW})$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

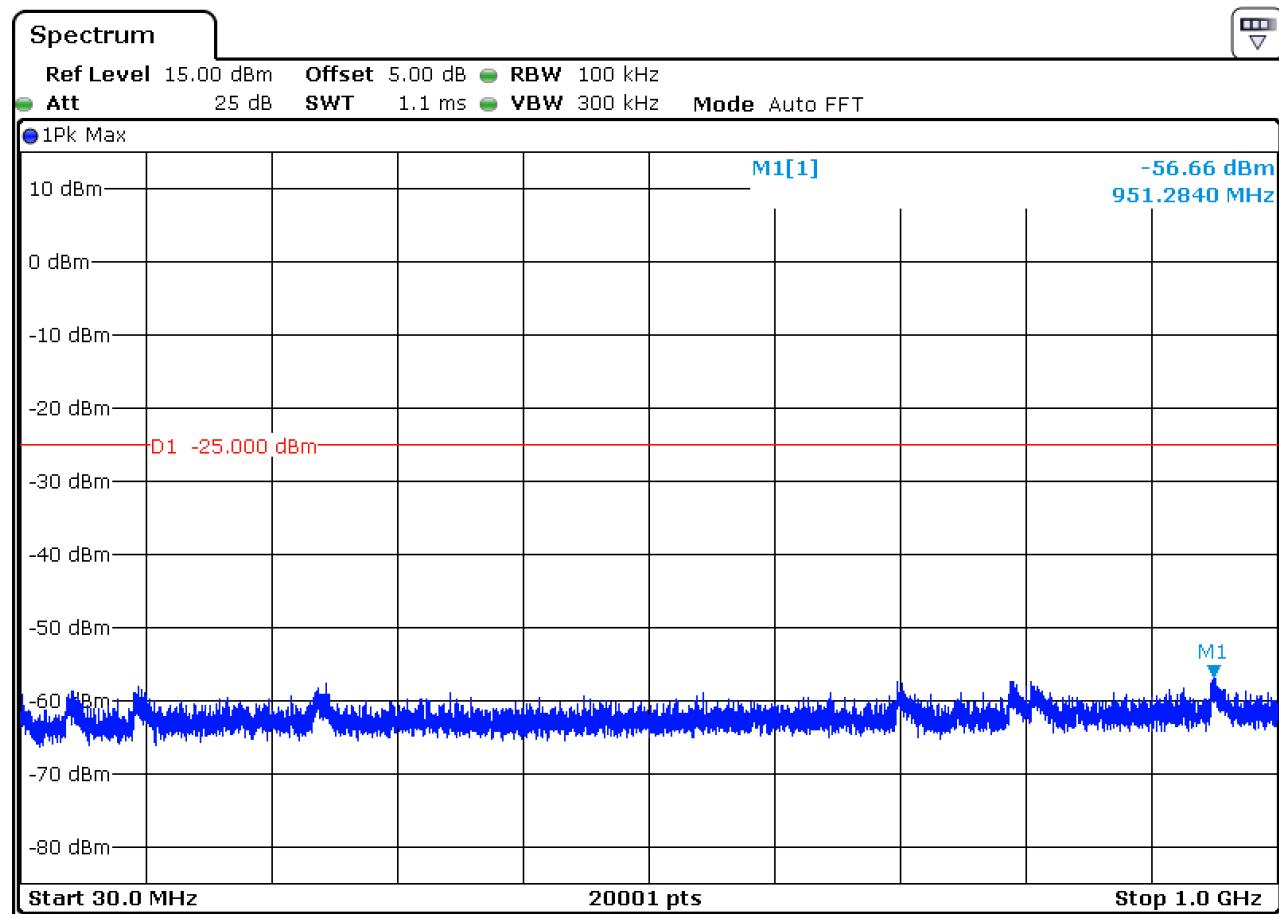
Part I - Test Plots

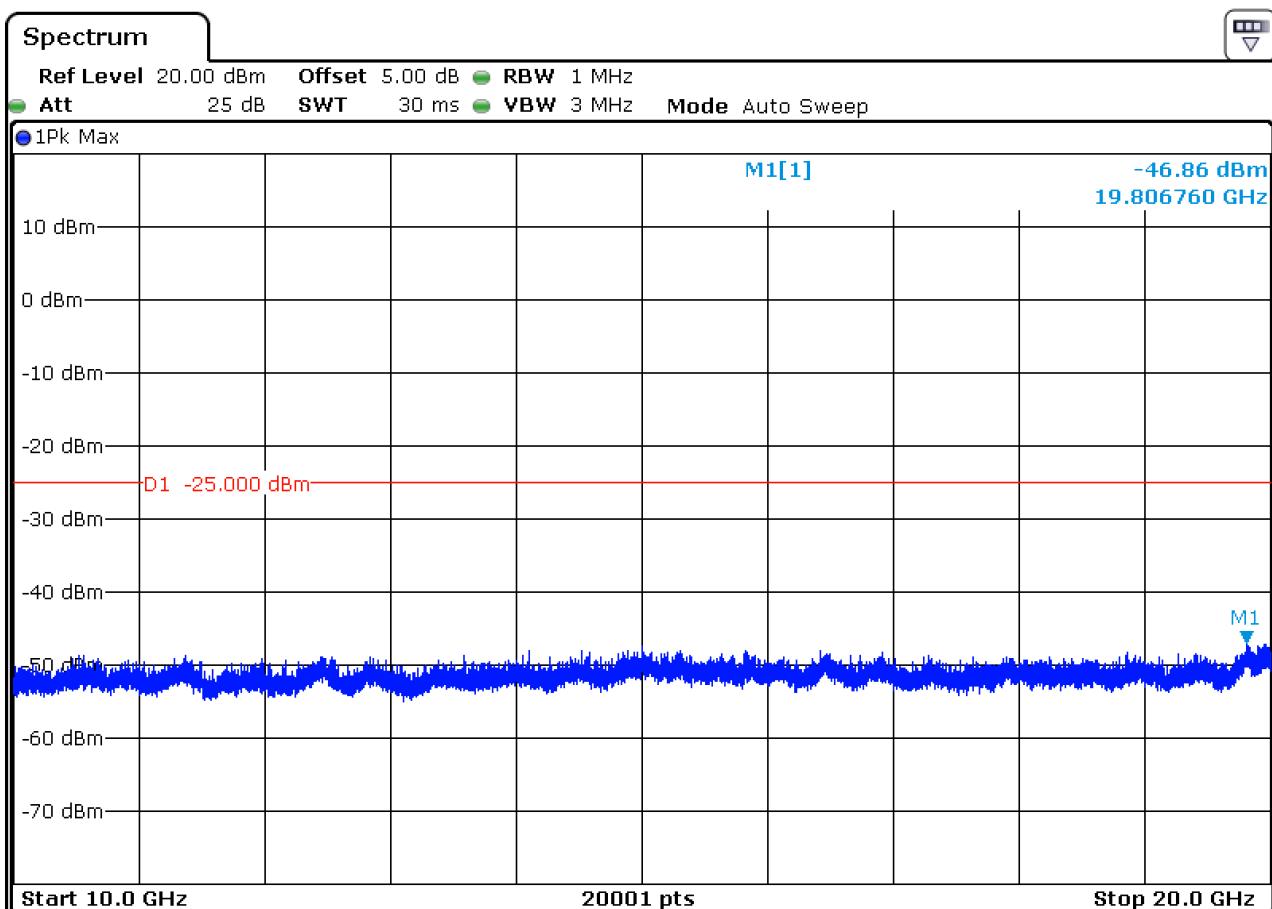
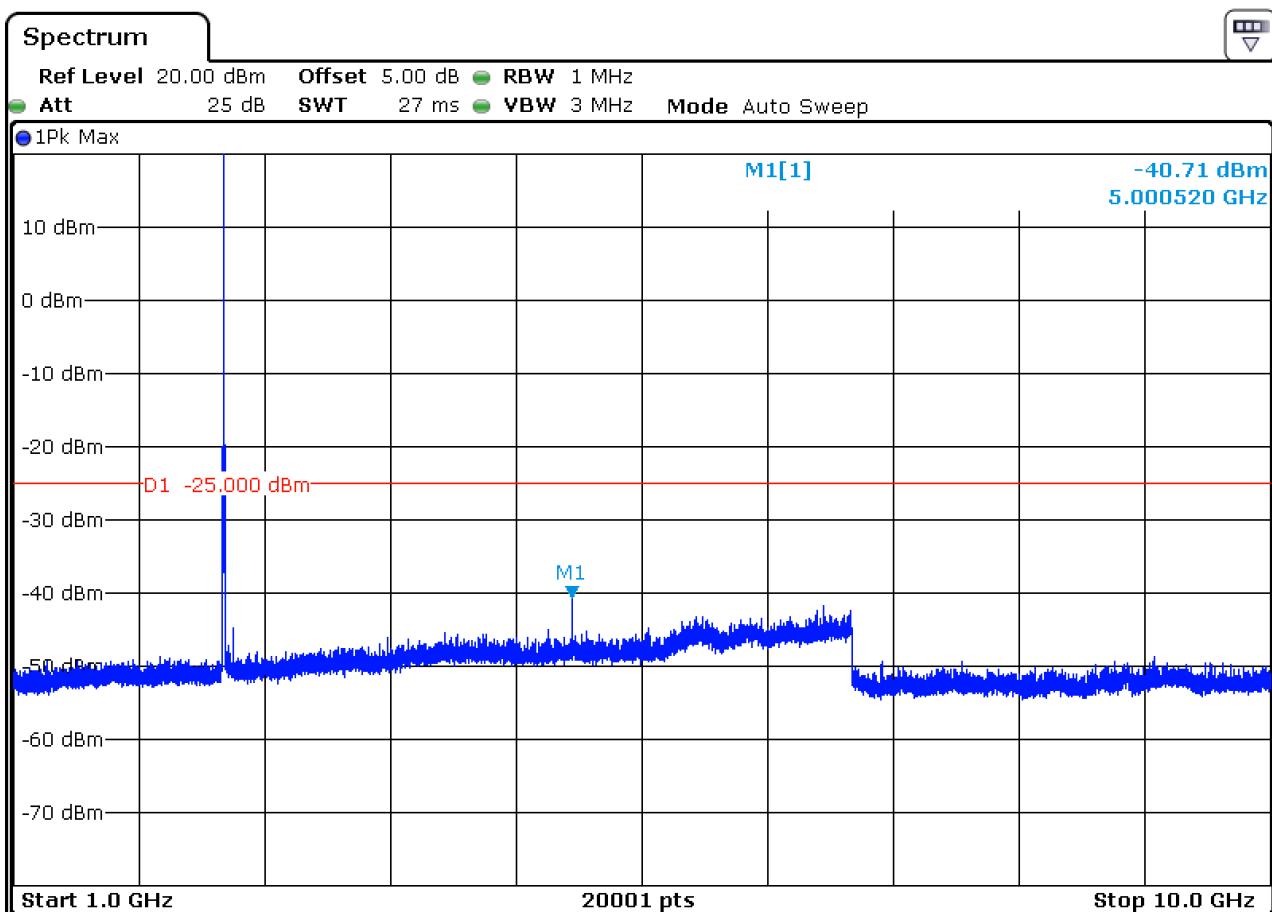
6.1 For LTE

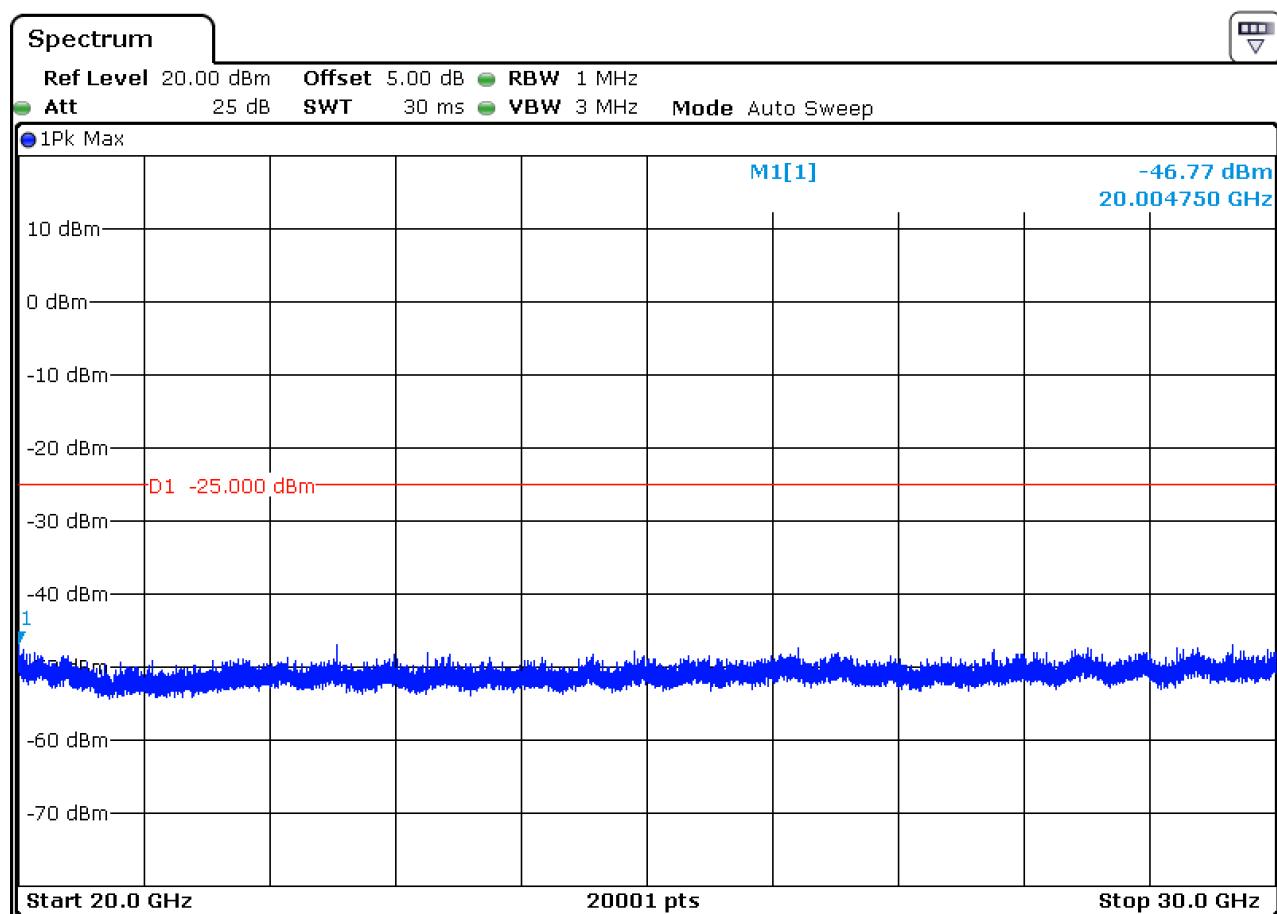
6.1.1 Test Band = LTE band7

6.1.1.1 Test Mode = LTE / TM1 5MHz RB1#0

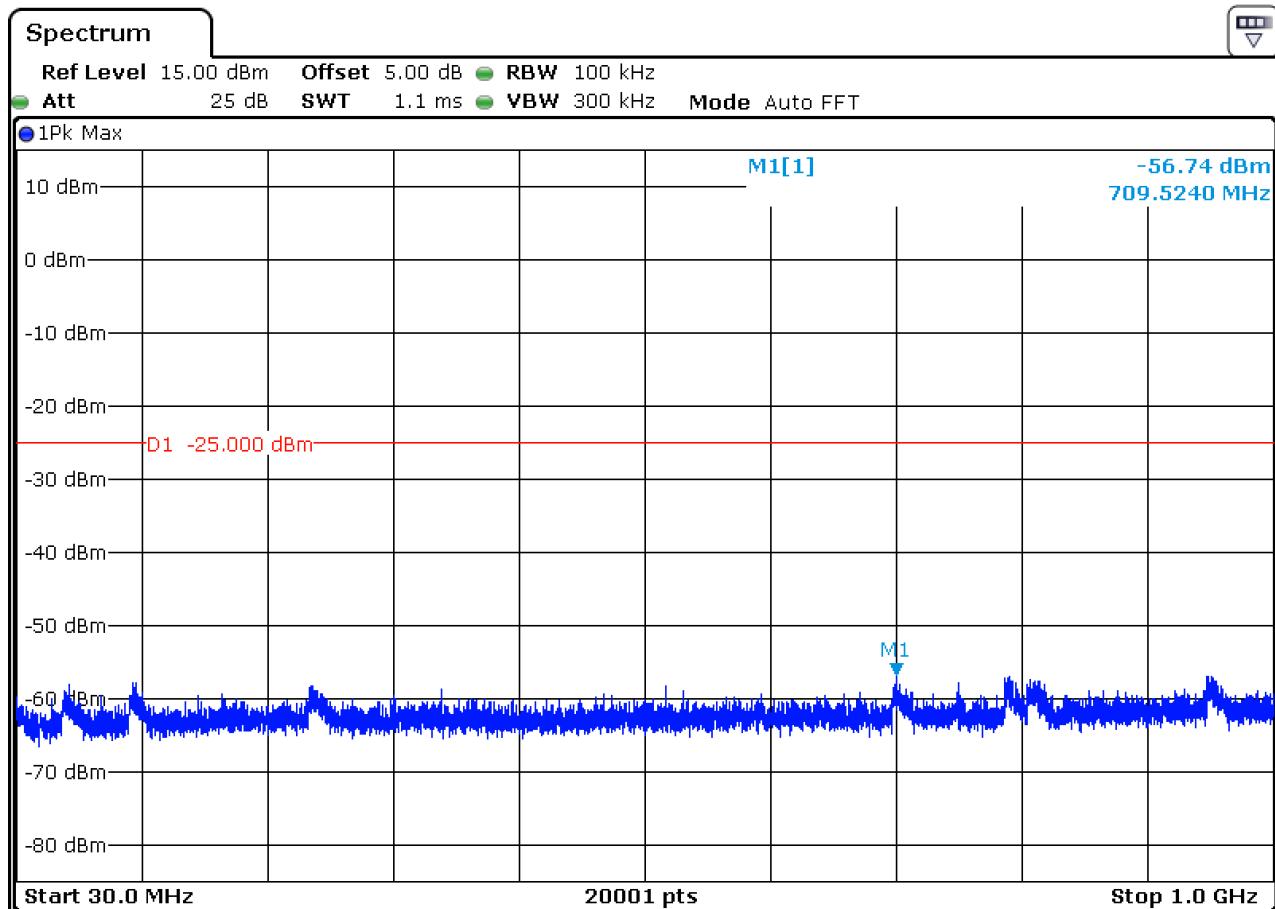
6.1.1.1.1 Test Channel = LCH

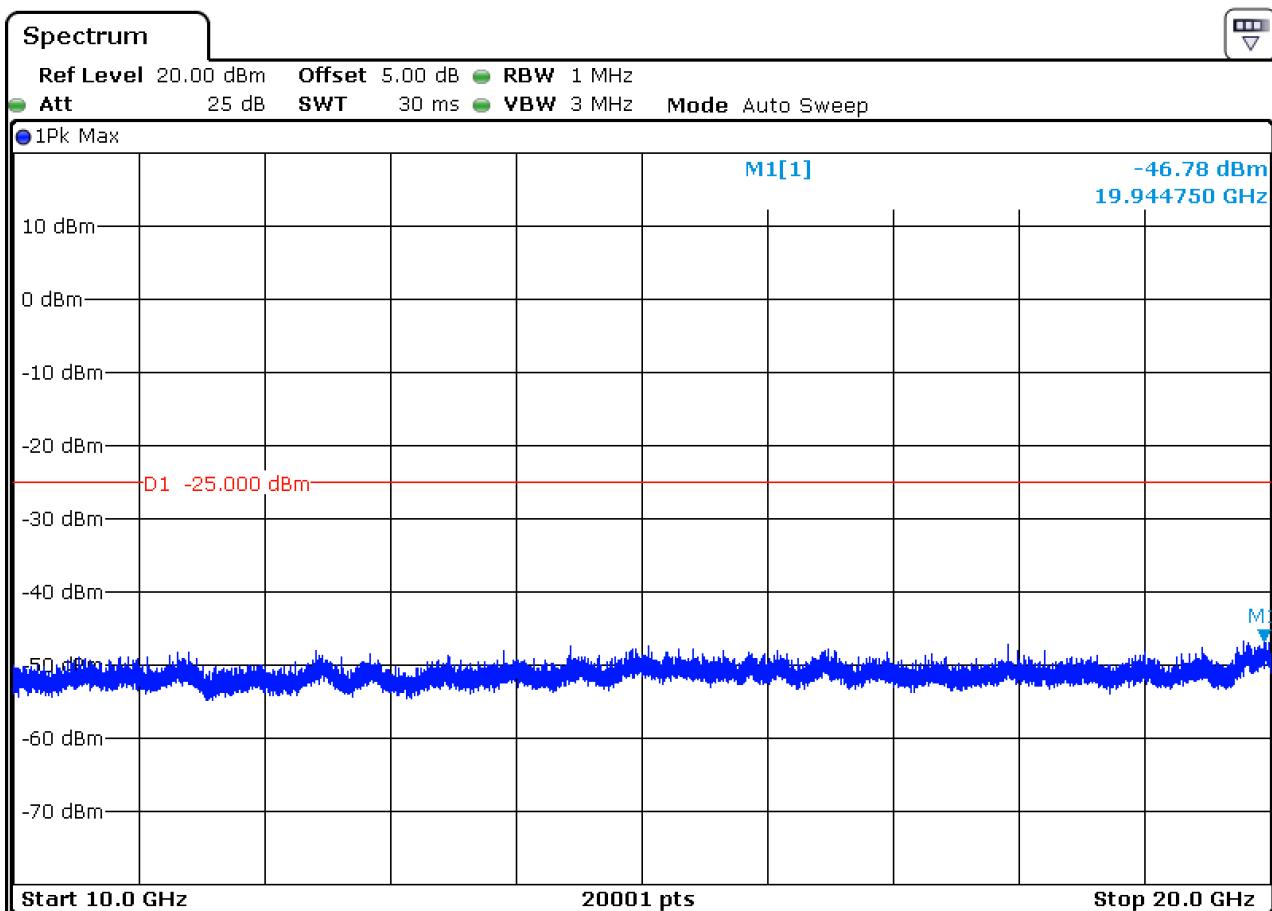
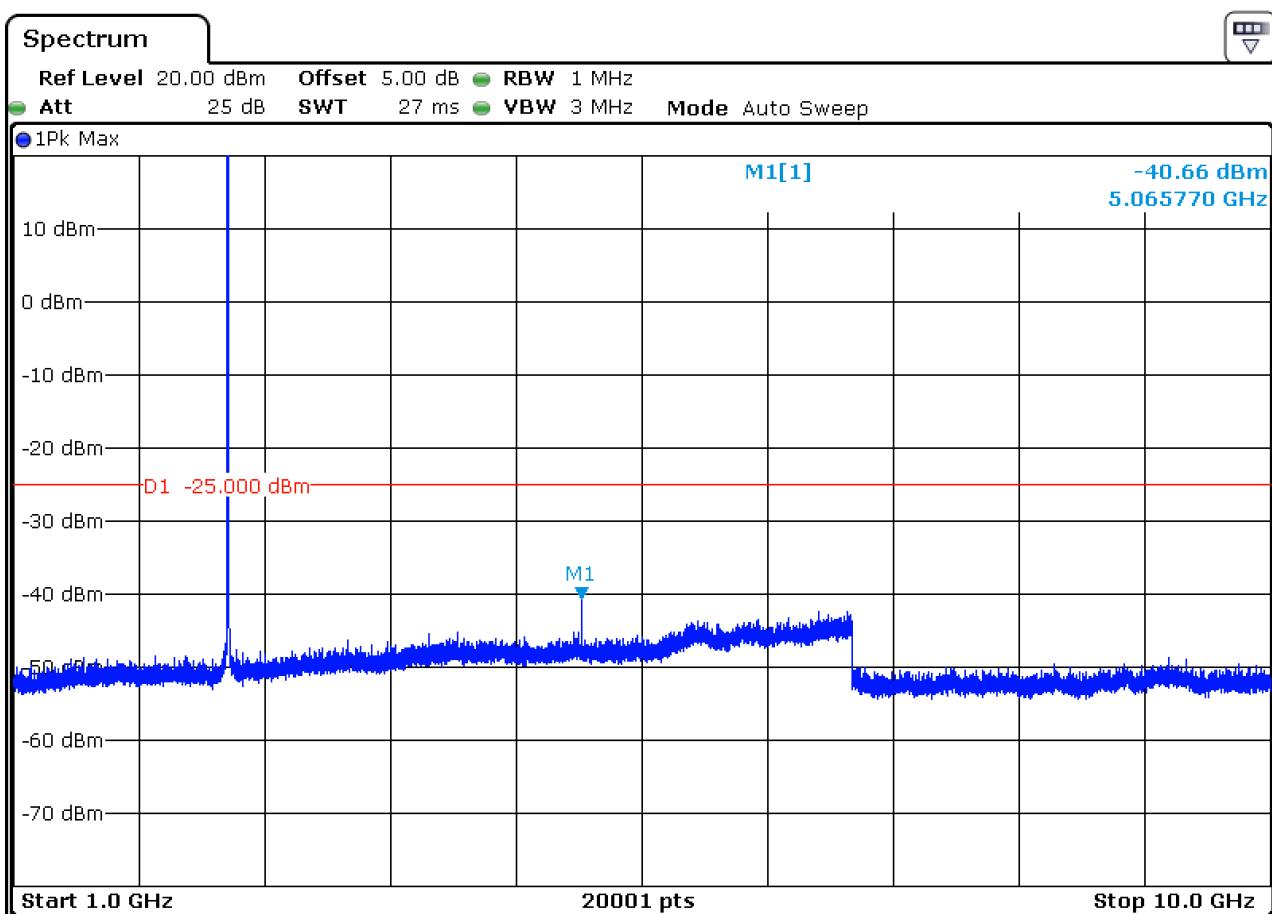


