



Appendix B

E-UTRA Band 41



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1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 41

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 41	LTE/TM1	5M	LCH	RB1#0	25.59	27.09	33.00	PASS
				RB1#13	25.65	27.15	33.00	PASS
				RB1#24	25.77	27.27	33.00	PASS
				RB12#0	24.73	26.23	33.00	PASS
				RB12#6	25.16	26.66	33.00	PASS
				RB12#13	25.03	26.53	33.00	PASS
				RB25#0	24.24	25.74	33.00	PASS
			MCH	RB1#0	25.38	26.88	33.00	PASS
				RB1#13	25.41	26.91	33.00	PASS
				RB1#24	25.16	26.66	33.00	PASS
				RB12#0	24.66	26.16	33.00	PASS
				RB12#6	24.57	26.07	33.00	PASS
				RB12#13	24.53	26.03	33.00	PASS
				RB25#0	24.03	25.53	33.00	PASS
			HCH	RB1#0	26.08	27.58	33.00	PASS
				RB1#13	26.14	27.64	33.00	PASS
				RB1#24	26.03	27.53	33.00	PASS
				RB12#0	25.07	26.57	33.00	PASS
				RB12#6	25.02	26.52	33.00	PASS
				RB12#13	24.81	26.31	33.00	PASS
				RB25#0	24.42	25.92	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM2	5M	LCH	RB1#0	24.65	26.15	33.00	PASS
				RB1#13	24.91	26.41	33.00	PASS
				RB1#24	24.95	26.45	33.00	PASS
				RB12#0	24.13	25.63	33.00	PASS
				RB12#6	23.97	25.47	33.00	PASS
				RB12#13	23.85	25.35	33.00	PASS
				RB25#0	23.55	25.05	33.00	PASS
			MCH	RB1#0	24.48	25.98	33.00	PASS
				RB1#13	24.53	26.03	33.00	PASS
				RB1#24	24.67	26.17	33.00	PASS
				RB12#0	23.68	25.18	33.00	PASS
				RB12#6	23.52	25.02	33.00	PASS
				RB12#13	23.83	25.33	33.00	PASS
				RB25#0	23.23	24.73	33.00	PASS
			HCH	RB1#0	25.27	26.77	33.00	PASS
				RB1#13	25.3	26.8	33.00	PASS
				RB1#24	25.13	26.63	33.00	PASS
				RB12#0	24.08	25.58	33.00	PASS
				RB12#6	24.14	25.64	33.00	PASS
				RB12#13	23.76	25.26	33.00	PASS
				RB25#0	23.85	25.35	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM1	10M	LCH	RB1#0	25.6	27.1	33.00	PASS
				RB1#25	25.92	27.42	33.00	PASS
				RB1#49	26.06	27.56	33.00	PASS
				RB25#0	24.83	26.33	33.00	PASS
				RB25#13	25.03	26.53	33.00	PASS
				RB25#25	24.88	26.38	33.00	PASS
				RB50#0	24.66	26.16	33.00	PASS
			MCH	RB1#0	24.83	26.33	33.00	PASS
				RB1#25	25.04	26.54	33.00	PASS
				RB1#49	24.75	26.25	33.00	PASS
				RB25#0	24.48	25.98	33.00	PASS
				RB25#13	24.42	25.92	33.00	PASS
				RB25#25	24.32	25.82	33.00	PASS
				RB50#0	24.15	25.65	33.00	PASS
			HCH	RB1#0	25.97	27.47	33.00	PASS
				RB1#25	26.32	27.82	33.00	PASS
				RB1#49	25.77	27.27	33.00	PASS
				RB25#0	24.77	26.27	33.00	PASS
				RB25#13	24.74	26.24	33.00	PASS
				RB25#25	24.66	26.16	33.00	PASS
				RB50#0	24.67	26.17	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM2	10M	LCH	RB1#0	24.65	26.15	33.00	PASS
				RB1#25	24.99	26.49	33.00	PASS
				RB1#49	25.08	26.58	33.00	PASS
				RB25#0	23.96	25.46	33.00	PASS
				RB25#13	24.16	25.66	33.00	PASS
				RB25#25	24.2	25.7	33.00	PASS
				RB50#0	23.52	25.02	33.00	PASS
			MCH	RB1#0	24.09	25.59	33.00	PASS
				RB1#25	24.7	26.2	33.00	PASS
				RB1#49	24.53	26.03	33.00	PASS
				RB25#0	23.59	25.09	33.00	PASS
				RB25#13	23.68	25.18	33.00	PASS
				RB25#25	23.42	24.92	33.00	PASS
				RB50#0	23.32	24.82	33.00	PASS
			HCH	RB1#0	24.87	26.37	33.00	PASS
				RB1#25	25.16	26.66	33.00	PASS
				RB1#49	24.85	26.35	33.00	PASS
				RB25#0	24.03	25.53	33.00	PASS
				RB25#13	24.01	25.51	33.00	PASS
				RB25#25	23.76	25.26	33.00	PASS
				RB50#0	23.76	25.26	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM1	15M	LCH	RB1#0	26	27.5	33.00	PASS
				RB1#38	26.65	28.15	33.00	PASS
				RB1#74	27.11	28.61	33.00	PASS
				RB36#0	25.16	26.66	33.00	PASS
				RB36#18	25.12	26.62	33.00	PASS
				RB36#39	25.35	26.85	33.00	PASS
				RB75#0	25.12	26.62	33.00	PASS
			MCH	RB1#0	25.76	27.26	33.00	PASS
				RB1#38	25.99	27.49	33.00	PASS
				RB1#74	25.5	27	33.00	PASS
				RB36#0	25.19	26.69	33.00	PASS
				RB36#18	24.66	26.16	33.00	PASS
				RB36#39	24.82	26.32	33.00	PASS
				RB75#0	24.44	25.94	33.00	PASS
			HCH	RB1#0	25.89	27.39	33.00	PASS
				RB1#38	25.87	27.37	33.00	PASS
				RB1#74	25.98	27.48	33.00	PASS
				RB36#0	24.99	26.49	33.00	PASS
				RB36#18	24.78	26.28	33.00	PASS
				RB36#39	24.84	26.34	33.00	PASS
				RB75#0	24.58	26.08	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM2	15M	LCH	RB1#0	24.99	26.49	33.00	PASS
				RB1#38	25.4	26.9	33.00	PASS
				RB1#74	25.75	27.25	33.00	PASS
				RB36#0	23.67	25.17	33.00	PASS
				RB36#18	24.38	25.88	33.00	PASS
				RB36#39	24.22	25.72	33.00	PASS
				RB75#0	24.17	25.67	33.00	PASS
			MCH	RB1#0	24.79	26.29	33.00	PASS
				RB1#38	24.7	26.2	33.00	PASS
				RB1#74	24.54	26.04	33.00	PASS
				RB36#0	23.74	25.24	33.00	PASS
				RB36#18	23.31	24.81	33.00	PASS
				RB36#39	23.41	24.91	33.00	PASS
				RB75#0	23.46	24.96	33.00	PASS
			HCH	RB1#0	24.97	26.47	33.00	PASS
				RB1#38	25.19	26.69	33.00	PASS
				RB1#74	24.93	26.43	33.00	PASS
				RB36#0	23.76	25.26	33.00	PASS
				RB36#18	23.57	25.07	33.00	PASS
				RB36#39	23.82	25.32	33.00	PASS
				RB75#0	23.77	25.27	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM1	20M	LCH	RB1#0	25.86	27.36	33.00	PASS
				RB1#50	26.76	28.26	33.00	PASS
				RB1#99	27.12	28.62	33.00	PASS
				RB50#0	25.07	26.57	33.00	PASS
				RB50#25	25.24	26.74	33.00	PASS
				RB50#50	25.11	26.61	33.00	PASS
				RB100#0	25.22	26.72	33.00	PASS
			MCH	RB1#0	25.75	27.25	33.00	PASS
				RB1#50	26.02	27.52	33.00	PASS
				RB1#99	25.55	27.05	33.00	PASS
				RB50#0	24.99	26.49	33.00	PASS
				RB50#25	24.56	26.06	33.00	PASS
				RB50#50	24.68	26.18	33.00	PASS
				RB100#0	24.76	26.26	33.00	PASS
			HCH	RB1#0	25.75	27.25	33.00	PASS
				RB1#50	26.03	27.53	33.00	PASS
				RB1#99	25.74	27.24	33.00	PASS
				RB50#0	24.5	26	33.00	PASS
				RB50#25	24.56	26.06	33.00	PASS
				RB50#50	24.73	26.23	33.00	PASS
				RB100#0	24.67	26.17	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM2	20M	LCH	RB1#0	24.88	26.38	33.00	PASS
				RB1#50	25.99	27.49	33.00	PASS
				RB1#99	26.44	27.94	33.00	PASS
				RB50#0	24.17	25.67	33.00	PASS
				RB50#25	24.28	25.78	33.00	PASS
				RB50#50	24.42	25.92	33.00	PASS
				RB100#0	23.74	25.24	33.00	PASS
			MCH	RB1#0	25.15	26.65	33.00	PASS
				RB1#50	25.1	26.6	33.00	PASS
				RB1#99	24.35	25.85	33.00	PASS
				RB50#0	24.01	25.51	33.00	PASS
				RB50#25	23.66	25.16	33.00	PASS
				RB50#50	23.93	25.43	33.00	PASS
				RB100#0	23.87	25.37	33.00	PASS
			HCH	RB1#0	24.56	26.06	33.00	PASS
				RB1#50	25.26	26.76	33.00	PASS
				RB1#99	24.86	26.36	33.00	PASS
				RB50#0	23.74	25.24	33.00	PASS
				RB50#25	23.63	25.13	33.00	PASS
				RB50#50	23.99	25.49	33.00	PASS
				RB100#0	23.69	25.19	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

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
Band 41	TM1/20M	LCH	6.67	13	PASS
		MCH	4.52	13	PASS
		HCH	5.62	13	PASS
	TM2/20M	LCH	6.96	13	PASS
		MCH	6.46	13	PASS
		HCH	4.78	13	PASS

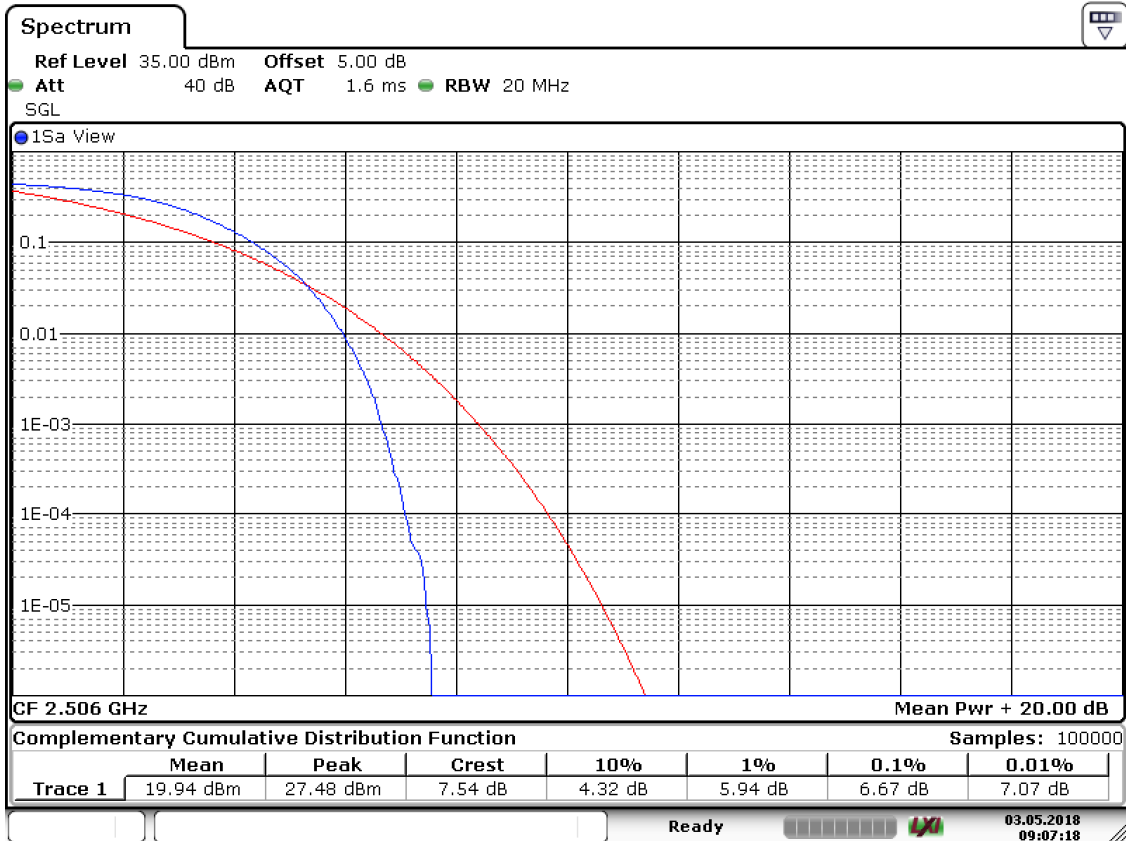
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band41

2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

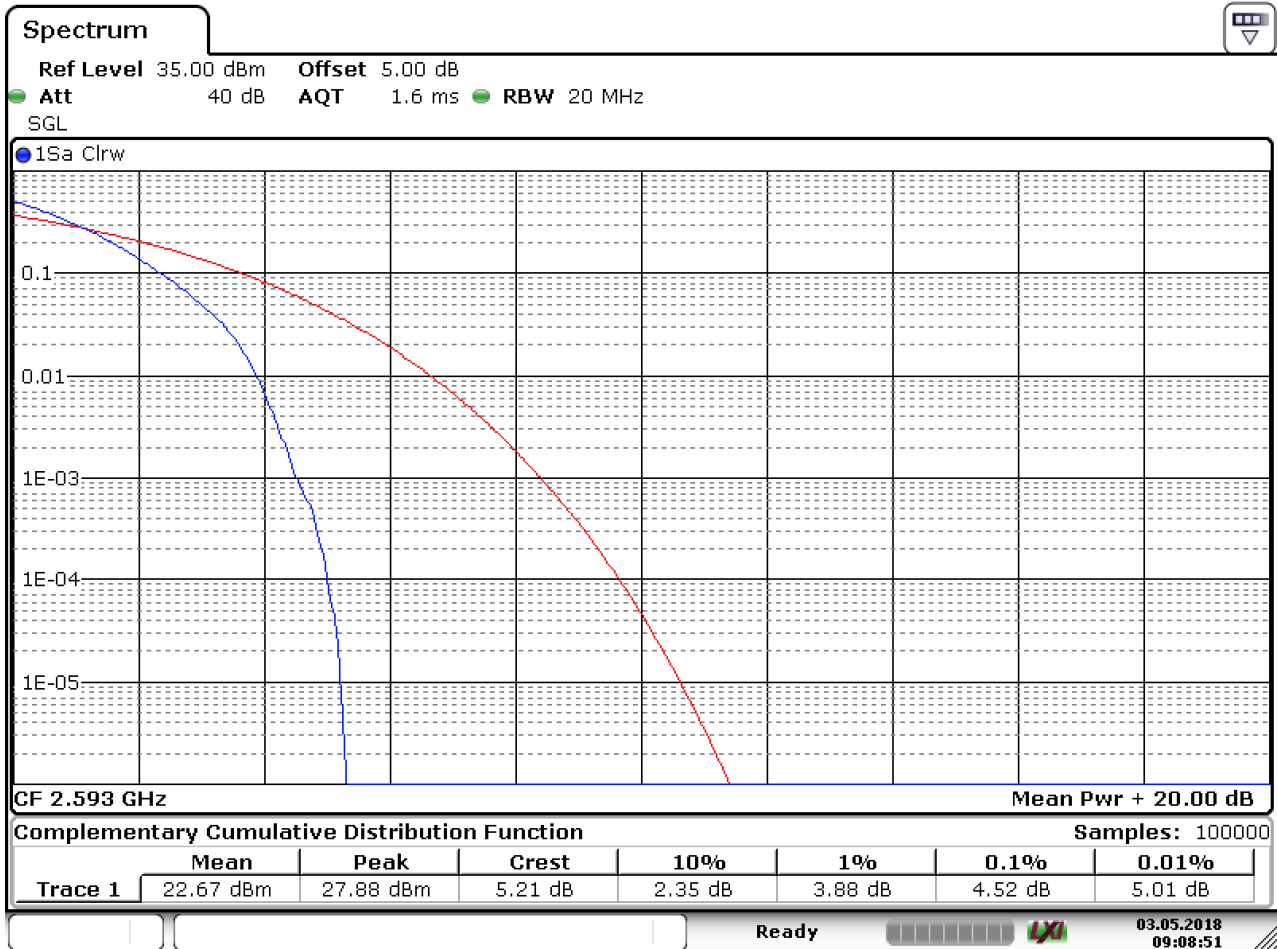
2.1.1.1.1 Test Channel = LCH



Date: 3.MAY.2018 09:07:18



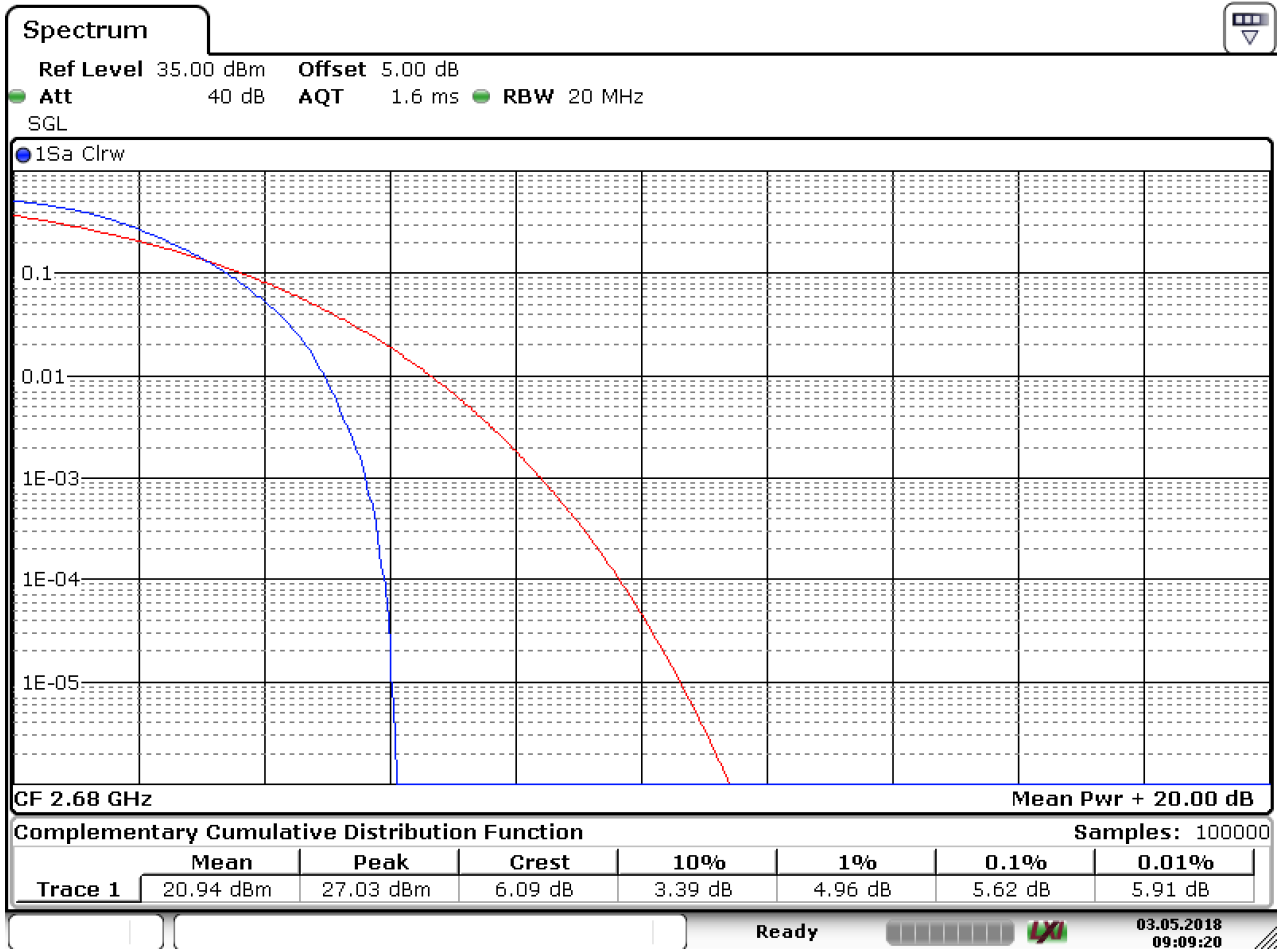
2.1.1.1.2 Test Channel = MCH



Date: 3.MAY.2018 09:08:52



2.1.1.1.3 Test Channel = HCH

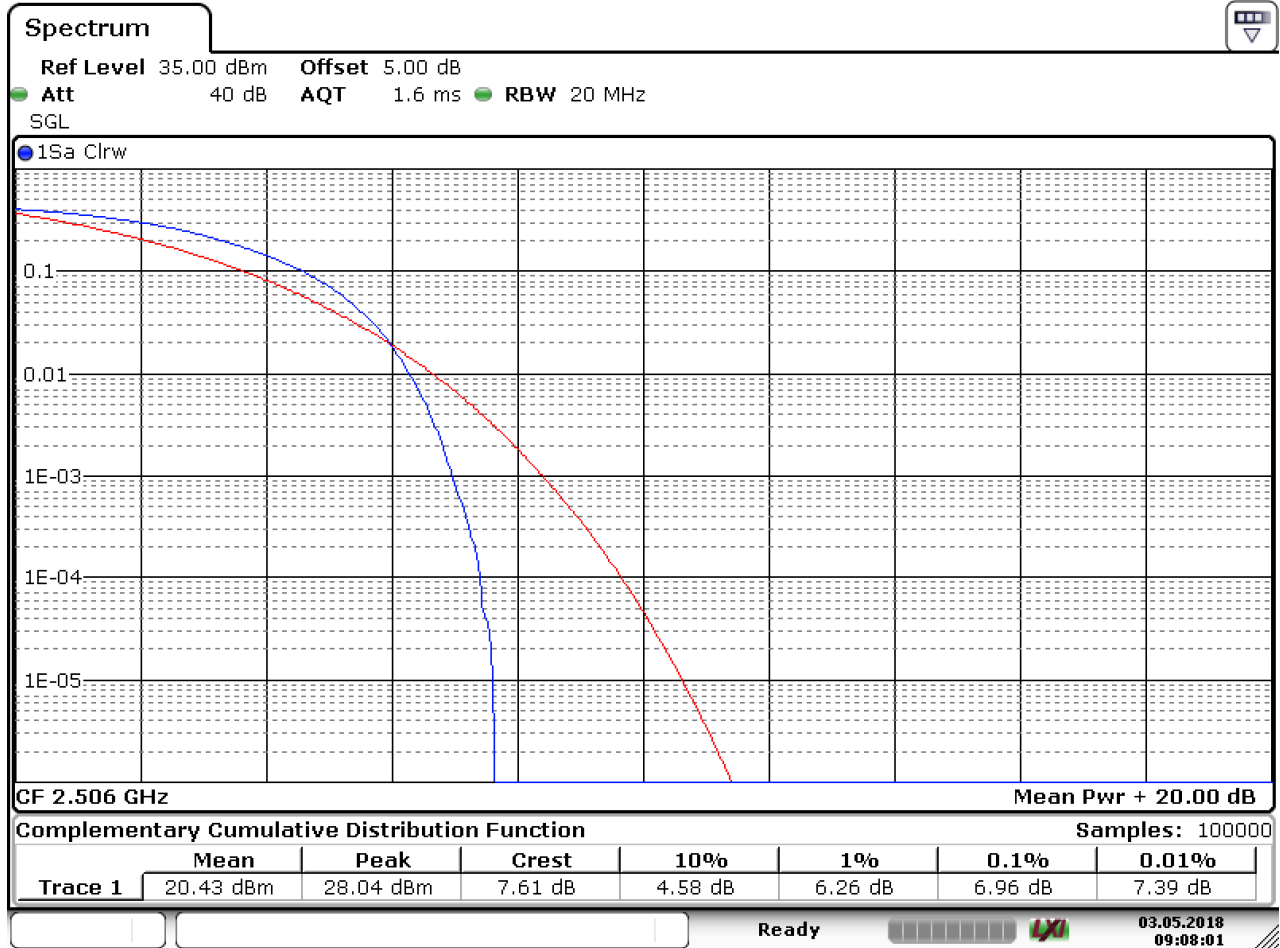


Date: 3.MAY.2018 09:09:21



2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

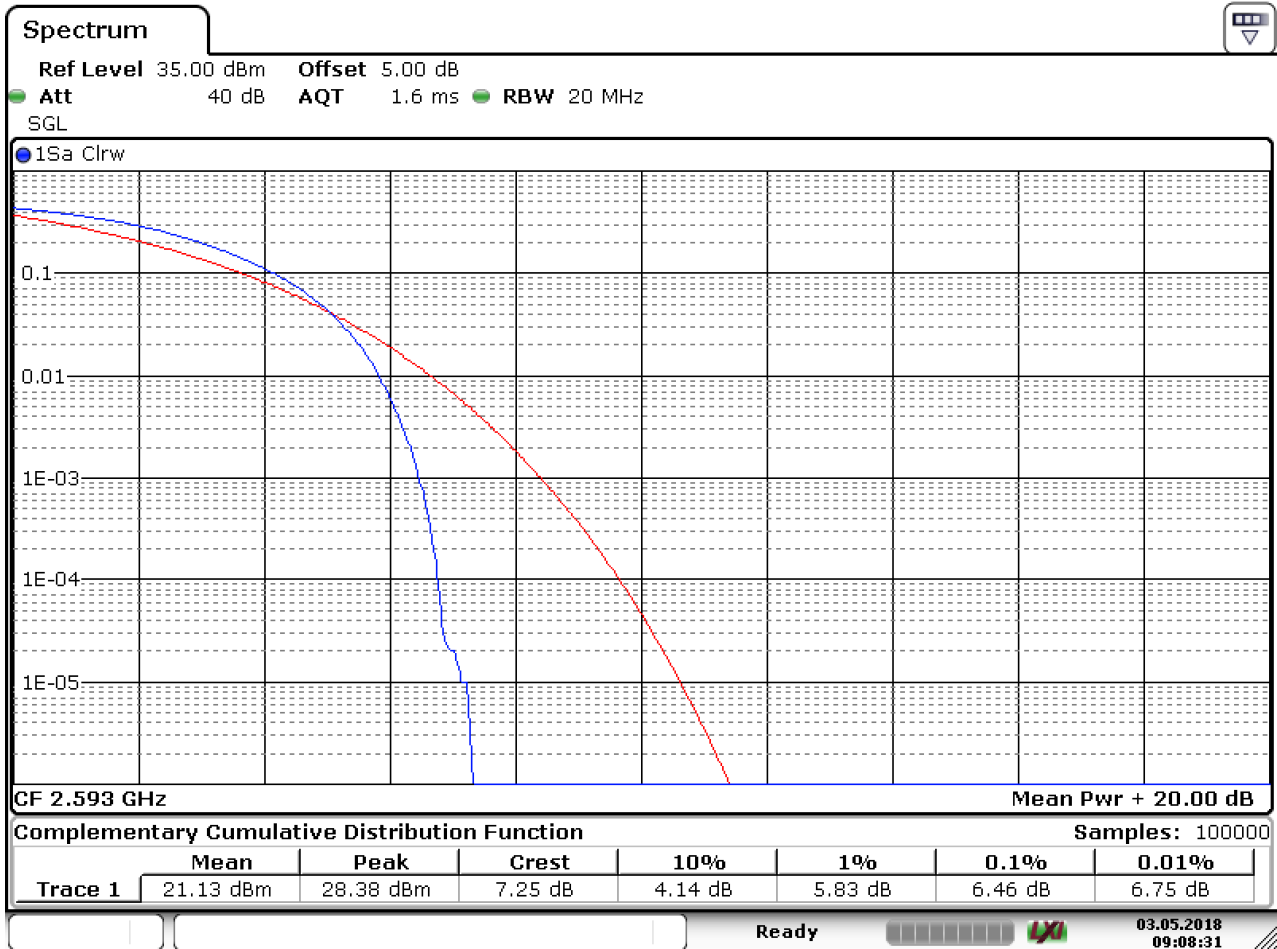
2.1.1.2.1 Test Channel = LCH



Date: 3.MAY.2018 09:08:01



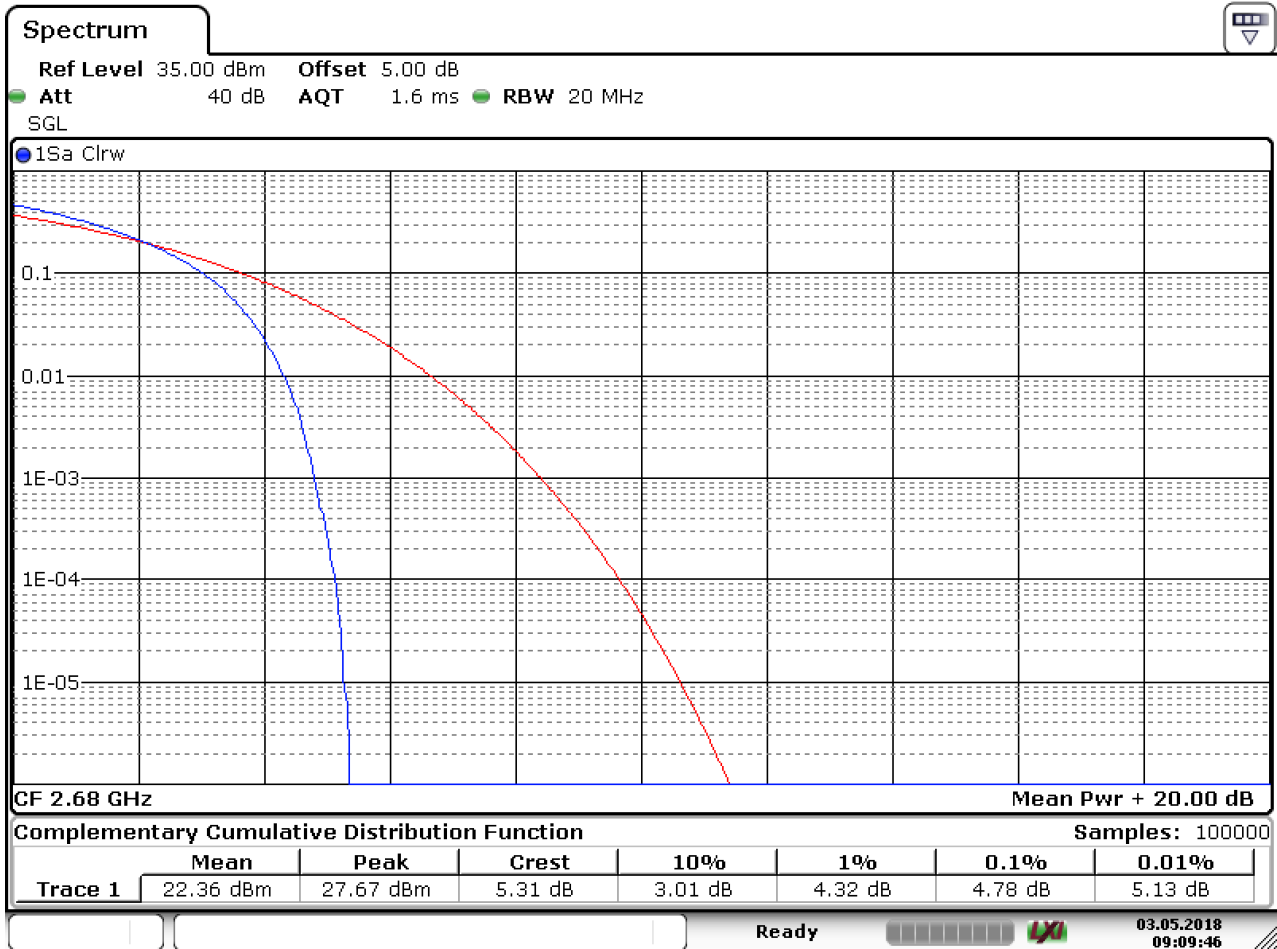
2.1.1.2.2 Test Channel = MCH



Date: 3.MAY.2018 09:08:31



2.1.1.2.3 Test Channel = HCH



Date: 3.MAY.2018 09:09:46

3 Modulation Characteristics

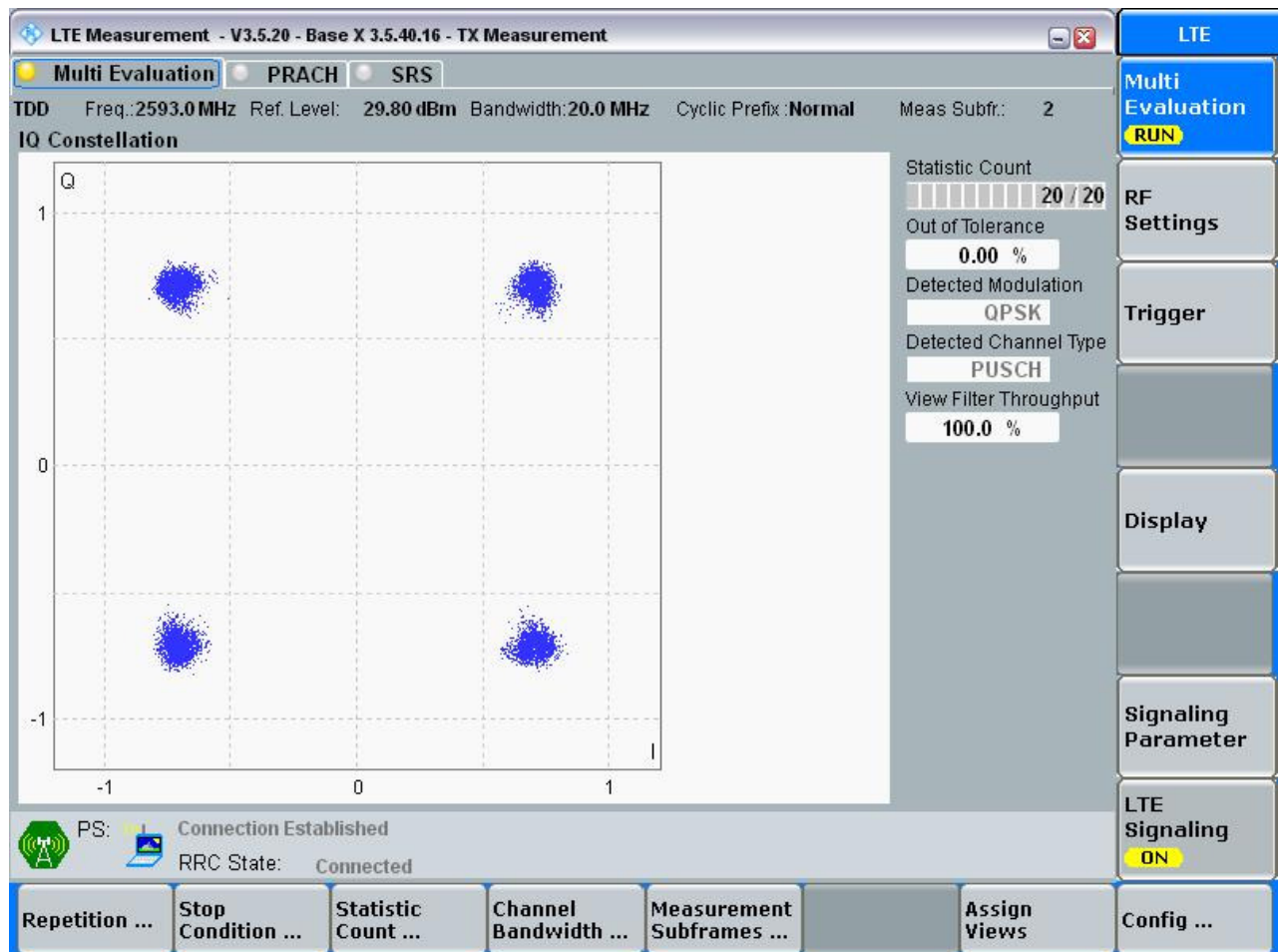
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band41

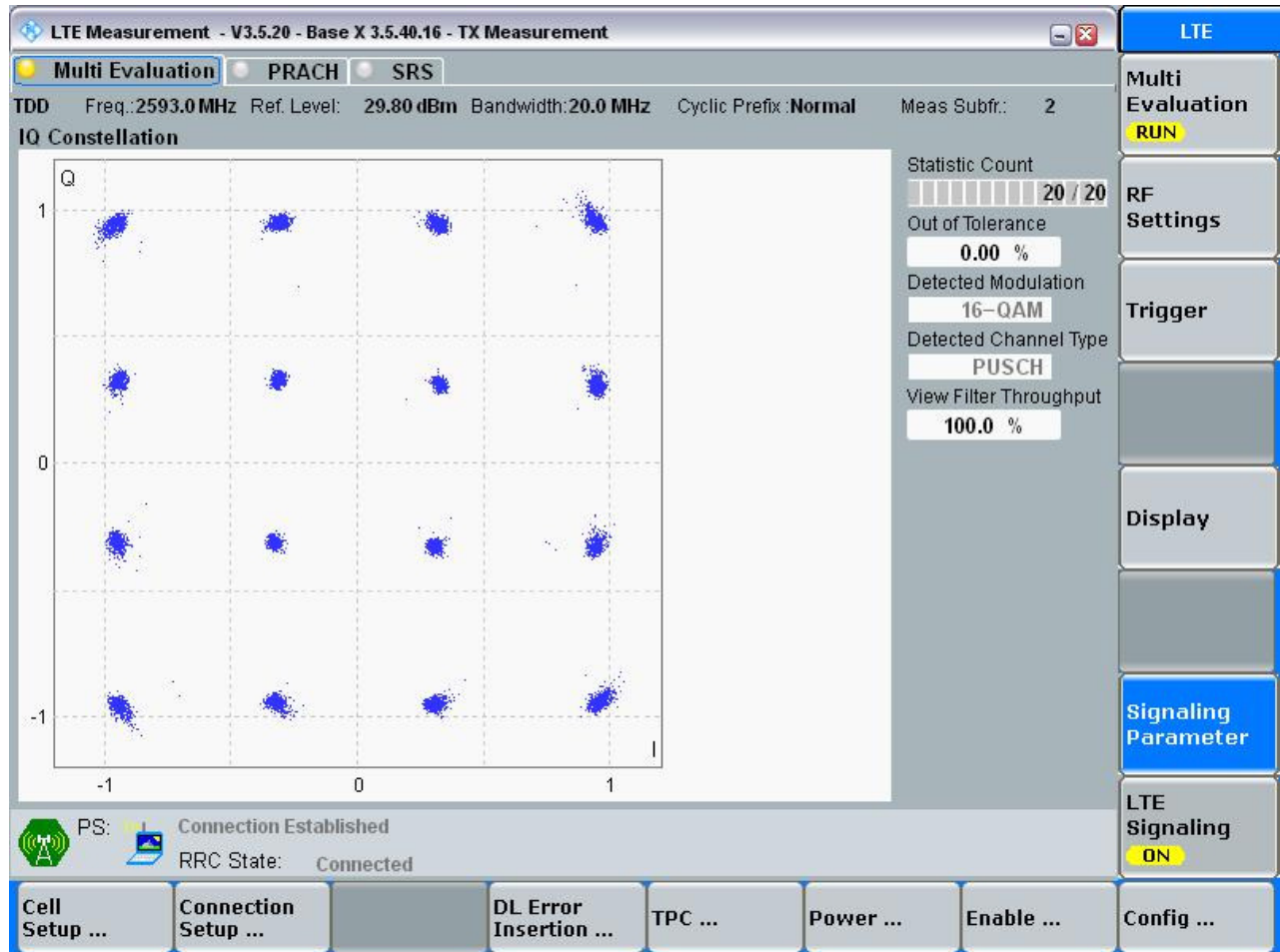
3.1.1.1 Test Mode = LTE /TM1 20MHz

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = LTE /TM2 20MHz

3.1.1.2.1 Test Channel = MCH



The screenshot displays the 'LTE Measurement - V3.5.20 - Base X 3.5.40.16 - TX Measurement' window. The interface includes a top navigation bar with 'LTE' and 'Multi Evaluation' tabs. Below this, measurement parameters are listed: TDD, Freq.: 2593.0 MHz, Ref. Level: 29.80 dBm, Bandwidth: 20.0 MHz, Cyclic Prefix: Normal, and Meas Subfr.: 2. The 'IQ Constellation' plot shows a 16-QAM signal with 16 distinct clusters of blue dots arranged in a 4x4 grid. To the right of the plot, a 'Statistic Count' section shows '20 / 20' samples, '0.00 %' Out of Tolerance, 'Detected Modulation' as '16-QAM', 'Detected Channel Type' as 'PUSCH', and 'View Filter Throughput' as '100.0 %'. A vertical toolbar on the right contains buttons for 'Multi Evaluation RUN', 'RF Settings', 'Trigger', 'Display', 'Signaling Parameter', and 'LTE Signaling ON'. The bottom status bar shows 'PS: Connection Established' and 'RRC State: Connected'. A bottom control bar contains buttons for 'Cell Setup ...', 'Connection Setup ...', 'DL Error Insertion ...', 'TPC ...', 'Power ...', 'Enable ...', and 'Config ...'.



