ATTACHMENT L

SAND/DUST TEST DATA SHEET AND CIRCULAR CHARTS

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DATA SHEET

Customer Global Election Systems
Specimen AccuVote-TS R6 DRE Voting Machine
Part No. AVTS-R6 Amb. Temp. ~74°F
Spec. FEC Standard Photo –
Para. 7.3.2.9 Test Med. –
S/N – Specimen Temp. ~74°F
GSI No

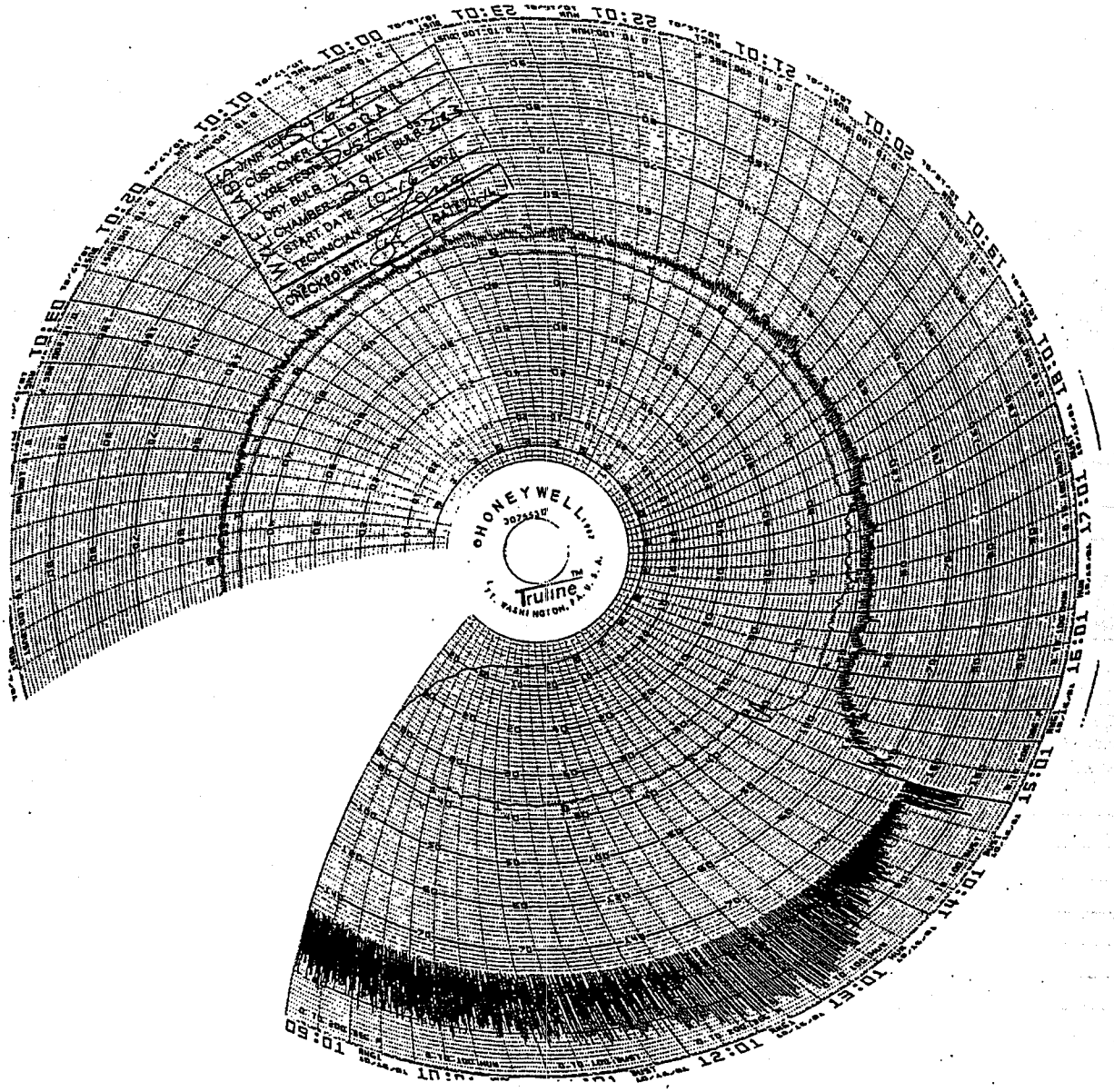
WYLE LABORATORIES
Job No. 46058
Report No. 46058-01
Start Date 10.17.01

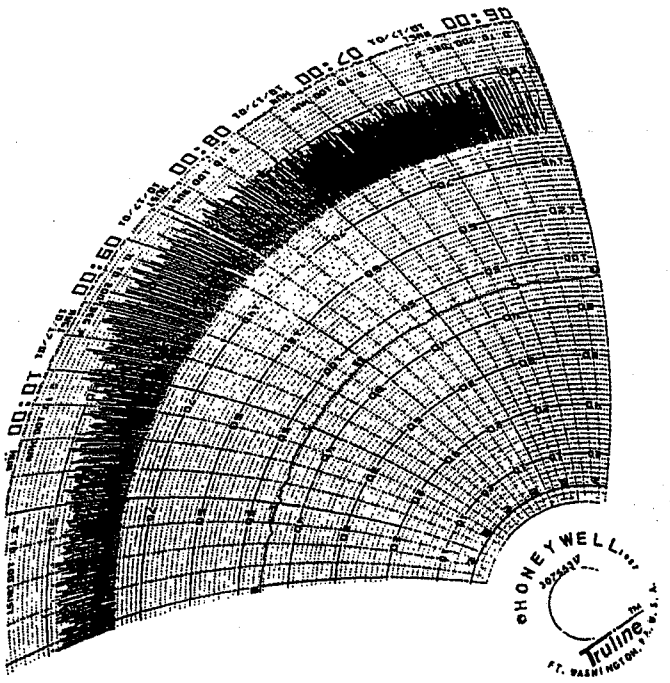
Test Title Sand and Dust Exposure

Test Configuration:
AVTS-R6 placed within a Global Polling Booth, Model 0001. The booth utilizes a gasket (3M Product, P/N 4508/4516) around its outer edges for added protection against moisture and/or particulate intrusion.
The R6 w/Polling Booth was placed inside the dust chamber and subjected to the required Blowing Dust requirements per Mil-Std-810D, Method 510.2, Procedure I, Blowing Dust. This test is intended to evaluate the ability of the equipment to survive exposure to dust and fine sand that may penetrate into cracks, crevices, switches, display surfaces, and electromechanical parts.
Test Results:
Upon removal of the R6 w/Polling Booth from the dust test chamber, the interior of the booth was inspected for any obvious signs of dust intrusion. Very minute traces of dust intrusion were observed and was limited to the area around the hinges of the booth. The R6 hardware remained dust free.