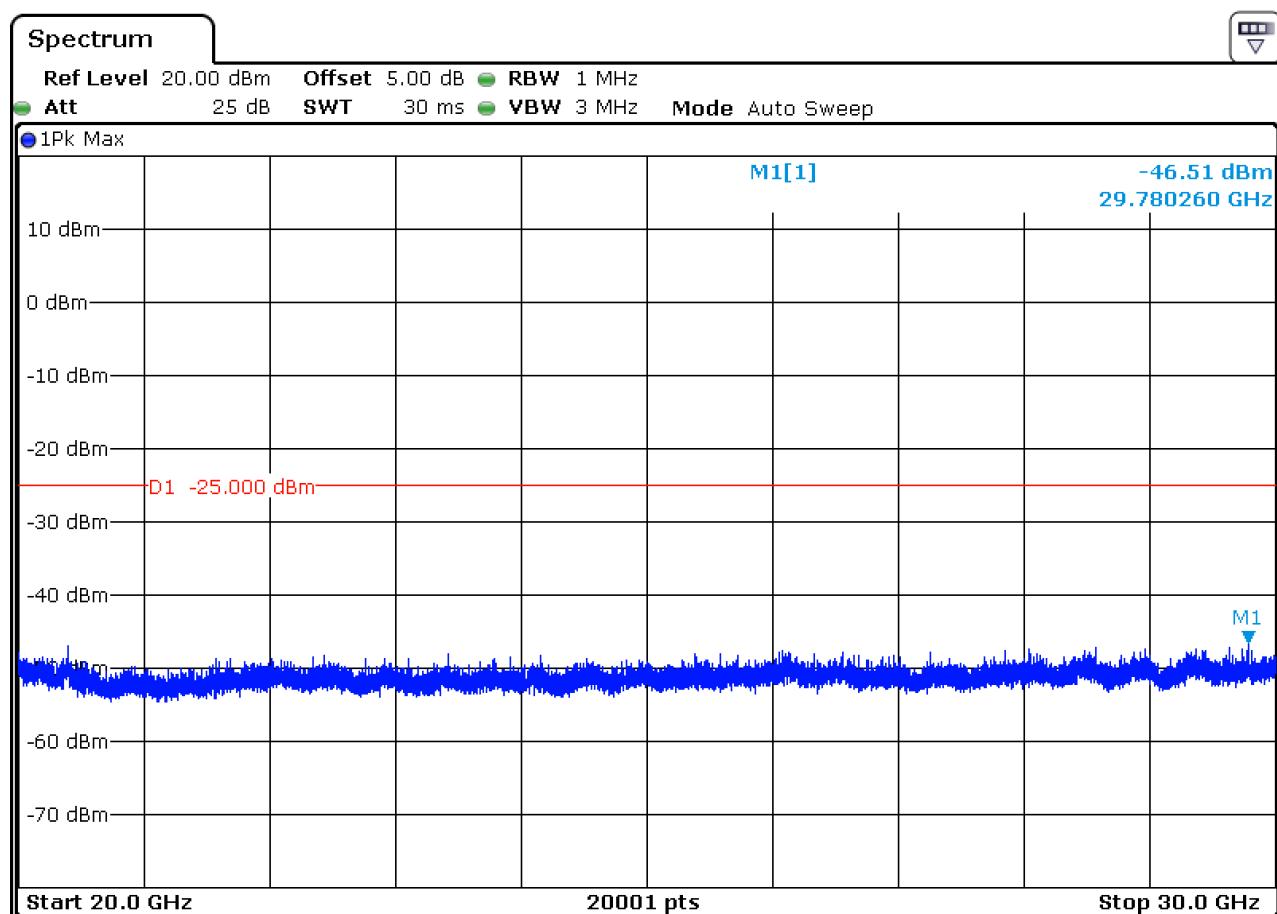




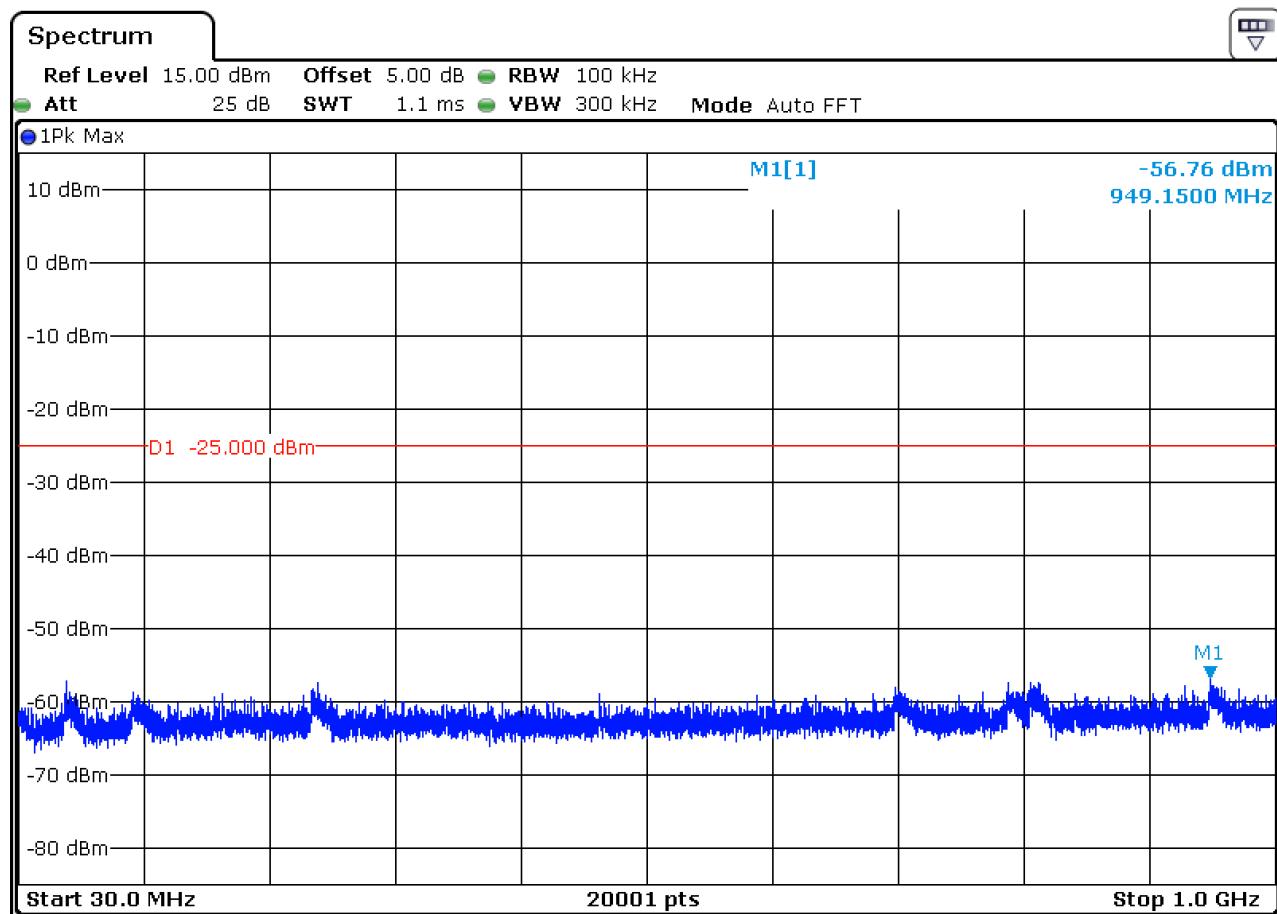
6.1.1.1.2 Test Channel = MCH

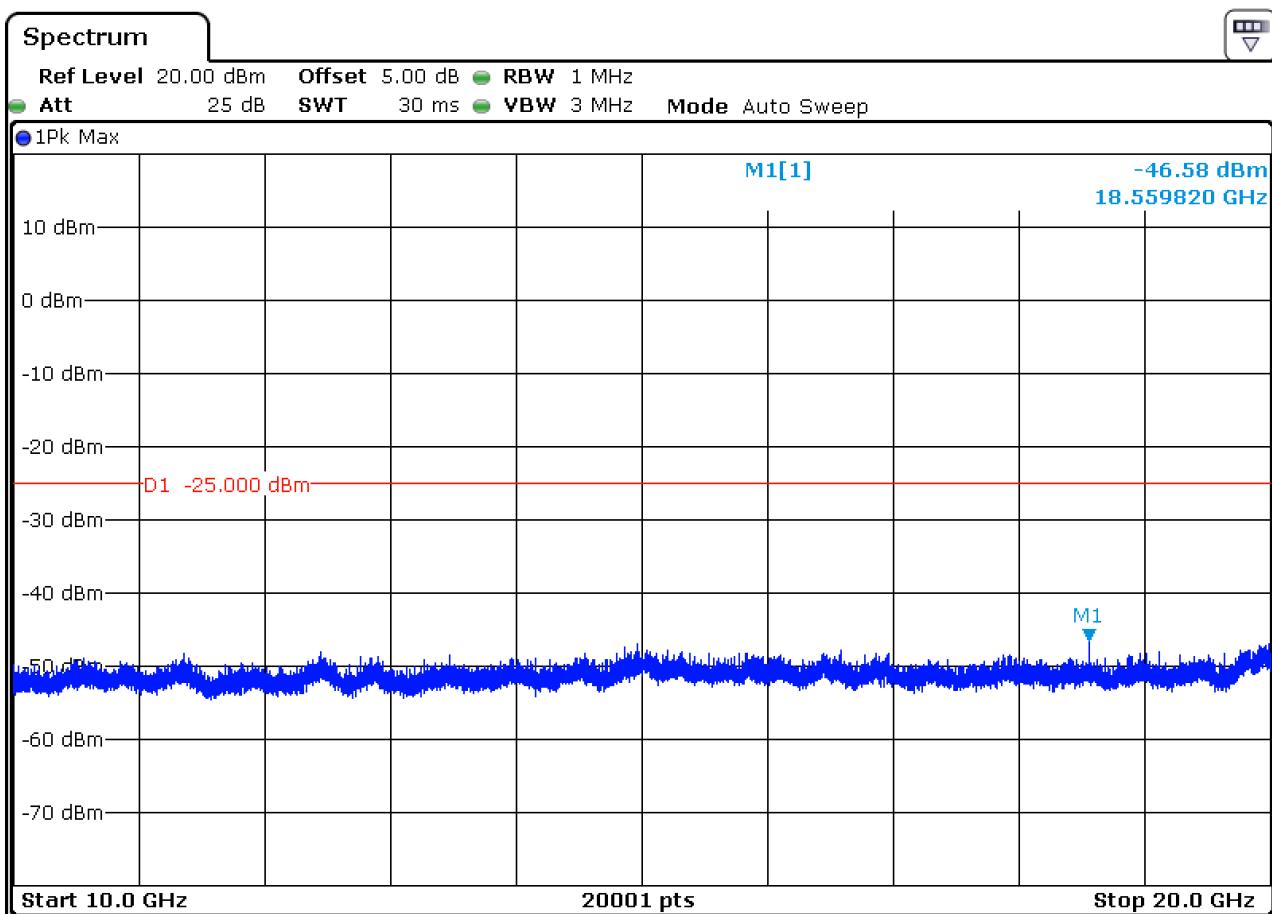
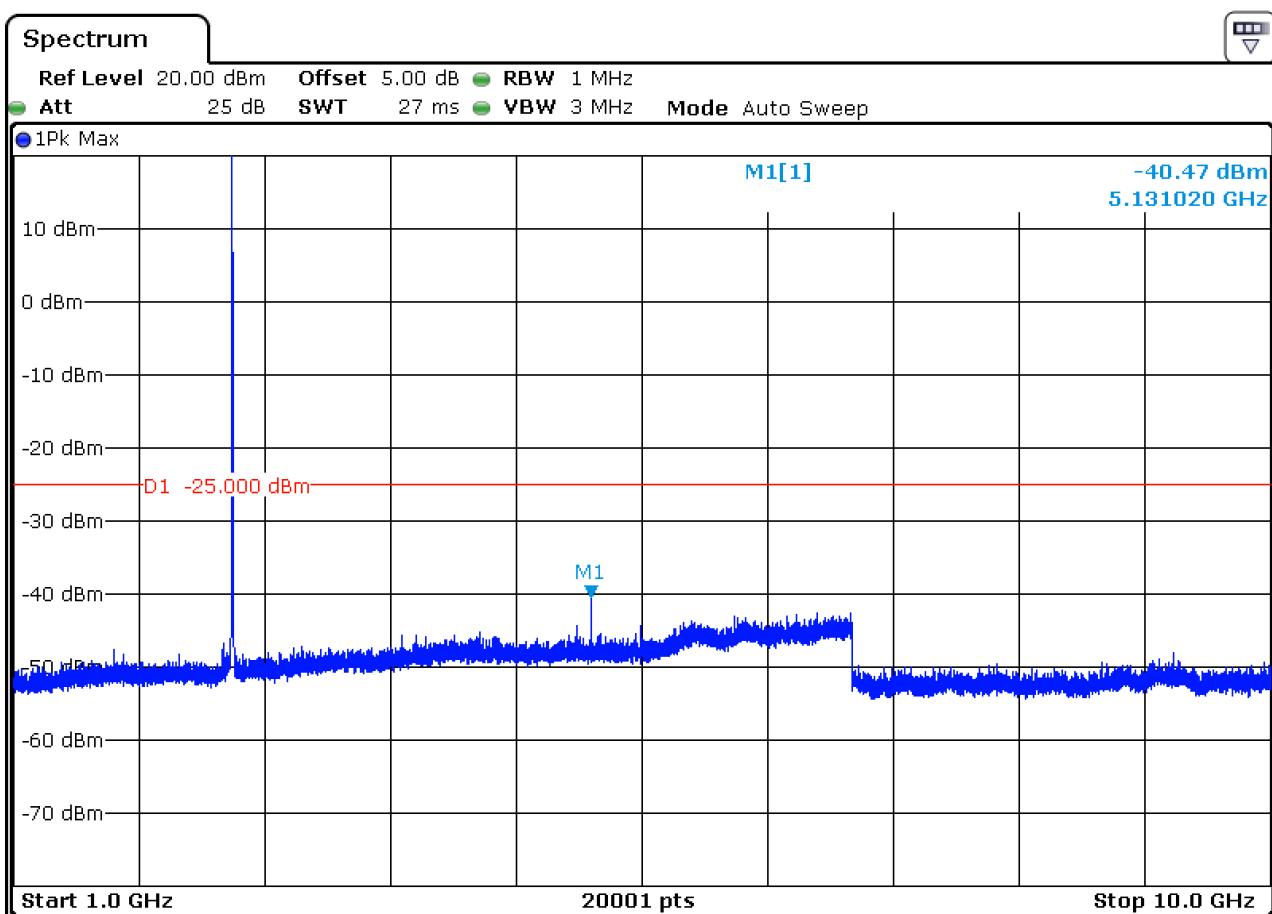