4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 7	TM1/ 5MHz	LCH	4.47	4.78	PASS
		MCH	4.47	4.80	PASS
		HCH	4.47	4.90	PASS
	TM2/ 5MHz	LCH	4.46	4.78	PASS
		MCH	4.46	4.80	PASS
		HCH	4.46	4.84	PASS
	TM1/10MHz	LCH	8.91	9.45	PASS
		MCH	8.89	9.41	PASS
		HCH	8.89	9.33	PASS
	TM2/ 10MHz	LCH	8.91	9.43	PASS
		MCH	8.91	9.41	PASS
		HCH	8.91	9.47	PASS
	TM1/ 15MHz	LCH	13.35	14.05	PASS
		MCH	13.34	13.94	PASS
		HCH	13.37	13.82	PASS
	TM2/ 15MHz	LCH	13.37	13.99	PASS
		MCH	13.37	13.97	PASS
		HCH	13.37	14.00	PASS
	TM1/ 20MHz	LCH	17.78	13.66	PASS
		MCH	17.78	13.38	PASS
		HCH	17.78	13.42	PASS
TM2/ 20MHz	LCH	17.78	13.62	PASS	
	MCH	17.78	13.42	PASS	
	HCH	17.82	13.42	PASS	

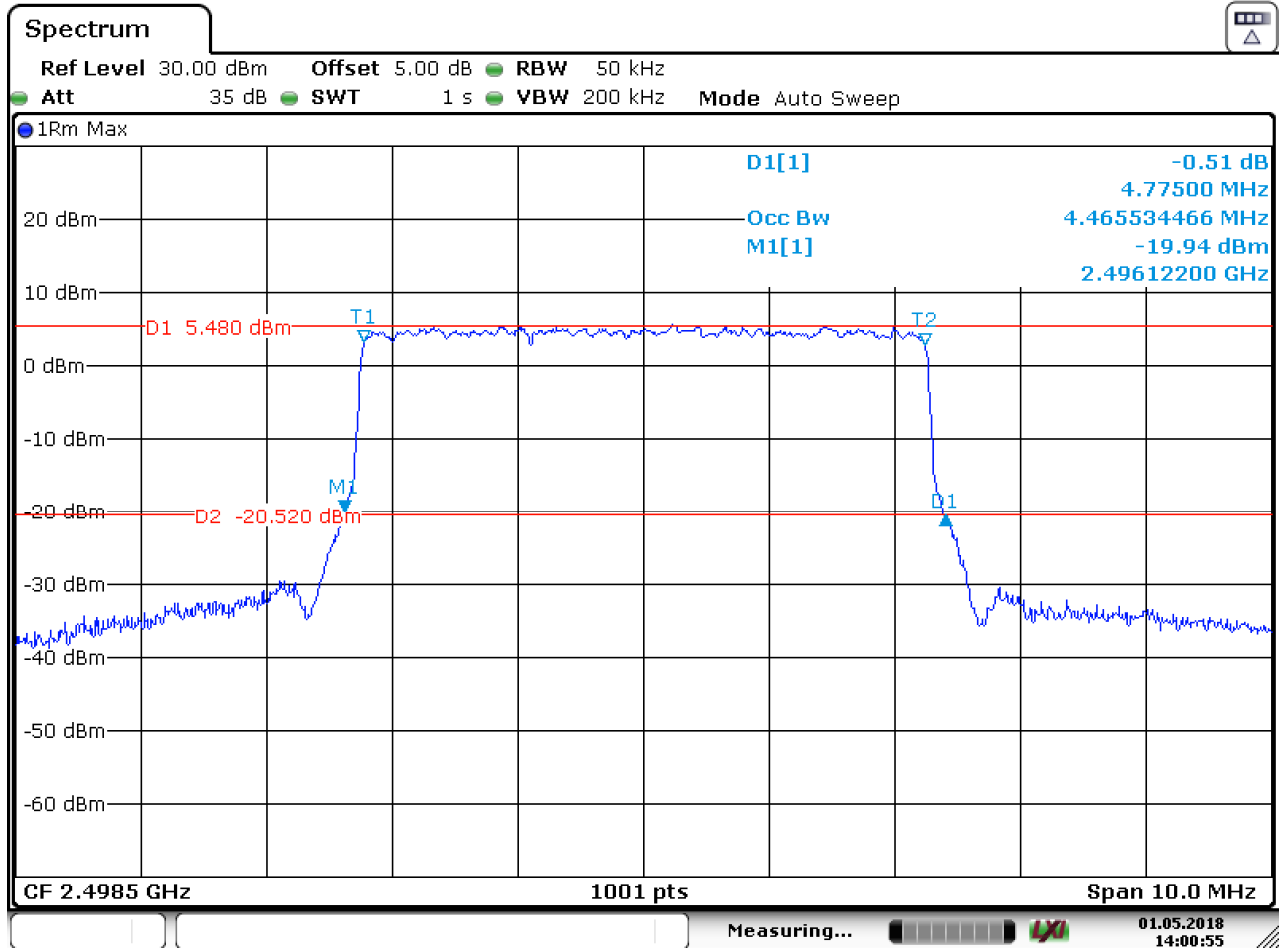


4.1 For LTE

4.1.1 Test Band = LTE band41

4.1.1.1 Test Mode = LTE/TM1 5MHz

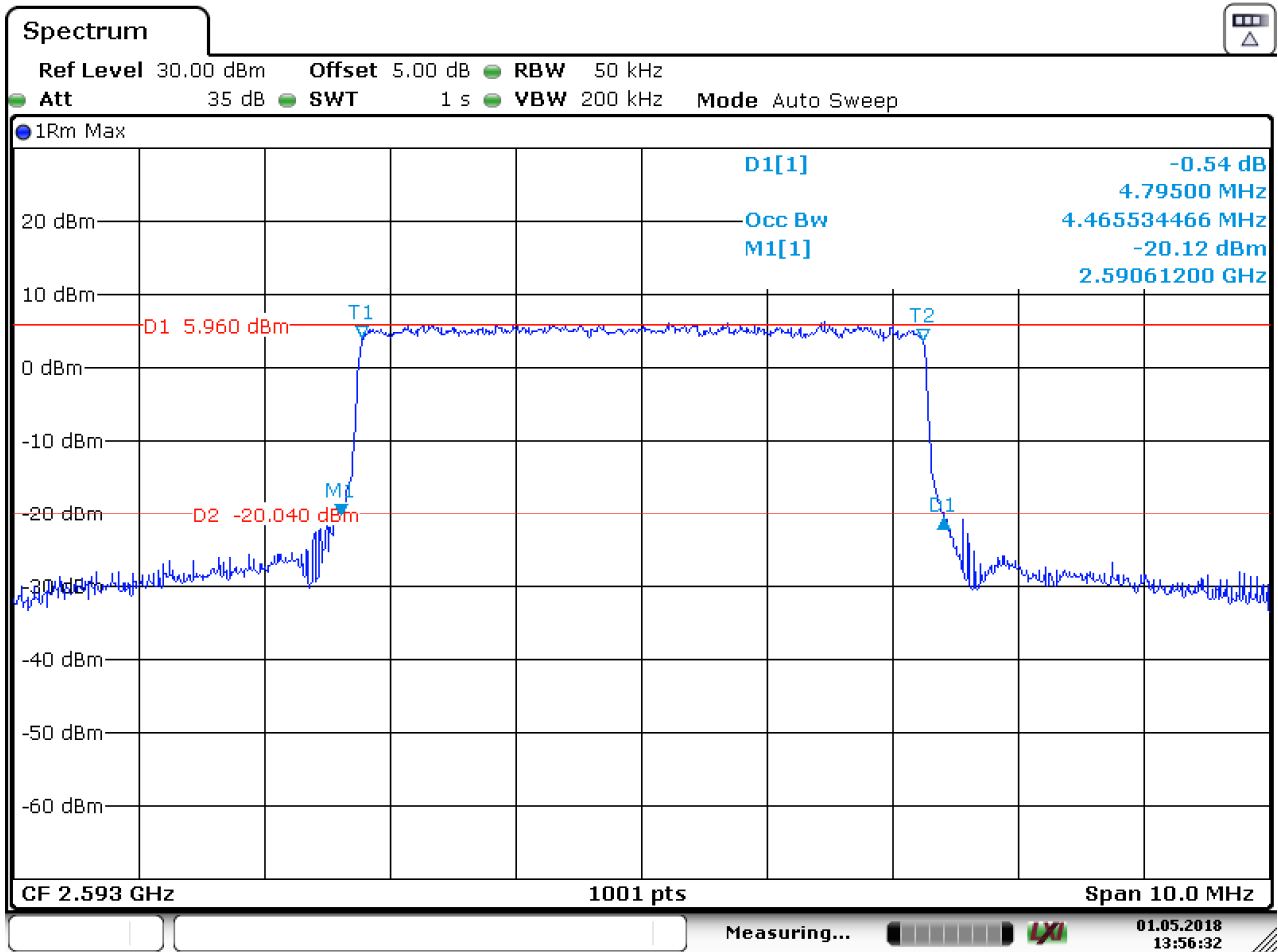
4.1.1.1.1 Test Channel = LCH



Date: 1.MAY.2018 14:00:55



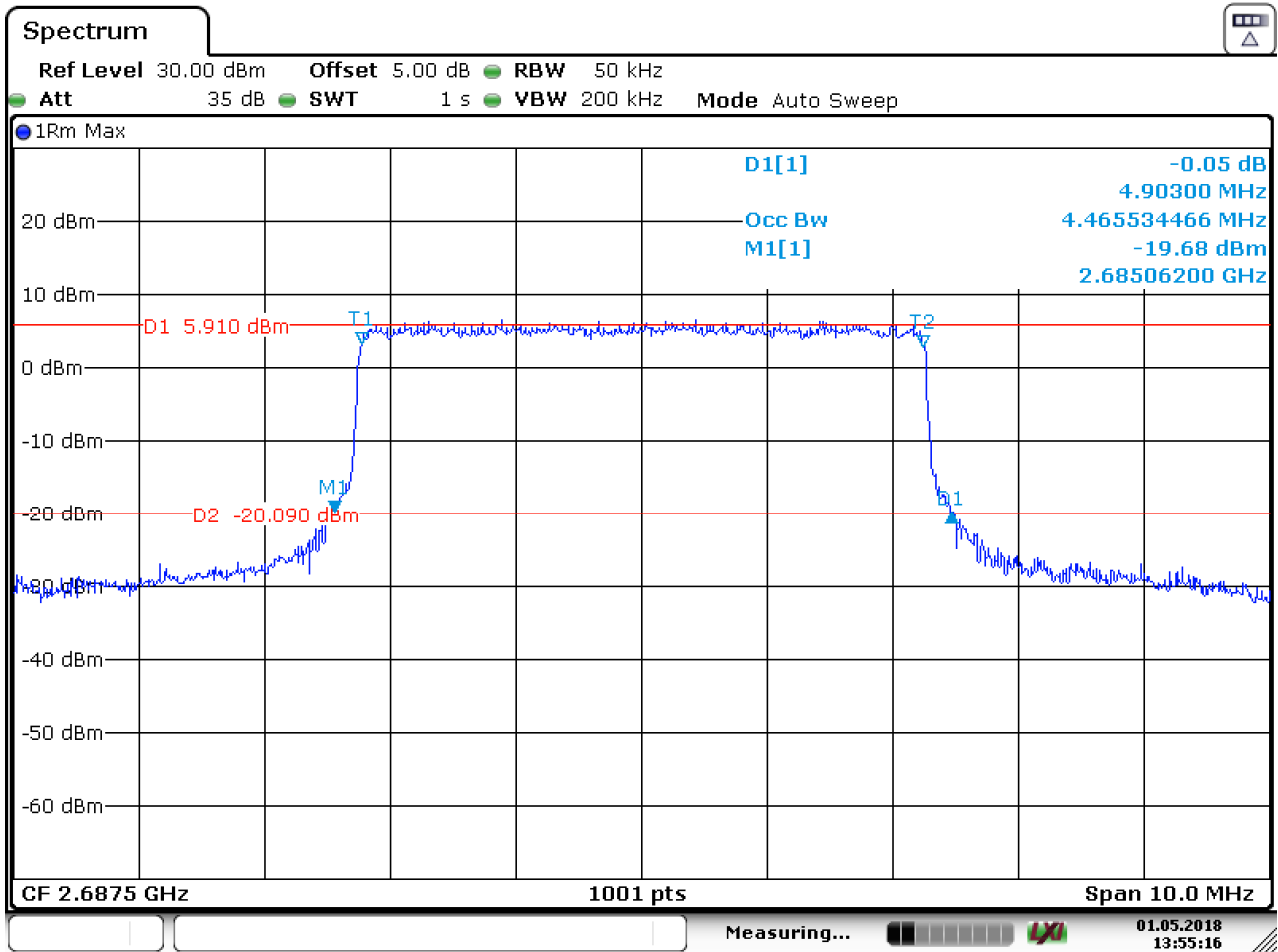
4.1.1.1.2 Test Channel = MCH



Date: 1.MAY.2018 13:56:33



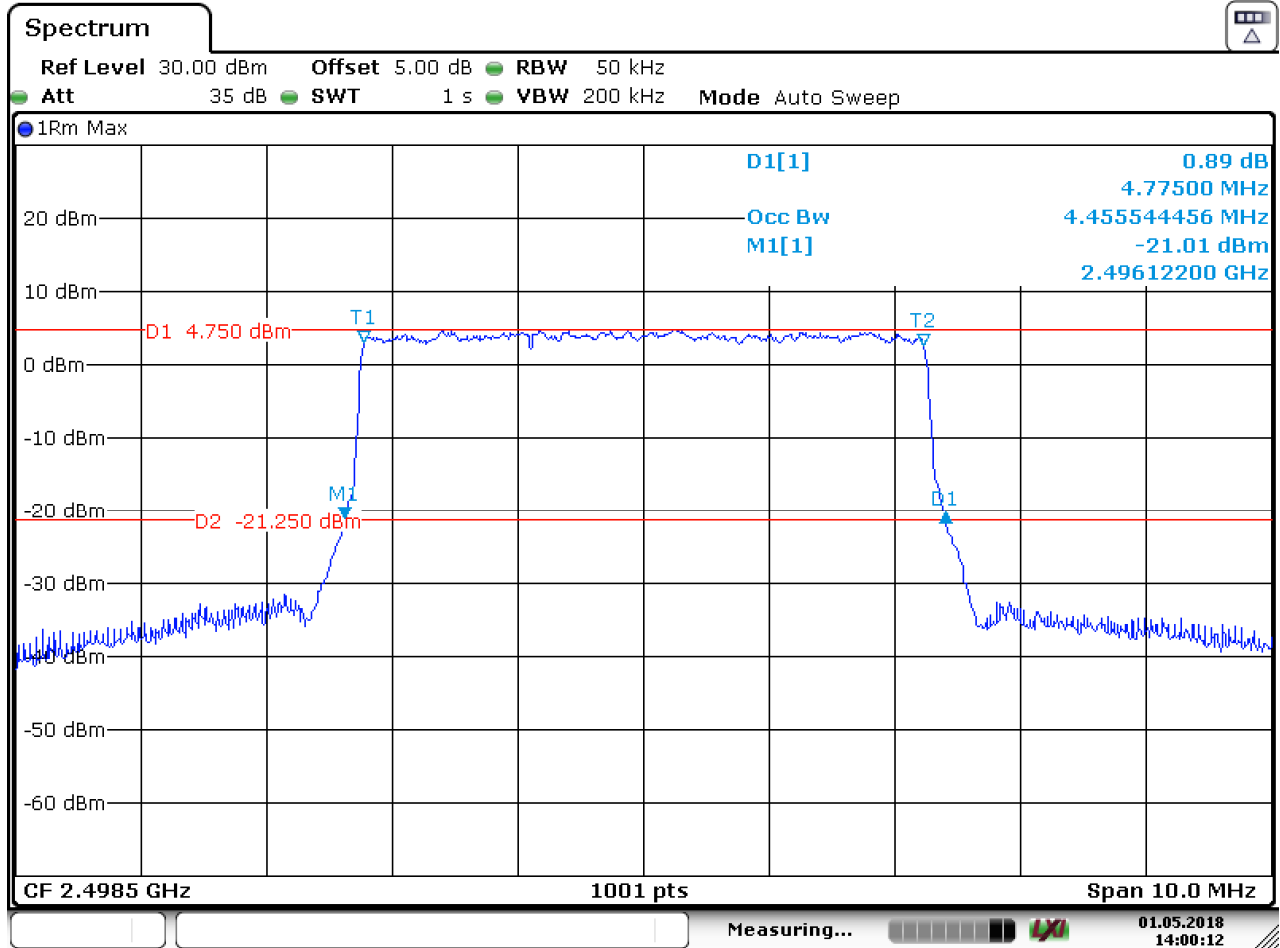
4.1.1.1.3 Test Channel = HCH



Date: 1.MAY.2018 13:55:16

4.1.1.2 Test Mode = LTE/TM2 5MHz

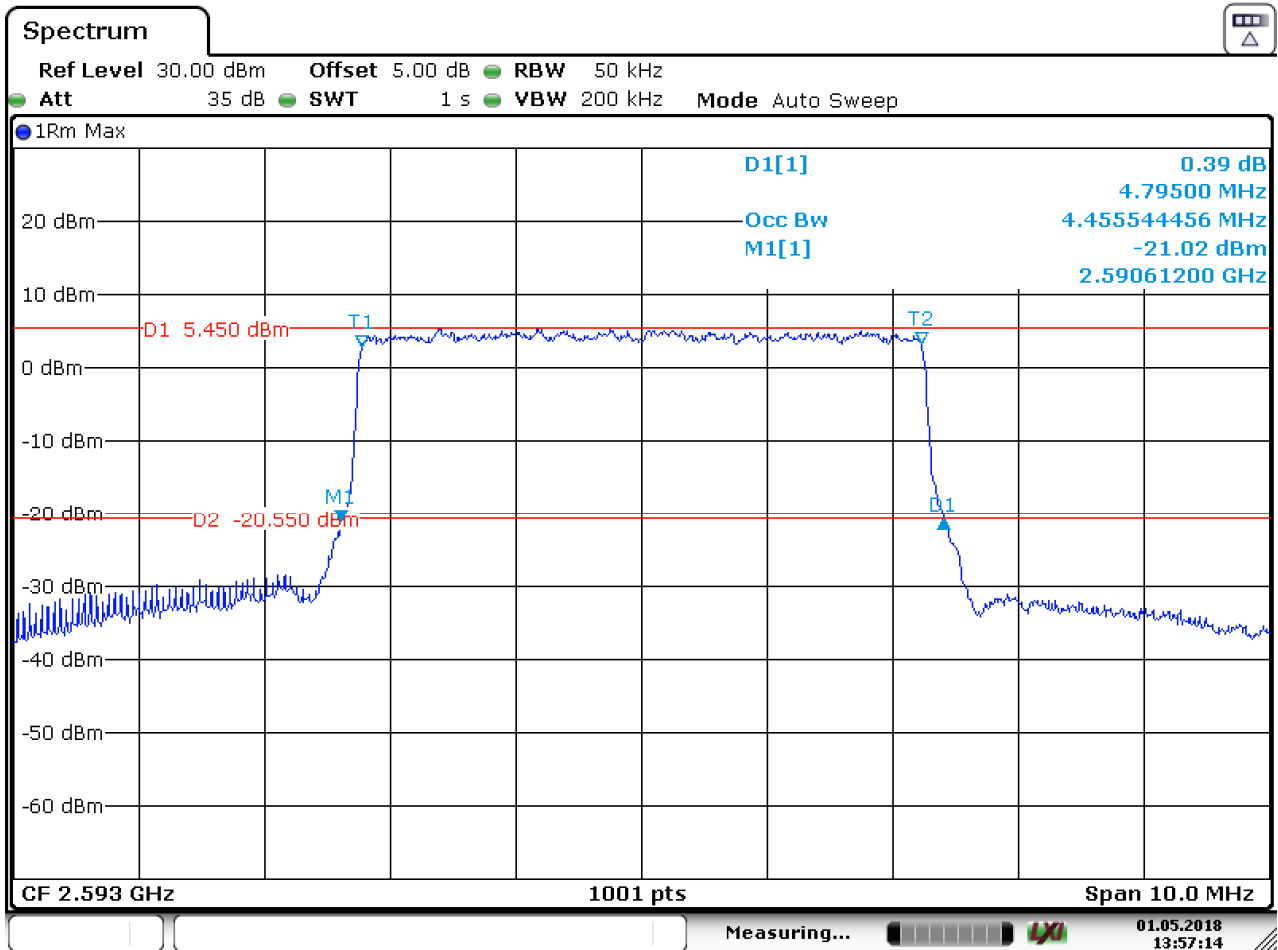
4.1.1.2.1 Test Channel = LCH



Date: 1.MAY.2018 14:00:12

