

Appendix B

E-UTRA Band 25

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1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 25

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND25	LTE/TM1	1.4M	LCH	RB1#0	20.76	21.96	33.00	PASS
				RB1#2	20.73	21.93	33.00	PASS
				RB1#5	20.88	22.08	33.00	PASS
				RB3#0	20.98	22.18	33.00	PASS
				RB3#2	20.77	21.97	33.00	PASS
				RB3#3	20.8	22	33.00	PASS
				RB6#0	19.78	20.98	33.00	PASS
			MCH	RB1#0	20.73	21.93	33.00	PASS
				RB1#2	20.82	22.02	33.00	PASS
				RB1#5	20.66	21.86	33.00	PASS
				RB3#0	20.92	22.12	33.00	PASS
				RB3#2	20.99	22.19	33.00	PASS
				RB3#3	20.92	22.12	33.00	PASS
				RB6#0	19.89	21.09	33.00	PASS
			HCH	RB1#0	20.76	21.96	33.00	PASS
				RB1#2	20.86	22.06	33.00	PASS
				RB1#5	20.85	22.05	33.00	PASS
				RB3#0	20.9	22.1	33.00	PASS
				RB3#2	20.94	22.14	33.00	PASS
				RB3#3	21.06	22.26	33.00	PASS
				RB6#0	19.85	21.05	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
BAND25	LTE/TM2	1.4M	LCH	RB1#0	19.87	21.07	33.00	PASS
				RB1#2	19.83	21.03	33.00	PASS
				RB1#5	19.91	21.11	33.00	PASS
				RB3#0	19.66	20.86	33.00	PASS
				RB3#2	19.65	20.85	33.00	PASS
				RB3#3	19.63	20.83	33.00	PASS
				RB6#0	18.59	19.79	33.00	PASS
			MCH	RB1#0	19.38	20.58	33.00	PASS
				RB1#2	19.4	20.6	33.00	PASS
				RB1#5	18.81	20.01	33.00	PASS
				RB3#0	19.57	20.77	33.00	PASS
				RB3#2	19.81	21.01	33.00	PASS
				RB3#3	19.76	20.96	33.00	PASS
				RB6#0	18.72	19.92	33.00	PASS
			HCH	RB1#0	19.13	20.33	33.00	PASS
				RB1#2	19.02	20.22	33.00	PASS
				RB1#5	19.42	20.62	33.00	PASS
				RB3#0	19.56	20.76	33.00	PASS
				RB3#2	19.8	21	33.00	PASS
				RB3#3	19.73	20.93	33.00	PASS
				RB6#0	18.91	20.11	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
BAND25	LTE/TM1	3M	LCH	RB1#0	20.9	22.1	33.00	PASS
				RB1#7	20.7	21.9	33.00	PASS
				RB1#14	20.75	21.95	33.00	PASS
				RB8#0	19.82	21.02	33.00	PASS
				RB8#4	19.91	21.11	33.00	PASS
				RB8#7	19.83	21.03	33.00	PASS
				RB15#0	19.83	21.03	33.00	PASS
			MCH	RB1#0	20.43	21.63	33.00	PASS
				RB1#7	20.74	21.94	33.00	PASS
				RB1#14	20.55	21.75	33.00	PASS
				RB8#0	19.8	21	33.00	PASS
				RB8#4	19.82	21.02	33.00	PASS
				RB8#7	19.77	20.97	33.00	PASS
				RB15#0	19.88	21.08	33.00	PASS
			HCH	RB1#0	20.66	21.86	33.00	PASS
				RB1#7	20.8	22	33.00	PASS
				RB1#14	20.66	21.86	33.00	PASS
				RB8#0	19.92	21.12	33.00	PASS
				RB8#4	19.87	21.07	33.00	PASS
				RB8#7	19.94	21.14	33.00	PASS
				RB15#0	19.92	21.12	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
BAND25	LTE/TM2	3M	LCH	RB1#0	19.97	21.17	33.00	PASS
				RB1#7	19.97	21.17	33.00	PASS
				RB1#14	20.26	21.46	33.00	PASS
				RB8#0	18.62	19.82	33.00	PASS
				RB8#4	18.87	20.07	33.00	PASS
				RB8#7	18.85	20.05	33.00	PASS
				RB15#0	19	20.2	33.00	PASS
			MCH	RB1#0	19.4	20.6	33.00	PASS
				RB1#7	19.1	20.3	33.00	PASS
				RB1#14	19.54	20.74	33.00	PASS
				RB8#0	18.87	20.07	33.00	PASS
				RB8#4	19	20.2	33.00	PASS
				RB8#7	18.84	20.04	33.00	PASS
				RB15#0	18.94	20.14	33.00	PASS
			HCH	RB1#0	20.35	21.55	33.00	PASS
				RB1#7	19.31	20.51	33.00	PASS
				RB1#14	19.6	20.8	33.00	PASS
				RB8#0	18.9	20.1	33.00	PASS
				RB8#4	18.94	20.14	33.00	PASS
				RB8#7	18.98	20.18	33.00	PASS
				RB15#0	19.05	20.25	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
BAND25	LTE/TM1	5M	LCH	RB1#0	20.7	21.9	33.00	PASS
				RB1#13	20.63	21.83	33.00	PASS
				RB1#24	20.67	21.87	33.00	PASS
				RB12#0	19.76	20.96	33.00	PASS
				RB12#6	19.83	21.03	33.00	PASS
				RB12#13	19.72	20.92	33.00	PASS
				RB25#0	19.75	20.95	33.00	PASS
			MCH	RB1#0	20.57	21.77	33.00	PASS
				RB1#13	20.54	21.74	33.00	PASS
				RB1#24	20.57	21.77	33.00	PASS
				RB12#0	19.79	20.99	33.00	PASS
				RB12#6	19.93	21.13	33.00	PASS
				RB12#13	19.87	21.07	33.00	PASS
				RB25#0	19.86	21.06	33.00	PASS
			HCH	RB1#0	20.6	21.8	33.00	PASS
				RB1#13	20.64	21.84	33.00	PASS
				RB1#24	20.66	21.86	33.00	PASS
				RB12#0	19.79	20.99	33.00	PASS
				RB12#6	19.82	21.02	33.00	PASS
				RB12#13	19.84	21.04	33.00	PASS
				RB25#0	19.9	21.1	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
BAND25	LTE/TM2	5M	LCH	RB1#0	20.1	21.3	33.00	PASS
				RB1#13	19.58	20.78	33.00	PASS
				RB1#24	19.66	20.86	33.00	PASS
				RB12#0	18.68	19.88	33.00	PASS
				RB12#6	18.66	19.86	33.00	PASS
				RB12#13	18.62	19.82	33.00	PASS
				RB25#0	18.63	19.83	33.00	PASS
			MCH	RB1#0	19.73	20.93	33.00	PASS
				RB1#13	19.73	20.93	33.00	PASS
				RB1#24	19.98	21.18	33.00	PASS
				RB12#0	18.62	19.82	33.00	PASS
				RB12#6	18.77	19.97	33.00	PASS
				RB12#13	18.93	20.13	33.00	PASS
				RB25#0	18.8	20	33.00	PASS
			HCH	RB1#0	20.04	21.24	33.00	PASS
				RB1#13	19.16	20.36	33.00	PASS
				RB1#24	19.5	20.7	33.00	PASS
				RB12#0	18.76	19.96	33.00	PASS
				RB12#6	18.91	20.11	33.00	PASS
				RB12#13	18.77	19.97	33.00	PASS
				RB25#0	18.73	19.93	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
BAND25	LTE/TM1	10M	LCH	RB1#0	20.57	21.77	33.00	PASS
				RB1#25	20.6	21.8	33.00	PASS
				RB1#49	20.71	21.91	33.00	PASS
				RB25#0	19.8	21	33.00	PASS
				RB25#13	19.9	21.1	33.00	PASS
				RB25#25	19.93	21.13	33.00	PASS
				RB50#0	19.84	21.04	33.00	PASS
			MCH	RB1#0	20.61	21.81	33.00	PASS
				RB1#25	20.89	22.09	33.00	PASS
				RB1#49	20.6	21.8	33.00	PASS
				RB25#0	20.03	21.23	33.00	PASS
				RB25#13	20.02	21.22	33.00	PASS
				RB25#25	19.89	21.09	33.00	PASS
				RB50#0	19.96	21.16	33.00	PASS
			HCH	RB1#0	20.59	21.79	33.00	PASS
				RB1#25	20.82	22.02	33.00	PASS
				RB1#49	20.78	21.98	33.00	PASS
				RB25#0	19.84	21.04	33.00	PASS
				RB25#13	19.84	21.04	33.00	PASS
				RB25#25	19.81	21.01	33.00	PASS
				RB50#0	19.86	21.06	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
BAND25	LTE/TM2	10M	LCH	RB1#0	19	20.2	33.00	PASS
				RB1#25	19.87	21.07	33.00	PASS
				RB1#49	19.65	20.85	33.00	PASS
				RB25#0	18.79	19.99	33.00	PASS
				RB25#13	18.99	20.19	33.00	PASS
				RB25#25	18.8	20	33.00	PASS
				RB50#0	18.88	20.08	33.00	PASS
			MCH	RB1#0	18.89	20.09	33.00	PASS
				RB1#25	19.15	20.35	33.00	PASS
				RB1#49	19.55	20.75	33.00	PASS
				RB25#0	18.89	20.09	33.00	PASS
				RB25#13	19.12	20.32	33.00	PASS
				RB25#25	18.89	20.09	33.00	PASS
				RB50#0	18.97	20.17	33.00	PASS
			HCH	RB1#0	19.5	20.7	33.00	PASS
				RB1#25	19.37	20.57	33.00	PASS
				RB1#49	19.44	20.64	33.00	PASS
				RB25#0	19.05	20.25	33.00	PASS
				RB25#13	18.96	20.16	33.00	PASS
				RB25#25	18.83	20.03	33.00	PASS
				RB50#0	18.87	20.07	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND25	LTE/TM1	15M	LCH	RB1#0	20.73	21.93	33.00	PASS
				RB1#38	20.76	21.96	33.00	PASS
				RB1#74	20.71	21.91	33.00	PASS
				RB36#0	19.9	21.1	33.00	PASS
				RB36#18	19.84	21.04	33.00	PASS
				RB36#39	19.82	21.02	33.00	PASS
				RB75#0	19.9	21.1	33.00	PASS
			MCH	RB1#0	20.68	21.88	33.00	PASS
				RB1#38	20.82	22.02	33.00	PASS
				RB1#74	20.71	21.91	33.00	PASS
				RB36#0	20.02	21.22	33.00	PASS
				RB36#18	19.93	21.13	33.00	PASS
				RB36#39	19.96	21.16	33.00	PASS
				RB75#0	19.93	21.13	33.00	PASS
			HCH	RB1#0	20.66	21.86	33.00	PASS
				RB1#38	20.95	22.15	33.00	PASS
				RB1#74	20.77	21.97	33.00	PASS
				RB36#0	19.9	21.1	33.00	PASS
				RB36#18	19.93	21.13	33.00	PASS
				RB36#39	19.71	20.91	33.00	PASS
				RB75#0	19.82	21.02	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
BAND25	LTE/TM2	15M	LCH	RB1#0	19.59	20.79	33.00	PASS
				RB1#38	19.4	20.6	33.00	PASS
				RB1#74	18.84	20.04	33.00	PASS
				RB36#0	18.95	20.15	33.00	PASS
				RB36#18	18.77	19.97	33.00	PASS
				RB36#39	18.95	20.15	33.00	PASS
				RB75#0	18.99	20.19	33.00	PASS
			MCH	RB1#0	19.84	21.04	33.00	PASS
				RB1#38	19.91	21.11	33.00	PASS
				RB1#74	19.79	20.99	33.00	PASS
				RB36#0	19.05	20.25	33.00	PASS
				RB36#18	18.95	20.15	33.00	PASS
				RB36#39	19	20.2	33.00	PASS
				RB75#0	18.97	20.17	33.00	PASS
			HCH	RB1#0	19.83	21.03	33.00	PASS
				RB1#38	19.66	20.86	33.00	PASS
				RB1#74	19.4	20.6	33.00	PASS
				RB36#0	18.89	20.09	33.00	PASS
				RB36#18	18.88	20.08	33.00	PASS
				RB36#39	18.89	20.09	33.00	PASS
				RB75#0	18.85	20.05	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND25	LTE/TM1	20M	LCH	RB1#0	20.61	21.81	33.00	PASS
				RB1#50	21.02	22.22	33.00	PASS
				RB1#99	20.47	21.67	33.00	PASS
				RB50#0	20.02	21.22	33.00	PASS
				RB50#25	19.85	21.05	33.00	PASS
				RB50#50	19.85	21.05	33.00	PASS
				RB100#0	19.91	21.11	33.00	PASS
			MCH	RB1#0	20.41	21.61	33.00	PASS
				RB1#50	21.01	22.21	33.00	PASS
				RB1#99	20.47	21.67	33.00	PASS
				RB50#0	20.01	21.21	33.00	PASS
				RB50#25	19.94	21.14	33.00	PASS
				RB50#50	19.91	21.11	33.00	PASS
				RB100#0	19.99	21.19	33.00	PASS
			HCH	RB1#0	20.66	21.86	33.00	PASS
				RB1#50	21	22.2	33.00	PASS
				RB1#99	20.74	21.94	33.00	PASS
				RB50#0	19.91	21.11	33.00	PASS
				RB50#25	19.84	21.04	33.00	PASS
				RB50#50	19.95	21.15	33.00	PASS
				RB100#0	19.81	21.01	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND25	LTE/TM2	20M	LCH	RB1#0	19.35	20.55	33.00	PASS
				RB1#50	19.81	21.01	33.00	PASS
				RB1#99	19.17	20.37	33.00	PASS
				RB50#0	19.04	20.24	33.00	PASS
				RB50#25	18.75	19.95	33.00	PASS
				RB50#50	19.04	20.24	33.00	PASS
				RB100#0	18.93	20.13	33.00	PASS
			MCH	RB1#0	19.6	20.8	33.00	PASS
				RB1#50	19.75	20.95	33.00	PASS
				RB1#99	19	20.2	33.00	PASS
				RB50#0	19	20.2	33.00	PASS
				RB50#25	19.14	20.34	33.00	PASS
				RB50#50	19.05	20.25	33.00	PASS
				RB100#0	19.06	20.26	33.00	PASS
			HCH	RB1#0	19.43	20.63	33.00	PASS
				RB1#50	19.33	20.53	33.00	PASS
				RB1#99	19.44	20.64	33.00	PASS
				RB50#0	19.02	20.22	33.00	PASS
				RB50#25	19.02	20.22	33.00	PASS
				RB50#50	19.05	20.25	33.00	PASS
				RB100#0	18.96	20.16	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 25	TM1/20M	LCH	4.58	13	PASS
		MCH	4.49	13	PASS
		HCH	4.70	13	PASS
	TM2/20M	LCH	5.59	13	PASS
		MCH	5.59	13	PASS
		HCH	5.62	13	PASS

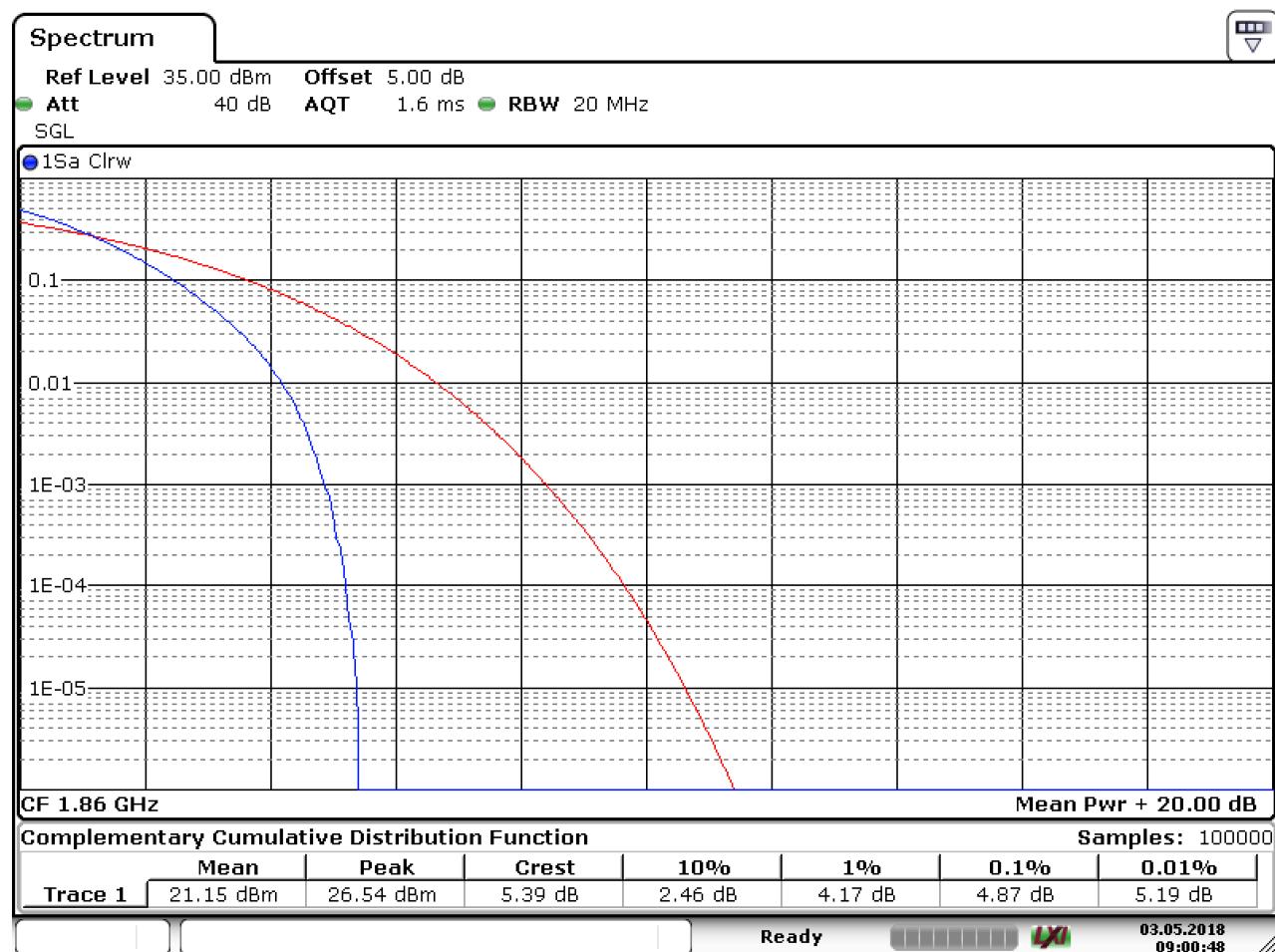
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band25

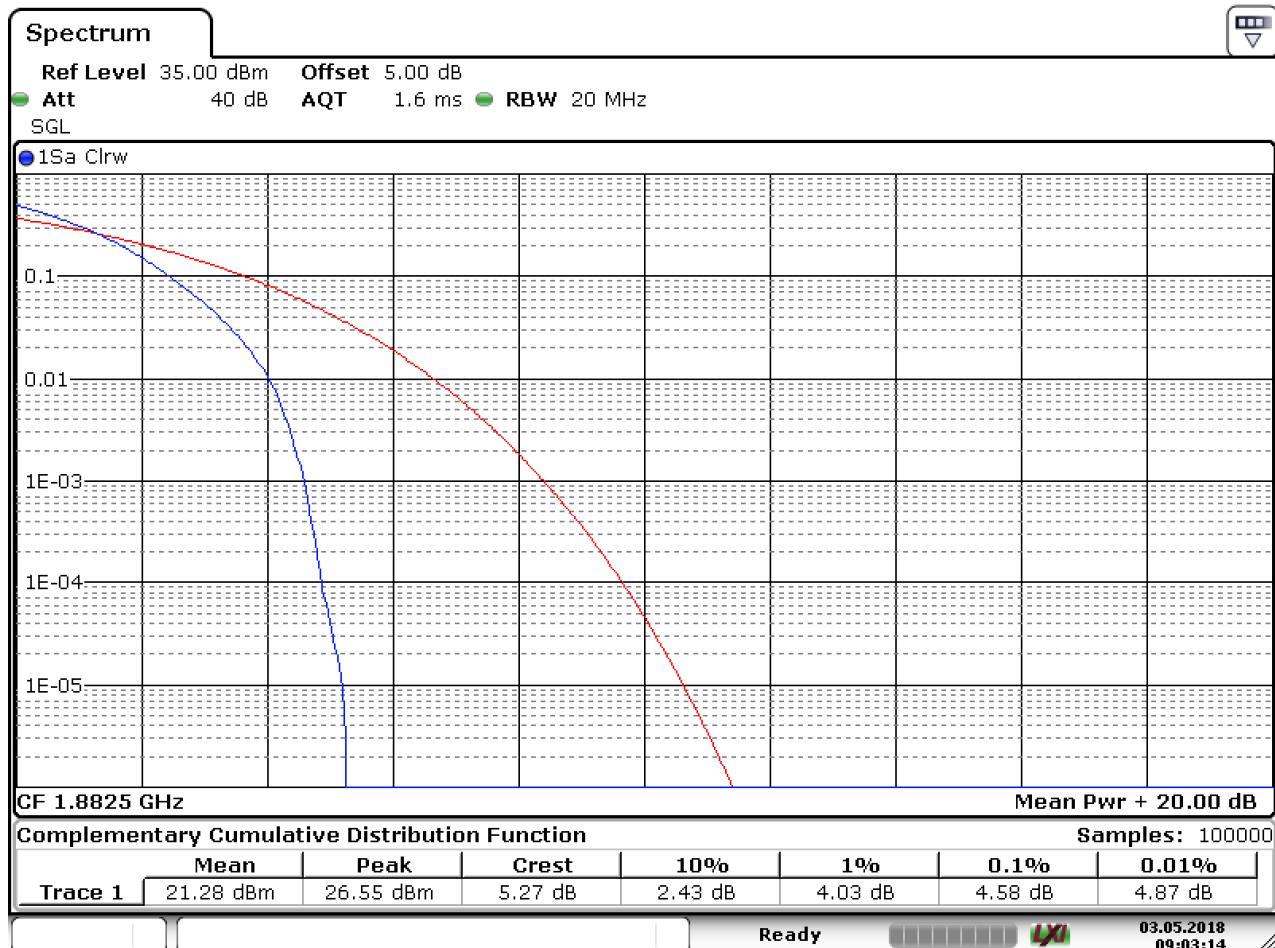
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

2.1.1.1.1 Test Channel = LCH



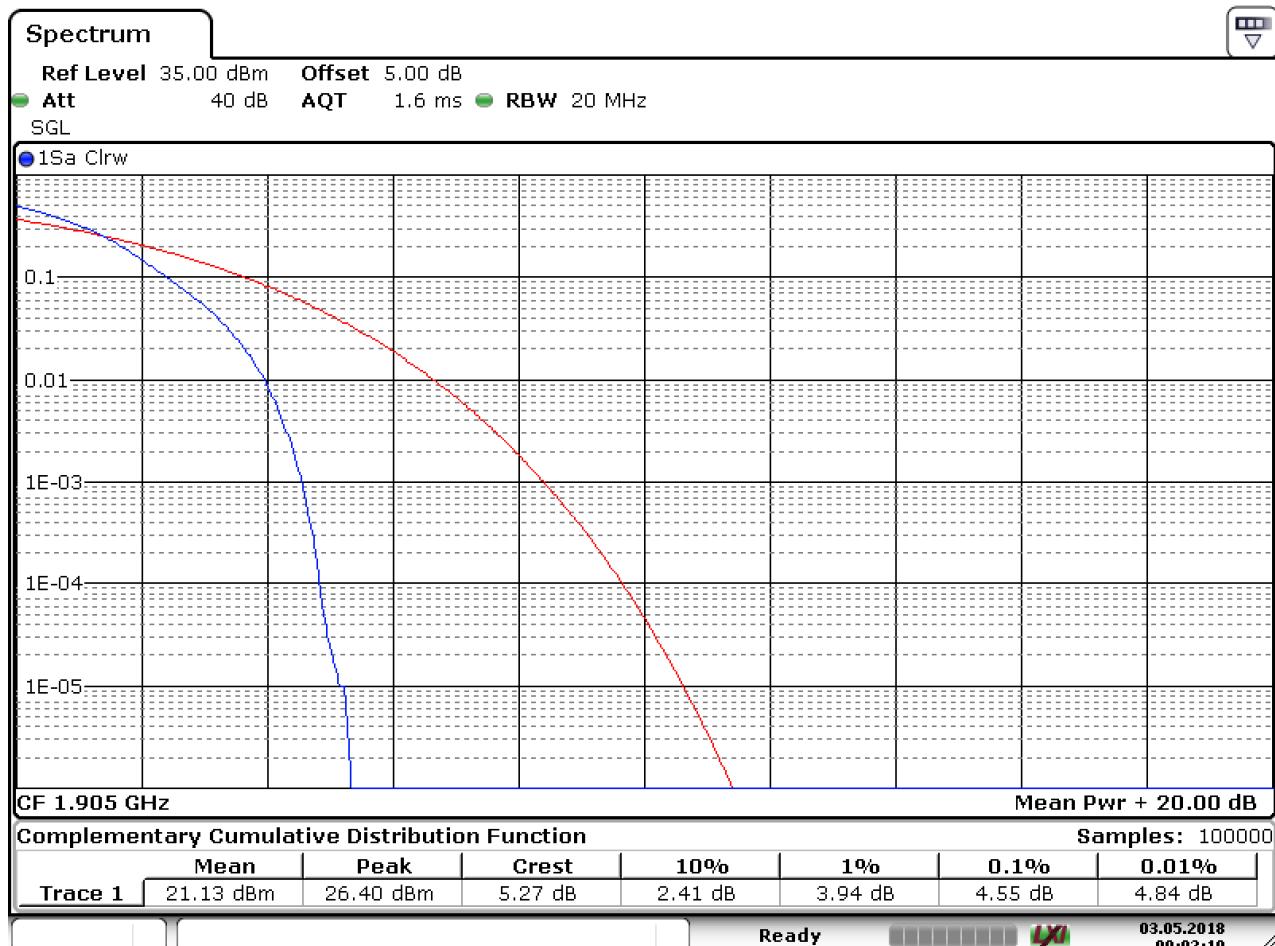
Date: 3.MAY.2018 09:00:49

2.1.1.1.2 Test Channel = MCH



Date: 3.MAY.2018 09:03:15

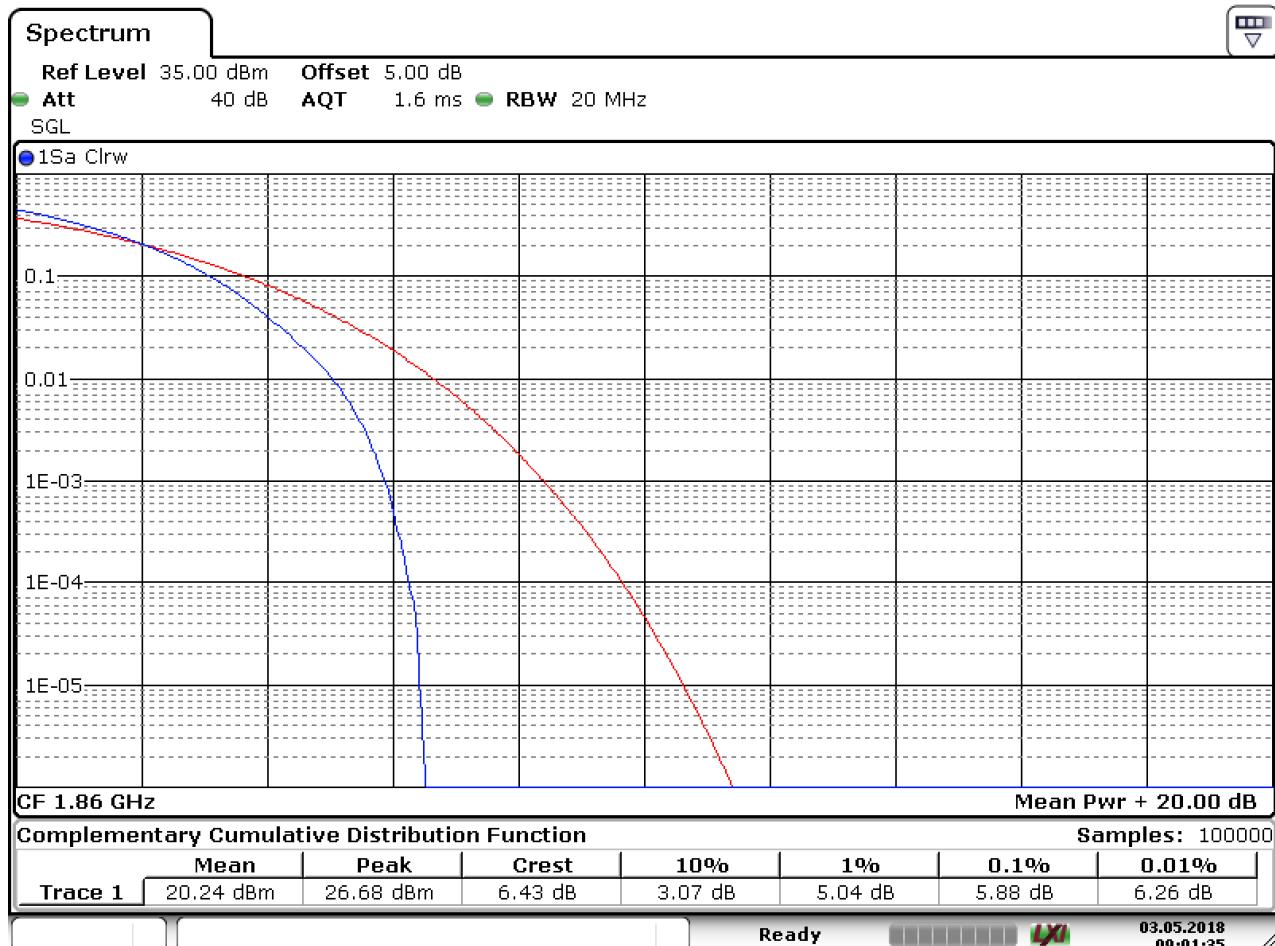
2.1.1.1.3 Test Channel = HCH



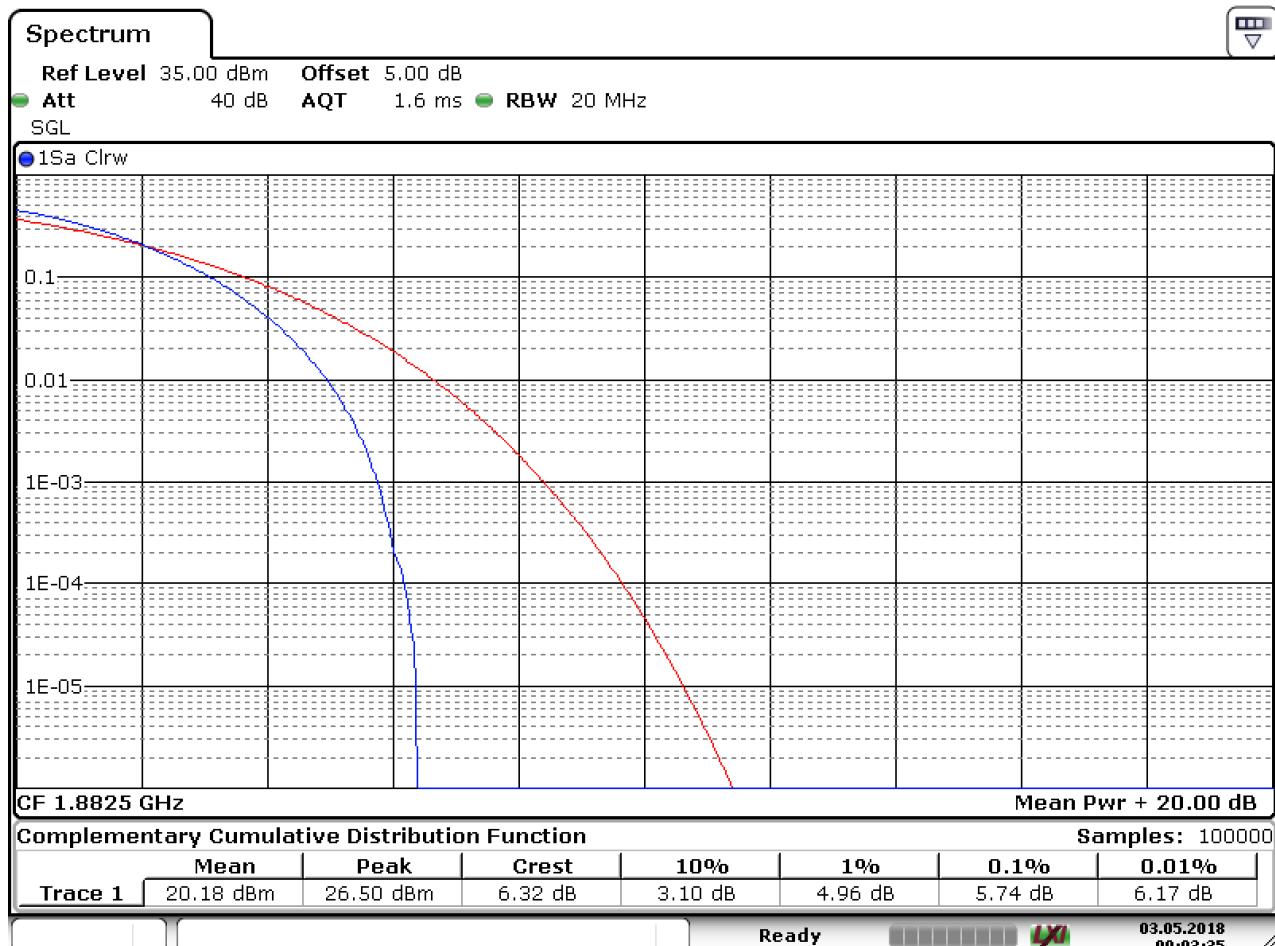
Date: 3.MAY.2018 09:02:11

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

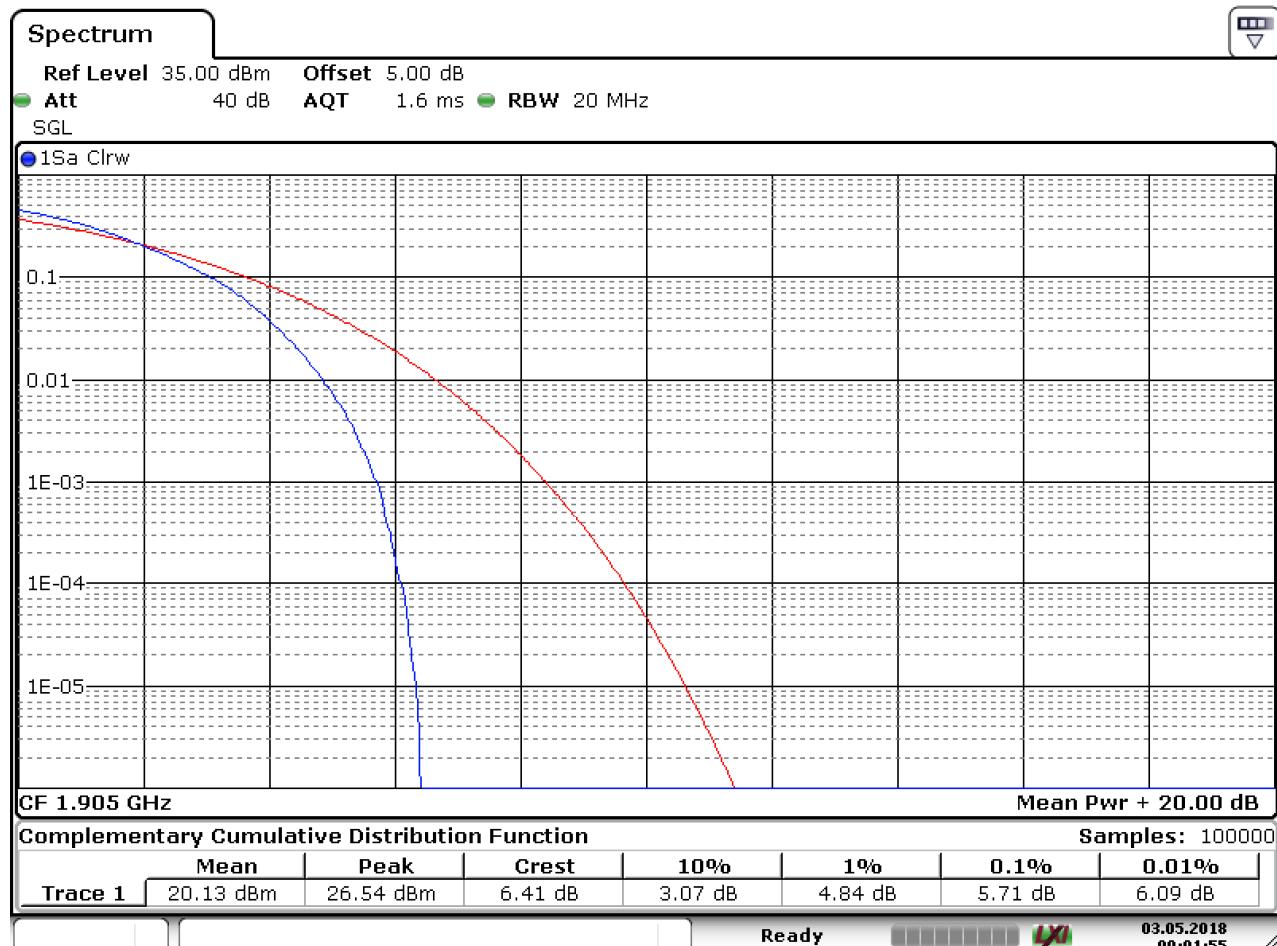
2.1.1.2.1 Test Channel = LCH



Date: 3.MAY.2018 09:01:35

2.1.1.2.2 Test Channel = MCH

Date: 3.MAY.2018 09:03:34

2.1.1.2.3 Test Channel = HCH

Date: 3.MAY.2018 09:01:56

3 Modulation Characteristics

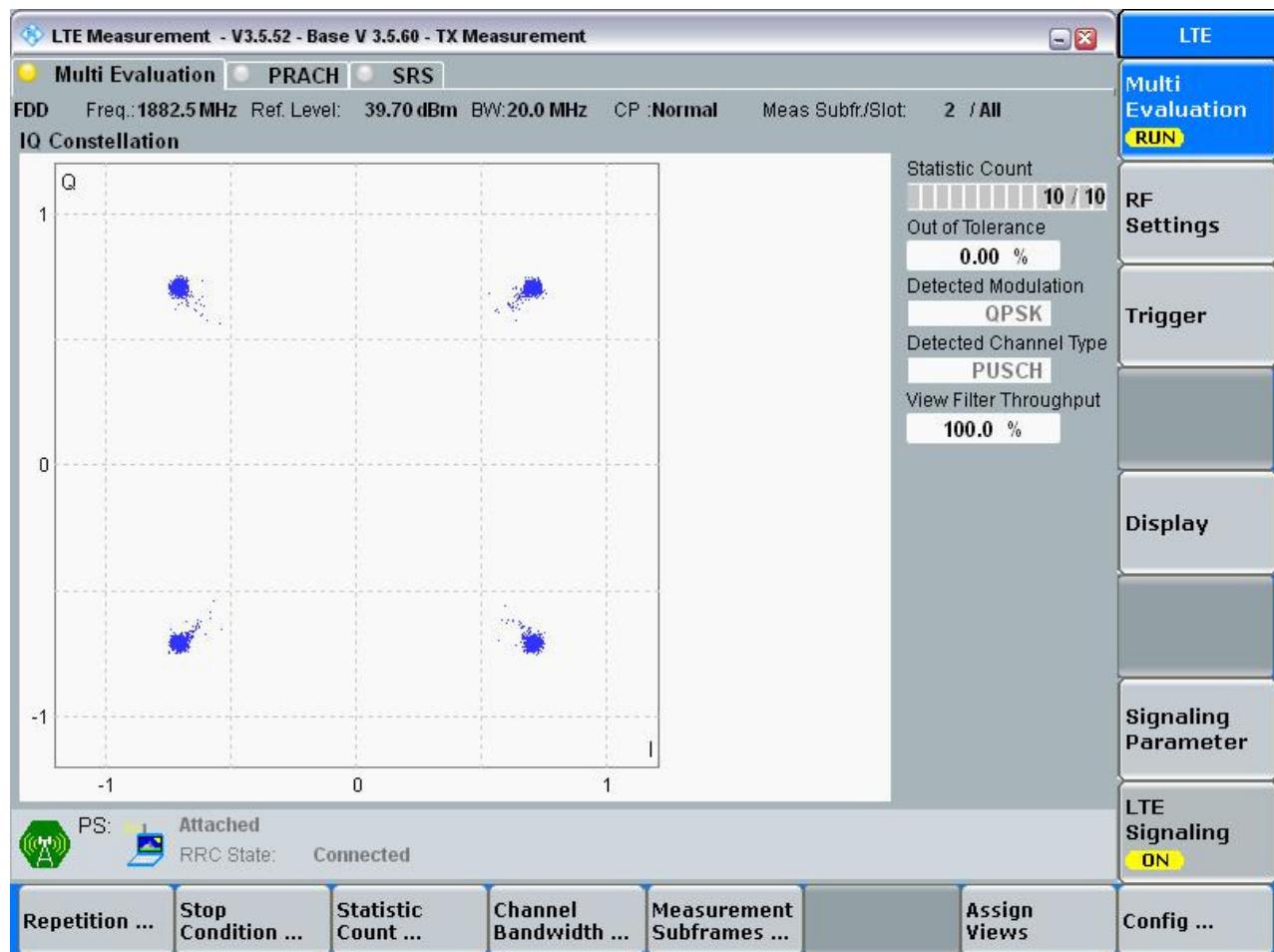
Part I - Test Plots

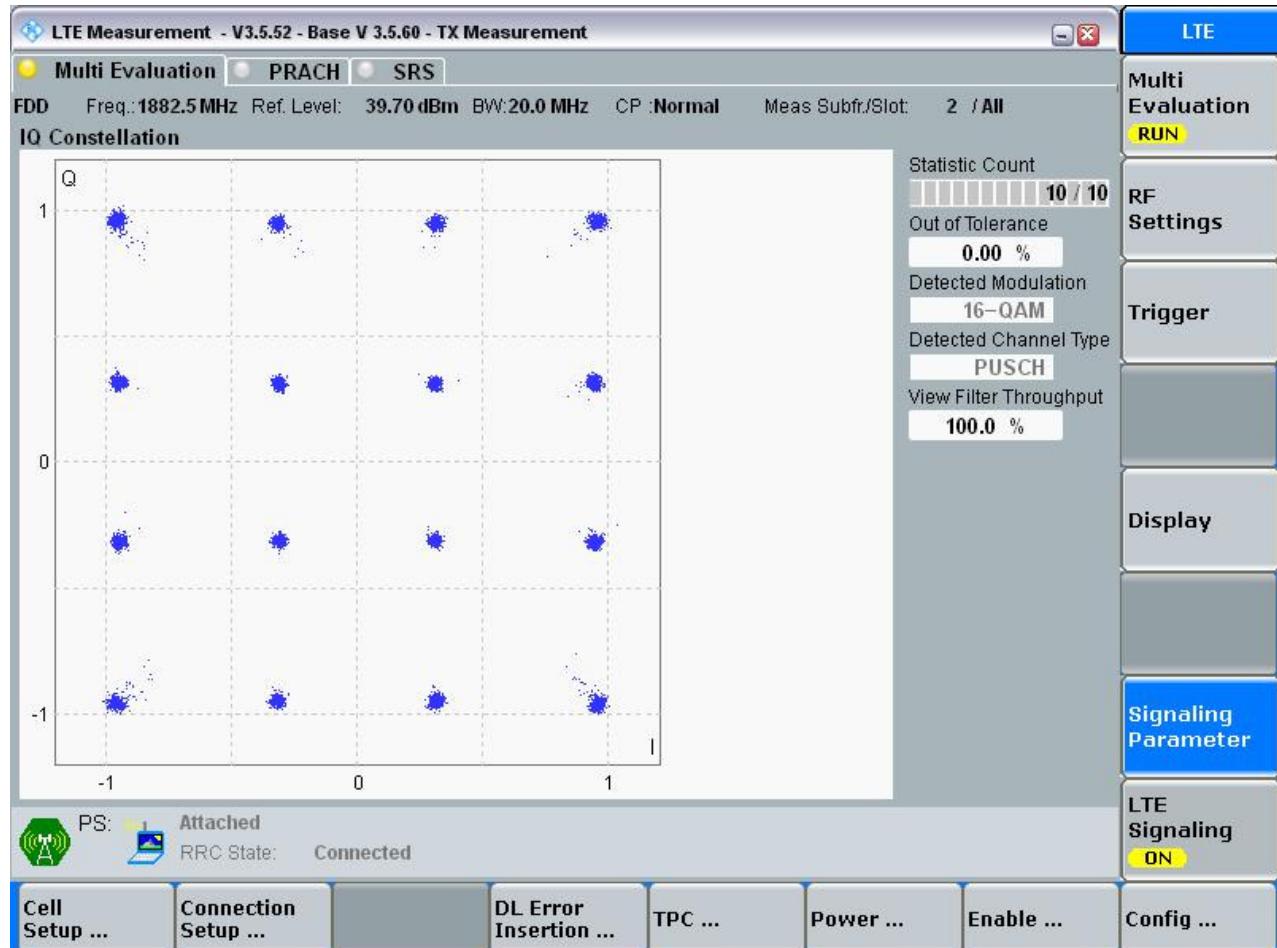
3.1 For LTE

3.1.1 Test Band = LTE band25

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**

4 Bandwidth

Part I - Test Results

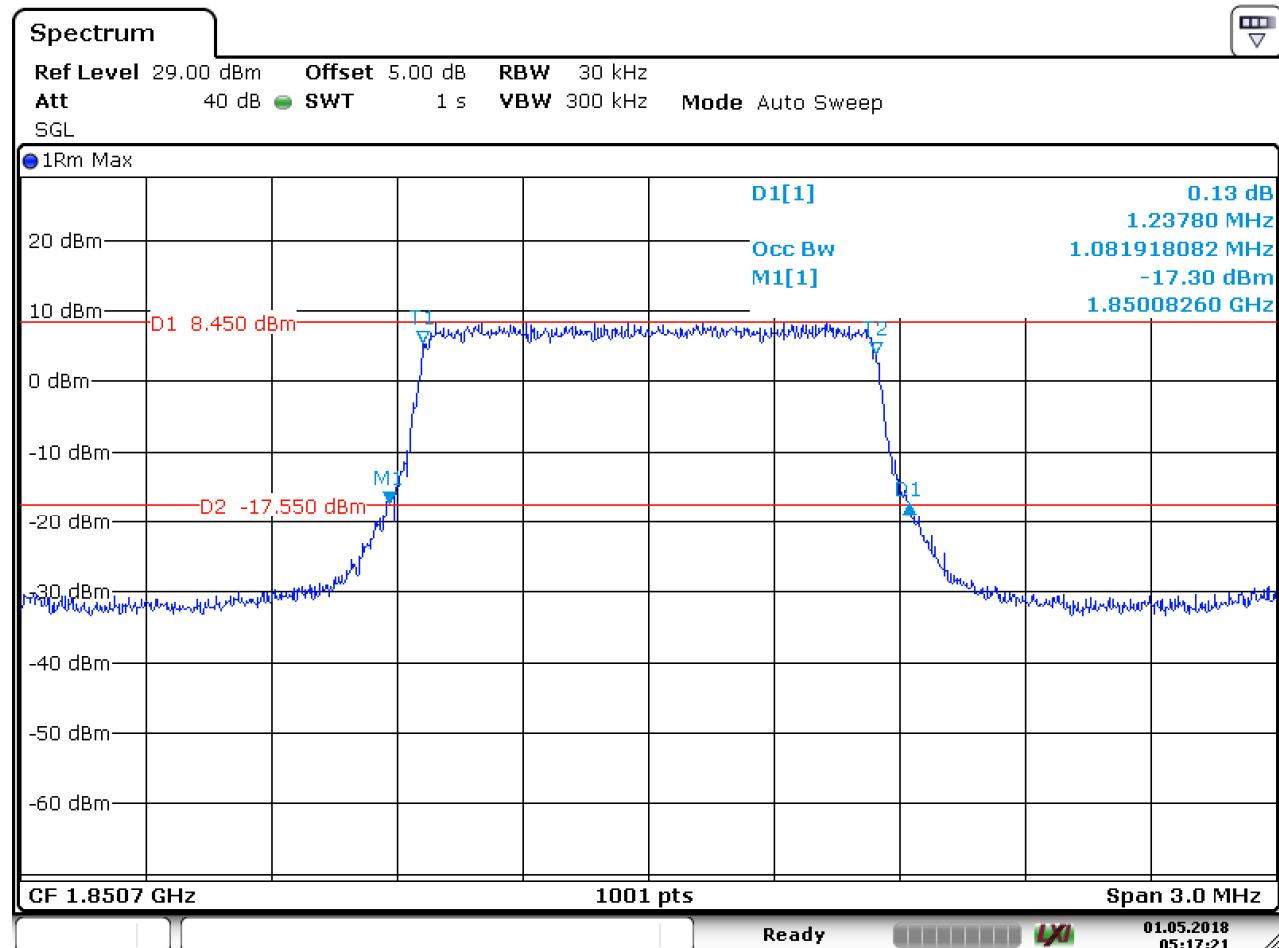
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 25	TM1/1.4MHz	LCH	1.08	1.24	PASS
		MCH	1.08	1.23	PASS
		HCH	1.09	1.24	PASS
	TM2/1.4MHz	LCH	1.08	1.24	PASS
		MCH	1.08	1.24	PASS
		HCH	1.08	1.23	PASS
	TM1/ 3MHz	LCH	2.72	2.96	PASS
		MCH	2.72	2.95	PASS
		HCH	2.73	2.98	PASS
	TM2/3MHz	LCH	2.72	2.96	PASS
		MCH	2.72	2.96	PASS
		HCH	2.72	2.97	PASS
	TM1/ 5MHz	LCH	4.48	4.83	PASS
		MCH	4.49	4.80	PASS
		HCH	4.49	4.81	PASS
	TM2/ 5MHz	LCH	4.49	4.82	PASS
		MCH	4.49	4.79	PASS
		HCH	4.49	4.80	PASS
	TM1/10MHz	LCH	8.93	9.49	PASS
		MCH	8.93	9.50	PASS
		HCH	8.93	9.49	PASS
	TM2/ 10MHz	LCH	8.93	9.51	PASS
		MCH	8.93	9.52	PASS
		HCH	8.91	9.49	PASS
	TM1/ 15MHz	LCH	13.40	14.24	PASS
		MCH	13.37	14.20	PASS
		HCH	13.37	14.21	PASS
	TM2/ 15MHz	LCH	13.40	14.24	PASS
		MCH	13.37	14.23	PASS
		HCH	13.37	14.21	PASS
	TM1/ 20MHz	LCH	17.94	19.18	PASS
		MCH	17.90	19.16	PASS
		HCH	17.90	19.10	PASS
	TM2/ 20MHz	LCH	17.94	19.22	PASS
		MCH	17.90	19.20	PASS
		HCH	17.90	19.14	PASS

