



Appendix B

E-UTRA Band 12



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1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 12

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM1	1.4M	LCH	1RB#0	22.65	15.6	34.77	PASS
				1RB#2	22.71	15.66	34.77	PASS
				1RB#5	22.71	15.66	34.77	PASS
				3RB#0	22.76	15.71	34.77	PASS
				3RB#1	22.76	15.71	34.77	PASS
				3RB#3	22.79	15.74	34.77	PASS
				6RB#0	21.91	14.86	34.77	PASS
			MCH	1RB#0	22.73	15.68	34.77	PASS
				1RB#2	22.75	15.7	34.77	PASS
				1RB#5	22.78	15.73	34.77	PASS
				3RB#0	22.76	15.71	34.77	PASS
				3RB#1	22.76	15.71	34.77	PASS
				3RB#3	22.75	15.7	34.77	PASS
				6RB#0	21.96	14.91	34.77	PASS
			HCH	1RB#0	22.71	15.66	34.77	PASS
				1RB#2	22.79	15.74	34.77	PASS
				1RB#5	22.81	15.76	34.77	PASS
				3RB#0	22.76	15.71	34.77	PASS
				3RB#1	22.76	15.71	34.77	PASS
				3RB#3	22.76	15.71	34.77	PASS
				6RB#0	21.98	14.93	34.77	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
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BAND 12	LTE/TM2	1.4M	LCH	1RB#0	21.62	14.57	34.77	PASS
				1RB#2	21.75	14.7	34.77	PASS
				1RB#5	21.66	14.61	34.77	PASS
				3RB#0	21.68	14.63	34.77	PASS
				3RB#1	21.68	14.63	34.77	PASS
				3RB#3	21.66	14.61	34.77	PASS
				6RB#0	20.89	13.84	34.77	PASS
			MCH	1RB#0	21.85	14.8	34.77	PASS
				1RB#2	21.93	14.88	34.77	PASS
				1RB#5	21.9	14.85	34.77	PASS
				3RB#0	21.69	14.64	34.77	PASS
				3RB#1	21.69	14.64	34.77	PASS
				3RB#3	21.75	14.7	34.77	PASS
				6RB#0	20.75	13.7	34.77	PASS
			HCH	1RB#0	21.85	14.8	34.77	PASS
				1RB#2	21.93	14.88	34.77	PASS
				1RB#5	21.91	14.86	34.77	PASS
				3RB#0	21.68	14.63	34.77	PASS
				3RB#1	21.69	14.64	34.77	PASS
				3RB#3	21.75	14.7	34.77	PASS
				6RB#0	20.78	13.73	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM1	3M	LCH	1RB#0	22.71	15.66	34.77	PASS
				1RB#8	22.67	15.62	34.77	PASS
				1RB#14	22.76	15.71	34.77	PASS
				8RB#0	21.96	14.91	34.77	PASS
				8RB#4	21.96	14.91	34.77	PASS
				8RB#7	22.03	14.98	34.77	PASS
				15RB#0	21.99	14.94	34.77	PASS
			MCH	1RB#0	22.86	15.81	34.77	PASS
				1RB#8	22.77	15.72	34.77	PASS
				1RB#14	22.84	15.79	34.77	PASS
				8RB#0	22.03	14.98	34.77	PASS
				8RB#4	22.03	14.98	34.77	PASS
				8RB#7	22.03	14.98	34.77	PASS
				15RB#0	21.96	14.91	34.77	PASS
			HCH	1RB#0	22.82	15.77	34.77	PASS
				1RB#8	22.77	15.72	34.77	PASS
				1RB#14	22.87	15.82	34.77	PASS
				8RB#0	22.03	14.98	34.77	PASS
				8RB#4	22.03	14.98	34.77	PASS
				8RB#7	22.06	15.01	34.77	PASS
				15RB#0	21.99	14.94	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM2	3M	LCH	1RB#0	21.9	14.85	34.77	PASS
				1RB#8	21.86	14.81	34.77	PASS
				1RB#14	21.93	14.88	34.77	PASS
				8RB#0	20.98	13.93	34.77	PASS
				8RB#4	20.97	13.92	34.77	PASS
				8RB#7	21.04	13.99	34.77	PASS
				15RB#0	21.01	13.96	34.77	PASS
			MCH	1RB#0	21.89	14.84	34.77	PASS
				1RB#8	21.82	14.77	34.77	PASS
				1RB#14	21.87	14.82	34.77	PASS
				8RB#0	20.93	13.88	34.77	PASS
				8RB#4	20.92	13.87	34.77	PASS
				8RB#7	20.93	13.88	34.77	PASS
				15RB#0	20.85	13.8	34.77	PASS
			HCH	1RB#0	21.72	14.67	34.77	PASS
				1RB#8	21.66	14.61	34.77	PASS
				1RB#14	21.75	14.7	34.77	PASS
				8RB#0	20.99	13.94	34.77	PASS
				8RB#4	20.98	13.93	34.77	PASS
				8RB#7	20.99	13.94	34.77	PASS
				15RB#0	20.85	13.8	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM1	5M	LCH	1RB#0	22.8	15.75	34.77	PASS
				1RB#12	22.82	15.77	34.77	PASS
				1RB#24	22.83	15.78	34.77	PASS
				12RB#0	21.78	14.73	34.77	PASS
				12RB#6	21.78	14.73	34.77	PASS
				12RB#13	21.96	14.91	34.77	PASS
				25RB#0	21.9	14.85	34.77	PASS
			MCH	1RB#0	22.89	15.84	34.77	PASS
				1RB#12	22.9	15.85	34.77	PASS
				1RB#24	22.88	15.83	34.77	PASS
				12RB#0	21.93	14.88	34.77	PASS
				12RB#6	21.93	14.88	34.77	PASS
				12RB#13	21.84	14.79	34.77	PASS
				25RB#0	21.88	14.83	34.77	PASS
			HCH	1RB#0	22.85	15.8	34.77	PASS
				1RB#12	22.8	15.75	34.77	PASS
				1RB#24	22.89	15.84	34.77	PASS
				12RB#0	21.88	14.83	34.77	PASS
				12RB#6	21.87	14.82	34.77	PASS
				12RB#13	21.83	14.78	34.77	PASS
				25RB#0	21.87	14.82	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM2	5M	LCH	1RB#0	21.97	14.92	34.77	PASS
				1RB#12	22.02	14.97	34.77	PASS
				1RB#24	21.97	14.92	34.77	PASS
				12RB#0	20.83	13.78	34.77	PASS
				12RB#6	20.83	13.78	34.77	PASS
				12RB#13	21	13.95	34.77	PASS
				25RB#0	20.9	13.85	34.77	PASS
			MCH	1RB#0	21.82	14.77	34.77	PASS
				1RB#12	21.82	14.77	34.77	PASS
				1RB#24	21.84	14.79	34.77	PASS
				12RB#0	20.9	13.85	34.77	PASS
				12RB#6	20.9	13.85	34.77	PASS
				12RB#13	20.84	13.79	34.77	PASS
				25RB#0	20.87	13.82	34.77	PASS
			HCH	1RB#0	21.85	14.8	34.77	PASS
				1RB#12	21.79	14.74	34.77	PASS
				1RB#24	21.83	14.78	34.77	PASS
				12RB#0	20.86	13.81	34.77	PASS
				12RB#6	20.86	13.81	34.77	PASS
				12RB#13	20.81	13.76	34.77	PASS
				25RB#0	20.87	13.82	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM1	10M	LCH	1RB#0	22.91	15.86	34.77	PASS
				1RB#24	22.91	15.86	34.77	PASS
				1RB#49	22.96	15.91	34.77	PASS
				25RB#0	21.79	14.74	34.77	PASS
				25RB#12	21.79	14.74	34.77	PASS
				25RB#25	21.79	14.74	34.77	PASS
				50RB#0	21.77	14.72	34.77	PASS
			MCH	1RB#0	22.95	15.9	34.77	PASS
				1RB#24	22.93	15.88	34.77	PASS
				1RB#49	22.96	15.91	34.77	PASS
				25RB#0	21.95	14.9	34.77	PASS
				25RB#12	21.93	14.88	34.77	PASS
				25RB#25	21.87	14.82	34.77	PASS
				50RB#0	21.92	14.87	34.77	PASS
			HCH	1RB#0	22.92	15.87	34.77	PASS
				1RB#24	22.87	15.82	34.77	PASS
				1RB#49	22.95	15.9	34.77	PASS
				25RB#0	21.99	14.94	34.77	PASS
				25RB#12	21.99	14.94	34.77	PASS
				25RB#25	21.94	14.89	34.77	PASS
				50RB#0	21.97	14.92	34.77	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND 12	LTE/TM2	10M	LCH	1RB#0	22.07	15.02	34.77	PASS
				1RB#24	22.02	14.97	34.77	PASS
				1RB#49	22.02	14.97	34.77	PASS
				25RB#0	20.8	13.75	34.77	PASS
				25RB#12	20.79	13.74	34.77	PASS
				25RB#25	20.8	13.75	34.77	PASS
				50RB#0	20.8	13.75	34.77	PASS
			MCH	1RB#0	21.86	14.81	34.77	PASS
				1RB#24	21.84	14.79	34.77	PASS
				1RB#49	21.89	14.84	34.77	PASS
				25RB#0	20.95	13.9	34.77	PASS
				25RB#12	20.95	13.9	34.77	PASS
				25RB#25	20.89	13.84	34.77	PASS
				50RB#0	20.91	13.86	34.77	PASS
			HCH	1RB#0	22.04	14.99	34.77	PASS
				1RB#24	22.08	15.03	34.77	PASS
				1RB#49	22.05	15	34.77	PASS
				25RB#0	20.96	13.91	34.77	PASS
				25RB#12	20.94	13.89	34.77	PASS
				25RB#25	20.9	13.85	34.77	PASS
				50RB#0	20.95	13.9	34.77	PASS

Note:

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

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

b: SGP=Signal Generator Level



2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BAND 12	TM1/10M	LCH	4.72	13	PASS
		MCH	4.67	13	PASS
		HCH	4.72	13	PASS
	TM2/10M	LCH	5.74	13	PASS
		MCH	5.65	13	PASS
		HCH	5.62	13	PASS

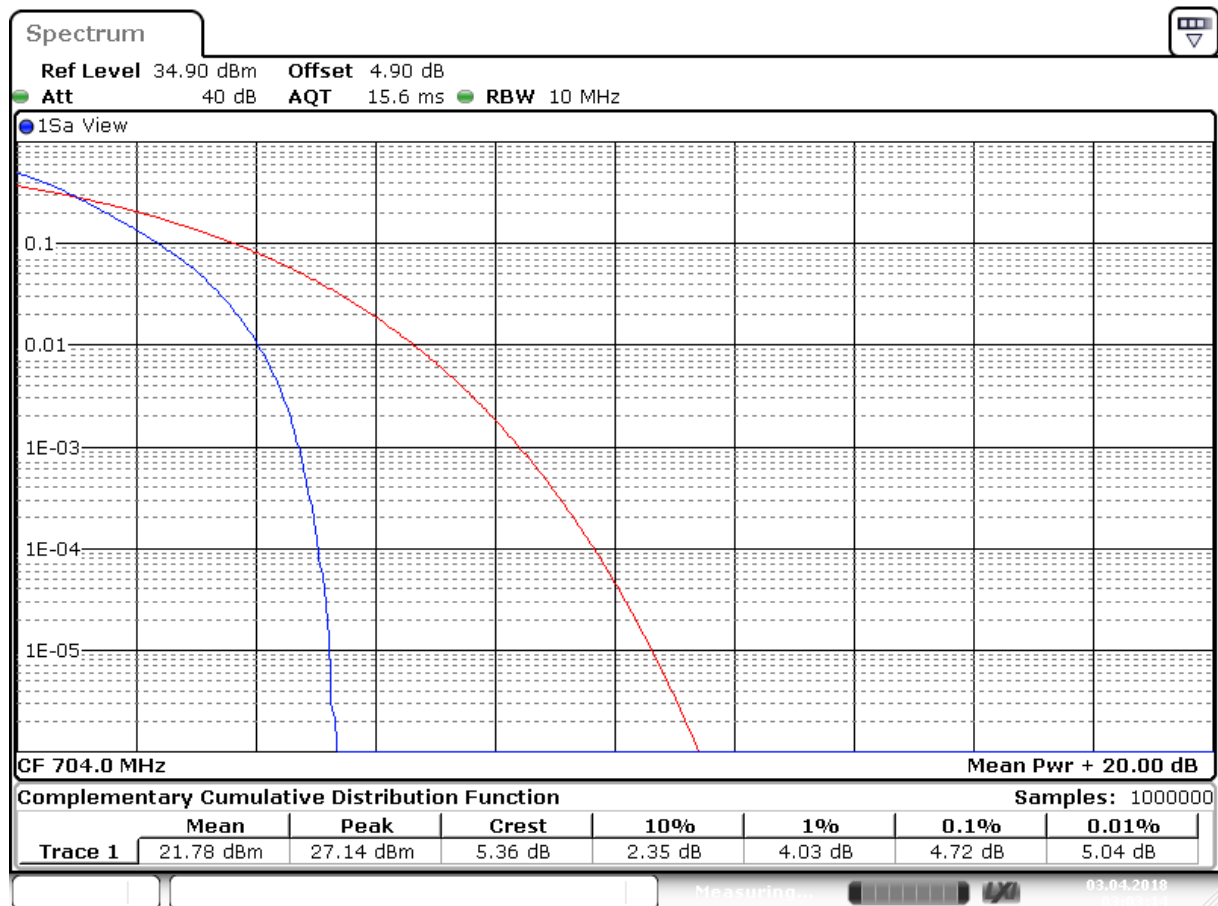
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE BAND 12

2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

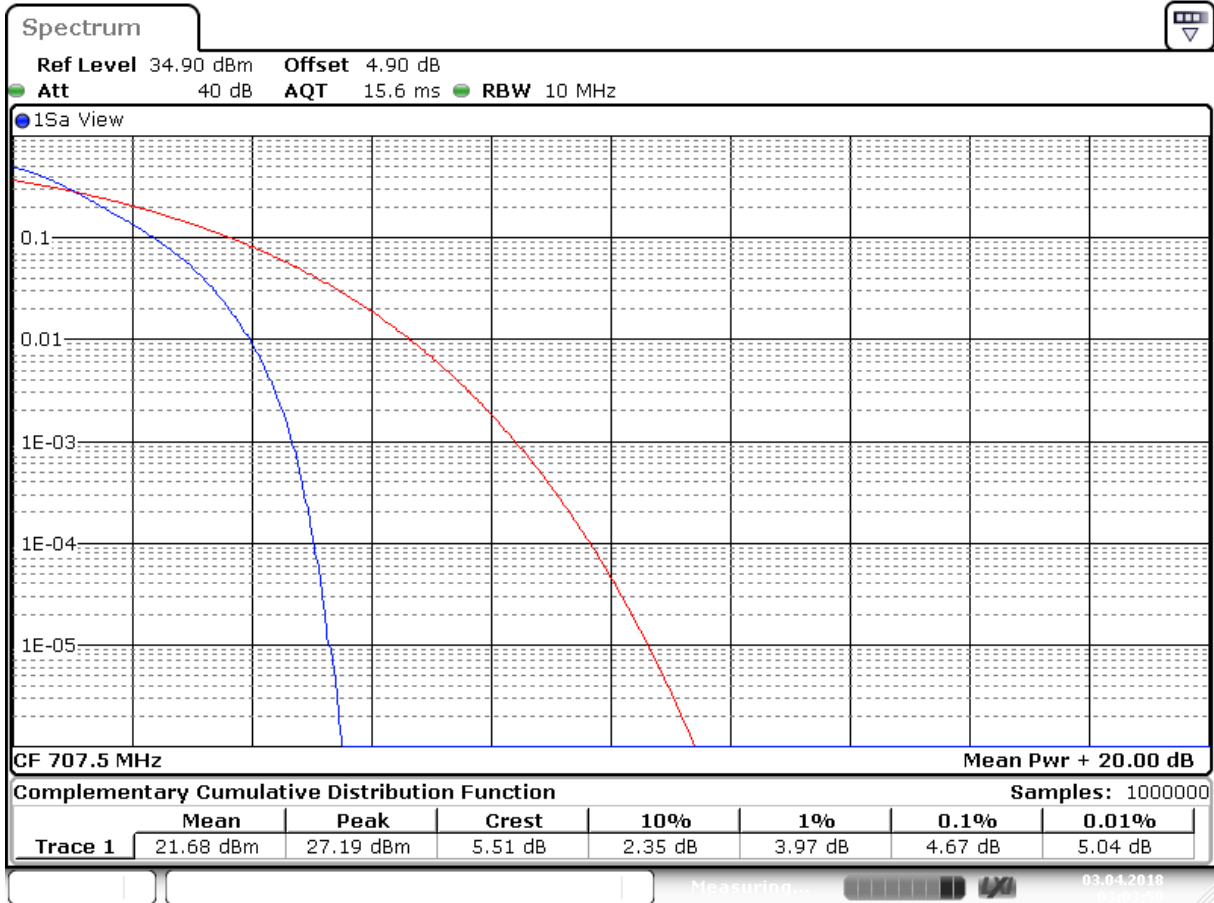
2.1.1.1.1 Test Channel = LCH



Date: 3 APR 2018 03:03:14



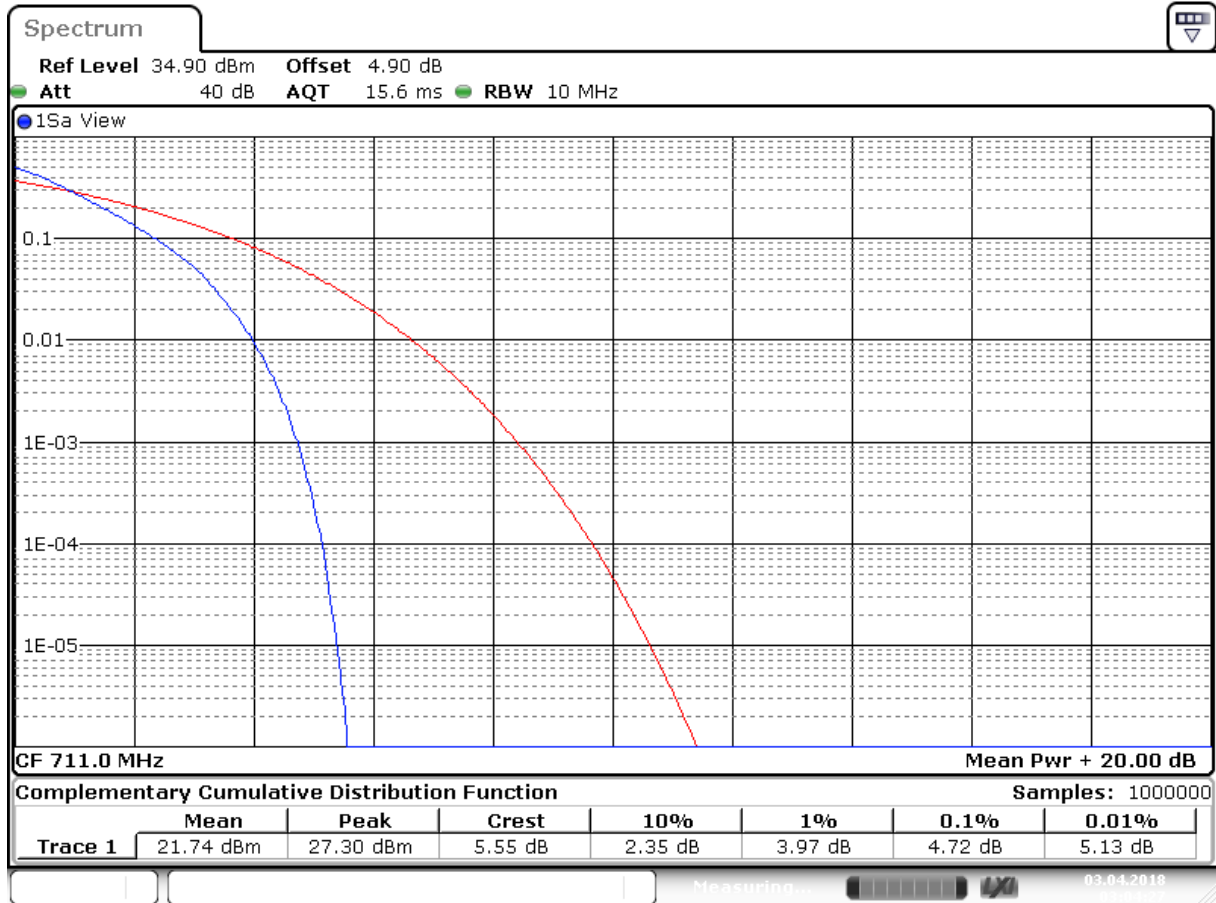
2.1.1.1.2 Test Channel = MCH



Date: 3 APR 2018 03:03:50



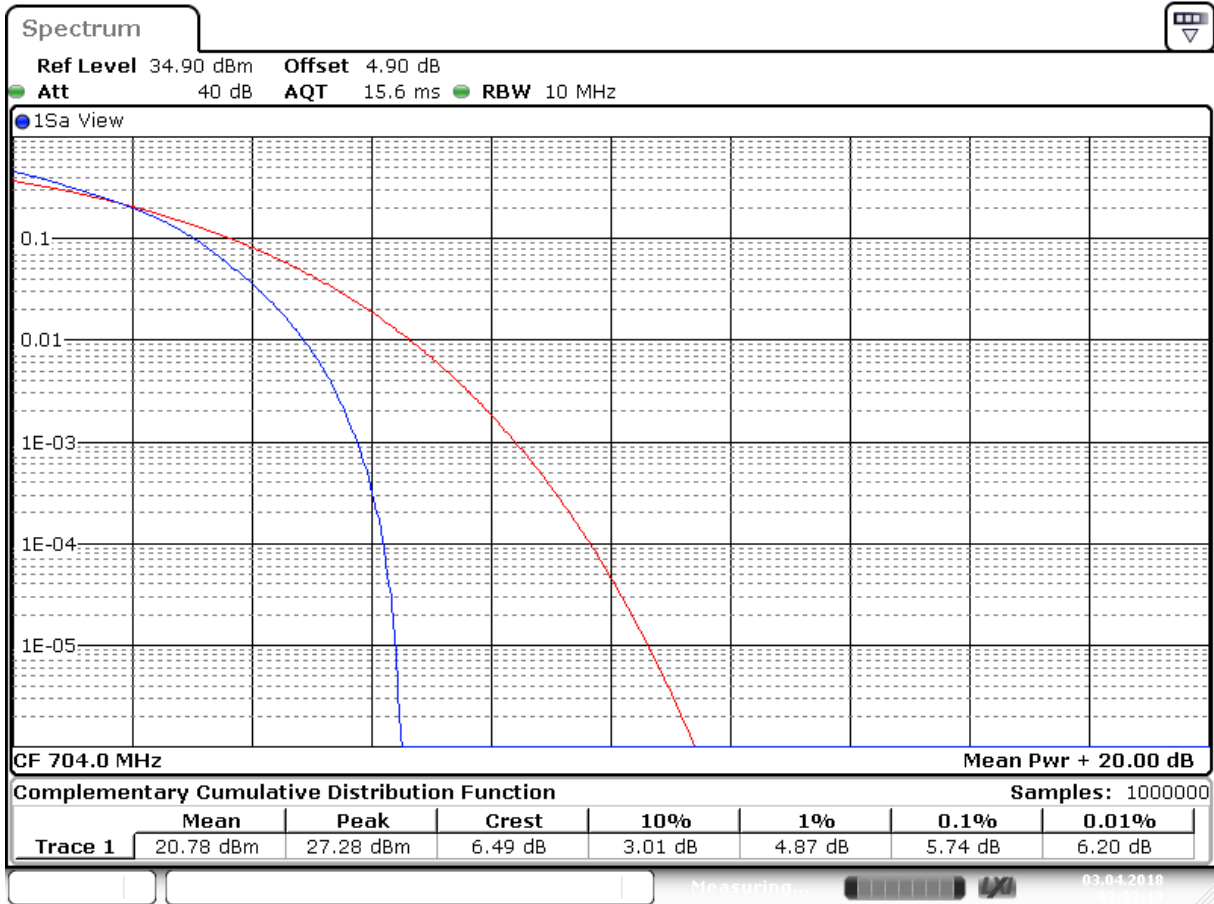
2.1.1.1.3 Test Channel = HCH



Date: 3 APR 2018 03:04:27

2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz

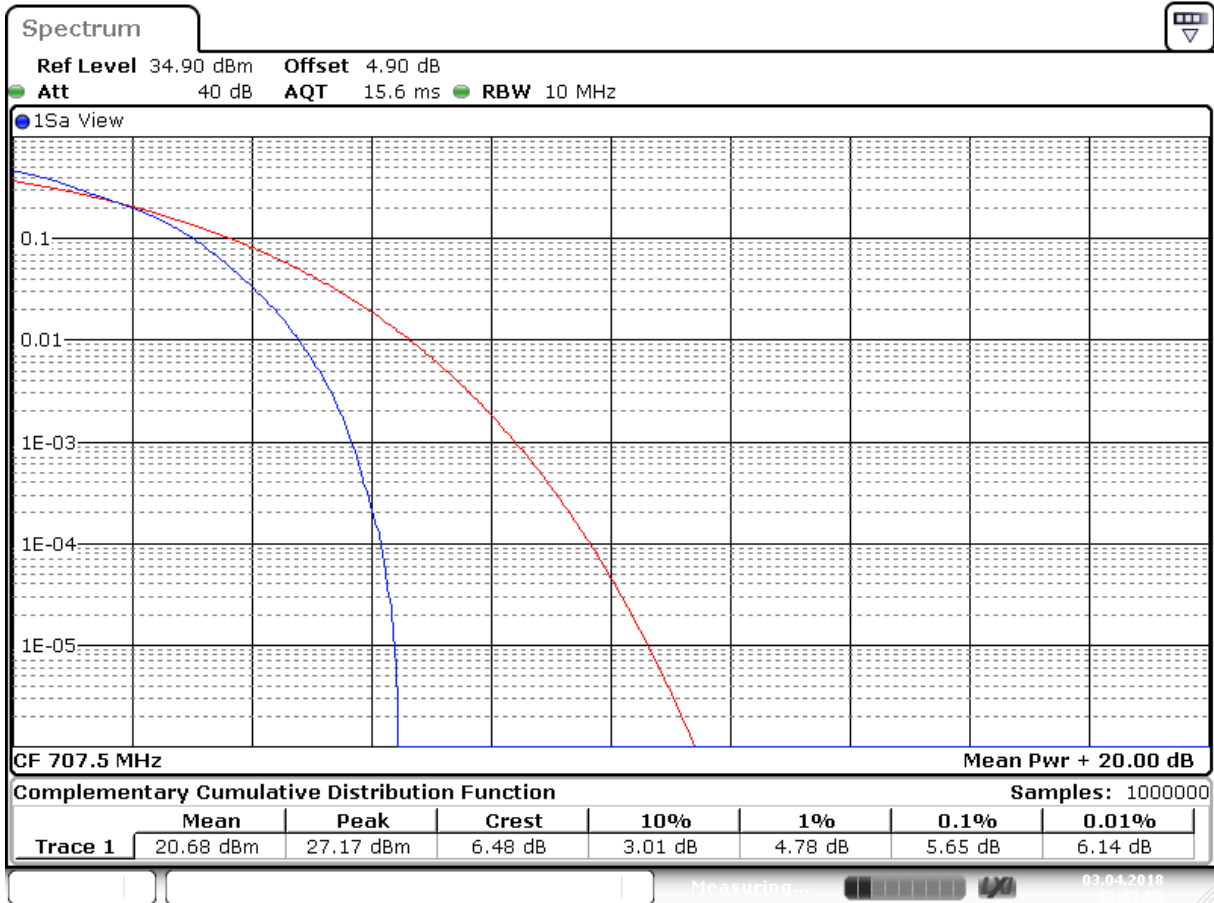
2.1.1.2.1 Test Channel = LCH



Date: 3 APR 2018 03:03:19

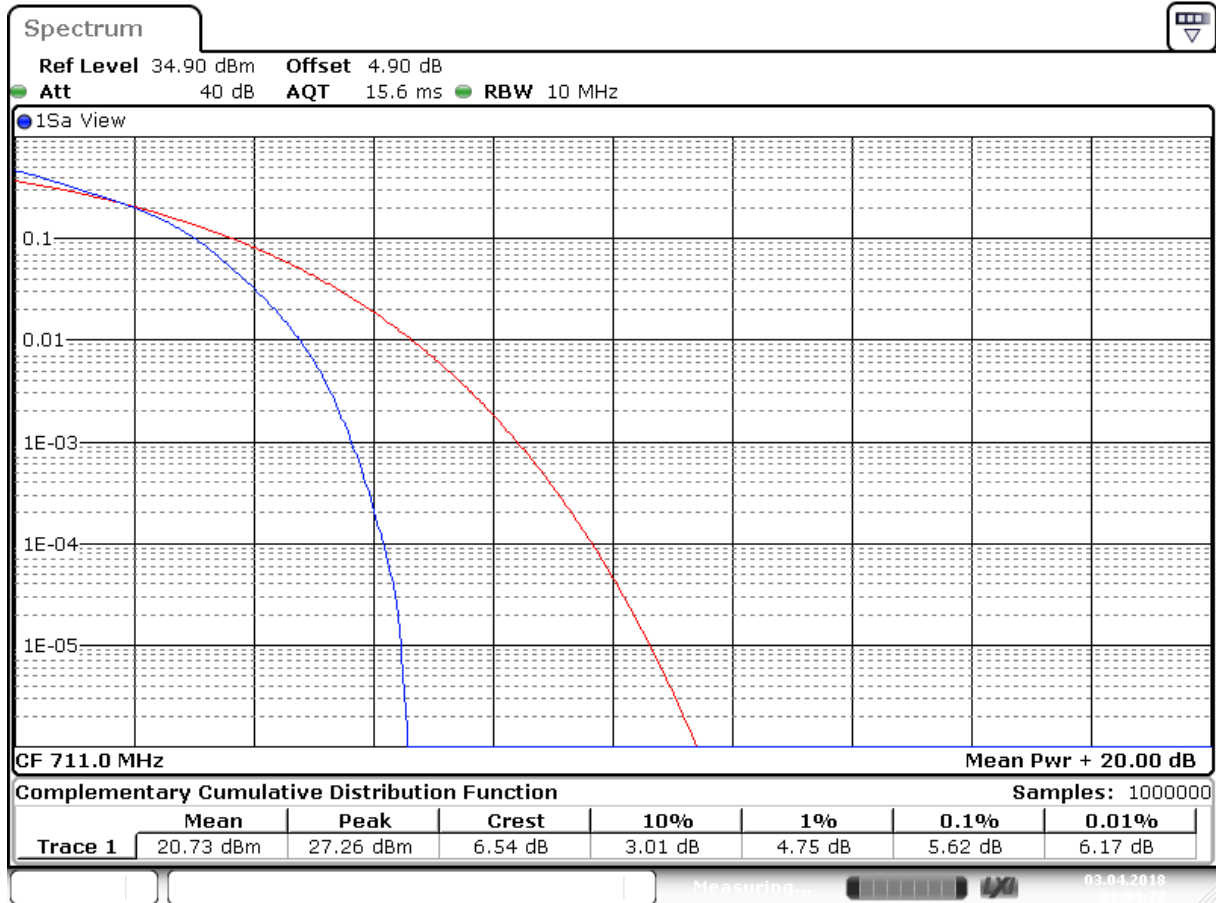


2.1.1.2.2 Test Channel = MCH



Date: 3 APR 2018 03:03:56

2.1.1.2.3 Test Channel = HCH



Date: 3.APR.2018 03:04:32

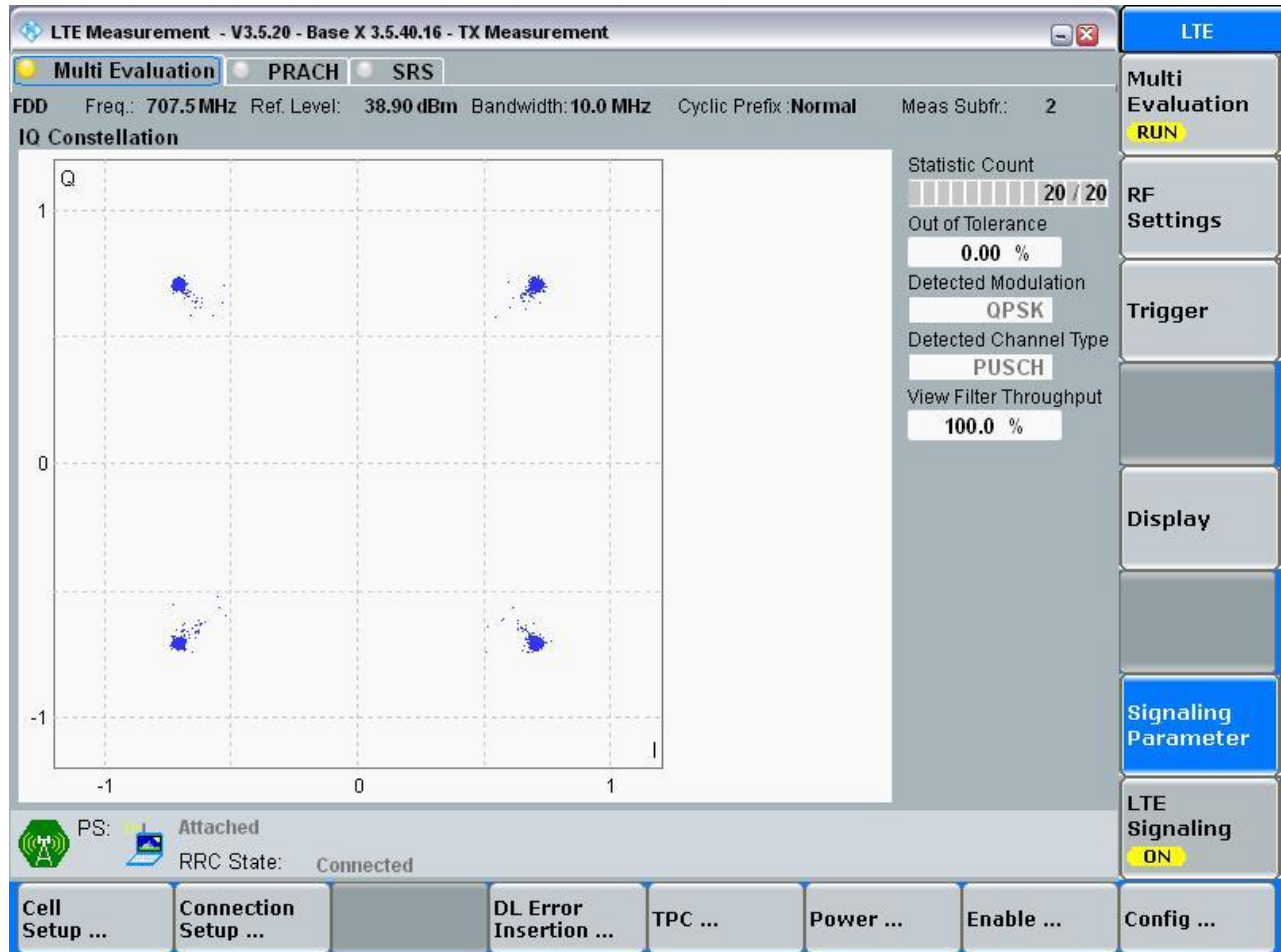
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE BAND 12

