FCC CFR47 PART 15 SUBPART C
IC RSS-210
CERTIFICATION
TEST REPORT

FOR

ELAN RF REMOTE CONTROL

MODEL NUMBER: DLA2RM, DLA4RM, DLA6RM

FCC ID: QNP-DLARM
IC: 4676A-DLARM

REPORT NUMBER: 07U11142-1, REVISION B

ISSUE DATE: AUGUST 28, 2007

Prepared for

SECURE WIRELESS, INC.
5817 DRYDEN PLACE, SUITE D
CARLSBAD, CA 92008, USA

Prepared by

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	08/14/07	Initial Issue	T. Chan
B	08/28/07	Revised Test Standard Issue	T. Hong

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SECURE WIRELESS, INC.
5817 DRYDEN PLACE, SUITE D
CARLSBAD, CA 92008, USA

EUT DESCRIPTION: ELAN RF REMOTE CONTROL

MODEL: DLA2RM, DLA4RM, DLA6RM

SERIAL NUMBER: 01996

DATE TESTED: JUNE 21-27, 2007

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART C	NO NON-COMPLIANCE NOTED
IC RSS-210 ISSUE 7	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

THANH NGUYEN
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2 and FCC CFR 47 Part 15 and IC RSS-210 Issue 7.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Radiated Emission Above 2000 MHz	+/- 4.3 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Description	Elan RF Remote Control
Equipment Type	Transmitter
Fundamental Frequency	433.92 MHz
Power Source	Lithium Battery 3V, Type CR2032x2
Transmitting Time	Periodic ≤5 seconds
Manufacturer	Secure Wireless, Inc.

5.2. SOFTWARE AND FIRMWARE

EUT is modified to transmit continuously.

5.3. MODIFICATIONS

No modifications to the EUT were performed.

5.4. WORST-CASE CONFIGURATION AND MODE

EUT has been evaluated at X, Y, and Z-axis. The highest measured output power was at Y-Axis.

5.5. DESCRIPTION OF AVAILABLE ANTENNAS

The transmitter utilizes an internal loop fixed antenna with a maximum gain of -15dBi.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

