

FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E

TEST REPORT

For

Xerox TMS

Trade Name: xerox

Model: IVU-4000

Issued to

Advantech Co.Ltd.

No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.

Issued by

Compliance Certification Services Inc.

**No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)**

<http://www.ccsrf.com>

service@ccsrf.com

Issued Date: June 4, 2016



Note: This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document.

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	June 4, 2016	Initial Issue	ALL	Doris Chu
01	July 18, 2016	1. Modify Peak and Average power. 2. Modify BC0 frequency range	P. 5, P. 14 ~ 18	Doris Chu

TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION	4
2. EUT DESCRIPTION.....	5
3. TEST METHODOLOGY.....	6
3.1 EUT CONFIGURATION	6
3.2 EUT EXERCISE	6
3.3 GENERAL TEST PROCEDURES.....	6
3.4 DESCRIPTION OF TEST MODES.....	7
4. INSTRUMENT CALIBRATION	8
4.1 MEASURING INSTRUMENT CALIBRATION	8
4.2 MEASUREMENT EQUIPMENT USED	8
4.3 MEASUREMENT UNCERTAINTY.....	9
5. FACILITIES AND ACCREDITATIONS	10
5.1 FACILITIES.....	10
5.2 EQUIPMENT.....	10
5.3 TABLE OF ACCREDITATIONS AND LISTINGS.....	11
6. SETUP OF EQUIPMENT UNDER TEST	12
6.1 SETUP CONFIGURATION OF EUT	12
6.2 SUPPORT EQUIPMENT	12
7. FCC PART 22 & 24 REQUIREMENTS.....	13
7.1 PEAK POWER	13
7.2 AVERAGE POWER	16
7.3 ERP & EIRP MEASUREMENT	19
7.4 OCCUPIED BANDWIDTH MEASUREMENT.....	25
7.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS.....	52
7.6 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT	93
7.7 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT	191
7.8 FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT	194
APPENDIX I PHOTOGRAPHS OF TEST SETUP	197
APPENDIX 1 - PHOTOGRAPHS OF EUT	

1. TEST RESULT CERTIFICATION

Applicant: Advantech Co.Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei
114, Taiwan, R.O.C.

Manufacturer: Advantech Co.Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District,
Taipei 114, Taiwan, R.O.C.

Equipment Under Test: Xerox TMS

Trade Name: xerox

Model: IVU-4000

Date of Test: May 19 ~ July 14, 2016

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 22 Subpart H & Part 24 Subpart E	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA-603-C: 2004 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rule FCC PART 22 Subpart H and PART 24 Subpart E.

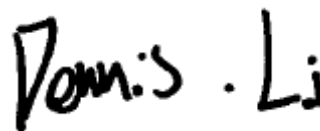
The test results of this report relate only to the tested sample identified in this report.

Approved by:



Miller Lee
Manager
Compliance Certification Services Inc.

Tested by



Dennis Li
Engineer
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	Xerox TMS
Trade Name	xerox
Model Number	IVU-4000
Received Date	May 15, 2016
Power Supply	Powered from host device.
Frequency Range	Band Class 0 US Cellular TX: 824 MHz - 849 MHz RX: 860 MHz - 894 MHz Band Class 1 North American PCS TX: 1850 MHz - 1910 MHz RX: 1930 MHz - 1990 MHz Band Class 10 Secondary 800 MHz TX: 806 MHz - 901 MHz RX: 851 MHz - 940 MHz
Transmit Power (ERP & EIRP Power)	CDMA Band Class 0 US Cellular: 27.74 dBm Band Class 1 North American PCS: 25.25 dBm Band Class 10 Secondary 800 MHz: 28.09 dBm 1xRTT Band Class 0 US Cellular: 28.05 dBm Band Class 1 North American PCS: 25.14 dBm Band Class 10 Secondary 800 MHz: 27.17 dBm 1xEVDO Rev.0 Band Class 0 US Cellular: 28.40 dBm Band Class 1 North American PCS: 26.24 dBm Band Class 10 Secondary 800 MHz: 28.80 dBm 1xEVDO Rev. A Band Class 0 US Cellular: 27.37 dBm Band Class 1 North American PCS: 25.66 dBm Band Class 10 Secondary 800 MHz: 27.94 dBm
Cellular Phone Protocol	CDMA, 1xRTT, 1xEVDO Rev.0, 1xEVDO Rev.A
Antenna Gain	1. GSA.8822.B.301111 / DIPOLE Antenna Band Class 0 US Cellular: Gain:2.7dBi Band Class 1 North American PCS: Gain: -0.86dBi Band Class 10 Secondary 800 MHz: Gain: 2.70dBi 2. MA230.LBC.002 / MONOPOLE Antenna Band Class 0 US Cellular: Gain: 2.16dBi Band Class 1 North American PCS: Gain: 0.42dBi Band Class 10 Secondary 800 MHz: Gain: 2.16dBi

Remark:

1. The EUT send are pre-pilot unit from factory

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures document in ANSI C63.10: 2013, TIA/EIA-603-C: 2004 and FCC CFR 47, 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

According to the requirements in ANSI C63.10: 2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 1.5 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in ANSI C63.10: 2013.

3.4 DESCRIPTION OF TEST MODES

The EUT (model: IVU-4000) had been tested under operating condition.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

EUT staying in continuous transmitting mode was programmed.

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year and Loop Antenna is scheduled for calibration once three years.

Conducted Emissions Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
DC Power Supplies	GW Instek	SPS-3610	GPE880163	01/19/2016	01/18/2017
Power Meter	Anritsu	ML2495A	1012009	07/04/2016	07/03/2017
Power Sensor	Anritsu	MA2411B	917072	07/04/2016	07/03/2017
Signal Analyzer	R&S	FSV 40	101073	07/20/2015	07/19/2016
Spectrum Analyzer	Agilent	E4446A	US42510268	02/15/2016	02/14/2017
Thermostatic/Hrgrosatic Chamber	TAICHY	MHG-150LF	930619	10/08/2015	10/07/2016
Vector Signal Generator	R&S	SMU 200A	102239	03/10/2016	03/09/2017
AC Power Source	EXTECH	6205	1140845	N.C.R	N.C.R

Wugu 966 Chamber A					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Bilog Antenna	Sunol Sciences	JB3	A030105	08/06/2015	08/05/2016
EMI Test Receiver	R&S	ESCI	100064	06/04/2015	06/03/2016
Horn Antenna	EMCO	3117	55165	02/24/2016	02/23/2017
Horn Antenna	EMCO	3116	26370	01/15/2016	01/14/2017
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	01/12/2016	01/11/2017
K Type Cable	Huber+Suhner	SUCOFLEX 102	22470/2	01/12/2016	01/11/2017
Pre-Amplifier	MITEQ	AMF-6F-2604 00-40-8P	985646	01/14/2016	01/13/2017
Pre-Amplifier	EMCI	EMC 012635	980151	06/05/2015	06/04/2016
Pre-Amplifier	EMCI	EM330	N/A	06/05/2015	06/04/2016
Spectrum Analyzer	Agilent	E4446A	US42510252	12/08/2015	12/07/2016
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	EZ-EMC (CCS-3A1RE)				

4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 1.2159
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0138
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9483
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5975
3M Semi Anechoic Chamber / 8G~18G	+/- 2.6112
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7389
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9683

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

☐ No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township, Taoyuan County 33841, TAIWAN, R.O.C.

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

5.2 EQUIPMENT

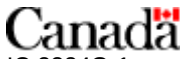
Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	 FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method -47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	 IC 2324G-1 IC 2324G-2

* No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.

6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
	N/A						

Remark:

1. *All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
2. *Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

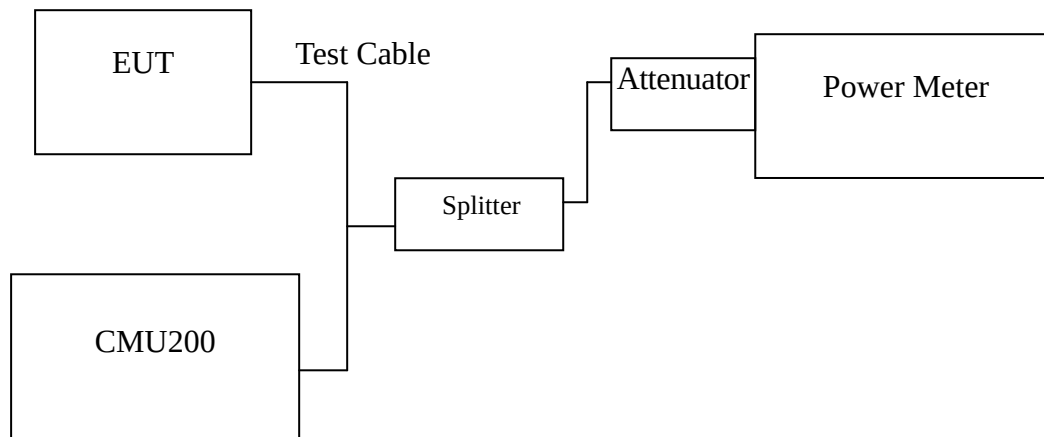
7. FCC PART 22 & 24 REQUIREMENTS

7.1 PEAK POWER

LIMIT

According to FCC §2.1046.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading.

TEST RESULTS

No non-compliance noted.

Test Data

CDMA

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
BC0	1013	824.70	24.33	0.27102
	384	836.52	24.91	0.30974
	777	848.31	24.17	0.26122
BC1	25	1851.25	24.33	0.27102
	600	1880.00	24.91	0.30974
	1175	1908.75	23.87	0.24378
BC10	476	817.90	24.62	0.28973
	580	820.50	24.35	0.27227
	684	823.10	24.15	0.26002

1xRTT

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
BC0	1013	824.70	24.31	0.26977
	384	836.52	24.66	0.29242
	777	848.31	24.53	0.28379
BC1	25	1851.25	24.51	0.28249
	600	1880.00	24.26	0.26669
	1175	1908.75	24.05	0.25410
BC10	476	817.90	24.93	0.31117
	580	820.50	24.74	0.29785
	684	823.10	24.68	0.29376

Remark: The value of factor includes both the loss of cable and external attenuator

1xEVDO Rev.0

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
BC0	1013	824.70	24.61	0.28907
	384	836.52	24.79	0.30130
	777	848.31	24.48	0.28054
BC1	25	1851.25	24.11	0.25763
	600	1880.00	24.36	0.27290
	1175	1908.75	24.03	0.25293
BC10	476	817.90	24.33	0.27102
	580	820.50	24.51	0.28249
	684	823.10	23.83	0.24155

1xEVDO Rev.A

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
BC0	1013	824.70	24.67	0.29309
	384	836.52	24.53	0.28379
	777	848.31	24.75	0.29854
BC1	25	1851.25	24.35	0.27227
	600	1880.00	24.56	0.28576
	1175	1908.75	24.13	0.25882
BC10	476	817.90	24.91	0.30974
	580	820.50	24.85	0.30549
	684	823.10	24.73	0.29717

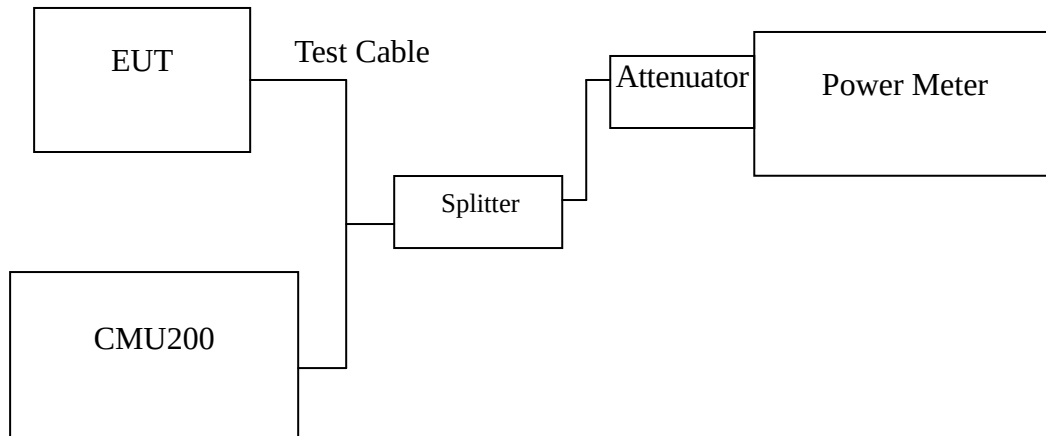
Remark: The value of factor includes both the loss of cable and external attenuator

7.2 AVERAGE POWER

LIMIT

For reporting purposes only.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading.

TEST RESULTS

No non-compliance noted.

Test Data**CDMA**

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
BC0	1013	824.70	22.91	0.19543
	384	836.52	22.71	0.18664
	777	848.31	22.31	0.17022
BC1	25	1851.25	22.46	0.17620
	600	1880.00	22.72	0.18707
	1175	1908.75	21.97	0.15740
BC10	476	817.90	22.93	0.19634
	580	820.50	22.88	0.19409
	684	823.10	22.79	0.19011

1xRTT

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
BC0	1013	824.70	22.72	0.18707
	384	836.52	22.88	0.19409
	777	848.31	22.79	0.19011
BC1	25	1851.25	22.47	0.17660
	600	1880.00	21.98	0.15776
	1175	1908.75	22.05	0.16032
BC10	476	817.90	22.86	0.19320
	580	820.50	22.84	0.19231
	684	823.10	22.98	0.19861

Remark: The value of factor includes both the loss of cable and external attenuator

1xEVDO Rev.0

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
BC0	1013	824.70	22.76	0.18880
	384	836.52	22.85	0.19275
	777	848.31	22.64	0.18365
BC1	25	1851.25	22.38	0.17298
	600	1880.00	22.68	0.18535
	1175	1908.75	22.58	0.18113
BC10	476	817.90	22.89	0.19454
	580	820.50	22.93	0.19634
	684	823.10	22.98	0.19861

1xEVDO Rev.A

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
BC0	1013	824.70	22.89	0.19454
	384	836.52	22.71	0.18664
	777	848.31	22.92	0.19588
BC1	25	1851.25	22.38	0.17298
	600	1880.00	22.59	0.18155
	1175	1908.75	22.71	0.18664
BC10	476	817.90	23.04	0.20137
	580	820.50	23.02	0.20045
	684	823.10	22.97	0.19815

Remark: The value of factor includes both the loss of cable and external attenuator

7.3 ERP & EIRP MEASUREMENT

LIMIT

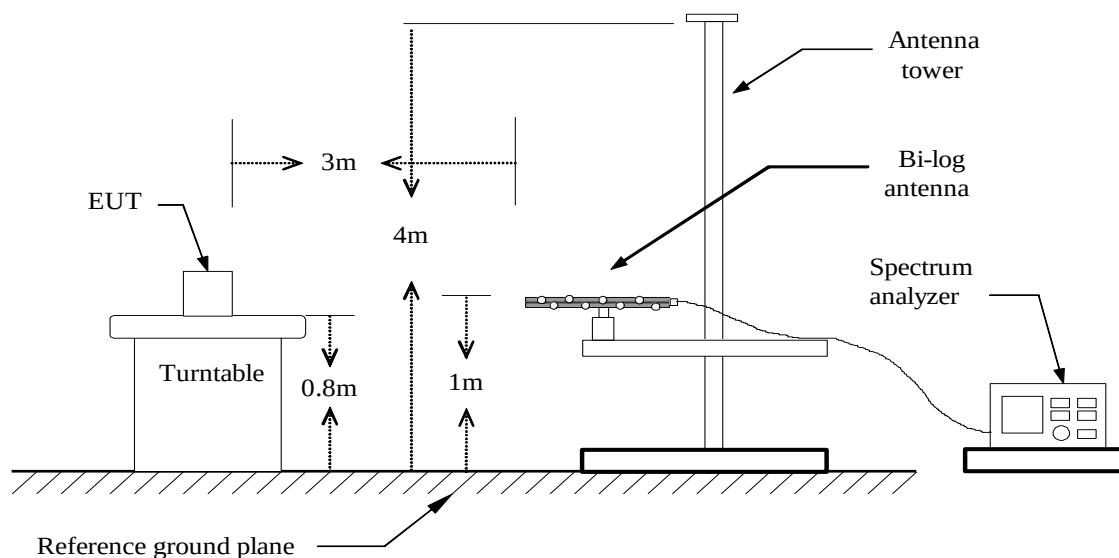
According to FCC §2.1046

FCC 22.913(b): The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts.

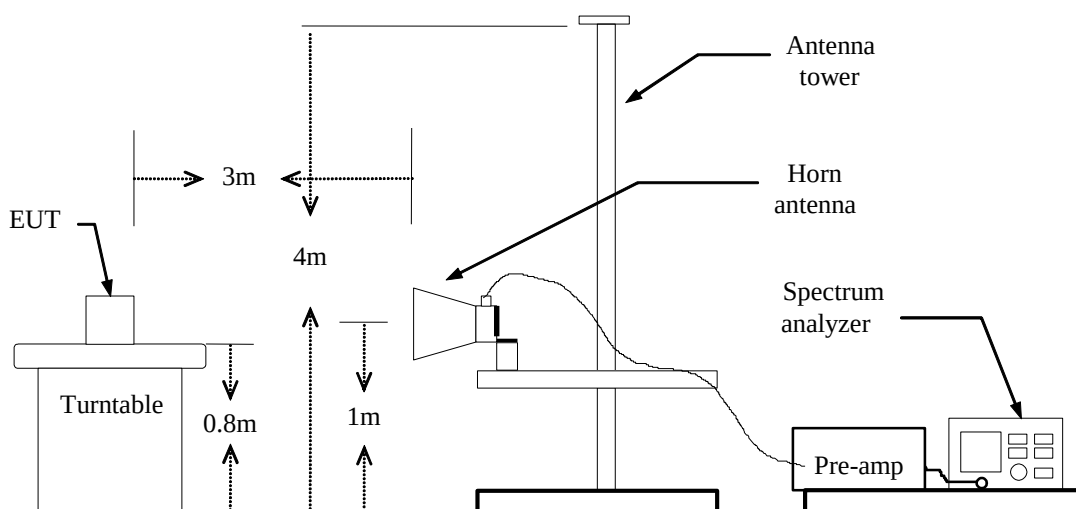
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

TEST CONFIGURATION

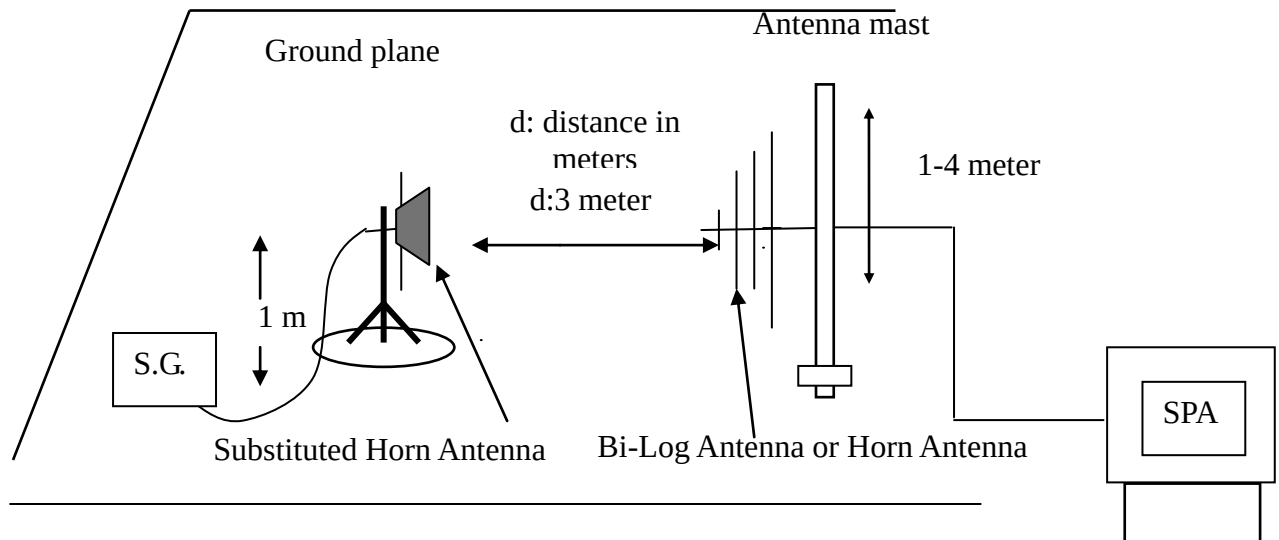
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



TEST PROCEDURE

The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 5MHz and the average bandwidth was set to 50MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)} - 2.15$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

TEST RESULTS

No non-compliance noted.

CDMA BC0 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1013	824.5400	V	10.2	3.39	6.24	13.05	38.45	-25.40
	824.8400	H	24.89	3.39	6.24	*27.74	38.45	-10.71
384	836.8400	V	9.22	3.4	6.37	12.19	38.45	-26.26
	836.3600	H	24.21	3.4	6.36	27.17	38.45	-11.28
777	848.4200	V	10.71	3.4	6.4	13.71	38.45	-24.74
	848.2400	H	24.73	3.4	6.4	27.73	38.45	-10.72

CDMA BC1 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
25	1851.360	V	23.69	5.37	5.67	23.99	33.00	-9.01
	1851.360	H	21.27	5.37	5.67	21.57	33.00	-11.43
600	1879.680	V	17.91	5.42	5.62	18.11	33.00	-14.89
	1879.800	H	25.05	5.42	5.62	*25.25	33.00	-7.75
1175	1908.840	V	23.84	5.47	5.56	23.93	33.00	-9.07
	1908.960	H	22.55	5.47	5.56	22.64	33.00	-10.36

CDMA BC10 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
476	817.9400	V	10.64	3.38	6.2	13.46	38.45	-24.99
	817.6400	H	25.27	3.38	6.2	*28.09	38.45	-10.36
580	820.5200	V	10.43	3.39	6.2	13.24	38.45	-25.21
	820.3400	H	25.05	3.39	6.2	27.86	38.45	-10.59
684	823.0400	V	9.62	3.39	6.23	12.46	38.45	-25.99
	823.1000	H	24.93	3.39	6.23	27.77	38.45	-10.68

1xRTT BC0 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1013	824.6000	V	11	3.39	6.24	13.85	38.45	-24.60
	824.8400	H	24.42	3.39	6.24	27.27	38.45	-11.18
384	836.4800	V	11.46	3.4	6.36	14.42	38.45	-24.03
	836.7200	H	24.05	3.4	6.37	27.02	38.45	-11.43
777	848.4200	V	14.12	3.4	6.4	17.12	38.45	-21.33
	848.3000	H	25.05	3.4	6.4	*28.05	38.45	-10.40

1xRTT BC1 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
25	1851.240	V	15.46	5.37	5.67	15.76	33.00	-17.24
	1851.120	H	23.95	5.37	5.67	24.25	33.00	-8.75
600	1879.440	V	16.7	5.42	5.62	16.90	33.00	-16.10
	1880.040	H	24.94	5.42	5.62	*25.14	33.00	-7.86
1175	1909.080	V	16.04	5.47	5.56	16.13	33.00	-16.87
	1908.720	H	24.45	5.47	5.56	24.54	33.00	-8.46

1xRTT BC10 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
476	820.4000	V	11.08	3.39	6.2	13.89	38.45	-24.56
	820.4000	H	24.31	3.39	6.2	27.12	38.45	-11.33
580	820.3400	V	10.76	3.39	6.2	13.57	38.45	-24.88
	820.7600	H	24.33	3.39	6.2	27.14	38.45	-11.31
684	823.2200	V	10.81	3.39	6.23	13.65	38.45	-24.80
	823.2800	H	24.33	3.39	6.23	*27.17	38.45	-11.28

1xEVDO Rev.0 BC0 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1013	824.3000	V	17.56	3.39	6.24	20.41	38.45	-18.04
	824.7200	H	25.55	3.39	6.24	*28.40	38.45	-10.05
384	836.4800	V	23.81	3.4	6.36	26.77	38.45	-11.68
	836.6000	H	23.68	3.4	6.37	26.65	38.45	-11.80
777	848.6000	V	19.32	3.4	6.4	22.32	38.45	-16.13
	847.9400	H	24.22	3.4	6.4	27.22	38.45	-11.23

1xEVDO Rev.0 BC1 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
25	1851.240	V	21.29	5.37	5.67	21.59	33.00	-11.41
	1851.120	H	25.94	5.37	5.67	*26.24	33.00	-6.76
600	1851.000	V	20.92	5.37	5.67	21.22	33.00	-11.78
	1851.000	H	25.23	5.37	5.67	25.53	33.00	-7.47
1175	1908.600	V	21.07	5.47	5.56	21.16	33.00	-11.84
	1908.480	H	25.56	5.47	5.56	25.65	33.00	-7.35

1xEVDO Rev.0 BC10 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
476	817.8200	V	19.7	3.38	6.2	22.52	38.45	-15.93
	818.0000	H	25.98	3.38	6.2	*28.80	38.45	-9.65
580	820.2200	V	18.64	3.39	6.2	21.45	38.45	-17.00
	820.3400	H	25.83	3.39	6.2	28.64	38.45	-9.81
684	823.2200	V	17.74	3.39	6.23	20.58	38.45	-17.87
	823.0400	H	25.43	3.39	6.23	28.27	38.45	-10.18

1xEVDO Rev. A BC0 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1013	824.4800	V	16.92	3.39	6.24	19.77	38.45	-18.68
	824.4200	H	24.52	3.39	6.24	*27.37	38.45	-11.08
384	836.5400	V	18.96	3.4	6.36	21.92	38.45	-16.53
	836.8400	H	23.57	3.4	6.37	26.54	38.45	-11.91
777	847.9400	V	17.3	3.4	6.4	20.30	38.45	-18.15
	848.0000	H	22.16	3.4	6.4	25.16	38.45	-13.29

1xEVDO Rev.A BC1 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
25	1851.360	V	24.67	5.37	5.67	24.97	33.00	-8.03
	1851.600	H	23.12	5.37	5.67	23.42	33.00	-9.58
600	1880.160	V	25.43	5.42	5.62	25.63	33.00	-7.37
	1880.520	H	23.71	5.42	5.62	23.91	33.00	-9.09
1175	1879.560	V	25.46	5.42	5.62	*25.66	33.00	-7.34
	1879.800	H	23.77	5.42	5.62	23.97	33.00	-9.03

1xEVDO Rev.A BC10 Test Data

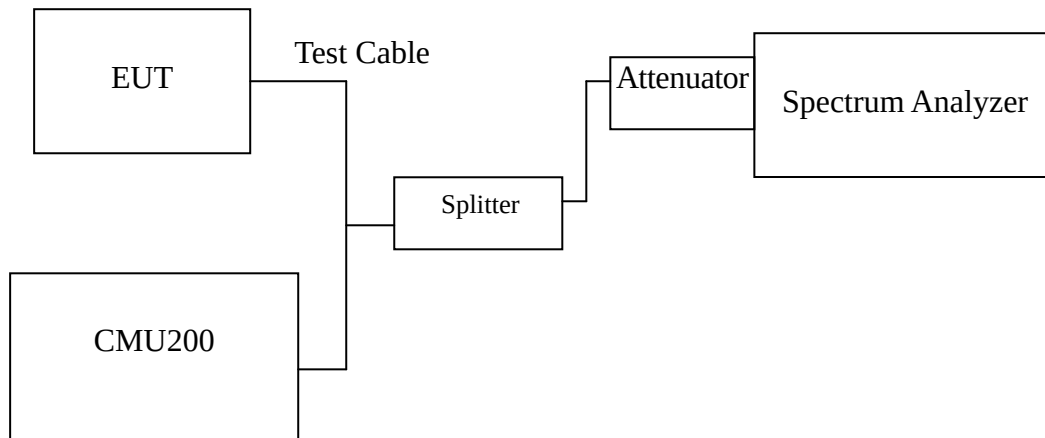
Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
476	817.7600	V	17.78	3.38	6.2	20.60	38.45	-17.85
	818.4800	H	25.03	3.38	6.2	27.85	38.45	-10.60
580	820.1000	V	17.41	3.39	6.2	20.22	38.45	-18.23
	820.3400	H	25.13	3.39	6.2	*27.94	38.45	-10.51
684	822.5600	V	16.87	3.39	6.22	19.70	38.45	-18.75
	823.1000	H	24.68	3.39	6.23	27.52	38.45	-10.93

7.4 OCCUPIED BANDWIDTH MEASUREMENT

LIMIT

According to §FCC 2.1049.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW is set to 3 times the RBW, -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

TEST RESULTS

No non-compliance noted

CDMA

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
BC0	1013	824.70	1.2677
	384	836.52	1.2720
	777	848.31	1.2677
BC1	25	1851.25	1.2677
	600	1880.00	1.2720
	1175	1908.75	1.2720
BC10	476	817.90	1.2677
	580	820.50	1.2677
	684	823.10	1.2720

1xRTT

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
BC0	1013	824.70	1.2720
	384	836.52	1.2720
	777	848.31	1.2720
BC1	25	1851.25	1.2720
	600	1880.00	1.2720
	1175	1908.75	1.2720
BC10	476	817.90	1.2720
	580	820.50	1.2720
	684	823.10	1.2677

1xEVDO Rev.0

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
BC0	1013	824.70	1.2677
	384	836.52	1.2677
	777	848.31	1.2677
BC1	25	1851.25	1.2677
	600	1880.00	1.2677
	1175	1908.75	1.2677
BC10	476	817.90	1.2677
	580	820.50	1.2720
	684	823.10	1.2633

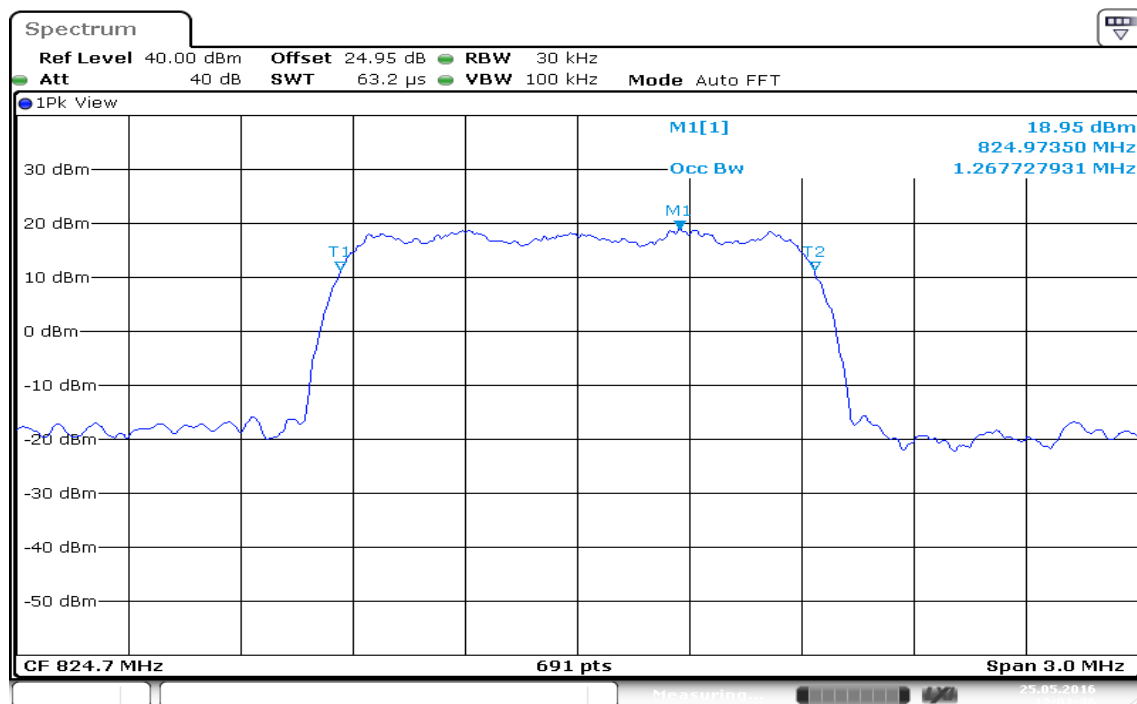
1xEVDO Rev.A

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
BC0	1013	824.70	1.2720
	384	836.52	1.2677
	777	848.31	1.2677
BC1	25	1851.25	1.2720
	600	1880.00	1.2677
	1175	1908.75	1.2720
BC10	476	817.90	1.2720
	580	820.50	1.2677
	684	823.10	1.2677

Remark: The value of factor includes both the loss of cable and external attenuator

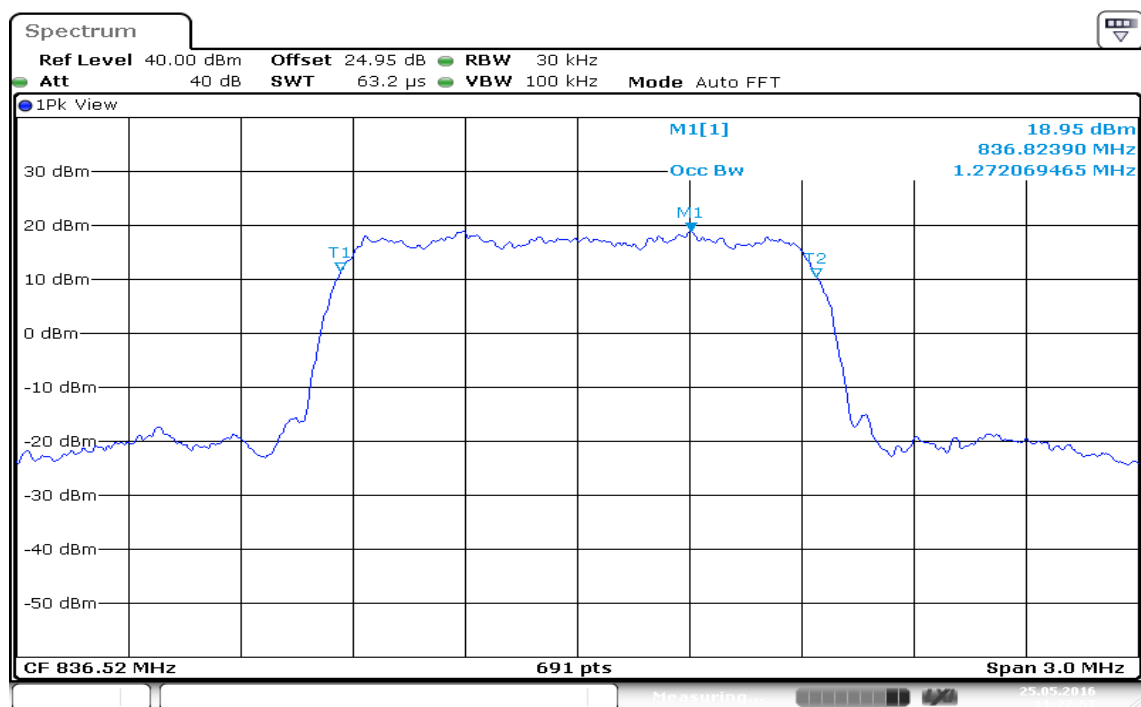
Test Plot

CDMA / BC0 (CH 1013)



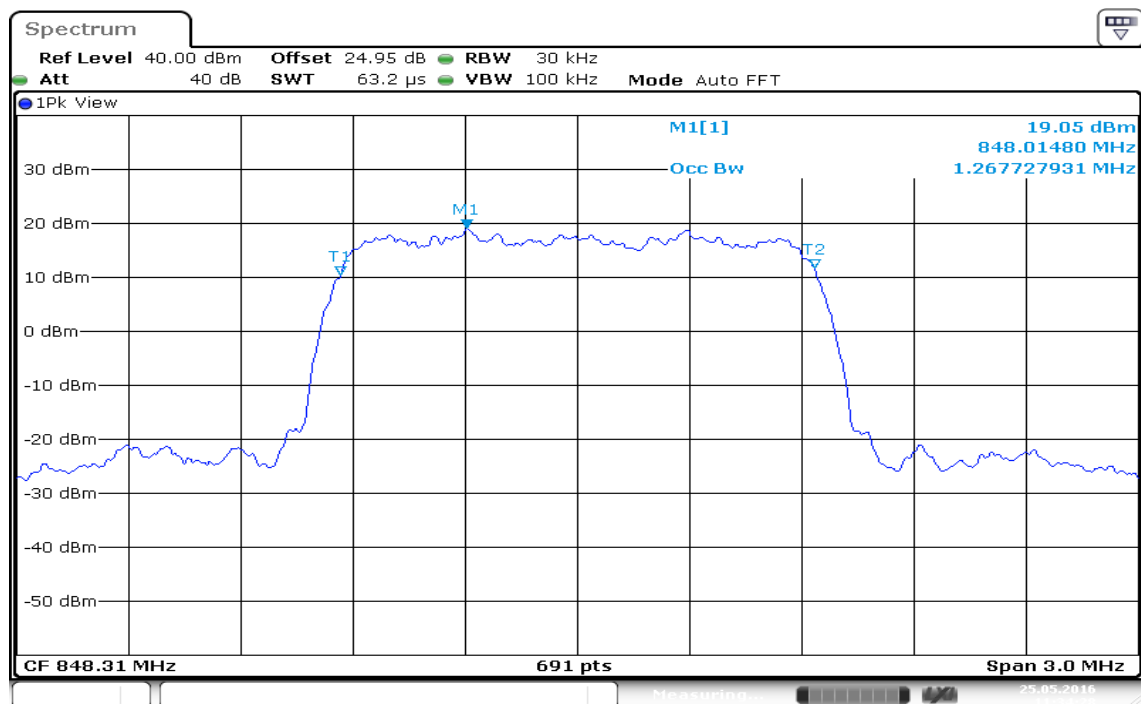
Date: 25.MAY.2016 12:01:36

CDMA / BC0 (CH 384)



