ENVIRONMENTAL TESTING CORPORATION
ACTON

Test Report No. 16013-2 No. of Pages 411

Report of Test

FOR

SEISMIC AND ENVIRONMENTAL TESTING
OF MERCOID PRESSURE SWITCHES FOR
AMERICAN ELECTRIC POWER SERVICE
CORPORATION

DONALD C. COOK NUCLEAR PLANT:
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OF ELECT. CEN. SECT. AEPSC, N.Y.
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Purchase Order No. 05729-820-ON

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Report No. 16013-2

Administrative Data

1.0 Purpose of Test: Seismic vibration testing of fifteen (15) various Mercoid pressure switches and one (1) Mercoid differential pressure switch and environmental testing of two (2) Mercoid pressure switches.

2.0 Manufacturer: The Mercoid Corporation Chicago, IL

3.0 Manufacturer's Type or Model No: Refer to section 1.0

4.0 Drawing, Specification or Exhibit: AETC Test Procedure 16013
American Electric Power Service Corporation Test Procedure No. EGSP-061280JM, Rev. 4

5.0 Quantity of Items Tested: Fifteen (15) Mercoid pressure switches
One (1) Mercoid differential pressure switch

6.0 Security Classification of Items: Unclassified

7.0 Date Test Completed: June 26, 1981

8.0 Test Conducted By: C. Pilotte, P. Lizotte, M. Bastien

9.0 Disposition of Specimens: Sent to Indiana & Michigan Power Co.
D. C. Cook Nuclear Plant Operation Dept.

10.0 Abstract: Refer to section 4.0

ACTON ENVIRONMENTAL TESTING CORPORATION

1.0 TEST ITEMS

The following items were submitted by American Electric Power Service Corporation for seismic and environmental testing at Acton Environmental Testing Corporation (AETC).

Manufacturer: The Mercoid Corporation Chicago, IL

ITEM NO.	MODEL NO.	RANGE
82075	DAW-7033-153	1
82076	DAW-7033-153	4
82077	DAW-7033-153	5
82078	DAW-7033-153	6
82079	DAW-7033-153	7
82080	DAW-7033-153	9
82081	DAW-7023-153	15S
82082	DAW-7033-153	3A
82083	DAW-7033-804	4
82084	DSW-7233-153	5
82085	DAW-7023-153	6S
82086	DAW-7023-153	13S
82087	DSW-7233-153	1
82088	DSW-7233-153	3A
82089	DSW-7233-153	4
82090	BBE-221-3	25S

1.0 TEST ITEMS (continued)

Items numbers 82075 to 82089 are pressure switches with single-pole/double-throw snap-action switches; one circuit closes as the other circuit opens.. The model numbers with the suffix -153 designate units with a single SPDT switch; the model number with the suffix -804 designates a unit with dual SPDT switches, two close, two open.

Those model numbers with the prefix DAW- designate units with double adjustment set points, one high pressure set point and one low pressure set point. The difference between the high and low set points is the operating differential between "on-off" switch operation. Those model numbers with the prefix DSW- designate units with single adjustment set points. The single set point sets the pressure where switch operation occurs; the operating differential is fixed.

Item No. 82090 is a differential pressure switch which received a high and a low pressure input. Switch action is determined by the difference in pressure between the two inputs. This unit was not electrically monitored for switch action during the testing.

All 16 test items were subjected to the seismic vibration testing as specified in section 3.0. Items 82079 and 82084 were

1.0 TEST ITEMS (continued)

also subjected to the environmental test, specified in section 3.0, subsequent to the seismic testing.

2.0 TEST REQUIREMENTS

2.1 RESONANCE SURVEY TEST REQUIREMENTS

The purpose of the resonance survey specified in section 3.3 was to monitor the mechanical response of the test items to determine any resonant frequencies in the seismic bandwidth and to determine each test item's ability to withstand the specified vibration without evidence of mechanical damage or deterioration. The pressure switches were not pressurized during the resonance survey.

2.2 MULTIPLE FREQUENCY TEST REQUIREMENTS

The purpose of the multiple frequency test specified in section 3.4 was to determine the test items' ability to withstand such vibration without evidence of mechanical damage, deterioration, false closure of open contacts for longer than 3 milliseconds, or false opening of closed contacts for longer than 10 milliseconds, or any other interference with proper operation as determined by operational tests performed before and after the multiple frequency vibration.

2.0 TEST REQUIREMENTS (continued)

The multiple frequency test was conducted in such a manner that the Test Response Spectra (TRS) at which the units were qualified would correspond to the SSE level of the Required Response Spectrum (RRS) or, if a failure occurred at that level, to the maximum level at which the unit would fulfill the above acceptance criteria.

Items 82075 to 82089 were pressurized and electrically monitored as specified in section 3.2 during all multiple frequency vibration testing.

Item number 82090 was pressurized as specified in section 3.4 but not electrically monitored during the multiple frequency vibration testing.

2.3 ENVIRONMENTAL TEST REQUIREMENTS

The purpose of the environmental test specified in section 3.6 was to determine the test item's ability to withstand the elevated steam temperature and pressure conditions without any evidence of mechanical damage, deterioration, false opening or closing of contacts, or interference with proper operation as determined by operational tests performed before and after the environ-

2.0 TEST REQUIREMENTS (continued)

mental testing. The test items were pressurized and electrically monitored as specified in section 3.6 during the environmental testing.

3.0 TEST PROCEDURES

3.1 TEST MOUNTING

Each Mercoid pressure switch was mounted on the vertical surface of a steel plate vibration test fixture in the manner shown in Figures 1 and 2. After each Mercoid pressure switch was plumbed and mounted, the test fixture/test item assembly was securely attached to the 45° biaxial table of the AETC seismic test facility. The use of the 45° biaxial table results in equal horizontal and vertical input components.

3.2 TEST MONITORING

During the multiple frequency vibration testing, test items 82075-82089 were electrically monitored to indicate any spurious opens and closures of the single-pole/double-throw switches. Across each of the open and closed contacts of the SPDT switches, a chatter monitoring circuit was connected. The chatter detector was set to monitor the open contacts for false closures longer than 3 milliseconds and to monitor the closed contacts for false openings longer than 10 milliseconds.

The output from the chatter monitor's gate circuitry was connected to an oscillographic recorder to record when

3.0 TEST PROCEDURES (continued)

contact chatter occurred in excess of the above specified times. Each contact set of the SPDT switches was also connected directly to the oscillographic recorder input circuit to record the switch status and to record false opens and closures. The visicorder records are included with this test report.

During the resonance survey, test items 82075-82083, 82085, 82086, 82089 and 82090 were each monitored with one (1) triaxial group of three (3) accelerometers to determine each unit's mechanical response. One triaxial group of three accelerometers was also attached to the test fixture to serve as control accelerometers monitoring the test input. Test items 82084, 82087 and 82088 (tested at an earlier date than the above) were each monitored with one (1) biaxial group of two (2) accelerometers, with one biaxial group also attached to the test fixture to serve as control accelerometers.

During the multiple frequency vibration test, all test items with the exception of item 82084 were monitored with triaxial groups of accelerometers as described above for the resonance survey. Item 82084 (tested at an earlier

3.0 TEST PROCEDURES (continued)

date) was monitored with one biaxial group of two accelerometers.

During each set of tests performed on groups of three Mercoid units, the accelerometers were mounted and numbered as follows:

TRIAXIAL ACCELEROMETER NO.	AXIS ORIENTATION	ITEM ATTACHED TO
1	Front-to-back	82075, 82078,
2	Side-to-side	82081, 82086
3	Vertical	82088*
4	Front-to-back	82076, 82079,
5	Side-to-side	82082, 82083,
6	Vertical	82087*
7	Front-to-back	82077, 82080,
8	Side-to-side	82085, 82089,
9	Vertical	82090
10	Front-to-back	On test
11	Side-to-side	fixture
12	Vertical	(control)

*During multiple frequency test only - see next table.

3.0 TEST PROCEDURES (continued)

BIAXIAL ACCELEROMETER NO.	AXIS ORIENTATION	ITEM ATTACHED TO
1 2	In-axis horizontal Vertical	82084
3 4	In-axis horizontal Vertical	82088*
5 6	In-axis horizontal Vertical	82087*
7 8	In-axis horizontal Vertical	On test fixture (control)

*During resonance survey only

During the resonance survey, the output from all accelerometers, through appropriate signal conditioning, was recorded on visicorder recording paper included with this test report. During the multiple frequency test, the output from the triaxial control accelerometers was used for response spectrum control. The output from the control accelerometers, through appropriate signal conditioning, was analyzed by a Spectral Dynamics SD321 Shock Spectrum Analyzer and the X-Y plots of the Test Response Spectra are included as part of this test report.

3.0 TEST PROCEDURES (continued)

During the vibration testing, the Mercoid pressure switches were visually monitored for signs of mechanical damage or deterioration. Item number 82090, the Mercoid differential pressure switch, was monitored visually only, without any additional electrical monitoring.

3.3 RESONANCE SURVEY

The resonance survey consisted of a biaxial sinusoidal input with peak horizontal and vertical acceleration components of 0.2 g at frequencies from 1 to 35 Hz. The resonance survey was performed at a sweep rate of 1 octave/minute. For each group of test items, the input was applied in two (2) horizontally perpendicular biaxial directions of excitation as follows:

Front-to-back and vertical

Right-to-left and vertical

3.4 MULTIPLE FREQUENCY TEST

The multiple frequency test consisted of a biaxial pseudo-random excitation. The shaker table test input was recorded on a 14-channel tape recorder, each track having discrete frequency sine beats recorded at a different

frequency and delay between beats. All frequencies were recorded at maximum level.

The outputs from the 14 channels were played back and combined in a 14-channel mixer which resulted in the pseudo-random multiple frequency test input. The individual mixer channels have attenuation controls so that the level of each tape channel output passing through the mixer could be controlled. In this manner, the Test Response Spectrum was shaped by controlling the level of the individual frequencies.

The test input was adjusted such that the Test Response Spectrum from the control accelerometer, computed at Q=20, 2 1/2% damping, enveloped the appropriate Required Response Spectrum shown in Figure 10. The test inputs were applied seven (7) times in each of four (4) horizontally perpendicular biaxial directions of excitation. The test duration for each input was thirty (30) seconds.

The levels of the first five (5) inputs in each biaxial direction were such that the TRS from the control accelerometer would envelope the OBE RRS shown in Figure 10. The levels of the sixth and seventh inputs in each biaxial

direction were such that the TRS from the control accelerometer would envelope the SSE RRS shown in Figure 10.

For each group of test items, the inputs were applied in four biaxial directions of excitation as follows:

Right-to-left and vertical

Front-to-back and vertical

Left-to-right and vertical

Back-to-front and vertical

In order to verify that the test items were operating properly, the operational tests specified in section 3.5 were performed prior to the vibration testing of each group of items and before and after test run #7 of the multiple frequency test in each biaxial direction of excitation. During each run of the multiple frequency test, the electrical monitoring of the SPDT switch contacts, as specified in section 3.2, was performed.

For each test item, a pressure input was applied and held constant during each run of the multiple frequency test. During the first six test runs in each biaxial direction of excitation, the pressure input was held constant at the Test Condition #1 level (see below). For the seventh test run, the

3.0 TEST PROCEDURES (continued)

pressure input was changed to the level of Test Condition #2. The pressure settings to which the set points of each test item were adjusted, the level of the pressure input for Test Conditions #1 and #2, and the adjustable operating range of each Mercoid pressure switch were as shown in Table 1.

ITEM NO.	ADJUSTABLE OPERATING RANGE (PSIG)	HIGH PRESSURE SET POINT (PSIG)	LOW PRESSURE SET POINT (PSIG)	TEST CONDITION #1 (PSIG)	TEST CONDITION #2 (PSIG)
82075	1/8 - 15	8	3	12	2
82076	1 - 35	17	10	20	7
82077	2 - 60	30	20	40	15
82078	5 - 100	50	40	60	35
82079	5 - 150	75	55	90	50
82080	10 - 300	150	120	190	100
82081	500 - 5000	2000	1000	2500	800
82082	1/8 - 20	10	5	12	2
82083	1 - 35	17	10	20	7
82084	2 - 60	3.8	NA	40	1
82085	5 - 100	50	35	60	30
82086	300 - 2500	1000	700	1250	500
82087	1/8 - 15	7	NA	10	5
82088	1/8 - 20	7	NA	10	5
82089	1 - 35	15	NA	20	10

TABLE 1 - TEST CONDITIONS

3.0 TEST PROCEDURES (continued)

Item number 82090, the Mercoid differential pressure switch, was supplied with a 13 psig pressure input to its high side and a 12.75 psig pressure input to its low side. These pressures were maintained constant during the multiple frequency test runs.

For those test items which failed to fulfill the qualification acceptance criteria during the SSE levels of multiple frequency testing (test runs #6 & #7), additional testing was done at lower vibration input levels until a maximum level was determined at which the unit would qualify. The additional multiple frequency testing was conducted using RRS curves of 3/4 SSE, 1/2 SSE, and 1/4 SSE as shown in Figure 11. The additional test runs were each 30 seconds in duration.

3.5 OPERATIONAL TEST

Operational tests were performed on test items 82075-82089 before and after vibration testing as specified in section 3.4, and before and after environmental testing as specified in section 3.6. The operational status of each Mercoid pressure switch was verified by the following operation test.

3.0 TEST PROCEDURES (continued)

After the set point indicators were adjusted to the values specified in Table 1 of section 3.4, the pressure input was varied above and below the set points and the SPDT switches were electrically monitored to verify that the contacts changed state. The contact monitoring was performed using the oscillographic recorder input circuit to record the switch action. The pressures at which the switching action occurred were observed as the input pressure was varied to below the low set point and above the high set point.

3.6 ENVIRONMENTAL TEST

Following the completion of the multiple frequency vibration test, items 82079 and 82084 were subjected to the following environmental test. The test items, mounted vertically as shown in Figure 1, were placed inside an AETC high pressure test chamber. The pressure switches were plumbed and wired through the chamber wall such that the switches could be pressurized and electrically monitored during the elevated temperature and pressure test.

3.0 TEST PROCEDURES (continued)

The set point indicators on the two test items were set as follows:

ITEM NO.	HIGH SET POINT	LOW SET POINT
82079	75 psig	55 psig
82084	3.8 psig	NA

Operational testing, as specified in section 3.5, was performed on the pressure switches. After the operational testing, the pressure inputs to the switches were set as follows:

ITEM NO.	TEST PRESSURE
82079	90 psig
82084	25 psig

The test chamber was sealed and steam at 15 psig and a minimum of 120°C was applied for a minimum of 10 seconds. The test was considered commenced when the chamber attained a steady-state temperature of a minimum of 120°C and a pressure of 15 psig. The steam temperature and pressure were continuously recorded during the testing.

3.0 TEST PROCEDURES (continued)

The SPDT switches were electrically monitored continuously using a chart recorder input circuit to record the switch status. Following completion of the high temperature and pressure test, the chamber was vented to atmospheric conditions and the operational test was repeated.

The pressure inputs to the switches were then set as follows:

ITEM NO.	TEST PRESSURE
82079	50 psig
82084	1 psig

The high temperature and pressure test was repeated in the same manner as above. After the test, the chamber was again vented to atmospheric conditions and a final operational test was performed.

4.0 TEST RESULTS

4.1 RESONANCE SURVEY TEST RESULTS

There were no structural resonant frequencies detected for any of the Mercoid pressure switches in the 1 to 35 Hz frequency band.

4.2 MULTIPLE FREQUENCY TEST RESULTS

For test items 82075-82083, 82085 and 82086, there was no evidence of mechanical damage, deterioration, false closure of open contacts for longer than 3 milliseconds or false opening of closed contacts for longer than 10 milliseconds, or interference with proper operation detected during or as a result of the multiple frequency test performed at the full SSE shown in Figure 10.

For test items 82084 and 82087-82089, there was no evidence of mechanical damage, deterioration, false closure of open contacts for longer than 3 milliseconds or false opening of closed contacts for longer than 10 milliseconds, or interference with proper operation detected during or as a result of the multiple frequency test performed at the following levels, shown in Figure 11.

4.0 TEST RESULTS (continued)

ITEM NO.	QUALIFICATION LEVELS TEST CONDITION #1	TEST CONDITION #2
82084	SSE	3/8 SSE
82087	3/4 SSE	1/2 SSE
82088	SSE	1/2 SSE
82089	3/4 SSE	3/4 SSE

4.3 ENVIRONMENTAL TEST RESULTS

For test items 82079 and 82084, there was no evidence of mechanical damage, deterioration, false opening or closing of contacts or interference with proper operation detected during or as a result of the environmental test specified in section 3.6.

TEST EQUIPMENT LIST

NAME	MFGR.	MODEL	SER.NO.	RANGE	ACCURACY	INV.#	CAL.FREQ.
Accelerometer	PCB	302A	1772	1 Hz - 5 KHz	±5%	AC415	6 months
Accelerometer	PCB	302A	1773	1 Hz - 5 KHz	±5%	AC416	6 months
Accelerometer	PCB	302A	1774	1 Hz - 5 KHz	±5%	AC417	6 months
Accelerometer	PCB	302A	1775	1 Hz - 5 KHz	±5%	AC418	6 months
Accelerometer	PCB	302A	1777	1 Hz - 5 KHz	±5%	AC420	6 months
Accelerometer	PCB	302A	1779	1 Hz - 5 KHz	±5%	AC422	6 months
Accelerometer	PCB	302A	1780	1 Hz - 5 KHz	±5%	AC423	6 months
Accelerometer	PCB	302A	1781	1 Hz - 5 KHz	±5%	AC424	6 months
Accelerometer	PCB	302A	1805	1 Hz - 5 KHz	±5%	AC425	6 months
Accelerometer	PCB	302A	1807	1 Hz - 5 KHz	±5%	AC426	6 months
Earthquake Simulator-Hydraulic Actuator	MTS	908.34-01 204.63S		24" DA max. DC-200 Hz, 22K force lbs.	±5% ampl.	PE367	6 months
Controller	MTS/Dennison	443.115		DC to 2000 Hz	±1%		
Power Supply		Mod. 63		120 GPM Max. 3K-5K psi max. 250 Hp	NA		
Power Supply	PCB	483M23	288	12 channel X1 & X5 gain filter frequency 50 Hz	±2%	PE384	6 months
Shock Spectrum Analyzer	SDC	SD321	18	Input: 0.1 Hz to 10 KHz Sensitivity: 31.6 MV to 100 V F.S.	±0.5 db	PE381	6 months
Visicorder	HON	906C	99078	DC to 2 KHz 12 channels 6" paper	±1 db	RE335	6 months
Visicorder	HON	960B	9-8687	DC to 2 KHz 12 channels 6" paper	±1 db	RE301	3 months
Recorder, X-Y	MFE	715E	70154	Input: 1-10-100 MV 1-10V	±0.5%	RE342	6 months
Sweep Oscillator	Ling	CO-100A (701C)	120	0.2 Hz to 5.0 KHz 0.1 to 9.9 octave/minute	±1%	SG321	6 months

TEST EQUIPMENT LIST

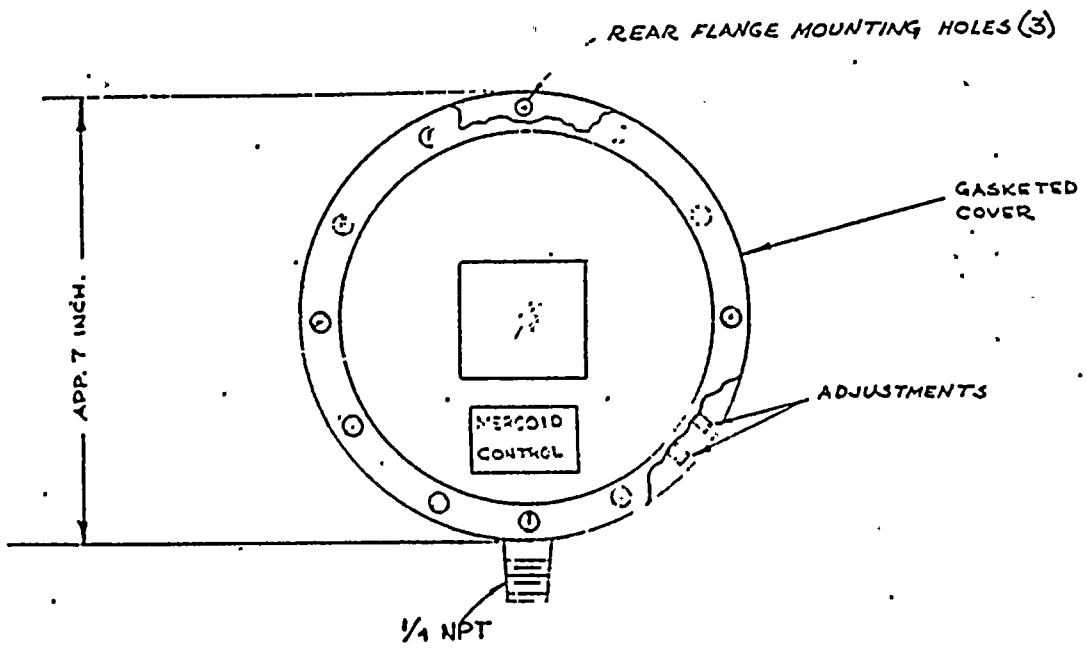
NAME	MFGR.	MODEL	SER.NO.	RANGE	ACCURACY	INV.#	CAL.FREQ.
Scope, Storage	TEK	T912	T912 B015257	DC - 10 MHz Dual Trace	±3%	OS304	6 months
Accelerometer	PCB	302A	2844	1 Hz - 5 KHz	±5%	AC374	6 months
Accelerometer	PCB	302A	666	1 Hz - 5 KHz	±5%	AC375	6 months
Accelerometer	PCB	302A	672	1 Hz - 5 KHz	±5%	AC381	6 months
Accelerometer	PCB	302A	673	1 Hz - 5 KHz	±5%	AC382	6 months
Accelerometer	PCB	302A	2845	1 Hz - 5 KHz	±5%	AC383	6 months
Accelerometer	PCB	302A	2853	1 Hz - 5 KHz	±5%	AC395	6 months
Accelerometer	PCB	302A	1778	1 Hz - 5 KHz	±5%	AC421	6 months
Accelerometer	PCB	302A	1983	1 Hz - 5 KHz	±5%	AC339	6 months
Accelerometer	PCB	302A	4441	1 Hz - 5 KHz	±5%	AC339	6 months
DC Amplifier	HON	117	0225TE74	6 Channel .01/.02/.05/.1/ .2/.5/1/2/5/10	±2%	PE409	6 months
Power Supply	PCB	483A	273	12 channel gain X1	±2%	PE374	6 months
Synthesizer	M/RAD	197S	19710R			PE393	
False Contact Monitor	MTX	202D	310	Detection: 10 & 100 usec	±2%	PE371	6 months
Oscillator Sweep Servo	SDC	SD114A	232	5 Hz - 5 KHz Dynamic Range: 80 db min.	±1% f	PE372	6 months
Amplifier, DC	HON	117-06	1000-54	Gain 0.01/.02/.05/.1/.2/ .5/1/2/5/10	±2 DC	PE394	6 months
Voltage Ref Source	SORE	QR40-2	20	0-40 VDC 0-2 Amp RIPPLE 150 uV	REG. .01%	PD338	6 months
Pressure Indicator	USG	50489	PI336	0 to 200 psi	±0.5 psi	PI336	6 months
Pressure Indicator	HES	NA	H25329	0-500 psi 250 Div.	±1.0 psi	PI305	6 months
Pressure Indicator	USG	1404	PI371	0-100 psi.	±1%	PI371	6 months

TEST EQUIPMENT LIST

NAME	MFGR.	MODEL	SER.NO.	RANGE	ACCURACY	INV.#	CAL.FREQ.
Pressure Indicator	HES		25325	0-10,000 psi 1000 Div.	±5psi	PI321	1 year
Amplifier Instrument	BB	3088/16	1003	Volt Gain 1 to 1000 15 Hz to 25 KHz	±1%	AM302	6 months
Filter, Dual	ITH	4302	35207	10 - 1 MHz	±3%	AM346	6 months
Recorder, X-Y	MFE	715#	70142	Input: 1-10-100 MV 1-10V Both Channels	±0.5%	RE343	6 months
Visicorder	HON	1508B	0304A	24 Channel - Inches	±1 db	RE348	6 months
Millivolt Recorder	BRUSH	260	03753	6 Channel	±2%	RE318	3 months
Power Supply	SORE	40-2	101	0-40VDC 0-2Amp RIPPLE 2000V REG.	.005%	PD331	6 months
Power Supply	SORE	40-2	107	0-40VDC 0-2Amp RIPPLE 200 uV REG.	.005%	PD302	6 months
Digital Thermometer	DORIC	DS-520	14954	Type "T" -310 to +750°F	±2°F	TI323	6 months
Digital Voltmeter	FLUKE	8050A	2646175	10 uV to 1000 VDC - 10 mV to 750 VAC True RMS 0-20 Megohms Res. dB voltage	DC±.03%R +2 digits	ML504	6 months
Pressure Indicator	USG	1404-4 1/4"		0-15 psi	±.25%	PI317	6 months

RENTAL EQUIPMENT:

Honeywell 5600E Recorder #73371
Pressure Transducer 0-200 psia Statham S/N 2702



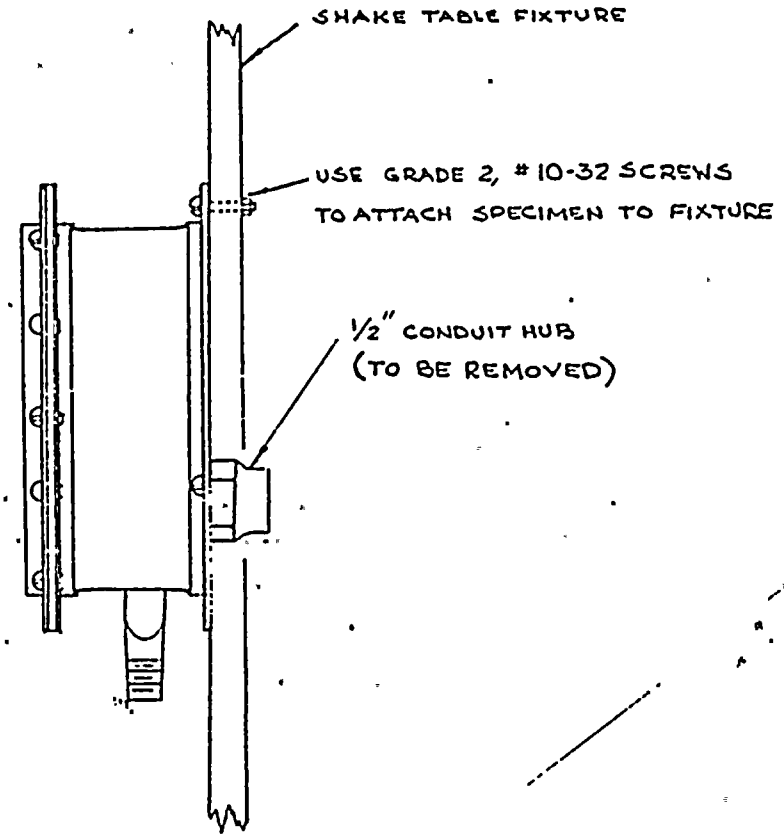


FIGURE 1

TEST MOUNTING

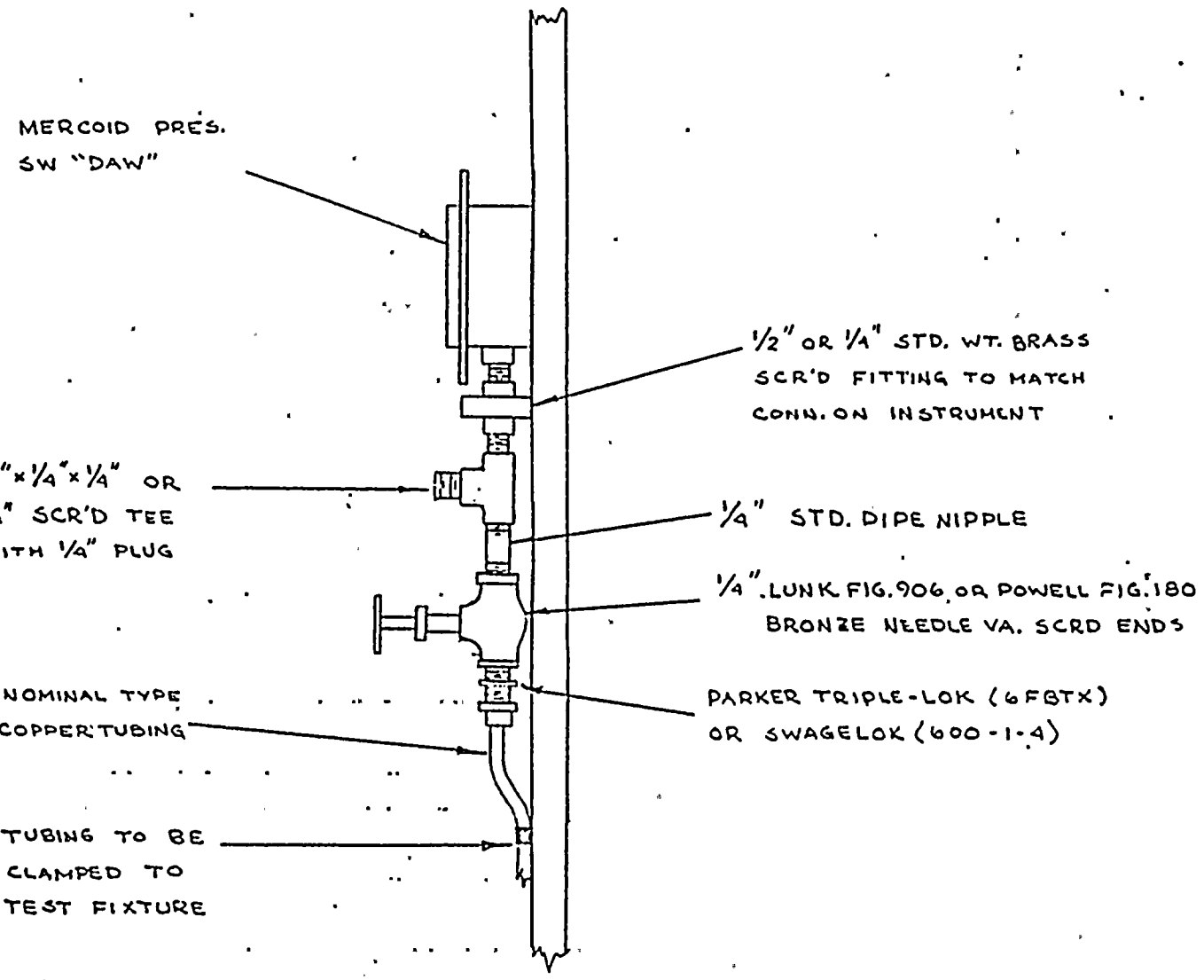


FIGURE 2

TEST MOUNTING

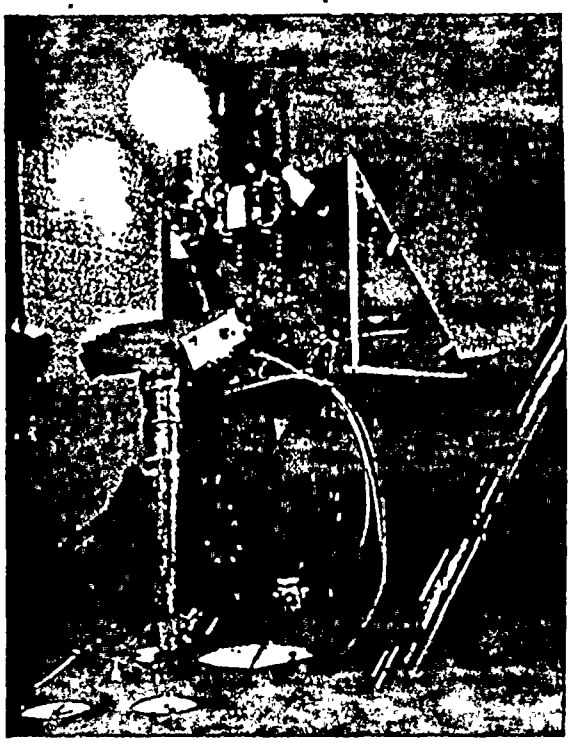


FIGURE 3

VIBRATION TEST SET-UP

FRONT-TO-BACK & VERTICAL
BIAXIAL DIRECTION

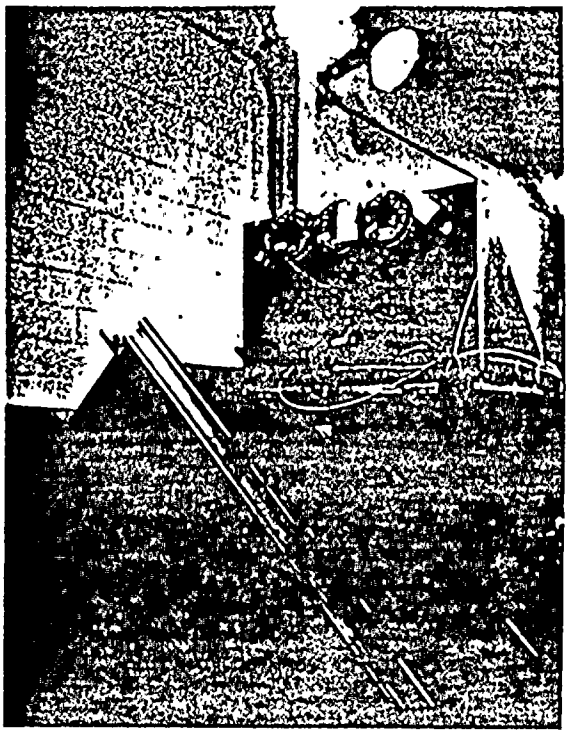


FIGURE 4

VIBRATION TEST SET-UP
RIGHT-TO-LEFT & VERTICAL
BIAXIAL DIRECTION

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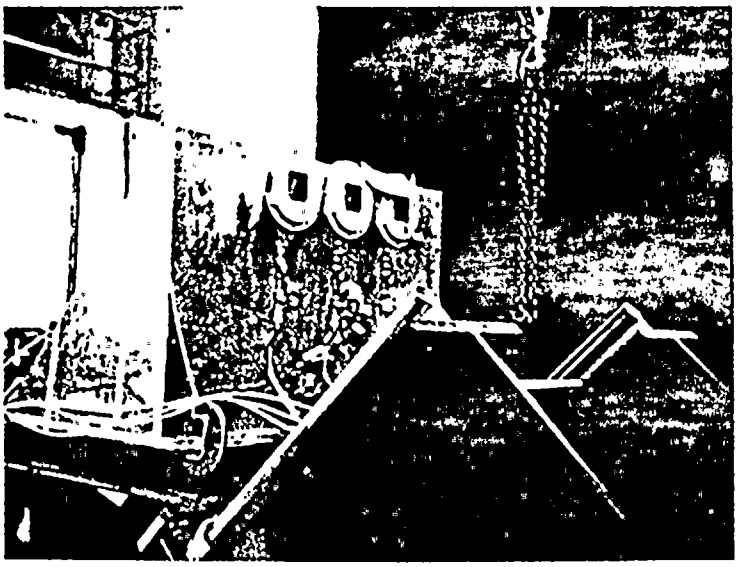

FIGURE 5

VIBRATION TEST SET-UP

BACK-TO-FRONT & VERTICAL
BIAXIAL DIRECTION

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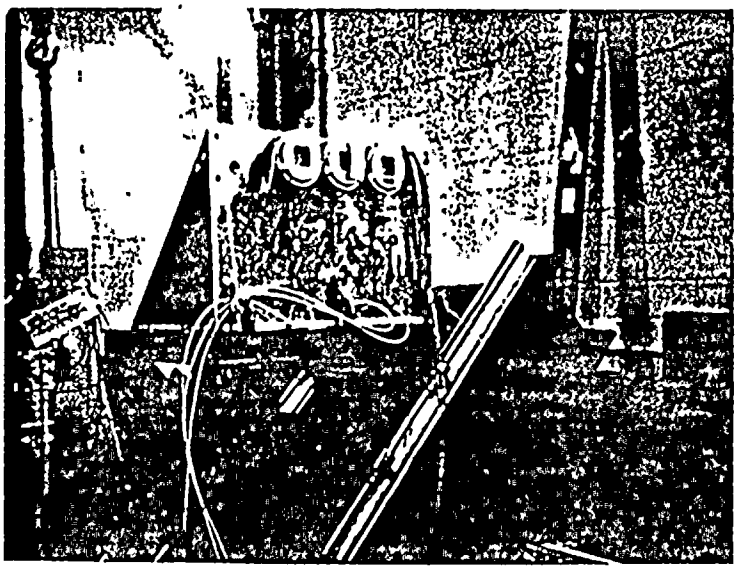


FIGURE 6

VIBRATION TEST SET-UP

LEFT-TO-RIGHT & VERTICAL
BIAXIAL DIRECTION

Report No. 16013-2

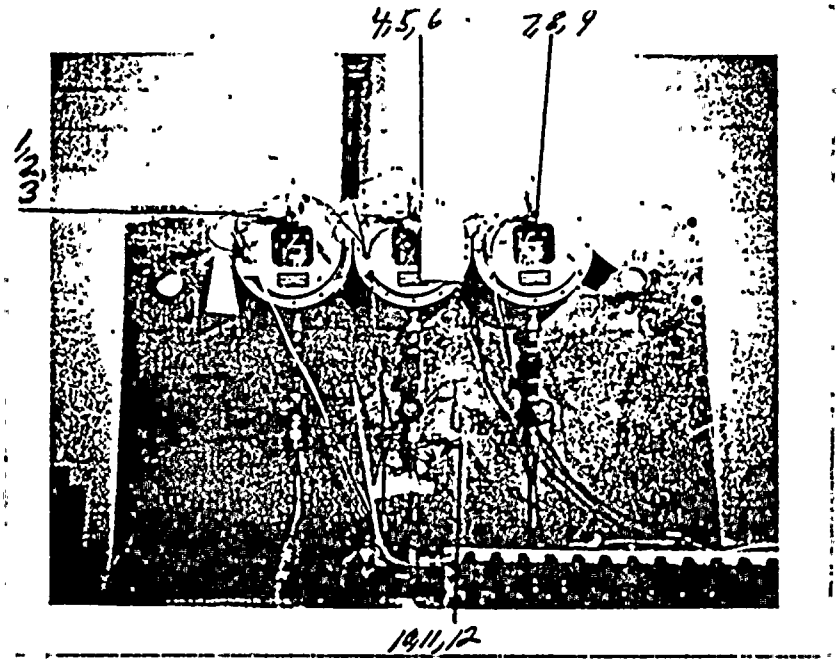


FIGURE 7

ACCELEROMETER LOCATIONS

Report No. 16013-2

ACTON ENVIRONMENTAL TESTING CORPORATION

Page _____

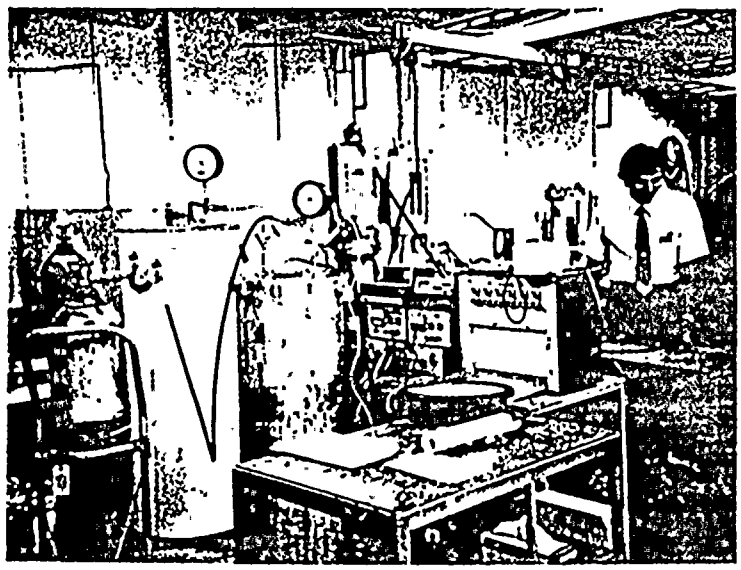


FIGURE 8

ENVIRONMENTAL TEST SET-UP

Report No. 16013-2

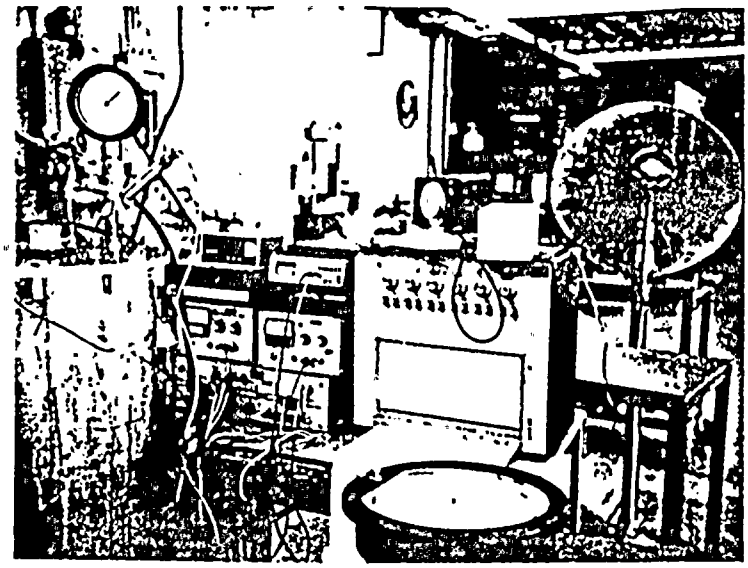


FIGURE 9

ENVIRONMENTAL TEST SET-UP

Report No. 16013-2

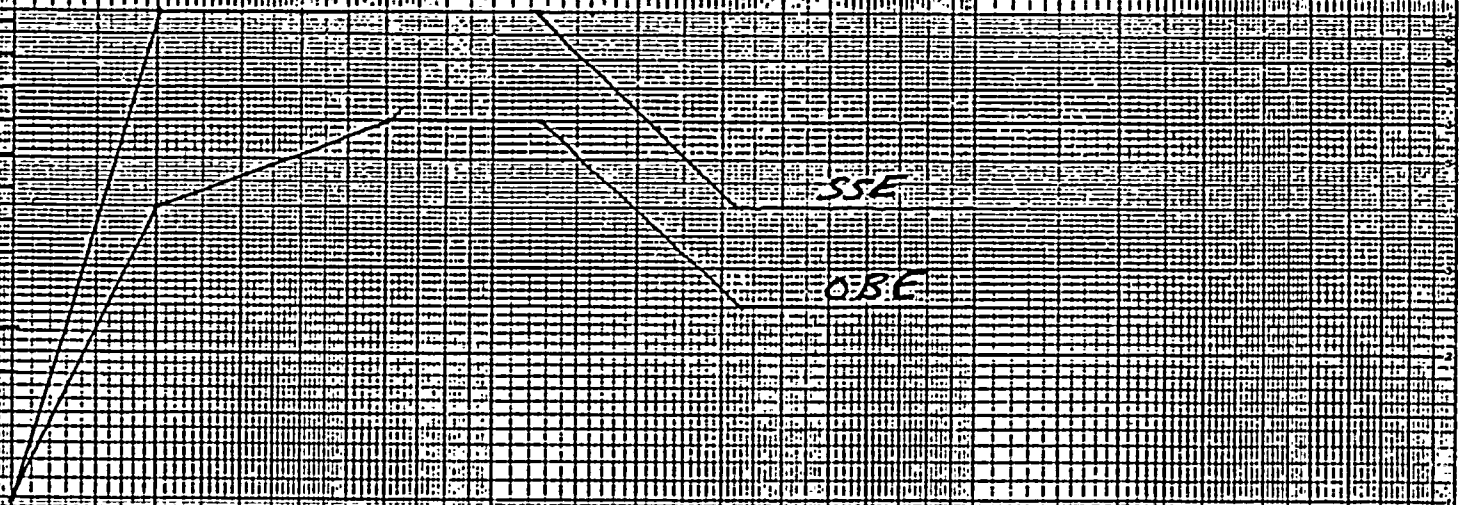
NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER ® IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTION ENVIRONMENTAL TESTING CORPORATION

Q-20

REQUIRED RESPONSE SPECTRUM
Q = 20, 2½ % DAMPING

Test No.
Date
Customer
Test Item P/N
Test Item S/N
Type of Test
Spec No.
Para. No.
Conditions
Temperature
Period of Test
Control Axis
Pick-up No.
Pick-up Axis
Operator
Program Co-Ordinator
GRMS



10.0
10
0.1

ACCELERATION (g)

FIGURE 10

NO. 31,258. LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20

REQUIRED RESPONSE SPECTRUM

Q = 20, 2½% DAMPING

Test No.
Date
Customer
Test Item P/N
Test Item S/N
Type of Test
Spec No.
Para. No.
Conditions
Temperature
Period of Test
Control Axis
Pick-up No.
Pick-up Axis
Operator
Program
Co-Ordinator
G's RMS

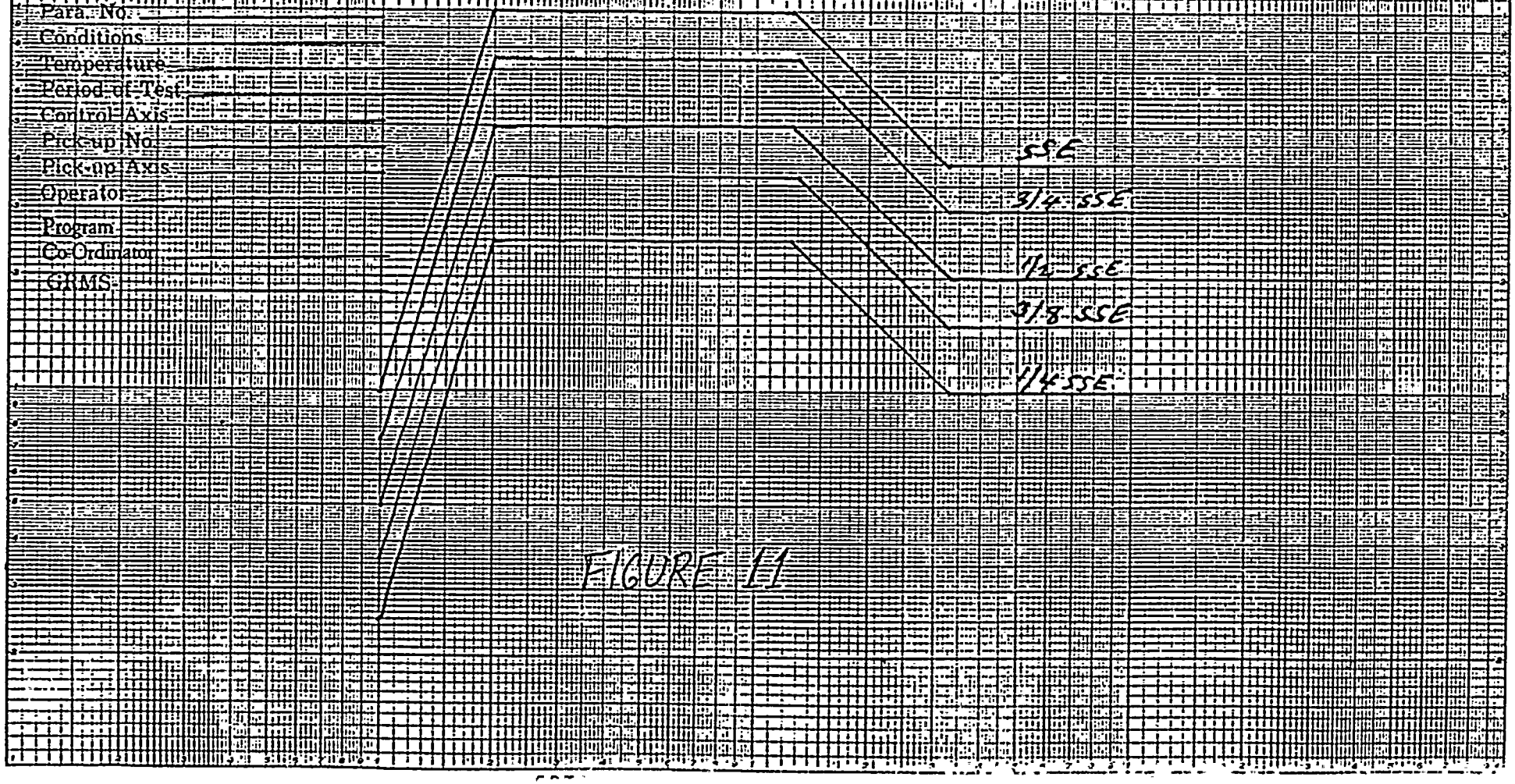


FIGURE 11

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type Item 82075, 82076, 82077

Customer American Electric

Report No. _____

P. O. _____

Operator C. P. to He

Spec. _____

Test Random

Date 6-2-81

Conditions TEST condition #1

Time _____

TEST	AXIS	LEVEL	82075	82076	82077		
3 Run 1	R-L+vert. ~~F-B~~	OBE	OKAY	OKAY	OKAY		
3 Run 2	"	"	"	"	"		
3 Run 3	"	"	"	"	"		
3 Run 4	"	"	"	"	"		
3 Run 5	"	"	"	"	"		
3 Run 6	"	SSE	"	"	"		
4 Run 1	F-B+vert	OBE	OKAY	OKAY	OKAY		
4 Run 2	"	"	"	"	"		
4 Run 3	"	"	"	"	"		
4 Run 4	"	"	"	"	"		
4 Run 5	"	"	"	"	"		
4 Run 6	"	SSE	"	"	"		
5 Run 1	L-R+vert	OBE	"	"	"		
5 Run 2	"	"	"	"	"		
5 Run 3	"	"	"	"	"		
5 Run 4	"	"	"	"	"		
5 Run 5	"	"	"	"	"		
5 Run 6	"	SSE	"	"	"		
6 Run 1	B-F+vert	OBE	"	"	"		
6 Run 2	"	"	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type Item 82075, 82076, 82077

Customer American Electric

Report No. _____

P. O. _____

Operator C. Pilotte

Spec. _____

Test Random

Date 6-3-81

Conditions Test Condition #1

Time _____

Test	Axis	Level	82075	82076	82077		
6 Run 3	Bi-Vert	OBE	OKAY	OKAY	OKAY		
6 Run 4	"	"	"	"	"		
6 Run 5	"	"	"	"	"		
6 Run 6	"	"	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type Item 82075, 82076, 82077

Customer American Electric

Report No. _____

P. O. _____

Operator C. Pilotte

Spec. _____

Test Random

Date 6-3-81

Conditions Test condition 2

Time _____

TEST	Axis	LEVEL	82075	82076	82077		
3 Run	R-L ~~B-F~~ Vert	SSE	OKAY	OKAY	OKAY		
4 Run	F-B Vert	"	"	"	"		
5 Run	L-R Vert	"	"	"	"		
1 Run	B-F Vert	"	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82078, 82079, 82080

Customer American Electric

Report No.

P. O.

Operator C. Wirth

Spec.

Test Random

Date 6-3-86

Conditions Test condition 1

Time

Test	Axis	Level	82078	82079	82080		
9 Run1	R-L Horiz.	OBE	OKAY	OKAY	OKAY		
9 Run2	"	"	"	"	"		
9 Run3	"	"	"	"	"		
9 Run4	"	"	"	"	"		
9 Run5	"	"	"	"	"		
9 Run6	"	SSE	"	"	"		
10 Run1	F-B+Vert.	OBE	"	"	"		
10 Run2	"	"	"	"	"		
10 Run3	"	"	"	"	"		
10 Run4	"	"	"	"	"		
10 Run5	"	"	"	"	"		
10 Run6	"	SSE	"	"	"		
11 Run1	L-R+Vert.	OBE	"	"	"		
11 Run2	"	"	"	"	"		
11 Run3	"	"	"	"	"		
11 Run4	"	"	"	"	"		
11 Run5	"	"	"	"	"		
11 Run6	"	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82078, 82079, 82080

Customer American Electric

Report No.

P. O.

Operator C Pilotte

Spec.

Test Random

Date 6-3-81

Conditions Test Condition I

Time

Test	Axis	Level	82078	82079	82086		
12 Run1	B-F-Vert	ORE	"	"	"		
12 Run2	"	"	"	"	"		
12 Run3	"	"	"	"	"		
12 Run4	"	"	"	"	"		
12 Run5	"	"	"	"	"		
12 Run6	"	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82078, 82079 82080

Customer American Electric

Report No. _____

P. O. _____

Operator C. Pilotte

Spec. _____

Test Random

Date 6-3-81

Conditions Test Condition # 2

Time _____

TEST	AXIS	LEVEL	82078	82079	82080		
9 Run 7	R-L+Vert.	SSE	OKAY	OKAY	OKAY		
10 Run 7	B-F+Vert	SSE	"	"	"		
11 Run 7	L-R+Vert	SSE	"	"	"		
12 Run 7	B-F+Vert	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82081, 82082, 82085 Customer American Electric

Report No. _____ P. O. _____

Operator C. Pilatte Spec. _____

Test Random Date 6-4-81

Conditions Test Condition #1

Time _____

Test	Axis	Level	82081	82082	82085		
15 Run 1	R-L+Vert.	OBE	OKAY	OKAY	OKAY		
15 Run 2	"	"	"	"	"		
15 Run 3	"	"	"	"	"		
15 Run 4	"	"	"	"	"		
15 Run 5	"	"	"	"	"		
15 Run 6	"	SSE	"	"	"		
16 Run 1	F-B+Vert.	OBE	"	"	"		
16 Run 2	"	"	"	"	"		
16 Run 3	"	"	"	"	"		
16 Run 4	"	"	"	"	"		
16 Run 5	"	"	"	"	"		
16 Run 6	"	SSE	"	"	"		
17 Run 1	L-R+Vert.	OBE	"	"	"		
17 Run 2	"	"	"	"	"		
17 Run 3	"	"	"	"	"		
17 Run 4	"	"	"	"	"		
17 Run 5	"	"	"	"	"		
17 Run 6	"	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82051, 82052, 82055 Customer American Electric

Report No. _____ P. O. _____

Operator C. Platte Spec. _____

Test Random Date 6-4-81

Conditions Test Conditions #1

Time _____

Test	Axis	Level	82051	82052	82055		
18 Run1	B-Event	OBE	OKAY	OKAY	OKAY		
18 Run2	"	"	"	"	"		
18 Run3	"	"	"	"	"		
18 Run4	"	"	"	"	"		
18 Run5	"	"	"	"	"		
18 Run6	"	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82081, 82082, 82085

Customer American Electric

Report No.

P. O.

Operator C. Pilette

Spec.

Test Random

Date 6-4-81

Conditions Test Condition #3

Time

Test	Axis	Level	82081	82082	82085		
15 Run	R-L Vert.	SSE	OKAY	OKAY	OKAY		
16 Run	F-B Vert	"	"	"	"		
17 Run	L-R Vert.	"	"	"	"		
18 Run	B-F Vert	"	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82086, 82083, 82089 Customer American Electric

Report No. _____ P. O. _____

Operator C. Pilotte Spec. _____

Test Random Date 6-4-81

Conditions Test Condition #1

Time _____

Test	Axis	Level	82086	82083	82089		
21 Run1	R-L Vert	OBE	OKAY	OKAY	OKAY		
21 Run2	"	"	"	"	"		
21 Run3	"	"	"	"	"		
21 Run4	"	"	"	"	"		
21 Run5	"	"	"	"	"		
21 Run6	"	SSE	"	"	"		
22 Run1	F-B Vert.	OBE	"	"	"		
22 Run2	"	"	"	"	"		
22 Run3	"	"	"	"	"		
22 Run4	"	"	"	"	"		
22 Run5	"	"	"	"	"		
22 Run6	"	SSE	"	"	"		
23 Run1	L-R Vert	OBE	"	"	"		
23 Run2	"	"	"	"	"		
23 Run3	"	"	"	"	"		
23 Run4	"	"	"	"	"		
23 Run5	"	"	"	"	"		
23 Run6	"	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82086, 82083, 82089

Customer American Electric

Report No. _____

P. O. _____

Operator C. Pilotte

Spec. _____

Test Random

Date 6-4-81

Conditions Test Condition I

Time _____

Test	Axis	Level	82086	82083	82089		
24 Run 1	B-F-Vert.	OBE	OKAY	OKAY	OKAY		
24 Run 2	"	"	"	"	"		
24 Run 3	"	"	"	"	"		
" Run 4	"	"	"	"	"		
" Run 5	"	"	"	"	"		
24 Run 6	"	SSE	"	"	~1c 710 msec ~1c 673 msec		
24 Run 7	"	"	"	"	OKAY		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82086, 82083, 82089

Customer American Electric

Report No. _____

P. O. _____

Operator C. Pilotte

Spec. _____

Test Random

Date 6-4-81

Conditions Test Condition 2

Time _____

Test	Axis	Level	82086	82083	82089		
21 Run7	R-L+Vert.	SSE	OKAY	OKAY	N/O 73msec N/C >10msec.		
21 Run8	"	1/2 SSE	"	"	OKAY		
21 Run9	"	3/4 SSE	"	"	"		
22 Run7	F-B+Vert	SSE	OKAY	OKAY	OKAY		
23 Run7	L-R+Vert.	SSE	"	"	"		
24 Run8	B-F+Vert.	SSE	"	"	"		

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82088, 82087, 82090 Customer American Electric

Report No. _____ P. O. _____

Operator C. Pilotte Spec. _____

Test Random Date 6-5-81

Conditions Test Condition #1

Time _____

Test	Axis	Level	82088	82087			
25 Run1	F-B+Vert.	OBE	OKAY	OKAY			
25 Run2	"	"	"	"			
25 Run3	"	"	"	"			
25 Run4	"	"	"	"			
25 Run5	"	"	"	"			
25 Run6	"	SSE	"	"			
26 Run1	R-L+Vert.	OBE	"	"			
26 Run2	"	"	"	"			
26 Run3	"	"	"	"			
26 Run4	"	"	"	"			
26 Run5	"	"	"	"			
26 Run6	"	SSE	"	close >10msec open 73msec.			
26 Run7	"	3/4 SSE	"	OKAY			
27 Run1	L-R+Vert	OBE	OKAY	OKAY			
27 Run2	"	"	"	"			
27 Run3	"	"	"	"			
27 Run4	"	"	"	"			
27 Run5	"	"	"	"			
27 Run6	"	SSE	"	"			

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82088, 82087, 82090

Customer American Electric

Report No.

P. O.

Operator C. Pilotte

Spec.

Test Random

Date 6-5-81

Conditions Test Condition #1

Time

Test	Axis	Level	82088	82087			
28 Run1	B-F-Vert.	OBE	OKAY	OKAY			
28 Run2	"	"	"	"			
28 Run3	"	"	"	"			
28 Run4	"	"	"	"			
28 Run5	"	"	"	"			
28 Run6	"	SSE	"	"			

ACTON

ENVIRONMENTAL TESTING CORPORATION

533 Main Street Acton, Massachusetts

DATA SHEET

Type 82088, 82087, 82090 Customer American Electric

Report No. _____ P. O. _____

Operator C. Pilotte Spec. _____

Test Random Date 6-5-81

Conditions Test Condition #2

Time _____

Test	Axis	Level	82088	82087			
25 Run 7	F-B+Vert.	SSE	OKAY	close > 10 msec open > 3 msec.			
25 Run 8	"	3/4 SSE	"	OKAY			
26 Run 8	R-L+Vert.	SSE	close > 10 msec. open > 3 msec	close > 10 msec open > 3 msec			
26 Run 9	"	3/4 SSE	"	"			
26 Run 10	"	1/2 SSE	OKAY	OKAY			
27 Run 7	L-R+Vert.	SSE	"	"			
28 Run 7	B-F+Vert.	SSE	close > 10 msec. open > 3 msec	close > 10 msec. open > 3 msec			
28 Run 8	"	3/4 SSE	OKAY	OKAY			

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
codex GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Q=20 2% Damping

ENVIRONMENTAL TESTING CORPORATION

ACTON

Test No. 3 Run 1
Date 4/8/81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec. No.
Para. No.
Conditions Operating 20 #
Temperature Room
Period of Test 30 Seconds
Control Axis R-L Vertical
Pick-up No. 6
Pick-up Axis Vertical
Operator C. Pinette
Program
Co-Ordinator R. Gelfarb
GRMS

10

g

10

p/n DSW-7233-153 Range 3A
p/n DSW-7233-153 Range 5
p/n DSW-7233-153 Range 1

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL ACOUSTICS TESTING CORPORATION

Q=25: 2½% Damping

Test No. 3 Run 2
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L + Vertical
Pick-up No. 8
Pick-up Axis ~~Ac~~ Vertical
Operator C. Pilotte
Program
Co-Ordinator K. Gifford
GRMS

10.

g

10

p/n DSW-7233-153 Range 3-A
p/n DSW-7233-153 Range 5
p/n DSW-7233-153 Range 1

NO 31,256, LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING ACTON CORPORATION

Q=20 2½% Damping

Test No. 3-Rqw-3
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec. No.
Para. No.
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L + Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilray
GRMS

p/n DSW-7233-153 Range-10
p/n DSW-7233-153 Range-5
p/n DSW-7233-153 Range-1

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
codex GRAPH PAPER®
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ENVIRONMENTAL
ACTON
TESTING
CORPORATION

Test No. 3 Run 4
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No.
Para No.
Conditions Open Loop Test
Temperature Room
Period of Test 32 Seconds
Control Axis Vertical
Pick-up No. 6
Pick-up Axis Vertical
Operator C. Platte
Program Co-Ordinator R. Gifford
GRMS

Q=10 2½% Damping

10.

g.

10

P/N DSW-7733-153 Range A
P/N DSW-7733-153 Range C
P/N DSW-7733-153 Range C

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTION ENVIRONMENTAL TESTING CORPORATION

Test No. 3 Run 5
Date 9-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No
Para. No.
Conditions Operating ECU
Temperature Room
Period of Test 30 Seconds
Control Axis R-L & Vertical
Pick-up No. 6
Pick-up Axis Vertical
Operator C. Dilette
Program
Co-Ordinator R. Gilbert
GRMS

Q=10 2½% Damping

10.

9

10

P/N DSW-7233-153 Range 3A
P/N DSW-7233-153 Range 5
P/N DSW-7233-153 Range 1

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
codex GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Ex no 249 Damping

ENVIRONMENTAL TESTING ACTION CORPORATION

Test No. 1 Run 6
Date 4-28-87
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random SSE
Spec No
Para No
Conditions Operating P.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L Vertical
Pick-up No 4
Pick-up Axis Vertical
Operator Christie
Program
Co-Ordinator R. Grifox
GRMS

p/n PSW-7233-153 Range 3-A
p/n PSW-7233-153 Range 5
p/n PSW-7233-153 Range 1

10
g
10

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER® IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 3 Run 7
Date 4-2-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random S.E.
Spec No.
Para No.
Conditions Operating FC #2
Temperature Room
Period of Test 3a Seconds
Control Axis R-L-V Vertical
Pick-up No. 6
Pick-up Axis Vertical
Operator C. Pratt
Program
Co-Ordinator R. Gilbert
GRMS

0.20 2 HP Damping

10.

g

10

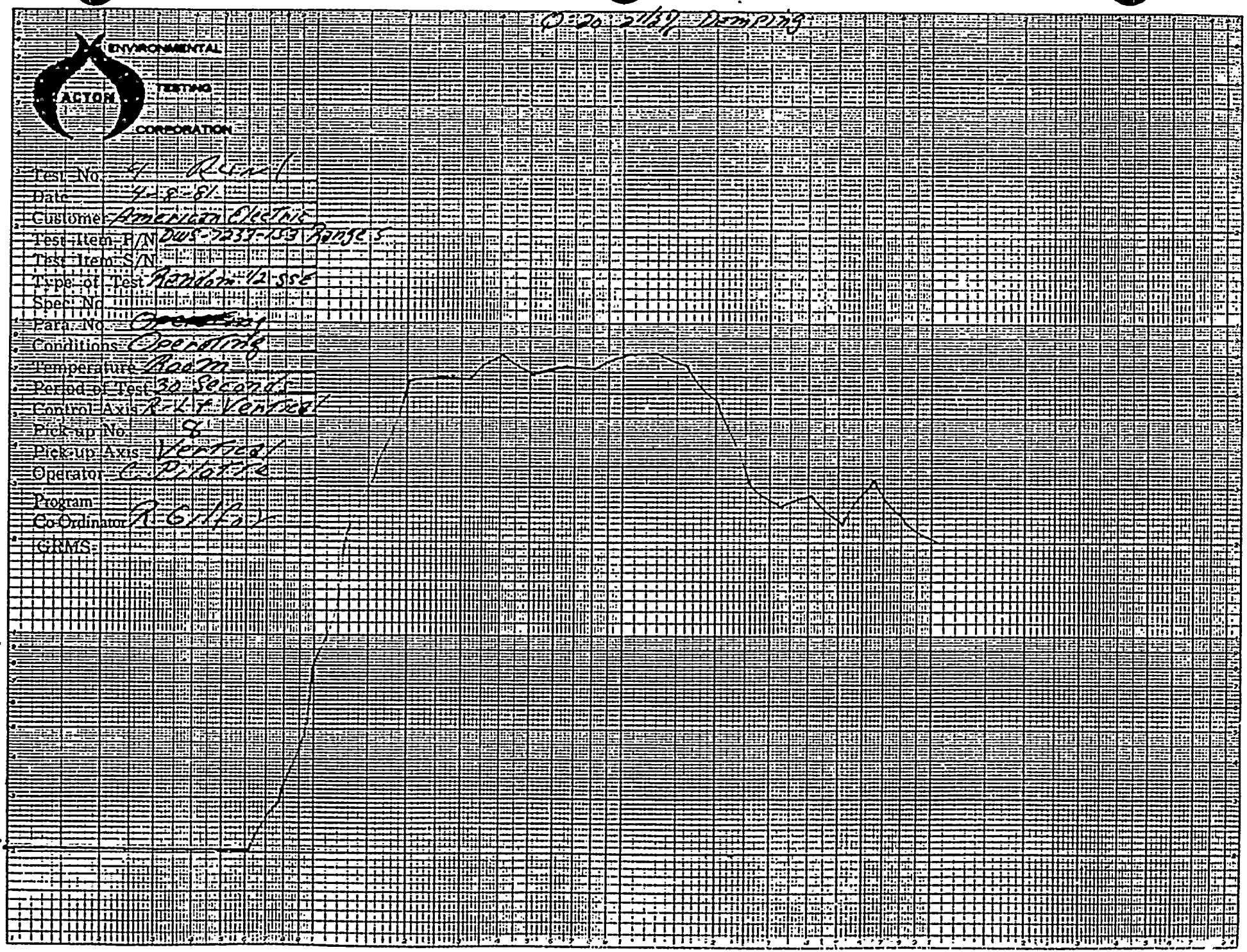
P/N DSW-7233-153 Range 3A
P/N DSW-7233-153 Range 3
P/N DSW-7233-153 Range 1
P/N DSW-7233-153 Range 1

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 3½% Damping

Test No. 4 Rev 1
Date 4-8-81
Customer American Electric
Test Item P/N DWS-7233-153 Range 5
Test Item S/N
Type of Test Random ½ SSE
Spec No.
Para. No. Operating
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R-L-F Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pirtle
Program
Co-Ordinator A. Girard
GRMS



NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 2
Date 4/18/67
Customer American Electric
Test Item P/N NASA 7233-153 Range-S
Test Item S/N
Type of Test Random 14 SSE
Spec No
Para No
Conditions Operating
Temperature Room
Period of Test 3d Seconds
Control Axis X-Y-Z Vertical
Pick-up No 8
Pick-up Axis Vertical
Operator C. Pilatic
Program
Co-Ordinator R. Gilroy
GRMS

10.

8

10

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

0-20 Hz Sweep

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 3
Date 4/8/87
Customer American Electric
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random 3 Axis
Spec. No.
Para. No.
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R-Lt Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. DiYorio
Program
Co-Ordinator R. Gilfox
GRMS

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NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2½% Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. CH-RUN-4
Date 4/8/81
Customer American Electric
Test Item P/N DSCC-7733-153 Ranges
Test Item S/N
Type of Test Random ½ SSE
Spec No
Para. No
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R.L.+ Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilfar
GRMS

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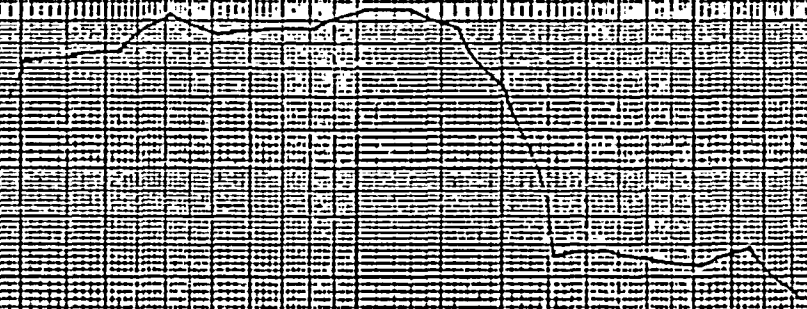
Q = 20 : 2% Damping

ENVIRONMENTAL TESTING CORPORATION

ACTON

Test No. 5 Run 1
Date 4-8-81
Customer American Electric
Test Item P/N 2SW-1233-153 Range 5
Test Item S/N
Type of Test Random 03B
Spec No
Para No
Conditions Operating S.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis 2-Y Vertical
Pick-up No 6
Pick-up Axis Vertical
Operator C Platte
Program Co-Ordinator R. Gilfix
GRMS



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W=20 2 Hz Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 15 Run 2
Date 9-8-81
Customer American Electric
Test Item P/N DSW-7733-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating RC
Temperature Room
Period of Test 30 Seconds
Control Axis 2 - R + Vert 1 81
Pick-up No. 6
Pick-up Axis Vertical
Operator C. Plant
Program Co-Ordinator R. Gilfoy
GRMS

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Q = 20 2½% Damping

ENVIRONMENTAL
ACTON
TESTING
CORPORATION

Test No. 5 Run 3
Date 4/18/91
Customer American Electric
Test Item P/N DRW-2233-153 Ranges
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis L R+ Vertical
Pick-up No. 5
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilpin
GRMS

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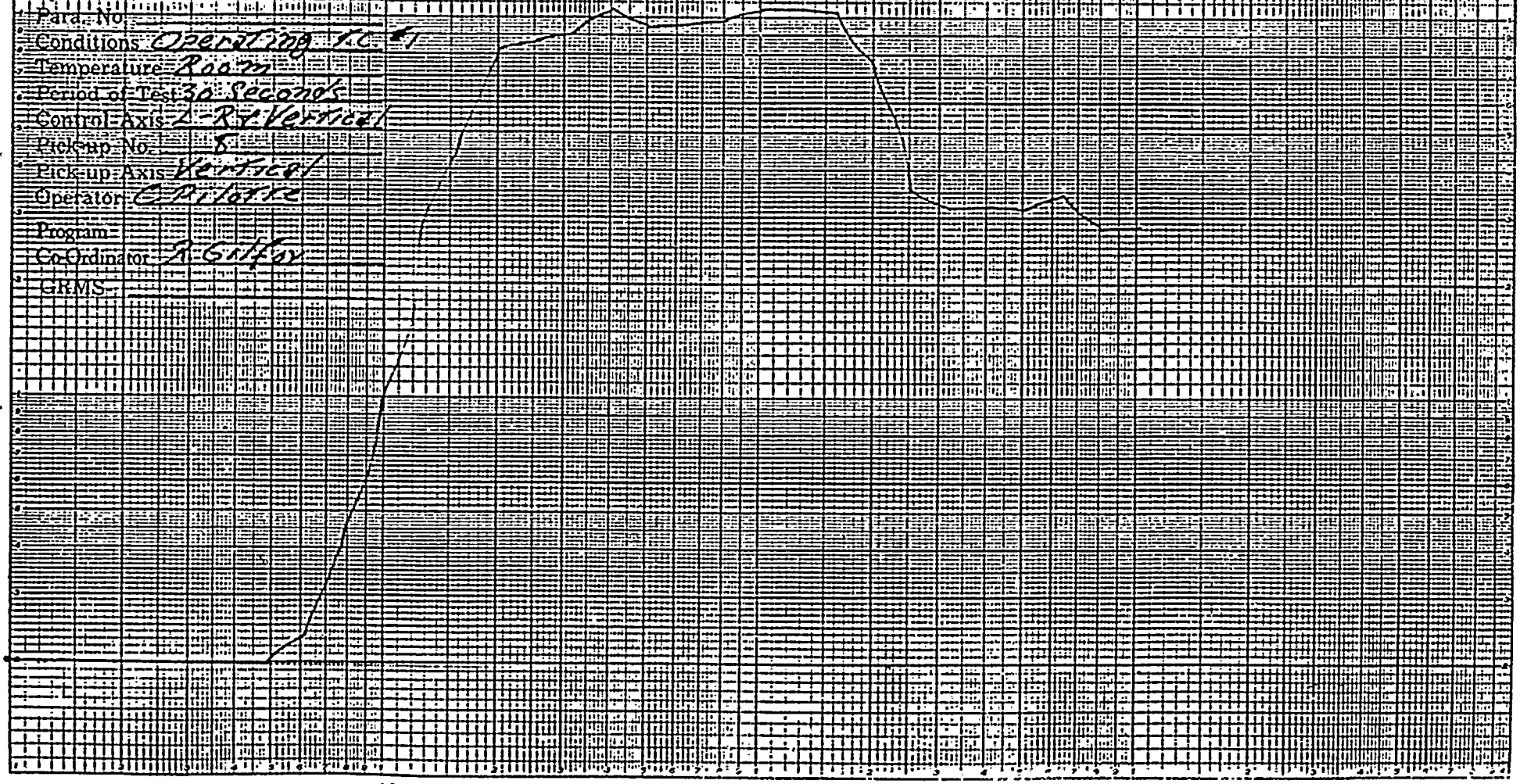
Q=20 2 lbf Pitching

ENVIRONMENTAL TESTING CORPORATION

ACTON

Test No. 5 Run 4
Date 4/8/81
Customer American Electric
Test Item P/N 2SW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec. No.
Para. No.
Conditions Operating L.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis 2-R Vertical
Pick-up No. 5
Pick-up Axis Vertical
Operator C. Blaske
Program
Co-Ordinator A. Gilfoy
GRMS



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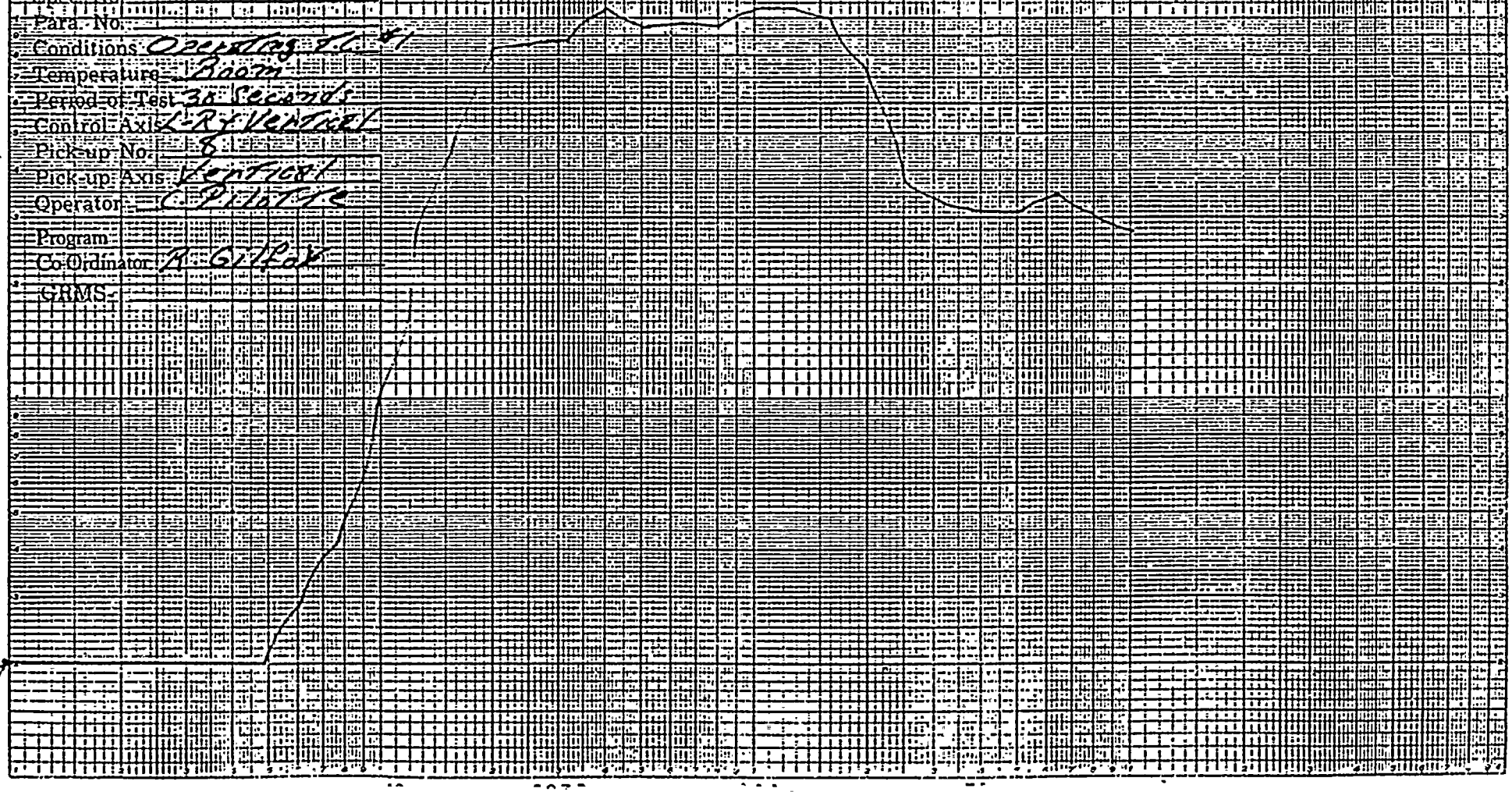
Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. S-Run 5
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-V53 Range 5
Test Item S/N
Type of Test Random 03E
Spec No
Para No
Conditions Operating E.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis Z-Ry Vertical
Pick-up No 8
Pick-up Axis Left Side
Operator C. Pilotte
Program
Co-Ordinator A. Gilpatrick
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2½ g Sampling

Test No. 3 Run 6
Date 4/6/81
Customer American Electric
Test Item P/N OSW-7733-153 Range-5
Test Item S/N
Type of Test Random SSE
Spec No
Para No
Conditions Operating Test
Temperature Room
Period of Test 30 Seconds
Control Axis Z-R-Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Griffey
GRMS

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Q = 20 2nd Dg Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 3 R&W 2
Date 4/18/81
Customer American Electric
Test Item P/N DSW-7233-153 Ranges
Test Item S/N
Type of Test Random 3/8 SSE
Spec. No.
Para. No.
Conditions Operating ECL2
Temperature Room
Period of Test 30 Seconds
Control Axis L+R+Vertical
Pickup No. 8
Pick-up Axis Vertical
Operator C. Pilatte
Program
Co-Ordinator R. Sullivan
GRMS

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ENVIRONMENTAL TESTING CORPORATION

Q=20 2½ Damping

Test No. 6 Run 6
Date 7-8-81
Customer Pinellas Plant C.
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec. No.
Para No.
Conditions Operating OBE
Temperature Room
Period of Test 30 Seconds
Control Axis B-F-Vertical
Pickup No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilfoy
GRMS

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Q=20 2½% Damping

ENVIRONMENTAL
ACTION TESTING
CORPORATION

Test No. 6 Run 2
Date 4-8-81
Customer American Electric
Test Item P/N DSC-7233-133-Range 5
Test Item S/N
Type of Test Random 03E
Spec No.
Para. No.
Conditions Operating 70°F
Temperature Room
Period of Test 30 Seconds
Control Axis Z-Z Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Crispax
GRMS

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Q=20 2nd Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. Grad 3
Date 4/28/87
Customer American Electric
Test Item P/N DSW-1233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating FC 4
Temperature Room
Period of Test 30 seconds
Control Axis B-F-Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C Pivotte
Program
Co-Ordinator R Gillot
GRMS

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Q=20 2 1/2% Damping

ENVIRONMENTAL TESTING CORPORATION ACTON

Test No. 6 Run 4
Date 4/18/81
Customer American Electric
Test Item P/N PSW-7233-133 Ranges
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating TC #1
Temperature Room
Period of Test 30 seconds
Control Axis B-C-Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pillote
Program Co-Ordinator R. Gilroy
GRMS

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Q=20 2nd Damping

ACTION ENVIRONMENTAL TESTING CORPORATION

Test No. 6 Run 6
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para. No
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis B-F & Vertical
Pick-up No 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilbert
GRMS

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ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 6 Run 6
Date 9-8-81
Customer American Electric
Test Item P/N DSW-7733-153 Range 5
Test Item S/N
Type of Test Random SSE
Spec No
Para No
Conditions Operating Loc #1
Temperature Room
Period of Test 30 Seconds
Control Axis Z-Y Averaged
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program Co-Ordinator R. Gurley
GRMS

9-20-2150 Range 5

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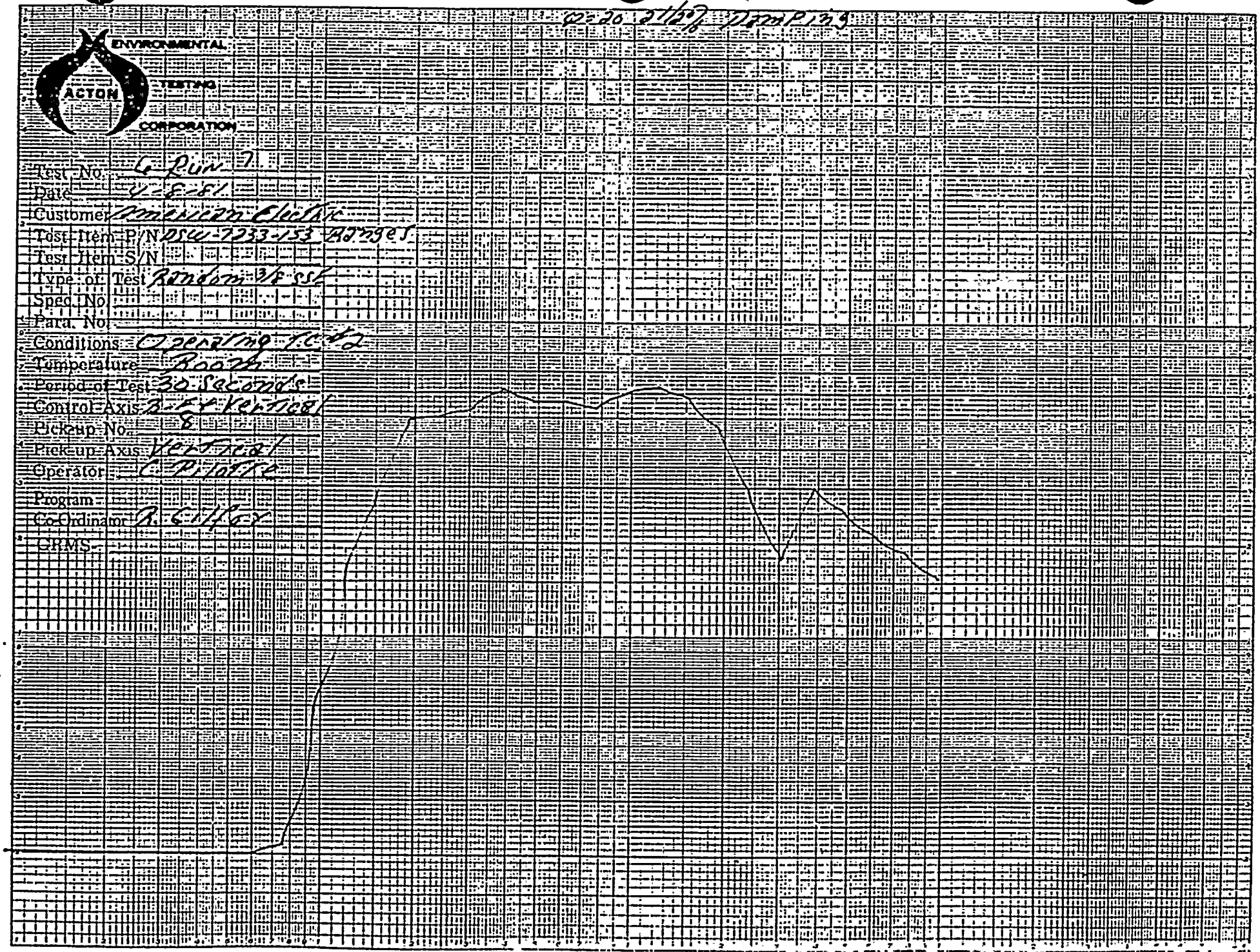
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2½% Damping

Test No. G Run 7
Date 9-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Arrays
Test Item S/N
Type of Test Random 3/8 SSE
Spec. No.
Para. No.
Conditions Operating TC #2
Temperature Room
Period of Test 30 Seconds
Control Axis Z-Ex Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Piatka
Program
Co-Ordinator R. Clifton
GRMS



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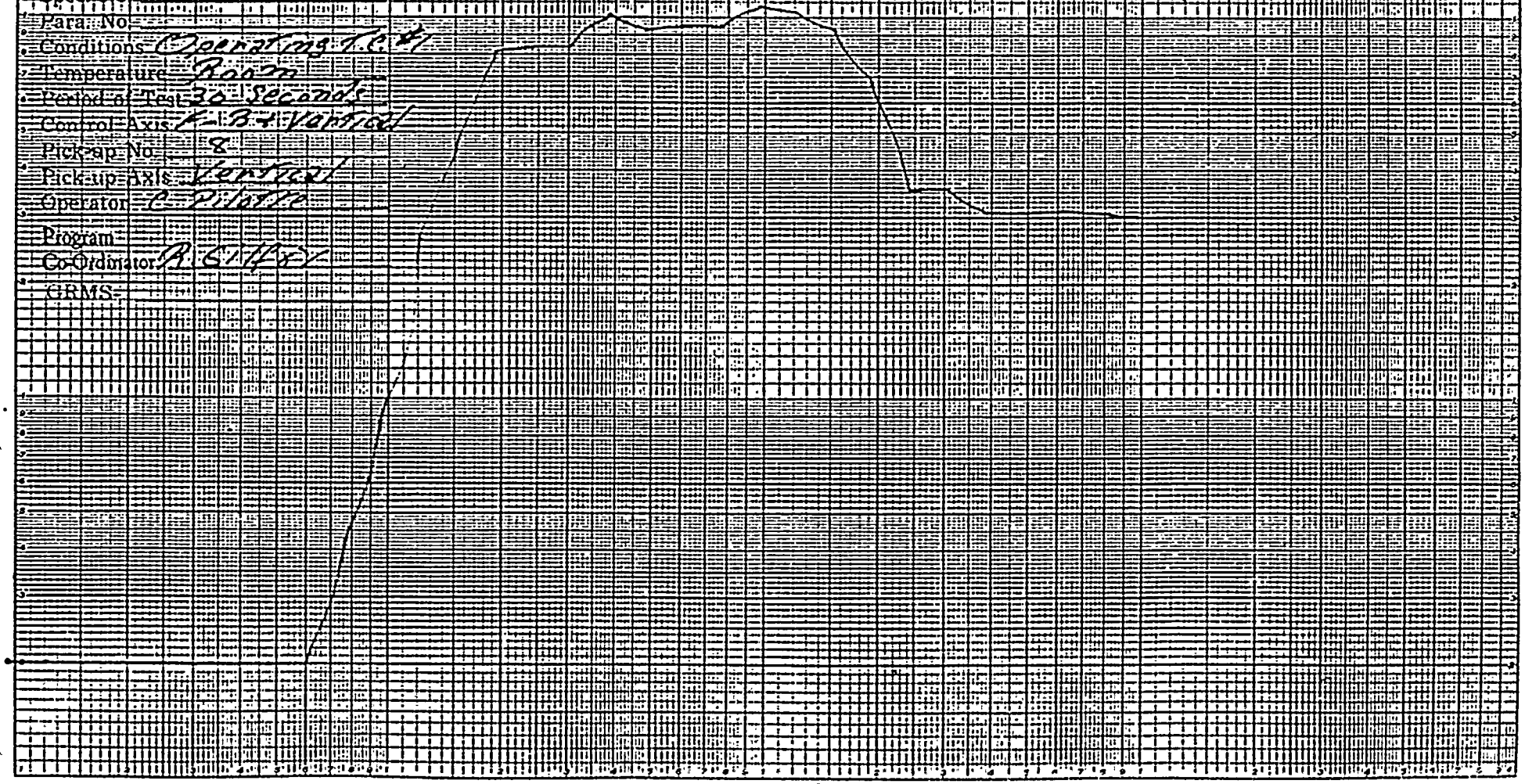
ENVIRONMENTAL
AYON TESTING
CORPORATION

Q=20 2 1/2% Damping

Test No: 1 Run 1
Date: 4-8-81
Customer: American Electric
Test Item P/N: DSW-7733-153 Range 5
Test Item S/N:
Type of Test: Random OBE
Spec No:
Para No:
Conditions: Operating T.C.'s
Temperature: Room
Period of Test: 30 Seconds
Control Axis: A-B Vertical
Pick-up No: 8
Pick-up Axis: Vertical
Operator: C. Pilotte
Program:
Co-Ordinator: R. Stiffler
GRMS:



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Q=20 2 1/2% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. Run 2
Date 4-8-87
Customer American Electronic
Test Item P/N DSW-7733-153 Range 5
Test Item S/N
Type of Test Random Vib
Spec No
Para No
Conditions Operating Test
Temperature Room
Period of Test 30 Seconds
Control Axis L-R Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pilotte
Program
Co-Ordinator R. Gilfoy
GRMS

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Q=20 2½% Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 1 Run 3
Date 4-8-81
Customer American Medical
Test Item P/N 0541-7283-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating FC #1
Temperature Room
Period of Test 30 seconds
Control Axis X-Z Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Pirtle
Program
Co-Ordinator R. Griffey
CRMS

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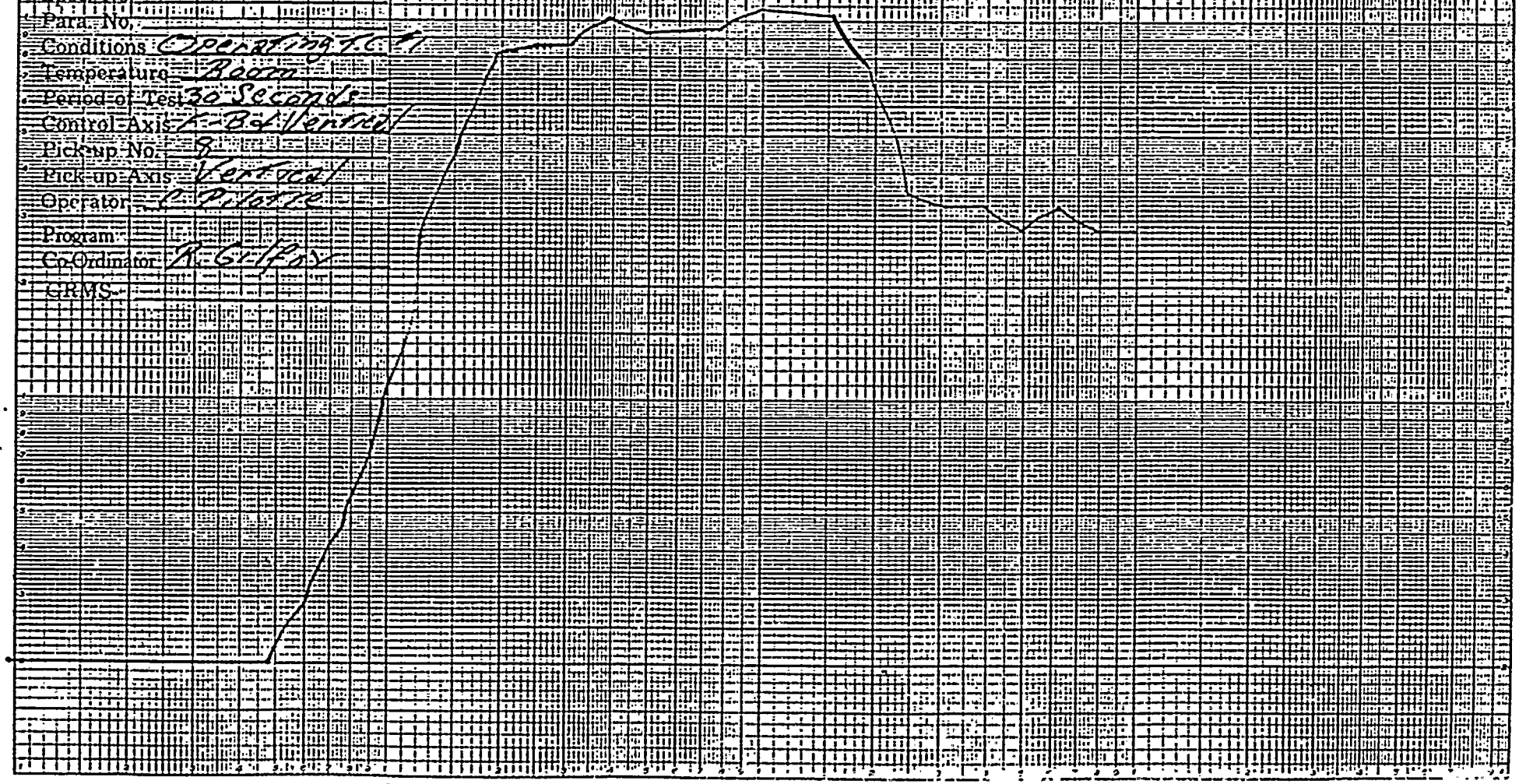
60-20 2 1/3% Damping