Tested By Troy Jong Date: 10-17-01
Witness – Date: –
Sheet No. 1 of 1
Notice of Anomaly: – Approved 10.17.01

Wyle Form WH 614A. Rev. APR '84


HONEYWELL
Truline
WASHINGTON, PA. U.S.A.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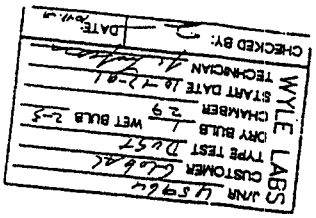
Truline
FT. WASHINGTON, PA. U.S.A.


WYLE LABS
J/NR
CUSTOMER
TYPE TEST
DRY BULB
WET BULB
CHAMBER
START DATE
TECHNICIAN
CHECKED BY:
DATE

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ATTACHMENT M

FCC TEST DATA

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Table of Contents

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Section 1. Summary of Test Results

General:

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with CFR 47, Part 15, Subpart B for Class B Digital Devices.

These tests were conducted using measurement procedures of ANSI C63.4-1992.

The equipment was tested for conducted emissions from 0.150 MHz to 30 MHz using a 50 microhenry line impedance stabilization network (L.I.S.N.) as described in ANSI C63.4-1992. Peripheral equipment was also operated through a 50 microhenry L.I.S.N.

The equipment was tested for radiated emissions from 30 MHz to 5000 MHz in accordance with the requirements of CFR 47, Part 15, Subpart B. Frequencies were initially identified in a large shielded room. Amplitude measurements were made on an outdoor Open Area Test Site. Details of the outdoor site are on file with the FCC.

Abstract:

Name of Test	Basic Standard	Results
Conducted Emissions (Mains port)	CFR 47, Part 15, Subpart B, Para. No. 15.107	Complies
Radiated Emissions	CFR 47, Part 15, Subpart B, Para. No. 15.109	Complies
Microwave Radiated Emissions	CFR 47, Part 15, Subpart B, Para. No. 15.109	Complies

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

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This report applies only to the item/s tested and does not constitute endorsement by the United States of America.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE: NONE

Section 2. Equipment Under Test (E.U.T.)

Manufacturer:	Global Election Systems
Name:	AccuVote
Model Number:	R6
Serial Number:	100003
Part Number:	FB-GS0001-000A
Production Status:	Preproduction
E.U.T. Arrival Date:	9/26/01

Description of E.U.T.:
Precinct level election tabulation

Clock, Oscillator, Highest Frequencies Utilized:
4MHz, 7.373MHz, 12MHz, 12.288MHz, 29.491MHz, 65MHz, 32.5MHz, 11.059MHz, 16MHz, 650MHz

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Modifications Incorporated in E.U.T.:

MODIFICATION RECORD

Job #: 1L0538E Company Name: Global Election Systems

Date	Tech Init's	Mod. #	Details	Photograph	Include In Report
9/27/01	J. FISH		Added modified printer control board with EMI fixes	☐	☑ Yes ☐ No
9/27/01	J. FISH		Changed to Rev 4.2 motherboard with screen jitter fix rework Changed to Rev. 4.0 LCD board	☐	☑ Yes ☐ No
9/27/01	J. FISH		Inverter board cable is taped to back of LCD with conductive tape. The slot on the cable cover of the video module is covered with conductive tape	☐	☑ Yes ☐ No
9/27/01	J. FISH		A 19" piece of 12AWG was added between the LCD board ground to the sheet metal base	☐	☑ Yes ☐ No
9/27/01	J. FISH		The slot on the cable cover of the video module is covered with conductive tape	☐	☑ Yes ☐ No
9/27/01	J. FISH		Ferrite added to LCD power cable, ground wire, and LCD power/ ground wire combination in video module.	☐	☑ Yes ☐ No

Client Signature: David Penetta

* Required only for modifications included in report

Justification:

The E.U.T. was configured for testing as per typical installation. Position and bundling of cables were investigated to establish maximum amplitude of emissions.

The following combinations were investigated to establish worst case configuration:
Election Mode - Insert Voter Card Screen

Exercise Program:

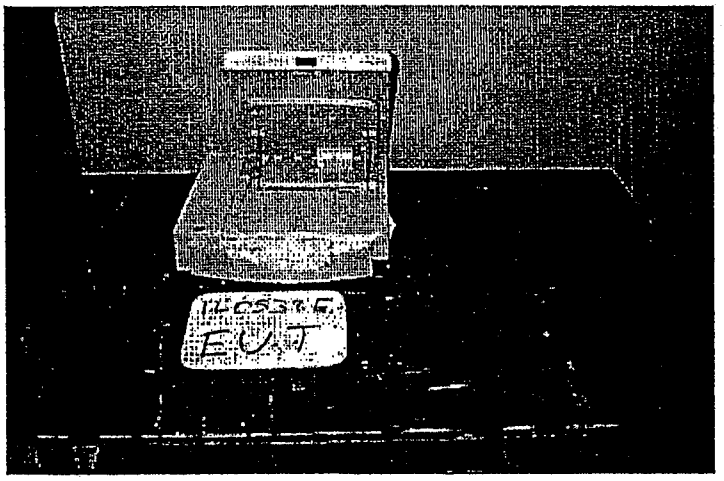
The E.U.T. exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to typical use.

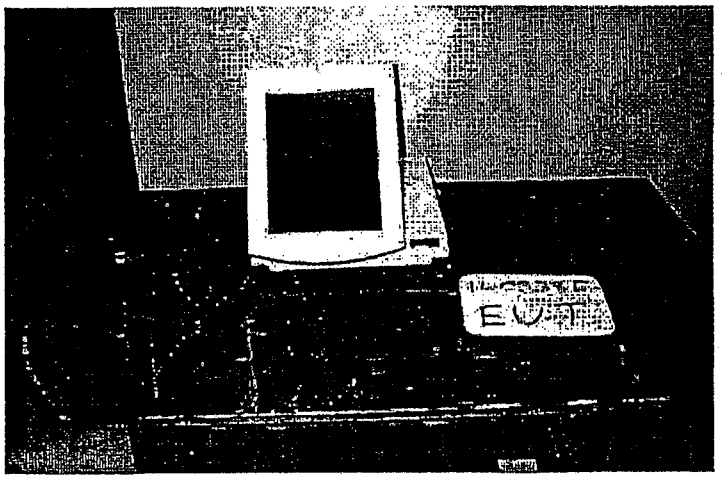
Exercise Mode:
Election Mode - Insert Voter Card Screen

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

E.U.T. Photographs:





Section 3. Equipment Configuration

Equipment Configuration List:

EQUIPMENT CONFIGURATION LIST (HARDWARE/PERIPHERALS):

Place an "*" next to EUT and any item that is part of the EUT.