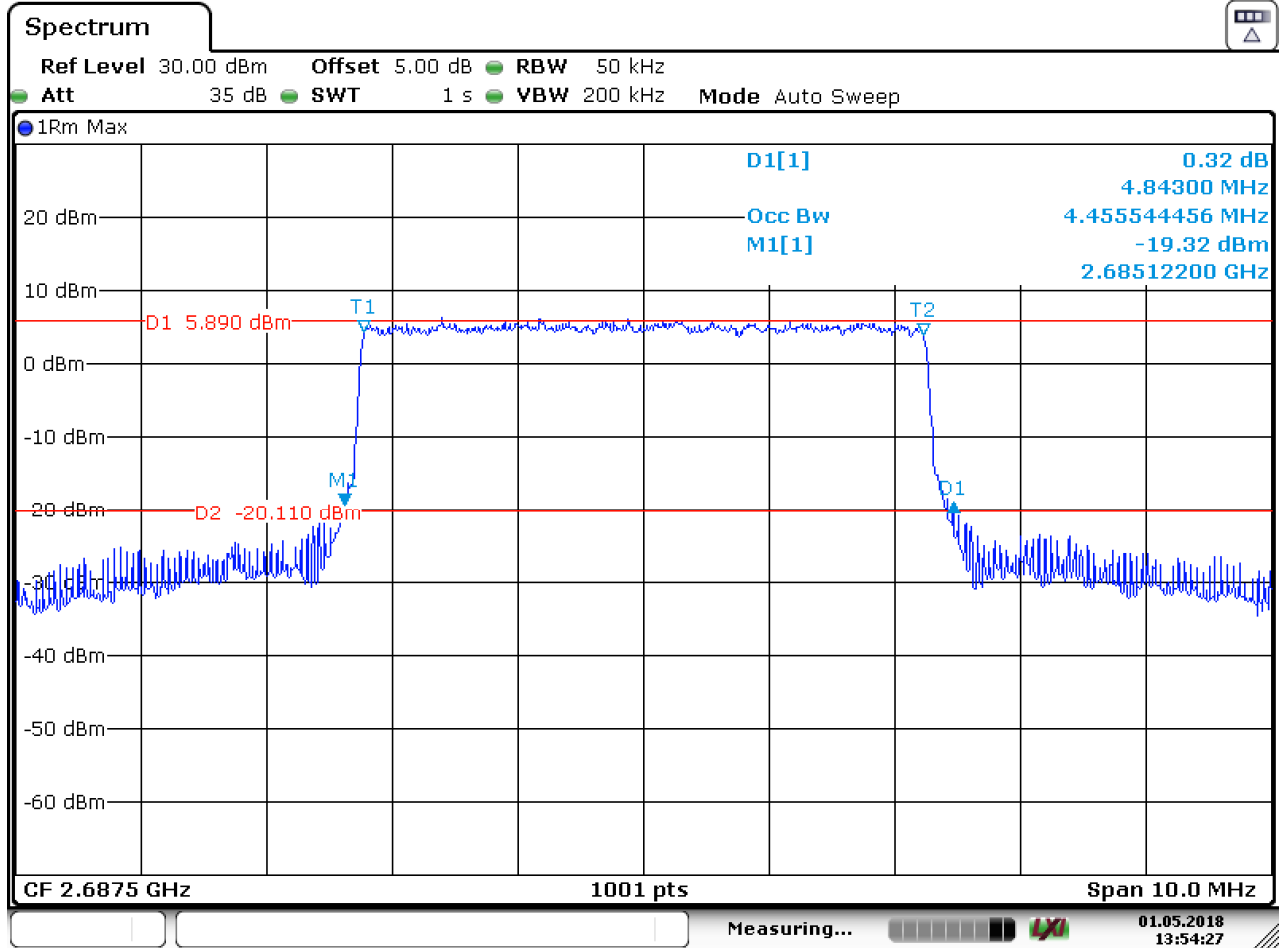


4.1.1.2.2 Test Channel = MCH



Date: 1.MAY.2018 13:57:14

4.1.1.2.3 Test Channel = HCH

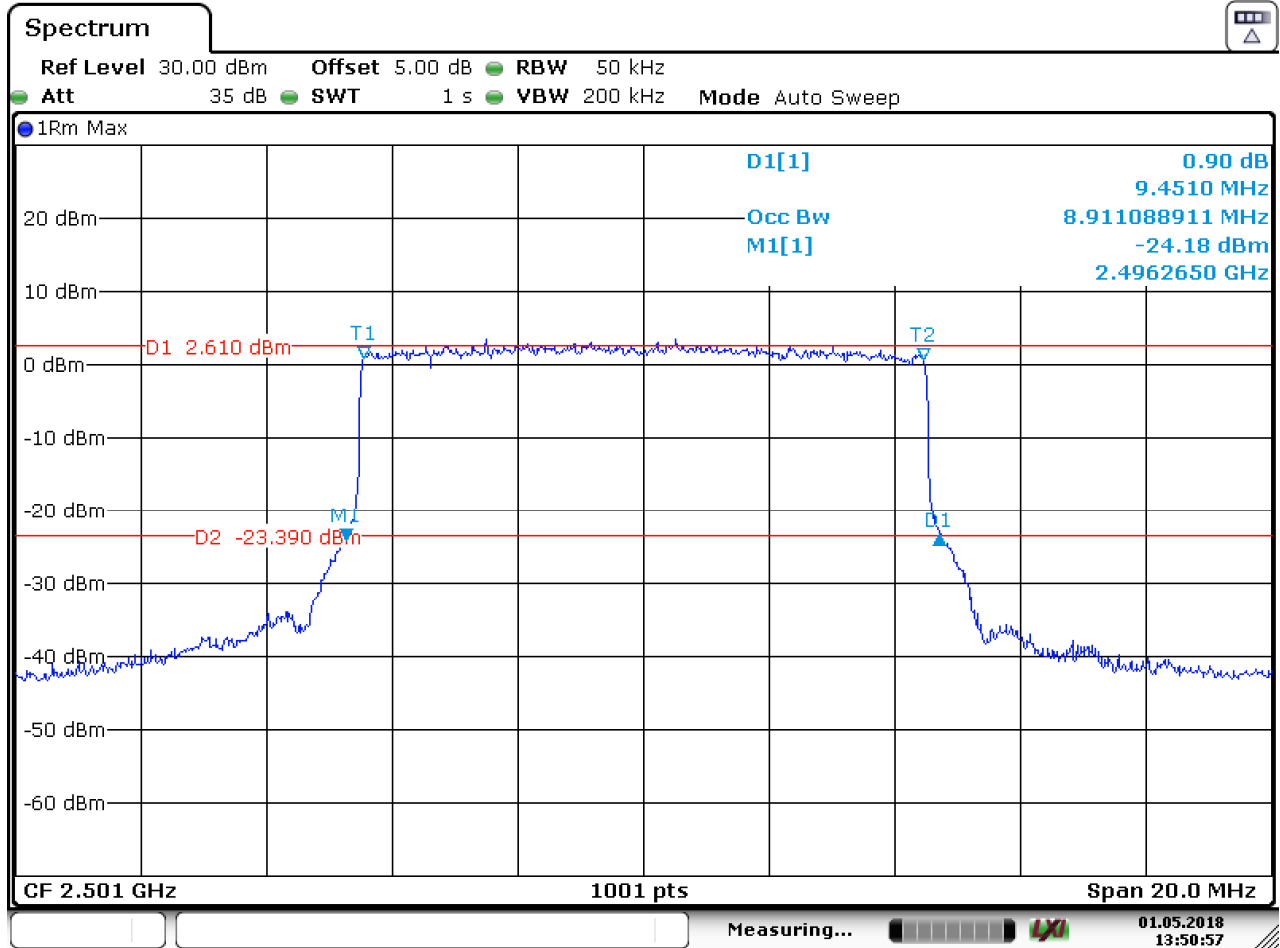


Date: 1.MAY.2018 13:54:28



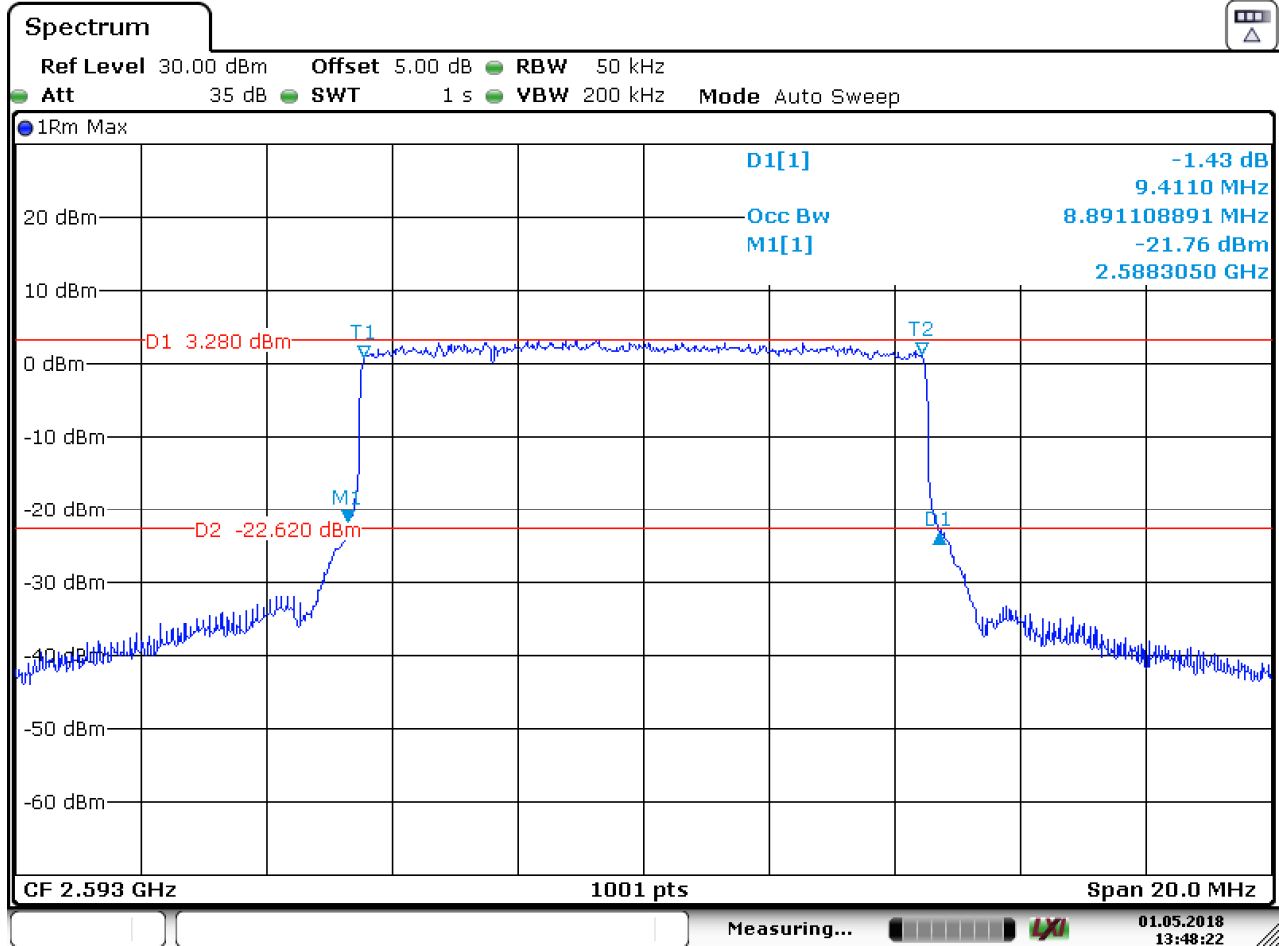
4.1.1.3 Test Mode = LTE/TM1 10MHz

4.1.1.3.1 Test Channel = LCH



Date: 1.MAY.2018 13:50:57

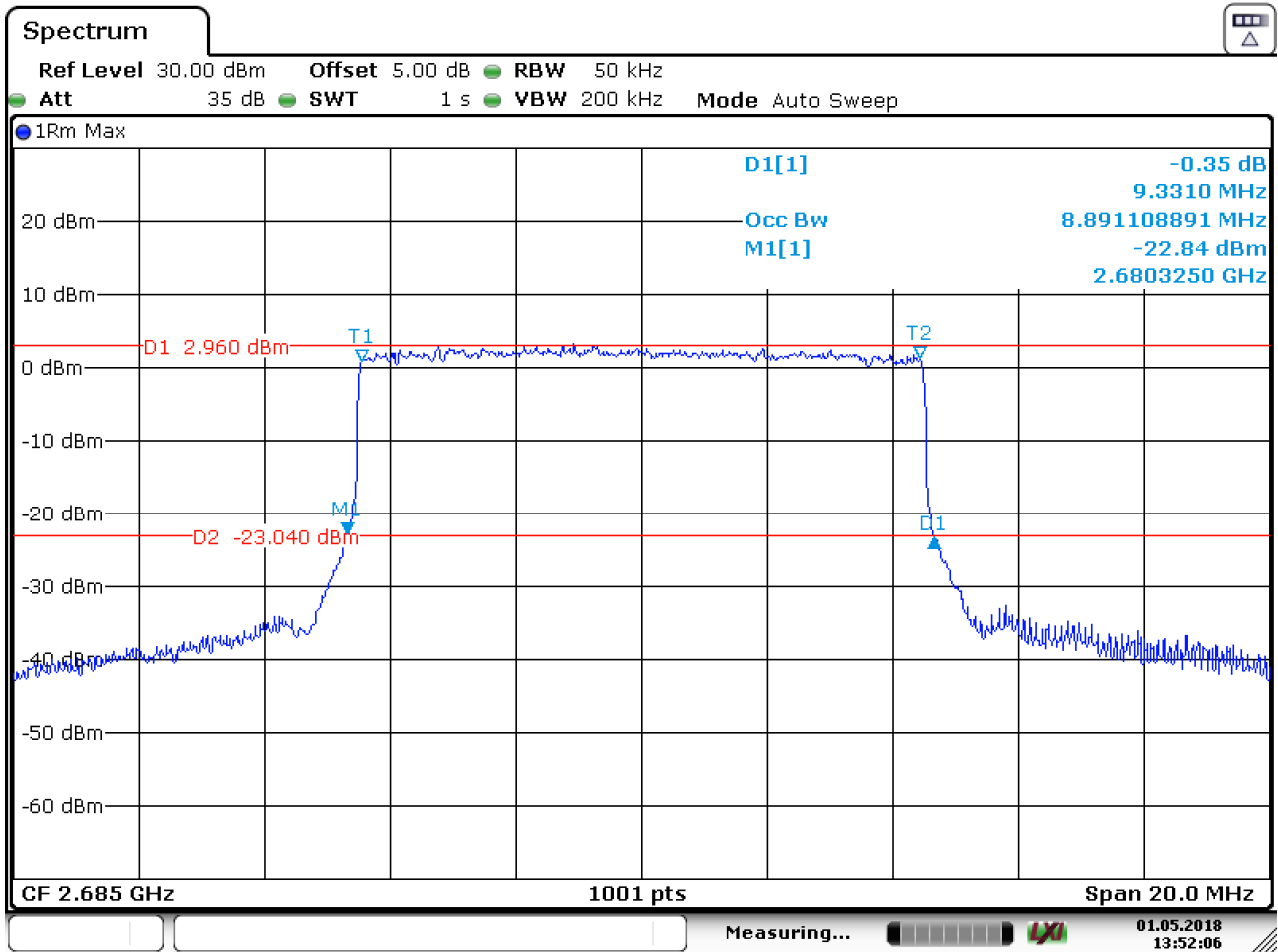
4.1.1.3.2 Test Channel = MCH



Date: 1.MAY.2018 13:48:23



4.1.1.3.3 Test Channel = HCH

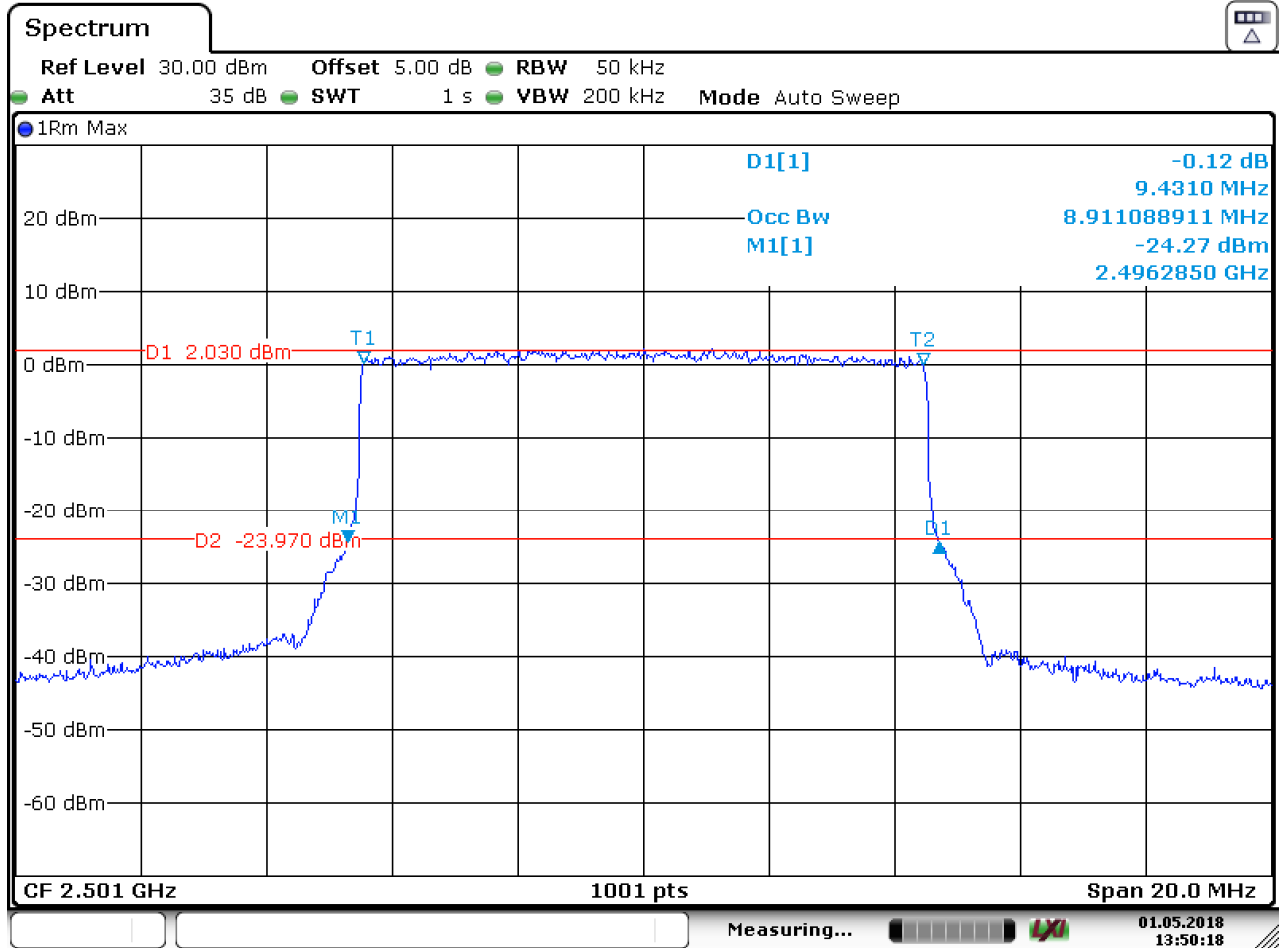


Date: 1.MAY.2018 13:52:06



4.1.1.4 Test Mode = LTE/TM2 10MHz

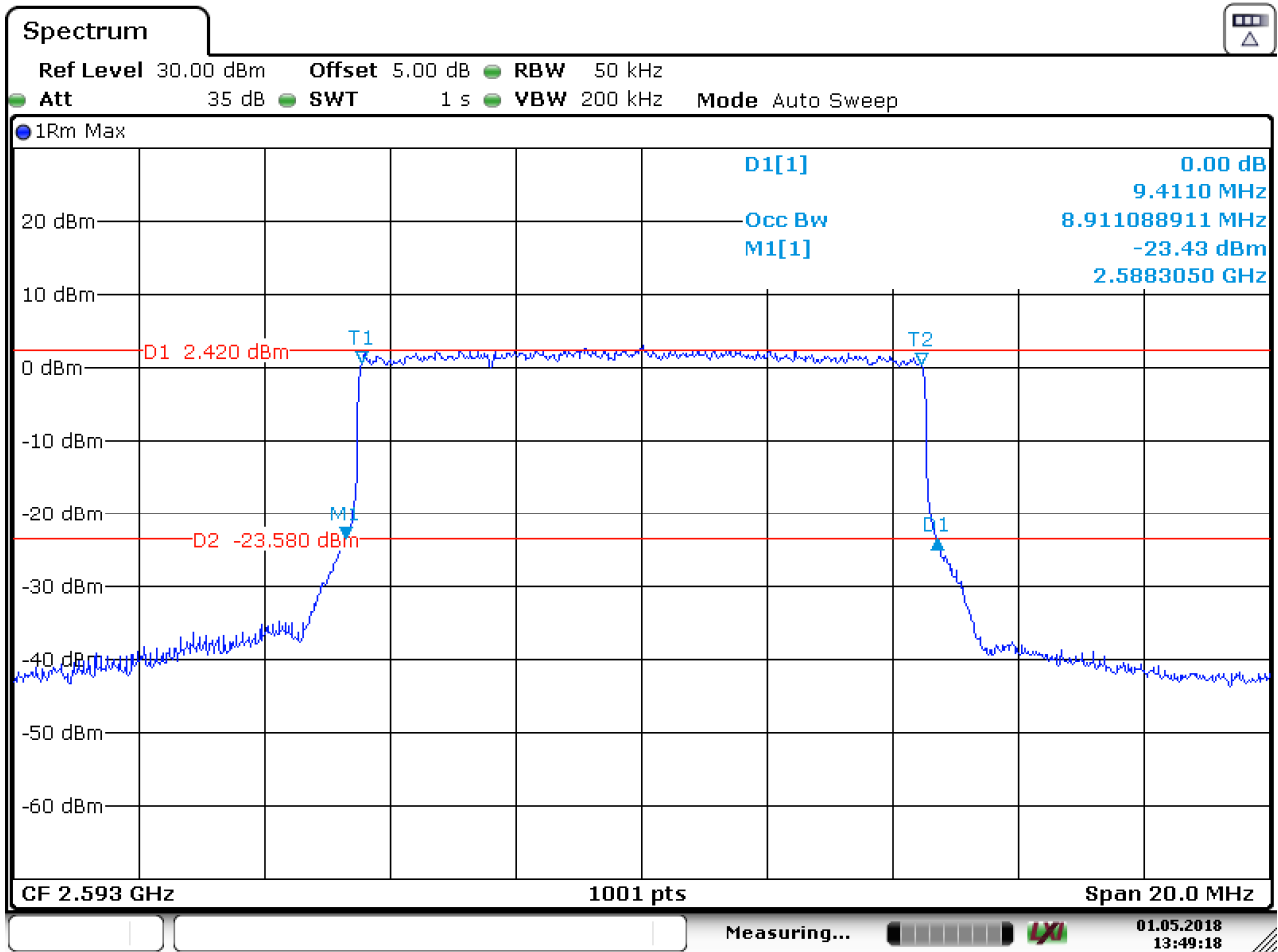
4.1.1.4.1 Test Channel = LCH



Date: 1.MAY.2018 13:50:18



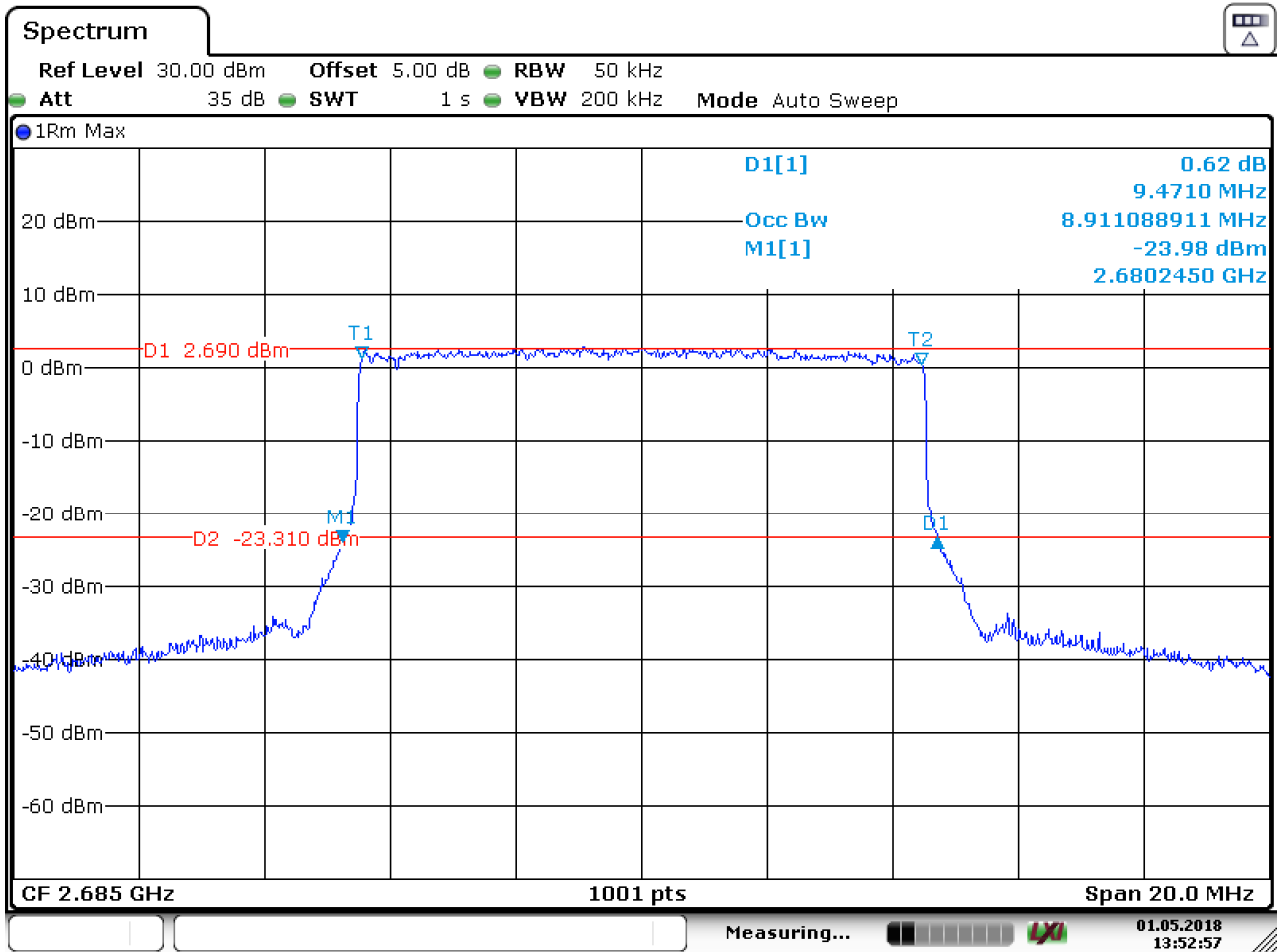
4.1.1.4.2 Test Channel = MCH



Date: 1.MAY.2018 13:49:19



4.1.1.4.3 Test Channel = HCH

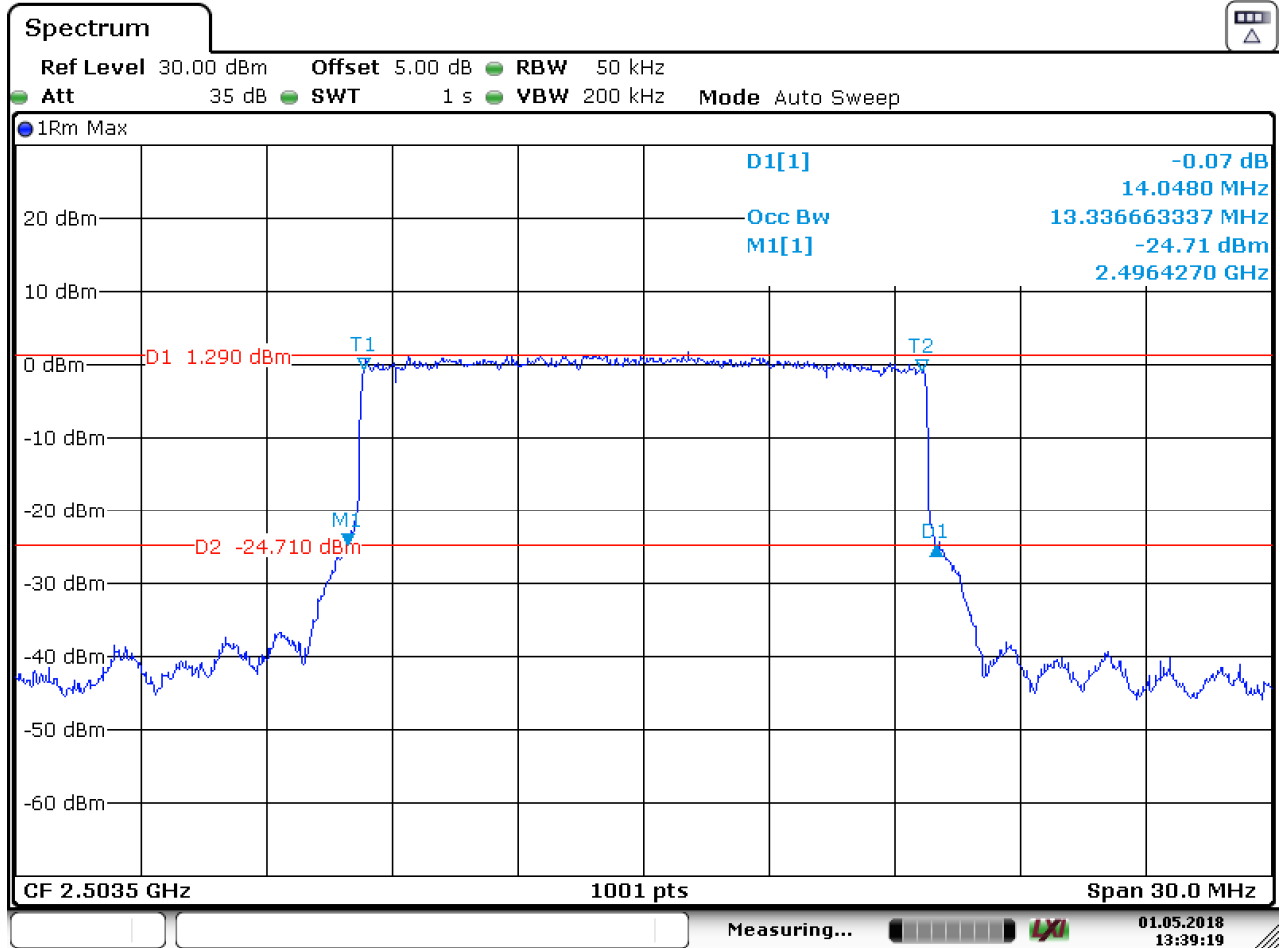


Date: 1.MAY.2018 13:52:58



4.1.1.5 Test Mode = LTE/TM1 15MHz

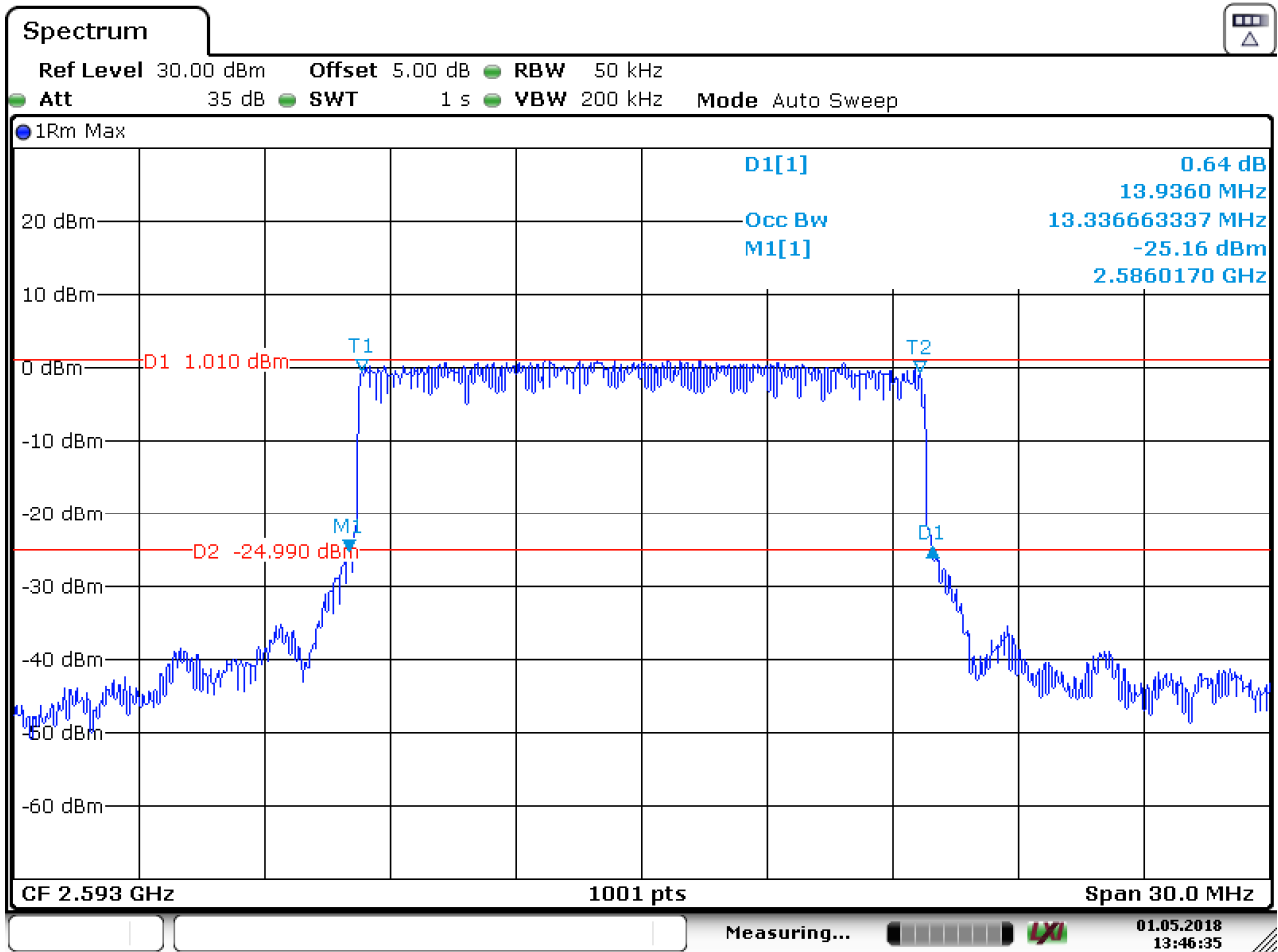
4.1.1.5.1 Test Channel = LCH



Date: 1.MAY.2018 13:39:19



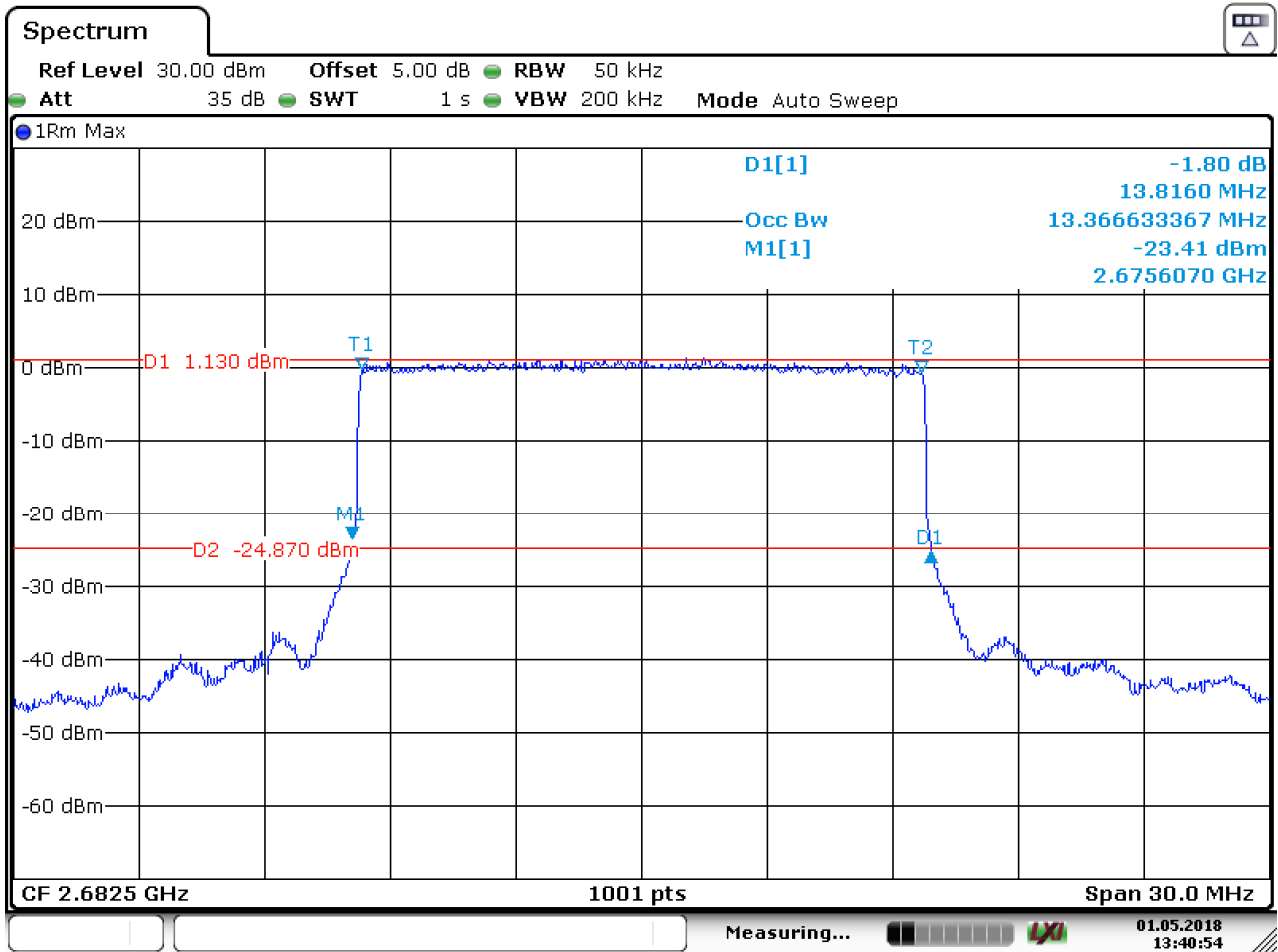
4.1.1.5.2 Test Channel = MCH



Date: 1.MAY.2018 13:46:36



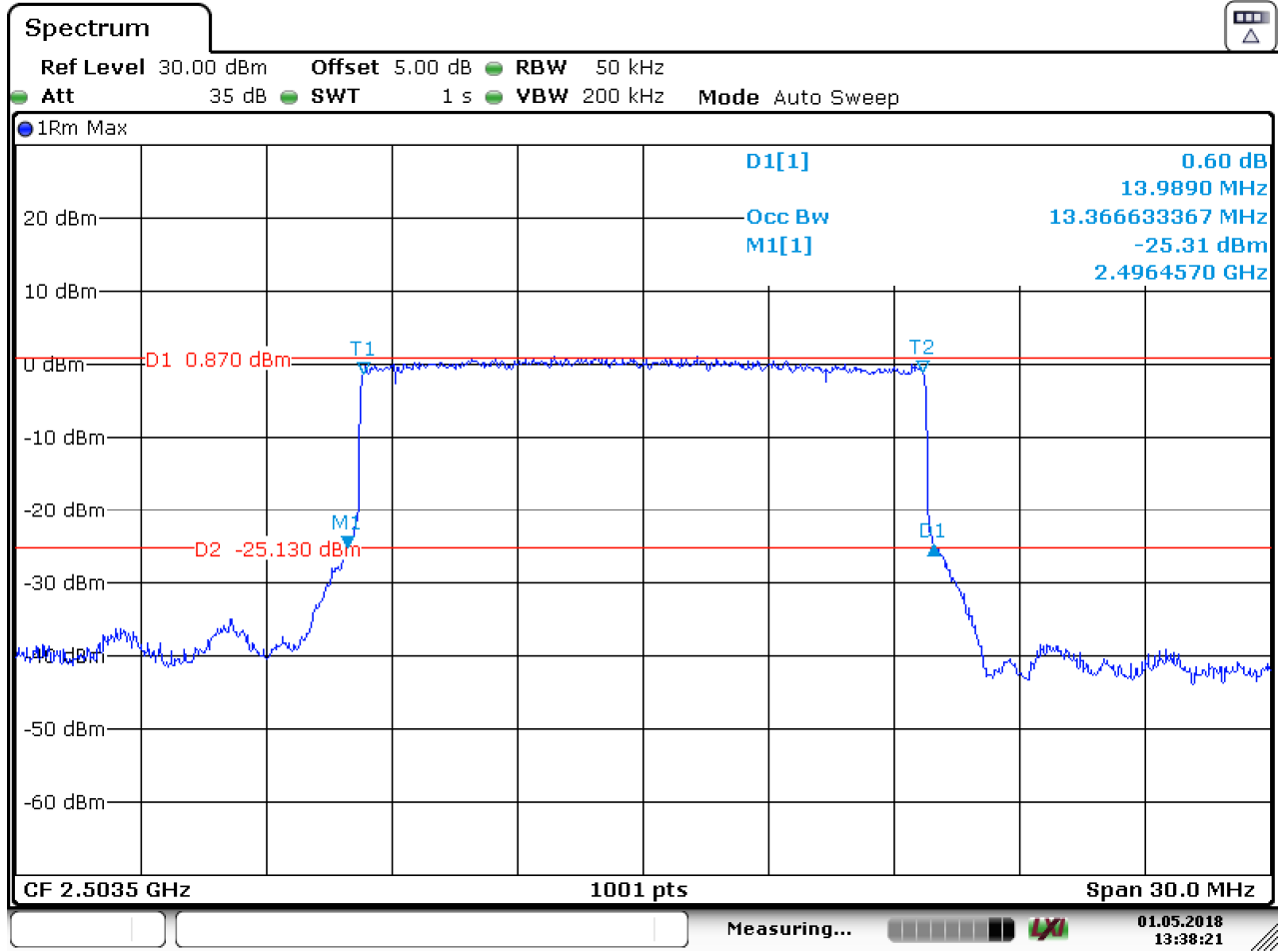
4.1.1.5.3 Test Channel = HCH



Date: 1.MAY.2018 13:40:55