4.1 For LTE

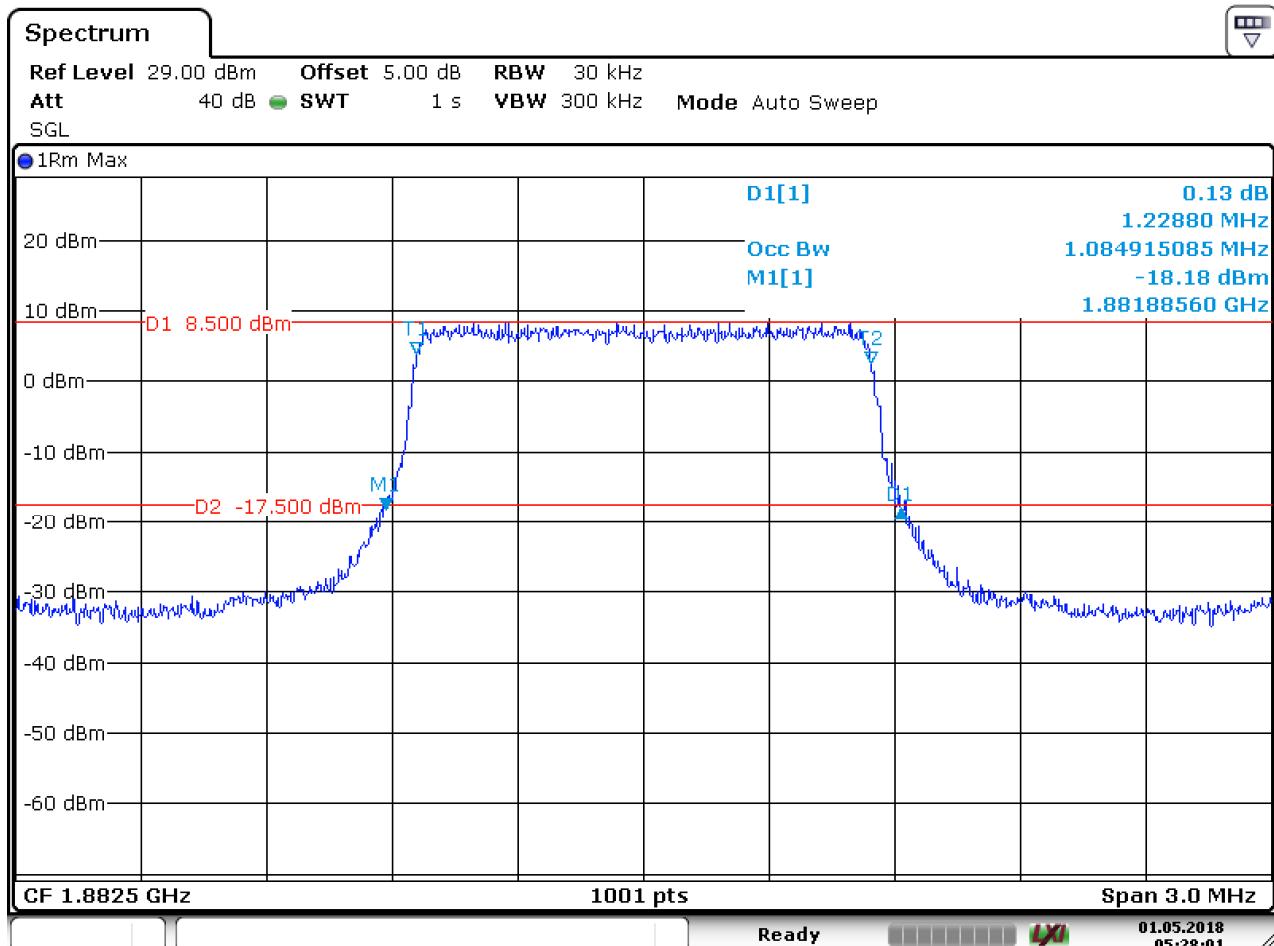
4.1.1 Test Band = LTE band25

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

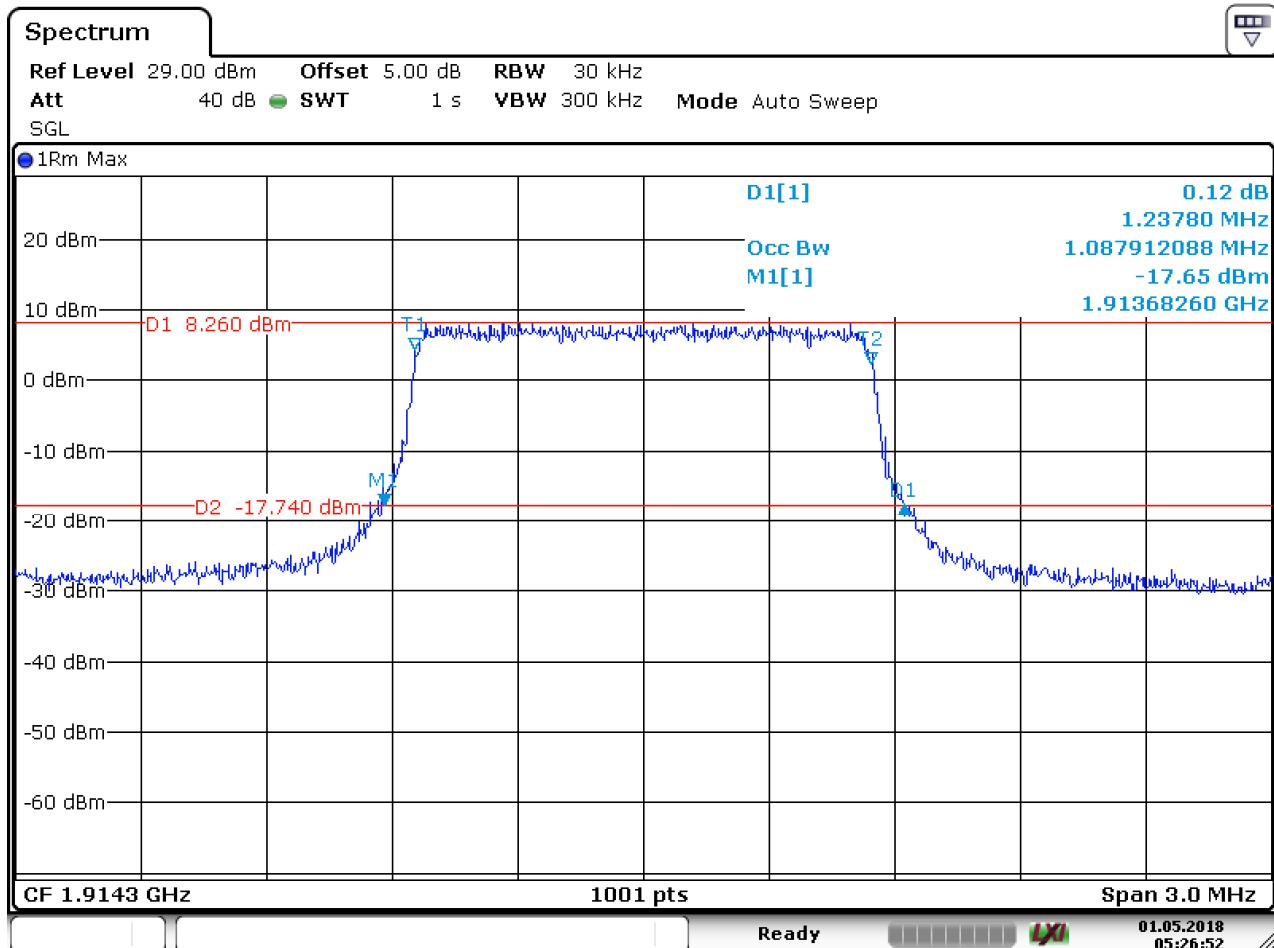
4.1.1.1.1 Test Channel = LCH



Date: 1.MAY.2018 05:17:21

4.1.1.1.2 Test Channel = MCH

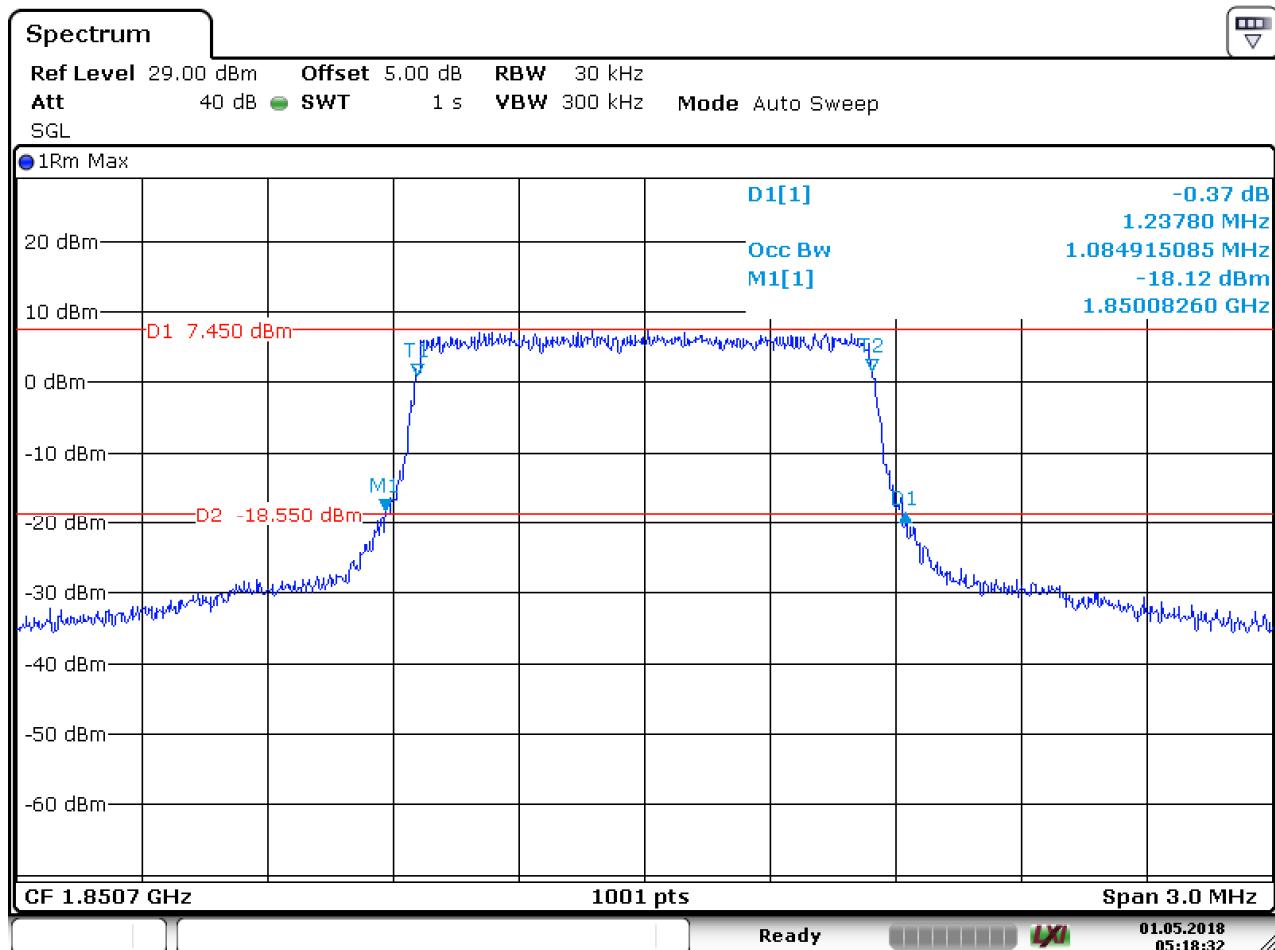
Date: 1.MAY.2018 05:28:01

4.1.1.1.3 Test Channel = HCH

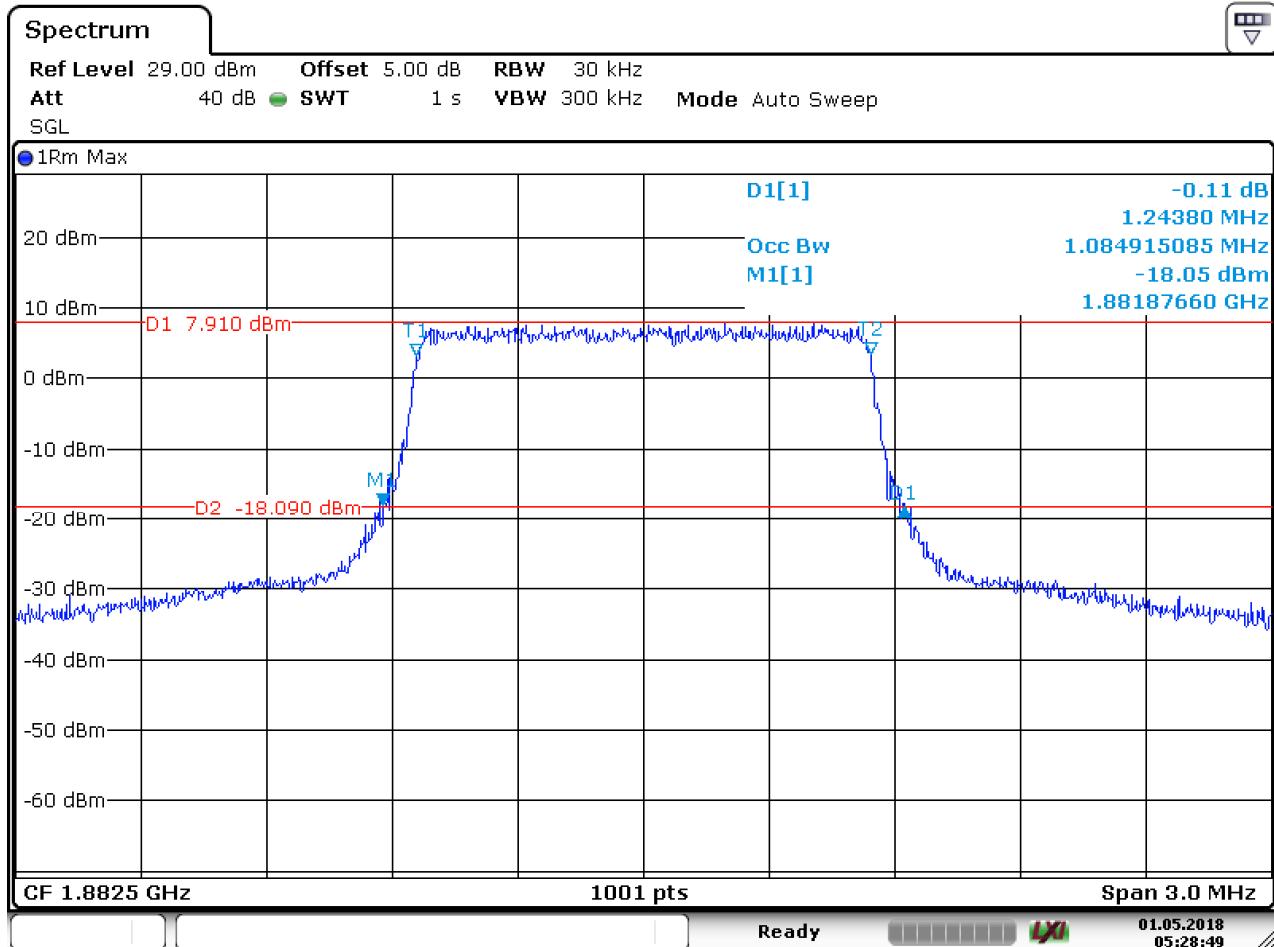
Date: 1.MAY.2018 05:26:52

4.1.1.2 Test Mode = LTE/TM2 1.4MHz

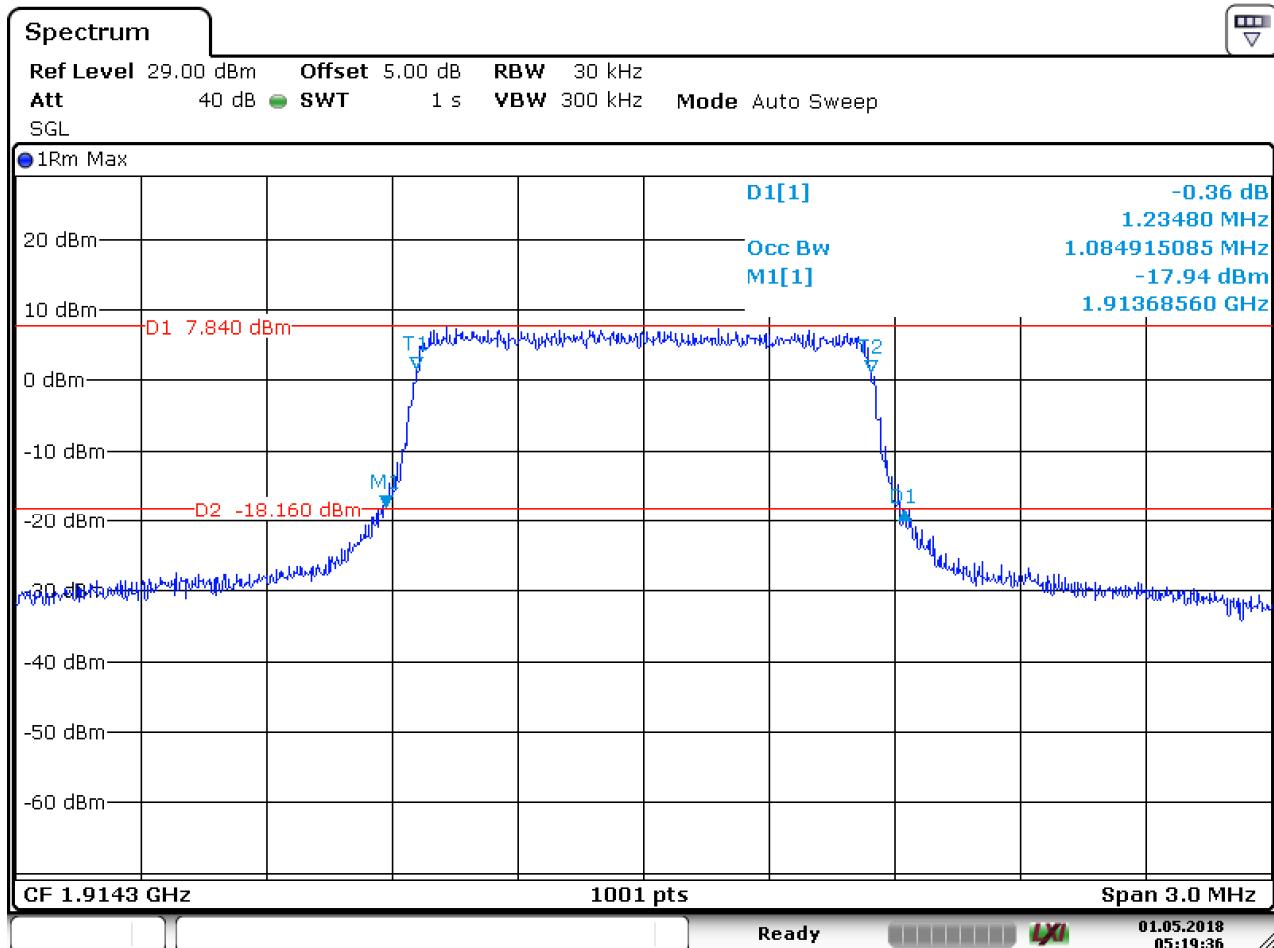
4.1.1.2.1 Test Channel = LCH



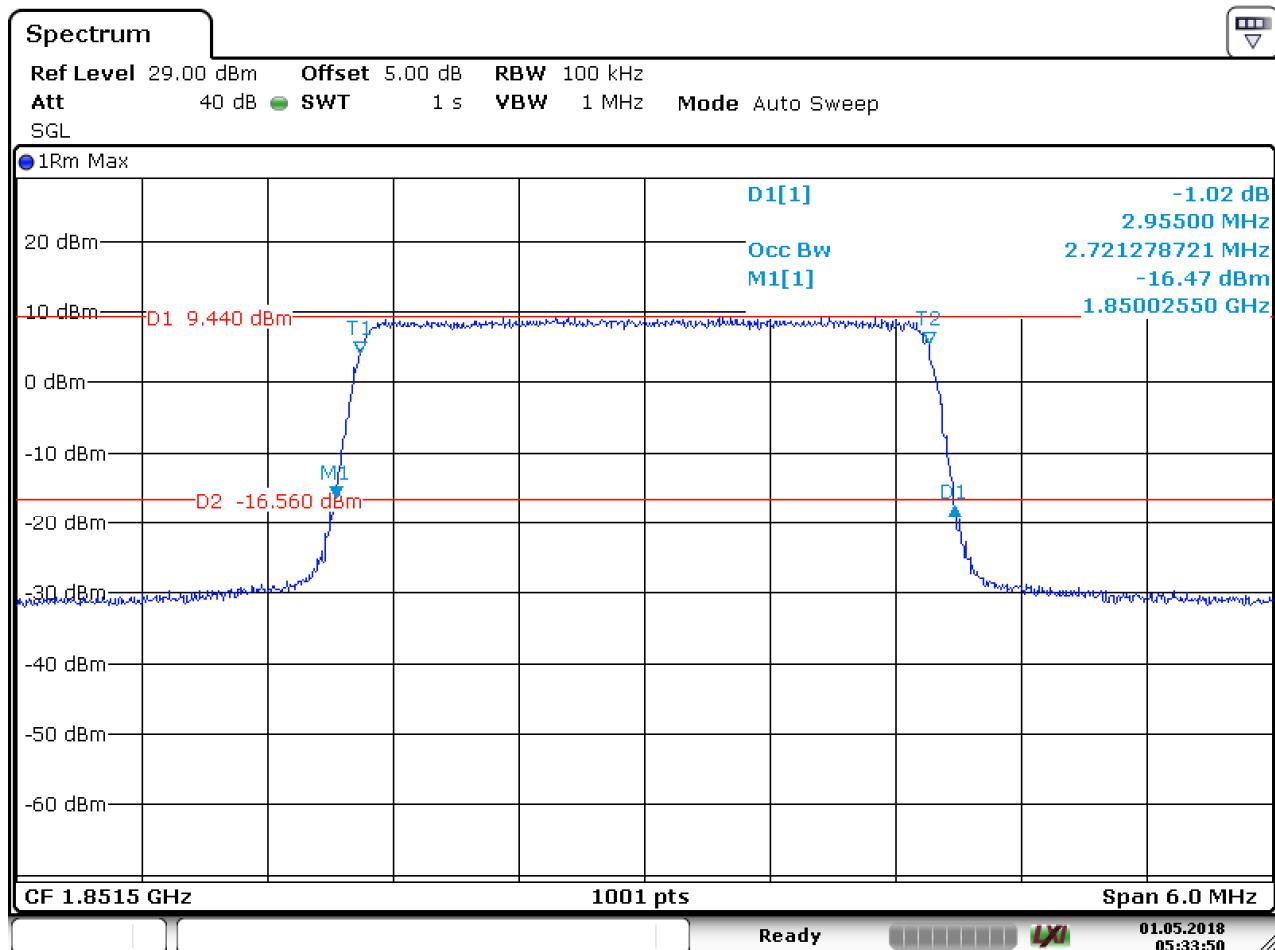
Date: 1.MAY.2018 05:18:32

4.1.1.2.2 Test Channel = MCH

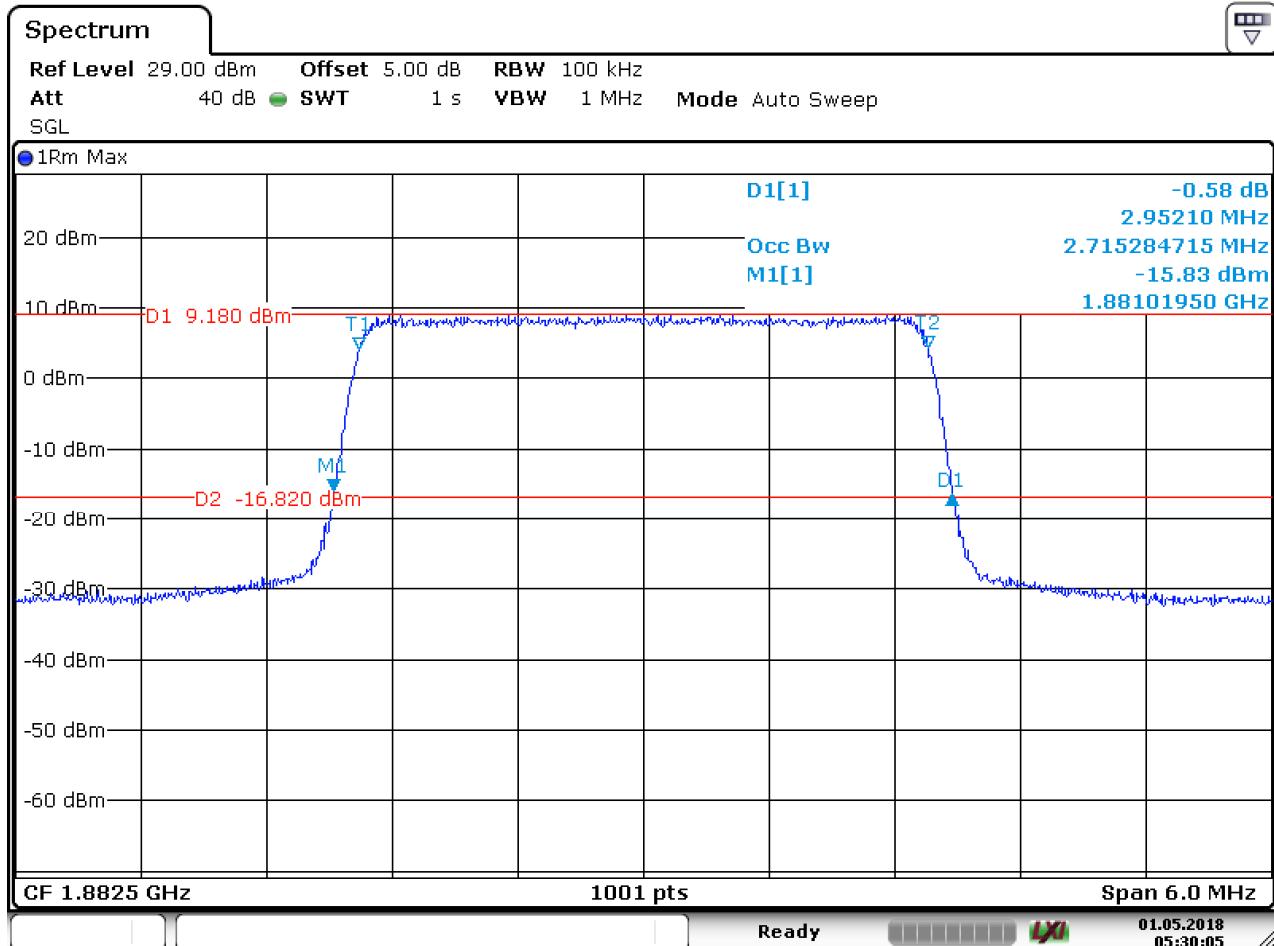
Date: 1.MAY.2018 05:28:50

4.1.1.2.3 Test Channel = HCH

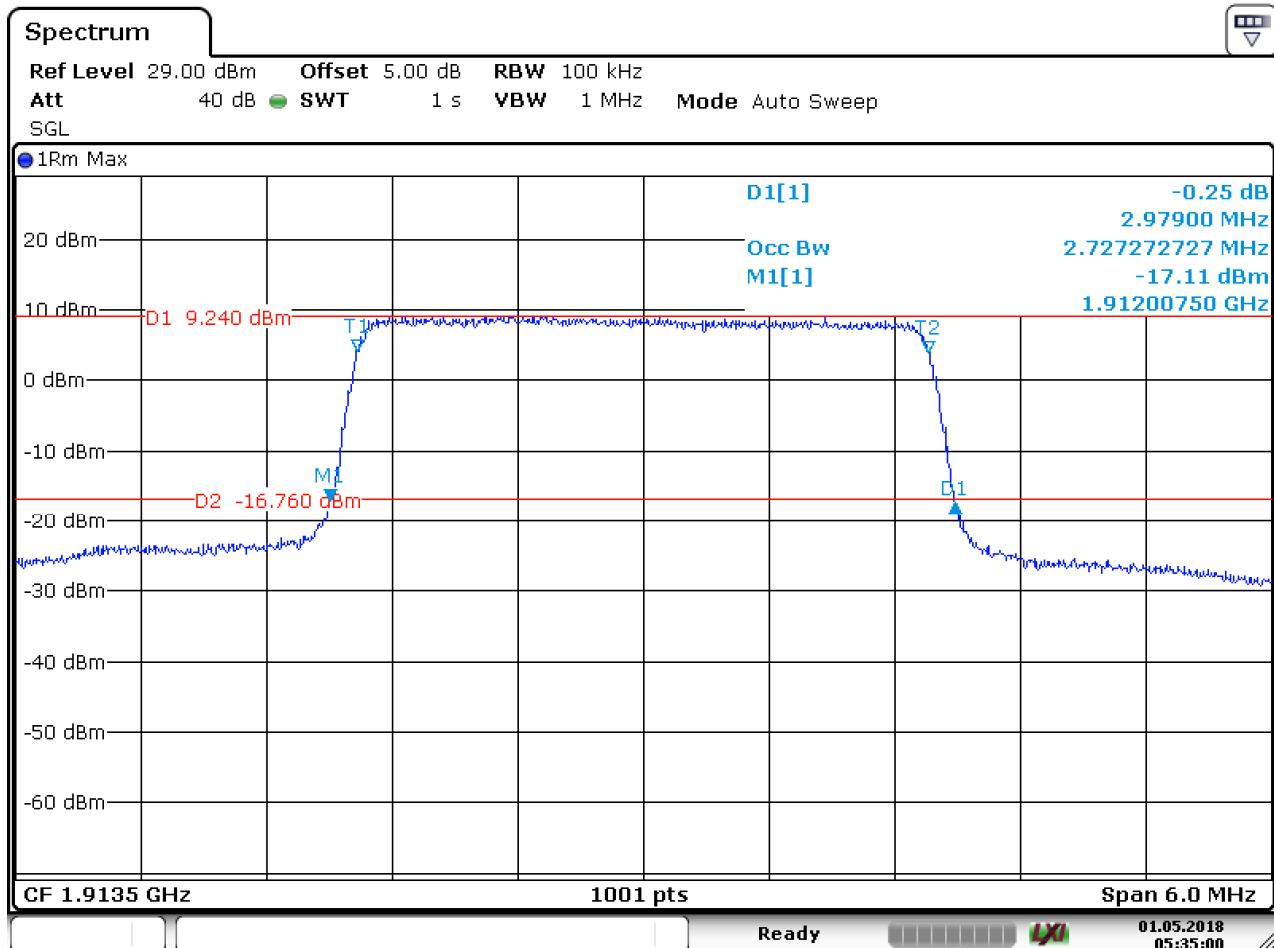
Date: 1.MAY.2018 05:19:36

4.1.1.3 Test Mode = LTE/TM1 3MHz**4.1.1.3.1 Test Channel = LCH**

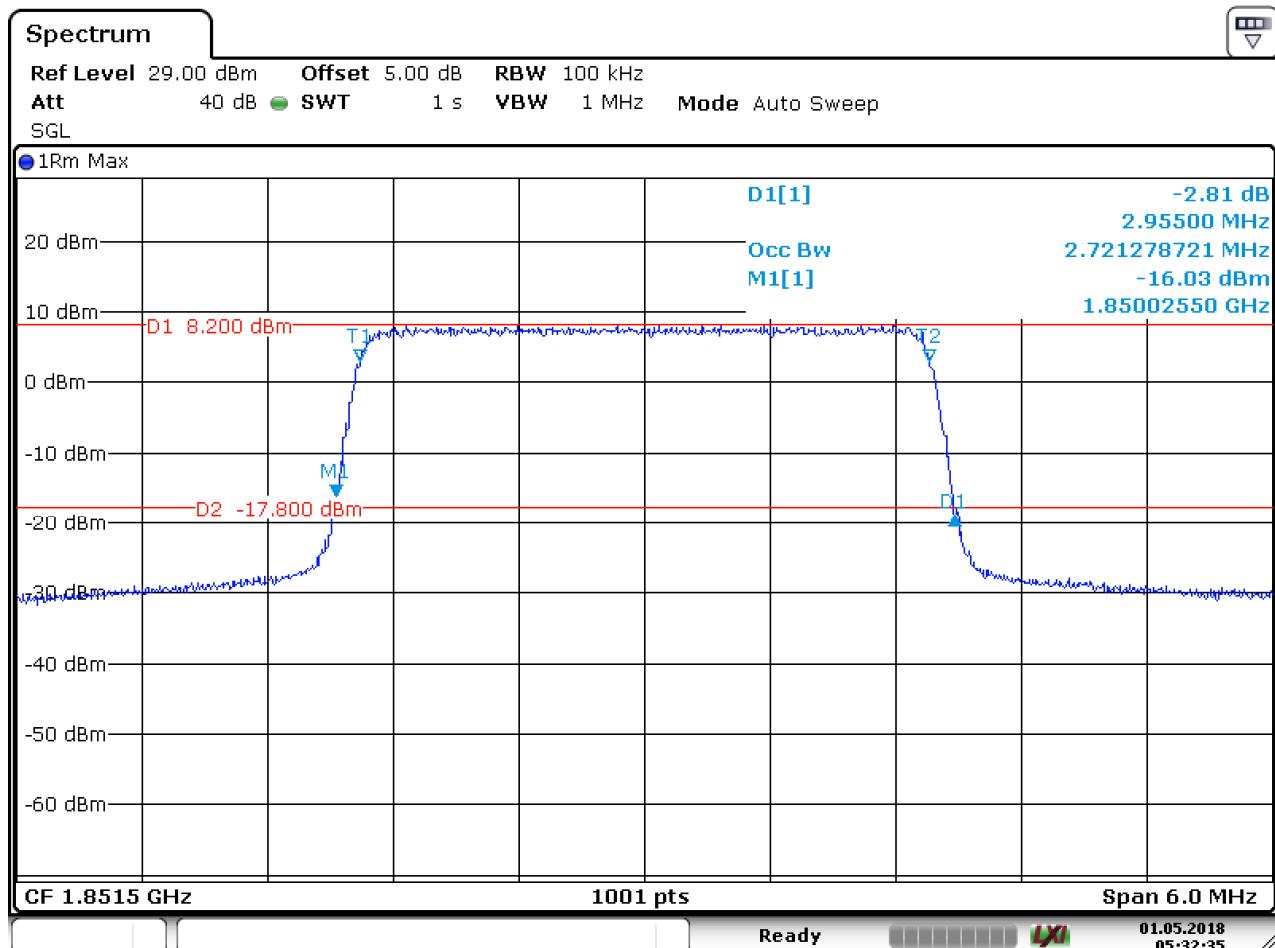
Date: 1.MAY.2018 05:33:50

4.1.1.3.2 Test Channel = MCH

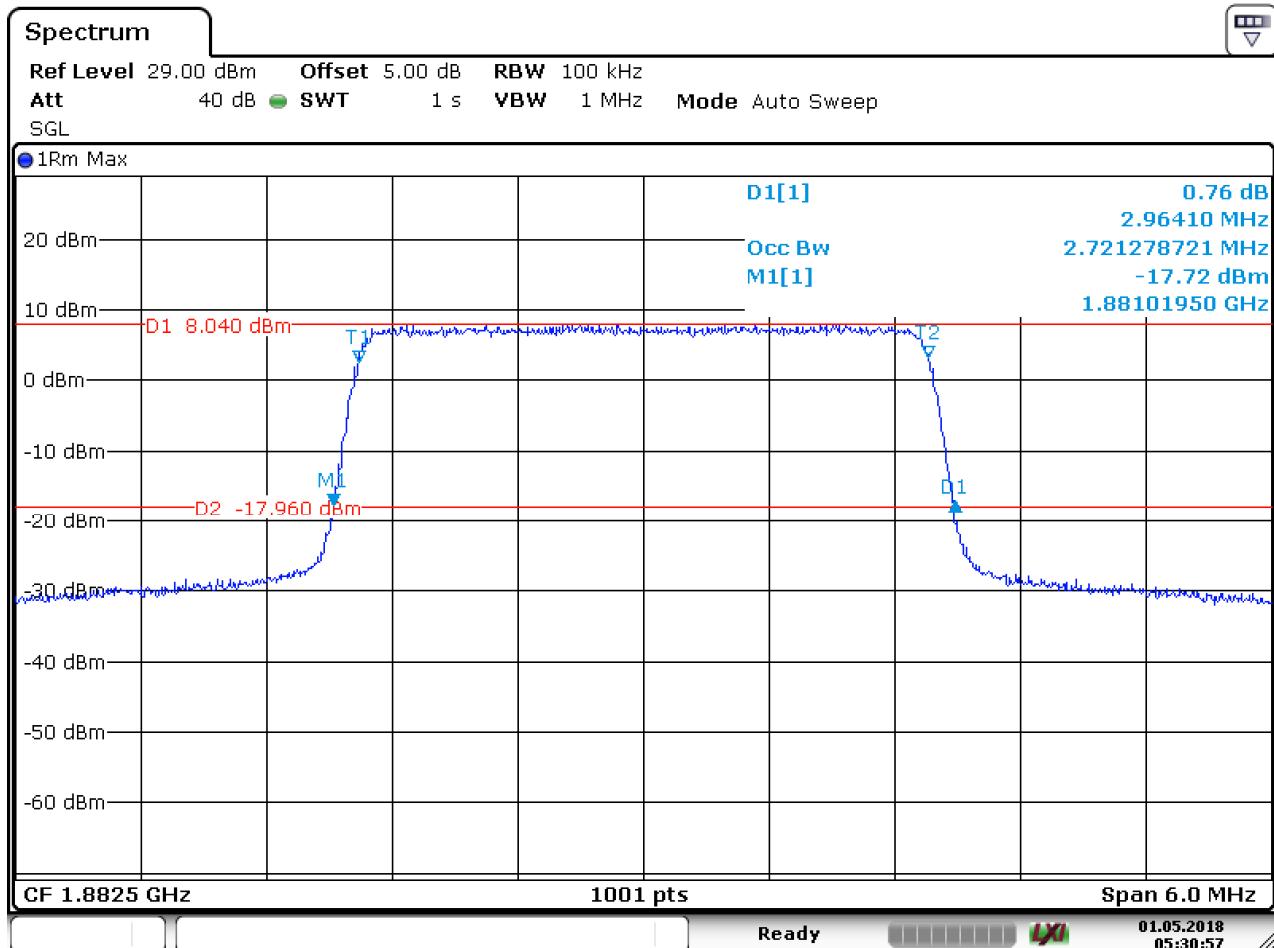
Date: 1.MAY.2018 05:30:06

4.1.1.3.3 Test Channel = HCH

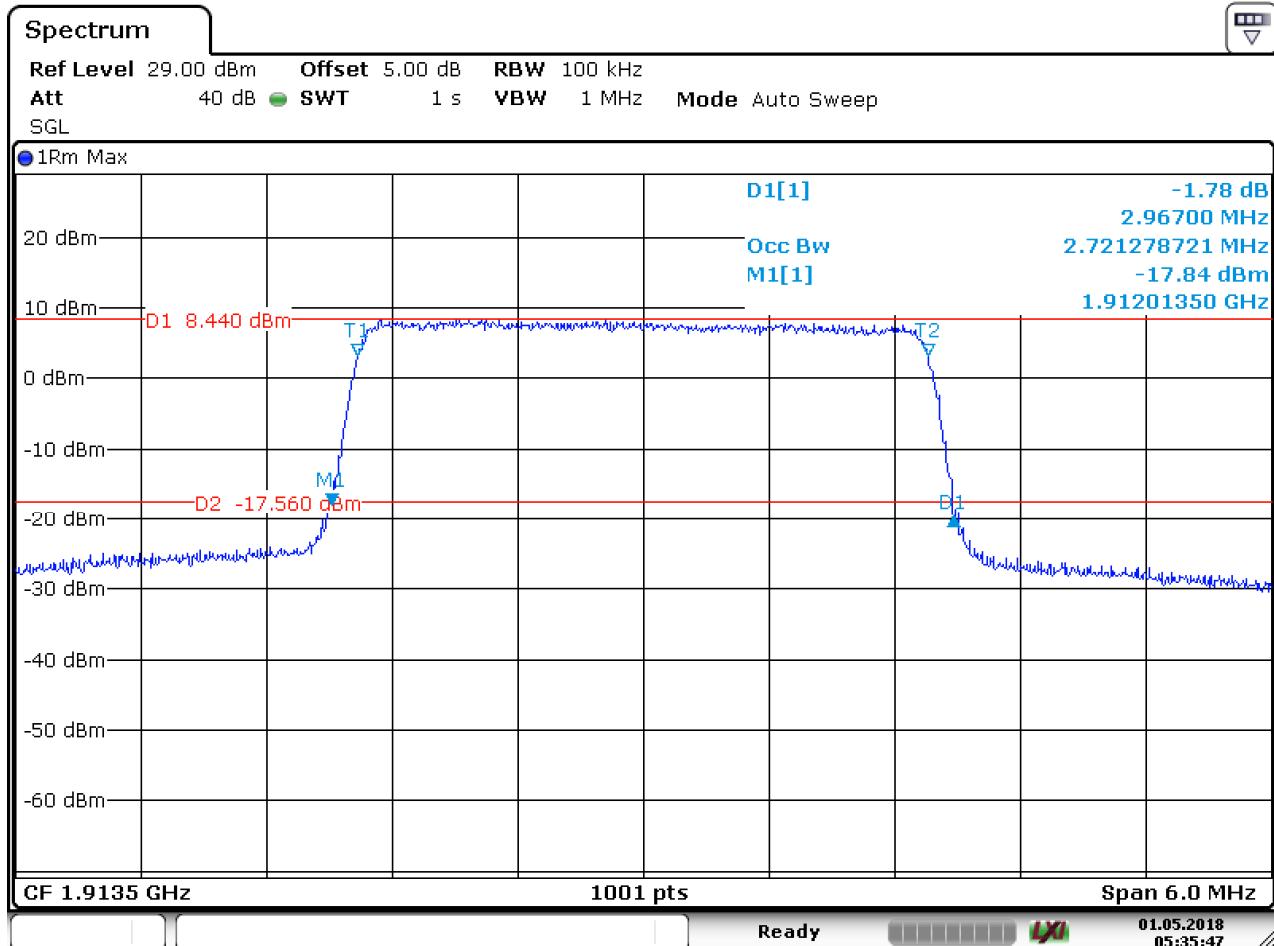
Date: 1.MAY.2018 05:35:00

4.1.1.4 Test Mode = LTE/TM2 3MHz**4.1.1.4.1 Test Channel = LCH**

Date: 1.MAY.2018 05:32:35

4.1.1.4.2 Test Channel = MCH

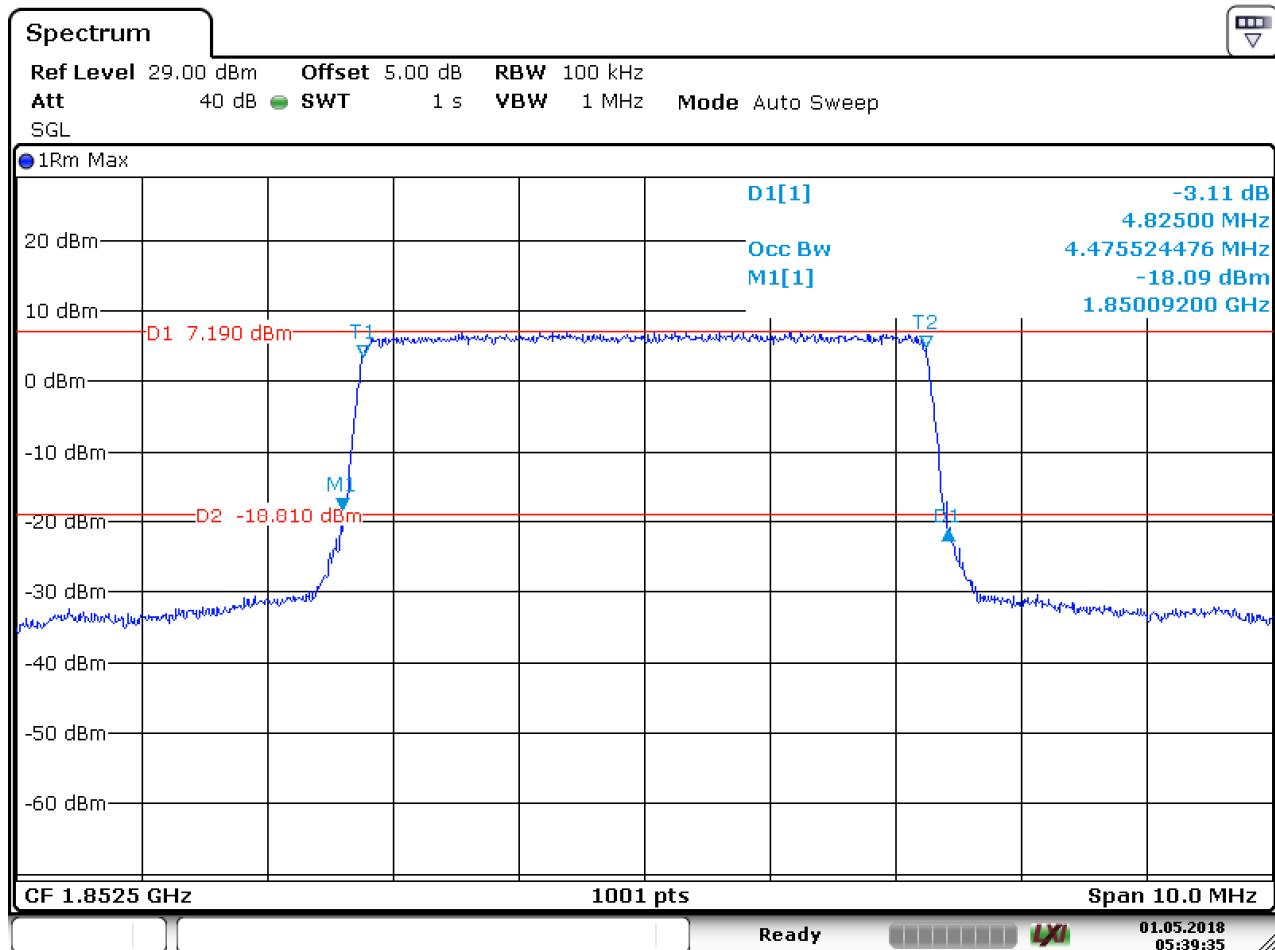
Date: 1.MAY.2018 05:30:58

4.1.1.4.3 Test Channel = HCH

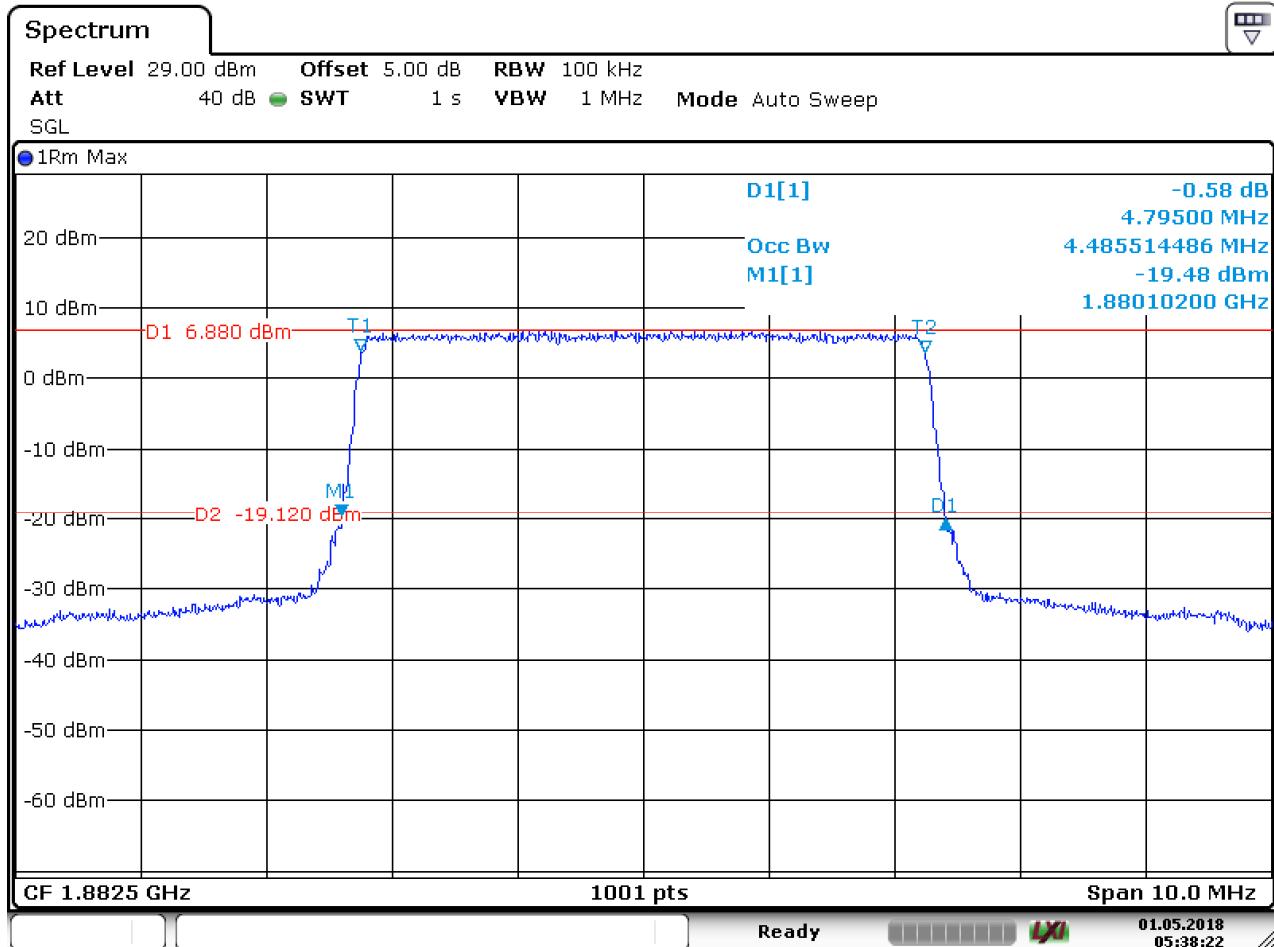
Date: 1.MAY.2018 05:35:47

