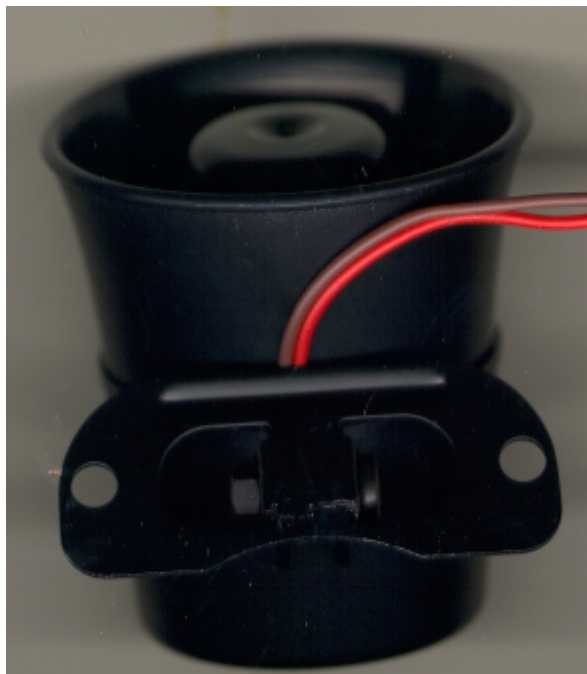
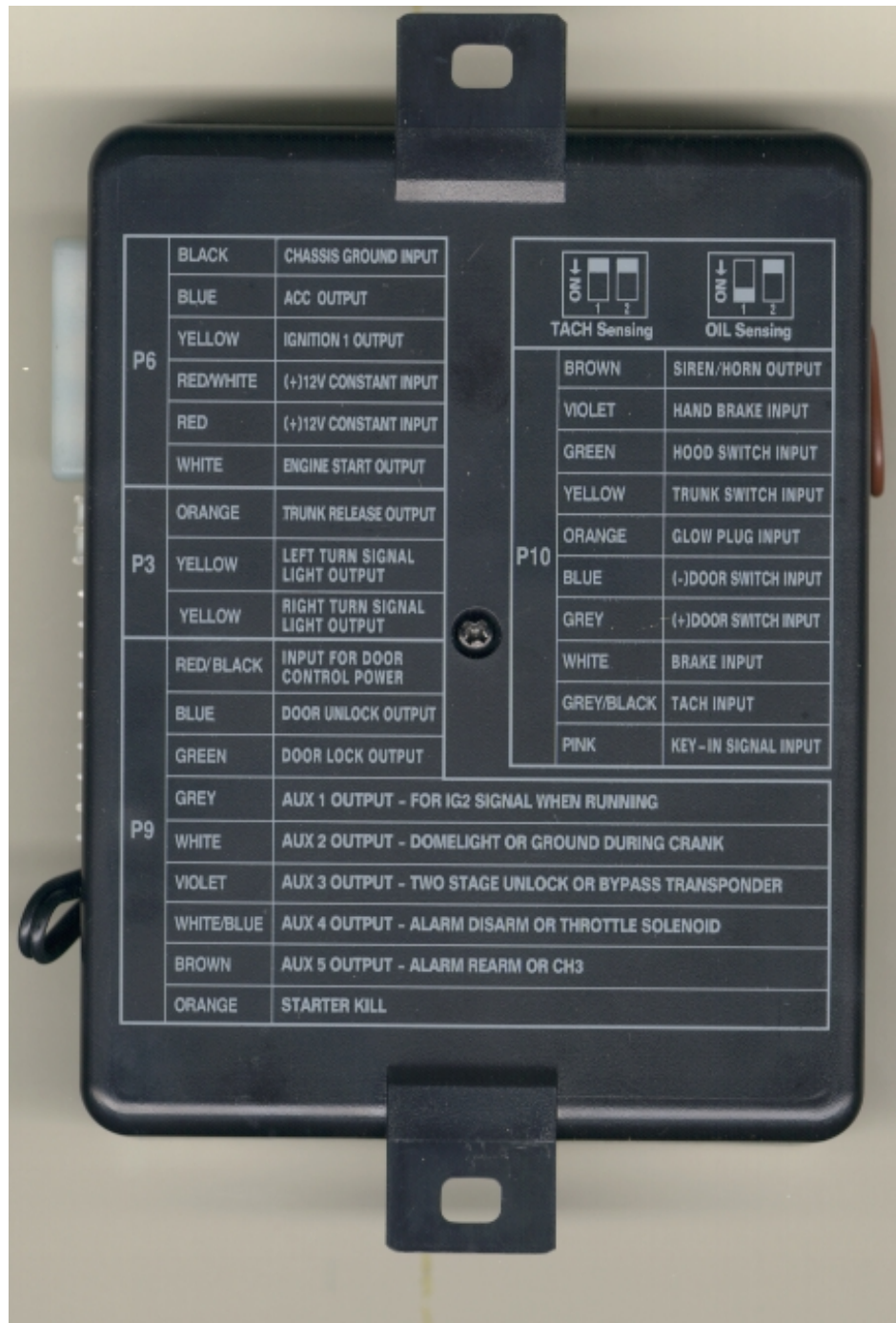