ENVIRONMENTAL TESTING ACTON CORPORATION

Test No. 1 Run 9
Date 4-8-81
Customer American Electronic
Test Item P/N DSW-7233-153-Ranges
Test Item S/N
Type of Test Random OBE
Spec No
Para No.
Conditions Operating F.C.
Temperature Room
Period of Test 30 Seconds
Control Axis X-Bar Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Palaze
Program
Co-Ordinator R. Gilfoy
GRMS



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9520 2% Damping

ENVIRONMENTAL TESTING CORPORATION

Test No: 7 Run 5
Date: 4-8-81
Customer: American Electric
Test Item P/N: DSW-7733-153 Range 5
Test Item S/N:
Type of Test: Random OBE
Spec No:
Para. No:
Conditions: Operating T.C. #1
Temperature: Room
Period of Test: 30 Seconds
Control Axis: Z-Bt Vertical
Pick-up No: 8
Pick-up Axis: Vertical
Operator: C. Pilotte
Program Co-Ordinator: R. Gerlach
ORMS:

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 2% Damping

Test No. 7-Run 6
Date 9-8-81
Customer American Electric
Test Item P/N DSW-1253-153 Range 5
Test Item S/N
Type of Test Random SS
Spec No.
Para. No.
Conditions Operating SC #1
Temperature Room
Period of Test 30 Seconds
Control Axis X-Y-Z Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Prater
Program
Co-Ordinator R. Gilroy
GRMS

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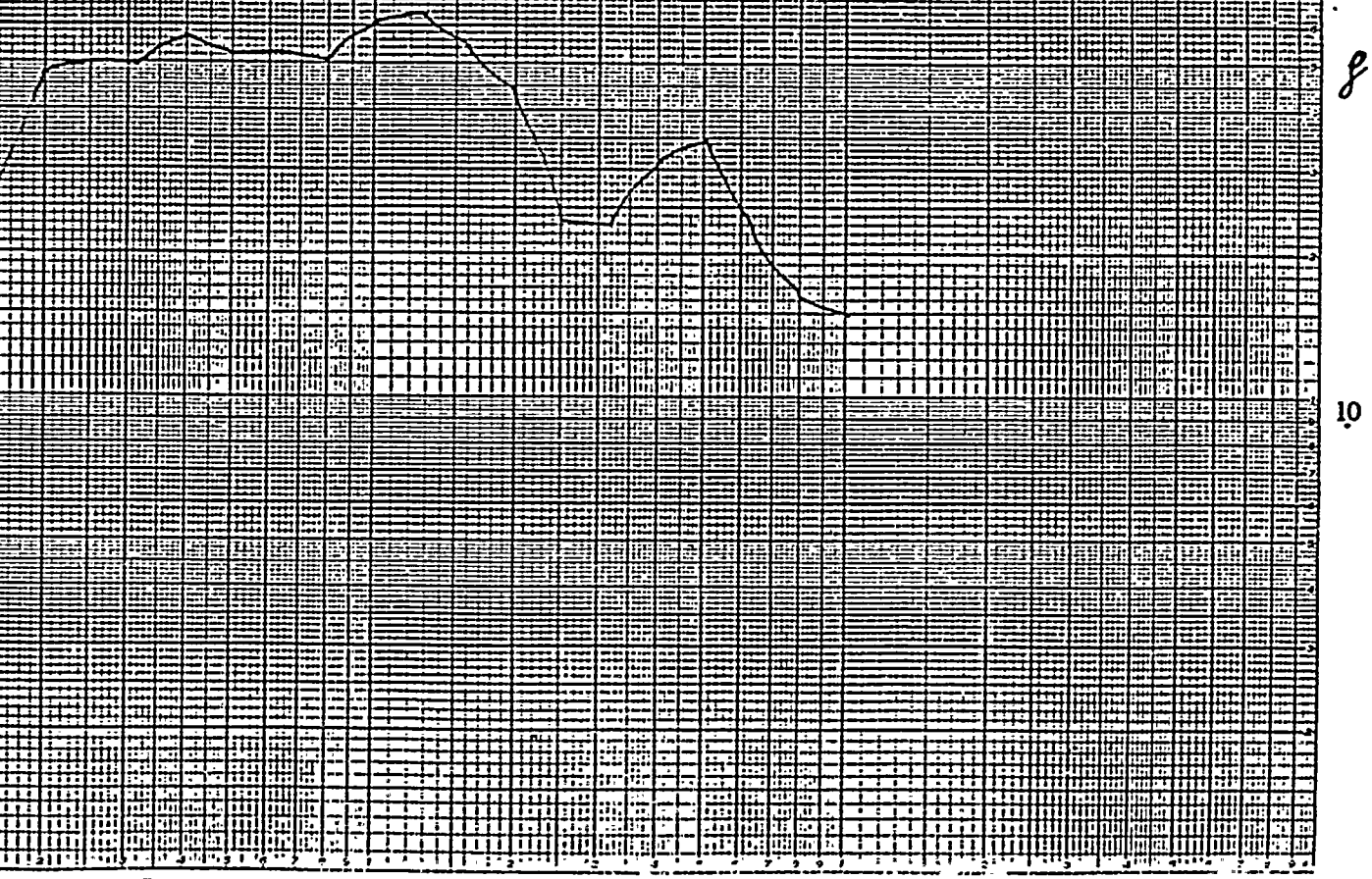
ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2 1/2% Damping

Test No. Run 1
Date 4-28-81
Customer American Electric
Test Item P/N PSW-2253-151 Ranger
Test Item S/N
Type of Test Random 3 Axis
Spec No.
Para. No.
Conditions Operating TC #2
Temperature Room
Period of Test 30 seconds
Control Axis F-B + Vertical
Pick-up No. 8
Pick-up Axis Vertical
Operator C. Poirier
Program
Co-Ordinator R. Gulezian
GRMS



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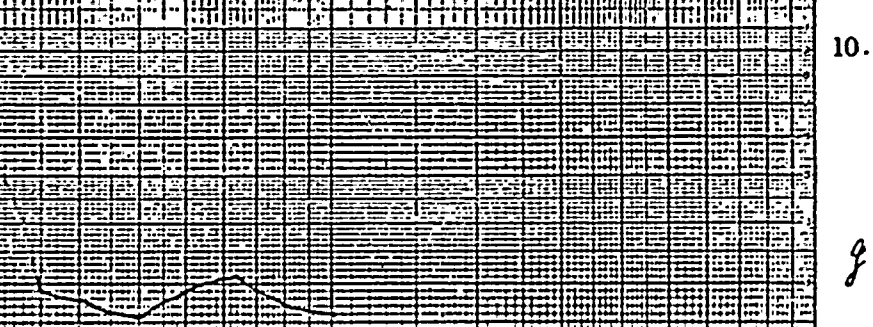
Q=20 2% of Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 3 Run 1
Date 4-8-81
Customer American Electric
Test Item P/N See below
Test Item S/N
Type of Test Random OBE
Spec. No
Para. No
Conditions Operating IC #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L-F Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilboy
GRMS



P/N DSW-7233-153 Range SA
P/N DSW-7233-153 Range S
P/N DSW-7233-153 Range L

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Q=20 - 2 Hz Damping

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Test No. 3 Run C
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating H.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis R.L.F. Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C. Pistole
Program
Co-Ordinator R. Griffin
GRMS

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P/N DSW-2233-153 Range 3-A
P/N DSW-2233-153 Range 2
P/N DSW-2233-153 Range 1

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Q=20 2½ Damping

ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 3 Run 3
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L ↓ Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C. Plaza
Program
Co-Ordinator R. Gilfoy
GRMS

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P/N-DSW-7233-153 Range-3A
P/N-DSW-7233-153 Range-5
P/N-DSW-7233-153 Range-1

NO 31,256 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2½% Damping

ENVIRONMENTAL TESTING CORPORATION

ACTON

Test No. 3 Run 4
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec. No
Para. No
Conditions Operating ICC#1
Temperature Room
Period of Test 30 seconds
Control Axis R+L+Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilatte
Program
Co-Ordinator R. Gilfoy
GRMS

p/n-DSW-7233-153 Range 3.0
p/n-DSW-7233-153 Range 5
p/n-DSW-7233-153 Range 1

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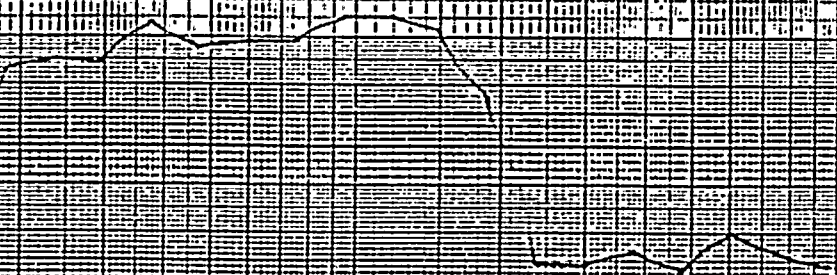
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 - 2½% Damping

Test No. 3 Run 5
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating S.C. at
Temperature Room
Period of Test 30 Seconds
Control Axis R-L Vertical
Pick-up No 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Griffey
GRMS



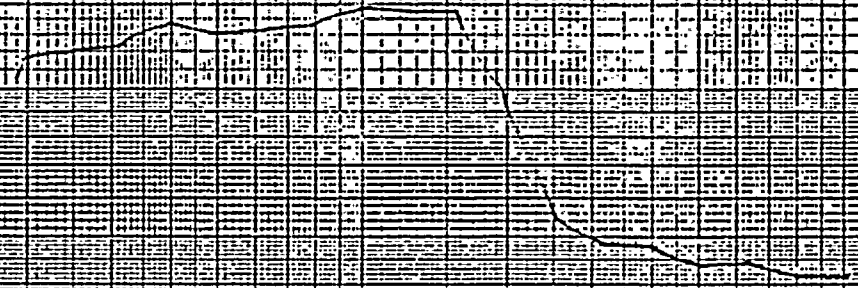
P/N 7233-153 Range 3A
P/N 7233-153 Range 5
P/N DSW-7233-153 Range 1

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2½% Damping

ENVIRONMENTAL TESTING ACTON CORPORATION

Test No. 3 Run 4
Date 4-8-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random SSE
Spec No
Para. No.
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis R-L + Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilfix
GRMS



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p/n DSW-7233-153 Range 3A
p/n DSW-7233-153 Range 5
p/n DSW-7233-153 Range 1

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Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 3 Rev 2
Date 4-28-81
Customer American Electric
Test Item P/N See Below
Test Item S/N
Type of Test Random S.S.E
Spec No
Para No
Conditions Operating L.C. #2
Temperature Room
Period of Test 30 Seconds
Control Axis R-L + Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilpin
GRMS

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P/N-DSW-7233-153 Range 3A
P/N-DSW-7233-153 Range 5
P/N-DSW-7233-153 Range 1

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ACTION ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 1
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random 12 SSE
Spec No
Para. No.
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis Rt Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Platte
Program
Co-Ordinator R. Gilfoy
GRMS

Q=20 2½% Damping

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Q = 20 2% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 2
Date 4-8-81
Customer American Electric
Test Item P/N PSW-7233-153 Range 5
Test Item S/N
Type of Test Random 114 SSE
Spec No
Para No
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R-L+ Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pierce
Program
Co-Ordinator R. Gilfoy
GRMS

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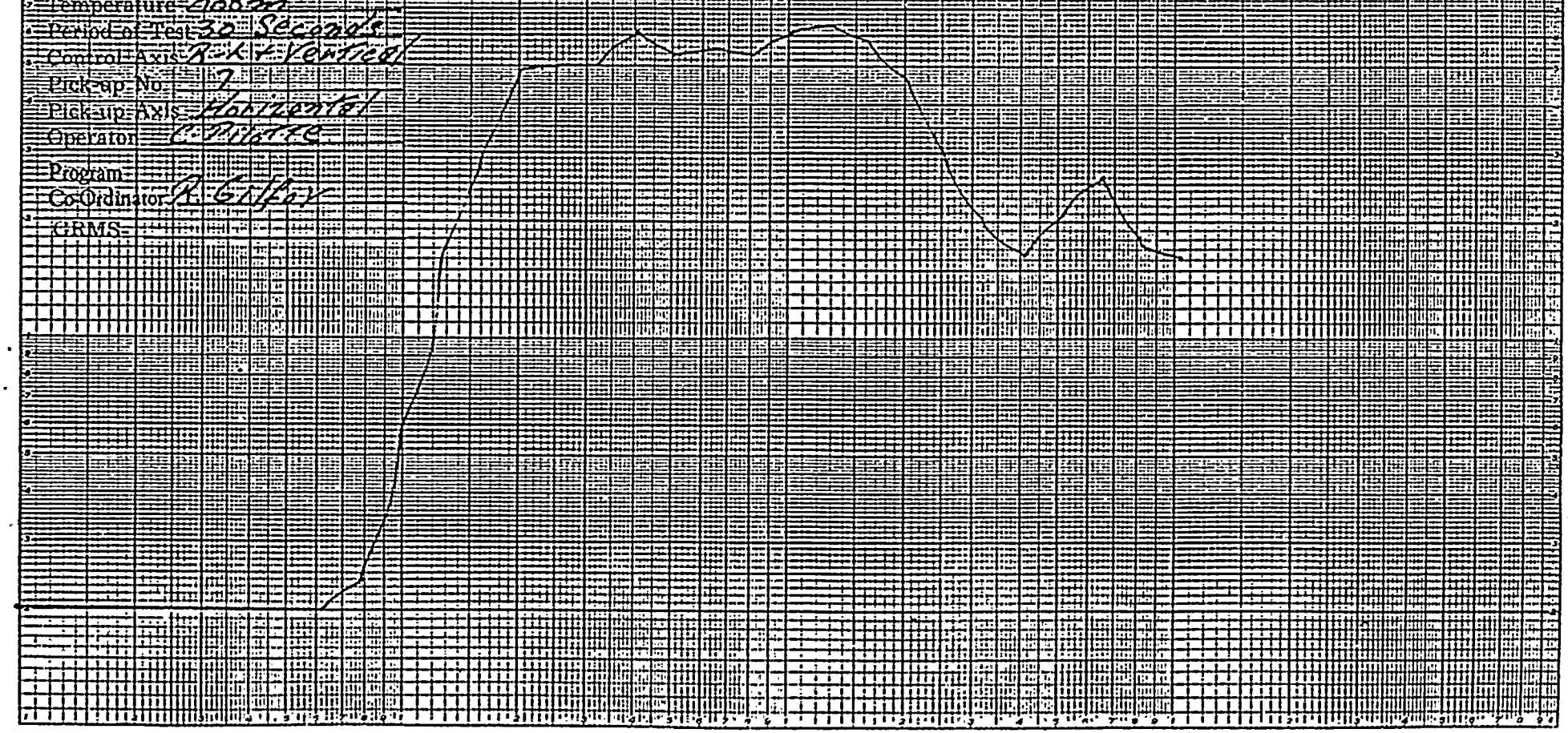
ENVIRONMENTAL
ACTION
TESTING
CORPORATION

Q=20 2½% Damping

Test No. 4 Run 3
Date 4-8-81
Customer American Electric
Test Item P/N OSU-7233-153 Range 5
Test Item S/N
Type of Test Random 3/2 SSE
Spec No
Para. No
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R+L+Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Miller
Program
Co-Ordinator R. Gilfoy
GRMS



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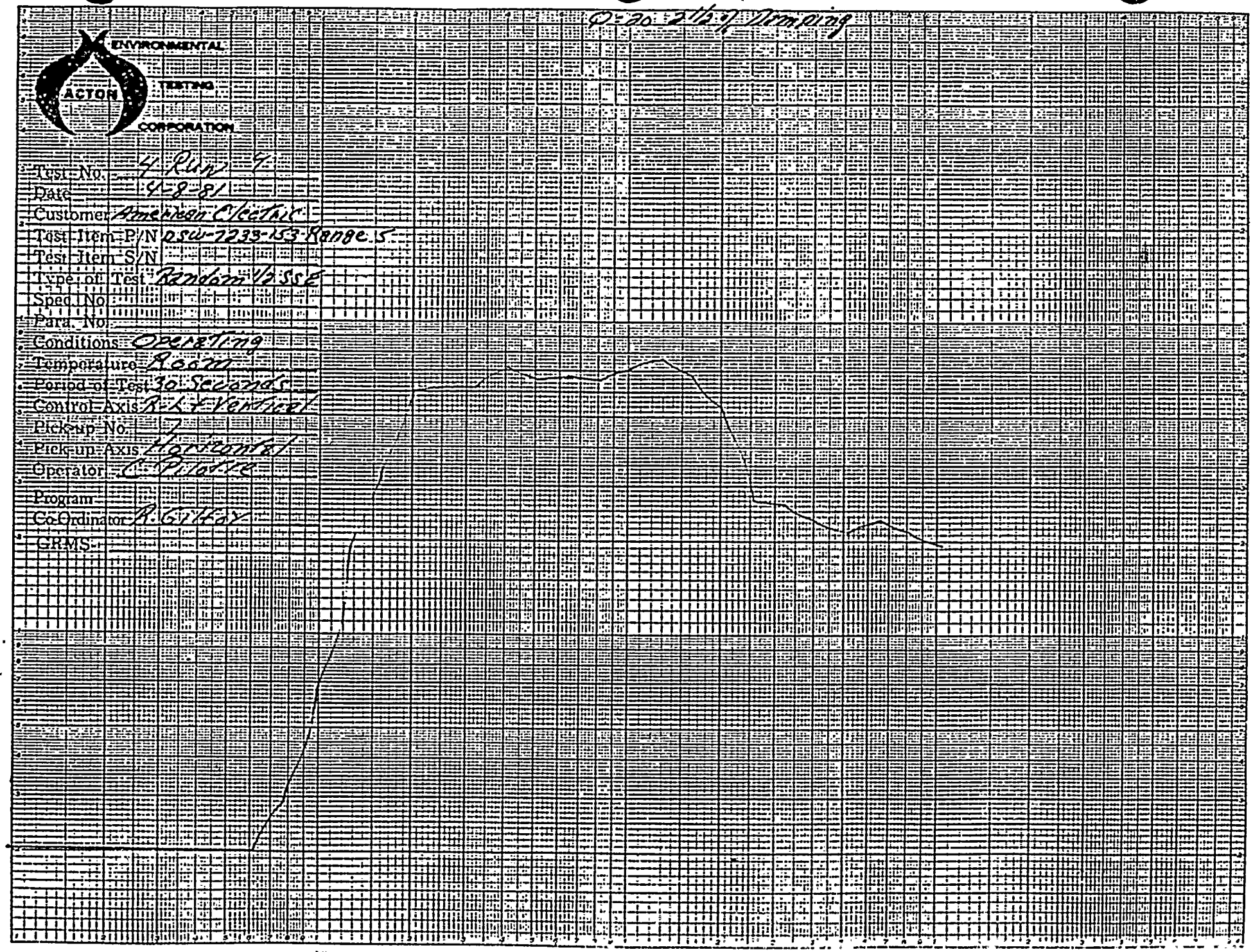
Q-20 2th of Naming

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 7
Date 4-8-81
Customer American Electric
Test Item P/N DSU-7233-153 Range 15
Test Item S/N
Type of Test Random Vib SSE
Spec. No.
Para. No.
Conditions Operating
Temperature Room
Period of Test 30 Seconds
Control Axis R & T Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Pierce
Program
Co-Ordinator R. Gilfoy
GRMS



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Q-20 2 1/4 DZ mP 1179

ENVIRONMENTAL ACTION CORPORATION TEST NO

Test No. 5 Read
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Range-S
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating S.C. #1
Temperature Room
Period of Test 30 seconds
Control Axis Z Reversed
Pick-up No 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilroy
GRMS

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Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 5 Run 2
Date 4-8-81
Customer American Electric
Test Item P/N DSCW-7233+153 Range 5
Test Item S/N
Type of Test Random 08C
Spec No
Para No
Conditions Operating T.C #1
Temperature Room
Period of Test 30 Seconds
Control Axis L-R+ Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilfar
GRMS

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 5 Run 3
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Ranges
Test Item S/N
Type of Test Random OBE
Spec. No.
Para. No.
Conditions Operating #1
Temperature Room
Period of Test 30 Seconds
Control Axis X-Ray Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Plante
Program
Co-Ordinator R. Gilbox
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2½% Damping

Test No. 3 Run 4
Date 4-8-81
Customer American Electric
Test Item P/N DSCC-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating Cold
Temperature Room
Period of Test 30 Seconds
Control Axis L-R + Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Platte
Program
Co-Ordinator R. Gilfoy
GRMS

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ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2½ g Damping

Test No. 5 Run 2
Date 4-2-81
Customer American Electric
Test Item P/N 054-7035-153 Range 5
Test Item S/N
Type of Test Random 613E
Spec No.
Para No.
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis Z Ctr Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Poole
Program
Co-Ordinator R. Gilfoy
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20-2128 Nom 109

Test No. 5 Run 6
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7293-153 Range 5
Test Item S/N
Type of Test Random SSE
Spec No.
Para. No.
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis L-R + Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C. Pierre
Program
Co-Ordinator R. Gilday
GRMS

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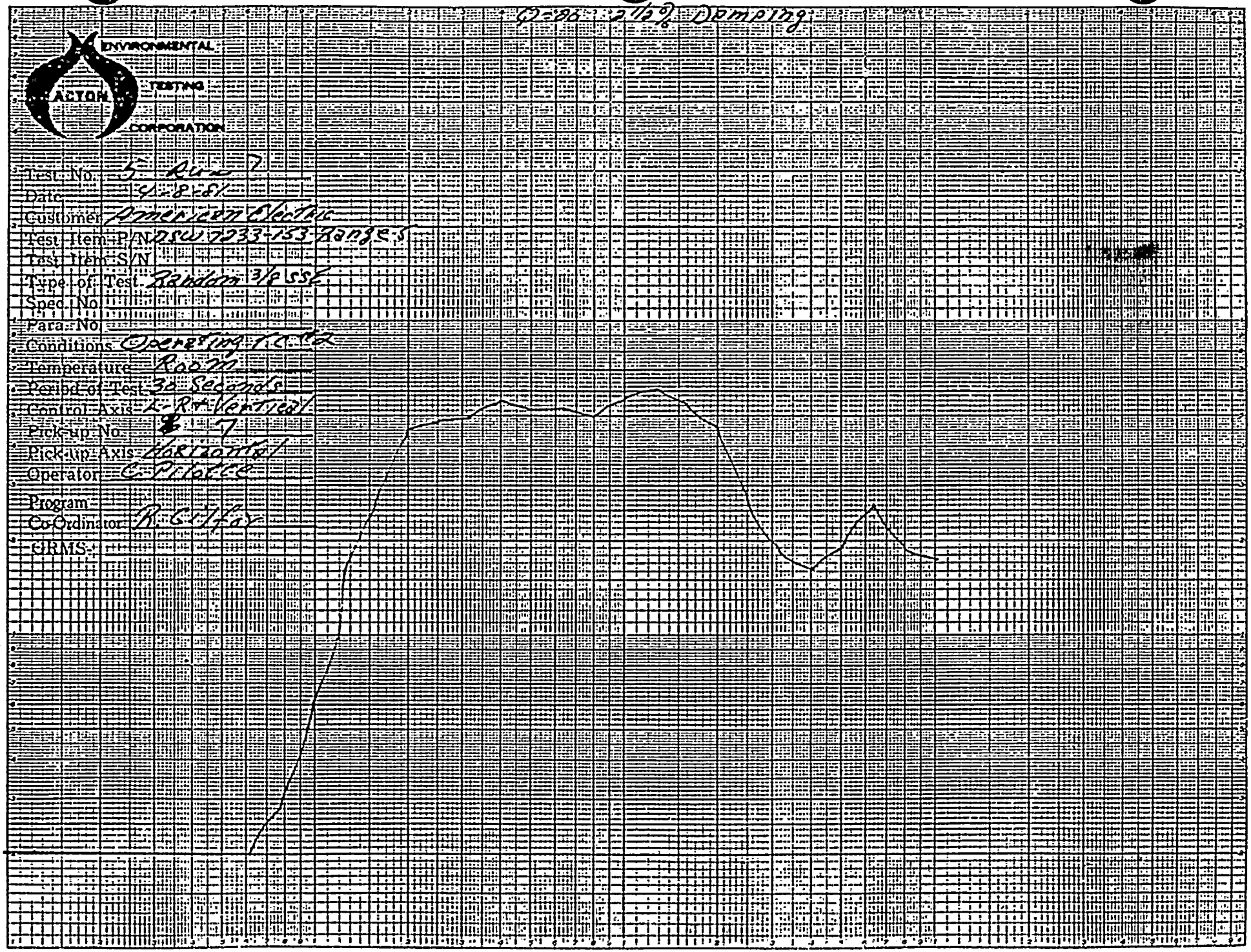
Q=20 2½% Damping

ENVIRONMENTAL TESTING ACTION CORPORATION

Test No. 5 Run 2
Date 9-8-81
Customer American Electric
Test Item P/N 25W7233-153 Range 5
Test Item S/N
Type of Test Random 3/8 SSE
Sped No
Para No
Conditions Operating Cycle
Temperature Room
Period of Test 30 Seconds
Control Axis L-R + Vertical
Pick-up No 3 7
Pick-up Axis Horizontal
Operator C. Pilcher
Program Co-Ordinator R. Cifaldi
GRMS



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Q = 20 2% Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. C Run 1
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para. No
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis B-F-V Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C Pilotte
Program
Co-Ordinator R Gifford
GRMS

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ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. Glen 2
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis B-A+ Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilatte
Program Co-Ordinator R. Gilfoy
GRMS

Q=20 2 % Damping

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Q=20 2½% Damping

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Test No. 6 Run 3
Date 4-8-81
Customer Amherst Electric
Test Item P/N SW-7733-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No.
Para No.
Conditions Operating F.C. 8/
Temperature Room
Period of Test 30 Seconds
Control Axis B.F.V. Nominal
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Platte
Program
Co-Ordinator R. Gilfoy
GRMS

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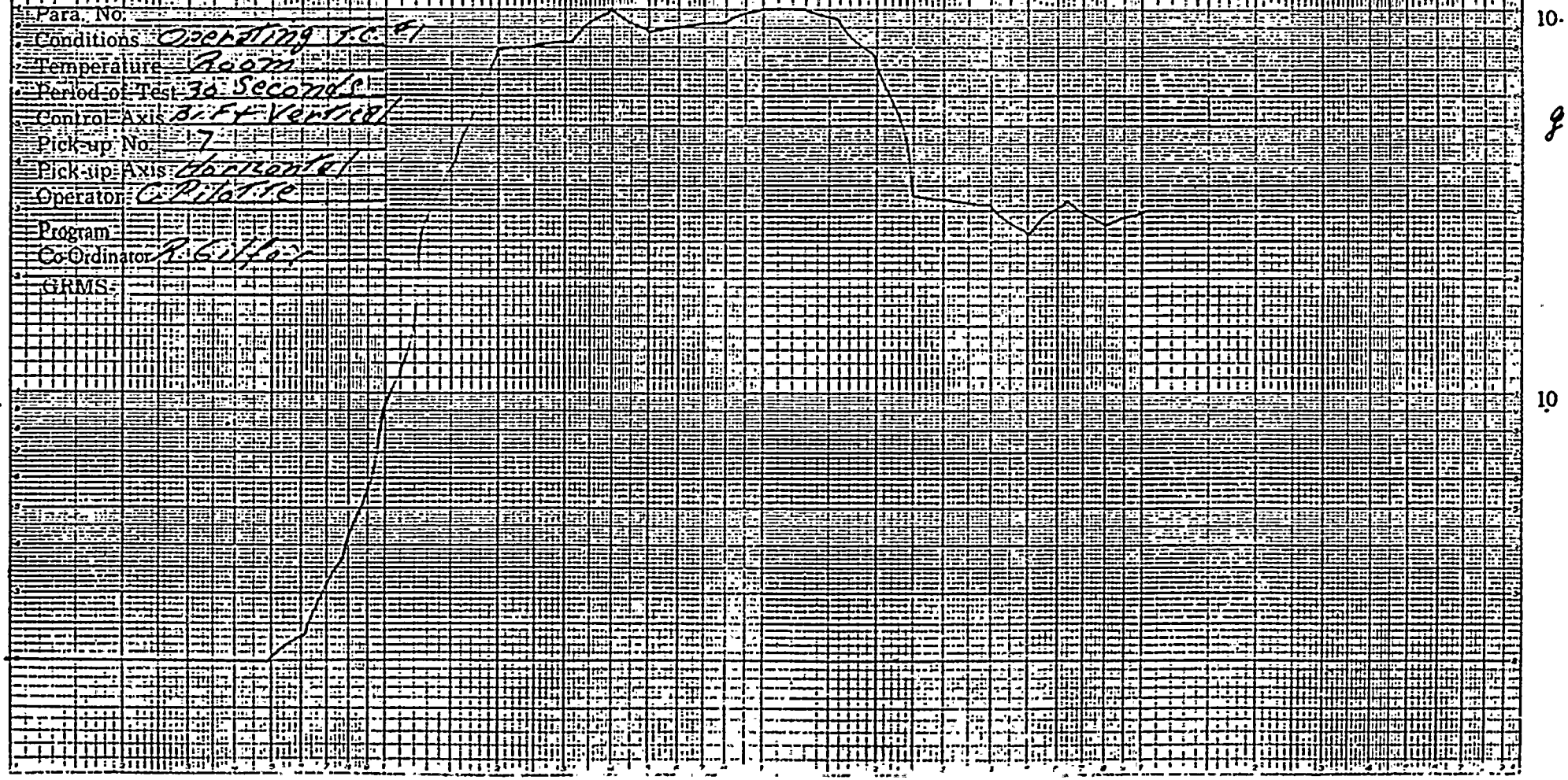
Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. Le Rim-4
Date 4-8-81
Customer American Electric
Test Item P/N DSW-1233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para. No
Conditions Operating F.C #1
Temperature Room
Period of Test 30 Seconds
Control Axis B.F.F. Vertical
Pick-up No 7
Pick-up Axis Horizontal
Operator C. Pilotte
Program Co-Ordinator R. Giffard
GRMS



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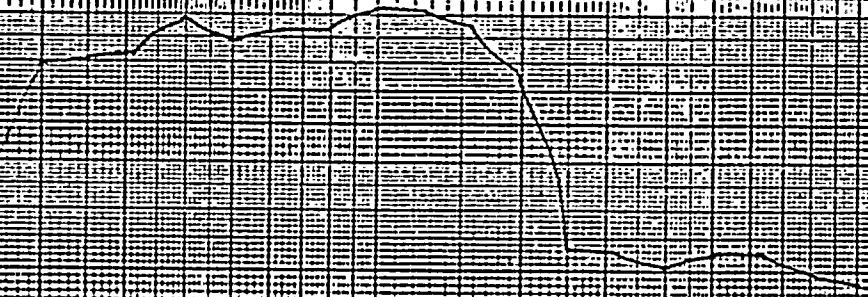
ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 - 2% Damping

Test No. 6 Run 5
Date 4-8-81
Customer American Clock
Test Item P/N OSW-7233-153 Ranges
Test Item S/N
Type of Test Random OBE
Spec No.
Para. No.
Conditions Operating Fig #1
Temperature Room
Period of Test 3a seconds
Control Axis B+F Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pinette
Program
Co-Ordinator R. Gilpin
GRMS



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Q=20 2½% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 6 Run 6
Date 4-8-81
Customer American Electric
Test Item P/N 0541-2233-153 Range 5
Test Item S/N
Type of Test Random SSE
Spec No.
Para. No.
Conditions Operating T.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis B+F Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C. Pilotte
Program Co-Ordinator R. Gilfoy
GRMS

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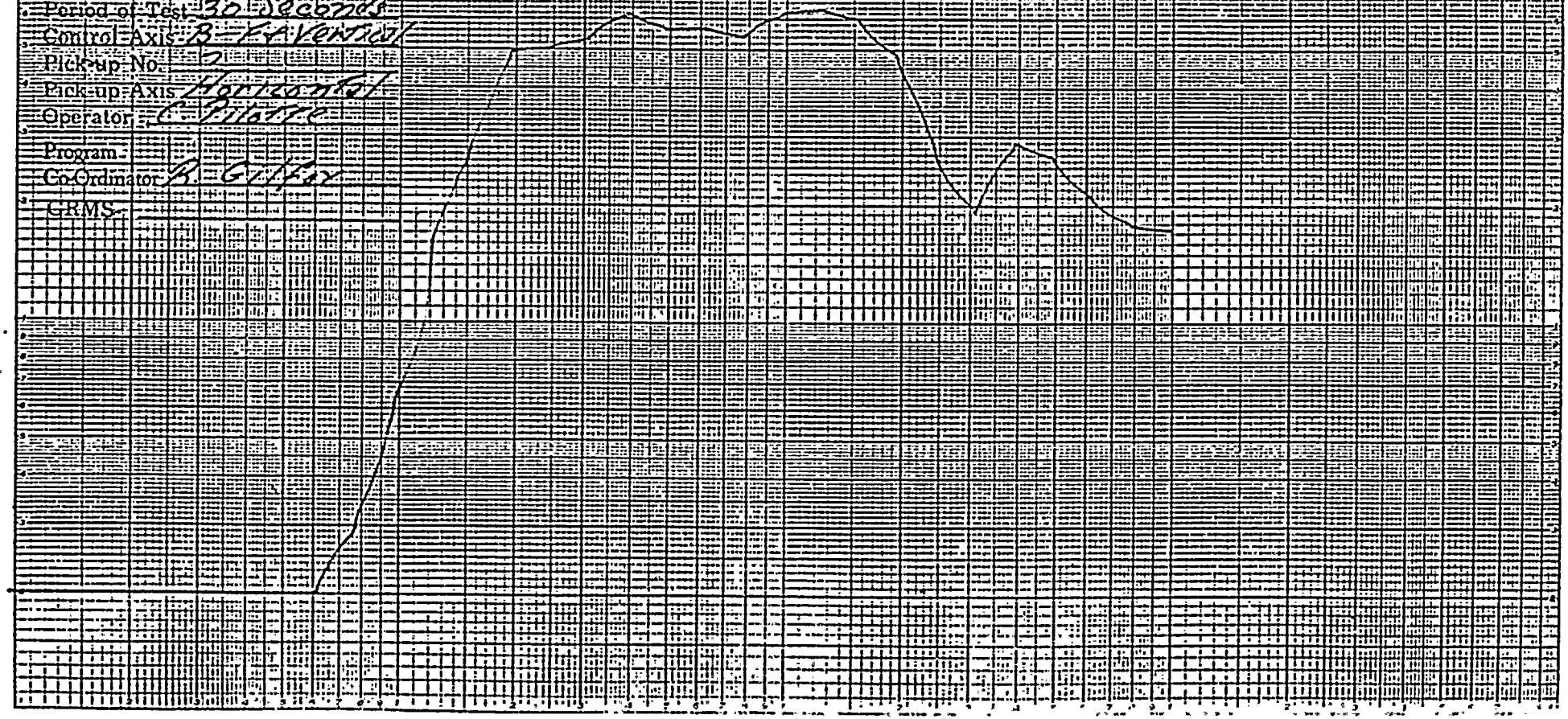
Q=20 2% Damping

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. C Run 2
Date 4-8-81
Customer American Electric
Test Item P/N DSU-7233-153 Bongo 3
Test Item S/N
Type of Test Random Vib SSE
Spec. No.
Para. No.
Conditions Operating Ref 2
Temperature Room
Period of Test 30 Seconds
Control Axis B - Fa Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Pilatte
Program Co-Ordinator R. Gulfax
GRMS



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ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 1 Run 1
Date 4-8-81
Customer American Electric
Test Item P/N PSW-7233-153 Range 5
Test Item S/N
Type of Test Random OBE
Spec. No.
Para. No.
Conditions Operating F.C. #1
Temperature Room
Period of Test 30 Seconds
Control Axis Z-B+ Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Plate
Program
Co-Ordinator R. Griffis
GRMS

Q=20 2% Damping

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Q=20 2½% damping

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Test No. 1 Run 2
Date 4-8-81
Custome American Electric
Test Item P/N 050-1333-153 Range 5
Test Item S/N
Type of Test Random 08E
Spec No
Para. No.
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis F-B + Vertical
Pick-up No. 2
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilroy
GRMS

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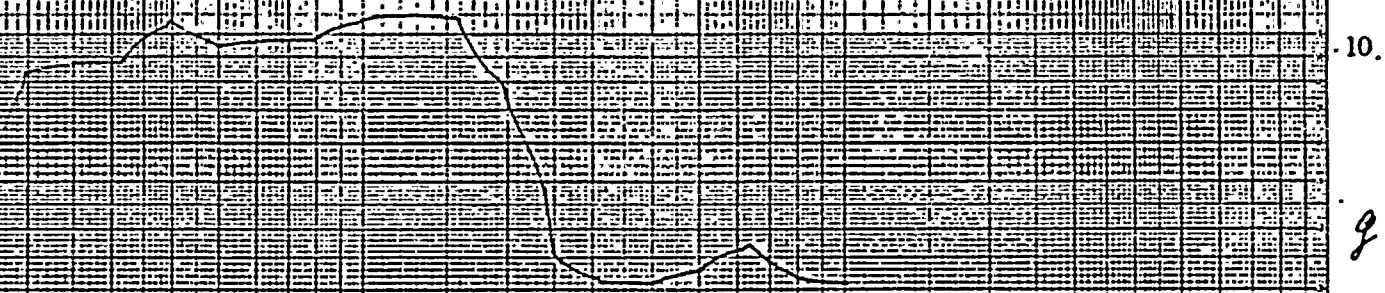
Q=20 2½% DAMPING

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 7 Run 3
Date 4-8-81
Customer American Electric
Test Item P/N DSU-7233-133 Range 5
Test Item S/N
Type of Test Random OBE
Spec No
Para No
Conditions Operating T.C.
Temperature Room
Period of Test 30 Seconds
Control Axis C-B-Vertical
Pick-up No. 8-7
Pick-up Axis Horizontal
Operator C. Pilatte
Program
Co-Ordinator R. Gilfax
GRMS



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ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. 1 Run 4
Date 4-8-81
Customer American Electric
Test Item P/N 054-7233-153 Range 5
Test Item S/N
Type of Test Random GBE
Spec No
Para. No
Conditions Operating F.C. 4
Temperature Room
Period of Test 30 Seconds
Control Axis F-B + Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Platte
Program
Co-Ordinator R. Gilfoy
GRMS

0-20-2kHz Damping

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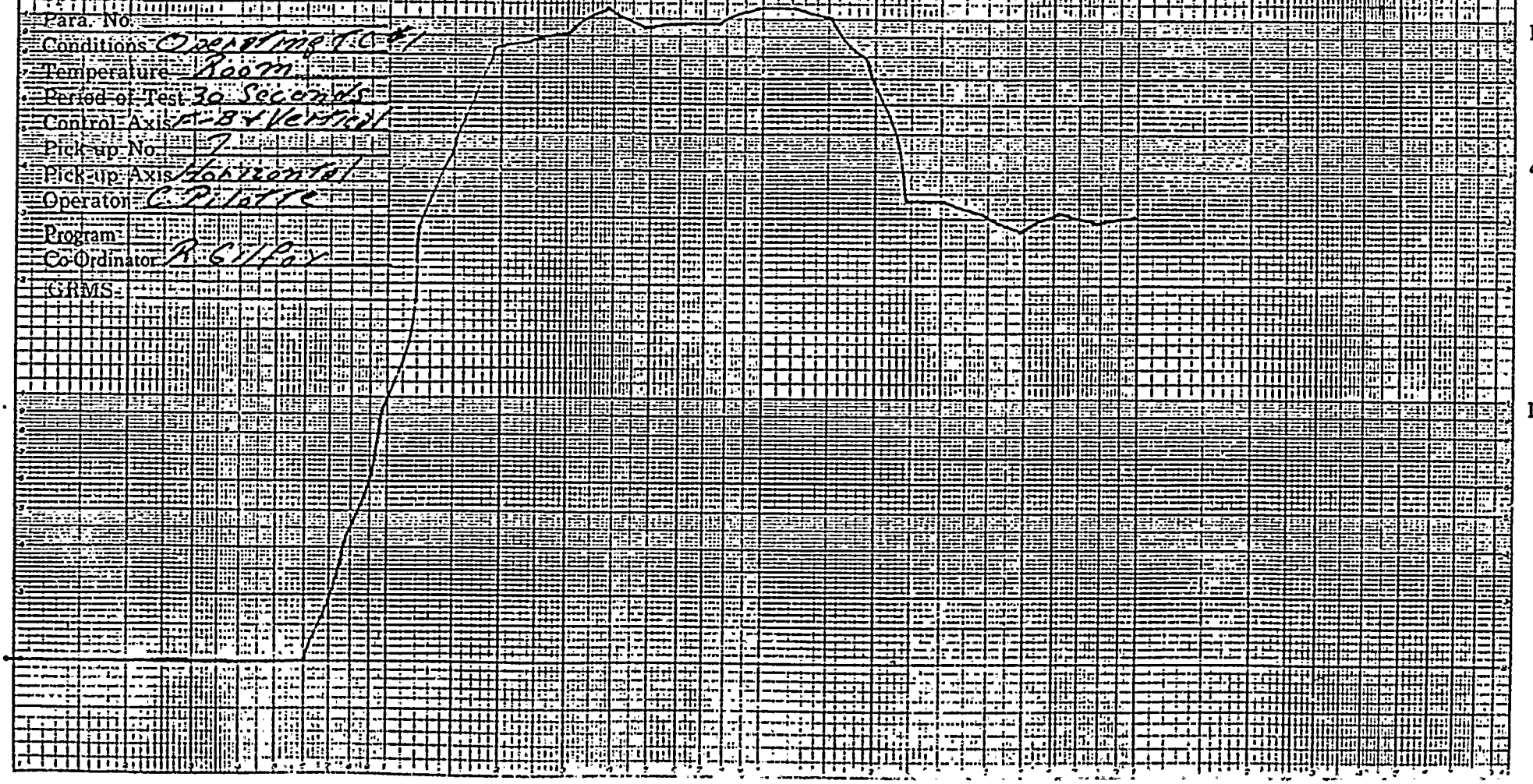
GE=20: 2½% Dam 2139

ENVIRONMENTAL TESTING CORPORATION

Test No. 1 Run 3
Date 4-8-81
Customer American Electric
Test Item P/N DSW-7233-153 Bands
Test Item S/N
Type of Test Random OBE
Spec No
Para. No
Conditions Operating TC #1
Temperature Room
Period of Test 30 Seconds
Control Axis A-B + Vertical
Pick-up No. 7
Pick-up Axis Horizontal
Operator C. Pilatte
Program Co-Ordinator R. Gilpin
GRMS



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Q=20 2½% Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 7 Run 6
Date 4-8-81
Customer American Electric
Test Item P/N DSU-7233-153 Range 5
Test Item S/N
Type of Test Random SSE
Spec No.
Para. No.
Conditions Operating ICT
Temperature Room
Period of Test 30 Seconds
Control Axis F-B + Vertical
Pick-up No. 1
Pick-up Axis Horizontal
Operator C. Pilotte
Program
Co-Ordinator R. Gilfoy
GRMS

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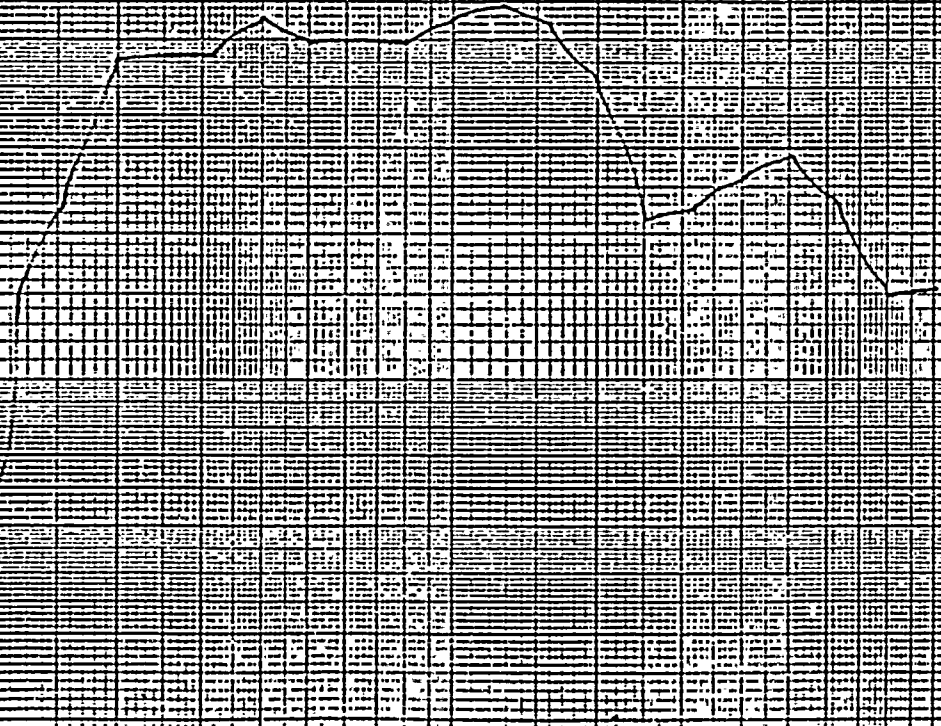
Q=20 2.4% Damping

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 7 Run 2
Date 9-8-81
Customer American Electric
Test Item P/N OSCI-7233-153 Assy C 5
Test Item S/N
Type of Test Random 3/0 SSE
Spec No
Para. No.
Conditions Operating F.C. #2
Temperature Room
Period of Test 30 Seconds
Control Axis F-B+ VERT 81
Pick-up No 7
Pick-up Axis Horizontal
Operator C. Pilatic
Program
Co-Ordinator R. Gilkes
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 3 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075 82076 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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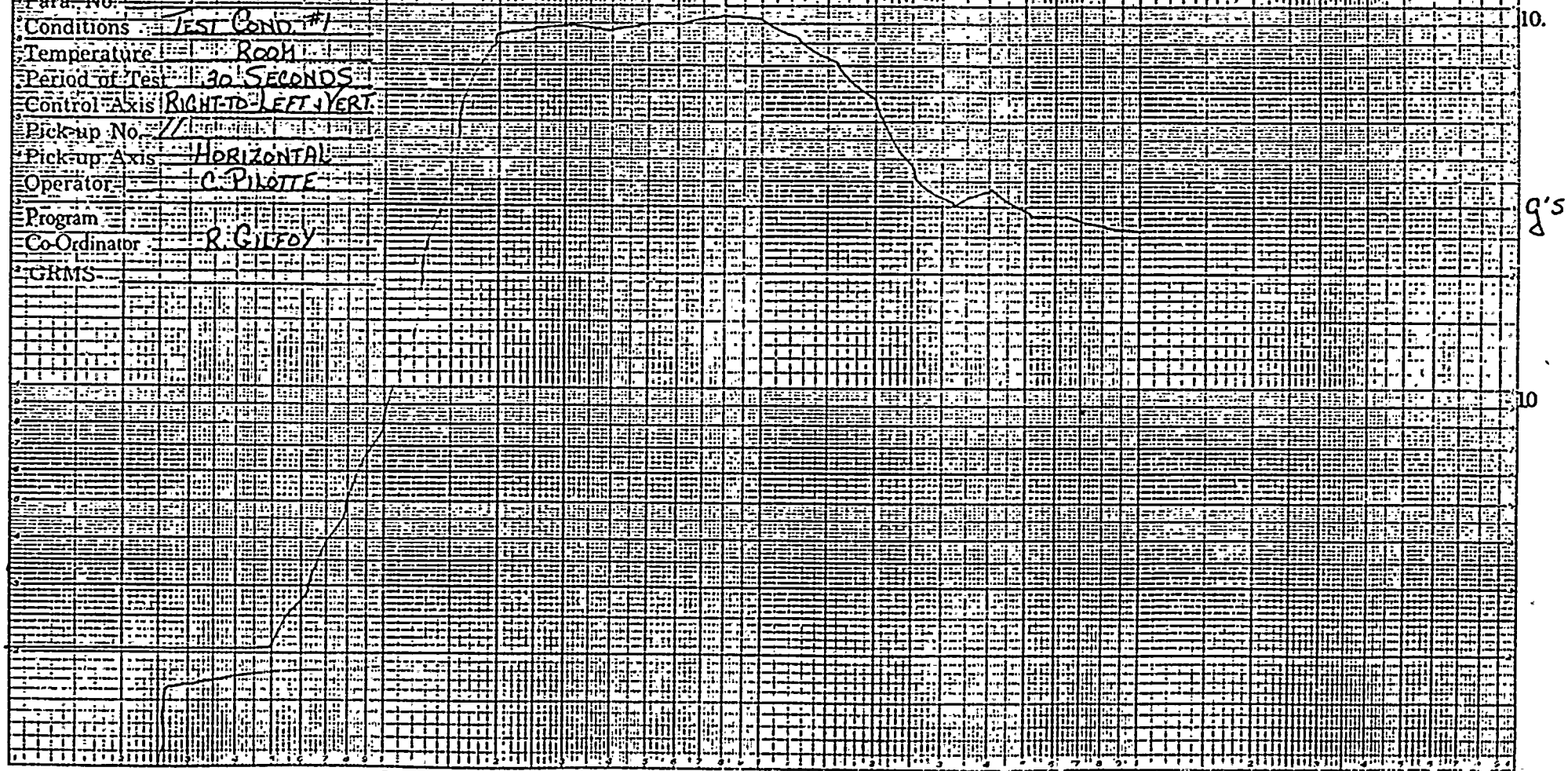
ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. //
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 3 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82073, 82074, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND F
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C PIOTTE
Program
Co-Ordinator R GILROY
GRMS

10.

g's

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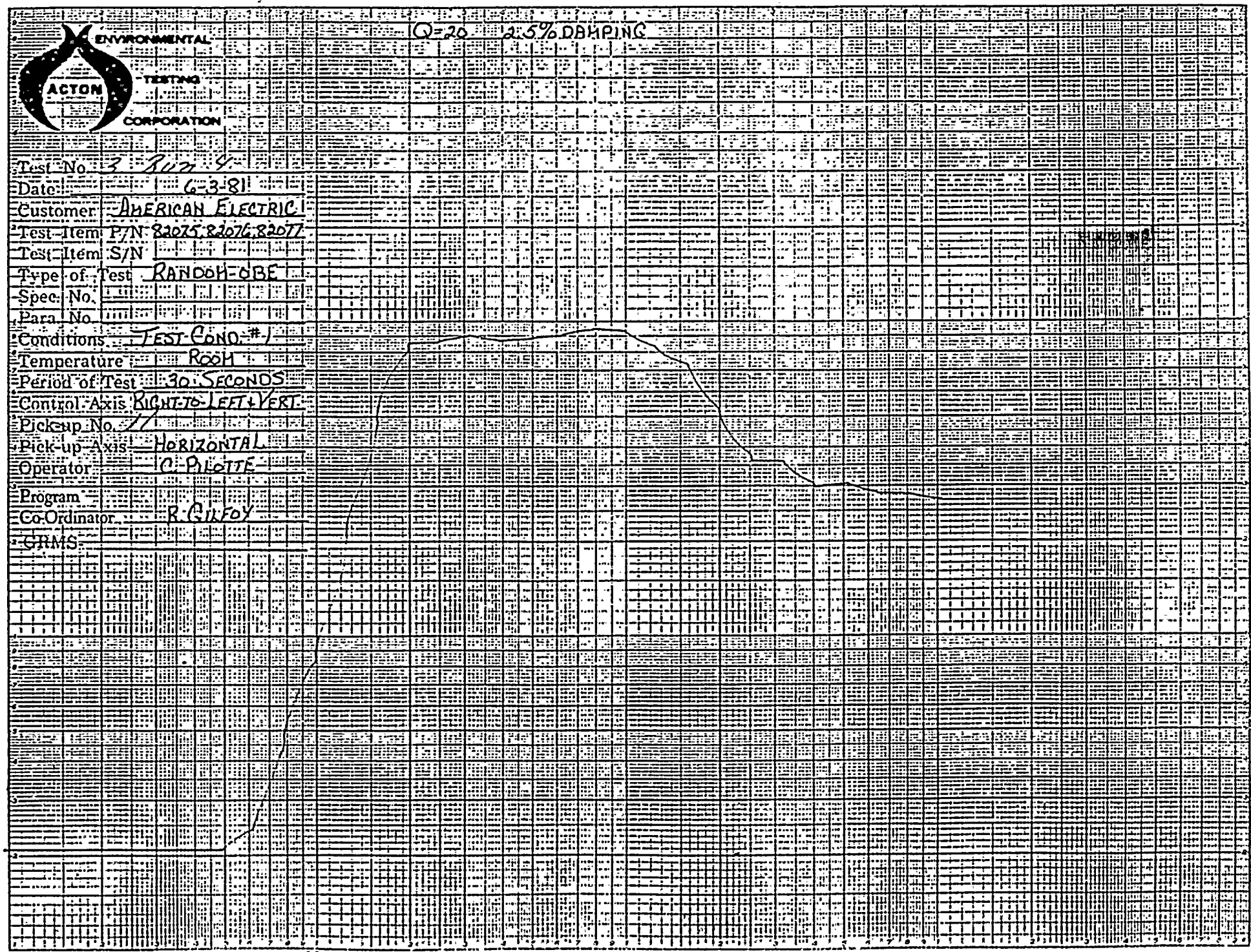
HCDT7

NO. 31.258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
CODEX GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No 3 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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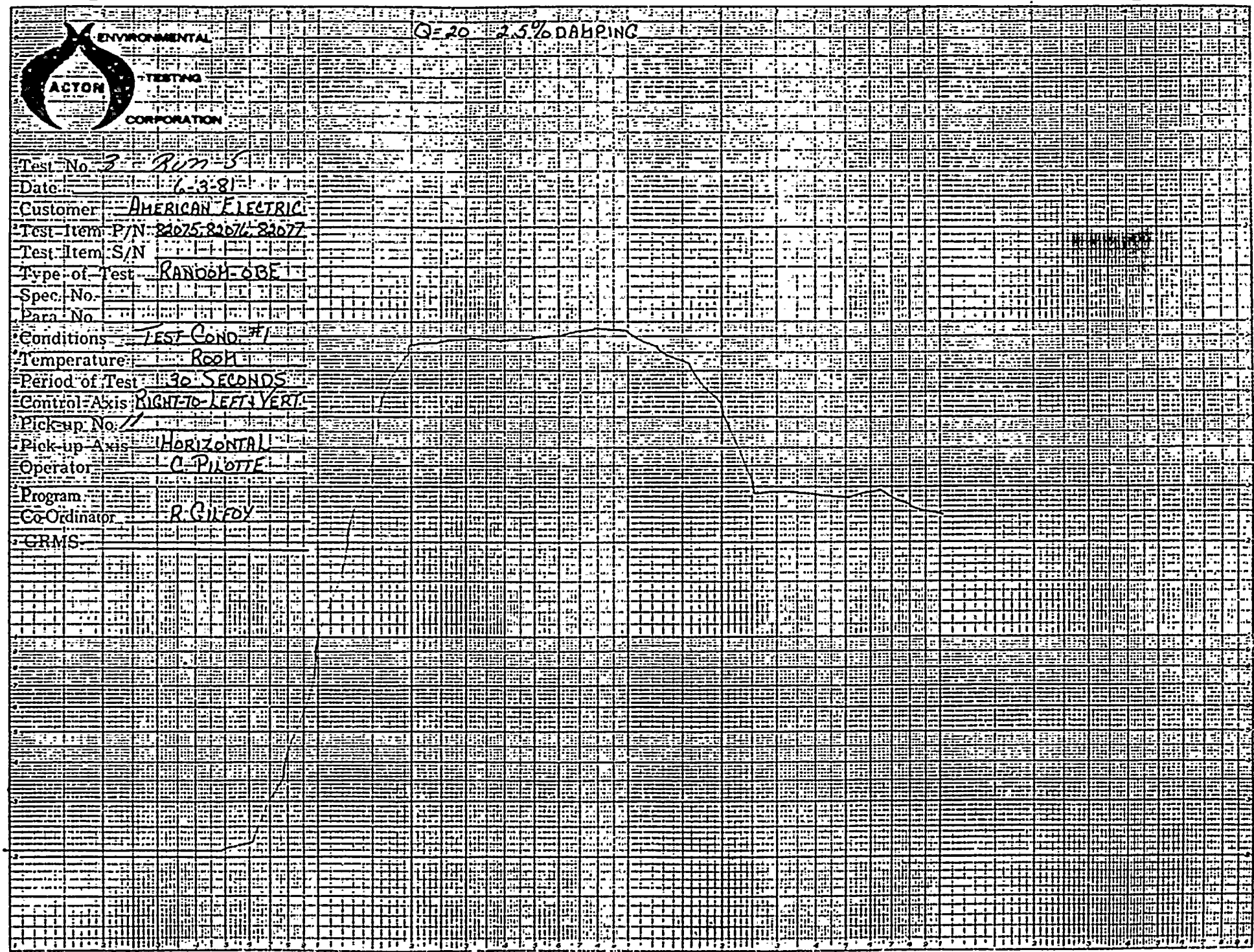
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No 3 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075 82076 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82675 82676 82677
Test Item S/N
Type of Test RANDOM SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. //
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. 2 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82035 82074 82011
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PINOTTE
Program
Co-Ordinator R. GIFFOY
G RMS

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NO. 31,250. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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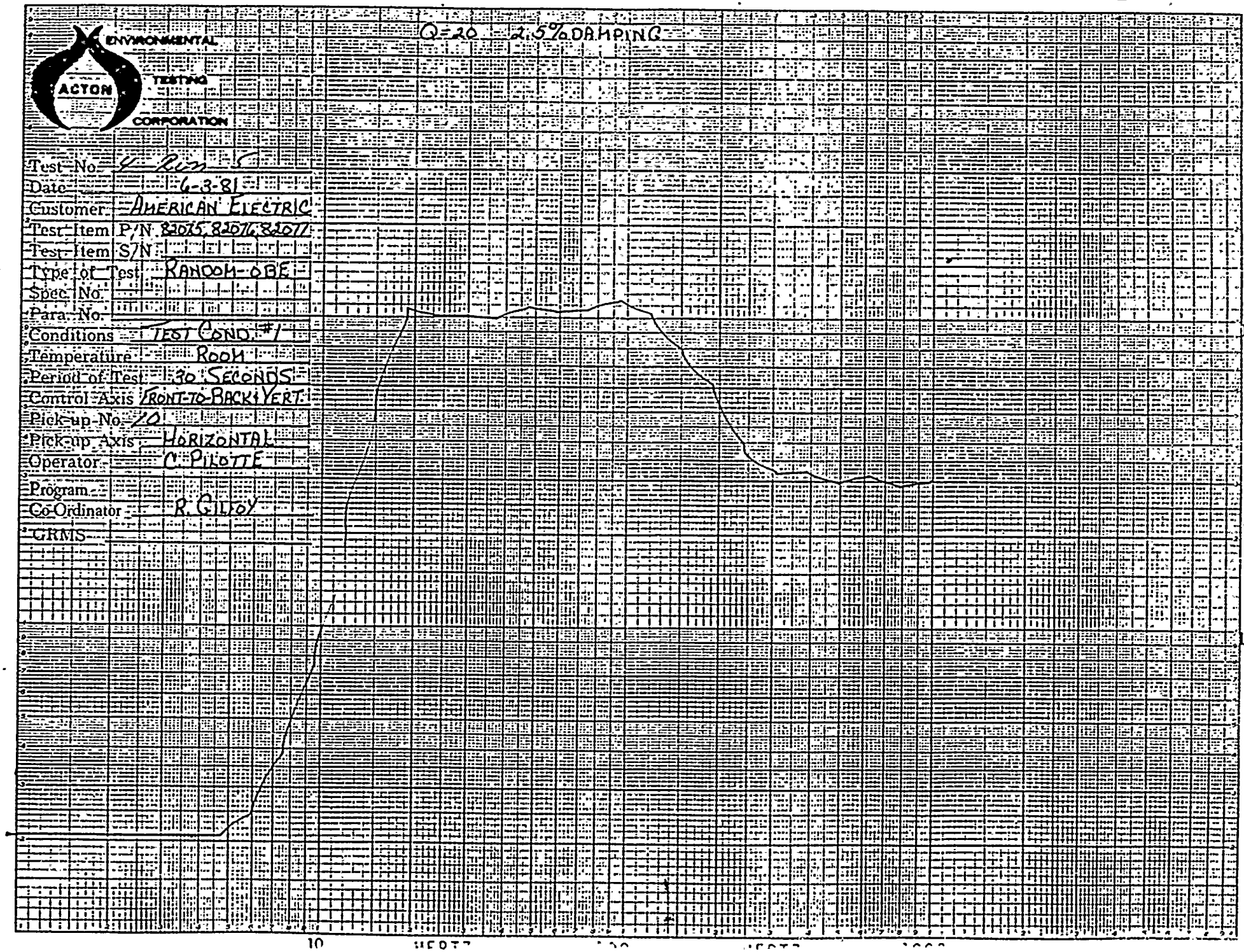
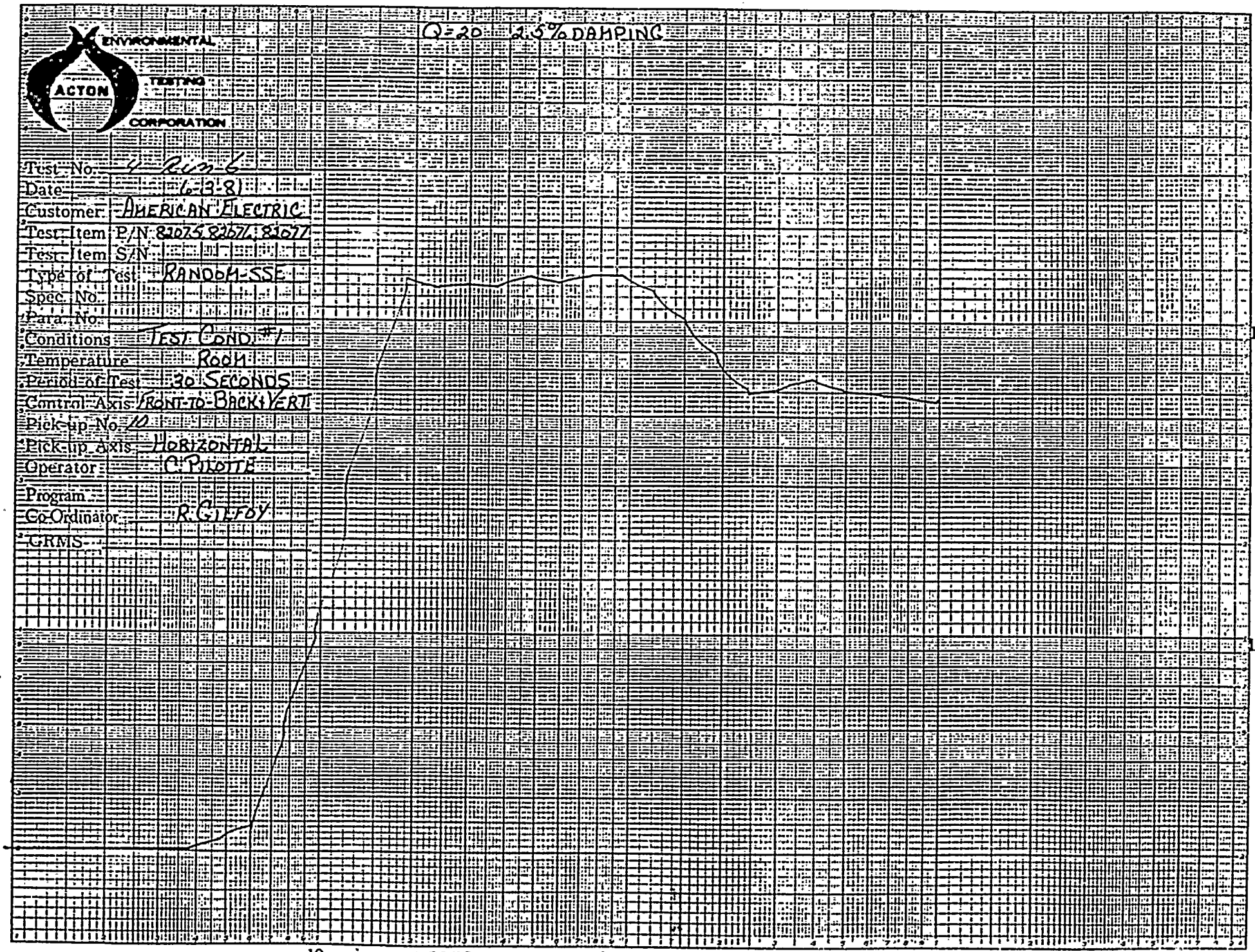
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

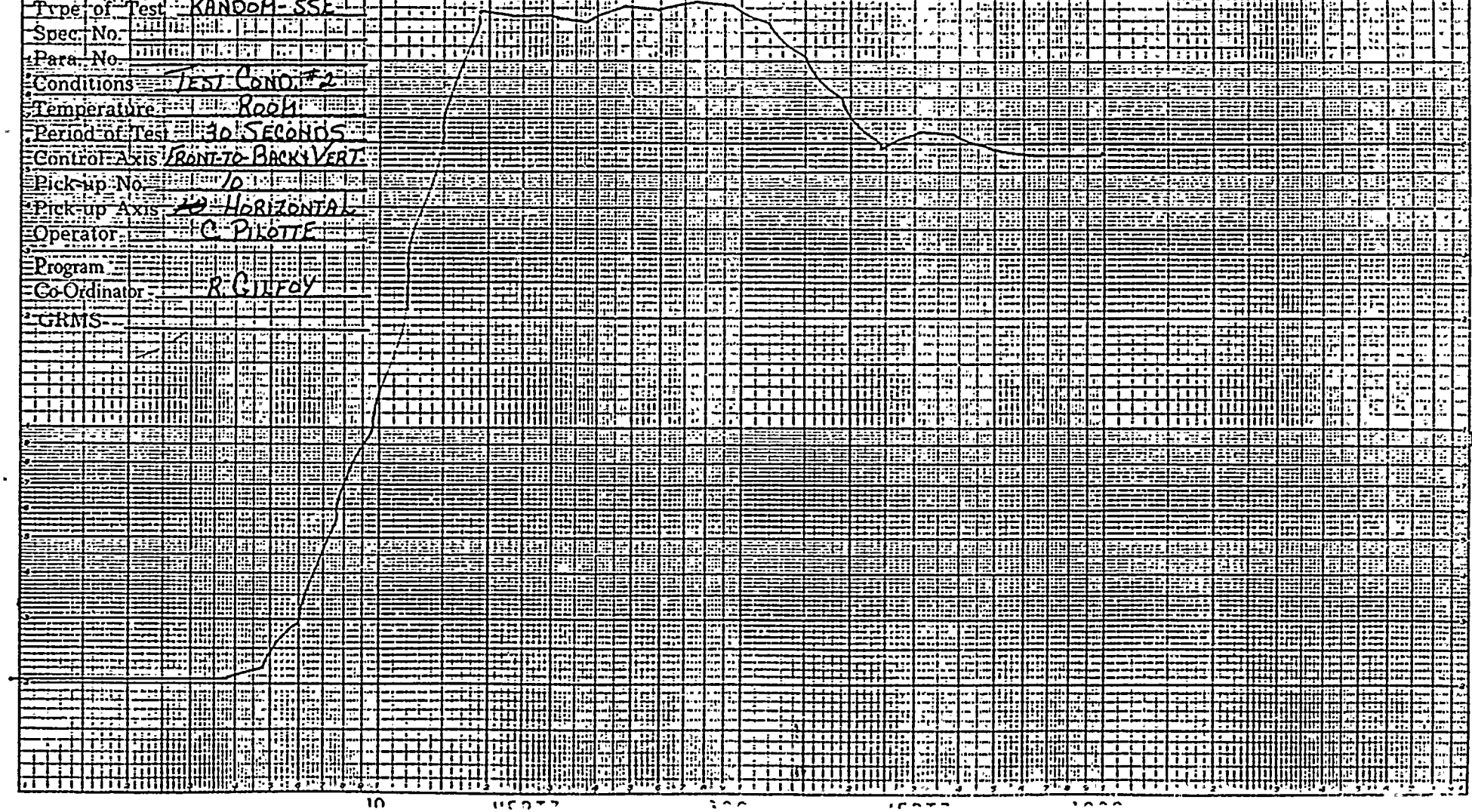


NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q-20 2.5% DAMPING

Test No. 4 Rem 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 820/5, 820/6, 820/7
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 10
Pick-up Axis 20 HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 Rm 1
Date 6-13-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-RIGHT & VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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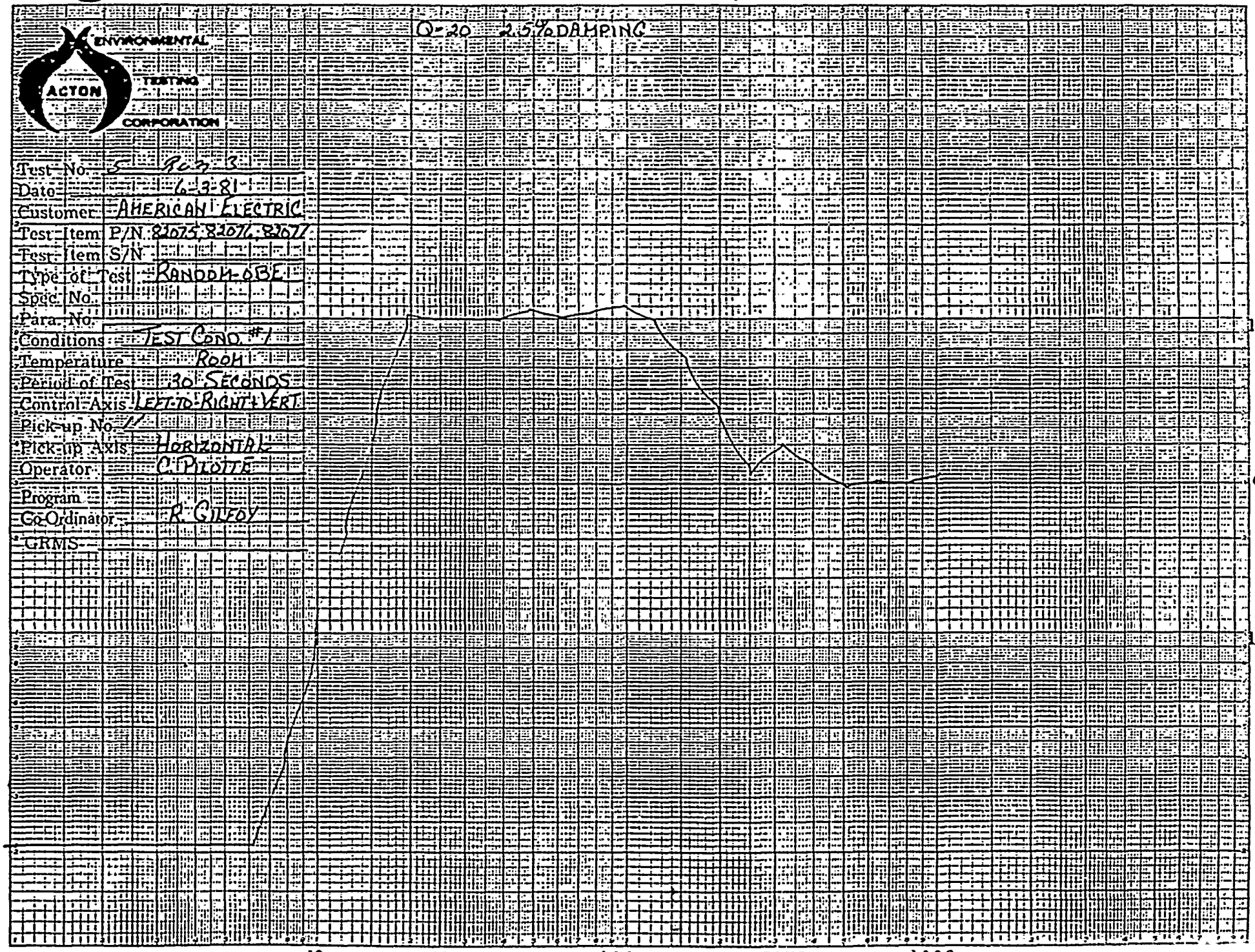
ACTON ENVIRONMENTAL TESTING CORPORATION

Q-20 2.5% DAMPING

Test No. 5 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 5 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CILLOY
GRMS

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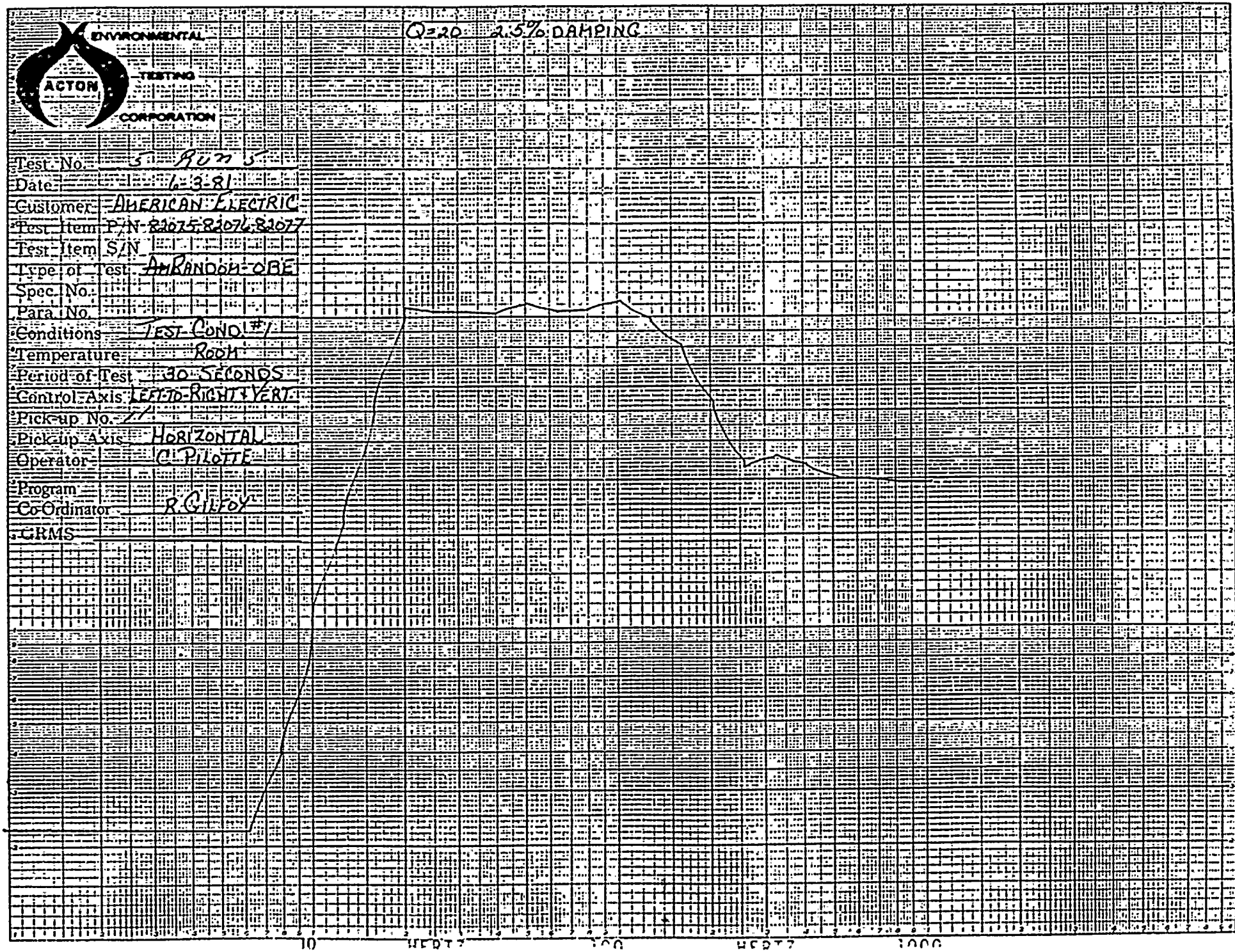
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 5 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test AMRANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT & VERT.
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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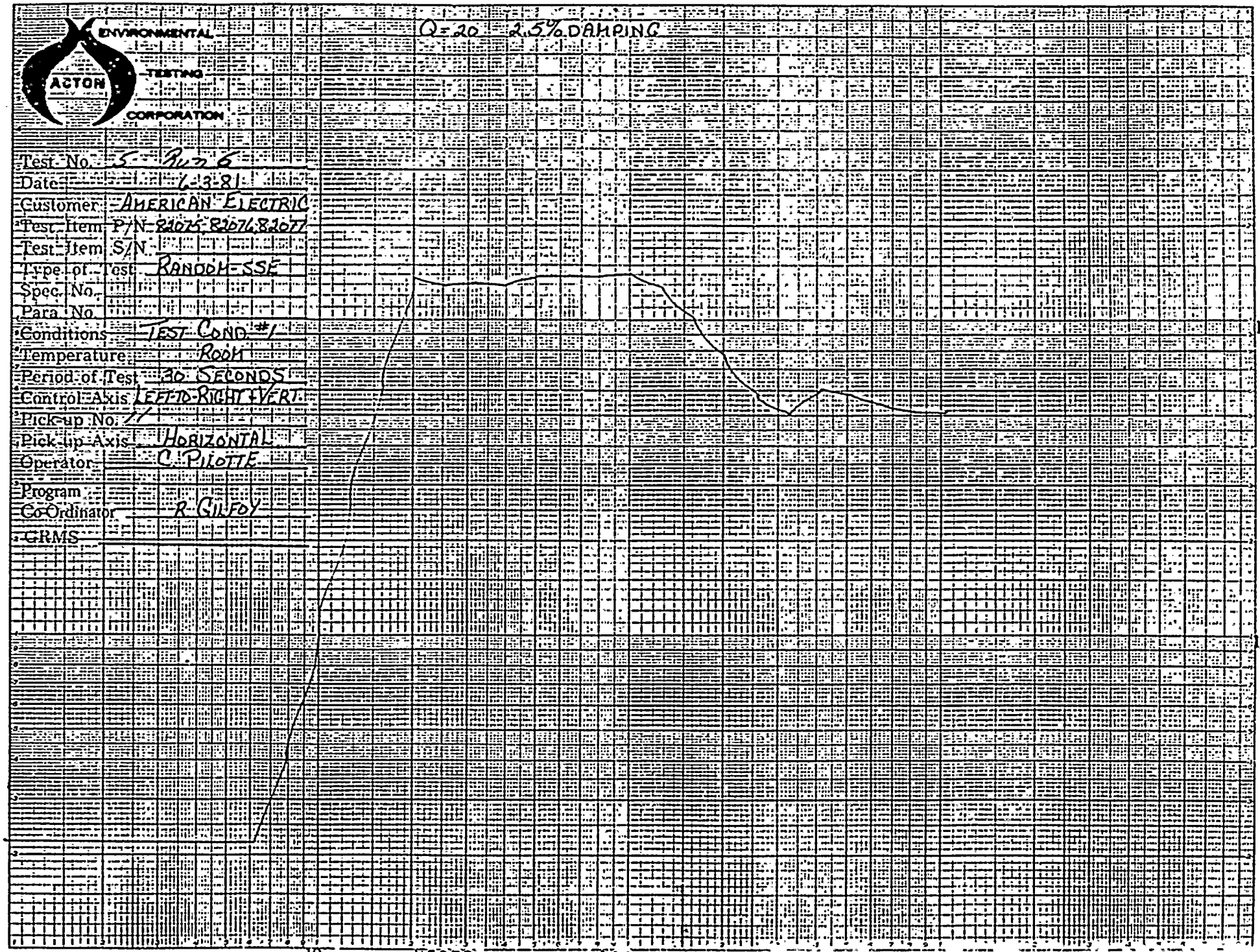
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 5 Run 6
Date 2-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075-82076-82077
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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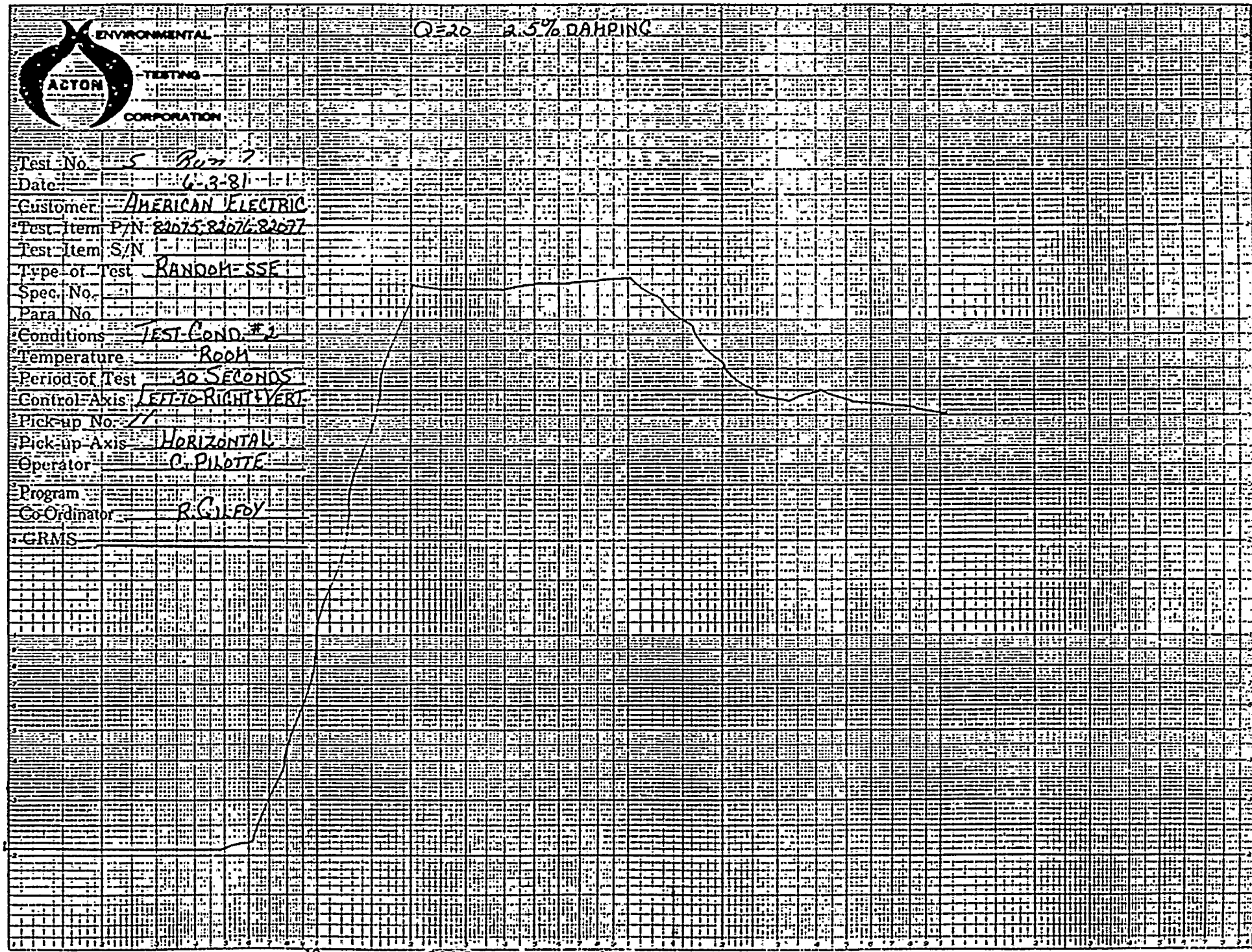
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075;82076;82077
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para No.
Conditions TEST-COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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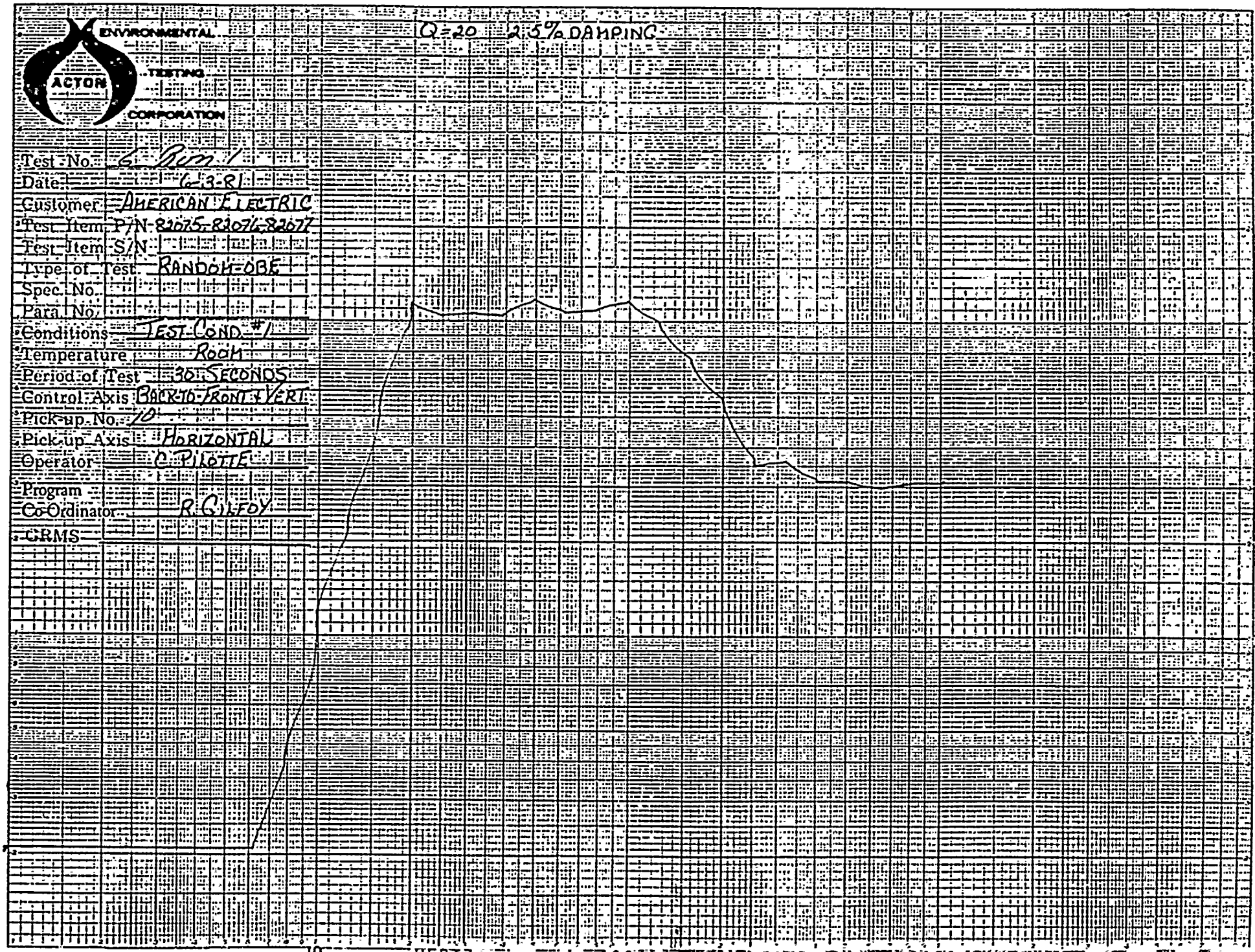
ENVIRONMENTAL TESTING CORPORATION

ACTON

Q=20 2.5% DAMPING

Test No. 6 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075-82076-82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6-Rev-2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS

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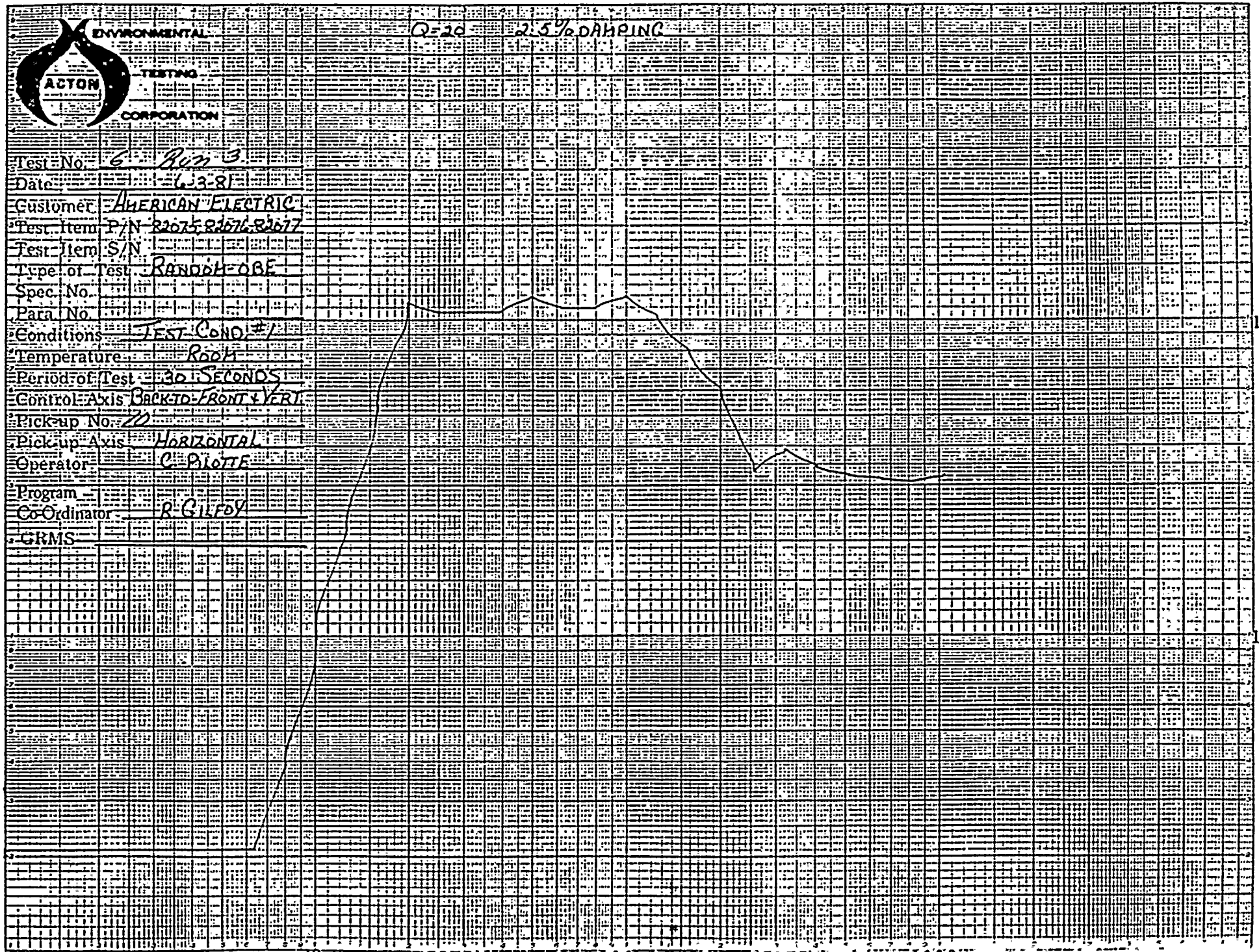
NO. 31.256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U. S. A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 6 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82675, 82676, 82677
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT & VERT
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program Co-Ordinator R. GILFOY
GRMS



