Technical Information

APPLICANT		MANUFACTURER	
Name:	Miller Edge, Inc.	Name:	Miller Edge, Inc.
Address:	300 North Jennersville Road	Address:	300 North Jennersville Road
City, State, Zip:	West Grove, PA 19390	City, State, Zip:	West Grove, PA 19390
Date of Report:	February 6, 2012		

TEST SPECIFICATION:

FCC Rules and Regulations Part 15, Subpart C, Section 15.231

TEST PROCEDURE: ANSI C63.4:2003

Test Sample Description

TEST SAMPLE: Monitored Device Radio Transmitter

BRANDNAME: Miller Edge

MODEL: ME-MDTX-10

FCC ID: OYE-MDTR303

TYPE: Control Alarm Transmitter

POWER REQUIREMENTS: (2) 1.5V Lithium Batteries

FREQUENCY OF OPERATION: 303.825

Tests Performed

The test methods performed on the Monitored Device Radio Transmitter are shown below:

FCC Part 15, Subpart C	Test Method
15.231(a)(3)	Periodic Operation
15.231(b)	Field Strength of Emissions
15.231(b)(2)	Duty Cycle Determination
15.231(b)(3)	Field Strength of Spurious Emissions
15.231(c)	Bandwidth of Emission

General Test Requirements

1. The measurement procedures of ANSI C63.4:2003 were utilized as specified in FCC Part 15, Subpart C, Section 15.31(a)(3).
2. All radiated emissions measurements were performed on an Open Area Test Site (OATS), listed with the FCC and IC, in accordance with FCC Section 15.31(d).
3. The level of the fundamental field strength was measured with new batteries installed.
4. All measurements were performed at the specified 3 meter test distance as required by FCC Section 15.31(f).
5. The EUT was rotated throughout 360 degrees for all radiated emissions measurements as specified in FCC Section 15.31(f)(5).
6. All readily accessible EUT controls were adjusted in such a manner as to maximize the level of emissions in accordance with FCC Section 15.31(g).
7. Appropriate accessories were attached to all EUT ports during the performance of radiated emissions measurements as required by FCC Section 15.31(i)).
8. The EUT operated at a single frequency of 303.825 MHz.
9. The frequency spectrum was investigated from the lowest frequency generated in the device up to the 10th harmonic of the highest fundamental frequency in accordance with FCC Section 15.33(a)(1).
10. All measurements were taken with a peak detector function as specified in FCC Section 15.35(a). The duty cycle, calculated in accordance with FCC Section 15.35(c), was applied to the peak readings in order to obtain the average value of emissions. The peak value of emissions was verified to meet the 20 dB requirement of FCC Section 15.35(b).

Certification and Signatures

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.

Dean Landers
EMC Test Engineer

Richard J. Reitz
Corporate Laboratory Manager
iNARTE Certified Engineer ATL-0036-E
NVLAP Approved Signatory

Non-Warranty Provision
The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement
This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

Requirements and Test Results

Requirement:
FCC Section 15.231(a) - Periodic operation in the band 40.66 - 40.7 MHz and above 70 MHz
The provisions of this Section are restricted to periodic operation within the band 40.66-40.7 MHz and above 70 MHz. Except as shown in Paragraph (e) of this Section, the intentional radiator is restricted to the transmissions of a control signal such as those used with alarm systems, door openers, remote switches, etc. Continuous transmissions, voice, video and the radio control of toys are not permitted. Data is permitted to be sent with a control signal.

- Results:
  The device operates at a frequency of 303.825 MHz and is for the transmission of a control signal used with door openers. Data is sent with the control signal.

Requirement:
FCC Sections 15.231(a)(1)-(5)
Periodic operation in the band 40.66 - 40.7 MHz and above 70 MHz
The following conditions were met in order to comply with the provisions for momentary operation:

FCC 15.231(a)(1): A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

- Results:
  The device is not manually operated.

FCC 15.231(a)(2): A transmitter activated automatically shall cease transmission within 5 seconds after activation.

- Results:
  An automatically activated transmission ceases within 5 seconds.

FCC 15.231(a)(3): Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.

- Results:
  The transmitter performs periodic transmissions and the total transmission time is 1.88 seconds per hour.

FCC 15.231(a)(4): Intentional radiators which are employed for radio control purposes during emergencies involving fire, security and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition.

- Results:
  This device is employed for radio control purposes during emergencies involving safety for life and transmits continuously during such events.

Requirements and Test Results (con't)

FCC 15.231(a)(5): Transmission of set-up information for security systems may exceed the transmission duration limits in paragraphs (a)(1) and (a)(2) of this section, provided such transmission are under the control of a professional installer and do not exceed ten seconds after a manually operated switch is released or a transmitter is activated automatically. Such set-up information may include data.

- Results:
  The device is not employed for security systems.

Requirement:
FCC Section 15.231(b) - Field Strength of Emissions
In addition to the provisions of Section 15.205, the field strength of emissions from intentional radiators operated under this Section shall not exceed the limits specified in Table 1.

Table 1 - Test Limits, Field Strength of Emissions

Fundamental Frequency (MHz)	Field Strength of Fundamental microvolts/meter @3 meters (watts, e.i.r.p.) Quasi Peak or Average	Field Strength of Spurious Emissions microvolts/meter @ 3 meters Quasi Peak or Average
40.66 to 40.70	2,250	225
70 to 130	1,250 (470 nW)	125
130 to 174	1,250 to 3,750**	125 to 375**
174 to 260	3,750 (4.2 µW)	375
260 to 470	3,750 to 12,500**	375 to 1,250**
Above 470	12,500 (47 µW)	1,250

**Linear Interpolations
For 130-174 MHz: FS (microvolts/m) = (56.82 x F) - 6,136
For 260-470 MHz: FS (microvolts/m) = (41.67 x F) - 7,083
The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

The Fundamental and Harmonic Emissions limits for a device operating at 303.825 MHz are listed in Table 2.

