



Appendix B

E-UTRA Band 5



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1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 5

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	1.4M	LCH	RB1#0	20.69	19.69	38.45	PASS
				RB1#2	20.65	19.65	38.45	PASS
				RB1#5	20.63	19.63	38.45	PASS
				RB3#0	20.70	19.70	38.45	PASS
				RB3#2	20.68	19.68	38.45	PASS
				RB3#3	20.68	19.68	38.45	PASS
				RB6#0	19.77	18.77	38.45	PASS
			MCH	RB1#0	20.63	19.63	38.45	PASS
				RB1#2	20.59	19.59	38.45	PASS
				RB1#5	20.65	19.65	38.45	PASS
				RB3#0	20.61	19.61	38.45	PASS
				RB3#2	20.61	19.61	38.45	PASS
				RB3#3	20.65	19.65	38.45	PASS
				RB6#0	19.72	18.72	38.45	PASS
			HCH	RB1#0	20.79	19.79	38.45	PASS
				RB1#2	20.70	19.70	38.45	PASS
				RB1#5	20.74	19.74	38.45	PASS
				RB3#0	20.73	19.73	38.45	PASS
				RB3#2	20.72	19.72	38.45	PASS
				RB3#3	20.76	19.76	38.45	PASS
				RB6#0	19.82	18.82	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	1.4M	LCH	RB1#0	19.67	18.67	38.45	PASS
				RB1#2	19.71	18.71	38.45	PASS
				RB1#5	19.60	18.60	38.45	PASS
				RB3#0	19.71	18.71	38.45	PASS
				RB3#2	19.65	18.65	38.45	PASS
				RB3#3	19.70	18.70	38.45	PASS
				RB6#0	18.66	17.66	38.45	PASS
			MCH	RB1#0	19.60	18.60	38.45	PASS
				RB1#2	19.62	18.62	38.45	PASS
				RB1#5	19.57	18.57	38.45	PASS
				RB3#0	19.61	18.61	38.45	PASS
				RB3#2	19.61	18.61	38.45	PASS
				RB3#3	19.59	18.59	38.45	PASS
				RB6#0	18.58	17.58	38.45	PASS
			HCH	RB1#0	19.77	18.77	38.45	PASS
				RB1#2	19.74	18.74	38.45	PASS
				RB1#5	19.73	18.73	38.45	PASS
				RB3#0	19.74	18.74	38.45	PASS
				RB3#2	19.70	18.70	38.45	PASS
				RB3#3	19.75	18.75	38.45	PASS
				RB6#0	18.76	17.76	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	3M	LCH	RB1#0	20.67	19.67	38.45	PASS
				RB1#7	20.58	19.58	38.45	PASS
				RB1#14	20.60	19.60	38.45	PASS
				RB8#0	19.74	18.74	38.45	PASS
				RB8#4	19.59	18.59	38.45	PASS
				RB8#7	19.66	18.66	38.45	PASS
				RB15#0	19.77	18.77	38.45	PASS
			MCH	RB1#0	20.67	19.67	38.45	PASS
				RB1#7	20.56	19.56	38.45	PASS
				RB1#14	20.66	19.66	38.45	PASS
				RB8#0	19.79	18.79	38.45	PASS
				RB8#4	19.69	18.69	38.45	PASS
				RB8#7	19.64	18.64	38.45	PASS
				RB15#0	19.77	18.77	38.45	PASS
			HCH	RB1#0	20.79	19.79	38.45	PASS
				RB1#7	20.73	19.73	38.45	PASS
				RB1#14	20.72	19.72	38.45	PASS
				RB8#0	19.82	18.82	38.45	PASS
				RB8#4	19.80	18.80	38.45	PASS
				RB8#7	19.77	18.77	38.45	PASS
				RB15#0	19.84	18.84	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	3M	LCH	RB1#0	19.64	18.64	38.45	PASS
				RB1#7	19.57	18.57	38.45	PASS
				RB1#14	19.58	18.58	38.45	PASS
				RB8#0	18.84	17.84	38.45	PASS
				RB8#4	18.67	17.67	38.45	PASS
				RB8#7	18.72	17.72	38.45	PASS
				RB15#0	18.79	17.79	38.45	PASS
			MCH	RB1#0	19.69	18.69	38.45	PASS
				RB1#7	19.55	18.55	38.45	PASS
				RB1#14	19.67	18.67	38.45	PASS
				RB8#0	18.83	17.83	38.45	PASS
				RB8#4	18.73	17.73	38.45	PASS
				RB8#7	18.68	17.68	38.45	PASS
				RB15#0	18.73	17.73	38.45	PASS
			HCH	RB1#0	19.71	18.71	38.45	PASS
				RB1#7	19.67	18.67	38.45	PASS
				RB1#14	19.73	18.73	38.45	PASS
				RB8#0	18.84	17.84	38.45	PASS
				RB8#4	18.84	17.84	38.45	PASS
				RB8#7	18.86	17.86	38.45	PASS
				RB15#0	18.82	17.82	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	5M	LCH	RB1#0	20.67	19.67	38.45	PASS
				RB1#13	20.54	19.54	38.45	PASS
				RB1#24	20.60	19.60	38.45	PASS
				RB12#0	19.69	18.69	38.45	PASS
				RB12#6	19.63	18.63	38.45	PASS
				RB12#13	19.62	18.62	38.45	PASS
				RB25#0	19.63	18.63	38.45	PASS
			MCH	RB1#0	20.60	19.60	38.45	PASS
				RB1#13	20.56	19.56	38.45	PASS
				RB1#24	20.64	19.64	38.45	PASS
				RB12#0	19.75	18.75	38.45	PASS
				RB12#6	19.75	18.75	38.45	PASS
				RB12#13	19.75	18.75	38.45	PASS
				RB25#0	19.74	18.74	38.45	PASS
			HCH	RB1#0	20.62	19.62	38.45	PASS
				RB1#13	20.71	19.71	38.45	PASS
				RB1#24	20.67	19.67	38.45	PASS
				RB12#0	19.66	18.66	38.45	PASS
				RB12#6	19.77	18.77	38.45	PASS
				RB12#13	19.81	18.81	38.45	PASS
				RB25#0	19.72	18.72	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	5M	LCH	RB1#0	19.64	18.64	38.45	PASS
				RB1#13	19.51	18.51	38.45	PASS
				RB1#24	19.50	18.50	38.45	PASS
				RB12#0	18.78	17.78	38.45	PASS
				RB12#6	18.71	17.71	38.45	PASS
				RB12#13	18.70	17.70	38.45	PASS
				RB25#0	18.71	17.71	38.45	PASS
			MCH	RB1#0	19.53	18.53	38.45	PASS
				RB1#13	19.50	18.50	38.45	PASS
				RB1#24	19.61	18.61	38.45	PASS
				RB12#0	18.83	17.83	38.45	PASS
				RB12#6	18.79	17.79	38.45	PASS
				RB12#13	18.80	17.80	38.45	PASS
				RB25#0	18.77	17.77	38.45	PASS
			HCH	RB1#0	19.58	18.58	38.45	PASS
				RB1#13	19.64	18.64	38.45	PASS
				RB1#24	19.70	18.70	38.45	PASS
				RB12#0	18.76	17.76	38.45	PASS
				RB12#6	18.83	17.83	38.45	PASS
				RB12#13	18.83	17.83	38.45	PASS
				RB25#0	18.69	17.69	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	10M	LCH	RB1#0	20.67	19.67	38.45	PASS
				RB1#25	20.59	19.59	38.45	PASS
				RB1#49	20.60	19.60	38.45	PASS
				RB25#0	19.65	18.65	38.45	PASS
				RB25#13	19.62	18.62	38.45	PASS
				RB25#25	19.81	18.81	38.45	PASS
				RB50#0	19.71	18.71	38.45	PASS
			MCH	RB1#0	20.68	19.68	38.45	PASS
				RB1#25	20.62	19.62	38.45	PASS
				RB1#49	20.67	19.67	38.45	PASS
				RB25#0	19.78	18.78	38.45	PASS
				RB25#13	19.76	18.76	38.45	PASS
				RB25#25	19.76	18.76	38.45	PASS
				RB50#0	19.72	18.72	38.45	PASS
			HCH	RB1#0	20.72	19.72	38.45	PASS
				RB1#25	20.61	19.61	38.45	PASS
				RB1#49	20.71	19.71	38.45	PASS
				RB25#0	19.73	18.73	38.45	PASS
				RB25#13	19.70	18.70	38.45	PASS
				RB25#25	19.67	18.67	38.45	PASS
				RB50#0	19.68	18.68	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	10M	LCH	RB1#0	19.66	18.66	38.45	PASS
				RB1#25	19.57	18.57	38.45	PASS
				RB1#49	19.62	18.62	38.45	PASS
				RB25#0	18.76	17.76	38.45	PASS
				RB25#13	18.70	17.70	38.45	PASS
				RB25#25	18.80	17.80	38.45	PASS
				RB50#0	18.69	17.69	38.45	PASS
			MCH	RB1#0	19.67	18.67	38.45	PASS
				RB1#25	19.56	18.56	38.45	PASS
				RB1#49	19.63	18.63	38.45	PASS
				RB25#0	18.78	17.78	38.45	PASS
				RB25#13	18.79	17.79	38.45	PASS
				RB25#25	18.78	17.78	38.45	PASS
				RB50#0	18.77	17.77	38.45	PASS
			HCH	RB1#0	19.77	18.77	38.45	PASS
				RB1#25	19.65	18.65	38.45	PASS
				RB1#49	19.69	18.69	38.45	PASS
				RB25#0	18.80	17.80	38.45	PASS
				RB25#13	18.76	17.76	38.45	PASS
				RB25#25	18.74	17.74	38.45	PASS
				RB50#0	18.76	17.76	38.45	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

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 5	TM1/10M	LCH	5.71	13	PASS
		MCH	5.42	13	PASS
		HCH	5.39	13	PASS
	TM2/10M	LCH	6.32	13	PASS
		MCH	6.20	13	PASS
		HCH	6.12	13	PASS



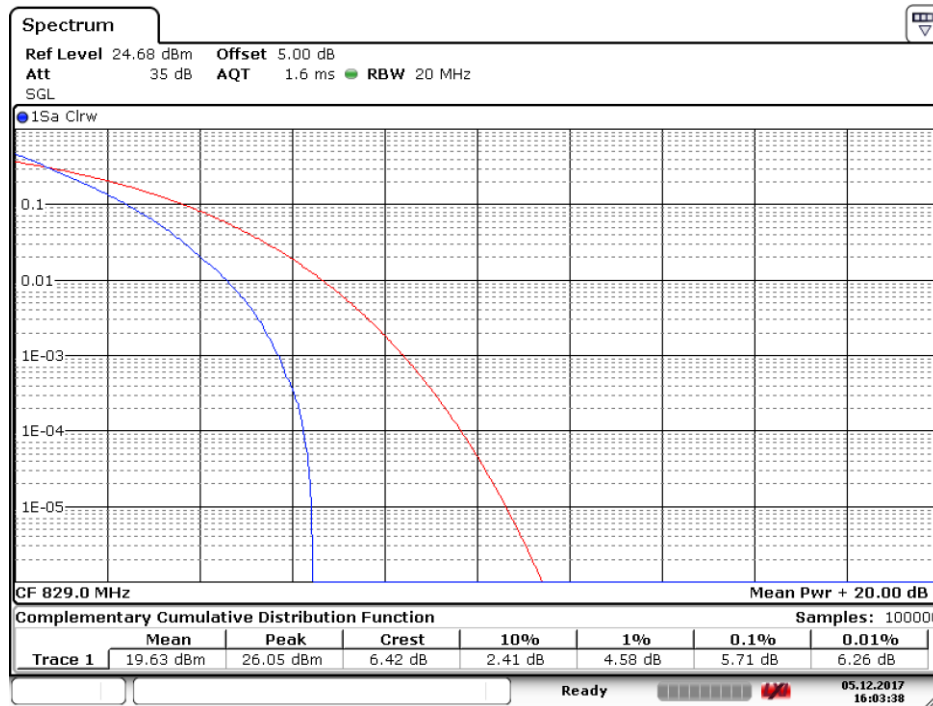
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band5

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

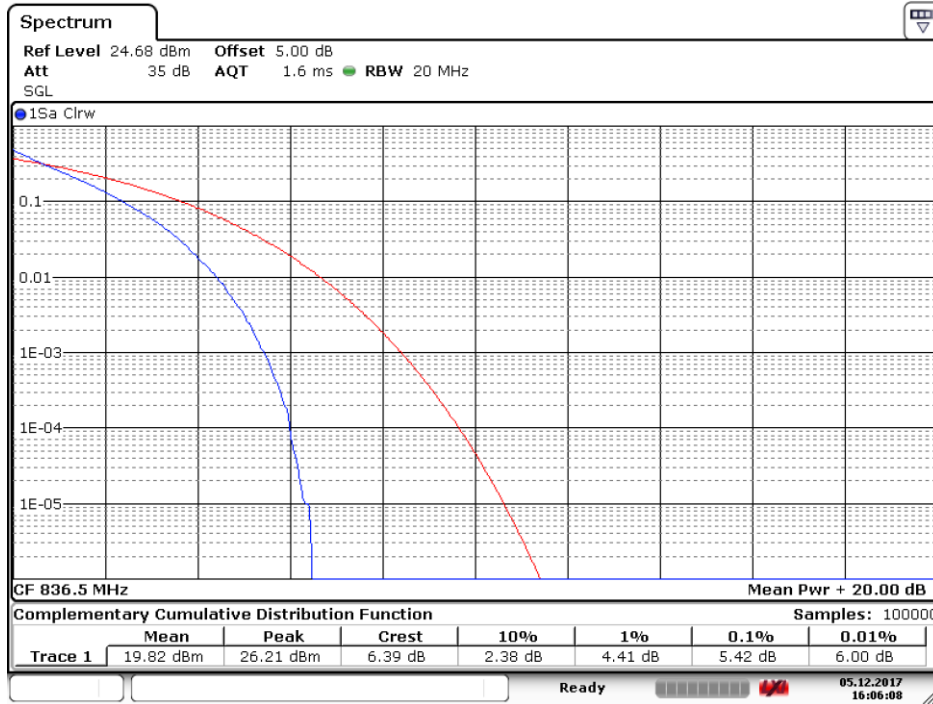
2.1.1.1.1 Test Channel = LCH



Date: 5.DEC.2017 16:03:38

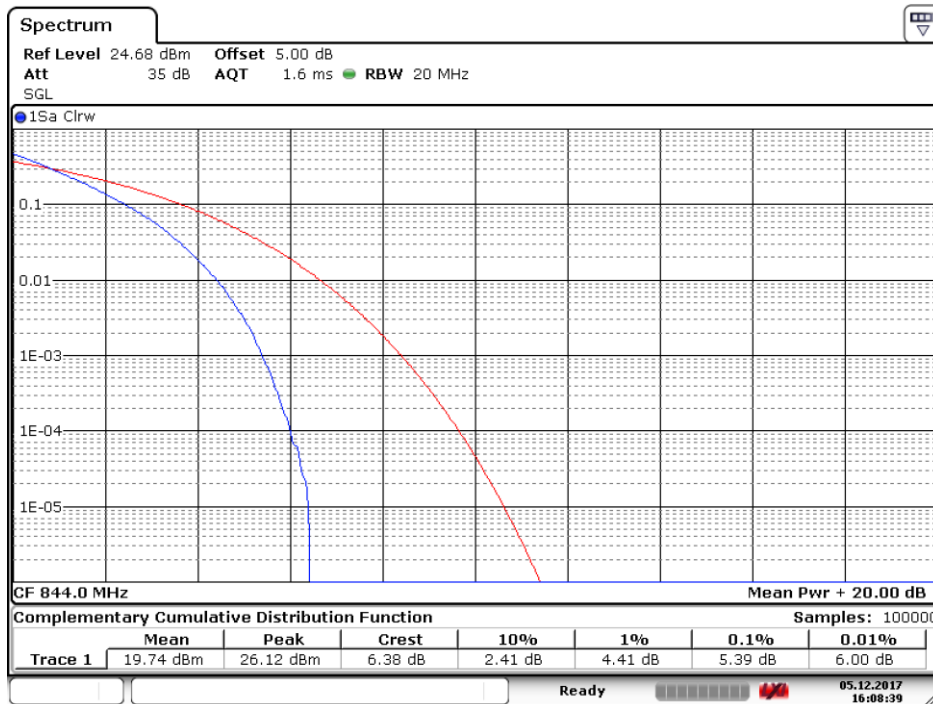


2.1.1.1.2 Test Channel = MCH



Date: 5.DEC.2017 16:06:08

2.1.1.1.3 Test Channel = HCH

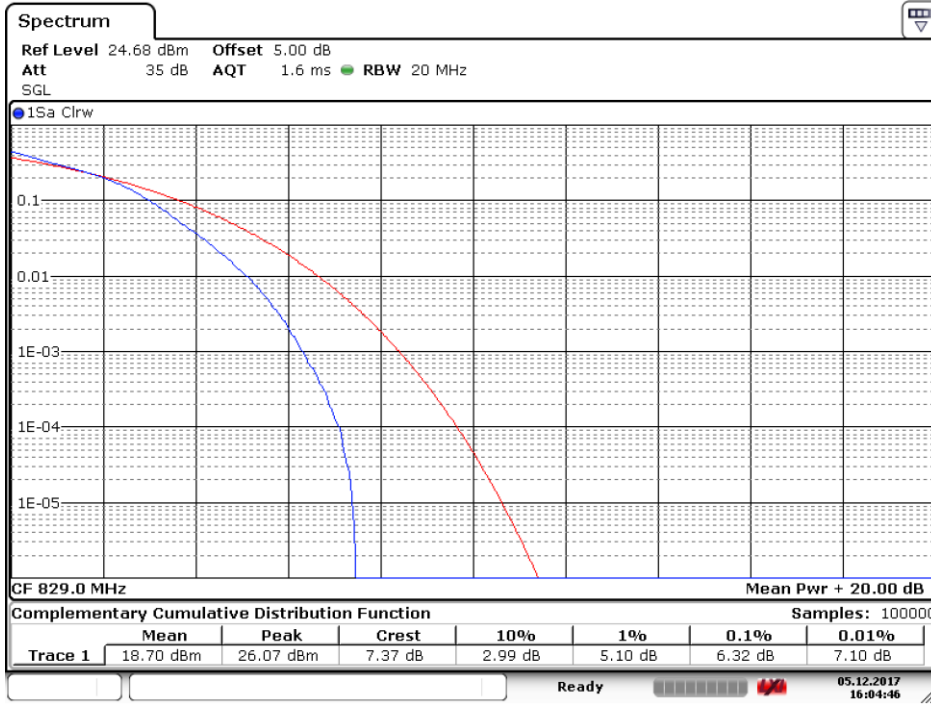


Date: 5.DEC.2017 16:08:39



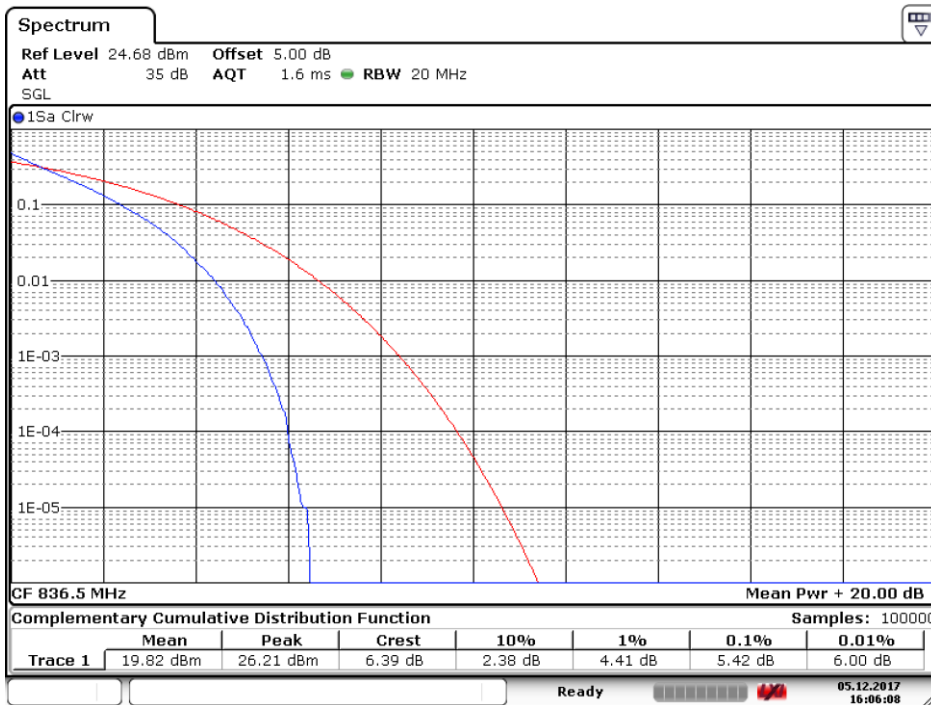
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz

2.1.1.2.1 Test Channel = LCH



Date: 5.DEC.2017 16:04:46

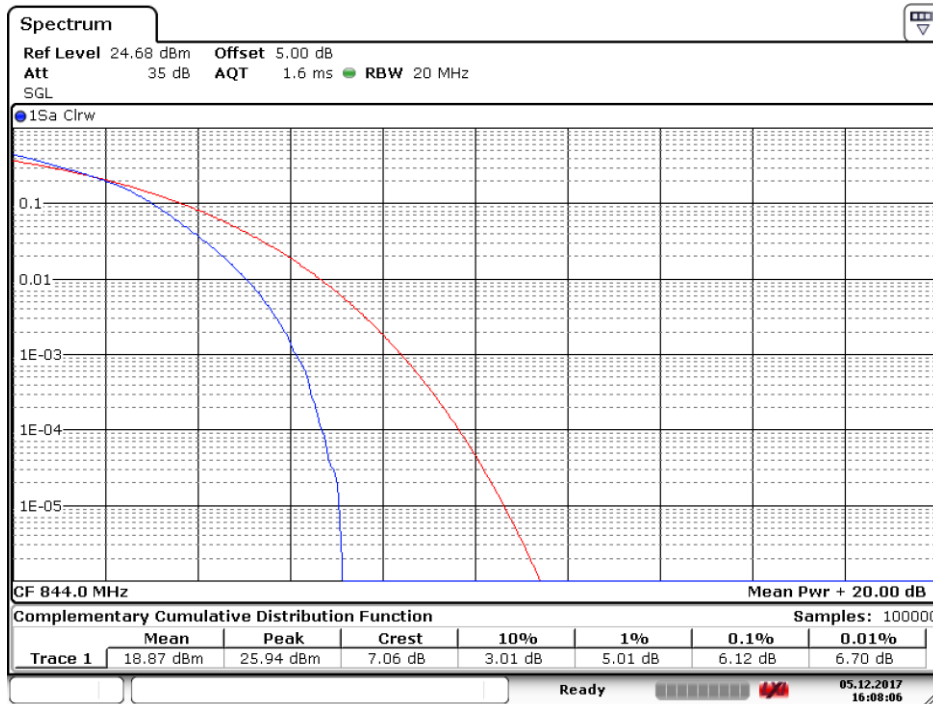
2.1.1.2.2 Test Channel = MCH



Date: 5.DEC.2017 16:06:08



2.1.1.2.3 Test Channel = HCH



Date: 5.DEC.2017 16:08:06

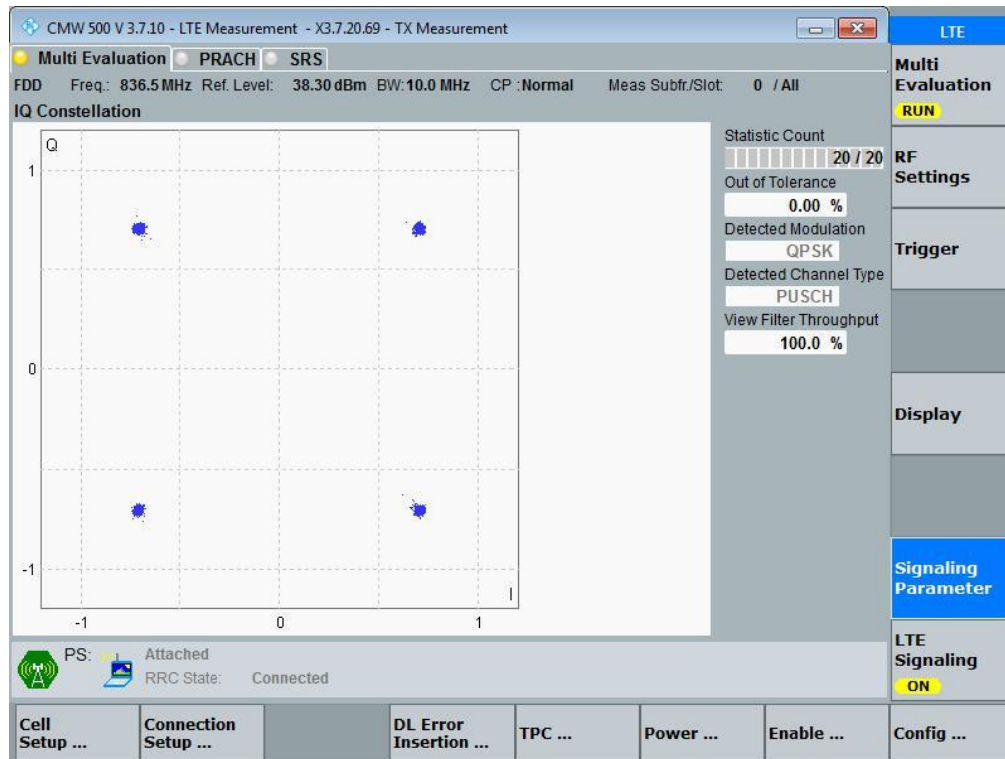
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE band5

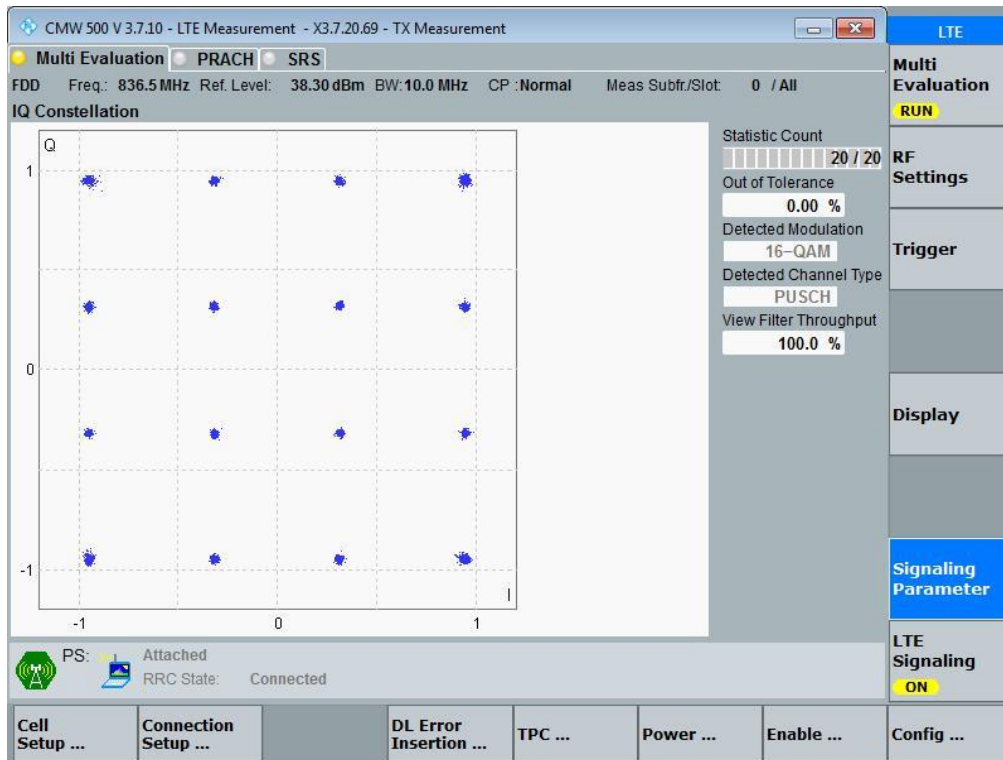
3.1.1.1 Test Mode = LTE /TM1 10MHz

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 5	TM1/1.4MHz	LCH	1.10	1.30	PASS
		MCH	1.10	1.28	PASS
		HCH	1.10	1.27	PASS
	TM2/1.4MHz	LCH	1.10	1.27	PASS
		MCH	1.10	1.26	PASS
		HCH	1.10	1.28	PASS
	TM1/ 3MHz	LCH	2.70	2.90	PASS
		MCH	2.69	2.90	PASS
		HCH	2.68	2.90	PASS
	TM2/3MHz	LCH	2.73	3.06	PASS
		MCH	2.73	3.05	PASS
		HCH	2.73	3.05	PASS
	TM1/ 5MHz	LCH	4.51	4.96	PASS
		MCH	4.51	4.96	PASS
		HCH	4.49	4.98	PASS
	TM2/ 5MHz	LCH	4.47	4.85	PASS
		MCH	4.47	4.90	PASS
		HCH	4.67	4.84	PASS
	TM1/10MHz	LCH	8.97	9.71	PASS
		MCH	8.95	9.71	PASS
		HCH	8.95	9.69	PASS
	TM2/ 10MHz	LCH	8.95	9.73	PASS
		MCH	8.95	9.59	PASS
		HCH	8.95	9.65	PASS



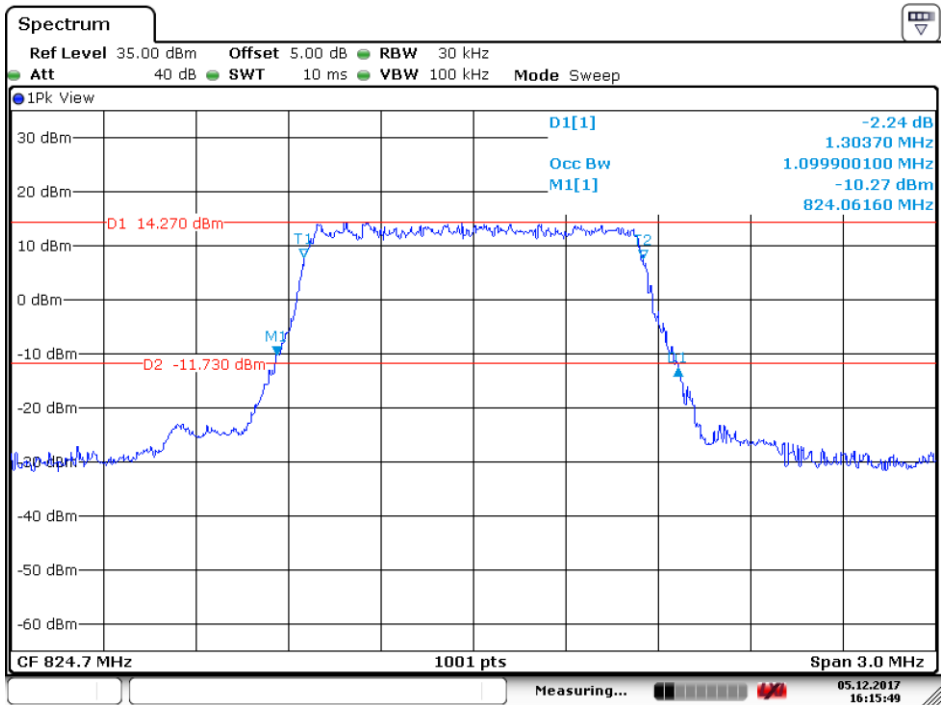
Part II –Test Plots

4.1 For LTE

4.1.1 Test Band = LTE band5

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

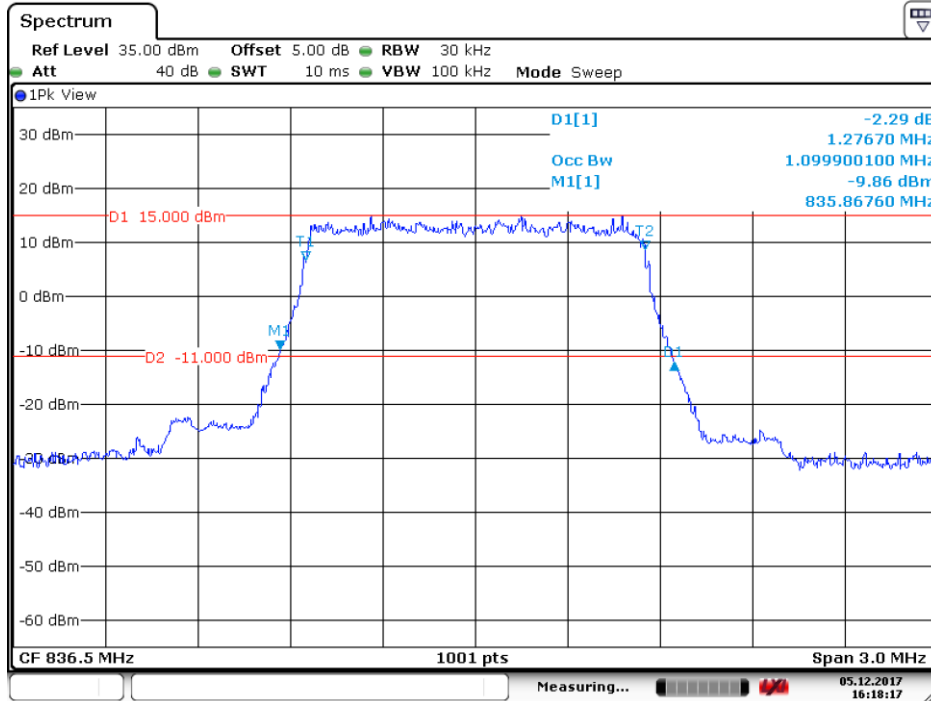
4.1.1.1.1 Test Channel = LCH



Date: 5.DEC.2017 16:15:50

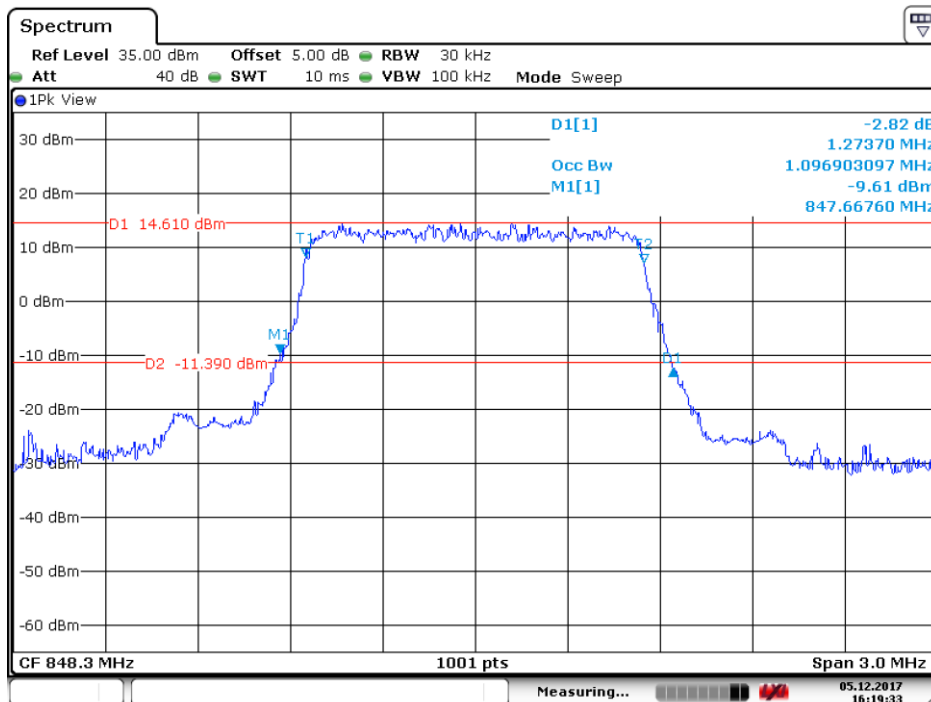


4.1.1.1.2 Test Channel = MCH



Date: 5.DEC.2017 16:18:17

4.1.1.1.3 Test Channel = HCH

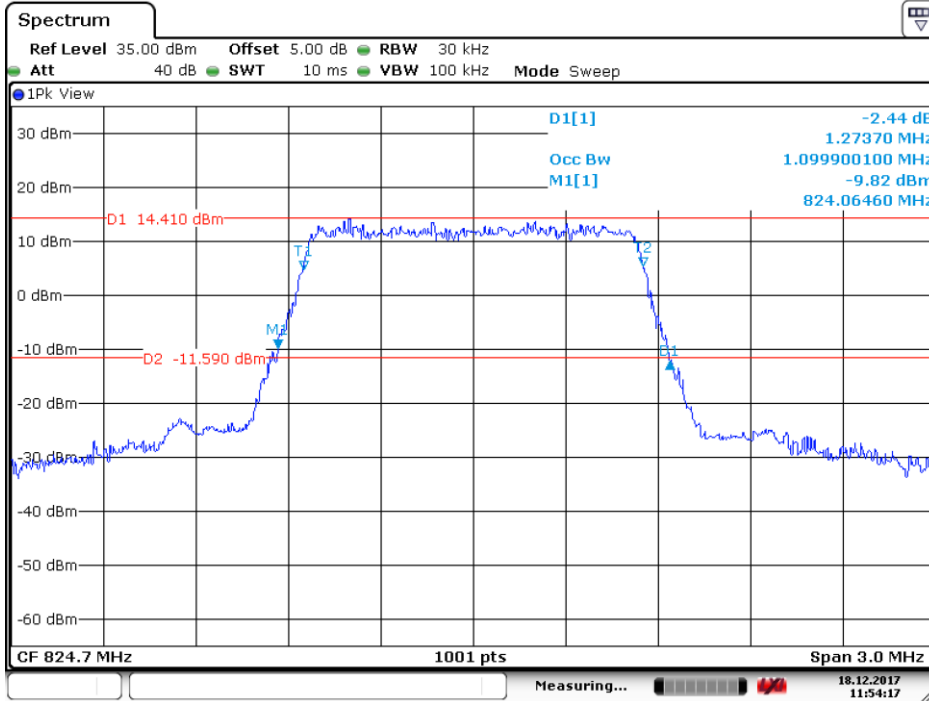


Date: 5.DEC.2017 16:19:33



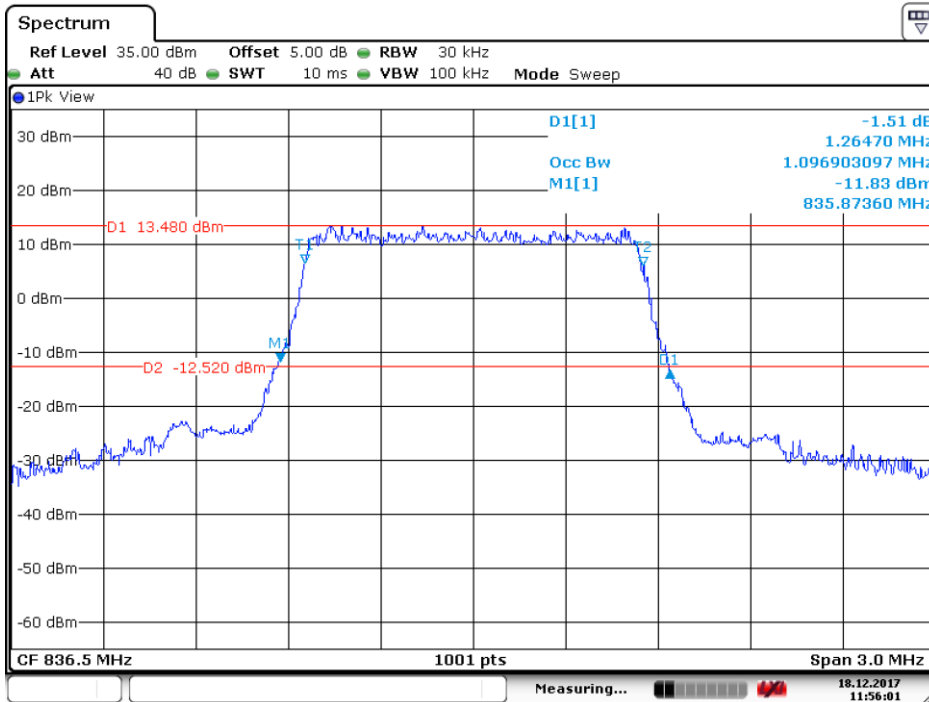
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