N/A

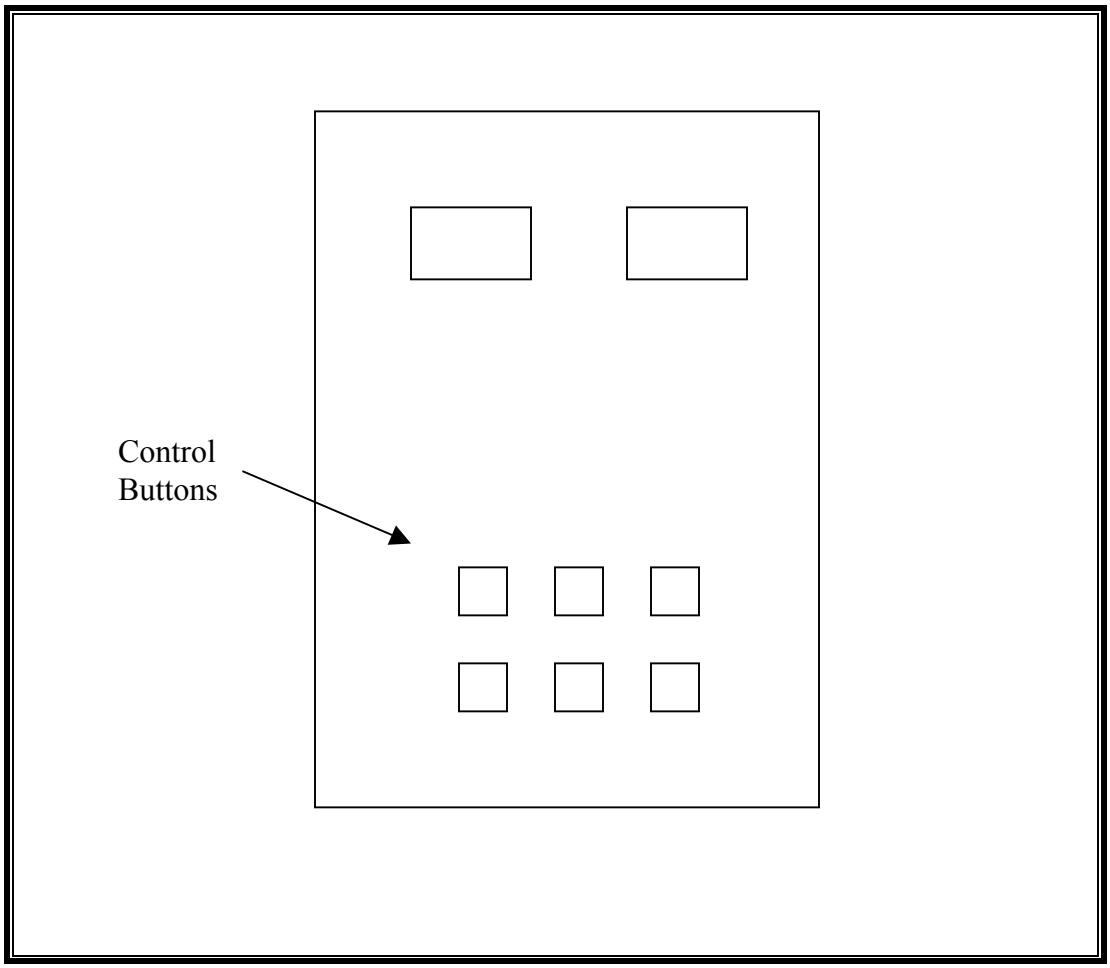
I/O CABLES

N/A

TEST SETUP

The EUT is stand-alone unit and is battery operated.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**Cal Due**
SA RF Section, 1.5 GHz	Agilent / HP	85680B	2814A04227	01/07/08
Spectrum Analyzer 9 Hz ~ 26.5 GHz	Agilent / HP	E4407B	US41444322	08/04/07
Antenna, Horn 1 ~ 18 GHz	ETS	3117	29301	04/22/08
Preamplifier, 1 ~ 26.5 GHz	Agilent / HP	8449B	3008A00369	08/17/07
Antenna, Bilog 30 MHz ~ 2 Ghz	Sunol Sciences	JB1	A0022704	09/03/07
Quasi-Peak Adaptor	Agilent / HP	85650A	3145A01654	01/21/08
SA Display Section 2	Agilent / HP	85662A	2816A16696	04/07/08

7. LIMITS AND RESULTS

7.1. 20dB BANDWIDTH

LIMIT

§15.231
IC RSS-210 Issue 7 A1.1.3

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer.

20dB Bandwidth: The RBW is set to 100 KHz. The VBW is set to 100 KHz. The sweep time is coupled. Bandwidth is determined at the points 20 dB down from the modulated carrier.

RESULTS

No non-compliance noted:

20dB Bandwidth

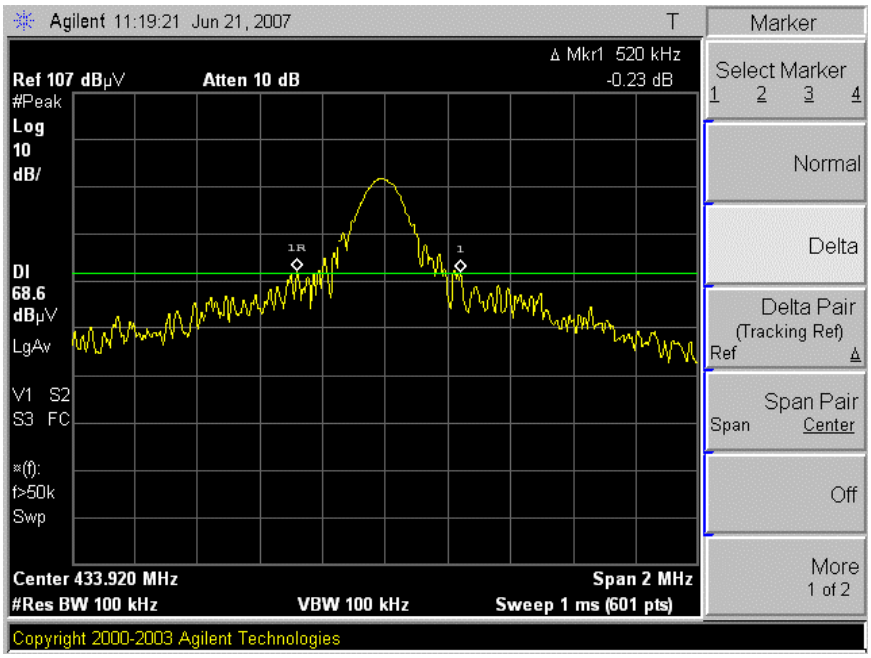
Frequency (MHz)	20dB Bandwidth (KHz)	Limit (KHz)	Margin (KHz)
433.92	520	1084.8	-564.8

99% Bandwidth

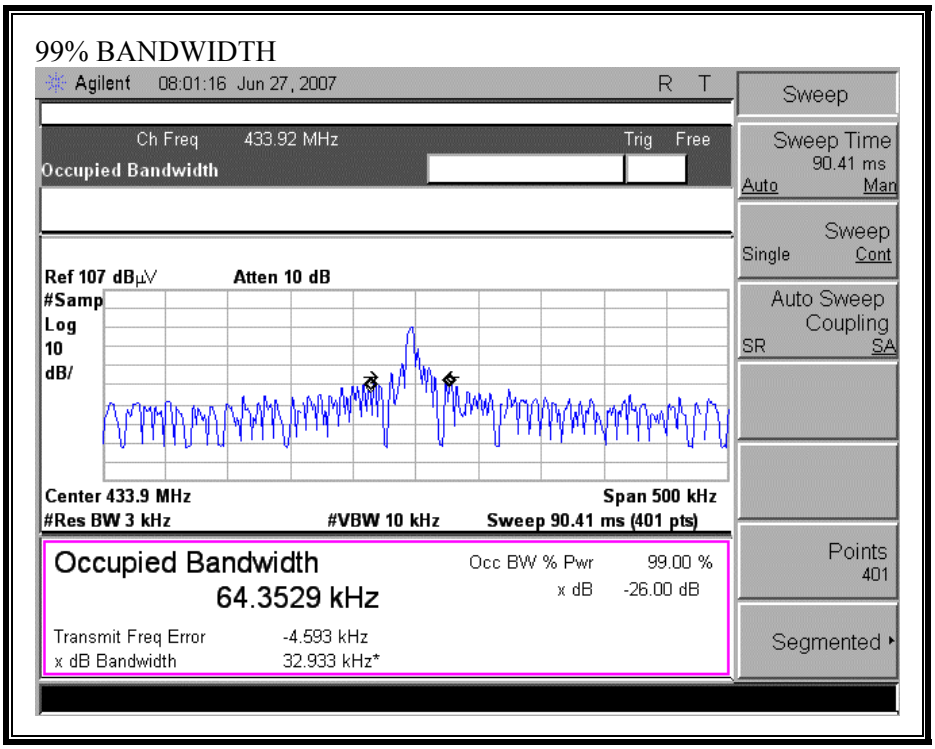
Frequency (MHz)	99% Bandwidth (KHz)	Limit (KHz)	Margin (KHz)
433.92	64.3529	1084.8	-1020.4471

20dB BANDWIDTH

20dB BANDWIDTH



99% BANDWIDTH



7.2. MAXIMUM MODULATION PERCENTAGE (M %)

LIMIT

§15.35 (c)
IC RSS-Gen Issue 2 §4.3

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is coupled and the span is set to 0 Hz. The number of pulses is measured and calculated in a 100 ms scan.