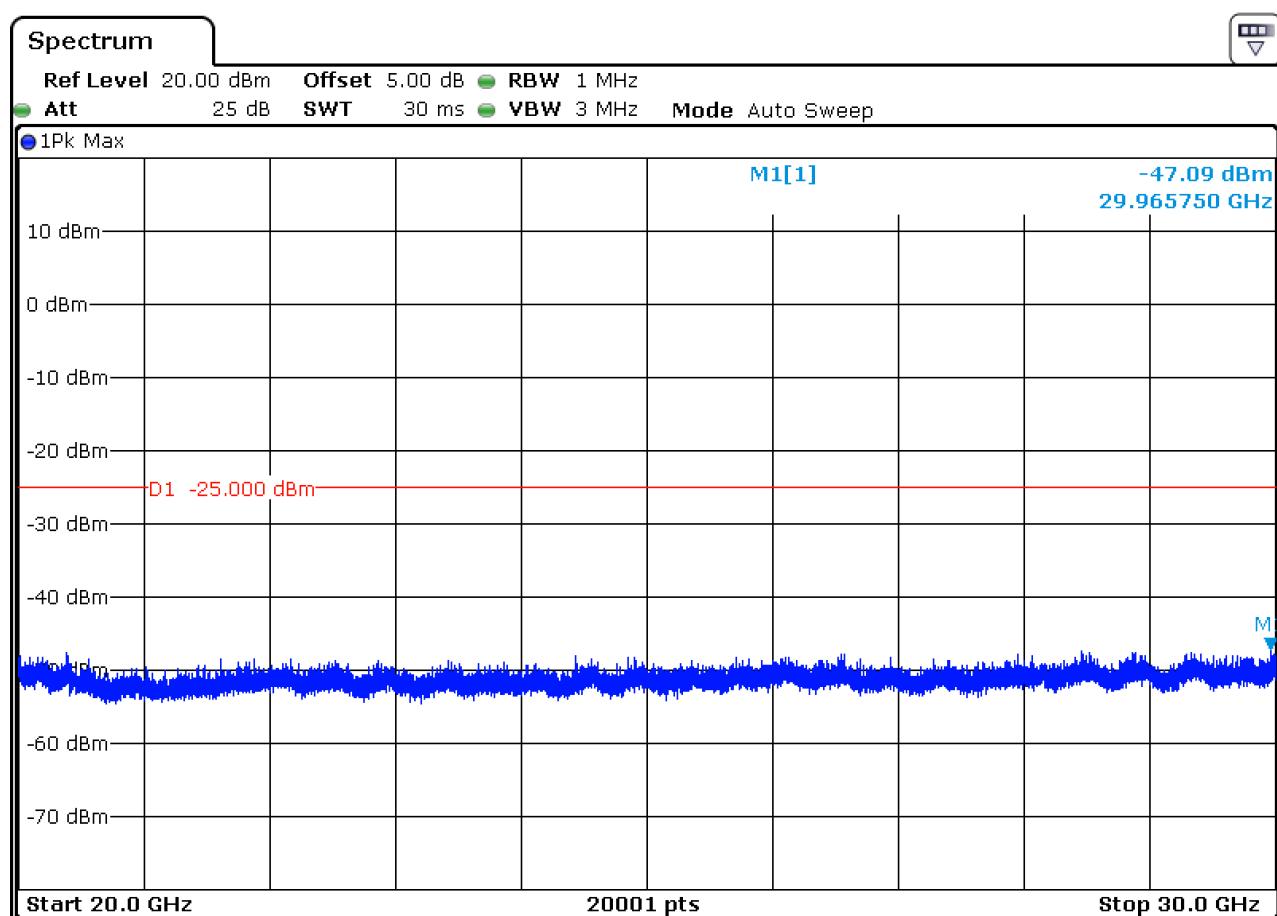


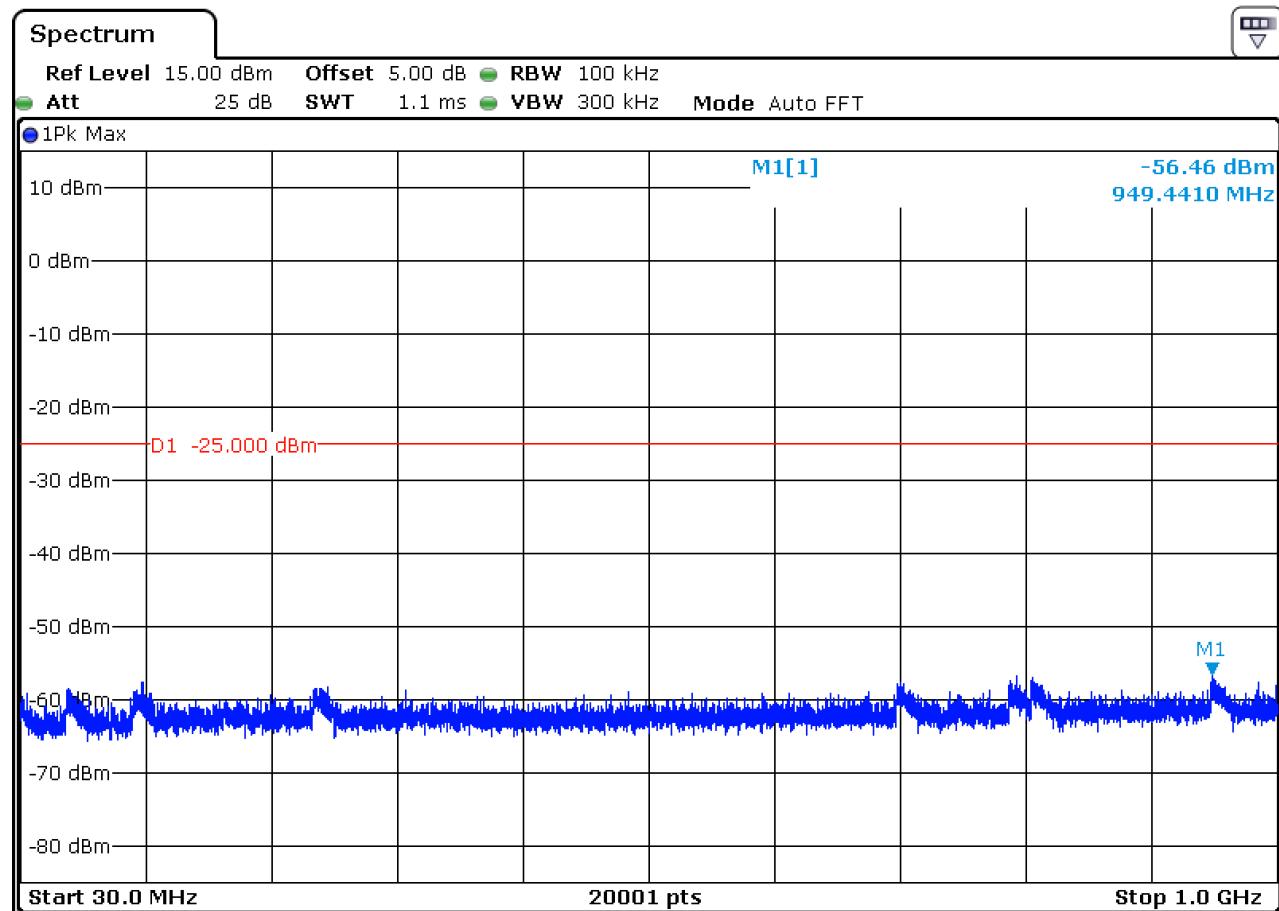


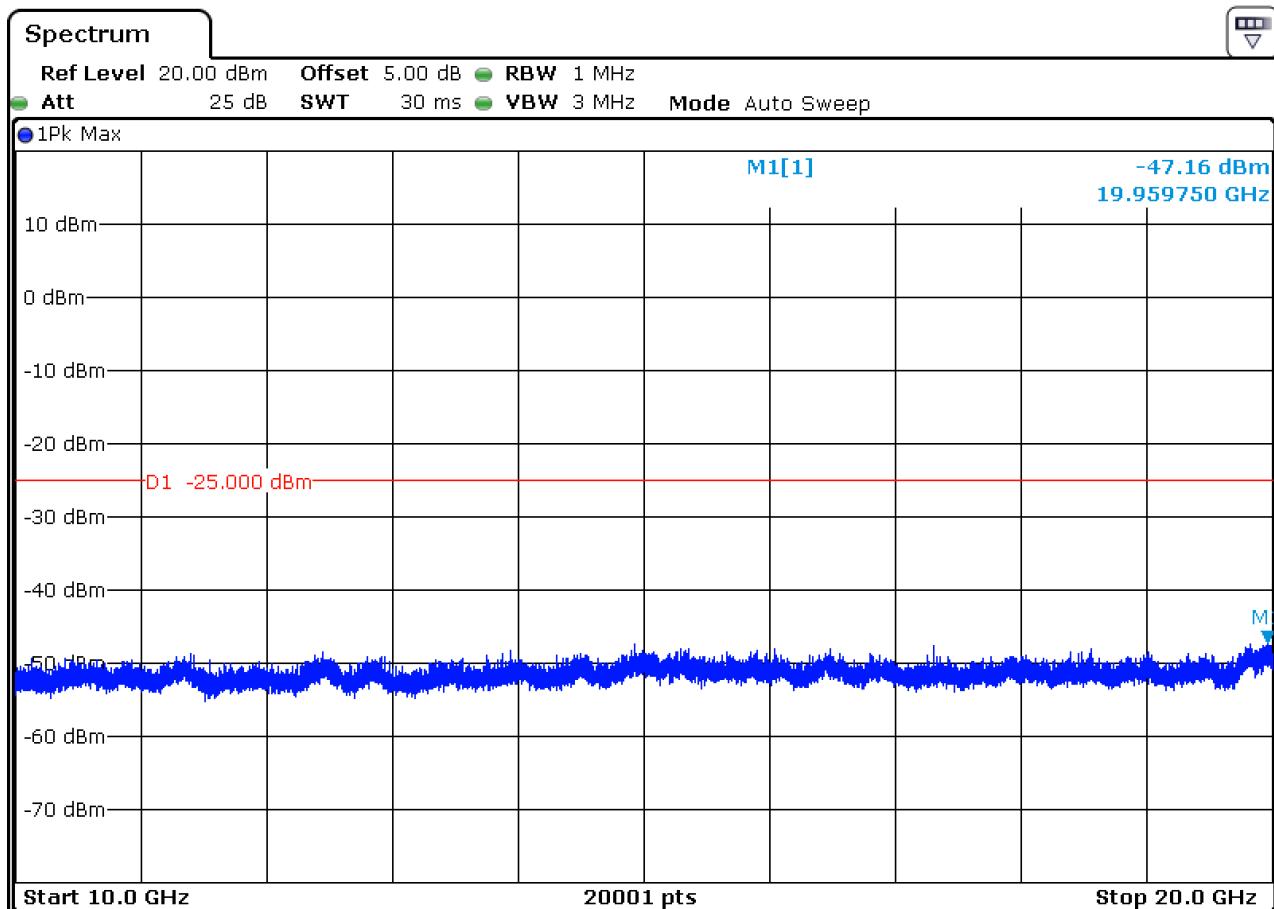
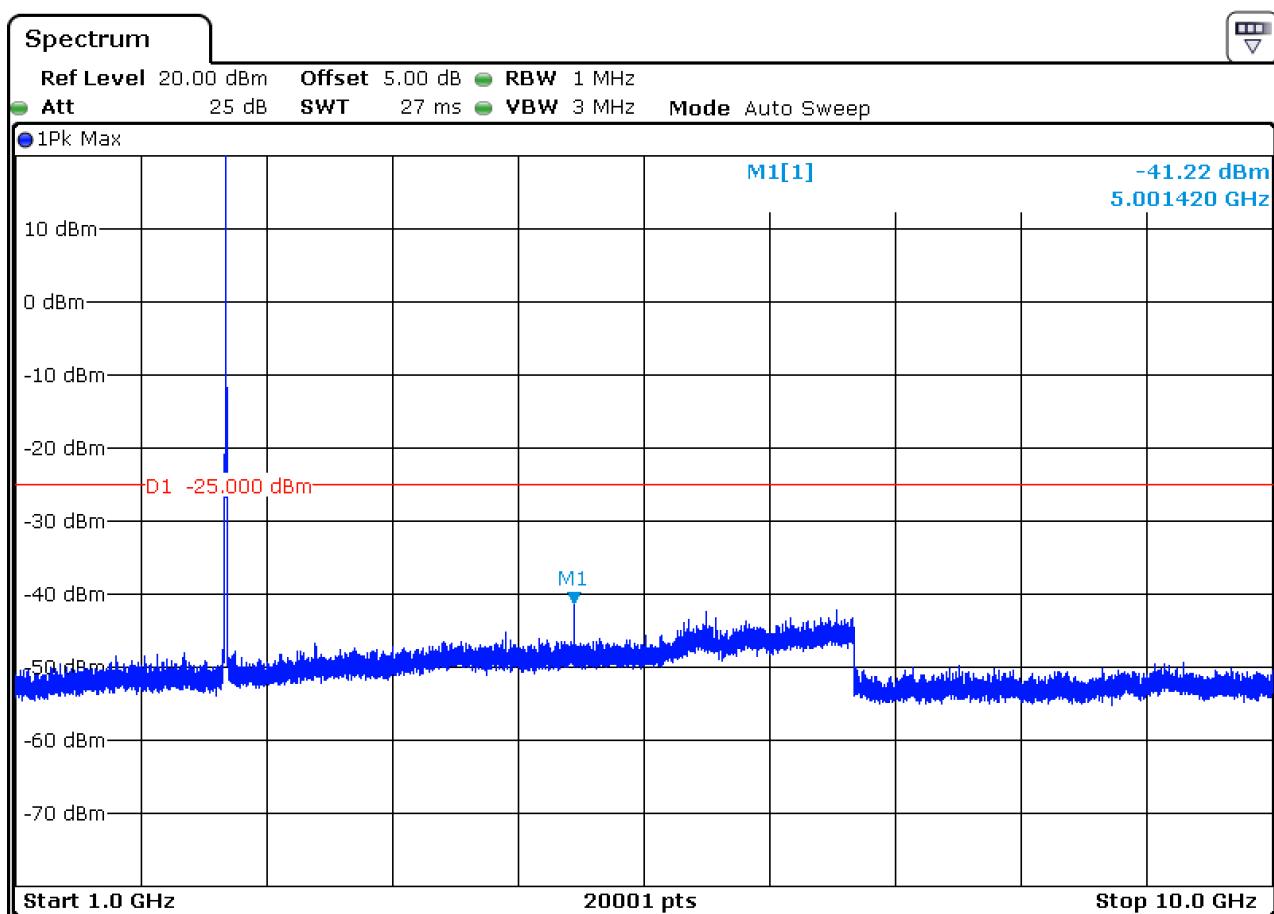
6.1.1.1.3 Test Channel = HCH

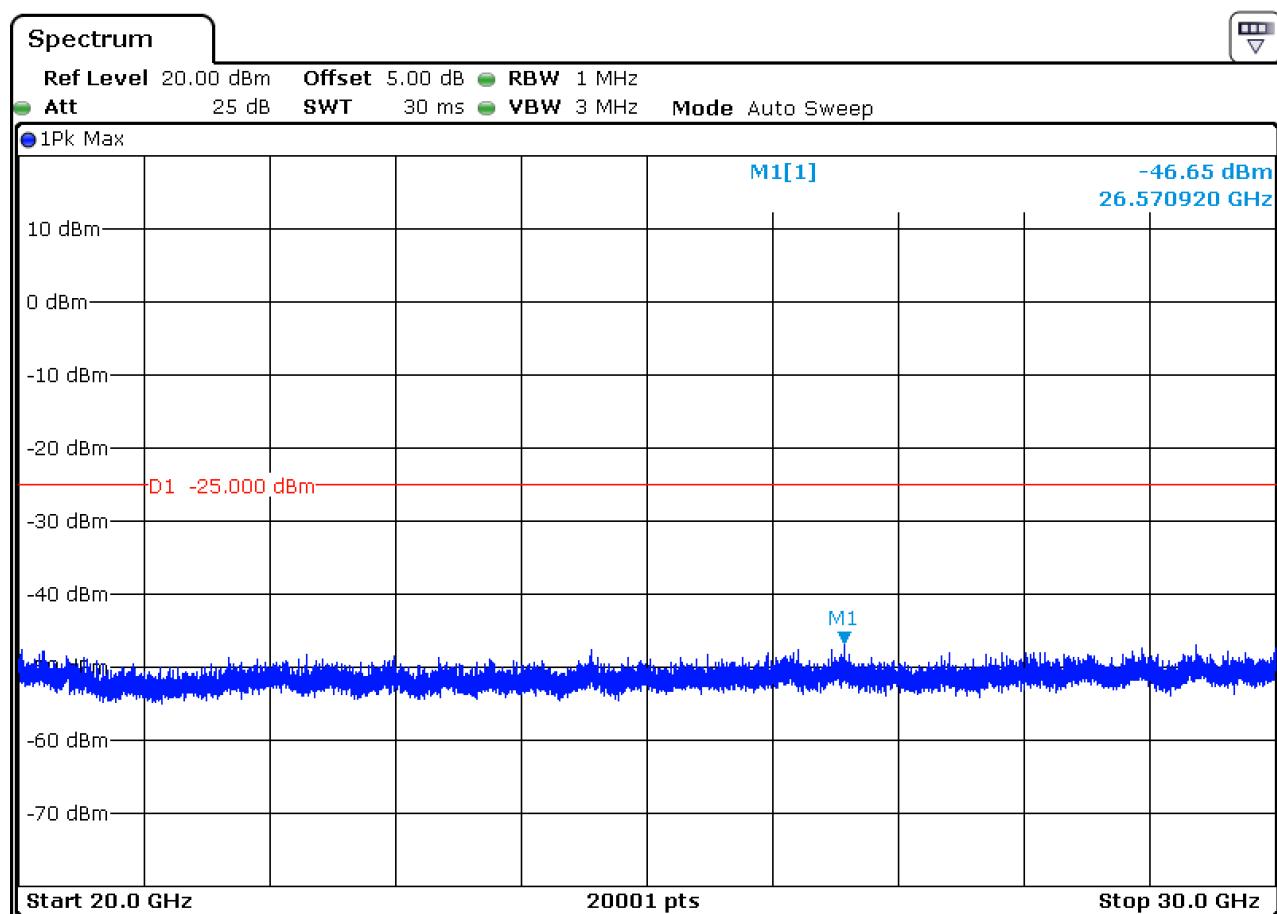




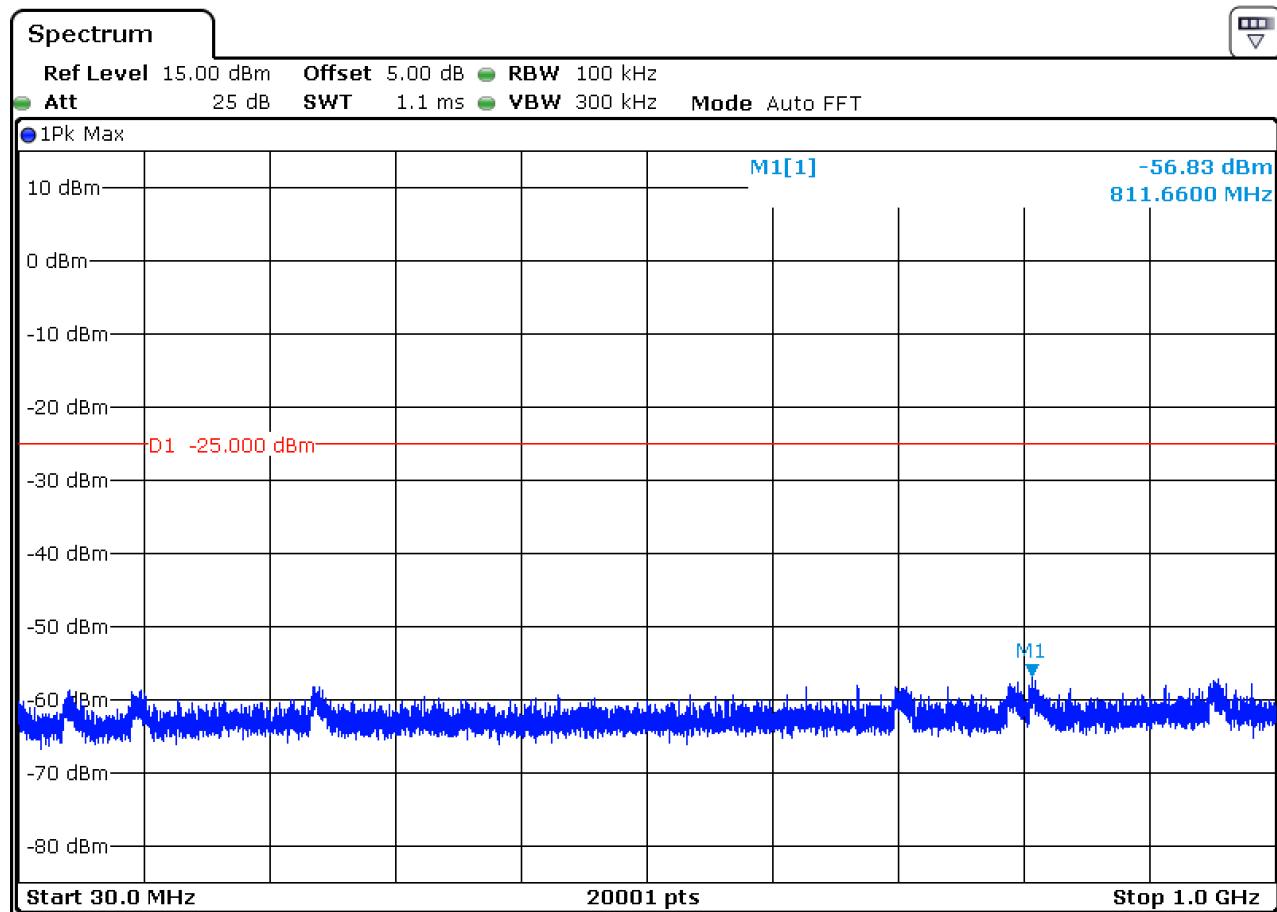


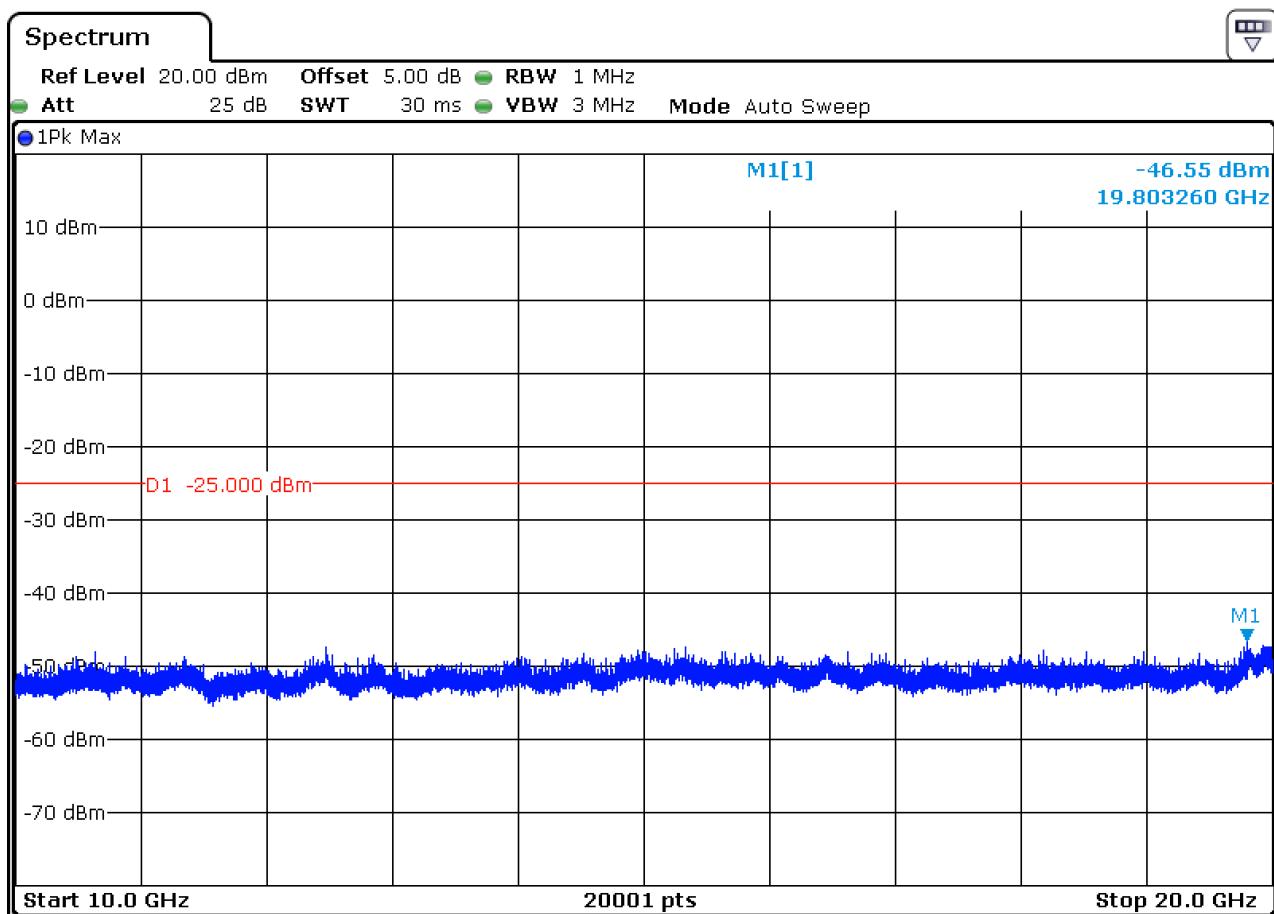
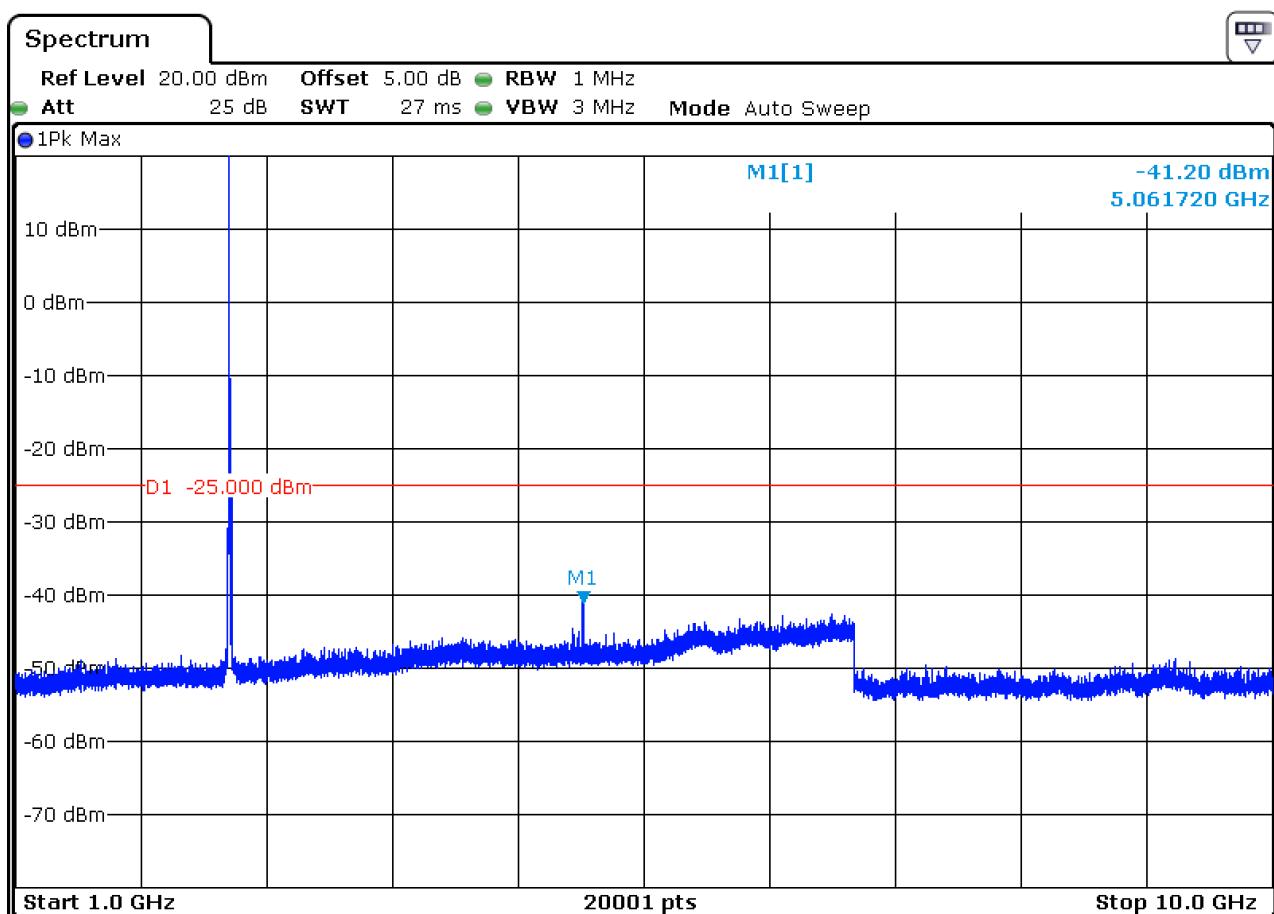
6.1.1.2 Test Mode = LTE / TM1 10MHz RB1#0**6.1.1.2.1 Test Channel = LCH**

