

TUV Rheinland of North America, Inc.

12 Commerce Road, Newtown, CT 06470
(203)426-0888 * FAX (203)270-8883



TUV Rheinland Proj # P9871371.01.71797.doc
FCCID: NPI 71797 Page 1 of 27

**Report of Measurements
for
CyberMaster PC Remote Control Toy
Model 71797 Mobile Unit
Applicant:
LEGO Systems, Inc.
555 Taylor Road
P.O. Box 1600
Enfield, CT 06083-1600**

**Report of Measurements
by
TUV Rheinland of North America, Inc.
12 Commerce Road
Newtown, CT 06470**

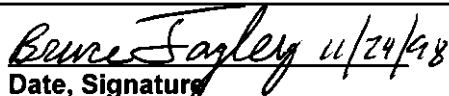

**TIMOTHY M. DWYER
Senior Specialist, EMC**

**Date of Test: 14 - 20 November 1998
Date of Report: 24 November 1998**

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Test Report Number: P987371.01.71846 Prübericht Nr.			Test Report Summary	
Applicant: Auftraggeber		LEGO Systems, Inc. 555 Taylor Road P.O. Box 1600 Enfield, CT 06083-1600		Tel: (860) 763-6886 Fax: (860) 763-6815
Type of Equipment: PC Remote Control Toy Gegenstand der Prüfung				
Model Number: Bezeichnung:		CyberMaster (Mobile Unit Model 71797)		Trademark: Ursprungszeichen
		LEGO ®		
Standards: Prufgrundlage			Date of Test: 14 - 20 November 1998	
Standard Number	Description	Severity Level or Limit	Minimum Acceptable Performance Criteria	Summary Result
FCC Part 15 Subpart B	Radiated Emissions	Sections 15.227 and 15.209	NA	Complies
Place of Test: Prüfört		Accredited by the National Voluntary Laboratory Accreditation Program for FCC Part 15 and CISPR 22 under Lab Code 200111		
TUV Rheinland of North America, 12 Commerce Road, Newtown, CT 06470 USA E-mail: info-new@tuv.com Web: http://www.tuv.com Phone: (203) 426-0888 Fax: (203) 270-8883				
Test Result: Prüfergebnis				
The unit presented for testing complied with criteria shown above. Additional Information is contained in the following pages.				
Tested By: Der Sachverständige		Checked By: Bruce Fagley geprüft		
Timothy M. Dwyer				
				
Date, Signature Datum, Unterschrift		Date, Signature Datum, Unterschrift		
11/24/98		11/24/98		



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1. General

1.1 Equipment Tested

**CyberMaster PC remote Controlled Toy
Model 71797 Mobile Unit**

1.2 Applicant/Manufacturer

**LEGO Systems, Inc.
555 Taylor Road
P.O. Box 1600
Enfield, CT 06083-1600**

1.3 FCCID: NPI 71797

1.4 Description

The CyberMaster is a personal computer operated remote control toy consisting of two units. This test report is for the Model 71797 Mobile Unit. Since the devices function together as a set, but differ in construction, two FCC filings are being submitted. The devices were tested together and so the reports for both devices are almost identical in content. The FCCID for the Model 71846 Tower Unit is NPI71846.

1.4.1 Physical:

The CyberMaster consists of two units, the Tower Unit (Model 71846) that connects to the PC and the Mobile Unit (Model 71797) on which the toy is constructed using LEGO blocks.

1.4.2 Functional:

Each unit contains a transmitter and receiver. The two units communicate in half duplex mode at 27.995 MHz. The Tower Unit acts as master to control the Mobile Unit. Only one unit transmits at a time, and the mobile unit transmits only after receiving a command from the Tower Unit instructing it to do so.



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1.4.3 Electrical and EMC Related:

Both units are battery operated and no means is provided in either unit for connection of external power. The Tower Unit is powered from a single 9 V battery. The mobile unit is powered from 6 AA type cells.

1.5 Description of Circuit Function

Refer to Exhibit C.

1.6 Block Diagram Showing Oscillators

Refer to Exhibit D.

2. Measurement Equipment Used

The measuring equipment used for measurements is shown in the following tables.

Equipment	Frequency Range of Measurements Performed	Manufacturer and Model	Calibration Last
EMI Receiver	450 - 4500 MHz	HP8546A	Jun 98
Antenna, Biconical	30-300 MHz	Schwarzbeck VHBB9124	Sep 98
Antenna, Log Periodic	300-1000 MHz	EMCO	Sep 98

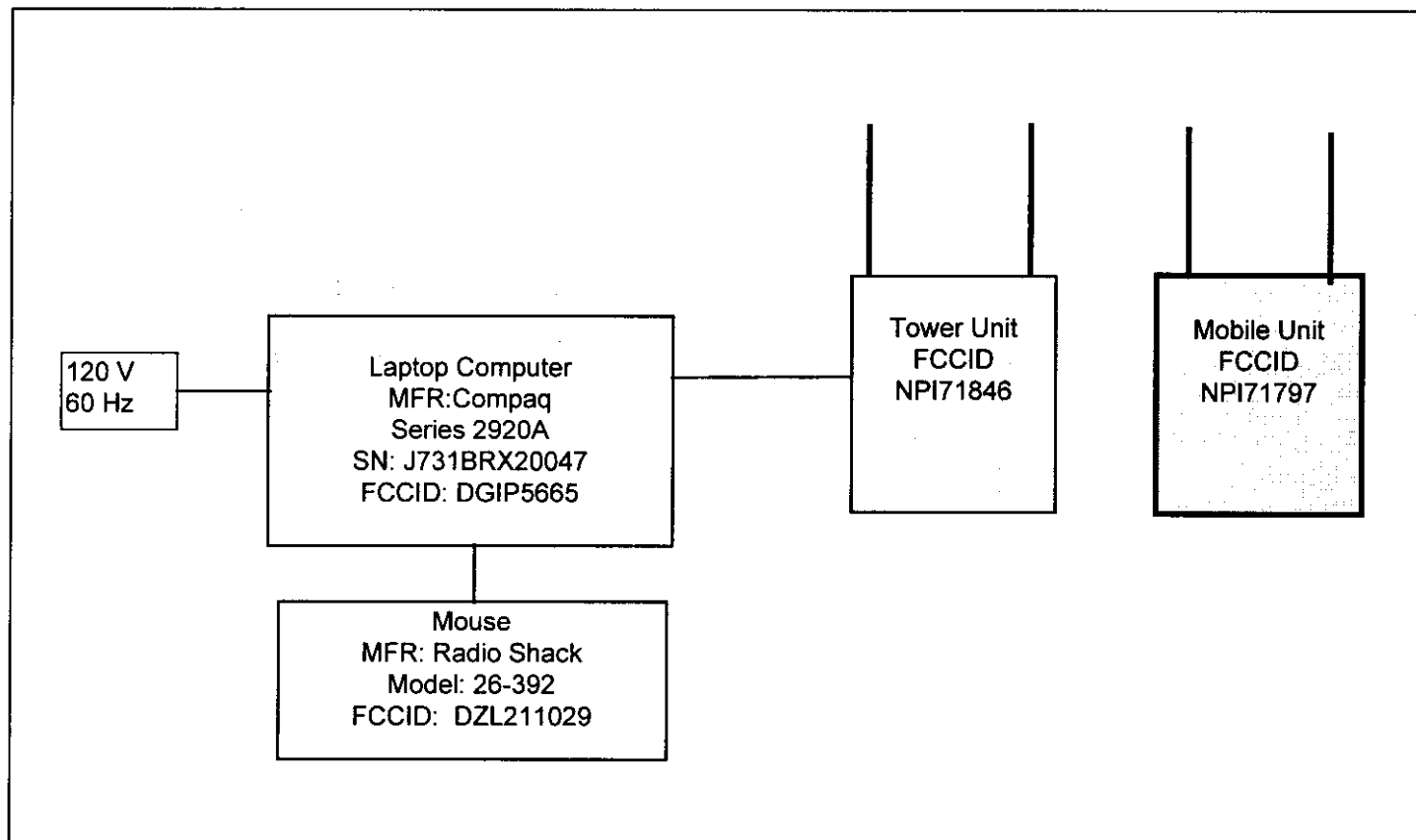


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3. Report of Measurements

3.1 Test Configuration Block Diagram





3.2 Conducted Emissions

Conducted emissions measurements were not performed as the CyberMaster has no provision for connection to the AC mains.

