Appendix B

E-UTRA Band CA_7C

CONTENT

1　Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE Band CA_7C

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM1	100RB+50RB	LCH	100RB#0/50RB#0	20.63	21.63	33.00	PASS
				50RB#0/0RB#0	21.99	22.99	33.00	PASS
				12RB#0/0RB#0	23.09	24.09	33.00	PASS
				1RB#49/1RB#0	16.18	17.18	33.00	PASS
				1RB#0/1RB#49	12.48	13.48	33.00	PASS
				1RB#0/0RB#0	23.02	24.02	33.00	PASS
			MCH	100RB#0/50RB#0	20.42	21.42	33.00	PASS
				50RB#0/0RB#0	21.78	22.78	33.00	PASS
				12RB#0/0RB#0	22.92	23.92	33.00	PASS
				1RB#49/1RB#0	16.02	17.02	33.00	PASS
				1RB#0/1RB#49	12.32	13.32	33.00	PASS
				1RB#0/0RB#0	22.92	23.92	33.00	PASS
			HCH	100RB#0/50RB#0	20.57	21.57	33.00	PASS
				50RB#0/0RB#0	21.80	22.80	33.00	PASS
				12RB#0/0RB#0	22.83	23.83	33.00	PASS
				1RB#49/1RB#0	16.86	17.86	33.00	PASS
				1RB#0/1RB#49	12.43	13.43	33.00	PASS
				1RB#0/0RB#0	22.84	23.84	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM2	100RB+50RB	LCH	100RB#0/50RB#0	19.51	20.51	33.00	PASS
				50RB#0/0RB#0	20.98	21.98	33.00	PASS
				12RB#0/0RB#0	21.37	22.37	33.00	PASS
			MCH	100RB#0/50RB#0	19.33	20.33	33.00	PASS
				50RB#0/0RB#0	20.62	21.62	33.00	PASS
				12RB#0/0RB#0	21.28	22.28	33.00	PASS
			HCH	100RB#0/50RB#0	20.45	21.45	33.00	PASS
				50RB#0/0RB#0	20.72	21.72	33.00	PASS
				12RB#0/0RB#0	21.26	22.26	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM3	100RB+50RB	LCH	100RB#0/50RB#0	18.96	19.96	33.00	PASS
				50RB#0/0RB#0	19.41	20.41	33.00	PASS
				12RB#0/0RB#0	20.35	21.35	33.00	PASS
			MCH	100RB#0/50RB#0	18.96	19.96	33.00	PASS
				50RB#0/0RB#0	19.24	20.24	33.00	PASS
				12RB#0/0RB#0	20.17	21.17	33.00	PASS
			HCH	100RB#0/50RB#0	18.75	19.75	33.00	PASS
				50RB#0/0RB#0	19.28	20.28	33.00	PASS
				12RB#0/0RB#0	20.08	21.08	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM1	100RB+100RB	LCH	100RB#0/100RB#0	20.59	21.59	33.00	PASS
				100RB#0/0RB#0	21.75	22.75	33.00	PASS
				18RB#0/0RB#0	23.09	24.09	33.00	PASS
				1RB#99/1RB#0	22.76	23.76	33.00	PASS
				1RB#0/1RB#99	12.68	13.68	33.00	PASS
				1RB#0/0RB#0	23.12	24.12	33.00	PASS
			MCH	100RB#0/100RB#0	20.54	21.54	33.00	PASS
				100RB#0/0RB#0	21.67	22.67	33.00	PASS
				18RB#0/0RB#0	22.96	23.96	33.00	PASS
				1RB#99/1RB#0	22.65	23.65	33.00	PASS
				1RB#0/1RB#99	12.66	13.66	33.00	PASS
				1RB#0/0RB#0	23.08	24.08	33.00	PASS
			HCH	100RB#0/100RB#0	20.53	21.53	33.00	PASS
				100RB#0/0RB#0	21.58	22.58	33.00	PASS
				18RB#0/0RB#0	22.79	23.79	33.00	PASS
				1RB#99/1RB#0	22.58	23.58	33.00	PASS
				1RB#0/1RB#99	12.65	13.65	33.00	PASS
				1RB#0/0RB#0	22.96	23.96	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM2	100RB+100RB	LCH	100RB#0/100RB#0	19.57	20.57	33.00	PASS
				100RB#0/0RB#0	20.75	21.75	33.00	PASS
				18RB#0/0RB#0	21.38	22.38	33.00	PASS
			MCH	100RB#0/100RB#0	19.43	20.43	33.00	PASS
				100RB#0/0RB#0	20.52	21.52	33.00	PASS
				18RB#0/0RB#0	21.26	22.26	33.00	PASS
			HCH	100RB#0/100RB#0	19.37	20.37	33.00	PASS
				100RB#0/0RB#0	20.51	21.51	33.00	PASS
				18RB#0/0RB#0	21.24	22.24	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	PCC RB/ SCC RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
CA_7C	LTE/TM3	100RB+100RB	LCH	100RB#0/100RB#0	19.09	20.09	33.00	PASS
				100RB#0/0RB#0	19.23	20.23	33.00	PASS
				18RB#0/0RB#0	20.27	21.27	33.00	PASS
			MCH	100RB#0/100RB#0	18.97	19.97	33.00	PASS
				100RB#0/0RB#0	19.15	20.15	33.00	PASS
				18RB#0/0RB#0	20.16	21.16	33.00	PASS
			HCH	100RB#0/100RB#0	18.97	19.97	33.00	PASS
				100RB#0/0RB#0	19.04	20.04	33.00	PASS
				18RB#0/0RB#0	20.09	21.09	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,

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

2   Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	PCC RB	SCC RB	Test Channel	Measured[dB]	Limit [dB]	Verdict
CA_7C	TM1/100RB+50RB	P_100@0	S_50@0	MCH	5.62	13	PASS
	TM1/100RB+50RB	P_100@0	S_50@0	MCH	6.14	13	PASS
	TM1/100RB+50RB	P_100@0	S_50@0	MCH	6.20	13	PASS
	TM1/100RB+100RB	P_100@0	S_100@0	MCH	6.12	13	PASS
	TM2/100RB+100RB	P_100@0	S_100@0	MCH	6.41	13	PASS
	TM3/100RB+100RB	P_100@0	S_100@0	MCH	6.52	13	PASS

Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE Band CA_7C

2.1.1.1   Test Mode = LTE/TM1.Bandwidth=100RB+50RB

2.1.1.1.1   Test Channel = MCH
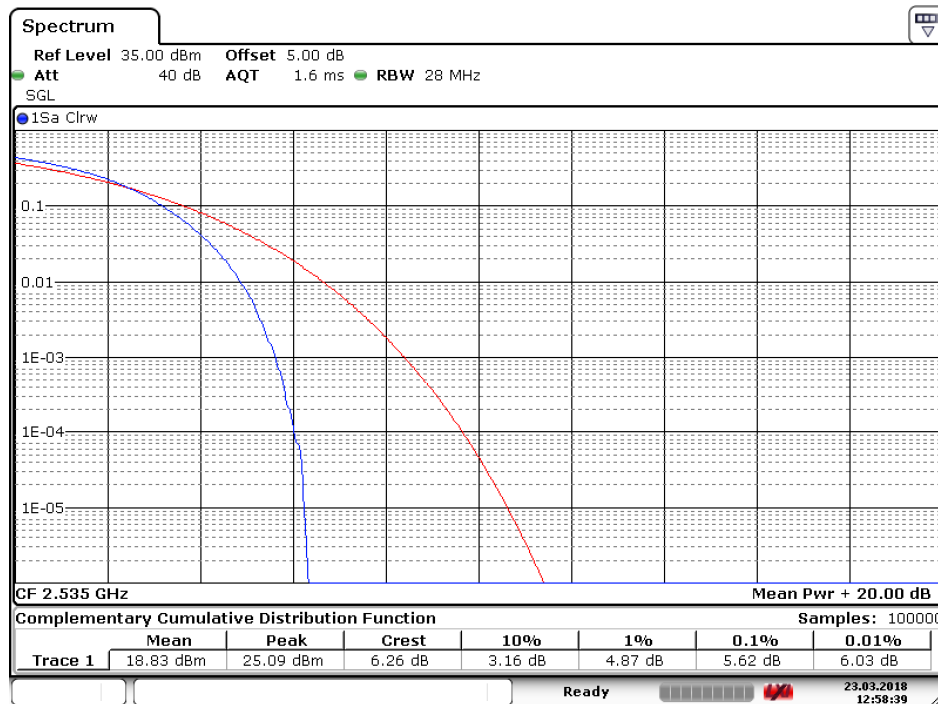
Date: 23.MAR.2018 12:58:39

2.1.1.2 Test Mode = LTE/TM2.Bandwidth=100RB+50RB

2.1.1.2.1 Test Channel = MCH

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	17.83 dBm	24.56 dBm	6.73 dB	3.45 dB	5.36 dB	6.14 dB	6.55 dB
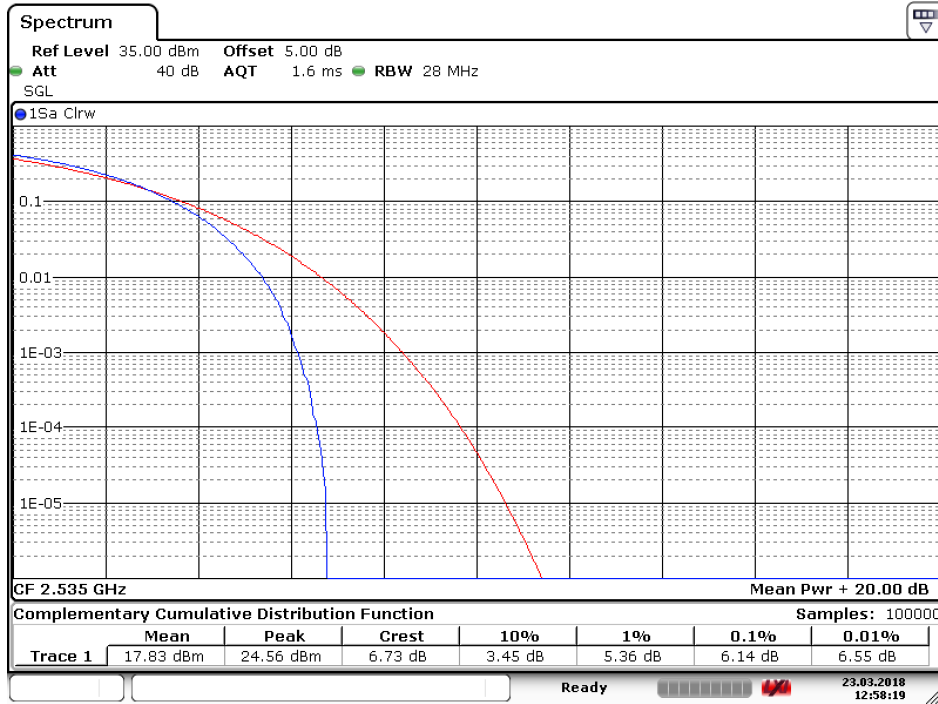
Date: 23.MAR.2018 12:58:19

2.1.1.3 Test Mode = LTE/TM3.Bandwidth=100RB+50RB

2.1.1.3.1 Test Channel = MCH

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	17.85 dBm	24.66 dBm	6.81 dB	3.48 dB	5.45 dB	6.20 dB	6.58 dB

Date: 23.MAR.2018 12:57:57

2.1.2 Test Band = LTE Band CA_7C

2.1.2.1   Test Mode = LTE/TM1.Bandwidth=100RB+100RB

2.1.2.1.1   Test Channel = MCH

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	17.76 dBm	24.62 dBm	6.86 dB	3.30 dB	5.22 dB	6.12 dB	6.67 dB
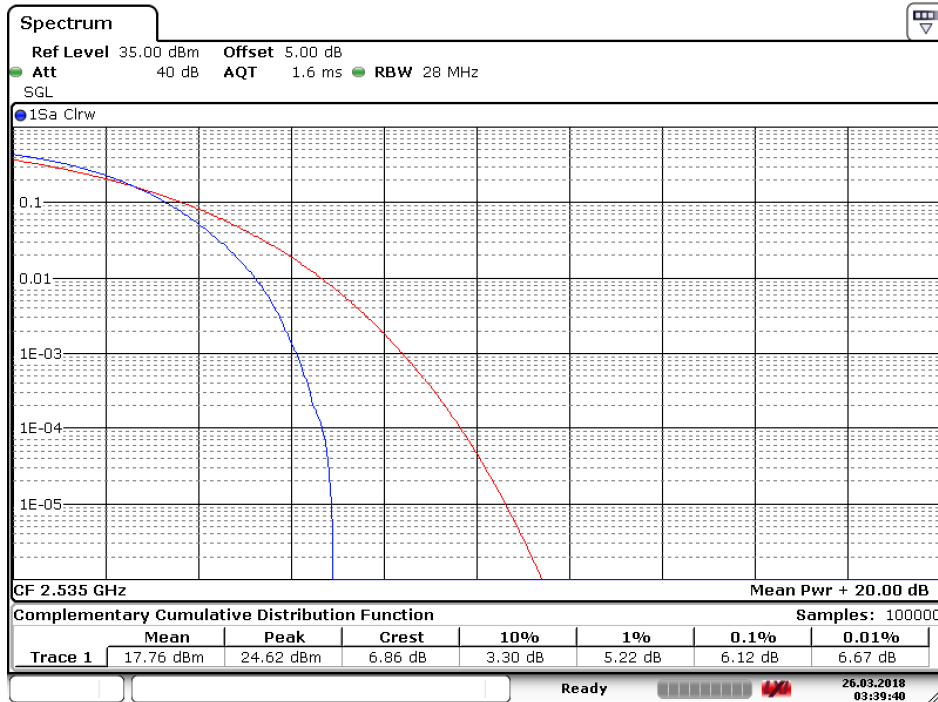
Date: 26.MAR.2018 03:39:40

