

Appendix B.1

**CDMA BC0/BC1/BC10
EVDO BC0/BC1/BC10**

Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2019/3/2	2020/3/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Hom Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/4/13	2021/4/12
Hom Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2019/3/2	2020/3/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018/7/12	2019/7/11
Wideband Radio Communication Tester	Anritsu	MT8821C	6201462742	2018/5/2	2019/5/1
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	W005-02	2019/1/13	2020/1/12
RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/11/2	2019/11/1
Signal Analyzer	Rohde & Schwarz	FSV	W005-02	2019/3/2	2020/3/1
Coaxial Cable	SGS	N/A	SEM031-01	2018/7/12	2019/7/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/11/2	2019/11/1
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/11/2	2019/11/1
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/2	2019/11/1
Wideband Radio Communication Tester	Anritsu	MT8821C	6201462742	2019/3/2	2020/3/1
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	W005-02	2018/11/2	2019/11/1

Measurement Uncertainty

For a 95% confidence level ($k = 2$), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	$U = \pm 0.37 \text{ dB}$
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24 \text{ ppm}$

1 Effective (Isotropic) Radiated Power Output Data

Part I - Test Results of CDMA

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
CDMA BC1	CDMA /TM1	LCH	22.31	25.14	33.00	PASS
CDMA BC1	CDMA /TM1	MCH	22.28	25.11	33.00	PASS
CDMA BC1	CDMA /TM1	HCH	22.48	25.31	33.00	PASS

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
CDMA BC0	CDMA /TM1	LCH	23.89	23.55	38.45	PASS
CDMA BC0	CDMA /TM1	MCH	23.94	23.60	38.45	PASS
CDMA BC0	CDMA /TM1	HCH	23.78	23.44	38.45	PASS

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	Limit [dBm]	Verdict
CDMA BC10	CDMA /TM1	LCH	23.89	50.00	PASS
CDMA BC10	CDMA /TM1	MCH	23.79	50.00	PASS
CDMA BC10	CDMA /TM1	HCH	23.73	50.00	PASS

Part II - Test Results of EVDO

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
EVDO BC1	EVDO /TM1	LCH	22.41	25.24	33.00	PASS
EVDO BC1	EVDO /TM1	MCH	22.38	25.21	33.00	PASS
EVDO BC1	EVDO /TM1	HCH	22.49	25.32	33.00	PASS

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
EVDO BC0	EVDO /TM1	LCH	23.92	23.58	38.45	PASS
EVDO BC0	EVDO /TM1	MCH	24.01	23.67	38.45	PASS
EVDO BC0	EVDO /TM1	HCH	23.89	23.55	38.45	PASS

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	Limit [dBm]	Verdict
EVDO BC10	EVDO /TM1	LCH	24.09	50.00	PASS
EVDO BC10	EVDO /TM1	MCH	23.99	50.00	PASS
EVDO BC10	EVDO /TM1	HCH	23.92	50.00	PASS

Note:

a: For getting the ERP (Efficient Radiated Power), the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$

2 Peak-to-Average Ratio

Part I - Test Results of CDMA and EVDO

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BC0	CDMA /TM1	LCH	3.91	13.00	PASS
BC0	CDMA /TM1	MCH	4.64	13.00	PASS
BC0	CDMA /TM1	HCH	3.65	13.00	PASS
BC1	CDMA /TM1	LCH	3.07	13.00	PASS
BC1	CDMA /TM1	MCH	3.25	13.00	PASS
BC1	CDMA /TM1	HCH	2.64	13.00	PASS
BC10	CDMA/TM1	LCH	3.30	13.00	PASS
BC10	CDMA/TM1	MCH	3.30	13.00	PASS
BC10	CDMA/TM1	HCH	3.77	13.00	PASS
BC0	EVDO /TM1	LCH	4.78	13.00	PASS
BC0	EVDO /TM1	MCH	4.29	13.00	PASS
BC0	EVDO /TM1	HCH	3.62	13.00	PASS
BC1	EVDO /TM1	LCH	3.30	13.00	PASS
BC1	EVDO /TM1	MCH	3.71	13.00	PASS
BC1	EVDO /TM1	HCH	2.96	13.00	PASS
BC10	EVDO /TM1	LCH	3.91	13.00	PASS
BC10	EVDO /TM1	MCH	3.94	13.00	PASS
BC10	EVDO /TM1	HCH	4.41	13.00	PASS

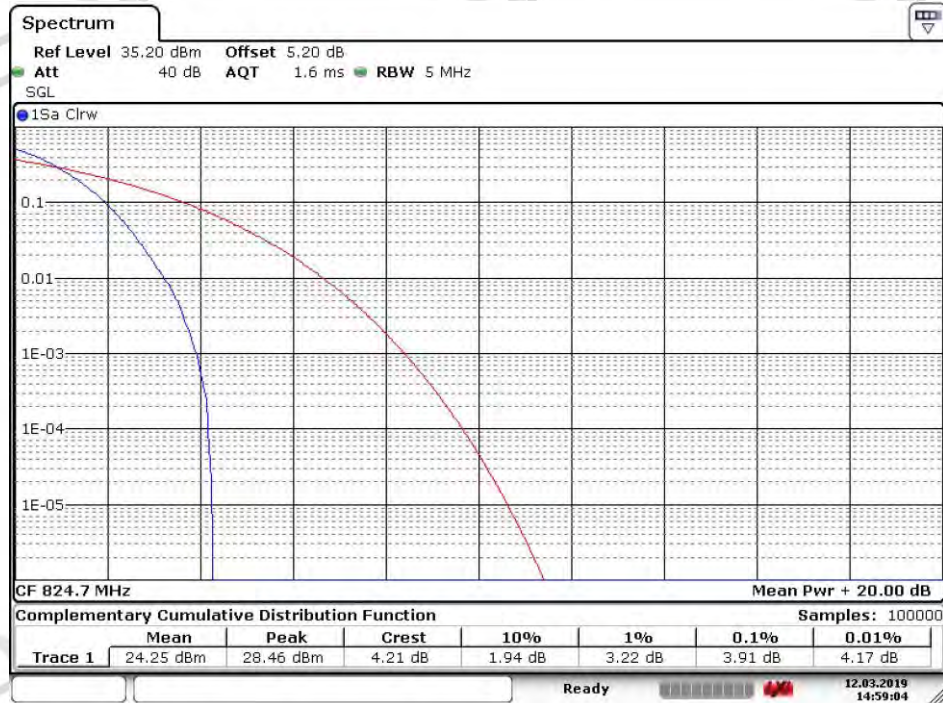
Part II - Test Plots

2.1 For CDMA

2.1.1 Test Band = CDMA BC0

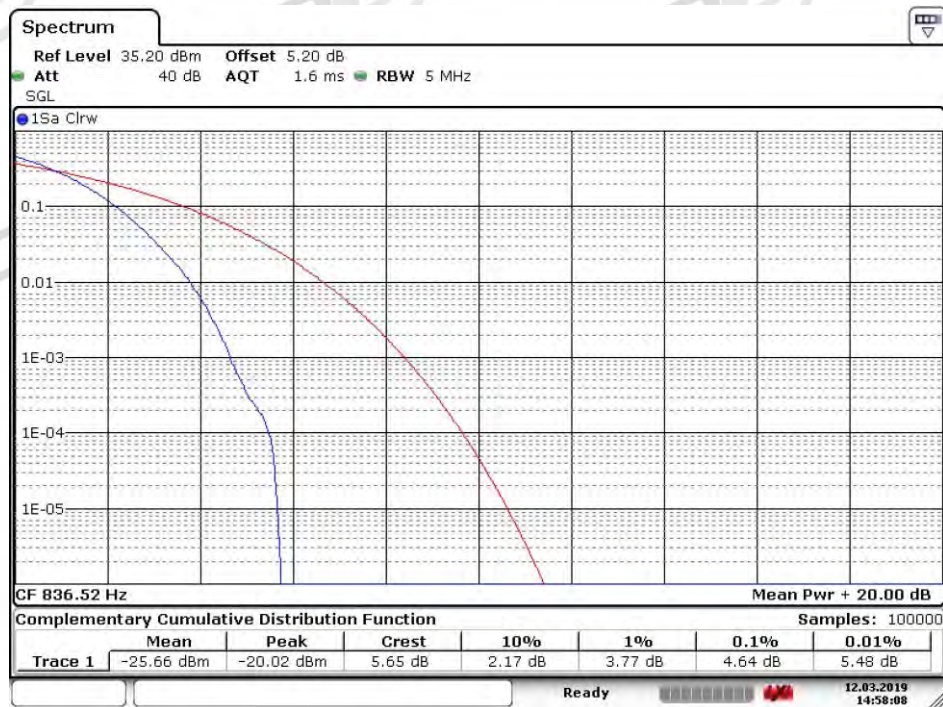
2.1.1.1 Test Mode = CDMA /TM1

2.1.1.1.1 Test Channel = LCH



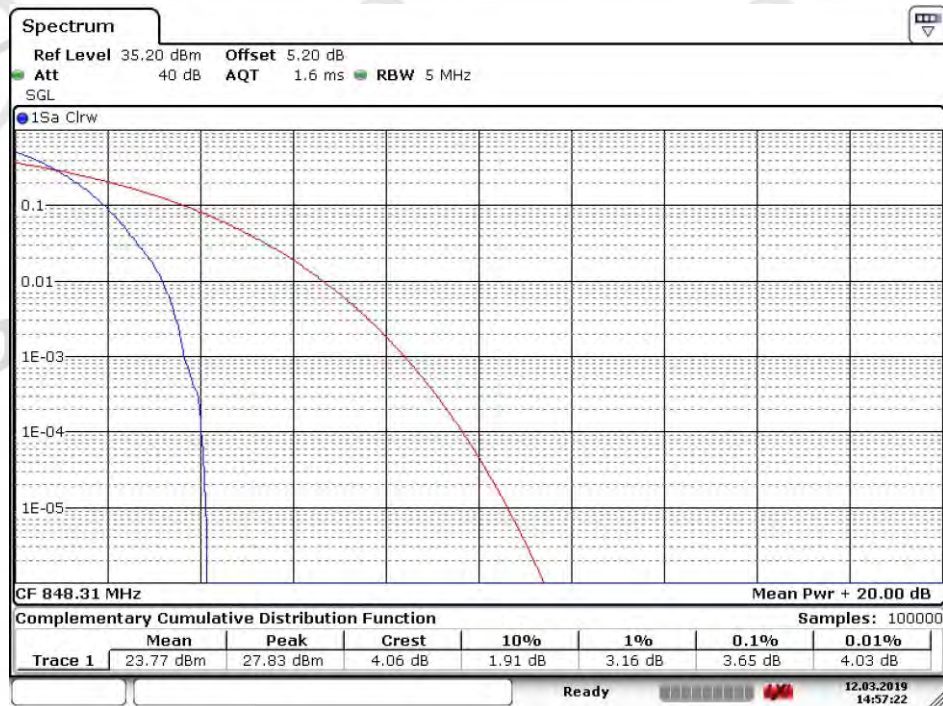
Date: 12.MAR.2019 14:59:04

2.1.1.1.2 Test Channel = MCH



Date: 12.MAR.2019 14:58:08

2.1.1.1.3 Test Channel = HCH

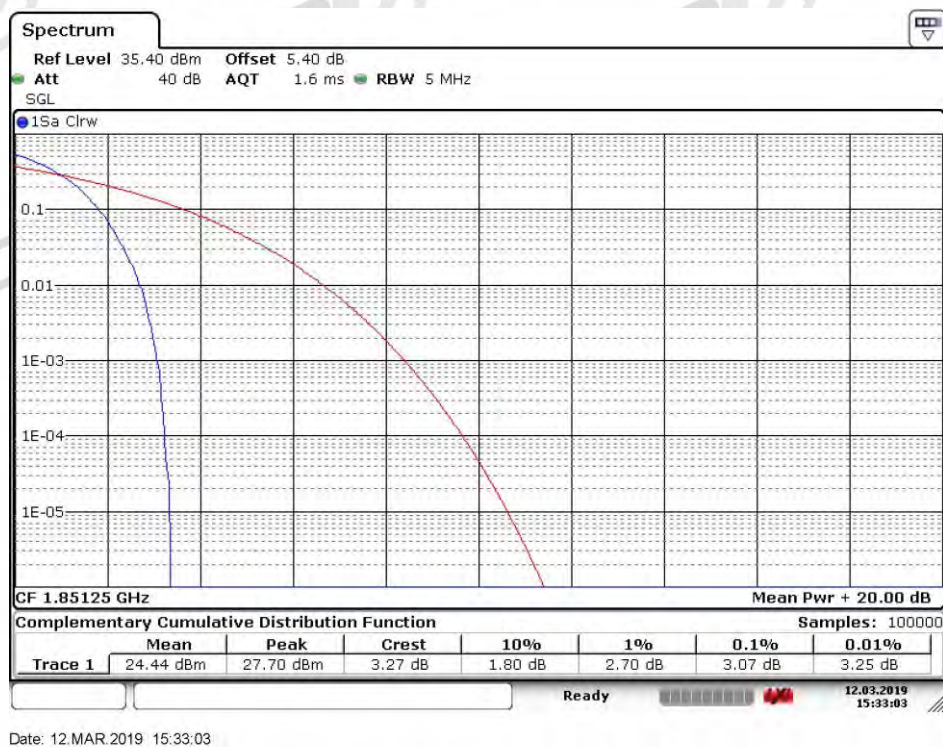


Date: 12.MAR.2019 14:57:23

2.1.2 Test Band = CDMA BC1

2.1.2.1 Test Mode = CDMA /TM1

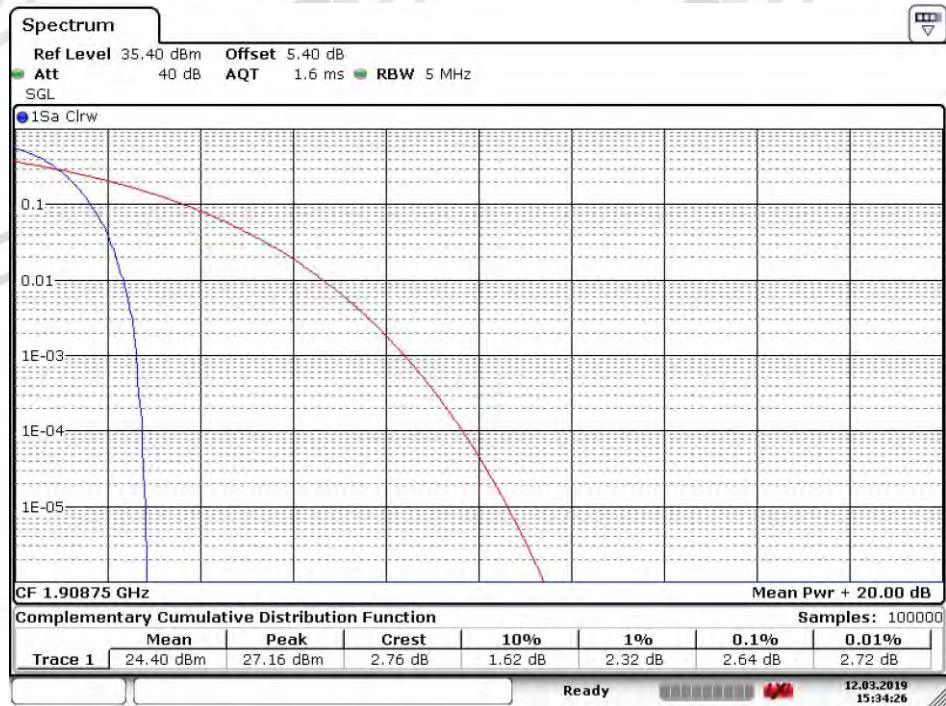
2.1.2.1.1 Test Channel = LCH



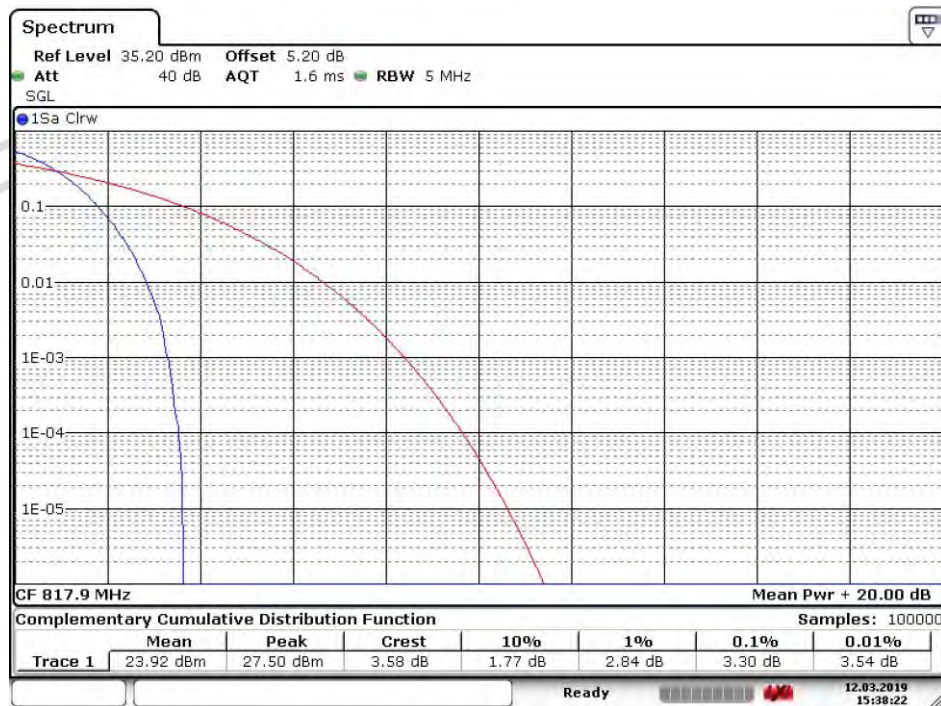
2.1.2.1.2 Test Channel = MCH



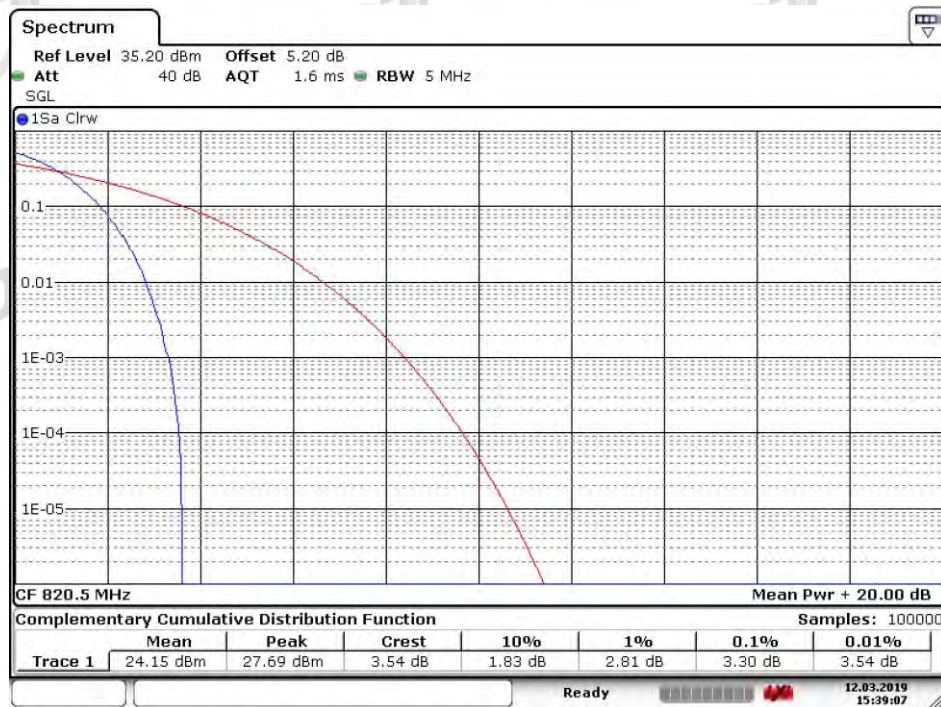
2.1.2.1.3 Test Channel = HCH



Date: 12.MAR.2019 15:34:26

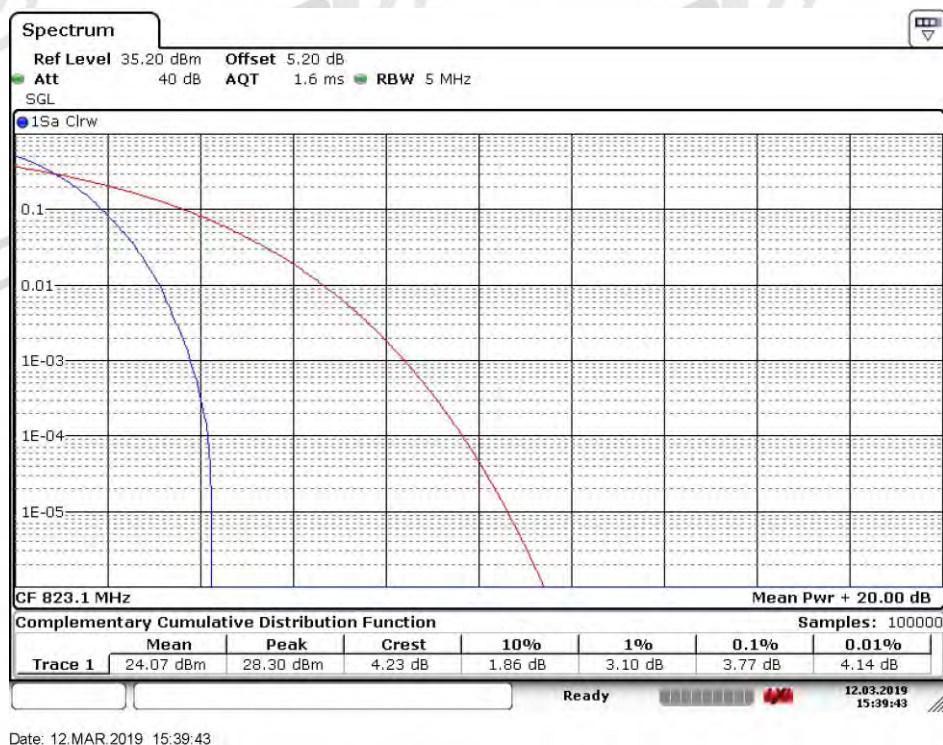
2.1.3 Test Band = CDMA BC10**2.1.3.1 Test Mode = CDMA /TM1****2.1.3.1.1 Test Channel = LCH**

