



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	21.44	20.64	33.00	PASS
				RB1#2	21.41	20.61	33.00	PASS
				RB1#5	21.45	20.65	33.00	PASS
				RB3#0	21.42	20.62	33.00	PASS
				RB3#2	21.41	20.61	33.00	PASS
				RB3#3	21.45	20.65	33.00	PASS
				RB6#0	20.54	19.74	33.00	PASS
			MCH	RB1#0	21.44	20.64	33.00	PASS
				RB1#2	21.43	20.63	33.00	PASS
				RB1#5	21.44	20.64	33.00	PASS
				RB3#0	21.46	20.66	33.00	PASS
				RB3#2	21.41	20.61	33.00	PASS
				RB3#3	21.46	20.66	33.00	PASS
				RB6#0	20.53	19.73	33.00	PASS
			HCH	RB1#0	21.31	20.51	33.00	PASS
				RB1#2	21.28	20.48	33.00	PASS
				RB1#5	21.27	20.47	33.00	PASS
				RB3#0	21.32	20.52	33.00	PASS
				RB3#2	21.27	20.47	33.00	PASS
				RB3#3	21.34	20.54	33.00	PASS
				RB6#0	20.26	19.46	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	20.40	19.60	33.00	PASS
				RB1#2	20.39	19.59	33.00	PASS
				RB1#5	20.42	19.62	33.00	PASS
				RB3#0	20.44	19.64	33.00	PASS
				RB3#2	20.39	19.59	33.00	PASS
				RB3#3	20.43	19.63	33.00	PASS
				RB6#0	19.39	18.59	33.00	PASS
			MCH	RB1#0	20.39	19.59	33.00	PASS
				RB1#2	20.40	19.60	33.00	PASS
				RB1#5	20.37	19.57	33.00	PASS
				RB3#0	20.40	19.60	33.00	PASS
				RB3#2	20.41	19.61	33.00	PASS
				RB3#3	20.44	19.64	33.00	PASS
				RB6#0	19.38	18.58	33.00	PASS
			HCH	RB1#0	20.26	19.46	33.00	PASS
				RB1#2	20.24	19.44	33.00	PASS
				RB1#5	20.18	19.38	33.00	PASS
				RB3#0	20.23	19.43	33.00	PASS
				RB3#2	20.19	19.39	33.00	PASS
				RB3#3	20.18	19.38	33.00	PASS
				RB6#0	19.16	18.36	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	21.40	20.60	33.00	PASS
				RB1#7	21.38	20.58	33.00	PASS
				RB1#14	21.37	20.57	33.00	PASS
				RB8#0	20.50	19.70	33.00	PASS
				RB8#4	20.49	19.69	33.00	PASS
				RB8#7	20.45	19.65	33.00	PASS
				RB15#0	20.44	19.64	33.00	PASS
			MCH	RB1#0	21.41	20.61	33.00	PASS
				RB1#7	21.37	20.57	33.00	PASS
				RB1#14	21.41	20.61	33.00	PASS
				RB8#0	20.45	19.65	33.00	PASS
				RB8#4	20.45	19.65	33.00	PASS
				RB8#7	20.48	19.68	33.00	PASS
				RB15#0	20.50	19.70	33.00	PASS
			HCH	RB1#0	21.33	20.53	33.00	PASS
				RB1#7	21.27	20.47	33.00	PASS
				RB1#14	21.25	20.45	33.00	PASS
				RB8#0	20.30	19.50	33.00	PASS
				RB8#4	20.26	19.46	33.00	PASS
				RB8#7	20.28	19.48	33.00	PASS
				RB15#0	20.31	19.51	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	20.38	19.58	33.00	PASS
				RB1#7	20.33	19.53	33.00	PASS
				RB1#14	20.38	19.58	33.00	PASS
				RB8#0	19.47	18.67	33.00	PASS
				RB8#4	19.50	18.70	33.00	PASS
				RB8#7	19.49	18.69	33.00	PASS
				RB15#0	19.42	18.62	33.00	PASS
			MCH	RB1#0	20.34	19.54	33.00	PASS
				RB1#7	20.31	19.51	33.00	PASS
				RB1#14	20.36	19.56	33.00	PASS
				RB8#0	19.44	18.64	33.00	PASS
				RB8#4	19.48	18.68	33.00	PASS
				RB8#7	19.48	18.68	33.00	PASS
				RB15#0	19.42	18.62	33.00	PASS
			HCH	RB1#0	20.19	19.39	33.00	PASS
				RB1#7	20.22	19.42	33.00	PASS
				RB1#14	20.16	19.36	33.00	PASS
				RB8#0	19.31	18.51	33.00	PASS
				RB8#4	19.30	18.50	33.00	PASS
				RB8#7	19.27	18.47	33.00	PASS
				RB15#0	19.24	18.44	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	21.39	20.59	33.00	PASS
				RB1#13	21.35	20.55	33.00	PASS
				RB1#24	21.36	20.56	33.00	PASS
				RB12#0	20.51	19.71	33.00	PASS
				RB12#6	20.44	19.64	33.00	PASS
				RB12#13	20.45	19.65	33.00	PASS
				RB25#0	20.43	19.63	33.00	PASS
			MCH	RB1#0	21.37	20.57	33.00	PASS
				RB1#13	21.33	20.53	33.00	PASS
				RB1#24	21.41	20.61	33.00	PASS
				RB12#0	20.48	19.68	33.00	PASS
				RB12#6	20.46	19.66	33.00	PASS
				RB12#13	20.42	19.62	33.00	PASS
				RB25#0	20.45	19.65	33.00	PASS
			HCH	RB1#0	21.32	20.52	33.00	PASS
				RB1#13	21.28	20.48	33.00	PASS
				RB1#24	21.22	20.42	33.00	PASS
				RB12#0	20.30	19.50	33.00	PASS
				RB12#6	20.31	19.51	33.00	PASS
				RB12#13	20.27	19.47	33.00	PASS
				RB25#0	20.30	19.50	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	20.33	19.53	33.00	PASS
				RB1#13	20.34	19.54	33.00	PASS
				RB1#24	20.32	19.52	33.00	PASS
				RB12#0	19.48	18.68	33.00	PASS
				RB12#6	19.49	18.69	33.00	PASS
				RB12#13	19.48	18.68	33.00	PASS
				RB25#0	19.48	18.68	33.00	PASS
			MCH	RB1#0	20.36	19.56	33.00	PASS
				RB1#13	20.30	19.50	33.00	PASS
				RB1#24	20.33	19.53	33.00	PASS
				RB12#0	19.45	18.65	33.00	PASS
				RB12#6	19.44	18.64	33.00	PASS
				RB12#13	19.46	18.66	33.00	PASS
				RB25#0	19.41	18.61	33.00	PASS
			HCH	RB1#0	20.20	19.40	33.00	PASS
				RB1#13	20.24	19.44	33.00	PASS
				RB1#24	20.19	19.39	33.00	PASS
				RB12#0	19.36	18.56	33.00	PASS
				RB12#6	19.32	18.52	33.00	PASS
				RB12#13	19.27	18.47	33.00	PASS
				RB25#0	19.30	18.50	33.00	PASS

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BAND25	LTE/TM1	10M	LCH	RB1#0	21.40	20.60	33.00	PASS
				RB1#25	21.38	20.58	33.00	PASS
				RB1#49	21.34	20.54	33.00	PASS
				RB25#0	20.46	19.66	33.00	PASS
				RB25#13	20.49	19.69	33.00	PASS
				RB25#25	20.44	19.64	33.00	PASS
				RB50#0	20.44	19.64	33.00	PASS
			MCH	RB1#0	21.41	20.61	33.00	PASS
				RB1#25	21.35	20.55	33.00	PASS
				RB1#49	21.40	20.60	33.00	PASS
				RB25#0	20.44	19.64	33.00	PASS
				RB25#13	20.45	19.65	33.00	PASS
				RB25#25	20.48	19.68	33.00	PASS
				RB50#0	20.46	19.66	33.00	PASS
			HCH	RB1#0	21.38	20.58	33.00	PASS
				RB1#25	21.32	20.52	33.00	PASS
				RB1#49	21.25	20.45	33.00	PASS
				RB25#0	20.30	19.50	33.00	PASS
				RB25#13	20.35	19.55	33.00	PASS
				RB25#25	20.29	19.49	33.00	PASS
				RB50#0	20.32	19.52	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	20.35	19.55	33.00	PASS
				RB1#25	20.38	19.58	33.00	PASS
				RB1#49	20.37	19.57	33.00	PASS
				RB25#0	19.47	18.67	33.00	PASS
				RB25#13	19.45	18.65	33.00	PASS
				RB25#25	19.43	18.63	33.00	PASS
				RB50#0	19.40	18.60	33.00	PASS
			MCH	RB1#0	20.34	19.54	33.00	PASS
				RB1#25	20.32	19.52	33.00	PASS
				RB1#49	20.39	19.59	33.00	PASS
				RB25#0	19.45	18.65	33.00	PASS
				RB25#13	19.42	18.62	33.00	PASS
				RB25#25	19.45	18.65	33.00	PASS
				RB50#0	19.44	18.64	33.00	PASS
			HCH	RB1#0	20.35	19.55	33.00	PASS
				RB1#25	20.26	19.46	33.00	PASS
				RB1#49	20.15	19.35	33.00	PASS
				RB25#0	19.36	18.56	33.00	PASS
				RB25#13	19.34	18.54	33.00	PASS
				RB25#25	19.34	18.54	33.00	PASS
				RB50#0	19.34	18.54	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	15M	LCH	RB1#0	21.42	20.62	33.00	PASS
				RB1#38	21.41	20.61	33.00	PASS
				RB1#74	21.32	20.52	33.00	PASS
				RB36#0	20.52	19.72	33.00	PASS
				RB36#18	20.51	19.71	33.00	PASS
				RB36#39	20.43	19.63	33.00	PASS
				RB75#0	20.44	19.64	33.00	PASS
			MCH	RB1#0	21.41	20.61	33.00	PASS
				RB1#38	21.40	20.60	33.00	PASS
				RB1#74	21.44	20.64	33.00	PASS
				RB36#0	20.45	19.65	33.00	PASS
				RB36#18	20.45	19.65	33.00	PASS
				RB36#39	20.47	19.67	33.00	PASS
				RB75#0	20.43	19.63	33.00	PASS
			HCH	RB1#0	21.40	20.60	33.00	PASS
				RB1#38	21.43	20.63	33.00	PASS
				RB1#74	21.28	20.48	33.00	PASS
				RB36#0	20.37	19.57	33.00	PASS
				RB36#18	20.30	19.50	33.00	PASS
				RB36#39	20.31	19.51	33.00	PASS
				RB75#0	20.40	19.60	33.00	PASS

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BAND25	LTE/TM2	15M	LCH	RB1#0	20.41	19.61	33.00	PASS
				RB1#38	20.36	19.56	33.00	PASS
				RB1#74	20.29	19.49	33.00	PASS
				RB36#0	19.48	18.68	33.00	PASS
				RB36#18	19.48	18.68	33.00	PASS
				RB36#39	19.40	18.60	33.00	PASS
				RB75#0	19.45	18.65	33.00	PASS
			MCH	RB1#0	20.44	19.64	33.00	PASS
				RB1#38	20.36	19.56	33.00	PASS
				RB1#74	20.44	19.64	33.00	PASS
				RB36#0	19.41	18.61	33.00	PASS
				RB36#18	19.42	18.62	33.00	PASS
				RB36#39	19.44	18.64	33.00	PASS
				RB75#0	19.46	18.66	33.00	PASS
			HCH	RB1#0	20.37	19.57	33.00	PASS
				RB1#38	20.35	19.55	33.00	PASS
				RB1#74	20.18	19.38	33.00	PASS
				RB36#0	19.32	18.52	33.00	PASS
				RB36#18	19.28	18.48	33.00	PASS
				RB36#39	19.32	18.52	33.00	PASS
				RB75#0	19.38	18.58	33.00	PASS

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM1701001110301

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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	20M	LCH	RB1#0	21.42	20.62	33.00	PASS
				RB1#50	21.40	20.60	33.00	PASS
				RB1#99	21.29	20.49	33.00	PASS
				RB50#0	20.48	19.68	33.00	PASS
				RB50#25	20.45	19.65	33.00	PASS
				RB50#50	20.43	19.63	33.00	PASS
				RB100#0	20.45	19.65	33.00	PASS
			MCH	RB1#0	21.40	20.60	33.00	PASS
				RB1#50	21.38	20.58	33.00	PASS
				RB1#99	21.36	20.56	33.00	PASS
				RB50#0	20.49	19.69	33.00	PASS
				RB50#25	20.46	19.66	33.00	PASS
				RB50#50	20.43	19.63	33.00	PASS
				RB100#0	20.43	19.63	33.00	PASS
			HCH	RB1#0	21.45	20.65	33.00	PASS
				RB1#50	21.35	20.55	33.00	PASS
				RB1#99	21.24	20.44	33.00	PASS
				RB50#0	20.51	19.71	33.00	PASS
				RB50#25	20.35	19.55	33.00	PASS
				RB50#50	20.27	19.47	33.00	PASS
				RB100#0	20.35	19.55	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	20M	LCH	RB1#0	20.39	19.59	33.00	PASS
				RB1#50	20.29	19.49	33.00	PASS
				RB1#99	20.28	19.48	33.00	PASS
				RB50#0	19.44	18.64	33.00	PASS
				RB50#25	19.42	18.62	33.00	PASS
				RB50#50	19.39	18.59	33.00	PASS
				RB100#0	19.41	18.61	33.00	PASS
			MCH	RB1#0	20.37	19.57	33.00	PASS
				RB1#50	20.32	19.52	33.00	PASS
				RB1#99	20.31	19.51	33.00	PASS
				RB50#0	19.46	18.66	33.00	PASS
				RB50#25	19.43	18.63	33.00	PASS
				RB50#50	19.42	18.62	33.00	PASS
				RB100#0	19.49	18.69	33.00	PASS
			HCH	RB1#0	20.50	19.70	33.00	PASS
				RB1#50	20.31	19.51	33.00	PASS
				RB1#99	20.15	19.35	33.00	PASS
				RB50#0	19.46	18.66	33.00	PASS
				RB50#25	19.34	18.54	33.00	PASS
				RB50#50	19.26	18.46	33.00	PASS
				RB100#0	19.32	18.52	33.00	PASS

Note:

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

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

b: SGP=Signal Generator Level

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

Detector: RMS

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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	5.22	13	PASS
		MCH	5.07	13	PASS
		HCH	5.04	13	PASS
	TM2/20M	LCH	6.20	13	PASS
		MCH	6.06	13	PASS
		HCH	6.12	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: 12.DEC.2017 17:06:24

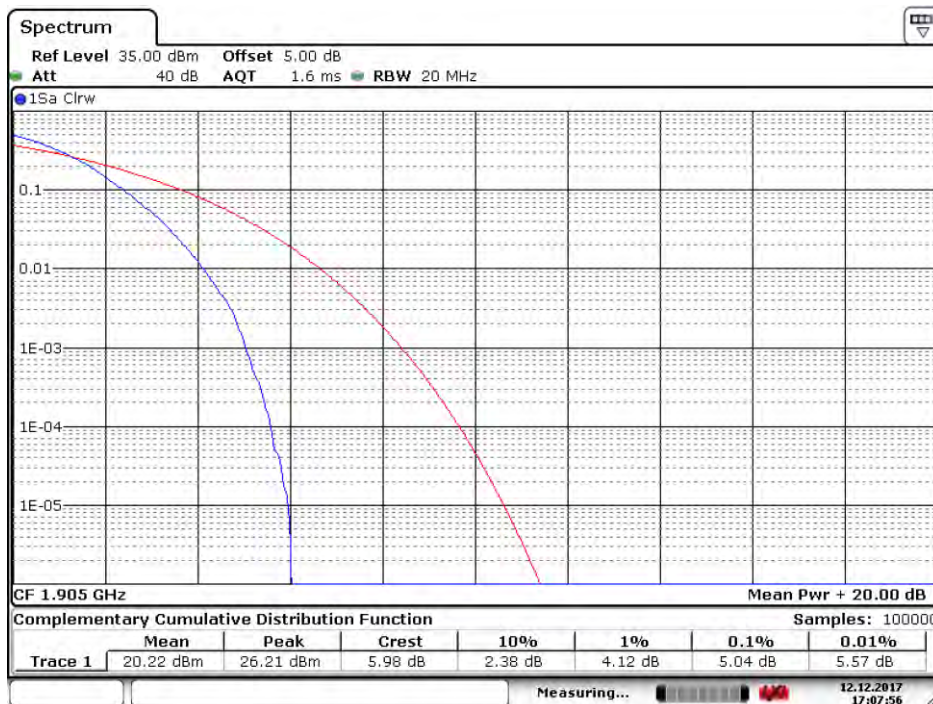


2.1.1.1.2 Test Channel = MCH



Date: 12.DEC.2017 17:07:24

2.1.1.1.3 Test Channel = HCH

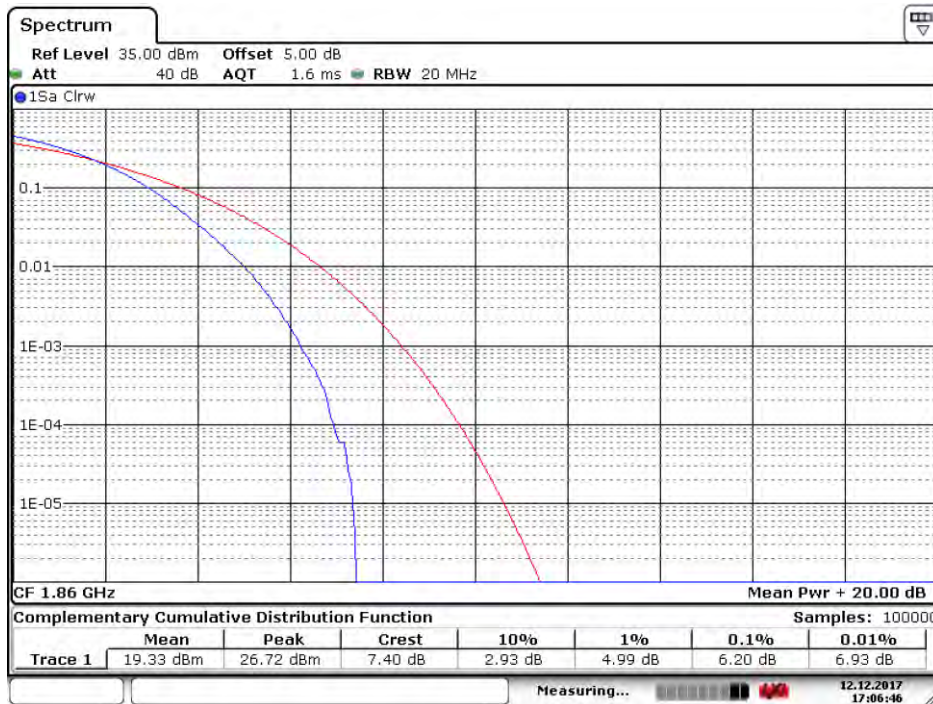


Date: 12.DEC.2017 17:07:56



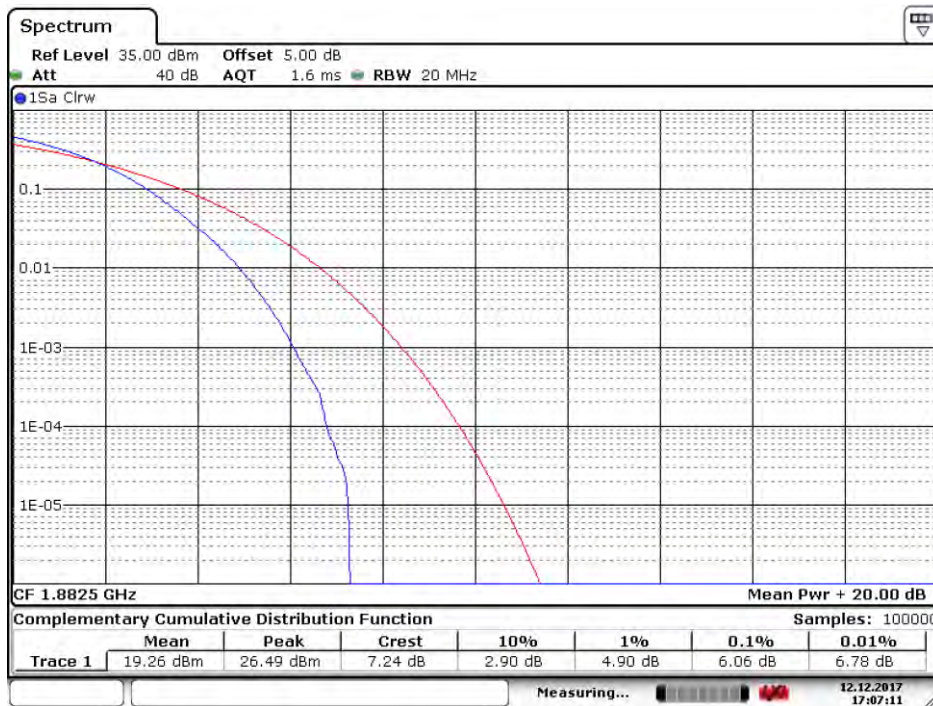
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

2.1.1.2.1 Test Channel = LCH



Date: 12.DEC.2017 17:06:46

2.1.1.2.2 Test Channel = MCH



Date: 12.DEC.2017 17:07:12

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2.1.1.2.3 Test Channel = HCH



Date: 12.DEC.2017 17:08:09



3 Modulation Characteristics

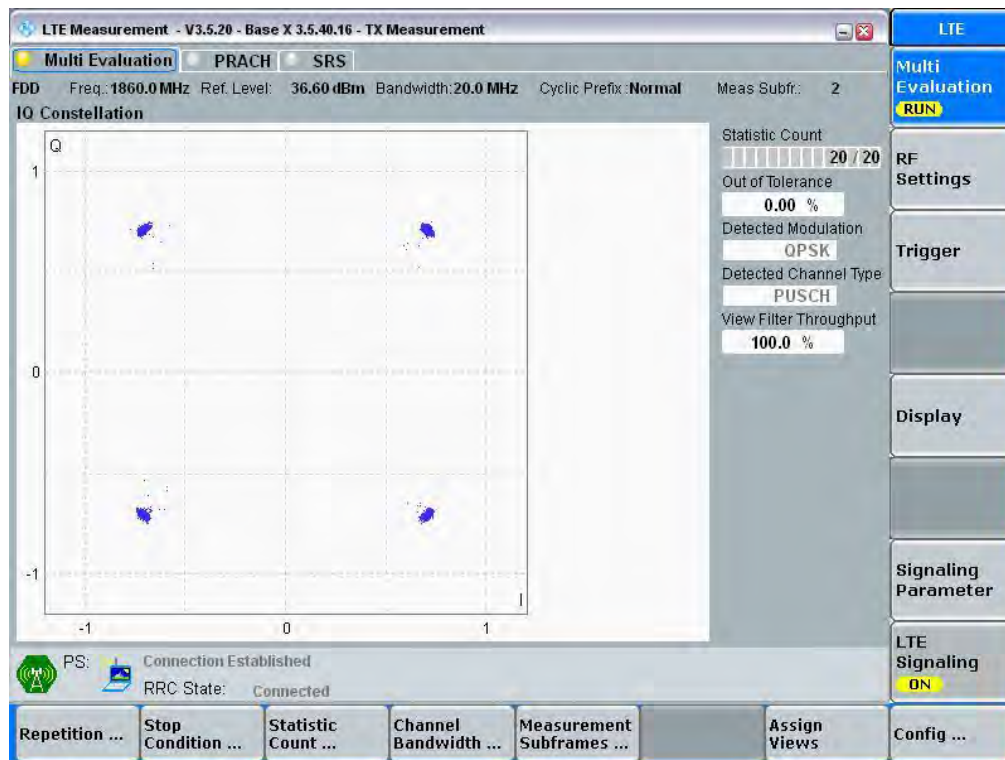
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band25

3.1.1.1 Test Mode = LTE /TM1 20MHz

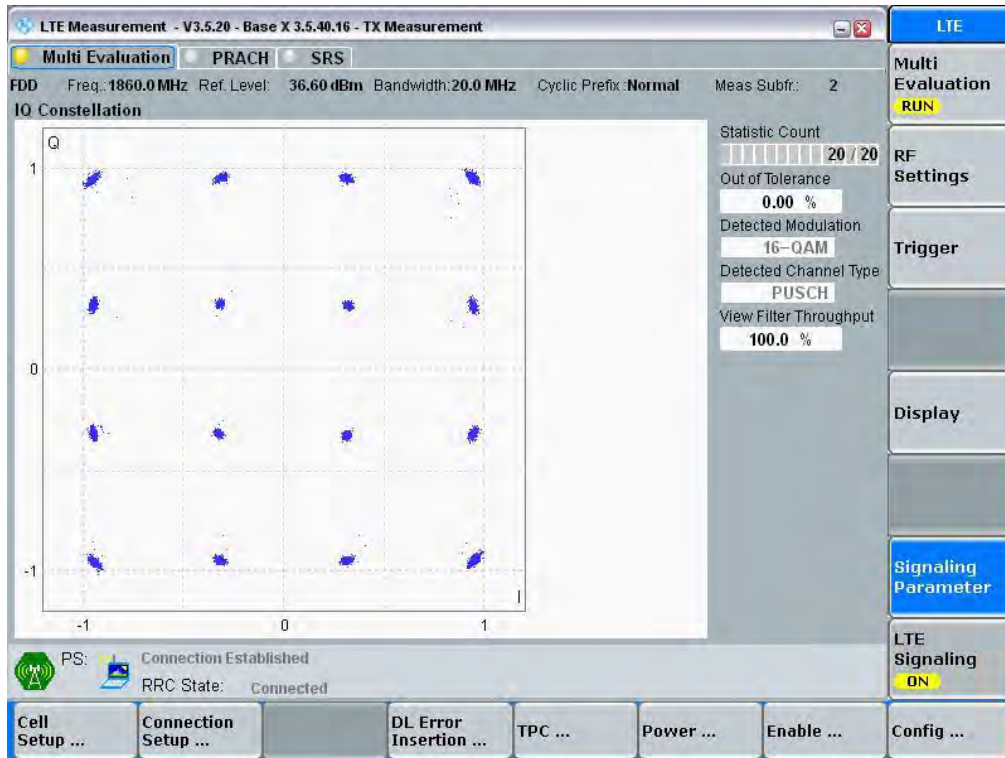
3.1.1.1.1 Test Channel = MCH





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	1.10	1.30	PASS
		MCH	1.10	1.29	PASS
		HCH	1.10	1.30	PASS
	TM2/1.4MHz	LCH	1.10	1.27	PASS
		MCH	1.10	1.27	PASS
		HCH	1.10	1.29	PASS
	TM1/ 3MHz	LCH	2.69	2.94	PASS
		MCH	2.69	2.94	PASS
		HCH	2.69	2.93	PASS
	TM2/3MHz	LCH	2.67	2.91	PASS
		MCH	2.68	2.95	PASS
		HCH	2.69	2.92	PASS
	TM1/ 5MHz	LCH	4.46	4.90	PASS
		MCH	4.47	4.90	PASS
		HCH	4.50	4.95	PASS
	TM2/ 5MHz	LCH	4.47	4.90	PASS
		MCH	4.47	4.84	PASS
		HCH	4.47	4.87	PASS
	TM1/10MHz	LCH	8.93	9.63	PASS
		MCH	8.93	9.65	PASS
		HCH	8.93	9.63	PASS
	TM2/ 10MHz	LCH	8.93	9.69	PASS
		MCH	8.93	9.51	PASS
		HCH	8.93	9.67	PASS
TM1/ 15MHz	LCH	13.37	14.24	PASS	
	MCH	13.40	14.30	PASS	
	HCH	13.40	14.30	PASS	
TM2/ 15MHz	LCH	13.40	14.18	PASS	
	MCH	13.37	14.27	PASS	
	HCH	13.37	14.33	PASS	
TM1/ 20MHz	LCH	17.82	19.26	PASS	
	MCH	17.86	19.22	PASS	
	HCH	17.82	19.18	PASS	
TM2/ 20MHz	LCH	17.82	19.22	PASS	
	MCH	17.86	19.26	PASS	
	HCH	17.82	19.22	PASS	