CALCULATION:

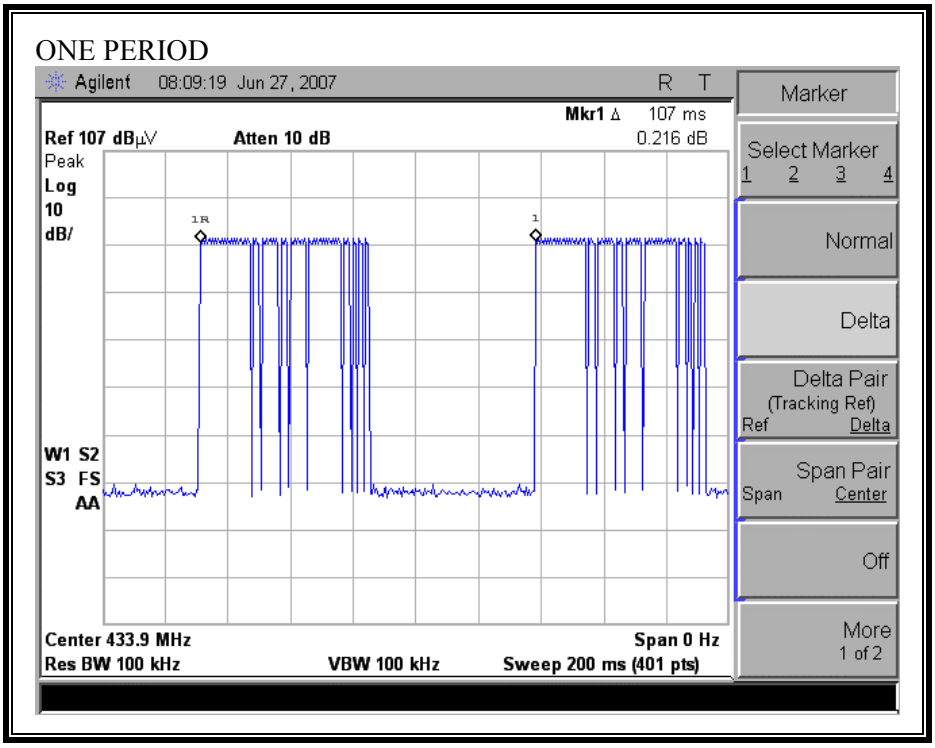
Average Reading = Peak Reading (dBuV/m)+ 20log (Duty Cycle), Where Duty Cycle is
(# of long pulses * long pulse width) + (# of short pulses * short pulse width) / 100 or T

RESULTS

No non-compliance noted:

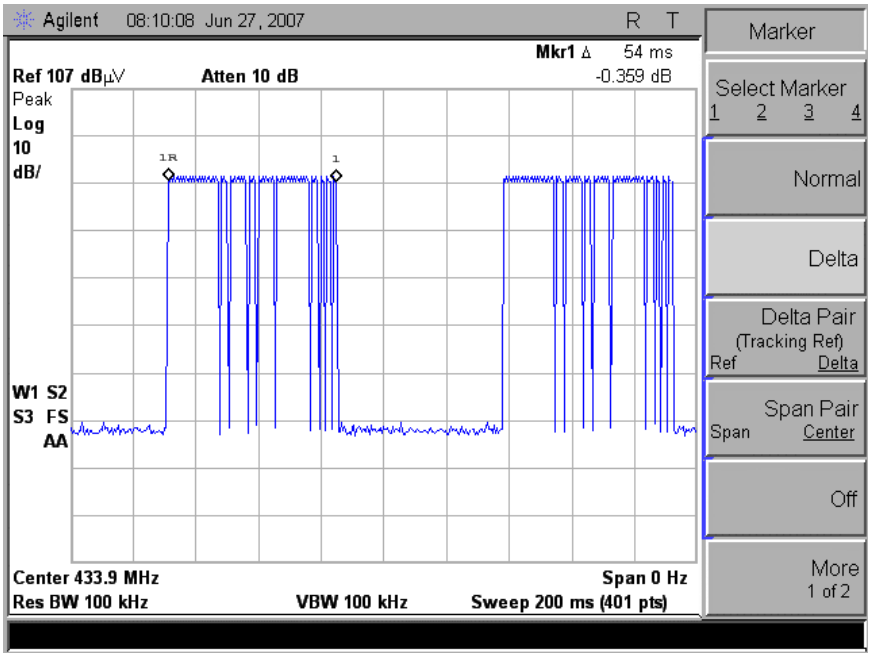
One Period (ms)	Long Pulse Width (ms)	# of Long Pulses	Short Width (ms)	# of Short Pulses	Duty Cycle	20*Log Duty Cycle (dB)
100	1.039	8	0.4454	39	0.257	-11.81