Date: 12.MAR.2019 15:38:23

2.1.3.1.2 Test Channel = MCH

Date: 12.MAR.2019 15:39:07

2.1.3.1.3 Test Channel = HCH

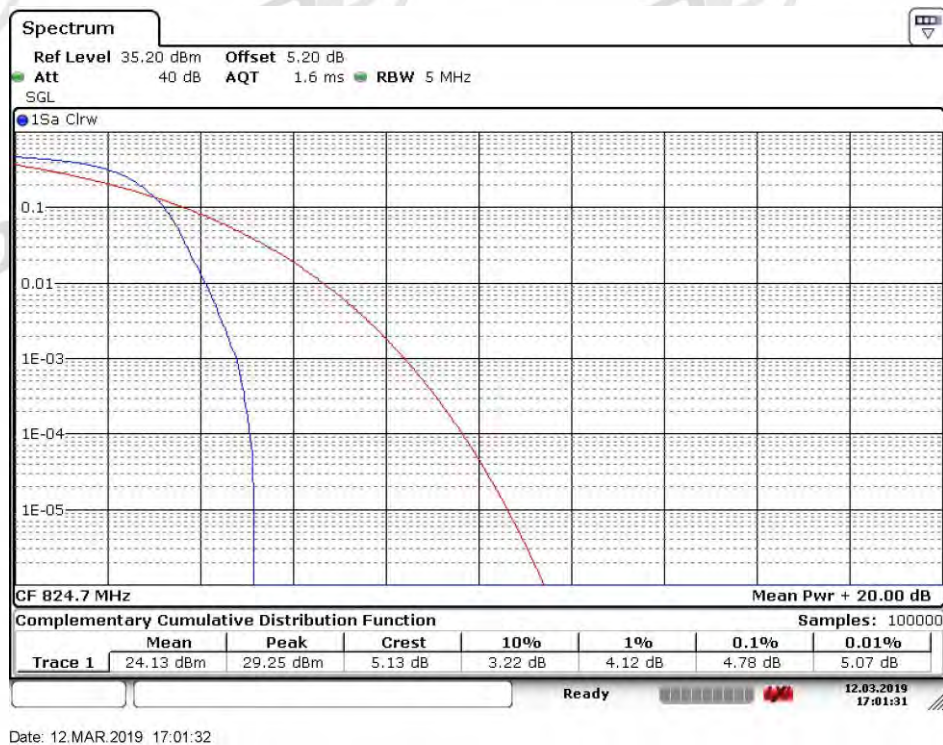


2.1 For EVDO

2.1.1 Test Band = EVDO BC0

2.1.1.1 Test Mode = EVDO /TM1

2.1.1.1.1 Test Channel = LCH

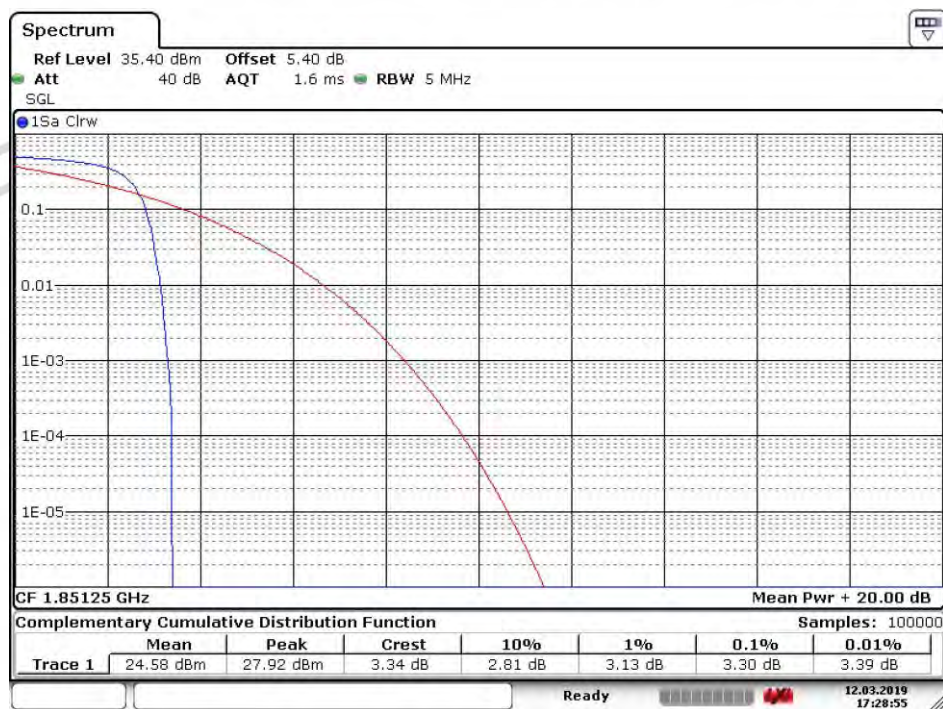


2.1.1.1.2 Test Channel = MCH

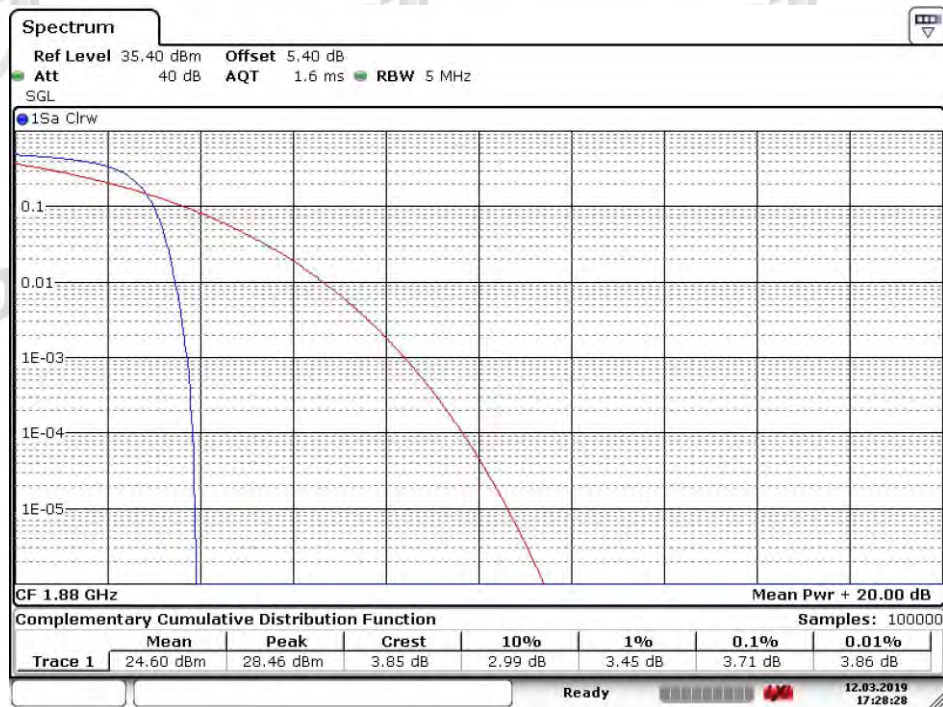


2.1.1.1.3 Test Channel = HCH



2.1.2 Test Band = EVDO BC1**2.1.2.1 Test Mode = EVDO /TM1****2.1.2.1.1 Test Channel = LCH**

Date: 12.MAR.2019 17:28:55

2.1.2.1.2 Test Channel = MCH

Date: 12.MAR.2019 17:28:28

2.1.2.1.3 Test Channel = HCH



2.1.3 Test Band = EVDO BC10

2.1.3.1 Test Mode = EVDO /TM1

2.1.3.1.1 Test Channel = LCH



2.1.3.1.2 Test Channel = MCH



2.1.3.1.3 Test Channel = HCH



3 Modulation Characteristics

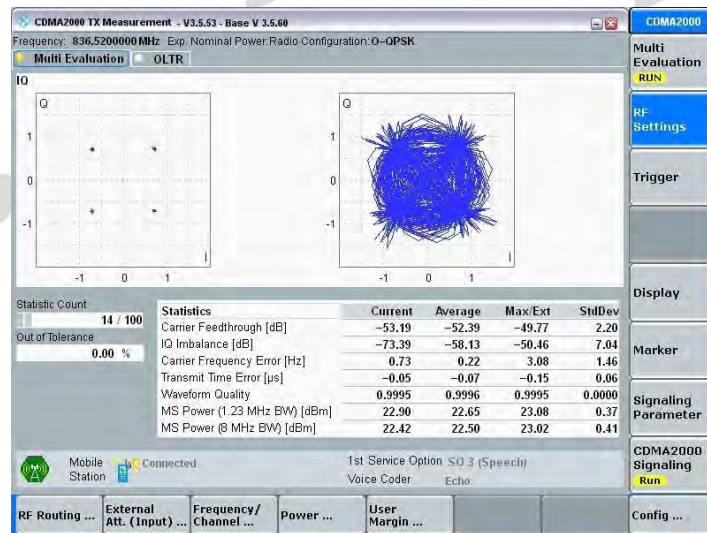
Part I - Test Plots

3.1 For CDMA

3.1.1 Test Band = CDMA BC0

3.1.1.1 Test Mode = CDMA /TM1

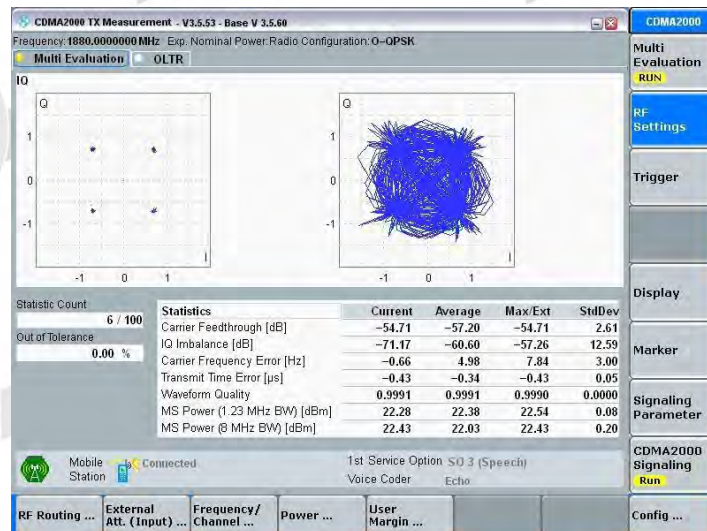
3.1.1.1.1 Test Channel = MCH



3.1.2 Test Band = CDMA BC1

3.1.2.1 Test Mode = CDMA /TM1

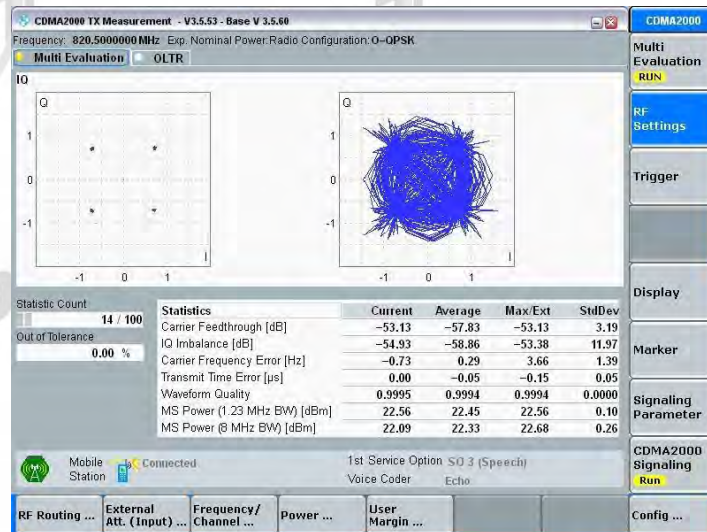
3.1.2.1.1 Test Channel = MCH



3.1.3 Test Band = CDMA BC10

3.1.3.1 Test Mode = CDMA /TM1

3.1.3.1.1 Test Channel = MCH

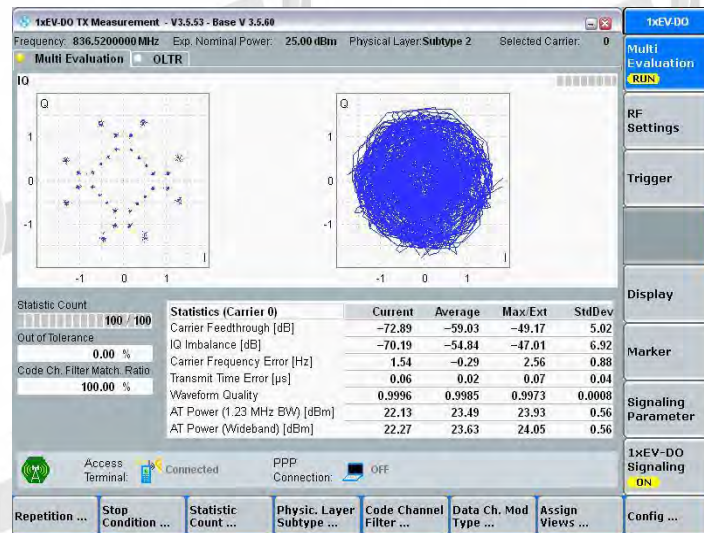


3.2 For EVDO

3.2.1 Test Band = EVDO BC0

3.2.1.1 Test Mode = EVDO /TM1

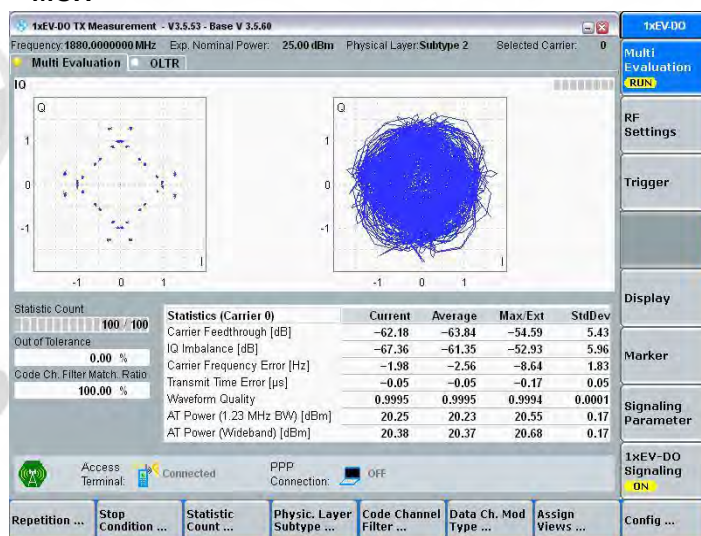
3.2.1.1.1 Test Channel = MCH



3.2.2 Test Band = EVDO BC1

3.2.2.1 Test Mode = EVDO /TM1

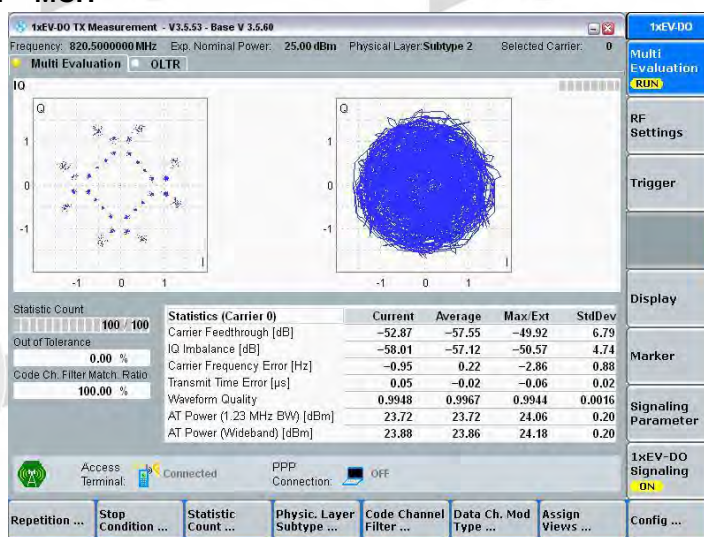
3.2.2.1.1 Test Channel = MCH



3.2.3 Test Band = EVDO BC10

3.2.3.1 Test Mode = EVDO /TM1

3.2.3.1.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results of CDMA

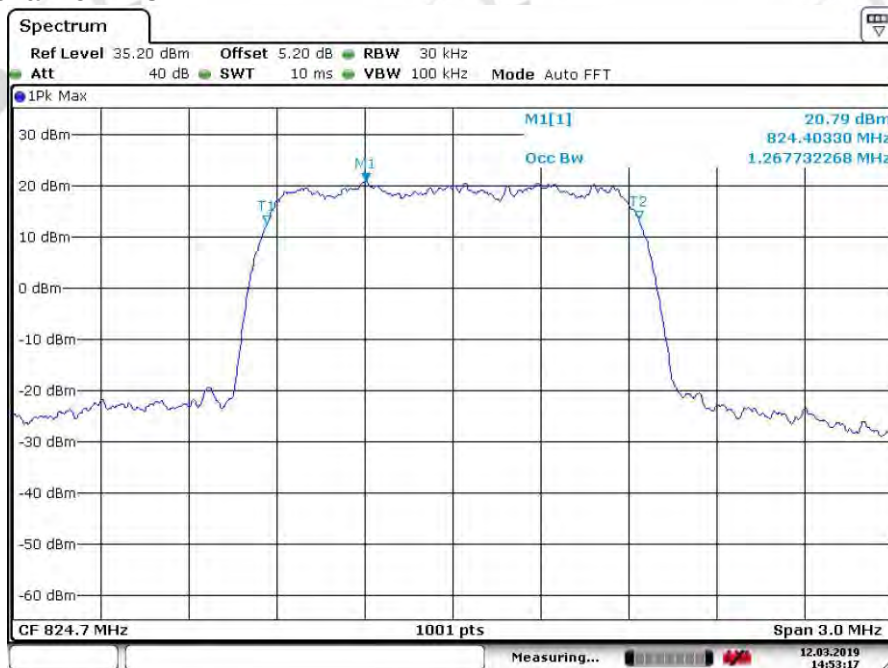
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
CDMA BC0	CDMA/TM1	LCH	1.27	1.43	PASS
CDMA BC0	CDMA/TM1	MCH	1.27	1.43	PASS
CDMA BC0	CDMA/TM1	HCH	1.27	1.43	PASS
CDMA BC1	CDMA/TM1	LCH	1.27	1.44	PASS
CDMA BC1	CDMA/TM1	MCH	1.27	1.44	PASS
CDMA BC1	CDMA/TM1	HCH	1.28	1.45	PASS
CDMA BC10	CDMA/TM1	LCH	1.27	1.43	PASS
CDMA BC10	CDMA/TM1	MCH	1.27	1.44	PASS
CDMA BC10	CDMA/TM1	HCH	1.27	1.43	PASS
EVDO BC0	EVDO /TM1	LCH	1.27	1.42	PASS
EVDO BC0	EVDO /TM1	MCH	1.27	1.42	PASS
EVDO BC0	EVDO /TM1	HCH	1.27	1.43	PASS
EVDO BC1	EVDO /TM1	LCH	1.29	1.47	PASS
EVDO BC1	EVDO /TM1	MCH	1.27	1.43	PASS
EVDO BC1	EVDO /TM1	HCH	1.29	1.94	PASS
EVDO BC10	EVDO /TM1	LCH	1.27	1.43	PASS
EVDO BC10	EVDO /TM1	MCH	1.28	1.45	PASS
EVDO BC10	EVDO /TM1	HCH	1.27	1.43	PASS