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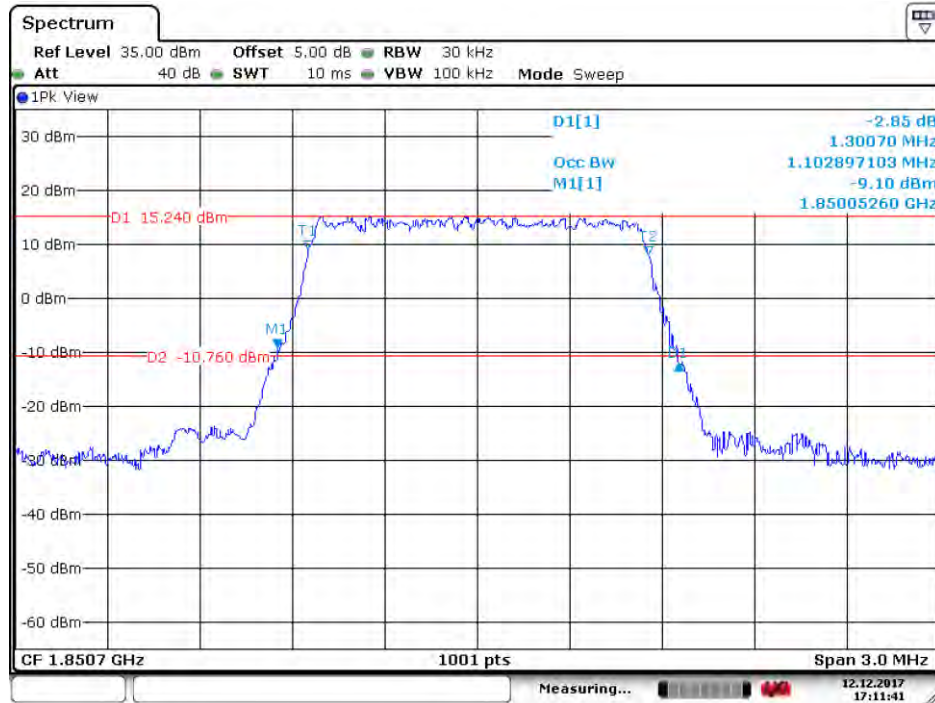


4.1 For LTE

4.1.1 Test Band = LTE band25

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

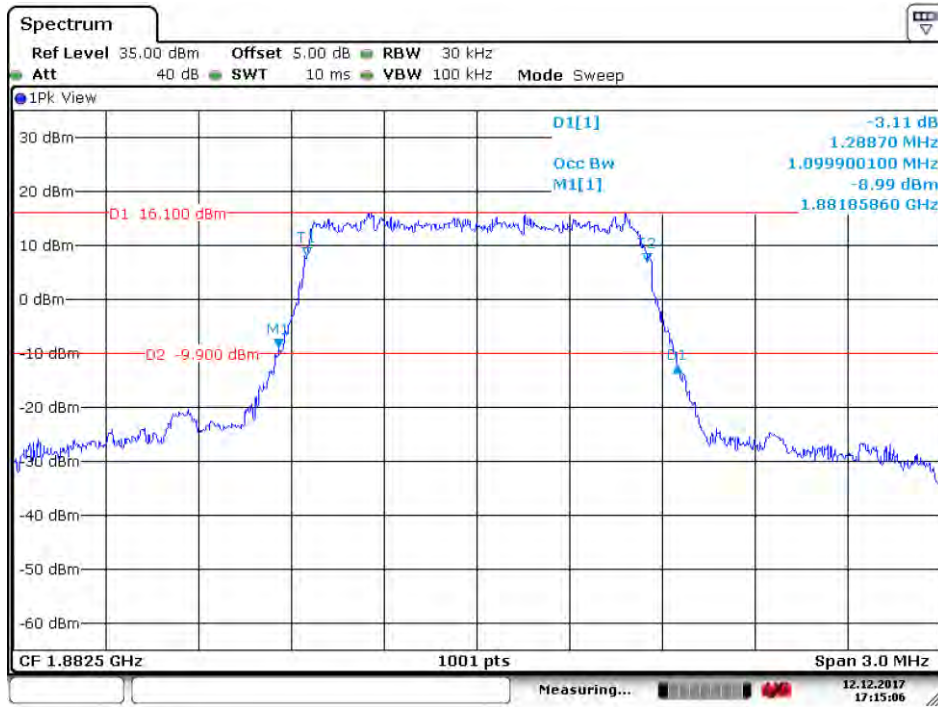
4.1.1.1.1 Test Channel = LCH



Date: 12.DEC.2017 17:11:41

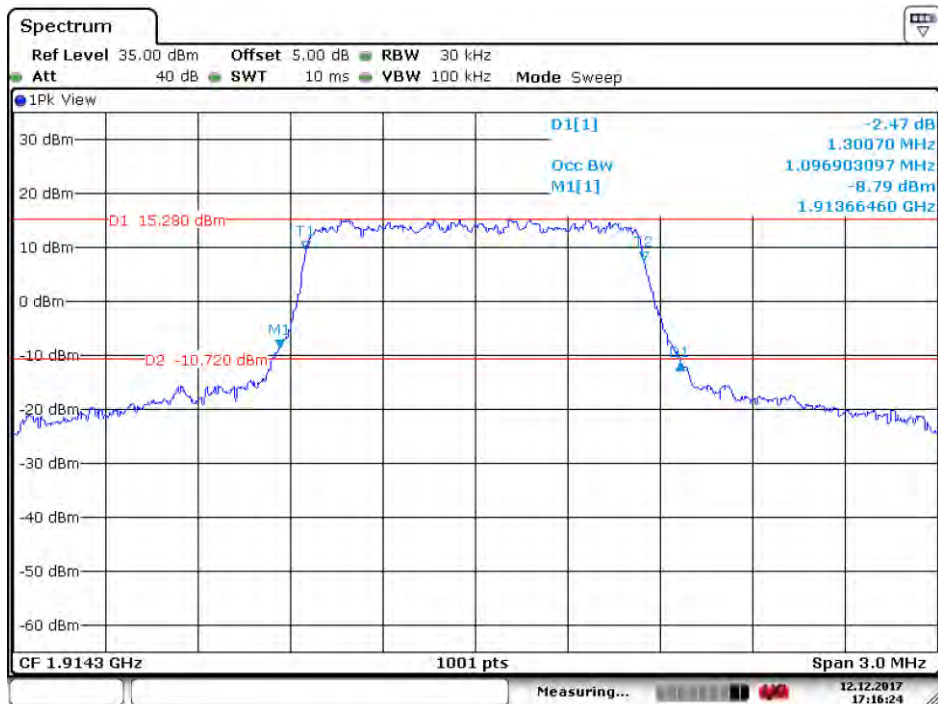


4.1.1.1.2 Test Channel = MCH



Date: 12.DEC.2017 17:15:06

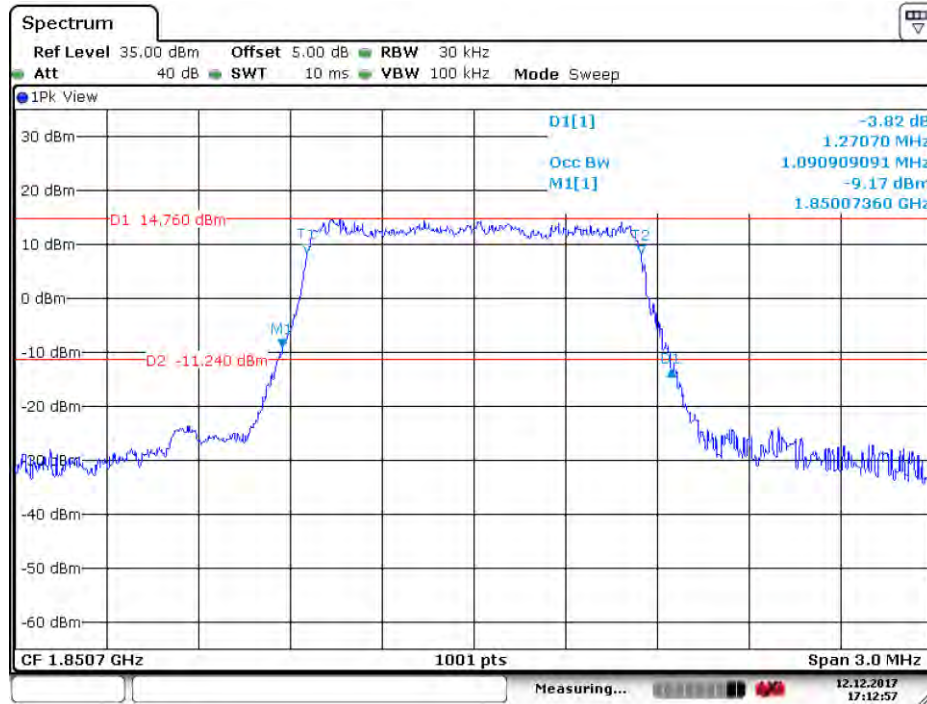
4.1.1.1.3 Test Channel = HCH



Date: 12.DEC.2017 17:16:24

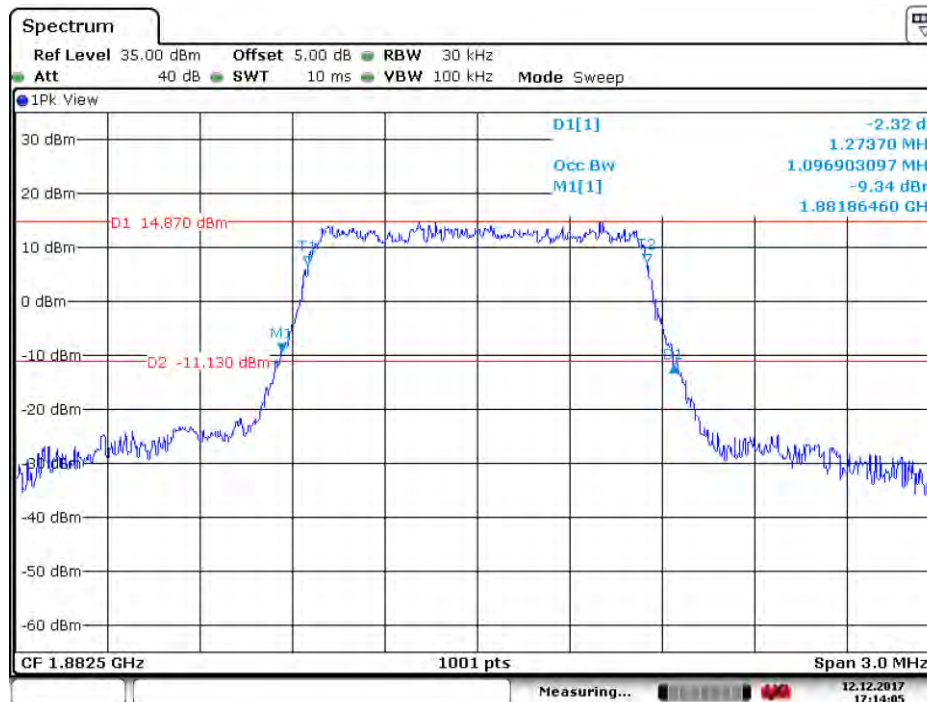
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