FCC ID: DFCTELA2000  
FCC ID: DFCTELA2000C





P6	BLACK	CHASSIS GROUND INPUT
	BLUE	ACC OUTPUT
	YELLOW	IGNITION 1 OUTPUT
	RED/WHITE	(+)12V CONSTANT INPUT
	RED	(+)12V CONSTANT INPUT
P3	WHITE	ENGINE START OUTPUT
	ORANGE	TRUNK RELEASE OUTPUT
	YELLOW	LEFT TURN SIGNAL LIGHT OUTPUT
P9	YELLOW	RIGHT TURN SIGNAL LIGHT OUTPUT
	RED/BLACK	INPUT FOR DOOR CONTROL POWER
	BLUE	DOOR UNLOCK OUTPUT
	GREEN	DOOR LOCK OUTPUT
	GREY	AUX 1 OUTPUT - FOR IG2 SIGNAL WHEN RUNNING
P9	WHITE	AUX 2 OUTPUT - DOMELIGHT OR GROUND DURING CRANK
	VIOLET	AUX 3 OUTPUT - TWO STAGE UNLOCK OR BYPASS TRANSPONDER
	WHITE/BLUE	AUX 4 OUTPUT - ALARM DISARM OR THROTTLE SOLENOID
	BROWN	AUX 5 OUTPUT - ALARM REARM OR CH3
	ORANGE	STARTER KILL

			
TACH Sensing		OIL Sensing	
P10	BROWN	SIREN/HORN OUTPUT	
	VIOLET	HAND BRAKE INPUT	
	GREEN	HOOD SWITCH INPUT	
	YELLOW	TRUNK SWITCH INPUT	
	ORANGE	GLOW PLUG INPUT	
	BLUE	(-)DOOR SWITCH INPUT	
	GREY	(+)DOOR SWITCH INPUT	
	WHITE	BRAKE INPUT	
	GREY/BLACK	TACH INPUT	
PINK	KEY-IN SIGNAL INPUT		