3.3 Radiated Emissions

3.3.1 MODE OF OPERATION:

The CyberMaster was exercised during the tests using the software running the "EMI Test". This test provides for repeated transmission from both transmitters in half duplex mode.

3.3.2 PROCEDURE:

Preliminary radiated measurements were made at a distance of 3 meters in a semi-anechoic chamber. The preliminary plots are included in the test data section.

Final radiated measurements were performed on an Open Area Test Site (OATS) at measurement distances of 3 meters for 26.995 MHz and 10 meters for 26.540 MHz meters. The measurements were made at a closer distance than is specified for 26.540 MHz in accordance with the provisions of sections 15.209(e) and 15.31(f)(2).

Radiated emissions measurements were performed using the ANSI C63.4-1992 measurement procedures as specified in paragraph 15.31(a)(6).

Date of Test:	14 - 20 November 1998
Frequency Range:	30 - 1000 MHz
Detector:	Peak, Quasi Peak and Average
Peak Measurement Bandwidth:	120 kHz
Quasi-Peak Measurement Bandwidth:	120 kHz
Average Measurement Bandwidth:	300 kHz

3.3.3 CRITERIA

CFR 47 (FCC) 15.227 and 15.209



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3.3.4 MEASUREMENT DATA

Radiated Emissions		Final OATS Measurements				D=	3 & 10 m	Antenna =	9124/3146		
Device Tested:		CyberMaster									
Meas #	Freq (MHz)	Peak	Quasi-Peak	Average	FCC Limit	Δ	Antenna + Cable Correction Factor (included in measured levels)	Result	Antenna Polarization	Antenna Height	Turntable Angle
	(MHz)	(dB μ V/m)	(dB μ V/m)	(dB μ V/m)	(dB μ V/m)	(dB)	(dB)		V or H	(m)	(°)
1	26.540	16.2	13.0	10.0	30 QP @ 30 m	-13.8	14.8	COMPLIES	V	1.50	0
2	26.540	14.1	4.2	-5.7	30 QP @ 30 m	-15.9	14.8	COMPLIES	H	3.55	0
3	26.995	79.6	79.1	71.2	80 AVG @ 3 m	-8.8	14.7	COMPLIES	V	1.80	0
4	26.995	55.5	53.5	45.5	80 AVG @ 3 m	-34.5	14.7	COMPLIES	H	2.14	0

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Note: The limit specified for 26.540 MHz is the 30 m limit as specified in 15.209(a) although the measurements were performed at a distance of 10 m. The actual limit allowed by 15.209(e) and 15.31(f)(2) would be 20 dB higher or 50 dB μ V/m QP.

3.3.5 CALCULATION

Measured Level (dB μ V) + Cable Loss (dB) + Antenna Factor dB = Field Strength (dB μ V/m)

3.3.6 RESULT

The radiated emissions of the CyberMaster were below the 10,000 μ V/m (80 dB μ V/m) limit specified in section 15.227 for the frequency of operation (26.995 MHz) 30 dB μ V/m limit specified in 15.209 for 26.540 MHz.



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4. Modifications to Equipment Tested

No modifications of any kind were made either to the CyberMaster or to support equipment used for this test.
All equipment was tested as received.



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6. Measurement Data Sheets

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14:42:04 14 NOV 1998

MFR: LEGO

MODEL

CYBER-MASTER

PRELIM/FINAL

NOTES: NO EMISSIONS OBSERVED OTHER THAN
AT FREQUENCY OF OPERATION

REMARKS "EMI TEST" PROGRAM

MEAS TYPE:

- ☒ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☐ Horizontal
☒ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



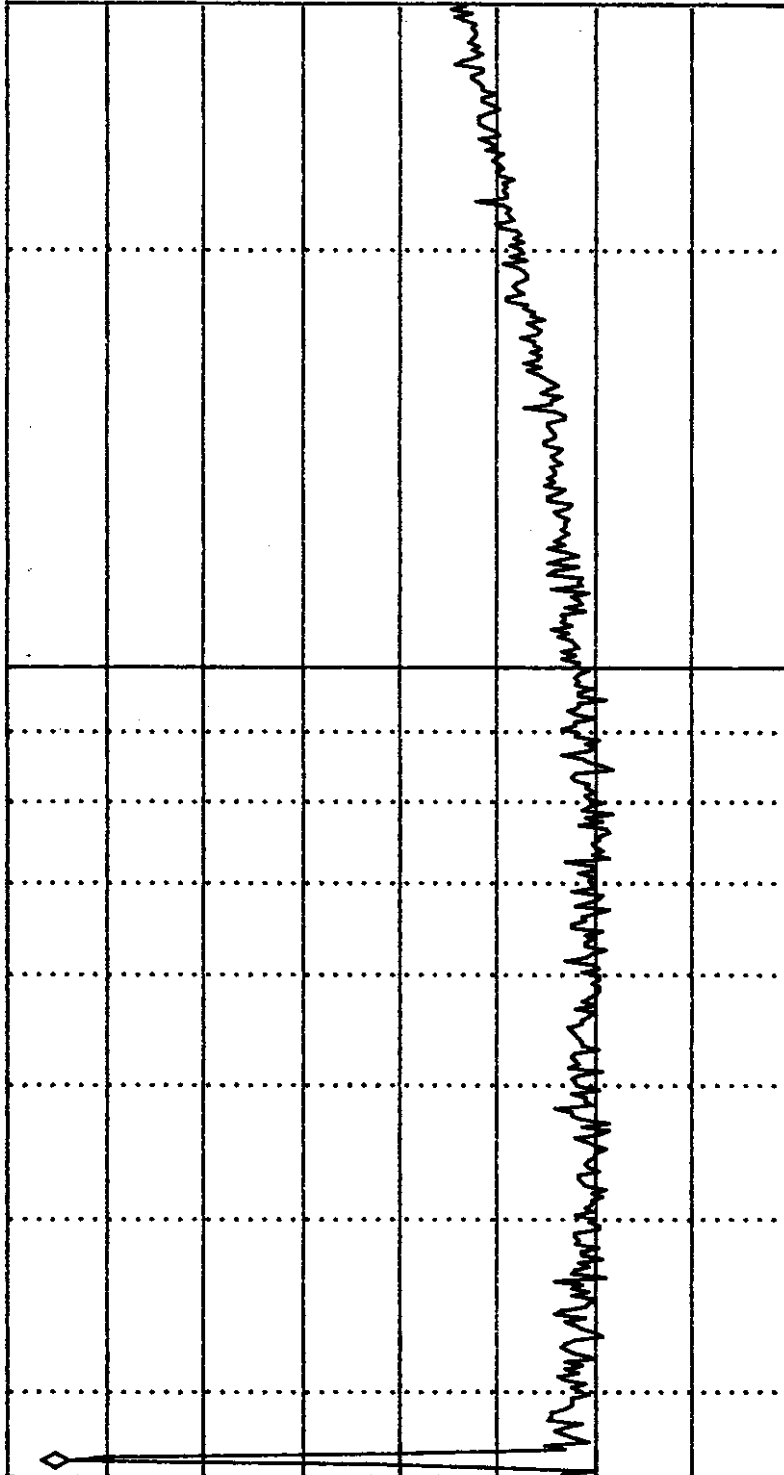
Paper

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 27.1 MHz
83.59 dBμV/m

PREAMP ON

LOG REF 90.0 dBμV/m

10
dB/
#ATN
20 dB



WA SB
SC FS
ACORR

START 26.0 MHz
#IF BW 120 kHz
AUG BW 300 kHz
STOP 300.0 MHz
#SWP 300 msec

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14:35:49 14 NOV 1998

MFR: LEGO

MODEL CYBERMASTER

NOTES: NO EMISSIONS OBSERVED OTHER THAN
AT FREQUENCY OF OPERATION
RUNNING "EAGLE TEST", PROGRAM

MEAS TYPE:

- ☒ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

MARKER

27.1 MHz

69.20 dBμV/m

ACTV DET: PEAK

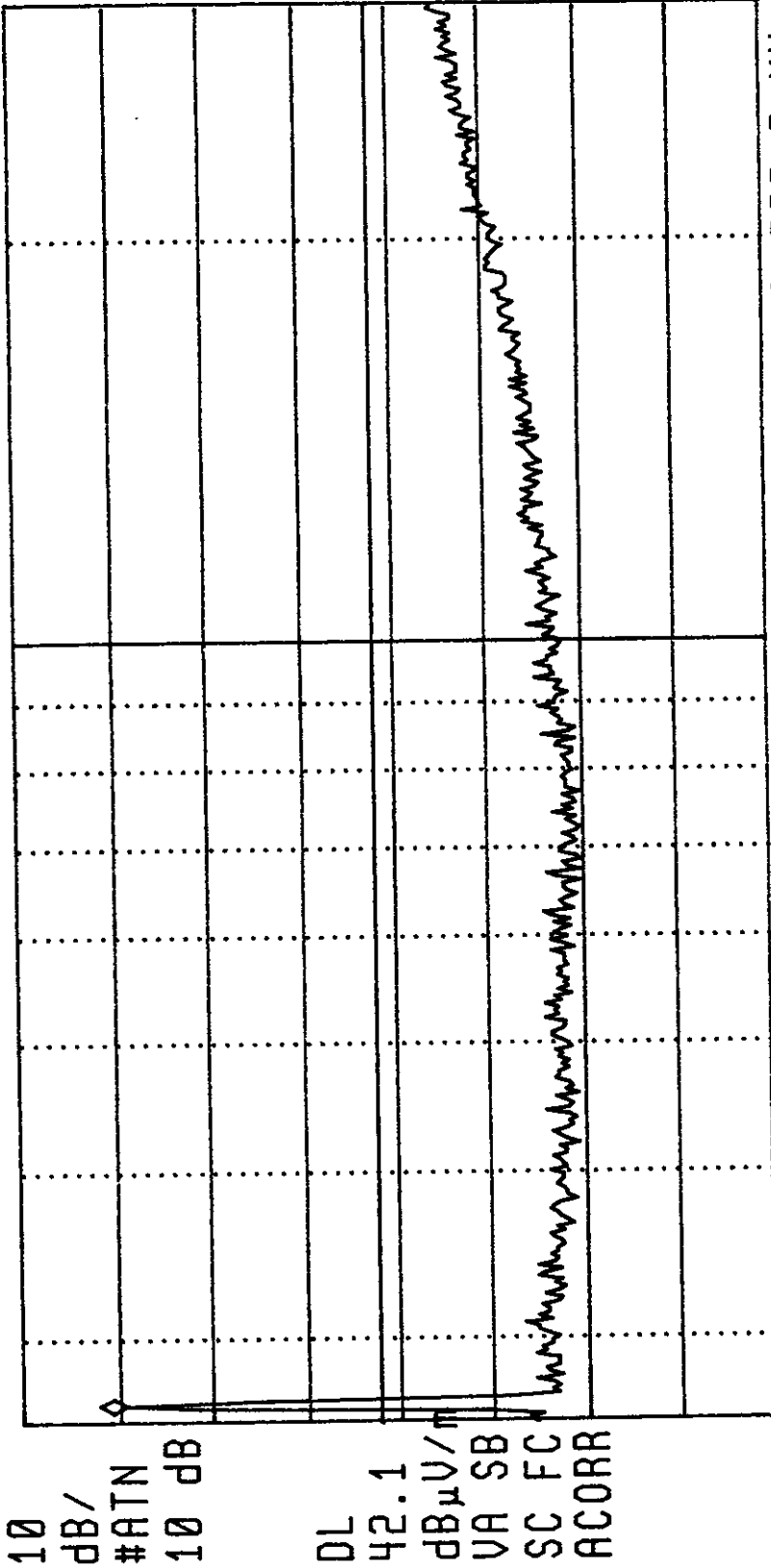
MEAS DET: PEAK QP AVG

MKR 27.1 MHz

69.20 dBμV/m

LOG REF 80.0 dBμV/m

PREAMP ON



START 26.0 MHz

#IF BW 120 kHz

#AVG BW 300 kHz

STOP 300.0 MHz

#SWP 300 msec

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



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14:45:15 14 NOV 1998

MFR: 660

MODEL CYBERMASTER

PRELIM/FINAL

SWEPTIME

750 msec

ACTV DET: PEAK

MEAS DET: PEAK QP AVG

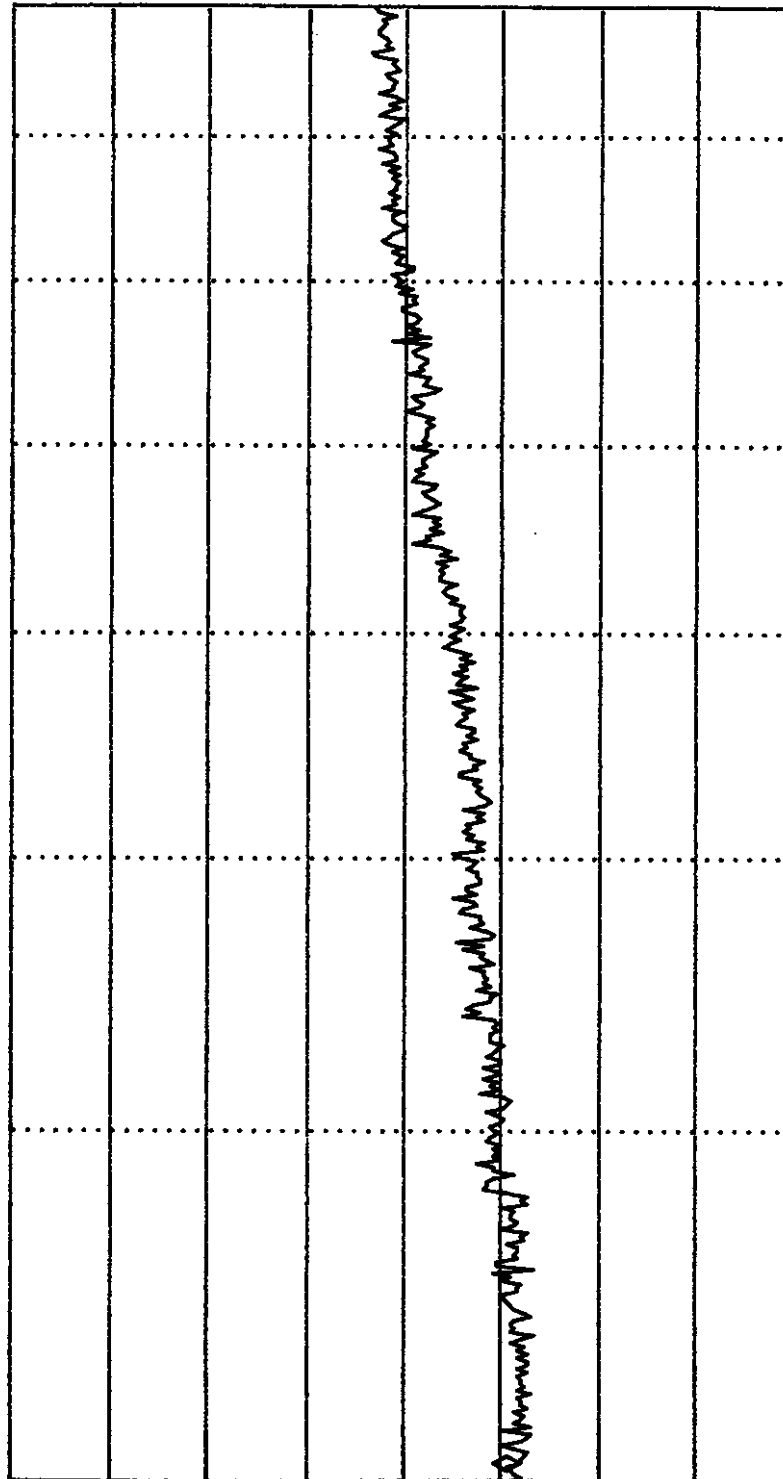
MKR 306.2 MHz

37.73 dBμV/m

LOG REF 90.0 dBμV/m

PREAMP ON

10 dB/ #ATN 20 dB



START 300.0 MHz

#IF BW 120 kHz

#AVG BW 300 kHz

STOP 1.0000 GHz

#SWP 750 msec

NOTES: No Emissions Observed

- MEAS TYPE:
- ☒ Radiated Prescan
 - ☒ Radiated Final
 - ☐ Conducted
 - ☐ Disturbance Power
 - ☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon
- ☒ 3146 Log Per
- ☐ 3106 Horn
- ☐ 3109 Bicon
- ☐ 3115 Horn
- ☐ CBL6140 X-Wing
- ☐ MDS-21 Clamp
- ☐ NSLK 8126 LISN
- ☐ NNB-4/63TL LISN

