FCC PART 15 SUBPART B and C
TEST REPORT

for

CribClicker™

Model: BT385 TX

Prepared for

BIKETRONICS, INC.
630 NORTH ALMON STREET, SUITE 140
MOSCOW, IDAHO 83843

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

MICHAEL CHIRSTENSEN

COMPATIBLE ELECTRONICS INC.
114 OLINDA DRIVE
BREA, CALIFORNIA 92823
(714) 579-0500

DATE: OCTOBER 2, 2009

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
PAGES	17	2	2	2	11	21	**55**

TABLE OF CONTENTS

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Recognitions
B	Modifications to the EUT
C	Additional Models Covered Under This Report
D	Diagram, Charts, and Photos • Test Setup Diagram • Antenna and Amplifier Factors • Radiated Emissions Photos
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Plot Map And Layout of Test Site – 3 Meters

GENERAL REPORT SUMMARY

Compatible Electronics Inc. generates this electromagnetic emission test report, which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested:	CribClicker™ Model: BT385 TX S/N: N/A
Product Description:	See Expository Statement
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Biketronics, Inc. 630 North Almon Street, Suite 140 Moscow, Idaho 83843
Test Date(s):	September 22, 2009
Test Specifications:	EMI requirements CFR Title 47, Part 15, Subpart B
Test Procedure:	ANSI C63.4
Test Deviations:	The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.
2	Radiated RF Emissions 10 kHz – 3200 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231. Highest reading in relation to spec limit: 54.29 dBuV @ 630 MHz (*Uc = 1.85 dB)
3	Radiated RF Emissions 10 kHz – 3200 MHz (Digital Portion)	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B.

*U_c = combined standard uncertainty

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the CribClicker™, Model: BT385 TX. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.231 for the transmitter portion.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Biketronics, Inc., Inc.

Michael Meehan President

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
Michael Christensen Lab Manager, Brea Division

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample has not yet been returned as of the date of this report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

FCC	Federal Communications Commission
RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
ITE	Information Technology Equipment
LISN	Line Impedance Stabilization Network
NVLAP	National Voluntary Laboratory Accreditation Program
CFR	Code of Federal Regulations
N/A	Not Applicable
Ltd.	Limited
Inc.	Incorporated
IR	Infrared

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4: 2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – EMI

The CribClicker™, Model: BT385 TX (EUT) was connected to a 12 volt (eight "D" batteries) battery holder. The EUT was tested in three orthogonal axis. The EUT was continuously transmitting.

The EUT's antenna is a PCB trace. The EUT stops transmitting immediately after the button is released during normal usage.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

4.1.1 Cable Construction and Termination

Cable 1 This is a 50-centimeter unshielded cable connecting the EUT to cable #2. The cable is hard wired at each end.

Cable 2 This is a 50-centimeter unshielded cable connecting the battery holder to cable #1. The cable is hard wired at the cable #1 end and has a (+) 9-volt battery terminal at the battery holder end.

Cable 3 This is a 50-centimeter unshielded cable connecting the EUT to cable #4. The cable is hard wired at each end.

Cable 4 This is a 50-centimeter unshielded cable connecting the battery holder to cable #3. The cable is hard wired at the cable #3 end and has a (-) 9-volt battery terminal at the battery holder end.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
CribClicker™ (EUT)	BIKETRONICS, INC.	BT385 TX	N/A	XSRBT385TX
"D" BATTERY HOLDER	N/A	N/A	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 29, 2009	May 29, 2010
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 29, 2009	May 29, 2010
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	May 29, 2009	May 29, 2010
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	February 23, 2009	Feb. 23, 2010
Log Periodic Antenna	Com Power	AL-100	16060	June 15, 2009	June 15, 2010
Preamplifier	Com-Power	PA-102	1017	January 12, 2009	Jan. 12, 2010
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2009
Horn Antenna	Com-Power	AH-118	071175	June 27, 2008	June 27, 2010
Microwave Preamplifier	Com Power	PA-122	181921	March 12, 2009	March 12, 2010
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1.2 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.

6.3 Facility Environmental Characteristics

When applicable refer to the data sheets in Appendix E for the relative humidity, air temperature, and barometric pressure.

7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 RF Emissions

7.1.1 Conducted Emissions Test

The measurement receiver was used as a measuring meter. The data was collected with the measurement receiver in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the measurement receiver's input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the measurement receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test

The measurement receiver was used as a measuring meter. A preamplifier was used to increase the sensitivity of the instrument. The measurement receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the measurement receiver records the highest measured reading over all the sweeps.

The readings were averaged by a "duty cycle correction factor", derived from 20 log (dwell time / one pulse train with blanking interval). The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	TRANSDUCER	EFFECTIVE MEASUREMENT BANDWIDTH
9 kHz to 150 kHz	Active Loop Antenna	200 Hz
150 kHz to 30 MHz	Active Loop Antenna	9 kHz
30 MHz to 300 MHz	Biconical Antenna	120 kHz
300 MHz to 1000 MHz	Log Periodic Antenna	120 kHz
1000 MHz to 3200 MHz	Horn Antenna	1 MHz

The final data was taken with a frequency span of 1 MHz for frequencies below 1000 MHz. For frequencies above 1000 MHz, the final data was taken with a frequency span of 10 MHz. The frequency span was reduced during the preliminary investigations as deemed necessary to distinguish between emissions from the EUT and any ambient signals.

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

Radiated Emissions (Spurious and Harmonics) Test (Continued)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3-meter distance to obtain final test data. The final qualification data is located in Appendix E.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.

7.2 Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. Plots of the -20 dB bandwidth are located in Appendix E.

Test Results:

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(c).

8. CONCLUSIONS

The CribClicker™, Model: BT385 TX, as tested, meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.231 for the transmitter portion.

APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 and/or FCC **Class B** specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

CribClicker™
Model: BT385 TX
S/N: N/A

No additional models were covered under this report.

APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

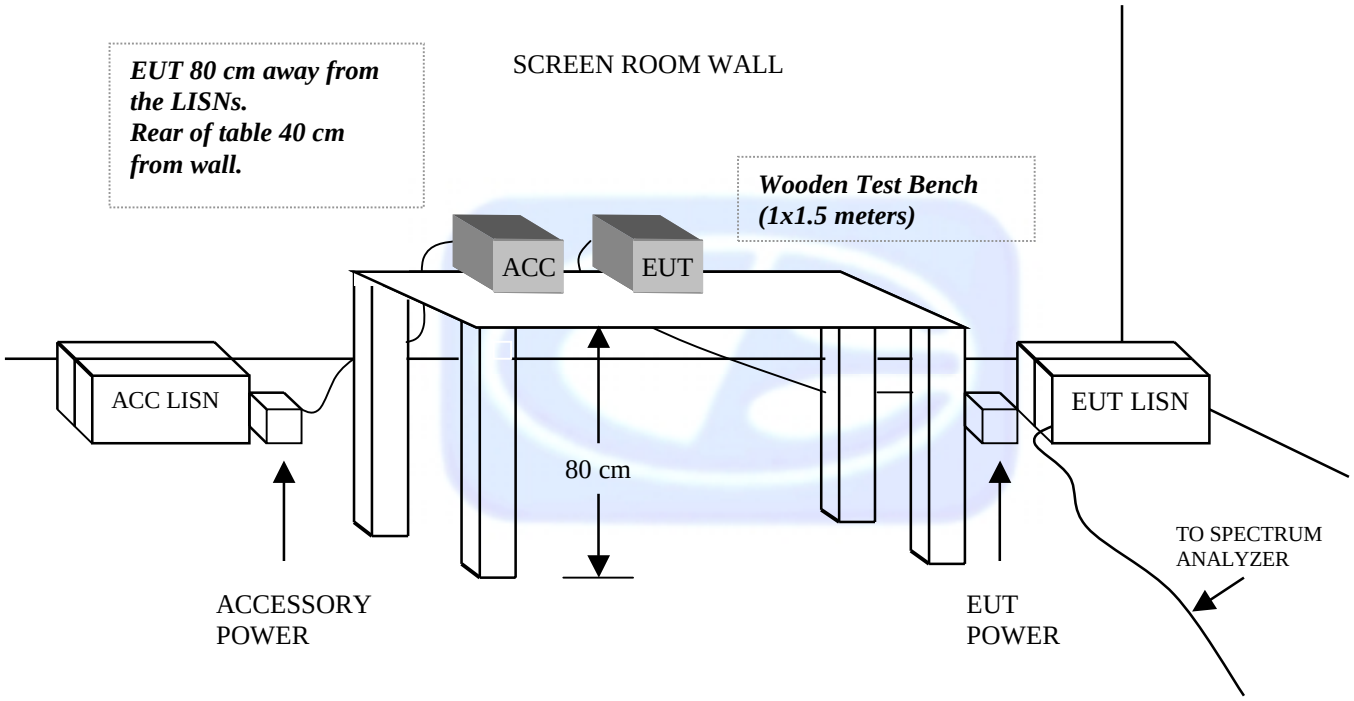
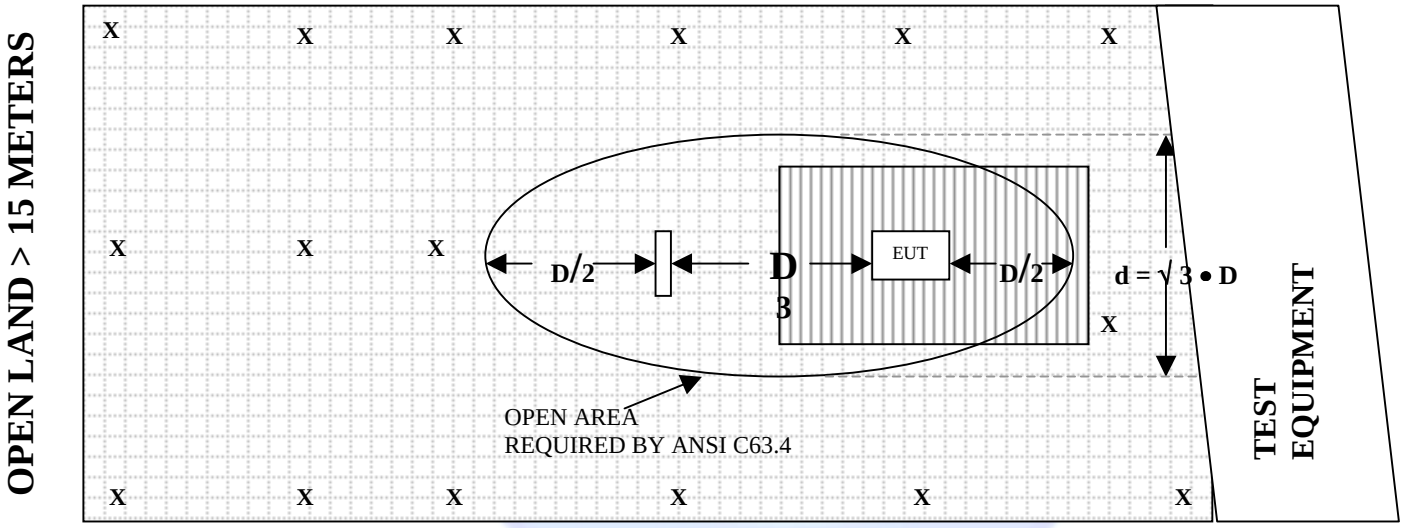


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS	= GROUND SCREEN
D = TEST DISTANCE (meters)	= WOOD COVER

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: FEBRUARY 23, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	13.0	100	11.1
35	11.1	120	13.6
40	10.2	140	12.4
45	11.2	160	12.9
50	11.6	180	16.5
60	9.1	200	17.0
70	8.4	250	16.3
80	6.2	275	18.2
90	8.5	300	17.9

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JUNE 15, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	14.2	700	20.1
400	15.9	800	21.2
500	17.1	900	21.3
600	18.8	1000	22.3

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 12, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	39.0	300	38.8
40	39.0	350	38.8
50	38.8	400	38.7
60	38.7	450	38.6
70	38.8	500	38.3
80	38.8	550	38.9
90	39.1	600	38.4
100	39.1	650	38.8
125	38.9	700	38.4
150	38.9	750	38.5
175	38.9	800	38.3
200	38.8	850	38.4
225	39.0	900	38.1
250	38.9	950	37.4
275	38.8	1000	38.1

COM-POWER PA-122

PREAMPLIFIER

S/N: 181921

CALIBRATION DATE: MARCH 12, 2009

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	36.46	10.0	35.06
1.5	35.36	10.5	34.82
2.0	34.76	11.0	33.12
2.5	34.94	11.5	34.33
3.0	34.59	12.0	34.75
3.5	34.55	12.5	33.94
4.0	34.25	13.0	35.50
4.5	33.89	13.5	34.89
5.0	34.22	14.0	36.56
5.5	34.81	14.5	36.06
6.0	35.74	15.0	36.67
6.5	36.51	15.5	36.84
7.0	36.66	16.0	34.31
7.5	35.72	16.5	35.11
8.0	33.28	17.0	35.35
8.5	33.11	17.5	34.11
9.0	34.71	18.0	33.88
9.5	35.50	18.5	32.20

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40

FRONT VIEW

BIKETRONICS, INC.
CribClicker™
MODEL: BT385 TX
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

BIKETRONICS, INC.
CribClicker™
MODEL: BT385 TX
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISISONS

DATA SHEETS

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	73.19	V	95.6	-22.41	Peak	1.25	135	
315	62.01	V	75.6	-13.59	Avg	1.25	135	
630	55.91	V	75.6	-19.69	Peak	1.35	155	
630	44.73	V	55.6	-10.87	Avg	1.35	155	
945	39.66	V	75.6	-35.94	Peak	2.5	315	
945	28.48	V	55.6	-27.12	Avg	2.5	315	
1260	43.35	V	74	-30.65	Peak	1.25	135	
1260	32.17	V	54	-21.83	Avg	1.25	135	
1575	47.52	V	74	-26.48	Peak	1.25	155	
1575	36.34	V	54	-17.66	Avg	1.25	155	
1890	47.76	V	74	-26.24	Peak	1.35	155	
1890	36.58	V	54	-17.42	Avg	1.35	155	
2205	42.77	V	74	-31.23	Peak	1.25	155	
2205	31.59	V	54	-22.41	Avg	1.25	155	
2520	53.68	V	74	-20.32	Peak	1.25	165	
2520	42.5	V	54	-11.5	Avg	1.25	165	
2835	47.65	V	74	-26.35	Peak	1.35	150	
2835	36.47	V	54	-17.53	Avg	1.35	150	
3150	50.44	V	74	-23.56	Peak	1.25	135	
3150	39.26	V	54	-14.74	Avg	1.25	135	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	85.45	H	95.6	-10.15	Peak	1.25	35	
315	74.27	H	75.6	-1.33	Avg	1.25	35	
630	65.47	H	75.6	-10.13	Peak	1	180	
630	54.29	H	55.6	-1.31	Avg	1	180	
945	47.99	H	75.6	-27.61	Peak	1.35	155	
945	36.81	H	55.6	-18.79	Avg	1.35	155	
1260	42.27	H	74	-31.73	Peak	1.55	155	
1260	31.09	H	54	-22.91	Avg	1.55	155	
1575	54.82	H	74	-19.18	Peak	1.25	135	
1575	43.64	H	54	-10.36	Avg	1.25	135	
1890	50.65	H	74	-23.35	Peak	1.25	155	
1890	39.47	H	54	-14.53	Avg	1.25	155	
2205	42.47	H	74	-31.53	Peak	1.26	165	
2205	31.29	H	54	-22.71	Avg	1.26	165	
2520	55.75	H	74	-18.25	Peak	1.28	135	
2520	44.57	H	54	-9.43	Avg	1.28	135	
2835	50.62	H	74	-23.38	Peak	1.29	155	
2835	39.44	H	54	-14.56	Avg	1.29	155	
3150	50.01	H	74	-23.99	Peak	1.58	165	
3150	38.83	H	54	-15.17	Avg	1.58	165	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	74.55	V	95.6	-21.05	Peak	1.5	225	
315	63.37	V	75.6	-12.23	Avg	1.5	225	
630	63.39	V	75.6	-12.21	Peak	1.5	135	
630	52.21	V	55.6	-3.39	Avg	1.5	135	
945	43.07	V	75.6	-32.53	Peak	1.25	150	
945	31.89	V	55.6	-23.71	Avg	1.25	150	
1260	44.77	V	74	-29.23	Peak	1.25	135	
1260	33.59	V	54	-20.41	Avg	1.25	135	
1575	53.71	V	74	-20.29	Peak	1.35	155	
1575	42.53	V	54	-11.47	Avg	1.35	155	
1890	54.85	V	74	-19.15	Peak	1.25	135	
1890	43.67	V	54	-10.33	Avg	1.25	135	
2205	44.66	V	74	-29.34	Peak	1.35	150	
2205	33.48	V	54	-20.52	Avg	1.35	150	
2520	52.66	V	74	-21.34	Peak	1.58	125	
2520	41.48	V	54	-12.52	Avg	1.58	125	
2835	48.93	V	74	-25.07	Peak	1.25	155	
2835	37.75	V	54	-16.25	Avg	1.25	155	
3150	51.24	V	74	-22.76	Peak	1.25	155	
3150	40.06	V	54	-13.94	Avg	1.25	155	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	72.08	H	95.6	-23.52	Peak	1.35	125	
315	60.9	H	75.6	-14.7	Avg	1.35	125	
630	61.21	H	75.6	-14.39	Peak	1	180	
630	50.03	H	55.6	-5.57	Avg	1	180	
945	43.07	H	75.6	-32.53	Peak	1.25	155	
945	31.89	H	55.6	-23.71	Avg	1.25	155	
1260	43.51	H	74	-30.49	Peak	1.25	155	
1260	32.33	H	54	-21.67	Avg	1.25	155	
1575	52.51	H	74	-21.49	Peak	1.35	155	
1575	41.33	H	54	-12.67	Avg	1.35	155	
1890	48.61	H	74	-25.39	Peak	1.55	135	
1890	37.43	H	54	-16.57	Avg	1.55	135	
2205	49.09	H	74	-24.91	Peak	1.25	135	
2205	37.91	H	54	-16.09	Avg	1.25	135	
2520	57.57	H	74	-16.43	Peak	1.25	155	
2520	46.39	H	54	-7.61	Avg	1.25	155	
2835	46.51	H	74	-27.49	Peak	1.35	165	
2835	35.33	H	54	-18.67	Avg	1.35	165	
3150	48.84	H	74	-25.16	Peak	1.55	165	
3150	37.66	H	54	-16.34	Avg	1.55	165	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	77.41	V	95.6	-18.19	Peak	1.25	135	
315	66.23	V	75.6	-9.37	Avg	1.25	135	
630	64.07	V	75.6	-11.53	Peak	1.25	45	
630	52.89	V	55.6	-2.71	Avg	1.25	45	
945	43.51	V	75.6	-32.09	Peak	1.25	135	
945	32.33	V	55.6	-23.27	Avg	1.25	135	
1260	45.21	V	74	-28.79	Peak	1.35	155	
1260	34.03	V	54	-19.97	Avg	1.35	155	
1575	51.38	V	74	-22.62	Peak	1.35	225	
1575	40.2	V	54	-13.8	Avg	1.35	225	
1890	52.71	V	74	-21.29	Peak	1.25	155	
1890	41.53	V	54	-12.47	Avg	1.25	155	
2205	49.08	V	74	-24.92	Peak	1.35	180	
2205	37.9	V	54	-16.1	Avg	1.35	180	
2520	58.91	V	74	-15.09	Peak	1.25	135	
2520	47.73	V	54	-6.27	Avg	1.25	135	
2835	50.67	V	74	-23.33	Peak	1.35	150	
2835	39.49	V	54	-14.51	Avg	1.35	150	
3150	52.87	V	74	-21.13	Peak	1.15	145	
3150	41.69	V	54	-12.31	Avg	1.15	145	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	78.08	H	95.6	-17.52	Peak	1	180	
315	66.9	H	75.6	-8.7	Avg	1	180	
630	65.43	H	75.6	-10.17	Peak	1.25	0	
630	54.25	H	55.6	-1.35	Avg	1.25	0	
945	39.69	H	75.6	-35.91	Peak	1.35	155	
945	28.51	H	55.6	-27.09	Avg	1.35	155	
1260	43.31	H	74	-30.69	Peak	1.25	155	
1260	32.13	H	54	-21.87	Avg	1.25	155	
1575	52.62	H	74	-21.38	Peak	1.35	155	
1575	41.44	H	54	-12.56	Avg	1.35	155	
1890	55.53	H	74	-18.47	Peak	1.25	225	
1890	44.35	H	54	-9.65	Avg	1.25	225	
2205	45.75	H	74	-28.25	Peak	1.35	155	
2205	34.57	H	54	-19.43	Avg	1.35	155	
2520	52.05	H	74	-21.95	Peak	1.25	145	
2520	40.87	H	54	-13.13	Avg	1.25	145	
2835	54.44	H	74	-19.56	Peak	1.25	135	
2835	43.26	H	54	-10.74	Avg	1.25	135	
3150	48.94	H	74	-25.06	Peak	1.36	215	
3150	37.76	H	54	-16.24	Avg	1.36	215	