FCC ID: DFCTELA2000  
FCC ID: DFCTELA2000C





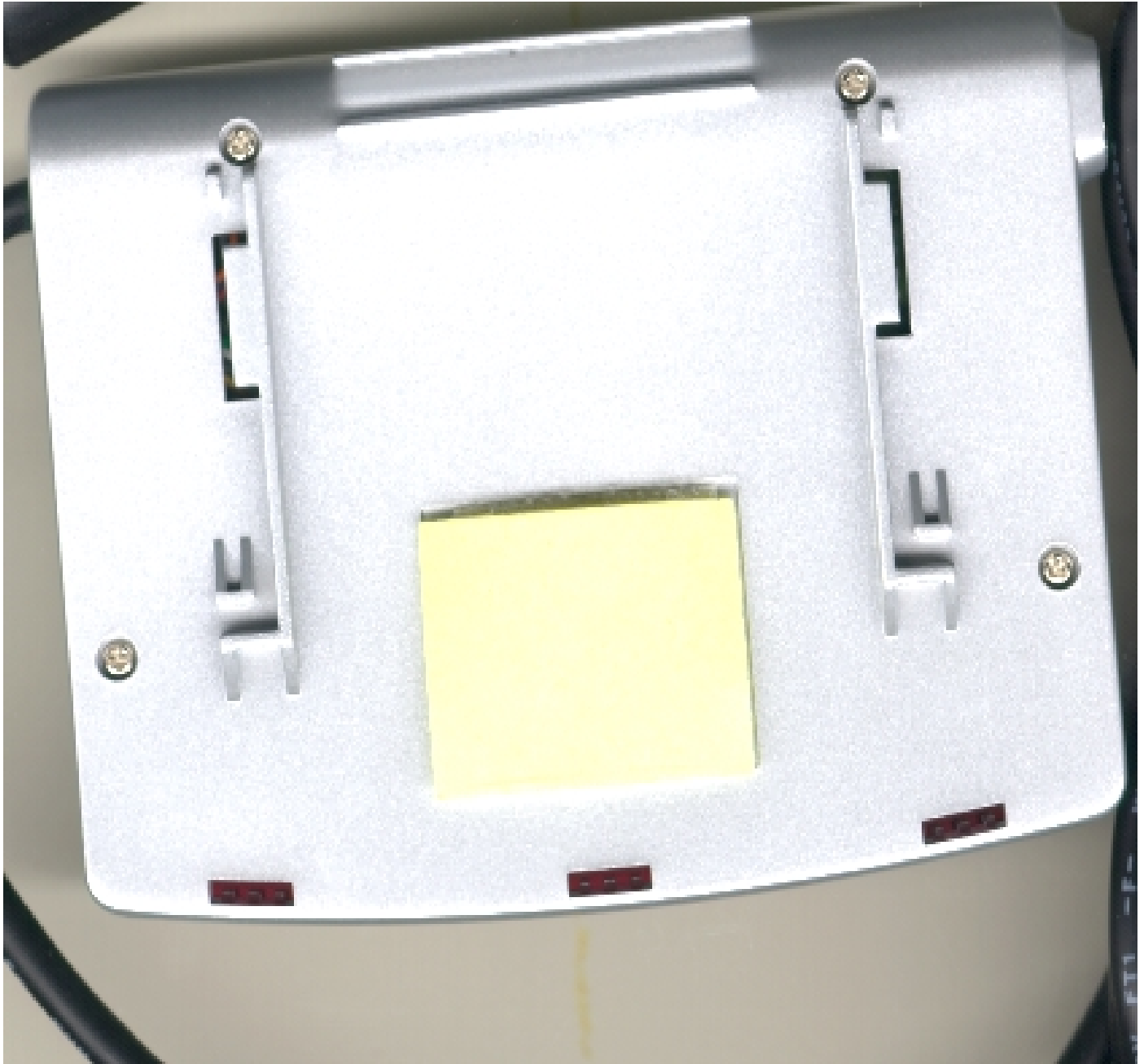


FCC ID: DFCTELA2000  
FCC ID: DFCTELA2000C



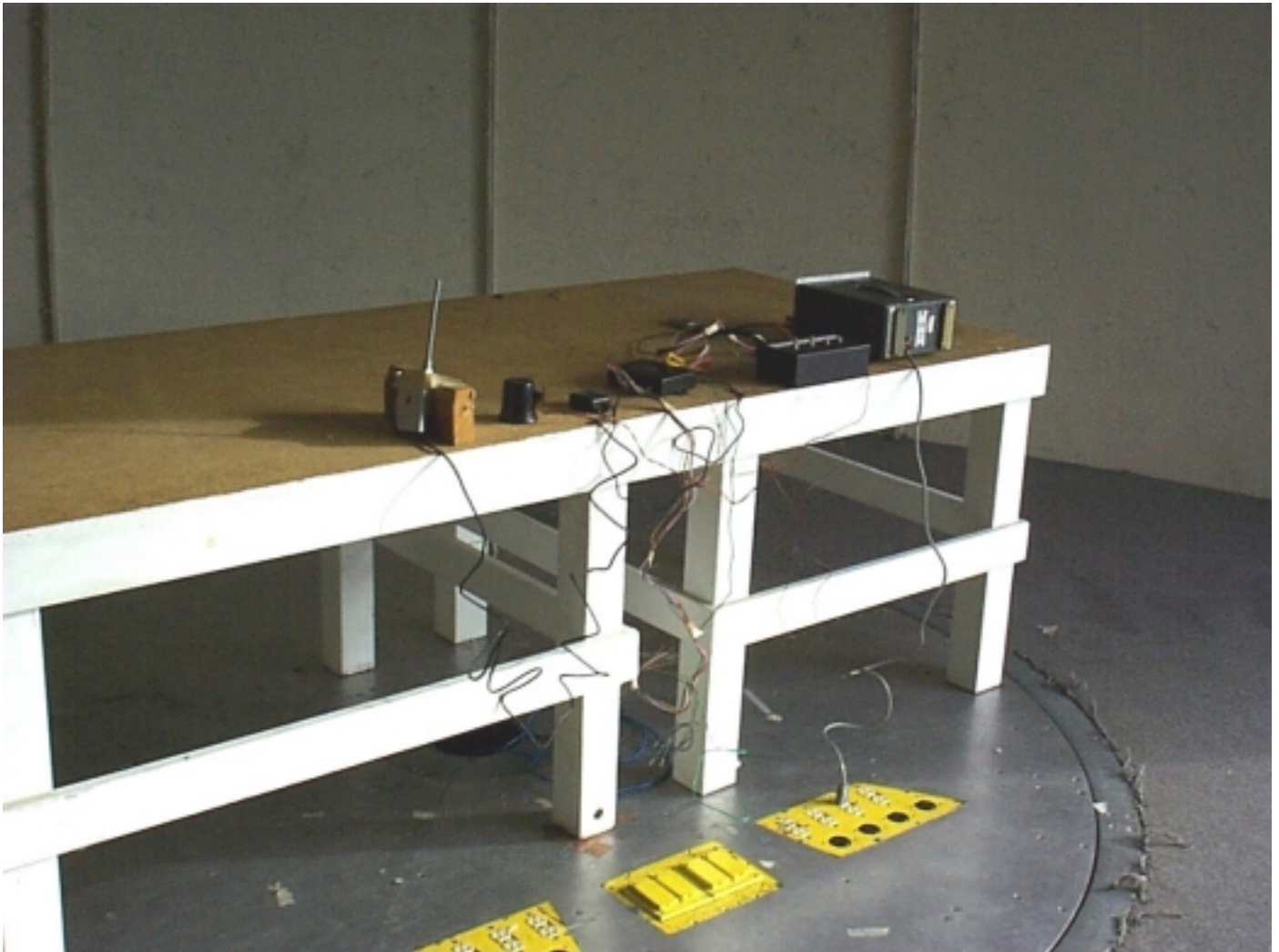


FCC ID: DFCTELA2000  
FCC ID: DFCTELA2000C













# **APPENDIX B**

## **TEST FACILITY**



## TEST FACILITY

**Location:** 11825 Niles Canyon Road  
Sunol, CA 94586

**Description:** At the Sunol facility, there are four 3/10 m open area test sites, two line conducted labs and two indoor conducted/radiated engineering labs. The OATS and the LC labs are constructed and calibrated to meet the FCC requirements in documents OST-55/MP-4 and ANSI C63.4 1992.

FCC has also accepted Underwriters Laboratories, Inc. facility site for filing applications for certification and notification.