Date: 12.DEC.2017 17:12:58

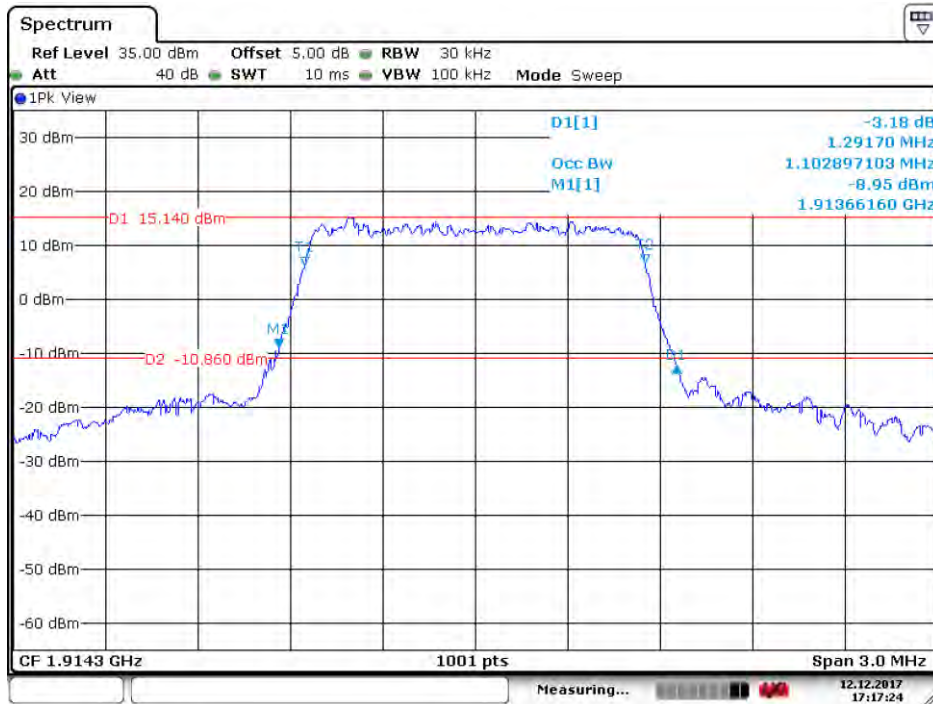
4.1.1.2.2 Test Channel = MCH



Date: 12.DEC.2017 17:14:06



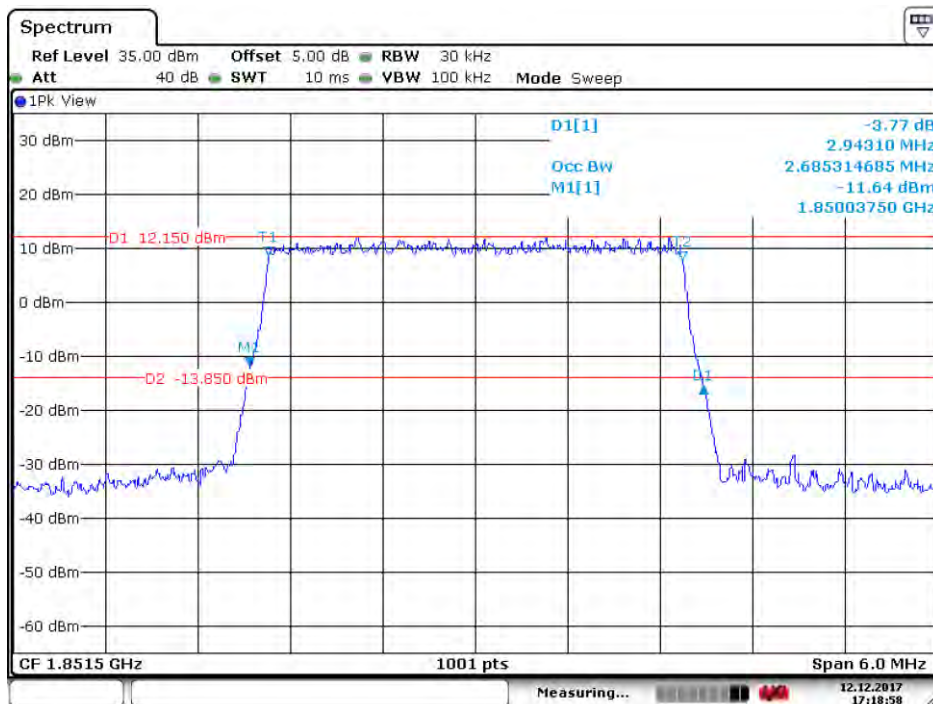
4.1.1.2.3 Test Channel = HCH



Date: 12.DEC.2017 17:17:23

4.1.1.3 Test Mode = LTE/TM1 3MHz

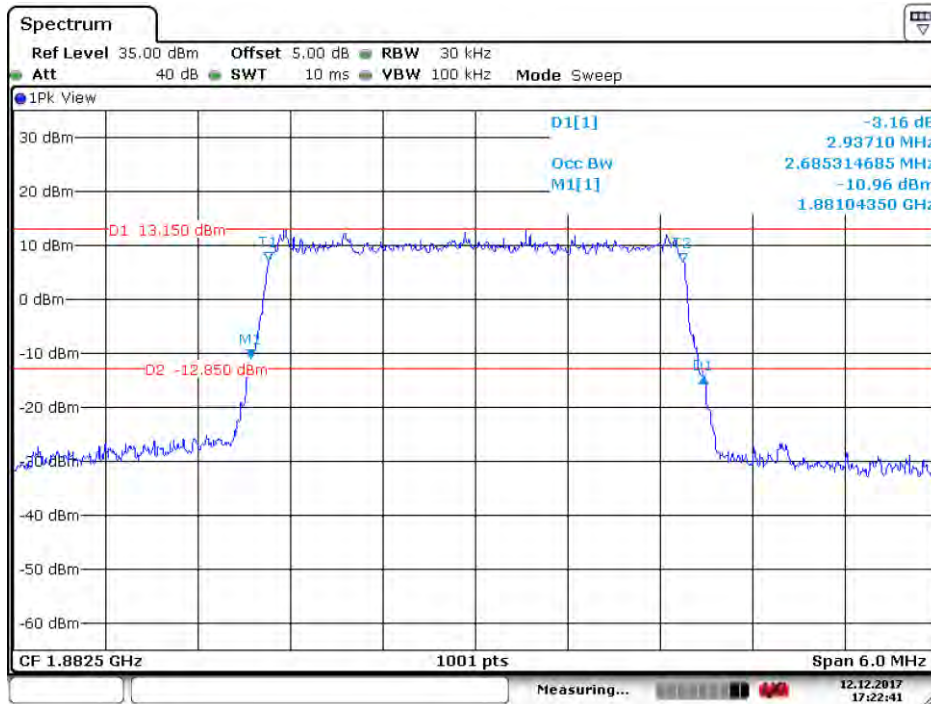
4.1.1.3.1 Test Channel = LCH



Date: 12.DEC.2017 17:18:58

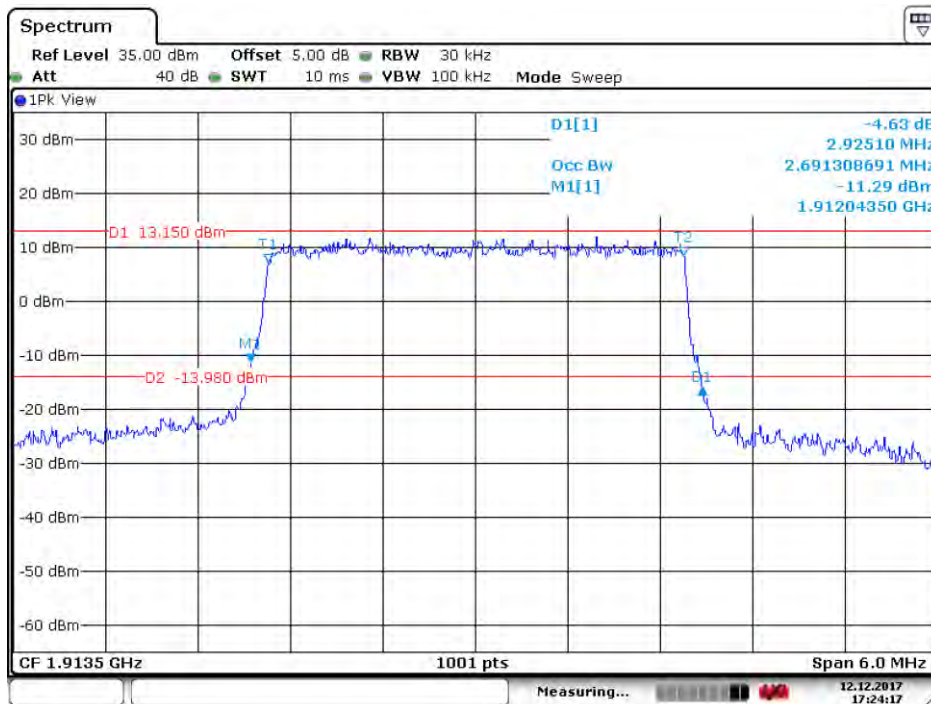


4.1.1.3.2 Test Channel = MCH



Date: 12.DEC.2017 17:22:42

4.1.1.3.3 Test Channel = HCH

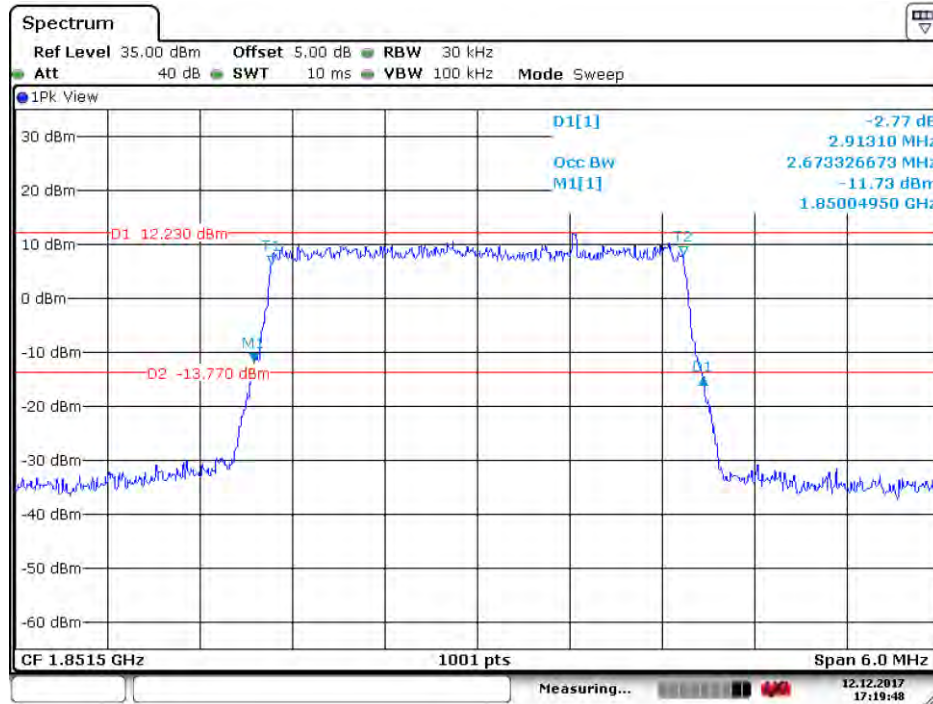


Date: 12.DEC.2017 17:24:17



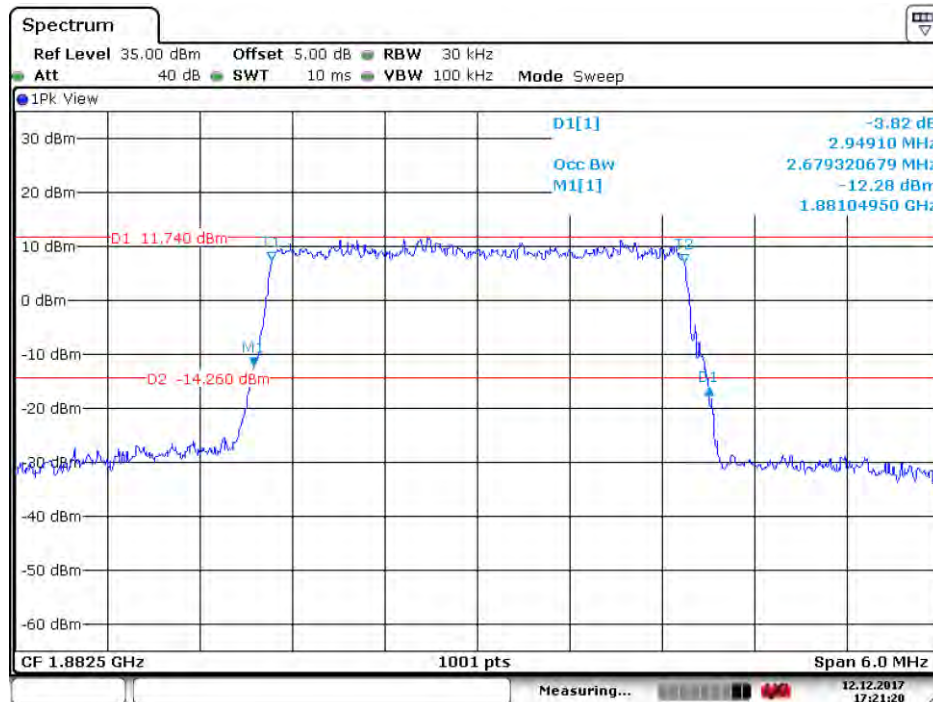
4.1.1.4 Test Mode = LTE/TM2 3MHz

4.1.1.4.1 Test Channel = LCH



Date: 12.DEC.2017 17:19:48

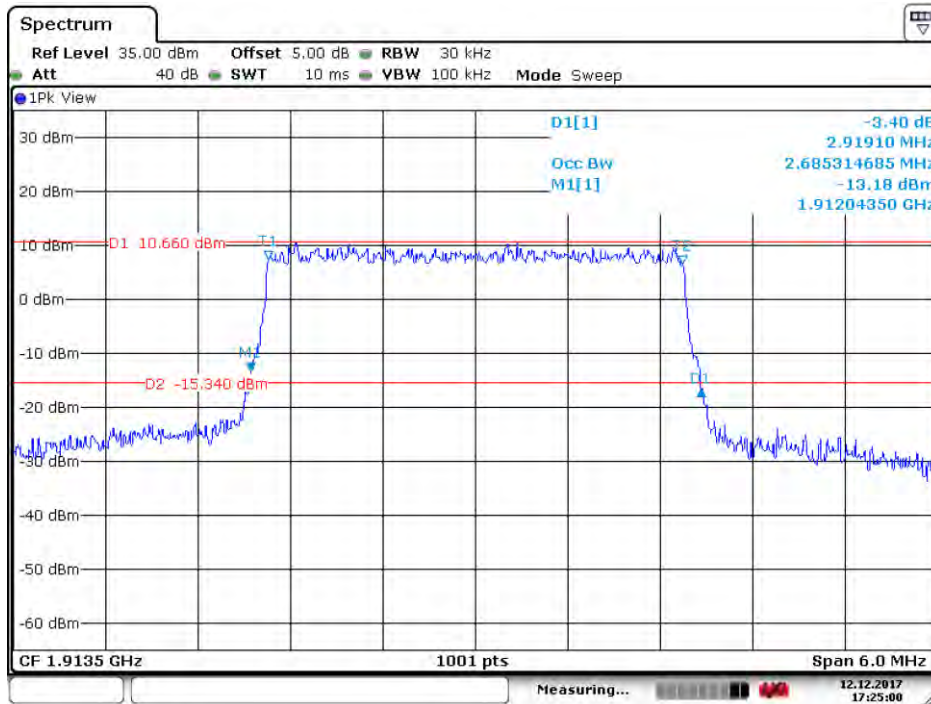
4.1.1.4.2 Test Channel = MCH



Date: 12.DEC.2017 17:21:20



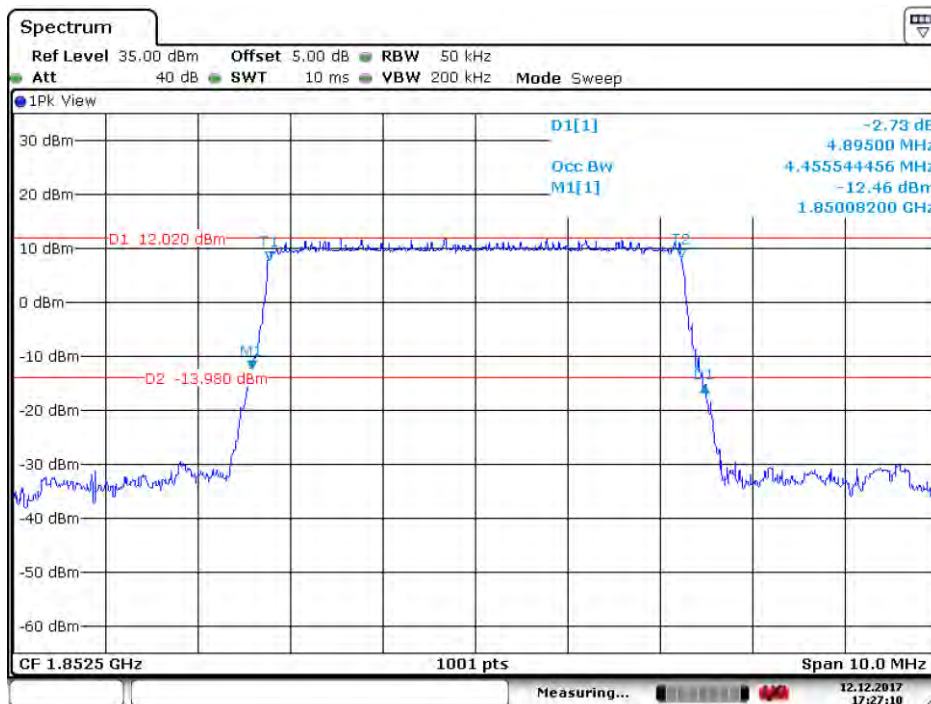
4.1.1.4.3 Test Channel = HCH



Date: 12.DEC.2017 17:25:00

4.1.1.5 Test Mode = LTE/TM1 5MHz

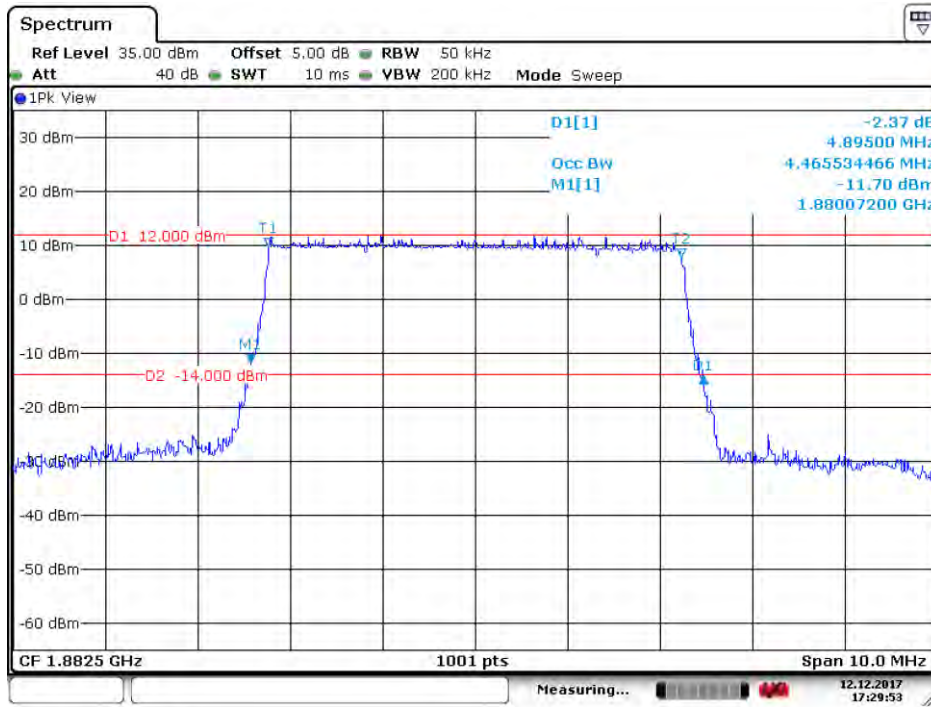
4.1.1.5.1 Test Channel = LCH



Date: 12.DEC.2017 17:27:10

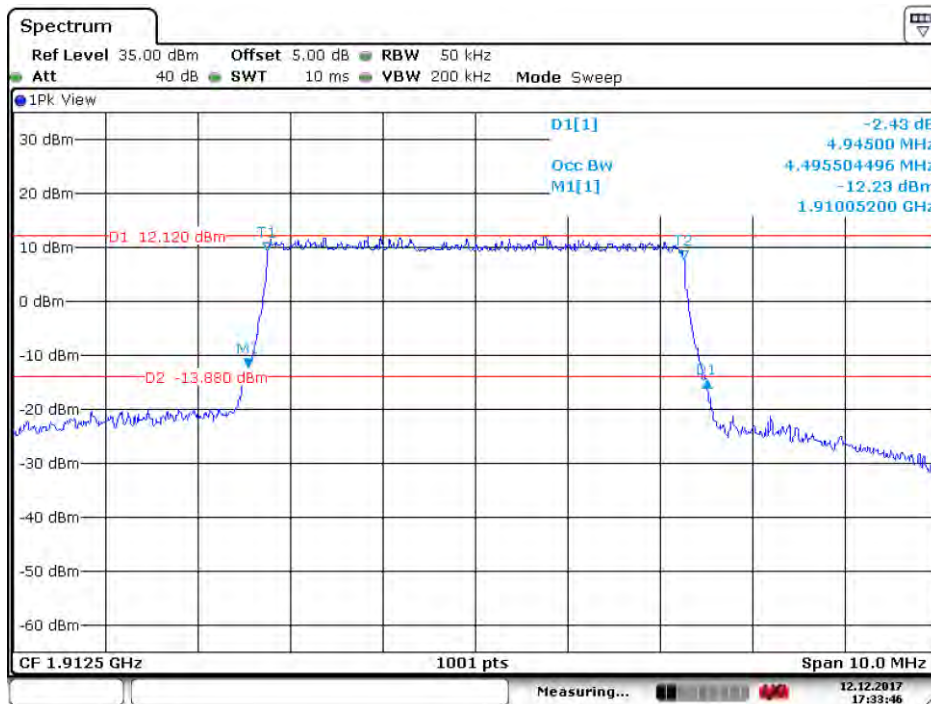


4.1.1.5.2 Test Channel = MCH



Date: 12.DEC.2017 17:29:53

4.1.1.5.3 Test Channel = HCH

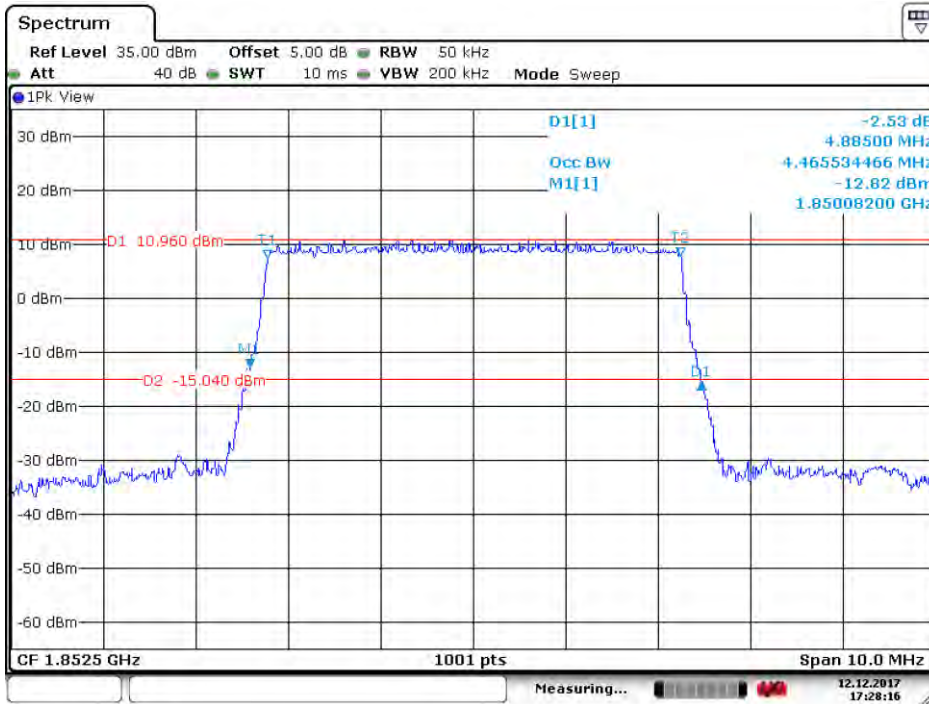


Date: 12.DEC.2017 17:33:45



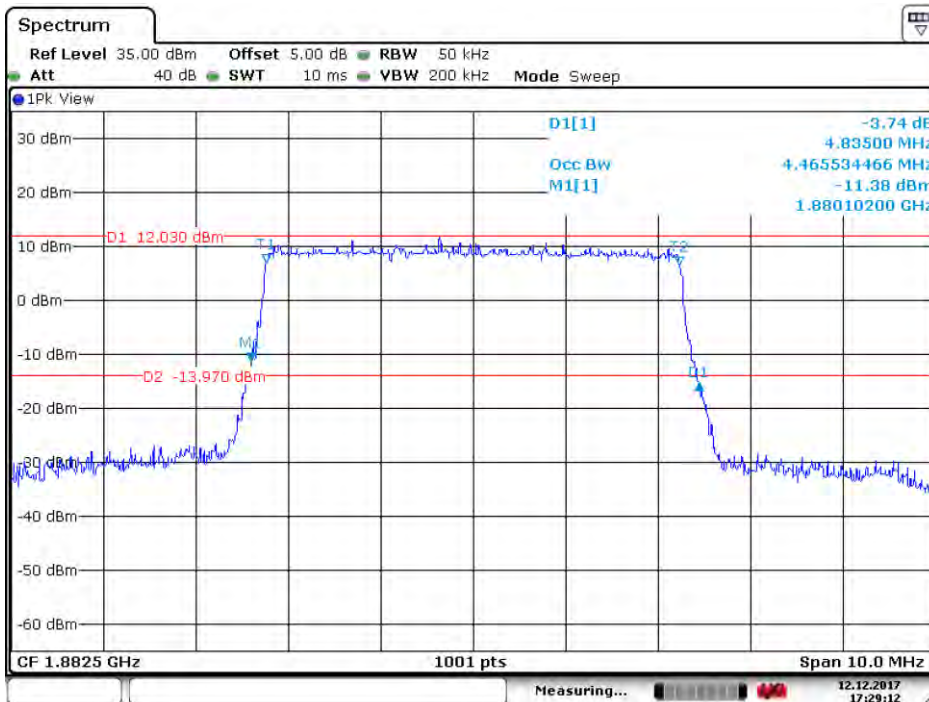
4.1.1.6 Test Mode = LTE/TM2 5MHz

4.1.1.6.1 Test Channel = LCH



Date: 12.DEC.2017 17:28:15

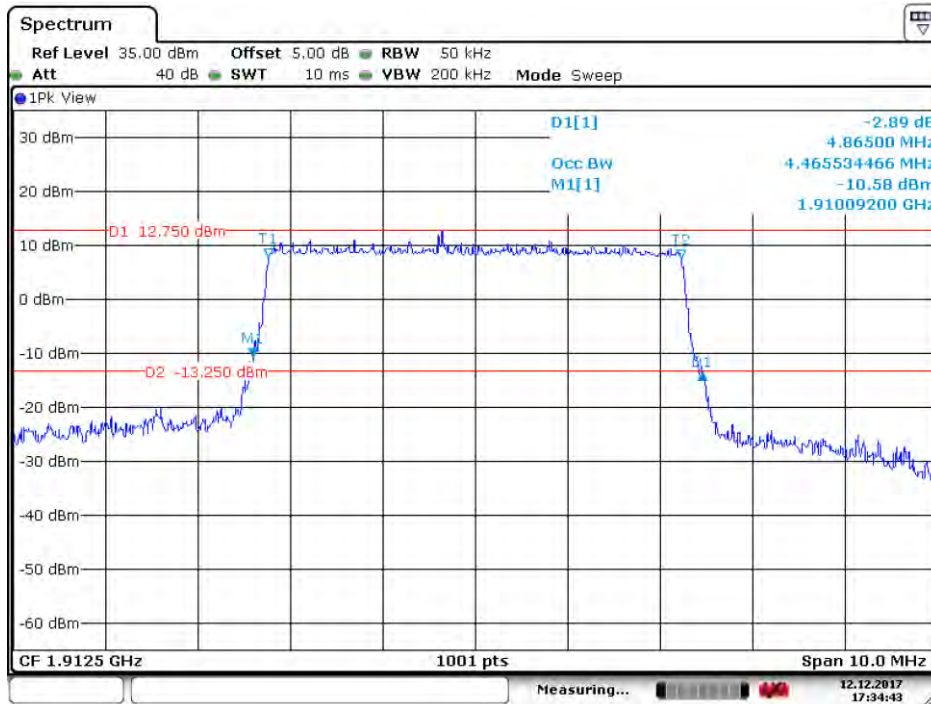
4.1.1.6.2 Test Channel = MCH



Date: 12.DEC.2017 17:29:13



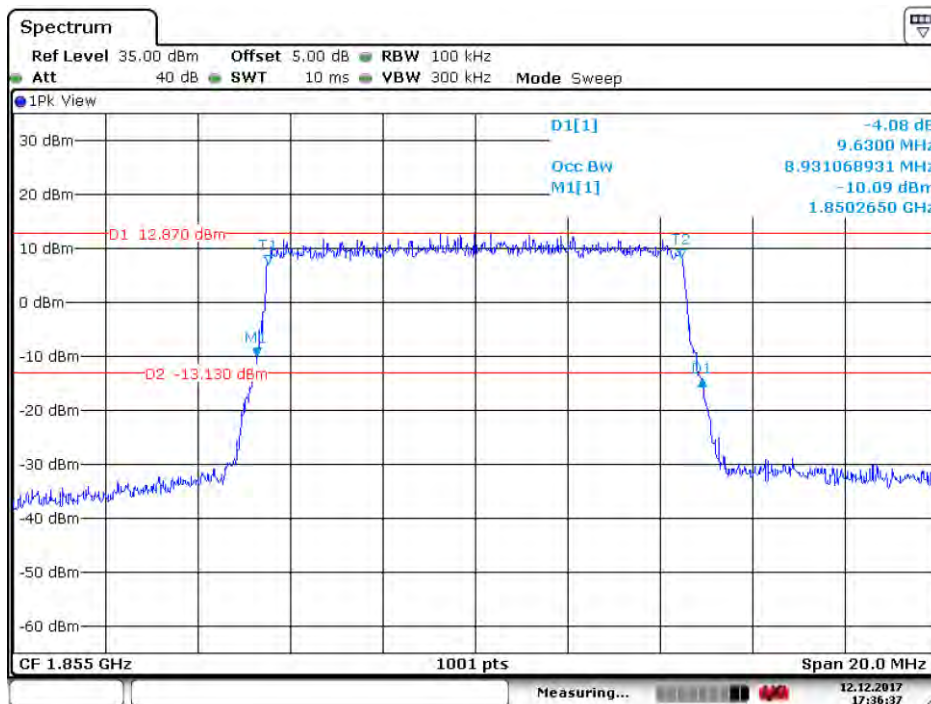
4.1.1.6.3 Test Channel = HCH



Date: 12.DEC.2017 17:34:44

4.1.1.7 Test Mode = LTE/TM1 10MHz

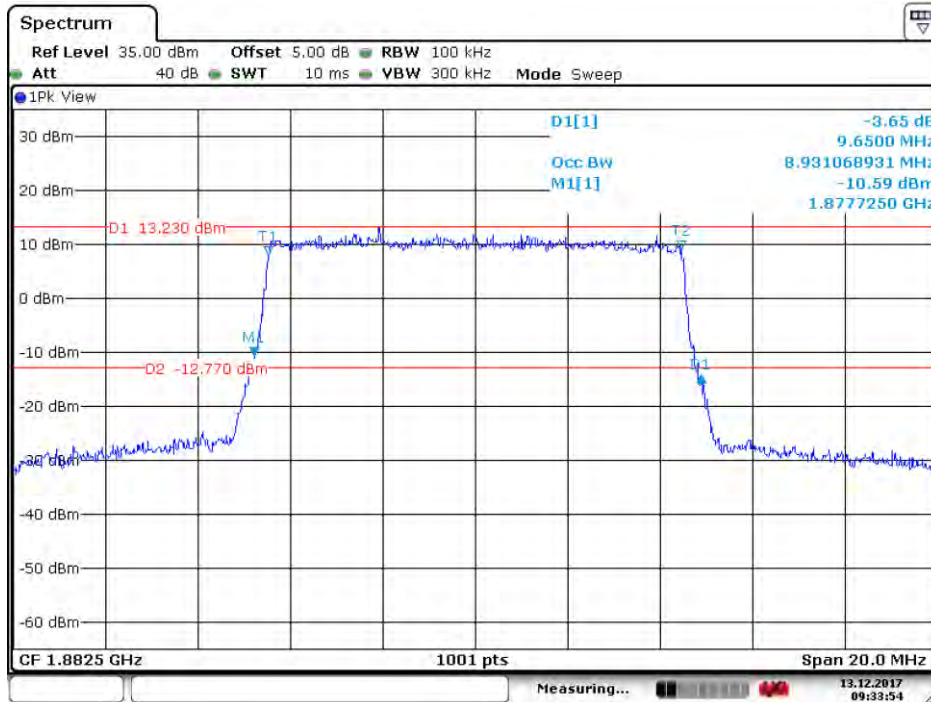
4.1.1.7.1 Test Channel = LCH



Date: 12.DEC.2017 17:36:38

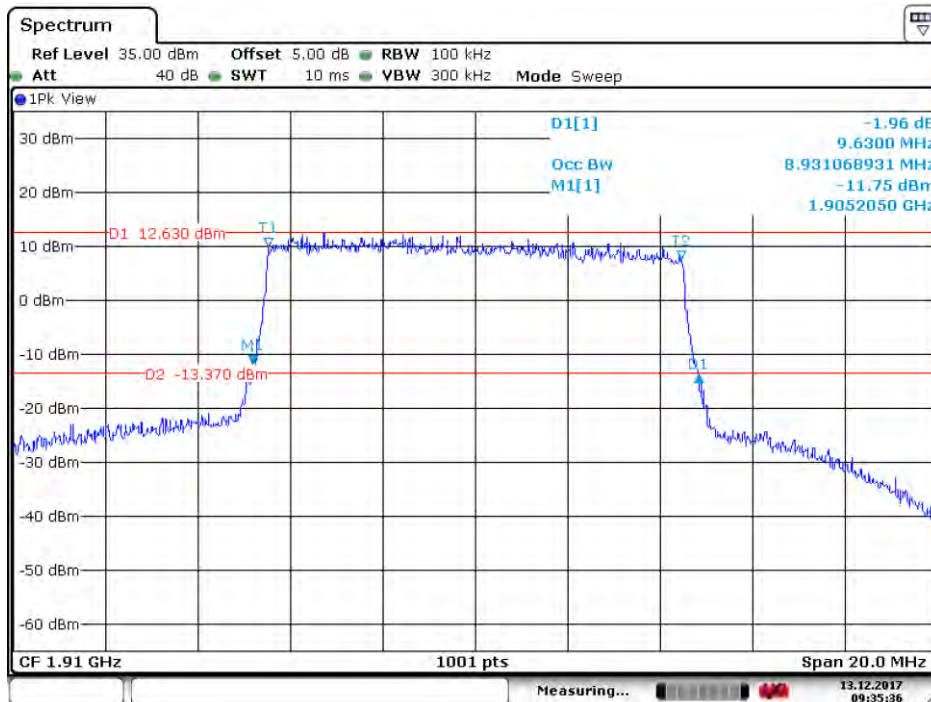


4.1.1.7.2 Test Channel = MCH



Date: 13.DEC.2017 09:33:55

4.1.1.7.3 Test Channel = HCH

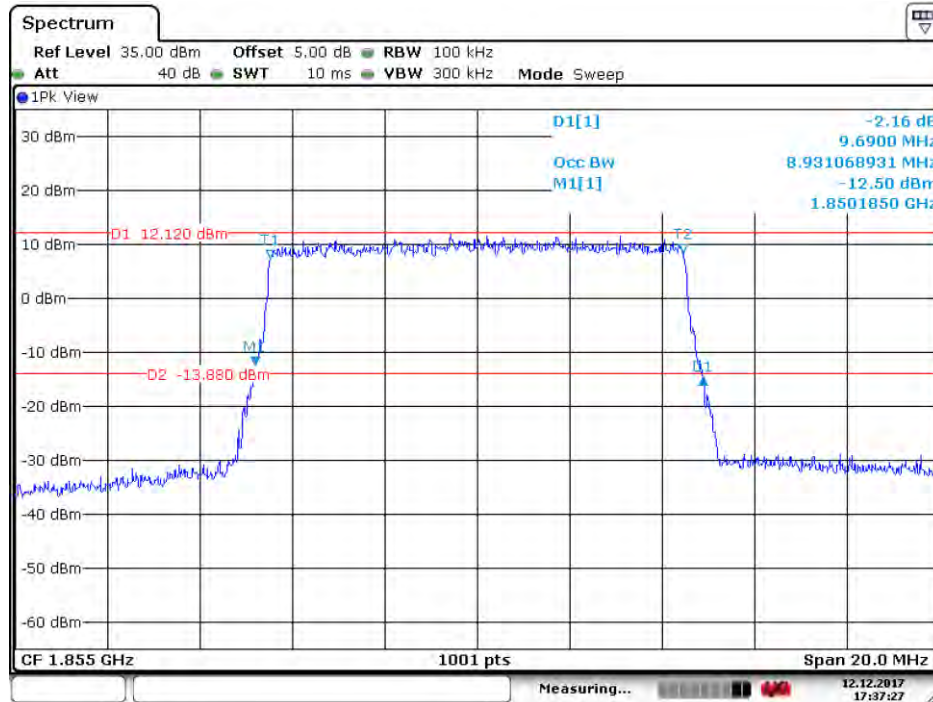


Date: 13.DEC.2017 09:35:37

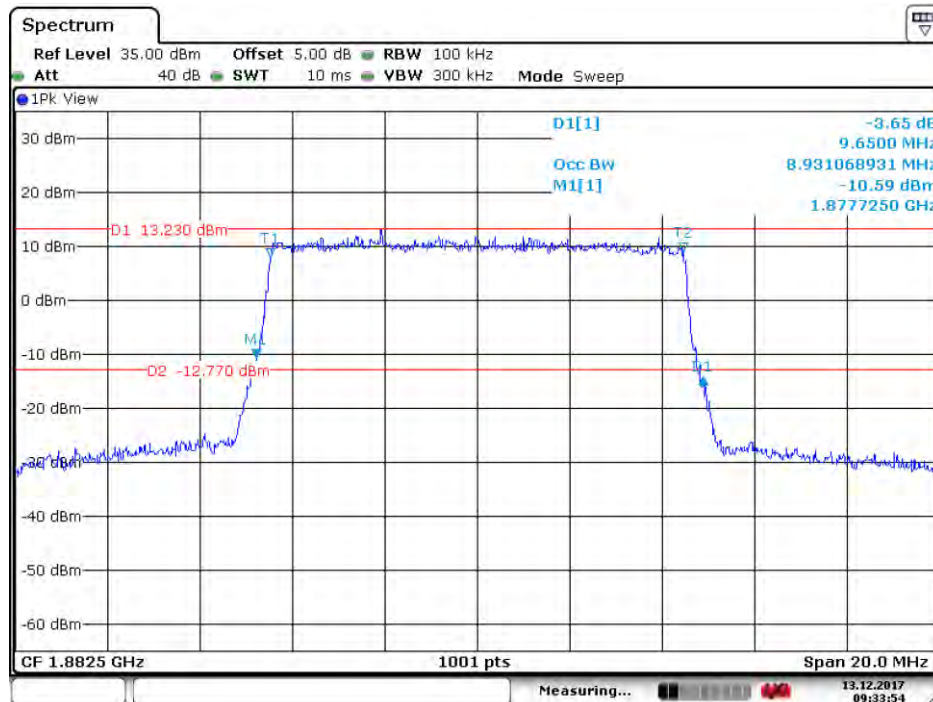


4.1.1.8 Test Mode = LTE/TM2 10MHz

4.1.1.8.1 Test Channel = LCH



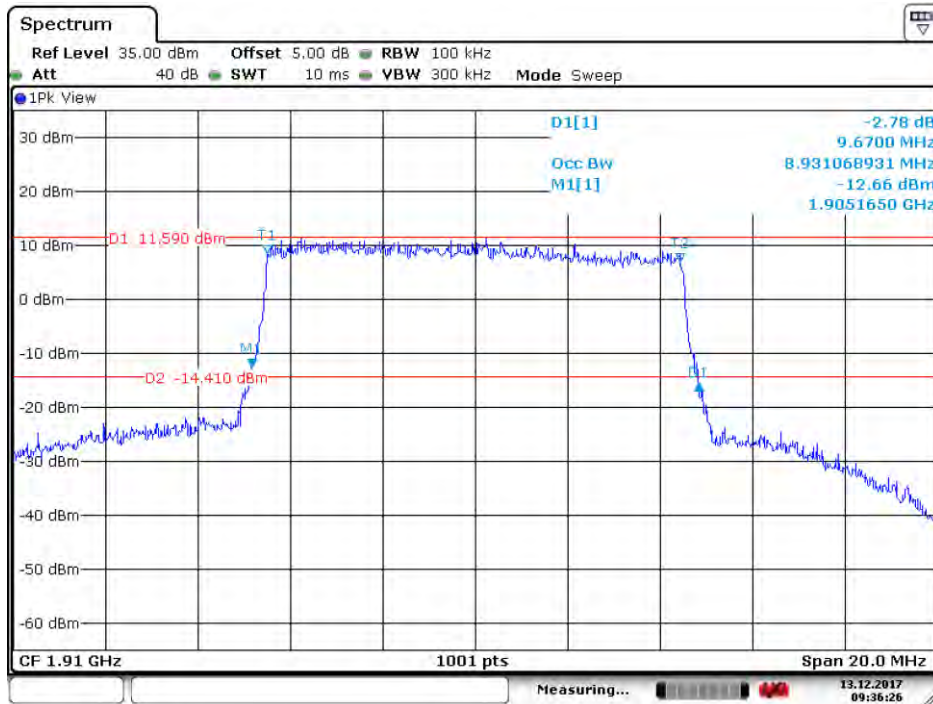
4.1.1.8.2 Test Channel = MCH



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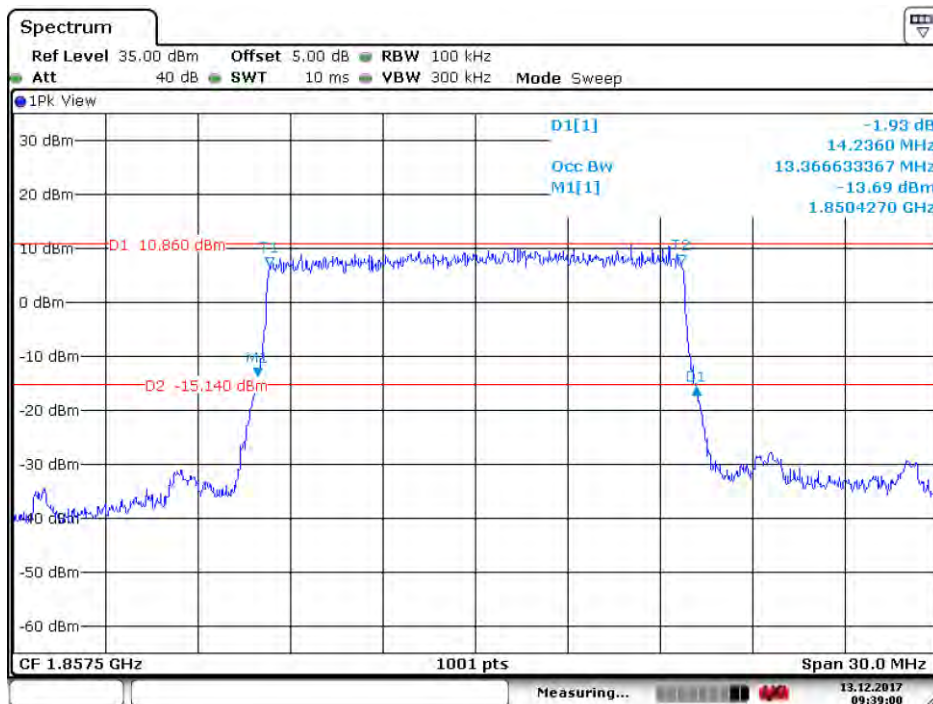
4.1.1.8.3 Test Channel = HCH