POLARIZATION:

- ☐ Horizontal
- ☒ Vertical
- ☐ NA

DISTANCE:

- ☒ 3 Meter
- ☐ 10 Meter
- ☐ Meter
- ☐ NA

LOCATION:

- ☐ OATS
- ☒ Semi-Anechoic
- ☐ Shielded Room
- ☐ Other



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14:50:01 14 NOV 1998

MFR: 4660

SWEPTIME

750 msec

MODEL CYBERMASTER

PRELIM/FINAL

ACTV DET: PEAK

MEAS DET: PEAK QP AVG

MKR 306.2 MHz

38.03 dBμV/m

LOG REF 90.0 dBμV/m

PREAMP ON

10

dB/

#ATN

20 dB

VA SB
SC FC
ACORR

START 300.0 MHz

#IF BW 120 kHz

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#AUG BW 300 kHz

12 Commerce Road, Willow Grove, PA 19094

Phone 610-270-8888

Fax 203-270-8883

STOP 1.0000 GHz

#SWP 750 msec

NOTES: NO EMISSIONS OBSERVED.

MEAS TYPE:

- ☒ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☒ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



PLATE

FCCID: NP171797

TUV Rheinland File: P9871371.01.71797 Page 17 of 27

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12:37:55 20 NOV 1998

MFR: LECO

MODEL CYBERMASTER

PRELIM/FINAL

NOTES: MODULATION SATURATED
TRANSMISSION IS < 0.1 SEC

MEAS TYPE:
☐ Radiated Prescan
☐ Radiated Final
☐ Conducted
☐ Disturbance Power
☒ Other MODULATION

MARKER Δ
64.500 msec
5.52 dB

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR Δ 64.500 msec
5.52 dB

ANTENNA/COUPLER:

☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

☐ Horizontal
☐ Vertical
☐ NA

DISTANCE:

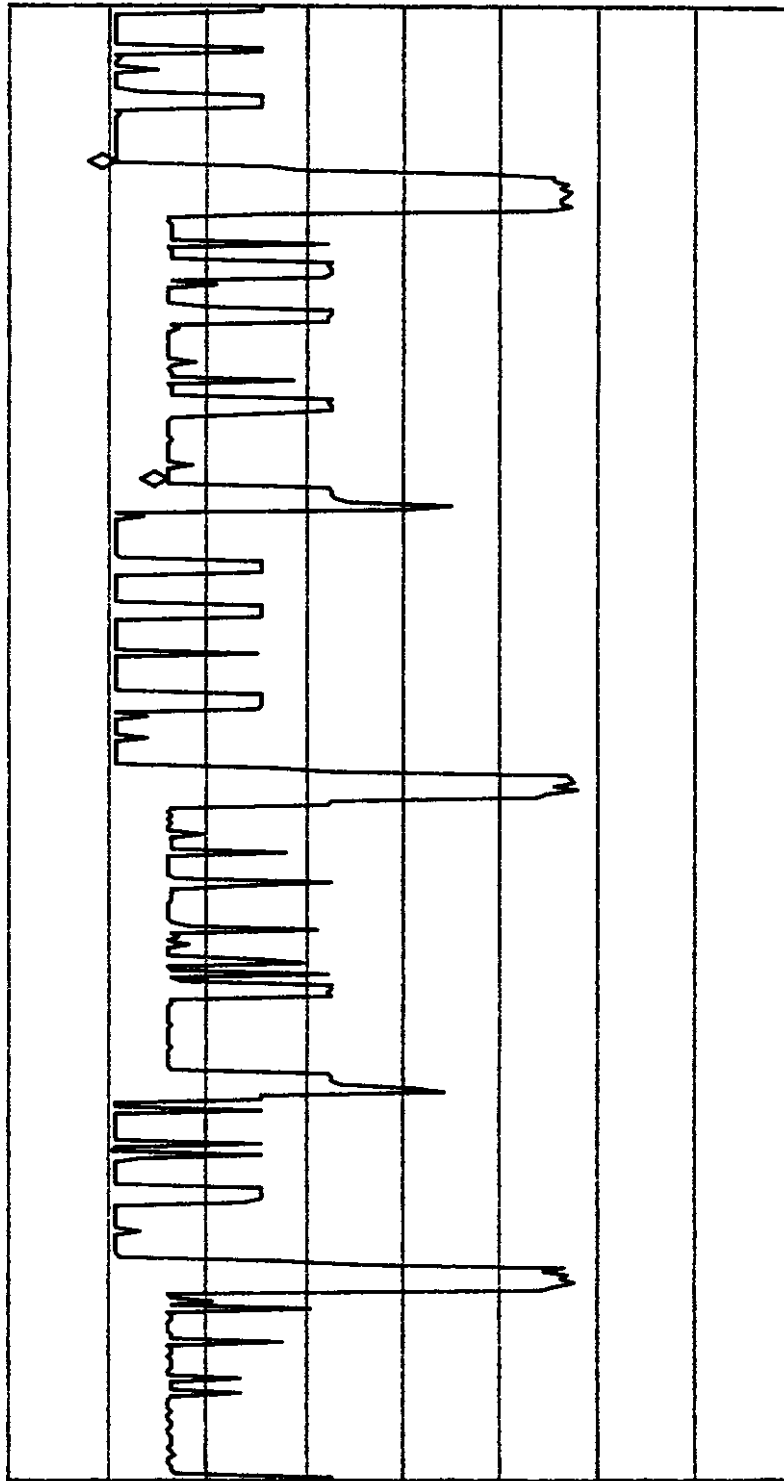
☐ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

☐ OATS
☐ Semi-Anechoic
☐ Shielded Room
☐ Other

LOG REF 80.0 dB μ V/m

10 dB/
#ATN
10 dB



WA SB
SC FS
ACORR

CENTER 26.995 MHz
#IF BW 120 kHz
AUG BW 300 kHz
SPAN 0 Hz
#SWP 300 msec



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13:48:56 14 NOV 1998

MFR: LEGO

MODEL CYBERMASTER

PRELIMINARY FINAL

NOTES: RUNNING "EMI TEST" PROGRAM.
TOWER & MOBILE UNITS TRANSMITTERS
OPERATE SEQUENTIALLY

AVERAGE BANDWIDTH
1.0 Hz

FREQ 27.00 MHz
PEAK 89.2 dBμV/m
QP 88.6 dBμV/m
AVG 82.8 dBμV/m

LIN REF 84.9 dBμV/m

PREAMP ON

#ATN
30 dB

VA SB
SC FC
ACORR

CENTER 26.9950 MHz

#IF BW 120 kHz

#AVG BW 1.0 Hz

SPAN 200.0 kHz
#SWP 50.0 sec

MEAS TYPE:

- ☒ Radiated Prescan
☐ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

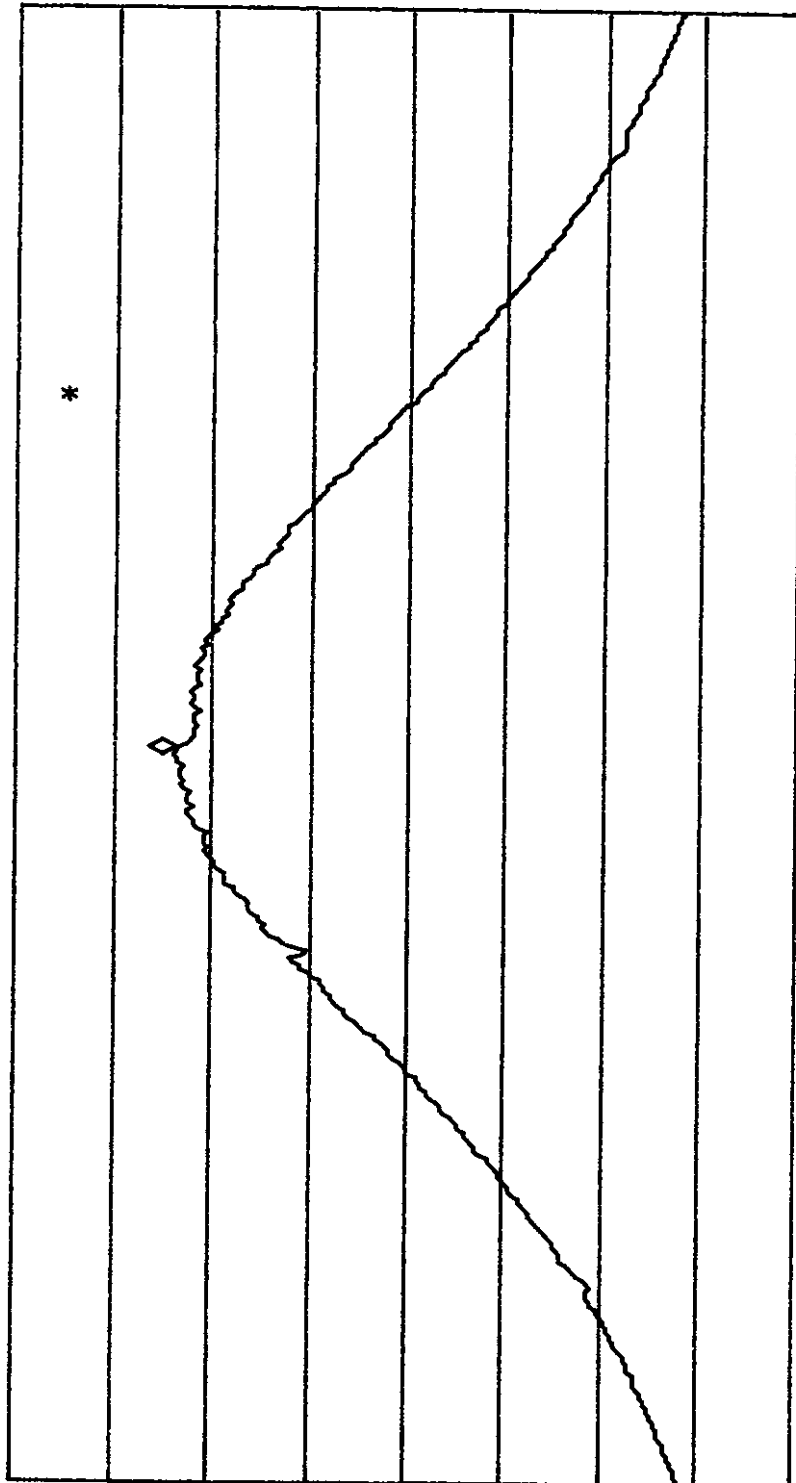
- ☐ Horizontal
☒ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



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14:12:06 14 NOV 1998

MFR: LEGO

MODEL: CYBERMASTER

PRELIM/FINAL

SWEPTIME
100 sec

ACTV DET: AVG

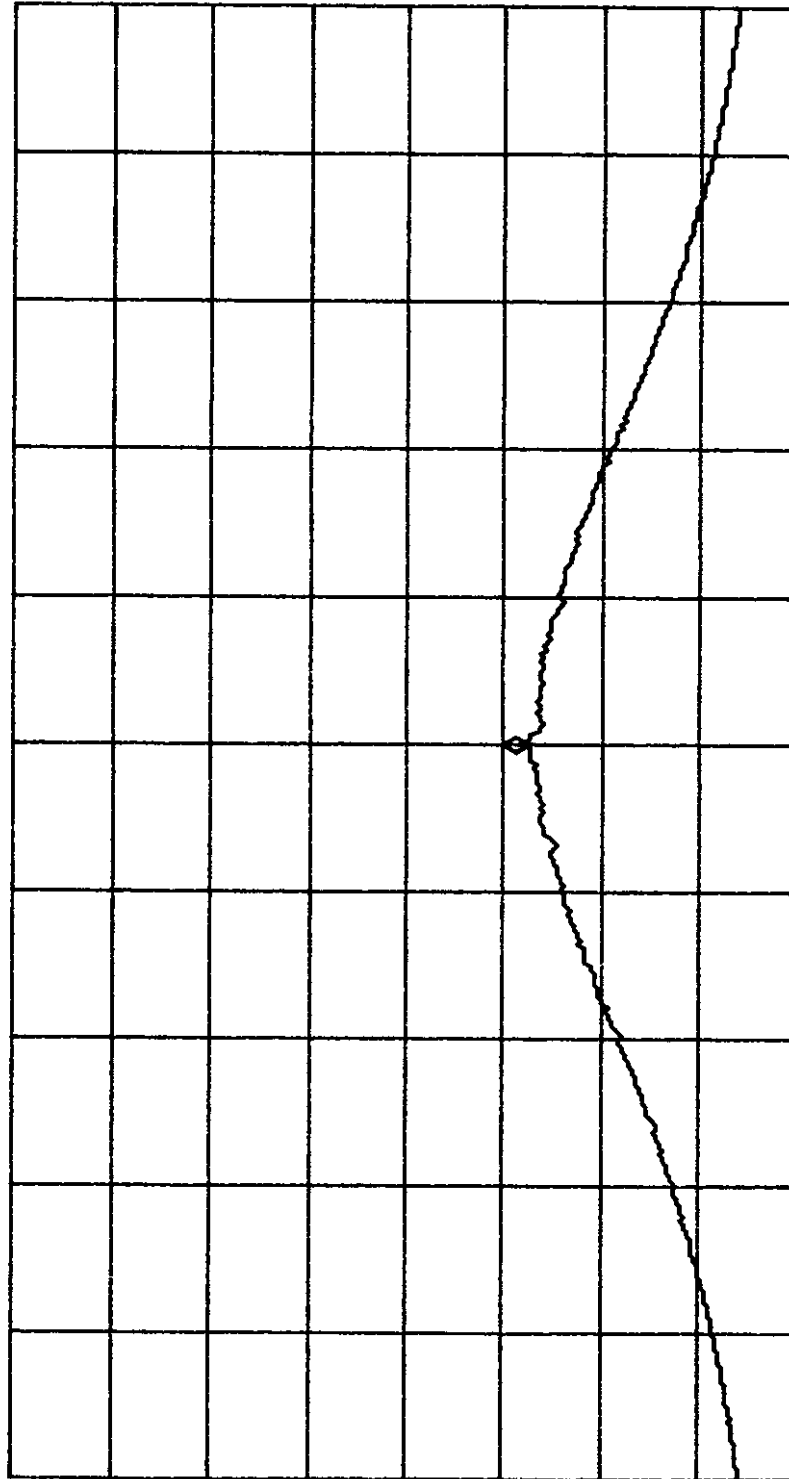
MEAS DET: PEAK QP AVG

MKR 26.9950 MHz

63.47 dB μ V/m

LIN REF 72.9 dB μ V/m

PREAMP ON



CENTER 26.9950 MHz

#IF BW 120 kHz

#AVG BW 1.0 Hz

SPAN 200.0 kHz

#SWP 100 sec

NOTES: RUNNING EMI TEST" PROGRAM

MEAS TYPE:
☒ Radiated Prescan
☐ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



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12:26:53 20 NOV 1998

MFR: LEGO

MODEL CYBERMASTER

PRELIM FINAL

REF LEVEL

80.0 dBμV/m

FREQ 26.54 MHz

PEAK 40.0 dBμV/m

QP 39.0 dBμV/m

AVG 36.9 dBμV/m

LOG REF 80.0 dBμV/m

PREAMP ON

10

dB/

#ATN

10 dB

WA SB

SC FS

ACORR

START 26.000 MHz

#IF BW 9.0 kHz

AVG BW 30 kHz

STOP 27.500 MHz

SWP 125 msec

NOTES:

MEAS TYPE:

- ☒ Radiated Prescan
☐ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

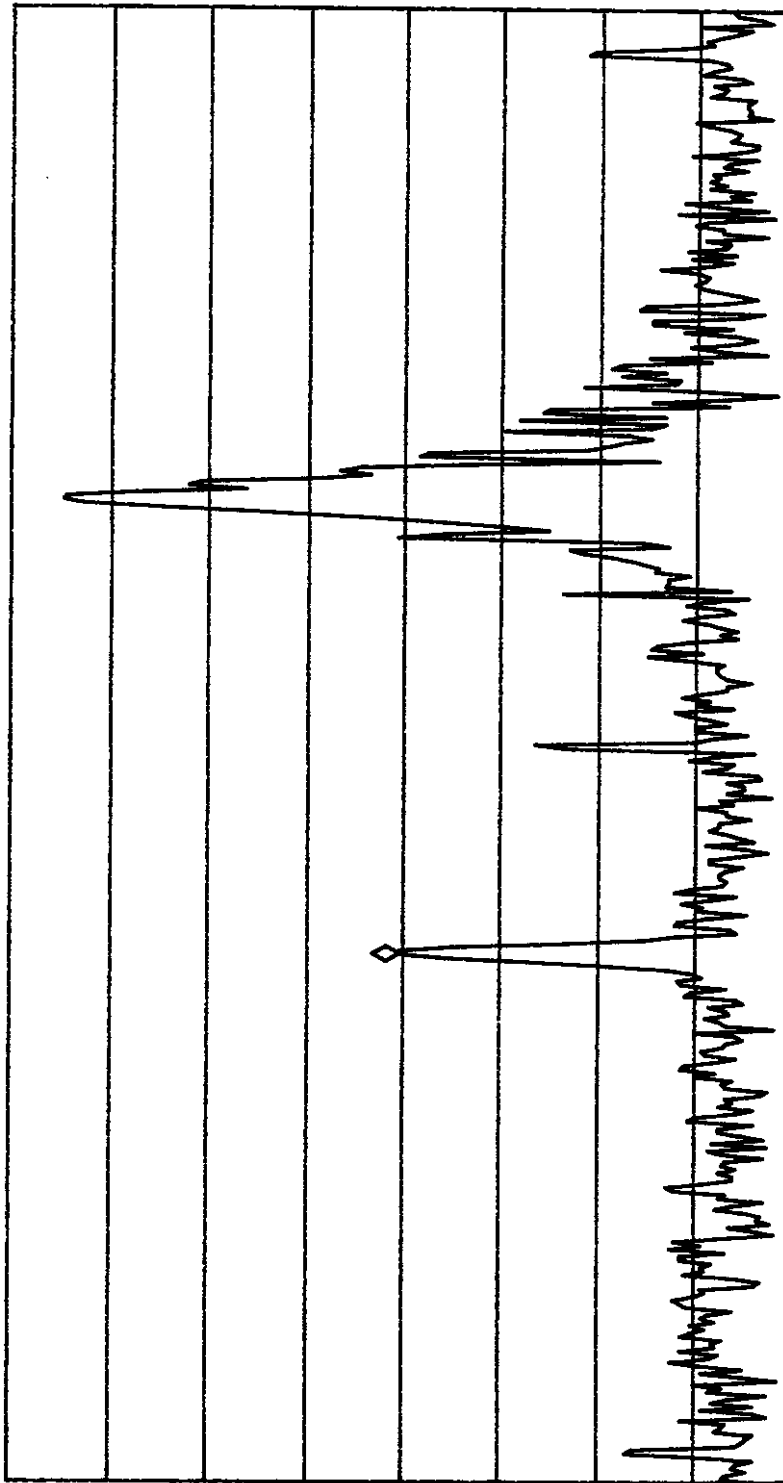
- ☐ Horizontal
☒ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



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12:31:06 20 NOV 1998

MFR: LE60

MODEL CYBERMASTER - PRELIM/FINAL

REF LEVEL

80.0 dBμV/m

FREQ 26.54 MHz

PEAK 21.0 dBμV/m

QP 18.6 dBμV/m

AUG 16.6 dBμV/m

LOG REF 80.0 dBμV/m

PREAMP ON

10

dB/

#ATN

10 dB

WA SB

SC FS

ACORR

START 26.000 MHz

#IF BW 9.0 kHz

AUG BW 30 kHz

STOP 27.500 MHz

SWP 125 msec

NOTES:

MEAS TYPE:

- ☒ Radiated Prescan
☐ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☐ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☒ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

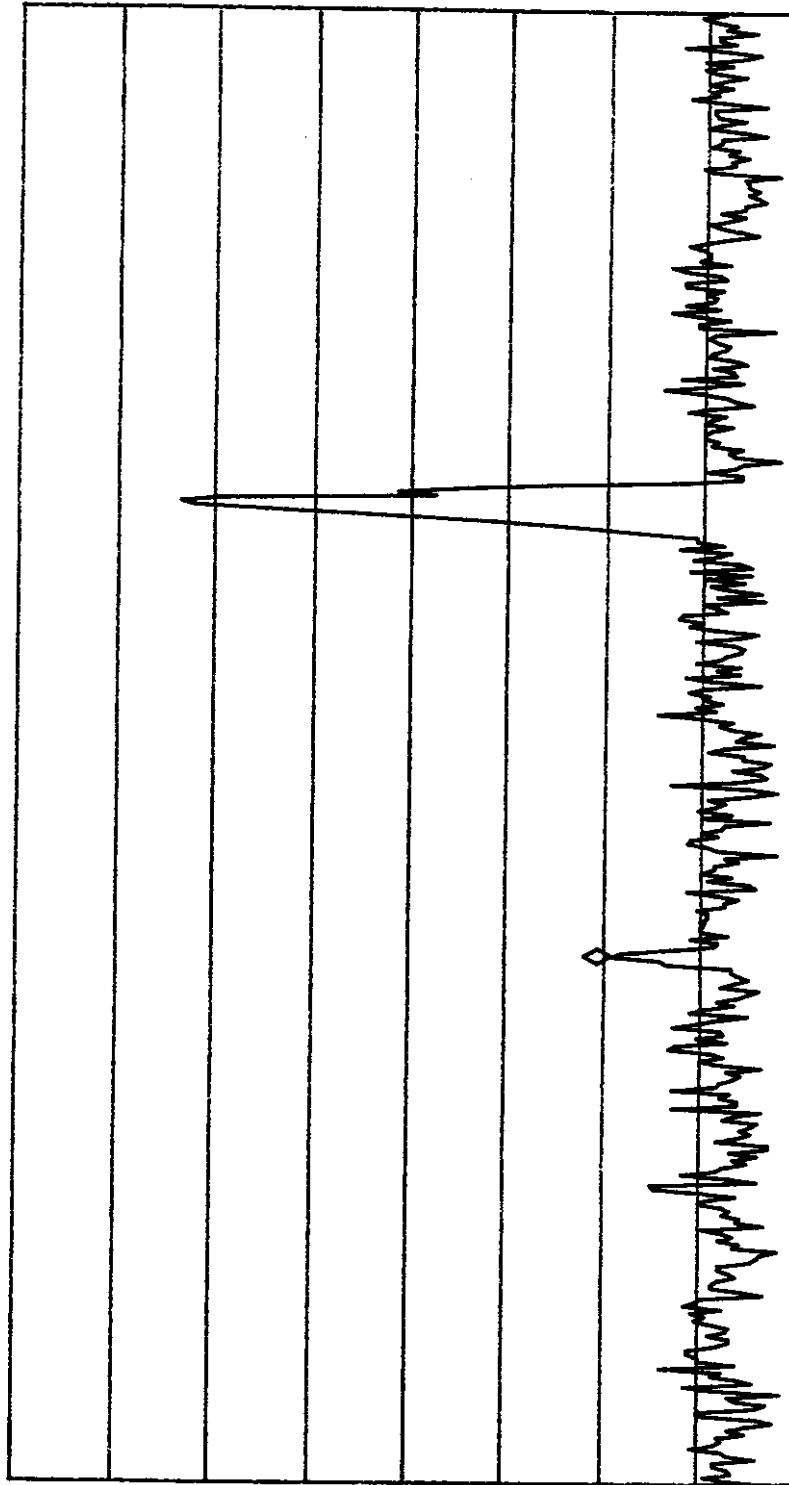
- ☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☐ OATS
☒ Semi-Anechoic
☐ Shielded Room
☐ Other



TUV Rheinland of North America, Inc.