Item	*	Generic Description	Manufacturer	Model No.	Serial #	Rev.	FCC ID Status[1]
(A)	*	Voting Machine	Global Election	Accuvote	100003		3
(B)	*	Voting Machine	Global Election	Accuvote	100005		
(C)							
(D)							
(E)							
(F)							
(G)							
(H)							
(I)							
(J)							
(K)							
(L)							

[1] FCC ID STATUS
1. FCC DOC
2. FCC A/B Verification
3. None - (If performing FCC testing, contact lab manager)
4. Certification (include FCC ID in parenthesis)

INTER-CONNECTION CABLES:

Place an "*" next to EUT and any item that is part of the EUT.

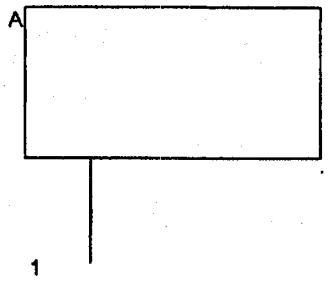
Item	*	Cable Type	Manufacturer	Lth (m)	Term[1]	Shield	Qty.
(1)	*	Power Cord	Generic	2	3	No	1
(2)	*	Power Cord	Generic	2	3	No	1
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							
(11)							
(12)							
(13)							

[1] TERMINATION
1. Peripheral
2. Loopback
3. EUT
4. Resistive
5. Remote Equipment
6. Other _____

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Configuration of the Equipment Under Test (E.U.T.):



Section 4. Conducted Emissions (Mains ports)

Purpose:

The test is intended to demonstrate the compliance of the Equipment Under Test (E.U.T.) to the limits for conducted disturbance as defined by CFR 47, Part 15, Subpart B, Class B, Paragraphs Number 15.107.

Specification Limits:

Limits for conducted disturbance at the mains ports

Frequency	Maximum Powerline Conducted RF Voltage	
(MHz)	μV	dBμV
0.45 - 30.0	250	48

Method of Measurement (Procedure ANSI C63.4-1992):

Measurements were made using a spectrum analyzer with 10 kHz RBW, Peak detector. Any emissions that are close to the limit are measured using a test receiver with 9 or 10 kHz bandwidth, CISPR Quasi-Peak detector.

See Sections 7 and 8

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test # : CEPV-02

Tested By: J. FISH

Date of Tests: 9/27/01

Test Conditions:
Test Voltage: 115

Temperature: 26°C

Humidity: 32%

Test Results:

The E.U.T. complies.

The worst case emission is 29.2 DbµV at 17.7 MHz on the Neutral side of the line.
This is -18.8 dB below the quasi-peak specification limit of 48.0dBµV/m

TEST EQUIPMENT

Asset Number	Description	Manufacturer	Model Number	Serial Number	Last Cal	Cal Due
969	lisn	Schwarzbeck	8120	8120281	7/18/01	7/18/02
1555	Filter high pass 5KHz	Solar Electronics	7930-5.0	933125	5/29/01	5/29/02
1129	CABLE, 9.5m	KTL	RG58	N/A	4/3/01	4/3/02
1325	CABLE, .5m	KTL	RG223	N/A	3/12/01	3/12/02
718	HP SPECTRUM ANALYZER	HEWLETT PACKARD	8591EM	3639A00980	11/21/00	11/21/01
1605	LIMITER	FISCHER	FCC-45013-1.2	184	12/16/00	12/16/01

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Data – Conducted Emissions, Power Lines Test# CEPV-02

Conducted Emissions
Powerline Voltage Measurement

Complete: X
Preliminary:
Job # : 1L0538E Test # : CEPV-02
Page 1 of 1

Client Name : Global Election Systems
EUT Name : AccuVote
EUT Model # : R6
EUT Part # : FB-GS0001-000A
EUT Serial # : 100003
EUT Config. : Election Mode - Insert Voter Card Screen

Specification : CFR 47, FCC PT. 15, Class B
Reference :
Transducer # : 969
HP Filter # : 1555
Cable 1 # : 1129
Cable 2 # : 1325
Detector 1 # : 716
Detector 2 # : NA
Limiter # : 1605
Temp. (deg. C) : 28
Humidity (%) : 32
EUT Voltage : 115
EUT Frequency : 60
Peak Bandwidth: 10KHz
QP Bandwidth 10KHz
Avg. Bandwidth
Date : 9/27/01
Time : 7:15
Staff : J. FISH
Location : LAB 5
Photo ID: 1L0538E CEPV-02

Meas. Freq. (MHz)	EUT Test Point	Detector Type (P,QP, A)	Limit Type (QP, A)	Meter Reading (dBuV)	Path Loss (dB)	Transducer Factor (dB)	Corrected Reading (dBuV)	Spec.limit (dBuV) Q.P.	Spec.limit (dBuV) Avg.	CR/SL Dlt. (dB)	Pass Fail Unc.	Comment
0.57	H	P	QP	22.3	0.0	0.0	22.3	48.0		-25.7	Pass	
1.3	H	P	QP	21.6	0.0	0.0	21.6	46.0		-26.4	Pass	
17.7	H	P	QP	29.1	0.0	0.0	29.1	48.0		-18.9	Pass	
0.57	N	P	QP	22.5	0.0	0.0	22.5	48.0		-25.5	Pass	
1.3	N	P	QP	21.9	0.0	0.0	21.9	46.0		-26.1	Pass	
17.7	N	P	QP	29.2	0.0	0.0	29.2	48.0		-18.8	Pass	
												SCANNED FROM
												.15MHz TO 30MHz