Date: 18.DEC.2017 11:54:17

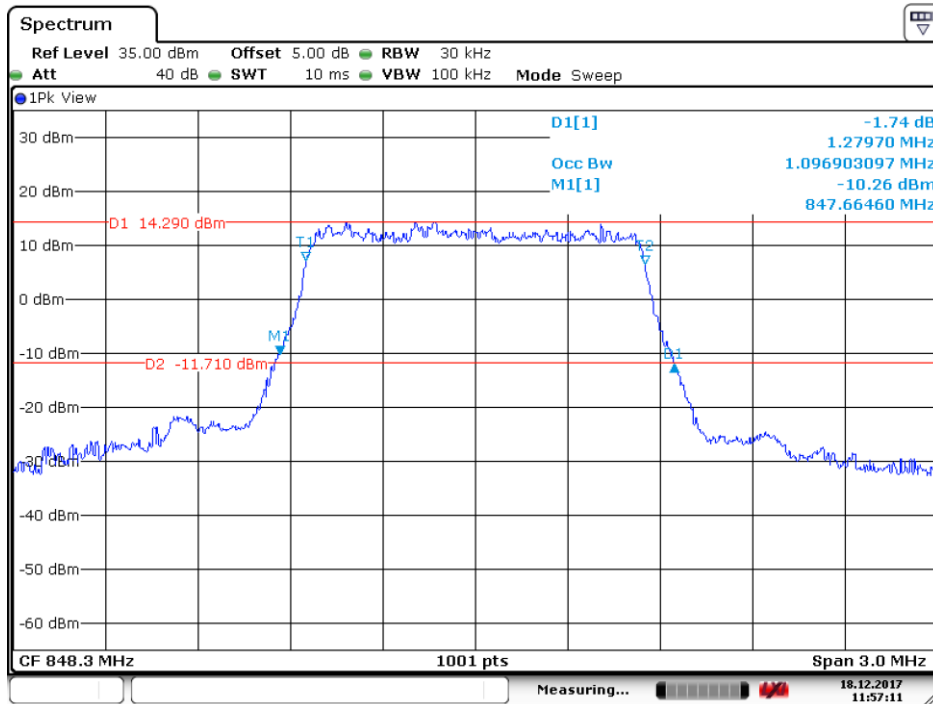
4.1.1.2.2 Test Channel = MCH



Date: 18.DEC.2017 11:56:01



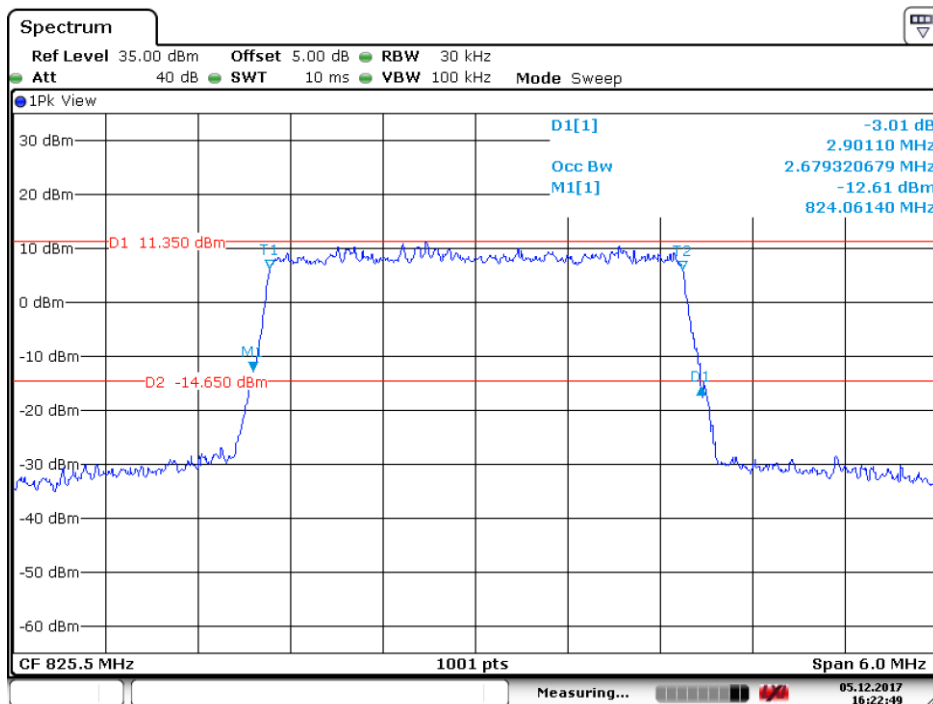
4.1.1.2.3 Test Channel = HCH



Date: 18.DEC.2017 11:57:11

4.1.1.3 Test Mode = LTE/TM1 3MHz

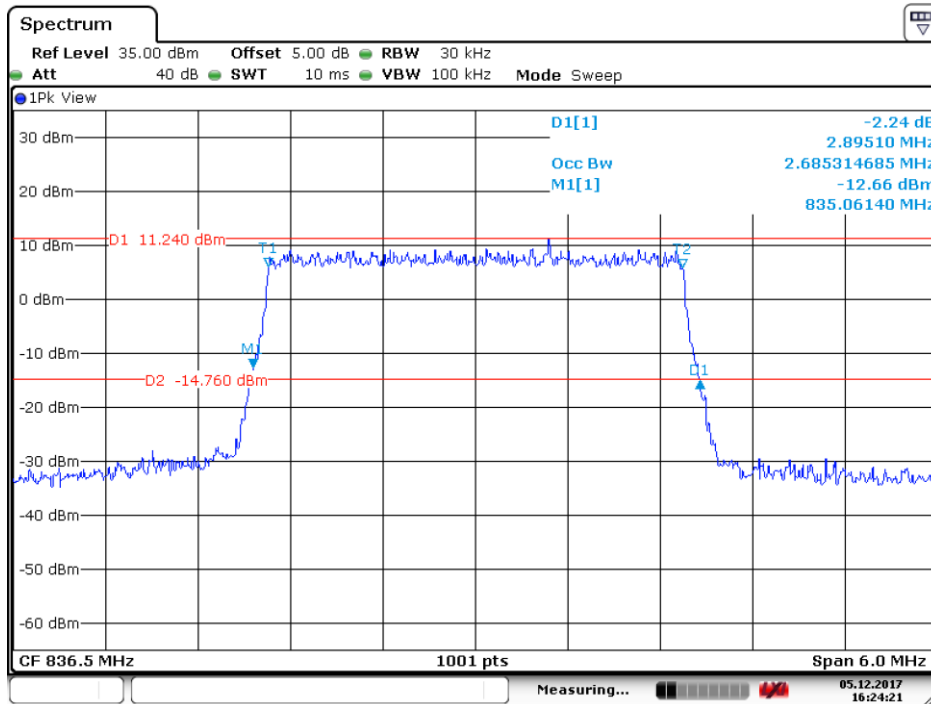
4.1.1.3.1 Test Channel = LCH



Date: 5.DEC.2017 16:22:50

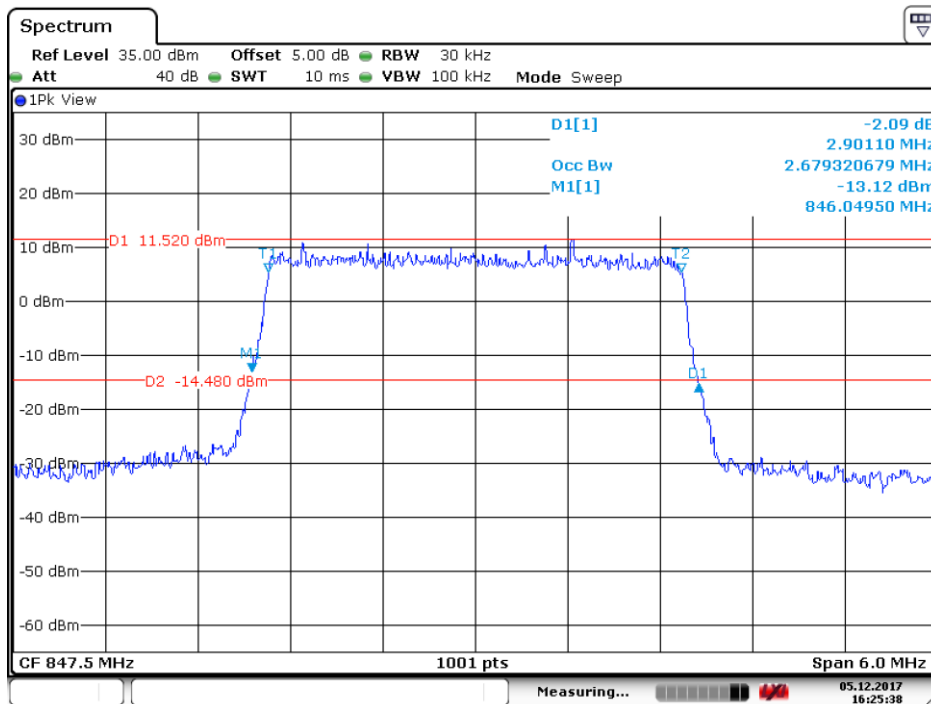


4.1.1.3.2 Test Channel = MCH



Date: 5.DEC.2017 16:24:22

4.1.1.3.3 Test Channel = HCH

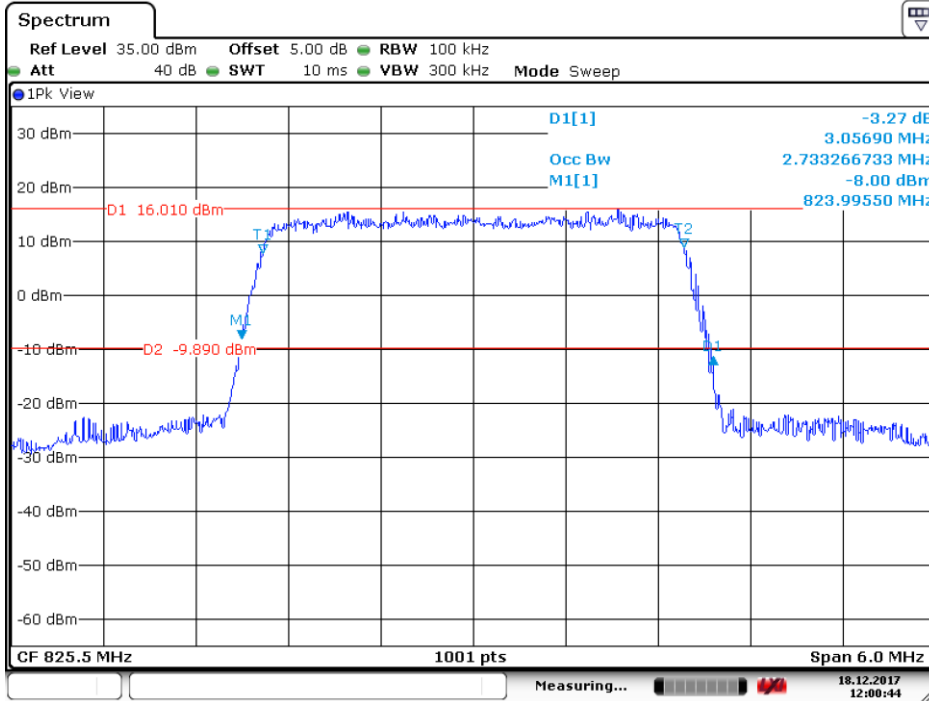


Date: 5.DEC.2017 16:25:39



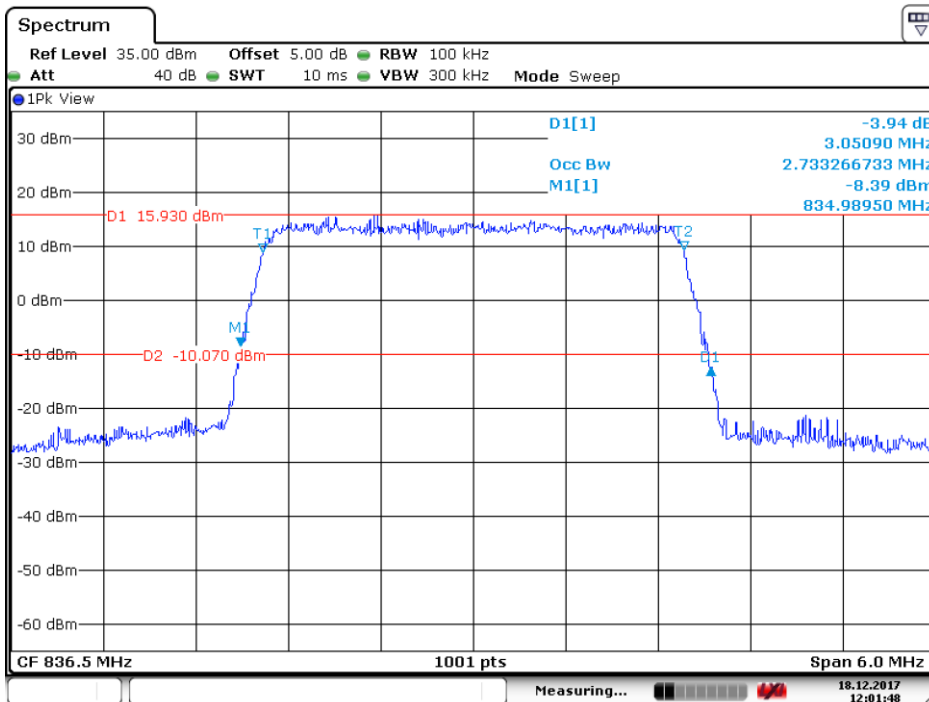
4.1.1.4 Test Mode = LTE/TM2 3MHz

4.1.1.4.1 Test Channel = LCH



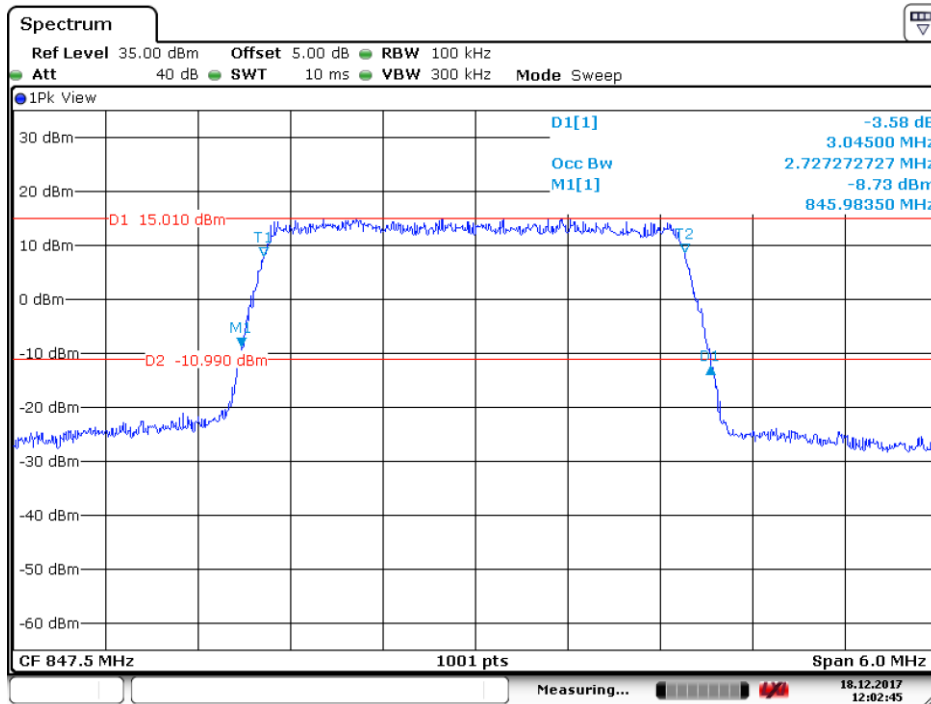
Date: 18.DEC.2017 12:00:44

4.1.1.4.2 Test Channel = MCH



Date: 18.DEC.2017 12:01:48

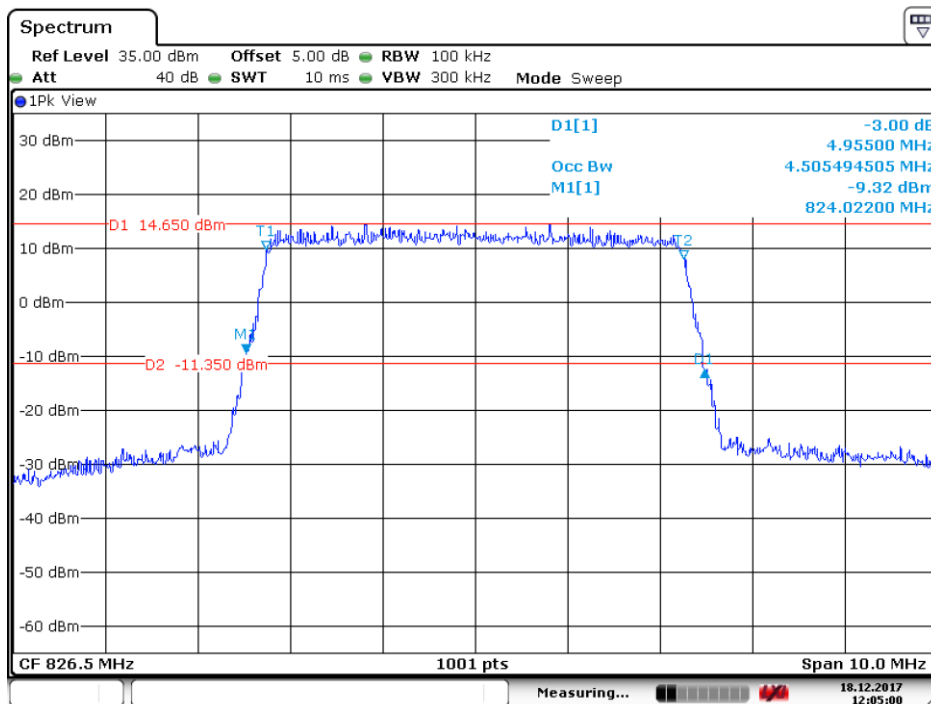
4.1.1.4.3 Test Channel = HCH



Date: 18.DEC.2017 12:02:45

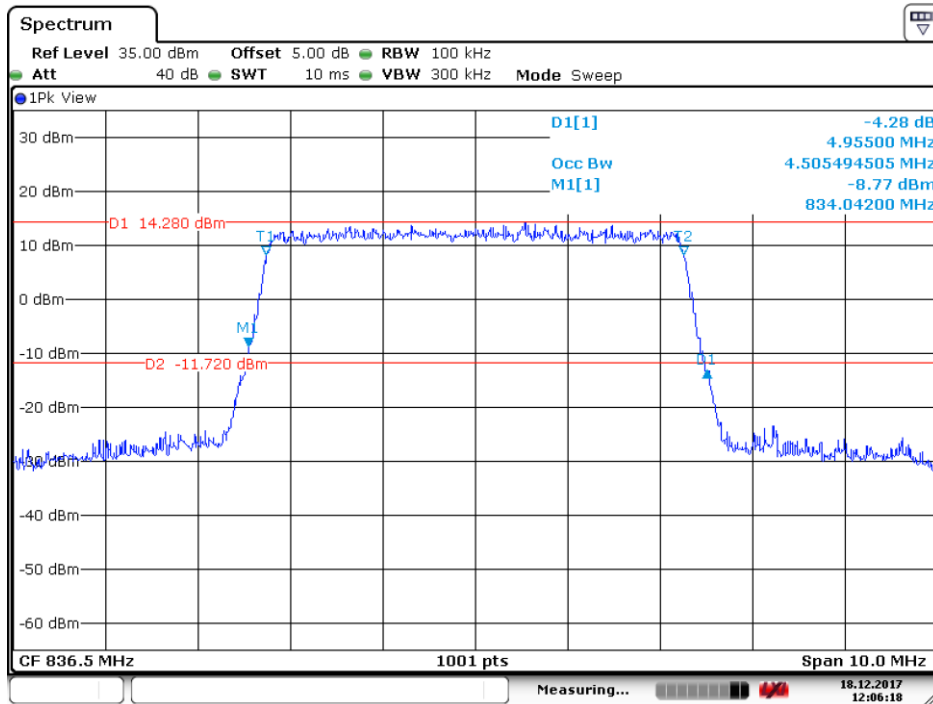
4.1.1.5 Test Mode = LTE/TM1 5MHz

4.1.1.5.1 Test Channel = LCH



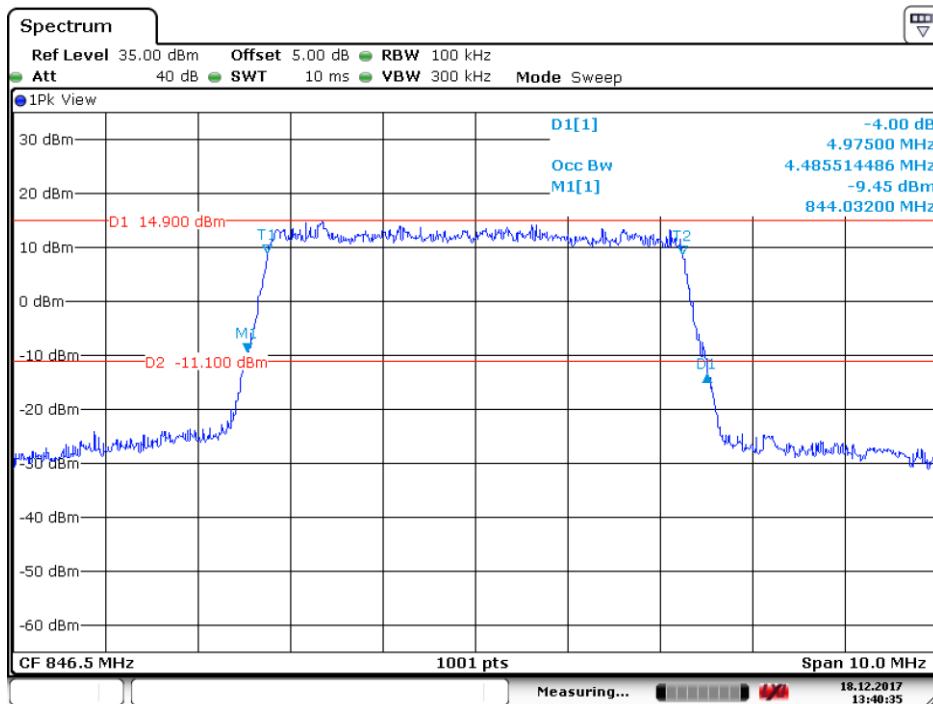
Date: 18.DEC.2017 12:05:01

4.1.1.5.2 Test Channel = MCH



Date: 18.DEC.2017 12:06:19