FCC 15.231

Biketronics, Inc.
CribClicker™
Model: BT385 TX

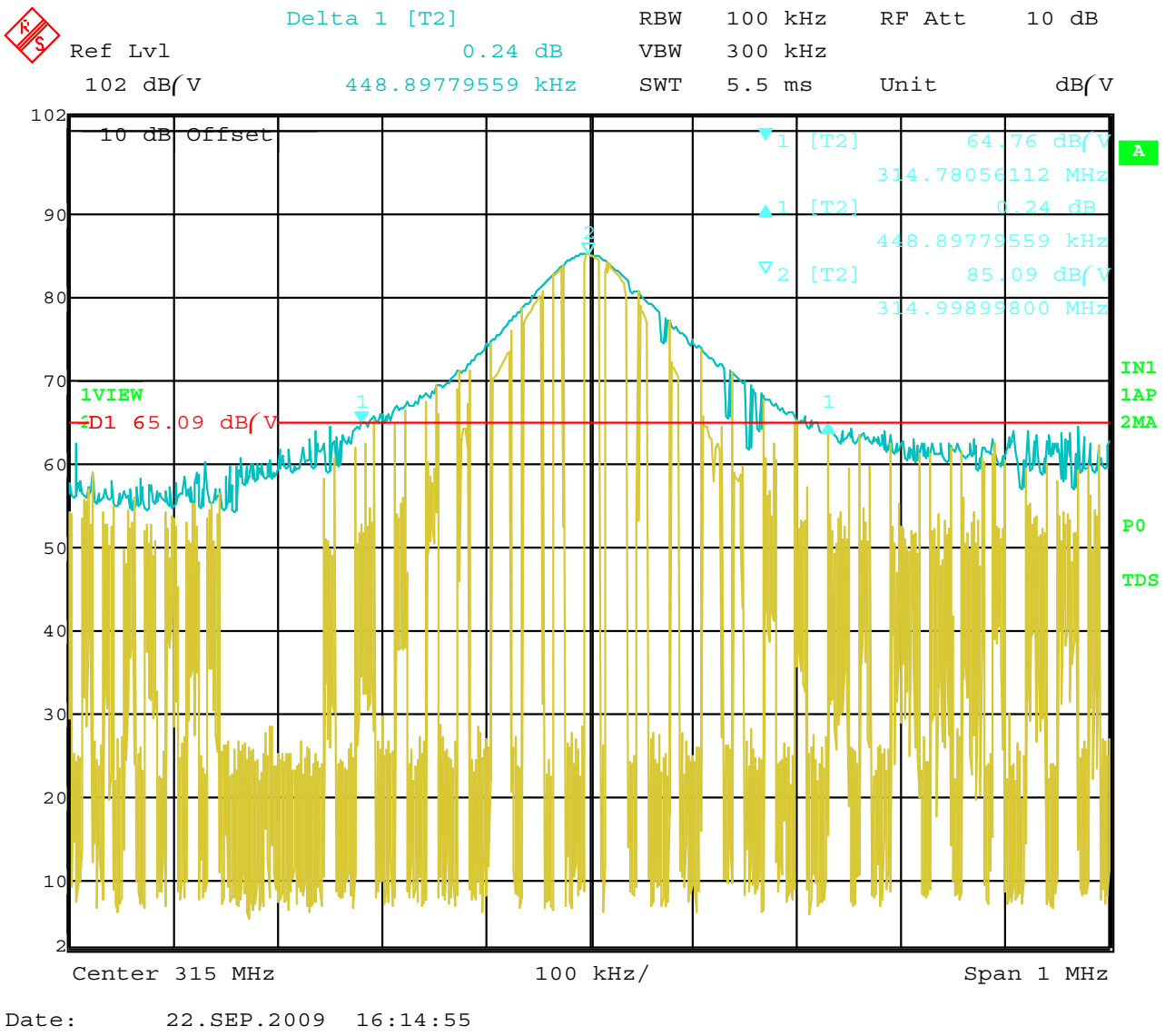
Date: 09/22/09
Labs: B and D
Tested By: Kyle Fujimoto

Duty Cycle: 27.58%
Digital Portion and Non-Harmonic Emissions from the Tx -- 10 kHz to 3200 MHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Detected
								from 10 kHz to 3200 MHz
								for the Digital Portion
								in Vertical and Horizontal
								Polarizations
								No Emissions Detected
								from 10 kHz to 3200 MHz
								for the Non-Harmonic
								Emissions from the Tx
								in Vertical and Horizontal
								Polarizations