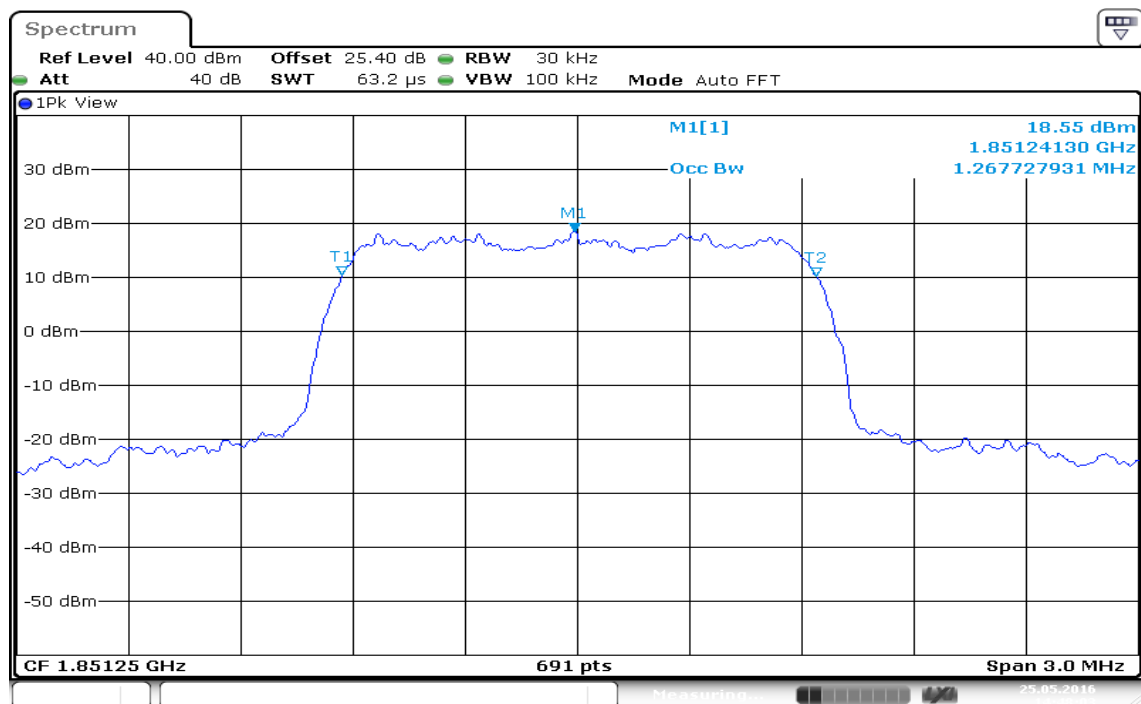
Date: 25.MAY.2016 11:27:57

CDMA / BC0 (CH 777)



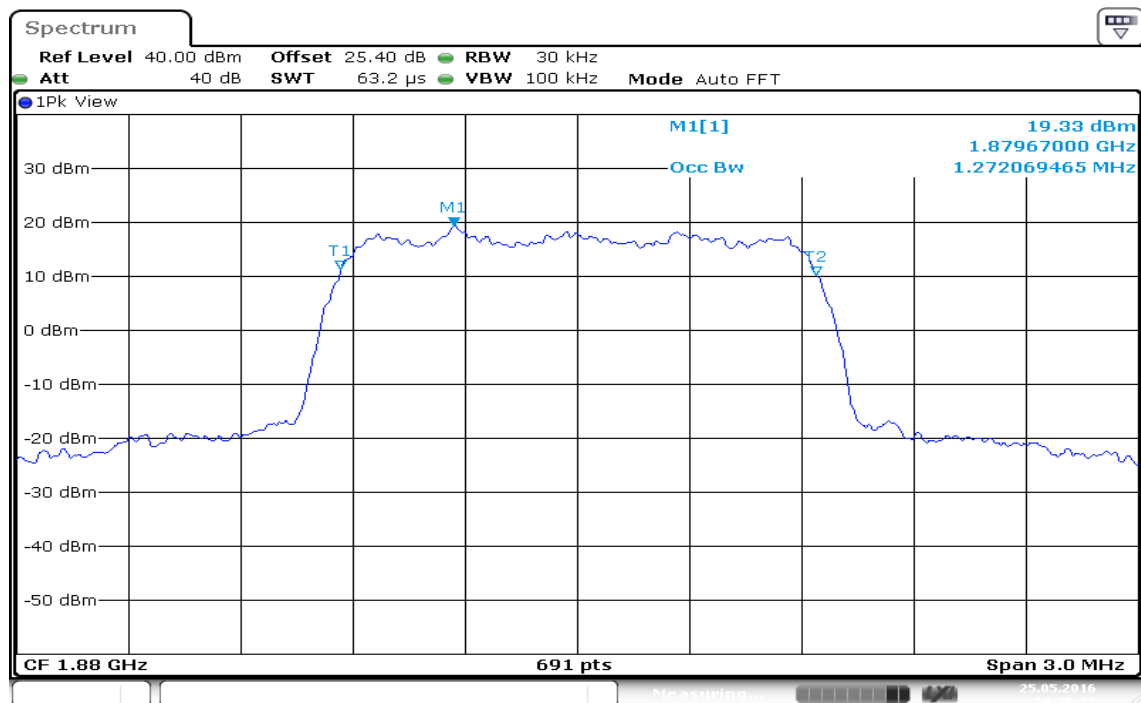
Date: 25.MAY.2016 11:34:28

CDMA / BC1 (CH 25)



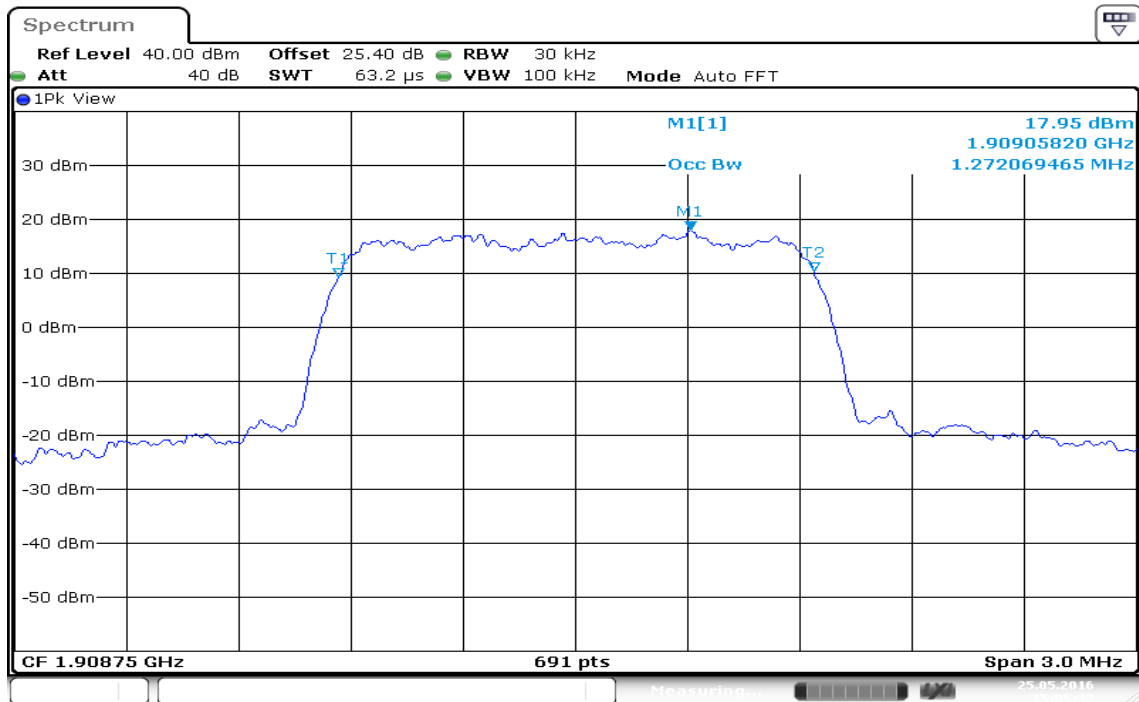
Date: 25.MAY.2016 14:48:03

CDMA / BC1 (CH 600)



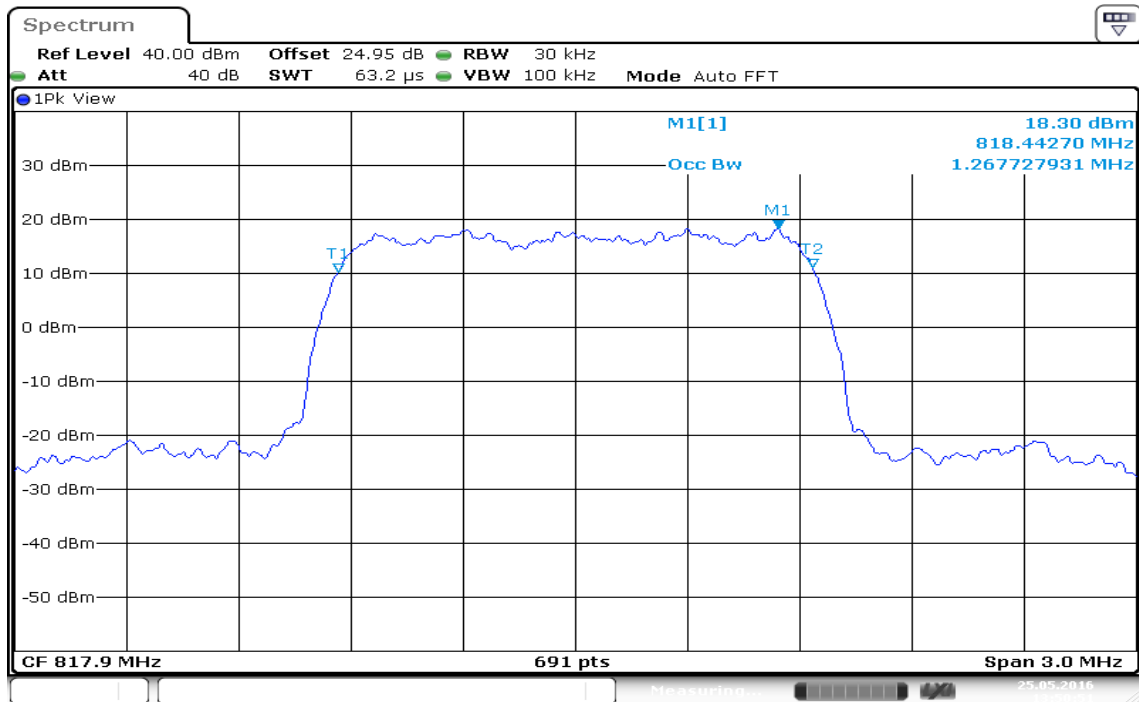
Date: 25.MAY.2016 14:46:23

CDMA / BC1 (CH 1175)



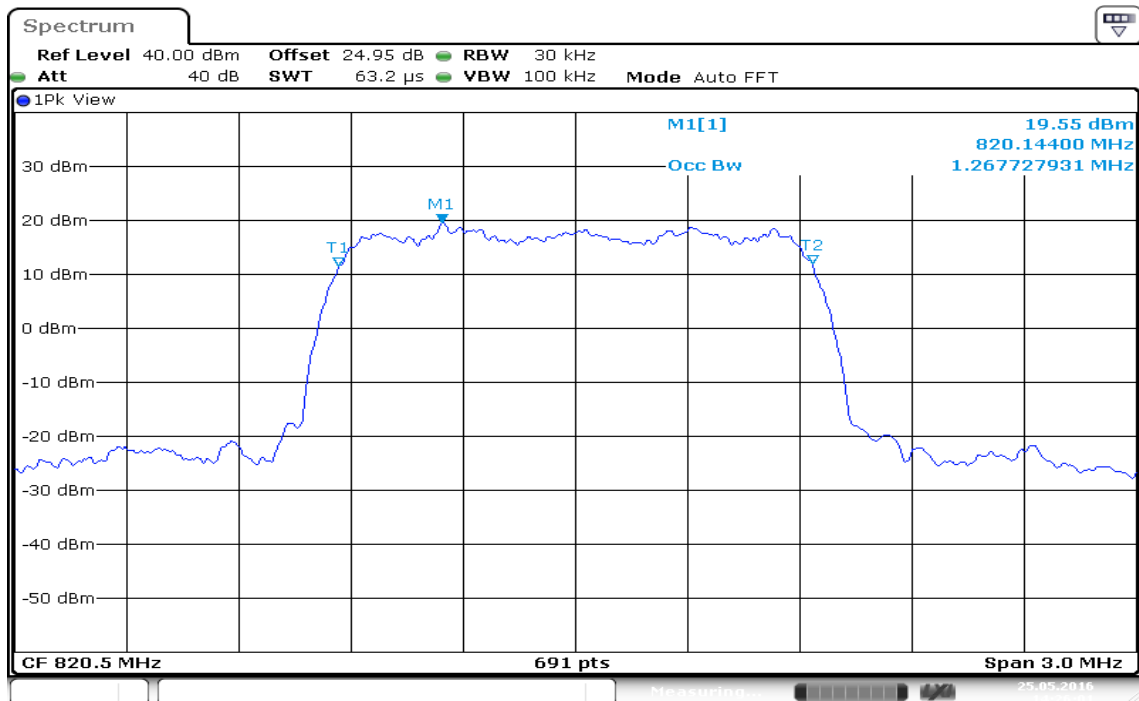
Date: 25.MAY.2016 15:05:47

CDMA / BC10 (CH 476)



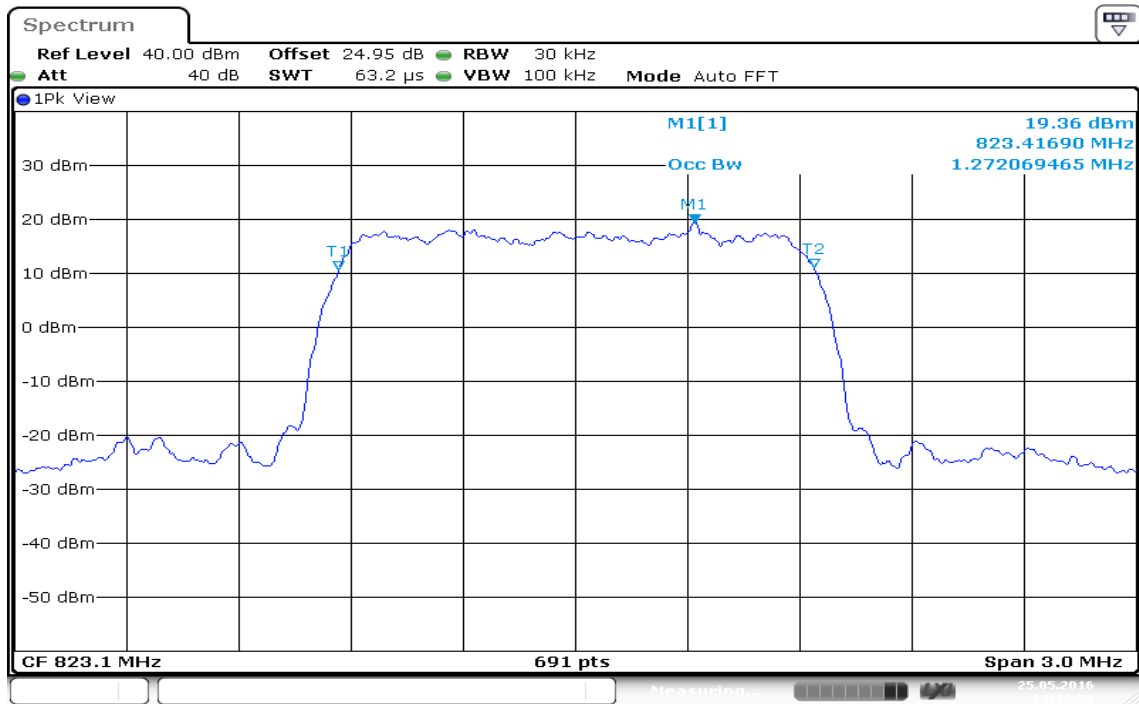
Date: 25.MAY.2016 13:50:51

CDMA / BC10 (CH 580)



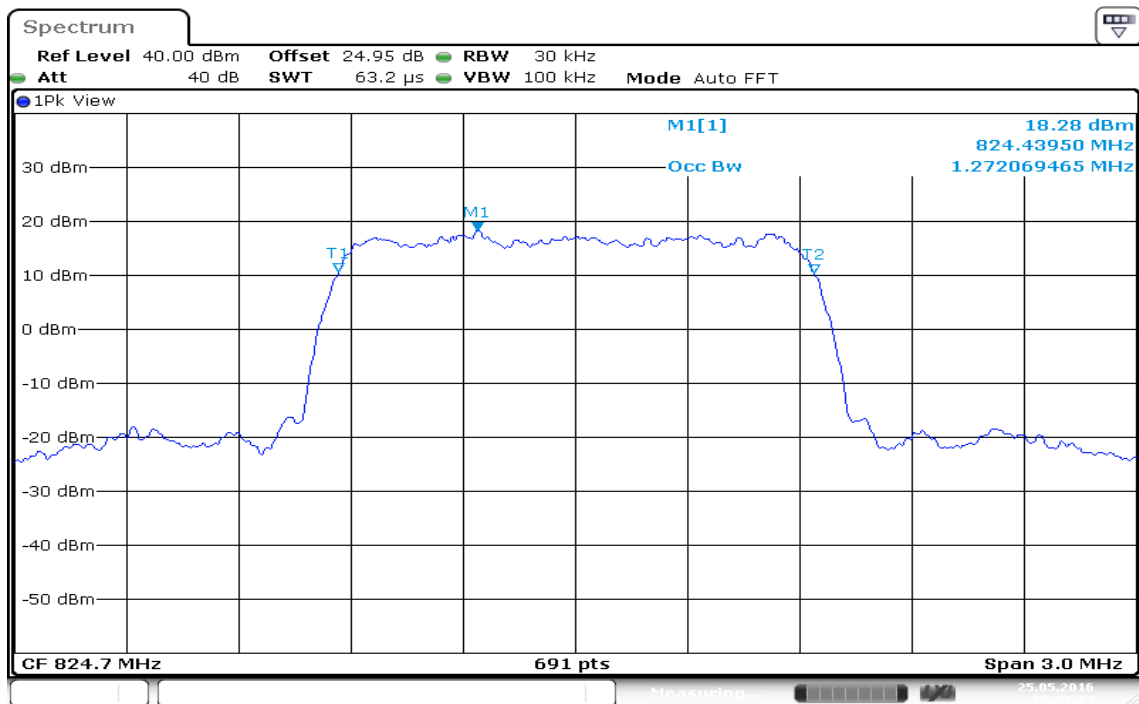
Date: 25.MAY.2016 14:26:01

CDMA / BC10 (CH 684)



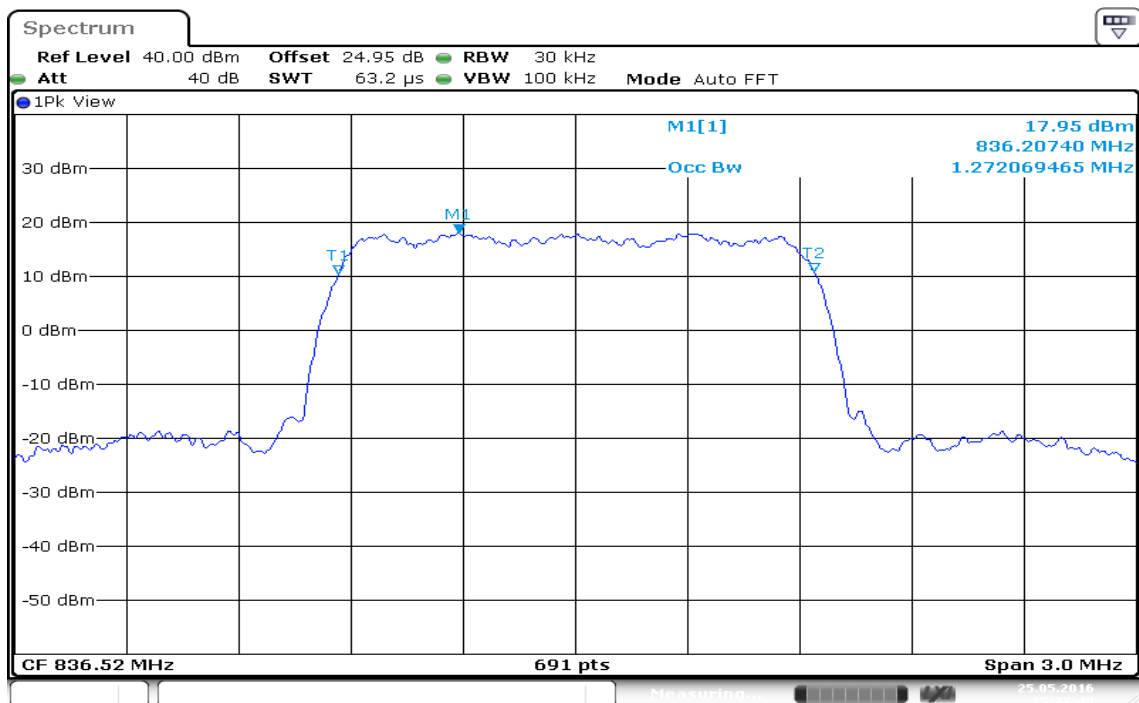
Date: 25.MAY.2016 14:18:09

1xRTT / BC0 (CH 1013)



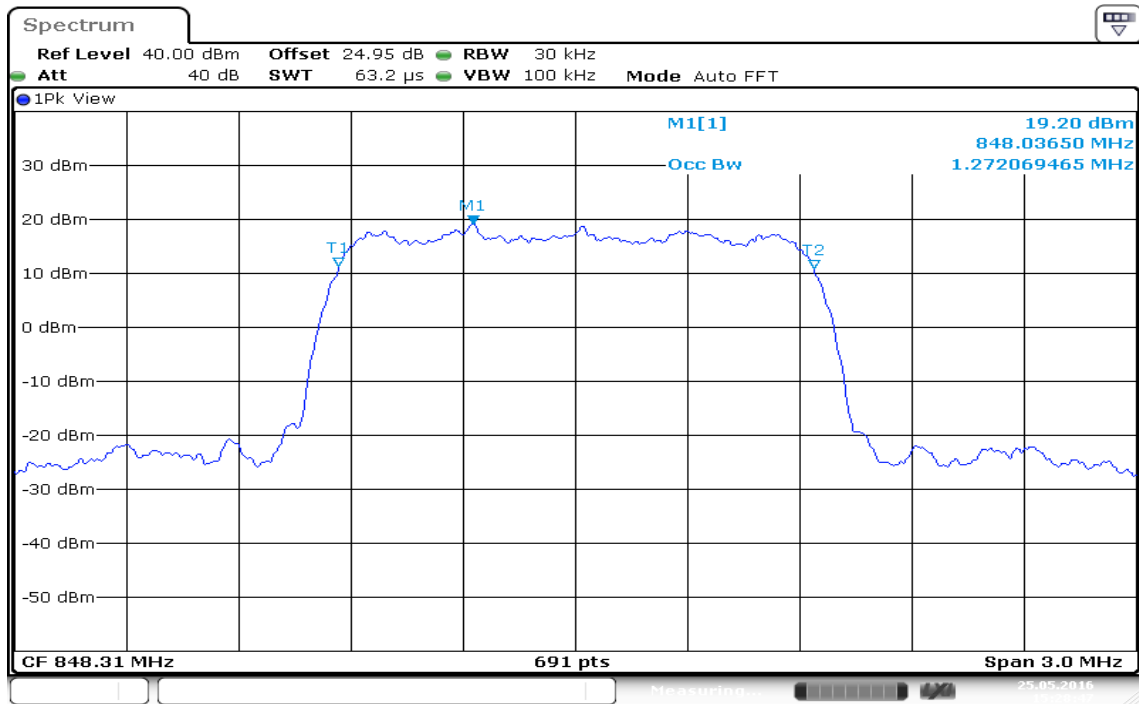
Date: 25.MAY.2016 15:29:34

1xRTT / BC0 (CH 384)



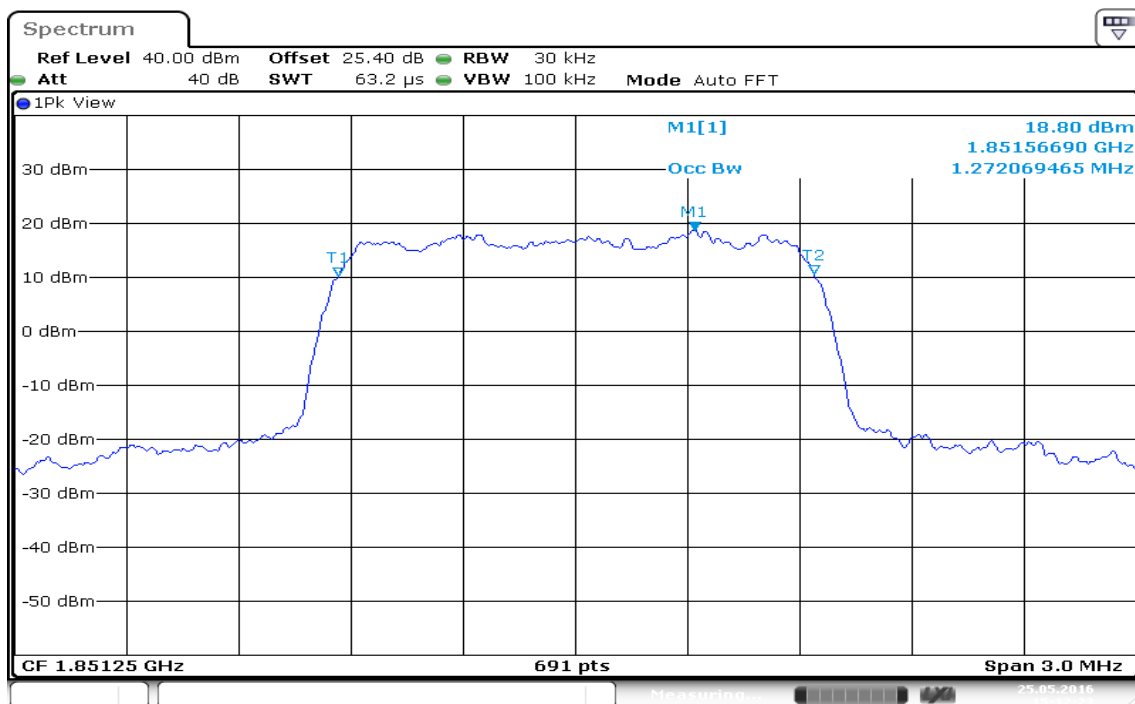
Date: 25.MAY.2016 15:27:40

1xRTT / BC0 (CH 777)



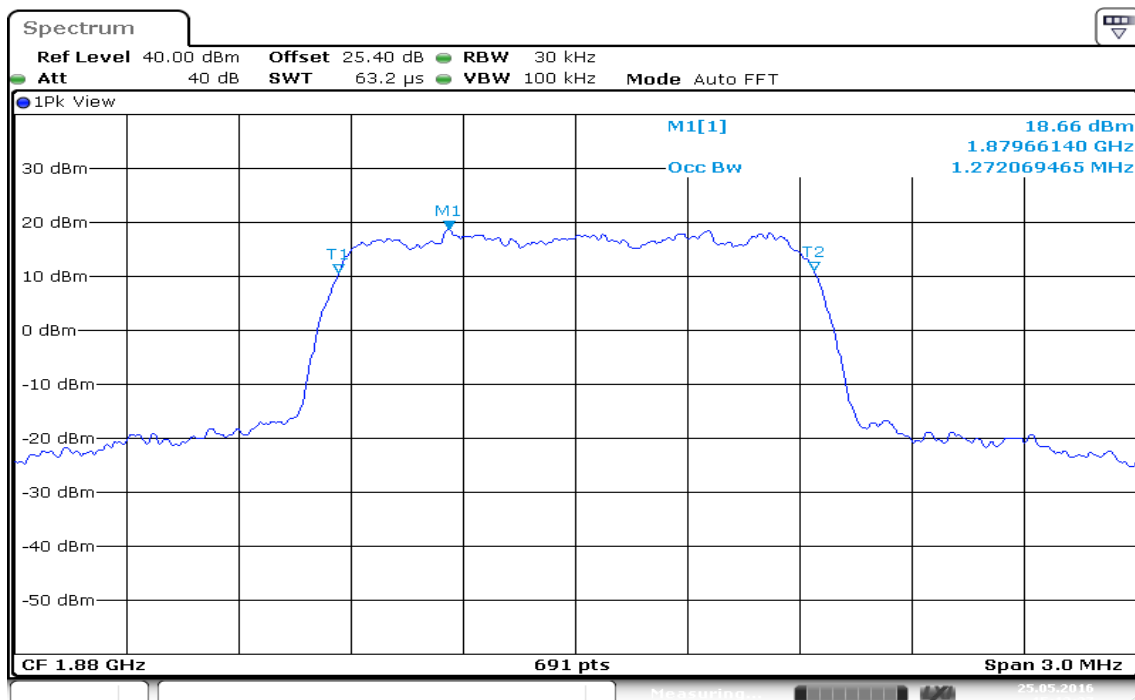
Date: 25.MAY.2016 15:28:47

1xRTT / BC1 (CH 25)



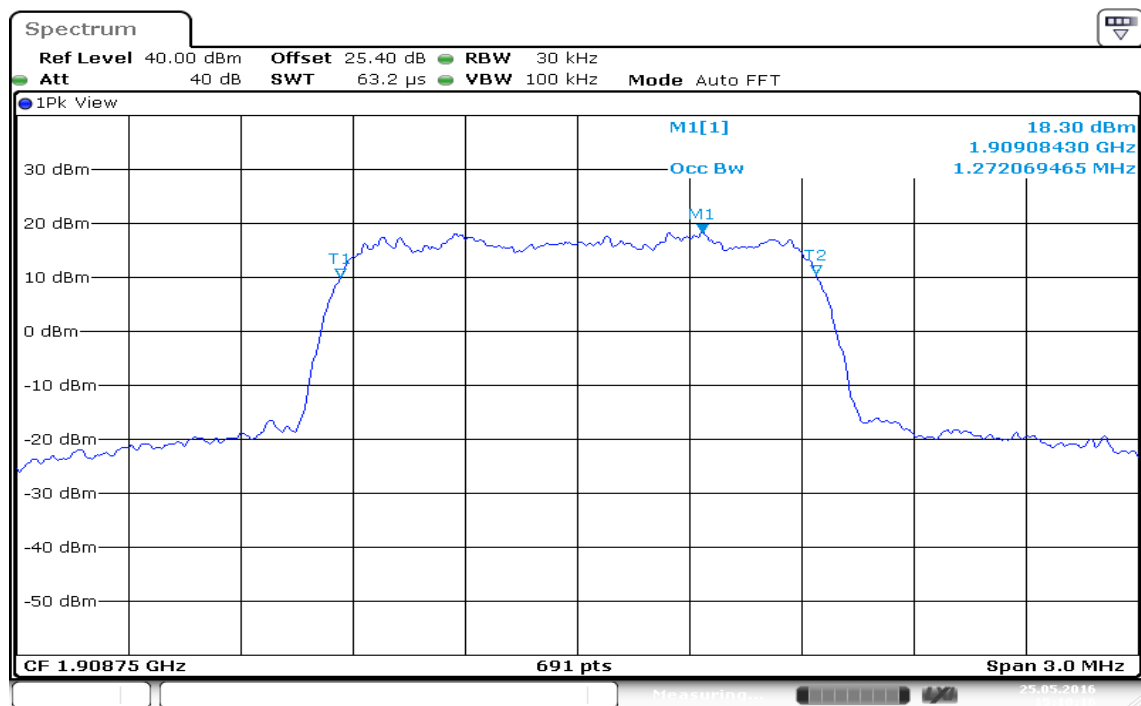
Date: 25.MAY.2016 15:12:23

1xRTT / BC1 (CH 600)



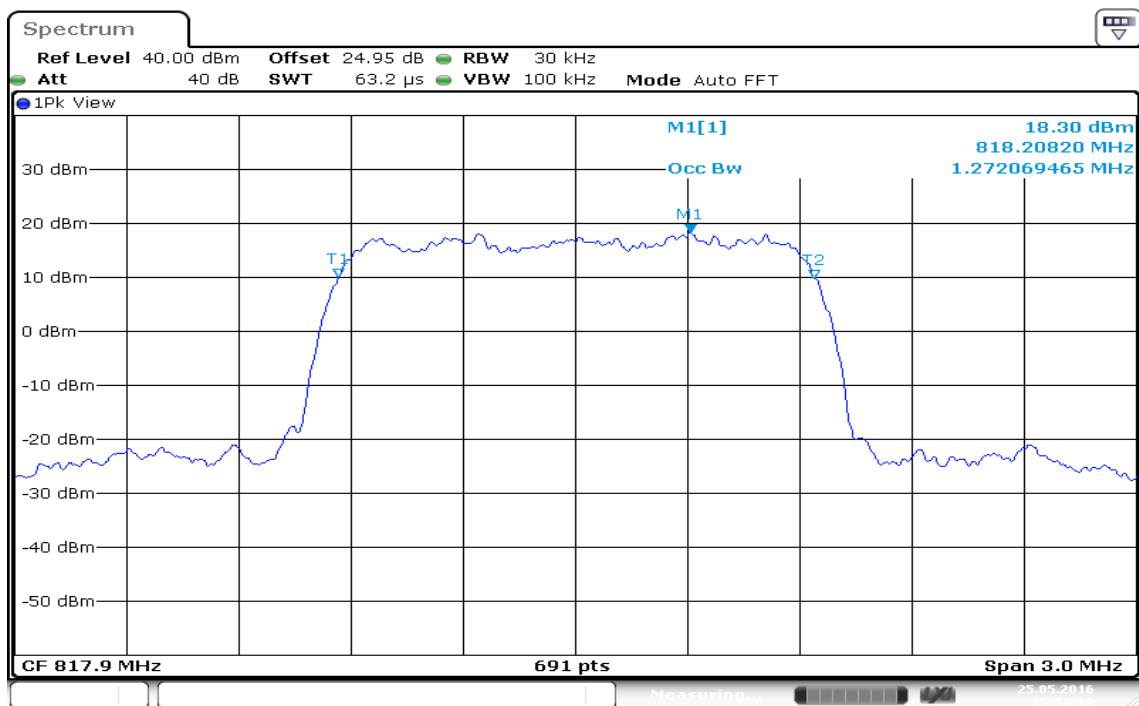
Date: 25.MAY.2016 15:13:28

1xRTT / BC1 (CH 1175)



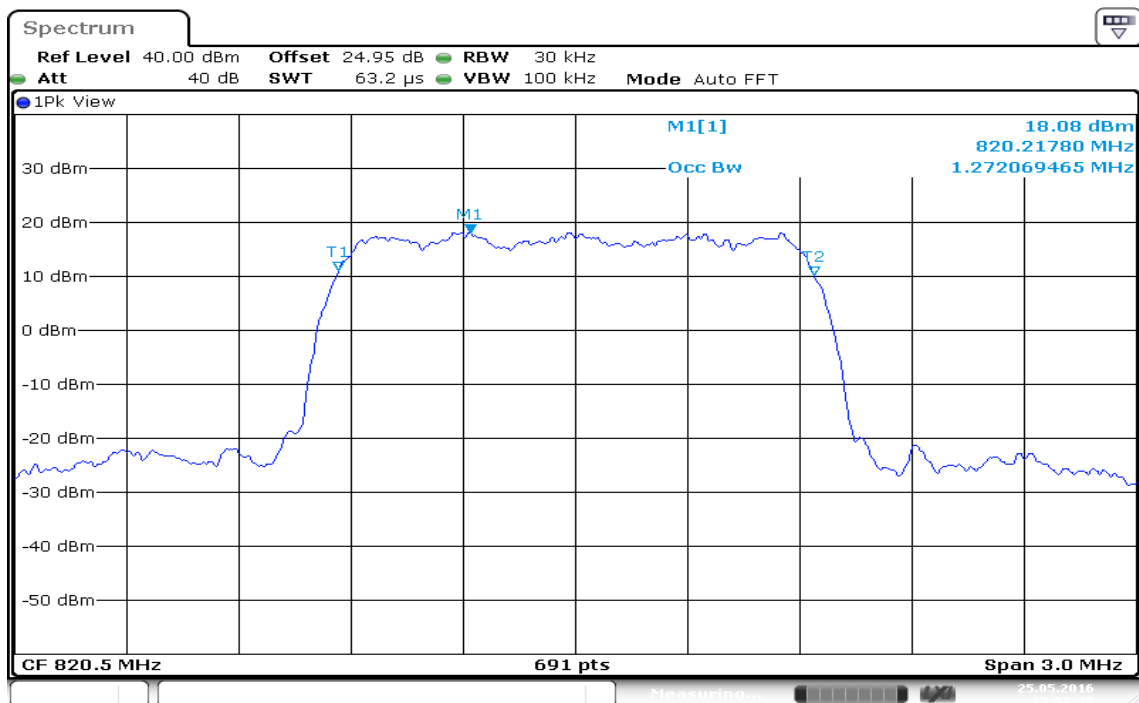
Date: 25.MAY.2016 15:10:17

1xRTT / BC10 (CH 476)