4.1.1.5 Test Mode = LTE/TM1 5MHz

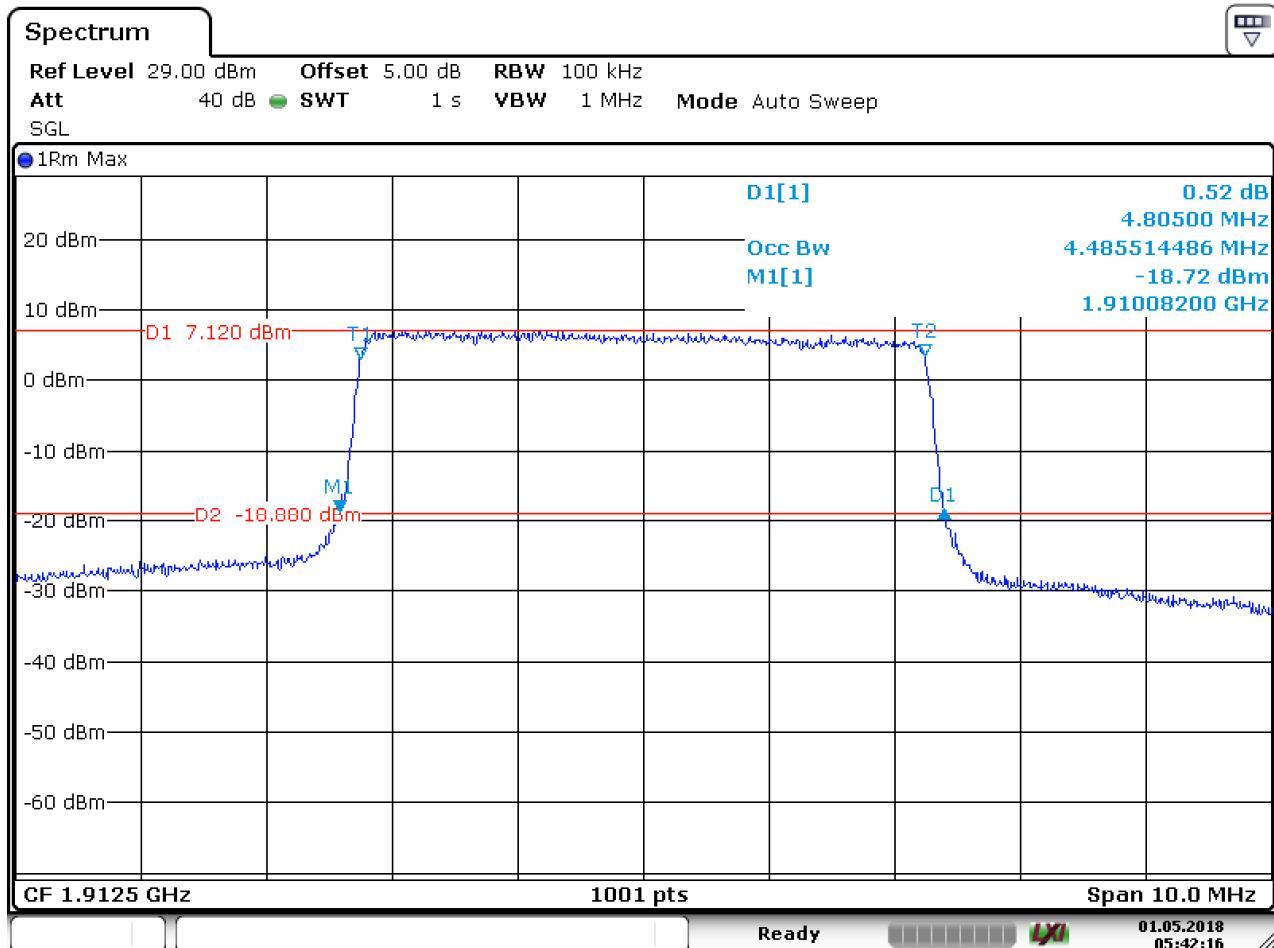
4.1.1.5.1 Test Channel = LCH



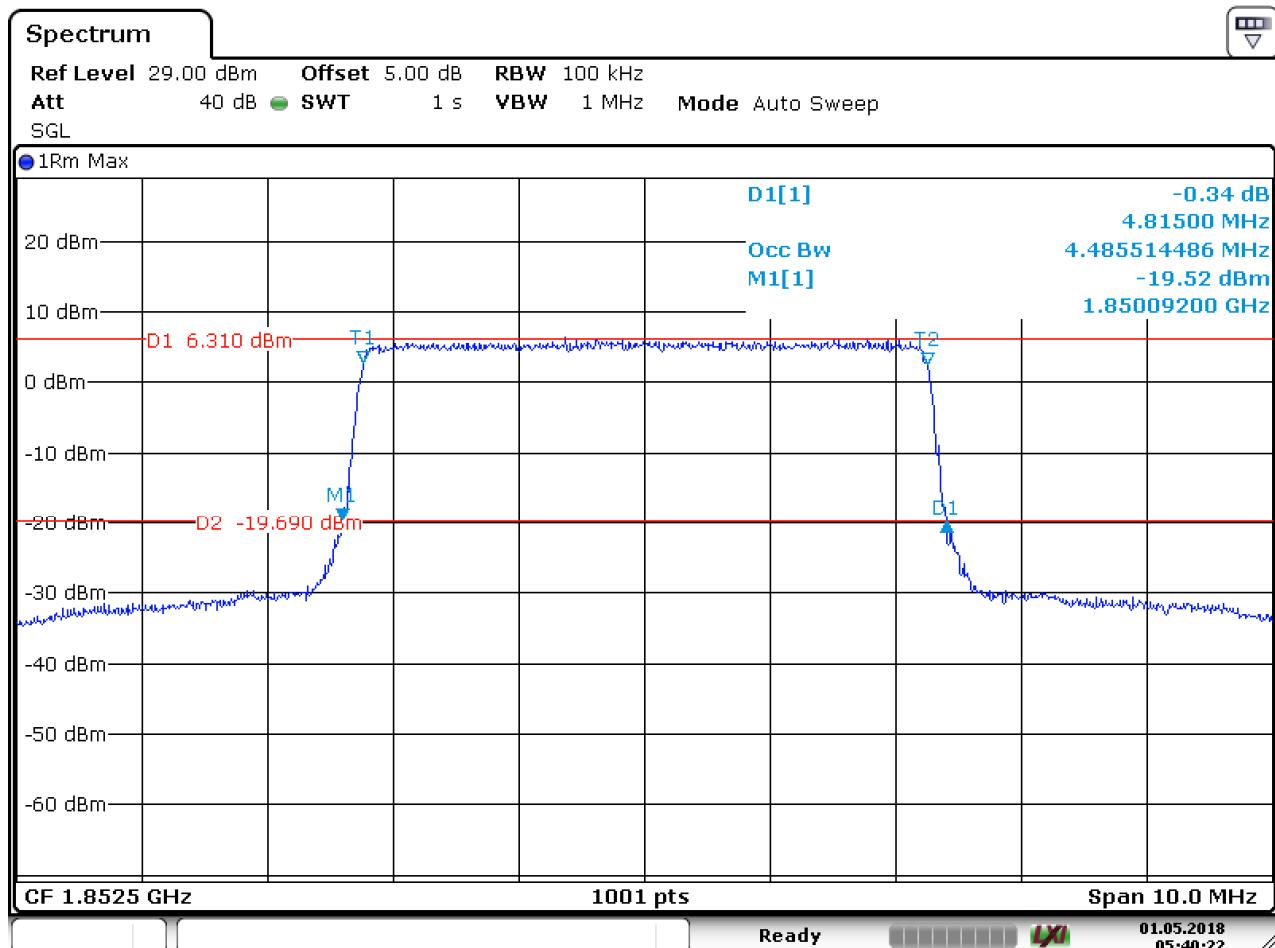
Date: 1.MAY.2018 05:39:35

4.1.1.5.2 Test Channel = MCH

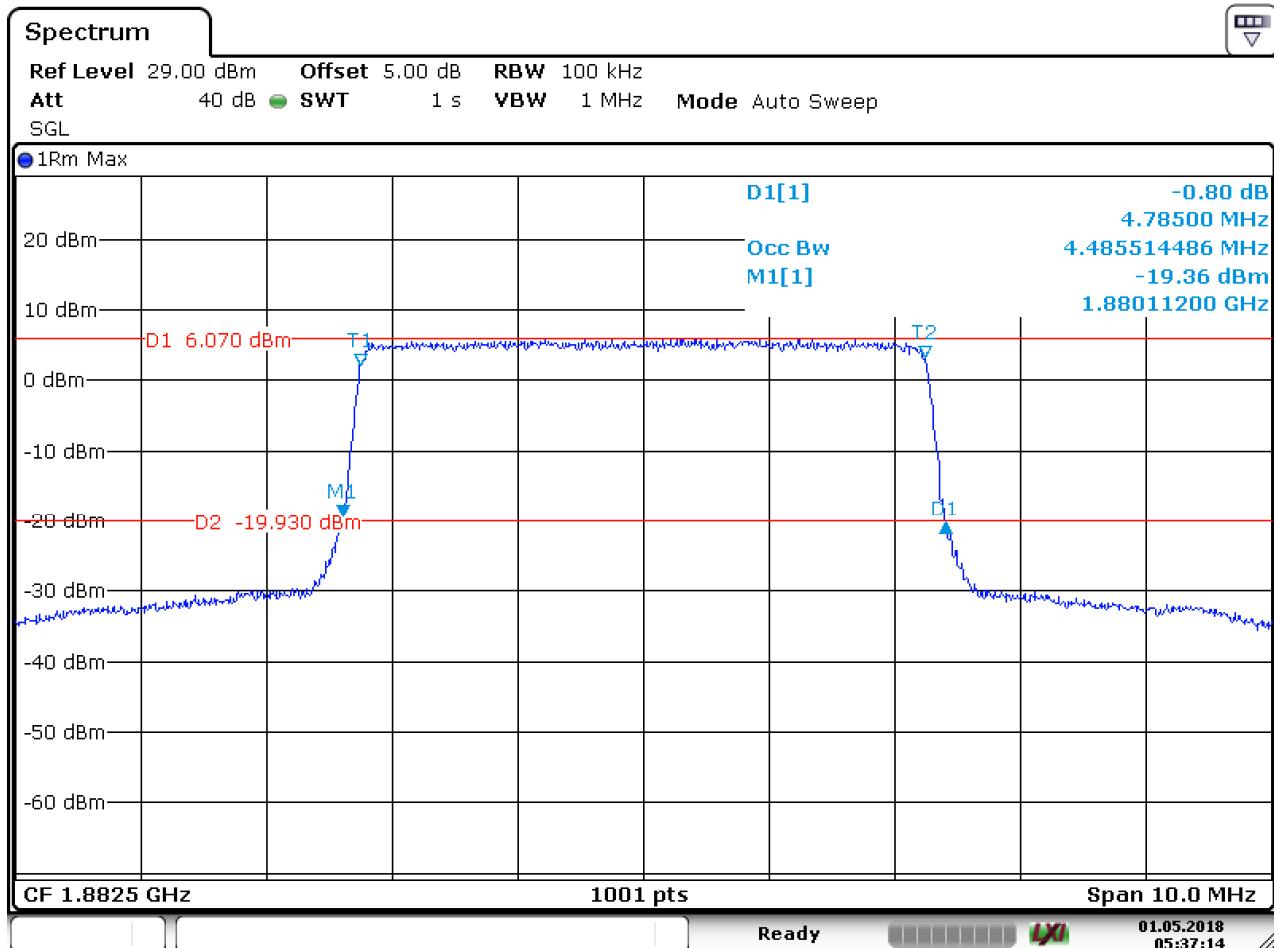
Date: 1.MAY.2018 05:38:23

4.1.1.5.3 Test Channel = HCH

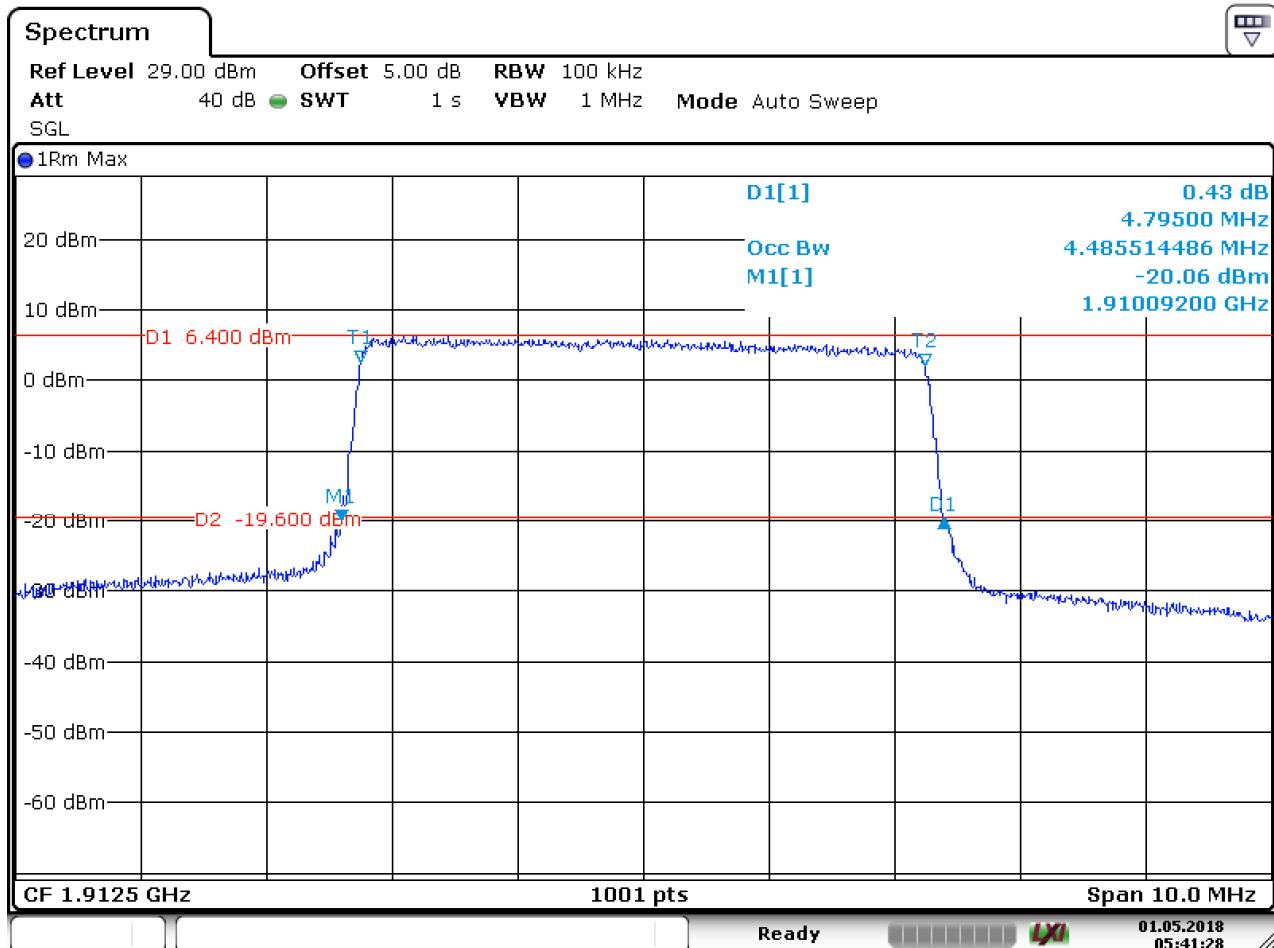
Date: 1.MAY.2018 05:42:16

4.1.1.6 Test Mode = LTE/TM2 5MHz**4.1.1.6.1 Test Channel = LCH**

Date: 1.MAY.2018 05:40:22

4.1.1.6.2 Test Channel = MCH

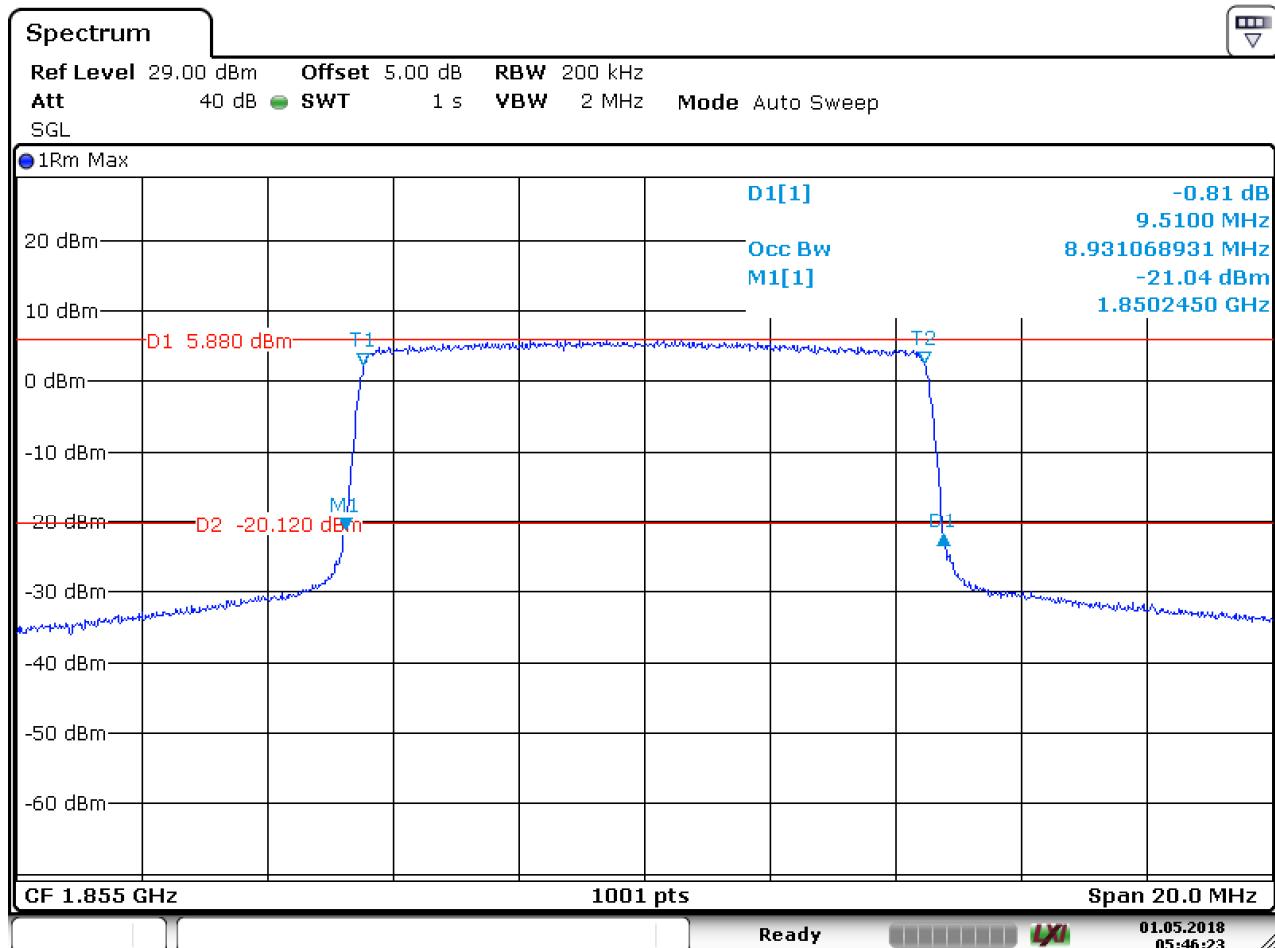
Date: 1.MAY.2018 05:37:14

4.1.1.6.3 Test Channel = HCH

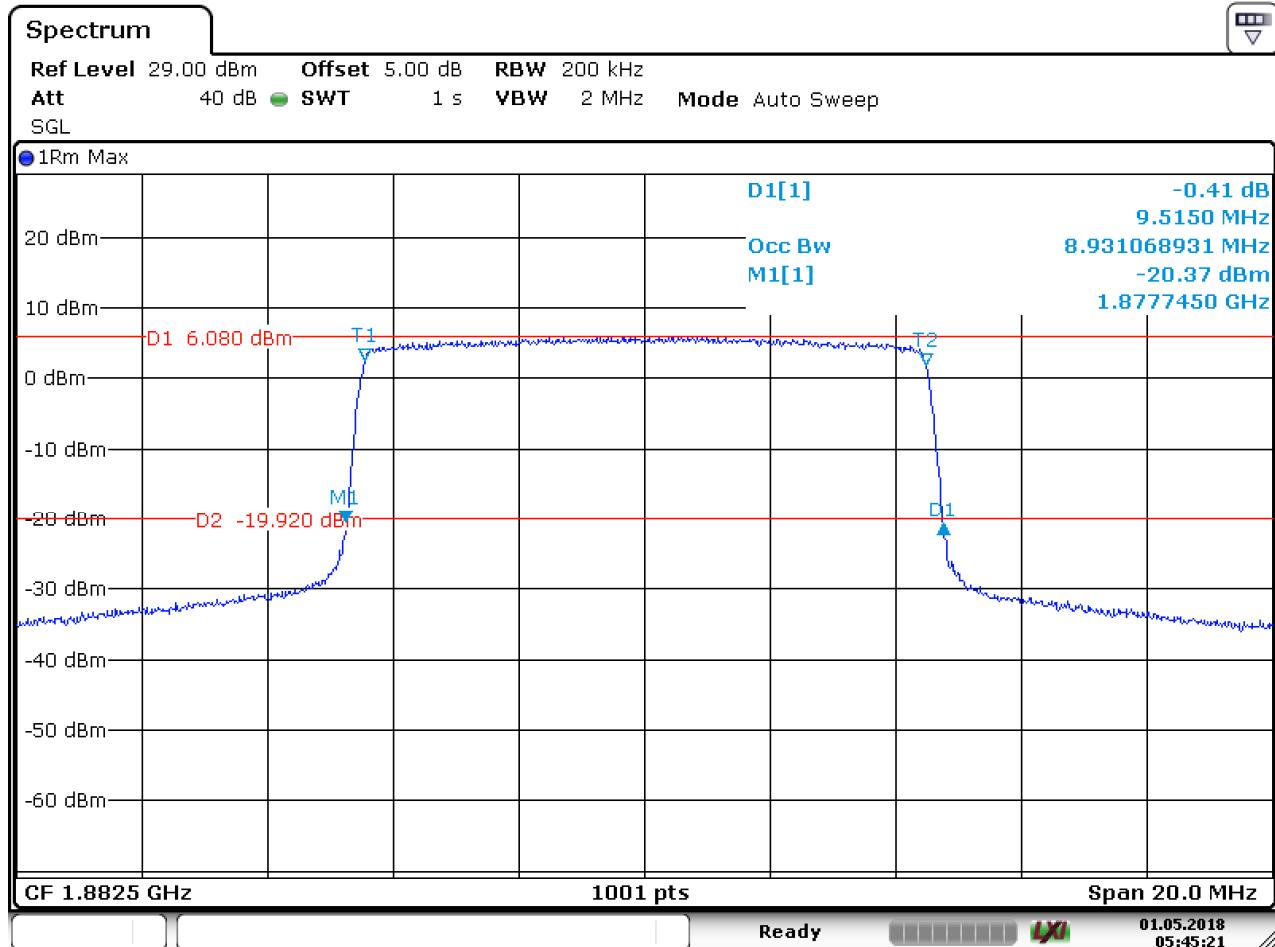
Date: 1.MAY.2018 05:41:29

4.1.1.7 Test Mode = LTE/TM1 10MHz

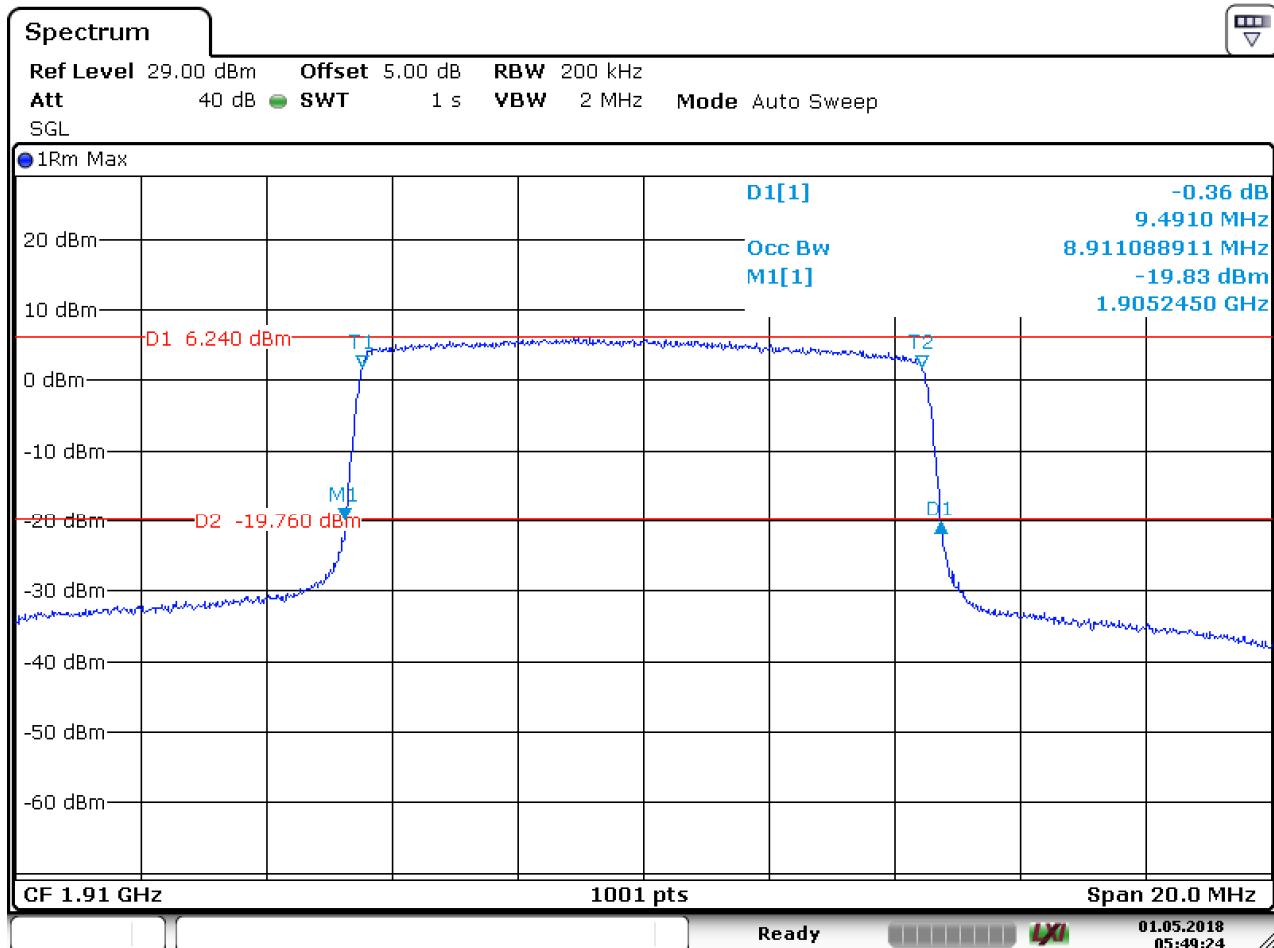
4.1.1.7.1 Test Channel = LCH



Date: 1.MAY.2018 05:46:23

4.1.1.7.2 Test Channel = MCH

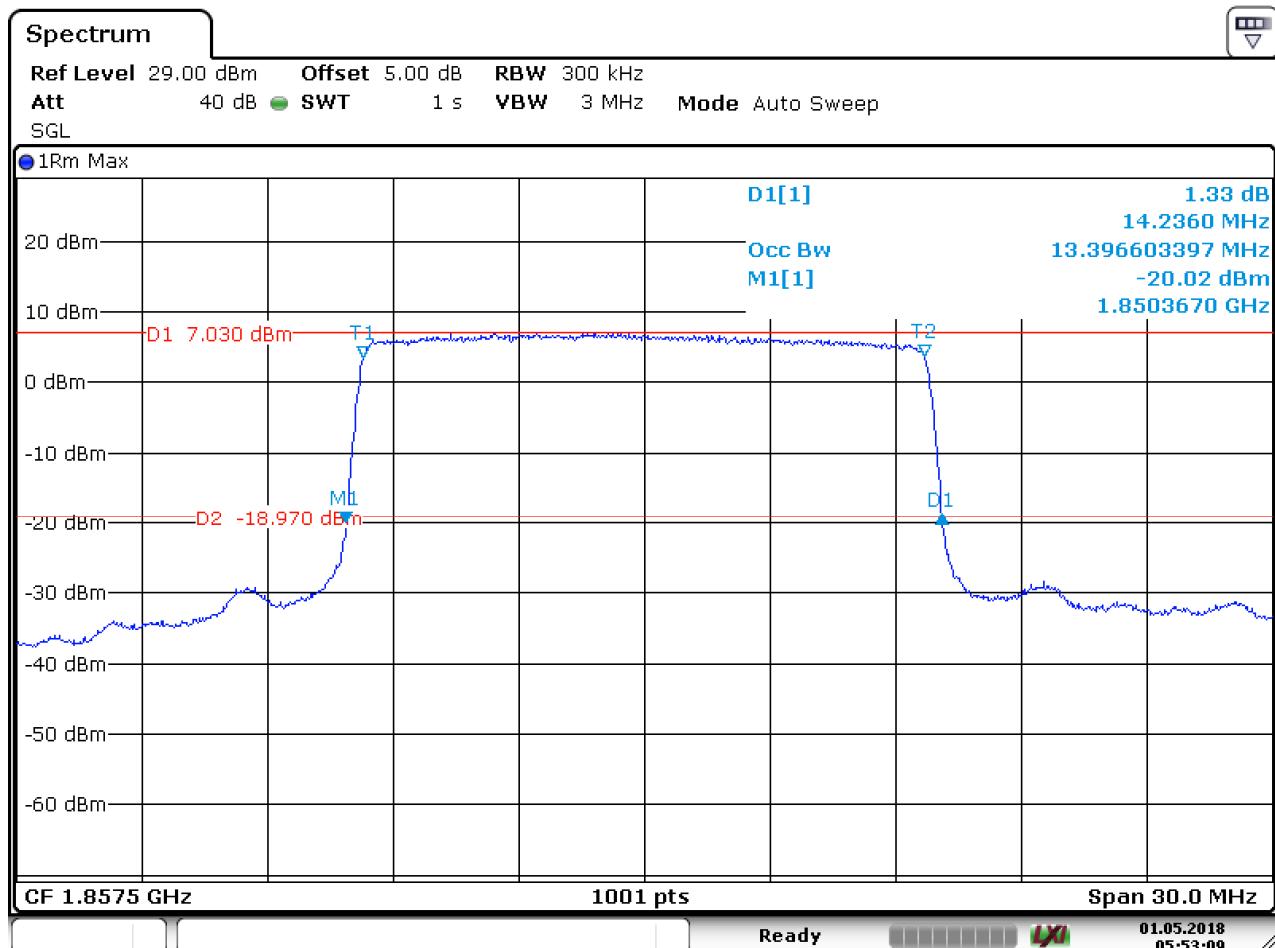
Date: 1.MAY.2018 05:45:22

4.1.1.7.3 Test Channel = HCH

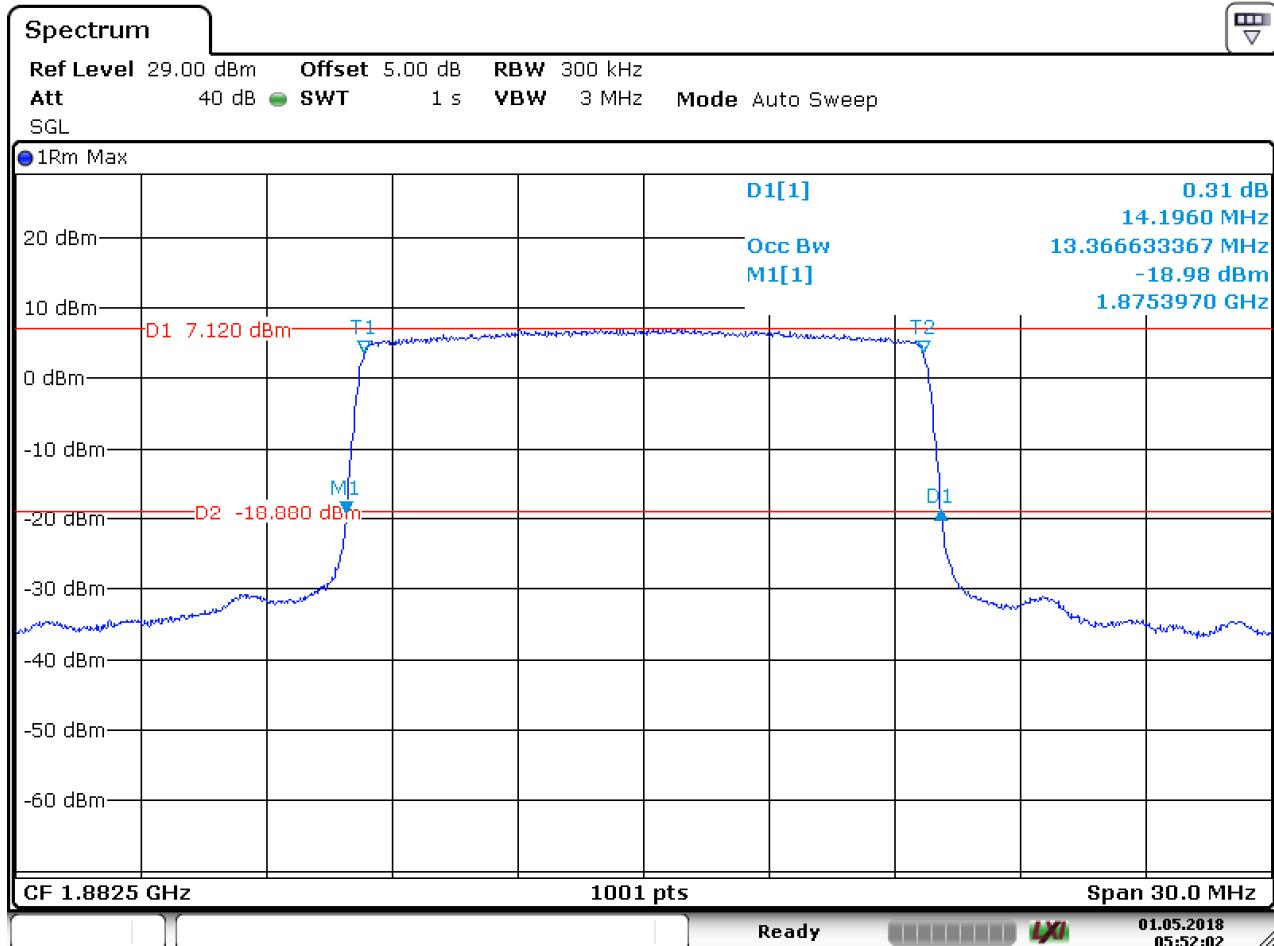
Date: 1.MAY.2018 05:49:25

4.1.1.8 Test Mode = LTE/TM2 10MHz

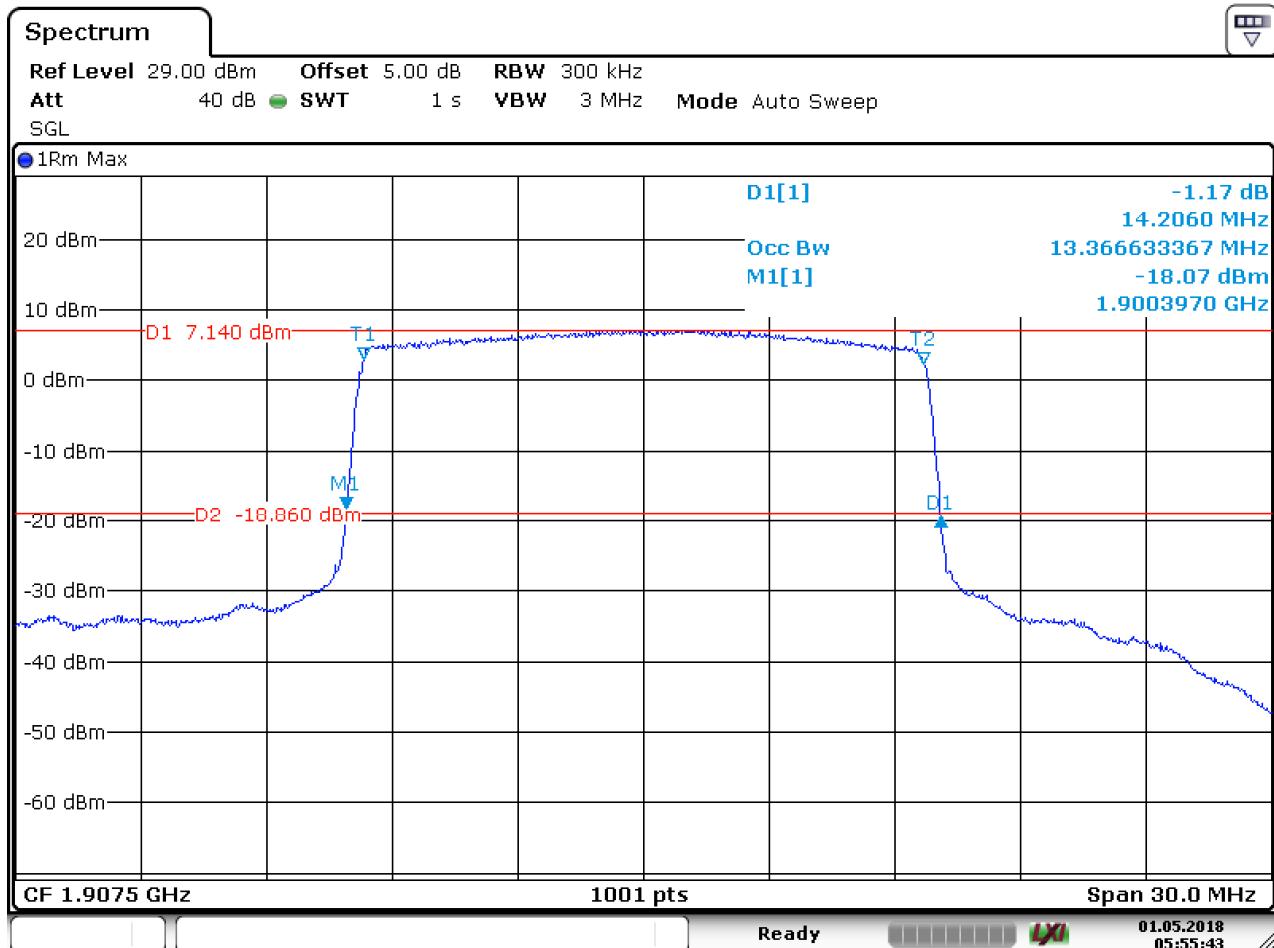
4.1.1.8.1 Test Channel = LCH



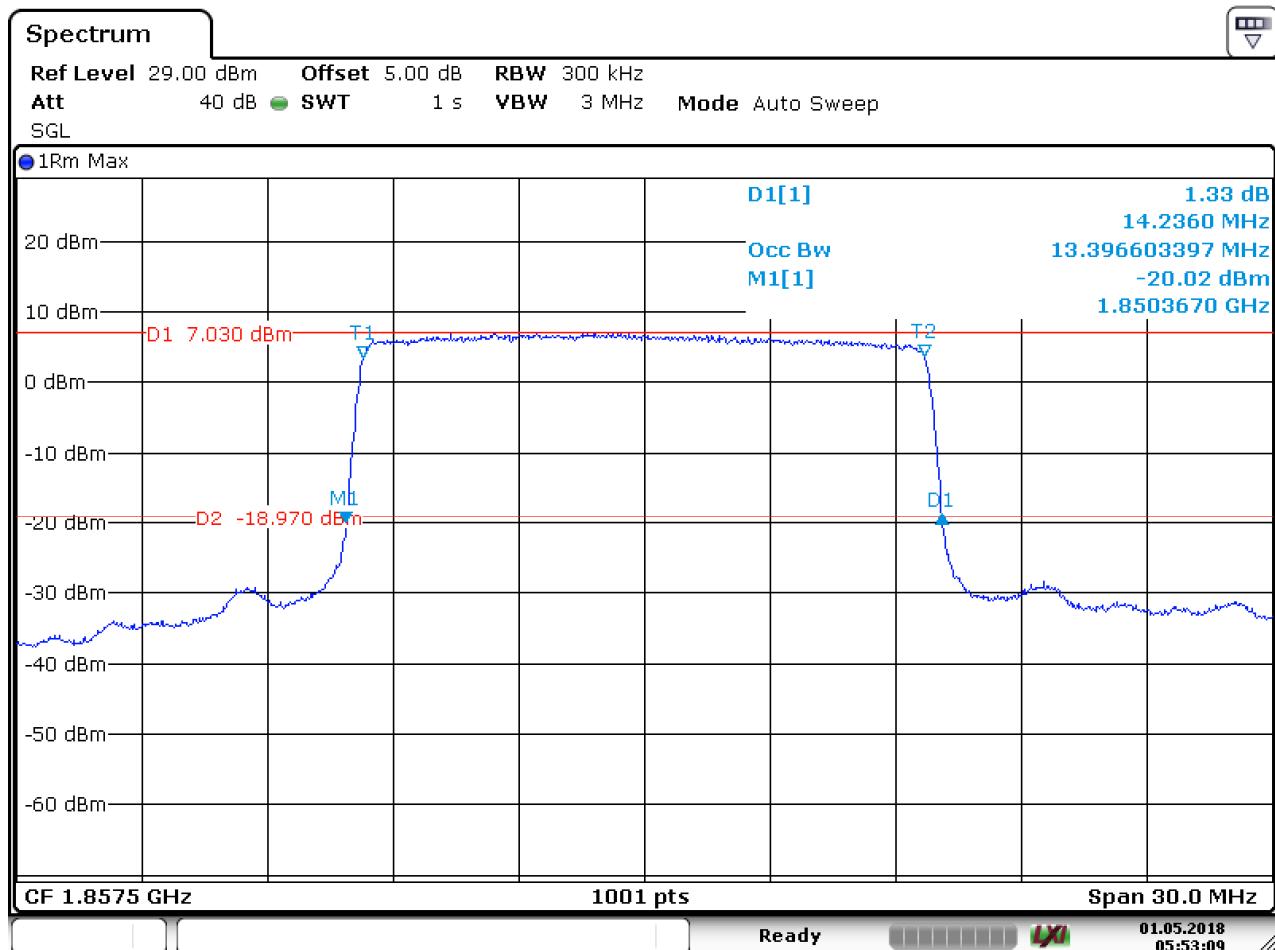
Date: 1.MAY.2018 05:53:09

4.1.1.8.2 Test Channel = MCH

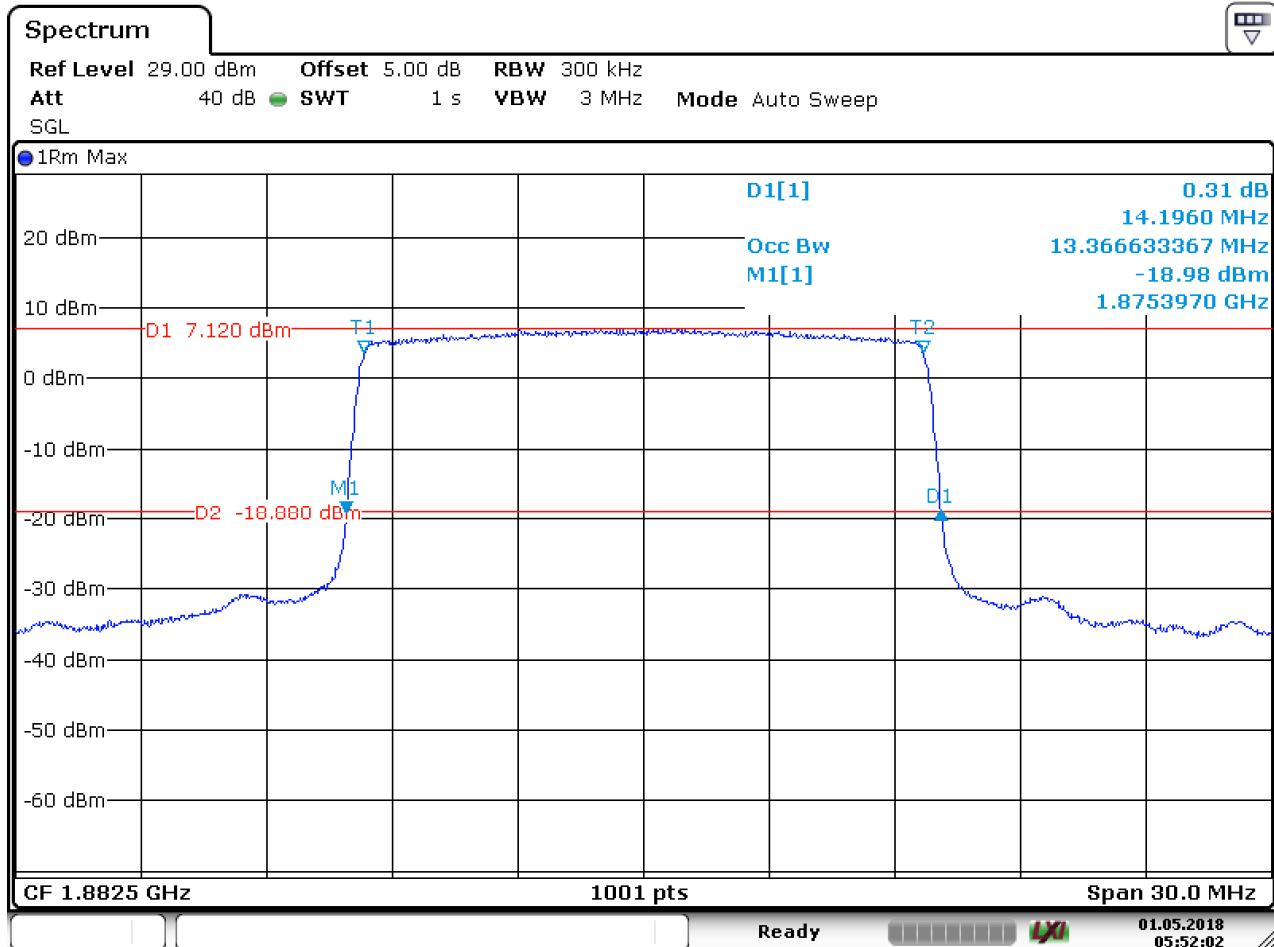
Date: 1.MAY.2018 05:52:02

4.1.1.8.3 Test Channel = HCH


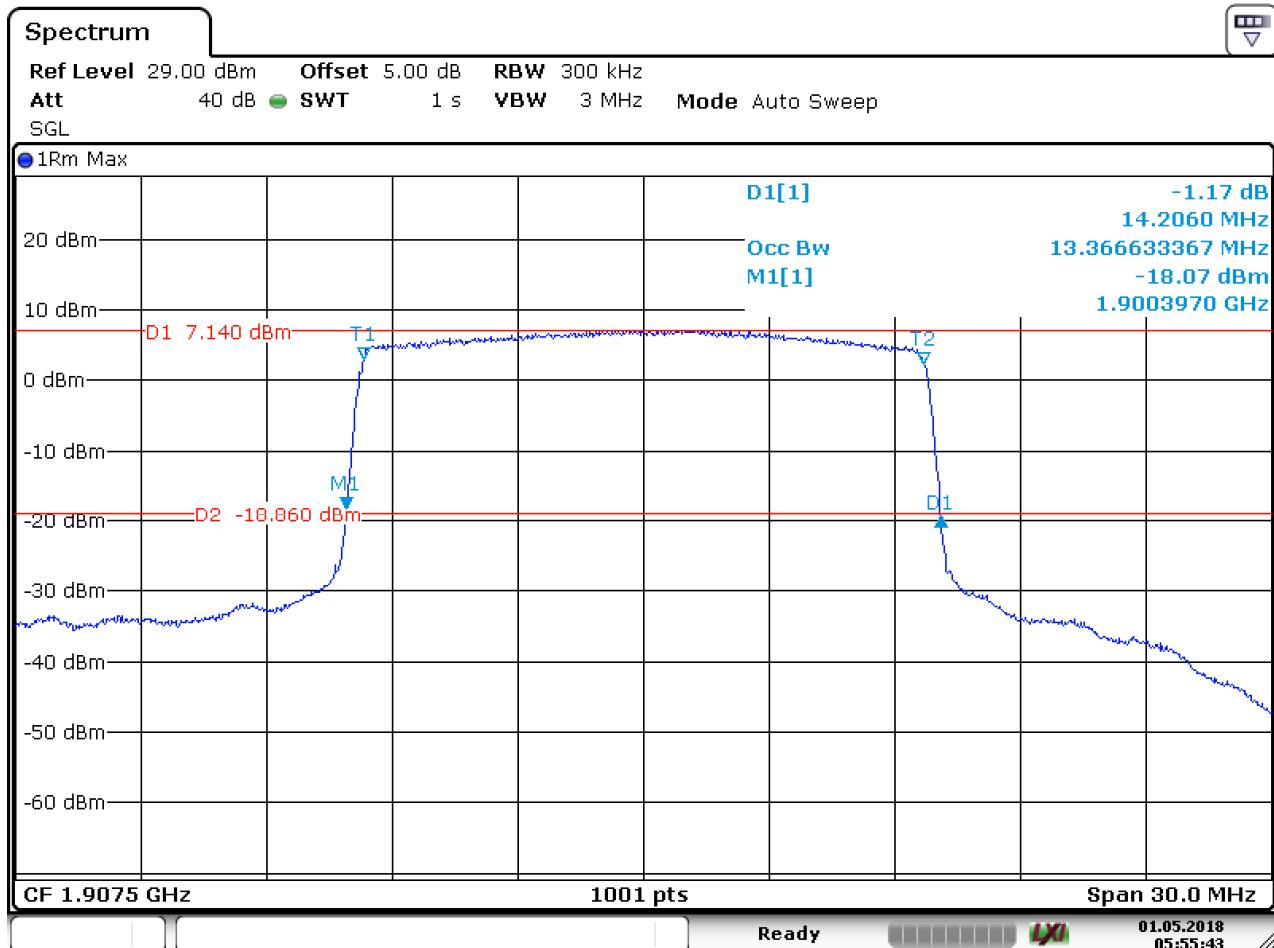
Date: 1.MAY.2018 05:55:43

4.1.1.9 Test Mode = LTE/TM1 15MHz**4.1.1.9.1 Test Channel = LCH**