-20 dB BANDWIDTH

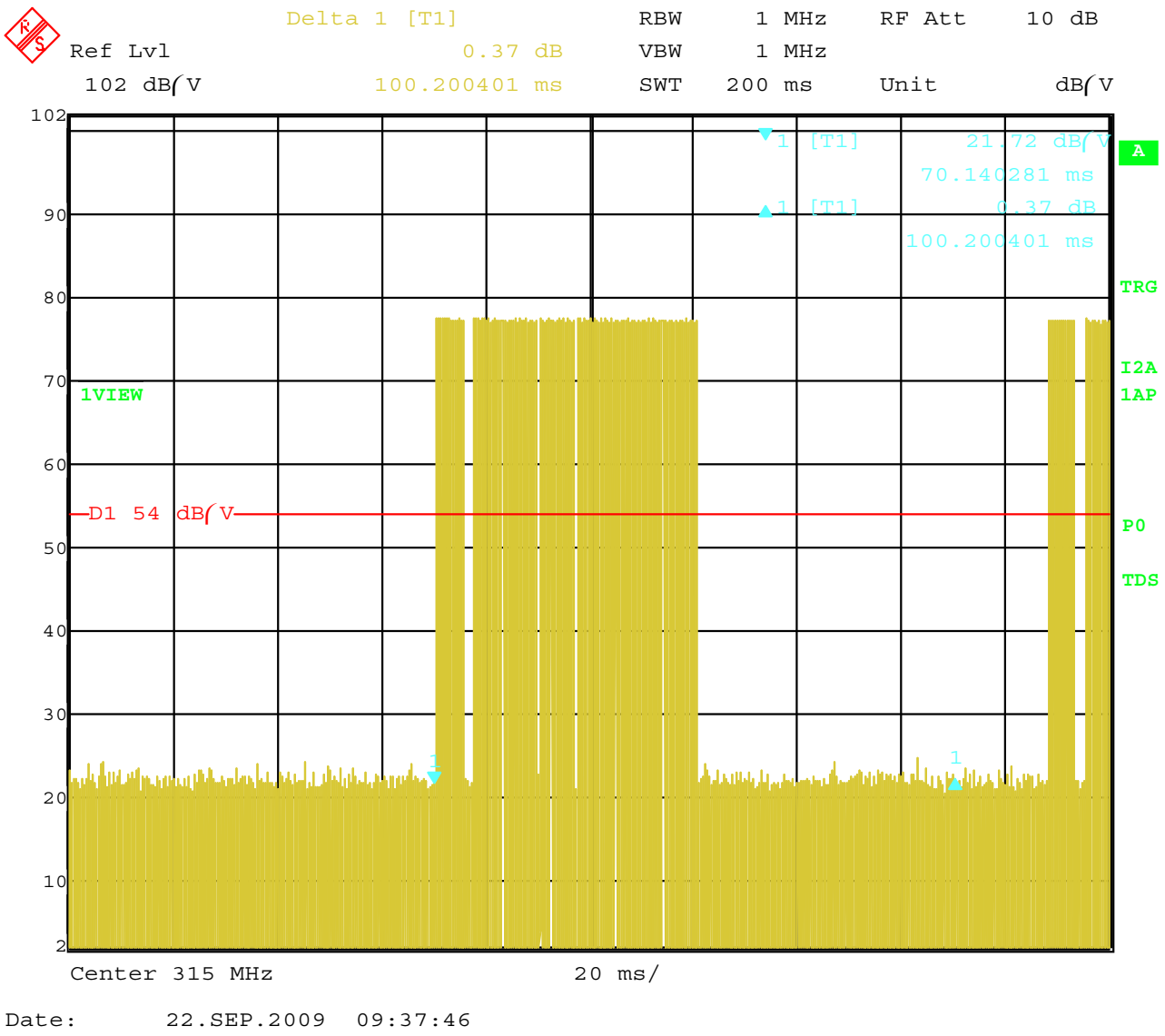
DATA SHEETS



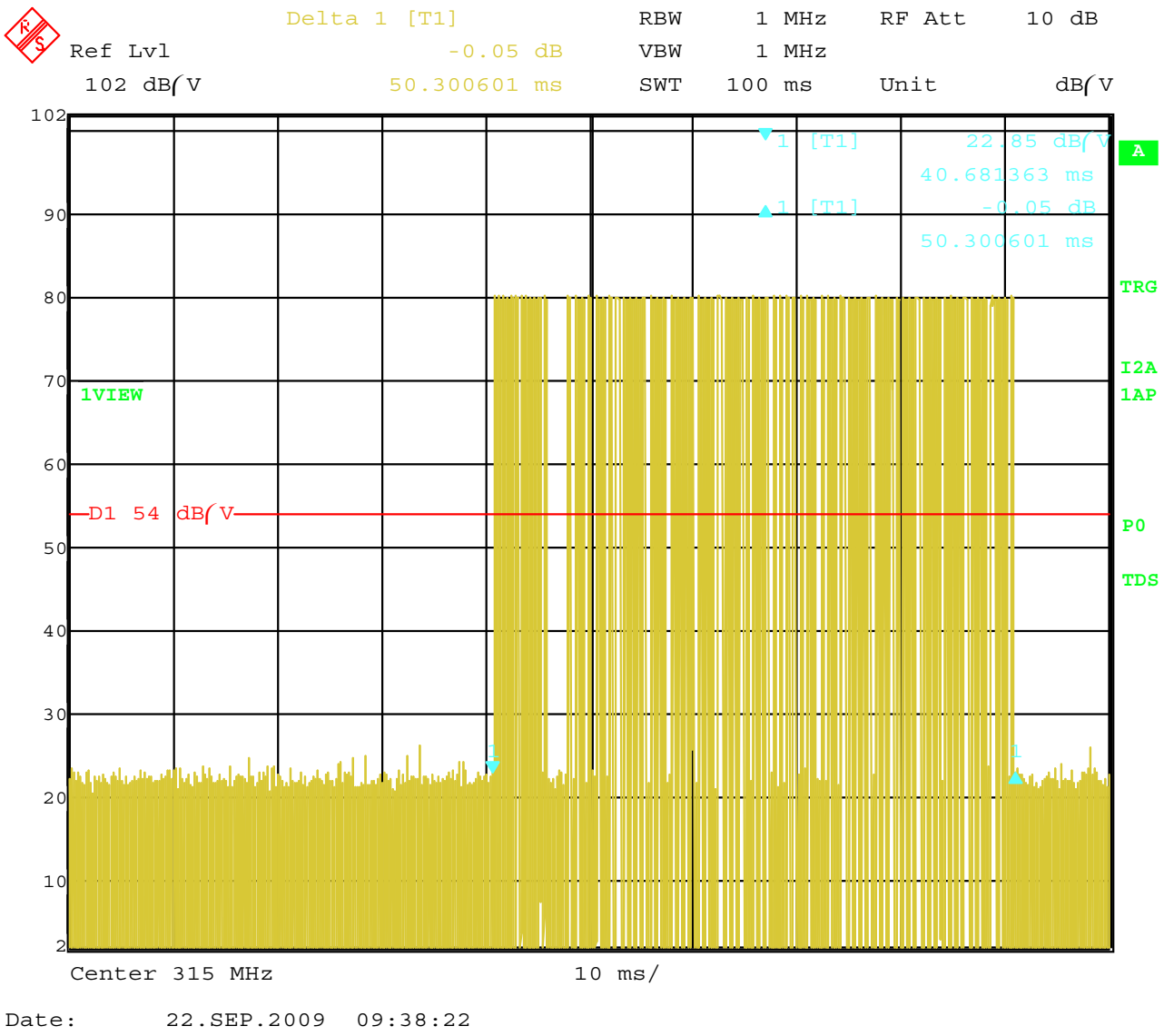
-20 dB Bandwidth of the Fundamental

DUTY CYCLE INFORMATION

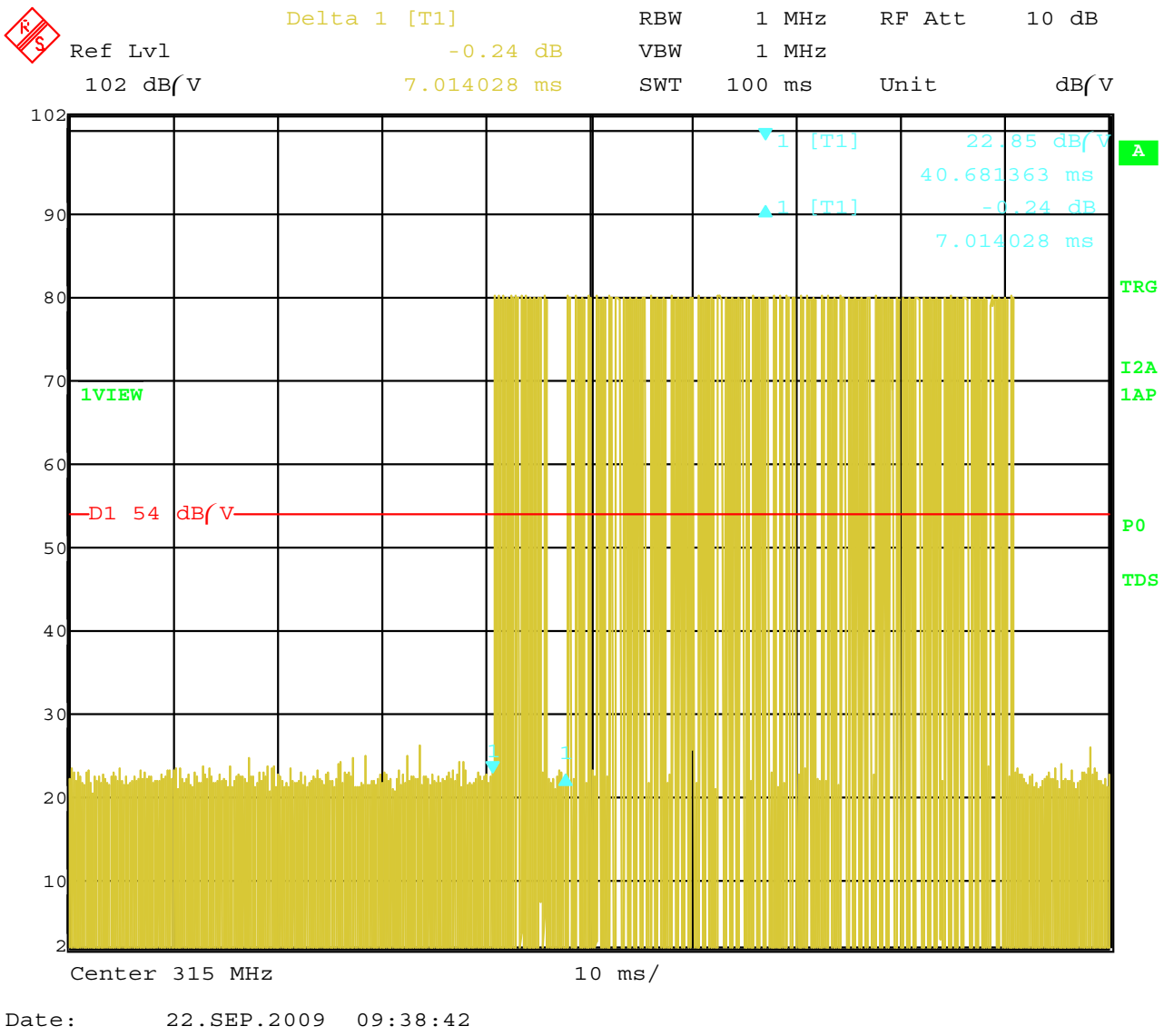
DATA SHEETS