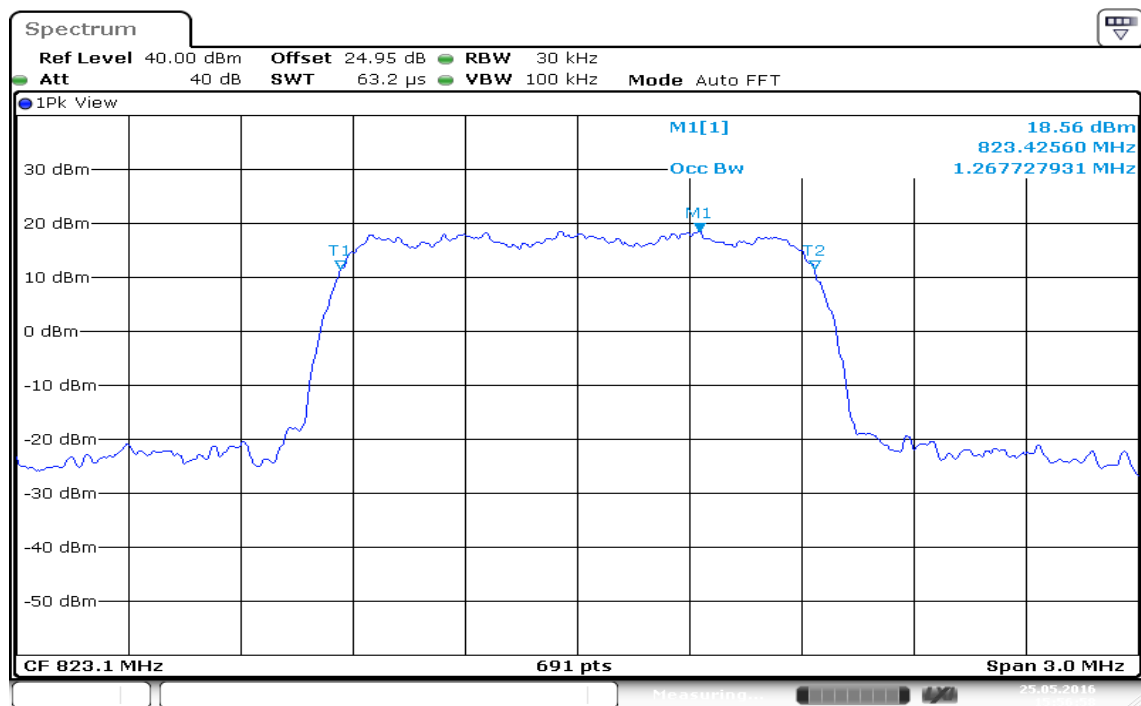
Date: 25.MAY.2016 15:58:20

1xRTT / BC10 (CH 580)



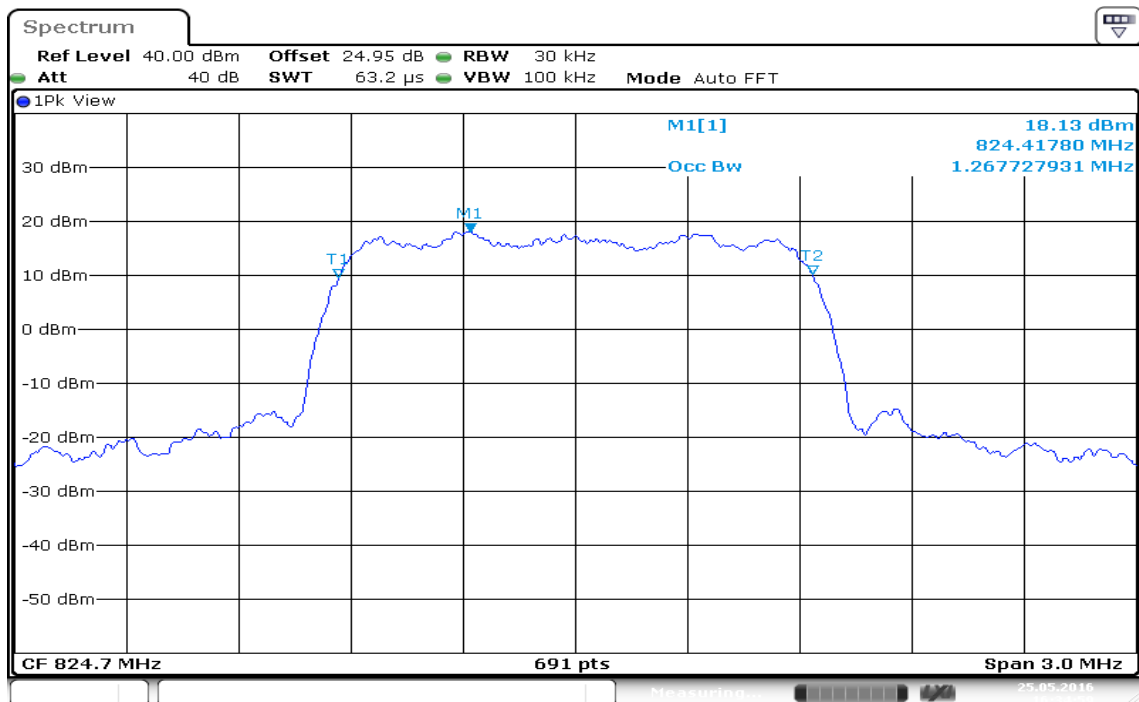
Date: 25.MAY.2016 15:57:39

1xRTT / BC10 (CH 684)



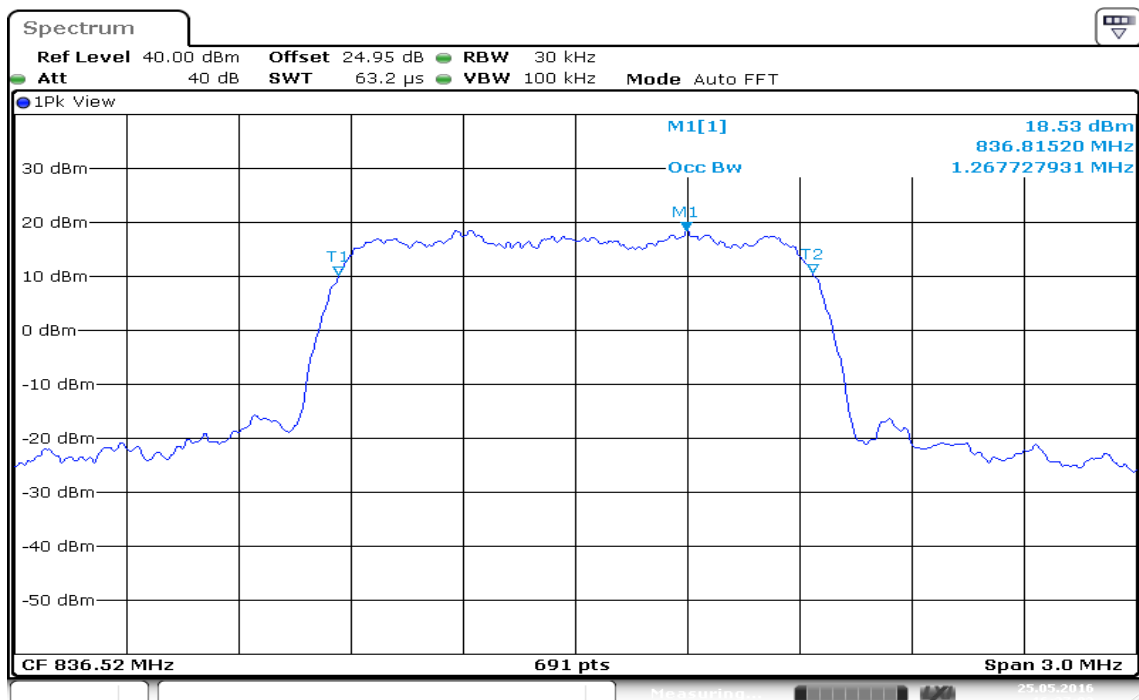
Date: 25.MAY.2016 15:56:58

1xEVDO Rev.0 / BC0 (CH 1013)



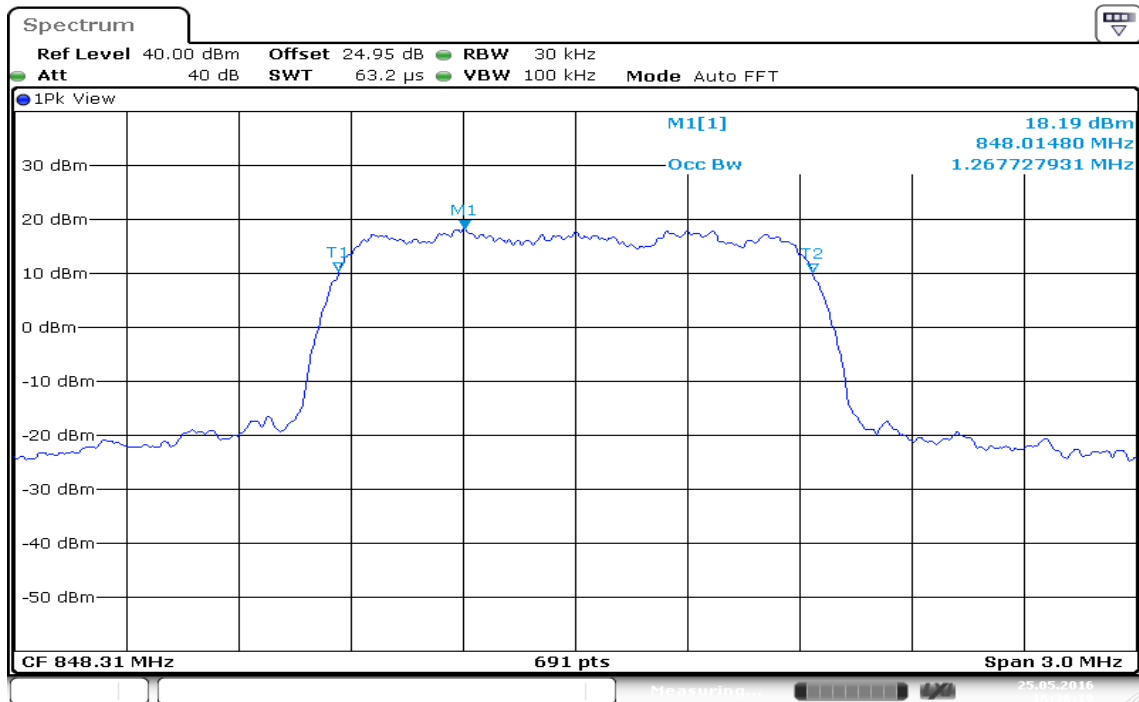
Date: 25.MAY.2016 16:35:00

1xEVDO Rev.0 / BC0 (CH 384)



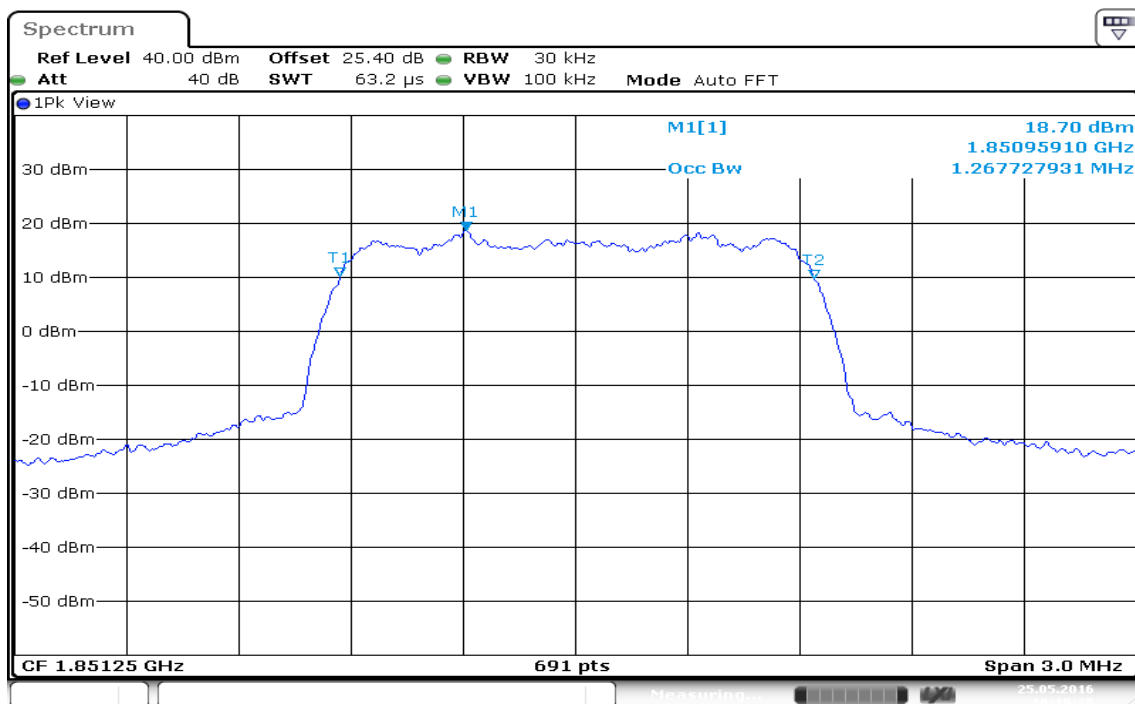
Date: 25.MAY.2016 16:37:04

1xEVDO Rev.0 / BC0 (CH 777)



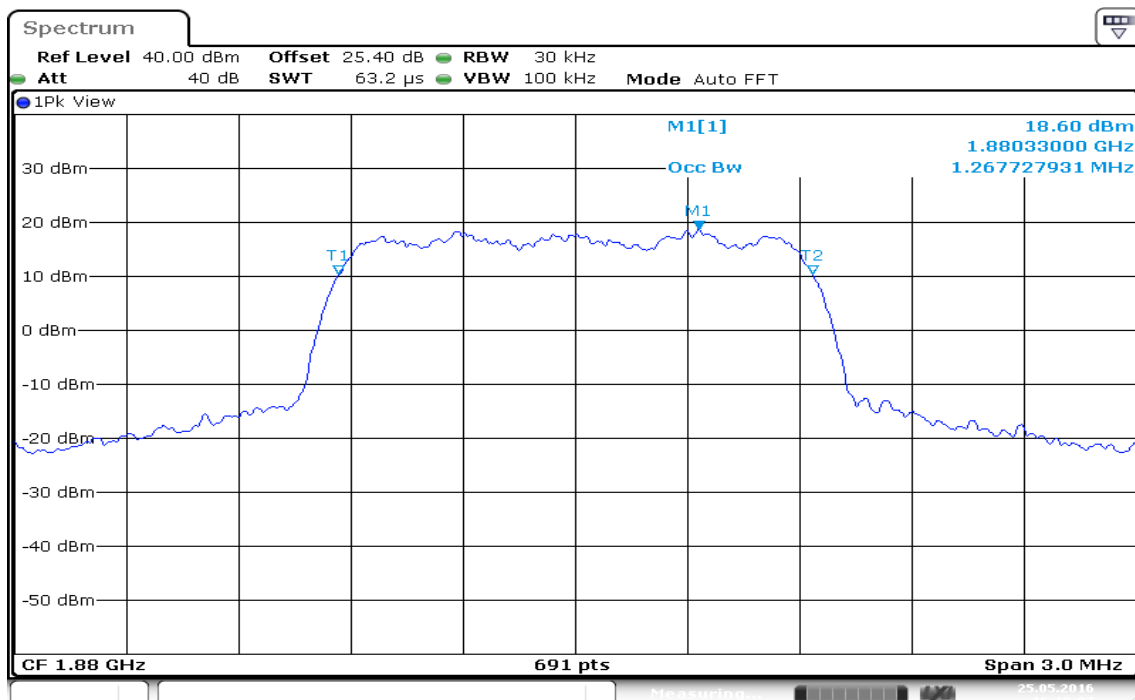
Date: 25.MAY.2016 16:36:19

1xEVDO Rev.0 / BC1 (CH 25)



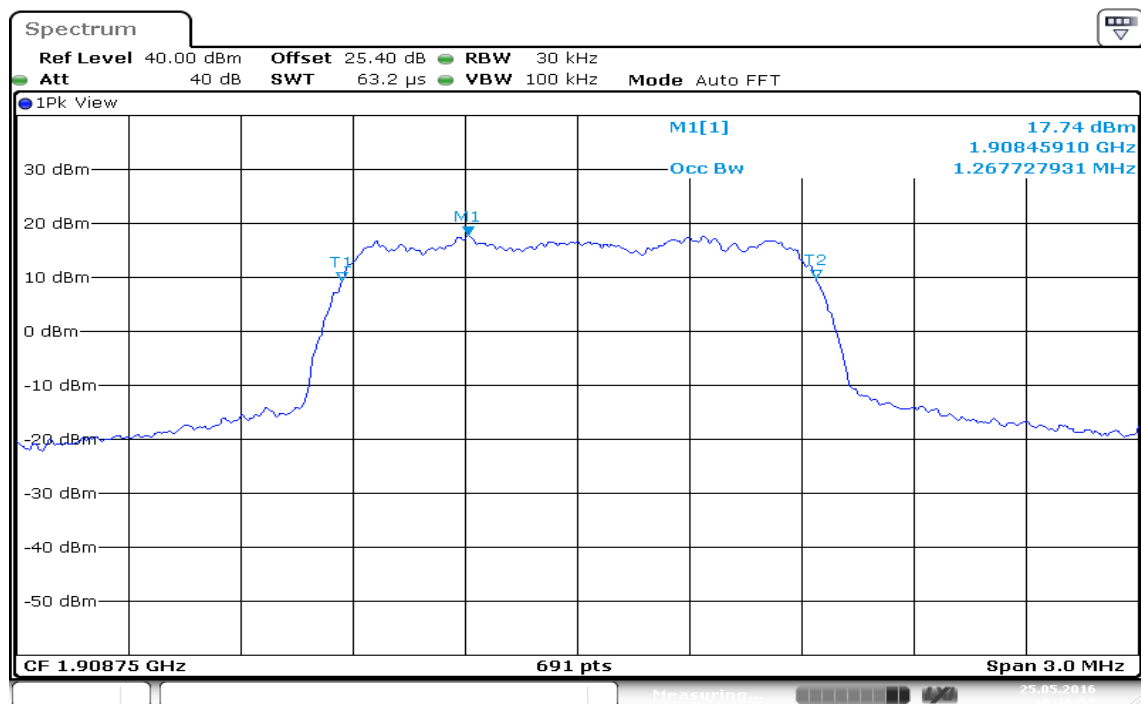
Date: 25.MAY.2016 16:19:28

1xEVDO Rev.0 / BC1 (CH 600)



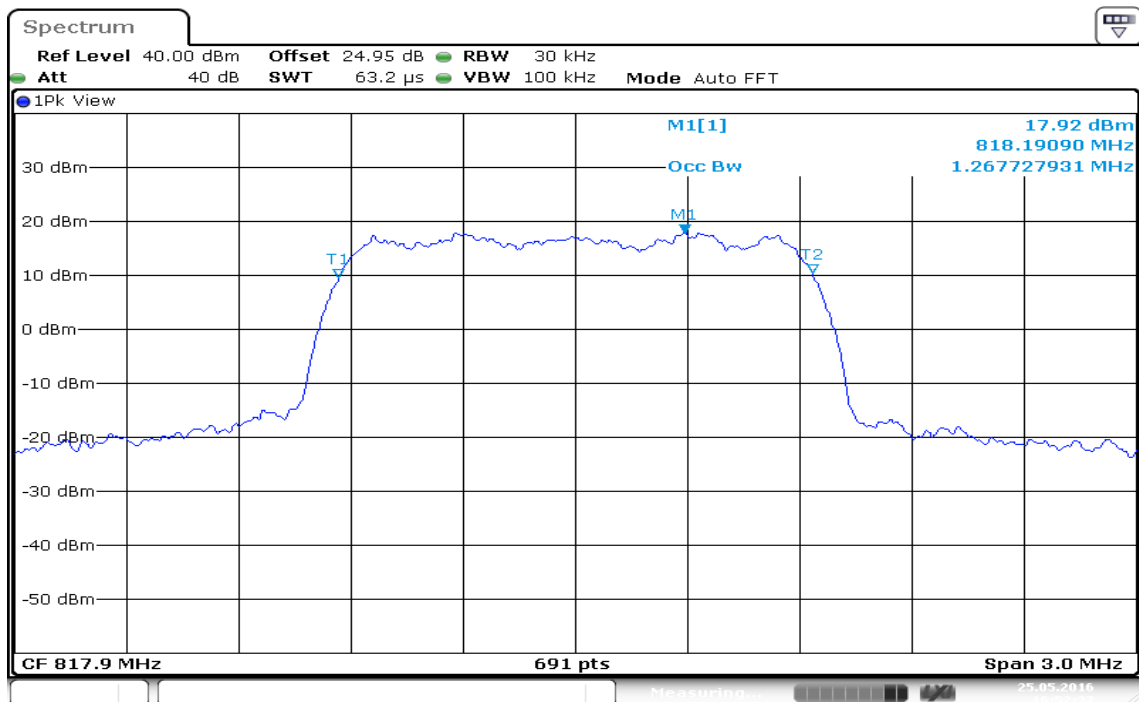
Date: 25.MAY.2016 16:18:07

1xEVDO Rev.0 / BC1 (CH 1175)



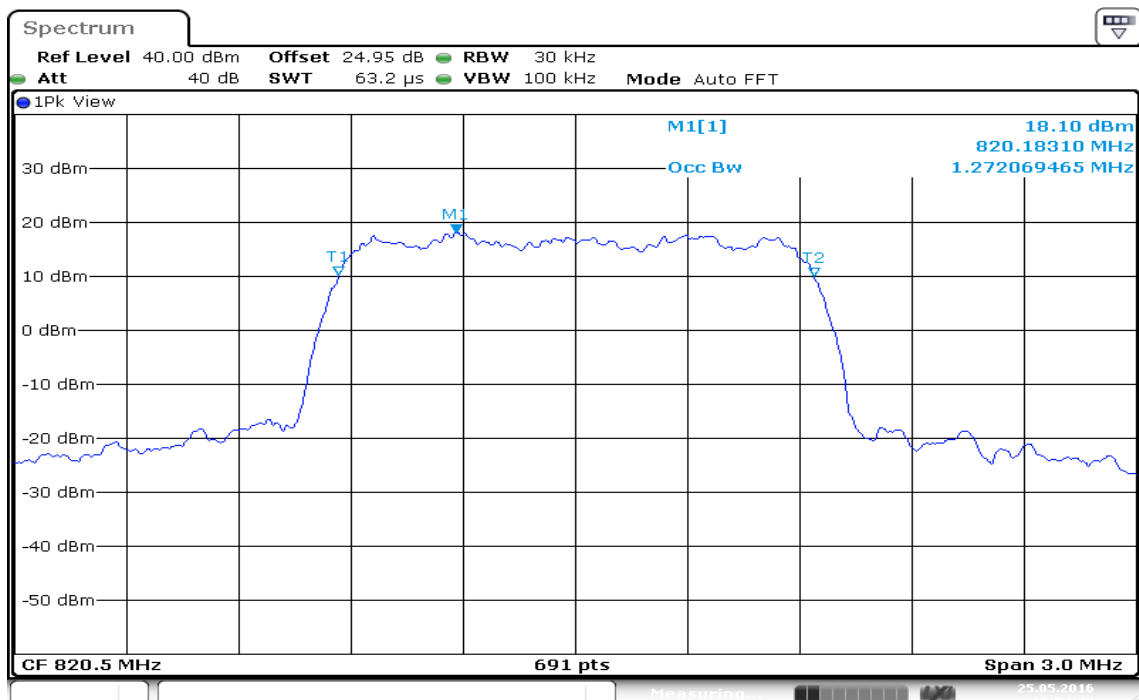
Date: 25.MAY.2016 16:16:52

1xEVDO Rev.0 / BC10 (CH 476)



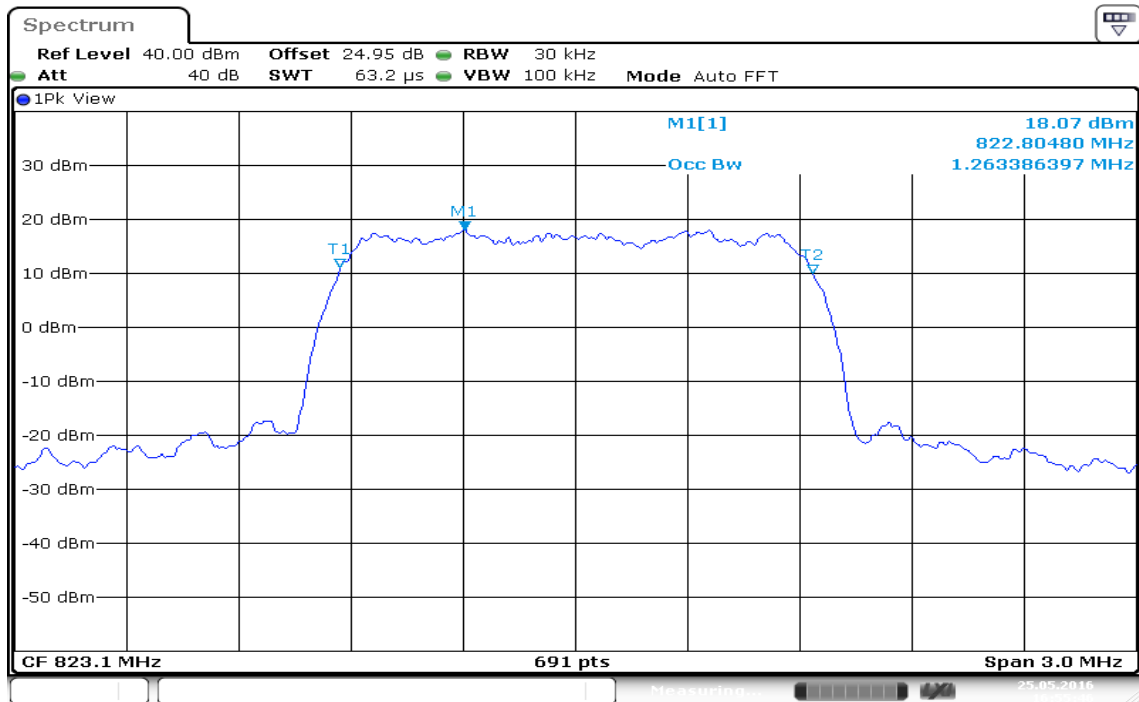
Date: 25.MAY.2016 16:52:37

1xEVDO Rev.0 / BC10 (CH 580)



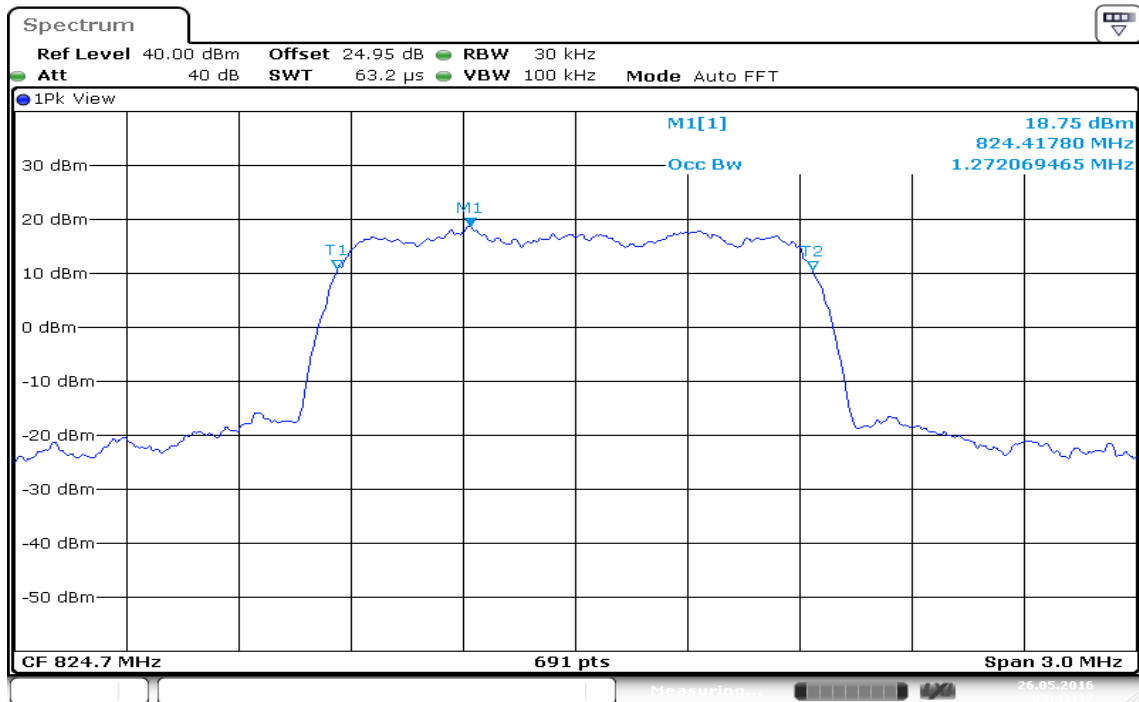
Date: 25.MAY.2016 16:54:50

1xEVDO Rev.0 / BC10 (CH 684)



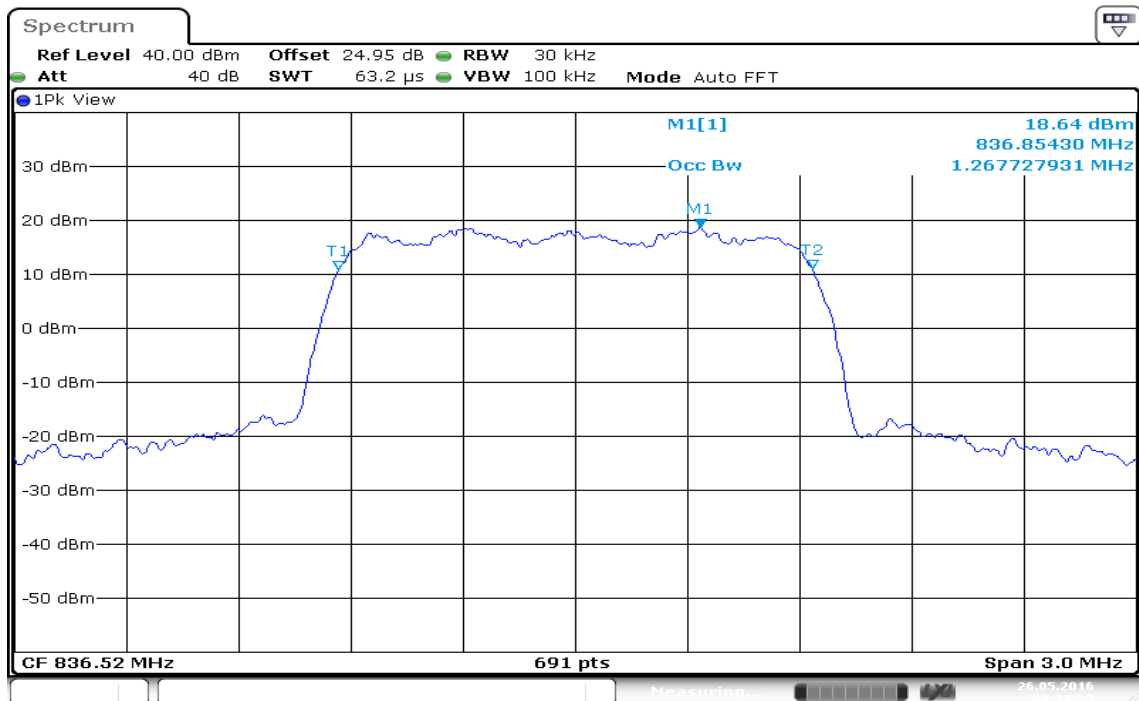
Date: 25.MAY.2016 16:55:46

1xEVDO Rev.A / BC0 (CH 1013)



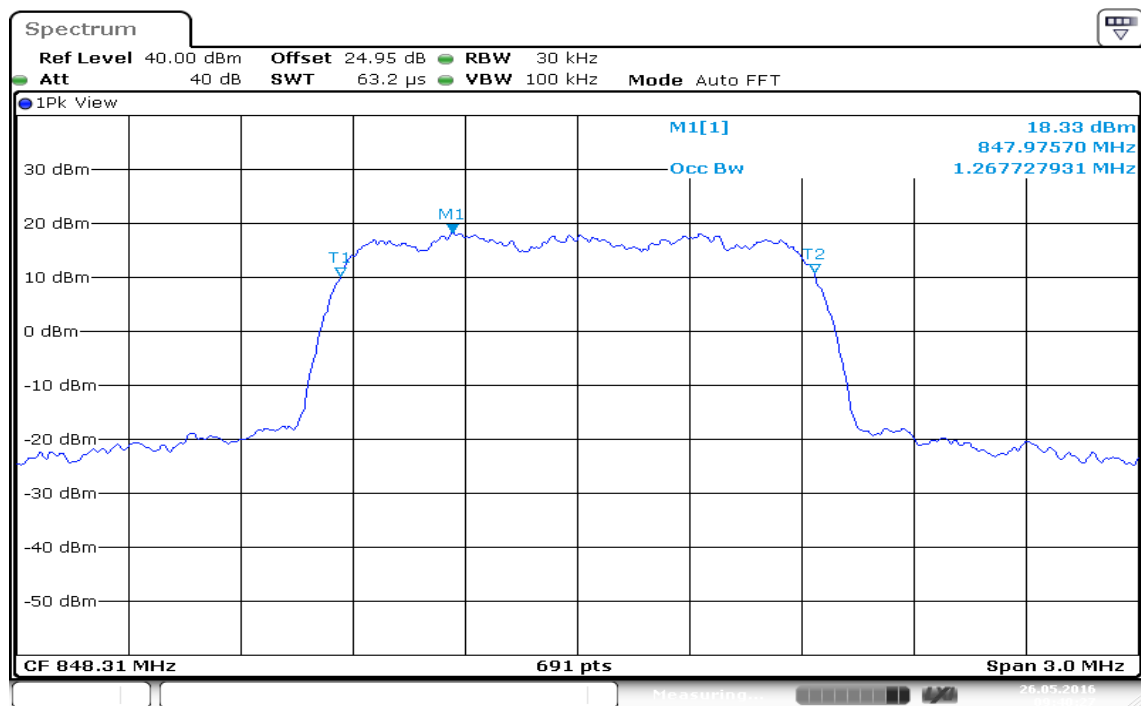
Date: 26.MAY.2016 09:41:17

1xEVDO Rev.A / BC0 (CH 384)



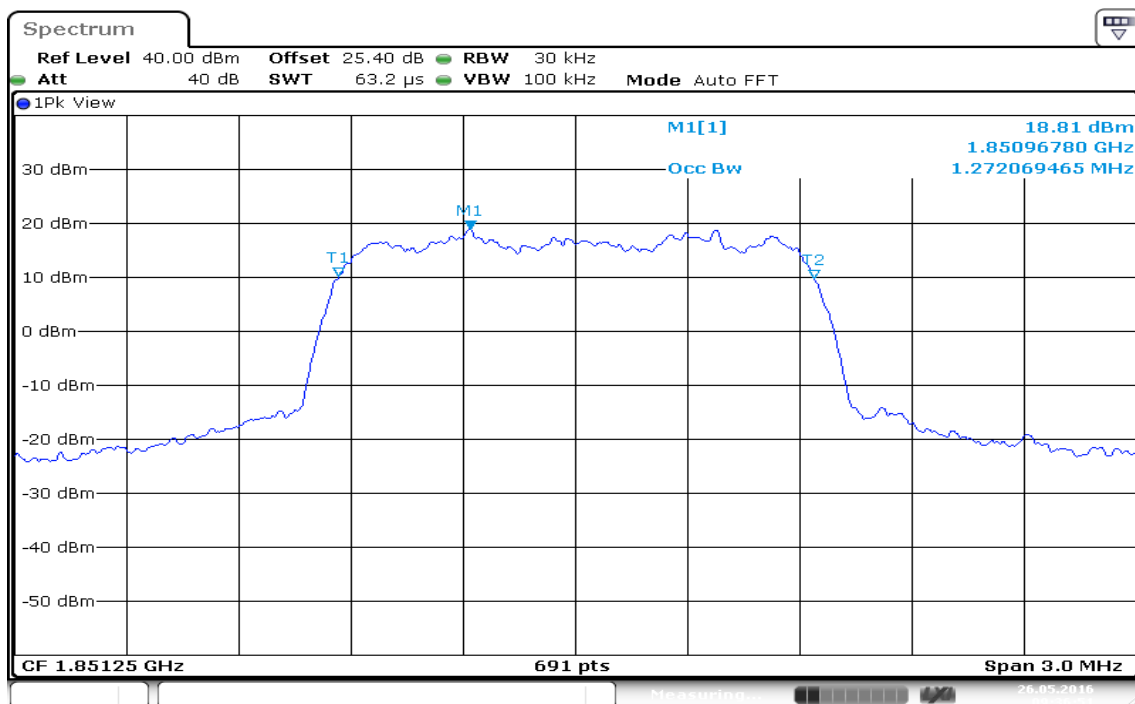
Date: 26.MAY.2016 09:39:25

1xEVDO Rev.A / BC0 (CH 777)