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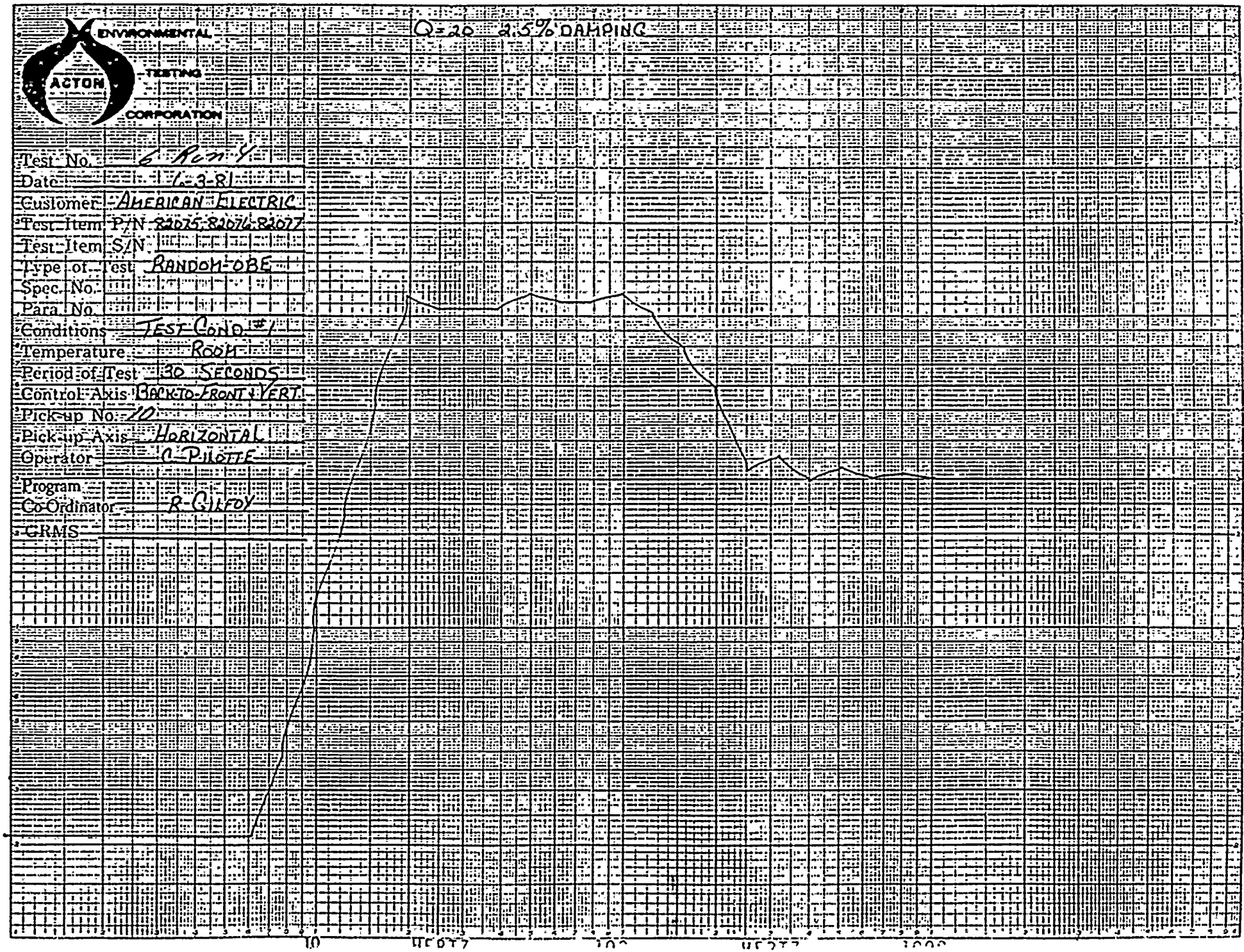
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Rem 4
Date 1-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075-82076-82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT & VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program Co-Ordinator R GILFOY
GRMS



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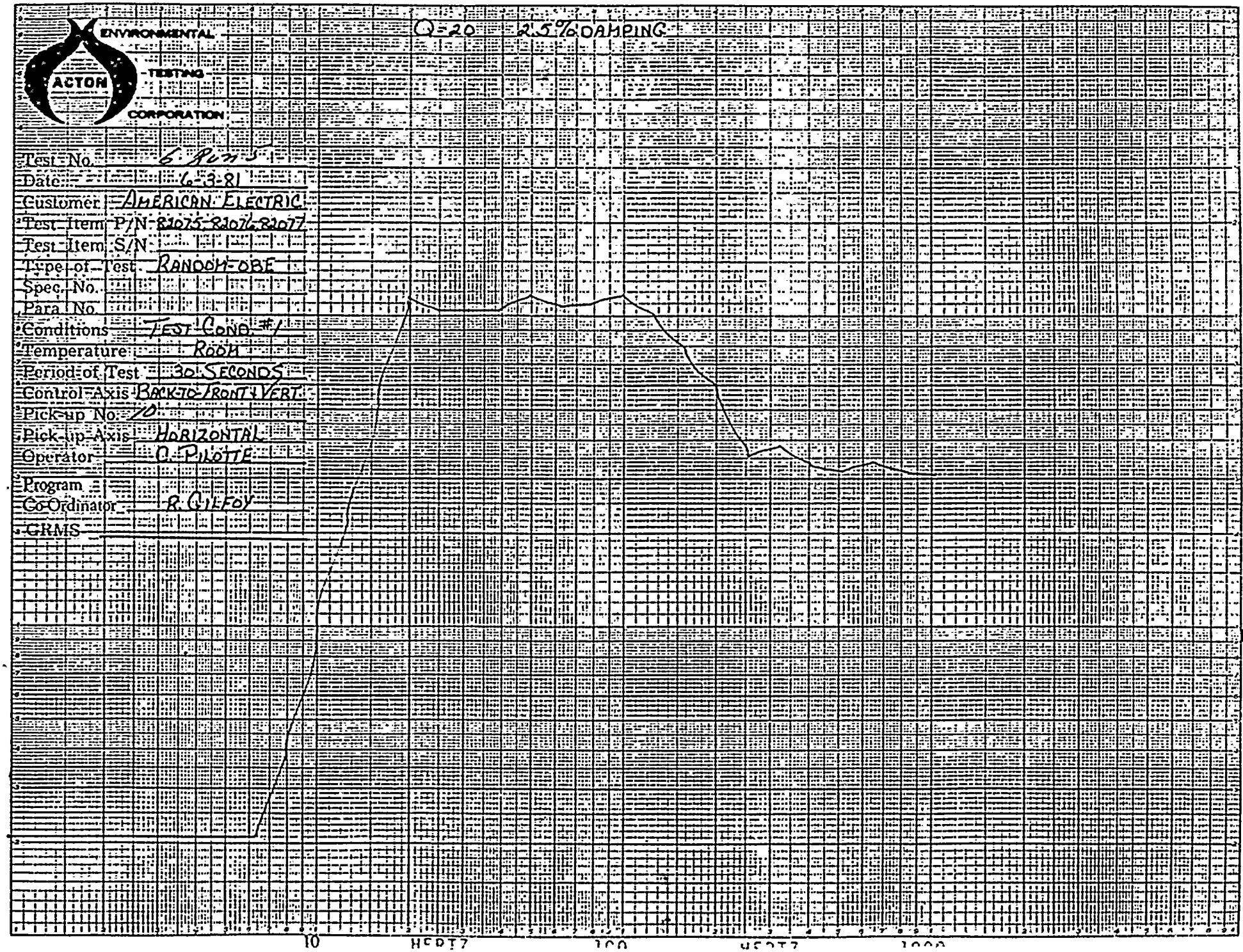
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 6 Rem 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL TESTING
ACTON
CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Rev 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82065, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT/VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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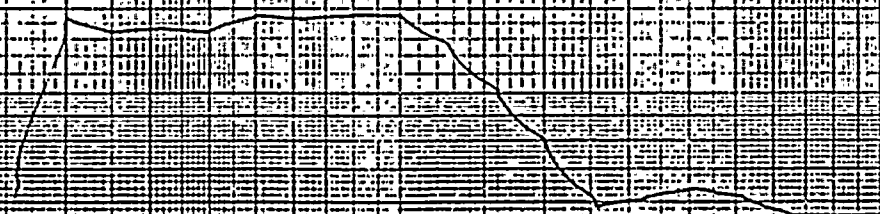
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT-VERT.
Pick-up No 70
Pick-up Axis HORIZONTAL
Operator D. PILOTTE
Program
Co-Ordinator R.G. LEFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 Run 1
Date 6-13-81
Customer AMERICAN ELECTRIC
Test Item P/N 82073, 82074, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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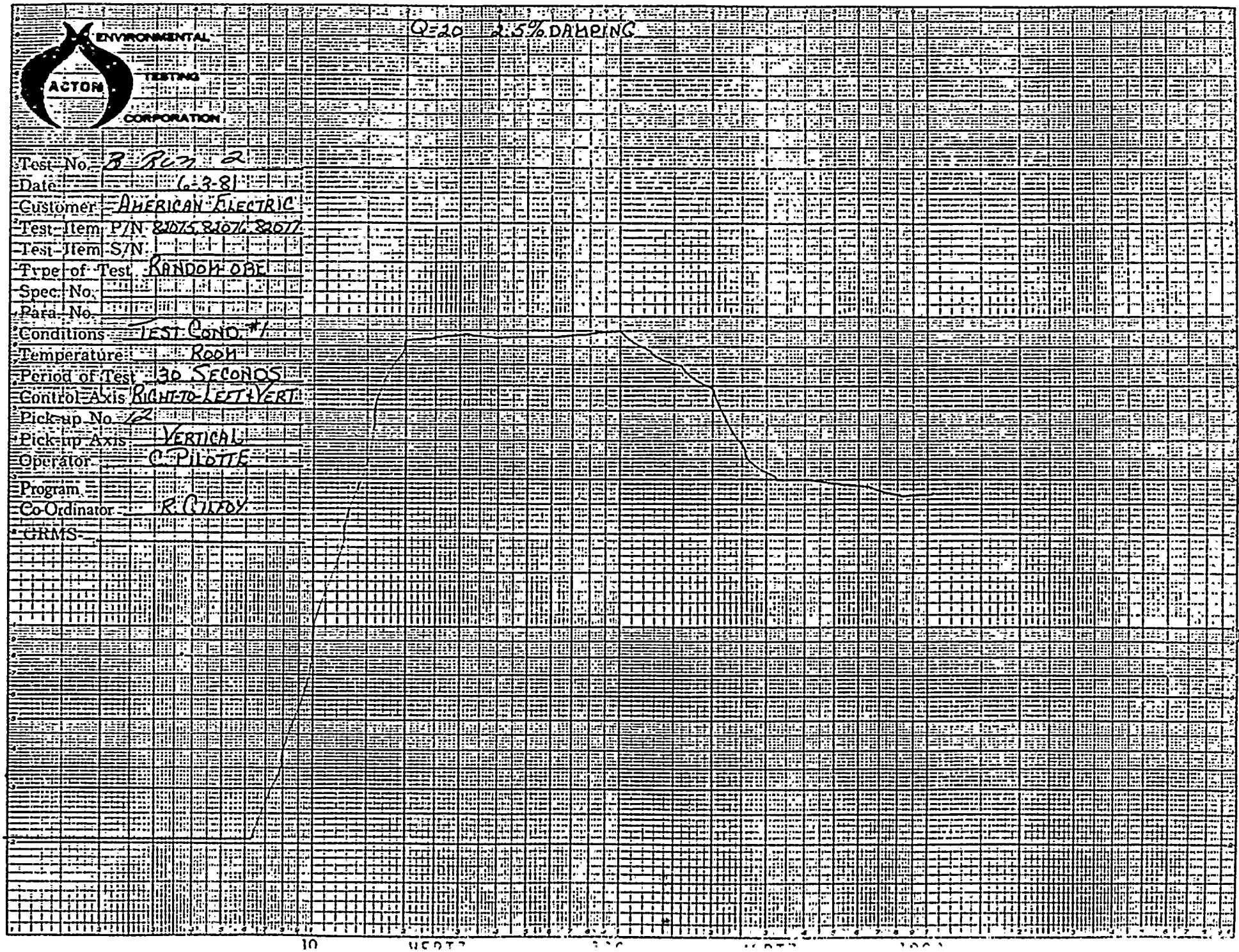
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. B RUN 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLIFFORD
GRMS



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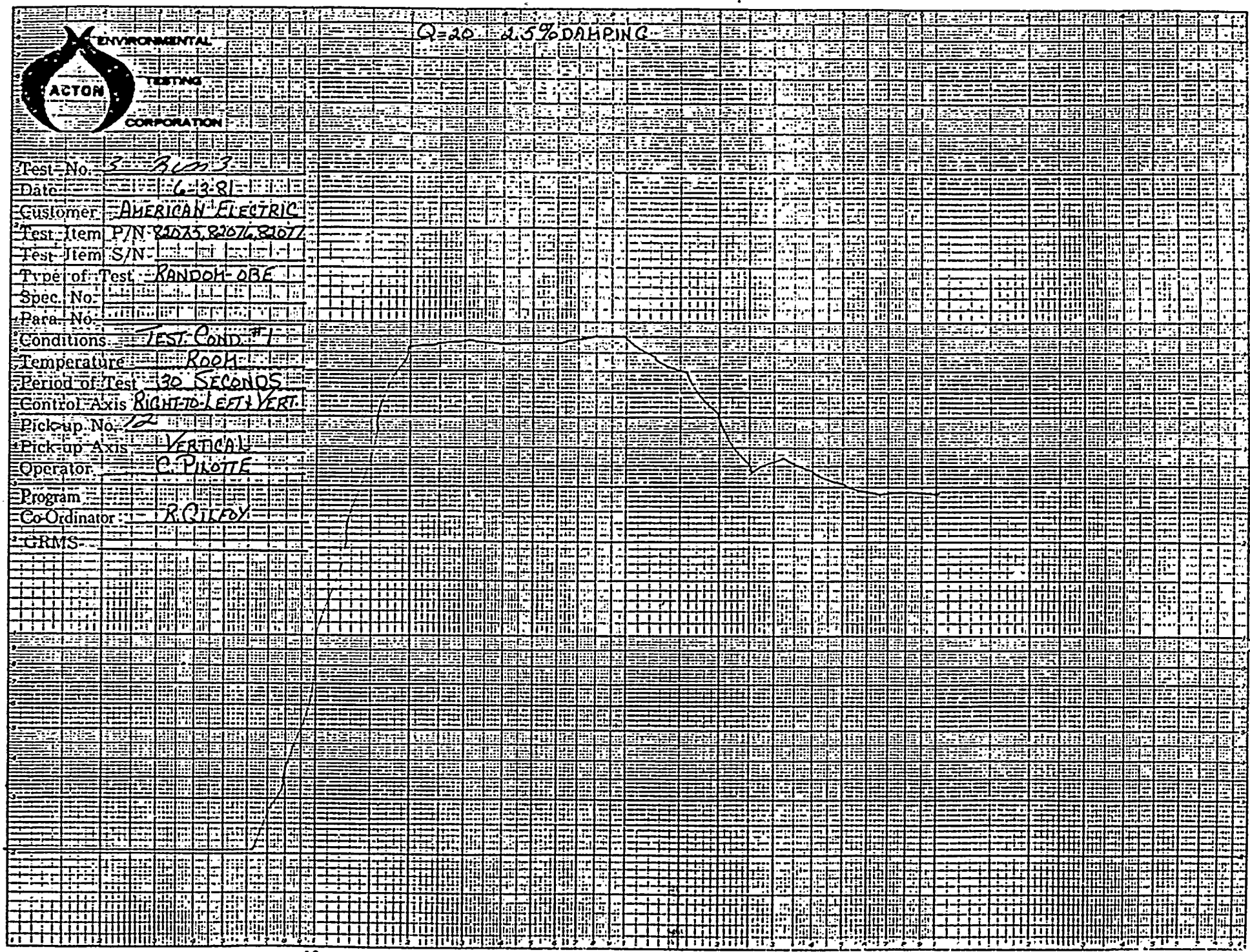
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 RUN 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82073, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. RILEY
GRMS



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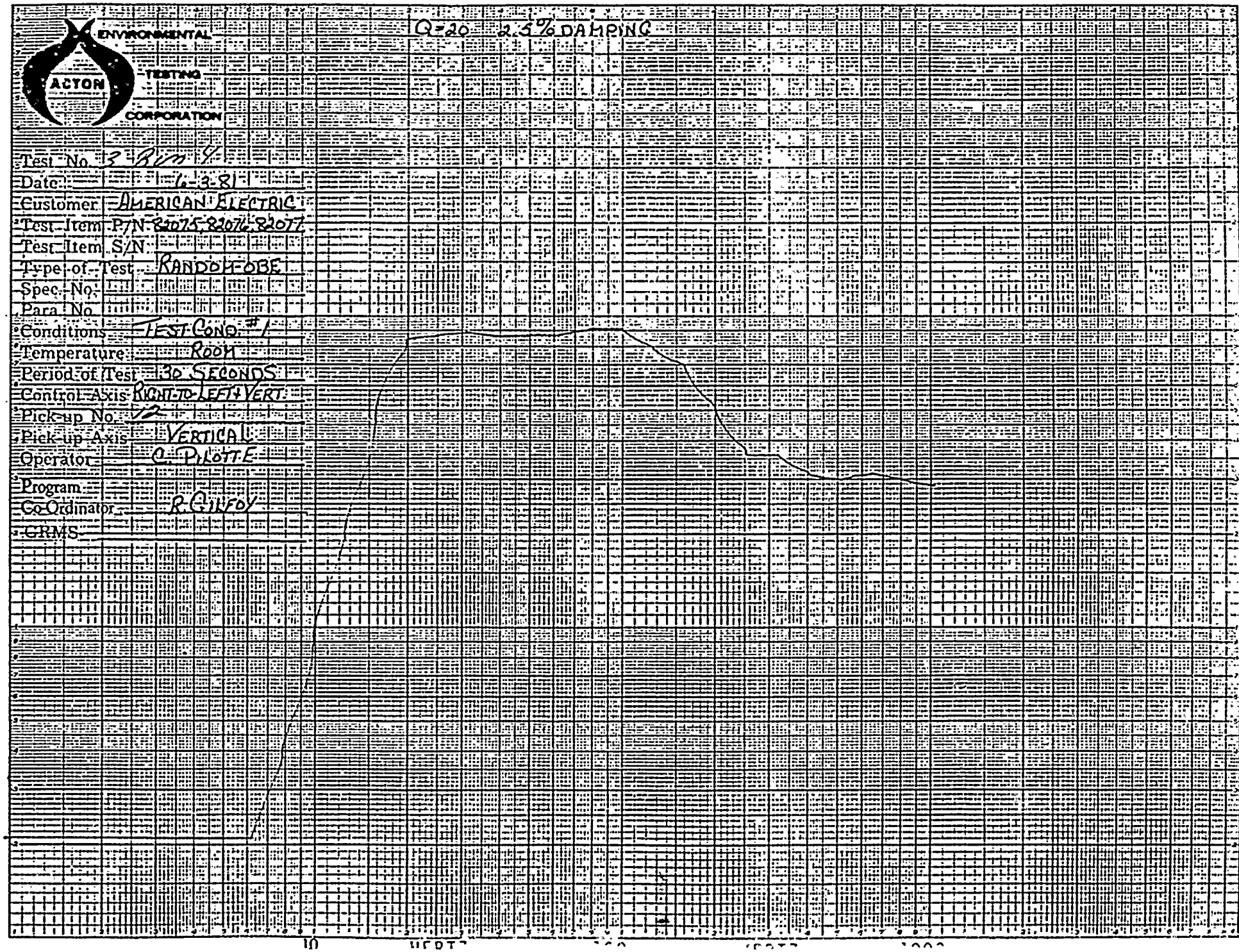
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 3 BWM 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. #2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5

Test No. 3 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS LEVEL

10.

g's

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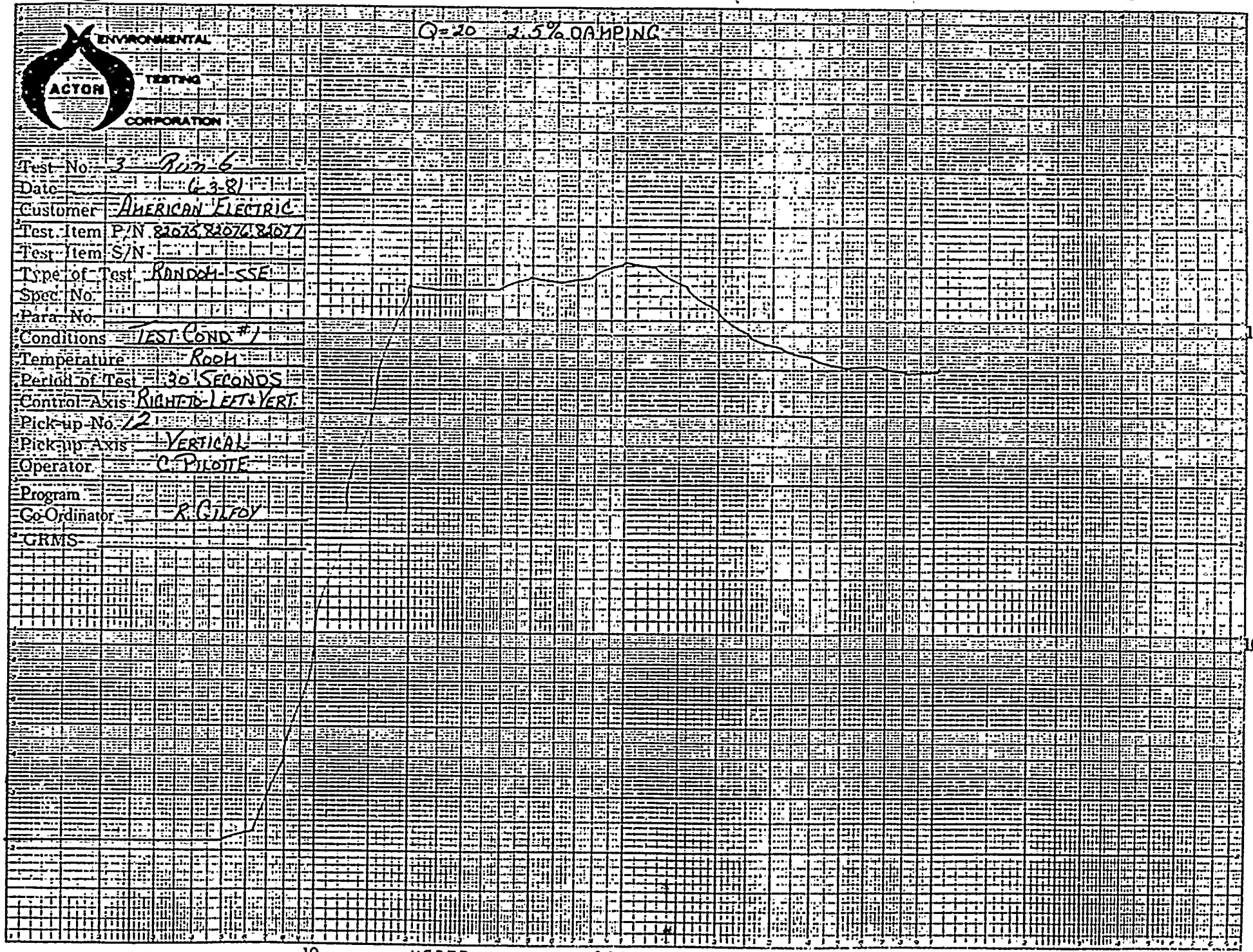
NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 RUN 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 820756 820761 820771
Test Item S/N
Type of Test RANDOM - SSE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTE
Program
Co-Ordinator R. GILFOY
GRMS

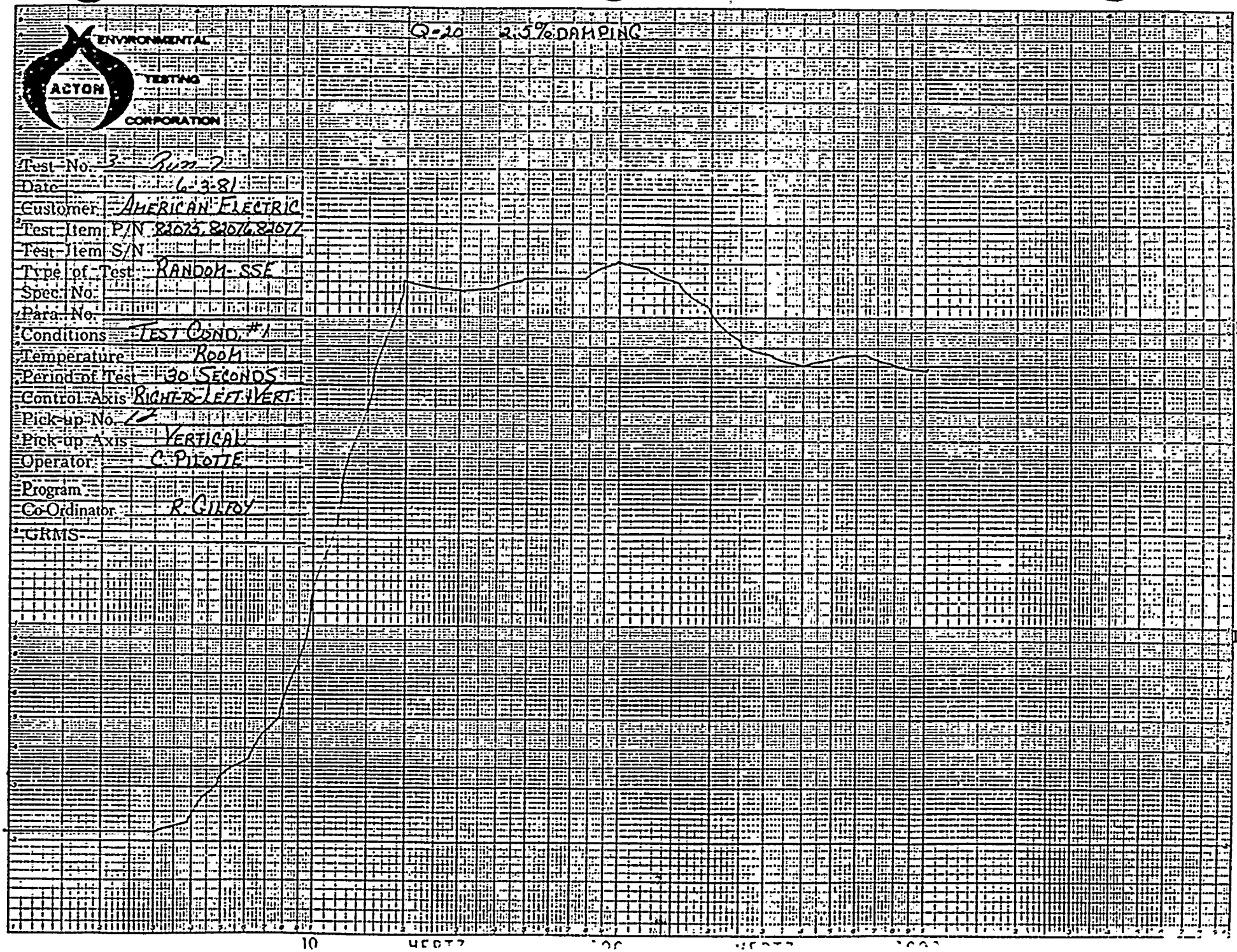


NO. 31,250. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 3 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-LEFT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PITOTTE
Program
Co-Ordinator R. GILTOY
GRMS

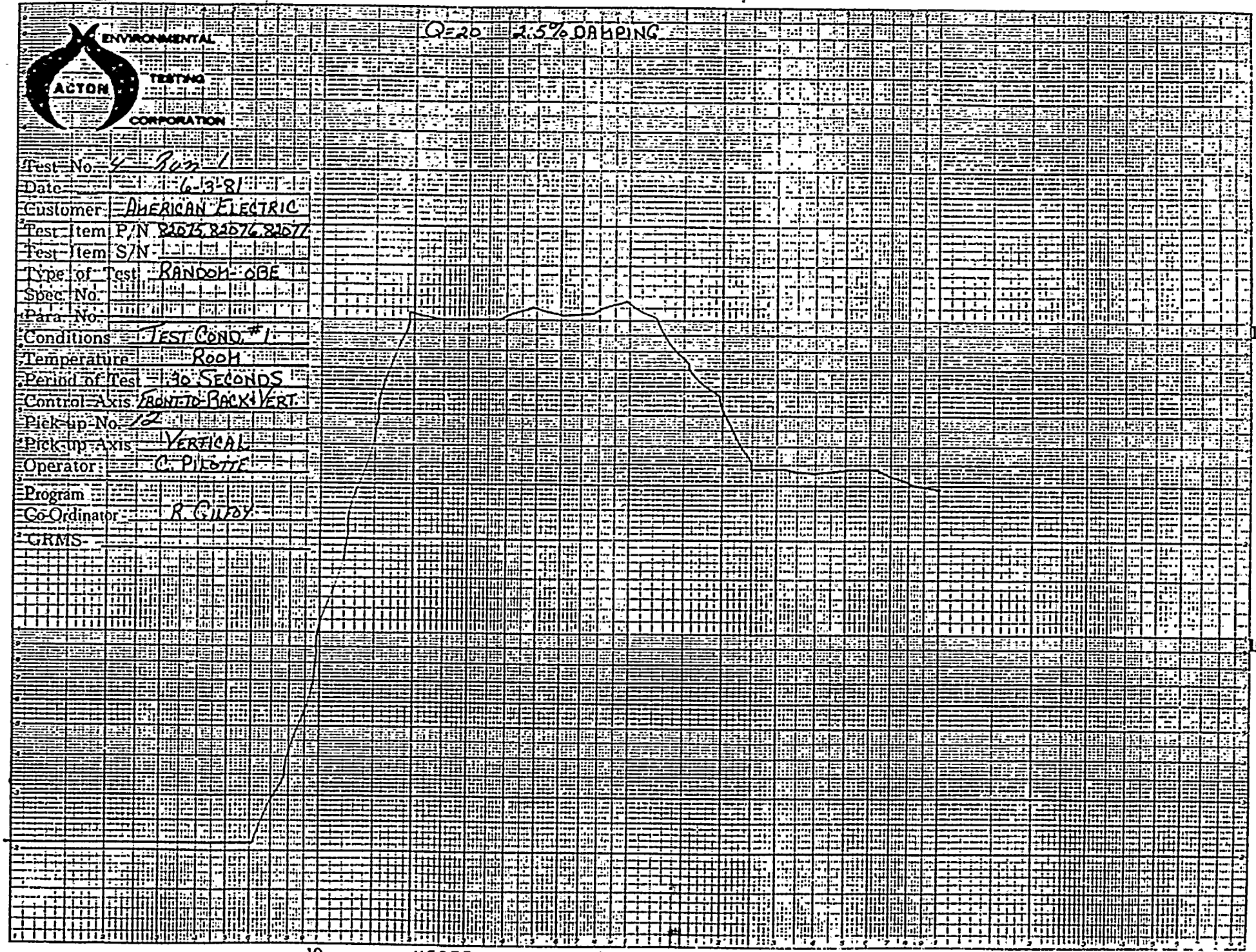


NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 1.30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. CILFONE
GRMS



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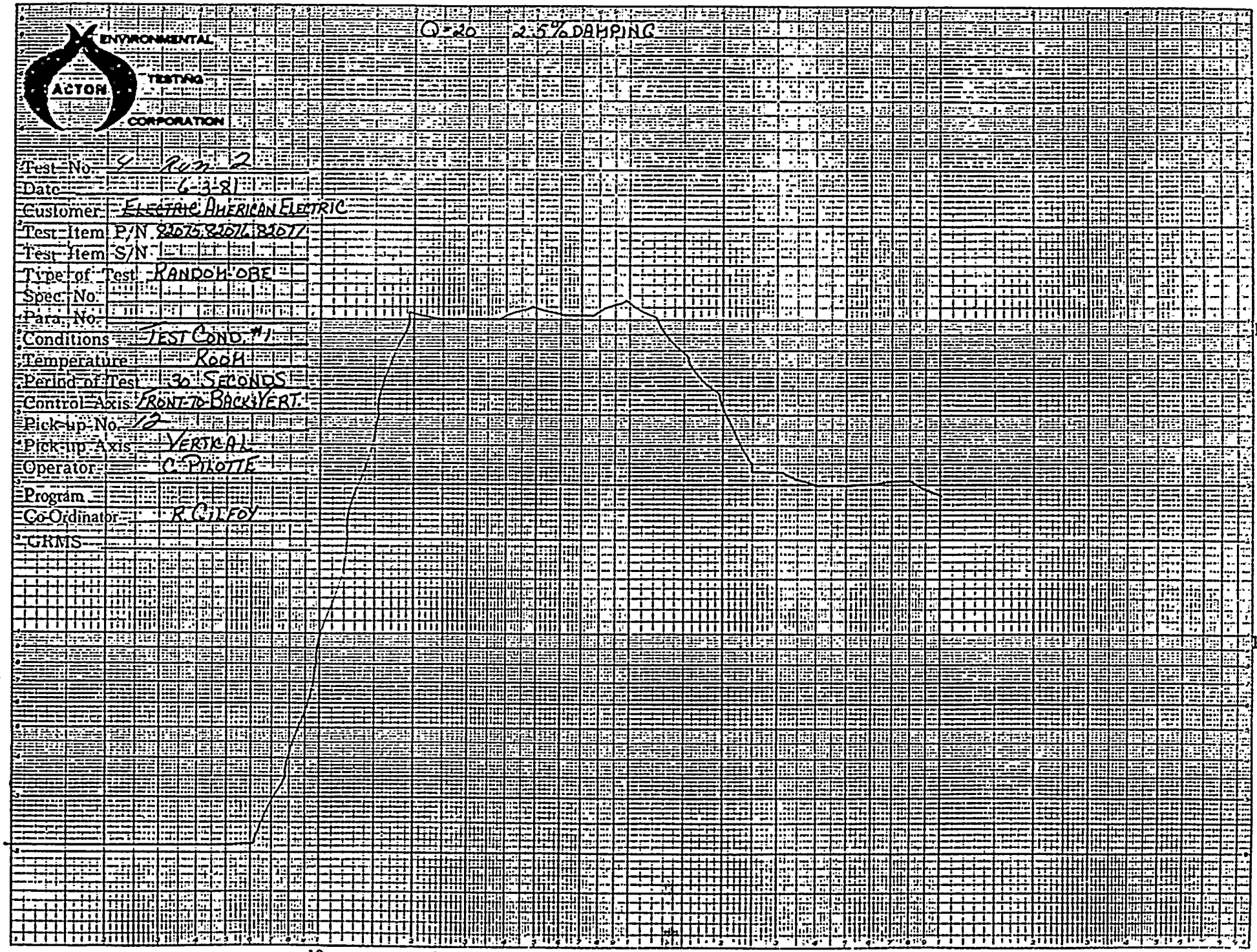
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 4 Run 2
Date 6-3-81
Customer ELECTRIC AMERICAN ELECTRIC
Test Item P/N 82075 82076 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C PILOTTE
Program
Co-Ordinator K GILFOY
GRMS



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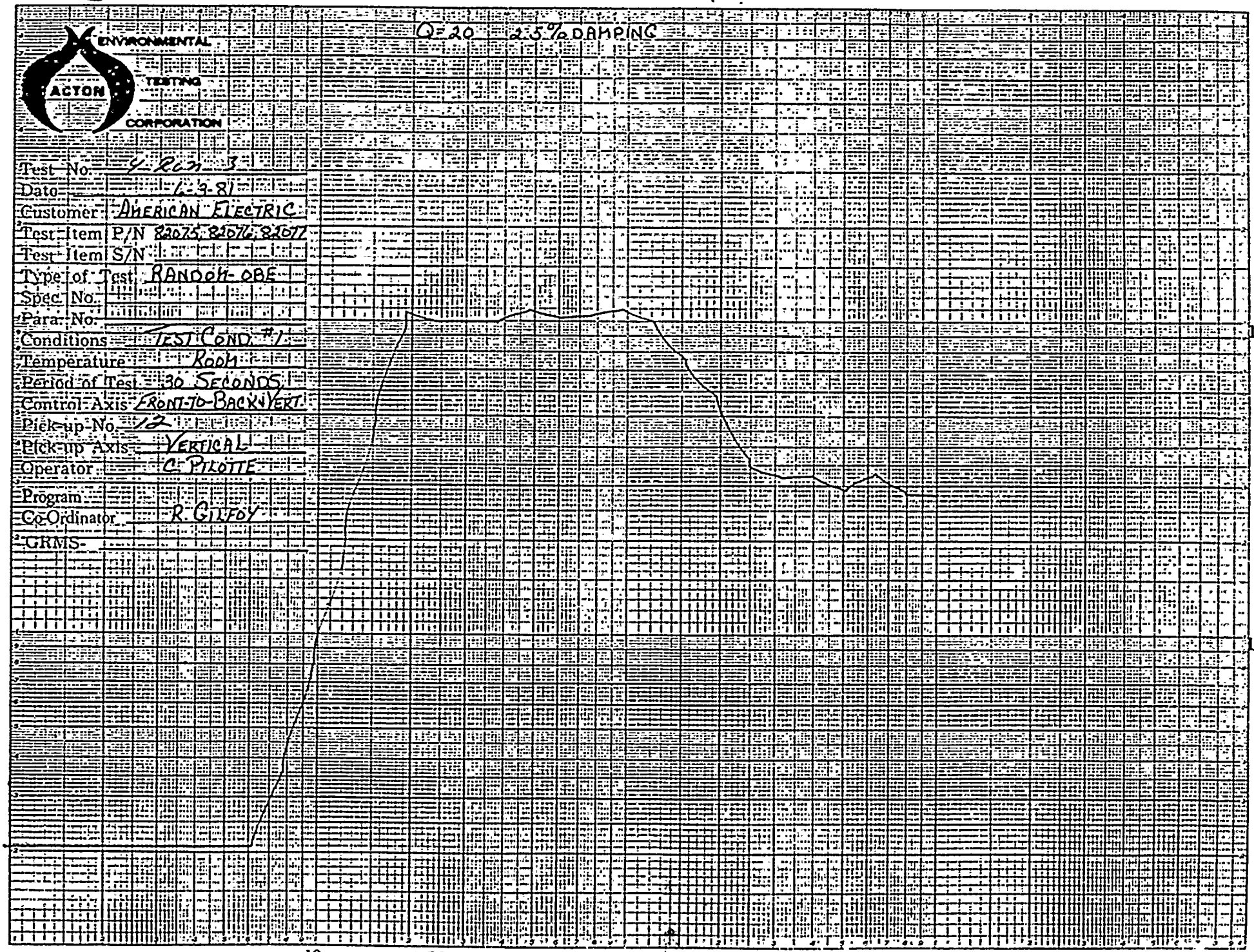
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 4 RCM 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 4 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

10.

g's

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codex GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 4 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82673, 82674, 82677
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions FRONT-TO-BACK/VERT.
Temperature ROOM
Period of Test 32 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILROY
GRMS

10.

g's

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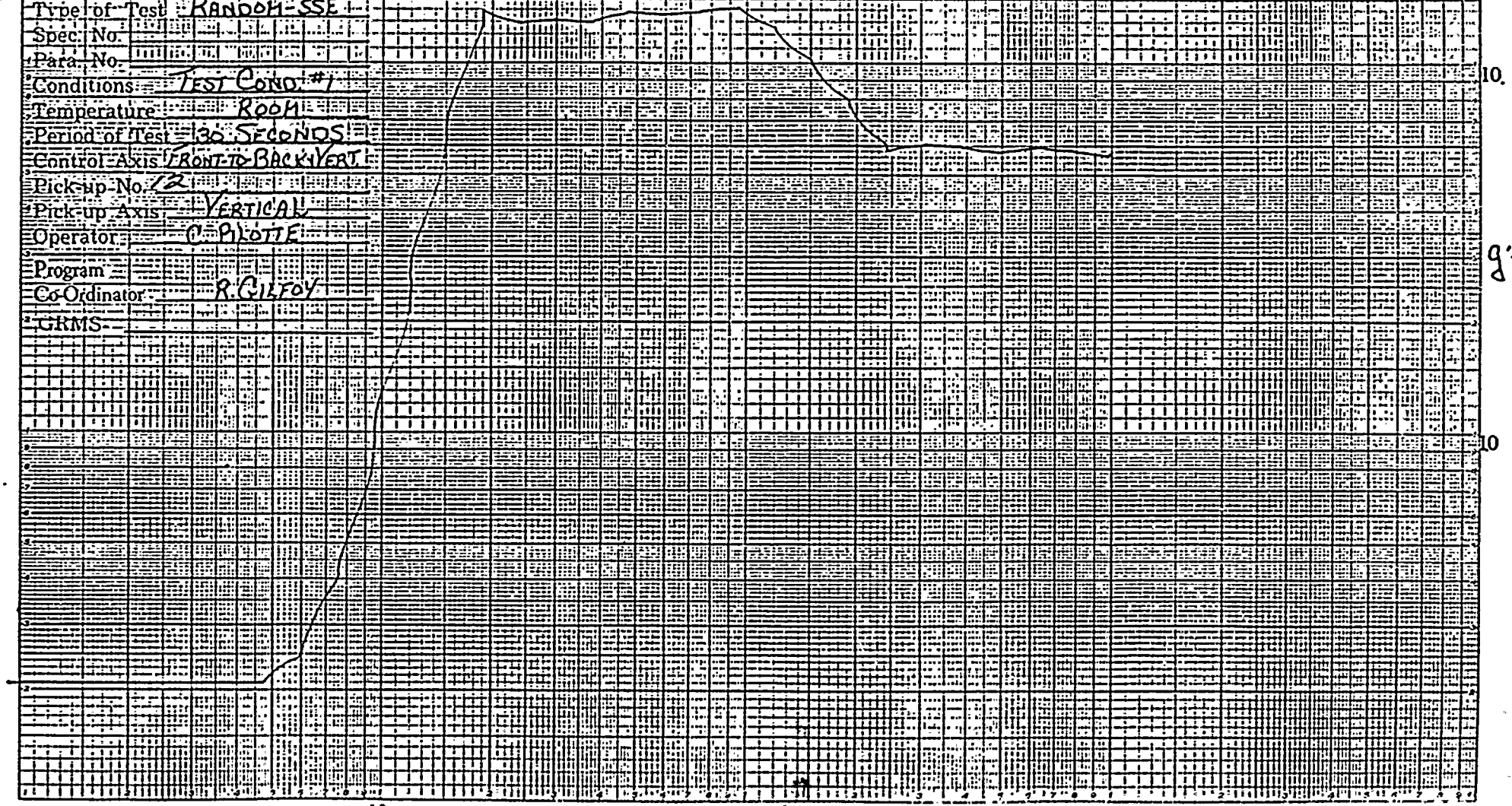
10 HERTZ 100

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Rem 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 130 SECONDS
Control Axis FRONT-TO-BACK/VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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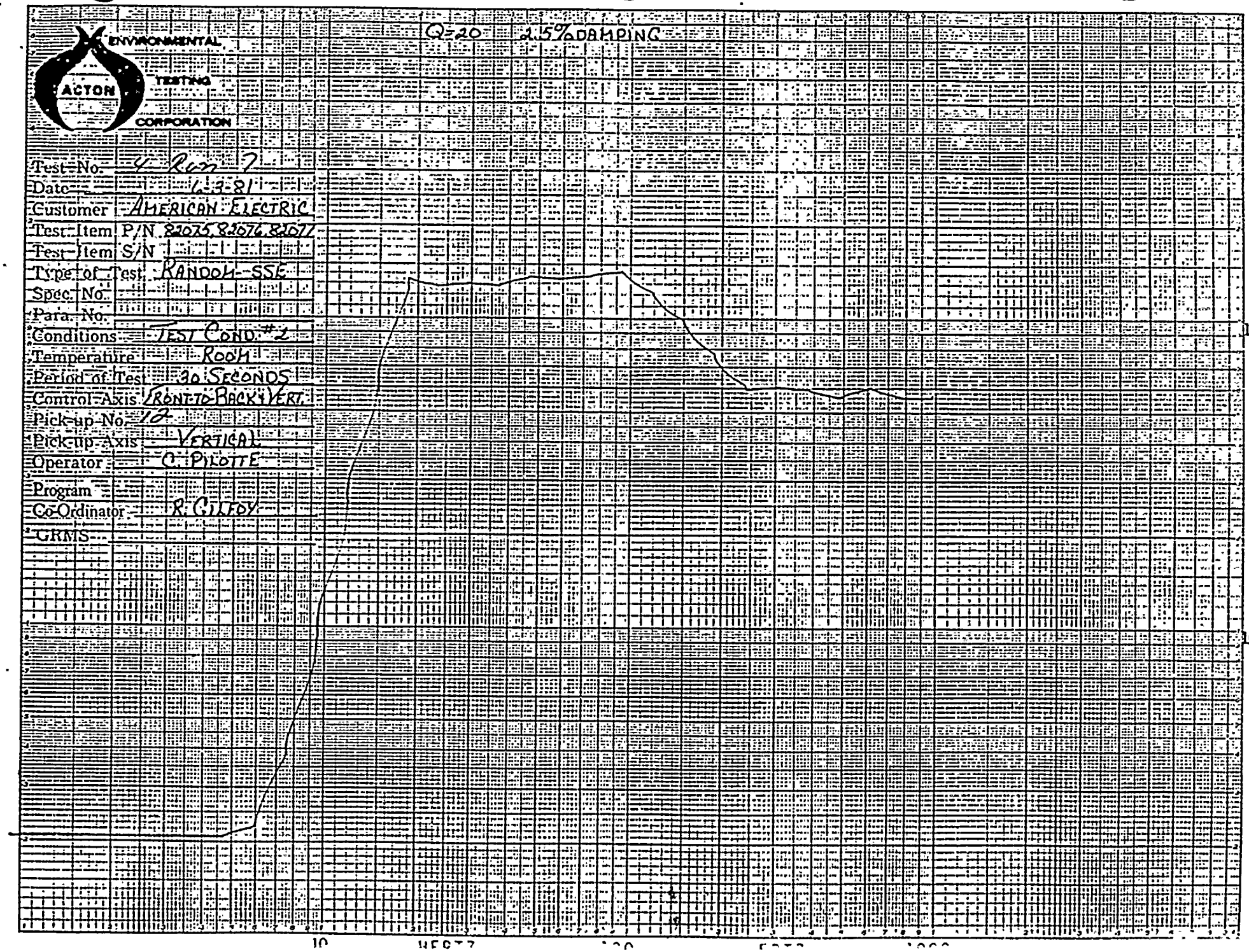
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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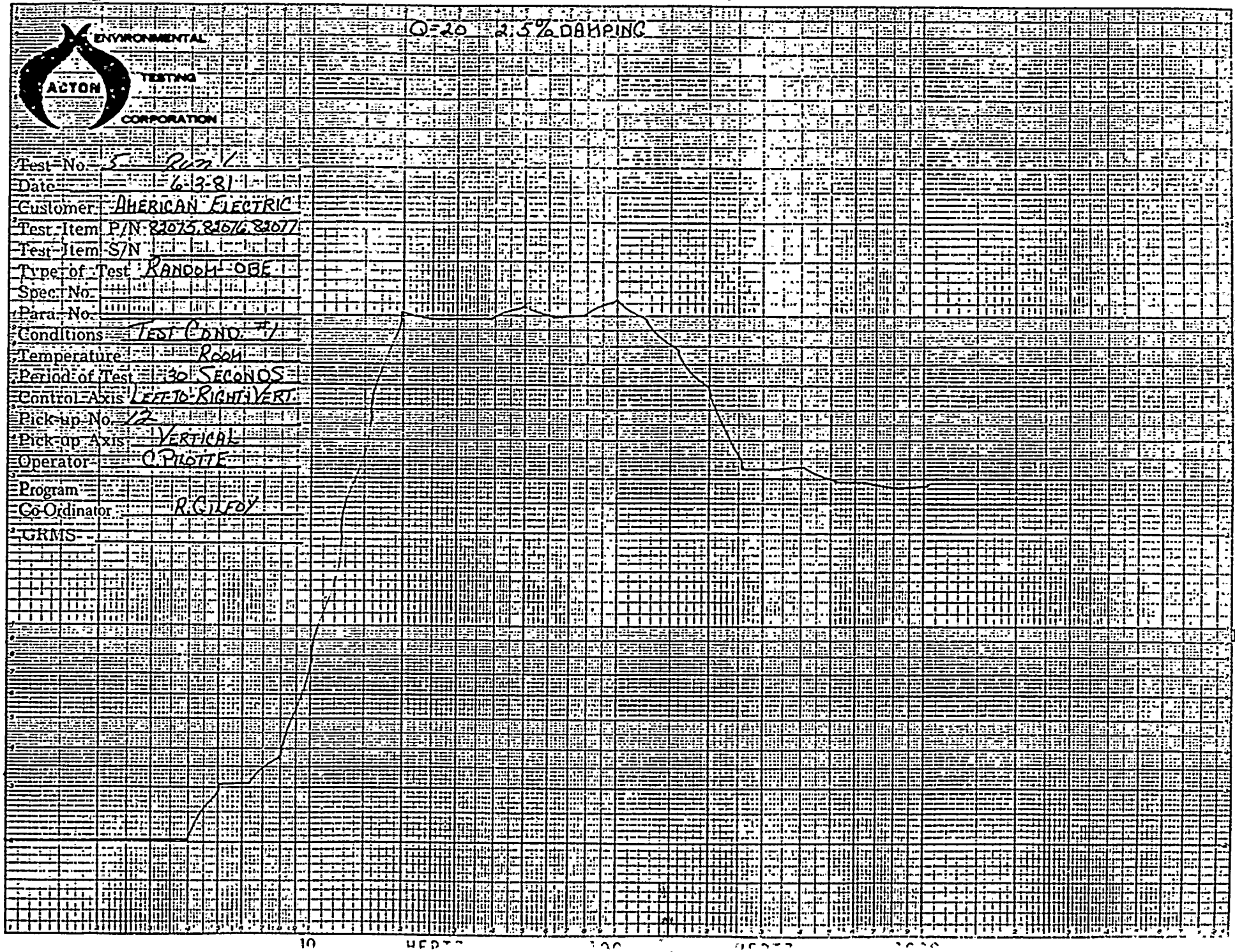
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 5 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION

Test No. 5 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. "I"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT & VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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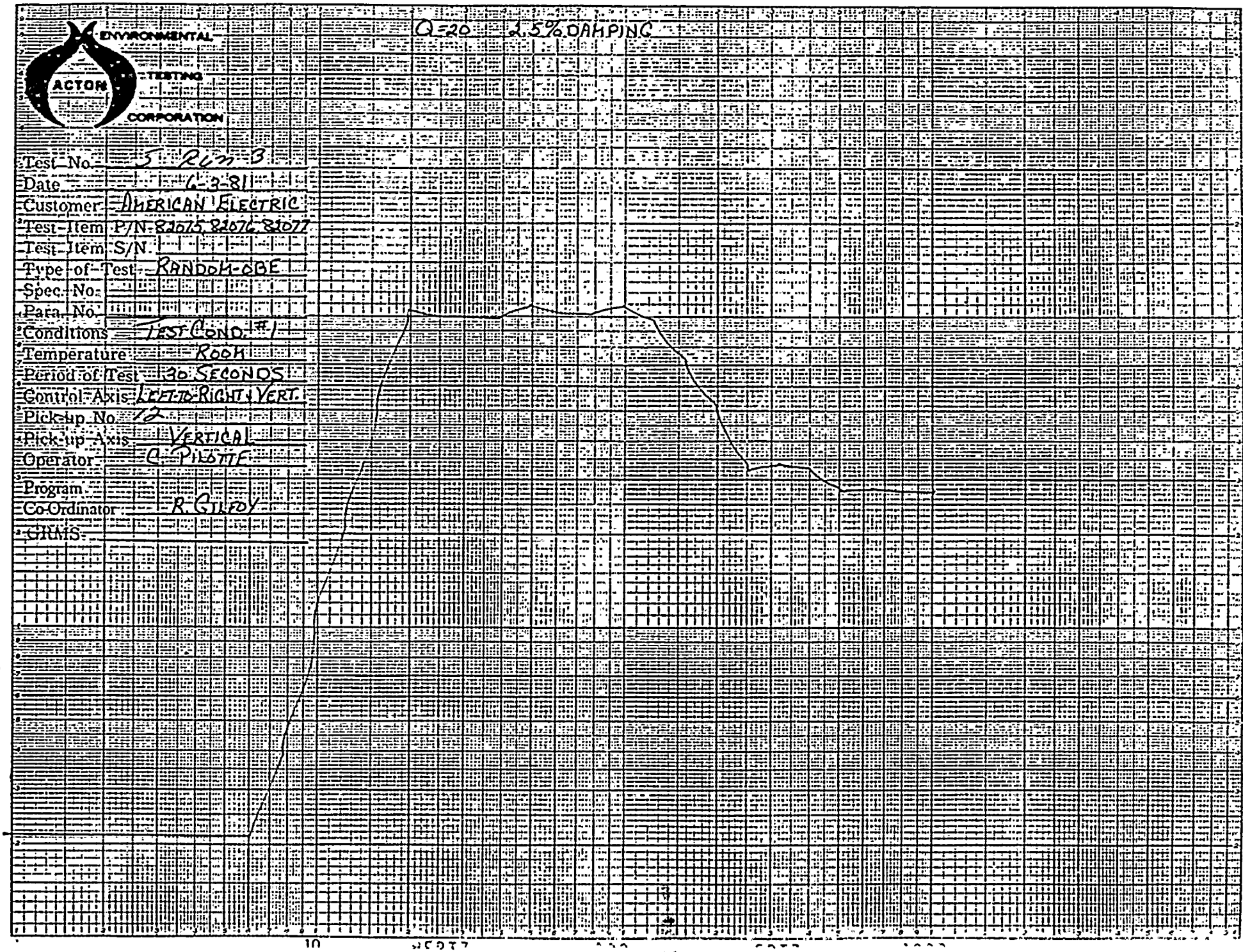
NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062. PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 RUN 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PINOTTE
Program
Co-Ordinator R. GILROY
GRMS



NO. 31.25S. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
CODEX GRAPH PAPER
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PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 5 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075 82076 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control-Axis LEFT-TO-RIGHT↓VERT.
Pick-up-No 10
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

10.
g's
10

10 HERTZ 100 HERTZ 1000

NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX CHART PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program
Co-Ordinator R. GILROY
GRMS

10.

g's

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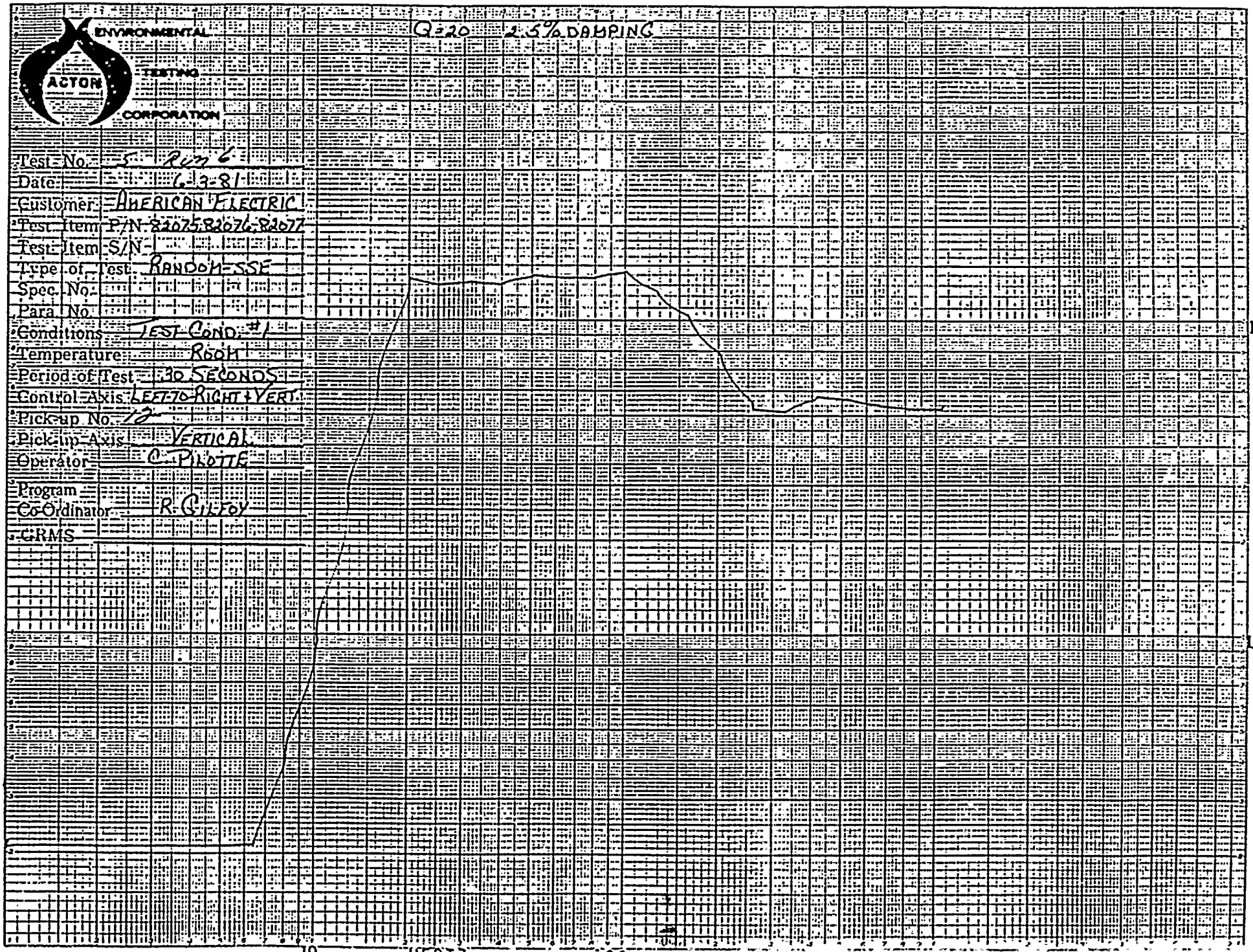
10 HERTZ 1000

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 81075-81076-81077
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C PILOTTE
Program Co-Ordinator R. CLIFOY
GRMS

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g's

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10 100 1000

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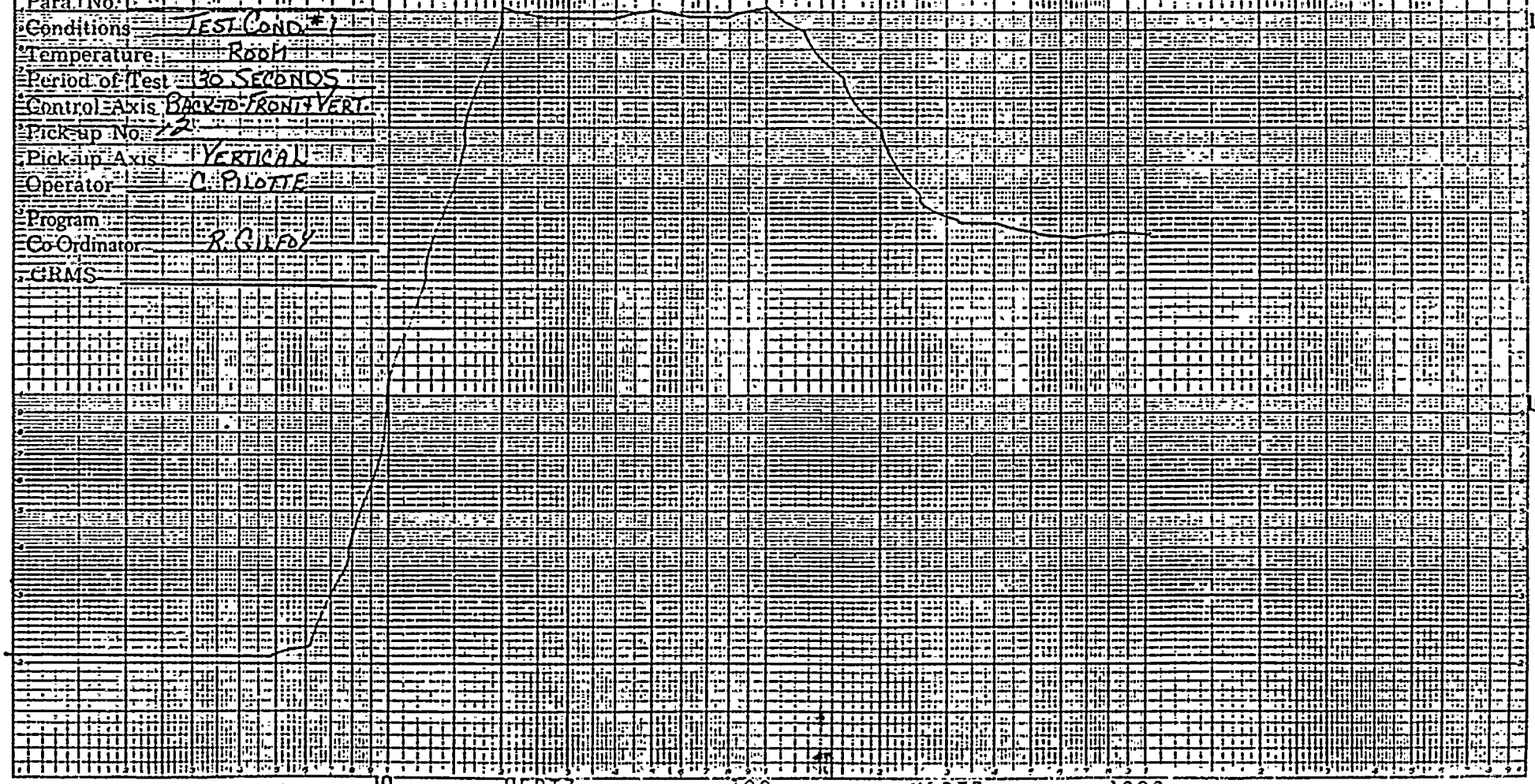
ENVIRONMENTAL TESTING ACTOR CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82074, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. #2
Pick-up Axis VERTICAL
Operator C. BLOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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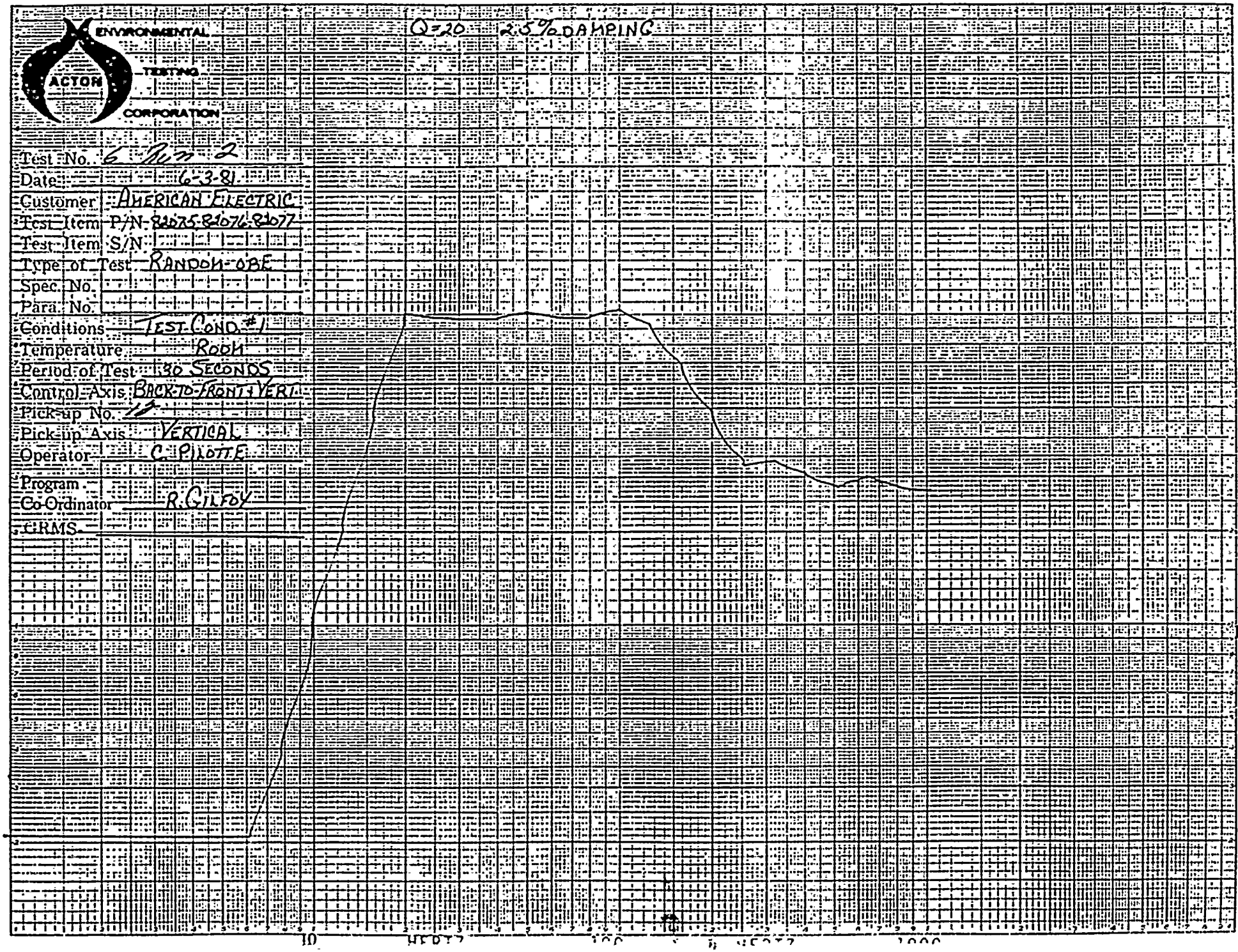
ENVIRONMENTAL TESTING ACTON CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075-82076-82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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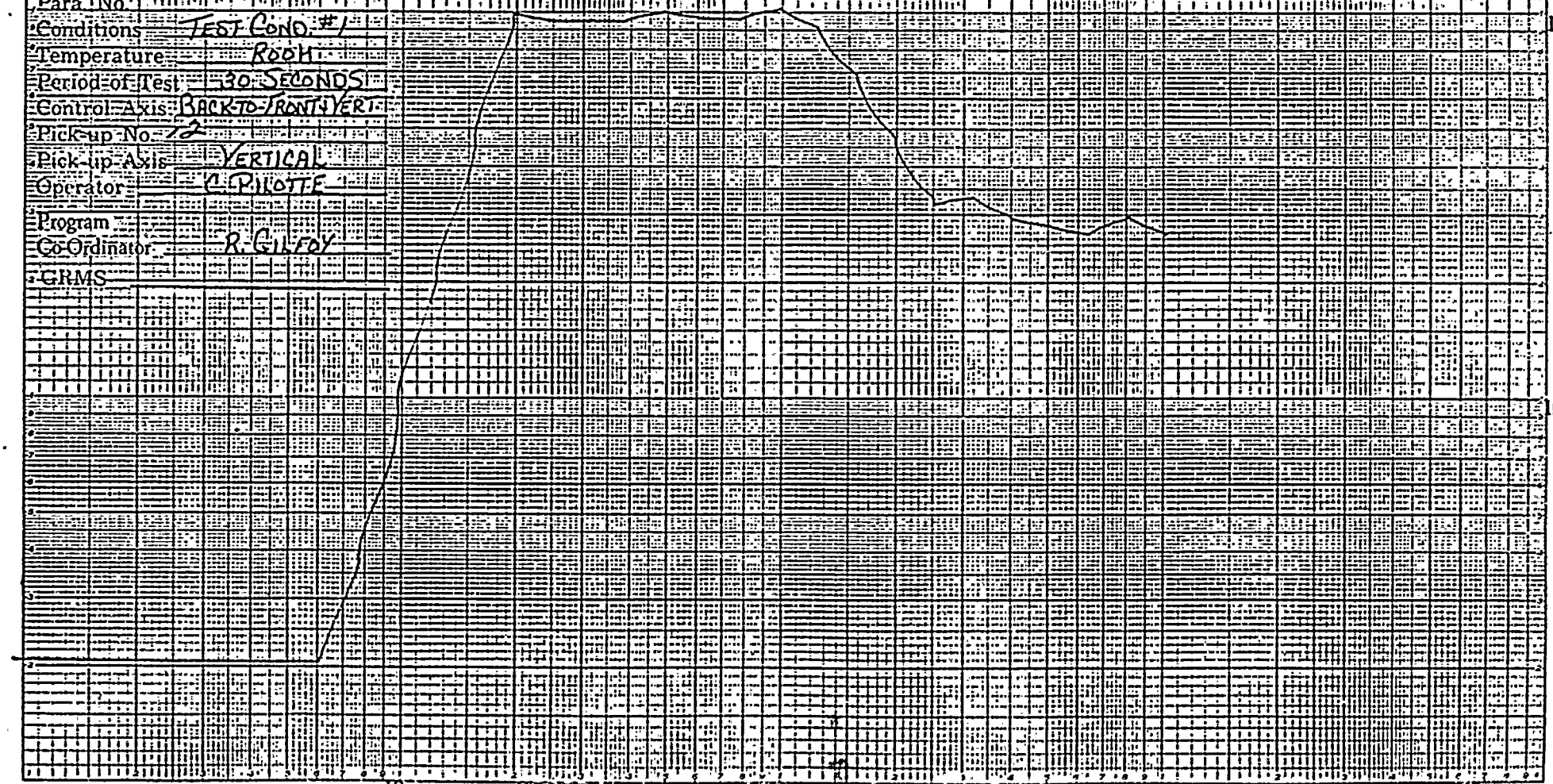
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Rem 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 32075 32076 32077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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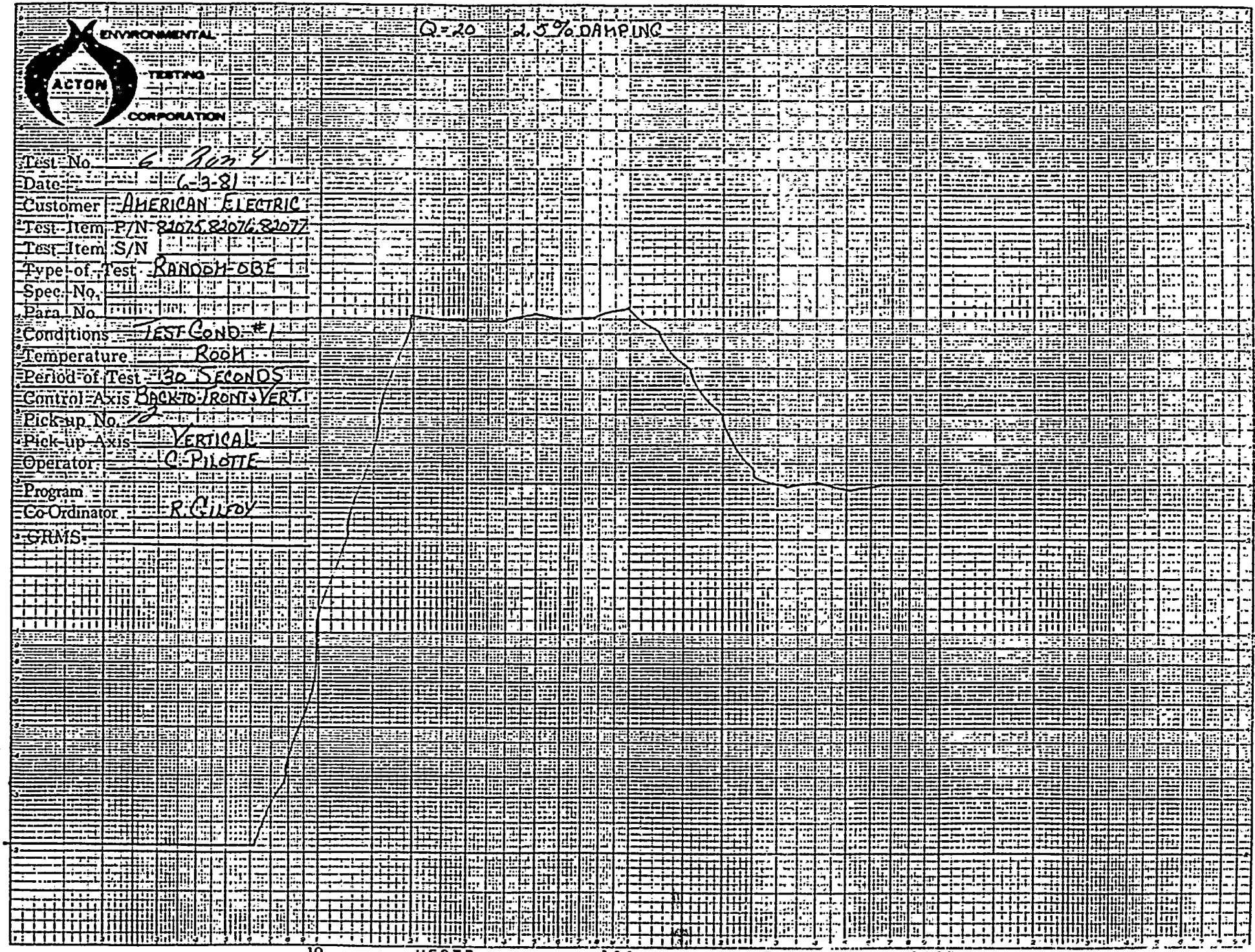
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 130 SECONDS
Control Axis BACK-TO-FRONT + VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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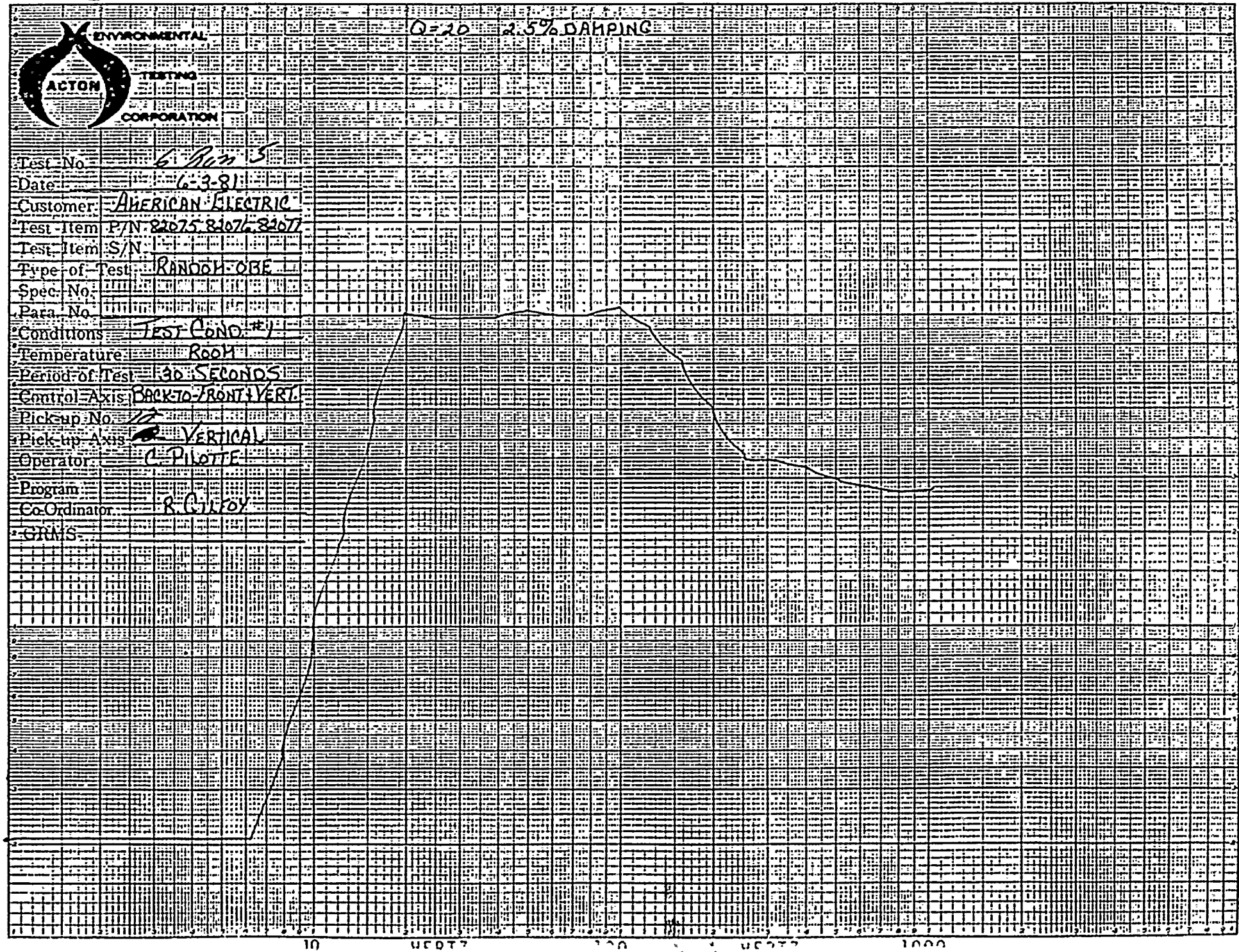
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 5
Date 6-3-81
Customer: AMERICAN ELECTRIC
Test Item P/N 82075 82076 82077
Test Item S/N
Type of Test: RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT & VERT.
Pick-up No.
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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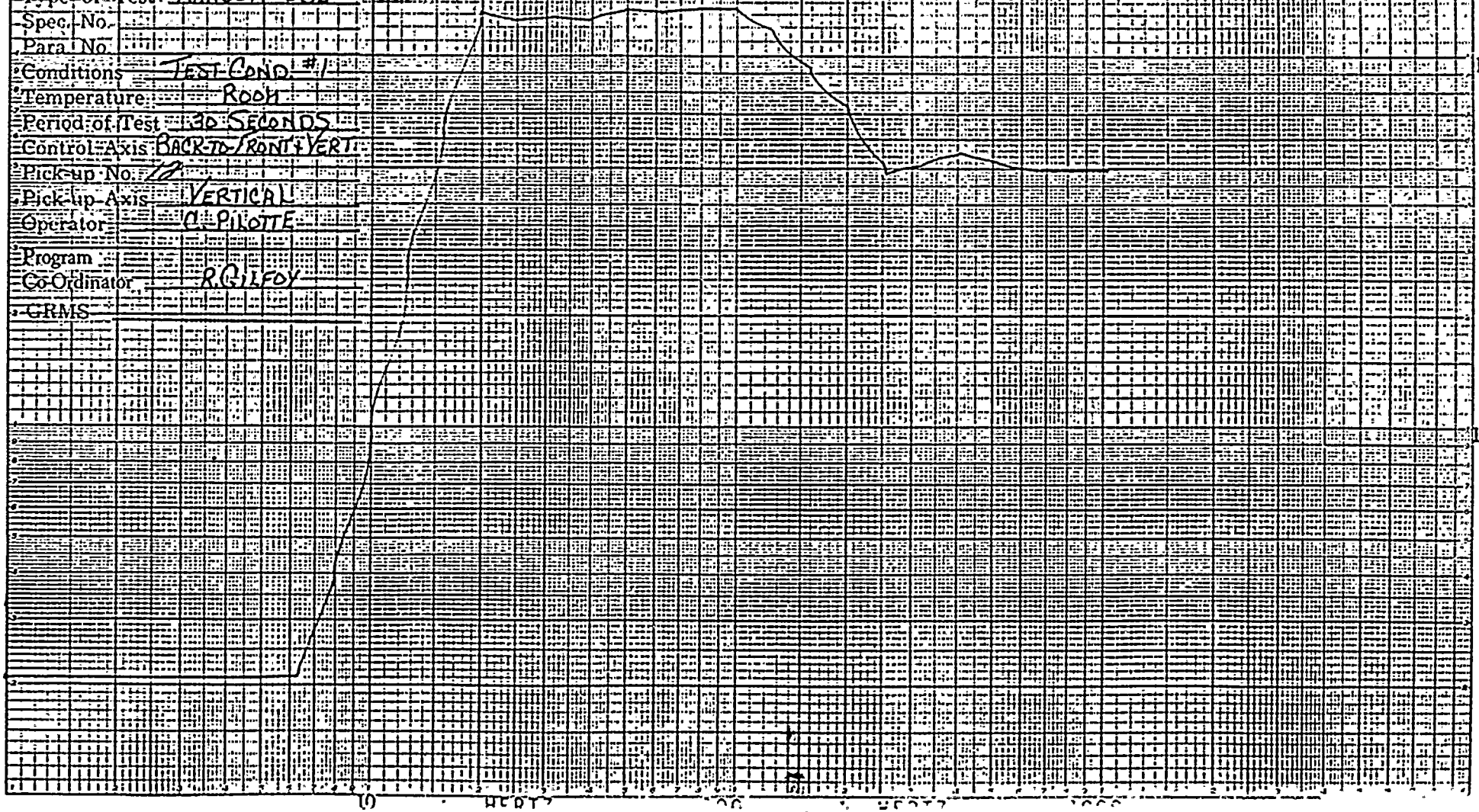
ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 RUN 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 81075, 81076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT
Pick-up No. 10
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No.	6 Run 7
Date	6-3-81
Customer	AMERICAN ELECTRIC
Test Item P/N	82075-82076-82077
Test Item S/N	
Type of Test	RANDOM-SSE
Spec No.	
Para No.	
Conditions	TEST COND. #2
Temperature	ROOM
Period of Test	30 SECONDS
Control Axis	BACK-TO-FRONT+VERT
Pick-up No.	2
Pick-up Axis	VERTICAL
Operator	B. PILOTE
Program Co-Ordinator	R. GILTOX
GRMS	

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NO. 31.258, LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTRON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Sun 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207, 8209, 8208
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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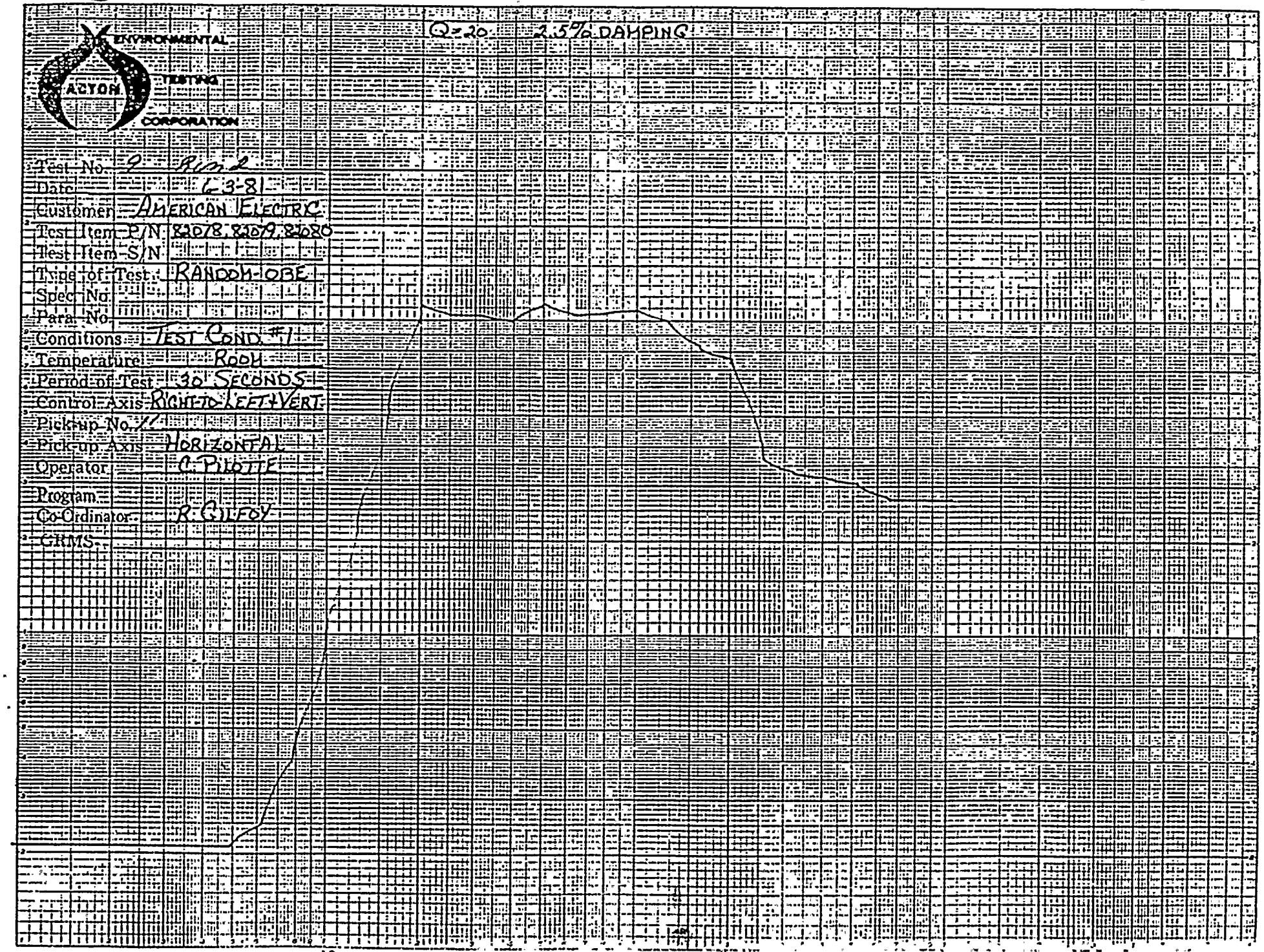
NO. 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER® IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTION ENVIRONMENTAL TESTING CORPORATION

Test No. 2 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 10 2.5% DAMPING

Test No. 1 Run 3
Date 6-3-87
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLIFFORD
CBMS

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NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 - 2.5% DAMPING

Test No: 9 Run 4
Date: 6-3-81
Customer: AMERICAN ELECTRIC
Test Item P/N: 82078, 82079, 82080
Test Item S/N:
Type of Test: RANDOM-OBE
Spec No:
Para. No:
Conditions: TEST COND. #1
Temperature: ROOM
Period of Test: 30 SECONDS
Control Axis: RIGHT-TO-LEFT/VERT.
Pick-up No: 11
Pick-up Axis: HORIZONTAL
Operator: C. PILOTTE
Program:
Co-Ordinator: R. GILROY
GRMS:

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No 9 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT.
Pick-up No 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLEDY
GRMS

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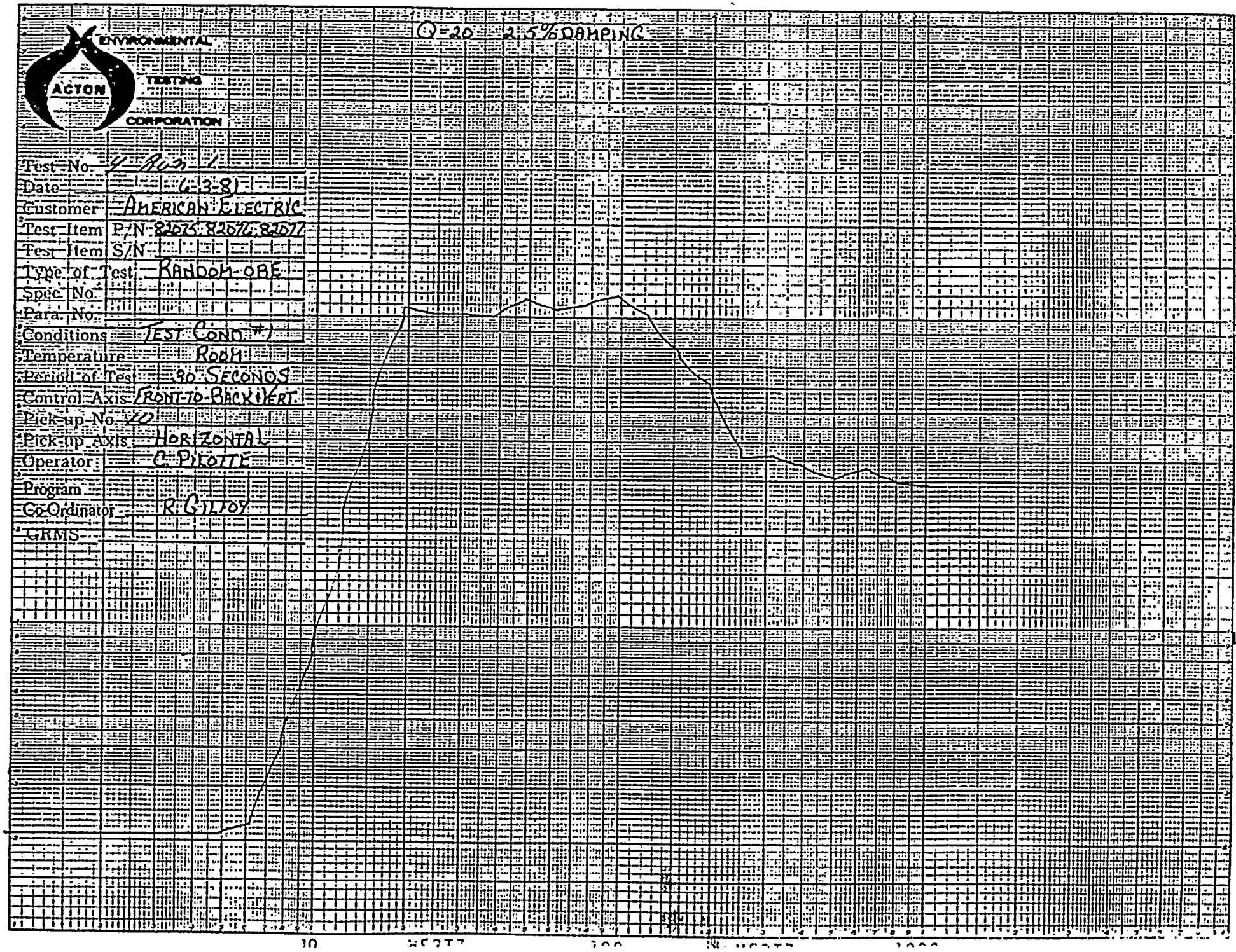
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Rev 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82076, 82077, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS



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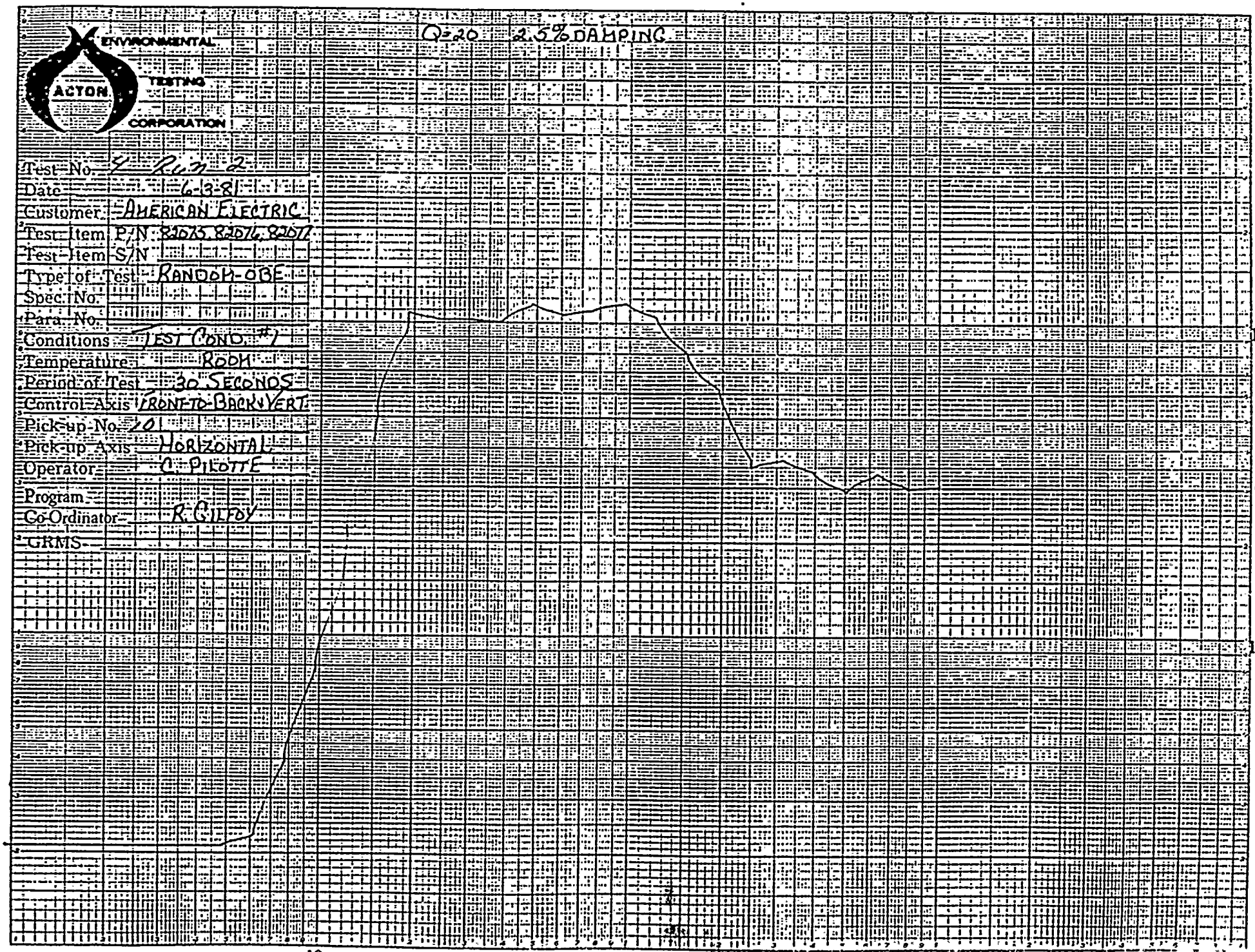
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 201
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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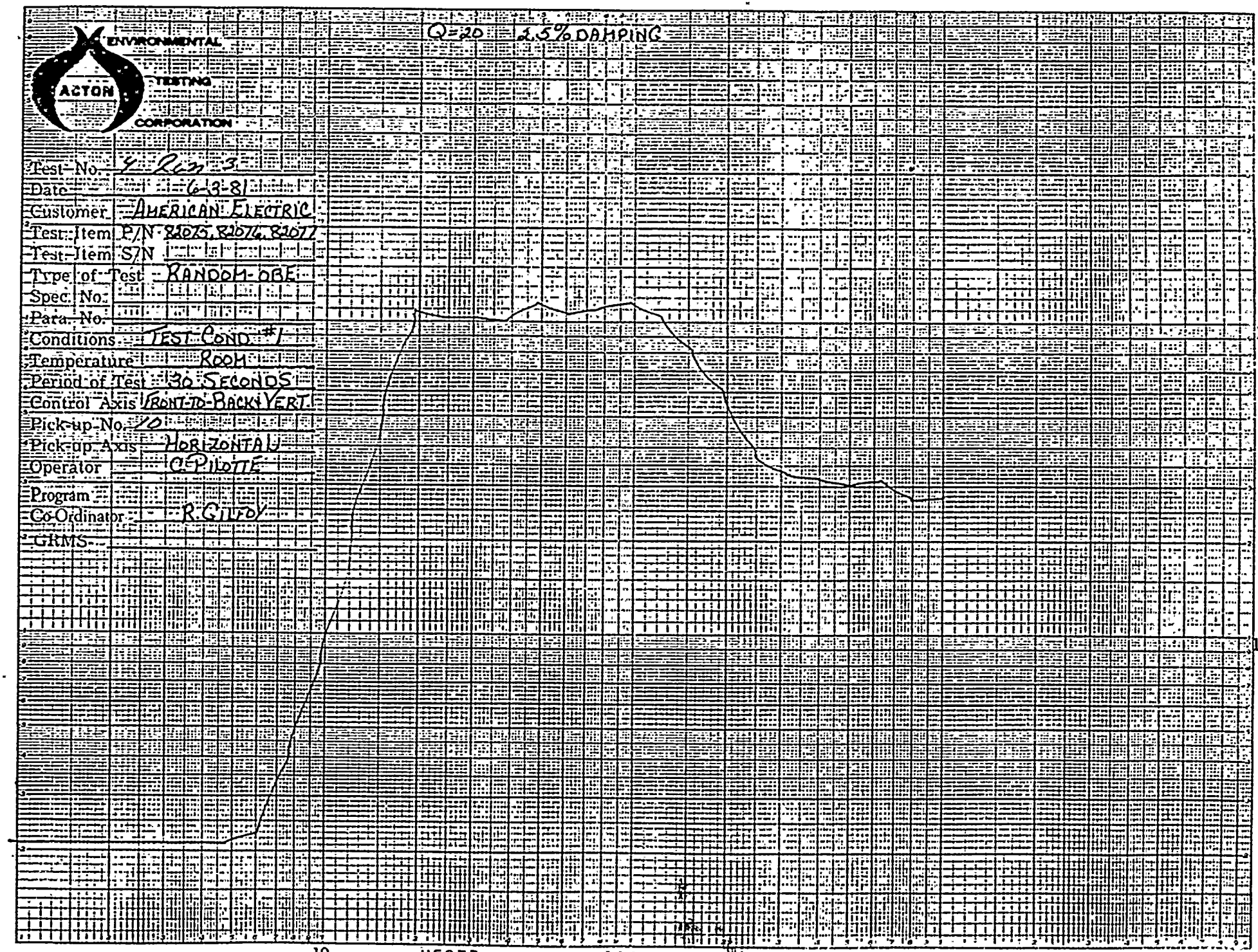
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075, 82076, 82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 4 Rev 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82075-82076-82077
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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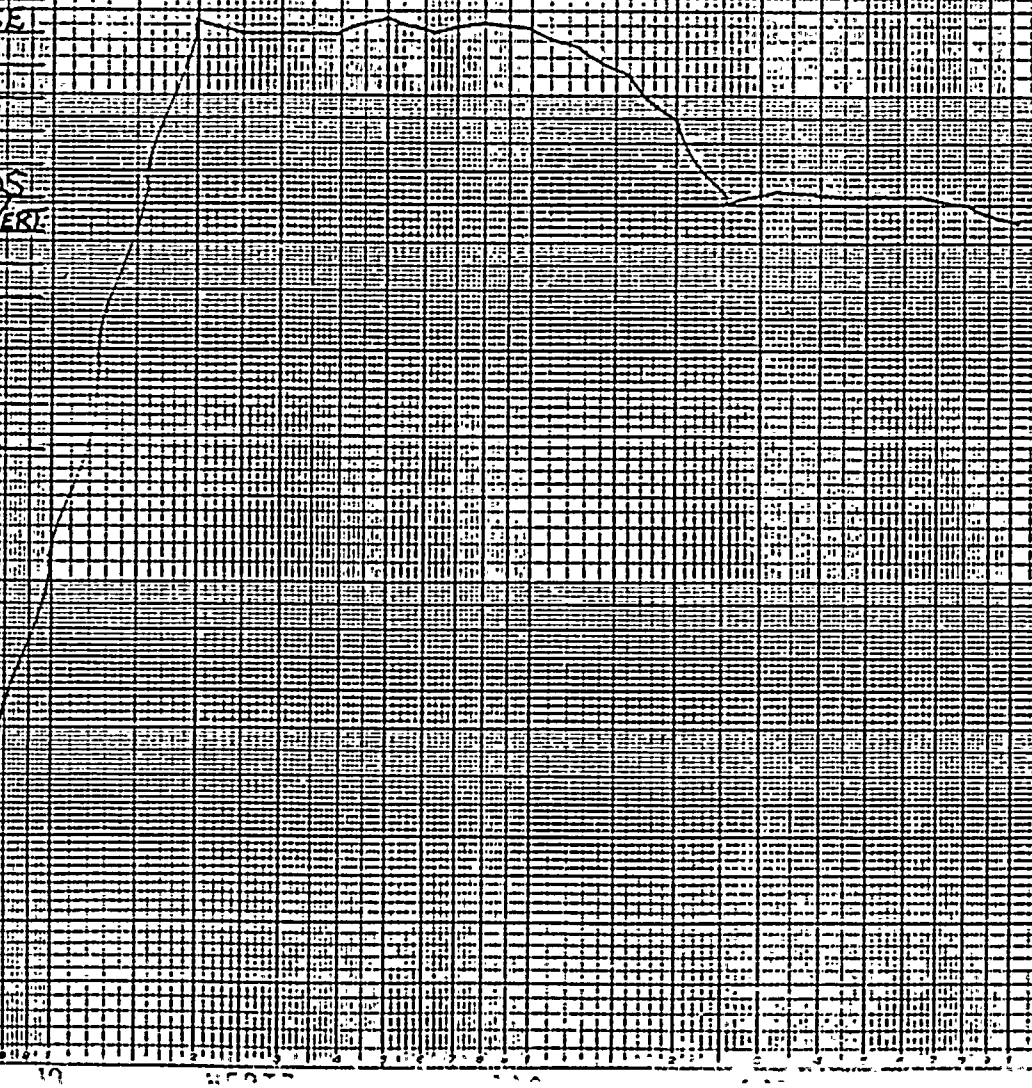
ENVIRONMENTAL ACTON TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 9 Run 6
Date 6-3-8
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Part No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT (YERT)
Pickup No. 11
Pickup Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
Units



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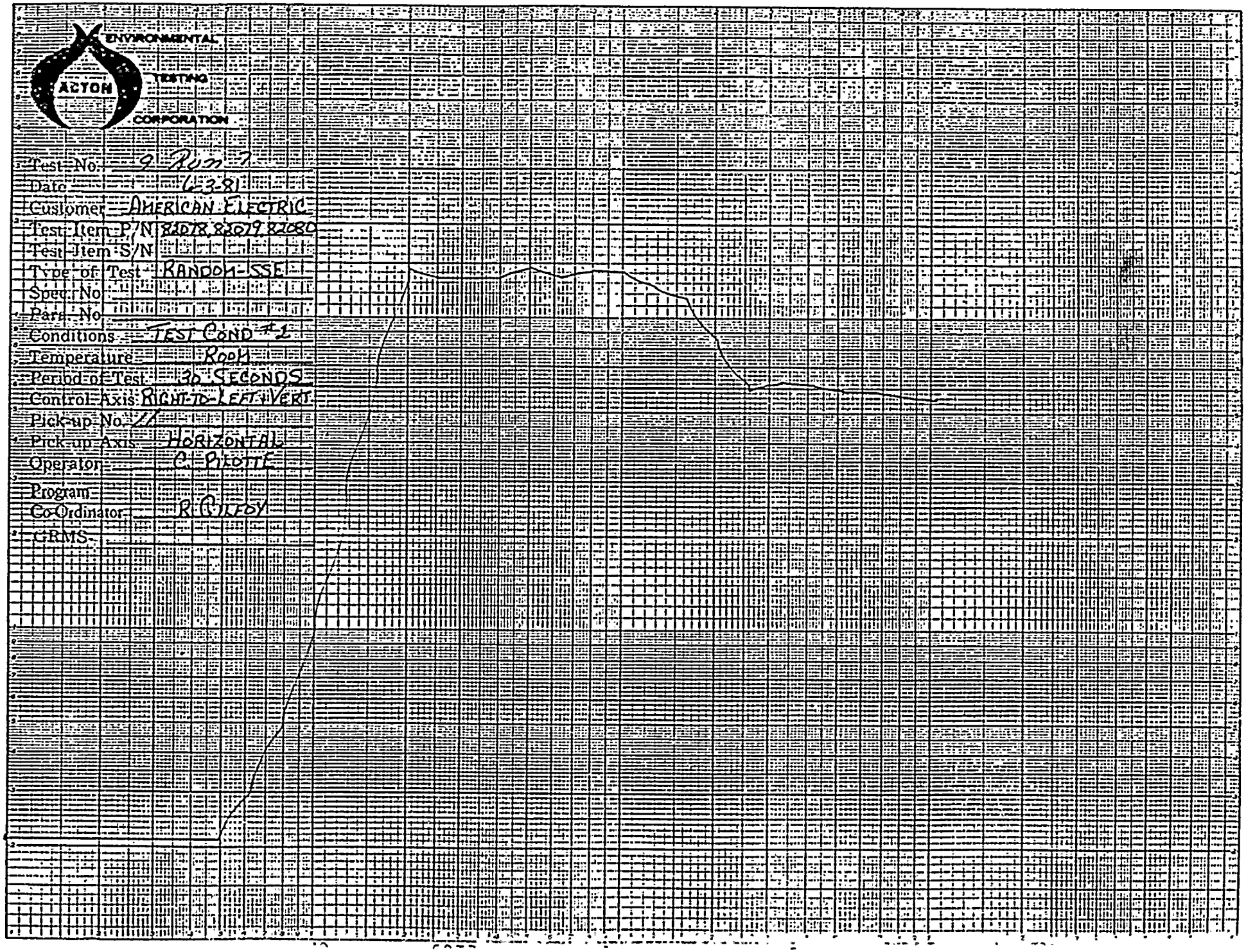
ACTON ENVIRONMENTAL TESTING CORPORATION

Test No: 9 Run 7
Date: 6-3-81
Customer: AMERICAN ELECTRIC
Test Item P/N: 82078, 82079, 82080
Test Item S/N:
Type of Test: RANDOM-SSE
Spec. No:
Para. No:
Conditions: TEST COND #2
Temperature: ROOM
Period of Test: 30 SECONDS
Control Axis: RIGHT-TO-LEFT-VERT
Pick-up No: 11
Pick-up Axis: HORIZONTAL
Operator: C. PILOTTE
Program Co-Ordinator: R. GILROY
GRMS:



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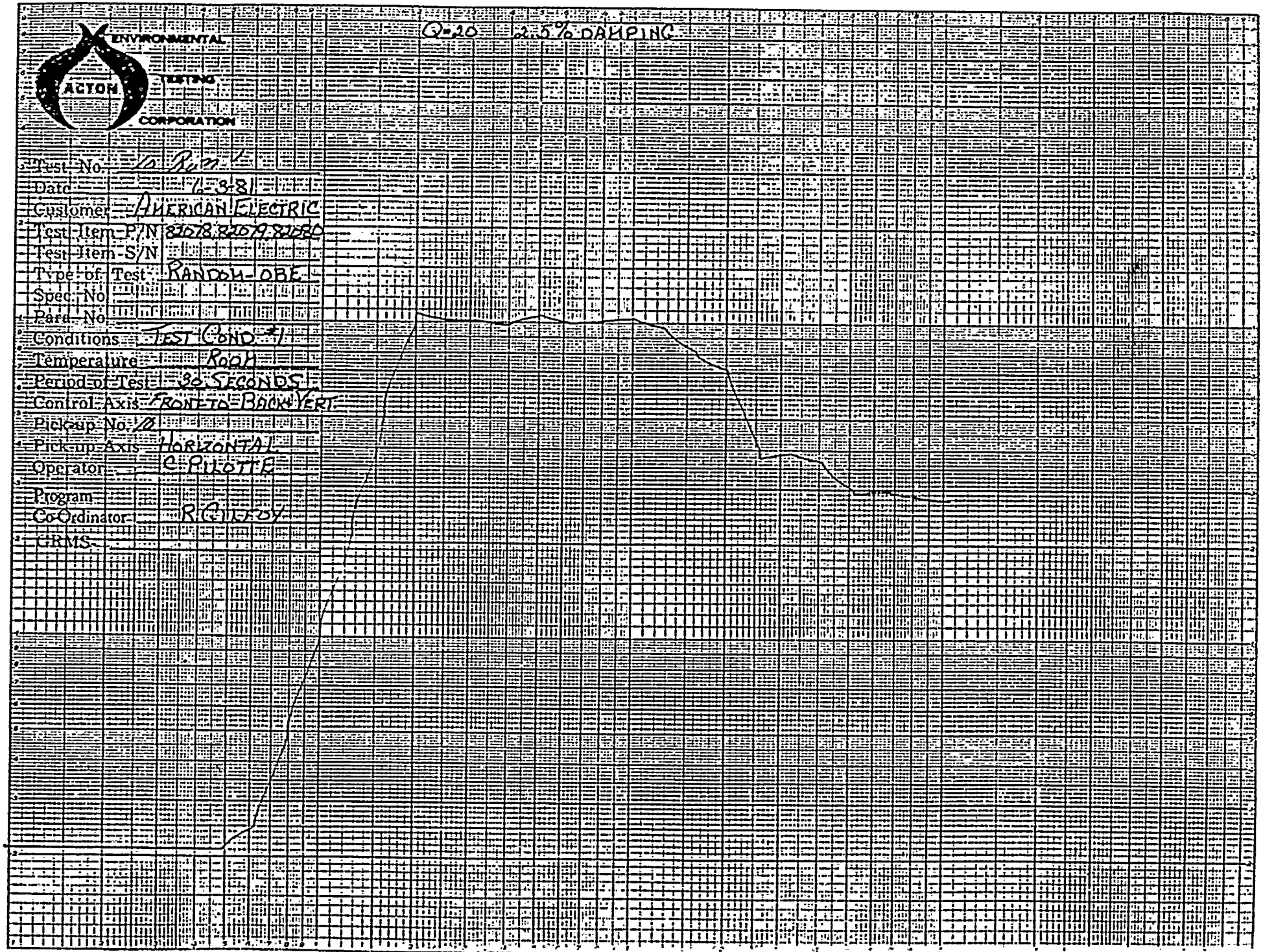
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 10 Run 1
Date 4-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R GILROY
GRMS



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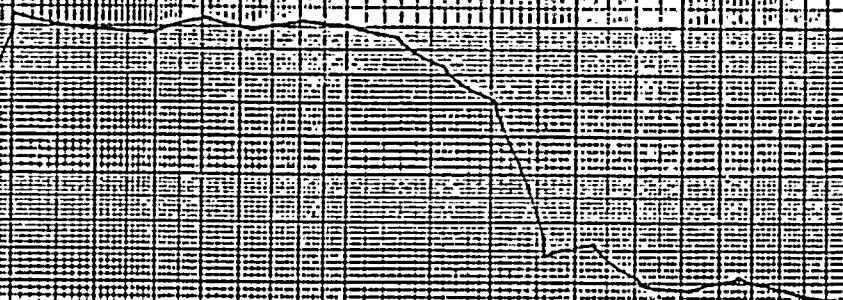
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R GILROY
GRMS



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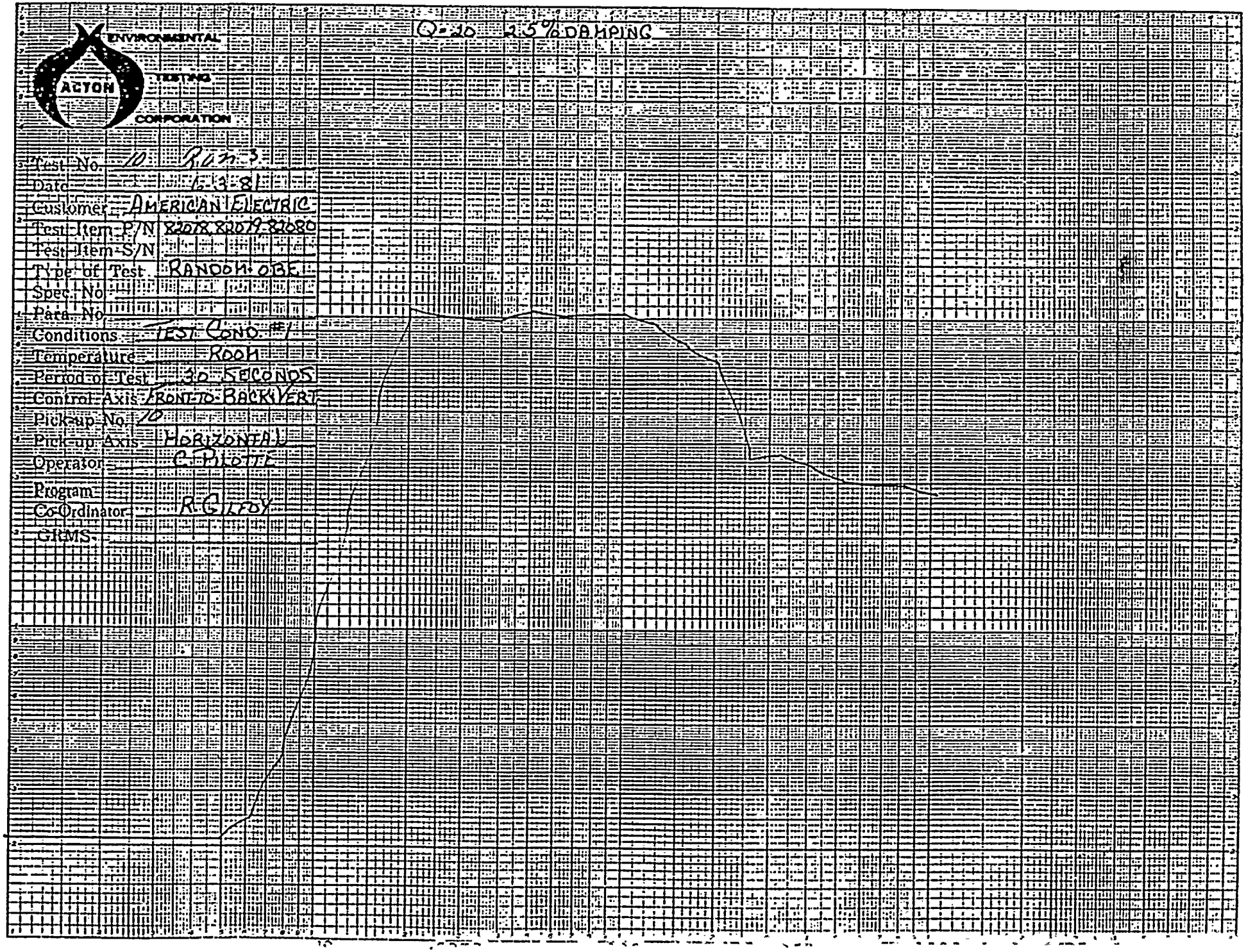
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 10 Rom 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL ACTION TESTING CORPORATION

Q-20 2.5% DAMPING

Test No. 10 RUN 9
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207, 8209, 8210
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. OILEY
GRMS

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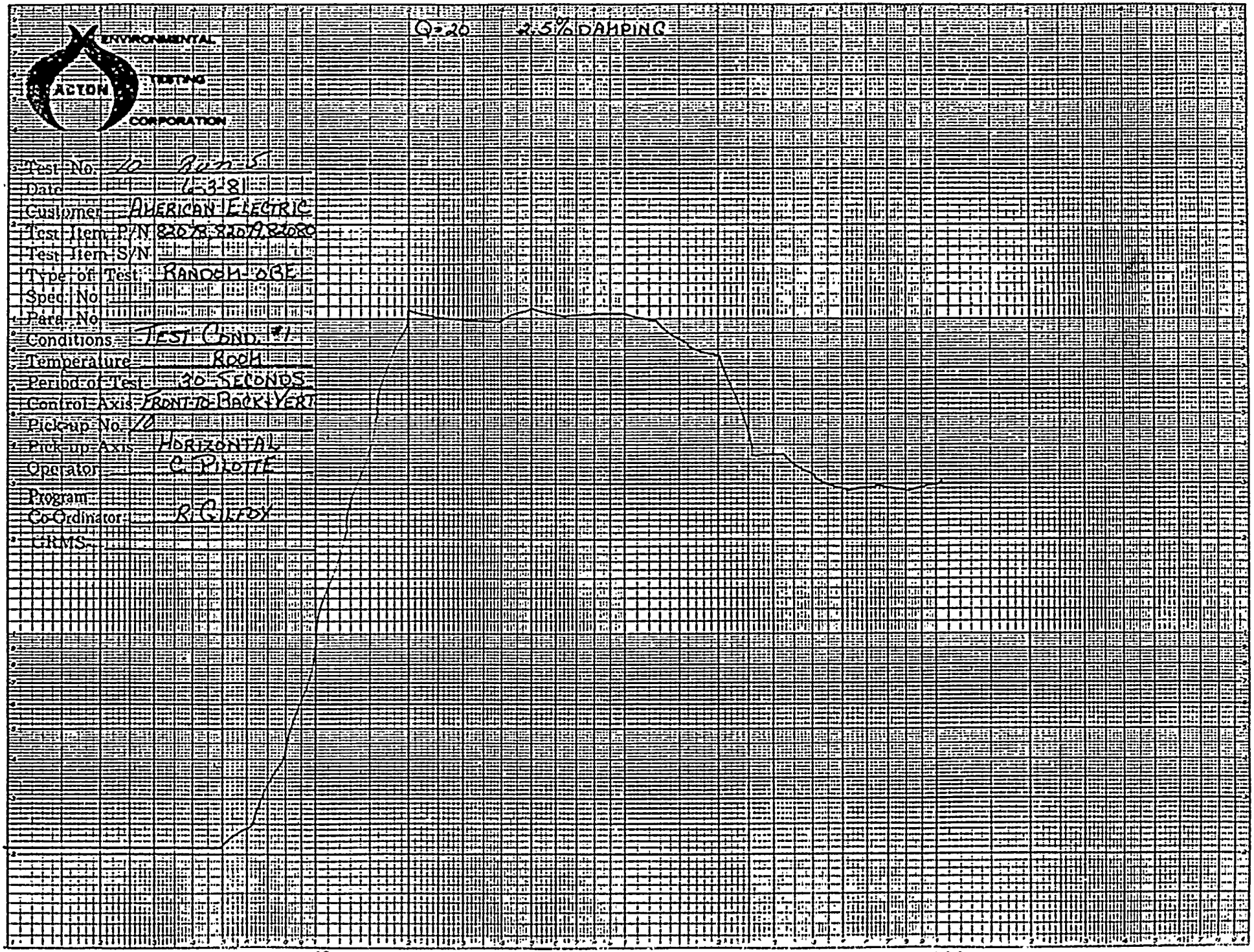
ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 10 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207B, 8207A, 8208C
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 -2.5% DAMPING

Test No. 20 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207, 8207, 8208
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PINOTTE
Program Co-Ordinator R. GILROY
GRMS

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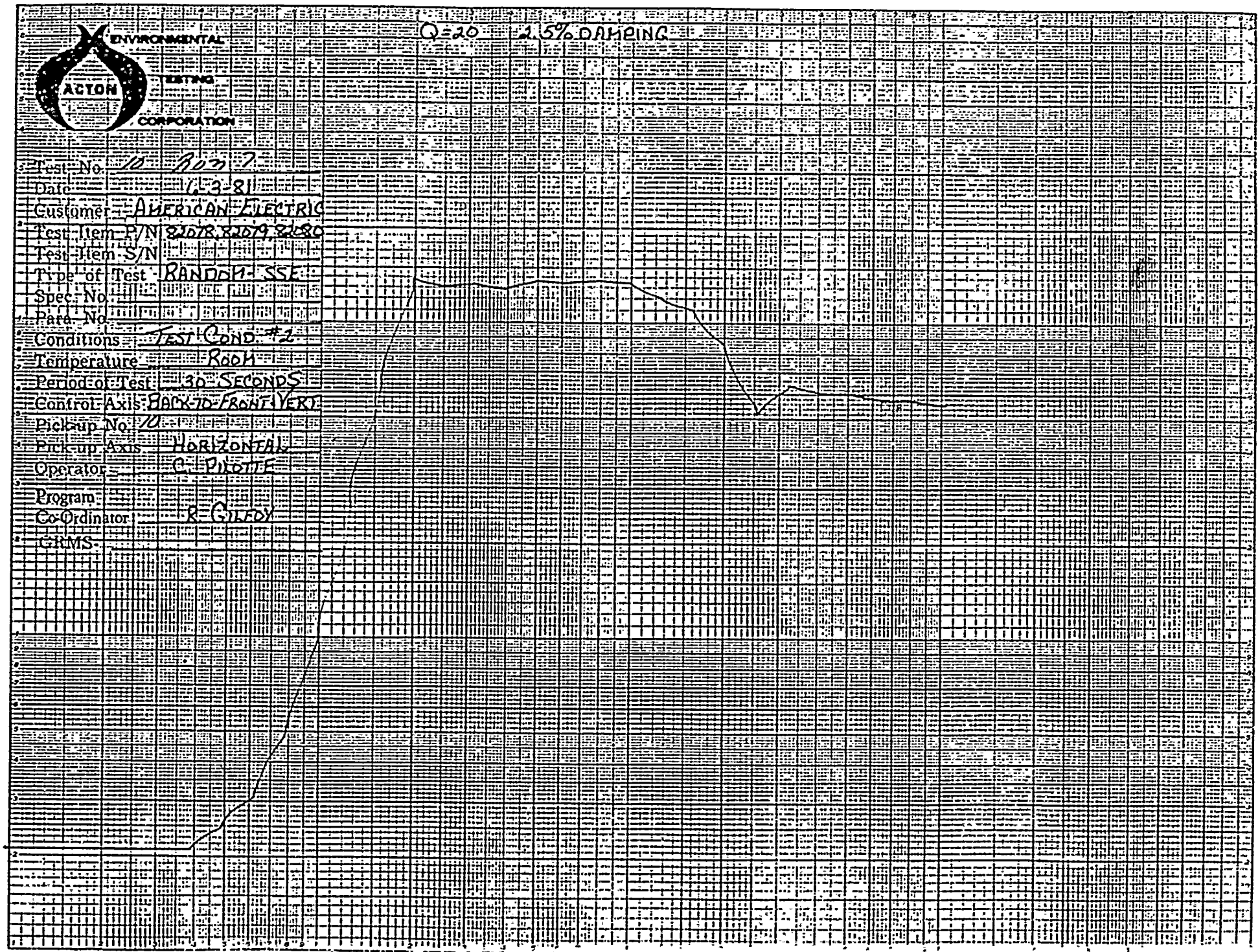
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 10 8037
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program Co-Ordinator R. GILFOY
GTMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 11 Rev 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT/VERT
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator A. PIOTTE
Program Co-Ordinator R. GILFOY
GRMS

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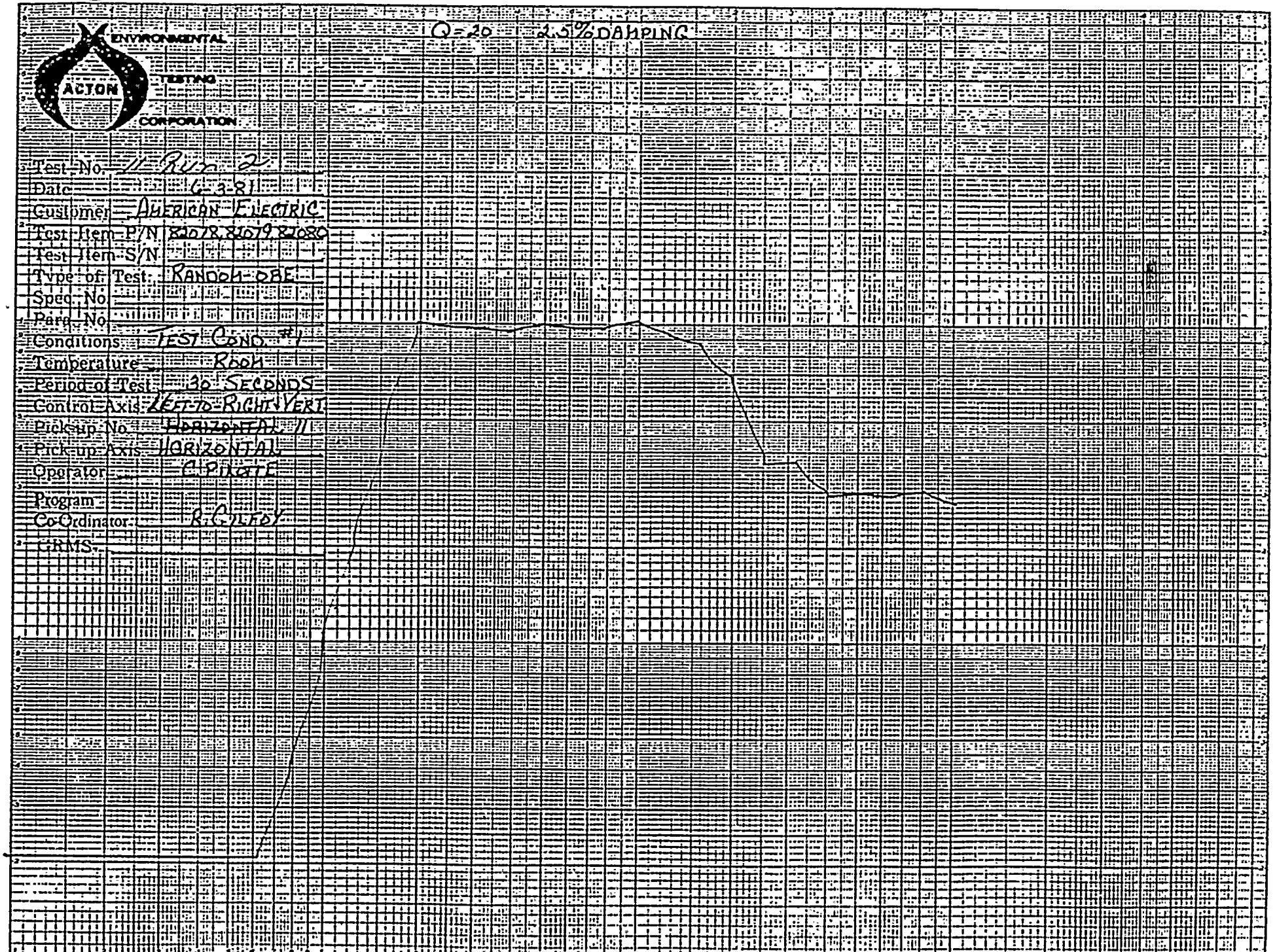
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q = 20 | 2.5% DAMPING

Test No. 1 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 81078, 81079 81080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pickup No ~~HORIZONTAL~~ 11
Pick-up Axis HORIZONTAL
Operator C. PIKATE
Program Co-Ordinator: R.C. LLOYD
GRMS



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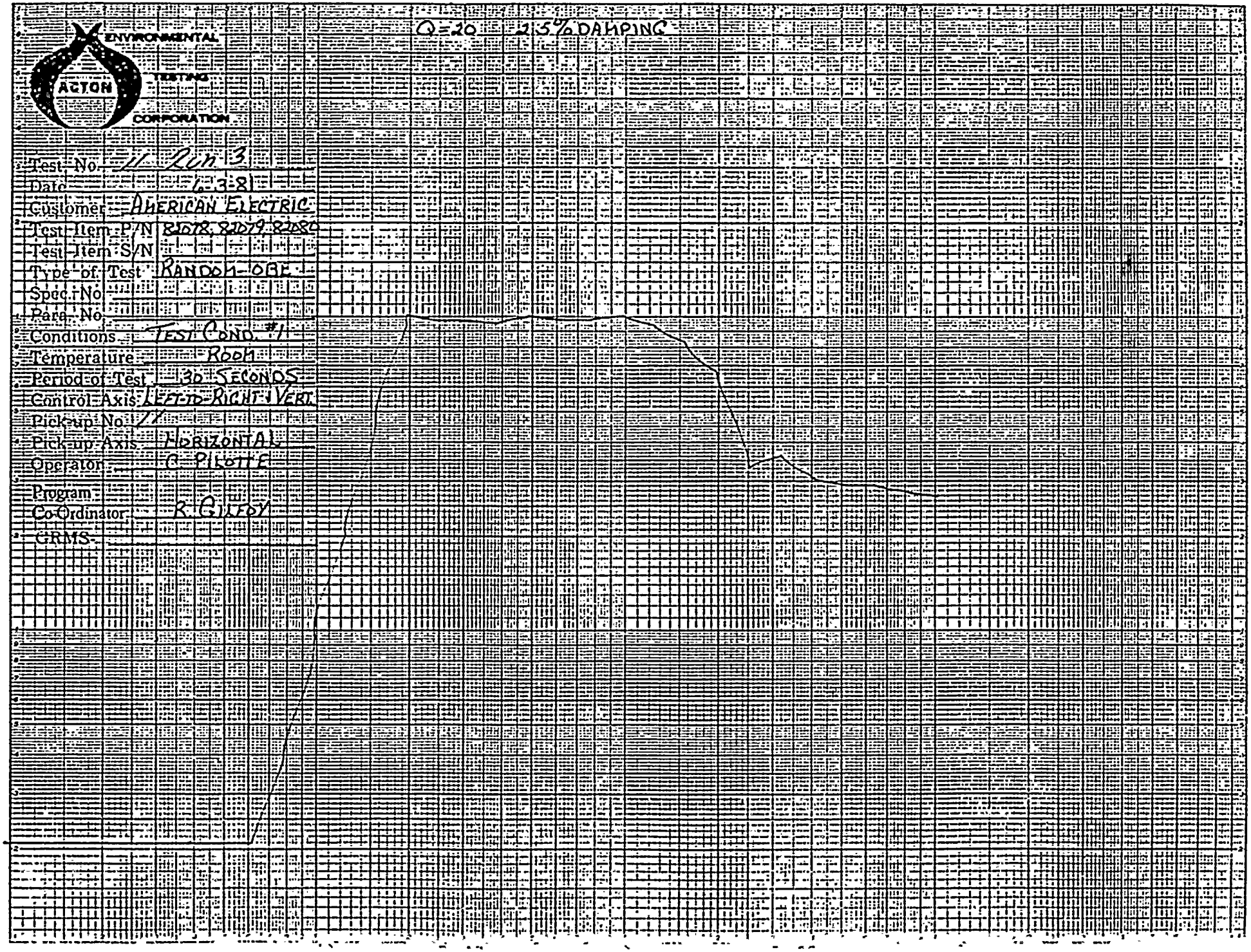
ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 20 — 2.5% DAMPING

Test No. 11 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No 11
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run-4
Date 1-31-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT-VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PRESTE
Program
Co-Ordinator R. GILROY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Axis
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 36 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator K. GILFOY
GRMS

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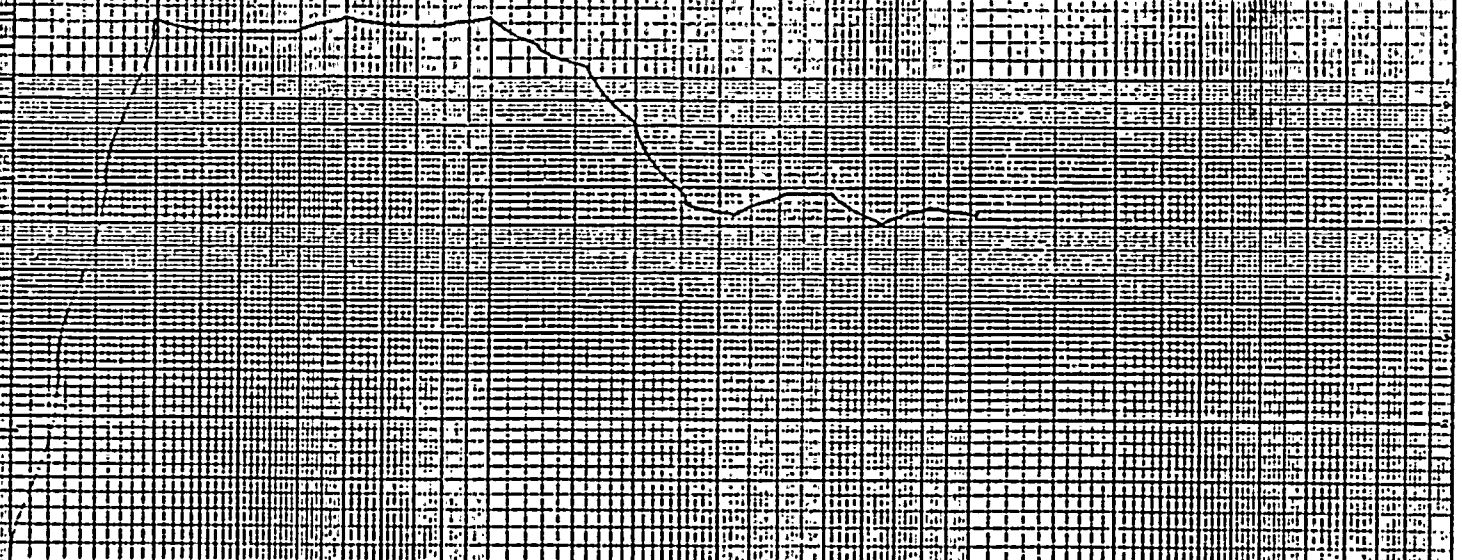
ACTON ENVIRONMENTAL TESTING CORPORATION

Q-20 2.5% DAMPING

Test No. 1 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 32 SECONDS
Control Axis LEFT-RIGHT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PITOTTE
Program
Co-Ordinator R. GILROY
GRMS



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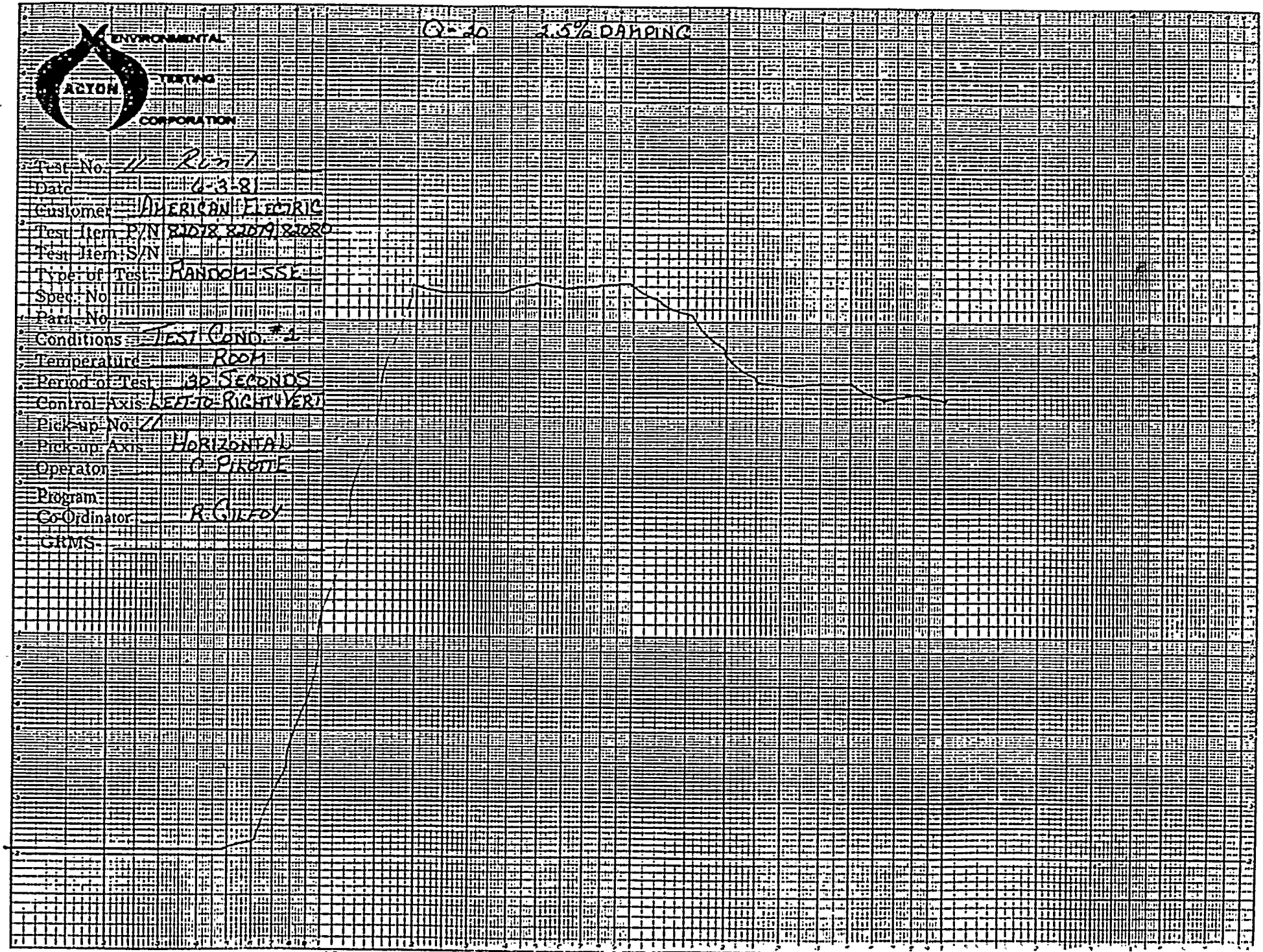
ACTON ENVIRONMENTAL TESTING CORPORATION

Q-20 2.5% DAMPING

Test No. 11 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 & 82080
Test Item S/N
Type of Test RANDOM SSE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 120 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PIROTTE
Program Co-Ordinator R. GILROY
GRMS



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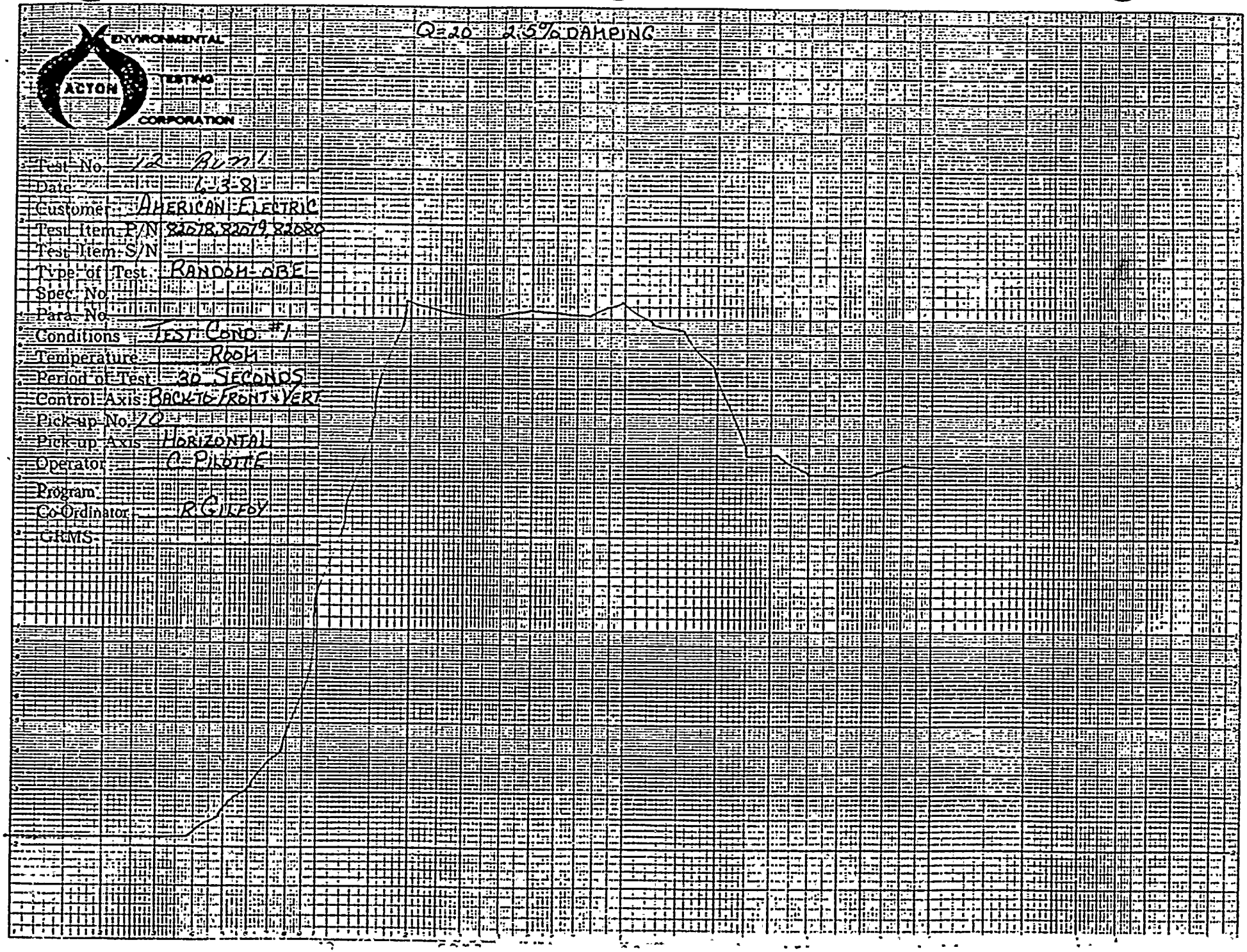
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT & VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PLOTTE
Program
Co-Ordinator R.G. REEDY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No 12 Run 2
Date 1-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078-82079-82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT-YOKE
Pick-up No 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
CRMS

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HERTZ 100 HERTZ 1000

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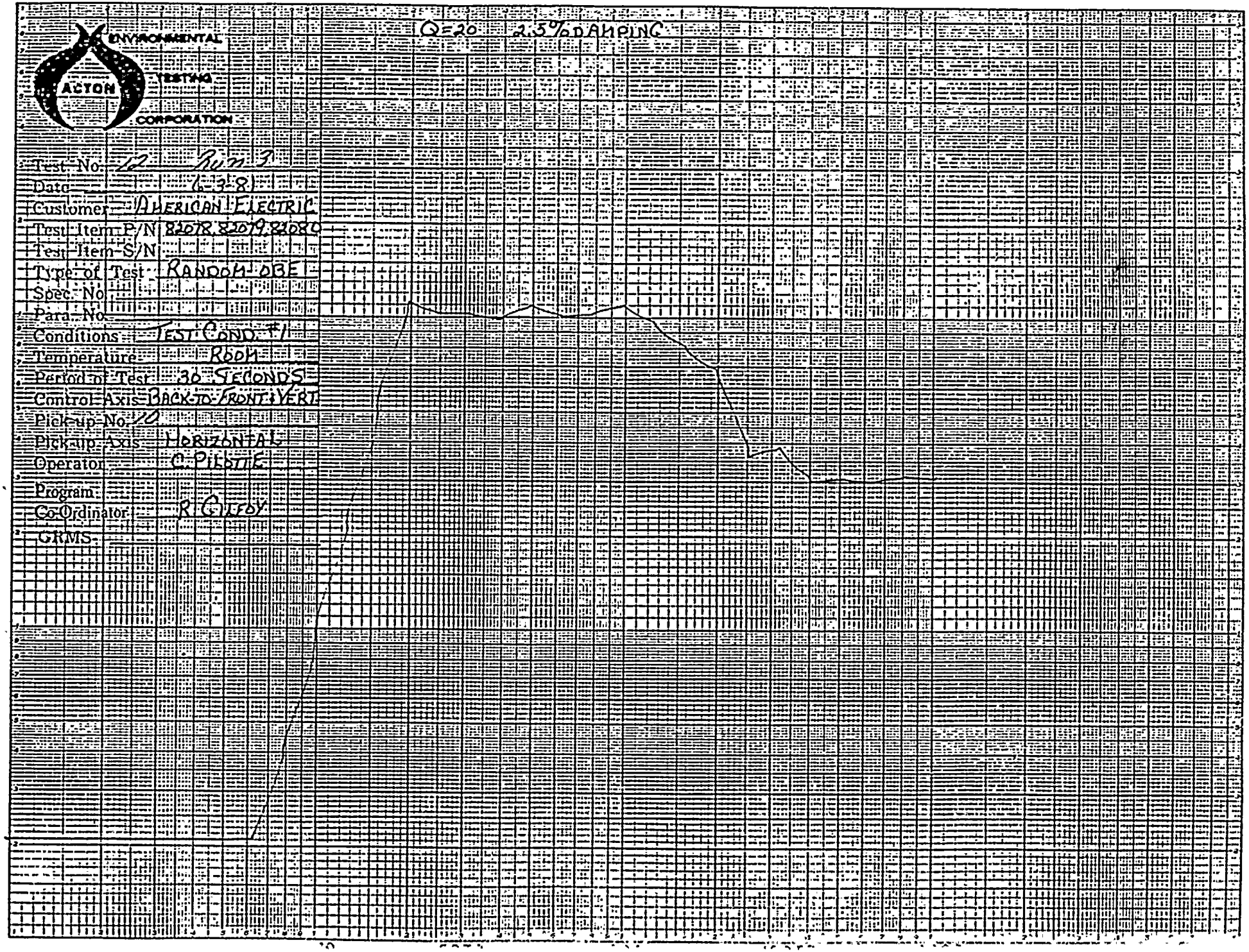
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 3
Date 6-3-8
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT & VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLEDY
GRMS



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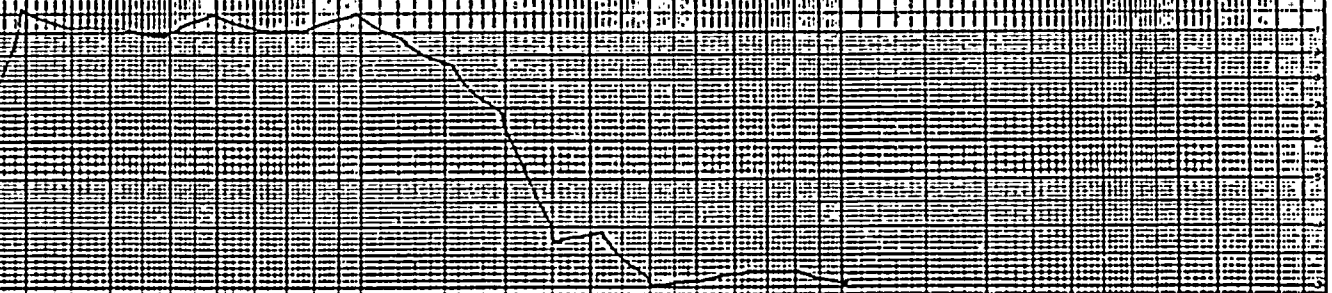
ENVIRONMENTAL TESTING ACTON CORPORATION

Q = 20 2.5% DAMPING

Test No. 12 RUN 4
Date 1-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078,82079,82080
Test Item S/N
Type Lot Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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10 HERTZ 100 HERTZ 1000

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM OBE
Spec. No
Para. No
Conditions TEST COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis BACK-TO-FRONT & VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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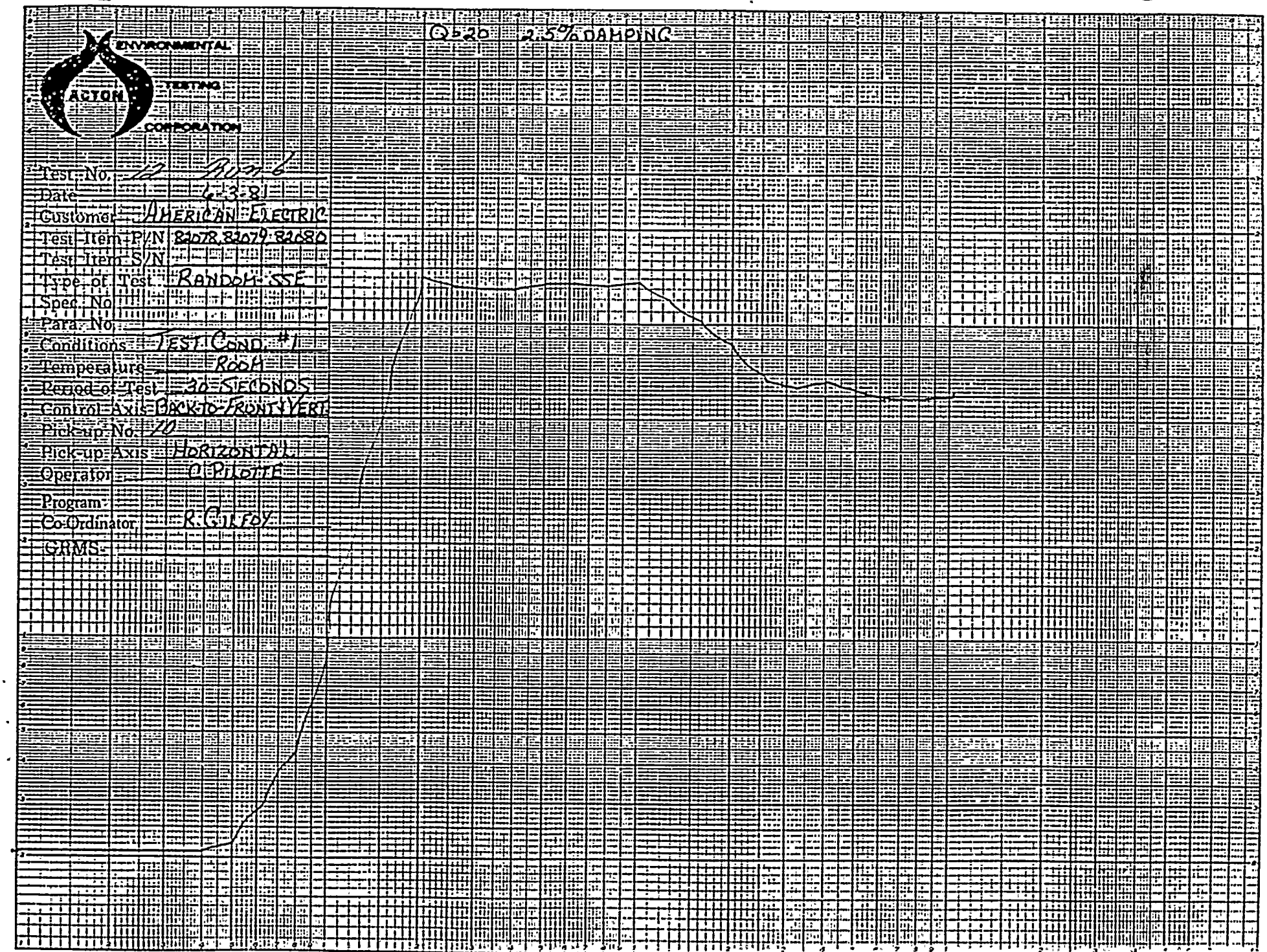
Q=20 2.5% DAMPING

ACTION ENVIRONMENTAL TESTING CORPORATION

Test No. 12 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM SSE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 2
Date 4-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 81078, 81079, 81080
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 36 SECONDS
Control Axis BACK-TO-FRONT+VERT
Pick-up No 11
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R GILFOY
GRMS

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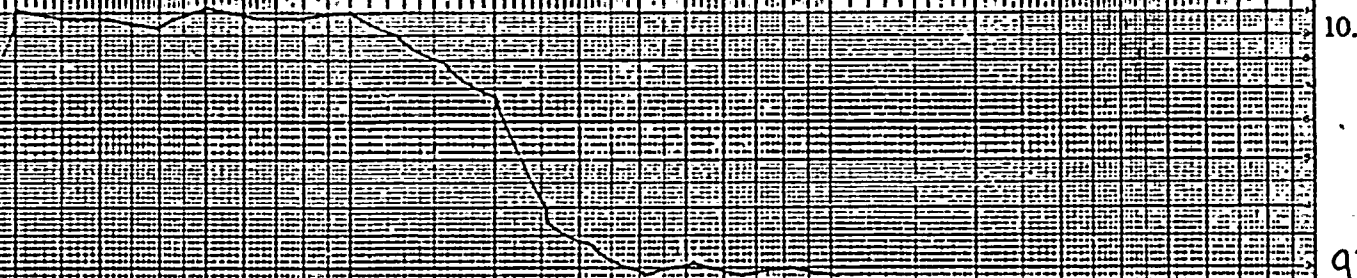
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 9 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N 11
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 9 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILROY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207, 8209, 8210
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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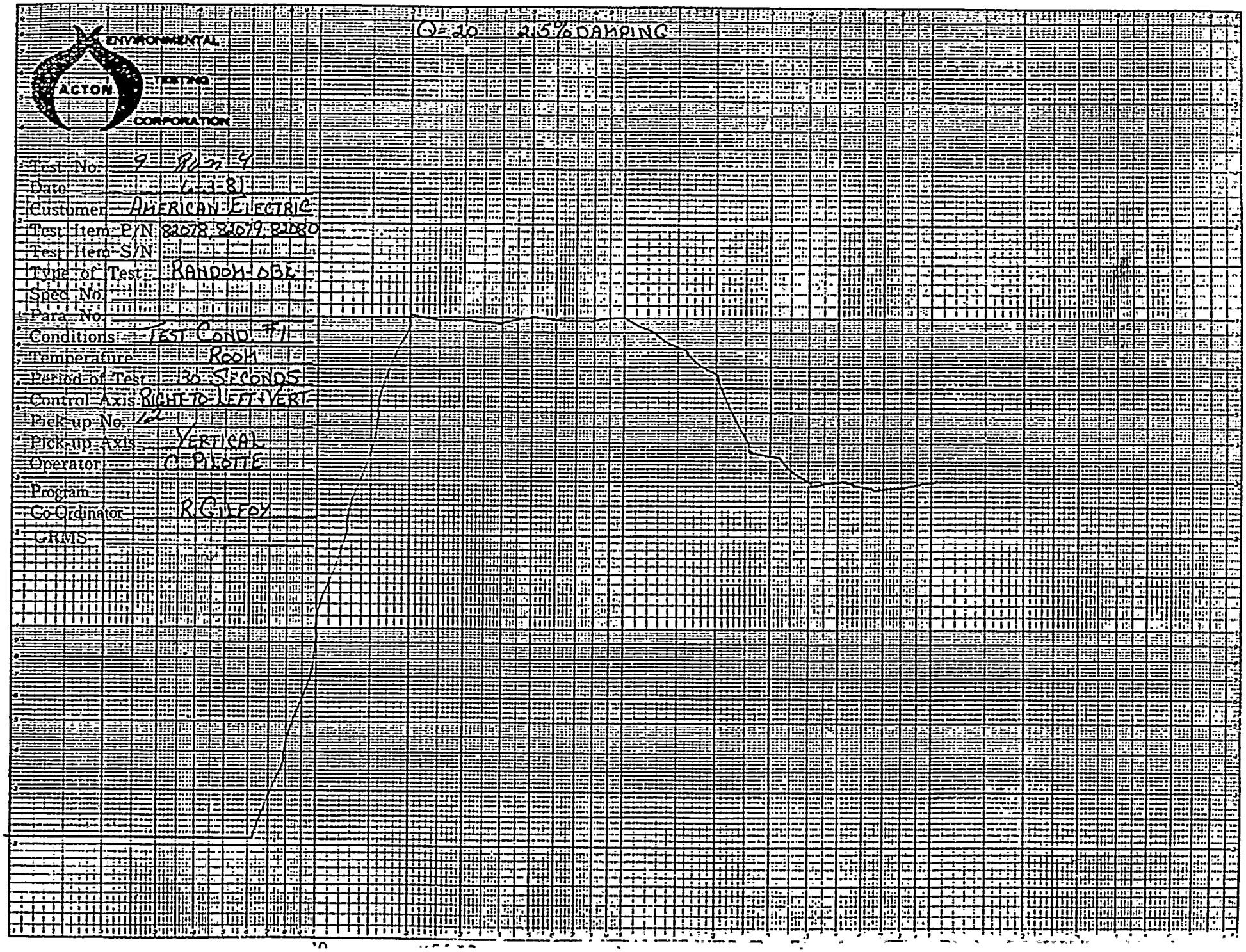
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 9 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT↓VERT
Pick-up No. 1/2
Pick-up Axis VERTICAL
Operator C PILOTE
Program Co-Ordinator R G LEDY
GRMS



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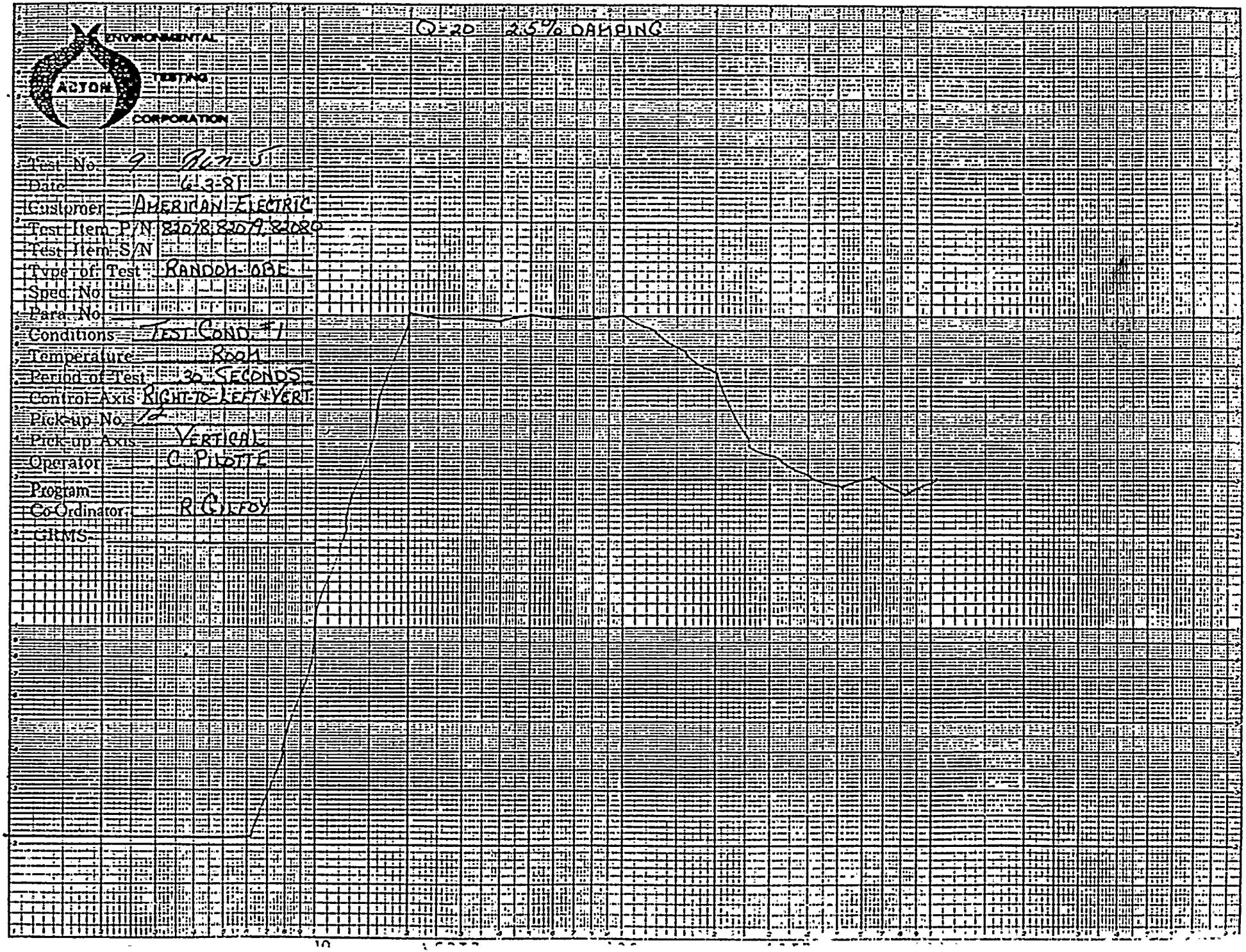
ENVIRONMENTAL
AZTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 9 RUN 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program Co-Ordinator R GILFOY
GLEMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 = 2.5% DAMPING

Test No. 2 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078,82079,82080
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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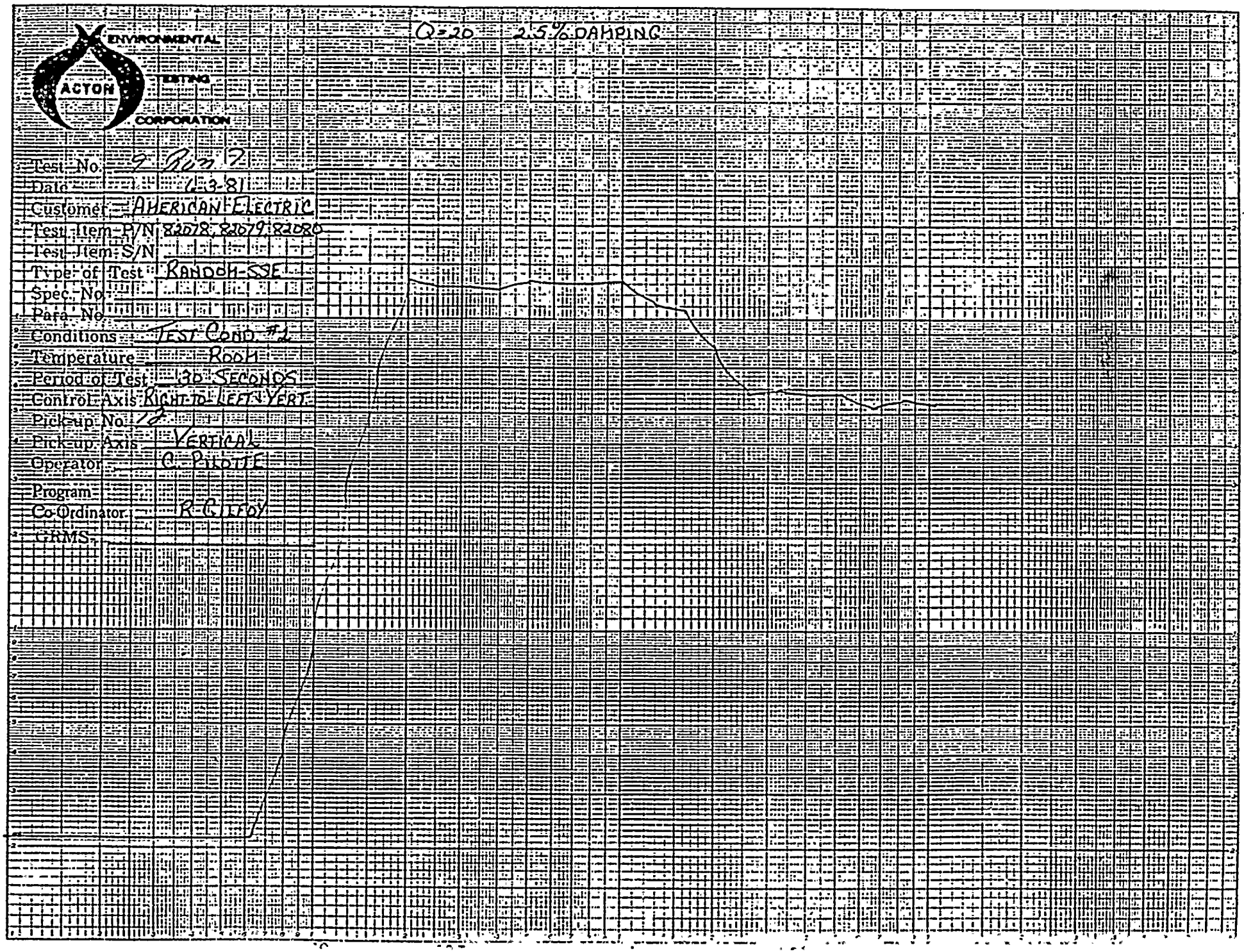
ENVIRONMENTAL
ACTON
TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Run 7
Date 4-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. CIFFOY
GRMS



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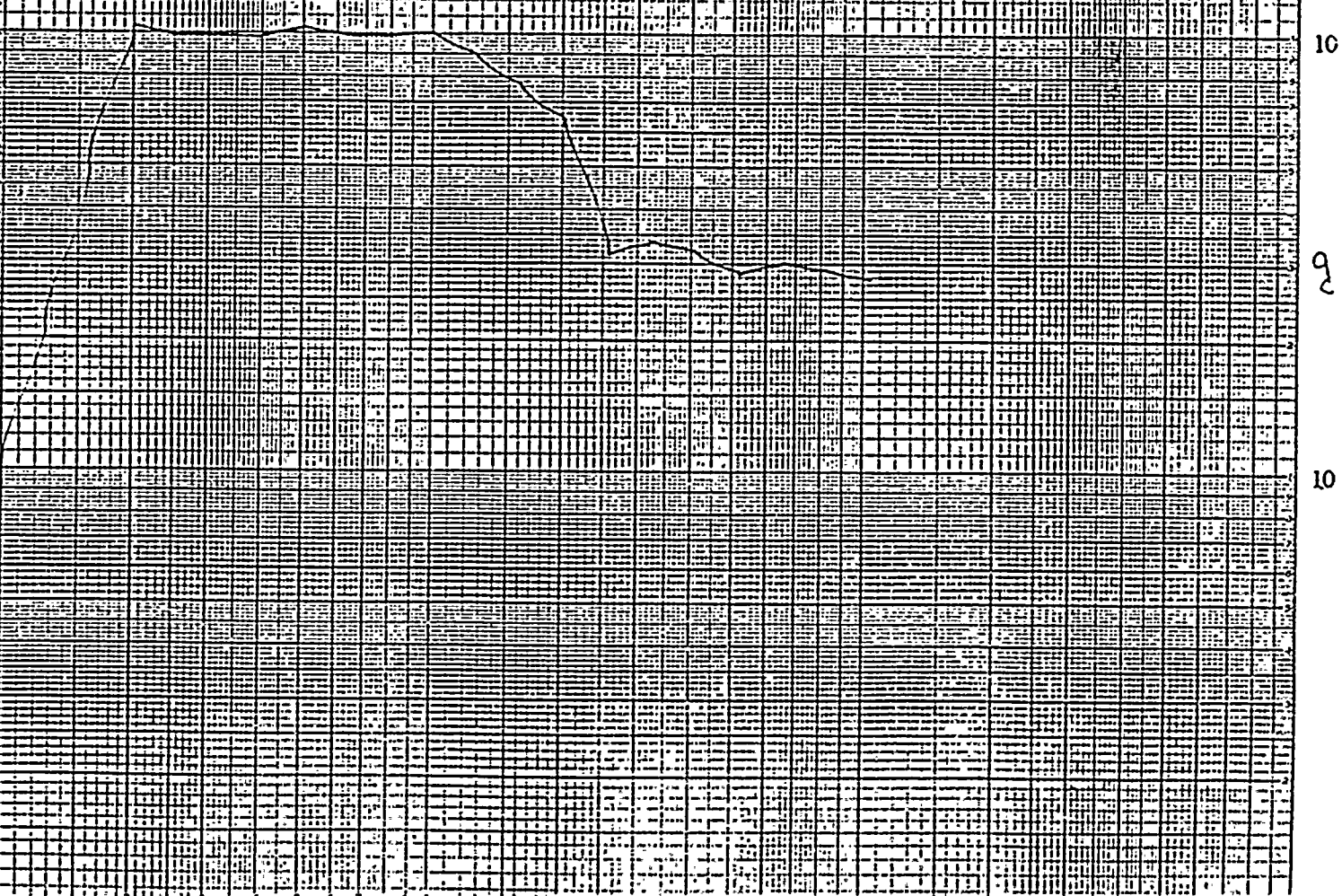
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 10 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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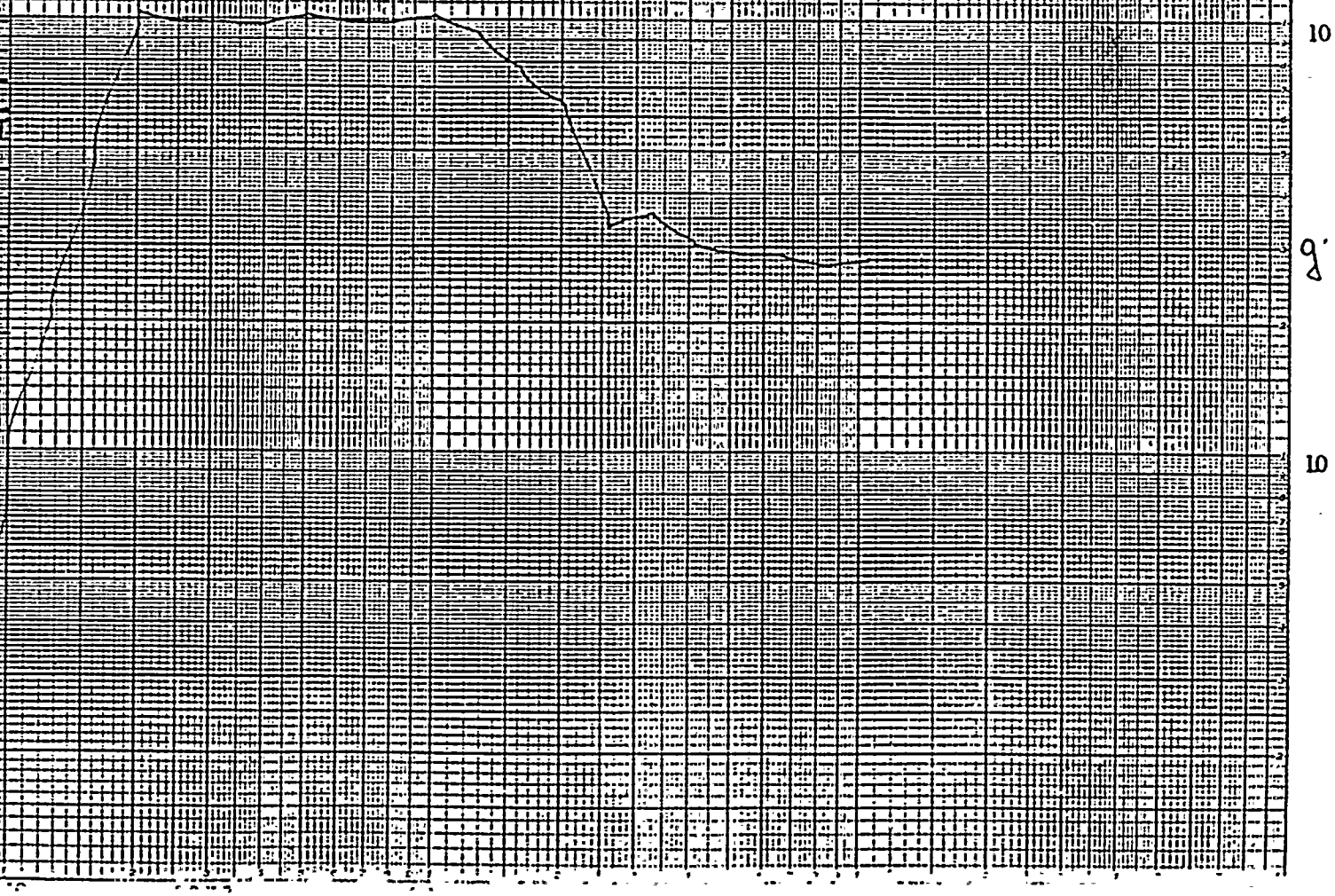
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Rim 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8078, 8079, 8080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK, VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. CLEROY
GRMS



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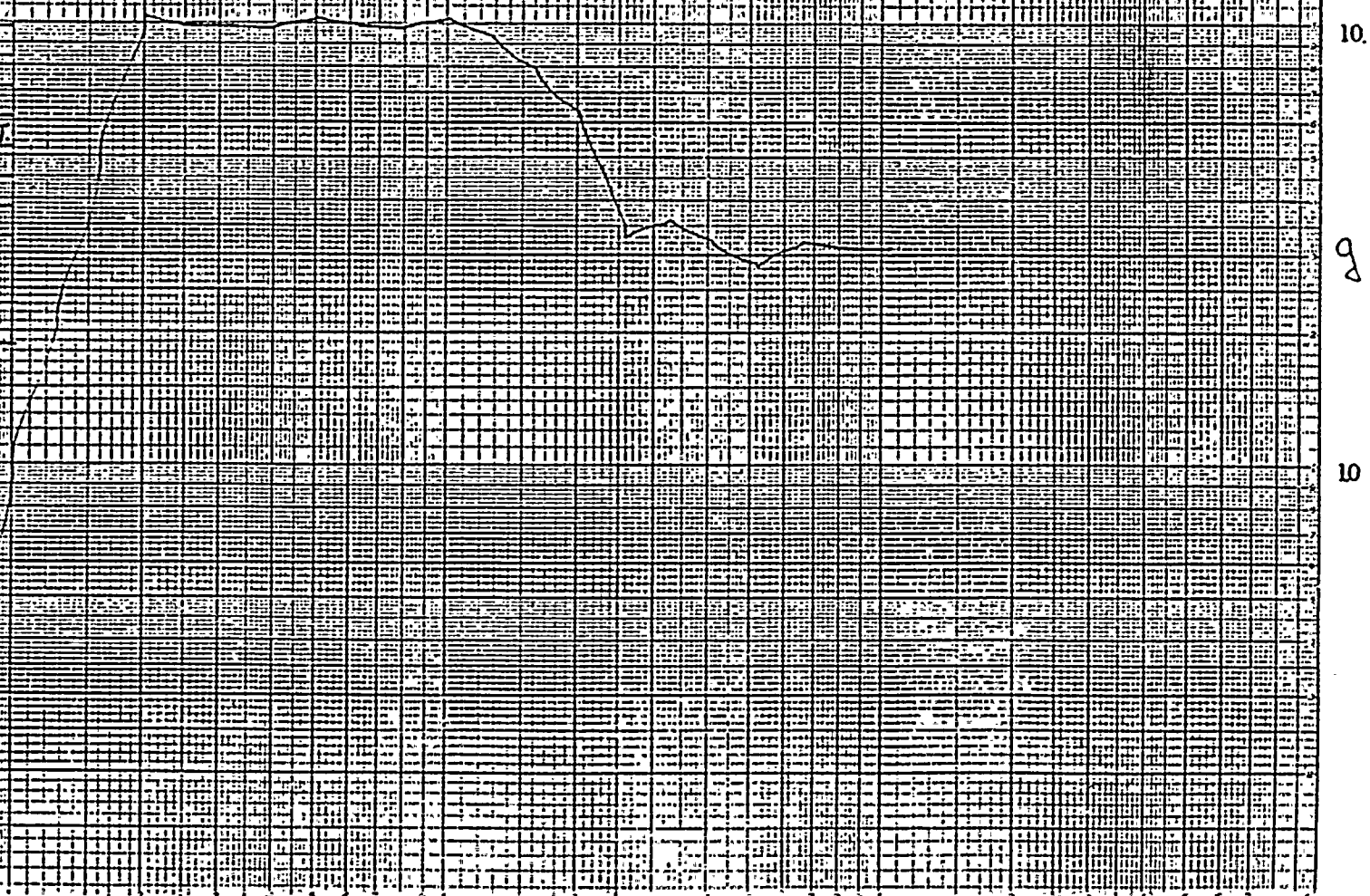
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis FRONT-TO-BACK, VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
CRMS



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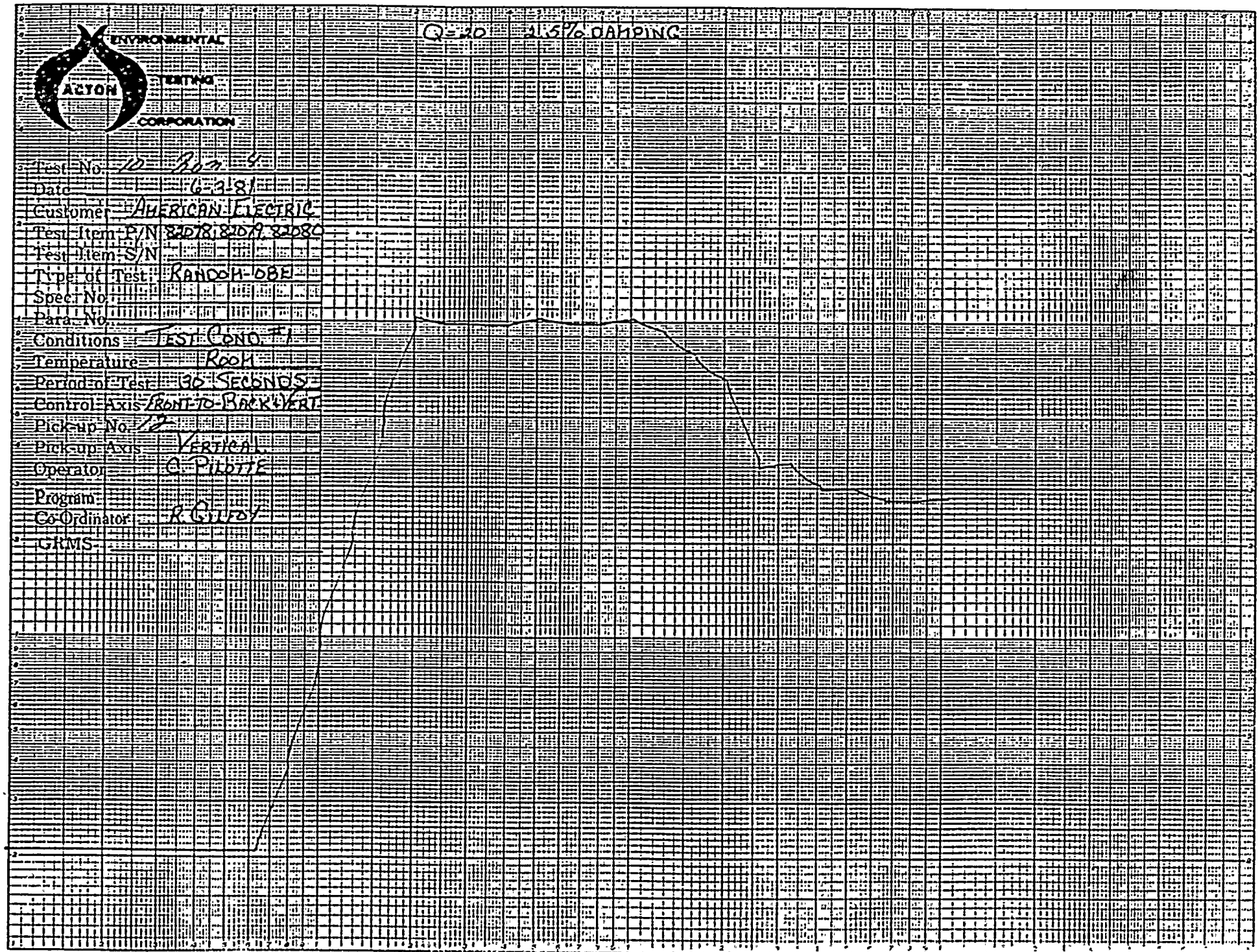
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 10 Run 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GUIDY
GRMS



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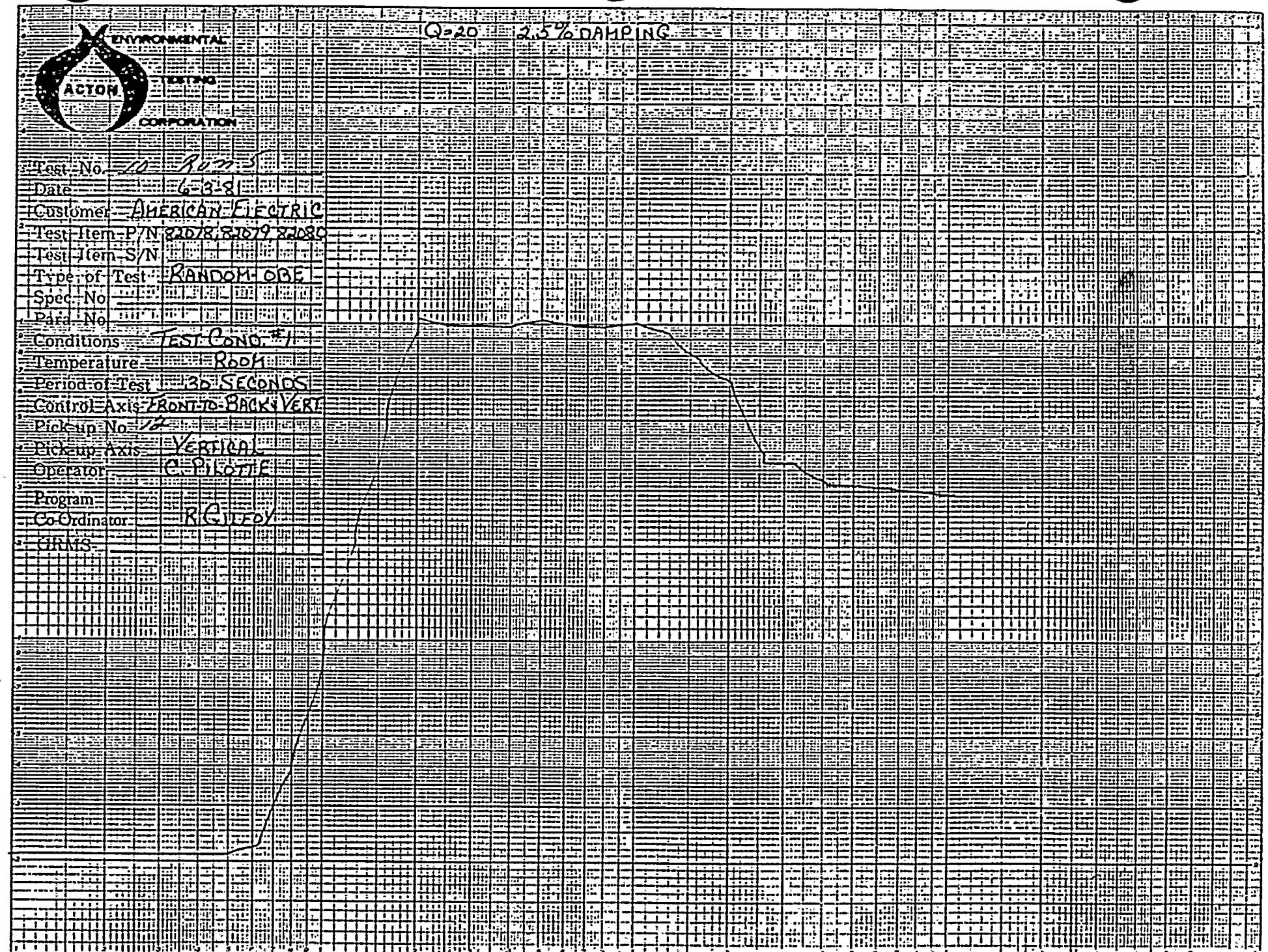
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 10 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GUIDOY
GRMS



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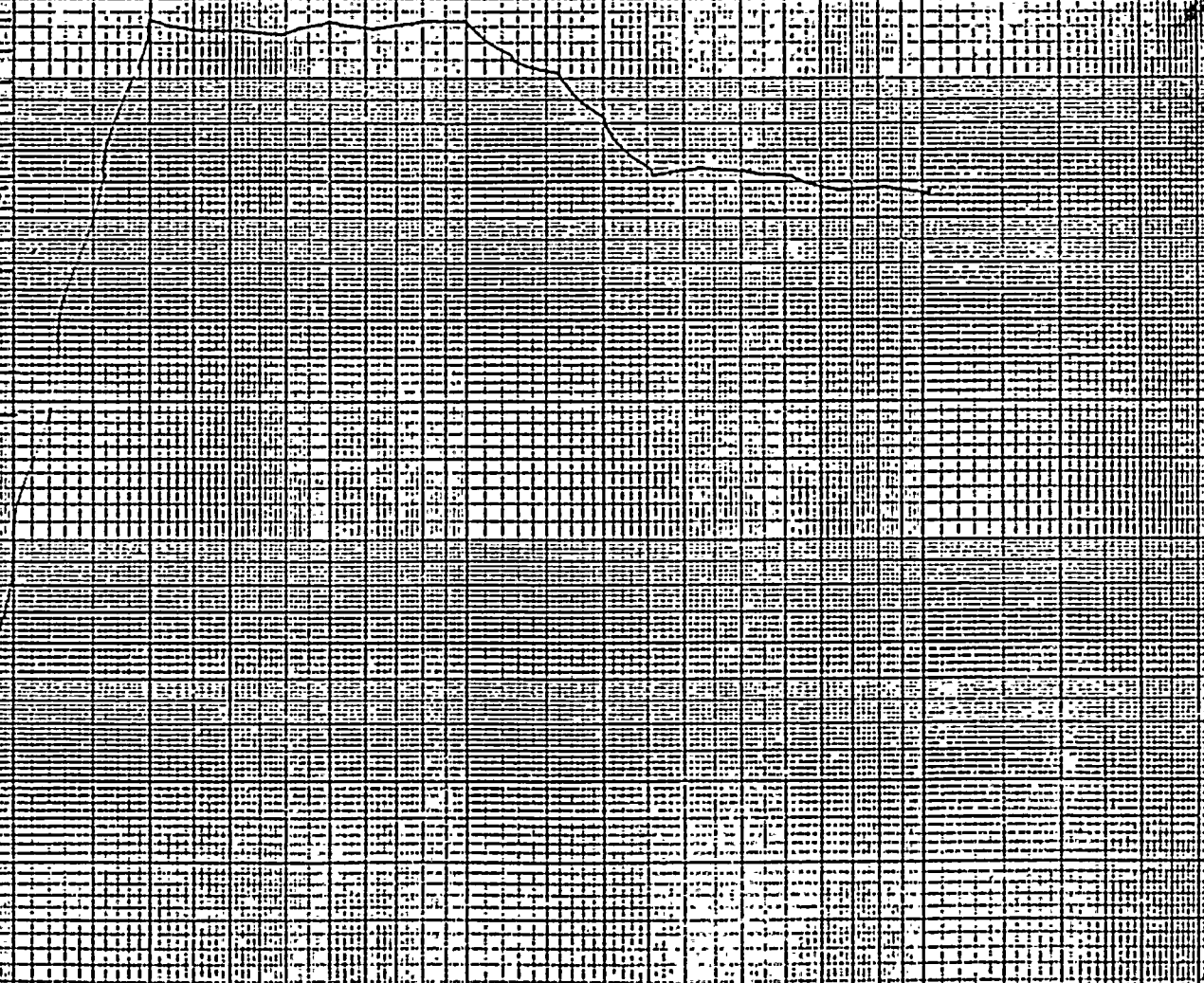
ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program:
Co-Ordinator R. GILFOY
GRMS



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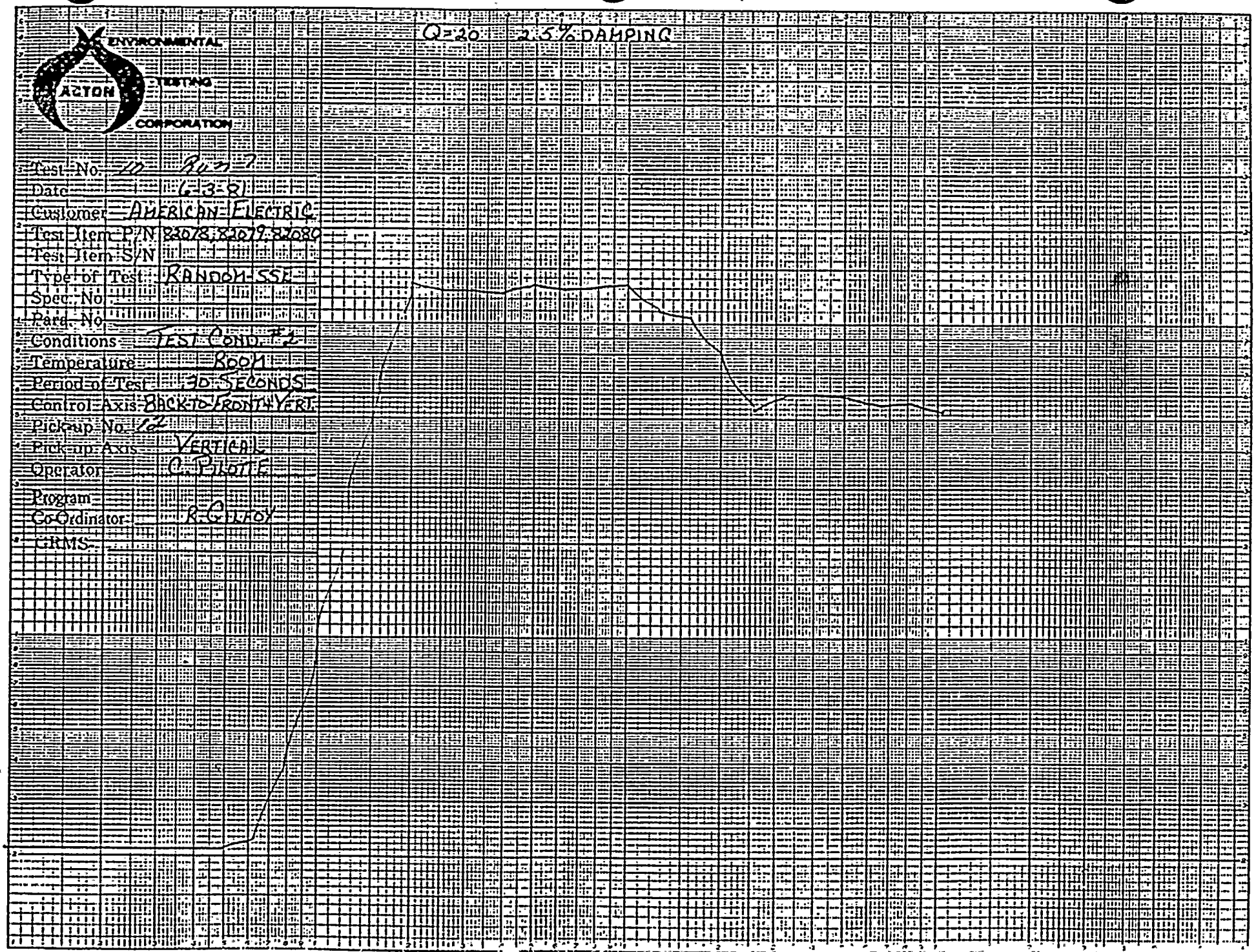
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 10 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec. No
Part. No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT + VERT.
Pickup No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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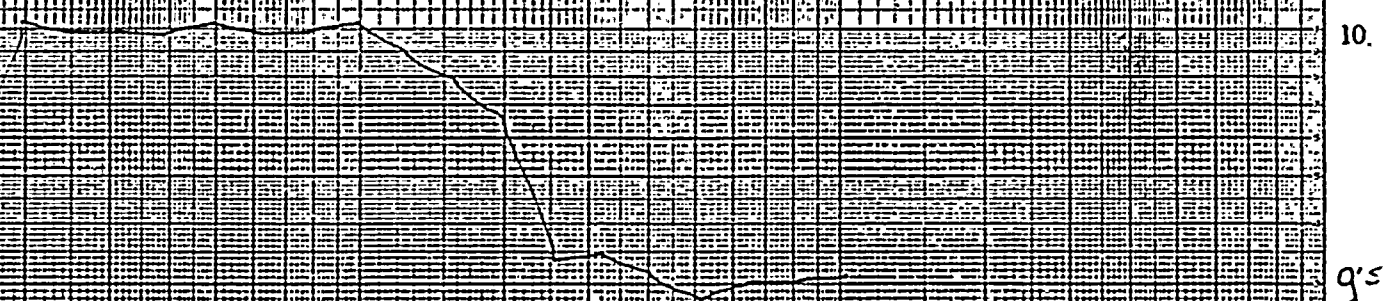
ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-RIGHT+VERT
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R.G. FOY
GRMS