4.1 For CDMA

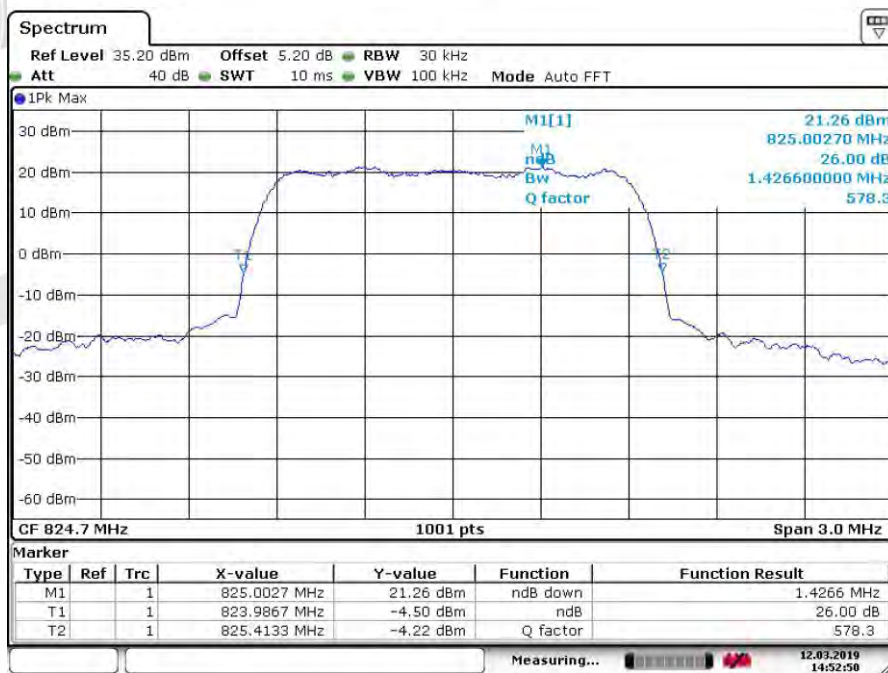
4.1.1 Test Band = CDMA BC0

4.1.1.1 Test Mode = CDMA /TM1

4.1.1.1.1 Test Channel = LCH

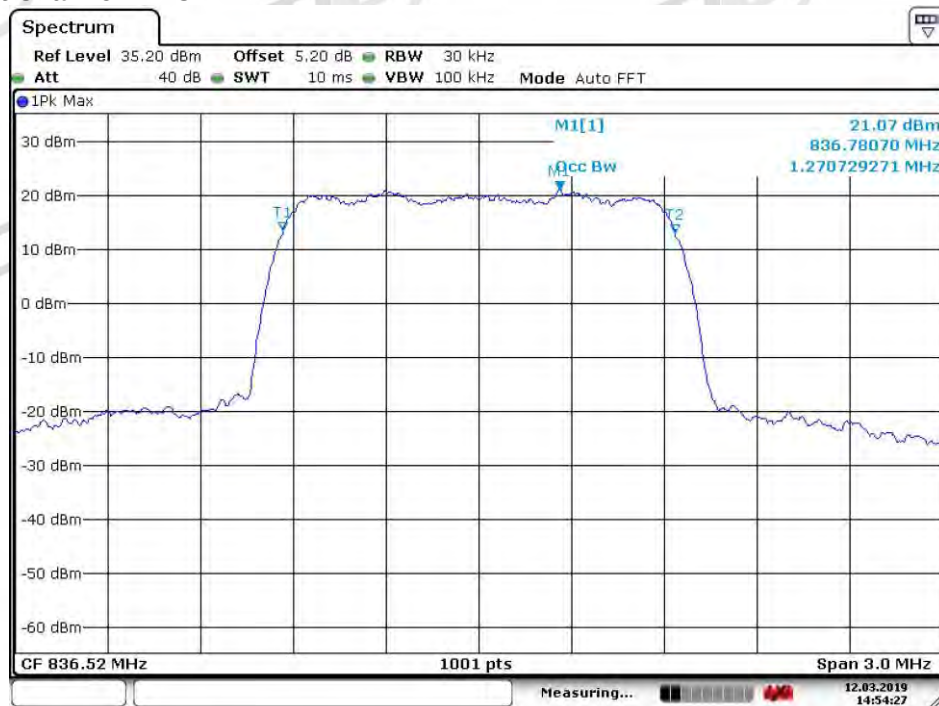


Date: 12.MAR.2019 14:53:17

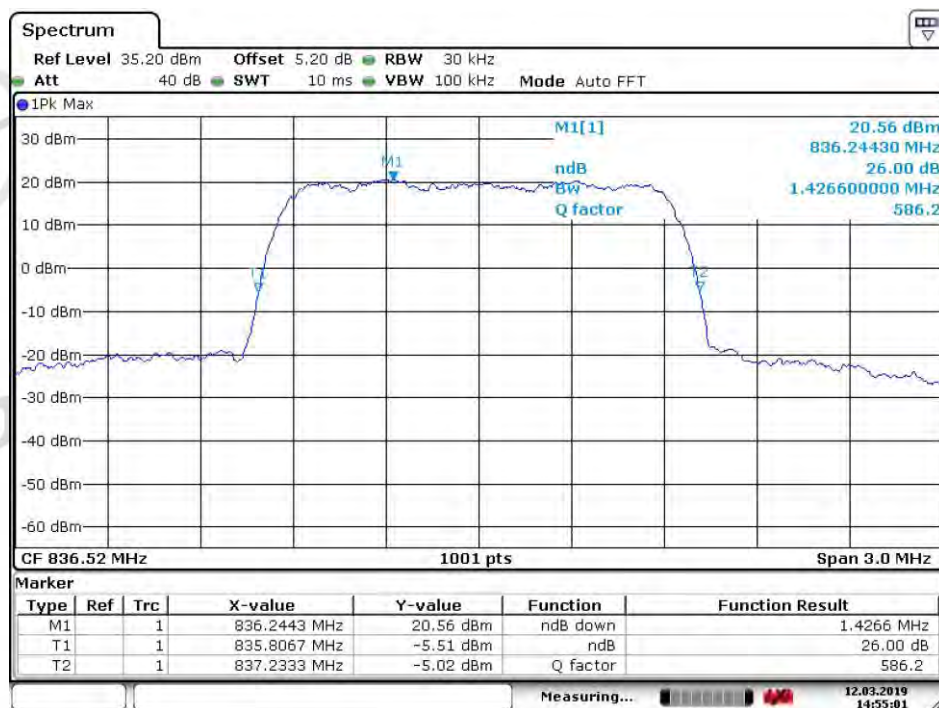


Date: 12.MAR.2019 14:52:50

4.1.1.1.2 Test Channel = MCH

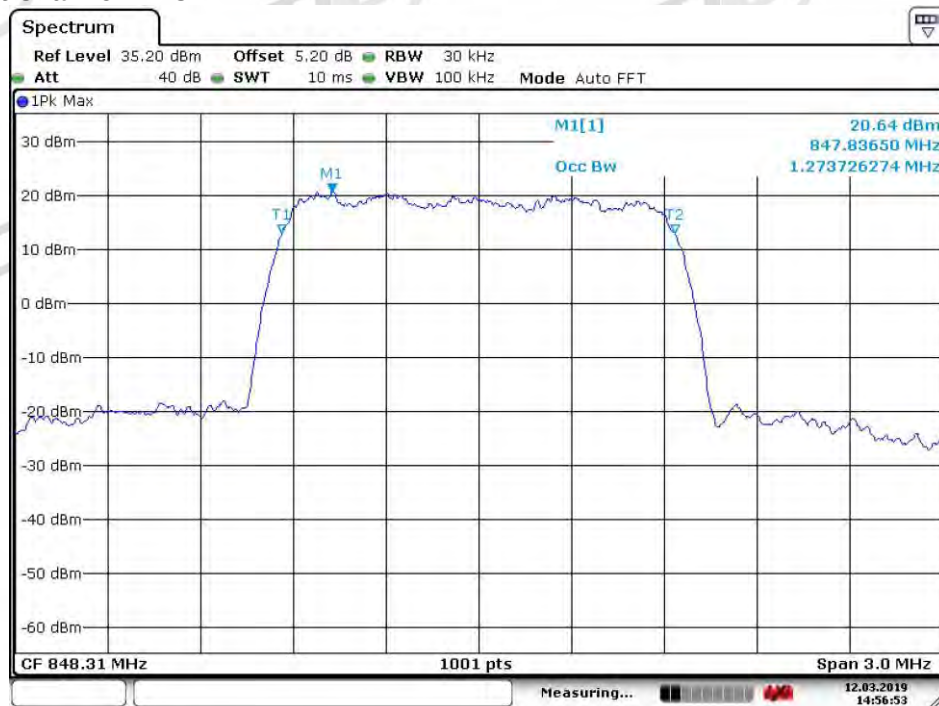


Date: 12.MAR.2019 14:54:27

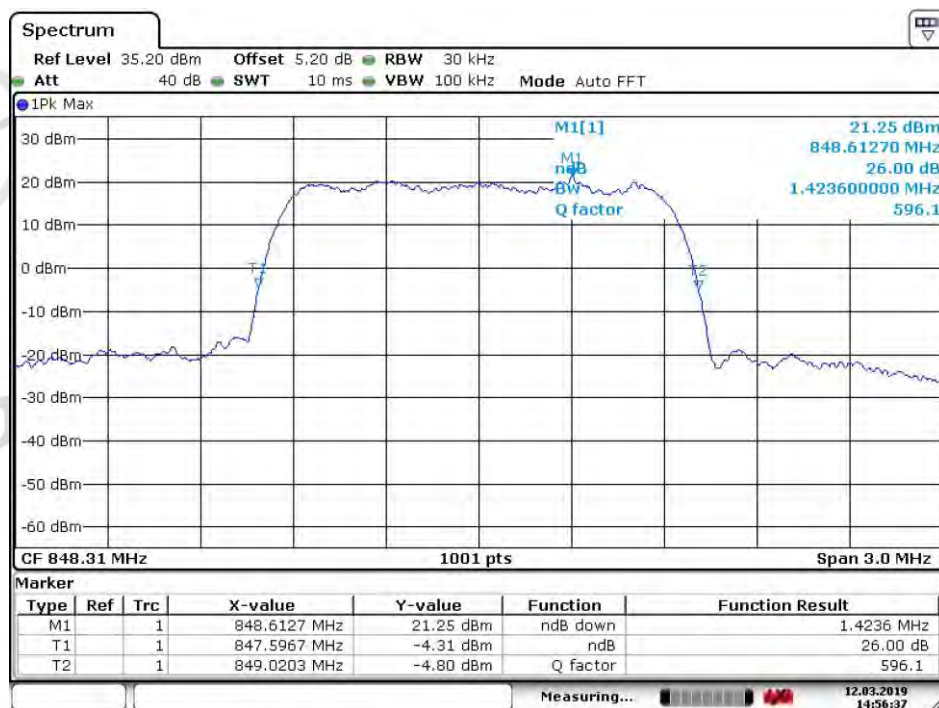


Date: 12.MAR.2019 14:55:02

4.1.1.1.3 Test Channel = HCH



Date: 12.MAR.2019 14:56:53

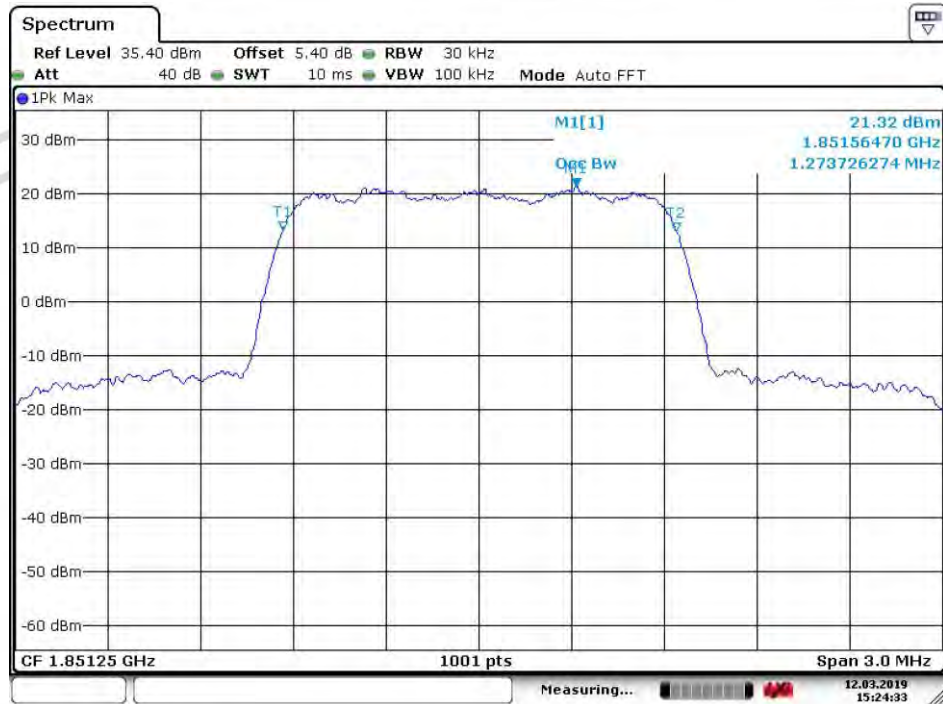


Date: 12.MAR.2019 14:56:38

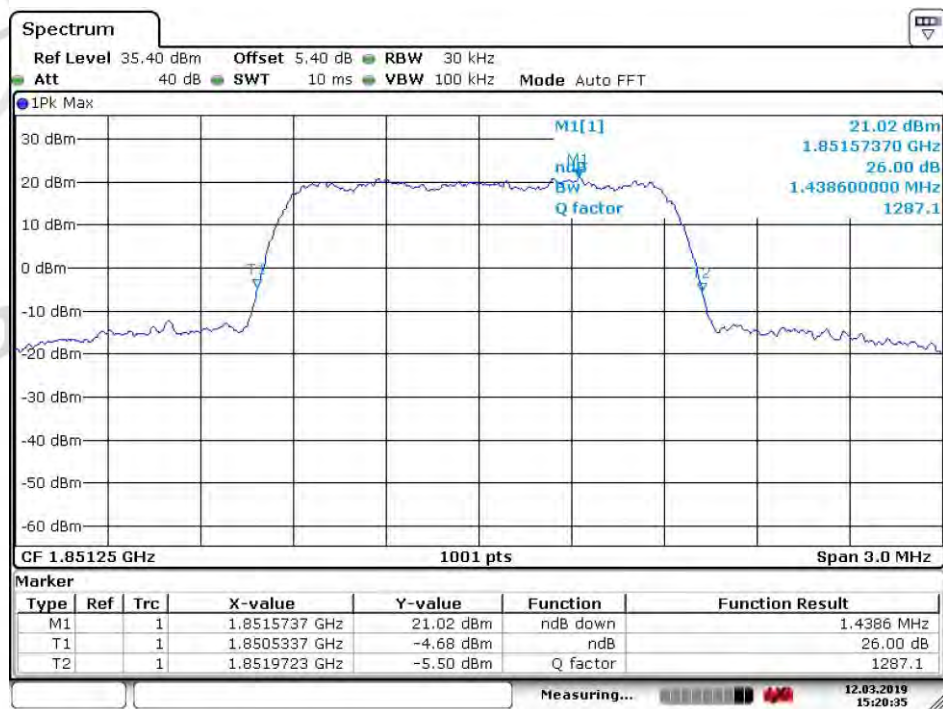
4.1.2 Test Band = CDMA BC1

4.1.2.1 Test Mode = CDMA /TM1

4.1.2.1.1 Test Channel = LCH

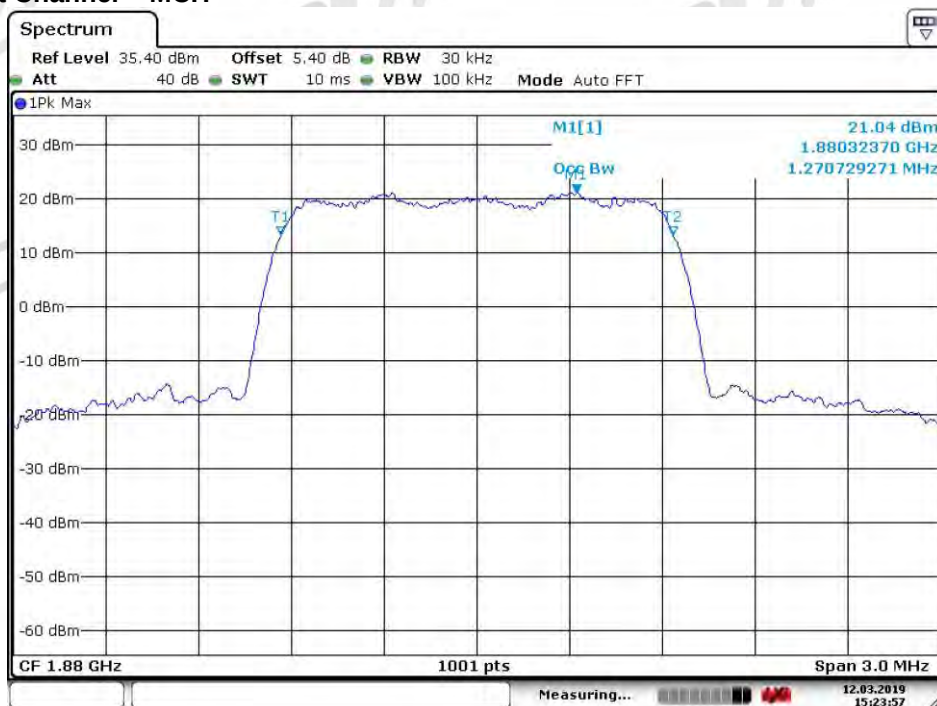


Date: 12.MAR.2019 15:24:33

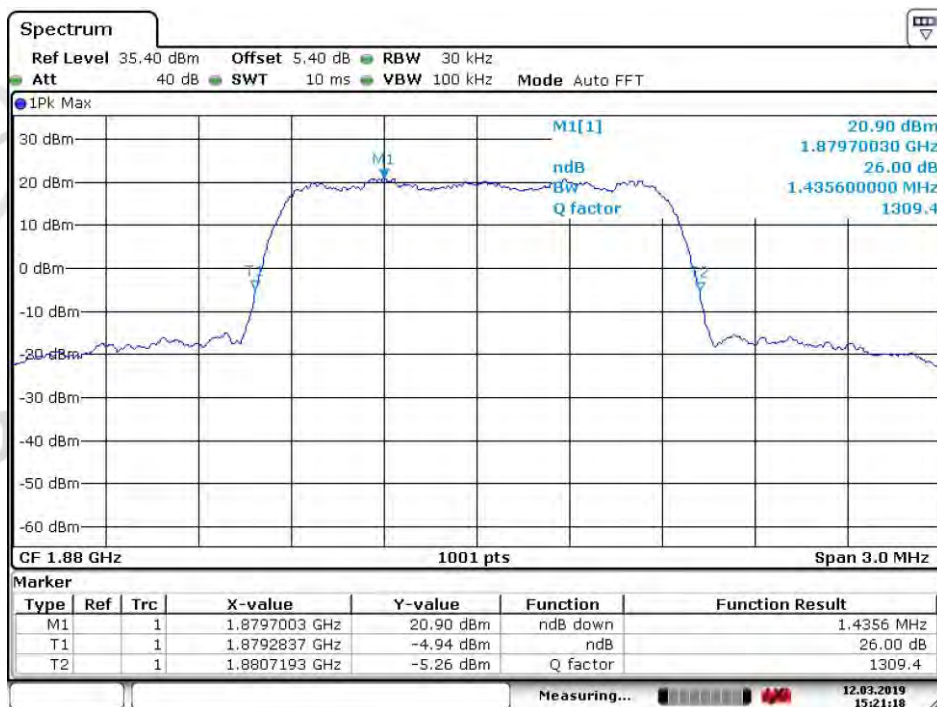


Date: 12.MAR.2019 15:20:36

4.1.2.1.2 Test Channel = MCH

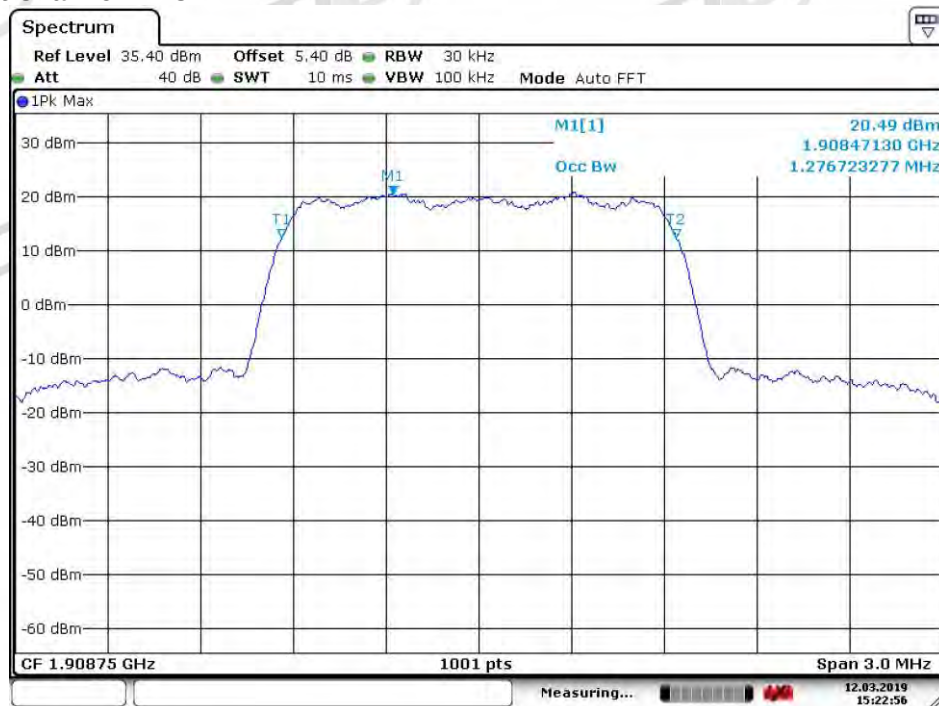


Date: 12.MAR.2019 15:23:57

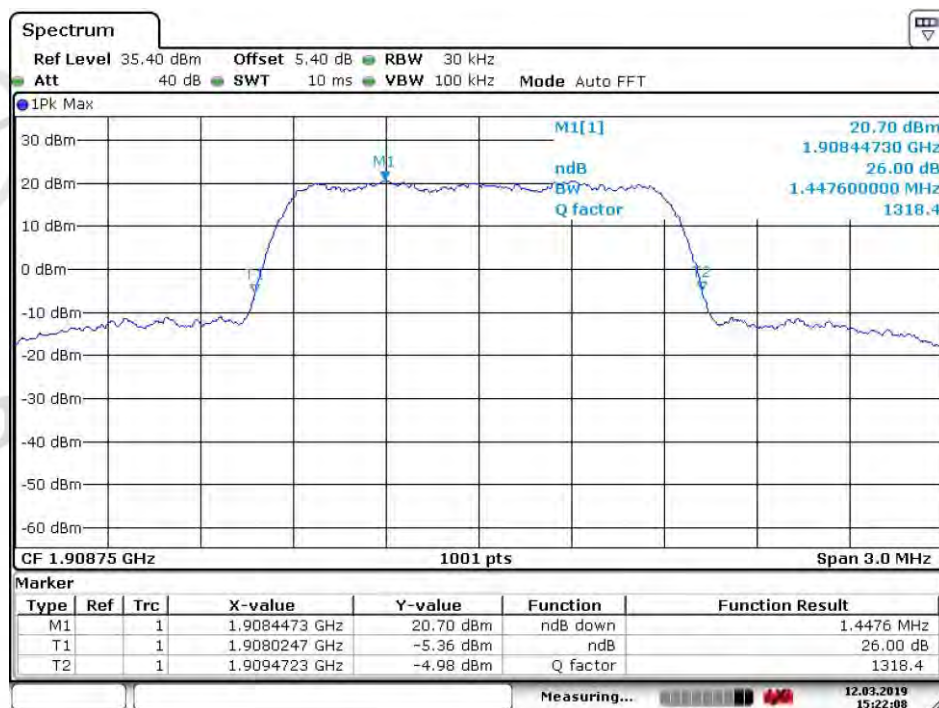


Date: 12.MAR.2019 15:21:18

4.1.2.1.3 Test Channel = HCH



Date: 12.MAR.2019 15:22:57

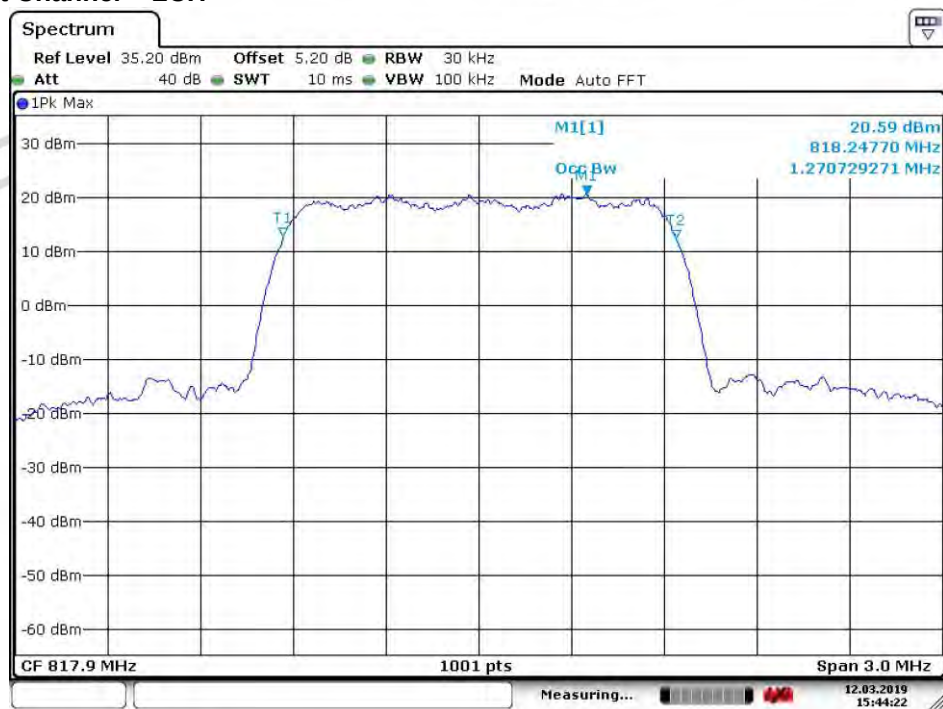


Date: 12.MAR.2019 15:22:08

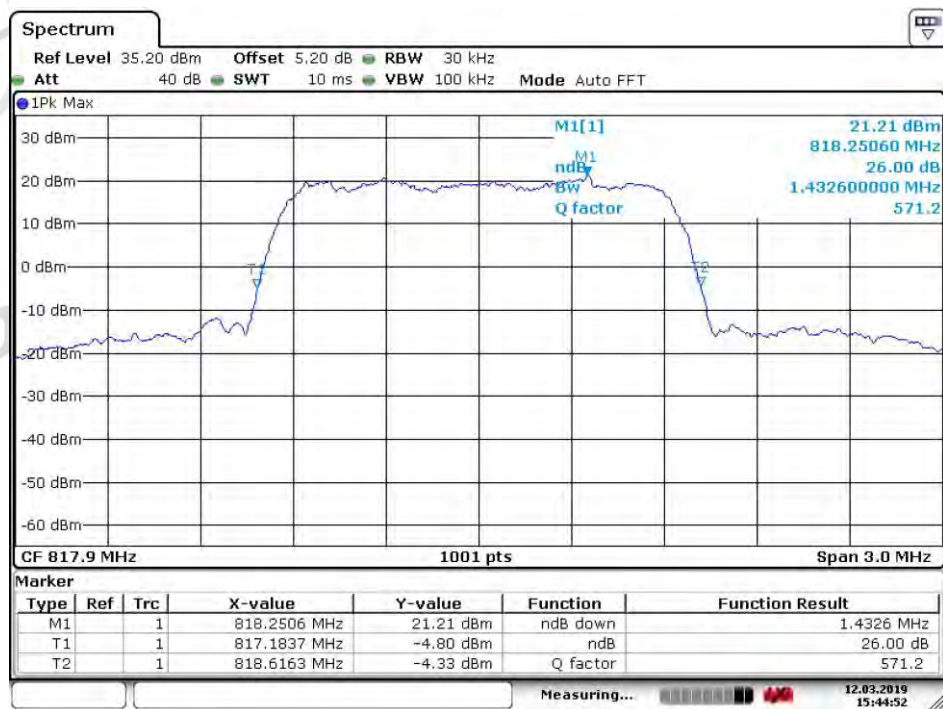
4.1.3 Test Band = CDMA BC10

4.1.3.1 Test Mode = CDMA /TM1

4.1.3.1.1 Test Channel = LCH

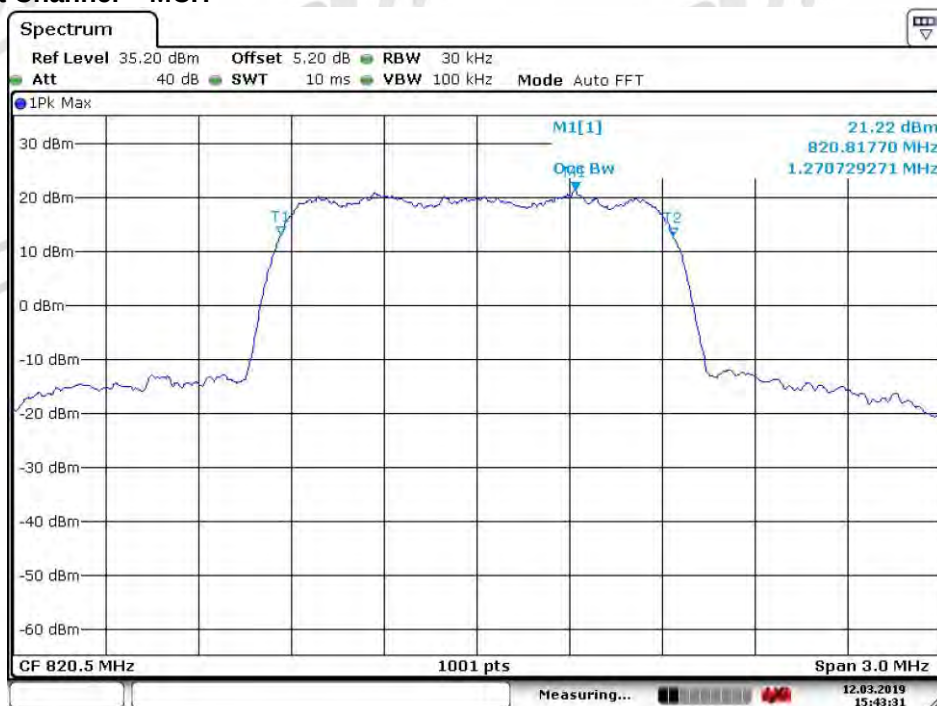


Date: 12.MAR.2019 15:44:22

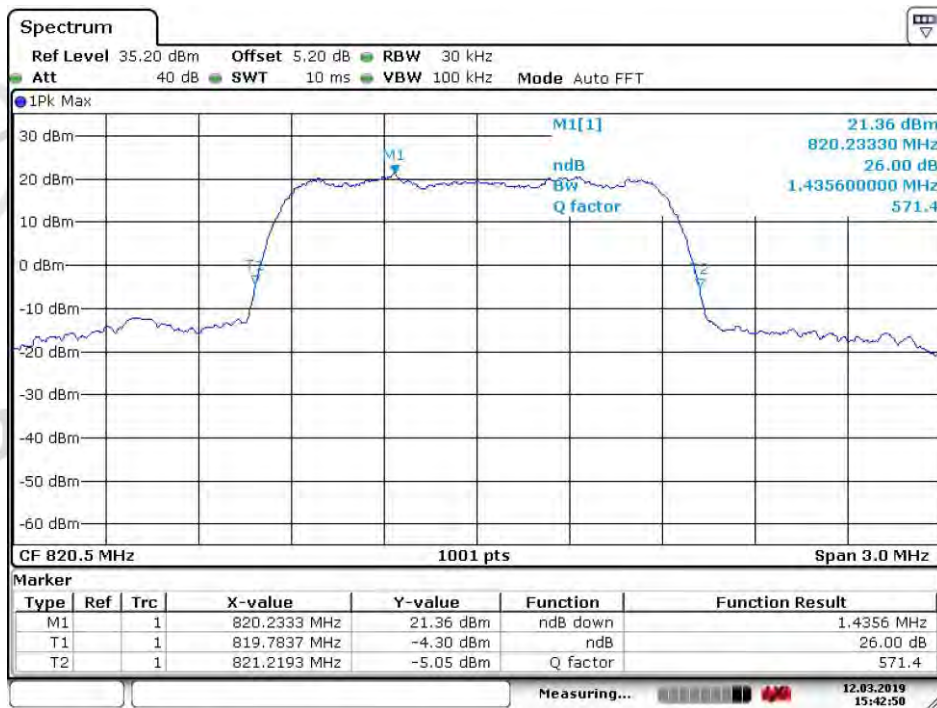


Date: 12.MAR.2019 15:44:53

4.1.3.1.2 Test Channel = MCH

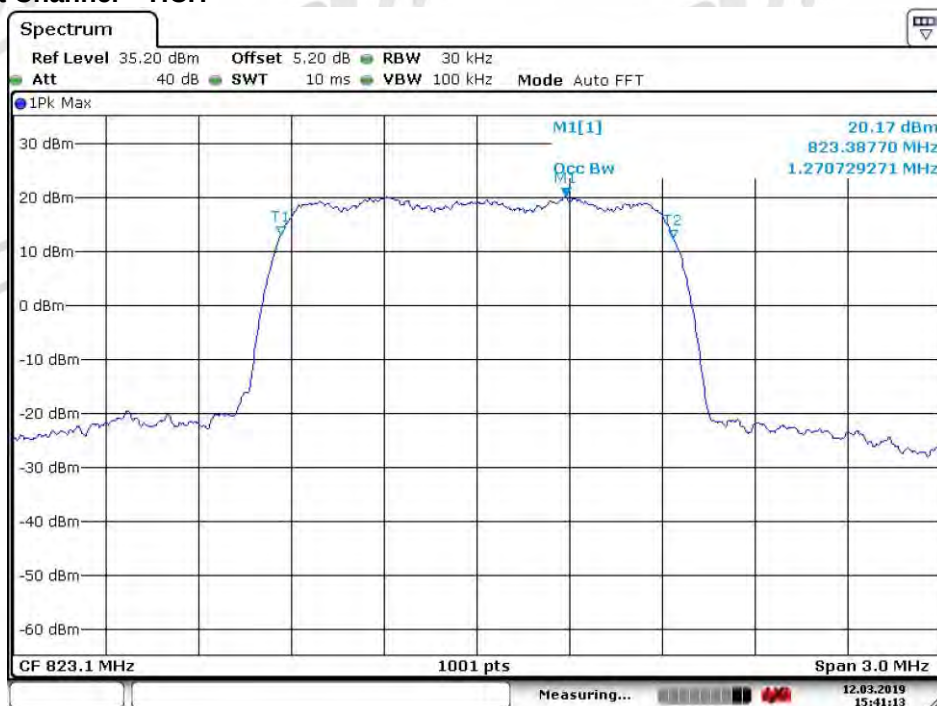


Date: 12.MAR.2019 15:43:32

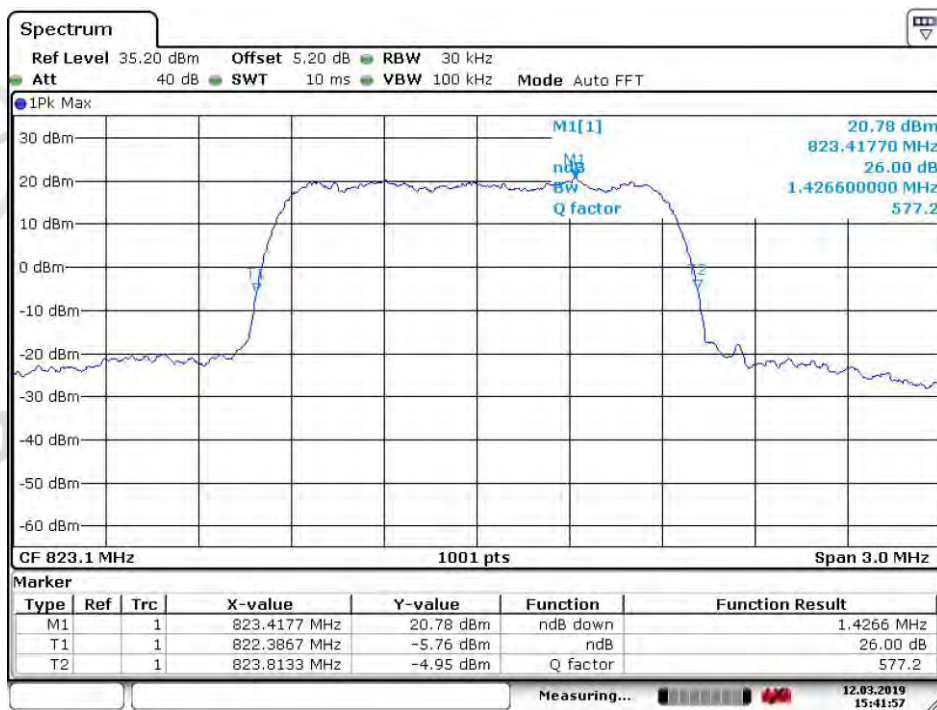


Date: 12.MAR.2019 15:42:50

4.1.3.1.3 Test Channel = HCH



Date: 12.MAR.2019 15:41:14