2.1.2.2   Test Mode = LTE/TM2.Bandwidth=100RB+100RB

2.1.2.2.1   Test Channel = MCH

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	16.74 dBm	24.01 dBm	7.28 dB	3.48 dB	5.45 dB	6.41 dB	7.07 dB
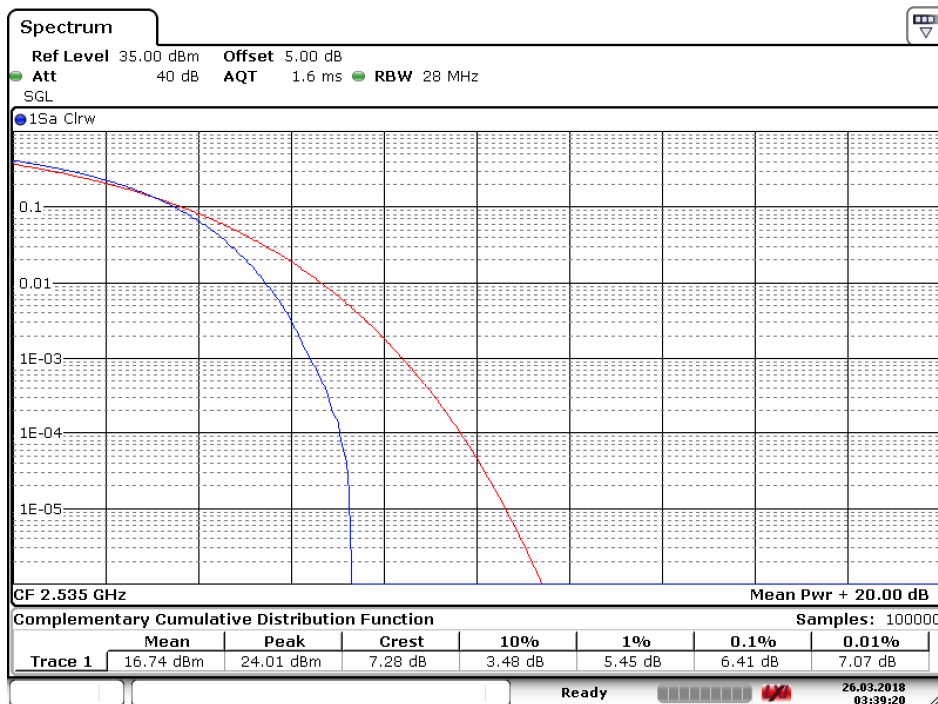
Date: 26.MAR.2018 03:39:21