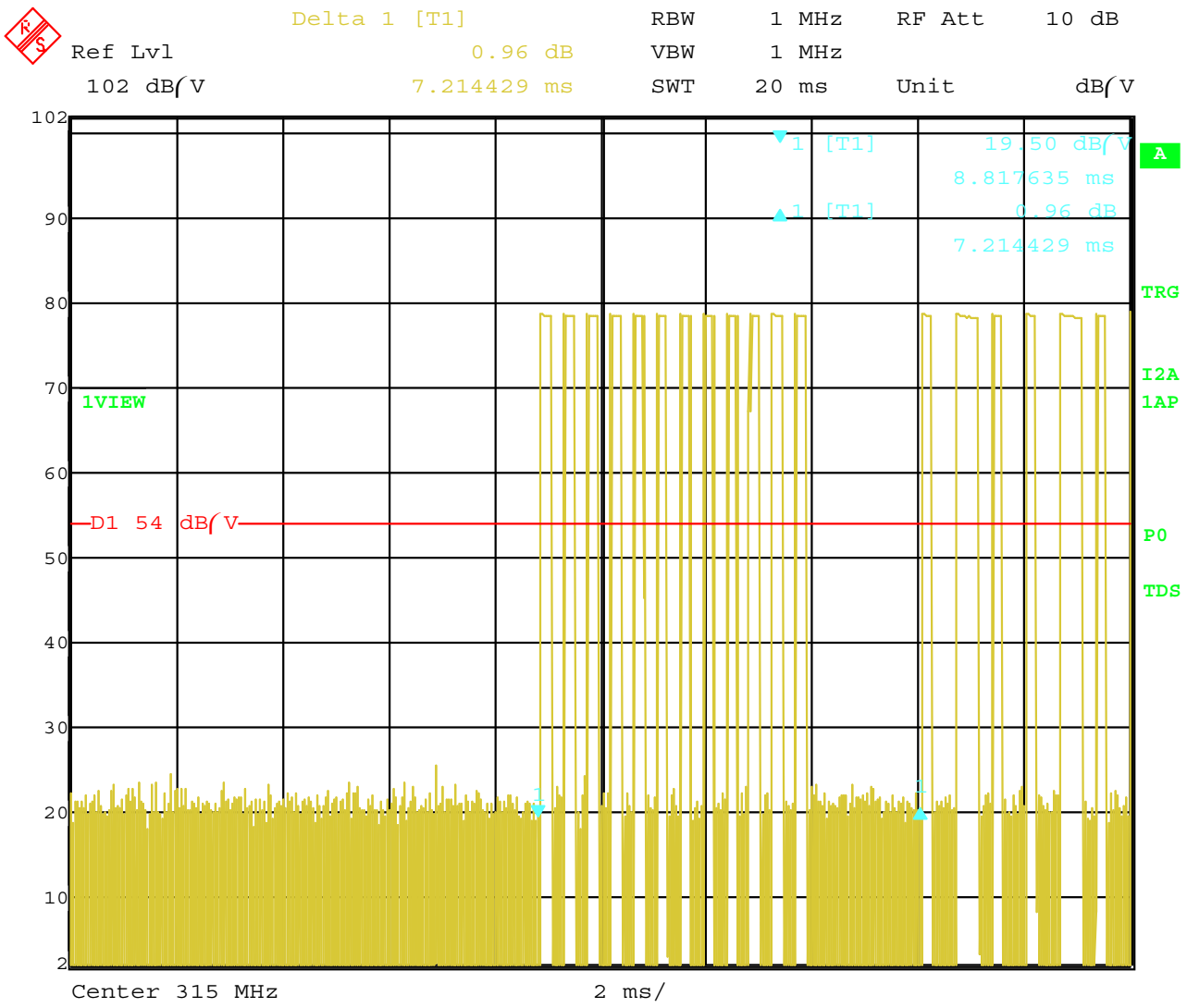
Time of One Pulse Train with Blanking Interval with 200 mS Scale



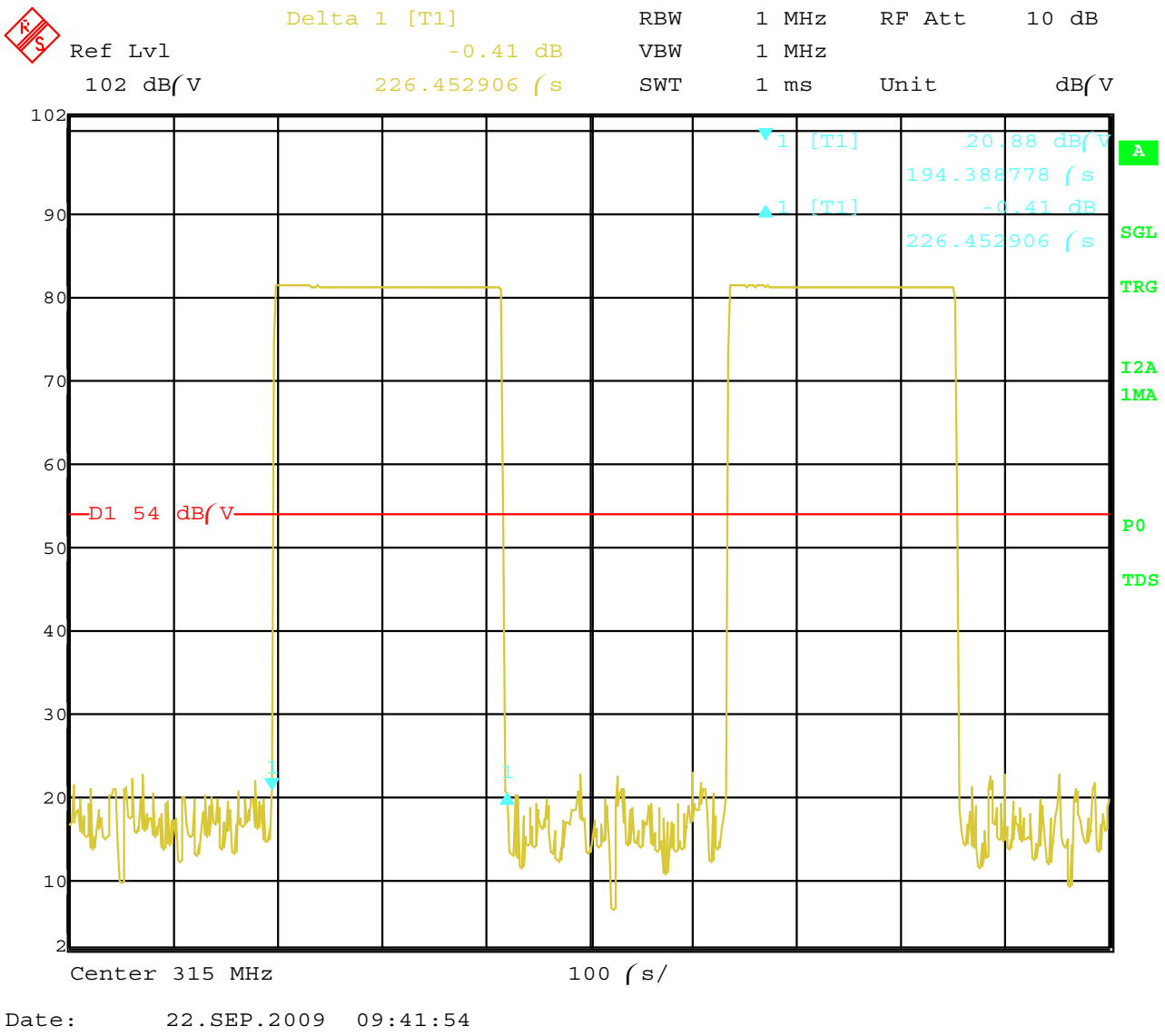
Time of One Pulse Train with 100 mS Scale – Note Pulse Train only shows up once.