ONE PERIOD

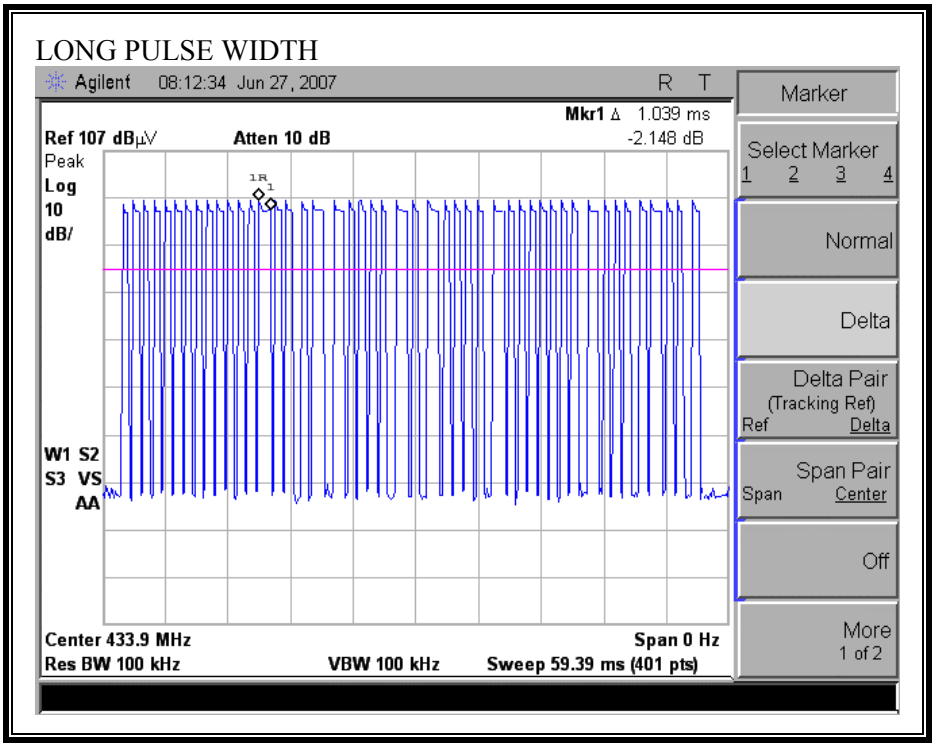


ON TIME

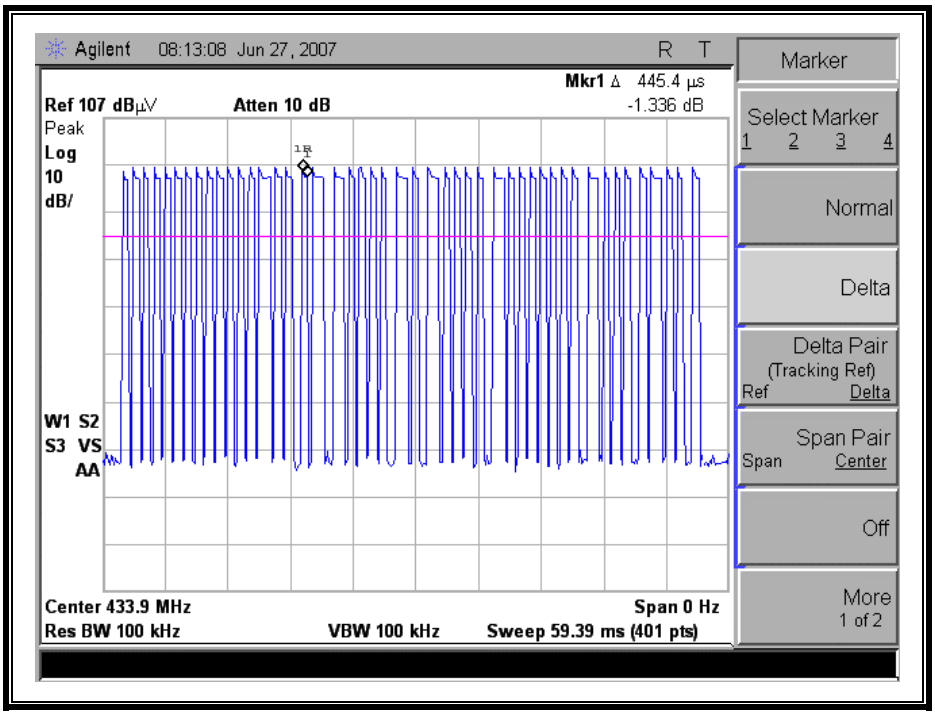
ON TIME



LONG PULSE WIDTH



SHORT PULSE WIDTH



7.3. LESS THAN 5 SECONDS PLOT

LIMIT