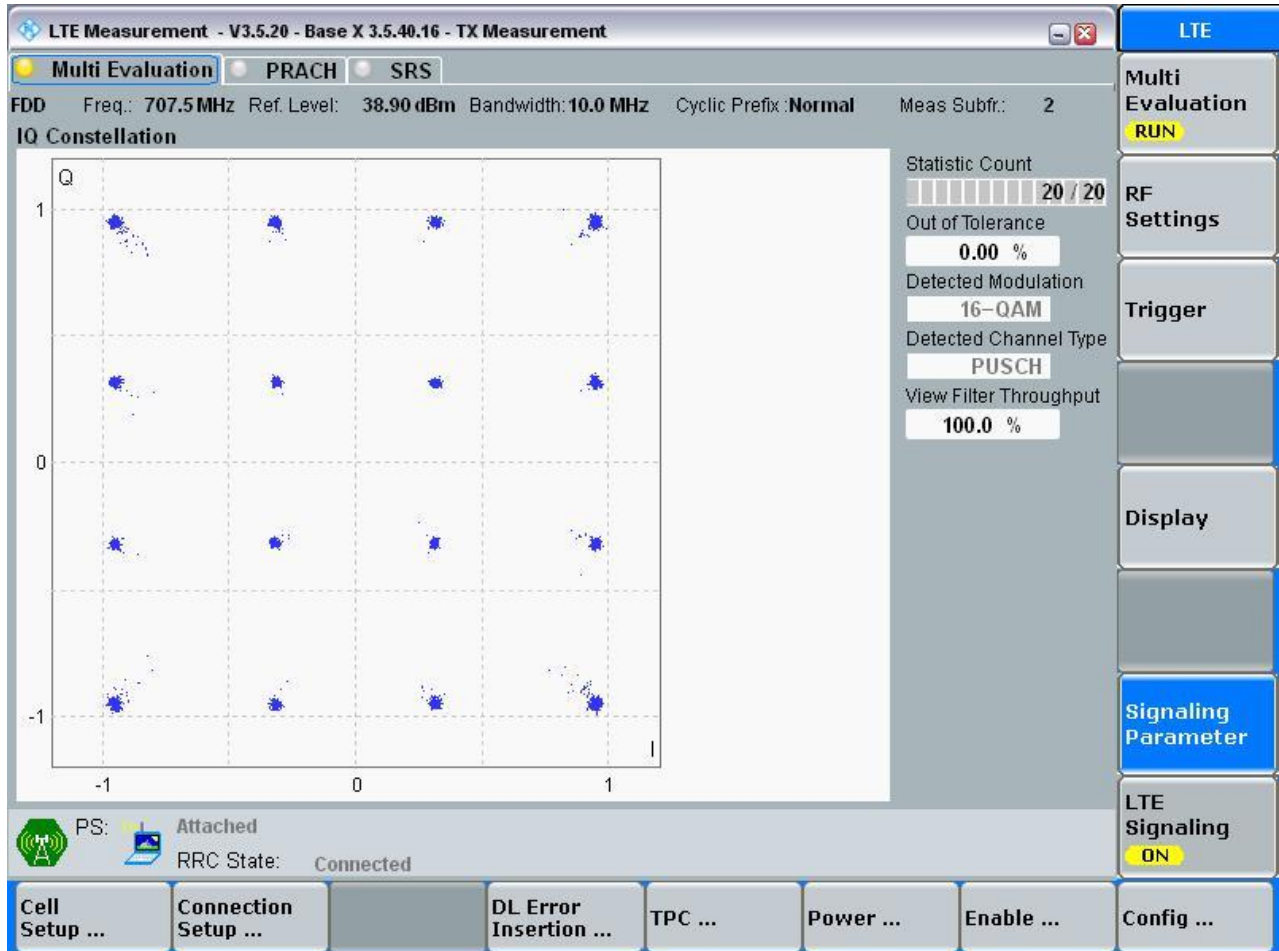
3.1.1.1 Test Mode = LTE /TM1 10MHz

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = LTE /TM2 10MHz

3.1.1.2.1 Test Channel = MCH





4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BAND 12	TM1/1.4MHz	LCH	1.088	1.203	PASS
		MCH	1.094	1.218	PASS
		HCH	1.088	1.227	PASS
	TM2/1.4MHz	LCH	1.091	1.206	PASS
		MCH	1.088	1.227	PASS
		HCH	1.088	1.233	PASS
	TM1/ 3MHz	LCH	2.697	2.844	PASS
		MCH	2.697	2.868	PASS
		HCH	2.697	2.850	PASS
	TM2/3MHz	LCH	2.691	2.874	PASS
		MCH	2.697	2.862	PASS
		HCH	2.697	2.862	PASS
	TM1/ 5MHz	LCH	4.476	4.740	PASS
		MCH	4.476	4.720	PASS
		HCH	4.476	4.740	PASS
	TM2/ 5MHz	LCH	4.476	4.710	PASS
		MCH	4.476	4.780	PASS
		HCH	4.476	4.750	PASS
	TM1/10MHz	LCH	8.931	9.300	PASS
		MCH	8.931	9.300	PASS
		HCH	8.931	9.300	PASS
TM2/ 10MHz	LCH	8.931	9.280	PASS	
	MCH	8.911	9.280	PASS	
	HCH	8.931	9.280	PASS	

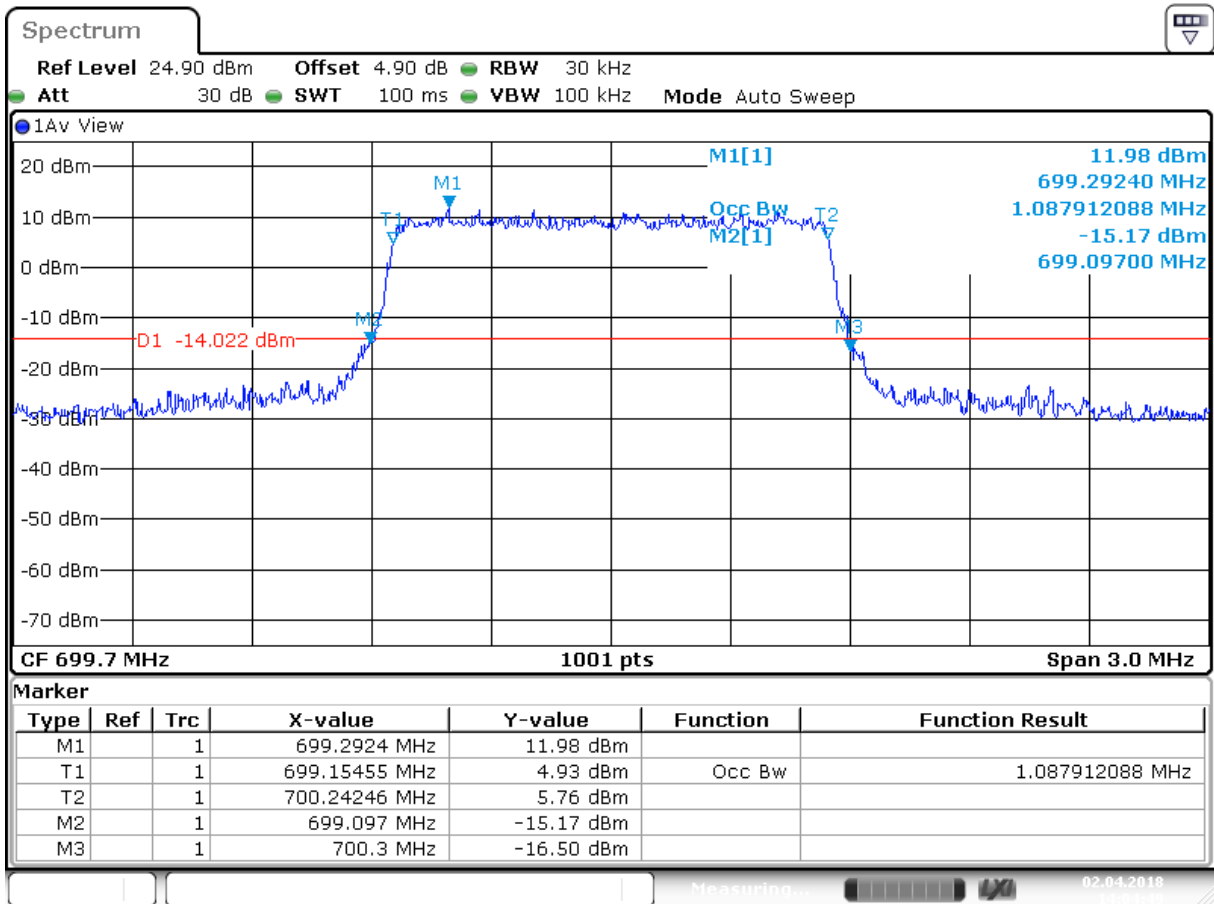
Part II –Test Plots

4.1 For LTE

4.1.1 Test Band = LTE BAND 12

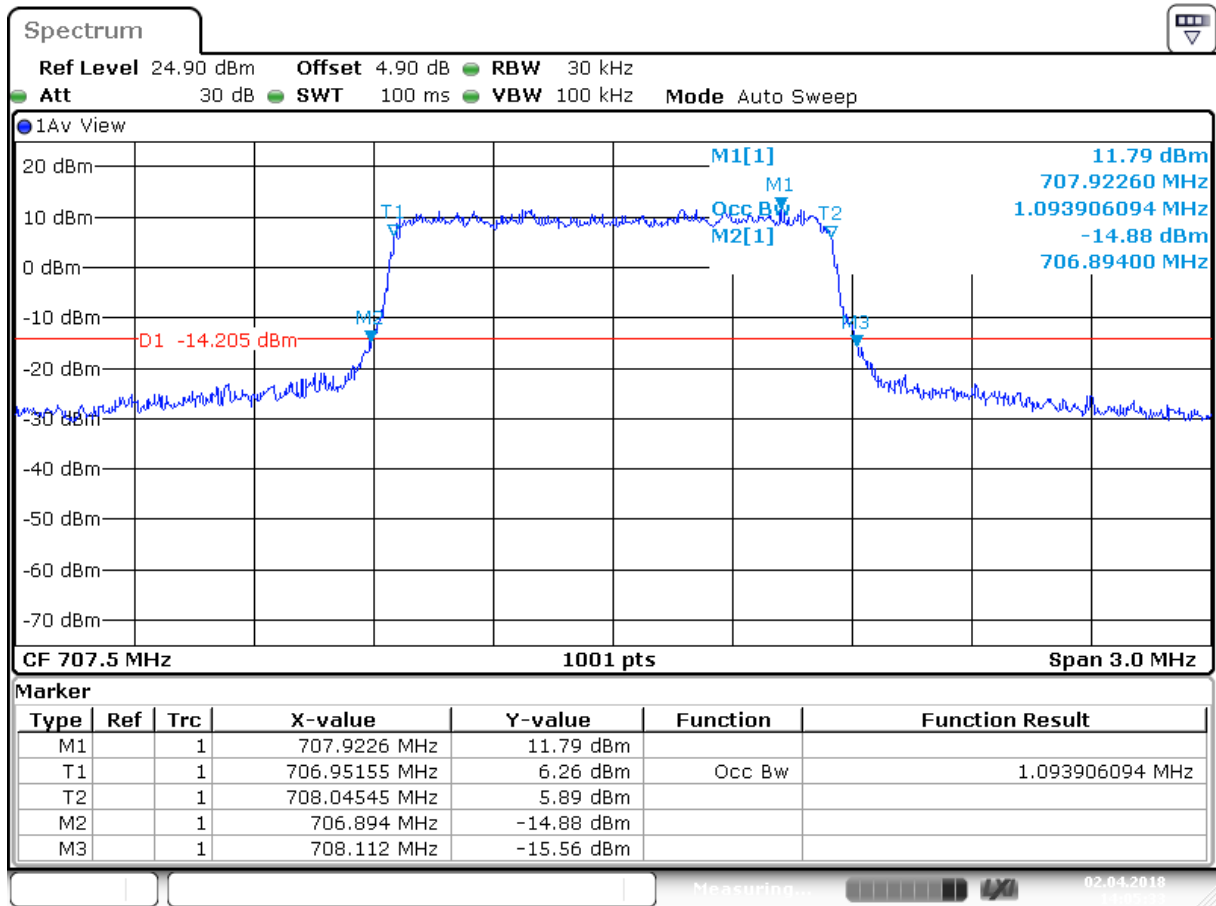
4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH



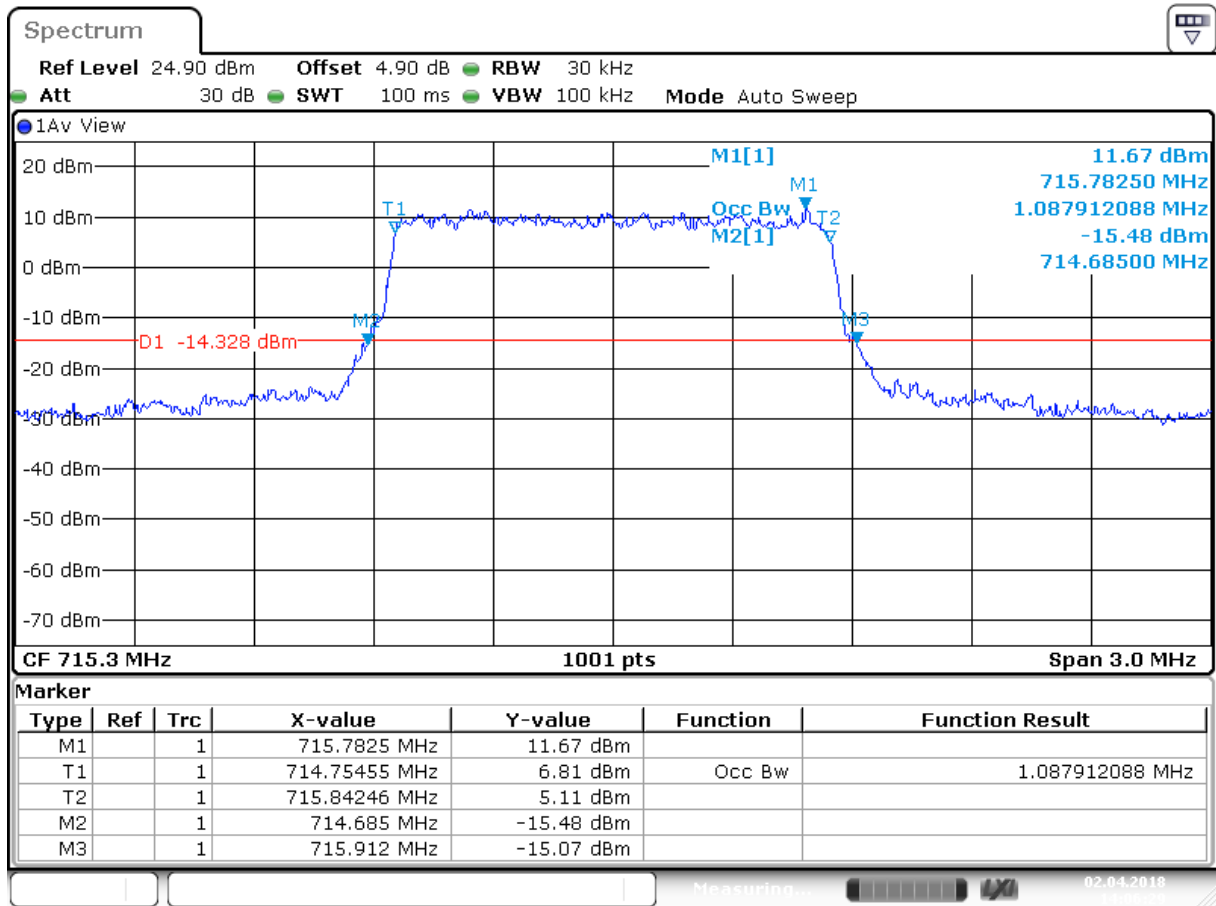
Date: 2 APR 2018 14:04:49

4.1.1.1.2 Test Channel = MCH



Date: 2 APR 2018 14:05:34

4.1.1.1.3 Test Channel = HCH

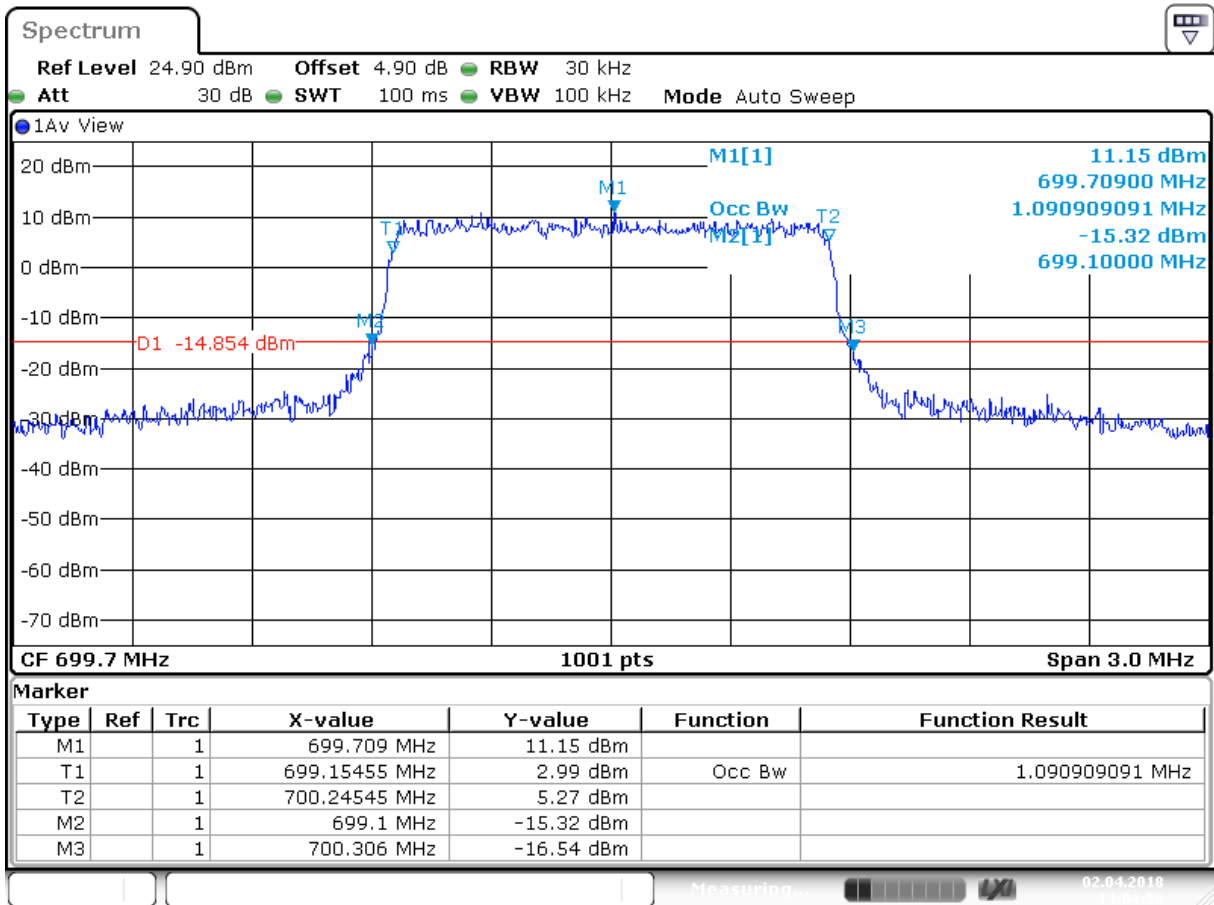


Date: 2 APR 2018 14:06:29



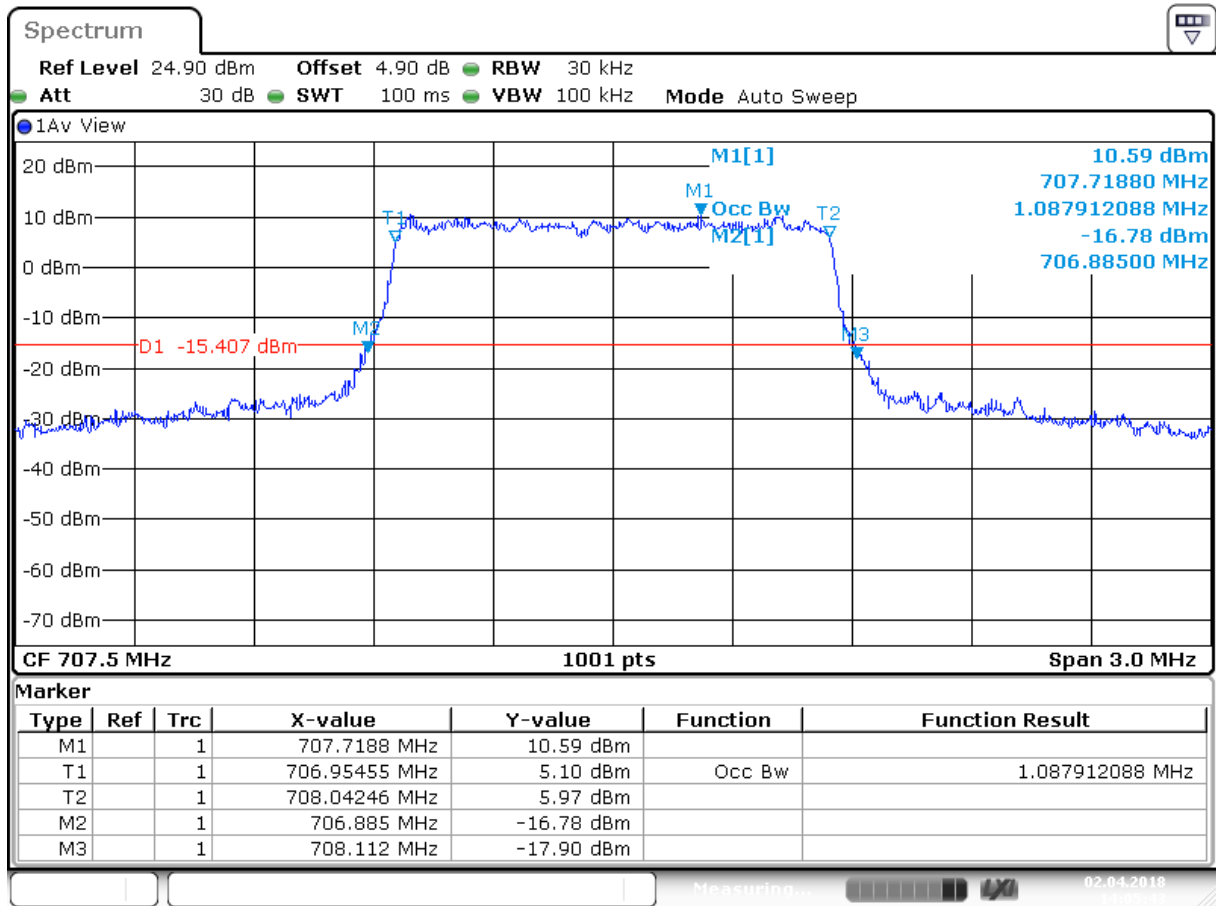
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