4.1.1.6 Test Mode = LTE/TM2 15MHz

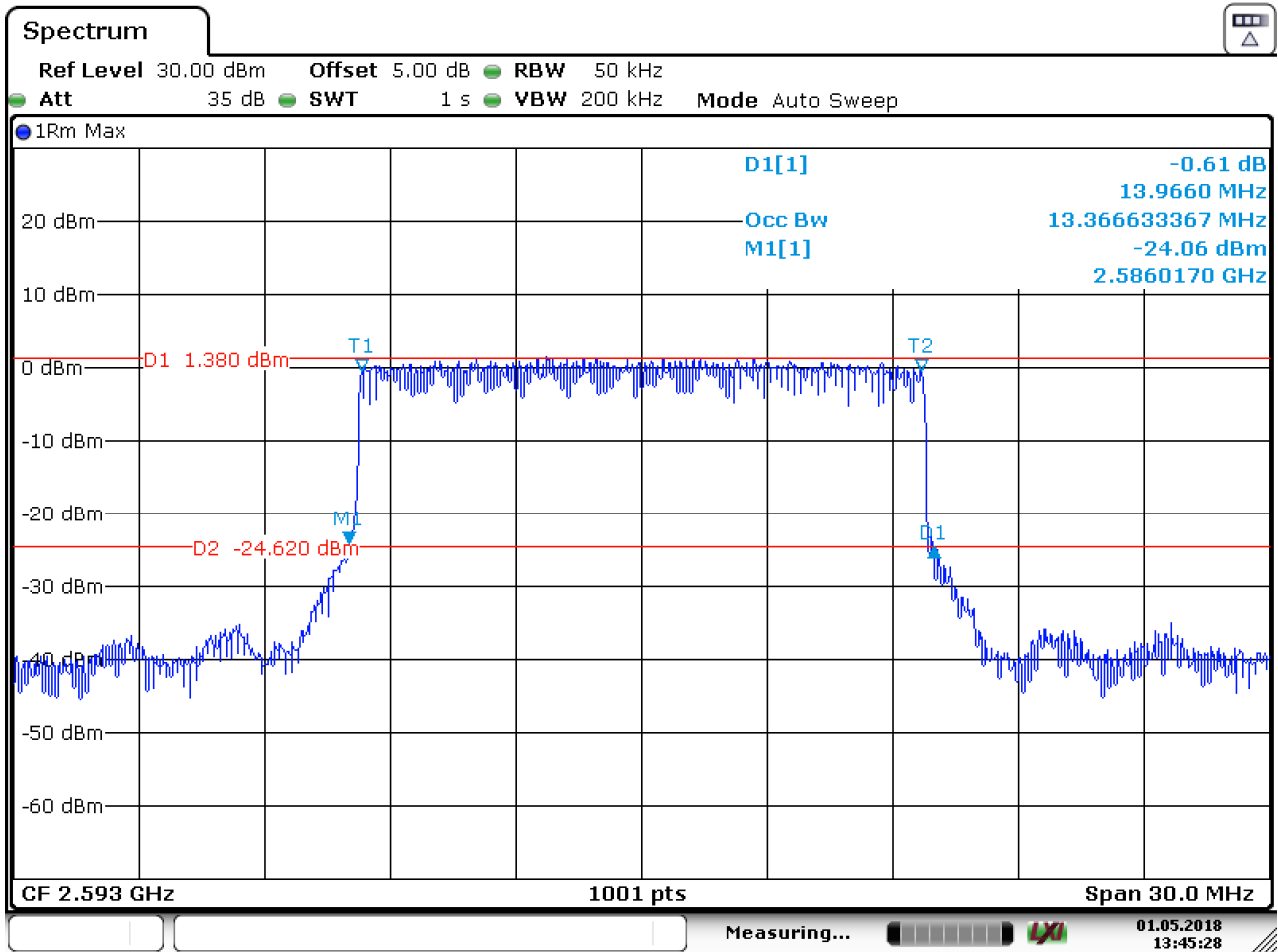
4.1.1.6.1 Test Channel = LCH



Date: 1.MAY.2018 13:38:22

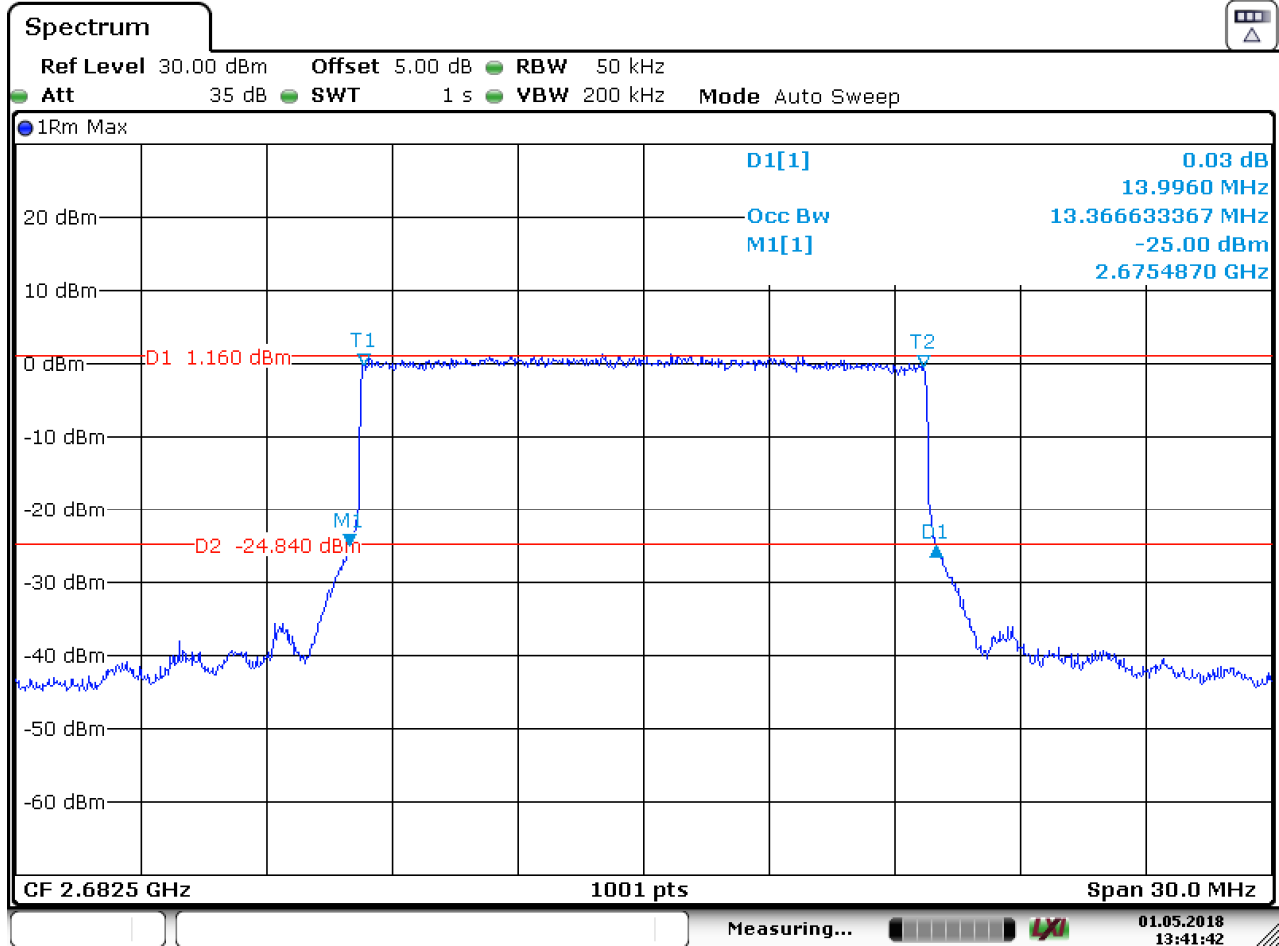


4.1.1.6.2 Test Channel = MCH



Date: 1.MAY.2018 13:45:28

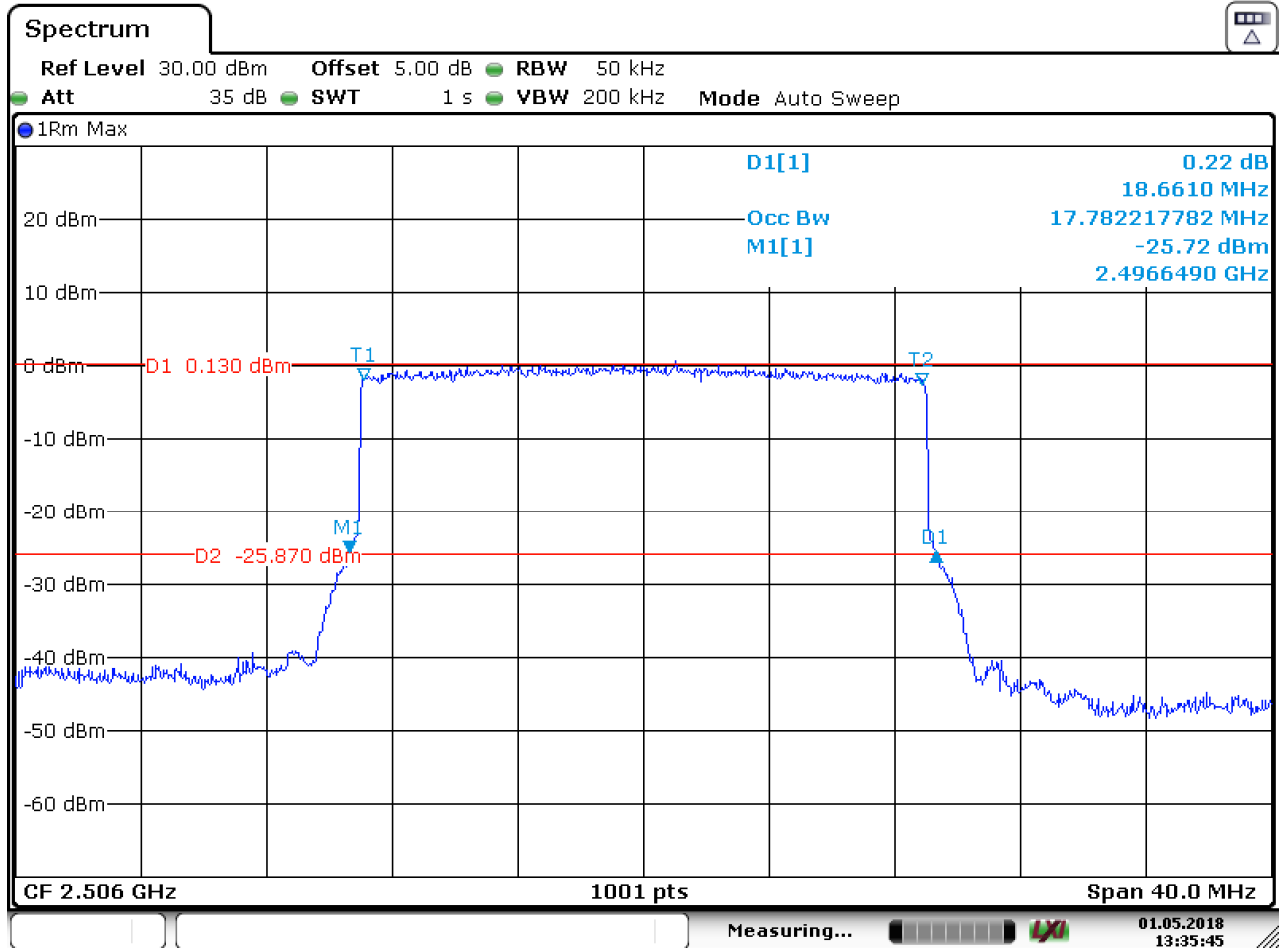
4.1.1.6.3 Test Channel = HCH



Date: 1.MAY.2018 13:41:42

4.1.1.7 Test Mode = LTE/TM1 20MHz

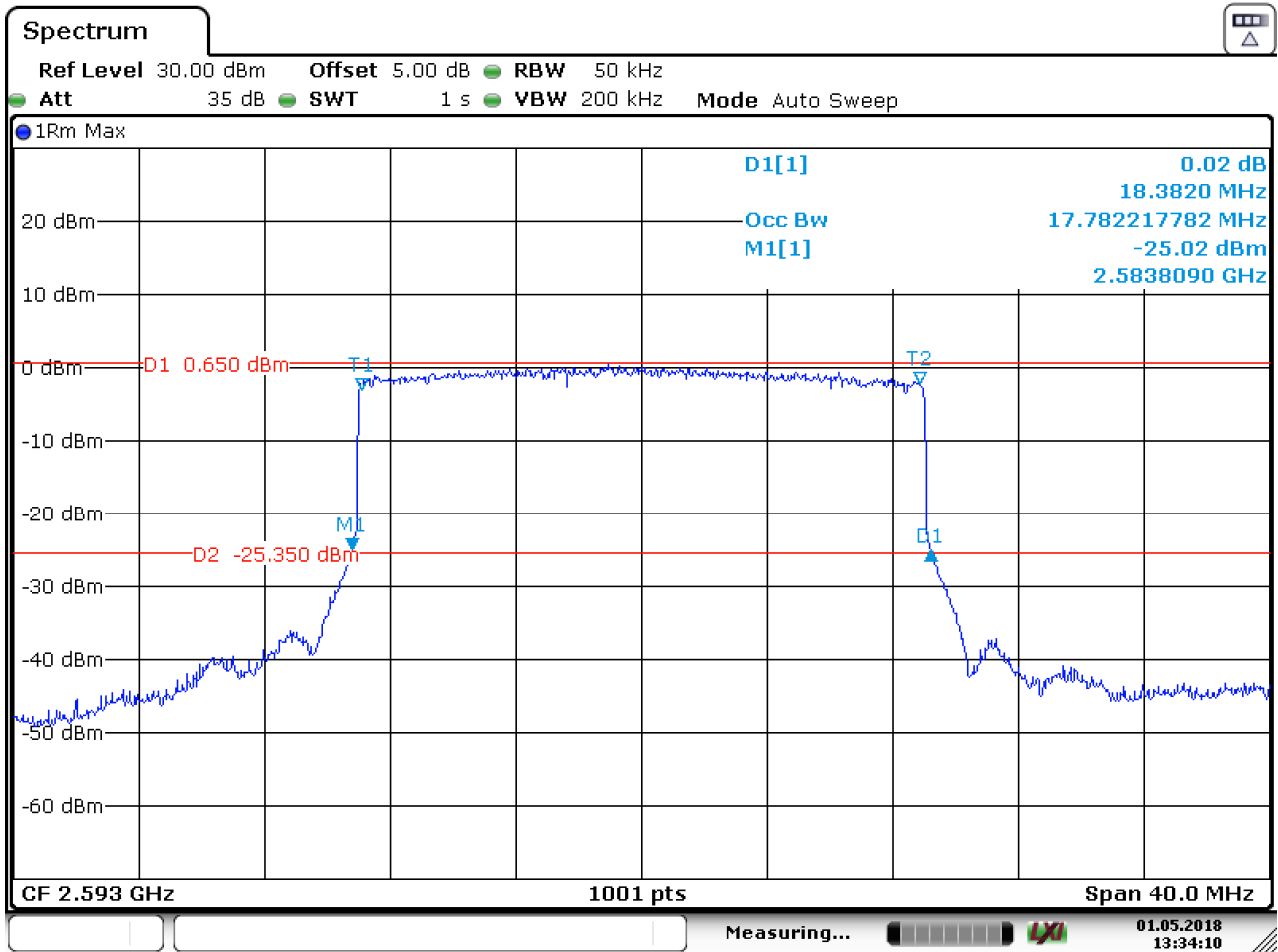
4.1.1.7.1 Test Channel = LCH



Date: 1.MAY.2018 13:35:45



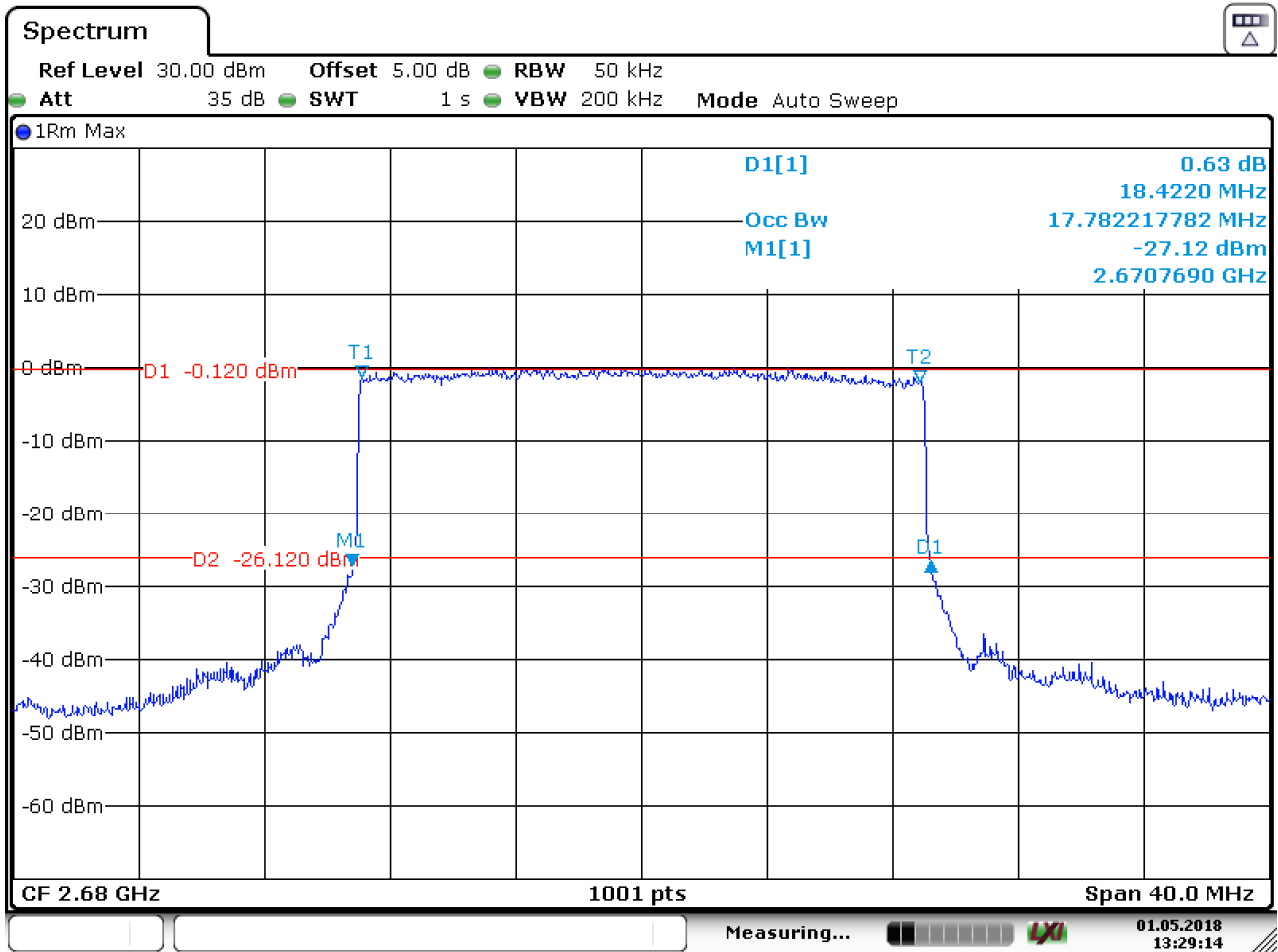
4.1.1.7.2 Test Channel = MCH



Date: 1.MAY.2018 13:34:10



4.1.1.7.3 Test Channel = HCH

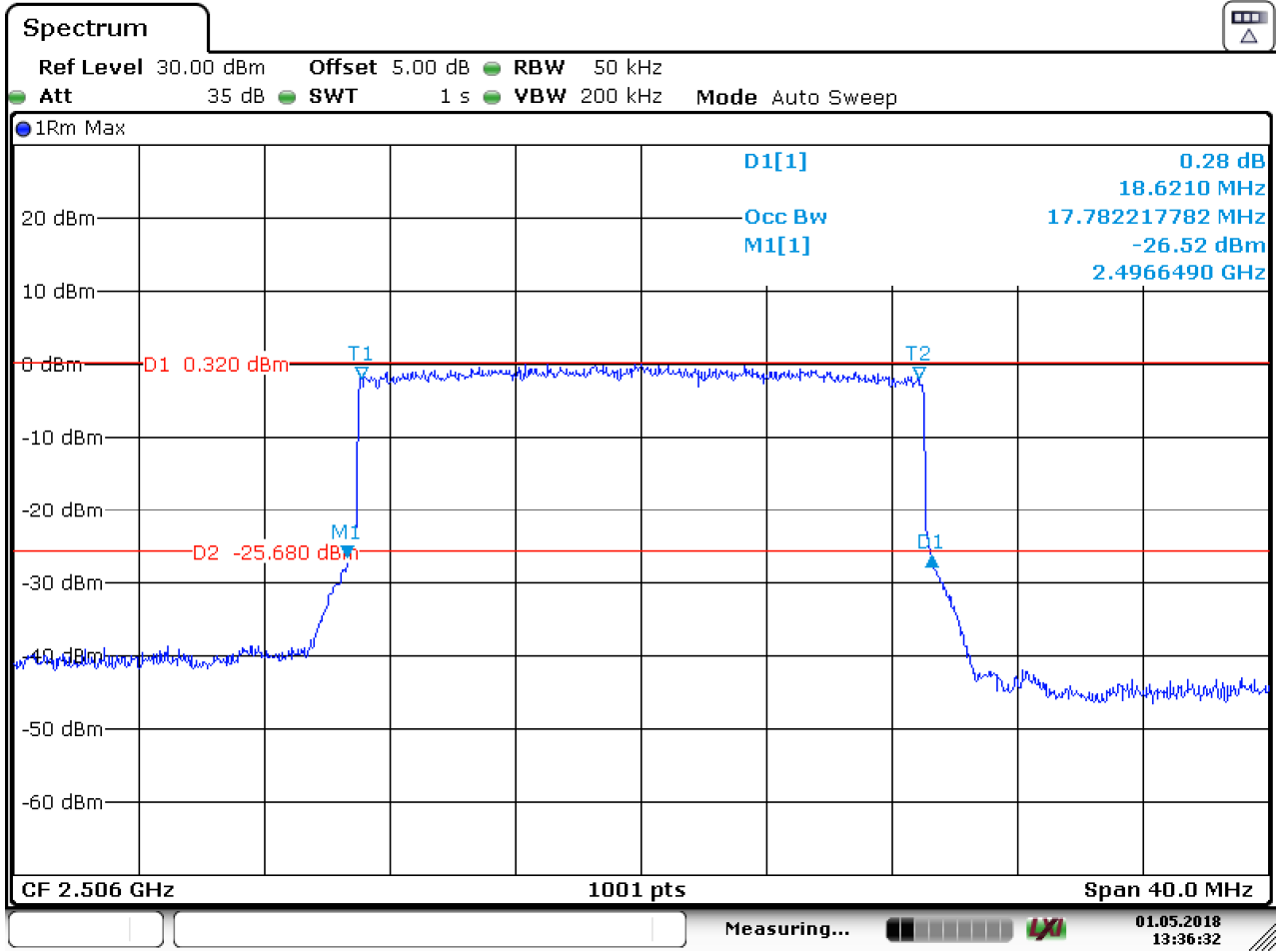


Date: 1.MAY.2018 13:29:14



4.1.1.8 Test Mode = LTE/TM2 20MHz

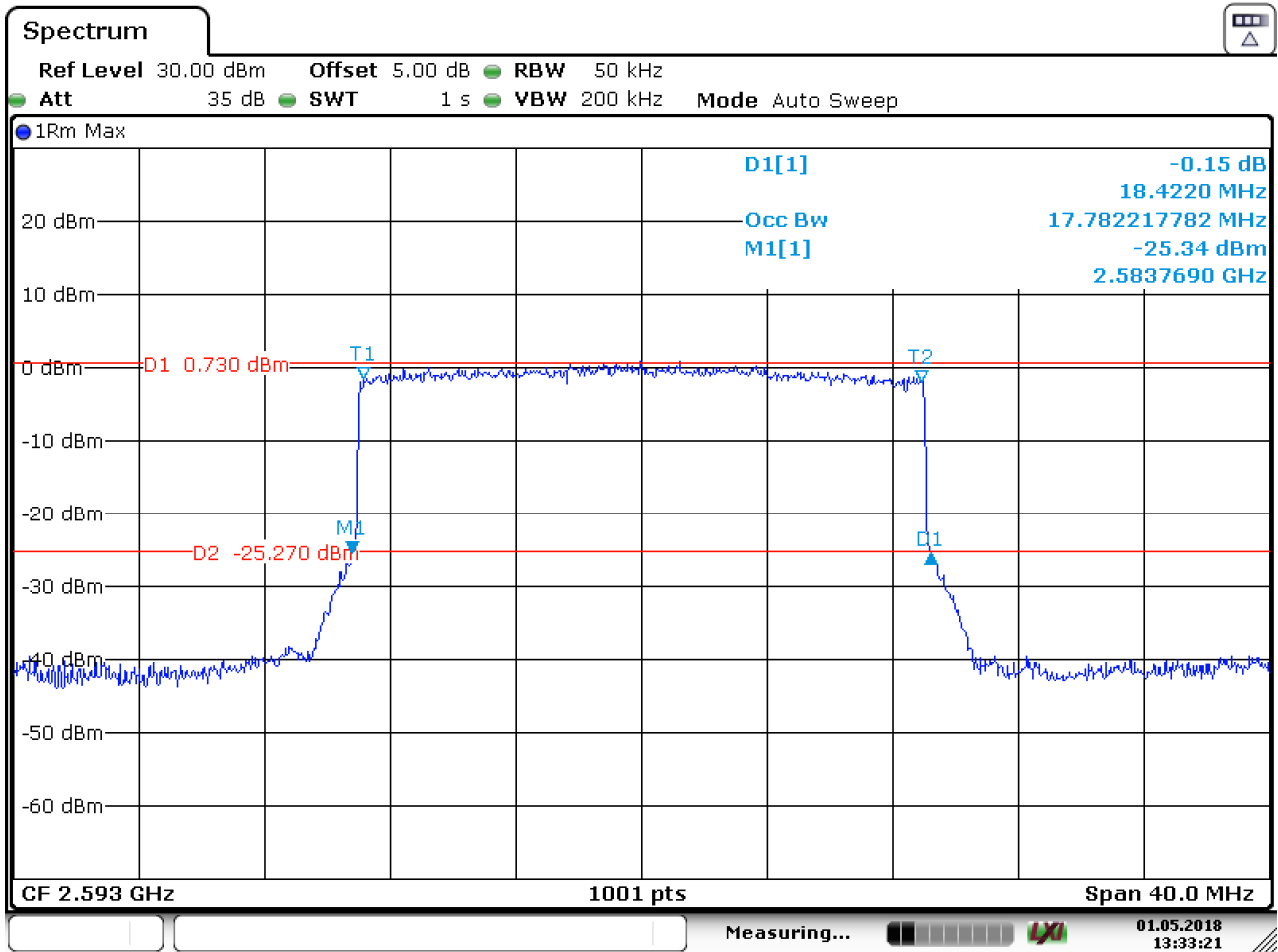
4.1.1.8.1 Test Channel = LCH



Date: 1.MAY.2018 13:36:32



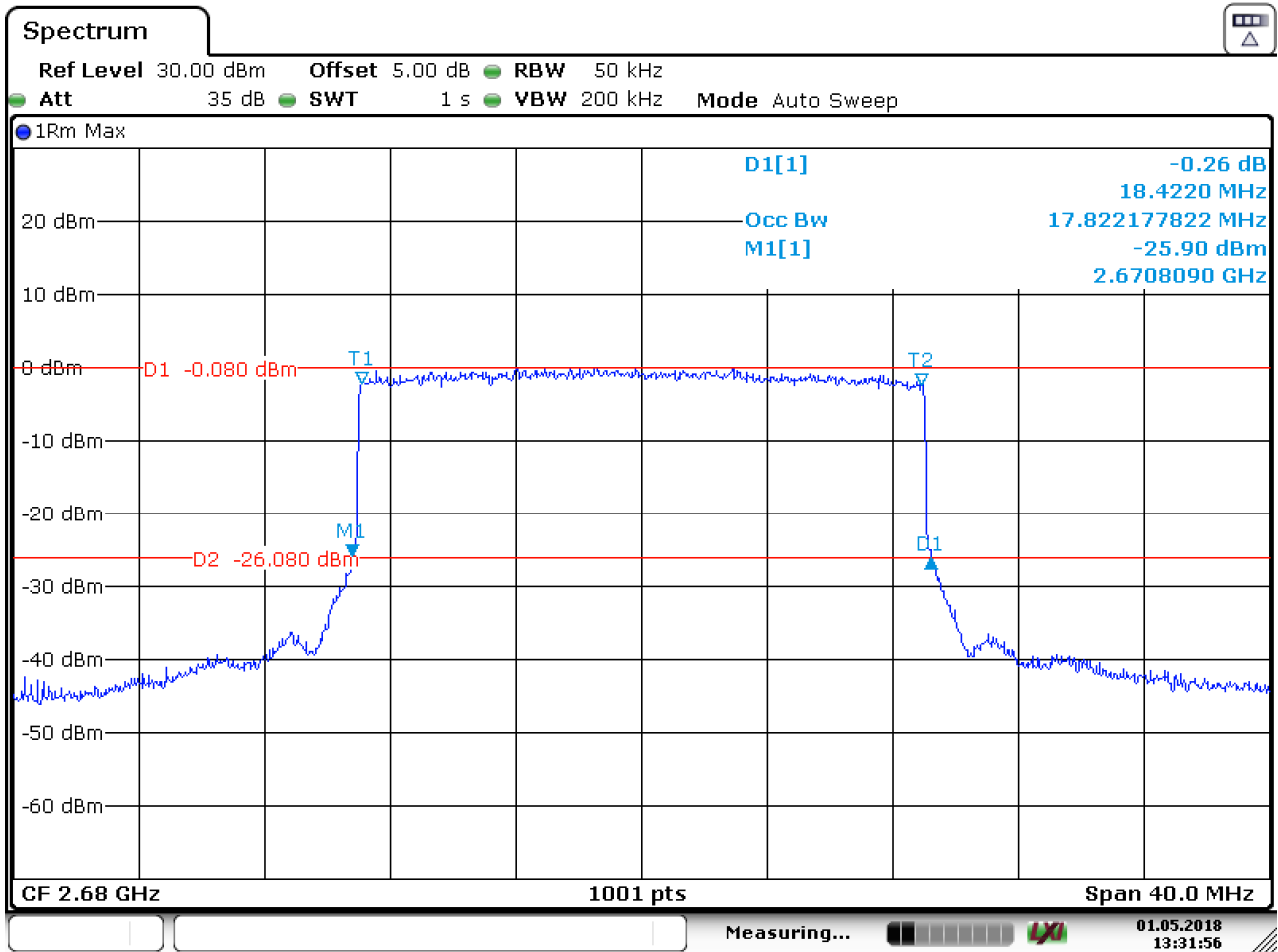
4.1.1.8.2 Test Channel = MCH



Date: 1.MAY.2018 13:33:22



4.1.1.8.3 Test Channel = HCH



Date: 1.MAY.2018 13:31:57

5 Band Edges Compliance

Part I –

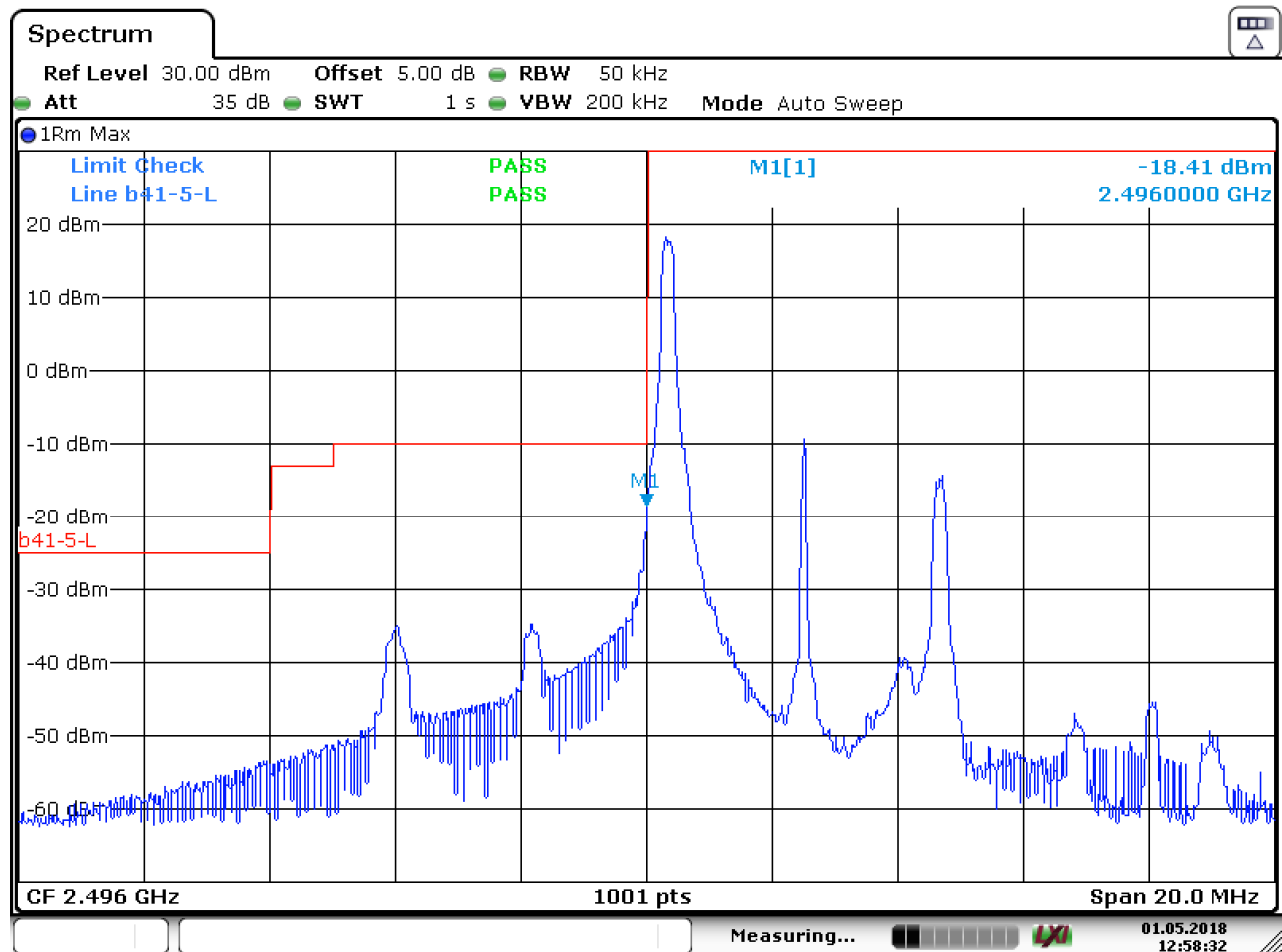
5.1 For LTE

5.1.1 Test Band = LTE band41

5.1.1.1 Test Mode = LTE/TM1 5MHz

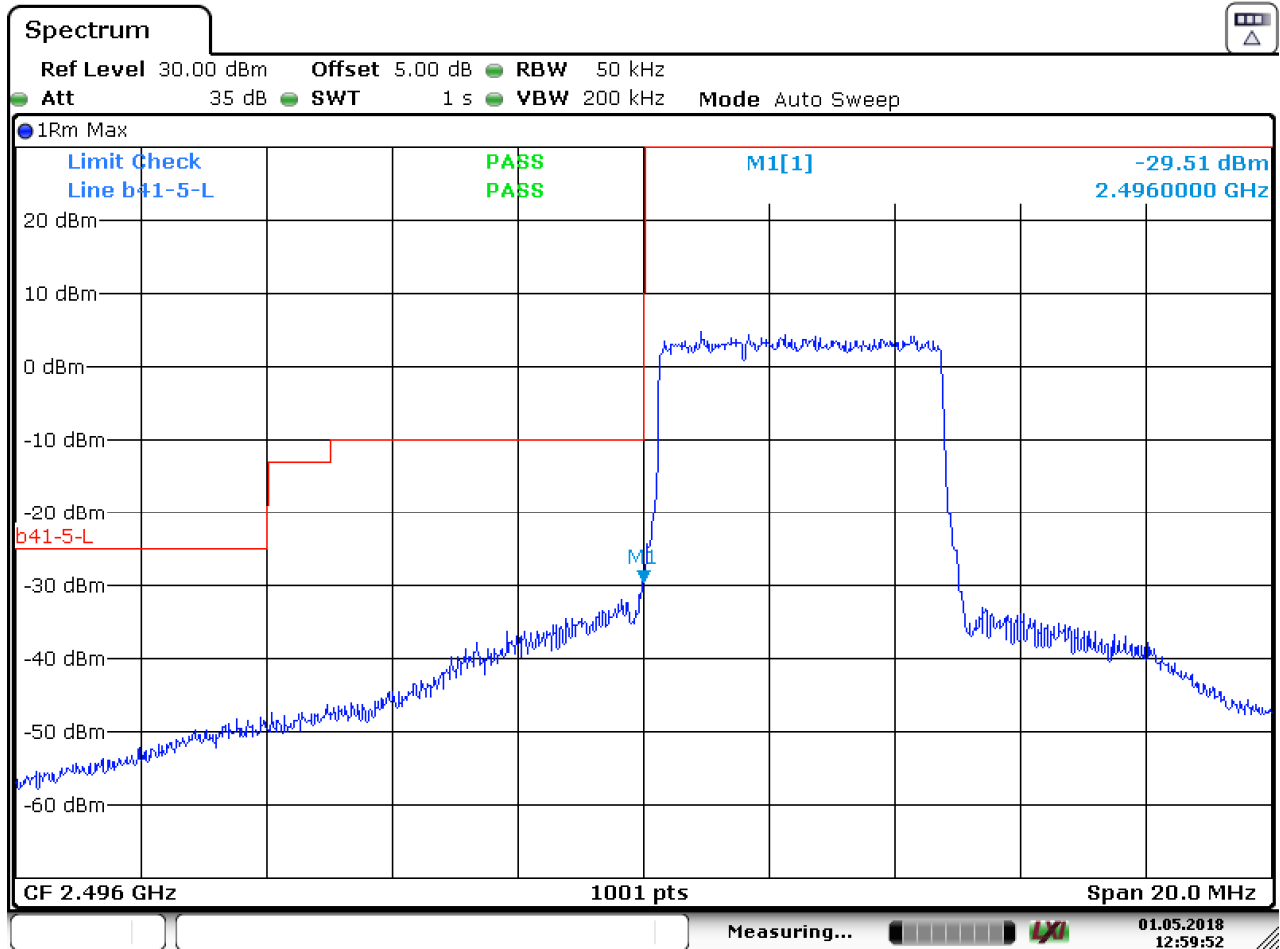
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 1.MAY.2018 12:58:33