2.1.2.3 Test Mode = LTE/TM3.Bandwidth=100RB+100RB

2.1.2.3.1 Test Channel = MCH
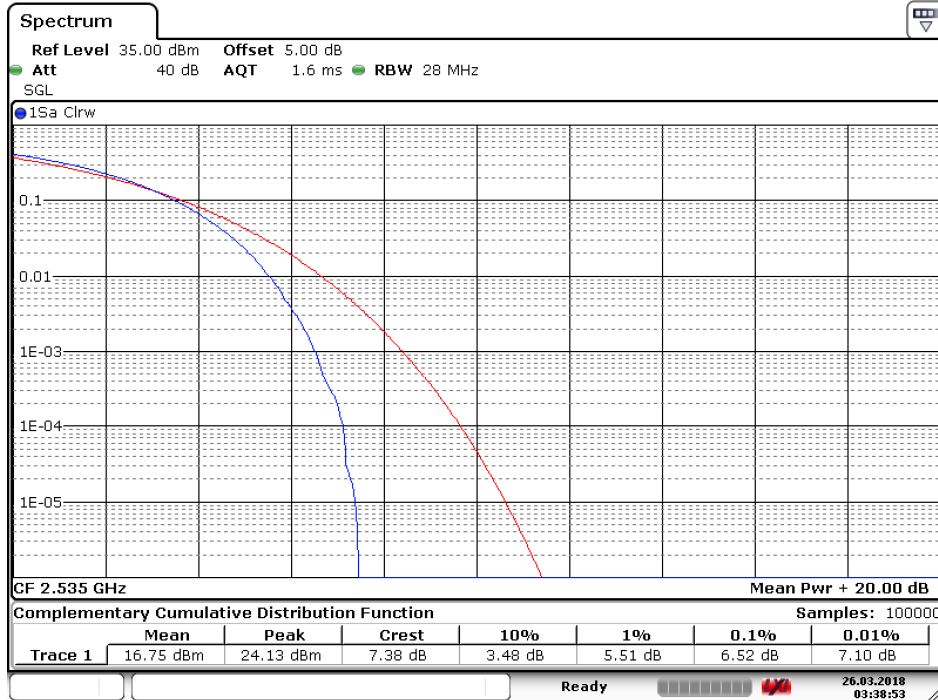
Date: 26.MAR.2018 03:38:54

3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE Band CA_7C

3.1.1.1 Test Mode = LTE /TM1 100RB+50RBs

3.1.1.1.1 Test Channel = MCH
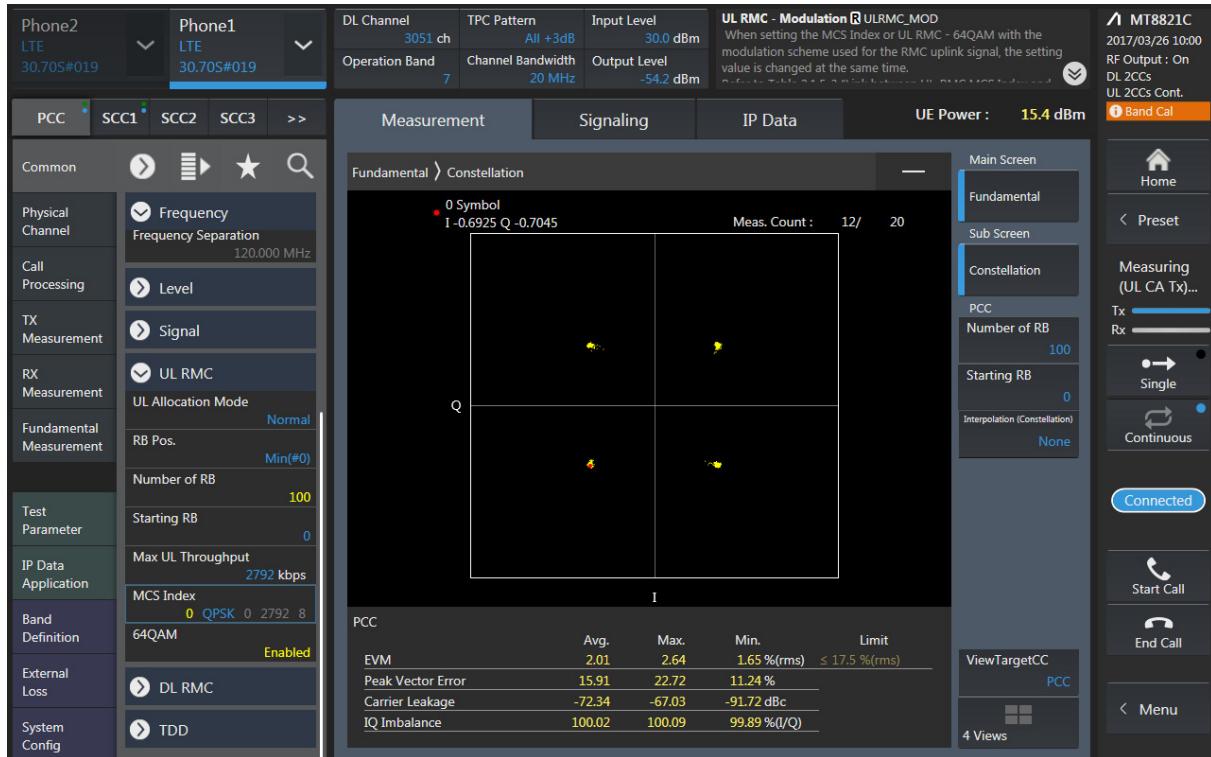
3.1.1.2   Test Mode = LTE /TM2 100RB+50RB

3.1.1.2.1   Test Channel = MCH
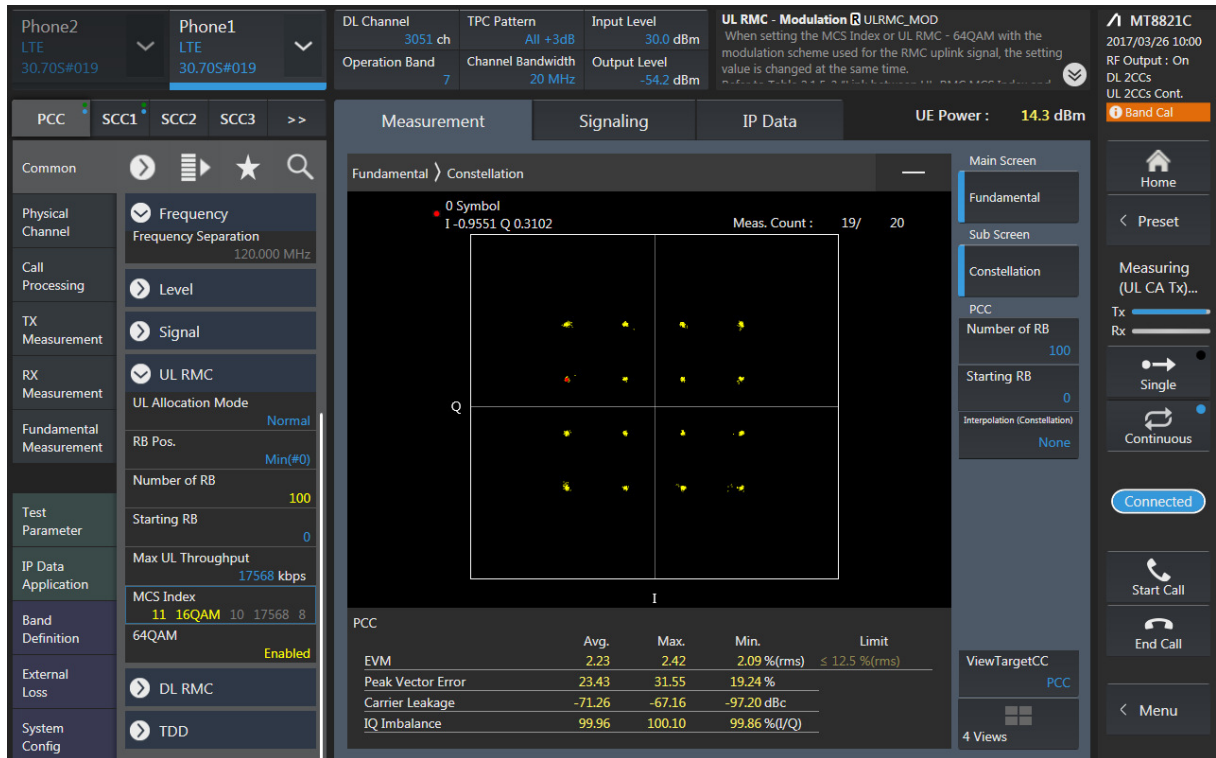
3.1.1.3   Test Mode = LTE /TM3 100RB+50RB

3.1.1.3.1   Test Channel = MCH
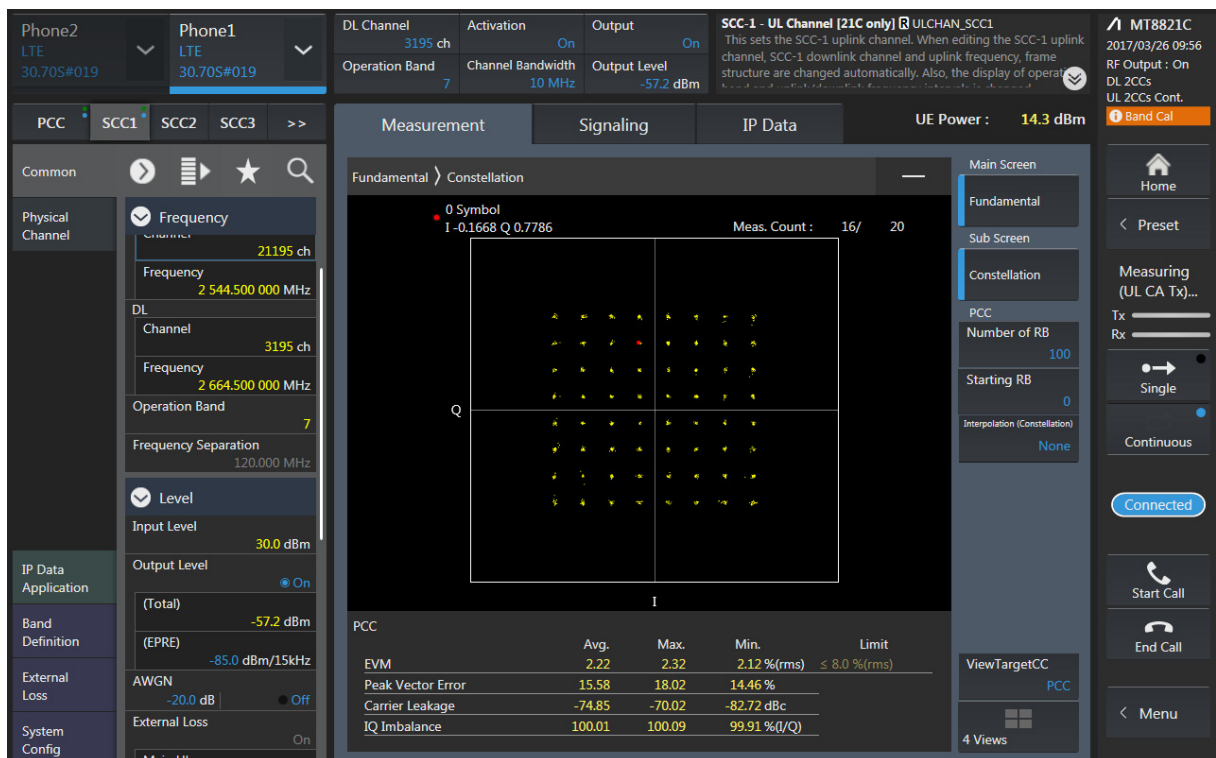
3.1.1.4   Test Mode = LTE /TM1 100RB+100RB

3.1.1.4.1   Test Channel = MCH
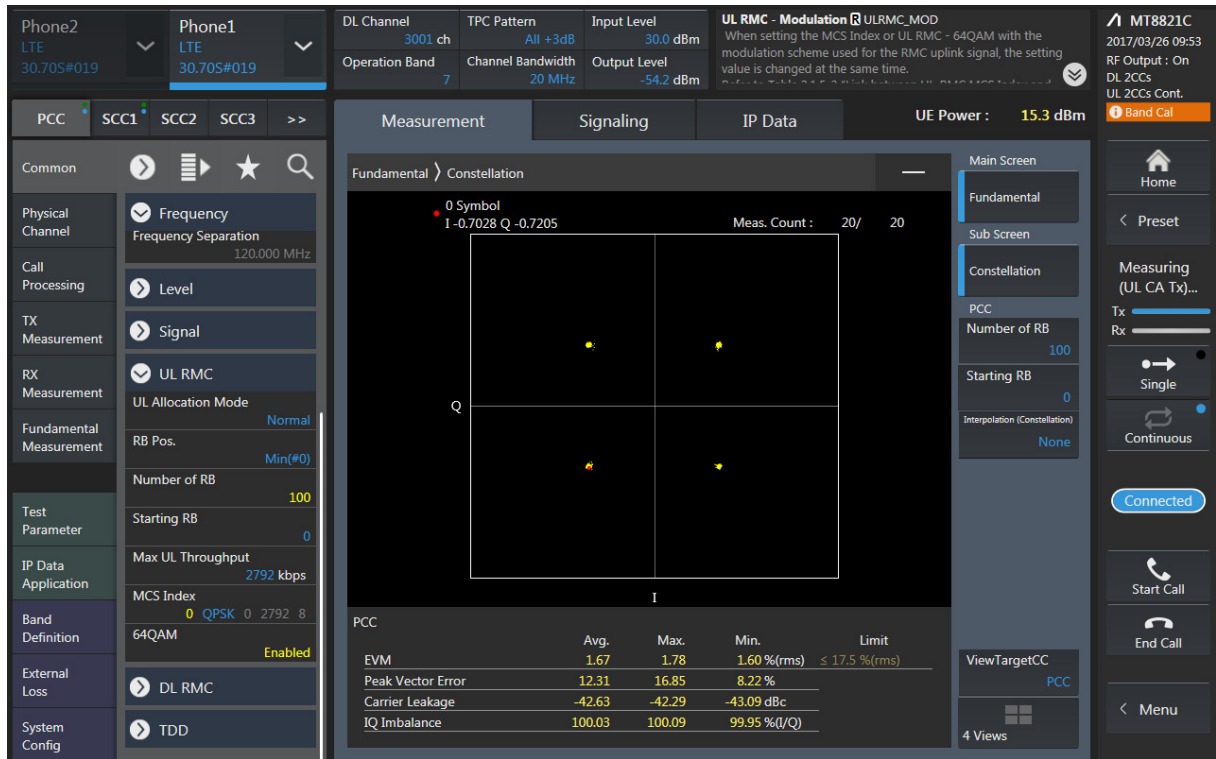
3.1.1.5   Test Mode = LTE /TM2 100RB+100RB

3.1.1.5.1   Test Channel = MCH

3.1.1.6   Test Mode = LTE /TM3 100RB+100RB

3.1.1.6.1   Test Channel = MCH

4   Bandwidth

Part I - Test Results

Test Band	Test Mode	PCC RB	SCC RB	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
CA_7C	TM1/100RB+50RB	P_100@0	S_50@0	MCH	27.69	29.31	PASS
	TM2/100RB+50RB	P_100@0	S_50@0	MCH	27.63	29.25	PASS
	TM3/100RB+50RB	P_100@0	S_50@0	MCH	27.63	29.31	PASS
	TM1/100RB+100RB	P_100@0	S_100@0	MCH	37.40	39.64	PASS
	TM2/100RB+100RB	P_100@0	S_100@0	MCH	37..48	39.64	PASS
	TM3/100RB+100RB	P_100@0	S_100@0	MCH	37.56	39.64	PASS