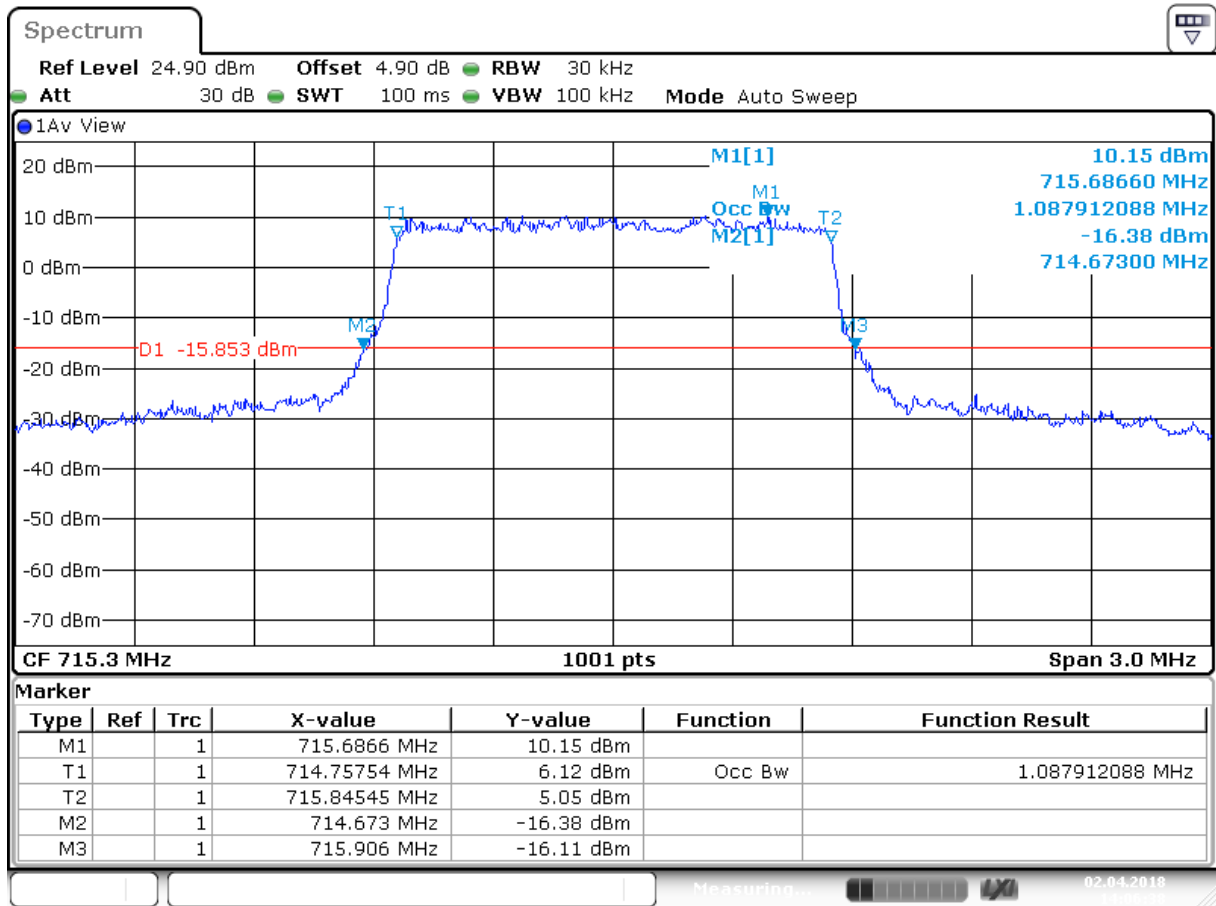
Date: 2 APR 2018 14:04:59

4.1.1.2.2 Test Channel = MCH



Date: 2 APR 2018 14:05:44

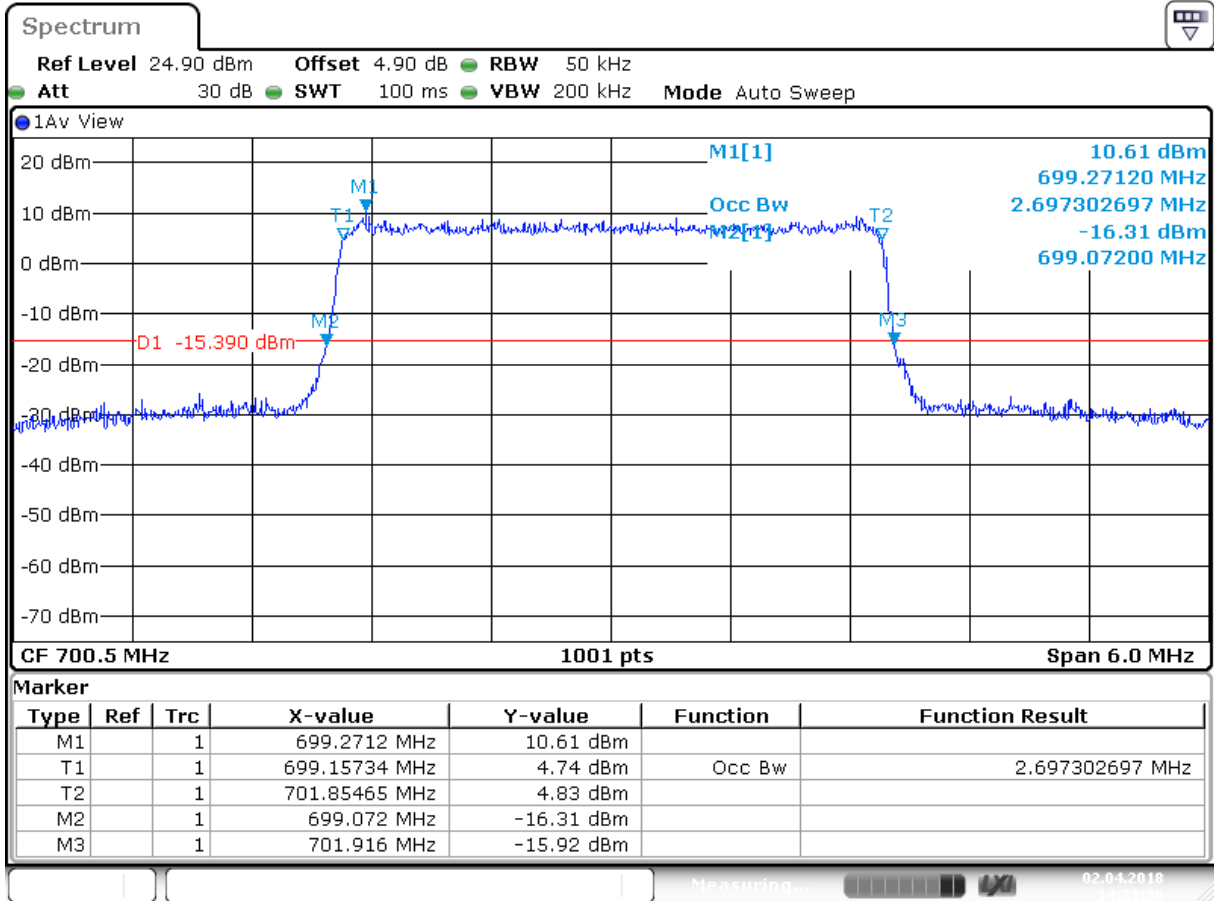
4.1.1.2.3 Test Channel = HCH



Date: 2 APR 2018 14:06:38

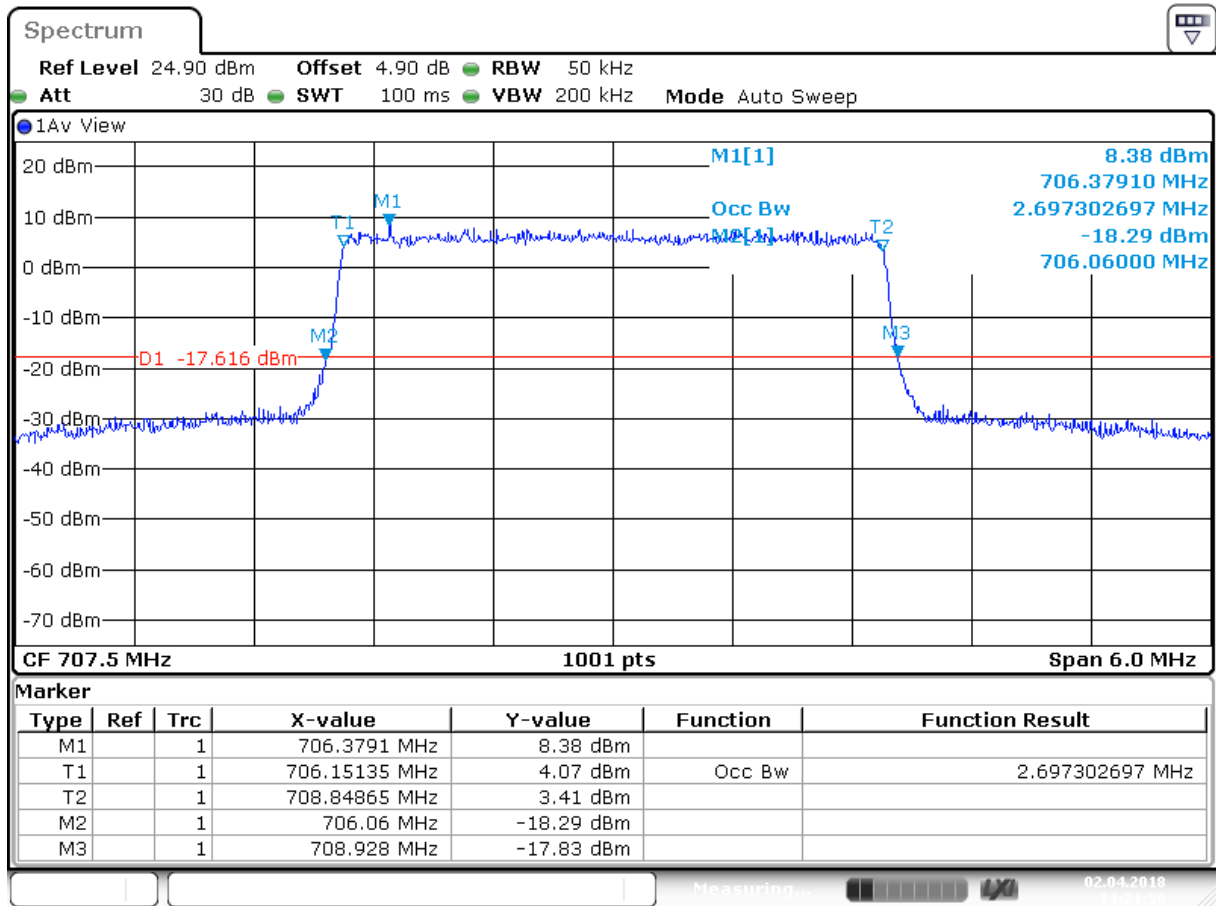
4.1.1.3 Test Mode = LTE/TM1 3MHz

4.1.1.3.1 Test Channel = LCH



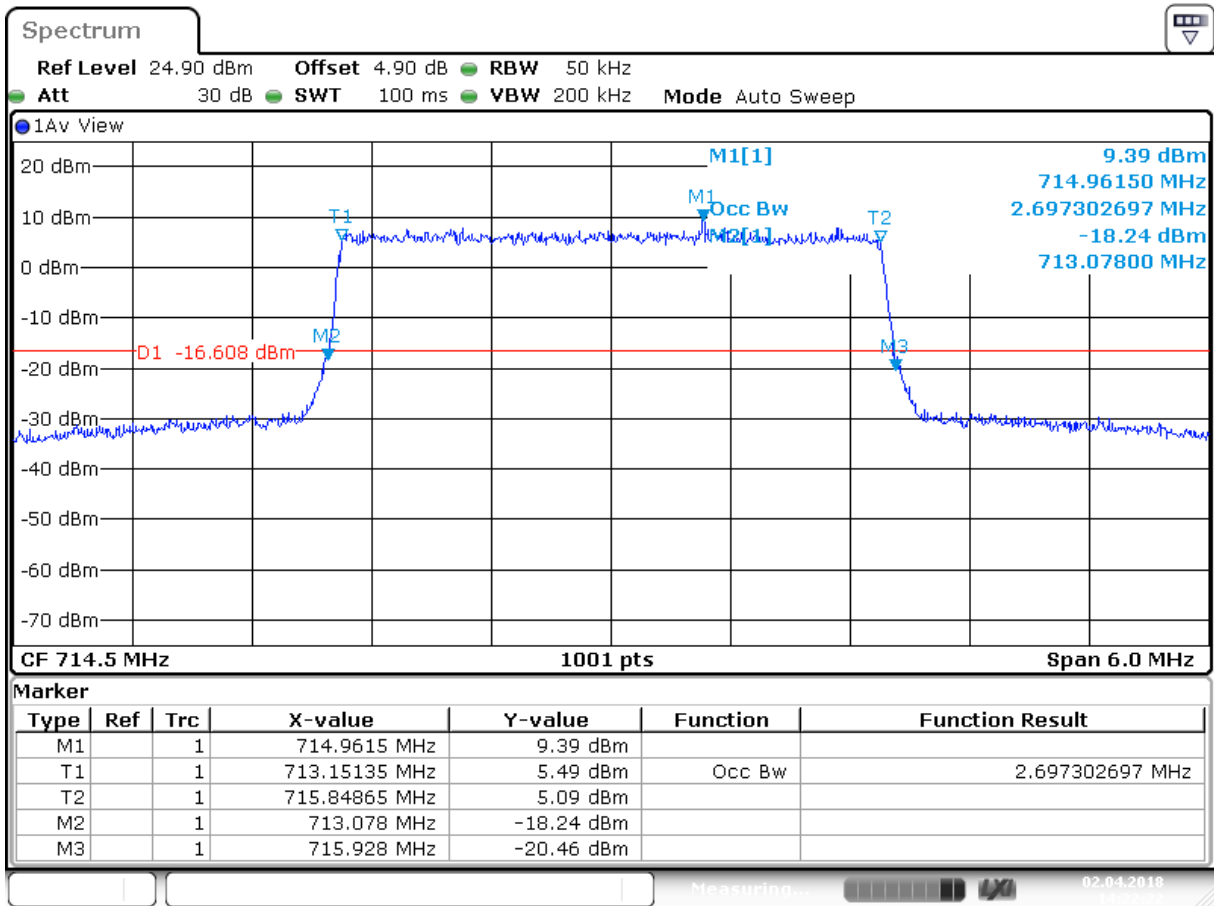
Date: 2 APR 2018 14:21:37

4.1.1.3.2 Test Channel = MCH



Date: 2 APR 2018 14:21:59

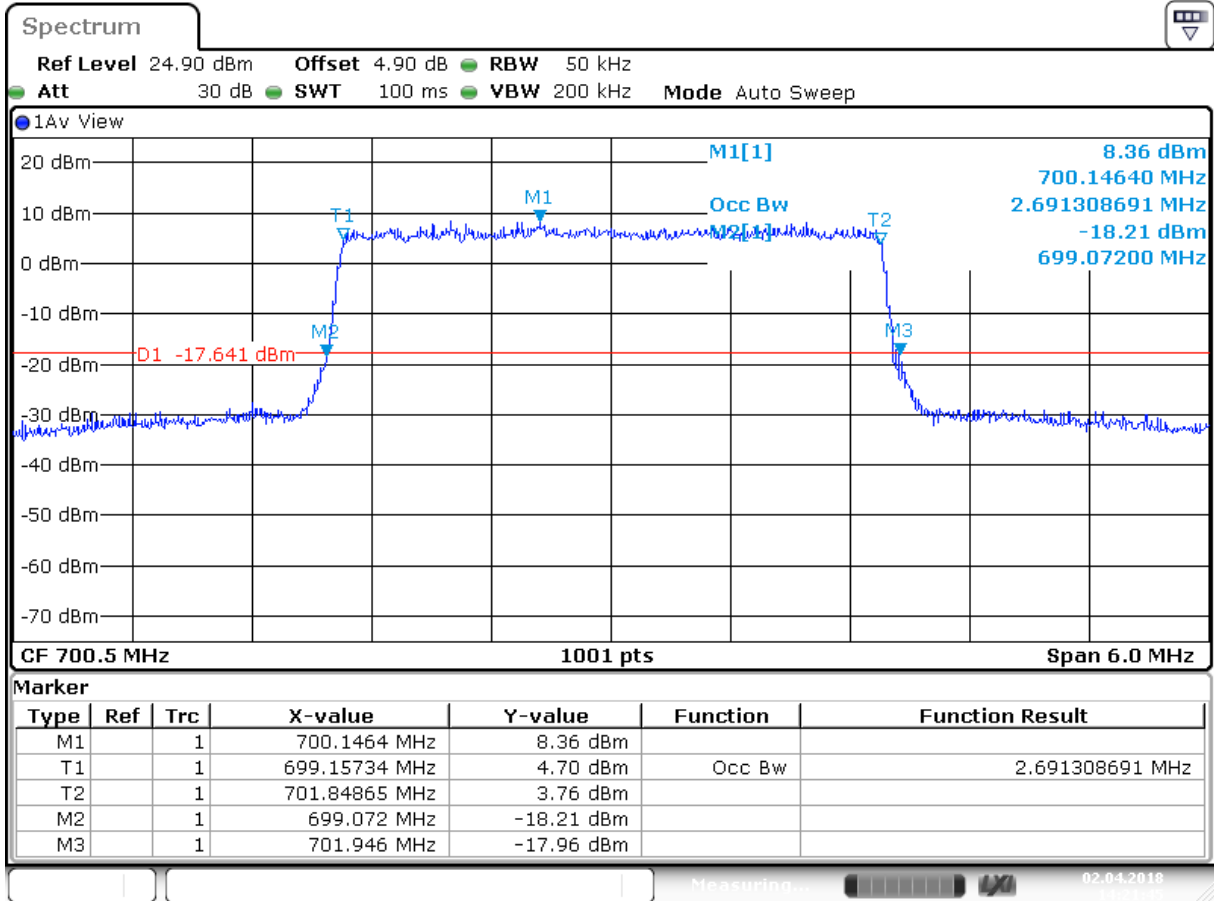
4.1.1.3.3 Test Channel = HCH



Date: 2 APR 2018 14:22:22

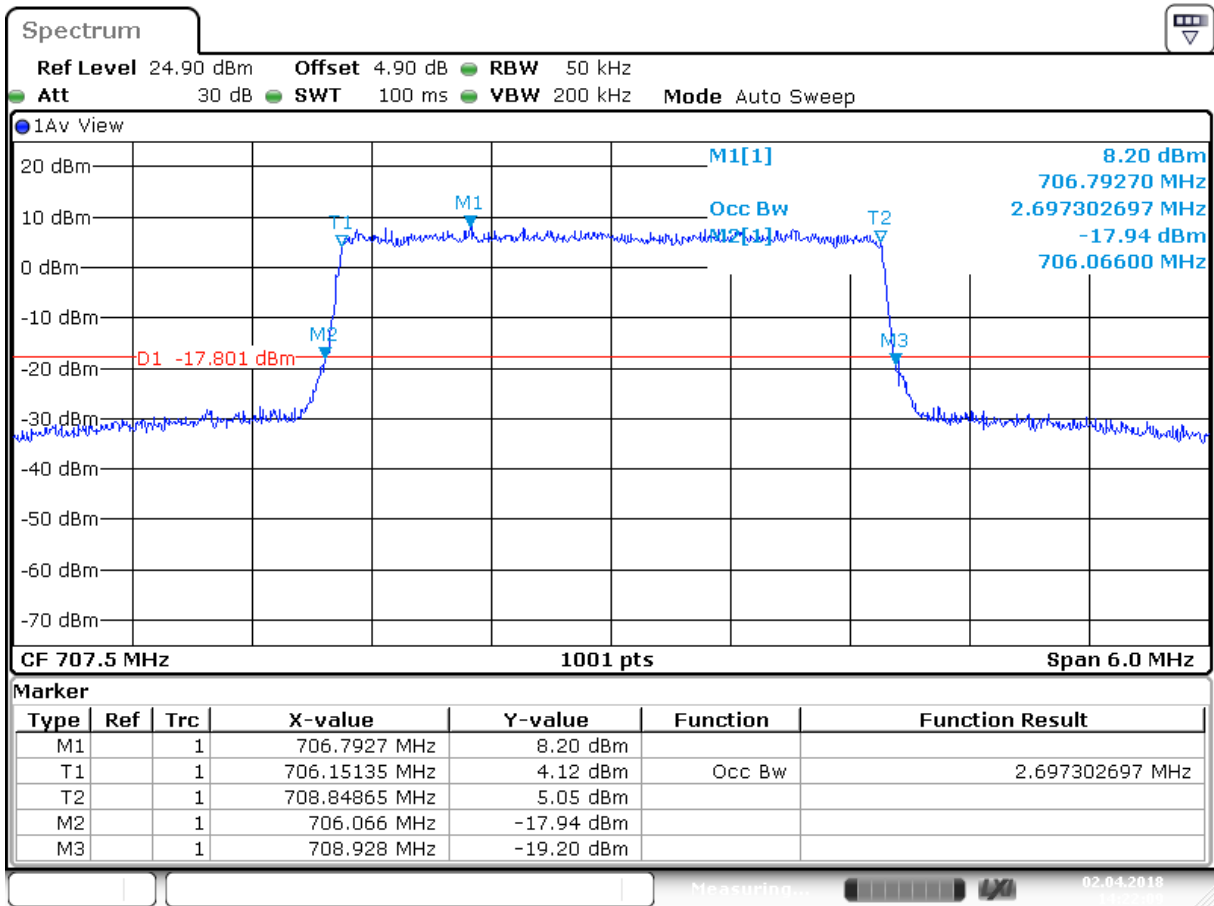
4.1.1.4 Test Mode = LTE/TM2 3MHz

4.1.1.4.1 Test Channel = LCH



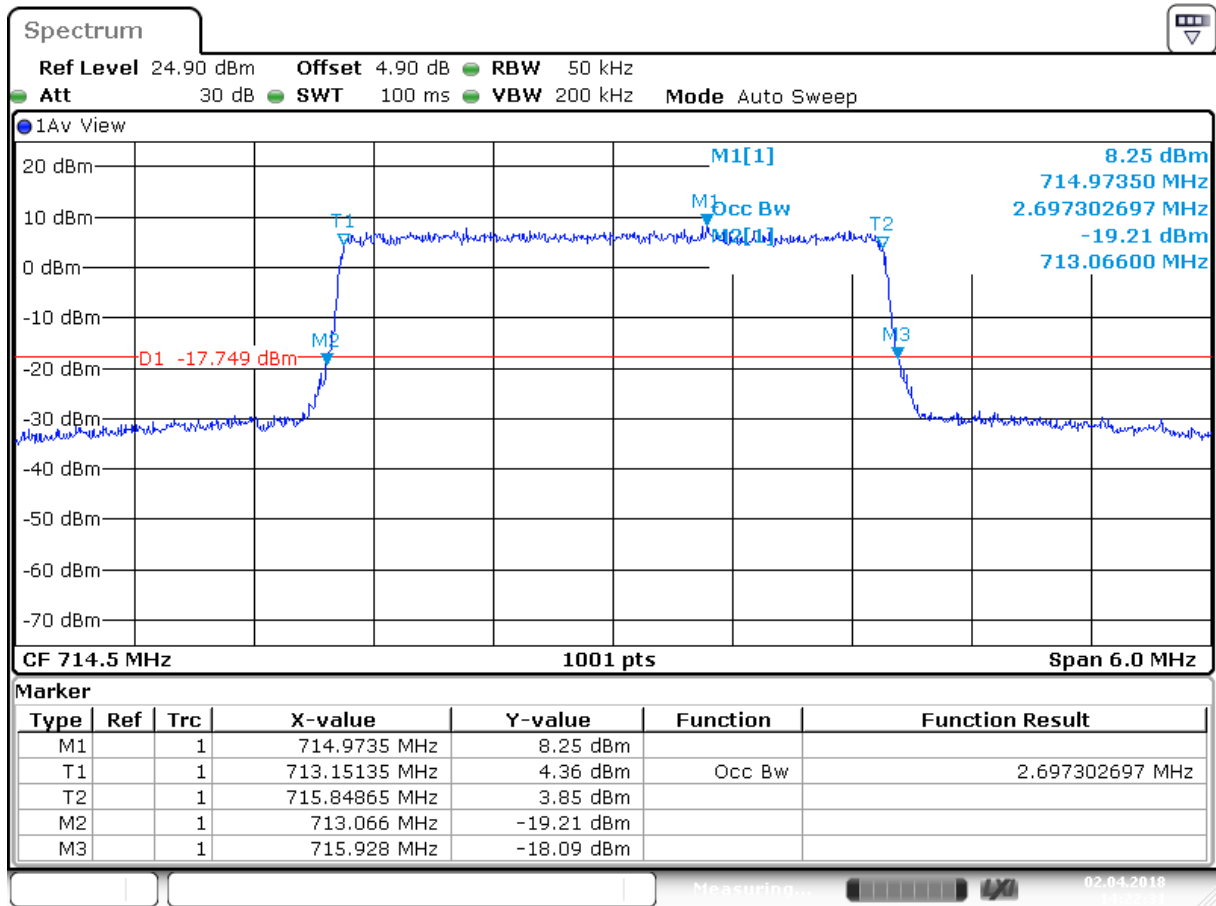
Date: 2 APR 2018 14:21:46

4.1.1.4.2 Test Channel = MCH



Date: 2 APR 2018 14:22:09

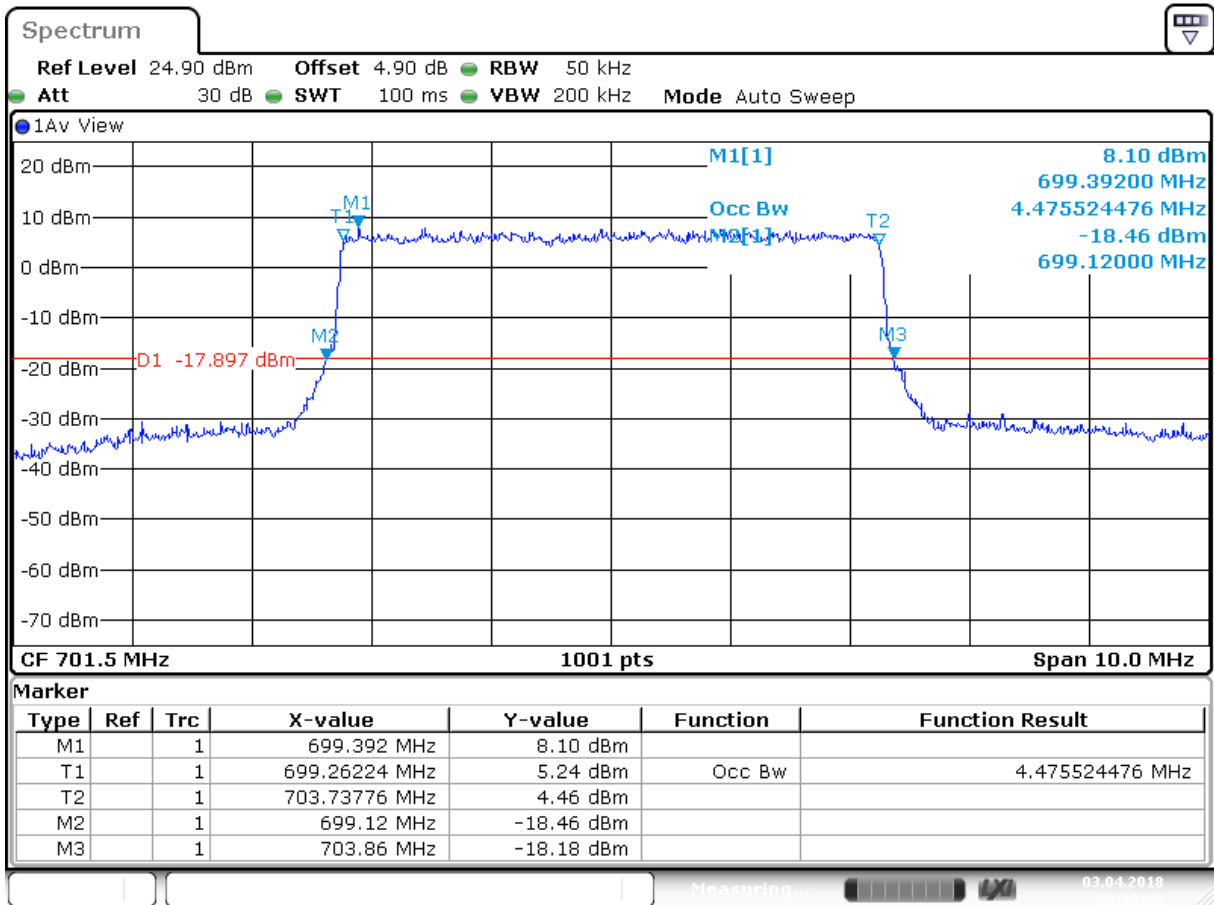
4.1.1.4.3 Test Channel = HCH



Date: 2 APR 2018 14:22:31

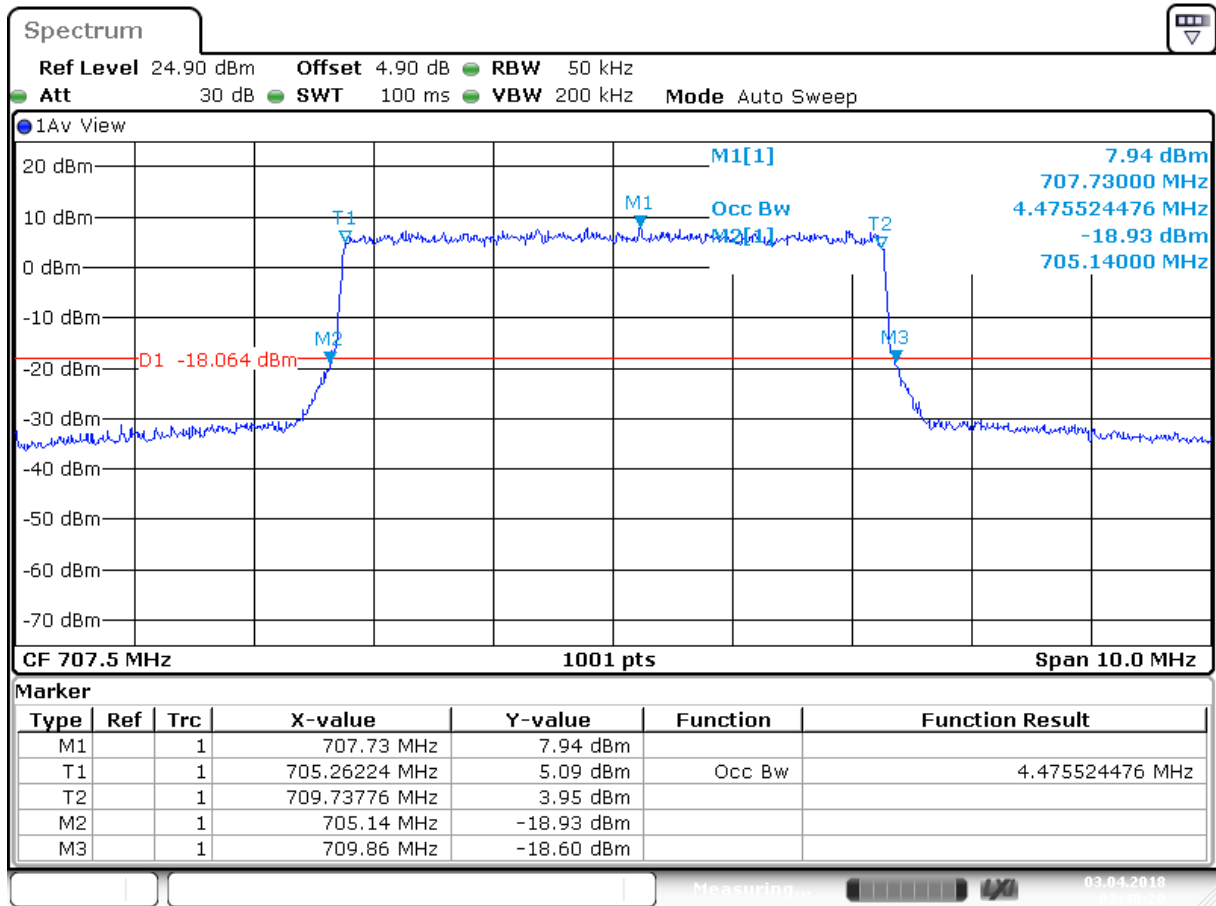
4.1.1.5 Test Mode = LTE/TM1 5MHz

4.1.1.5.1 Test Channel = LCH



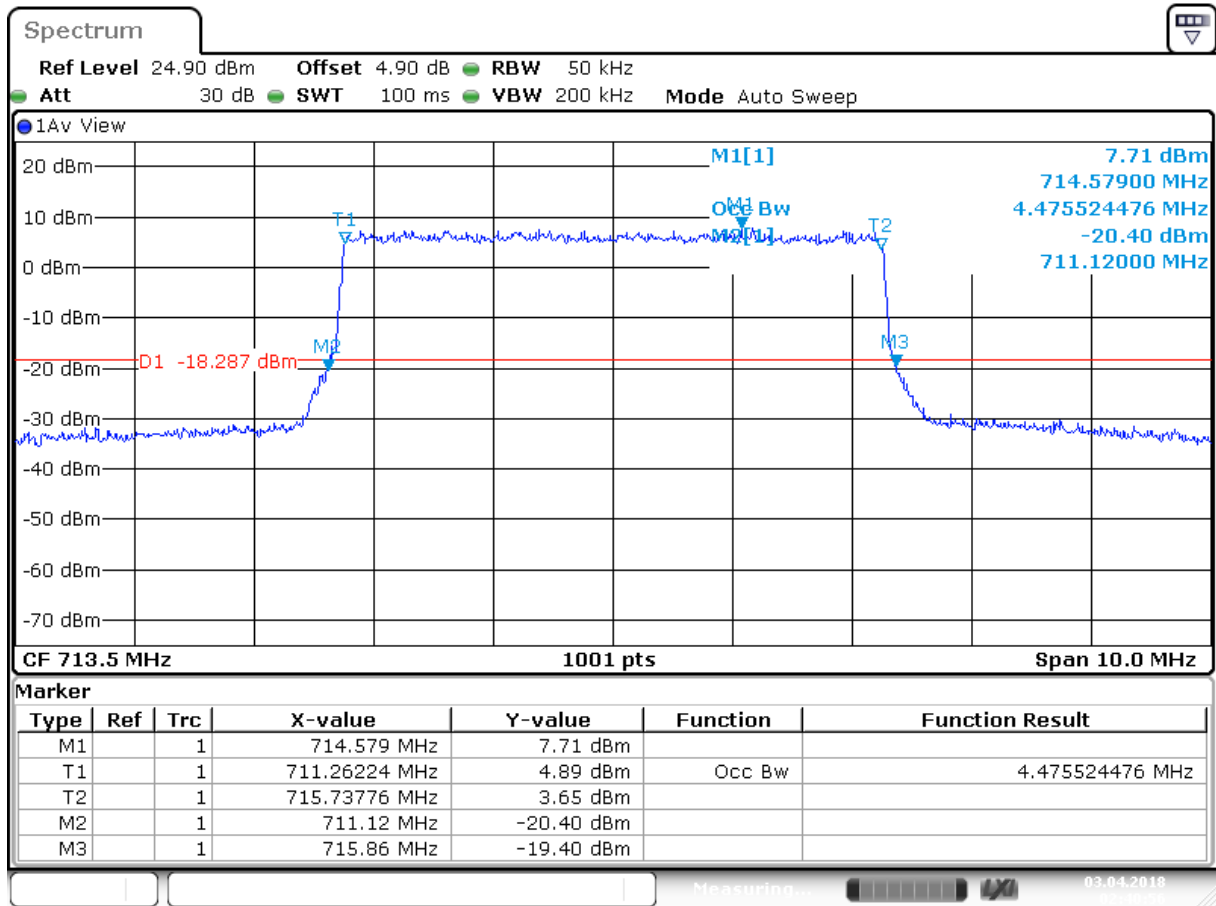
Date: 3 APR 2018 02:39:43

4.1.1.5.2 Test Channel = MCH



Date: 3 APR 2018 02:40:20

4.1.1.5.3 Test Channel = HCH

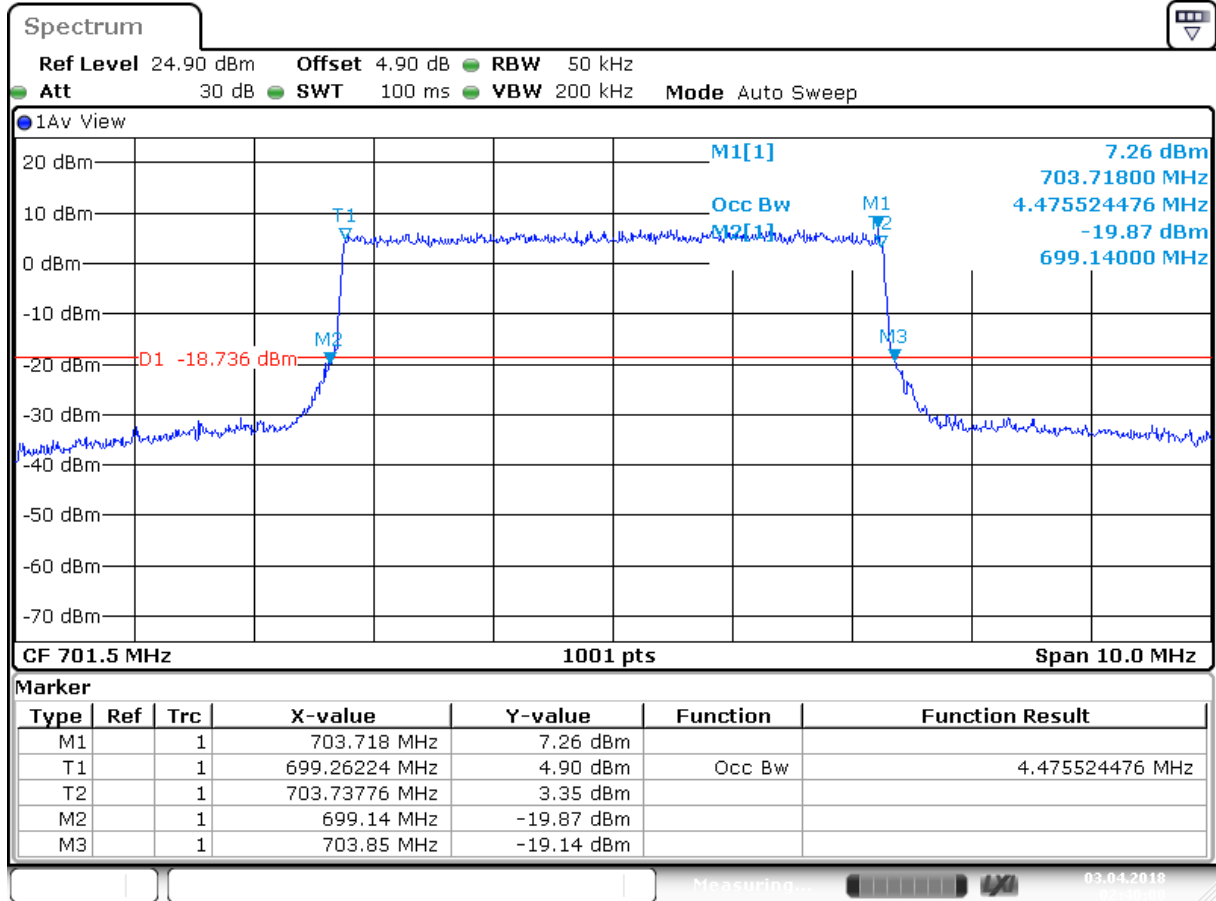


Date: 3 APR 2018 02:40:57



4.1.1.6 Test Mode = LTE/TM2 5MHz

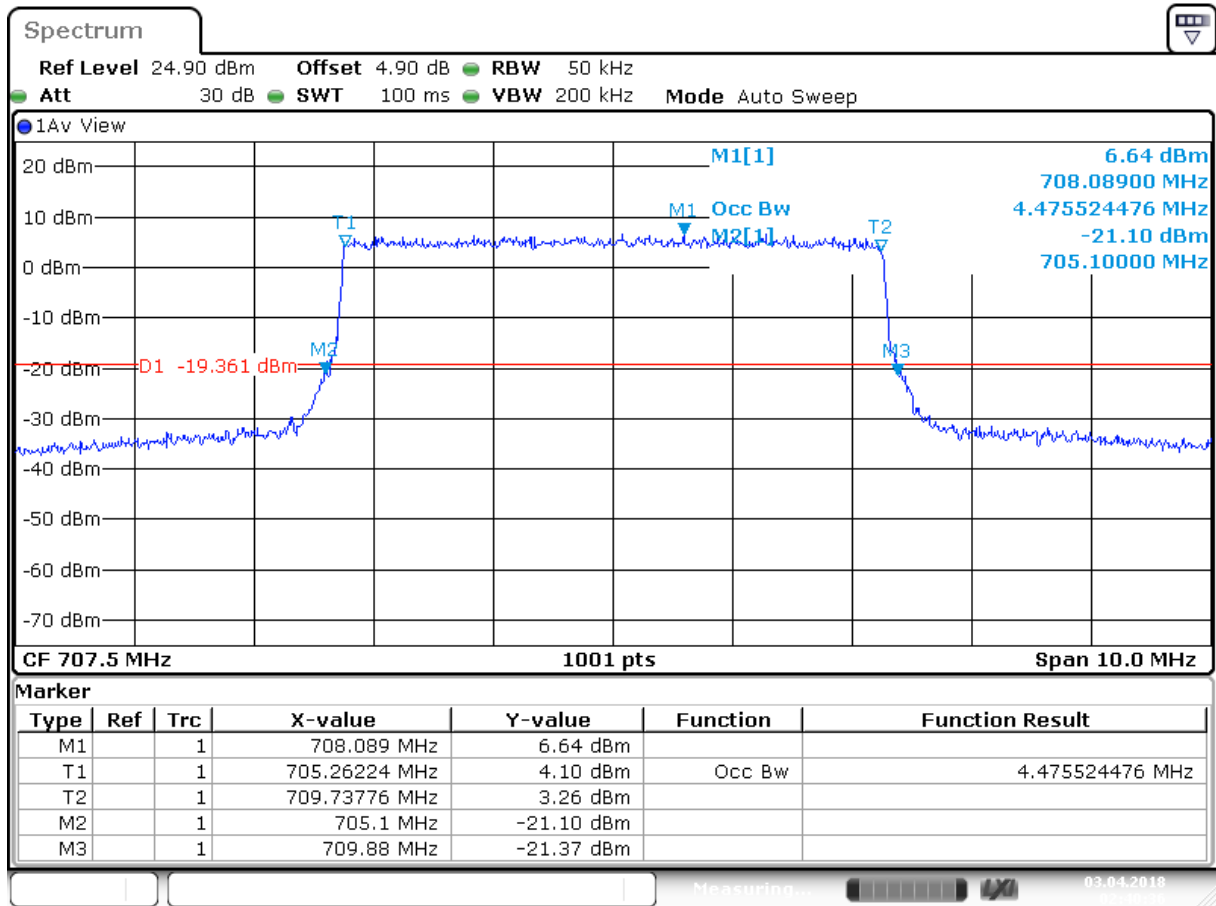
4.1.1.6.1 Test Channel = LCH