Date: 13.DEC.2017 09:36:26

4.1.1.9 Test Mode = LTE/TM1 15MHz

4.1.1.9.1 Test Channel = LCH

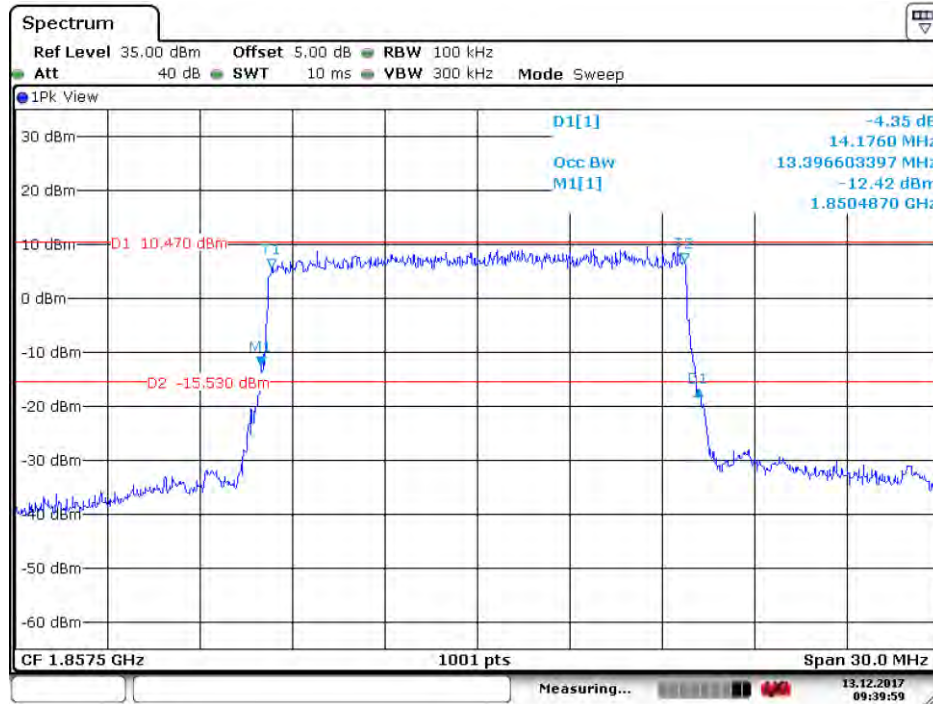


Date: 13.DEC.2017 09:39:00



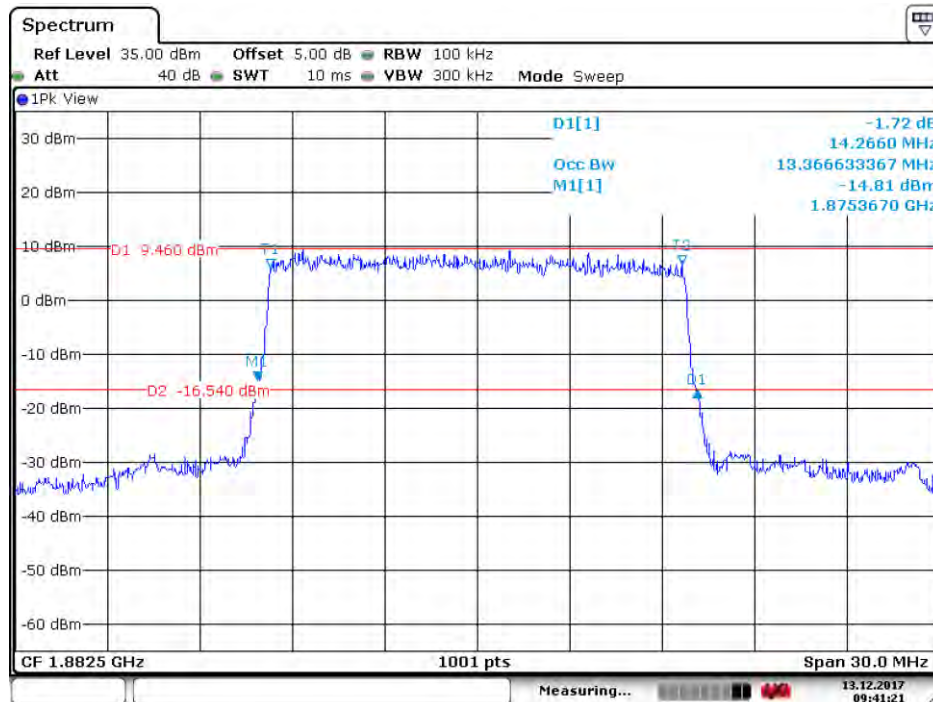
4.1.1.10 Test Mode = LTE/TM2 15MHz

4.1.1.10.1 Test Channel = LCH



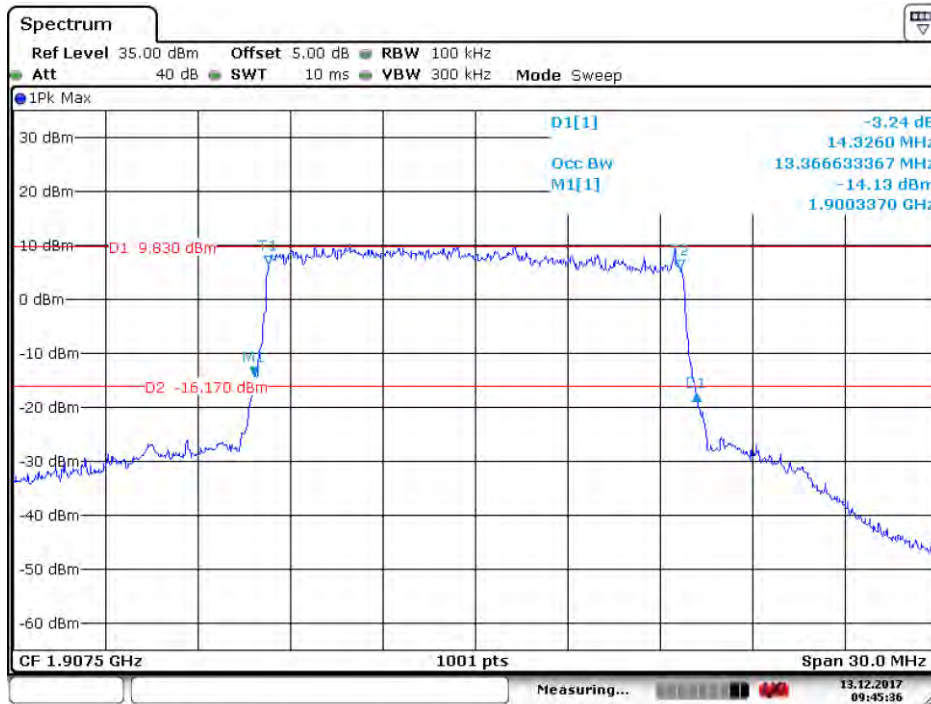
Date: 13.DEC.2017 09:39:59

4.1.1.10.2 Test Channel = MCH



Date: 13.DEC.2017 09:41:21

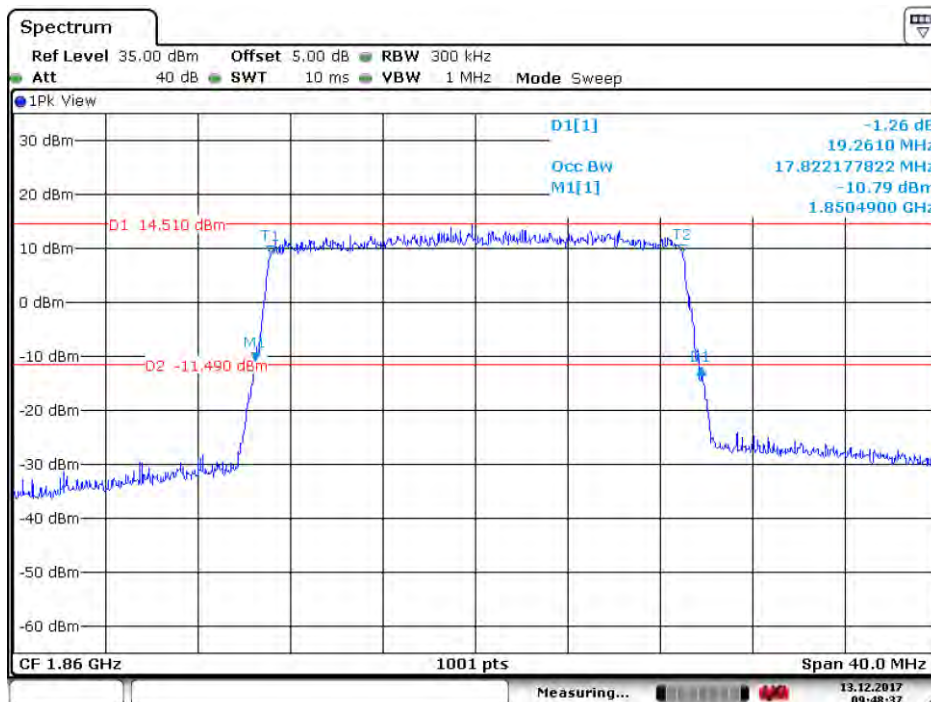
4.1.1.10.3 Test Channel = HCH



Date: 13.DEC.2017 09:45:37

4.1.1.11 Test Mode = LTE/TM1 20MHz

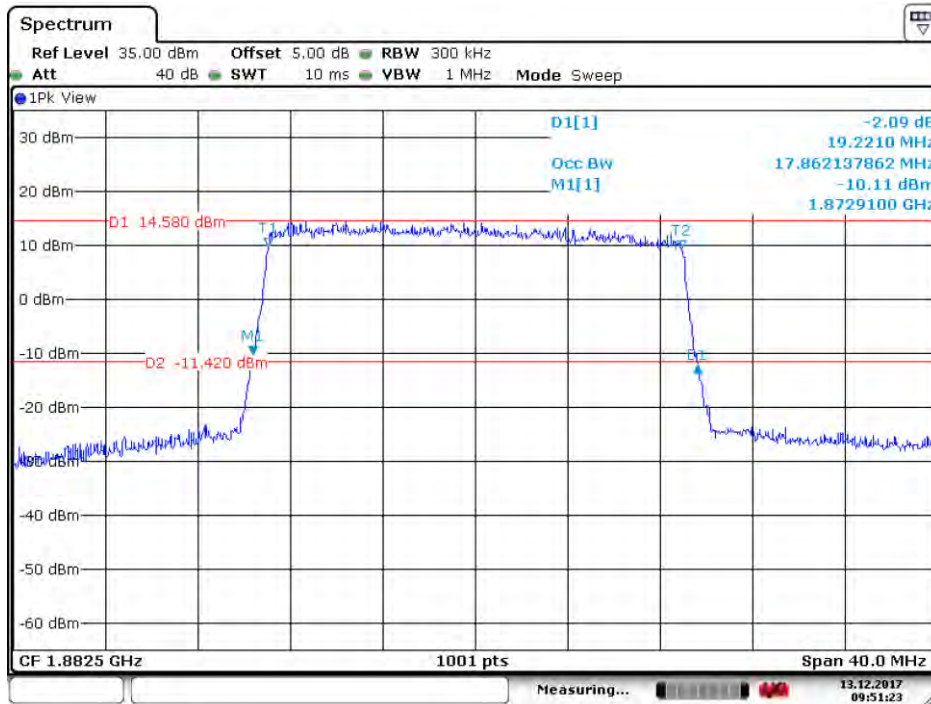
4.1.1.11.1 Test Channel = LCH



Date: 13.DEC.2017 09:48:37

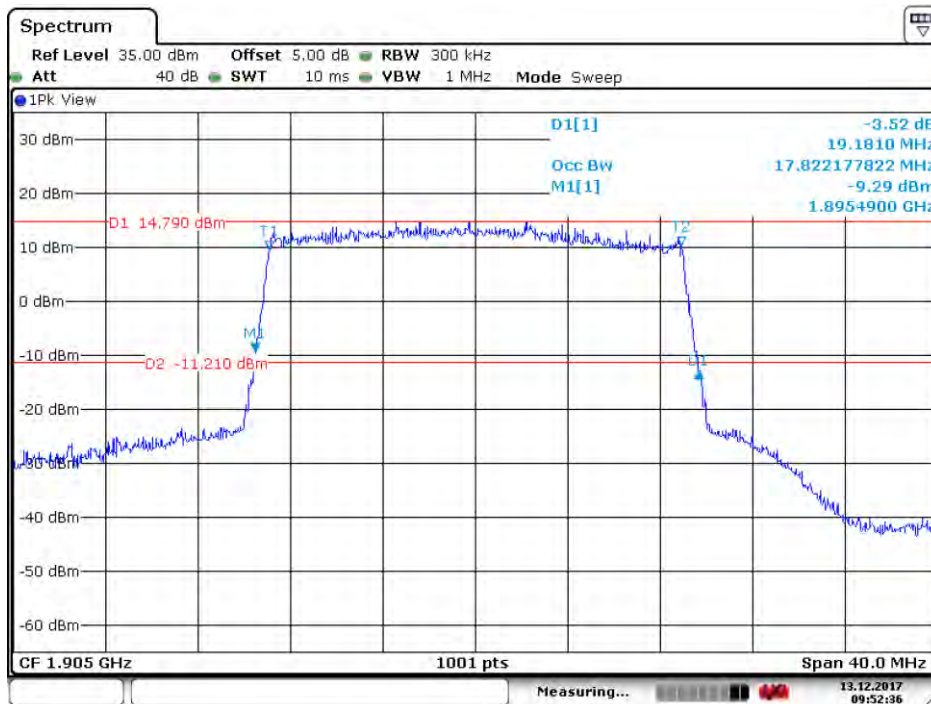


4.1.1.11.2 Test Channel = MCH



Date: 13.DEC.2017 09:51:23

4.1.1.11.3 Test Channel = HCH

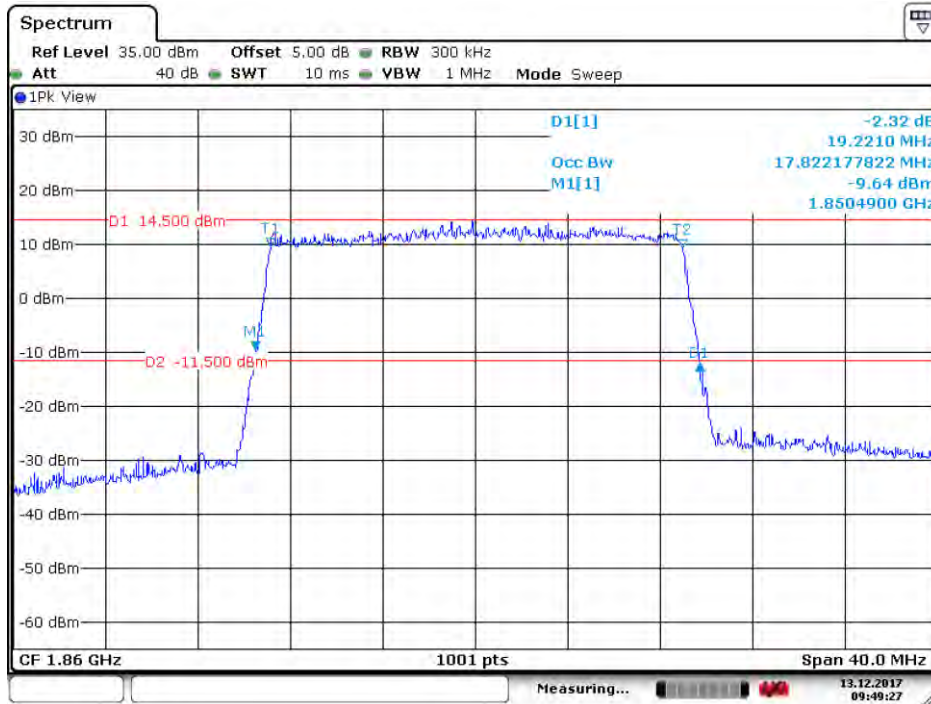


Date: 13.DEC.2017 09:52:36



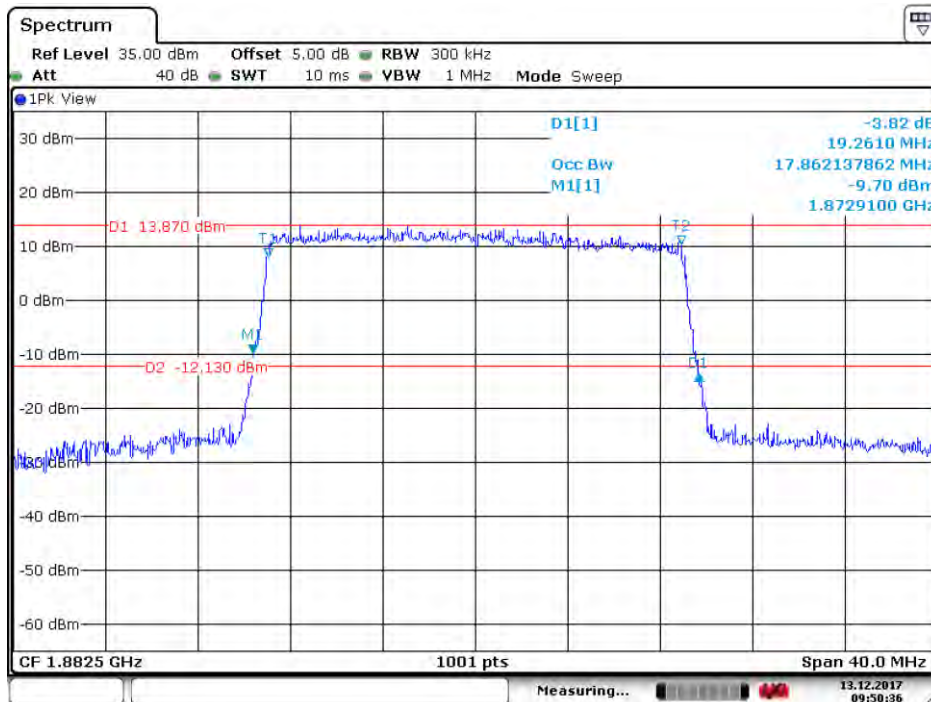
4.1.1.12 Test Mode = LTE/TM2 20MHz

4.1.1.12.1 Test Channel = LCH



Date: 13.DEC.2017 09:49:28

4.1.1.12.2 Test Channel = MCH



Date: 13.DEC.2017 09:50:37



5 Band Edges Compliance

Part I –

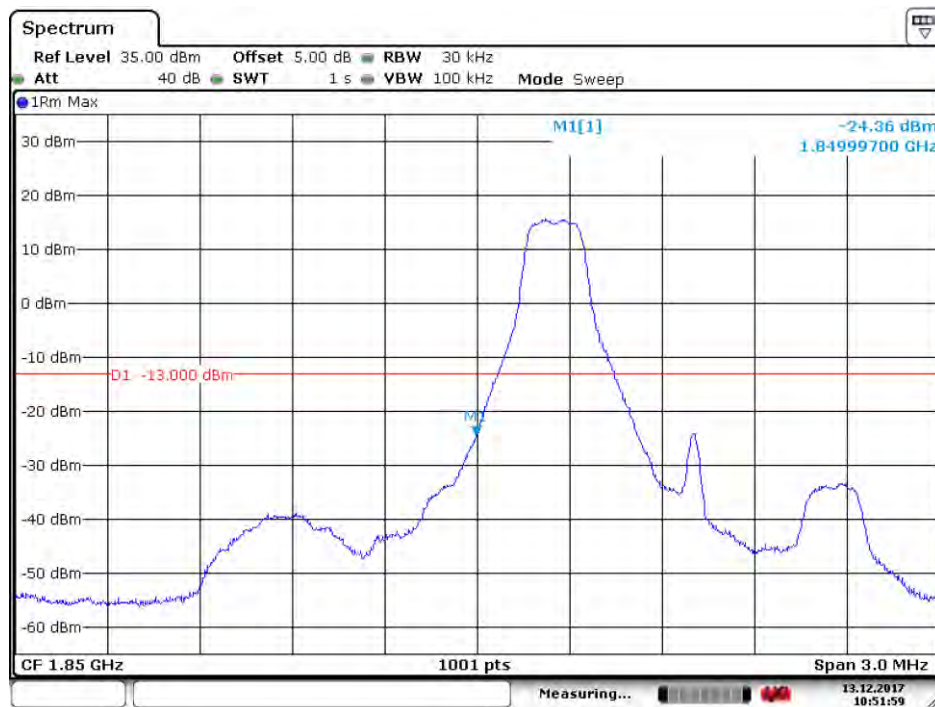
5.1 For LTE

5.1.1 Test Band = LTE band25

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

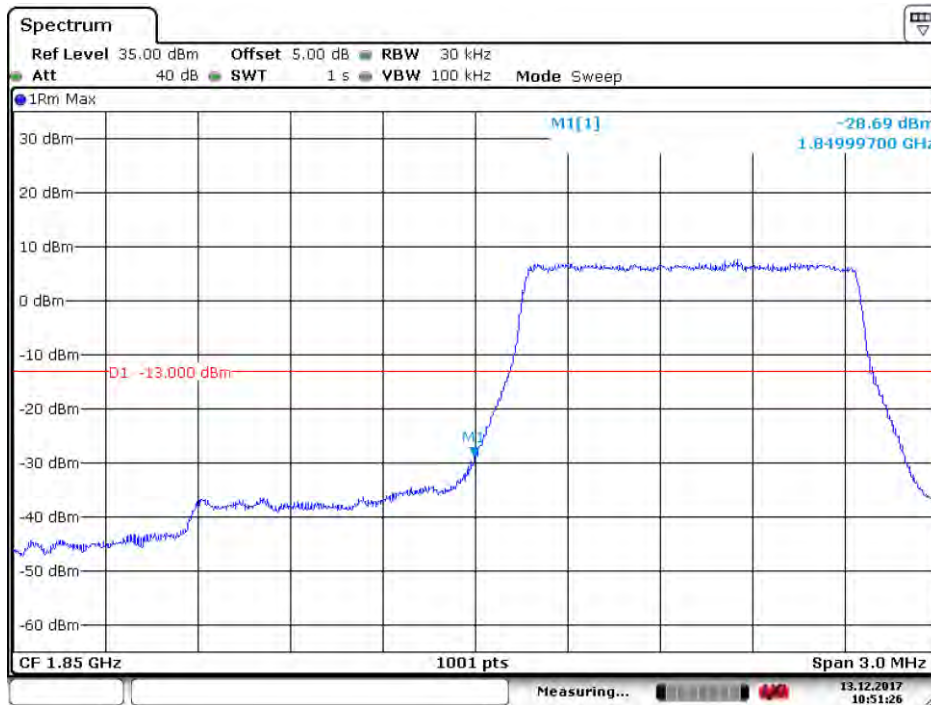
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 13.DEC.2017 10:51:59

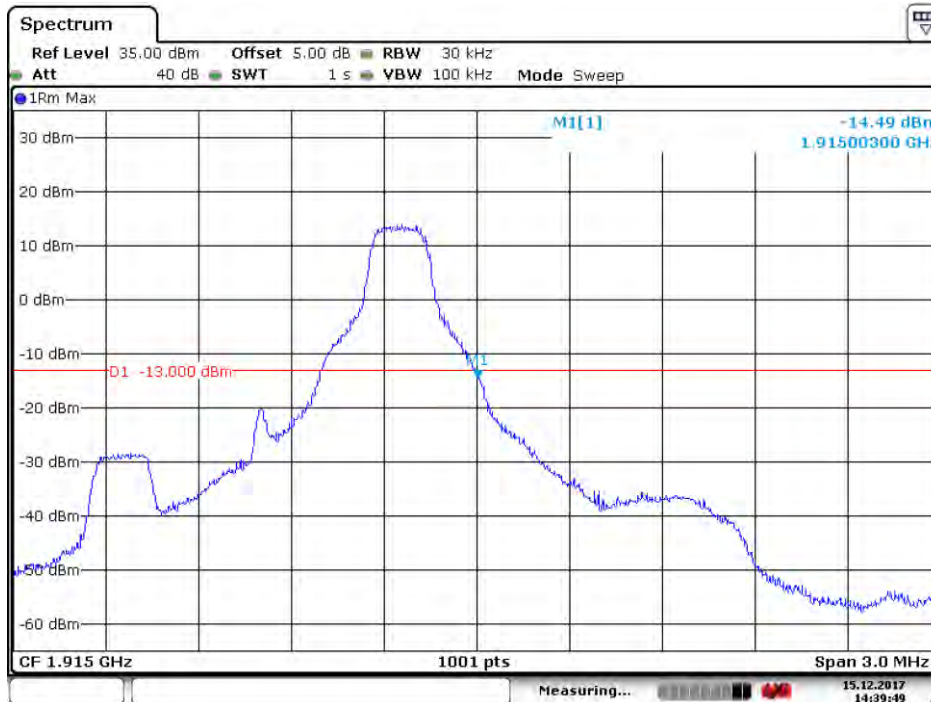
5.1.1.1.2 Test RB=6RB



Date: 13.DEC.2017 10:51:26

5.1.1.1.2 Test Channel = HCH

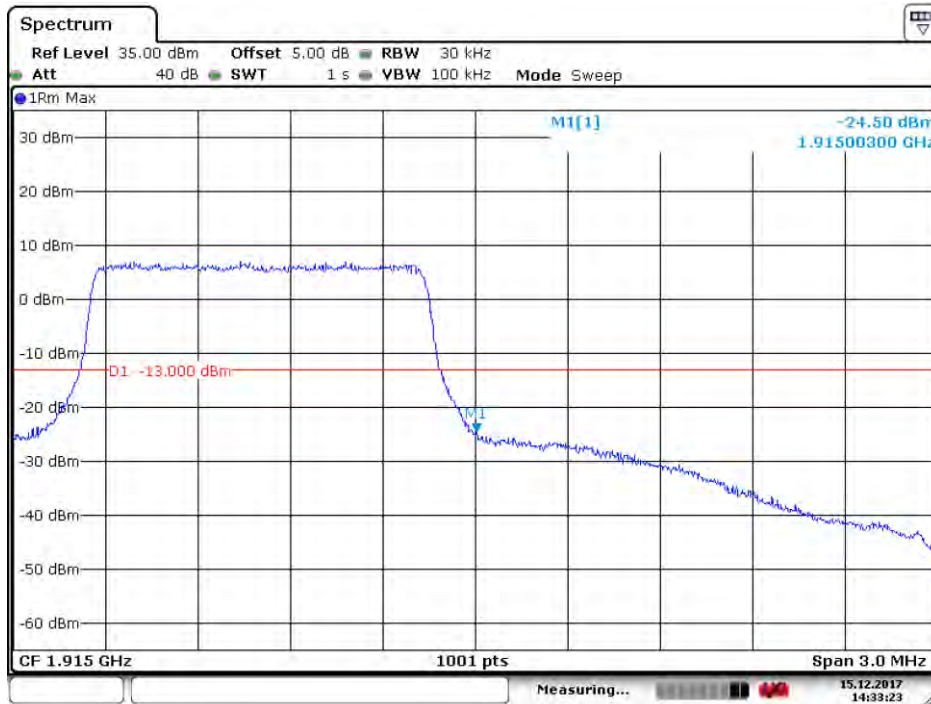
5.1.1.1.2.1 Test RB=1RB



Date: 15.DEC.2017 14:39:49



5.1.1.1.2.2 Test RB=6RB

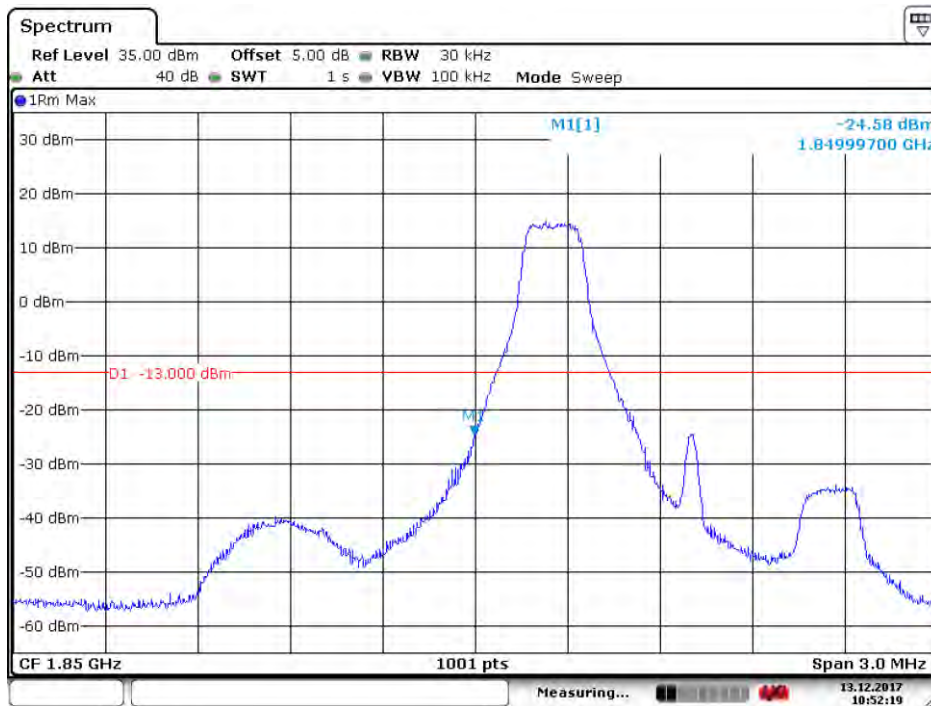


Date: 15.DEC.2017 14:33:23

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

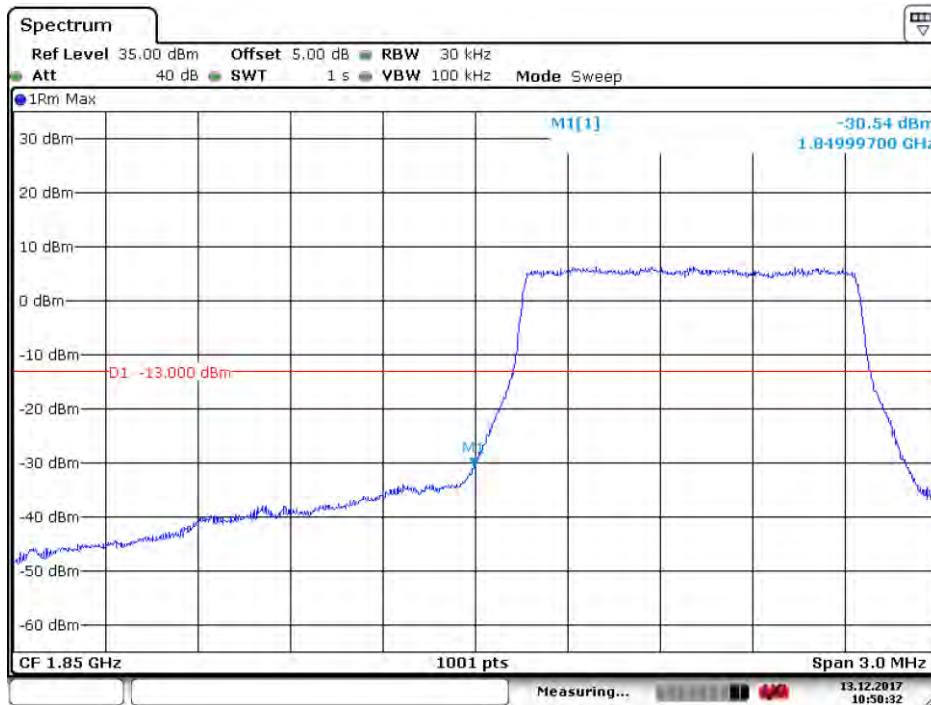
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 13.DEC.2017 10:52:20