4.1.1.5.3 Test Channel = HCH

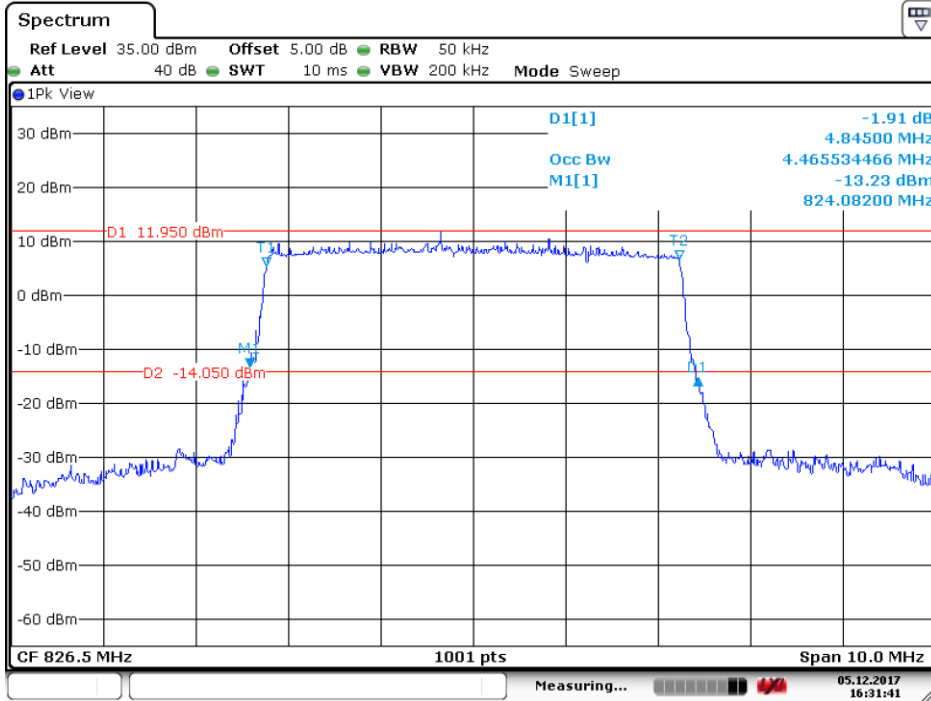


Date: 18.DEC.2017 13:40:36



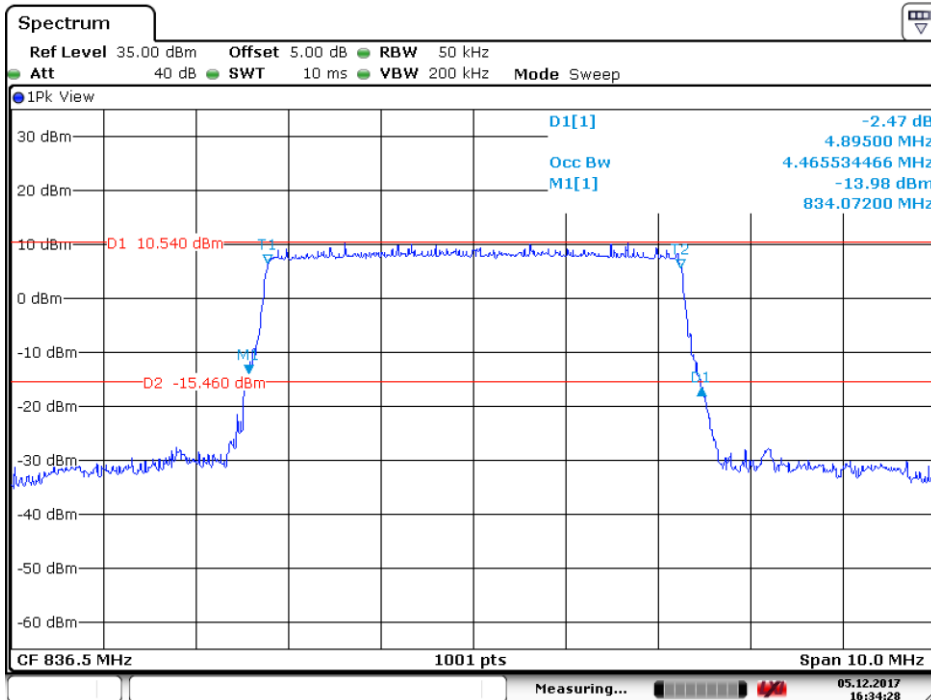
4.1.1.6 Test Mode = LTE/TM2 5MHz

4.1.1.6.1 Test Channel = LCH



Date: 5.DEC.2017 16:31:42

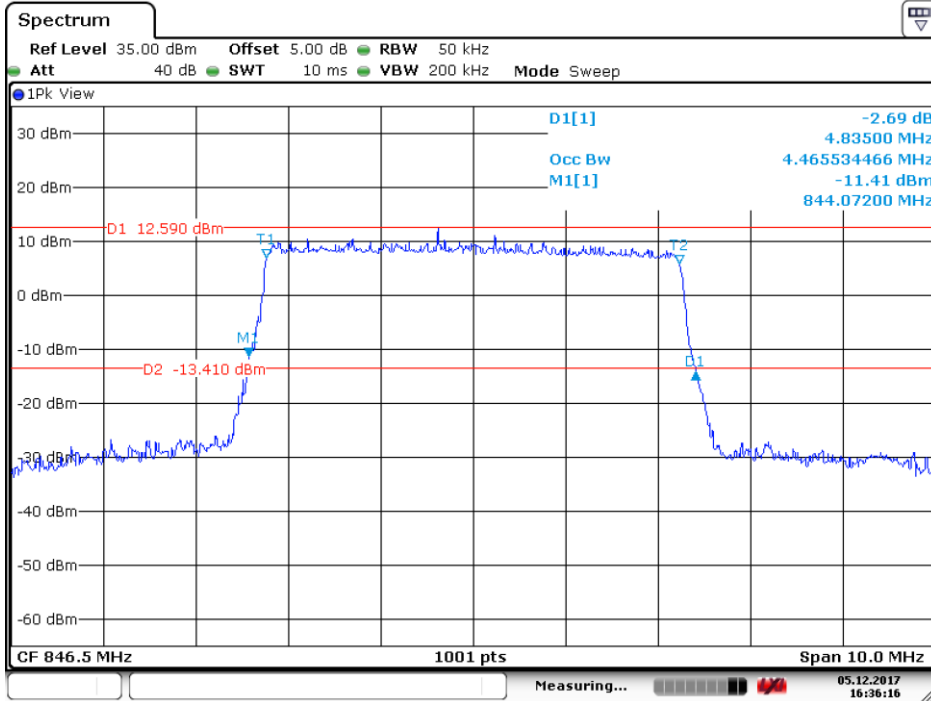
4.1.1.6.2 Test Channel = MCH



Date: 5.DEC.2017 16:34:28



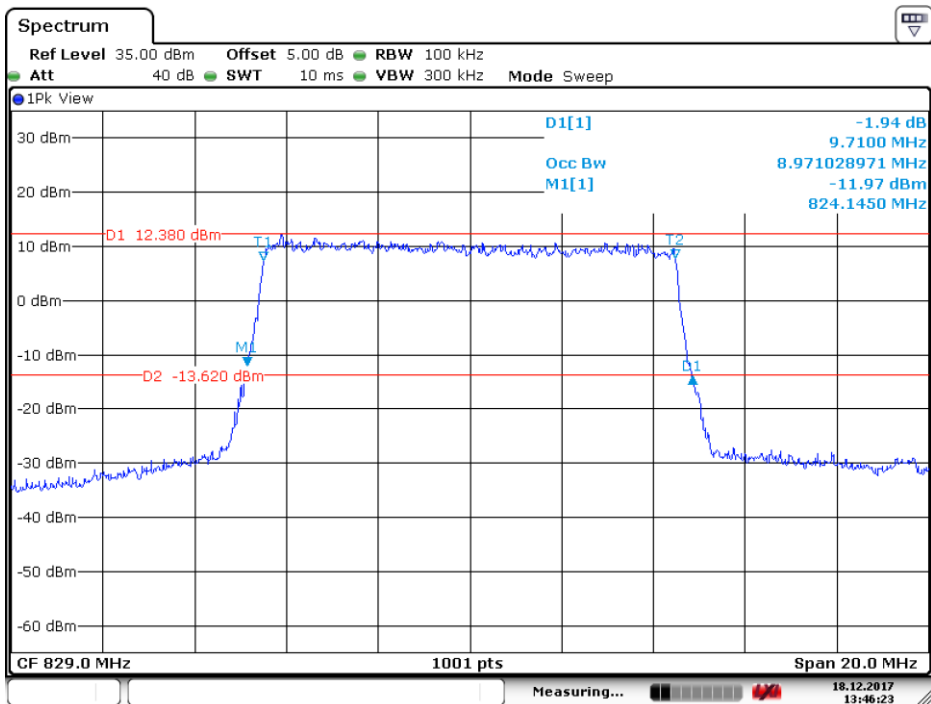
4.1.1.6.3 Test Channel = HCH



Date: 5.DEC.2017 16:36:16

4.1.1.7 Test Mode = LTE/TM1 10MHz

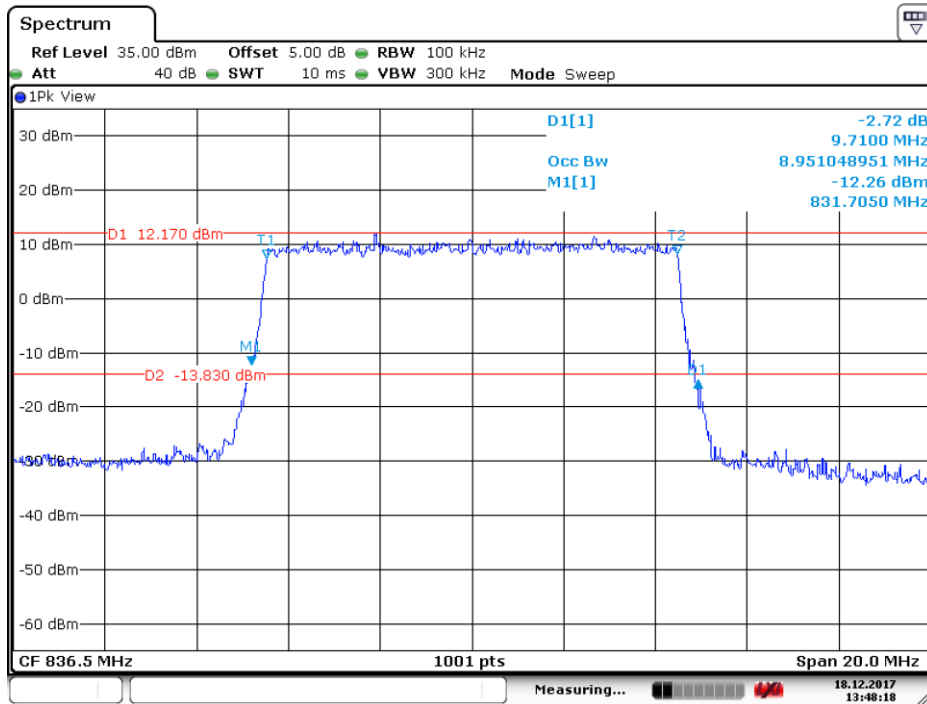
4.1.1.7.1 Test Channel = LCH



Date: 18.DEC.2017 13:46:23

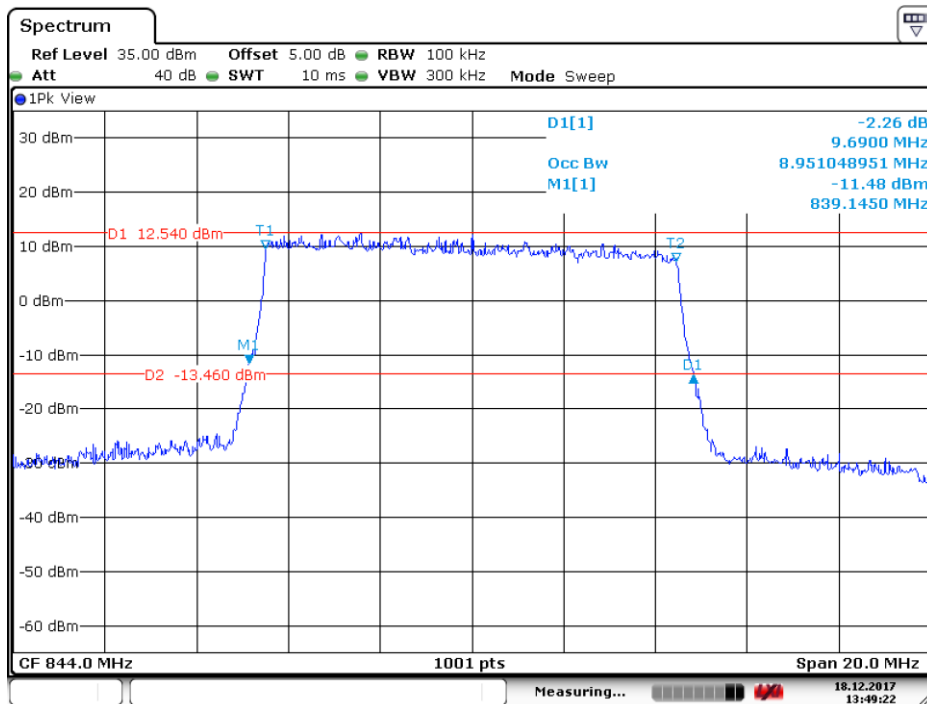


4.1.1.7.2 Test Channel = MCH



Date: 18.DEC.2017 13:48:18

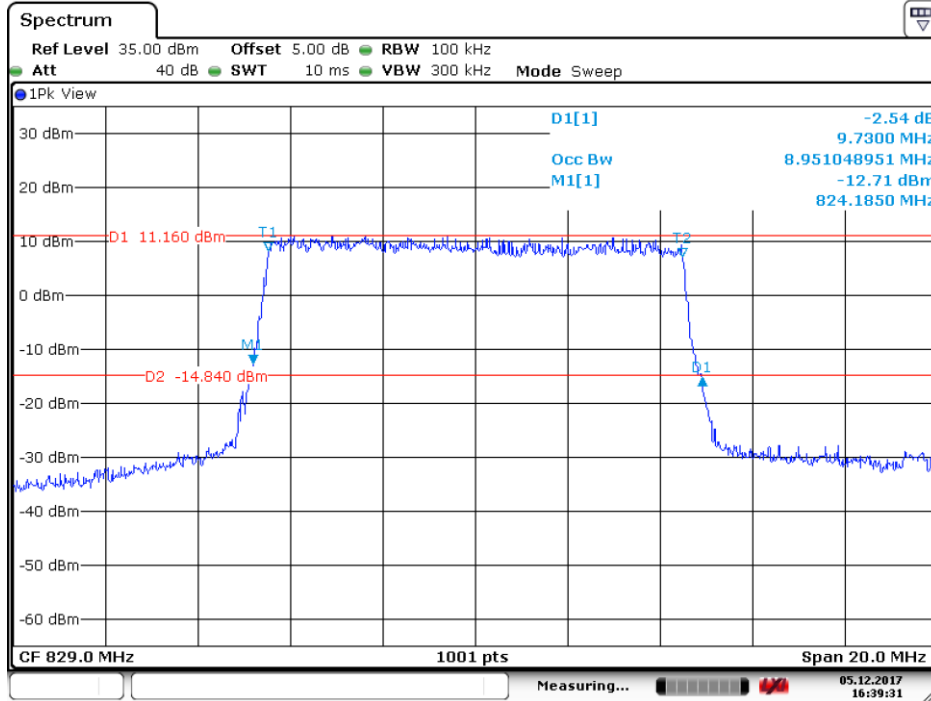
4.1.1.7.3 Test Channel = HCH



Date: 18.DEC.2017 13:49:22

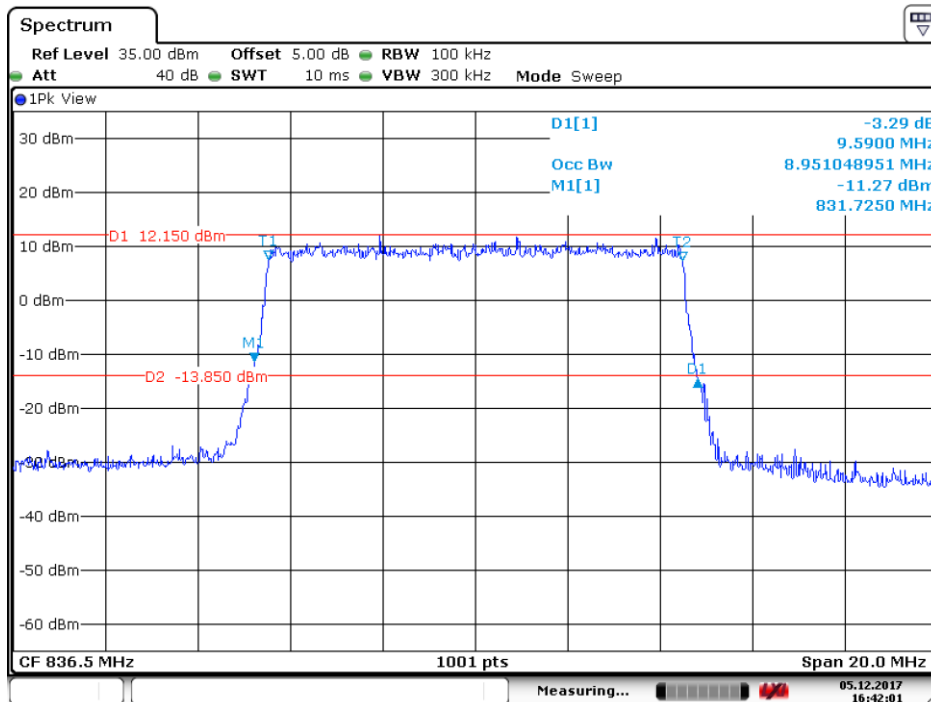
4.1.1.8 Test Mode = LTE/TM2 10MHz

4.1.1.8.1 Test Channel = LCH



Date: 5.DEC.2017 16:39:32

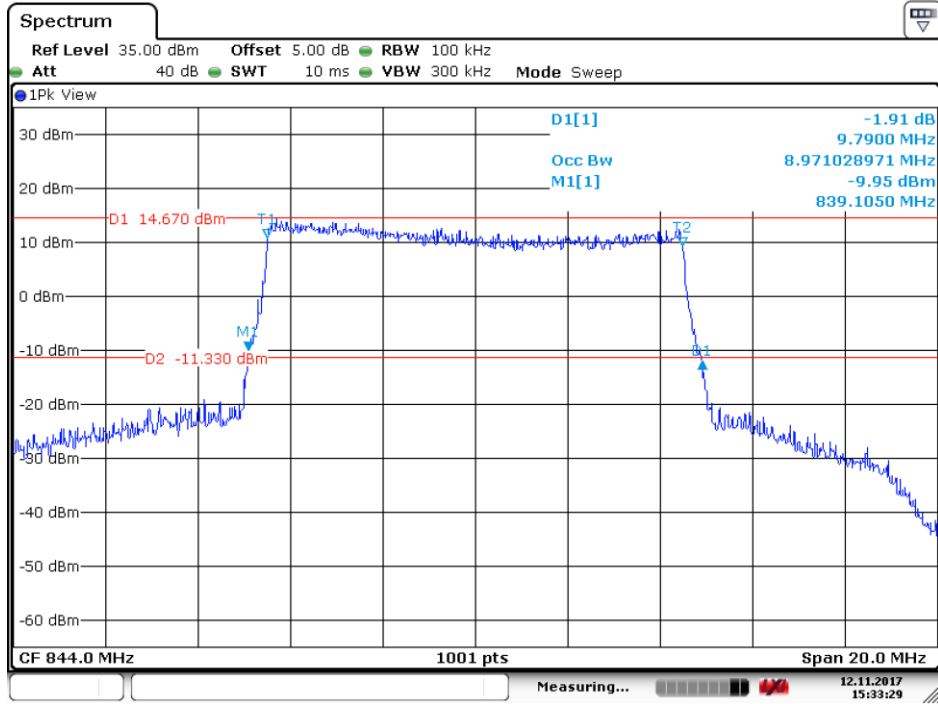
4.1.1.8.2 Test Channel = MCH



Date: 5.DEC.2017 16:42:02



4.1.1.8.3 Test Channel = HCH



Date: 12.NOV.2017 15:33:30



5 Band Edges Compliance

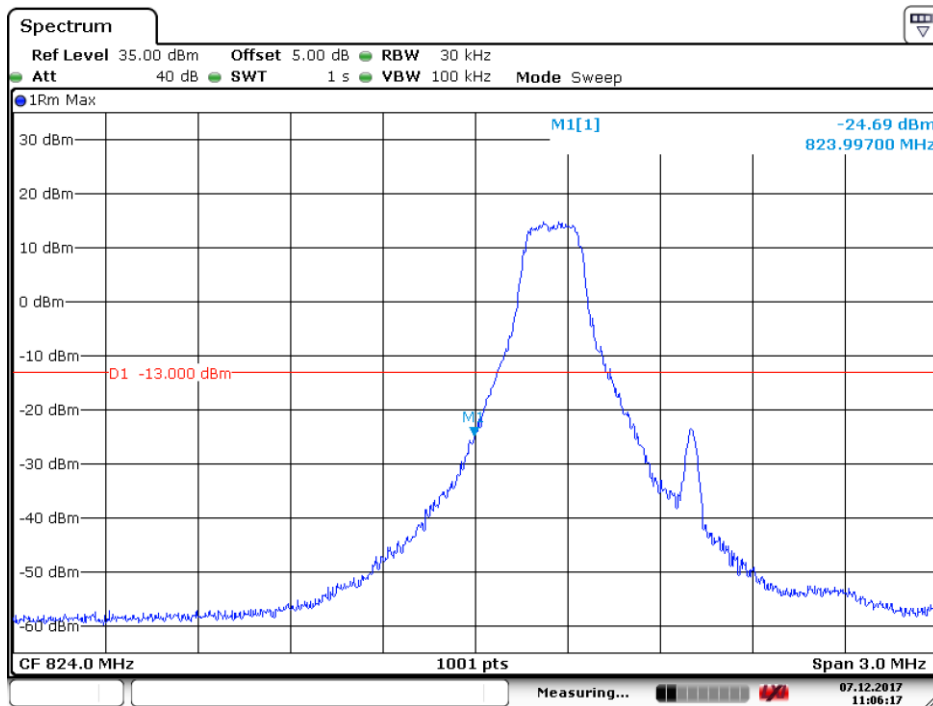
5.1 For LTE