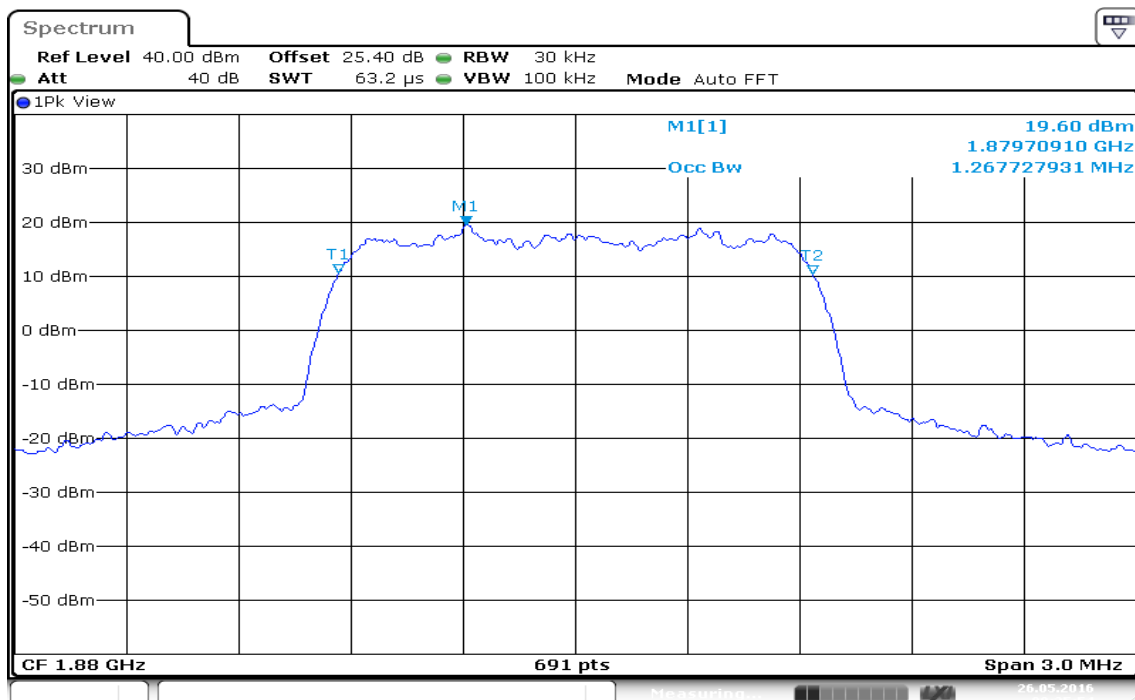
Date: 26.MAY.2016 09:40:27

1xEVDO Rev.A / BC1 (CH 25)



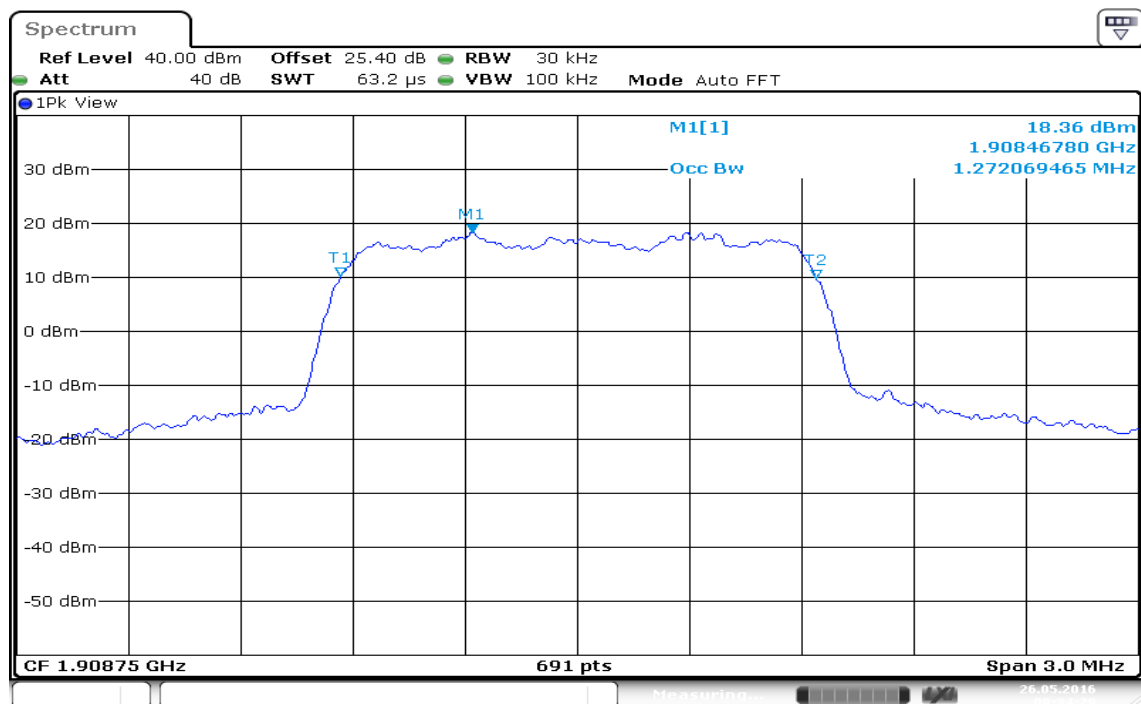
Date: 26.MAY.2016 09:36:51

1xEVDO Rev.A / BC1 (CH 600)



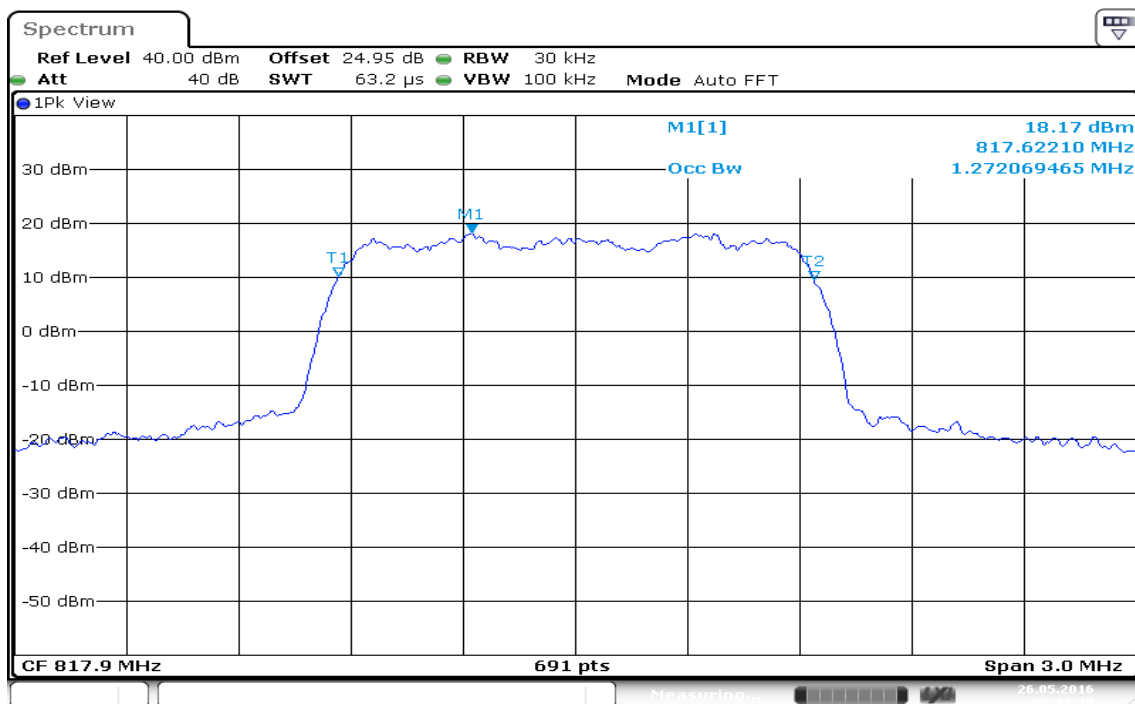
Date: 26.MAY.2016 09:35:54

1xEVDO Rev.A / BC1 (CH 1175)



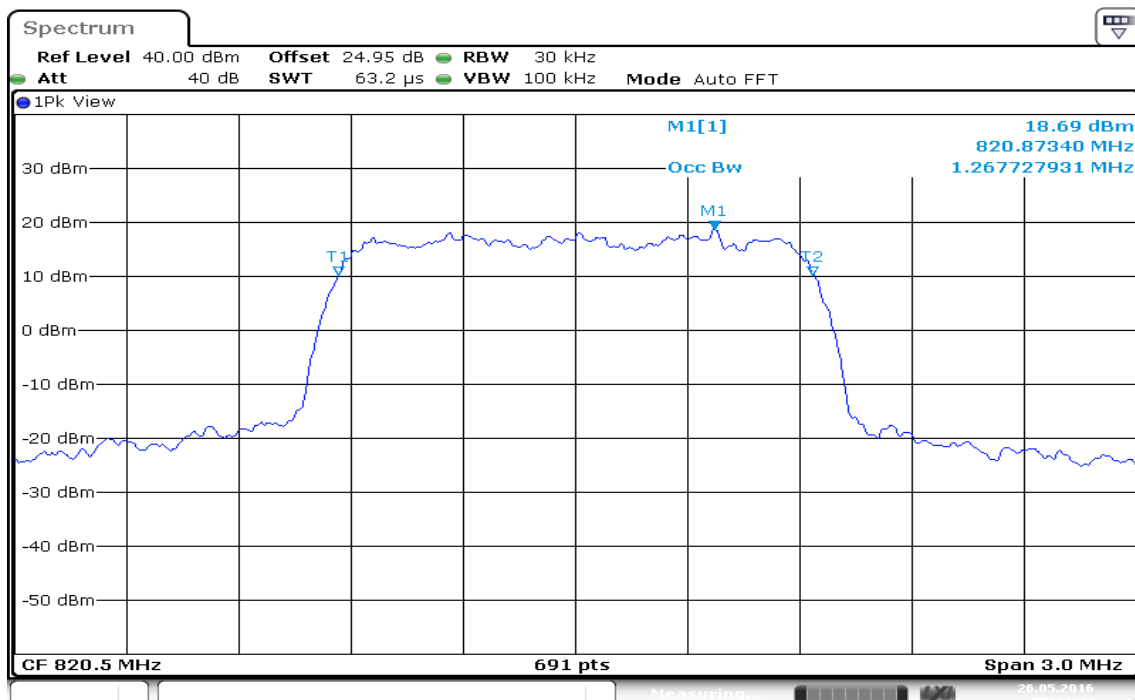
Date: 26.MAY.2016 09:34:29

1xEVDO Rev.A / BC10 (CH 476)



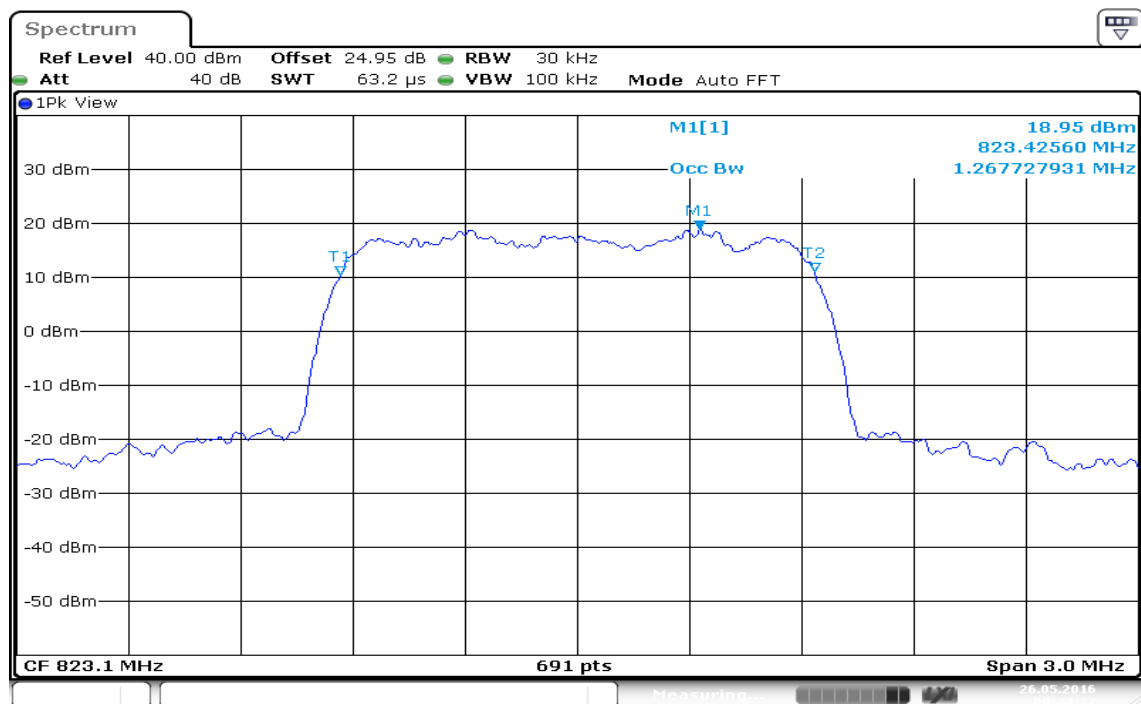
Date: 26.MAY.2016 09:42:30

1xEVDO Rev.A / BC10 (CH 580)



Date: 26.MAY.2016 09:43:23

1xEVDO Rev.A / BC10 (CH 684)



Date: 26.MAY.2016 09:44:37

7.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

According to FCC §2.1051, FCC §22.917, FCC §24.238(a).

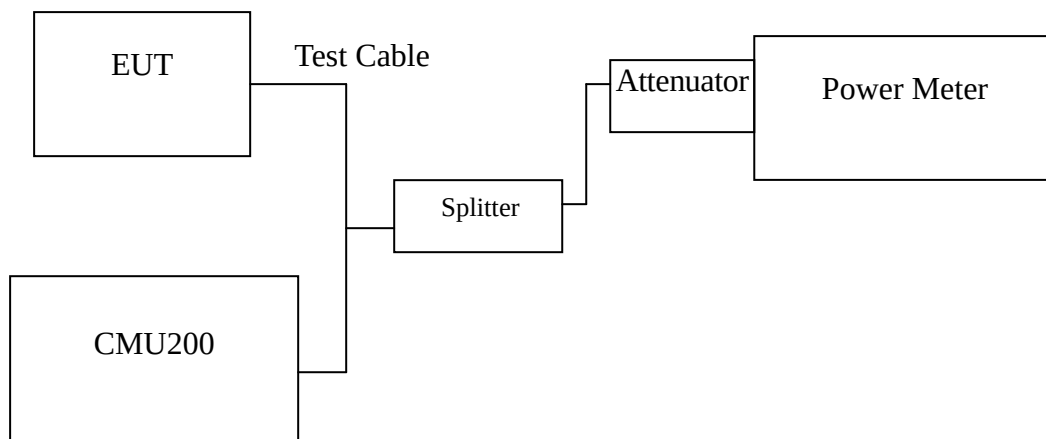
Out of Band Emissions: The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log P$ dB.

Mobile Emissions in Base Frequency Range: The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not exceed -80 dBm at the transmit antenna connector.

Band Edge Requirements: In the 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the Out of band Emission

TEST CONFIGURATION

Out of band emission at antenna terminals:



TEST PROCEDURE

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10 th harmonic. Limit = -13dBm

Band Edge Requirements (824 MHz and 849 MHz /1850MHz and 1910MHz): In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

TEST RESULTS

No non-compliance noted.

Test Data

Mode	CH	Location	Description
CDMA / BC0	1013	Figure 7-1	Conducted spurious emissions, 30MHz - 20GHz
	384	Figure 7-2	Conducted spurious emissions, 30MHz - 20GHz
	777	Figure 7-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
CDMA / BC1	25	Figure 8-1	Conducted spurious emissions, 30MHz - 20GHz
	600	Figure 8-2	Conducted spurious emissions, 30MHz - 20GHz
	1175	Figure 8-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
CDMA / BC10	476	Figure 9-1	Conducted spurious emissions, 30MHz - 20GHz
	580	Figure 9-2	Conducted spurious emissions, 30MHz - 20GHz
	684	Figure 9-3.	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
1xRTT / BC0	1013	Figure 10-1	Conducted spurious emissions, 30MHz - 20GHz
	384	Figure 10-2	Conducted spurious emissions, 30MHz - 20GHz
	777	Figure 10-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
1xRTT / BC1	25	Figure 11-1	Conducted spurious emissions, 30MHz - 20GHz
	600	Figure 11-2	Conducted spurious emissions, 30MHz - 20GHz
	1175	Figure 11-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
1xRTT / BC10	476	Figure 12-1	Conducted spurious emissions, 30MHz - 20GHz
	580	Figure 12-2	Conducted spurious emissions, 30MHz - 20GHz
	684	Figure 12-3.	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
1xEVDO Rev.0 / BC0	1013	Figure 13-1	Conducted spurious emissions, 30MHz - 20GHz
	384	Figure 13-2	Conducted spurious emissions, 30MHz - 20GHz
	777	Figure 13-3	Conducted spurious emissions, 30MHz - 20GHz
Mode	CH	Location	Description
1xEVDO Rev.0 / BC1	25	Figure 14-1	Conducted spurious emissions, 30MHz - 20GHz
	600	Figure 14-2	Conducted spurious emissions, 30MHz - 20GHz
	1175	Figure 14-3	Conducted spurious emissions, 30MHz - 20GHz
Mode	CH	Location	Description
1xEVDO Rev.0 / BC10	476	Figure 15-1	Conducted spurious emissions, 30MHz - 20GHz
	580	Figure 15-2	Conducted spurious emissions, 30MHz - 20GHz
	684	Figure 15-3.	Conducted spurious emissions, 30MHz - 20GHz
Mode	CH	Location	Description
1xEVDO Rev.A / BC0	1013	Figure 16-1	Conducted spurious emissions, 30MHz - 20GHz
	384	Figure 16-2	Conducted spurious emissions, 30MHz - 20GHz
	777	Figure 16-3	Conducted spurious emissions, 30MHz - 20GHz
Mode	CH	Location	Description
1xEVDO Rev.A / BC1	25	Figure 17-1	Conducted spurious emissions, 30MHz - 20GHz
	600	Figure 17-2	Conducted spurious emissions, 30MHz - 20GHz
	1175	Figure 17-3	Conducted spurious emissions, 30MHz - 20GHz
Mode	CH	Location	Description
1xEVDO Rev.A / BC10	476	Figure 18-1	Conducted spurious emissions, 30MHz - 20GHz
	580	Figure 18-2	Conducted spurious emissions, 30MHz - 20GHz
	684	Figure 18-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
CDMA / BC0	1013	Figure 19-1	Band Edge emissions
	777	Figure 19-2	Band Edge emissions

Mode	CH	Location	Description
CDMA / BC1	25	Figure 20-1	Band Edge emissions
	1175	Figure 20-2	Band Edge emissions

Mode	CH	Location	Description
CDMA / BC10	476	Figure 21-1	Band Edge emissions
	684	Figure 21-2	Band Edge emissions

Mode	CH	Location	Description
1xRTT / BC0	1013	Figure 22-1	Band Edge emissions
	777	Figure 22-2	Band Edge emissions

Mode	CH	Location	Description
1xRTT / BC1	25	Figure 23-1	Band Edge emissions
	1175	Figure 23-2	Band Edge emissions

Mode	CH	Location	Description
1xRTT / BC10	476	Figure 24-1	Band Edge emissions
	684	Figure 24-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.0 / BC0	1013	Figure 25-1	Band Edge emissions
	777	Figure 25-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.0 / BC1	25	Figure 26-1	Band Edge emissions
	1175	Figure 26-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.0 / BC10	476	Figure 27-1	Band Edge emissions
	684	Figure 27-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.A / BC0	1013	Figure 28-1	Band Edge emissions
	777	Figure 28-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.A / BC1	25	Figure 29-1	Band Edge emissions
	1175	Figure 29-2	Band Edge emissions

Mode	CH	Location	Description
1xEVDO Rev.A / BC10	476	Figure 30-1	Band Edge emissions
	684	Figure 30-2	Band Edge emissions

Test Plot

Figure 7-1: Out of Band emission at antenna terminals –CDMA / BC0 / CH 1013

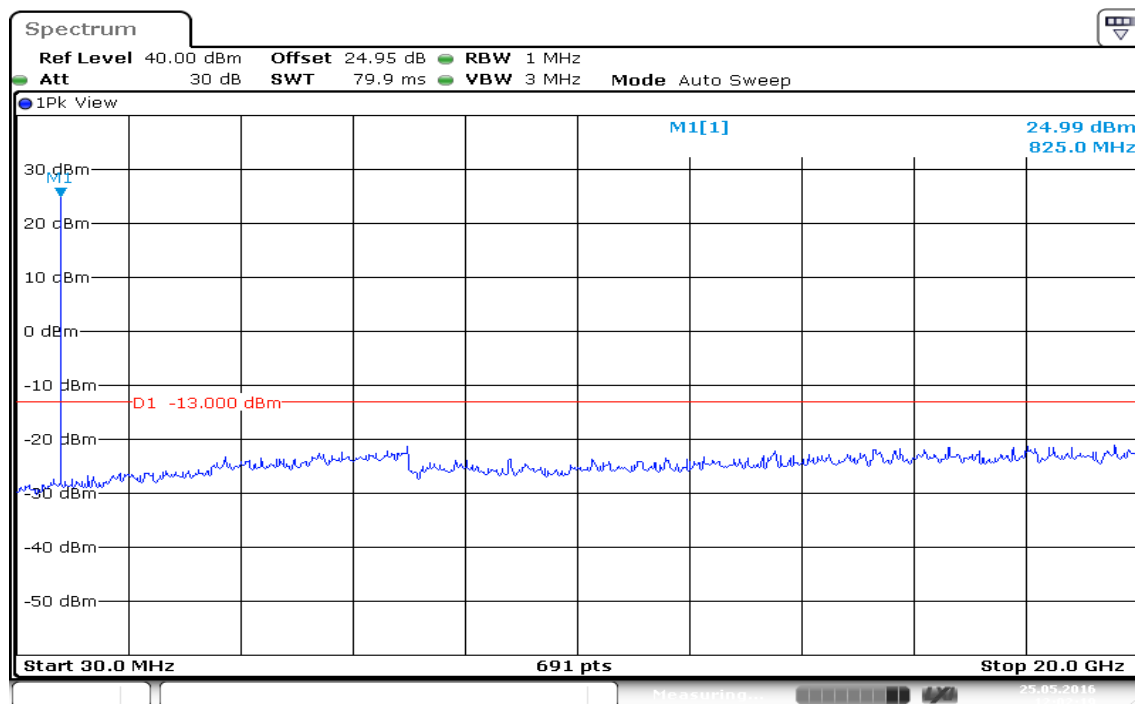


Figure 7-2: Out of Band emission at antenna terminals –CDMA / BC0 / CH 384

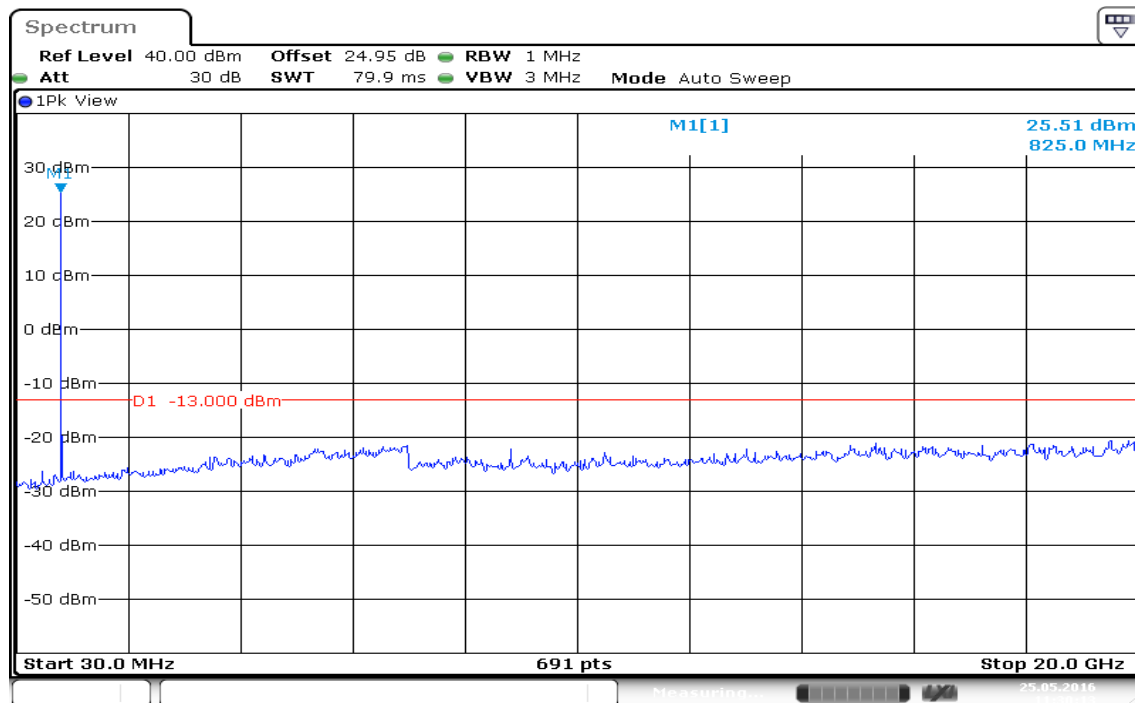
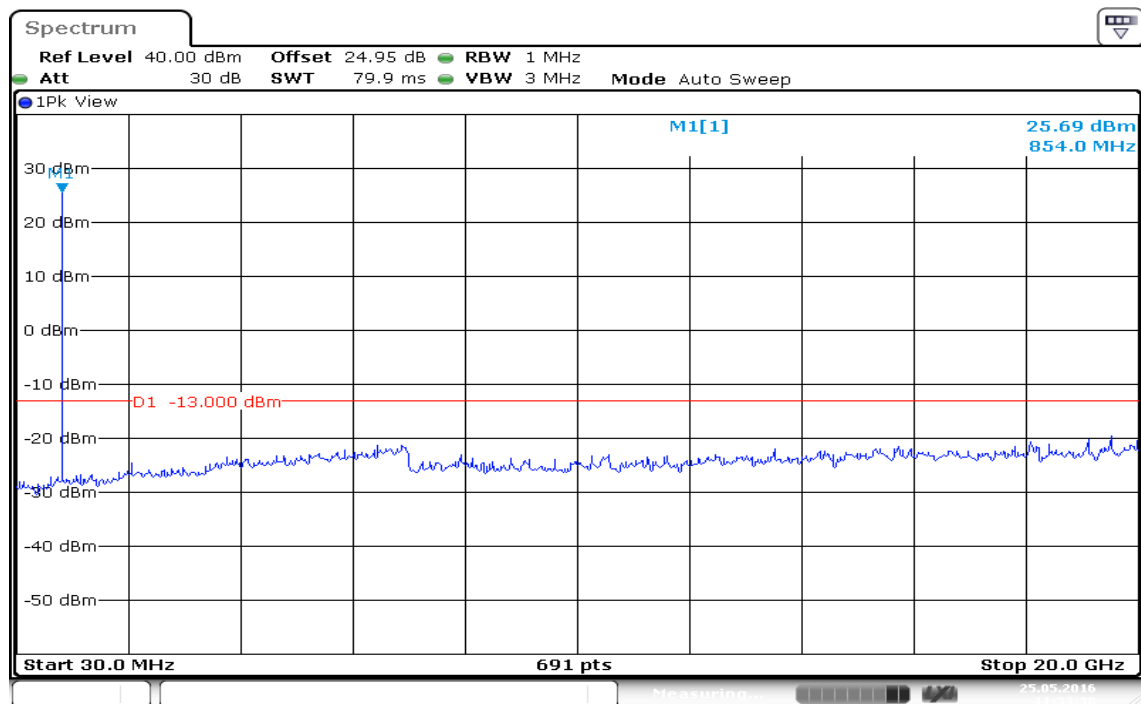


Figure 7-3: Out of Band emission at antenna terminals –CDMA / BC0 / CH 777



Date: 25.MAY.2016 11:33:39

Figure 8-1: Out of Band emission at antenna terminals –CDMA / BC1 / CH 25

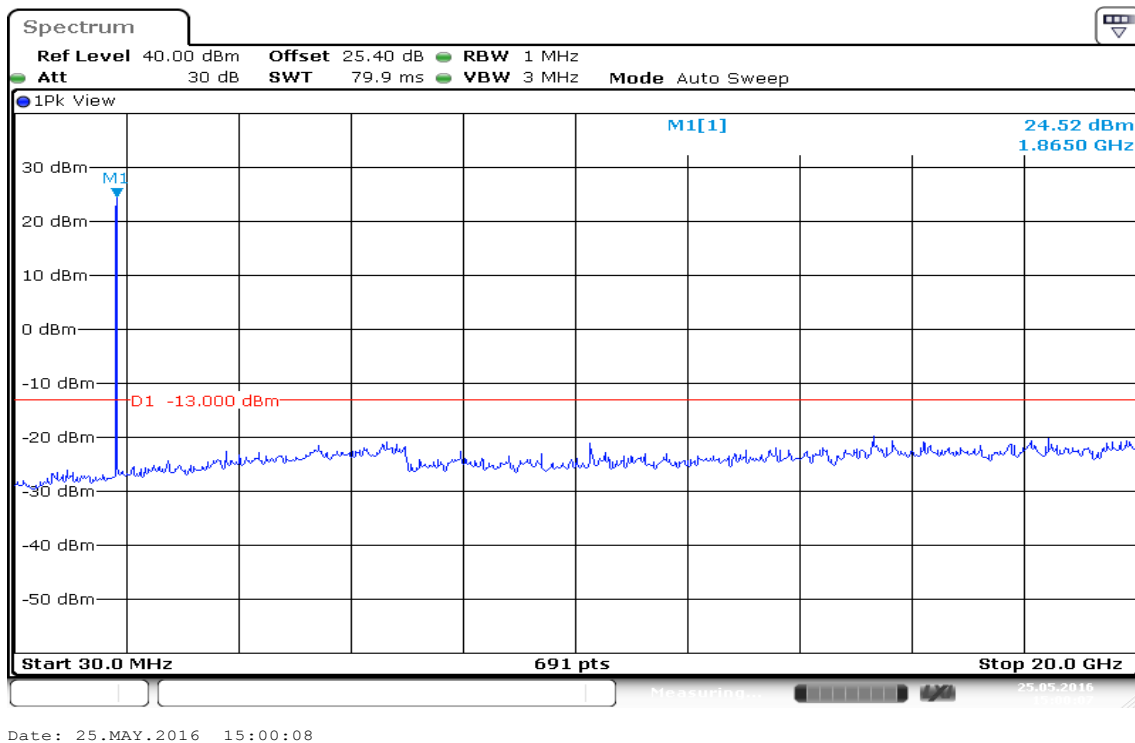


Figure 8-2: Out of Band emission at antenna terminals –CDMA / BC1 / CH 600

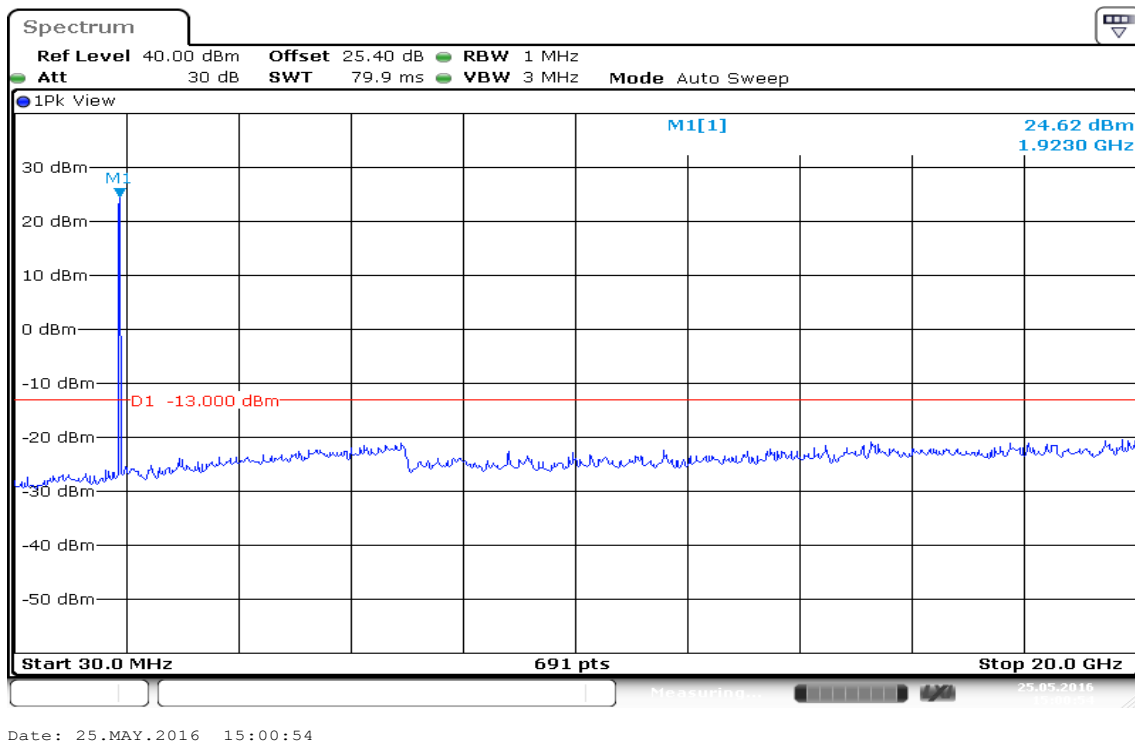
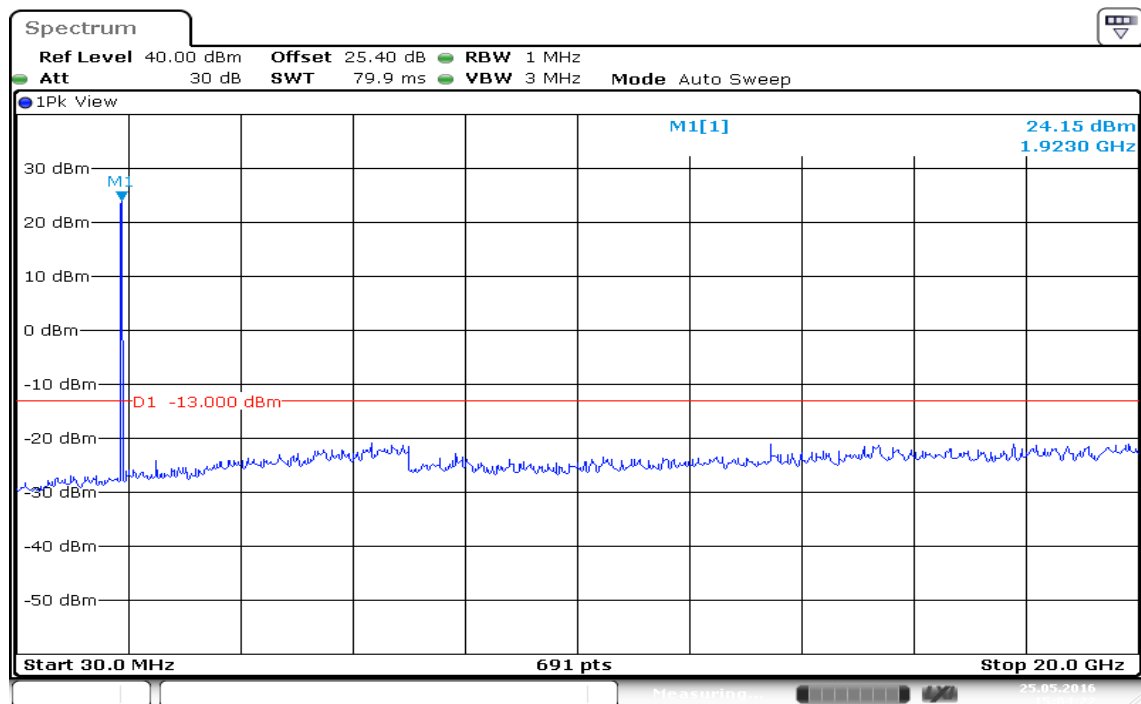