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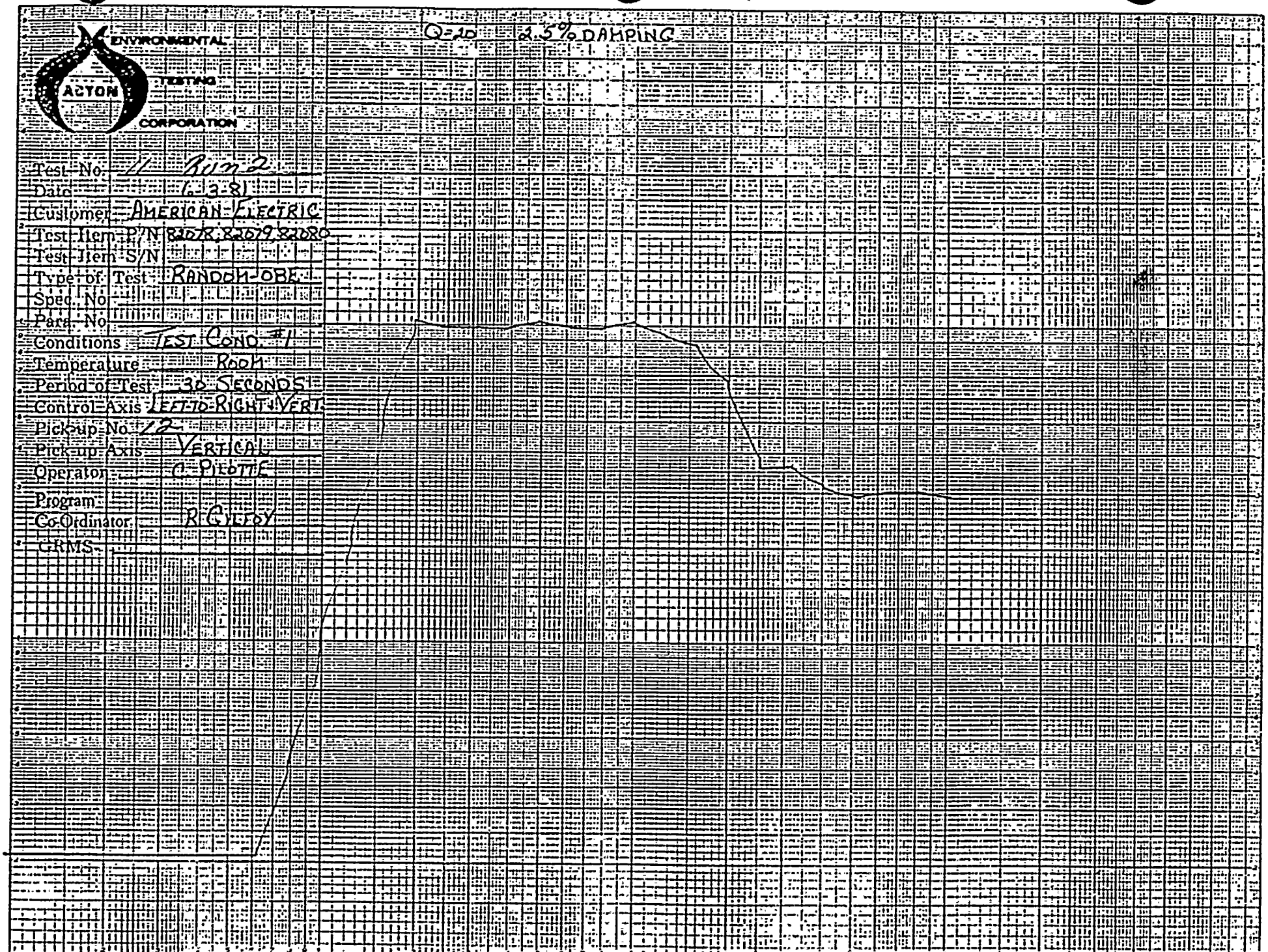
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 11 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT, VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PIEDTE
Program
Co-Ordinator R. GYLFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No 11 Run 3
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST-COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis LEFT-TO-RIGHT/VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator K.G. FOX
GRMS

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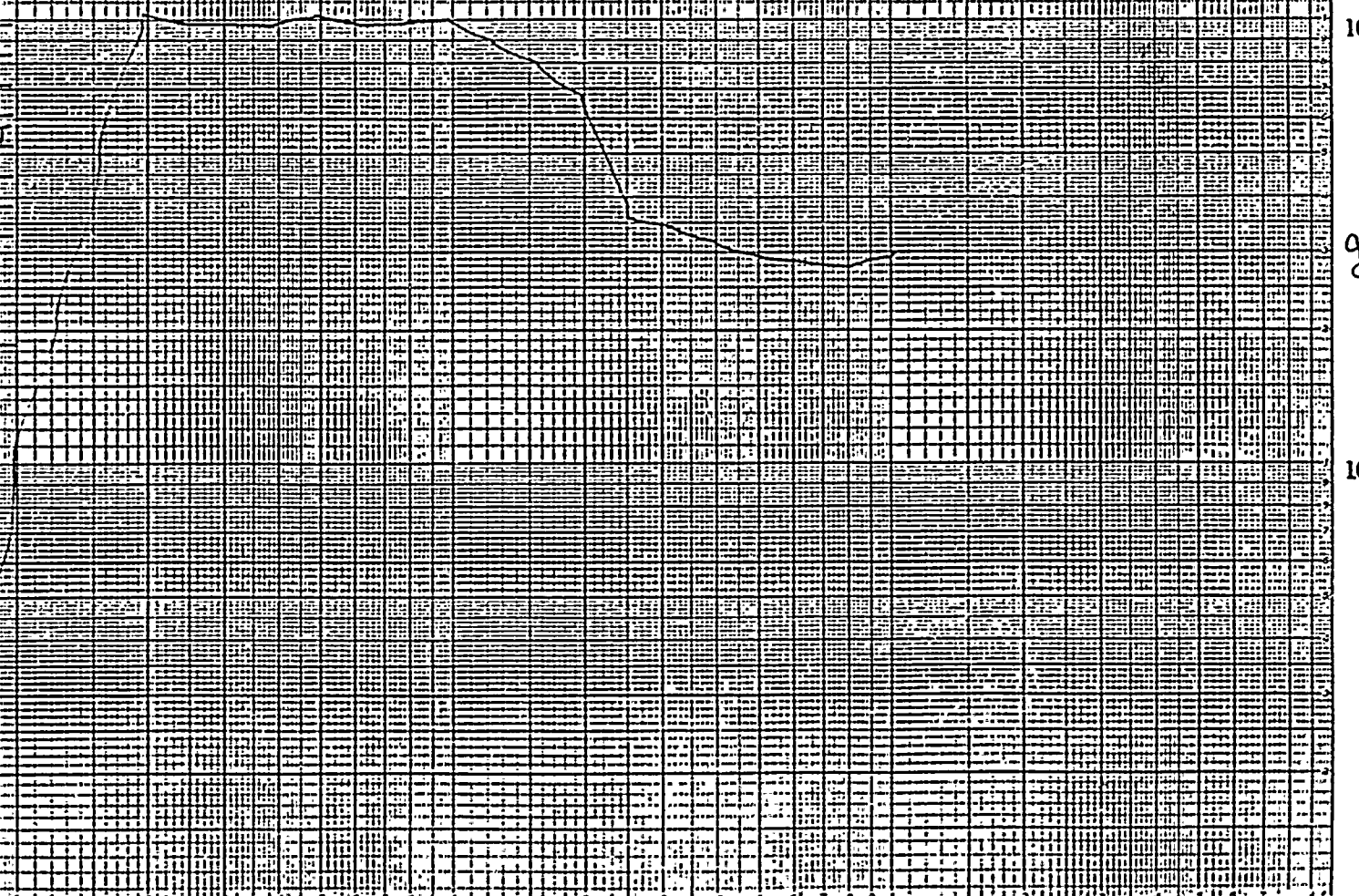
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 - 2.5% DAMPING

Test No. 11 RUN 4
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No 72
Pick-up Axis VERTICAL
Operator C PILOTTE
Program Co-Ordinator R GILROY
GRMS



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ENVIRONMENTAL TESTING
ACTON
CORPORATION

Q=20 2.5% DAMPING

Test No. 11 20 of
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079 & 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST-COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C-PILOTTE
Program Co-Ordinator R.C. TROY
GRMS

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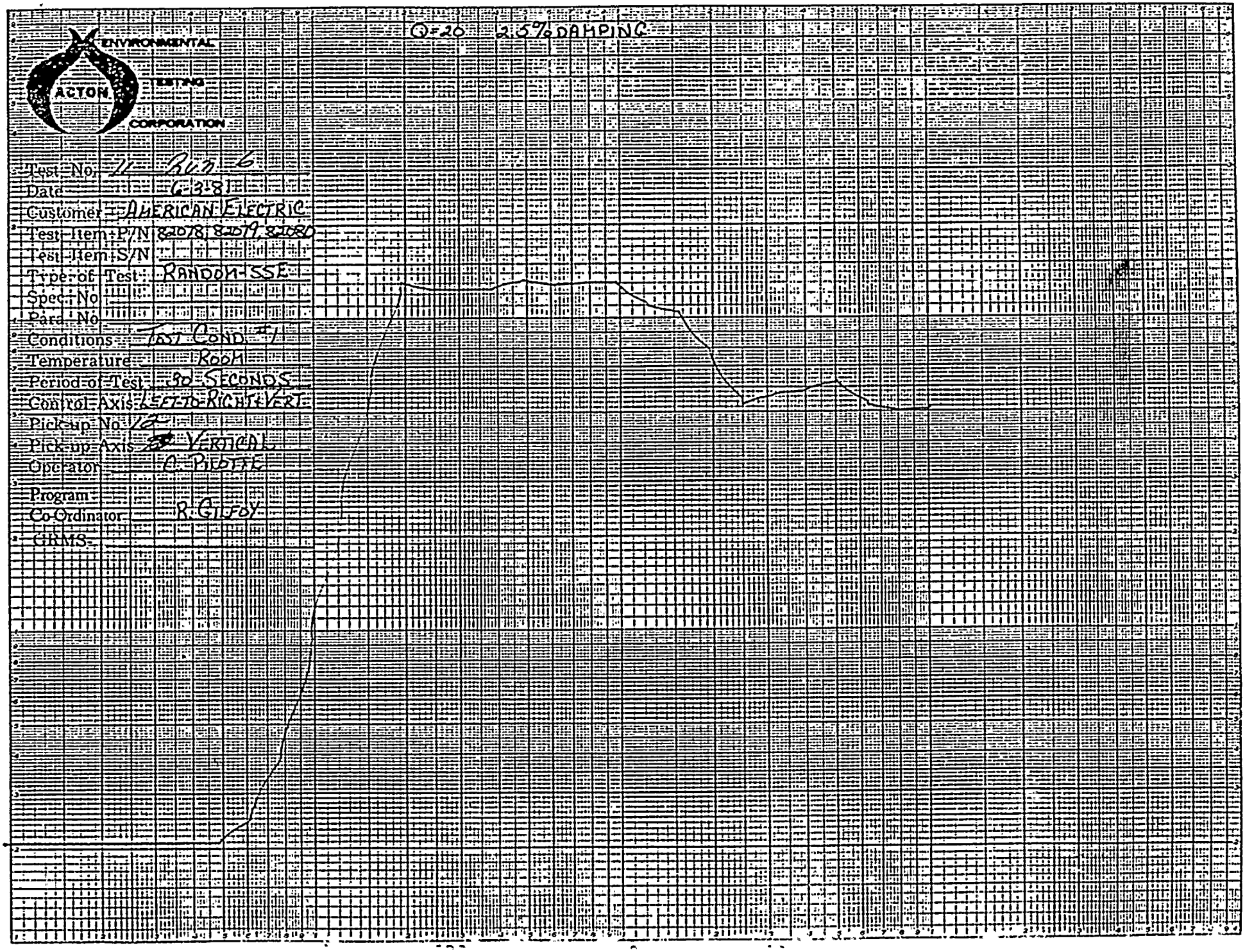
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Run 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis L-R-T-O-RIGHT+VERT
Pick-up No V2
Pick-up Axis VERTICAL
Operator C. PIDDIE
Program Co-Ordinator R. GILFOY
GRMS



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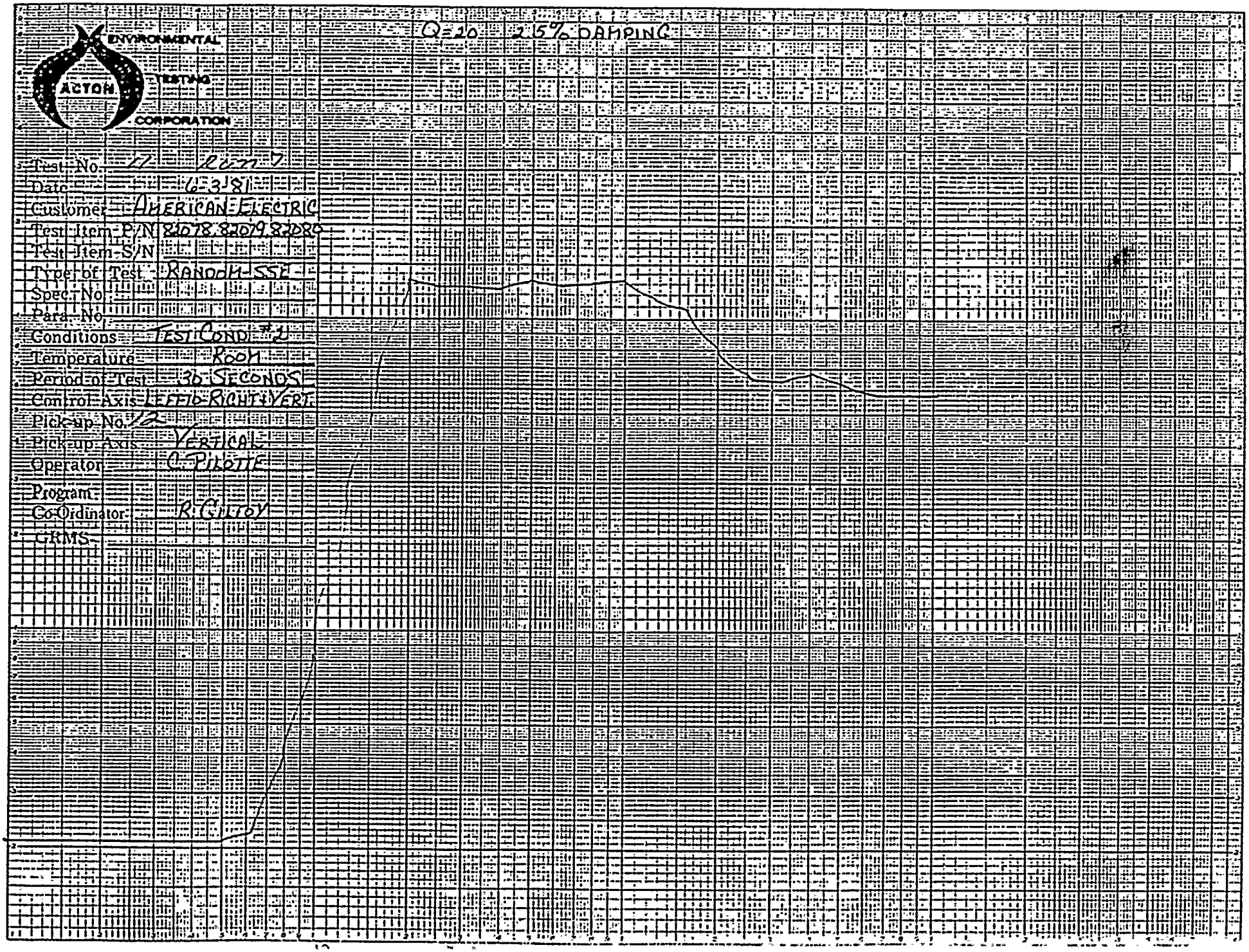
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Run 7
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 36 SECONDS
Control Axis LEFT & RIGHT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS



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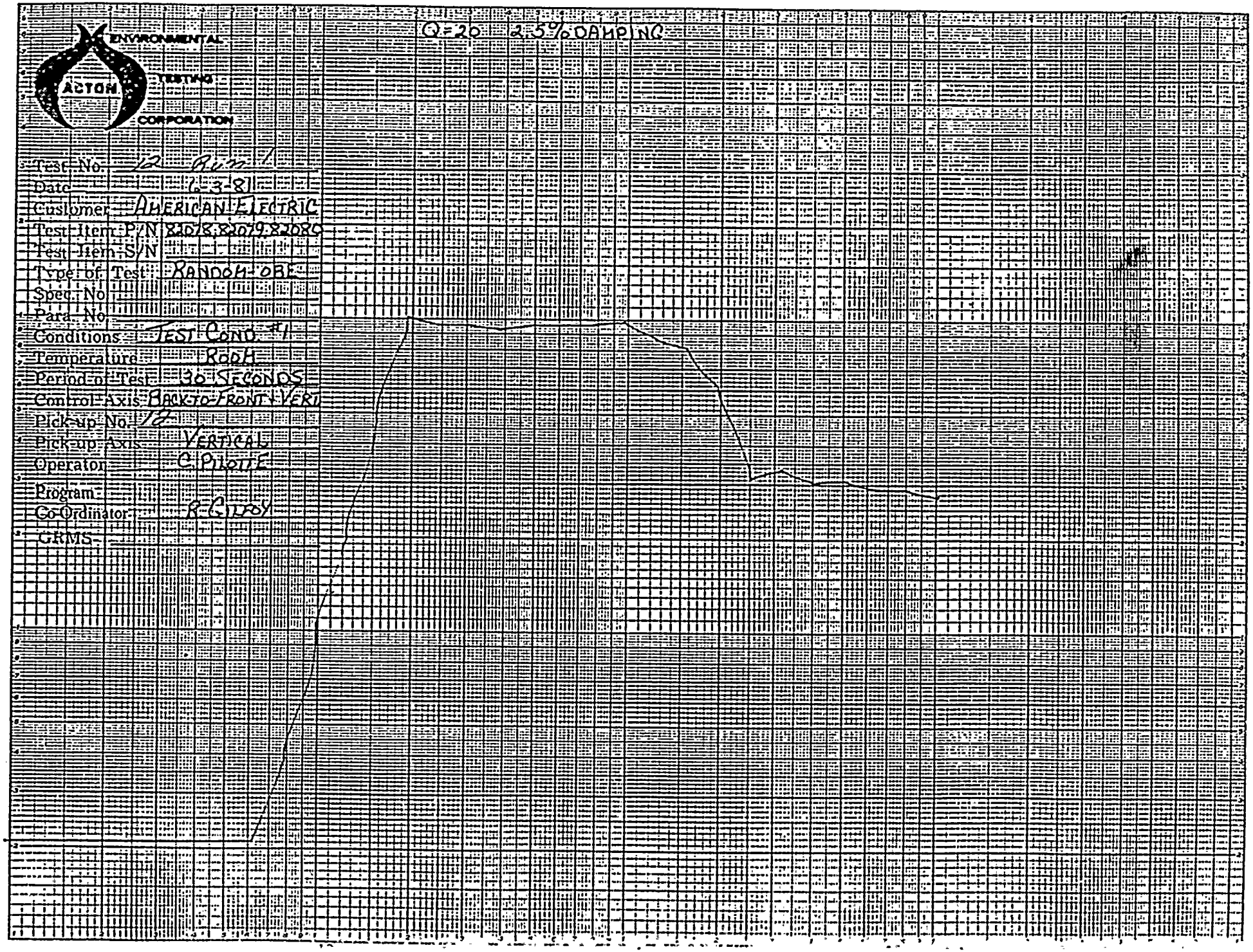
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 12 Rem 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 8207,8207,8208
Test Item S/N
Type of Test RANDOM OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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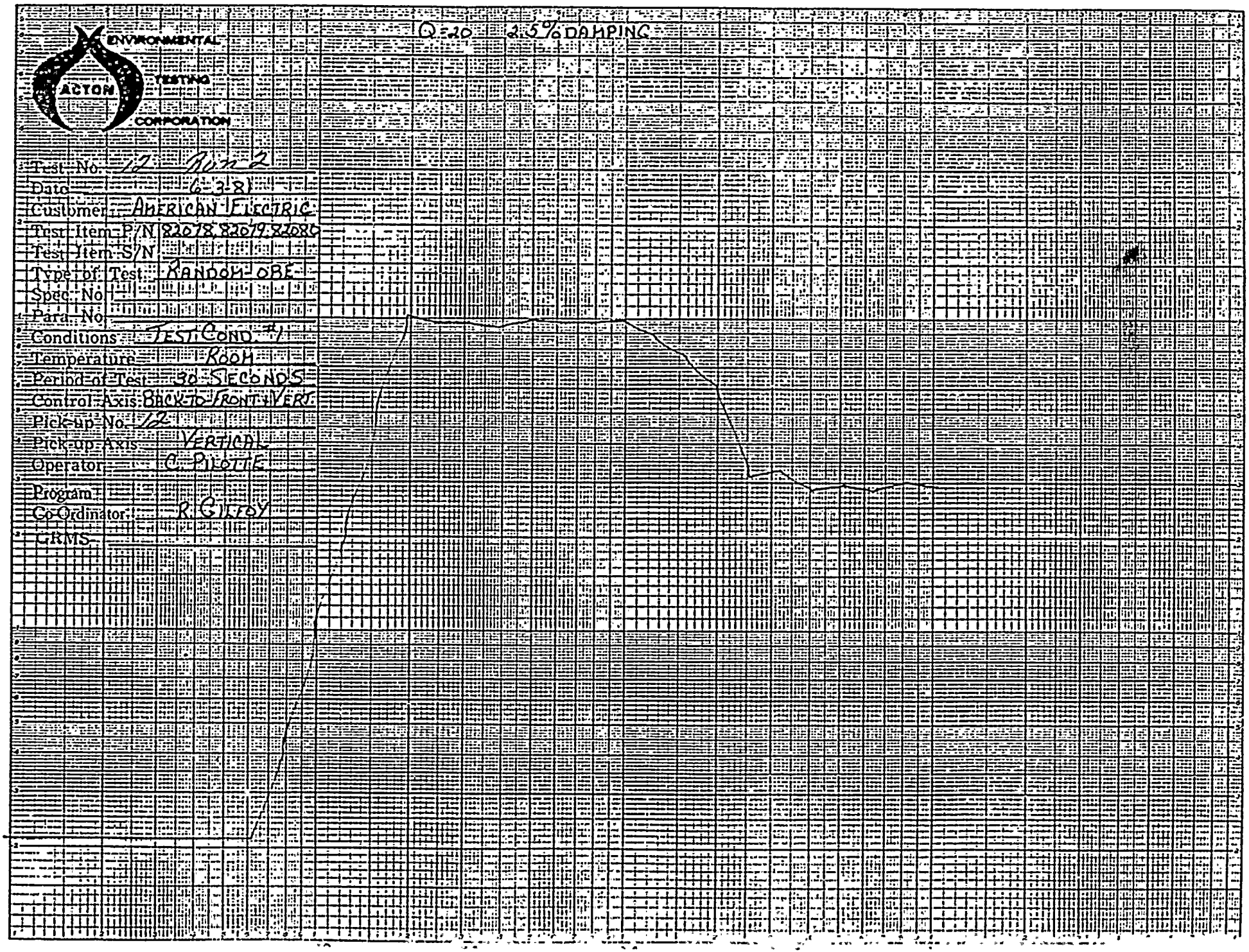
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 2
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program
Co-Ordinator R. GILTOY
GRMS



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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 12 RUN 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis BACK-TO-FRONT+VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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Q=20 2.5% DAMPING

Test No. #2 Run 9
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078; 82079; 82080
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 12 Run 5
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82077, 82080
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST CONO. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT+VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator RIGHTLEY
GRMS

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 12 Rev 6
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078 82079 82080
Test Item S/N
Type of Test RANDOM SSE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 1
Date 6-3-81
Customer AMERICAN ELECTRIC
Test Item P/N 82078, 82079, 82080
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT.
Pick-up No. 18
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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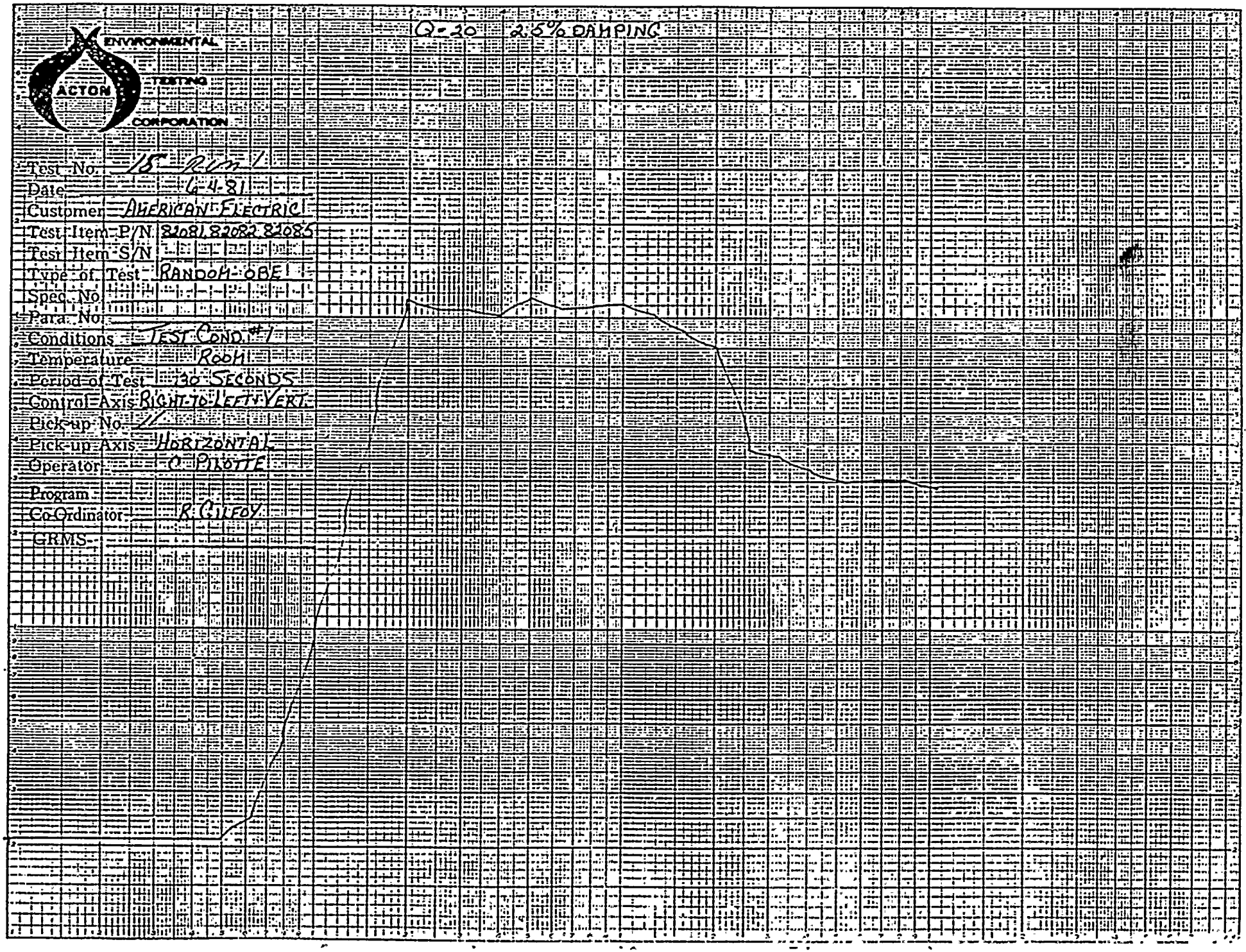
Q-20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 15 RUN 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator O PILOTTE
Program
Co-Ordinator R GILFOY
GRMS



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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 15 Rev 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No 78 R023
Date 6-N-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. LE Run 4
Date 2-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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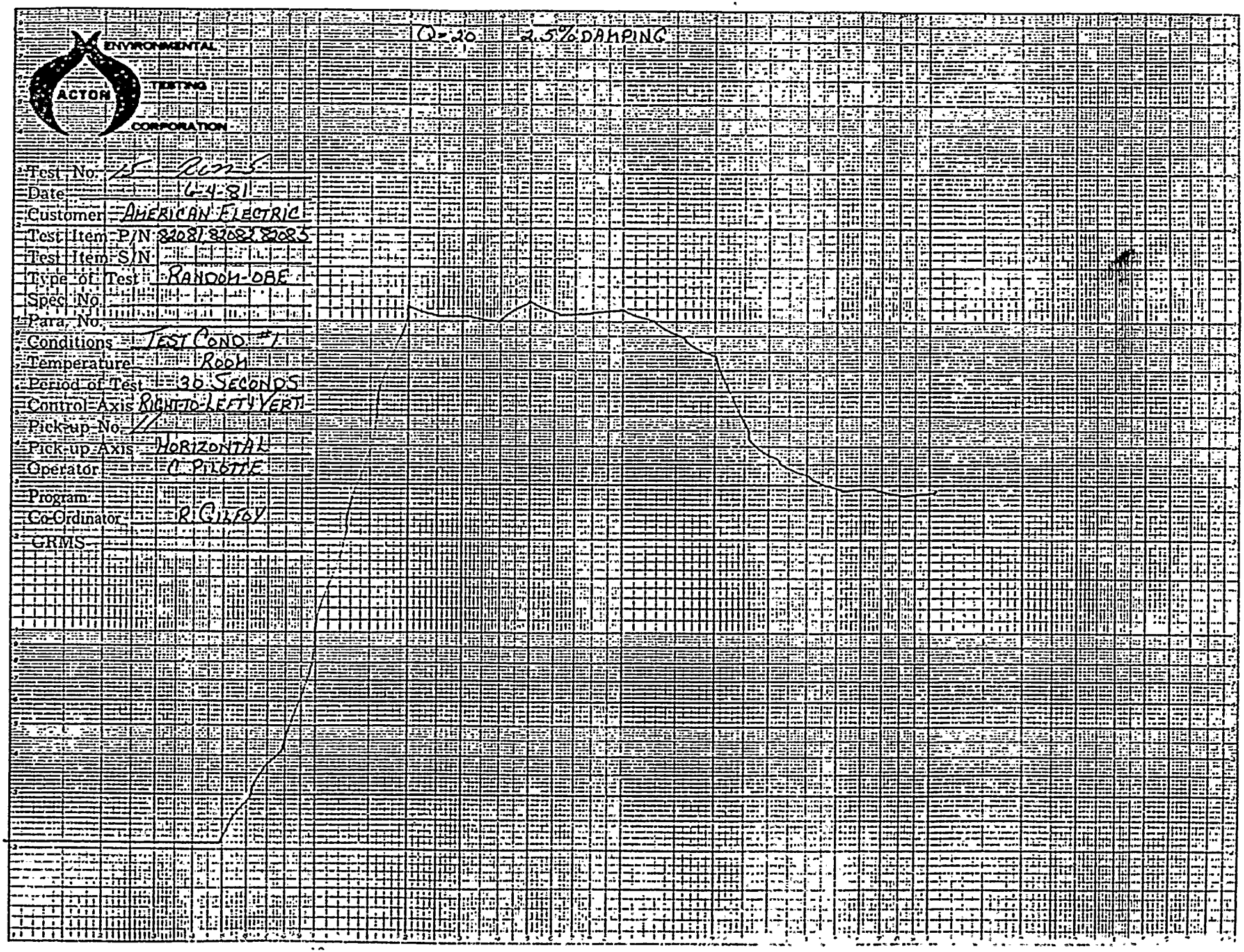
Q=20 2.5% DAMPING

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Test No. 2E Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82083
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C PIOTTE
Program
Co-Ordinator R GILROY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 5 Run 6
Date 12-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 & 82082-82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-LEFT VERT.
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. BIOTTE
Program
Co-Ordinator R. G. FOX
GRMS

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ACTON

Q=20 2.5% DAMPING

Test No. 13 Rem 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para. No
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. C. LEDOUX
GRMS

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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 12 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK + VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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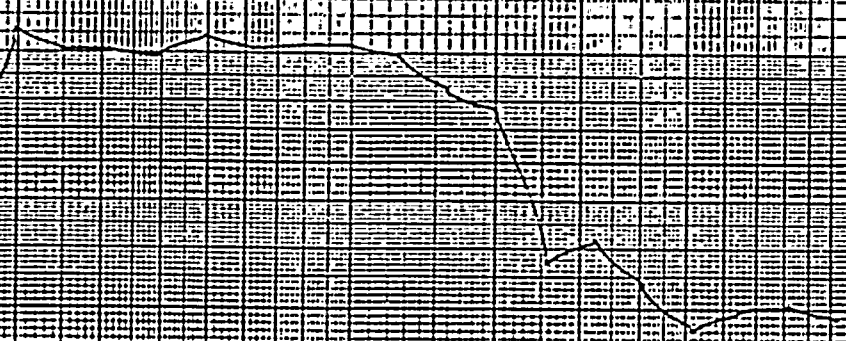
ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 16 Run 2
Date 4-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82083, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLIFFORD
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Test No. 16 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 36 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 16
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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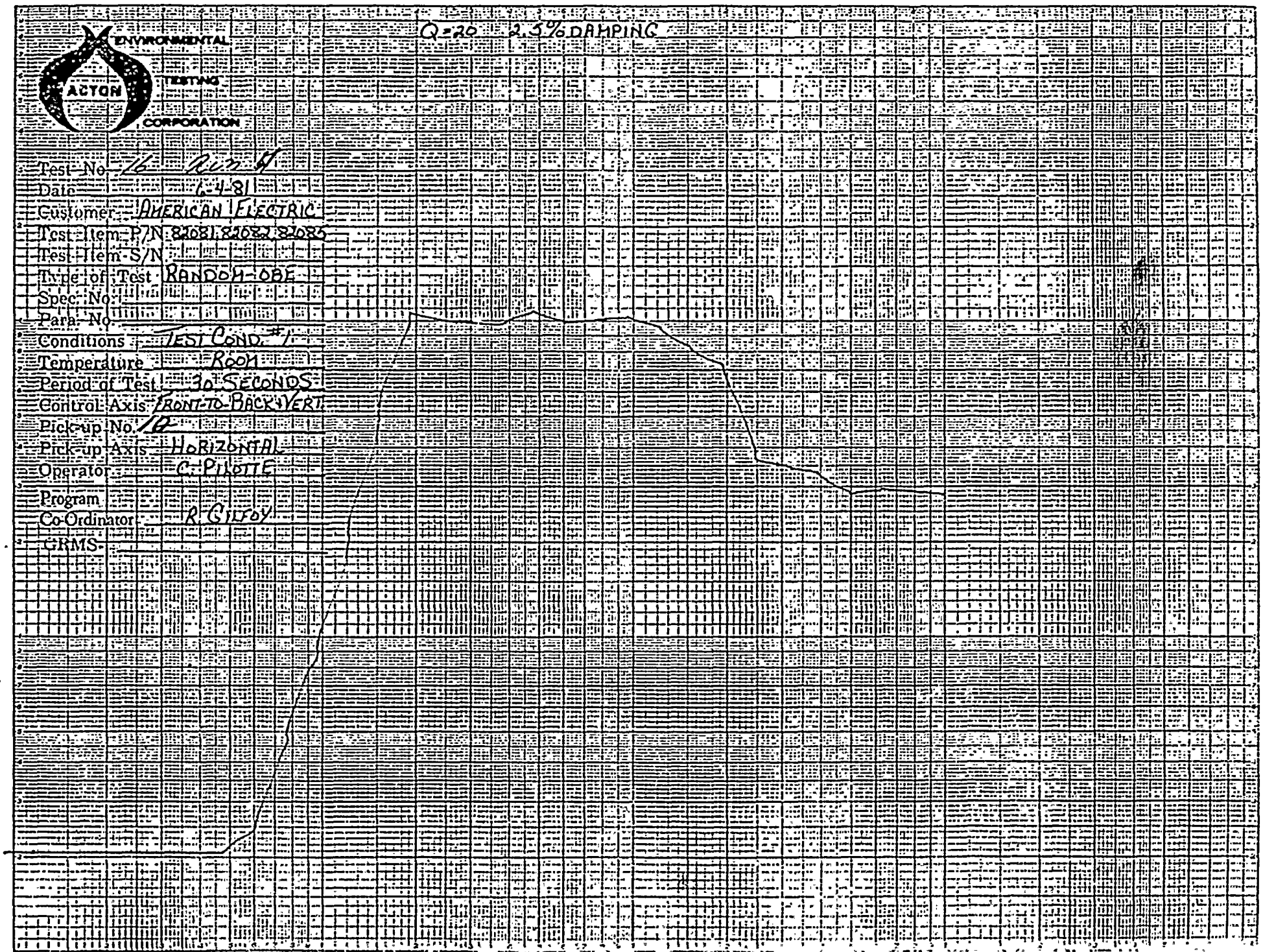
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 16 Run 9
Date 7-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 820812 820822 820852
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GIFFOY
GRMS



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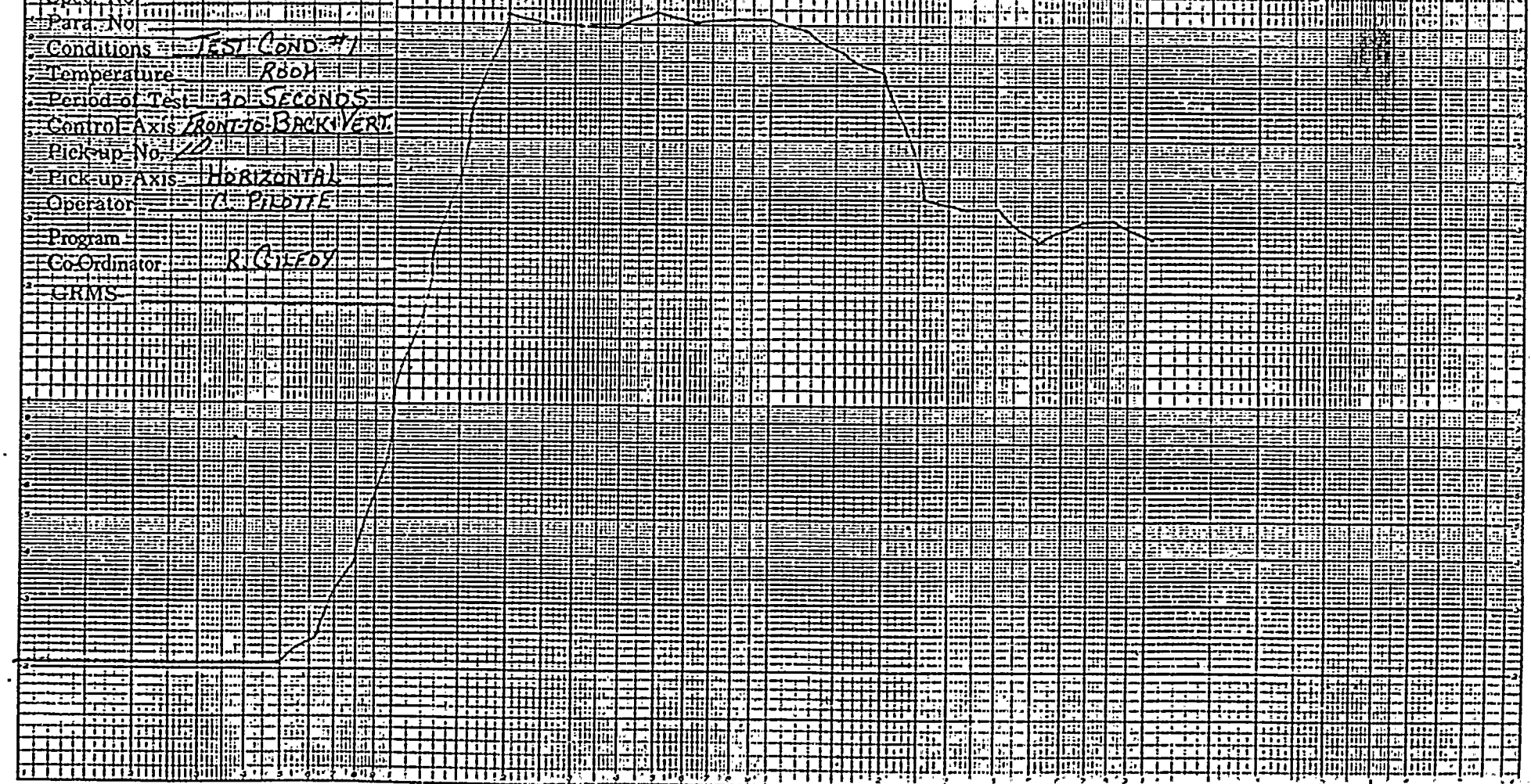
ENVIRONMENTAL TESTING
ACTON CORPORATION

Q=20 2.5% DAMPING

Test No. 26-120-5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator A. PIEDTTE
Program
Co-Ordinator R. GILFOY
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. 16 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator RICHTOY
GRMS

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NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½ INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. 16 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No
Para. No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

10.

g's

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NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES
CODEX GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ENVIRONMENTAL
ACTON
TESTING
CORPORATION

Q = 20 2.5% DAMPING

Test No. 12 Rev 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82083
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT TO RIGHT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q = 20 2.5% DAMPING

Test No. L2 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions TEST CONDITION #1
Temperature RDOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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g's

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No. 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 17 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT/VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

10.

g's

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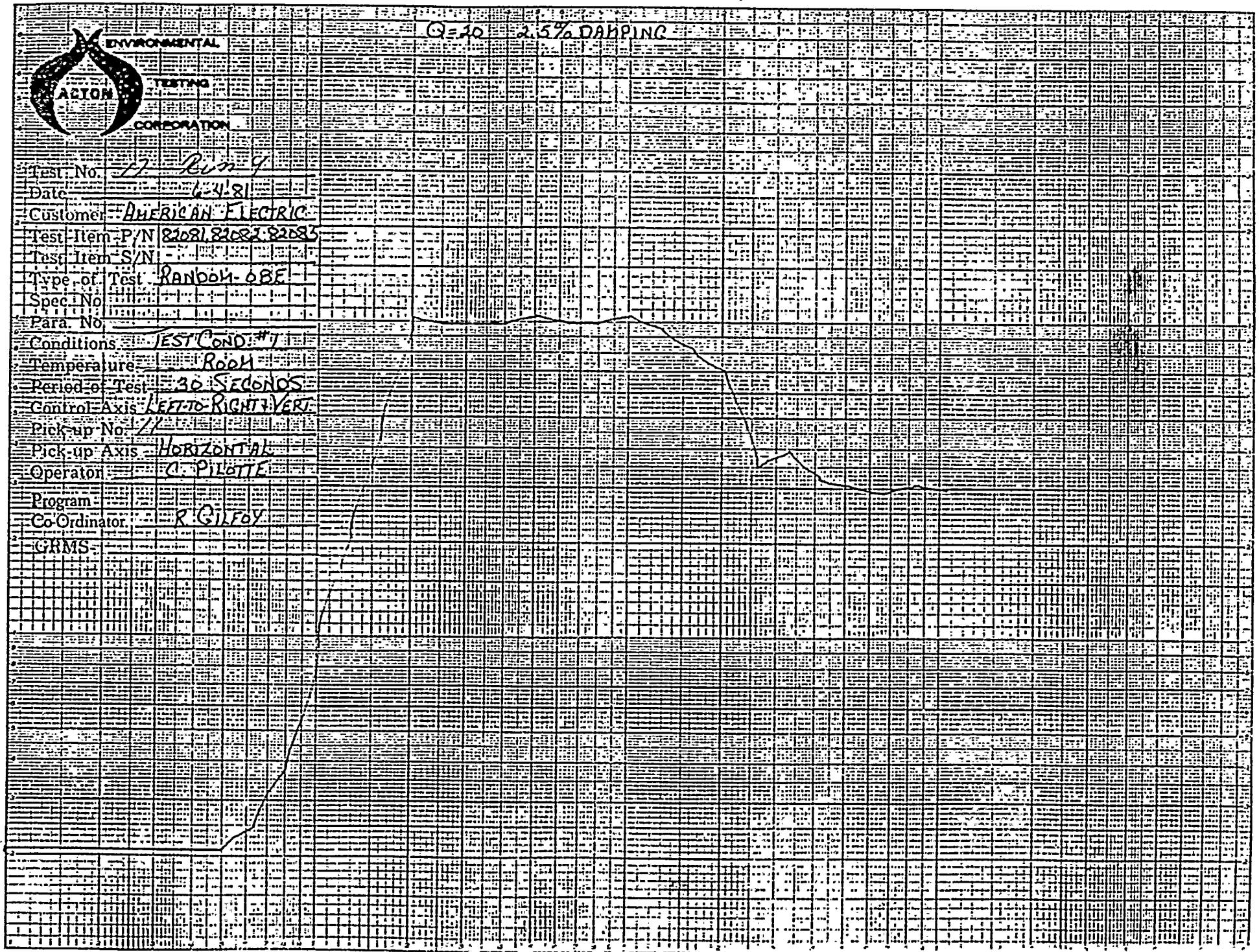
NO. 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=10 2.5% DAMPING

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 12 Rev G
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-68E
Spec No
Para. No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT/VERT.
Pick-up No 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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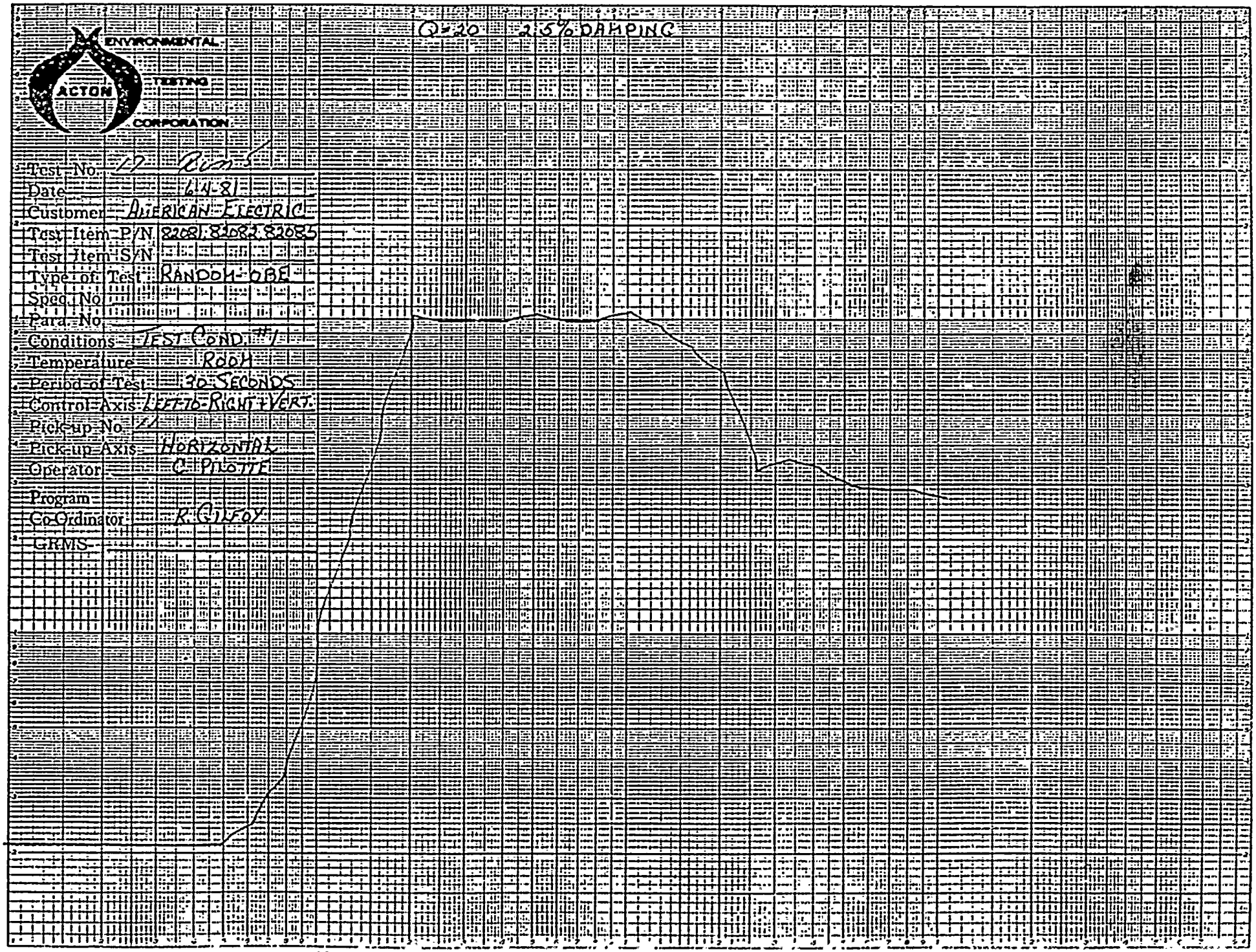
ENVIRONMENTAL TESTING CORPORATION

ACTON

Q=20 2.5% DAMPING

Test No. 12 Runs
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PINOTTE
Program Co-Ordinator K. GILROY
GRMS



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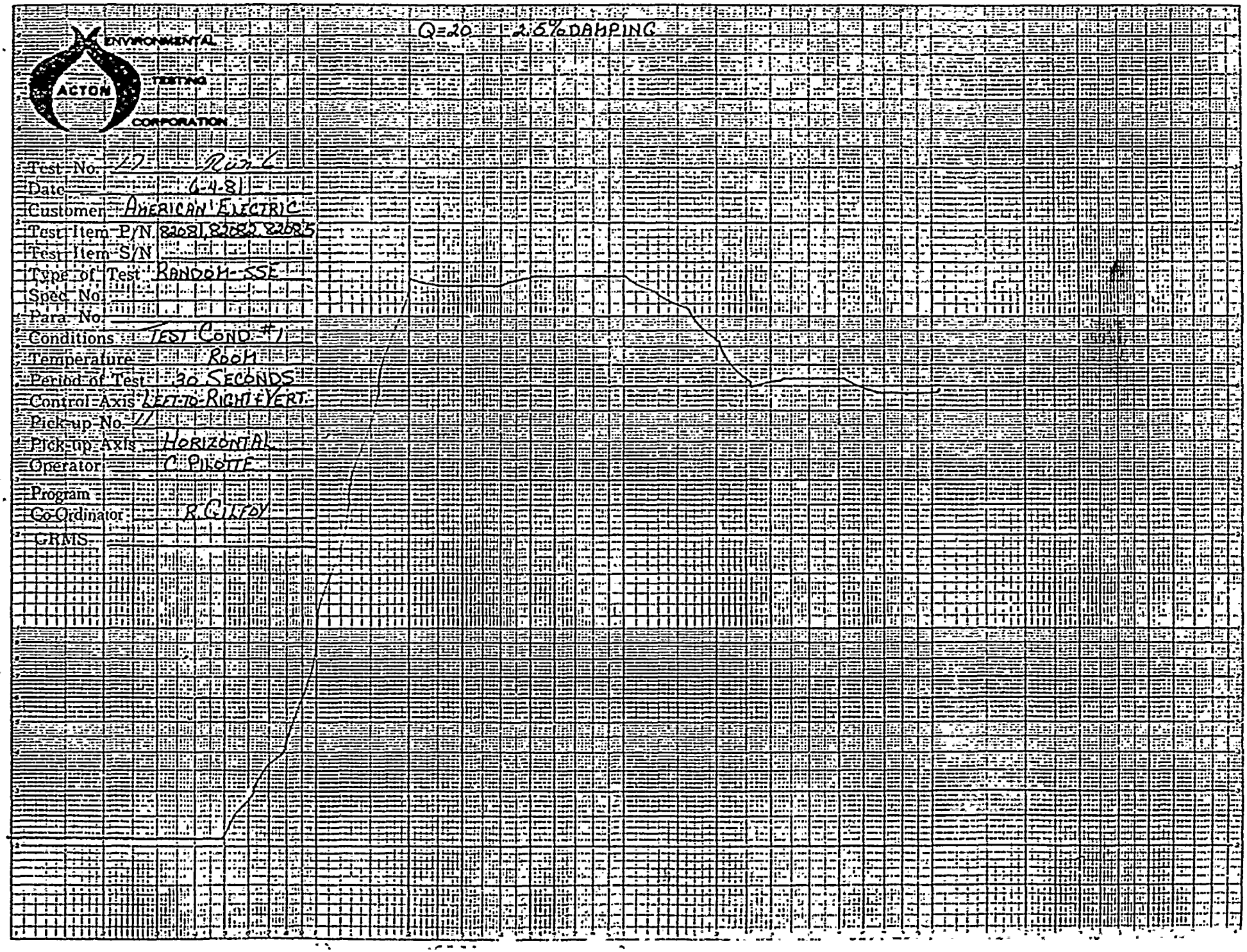
ENVIRONMENTAL TESTING CORPORATION

Q=20 - 2.5% DAMPING

Test No. 12 Rev L
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT & VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PIKOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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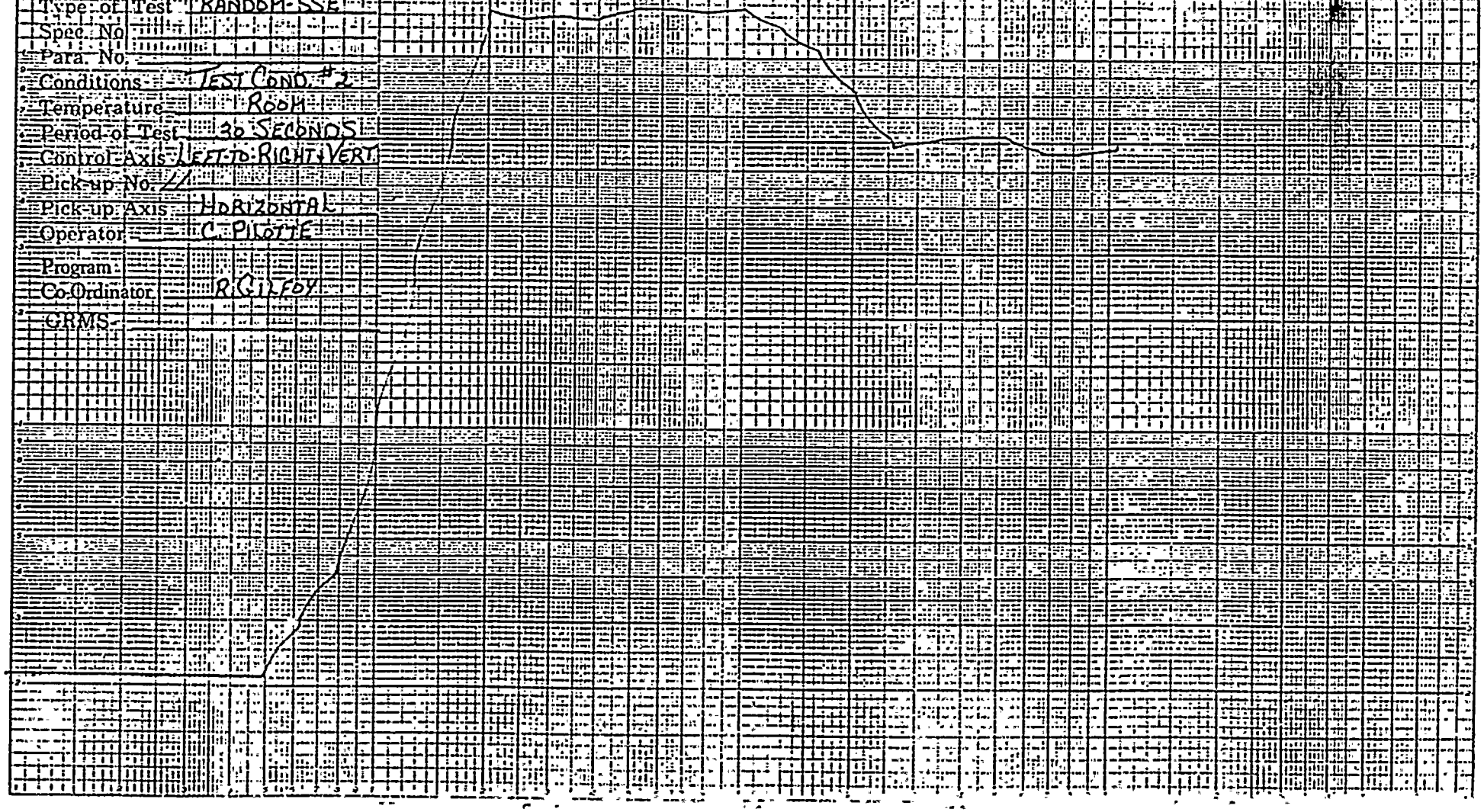
ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Rev 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec. No
Para. No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 36 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 82 Rem 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N: 82081, 82082, 82084
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis: BACK-TO-FRONT VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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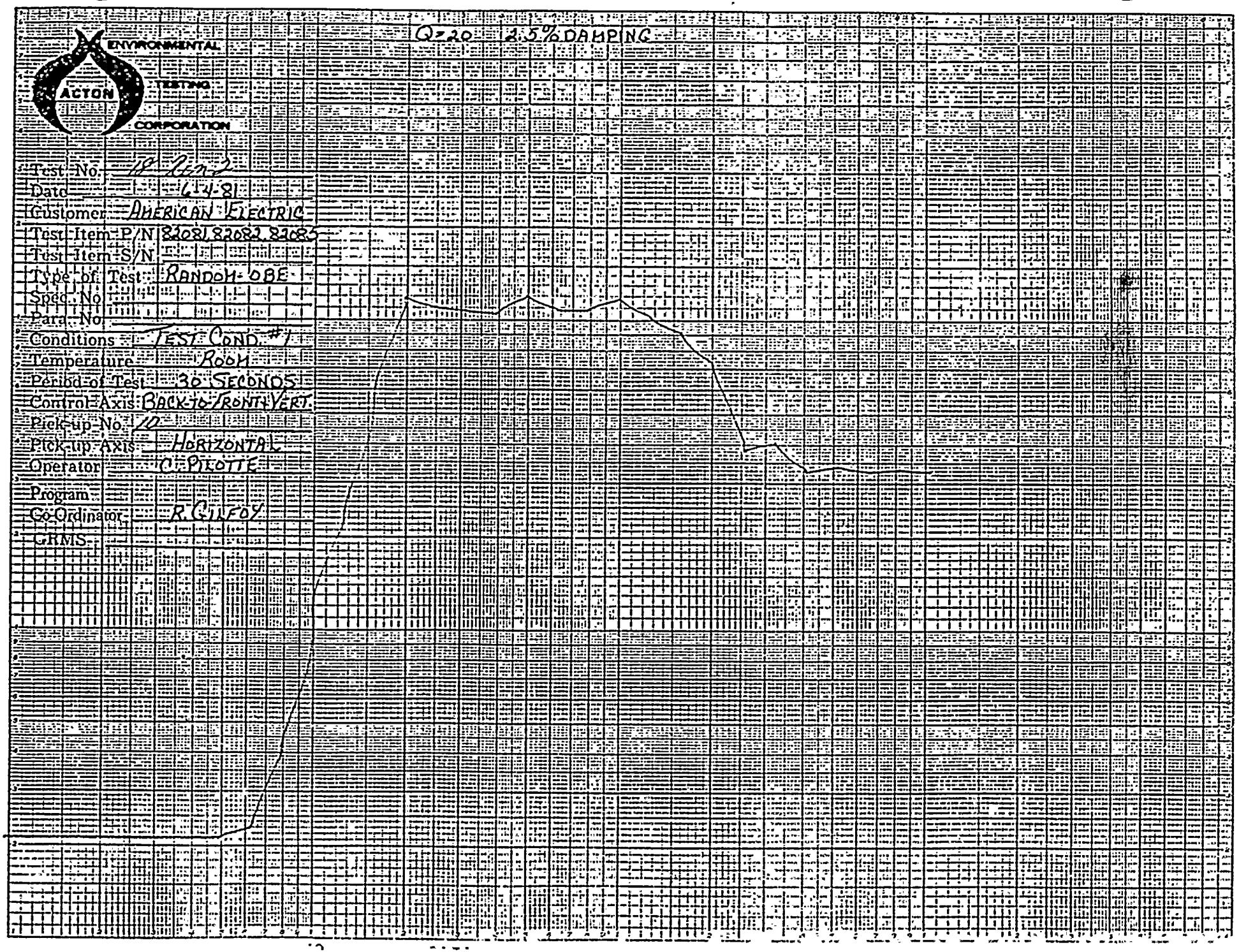
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 82 Lev 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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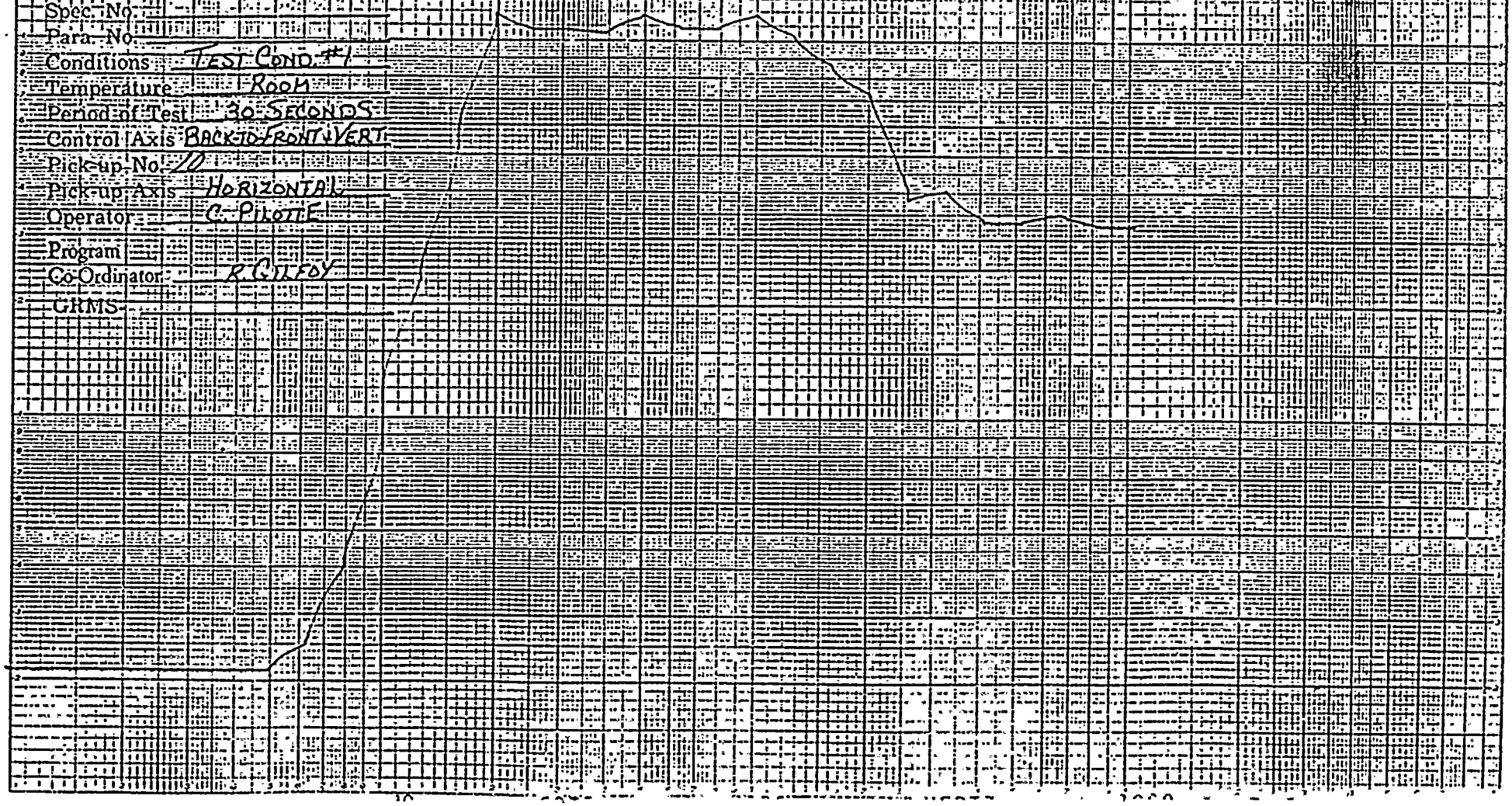
ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. H Rim 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program Co-Ordinator R. GILFOY
GRMS



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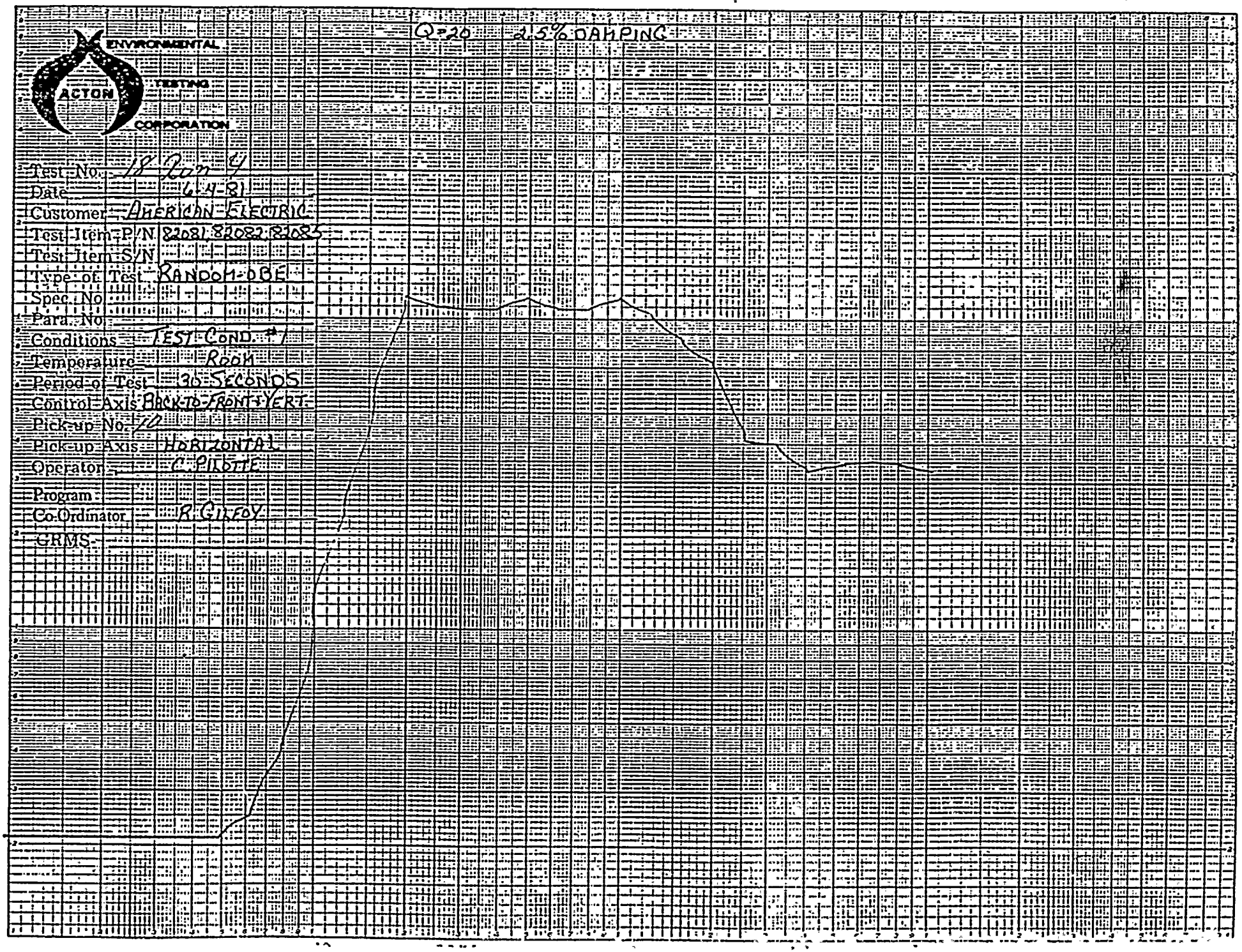
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 18 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 12
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program
Co-Ordinator R. GILROY
GRMS



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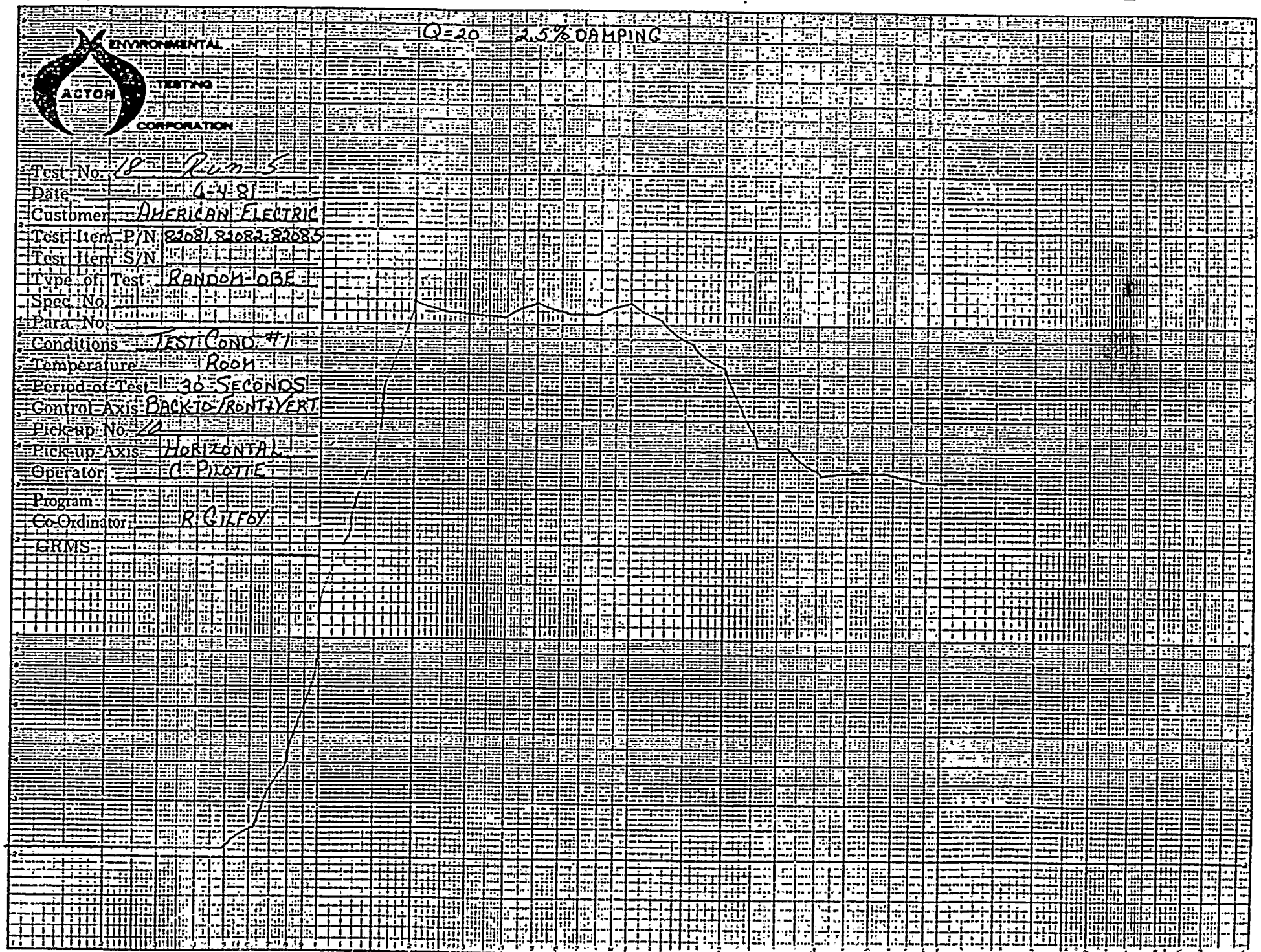
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 18 Run 5
Date 4-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT+VERT.
Pick-up No. 12
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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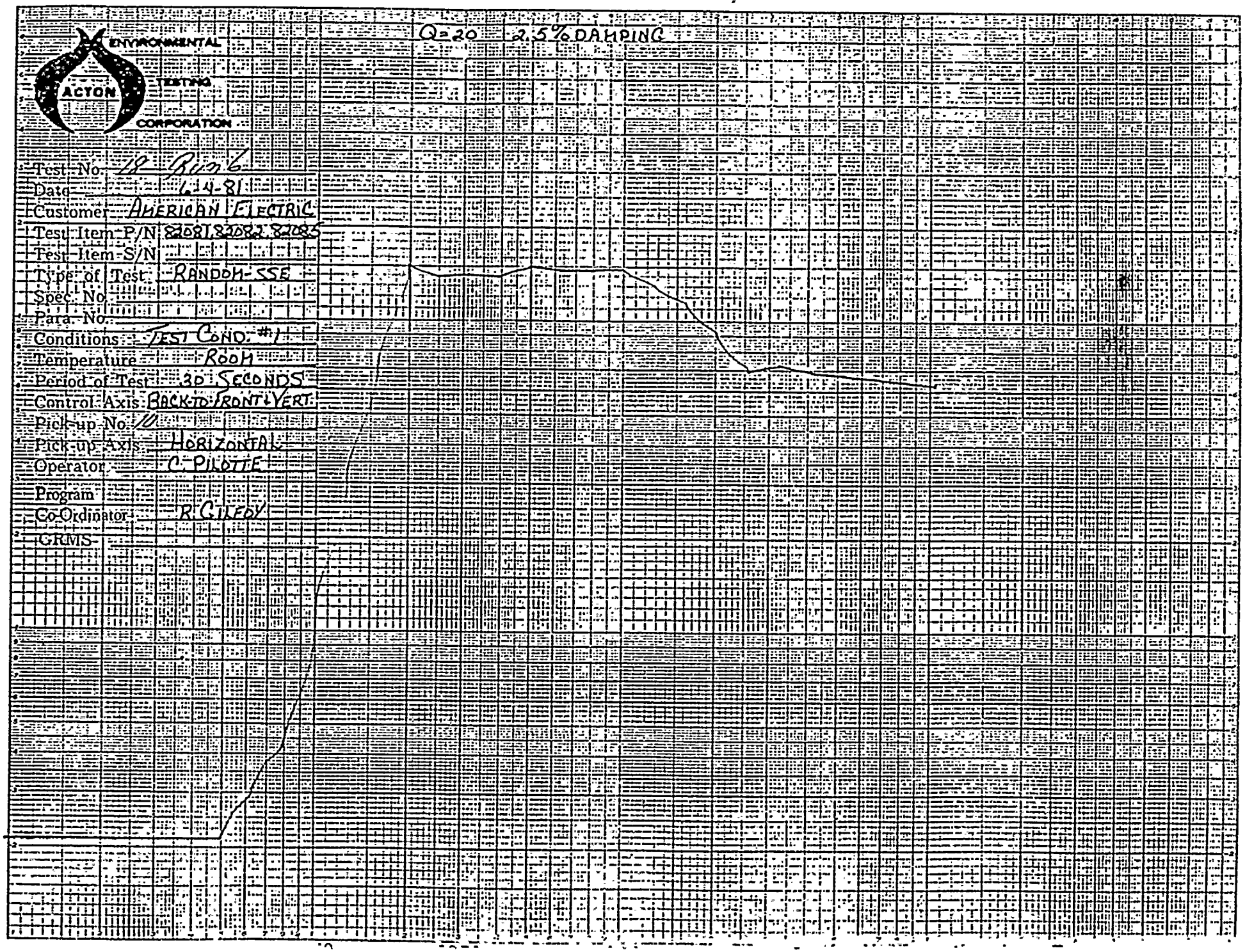
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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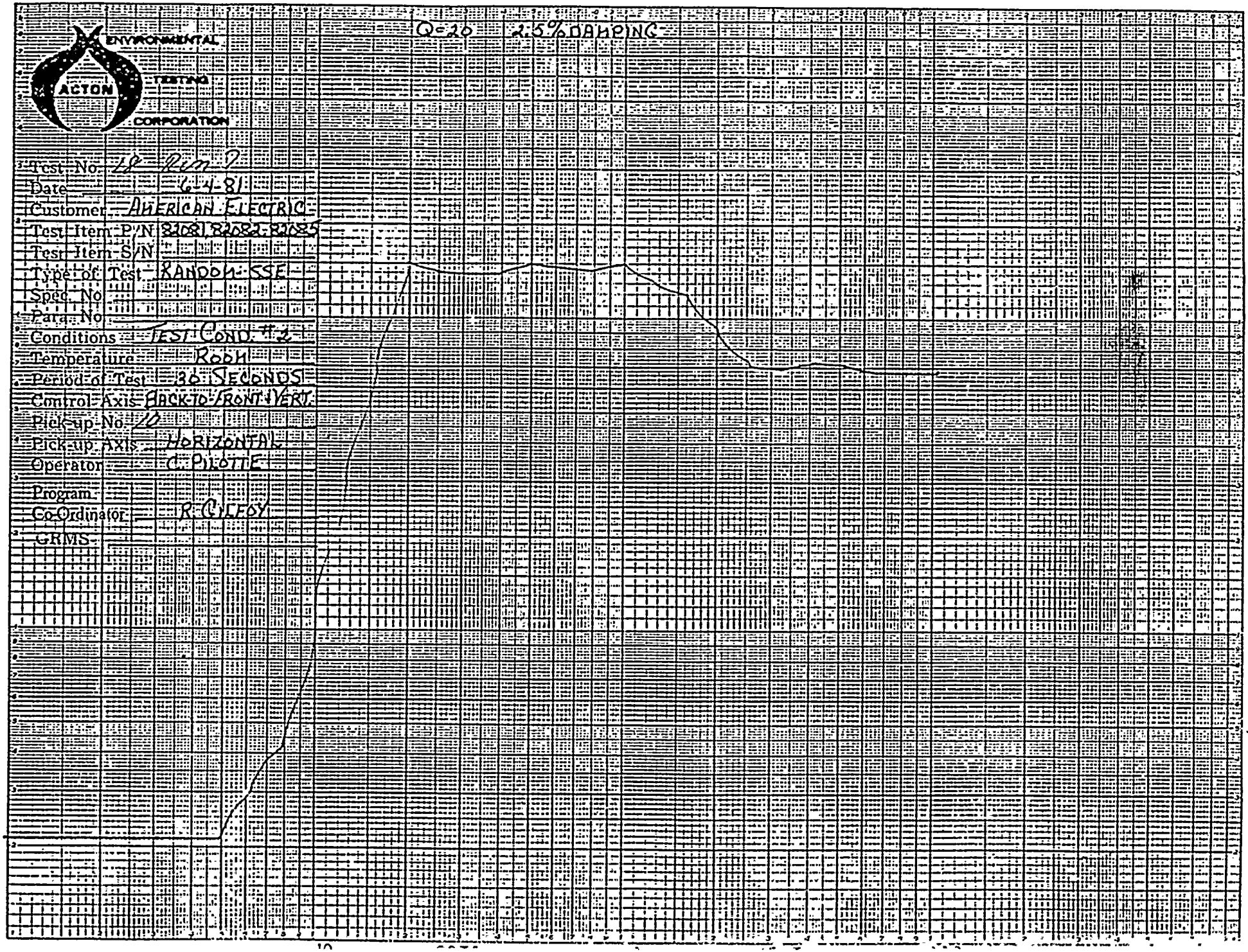
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Rem 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec. No
Para. No
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. C. LEOY
GRMS



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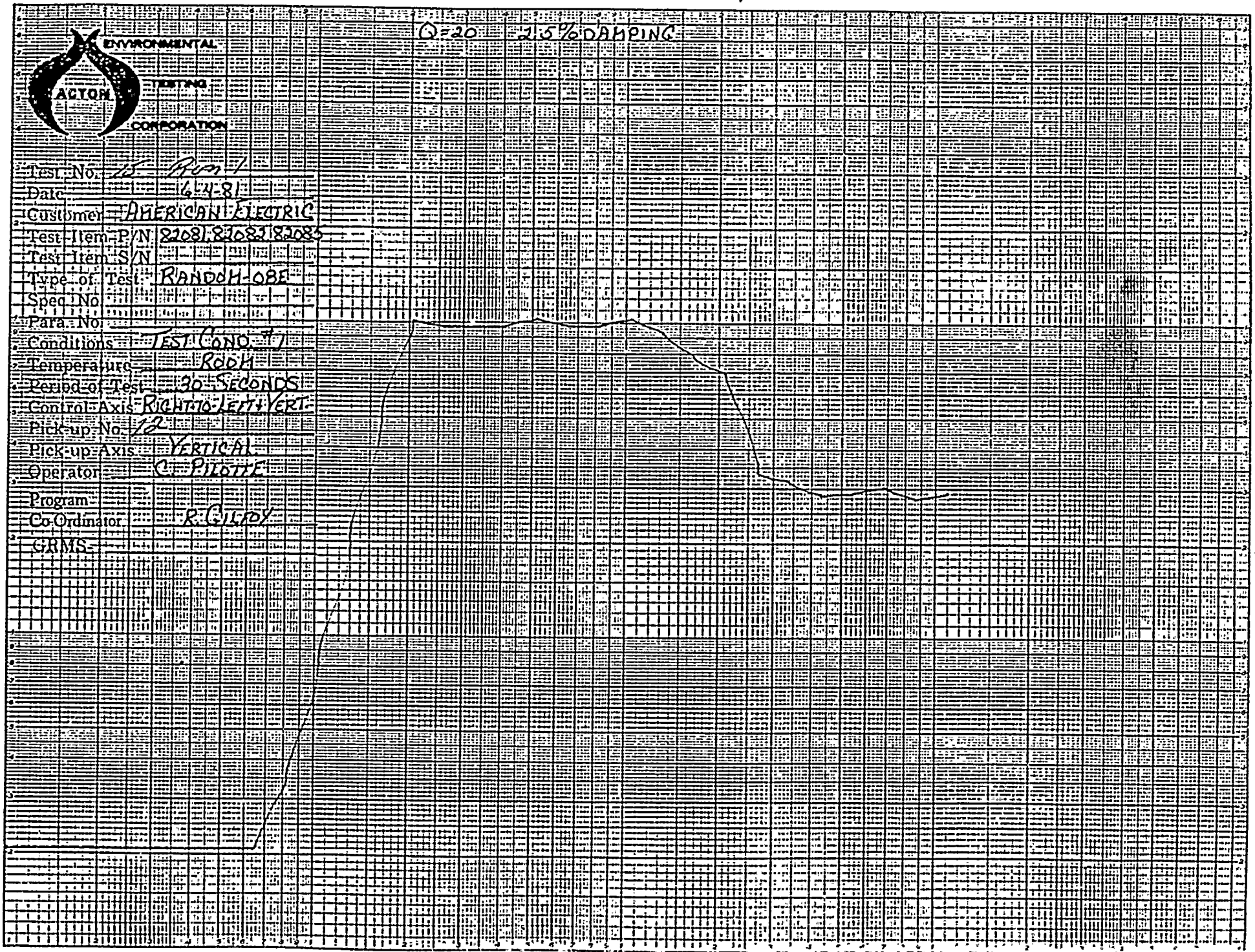
ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 RUN 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 15 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST CONO. #1
Temperature ROOM
Period of Test 30 SECONDS
Control: Axis RIGHT-TO-LEFT V VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PISTOLE
Program
Co-Ordinator R. GILFOY
GRMS

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ENVIRONMENTAL TESTING ACTON CORPORATION

Q=20 2.5% DAMPING

Test No. 15 Run 3
Date 1-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081/82082/82085
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. CILFOY
GRMS

NC 31,250, LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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ENVIRONMENTAL
ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 15 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para. No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS

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NC 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES
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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 10 2123 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 25 Rev 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082-82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. CODY
GRMS

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NO. 51.4SG, LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. COCEX GRAPH PAPER IN STOCK DIRECT FROM COCEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. SE Run 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. # 2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 1, 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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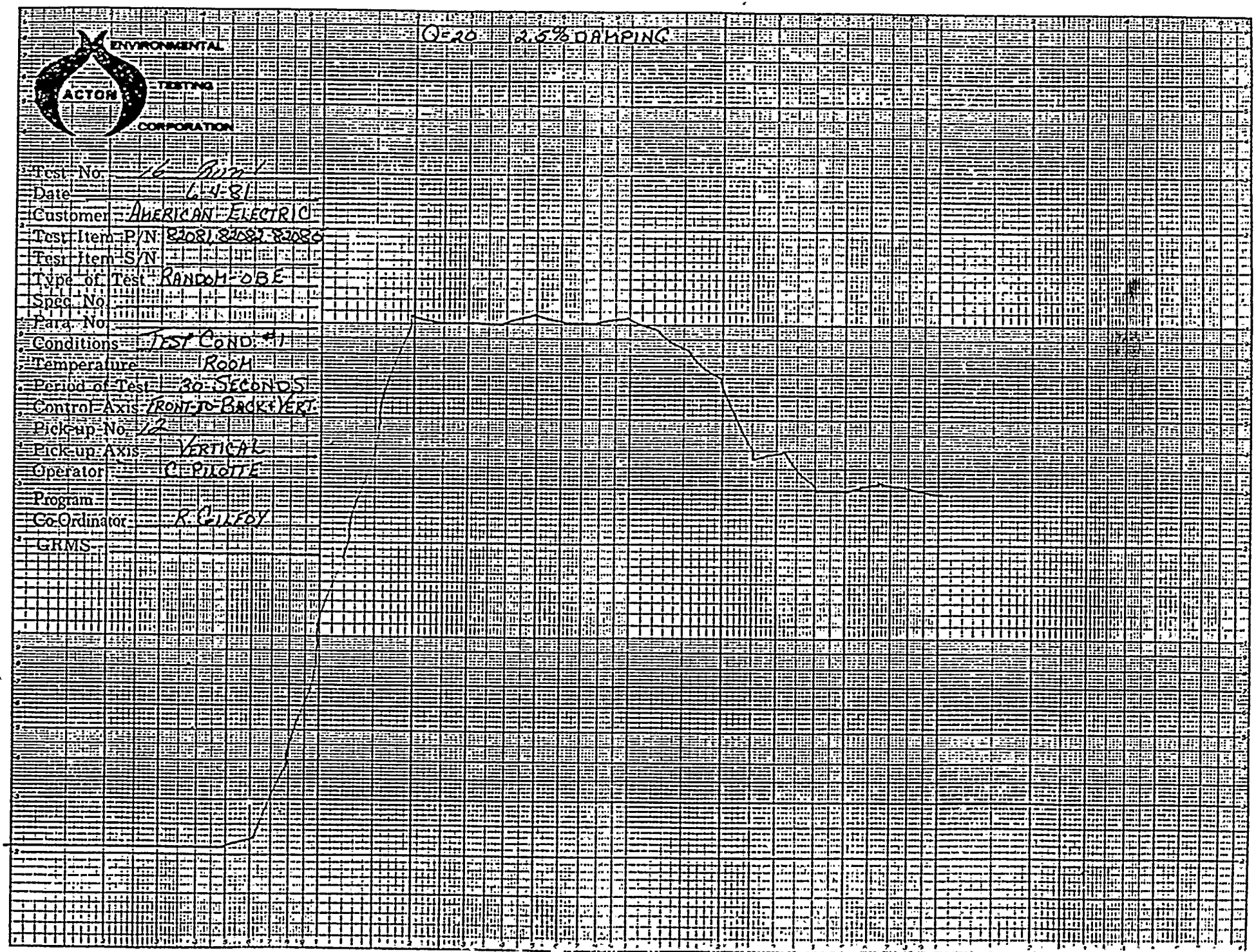
QE20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 16 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82086
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 6 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 36 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 10
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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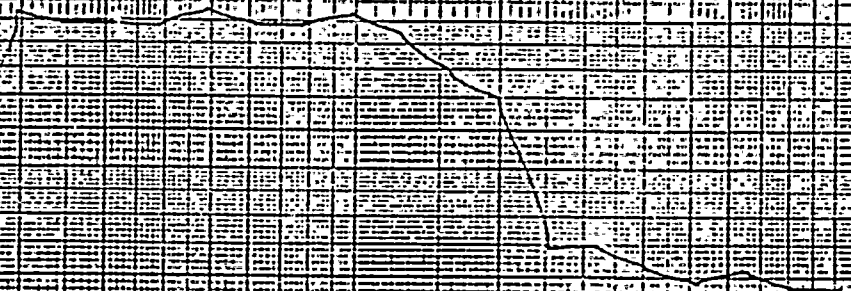
NC 31,256 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 16 Run 3
Date 1-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

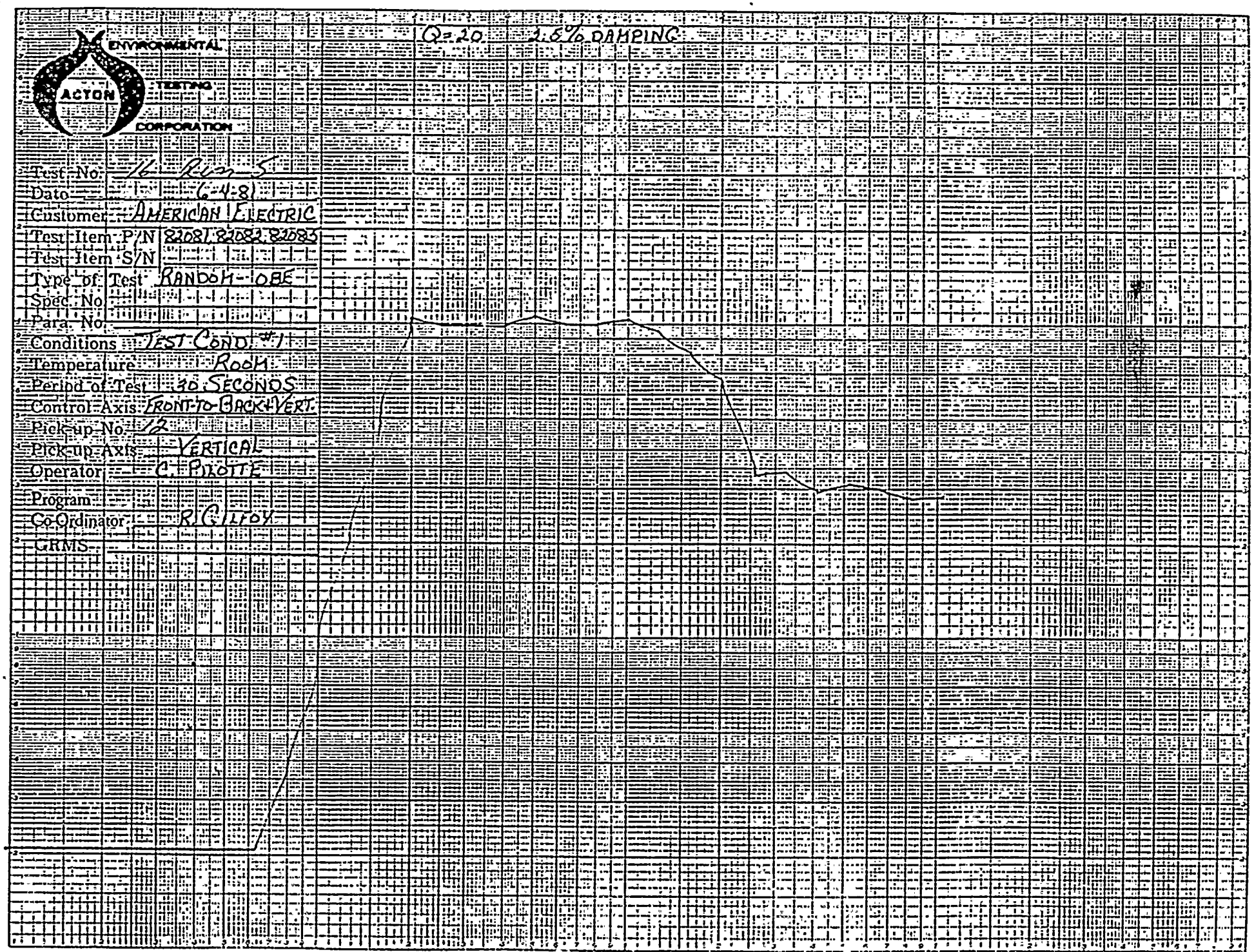
Test No. 4 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program
Co-Ordinator R. CLIFOY
GRMS