4.1 For LTE

4.1.1 Test Band = LTE Band CA_7C

4.1.1.1   Test Mode = LTE/TM1 100RB+50RB

4.1.1.1.1   Test Channel = MCH
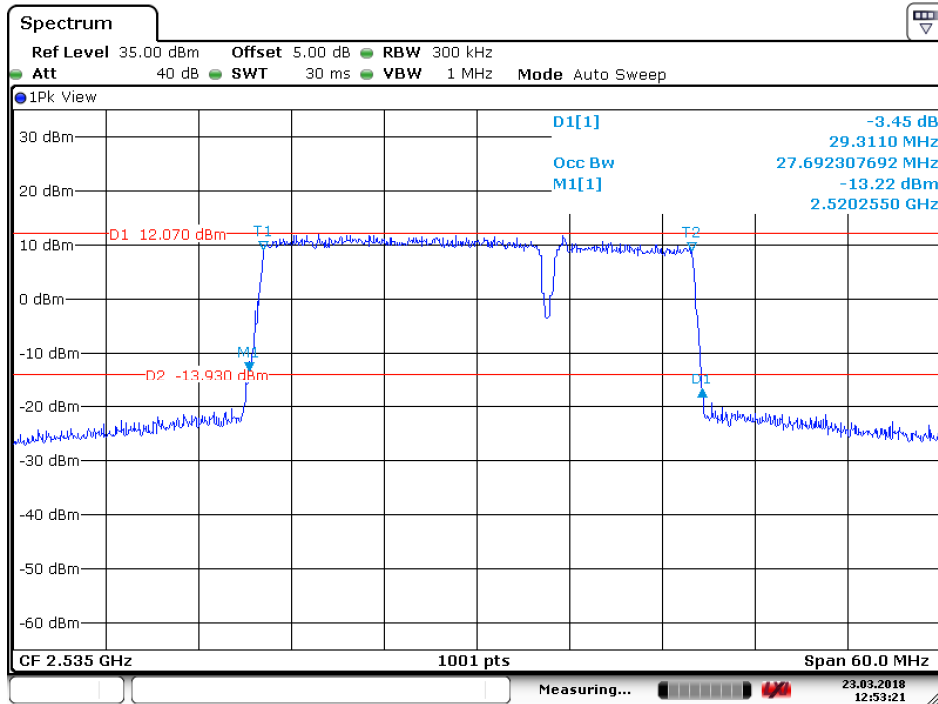
Date: 23.MAR.2018 12:53:22

4.1.1.2   Test Mode = LTE/TM2 100RB+50RB

4.1.1.2.1   Test Channel = MCH
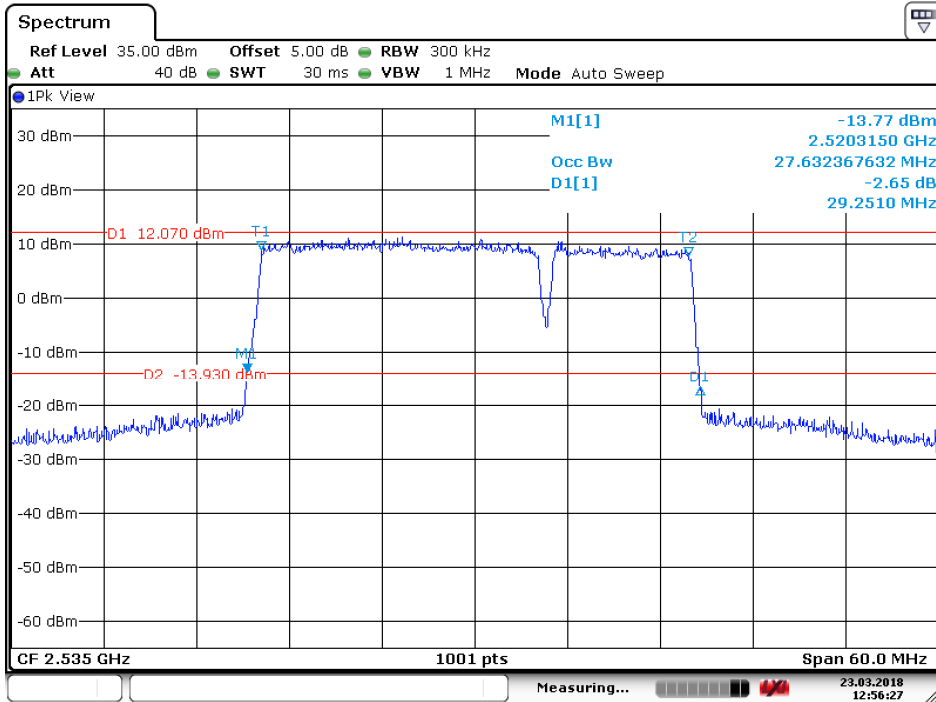
Date: 23.MAR.2018 12:56:27

4.1.1.3   Test Mode = LTE/TM3 100RB+50RB

4.1.1.3.1   Test Channel = MCH
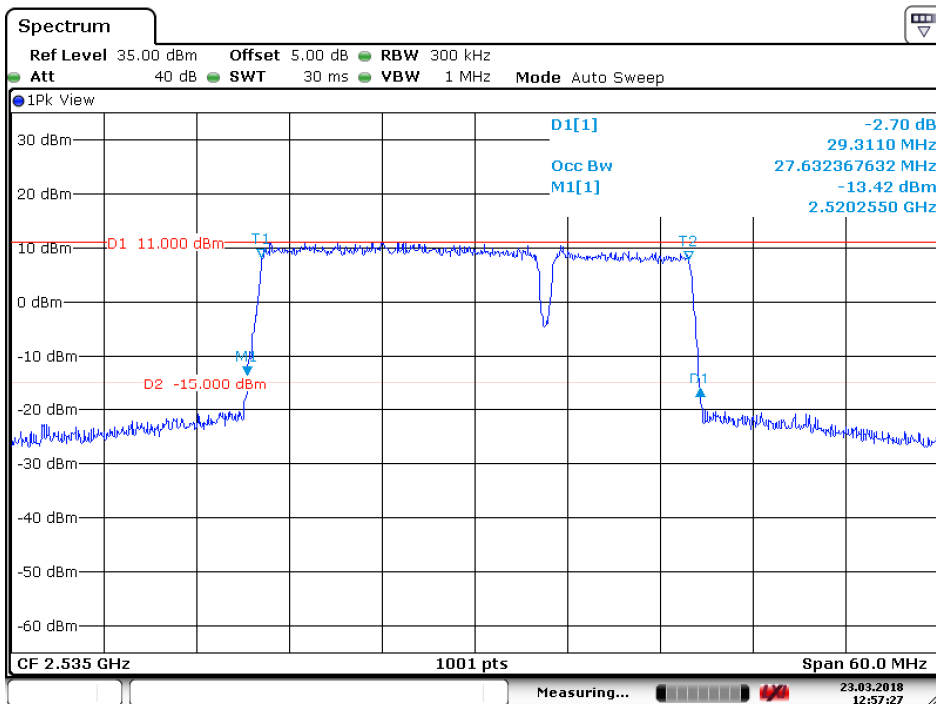
Date: 23.MAR.2018 12:57:27

4.1.1.4 Test Mode = LTE/TM1 100RB+100RB

4.1.1.4.1 Test Channel = MCH
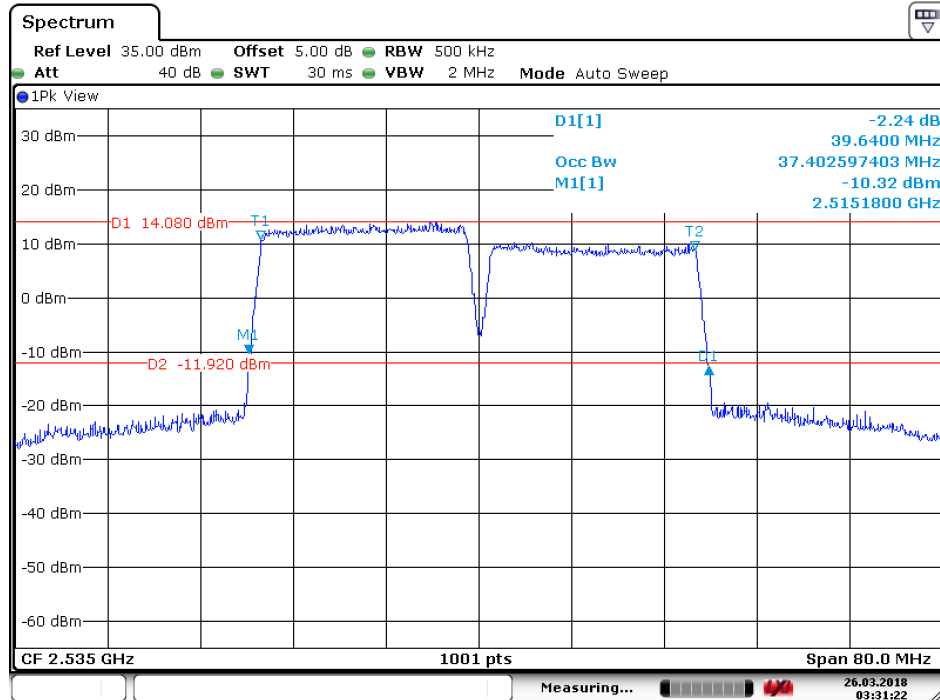
Date: 26.MAR.2018 03:31:22

4.1.1.5 Test Mode = LTE/TM2 100RB+100RB

4.1.1.5.1 Test Channel = MCH

Date: 26.MAR.2018 03:35:02

4.1.1.6   Test Mode = LTE/TM3 100RB+100RB

4.1.1.6.1   Test Channel =MCH

Date: 26.MAR.2018 03:35:50

5   Band Edges Compliance

5.1 For LTE

5.1.1 Test Band = LTE Band CA_7C

5.1.1.1   Test Mode = LTE/TM1 100RB+50RB

5.1.1.1.1   Test Channel = LCH

5.1.1.1.1.1 Test RB= P_1@0 S_0@0
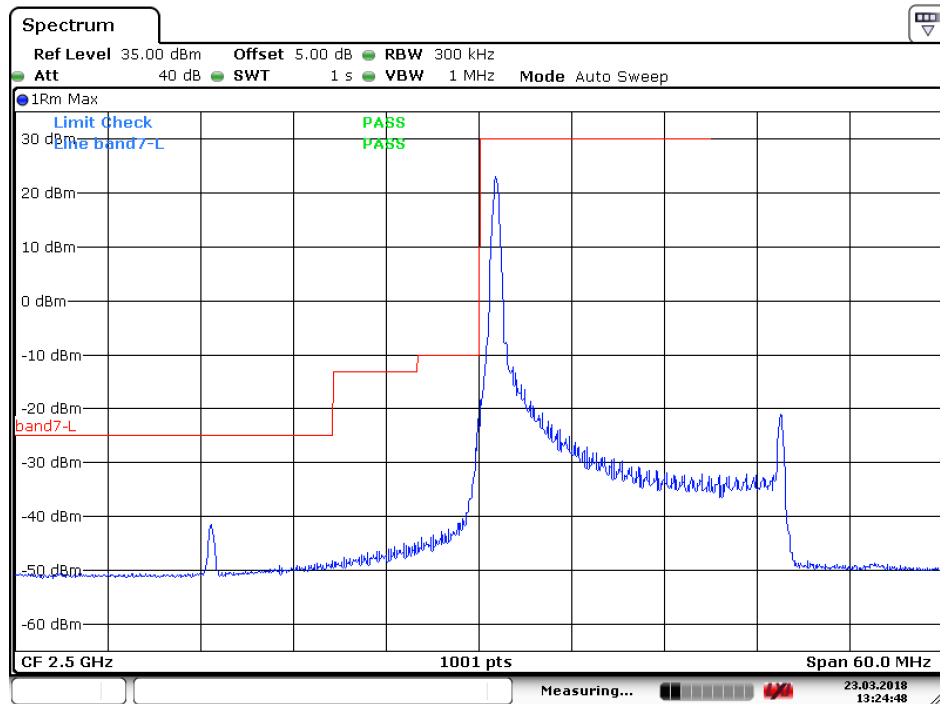
Date: 23.MAR.2018 13:24:49

5.1.1.1.1.2 Test RB= P_1@0 S_1@49
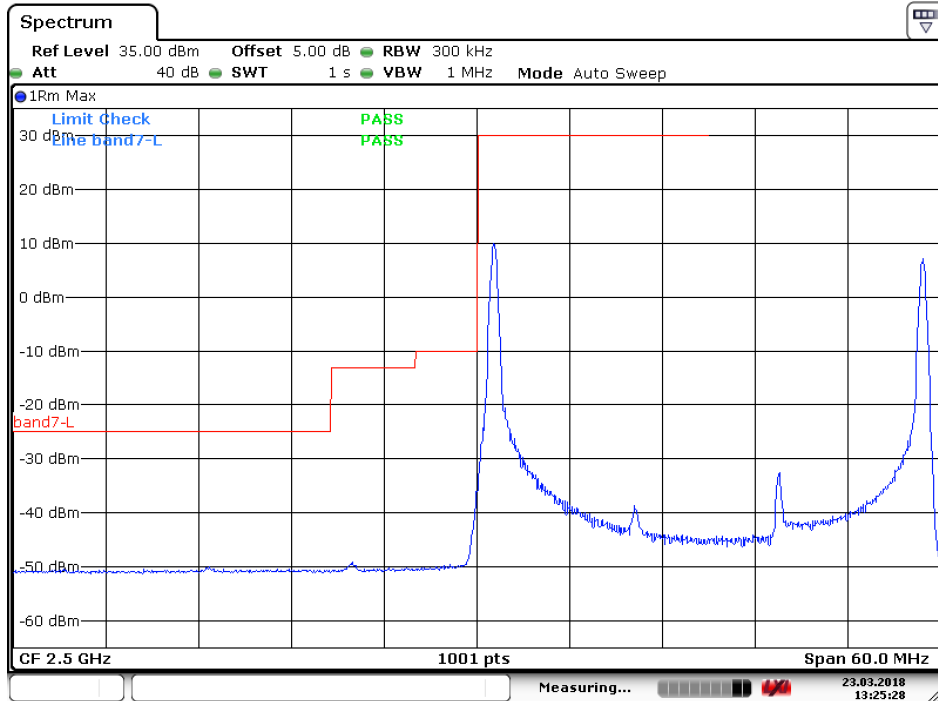
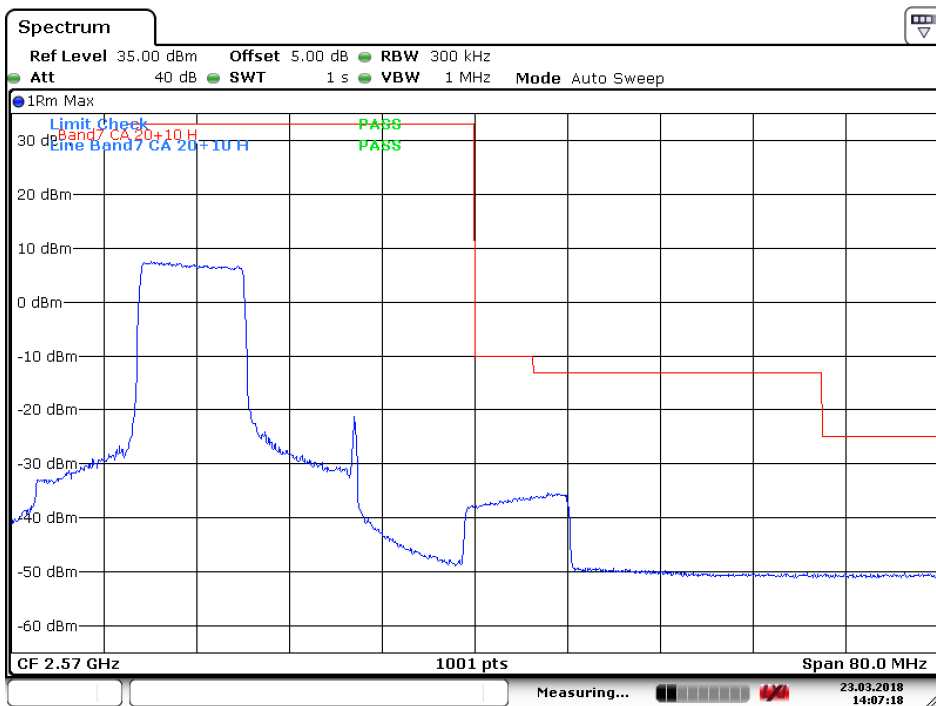Date: 23.MAR.2018 13:25:28