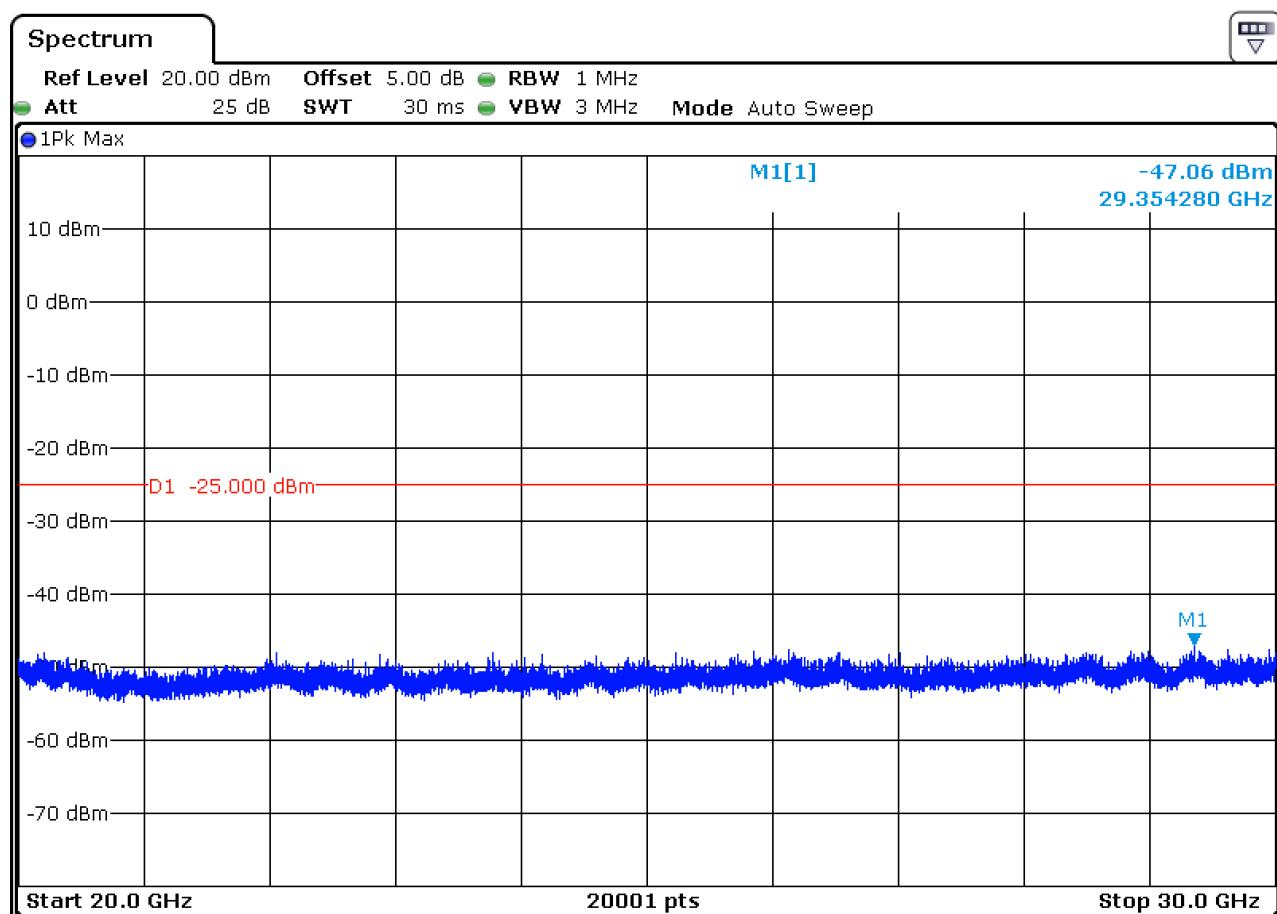




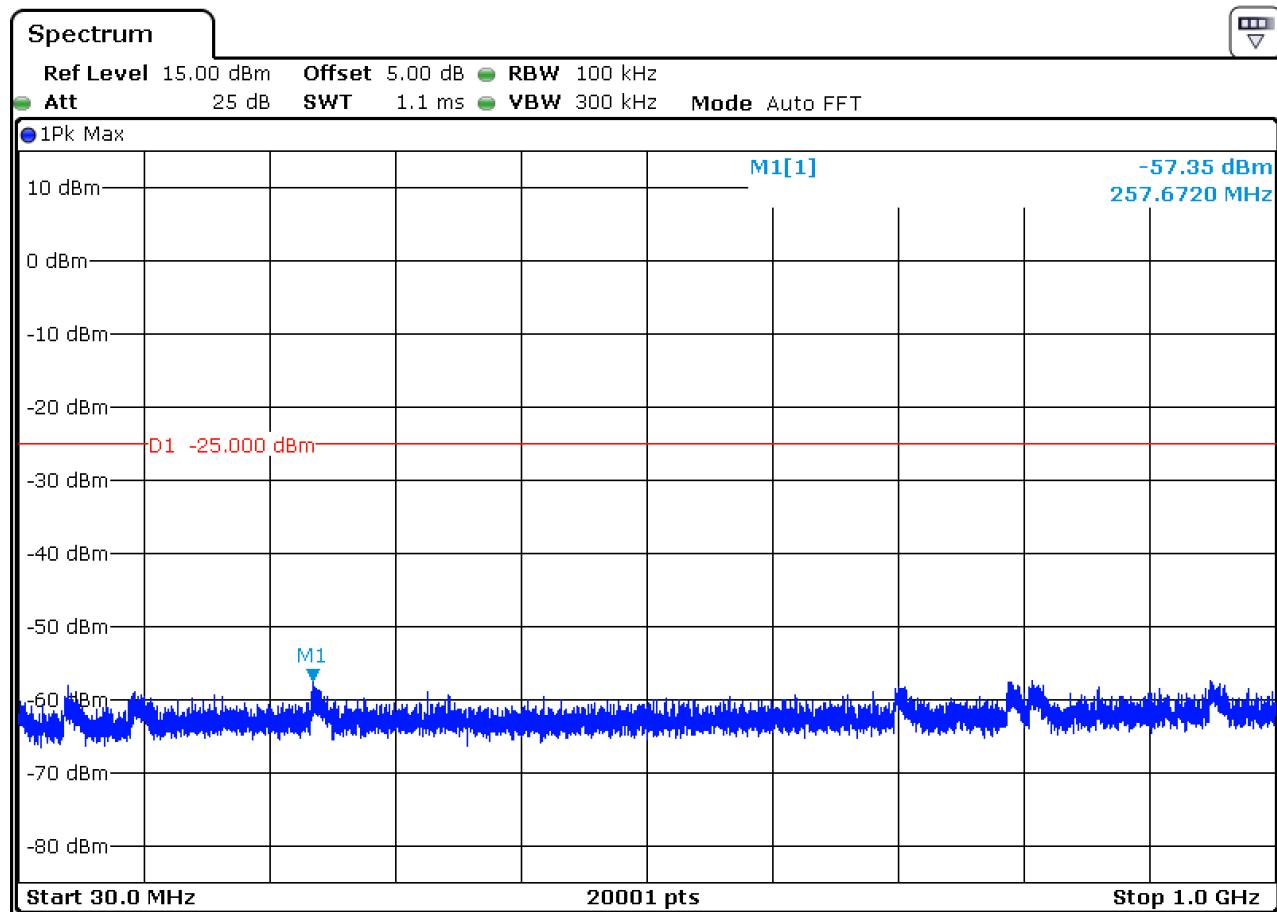
6.1.1.2.2 Test Channel = MCH

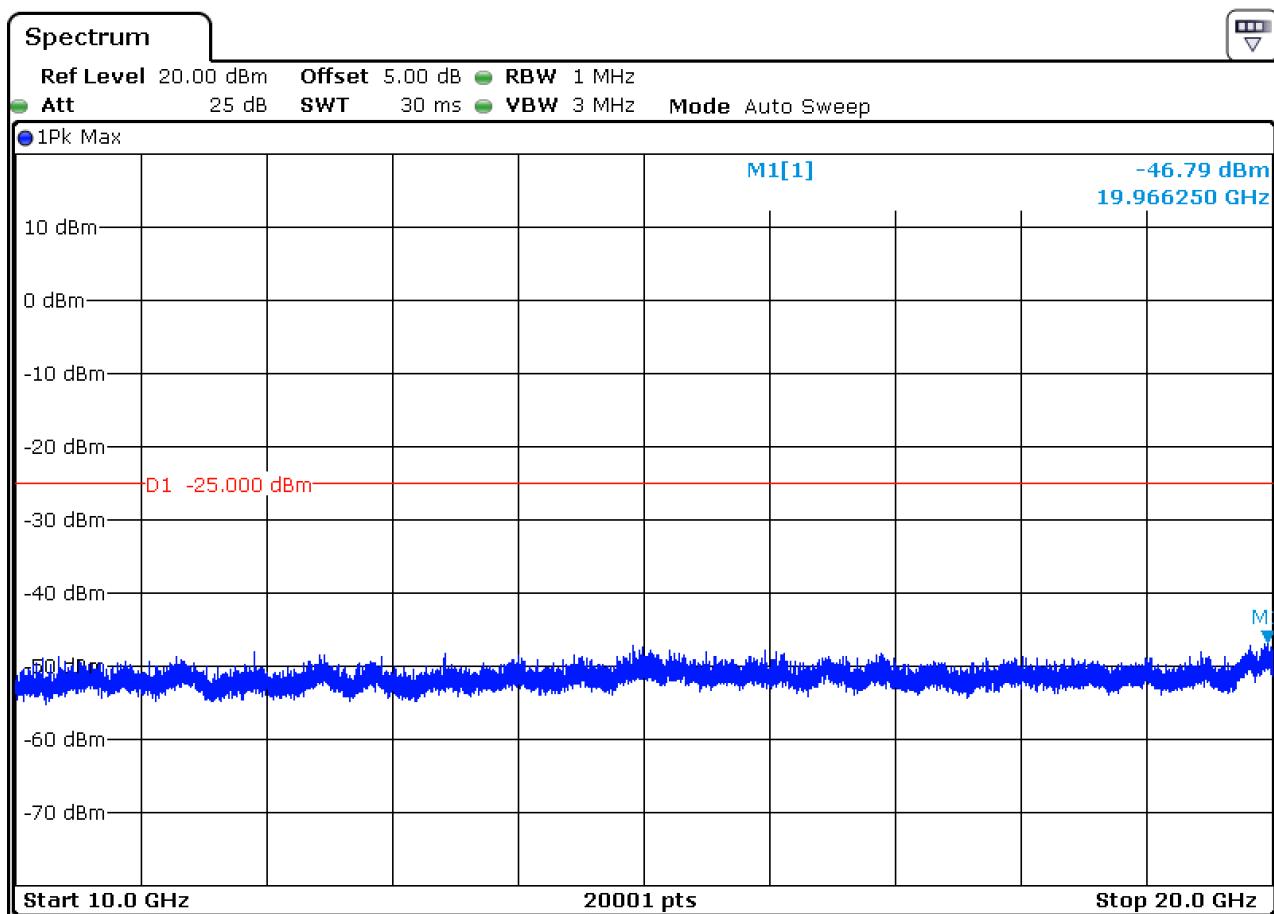
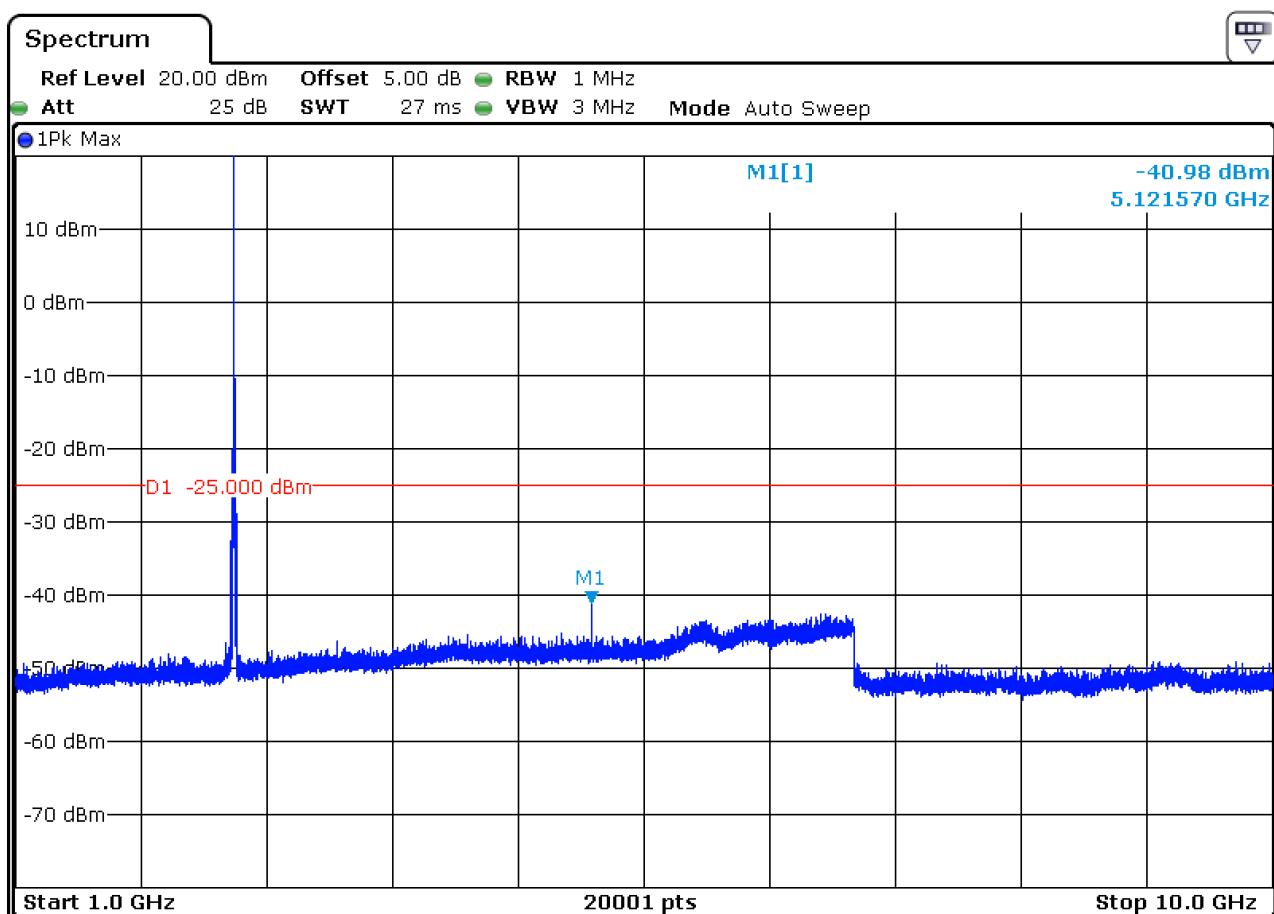