5.1.1.2.1.2 Test RB=6RB



Date: 13.DEC.2017 10:50:33

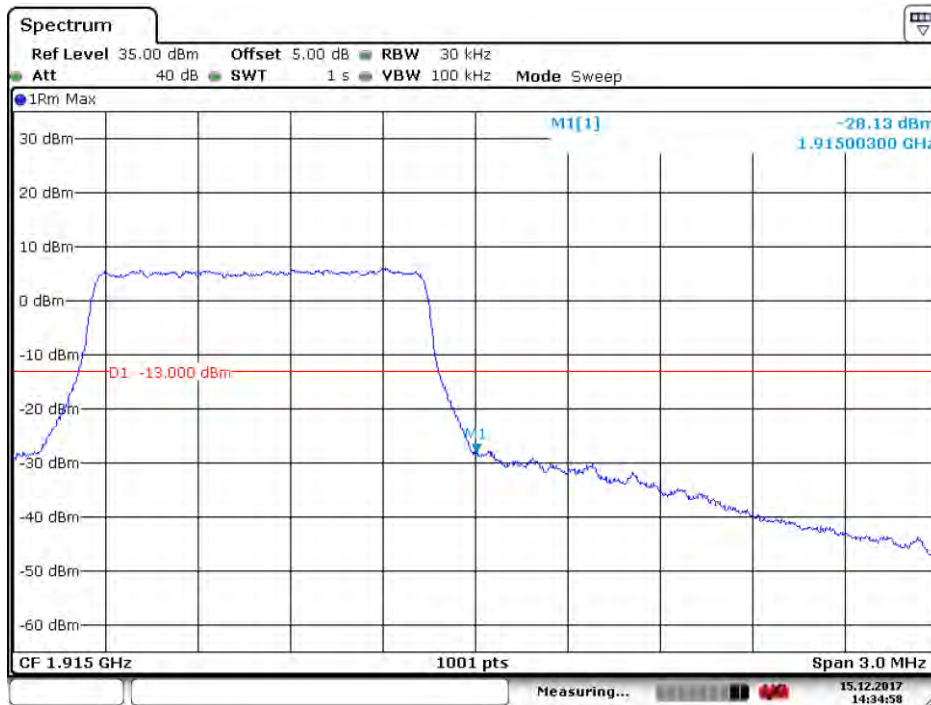
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 15.DEC.2017 14:39:11

5.1.1.2.2 Test RB=6RB

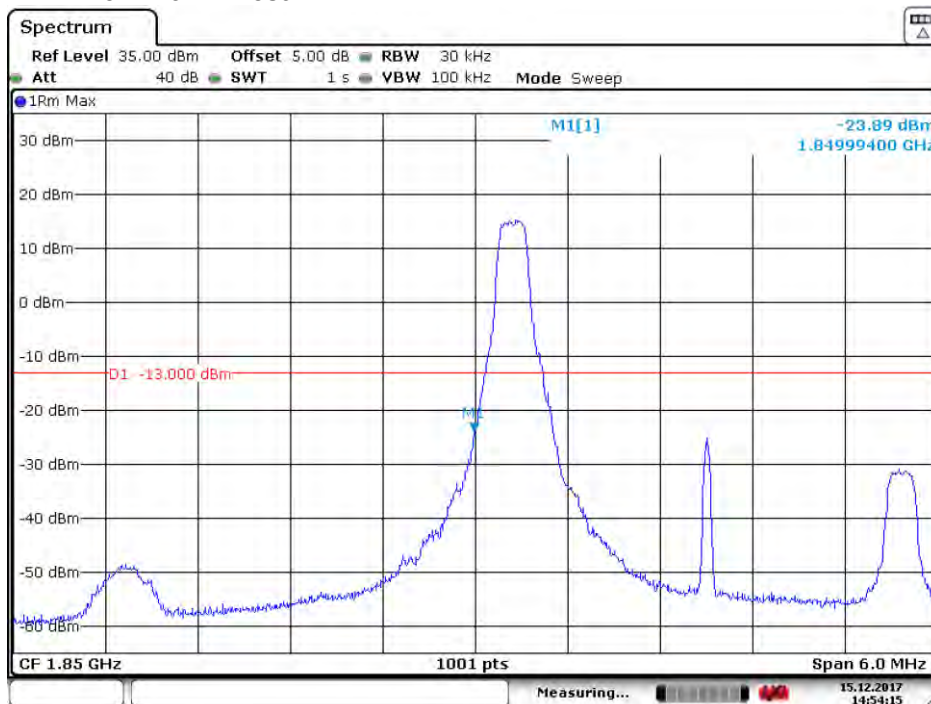


Date: 15.DEC.2017 14:34:58

5.1.1.3 Test Mode = LTE/TM1 3MHz

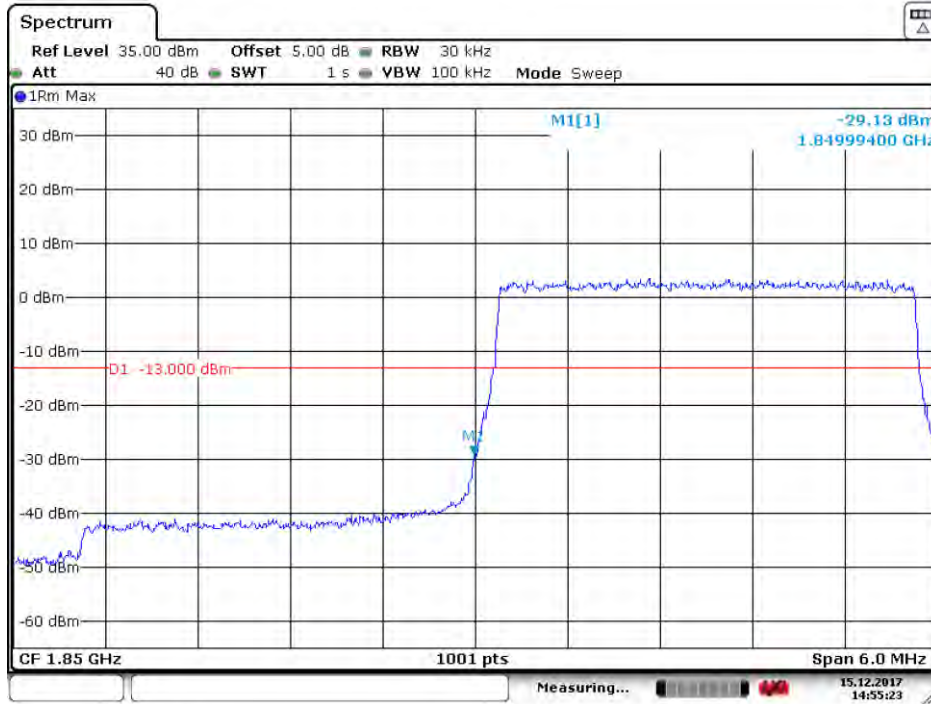
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 15.DEC.2017 14:54:15

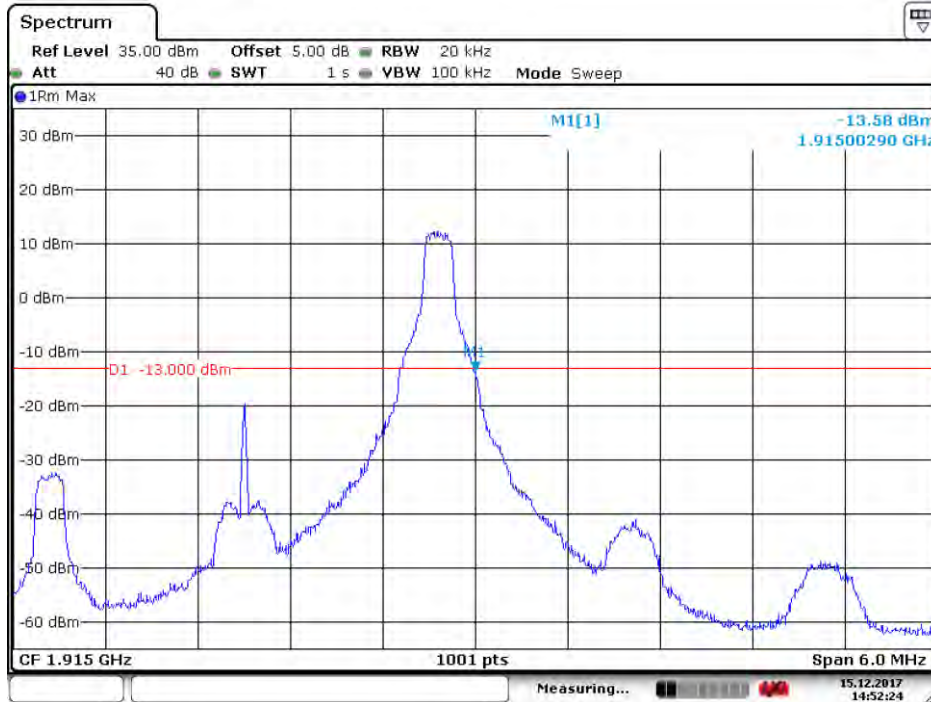
5.1.1.3.1.2 Test RB=15RB



Date: 15.DEC.2017 14:55:23

5.1.1.3.2 Test Channel = HCH

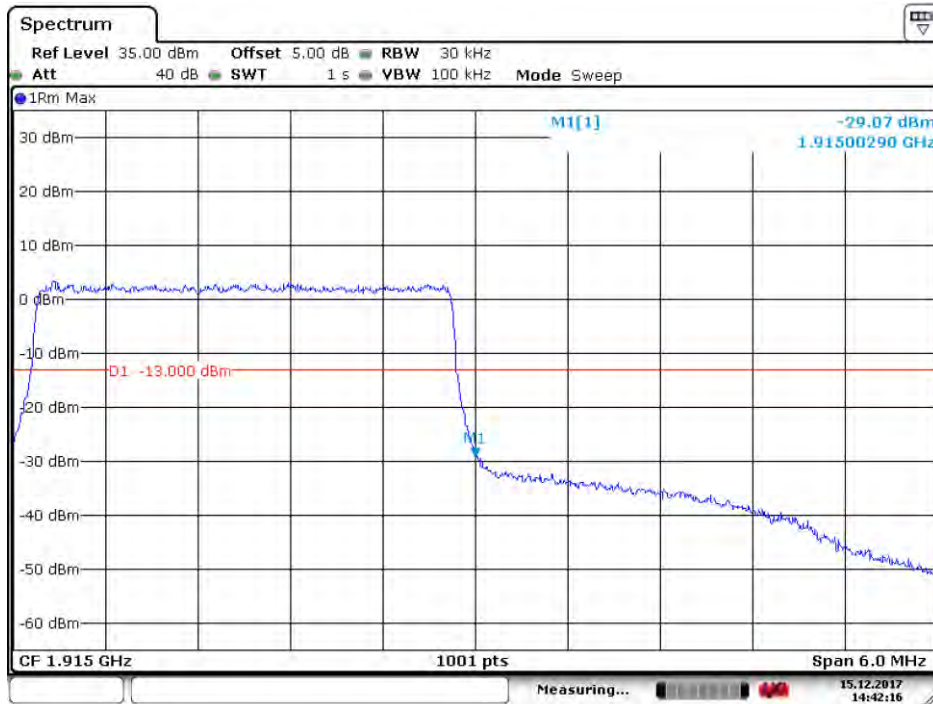
5.1.1.3.2.1 Test RB=1RB



Date: 15.DEC.2017 14:52:25



5.1.1.3.2.2 Test RB=15RB

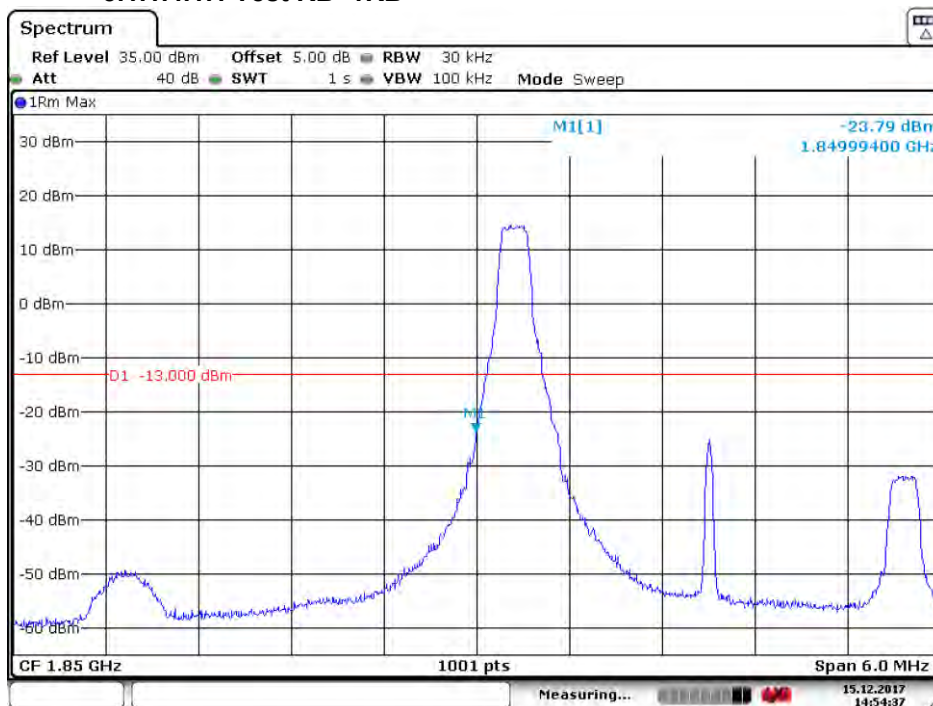


Date: 15.DEC.2017 14:42:17

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

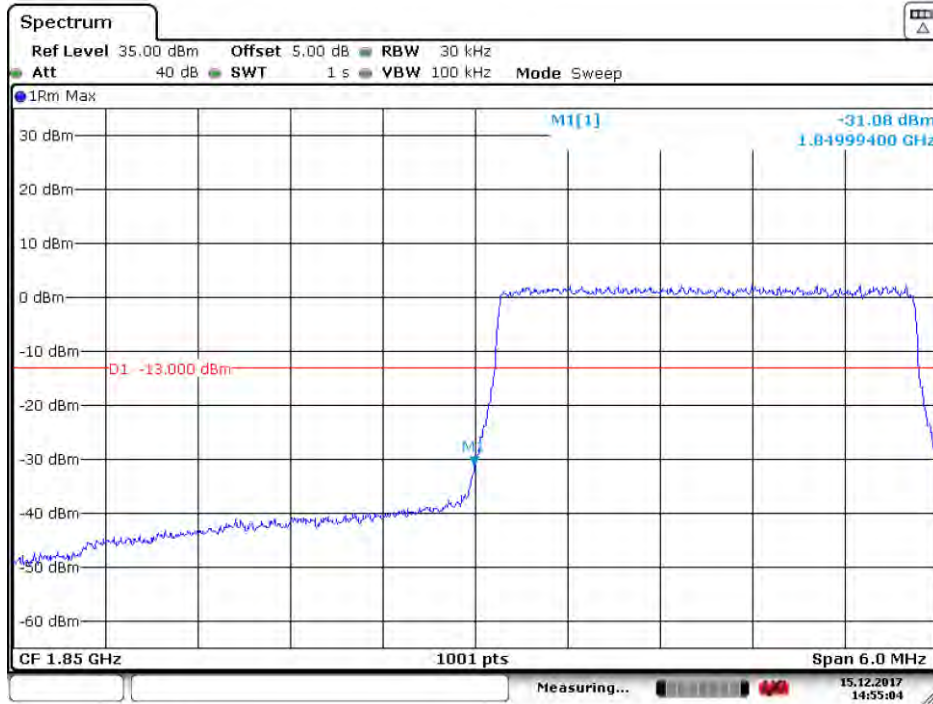


Date: 15.DEC.2017 14:54:38

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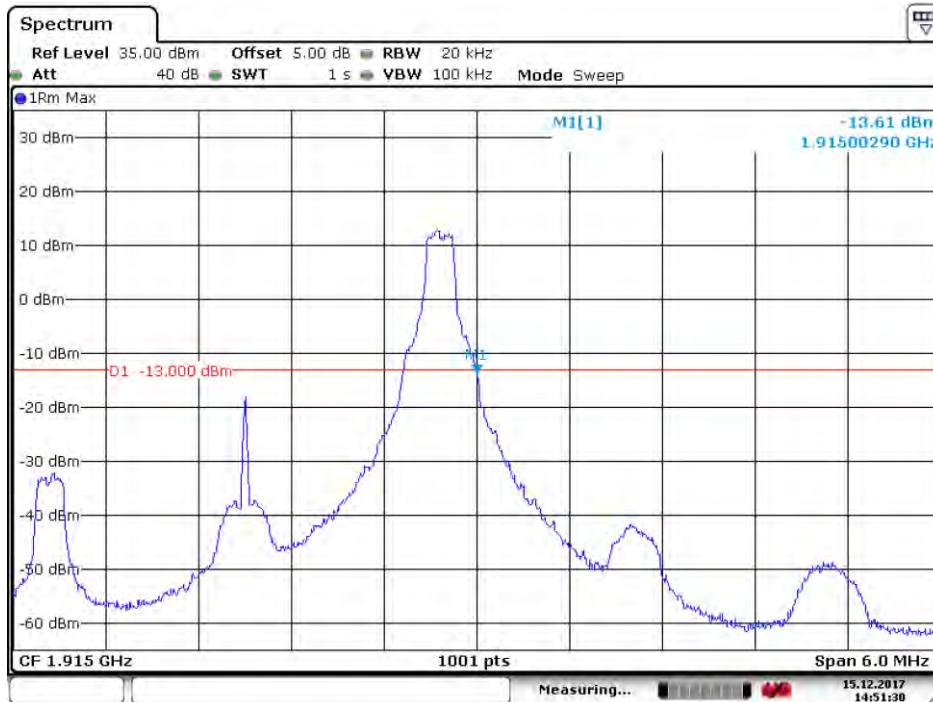
5.1.1.4.1.2 Test RB=15RB



Date: 15.DEC.2017 14:55:04

5.1.1.4.2 Test Channel = HCH

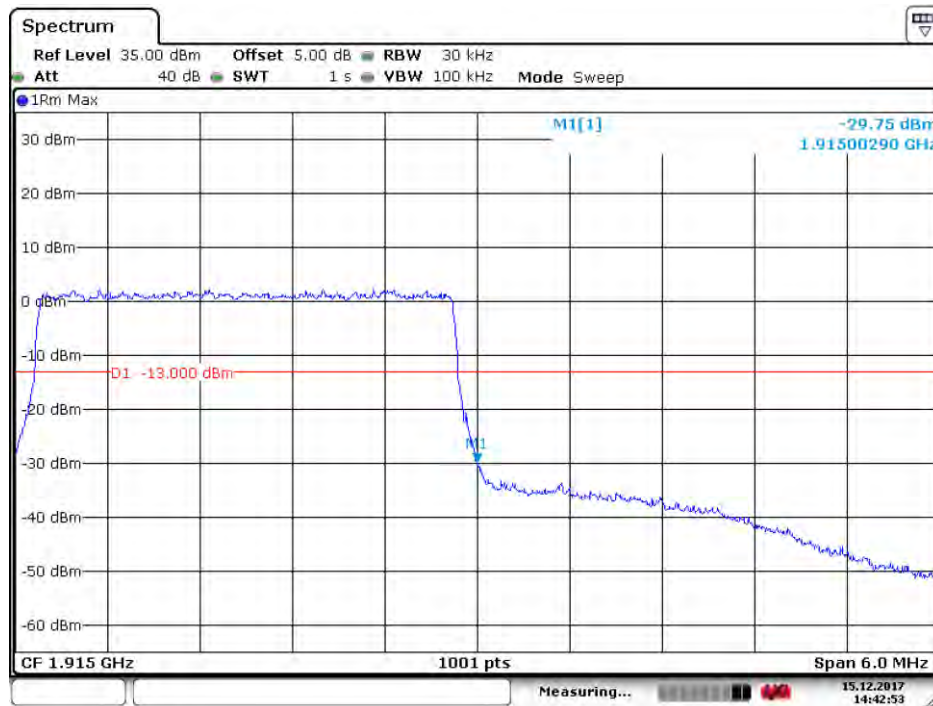
5.1.1.4.2.1 Test RB=1RB



Date: 15.DEC.2017 14:51:30



5.1.1.4.3 Test RB=15RB

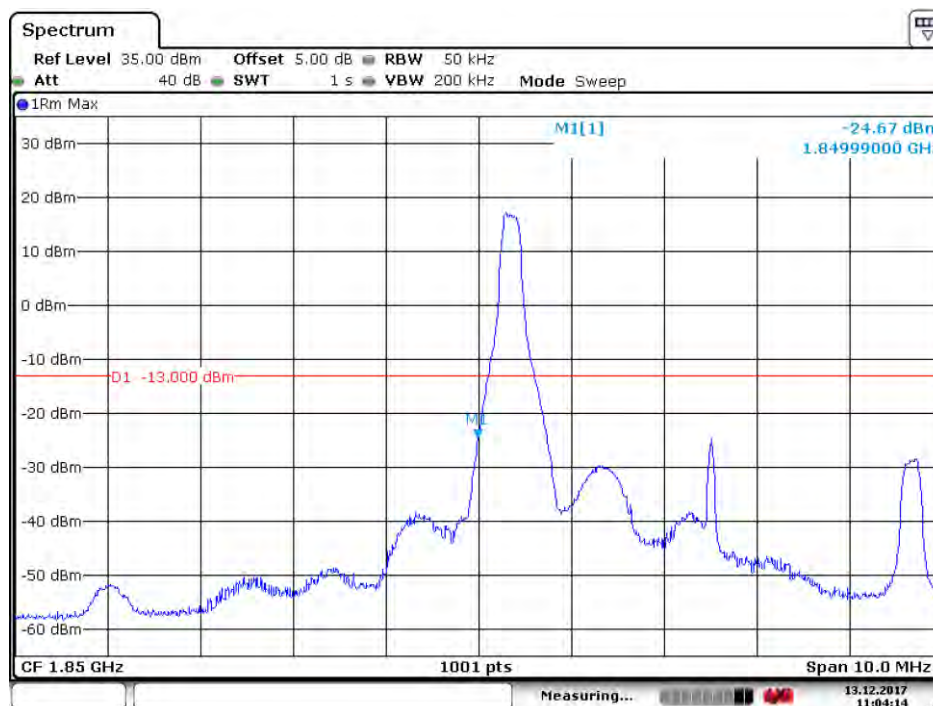


Date: 15 DEC.2017 14:42:53

5.1.1.5 Test Mode = LTE/TM1 5MHz

5.1.1.5.1 Test Channel = LCH

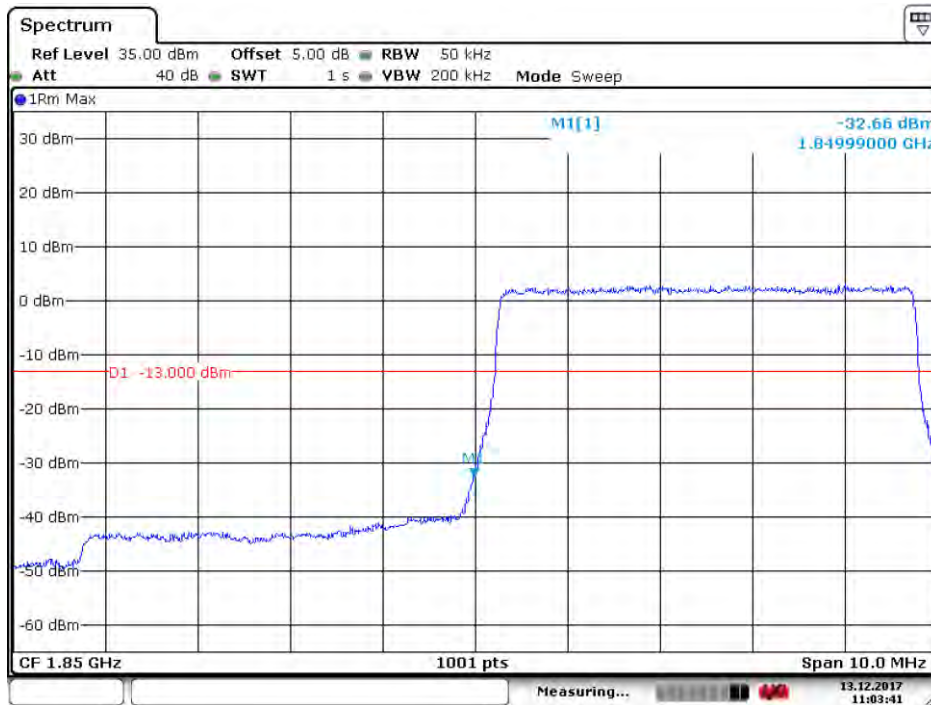
5.1.1.5.1.1 Test RB=1RB



Date: 13 DEC.2017 11:04:14

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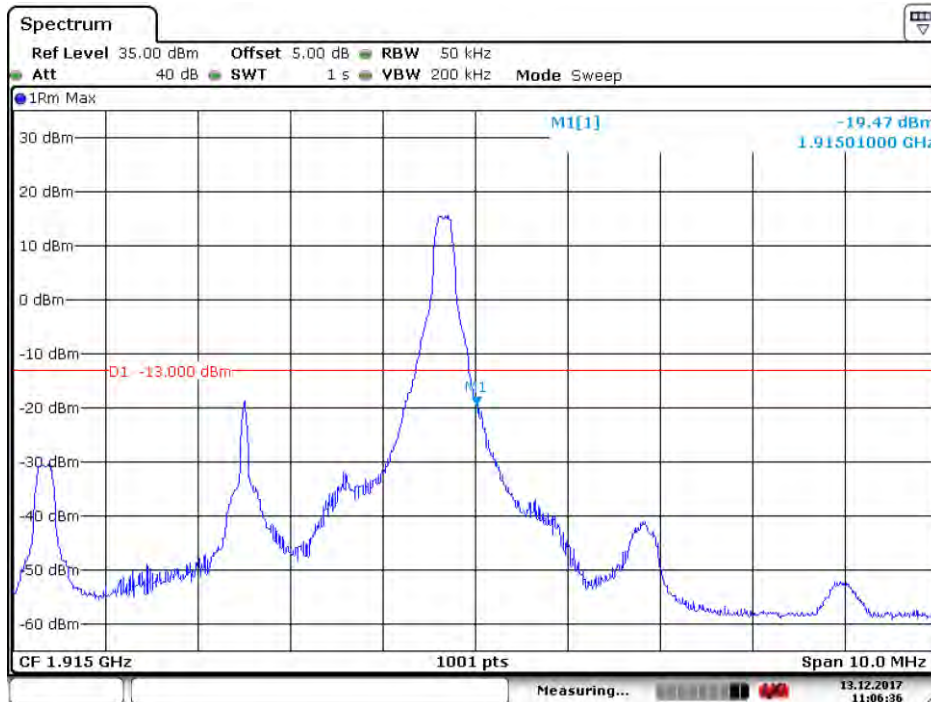
5.1.1.5.1.2 Test RB=25RB