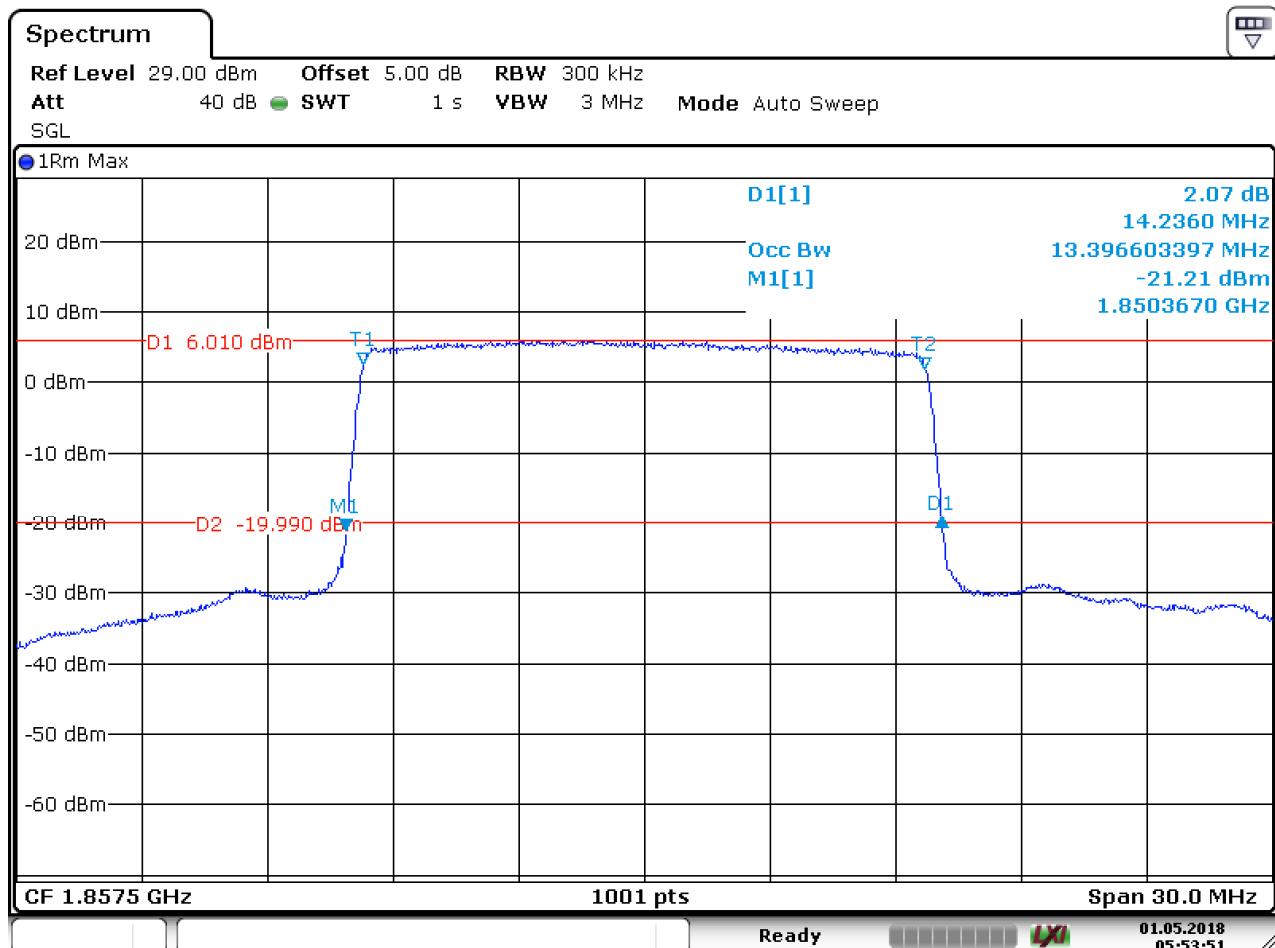
Date: 1.MAY.2018 05:53:09

4.1.1.9.2 Test Channel = MCH

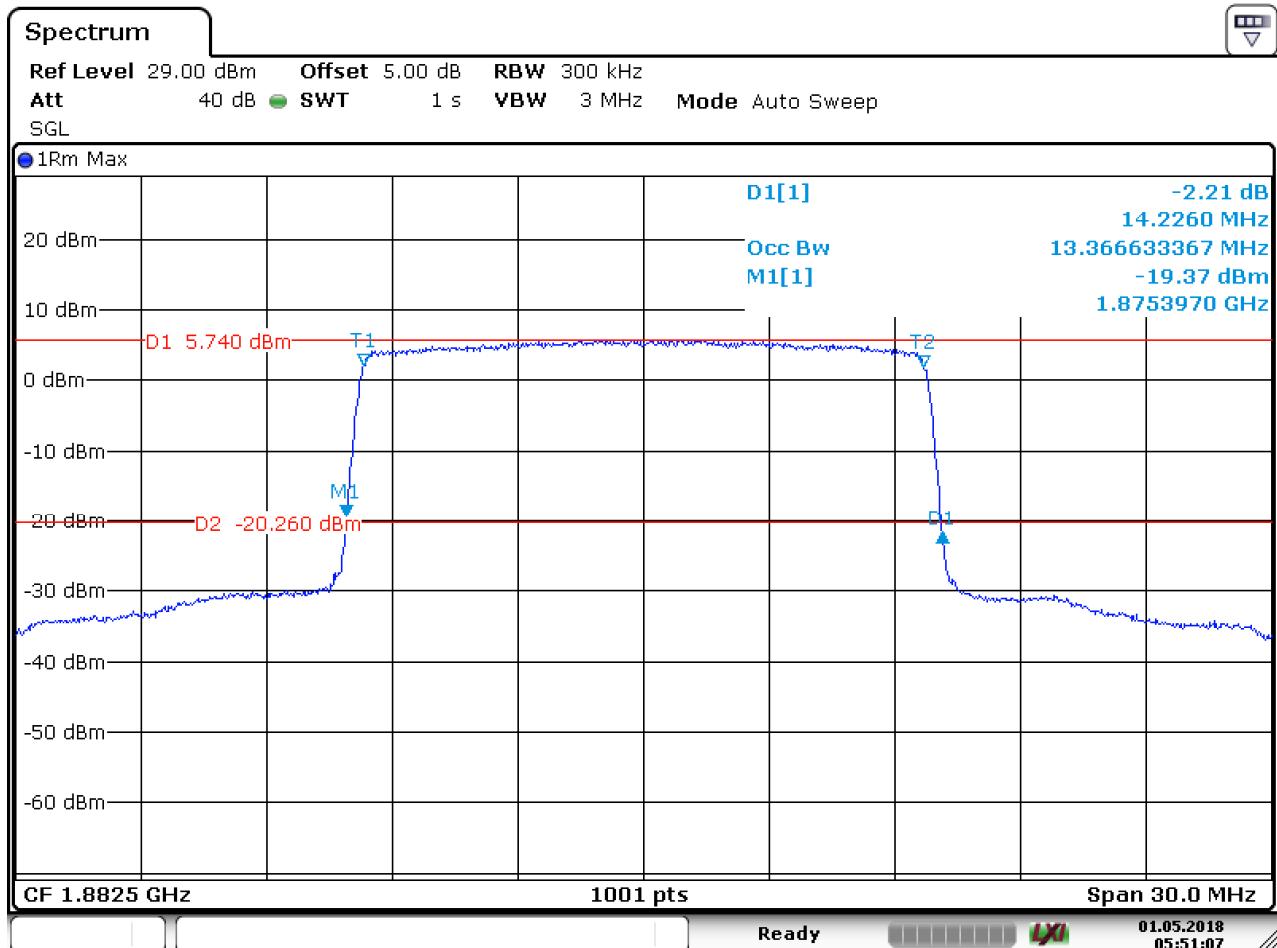
Date: 1.MAY.2018 05:52:02

4.1.1.9.3 Test Channel = HCH

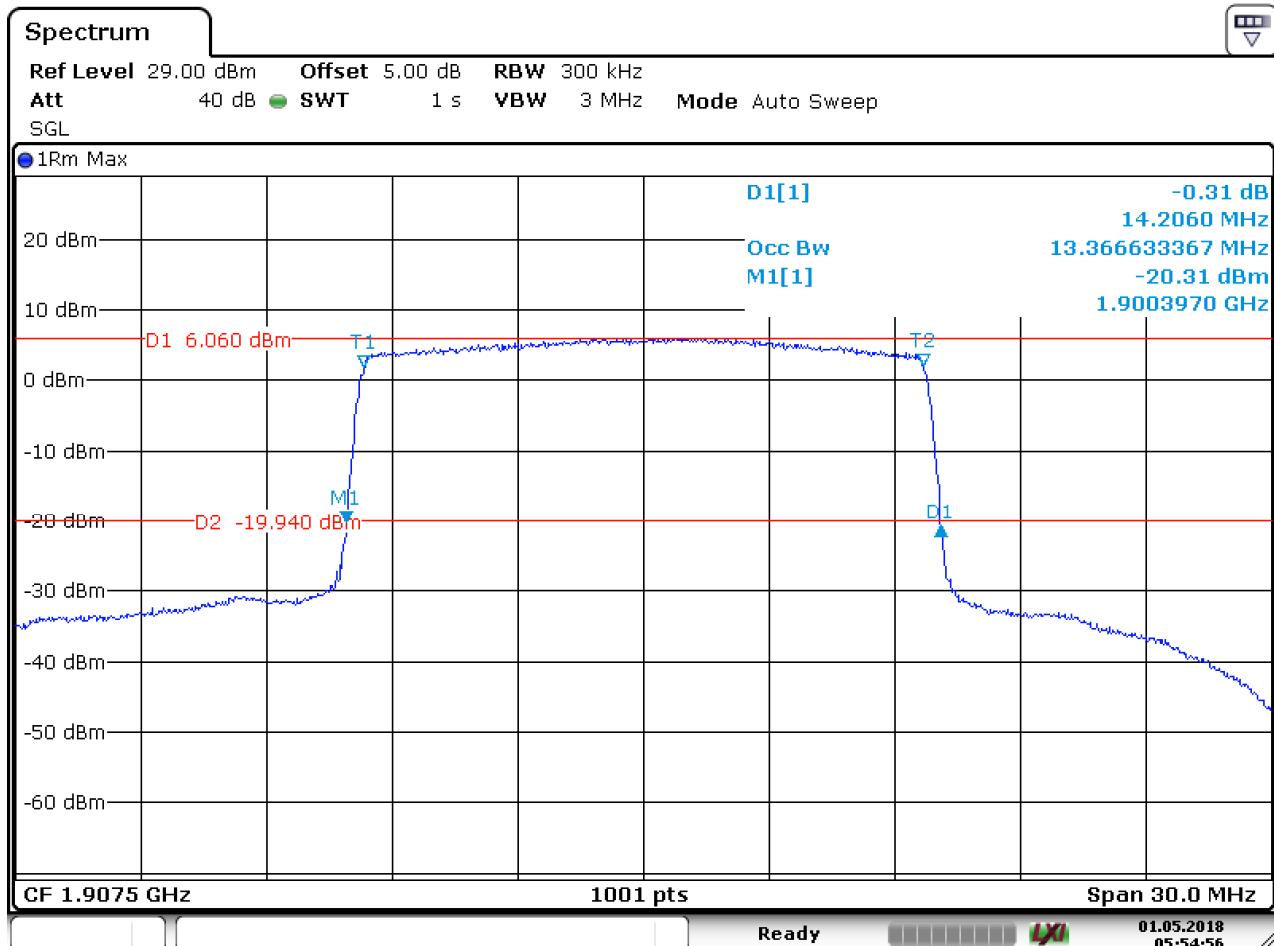
Date: 1.MAY.2018 05:55:43

4.1.1.10 Test Mode = LTE/TM2 15MHz**4.1.1.10.1 Test Channel = LCH**

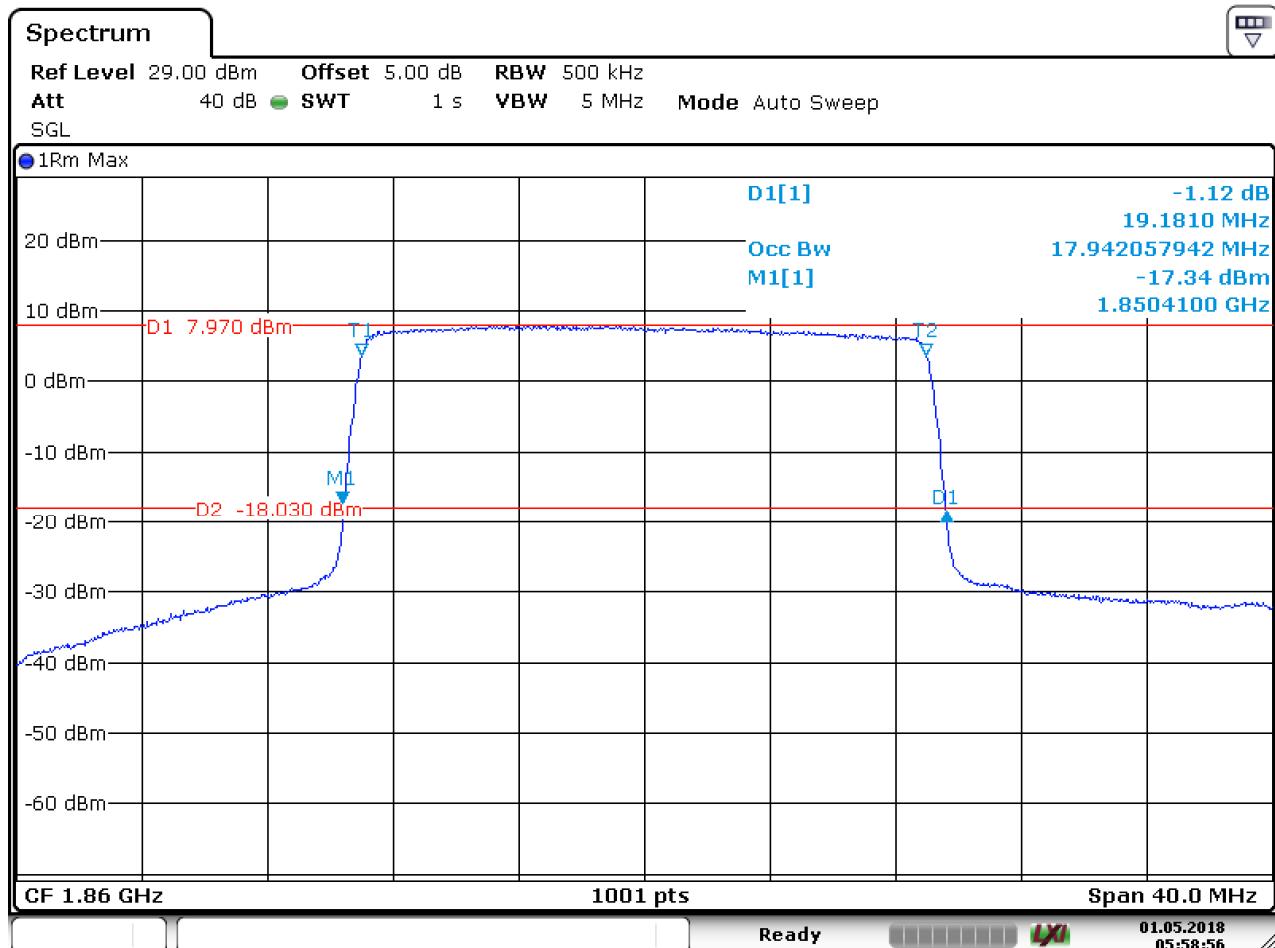
Date: 1.MAY.2018 05:53:52

4.1.1.10.2 Test Channel = MCH

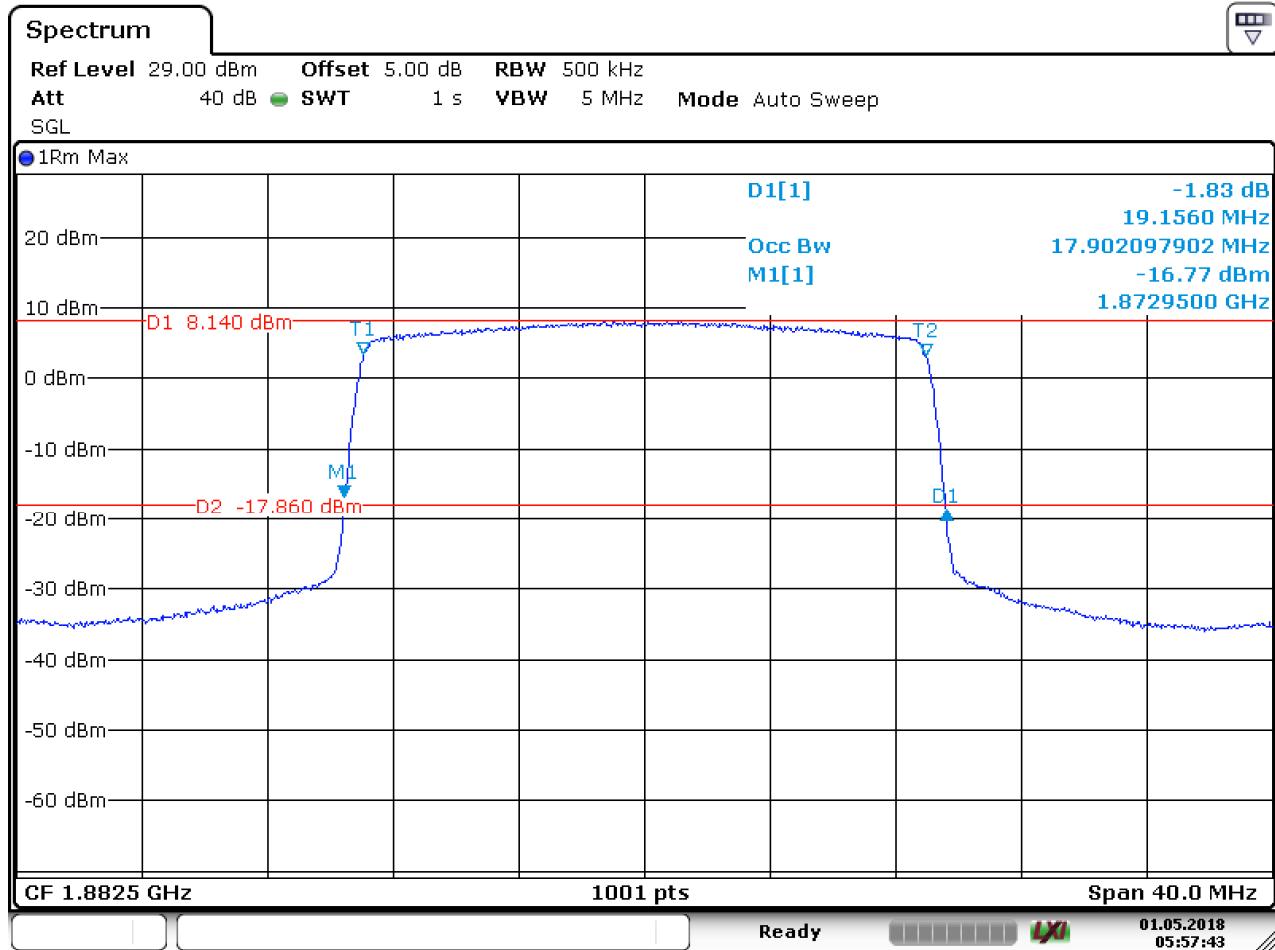
Date: 1.MAY.2018 05:51:07

4.1.1.10.3 Test Channel = HCH

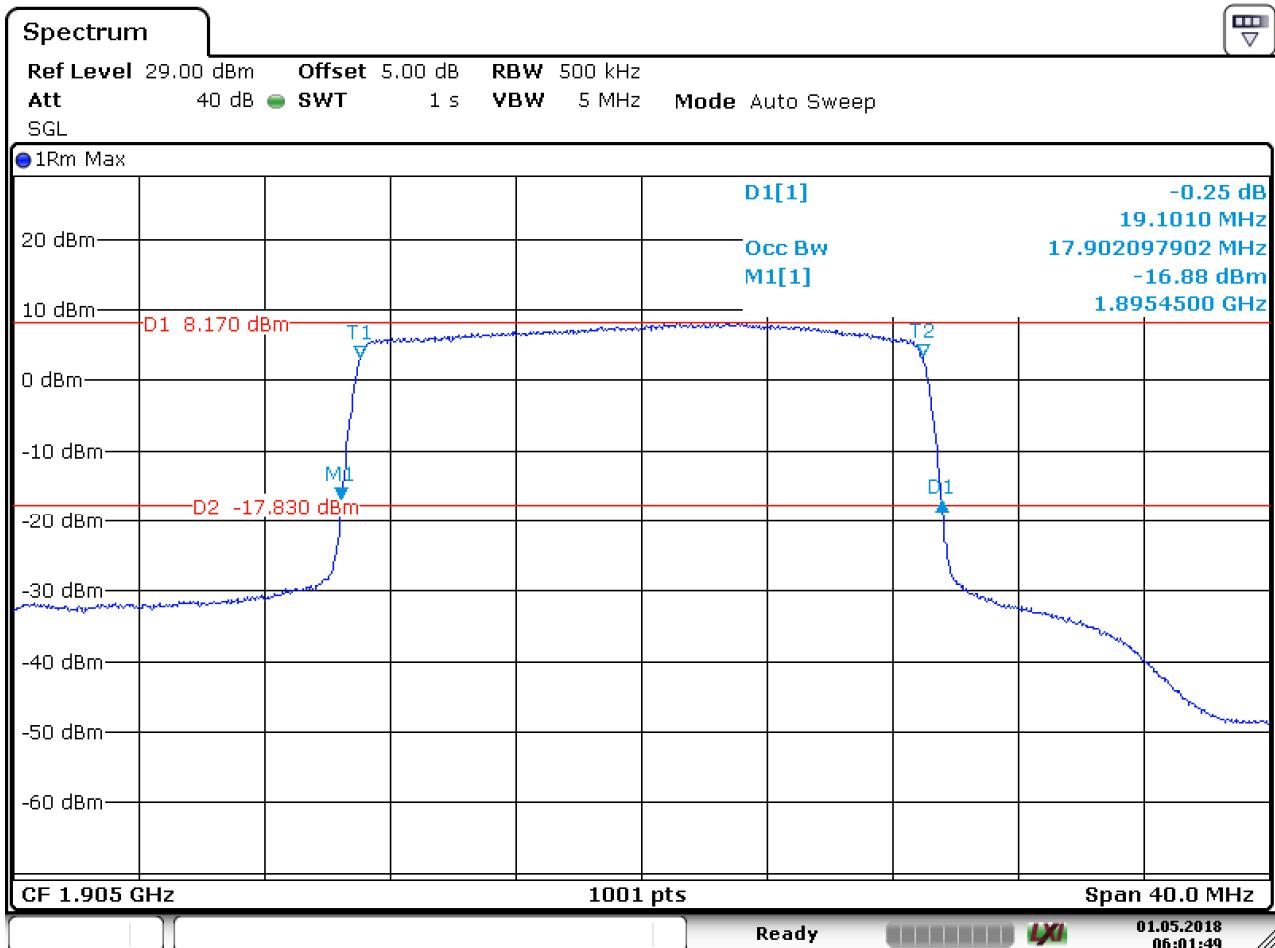
Date: 1.MAY.2018 05:54:56

4.1.1.11 Test Mode = LTE/TM1 20MHz**4.1.1.11.1 Test Channel = LCH**

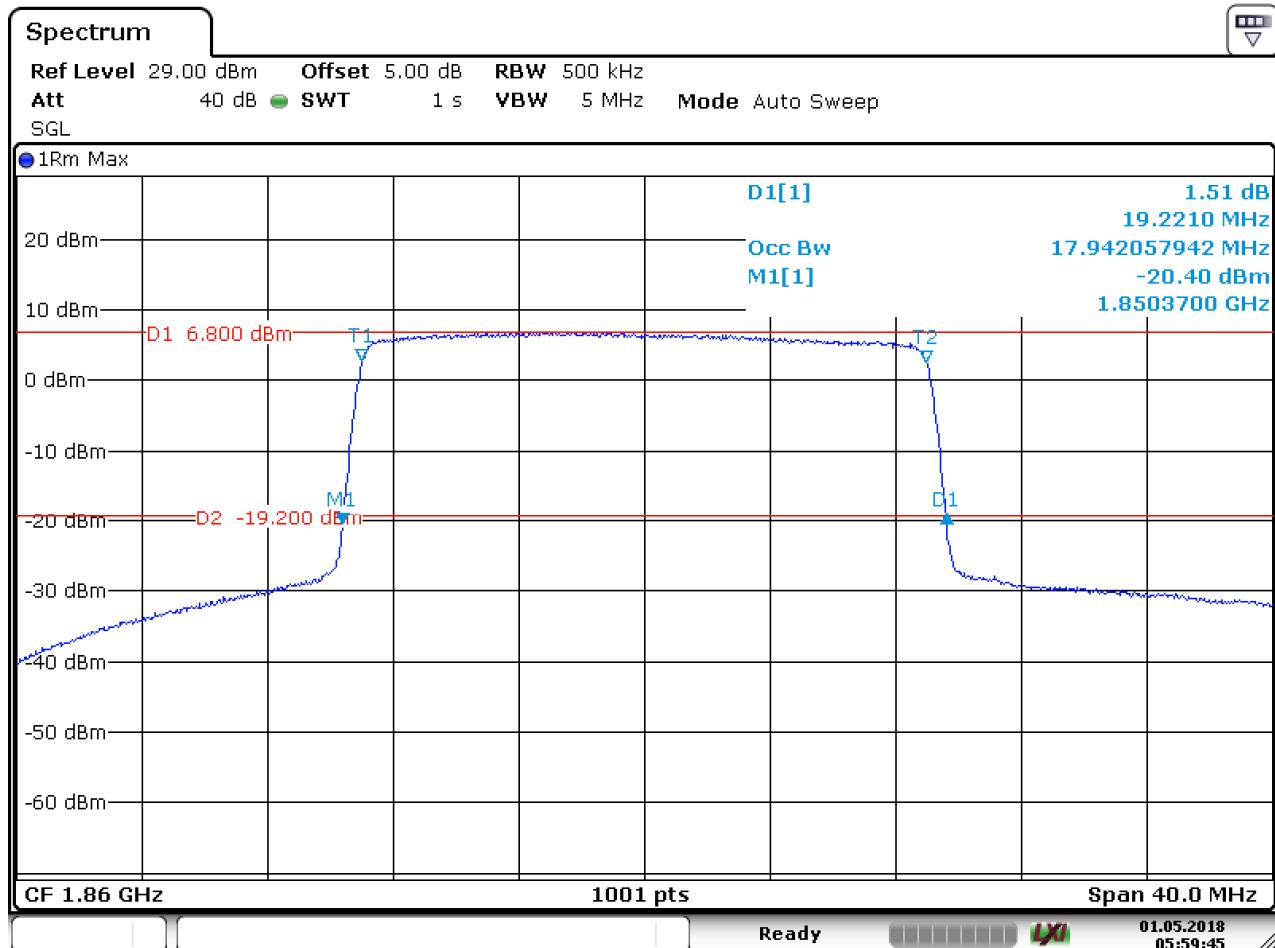
Date: 1.MAY.2018 05:58:57

4.1.1.11.2 Test Channel = MCH

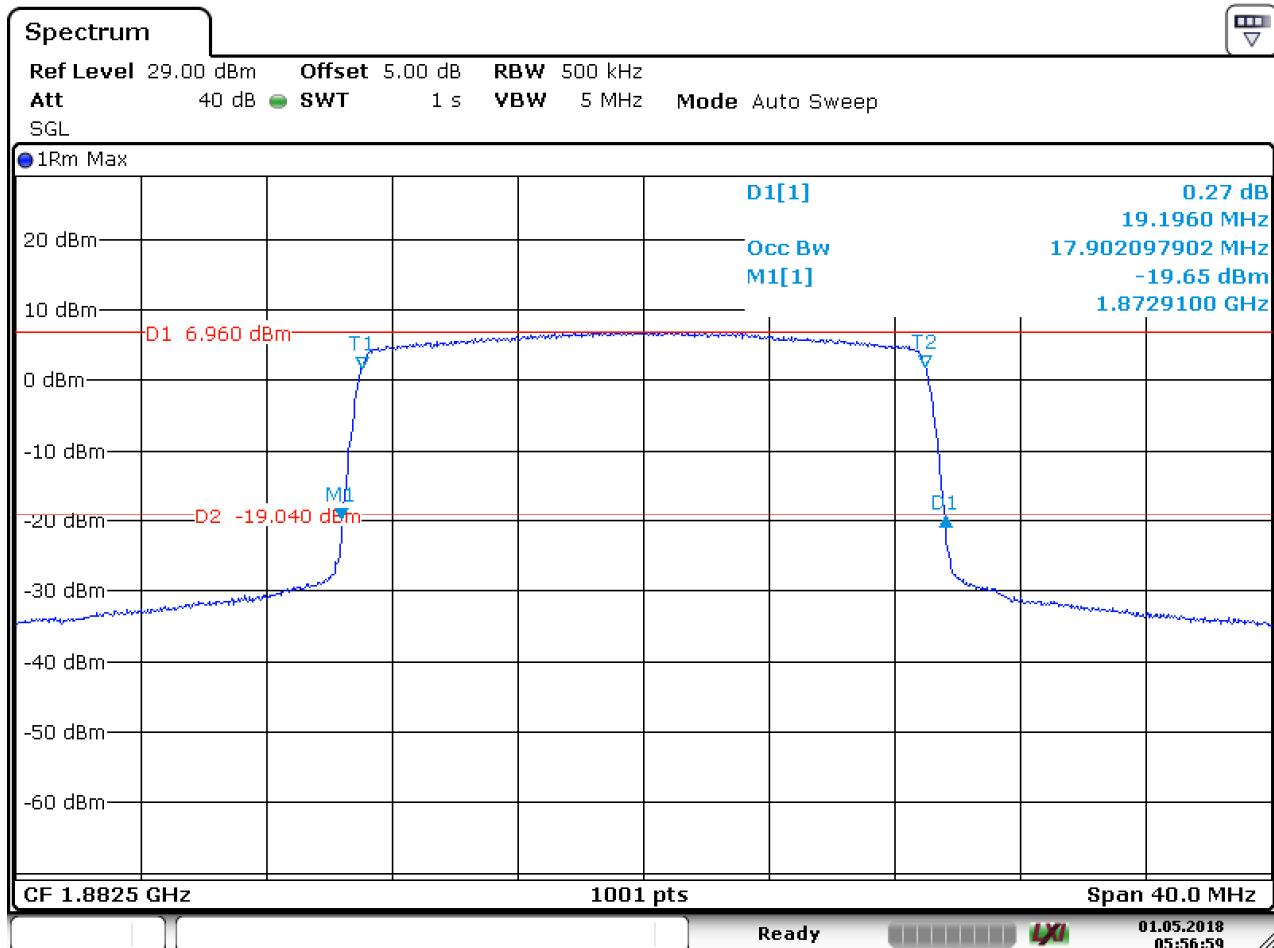
Date: 1.MAY.2018 05:57:44

4.1.1.11.3 Test Channel = HCH

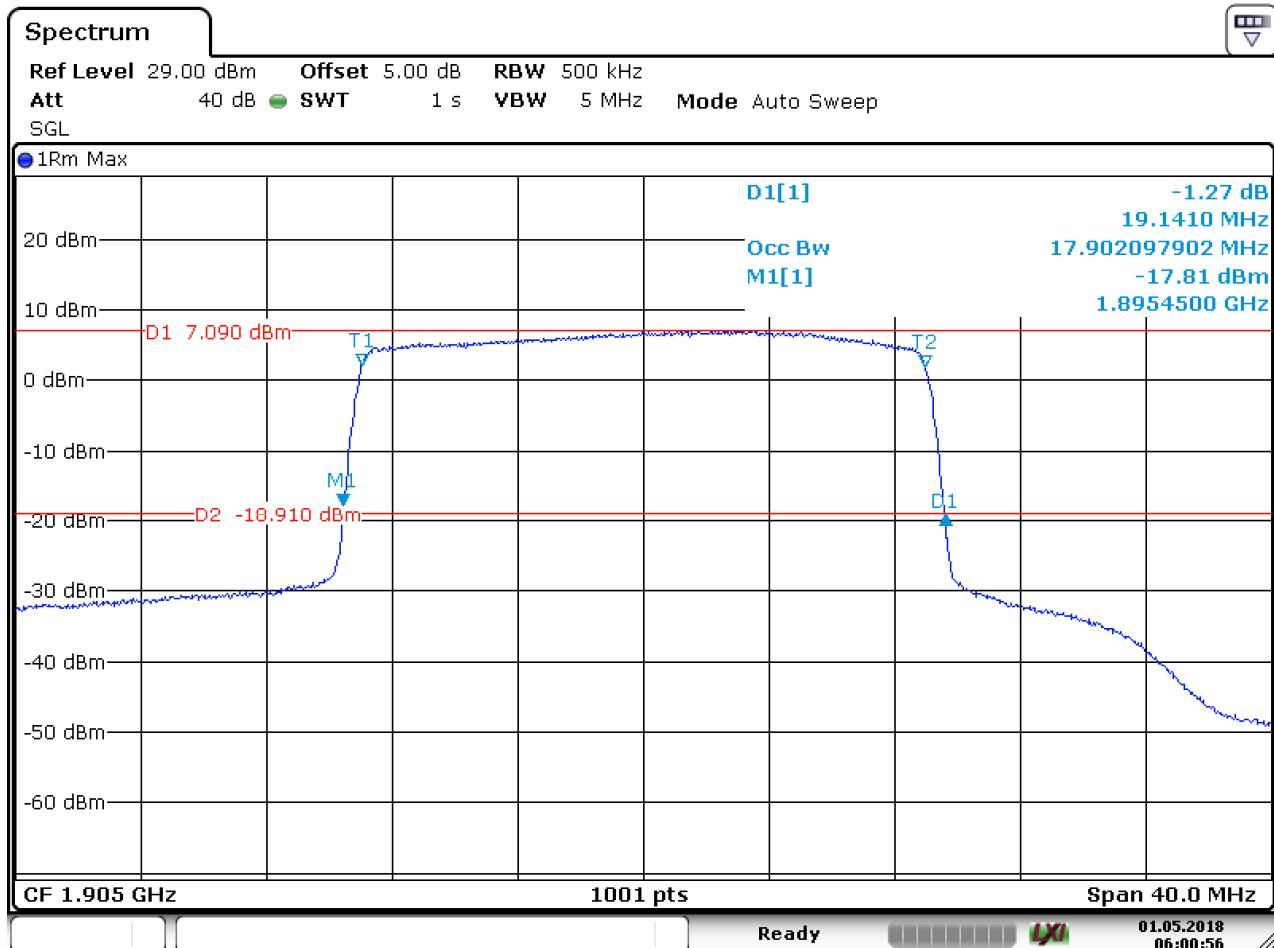
Date: 1.MAY.2018 06:01:50

4.1.1.12 Test Mode = LTE/TM2 20MHz
4.1.1.12.1 Test Channel = LCH


Date: 1.MAY.2018 05:59:46

4.1.1.12.2 Test Channel = MCH

Date: 1.MAY.2018 05:57:00

4.1.1.12.3 Test Channel = HCH

Date: 1.MAY.2018 06:00:56

5 Band Edges Compliance

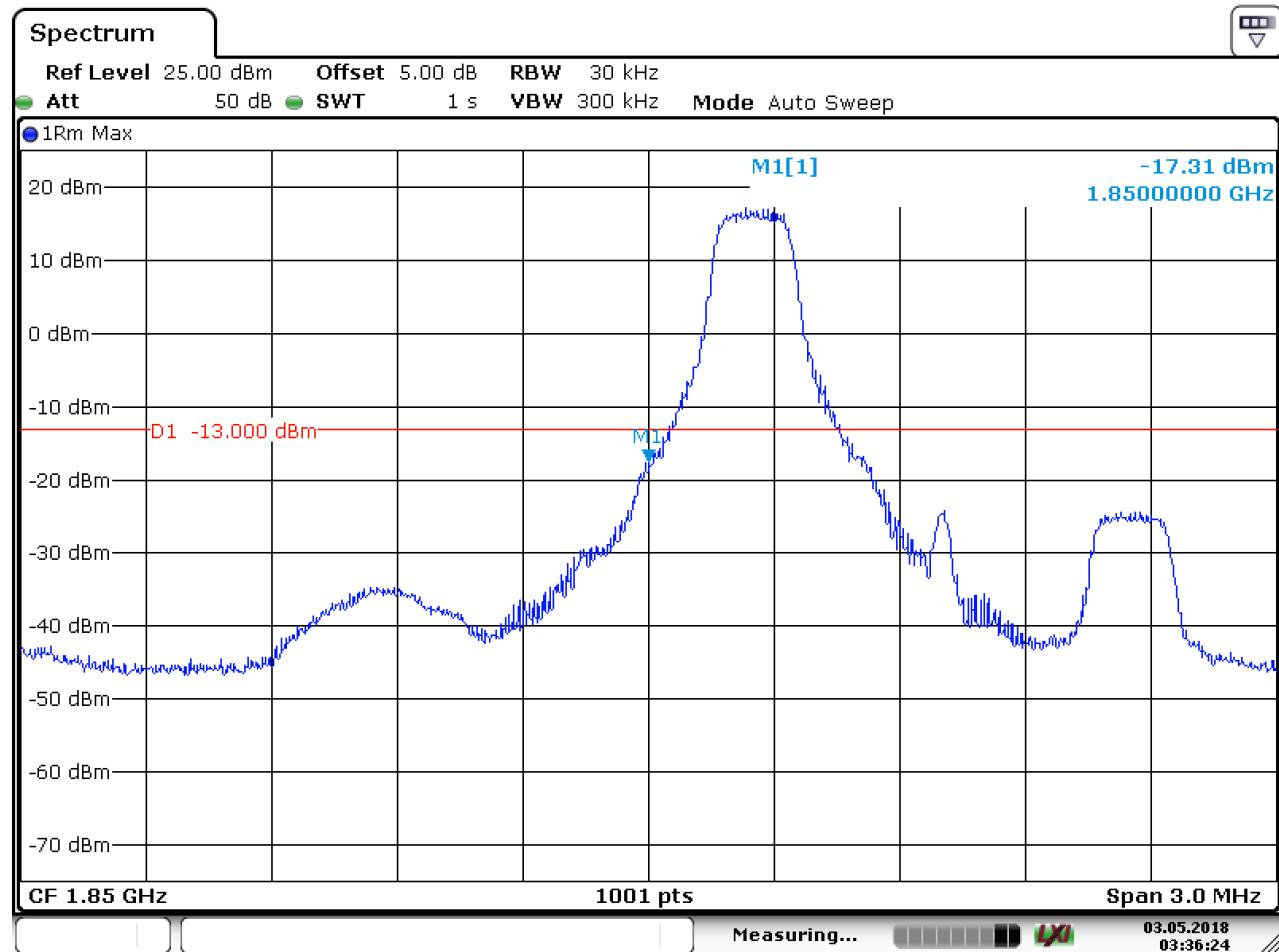
5.1 For LTE

5.1.1 Test Band = LTE band25

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

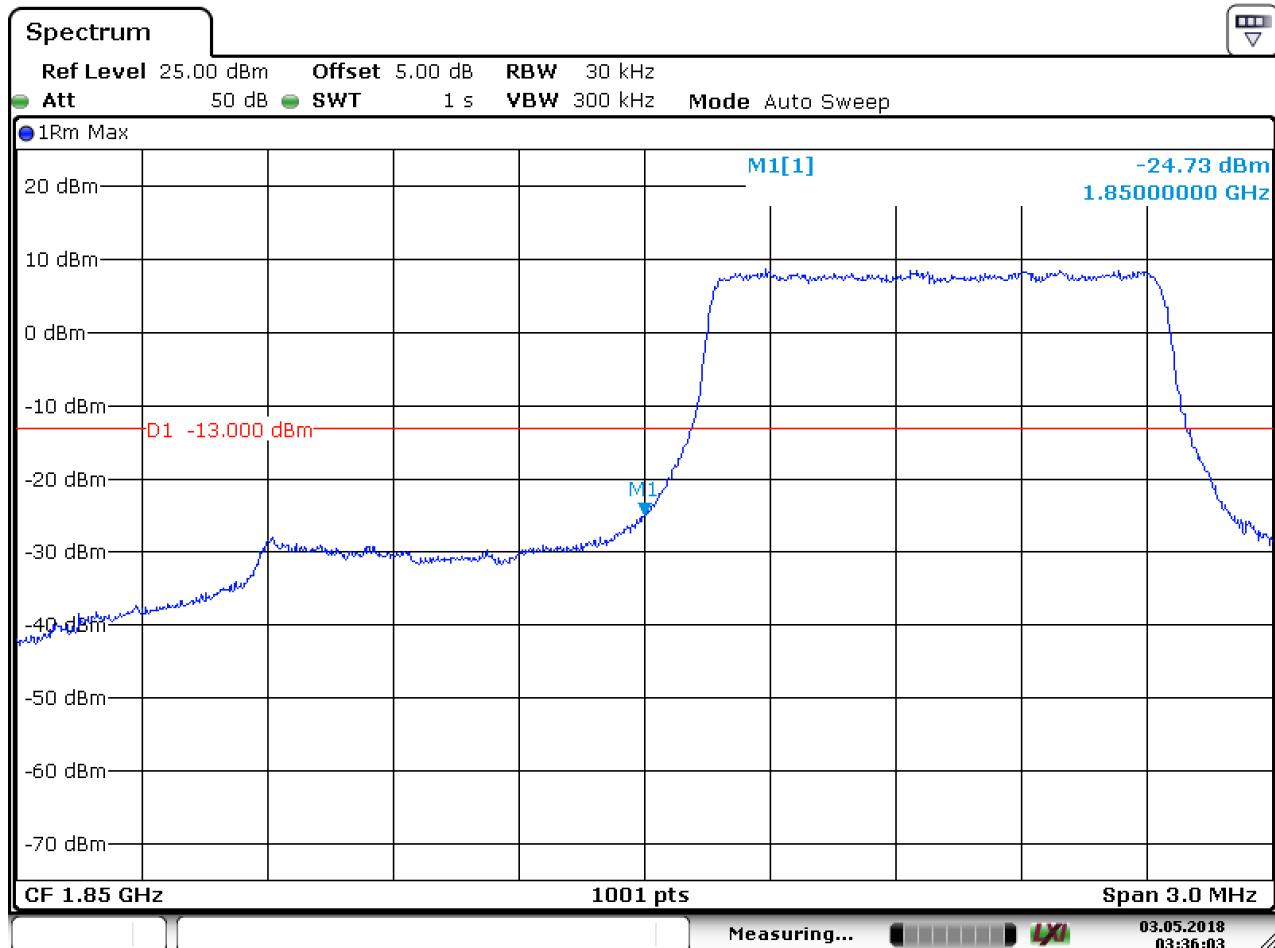
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 3.MAY.2018 03:36:25