NO 31,256 LOGARITHMIC; FOUR BY THREE 2½ INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 16 Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM - OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. C. LEOX
GRMS

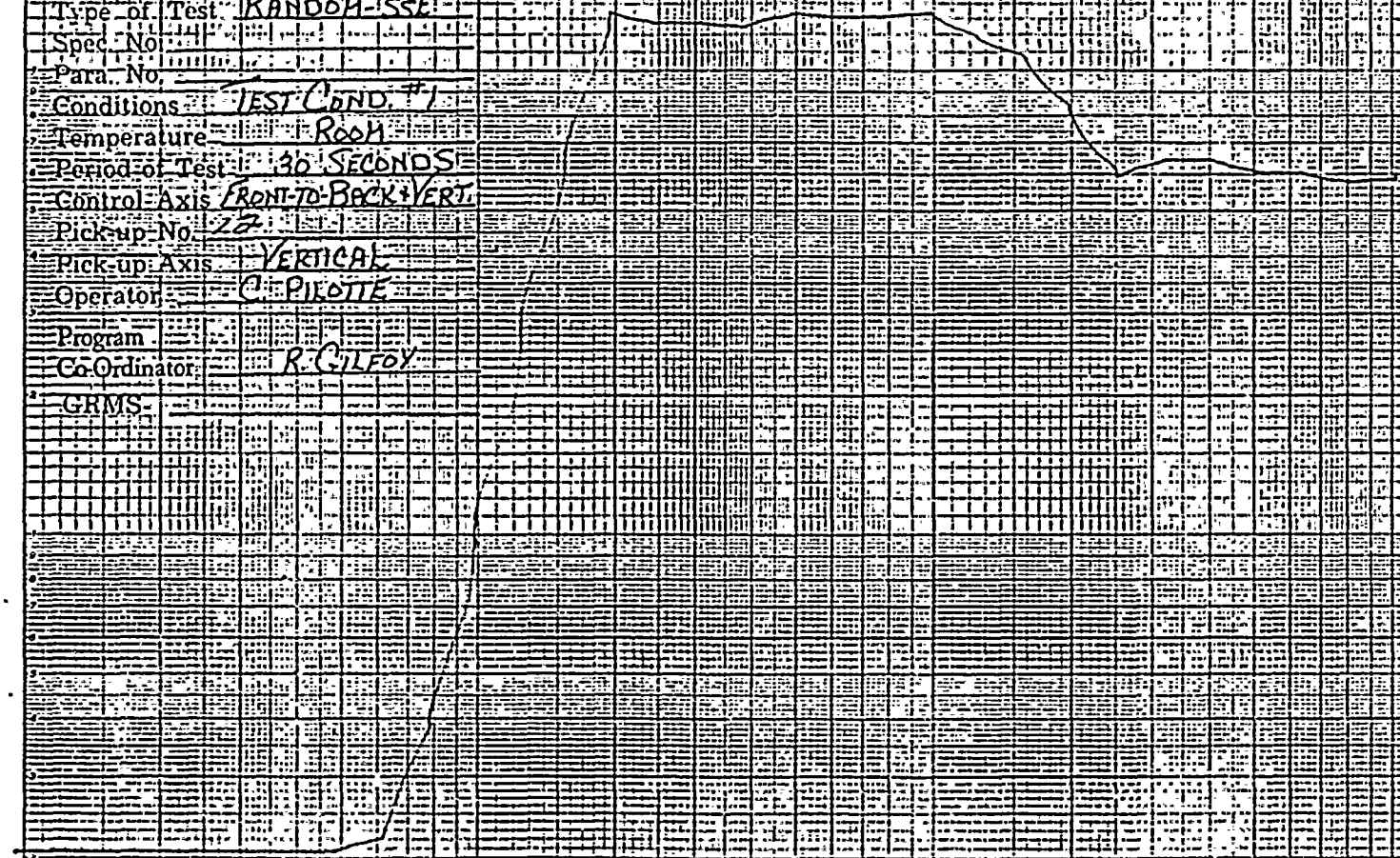


NO. 31,256 LOGARITHMIC FOUR BY THREE 2-CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 16 RUN 6
Date 6-4-81
Customer AMERICAN ELETRIC
Test Item P/N 81081 81082 81085
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO 31,258. LOGARITHMIC: FOUR BY THREE 2½ INCH CYCLES.
CODEX CHART PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 16 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82084
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. CLOY
GRMS

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NO 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 7 Rm 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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NO. 31,256 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
CODEX GRAPH PAPER
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 12 Rom 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST CONO. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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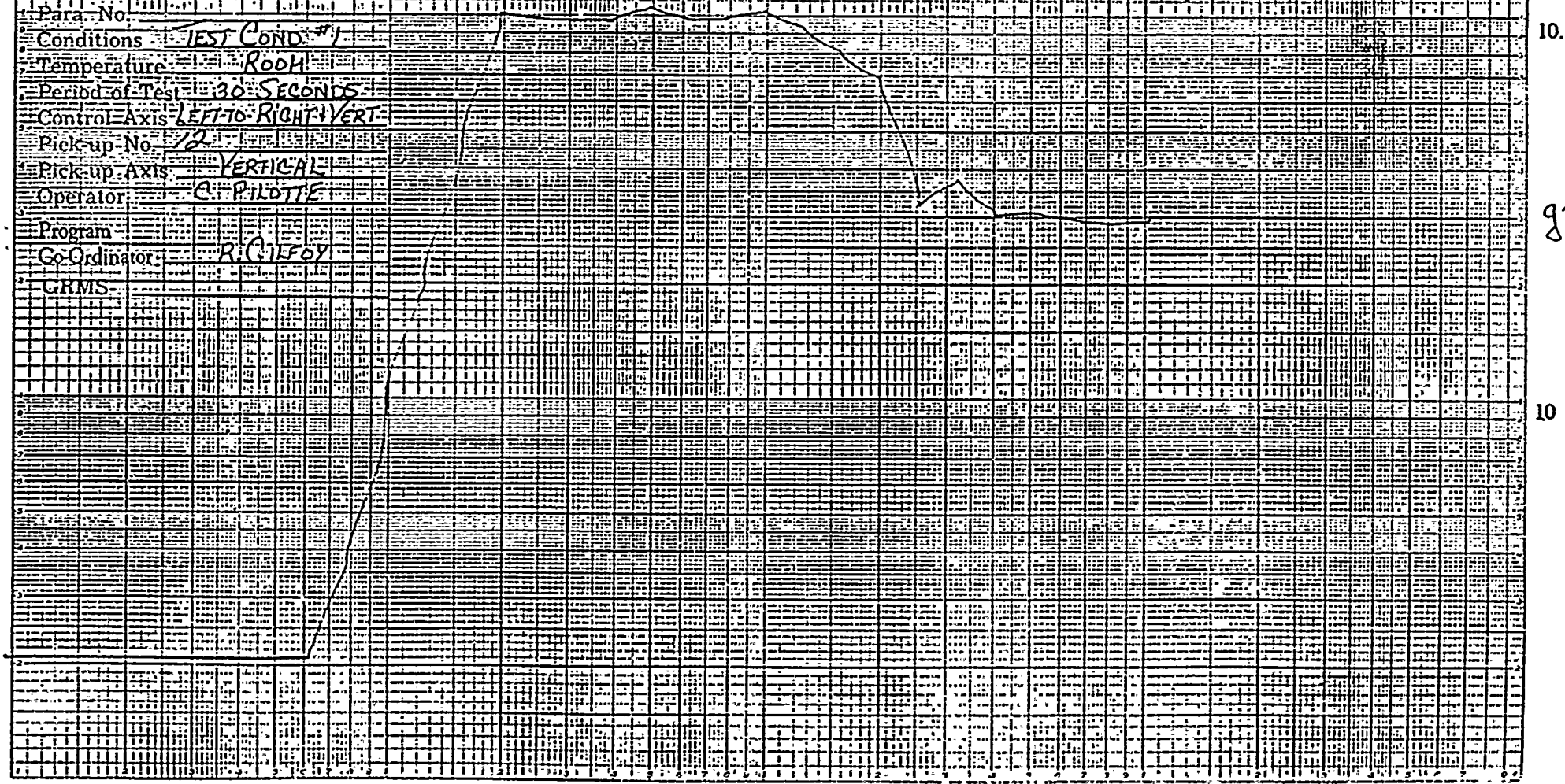
NO. 31,256 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 12 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. CILFOY
GRMS

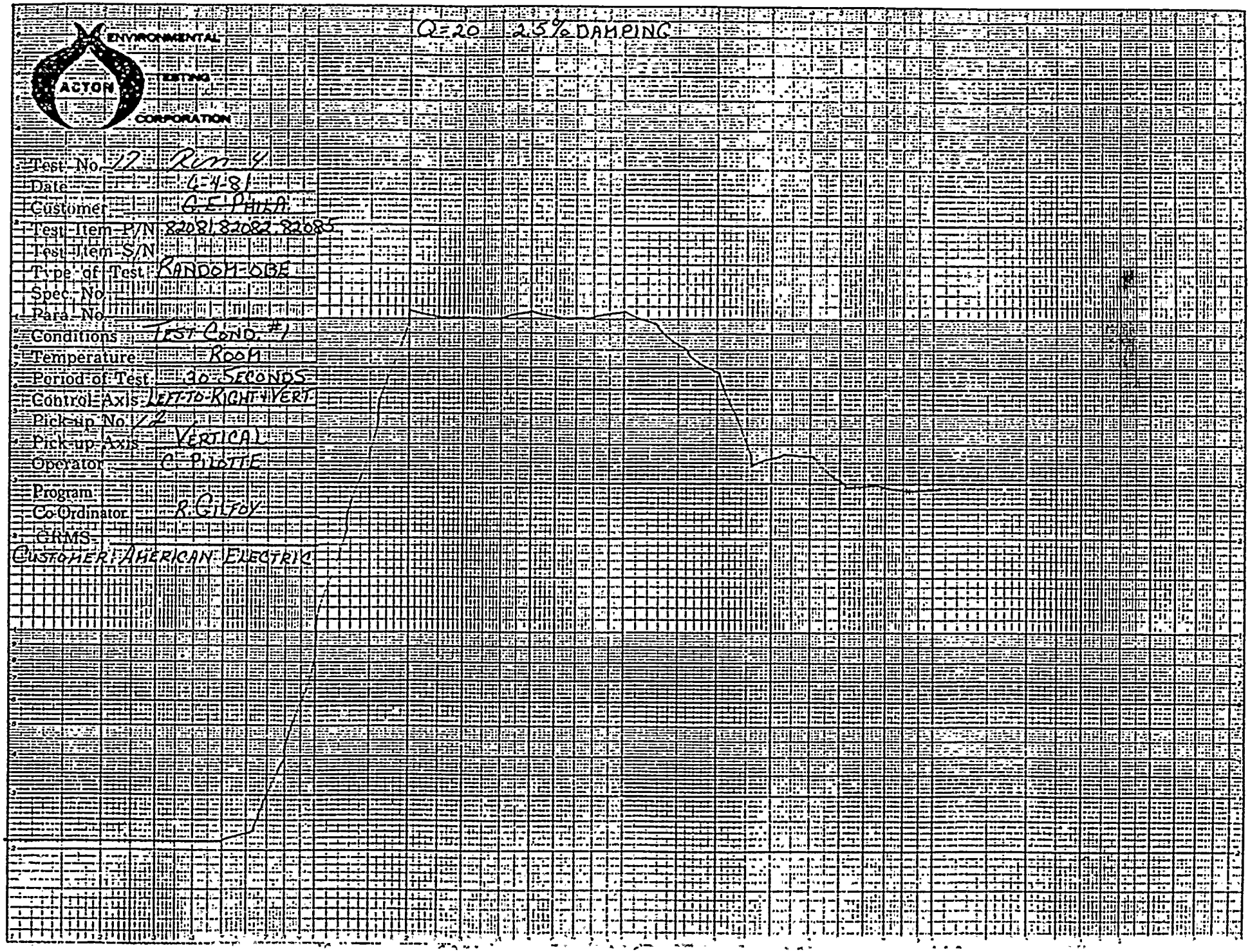


NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 4
Date 4-4-81
Customer G.E. PHILA.
Test Item P/N 82081, 82082, 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program
Co-Ordinator R. GILFOY
GRMS
CUSTOMER: AMERICAN ELECTRIC

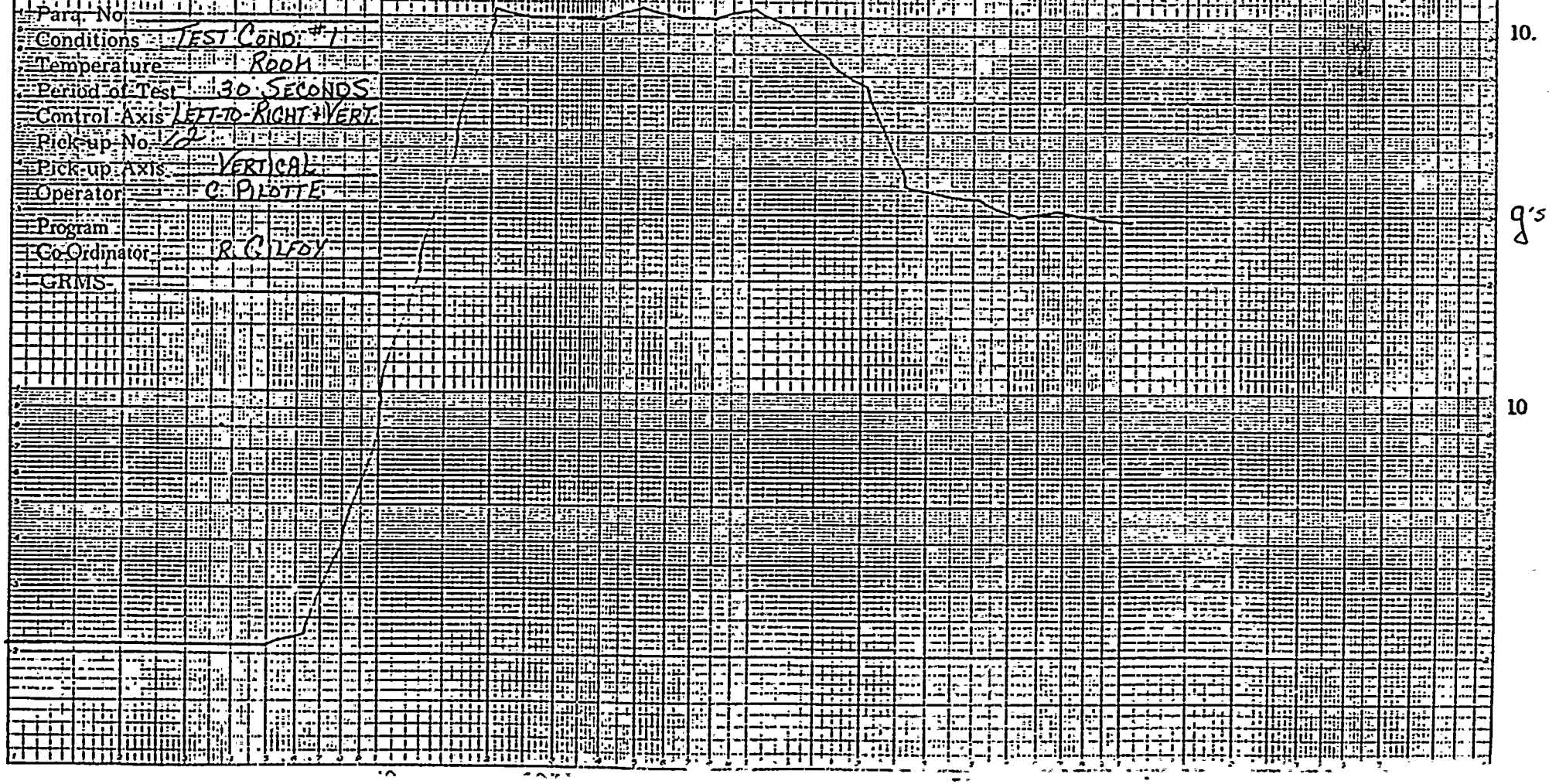


NC 51,258 LOGARITHMIC: FOUR BY THREE 2½ INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081, 82082, 82083
Test Item S/N
Type of Test RANDOM-LOBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PLOTTE
Program
Co-Ordinator R. G. LEDOUX
GRMS

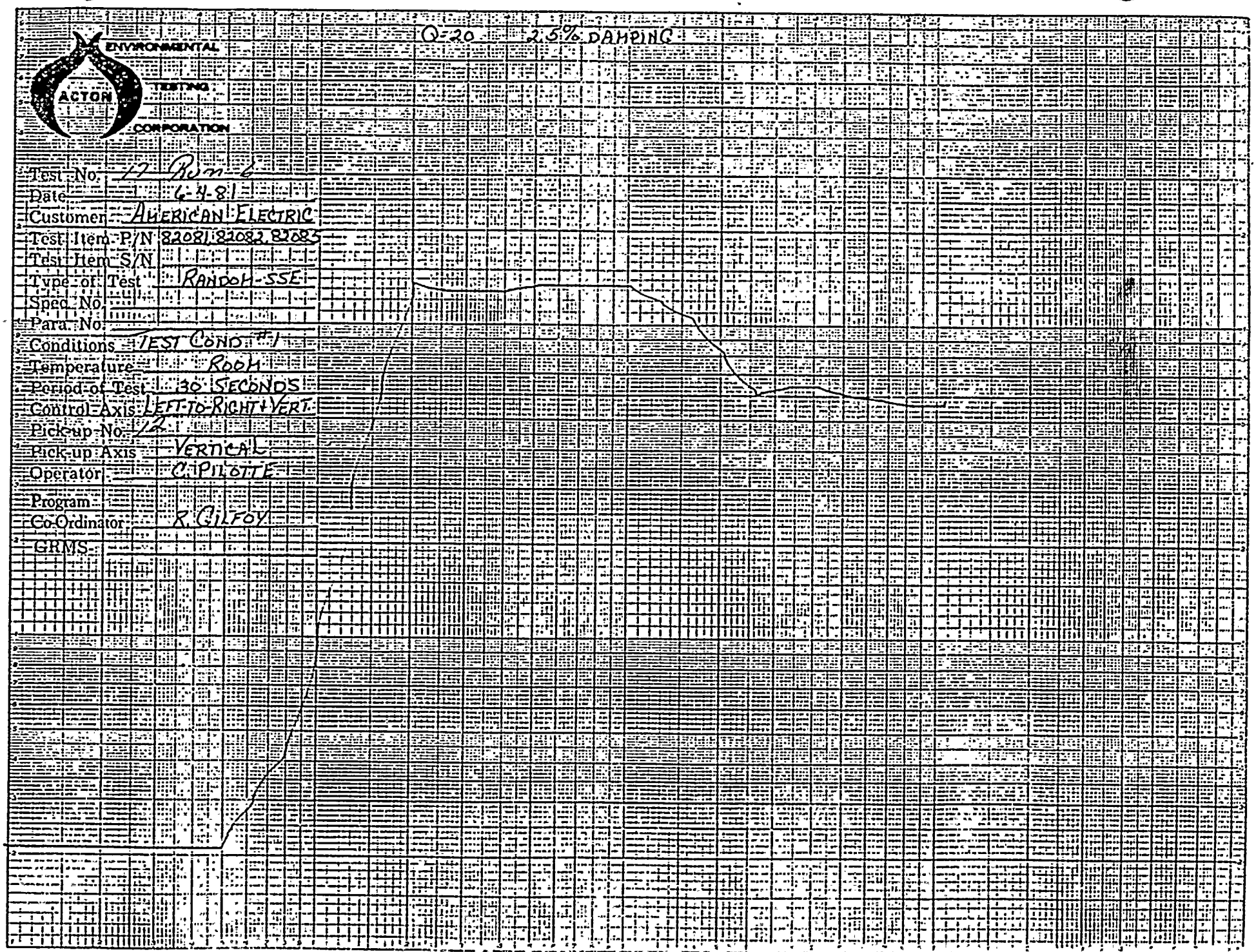


NO. 31,250. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82083
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 130 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 1 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator K. GILFOY
GRMS

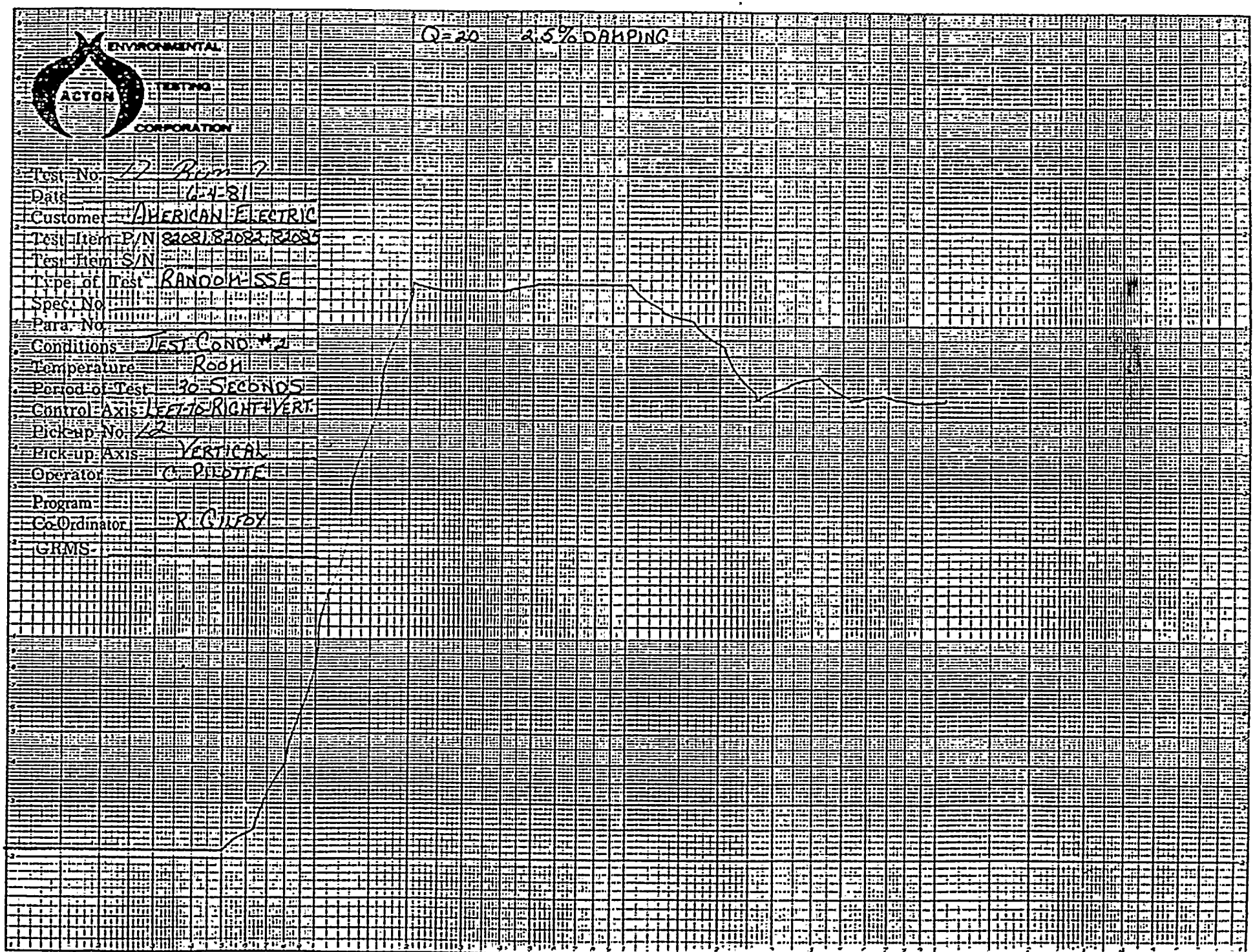


NO. 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 12 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO RIGHT-VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIEDTE
Program
Co-Ordinator R. GILFOY
GRMS

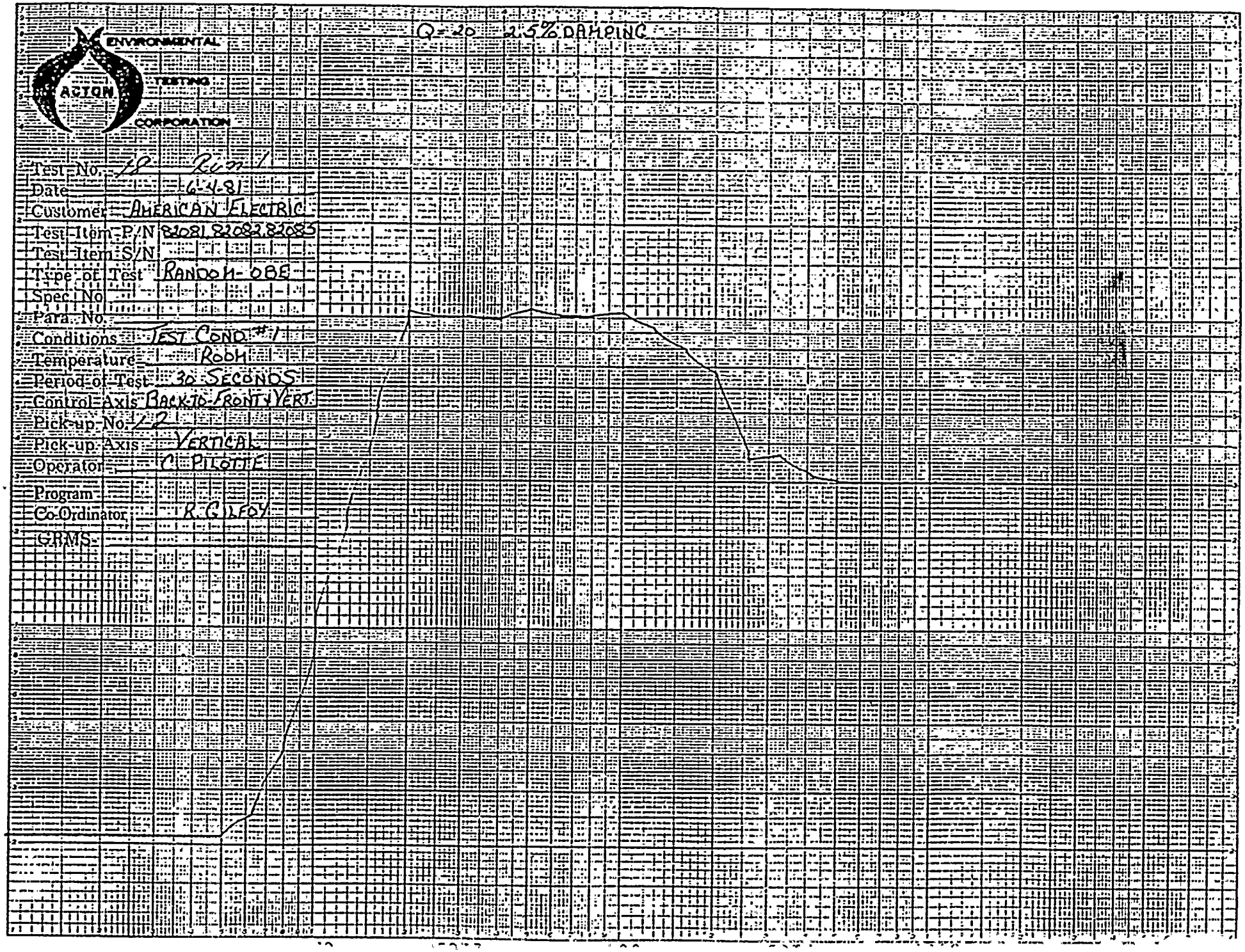


NO. 31,25d. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
CRASH PAPER
PRINTED IN U.S.A.

ENVIRONMENTAL ACTION TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. 12 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

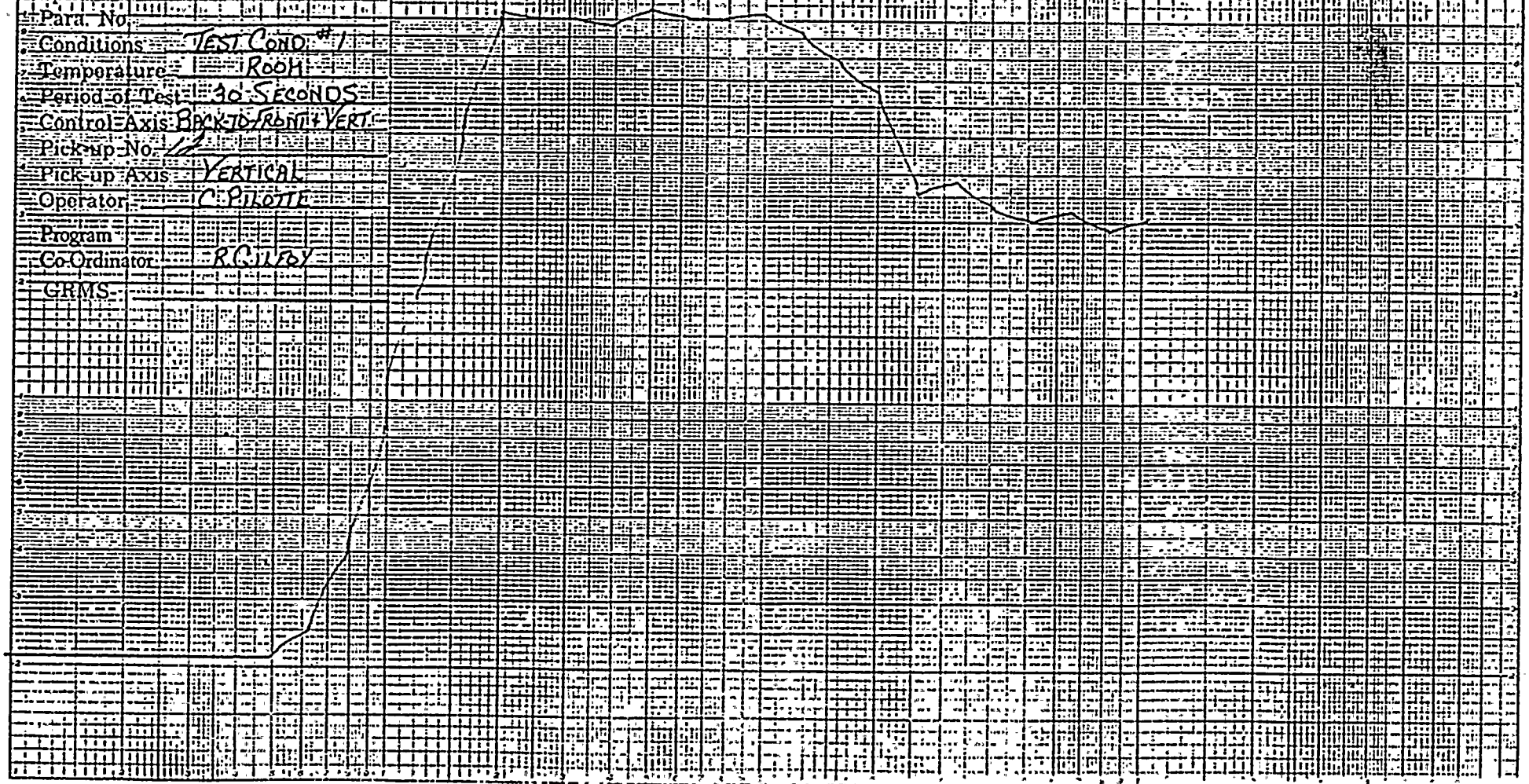


NO 31,256, LOGARITHMIC: FOUR BY THREE 2 CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
GRAPH PAPER
PRINTED IN U.S.A.

ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 2g Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT.
Pick-up No 12
Pick-up Axis VERTICAL
Operator C PILOTTE
Program
Co-Ordinator R.G. LEFEBVRE
GRMS



NO. 31,238. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES
CODEX GRAPH PAPER
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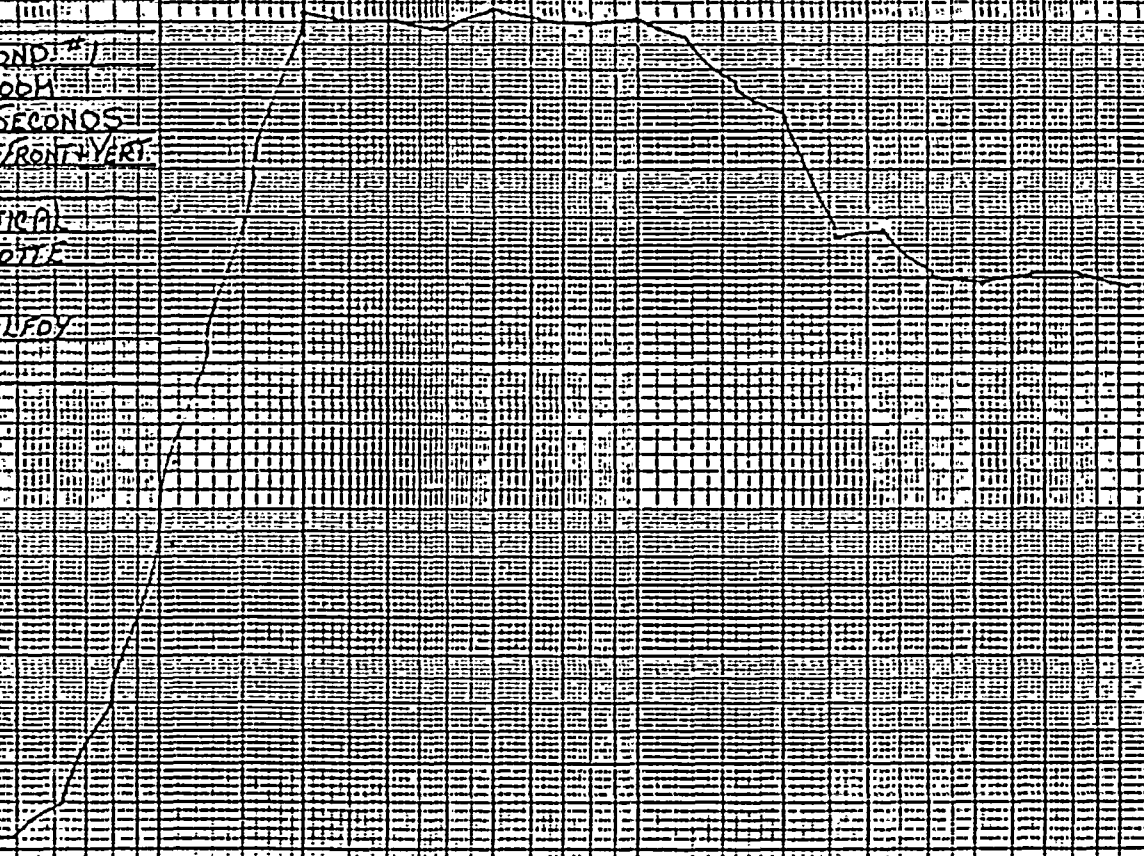
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILFOY
GRMS



NO. 31,256 LOGARITHMIC: FOUR BY THREE 2½ INCH CYCLES.
CODEX GRAPH PAPER
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PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. Ll Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILFOY
GRMS

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NO. 31 256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 18 Run 5
Date 6-4-8
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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NO 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
CODEX GRAPH PAPER
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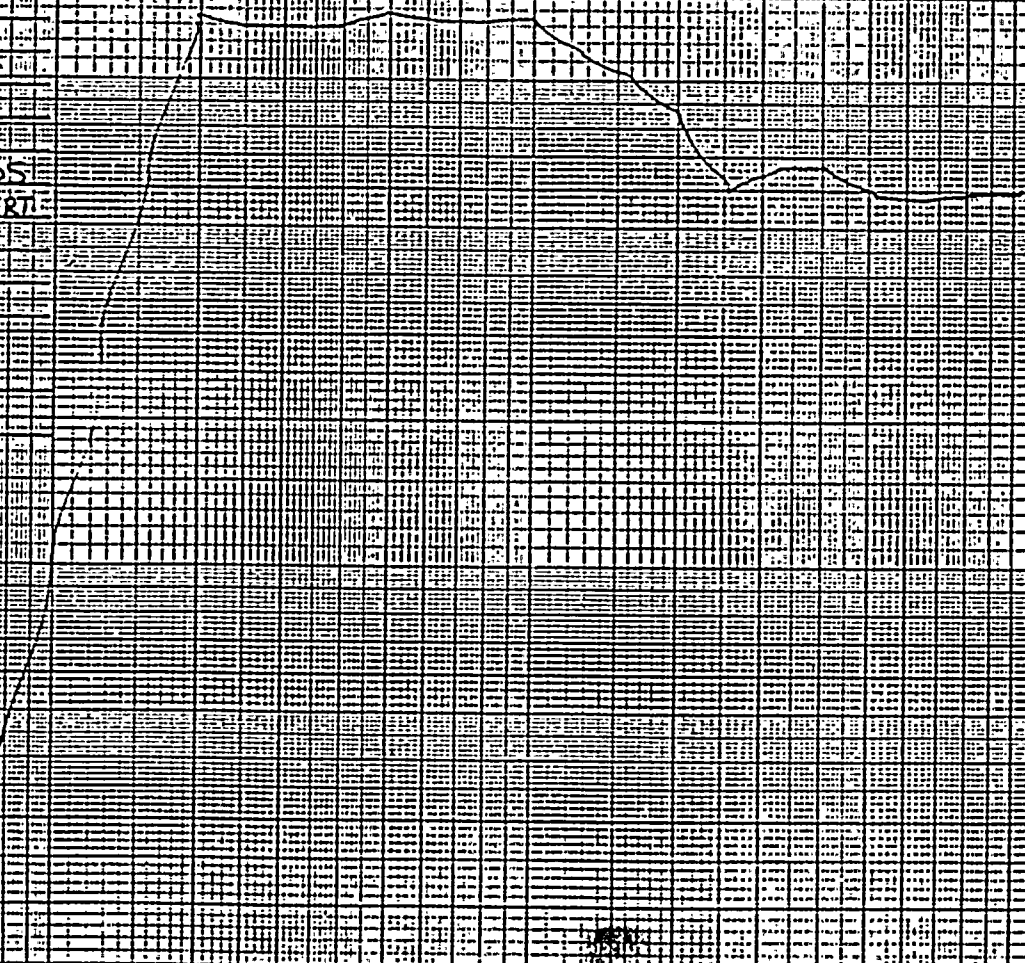
PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No 2E Run 6
Date 4-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 8208I 8208J 8208S
Test Item S/N
Type of Test RANDOM SSE
Spec No
Para No
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT + VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



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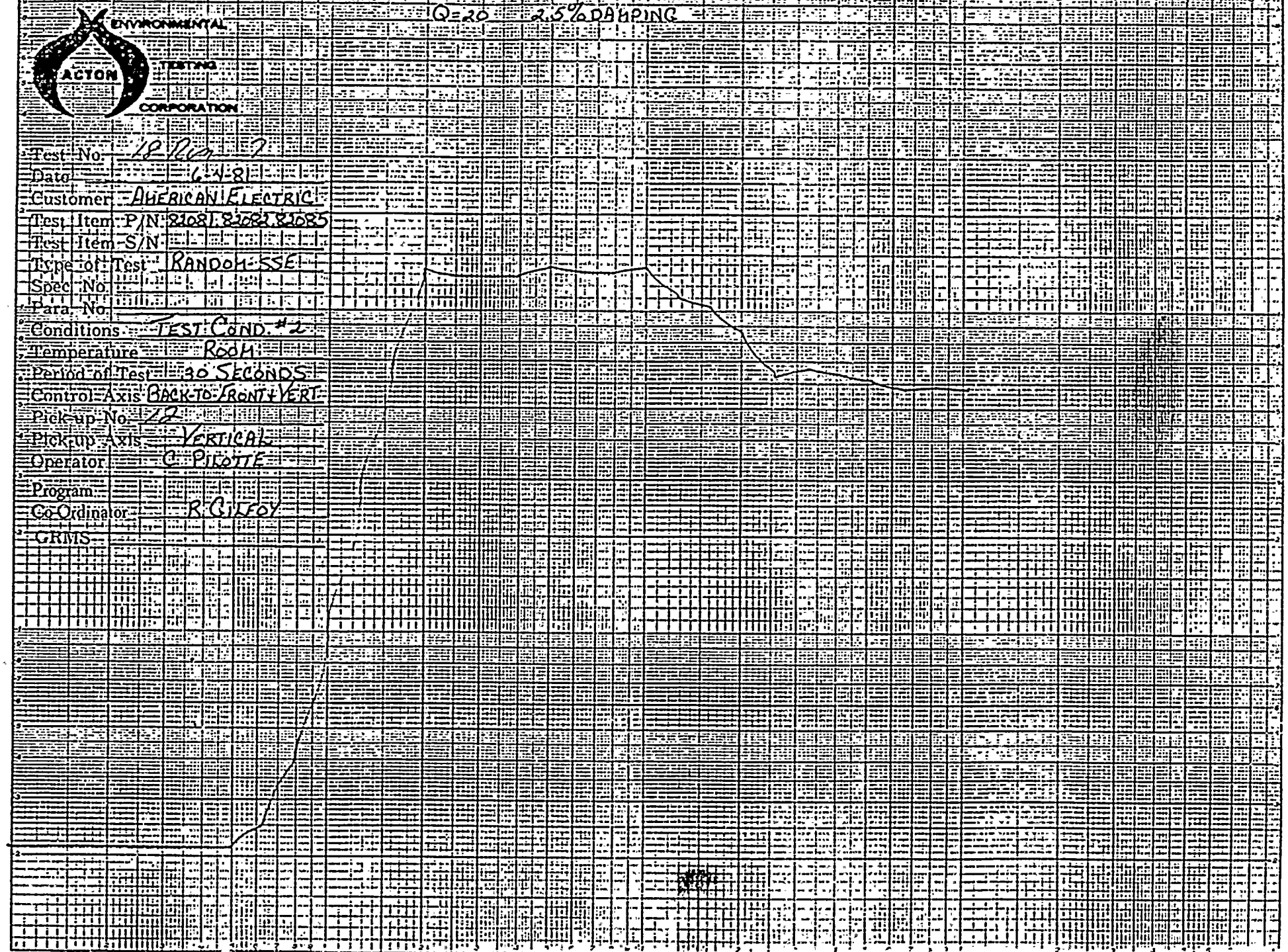
NO 31.258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

IQ=20 2.5% DAMPING

Test No. 18 Rev 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82081 82082 82085
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

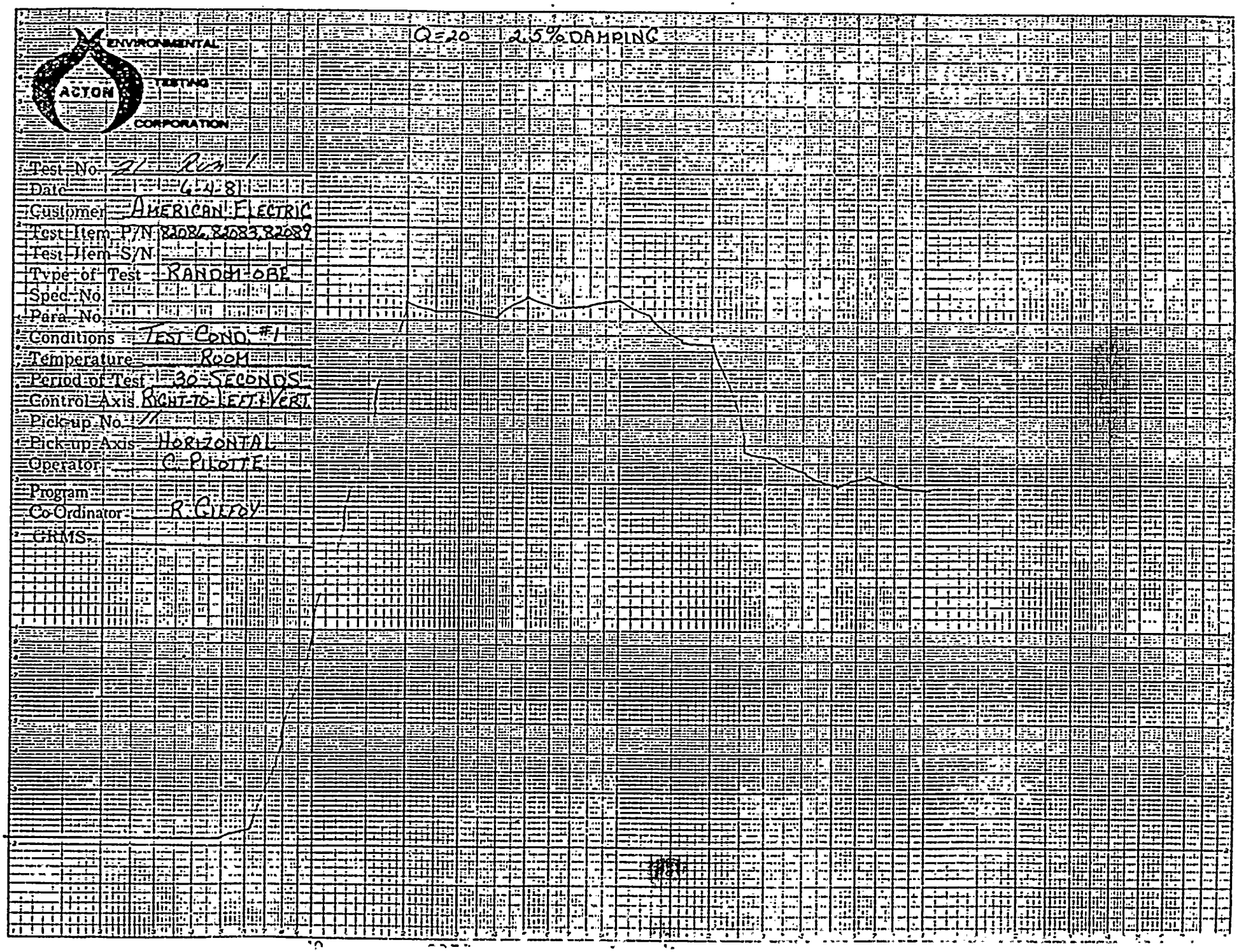


NO. 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 2 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82082, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT-VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



NO. 31,256 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX CHART PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 21 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
CODEX GRAPH PAPER
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ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Rev. F
Date 6-2-81
Customer AMERICAN ELECTRIC
Test Item P/N 82082, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT (VERT)
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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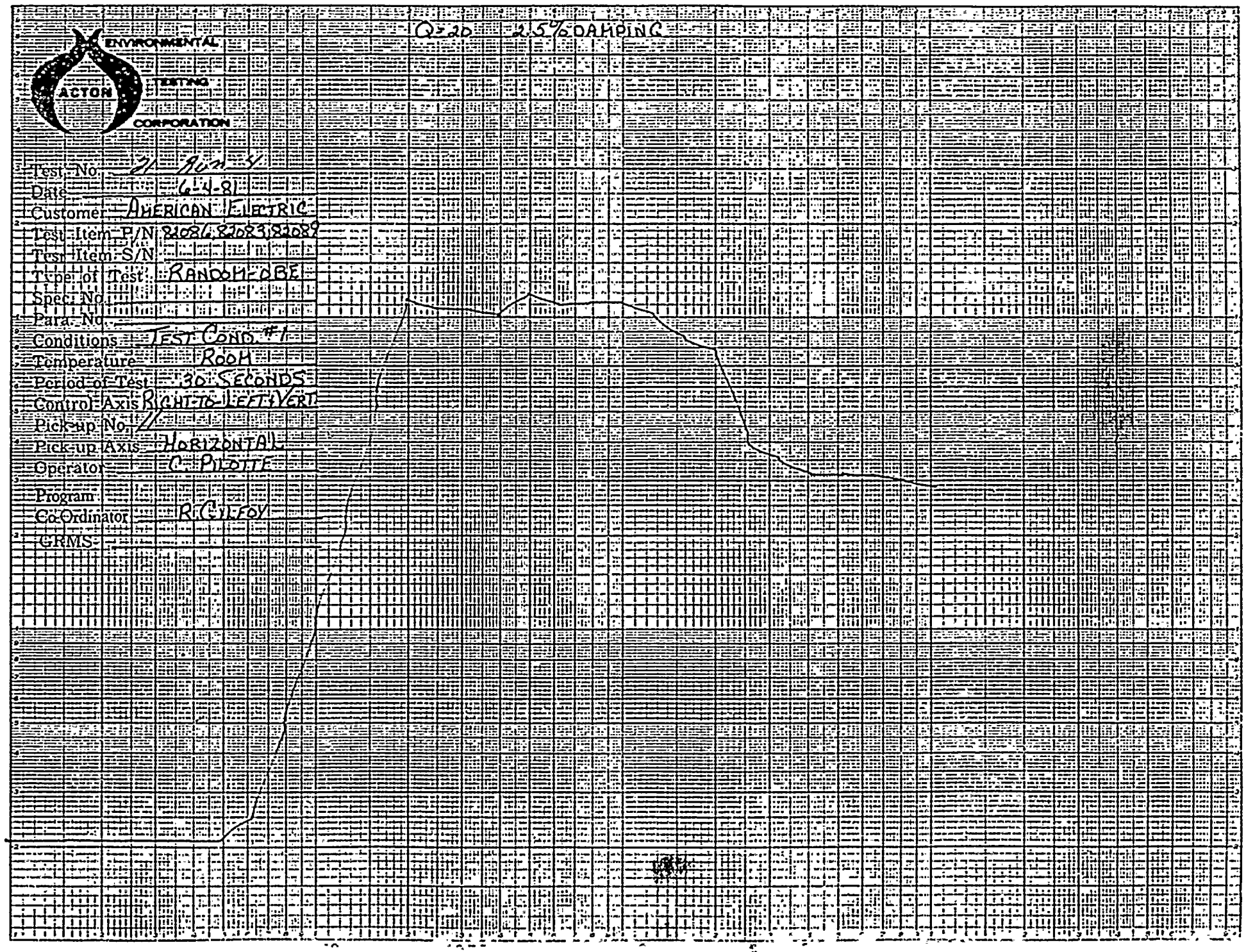
NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

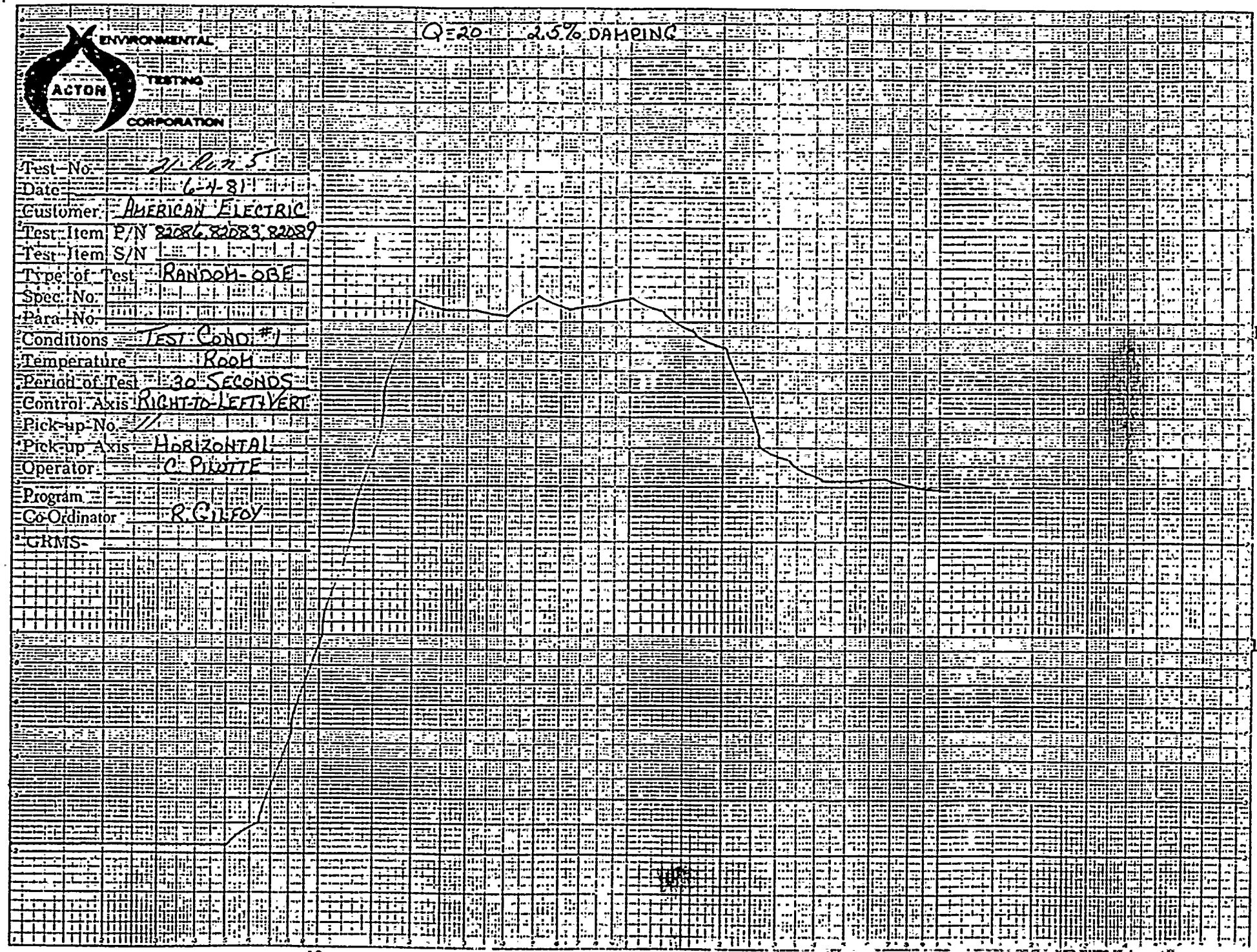


NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL TESTING ACTON CORPORATION

Q=20 2.5% DAMPING

Test No. 31 Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. //
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31 256. LOGARITHMIC: FOUR BY THREE 2-CYCLE.
GRAF-O-PAPER
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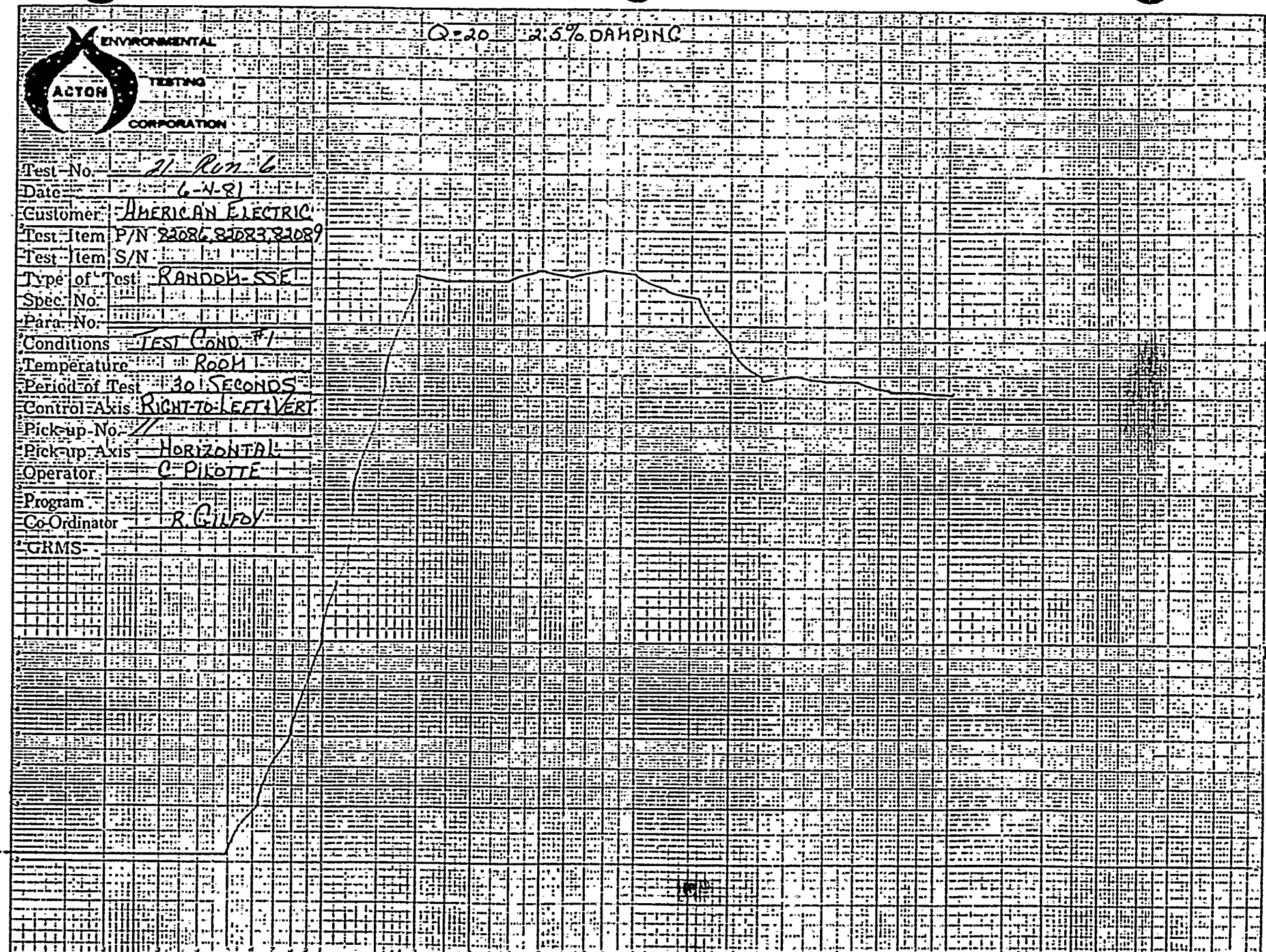
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 11 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 301 SECONDS
Control Axis RIGHT-TO-LEFT (VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

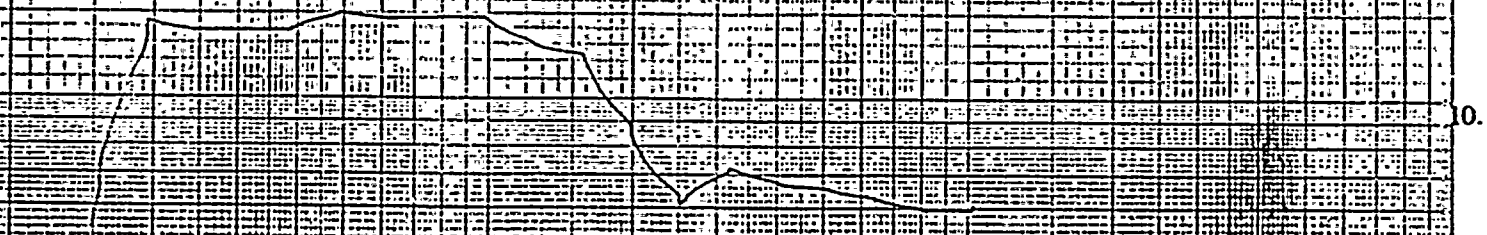


NC 31.256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
CODEX GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82082, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-LEFT & VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. Z Run 8
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-½ SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PLOTTS
Program
Co-Ordinator R. GILROY
GRMS

10.
9.5
9.0

10 HERTZ 100 HERTZ

NO. 31.258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES
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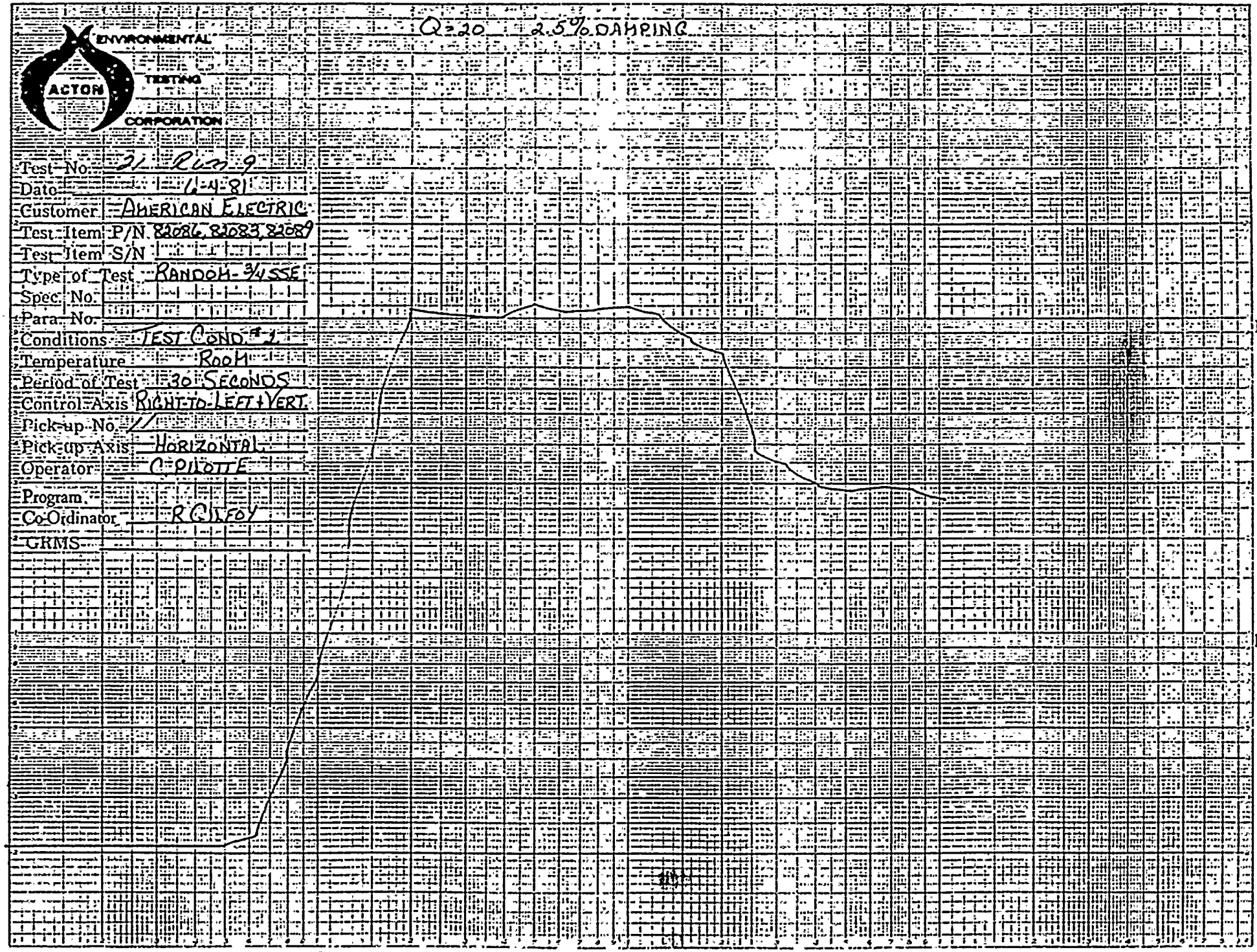
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 21 Run 9
Date 1-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-3/4 SSE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. CLEFOY
GRMS



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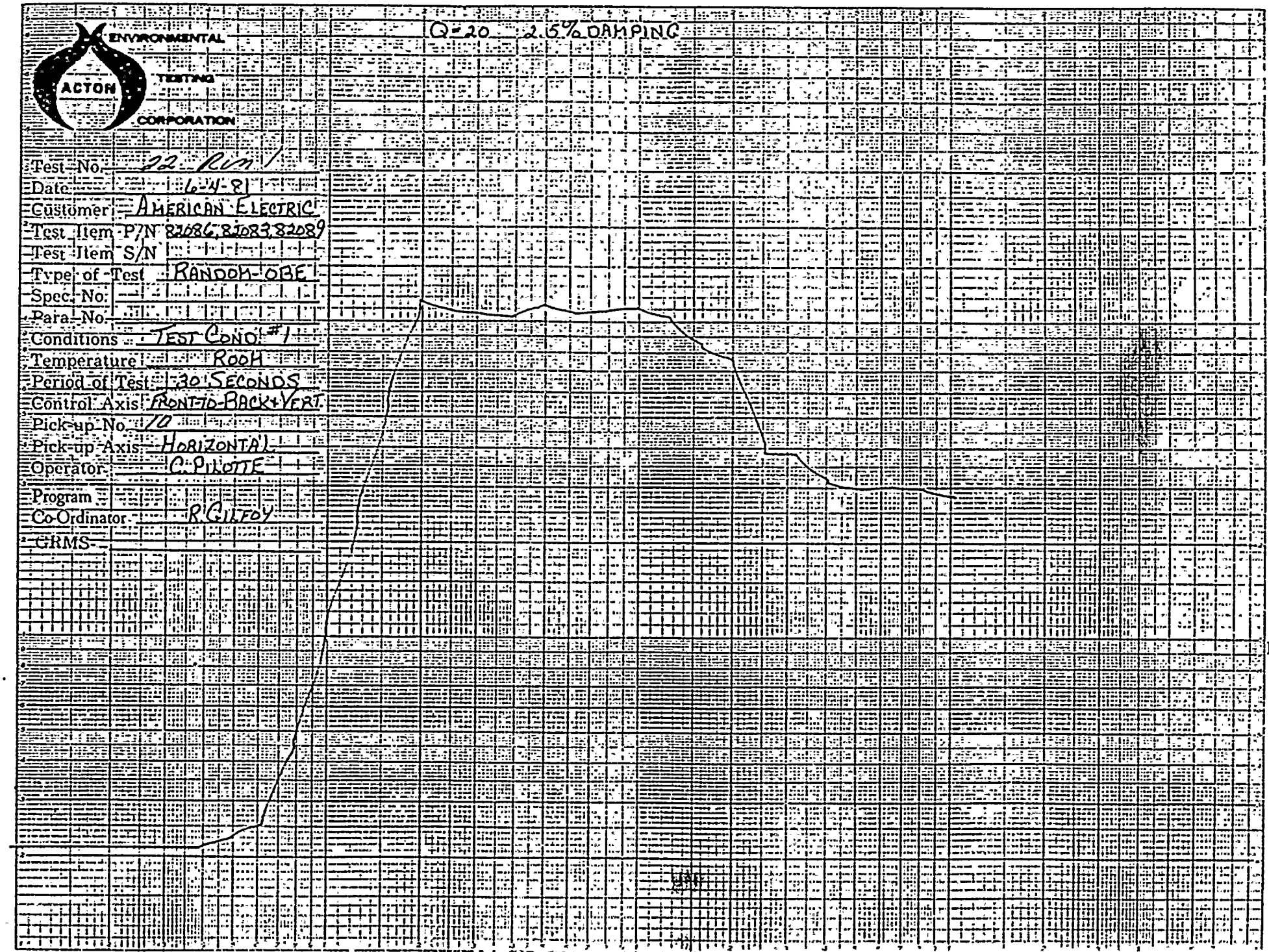
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 22 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST CONF #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK + VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 22 Rev 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

10

g's

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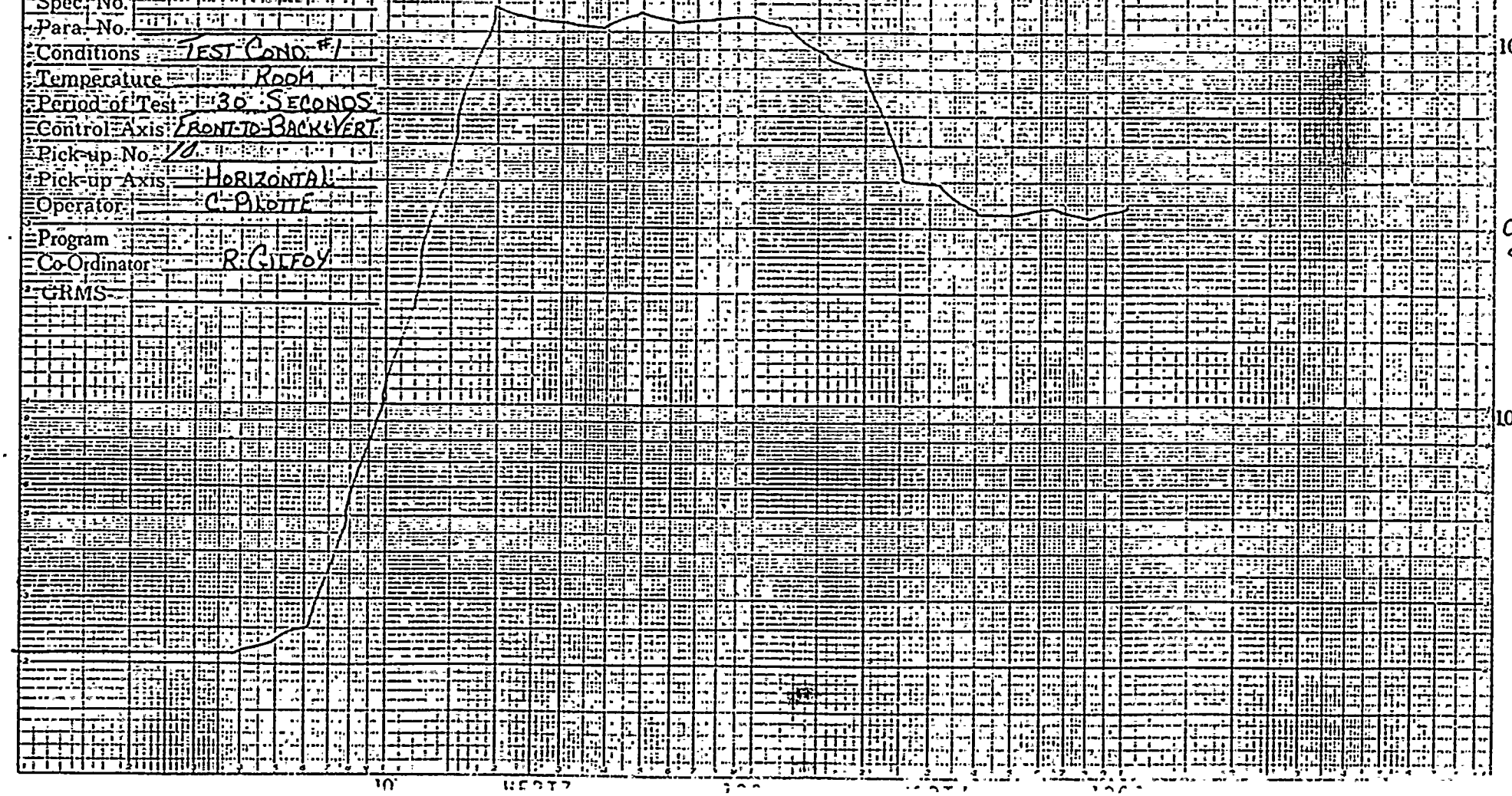
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 22 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 81089
Test Item S/N
Type of Test RANDOM- OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PLOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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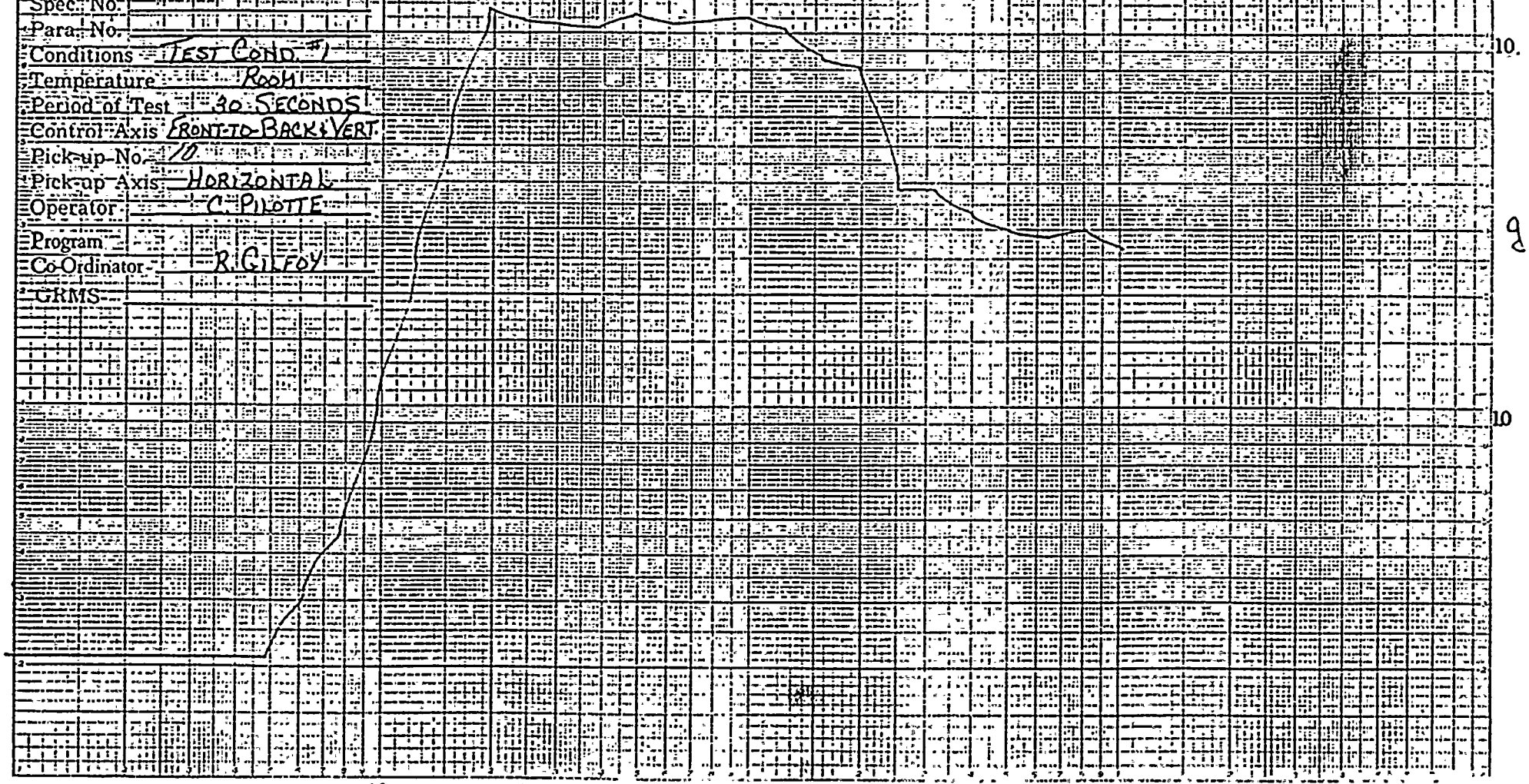
ENVIRONMENTAL TESTING ACTON CORPORATION

Q = 20 - 2.5% DAMPING

Test No. 22 Run 9
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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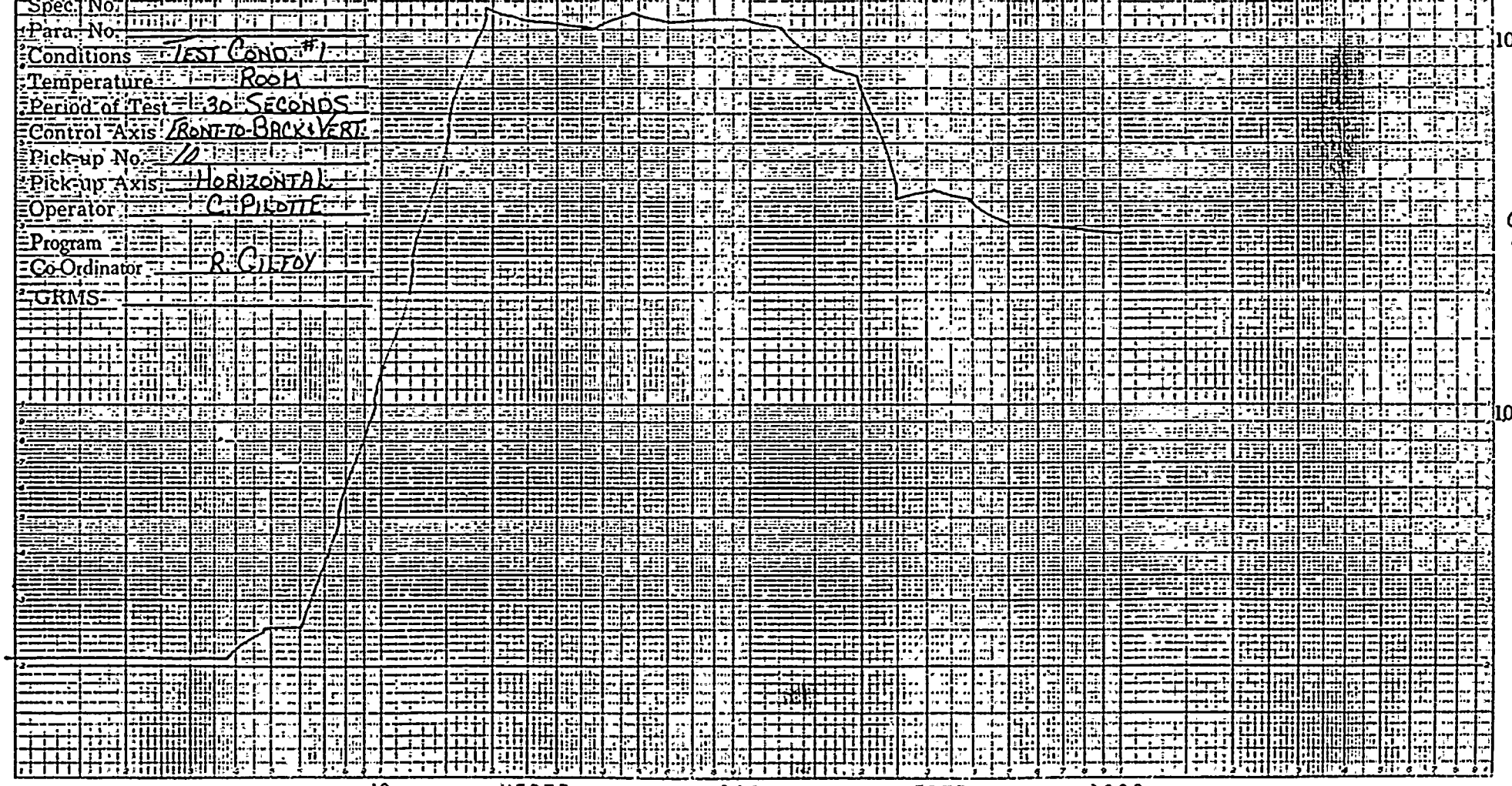
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No 22 Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82082, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT.
Pick-up No 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS



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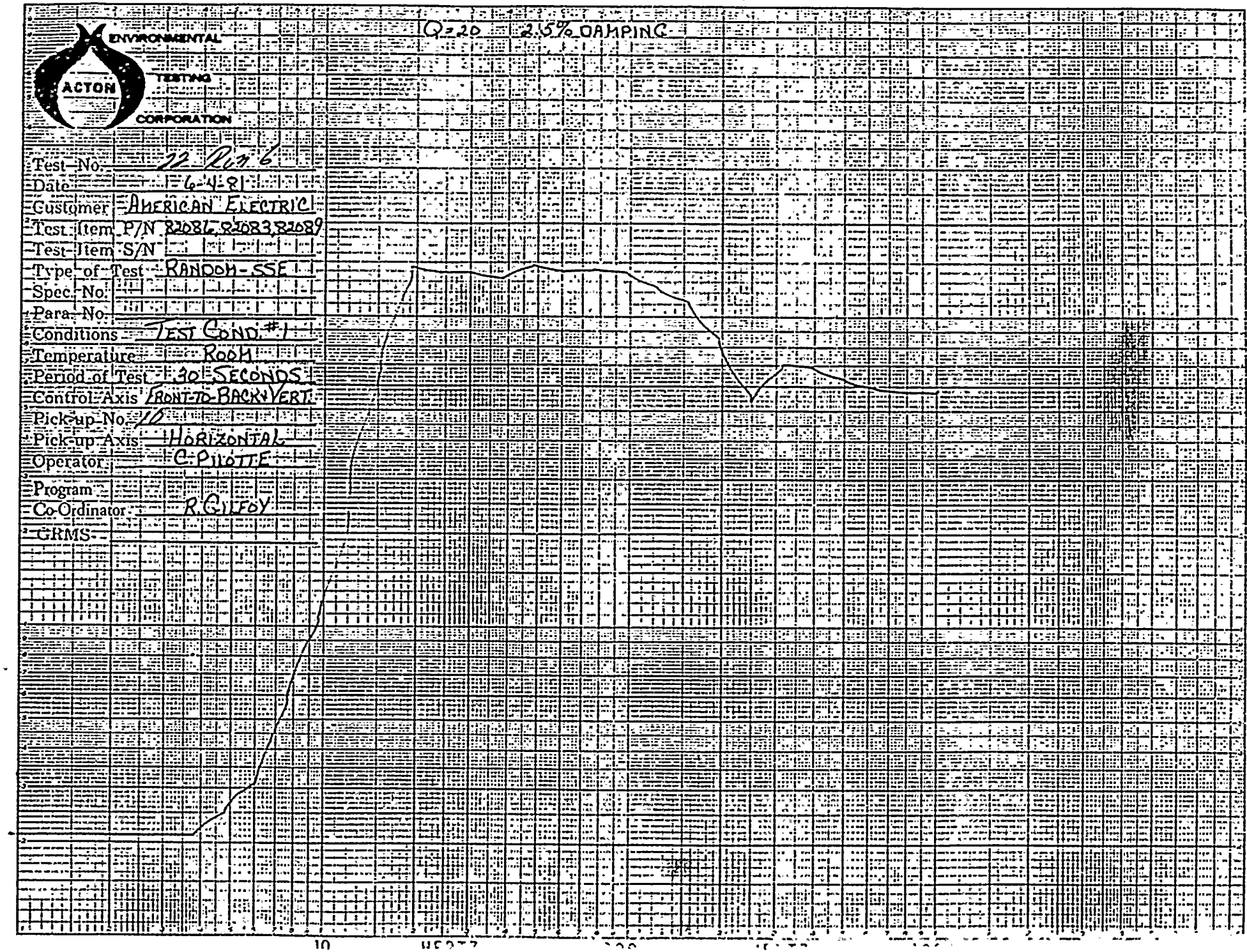
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Rev 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 22 Rem 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK + VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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g's

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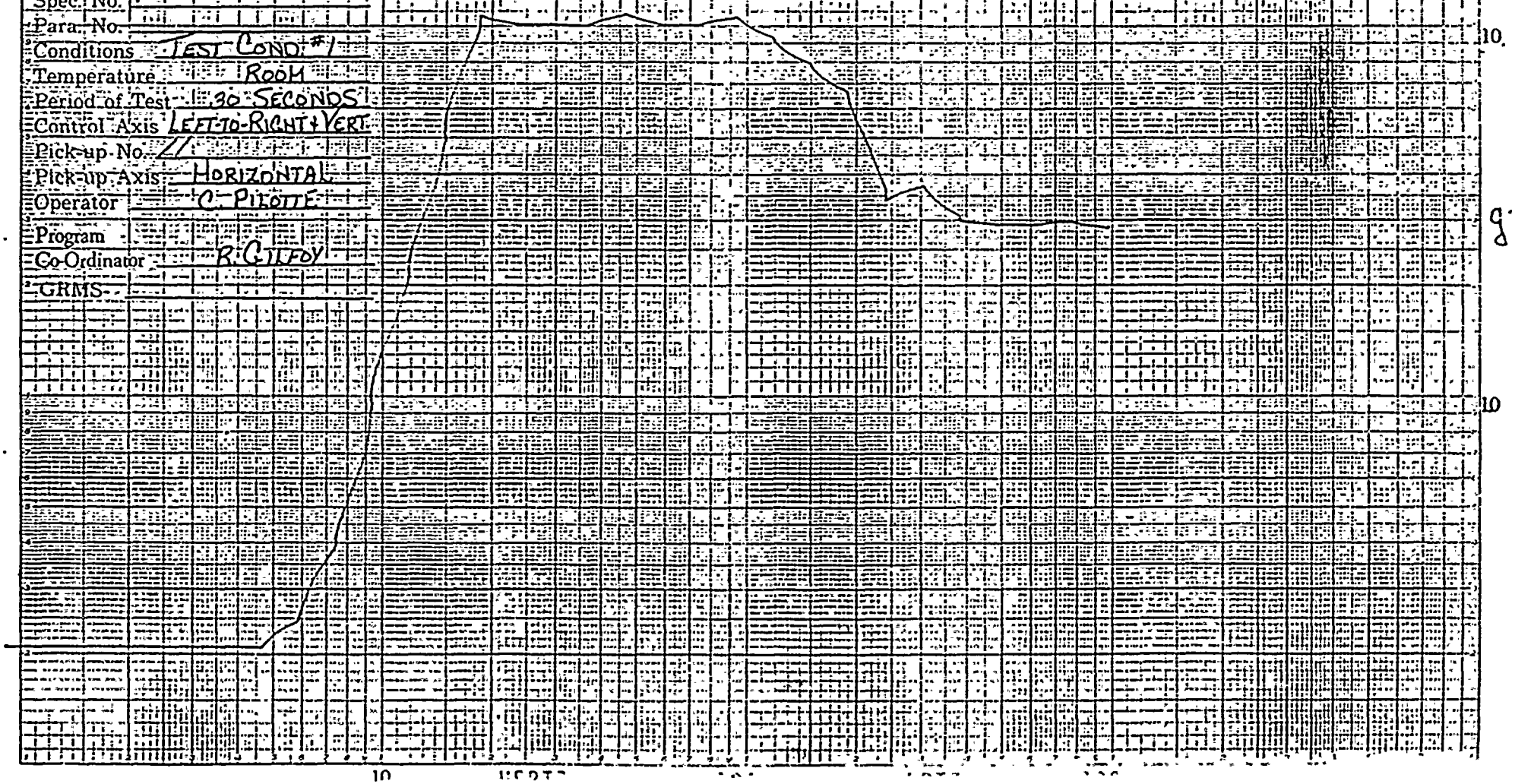
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 23 Run L
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. CLIFFORD
GRMS



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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 23 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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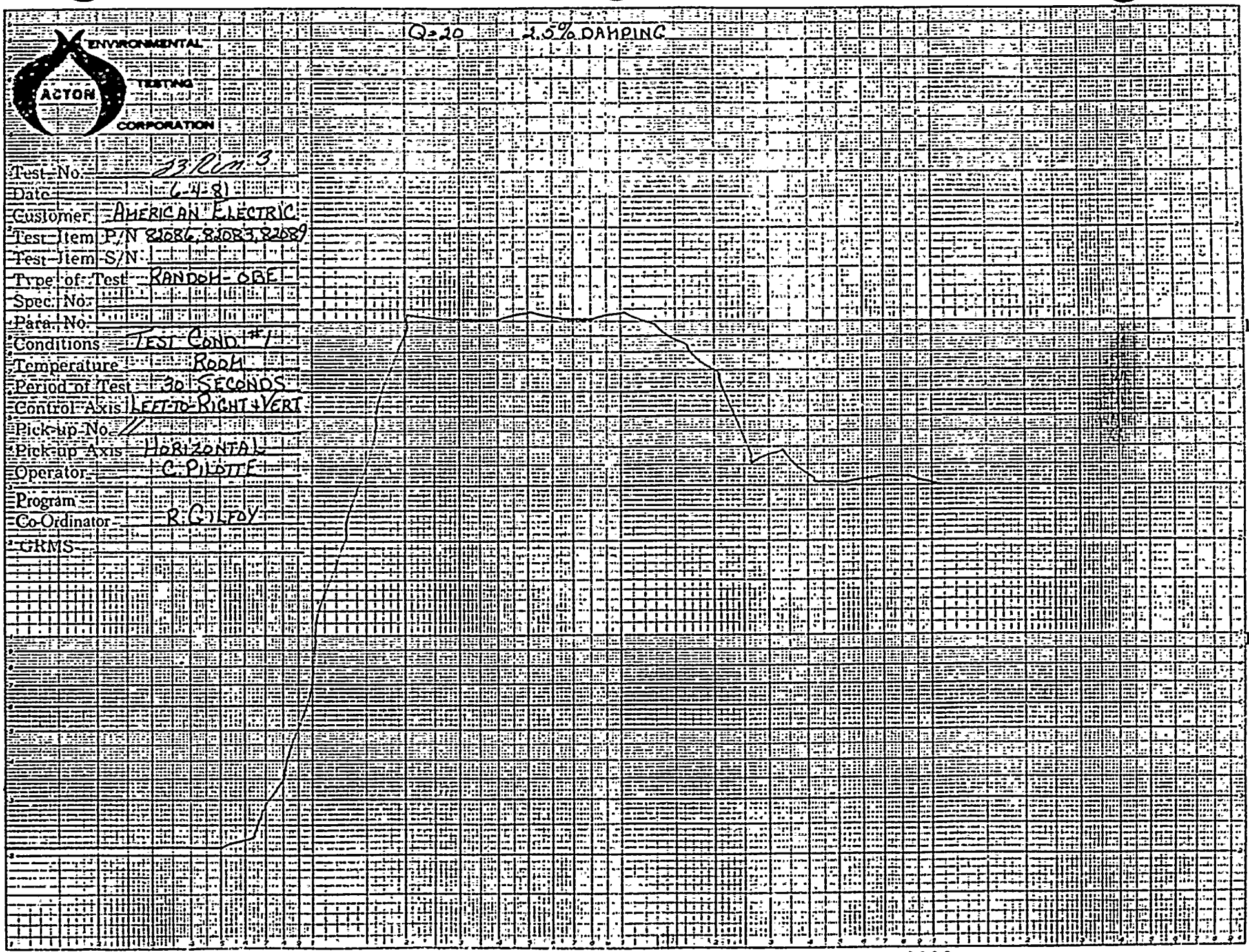
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 33RUN 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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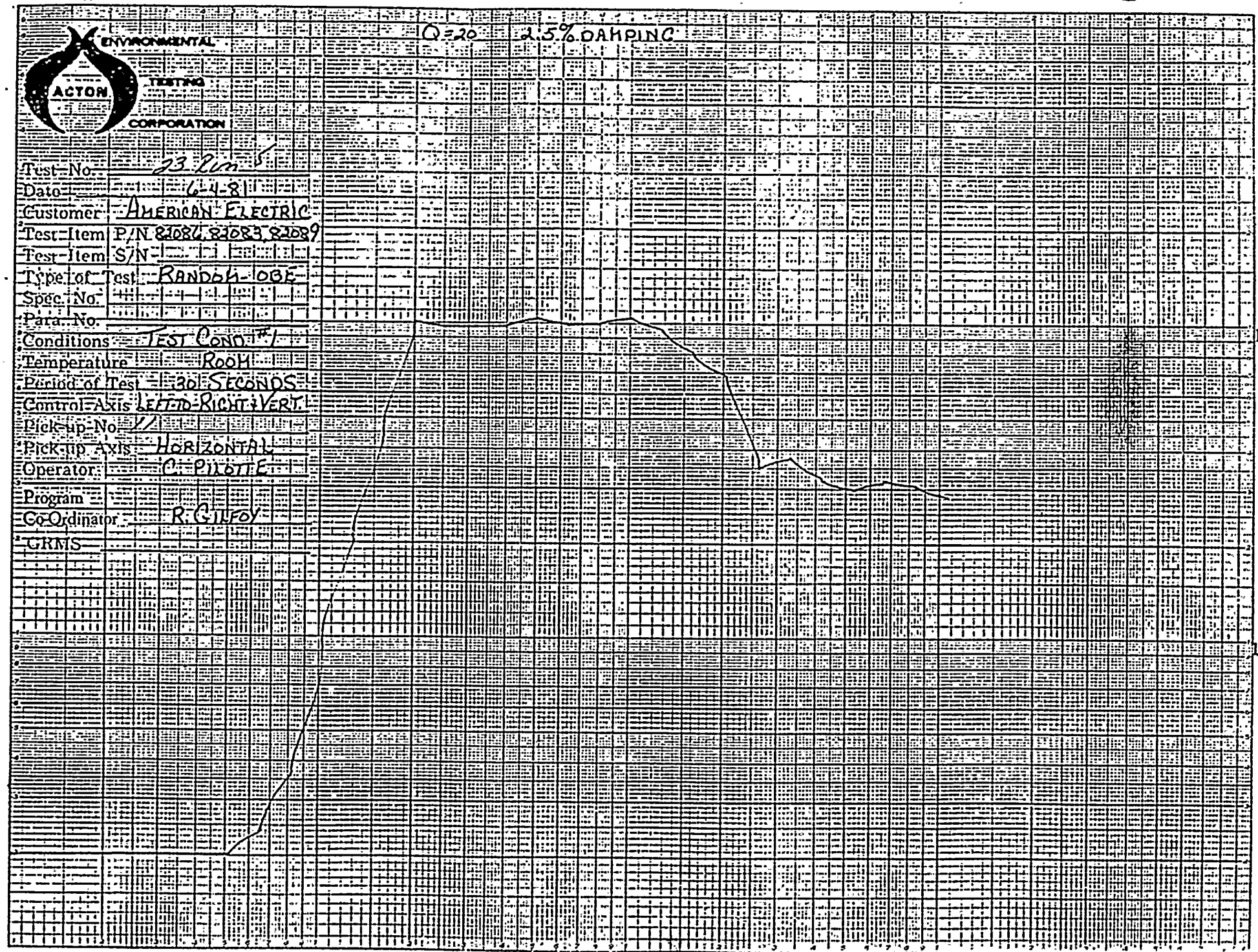
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Rim 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 - 2.5% DAMPING

Test No. 23 Run 6
Date 1-6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM - SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILTOY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Rem 7
Date 4-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM SSE
Spec. No.
Para. No.
Conditions TEST COND #3
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT
Pickup No. 4
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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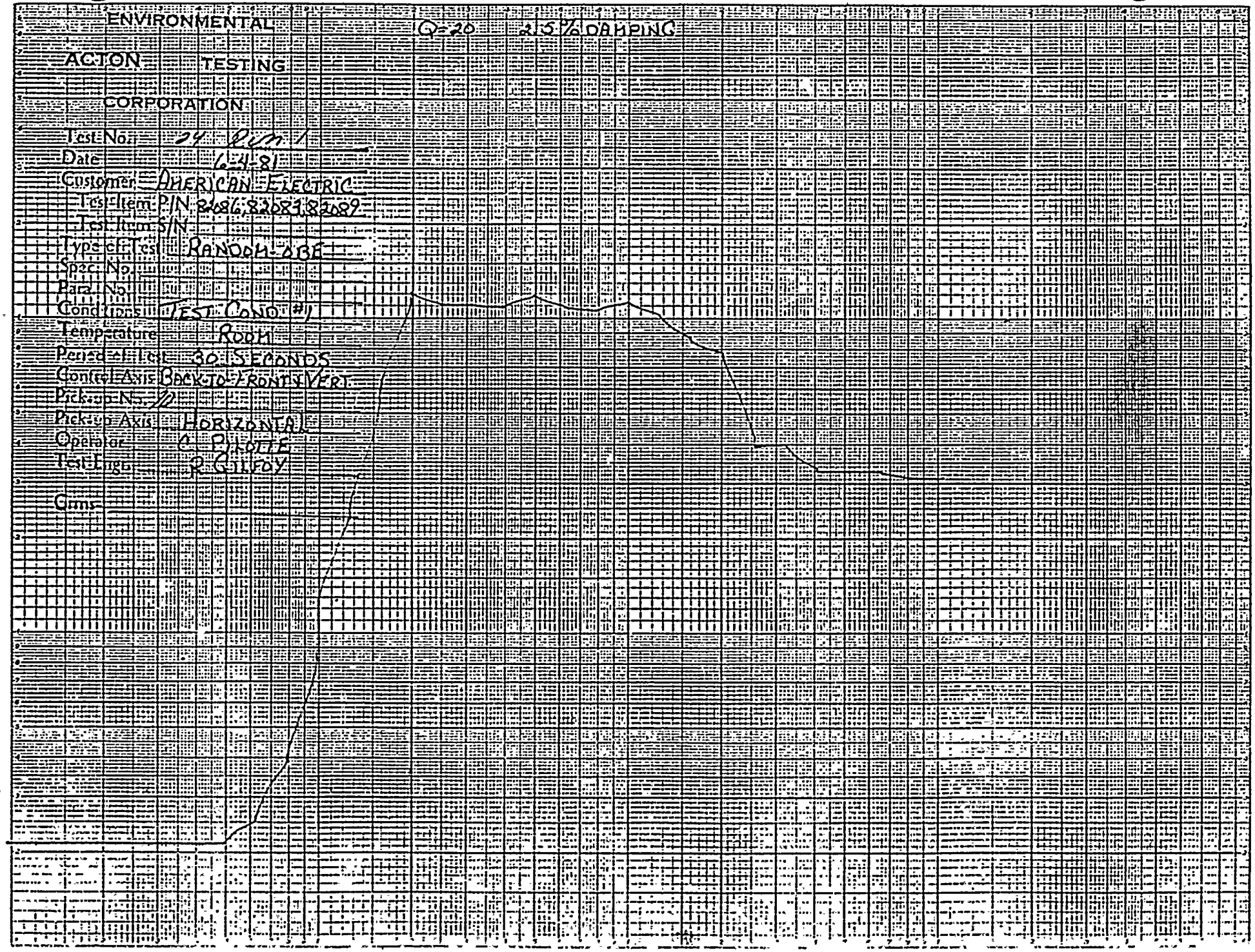
ENVIRONMENTAL

ACTON TESTING

CORPORATION

Q=20 2.5% DAMPING

Test No: 24 Run 1
Date: 6-4-81
Customer: AMERICAN ELECTRIC
Test Item P/N: 82086, 82083, 82089
Test Item S/N:
Type of Test: RANDOM-OBE
Spec. No:
Part No:
Conditions: TEST COND #1
Temperature: ROOM
Period of Test: 30 SECONDS
Control Axis: BACK-TO-FRONT VERT
Pick-up No.: 10
Pick-up Axis: HORIZONTAL
Operator: C. PLOTE
Test Engr: R. GILFOY
Cmts:



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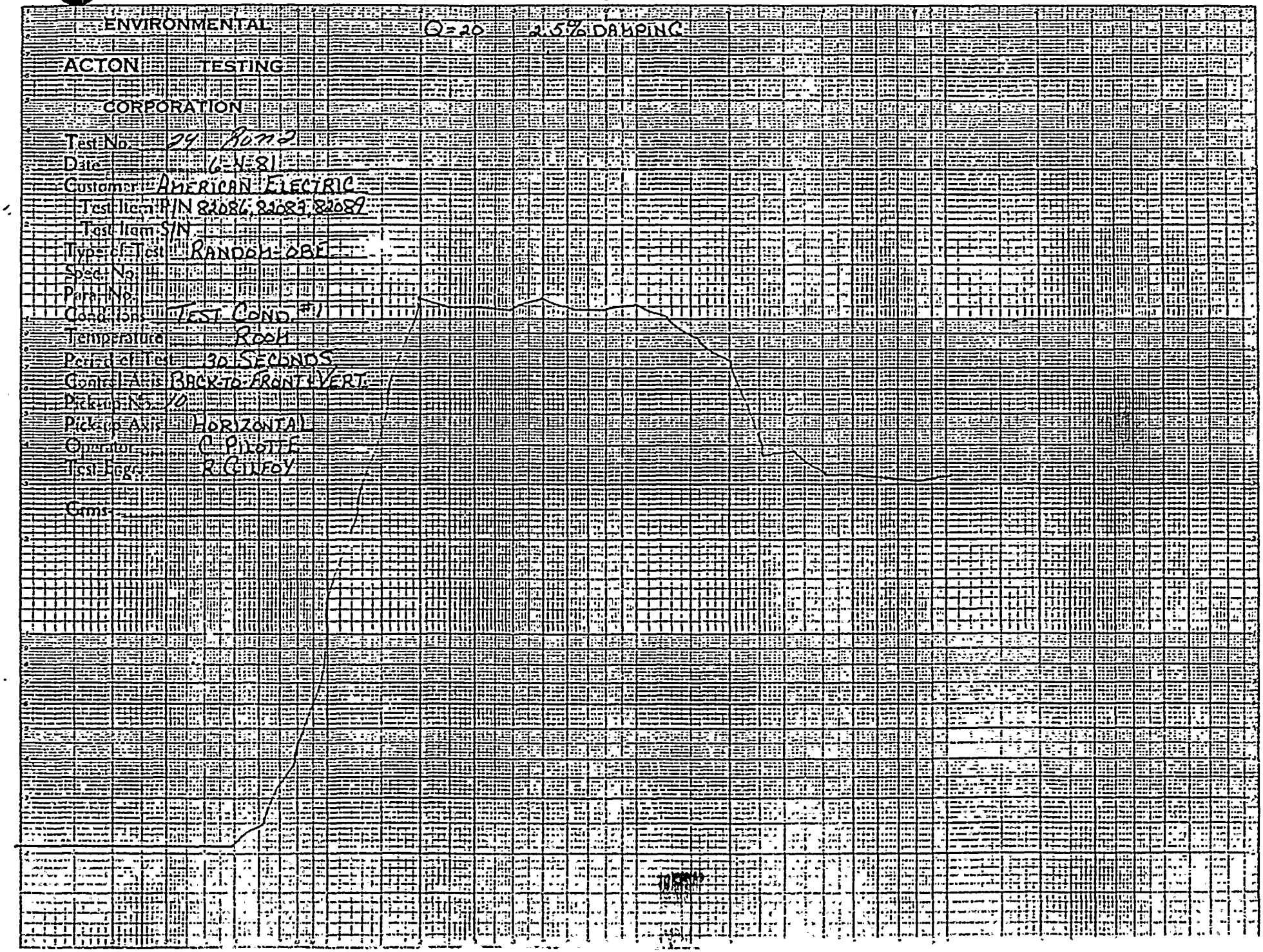
ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING CORPORATION

Test No. 29 Rev 2
Date 6-W-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Condition TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pickup No. 10
Pickup Axis HORIZONTAL
Operator C. PIROTTE
Test Engr. R. CONROY
Grms



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ENVIRONMENTAL Q-20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 2E Con 3

Date 6-4-81

Customer AMERICAN ELECTRIC

Test Item P/N 82086, 82083, 82089

Test Item S/N

Type of Test RANDOM-OBE

Spec. No.