**Certification:** Underwriters Laboratories, Inc. has the following test/lab sites certified by VCCI and Industry Canada (IC):

Open Area Test Site #1: VCCI No. R-802 and IC 2816-1

Open Area Test Site #2: VCCI No. R-376 and IC 2816-2

Open Area Test Site #3: VCCI No. R-377 and IC 2816-3

Open Area Test Site #4: VCCI No. R-378 and IC 2816-4

Line Conducted Lab #1: VCCI No. C-392

Line Conducted Lab #2: VCCI No. C-427



# APPENDIX C

## TEST EQUIPMENT





## MEASURING INSTRUMENT SETTINGS

TEST TYPE	DETECTOR	FREQUENCY RANGE	RESOLUTION BANDWIDTH	VIDEO BANDWIDTH
Conducted	Peak/Avg	10 kHz-150 kHz	300 Hz/3 kHz	100 kHz/3 kHz
Conducted	Peak/QP/Avg	150 kHz-30 MHz	10 kHz/100 kHz	100 kHz
Radiated	Peak/Avg	60 Hz-1 kHz	10 Hz	100 kHz
Radiated	Peak/Avg	1 kHz-10 kHz	100 Hz	100 kHz
Radiated	Peak/Avg	10 kHz-150 kHz	300 Hz	100 kHz/300 Hz
Radiated	Peak/QP/Avg	150 kHz-30 MHz	10 kHz	100 kHz/10 kHz
Radiated	Peak/QP/Avg	30 MHz-1 GHz	100 kHz	100 kHz/10 kHz
Radiated	Peak/Avg	Above 1 GHz	1 MHz	1 MHz/300 kHz

**Note:** All readings on data pages are taken with the detector in peak mode unless otherwise stated.



## TEST EQUIPMENT LIST

EQUIPMENT TYPE	* MFR	MODEL NUMBER	SERIAL NUMBER	LAST ** CAL.	CAL. DUE
Biconical Antenna	EMCO	3110	9210-1581	09-05-00	09-05-01
Horn Antenna	EMCO	3115	9609-4906	09-03-00	09-03-01
Spectrum Analyzer/Receiver	Hewlett Packard	85462A	3807A00446	06-26-00	06-26-01
RF Filter Section	Hewlett Packard	85460A	3704A00417	06-26-00	06-26-01
Spectrum Analyzer	Tektronix	2782	B020370	06-16-00	06-16-01

\* **MFR** = Manufacturer

\*\* **CAL.** = Calibration



# **APPENDIX D**

## **TEST METHODS**



## TEST METHODS (LINE CONDUCTED TEST)

- 1) The equipment will be set up according to the test specification to simulate typical actual usage. When the EUT is a table-top system, a wooden table with a height of 0.8 meters is used which is placed on the ground plane according to the test specification. When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, will be placed according to the test specification.
- 3) All I/O cables are positioned to simulate typical actual usage according to the test specification.
- 4) The ALADDIN 2000 receives AC power through a Line Impedance Stabilization Network (LISN) which is grounded to the ground plane.
- 5) Support equipment, if used, will receive AC power through a second LISN.
- 6) Emissions are measured on each current carrying line of the EUT using a spectrum analyzer connected to the LISN powering the EUT.
- 7) During the emission measurement, the I/O cable placement position is adjusted in order to maximize the emission measurement level.
- 8) Emission frequency and amplitude are recorded into a computer in which correction factors are used to calculate the emission level and compare the reading to the applicable limit.

### Data Sample:

Freq. MHz	Corr'd dBμV	Site CF	Limit dBμV	Margin dBμV	Line
2.47	46.0	6.0	48.0	-2.0	L1

Freq. = Emission frequency in MHz  
Corr'd dBμV = RAW reading converted to dBμV and CF added  
Site CF = Correction Factors for pad/cable losses  
Limit dBμV = Limit stated in standard  
Margin dBμV = Reading in reference to limit  
Note = Current carrying line of reading



## TEST METHODS (RADIATED TEST)

- 1) The equipment will be set up according to the test specification to simulate typical actual usage. When the EUT is a table-top system, a wooden table with a height of 0.8 meters is used which is placed on the ground plane according to the test specification. When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, will be placed according to the test specification.
- 3) All I/O cables are positioned to simulate typical actual usage according to the test specification.
- 4) The antenna is placed at some given distance away from the EUT as stated in the test specification. The antenna connects to the analyzer via a cable and at times a preamp is used.
- 5) Emissions are scanned and measured rotating the EUT to 360 degrees, positioning cable placement, and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarizations in order to maximize the emission reading level.
- 6) Emission frequency, amplitude, antenna position, polarization, and table position are recorded into a computer in which correction factors are used to calculate the emission level and compare the reading to the applicable limit.

### Data Sample:

Freq. MHz	Corr'd dB $\mu$ V	Site CF	Limit dB $\mu$ V	Margin dB $\mu$ V	Table Pos.	Ant Pos.
76.57	44.2	-12.8	40.0	-5.3	180	1.5V

Freq.	= Emission frequency in MHz
Corr'd dB $\mu$ V	= RAW reading converted to dB $\mu$ V and CF added
Site CF	= Correction Factors for pad/cable losses
Limit dB $\mu$ V	= Limit stated in standard
Margin dB $\mu$ V	= Reading in reference to limit
Table Position	= EUT placement in reference to antenna
Antenna Position	= Antenna polarization and height above ground plane





## **APPENDIX E**

## **CLASS TYPES**



## FCC CLASS TYPES

### CLASS A COMPUTING DEVICE

A computing device which is marketed for use in a commercial or business environment; exclusive of a device which is marketed for use by the general public, or which is intended to be used in the home. Reference: Section 15.3 (h).