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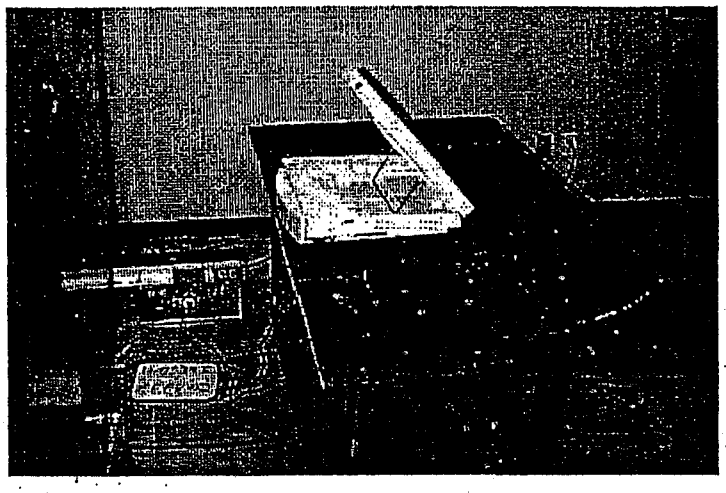
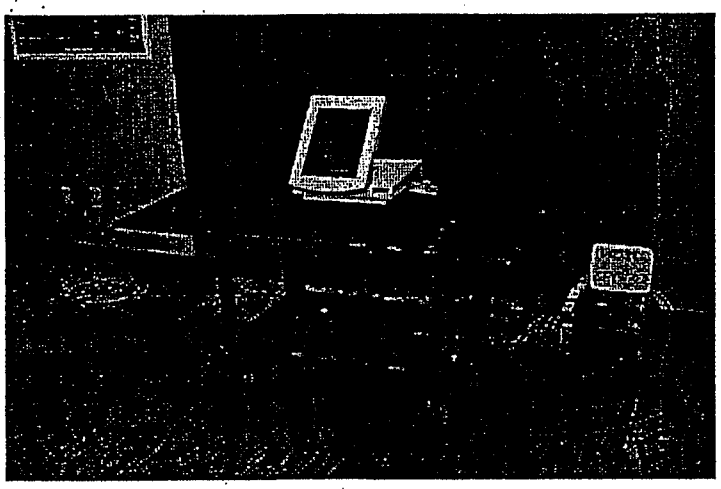
CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Photographs - Test # CEPV-02





Section 5. Radiated Emissions

Purpose:

The tests are intended to demonstrate the compliance of the Equipment Under Test (E.U.T.) to the limits for radiated emissions as defined by CFR 47, Part 15, Subpart B, Class B, Paragraph Number 15.109.

Specification Limits:

Limits for radiated disturbance.

Frequency(MHz)	Maximum Field Strength at 3m and 10m			
	3m (μV/m)	3m (dBμV/m)	10m (μV/m)	10m (dBμV/m)
30 - 88	100	40	31.6	30
88 - 216	150	43.5	47.3	33.5
216 - 960	200	46	63.1	36
Above 960	500	54	158.5	44

Method of Measurement (Procedure ANSI C63.4-1992):

The equipment was prescanned in a shielded room using a spectrum analyzer and broadband antenna. A list of frequencies was compiled for investigation in the open field. The equipment was then moved to an open area test site where amplitude measurements were made at a distance of 10 meters. The bandwidth was set to 100 kHz and the detector function was CISPR Quasi-Peak. Any emission within 6 dB of the specification limit is re-measured using a reference tuned dipole antenna per ANSI C63.4.

Any emissions above 1 GHz were measured with a horn antenna and low noise pre-amplifier at a distance of 3 meters.

See Sections 7 and 8

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test # : REHE-02

Tested By: J. FISH

Date of Tests: 9/27/01

Test Conditions:
Test Voltage: 115

Temperature: 26°C

Humidity: 31%

Test Results:

The E.U.T. complies.

The worst case emission is 38.6 dBµV at 195.1 MHz in the Horizontal polarity.
This is -4.9 dB below the specification limit of 43.5dBµV/m

TEST EQUIPMENT

Asset Number	Description	Manufacturer	Model Number	Serial Number	Last Cal	Cal Due
499	Antenna-Biconica	ICC	BCON-30300	210	3/31/01	3/31/02
1034	ANTENNA,LP	A.H. SYSTEMS	SAS-200/510	121	2/1/01	2/1/02
1522	Cable Assy, LAB 5 - D OATS	KTL	Site D OATS	N/A	12/12/00	12/12/01
762	27dB GAIN PREAMP	ICC	27dB LNA	946	5/29/01	5/29/02
1605	LIMITER	FISCHER	FCC-45013-1.2	184	12/16/00	12/16/01
718	HP SPECTRUM ANALYZER	HEWLETT PACKARD	8591EM	3639A00980	11/21/00	11/21/01
D OATS	Open Area Test Site	KTL	None	D	4/21/01	4/21/02

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Data – Radiated Emissions, Electric Field, Test# REHE-02

Radiated Emissions Data

Complete: X
Preliminary:

Job # : 1L0538E Test # : REHE-02
Page 1 of 2

Client Name : Global Election Systems
EUT Name : AccuVote
EUT Model # : R6
EUT Part # : FB-GS0001-000A
EUT Serial # : 100003
EUT Config. : Election Mode - Insert Voter Card Screen

Specification : CFR47 Part 15, Subpart B, Class B
Rod. Ant. #:
Bicon Ant.#: 499
Log Ant.#: 1034
Blog Ant.#:
Dipole Ant.#:
Cable#: 1522
Preamp#: 762
Limiter#: 1605
Atten #: NA
Detector#: 718

Temp. (deg. C) : 26
Humidity (%) : 31
EUT Voltage : 115
EUT Frequency : 60
Phase: 1
Location: D OATS
Distance: 3

Reference :
Date : 9/27/01
Time : 3:00
Staff : J. FISH
Photo ID: 1L0538E REHE-02
Peak Bandwidth: 100KHz
Video Bandwidth 100KHz