5.1.1.1.1.3 Test RB= P_1@49 S_1@0
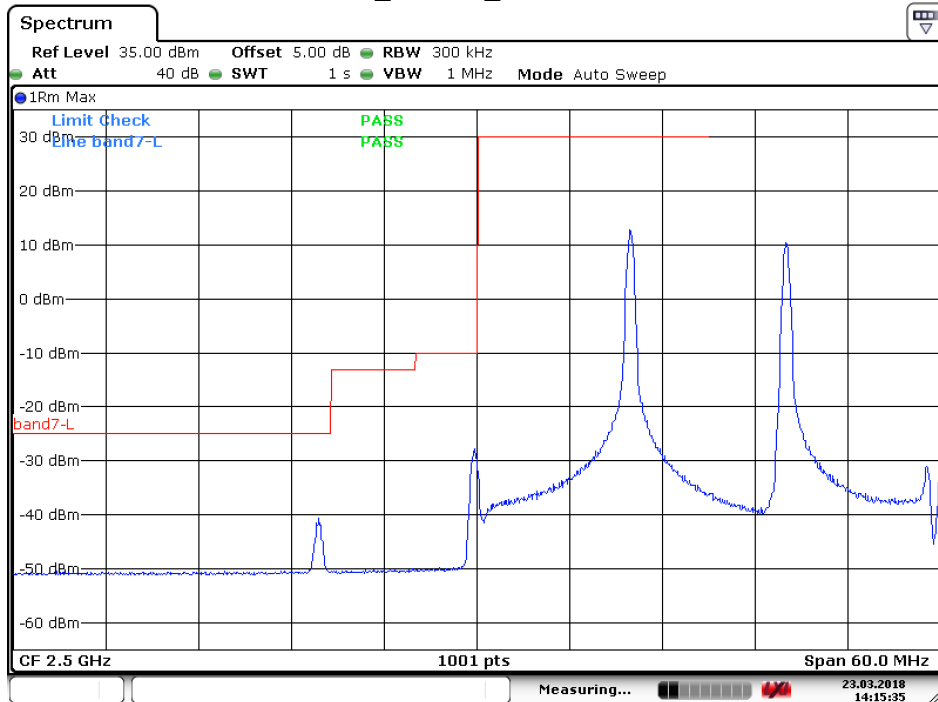
Date: 23.MAR.2018 14:15:36

5.1.1.1.1.4 Test RB= P_12@0 S_0@0
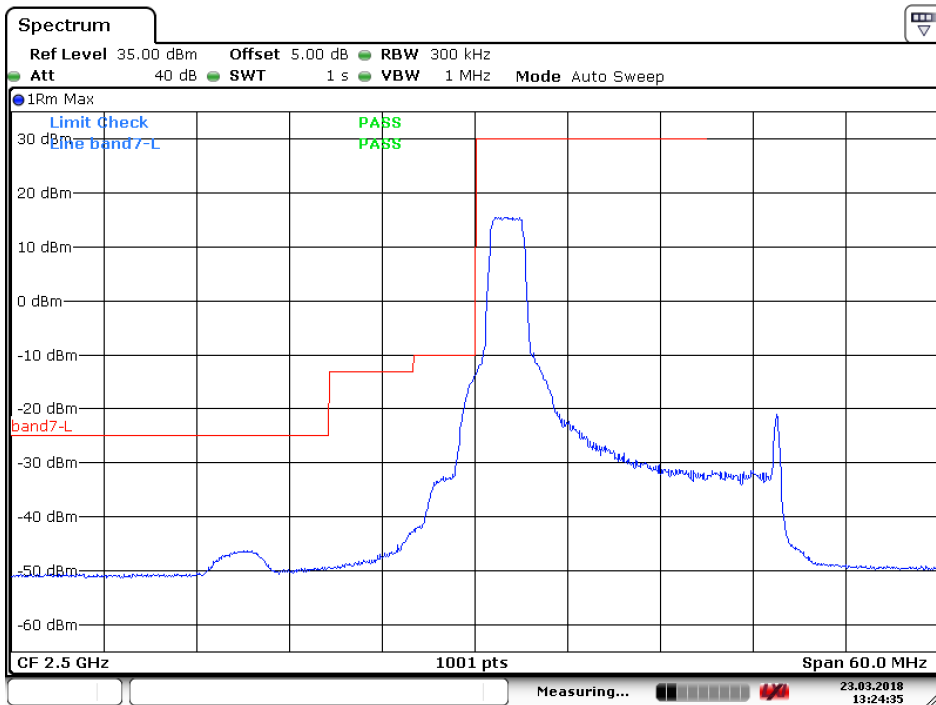
Date: 23.MAR.2018 13:24:35

5.1.1.1.1.5 Test RB= P_50@0 S_0@0

Date: 23.MAR.2018 13:24:15

5.1.1.1.1.6 Test RB= P_100@0 S_50@0

Date: 23.MAR.2018 13:20:39

5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB= P_1@0 S_0@0
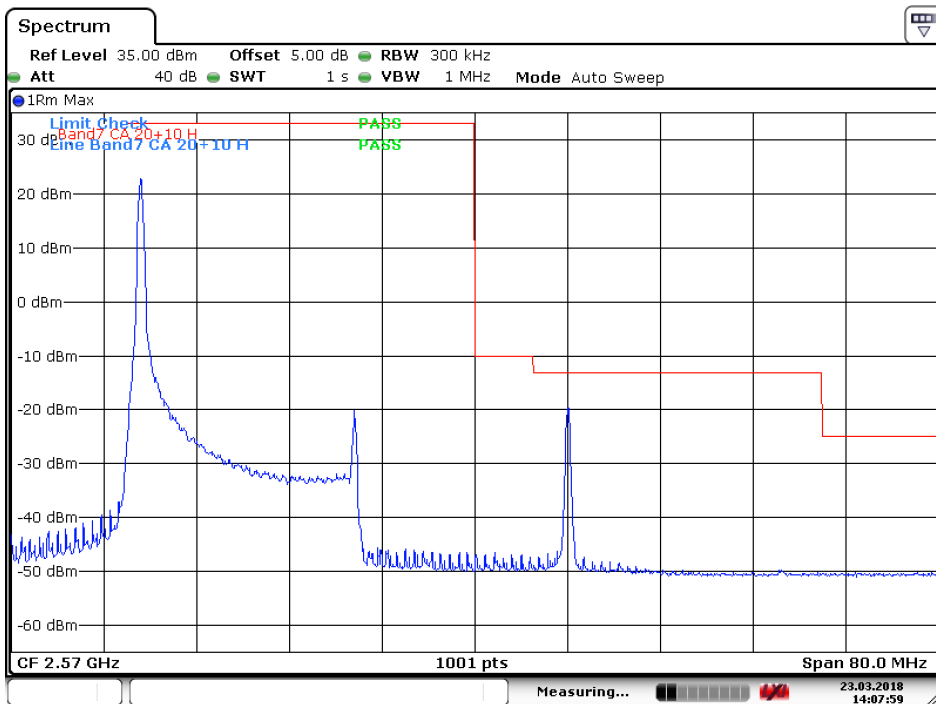
Date: 23.MAR.2018 14:07:59

5.1.1.1.2.2 Test RB= P_1@0 S_1@49
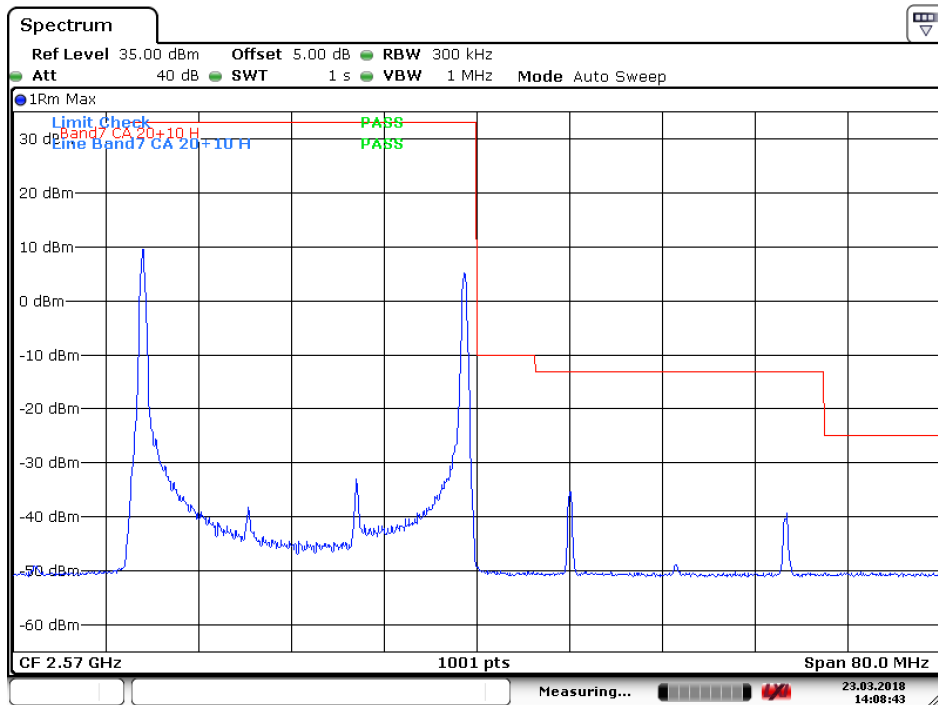
Date: 23.MAR.2018 14:08:43

5.1.1.1.2.3 Test RB= P_1@49 S_1@0
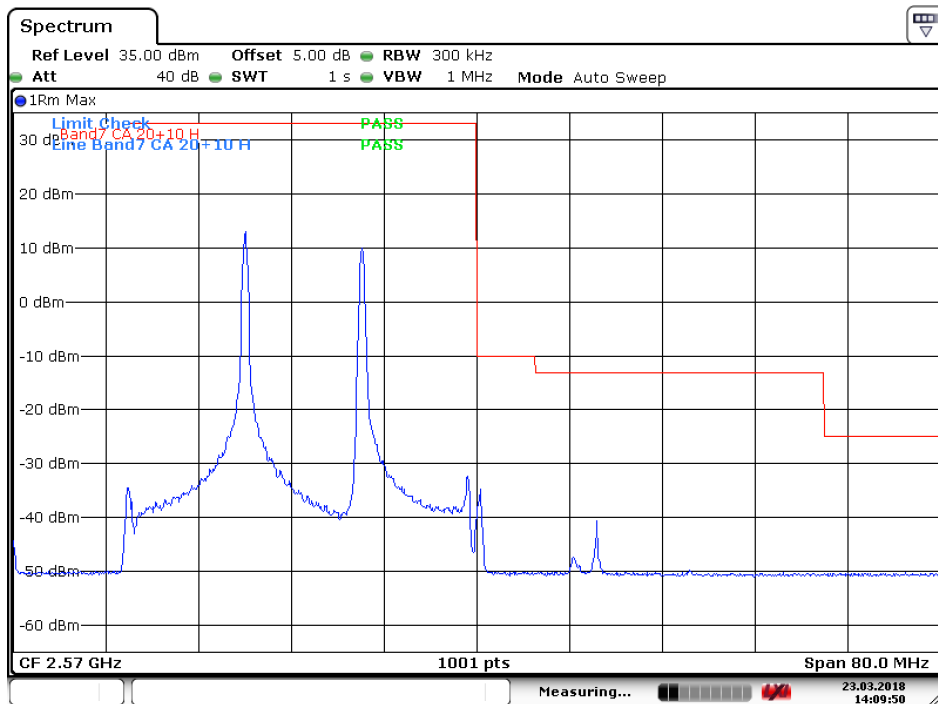
Date: 23.MAR.2018 14:09:50

5.1.1.1.2.4 Test RB= P_12@0 S_0@0
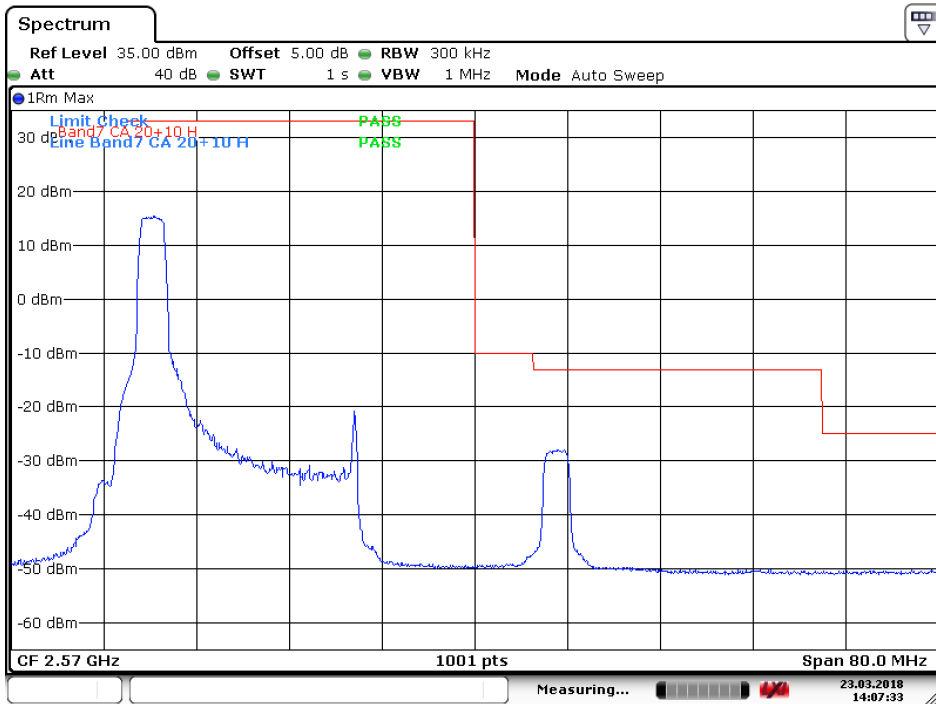
Date: 23.MAR.2018 14:07:33

5.1.1.1.2.5 Test RB= P_50@0 S_0@0

Date: 23.MAR.2018 14:07:19

5.1.1.1.2.6 Test RB= P_100@0 S_50@0

Date: 23.MAR.2018 14:05:45

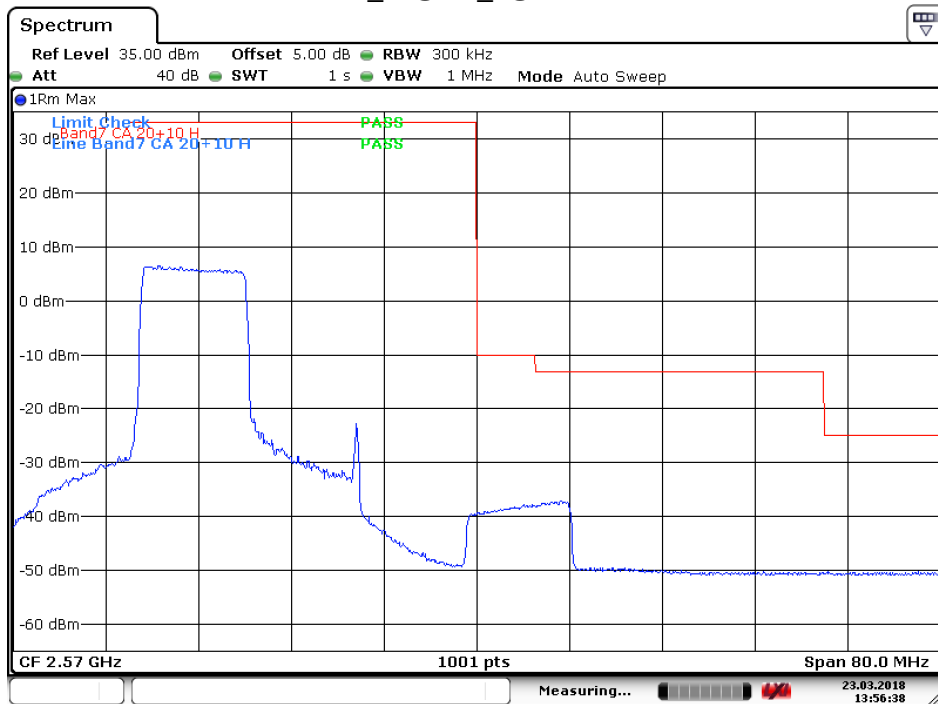### 5.1.1.2   Test Mode = LTE/TM2 100RB+50RB