### CLASS B COMPUTING DEVICE

A computing device that is marketed for use in a residential environment notwithstanding use in a commercial, business, or industrial environment. Examples of such devices include, but are not limited to: electronic games, personal computers, calculators, and similar devices that are marketed for the general public. Reference: Section 15.3 (i).

**NOTE:** A manufacturer may also qualify a device intended to be marketed in a commercial, business, or industrial environment as a Class B computing device, and in fact is encouraged to do so, provided the device complies with the technical specifications for a Class B computing device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a computing device as a Class B computing device, regardless of its intended use.



## **APPENDIX F**

# **LABELING REQUIREMENTS**



## FCC CLASS B LABELING REQUIREMENT

### Section 15.19 of the Code of Federal Regulation

- A) The Class B computing device subject to **certification** by the Commission shall be identified pursuant to par. 2.925 et seq of this Chapter. In addition, the label shall include the following statement:

FCC ID: DFCTELA2000  
THIS DEVICE COMPLIES WITH PART 15 OF THE  
FCC RULES. OPERATION IS SUBJECT TO THE  
FOLLOWING TWO CONDITIONS:  
(1) THIS DEVICE MAY NOT CAUSE HARMFUL  
INTERFERENCE, AND (2) THIS DEVICE MUST  
ACCEPT ANY INTERFERENCE RECEIVED,  
INCLUDING INTERFERENCE THAT MAY CAUSE  
UNDESIRE OPERATION.

- B) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified in this Section is required to be affixed only to the main control unit.
- C) When the device is so small or for such use that it is not practicable to place the statement specified in this Section on it, the information required by these paragraphs shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.
- D) The label shall not be a stick-on paper label. The label on these products shall be permanently affixed to the product and shall be readily visible to the purchaser at the time of purchase. "Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or use of a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.