Date: 3 APR 2018 02:40:00

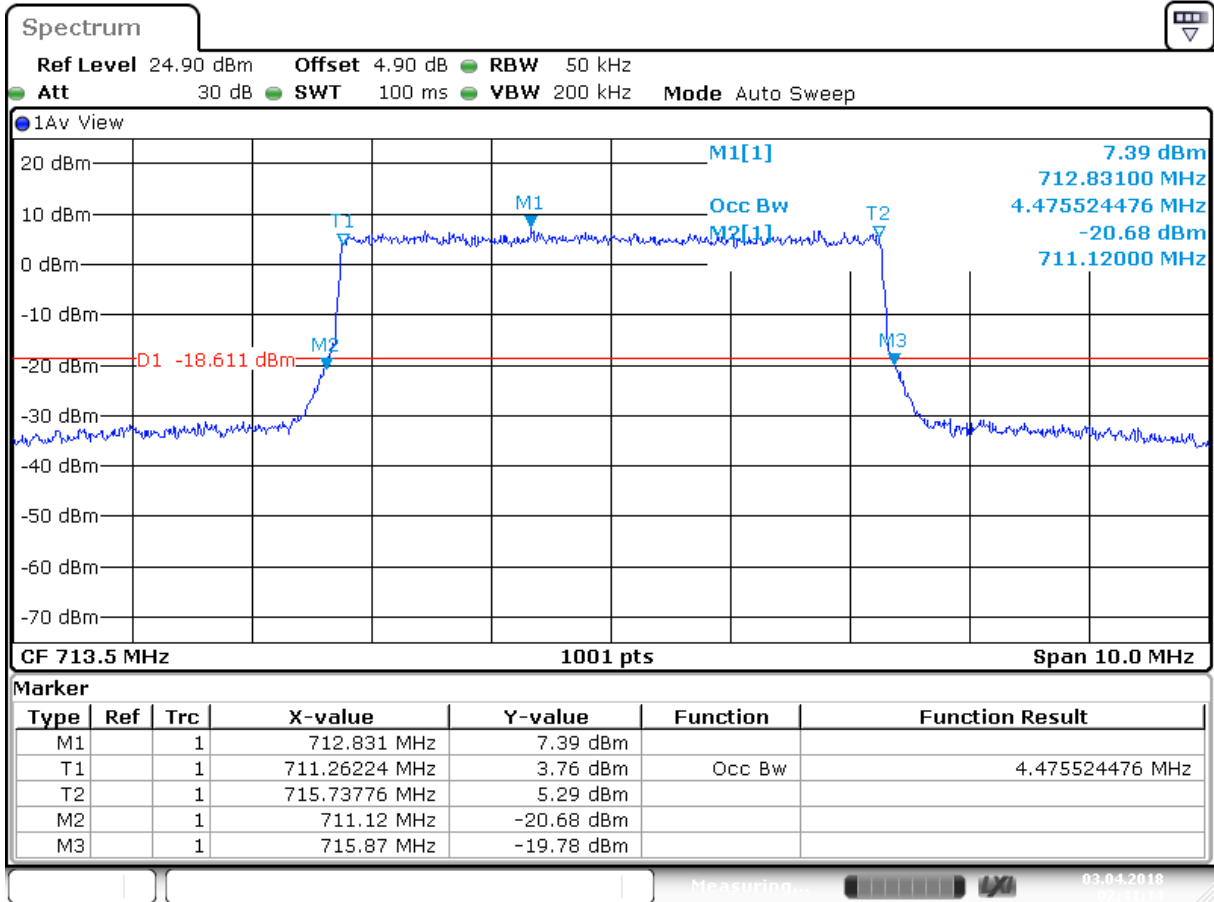


4.1.1.6.2 Test Channel = MCH



Date: 3 APR 2018 02:40:37

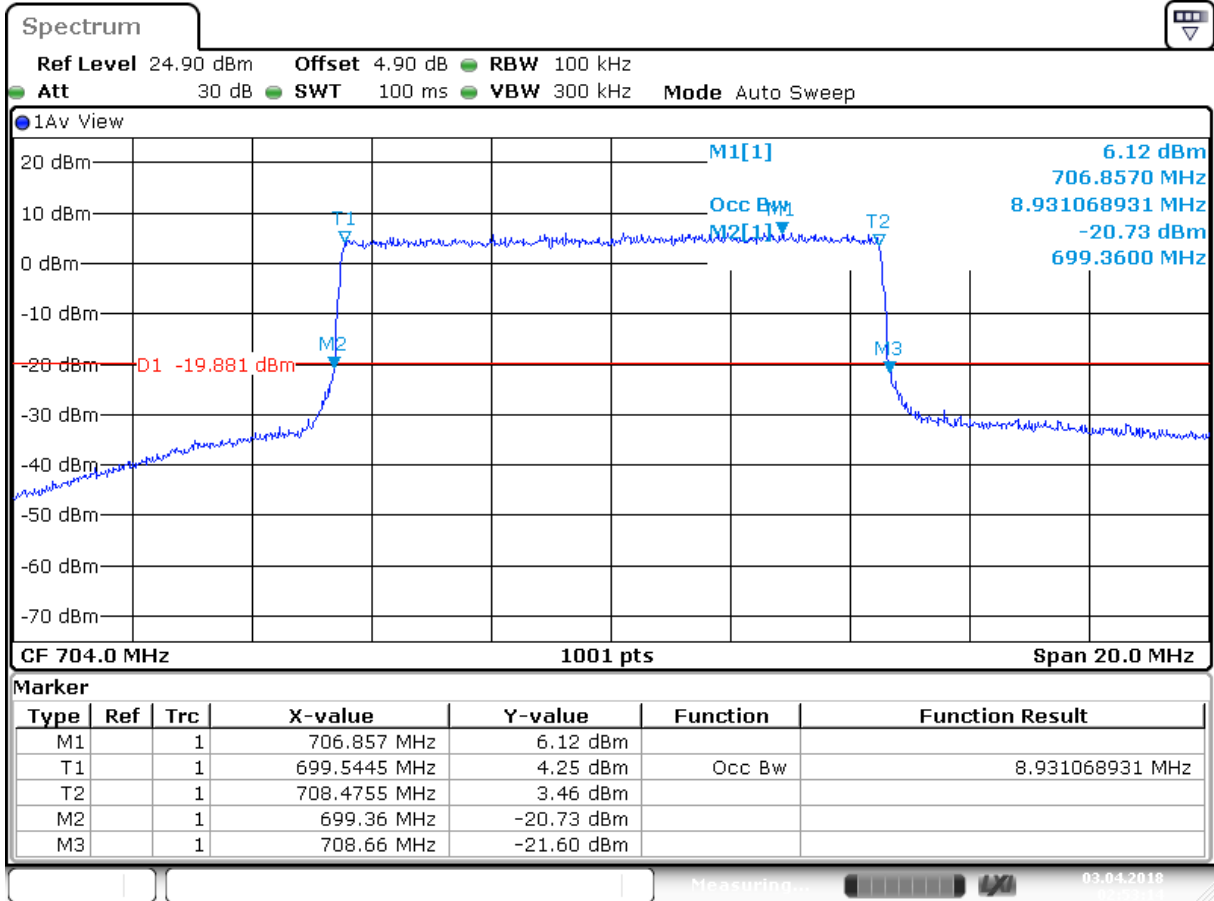
4.1.1.6.3 Test Channel = HCH



Date: 3 APR 2018 02:41:14

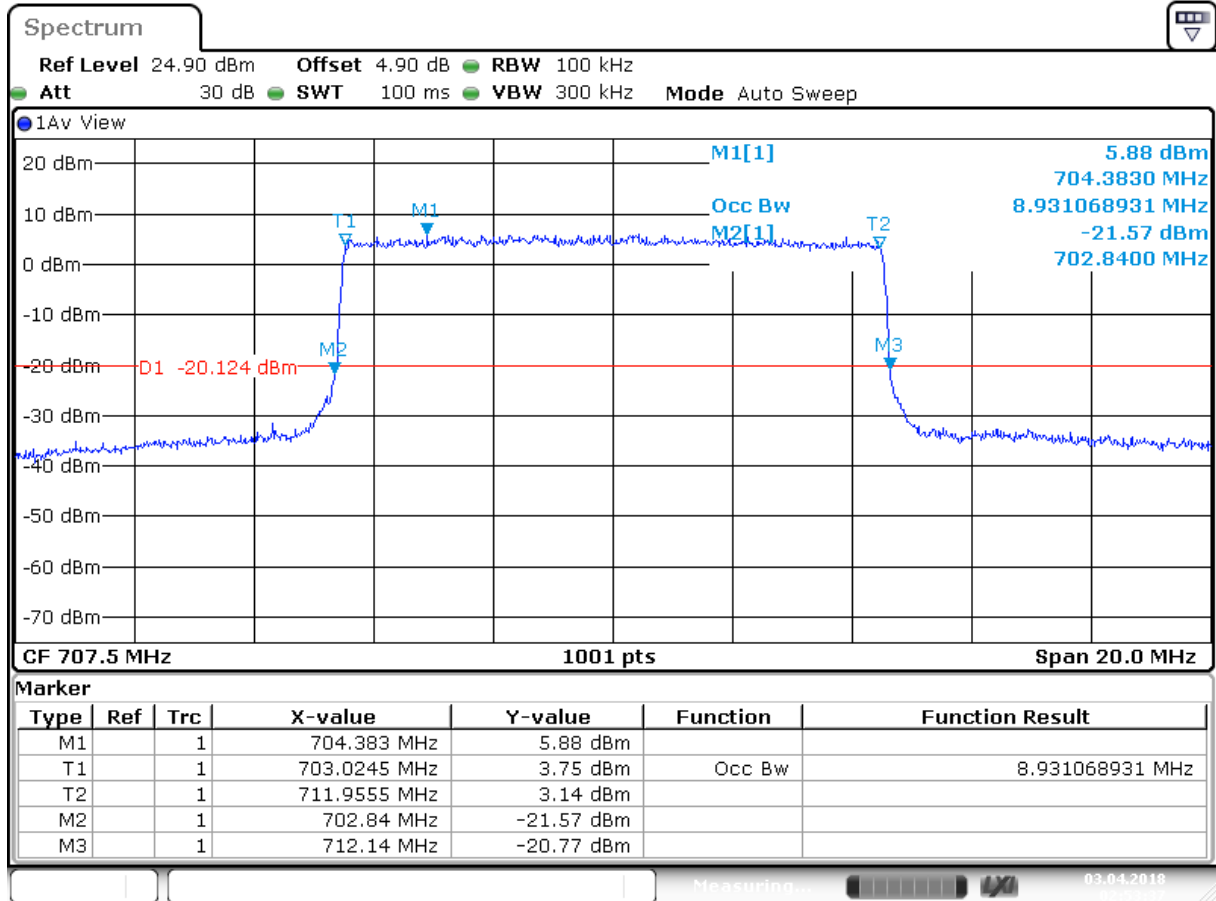
4.1.1.7 Test Mode = LTE/TM1 10MHz

4.1.1.7.1 Test Channel = LCH



Date: 3 APR 2018 02:53:14

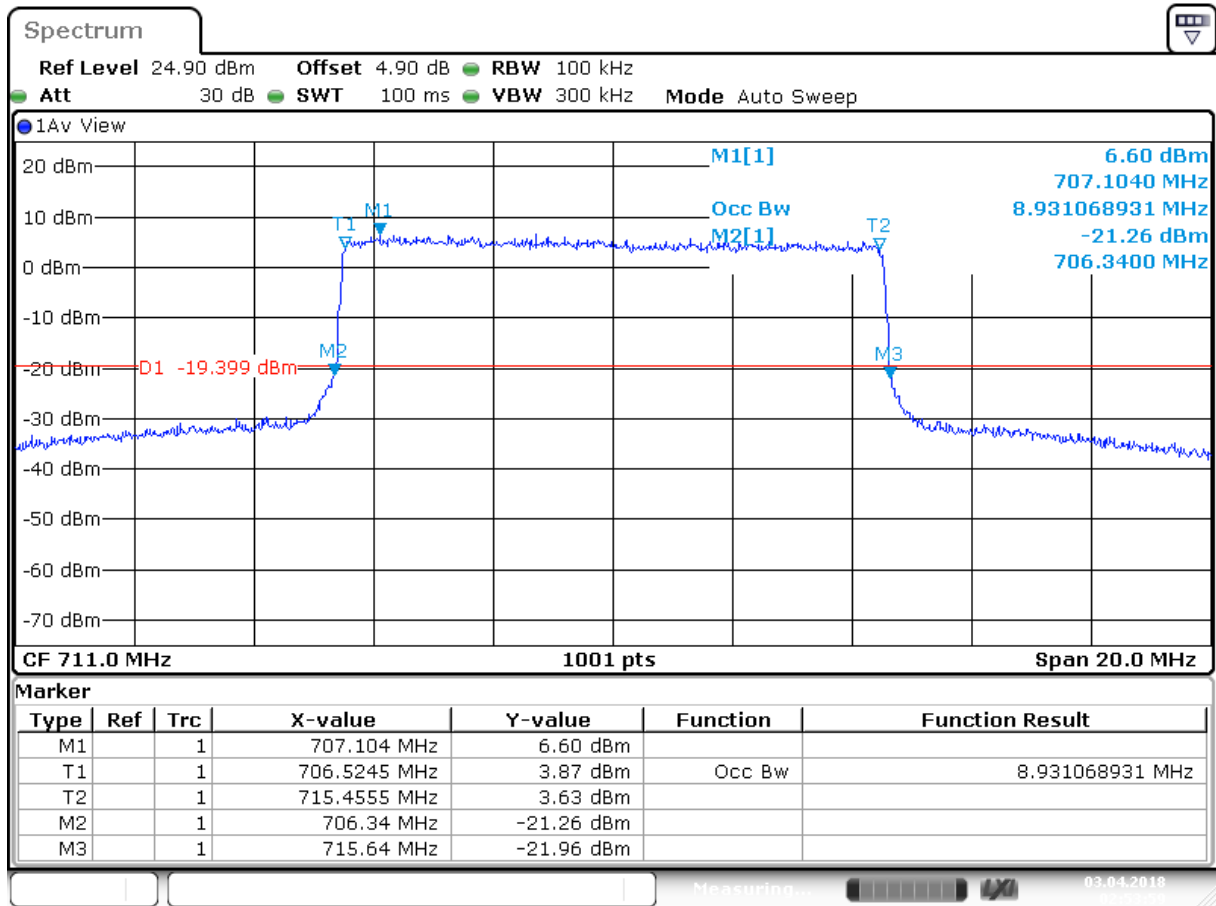
4.1.1.7.2 Test Channel = MCH



Date: 3 APR 2018 02:53:37



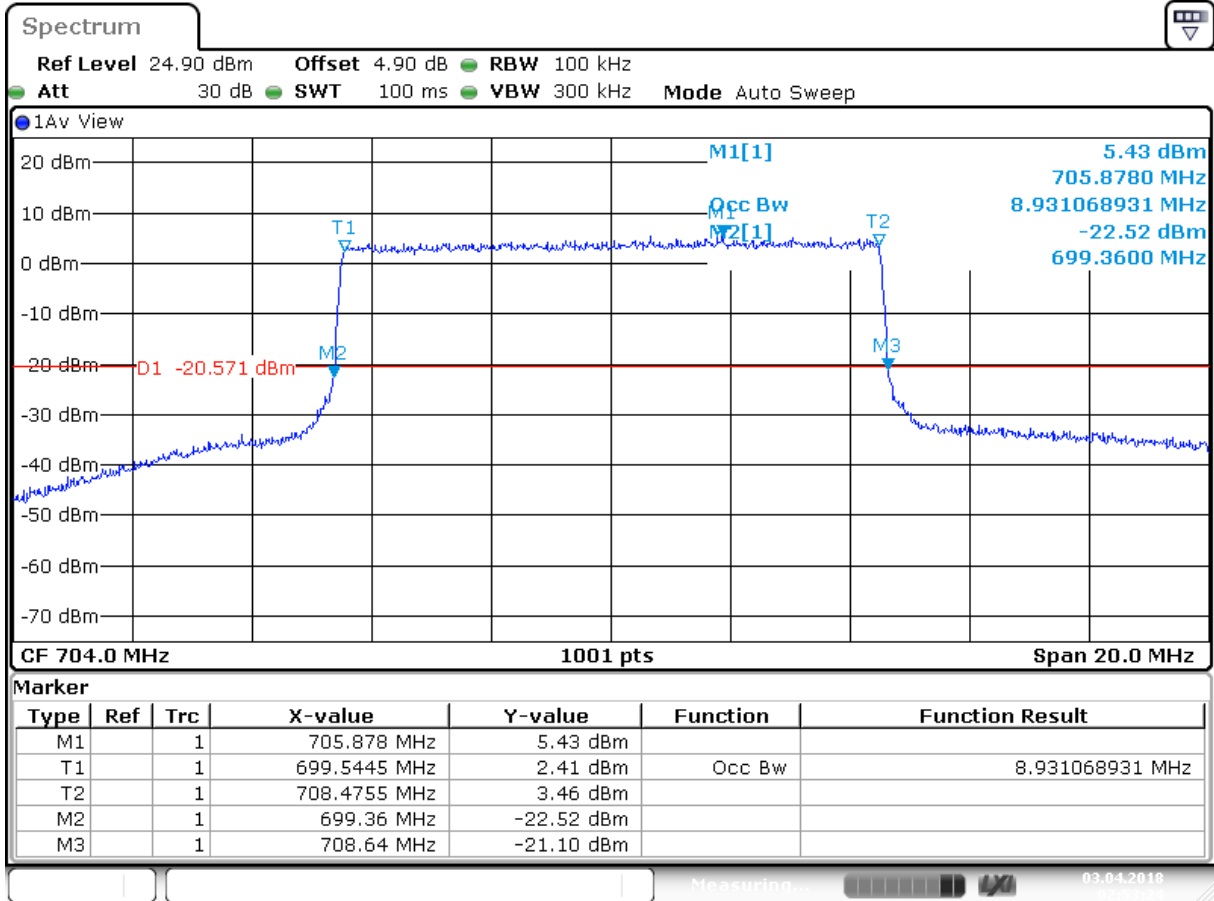
4.1.1.7.3 Test Channel = HCH



Date: 3 APR 2018 02:54:00

4.1.1.8 Test Mode = LTE/TM2 10MHz

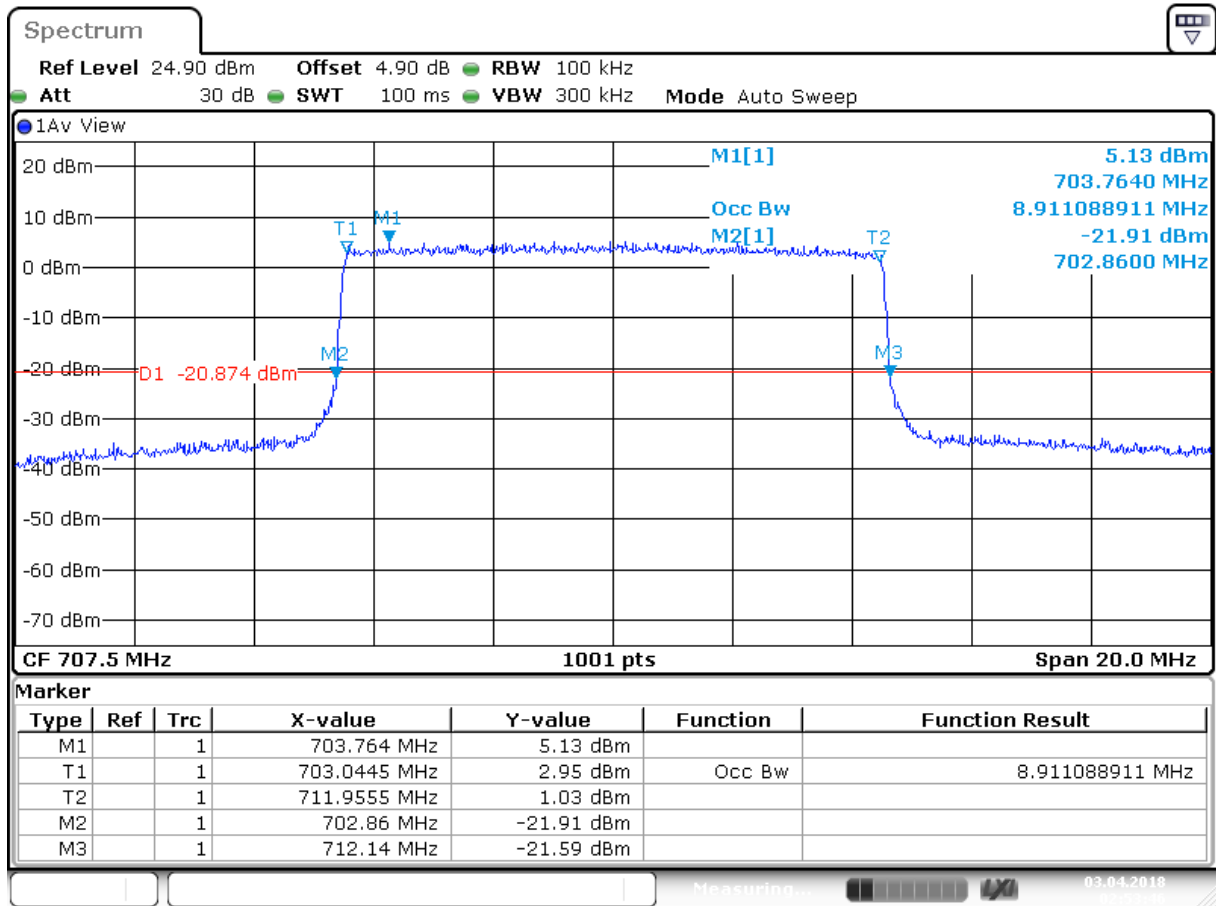
4.1.1.8.1 Test Channel = LCH



Date: 3 APR 2018 02:53:24

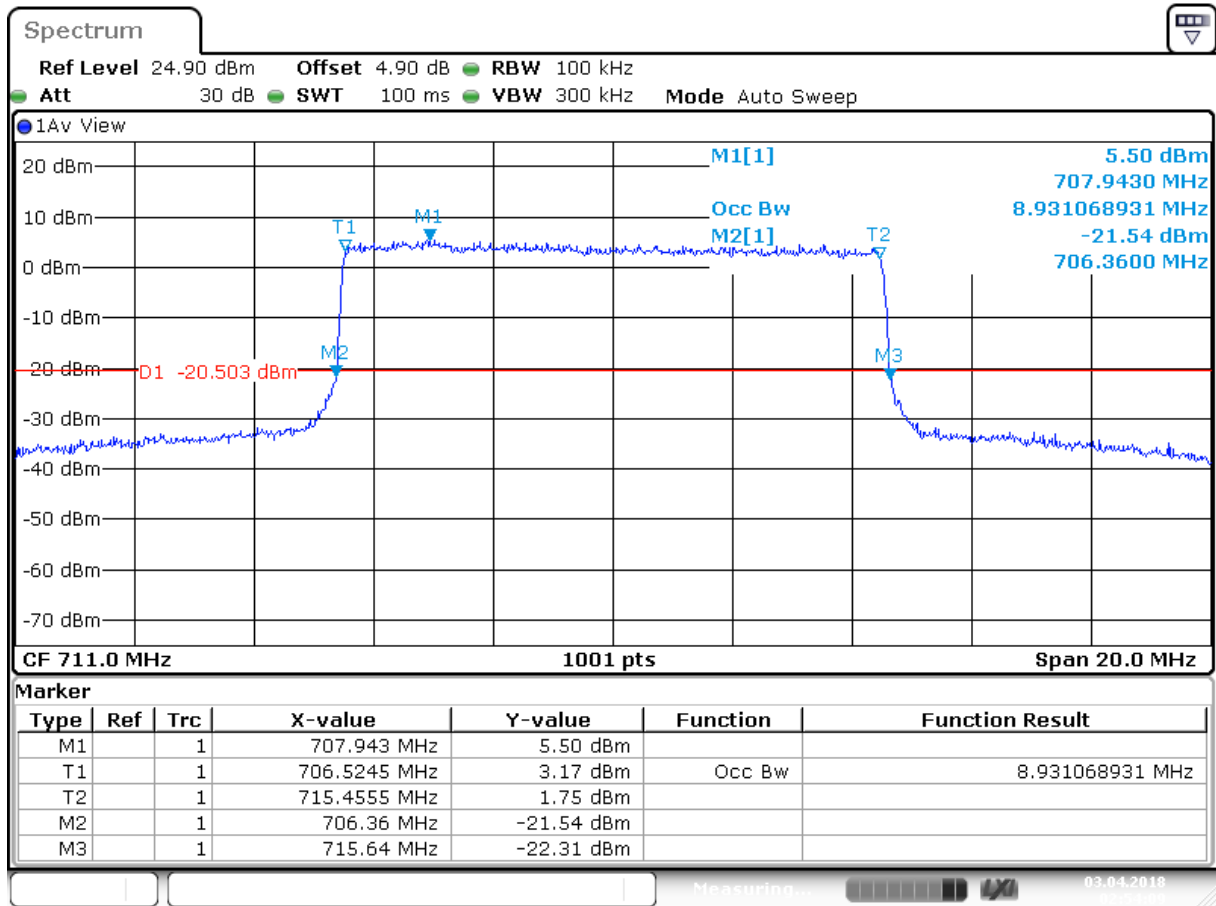


4.1.1.8.2 Test Channel = MCH



Date: 3 APR 2018 02:53:47

4.1.1.8.3 Test Channel = HCH



Date: 3 APR 2018 02:54:10

5 Band Edges Compliance

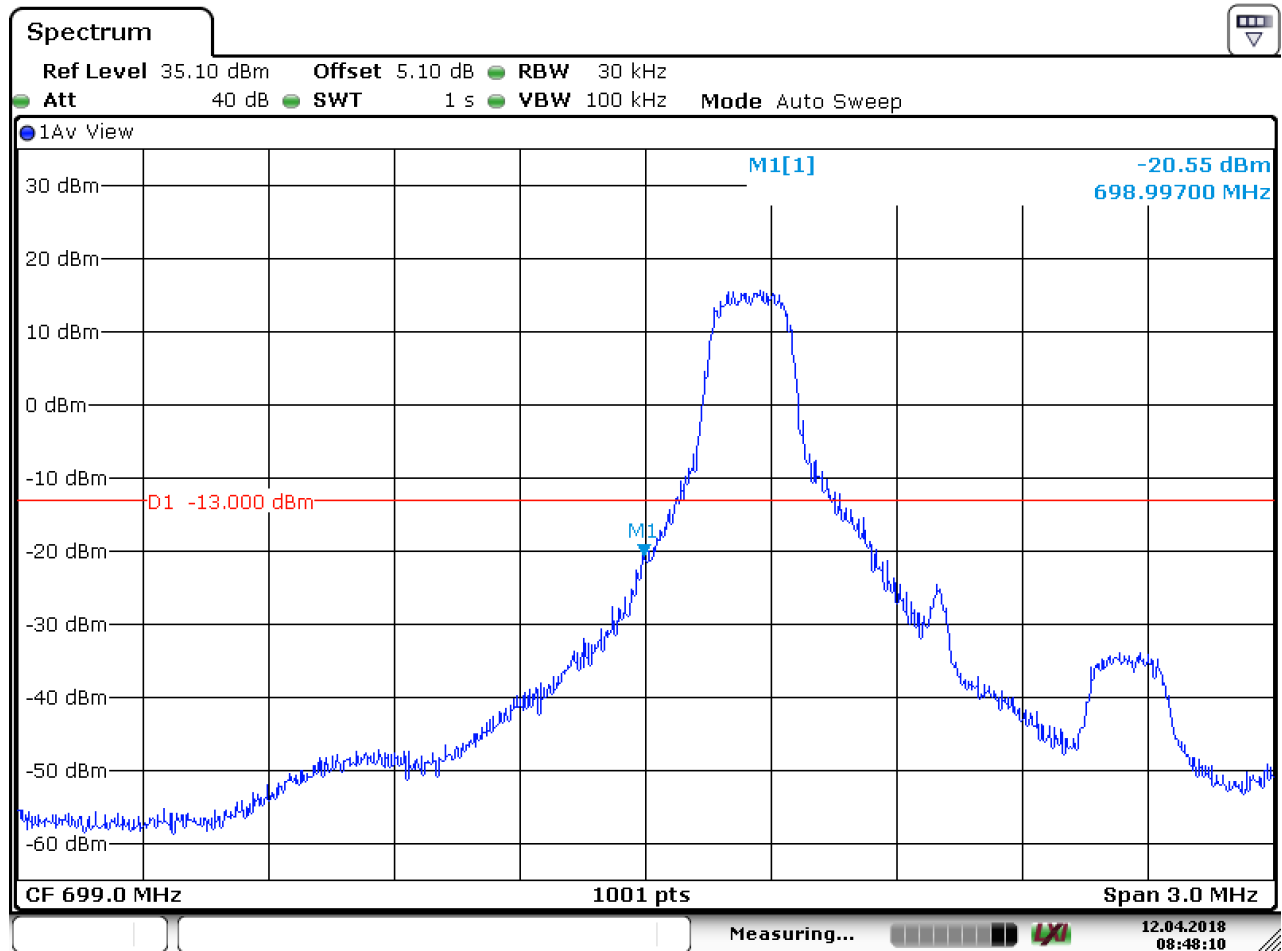
5.1 For LTE

5.1.1 Test Band = LTE BAND 12

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

5.1.1.1.1 Test Channel = LCH

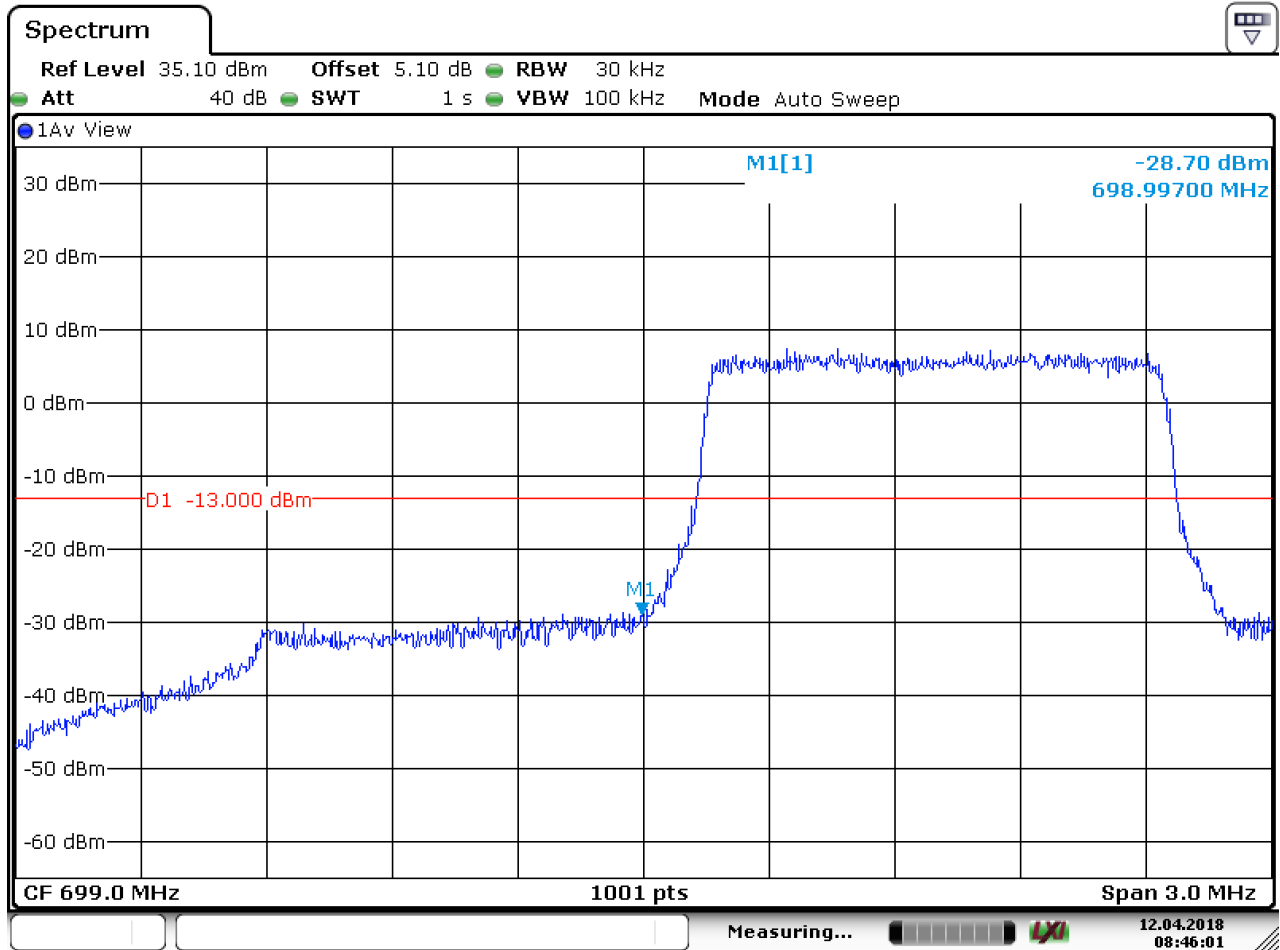
5.1.1.1.1.1 Test RB=1RB



Date: 12.APR.2018 08:48:11



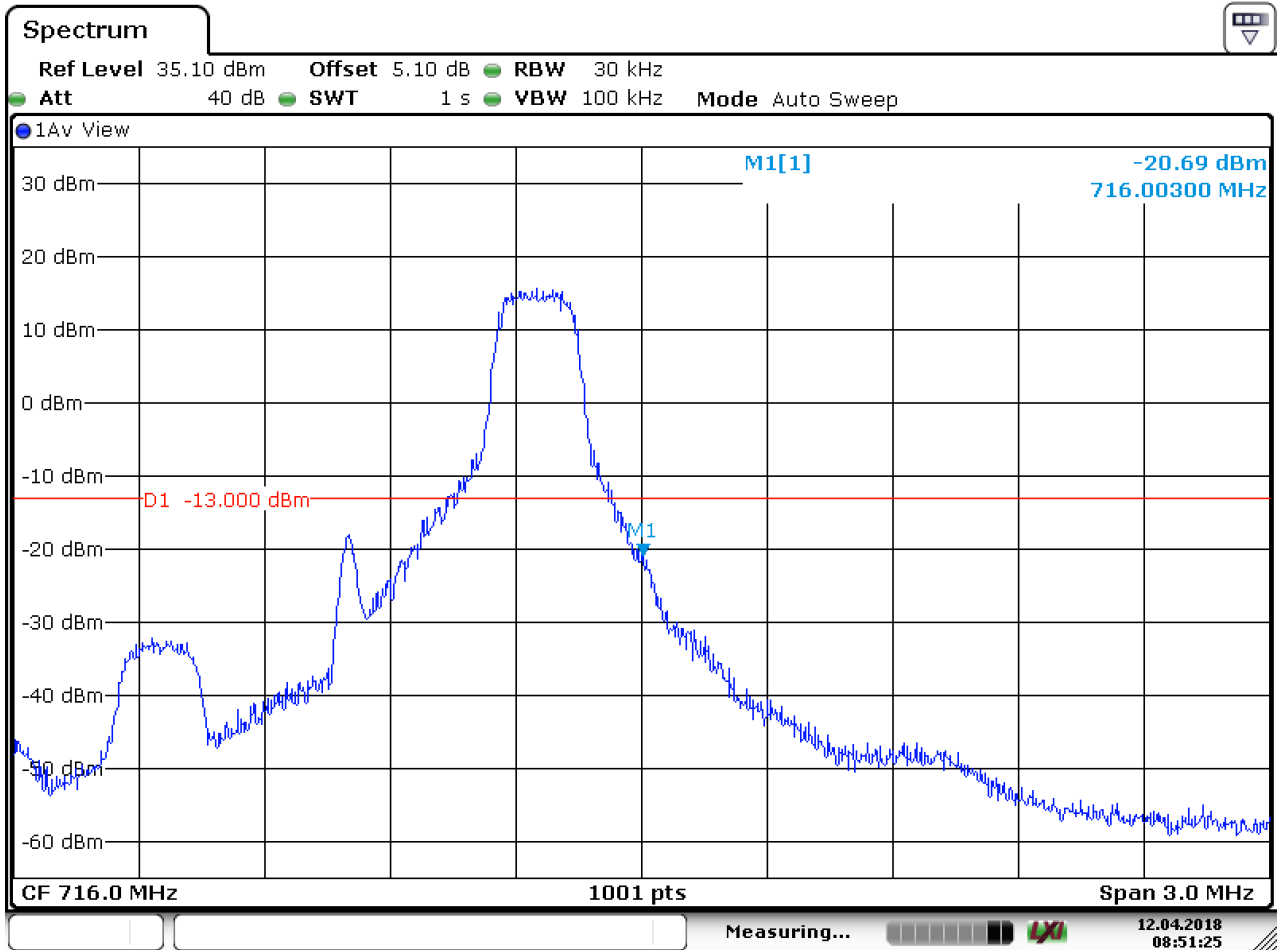
5.1.1.1.2 Test RB=6RB



Date: 12.APR.2018 08:46:01

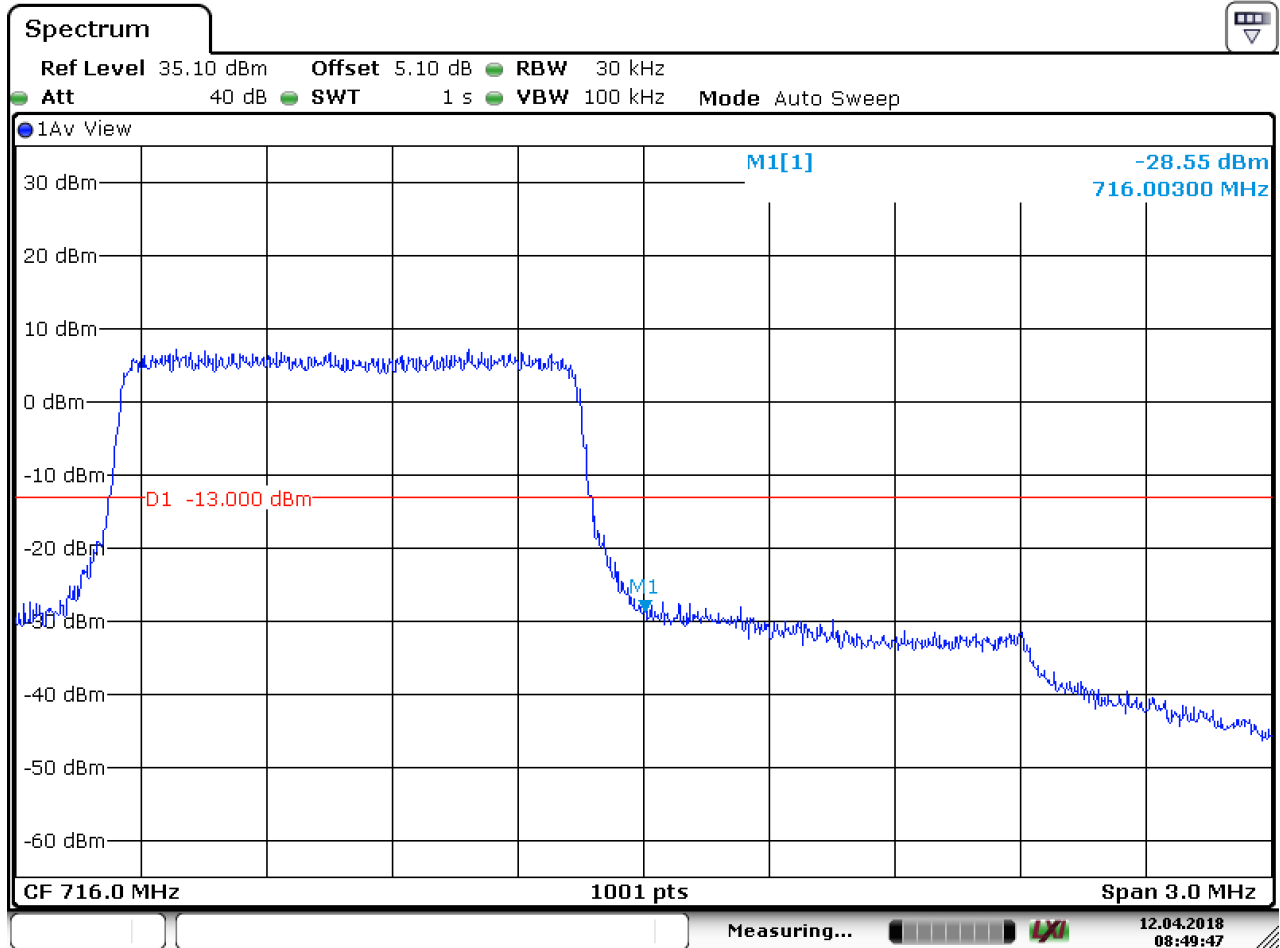
5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB



Date: 12.APR.2018 08:51:26

5.1.1.1.2.2 Test RB=6RB

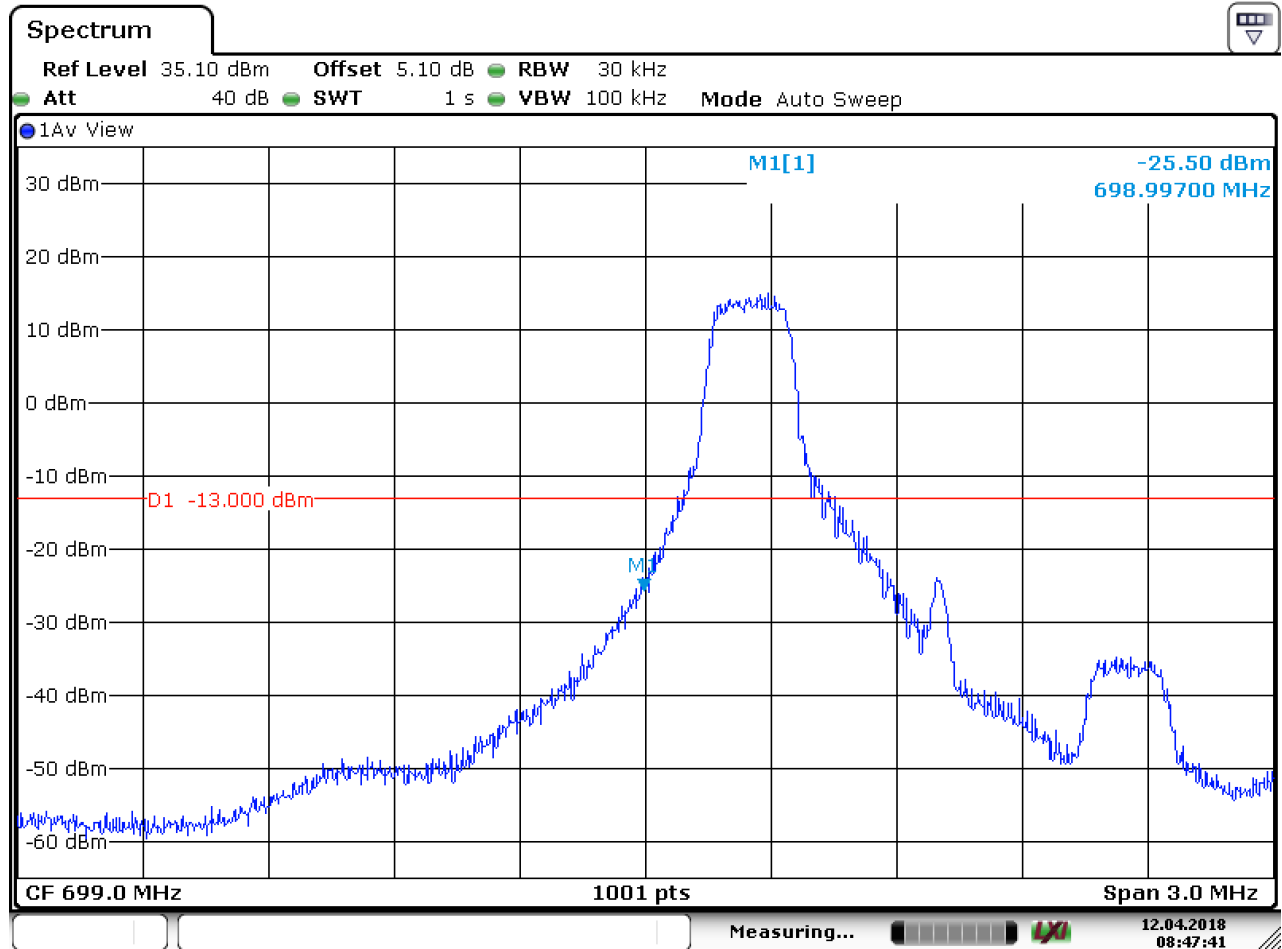


Date: 12.APR.2018 08:49:47



5.1.1.2 Test Mode = LTE/TM2 1.4MHz
5.1.1.2.1 Test Channel = LCH

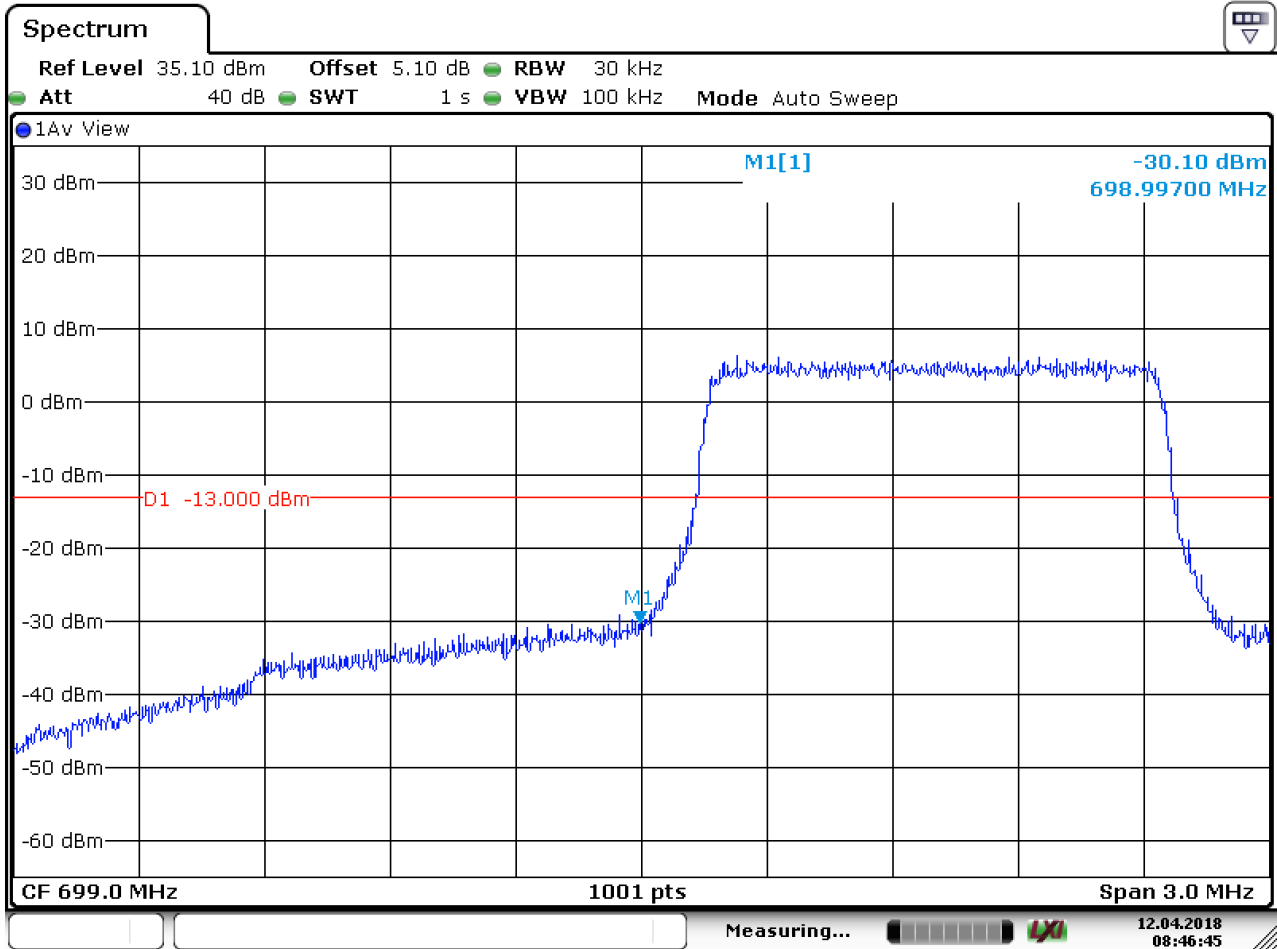
5.1.1.2.1.1 Test RB=1RB



Date: 12.APR.2018 08:47:42



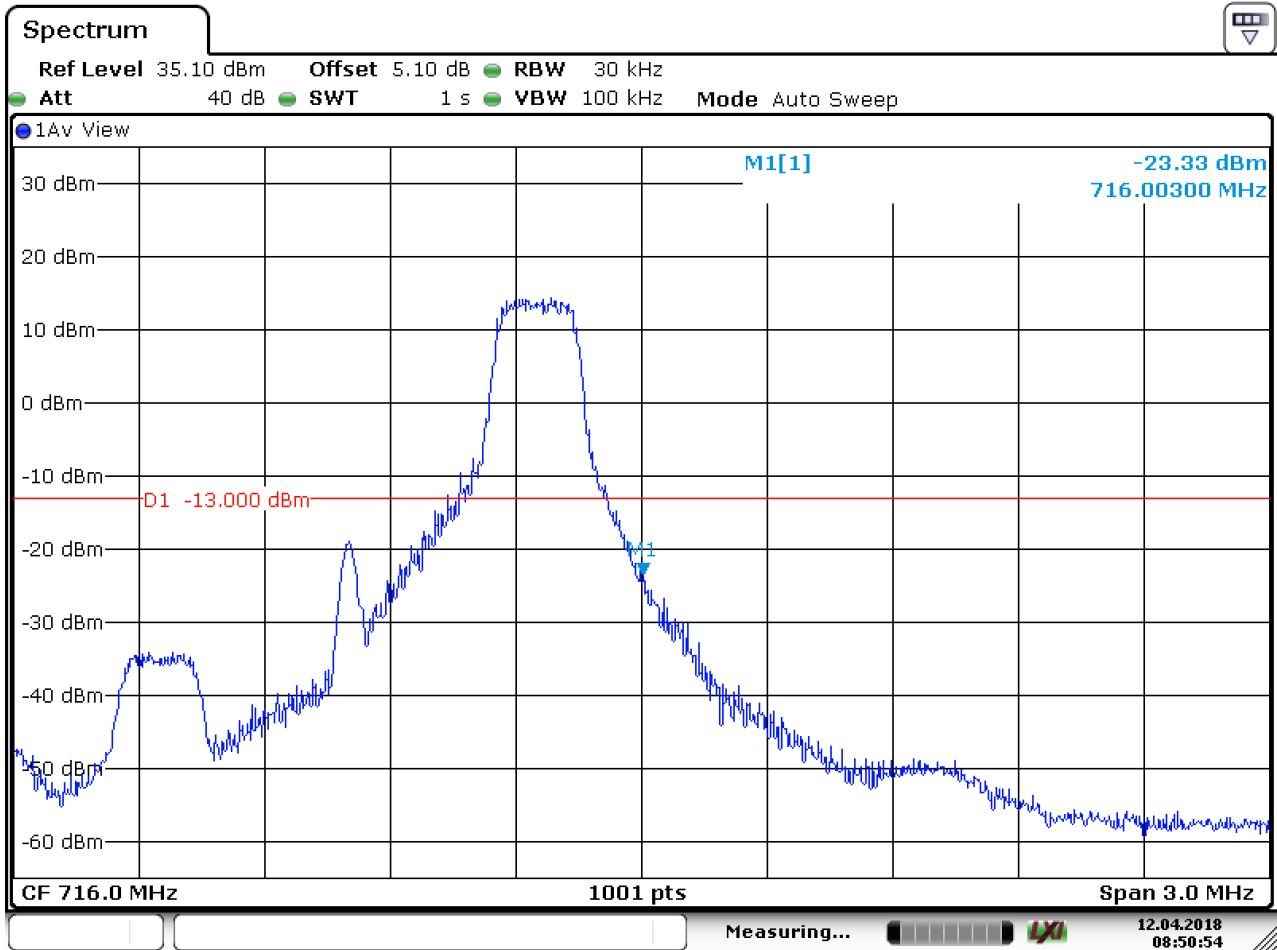
5.1.1.2.1.2 Test RB=6RB



Date: 12.APR.2018 08:46:46

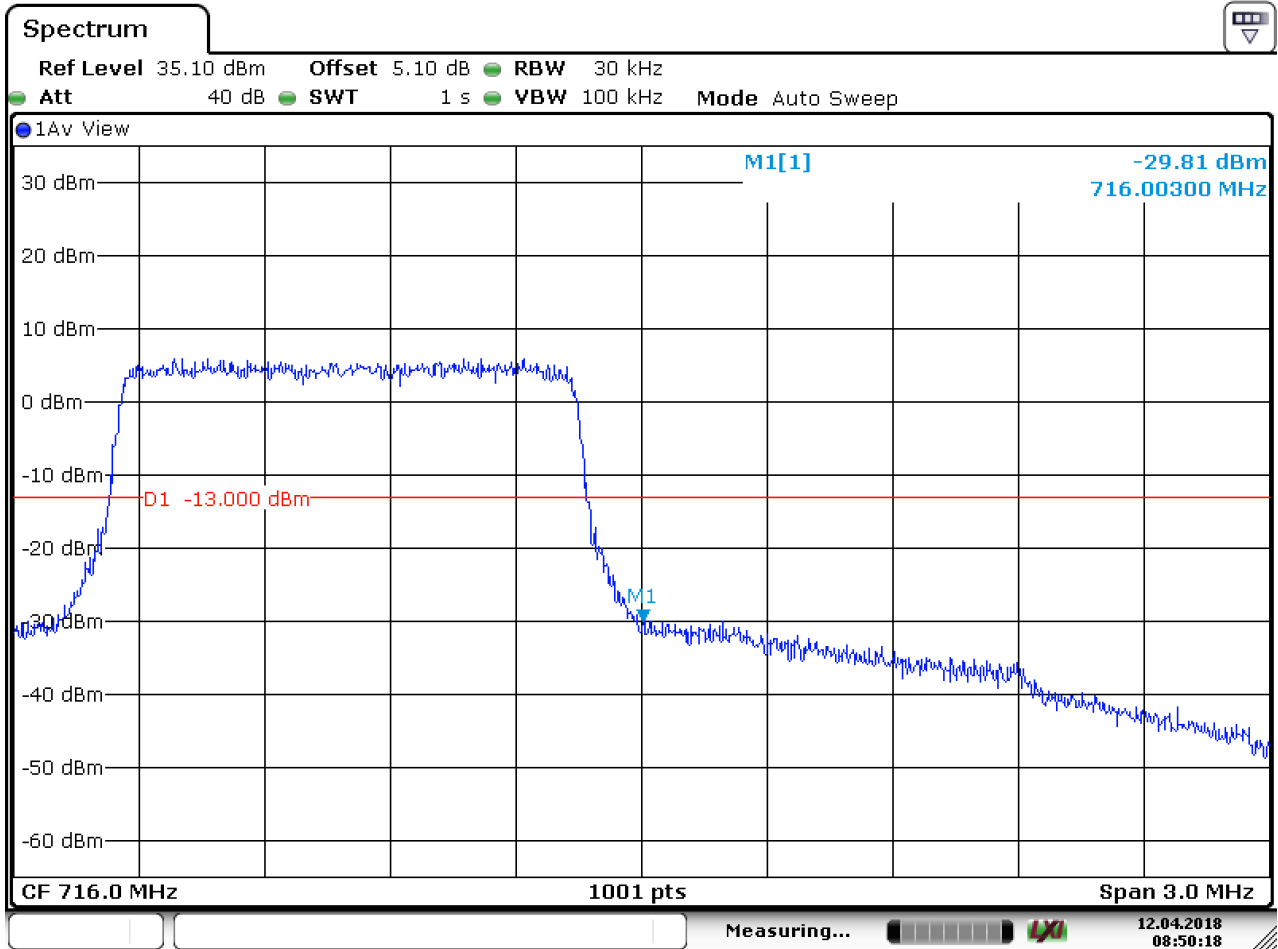
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 12.APR.2018 08:50:54

5.1.1.2.2.2 Test RB=6RB



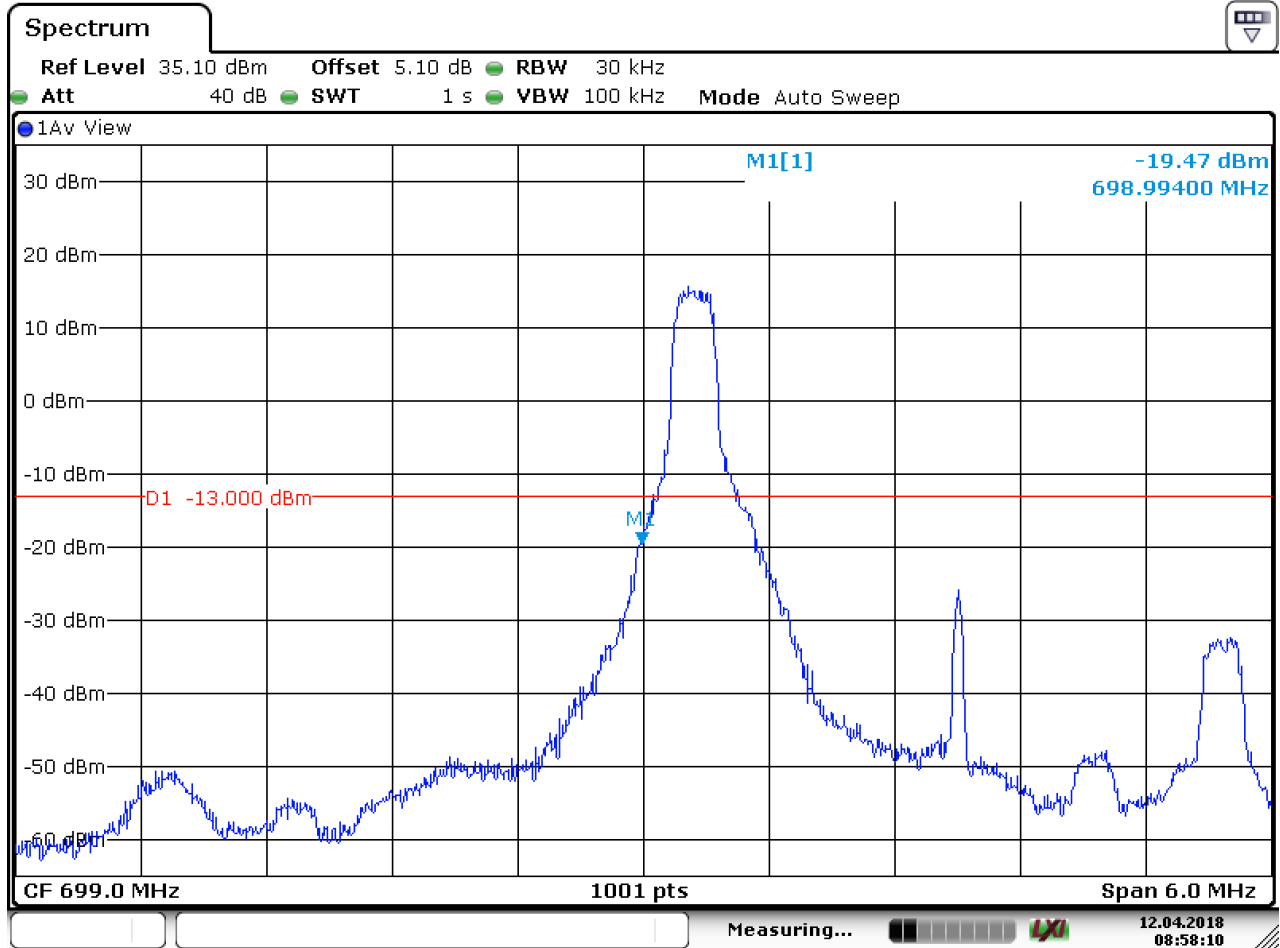
Date: 12.APR.2018 08:50:18



5.1.1.3 Test Mode = LTE/TM1 3MHz

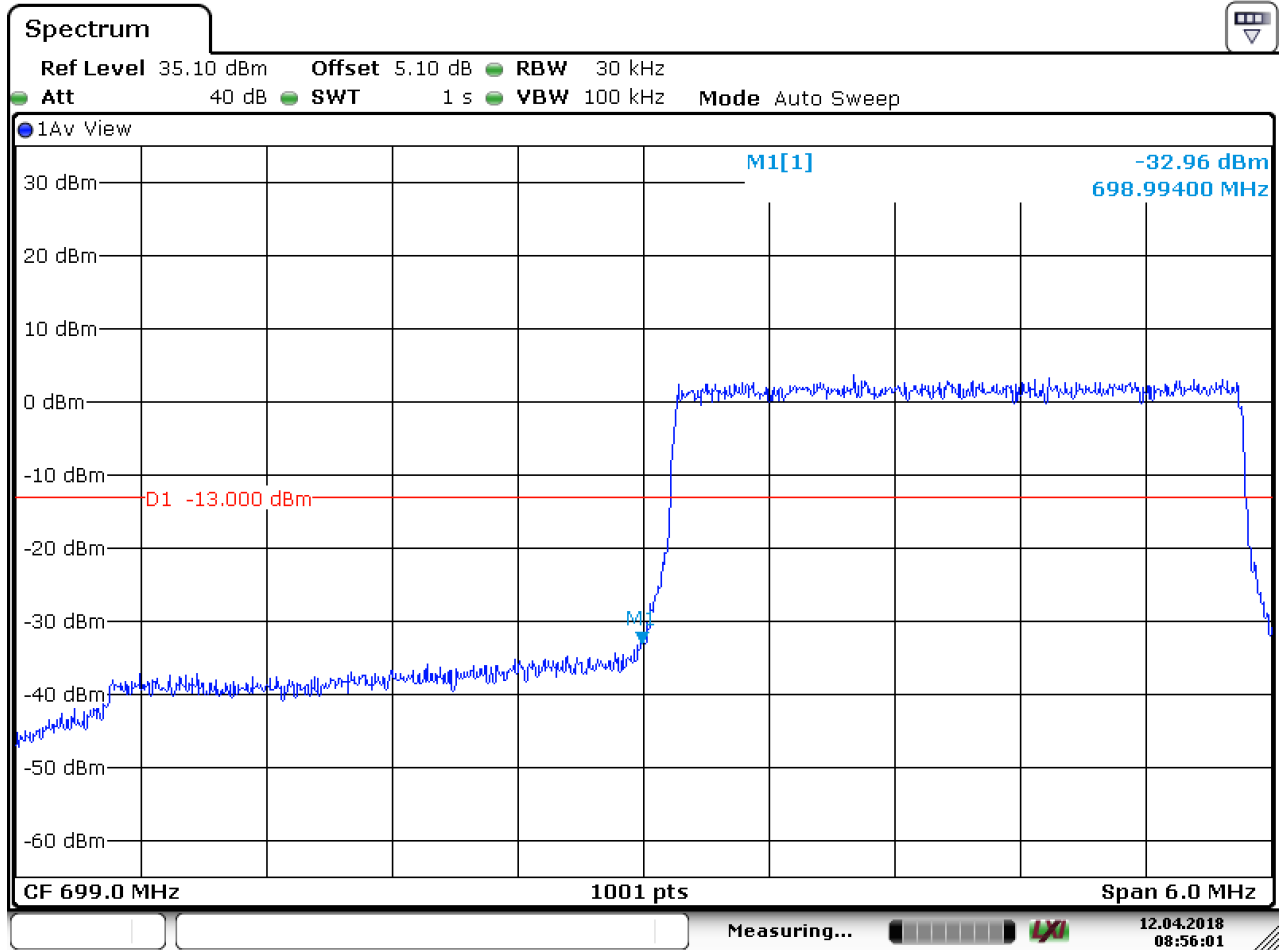
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 12.APR.2018 08:58:10