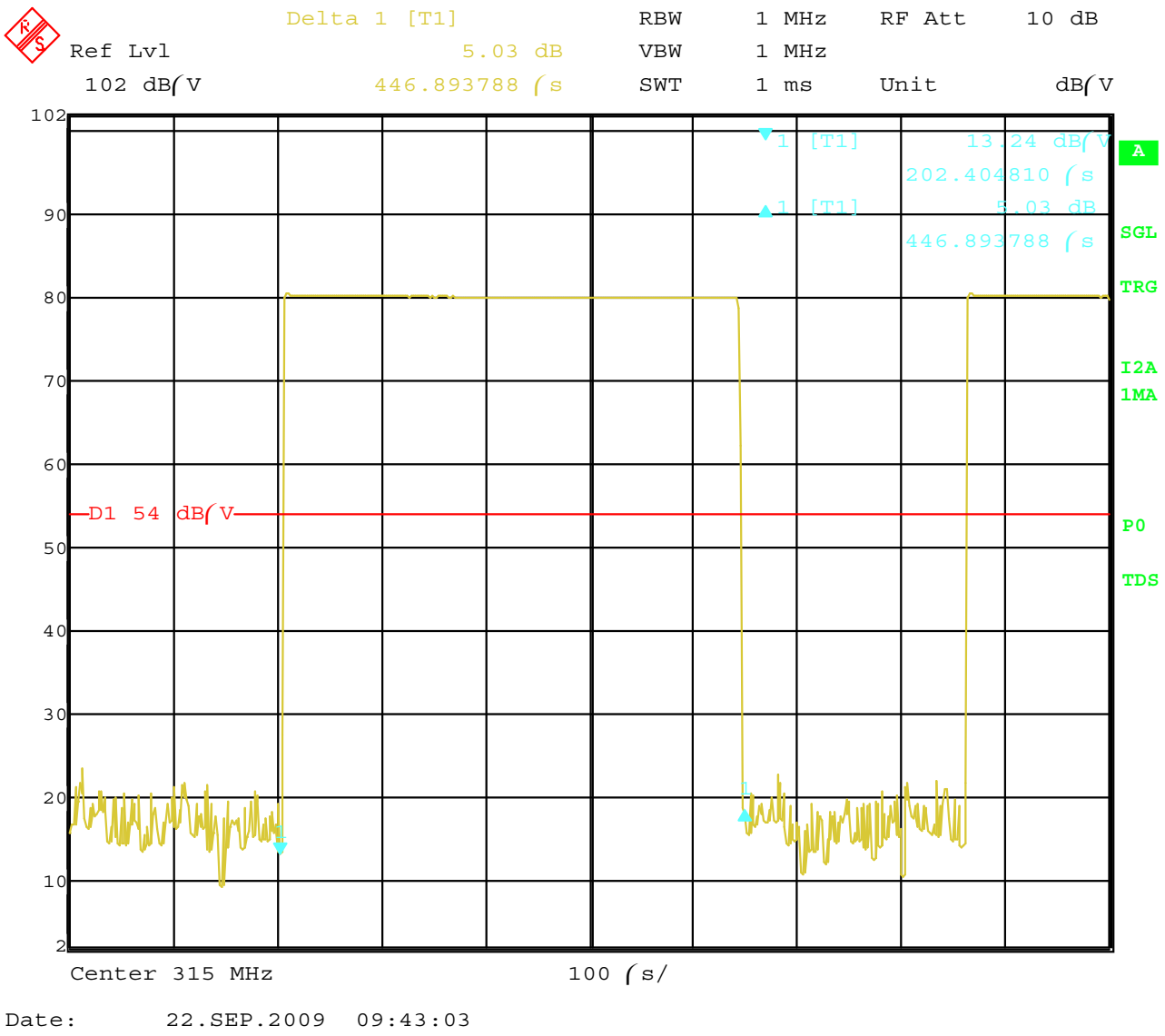
Time Showing 1st Part of Pulse Train



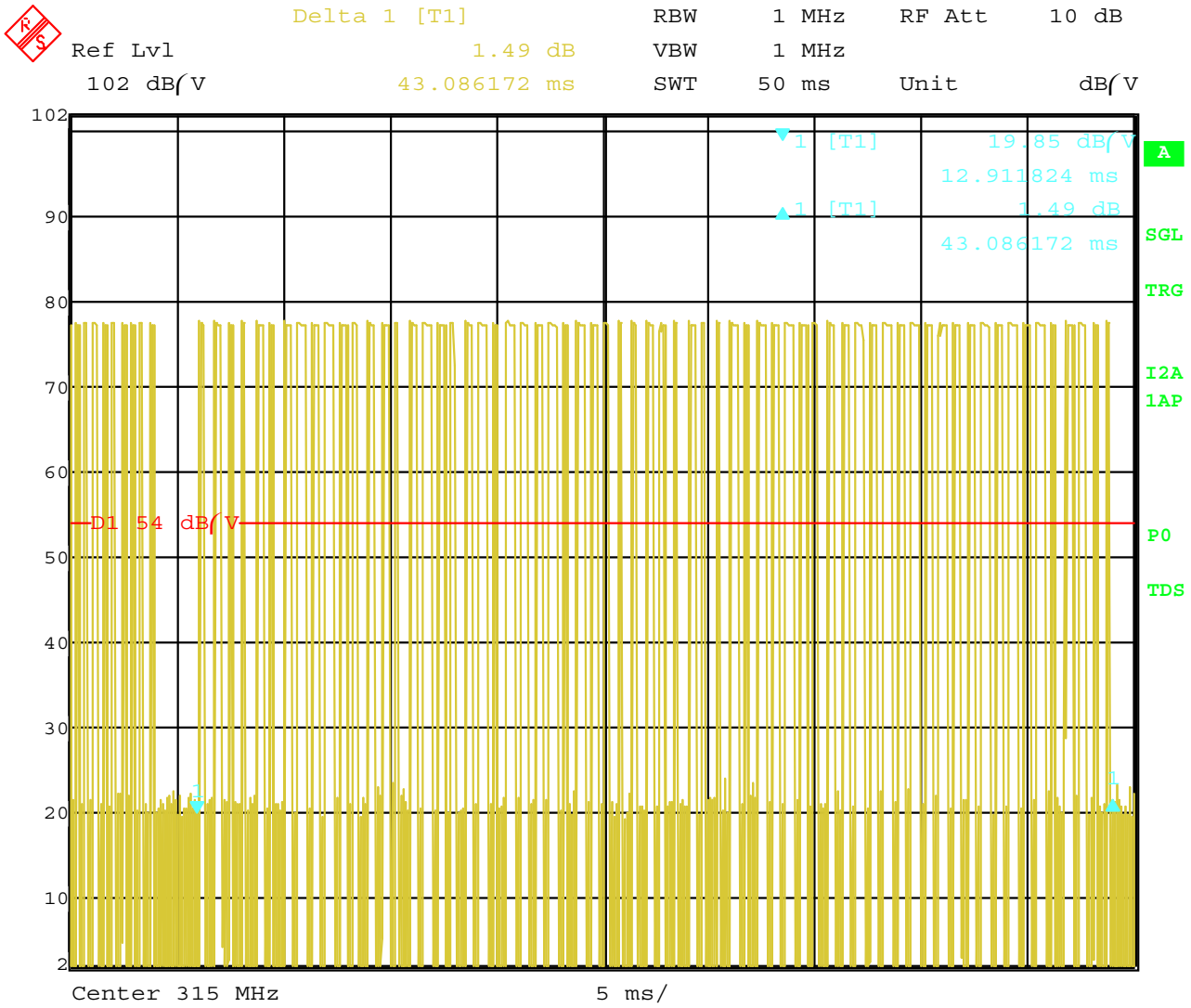
1st Portion of Pulse Train = 12 Small Pulses