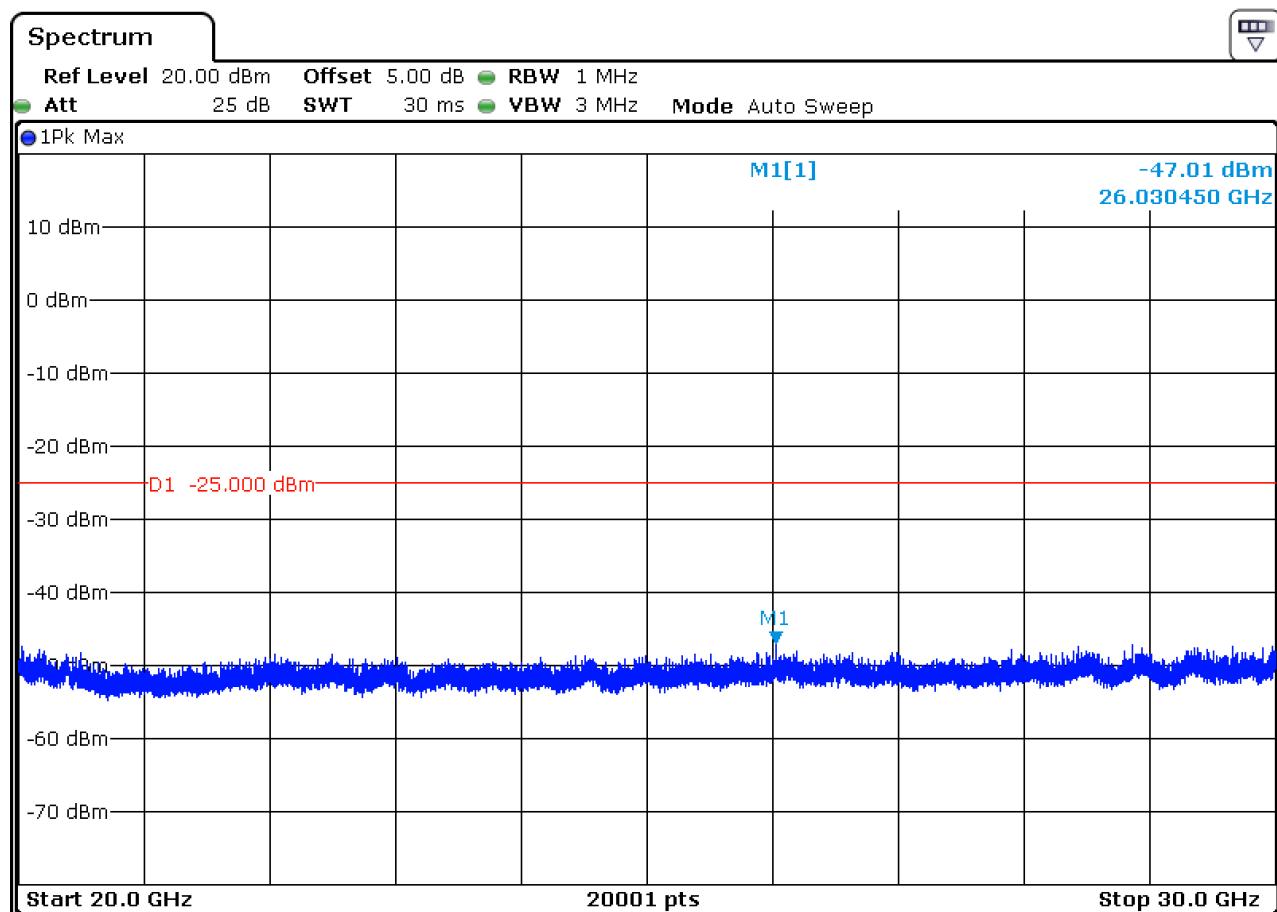




6.1.1.2.3 Test Channel = HCH

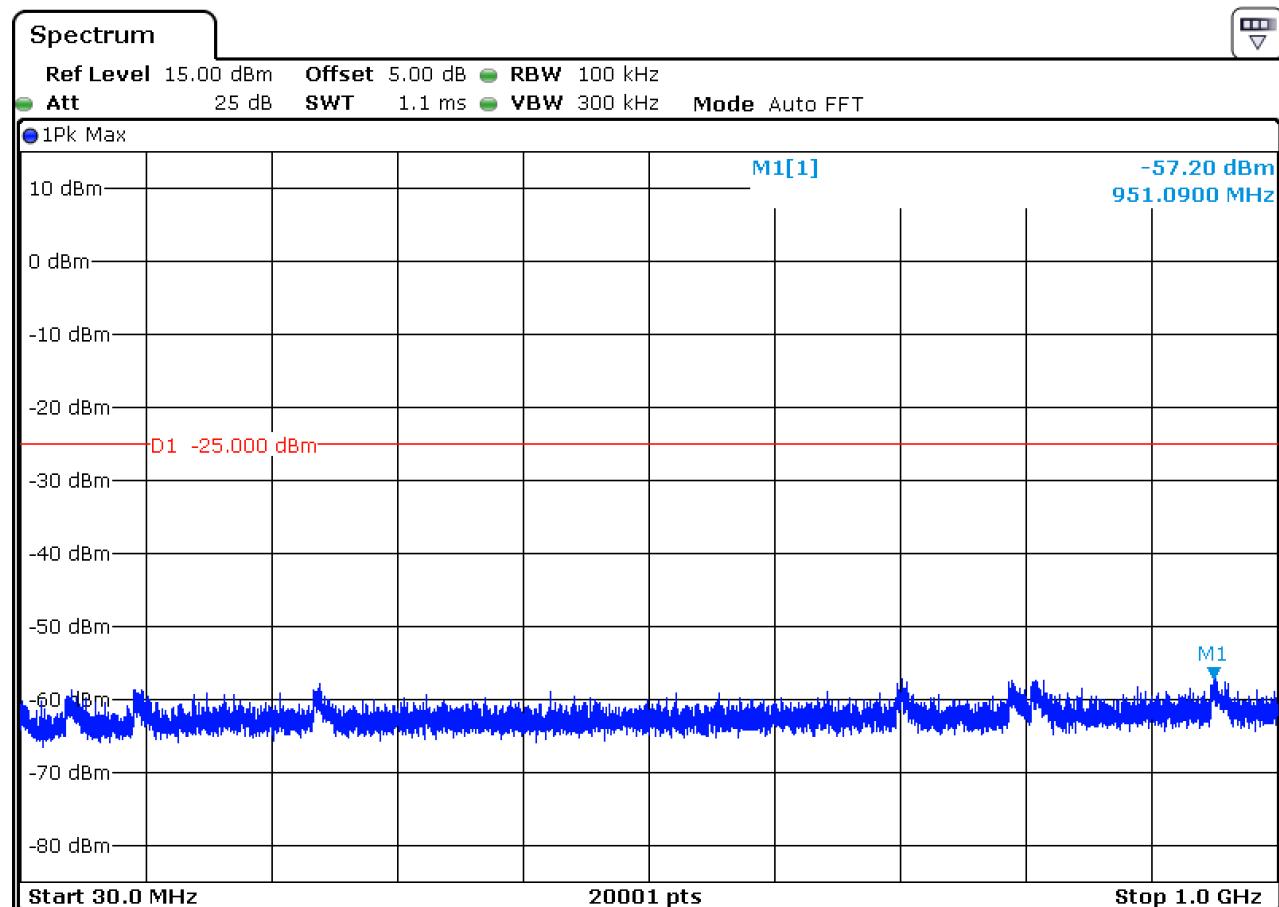


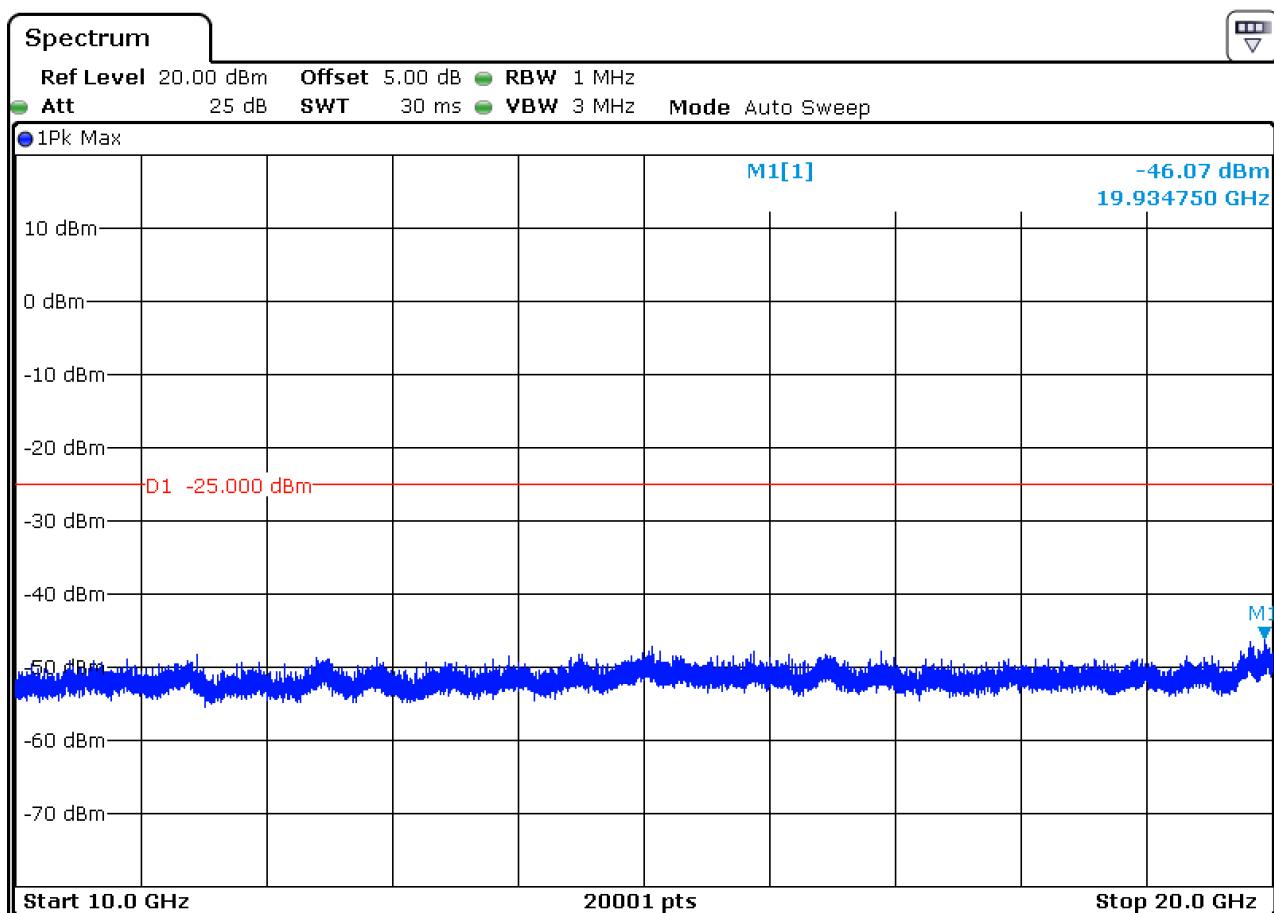
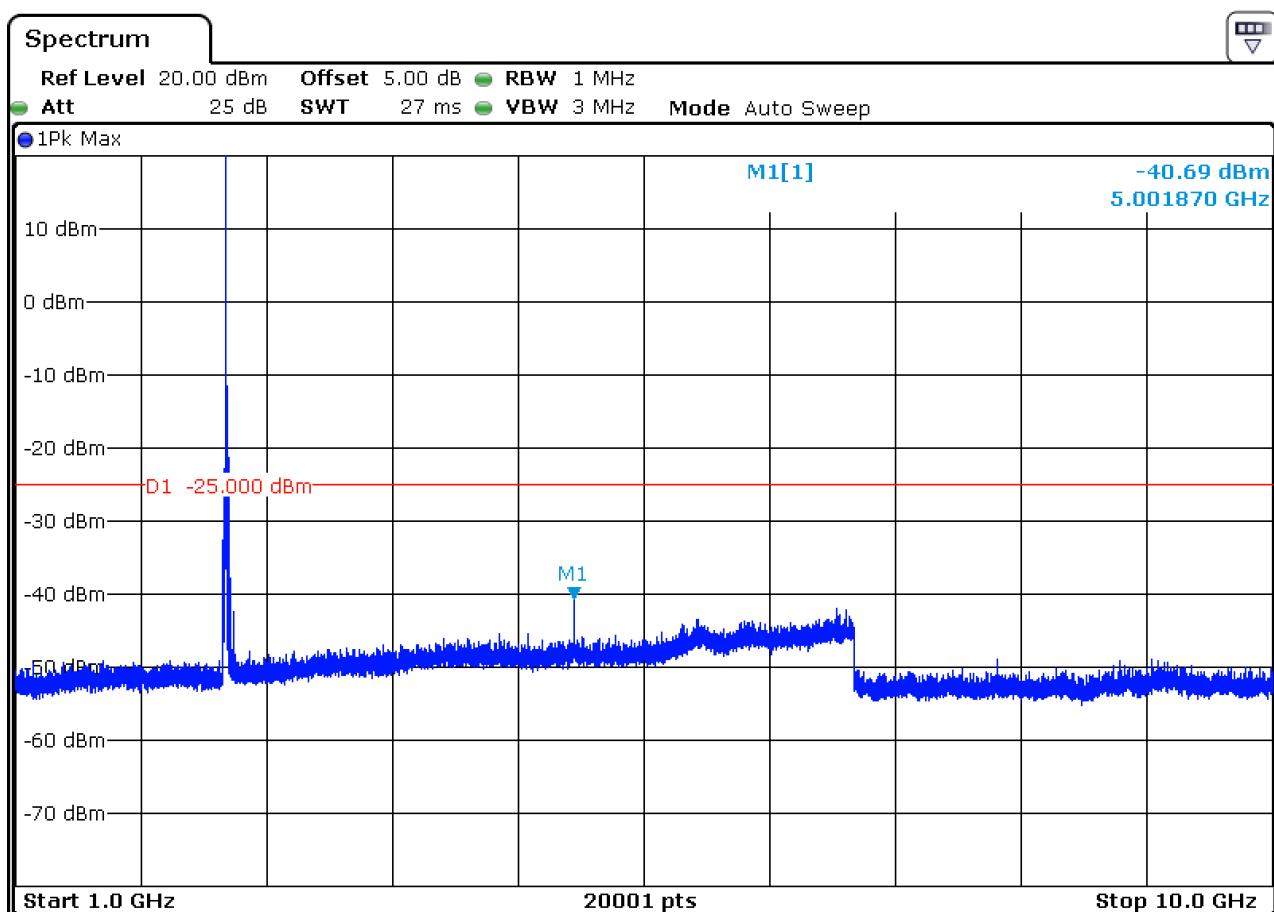


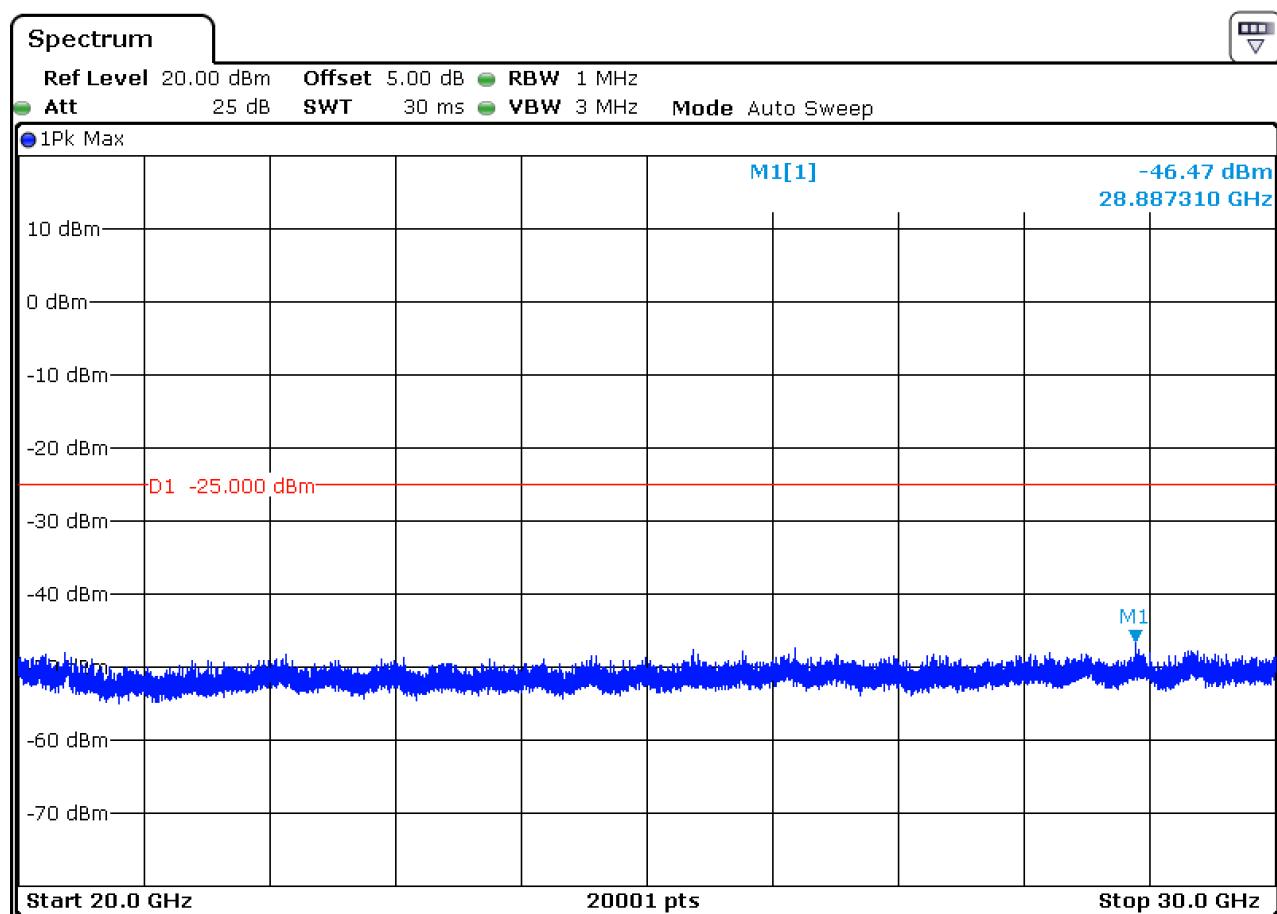


6.1.1.3 Test Mode = LTE / TM1 15MHz RB1#0

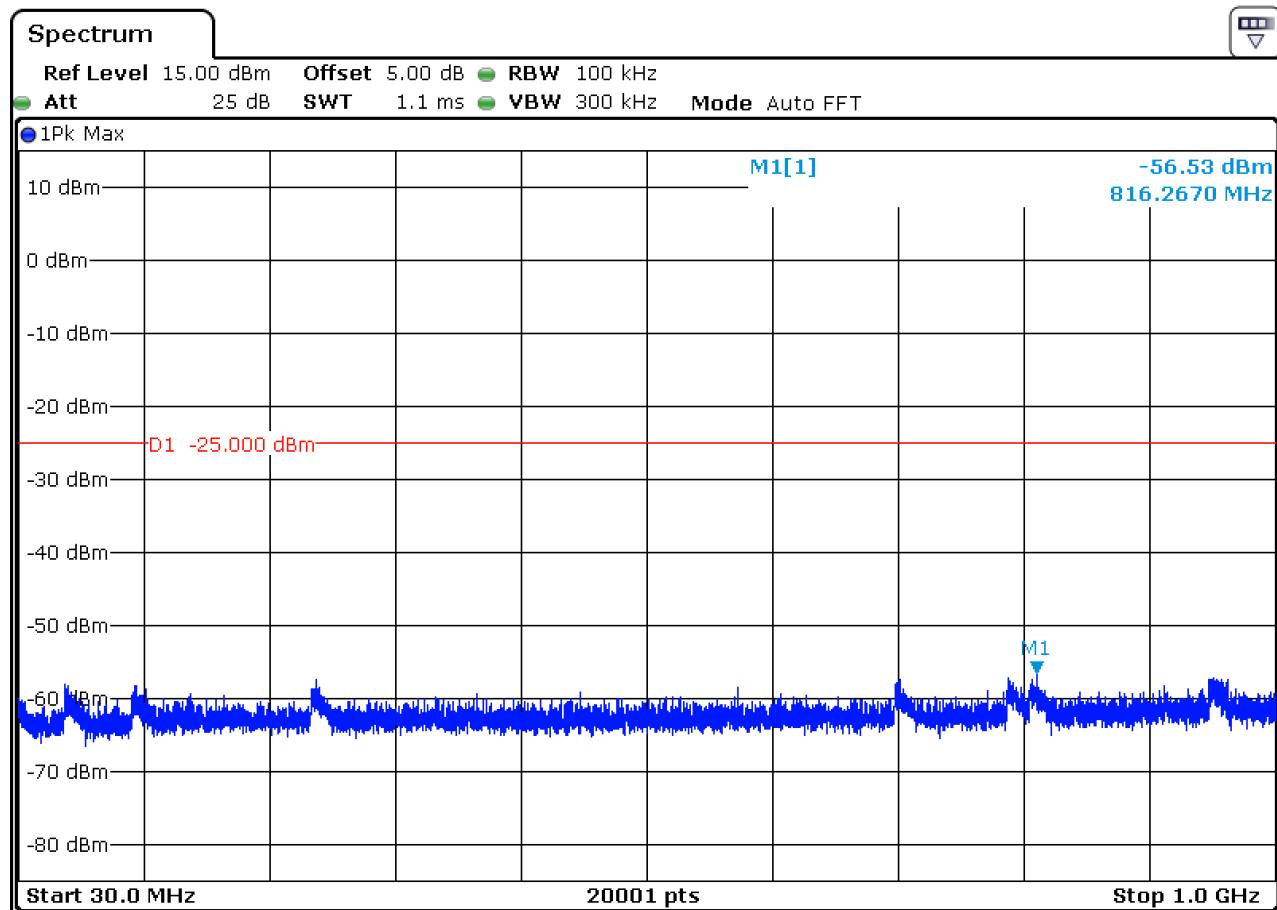
6.1.1.3.1 Test Channel = LCH

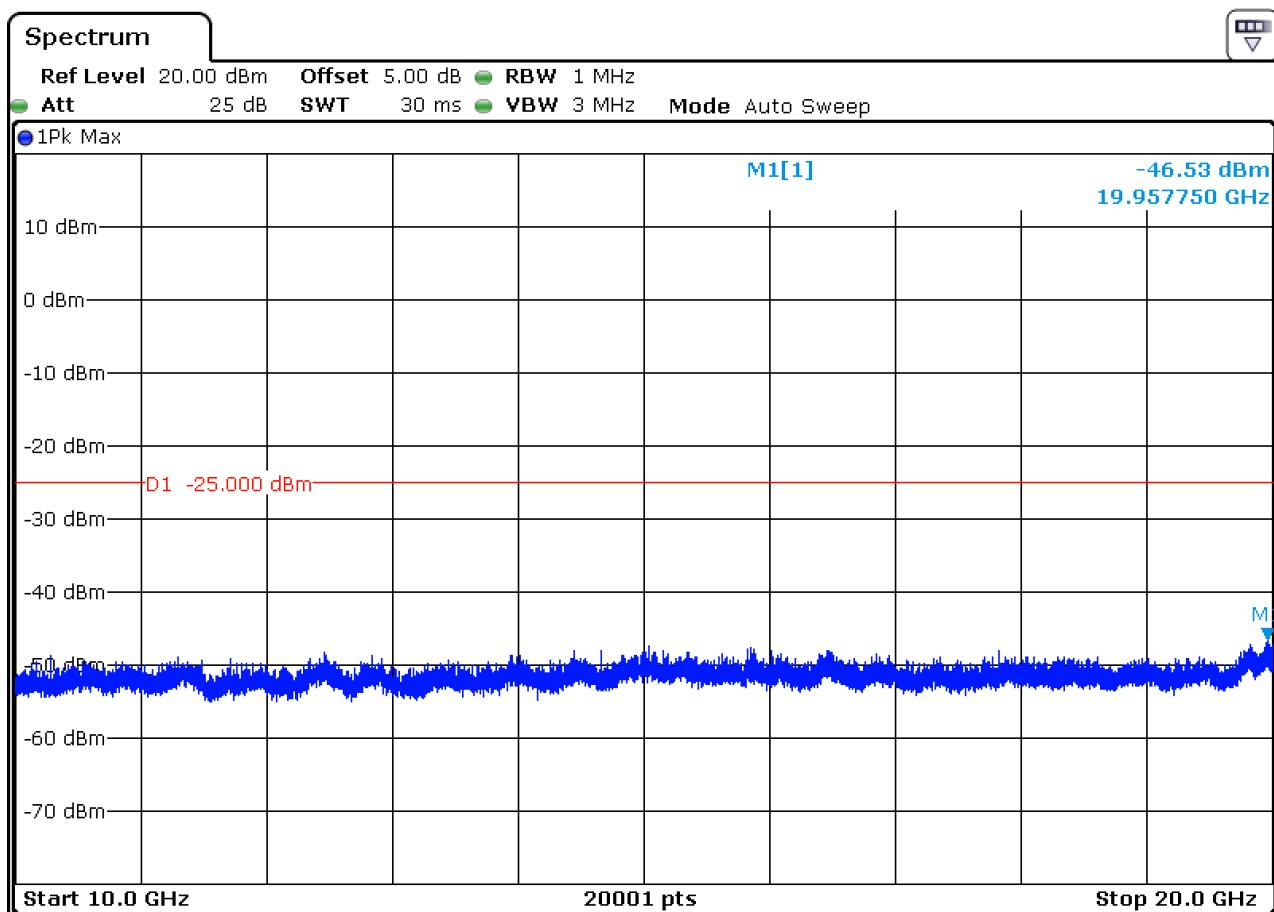
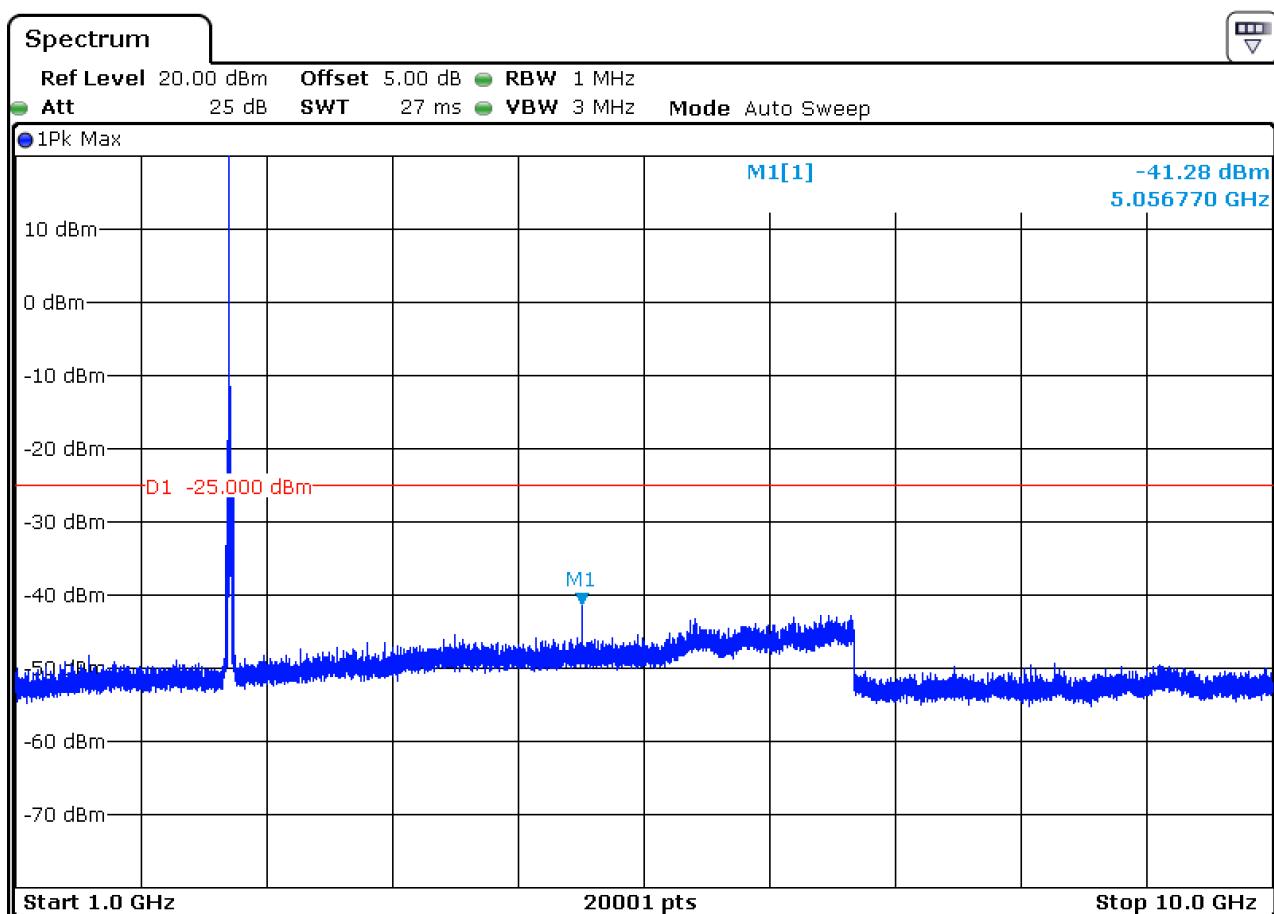