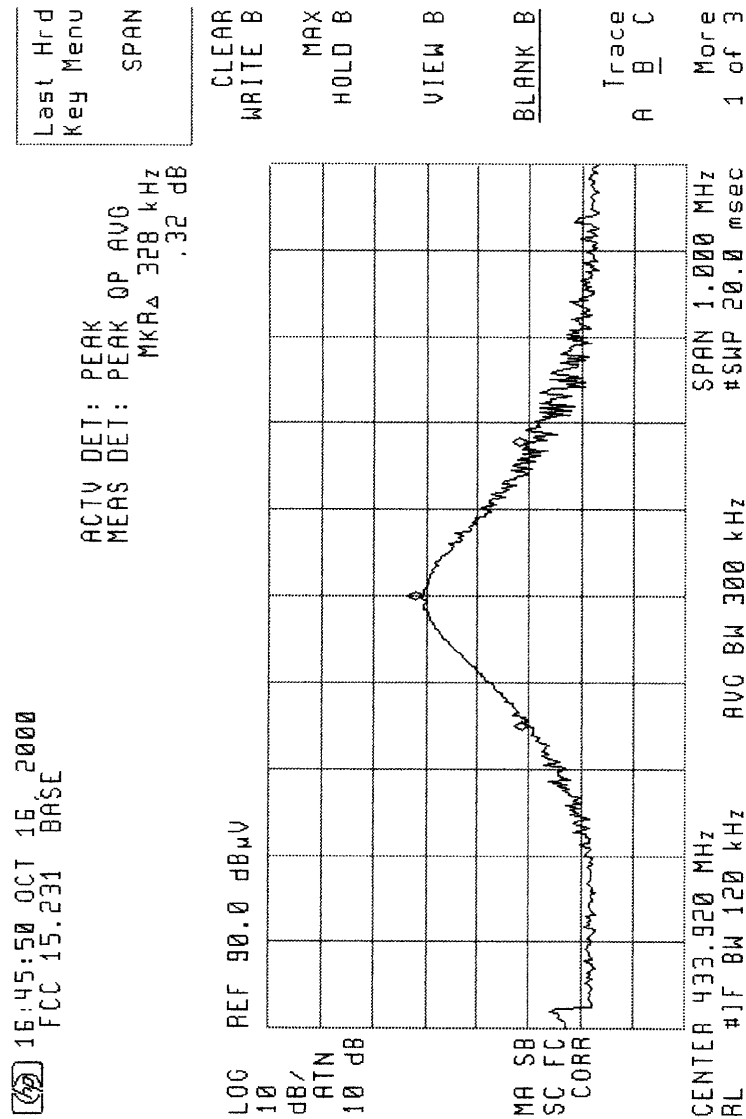
## APPENDIX G

## DATA READINGS





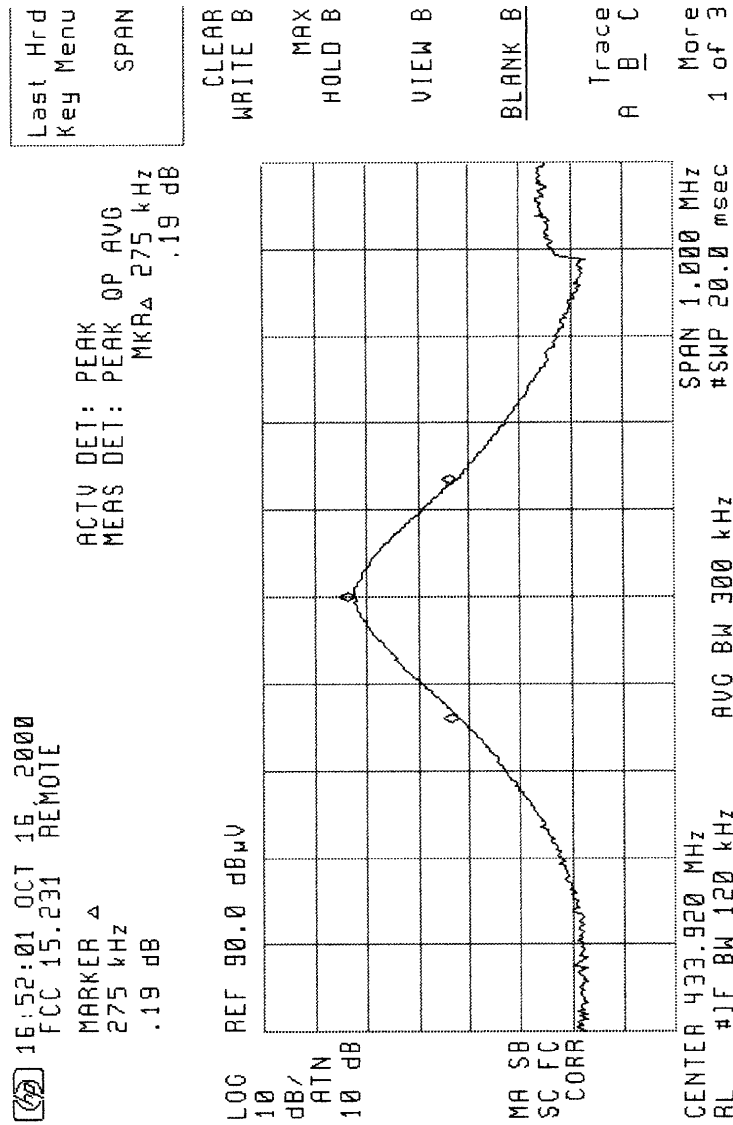
Screen Capture - captured on 10/16/2000 4:45:50 PM



15.231(c)  
Base  
Bandwidth



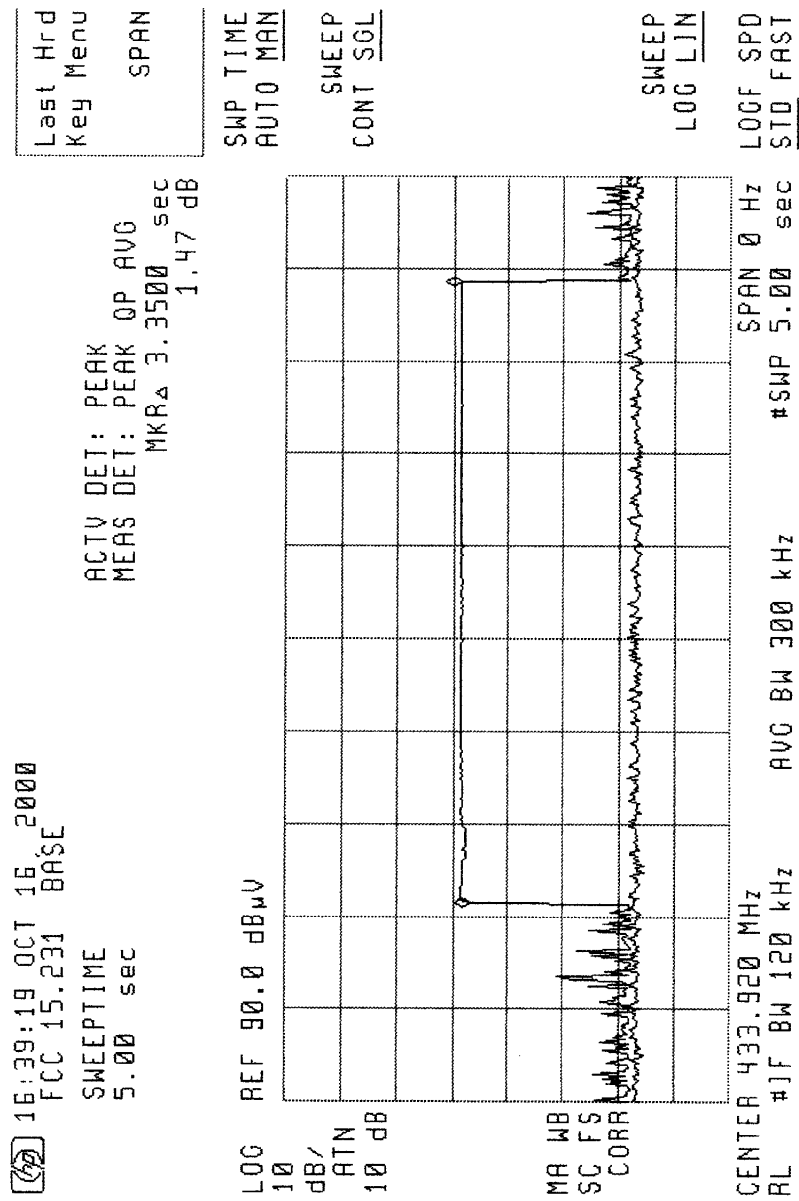
Screen Capture - captured on 10/16/2000 4:52:00 PM