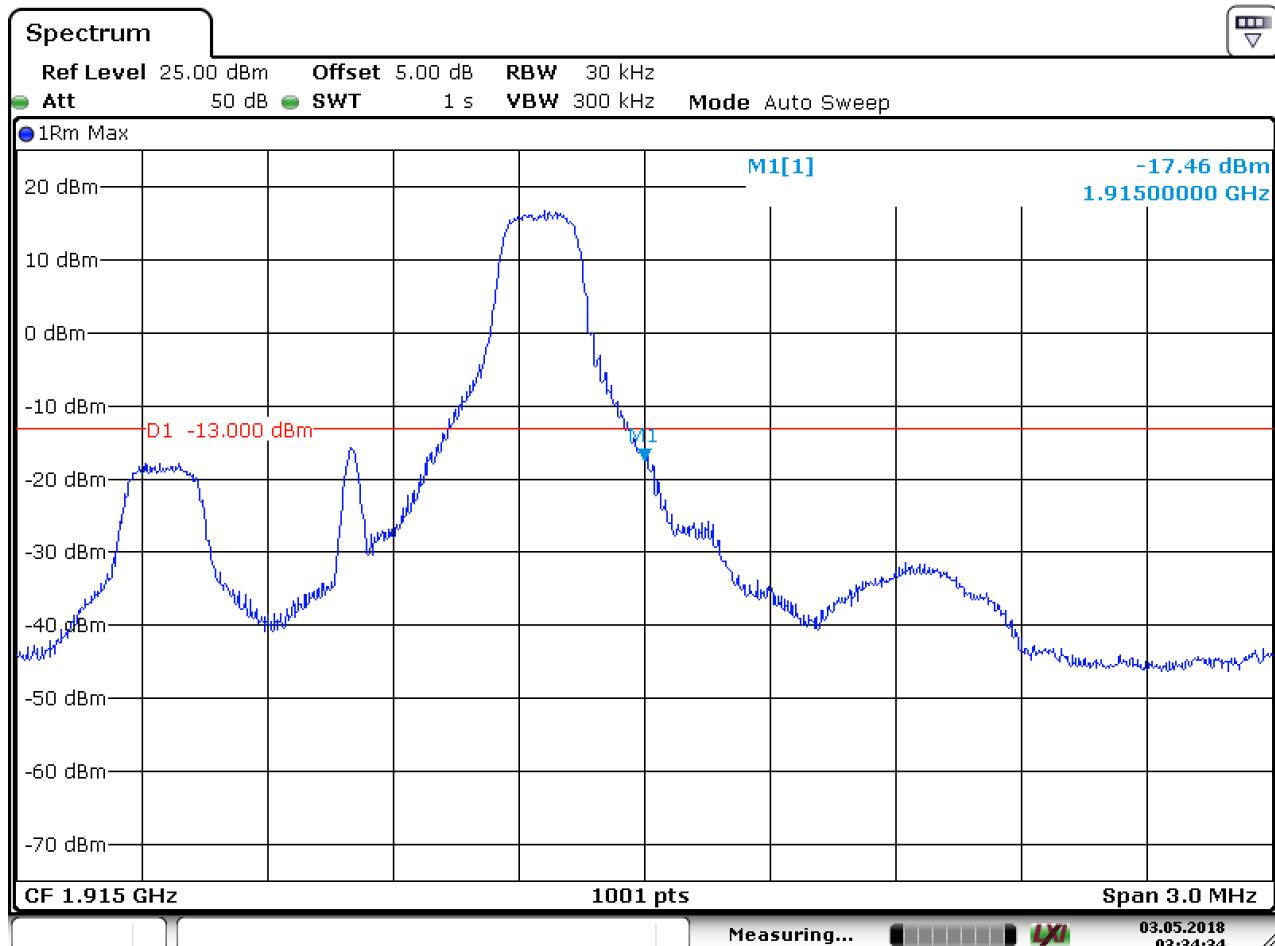
5.1.1.1.1.2 Test RB=6RB



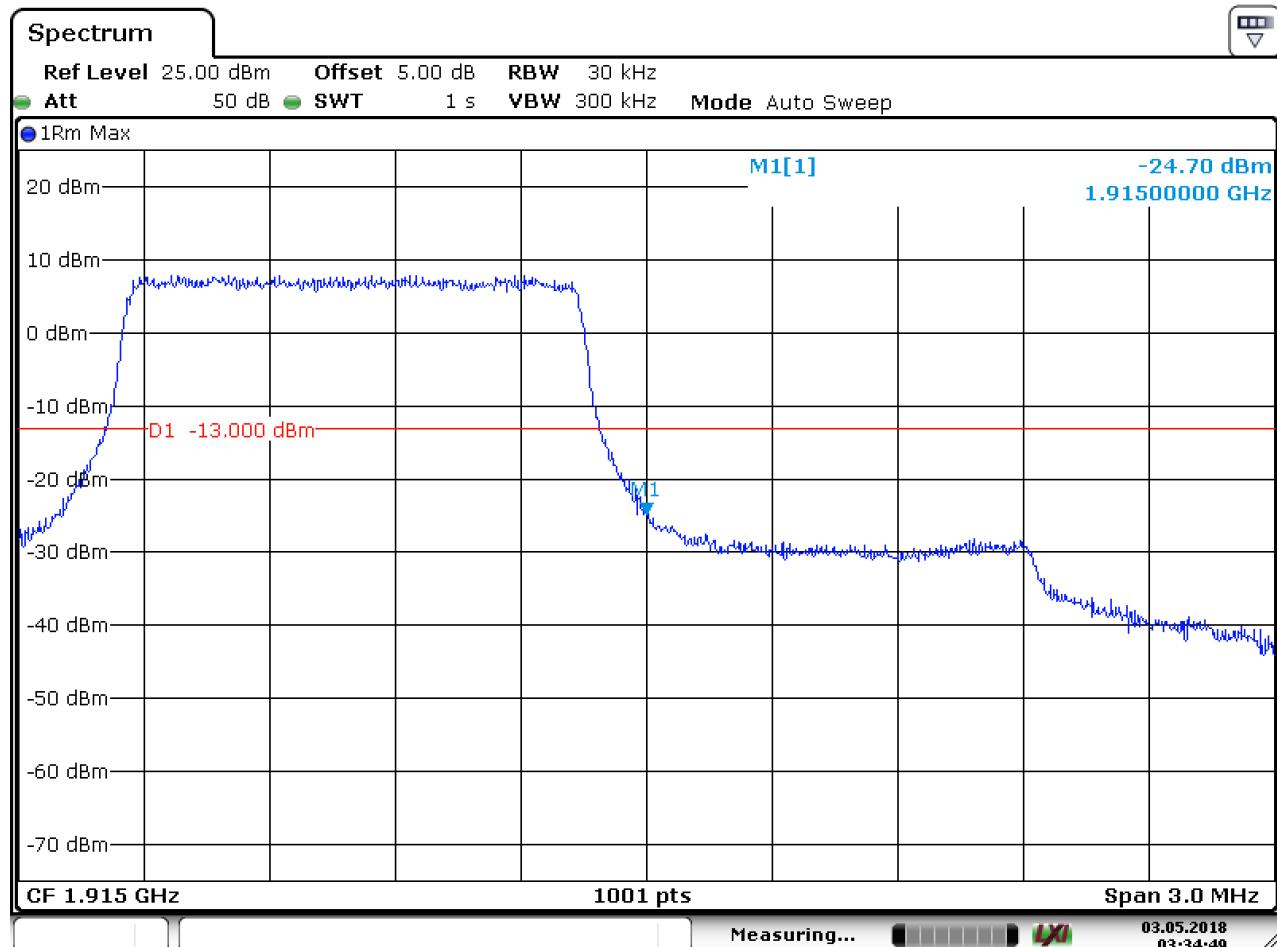
Date: 3.MAY.2018 03:36:03

5.1.1.1.2 Test Channel = HCH

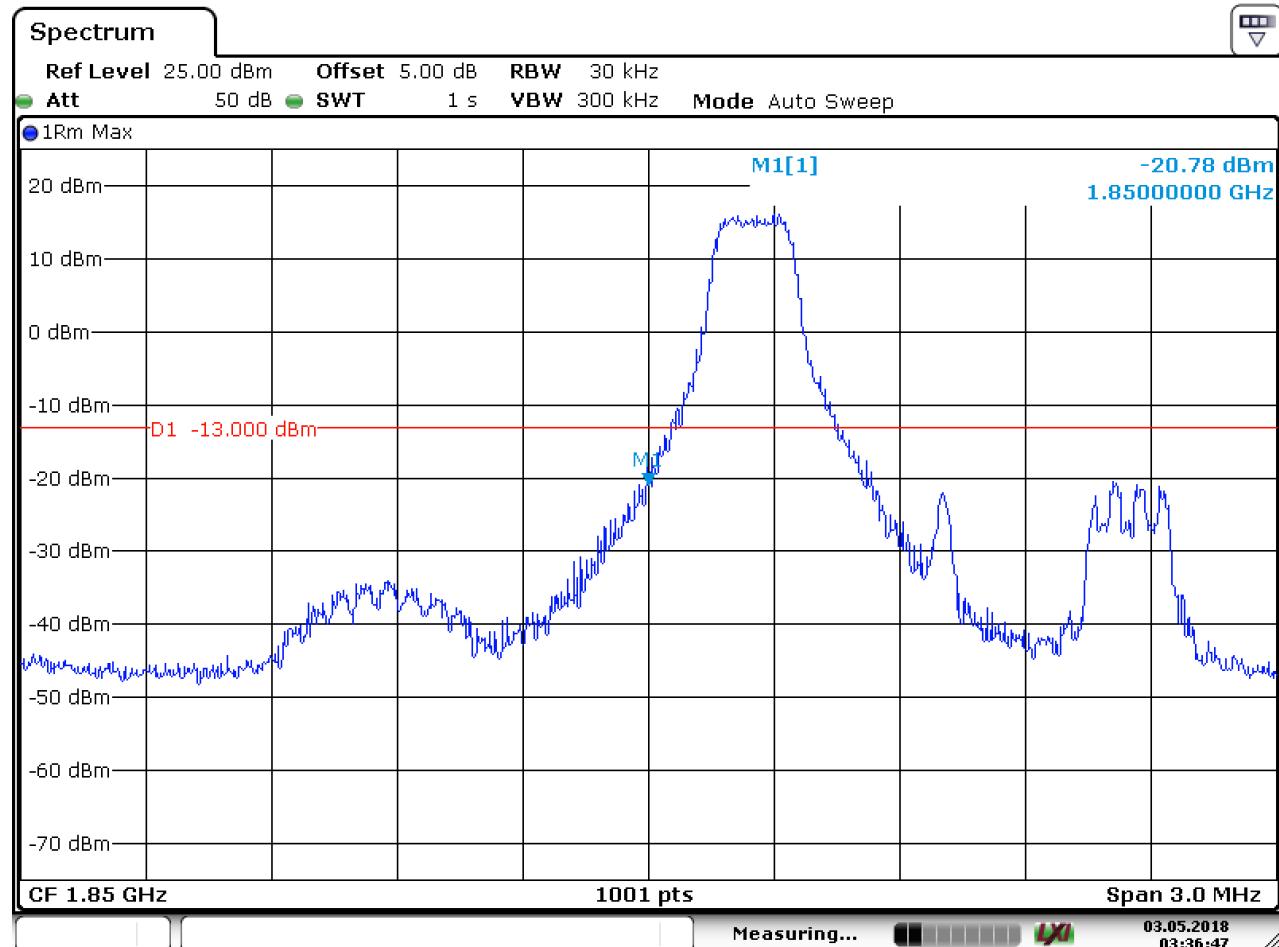
5.1.1.1.2.1 Test RB=1RB



Date: 3 MAY 2018 03:34:34

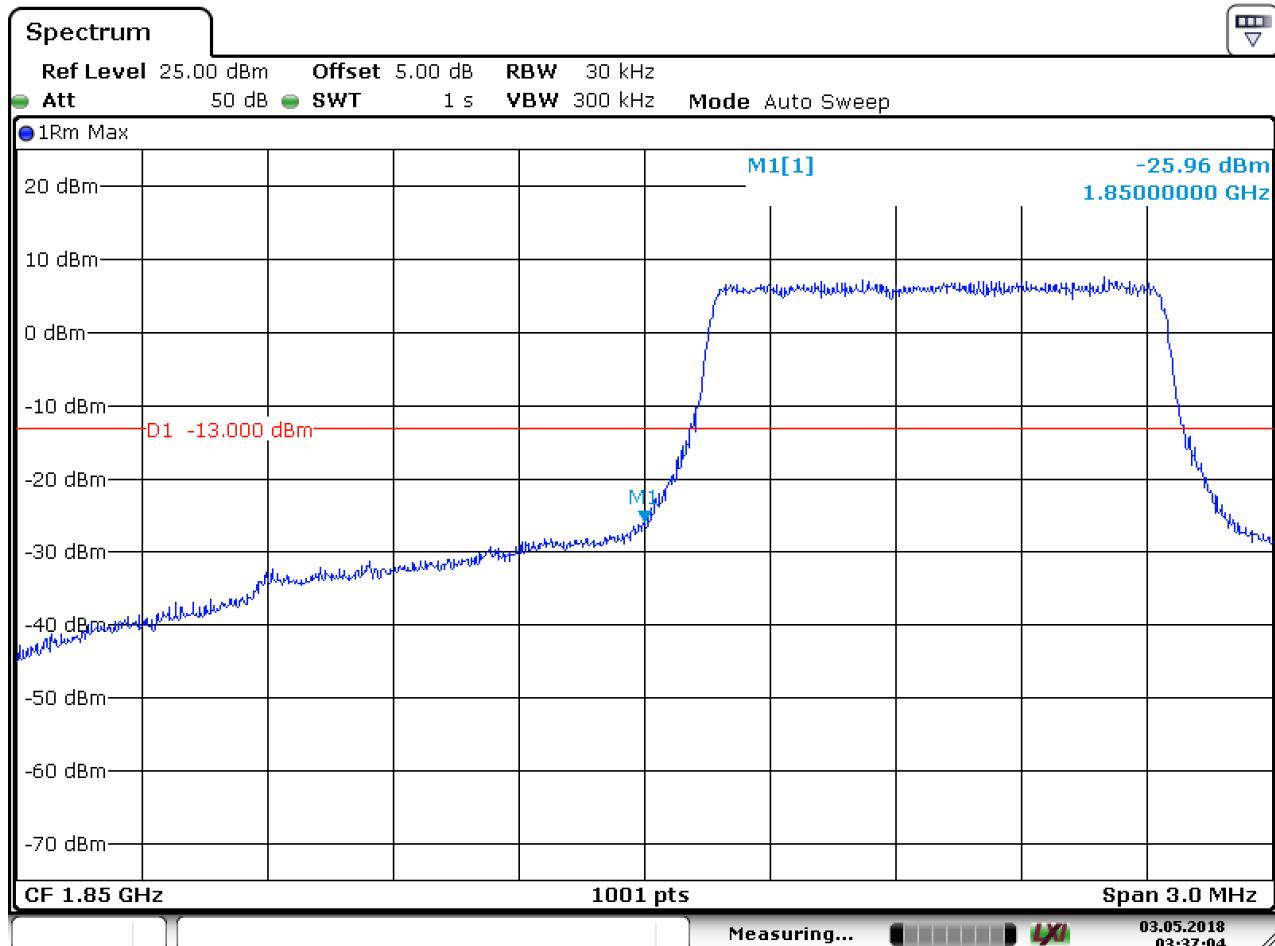
5.1.1.1.2.2 Test RB=6RB

Date: 3.MAY.2018 03:34:50

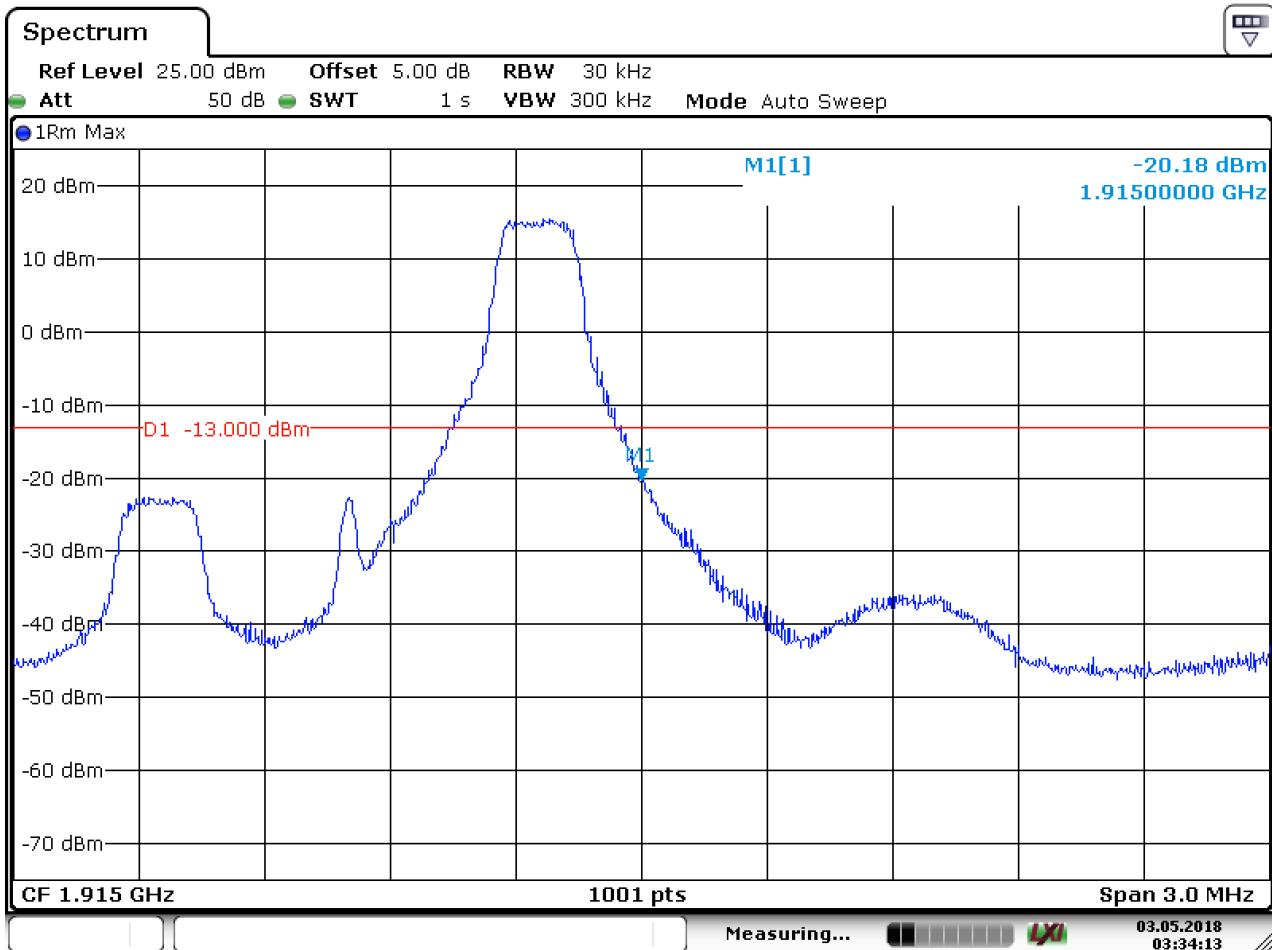
5.1.1.2 Test Mode = LTE/TM2 1.4MHz**5.1.1.2.1 Test Channel = LCH****5.1.1.2.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:36:47

5.1.1.2.1.2 Test RB=6RB

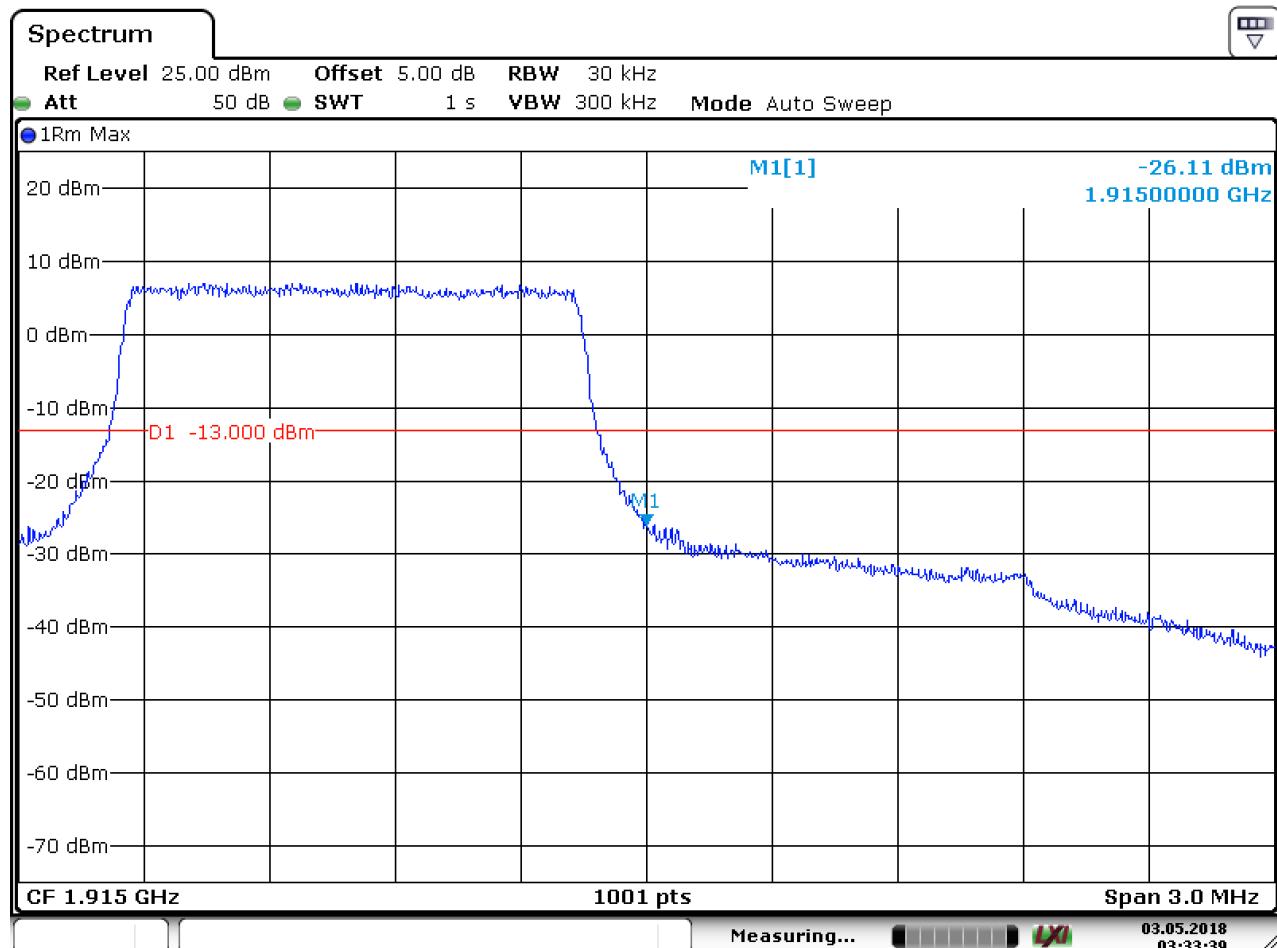


Date: 3.MAY.2018 03:37:05

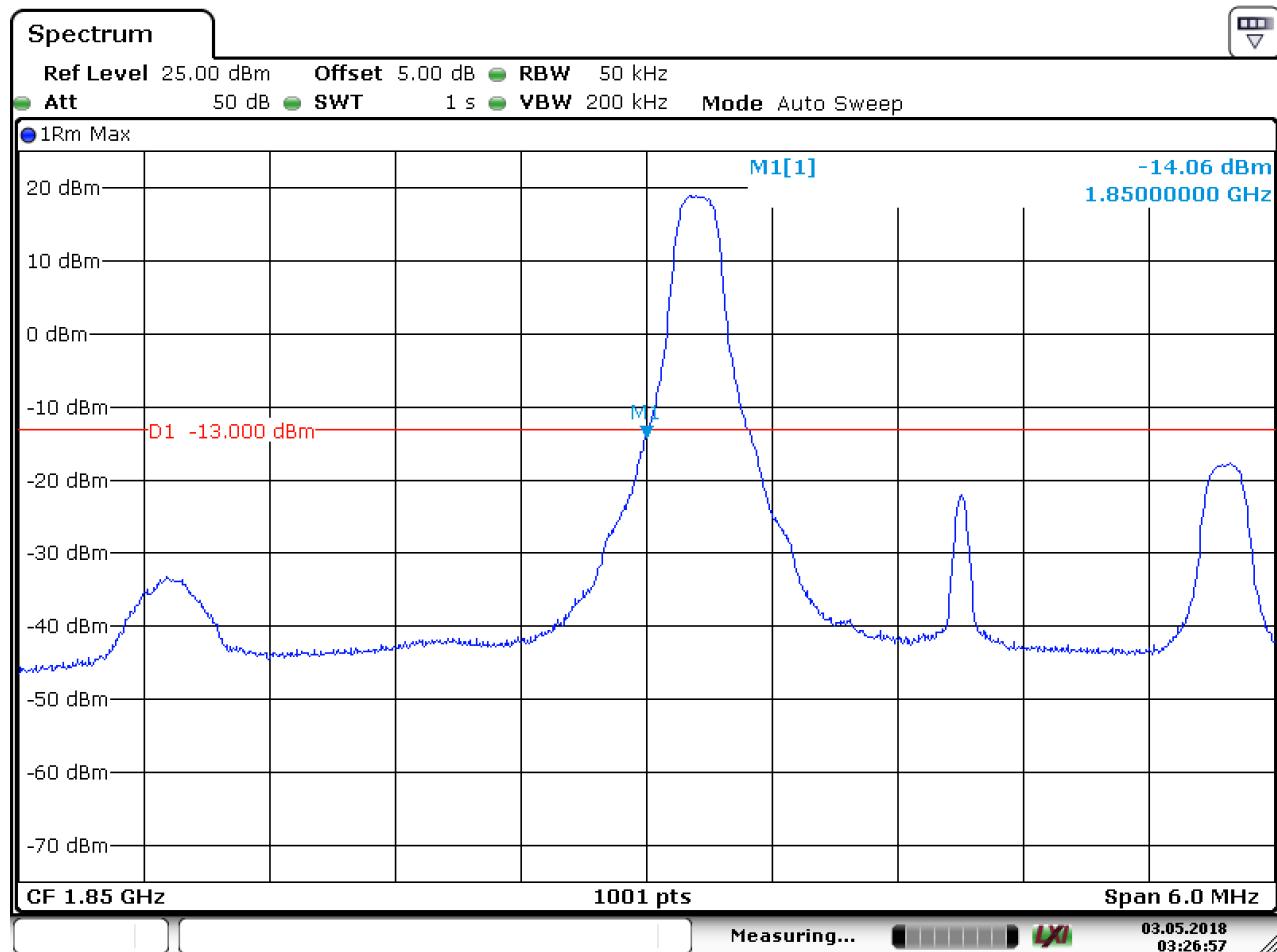
5.1.1.2.2 Test Channel = HCH**5.1.1.2.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:34:13

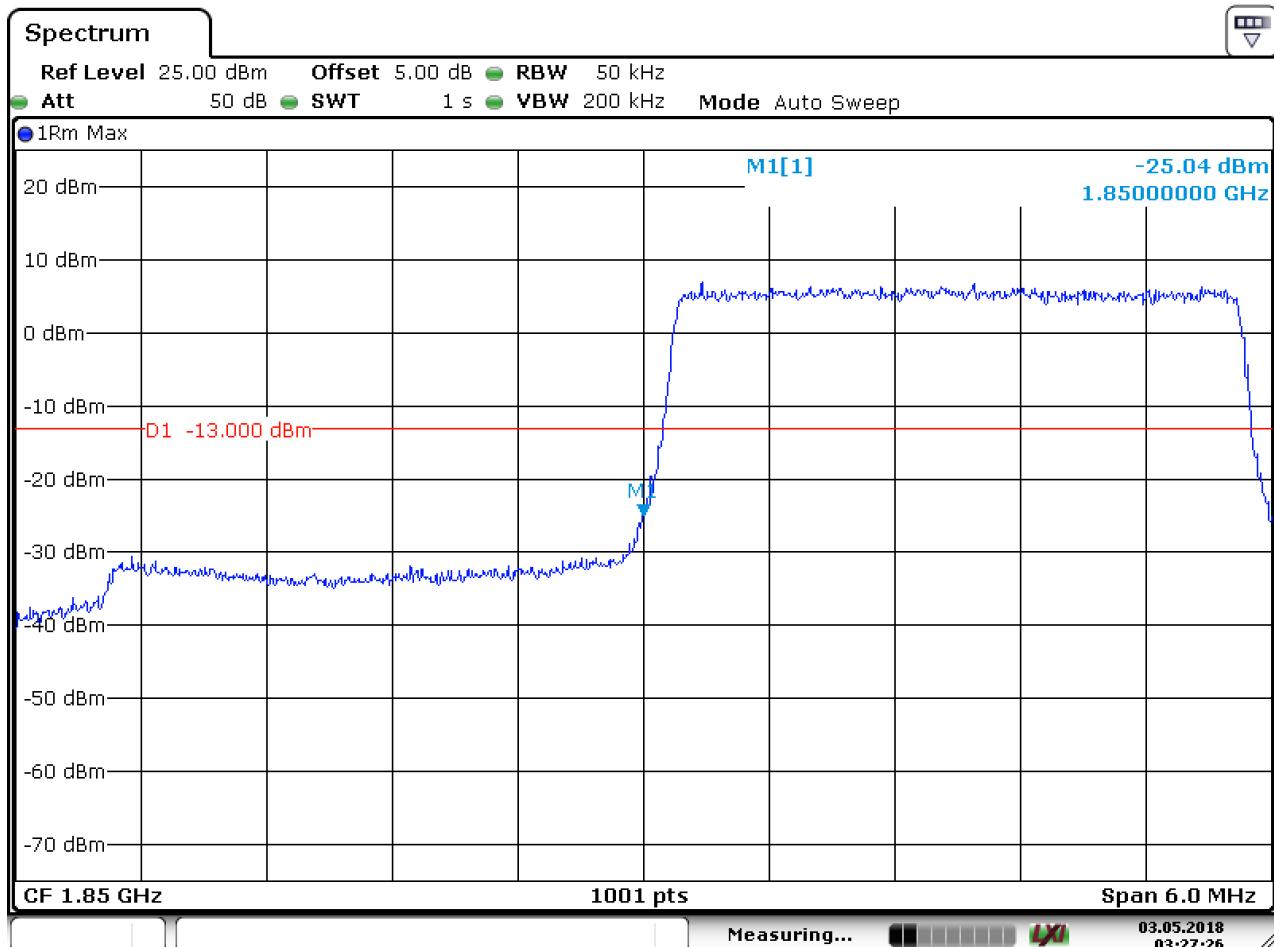
5.1.1.2.2.2 Test RB=6RB



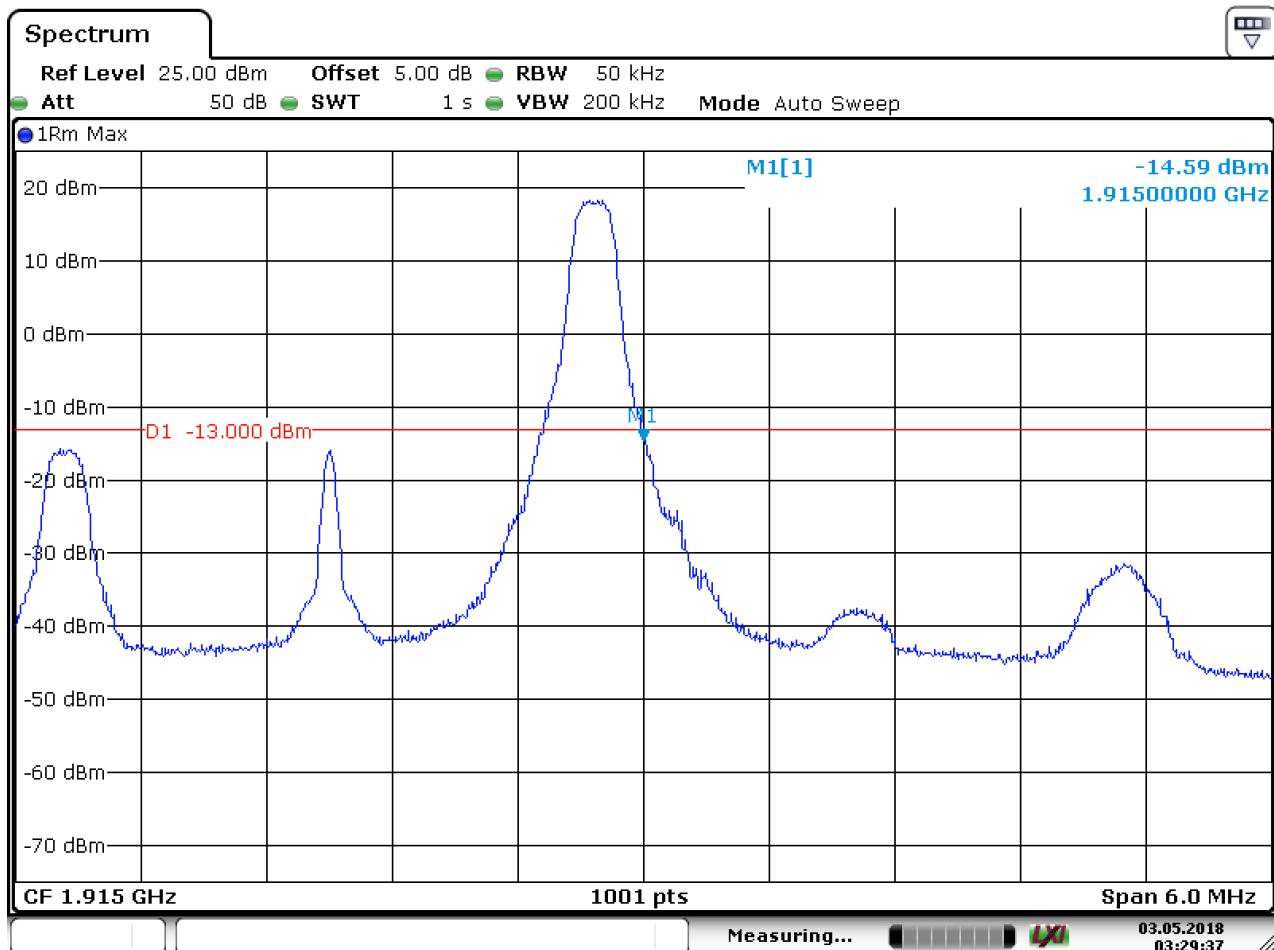
Date: 3.MAY.2018 03:33:39

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**

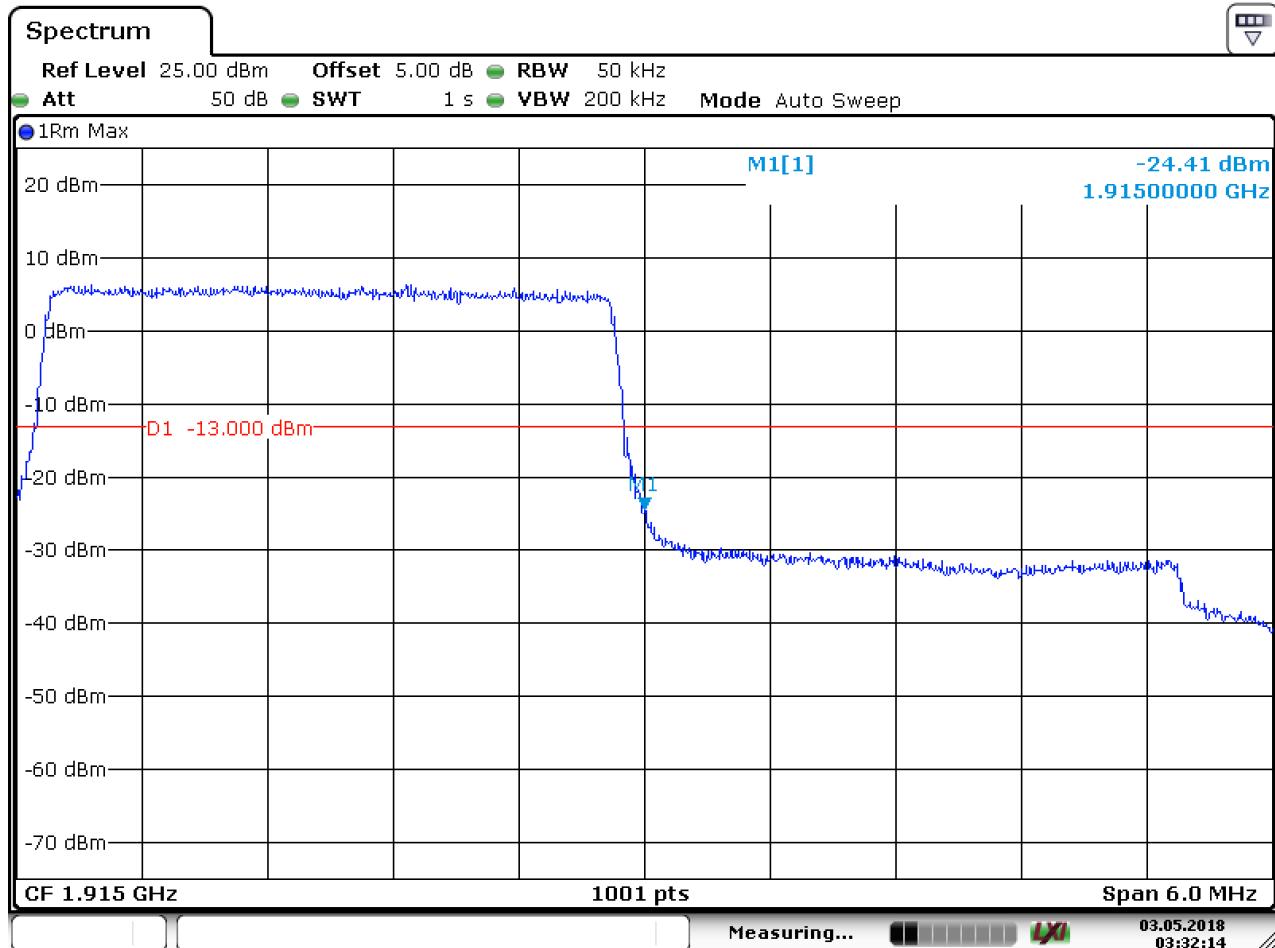
Date: 3.MAY.2018 03:26:57

5.1.1.3.1.2 Test RB=15RB

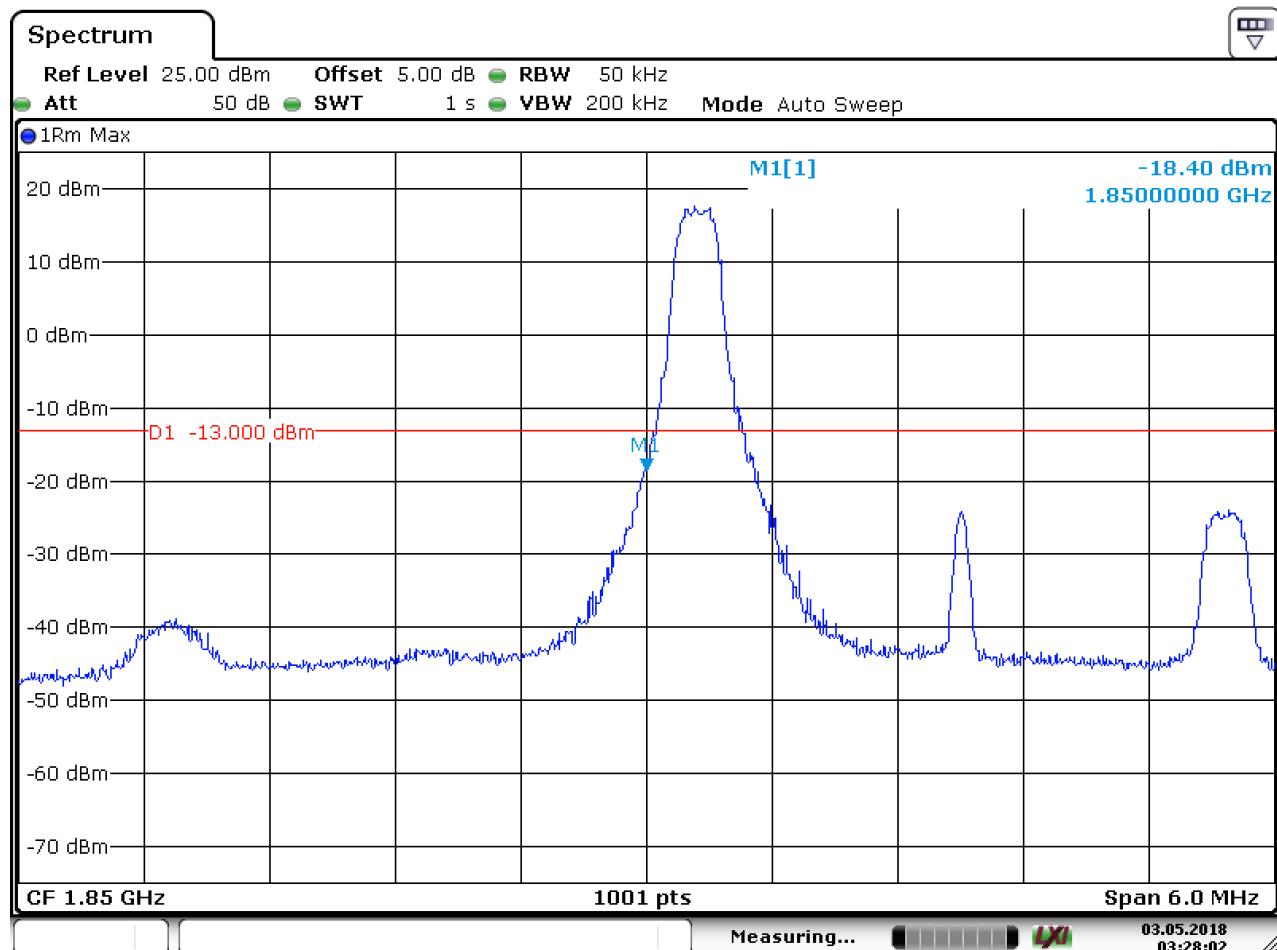
Date: 3.MAY.2018 03:27:26

5.1.1.3.2 Test Channel = HCH**5.1.1.3.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:29:37

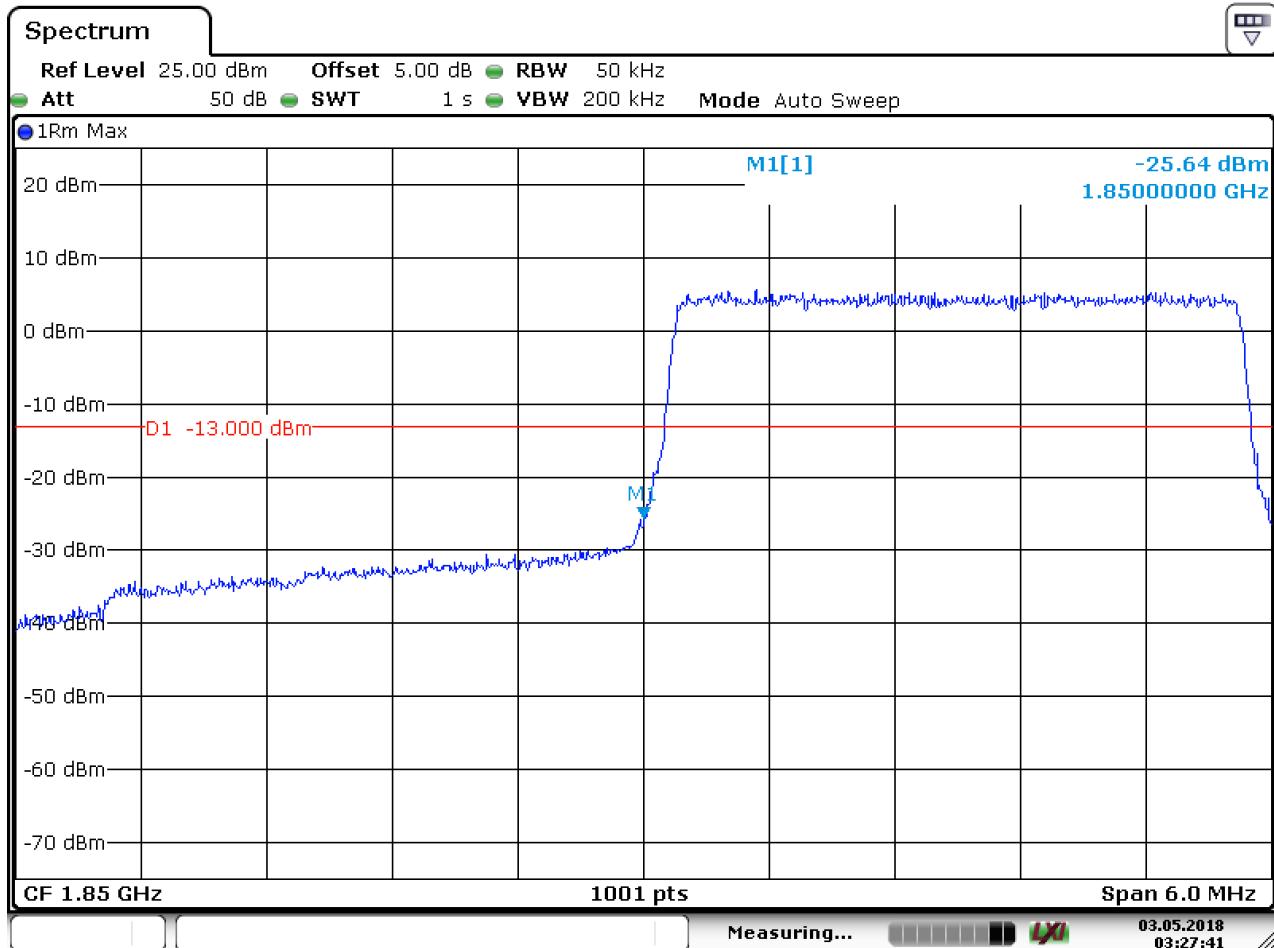
5.1.1.3.2.2 Test RB=15RB

Date: 3.MAY.2018 03:32:15

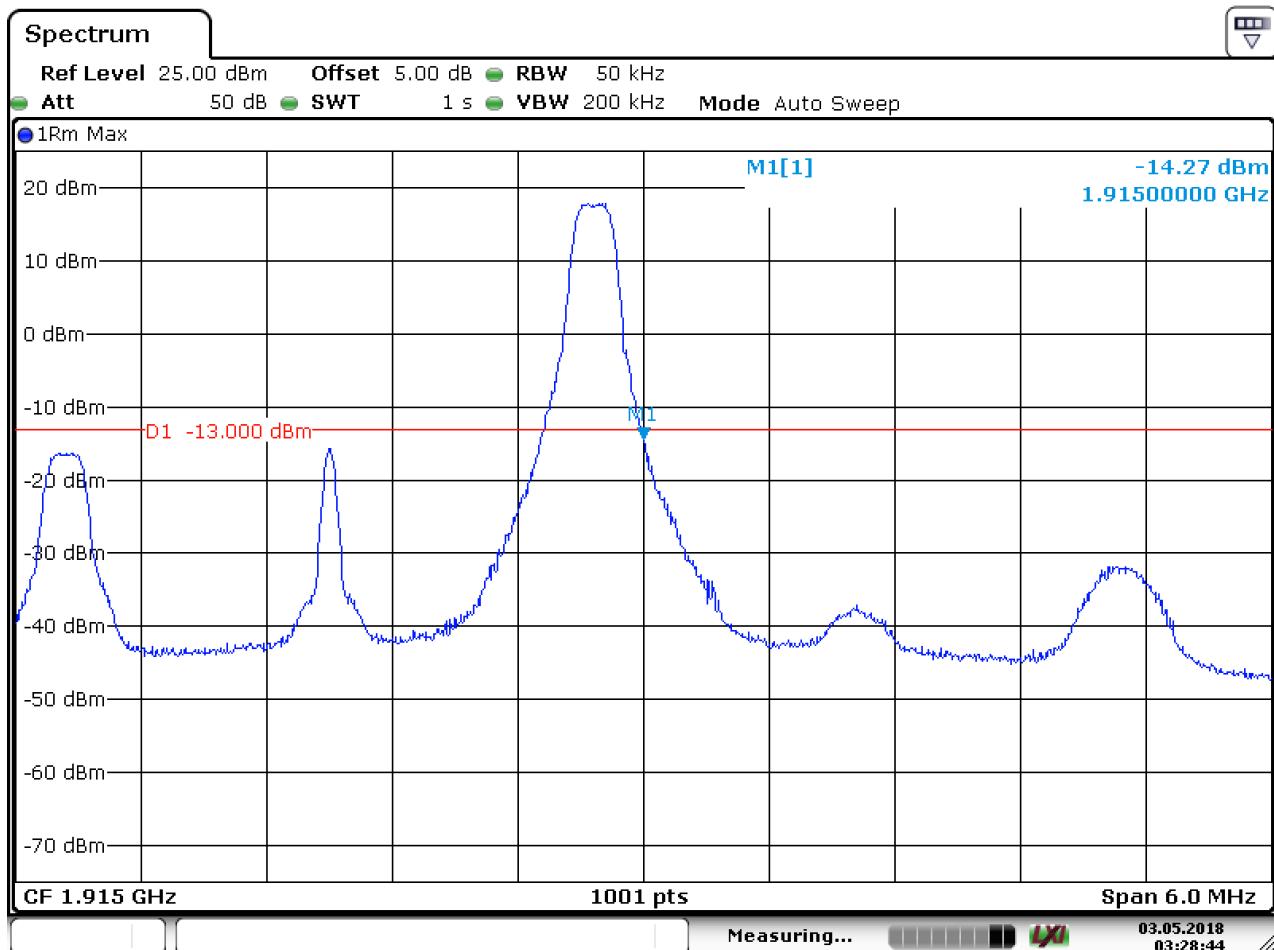
5.1.1.4 Test Mode = LTE/TM2 3MHz**5.1.1.4.1 Test Channel = LCH****5.1.1.4.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:28:03

5.1.1.4.1.2 Test RB=15RB

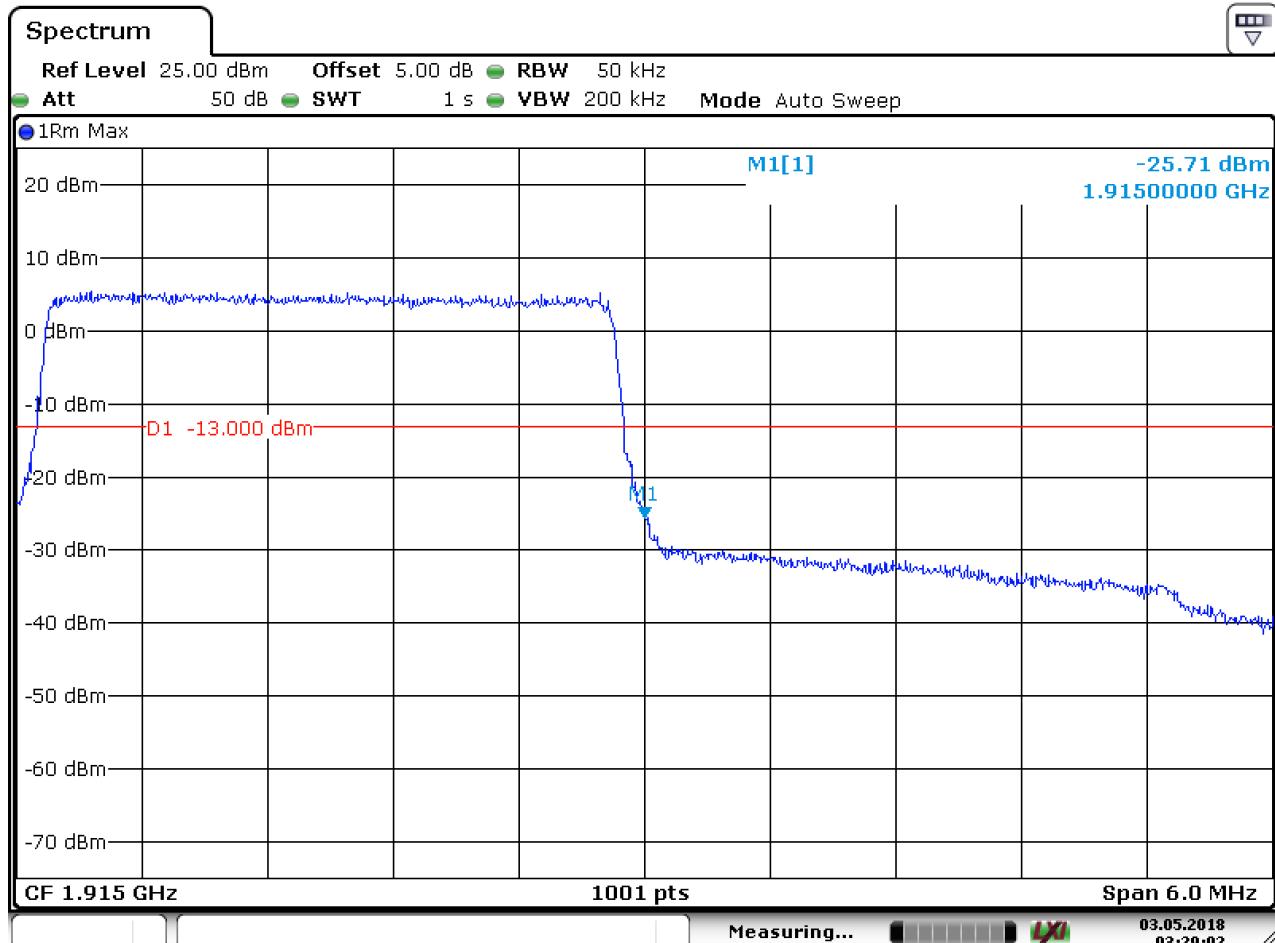


Date: 3.MAY.2018 03:27:42

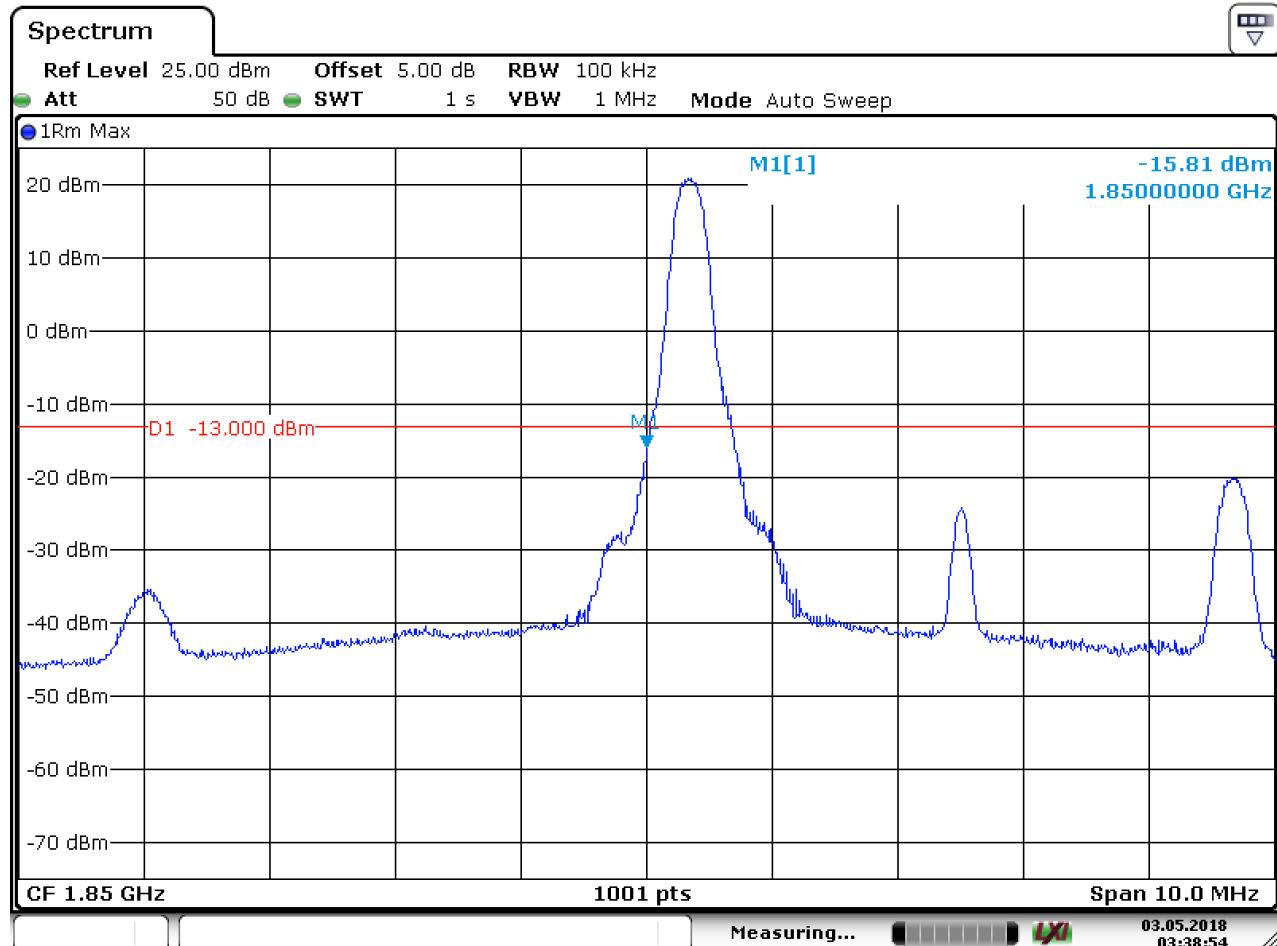
5.1.1.4.2 Test Channel = HCH**5.1.1.4.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:28:45