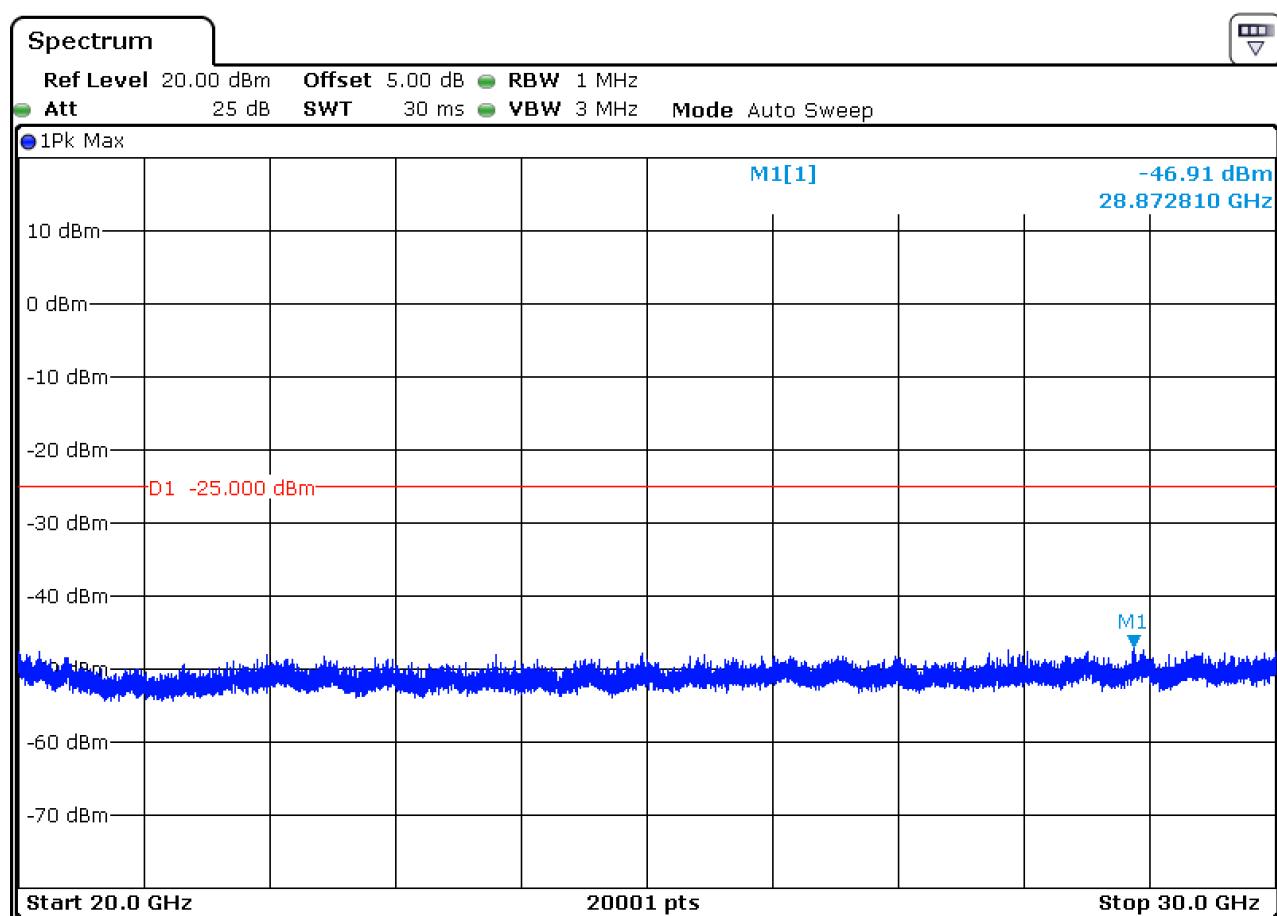




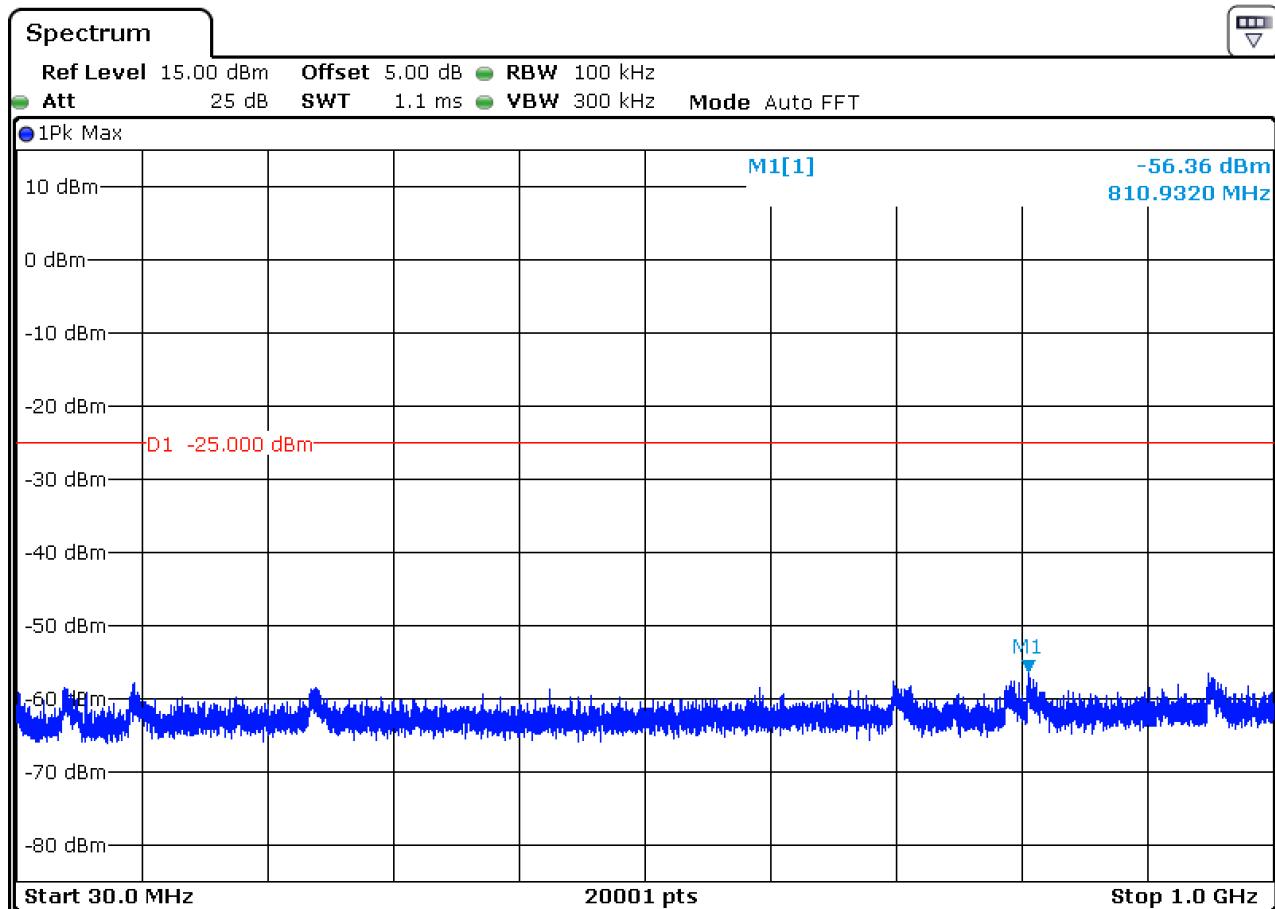
6.1.1.3.2 Test Channel = MCH

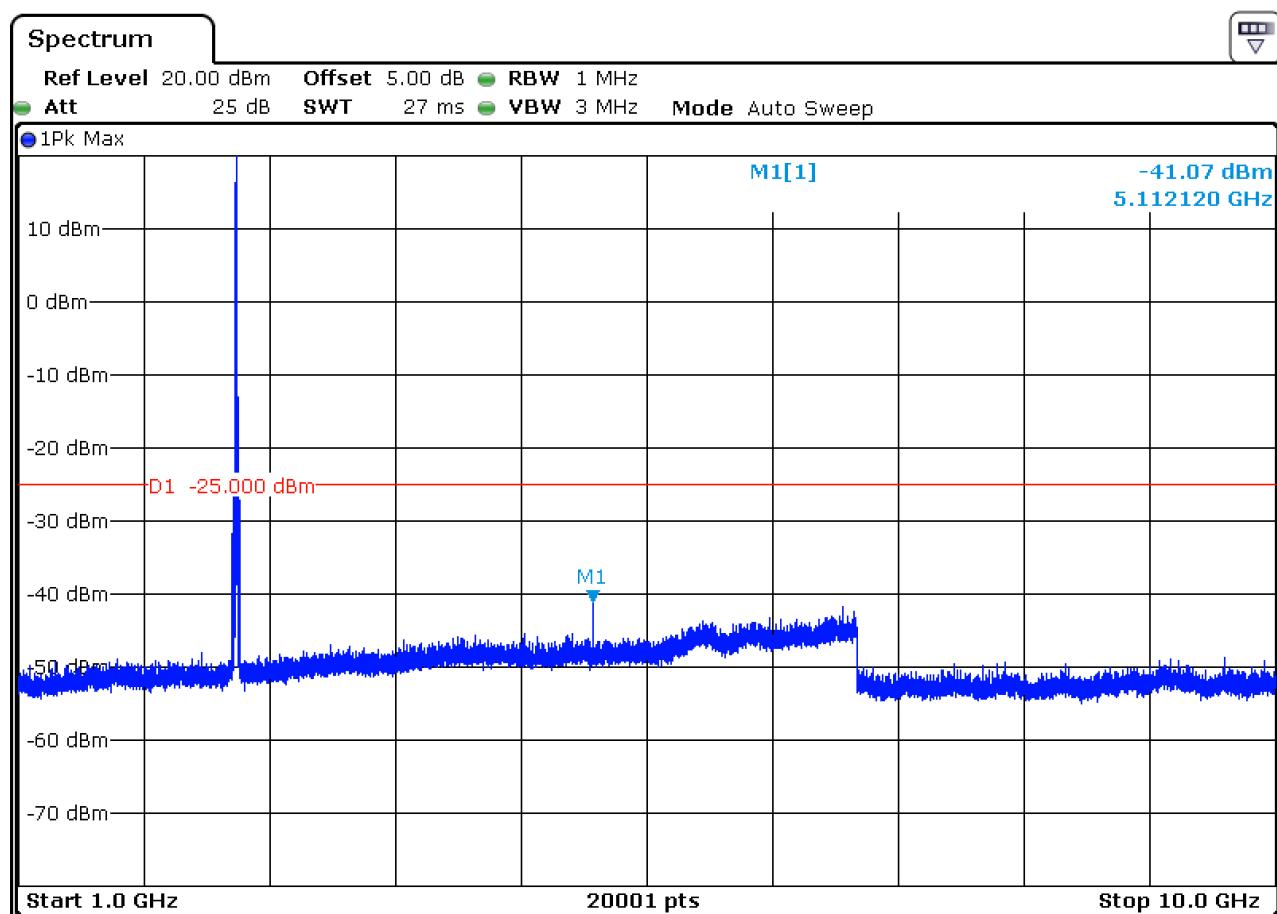


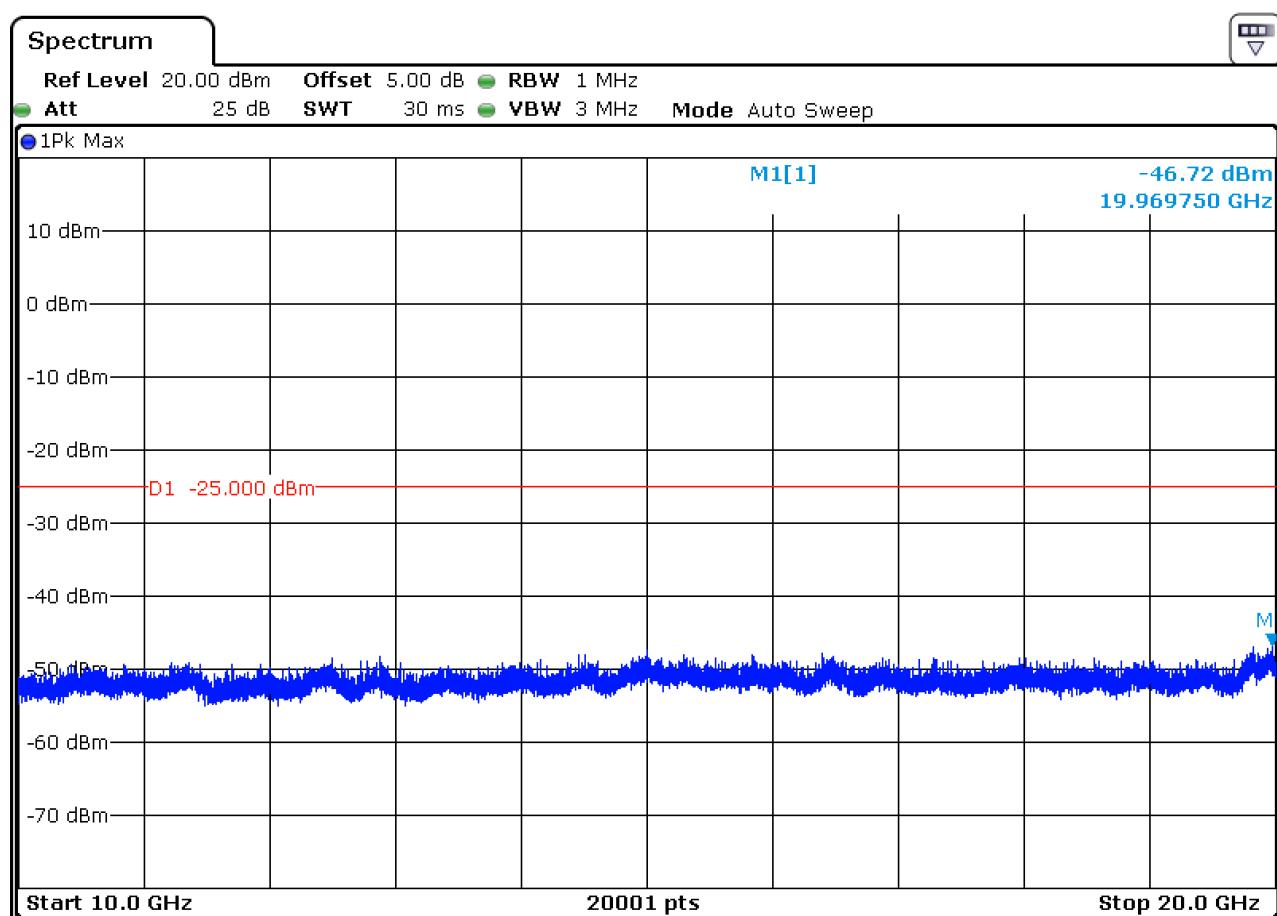


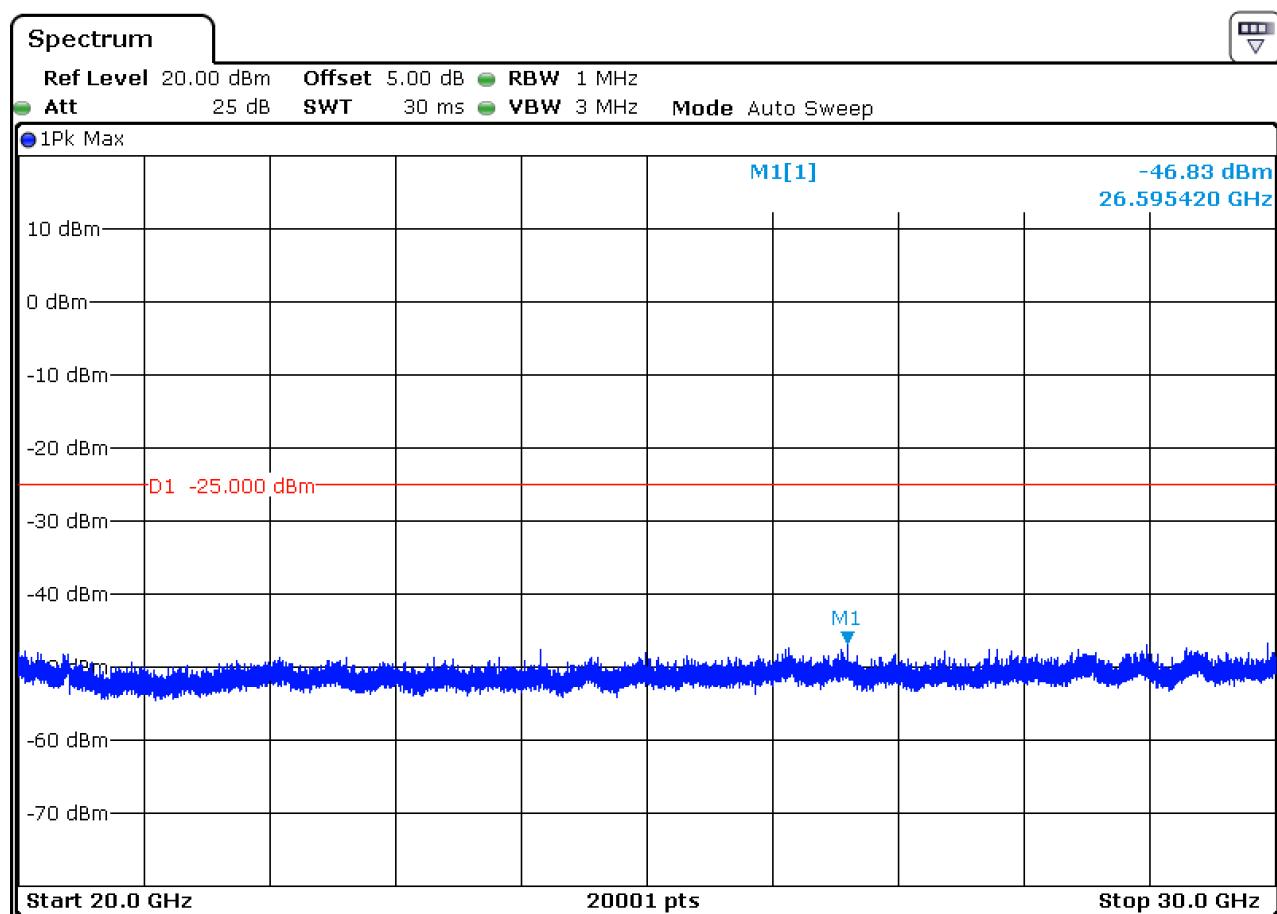


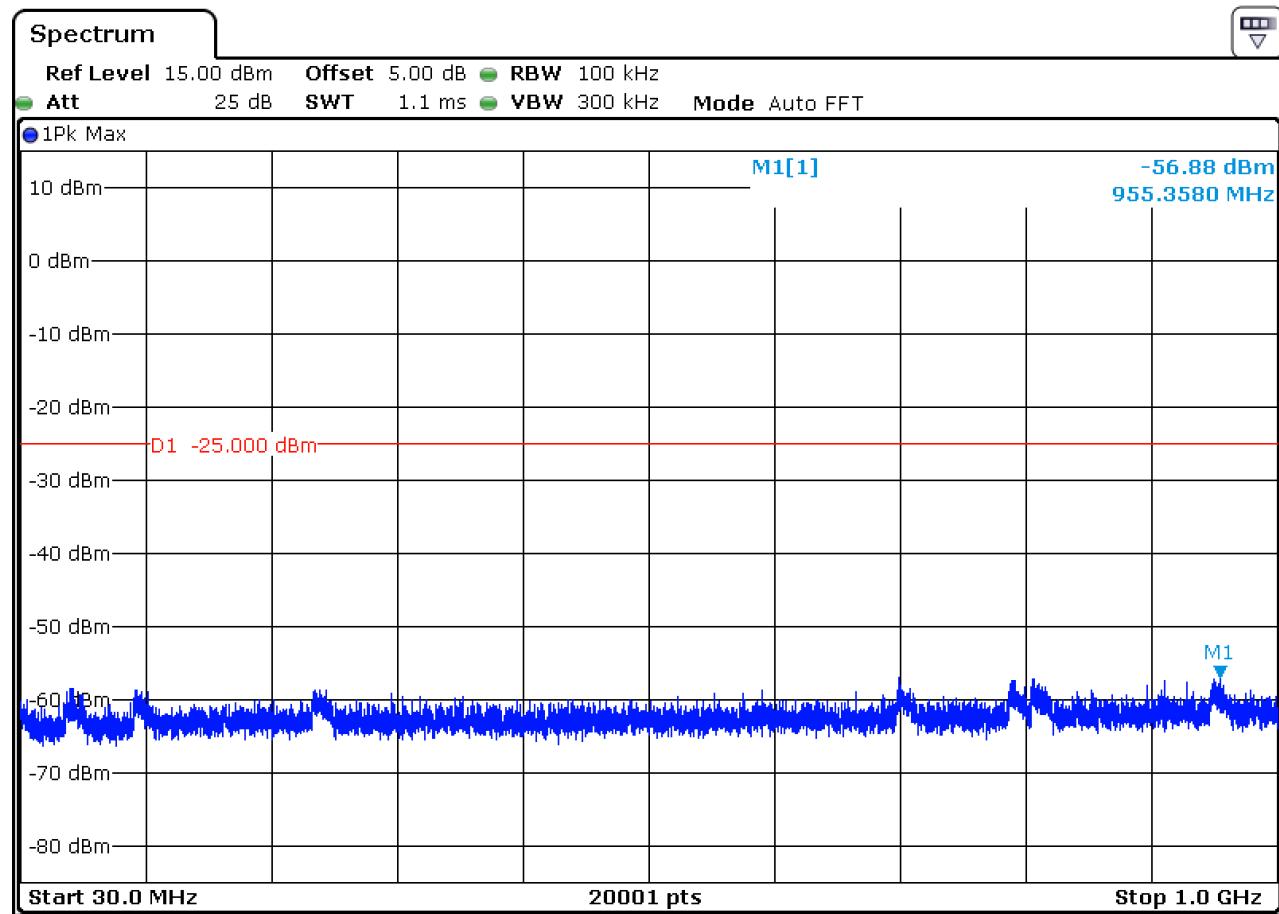
6.1.1.3.3 Test Channel = HCH