5.1.1 Test Band = LTE band5

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

5.1.1.1.1 Test Channel = LCH

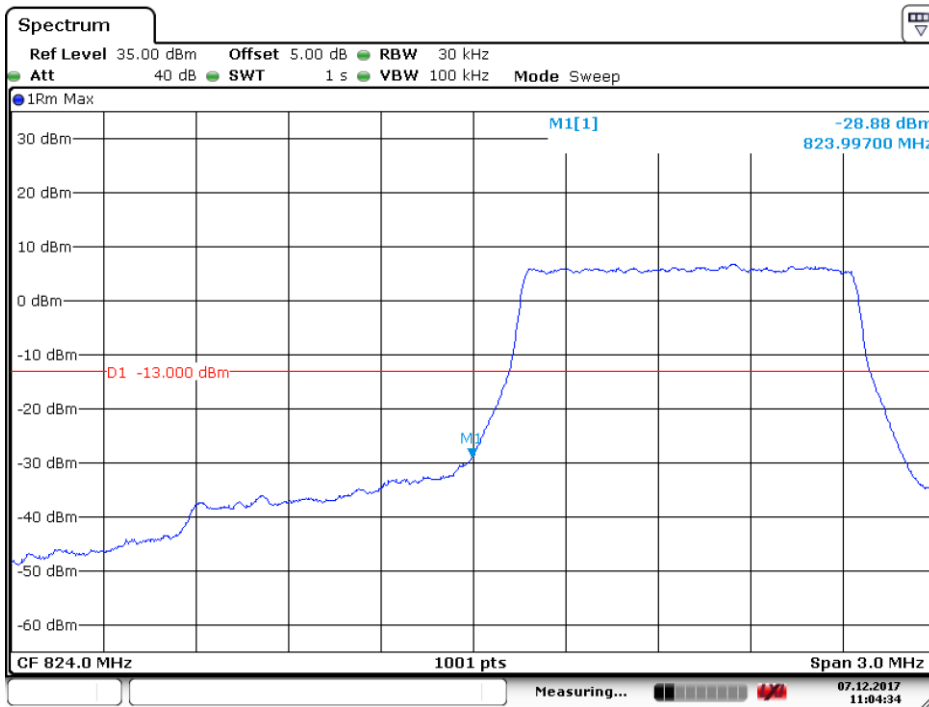
5.1.1.1.1.1 Test RB=1RB



Date: 7.DEC.2017 11:06:17



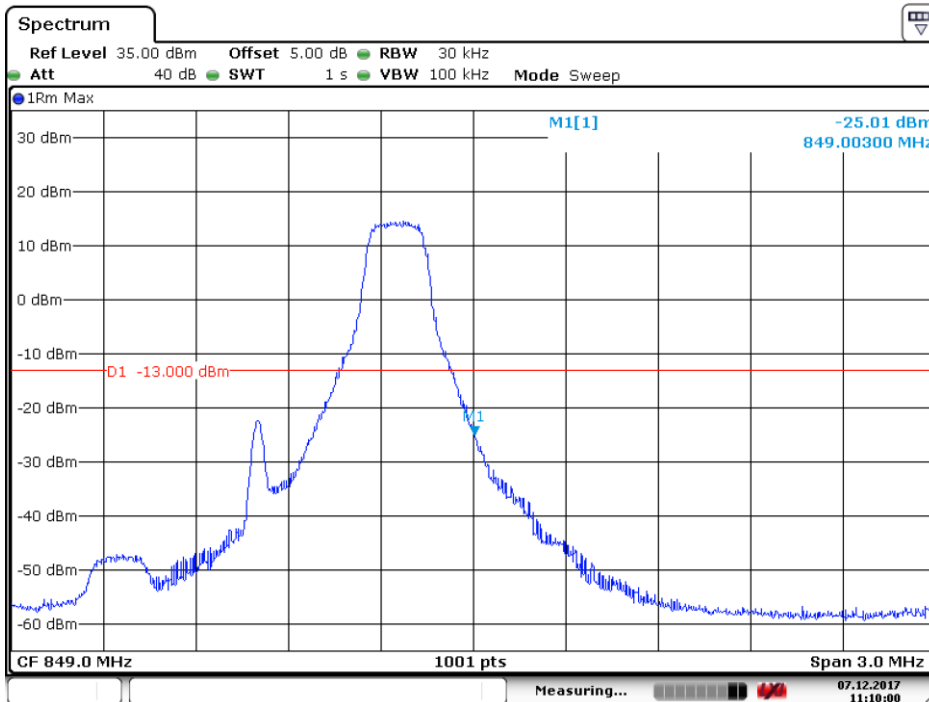
5.1.1.1.2 Test RB=6RB



Date: 7.DEC.2017 11:04:34

5.1.1.1.2 Test Channel = HCH

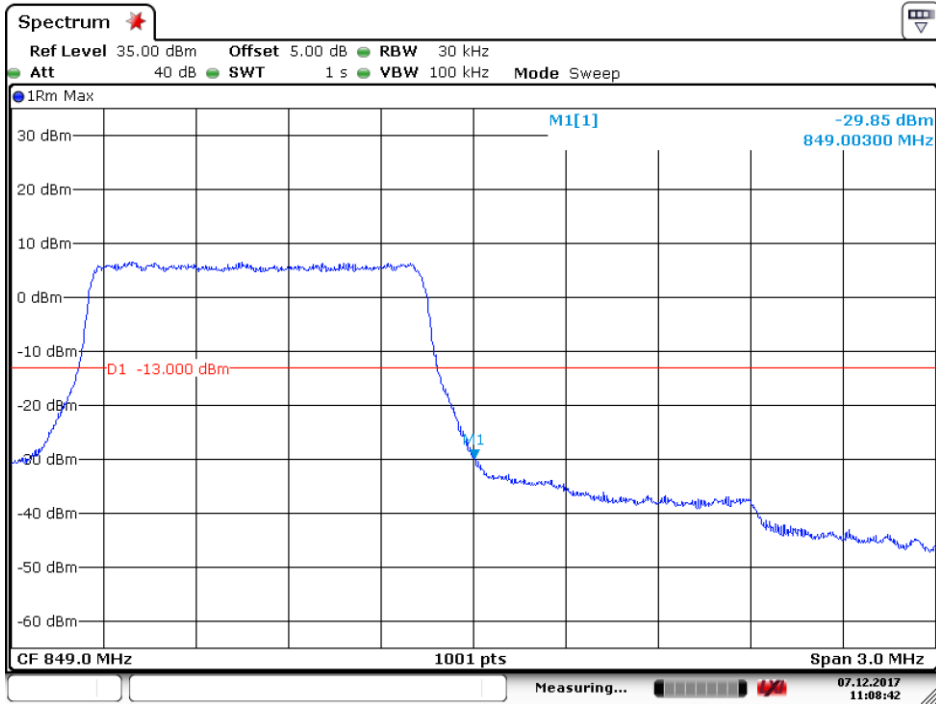
5.1.1.1.2.1 Test RB=1RB



Date: 7.DEC.2017 11:10:00



5.1.1.1.2.2 Test RB=6RB

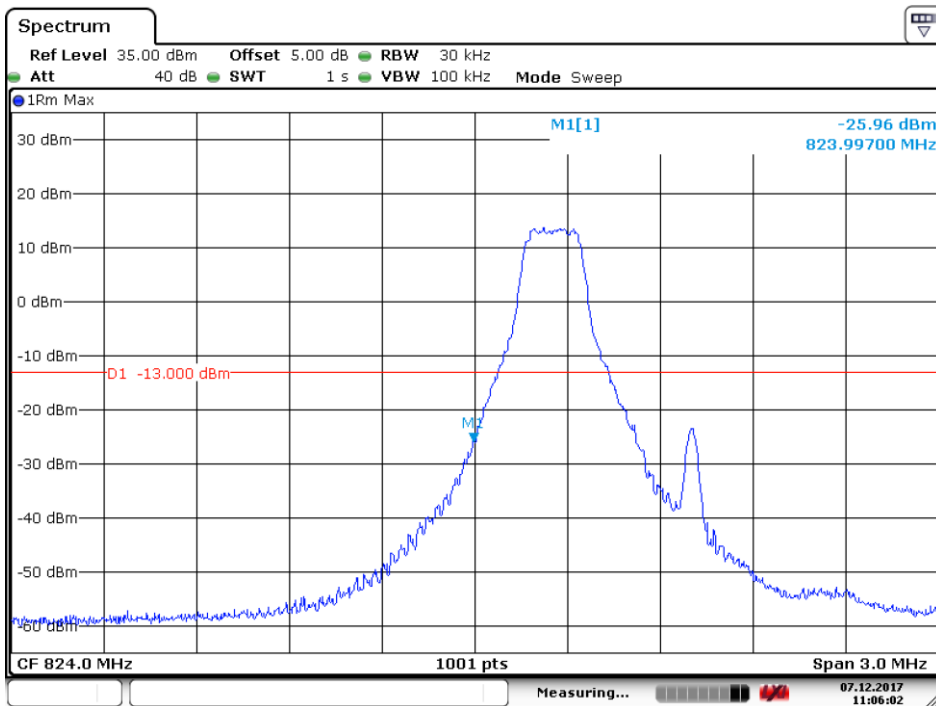


Date: 7.DEC.2017 11:08:42

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

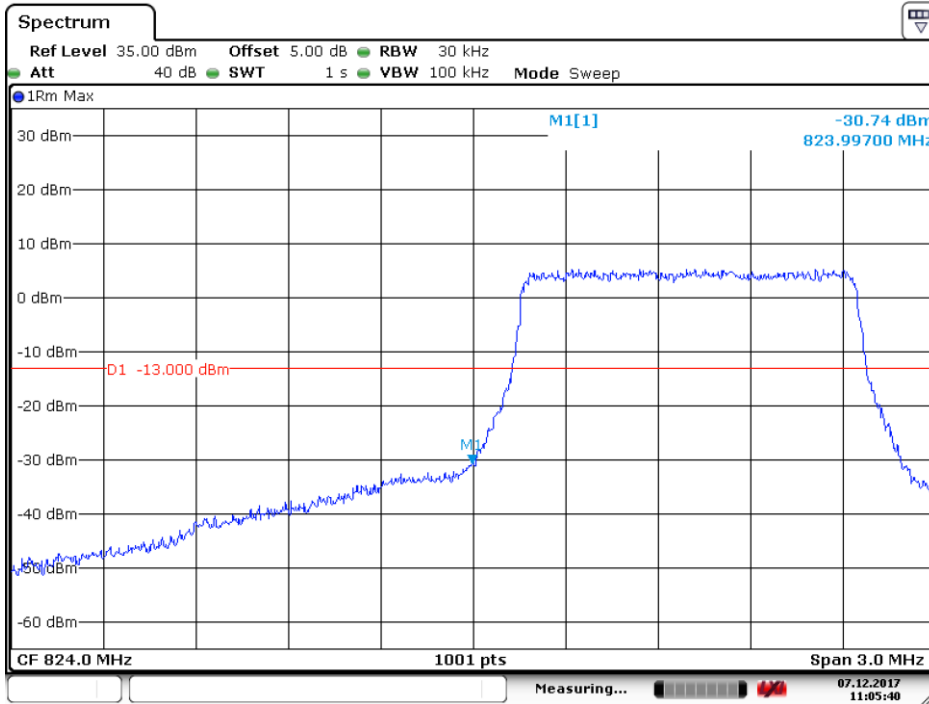
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 7.DEC.2017 11:06:02

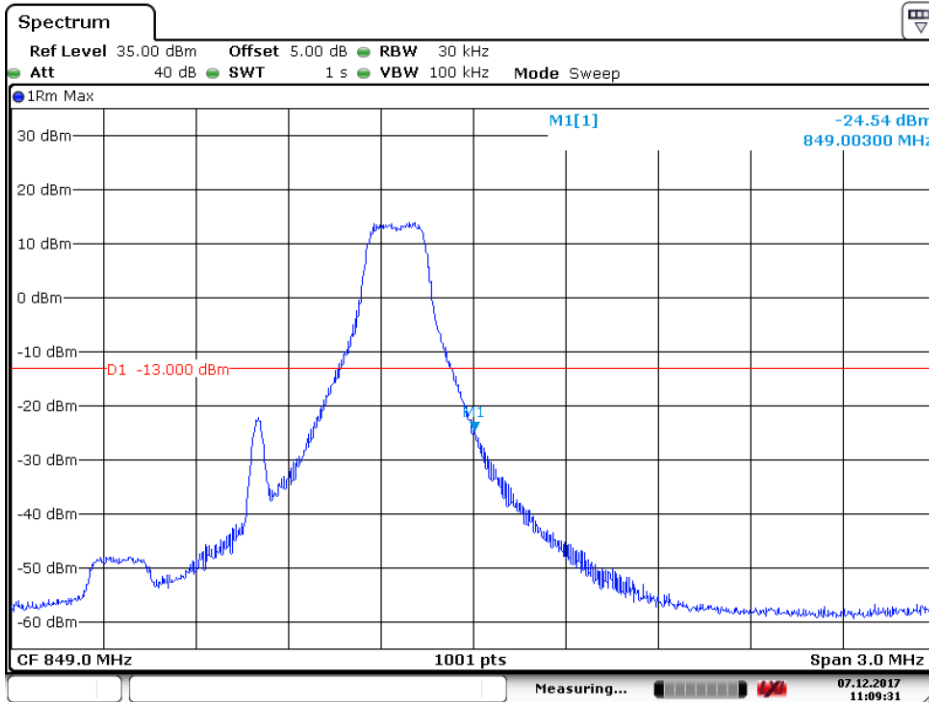
5.1.1.2.1.2 Test RB=6RB



Date: 7.DEC.2017 11:05:41

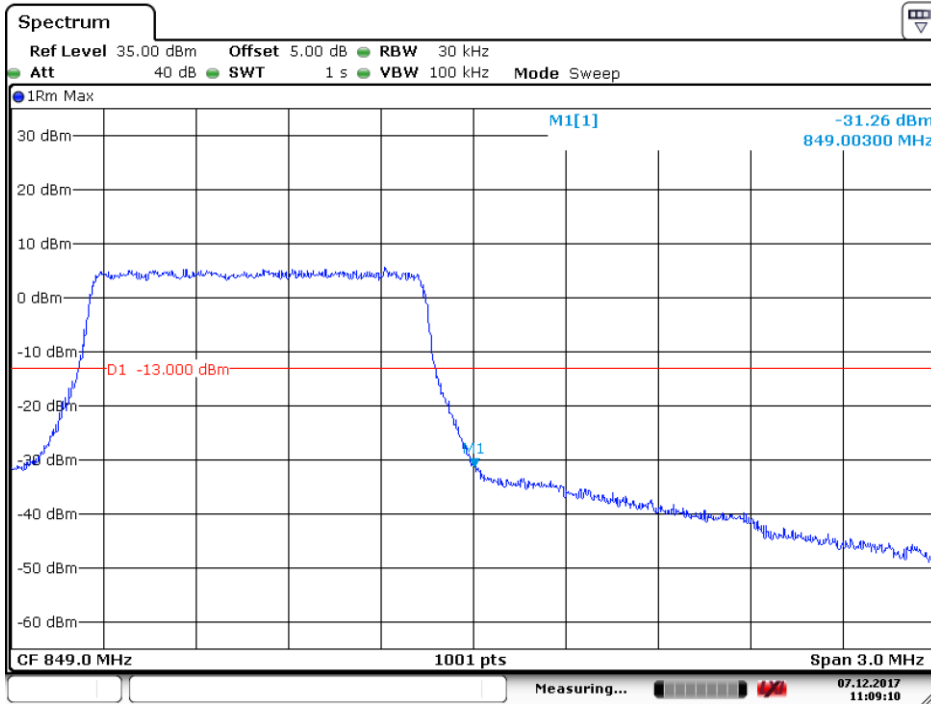
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 7.DEC.2017 11:09:31

5.1.1.2.2 Test RB=6RB

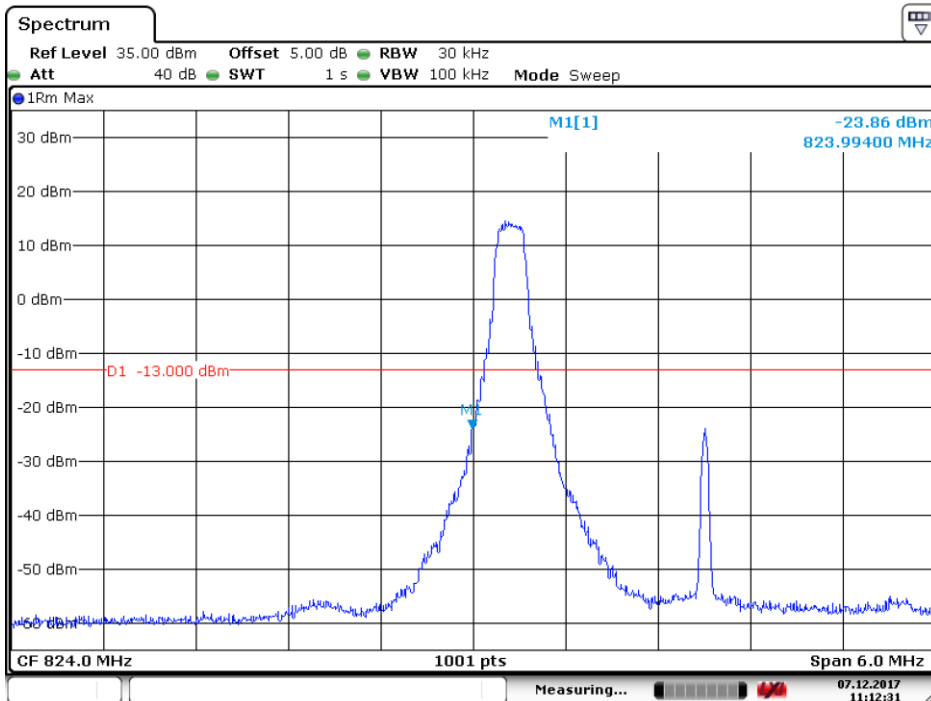


Date: 7.DEC.2017 11:09:11

5.1.1.3 Test Mode = LTE/TM1 3MHz

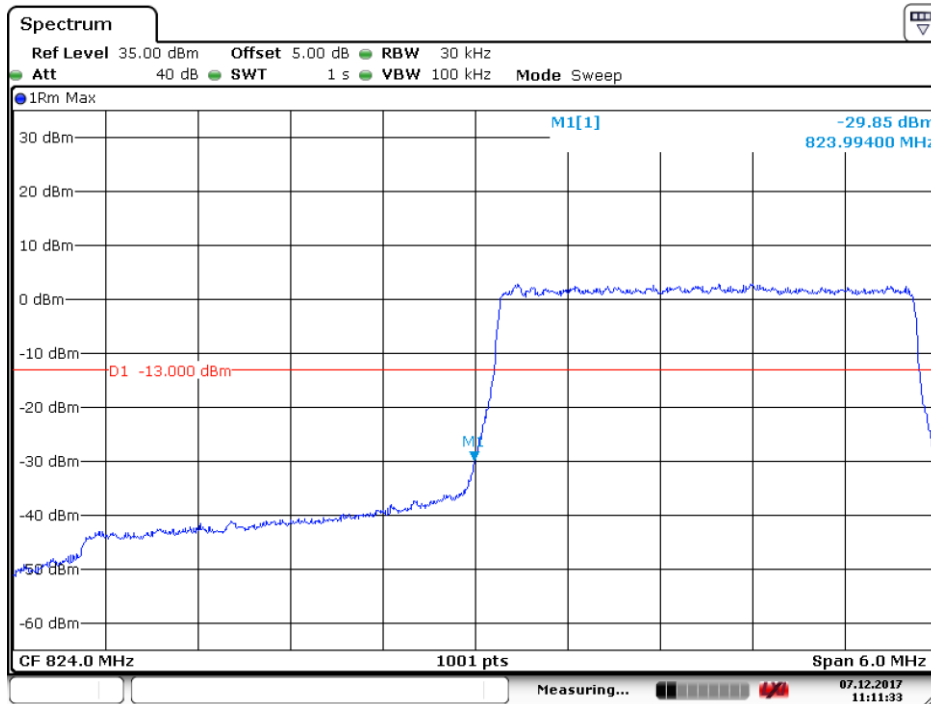
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 7.DEC.2017 11:12:31