Para. No.

Conditions TEST COND. #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK TO FRONT + VERT.

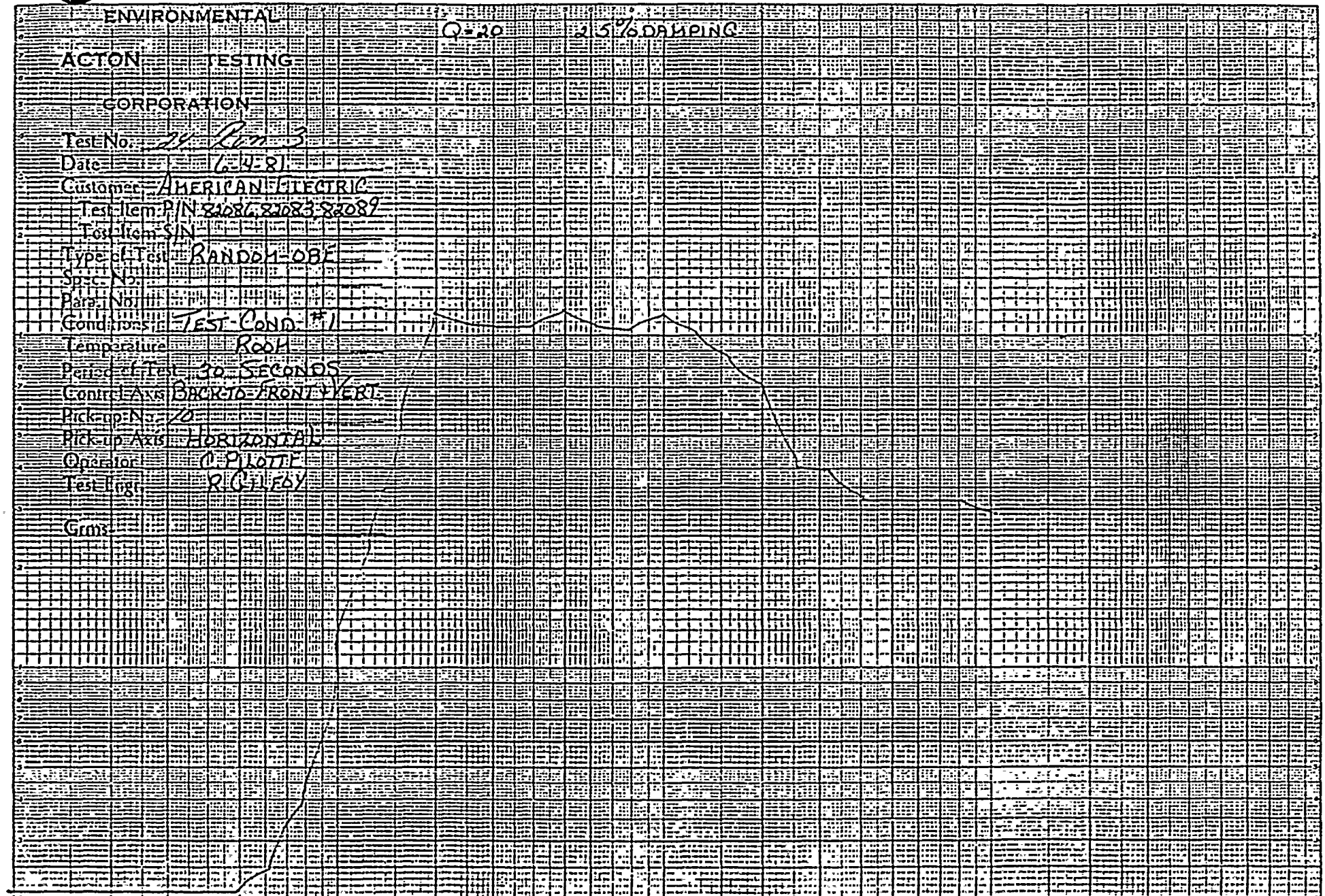
Pick-up No. 10

Pick-up Axis HORIZONTAL

Operator C. PILOTTE

Test Engr. R. GILFOY

Grms:



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ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No 25 Run 4

Date 6-4-81

Customer AMERICAN ELECTRIC

Test Item P/N 82086, 82083, 82089

Test Item S/N

Type of Test RANDOM-OBE

Spec No.

Para No.

Conditions TEST COND. #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK-TO-FRONT VERT.

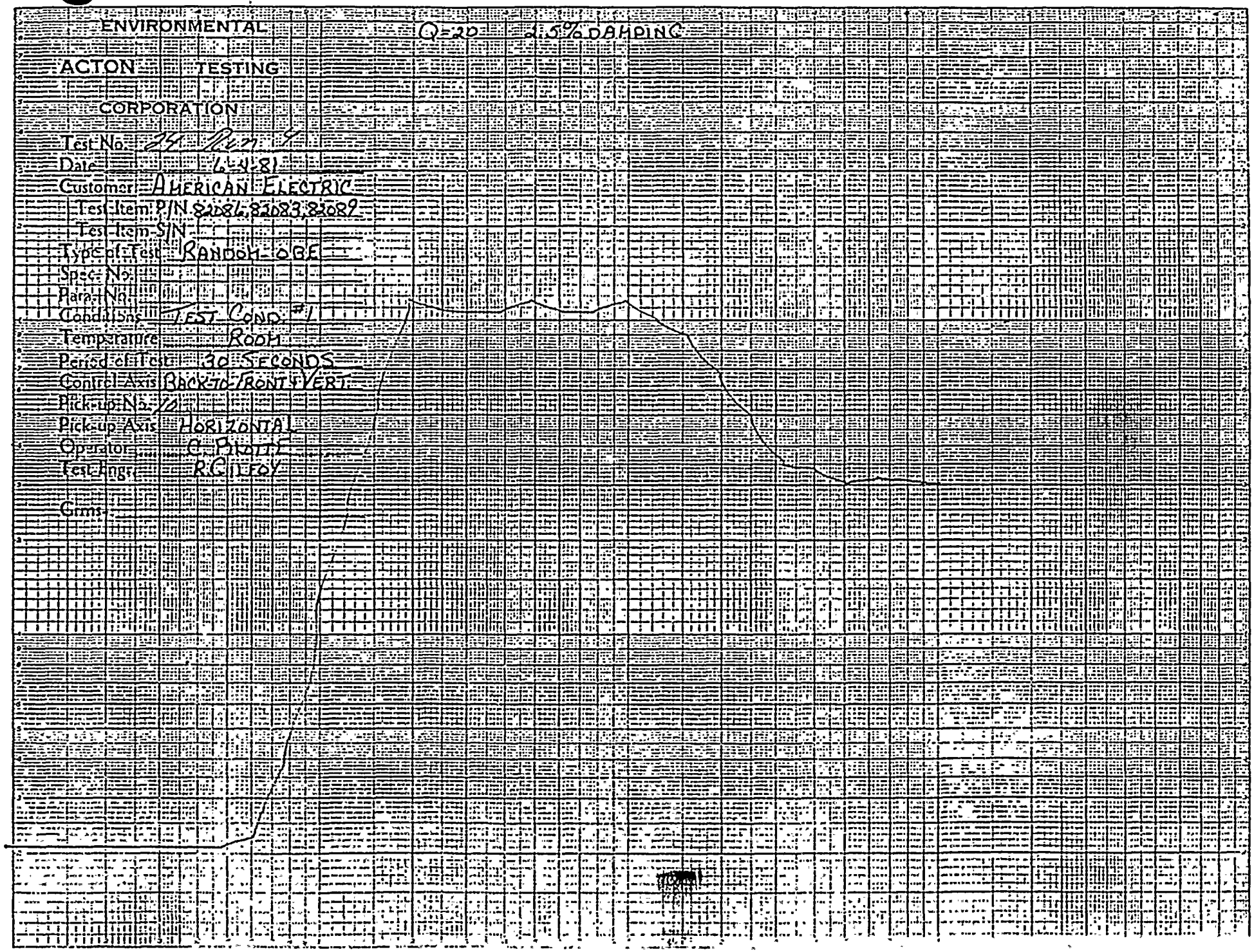
Pick-up No. 10

Pick-up Axis HORIZONTAL

Operator C. PIATT

Test Engr. R.C. TROY

Grms



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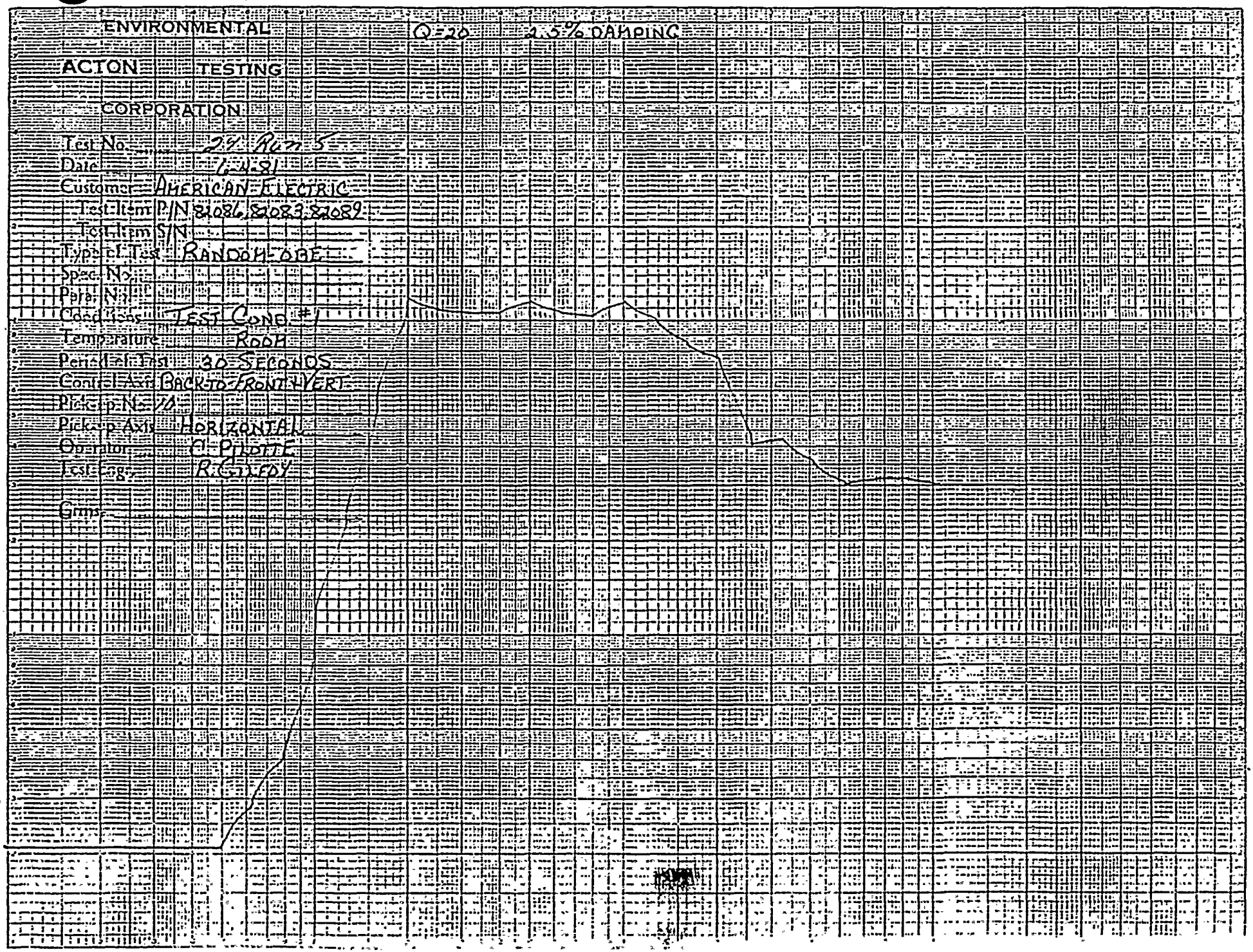
ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING CORPORATION

Test No. 29 Rem 5
Date 1-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 18
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Test Engr. R. GILROY
Grms



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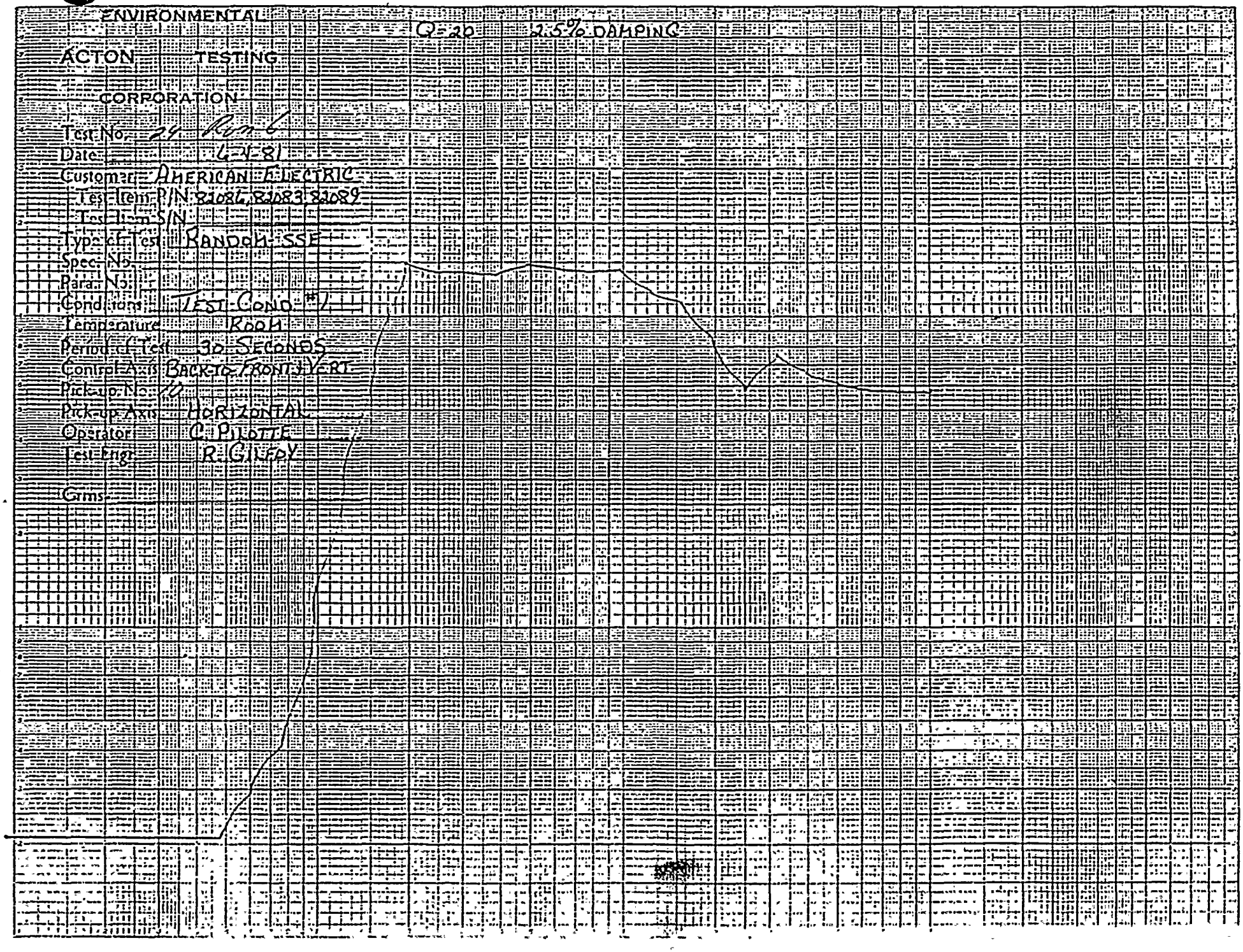
ENVIRONMENTAL

Q=20 2.5% DAMPING

ACTON TESTING CORPORATION

Test No. 29 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT-VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Test Engr R.C. LUFOY
Grms



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 130 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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10 HERTZ 100 HERTZ 1000

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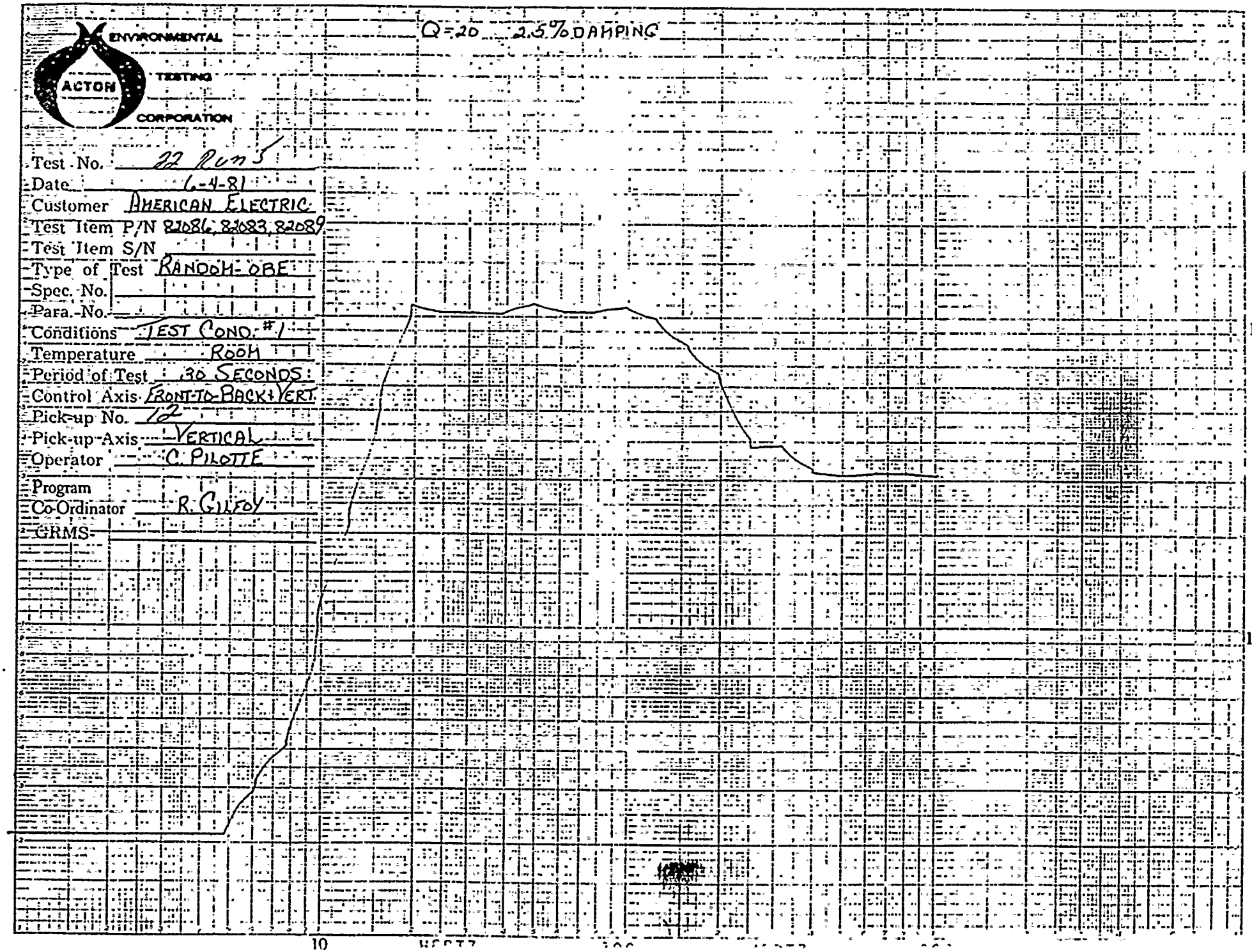
PRINTED IN U.S.A.

ENVIRONMENTAL TESTING ACTON CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Run 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

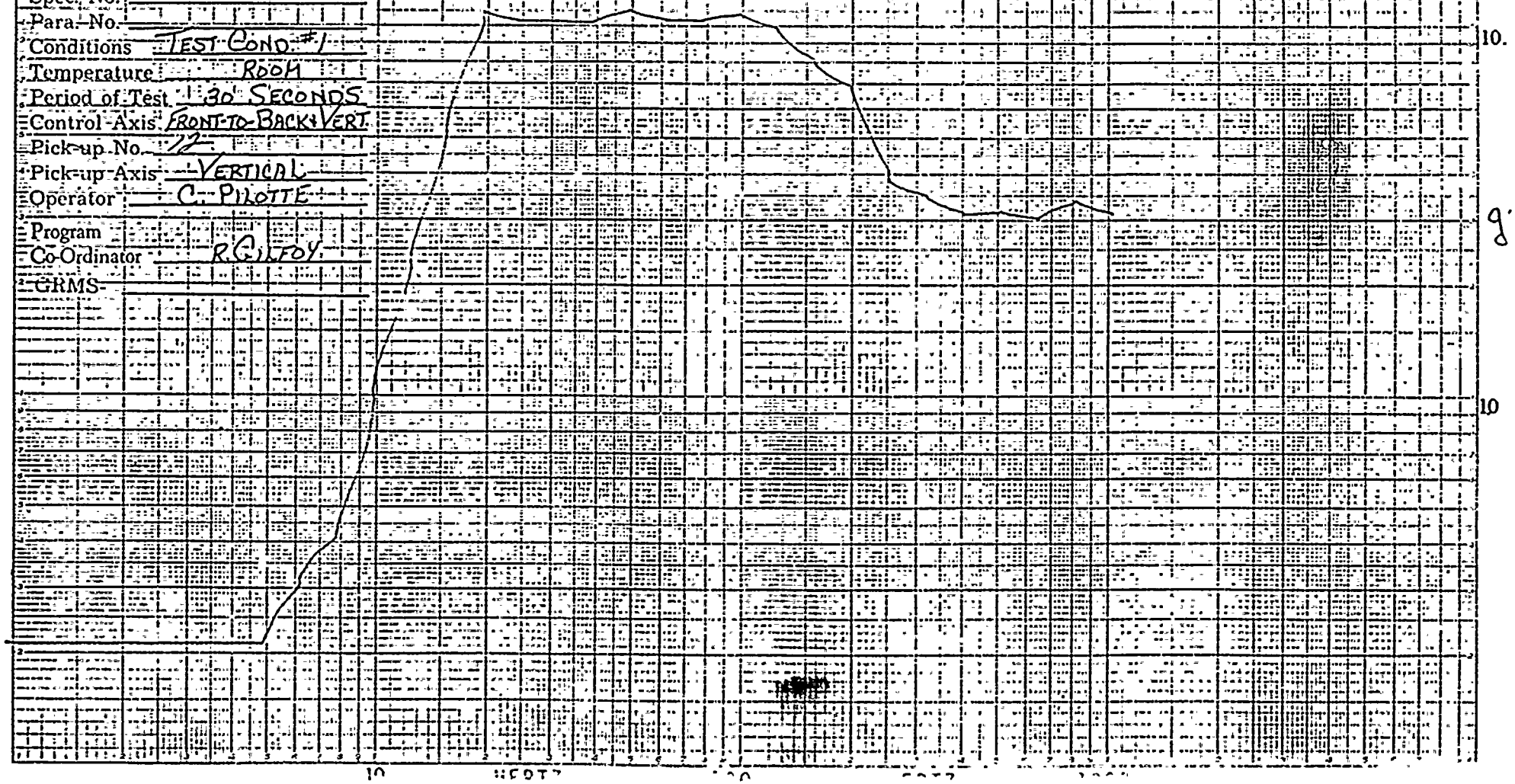


NO. 31,258 LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
GRAPH PAPER
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test-No. 22 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



NO. 3 LOG, LOGARITHMIC; FOUR BY THREE 2½-INCH CYCLES
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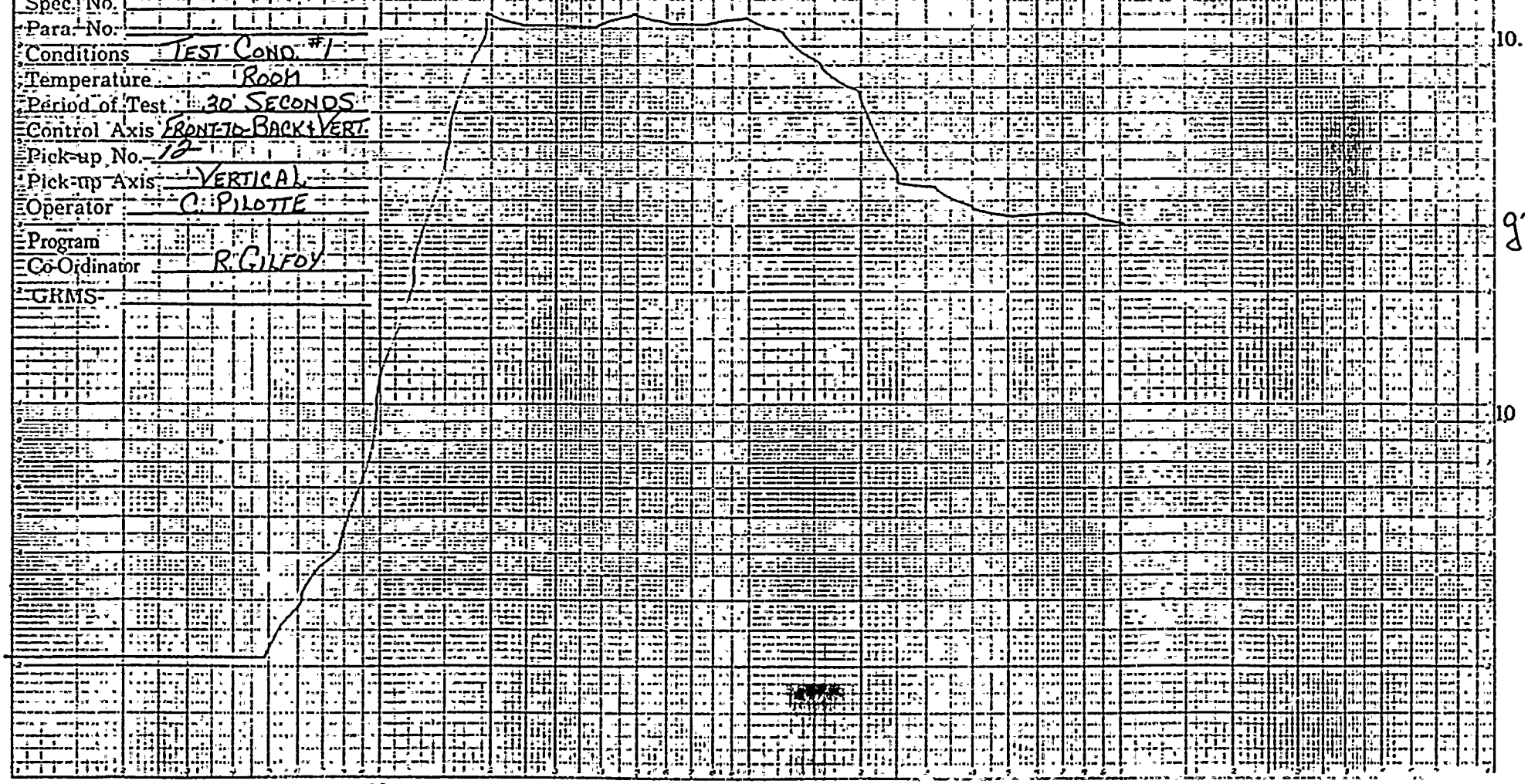
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test-No. 22 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,258 LOGARITHMIC FOUR BY THREE 2-INCH CYCLES
CRAVON PAPER
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PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 RUN 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK & VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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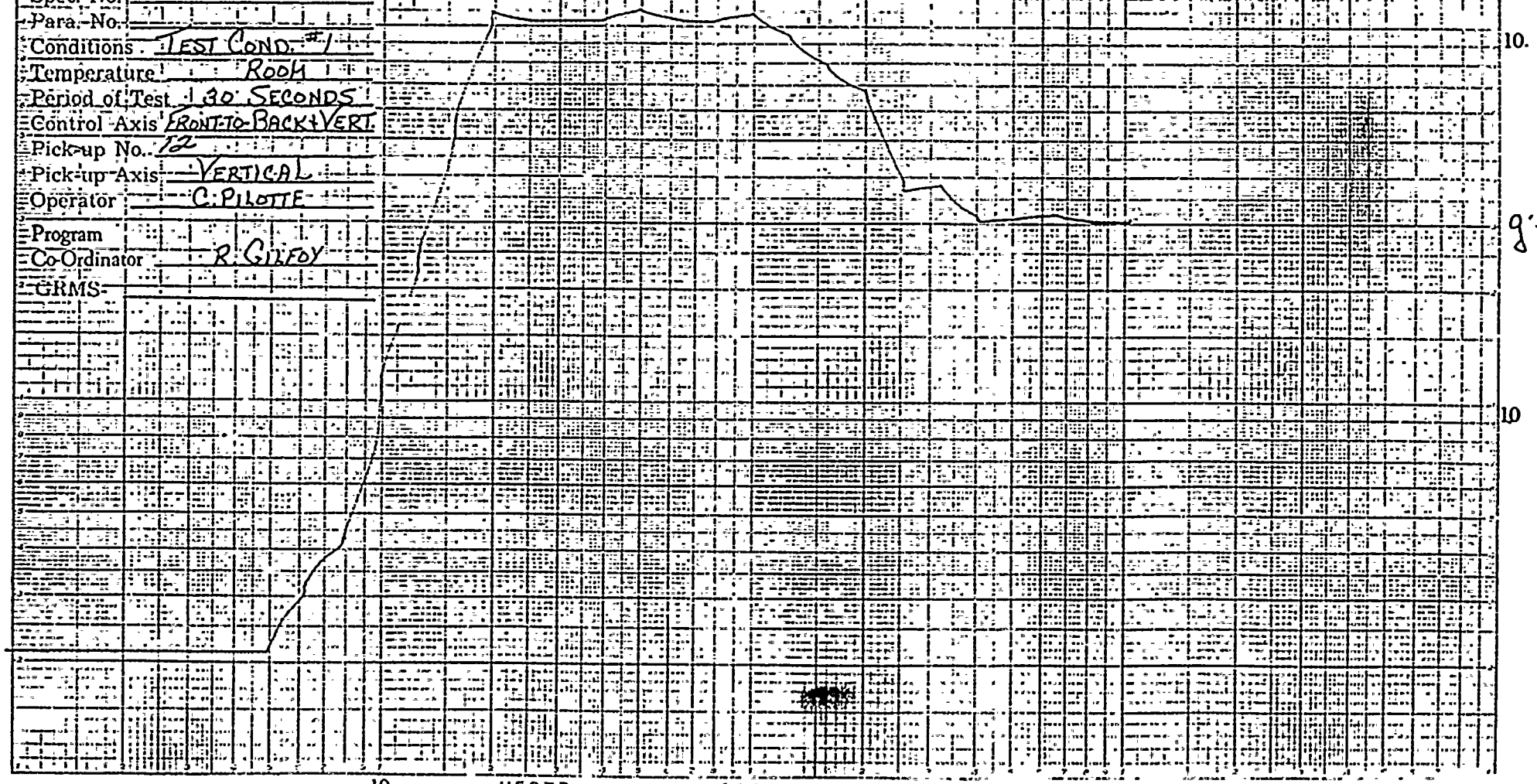
NO 31,250, LOGARITHMIC FOUR BY THREE 2½-INCH CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
GRAPH PAPER
PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 22 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 340 LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES.
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PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Run 9
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM - ¾ SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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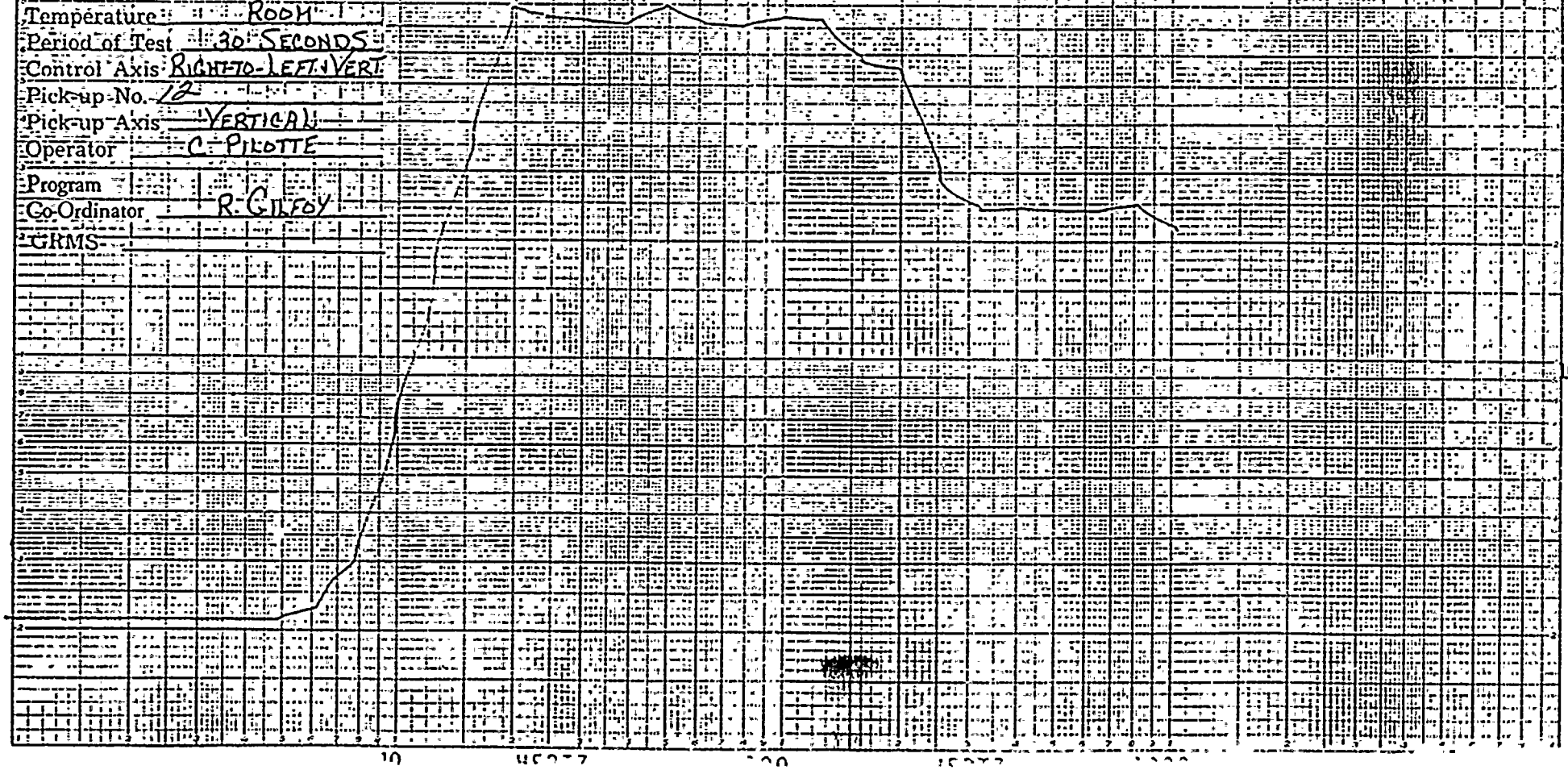
NO 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. KEUFFEL & ESSER CO. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 2 RUN 8
Date 6-24-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-½ SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



NO. 31,508 LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES.
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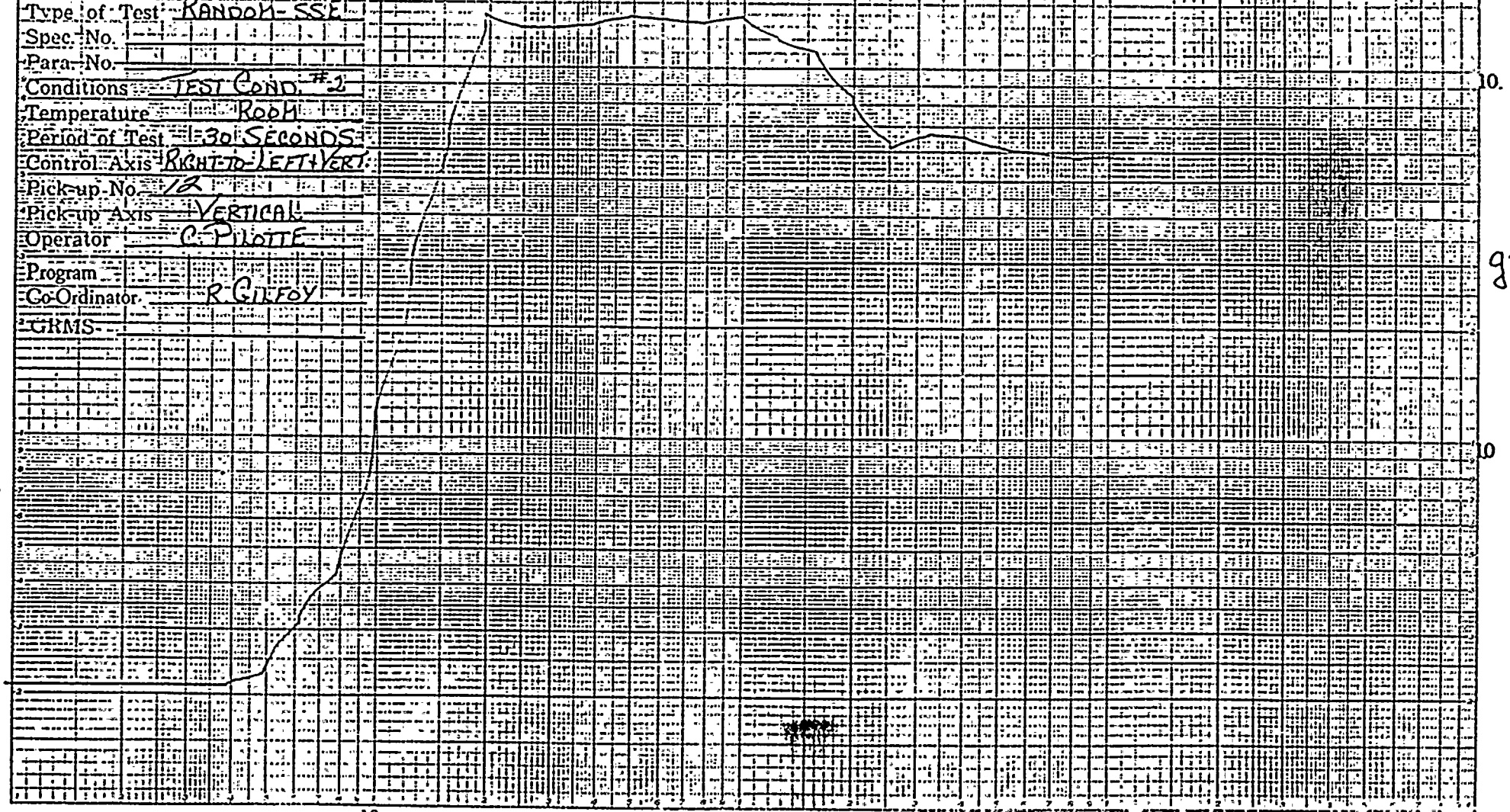
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Run 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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GRAV-A-PAPER
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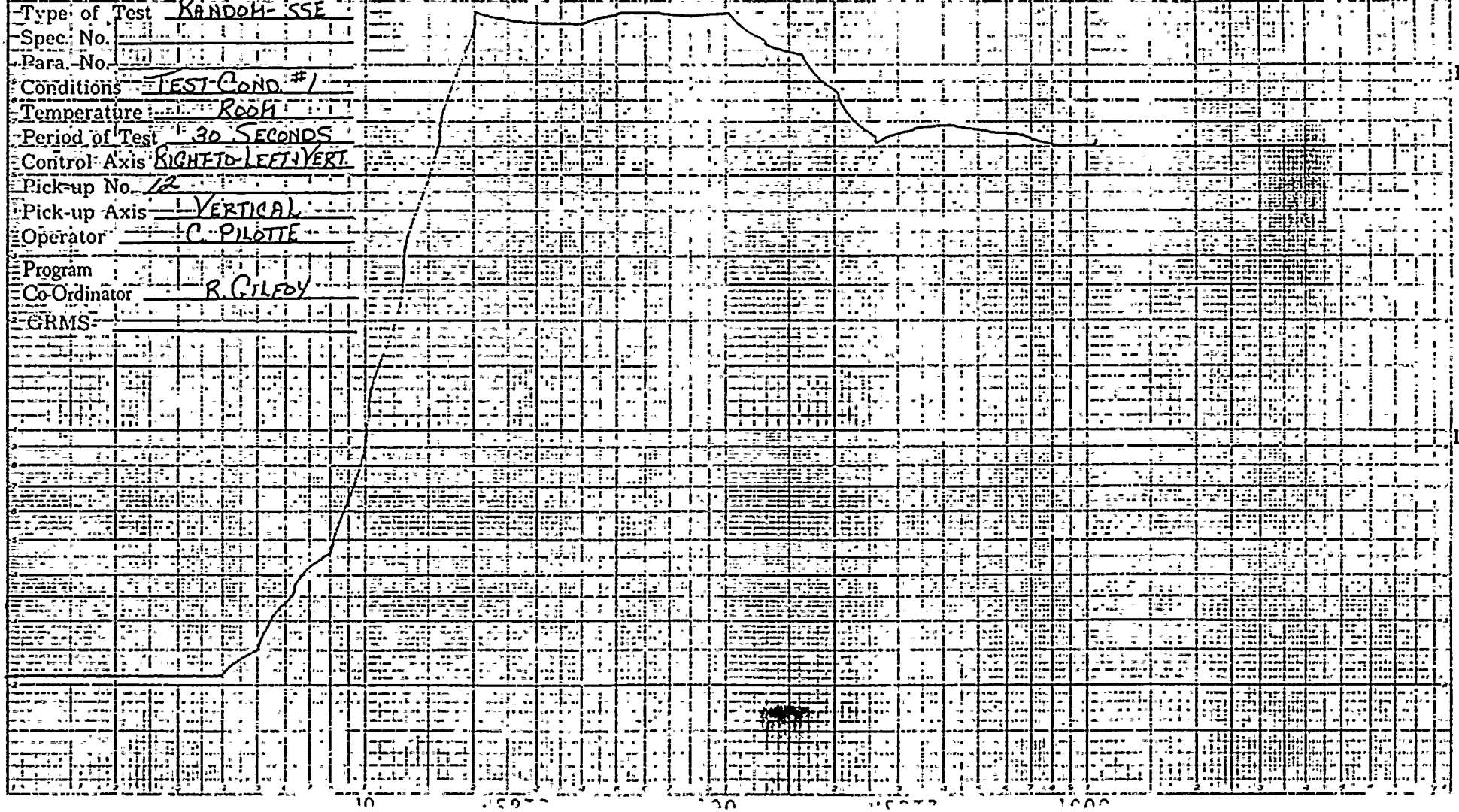
PRINTED IN U.S.A.

ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 21 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST-COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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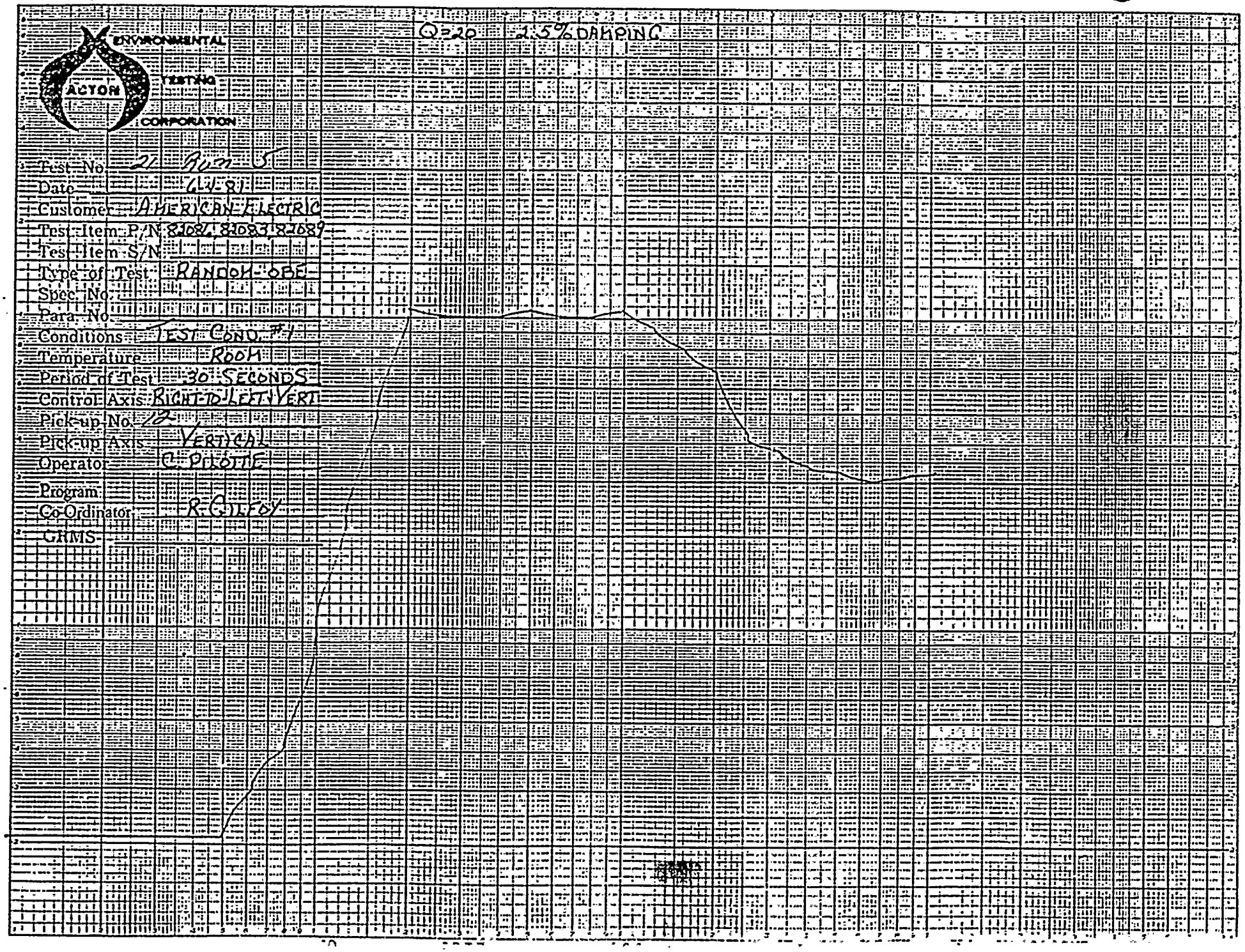

NO. 31,253. LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES. IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
GREEN PAPER
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 21 Rev 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82082, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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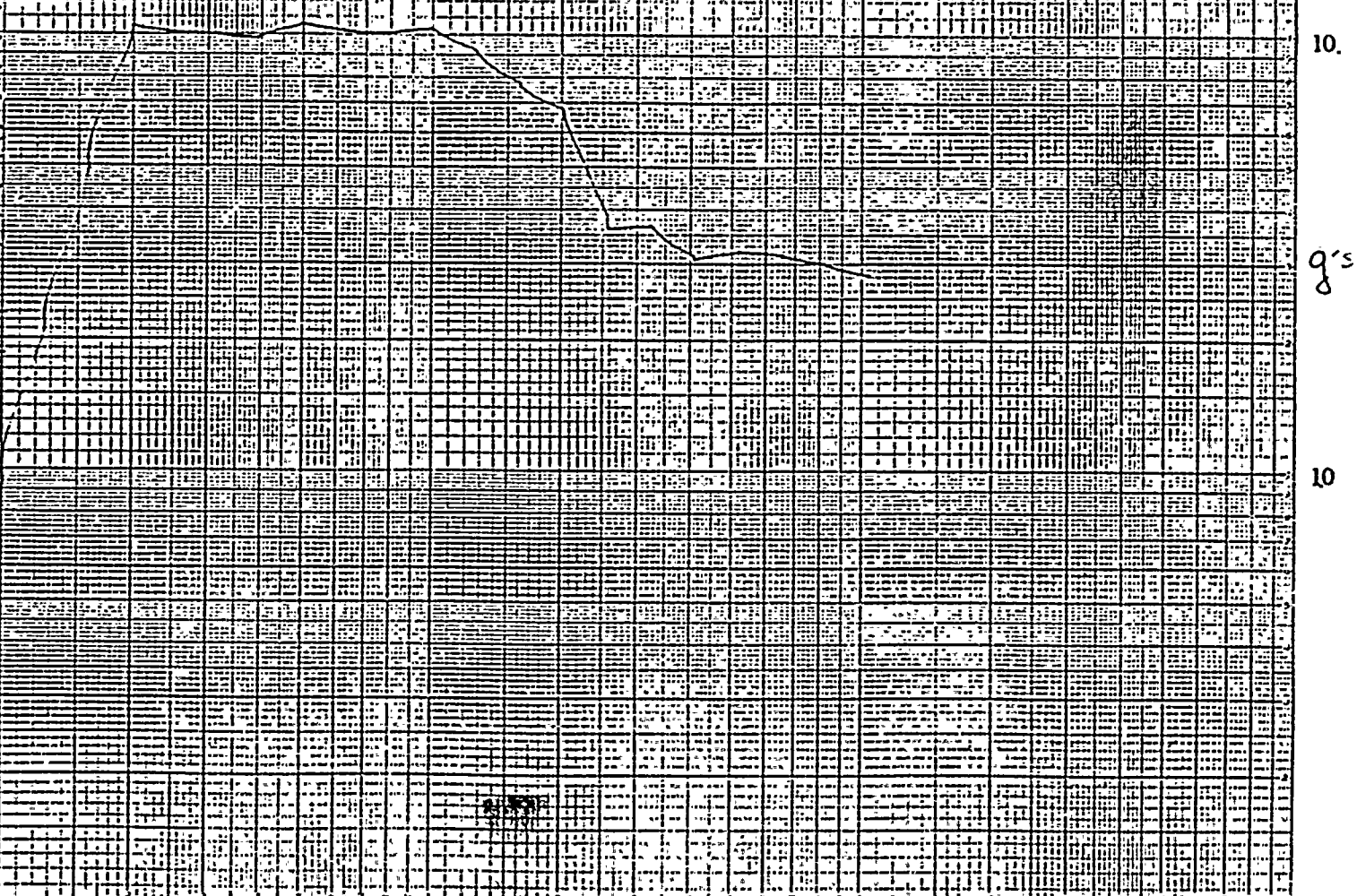
NO 31,256 LOGARITHMIC FOUR BY THREE 2½ INCH CYCLES.
CODEX GRAPH PAPER
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 21 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82087, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½ INCH CYCLES
CODEX GRAPH PAPER
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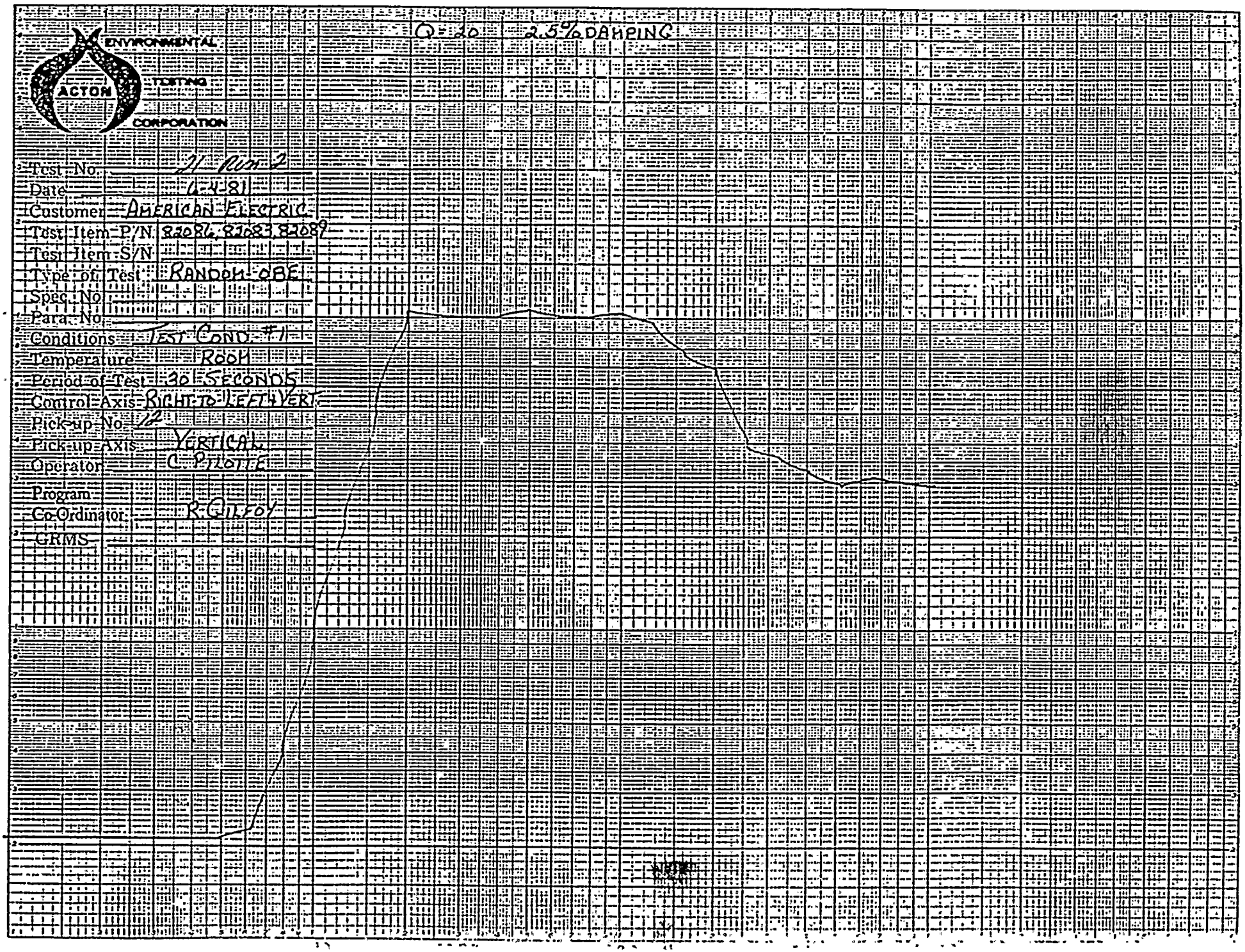
ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 10 2.5% DAMPING

Test No. 11 Run 2
Date 4-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM OBE
Spec No
Para No
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C. PLOTTE
Program
Co-Ordinator R. GILROY
GRMS



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KEUFFEL & ESSER CO. PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 1 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084; 82083 82089
Test Item S/N
Type of Test RANDOM - OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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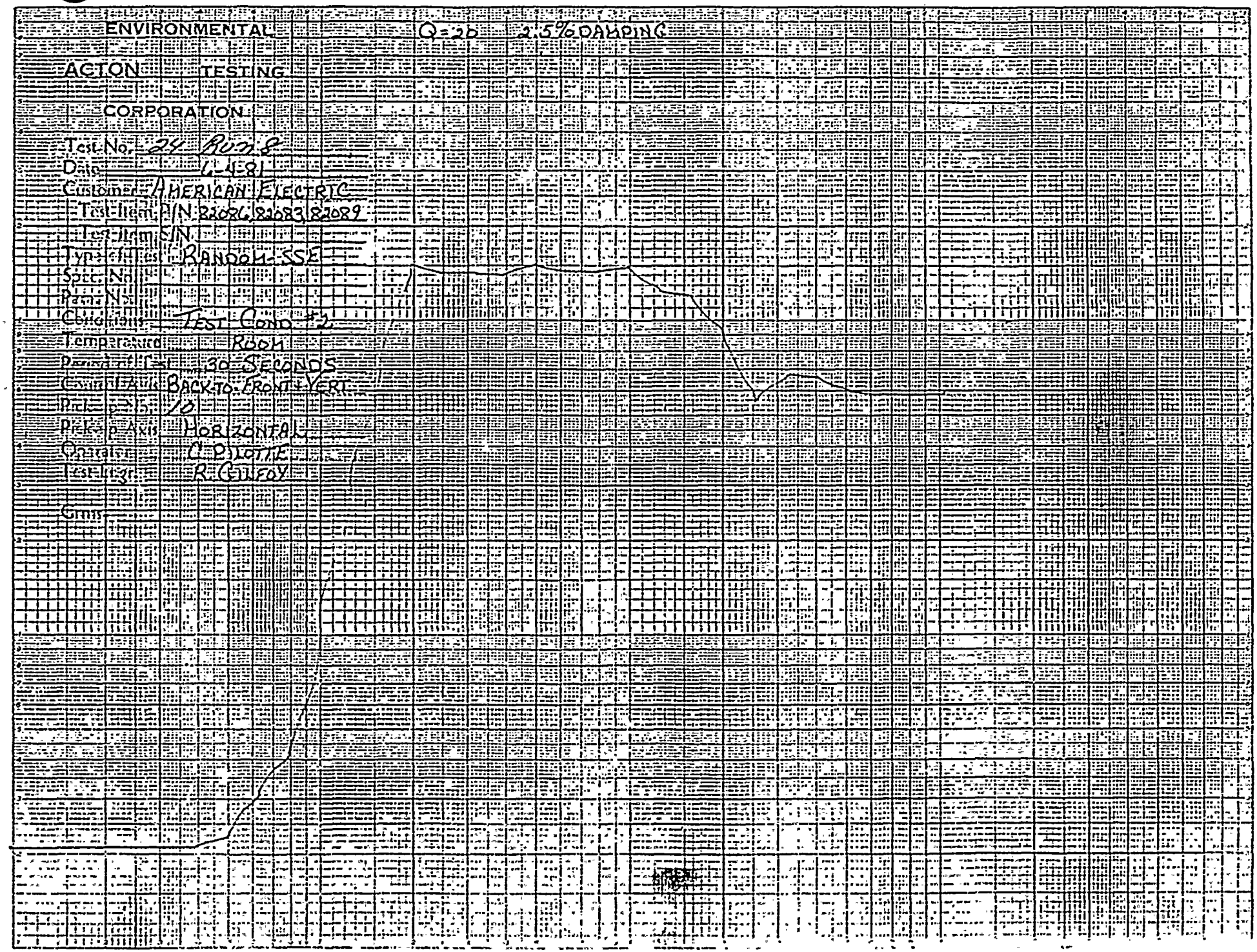
NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING CORPORATION

Test No. 24 Run 8
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82026, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT + VERT
Pick-up Points 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Test Engr. R. GILLEO
Cmts:



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ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No: 29 Run 1

Date: 6-4-81

Customer: AMERICAN ELECTRIC

Test Item: P/N 82086; 82083; 82089

Test Item S/N:

Type of Test: RANDOM-SSE

Spec. No:

Para. No:

Conditions: TEST COND #1

Temperature: ROOM

Period of Test: 130 SECONDS

Control Axis: BACK-TO-FRONT: VERT.

Pick-up No: 10

Pick-up Axis: HORIZONTAL

Operator: C PILOTTE

Test Engr: R GILROY

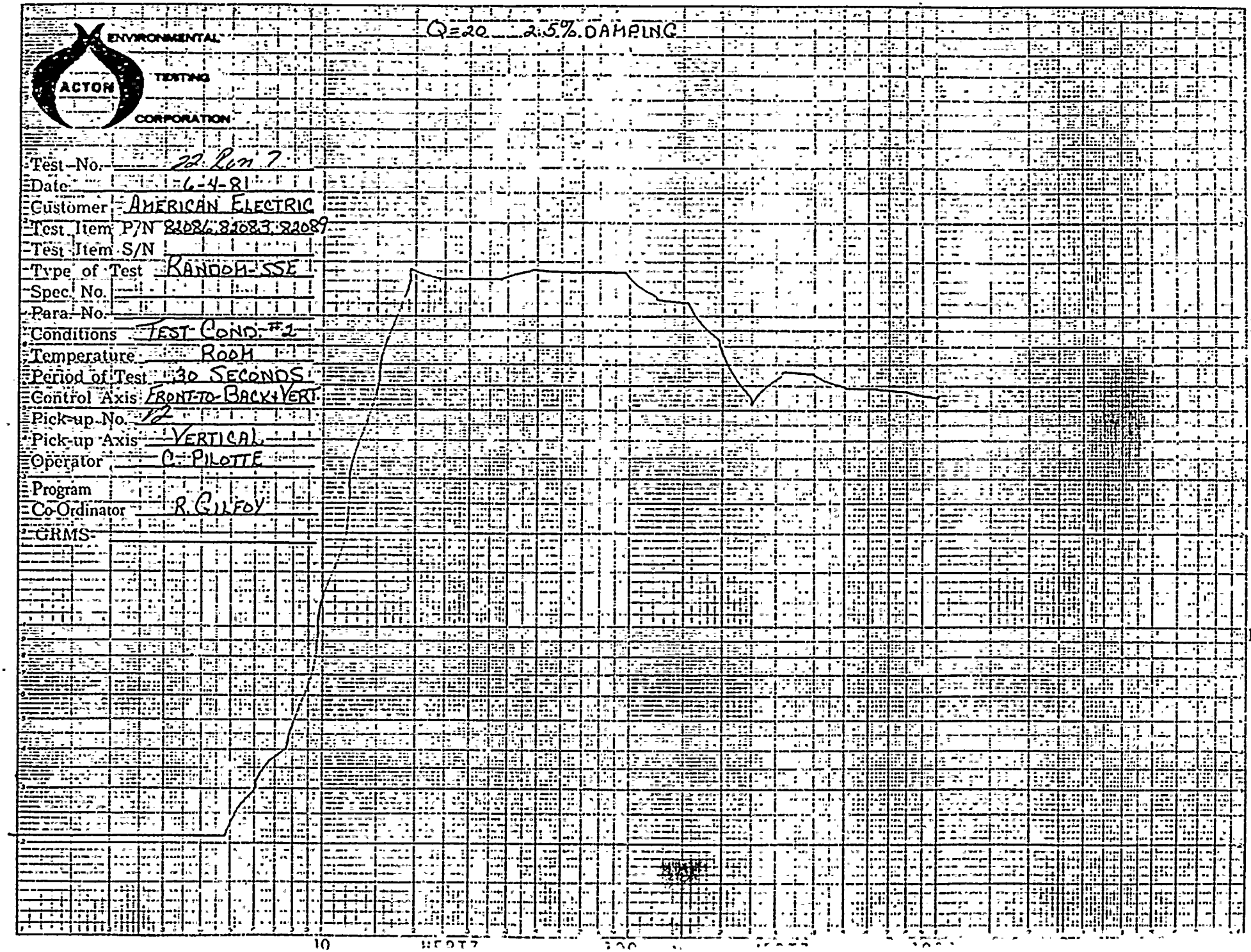
Grms:

NO. 31,258 LOGARITHMIC. FOUR BY THREE 2½-INCH CYCLES. GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U. S. A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Rev 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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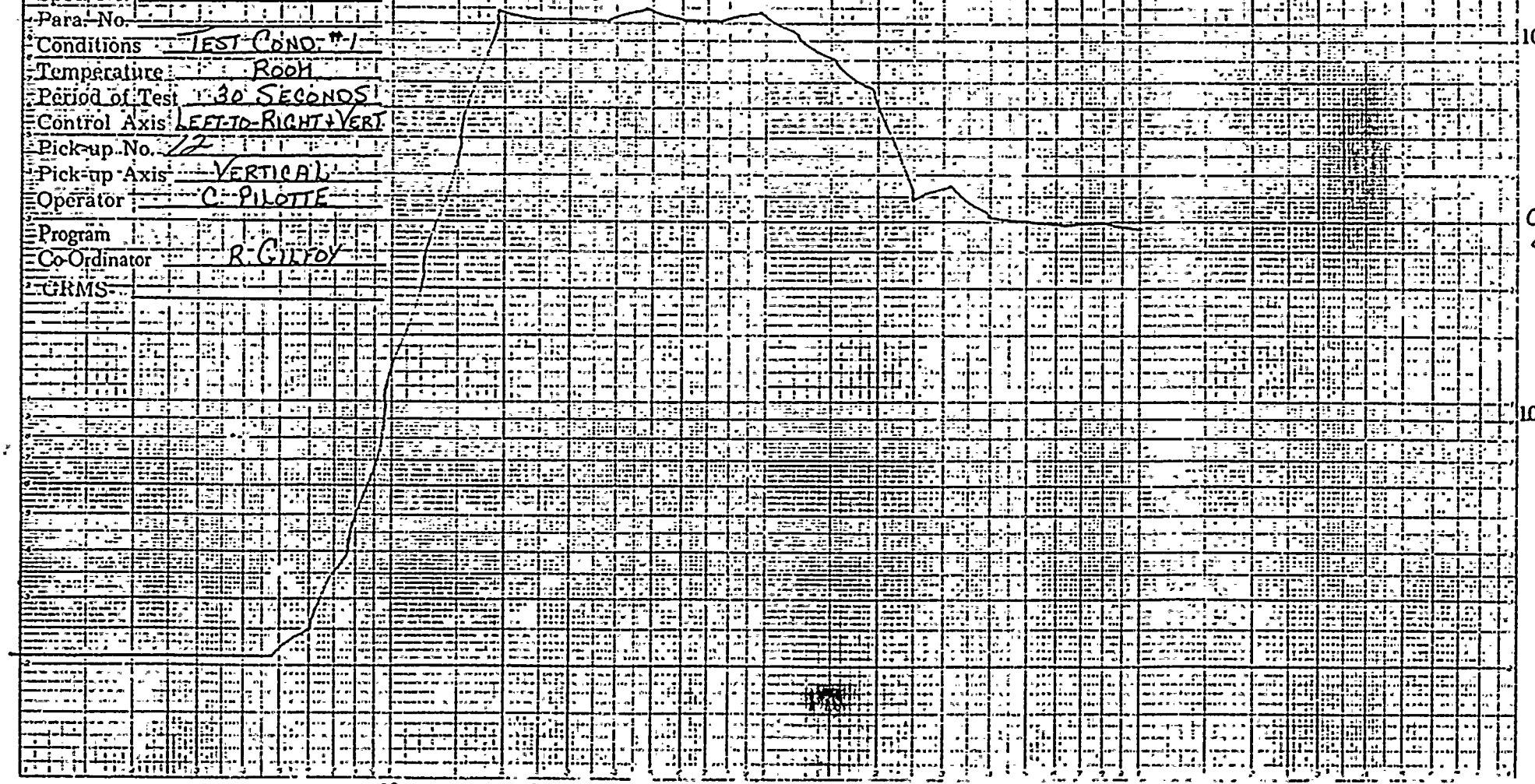
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Run 1
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #-1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS



NO. 31,255. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION
ACTON

Test No. 23 Run 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 1.30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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10 HERTZ 100 FORTZ 1000

NO 31.288, LOGARITHMIC, FOUR BY THREE 2/3-INCH CYCLES.
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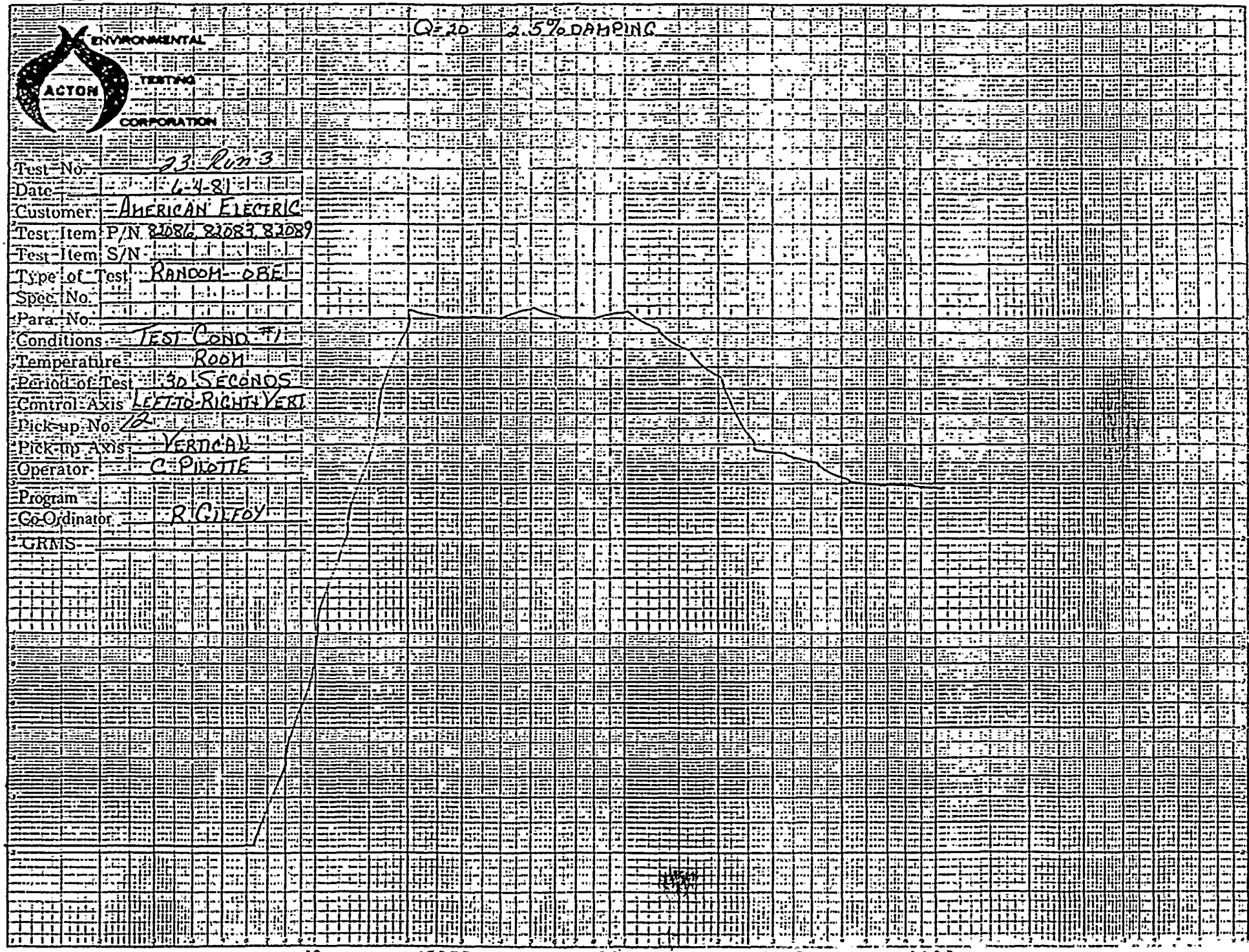
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Run 3
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM - OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 23 Run 4
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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10 HERTZ 100 HERTZ 1000

NO. 31,258. LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES.
IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 23 Rem 5
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM OBE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILFOY
GRMS

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10 HERTZ 100 HERTZ 1000

NO. 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 23 Run 6
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 130 SECONDS
Control Axis LEFT-TO-RIGHT + VERT
Pick-up No. 1 & 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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10 HERTZ

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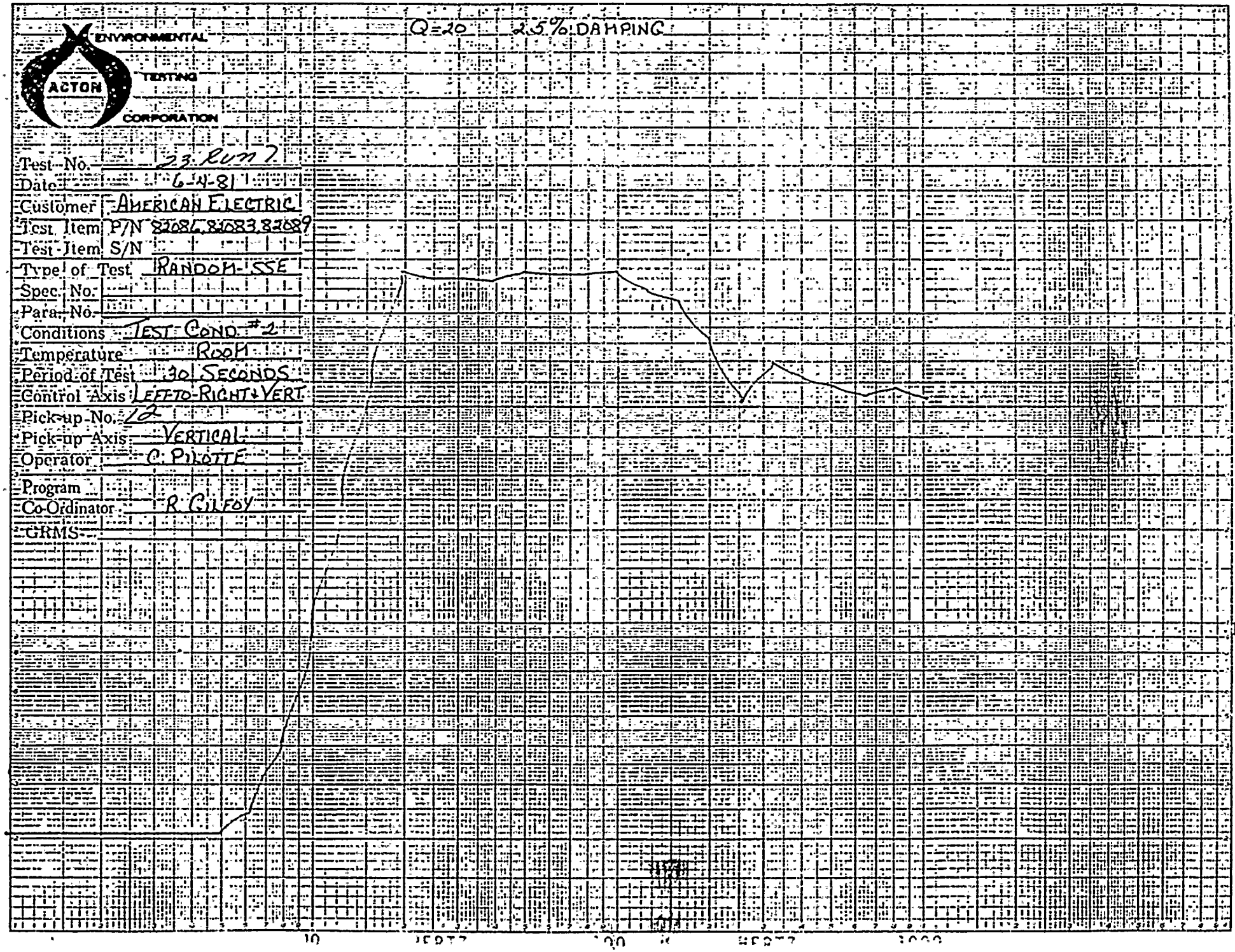
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 23 Run 7
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 84 Rem 1

Date 6-21-84

Customer AMERICAN ELECTRIC

Test Item P/N 82084, 82083, 82089

Test Item S/N

Type of Test RANDOM-OBE

Spec. No.

Para. No.

Conditions TEST COND #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK-TO-FRONT/VERT.

Pick-up No. 12

Pick-up Axis VERTICAL

Operator C. PILOTTE

Test Engr. R. GILFOY

Cmts

NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No 24 Plan 2
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82084, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT, VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Test Engr. R. GILROY
Grms

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NO. 31,253. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. CODEX GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 29 Run 3

Date 6-4-81

Customer AMERICAN ELECTRIC

Test Item P/N 82086, 82083, 82089

Test Item S/N

Type of Test RANDOM-OBE

Spec. No.

Para. No.

Conditions TEST COND. #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK-TO-FRONT + VERT

Pickup No. 12

Pickup Axis VERTICAL

Operator C. PLOTTE

Test Engr. R GILEAY

Grms

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NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
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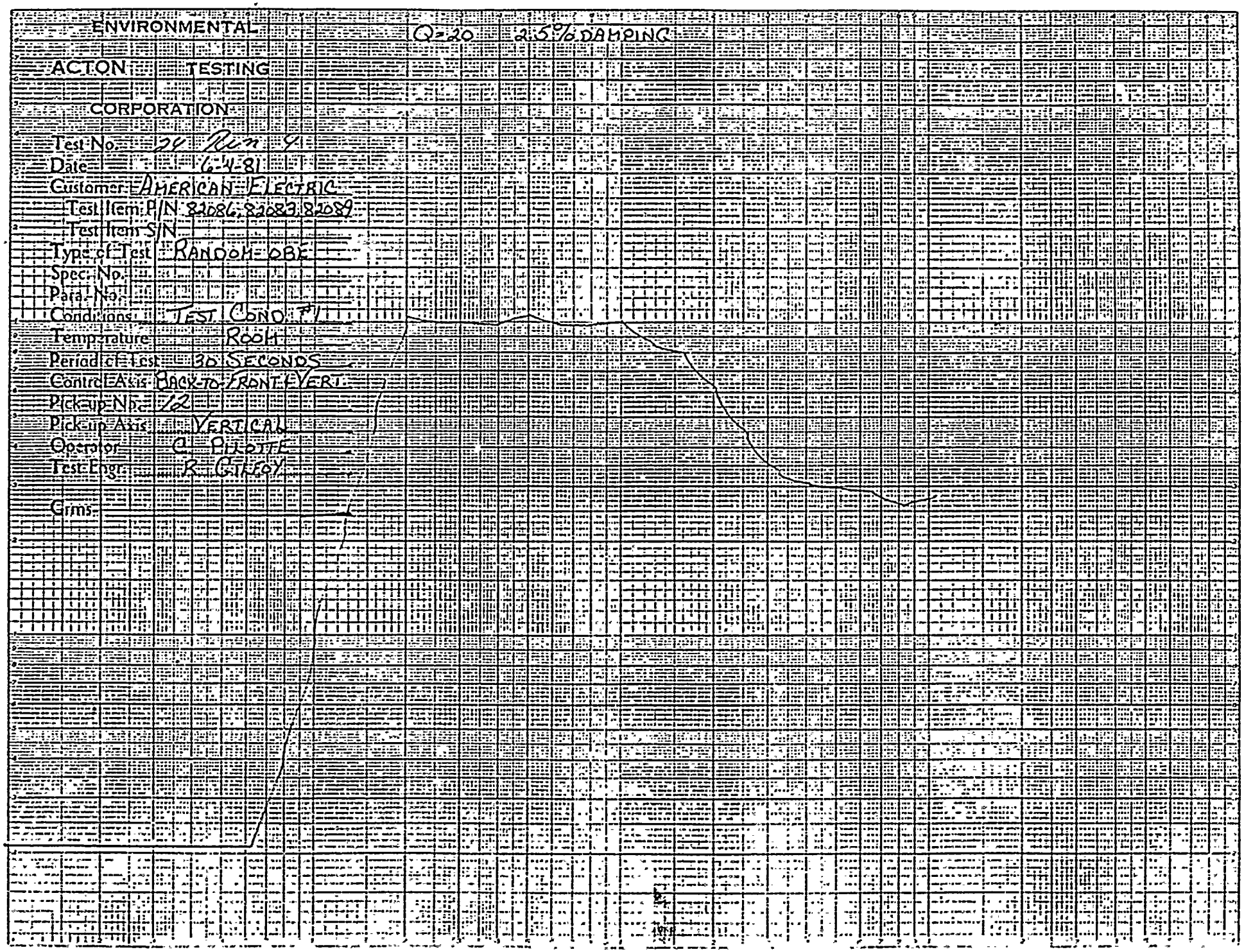
ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 24 Rev 9
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND F1
Temperature ROOM
Period of Test 30 SECONDS
Contrl Axis BACK-TO-FRONT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Test Engr. R. GILFOY

Grms



NO. 31,258 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 24 Run 5

Date 6-4-81

Customer AMERICAN ELECTRIC

Test Item P/N 82081, 82083, 82089

Test Item S/N

Type of Test RANDOM-OBE

Spec. No.

Para. No.

Conditions TEST COND. #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK-TO-FRONT + VERT

Pick-up No. 12

Pick-up Axis VERTICAL

Operator C. PILOTTE

Test Engr. R.C. TILFOY

Grms:

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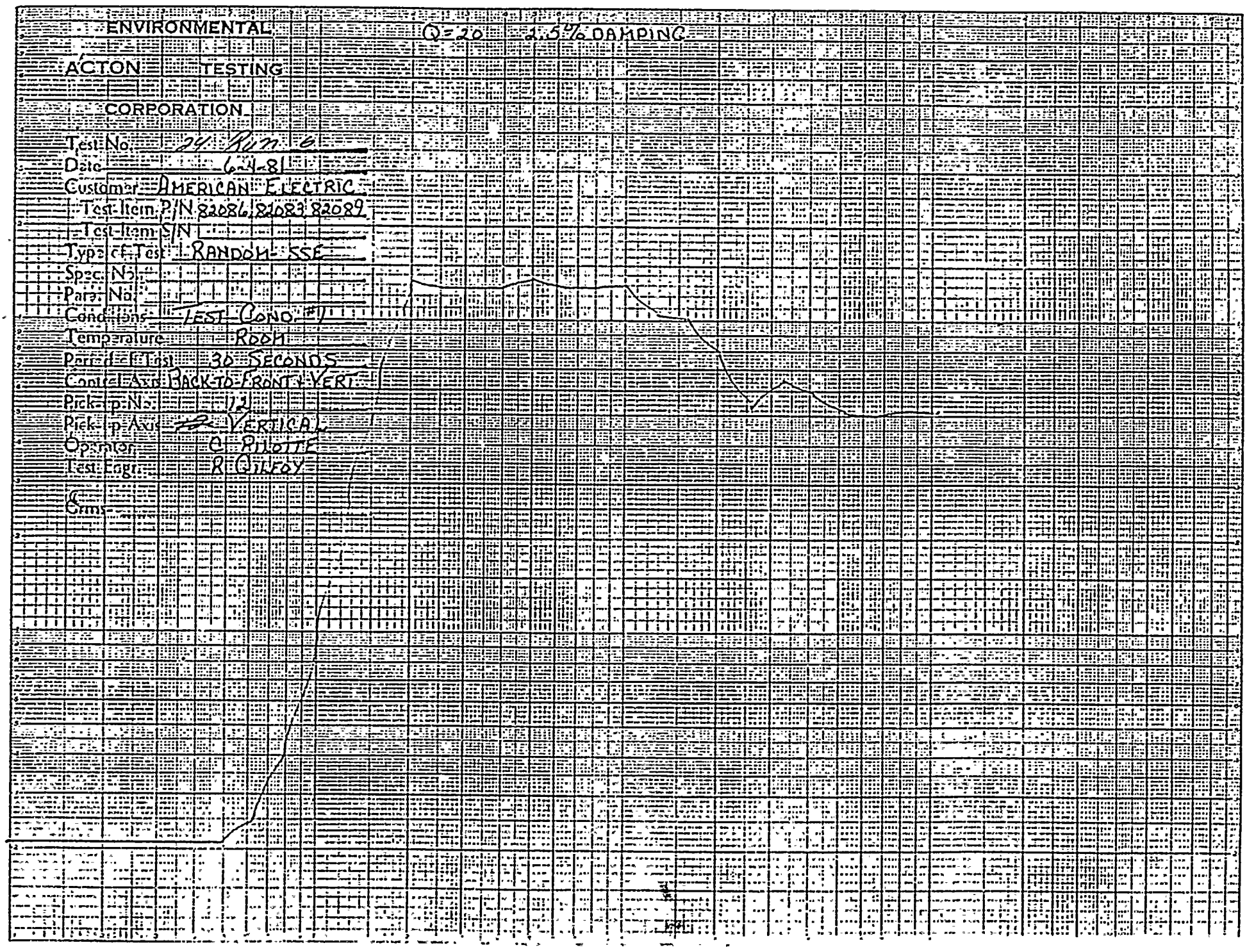
ENVIRONMENTAL

ACTON TESTING

CORPORATION

Q = 20 2.5% DAMPING

Test No: 24 Run 6
Date: 6-4-81
Customer: AMERICAN ELECTRIC
Test Item P/N 82086, 82083, 82089
Test Item S/N
Type of Test: RANDOM-SSE
Spec. No:
Para. No:
Conditions: TEST COND #1
Temperature: ROOM
Period of Test: 30 SECONDS
Control Axis: BACK-TO-FRONT + VERT
Pick-up No: 1, 2
Pick-up Axis: 2 VERTICAL
Operator: C. PILOTTE
Test Engr: R. QUILTY
Grms:



NO. 31.255 LOGARITHMIC, FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING

CORPORATION

Test No. 19 Cont 1

Date 6-4-81

Customer AMERICAN ELECTRIC

Test Item P/N 82086, 82083, 82089

Test Item S/N

Type of Test RANDOM-SSE

Spec. No.

Para. No.