5.1.1.4.3 Test RB=15RB

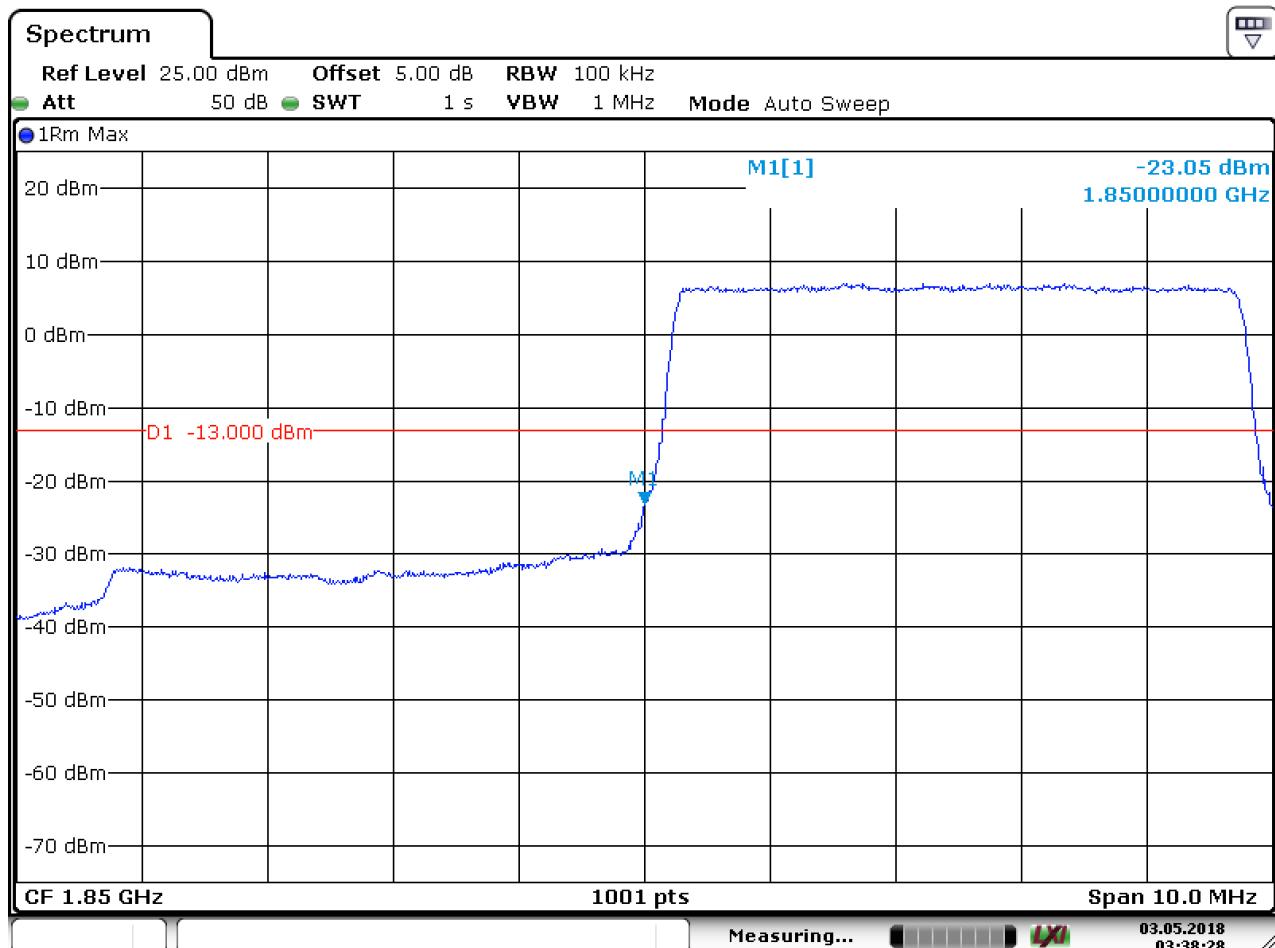


Date: 3.MAY.2018 03:29:03

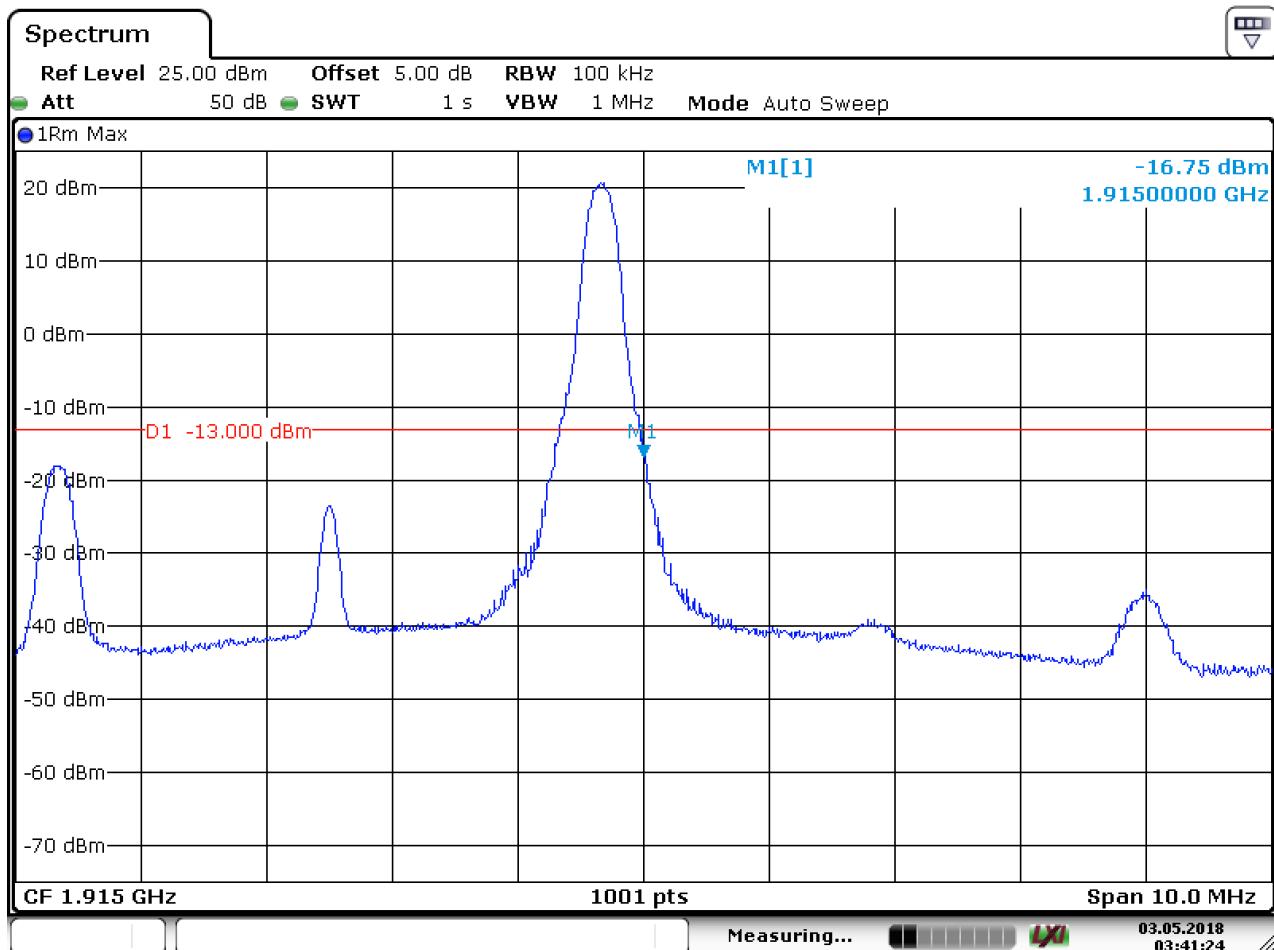
5.1.1.5 Test Mode = LTE/TM1 5MHz**5.1.1.5.1 Test Channel = LCH****5.1.1.5.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:38:53

5.1.1.5.1.2 Test RB=25RB

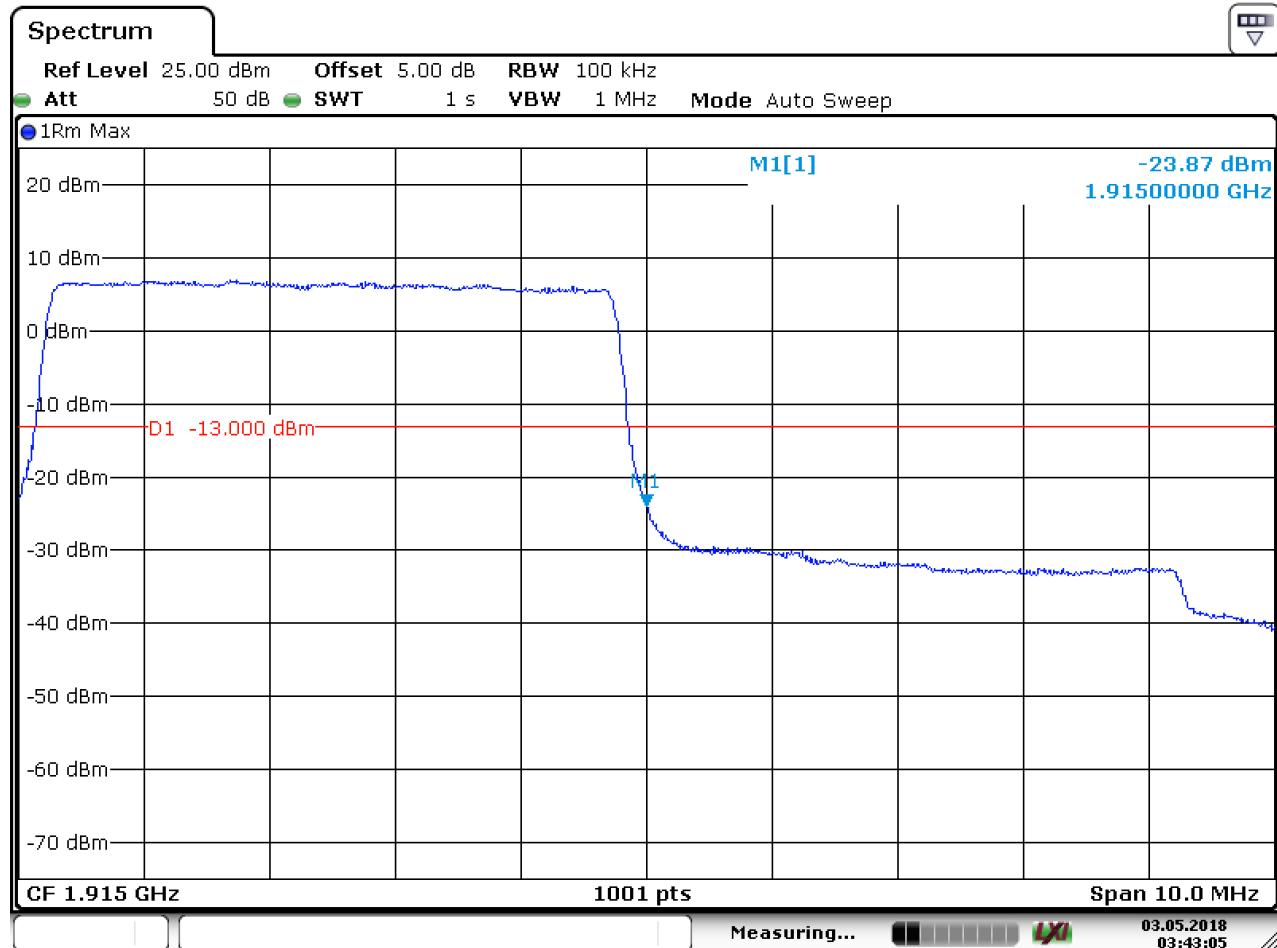


Date: 3.MAY.2018 03:38:28

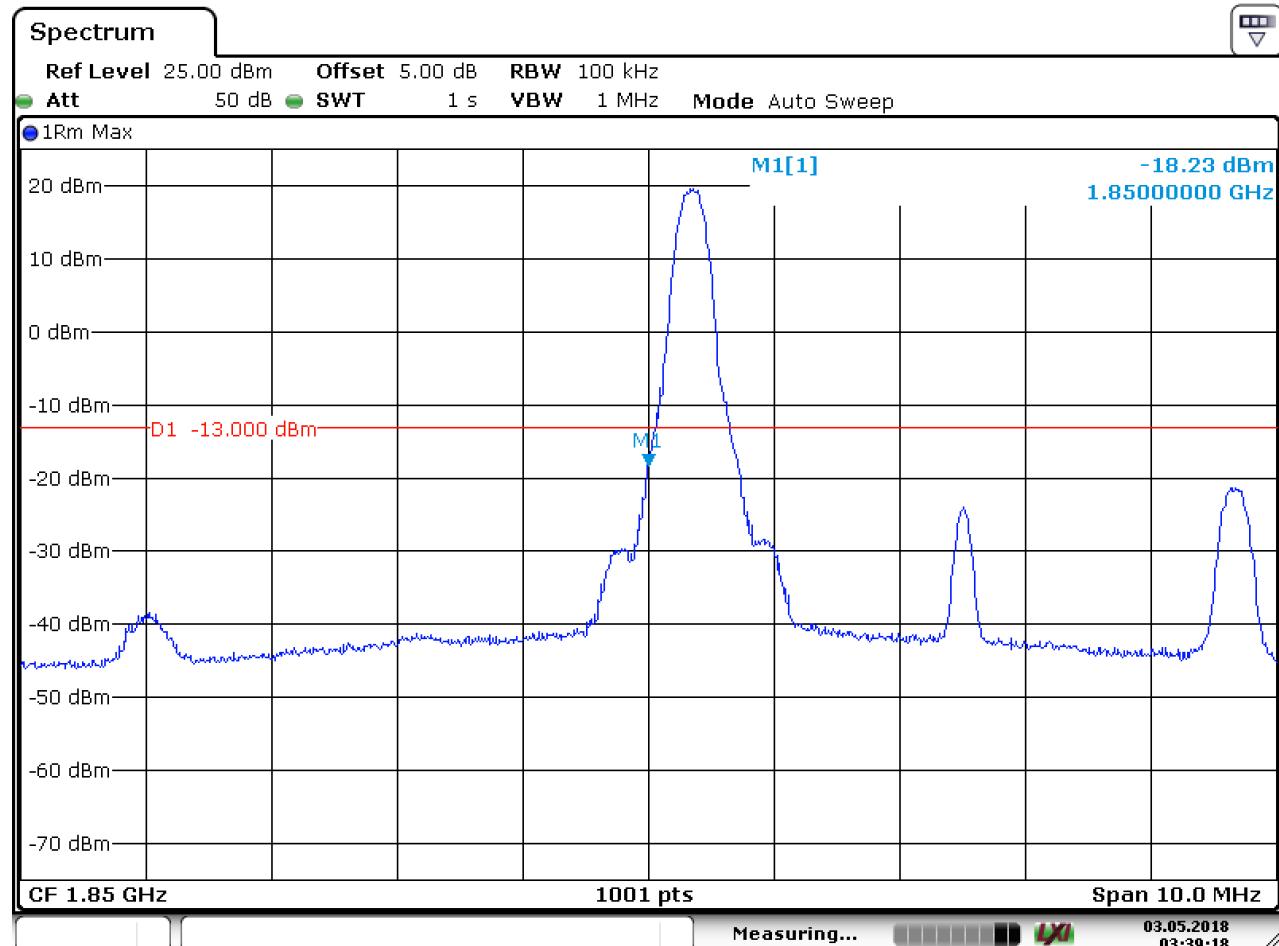
5.1.1.5.2 Test Channel = HCH**5.1.1.5.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:41:24

5.1.1.5.2.2 Test RB=25RB

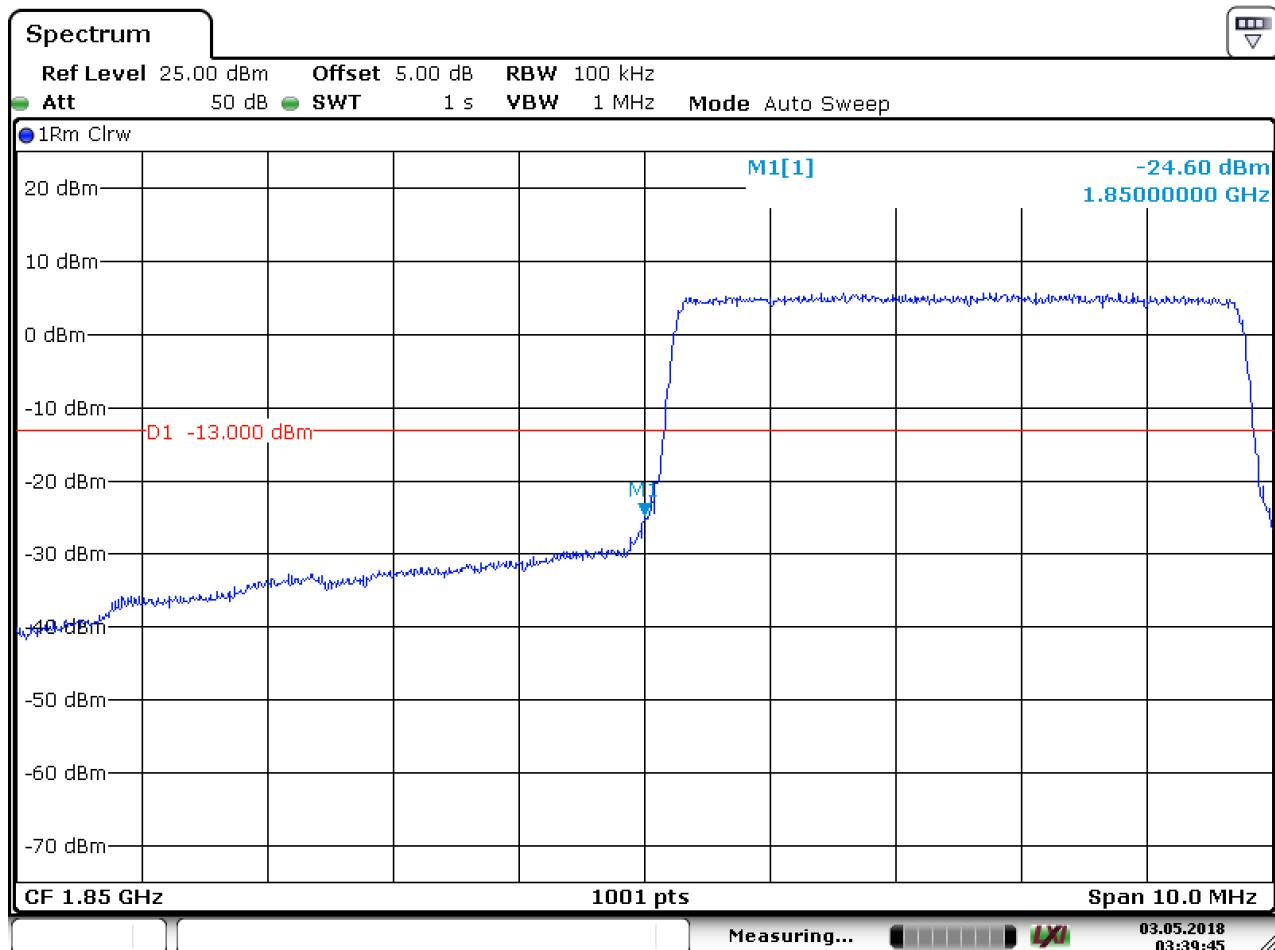


Date: 3.MAY.2018 03:43:06

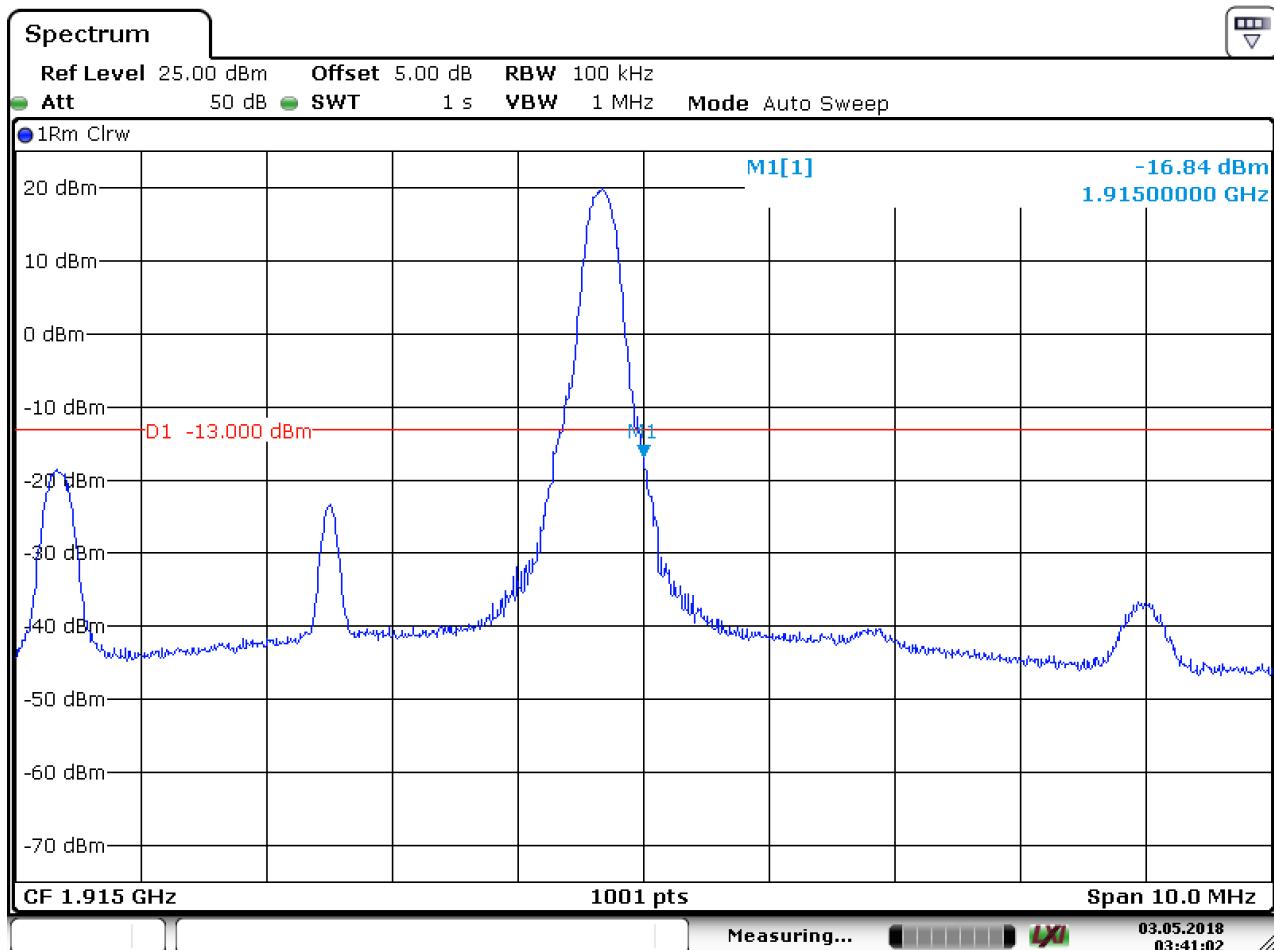
5.1.1.6 Test Mode = LTE/TM2 5MHz**5.1.1.6.1 Test Channel = LCH****5.1.1.6.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:39:18

5.1.1.6.1.2 Test RB=25RB



Date: 3.MAY.2018 03:39:45

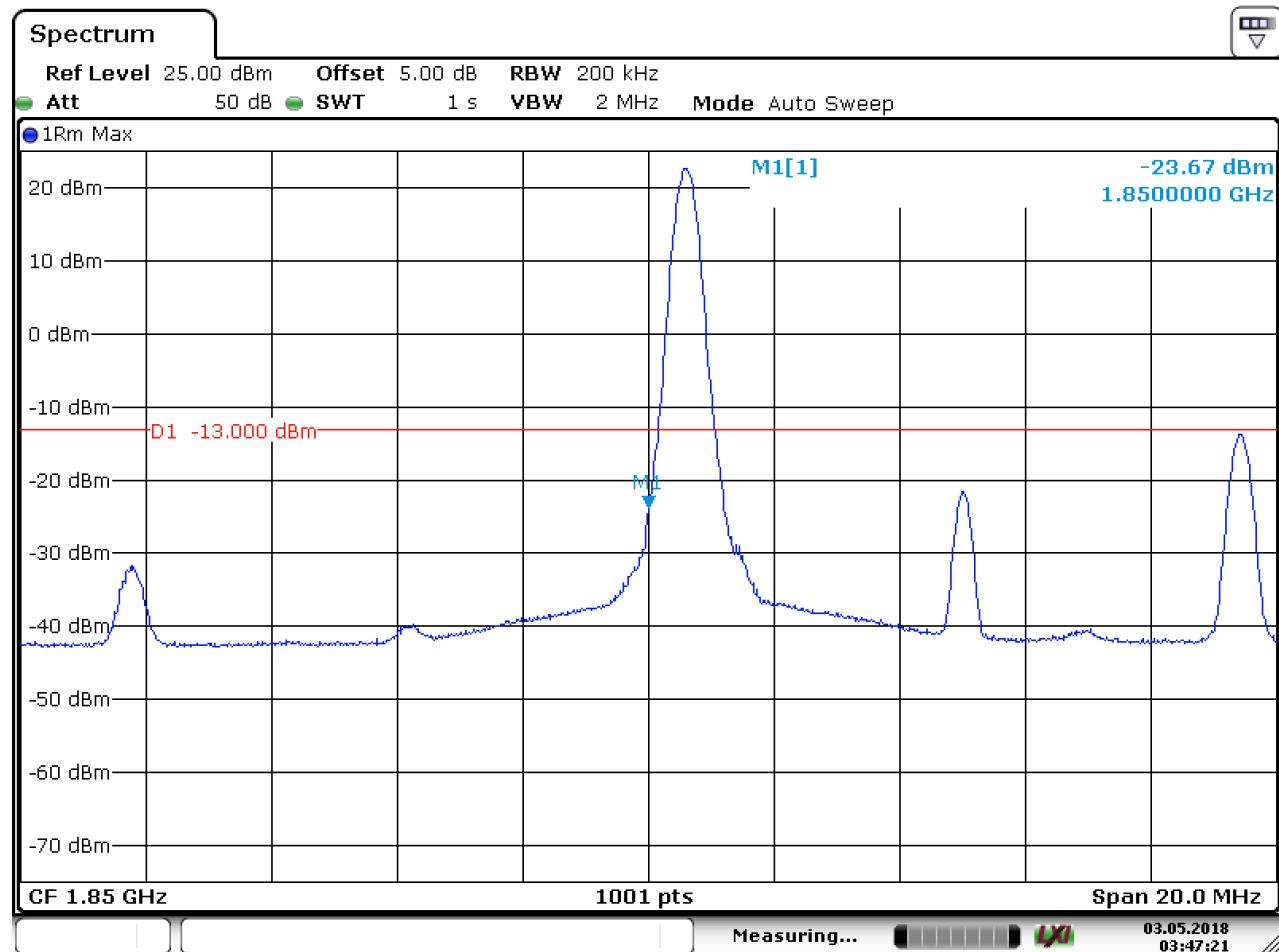
5.1.1.6.2 Test Channel = HCH**5.1.1.6.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:41:03

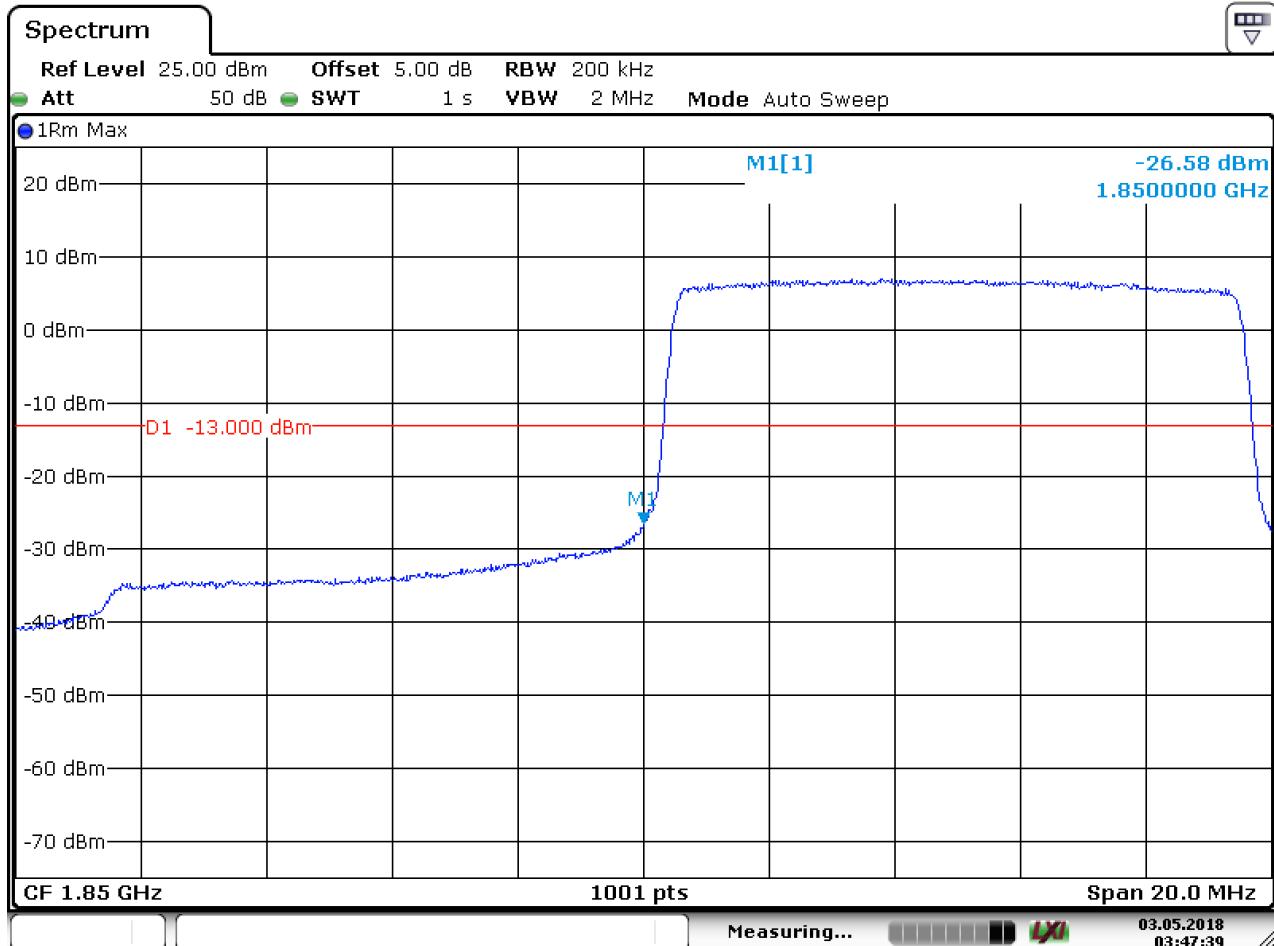
5.1.1.6.2.2 Test RB=25RB



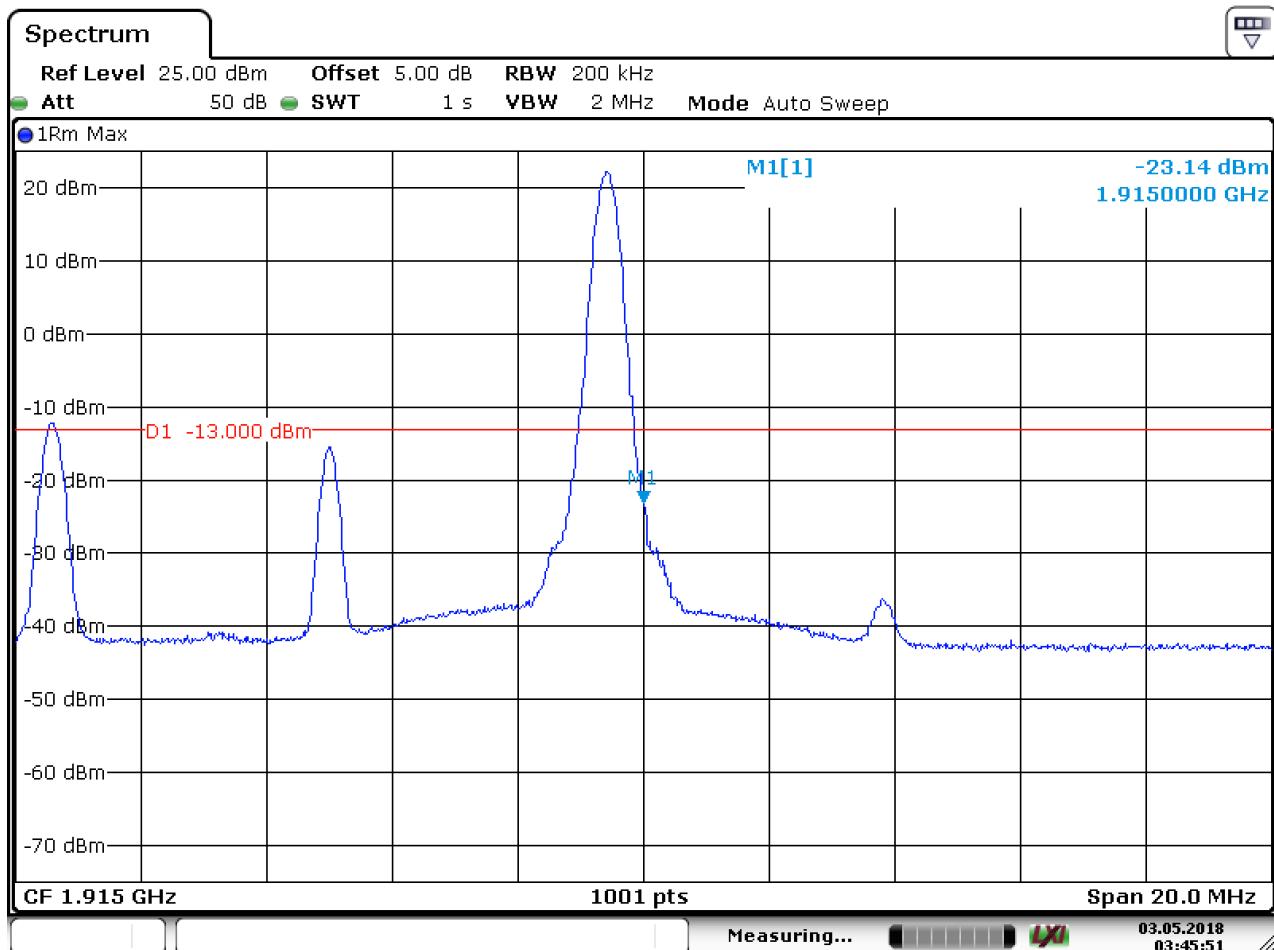
Date: 3.MAY.2018 03:40:38

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: 3.MAY.2018 03:47:21

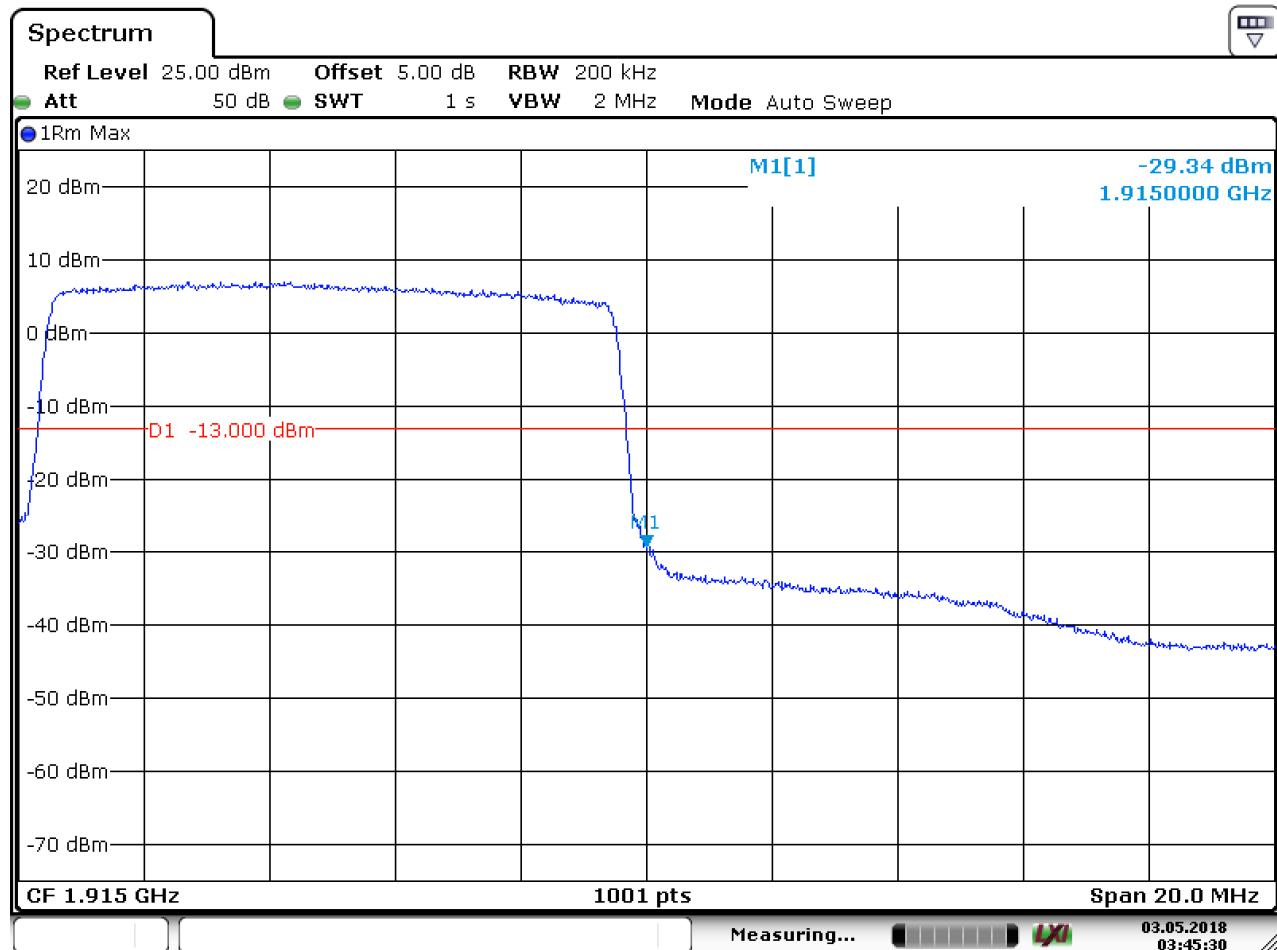
5.1.1.7.1.2 Test RB=50RB

Date: 3.MAY.2018 03:47:39

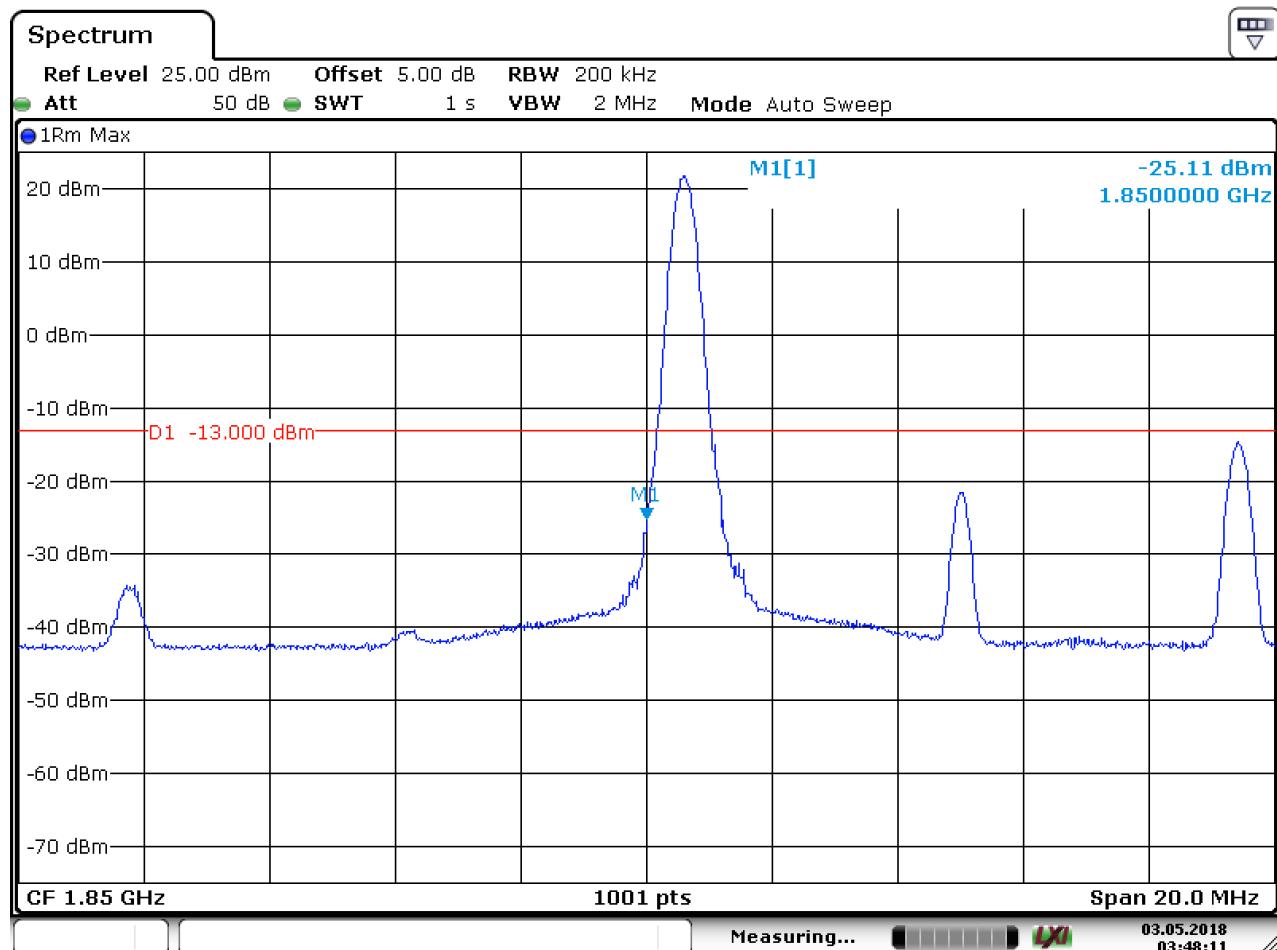
5.1.1.7.2 Test Channel = HCH**5.1.1.7.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:45:51

5.1.1.7.2.2 Test RB=50RB

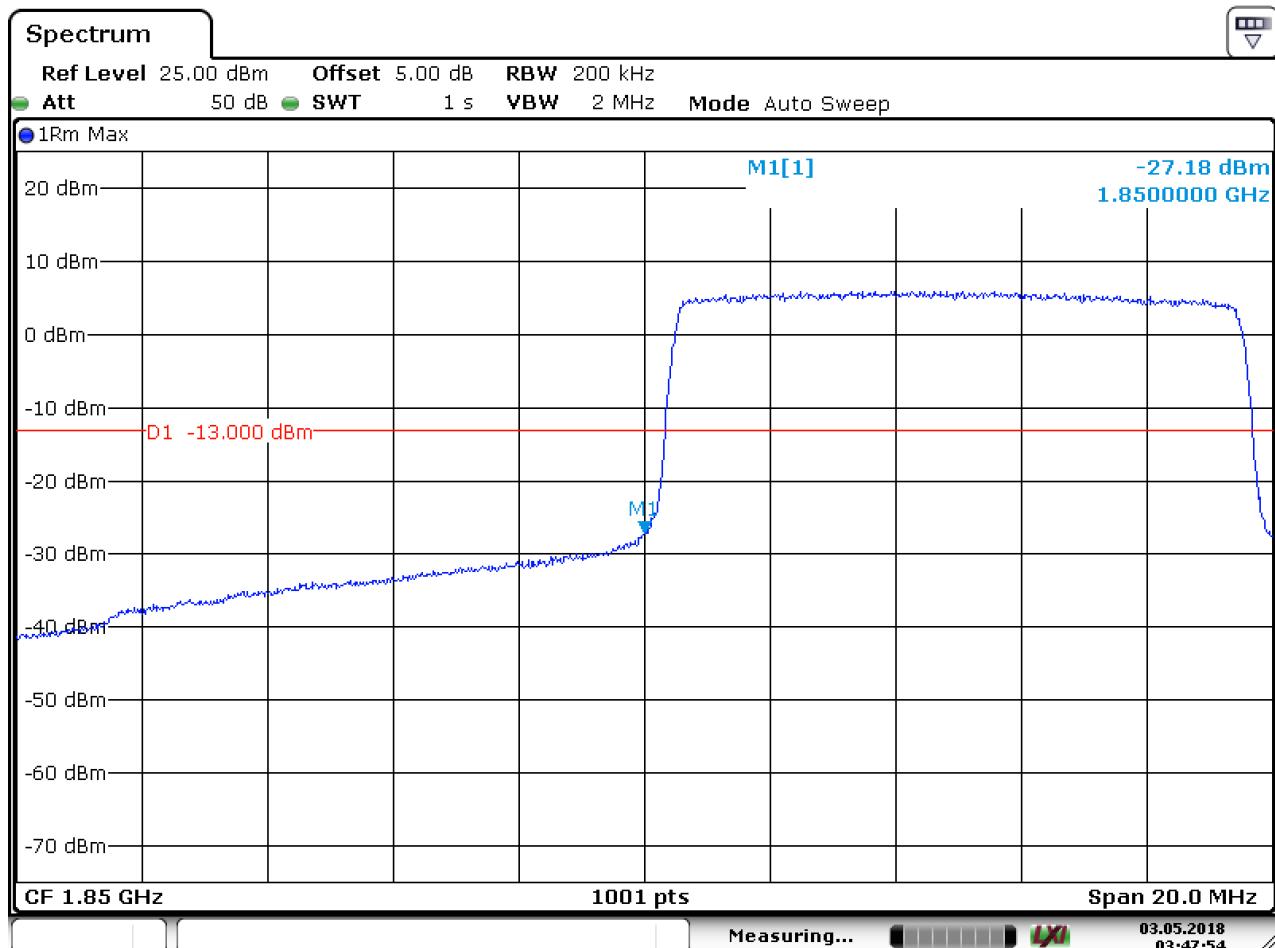


Date: 3.MAY.2018 03:45:31

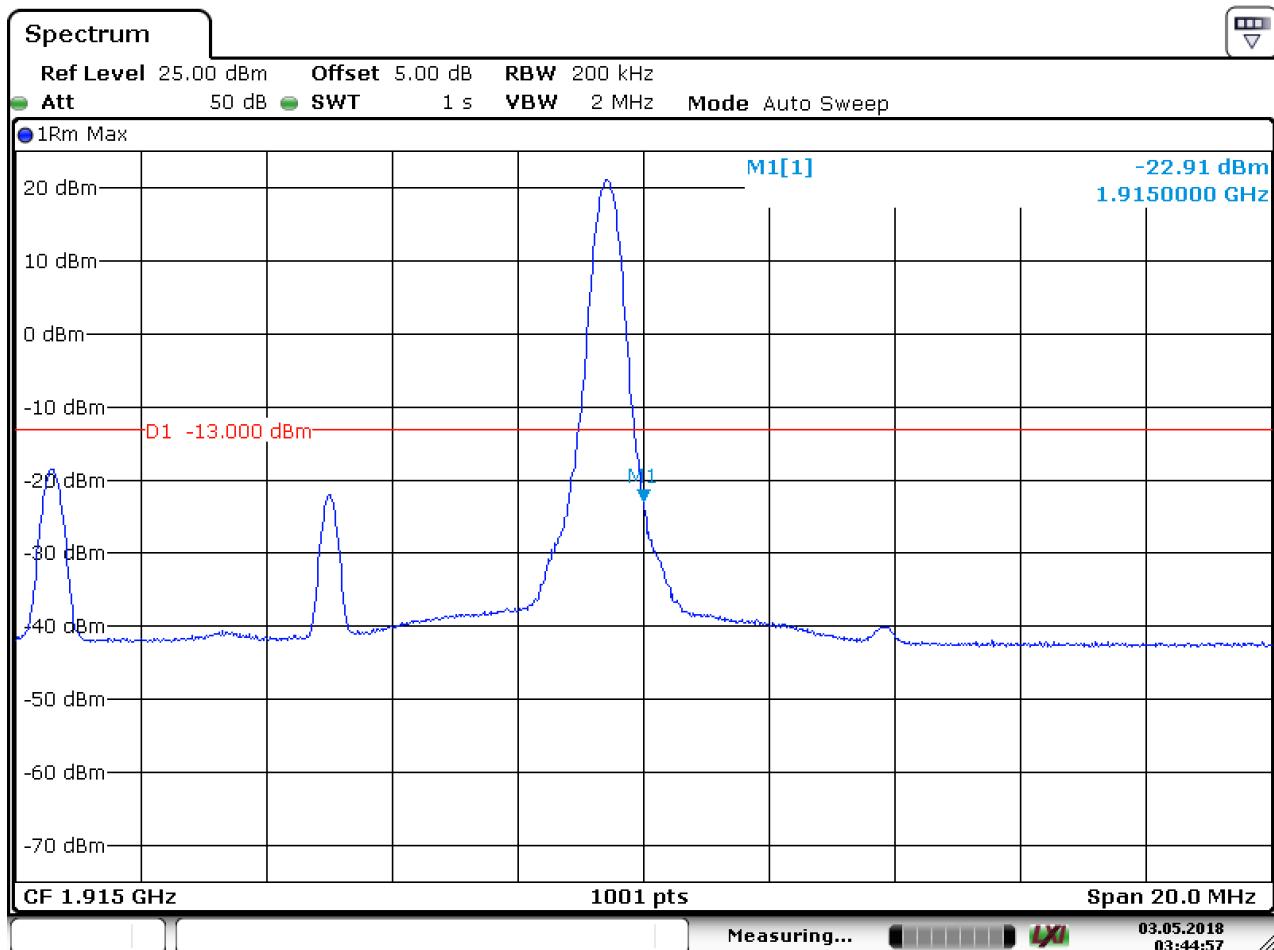
5.1.1.8 Test Mode = LTE/TM2 10MHz**5.1.1.8.1 Test Channel = LCH****5.1.1.8.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:48:12