Date: 13.DEC.2017 11:03:42

5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 13.DEC.2017 11:06:37



5.1.1.5.2.2 Test RB=25RB

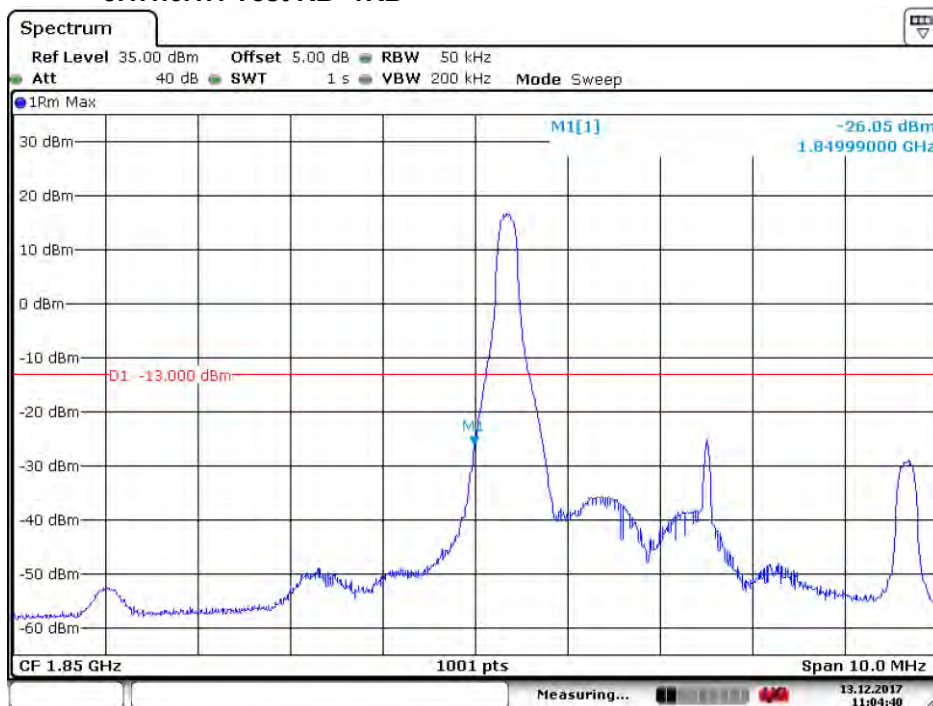


Date: 13.DEC.2017 11:08:56

5.1.1.6 Test Mode = LTE/TM2 5MHz

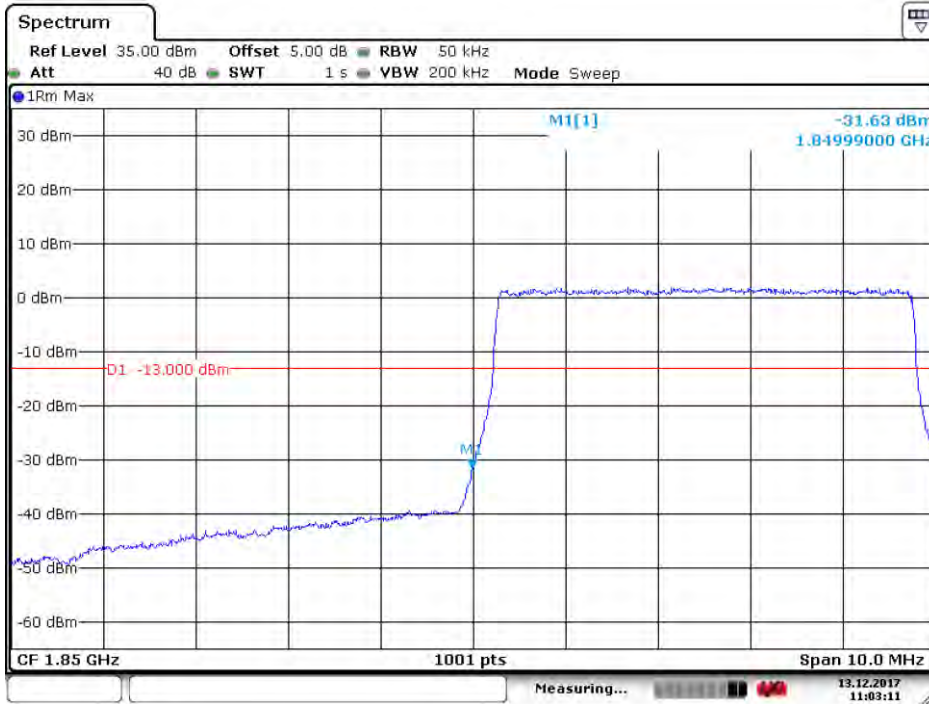
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 13.DEC.2017 11:04:40

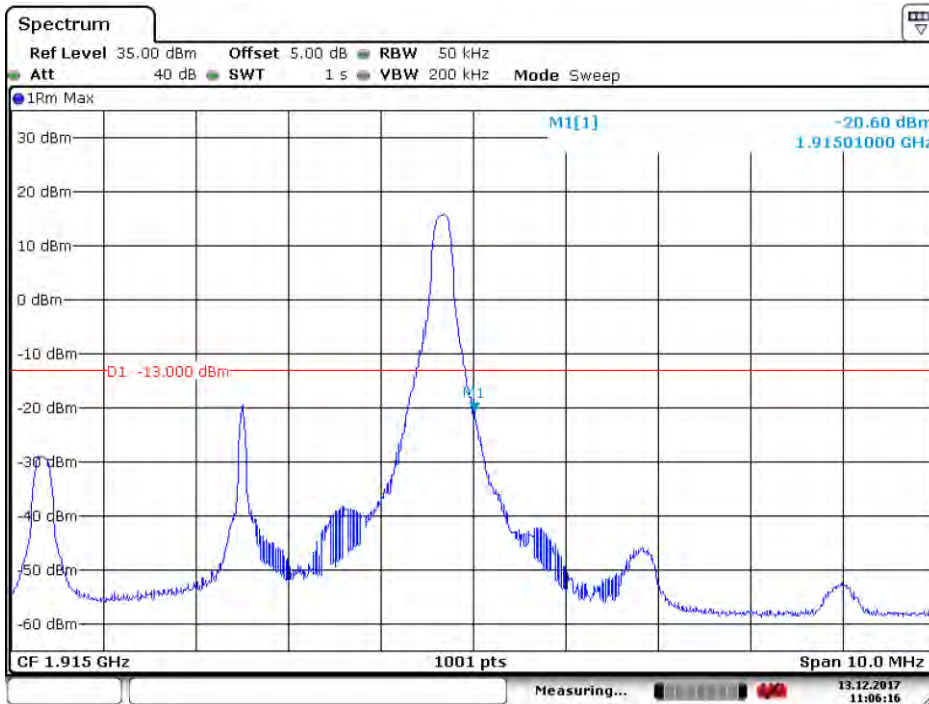
5.1.1.6.1.2 Test RB=25RB



Date: 13.DEC.2017 11:03:12

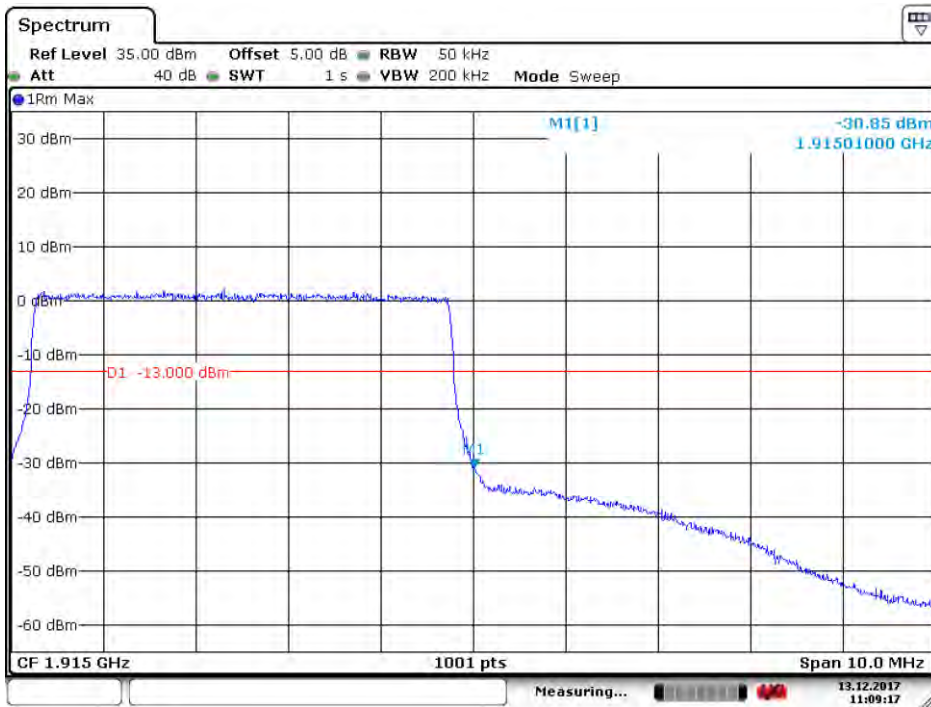
5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 13.DEC.2017 11:06:16

5.1.1.6.2.2 Test RB=25RB

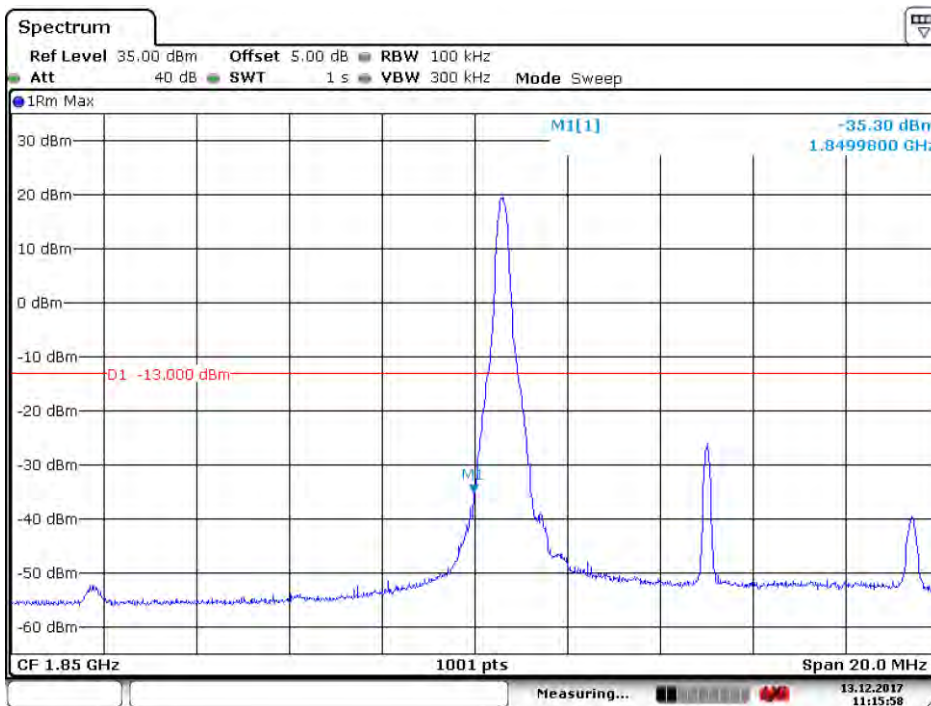


Date: 13.DEC.2017 11:09:17

5.1.1.7 Test Mode = LTE/TM1 10MHz

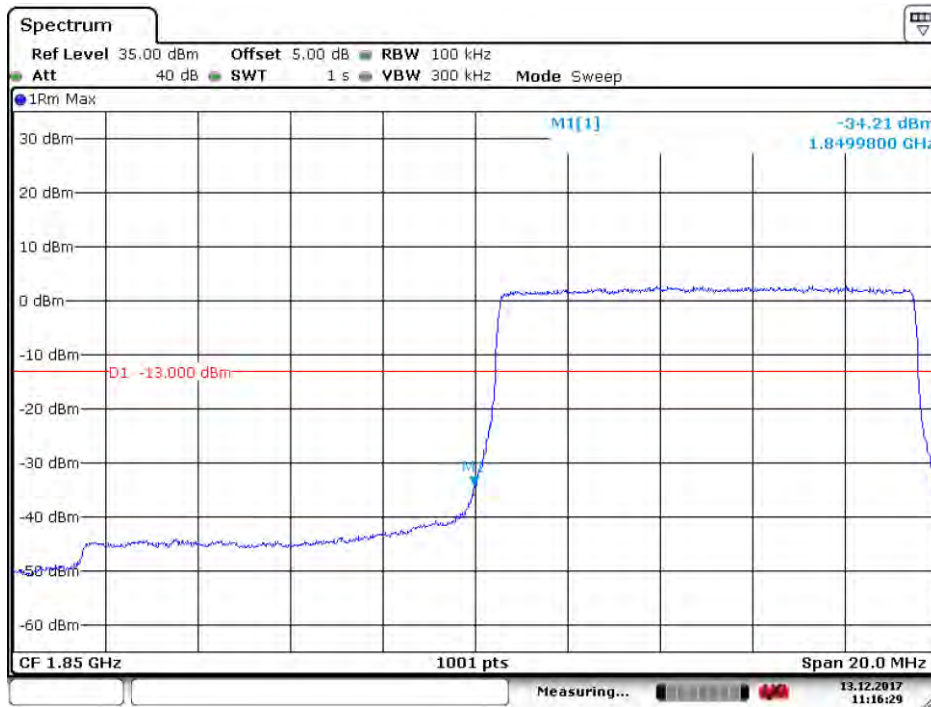
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 13.DEC.2017 11:15:59

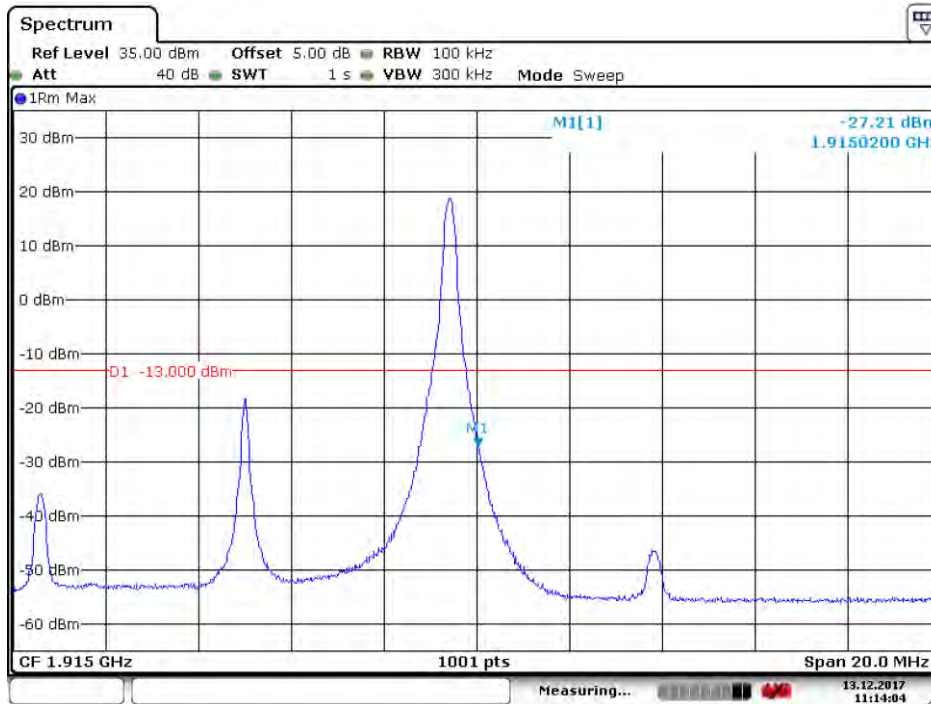
5.1.1.7.1.2 Test RB=50RB



Date: 13.DEC.2017 11:16:30

5.1.1.7.2 Test Channel = HCH

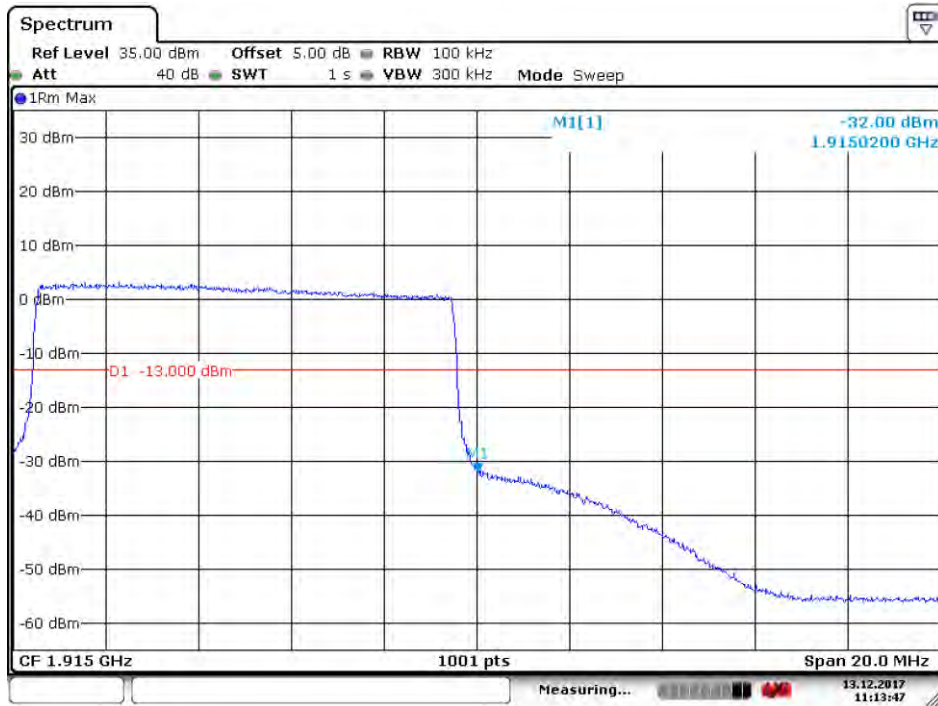
5.1.1.7.2.1 Test RB=1RB



Date: 13.DEC.2017 11:14:05



5.1.1.7.2.2 Test RB=50RB

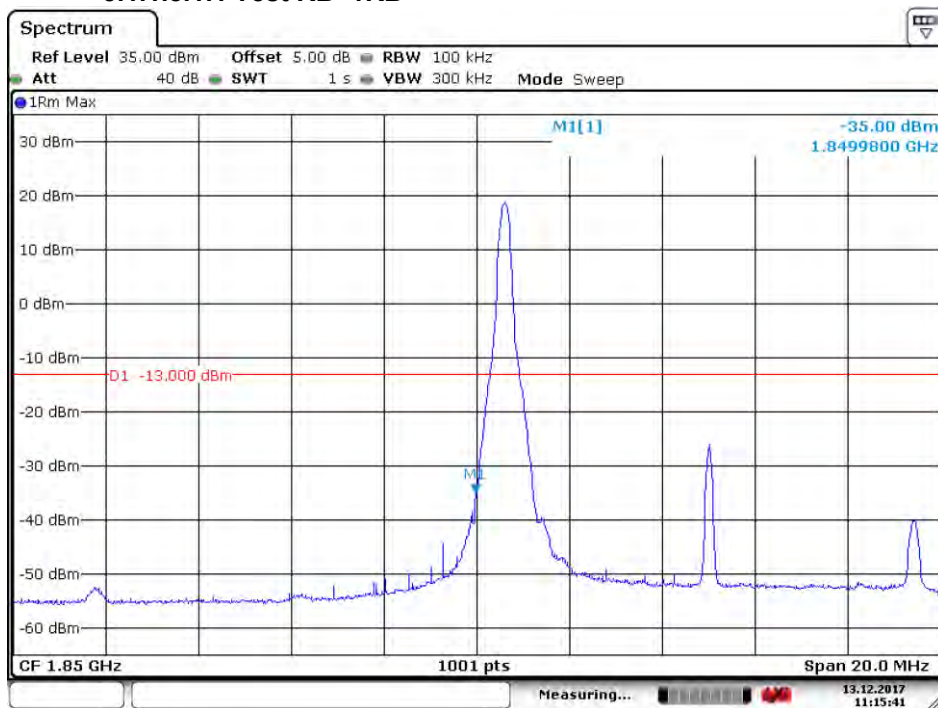


Date: 13 DEC.2017 11:13:47

5.1.1.8 Test Mode = LTE/TM2 10MHz

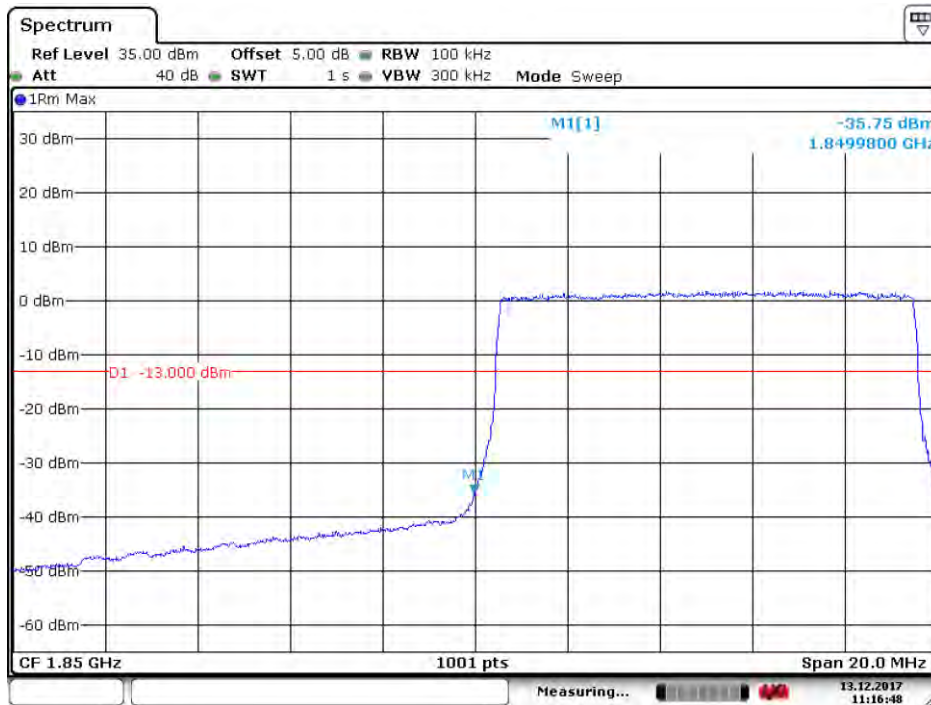
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 13 DEC.2017 11:15:41

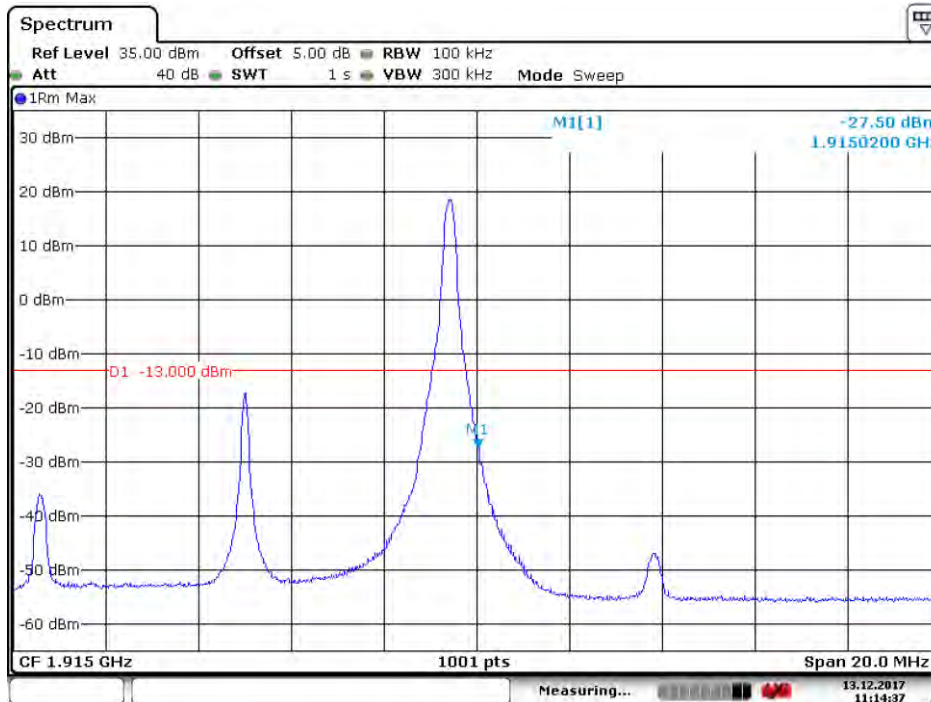
5.1.1.8.1.2 Test RB=50RB



Date: 13.DEC.2017 11:16:49

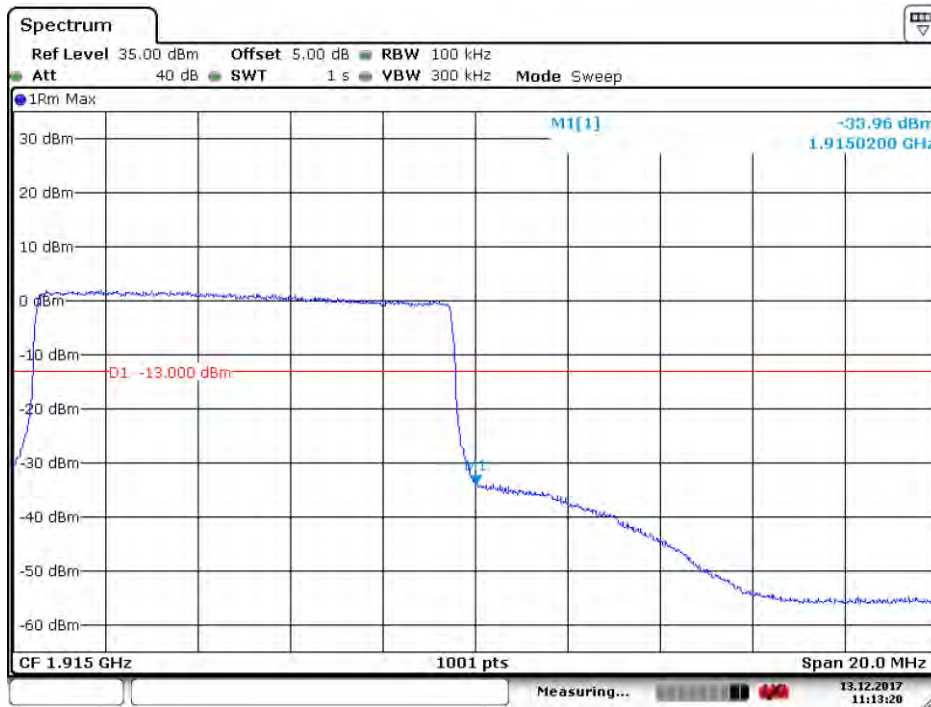
5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