Meas. Freq. (MHz)	Ant. Pol. (H/V)	Det. Atten. (dB)	Meter Reading (dBuV)	Antenna Factor (dB)	Path Loss (dB)	RF Gain (dB)	Corrected Reading (dBuV)	Spec. limit (dBuV)	CRISL Dift. (dB)	Pass Fail Unc.	Comment
48	V	0	30.2	13.2	1.7	24.6	20.5	40.0	-19.5	Pass	
64.7	V	0	35.7	9.4	2.3	24.4	23.0	40.0	-17.0	Pass	
80	V	0	44.4	9.2	2.6	24.2	32.0	40.0	-8.0	Pass	
112.1	V	0	43.4	10.9	3.2	24.3	33.2	43.5	-10.3	Pass	
128.1	V	0	42.3	11.4	3.6	24.4	32.9	43.5	-10.6	Pass	
144.2	V	0	39.7	12.1	3.6	24.3	31.1	43.5	-12.4	Pass	
160.2	V	0	39.6	12.7	3.6	24.0	31.9	43.5	-11.6	Pass	
192.2	V	0	42.4	14.6	3.6	24.1	36.5	43.5	-7.0	Pass	
195.1	V	0	43.2	14.6	3.6	24.1	37.3	43.5	-6.2	Pass	
227	V	0	40.6	14.3	5.2	24.2	35.9	46.0	-10.1	Pass	
234	V	0	40.1	14.3	5.2	24.2	35.4	46.0	-10.6	Pass	
236	V	0	37.9	14.3	5.2	24.2	33.2	46.0	-12.8	Pass	
260	V	0	37.9	15.9	5.3	24.2	34.9	46.0	-11.1	Pass	
48	H	0	29.7	13.2	1.7	24.6	20.0	40.0	-20.0	Pass	
64.7	H	0	31.8	9.4	2.3	24.4	19.1	40.0	-20.9	Pass	
80	H	-0	37	9.2	2.6	24.2	24.6	40.0	-15.4	Pass	
112.1	H	0	38.7	10.9	3.2	24.3	28.5	43.5	-15.0	Pass	
130	H	0	44.8	11.4	3.6	24.2	35.6	43.5	-7.9	Pass	
160.1	H	0	40.1	12.7	3.6	24.0	32.4	43.5	-11.1	Pass	
162.5	H	0	39.7	12.7	3.6	24.0	32.0	43.5	-11.5	Pass	

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Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Data – Radiated Emissions, Electric Field, Test# REHE-02 -Cont.

Radiated Emissions Data

Complete: X
Preliminary:

Job # :1L0538E Test # : REHE-02
Page 2 of 2

Client Name : Global Election Systems
EUT Name : AccuVote
EUT Model # : R6
EUT Part # : FB-GS0001-000A
EUT Serial # : 100003
EUT Config. : Election Mode - Insert Voter Card Screen

Specification : CFR47 Part 15, Subpart B, Class B Reference :

Meas. Freq. (MHz)	Ant. Pol. (H/V)	Det. Atten. (dB)	Meter Reading (dBuV)	Antenna Factor (dB)	Path Loss (dB)	RF Gain (dB)	Corrected Reading (dBuV)	Spec. limit (dBuV)	CRISL Diff. (dB)	Pass Fail Unc.	Comment
195.1	H	0	45	14.6	3.6	24.1	39.1	43.5	-4.4	Pass	REFER TO QP
195.1	H	0	44.5	14.6	3.6	24.1	38.6	43.5	-4.9	Pass	QP#1544
227.5	H	0	38.3	14.3	5.2	24.2	33.6	46.0	-12.4	Pass	
260	H	0	42.1	15.9	5.3	24.2	39.1	46.0	-6.9	Pass	
325.2	V	0	37.4	16.8	6.1	24.2	36.1	46.0	-9.9	Pass	REFER TO QP
325.2	V	0	36	16.8	6.1	24.2	34.7	46.0	-11.3	Pass	QP#1544
353.2	V	0	38.5	15.4	6.1	24.2	35.8	46.0	-10.2	Pass	
390.1	V	0	42.8	14.4	6.1	24.2	39.1	46.0	-6.9	Pass	
455	V	0	36	16	7.1	24.2	34.9	46.0	-11.1	Pass	
650	V	0	36.1	18.6	9.4	24.2	39.9	46.0	-6.1	Pass	
715			31	20.8	10.0	24.2	37.6	46.0	-8.4	Pass	
325	H	0	36.4	16.8	6.1	24.2	35.1	46.0	-10.9	Pass	
390.3	H	0	33.3	14.4	6.1	24.2	29.6	46.0	-16.4	Pass	
650	H	0	36.8	18.6	9.4	24.2	40.6	46.0	-5.4	Pass	
											SCANNED FROM
											30MHz TO 1GHz

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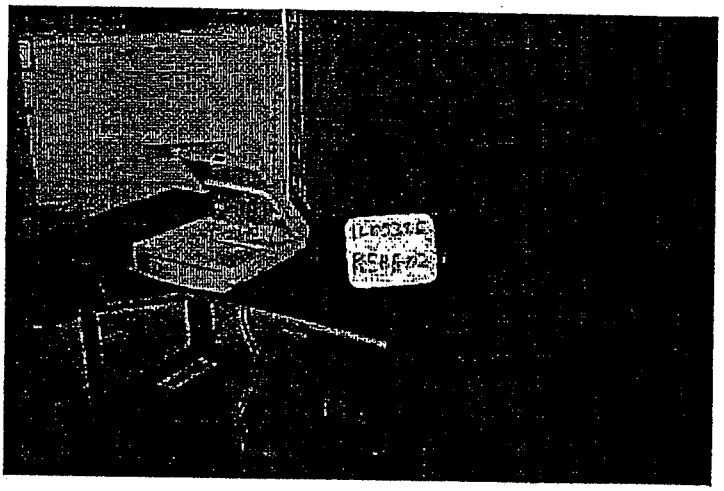
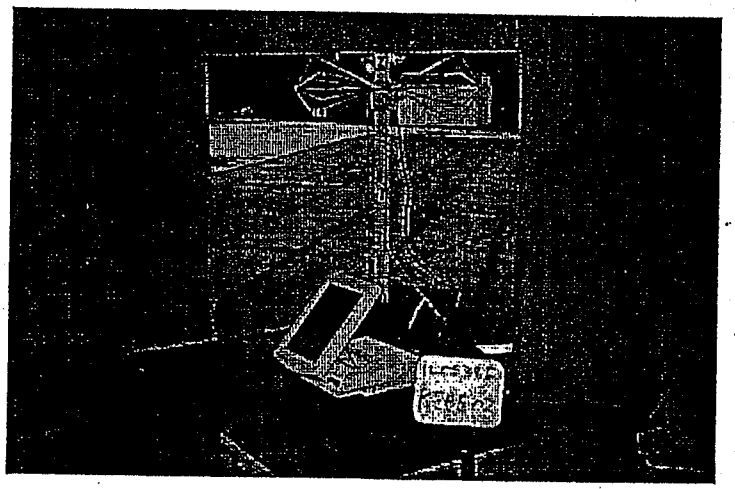
Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Photographs - Test # REHE-02





Section 6. Microwave Radiated Emissions

Purpose:

The tests are intended to demonstrate the compliance of the Equipment Under Test (E.U.T.) to the limits for radiated emissions as defined by CFR 47, Part 15, Subpart B, Class B, Paragraph Number 15.109.