Figure 8-3: Out of Band emission at antenna terminals –CDMA / BC1 / CH 1175



Date: 25.MAY.2016 15:04:22

Figure 9-1: Out of Band emission at antenna terminals –CDMA / BC10 / CH 476

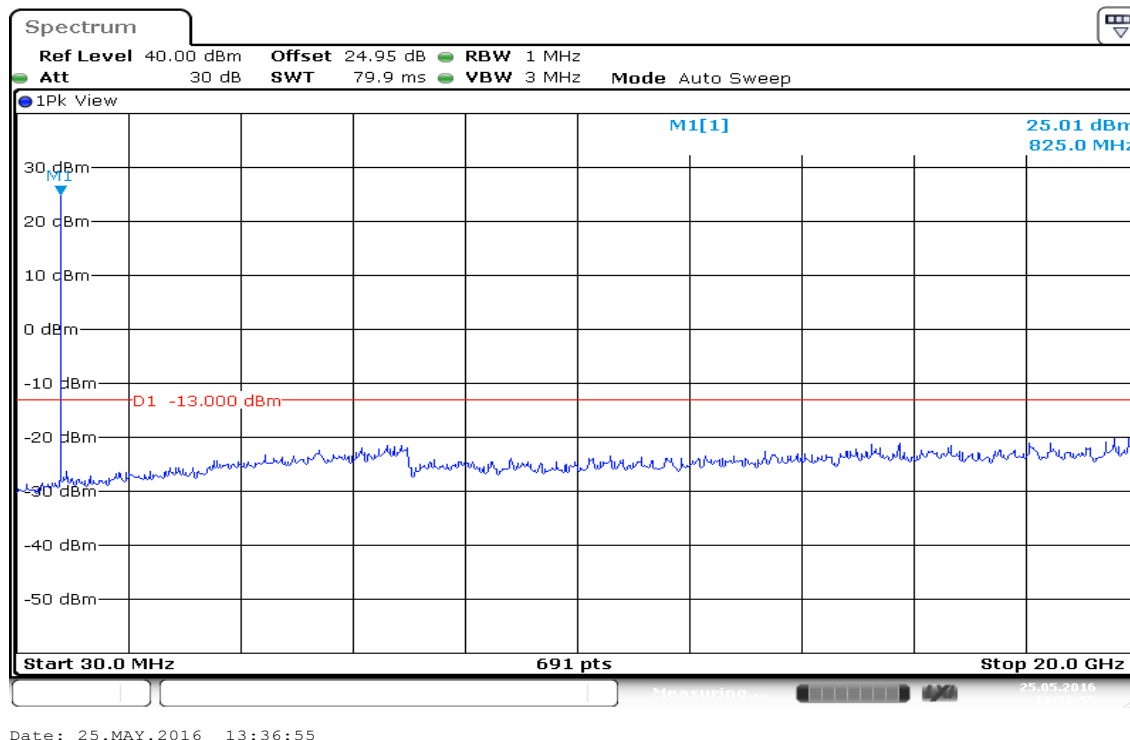


Figure 9-2: Out of Band emission at antenna terminals –CDMA / BC10 / CH 580

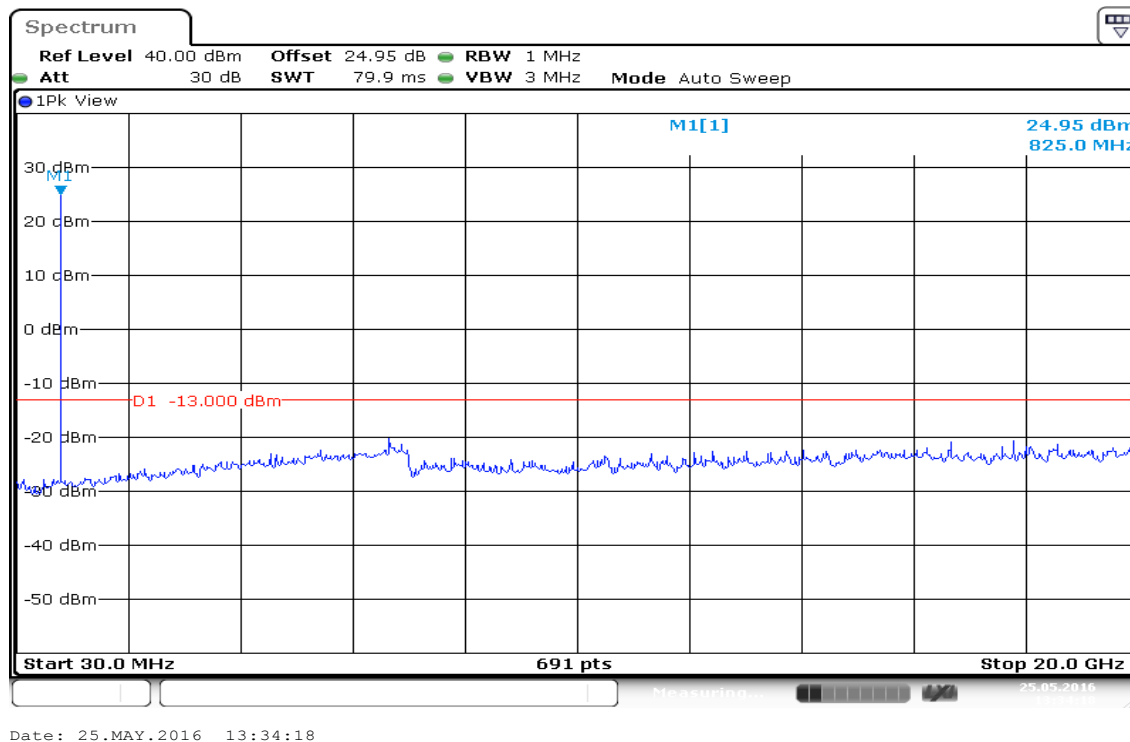
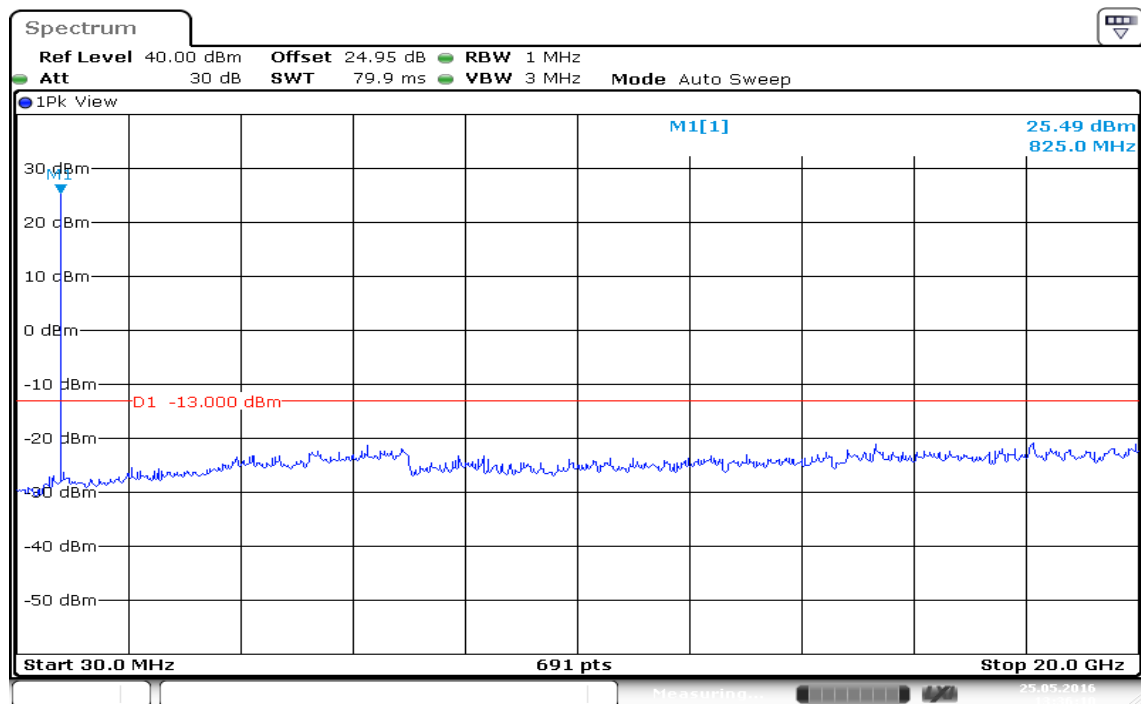


Figure 9-3: Out of Band emission at antenna terminals –CDMA / BC10 / CH 684



Date: 25.MAY.2016 13:36:11

Figure 10-1: Out of Band emission at antenna terminals –1xRTT / BC0 / CH 1013

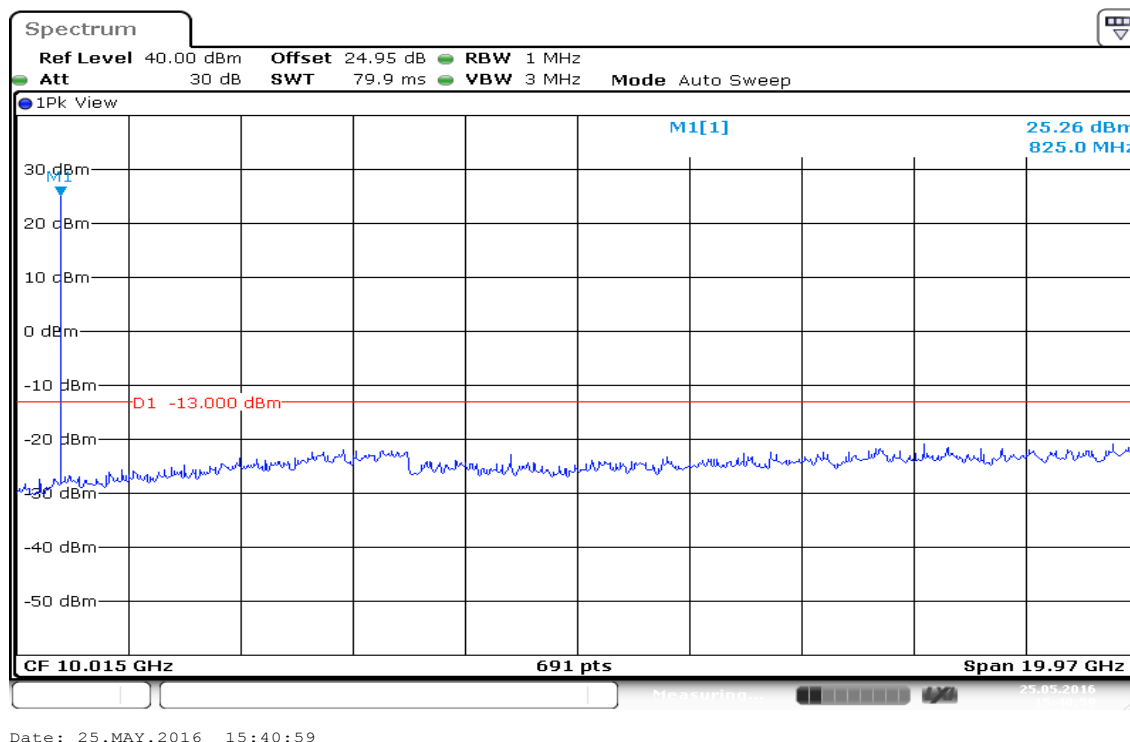


Figure 10-2: Out of Band emission at antenna terminals –1xRTT / BC0 / CH 384

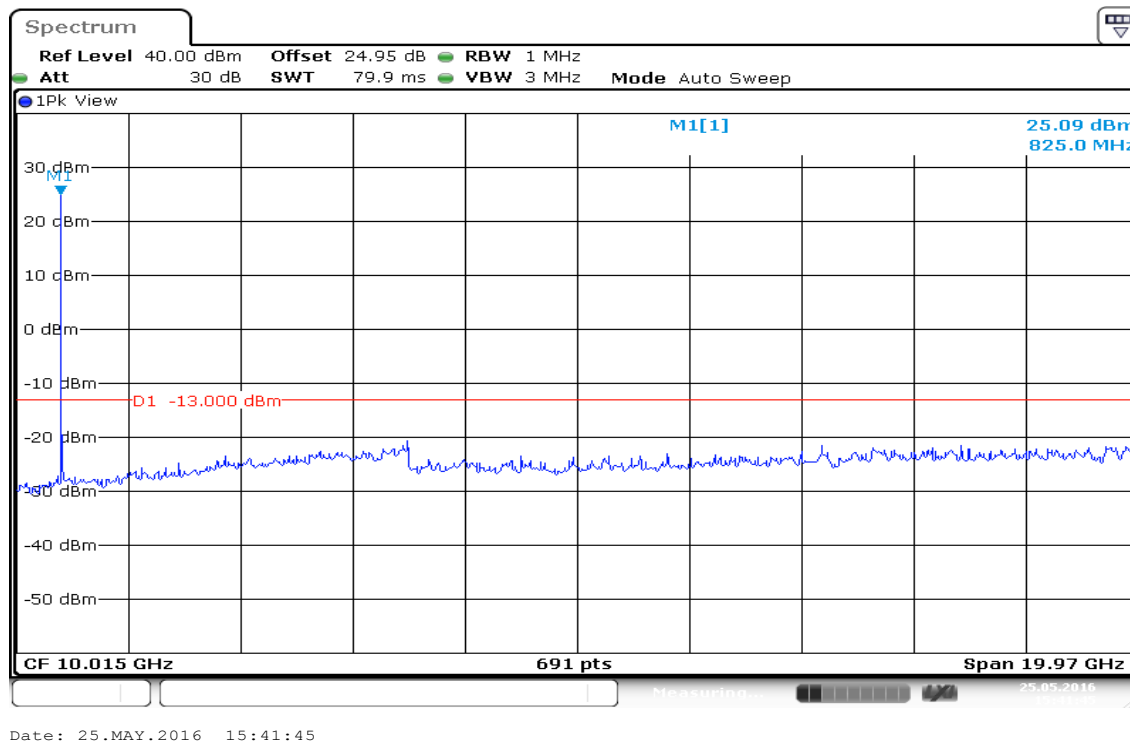
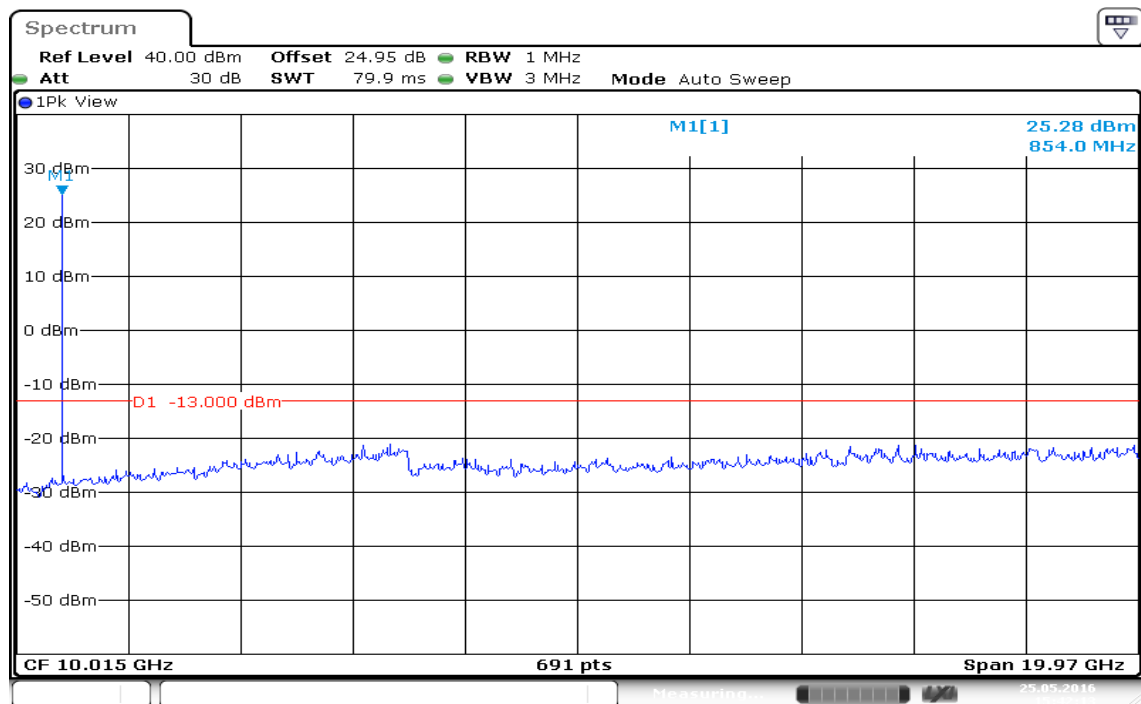


Figure 10-3: Out of Band emission at antenna terminals –1xRTT / BC0 / CH 777



Date: 25.MAY.2016 15:42:13

Figure 11-1: Out of Band emission at antenna terminals –1xRTT / BC1 / CH 25

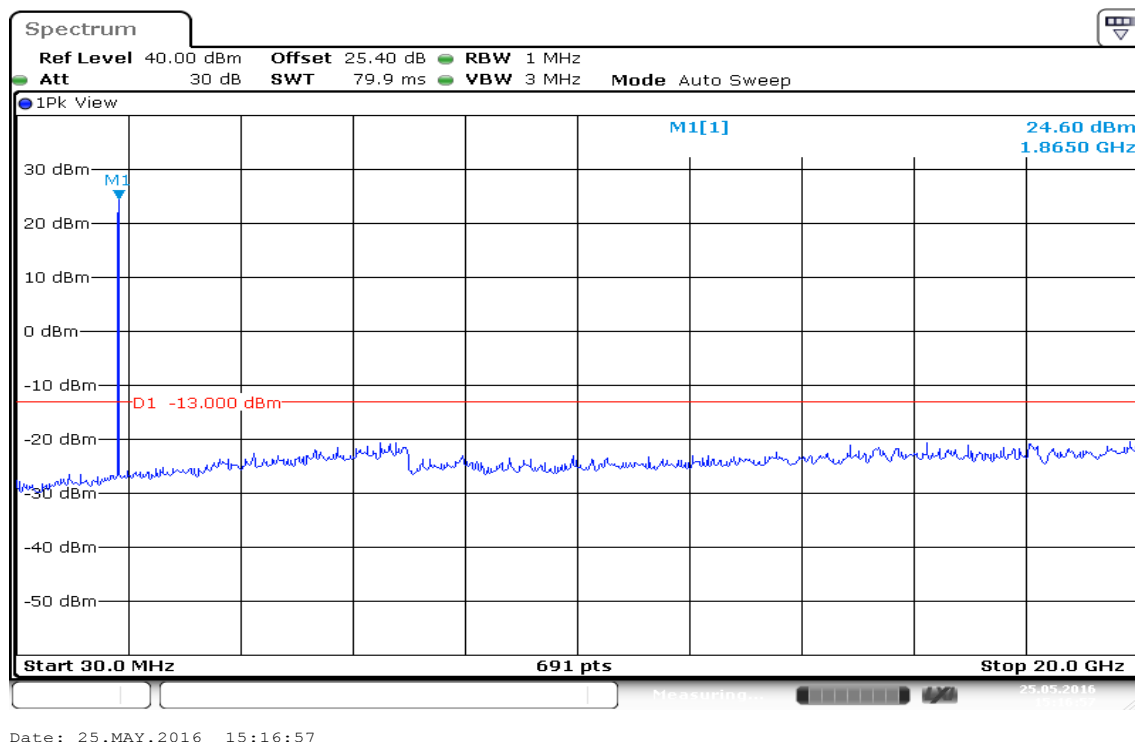


Figure 11-2: Out of Band emission at antenna terminals –1xRTT / BC1 / CH 600

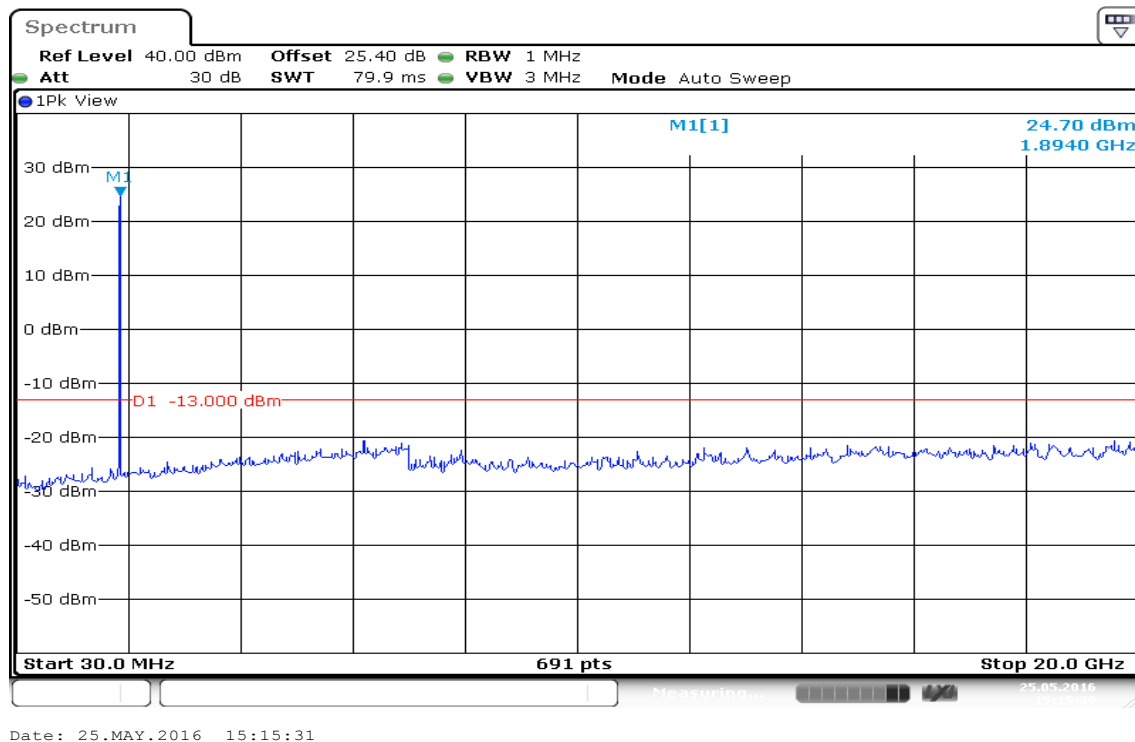
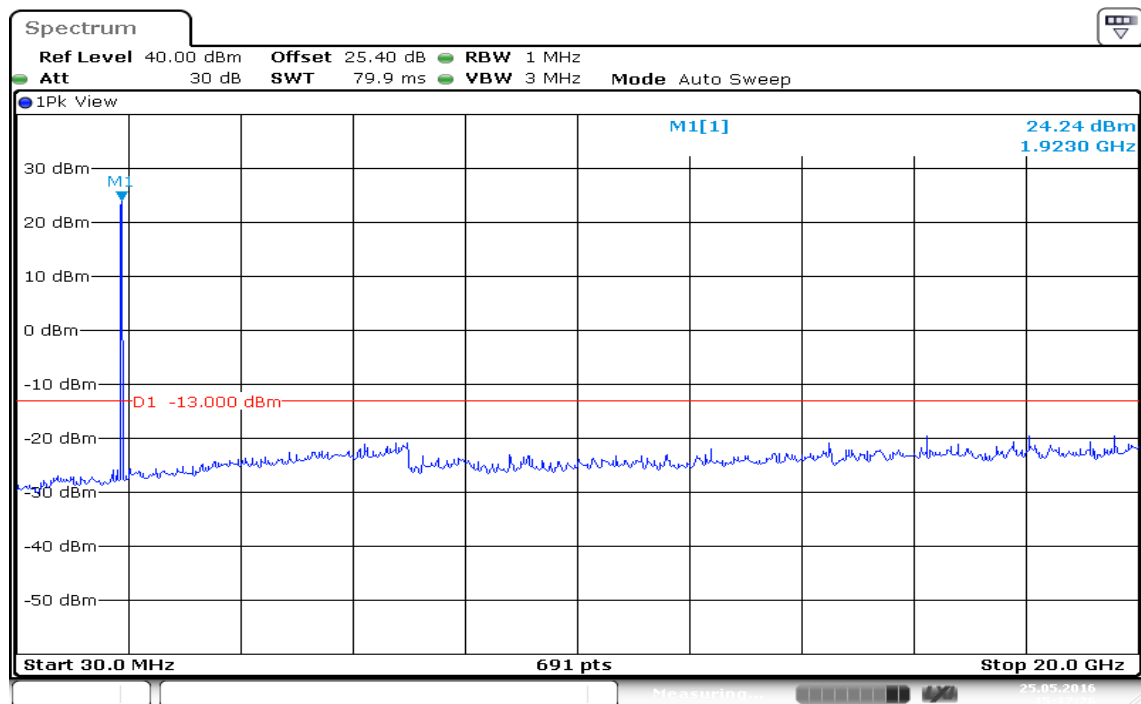


Figure 11-3: Out of Band emission at antenna terminals –1xRTT / BC1 / CH 1175



Date: 25.MAY.2016 15:17:26

Figure 12-1: Out of Band emission at antenna terminals –1xRTT / BC10 / CH 476

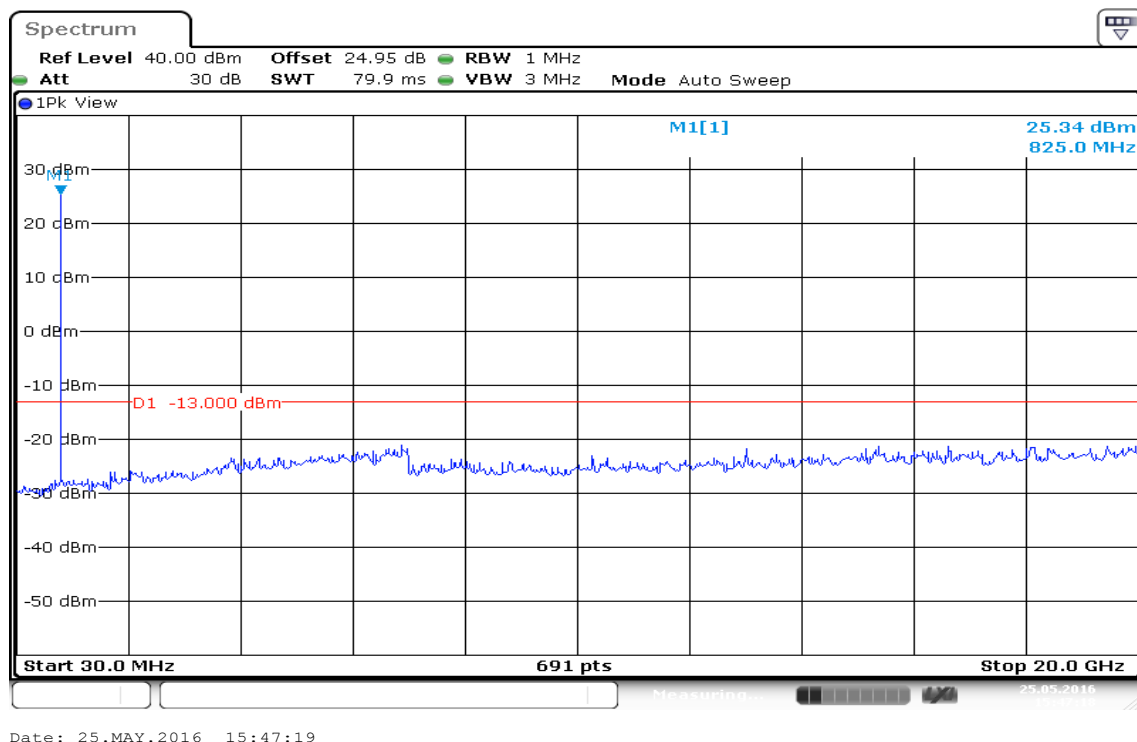


Figure 12-2: Out of Band emission at antenna terminals –1xRTT / BC10 / CH 580

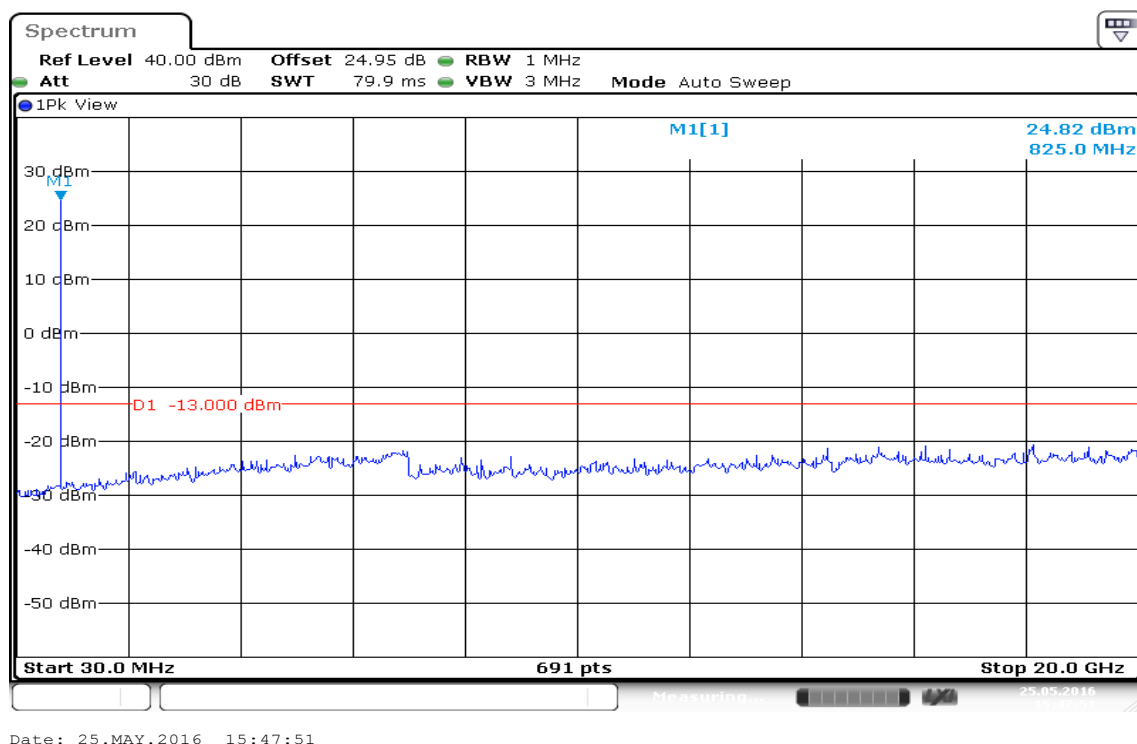
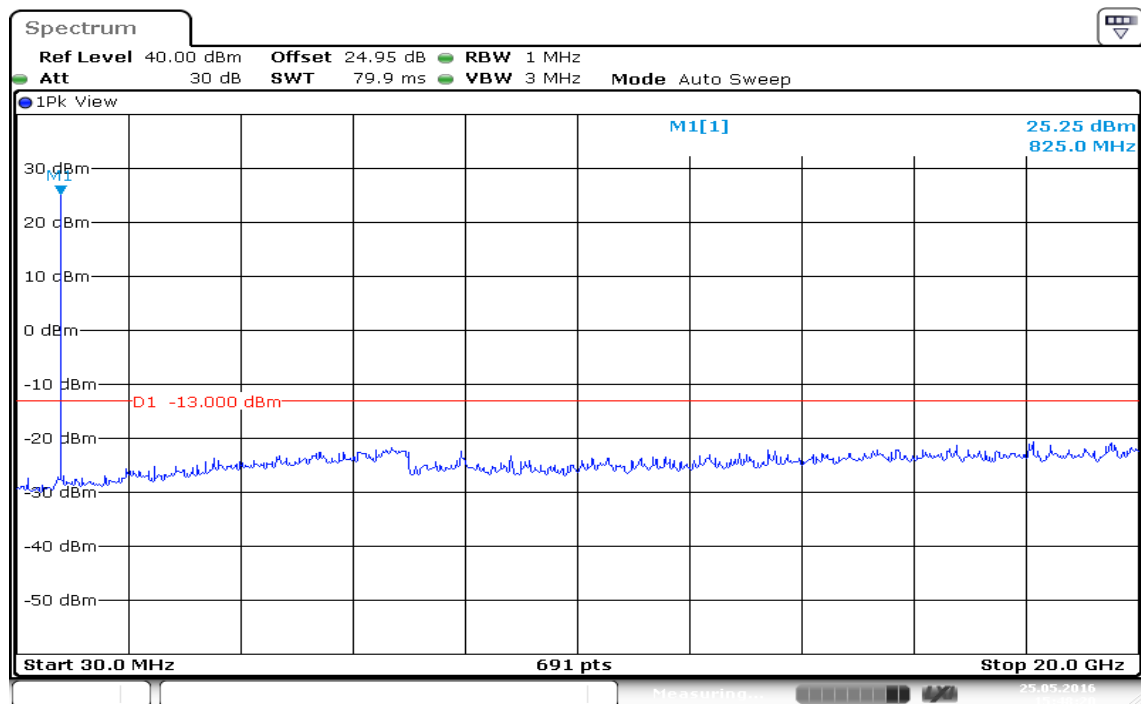