5.1.1.2.1   Test Channel = LCH

5.1.1.2.1.1 Test RB=P_12@0 S_0@0
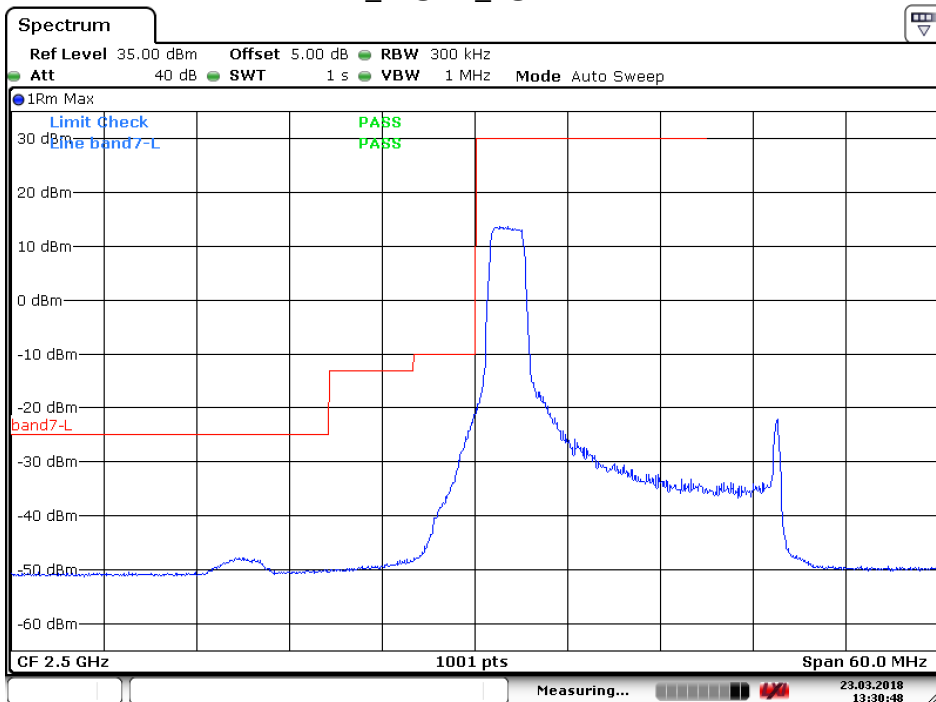
Date: 23.MAR.2018 13:30:48

5.1.1.2.1.2 Test RB=P_50@0 S_0@0

Date: 23.MAR.2018 13:31:21

5.1.1.2.1.3 Test RB=P_100@0 S_50@0
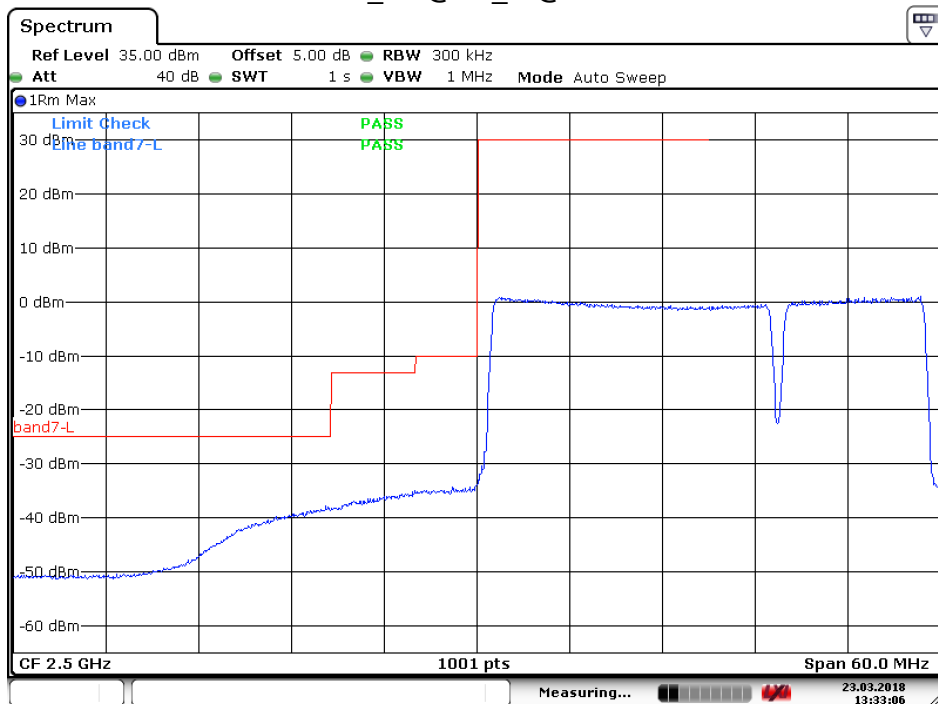
Date: 23.MAR.2018 13:33:07

5.1.1.2.2   Test Channel = HCH

5.1.1.2.2.1 Test RB=P_12@0 S_0@0
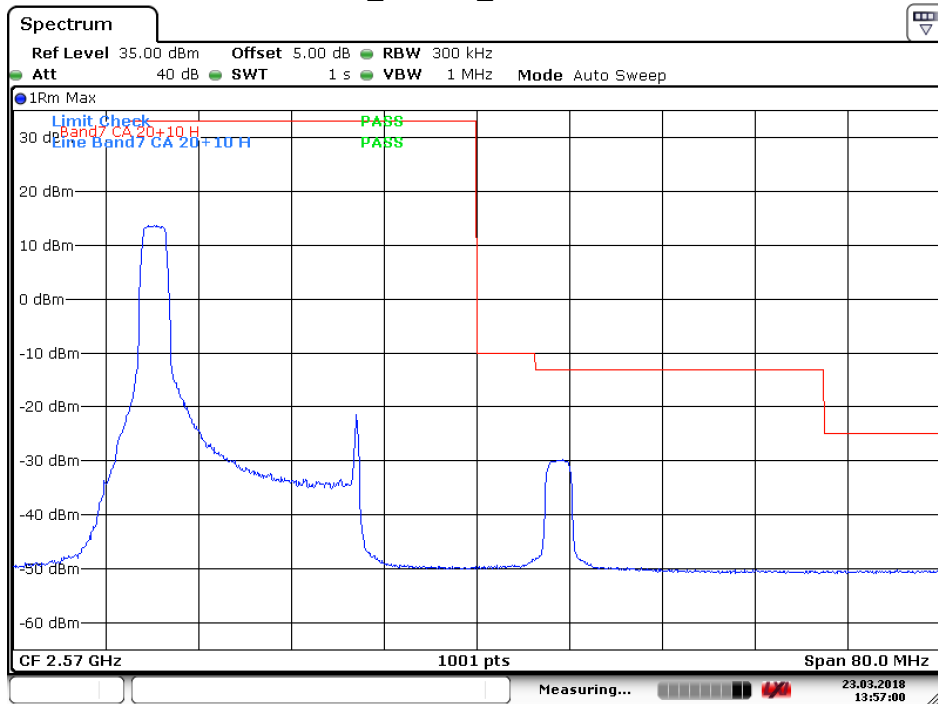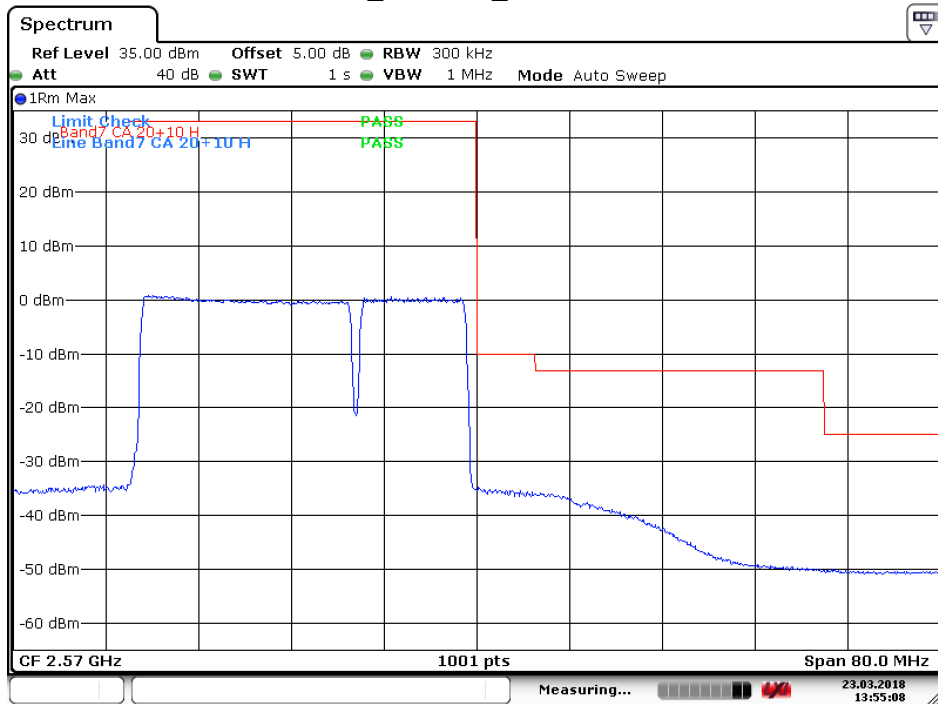

Date: 23.MAR.2018 13:57:00

5.1.1.2.2.2 Test RB=P_50@0 S_0@0

Date: 23.MAR.2018 13:56:38
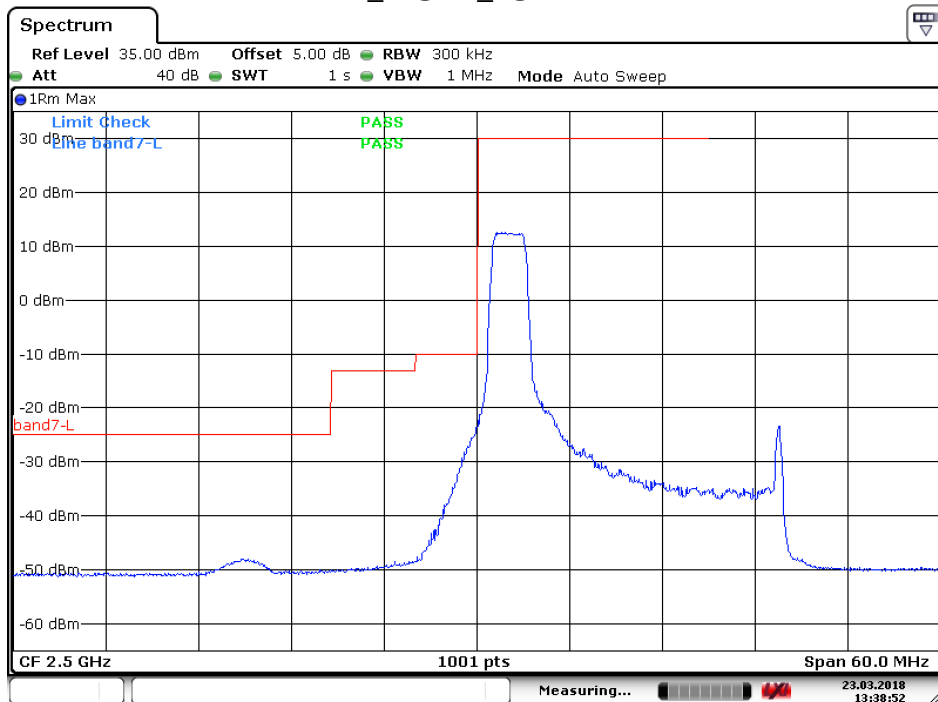
5.1.1.2.2.3 Test RB=P_100@0 S_50@0