15.231(c)  
Remote  
Bandwidth



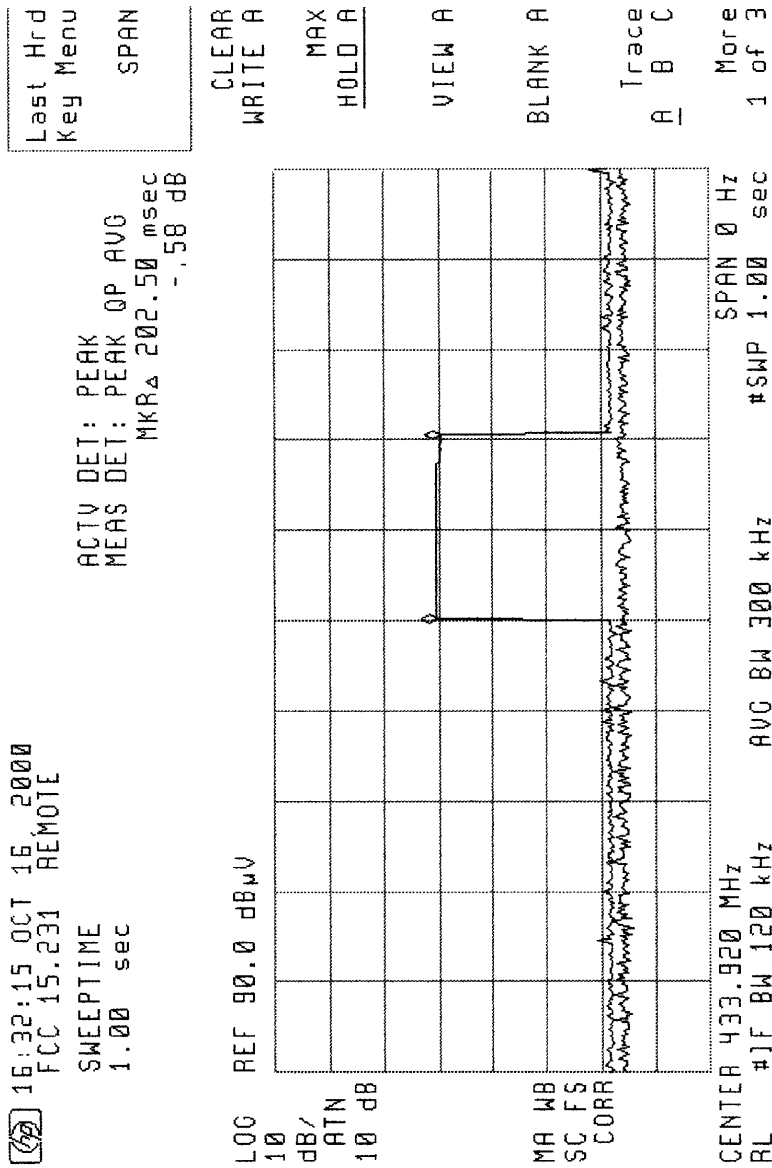
Screen Capture - captured on 10/16/2000 4:39:18 PM



15.231(a)(1)  
Base



Screen Capture - captured on 10/16/2000 4:32:14 PM



15.231(a)(1)  
Remote



## RADIATED EMISSION DATA

COMPANY: Televideo  
EQUIP. UNDER TEST: Aladdin 2000

MODEL NUMBER: A2000  
TEST PROCEDURE: FCC Part 15.231 (Remote Unit - Transmit)  
SUPPORT EQUIPMENT: DC Power Supply

TESTED BY: Wayne Fisher / Kent Chesley  
DATE: January 10 2001

TEST SITE 1

TIME: 08:37pm Control RM Temp: 70 Deg.F Humidity: 45 %RH  
EUT Room Temp: 65 Deg.F Humidity: 56 %RH

### 400MHz to 1000MHz Biconical Antenna at 3 meters Horz.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT dBuV/m	EUT MARGIN dBuV	POSITION TBL	ANT
433.92	+79.2PK	-7.6	71.6	80.0	-8.4	0	1.00

### 400MHz to 1000MHz Biconical Antenna at 3 meters Vert.

433.92	+78.0PK	-7.6	70.4	80.0	-9.6	0	1.00
578.53	+43.0PK	-4.5	38.5	54.0	-15.5	0	1.00

### 1 TO 18 GHz 3115 Horn Antenna at 3 meters Horz.

1735.60	+47.0PK	-4.6	42.4	54.0	-11.6	0	1.00
2169.50	+35.8PK	-2.6	33.2	54.0	-20.8	0	1.00
2603.40	+39.5PK	-0.6	38.9	54.0	-15.1	0	1.00
3037.30	+51.2PK	-0.1	51.1	54.0	-2.9	0	1.00
3471.20	+43.8PK	+1.0	44.8	54.0	-9.2	0	1.00
3905.10	+42.5PK	+2.1	44.6	54.0	-9.4	0	1.00

### 1 TO 18 GHz 3115 Horn Antenna at 3 meters Vert.

1735.60	+40.2PK	-4.6	35.6	54.0	-18.4	0	1.00
2169.50	+34.5PK	-2.6	31.9	54.0	-22.1	0	1.00
2603.40	+36.1PK	-0.6	35.5	54.0	-18.5	0	1.00
3037.30	+45.0PK	-0.1	44.9	54.0	-9.1	0	1.00



## RADIATED EMISSION DATA

COMPANY: Televideo  
EQUIP. UNDER TEST: Aladdin 2000

MODEL NUMBER: A2000  
TEST PROCEDURE: FCC Part 15.231 (Remote Unit - Transmit)  
SUPPORT EQUIPMENT: DC Power Supply