Specification Limits:

Limits for radiated disturbance.

Frequency(MHz)	Maximum Field Strength at 3m and 10m			
	3m (μV/m)	3m (dBμV/m)	10m (μV/m)	10m (dBμV/m)
30 - 88	100	40	31.6	30
88 - 216	150	43.5	47.3	33.5
216 - 960	200	46	63.1	36
Above 960	500	54	158.5	44

Method of Measurement (Procedure ANSI C63.4-1992):

The equipment was prescanned in a shielded room using a spectrum analyzer and broadband antenna. A list of frequencies was compiled for investigation in the open field. The equipment was then moved to an open area test site where amplitude measurements were made at a distance of 10 meters. The bandwidth was set to 100 kHz and the detector function was CISPR Quasi-Peak. Any emission within 6 dB of the specification limit is re-measured using a reference tuned dipole antenna per ANSI C63.4.

Any emissions above 1 GHz were measured with a horn antenna and low noise pre-amplifier at a distance of 3 meters.

See Sections 7 and 8

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test # : REWE-01

Tested By: J. FISH

Date of Tests: 9/27/01

Test Conditions:
Test Voltage: 115

Temperature: 26°C

Humidity: 38%

Test Results:

The E.U.T. complies.

The worst case emission is 45.3 dBµV at 1.3 GHz in the Vertical polarity.
This is -8.7 dB below the specification limit of 54dBµV/m

TEST EQUIPMENT

Asset Number	Description	Manufacturer	Model Number	Serial Number	Last Cal	Cal Due
1310	Antenna horn	Electro Metrics	RGA-60	6174	7/30/01	7/31/03
1278	SPECTRUM ANALYZER	HEWLETT PACKARD	8566B	2618A02843	10/5/00	10/5/01
1041	CABLE, 3m	KTL	Semi-Flex	N/A	11/4/00	11/4/01
1067	Blue cable 4m	Storm	PR90-010-144	0	6/6/01	6/6/02
1529	CABLE 4M 2.0-18.0 Ghz	Storm	PR90-010-144	00-07-002	6/6/01	6/6/02
1615	Pre-Amp	KTL (MITEQ)	AFS501001800 3510P5	CHINDA1	2/6/01	2/6/02

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Data – Microwave Radiated Emissions, Test# REWE-01

Microwave Radiated Emissions Data

Complete: X
Preliminary:

Job # : 1L0538E Test # : REWE-01
Page 1 of 1

Client Name : Global Election Systems
EUT Name : AccuVote
EUT Model # : R6
EUT Part # : FB-GS0001-000A
EUT Serial # : 100003
EUT Config. : Election Mode - Insert Voter Card Screen

Specification : CFR47 Part 15, Subpart B, Class B
Antenna #: 1310
Detector #: 1278
Cable 1 # : 1041
Cable 2 # : 1067
Cable 3 # : 1529
Preamp 1 #: 1615
Preamp 2 #:
Preamp 3 #:

Temp. (deg. C) : 26
Humidity (%) : 38
EUT Voltage : 115
EUT Frequency : 60
Phase: 1
Location: SAC
Distance: 3m

Reference :
Date : 9/27/01
Time : 7:30
Staff : J. FISH
Photo ID: 1L0538E REWE-01
Peak Bandwidth: 1MHz
Avg. Bandwidth: 1MHz
Video Bandwidth 1MHz

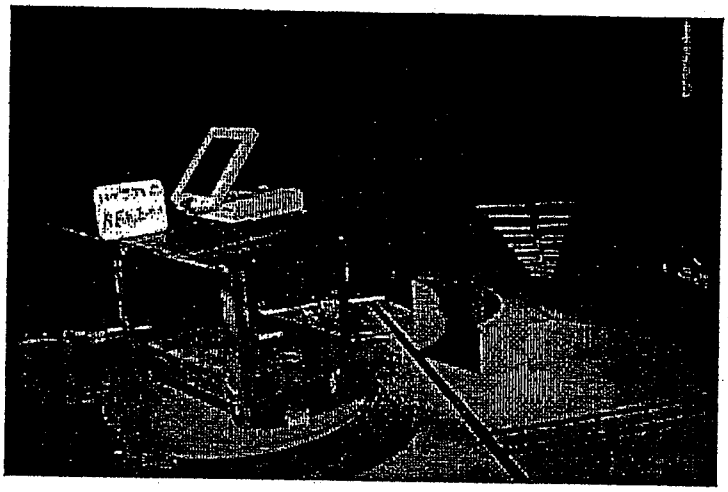
Meas. Freq. (GHz)	Meter Reading (dBm)	Antenna Factor (dB)	Path Loss (dB)	RF Gain (dB)	Conversion Factor (dBuV/m)	Corrected Reading (dBuV)	Spec. limit (dBuV)	CR/SL Dist. (dB)	Pass Fail Unc.	Pol.	Comment
1.04	-69.7	24.6	3.3	28.0	107.0	37.2	54.0	-16.8	Pass	V	
1.3	-62.3	24.6	3.3	27.3	107.0	45.3	54.0	-8.7	Pass	V	
1.625	-69.5	25.3	3.3	27.8	107.0	38.3	54.0	-15.7	Pass	V	
1.04	-70.1	24.6	3.3	28.0	107.0	36.8	54.0	-17.2	Pass	H	
1.3	-62.5	24.6	3.3	27.3	107.0	45.1	54.0	-8.9	Pass	H	
1.625	-69	25.3	3.3	27.8	107.0	38.8	54.0	-15.2	Pass	H	
											SCANNED FROM
											1GHz TO 5GHz