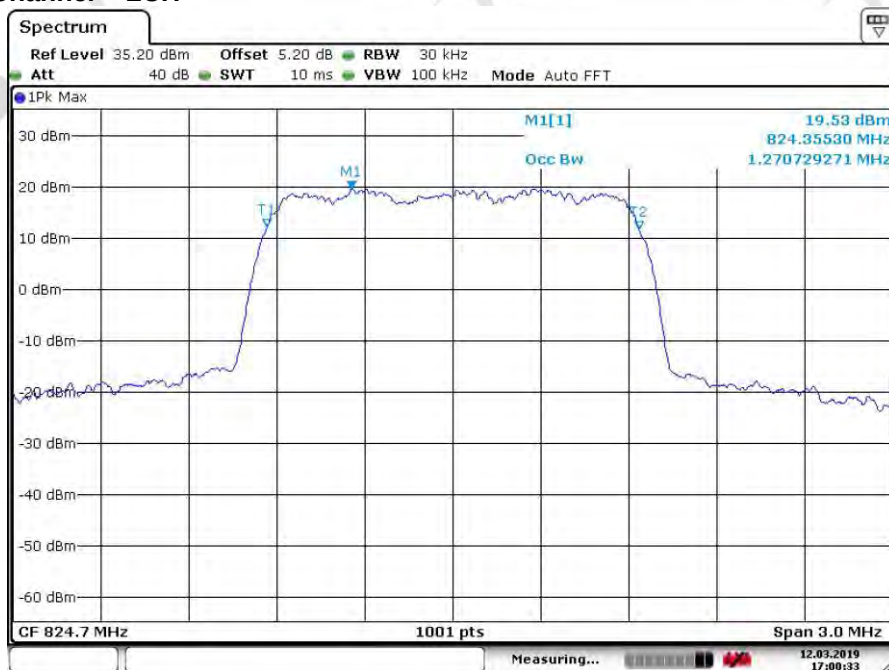
Date: 12.MAR.2019 15:41:57

4.2 For EVDO

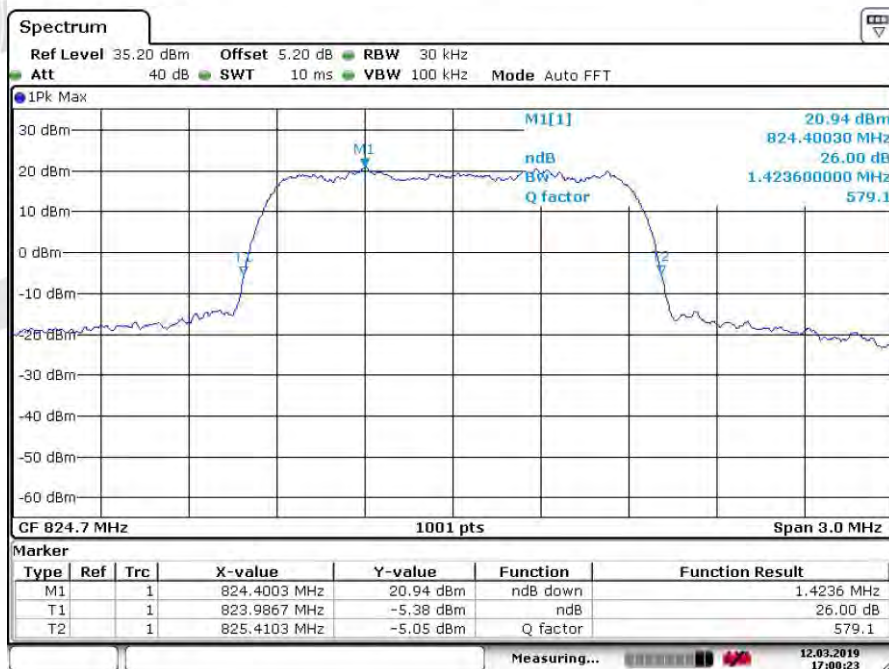
4.2.1 Test Band = EVDO BC0

4.2.1.1 Test Mode = EVDO /TM1

4.2.1.1.1 Test Channel = LCH

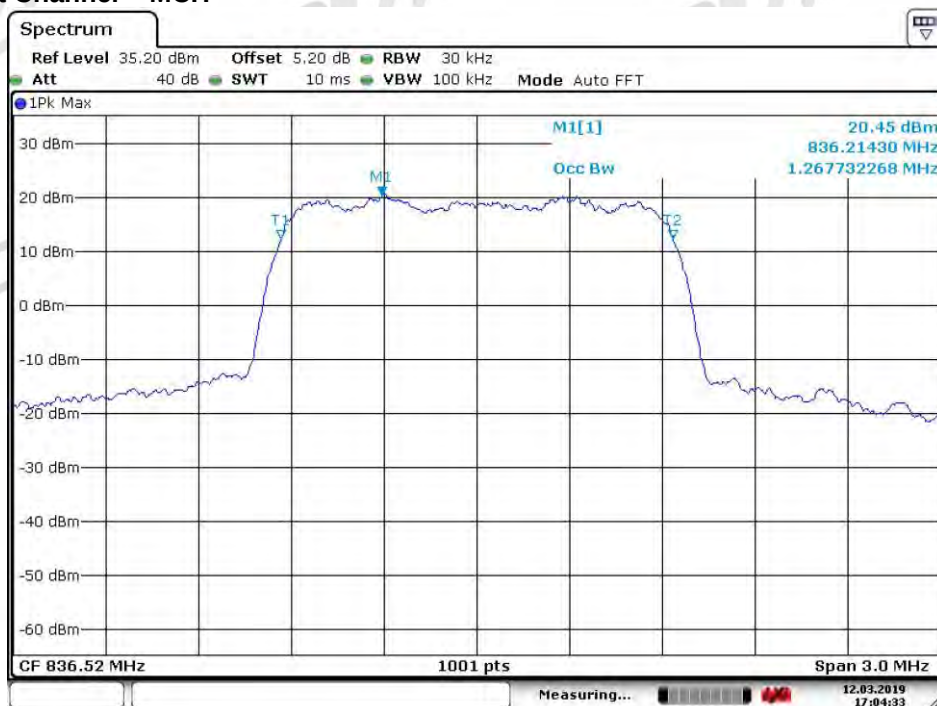


Date: 12.MAR 2019 17:00:34

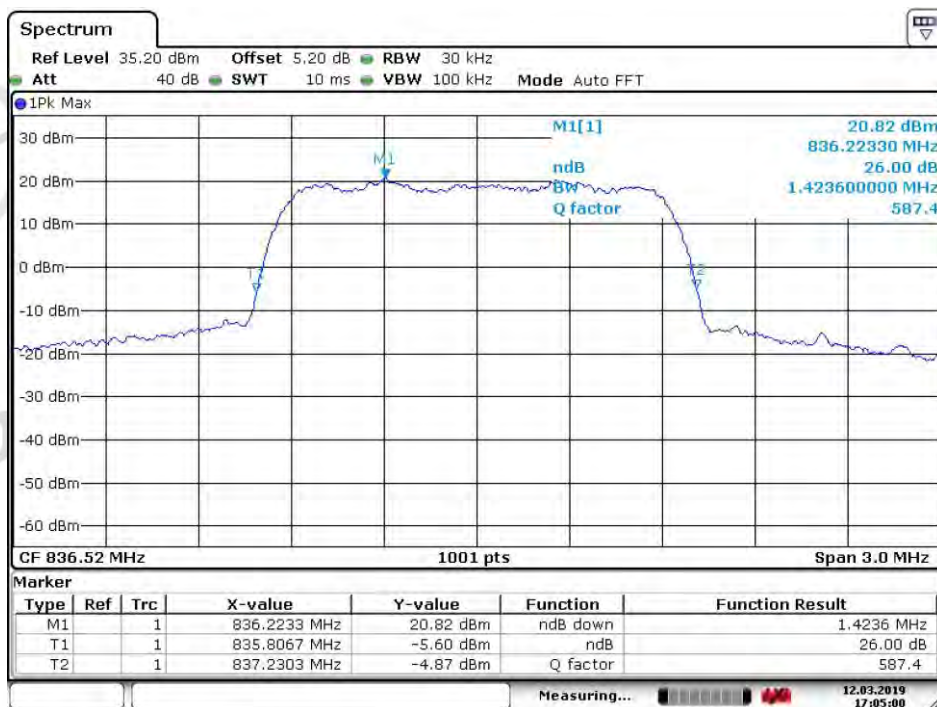


Date: 12.MAR 2019 17:00:23

4.2.1.1.2 Test Channel = MCH

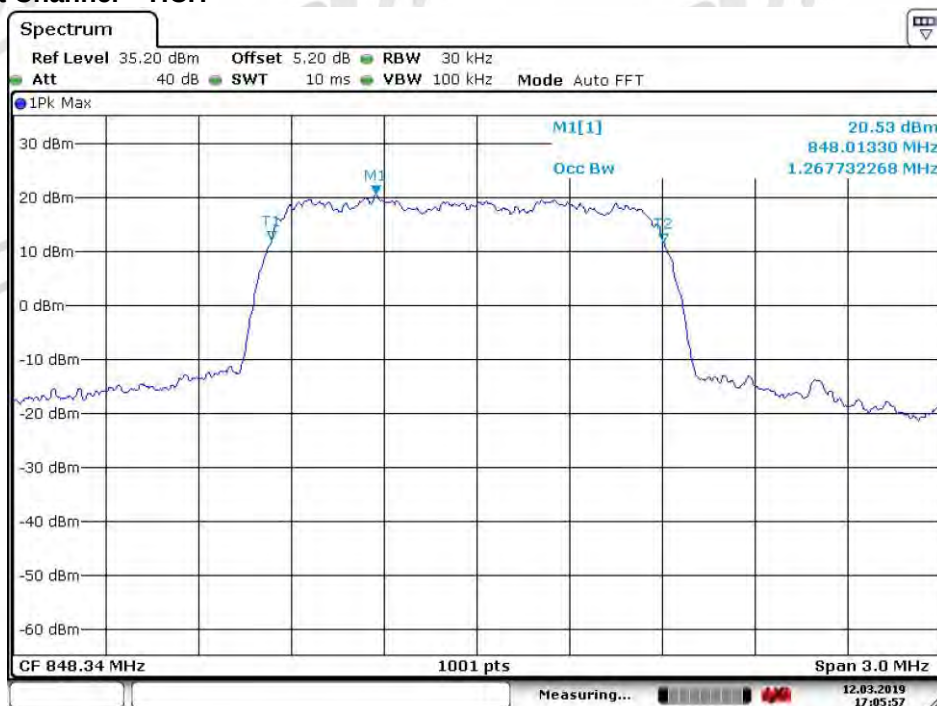


Date: 12.MAR.2019 17:04:34

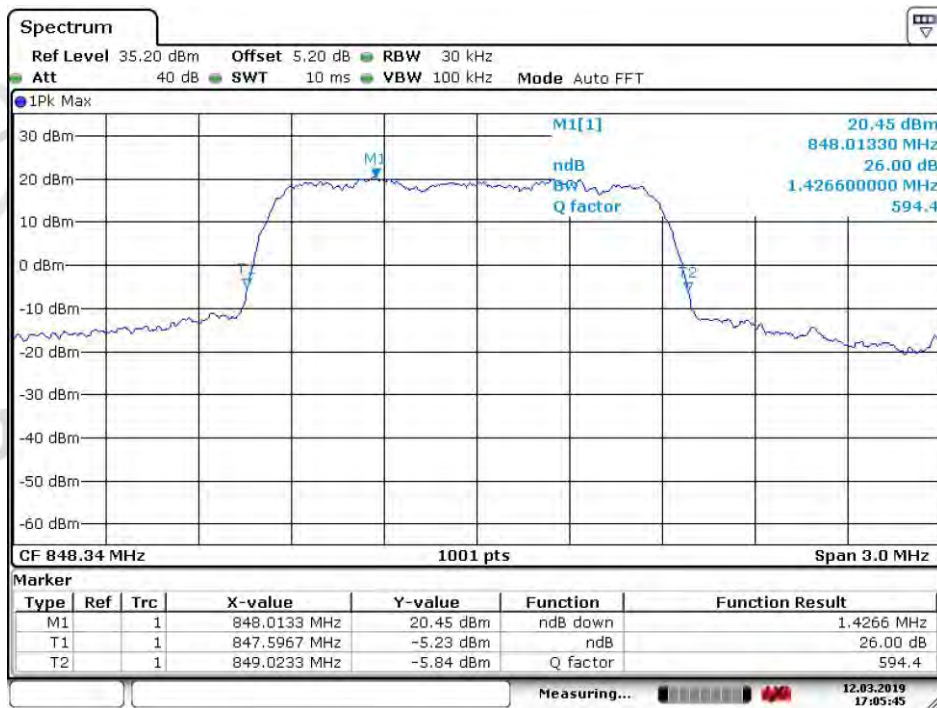


Date: 12.MAR.2019 17:05:00

4.2.1.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:05:57

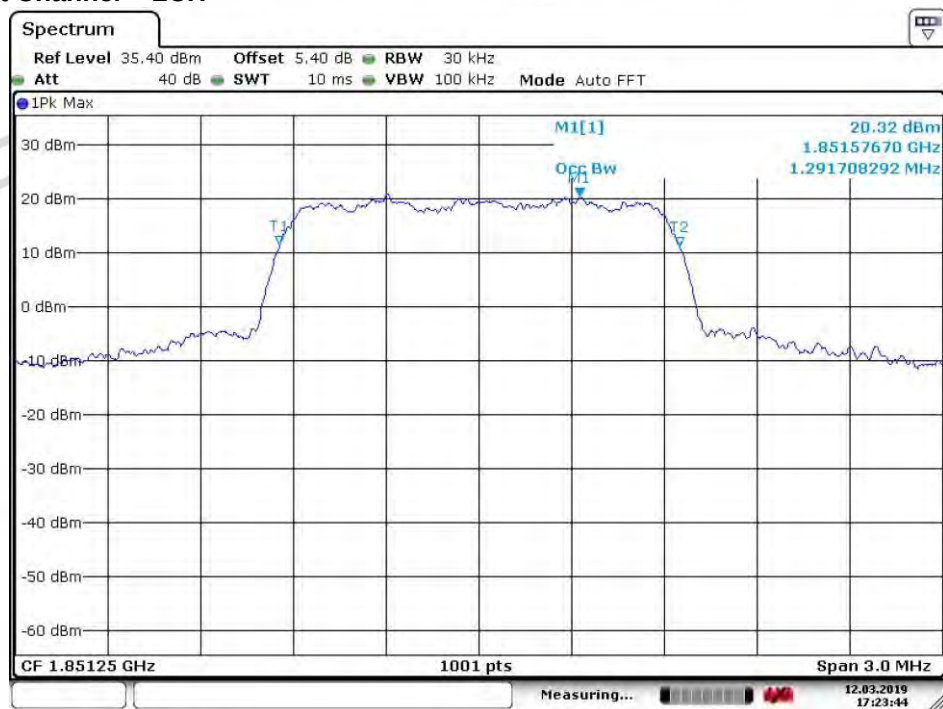


Date: 12.MAR.2019 17:05:46

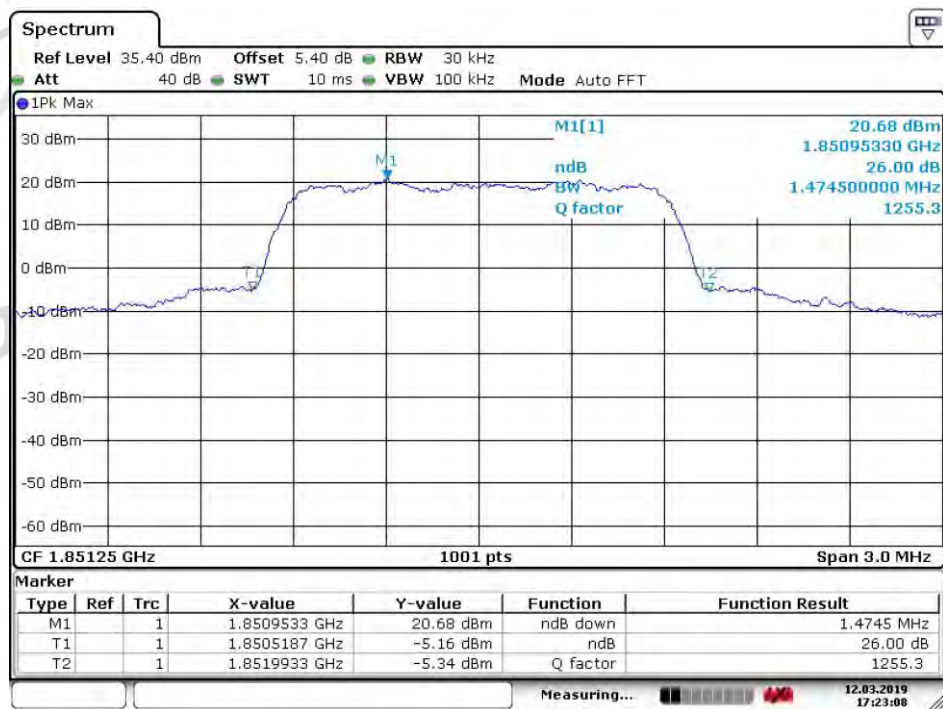
4.2.2 Test Band = EVDO BC1

4.2.2.1 Test Mode = EVDO /TM1

4.2.2.1.1 Test Channel = LCH

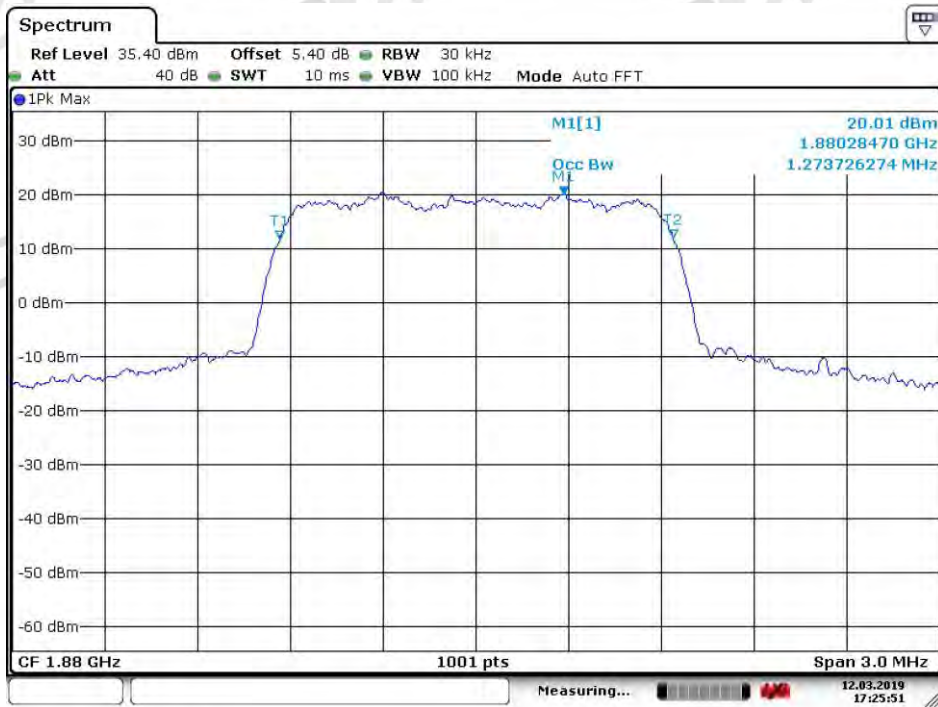


Date: 12.MAR.2019 17:23:44

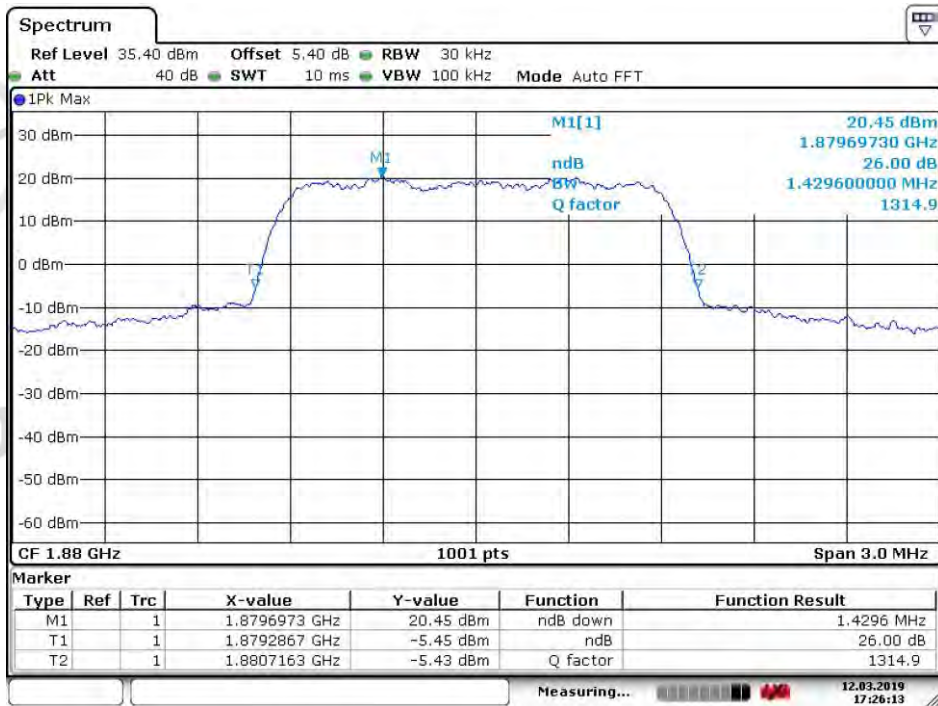


Date: 12.MAR.2019 17:23:08

4.2.2.1.2 Test Channel = MCH

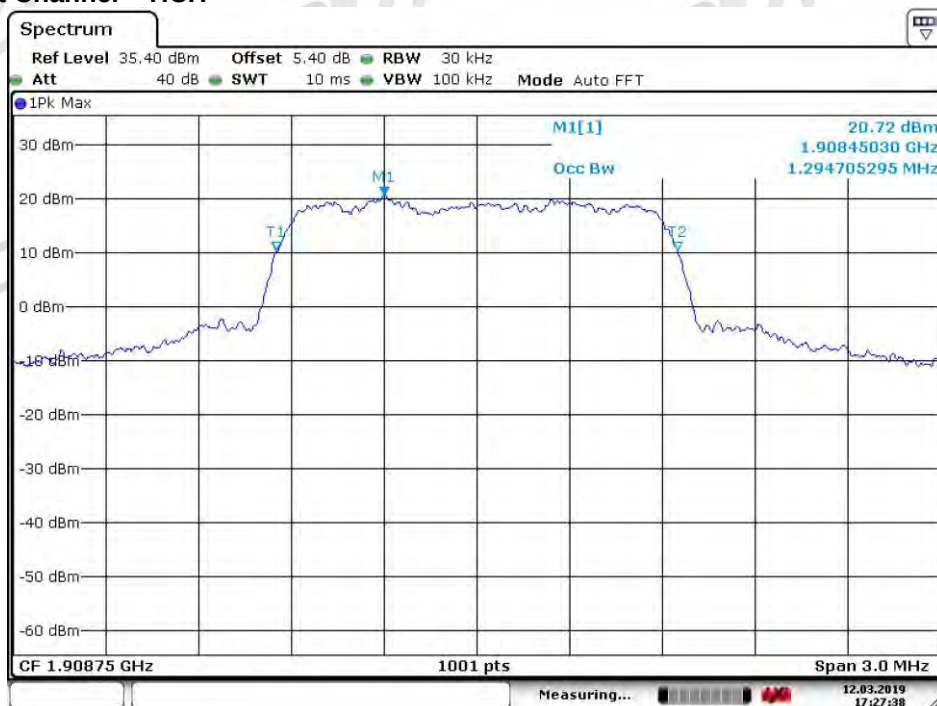


Date: 12.MAR.2019 17:25:51

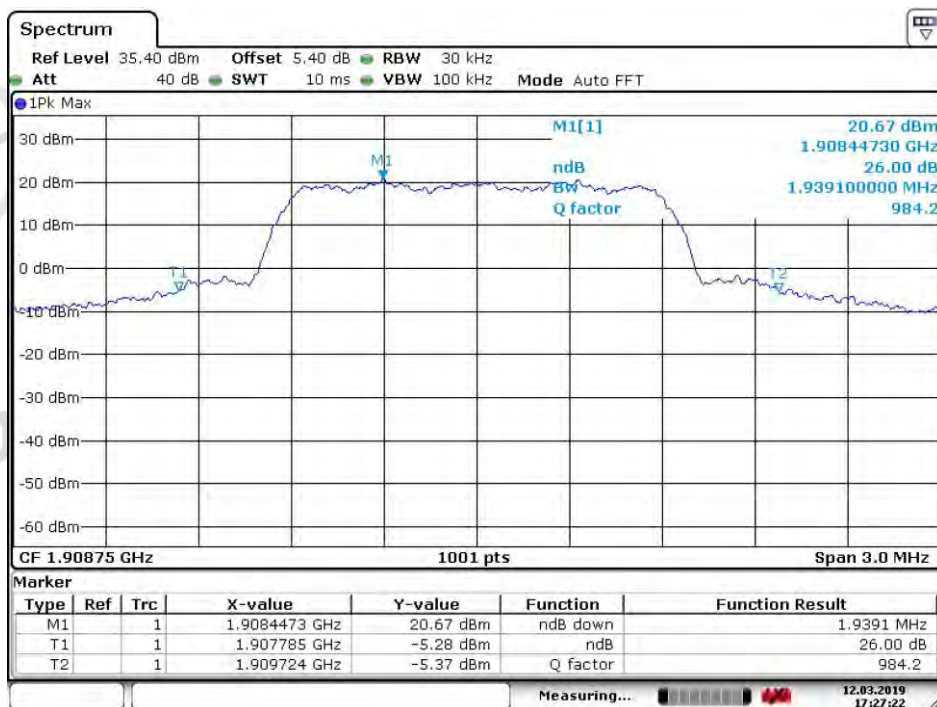


Date: 12.MAR.2019 17:26:14

4.2.2.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:27:38

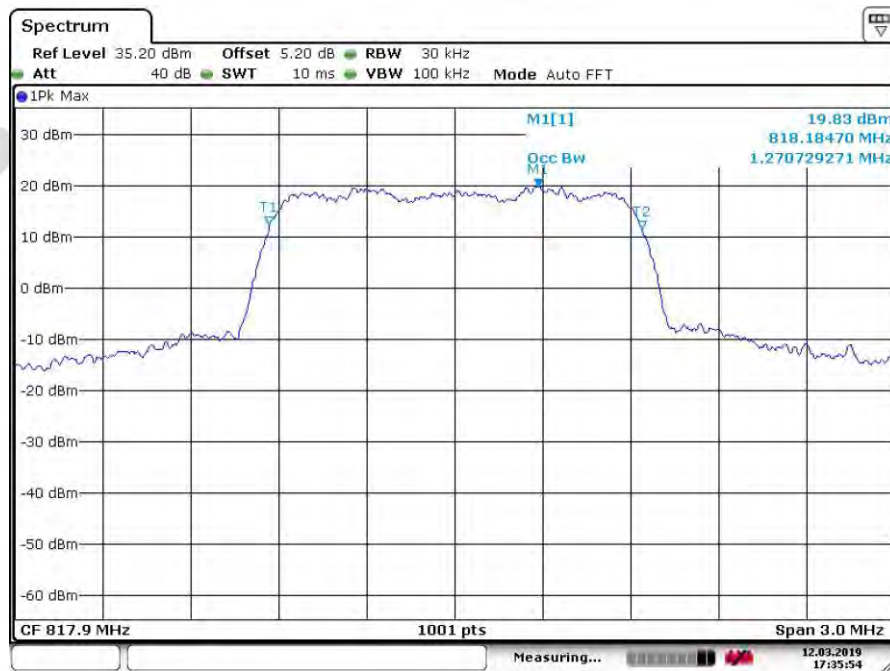


Date: 12.MAR.2019 17:27:23

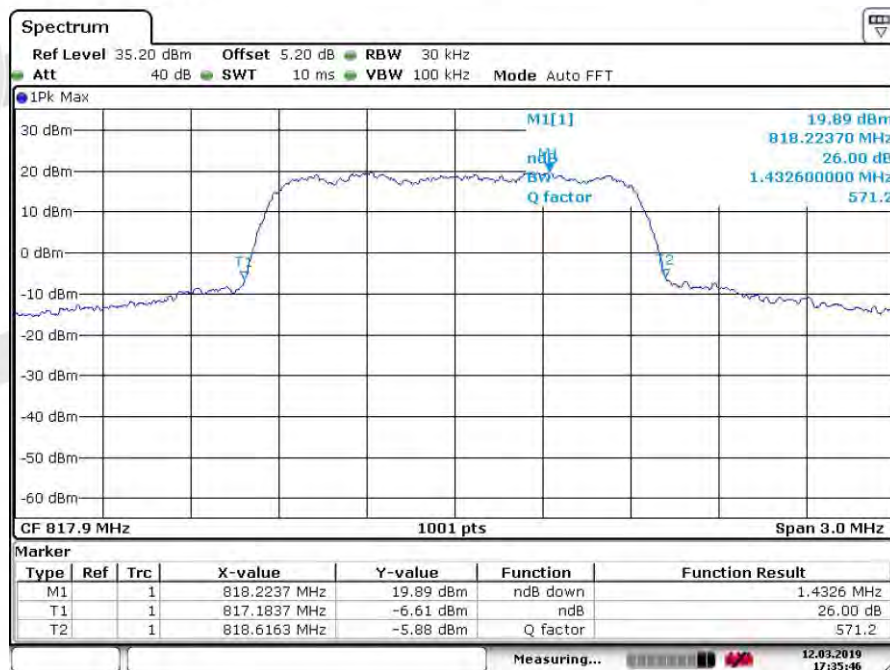
4.2.3 Test Band = EVDO BC10

4.2.3.1 Test Mode = EVDO /TM1

4.2.3.1.1 Test Channel = LCH

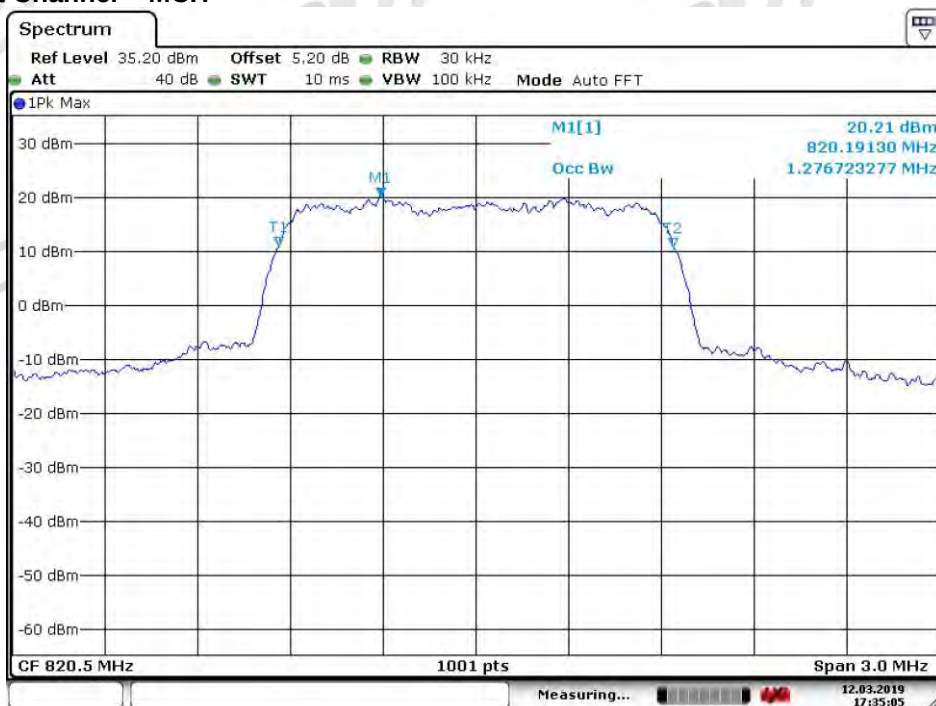


Date: 12.MAR.2019 17:35:55

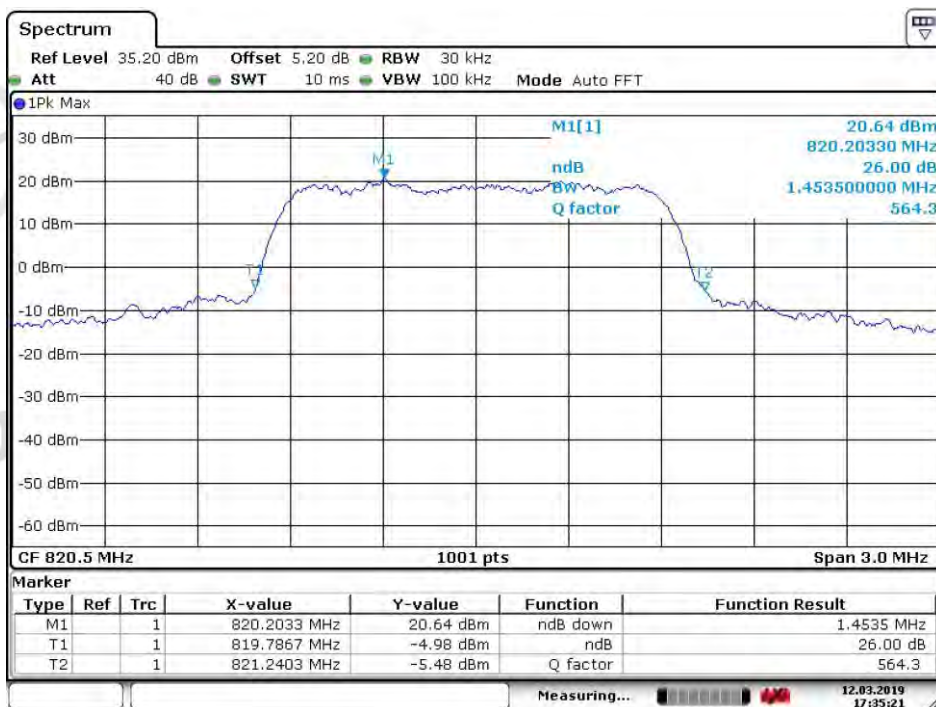


Date: 12.MAR.2019 17:35:47

4.2.3.1.2 Test Channel = MCH

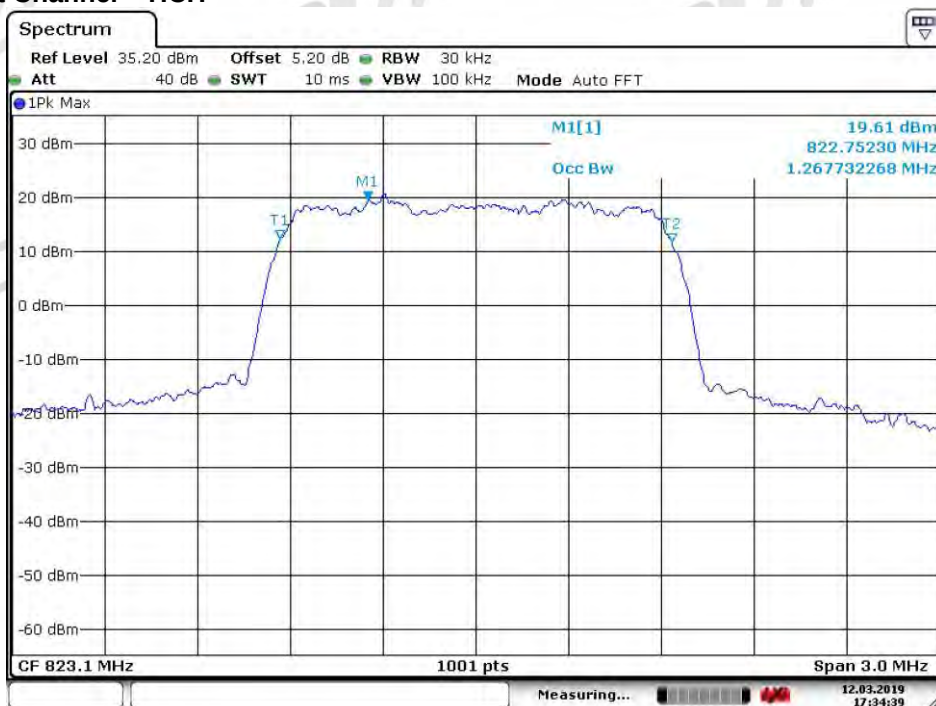


Date: 12.MAR.2019 17:35:05

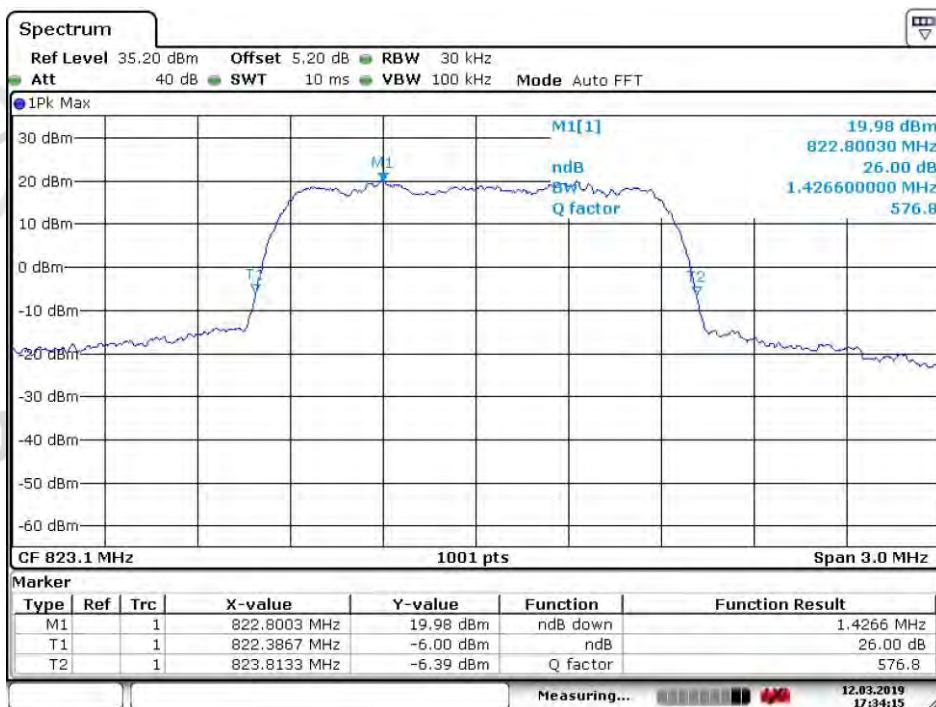


Date: 12.MAR.2019 17:35:22