North American Headquarters

Web: <http://www.tuv.com> E-mail: info-new@tuv.com



10:34:26 18 NOV 1998

MFR: LEGO

MODEL CYBERMASTER

PRELIM/FINAL

NOTES: MAX HOLD TRACE

ANT H = 1.80M

MARKER

26.9950 MHz

79.41 dBμV/m

FREQ 26.99 MHz

PEAK 79.6 dBμV/m

QP 79.1 dBμV/m

AVG 71.2 dBμV/m

LOG REF 90.0 dBμV/m

10

dB/

#ATN

20 dB

DL

80.0

dBμV/m

VA SB

SC FC

ACORR

CENTER 27.0000 MHz

#IF BW 120 kHz

—TUV Rheinland of North America, Inc. North American Headquarters

AVG BW 300 kHz

12 Commerce Road Newtown, CT 06470 Telephone 203-426-0888 Fax 203-270-8883

SPAN 500.0 kHz

#SWP 200 msec

MEAS TYPE:

- ☐ Radiated Prescan
- ☒ Radiated Final
- ☐ Conducted
- ☐ Disturbance Power
- ☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon
- ☐ 3146 Log Per
- ☐ 3106 Horn
- ☐ 3109 Bicon
- ☐ 3115 Horn
- ☐ CBL6140 X-Wing
- ☐ MDS-21 Clamp
- ☐ NSLK 8126 LISN
- ☐ NNB-4/63TL LISN

POLARIZATION:

- ☐ Horizontal
- ☒ Vertical
- ☐ NA

DISTANCE:

- ☒ 3 Meter
- ☐ 10 Meter
- ☐ Meter
- ☐ NA

LOCATION:

- ☒ OATS
- ☐ Semi-Anechoic
- ☐ Shielded Room
- ☐ Other



Poller

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10:31:55 18 NOV 1998

MFR: LEGO

MODEL CYBERMASTER

PRELIM/FINAL

NOTES: PEAK TRACE

ANT H = 1.80 m

MEAS TYPE:

- ☐ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☐ Horizontal
☒ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☒ OATS
☐ Semi-Anechoic
☐ Shielded Room
☐ Other



LOG REF 90.0 dB μ V/m

10

dB/

#ATN

20 dB

DL

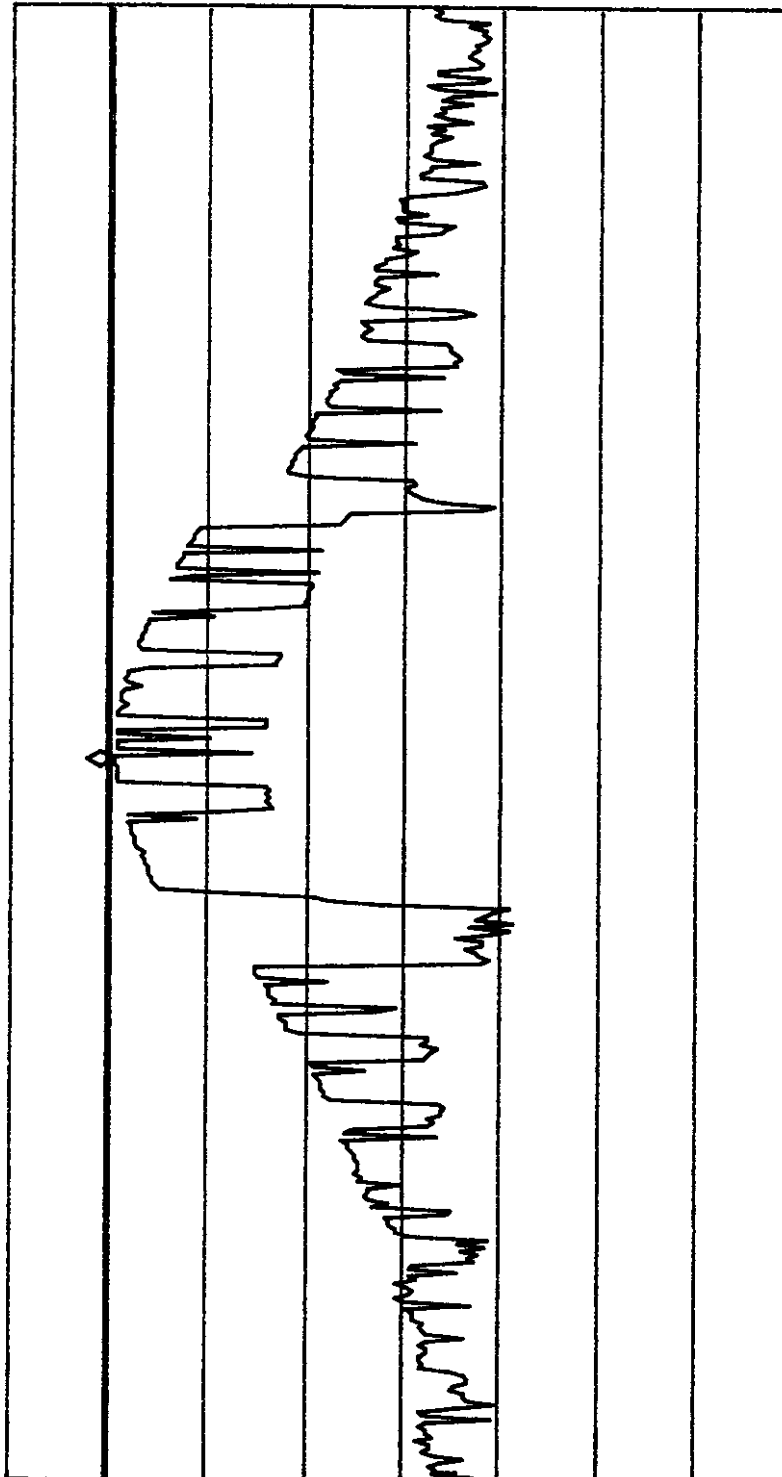
80.0

dB μ V/

WA SB

SC FS

ACORR



CENTER 27.0000 MHz

#IF BW 120 kHz

AVG BW 300 kHz

SPAN 500.0 kHz

#SWP 200 msec

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10:41:30 18 NOV 1998

MFR: LEO

MODEL CY88000000

PRELIM/FINAL

NOTES: ANT H = 2.14 m
PEAK TRACE

MEAS TYPE:

- ☐ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

- ☒ 3 Meter
☐ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☒ OATS
☐ Semi-Anechoic
☐ Shielded Room
☐ Other



LOG REF 90.0 dBμV/m

10

dB/

#ATN

20 dB

DL

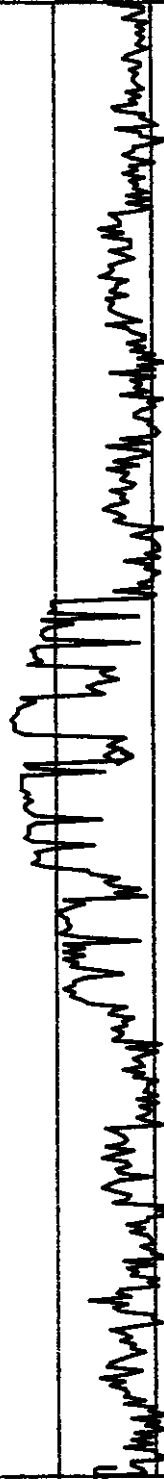
80.0

dBμV/m

WA SB

SC FS

ACORR



FREQ 26.99 MHz

PEAK 55.5 dBμV/m

QP 53.5 dBμV/m

AVG 45.5 dBμV/m

CENTER 27.0000 MHz

#IF BW 120 kHz

AVG BW 300 kHz

SPAN 500.0 kHz

#SWP 200 msec

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13:06:21 20 NOV 1998

MFR: LECO

MODEL CYBERMASTER

PRELIM/FINAL

NOTES:

MEAS TYPE:

- ☐ Radiated Prescan
☒ Radiated Final
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon H=1.5 M
☐ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☐ Horizontal
☒ Vertical
☐ NA

DISTANCE:

- ☐ 3 Meter
☒ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☒ OATS
☐ Semi-Anechoic
☐ Shielded Room
☐ Other