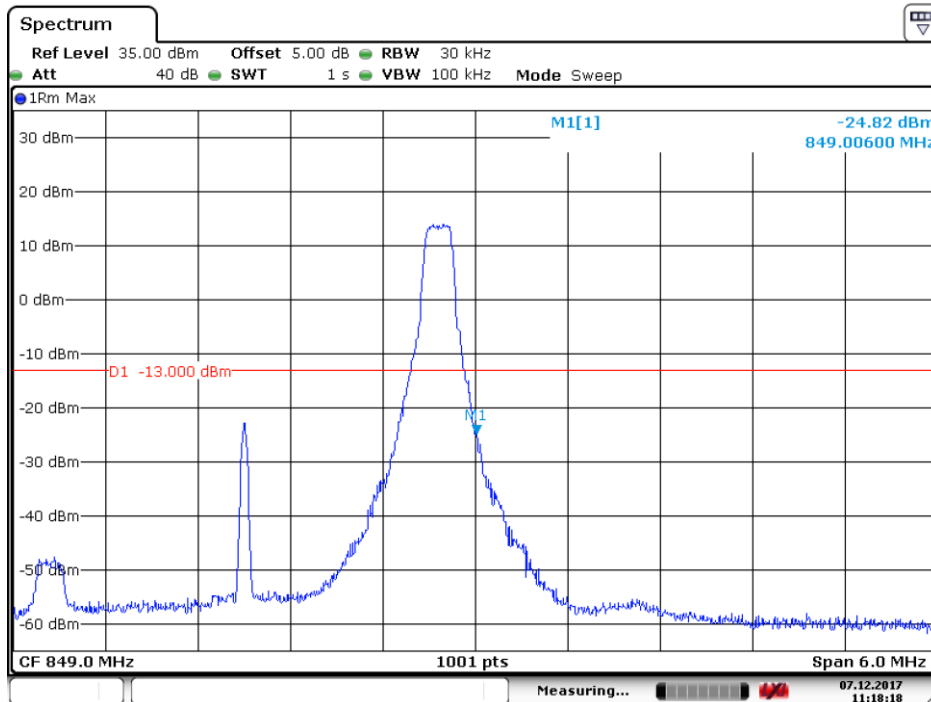
5.1.1.3.1.2 Test RB=15RB



Date: 7.DEC.2017 11:11:33

5.1.1.3.2 Test Channel = HCH

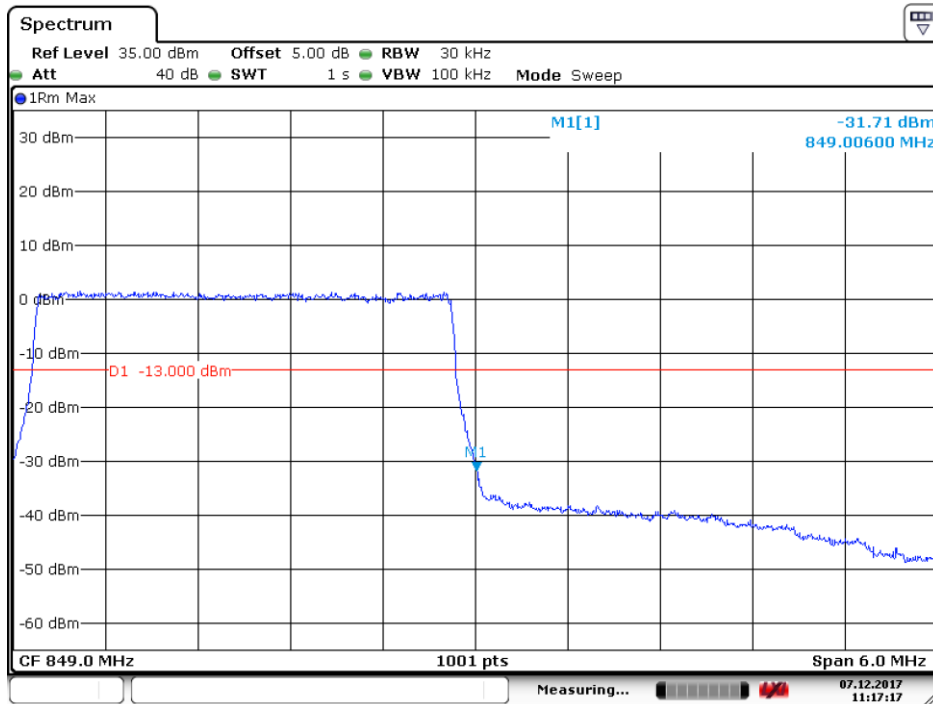
5.1.1.3.2.1 Test RB=1RB



Date: 7.DEC.2017 11:18:18



5.1.1.3.2.2 Test RB=15RB

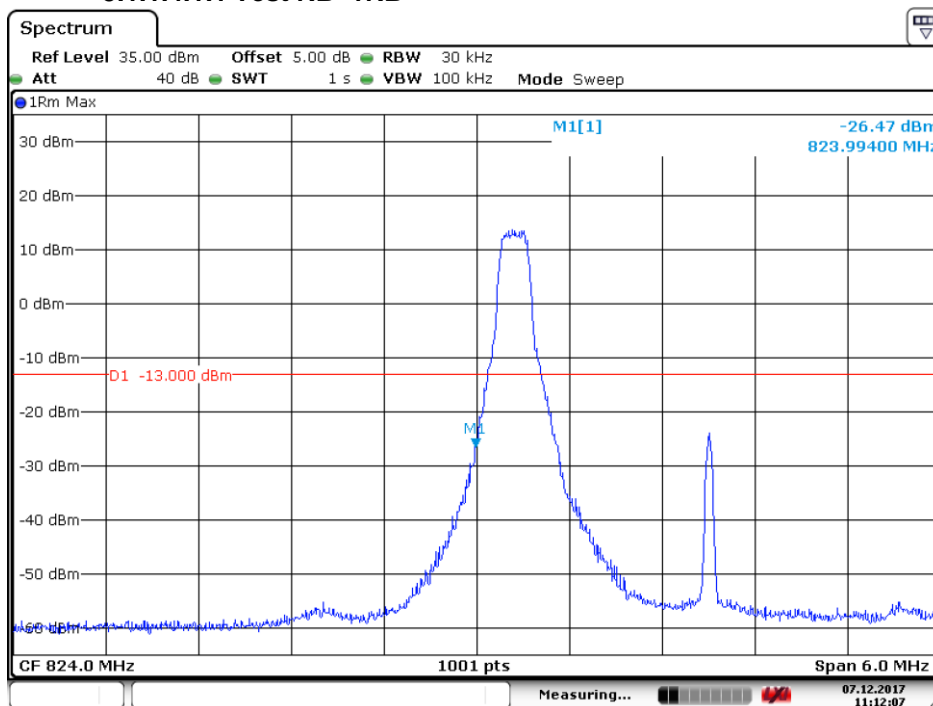


Date: 7.DEC.2017 11:17:18

5.1.1.4 Test Mode = LTE/TM2 3MHz

5.1.1.4.1 Test Channel = LCH

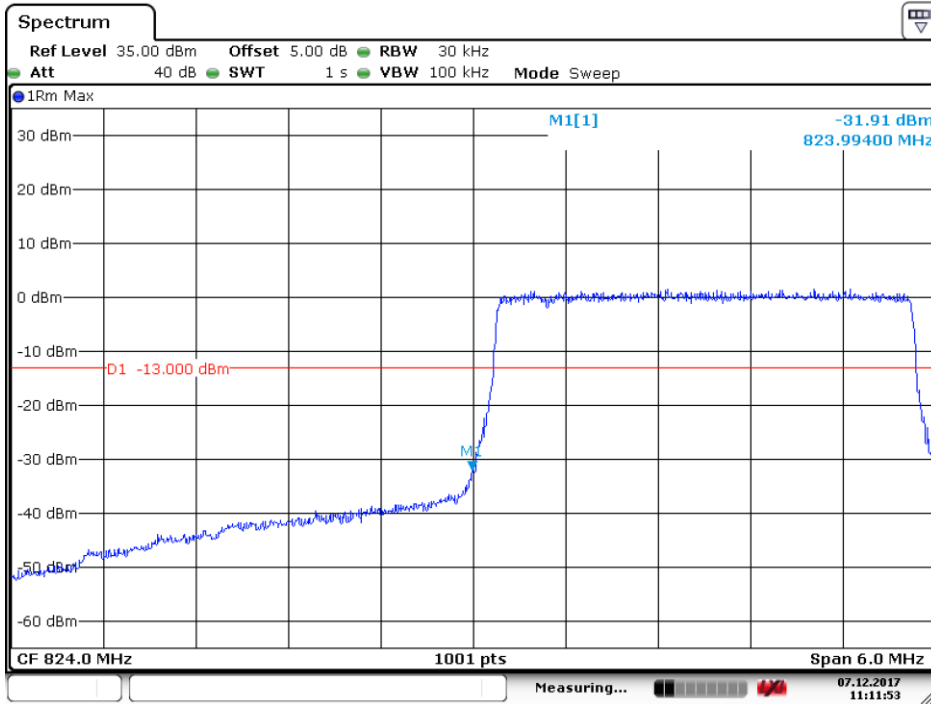
5.1.1.4.1.1 Test RB=1RB



Date: 7.DEC.2017 11:12:07



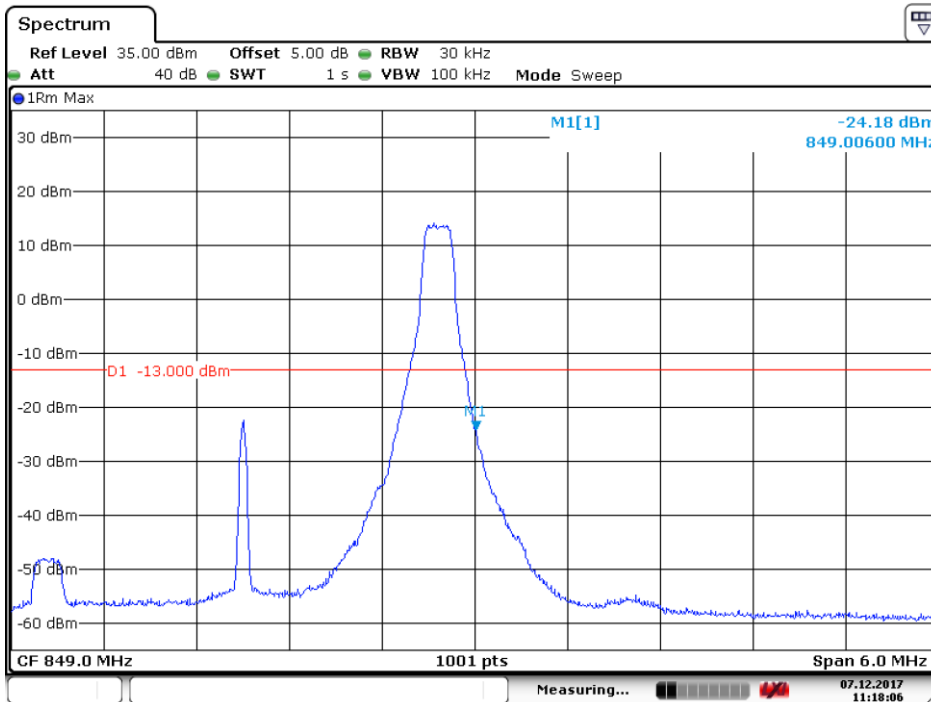
5.1.1.4.1.2 Test RB=15RB



Date: 7.DEC.2017 11:11:53

5.1.1.4.2 Test Channel = HCH

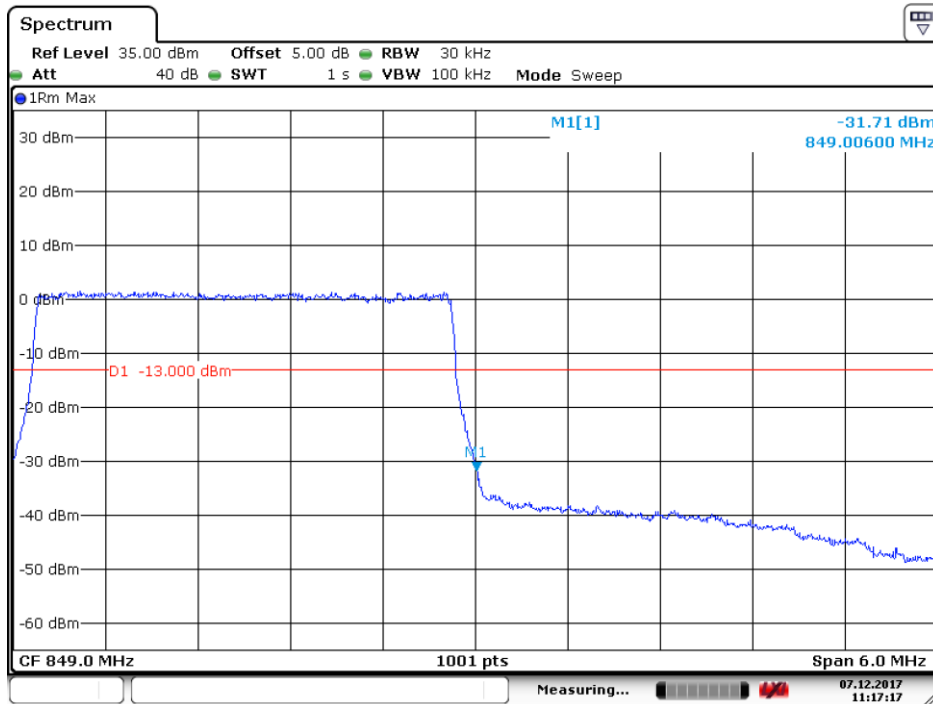
5.1.1.4.2.1 Test RB=1RB



Date: 7.DEC.2017 11:18:06



5.1.1.4.3 Test RB=15RB

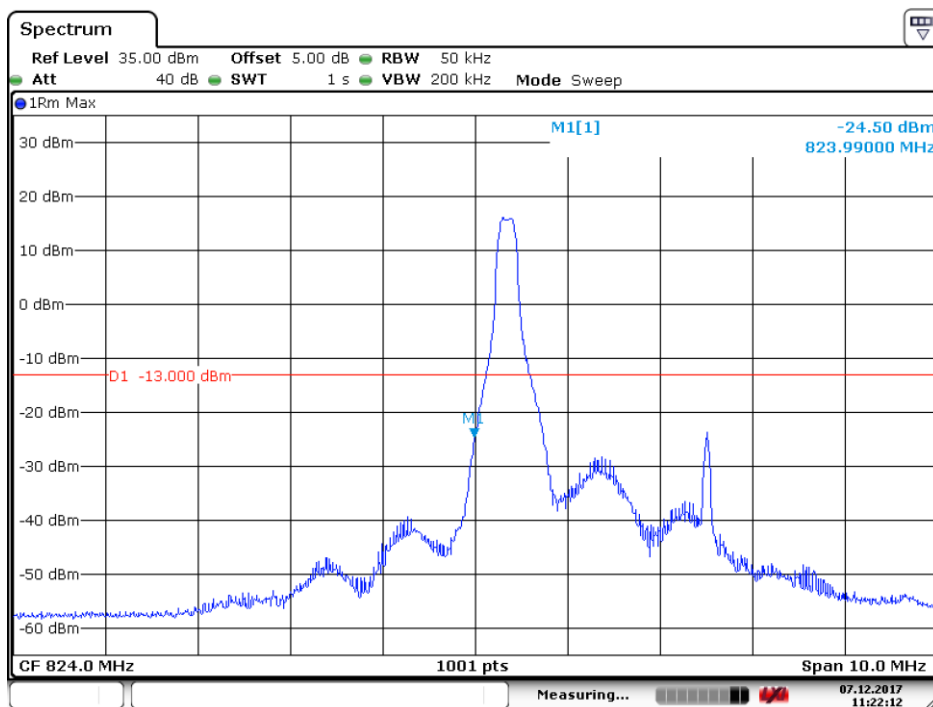


Date: 7.DEC.2017 11:17:18

5.1.1.5 Test Mode = LTE/TM1 5MHz

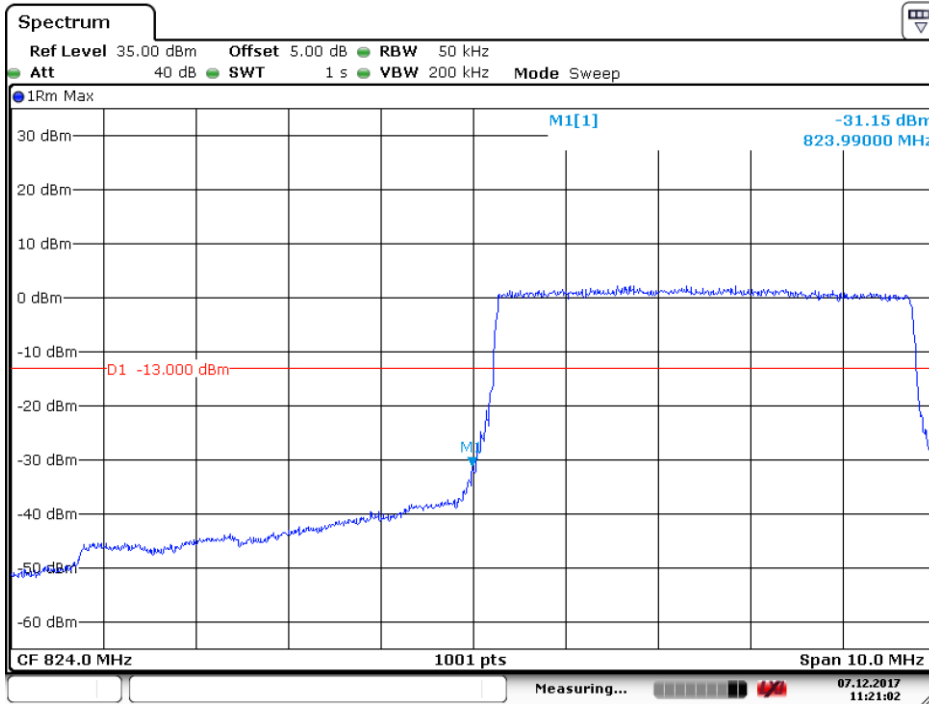
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 7.DEC.2017 11:22:12

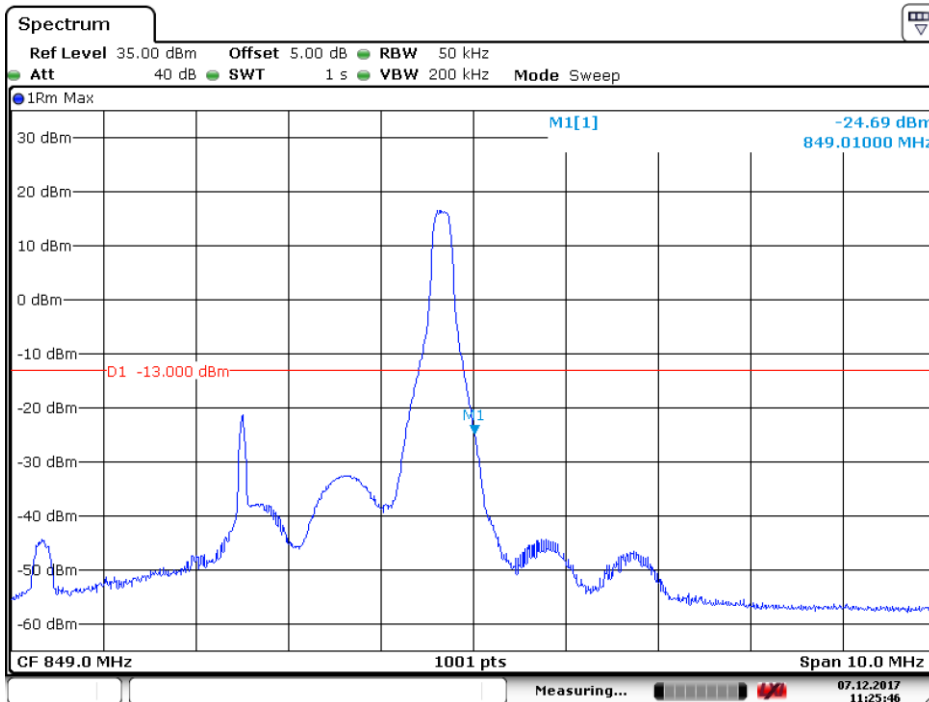
5.1.1.5.1.2 Test RB=25RB



Date: 7.DEC.2017 11:21:03

5.1.1.5.2 Test Channel = HCH

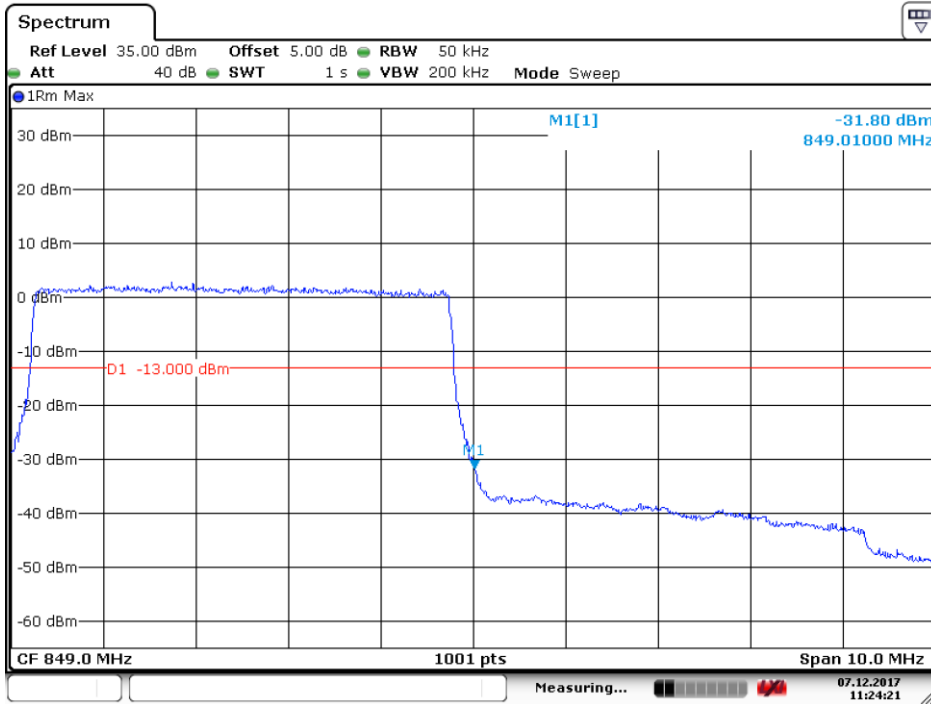
5.1.1.5.2.1 Test RB=1RB



Date: 7.DEC.2017 11:25:46



5.1.1.5.2.2 Test RB=25RB

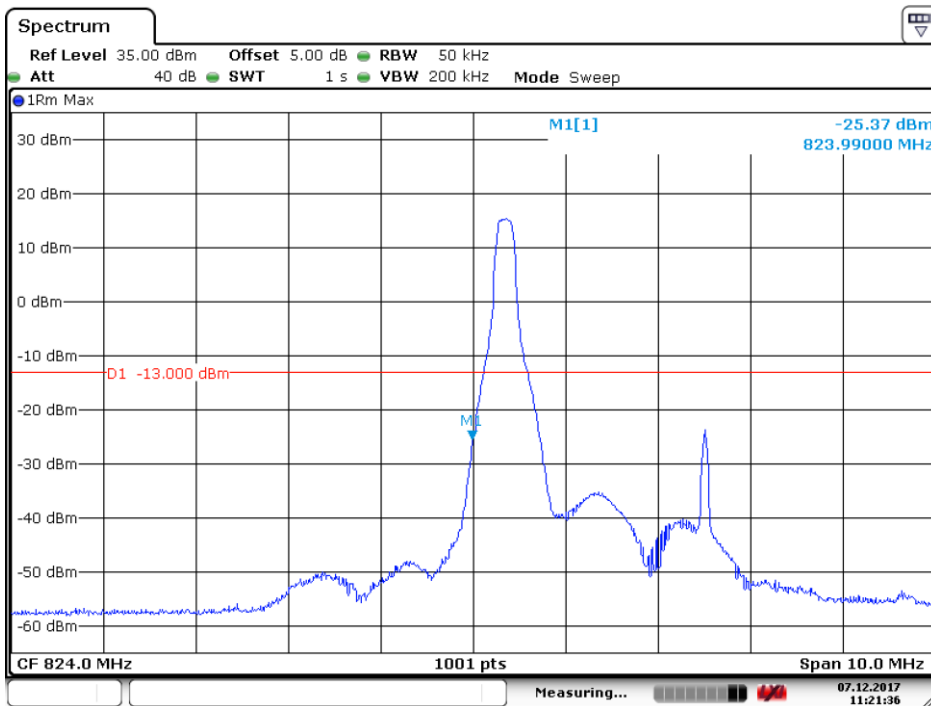


Date: 7.DEC.2017 11:24:22

5.1.1.6 Test Mode = LTE/TM2 5MHz

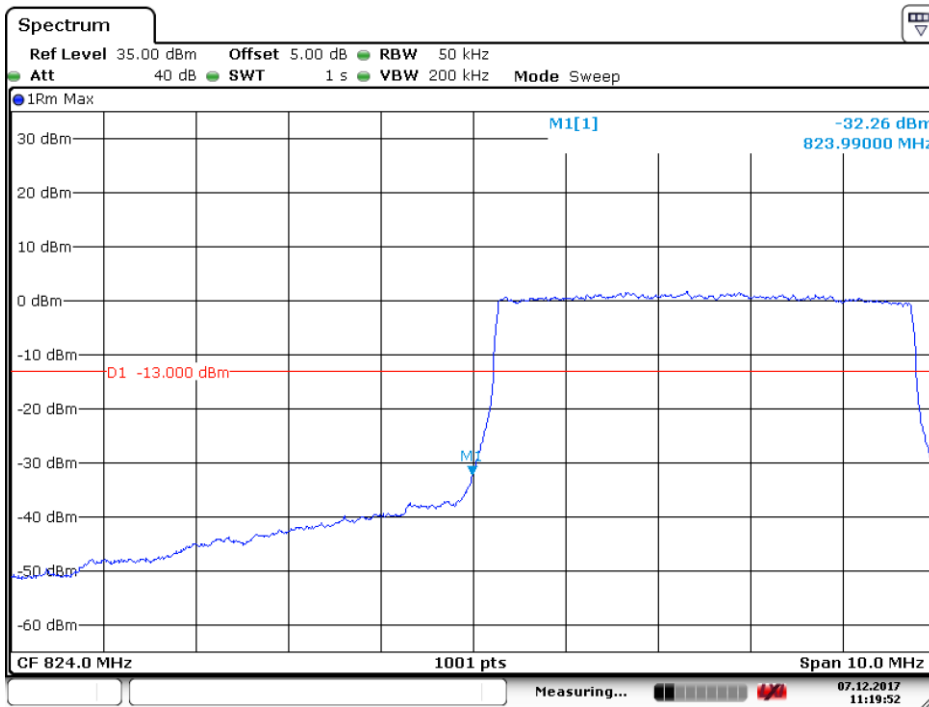
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 7.DEC.2017 11:21:36