§15.231 (a) (1); (a) (2)
RSS210 A1.1.1 (1)

TEST PROCEDURE

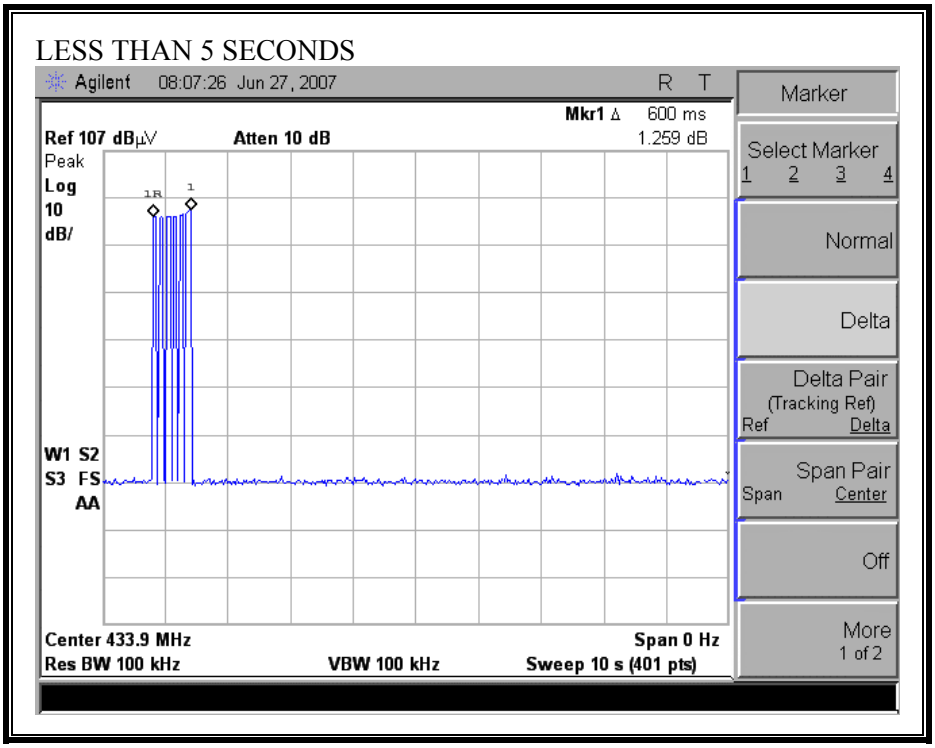
The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is set to 10 seconds and the span is set to 0 Hz.