Date: 13.DEC.2017 11:14:38

5.1.1.8.2.2 Test RB=50RB

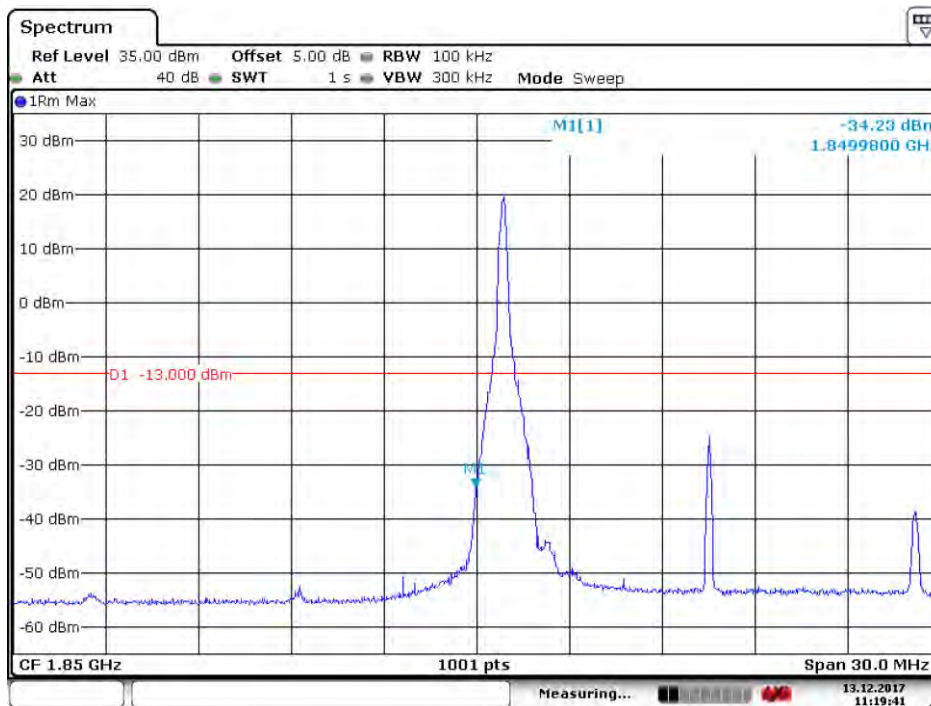


Date: 13.DEC.2017 11:13:20

Test Mode = LTE/TM1 15MHz

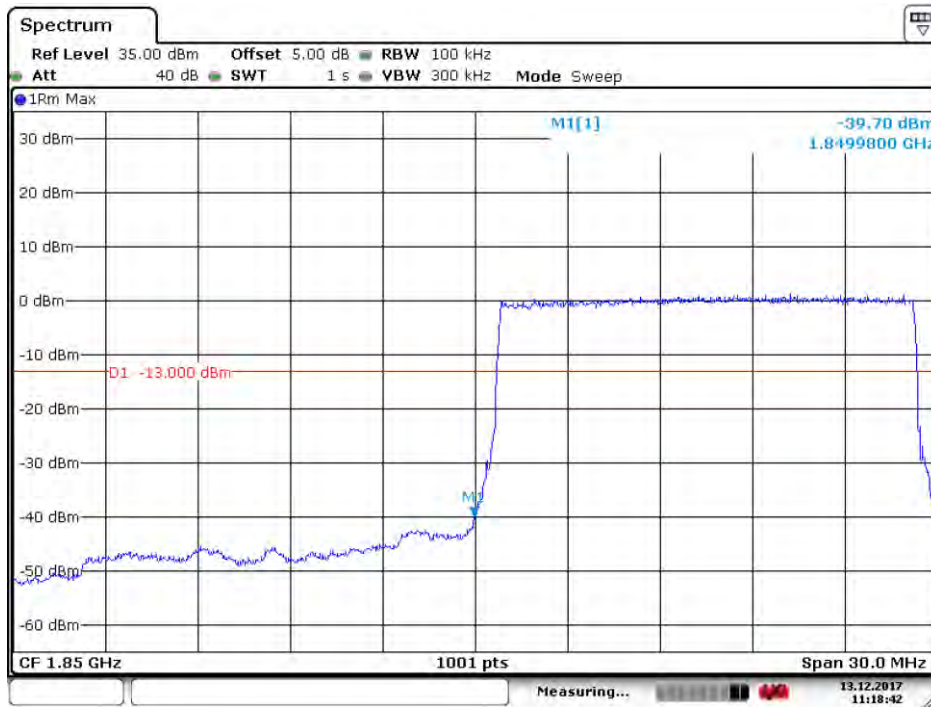
5.1.1.8.3 Test Channel = LCH

5.1.1.8.3.1 Test RB=1RB



Date: 13.DEC.2017 11:19:42

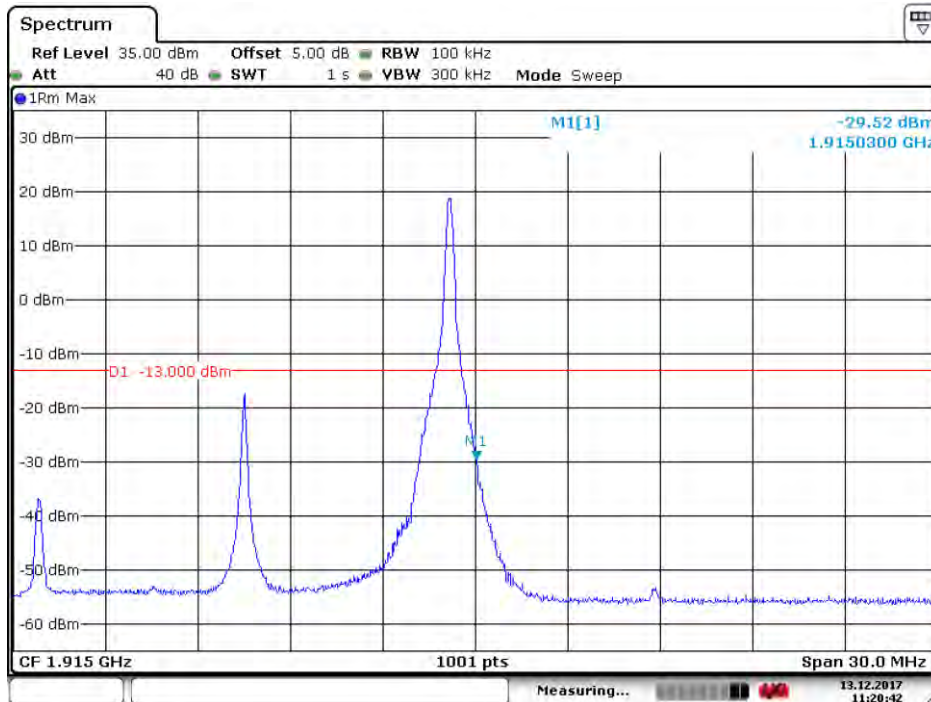
5.1.1.8.3.2 Test RB=75RB



Date: 13.DEC.2017 11:18:43

5.1.1.8.4 Test Channel = HCH

5.1.1.8.4.1 Test RB=1RB



Date: 13.DEC.2017 11:20:43

5.1.1.8.4.2 Test RB=75RB

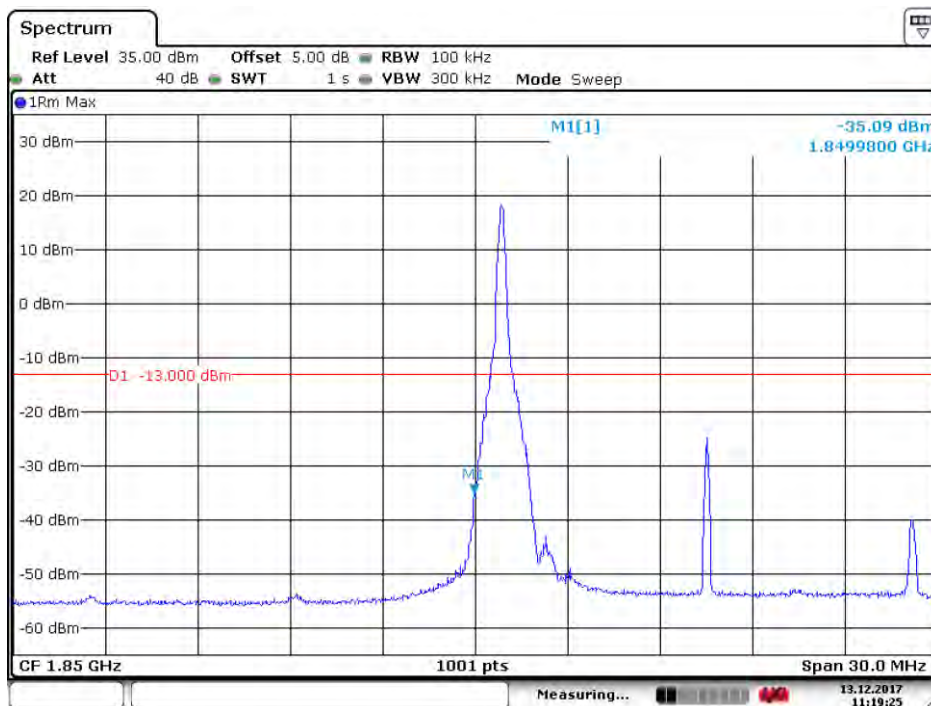


Date: 13.DEC.2017 11:23:03

5.1.1.9 Test Mode = LTE/TM2 15MHz

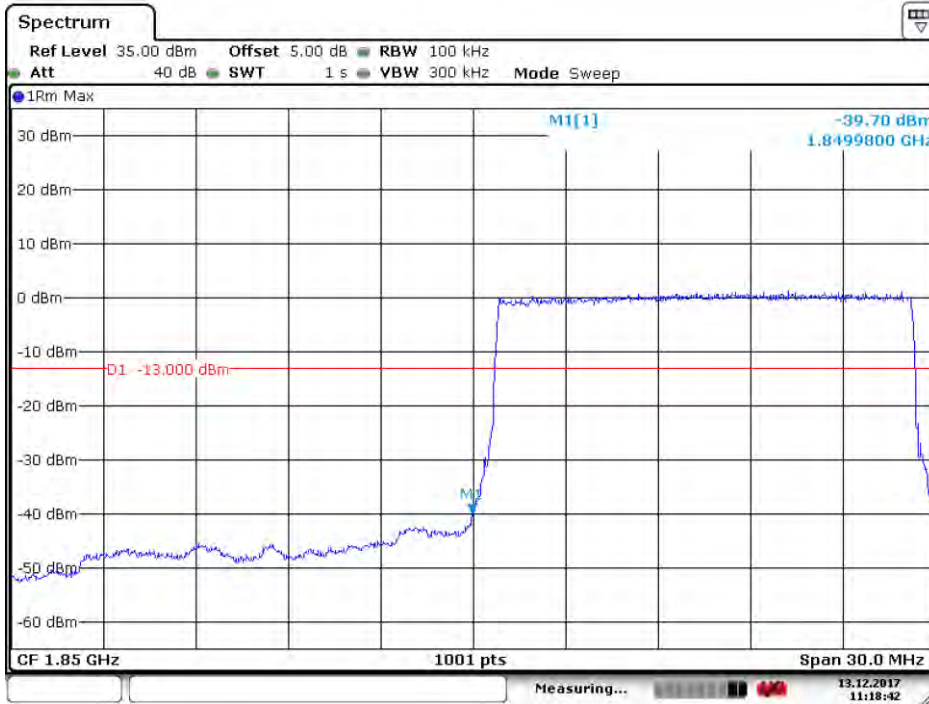
5.1.1.9.1 Test Channel = LCH

5.1.1.9.1.1 Test RB=1RB



Date: 13.DEC.2017 11:19:25

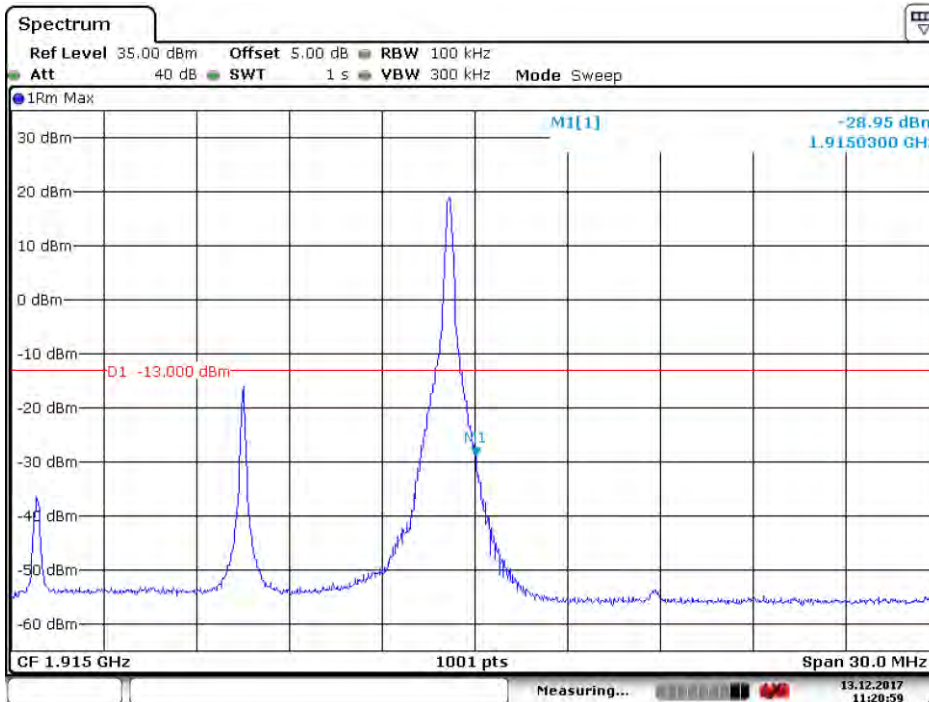
5.1.1.9.1.2 Test RB=75RB



Date: 13.DEC.2017 11:18:43

5.1.1.9.2 Test Channel = HCH

5.1.1.9.2.1 Test RB=1RB



Date: 13.DEC.2017 11:21:00

5.1.1.9.2.2 Test RB=75RB

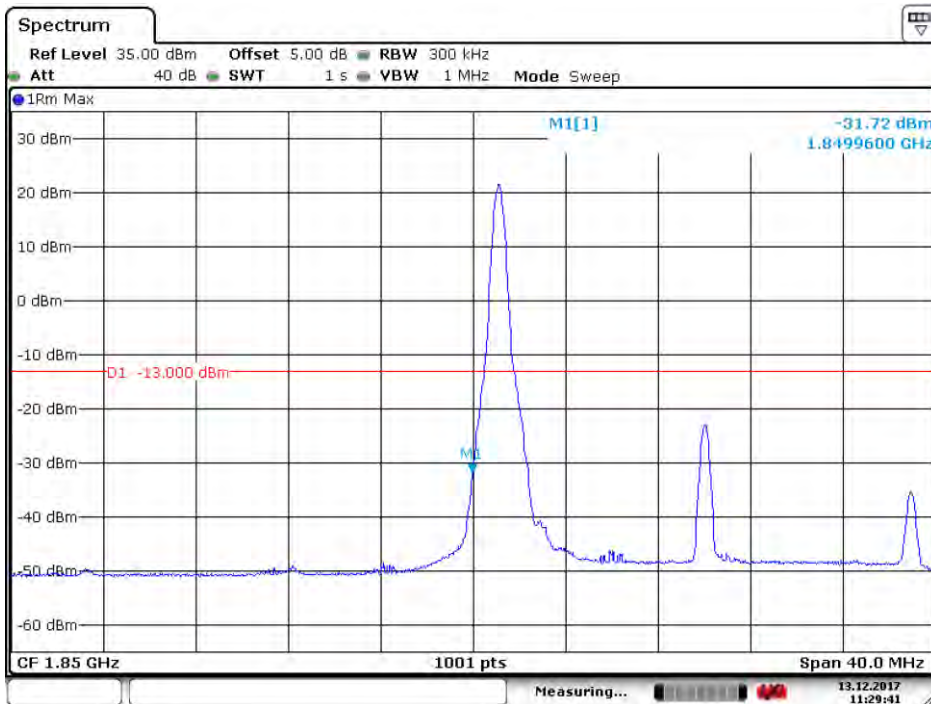


Date: 13.DEC.2017 11:22:41

5.1.1.10 Test Mode = LTE/TM1 20MHz

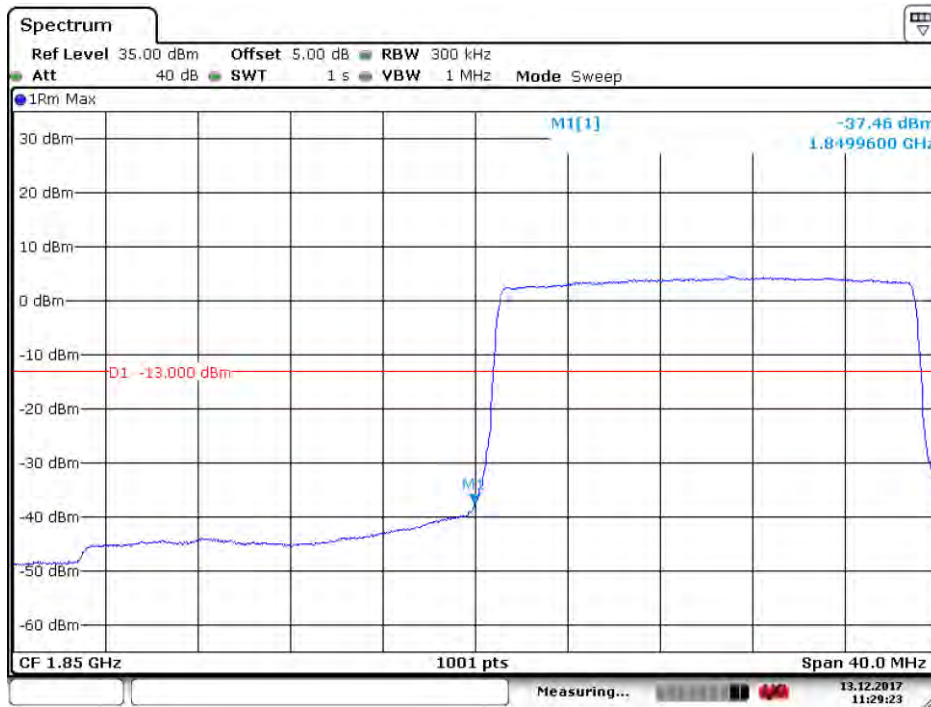
5.1.1.10.1 Test Channel = LCH

5.1.1.10.1.1 Test RB=1RB



Date: 13.DEC.2017 11:29:42

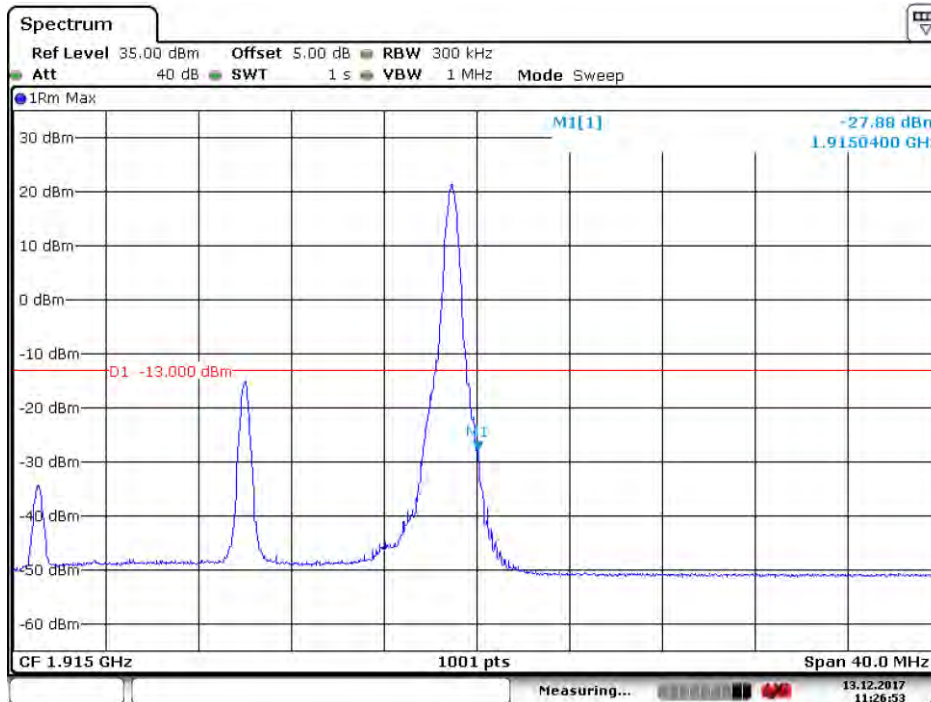
5.1.1.10.1.2 Test RB=100RB



Date: 13.DEC.2017 11:29:24

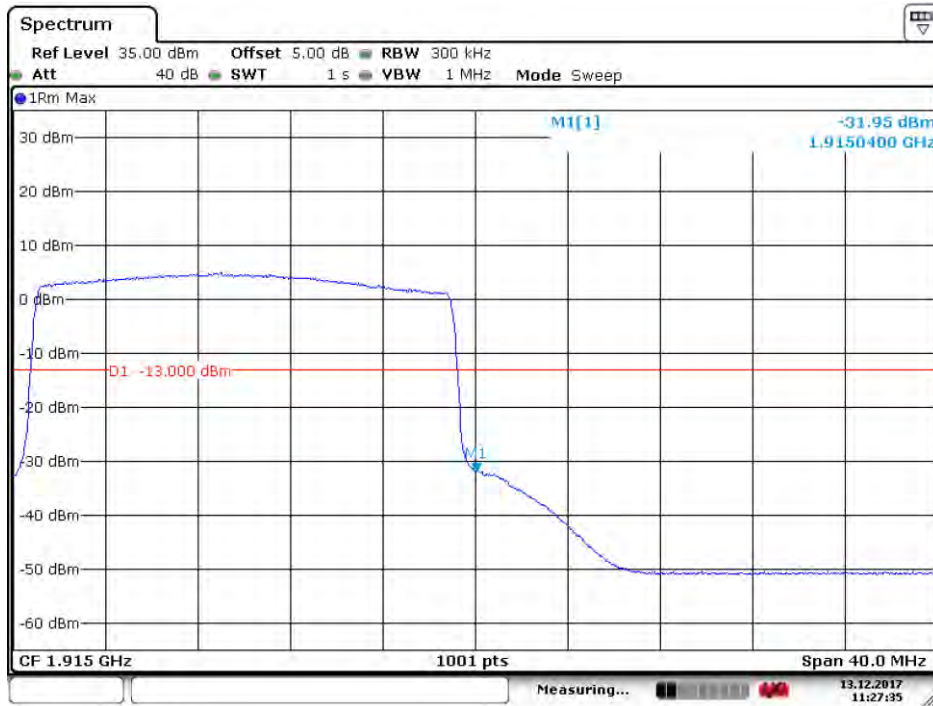
5.1.1.10.2 Test Channel = HCH

5.1.1.10.2.1 Test RB=1RB



Date: 13.DEC.2017 11:26:53

5.1.1.10.2.2 Test RB=100RB

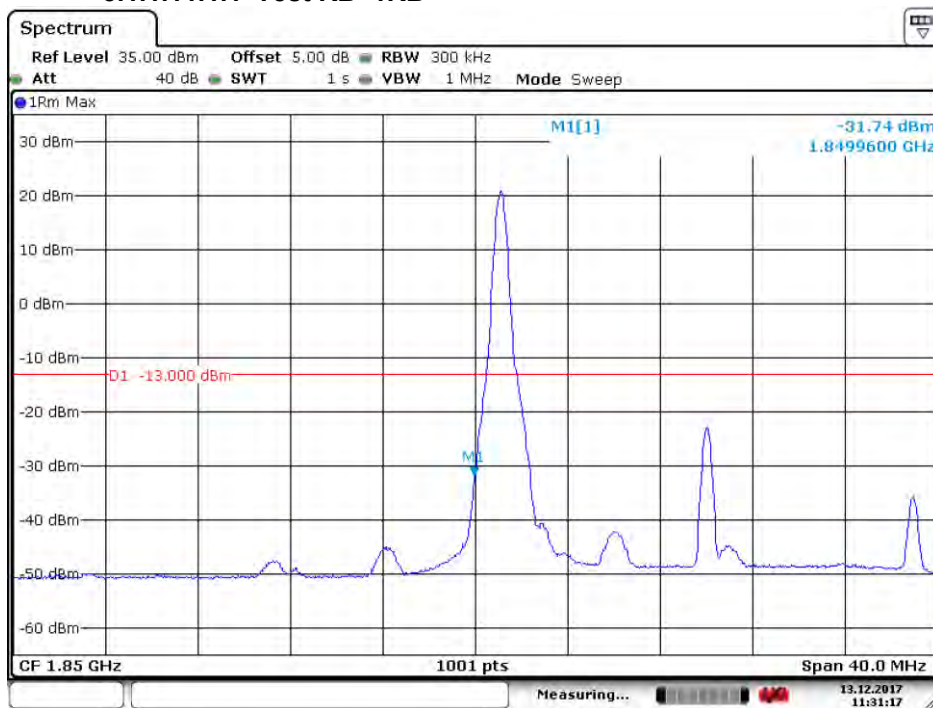


Date: 13.DEC.2017 11:27:35

5.1.1.11 Test Mode = LTE/TM2 20MHz

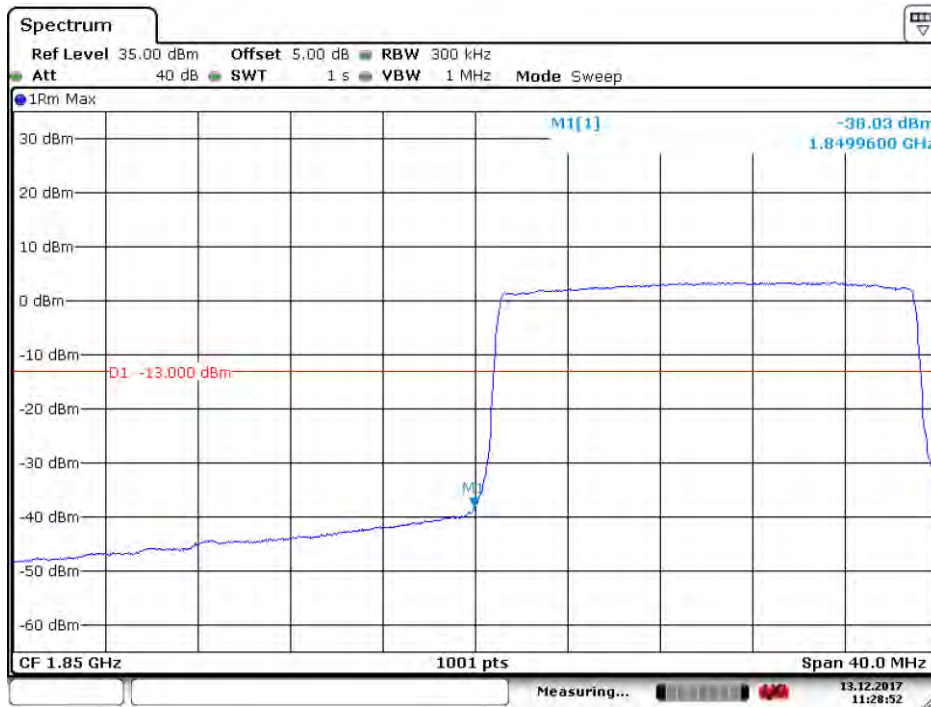
5.1.1.11.1 Test Channel = LCH

5.1.1.11.1.1 Test RB=1RB



Date: 13.DEC.2017 11:31:17

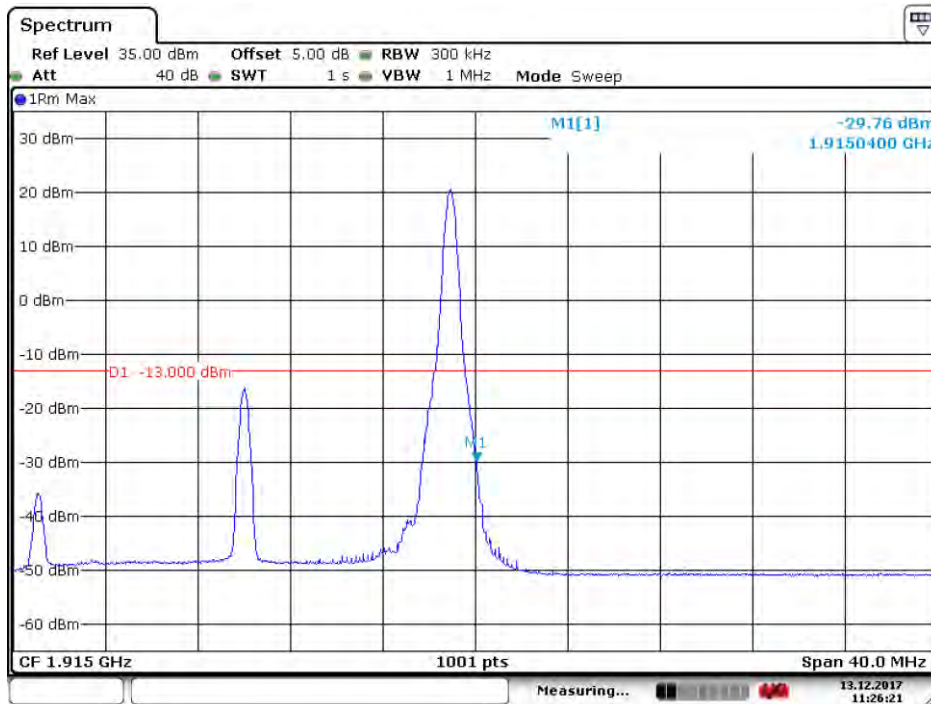
5.1.1.11.1.2 Test RB=100RB



Date: 13.DEC.2017 11:28:53

5.1.1.11.2 Test Channel = HCH

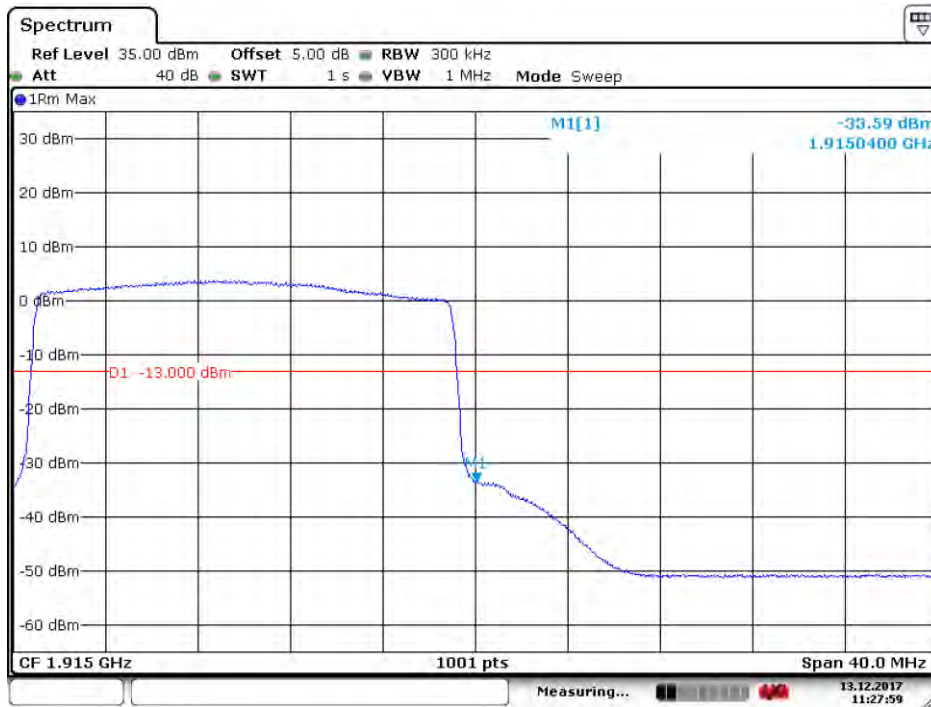
5.1.1.11.2.1 Test RB=1RB



Date: 13.DEC.2017 11:26:21



5.1.1.11.2.2 Test RB=100RB



Date: 13.DEC.2017 11:27:59

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.