Table 2 - Fundamental and Harmonic Limits

Frequency of Operation MHz	Fundamental µV/m	Harmonics µV/m
303.825	5577.4	557.7

- Results:
  The Fundamental and Harmonics field strengths did not exceed the limits specified in Table 2 at a test distance of 3 meters, taken with an Average Detector. See Table 3 for the Fundamental and Harmonic emissions test results.

Table 3 - Fundamental and Harmonics Test Results

Fundamental Frequency MHz	Maximum Fundamental µV/m	Maximum Harmonics µV/m
303.825	3213.6	60.1

Requirements and Test Results (con't)

Requirement:
FCC Section 15.231(b)(2) - Duty Cycle Determination-Pulsed Operation
Intentional radiators operating under the provisions of the Section shall demonstrate compliance with the limits on the field strength emissions, as shown in Table 1, based on the average value of the measured emissions. As an alternative, compliance with the limits in the Table 1 may be based on the use of measurement instrumentation with a CISPR quasi-peak detector. The specific method of measurement employed shall be specified in the application for equipment authorization. If average emission measurements are employed, the provisions in Section 15.35 for averaging pulsed emissions and for limiting peak emissions apply. Further, compliance with the provisions of Section 15.205 shall be demonstrated using the measurement instrumentation specified in that Section.

- Results:
  The emissions did not exceed the limits specified in Table 1. See below for the exact method of calculating the average field strength.

Transmitter On Time = 100 milliseconds (maximum per cycle)

Transmitter Cycle Time = 16.8 milliseconds (100 ms maximum)

Transmitter Duty Cycle = 16.8 %

CALCULATION

Pulse Width = 2.4 milliseconds

7 x 2.4 ms = 16.8 milliseconds

Duty Cycle (16.8 / 100) = 16.8 %

Correction Factor = 20 log (0.168) = 15.5 dB

Requirement:
FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions
The limits on the field strength of the spurious emissions specified in Table 1 are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in Table 1 or to the general limits shown in Section 15.209, whichever limit permits a higher field strength.

- Results:
  No spurious emissions were observed within 20 dB of the specified limit.

Requirement:
FCC Section 15.231(c) - Bandwidth of Emissions
The bandwidth of the emissions shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

- Results:
  The maximum allowed bandwidth was 759.6 kHz. The bandwidth was measured and found to be 66.13 kHz.

General Requirements FCC and IC

RF Exposure Limits

The following power measurement was calculated from field strength measurements:

$$TP = \frac{(FS \times D)^2}{30 \times G}$$

FS = 0.034158 (Peak)
D = 3 M
G = 1.0 (Assumed)
TP = 350.0 microwatts

This device is exempt from SAR evaluation since the TP is less than 200 milliwatts and the device is portable.

Spectrum Analyzer Desensitization Considerations

Due to the nature of the emissions being measured, care was taken to ensure that the resolution bandwidth of the spectrum analyzer was adequate to provide accurate measurements. The following formula was utilized:

minimum bandwidth = 1/{minimum pulse width (in seconds) x 1.5} = Hz

Setting pulse desensitization equal to zero and utilizing the minimum observed pulse width of 52 µs yields a minimum required bandwidth of 12.82 kHz. FCC specified bandwidths of 100 kHz and 1 MHz were utilized below and above 1GHz, respectively.

Equipment Lists

FCC Section 15.231(a)(3) – Periodic Opertion

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
713	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 26.5 GHz	ESIB26	6/8/2011	6/8/2012

FCC Section 15.231(b) - Field Strength of Emissions

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
713	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 26.5 GHz	ESIB26	6/8/2011	6/8/2012
8017	EMCO	DOUBLE RIDGE GUIDE	1 - 18 GHz	3115	8/24/2011	8/24/2012
8071	AGILENT / HP	SPECTRUM ANALYZER	100Hz-2.5 GHz/2-22GH	8566B	6/10/2011	6/10/2012
8072	AGILENT / HP	SPECTRUM ANALYZER DISPLAY		85662A	6/10/2011	6/10/2012
8080	ROHDE & SCHWARZ	EMI TEST RECEIVER	20-1300 MHz	ESVP	7/18/2011	7/18/2012
8300C	UNKNOWN	3/10 METER CABLE	3/10 METER	3 METER CABLE	8/23/2011	8/23/2012
8317	AGILENT / HP	PRE-AMPLIFIER	1-26.5 GHz, 30 dB	8449B	6/10/2011	6/10/2012
8411	SONOMA INSTRUMENT	PRE-AMPLIFIER	9 kHz - 1 GHz	310N	8/11/2011	8/11/2012
8433	ETS LINDGREN	BICONILOG	20 - 6000 MHz	3142D	8/31/2011	8/31/2012

FCC Section 15.231(b)(2) - Duty Cycle Determination - Pulsed Operation

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
713	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 26.5 GHz	ESIB26	6/8/2011	6/8/2012