4.2.3.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:34:40



Date: 12.MAR.2019 17:34:15

5 Band Edges Compliance

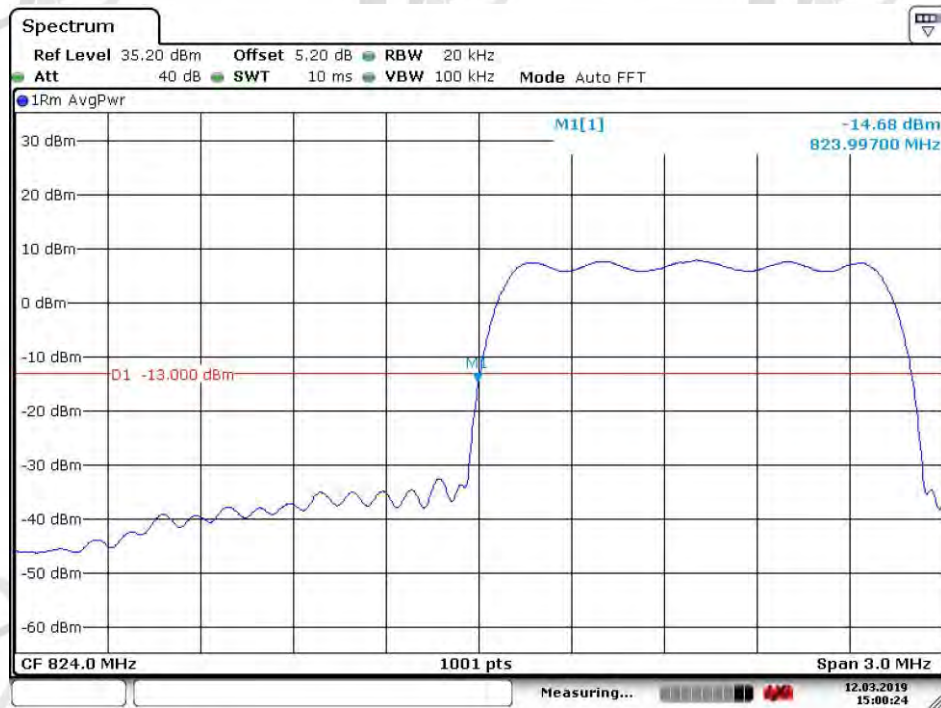
Part I - Test Plots

5.1 For CDMA

5.1.1 Test Band = CDMA BC0

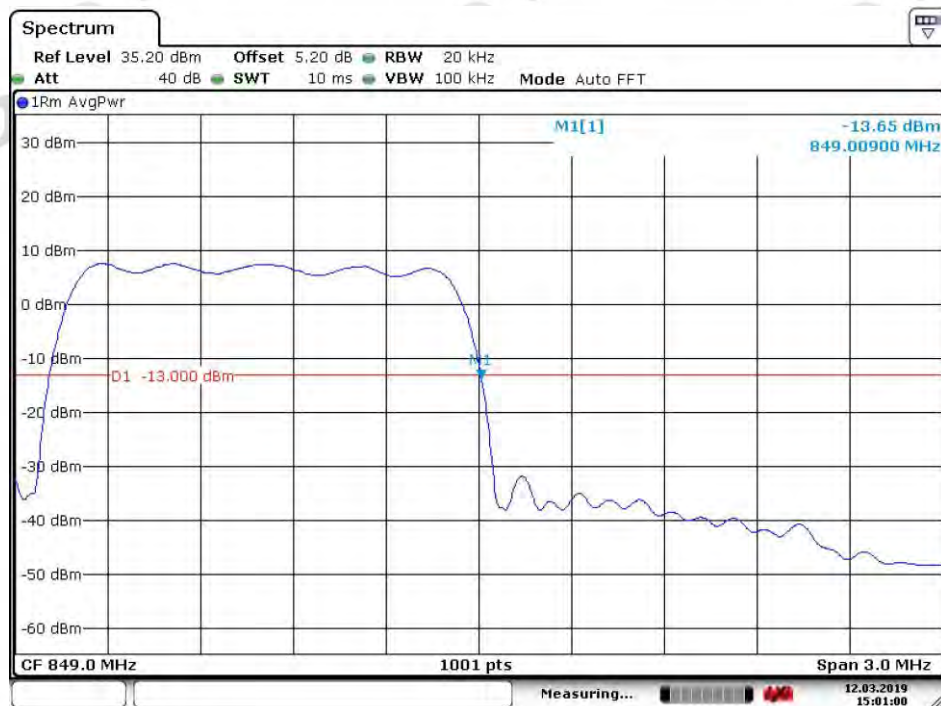
5.1.1.1 Test Mode = CDMA /TM1

5.1.1.1.1 Test Channel = LCH



Date: 12.MAR.2019 15:00:24

5.1.1.1.2 Test Channel = HCH

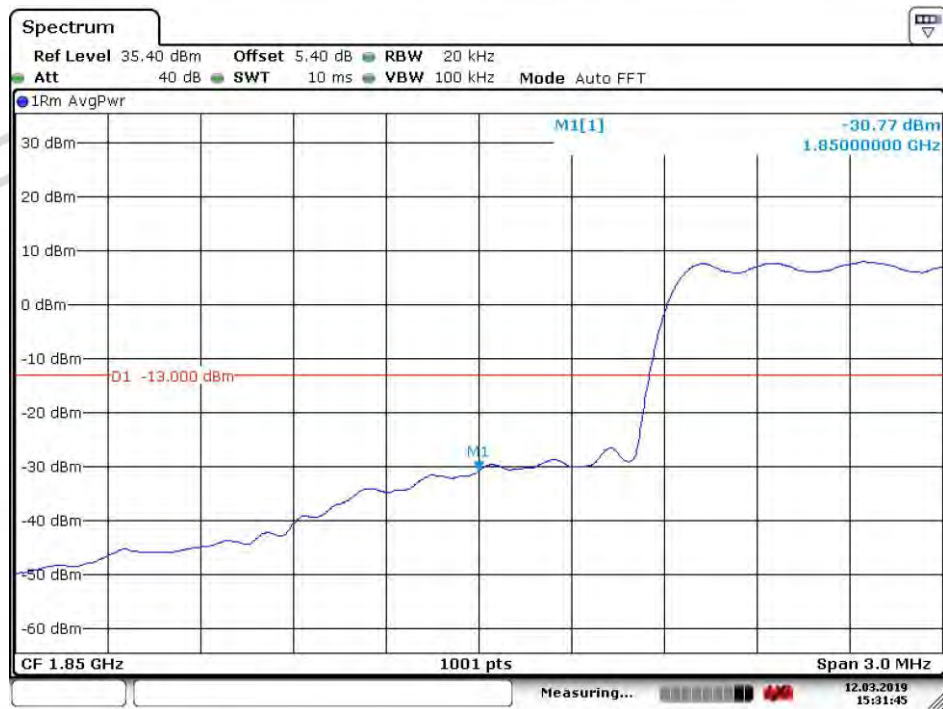


Date: 12.MAR.2019 15:01:01

5.1.2 Test Band = CDMA BC1

5.1.2.1 Test Mode = CDMA /TM1

5.1.2.1.1 Test Channel = LCH

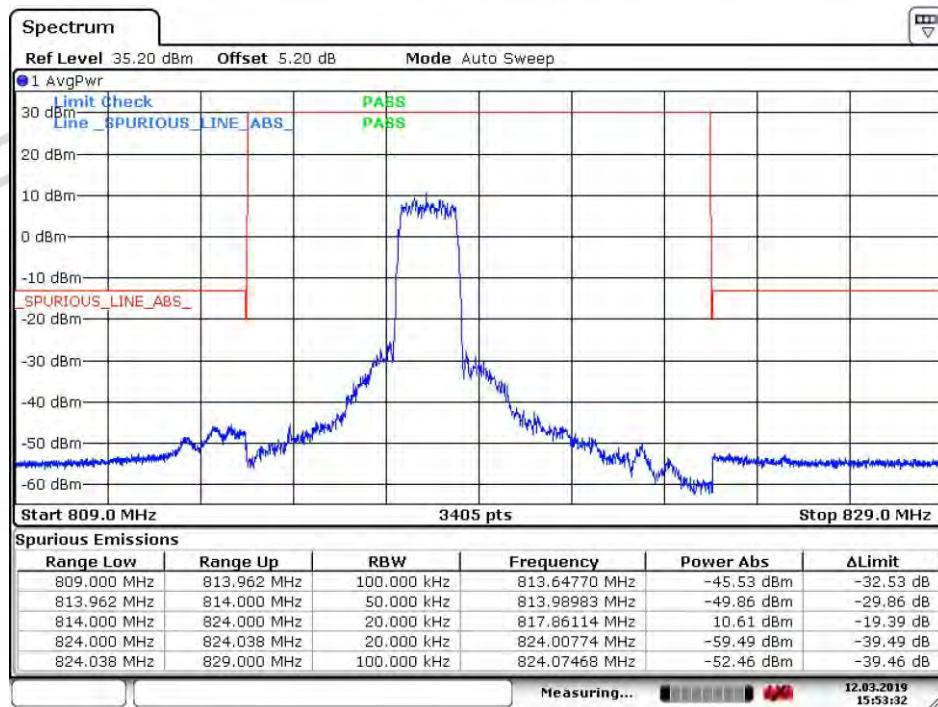


Date: 12.MAR.2019 15:31:45

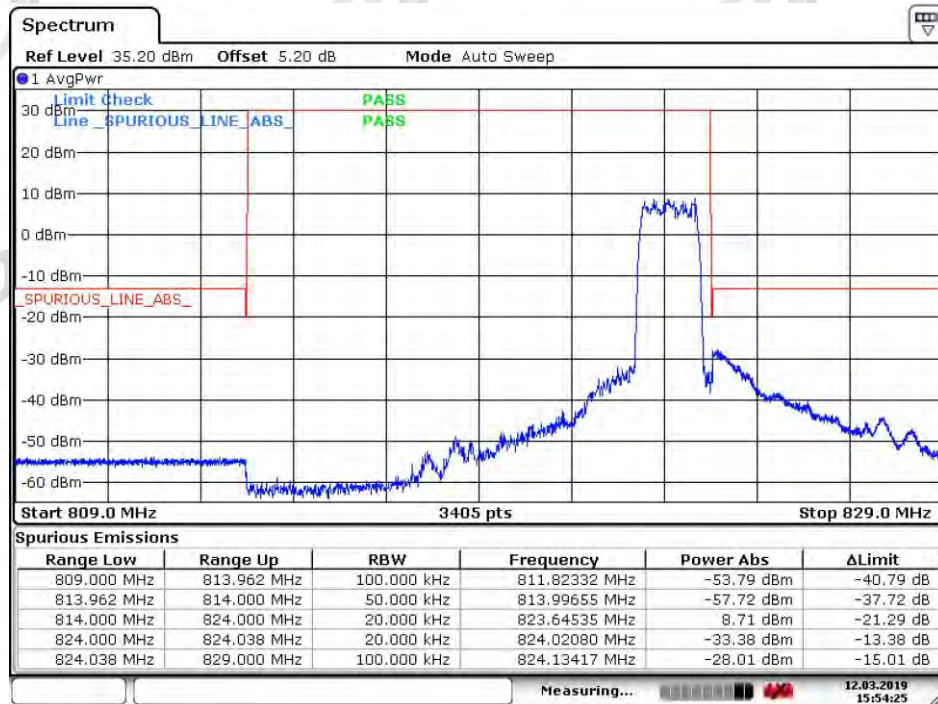
5.1.2.1.2 Test Channel = HCH



Date: 12.MAR.2019 15:31:06

5.1.3 Test Band = CDMA BC10**5.1.3.1 Test Mode = CDMA /TM1****5.1.3.1.1 Test Channel = LCH**

Date: 12.MAR.2019 15:53:32

5.1.3.1.2 Test Channel = HCH

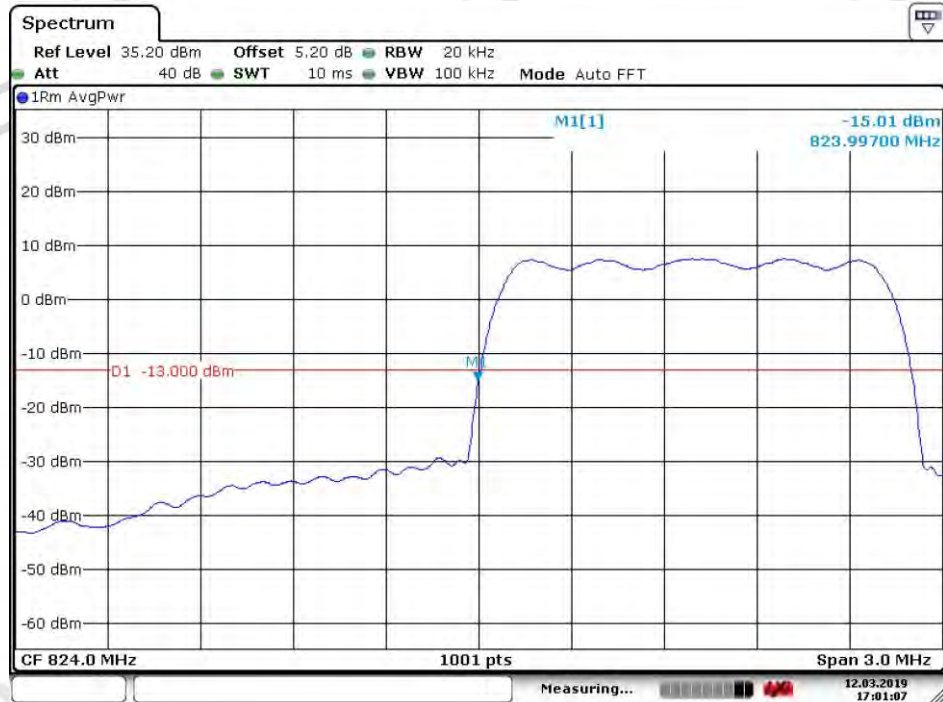
Date: 12.MAR.2019 15:54:26

5.2 For EVDO

5.2.1 Test Band = EVDO BC0

5.2.1.1 Test Mode = EVDO /TM1

5.2.1.1.1 Test Channel = LCH



Date: 12.MAR.2019 17:01:07

5.2.1.1.2 Test Channel = HCH



Date: 12.MAR.2019 17:06:40

5.2.2 Test Band = EVDO BC1

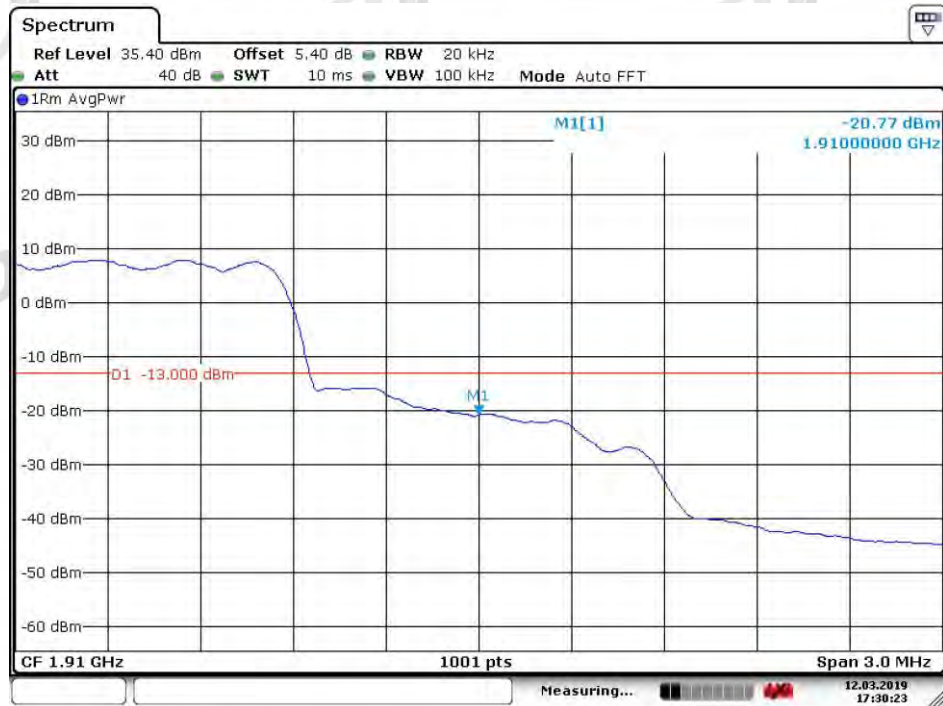
5.2.2.1 Test Mode = EVDO /TM1

5.2.2.1.1 Test Channel = LCH



Date: 12.MAR.2019 17:29:52

5.2.2.1.2 Test Channel = HCH

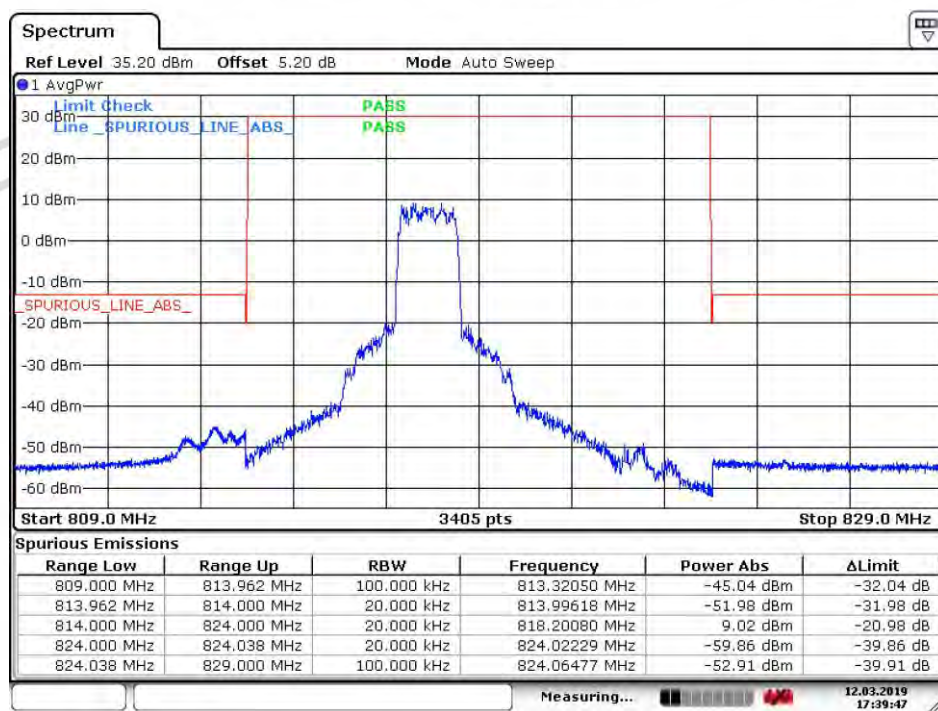


Date: 12.MAR.2019 17:30:23

5.2.3 Test Band = EVDO BC10

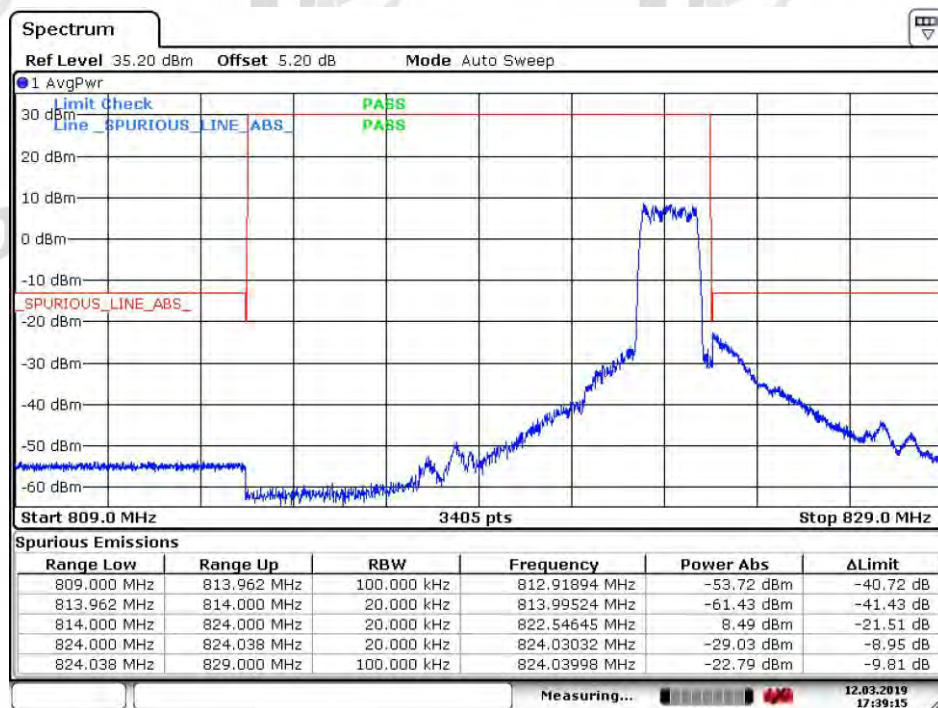
5.2.3.1 Test Mode = EVDO /TM1

5.2.3.1.1 Test Channel = LCH



Date: 12.MAR.2019 17:39:47

5.2.3.1.2 Test Channel = HCH



Date: 12.MAR.2019 17:39:15

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.