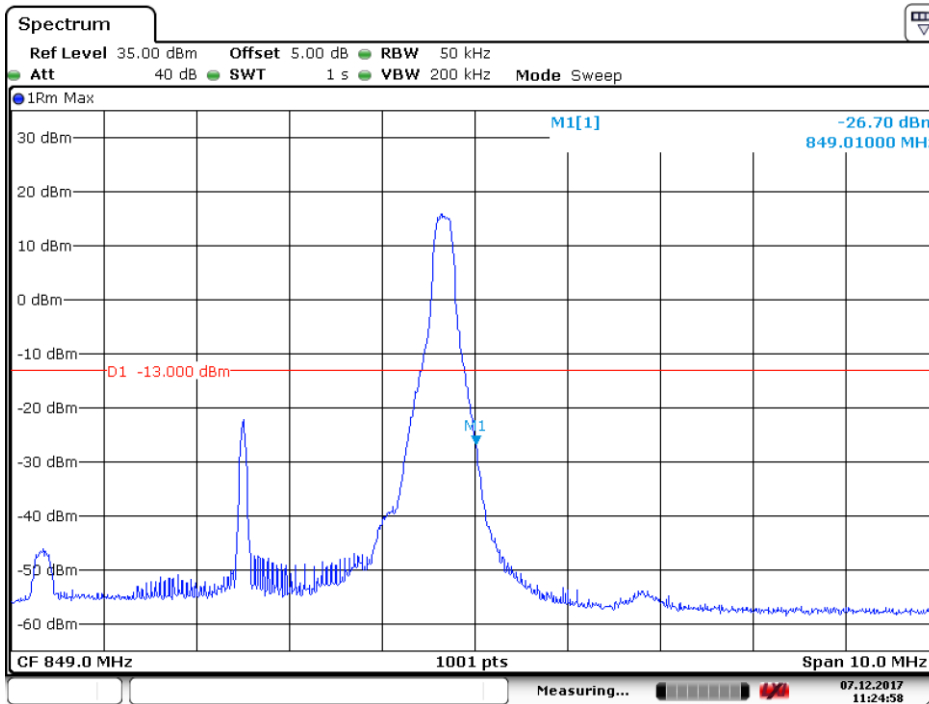
5.1.1.6.1.2 Test RB=25RB



Date: 7.DEC.2017 11:19:52

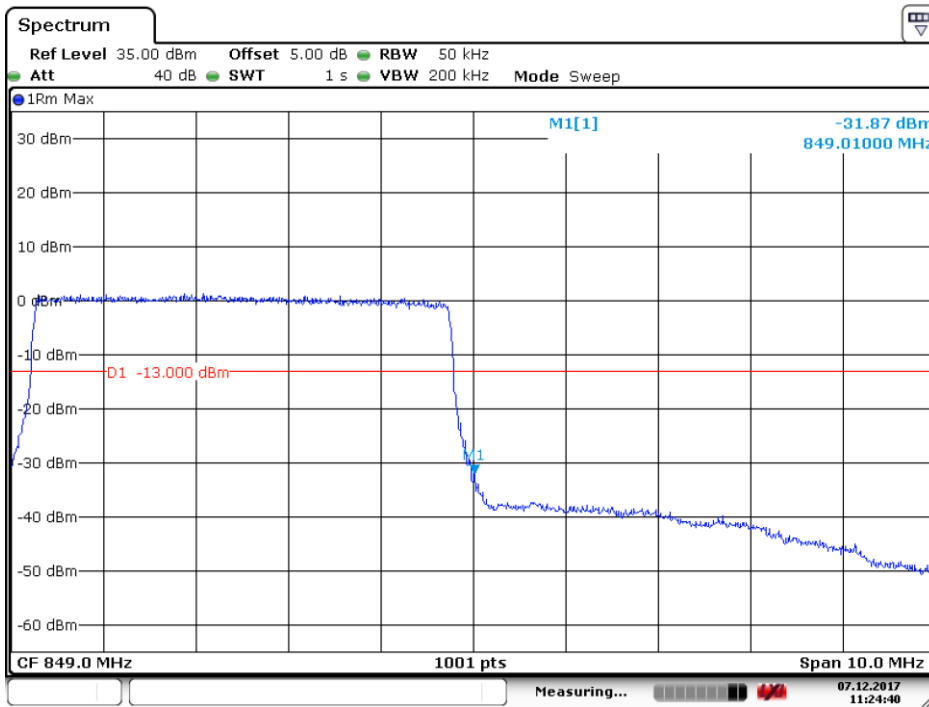
5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 7.DEC.2017 11:24:58

5.1.1.6.2.2 Test RB=25RB

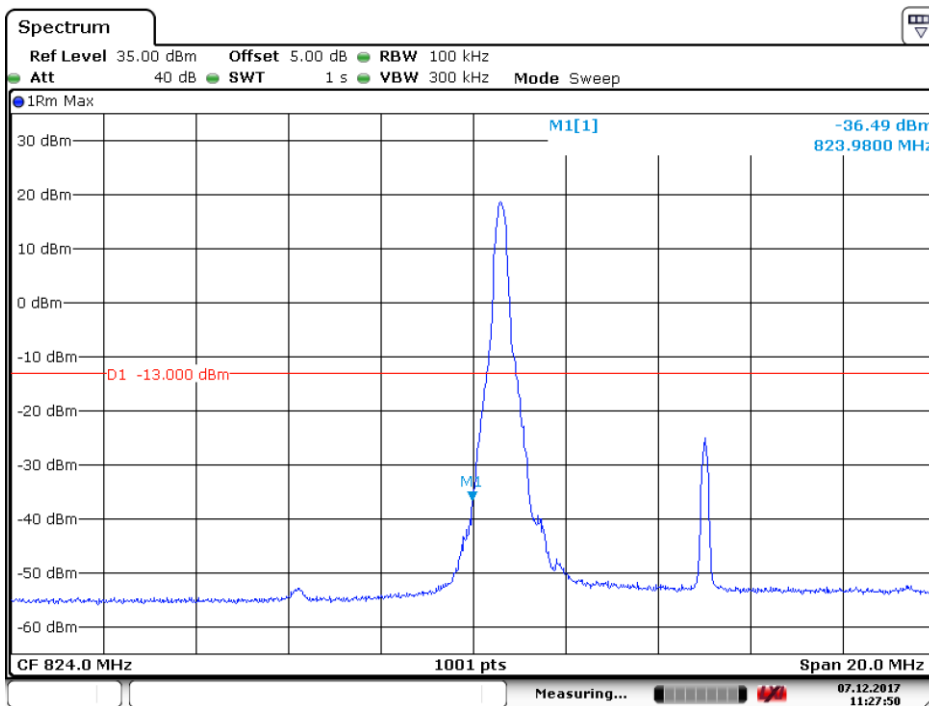


Date: 7.DEC.2017 11:24:40

5.1.1.7 Test Mode = LTE/TM1 10MHz

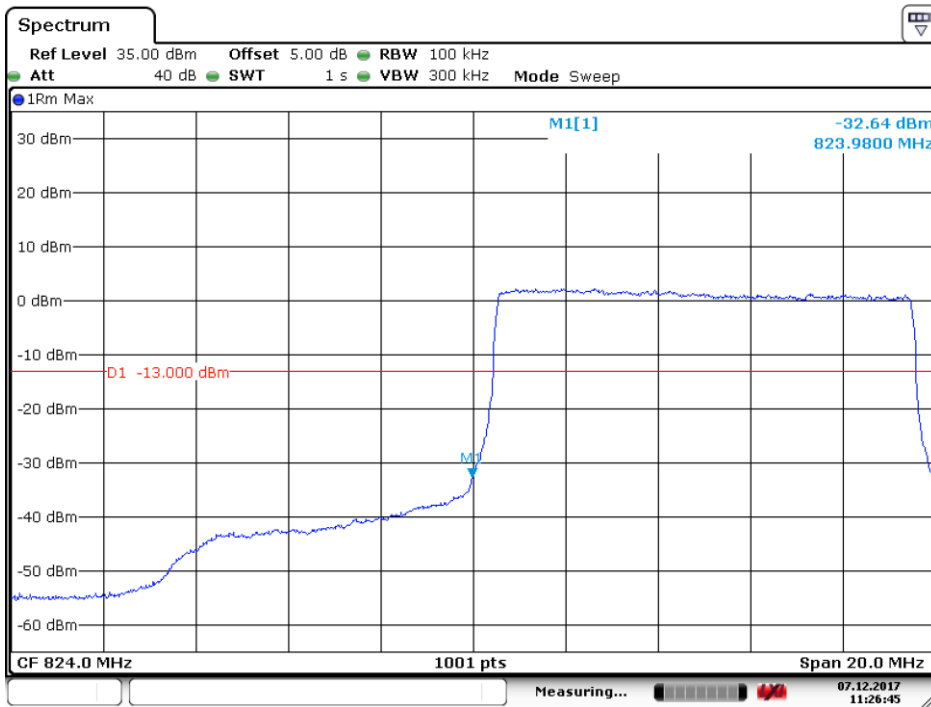
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 7.DEC.2017 11:27:51

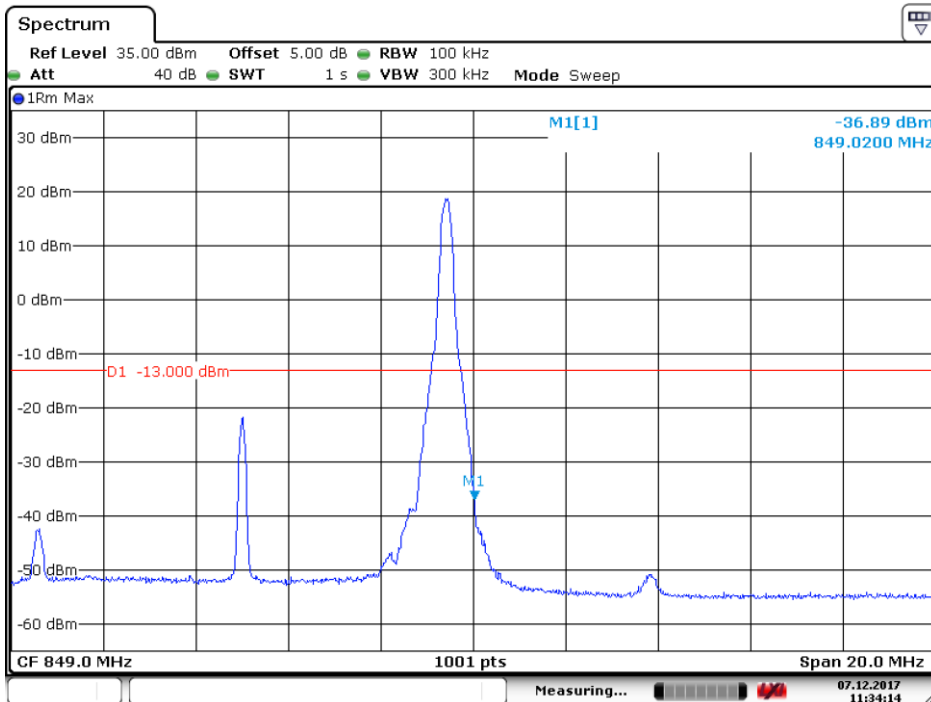
5.1.1.7.1.2 Test RB=50RB



Date: 7.DEC.2017 11:26:45

5.1.1.7.2 Test Channel = HCH

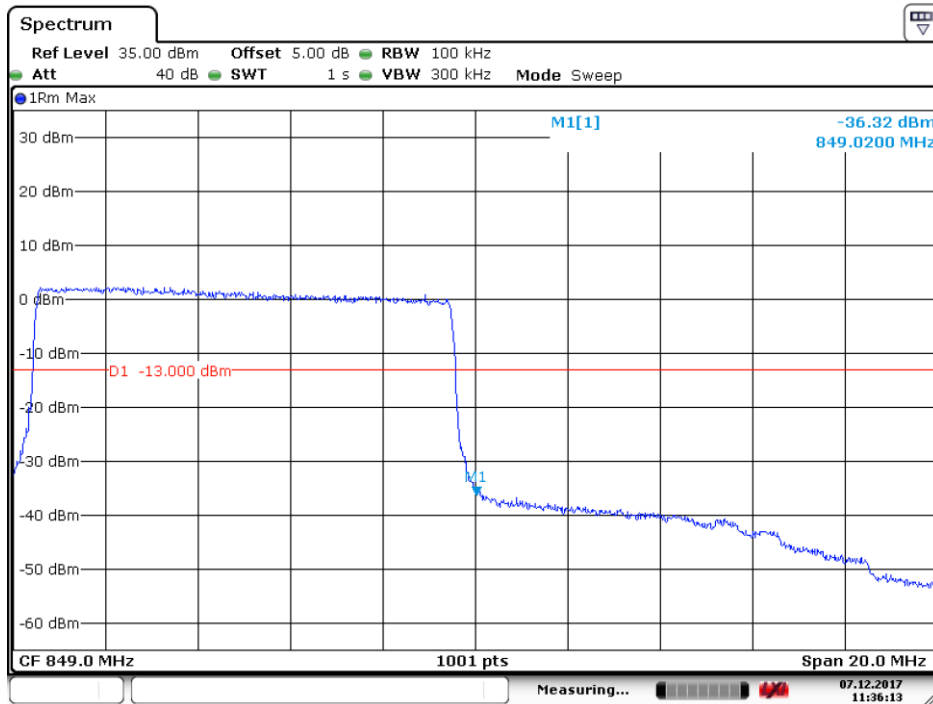
5.1.1.7.2.1 Test RB=1RB



Date: 7.DEC.2017 11:34:15



5.1.1.7.2.2 Test RB=50RB

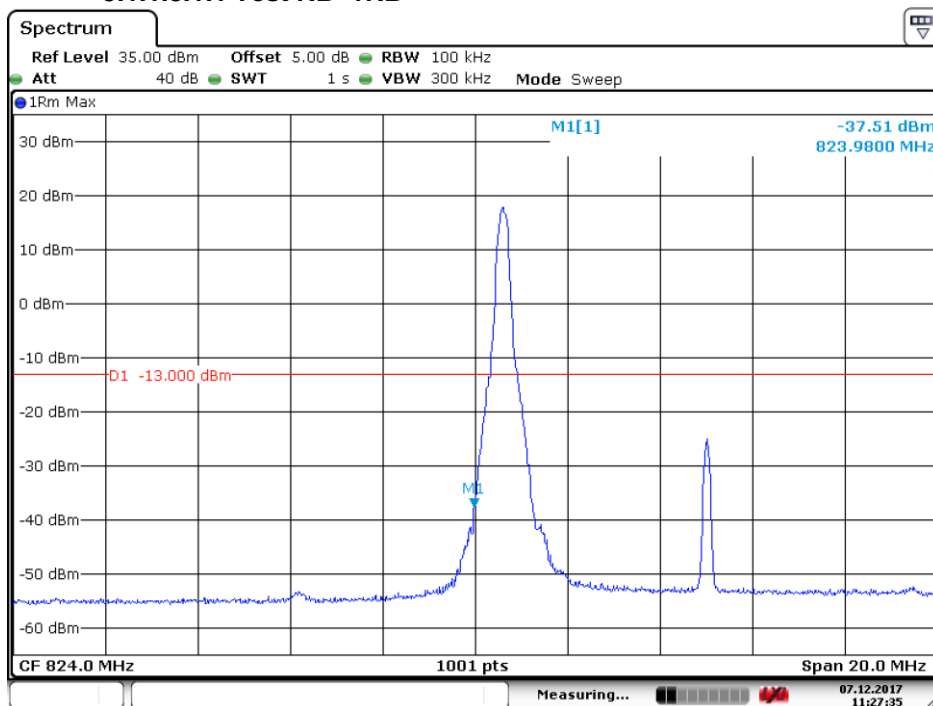


Date: 7.DEC.2017 11:36:14

5.1.1.8 Test Mode = LTE/TM2 10MHz

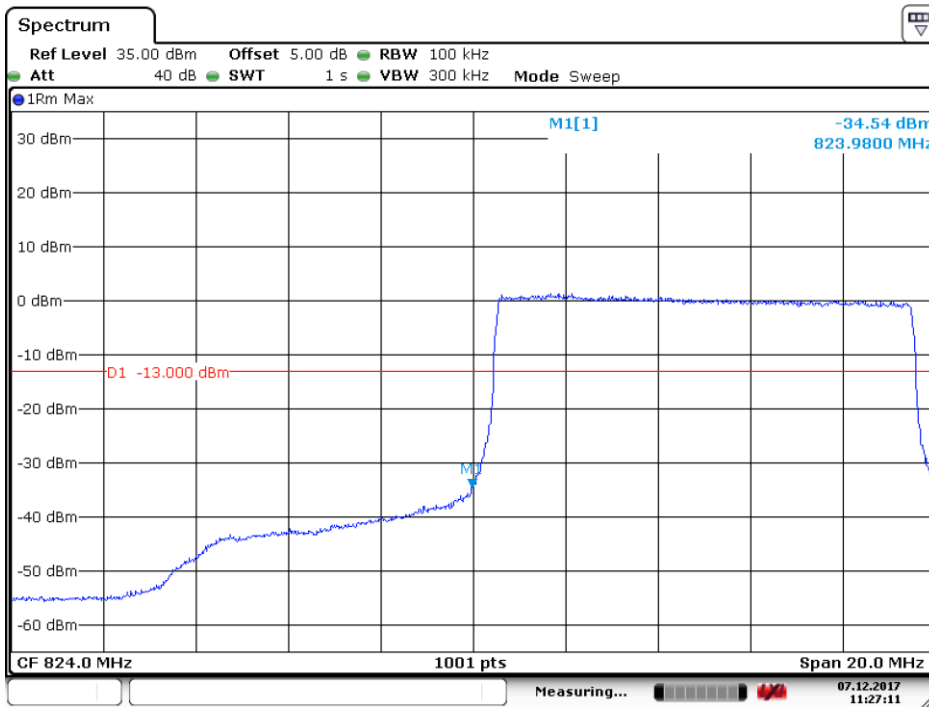
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 7.DEC.2017 11:27:35