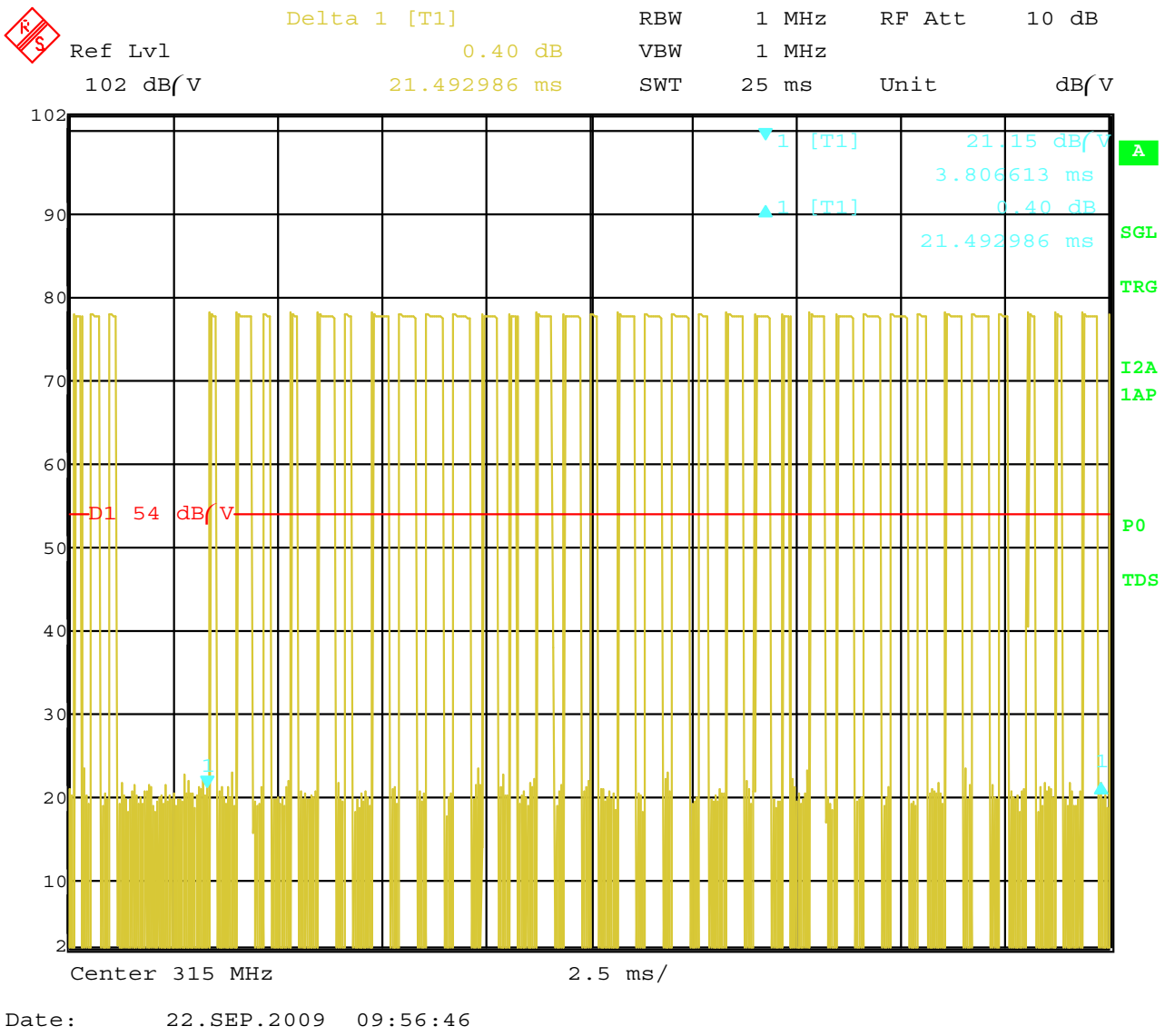
Time of Small Pulse with 1 mS Scale = 226.452906 uS



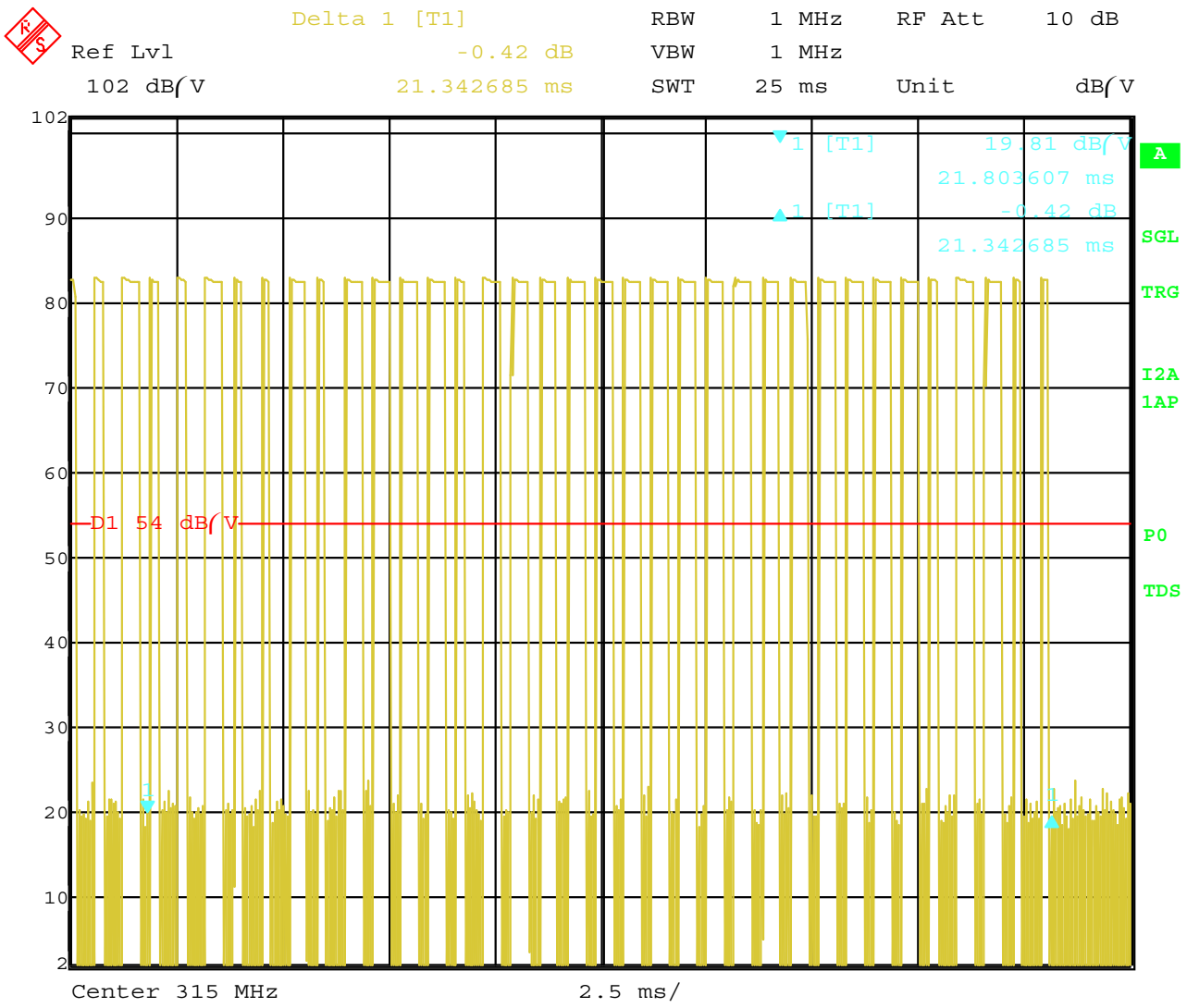
Time of Large Pulse with 1 mS Scale = 446.893788 uS



2nd Portion of Pulse Train = 66 Total Pulses



1st 33 Pulses of the 2nd Portion of the Pulse Train
12 Small Pulses
21 Large Pulses



Last 33 Pulses of the 2nd Portion of the Pulse Train
9 Small Pulses
24 Large Pulses

Total Duty Cycle:

12+12+9 Small Pulses = 33 Small Pulses * 226.452906 uS = 7.472945898 mS
21+24 Large Pulses = 45 Large Pulses * 446.893788 uS = 20.11022046 mS
Total Duty Cyle = 27.583166358 mS / 100 mS = 27.58%