5.1.1.1.1.2 Test RB=25RB

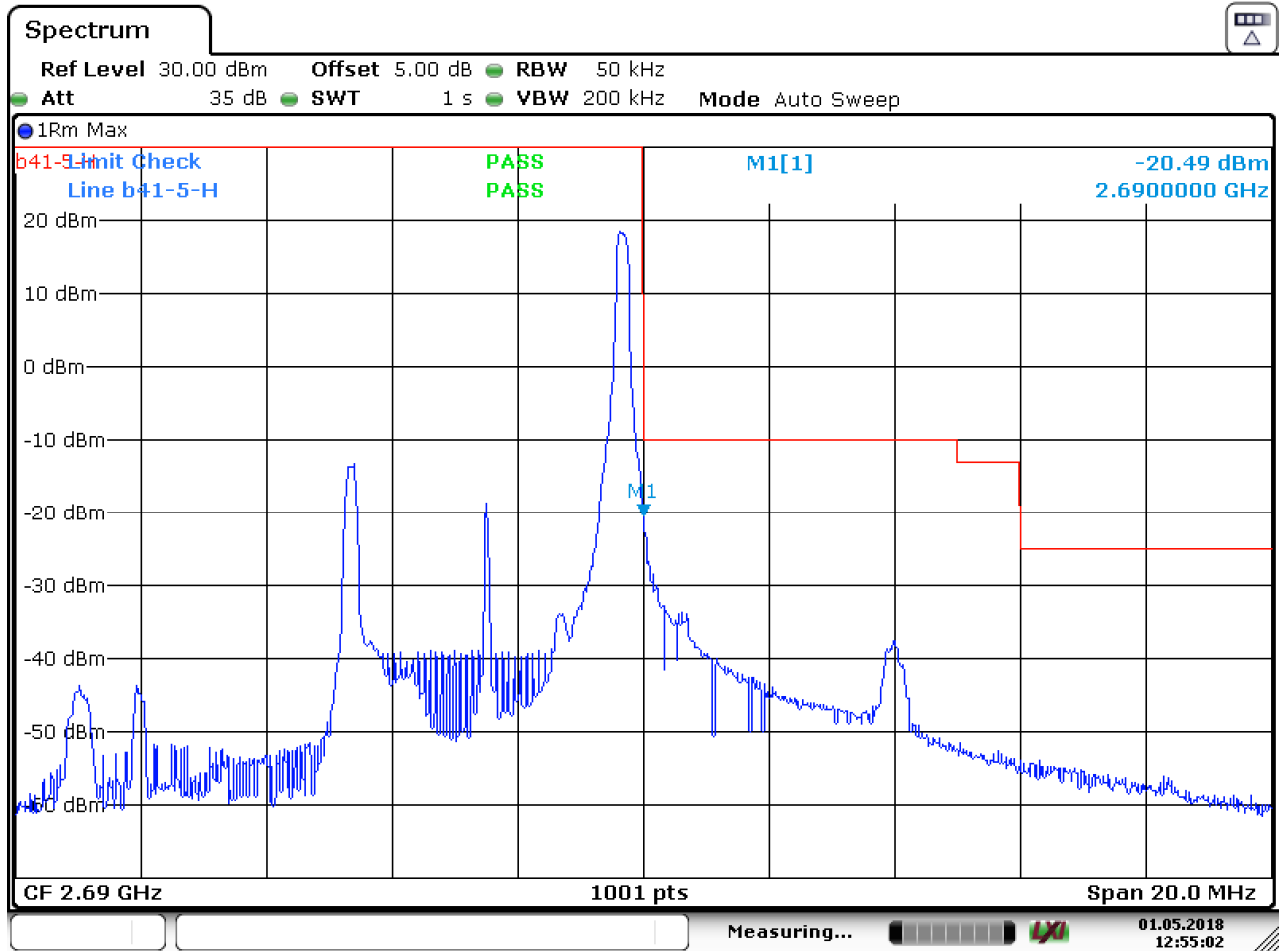


Date: 1.MAY.2018 12:59:52



5.1.1.1.2 Test Channel = HCH

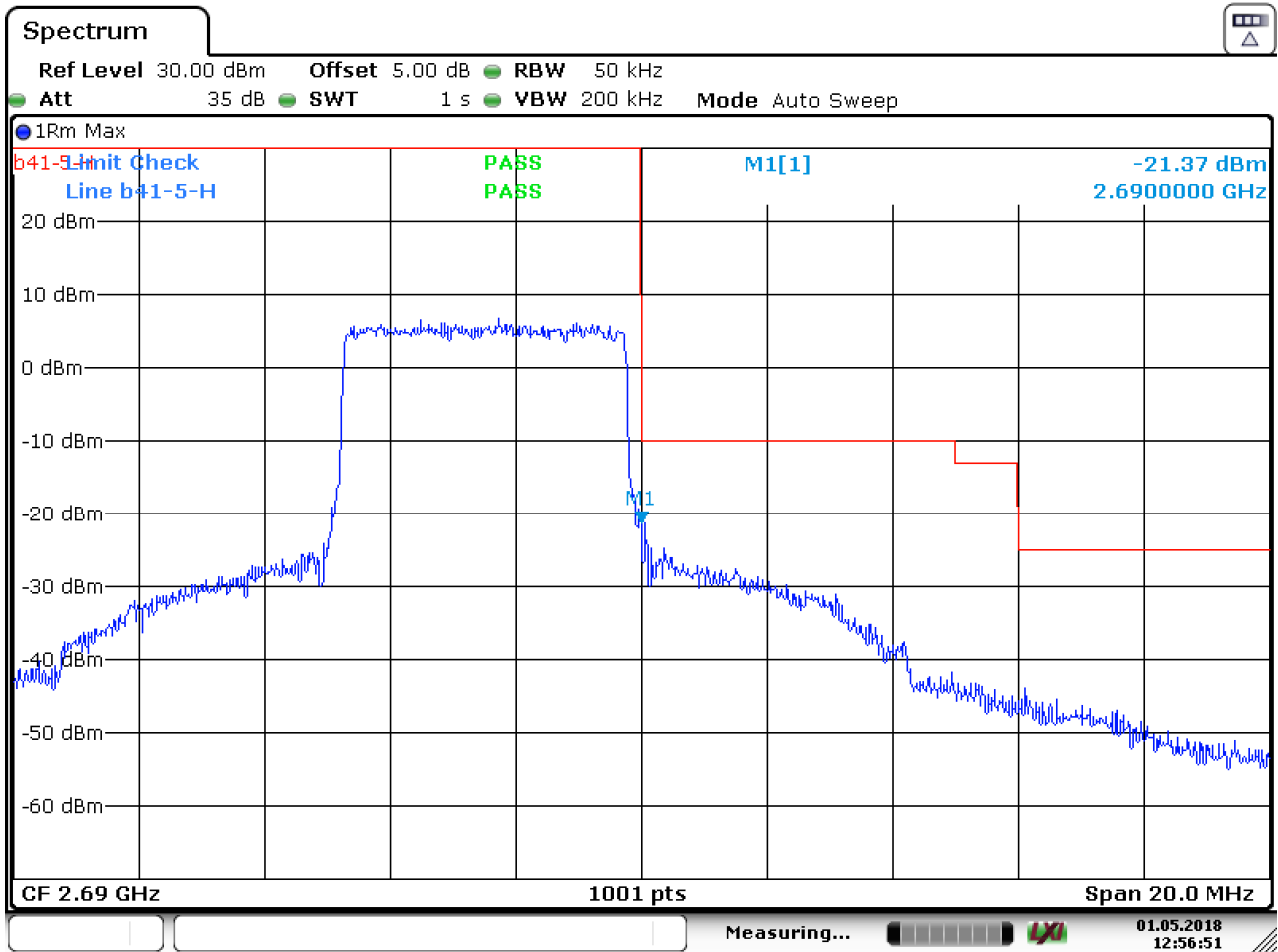
5.1.1.1.2.1 Test RB=1RB



Date: 1.MAY.2018 12:55:03



5.1.1.1.2.2 Test RB=25RB



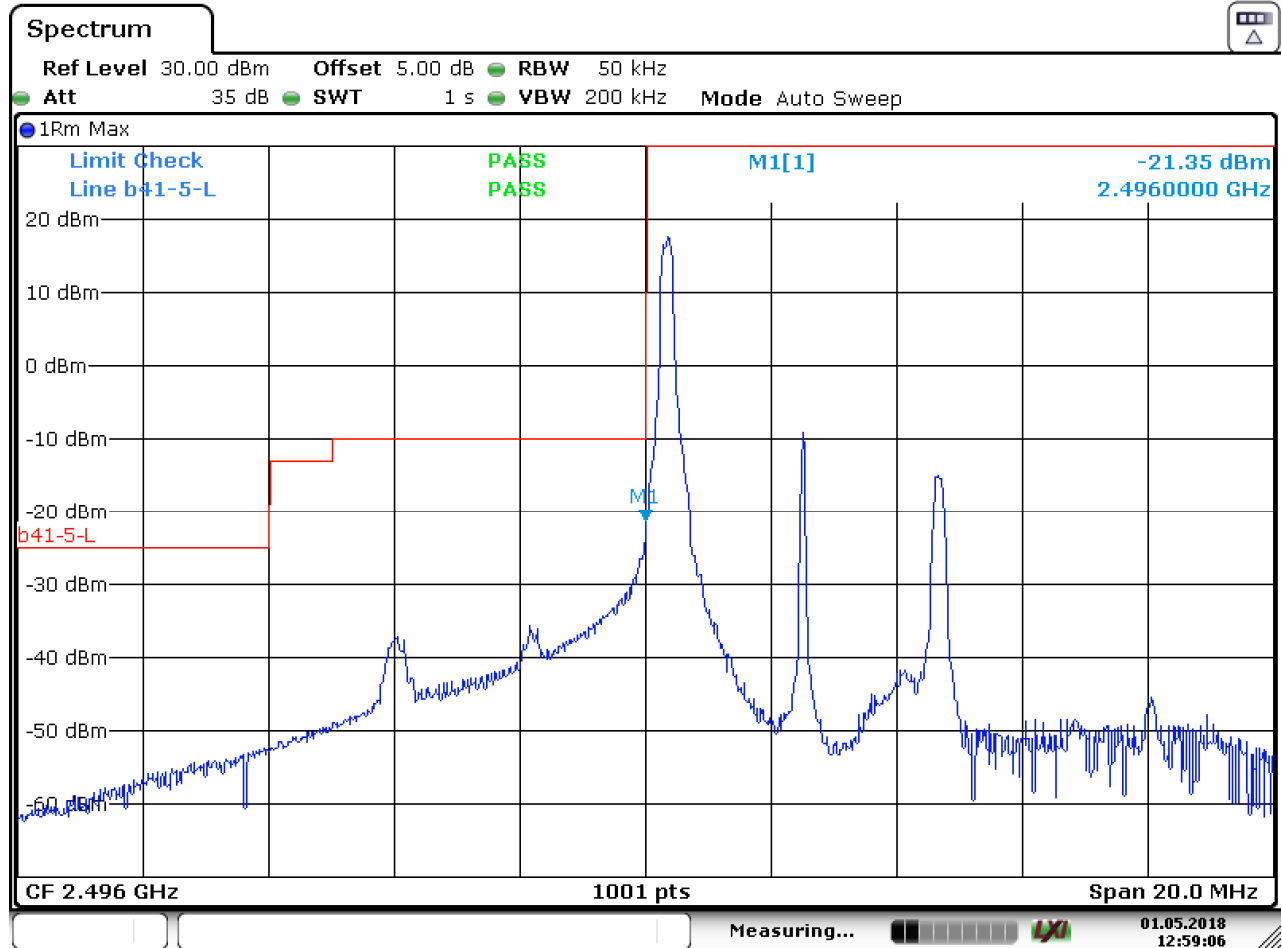
Date: 1.MAY.2018 12:56:51



5.1.1.2 Test Mode = LTE/TM2 5MHz

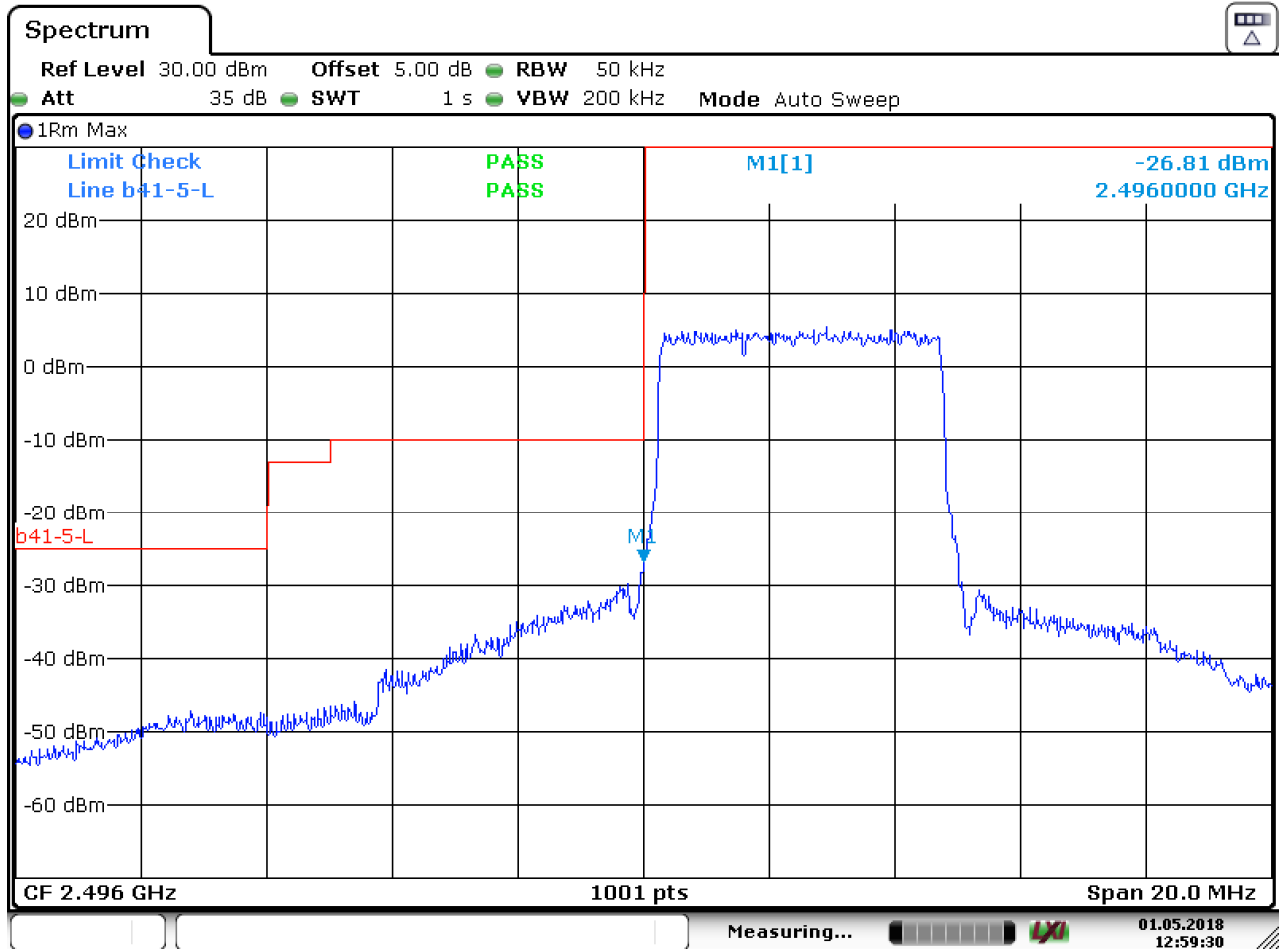
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 1.MAY.2018 12:59:06

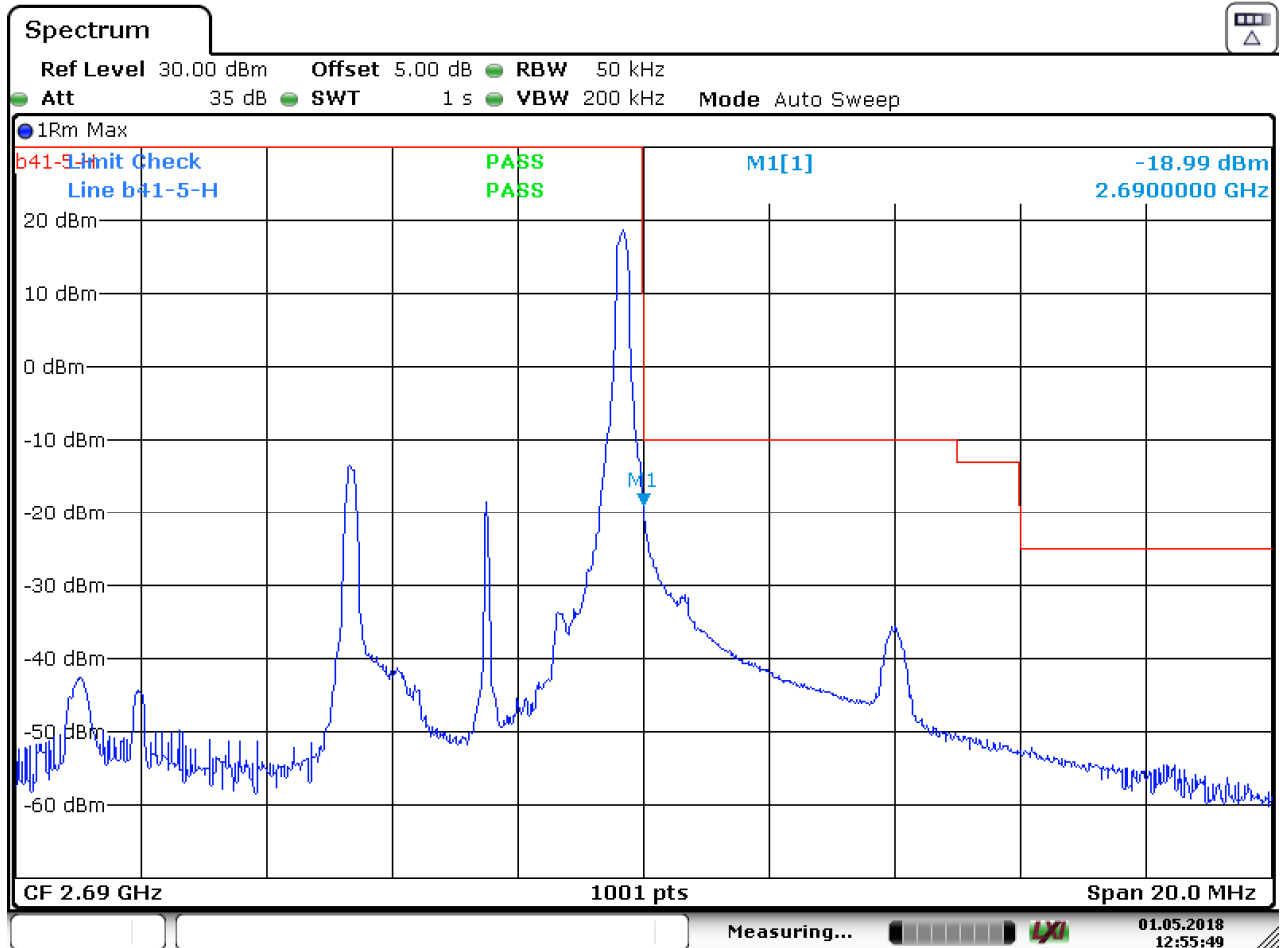
5.1.1.2.1.2 Test RB=25RB



Date: 1.MAY.2018 12:59:31

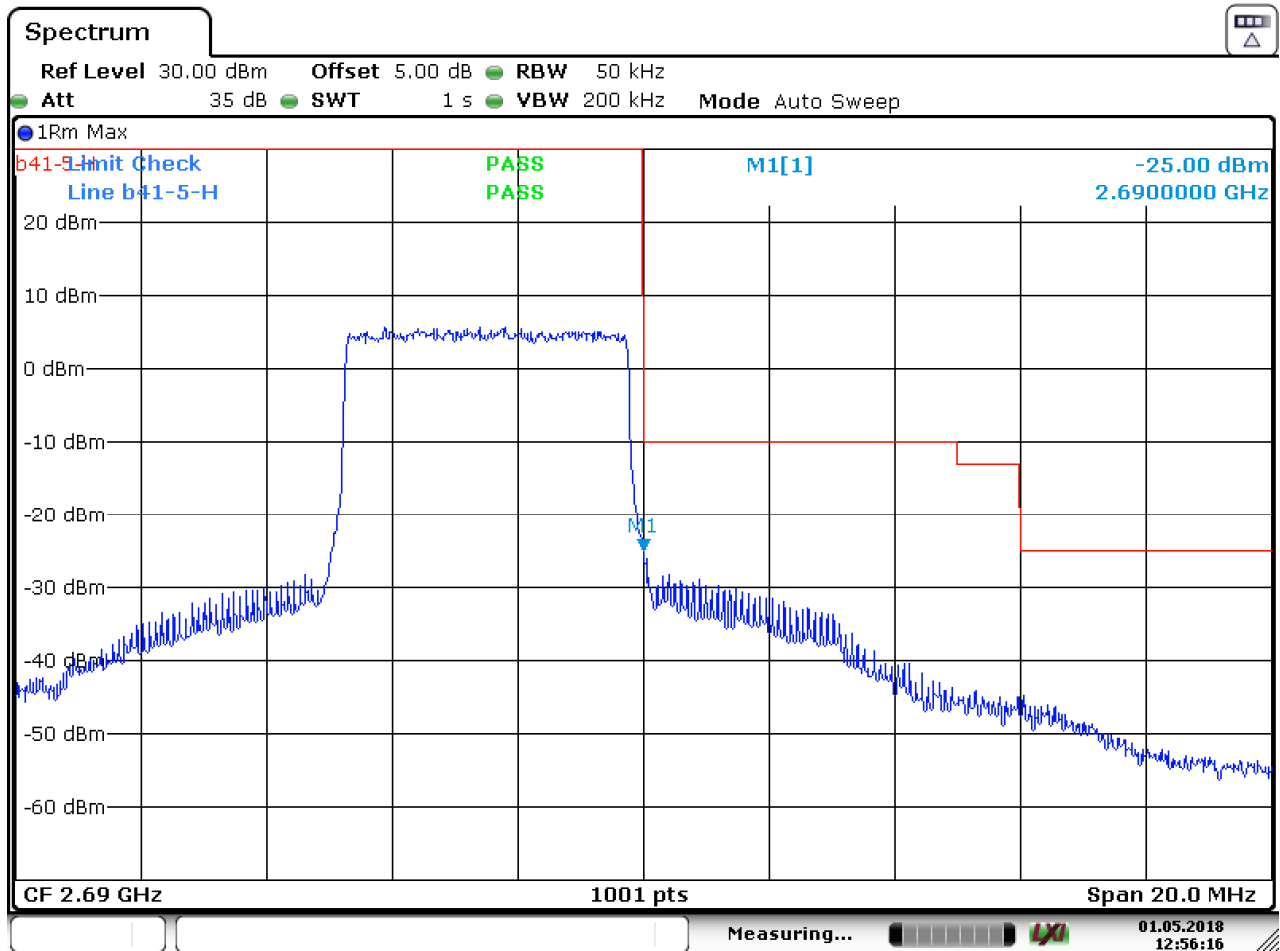
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 1.MAY.2018 12:55:49

5.1.1.2.2.2 Test RB=25RB

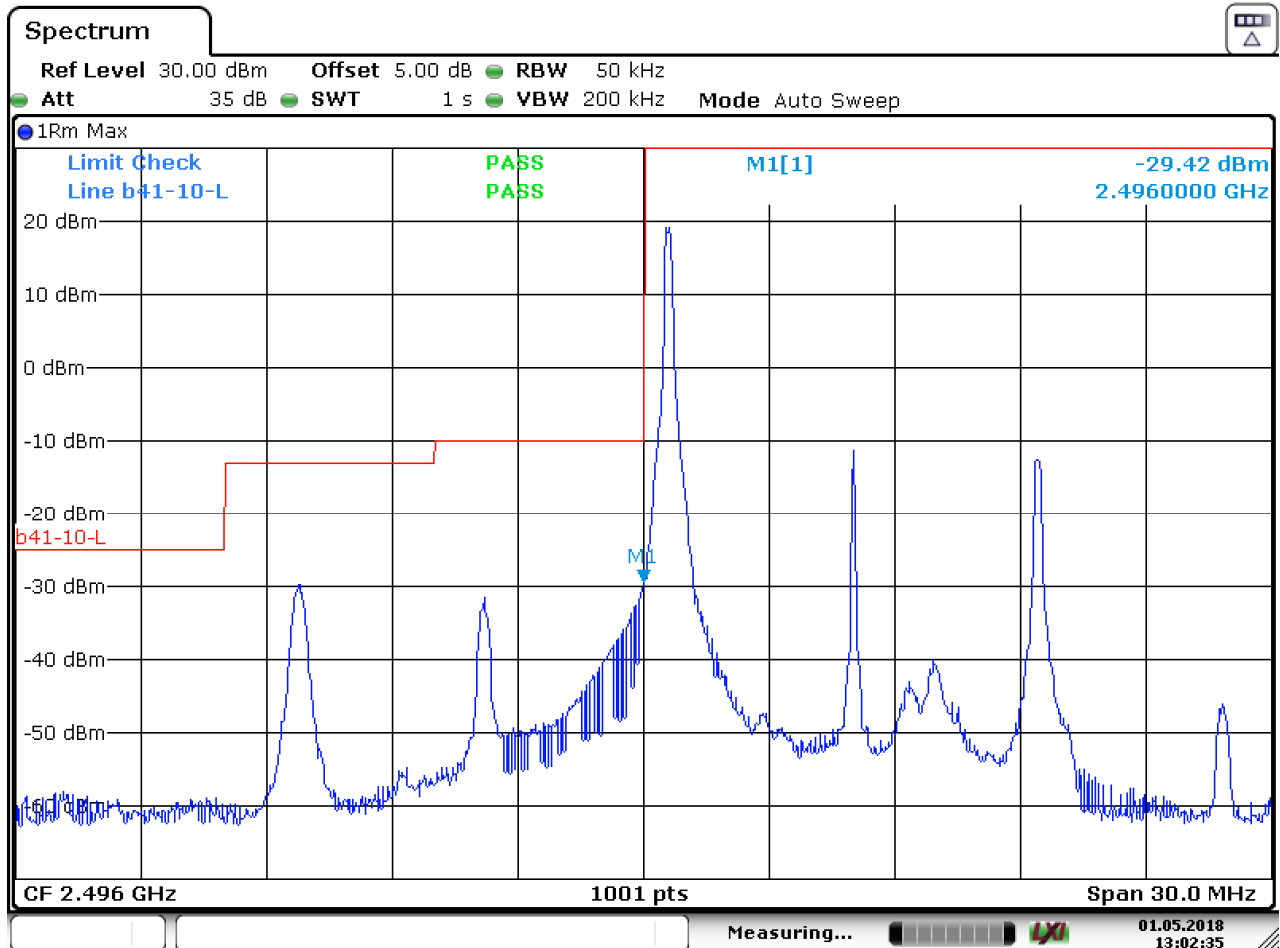


Date: 1.MAY.2018 12:56:16

5.1.1.3 Test Mode = LTE/TM1 10MHz

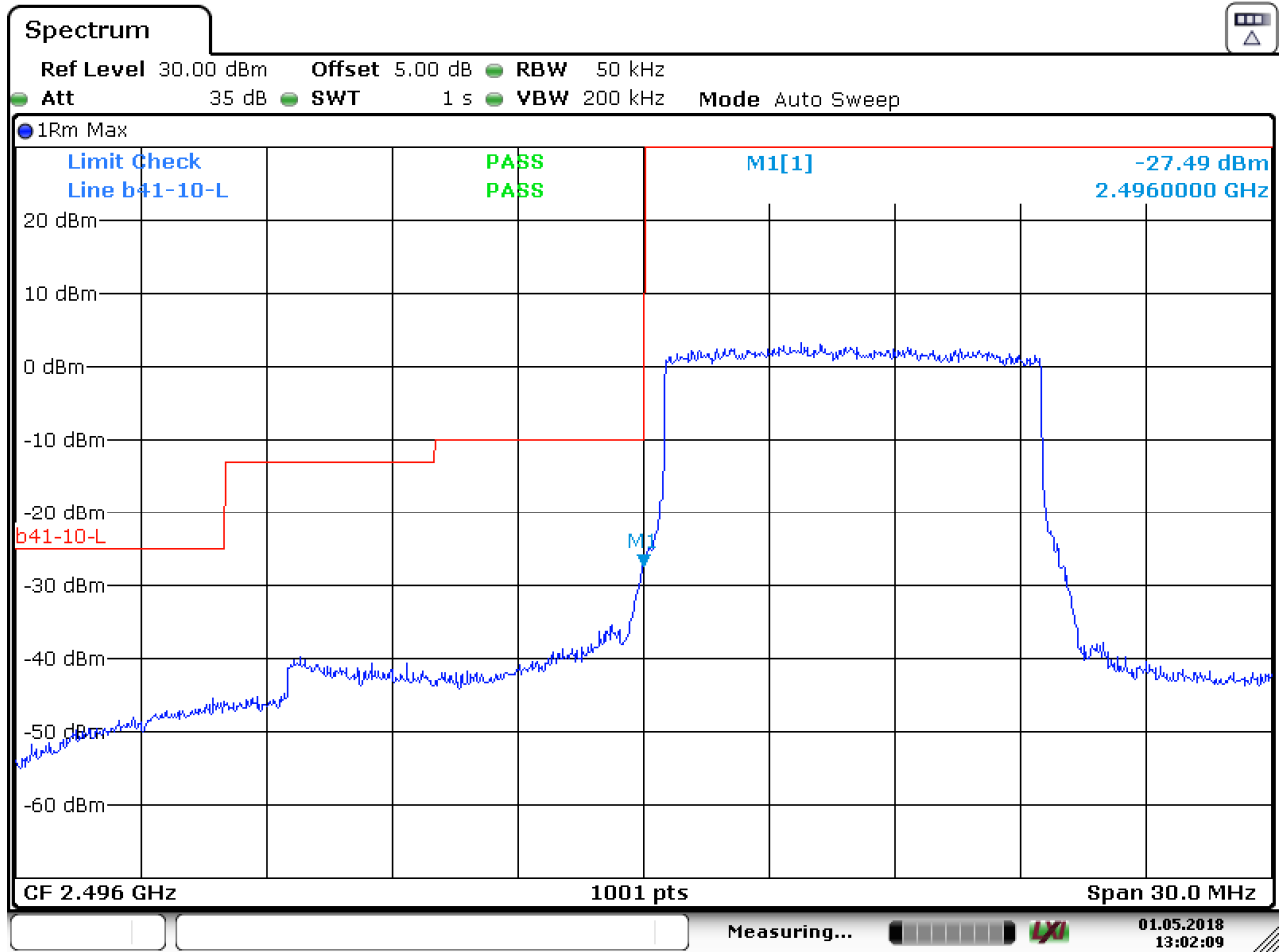
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 1.MAY.2018 13:02:36