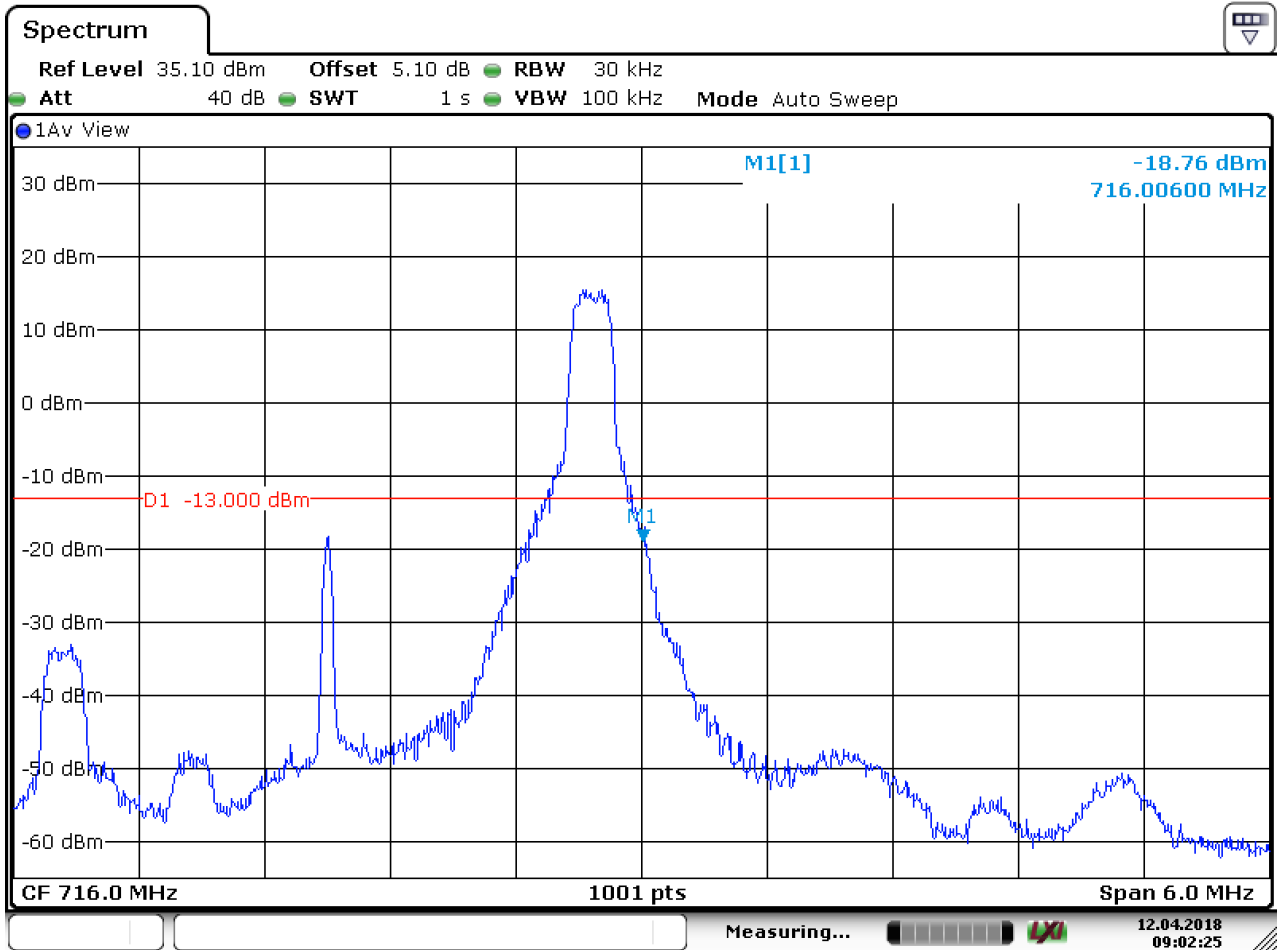
5.1.1.3.1.2 Test RB=15RB



Date: 12.APR.2018 08:56:02

5.1.1.3.2 Test Channel = HCH

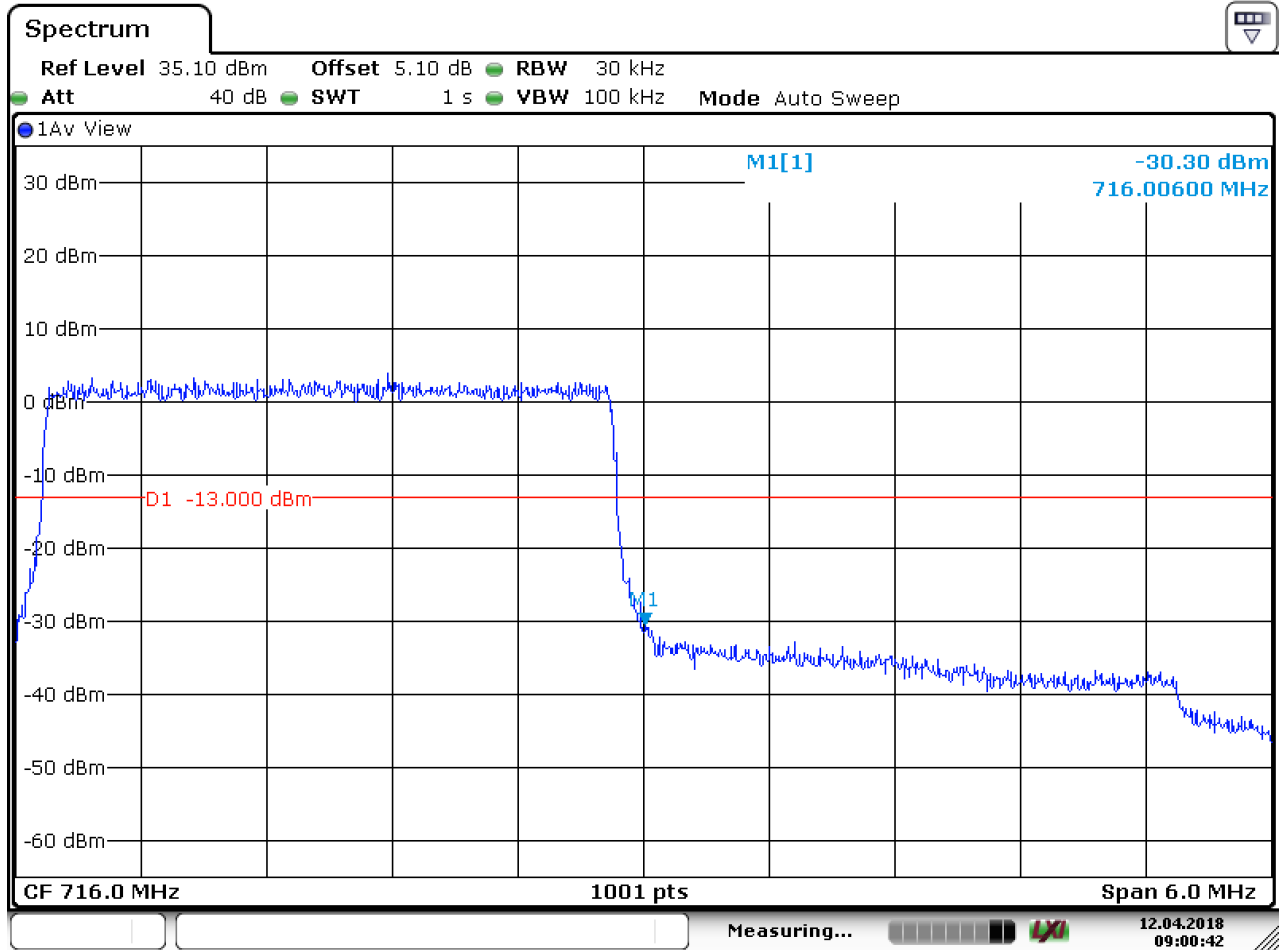
5.1.1.3.2.1 Test RB=1RB



Date: 12.APR.2018 09:02:26



5.1.1.3.2.2 Test RB=15RB

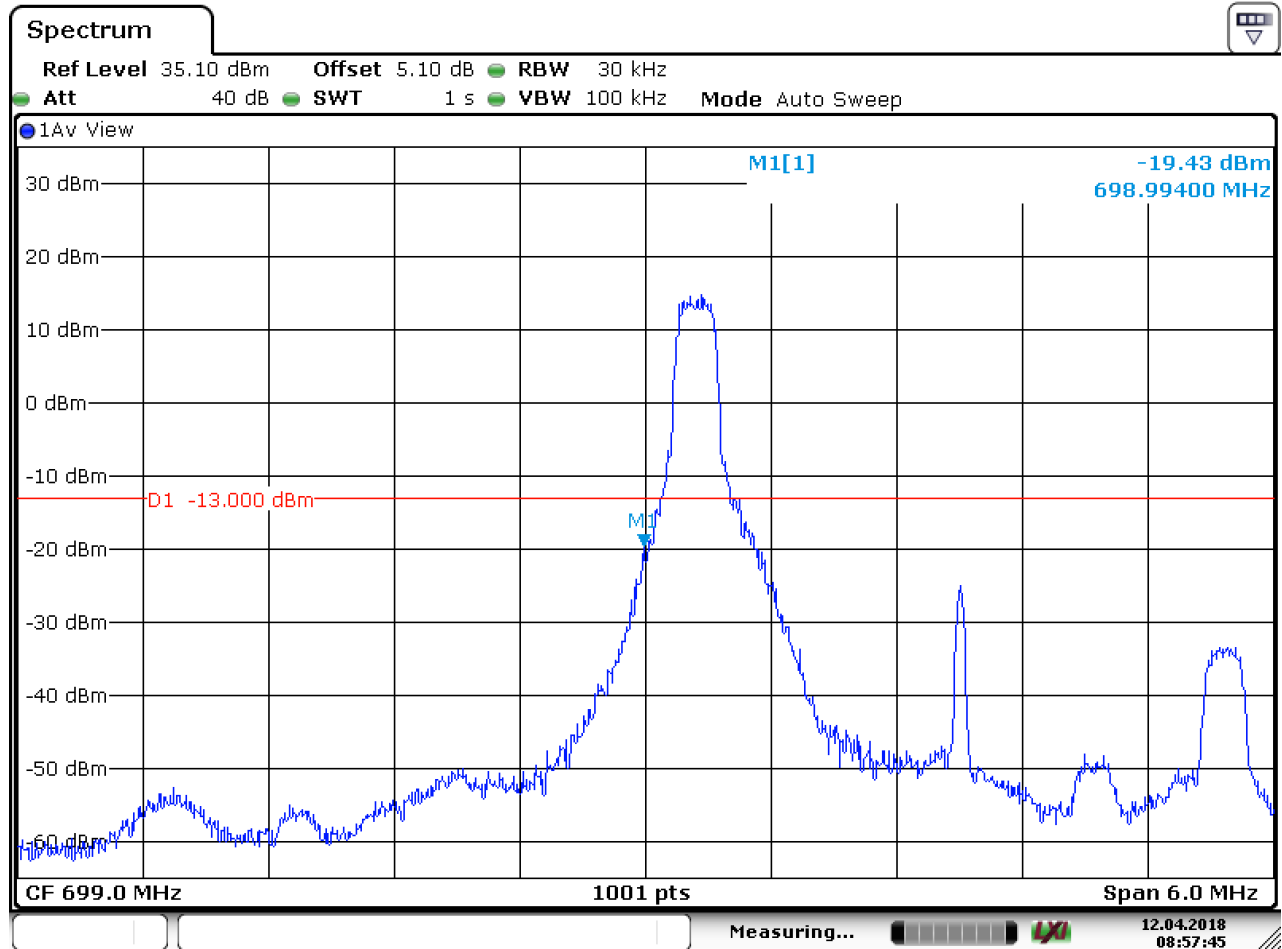


Date: 12.APR.2018 09:00:42

5.1.1.4 Test Mode = LTE/TM2 3MHz

5.1.1.4.1 Test Channel = LCH

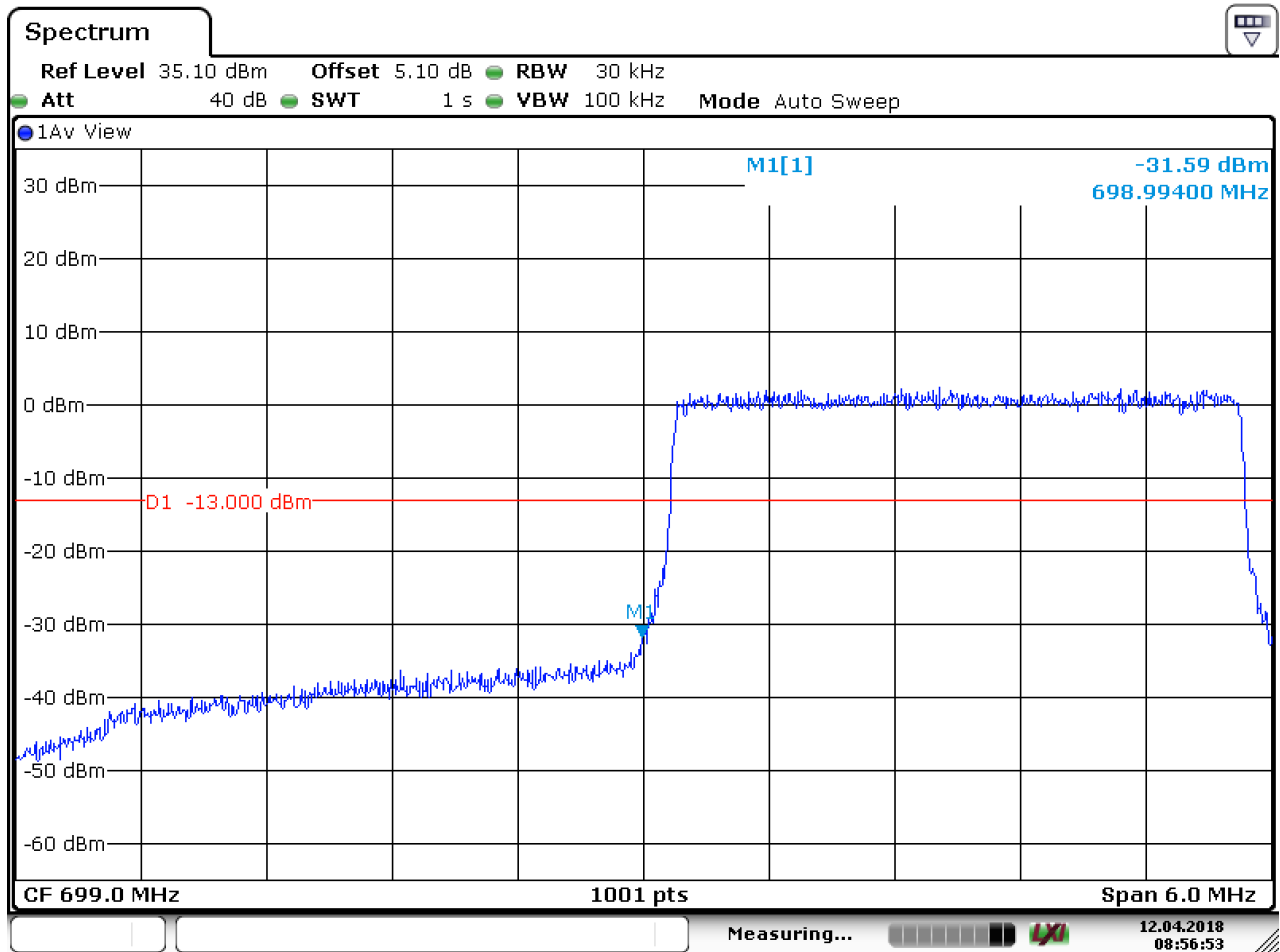
5.1.1.4.1.1 Test RB=1RB



Date: 12.APR.2018 08:57:46



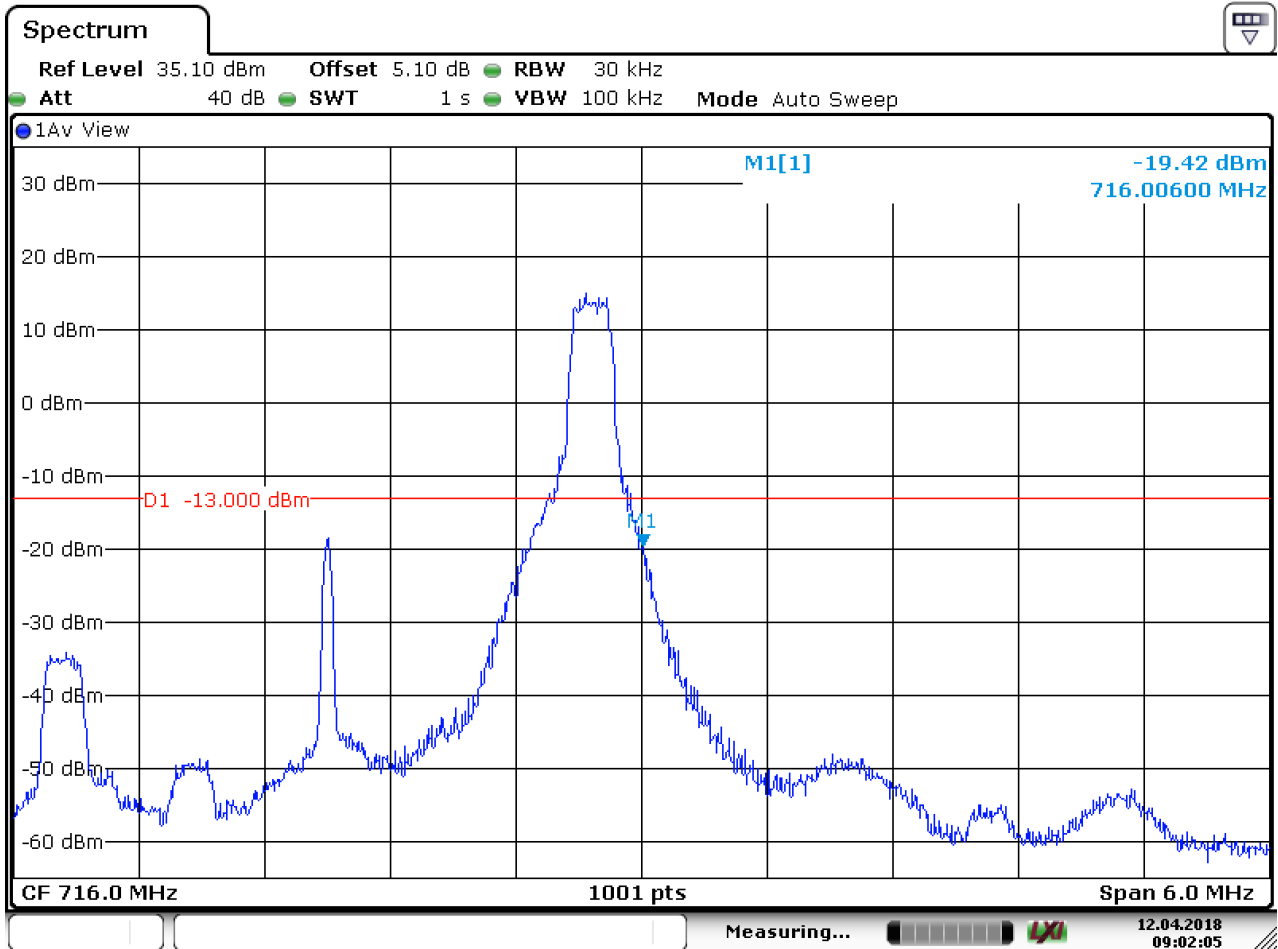
5.1.1.4.1.2 Test RB=15RB



Date: 12.APR.2018 08:56:53

5.1.1.4.2 Test Channel = HCH

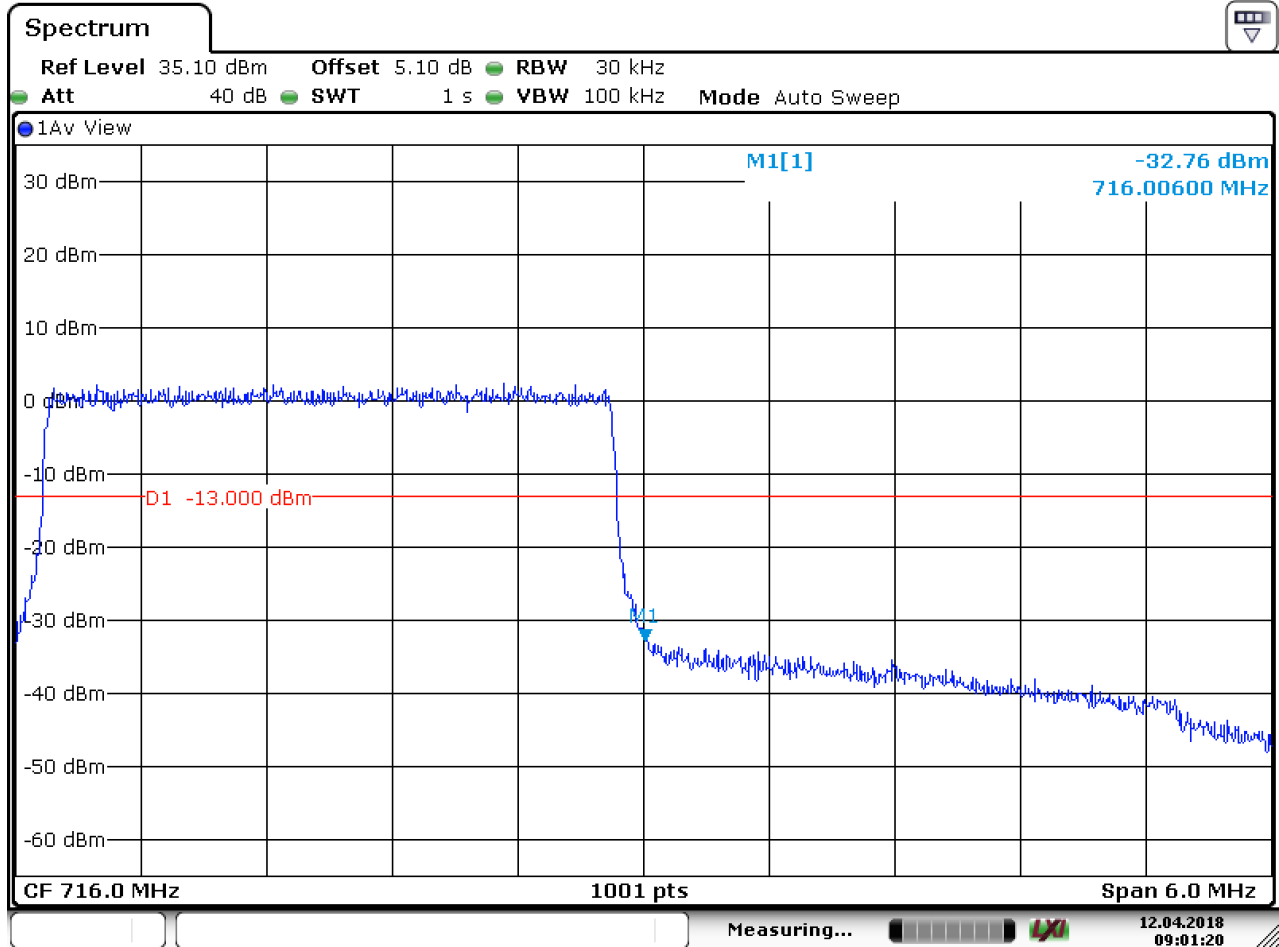
5.1.1.4.2.1 Test RB=1RB



Date: 12.APR.2018 09:02:06



5.1.1.4.2.2 Test RB=15RB

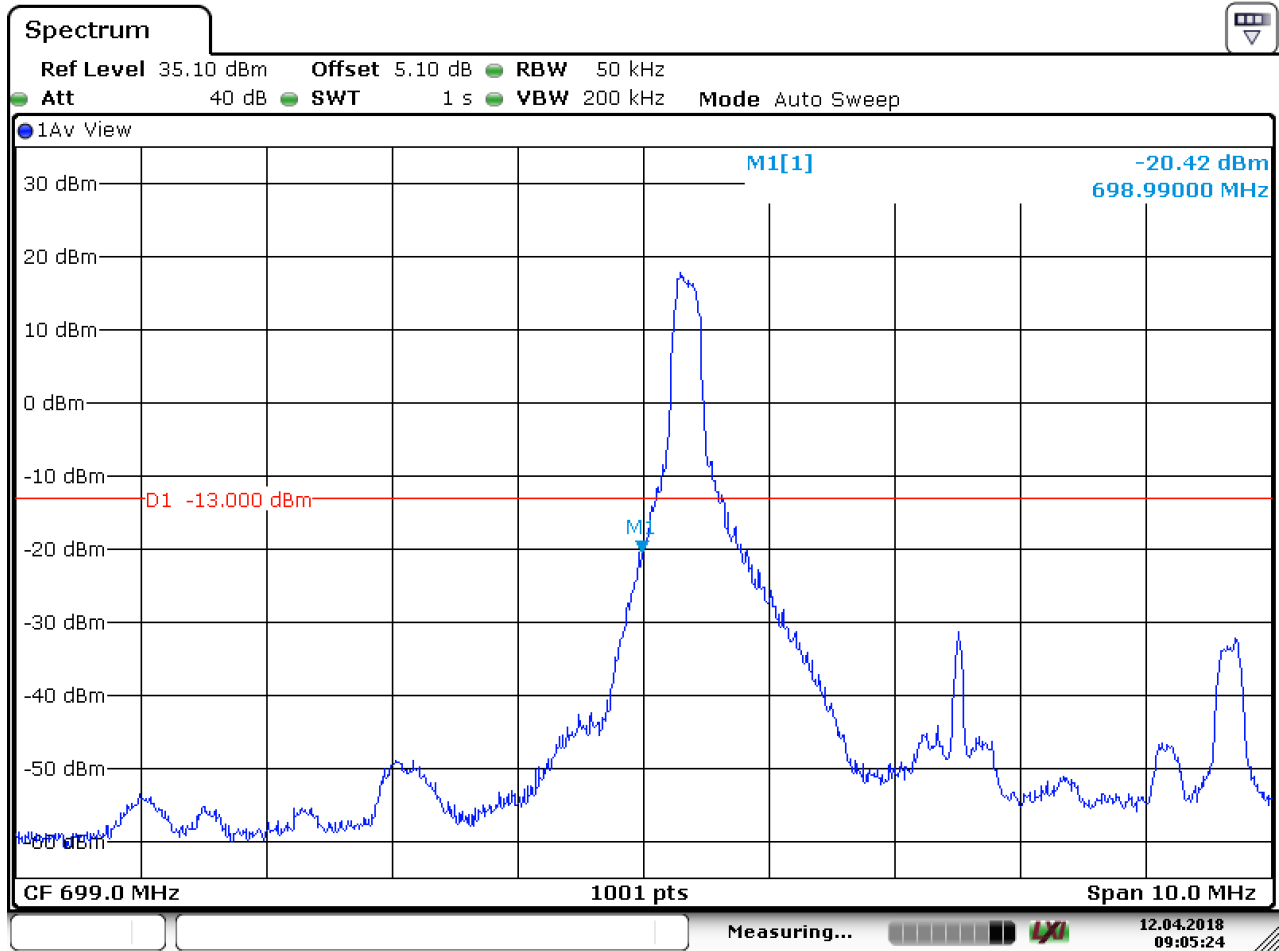


Date: 12.APR.2018 09:01:21

5.1.1.5 Test Mode = LTE/TM1 5MHz

5.1.1.5.1 Test Channel = LCH

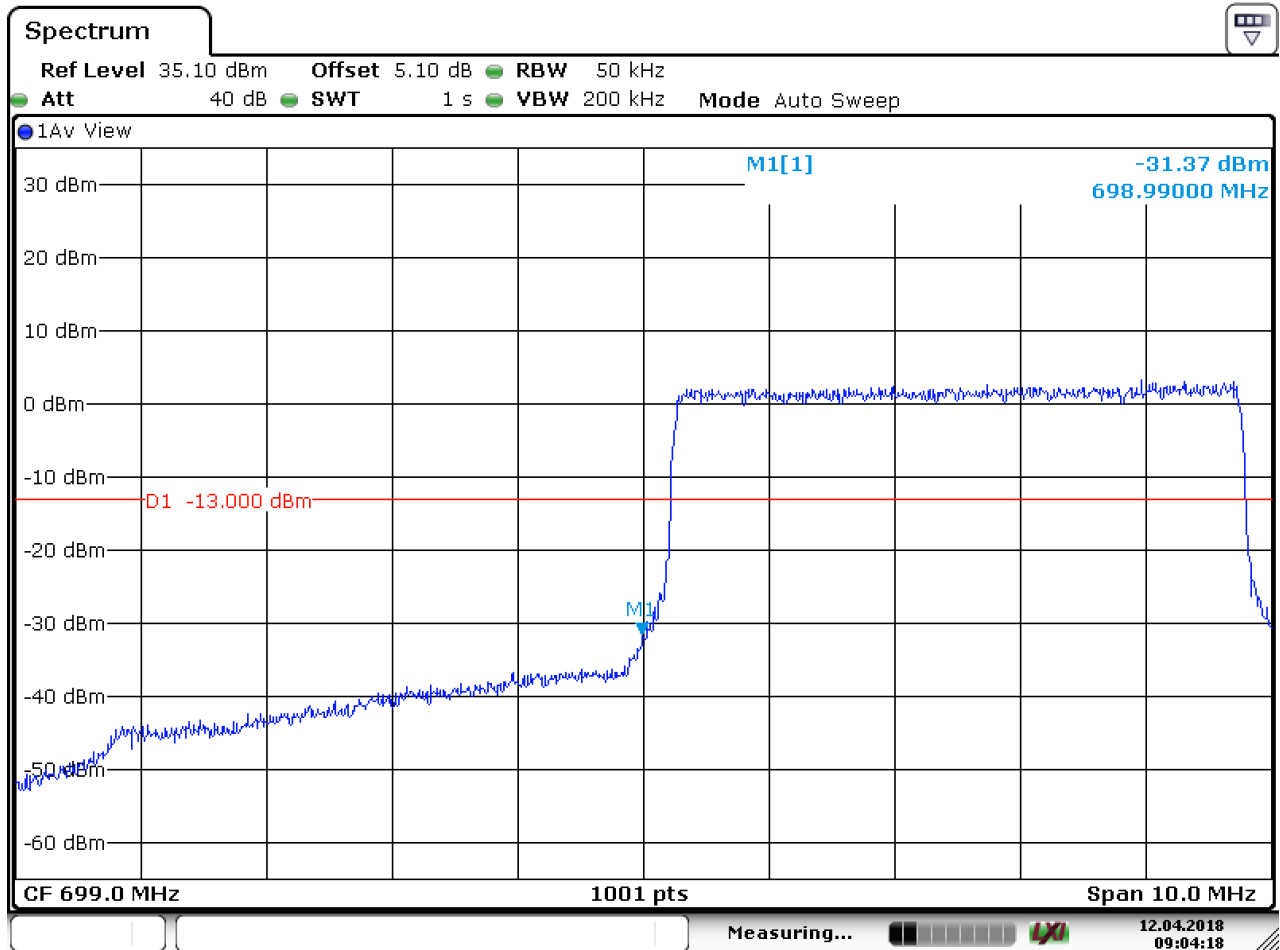
5.1.1.5.1.1 Test RB=1RB



Date: 12.APR.2018 09:05:25



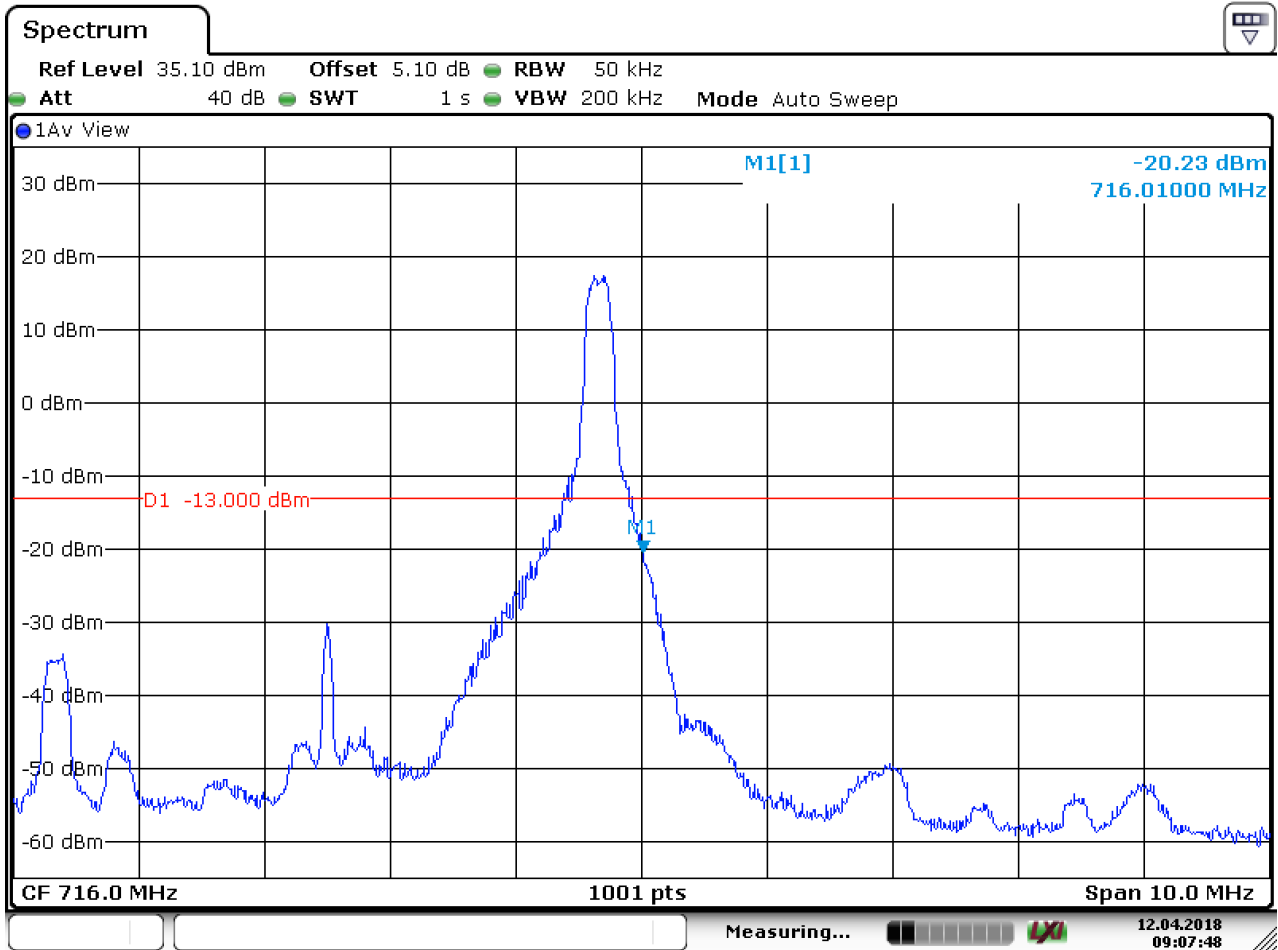
5.1.1.5.1.2 Test RB=25RB



Date: 12.APR.2018 09:04:18

5.1.1.5.2 Test Channel = HCH

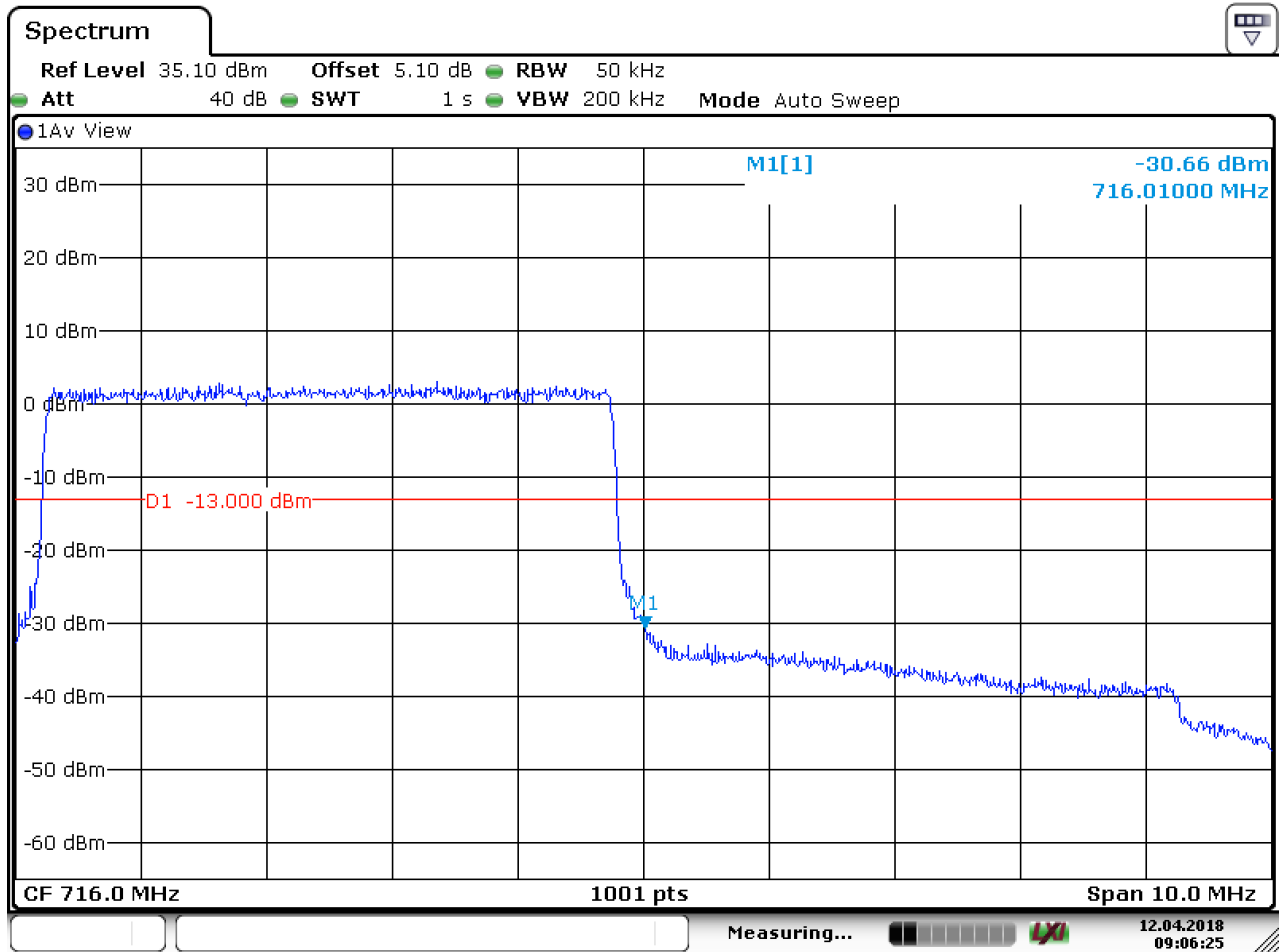
5.1.1.5.2.1 Test RB=1RB



Date: 12.APR.2018 09:07:48