Date: 23.MAR.2018 13:55:09

5.1.1.3   Test Mode = LTE/TM3 100RB+50RB
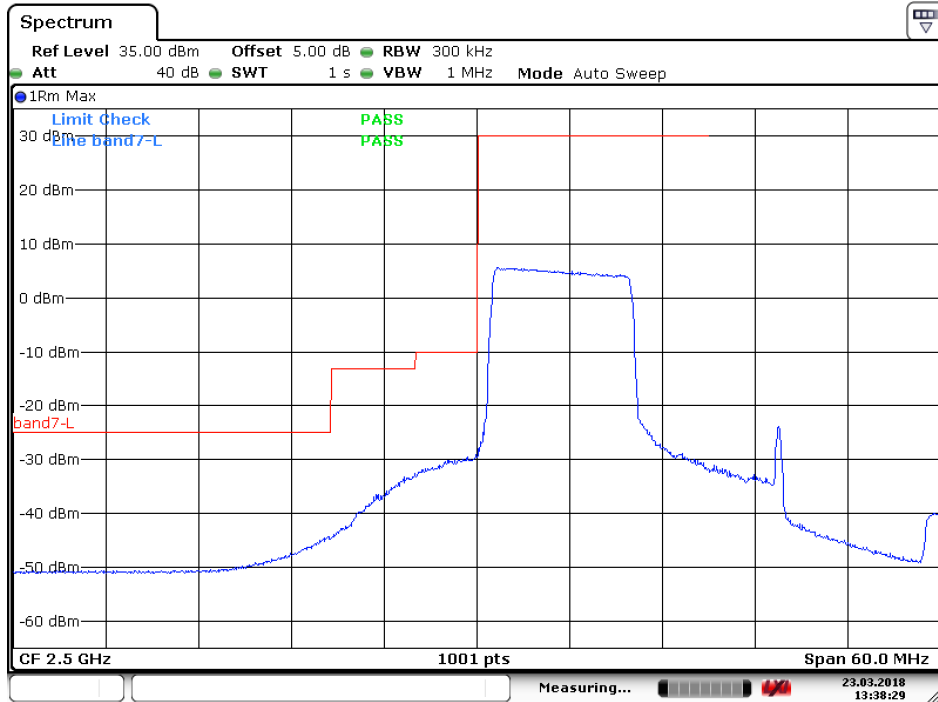
5.1.1.3.1   Test Channel = LCH

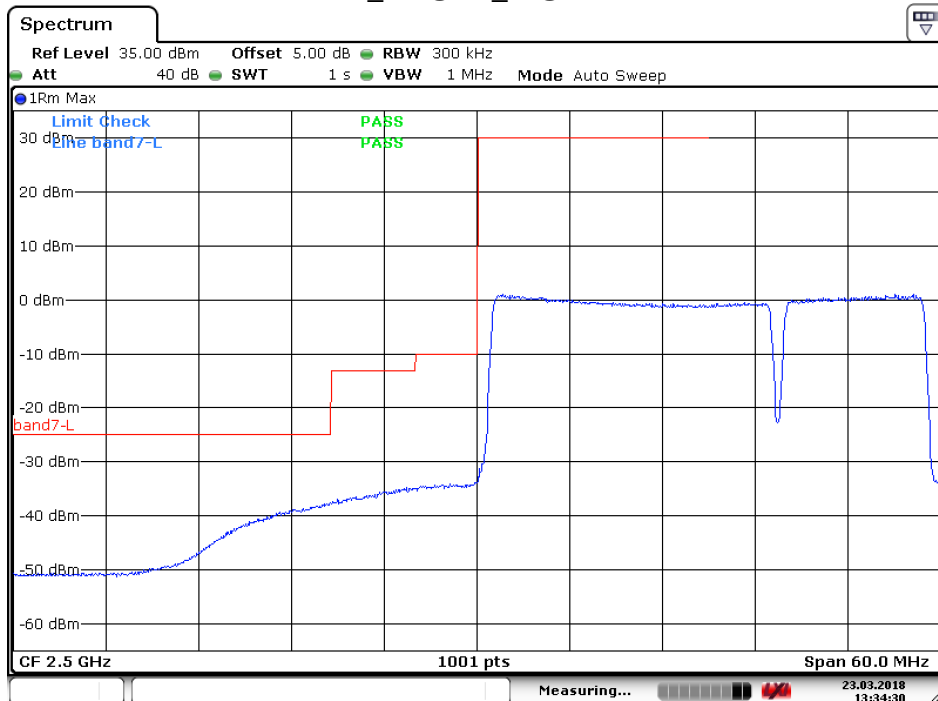### 5.1.1.3.1.1 Test RB=P_12@0 S_0@0

Date: 23.MAR.2018 13:38:52

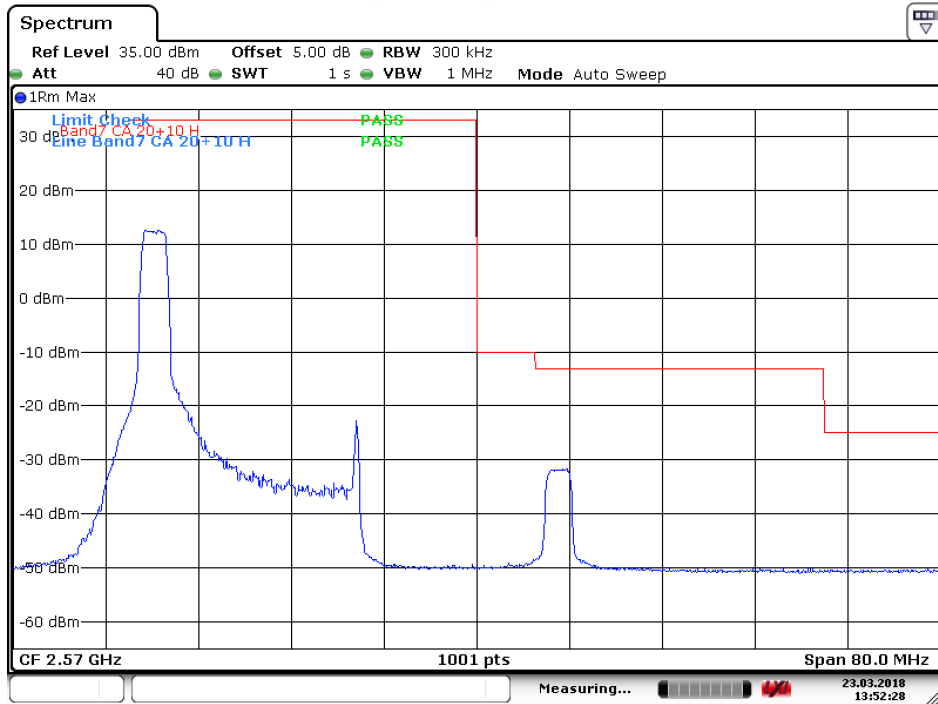### 5.1.1.3.1.2 Test RB=P_50@0 S_0@0

Date: 23.MAR.2018 13:38:28

5.1.1.3.1.3 Test RB=P_100@0 S_50@0
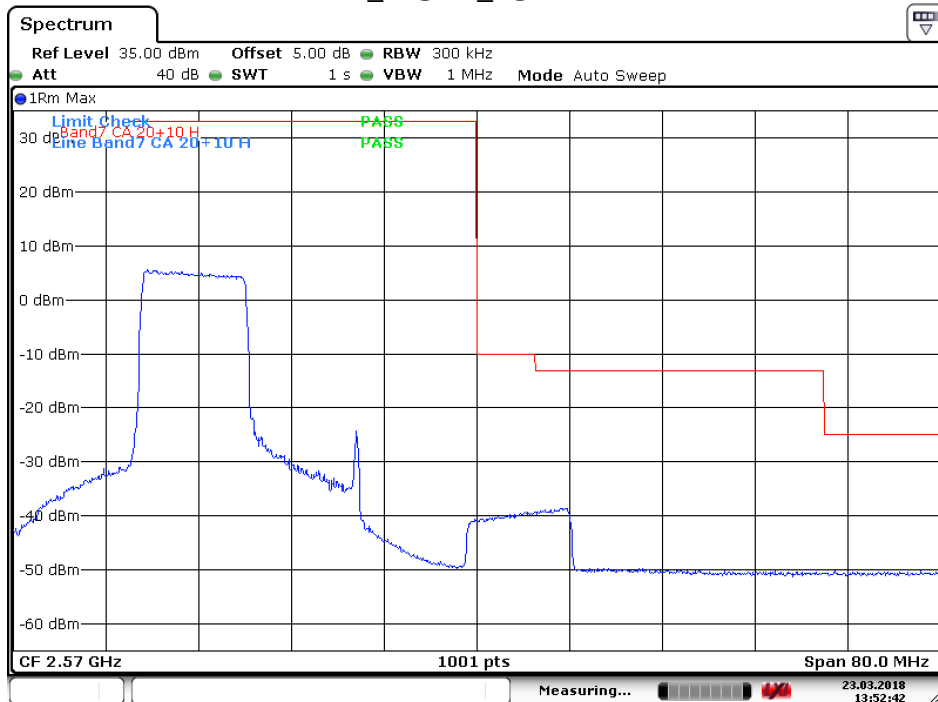

Date: 23.MAR.2018 13:34:30

5.1.1.3.2   Test Channel = HCH

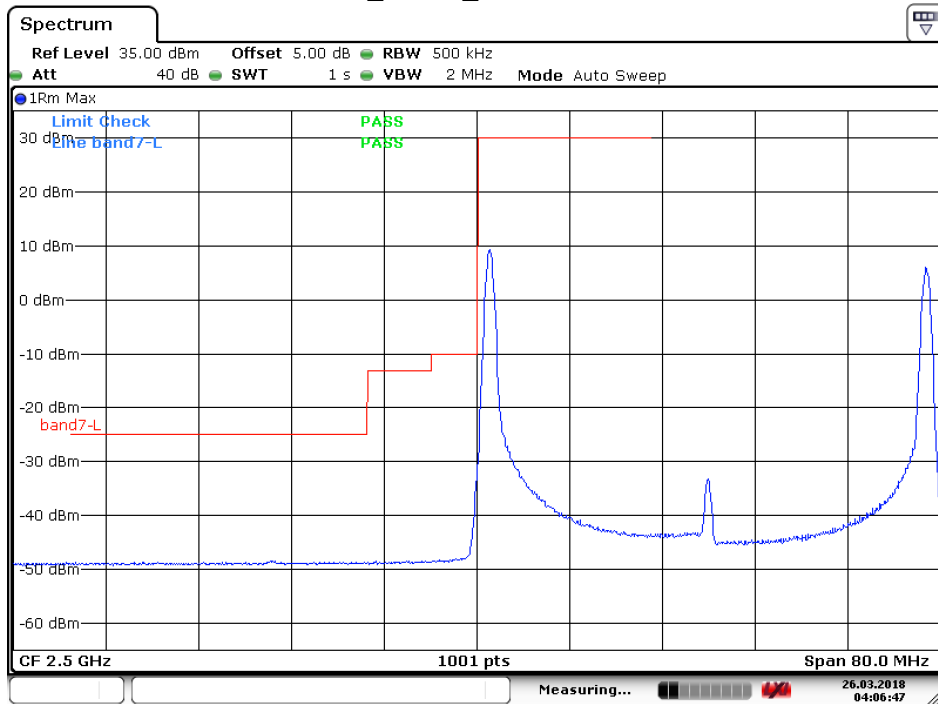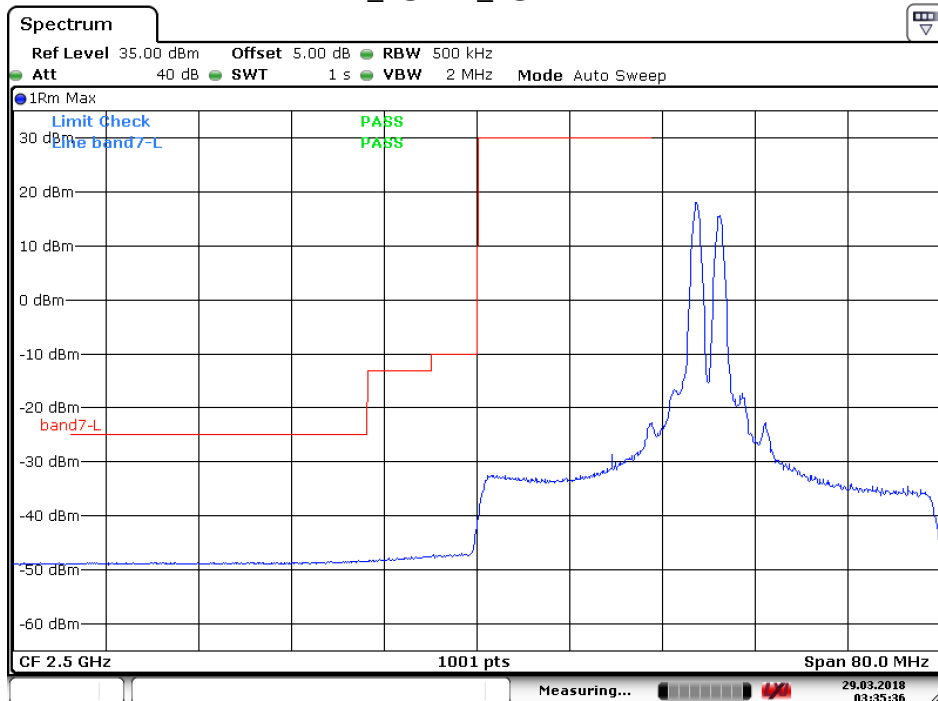#### 5.1.1.3.2.1 Test RB=P_12@0 S_0@0

Date: 23.MAR.2018 13:52:29

5.1.1.3.2.2 Test RB=P_50@0 S_0@0

Date: 23.MAR.2018 13:52:43

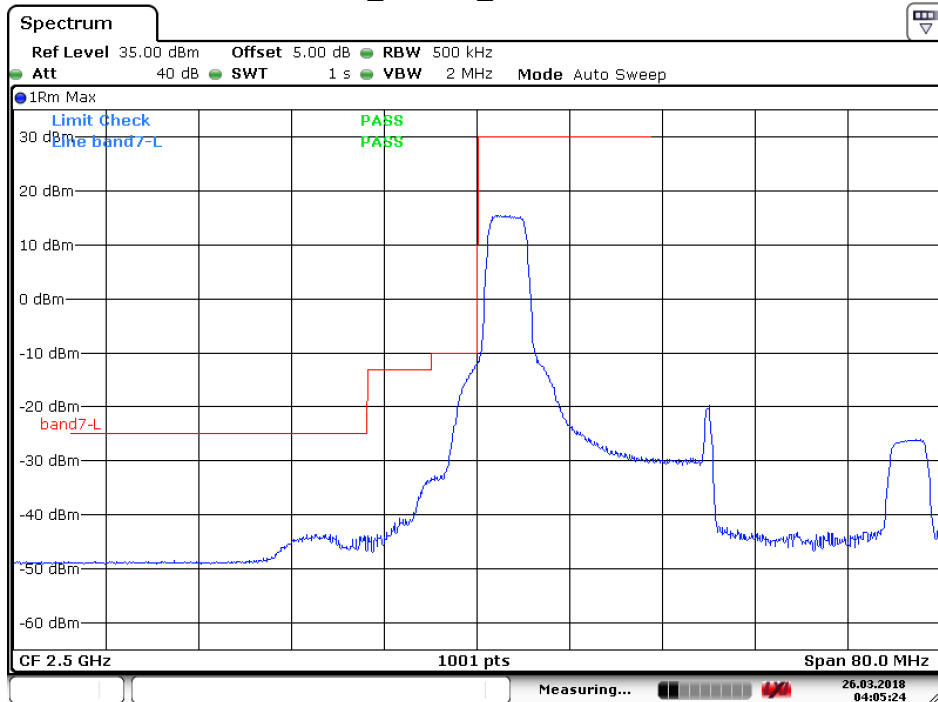### 5.1.1.3.2.3 Test RB=P_100@0 S_50@0

Date: 23.MAR.2018 13:53:48

5.1.1.4   Test Mode = LTE/TM1 100RB+100RB

5.1.1.4.1   Test Channel = LCH

5.1.1.4.1.1 Test RB=P_1@0 S_0@0

Date: 26.MAR.2018 04:05:59

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5.1.1.4.1.2 Test RB=P_1@0 S_1@99