TESTED BY: Wayne Fisher / Kent Chesley TEST SITE 1  
DATE: January 10 2001

TIME: 9:00am Control RM Temp: 70 Deg.F Humidity: 45 %RH  
EUT Room Temp: 65 Deg.F Humidity: 56 %RH

1 TO 18 GHz 3115 Horn Antenna at 3 meters Vert.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT dBuV/m	EUT MARGIN dBuV	POSITION TBL ANT
3471.20	+40.5PK	+1.0	41.5	54.0	-12.5	0 1.00
3905.10	+38.9PK	+2.1	41.0	54.0	-13.0	0 1.00

\*\*\*\*\*  
\*\*\*\*\* END OF RADIATED TEST \*\*\*\*\*  
\*\*\*\*\*



## RADIATED EMISSION DATA

COMPANY: Televideo  
EQUIP. UNDER TEST: Aladdin 2000

MODEL NUMBER: October  
TEST PROCEDURE: FCC Part 15.231 (Base Unit - Transmit)  
SUPPORT EQUIPMENT: DC Power Supply

TESTED BY: Wayne Fisher TEST SITE 1  
DATE: January 16 2000

TIME: 2:20pm Control RM Temp: 80 Deg.F Humidity: 28 %RH  
EUT Room Temp: 73 Deg.F Humidity: 30 %RH

### 400MHz to 1000MHz Biconical Antenna at 3 meters Vert.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT dBuV/m	EUT MARGIN dBuV	POSITION TBL ANT
400MHz to 1000MHz Biconical Antenna at 3 meters Vert.						
433.92	+66.5PK	-7.6	58.9	80.0	-21.1	0 1.00
578.55	+34.3PK	-4.5	29.8	54.0	-24.2	0 1.00

### 400MHz to 1000MHz Biconical Antenna at 3 meters Horz.

433.92	+69.5PK	-7.6	61.9	80.0	-18.1	0 1.00
578.55	+40.4PK	-4.5	35.9	54.0	-18.1	0 1.00

### 1 TO 18 GHz 3115 Horn Antenna at 3 meters Horz.

1301.80	+53.0PK	-6.6	46.4	54.0	-7.6	0 1.00
1446.50	+43.5PK	-5.9	37.6	54.0	-16.4	0 1.00
1591.26	+44.8PK	-5.3	39.5	54.0	-14.5	0 1.00
1735.60	+50.1PK	-4.6	45.5	54.0	-8.5	0 1.00
1880.00	+43.5PK	-4.0	39.5	54.0	-14.5	0 1.00
2170.00	+45.1PK	-2.6	42.5	54.0	-11.5	0 1.00

### 1 TO 18 GHz 3115 Horn Antenna at 3 meters Vert.

1301.80	+55.9PK	-6.6	49.3	54.0	-4.7	0 1.00
1446.58	+51.0PK	-5.9	45.1	54.0	-8.9	0 1.00
1591.26	+52.4PK	-5.3	47.1	54.0	-6.9	0 1.00
1735.60	+51.1PK	-4.6	46.5	54.0	-7.5	0 1.00
1880.00	+48.4PK	-4.0	44.4	54.0	-9.6	0 1.00
2170.00	+47.5PK	-2.6	44.9	54.0	-9.1	0 1.00





## RADIATED EMISSION DATA

COMPANY: Televideo  
EQUIP. UNDER TEST: Aladdin 2000

MODEL NUMBER: October  
TEST PROCEDURE: FCC Part 15.231 (Base Unit - Transmit)  
SUPPORT EQUIPMENT: DC Power Supply

TESTED BY: Wayne Fisher TEST SITE 1  
DATE: January 16 2000

TIME: 3:14pm Control RM Temp: 80 Deg.F Humidity: 28 %RH  
EUT Room Temp: 73 Deg.F Humidity: 30 %RH

1 TO 18 GHz 3115 Horn Antenna at 3 meters Vert.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT dBuV/m	EUT MARGIN dBuV	POSITION TBL ANT
3037.60	+51.1PK	-0.1	51.0	54.0	-3.0	0 1.00
3471.00	+41.1PK	+1.0	42.1	54.0	-11.9	0 1.00

=====

===== END OF RADIATED TEST =====

=====



**FCC CLASS B  
RADIATED EMISSION DATA**

COMPANY: Televideo  
EQUIP. UNDER TEST: Aladdin 2000

MODEL NUMBER: A2000  
TEST PROCEDURE: FCC Part 15.231 (Spurious - Reciever)  
SUPPORT EQUIPMENT: Power Supply

TESTED BY: Wayne Fisher      TEST SITE 1  
DATE: October 16 2000

TIME: 1:43pm      Control RM Temp: 80 Deg.F      Humidity: 28 %RH  
EUT      Room Temp: 73 Deg.F      Humidity: 30 %RH

400MHz to 1000MHz Biconical Antenna at 3 meters Vert.

FREQ	RAW	SITE	CORR'D	LIMIT	EUT MARGIN	POSITION
MHz	dBuV	CF	dBuV/m	A	B	TBL ANT
----	----	----	----	---	---	---

No emissions observed in Reciever mode for either Base or remote unit.

=====

===== END OF RADIATED TEST =====

=====



# **APPENDIX H**

## **TEST PROCEDURES**

**For a Copy Contact:**

**Underwriters Laboratories Inc.**  
11825 Niles Canyon Road  
Sunol, CA 94586