5.1.1.5.2.2 Test RB=25RB

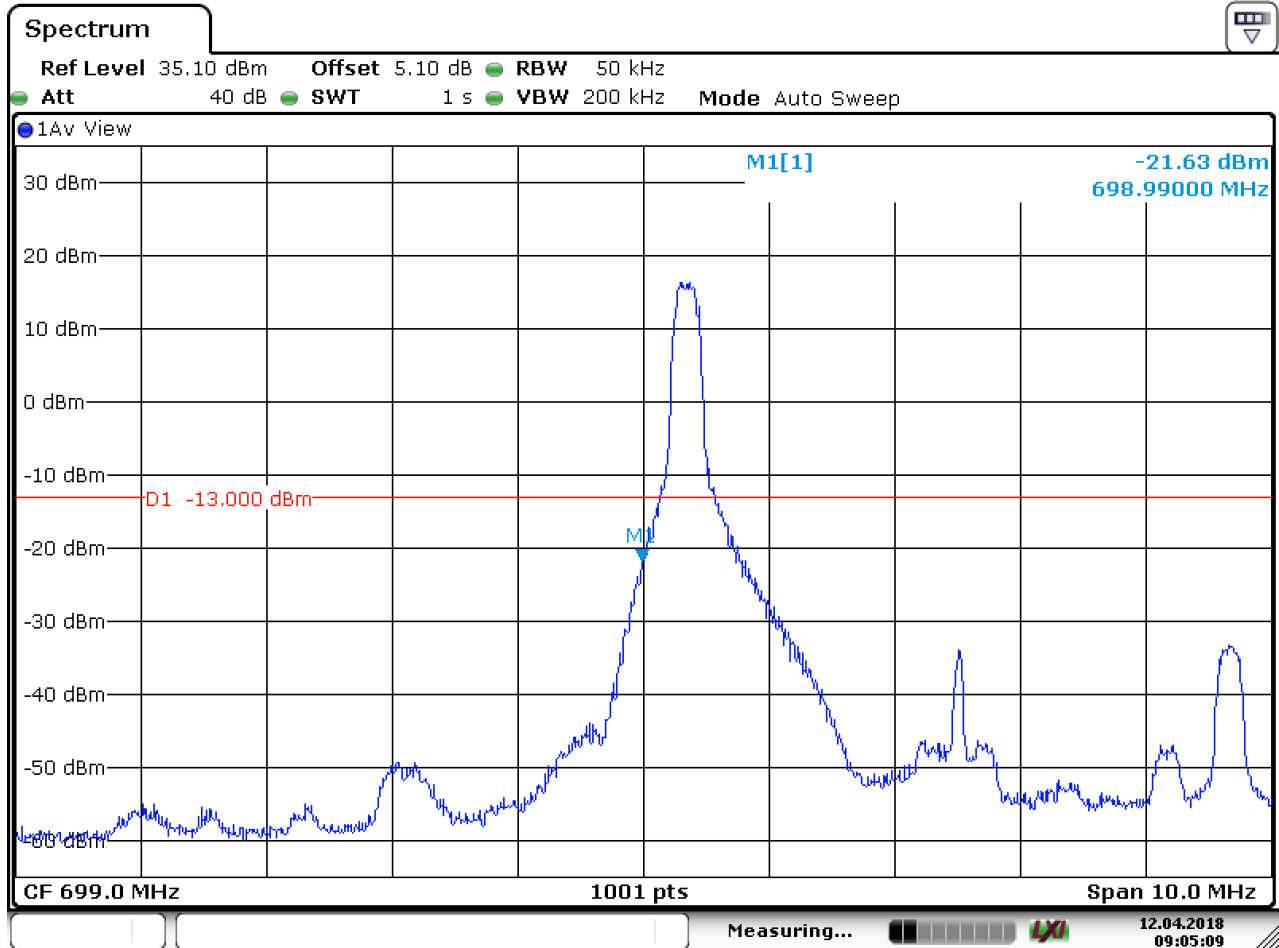


Date: 12.APR.2018 09:06:25

5.1.1.6 Test Mode = LTE/TM2 5MHz

5.1.1.6.1 Test Channel = LCH

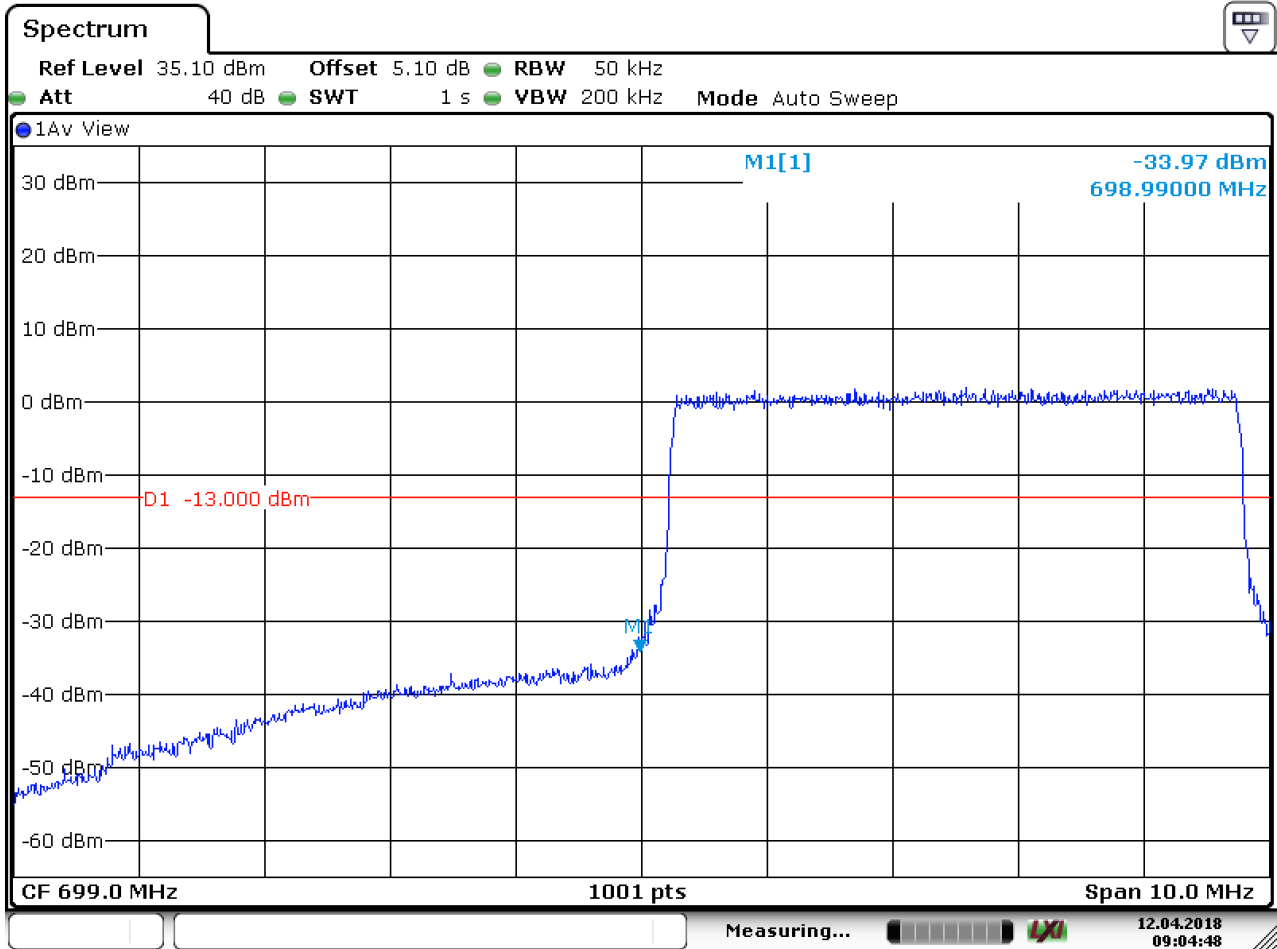
5.1.1.6.1.1 Test RB=1RB



Date: 12.APR.2018 09:05:09



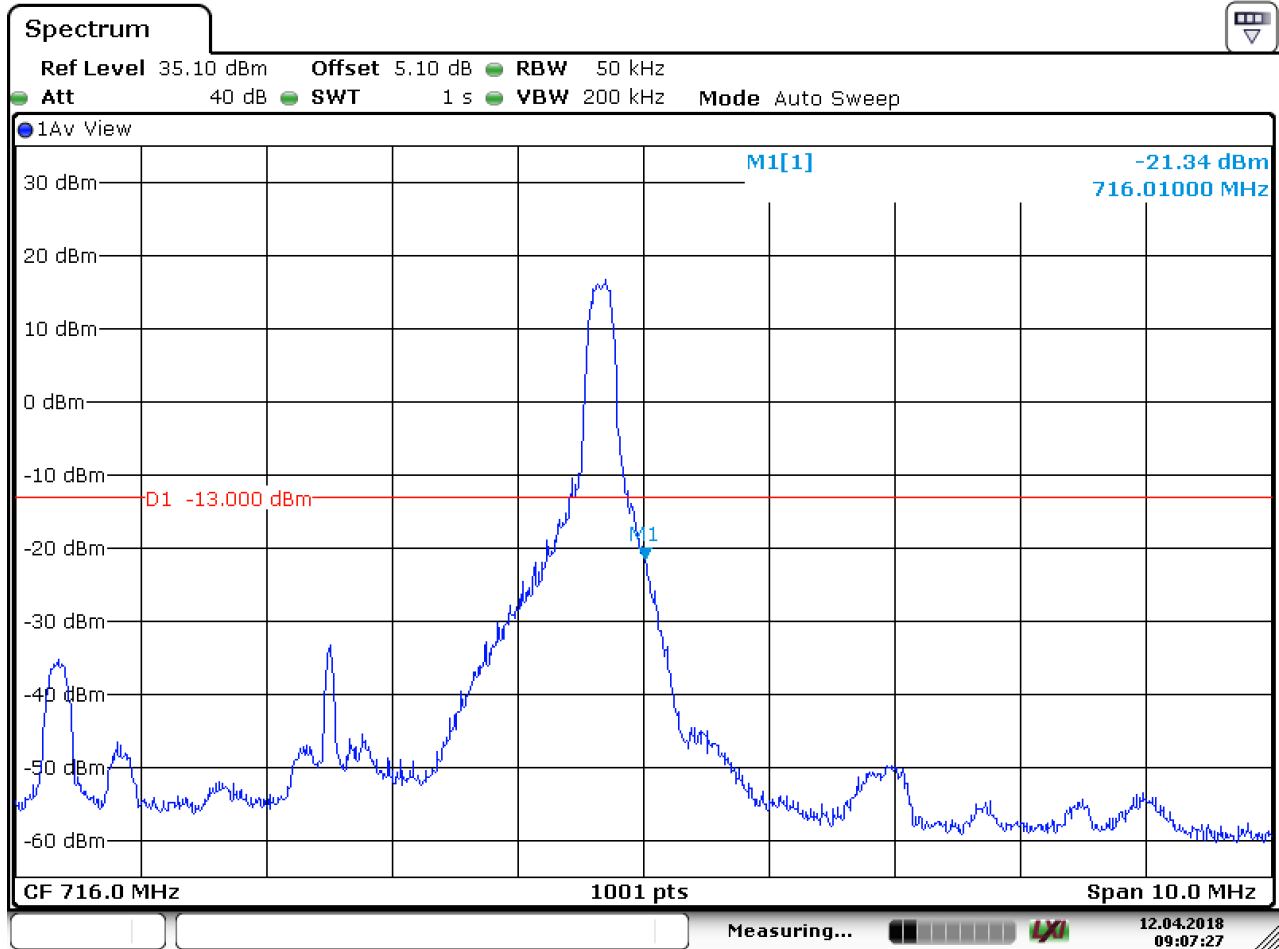
5.1.1.6.1.2 Test RB=25RB



Date: 12.APR.2018 09:04:48

5.1.1.6.2 Test Channel = HCH

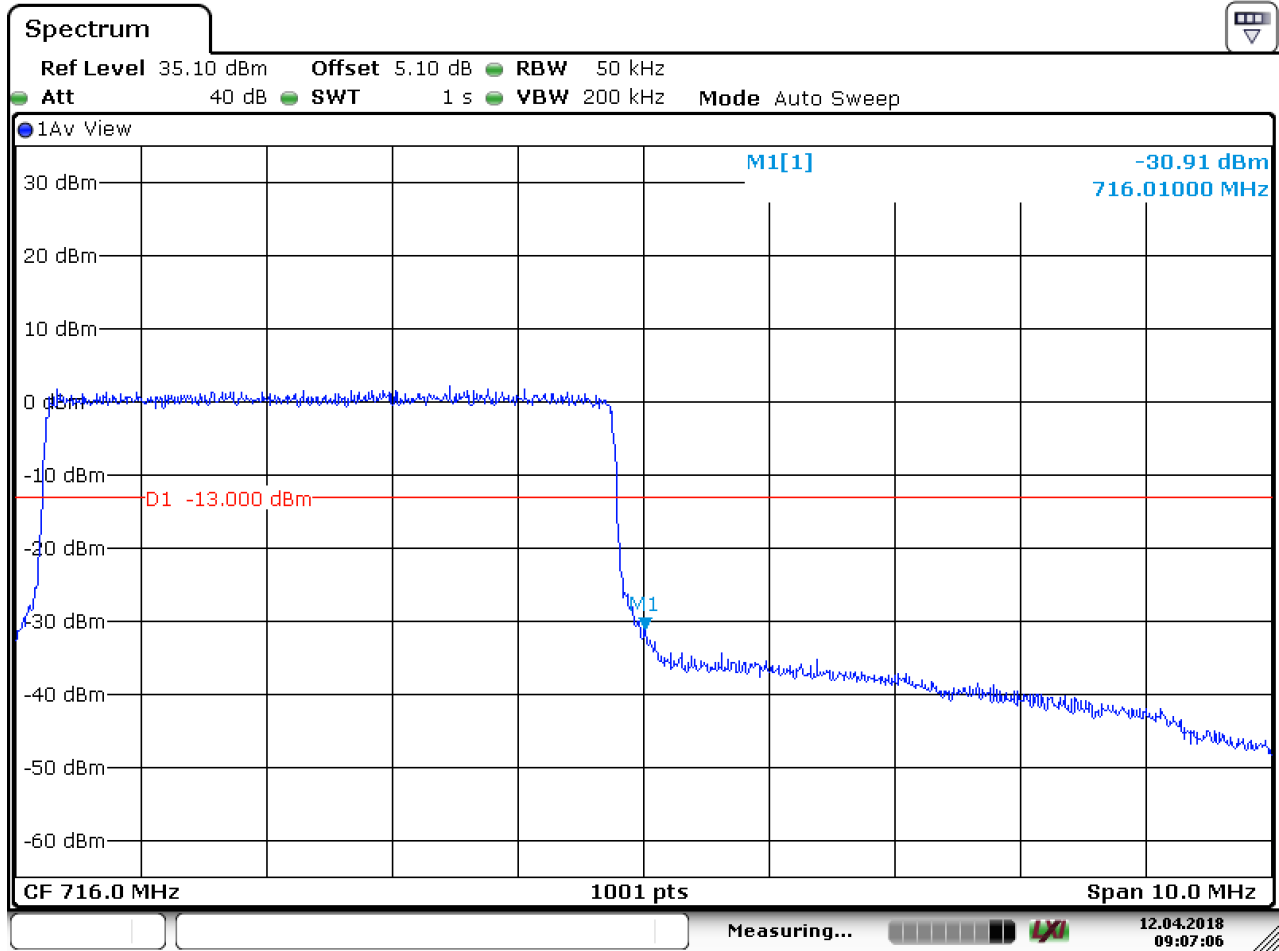
5.1.1.6.2.1 Test RB=1RB



Date: 12.APR.2018 09:07:28

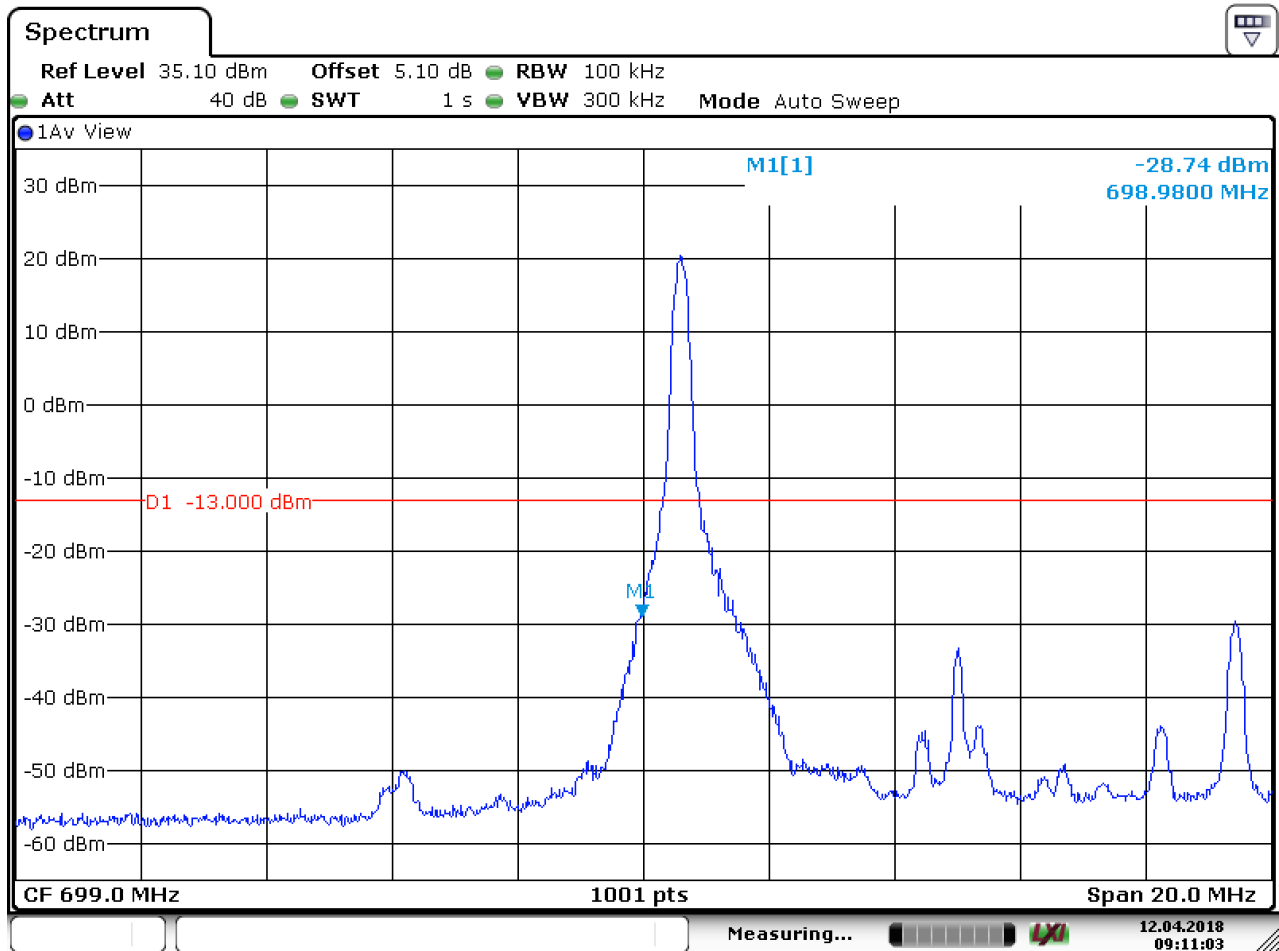


5.1.1.6.2.2 Test RB=25RB



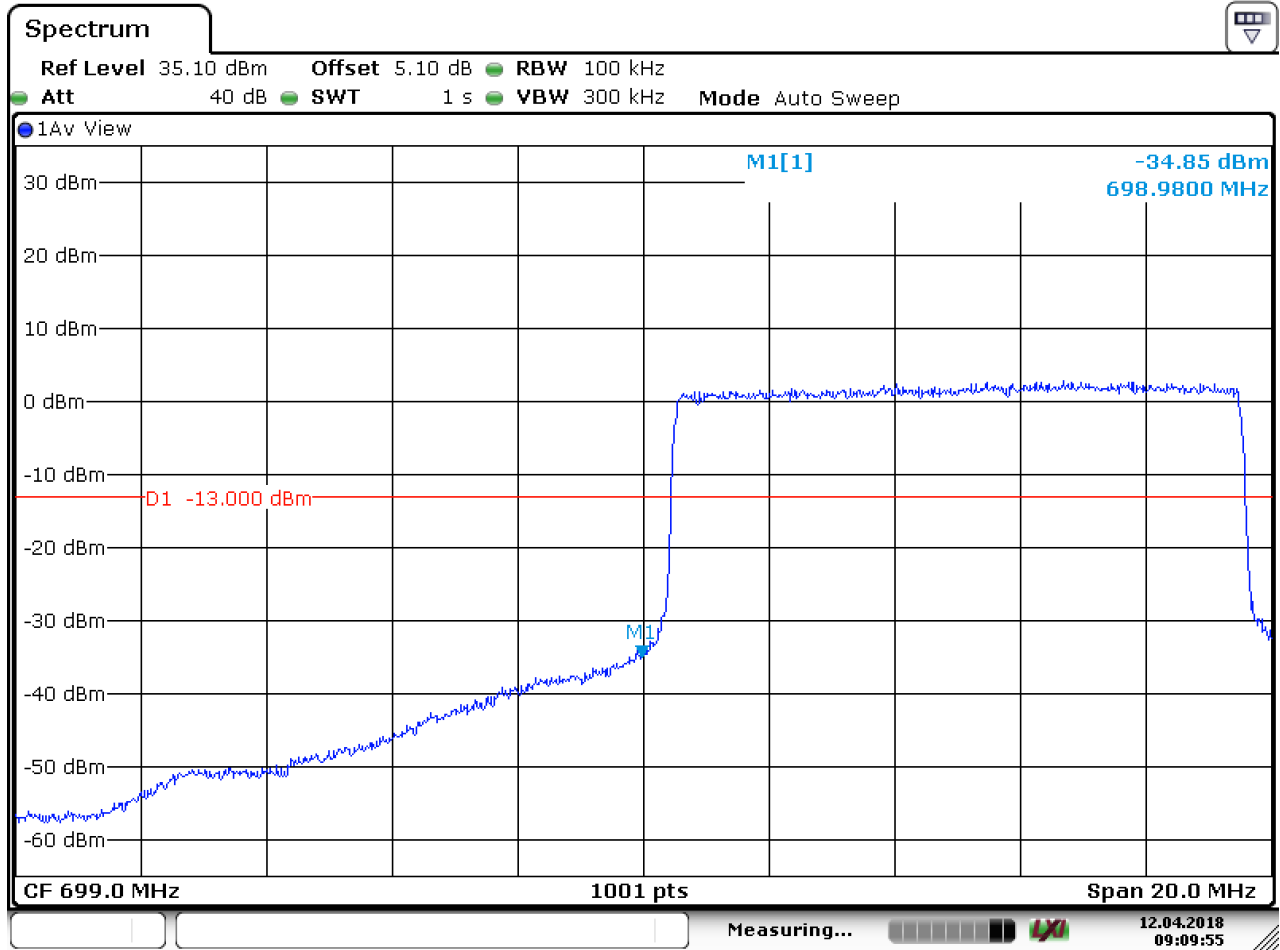
Date: 12.APR.2018 09:07:06

5.1.1.7 Test Mode = LTE/TM1 10MHz
5.1.1.7.1 Test Channel = LCH
5.1.1.7.1.1 Test RB=1RB



Date: 12.APR.2018 09:11:04

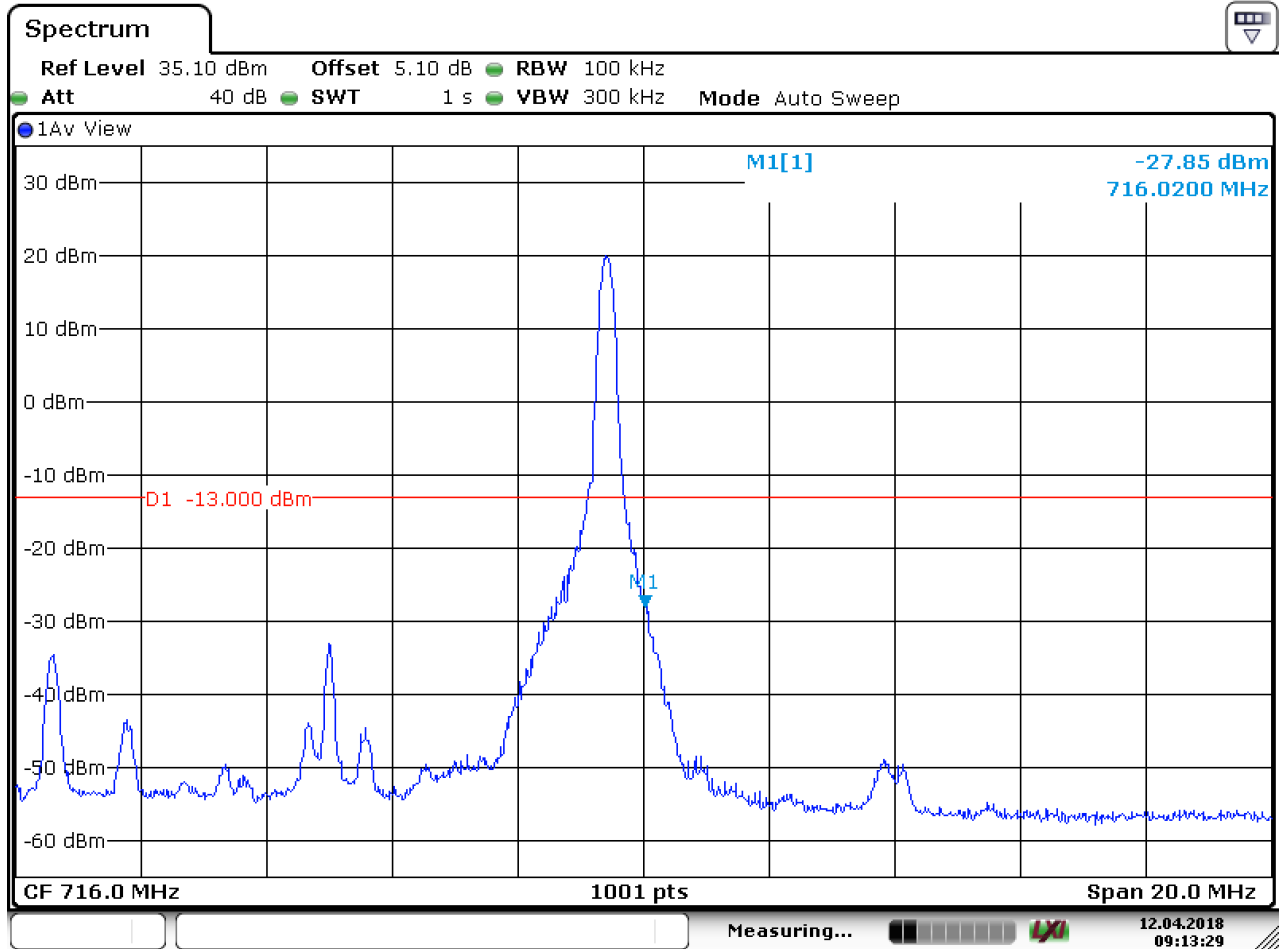
5.1.1.7.1.2 Test RB=50RB



Date: 12.APR.2018 09:09:55

5.1.1.7.2 Test Channel = HCH

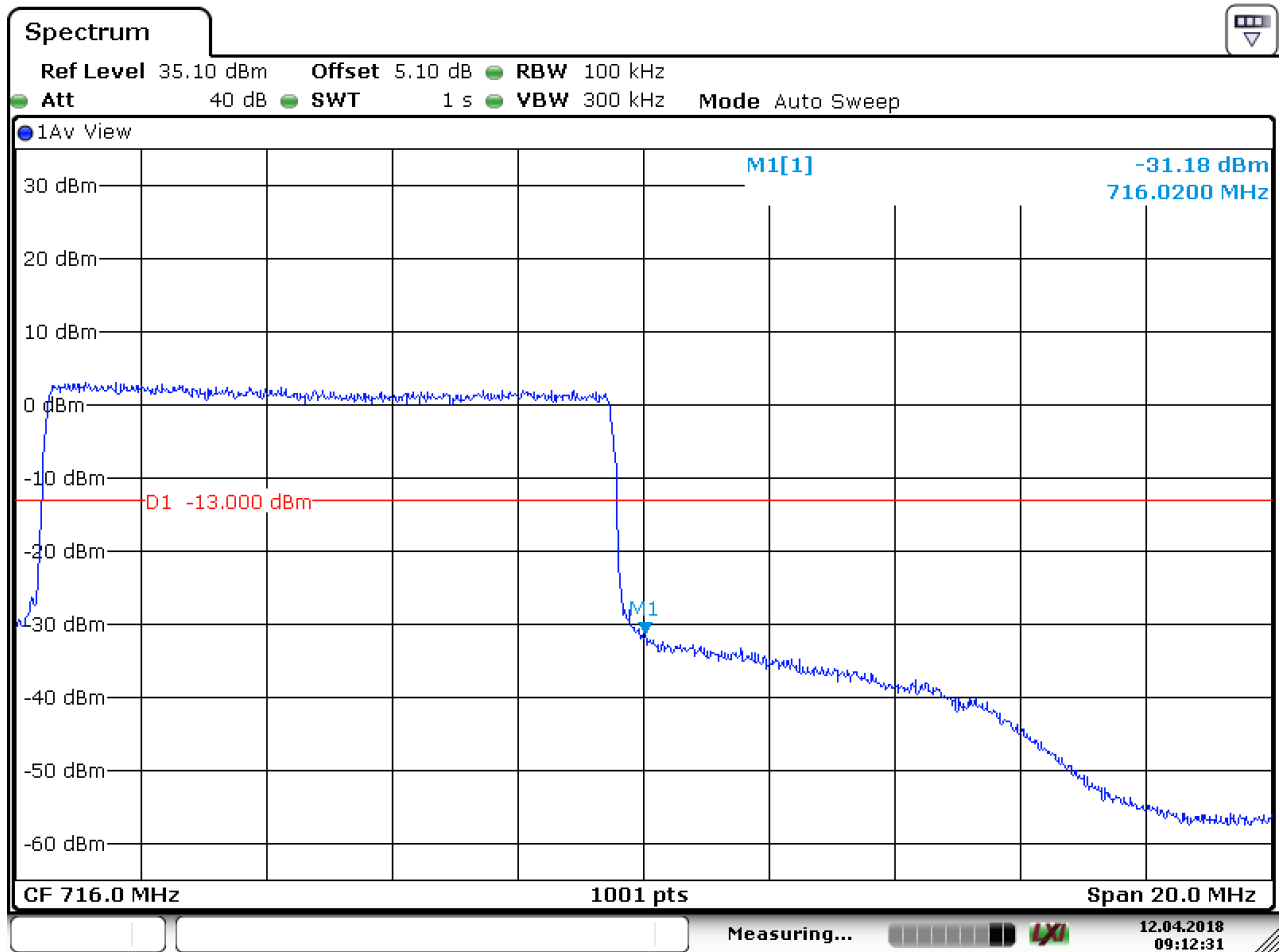
5.1.1.7.2.1 Test RB=1RB



Date: 12.APR.2018 09:13:30



5.1.1.7.2.2 Test RB=50RB

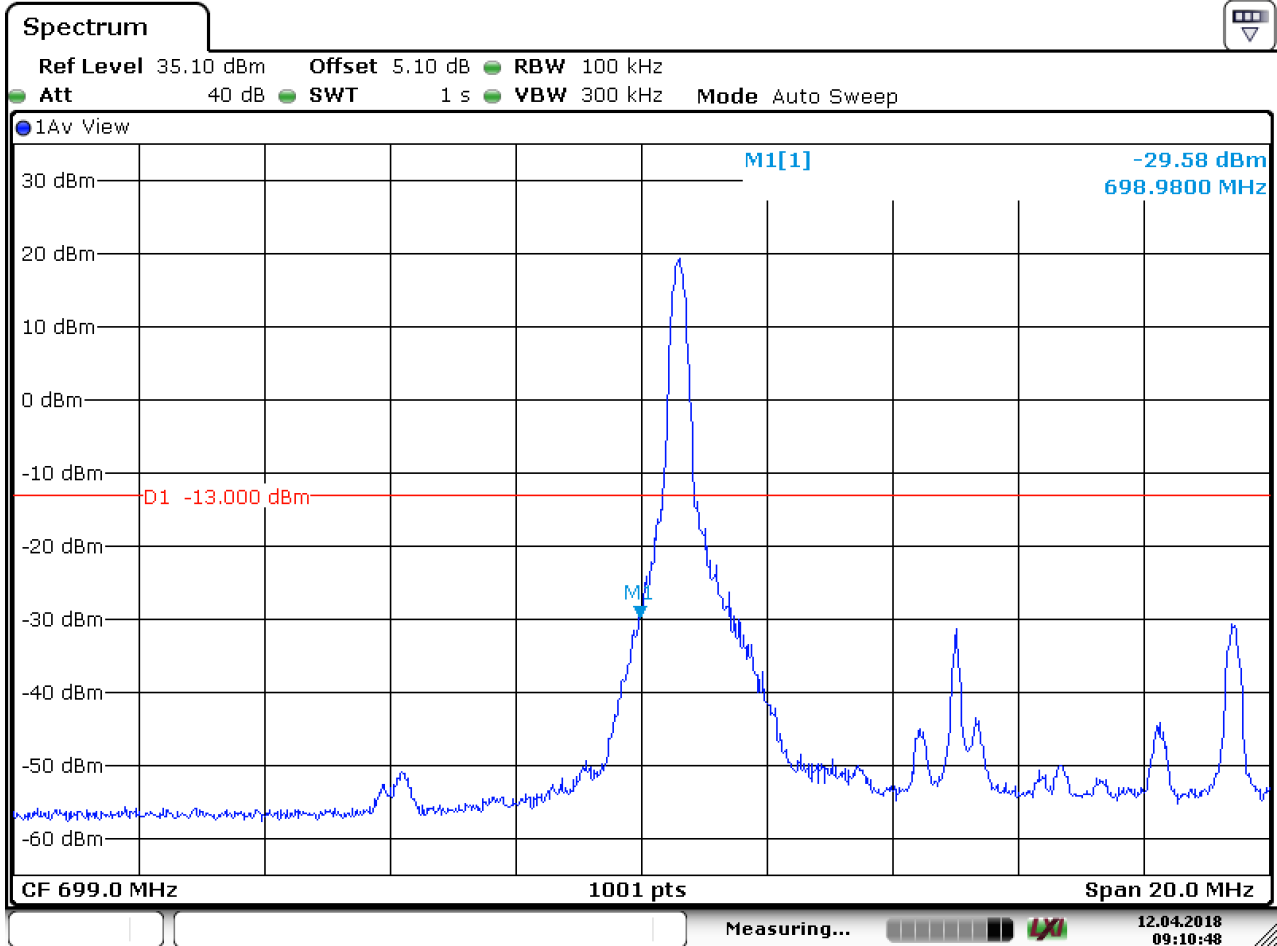


Date: 12.APR.2018 09:12:31

5.1.1.8 Test Mode = LTE/TM2 10MHz

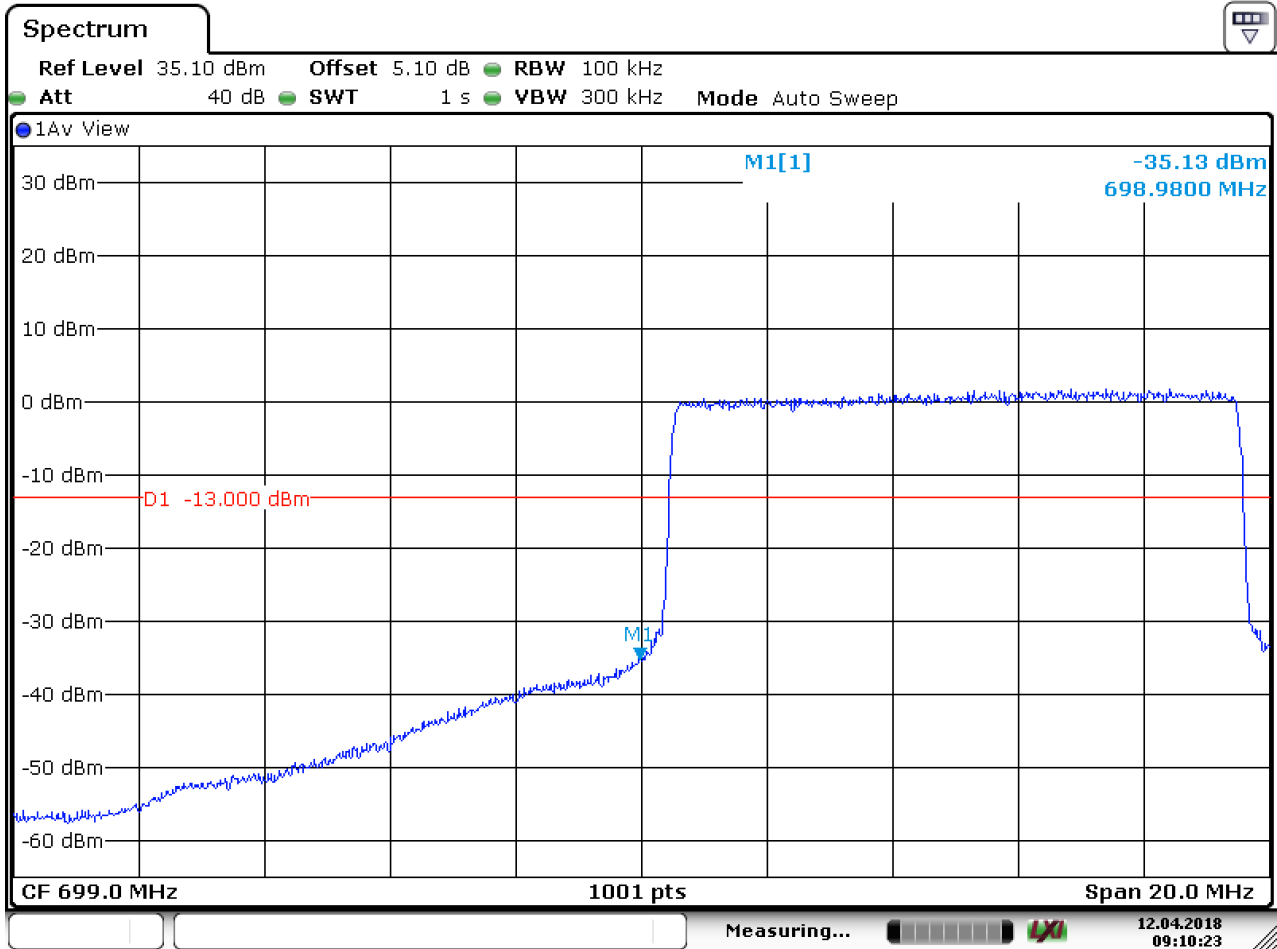
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 12.APR.2018 09:10:49