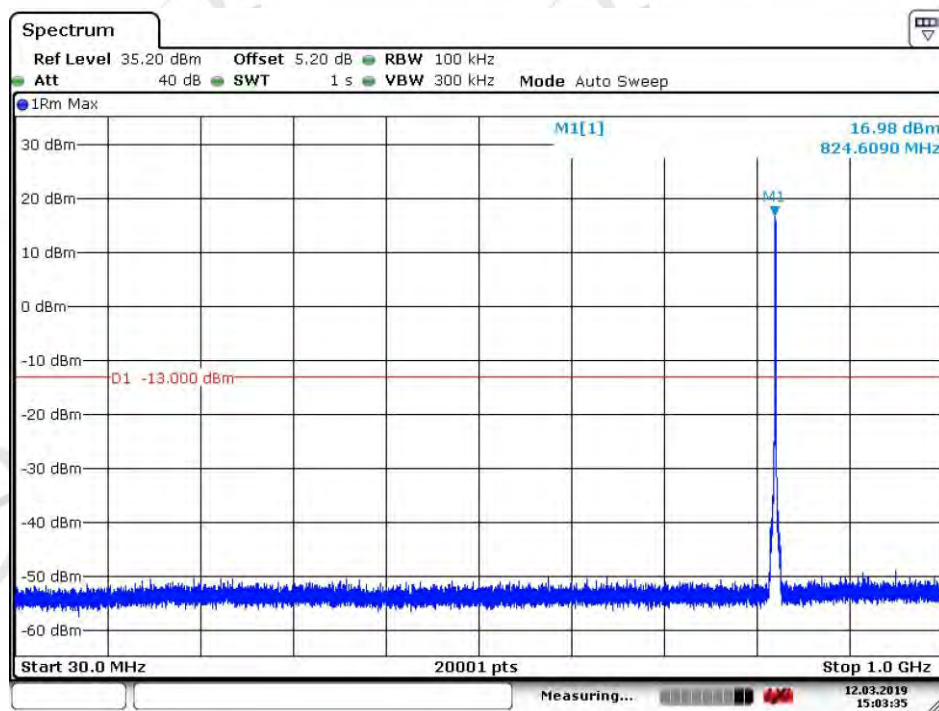
Part I - Test Plots

6.1 For CDMA

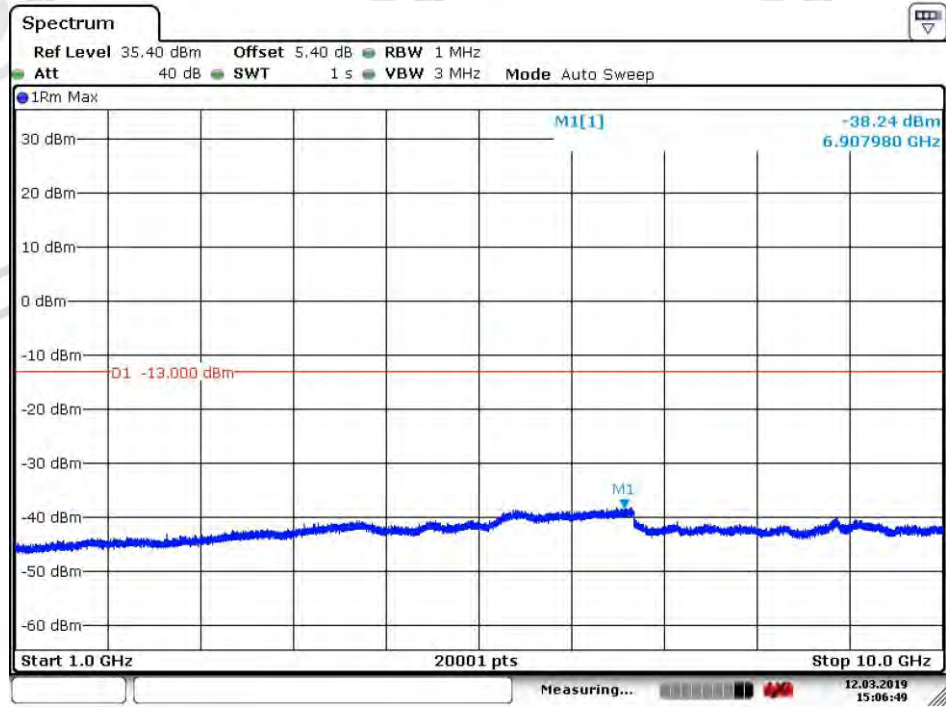
6.1.1 Test Band = CDMA BC0

6.1.1.1 Test Mode = CDMA /TM1

6.1.1.1.1 Test Channel = LCH

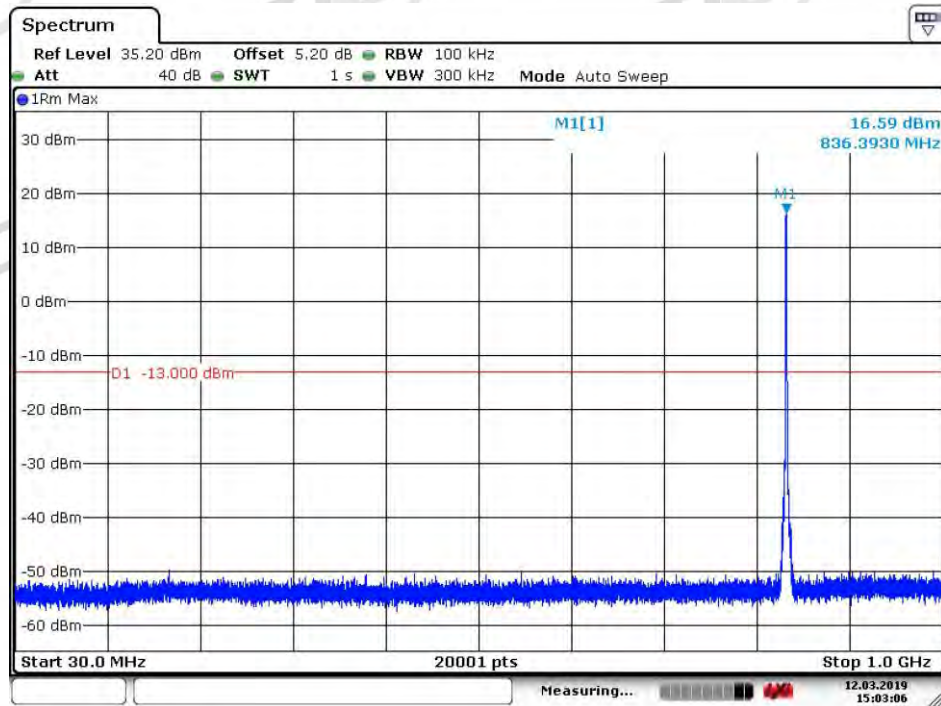


Date: 12.MAR.2019 15:03:36

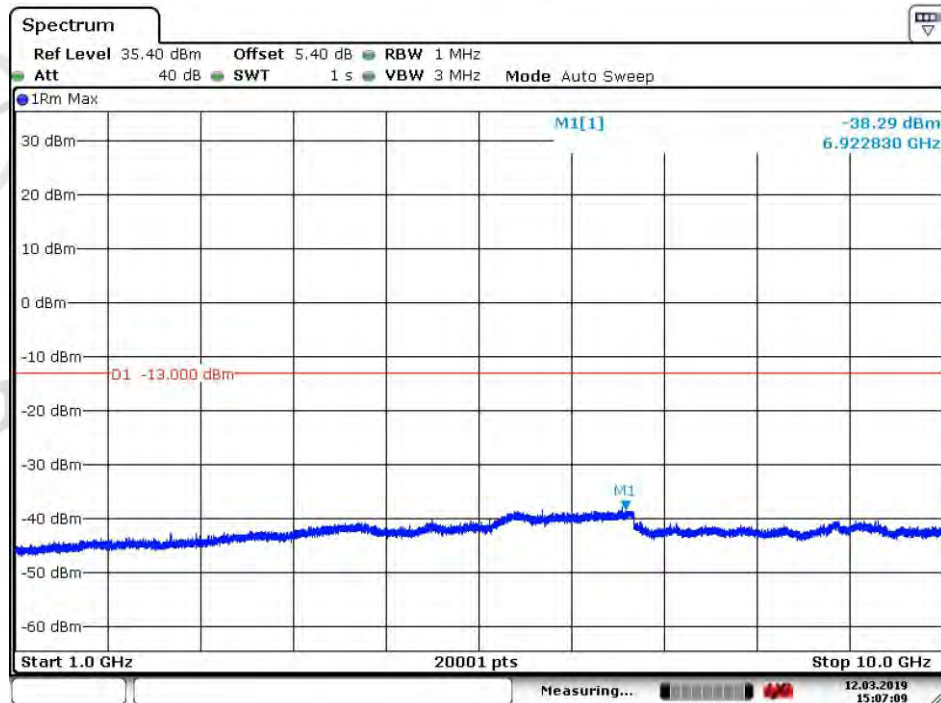


Date: 12.MAR.2019 15:06:49

6.1.1.1.2 Test Channel = MCH

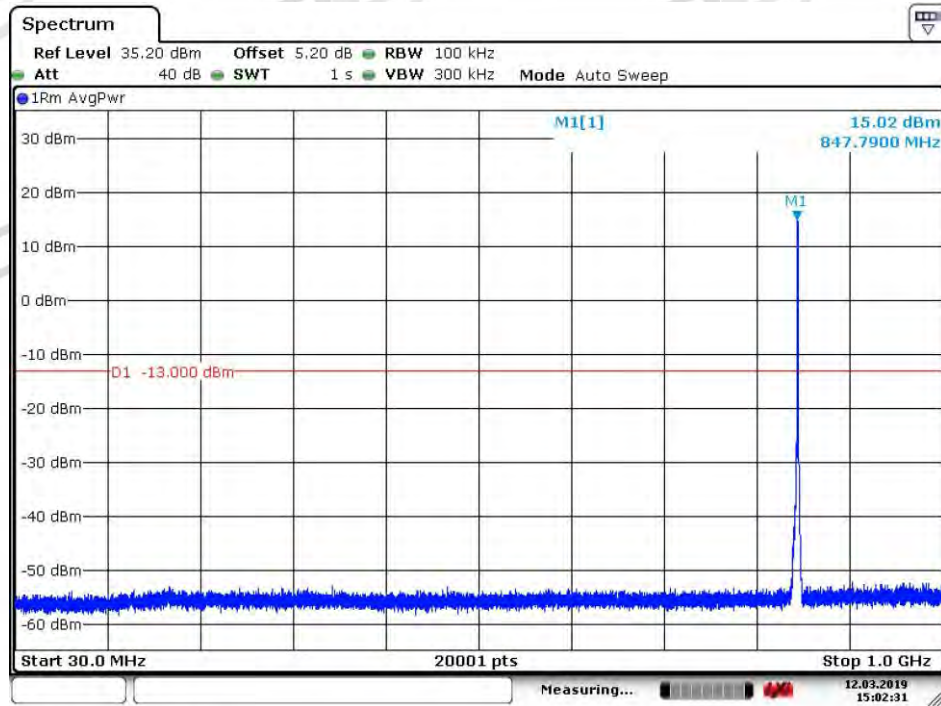


Date: 12.MAR.2019 15:03:06

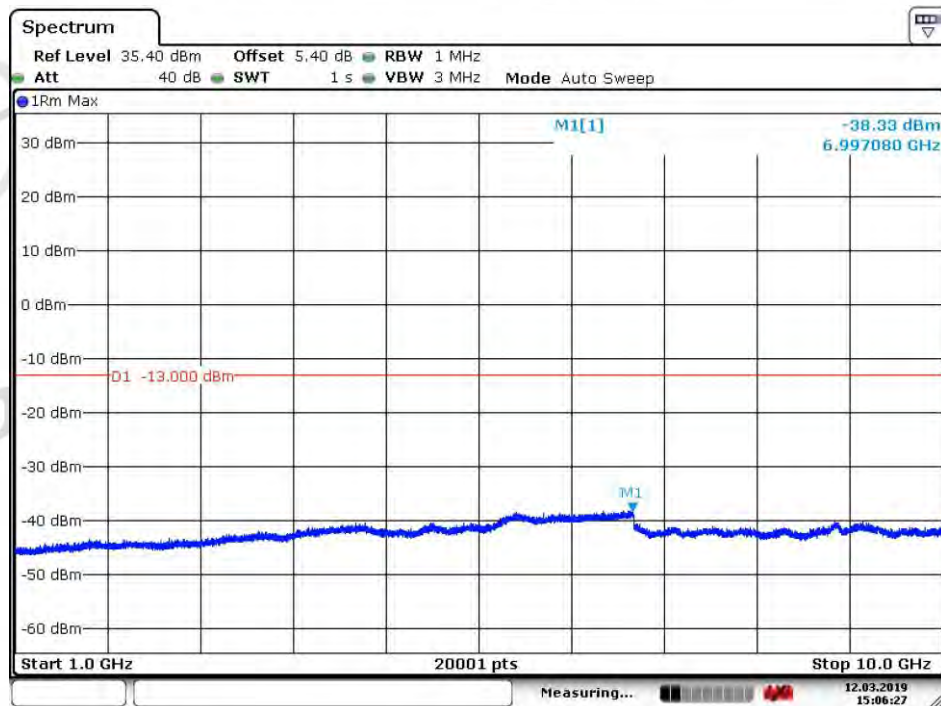


Date: 12.MAR.2019 15:07:10

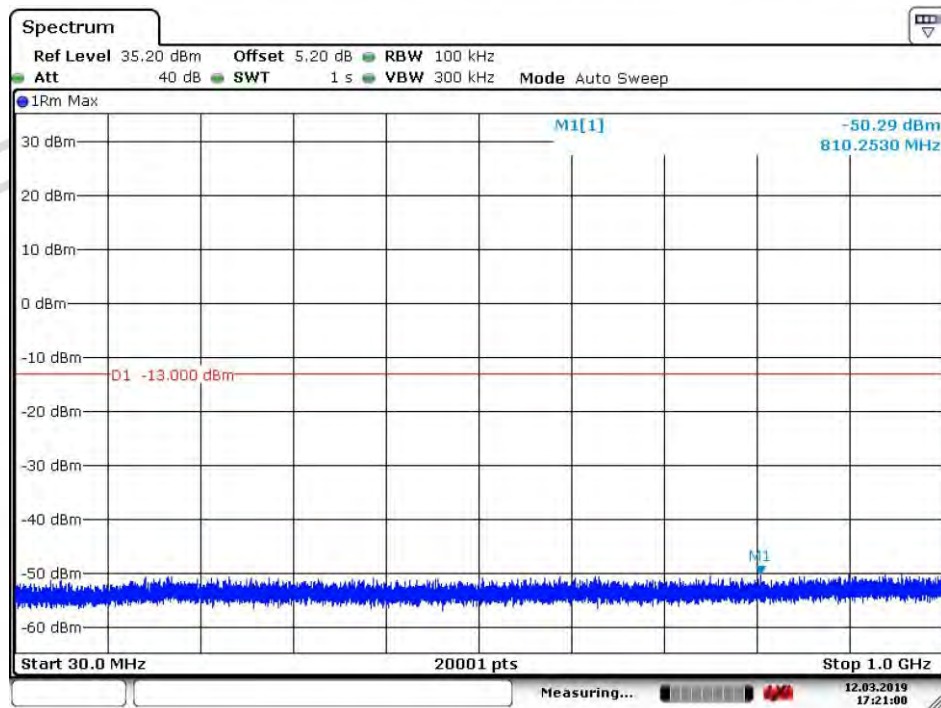
6.1.1.1.3 Test Channel = HCH



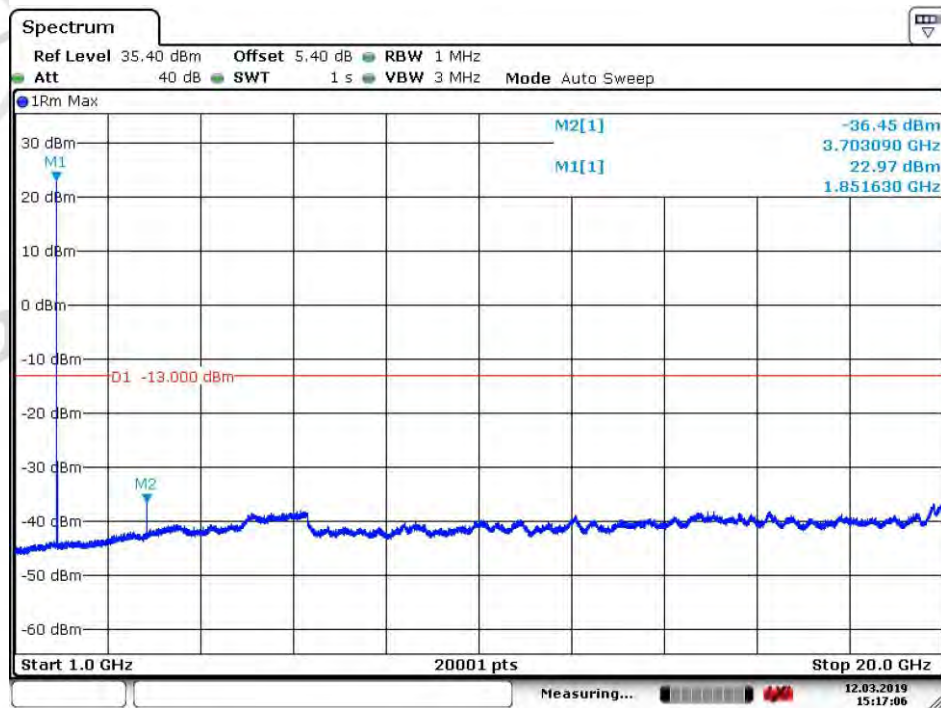
Date: 12.MAR.2019 15:02:32



Date: 12.MAR.2019 15:06:27

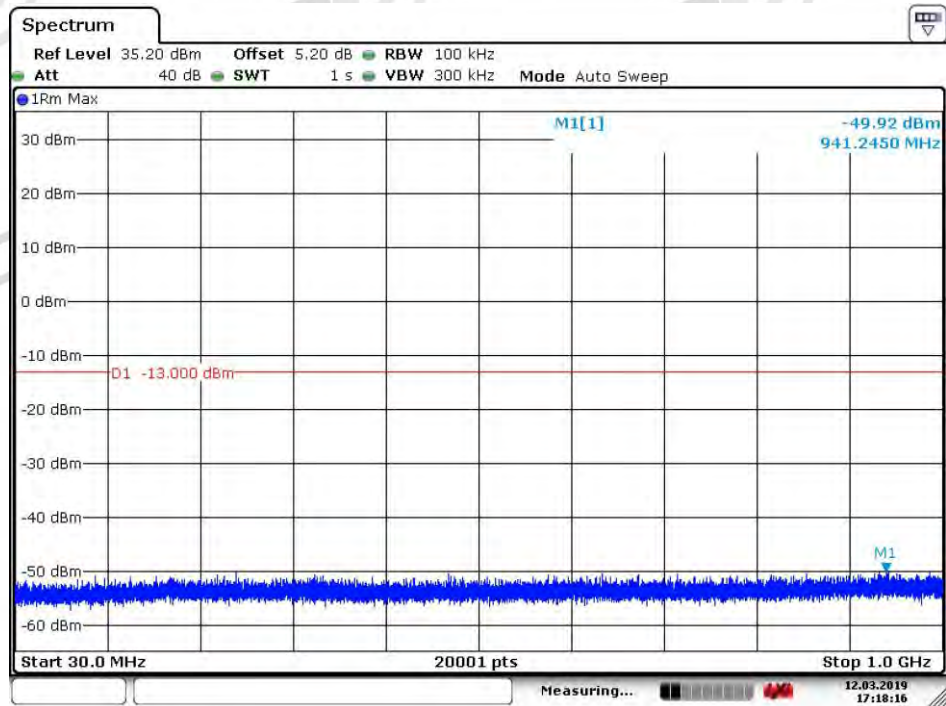
6.1.2 Test Band = CDMA BC1**6.1.2.1 Test Mode = CDMA /TM1****6.1.2.1.1 Test Channel = LCH**