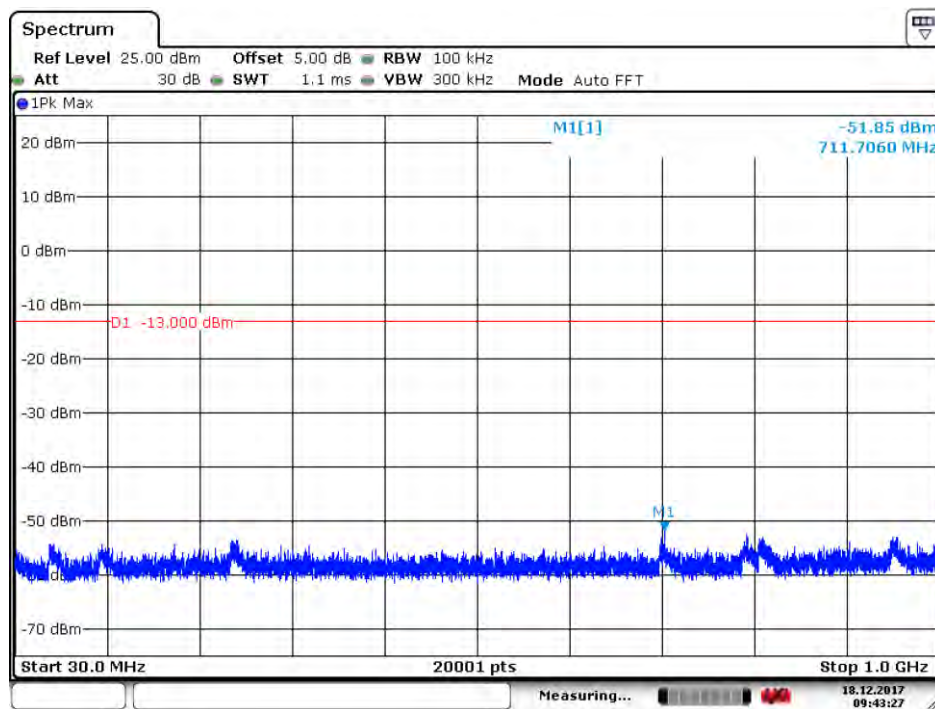
Part I - Test Plots

6.1 For LTE

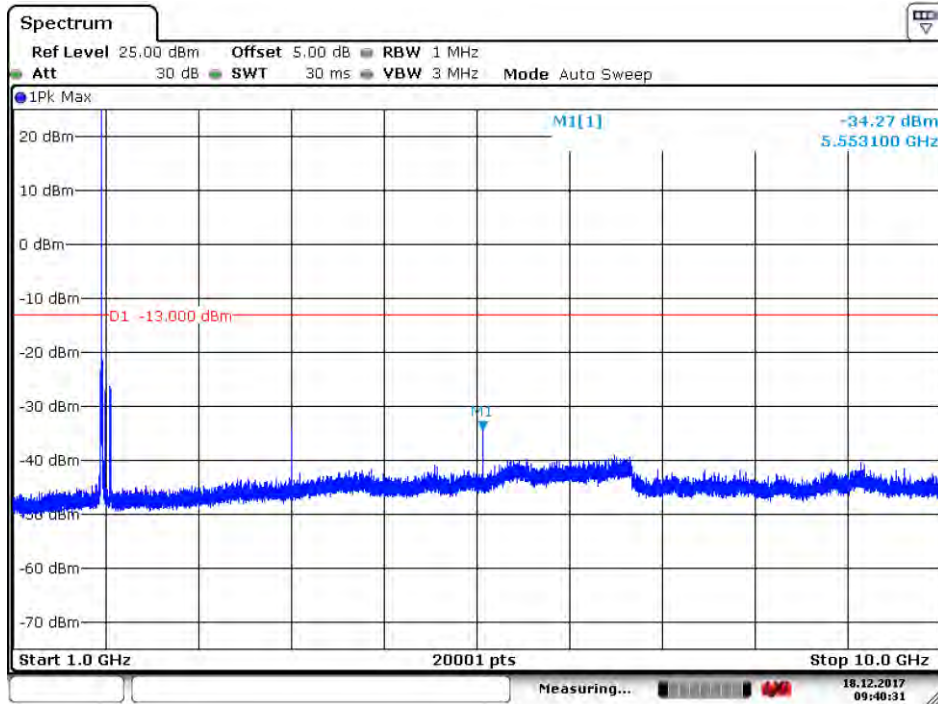
6.1.1 Test Band = LTE band25

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

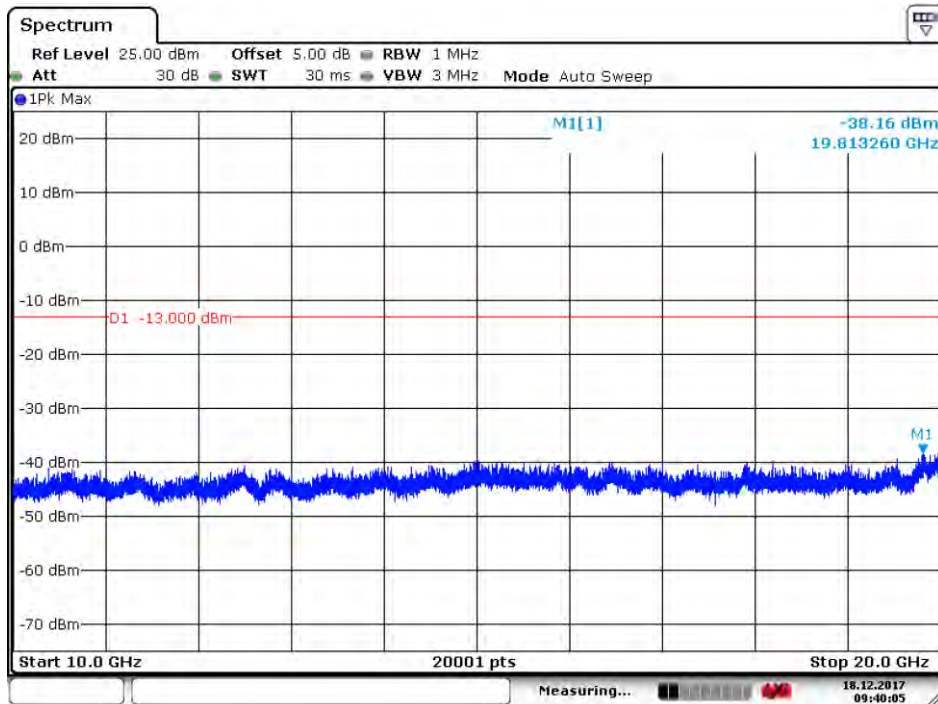
6.1.1.1.1 Test Channel = LCH



Date: 18.DEC.2017 09:43:28



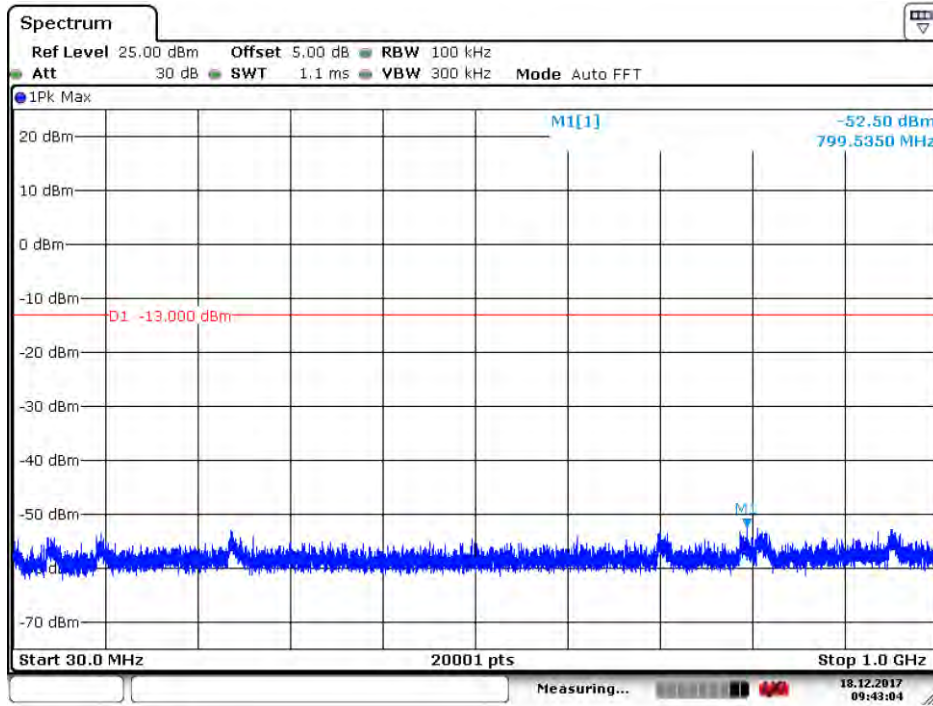
Date: 18.DEC.2017 09:40:31



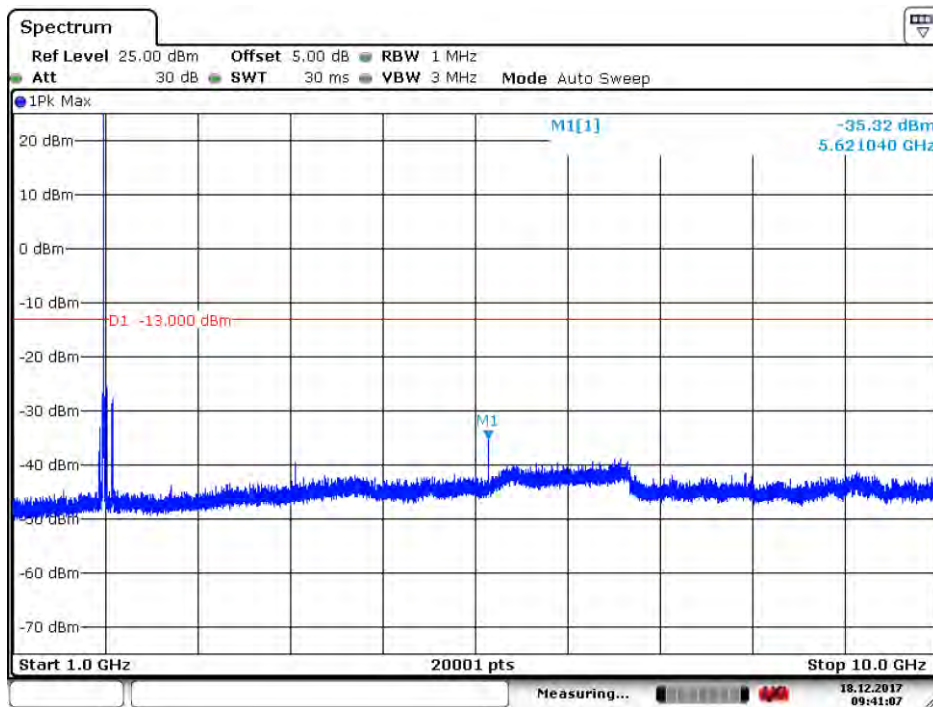
Date: 18.DEC.2017 09:40:05



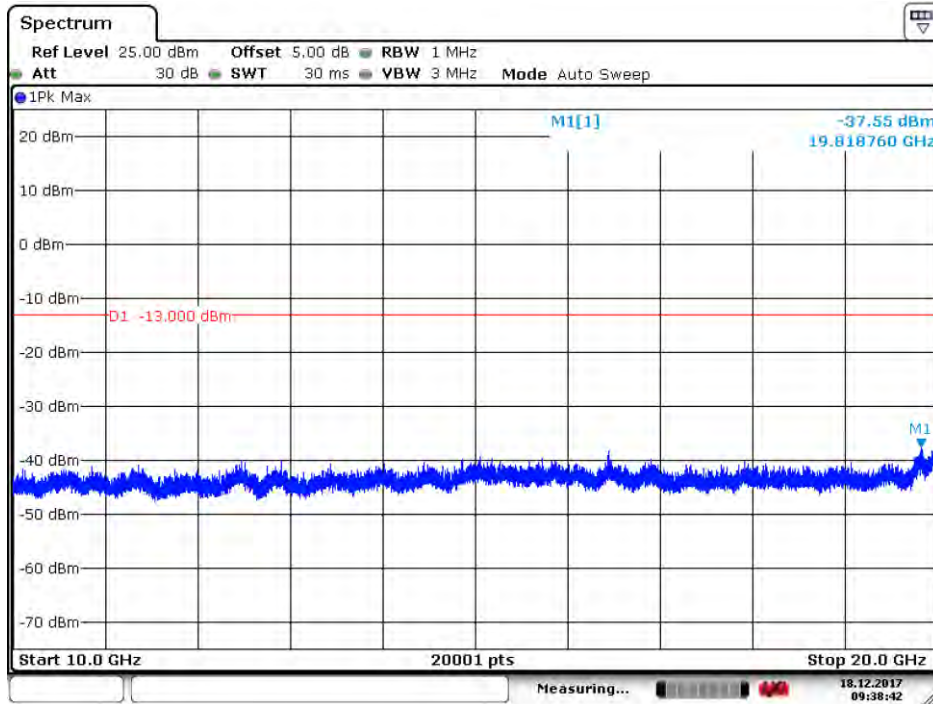
6.1.1.1.2 Test Channel = MCH



Date: 18.DEC.2017 09:43:04

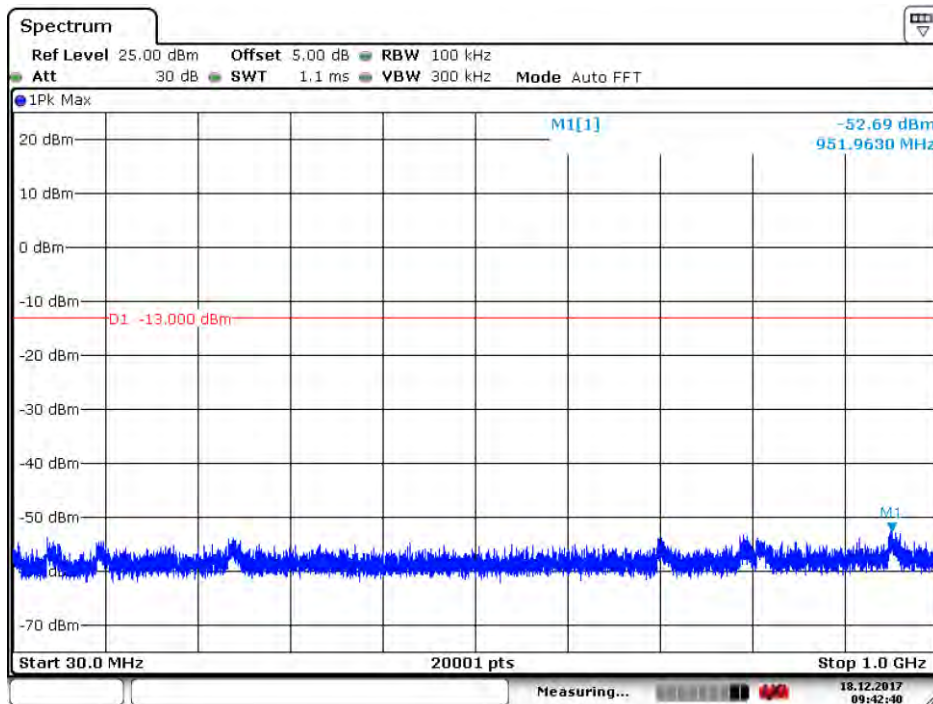


Date: 18.DEC.2017 09:41:08

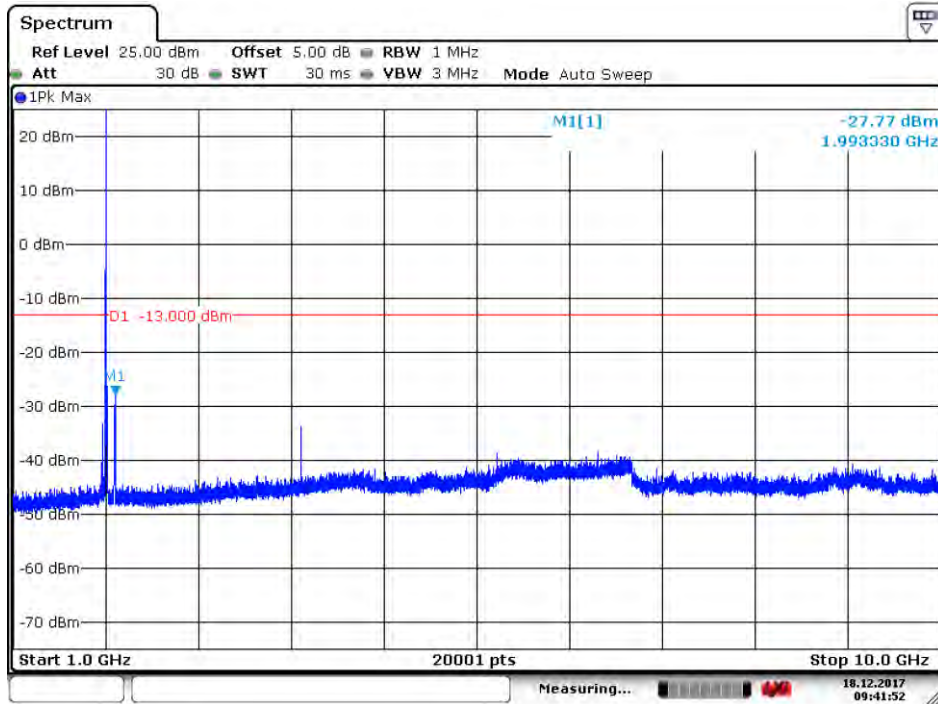


Date: 18.DEC.2017 09:38:43

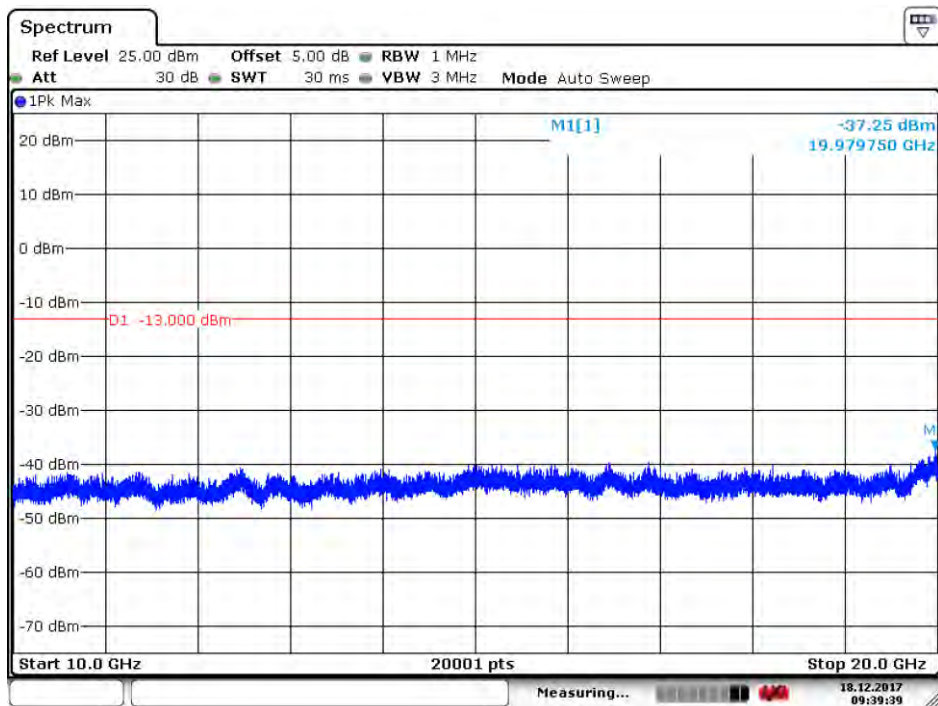
6.1.1.1.3 Test Channel = HCH



Date: 18.DEC.2017 09:42:40



Date: 18.DEC.2017 09:41:52



Date: 18.DEC.2017 09:39:40



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
72.550000	-70.78	-13.00	-57.78	Vertical
300.950000	-74.53	-13.00	-61.53	Vertical
2789.500000	-57.73	-13.00	-44.73	Vertical
3702.000000	-57.06	-13.00	-44.06	Vertical
5553.200000	-53.23	-13.00	-40.23	Vertical
7404.400000	-50.02	-13.00	-37.02	Vertical
65.000000	-76.26	-13.00	-63.26	Horizontal
131.250000	-70.22	-13.00	-57.22	Horizontal
164.850000	-68.79	-13.00	-55.79	Horizontal
3702.000000	-48.54	-13.00	-35.54	Horizontal
5553.200000	-50.16	-13.00	-37.16	Horizontal
7404.400000	-48.13	-13.00	-35.13	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
73.750000	-69.54	-13.00	-56.54	Vertical
300.650000	-73.19	-13.00	-60.19	Vertical
1202.000000	-66.16	-13.00	-53.16	Vertical
3747.175000	-54.27	-13.00	-41.27	Vertical
5620.800000	-55.90	-13.00	-42.90	Vertical
7494.425000	-52.92	-13.00	-39.92	Vertical
63.850000	-74.45	-13.00	-61.45	Horizontal
163.200000	-67.33	-13.00	-54.33	Horizontal
1525.000000	-57.95	-13.00	-44.95	Horizontal
3747.175000	-47.13	-13.00	-34.13	Horizontal
5620.475000	-51.30	-13.00	-38.30	Horizontal
7494.425000	-49.15	-13.00	-36.15	Horizontal



7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
40.150000	-73.03	-13.00	-60.03	Vertical
74.850000	-73.79	-13.00	-60.79	Vertical
166.250000	-71.69	-13.00	-58.69	Vertical
3792.025000	-53.19	-13.00	-40.19	Vertical
5688.075000	-53.91	-13.00	-40.91	Vertical
7584.450000	-52.05	-13.00	-39.05	Vertical
126.200000	-74.82	-13.00	-61.82	Horizontal
164.200000	-71.91	-13.00	-58.91	Horizontal
2743.000000	-57.38	-13.00	-44.38	Horizontal
3792.025000	-44.55	-13.00	-31.55	Horizontal
5688.075000	-51.46	-13.00	-38.46	Horizontal
7584.450000	-49.56	-13.00	-36.56	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.



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 20 MHz	LCH	TN	VL	-4.64	-0.00249	PASS
				VN	3.42	0.00184	PASS
				VH	-6.53	-0.00351	PASS
		MCH	TN	VL	1.49	0.00079	PASS
				VN	-6.84	-0.00363	PASS
				VH	2.23	0.00118	PASS
		HCH	TN	VL	-3.86	-0.00203	PASS
				VN	-5.12	-0.00269	PASS
				VH	-2.74	-0.00144	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.26	-0.00229	PASS
				VN	-2.24	-0.00120	PASS
				VH	-3.66	-0.00197	PASS
		MCH	TN	VL	5.56	0.00295	PASS
				VN	-0.50	-0.00027	PASS
				VH	4.39	0.00233	PASS
		HCH	TN	VL	-3.08	-0.00162	PASS
				VN	-8.12	-0.00426	PASS
				VH	4.34	0.00228	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	-2.49	-0.00134	PASS
				-20	-3.35	-0.00180	PASS
				-10	-2.18	-0.00117	PASS
				0	0.70	0.00038	PASS
				10	1.65	0.00089	PASS
				20	0.22	0.00012	PASS
				30	-0.67	-0.00036	PASS
				40	-0.13	-0.00007	PASS
				50	0.39	0.00021	PASS
		MCH	VN	-30	-2.86	-0.00152	PASS
				-20	-5.95	-0.00316	PASS
				-10	-5.43	-0.00288	PASS
				0	-5.66	-0.00301	PASS
				10	-0.34	-0.00018	PASS
				20	-4.24	-0.00225	PASS
				30	-3.76	-0.00200	PASS
				40	-4.12	-0.00219	PASS
				50	-1.72	-0.00091	PASS
		HCH	VN	-30	0.44	0.00023	PASS
				-20	-1.13	-0.00059	PASS
				-10	1.73	0.00091	PASS
				0	-2.33	-0.00122	PASS
				10	2.01	0.00106	PASS
				20	-3.97	-0.00208	PASS
				30	-2.10	-0.00110	PASS
				40	-3.53	-0.00185	PASS
				50	-8.90	-0.00467	PASS

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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	-0.58	-0.00031	PASS
				-20	-2.44	-0.00131	PASS
				-10	3.32	0.00178	PASS
				0	2.67	0.00144	PASS
				10	1.64	0.00088	PASS
				20	-0.03	-0.00002	PASS
				30	-0.54	-0.00029	PASS
				40	3.34	0.00180	PASS
		MCH	VN	-30	-5.80	-0.00308	PASS
				-20	-5.68	-0.00302	PASS
				-10	-7.49	-0.00398	PASS
				0	-4.22	-0.00224	PASS
				10	-0.84	-0.00045	PASS
				20	1.04	0.00055	PASS
				30	-2.64	-0.00140	PASS
				40	3.62	0.00192	PASS
		HCH	VN	-30	1.64	0.00086	PASS
				-20	-2.75	-0.00144	PASS
				-10	1.99	0.00104	PASS
				0	-3.23	-0.00170	PASS
				10	2.48	0.00130	PASS
				20	-1.77	-0.00093	PASS
				30	-2.19	-0.00115	PASS
				40	-4.03	-0.00212	PASS
			50	-3.60	-0.00189	PASS	

The End