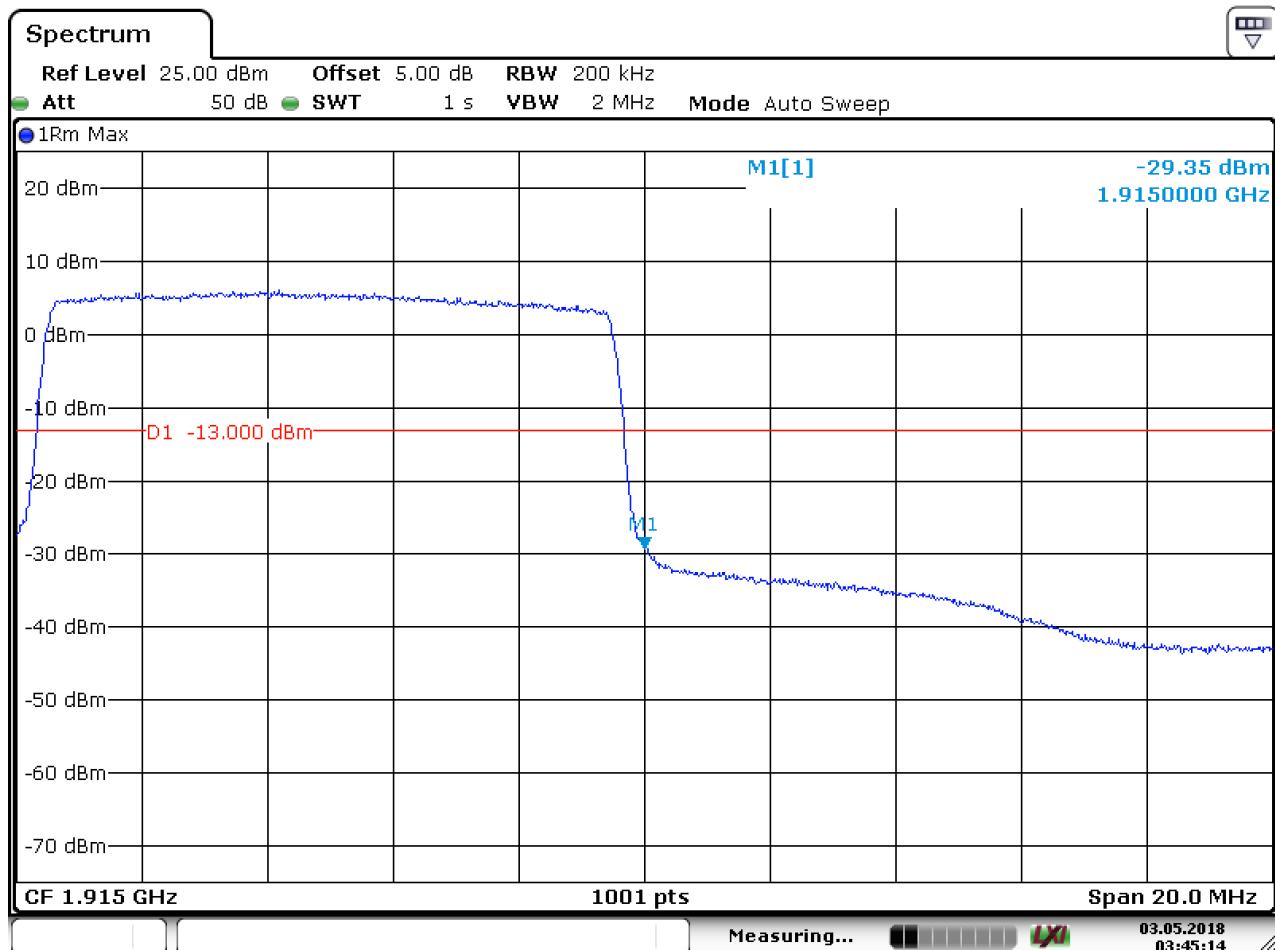
5.1.1.8.1.2 Test RB=50RB



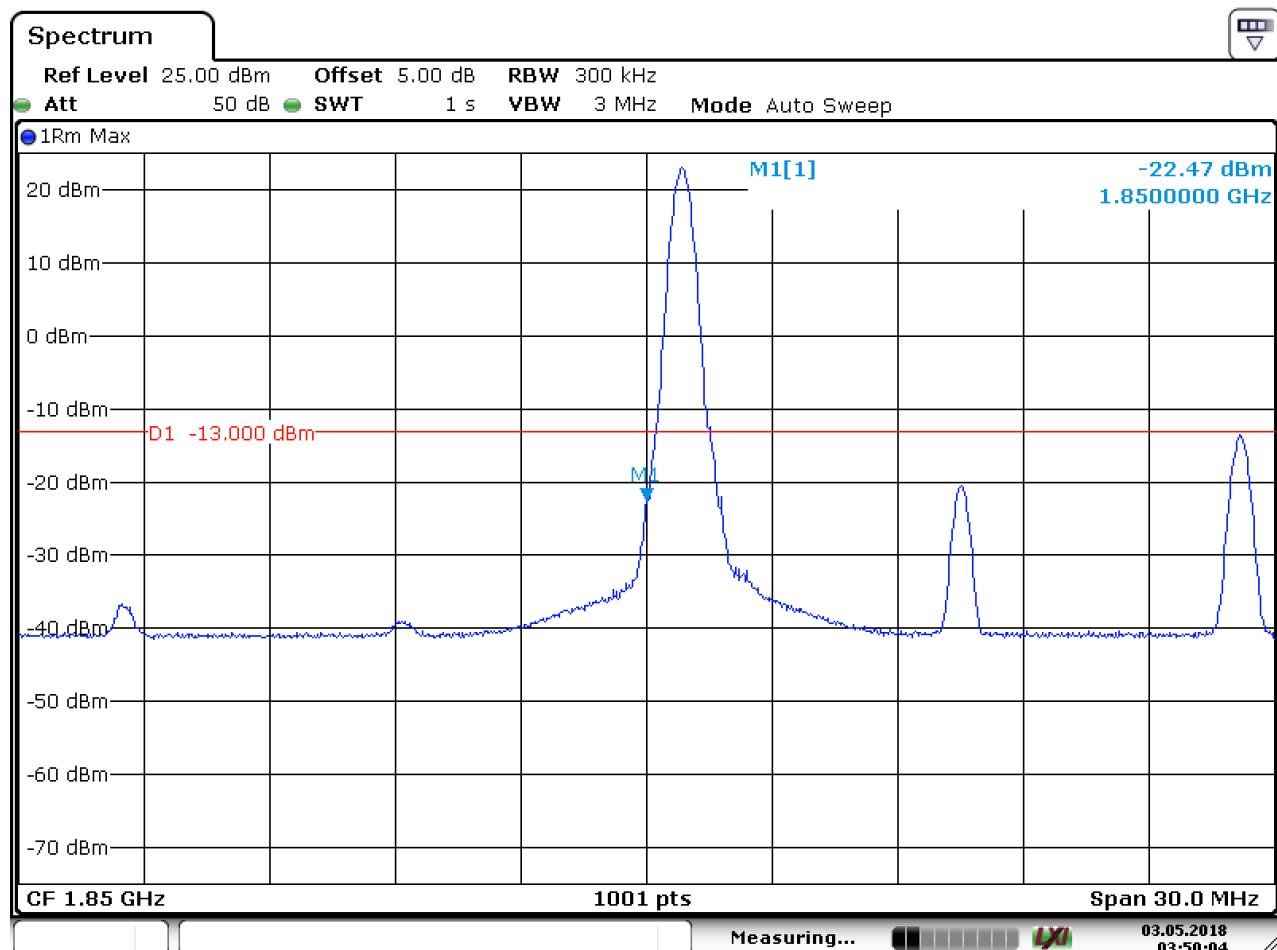
Date: 3.MAY.2018 03:47:55

5.1.1.8.2 Test Channel = HCH**5.1.1.8.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:44:56

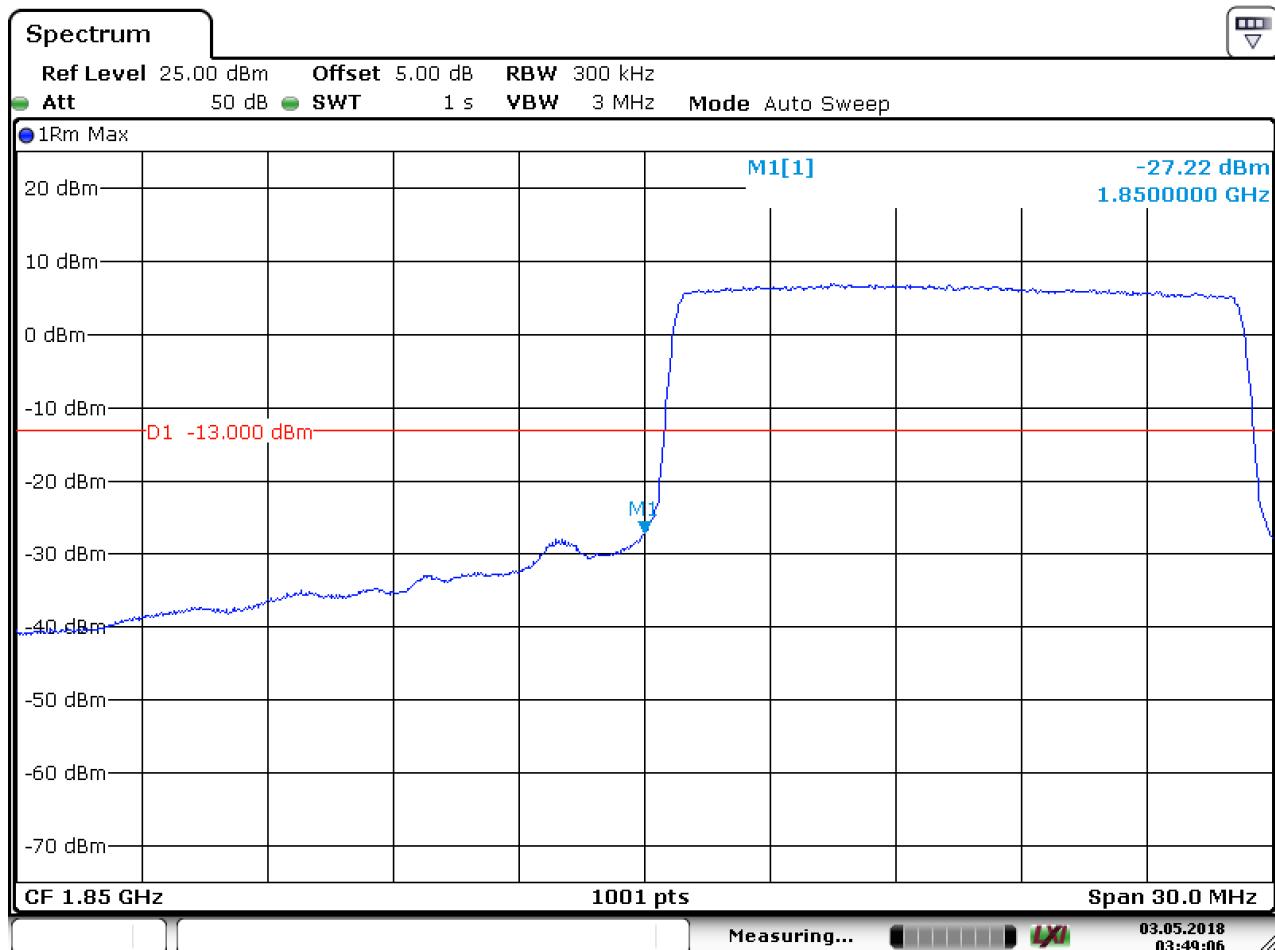
5.1.1.8.2.2 Test RB=50RB

Date: 3.MAY.2018 03:45:14

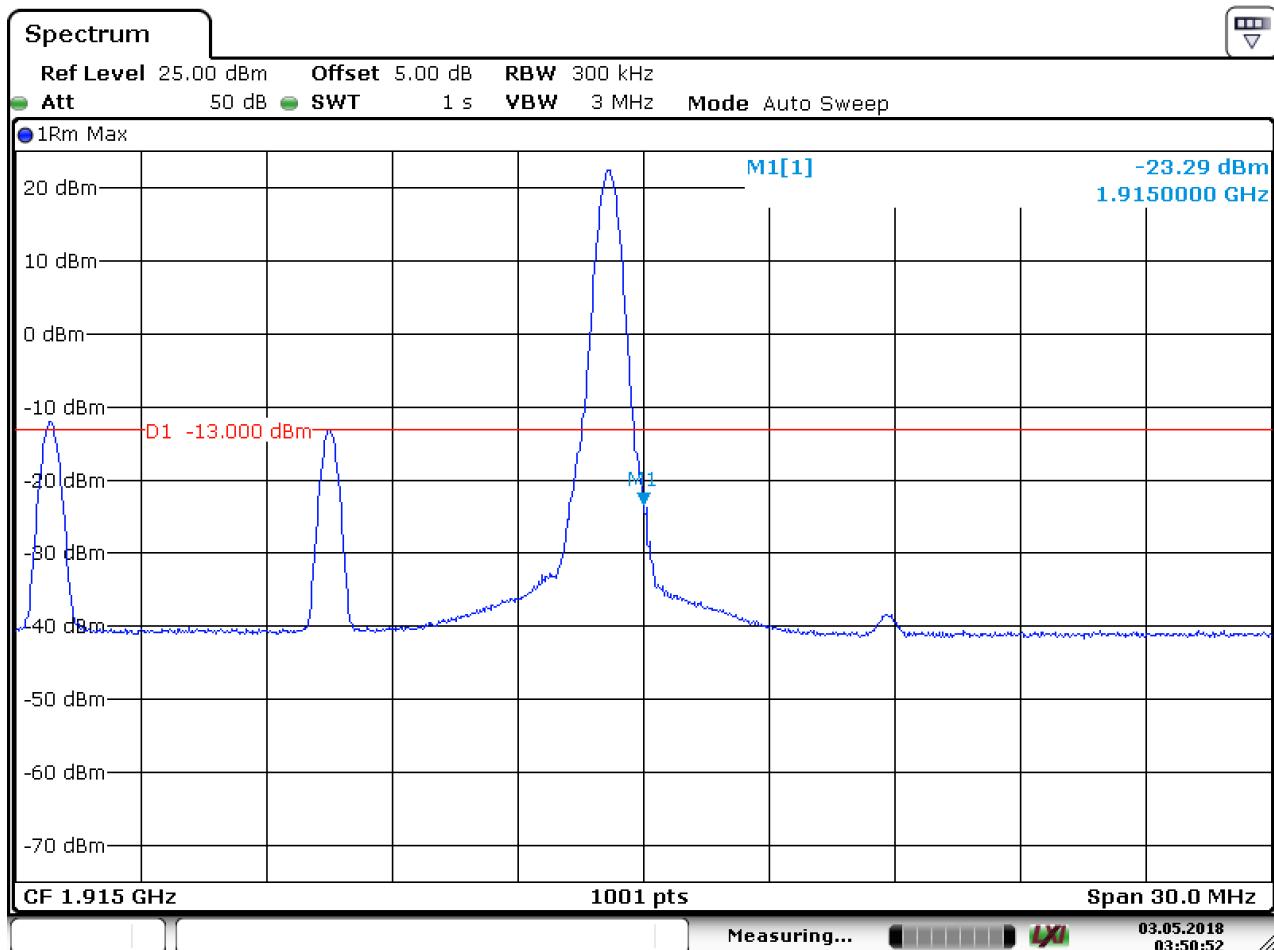
5.1.1.9 Test Mode = LTE/TM1 15MHz**5.1.1.9.1 Test Channel = LCH****5.1.1.9.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:50:04

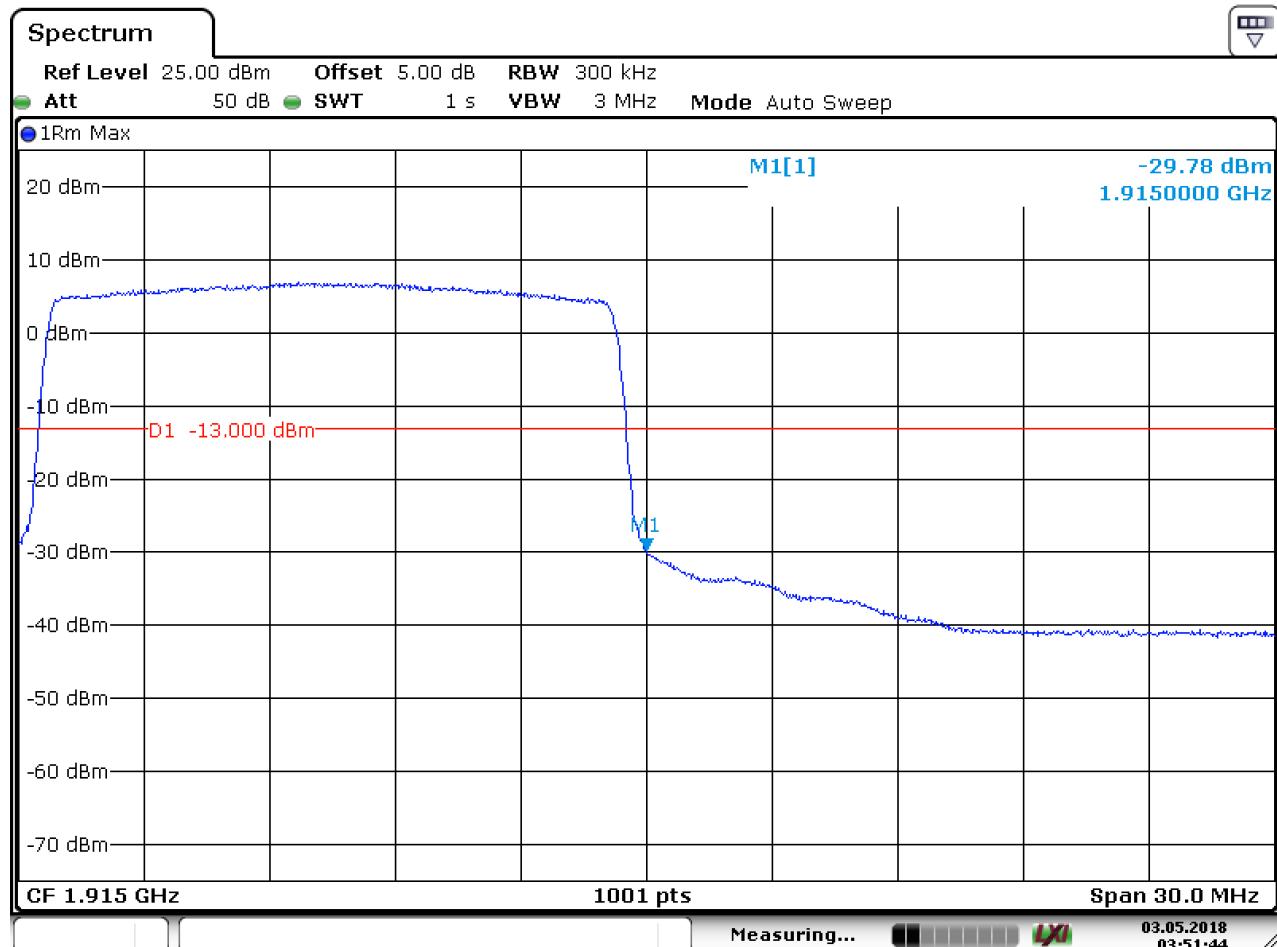
5.1.1.9.1.2 Test RB=75RB



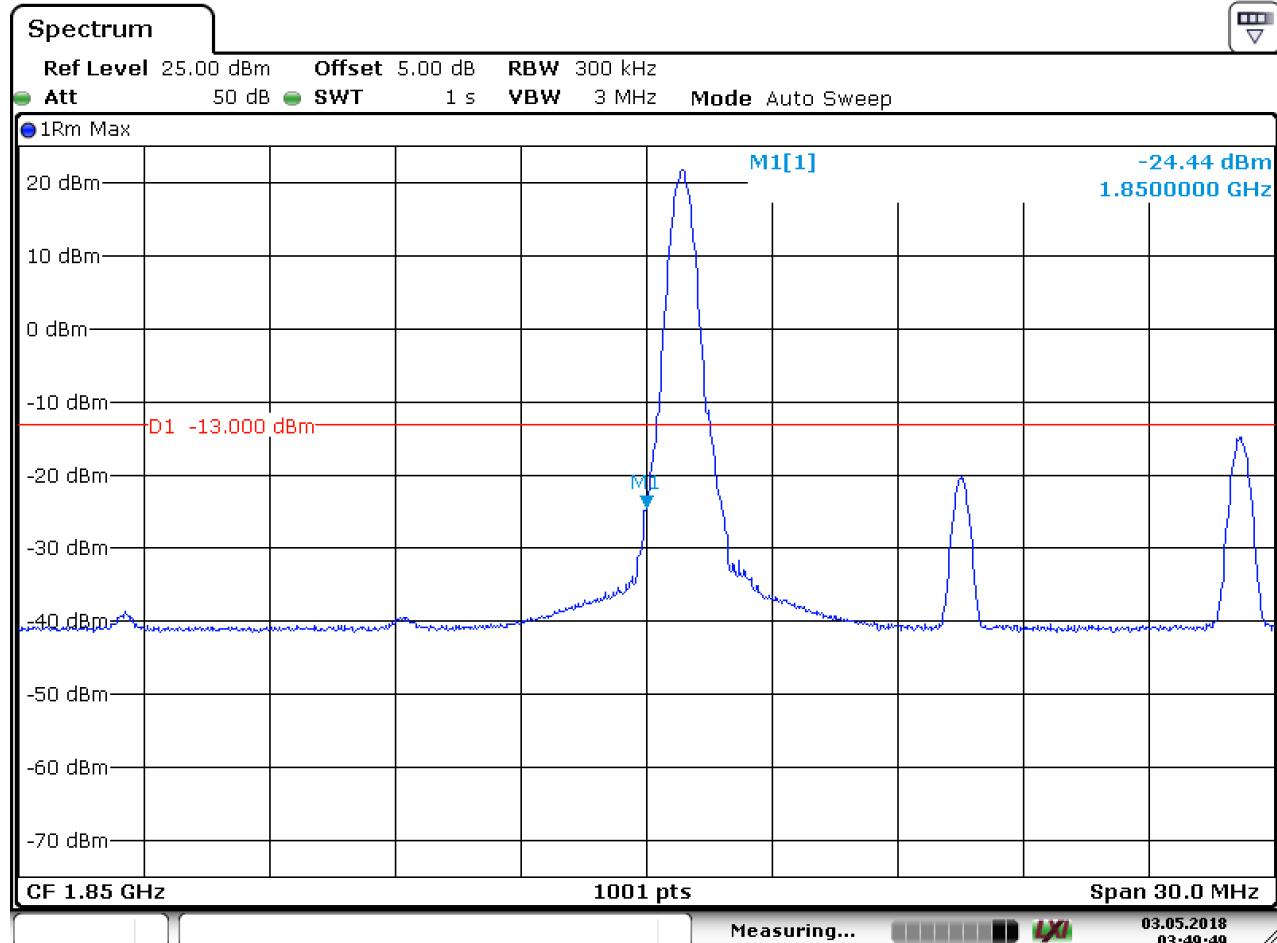
Date: 3.MAY.2018 03:49:06

5.1.1.9.2 test Channel = HCH**5.1.1.9.2.1 Test RB=1RB**

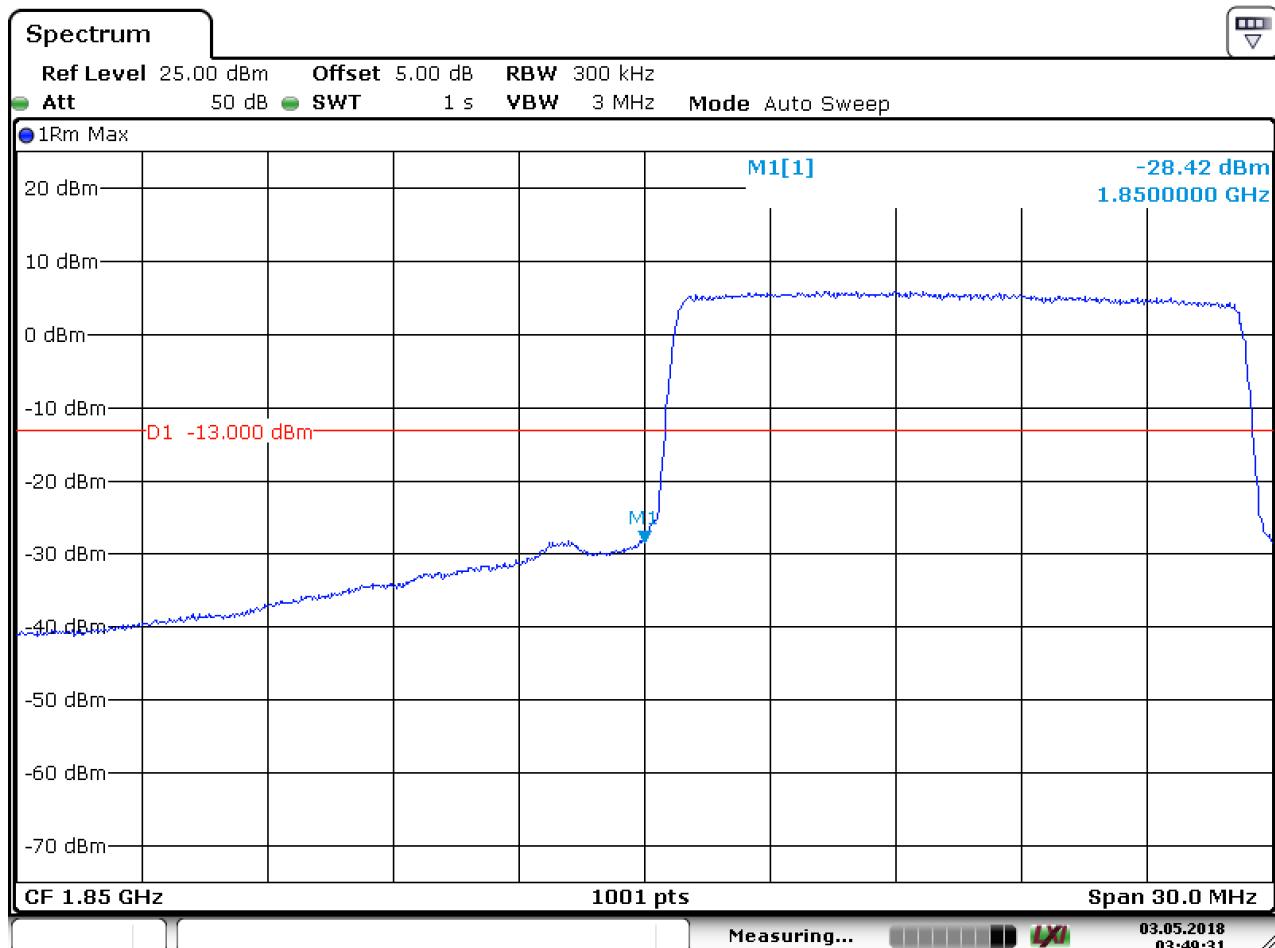
Date: 3.MAY.2018 03:50:53

5.1.1.9.2.2 Test RB=75RB

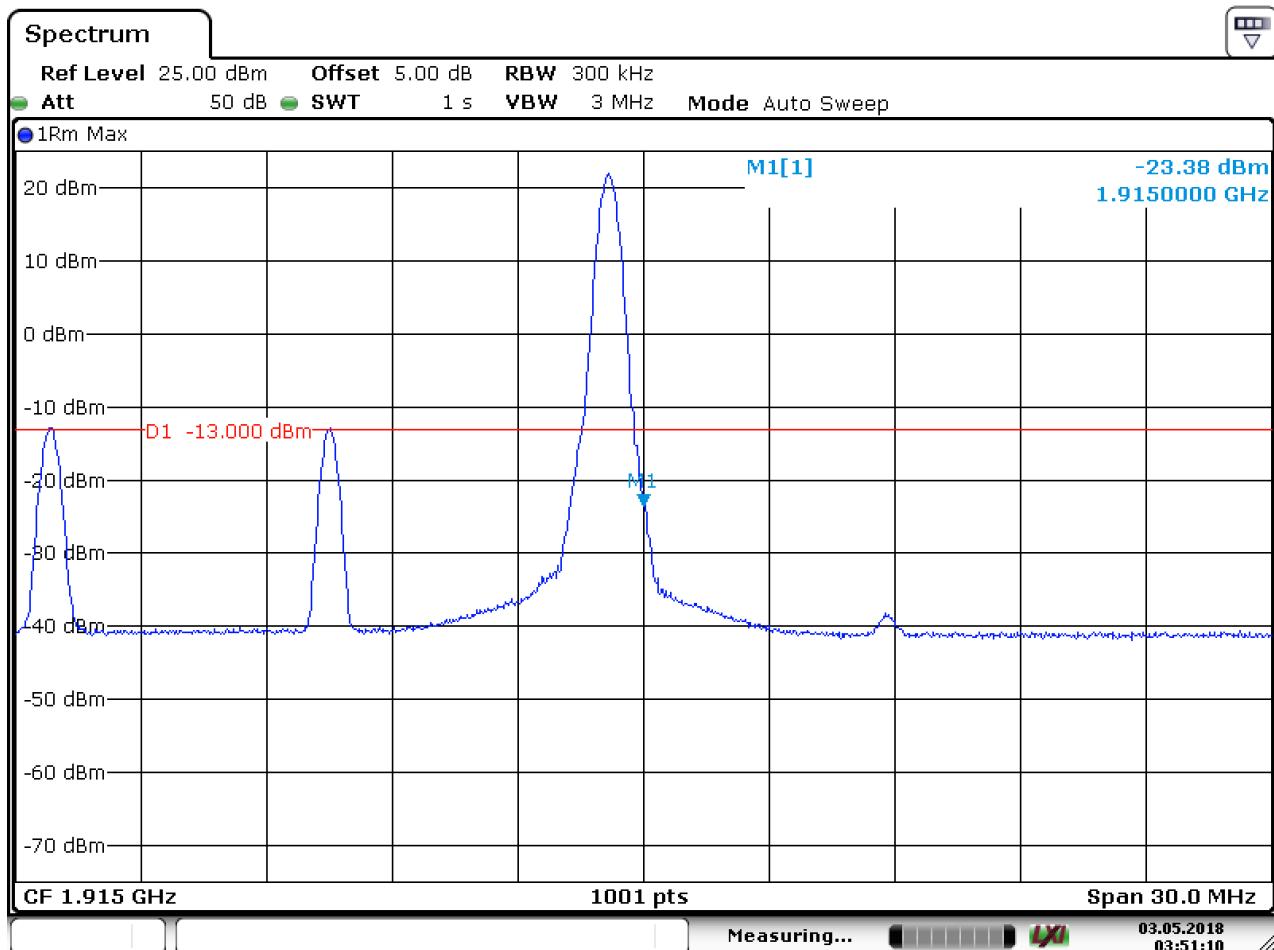
Date: 3.MAY.2018 03:51:44

5.1.1.10 Test Mode = LTE/TM2 15MHz**5.1.1.10.1 Test Channel = LCH****5.1.1.10.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:49:49

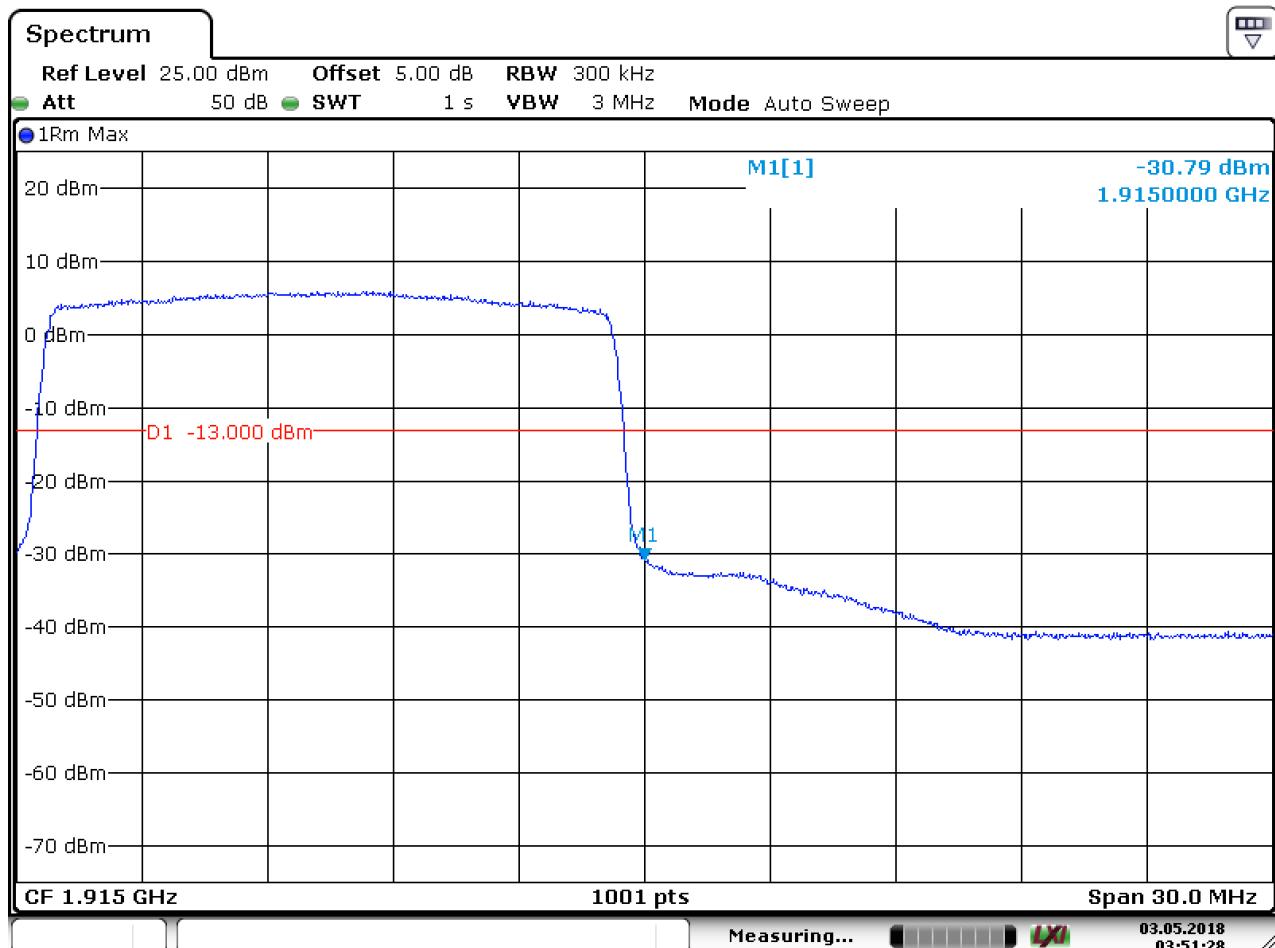
5.1.1.10.1.2 Test RB=75RB

Date: 3.MAY.2018 03:49:32

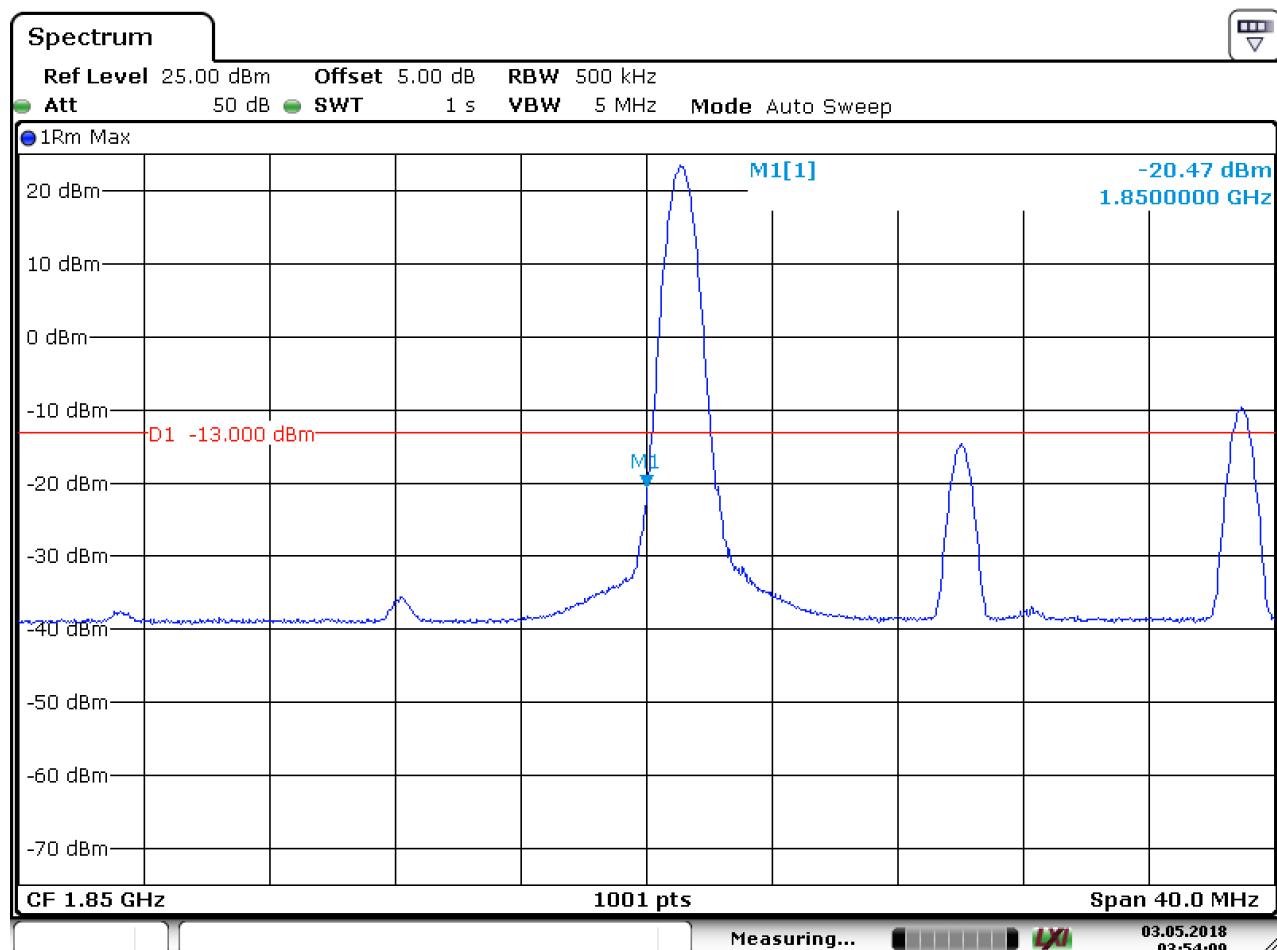
5.1.1.10.2 Test Channel = HCH**5.1.1.10.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:51:10

5.1.1.10.2.2 Test RB=75RB

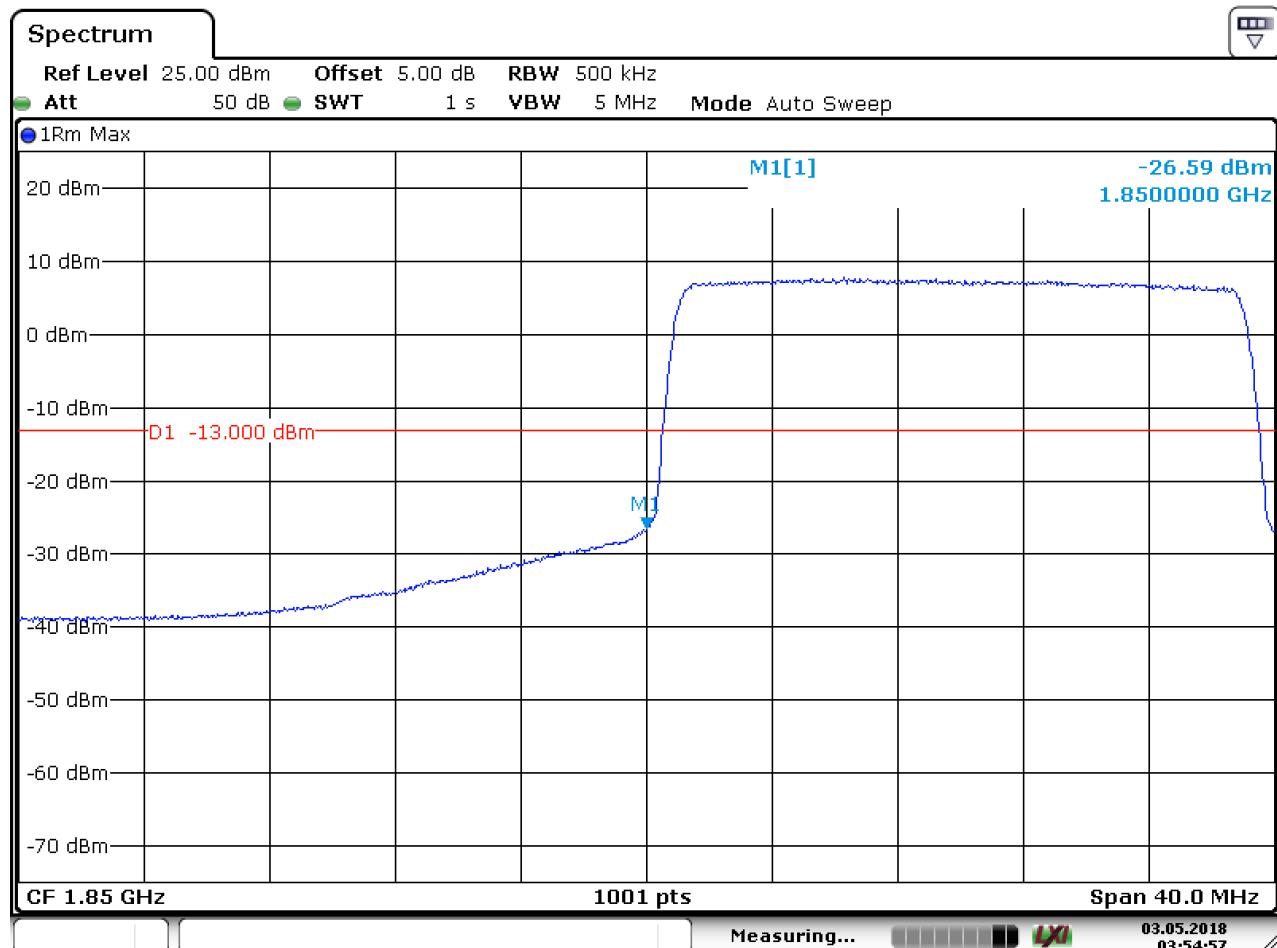


Date: 3.MAY.2018 03:51:28

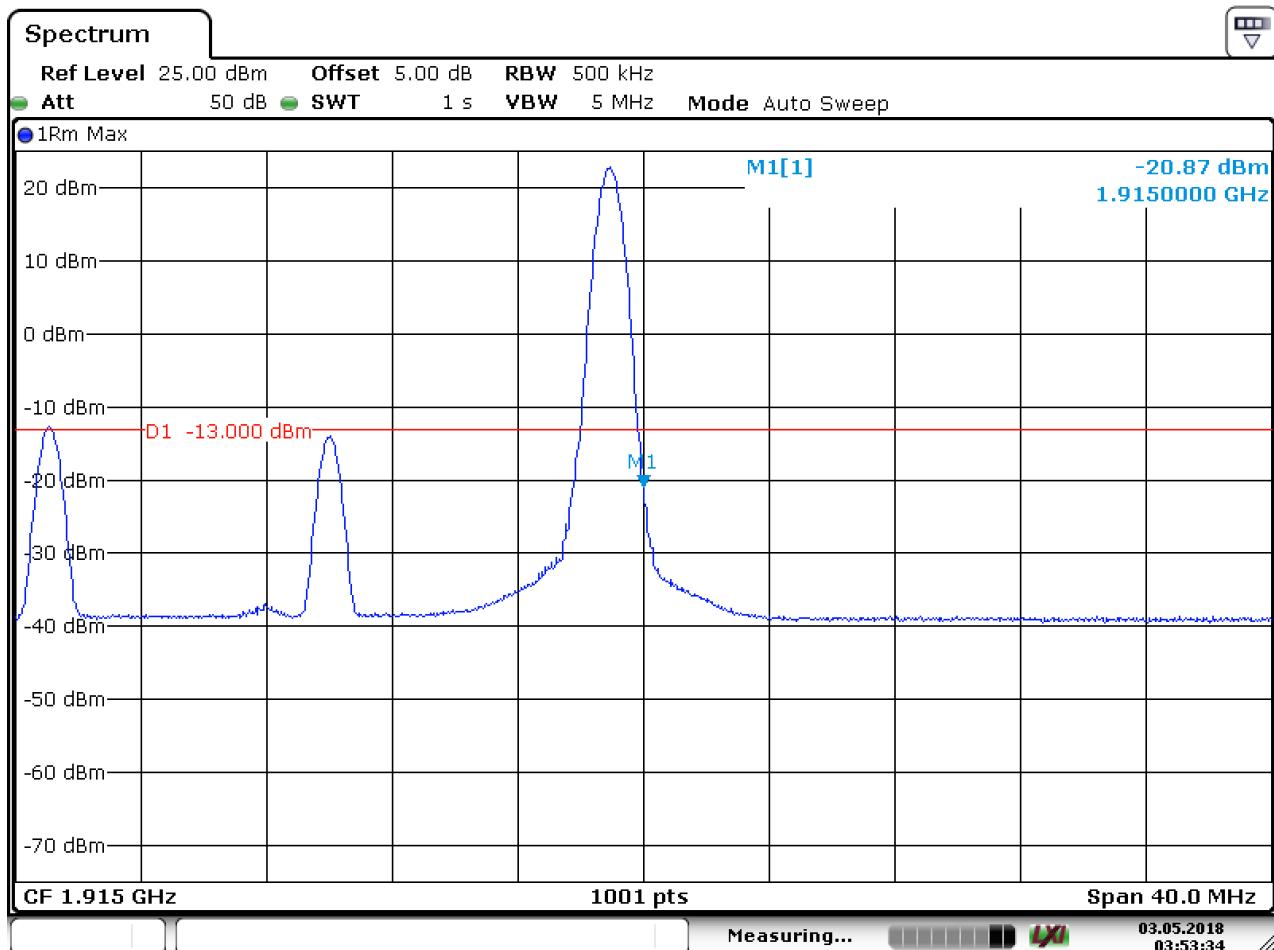
5.1.1.11 Test Mode = LTE/TM1 20MHz**5.1.1.11.1 Test Channel = LCH****5.1.1.11.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:54:10

5.1.1.11.1.2 Test RB=100RB

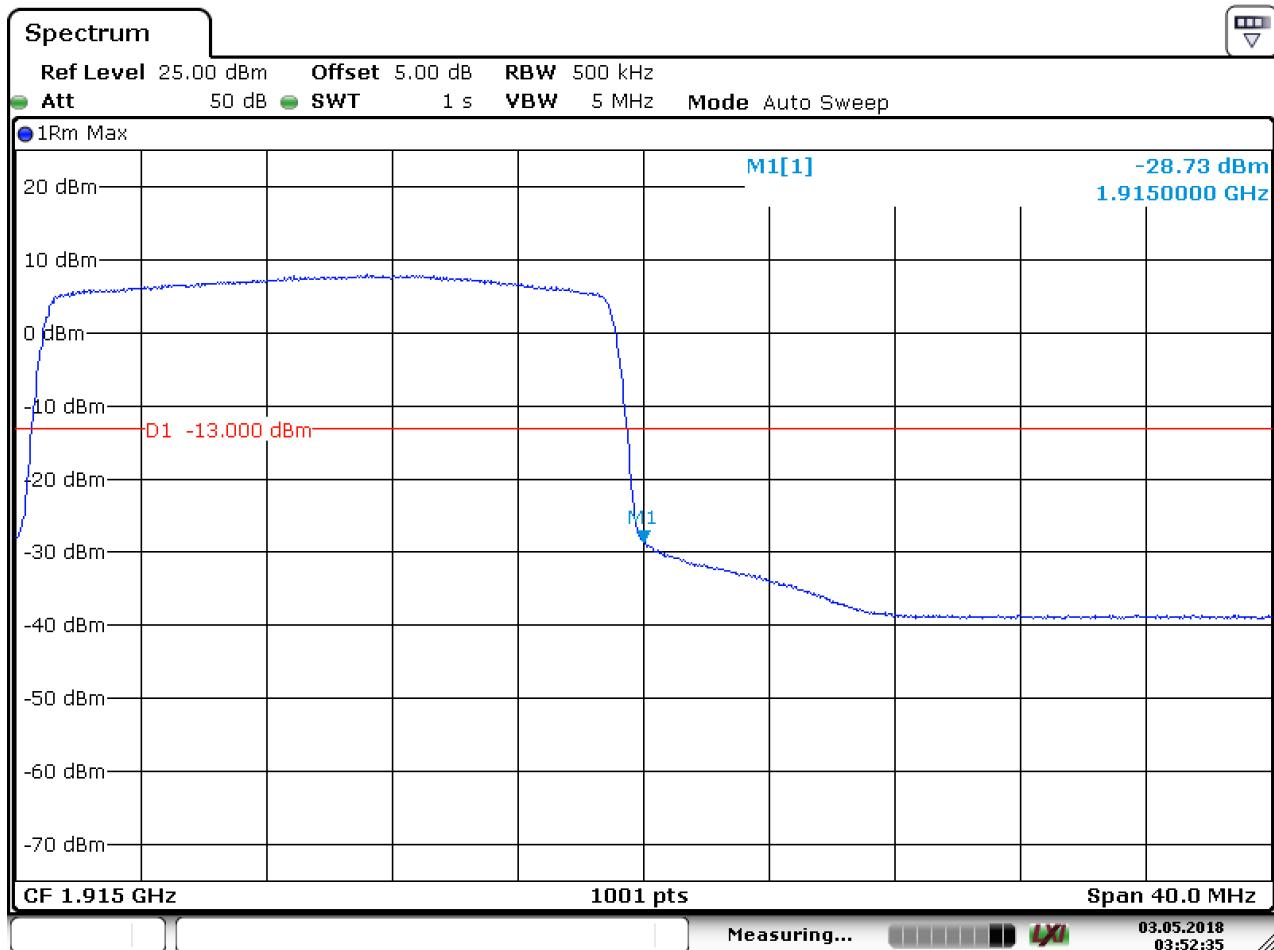


Date: 3.MAY.2018 03:54:58

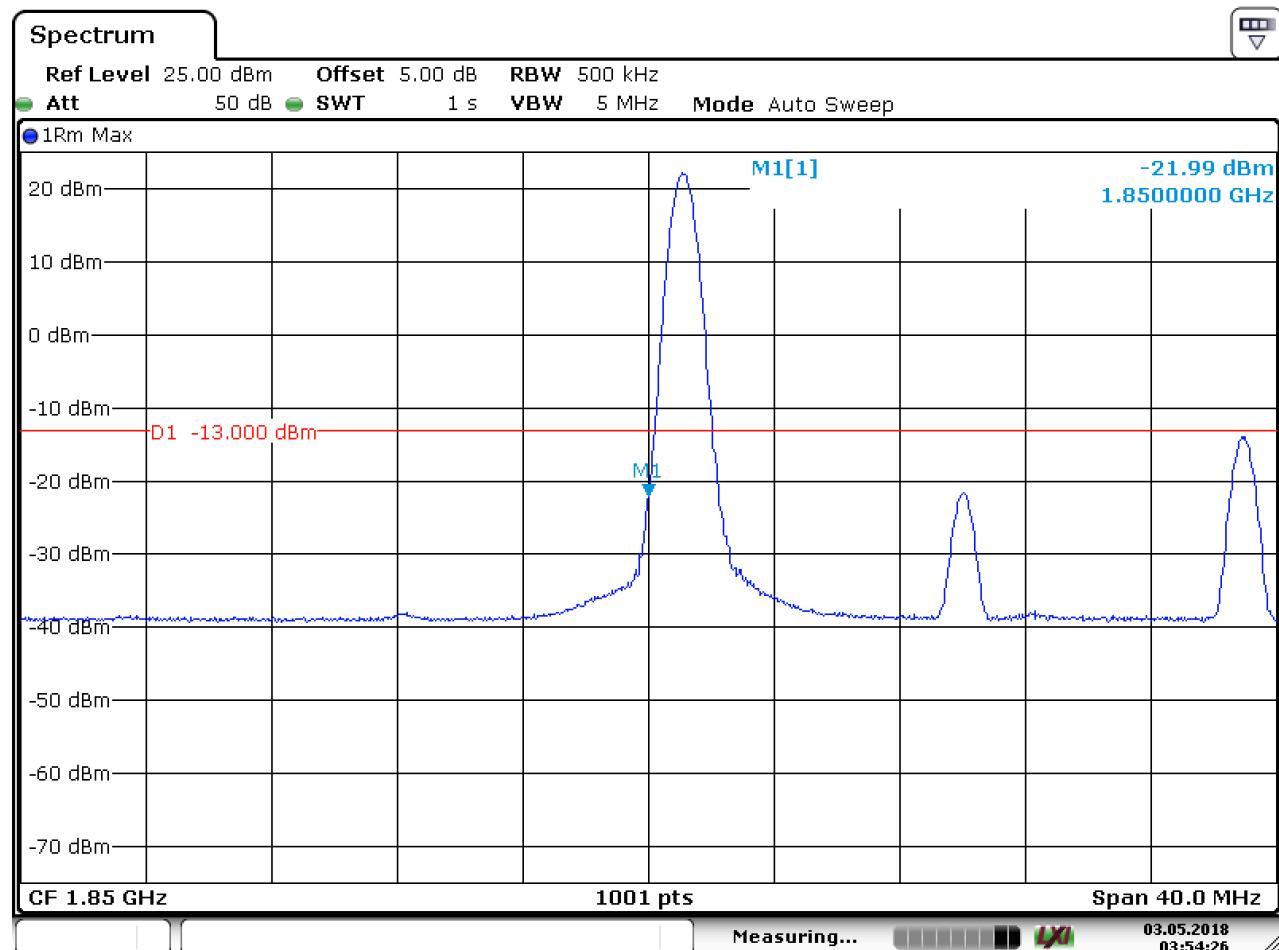
5.1.1.11.2 Test Channel = HCH**5.1.1.11.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:53:34