Conditions TEST CONO. # 1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis BACK-TO-FRONT + VERT

Pickup No. 12

Pickup Axis VERTICAL

Operator C. PILOTTE

Test Engr. R. CILFOY

Grms

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NO. 3[illegible]58. LOGARITHMIC. FOUR BY THREE 2½-INCH CYCLES.
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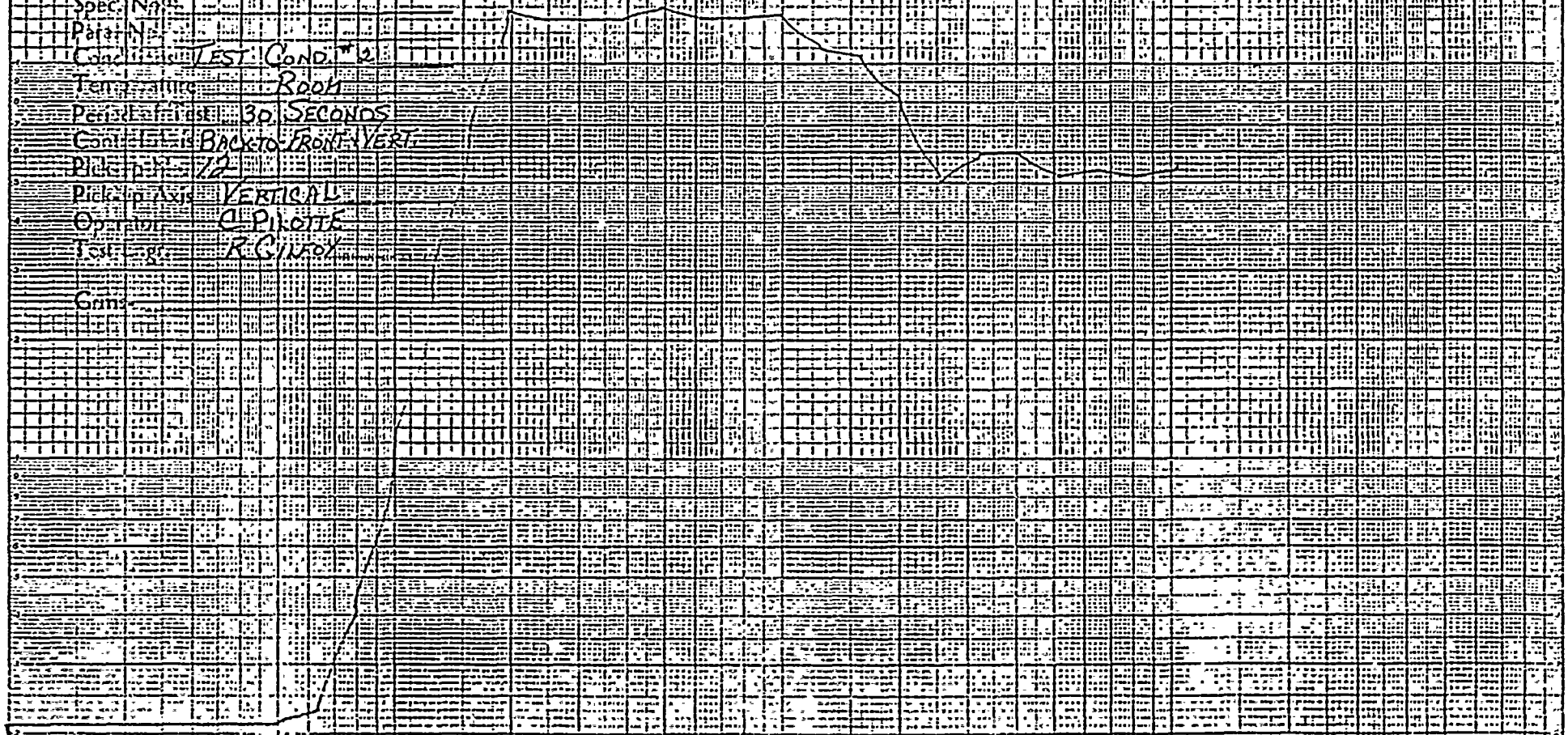
ENVIRONMENTAL Q=20 2.5% DAMPING

ACTON TESTING CORPORATION

Test No. 24 R638
Date 6-4-81
Customer AMERICAN ELECTRIC
Test Item P/N 82086 82083 82089
Test Item S/N
Type of Test RANDOM-SSE
Spec. No.
Para. No.
Condition TEST COND. "2"
Temperature ROOM
Period of Test 30 SECONDS
Control is BACK TO FRONT VERT.
Pick-up # 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Tested R. CILNOX
Comments



NO. 31,238. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES.
Codex GRAPH PAPER
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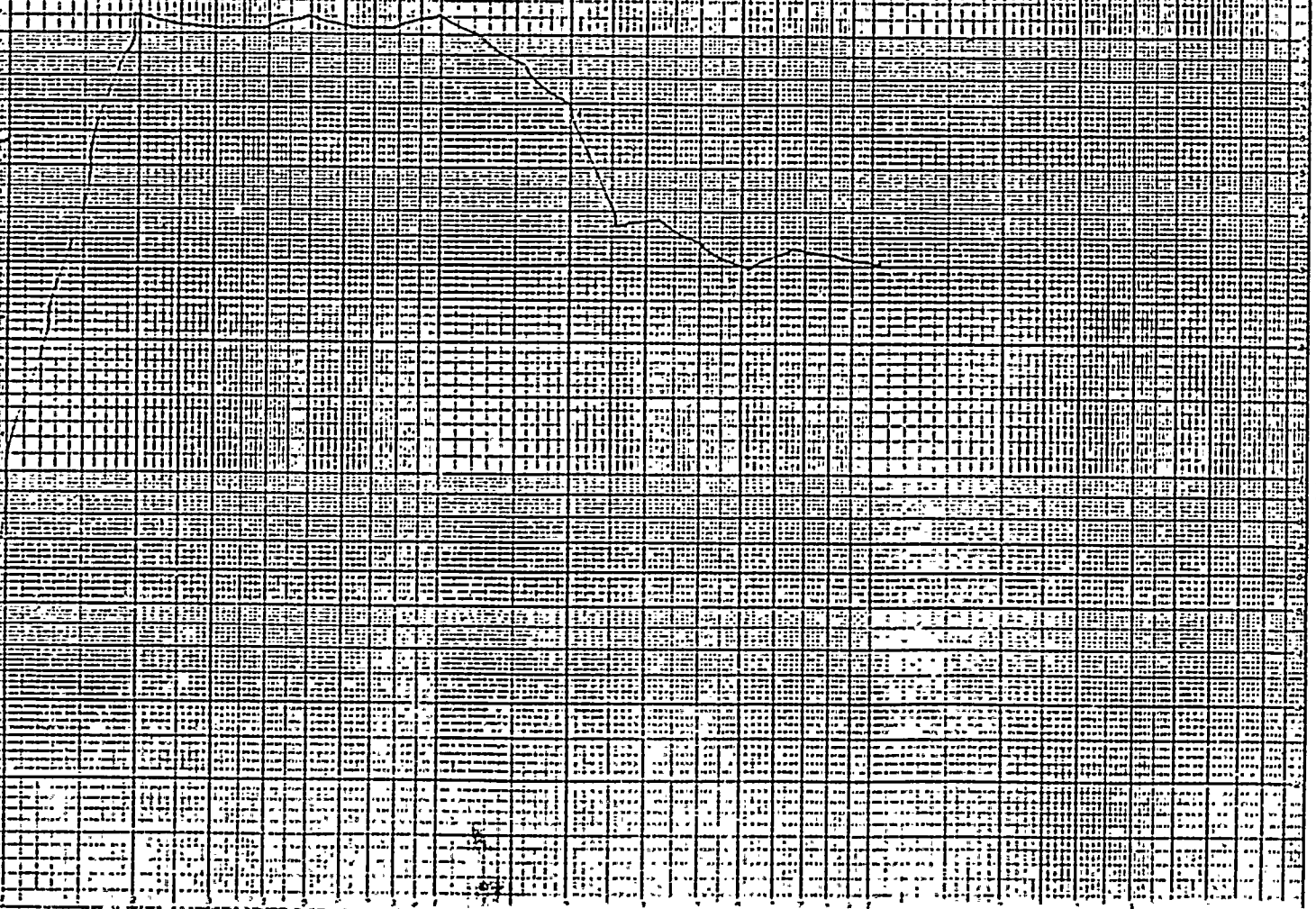
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 25 Run 1
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator O. PIOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO. 31,253. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 25 Run 2
Date 6-6-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTE
Program
Co-Ordinator R. GILROY
GRMS

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NO. 31,256. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. Codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 25 Rem 3
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No 12
Pick-up Axis VERTICAL
Operator C PILOTTE
Program Co-Ordinator R GILFOY
GRMS

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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 25 Run 4
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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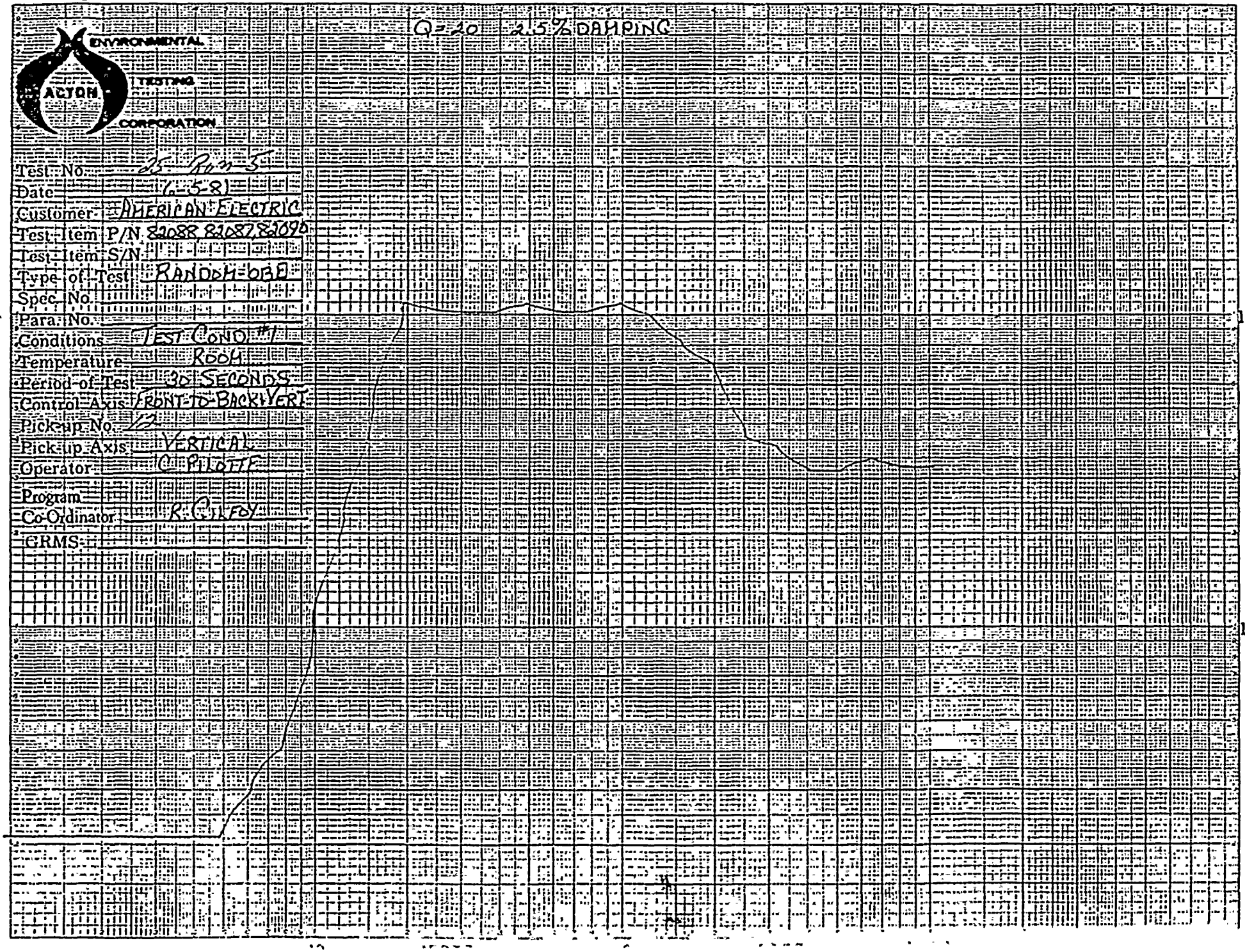
Q=10 2.5% DAMPING

ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. 25 Run 3
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 1/2
Pick-up Axis VERTICAL
Operator C PILOTTE
Program Co-Ordinator K. GILFOY
GRMS



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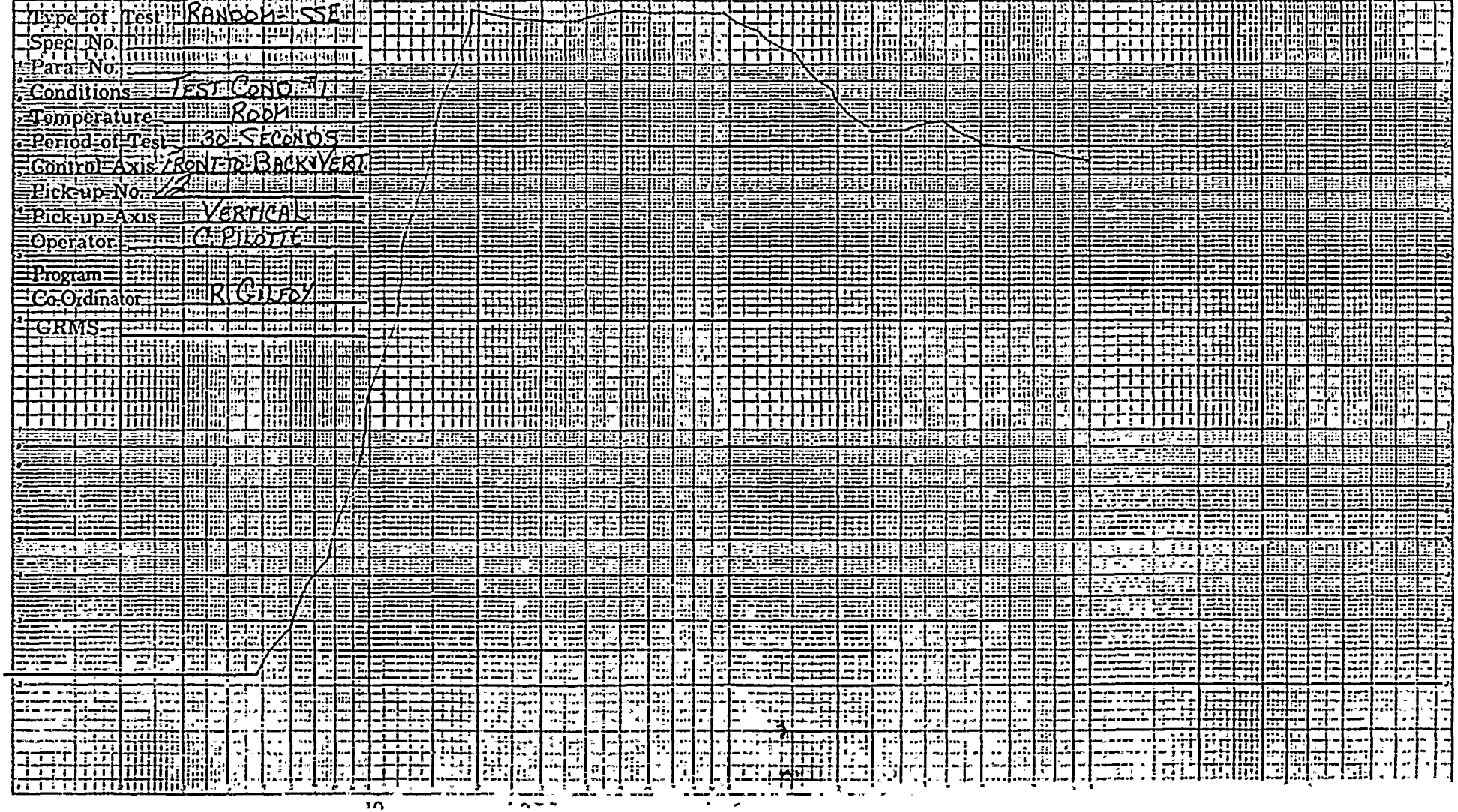
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 25 Rev 6
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST CONFIG. 1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT TO BACK VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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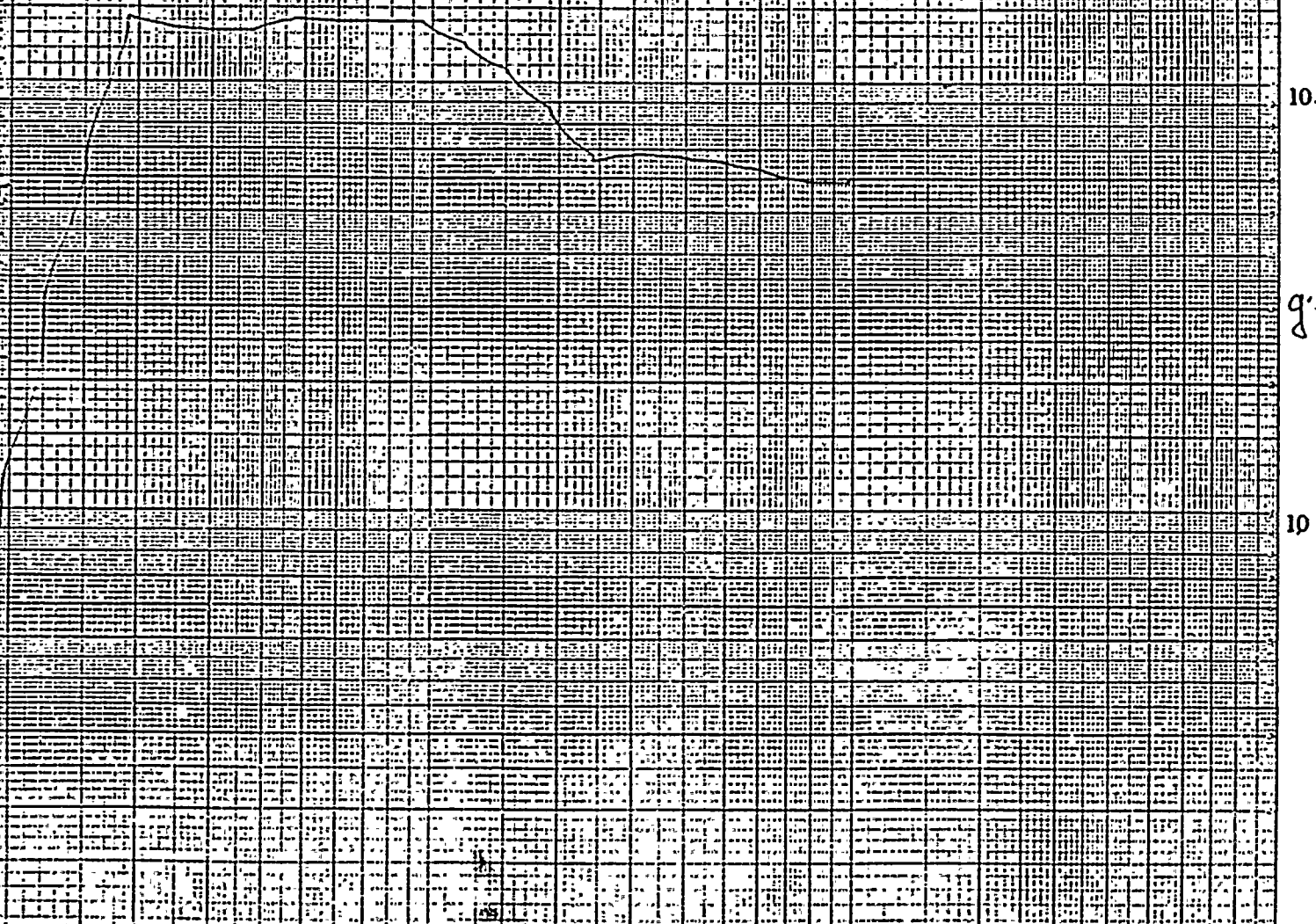
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q = 20 2.5% DAMPING

Test No. 25-Run 7
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator M. PILOTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 25-RUN 8
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-WISSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator RICHLEY
GRMS

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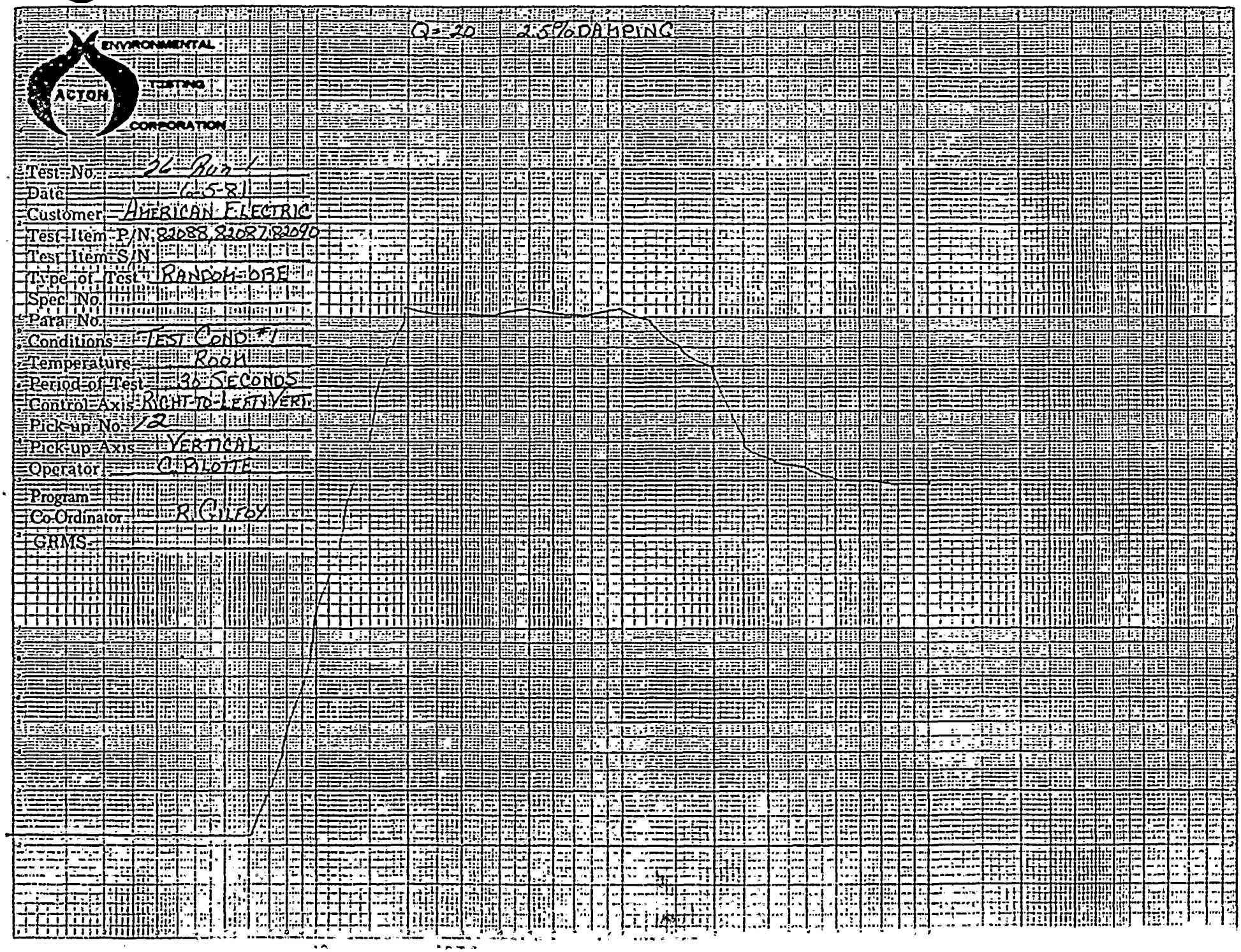
Q = 20 2.5% DAMPING

ENVIRONMENTAL ACTON TESTING CORPORATION

Test No. 2L Run 1
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N: 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. BLOTTE
Program
Co-Ordinator R. GILFOY
GRMS



NO 31,250 LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=10 5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 26 Run 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST CONO. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT + VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS

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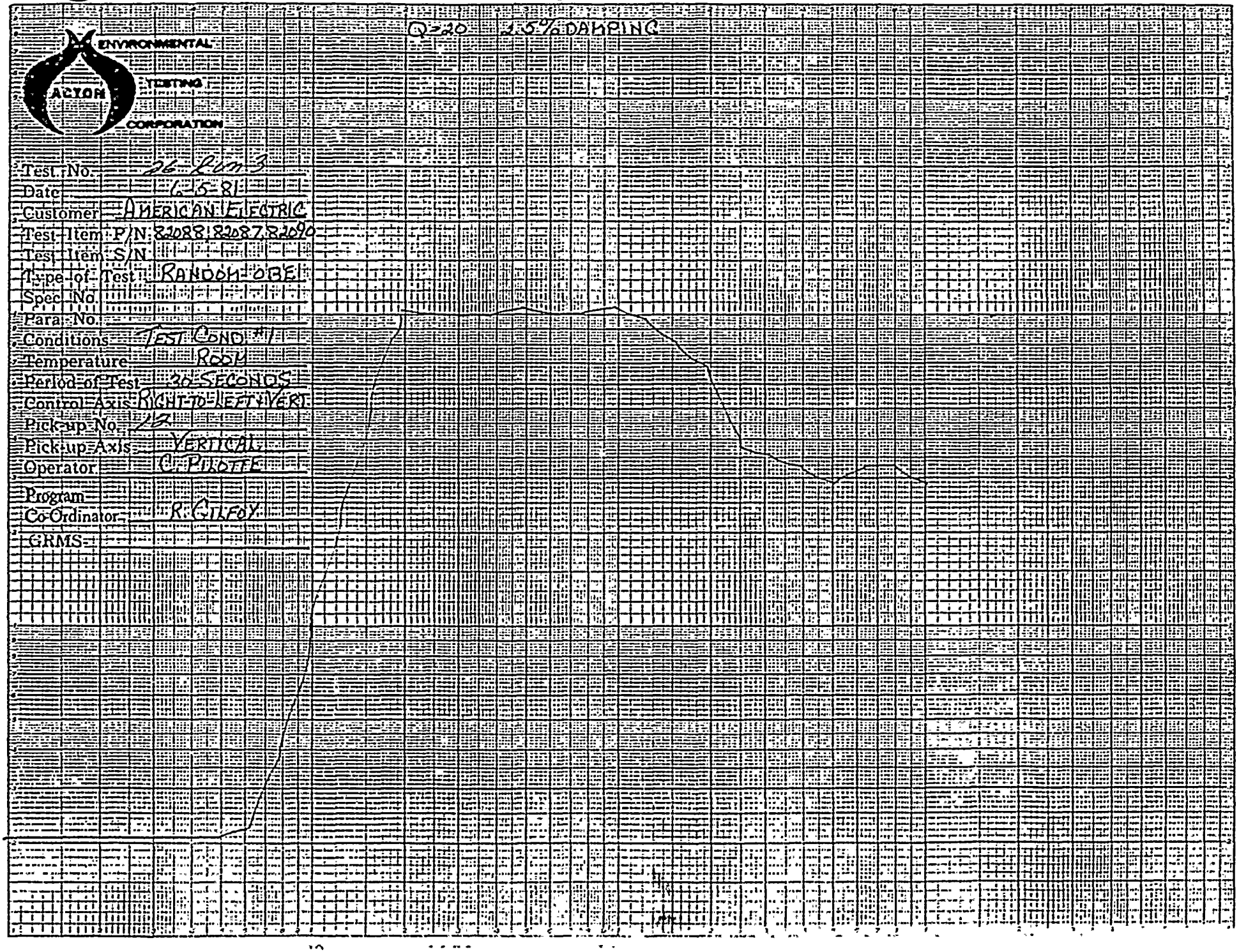
NO. 31,258. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

ACTION ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26 Lim 3
Date 6-15-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT-VERT
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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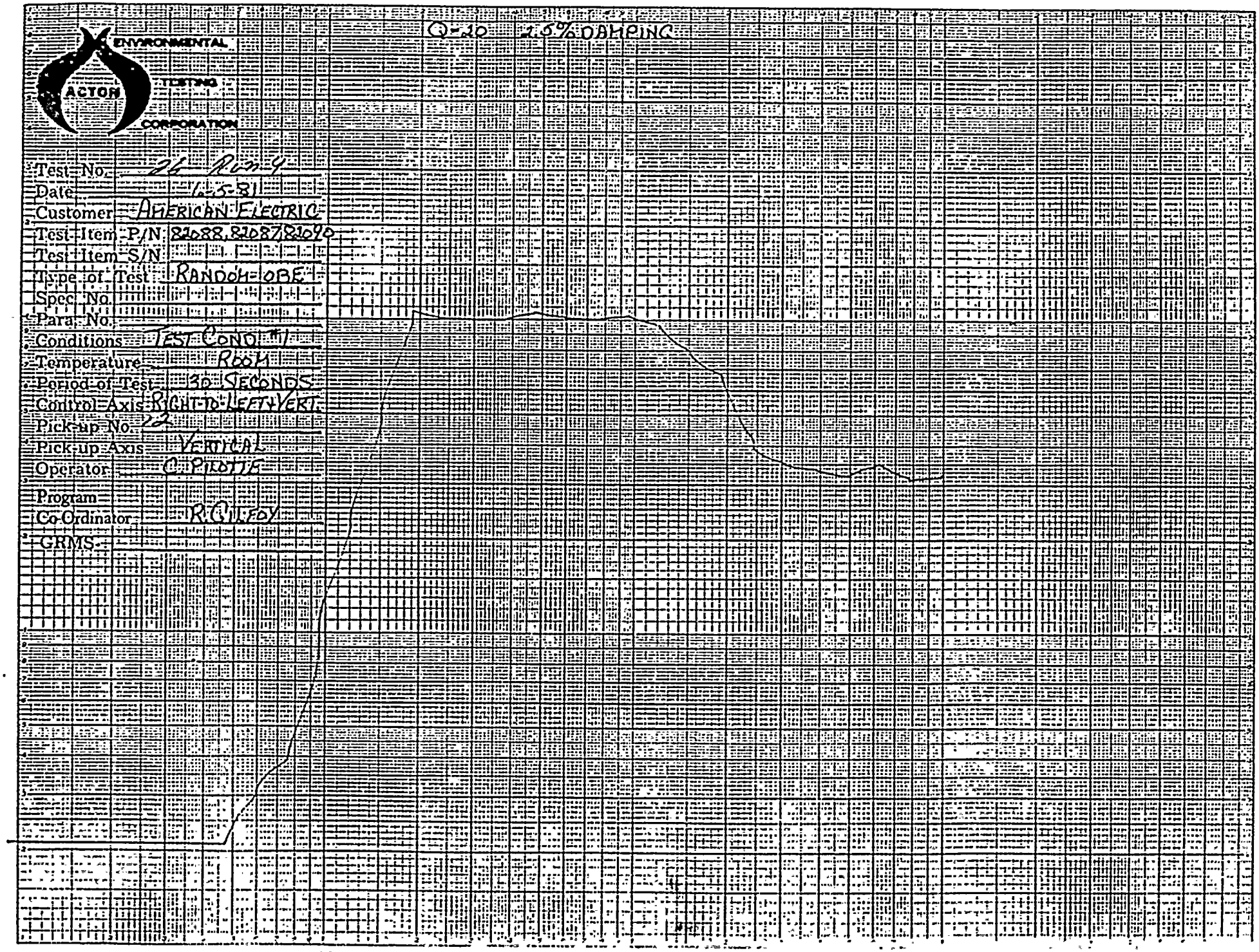
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26 Run 4
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R.G. FOX
GRMS



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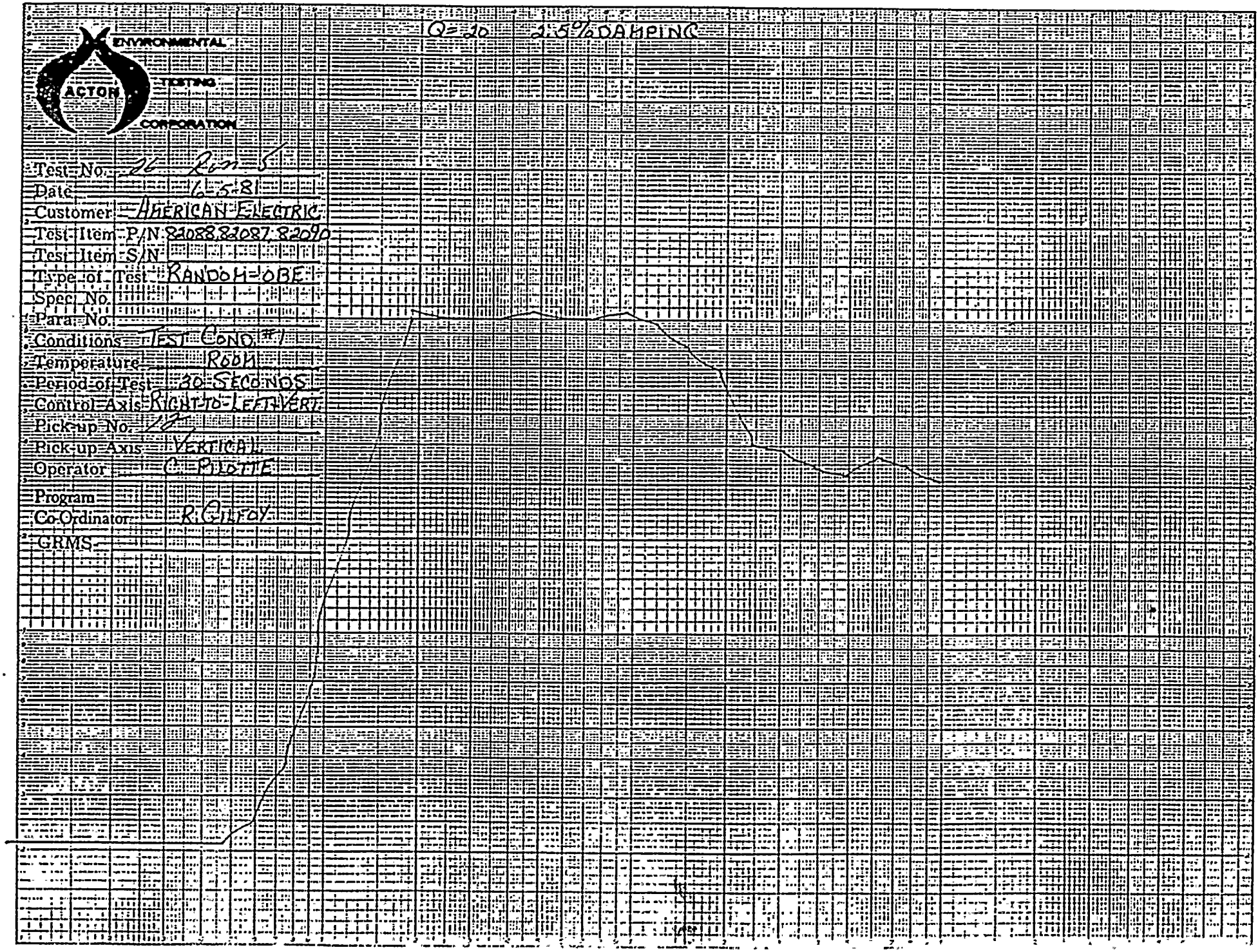
ACTOR ENVIRONMENTAL TESTING CORPORATION

Q=10 2.5% DAMPING

Test No. 26 Run 5
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND. F
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT-VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program Co-Ordinator R. GILFOY
GRMS



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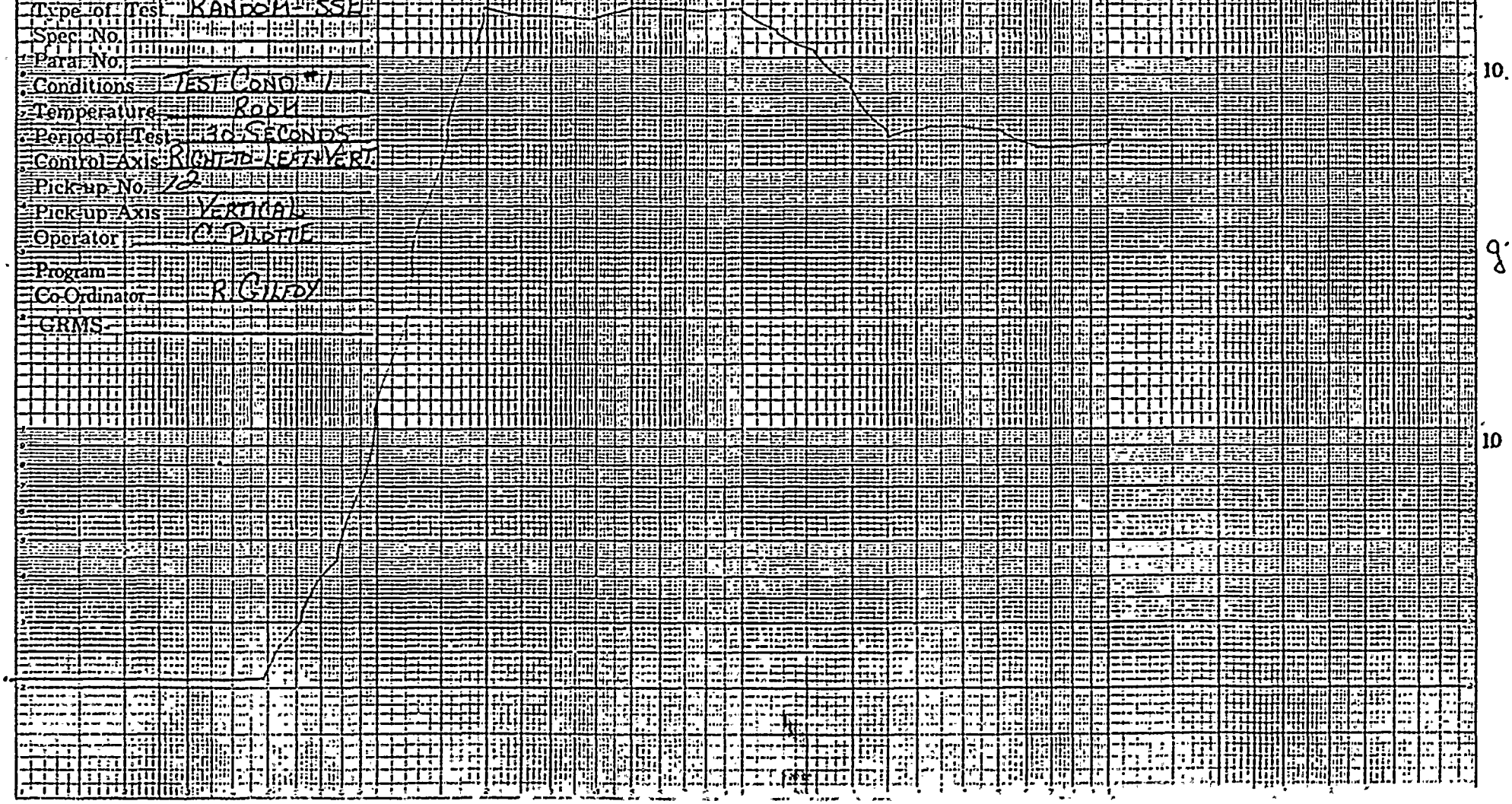
10-20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 26 Run 6
Date 6-15-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SSD
Spec No.
Para No.
Conditions TEST COND "I"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT-VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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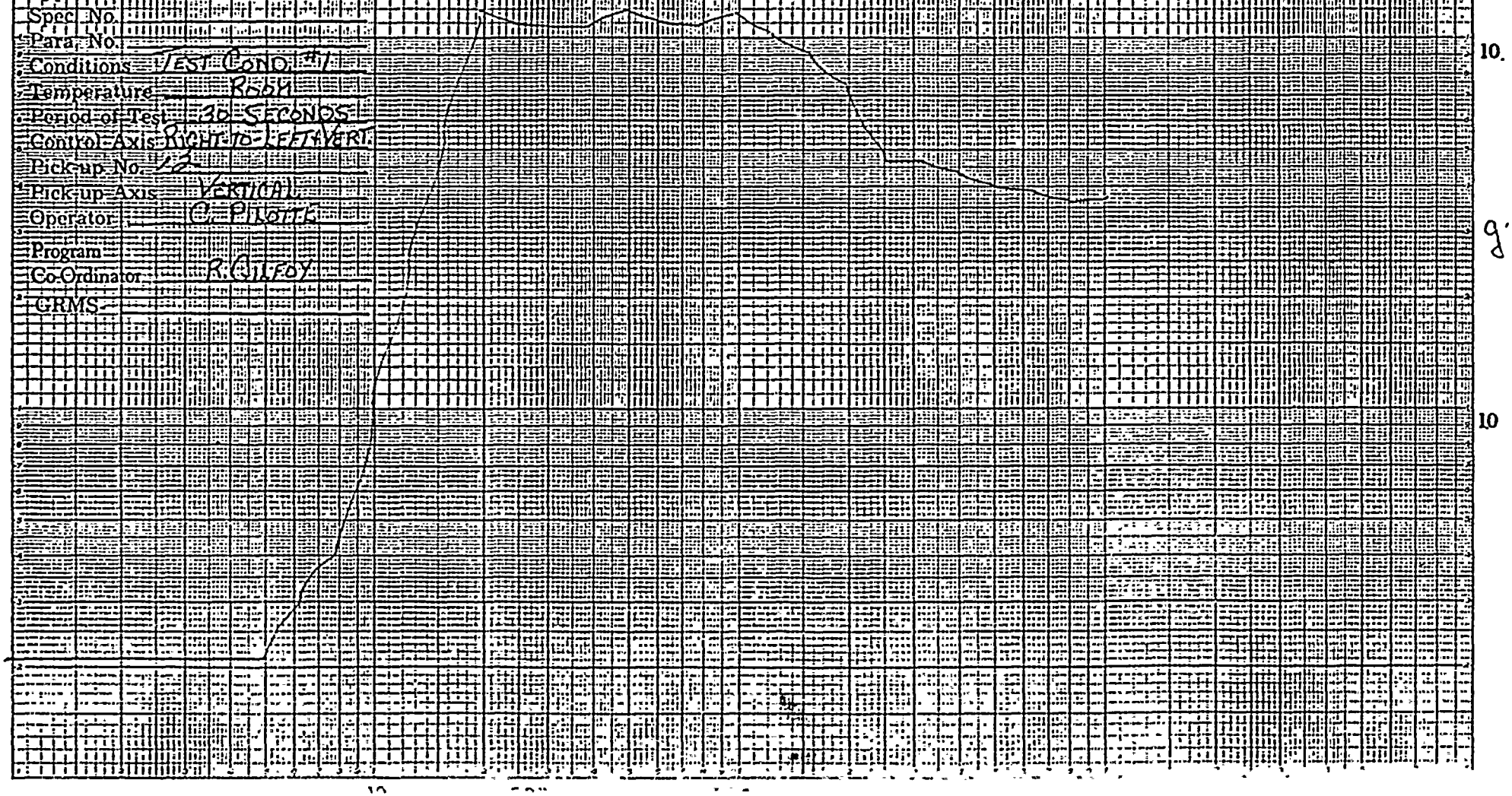
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 26 Rev 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82688, 82087, 82690
Test Item S/N
Type of Test RANDOM-SINE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL ACTOR TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26-Rom-8
Date 12-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PIOTTE
Program
Co-Ordinator R.C. TROY
GRMS

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ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26 Run 9
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N: 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-3/4 SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT
Pick-up No. 28
Pick-up Axis VERTICAL
Operator C. PILOTE
Program Co-Ordinator R. CLOY
GRMS

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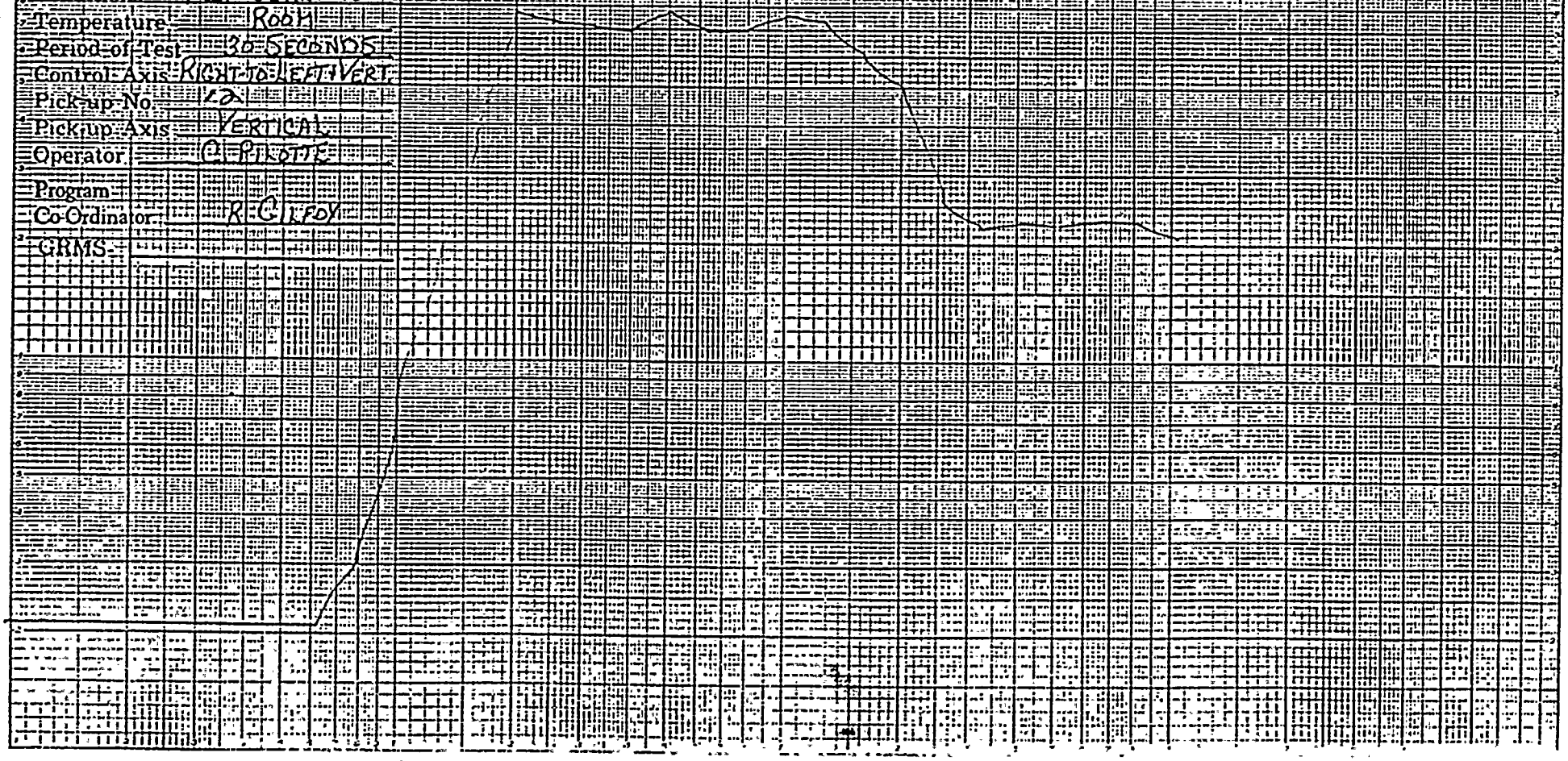
ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 3C-82-10
Date 1-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM ½ SSE
Spec. No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. C. LEDOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 27 Run 1
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT TO RIGHT VERT
Pick-up No 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 27 Run 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT/YAW
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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NO. 31.238. LOGARITHMIC: FOUR BY THREE 2½-INCH CYCLES. codex GRAPH PAPER IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062 PRINTED IN U.S.A.

Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 27 Run 3
Date 6-5-78
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND. F
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTE
Program
Co-Ordinator R. GILFOY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 22 Run 4
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 820881 820878 820900
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. ANDOLFE
Program
Co-Ordinator K. GILFOY
GRMS

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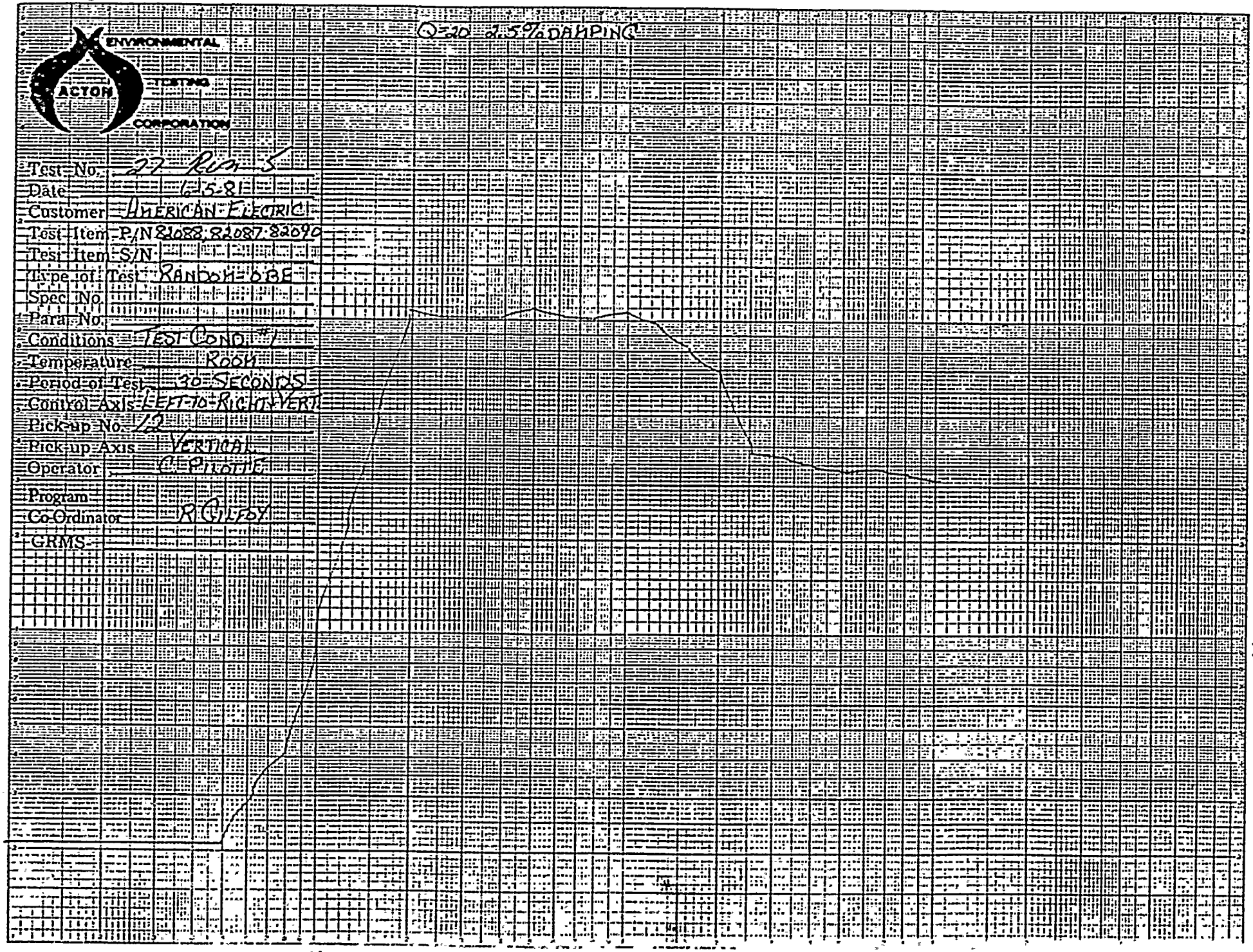
ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=10 2.5% DAMPING

Test No. 27 Run 5
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT/VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R GILFOY
GRMS



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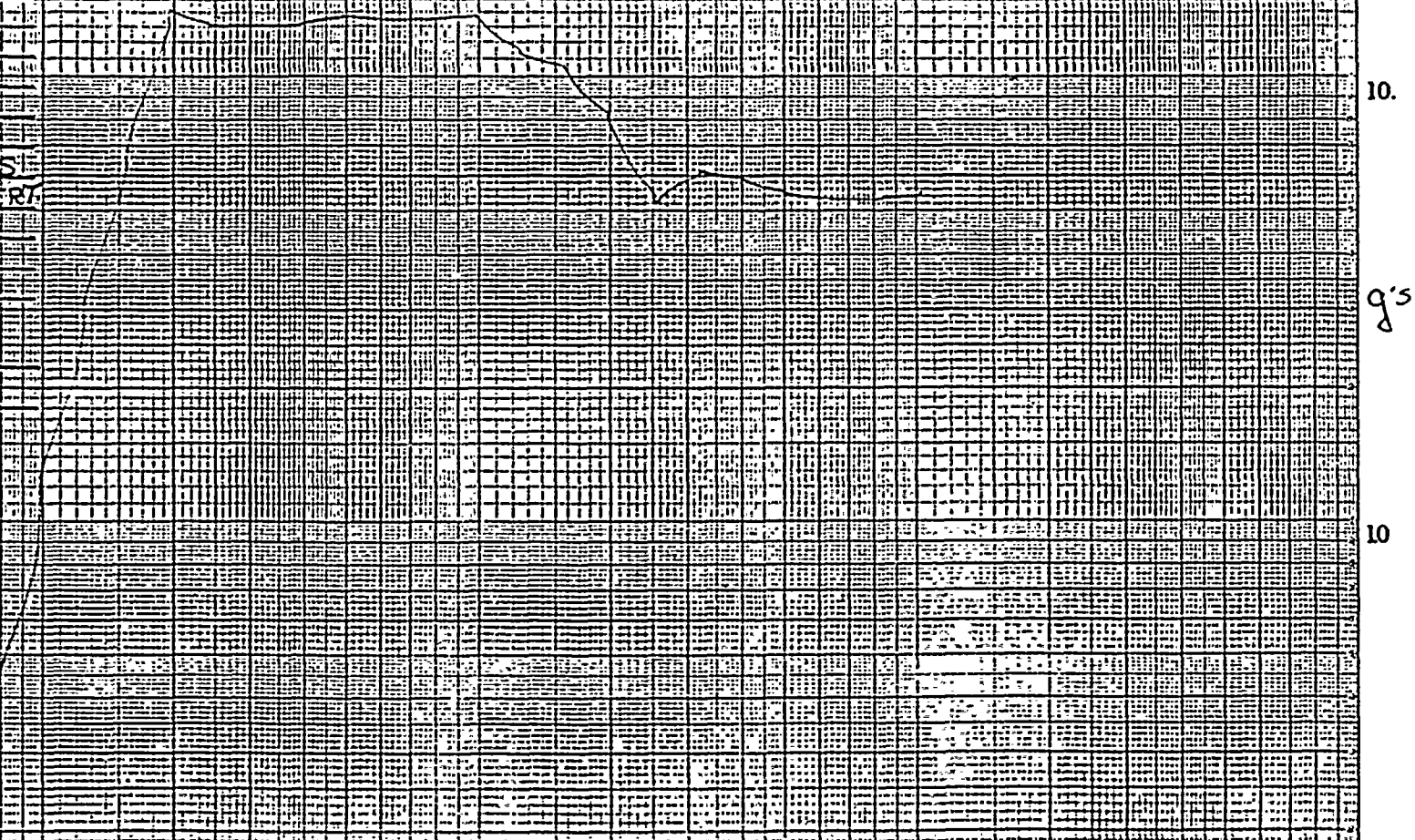
Q=20 2.5% DAMPING

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 2J Run 6
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND "I"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 27620-7
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N: 82088, 82087 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND "D"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT
Pick-up No. 2
Pick-up Axis VERTICAL
Operator O. PILOTE
Program
Co-Ordinator R. GILFOY
GRMS

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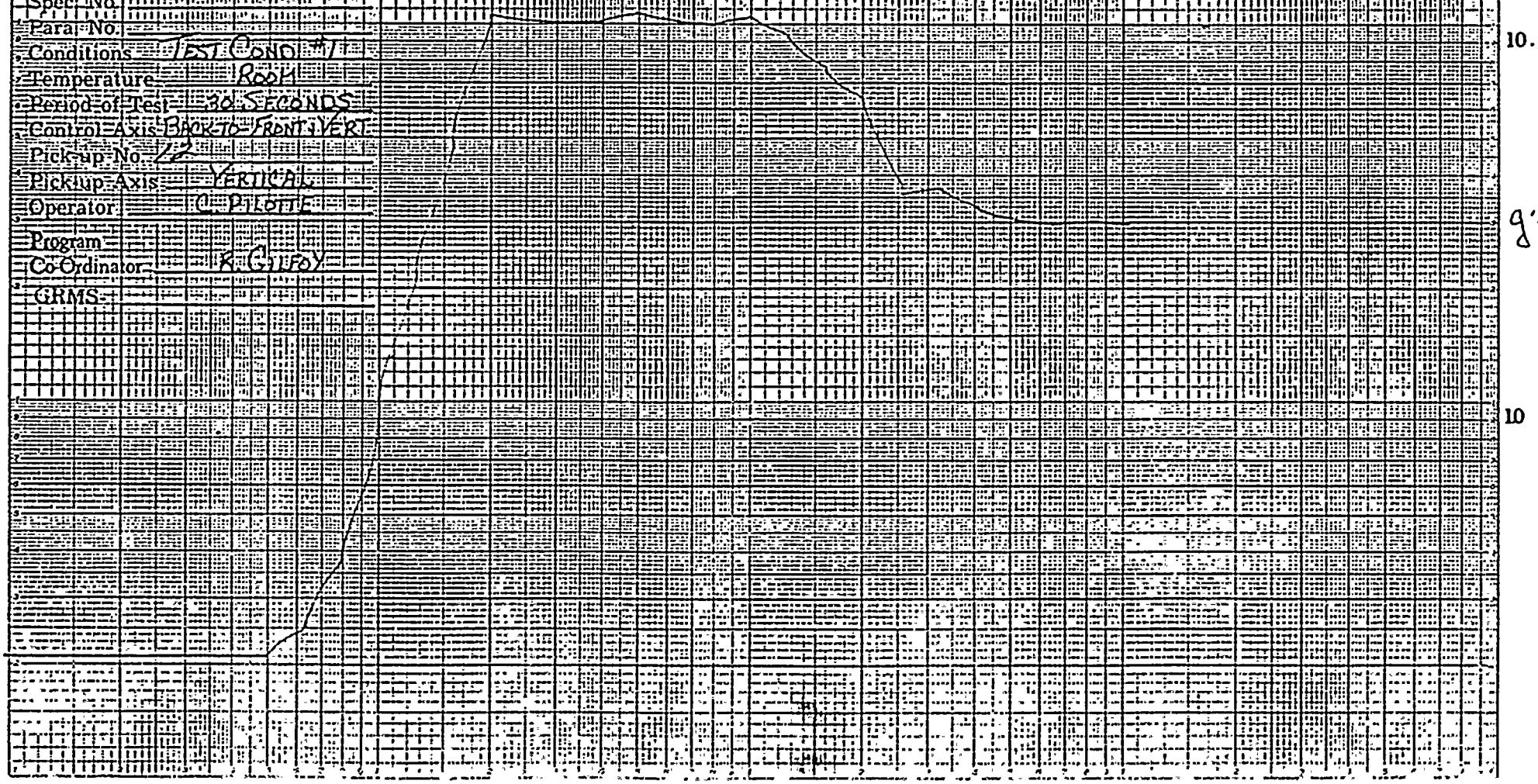
ACTION ENVIRONMENTAL TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. 28 Lon 1
Date 6-6-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 2
Pickup Axis VERTICAL
Operator C PILOTTE
Program
Co-Ordinator R GILROY
GRMS



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Q=20 2.5% DAMPING

ENVIRONMENTAL TESTING CORPORATION ACTON

Test No. 22-Lon-2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 96 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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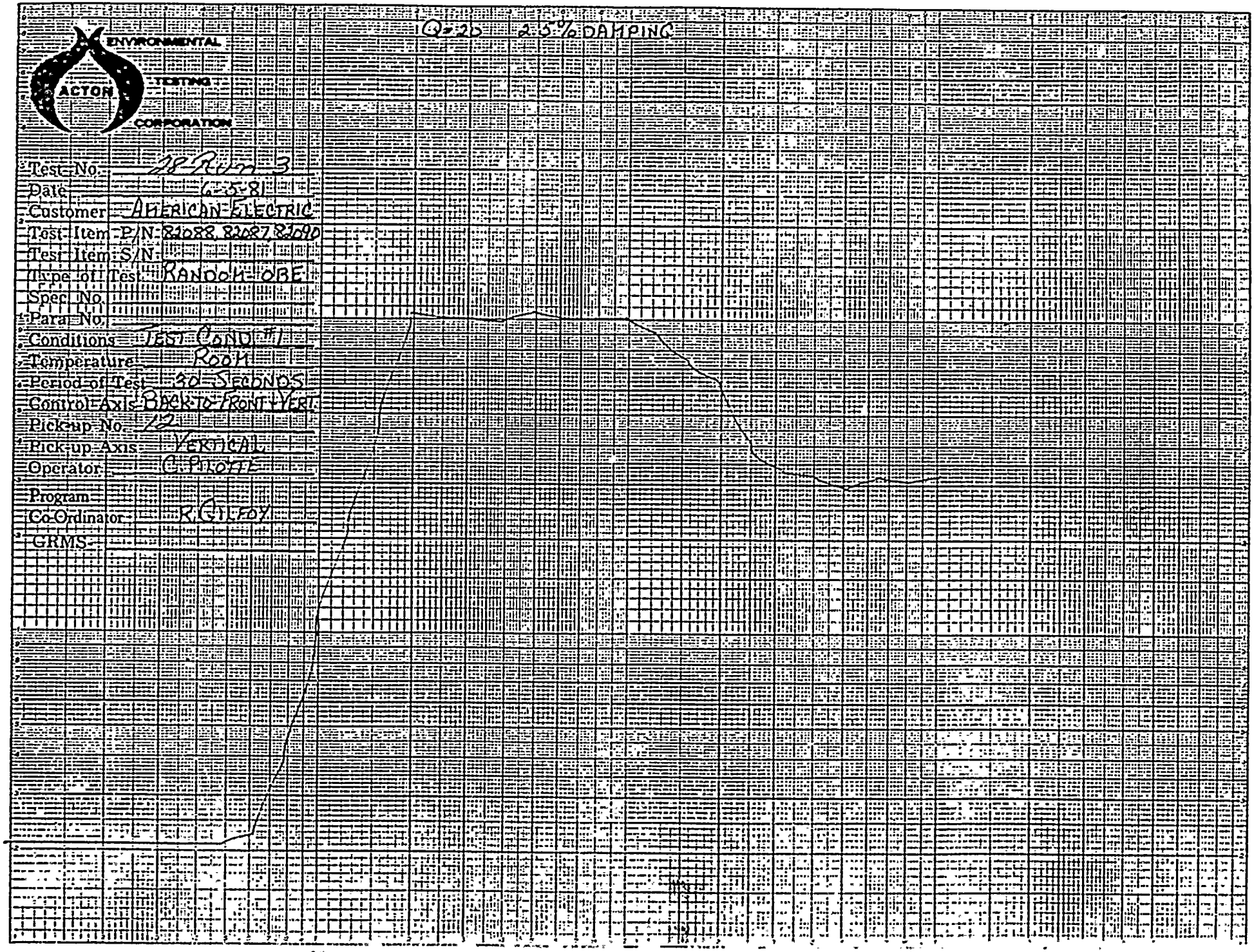
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 18 Run 3
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N: 82088, 82087, 82090
Test Item S/N:
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PROFFE
Program
Co-Ordinator R. GILFOY
GRMS



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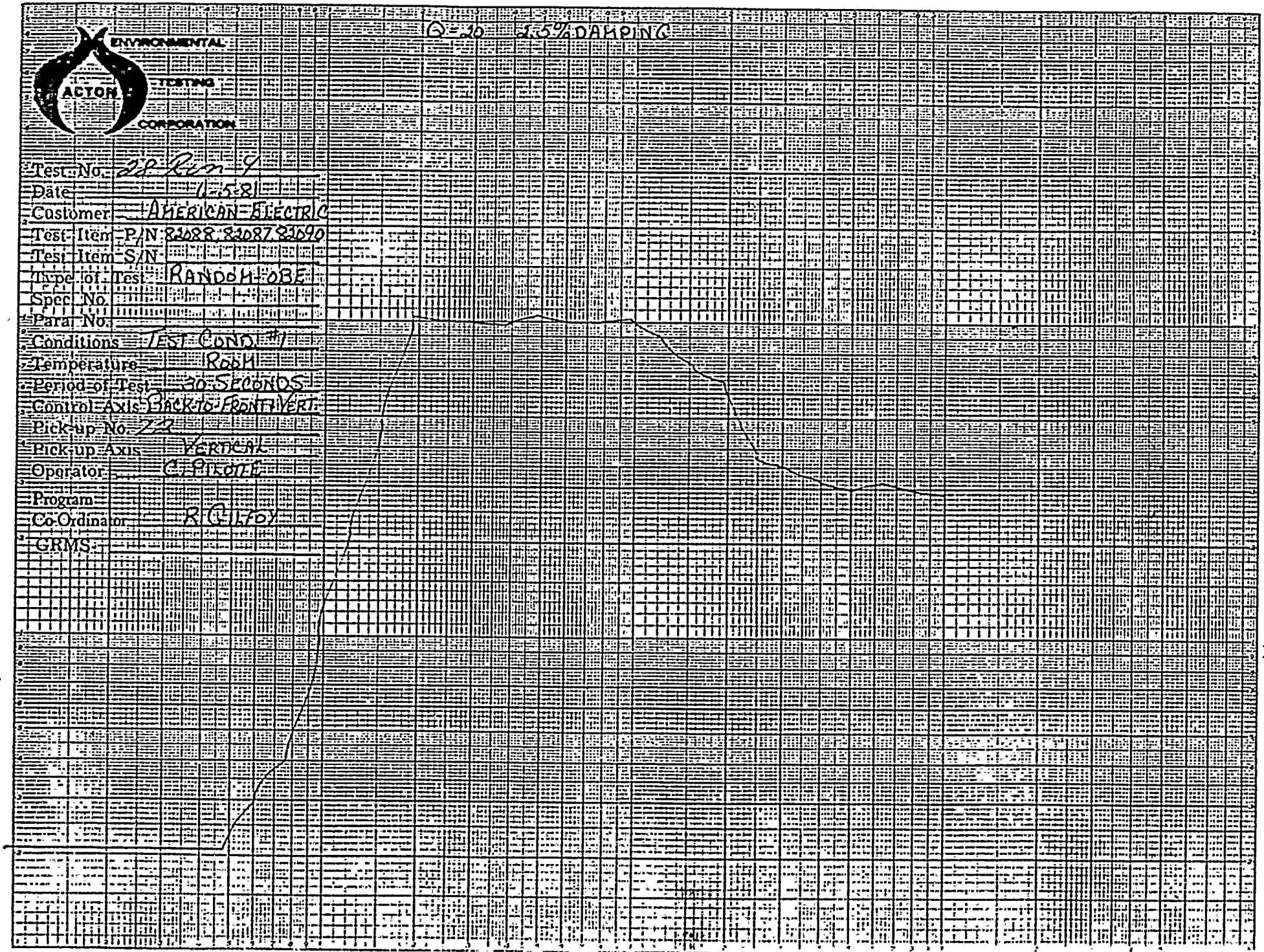
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=10 1.5% DAMPING

Test No. 22 Run 4
Date 1-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82690
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTE
Program
Co-Ordinator R. GILROY
GRMS



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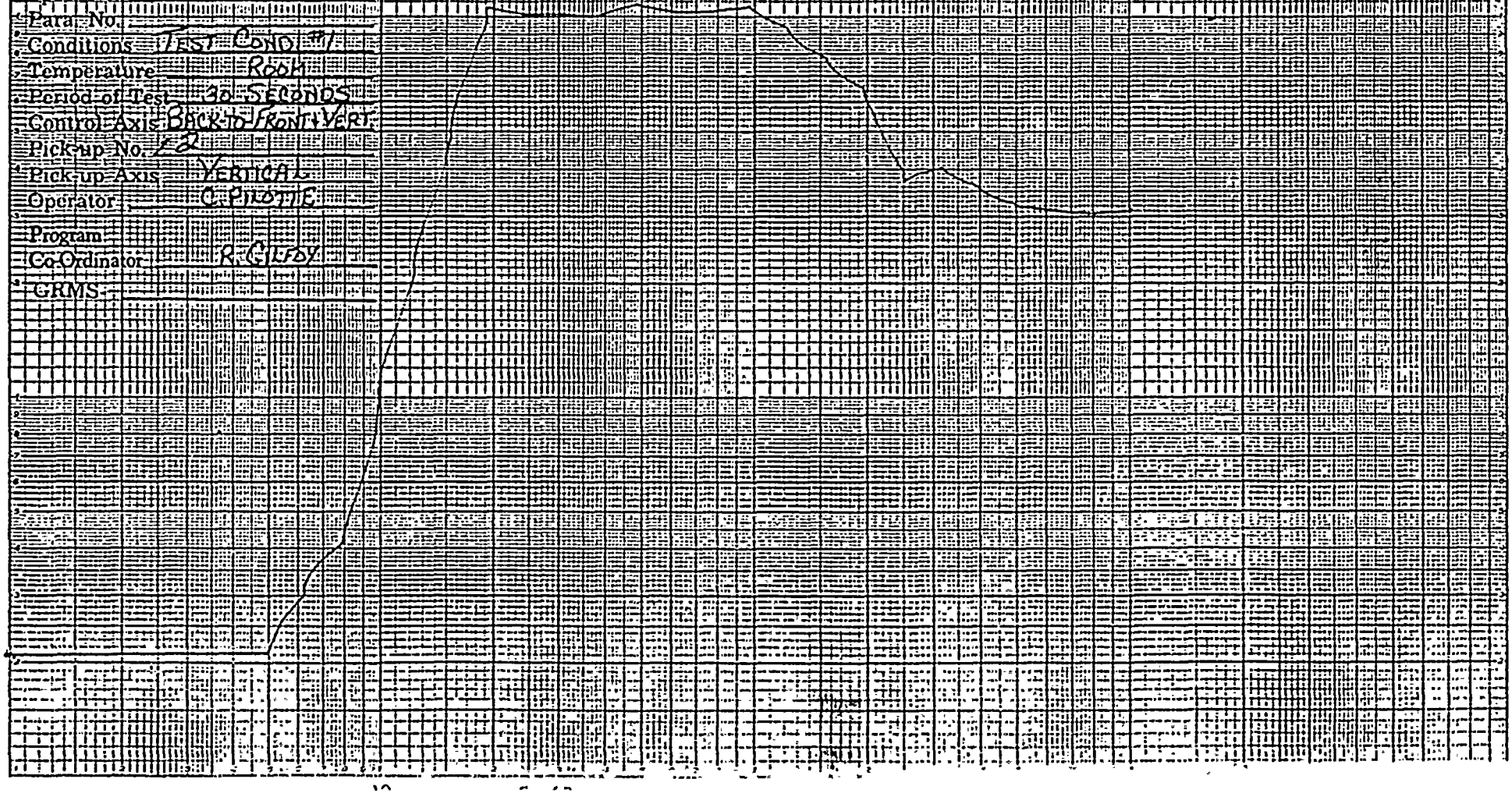
ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Run 5
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 2
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program Co-Ordinator R. GILFOY
GRMS



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ENVIRONMENTAL ACTON TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Run 6
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 820882820878209D
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator G. PILOTTE
Program
Co-Ordinator RICH FOY
GRMS

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Q=20 2.5% DAMPING

Test No. #2 2B RUN 7
Date 6.5.81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT+VERT
Pick-up No. 12
Pick-up Axis VERTICAL
Operator C. PIKOTTE
Program Co-Ordinator R. GIFFEY
GRMS

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ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Rev. 8
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 8308182087,8209
Test Item S/N
Type of Test RANDOM-3 AXIS
Spec No.
Para No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BNC TO FRONT+VERT.
Pick-up No. 22
Pick-up Axis VERTICAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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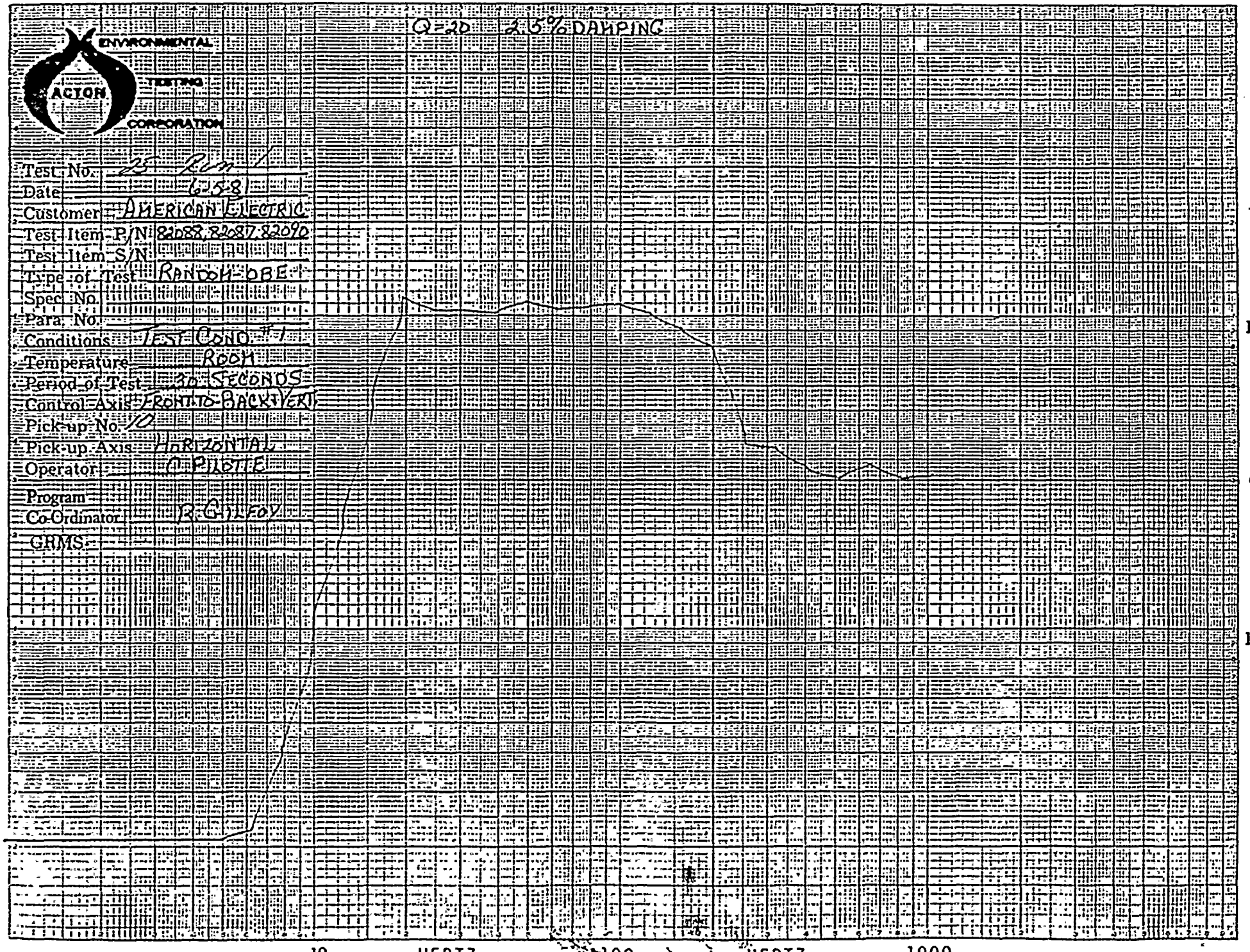
10 HERTZ 100 HERTZ 1000


Q=20 2.5% DAMPING
ENVIRONMENTAL
ACTION
TESTING
CORPORATION
Test No. 25 Rev 1
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 20 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program
Co-Ordinator R GILFOY
GRMS
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HERTZ
1000

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 25 Rem 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec. No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK Y-R
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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10 HERTZ 100 HERTZ 1000

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 25 Rev 3
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK+VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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ENVIRONMENTAL TESTING CORPORATION

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Q=20 2.5% DAMPING

Test No. 23 Rev F
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 83087 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND. "I"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program
Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 25 Rev C
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT TO BACK VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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Q=20 2.5% DAMPING

Test No. 25 Run 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088/82087/82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator A. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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Q=20 2.5% DAMPING

Test No. 25 F03-7
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 21688; 21687 82090
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK (X)
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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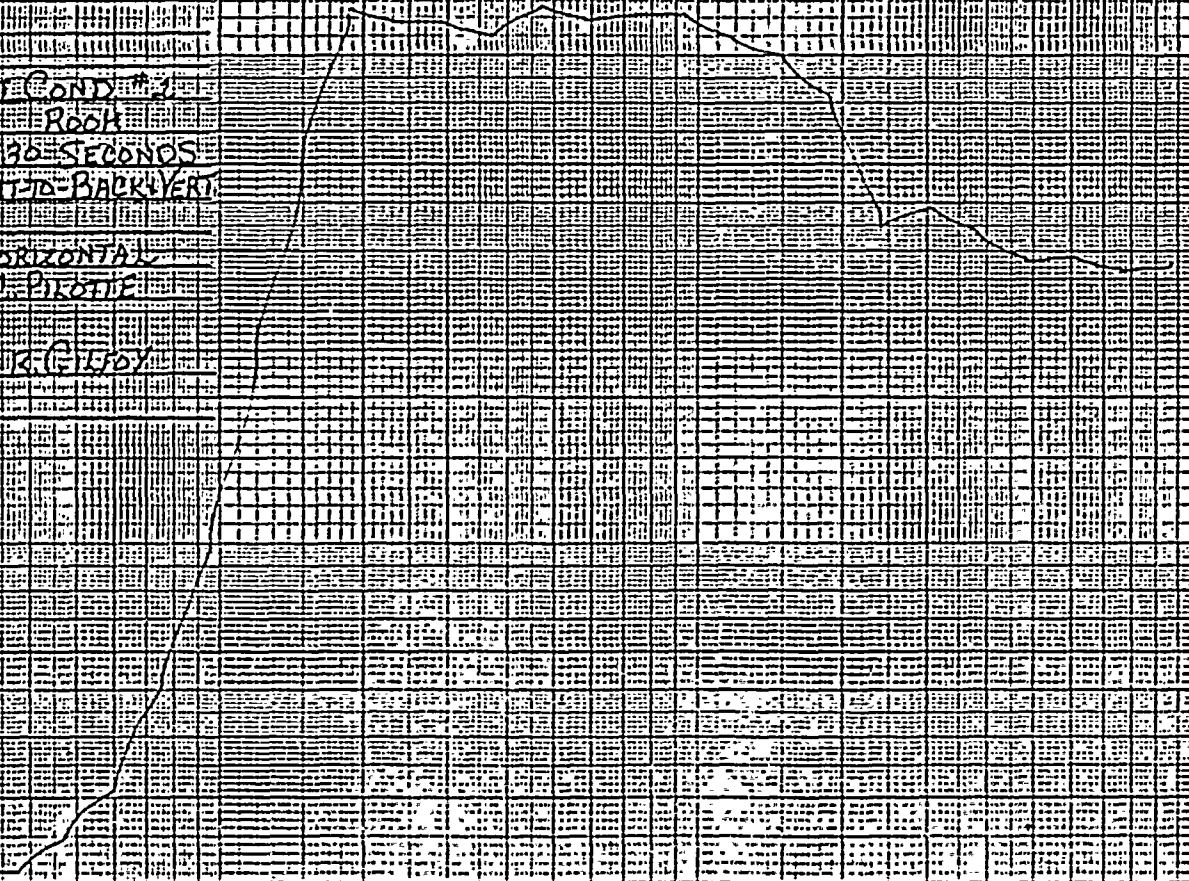
Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 25 Rot 8
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088 82087 82090
Test Item S/N
Type of Test RANDOM-WISE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis FRONT-TO-BACK VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILROY
GRMS



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ENVIRONMENTAL TESTING CORPORATION

ACTON

Q=20 2.5% DAMPING

Test No. 26 Rom 1
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT.
Pick-up No. 1/
Pick-up Axis HORIZONTAL
Operator C. PINOTTE
Program Co-Ordinator R. GILROY
GRMS

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Q=20 & 5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 26 Run 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088,82087,82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. F1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT
Pick-up No. 4
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. CILEY
GRMS

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10 HERTZ 100 HERTZ 1000

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ENVIRONMENTAL ACTION TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. 2L Rm 3
Date 6-5-8
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-BBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 3D SECONDS
Control Axis RIGHT-TO-LEFT VERT.
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Progtam
Co-Ordinator R. GILFOY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26 Run 4
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82040
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PEDITTE
Program Co-Ordinator R. CLIFFORD
GRMS

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ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Rev 8
Date 12-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Tes RANDOM-DBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis RIGHT-TO-LEFT+VERT.
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PINOTTI
Program
Co-Ordinator R. GILROY
GRMS

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10 HERTZ 100 HERTZ 1000

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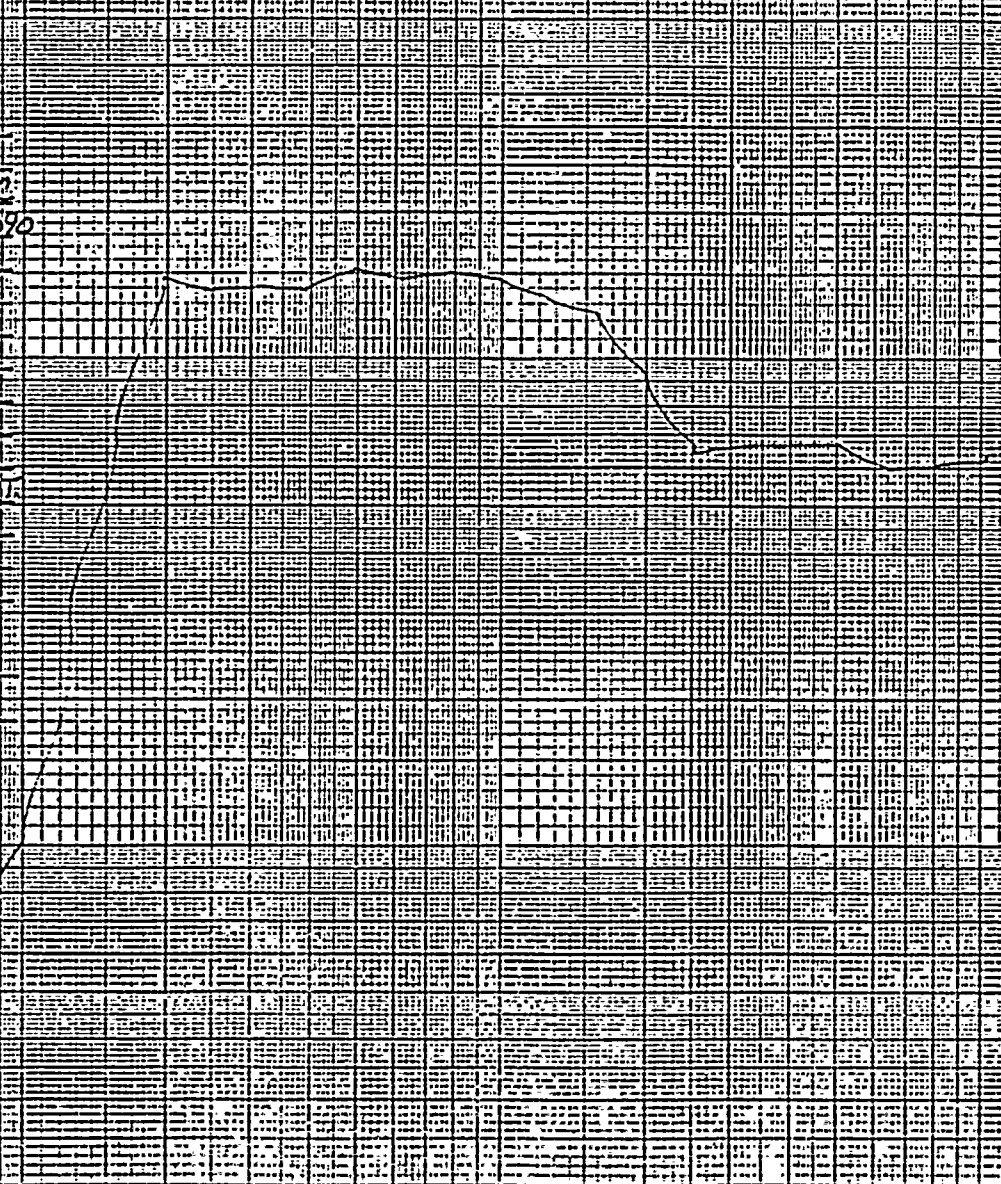
Q=20 2.5% DAMPING

Test No. 26 Run 6
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-LEFT VERT.
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator K. GILFOY
GRMS



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10 HERTZ 100 HERTZ 1000

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 26 Run 7
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SWEPT SINE
Spec No.
Para No.
Conditions TEST COND. #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program
Co-Ordinator R. CLAY
GRMS

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10 HERTZ 100 HERTZ 1000

ENVIRONMENTAL ACTION TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 26 RUN 8
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82687, 82690
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para. No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT & VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. WILCOTT
Program
Co-Ordinator R. CILEK
GRMS

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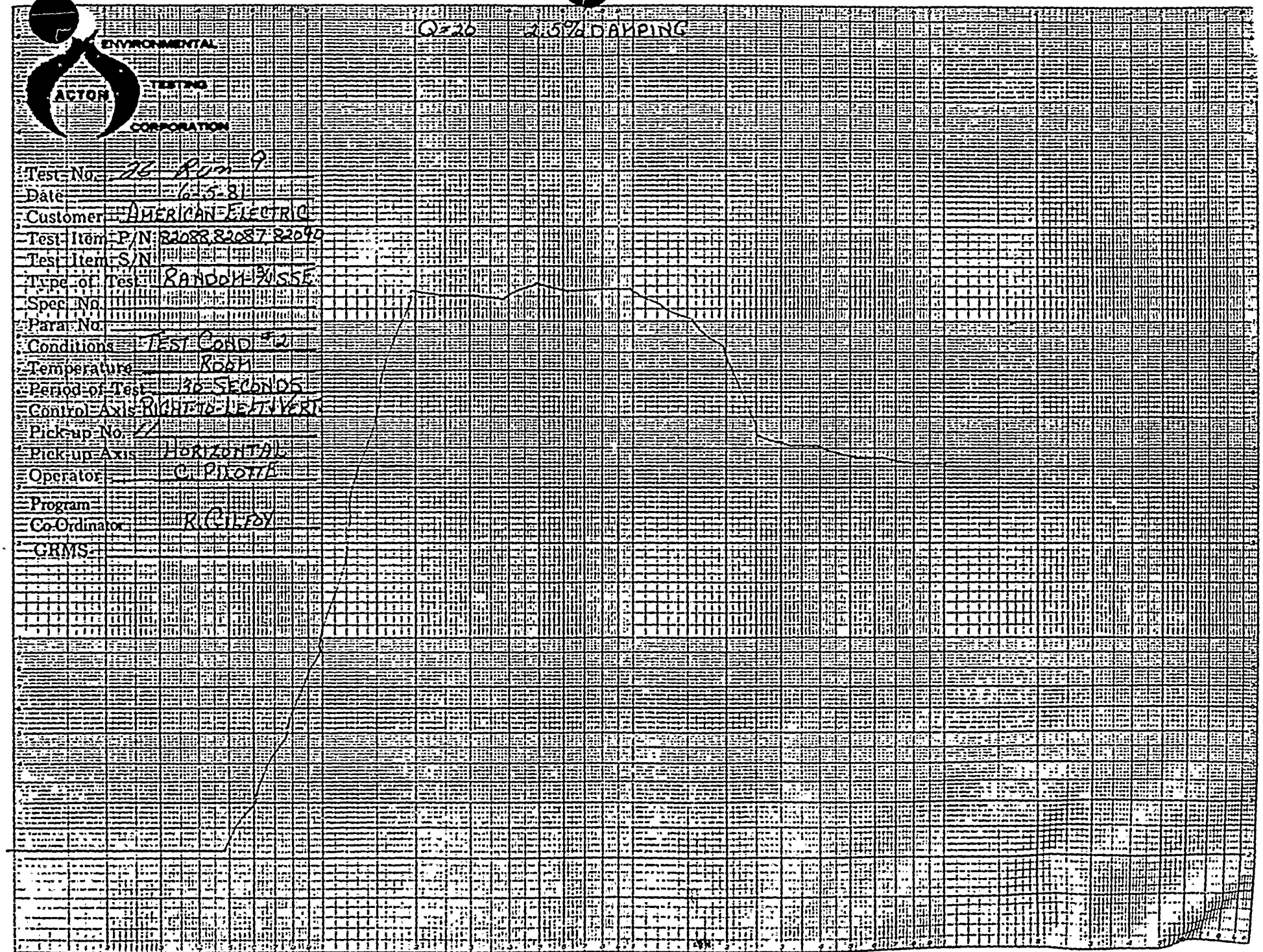
ENVIRONMENTAL TESTING CORPORATION

Q=26 2.5% DAMPING

Test No. 26 Run 9
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM W/SSE
Spec No.
Para No.
Conditions TEST COND "2"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT-TO-LEFT/VERT
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator C. PIXOTTO
Program
Co-Ordinator R. GILROY
GRMS



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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28-Su-77-E
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SINE
Spec No.
Para. No.
Conditions TEST COND. #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program Co-Ordinator R. GILFOY
GRMS

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ENVIRONMENTAL
ACTON TESTING
CORPORATION

Q=20 2.5% DAMPING

Test No. 26 Run 10
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-½ SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis RIGHT TO LEFT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PIOTTE
Program Co-Ordinator R. CLIFFORD
GRMS

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ACTION ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 2-2 Panel
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 90 SECONDS
Control Axis LEFT-TO-RIGHT/VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R. GILLEY
GRMS

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10 HERTZ 100 HERTZ 1000

ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 27 Lm 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82688, 82687, 82690
Test Item S/N
Type of Test RANDOM ABE
Spec No.
Para No.
Conditions TEST CONO #1
Temperature ROOM
Period of Test 20 SECONDS
Control Axis LEFT TO RIGHT VERT
Pick-up No. 2
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILFOY
GRMS

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ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 27 2077

Date 6-5-81

Customer AMERICAN ELECTRIC

Test Item P/N 82088; 82087 82090

Test Item S/N

Type of Test RANDOM-OBE

Spec No.

Para No.

Conditions TEST COND. #1

Temperature ROOM

Period of Test 30 SECONDS

Control Axis LEFT-TO-RIGHT/VERT

Pick-up No. 2

Pick-up Axis HORIZONTAL

Operator C. PILOTTE

Program Co-Ordinator K. CIFFOY

GRMS

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ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 22 Run 9
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT TO RIGHT VERT
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program Co-Ordinator R.C. LUFOY
GRMS

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ENVIRONMENTAL TESTING CORPORATION
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Q=20 2.5% DAMPING

Test No. 22 Rev 5
Date 7-25-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 11
Pick-up Axis HORIZONTAL
Operator C. PILETTE
Program
Co-Ordinator R. GILROY
GRMS

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Q=20 2.5% DAMPING

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 27 Run 6
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SSE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 20 SECONDS
Control Axis LEFT to RIGHT VERT.
Pick-up No. 2A
Pick-up Axis HORIZONTAL
Operator C PILOTTE
Program Co-Ordinator R.G. LEVY
GRMS

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ENVIRONMENTAL TESTING CORPORATION
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Q=20 2.5% DAMPING

Test No. 22 Run 2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82688, 82687, 82690
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis LEFT-TO-RIGHT VERT.
Pick-up No. 1
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program Co-Ordinator R. C. TROY
GRMS

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ENVIRONMENTAL TESTING CORPORATION ACTON

Q=20 2.5% DAMPING

Test No. 2P Run 1
Date 7-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82688, 82687, 82696
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions TEST COND. #1
Temperature RODM
Period of Test 20 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator C. PILOTE
Program
Co-Ordinator R.C. LEROY
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q=20 2.5% DAMPING

Test No. 28 Rev-2
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 820888 820878 820490
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND "I"
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PIOTTI
Program
Co-Ordinator R.C. FOX
GRMS

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Q=20 3% DAMPING

ENVIRONMENTAL TESTING CORPORATION

Test No. SP XE-3
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-OBE
Spec No.
Para No.
Conditions TEST COND. F1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT (YERT)
Pick-up No. 26
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R.G. FOX
GRMS

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ENVIRONMENTAL TESTING CORPORATION
ACTON

Q=20 2.5% DAMPING

Test No. 22 Run 1
Date 12-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions TEST COND 1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT
Pick-up No. 22
Pick-up Axis HORIZONTAL
Operator C. PIDDIE
Program
Co-Ordinator R. GUTOY
GRMS

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Q=20 2.5% DAMPING

ACTON ENVIRONMENTAL TESTING CORPORATION

Test No. 28 Rev 5
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM OBE
Spec No.
Para. No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK-TO-FRONT VERT.
Pick-up No. 20
Pick-up Axis HORIZONTAL
Operator C. PILONE
Program
Co-Ordinator R. CLIFFORD
GRMS

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ACTON ENVIRONMENTAL TESTING CORPORATION

Q = 20 2.5% DAMPING

Test No. 2P Lon 6
Date 1-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM-SSE
Spec No.
Para No.
Conditions TEST COND #1
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT.
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator C. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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Q=20 2.5% DAMPING

ENVIRONMENTAL ACTION TESTING CORPORATION

Test No. 28 Rem 7
Date 6-5-81
Customer AMERICAN ELECTRIC
Test Item P/N 82088, 82087, 82090
Test Item S/N
Type of Test RANDOM SINE
Spec No.
Para No.
Conditions TEST COND #2
Temperature ROOM
Period of Test 30 SECONDS
Control Axis BACK TO FRONT VERT
Pick-up No. 10
Pick-up Axis HORIZONTAL
Operator G. PILOTTE
Program
Co-Ordinator R. GILROY
GRMS

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