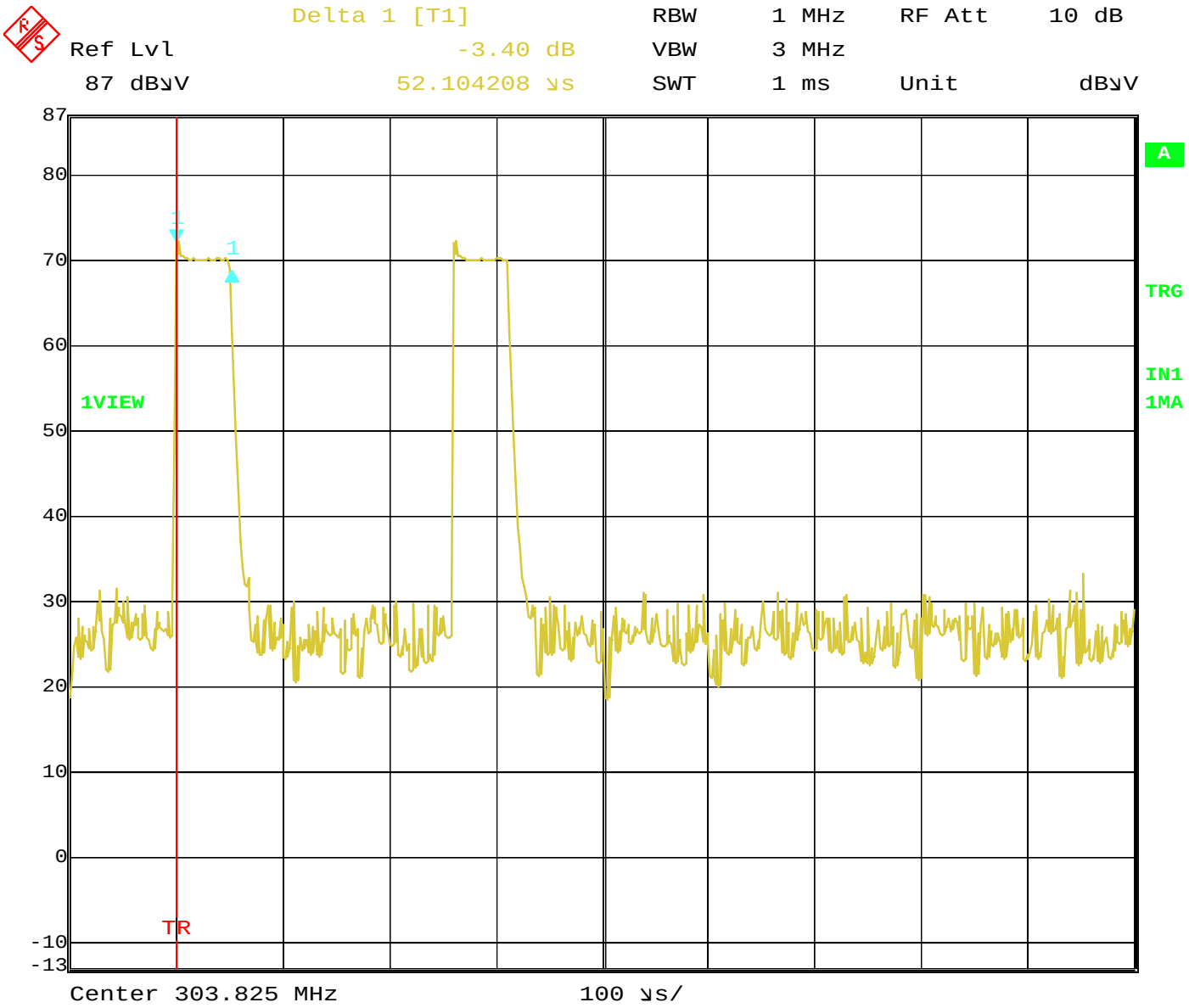
FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
8071	AGILENT / HP	SPECTRUM ANALYZER	100Hz-2.5 GHz/2-22GH	8566B	6/10/2011	6/10/2012
8072	AGILENT / HP	SPECTRUM ANALYZER DISPLAY		85662A	6/10/2011	6/10/2012
8080	ROHDE & SCHWARZ	EMI TEST RECEIVER	20-1300 MHz	ESVP	7/18/2011	7/18/2012
8300C	UNKNOWN	3/10 METER CABLE	3/10 METER	3 METER CABLE	8/23/2011	8/23/2012
8411	SONOMA INSTRUMENT	PRE-AMPLIFIER	9 kHz - 1 GHz	310N	8/11/2011	8/11/2012
8433	ETS LINDGREN	BICONILOG	20 - 6000 MHz	3142D	8/31/2011	8/31/2012

FCC Section 15.231(c) - Bandwidth of Emission

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
713	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 26.5 GHz	ESIB26	6/8/2011	6/8/2012

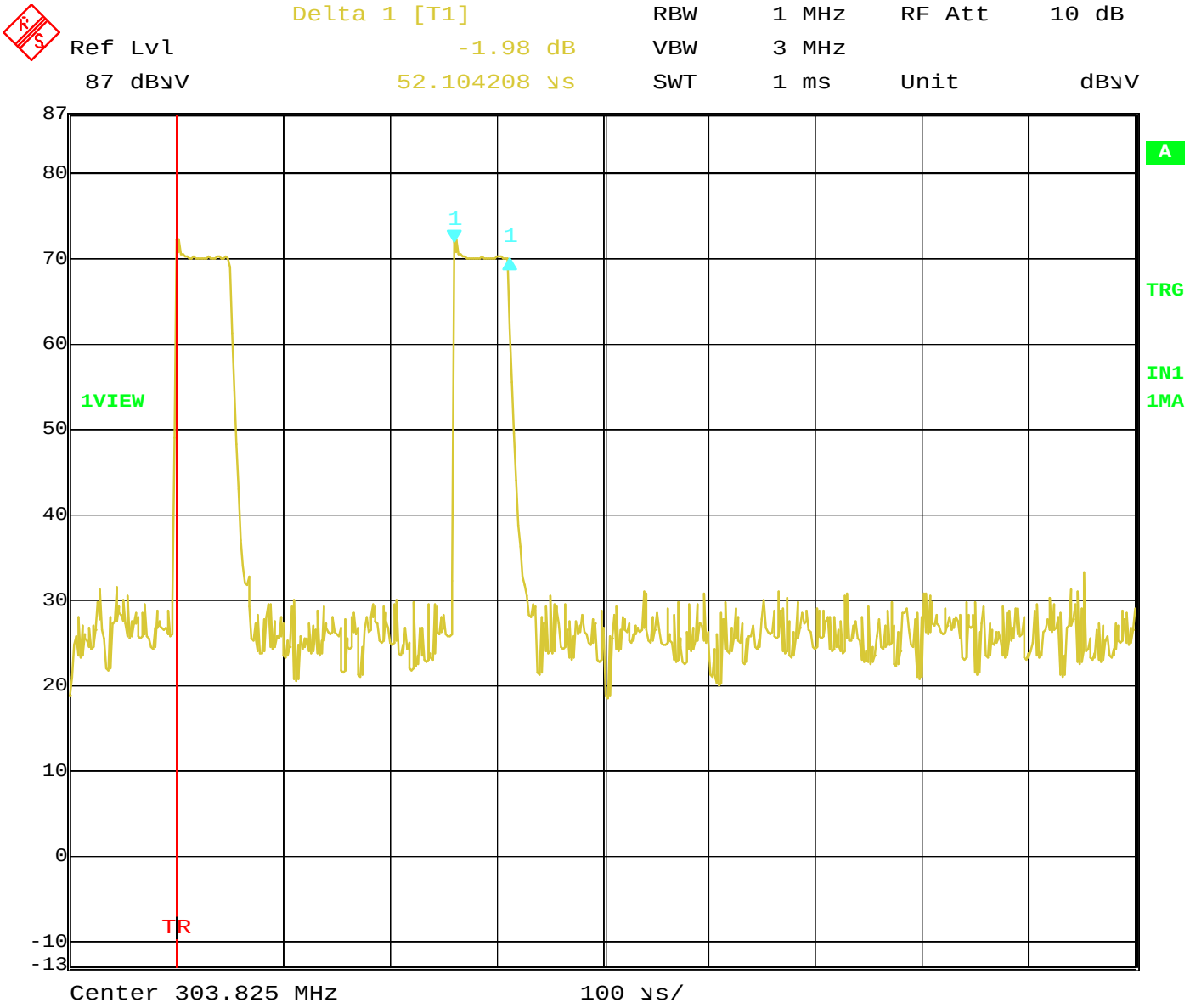
FCC Part 15, Subpart C, Section 15.231(a)(3), Periodic Operation
Test Data