RESULTS

No non-compliance noted:

Transmission begins approximately 0.8 seconds after activation and transmission ceases approximately 1.4 seconds after activation.

LESS THAN 5 SECONDS



7.4. RADIATED EMISSIONS

7.4.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

§15.231 (b)
§15.205 (a)
§15.205 (b)
§15.209 (a)
§15.209 (b)

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak, and duty cycle apply for average measurement.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurement, and duty cycle apply for average measurement.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

FUNDAMENTAL HARMONICS AND SPURIOUS EMISSIONS 30 – 1000 MHz

COMPLIANCE Certification Services
FCC, VCCI, CISPR, CE, AUSTEL, NZ
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Project #:	07U11142
Report #:	070621A1
Date& Time:	6/21/2007 1033 AM
Test Engr:	Thanh Nguyen
Company:	Secure Wireless
EUT Description:	ELAN RF Remote Control
Test Configuration :	Stand Alone EUT
Type of Test:	FCC 15.231
Mode of Operation:	TX ON

M% = ((t1+t2+t3+...)/T) = 0.257

Av Reading = Pk Reading + 20*log(M%)
20 * log (M%) = -11.80 (Max=-20dB)

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	AF (dB)	Closs (dB)	Pre-amp (dB)	Pk Level (dBuV/m)	Av Level (dBuV/m)	Pk Limit FCC_B	Av Limit FCC_B	Pk Margin (dB)	Avg Margin (dB)	Pol (H/V)
433.92MHz Fundamental frequency												
X-Position												
433.92	58.59	46.79	16.71	1.83	0.00	77.13	65.33	100.830	80.830	-23.70	-15.50	3mV
433.92	71.85	60.05	16.71	1.83	0.00	90.39	78.59	100.830	80.830	-10.44	-2.24	3mH
Y-Position												
433.92	73.56	61.76	16.71	1.83	0.00	92.10	80.30	100.830	80.830	-8.73	-0.53	3mV
433.92	64.89	53.09	16.71	1.83	0.00	83.43	71.63	100.830	80.830	-17.40	-9.20	3mH
Z-Position												
433.92	70.21	58.41	16.71	1.83	0.00	88.75	76.95	100.830	80.830	-12.08	-3.88	3mV
433.92	72.13	60.33	16.71	1.83	0.00	90.67	78.87	100.830	80.830	-10.16	-1.96	3mH
The Data shows that Y-Position is the worst case												
867.84	70.16	58.36	22.39	3.37	31.50	64.42	52.62	80.830	60.830	-16.41	-8.21	3mV
867.84	58.07	46.27	22.39	3.37	31.50	52.33	40.53	80.830	60.830	-28.50	-20.30	3mH

Note: No other emissions were detected above system noise floor from 30 MHz to 1000 MHz.

HARMONICS AND SPURIOUS EMISSIONS ABOVE 1GHz

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber Site

Company: Secure Wireless
Project #: 07U11142
Date: 6/21/2007
Test Engineer: Thanh Nguyen
Configuration: Stand Alone EUT
Mode: TX ON
EUT: ELAN RF REMOTE CONTROL.

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T144 Miteq 3008A00931			FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		Gordon 203134001		