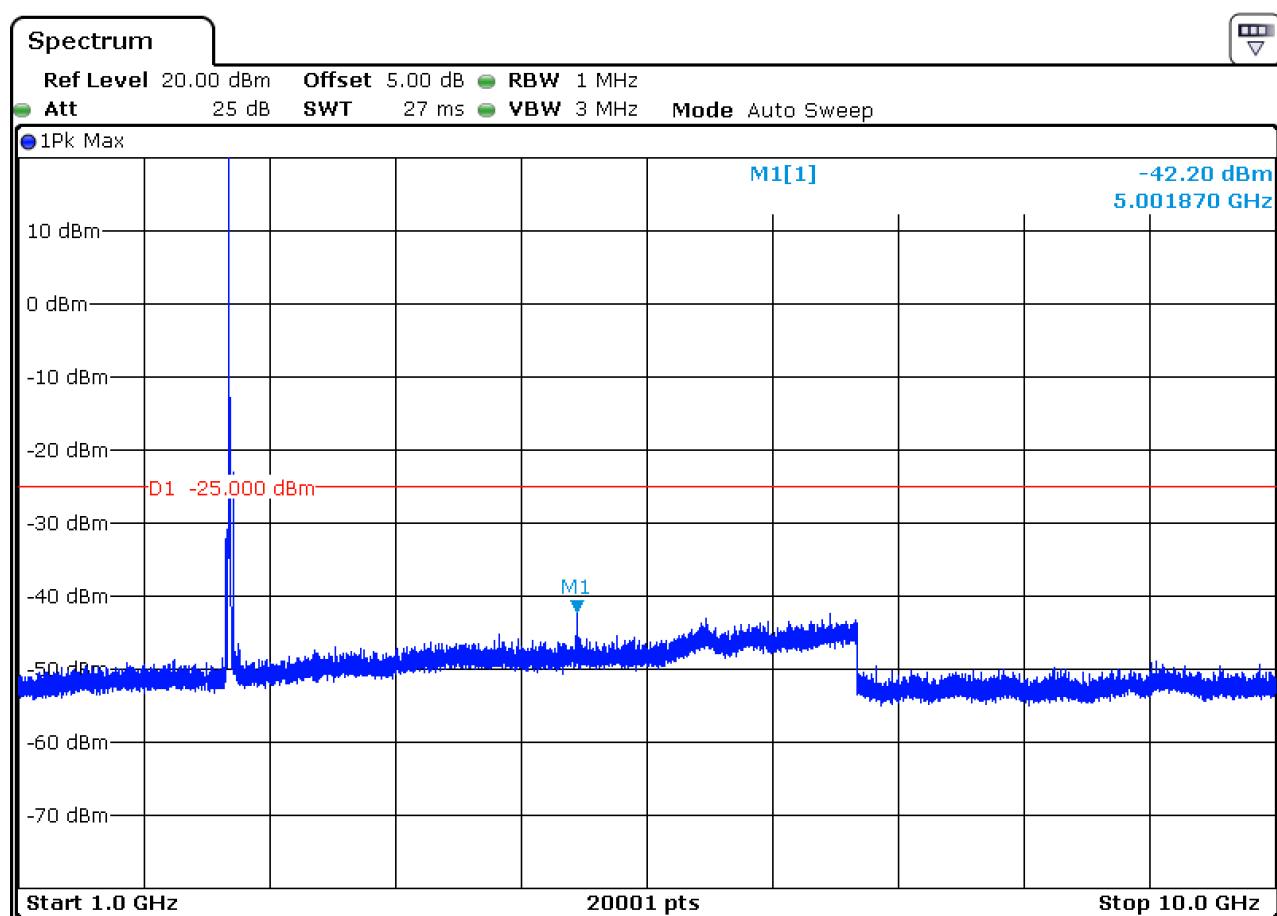


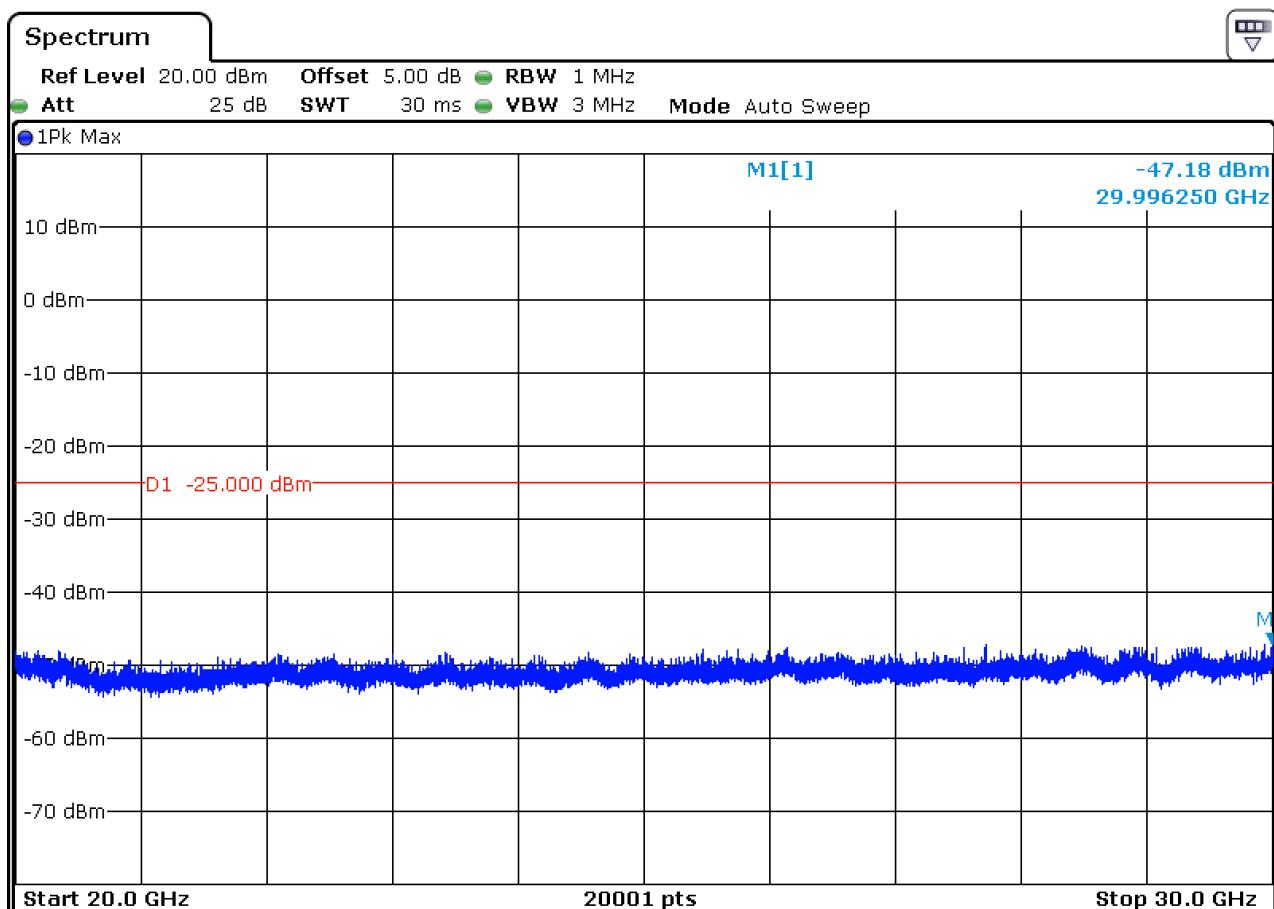
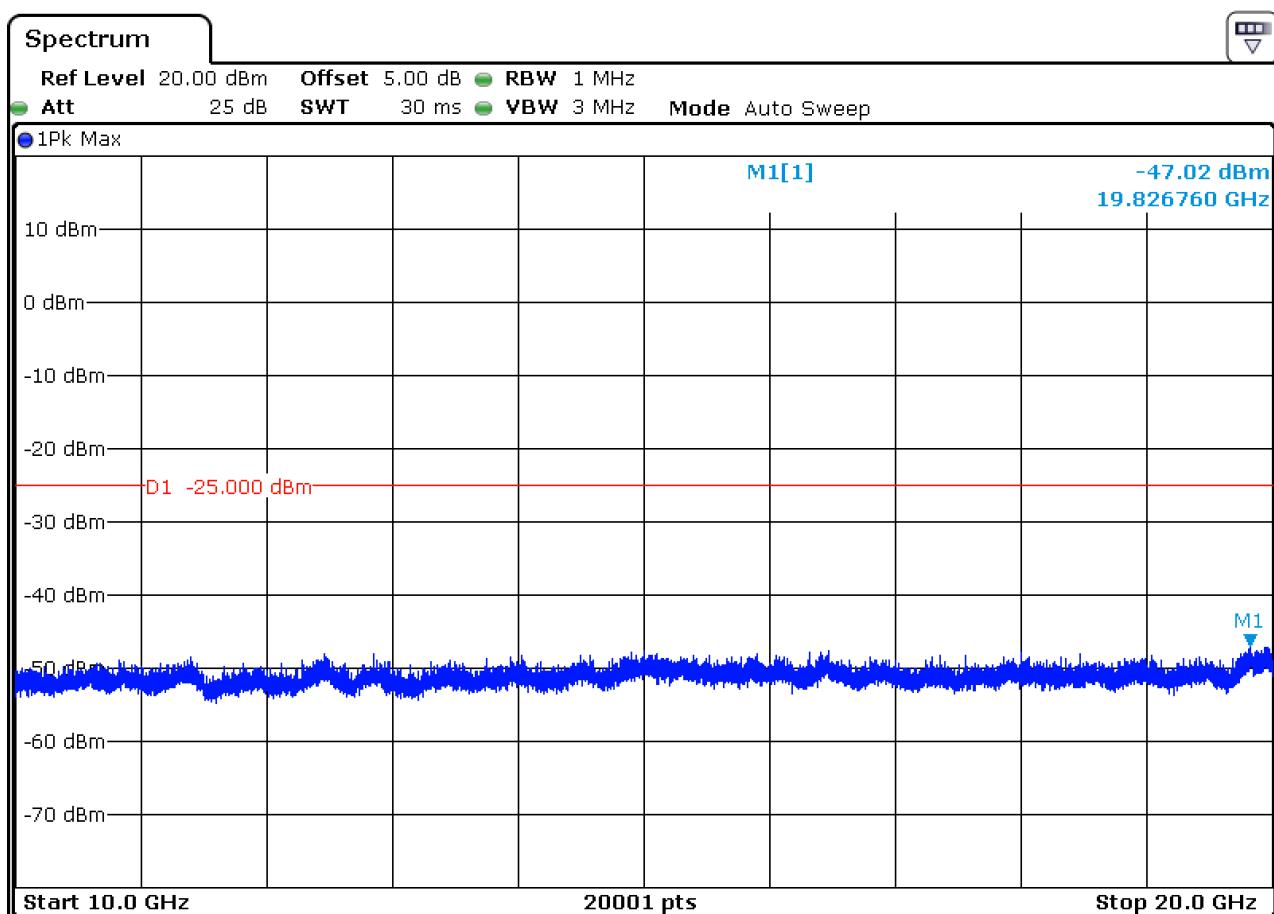




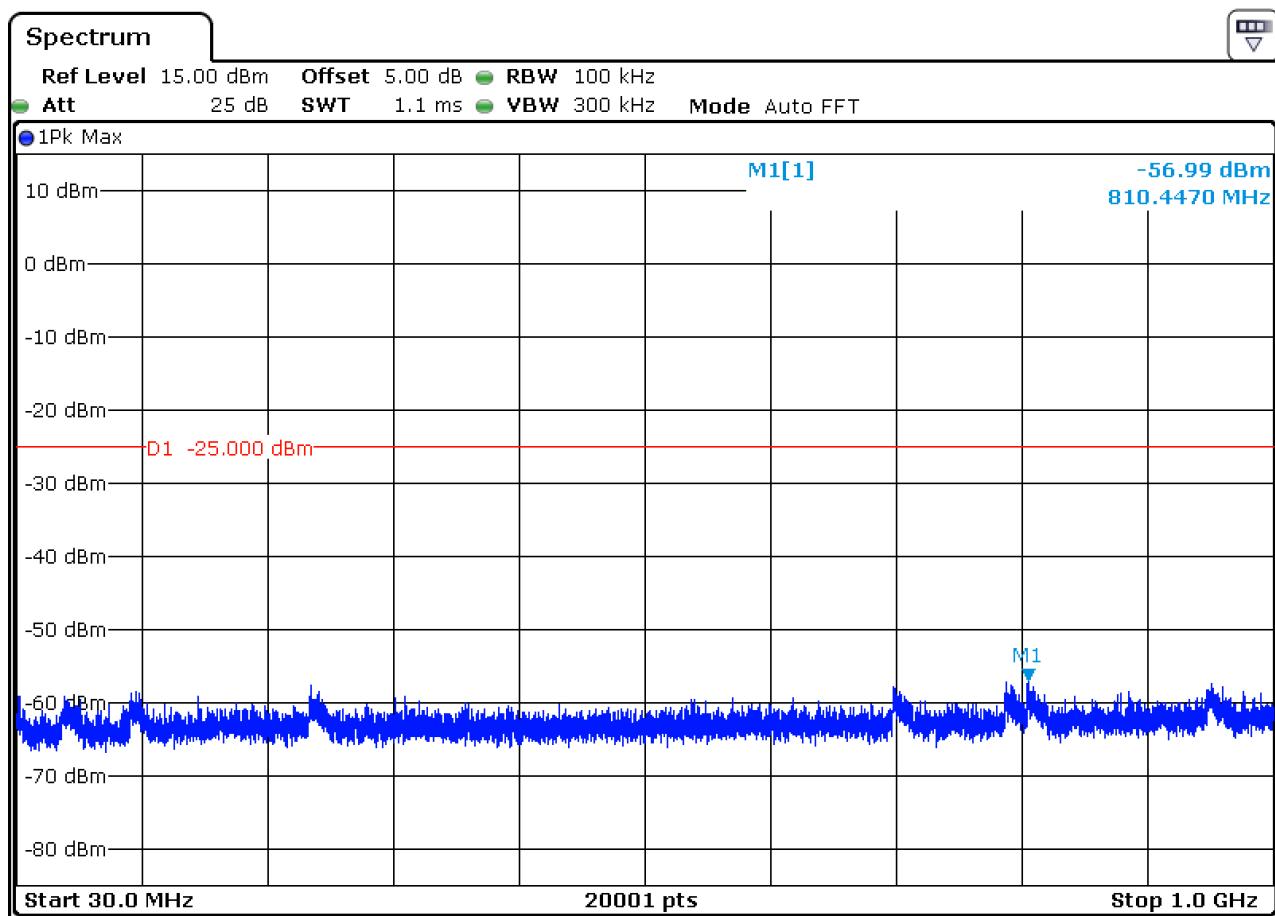


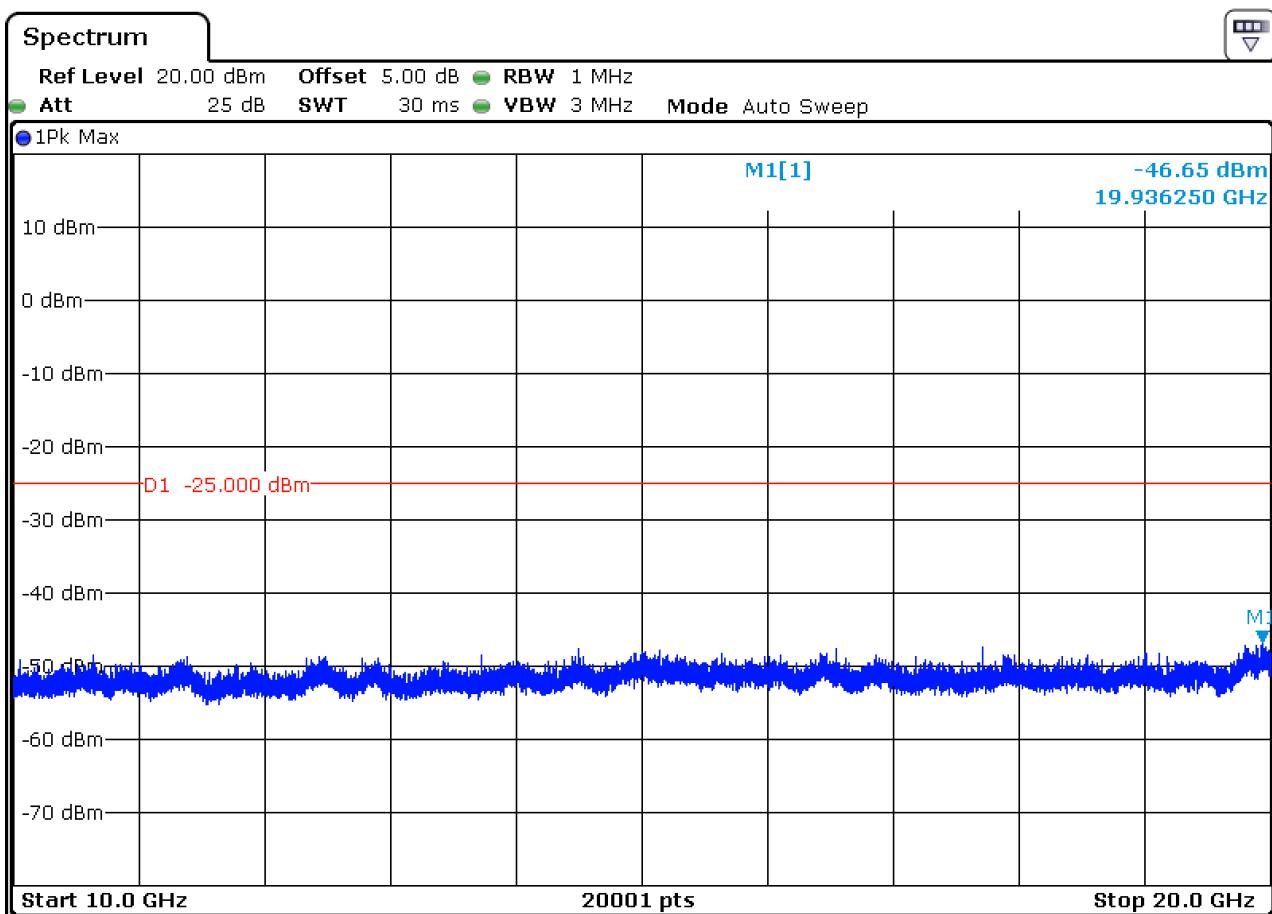
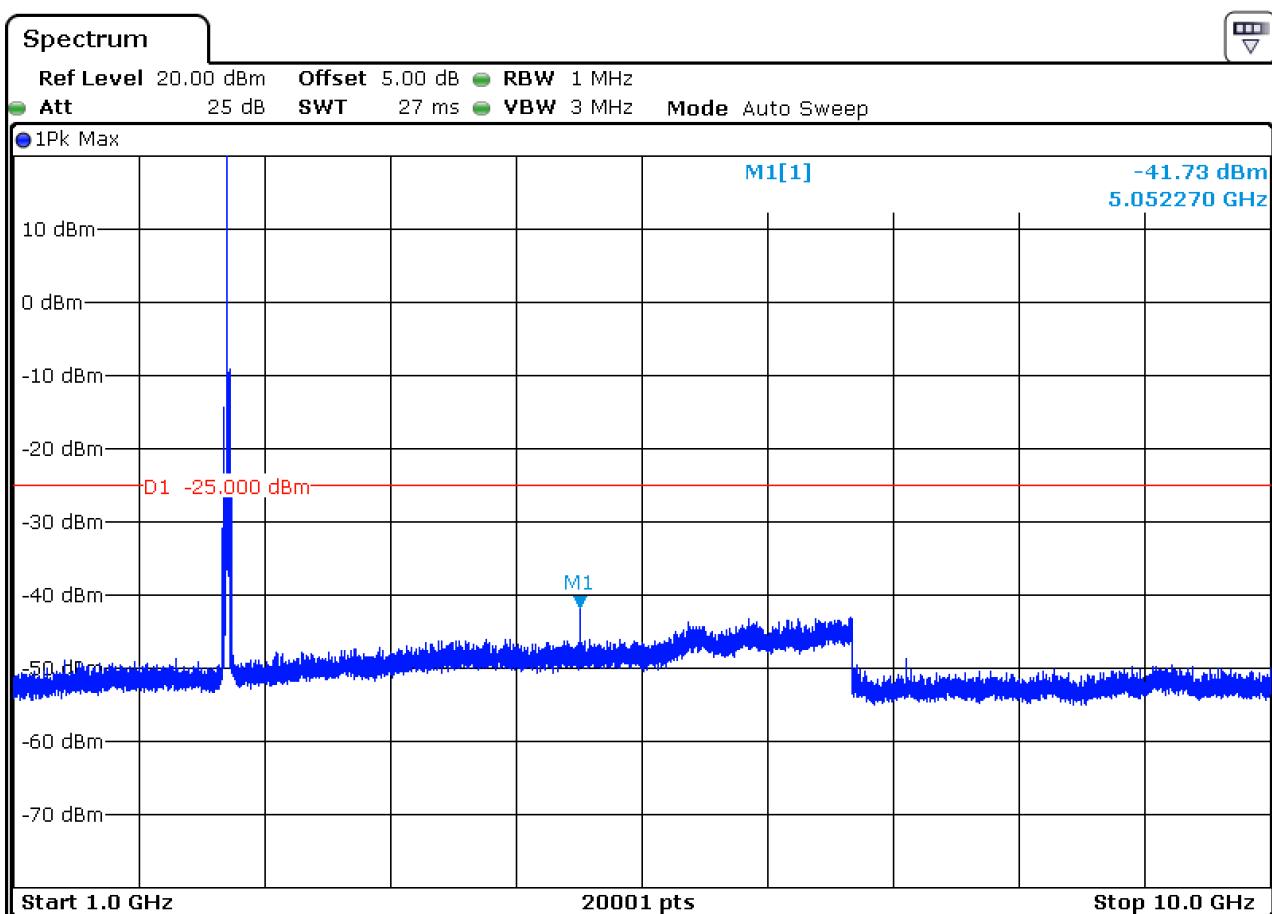
6.1.1.4 Test Mode = LTE / TM1 20MHz RB1#0**6.1.1.4.1 Test Channel = LCH**