Date: 4.JAN.2012 17:41:44

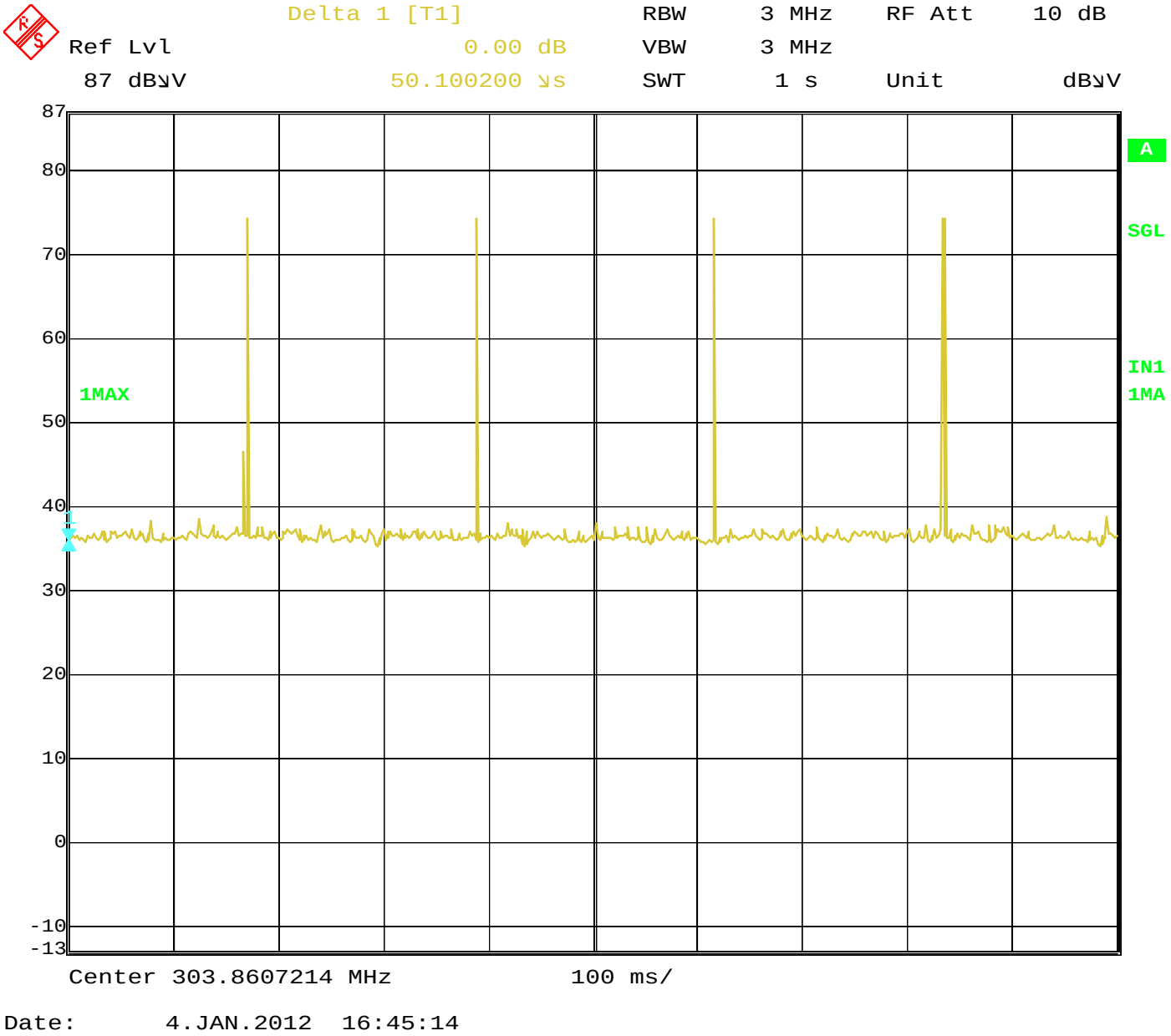
Test Method: **FCC Part 15.231(a)(3), Periodic Operation**
Notes: Pulse 1