Date: 26.MAR.2018 04:06:48

5.1.1.4.1.3 Test RB=P_1@99 S_1@0

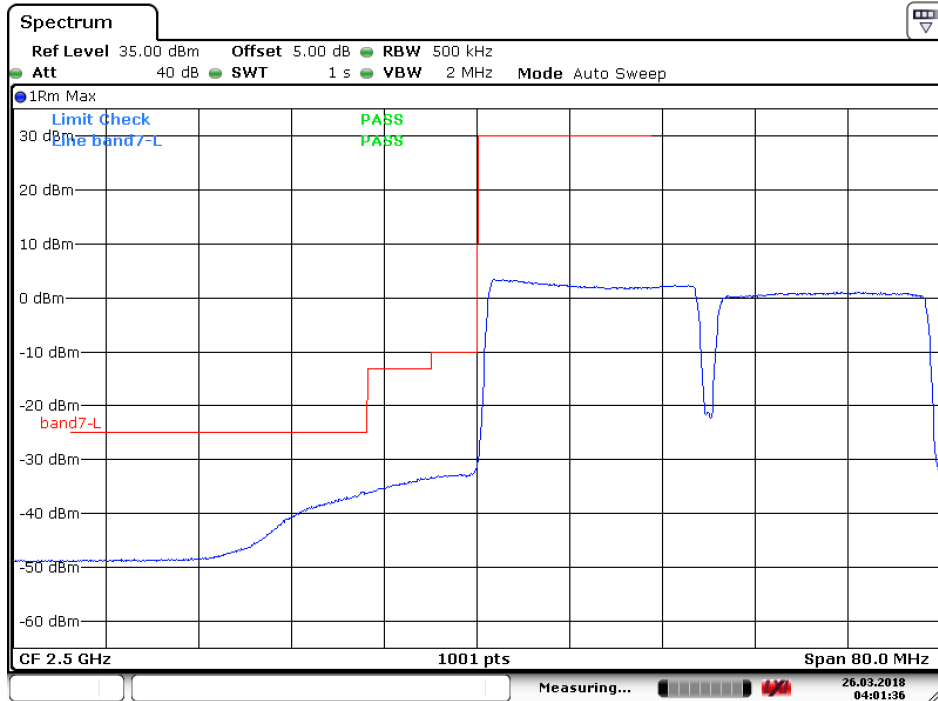

Date: 29.MAR.2018 03:35:37

5.1.1.4.1.4 Test RB=P_18@0 S_0@0

Date: 26.MAR.2018 04:05:25

5.1.1.4.1.5 Test RB=P_100@0 S_0@0
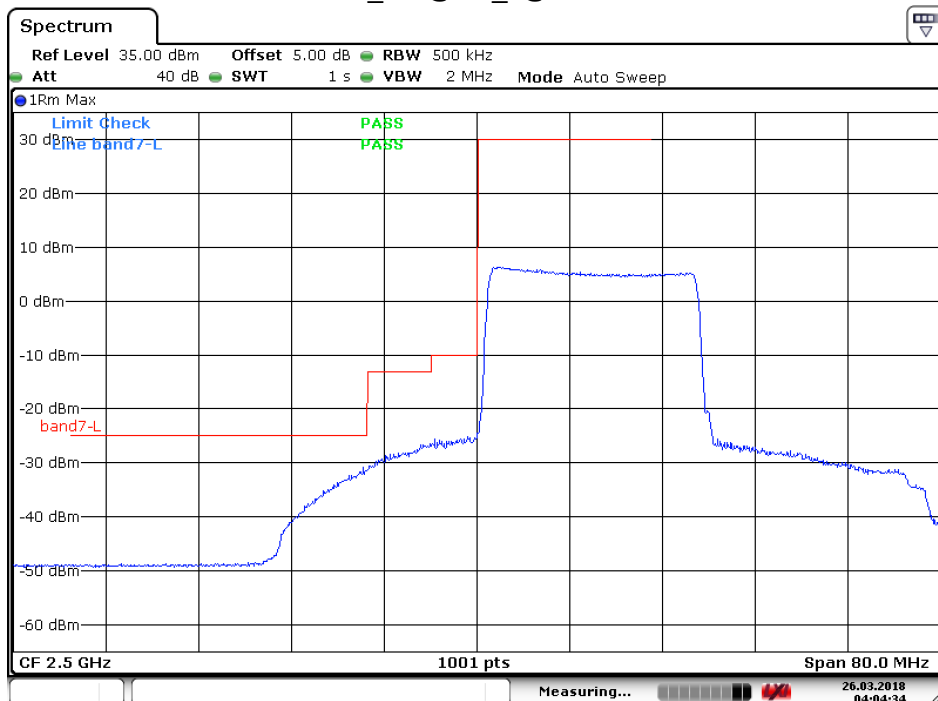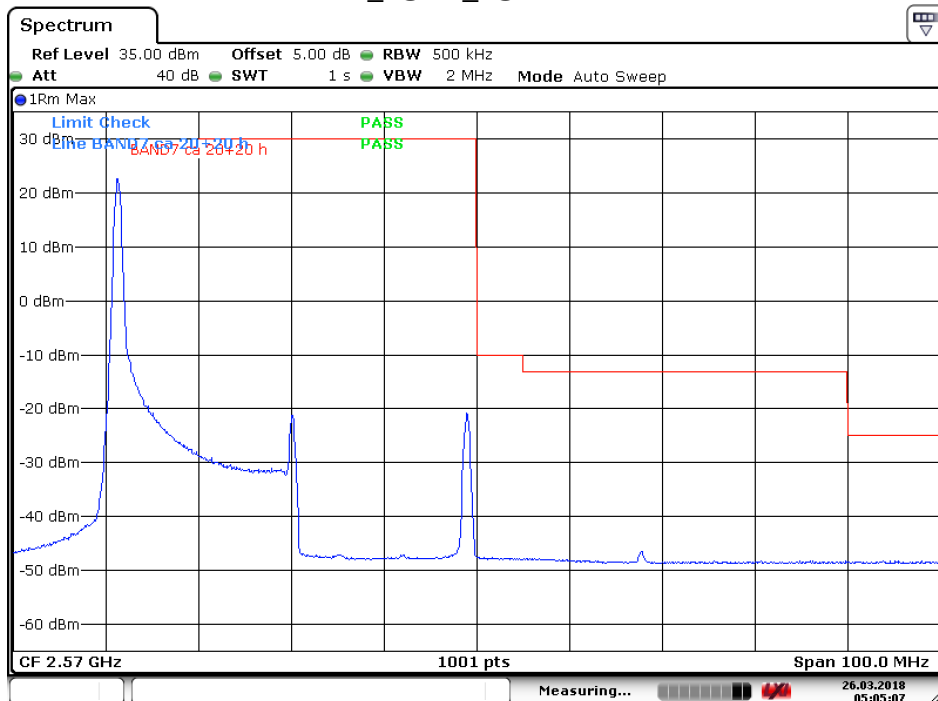

Date: 26.MAR.2018 04:04:34

5.1.1.4.1.6 Test RB=P_100@0 S_100@0

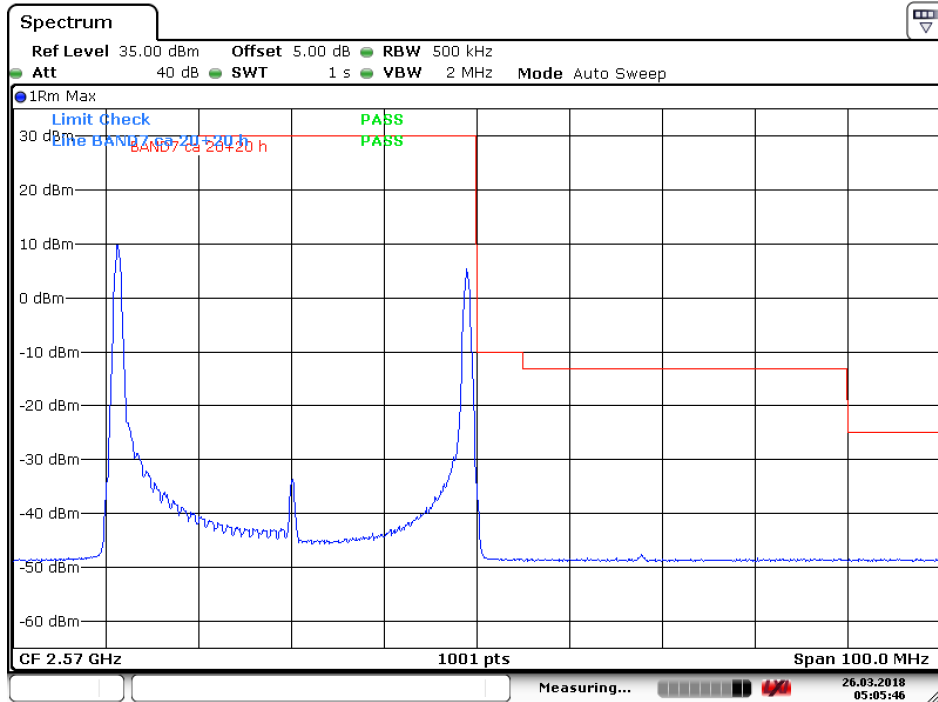Date: 26.MAR.2018 04:01:37

5.1.1.4.2   Test Channel = HCH

5.1.1.4.2.1 Test RB=P_1@0 S_0@0
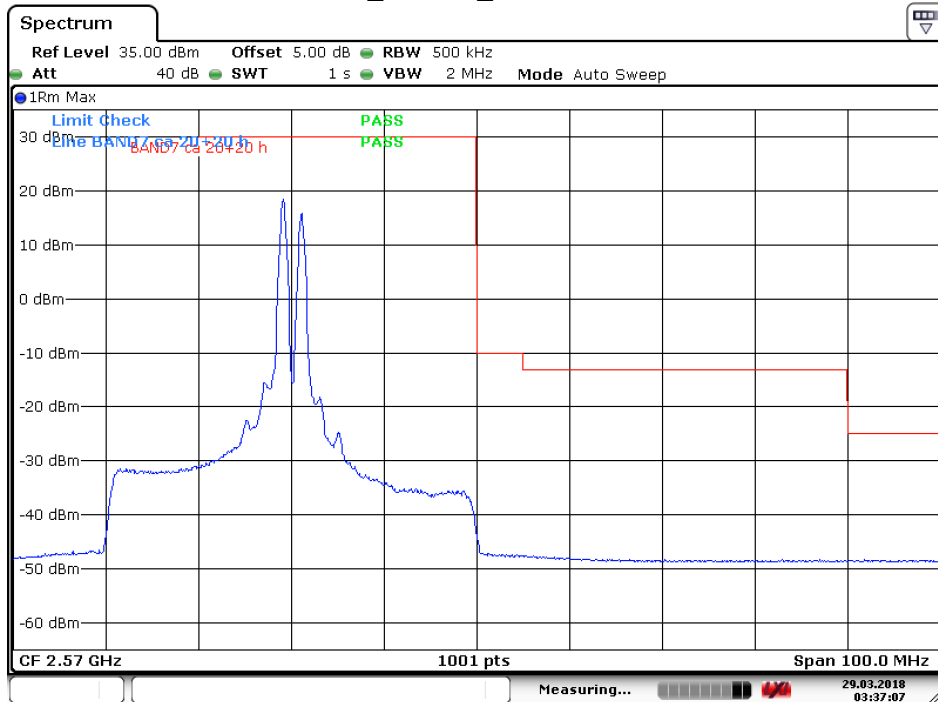

Date: 26.MAR.2018 05:05:07

5.1.1.4.2.2 Test RB=P_1@0 S_1@99

Date: 26.MAR.2018 05:05:47

5.1.1.4.2.3 Test RB=P_1@99 S_1@0

Date: 29.MAR.2018 03:37:06