Date: 12.MAR.2019 17:21:00

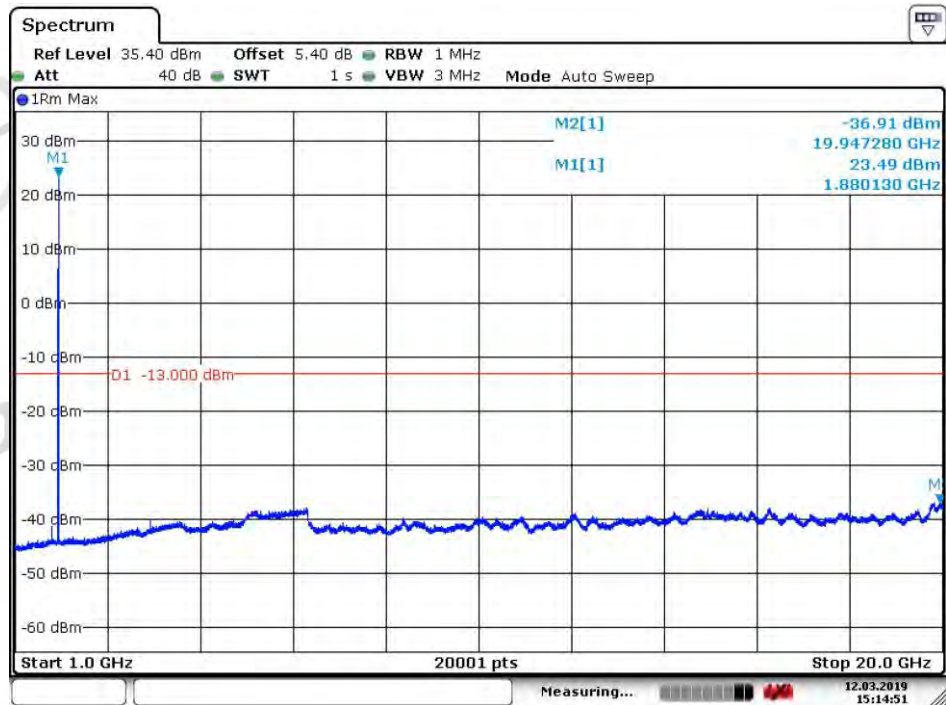


Date: 12.MAR.2019 15:17:07

6.1.2.1.2 Test Channel = MCH

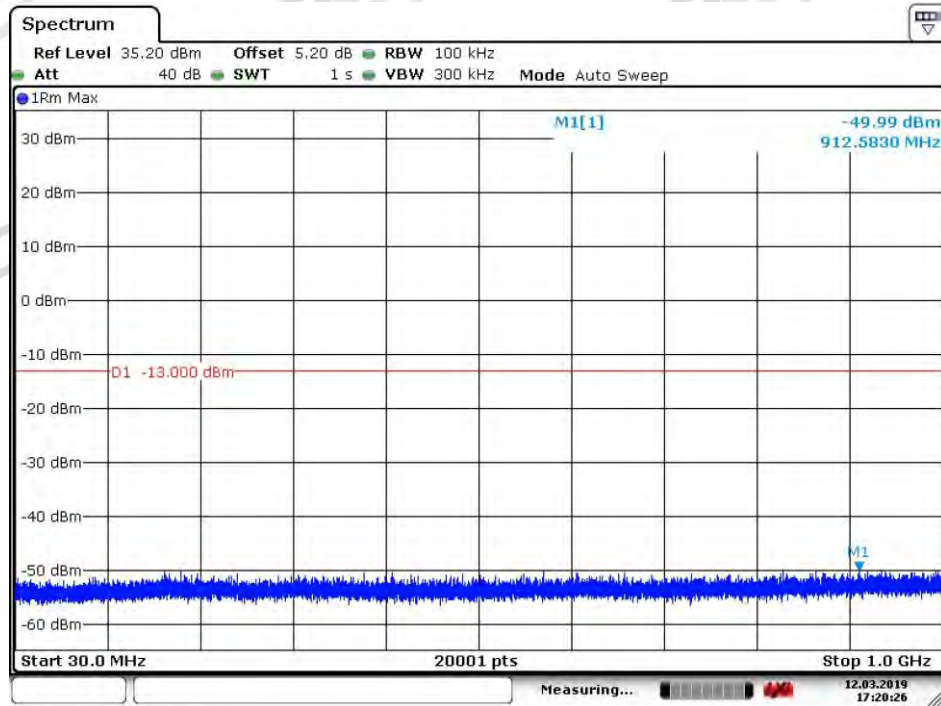


Date: 12.MAR.2019 17:18:16

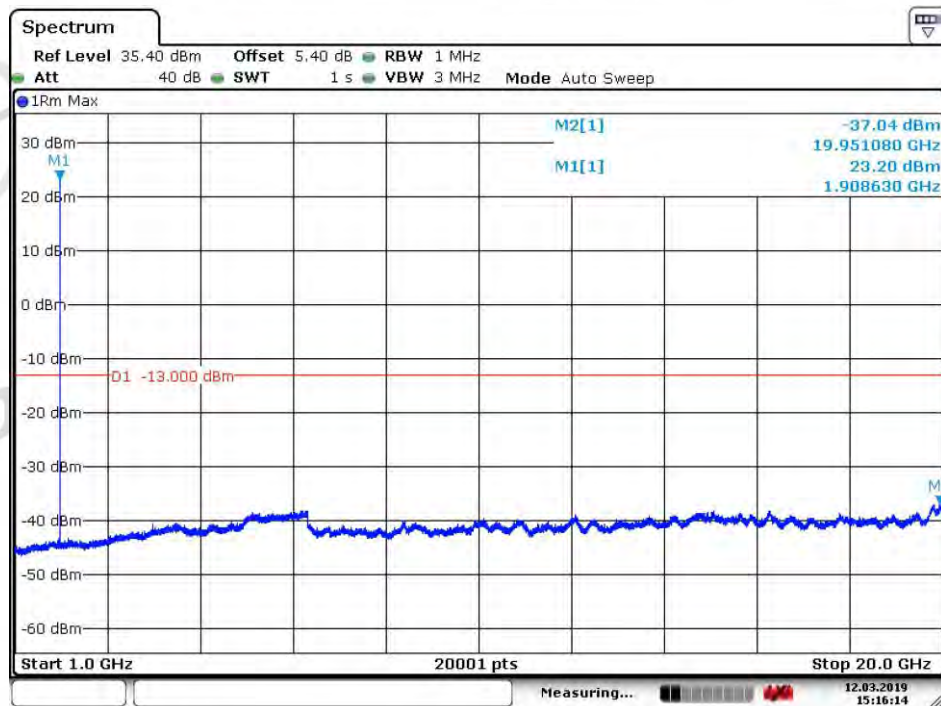


Date: 12.MAR.2019 15:14:51

6.1.2.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:20:26

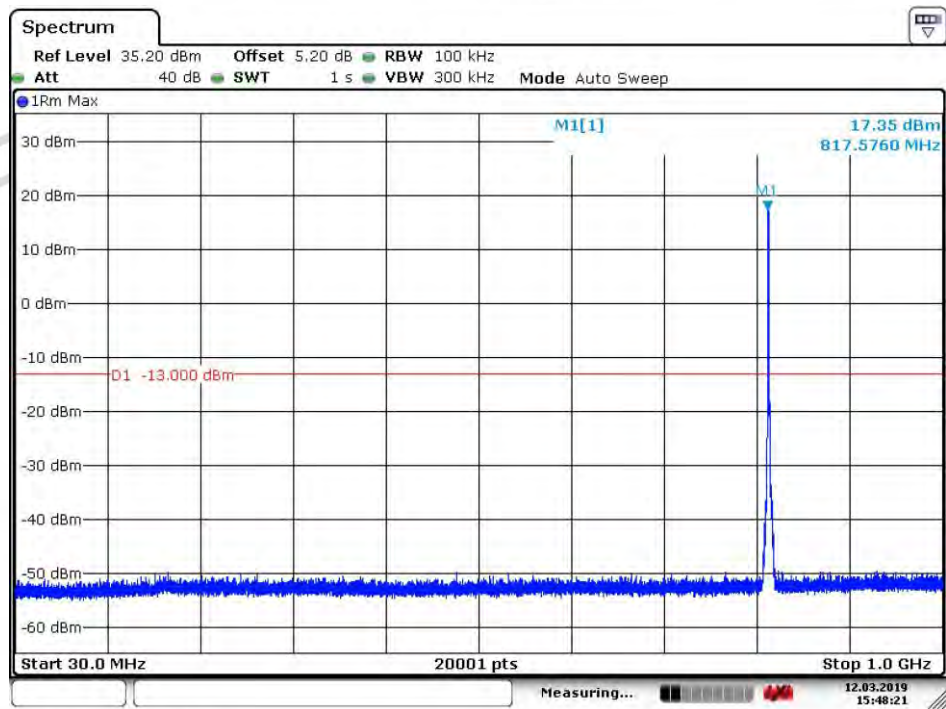


Date: 12.MAR.2019 15:16:14

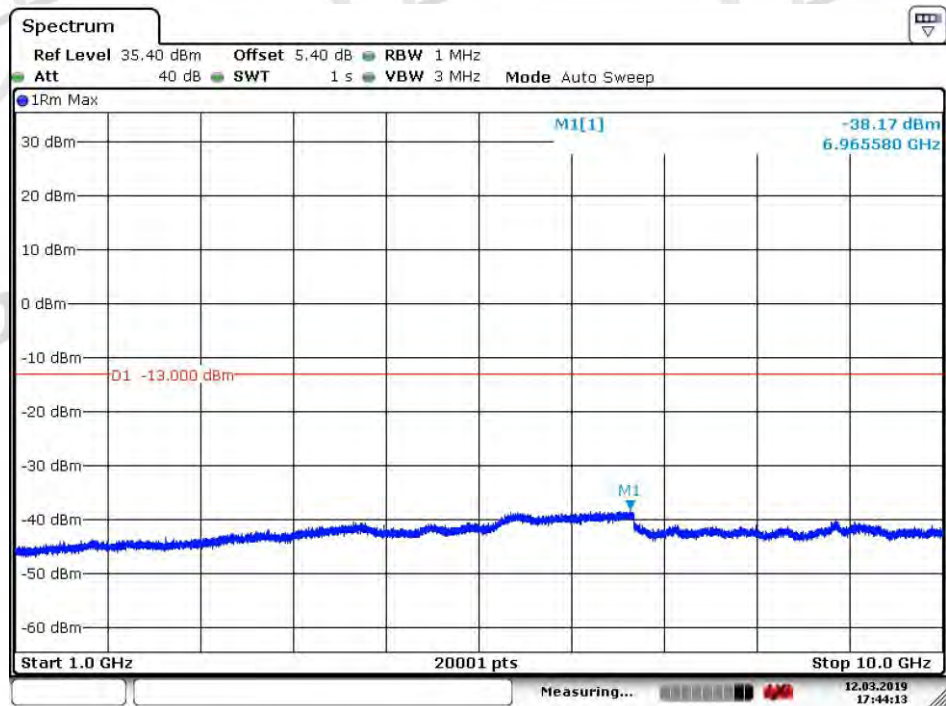
6.1.3 Test Band = CDMA BC10

6.1.3.1 Test Mode = CDMA /TM1

6.1.3.1.1 Test Channel = LCH

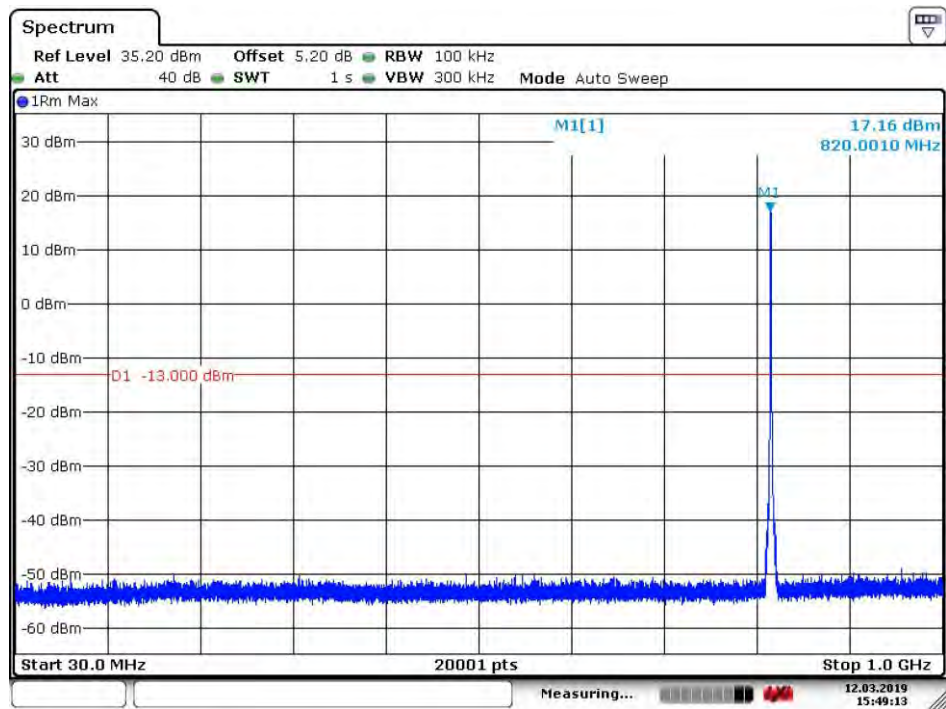


Date: 12.MAR.2019 15:48:22

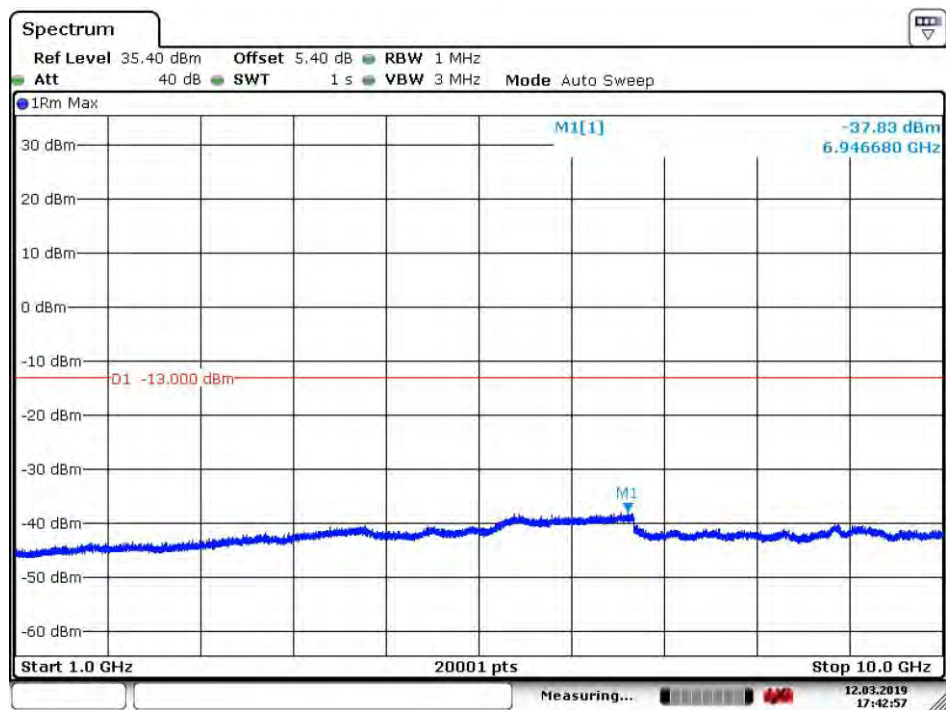


Date: 12.MAR.2019 17:44:13

6.1.3.1.2 Test Channel = MCH

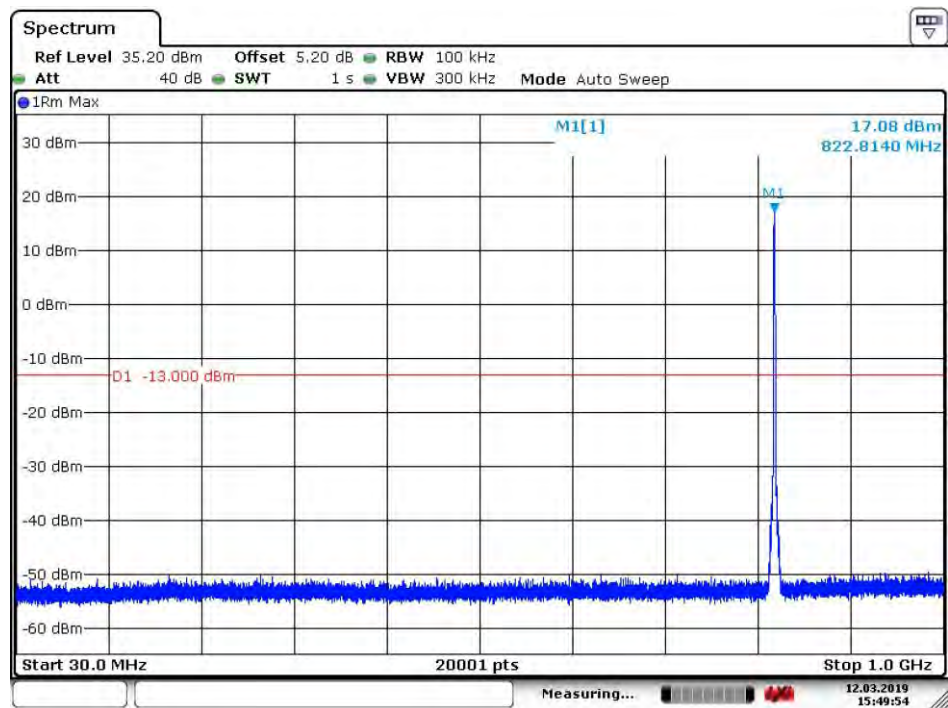


Date: 12.MAR.2019 15:49:13

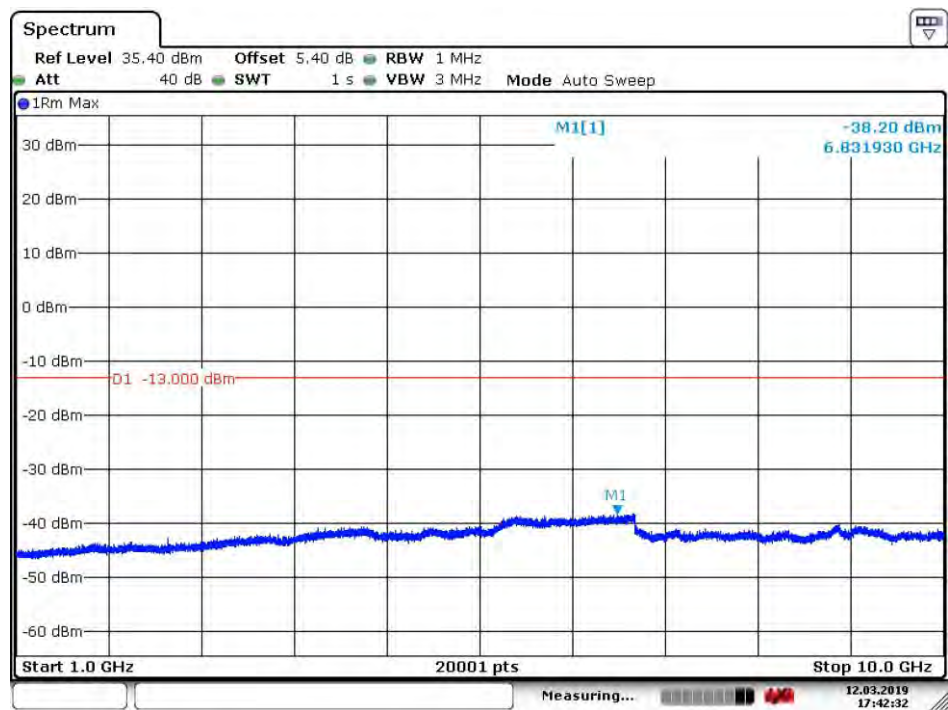


Date: 12.MAR.2019 17:42:58

6.1.3.1.3 Test Channel = HCH



Date: 12.MAR.2019 15:49:53



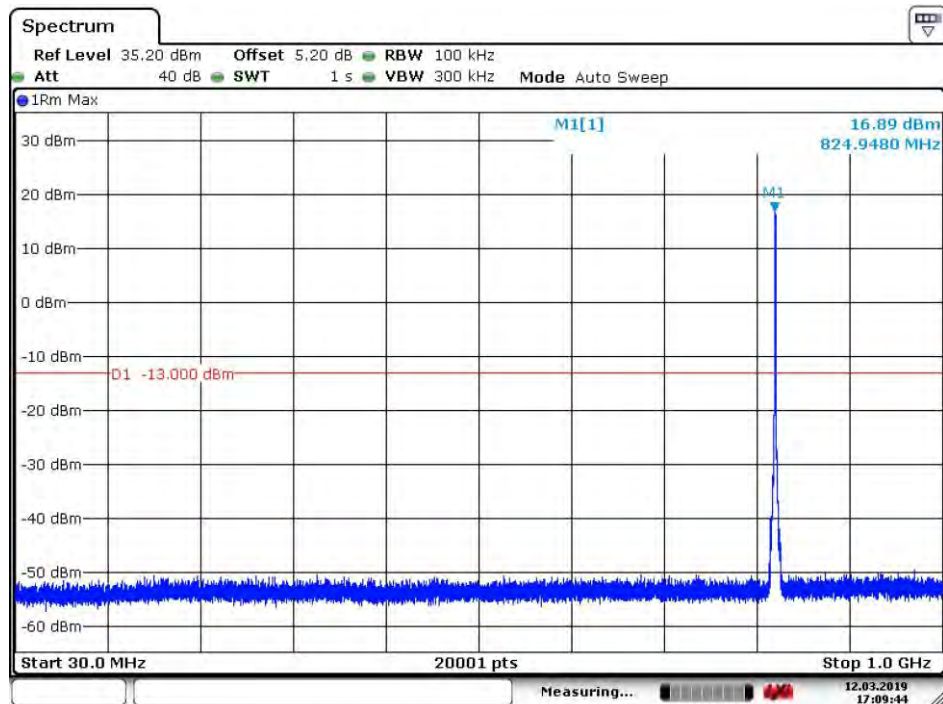
Date: 12.MAR.2019 17:42:32

6.2 For EVDO

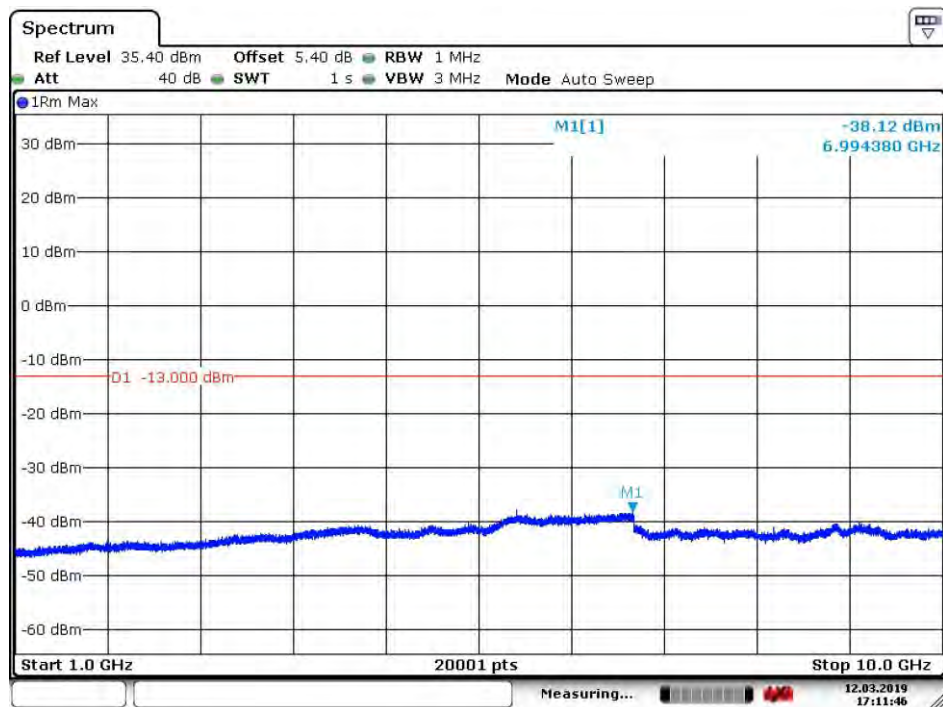
6.2.1 Test Band = EVDO BC0

6.2.1.1 Test Mode = EVDO /TM1

6.2.1.1.1 Test Channel = LCH

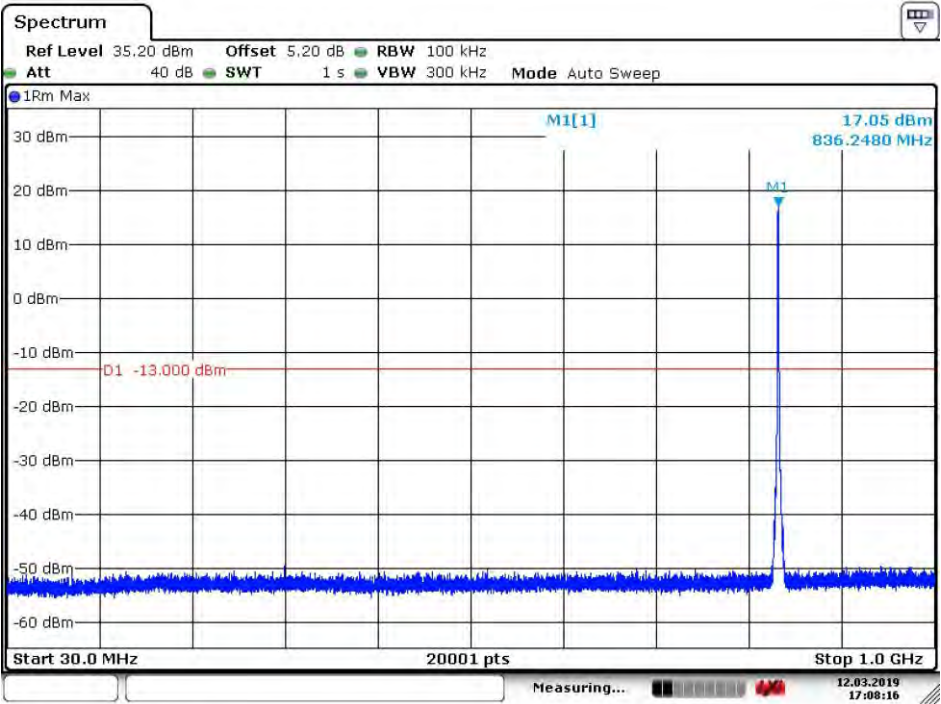


Date: 12.MAR.2019 17:09:44

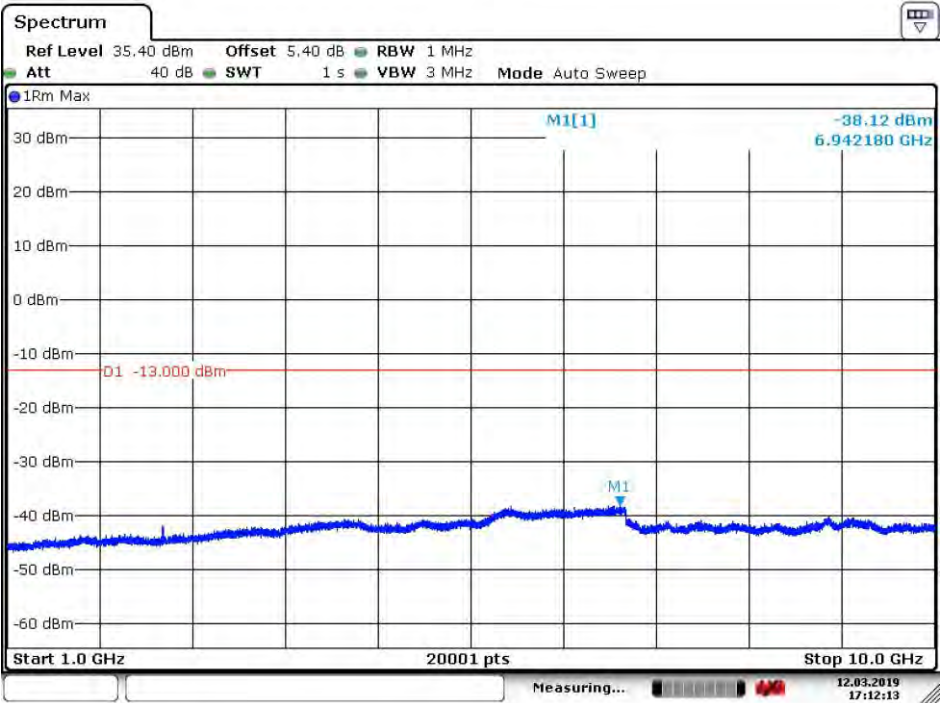


Date: 12.MAR.2019 17:11:46

6.2.1.1.2 Test Channel = MCH

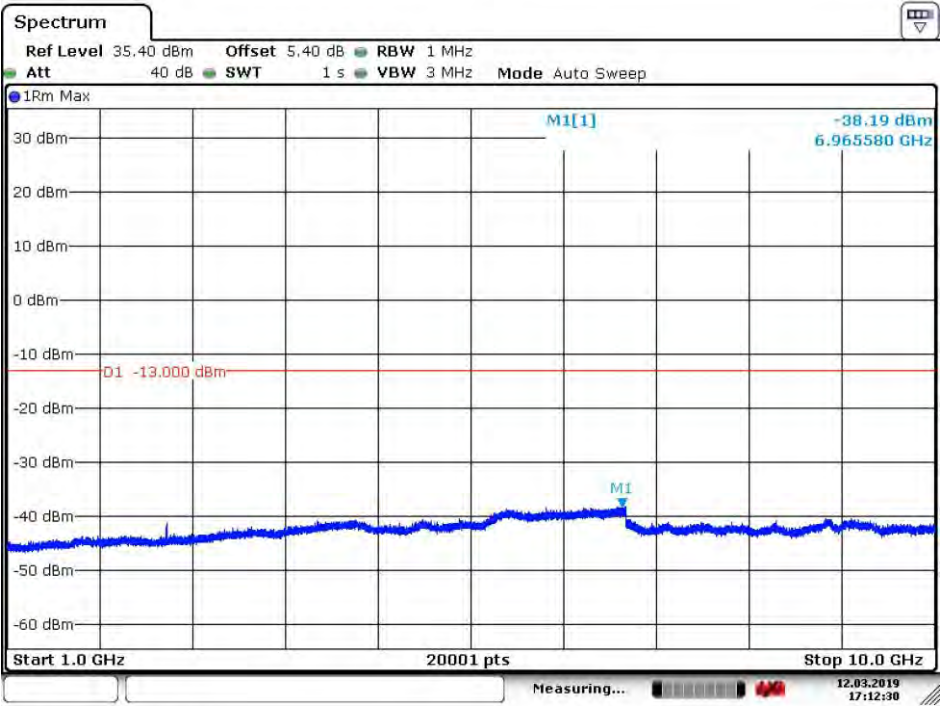


Date: 12.MAR.2019 17:08:17

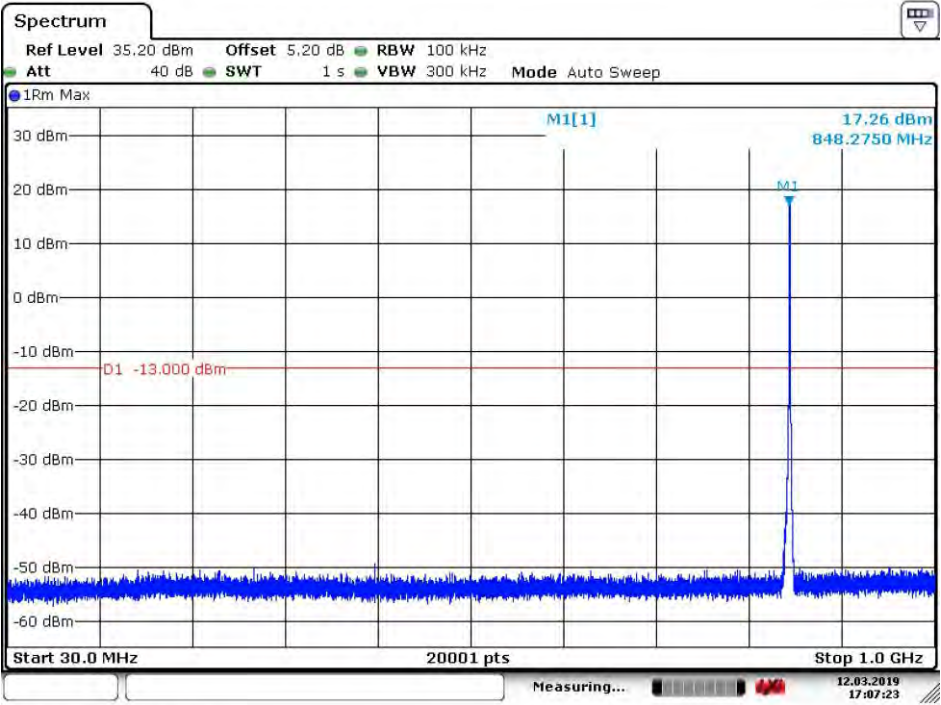


Date: 12.MAR.2019 17:12:13

6.2.1.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:12:30

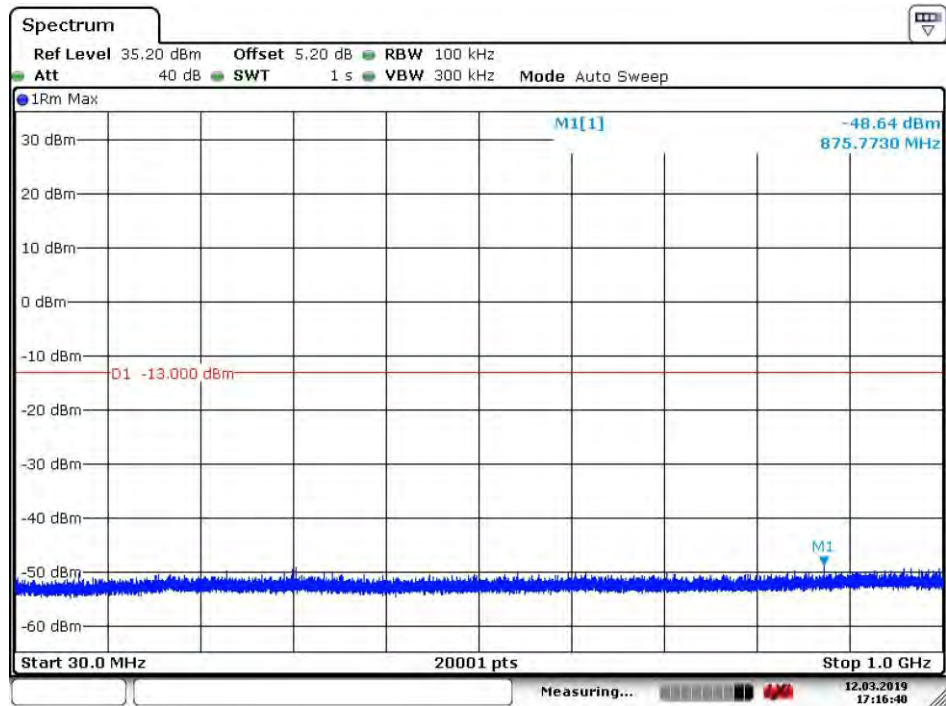


Date: 12.MAR.2019 17:07:23

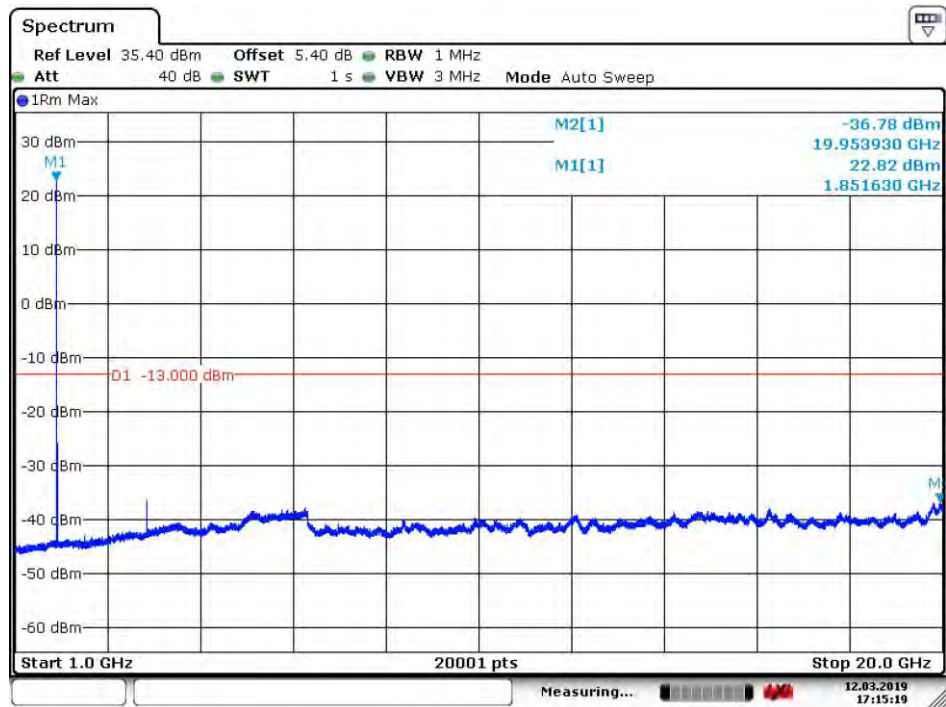
6.2.2 Test Band = EVDO BC1

6.2.2.1 Test Mode = EVDO /TM1

6.2.2.1.1 Test Channel = LCH

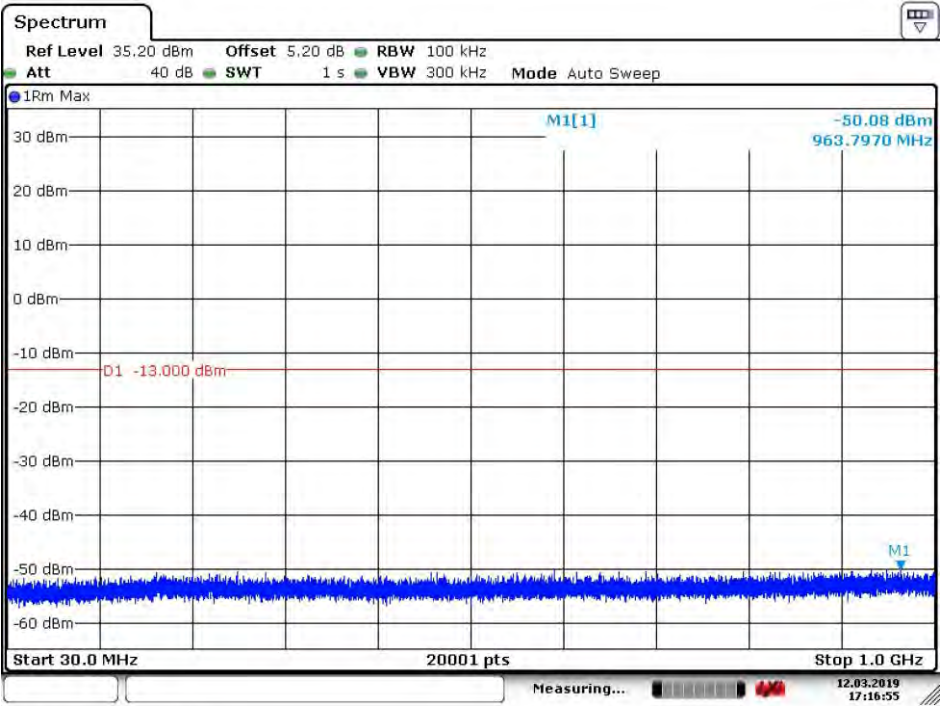


Date: 12.MAR.2019 17:16:40

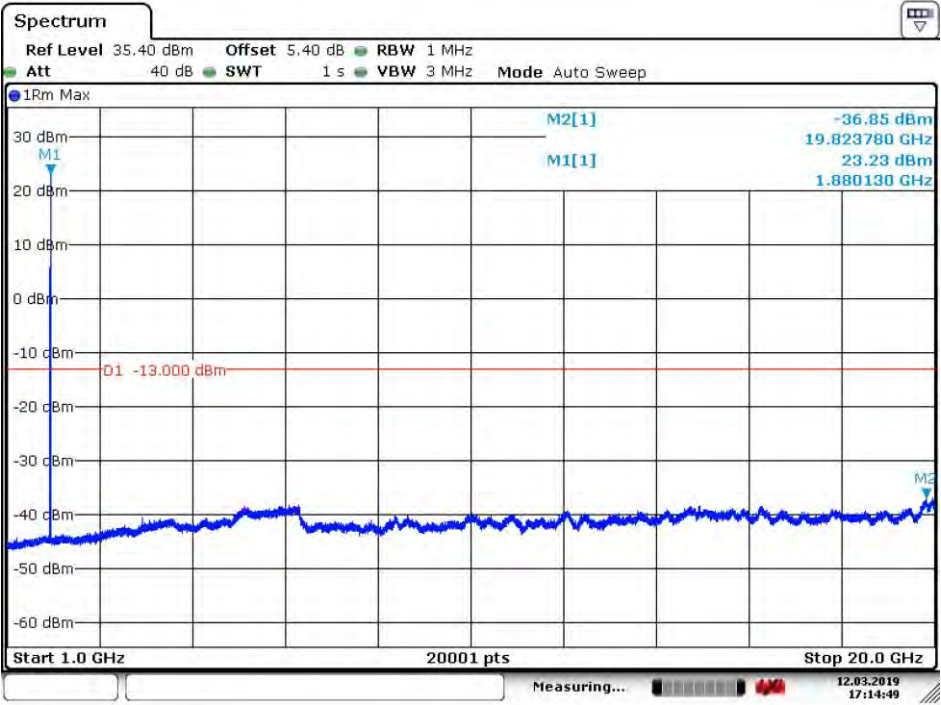


Date: 12.MAR.2019 17:15:19

6.2.2.1.2 Test Channel = MCH

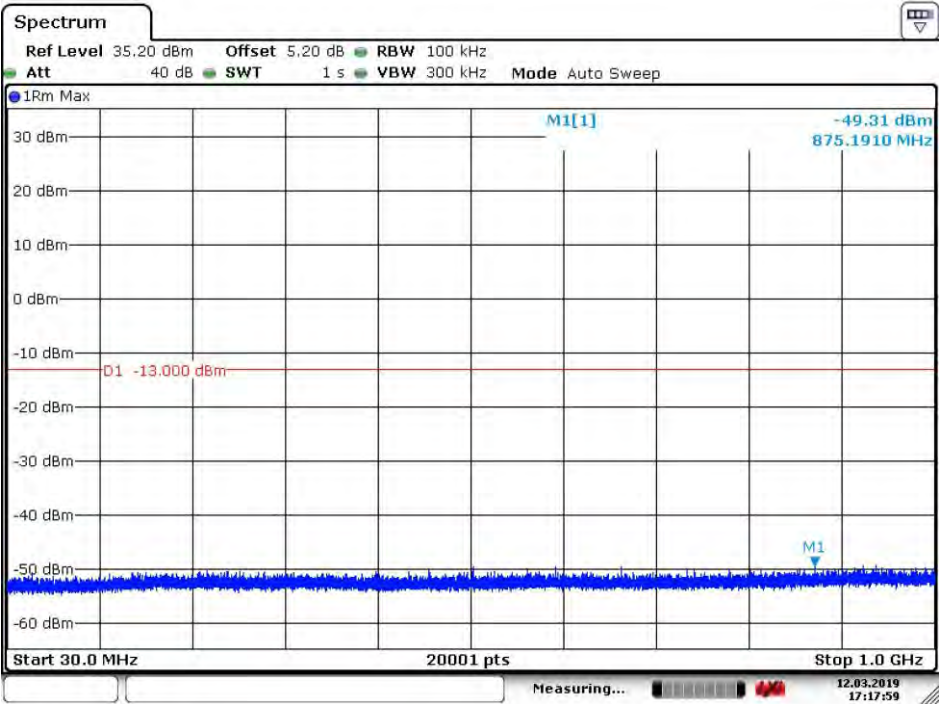


Date: 12.MAR.2019 17:16:55

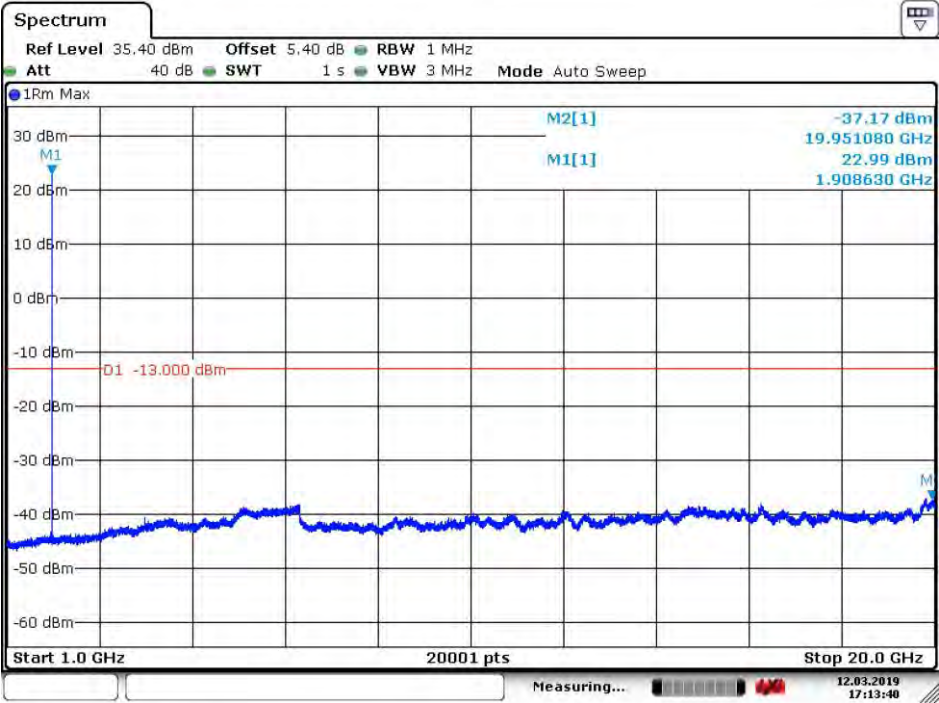


Date: 12.MAR.2019 17:14:49

6.2.2.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:17:59

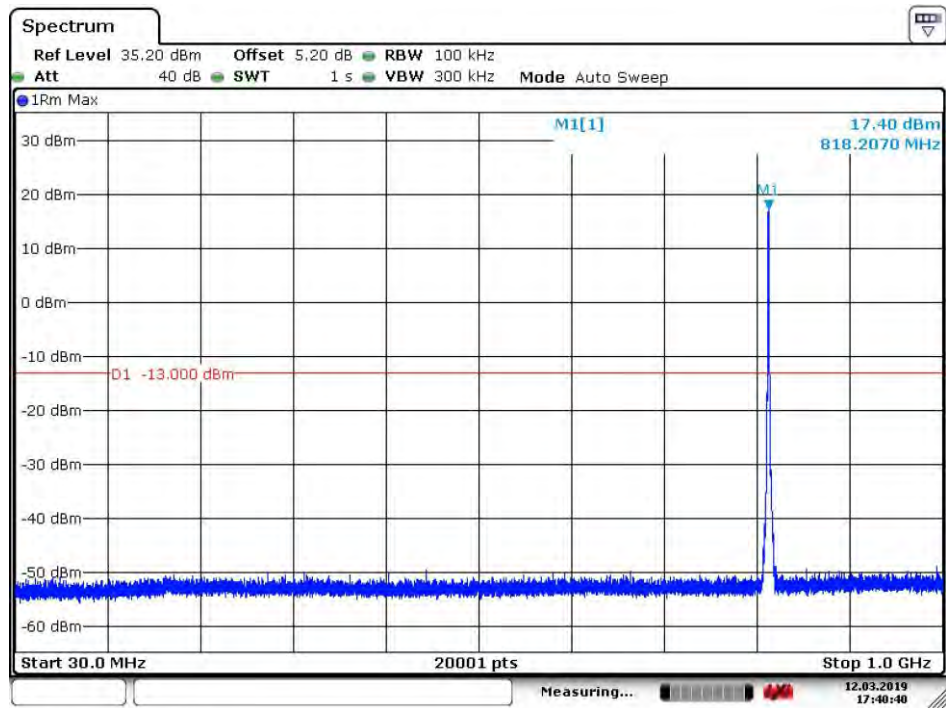


Date: 12.MAR.2019 17:13:40

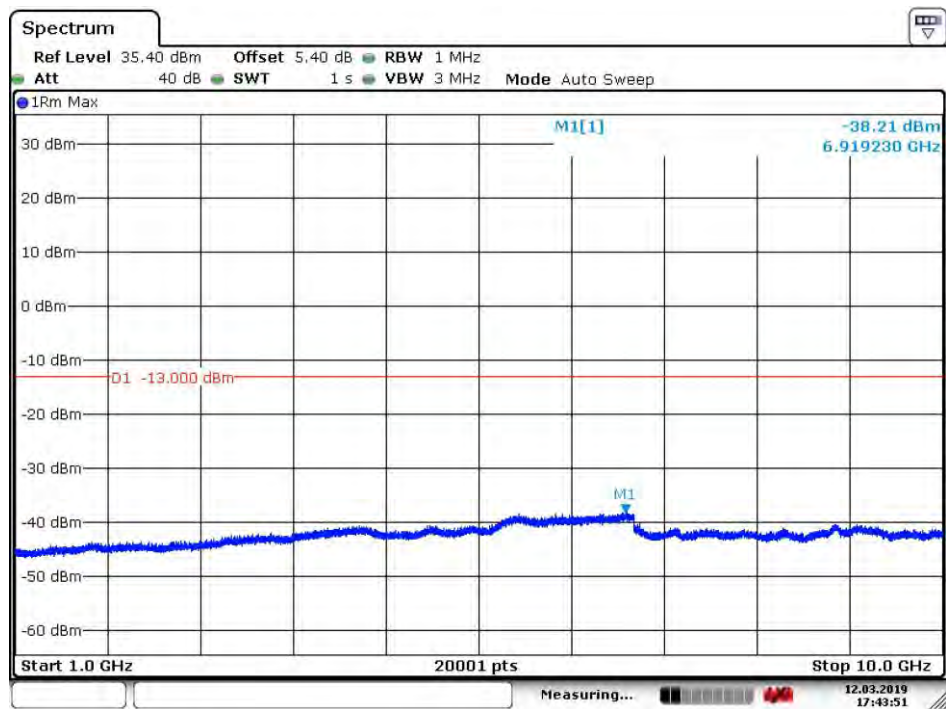
6.2.3 Test Band = EVDO BC10

6.2.3.1 Test Mode = EVDO /TM1

6.2.3.1.1 Test Channel = LCH

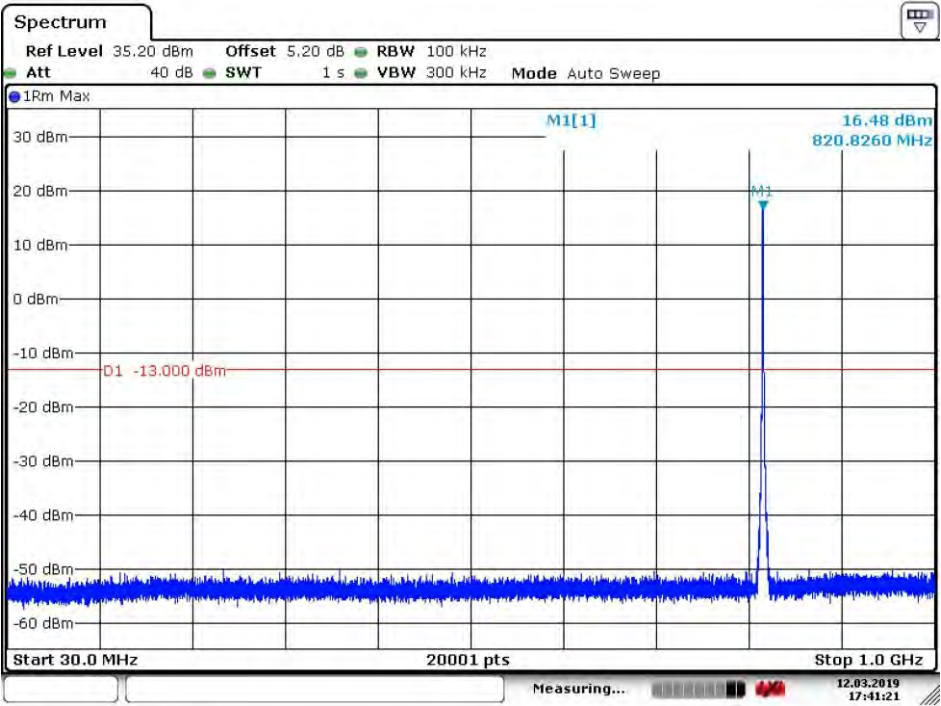


Date: 12.MAR.2019 17:40:41

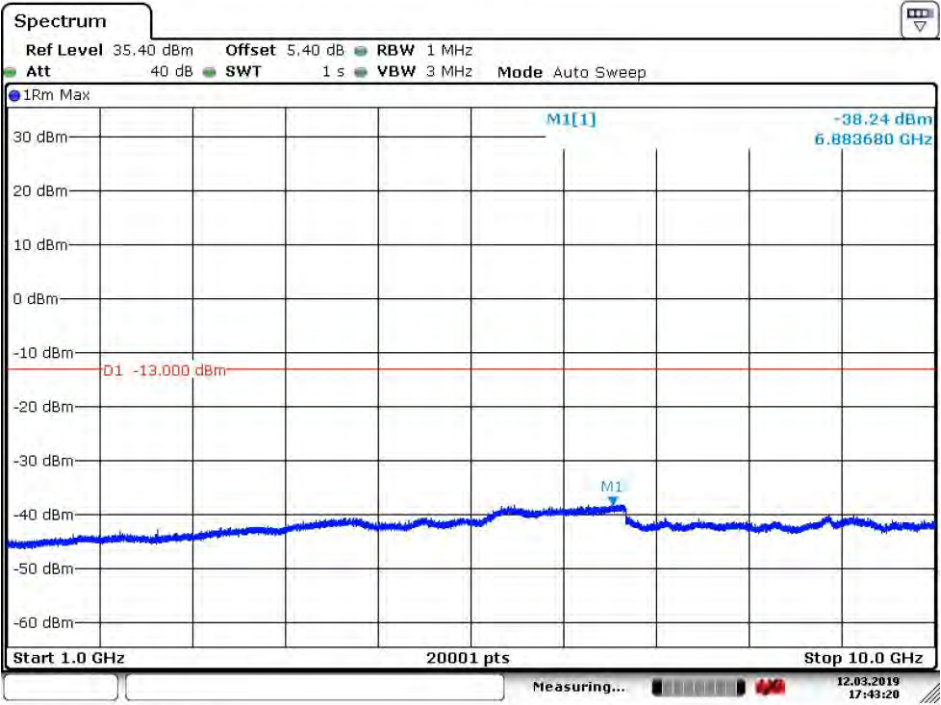


Date: 12.MAR.2019 17:43:51

6.2.3.1.2 Test Channel = MCH

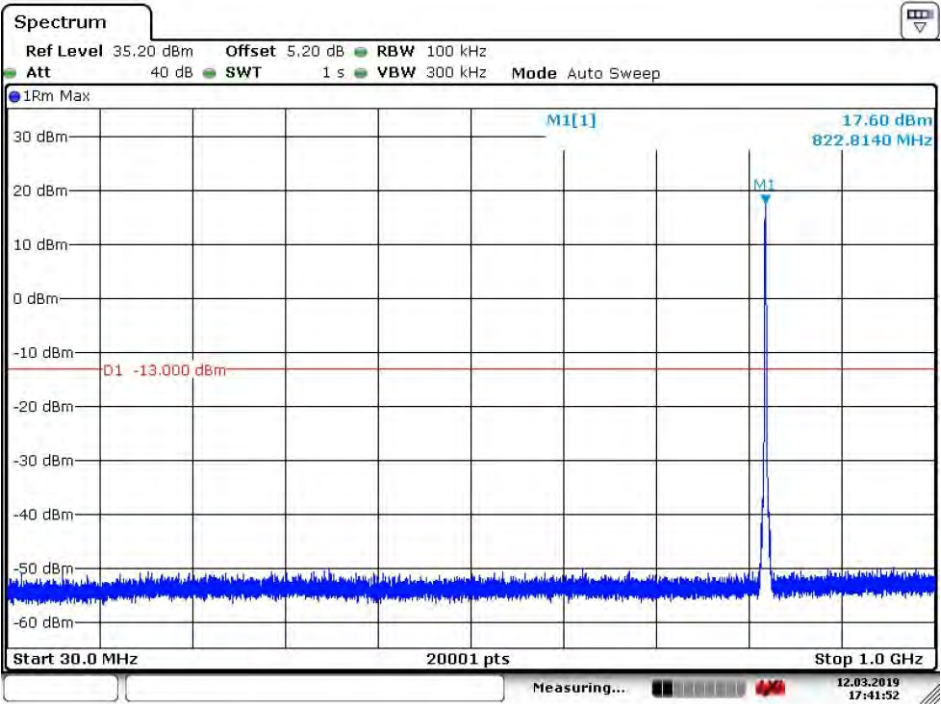


Date: 12.MAR.2019 17:41:21

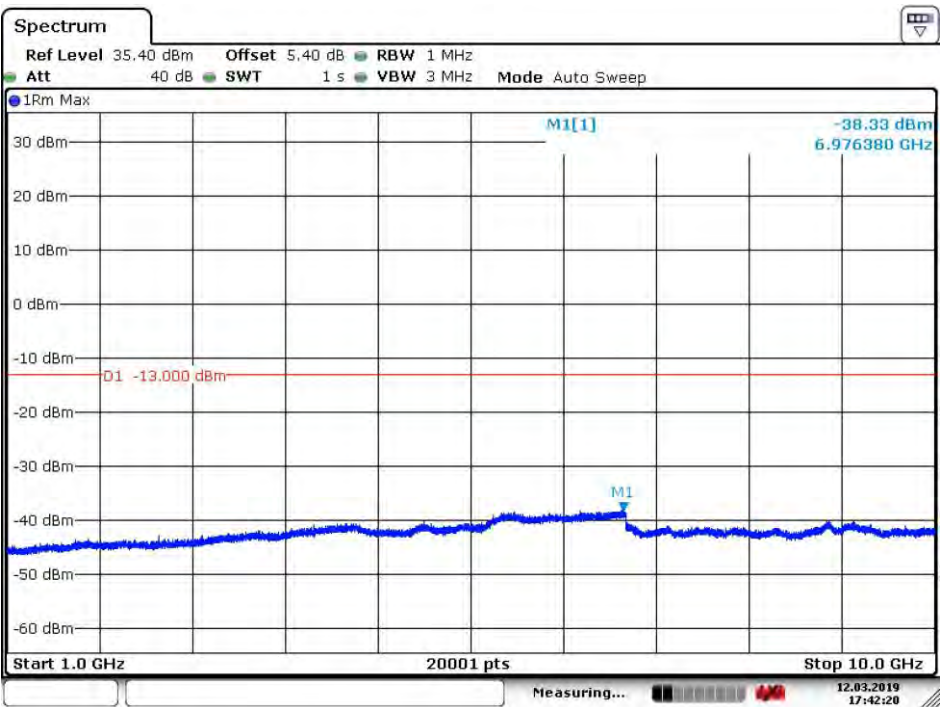


Date: 12.MAR.2019 17:43:20

6.2.3.1.3 Test Channel = HCH



Date: 12.MAR.2019 17:41:53



Date: 12.MAR.2019 17:42:20

7 Frequency Stability

7.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Verdict
CDMA BC0	CDMA/TM1	LCH	TN	VL	-6.97	-0.008452	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	TN	VN	-5.86	-0.007100	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	TN	VH	-13.34	-0.016172	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	TN	VL	-12.33	-0.014736	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	TN	VN	12.90	0.015427	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	TN	VH	12.21	0.014592	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	TN	VL	-6.01	-0.007084	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	TN	VN	12.49	0.014723	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	TN	VH	-5.07	-0.005973	±2.5	PASS
EVDO BC0	EVDO /TM1	LCH	TN	VL	-7.30	-0.008847	±2.5	PASS
EVDO BC0	EVDO /TM1	LCH	TN	VN	-10.77	-0.013055	±2.5	PASS
EVDO BC0	EVDO /TM1	LCH	TN	VH	-10.74	-0.013018	±2.5	PASS
EVDO BC0	EVDO /TM1	MCH	TN	VL	-14.53	-0.017369	±2.5	PASS
EVDO BC0	EVDO /TM1	MCH	TN	VN	-11.07	-0.013232	±2.5	PASS
EVDO BC0	EVDO /TM1	MCH	TN	VH	-11.78	-0.014086	±2.5	PASS
EVDO BC0	EVDO /TM1	HCH	TN	VL	-1.59	-0.001877	±2.5	PASS
EVDO BC0	EVDO /TM1	HCH	TN	VN	-8.28	-0.009758	±2.5	PASS
EVDO BC0	EVDO /TM1	HCH	TN	VH	-7.07	-0.008333	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	TN	VL	10.98	0.005934	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	TN	VN	5.15	0.002781	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	TN	VH	-13.95	-0.007537	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	TN	VL	-1.22	-0.000651	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	TN	VN	-6.09	-0.003237	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	TN	VH	0.25	0.000132	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	TN	VL	-12.56	-0.006578	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	TN	VN	-5.73	-0.003000	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	TN	VH	5.92	0.003104	±2.5	PASS
EVDO BC1	EVDO /TM1	LCH	TN	VL	11.66	0.006296	±2.5	PASS
EVDO BC1	EVDO /TM1	LCH	TN	VN	7.75	0.004186	±2.5	PASS
EVDO BC1	EVDO /TM1	LCH	TN	VH	-3.41	-0.001841	±2.5	PASS
EVDO BC1	EVDO /TM1	MCH	TN	VL	0.94	0.000500	±2.5	PASS
EVDO BC1	EVDO /TM1	MCH	TN	VN	-3.21	-0.001706	±2.5	PASS
EVDO BC1	EVDO /TM1	MCH	TN	VH	-2.11	-0.001123	±2.5	PASS
EVDO BC1	EVDO /TM1	HCH	TN	VL	11.96	0.006265	±2.5	PASS
EVDO BC1	EVDO /TM1	HCH	TN	VN	-11.27	-0.005902	±2.5	PASS
EVDO BC1	EVDO /TM1	HCH	TN	VH	3.84	0.002013	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	TN	VL	11.72	0.014328	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	TN	VN	10.85	0.013266	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	TN	VH	-10.01	-0.012241	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	TN	VL	10.81	0.013178	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	TN	VN	-8.98	-0.010948	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	TN	VH	3.17	0.003864	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	TN	VL	-9.33	-0.011333	±2.5	PASS

CDMA BC10	CDMA/TM1	HCH	TN	VN	-14.30	-0.017379	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	TN	VH	-7.76	-0.009428	±2.5	PASS
EVDO BC10	EVDO /TM1	LCH	TN	VL	-2.04	-0.002496	±2.5	PASS
EVDO BC10	EVDO /TM1	LCH	TN	VN	12.83	0.015683	±2.5	PASS
EVDO BC10	EVDO /TM1	LCH	TN	VH	3.16	0.003859	±2.5	PASS
EVDO BC10	EVDO /TM1	MCH	TN	VL	13.09	0.015956	±2.5	PASS
EVDO BC10	EVDO /TM1	MCH	TN	VN	9.43	0.011492	±2.5	PASS
EVDO BC10	EVDO /TM1	MCH	TN	VH	-13.44	-0.016375	±2.5	PASS
EVDO BC10	EVDO /TM1	HCH	TN	VL	9.74	0.011838	±2.5	PASS
EVDO BC10	EVDO /TM1	HCH	TN	VN	-6.73	-0.008182	±2.5	PASS
EVDO BC10	EVDO /TM1	HCH	TN	VH	6.38	0.007750	±2.5	PASS

7.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Verdict
CDMA BC0	CDMA/TM1	LCH	VN	-30	9.87	0.011968	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	-20	-3.68	-0.004462	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	-10	9.45	0.011459	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	0	0.71	0.000861	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	10	-3.18	-0.003856	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	20	1.12	0.001358	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	30	0.98	0.001188	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	40	1.14	0.001382	±2.5	PASS
CDMA BC0	CDMA/TM1	LCH	VN	50	0.89	0.001079	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	-30	9.87	0.011799	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	-20	-3.68	-0.004399	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	-10	9.45	0.011297	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	0	0.71	0.000849	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	10	-3.18	-0.003801	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	20	1.12	0.001339	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	30	0.98	0.001172	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	40	1.14	0.001363	±2.5	PASS
CDMA BC0	CDMA/TM1	MCH	VN	50	0.89	0.001064	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	-30	9.87	0.011635	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	-20	-3.68	-0.004338	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	-10	9.45	0.011140	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	0	0.71	0.000837	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	10	-3.18	-0.003749	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	20	1.12	0.001320	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	30	0.98	0.001155	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	40	1.14	0.001344	±2.5	PASS
CDMA BC0	CDMA/TM1	HCH	VN	50	0.89	0.001049	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	-30	9.87	0.011968	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	-20	-3.68	-0.004462	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	-10	9.45	0.011459	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	0	0.71	0.000861	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	10	-3.18	-0.003856	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	20	1.12	0.001358	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	30	0.98	0.001188	±2.5	PASS

EVDO BC0	CDMA/TM1	LCH	VN	40	1.14	0.001382	±2.5	PASS