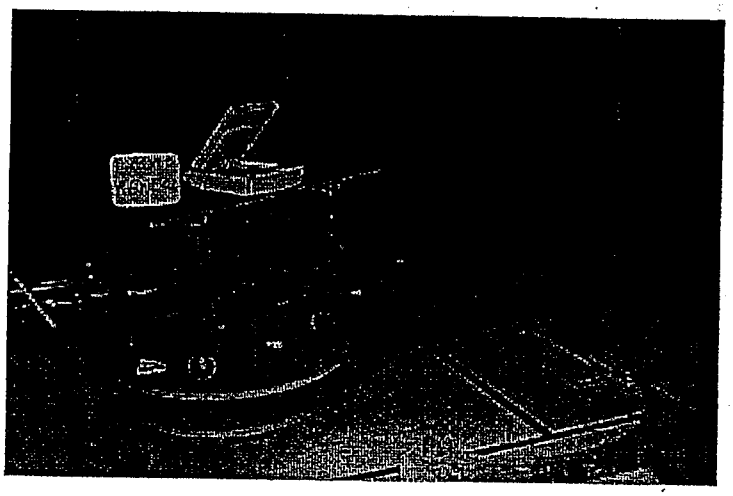
..\EMCShare\AUTOMATE\DATASHTS\FCCmwradem Rev C.xls Document Control #EMC DS EM RAD MW FCC

Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Test Photographs - Test # REWE-01





Section 7. Sample Calculations

Conducted Emissions:

If the Quasi-Peak to Average ratio is greater than 6 dB, then the emission is classified as broadband and its Quasi-Peak level is reduced by 13 dB for comparison to the limit.

i.e. Quasi-Peak level = 40 dBµV
Average level = 34 dBµV
Corrected level = 40 - 13 = 27 dBµV

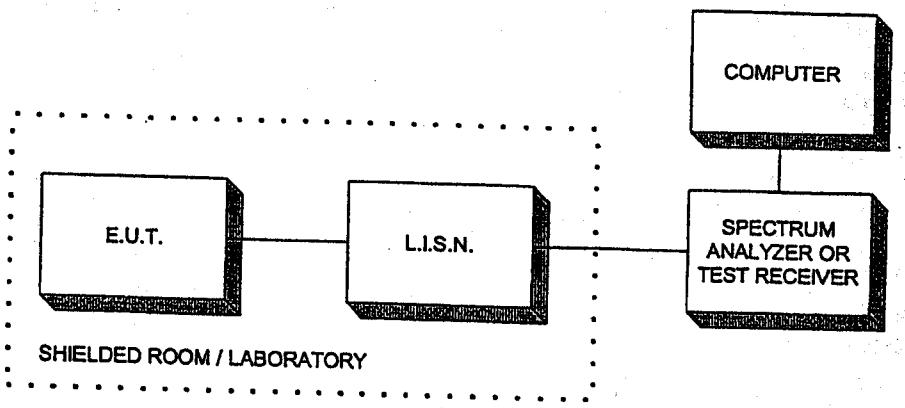
Radiated Emissions:

Emissions are measured at a distance of 10 meters and corrected for antenna factor and cable loss.

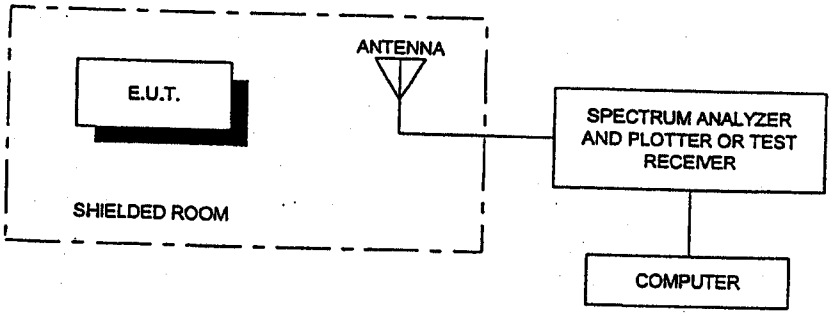
i.e. Received Signal = 25 dBµV @ 100 MHz
Antenna Factor & Cable Loss = 9.8 dB
Field Intensity = 25 + 9.8 = 34.8 dBµV/m @ 10 m

Section 8. Block Diagrams

Conducted Emissions:



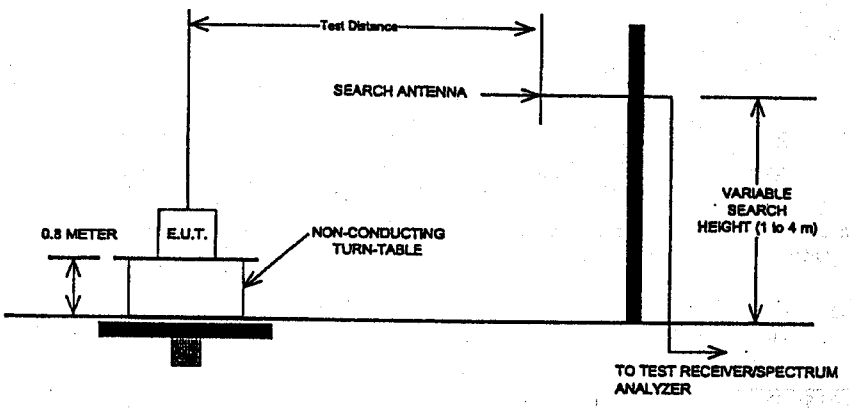
Radiated Prescan:



Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Outdoor Test Site for Radiated Emissions:



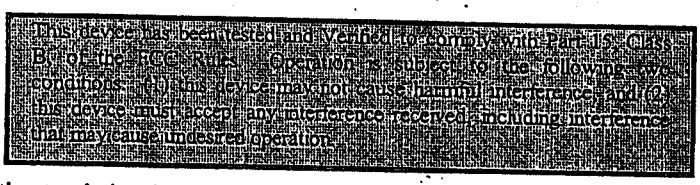
Nemko Dallas, Inc.

CFR 47, PART 15, SUBPART B,
CLASS B VERIFICATION
REPORT NO.: 1L0538EUS1
EQUIPMENT: Accuvote, Model R6

Section 9. Labeling Requirements

Your product has successfully complied with 47 CFR FCC Part 15.B Class B requirements.

FCC Class B Label:



In addition to placing the above label on your product, the three items required to be included in your product's manual are:

(1) For a Class B Verified device, the instructions furnished to the user shall include the following or similar statement, placed in a prominent location at the front of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(2) The user's manual must caution the user that changes or modifications not expressly approved by the party responsible for compliance (you/your company) could void the user's authority to operate the equipment.

(3) In addition, the instruction manual must include appropriate instructions on the first page of the manual concerning installation of the device or special accessories (special cabling, shields, adapters) that must be used with the device. An appropriate caution statement should warn the user to utilize the special accessories supplied with the equipment for continued FCC compliance.