5.1.1.11.2.2 Test RB=100RB

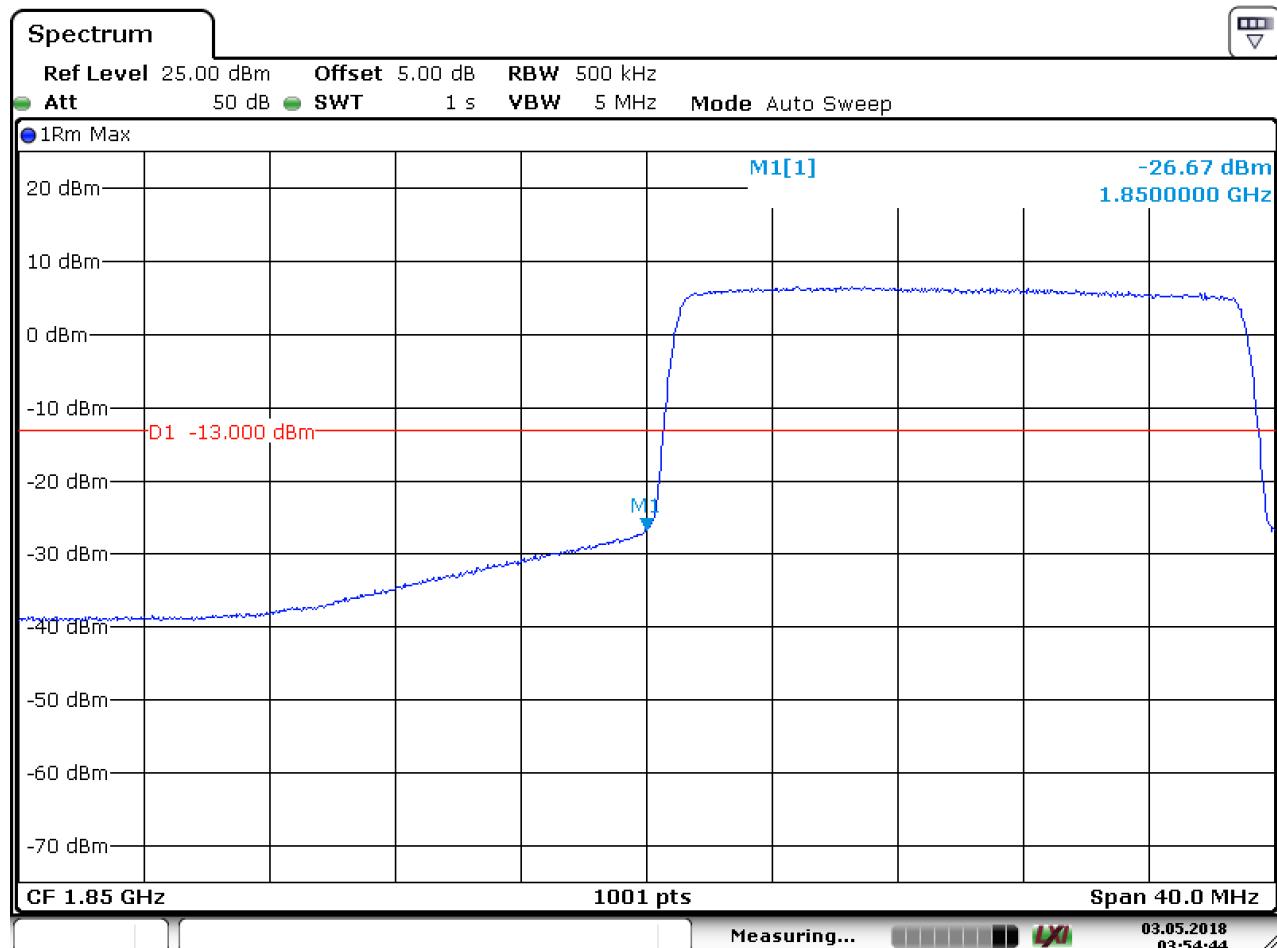


Date: 3.MAY.2018 03:52:36

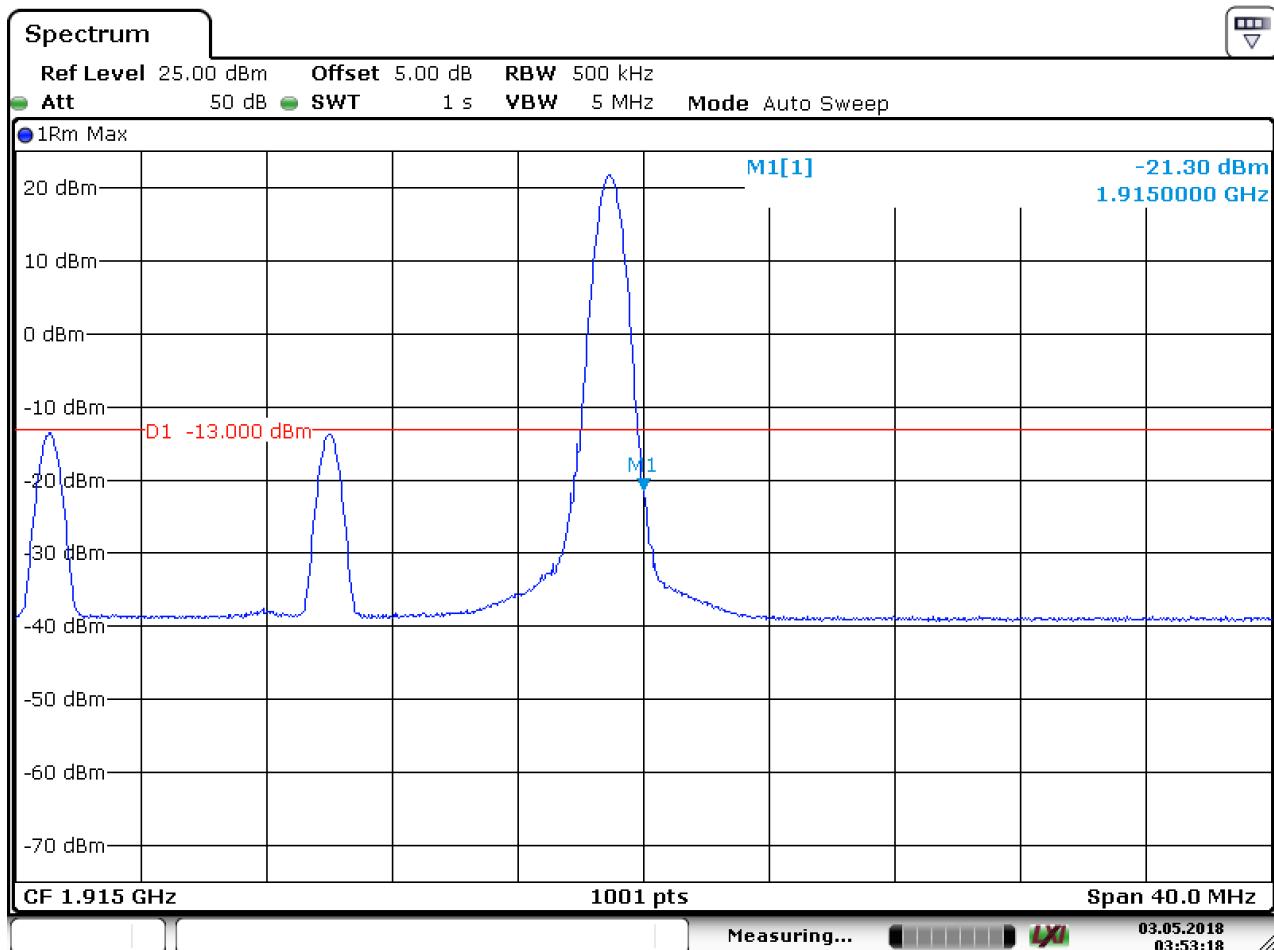
5.1.1.12 Test Mode = LTE/TM2 20MHz**5.1.1.12.1 Test Channel = LCH****5.1.1.12.1.1 Test RB=1RB**

Date: 3.MAY.2018 03:54:27

5.1.1.12.1.2 Test RB=100RB

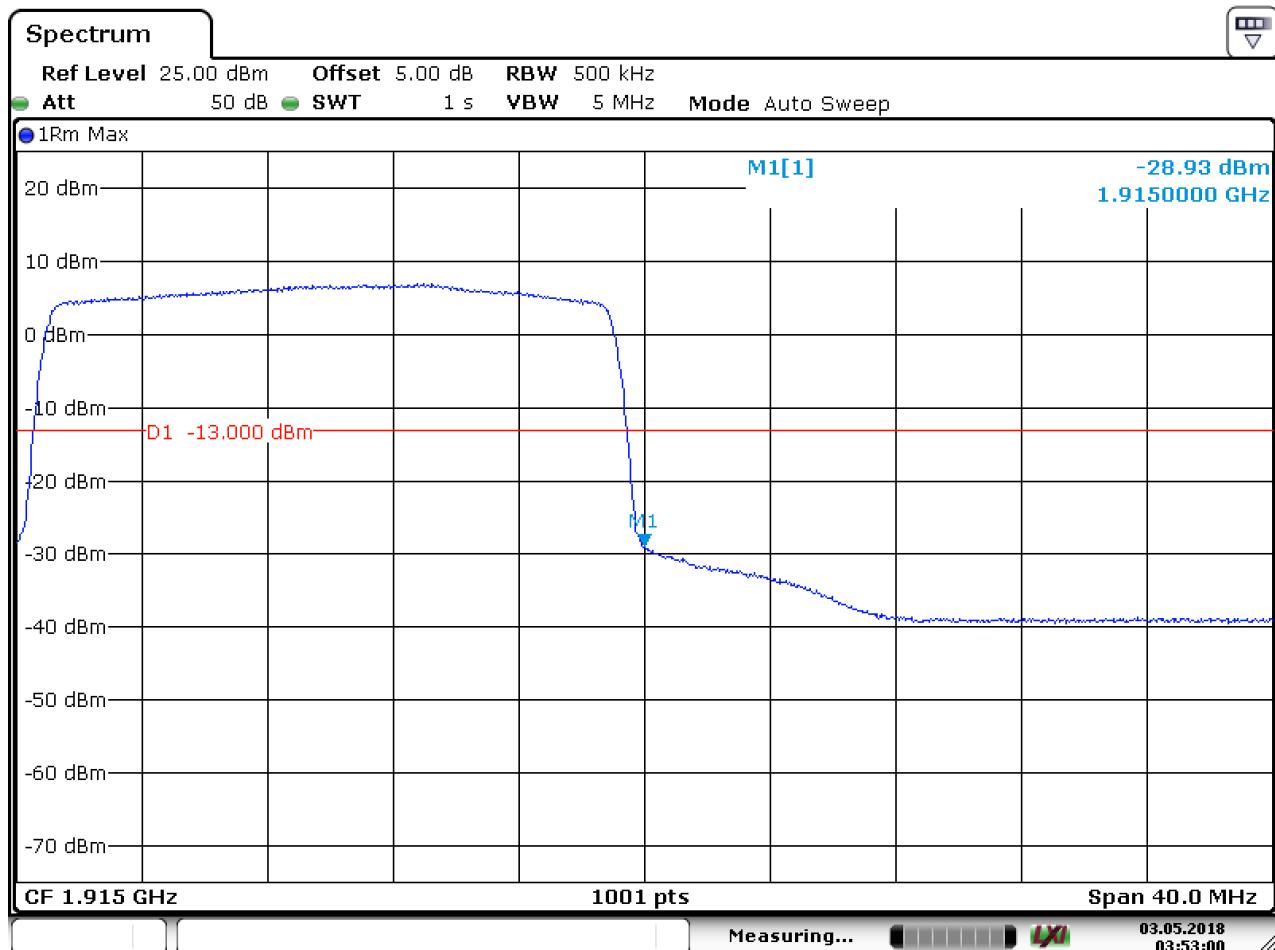


Date: 3.MAY.2018 03:54:44

5.1.1.12.2 Test Channel = HCH**5.1.1.12.2.1 Test RB=1RB**

Date: 3.MAY.2018 03:53:19

5.1.1.12.2.2 Test RB=100RB



Date: 3.MAY.2018 03:53:00

6 Spurious Emission at Antenna Terminal

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

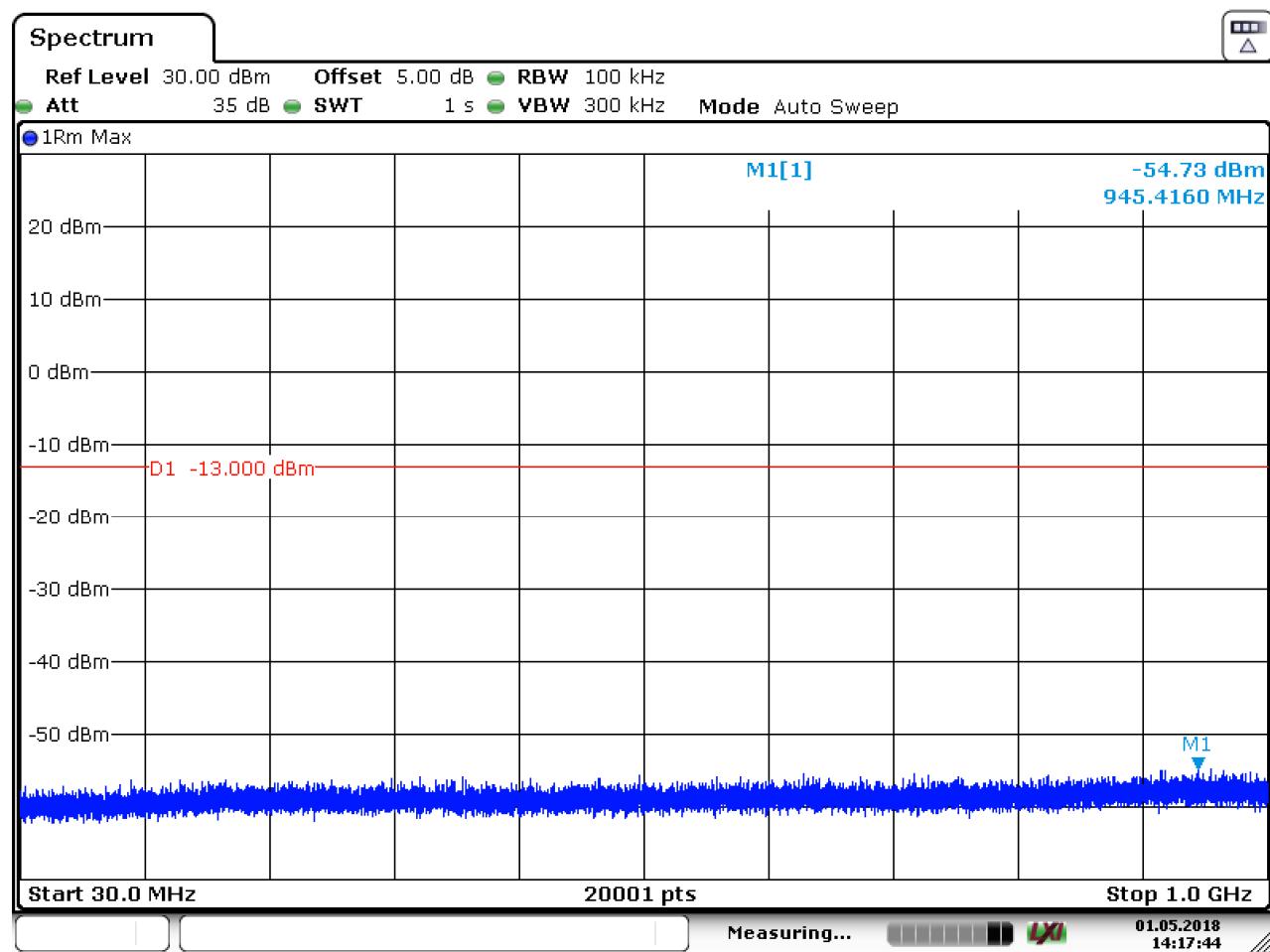
Part I - Test Plots

6.1 For LTE

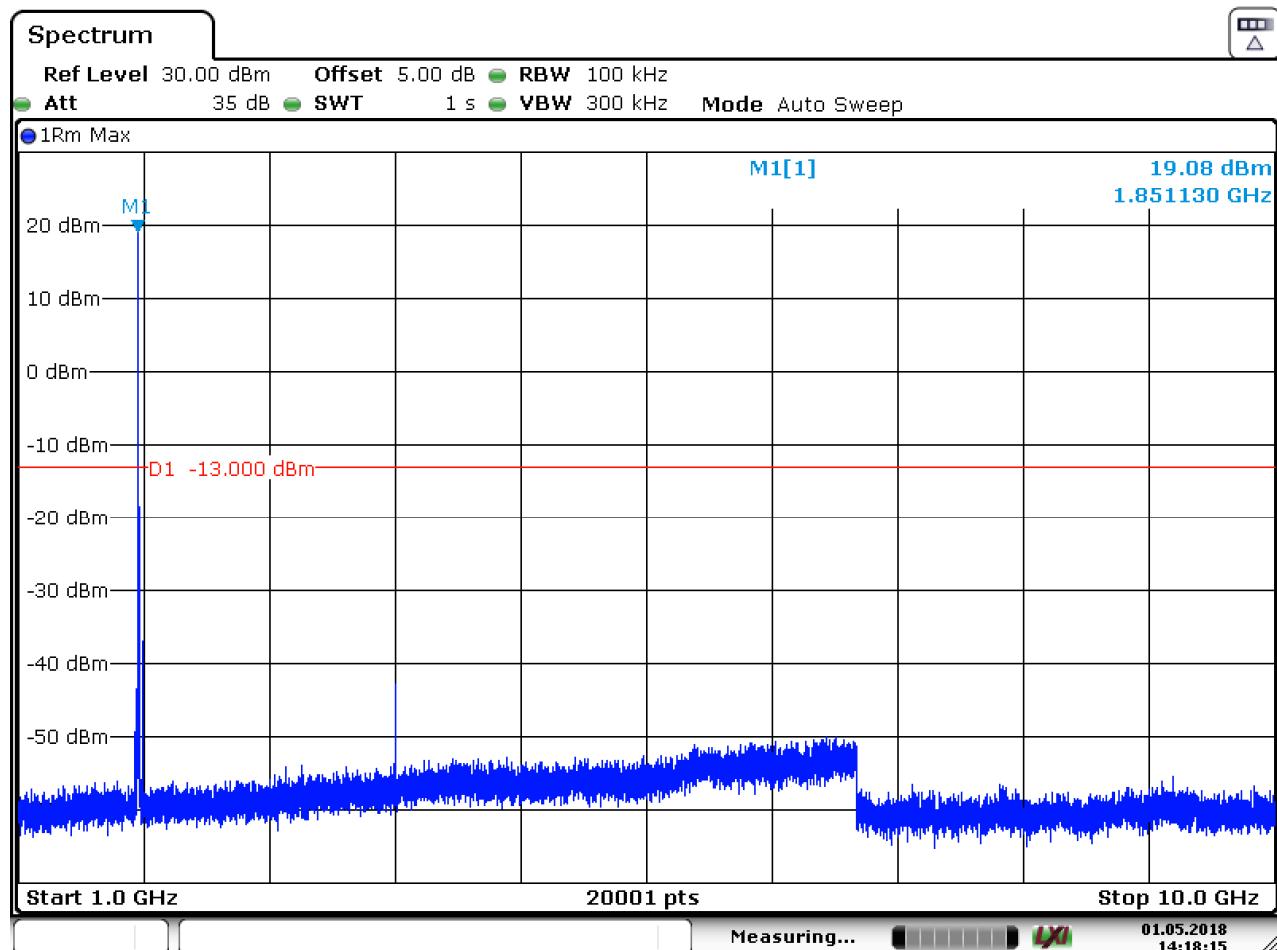
6.1.1 Test Band = LTE band25

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

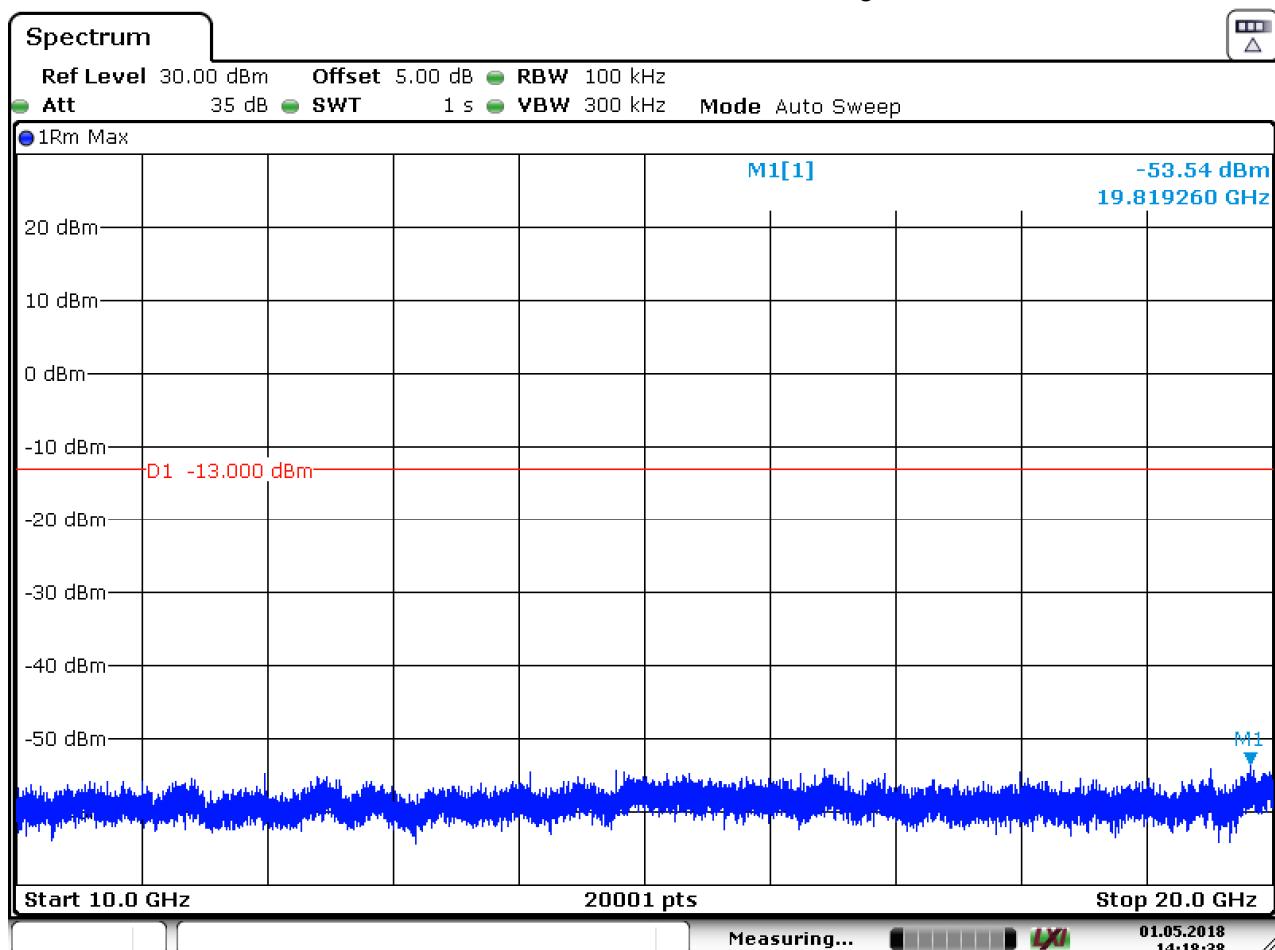
6.1.1.1.1 Test Channel = LCH



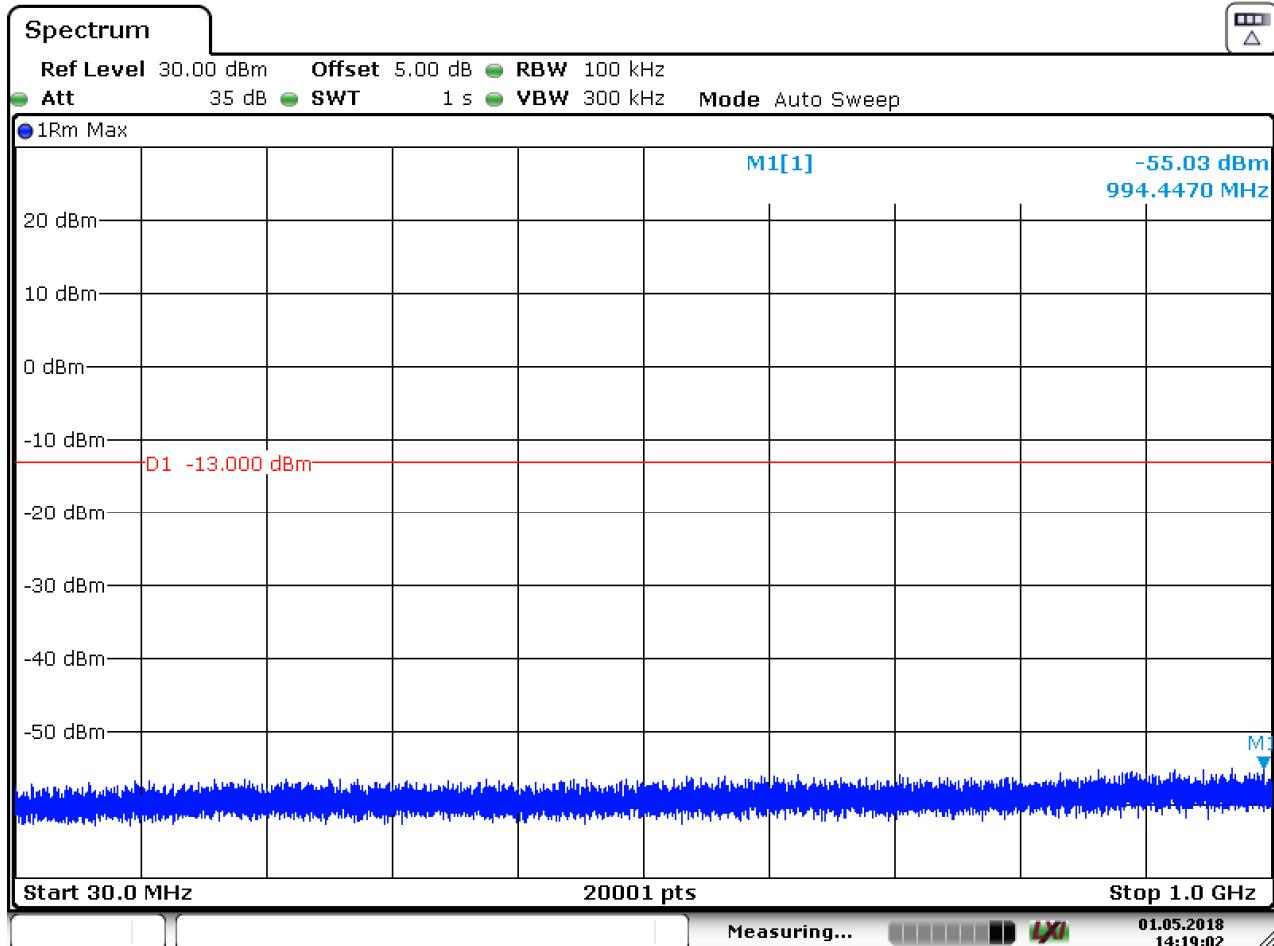
Date: 1.MAY.2018 14:17:45



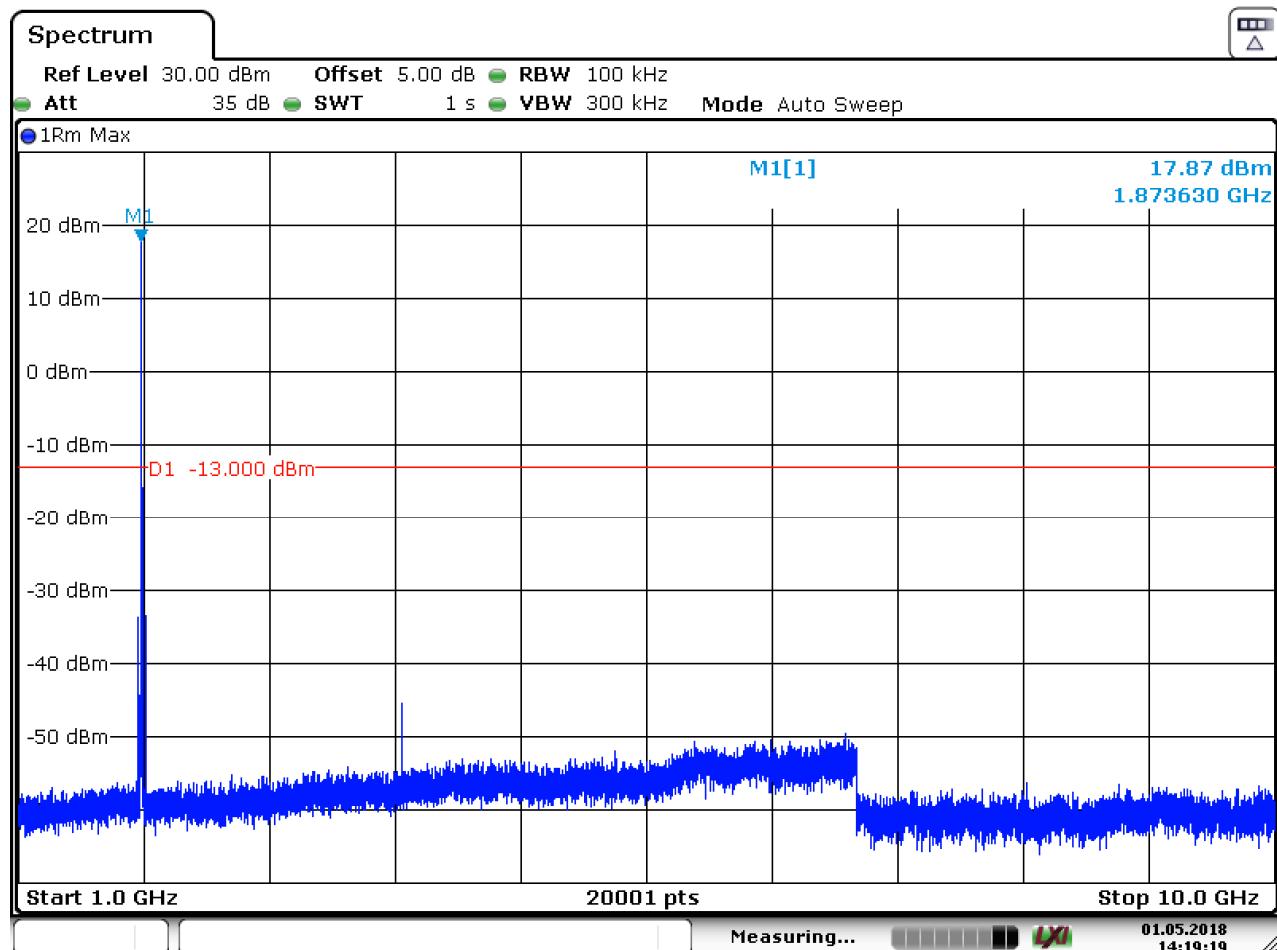
Date: 1.MAY.2018 14:18:16



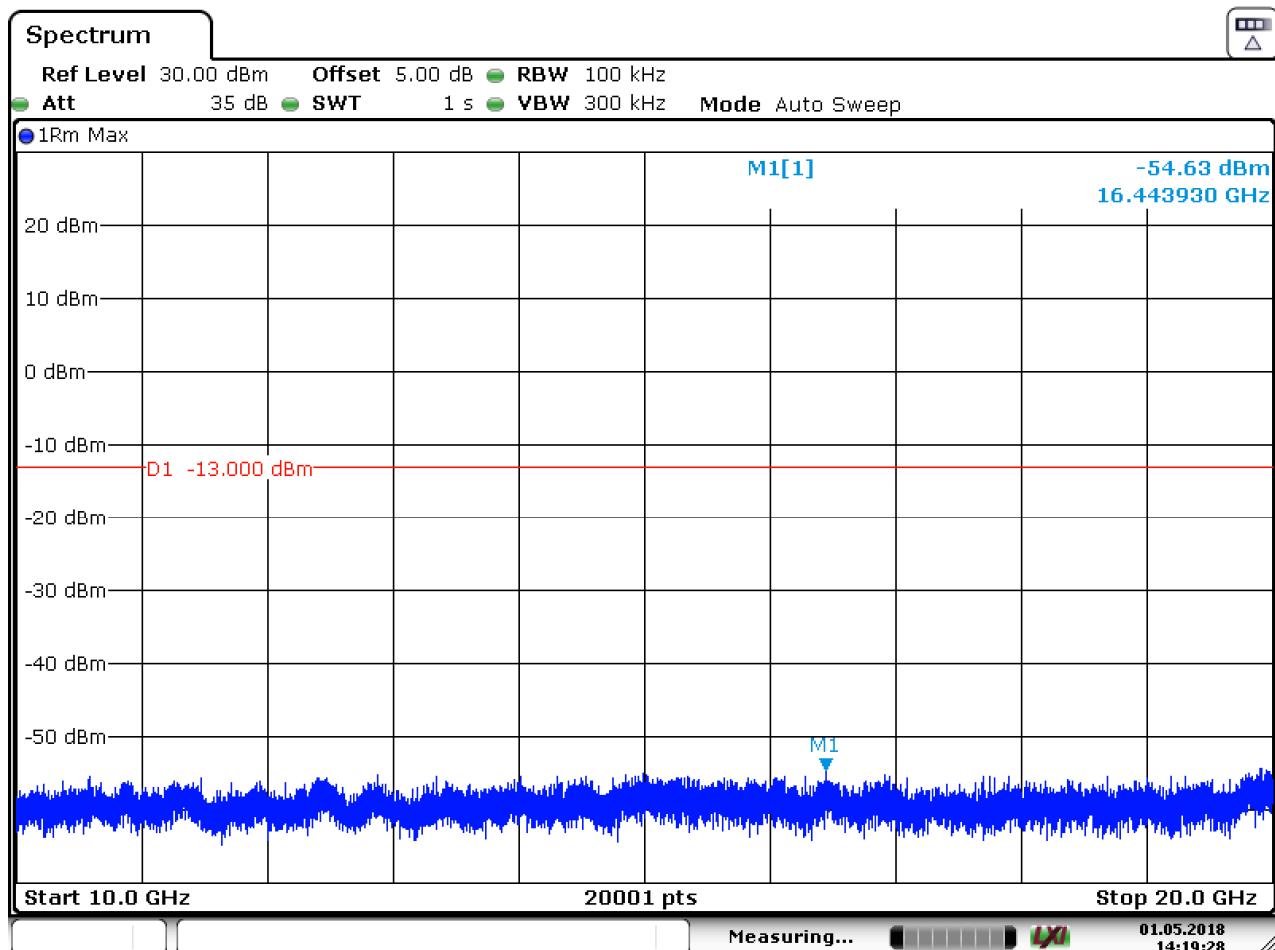
Date: 1.MAY.2018 14:18:38

6.1.1.1.2 Test Channel = MCH

Date: 1.MAY.2018 14:19:02

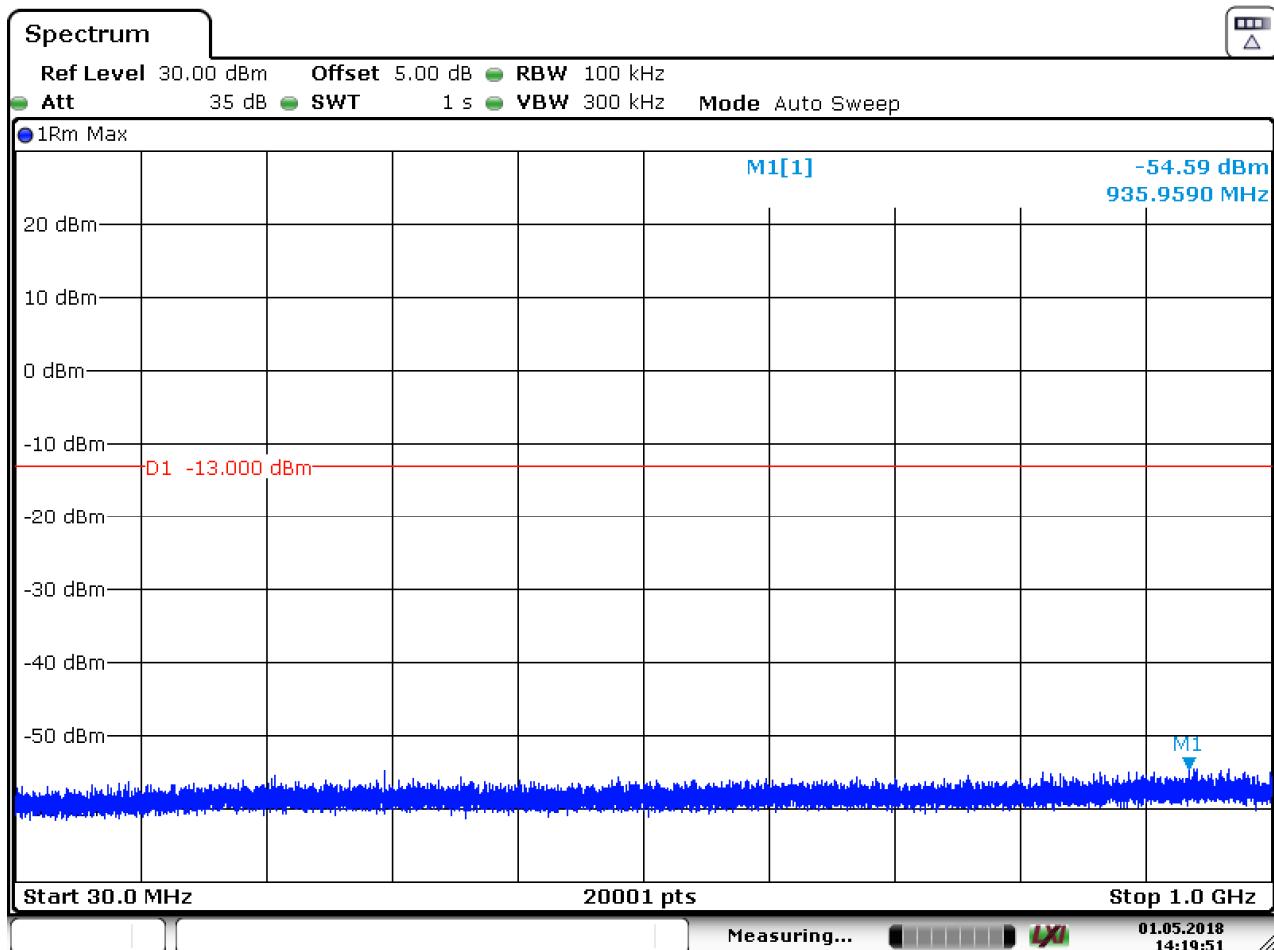


Date: 1.MAY.2018 14:19:19

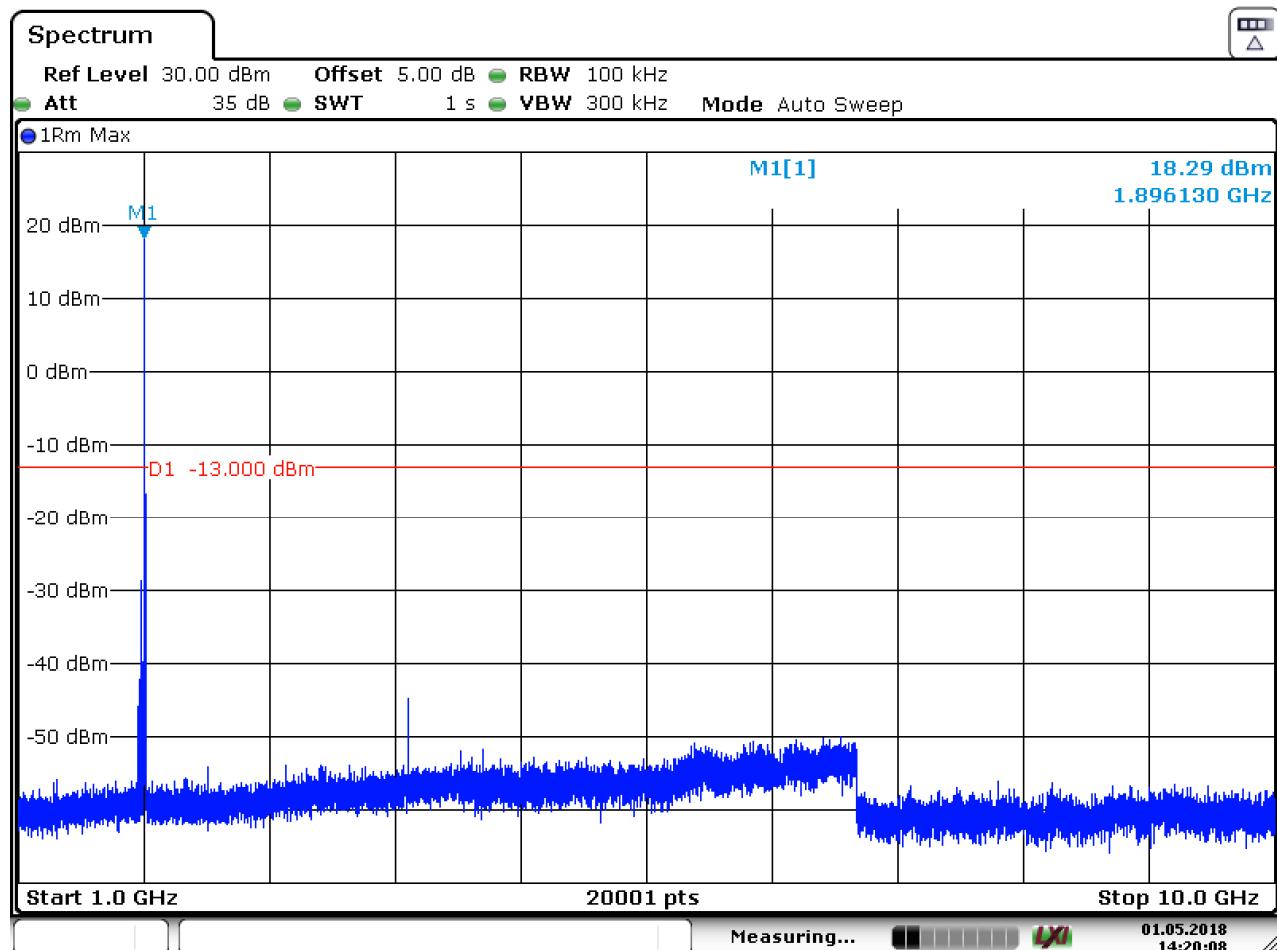


Date: 1.MAY.2018 14:19:29

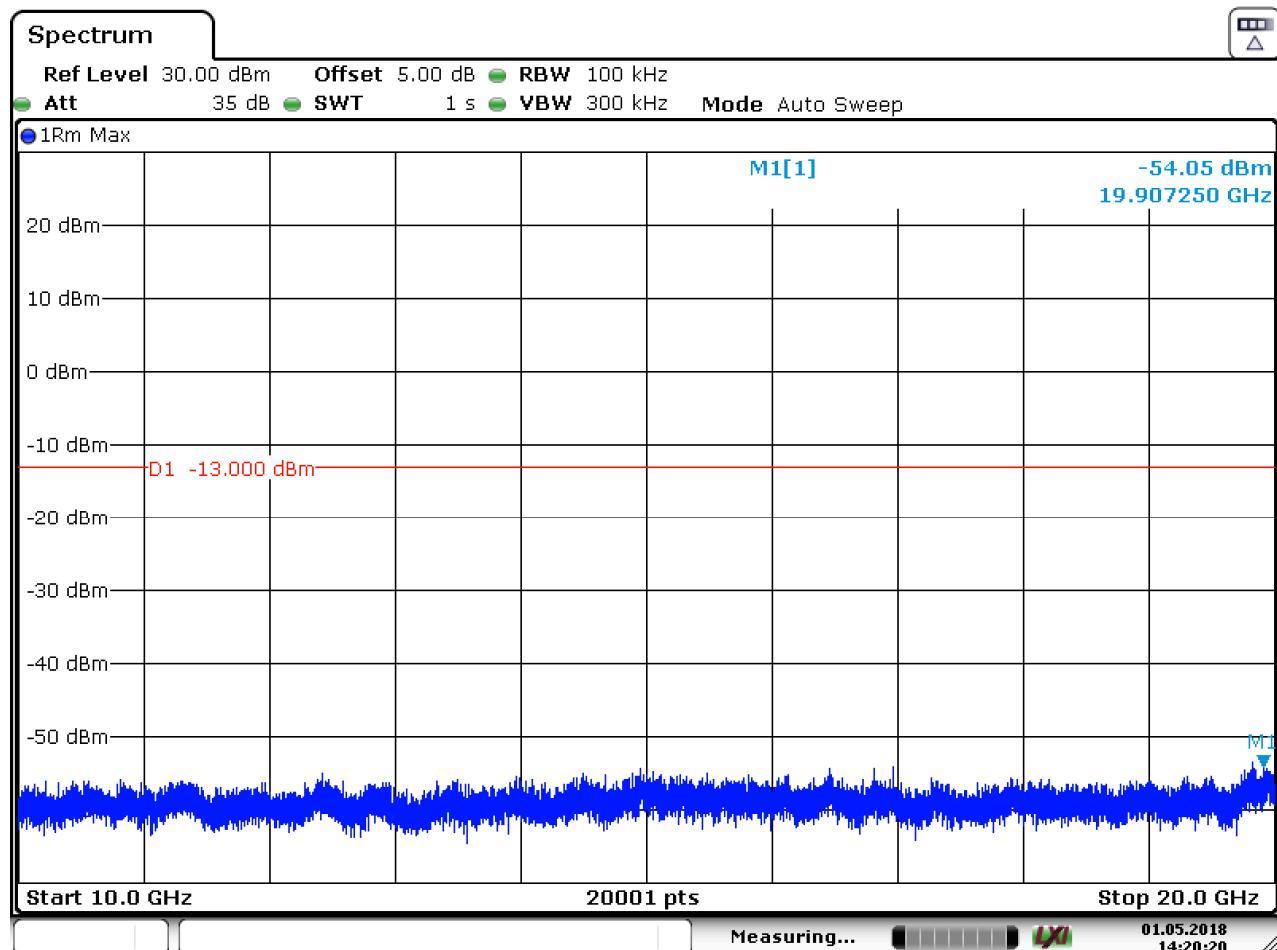
6.1.1.1.3 Test Channel = HCH



Date: 1.MAY.2018 14:19:51



Date: 1.MAY.2018 14:20:08



Date: 1.MAY.2018 14:20:20

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band25

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
72.850000	-77.49	-13.00	64.49	Vertical
144.000000	-70.78	-13.00	57.78	Vertical
288.000000	-76.40	-13.00	63.40	Vertical
3702.000000	-52.91	-13.00	39.91	Vertical
7404.400000	-60.58	-13.00	47.58	Vertical
9255.600000	-55.79	-13.00	42.79	Vertical
62.750000	-77.85	-13.00	64.85	Horizontal
144.000000	-75.77	-13.00	62.77	Horizontal
3702.000000	-54.27	-13.00	41.27	Horizontal
5553.200000	-65.61	-13.00	52.61	Horizontal
7404.400000	-55.08	-13.00	42.08	Horizontal
9255.600000	-45.76	-13.00	32.76	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.050000	-77.14	-13.00	64.14	Vertical
144.000000	-69.59	-13.00	56.59	Vertical
288.050000	-78.61	-13.00	65.61	Vertical
3746.850000	-58.38	-13.00	45.38	Vertical
7494.100000	-60.28	-13.00	47.28	Vertical
9368.050000	-61.49	-13.00	48.49	Vertical
62.550000	-78.30	-13.00	65.30	Horizontal
144.000000	-75.68	-13.00	62.68	Horizontal
3746.850000	-57.71	-13.00	44.71	Horizontal
5620.800000	-64.32	-13.00	51.32	Horizontal
7494.425000	-54.79	-13.00	41.79	Horizontal
9368.050000	-53.23	-13.00	40.23	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
71.950000	-76.90	-13.00	63.90	Vertical
144.000000	-71.05	-13.00	58.05	Vertical
3792.025000	-59.10	-13.00	46.10	Vertical
5688.075000	-65.22	-13.00	52.22	Vertical
7584.125000	-59.40	-13.00	46.40	Vertical
9480.500000	-60.86	-13.00	47.86	Vertical
62.350000	-78.10	-13.00	65.10	Horizontal
144.000000	-72.76	-13.00	59.76	Horizontal
3792.025000	-58.58	-13.00	45.58	Horizontal
5688.075000	-61.76	-13.00	48.76	Horizontal
7584.450000	-56.91	-13.00	43.91	Horizontal
9480.500000	-60.54	-13.00	47.54	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
LTEband25	LTE/TM1 20MHz	LCH	TN	VL	-7.30	-0.00392	PASS
				VN	-3.88	-0.00208	PASS
				VH	-5.17	-0.00278	PASS
		MCH	TN	VL	8.97	0.00477	PASS
				VN	-7.84	-0.00416	PASS
				VH	-9.87	-0.00524	PASS
		HCH	TN	VL	6.29	0.00330	PASS
				VN	0.27	0.00014	PASS
				VH	-2.75	-0.00145	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.65	-0.00250	PASS
				VN	-8.37	-0.00450	PASS
				VH	-8.57	-0.00461	PASS
		MCH	TN	VL	-0.09	-0.00005	PASS
				VN	-4.16	-0.00221	PASS
				VH	-1.24	-0.00066	PASS
		HCH	TN	VL	8.74	0.00459	PASS
				VN	8.39	0.00440	PASS
				VH	-5.34	-0.00281	PASS
	LTE/TM3 20MHz	LCH	TN	VL	0.97	0.00052	PASS
				VN	-8.81	-0.00474	PASS
				VH	4.45	0.00239	PASS
		MCH	TN	VL	-0.57	-0.00030	PASS
				VN	-8.09	-0.00430	PASS
				VH	-0.82	-0.00044	PASS
		HCH	TN	VL	-7.23	-0.00380	PASS
				VN	9.38	0.00493	PASS
				VH	6.34	0.00333	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
LTEband25	LTE/TM1 20MHz	LCH	VN	-30	4.99	0.00268	PASS
				-20	-0.69	-0.00037	PASS
				-10	7.97	0.00429	PASS
				0	7.90	0.00425	PASS
				10	2.72	0.00146	PASS
				20	7.30	0.00393	PASS
				30	-8.84	-0.00475	PASS
				40	7.09	0.00381	PASS
				50	8.21	0.00441	PASS
		MCH	VN	-30	6.61	0.00351	PASS
				-20	-9.89	-0.00525	PASS
				-10	0.07	0.00004	PASS
				0	-9.54	-0.00507	PASS
				10	-8.17	-0.00434	PASS
				20	9.93	0.00527	PASS
				30	-1.65	-0.00088	PASS
				40	-3.41	-0.00181	PASS
				50	-0.11	-0.00006	PASS
		HCH	VN	-30	7.66	0.00402	PASS
				-20	-5.91	-0.00310	PASS
				-10	-5.60	-0.00294	PASS
				0	-8.13	-0.00427	PASS
				10	-6.91	-0.00363	PASS
				20	-6.61	-0.00347	PASS
				30	9.18	0.00482	PASS
				40	-9.21	-0.00483	PASS
				50	1.26	0.00066	PASS



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Shenzhen Branch**

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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband25	LTE/TM2 20MHz	LCH	VN	-30	-3.82	-0.00205	PASS
				-20	-5.66	-0.00304	PASS
				-10	-2.37	-0.00127	PASS
				0	-0.39	-0.00021	PASS
				10	-1.06	-0.00057	PASS
				20	-2.85	-0.00153	PASS
				30	-8.37	-0.00450	PASS
				40	3.38	0.00181	PASS
				50	-9.53	-0.00512	PASS
		MCH	VN	-30	-8.00	-0.00425	PASS
				-20	6.47	0.00344	PASS
				-10	8.14	0.00433	PASS
				0	-9.32	-0.00495	PASS
				10	-8.79	-0.00467	PASS
				20	-5.89	-0.00313	PASS
				30	2.59	0.00138	PASS
				40	-3.50	-0.00186	PASS
				50	-3.57	-0.00190	PASS
		HCH	VN	-30	4.82	0.00253	PASS
				-20	1.98	0.00104	PASS
				-10	-3.05	-0.00160	PASS
				0	-3.21	-0.00168	PASS
				10	7.89	0.00414	PASS
				20	1.83	0.00096	PASS
				30	-0.69	-0.00036	PASS
				40	1.74	0.00091	PASS
				50	-7.84	-0.00411	PASS

The End