EVDO BC0	CDMA/TM1	LCH	VN	50	0.89	0.001079	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	-30	9.87	0.011799	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	-20	-3.68	-0.004399	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	-10	9.45	0.011297	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	0	0.71	0.000849	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	10	-3.18	-0.003801	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	20	1.12	0.001339	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	30	0.98	0.001172	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	40	1.14	0.001363	±2.5	PASS
EVDO BC0	CDMA/TM1	MCH	VN	50	0.89	0.001064	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	-30	9.87	0.011635	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	-20	-3.68	-0.004338	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	-10	9.45	0.011140	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	0	0.71	0.000837	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	10	-3.18	-0.003749	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	20	1.12	0.001320	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	30	0.98	0.001155	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	40	1.14	0.001344	±2.5	PASS
EVDO BC0	CDMA/TM1	HCH	VN	50	0.89	0.001049	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	-30	9.87	0.005332	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	-20	-3.68	-0.001988	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	-10	9.45	0.005105	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	0	0.71	0.000384	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	10	-3.18	-0.001718	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	20	1.12	0.000605	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	30	0.98	0.000529	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	40	1.14	0.000616	±2.5	PASS
CDMA BC1	CDMA/TM1	LCH	VN	50	0.89	0.000481	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	-30	9.87	0.005250	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	-20	-3.68	-0.001957	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	-10	9.45	0.005027	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	0	0.71	0.000378	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	10	-3.18	-0.001691	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	20	1.12	0.000596	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	30	0.98	0.000521	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	40	1.14	0.000606	±2.5	PASS
CDMA BC1	CDMA/TM1	MCH	VN	50	0.89	0.000473	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	-30	9.87	0.005171	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	-20	-3.68	-0.001928	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	-10	9.45	0.004951	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	0	0.71	0.000372	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	10	-3.18	-0.001666	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	20	1.12	0.000587	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	30	0.98	0.000513	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	40	1.14	0.000597	±2.5	PASS
CDMA BC1	CDMA/TM1	HCH	VN	50	0.89	0.000466	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	-30	9.87	0.005332	±2.5	PASS

EVDO BC1	CDMA/TM1	LCH	VN	-20	-3.68	-0.001988	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	-10	9.45	0.005105	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	0	0.71	0.000384	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	10	-3.18	-0.001718	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	20	1.12	0.000605	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	30	0.98	0.000529	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	40	1.14	0.000616	±2.5	PASS
EVDO BC1	CDMA/TM1	LCH	VN	50	0.89	0.000481	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	-30	9.87	0.005250	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	-20	-3.68	-0.001957	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	-10	9.45	0.005027	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	0	0.71	0.000378	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	10	-3.18	-0.001691	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	20	1.12	0.000596	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	30	0.98	0.000521	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	40	1.14	0.000606	±2.5	PASS
EVDO BC1	CDMA/TM1	MCH	VN	50	0.89	0.000473	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	-30	9.87	0.005171	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	-20	-3.68	-0.001928	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	-10	9.45	0.004951	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	0	0.71	0.000372	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	10	-3.18	-0.001666	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	20	1.12	0.000587	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	30	0.98	0.000513	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	40	1.14	0.000597	±2.5	PASS
EVDO BC1	CDMA/TM1	HCH	VN	50	0.89	0.000466	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	-30	9.87	0.012067	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	-20	-3.68	-0.004499	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	-10	9.45	0.011554	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	0	0.71	0.000868	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	10	-3.18	-0.003888	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	20	1.12	0.001369	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	30	0.98	0.001198	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	40	1.14	0.001394	±2.5	PASS
CDMA BC10	CDMA/TM1	LCH	VN	50	0.89	0.001088	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	-30	9.87	0.012029	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	-20	-3.68	-0.004485	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	-10	9.45	0.011517	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	0	0.71	0.000865	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	10	-3.18	-0.003876	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	20	1.12	0.001365	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	30	0.98	0.001194	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	40	1.14	0.001389	±2.5	PASS
CDMA BC10	CDMA/TM1	MCH	VN	50	0.89	0.001085	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	-30	9.87	0.011991	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	-20	-3.68	-0.004471	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	-10	9.45	0.011481	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	0	0.71	0.000863	±2.5	PASS

CDMA BC10	CDMA/TM1	HCH	VN	10	-3.18	-0.003863	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	20	1.12	0.001361	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	30	0.98	0.001191	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	40	1.14	0.001385	±2.5	PASS
CDMA BC10	CDMA/TM1	HCH	VN	50	0.89	0.001081	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	-30	9.87	0.012067	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	-20	-3.68	-0.004499	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	-10	9.45	0.011554	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	0	0.71	0.000868	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	10	-3.18	-0.003888	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	20	1.12	0.001369	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	30	0.98	0.001198	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	40	1.14	0.001394	±2.5	PASS
EVDO BC10	CDMA/TM1	LCH	VN	50	0.89	0.001088	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	-30	9.87	0.012029	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	-20	-3.68	-0.004485	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	-10	9.45	0.011517	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	0	0.71	0.000865	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	10	-3.18	-0.003876	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	20	1.12	0.001365	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	30	0.98	0.001194	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	40	1.14	0.001389	±2.5	PASS
EVDO BC10	CDMA/TM1	MCH	VN	50	0.89	0.001085	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	-30	9.87	0.011991	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	-20	-3.68	-0.004471	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	-10	9.45	0.011481	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	0	0.71	0.000863	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	10	-3.18	-0.003863	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	20	1.12	0.001361	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	30	0.98	0.001191	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	40	1.14	0.001385	±2.5	PASS
EVDO BC10	CDMA/TM1	HCH	VN	50	0.89	0.001081	±2.5	PASS

The End