Please do not hesitate to contact us for future testing or consultation services. Thank you for choosing Nemko Dallas, Inc.

ATTACHMENT N

INSTRUMENTATION EQUIPMENT SHEETS

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wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 6/28/01 JOB NUMBER: 46058 TEST AREA: ENV CH 54
TECHNICIAN: T.LANG CUSTOMER: GLOBAL TYPE TEST: TEMP HUM

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	TEMP RECORDER	HONEYWELL	DR4500	9633Y6266	114030	-200-600°F	.4°F	5/11/01	8/ 9/01
2	PROGRAMMER	THERMOTRON	4800	977800	112887	-125 - 375°F	.25%	2/28/01	8/27/01
3	TEMP CONTROLLE	THERMOTRON	12005	236944TP	102806	-125-375°F	.25%	2/28/01	8/27/01

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION Troy Long 6-28-01 CHECKED & RECEIVED BY 6-28-01

Q.A. Brenda Mouse 6.28.01

WH-1029A, REV. APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/12/01 JOB NUMBER: 46058 TEST AREA: ENV CH 7 1
TECHNICIAN: T.LANG CUSTOMER: GLOBAL TYPE TEST: HIGH / LOW TEMP

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	TEMP RECORDER	HONEYWELL	DR4500	9628Y6262947	112722	-200-600°F	.4°F	6/12/01	9/10/01
2	MICROCOMPUTER	THERMOTRON	3038	7626-TP	114130	-125 - 375°F	.25%	3/16/01	9/12/01
3	TEMP ALARM	THERMOTRON	012005	N/A	092490	-125 to 375°F	.25%	3/16/01	9/12/01

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION Tracy Lang 7-12-01 CHECKED & RECEIVED BY

Q.A. Brenda Mercer 7.12.01

WH-1029A, REV. APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/ 6/01 JOB NUMBER: 46058 TEST AREA: ENV CH 10 1
TECHNICIAN: J.LAXSON CUSTOMER: GLOBAL TYPE TEST: TEMP CYCLE

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	TEMP ALARM	THERMOTRON	012005	263002	003043	-125 to 375°F	.25%	8/ 3/01	1/30/02
2	CONTROLLER	THERMOTRON	6800	783382	115947	-148 to 437°F	±.25%	8/ 3/01	8/ 2/02
3	TEMP RECORDER	HONEYWELL	DR4500	9530Y5220933	112494	-200-600°F	.4°F	6/14/01	9/12/01
4	DMM	FLUKE	70	54450337	109680	MULTI	MFG	12/ 4/00	12/ 4/01

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION John Fallo 8/7/01 CHECKED & RECEIVED BY [signature] 8.7.01

Q.A. B. Mauer 8.7.01

WH-1029A, REV. APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/17/01
TECHNICIAN: D.MEDLEY
JOB NUMBER: 46058
CUSTOMER: GLOBAL
TEST AREA: DYN LAB
TYPE TEST: VIBRATION

1

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	ACCEL	BRUEL & KJAER	4366	1104902	101748	2KGSV/5KGSK	5%	5/10/01	8/ 8/01
2	HARD COPY UNIT	TEKTRONIX	4631	B187407	113330	MULTI	MFG	3/23/01	9/19/01
3	VIB CONTROL	HP	5427A366	2120A00409	100291	MULTI	MFG	11/22/00	11/22/01
4	TERMINAL	TEKTRONIX	4612	N/A	100589	MULTI	MFG	1/16/01	1/16/02
5	OSCOPE	TEKTRONIX	2213	N/A	101036	60MHZ	4%	4/10/01	10/ 5/01
6	COND SIGNAL	ENDEVCO	2775	AL43	102281	GAIN	1.55	2/14/01	8/13/01
7	OSCOPE	TEKTRONIX	2213A	B013724	101481	60MHZ	3%	4/10/01	10/ 5/01
8	DMM	KEITHLEY	179A	196804	101203	MULTI	MFG	9/28/00	9/28/01

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION [signature] 7.17.01 CHECKED & RECEIVED BY [signature] 7.17.01

Q.A. [signature] 7.17.01

WH-1029A, REV. APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 10/22/01
TECHNICIAN: T.BATES
JOB NUMBER: 46058
CUSTOMER: GLOBAL
TEST AREA: PACK TECH
TYPE TEST: DROP
1

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	SCALE	OHAUS	CD11	00082316GA	116051	0-50LBS	+/-.01 LBS	3/14/01	3/14/02

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION Tina Bates 10/24/01 CHECKED & RECEIVED BY 10/24/01

Q.A. Brenda Mann 10/24/01

WH-1029A, REV, APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 10/17/01
TECHNICIAN: T.LANG

JOB NUMBER: 45964
CUSTOMER: GLOBAL

TEST AREA: ENV LAB
TYPE TEST: DRIP

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	STOP WATCH	VWR	62379218	97296739	114301	10HR	.5SEC	8/14/01	2/ 8/02

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION Troy Long 10-17-01 CHECKED & RECEIVED BY 10.17.01

Q.A. Brenda Mangus 10/17/01

WH-1029A. REV. APR '99

wyle laboratories

INSTRUMENTATION EQUIPMENT SHEET

DATE: 10/16/01
TECHNICIAN: J.MC DERMOTT
JOB NUMBER: 45964
CUSTOMER: GLOBAL
TEST AREA: SITE G
TYPE TEST: DUST
1

NO.	INSTRUMENT	MANUFACTURER	MODEL #	SERIAL #	WYLE #	RANGE	ACCURACY	CAL DATE	CAL DUE
1	TEMP RECORDER	HONEYWELL	DR450T	920284912600	109510	-200-600°F	.4°F	8/ 9/01	11/ 7/01
2	CONTR DUST	PHOTOMATION	DSMIPB	246438	101480	5G/CU FT 0-10	2%	5/ 1/01	5/ 1/02
3	HUM XMITTER	HYCAL	CT-829AR	112055	112055	20-80%RH	MFG	7/17/01	1/11/02
4	TEMP CONTROLLE	RESEARCH	61011	N/A	000719	-175°-375°F	MFG	10/15/01	4/12/02
5	TEMP ALARM	RESEARCH	61034	31524-01-59	000740	-175-375°F	±0.5%	10/12/01	4/10/02

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION Terry Long 10-16-01 CHECKED & RECEIVED BY 10-16-01

Q.A. Brenda Mauna 10/16/01

WH-1029A, REV. APR '99

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