Figure 12-3: Out of Band emission at antenna terminals –1xRTT / BC10 / CH 684



Date: 25.MAY.2016 15:48:21

Figure 13-1: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC0 / CH 1013

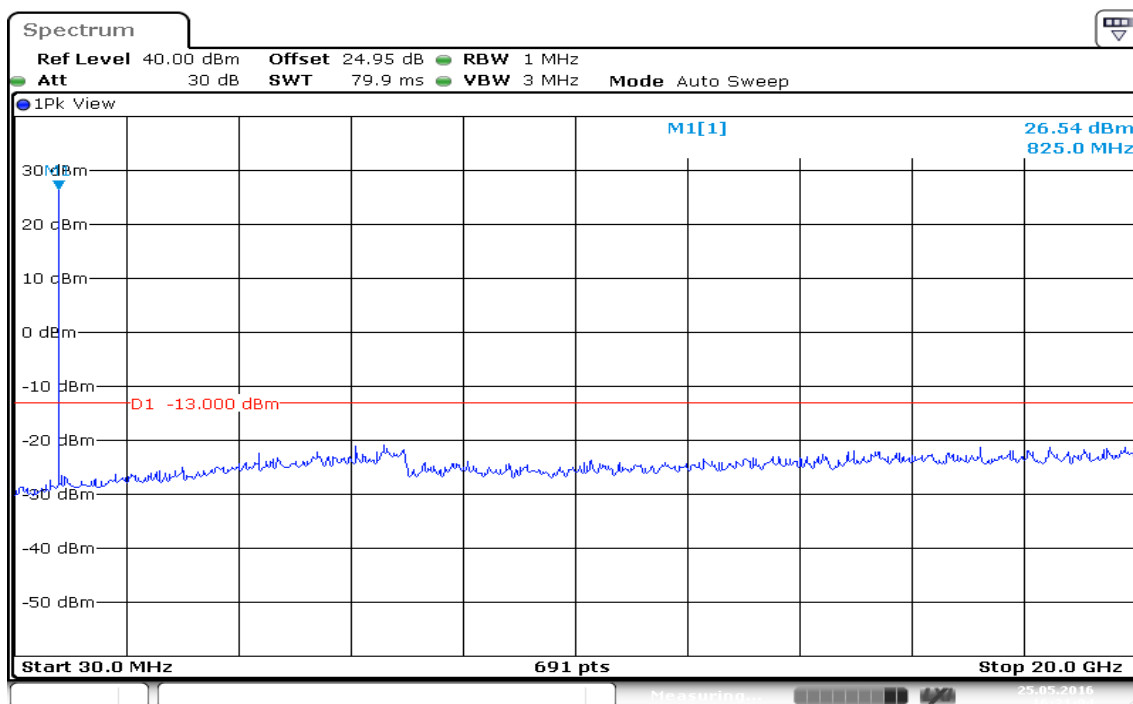


Figure 13-2: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC0 / CH 384

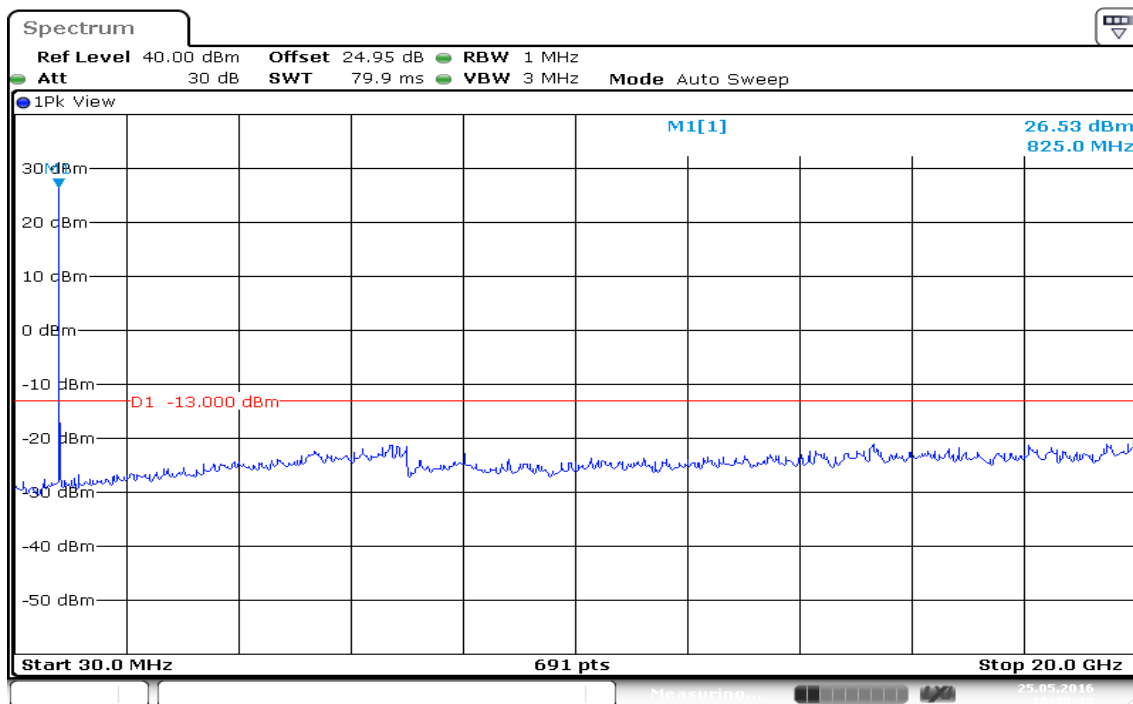
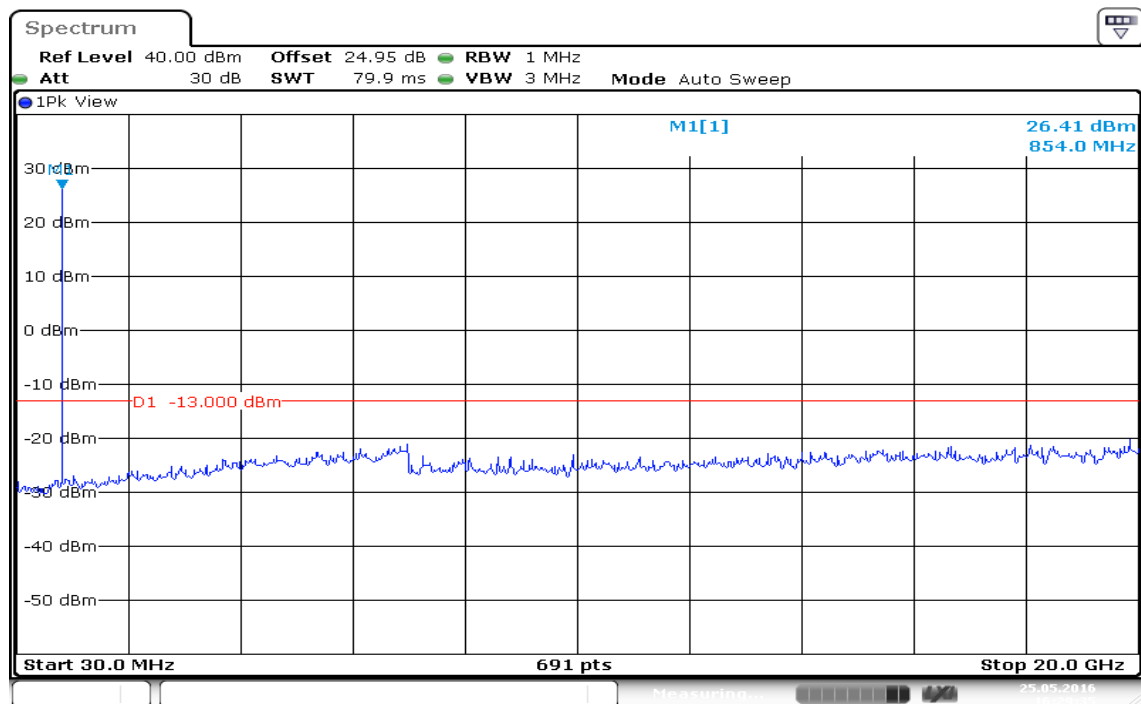


Figure 13-3: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC0 / CH 777



Date: 25.MAY.2016 16:29:35

Figure 14-1: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC1 / CH 25

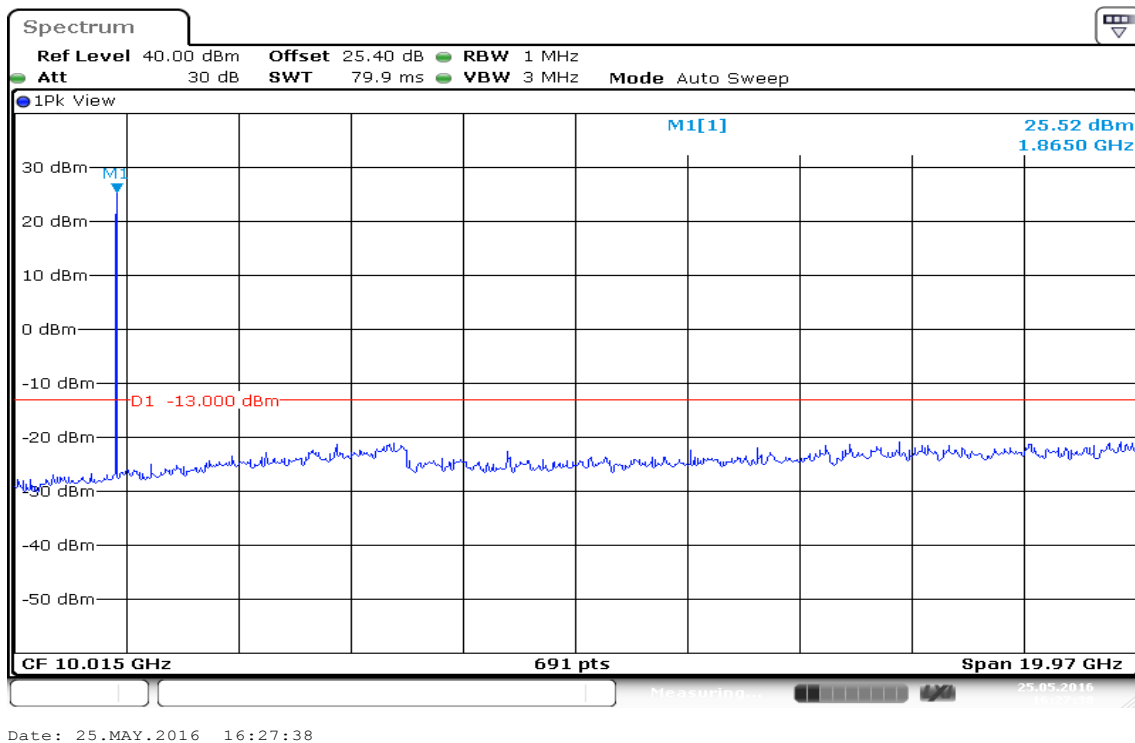


Figure 14-2: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC1 / CH 600

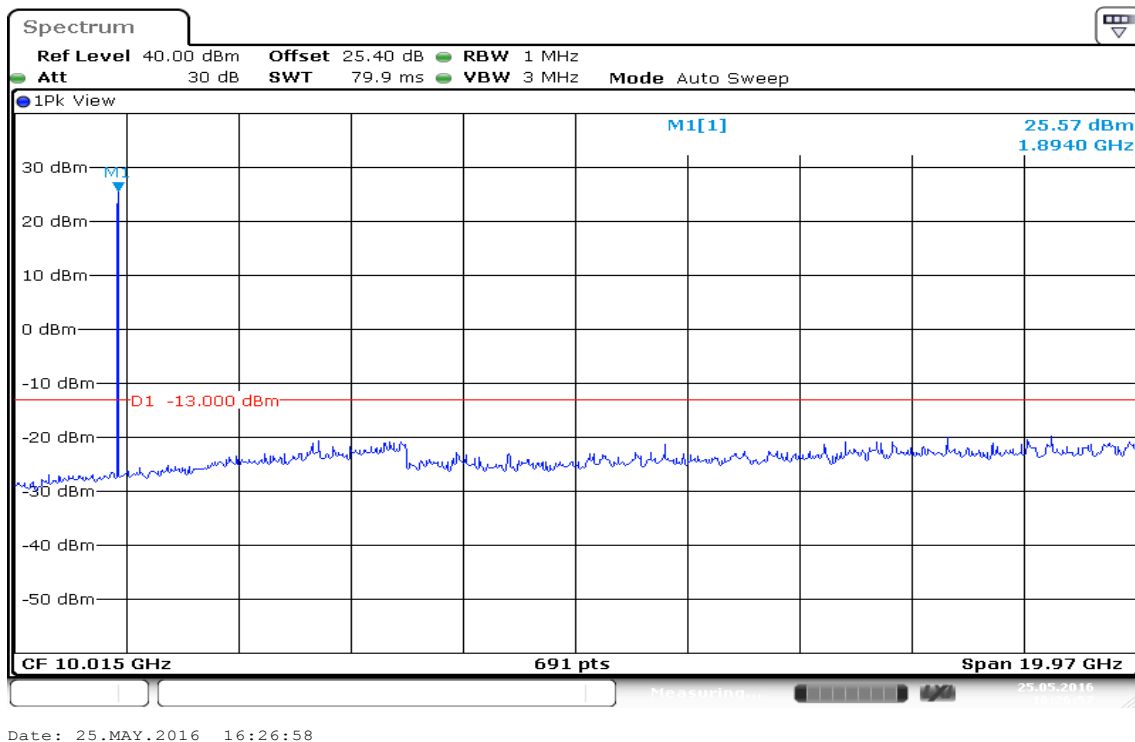
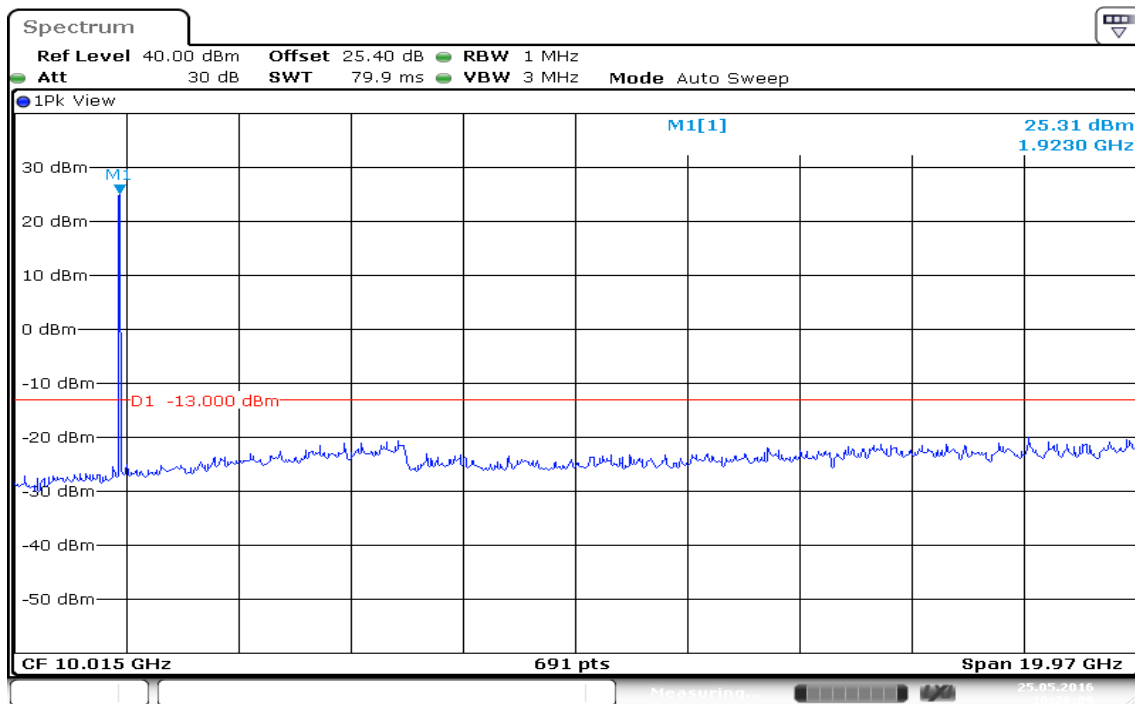


Figure 14-3: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC1 / CH 1175



Date: 25.MAY.2016 16:26:09

Figure 15-1: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC10 / CH 476

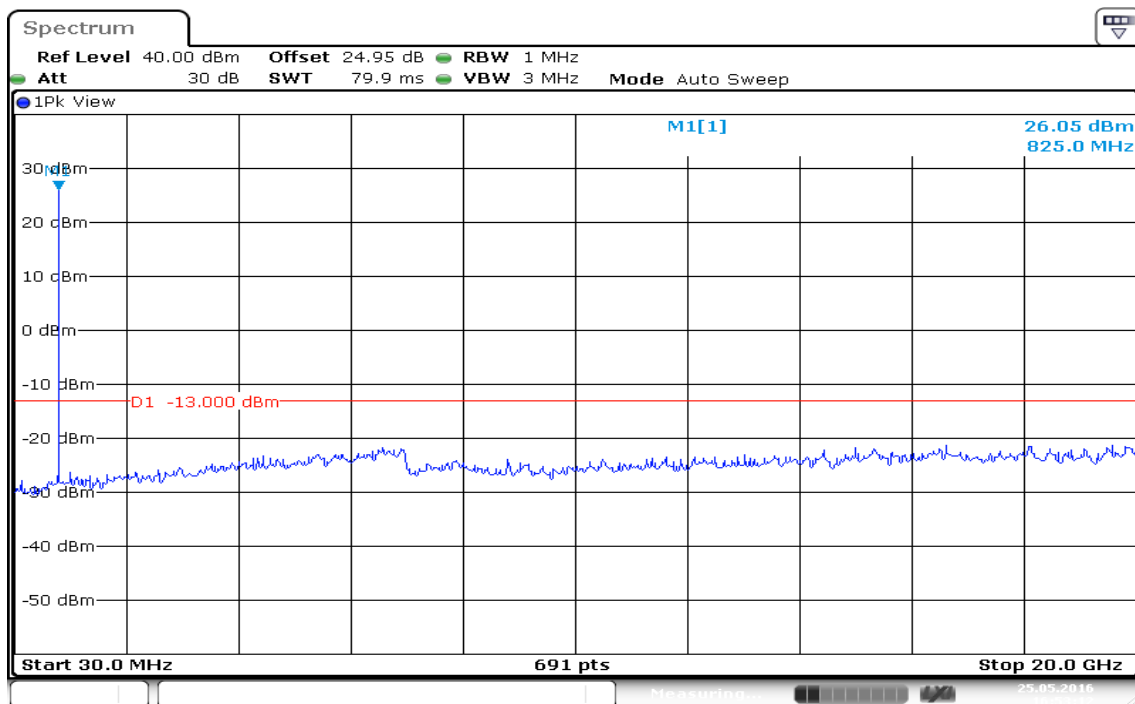


Figure 15-2: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC10 / CH 580

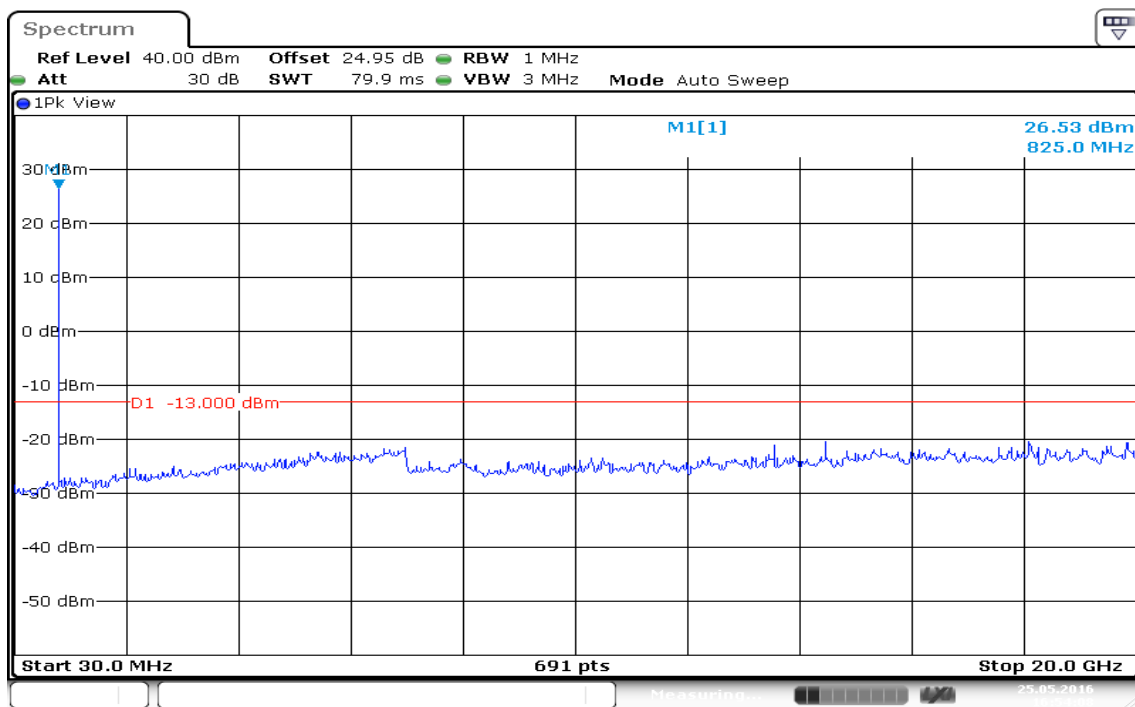
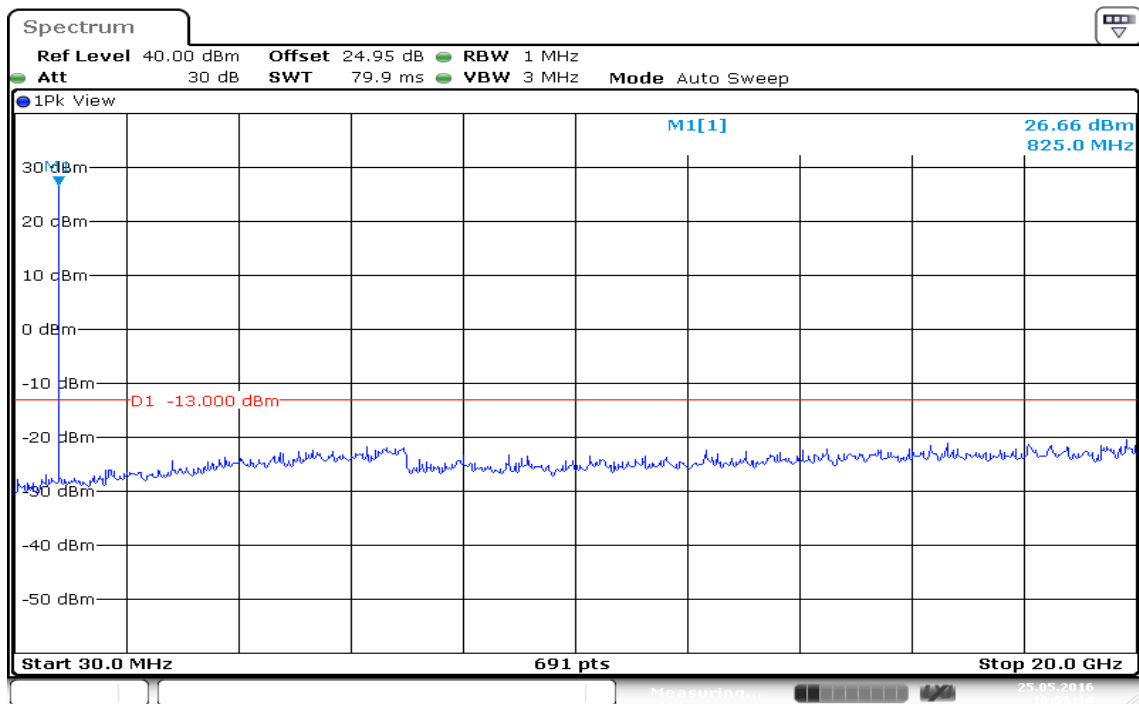


Figure 15-3: Out of Band emission at antenna terminals –1xEVDO Rev.0 / BC10 / CH 684



Date: 25.MAY.2016 16:56:14

Figure 16-1: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC0 / CH 1013

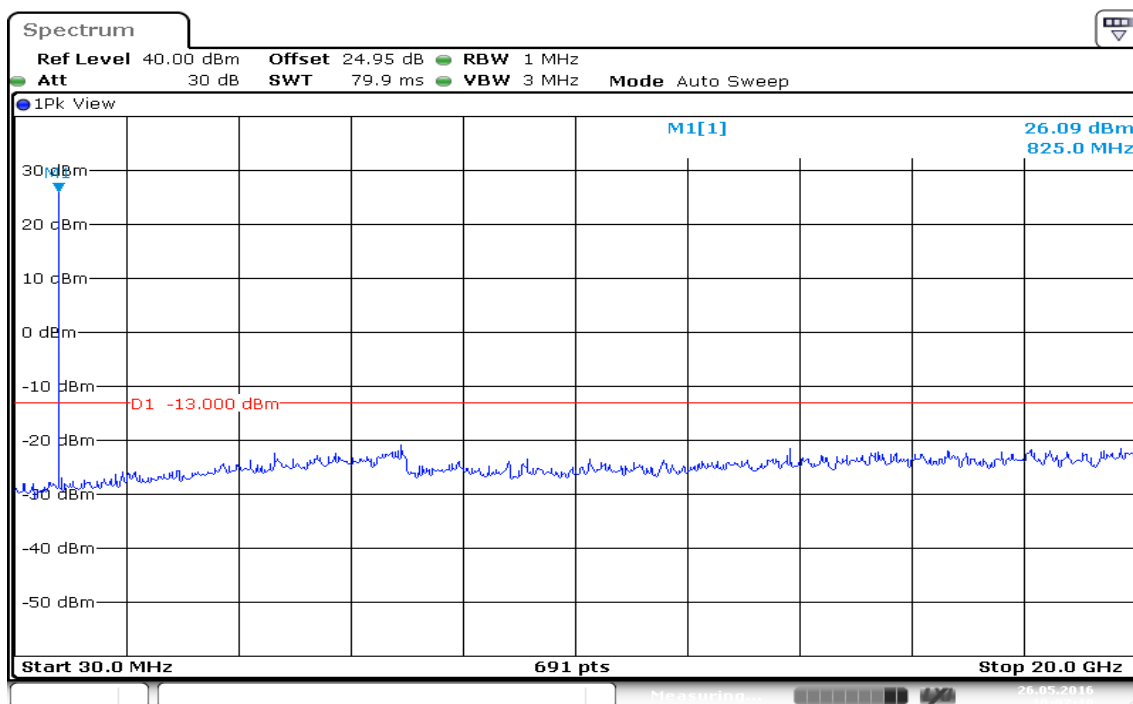


Figure 16-2: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC0 / CH 384

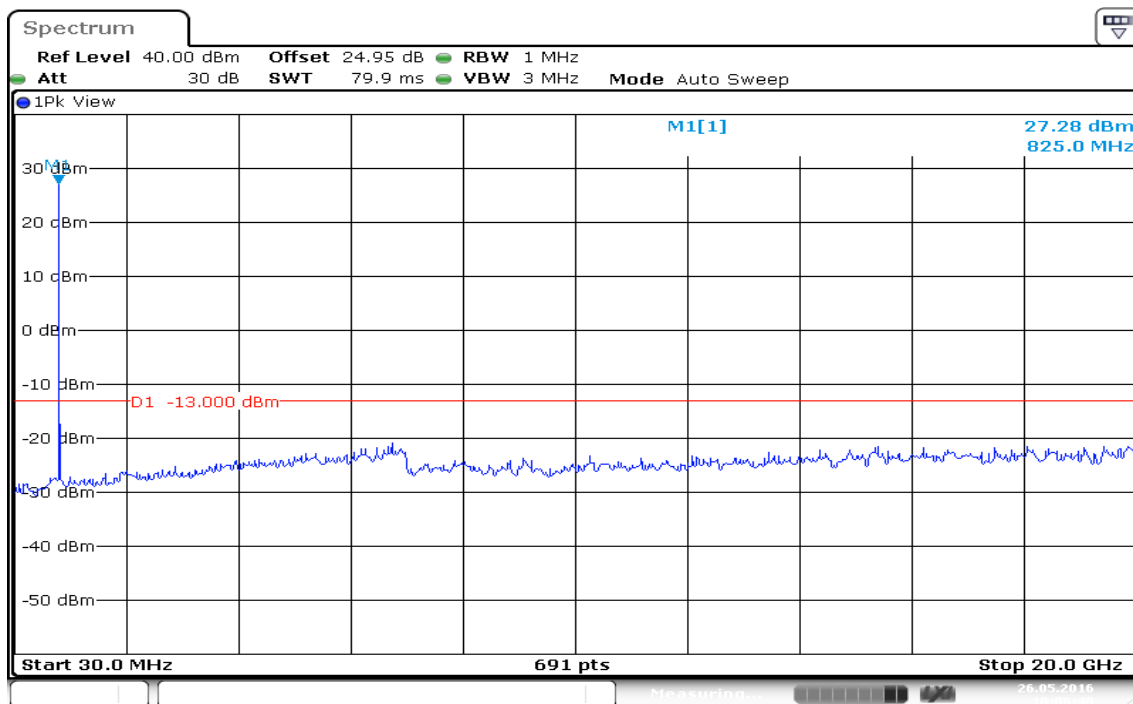
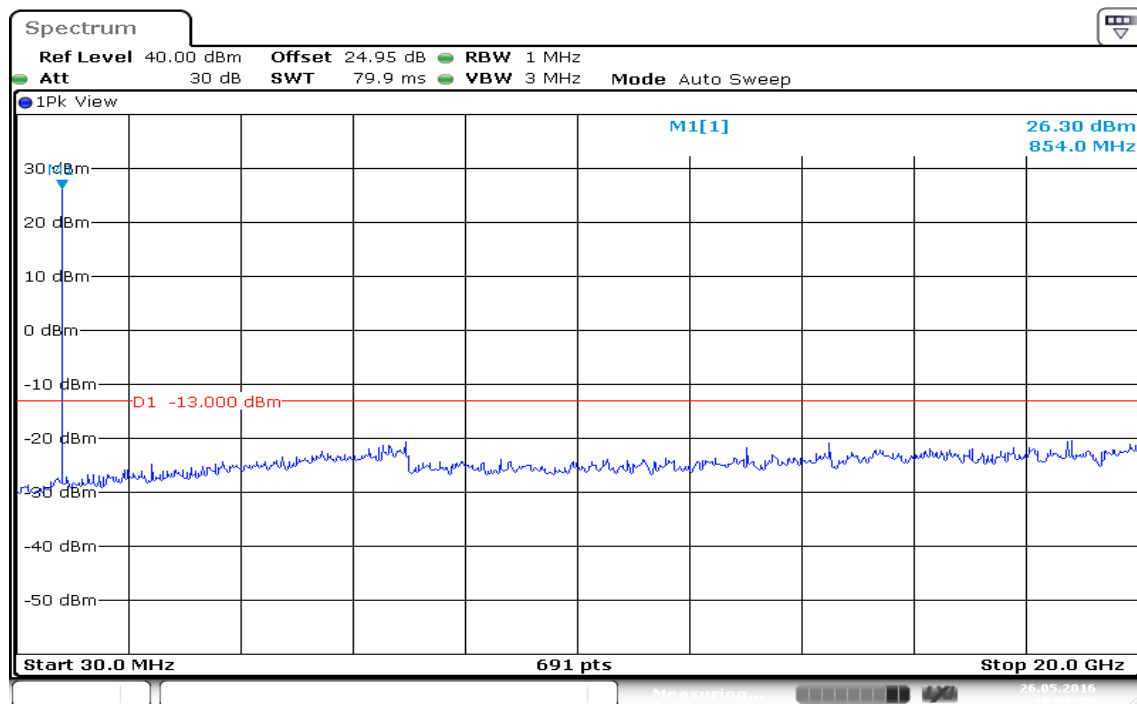


Figure 16-3: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC0 / CH 777



Date: 26.MAY.2016 10:06:06

Figure 17-1: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC1 / CH 25

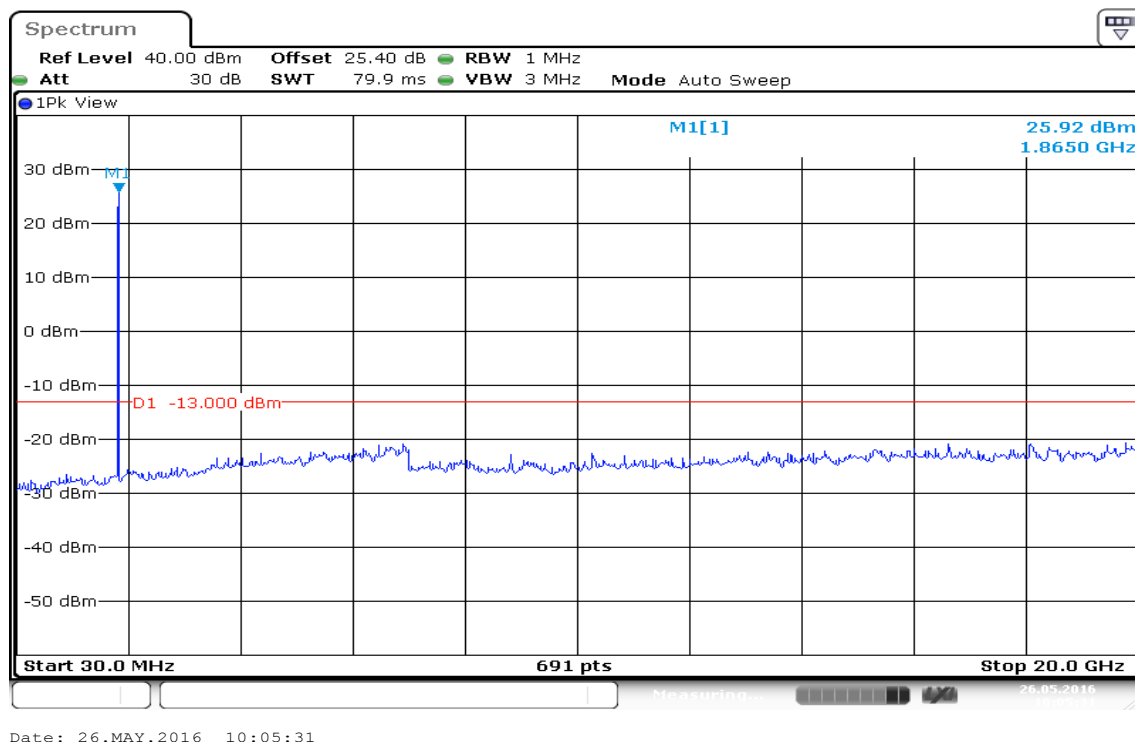


Figure 17-2: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC1 / CH 600

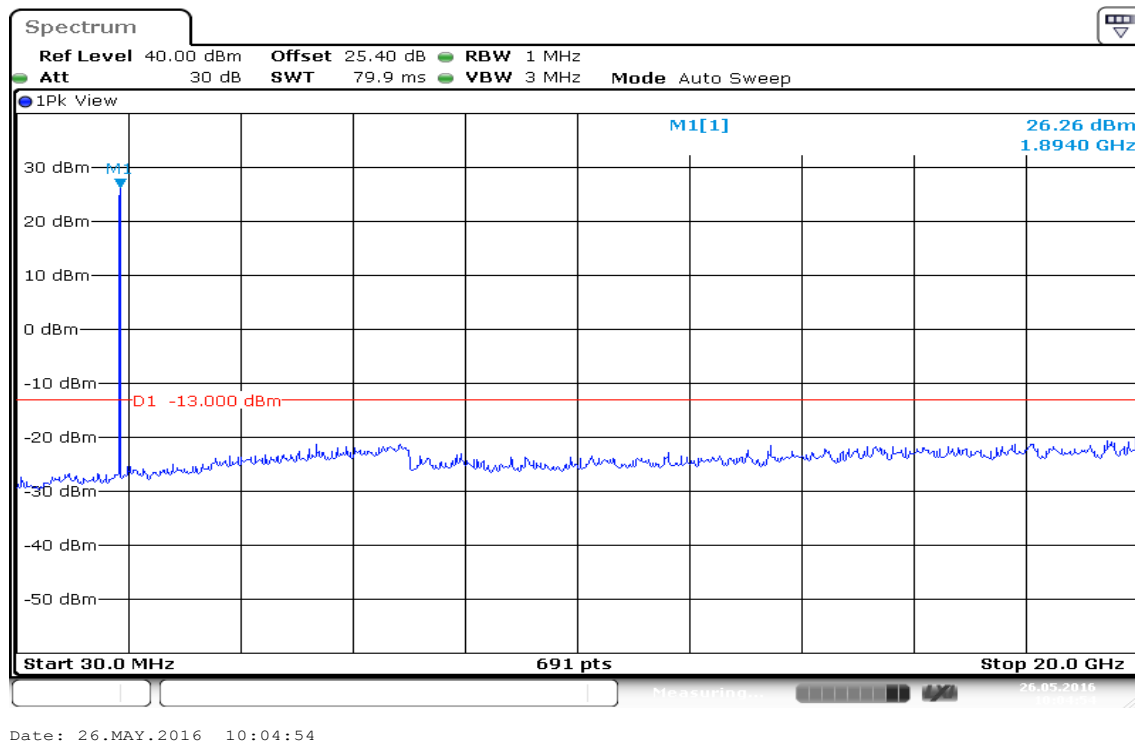
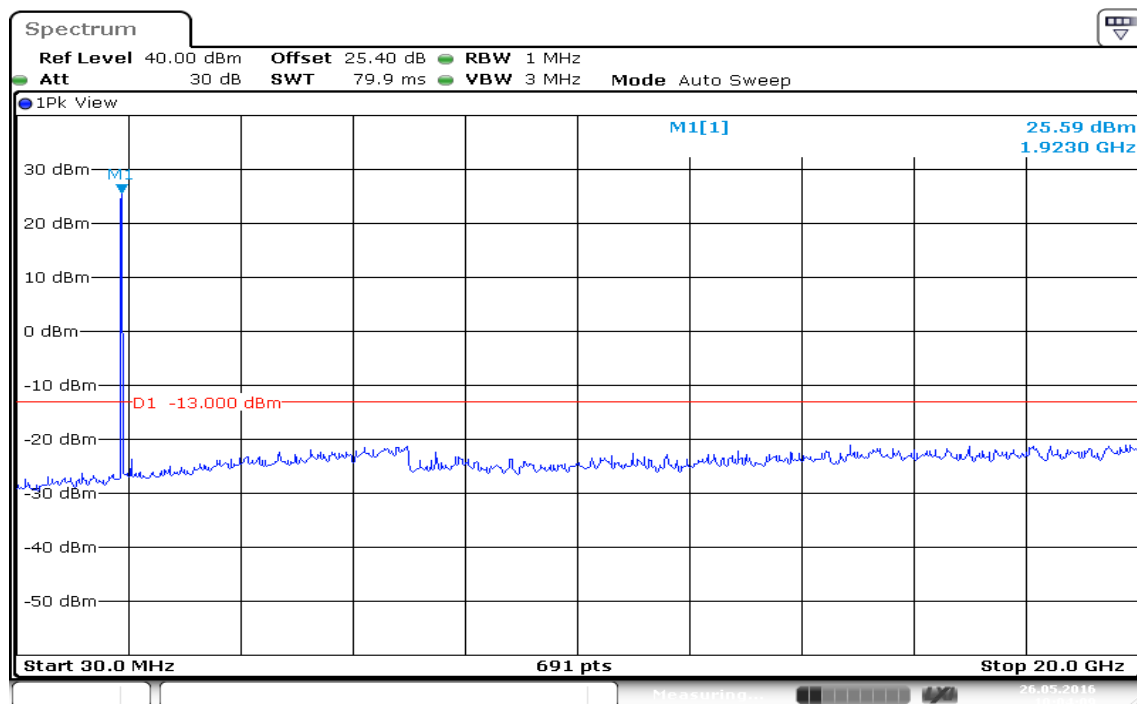
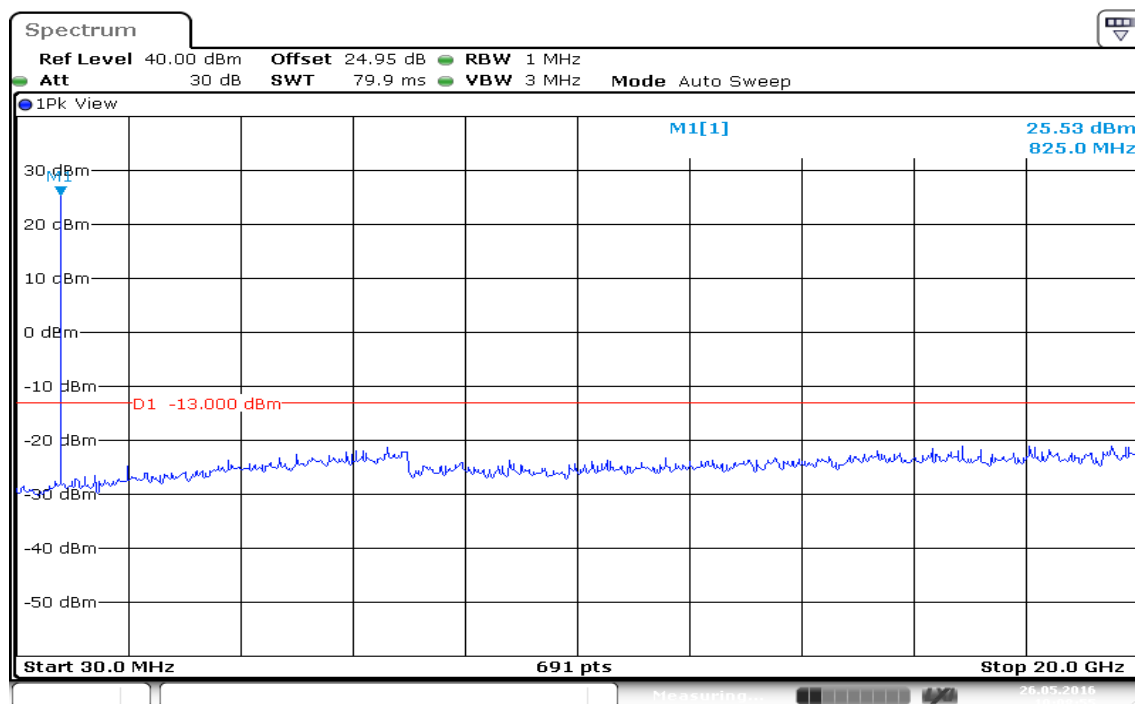