Customer	Miller Edge, Inc.
Test Sample	Monitored Device Radio Transmitter
Model	ME-MDTX-10
Date 1-4-2012	Tech: D. Fiore



Test Method: **FCC Part 15.231(a)(3), Periodic Operation**
Notes: Pulse 2

Customer	Miller Edge, Inc.
Test Sample	Monitored Device Radio Transmitter
Model	ME-MDTX-10
Date 1-4-2012	Tech: D. Fiore



Date: 4.JAN.2012 16:45:14

Test Method: **FCC Part 15.231(a)(3), Periodic Operation**
Notes: Pulse 1 = 52.1uS
Pulse 2 = 52.1uS
Pulse 1 + Pulse 2 = 104.2uS

104.2uS x 5 per sec. x 60sec. x 60min. = 1.88sec./hour

Customer	Miller Edge, Inc.
Test Sample	Monitored Device Radio Transmitter
Model	ME-MDTX-10
Date 1-4-2012	Tech: D. Fiore

FCC Part 15, Subpart C, Section 15.231(b), Field Strength of Emissions
Test Data

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)		
Customer:	Miller Edge, Inc.	**Job No.**	R-1771P-3
Test Sample:	Monitored Device Radio Transmitter		
Model	ME-MDTX-10	**FCC ID:**	OYE-MDTR303
Operating Mode:	Continuously transmitting a RF signal at 303.825MHz		
Technician:	D.Fiore	**Date:**	1/5-6/11
Notes:	Detector: Peak, Unless otherwise specified	Test Distance: 3 Meters	

Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)/Meters	X / Y / Z	dBµV	dB	dBµV/m	uV/m	uV/m
303.825	V / 1.00	X	57.55	17.7	75.25	5787.62	55774.0
|	V / 1.00	Y	55.29	17.7	72.99	4461.70	|
|	V / 1.00	Z	58.22	17.7	75.92	6251.73	|
|	H / 1.00	X	66.83	17.7	84.53	16846.12	|
|	H / 1.00	Y	66.06	17.7	83.76	15417.00	|
303.825	H / 1.00	Z	67.94	17.7	85.64	19142.56	55774.0
607.65	V / 1.00	X	18.4	26.0	44.4	165.96	5577.4
|	V / 1.00	Y	15.0	26.0	41.0	112.20	|
|	V / 1.00	Z	12.1	26.0	38.1	80.35	|
|	H / 1.00	X	20.5	26.0	46.5	211.35	|
|	H / 1.00	Y	21.6	26.0	47.6	239.88	|
607.65	H / 1.00	Z	25.08	26.0	51.08	358.10	5577.4
*911.475	V / 1.00	X	12.5	31.5	44.0	158.49	5577.4
|	V / 1.00	Y	12.5	31.5	44.0	158.49	|
|	V / 1.00	Z	12.5	31.5	44.0	158.49	|
|	H / 1.00	X	12.5	31.5	44.0	158.49	|
|	H / 1.00	Y	12.5	31.5	44.0	158.49	|
*911.475	H / 1.00	Z	12.5	31.5	44.0	158.49	5577.4
*1215.3	V / 1.00	X	41.36	3.05	44.41	166.15	5000.0
|	V / 1.00	Y	41.36	3.05	44.41	166.15	|
|	V / 1.00	Z	41.36	3.05	44.41	166.15	|
|	H / 1.00	X	41.36	3.05	44.41	166.15	|
|	H / 1.00	Y	41.36	3.05	44.41	166.15	|
*1215.3	H / 1.00	Z	41.36	3.05	44.41	166.15	5000.0
*1519.125	V / 1.00	X	41.70	3.02	44.72	172.19	5000.0
|	V / 1.00	Y	41.70	3.02	44.72	172.19	|
|	V / 1.00	Z	41.70	3.02	44.72	172.19	|
|	H / 1.00	X	41.70	3.02	44.72	172.19	|
|	H / 1.00	Y	41.70	3.02	44.72	172.19	|
*1519.125	H / 1.00	Z	41.70	3.02	44.72	172.19	5000.0

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)		
Customer:	Miller Edge, Inc.	**Job No.**	R-1771P-3
Test Sample:	Monitored Device Radio Transmitter		
Model	ME-MDTX-10	**FCC ID:**	OYE-MDTR303
Operating Mode:	Continuously transmitting a RF signal at 303.825MHz		
Technician:	D.Fiore	**Date:**	1/5-6/11
Notes:	Detector: Peak, unless otherwise specified	Test Distance: 3 Meters	

Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)-Meters	X / Y / Z	dBµV	dB	dBµV/m	uV/m	uV/m
*1822.95	V / 1.00	X	42.11	5.94	48.05	252.64	5577.4
|	V / 1.00	Y	42.11	5.94	48.05	252.64	|
|	V / 1.00	Z	42.11	5.94	48.05	252.64	|
|	H / 1.00	X	42.11	5.94	48.05	252.64	|
|	H / 1.00	Y	42.11	5.94	48.05	252.64	|
*1822.95	H / 1.00	Z	42.11	5.94	48.05	252.64	5577.4
*2126.775	V / 1.00	X	51.55	8.02	59.57	951.70	5577.4
|	V / 1.00	Y	51.55	8.02	59.57	951.70	|
|	V / 1.00	Z	51.55	8.02	59.57	951.70	|
|	H / 1.00	X	51.55	8.02	59.57	951.70	|
|	H / 1.00	Y	51.55	8.02	59.57	951.70	|
*2126.775	H / 1.00	Z	51.55	8.02	59.57	951.70	5577.4
*2430.6	V / 1.00	X	46.70	9.81	56.51	669.11	5577.4
|	V / 1.00	Y	46.70	9.81	56.51	669.11	|
|	V / 1.00	Z	46.70	9.81	56.51	669.11	|
|	H / 1.00	X	46.70	9.81	56.51	669.11	|
|	H / 1.00	Y	46.70	9.81	56.51	669.11	|
*2430.6	H / 1.00	Z	46.70	9.81	56.51	669.11	5577.4
*2734.425	V / 1.00	X	51.28	10.81	62.09	1272.04	5000.0
|	V / 1.00	Y	51.28	10.81	62.09	1272.04	|
|	V / 1.00	Z	51.28	10.81	62.09	1272.04	|
|	H / 1.00	X	51.28	10.81	62.09	1272.04	|
|	H / 1.00	Y	51.28	10.81	62.09	1272.04	|
*2734.425	H / 1.00	Z	51.28	10.81	62.09	1272.04	5000.0
*3038.25	V / 1.00	X	41.90	12.89	54.79	548.91	5577.4
|	V / 1.00	Y	41.90	12.89	54.79	548.91	|
|	V / 1.00	Z	41.90	12.89	54.79	548.91	|
|	H / 1.00	X	41.90	12.89	54.79	548.91	|
|	H / 1.00	Y	41.90	12.89	54.79	548.91	|
*3038.25	H / 1.00	Z	41.90	12.89	54.79	548.91	5577.4