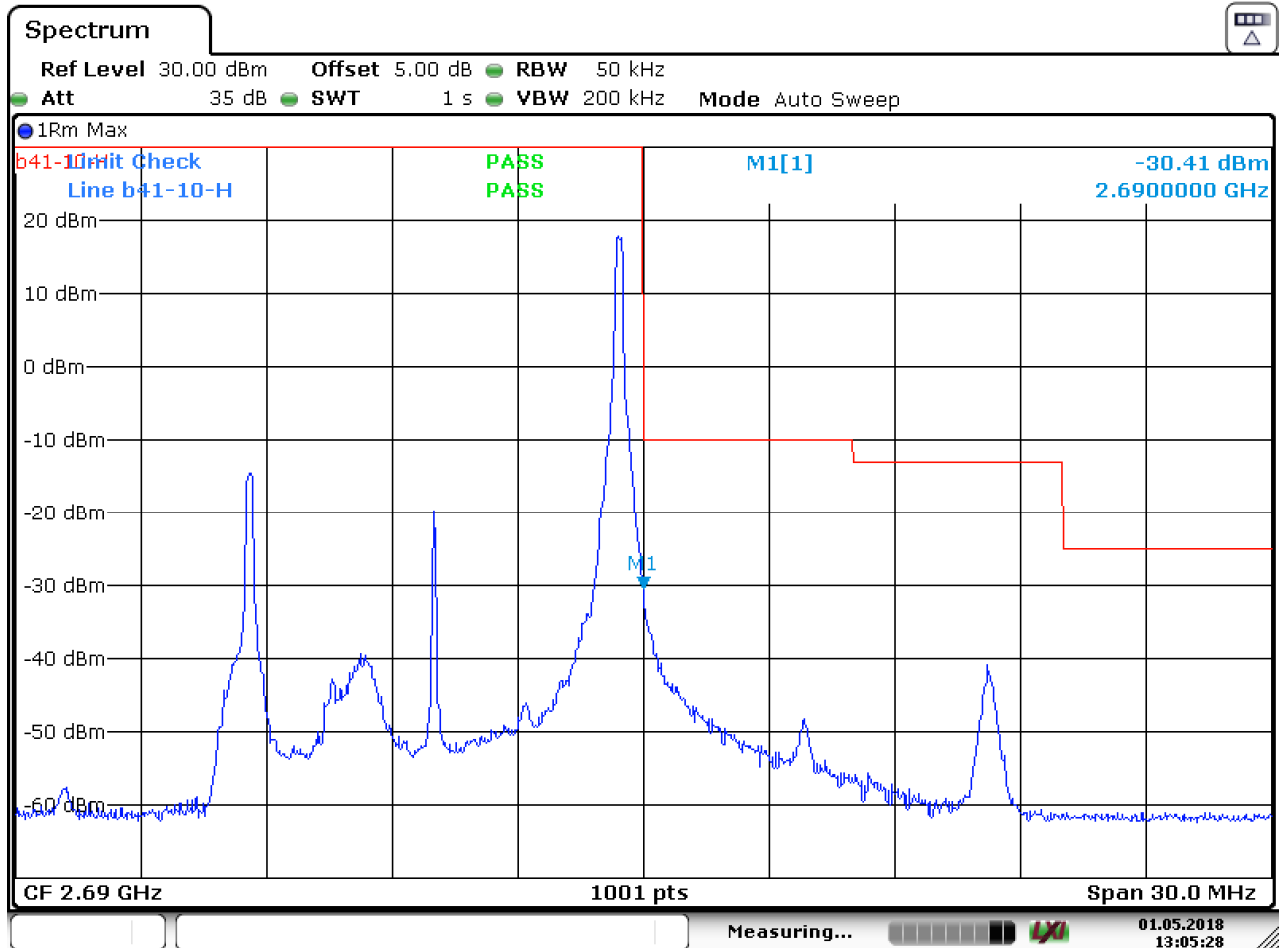
5.1.1.3.1.2 Test RB=50RB



Date: 1.MAY.2018 13:02:09

5.1.1.3.2 Test Channel = HCH

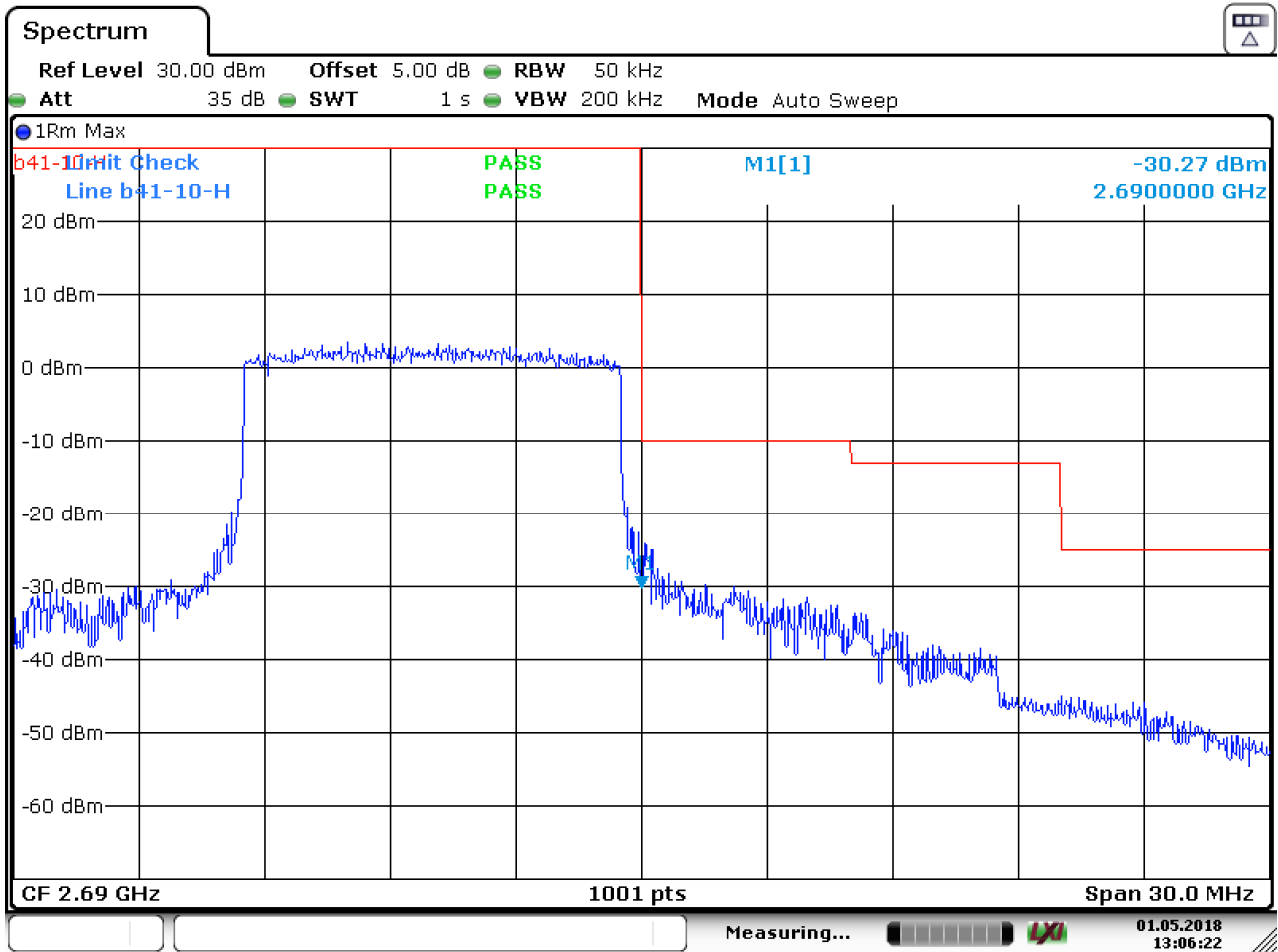
5.1.1.3.2.1 Test RB=1RB



Date: 1.MAY.2018 13:05:29



5.1.1.3.2.2 Test RB=50RB

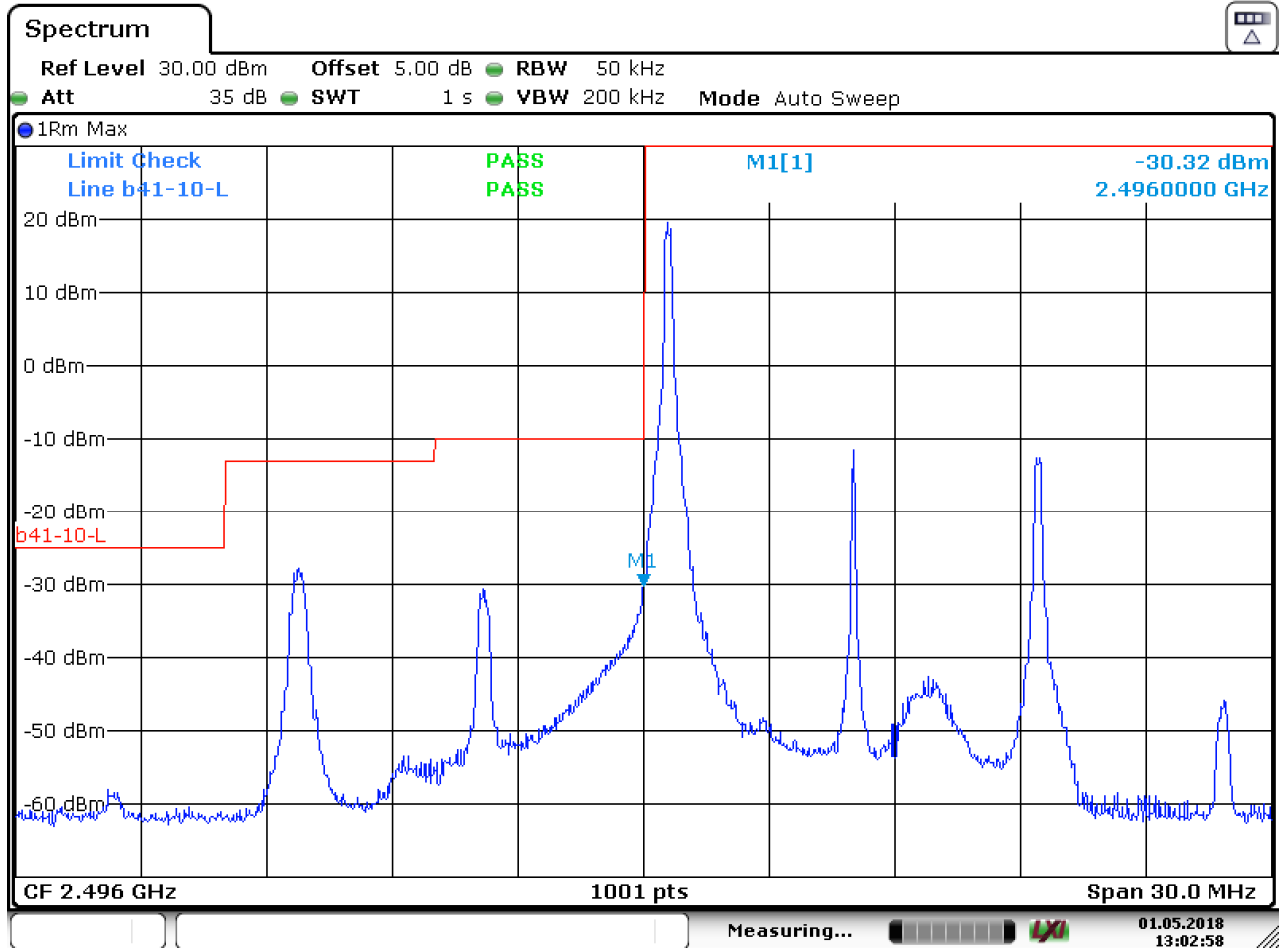


Date: 1.MAY.2018 13:06:22

5.1.1.4 Test Mode = LTE/TM2 10MHz

5.1.1.4.1 Test Channel = LCH

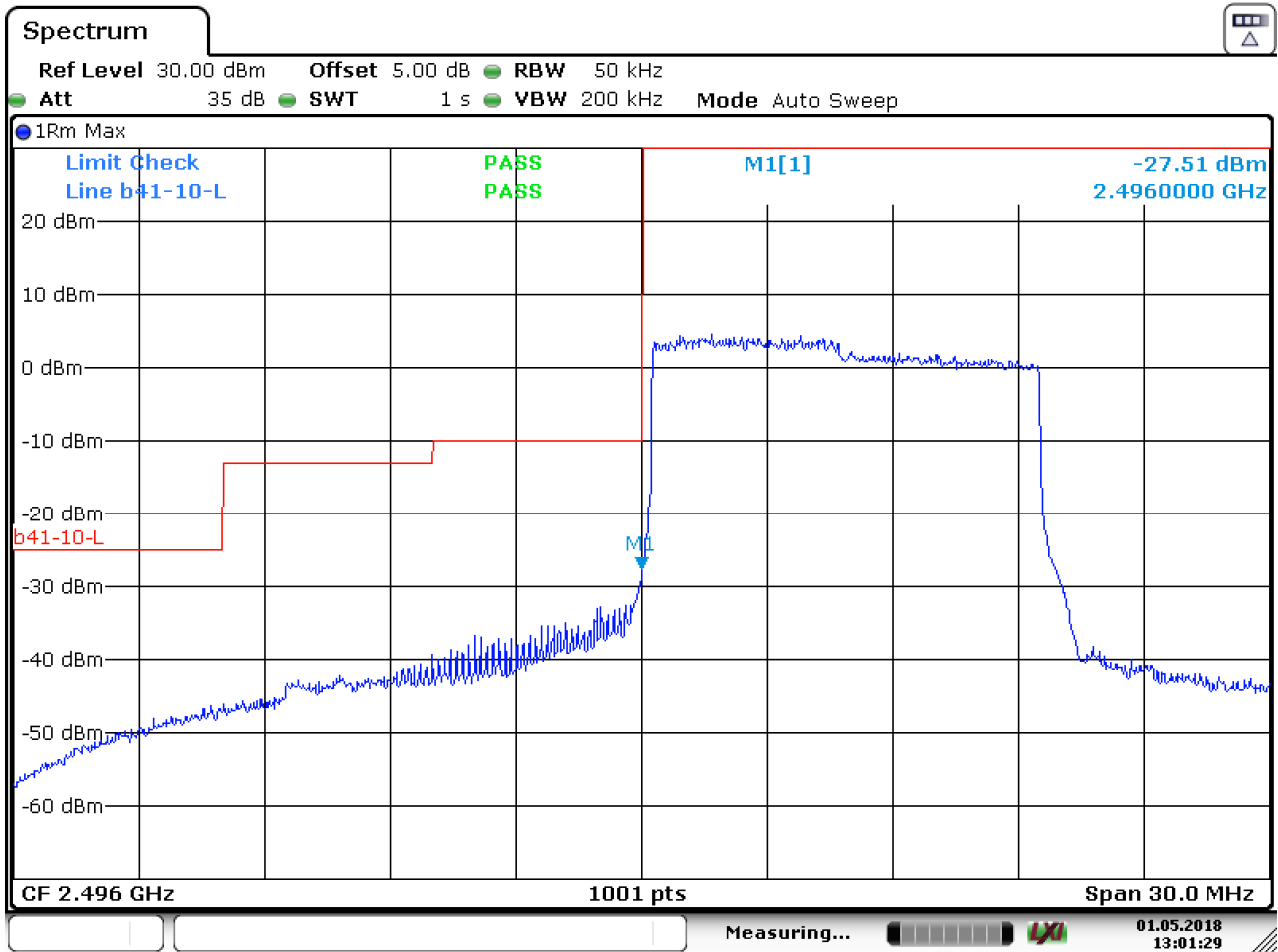
5.1.1.4.1.1 Test RB=1RB



Date: 1.MAY.2018 13:02:58



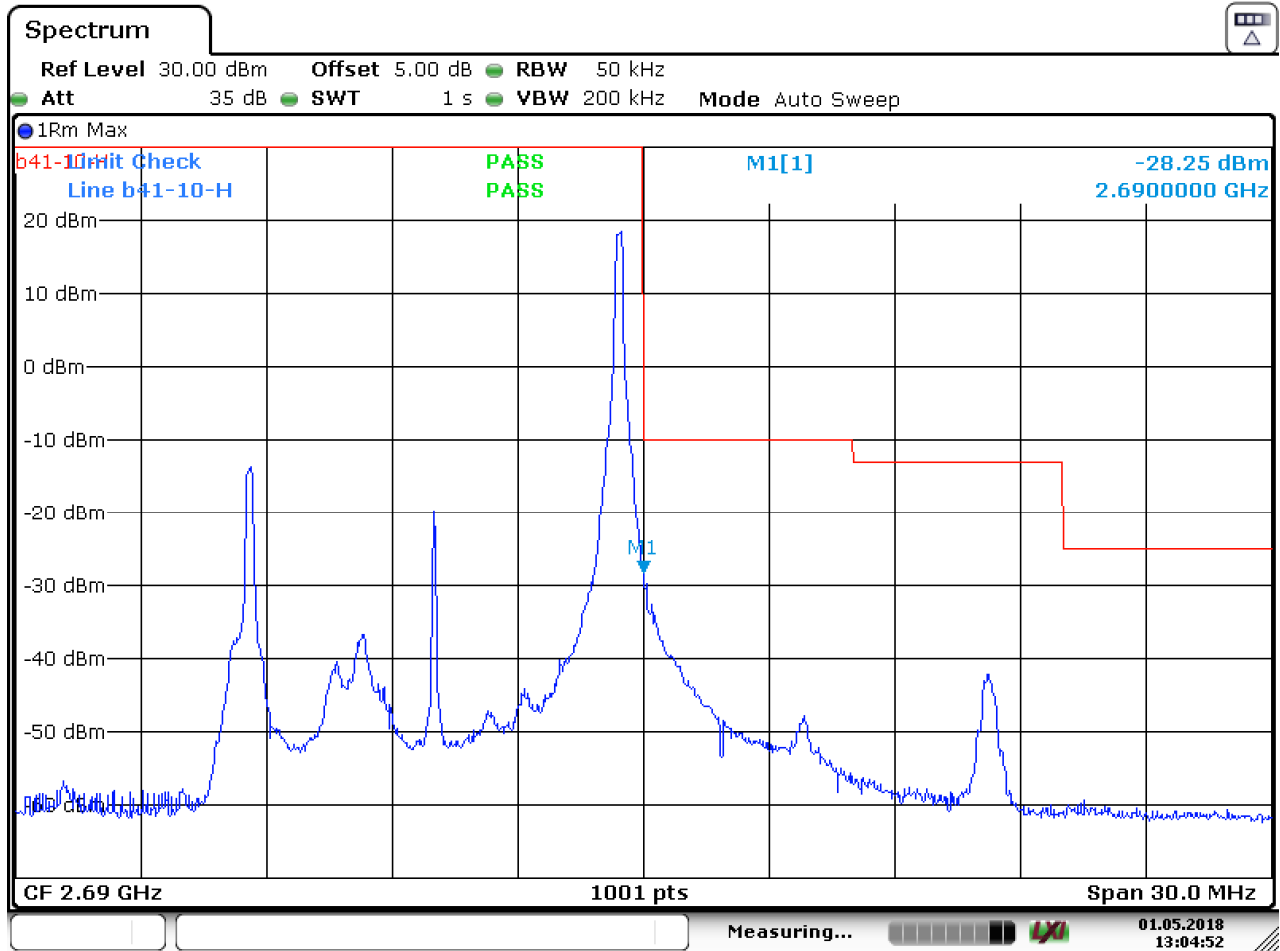
5.1.1.4.1.2 Test RB=50RB



Date: 1.MAY.2018 13:01:29

5.1.1.4.2 Test Channel = HCH

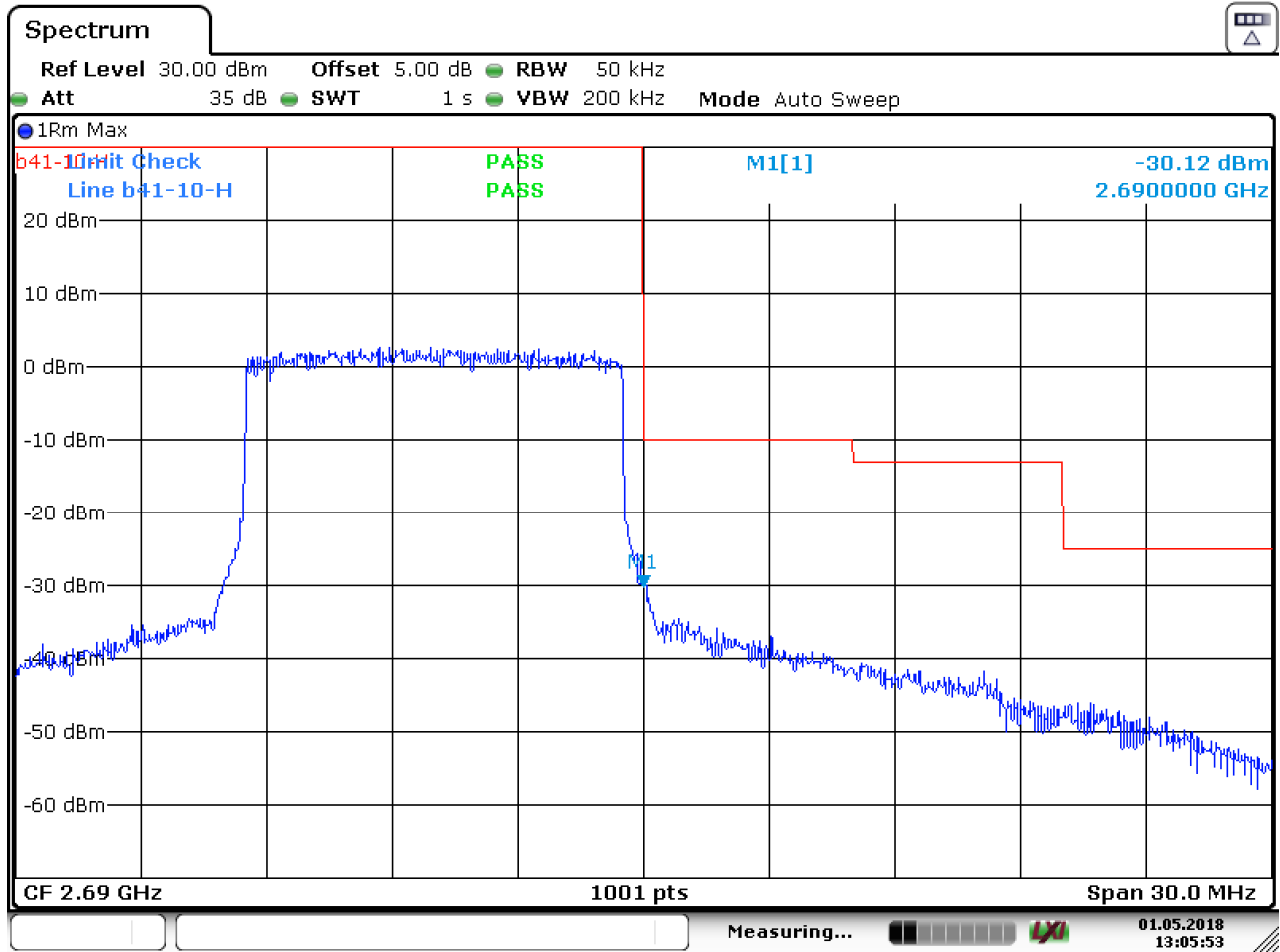
5.1.1.4.2.1 Test RB=1RB



Date: 1.MAY.2018 13:04:52



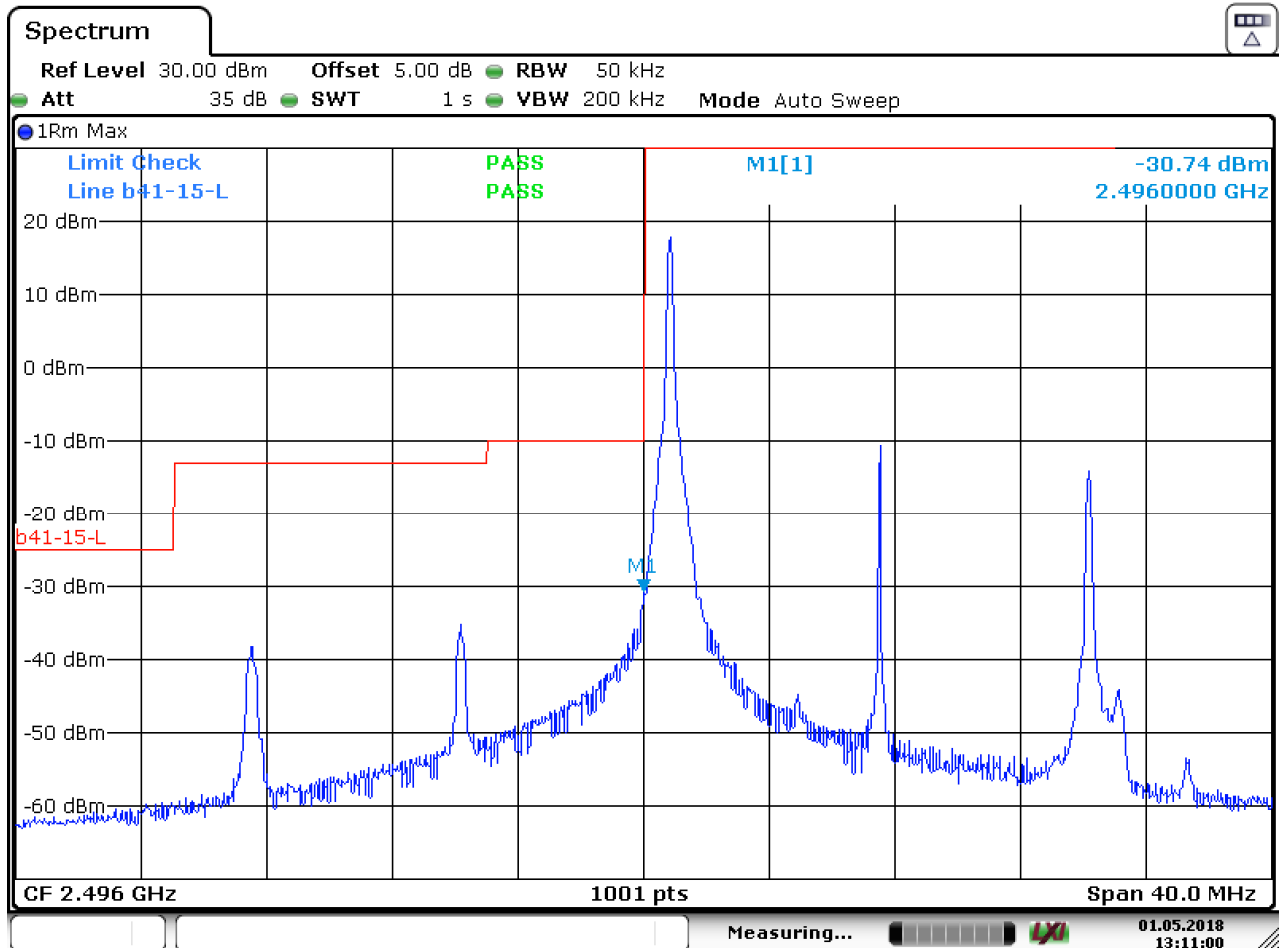
5.1.1.4.2.2 Test RB=50RB



Date: 1.MAY.2018 13:05:54

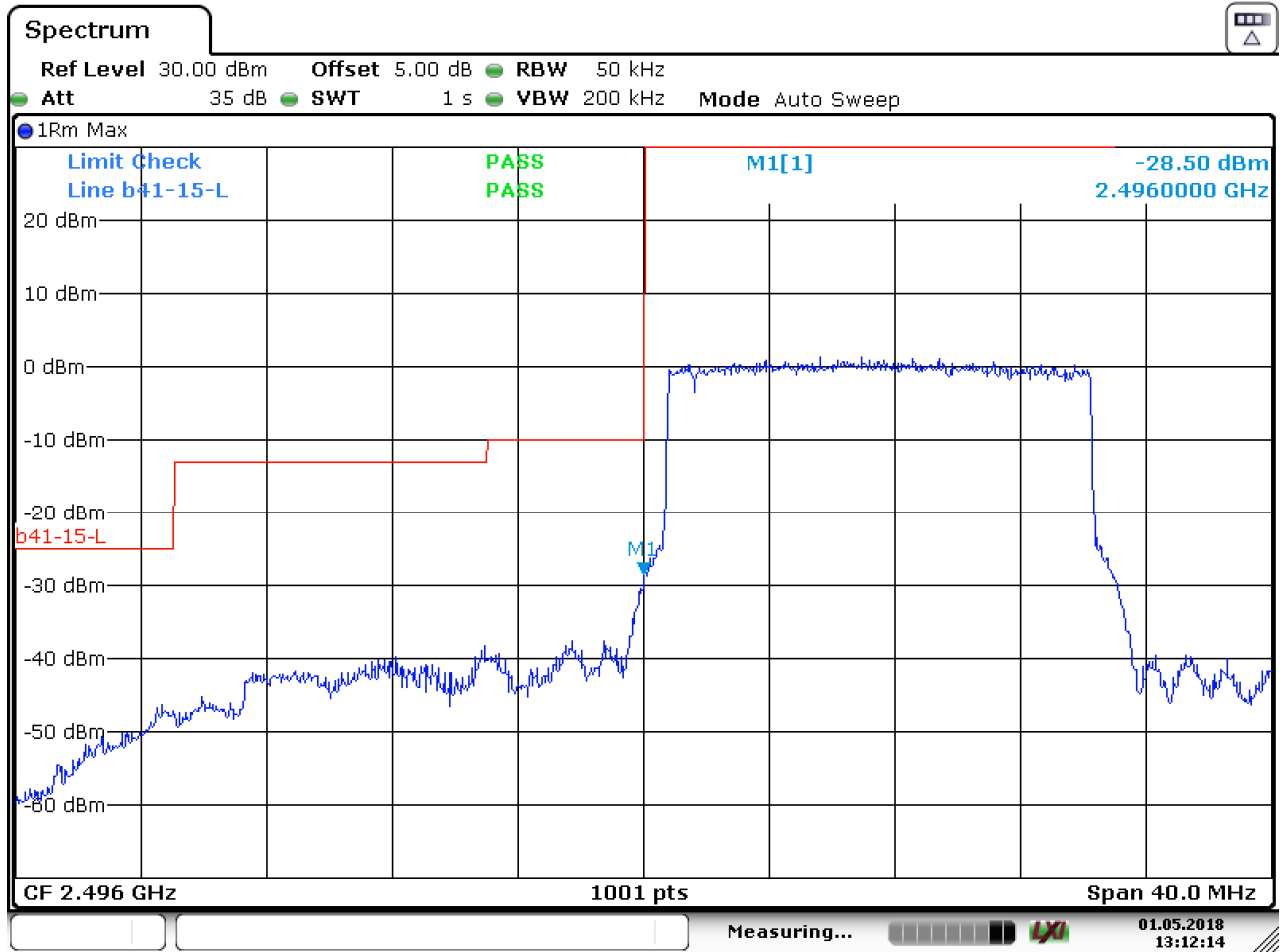
5.1.1.5 Test Mode = LTE/TM1 15MHz
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 1.MAY.2018 13:11:01

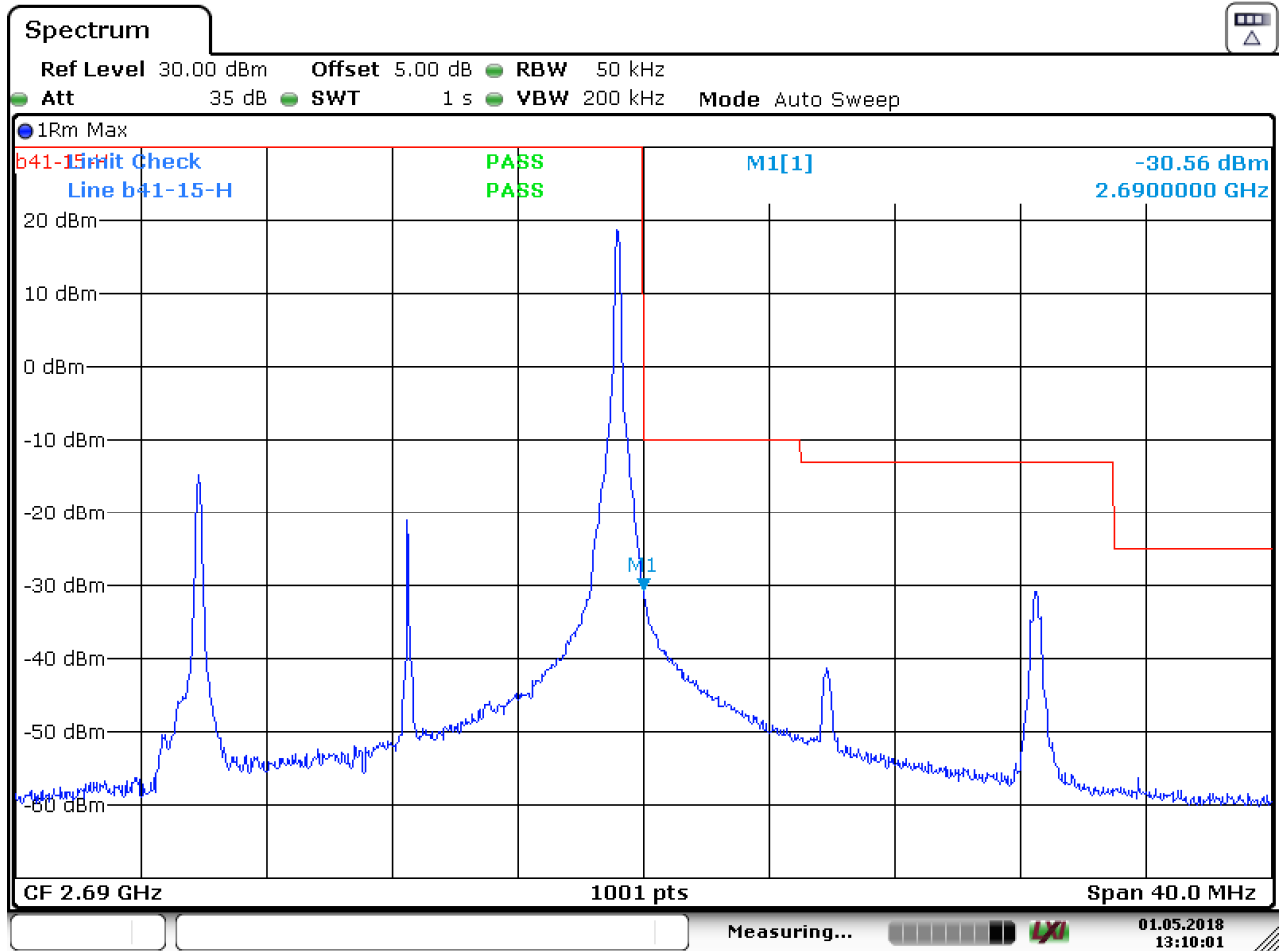
5.1.1.5.1.2 Test RB=75RB



Date: 1.MAY.2018 13:12:15

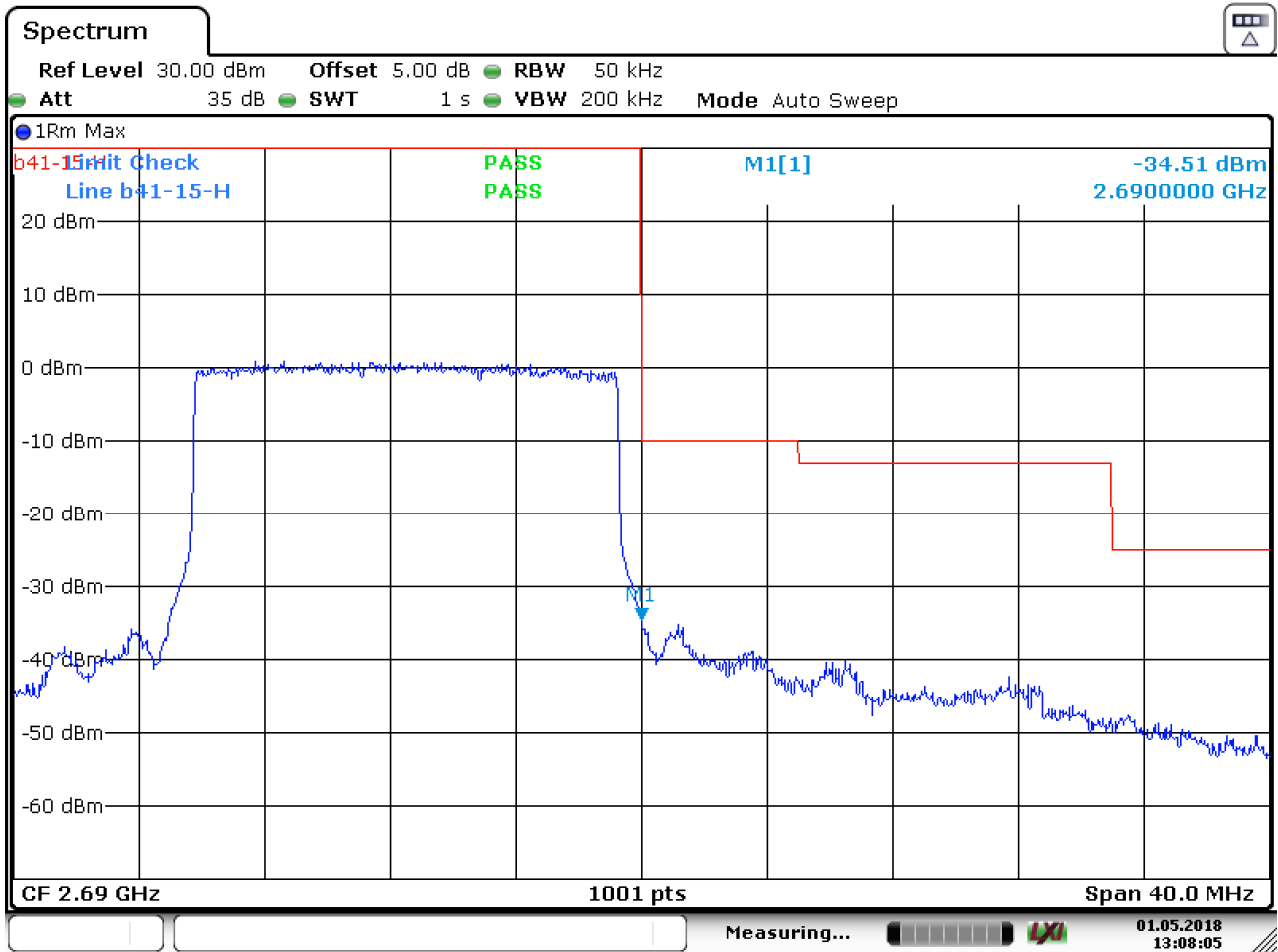
5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 1.MAY.2018 13:10:01