Figure 17-3: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC1 / CH 1175



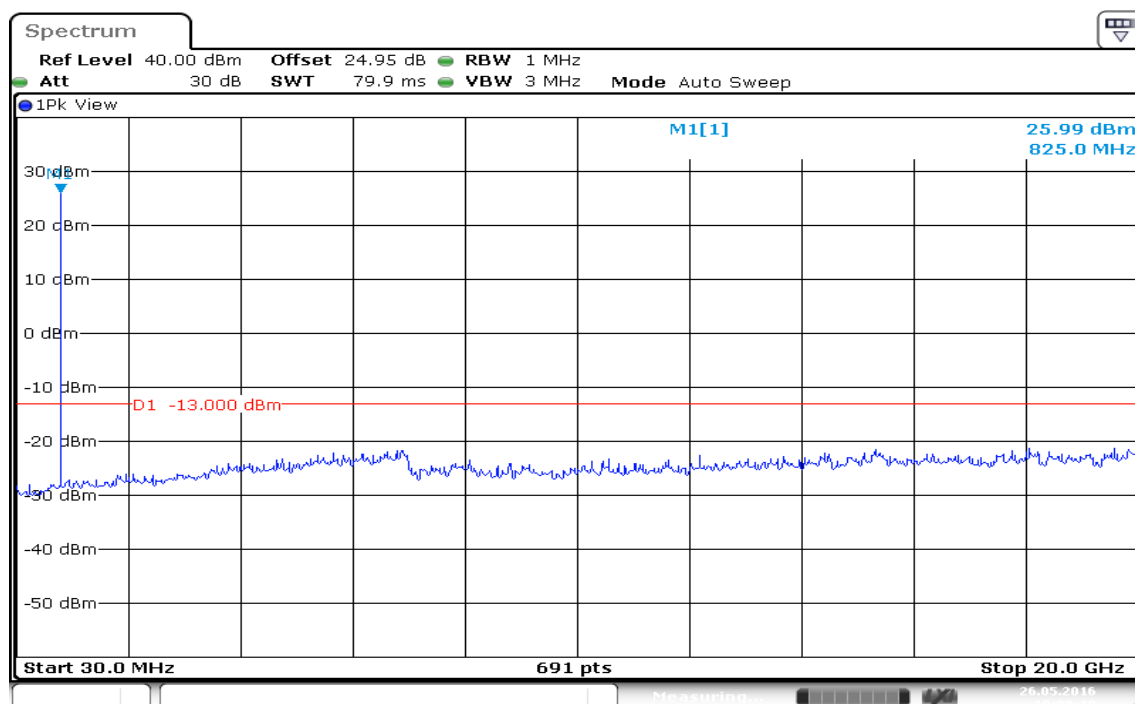
Date: 26.MAY.2016 10:04:08

Figure 18-1: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC10 / CH 476



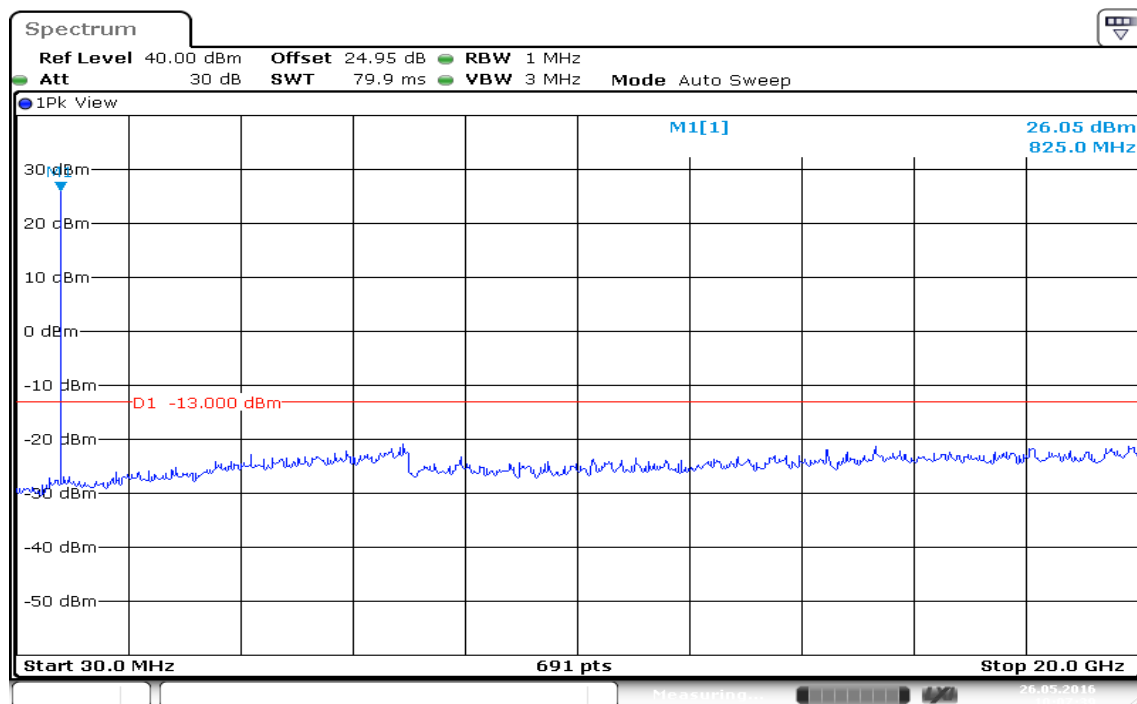
Date: 26.MAY.2016 10:08:55

Figure 18-2: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC10 / CH 580



Date: 26.MAY.2016 10:08:19

Figure 18-3: Out of Band emission at antenna terminals –1xEVDO Rev.A / BC10 / CH 684