Poster

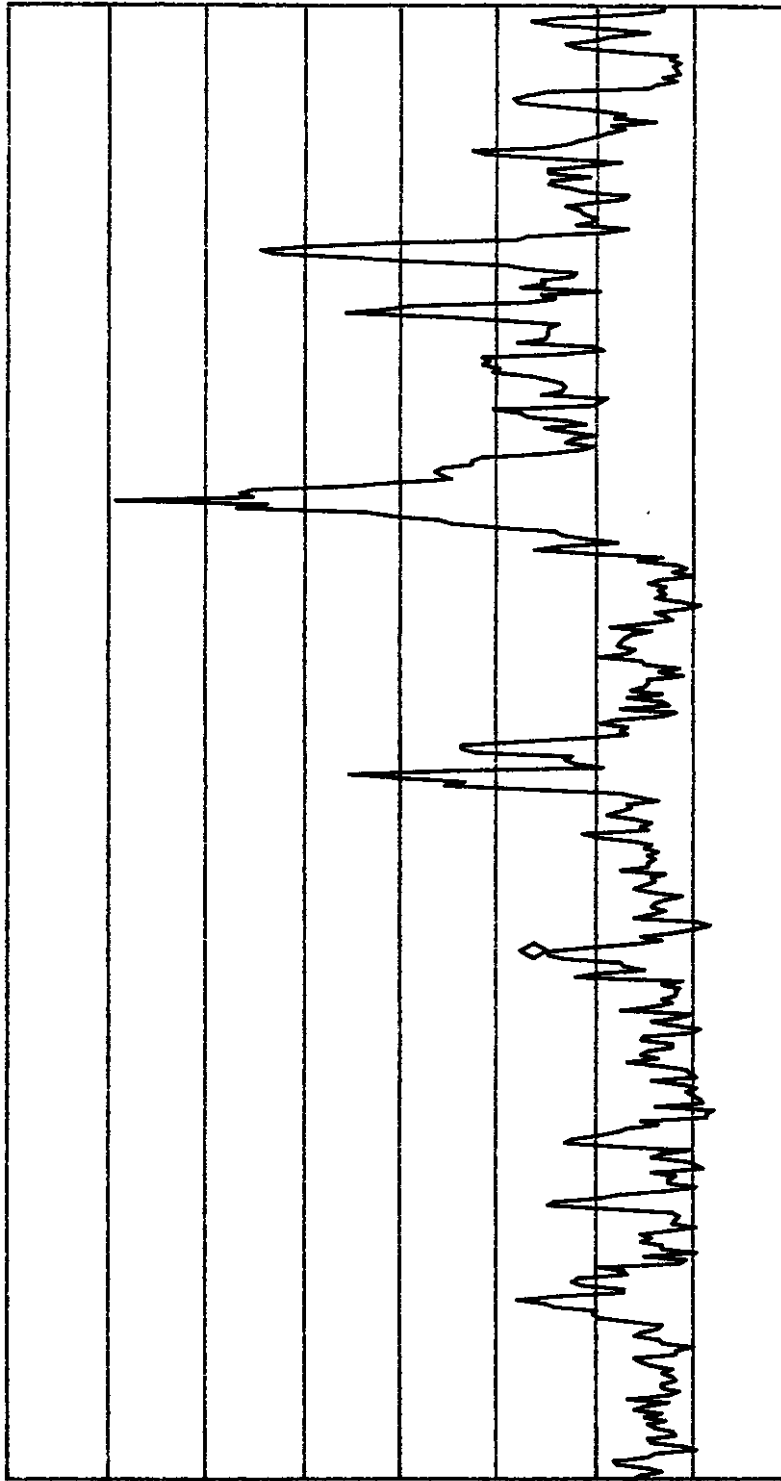
PREAMP ON

REF 70.0 dBμV/m

LOG 10 dB/ #ATN 0 dB

REN TRUE

FREQ 26.54 MHz
PEAK 16.2 dBμV/m
QP 13.0 dBμV/m
AVG 10.0 dBμV/m



WA SB
SC FS
ACORR

START 26.000 MHz

STOP 27.500 MHz

#IF BW 9.0 kHz

AVG BW 30 kHz

#SWP 300 msec

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13:13:00 20 NOV 1998

MFR: LEGO

MODEL CYBERTEST

PRELIM/FINAL

NOTES:

MEAS TYPE:

- ☐ Radiated Prescan
☒ Radiated Final $H=3.5$
☐ Conducted
☐ Disturbance Power
☐ Other

ANTENNA/COUPLER:

- ☒ 9124 Bicon
☐ 3146 Log Per
☐ 3106 Horn
☐ 3109 Bicon
☐ 3115 Horn
☐ CBL6140 X-Wing
☐ MDS-21 Clamp
☐ NSLK 8126 LISN
☐ NNB-4/63TL LISN

POLARIZATION:

- ☒ Horizontal
☐ Vertical
☐ NA

DISTANCE:

- ☐ 3 Meter
☒ 10 Meter
☐ Meter
☐ NA

LOCATION:

- ☒ OATS
☐ Semi-Anechoic
☐ Shielded Room
☐ Other



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FCCID: NPI71797

FREQ 26.54 MHz
PEAK 14.1 dB μ V/m
QP 4.2 dB μ V/m
AVG -5.7 dB μ V/m

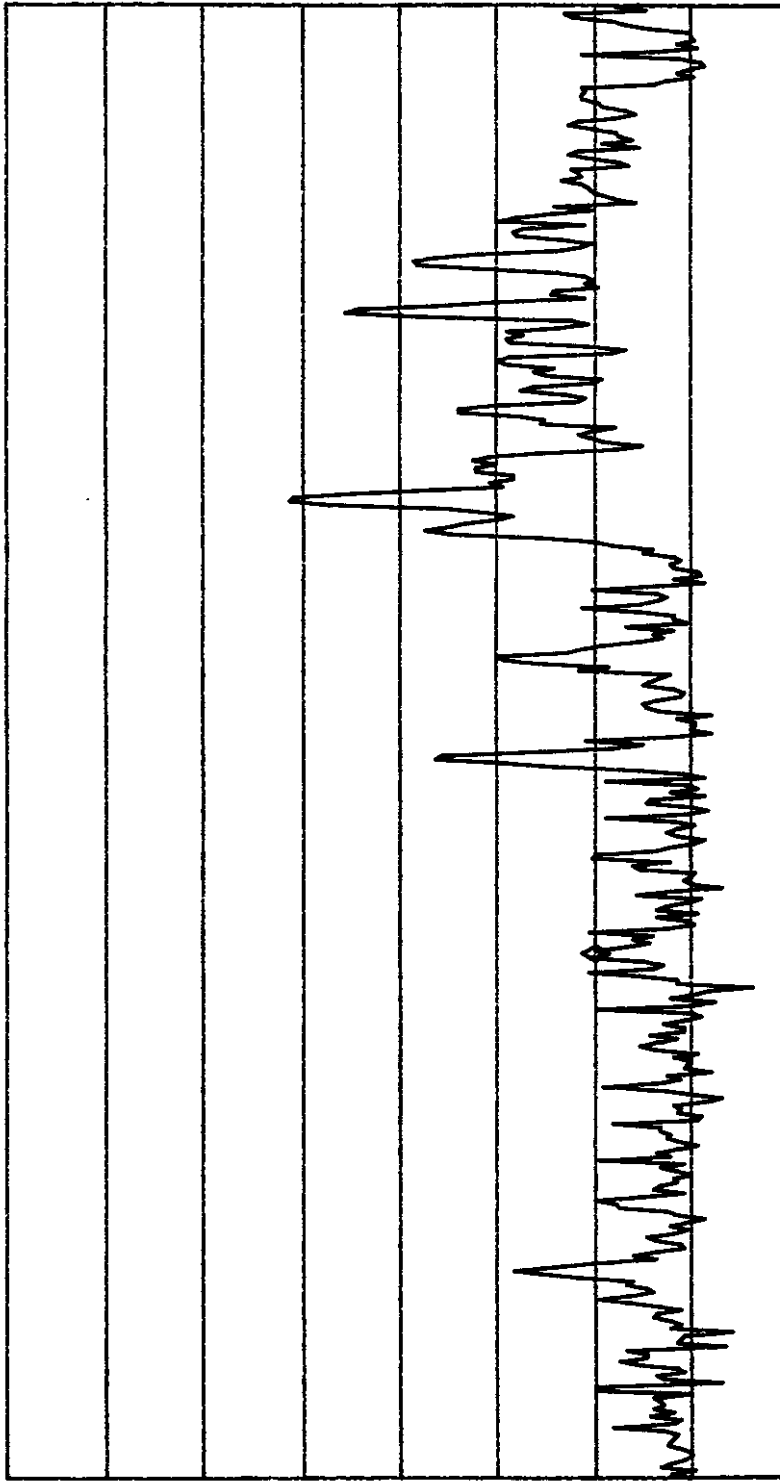
REN TRUE

PREAMP ON

LOG REF 70.0 dB μ V/m

10
dB/
#ATN
0 dB

WA SB
SC FS
ACORR



START 26.000 MHz
#IF BW 9.0 kHz
STOP 27.500 MHz
#SWP 300 msec
AVG BW 30 kHz