5.1.1.5.2.2 Test RB=75RB

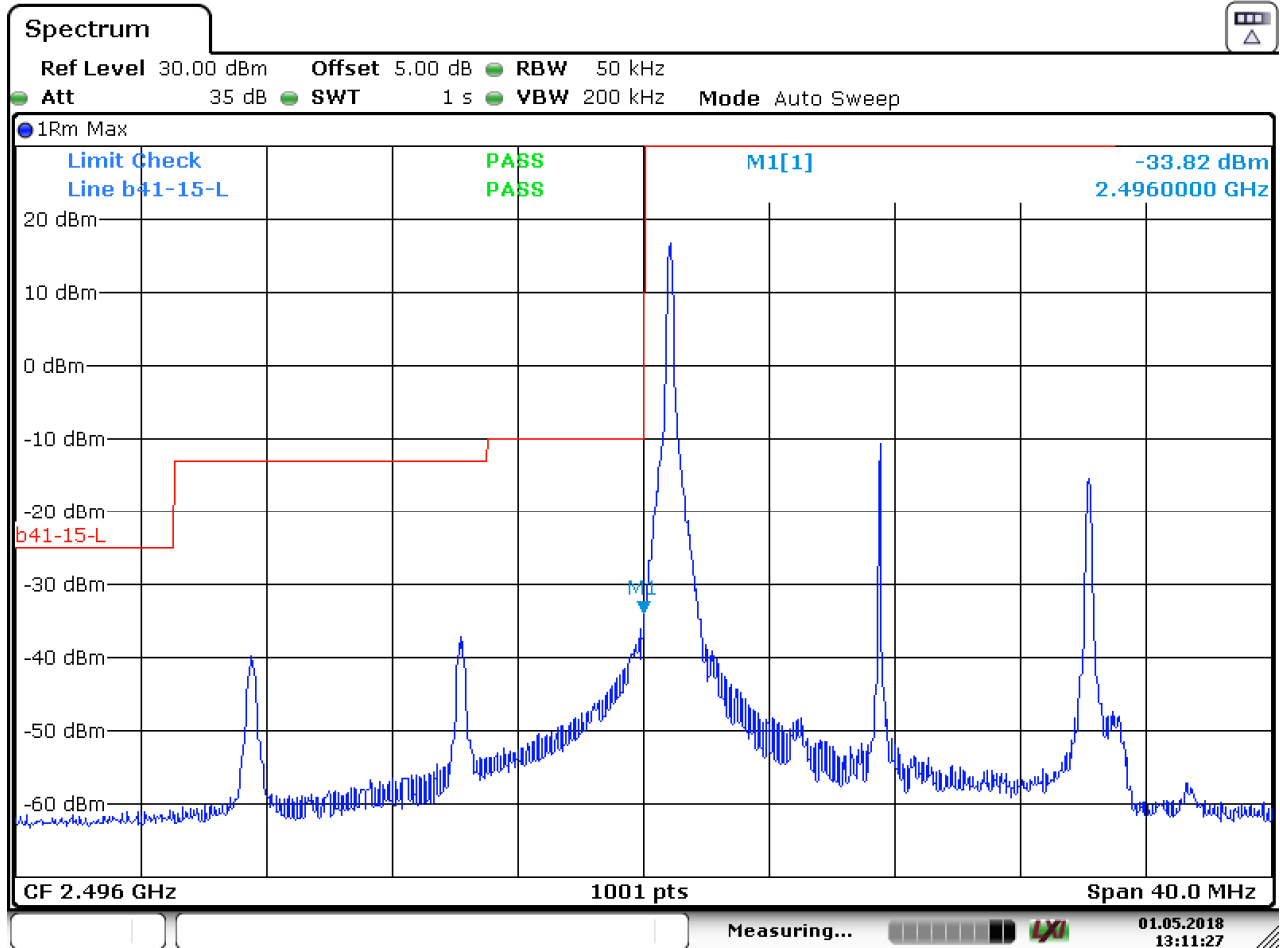


Date: 1.MAY.2018 13:08:05



5.1.1.6 Test Mode = LTE/TM2 15MHz
5.1.1.6.1 Test Channel = LCH

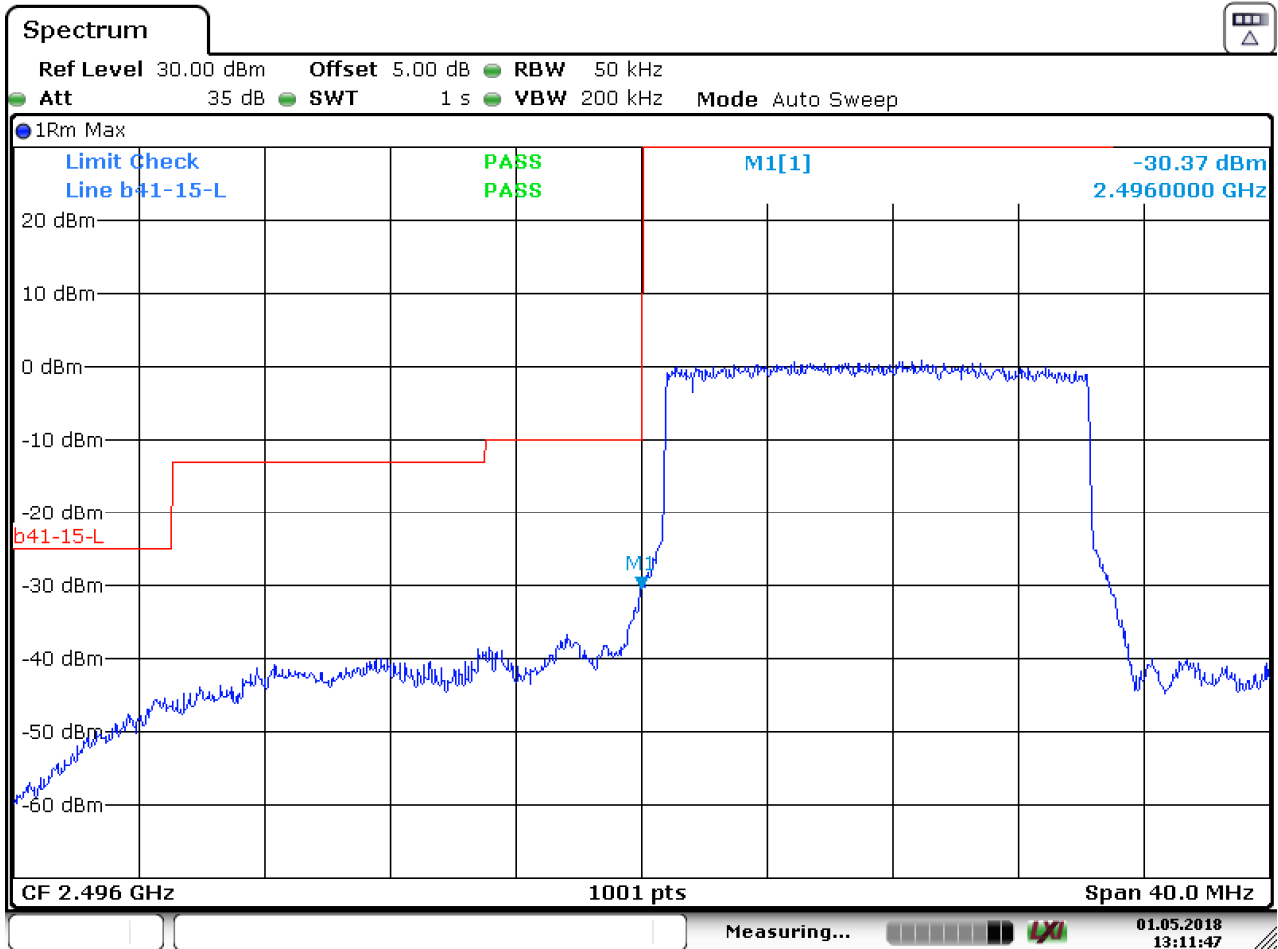
5.1.1.6.1.1 Test RB=1RB



Date: 1.MAY.2018 13:11:27



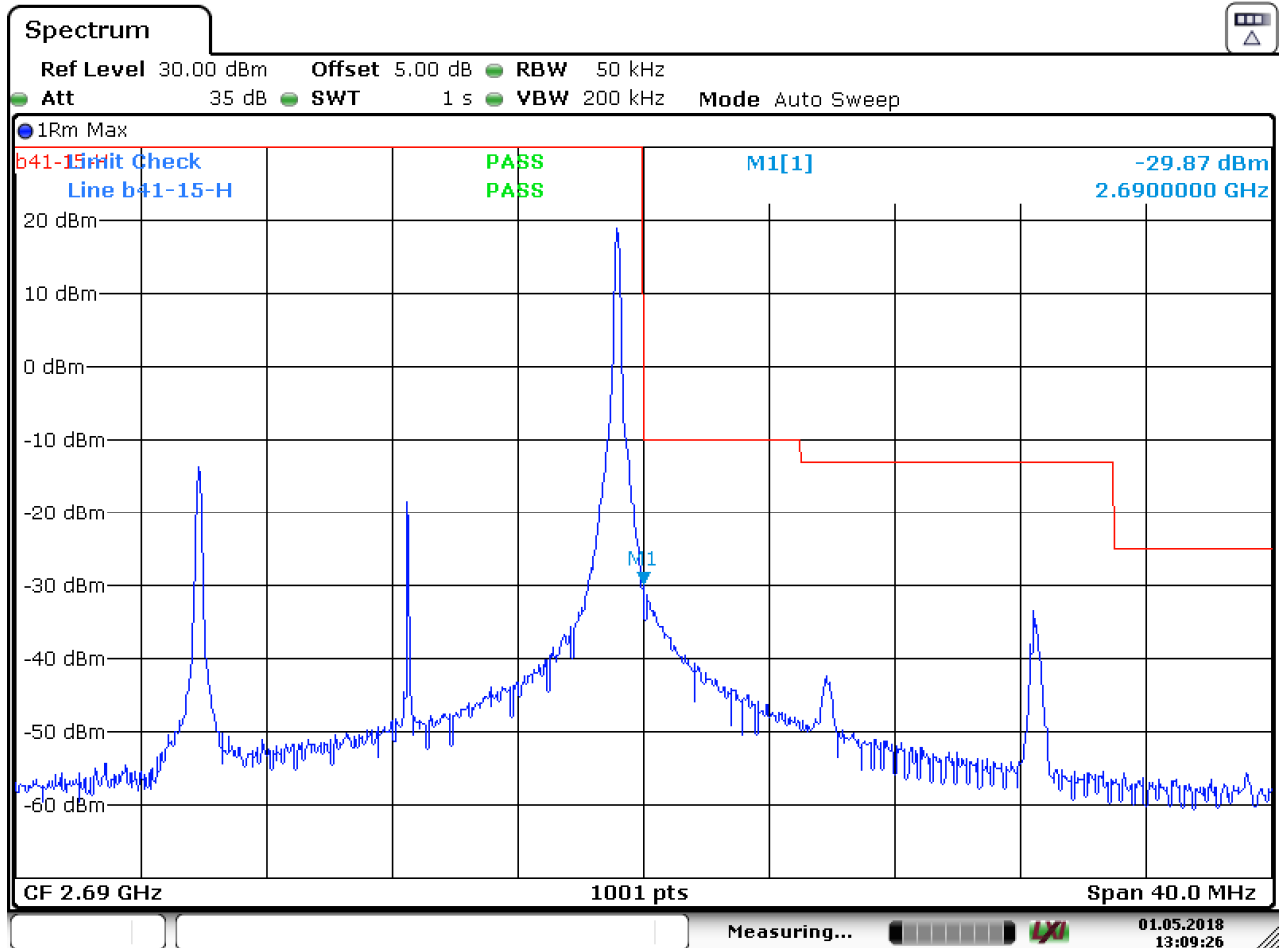
5.1.1.6.1.2 Test RB=75RB



Date: 1.MAY.2018 13:11:48

5.1.1.6.2 Test Channel = HCH

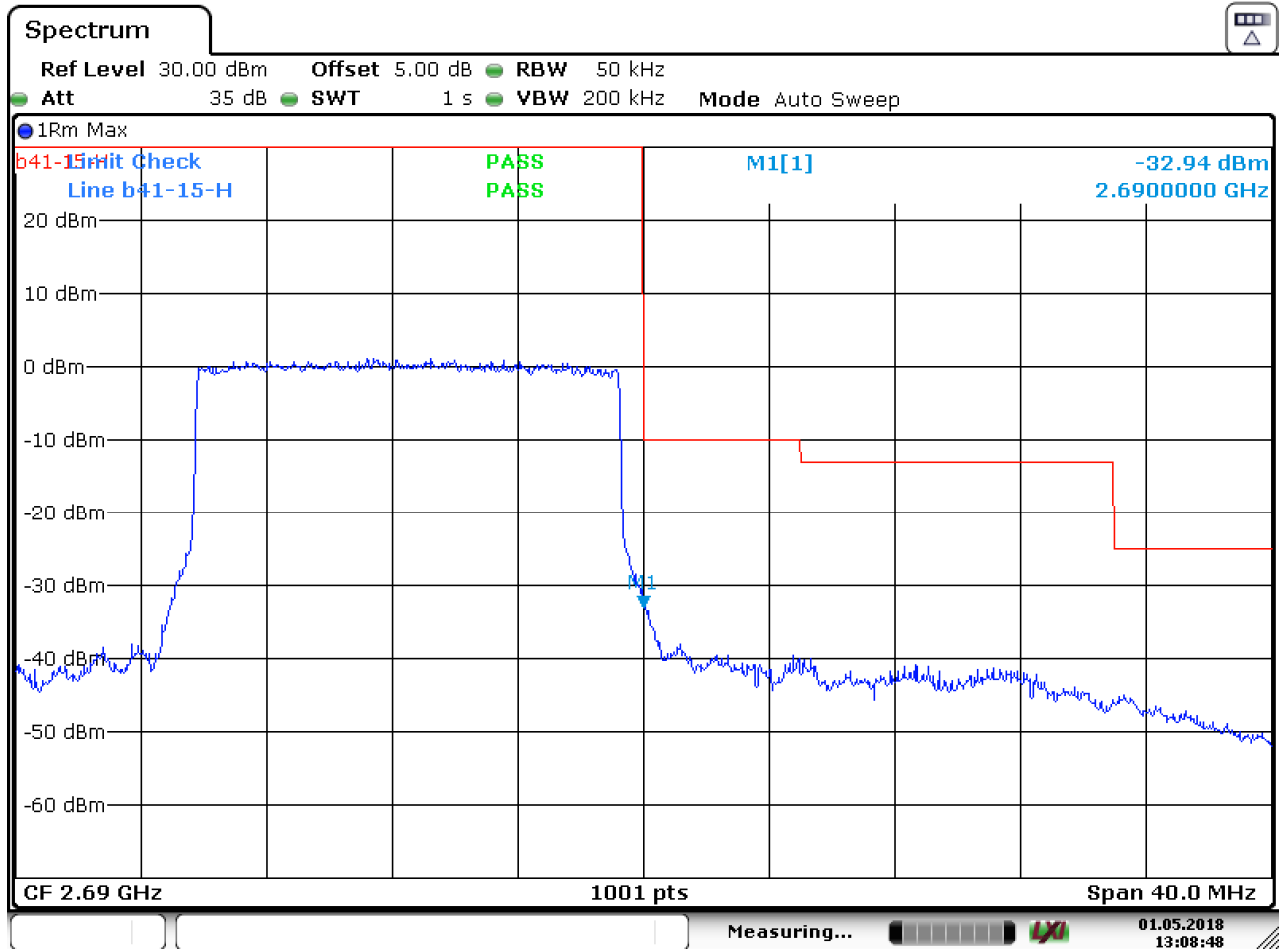
5.1.1.6.2.1 Test RB=1RB



Date: 1.MAY.2018 13:09:27



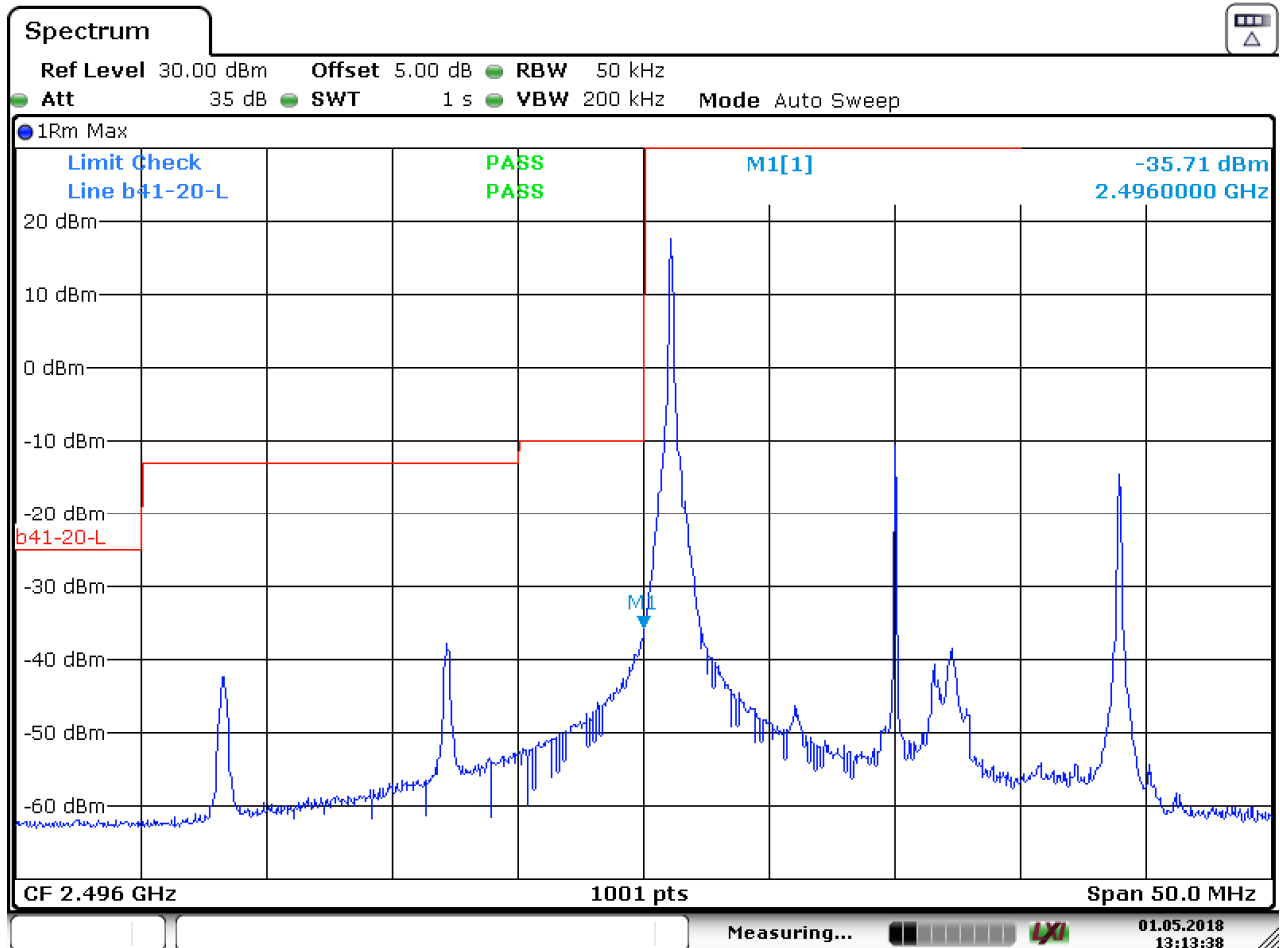
5.1.1.6.2.2 Test RB=75RB



Date: 1.MAY.2018 13:08:48

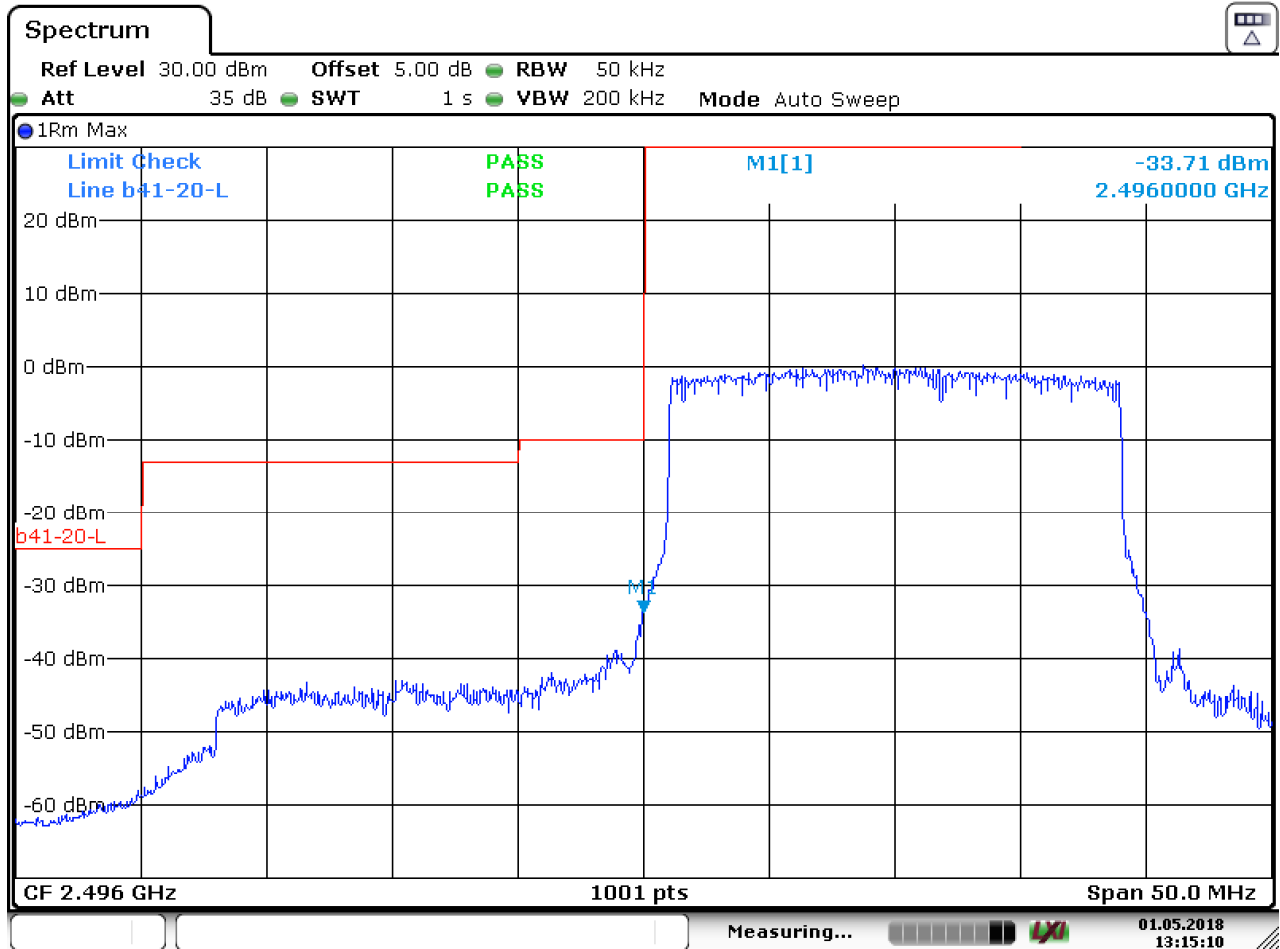
5.1.1.7 Test Mode = LTE/TM1 20MHz
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 1.MAY.2018 13:13:38

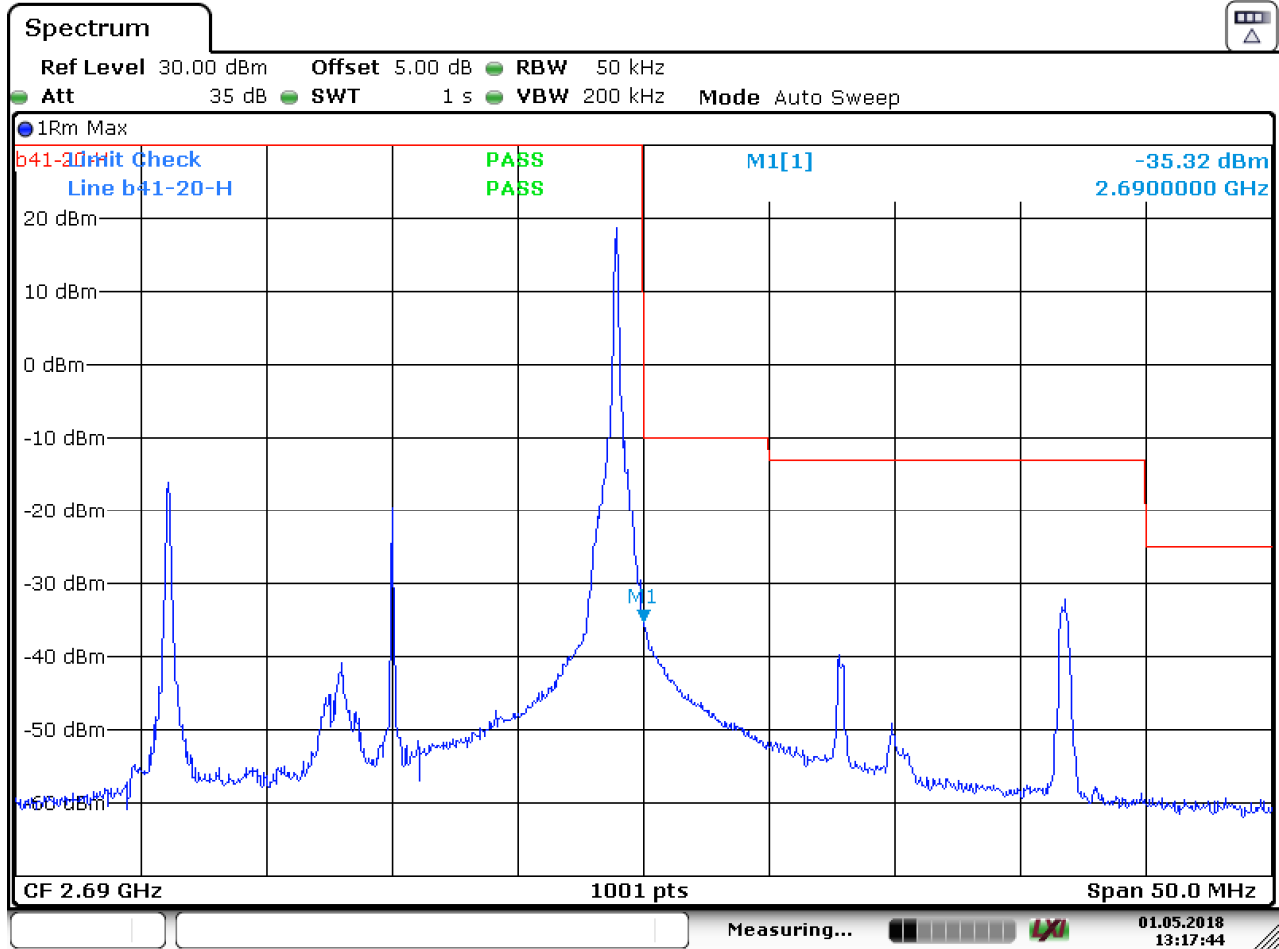
5.1.1.7.1.2 Test RB=100RB



Date: 1.MAY.2018 13:15:10

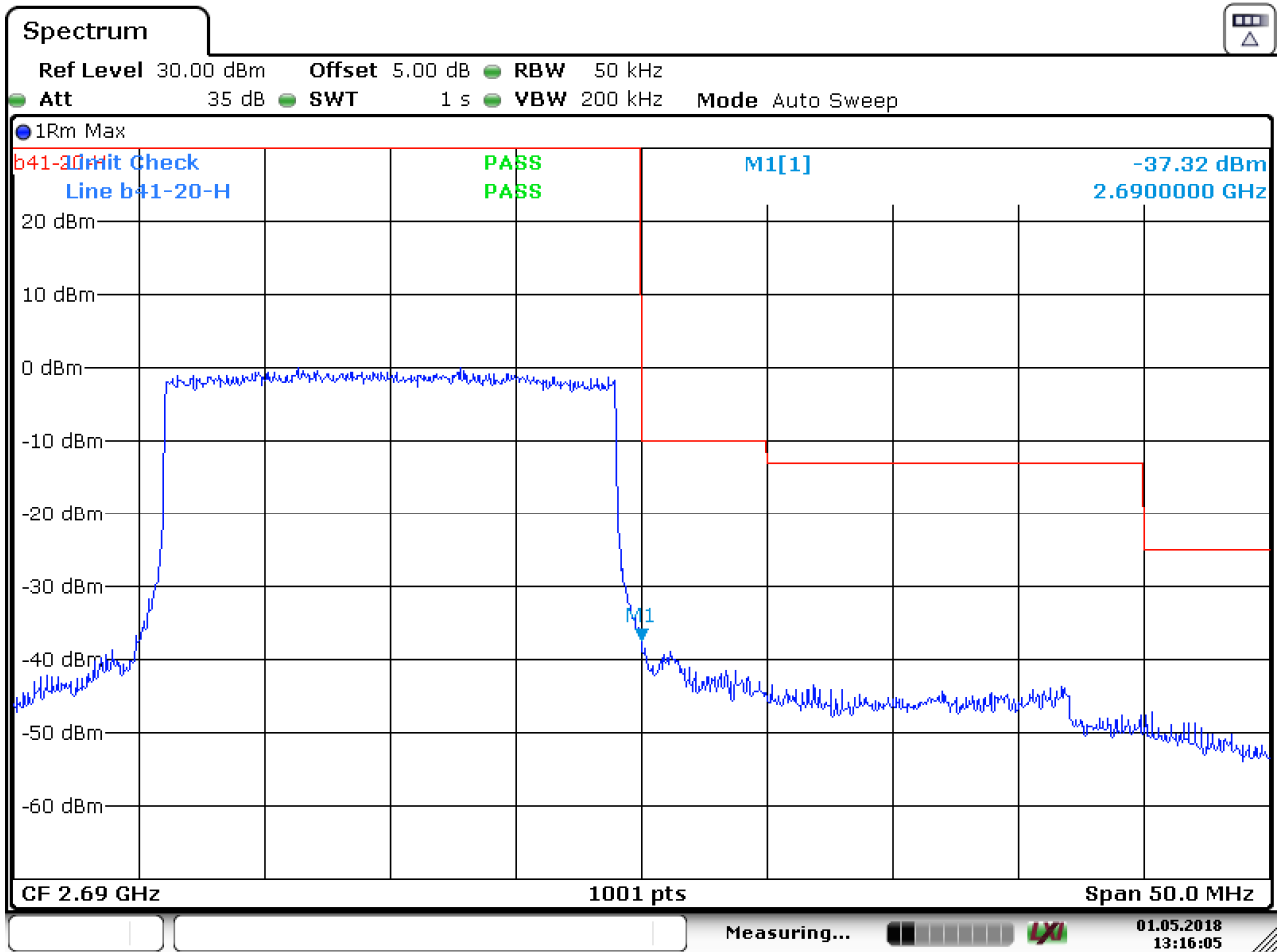
5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



Date: 1.MAY.2018 13:17:45

5.1.1.7.2.2 Test RB=100RB

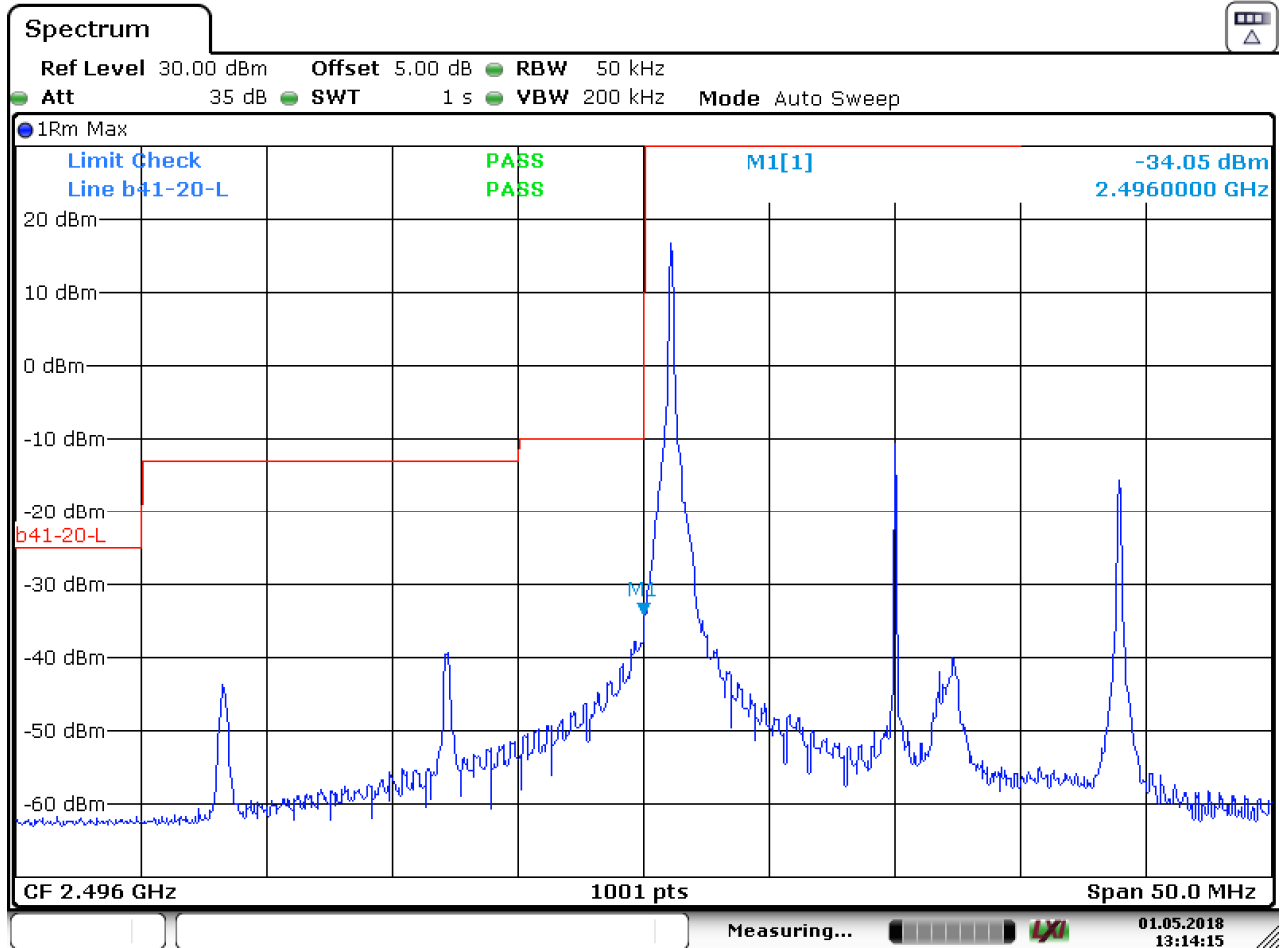


Date: 1.MAY.2018 13:16:05



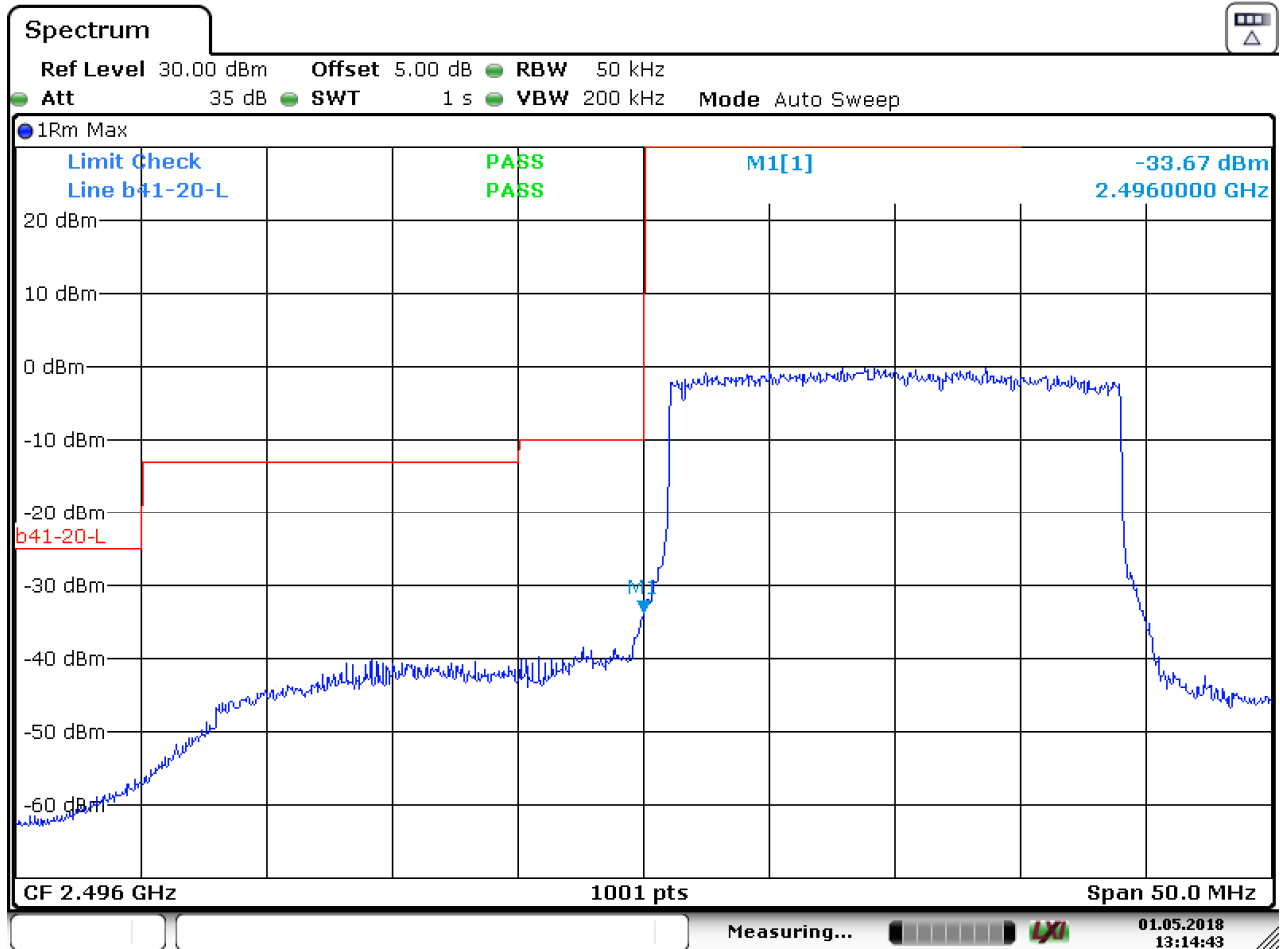
5.1.1.8 Test Mode = LTE/TM2 20MHz
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 1.MAY.2018 13:14:16

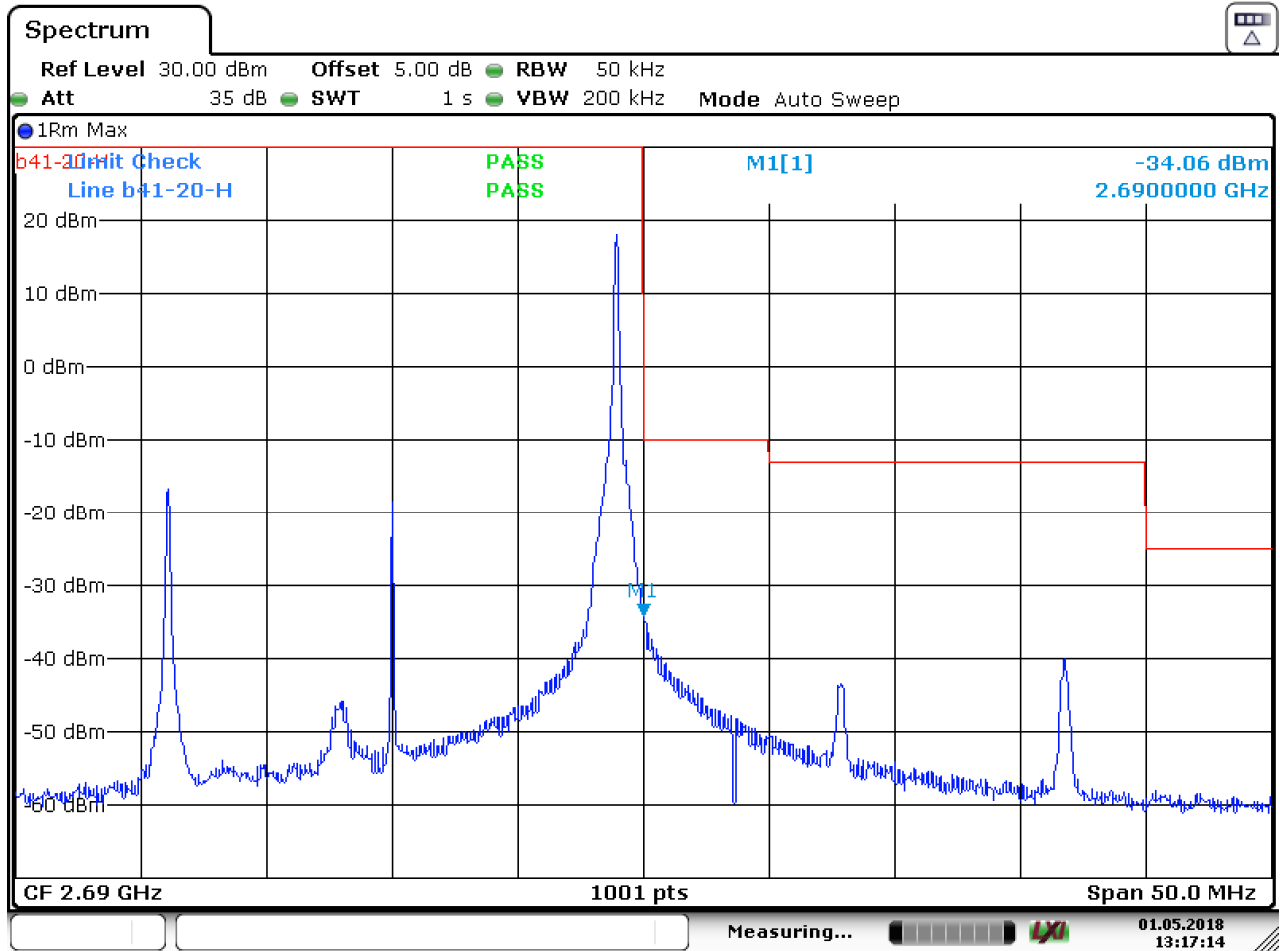
5.1.1.8.1.2 Test RB=100RB



Date: 1.MAY.2018 13:14:43

5.1.1.8.2 Test Channel = HCH

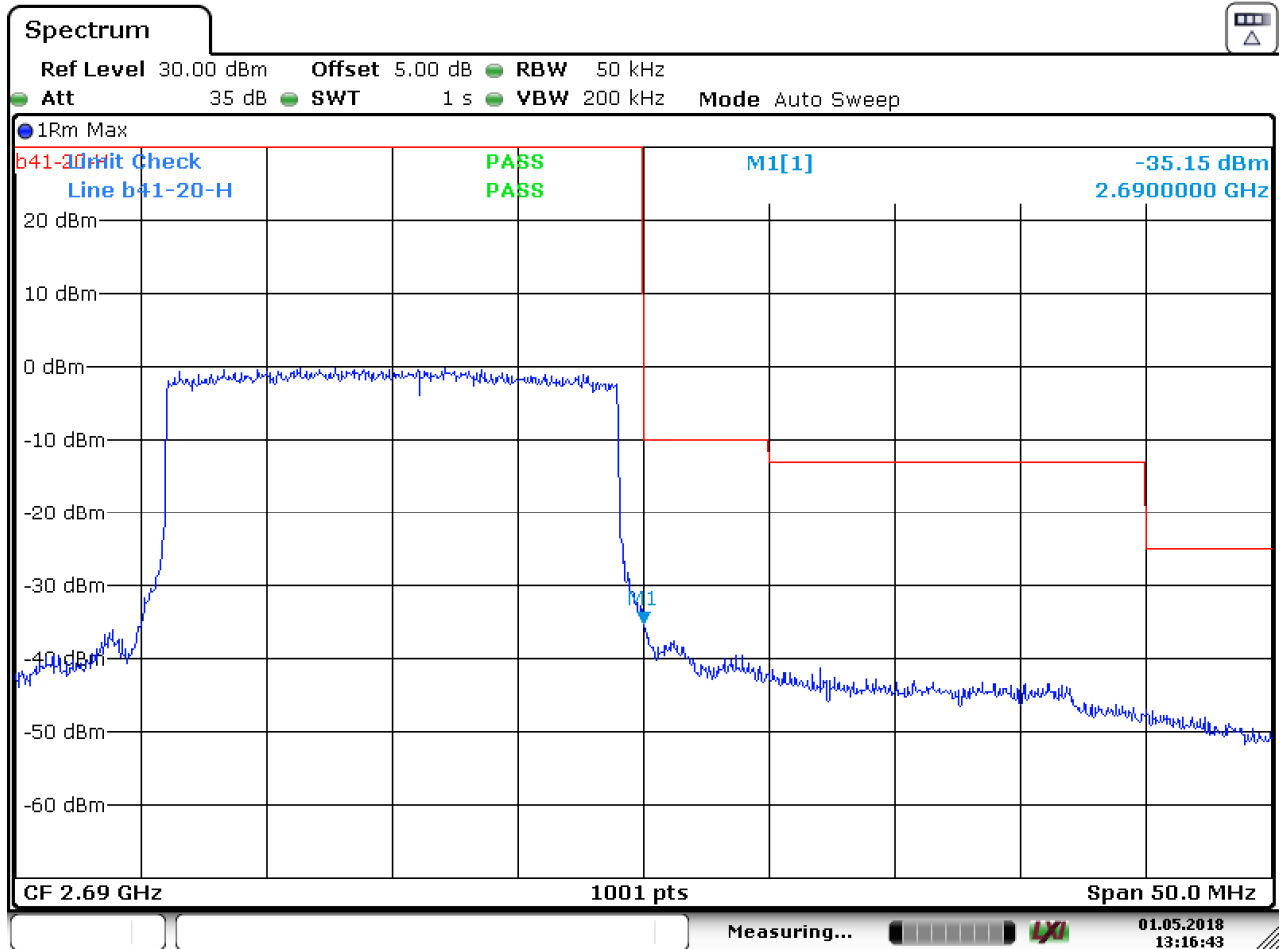
5.1.1.8.2.1 Test RB=1RB



Date: 1.MAY.2018 13:17:14



5.1.1.8.2.2 Test RB=100RB



Date: 1.MAY.2018 13:16:44

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.