The frequency range was scanned from 30 MHz to 3.04 GHz. All emissions not recorded were more than 20 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.

*=Noise Floor Measurements (Minimum system sensitivity)

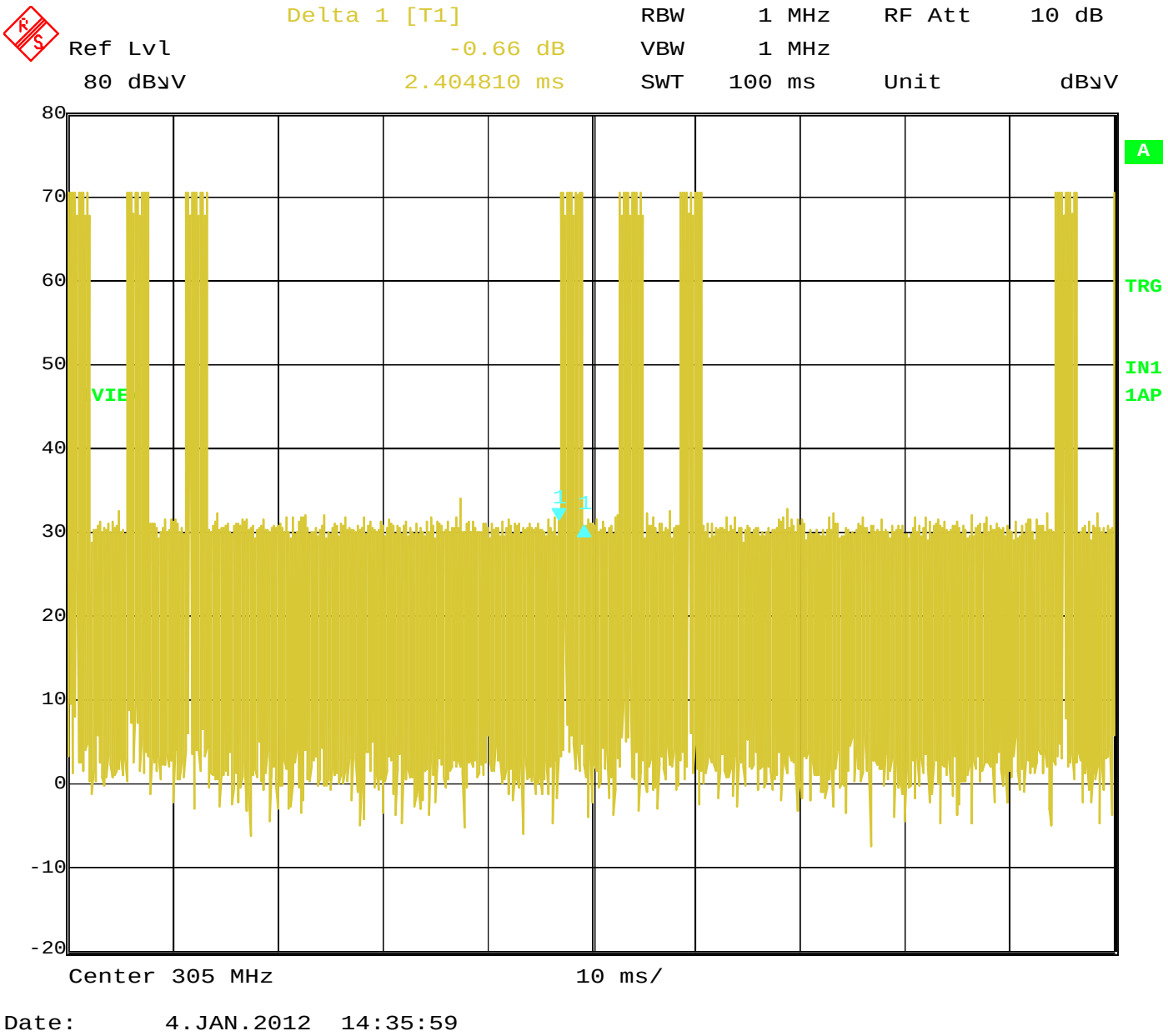
Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)		
Customer:	Miller Edge, Inc.	**Job No.**	R-1771P-3
Test Sample:	Monitored Device Radio Transmitter		
Model	ME-MDTX-10	**FCC ID:**	OYE-MDTR303
Operating Mode:	Continuously transmitting a RF signal at 303.825MHz		
Technician:	D.Fiore	**Date:**	1/5-6/11
Notes:	Average values calculated from Peak readings	Duty Cycle: 16.8%	Duty Cycle Correction: -

Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBµV	dB	dBµV/m	uV/m	uV/m
303.825	V / 1.00	X	75.25	-15.5	59.75	971.63	5577.4
|	V / 1.00	Y	72.99	-15.5	57.49	749.03	|
|	V / 1.00	Z	75.92	-15.5	60.42	1049.54	|
|	H / 1.00	X	84.53	-15.5	69.03	2828.13	|
|	H / 1.00	Y	83.76	-15.5	68.26	2588.21	|
303.825	H / 1.00	Z	85.64	-15.5	70.14	3213.66	5577.4
607.65	V / 1.00	X	44.4	-15.5	28.9	27.86	557.7
|	V / 1.00	Y	41.0	-15.5	25.5	18.84	|
|	V / 1.00	Z	38.1	-15.5	22.6	13.49	|
|	H / 1.00	X	46.5	-15.5	31.0	35.48	|
|	H / 1.00	Y	47.6	-15.5	32.1	40.27	|
607.65	H / 1.00	Z	51.08	-15.5	35.58	60.12	557.7
*911.475	V / 1.00	X	44.0	-15.5	28.5	26.61	557.7
|	V / 1.00	Y	44.0	-15.5	28.5	26.61	|
|	V / 1.00	Z	44.0	-15.5	28.5	26.61	|
|	H / 1.00	X	44.0	-15.5	28.5	26.61	|
|	H / 1.00	Y	44.0	-15.5	28.5	26.61	|
*911.475	H / 1.00	Z	44.0	-15.5	28.5	26.61	557.7
*1215.3	V / 1.00	X	44.41	-15.5	28.91	27.89	500.0
|	V / 1.00	Y	44.41	-15.5	28.91	27.89	|
|	V / 1.00	Z	44.41	-15.5	28.91	27.89	|
|	H / 1.00	X	44.41	-15.5	28.91	27.89	|
|	H / 1.00	Y	44.41	-15.5	28.91	27.89	|
*1215.3	H / 1.00	Z	44.41	-15.5	28.91	27.89	500.0
*1519.125	V / 1.00	X	44.72	-15.5	29.22	28.91	500.0
|	V / 1.00	Y	44.72	-15.5	29.22	28.91	|
|	V / 1.00	Z	44.72	-15.5	29.22	28.91	|
|	H / 1.00	X	44.72	-15.5	29.22	28.91	|
|	H / 1.00	Y	44.72	-15.5	29.22	28.91	|
*1519.125	H / 1.00	Z	44.72	-15.5	29.22	28.91	500.0

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)		
Customer:	Miller Edge, Inc.	**Job No.**	R-1771P-3
Test Sample:	Monitored Device Radio Transmitter		
Model	ME-MDTX-10	**FCC ID:**	OYE-MDTR303
Operating Mode:	Continuously transmitting a RF signal at 303.825MHz		
Technician:	D.Fiore	**Date:**	1/5-6/11
Notes:	Average values calculated from Peak readings Duty Cycle: 16.8% Duty Cycle Correction: -		

Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBµV	dB	dBµV/m	uV/m	uV/m
*1822.95	V / 1.00	X	48.05	-15.5	32.55	42.41	557.7
|	V / 1.00	Y	48.05	-15.5	32.55	42.41	|
|	V / 1.00	Z	48.05	-15.5	32.55	42.41	|
|	H / 1.00	X	48.05	-15.5	32.55	42.41	|
|	H / 1.00	Y	48.05	-15.5	32.55	42.41	|
*1822.95	H / 1.00	Z	48.05	-15.5	32.55	42.41	557.7
*2126.775	V / 1.00	X	59.57	-15.5	44.07	159.77	557.7
|	V / 1.00	Y	59.57	-15.5	44.07	159.77	|
|	V / 1.00	Z	59.57	-15.5	44.07	159.77	|
|	H / 1.00	X	59.57	-15.5	44.07	159.77	|
|	H / 1.00	Y	59.57	-15.5	44.07	159.77	|
*2126.775	H / 1.00	Z	59.57	-15.5	44.07	159.77	557.7
*2430.6	V / 1.00	X	56.51	-15.5	41.01	112.33	557.7
|	V / 1.00	Y	56.51	-15.5	41.01	112.33	|
|	V / 1.00	Z	56.51	-15.5	41.01	112.33	|
|	H / 1.00	X	56.51	-15.5	41.01	112.33	|
|	H / 1.00	Y	56.51	-15.5	41.01	112.33	|
*2430.6	H / 1.00	Z	56.51	-15.5	41.01	112.33	557.7
*2734.425	V / 1.00	X	62.09	-15.5	46.59	213.55	500.0
|	V / 1.00	Y	62.09	-15.5	46.59	213.55	|
|	V / 1.00	Z	62.09	-15.5	46.59	213.55	|
|	H / 1.00	X	62.09	-15.5	46.59	213.55	|
|	H / 1.00	Y	62.09	-15.5	46.59	213.55	|
*2734.425	H / 1.00	Z	62.09	-15.5	46.59	213.55	500.0
*3038.25	V / 1.00	X	54.79	-15.5	39.29	92.15	500.0
|	V / 1.00	Y	54.79	-15.5	39.29	92.15	|
|	V / 1.00	Z	54.79	-15.5	39.29	92.15	|
|	H / 1.00	X	54.79	-15.5	39.29	92.15	|
|	H / 1.00	Y	54.79	-15.5	39.29	92.15	|
*3038.25	H / 1.00	Z	54.79	-15.5	39.29	92.15	500.0
	*=Noise Floor Measurements (Minimum system sensitivity)						

FCC Part 15, Subpart C, Section 15.231(b), Duty Cycle Determination Pulsed Operation Test Data



Date: 4.JAN.2012 14:35:59

Test Method: **FCC Part 15.231(b), Duty Cycle Determination Pulsed Operation**
Notes: Measurement of cycle time = 2.40mSec. per Pulse x 7 Pulses = 16.8mS/100mS

Customer	Miller Edge, Inc.
Test Sample	Monitored Device Radio Transmitter
Model	ME-MDTX-10
Date 1-4-2012	Tech: D. Fiore

FCC Part 15, Subpart B, Paragraph 15.109(a) Radiated Emissions
30 MHz to 1 GHz
Test Data