Peak Measurements
RBW=VBW=1MHz

Average=Peak-Duty Cycle

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
1.3030	3.0	56.80	45.0	24.9	3.4	-39.1	0.0	0.0	46.0	34.2	74	54	-28.0	-19.8	V
2.1700	3.0	56.63	44.8	27.8	4.5	-37.8	0.0	0.0	51.1	39.3	80.83	60.83	-29.7	-21.5	V
2.6030	3.0	59.14	47.3	28.9	5.0	-37.4	0.0	0.0	55.6	43.7	80.83	60.83	-25.3	-17.1	V
3.0374	3.0	65.09	53.3	30.1	5.4	-37.3	0.0	0.0	63.2	51.4	80.83	60.83	-17.6	-9.5	V
3.4730	3.0	47.21	35.4	31.2	5.7	-37.0	0.0	0.0	47.1	35.3	80.83	60.83	-33.7	-25.5	V
3.9030	3.0	46.30	34.5	32.3	6.1	-36.7	0.0	0.0	48.1	36.2	74	54	-25.9	-17.8	V
4.3400	3.0	44.63	32.8	32.9	6.5	-36.5	0.0	0.0	47.4	35.6	74	54	-26.6	-18.4	V
1.3020	3.0	49.85	38.0	24.9	3.4	-39.1	0.0	0.0	39.1	27.3	74	54	-34.9	-26.7	H
1.7357	3.0	46.62	34.8	26.5	4.0	-38.4	0.0	0.0	38.6	26.8	80.83	60.83	-42.2	-34.0	H
2.1696	3.0	58.36	46.6	27.8	4.5	-37.8	0.0	0.0	52.9	41.0	80.83	60.83	-28.0	-19.8	H
2.6035	3.0	63.35	51.5	28.9	5.0	-37.4	0.0	0.0	59.8	48.0	80.83	60.83	-21.1	-12.9	H
3.0374	3.0	67.92	56.1	30.1	5.4	-37.3	0.0	0.0	66.0	54.2	80.83	60.83	-14.8	-6.6	H
3.4714	3.0	58.45	46.6	31.2	5.7	-37.0	0.0	0.0	58.4	46.6	80.83	60.83	-22.5	-14.3	H
3.9057	3.0	52.17	40.4	32.3	6.1	-36.7	0.0	0.0	53.9	42.1	74	54	-20.1	-11.9	H
4.3392	3.0	53.33	41.5	32.9	6.5	-36.5	0.0	0.0	56.1	44.3	74	54	-17.9	-9.7	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other emissions from EUT were detected above system noise floor.

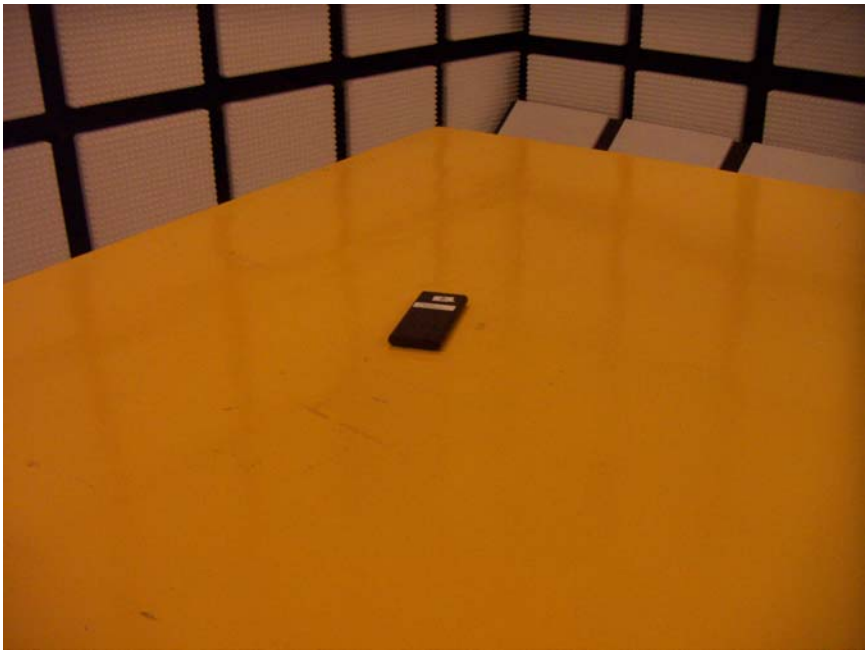
7.4.2. RECEIVER SPURIOUS EMISSIONS LIMIT

Not applicable, this EUT is transmitter only.

8. SETUP PHOTOS

RADIATED RF MEASUREMENT SETUP FOR PORTABLE CONFIGURATION

X-AXIS



Y-AXIS

Z-AXIS

END OF REPORT