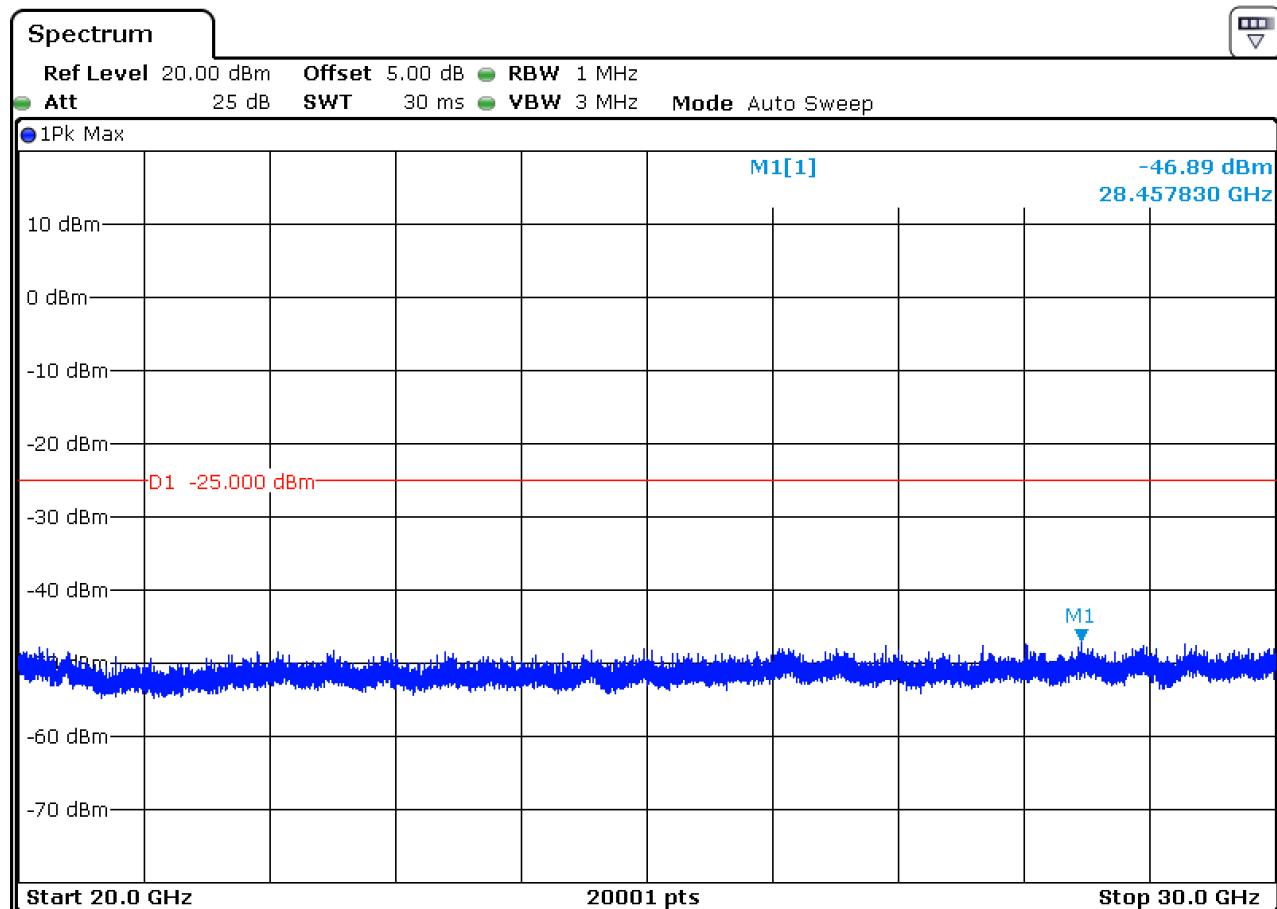




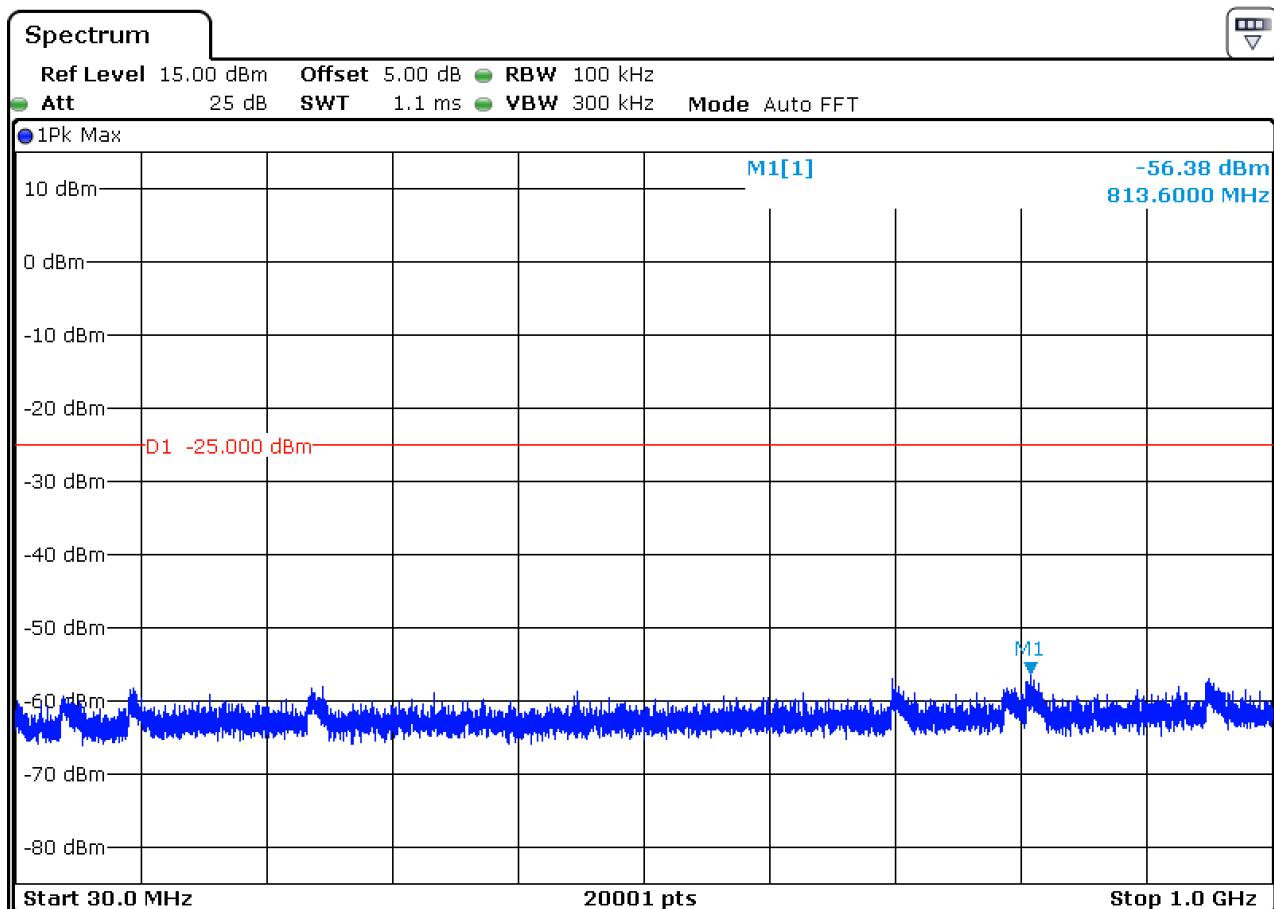
6.1.1.4.2 Test Channel = MCH

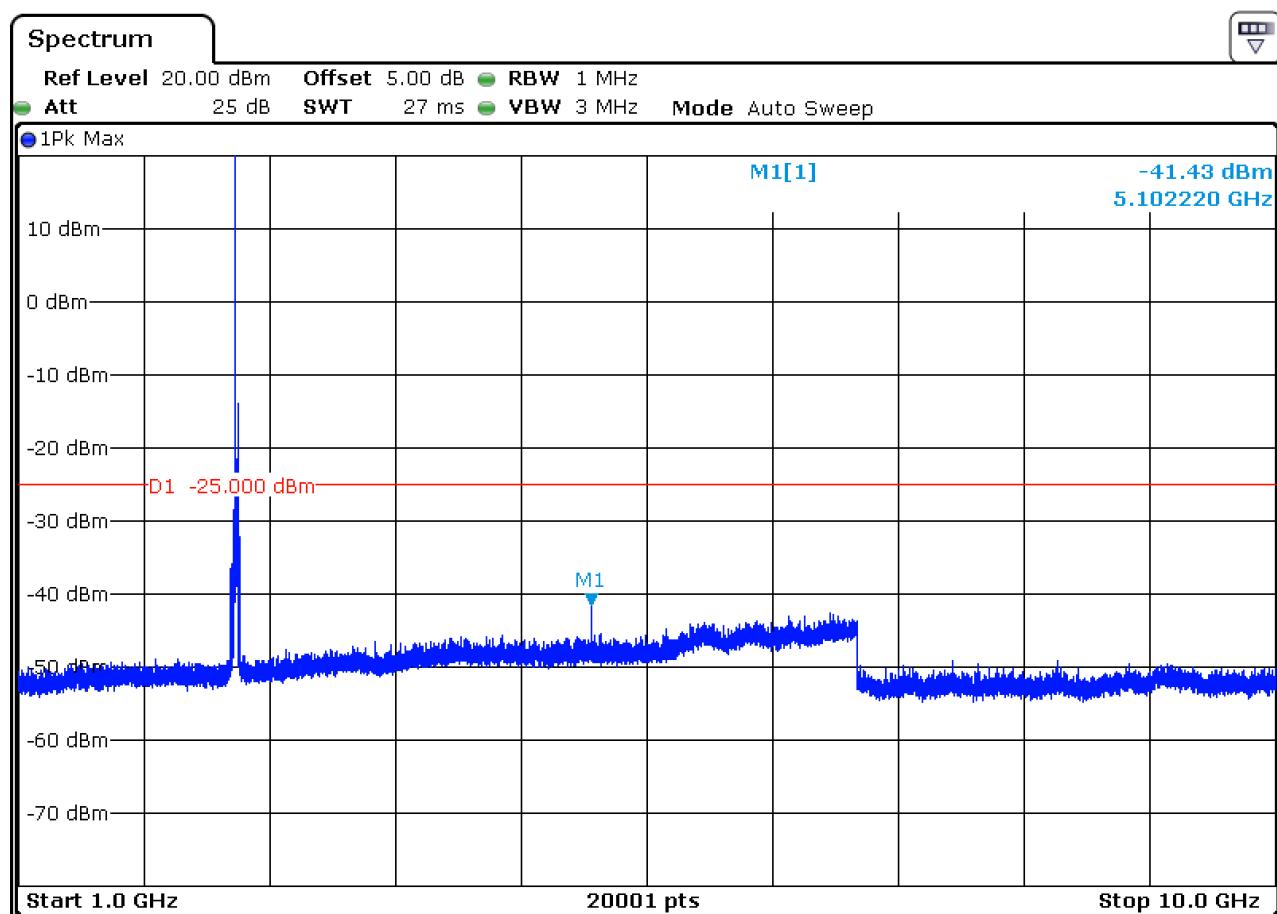


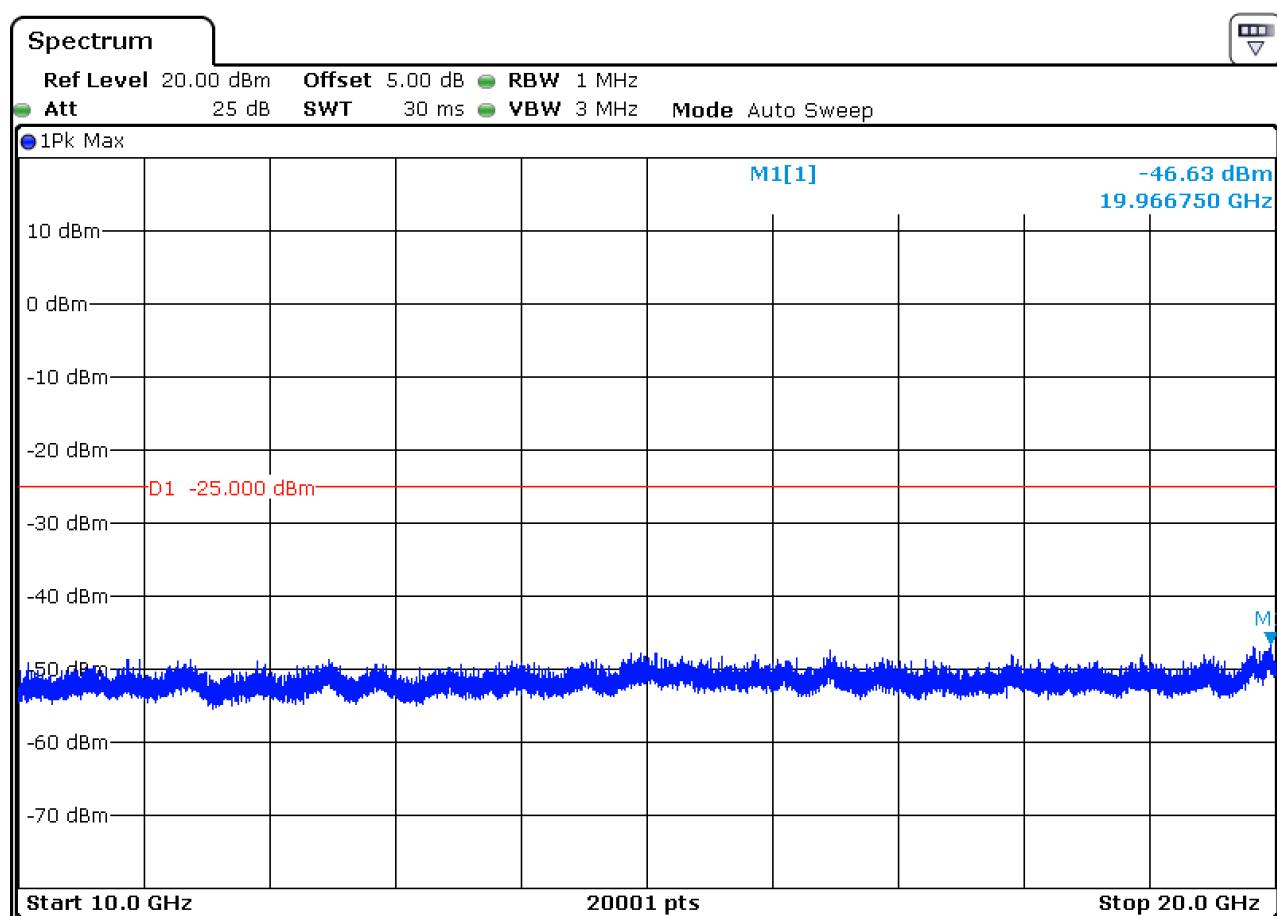


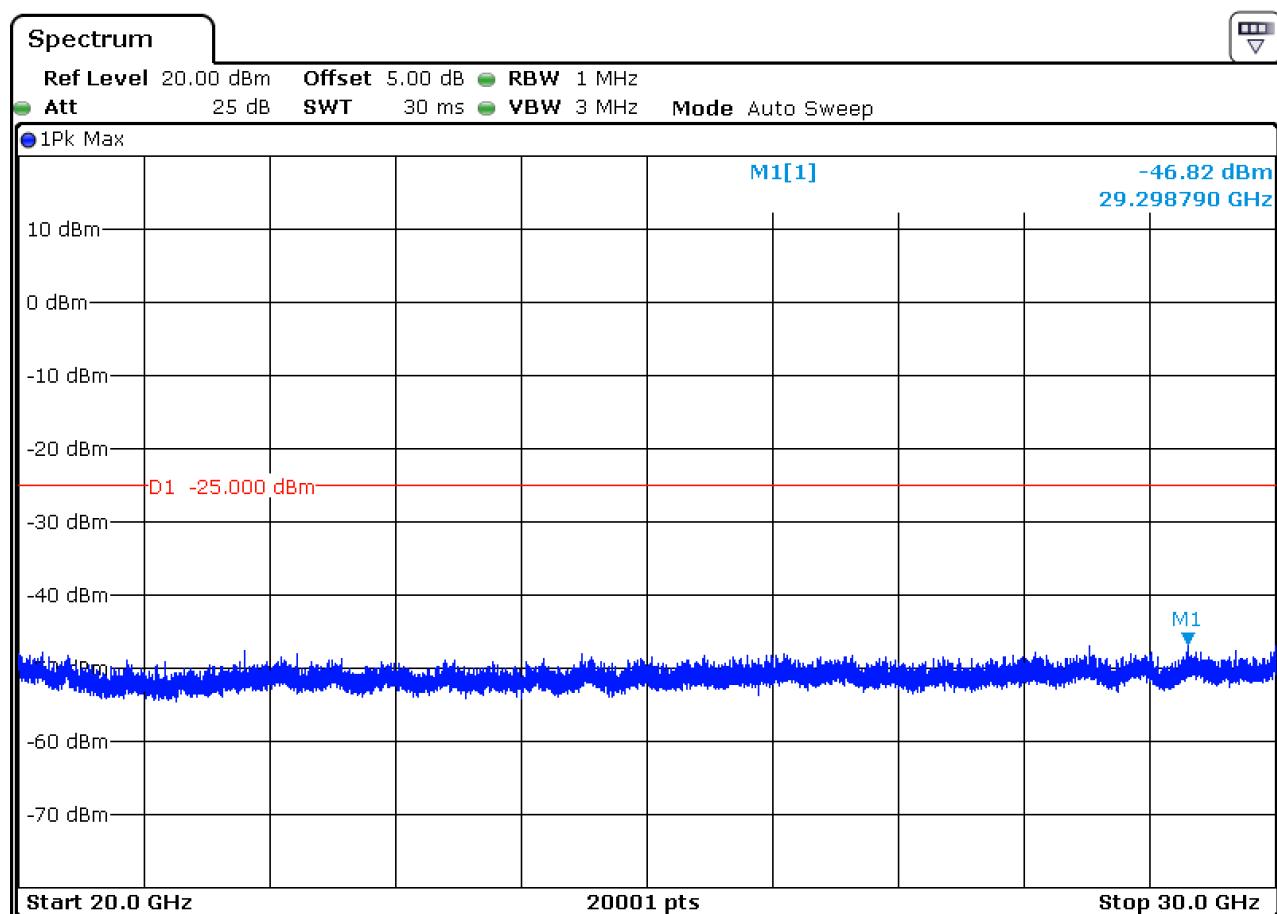


6.1.1.4.3 Test Channel = HCH









7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band7

7.1.1.1 Test Mode =LTE/TM1 20MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
5020.000	-59.41	-25	-34.41	Vertical
7530.000	-60.93	-25	-35.93	Vertical
10040.000	-61.99	-25	-36.99	Vertical
5020.000	-58.86	-25	-33.86	Horizontal
7530.000	-61.71	-25	-36.71	Horizontal
10040.000	-59.51	-25	-34.51	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
5070.000	-60.28	-25	-35.28	Vertical
7605.000	-59.47	-25	-34.47	Vertical
10140.000	-60.87	-25	-35.87	Vertical
5070.000	-60.14	-25	-35.14	Horizontal
7605.000	-59.73	-25	-34.73	Horizontal
10140.000	-61.34	-25	-36.34	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
5120.000	-58.81	-25	-33.81	Vertical
7680.000	-58.30	-25	-33.30	Vertical
10240.000	-59.77	-25	-34.77	Vertical
5120.000	-60.49	-25	-35.49	Horizontal
7680.000	-61.47	-25	-36.47	Horizontal
10240.000	-61.86	-25	-36.86	Horizontal

NOTE:

- 1) The disturbance above 13GHz and below 1GHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band7	LTE/TM1 5MHz	LCH	TN	VL	-1.30	-0.00052	PASS
				VN	-3.38	-0.00135	PASS
				VH	-1.93	-0.00077	PASS
		MCH	TN	VL	0.09	0.00004	PASS
				VN	-2.57	-0.00101	PASS
				VH	-5.72	-0.00226	PASS
		HCH	TN	VL	3.05	0.00119	PASS
				VN	-4.98	-0.00194	PASS
				VH	-2.07	-0.00081	PASS
	LTE/TM2 5MHz	LCH	TN	VL	-4.69	-0.00187	PASS
				VN	2.32	0.00093	PASS
				VH	0.53	0.00021	PASS
		MCH	TN	VL	1.90	0.00075	PASS
				VN	-1.70	-0.00067	PASS
				VH	-2.07	-0.00082	PASS
		HCH	TN	VL	-4.52	-0.00176	PASS
				VN	-3.89	-0.00152	PASS
				VH	-3.52	-0.00137	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band7	LTE/TM1 10MHz	LCH	TN	VL	-2.79	-0.00111	PASS
				VN	1.65	0.00066	PASS
				VH	-2.16	-0.00086	PASS
		MCH	TN	VL	-1.83	-0.00072	PASS
				VN	1.87	0.00074	PASS
				VH	-0.30	-0.00012	PASS
		HCH	TN	VL	-2.45	-0.00096	PASS
				VN	1.65	0.00064	PASS
				VH	-2.96	-0.00115	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-9.61	-0.00384	PASS
				VN	-2.39	-0.00095	PASS
				VH	0.14	0.00006	PASS
		MCH	TN	VL	-1.97	-0.00078	PASS
				VN	1.47	0.00058	PASS
				VH	-6.24	-0.00246	PASS
		HCH	TN	VL	1.24	0.00048	PASS
				VN	1.06	0.00041	PASS
				VH	-10.17	-0.00396	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band7	LTE/TM1 15MHz	LCH	TN	VL	0.11	0.00004	PASS
				VN	0.33	0.00013	PASS
				VH	2.60	0.00104	PASS
		MCH	TN	VL	-0.40	-0.00016	PASS
				VN	-0.84	-0.00033	PASS
				VH	-1.12	-0.00044	PASS
		HCH	TN	VL	-2.16	-0.00084	PASS
				VN	2.23	0.00087	PASS
				VH	0.11	0.00004	PASS
	LTE/TM2 15MHz	LCH	TN	VL	0.53	0.00021	PASS
				VN	0.11	0.00004	PASS
				VH	-0.23	-0.00009	PASS
		MCH	TN	VL	-0.27	-0.00011	PASS
				VN	1.60	0.00063	PASS
				VH	0.17	0.00007	PASS
		HCH	TN	VL	-0.63	-0.00025	PASS
				VN	-0.80	-0.00031	PASS
				VH	0.51	0.0002	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band7	LTE/TM1 20MHz	LCH	TN	VL	-3.03	-0.00121	PASS
				VN	1.46	0.00058	PASS
				VH	-6.23	-0.00248	PASS
		MCH	TN	VL	1.40	0.00055	PASS
				VN	-2.34	-0.00092	PASS
				VH	2.61	0.00103	PASS
		HCH	TN	VL	-4.56	-0.00178	PASS
				VN	-5.17	-0.00202	PASS
				VH	-1.29	-0.00050	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.20	-0.00167	PASS
				VN	-2.45	-0.00098	PASS
				VH	-5.36	-0.00214	PASS
		MCH	TN	VL	1.26	0.00050	PASS
				VN	-2.80	-0.00110	PASS
				VH	2.76	0.00109	PASS
		HCH	TN	VL	-3.08	-0.00120	PASS
				VN	-8.20	-0.00320	PASS
				VH	4.44	0.00173	PASS

8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM1 5MHz	LCH	VN	-30	1.76	0.0007	PASS
				-20	3.58	0.00143	PASS
				-10	-0.83	-0.00033	PASS
				0	-1.77	-0.00071	PASS
				10	-5.35	-0.00214	PASS
				20	2.37	0.00095	PASS
				30	1.24	0.0005	PASS
				40	-3.13	-0.00125	PASS
				50	3.32	0.00133	PASS
		MCH	VN	-30	-1.10	-0.00043	PASS
				-20	1.07	0.00042	PASS
				-10	-2.56	-0.00101	PASS
				0	-3.92	-0.00155	PASS
				10	-2.37	-0.00093	PASS
				20	-0.94	-0.00037	PASS
				30	-2.37	-0.00093	PASS
				40	-3.33	-0.00131	PASS
				50	1.63	0.00064	PASS
		HCH	VN	-30	-4.84	-0.00189	PASS
				-20	-2.98	-0.00116	PASS
				-10	-1.02	-0.0004	PASS
				0	-2.22	-0.00086	PASS
				10	-1.09	-0.00042	PASS
				20	0.77	0.0003	PASS
				30	-4.94	-0.00192	PASS
				40	-2.56	-0.001	PASS
				50	-4.94	-0.00192	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 5MHz	LCH	VN	-30	-4.94	-0.00192	PASS
				-20	-2.56	-0.001	PASS
				-10	-4.94	-0.00192	PASS
				0	-6.08	-0.00243	PASS
				10	-5.25	-0.0021	PASS
				20	-0.31	-0.00012	PASS
				30	-22.57	-0.00902	PASS
				40	-12.86	-0.00514	PASS
				50	-44.85	-0.01792	PASS
		MCH	VN	-30	-2.10	-0.00084	PASS
				-20	1.37	0.00055	PASS
				-10	-18.90	-0.00755	PASS
				0	-51.24	-0.02048	PASS
				10	2.09	0.00082	PASS
				20	-3.62	-0.00143	PASS
				30	-7.25	-0.00286	PASS
				40	-4.48	-0.00177	PASS
				50	-0.57	-0.00022	PASS
		HCH	VN	-30	4.13	0.00163	PASS
				-20	0.03	0.00001	PASS
				-10	-0.19	-0.00007	PASS
				0	-2.76	-0.00109	PASS
				10	-5.45	-0.00212	PASS
				20	-5.58	-0.00217	PASS
				30	2.80	0.00109	PASS
				40	-1.27	-0.00049	PASS
				50	-3.60	-0.0014	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM1 10MHz	LCH	VN	-30	-4.94	-0.00192	PASS
				-20	-6.08	-0.00243	PASS
				-10	-2.12	-0.00085	PASS
				0	1.97	0.00079	PASS
				10	-3.13	-0.00125	PASS
				20	1.20	0.00048	PASS
				30	-2.42	-0.00097	PASS
				40	-0.57	-0.00023	PASS
				50	-4.98	-0.00199	PASS
		MCH	VN	-30	-2.36	-0.00094	PASS
				-20	-0.36	-0.00014	PASS
				-10	-14.26	-0.00563	PASS
				0	-3.58	-0.00141	PASS
				10	-3.18	-0.00125	PASS
				20	-2.70	-0.00107	PASS
				30	-3.19	-0.00126	PASS
				40	1.70	0.00067	PASS
				50	-0.83	-0.00033	PASS
		HCH	VN	-30	-3.81	-0.0015	PASS
				-20	-1.12	-0.00044	PASS
				-10	2.29	0.00089	PASS
				0	1.89	0.00074	PASS
				10	-4.31	-0.00168	PASS
				20	-5.41	-0.00211	PASS
				30	5.52	0.00215	PASS
				40	-6.01	-0.00234	PASS
				50	-1.79	-0.0007	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 10MHz	LCH	VN	-30	-3.30	-0.00132	PASS
				-20	1.12	0.00045	PASS
				-10	-0.20	-0.00008	PASS
				0	0.14	0.00006	PASS
				10	-1.99	-0.00079	PASS
				20	-14.65	-0.00585	PASS
				30	-10.36	-0.00414	PASS
				40	-2.20	-0.00088	PASS
				50	-2.83	-0.00113	PASS
		MCH	VN	-30	0.63	0.00025	PASS
				-20	0.99	0.00039	PASS
				-10	4.25	0.00168	PASS
				0	-11.19	-0.00441	PASS
				10	1.70	0.00067	PASS
				20	-2.45	-0.00097	PASS
				30	2.12	0.00084	PASS
				40	-3.79	-0.0015	PASS
				50	-1.49	-0.00059	PASS
		HCH	VN	-30	-1.75	-0.00068	PASS
				-20	-1.30	-0.00051	PASS
				-10	-10.07	-0.00393	PASS
				0	-5.82	-0.00227	PASS
				10	-0.90	-0.00035	PASS
				20	-8.20	-0.0032	PASS
				30	-0.11	-0.00004	PASS
				40	2.09	0.00081	PASS
				50	-4.82	-0.00188	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM1 15MHz	LCH	VN	-30	-0.49	-0.0002	PASS
				-20	2.02	0.00081	PASS
				-10	0.49	0.0002	PASS
				0	-0.33	-0.00013	PASS
				10	-1.95	-0.00078	PASS
				20	-0.47	-0.00019	PASS
				30	-3.43	-0.00137	PASS
				40	-1.26	-0.0005	PASS
				50	0.56	0.00022	PASS
		MCH	VN	-30	-1.04	-0.00041	PASS
				-20	-1.54	-0.00061	PASS
				-10	-2.45	-0.00097	PASS
				0	1.93	0.00076	PASS
				10	-0.37	-0.00015	PASS
				20	0.56	0.00022	PASS
				30	0.73	0.00029	PASS
				40	-0.51	-0.0002	PASS
				50	-0.89	-0.00035	PASS
		HCH	VN	-30	-1.83	-0.00071	PASS
				-20	-2.06	-0.0008	PASS
				-10	-2.73	-0.00107	PASS
				0	-2.20	-0.00086	PASS
				10	-2.73	-0.00107	PASS
				20	1.16	0.00045	PASS
				30	0.84	0.00033	PASS
				40	-3.20	-0.00125	PASS
				50	1.76	0.0007	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 15MHz	LCH	VN	-30	-13.38	-0.00534	PASS
				-20	1.57	0.00063	PASS
				-10	0.31	0.00012	PASS
				0	-1.92	-0.00077	PASS
				10	-0.43	-0.00017	PASS
				20	1.13	0.00045	PASS
				30	-0.54	-0.00022	PASS
				40	-2.37	-0.00095	PASS
				50	0.09	0.00004	PASS
		MCH	VN	-30	1.66	0.00065	PASS
				-20	-2.63	-0.00104	PASS
				-10	-4.71	-0.00186	PASS
				0	0.46	0.00018	PASS
				10	-1.73	-0.00068	PASS
				20	0.64	0.00025	PASS
				30	-1.86	-0.00073	PASS
				40	0.41	0.00016	PASS
				50	-0.56	-0.00022	PASS
		HCH	VN	-30	-4.35	-0.0017	PASS
				-20	-0.73	-0.00028	PASS
				-10	-0.92	-0.00036	PASS
				0	-2.40	-0.00094	PASS
				10	-1.12	-0.00044	PASS
				20	-1.75	-0.00068	PASS
				30	-4.23	-0.00165	PASS
				40	1.20	0.00047	PASS
				50	-3.18	-0.00124	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM1 20MHz	LCH	VN	-30	-5.45	-0.00217	PASS
				-20	-1.24	-0.00049	PASS
				-10	4.38	0.00175	PASS
				0	1.75	0.00070	PASS
				10	-1.65	-0.00066	PASS
				20	0.11	0.00004	PASS
				30	-5.31	-0.00212	PASS
				40	-2.14	-0.00085	PASS
				50	3.59	0.00143	PASS
		MCH	VN	-30	-3.40	-0.00134	PASS
				-20	-5.95	-0.00235	PASS
				-10	-7.49	-0.00295	PASS
				0	-2.62	-0.00103	PASS
				10	-1.04	-0.00041	PASS
				20	-4.90	-0.00193	PASS
				30	-5.64	-0.00222	PASS
				40	-2.62	-0.00103	PASS
				50	-6.55	-0.00258	PASS
		HCH	VN	-30	3.54	0.00138	PASS
				-20	-1.49	-0.00058	PASS
				-10	3.53	0.00138	PASS
				0	-2.83	-0.00111	PASS
				10	2.40	0.00094	PASS
				20	-6.57	-0.00257	PASS
				30	-2.66	-0.00104	PASS
				40	-2.43	-0.00095	PASS
				50	-7.42	-0.00290	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 20MHz	LCH	VN	-30	-3.50	-0.00139	PASS
				-20	-2.65	-0.00106	PASS
				-10	3.38	0.00135	PASS
				0	2.64	0.00105	PASS
				10	1.60	0.00064	PASS
				20	-0.23	-0.00009	PASS
				30	-4.40	-0.00175	PASS
				40	5.34	0.00213	PASS
				50	2.79	0.00111	PASS
		MCH	VN	-30	-3.80	-0.00150	PASS
				-20	-5.32	-0.00210	PASS
				-10	-7.29	-0.00288	PASS
				0	-4.11	-0.00162	PASS
				10	-0.34	-0.00013	PASS
				20	1.84	0.00073	PASS
				30	-3.64	-0.00144	PASS
				40	-2.32	-0.00092	PASS
				50	-5.91	-0.00233	PASS
		HCH	VN	-30	1.74	0.00068	PASS
				-20	-4.55	-0.00178	PASS
				-10	1.29	0.00050	PASS
				0	-5.73	-0.00224	PASS
				10	2.88	0.00113	PASS
				20	-1.87	-0.00073	PASS
				30	-2.39	-0.00093	PASS
				40	-4.13	-0.00161	PASS
				50	-7.40	-0.00289	PASS

The End