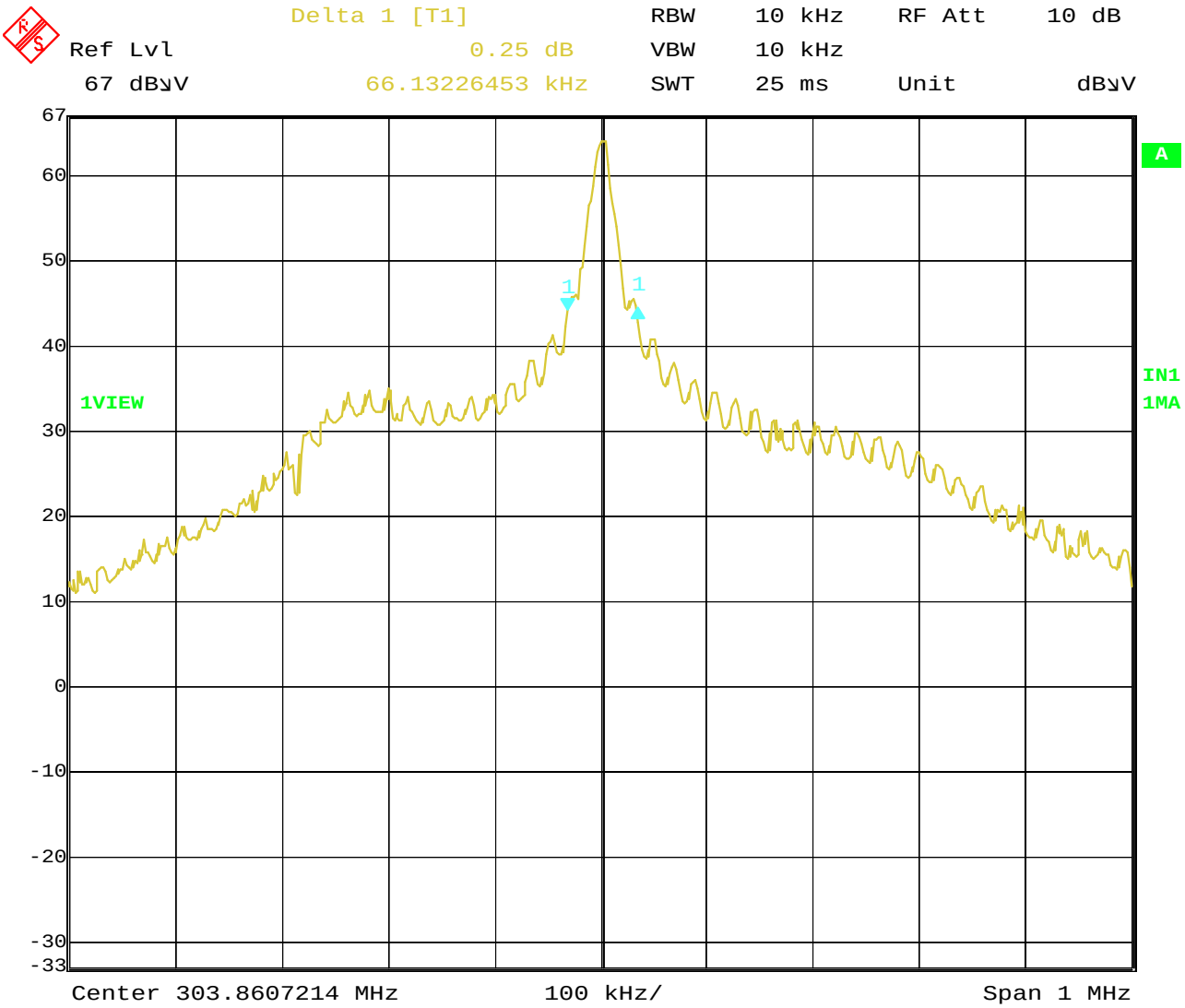
Test Method:	**FCC Part 15, Subpart B, Radiated Emissions, 30 MHz to 1 GHz, Para:15.109(a)**		
Customer:	Miller-Edge, Inc.	**Job No.:**	R-1771P-3
Test Sample:	Monitored Device Radio Transmitter		
Model No.:	ME-MDTX-10	**Serial No.:**	N/A
Operating Mode:	Continuously Transmitting a RF signal at 303.825MHz		
Technician:	D.Fiore	**Date:**	1/5/12

Notes: Test Distance: 3 Meters Temp: 9 °C RH: 37%
Detector: Quasi-Peak Below 1 GHz, Peak above 1 GHz

Frequency	Antenna Position	EUT Orientation	Meter Readings	Correction Factor	Corrected Reading	Converted Reading	Limit
MHz	(V/H) /	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
*33.71	H/1.00	180.0	6.2	19.6	25.8	19.50	
88.00							100
88.00							150
*110.00	H/1.00	180.0	3.3	10.99	14.29	5.18	
*197.20	H/1.00	180.0	5.1	13.91	19.01	8.92	
*203.00	H/1.00	180.0	6.2	14.14	20.34	10.40	
216							150
216							200
*602.54	H/1.00	180.0	3.3	25.80	29.10	28.51	
960.00							200
960.00							500
*995.00	H/1.00	180.0	3.6	32.15	35.75	61.30	
1000.0							500

* This measurement represents the minimum sensitivity of measurement system.
The frequency range was scanned from 30 MHz to 1 GHz.
The emissions observed from the EUT do not exceed the specified limits.
Emissions not recorded were more than 20dB under the specified limit.

FCC Part 15, Subpart C, Section 15.231 (c) Bandwidth of Emission
Test Data



Test Method: **FCC Part 15.231(c), Bandwidth of Emissions**
Notes: 0.25% of 303.825MHz = 759.6kHz

Customer	Miller Edge, Inc.
Test Sample	Monitored Device Radio Transmitter
Model	ME-MDTX-10
Date 1-4-2012	Tech: D. Fiore