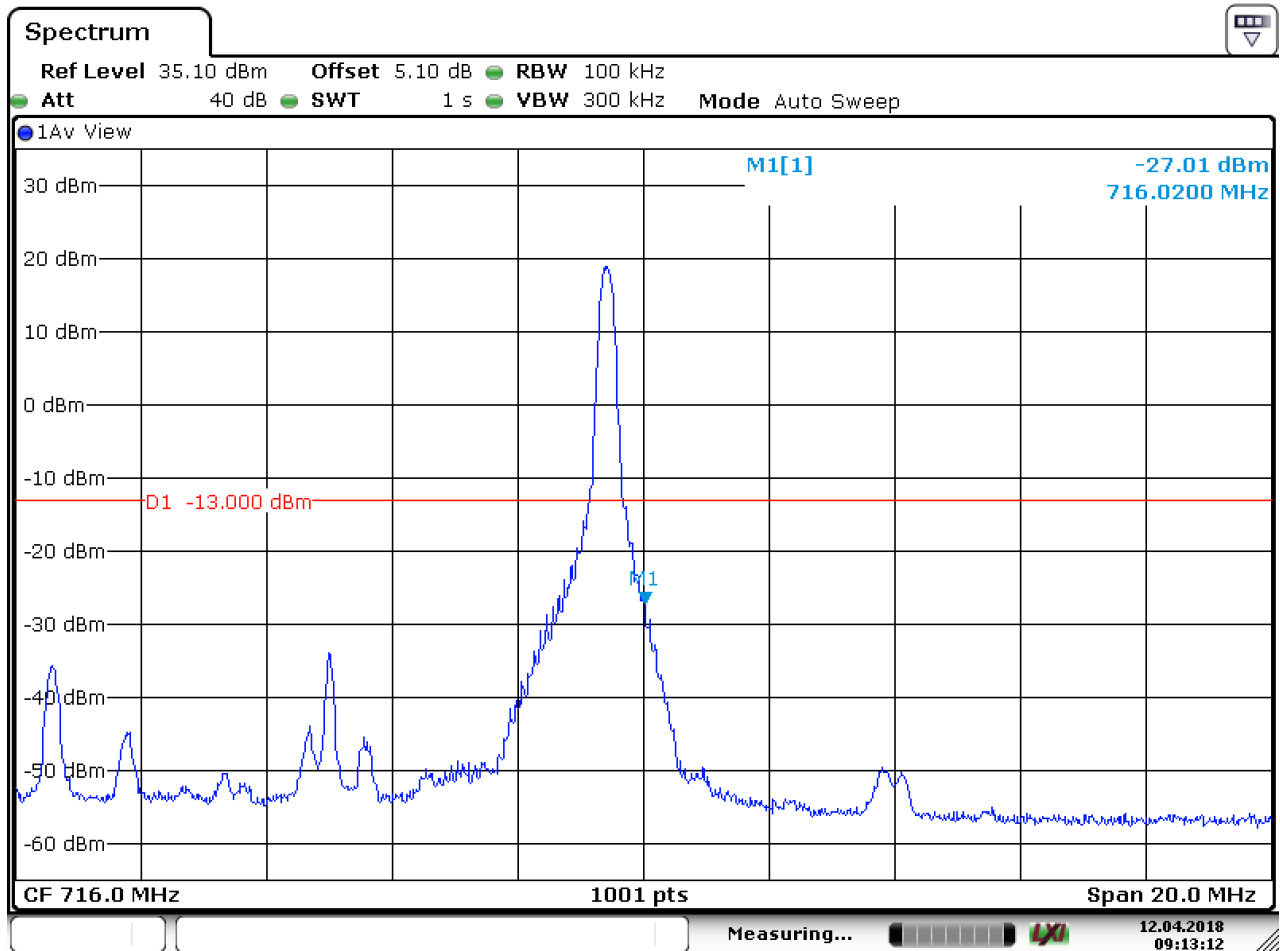
5.1.1.8.1.2 Test RB=50RB



Date: 12.APR.2018 09:10:23

5.1.1.8.2 Test Channel = HCH

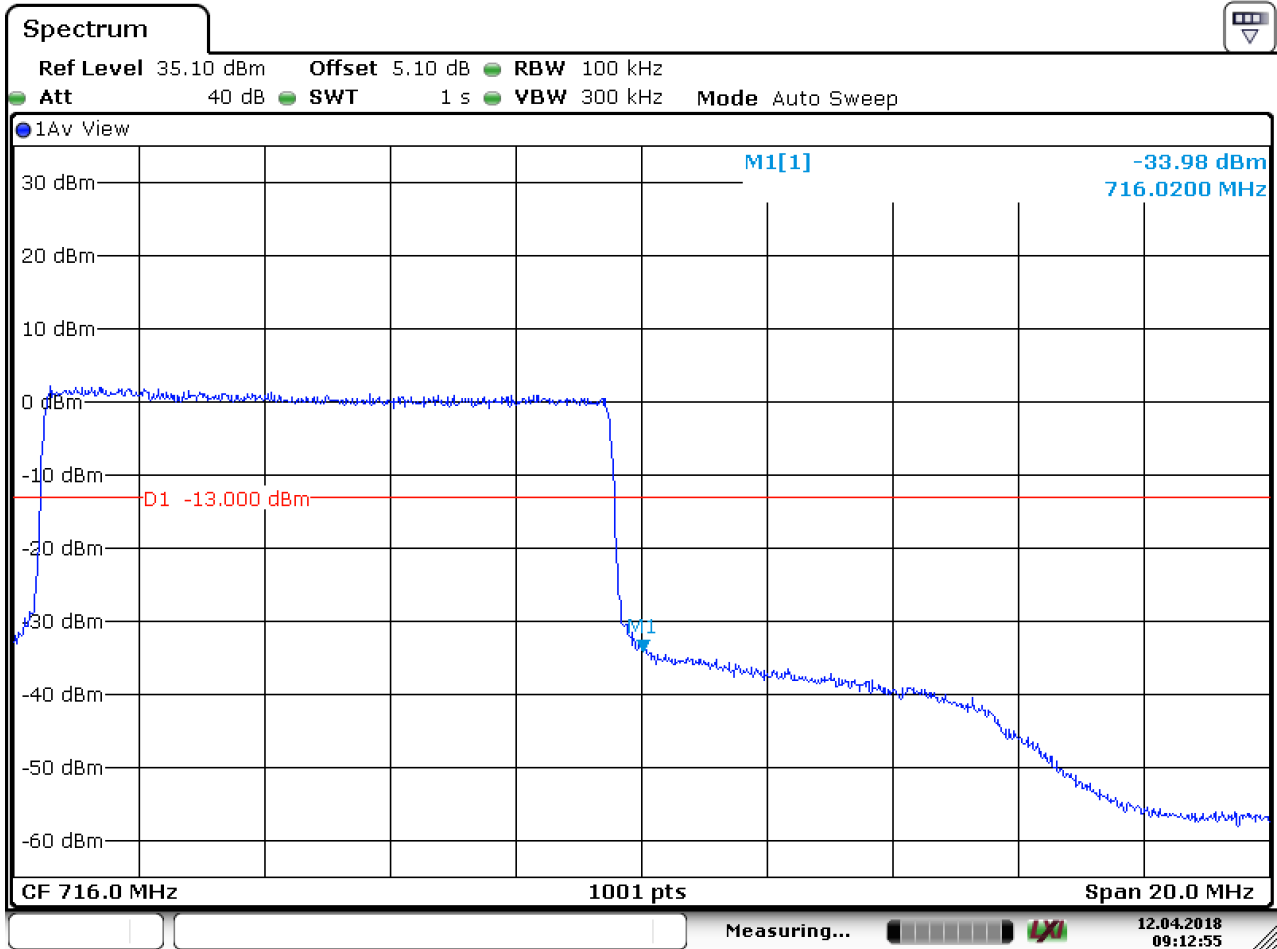
5.1.1.8.2.1 Test RB=1RB



Date: 12.APR.2018 09:13:12



5.1.1.8.2.2 Test RB=50RB



Date: 12.APR.2018 09:12:55

6 Spurious Emission at Antenna Terminal

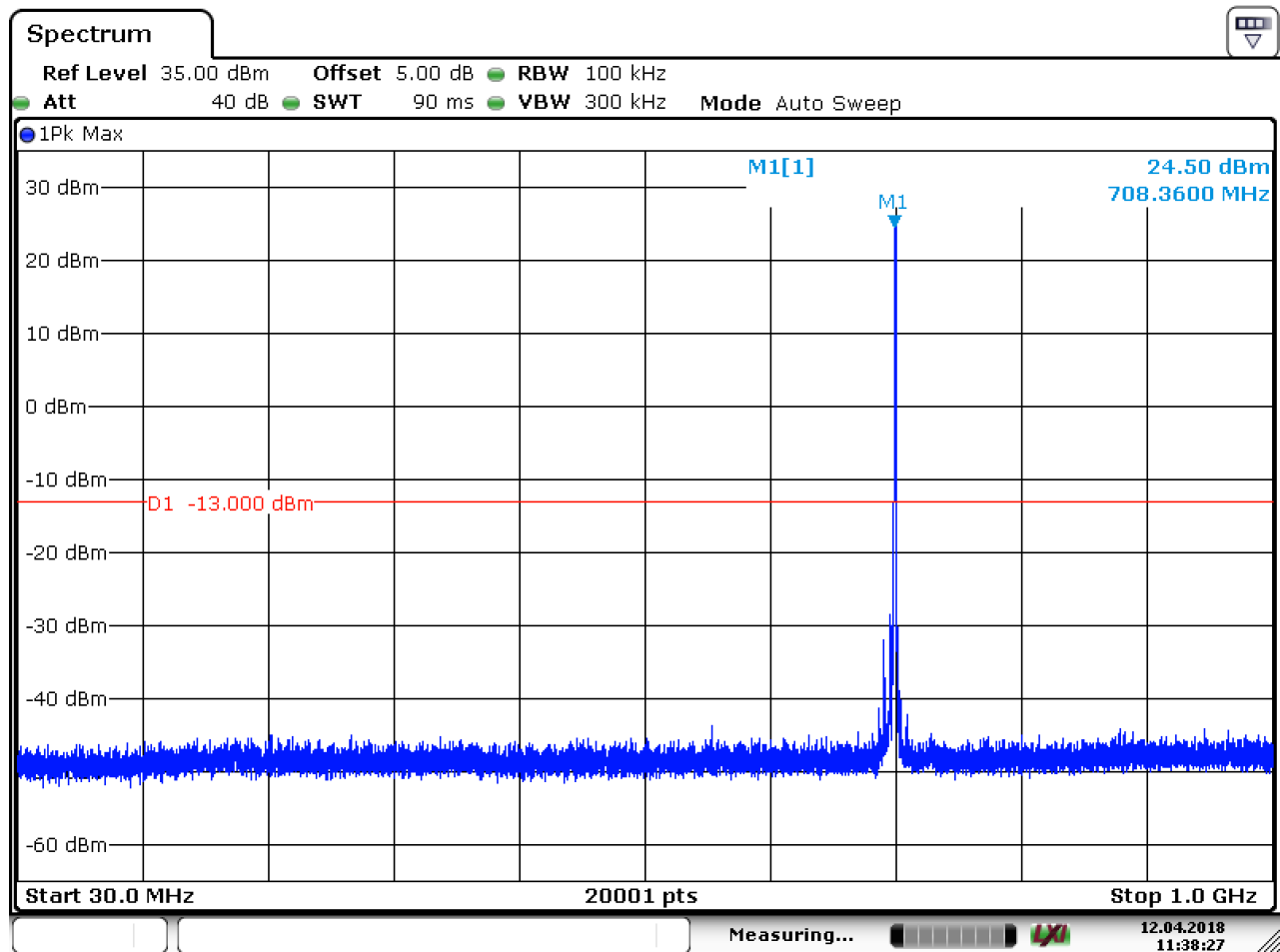
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k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

Part I - Test Plots

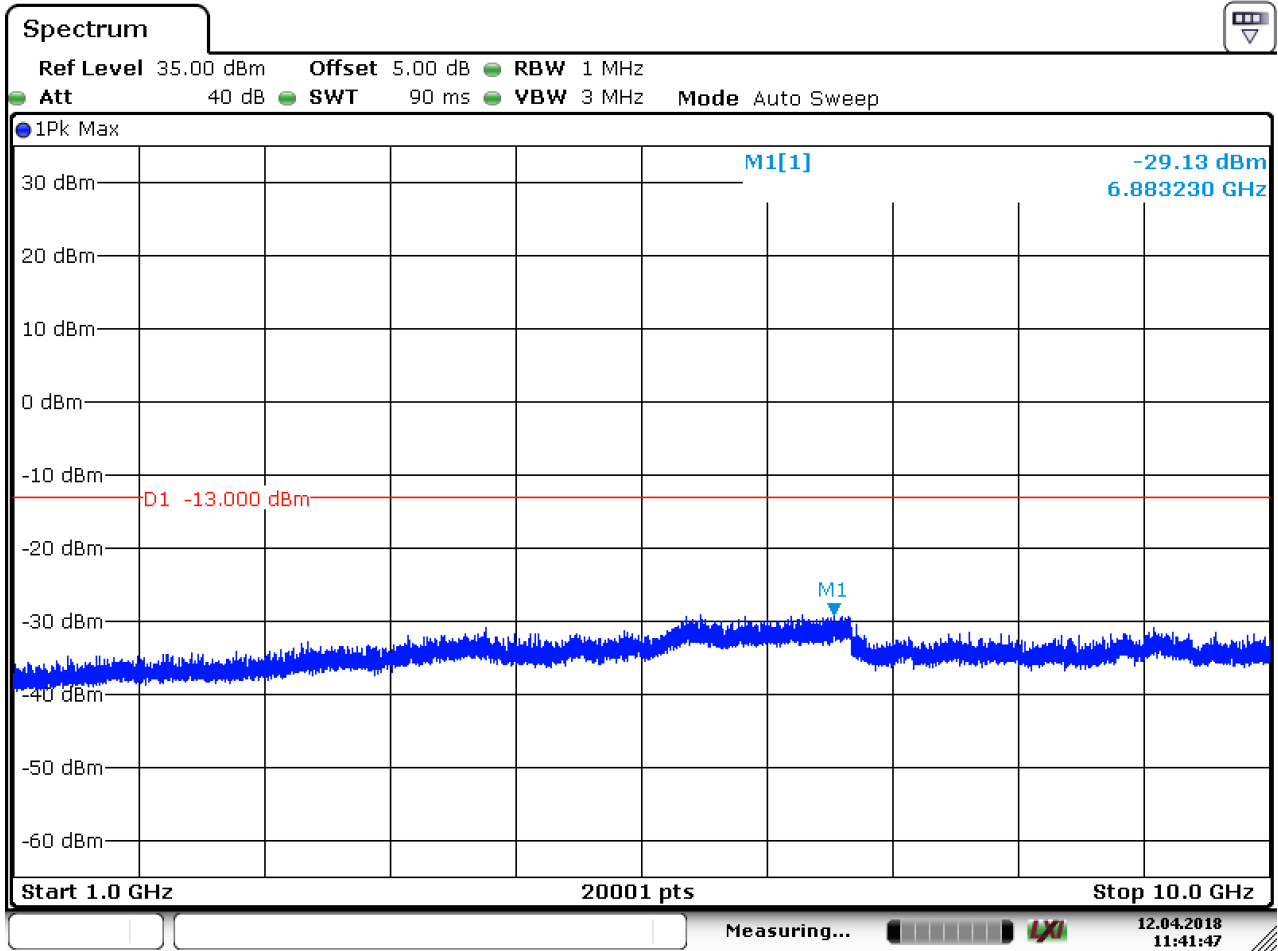
6.1 For LTE

6.1.1.1 Test Mode = LTE / TM1 10MHz RB1#0

6.1.1.1.1 Test Channel = LCH



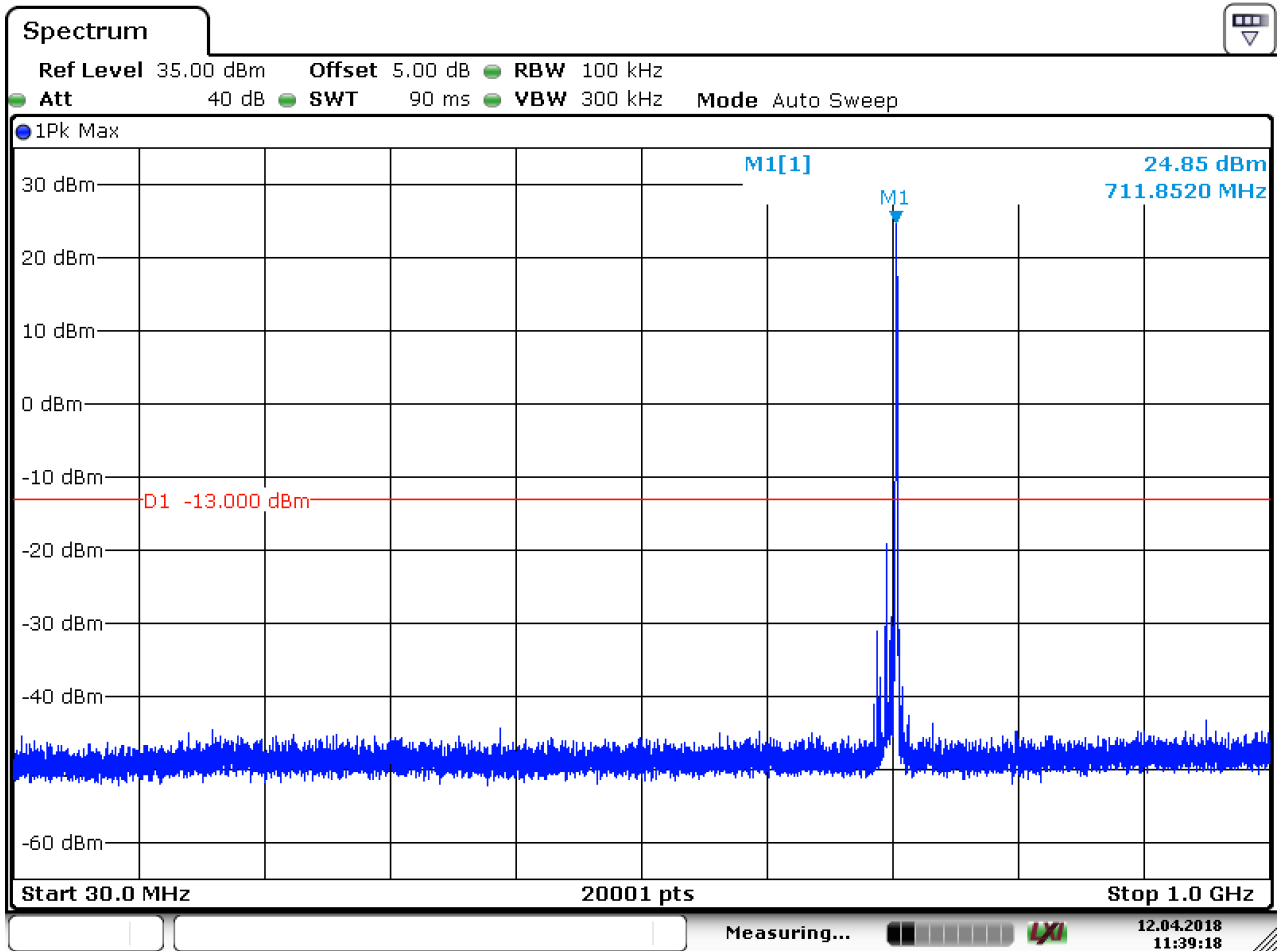
Date: 12.APR.2018 11:38:27



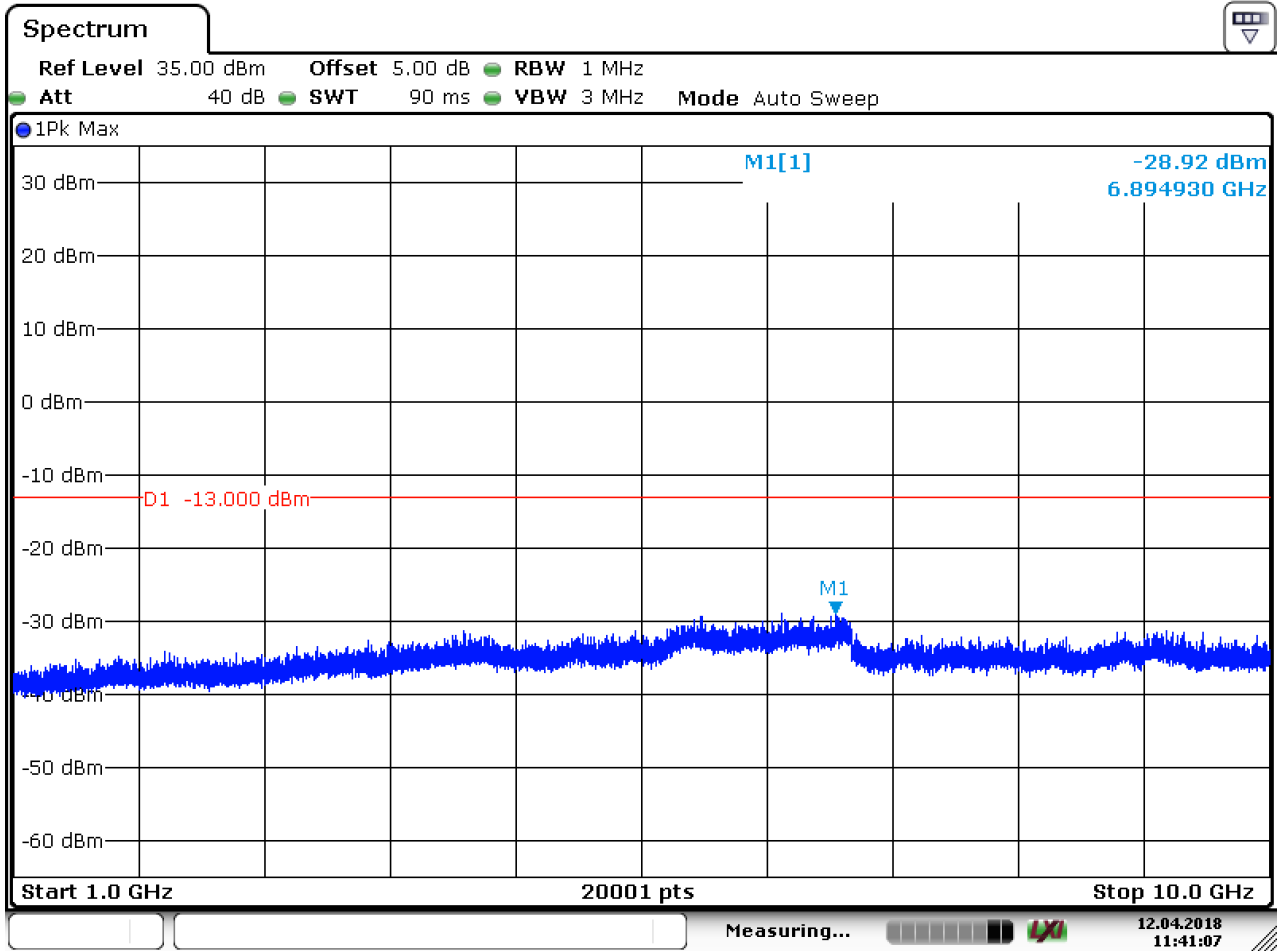
Date: 12.APR.2018 11:41:47



6.1.1.1.2 Test Channel = MCH

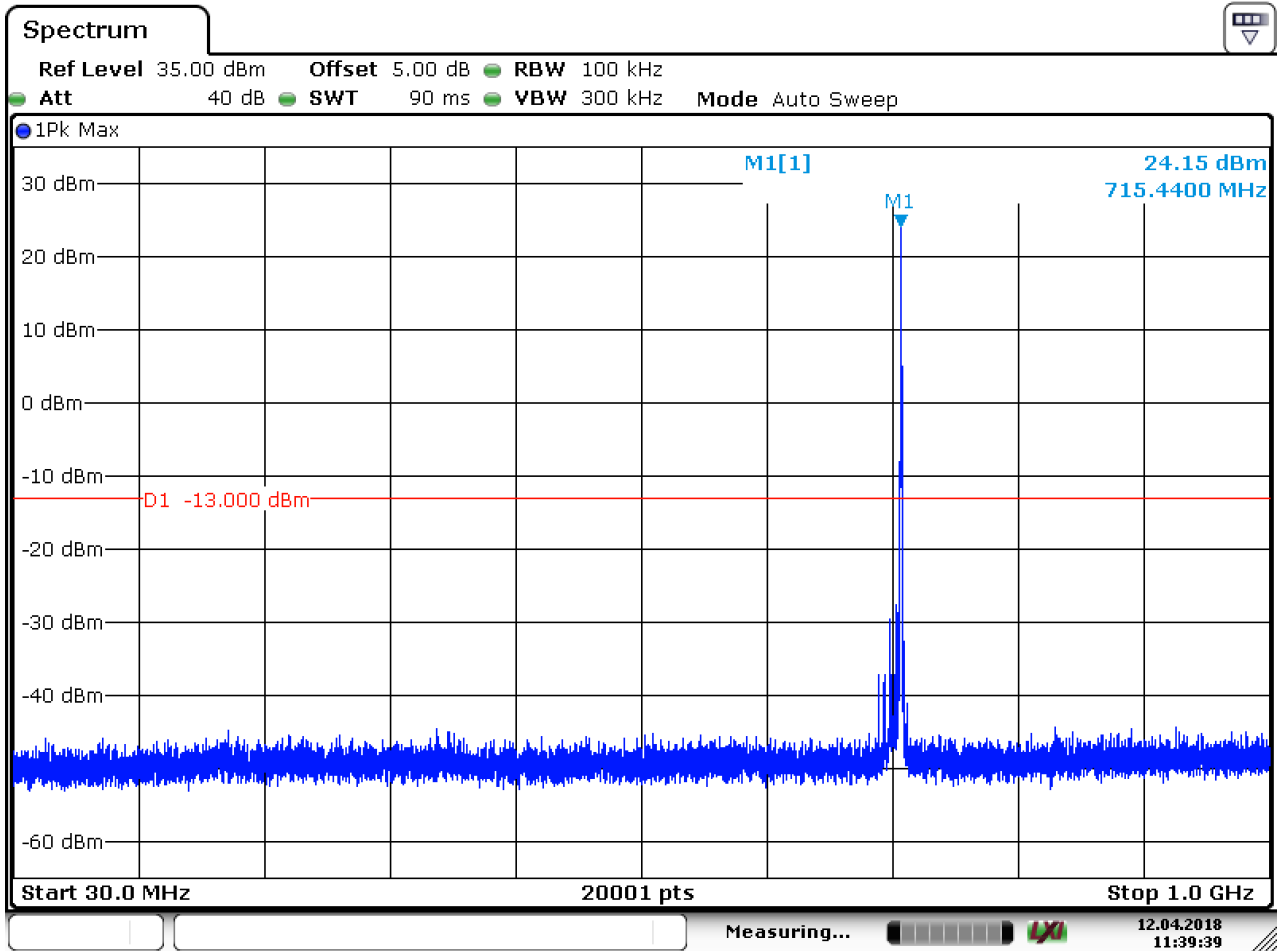


Date: 12.APR.2018 11:39:18

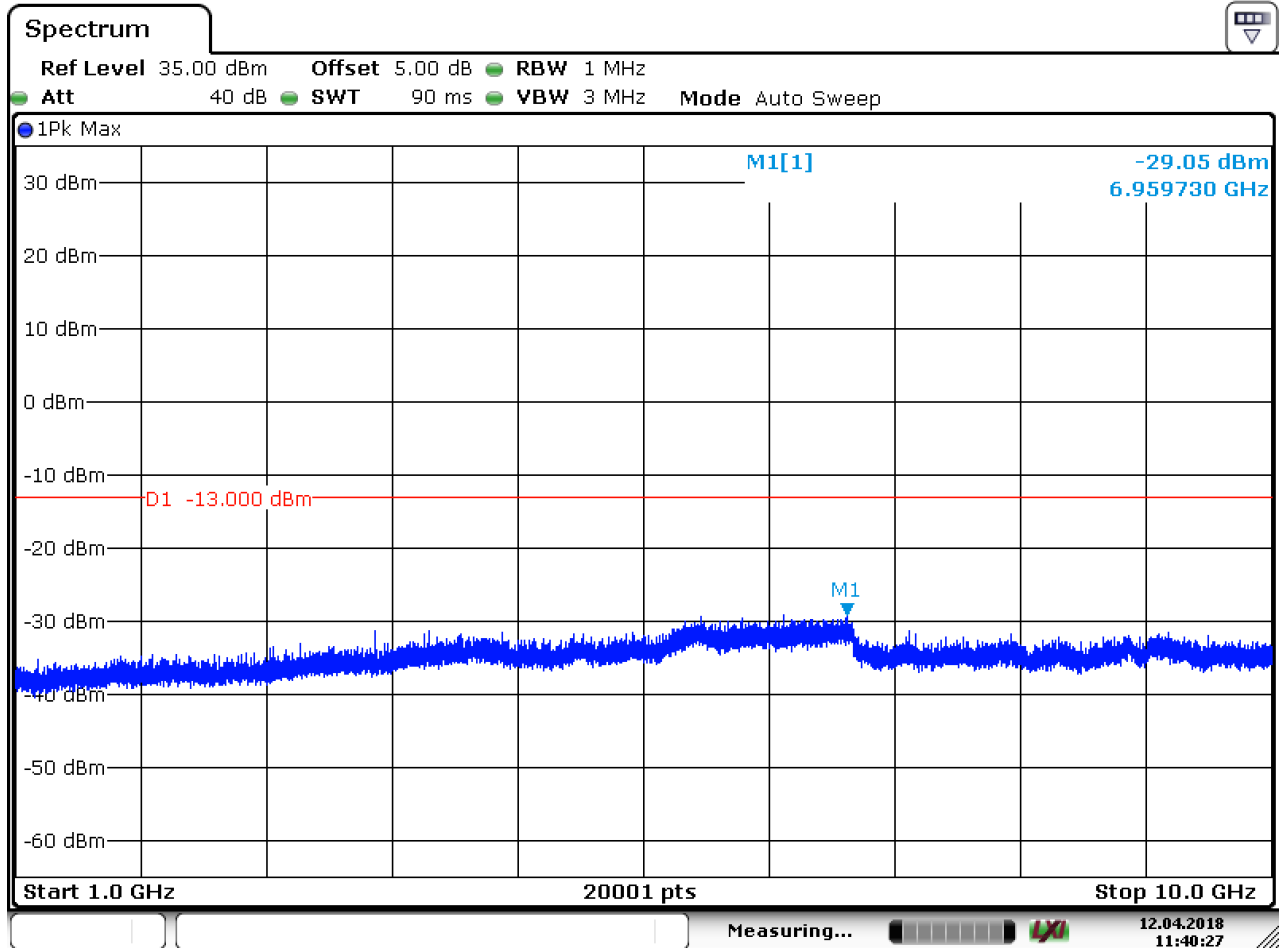


Date: 12.APR.2018 11:41:07

6.1.1.1.3 Test Channel = HCH



Date: 12.APR.2018 11:39:39



Date: 12.APR.2018 11:40:27



7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE BAND 12

7.1.1.1 Test Mode =LTE/TM1 10MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
64.533333	-81.76	-13.00	68.76	Vertical
124.966667	-85.05	-13.00	72.05	Vertical
1399.000000	-66.79	-13.00	53.79	Vertical
2798.500000	-55.85	-13.00	42.85	Vertical
3497.737500	-66.86	-13.00	53.86	Vertical
4197.300000	-62.32	-13.00	49.32	Vertical
62.900000	-77.64	-13.00	64.64	Horizontal
146.900000	-85.29	-13.00	72.29	Horizontal
2099.000000	-60.66	-13.00	47.66	Horizontal
2798.500000	-54.99	-13.00	41.99	Horizontal
3497.737500	-65.86	-13.00	52.86	Horizontal
4197.300000	-63.55	-13.00	50.55	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
63.880000	-81.96	-13.00	68.96	Vertical
124.966667	-85.17	-13.00	72.17	Vertical
2109.500000	-59.99	-13.00	46.99	Vertical
2812.500000	-56.56	-13.00	43.56	Vertical
3515.287500	-67.37	-13.00	54.37	Vertical
4218.262500	-63.47	-13.00	50.47	Vertical
63.320000	-77.97	-13.00	64.97	Horizontal
433.993333	-78.56	-13.00	65.56	Horizontal
2109.500000	-57.99	-13.00	44.99	Horizontal
2812.500000	-55.60	-13.00	42.60	Horizontal
3515.287500	-67.12	-13.00	54.12	Horizontal
4218.750000	-64.51	-13.00	51.51	Horizontal



7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
63.460000	-82.07	-13.00	69.07	Vertical
124.966667	-84.82	-13.00	71.82	Vertical
2120.000000	-59.29	-13.00	46.29	Vertical
3532.837500	-67.11	-13.00	54.11	Vertical
4239.225000	-63.65	-13.00	50.65	Vertical
7942.762500	-64.00	-13.00	51.00	Vertical
63.226667	-78.80	-13.00	65.80	Horizontal
613.075000	-79.28	-13.00	66.28	Horizontal
2120.000000	-56.90	-13.00	43.90	Horizontal
3532.837500	-67.11	-13.00	54.11	Horizontal
4239.225000	-63.60	-13.00	50.60	Horizontal
7045.762500	-65.20	-13.00	52.20	Horizontal

NOTE:

- 1) All modes are tested, but the data presented above is the worst case. The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



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 BAND 12	LTE/TM1 10MHz	LCH	TN	VL	-2.32	-0.003295	PASS
				VN	4.11	0.005838	PASS
				VH	4.32	0.006136	PASS
		MCH	TN	VL	4.62	0.006530	PASS
				VN	4.56	0.006445	PASS
				VH	-11.10	-0.015689	PASS
		HCH	TN	VL	4.12	0.005795	PASS
				VN	4.72	0.006639	PASS
				VH	-11.82	-0.016624	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-5.59	-0.007940	PASS
				VN	-3.63	-0.005156	PASS
				VH	3.79	0.005384	PASS
		MCH	TN	VL	-4.76	-0.006728	PASS
				VN	-5.04	-0.007124	PASS
				VH	-3.75	-0.005300	PASS
		HCH	TN	VL	-3.20	-0.004501	PASS
				VN	-3.39	-0.004768	PASS
				VH	2.63	0.003699	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
LTE BAND 12	LTE/TM1 10MHz	LCH	VN	-30	3.13	0.004446	PASS
				-20	-4.39	-0.006236	PASS
				-10	-4.25	-0.006037	PASS
				0	5.29	0.007514	PASS
				10	4.36	0.006193	PASS
				20	-2.98	-0.004212	PASS
				30	-2.70	-0.003816	PASS
				40	2.80	0.003958	PASS
				50	4.79	0.006770	PASS
		MCH	VN	-30	5.09	0.007194	PASS
				-20	5.55	0.007806	PASS
				-10	2.35	0.003305	PASS
				0	5.87	0.008256	PASS
				10	5.01	0.007046	PASS
				20	4.63	0.006512	PASS
				30	-3.82	-0.005453	PASS
				40	-2.66	-0.003797	PASS
				50	-2.72	-0.003883	PASS
		HCH	VN	-30	-4.56	-0.006510	PASS
				-20	-5.58	-0.007966	PASS
				-10	2.79	0.003943	PASS
				0	3.13	0.004446	PASS
				10	-4.39	-0.006236	PASS
				20	-4.25	-0.006037	PASS
				30	5.29	0.007514	PASS
				40	4.36	0.006193	PASS
				50	-2.98	-0.004212	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE BAND 12	LTE/TM2 10MHz	LCH	VN	-30	-3.72	-0.005258	PASS
				-20	-2.59	-0.003661	PASS
				-10	3.53	0.004989	PASS
				0	4.46	0.006304	PASS
				10	4.43	0.006193	PASS
				20	-4.18	-0.005844	PASS
				30	-4.85	-0.006780	PASS
				40	-5.48	-0.007661	PASS
				50	3.00	0.004194	PASS
		MCH	VN	-30	-3.85	-0.005469	PASS
				-20	-4.66	-0.006619	PASS
				-10	-5.69	-0.008082	PASS
				0	-4.09	-0.005810	PASS
				10	-4.52	-0.006420	PASS
				20	4.58	0.006473	PASS
				30	4.61	0.006516	PASS
				40	5.08	0.007180	PASS
				50	4.46	0.006304	PASS
		HCH	VN	-30	-2.73	-0.003859	PASS
				-20	-4.02	-0.005654	PASS
				-10	-4.26	-0.005992	PASS
				0	-3.93	-0.005527	PASS
				10	4.78	0.006723	PASS
				20	4.53	0.006371	PASS
				30	-3.72	-0.005258	PASS
				40	-2.59	-0.003661	PASS
				50	3.53	0.004989	PASS

The End