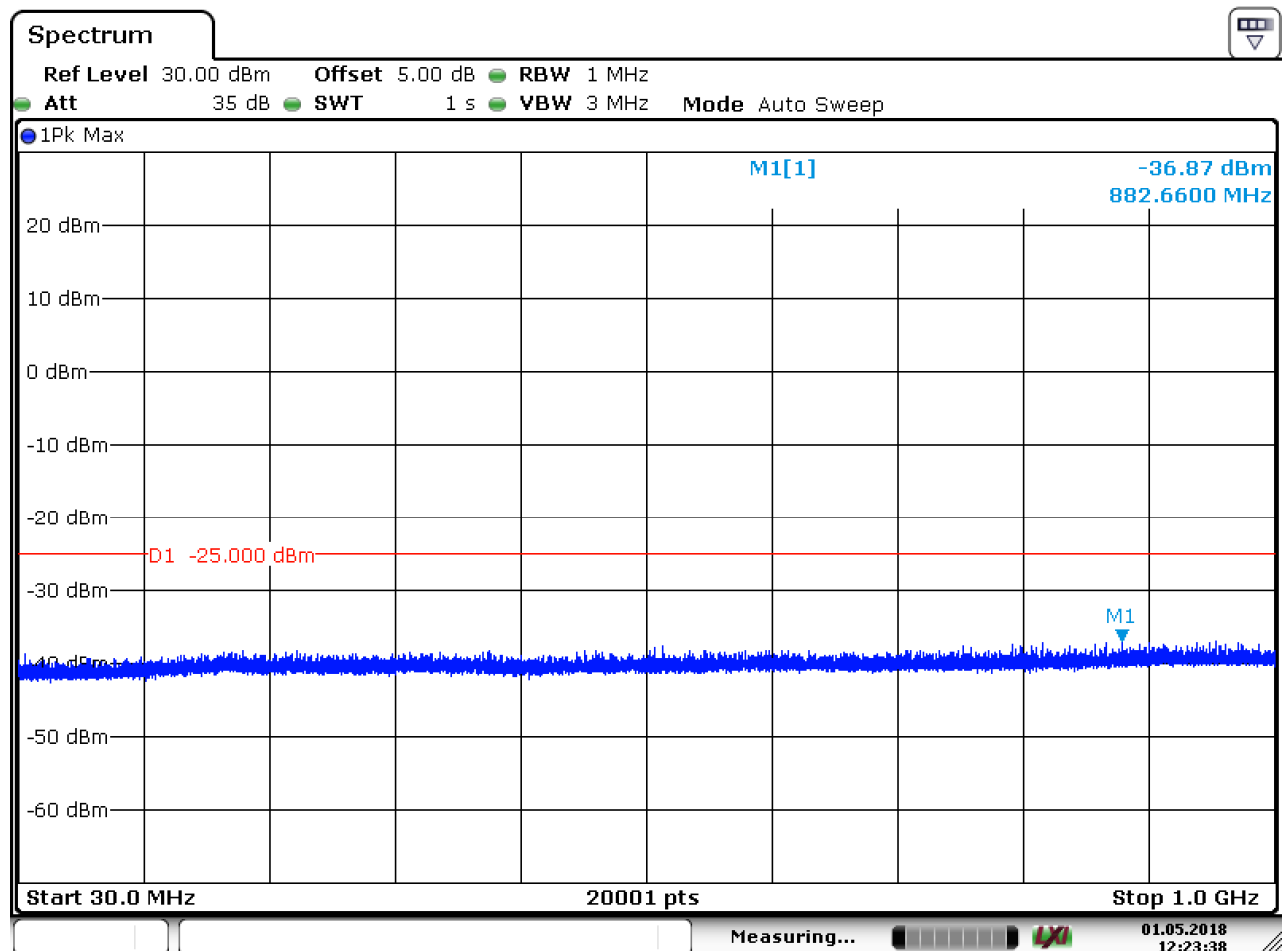
Part I - Test Plots

6.1 For LTE

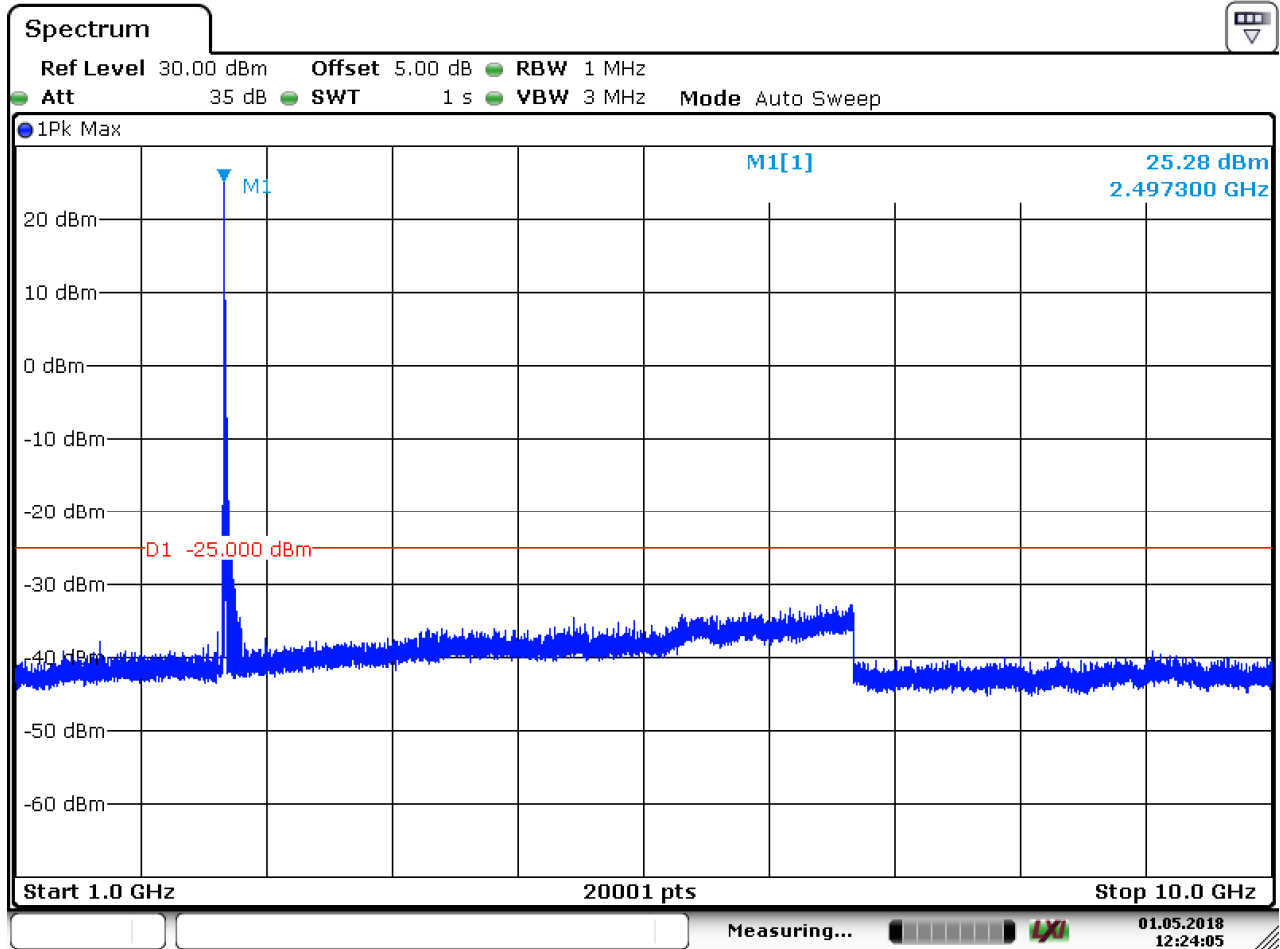
6.1.1 Test Band = LTE band41

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

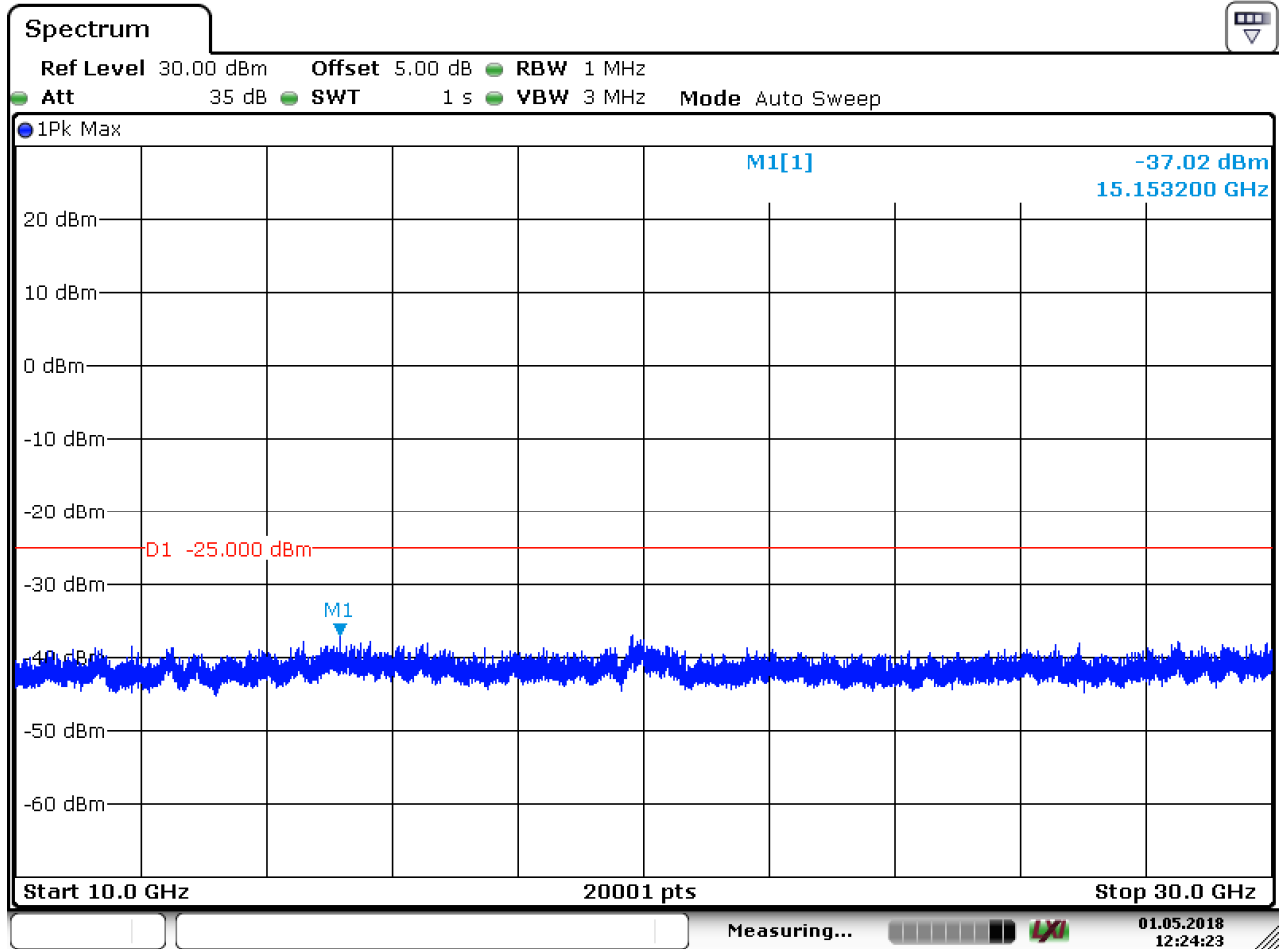
6.1.1.1.1 Test Channel = LCH



Date: 1.MAY.2018 12:23:39



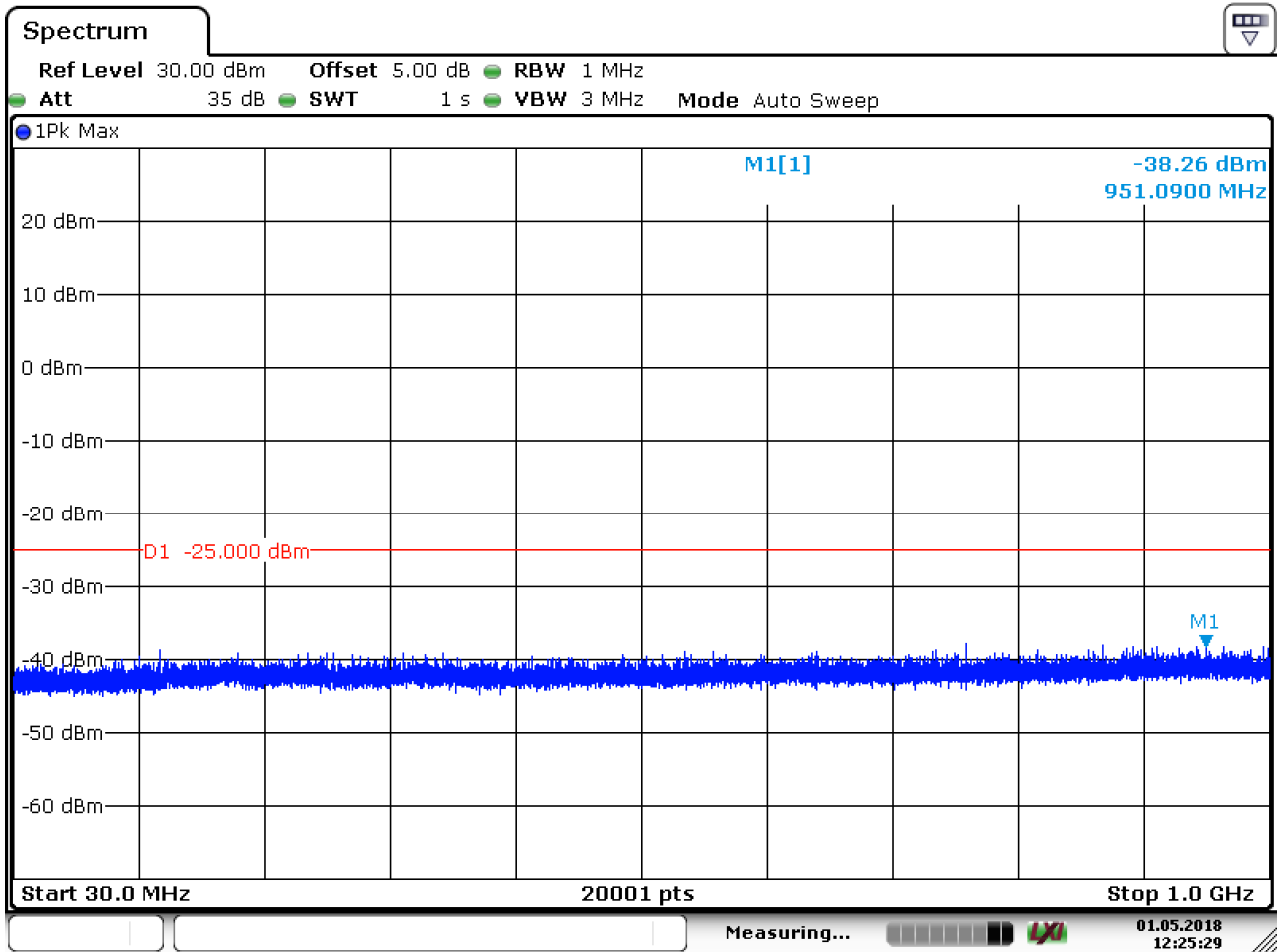
Date: 1.MAY.2018 12:24:05



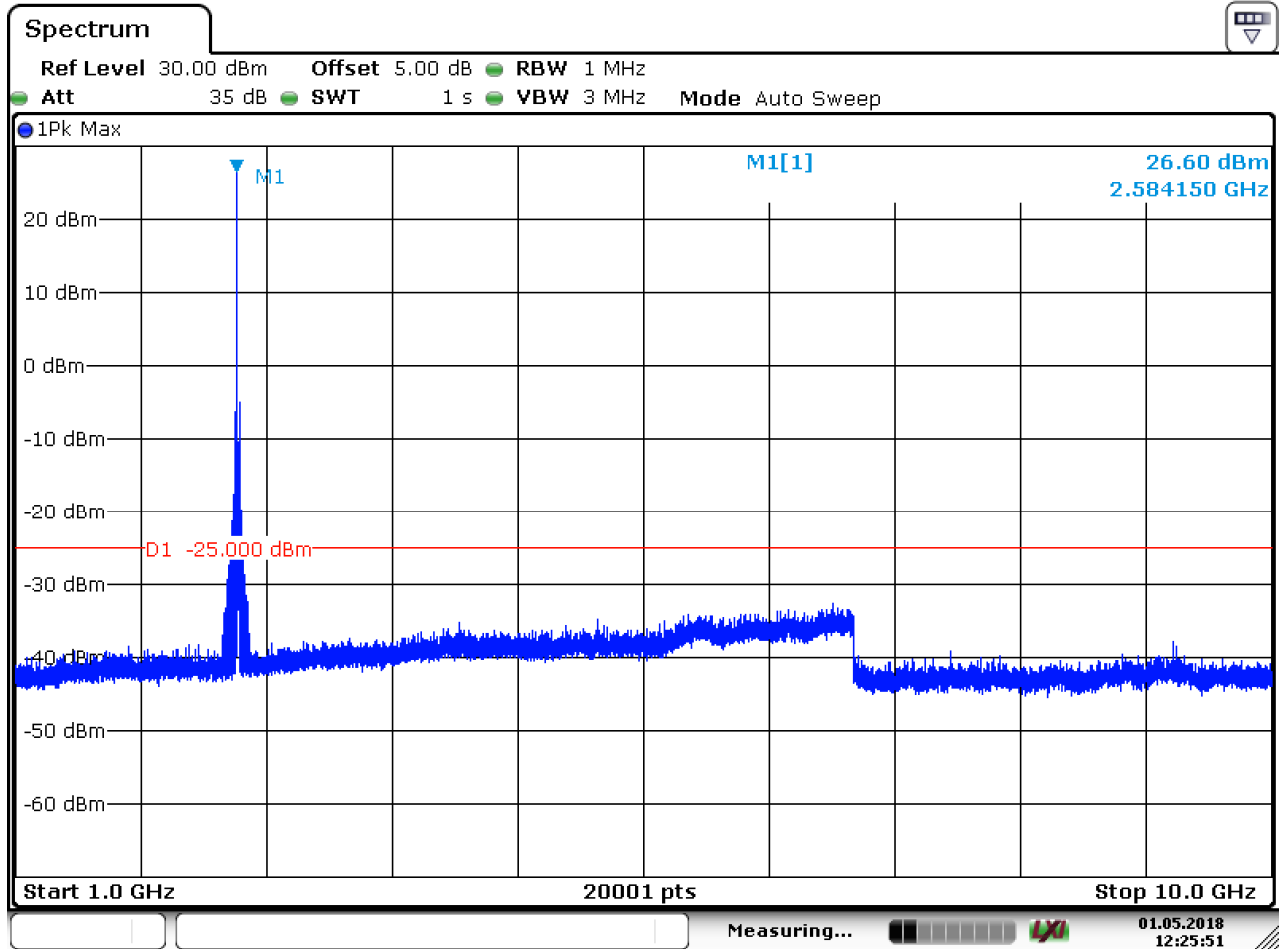
Date: 1.MAY.2018 12:24:23



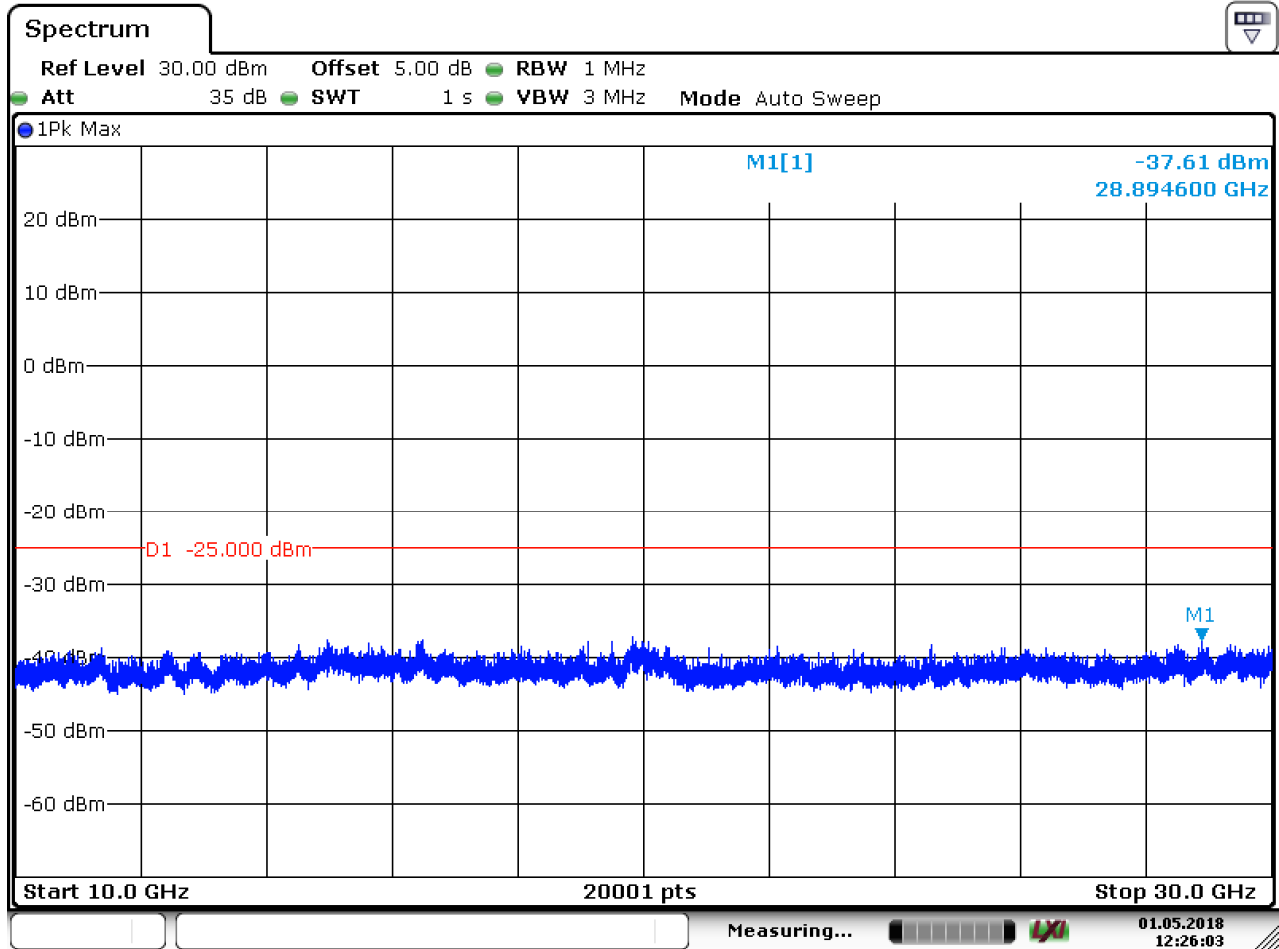
6.1.1.1.2 Test Channel = MCH



Date: 1.MAY.2018 12:25:29



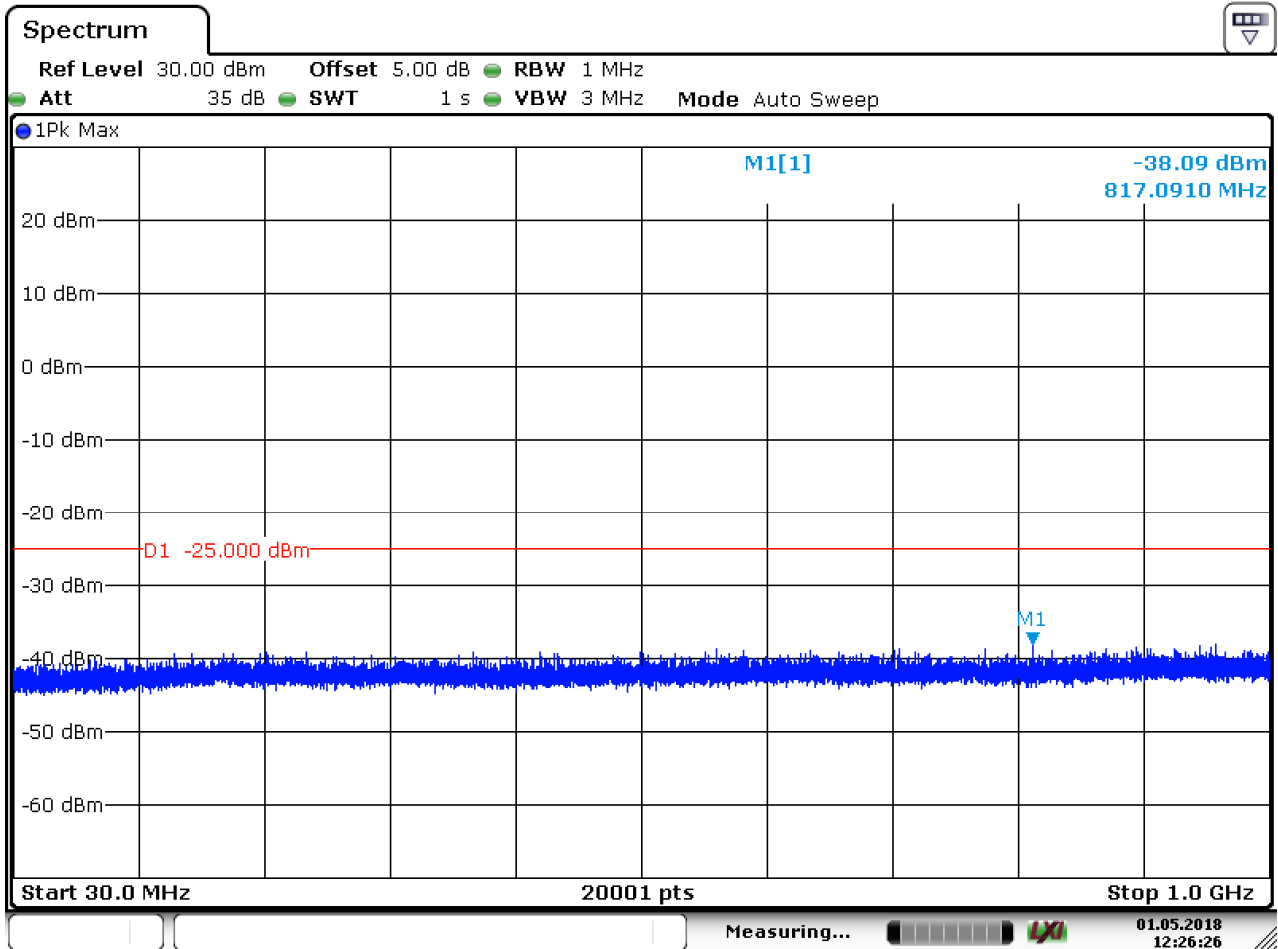
Date: 1.MAY.2018 12:25:51



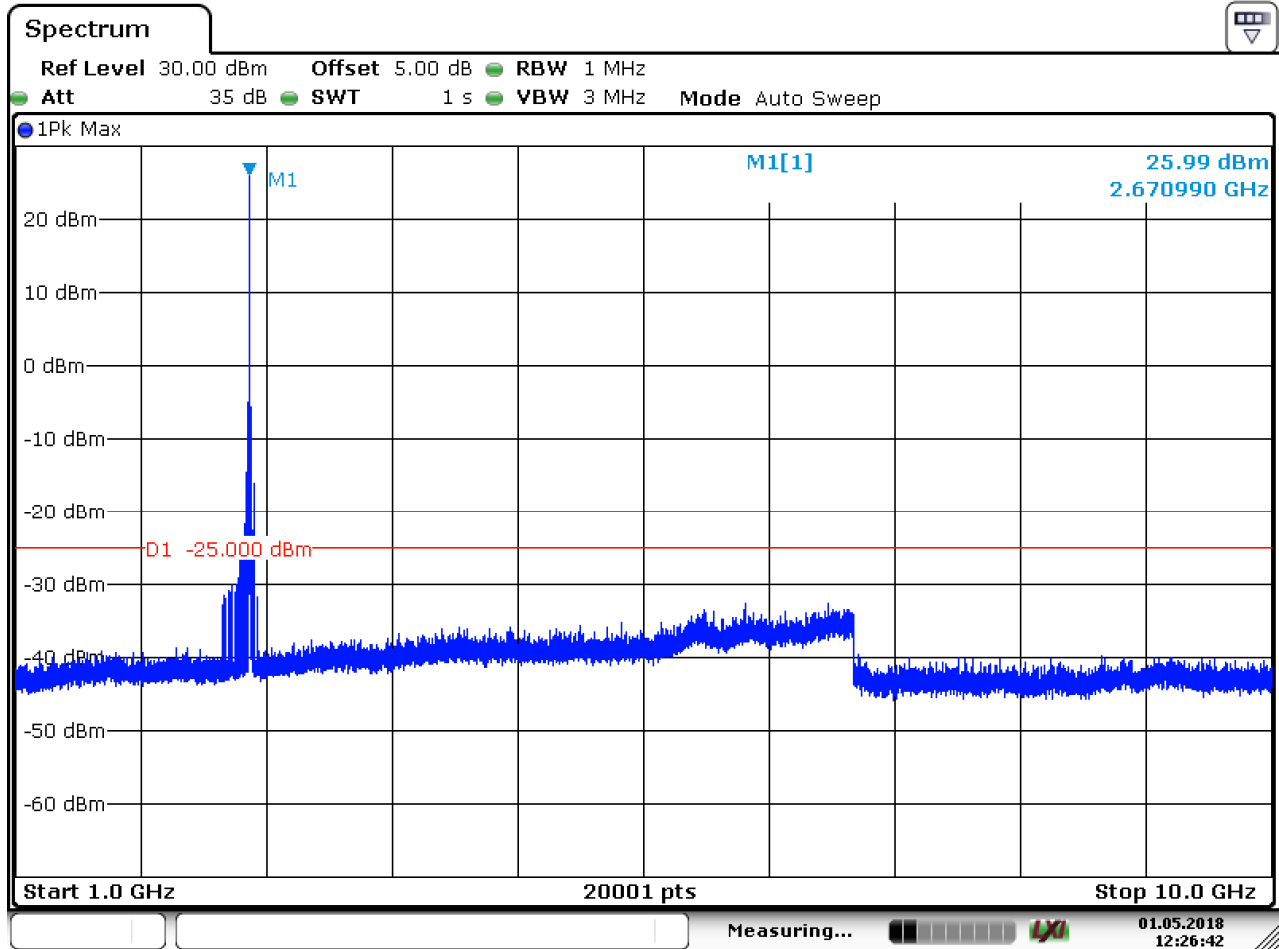
Date: 1.MAY.2018 12:26:04



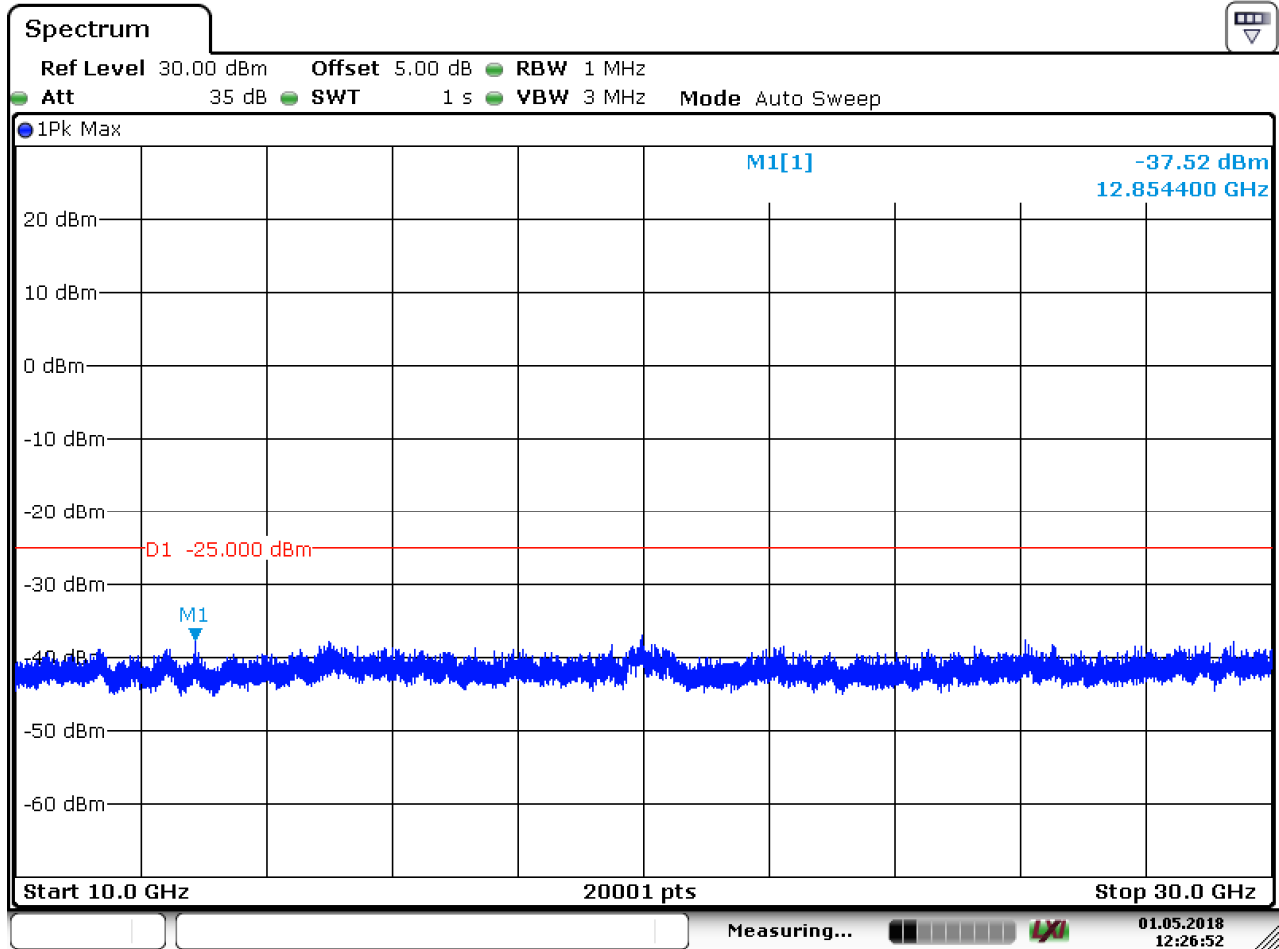
6.1.1.1.3 Test Channel = HCH



Date: 1.MAY.2018 12:26:26



Date: 1.MAY.2018 12:26:42



Date: 1.MAY.2018 12:26:52



7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band41

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
72.050000	-78.09	-25.00	53.09	Vertical
144.000000	-70.81	-25.00	45.81	Vertical
288.000000	-76.91	-25.00	51.91	Vertical
4993.875000	-59.15	-25.00	34.15	Vertical
7491.175000	-61.41	-25.00	36.41	Vertical
9988.150000	-61.88	-25.00	36.88	Vertical
63.750000	-77.55	-25.00	52.55	Horizontal
144.000000	-78.26	-25.00	53.26	Horizontal
4994.525000	-61.06	-25.00	36.06	Horizontal
7491.500000	-62.87	-25.00	37.87	Horizontal
9988.800000	-54.50	-25.00	29.50	Horizontal
12485.450000	-61.53	-25.00	36.53	Horizontal

7.1.1.1.1 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.100000	-77.34	-25.00	52.34	Vertical
144.000000	-69.80	-25.00	44.80	Vertical
288.000000	-78.54	-25.00	53.54	Vertical
5168.725000	-56.60	-25.00	31.60	Vertical
7751.825000	-62.46	-25.00	37.46	Vertical
10336.550000	-61.74	-25.00	36.74	Vertical
63.650000	-77.77	-25.00	52.77	Horizontal
144.000000	-77.81	-25.00	52.81	Horizontal
288.000000	-80.88	-25.00	55.88	Horizontal
5168.400000	-60.58	-25.00	35.58	Horizontal
7752.475000	-60.83	-25.00	35.83	Horizontal
10335.900000	-61.92	-25.00	36.92	Horizontal



7.1.1.1.1 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.150000	-76.44	-25.00	51.44	Vertical
144.000000	-72.79	-25.00	47.79	Vertical
288.000000	-77.87	-25.00	52.87	Vertical
5341.625000	-62.94	-25.00	37.94	Vertical
7939.675000	-64.32	-25.00	39.32	Vertical
11404.175000	-65.42	-25.00	40.42	Vertical
62.600000	-78.06	-25.00	53.06	Horizontal
144.000000	-77.09	-25.00	52.09	Horizontal
288.000000	-81.93	-25.00	56.93	Horizontal
5341.625000	-58.51	-25.00	33.51	Horizontal
8013.775000	-63.13	-25.00	38.13	Horizontal
10684.300000	-64.05	-25.00	39.05	Horizontal

NOTE:

- 1) 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
LTEban41	LTE/TM1 20MHz	LCH	TN	VL	-8.45	-0.00337	PASS
				VN	2.83	0.00113	PASS
				VH	7.93	0.00316	PASS
		MCH	TN	VL	-0.46	-0.00018	PASS
				VN	0.02	0.00001	PASS
				VH	6.76	0.00261	PASS
		HCH	TN	VL	-2.05	-0.00076	PASS
				VN	-4.57	-0.00171	PASS
				VH	-5.37	-0.00200	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-0.89	-0.00036	PASS
				VN	-3.26	-0.00130	PASS
				VH	-8.25	-0.00329	PASS
		MCH	TN	VL	2.43	0.00094	PASS
				VN	8.19	0.00316	PASS
				VH	-0.26	-0.00010	PASS
		HCH	TN	VL	1.32	0.00049	PASS
				VN	6.26	0.00234	PASS
				VH	-1.62	-0.00060	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
LTEband41	LTE/TM1 20MHz	LCH	VN	-30	-7.59	-0.00303	PASS
				-20	1.96	0.00078	PASS
				-10	4.65	0.00186	PASS
				0	9.45	0.00377	PASS
				10	5.30	0.00212	PASS
				20	9.76	0.00389	PASS
				30	4.04	0.00161	PASS
				40	-1.17	-0.00047	PASS
				50	1.14	0.00046	PASS
		MCH	VN	-30	5.26	0.00203	PASS
				-20	4.43	0.00171	PASS
				-10	4.90	0.00189	PASS
				0	0.36	0.00014	PASS
				10	8.38	0.00323	PASS
				20	-9.51	-0.00367	PASS
				30	-0.73	-0.00028	PASS
				40	0.75	0.00029	PASS
				50	2.47	0.00095	PASS
		HCH	VN	-30	-3.43	-0.00128	PASS
				-20	8.38	0.00313	PASS
				-10	5.84	0.00218	PASS
				0	6.75	0.00252	PASS
				10	-7.68	-0.00287	PASS
				20	-0.94	-0.00035	PASS
				30	-5.75	-0.00214	PASS
				40	1.40	0.00052	PASS
				50	8.26	0.00308	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband41	LTE/TM2 20MHz	LCH	VN	-30	-4.91	-0.00196	PASS
				-20	4.73	0.00189	PASS
				-10	-1.68	-0.00067	PASS
				0	3.83	0.00153	PASS
				10	-0.41	-0.00016	PASS
				20	6.72	0.00268	PASS
				30	1.83	0.00073	PASS
				40	6.82	0.00272	PASS
		MCH	VN	-30	-2.49	-0.00096	PASS
				-20	-8.34	-0.00322	PASS
				-10	-8.56	-0.00330	PASS
				0	-6.22	-0.00240	PASS
				10	2.76	0.00106	PASS
				20	4.57	0.00176	PASS
				30	1.47	0.00057	PASS
				40	-4.23	-0.00163	PASS
		HCH	VN	-30	7.06	0.00263	PASS
				-20	-4.20	-0.00157	PASS
				-10	-5.40	-0.00202	PASS
				0	-6.74	-0.00252	PASS
				10	-5.86	-0.00219	PASS
				20	6.48	0.00242	PASS
				30	-2.54	-0.00095	PASS
				40	-3.39	-0.00126	PASS
			50	7.12	0.00265	PASS	

The End