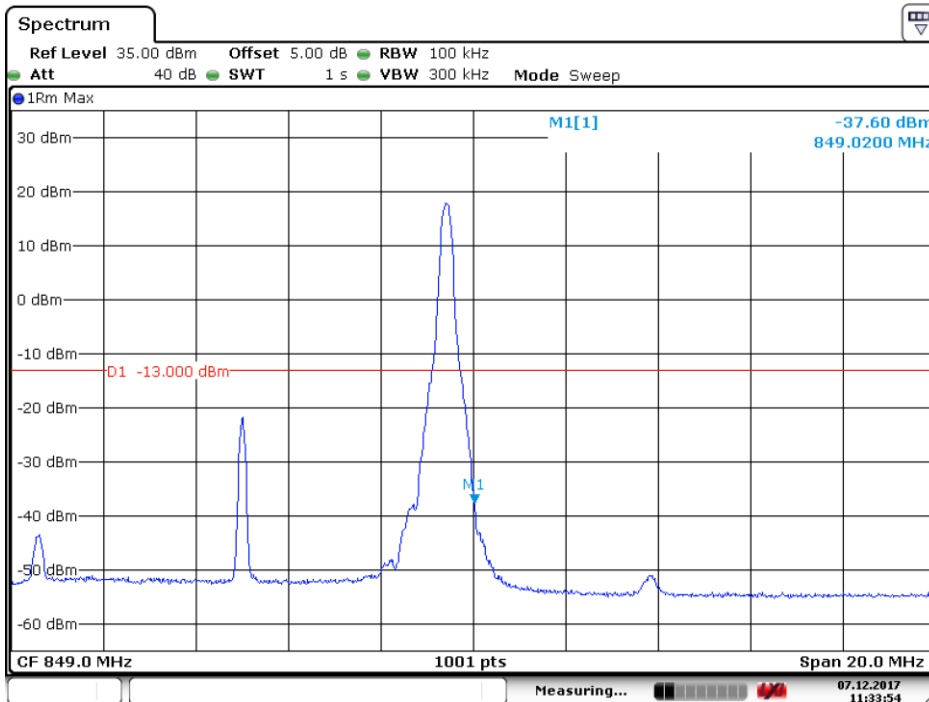
5.1.1.8.1.2 Test RB=50RB



Date: 7.DEC.2017 11:27:12

5.1.1.8.2 Test Channel = HCH

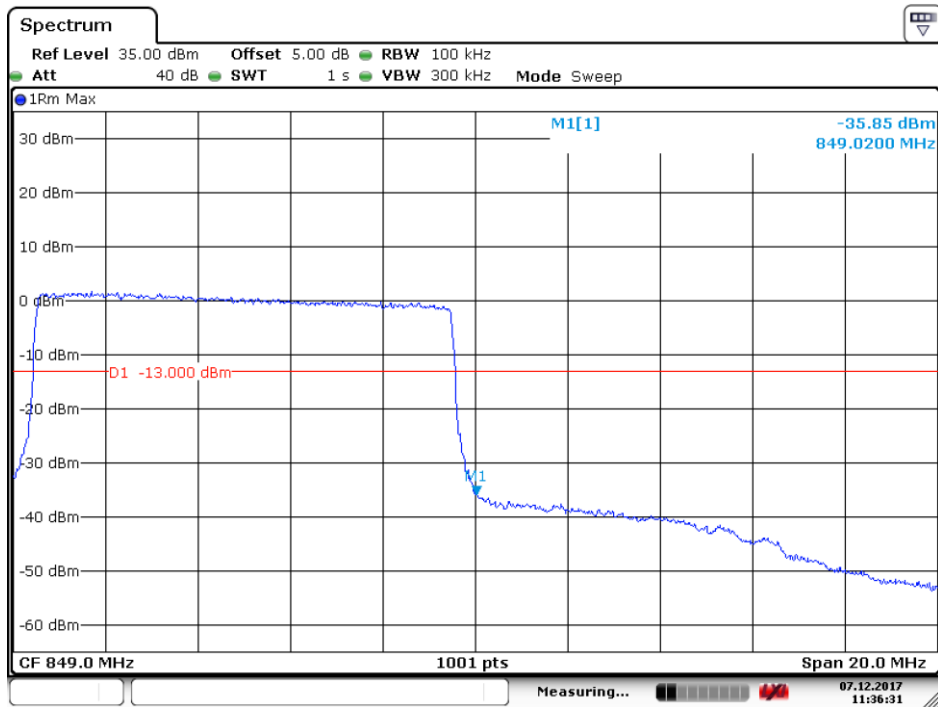
5.1.1.8.2.1 Test RB=1RB



Date: 7.DEC.2017 11:33:54



5.1.1.8.2.2 Test RB=50RB



Date: 7.DEC.2017 11:36:32



6 Spurious Emission at Antenna Terminal

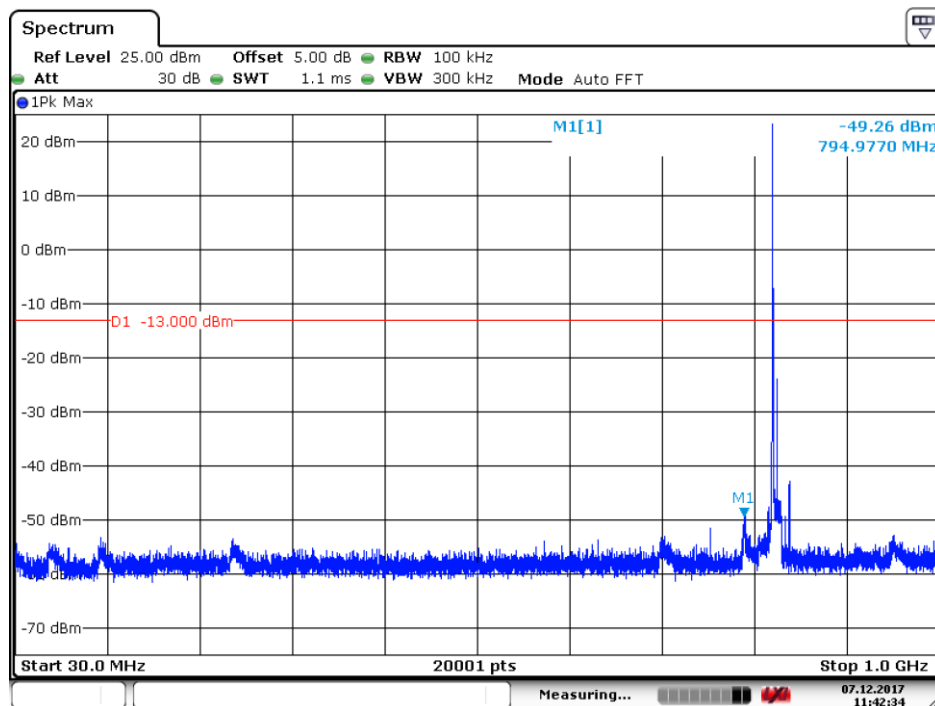
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k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

Part I - Test Plots

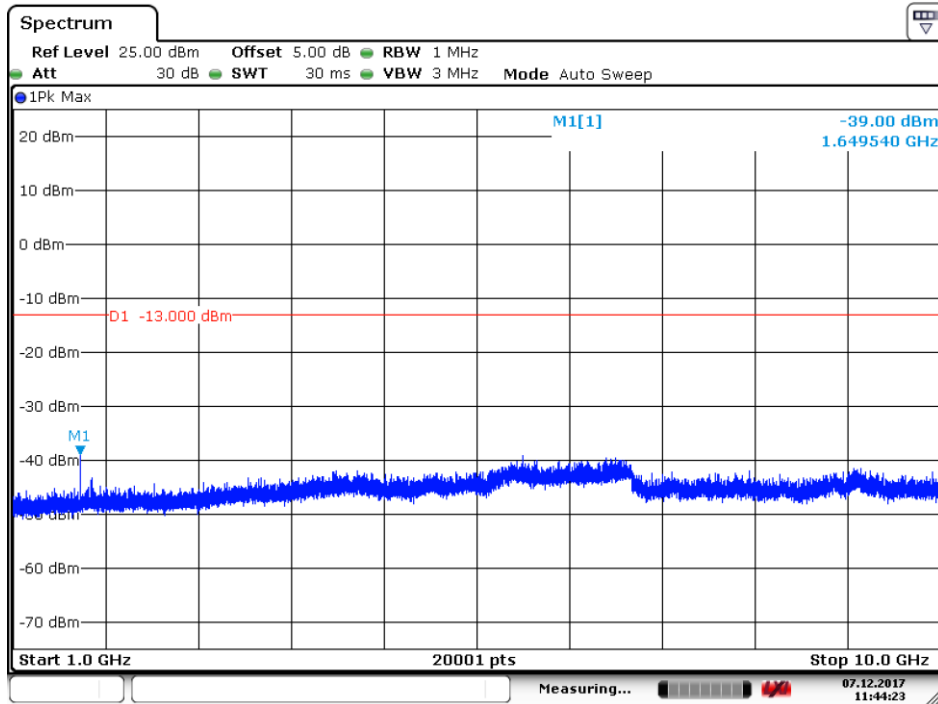
6.1 For LTE

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

6.1.1.1.1 Test Channel = LCH

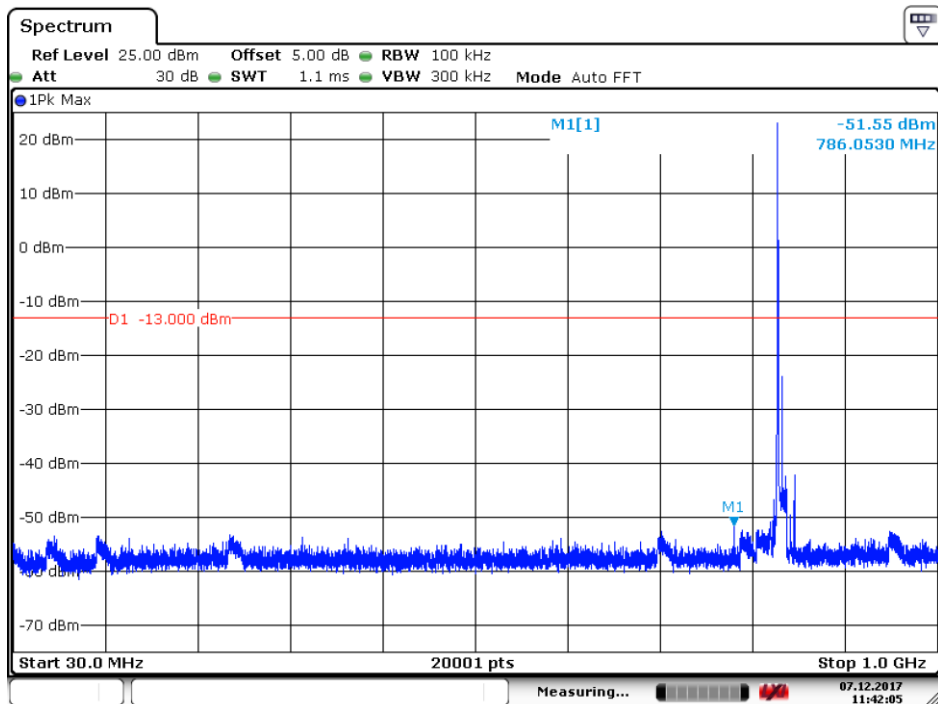


Date: 7. DEC. 2017 11:42:34

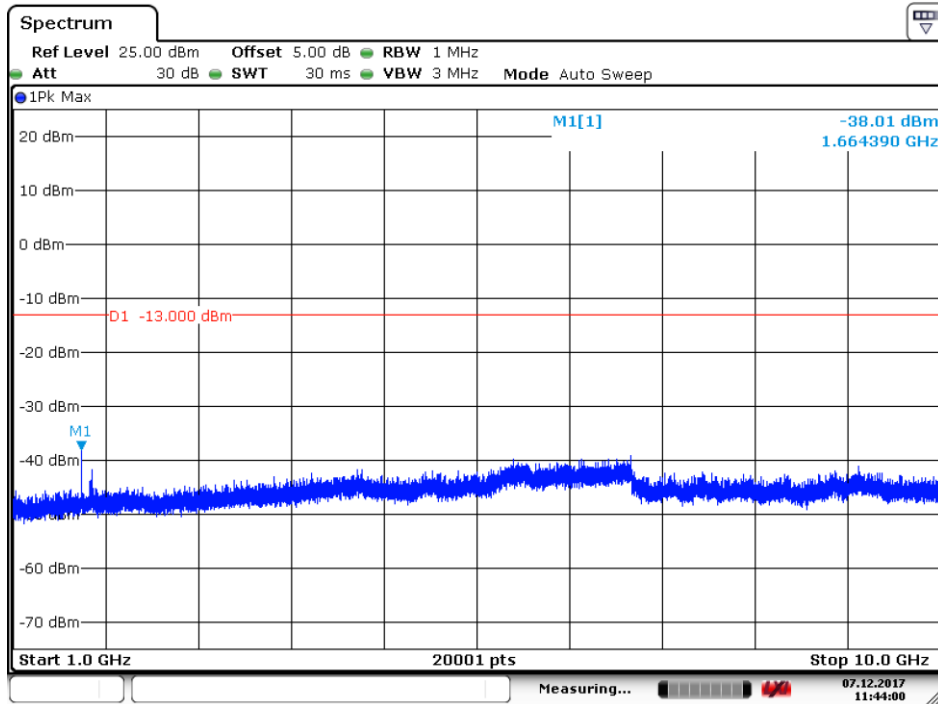


Date: 7.DEC.2017 11:44:23

6.1.1.1.2 Test Channel = MCH

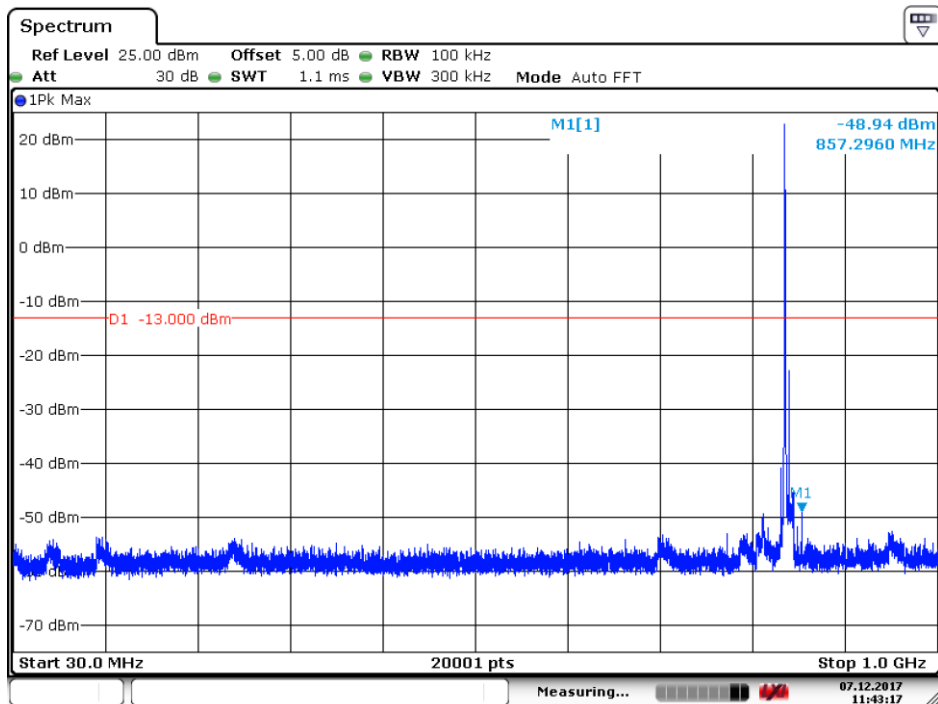


Date: 7.DEC.2017 11:42:05

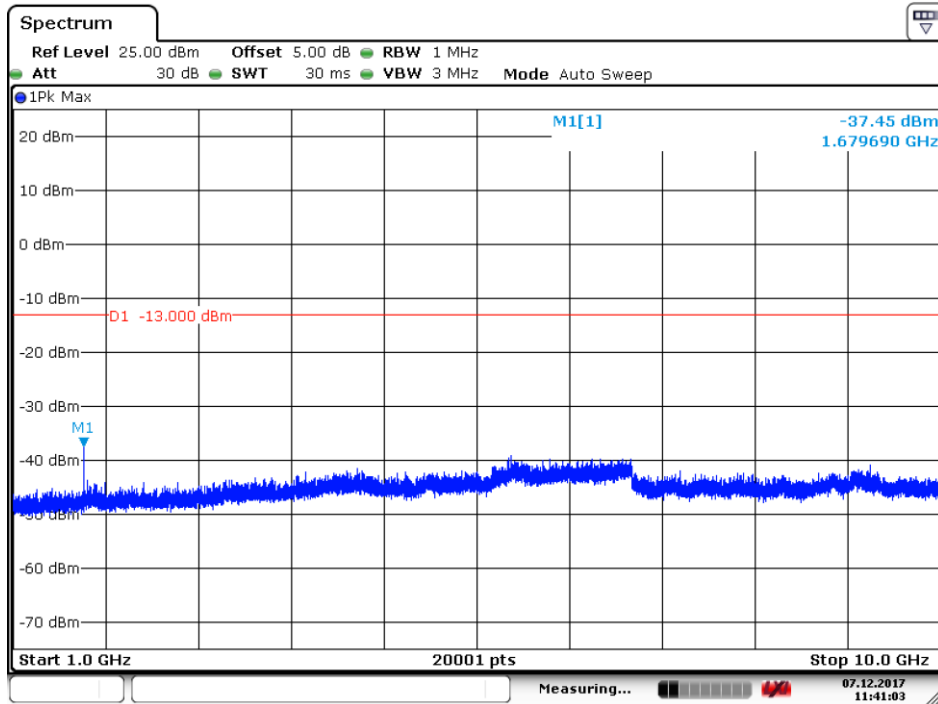


Date: 7.DEC.2017 11:44:01

6.1.1.1.3 Test Channel = HCH



Date: 7.DEC.2017 11:43:17



Date: 7.DEC.2017 11:41:03



7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band5

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
40.546667	-70.58	-13.00	-57.58	Vertical
74.986667	-71.16	-13.00	-58.16	Vertical
164.820000	-70.76	-13.00	-57.76	Vertical
1649.000000	-51.46	-13.00	-38.46	Vertical
2473.500000	-49.01	-13.00	-36.01	Vertical
3298.350000	-63.31	-13.00	-50.31	Vertical
73.306667	-73.02	-13.00	-60.02	Horizontal
165.146667	-71.68	-13.00	-58.68	Horizontal
1649.000000	-48.99	-13.00	-35.99	Horizontal
2473.500000	-46.86	-13.00	-33.86	Horizontal
3298.350000	-55.79	-13.00	-42.79	Horizontal
6468.075000	-65.26	-13.00	-52.26	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
40.966667	-63.81	-13.00	-50.81	Vertical
166.126667	-63.76	-13.00	-50.76	Vertical
1664.000000	-49.92	-13.00	-36.92	Vertical
2496.000000	-50.72	-13.00	-37.72	Vertical
3328.087500	-64.46	-13.00	-51.46	Vertical
6146.325000	-65.25	-13.00	-52.25	Vertical
73.58667	-72.39	-13.00	-59.39	Horizontal
164.026667	-65.70	-13.00	-52.70	Horizontal
1664.000000	-50.01	-13.00	-37.01	Horizontal
2496.000000	-48.86	-13.00	-35.86	Horizontal
3328.087500	-58.12	-13.00	-45.12	Horizontal
6595.800000	-65.22	-13.00	-52.22	Horizontal



7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
39.706667	-71.32	-13.00	-58.32	Vertical
74.986667	-70.27	-13.00	-57.27	Vertical
166.126667	-66.54	-13.00	-53.54	Vertical
1679.000000	-49.82	-13.00	-36.82	Vertical
2518.500000	-52.35	-13.00	-39.35	Vertical
3358.312500	-65.07	-13.00	-52.07	Vertical
72.326667	-75.83	-13.00	-62.83	Horizontal
165.100000	-68.88	-13.00	-55.88	Horizontal
1679.000000	-48.91	-13.00	-35.91	Horizontal
2518.500000	-51.25	-13.00	-38.25	Horizontal
3358.312500	-58.56	-13.00	-45.56	Horizontal
6472.462500	-65.19	-13.00	-52.19	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.



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 band5	LTE/TM1 10MHz	LCH	TN	VL	-2.59	-0.00312	PASS
				VN	3.15	0.00380	PASS
				VH	-7.28	-0.00878	PASS
		MCH	TN	VL	-1.68	-0.00201	PASS
				VN	-5.27	-0.00630	PASS
				VH	2.21	0.00264	PASS
		HCH	TN	VL	-5.35	-0.00634	PASS
				VN	-3.68	-0.00436	PASS
				VH	-1.25	-0.00148	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-4.41	-0.00532	PASS
				VN	-4.36	-0.00526	PASS
				VH	-3.86	-0.00466	PASS
		MCH	TN	VL	1.51	0.00181	PASS
				VN	-3.66	-0.00438	PASS
				VH	3.86	0.00461	PASS
		HCH	TN	VL	-2.86	-0.00339	PASS
				VN	-6.47	-0.00767	PASS
				VH	1.36	0.00161	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 band5	LTE/TM1 10MHz	LCH	VN	-30	-4.61	-0.00556	PASS
				-20	-2.23	-0.00269	PASS
				-10	-2.72	-0.00328	PASS
				0	3.64	0.00439	PASS
				10	3.62	0.00437	PASS
				20	0.54	0.00065	PASS
				30	6.97	0.00841	PASS
				40	-2.67	-0.00322	PASS
				50	-3.84	-0.00463	PASS
		MCH	VN	-30	-5.78	-0.00691	PASS
				-20	-5.34	-0.00638	PASS
				-10	-2.83	-0.00338	PASS
				0	-1.45	-0.00173	PASS
				10	-6.16	-0.00736	PASS
				20	-1.64	-0.00196	PASS
				30	-2.93	-0.00350	PASS
				40	-4.64	-0.00555	PASS
				50	-5.87	-0.00702	PASS
		HCH	VN	-30	-0.43	-0.00051	PASS
				-20	-5.53	-0.00655	PASS
				-10	5.85	0.00693	PASS
				0	-2.78	-0.00329	PASS
				10	2.26	0.00268	PASS
				20	-1.66	-0.00197	PASS
30	-2.44			-0.00289	PASS		
40	-4.53			-0.00537	PASS		
50	-3.72			-0.00441	PASS		



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band5	LTE/TM2 10MHz	LCH	VN	-30	-3.44	-0.00415	PASS
				-20	-2.42	-0.00292	PASS
				-10	1.74	0.00210	PASS
				0	2.89	0.00349	PASS
				10	1.94	0.00234	PASS
				20	-0.57	-0.00069	PASS
				30	-3.27	-0.00394	PASS
				40	2.74	0.00331	PASS
		MCH	VN	-30	-3.43	-0.00410	PASS
				-20	-2.38	-0.00285	PASS
				-10	-2.88	-0.00344	PASS
				0	-1.36	-0.00163	PASS
				10	-0.83	-0.00099	PASS
				20	1.55	0.00185	PASS
				30	-2.37	-0.00283	PASS
				40	-6.58	-0.00787	PASS
		HCH	VN	-30	-3.63	-0.00430	PASS
				-20	-4.36	-0.00517	PASS
				-10	2.47	0.00293	PASS
				0	-3.46	-0.00410	PASS
				10	2.96	0.00351	PASS
				20	-1.16	-0.00137	PASS
				30	-3.33	-0.00395	PASS
				40	-5.46	-0.00647	PASS
				50	-4.69	-0.00556	PASS

The End