Date: 26.MAY.2016 10:07:39

Figure 19-1: Band Edge emissions –CDMA / BC0 / CH 1013

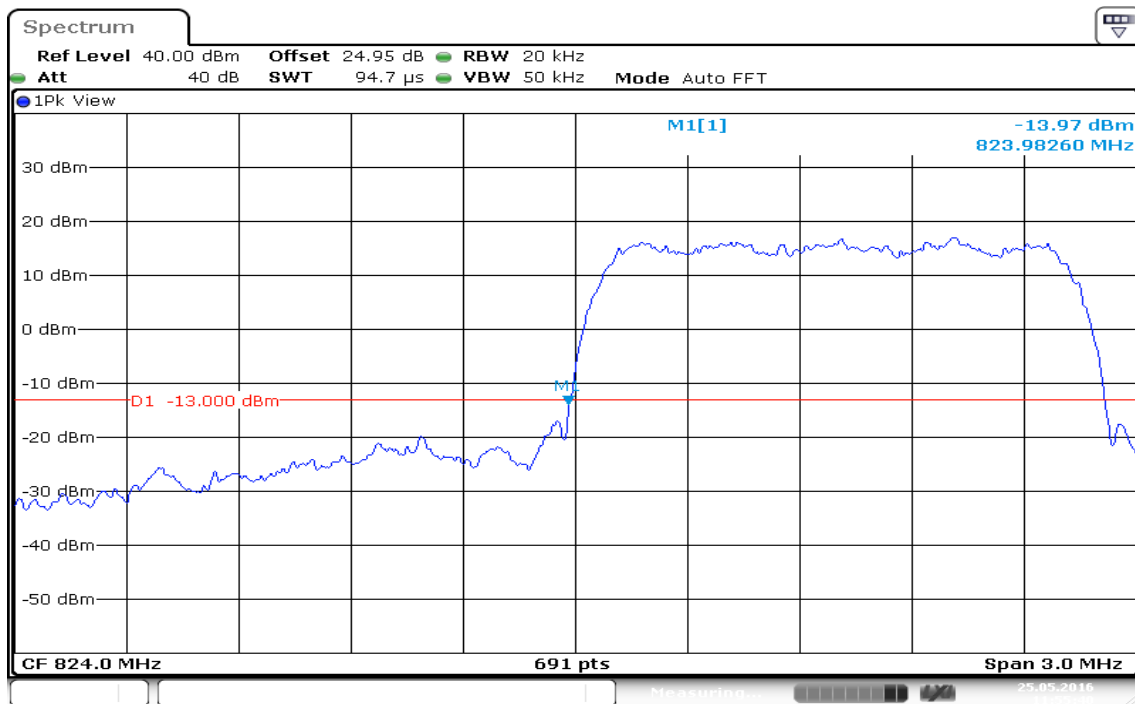


Figure 19-2: Band Edge emissions –CDMA / BC0 / CH 777

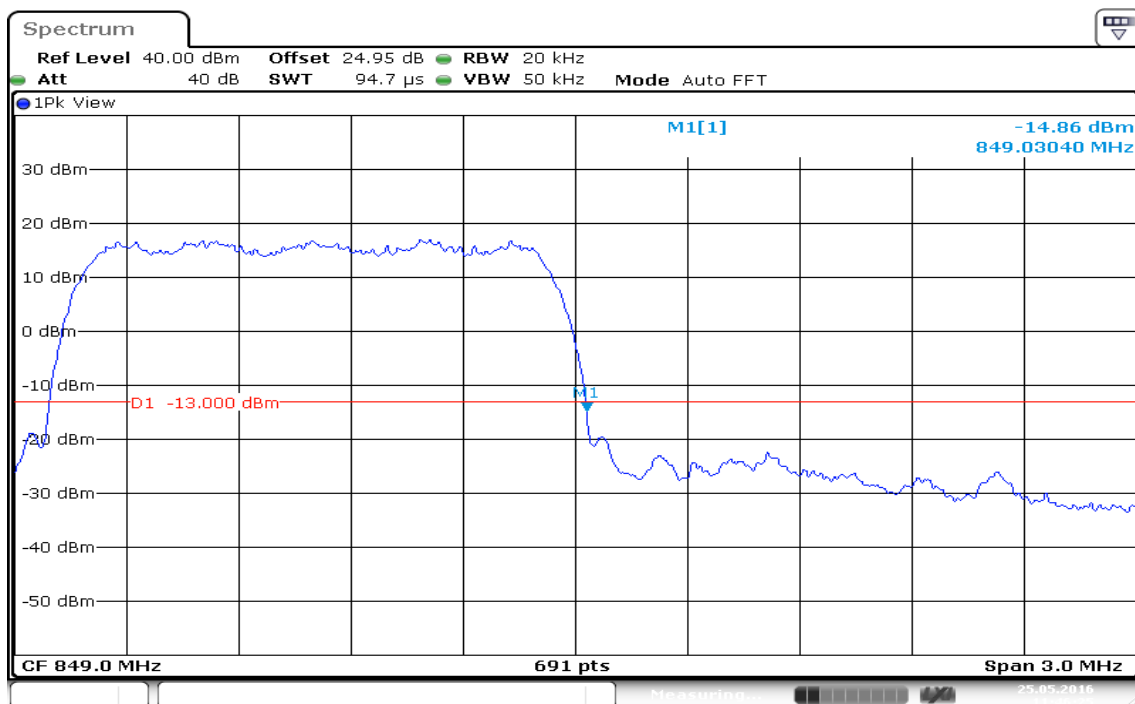


Figure 20-1: Band Edge emissions –CDMA / BC1 / CH 25

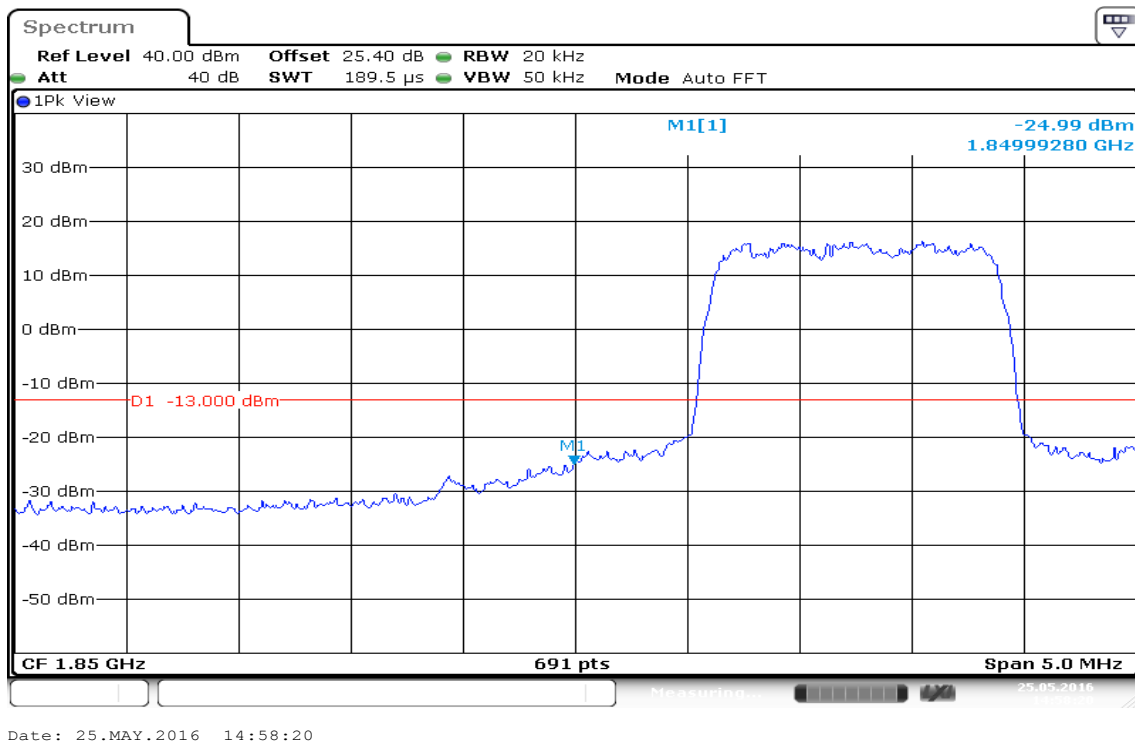


Figure 20-2: Band Edge emissions –CDMA / BC1 / CH 1175

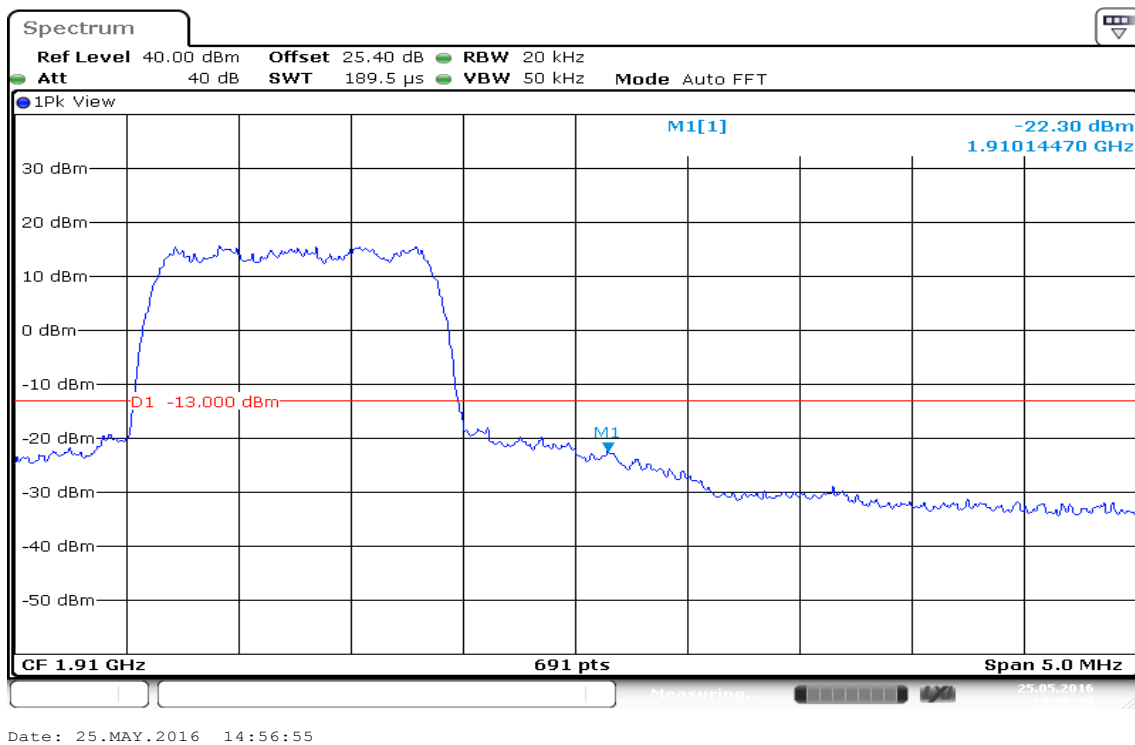


Figure 21-1: Band Edge emissions –CDMA / BC10 / CH 476

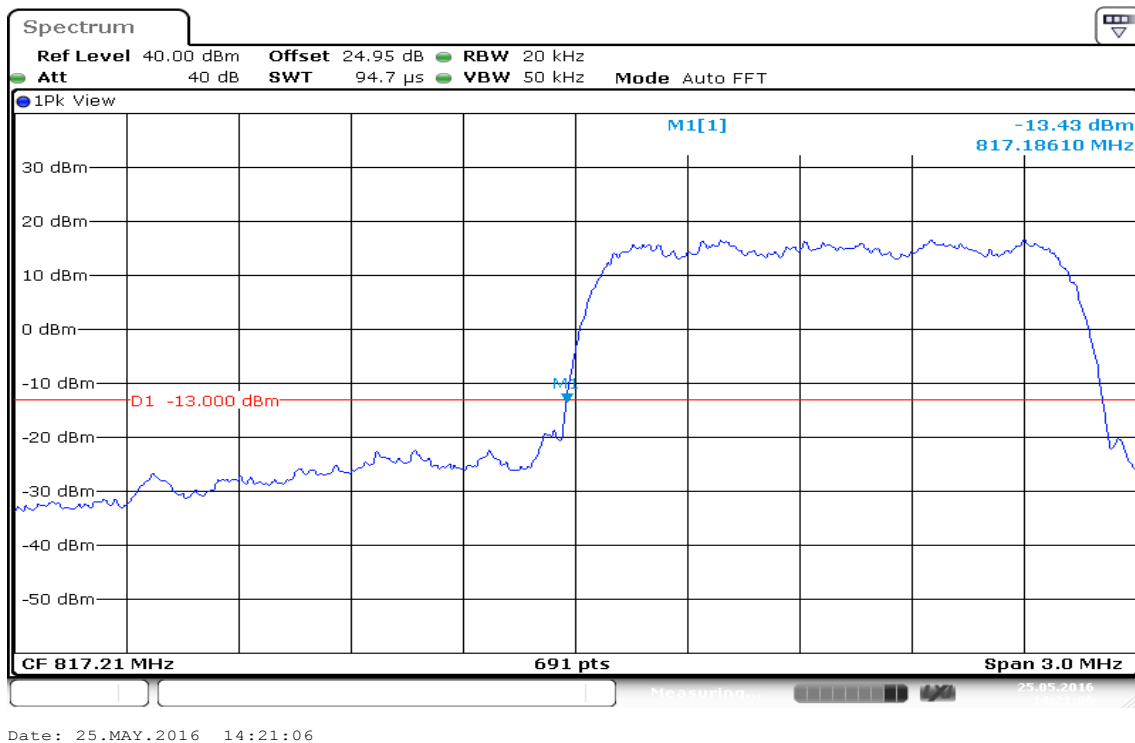


Figure 21-2: Band Edge emissions –CDMA / BC10 / CH 684

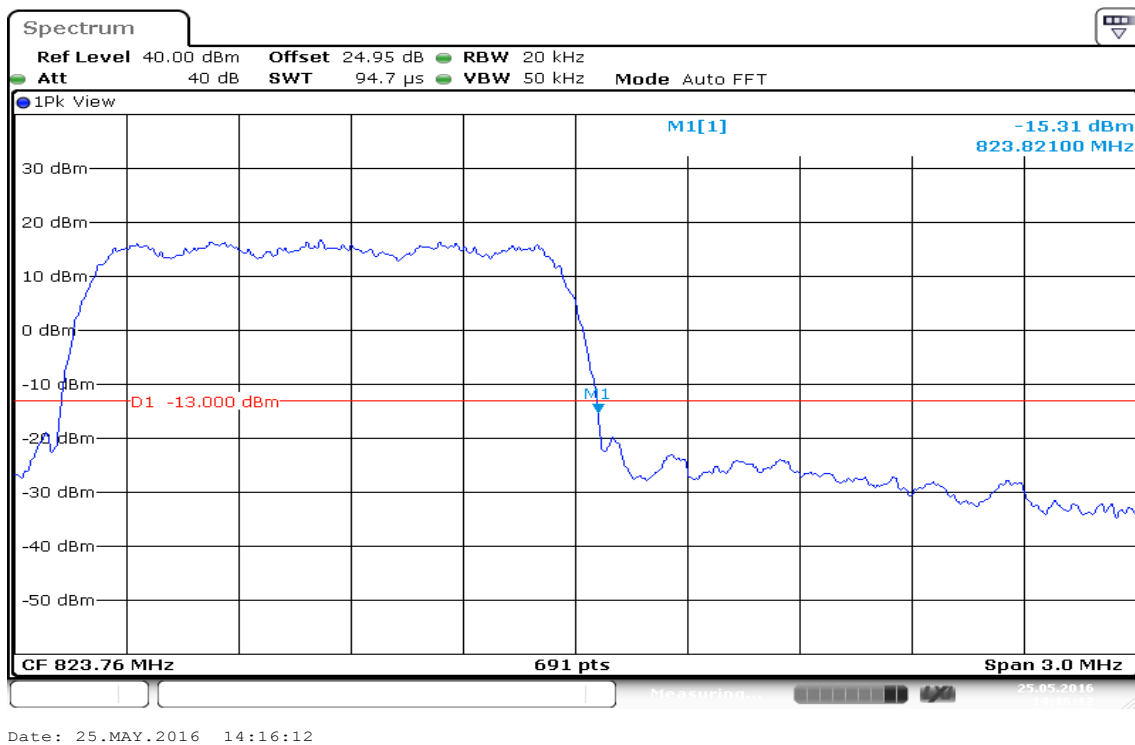


Figure 22-1: Band Edge emissions –1xRTT / BC0 / CH 1013

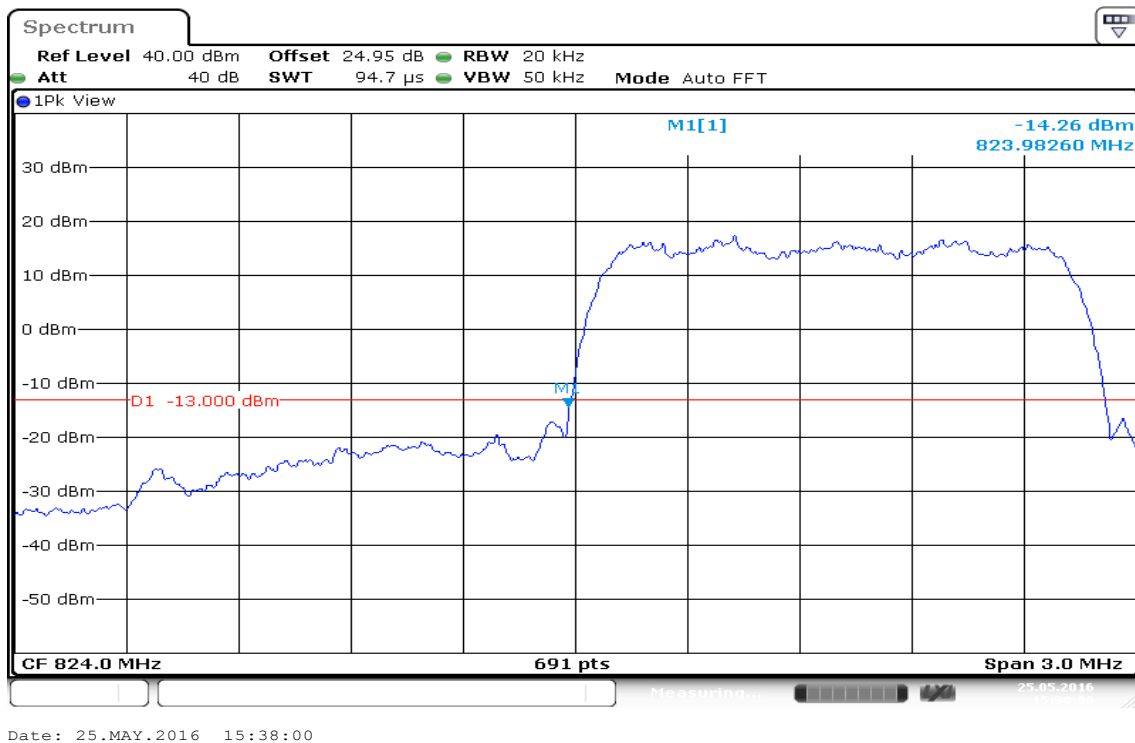


Figure 22-2: Band Edge emissions –1xRTT / BC0 / CH 777

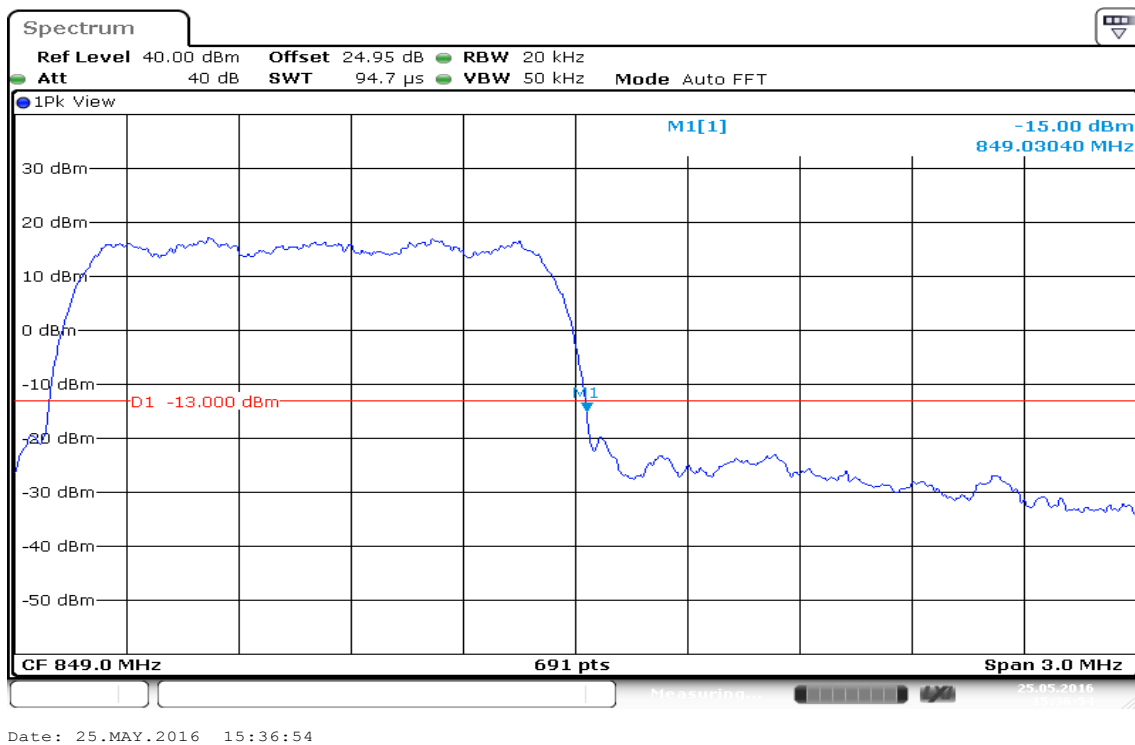


Figure 23-1: Band Edge emissions –1xRTT / BC1 / CH 25

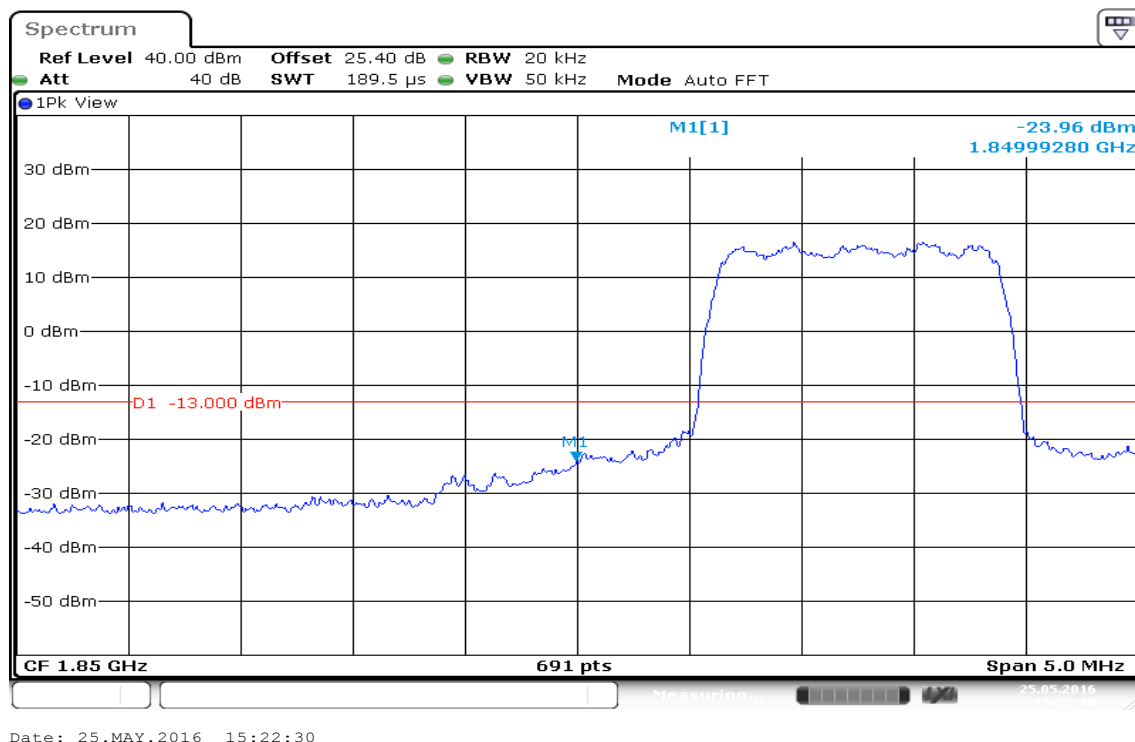


Figure 23-2: Band Edge emissions –1xRTT / BC1 / CH 1175

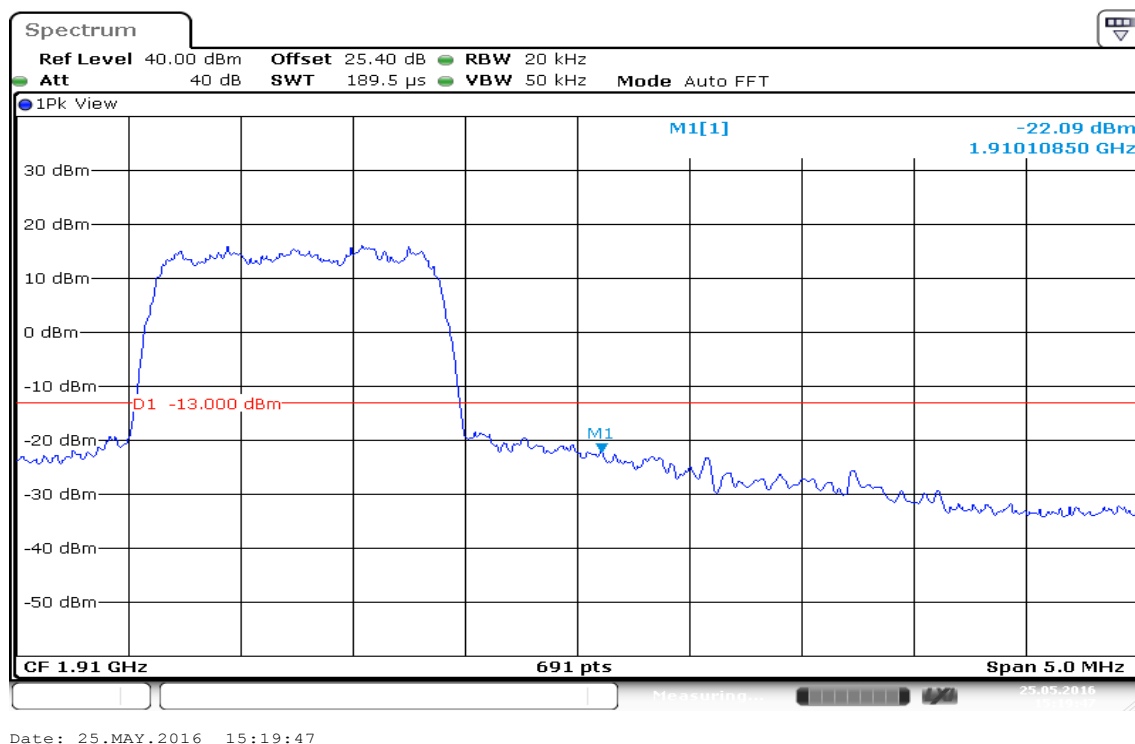


Figure 24-1: Band Edge emissions –1xRTT / BC10 / CH 476

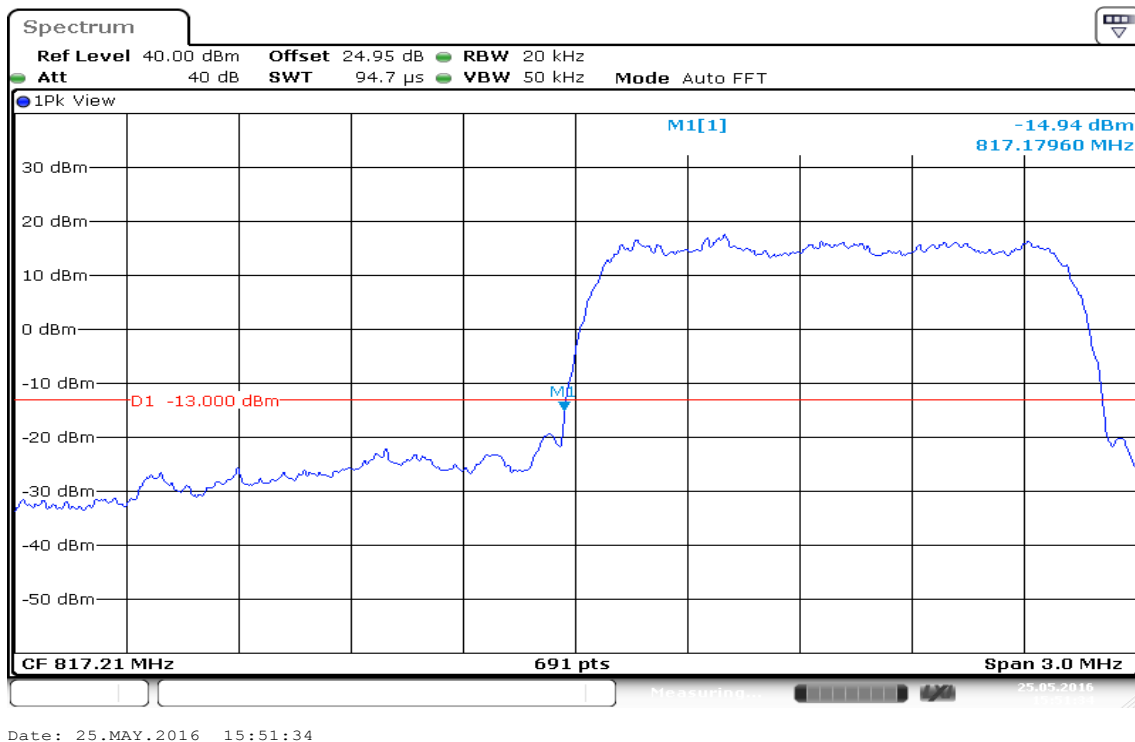


Figure 24-2: Band Edge emissions –1xRTT / BC10 / CH 684

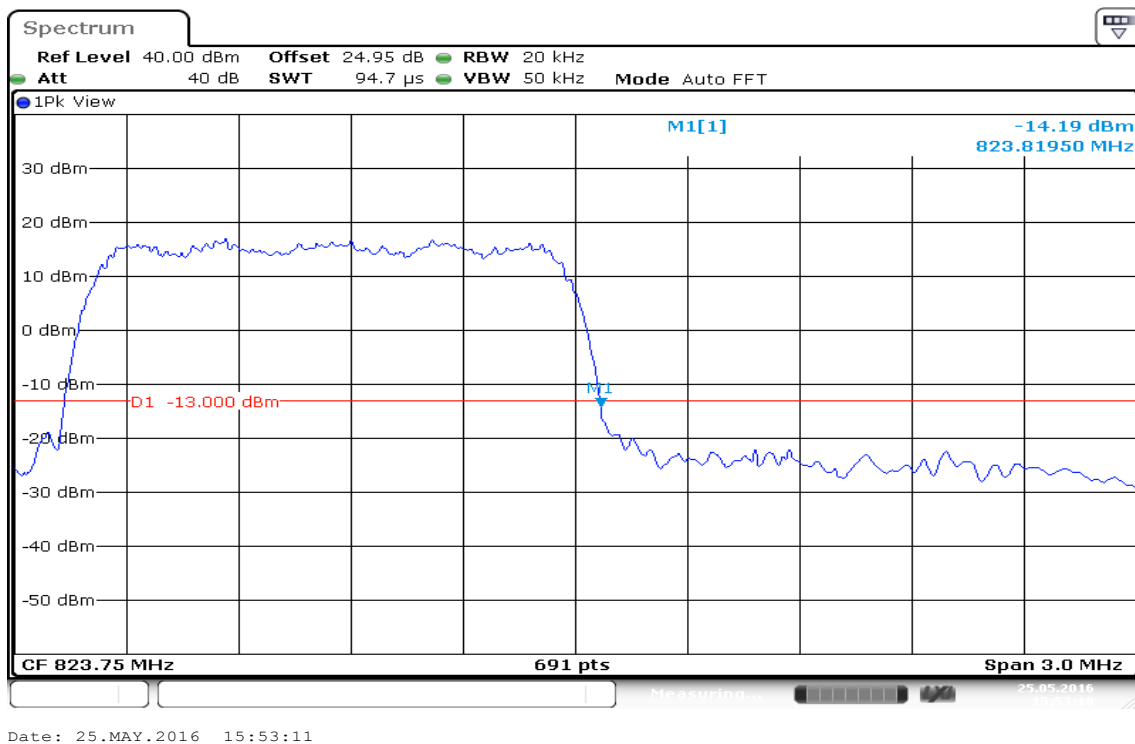


Figure 25-1: Band Edge emissions –1xEVDO Rev.0 / BC0 / CH 1013

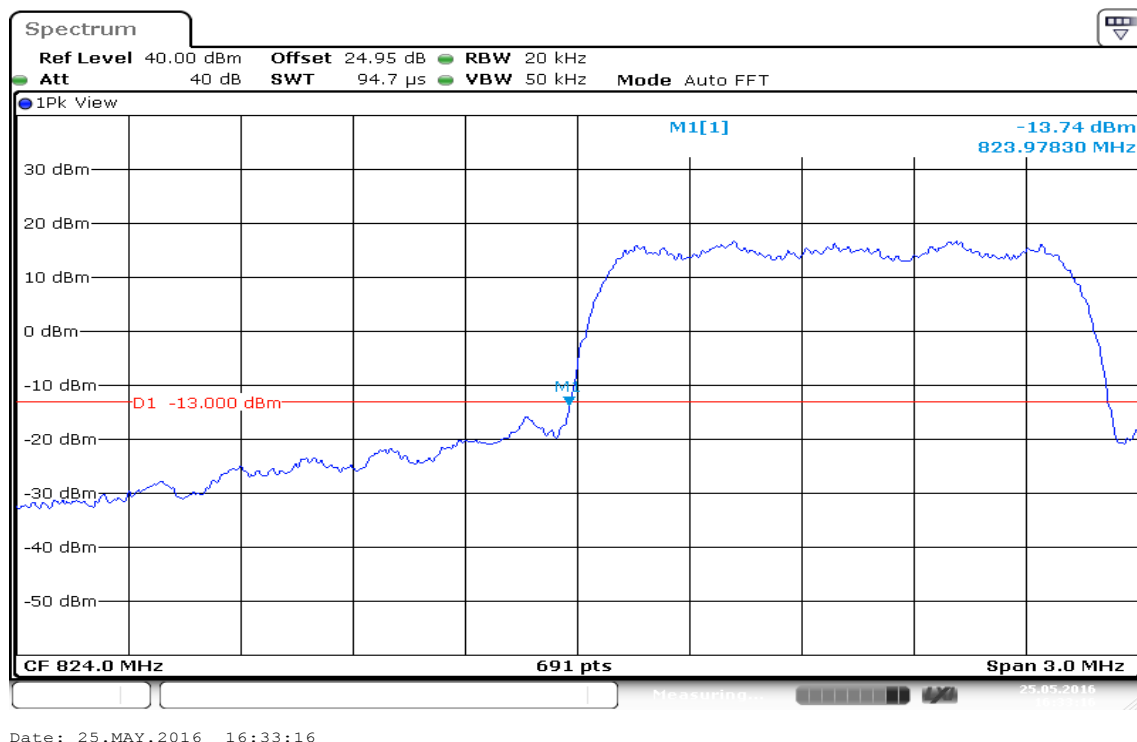


Figure 25-2: Band Edge emissions –1xEVDO Rev.0 / BC0 / CH 777

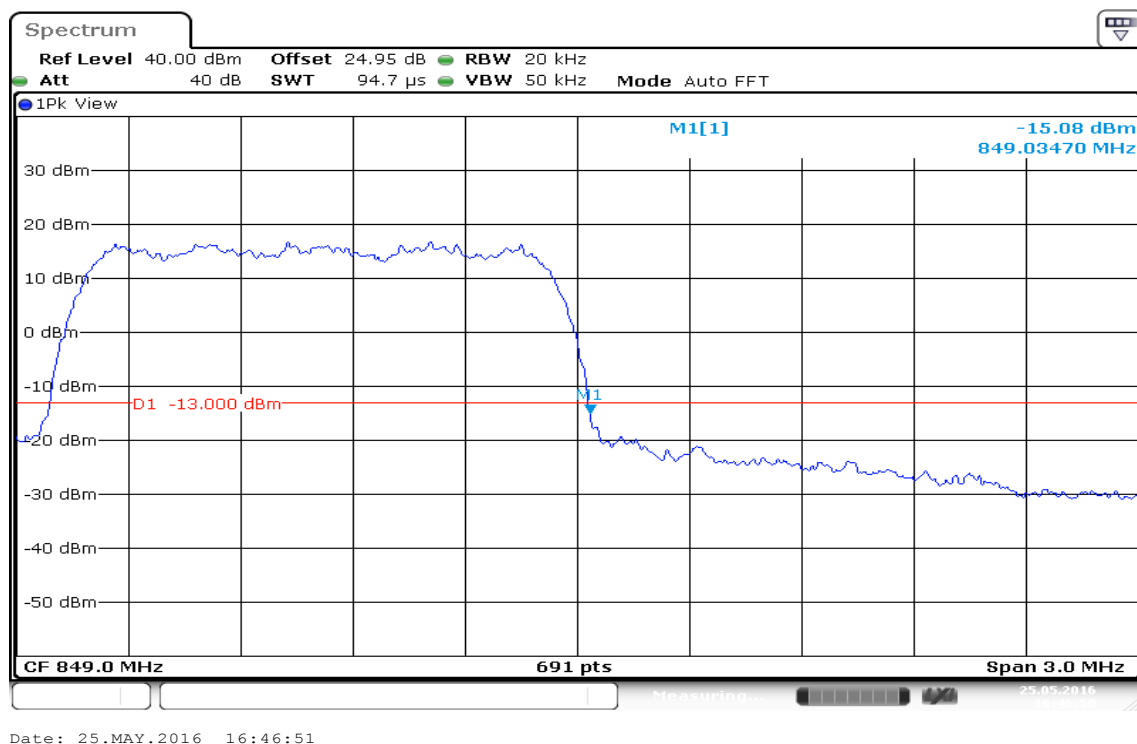


Figure 26-1: Band Edge emissions –1xEVDO Rev.0 / BC1 / CH 25

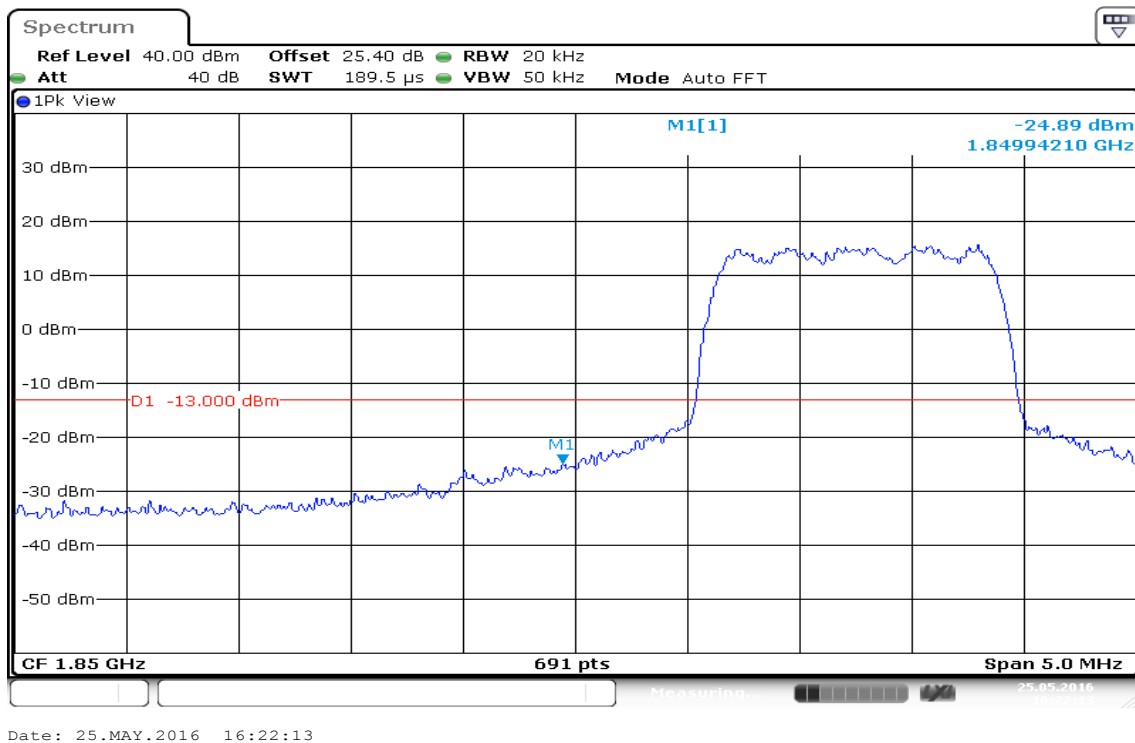


Figure 26-2: Band Edge emissions –1xEVDO Rev.0 / BC1 / CH 1175

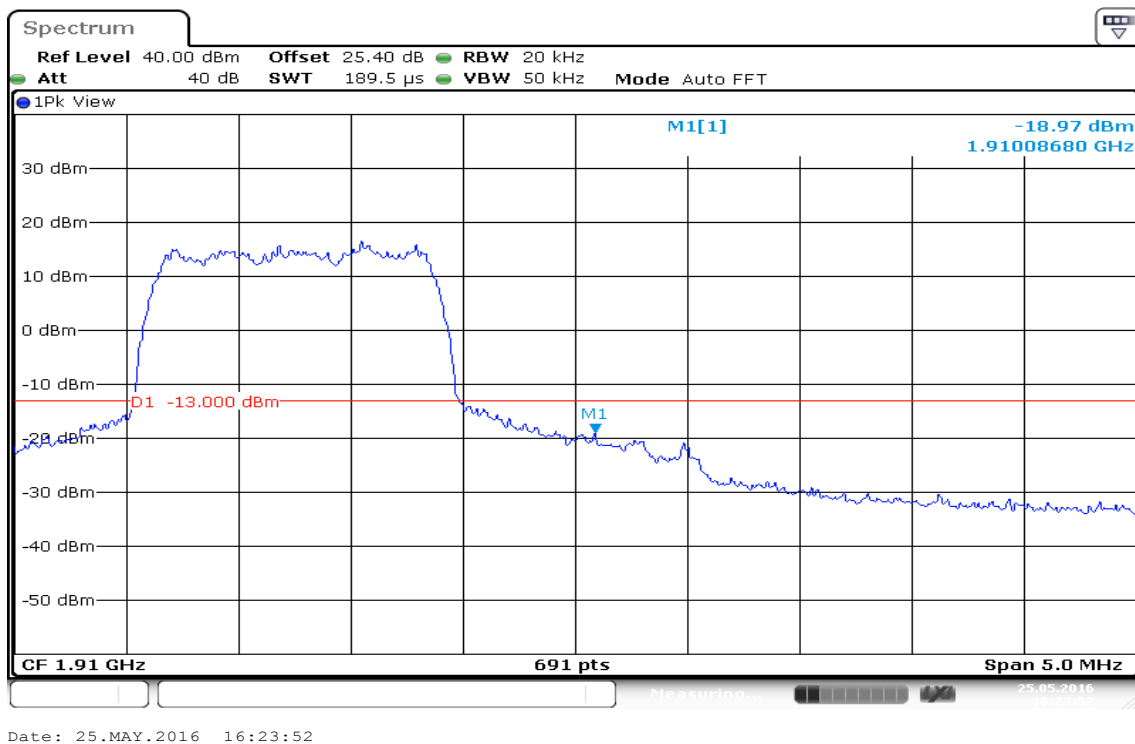


Figure 27-1: Band Edge emissions –1xEVDO Rev.0 / BC10 / CH 476

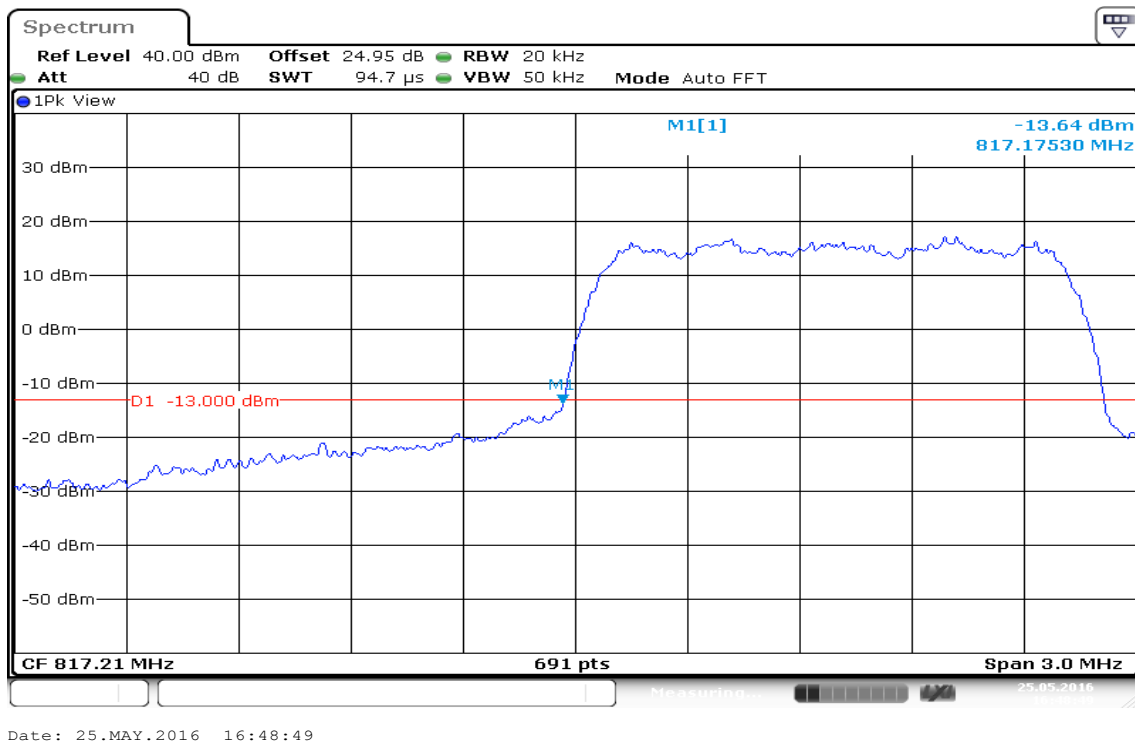


Figure 27-2: Band Edge emissions –1xEVDO Rev.0 / BC10 / CH 684

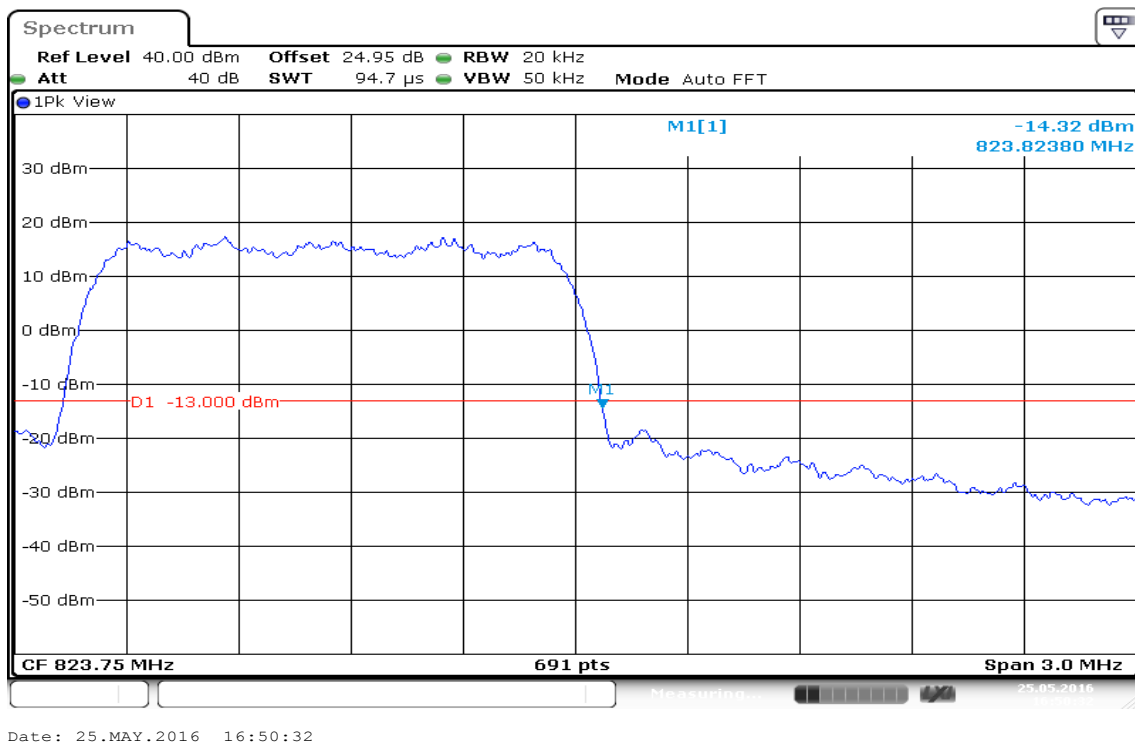


Figure 28-1: Band Edge emissions –1xEVDO Rev.A / BC0 / CH 1013

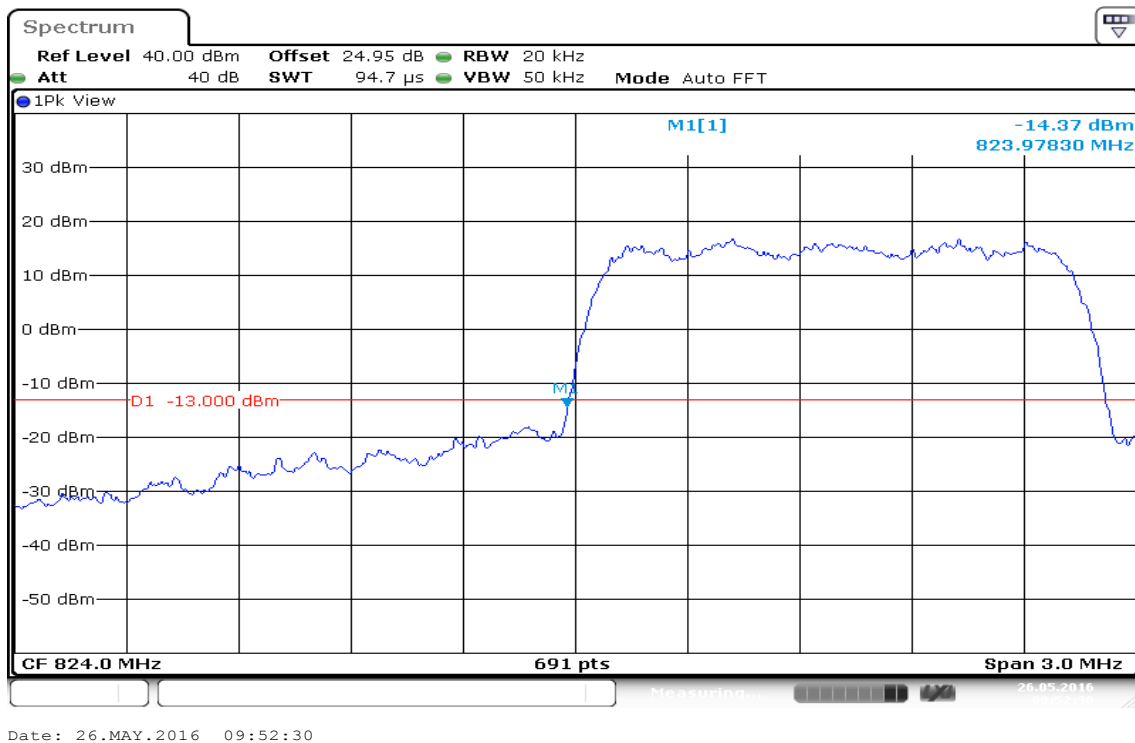


Figure 28-2: Band Edge emissions –1xEVDO Rev.A / BC0 / CH 777

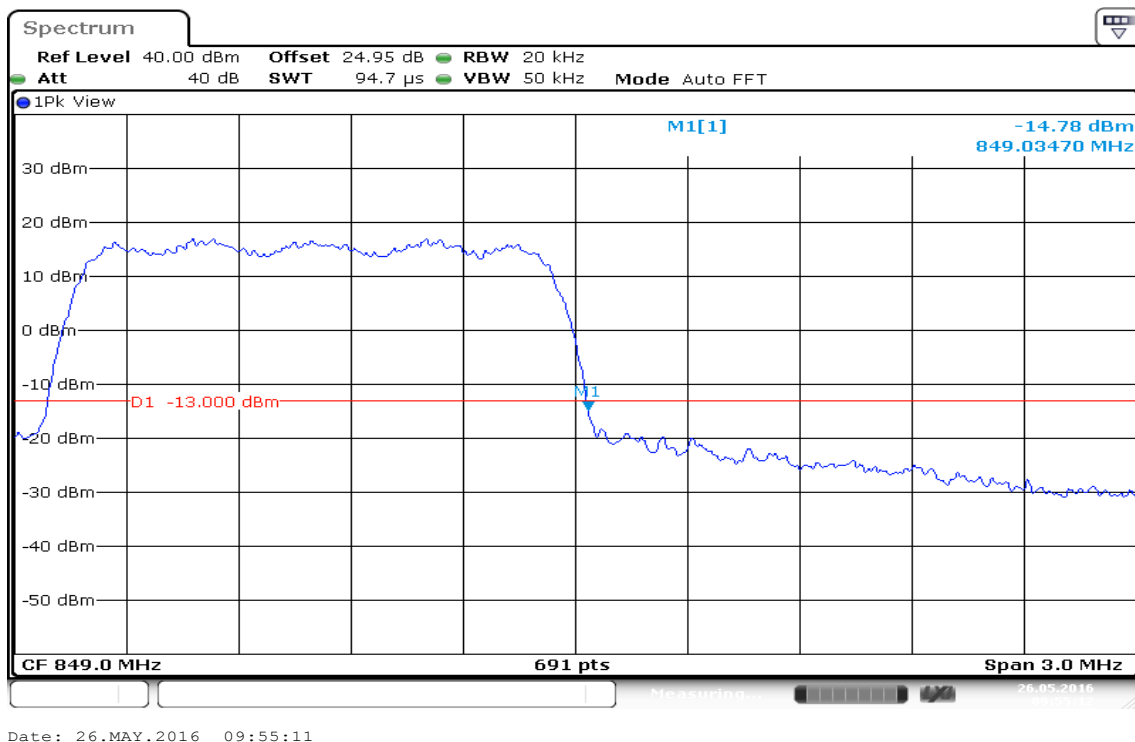


Figure 29-1: Band Edge emissions –1xEVDO Rev.A / BC1 / CH 25

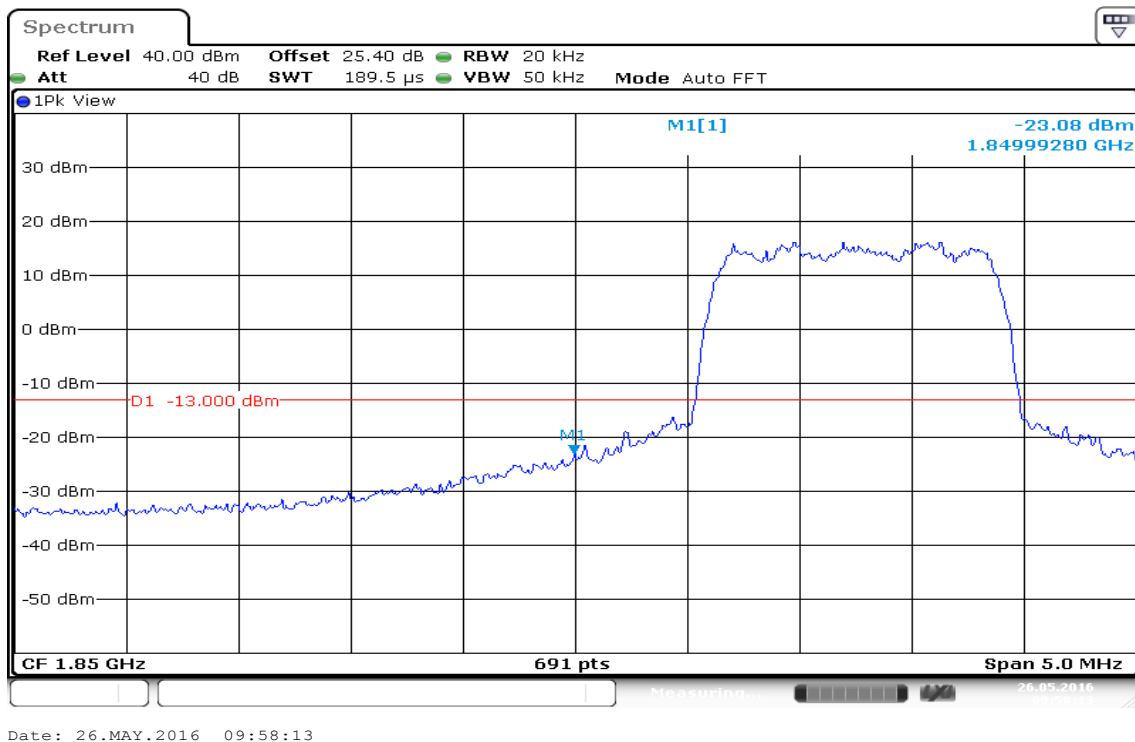


Figure 29-2: Band Edge emissions –1xEVDO Rev.A / BC1 / CH 1175

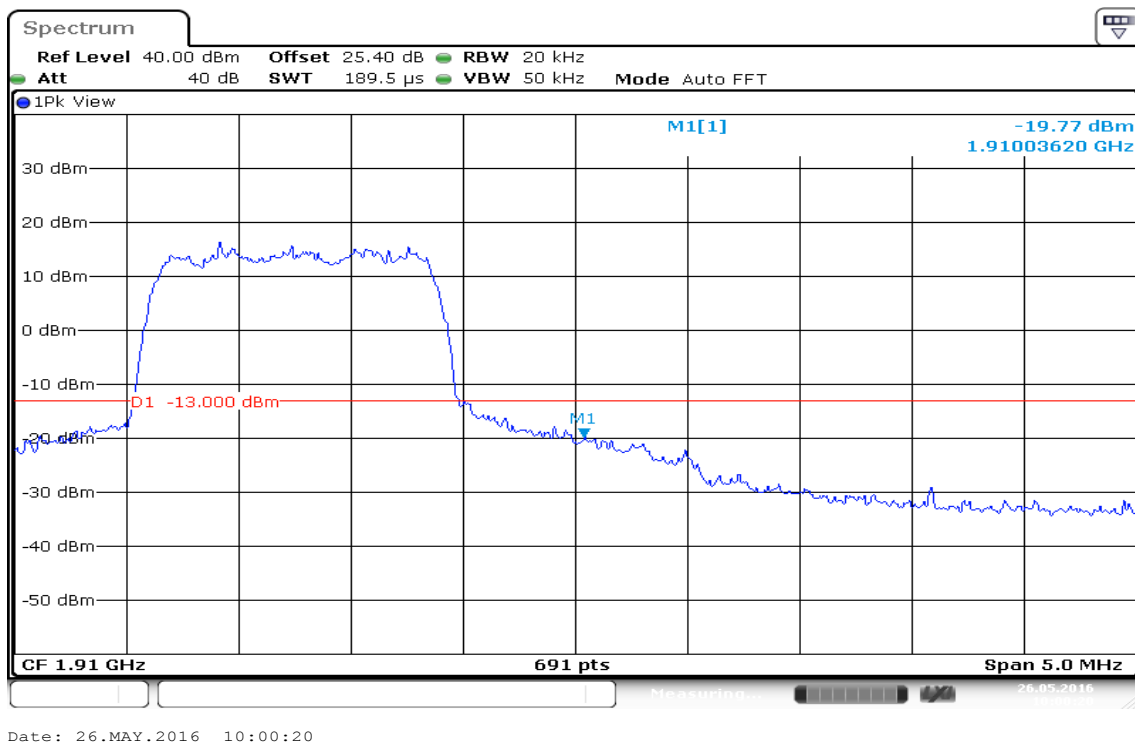
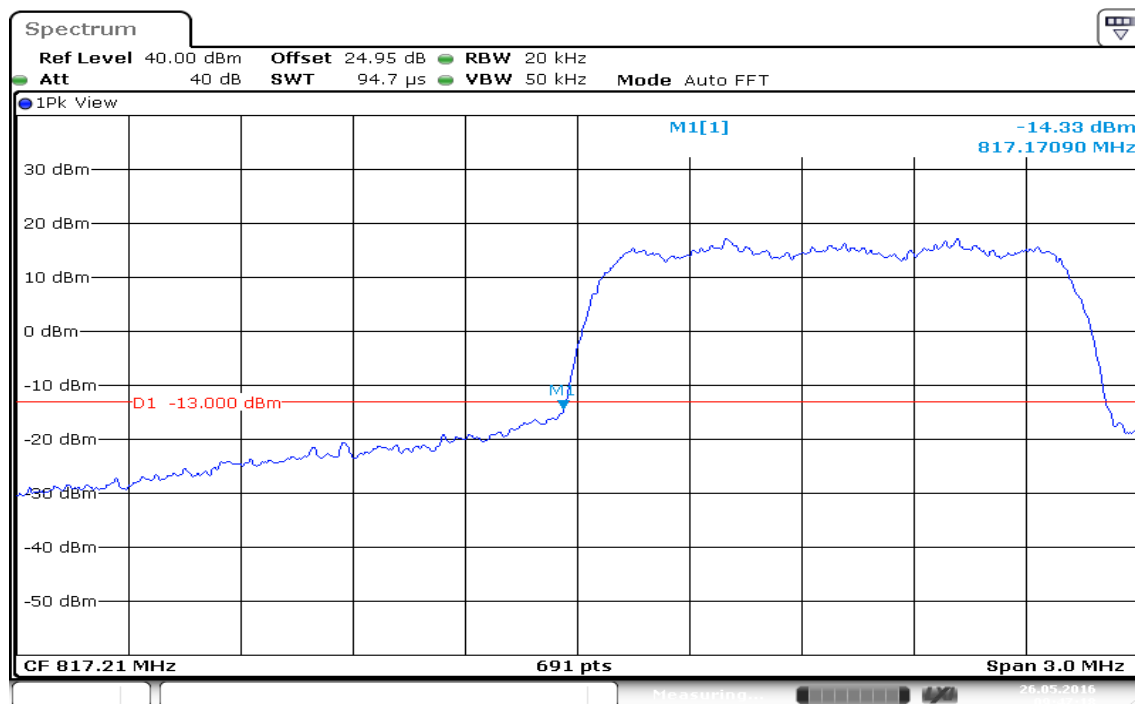
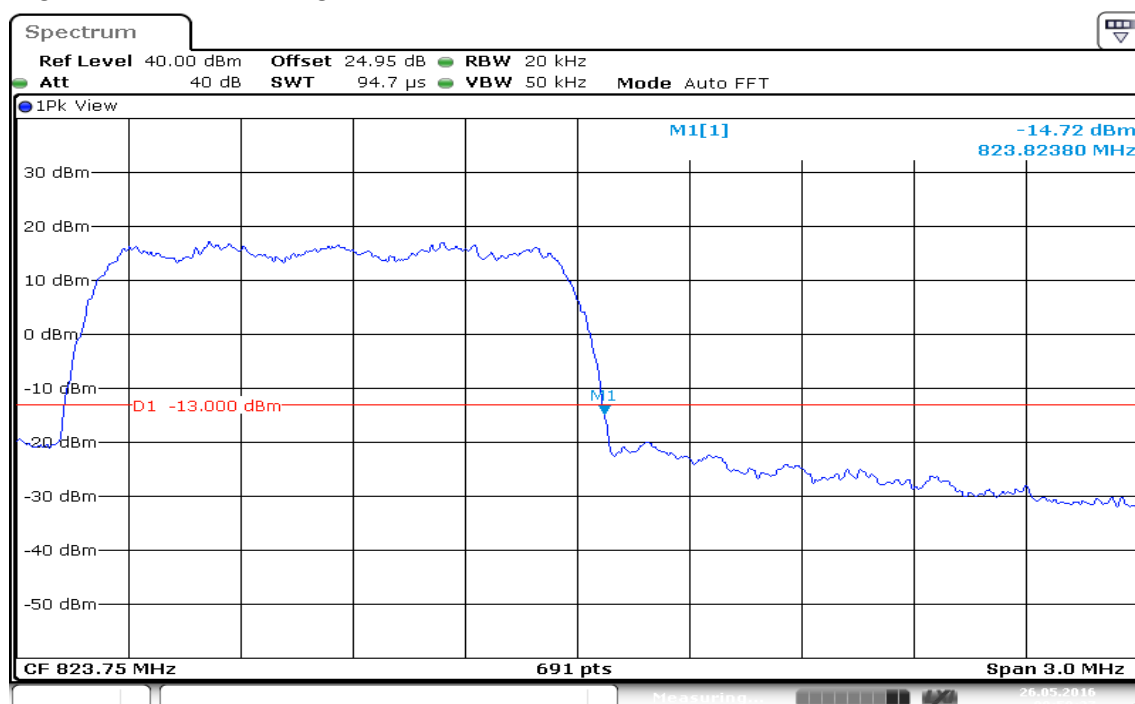


Figure 30-1: Band Edge emissions –1xEVDO Rev.A / BC10 / CH 476



Date: 26.MAY.2016 09:47:18

Figure 30-2: Band Edge emissions –1xEVDO Rev.A / BC10 / CH 684



Date: 26.MAY.2016 09:50:36