

TEST REPORT FROM RADIO FREQUENCY INVESTIGATION LTD.

Test Of: Basys 418MHz Receiver

To: FCC Part 15: 1996 Class B

Test Report Serial No:
RFI/EMCA1/RP37143A

This Test Report Is Issued Under The Authority Of Brian Watson, Technical Director:	
Tested By:	Checked By:
Report Copy No:	
Issue Date: 10 August 1998	Test Date: 12 June 1998

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The results in this report apply only to the sample(s) tested.

RADIO FREQUENCY INVESTIGATION LTD.

EMC Department

Test Of: Basys 418MHz Receiver
To: F.C.C. Part 15: 1996 Class B

TEST REPORT

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1. Client Information

Company Name:	Basys Technology Ltd
Address:	Mumby Road Gosport Hampshire PO12 1AF
Contact Name:	Mr S Grant

2. Equipment Under Test (EUT)

The client has supplied the following information (with the exception of the Date of Receipt):

2.1. Identification Of Equipment Under Test (EUT)

Brand Name:	Basys Technology Ltd
Model Name or Number:	418MHz Receiver
Unique Type Identification:	Not stated
Serial Number:	Not stated
Country of Manufacture:	UK
FCC ID Number:	Not applicable
Date of Receipt:	12 June 1998

2.2. Description Of EUT

The equipment under test was a 418MHz receiver.

2.3. Modifications Incorporated In EUT

None stated by client.

2.4. Additional Information Related To Testing

Power Supply Requirement:	DC power supply of 12V
Intended Operating Environment:	Residential
Weight:	Approx. 1.2Kg
Dimensions:	Approx. 0.2m x 0.2m x 0.2m
Interface Ports:	2 serial & 1 power

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2.5. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Keyboard
Brand Name:	Compaq
Model Name or Number:	KPQ-E99 AC-10
Serial Number:	CTIGE62CVPQ2C
FCC ID Number:	EW4KPQ4813
Cable Length And Type:	2.0m shielded
Connected to Port:	Keyboard

Description:	Mouse
Brand Name:	Compaq
Model Name or Number:	M-S34
Serial Number:	B04ABOH5BEC4JZH
FCC ID Number:	DZL211029
Cable Length And Type:	1.85m shielded
Connected to Port:	Mouse

Description:	PC
Brand Name:	Compaq
Model Name or Number:	Prolinea 5133
Serial Number:	8610HXM20867
FCC ID Number:	CNT75MDAC5
Cable Length And Type:	2.2m unshielded
Connected to Port:	Mains

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Support Equipment continued

Description:	Monitor
Brand Name:	Compaq
Model Name or Number:	445
Serial Number:	520BC05 CB
FCC ID Number:	A3KM050
Cable Length And Type:	1.4m shielded
Connected to Port:	Monitor

Description:	Printer
Brand Name:	Hewlett Packard
Model Name or Number:	C2168A
Serial Number:	SG415161R5
FCC ID Number:	B94C2121X
Cable Length And Type:	1.85m shielded
Connected to Port:	Parallel

Description:	Dummy Load
Brand Name:	Not stated
Model Name or Number:	Note stated
Serial Number:	Not stated
FCC ID Number:	Not applicable
Cable Length And Type:	3.3m shielded
Connected to Port:	EUT

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Support Equipment continued

Description:	PSU (to HP Printer)
Brand Name:	Hewlett Packard
Model Name or Number:	17122B
Serial Number:	Data code 93K249L2
FCC ID Number:	Not applicable
Cable Length And Type:	2 x 2.0m
Connected to Port:	HP Printer power in

Description:	Battery (2 off)
Brand Name:	Yvasa
Model Name or Number:	NP7-6 (6V 7.0ah)
Serial Number:	Not stated
FCC ID Number:	Not applicable
Cable Length And Type:	Not applicable
Connected to Port:	DC power in

Description:	SAT Tag
Brand Name:	Basys
Model Name or Number:	SAT 1
Serial Number:	63-2015
FCC ID Number:	Not applicable
Cable Length And Type:	Not applicable
Connected to Port:	Not applicable

3. Test Specification, Methods And Procedures

3.1. Test Specification

Reference:	FCC Part 15: 1996 Class B
Title:	Code of Federal Regulations, Part 15 (47CFR15) Radio Frequency Devices: Digital Devices.
Comments:	A description of the test facility used for this test is on file with, and has been accepted by, the Federal Communications Commission as required by Section 2.948 of Federal Rules.
Purpose of Test:	To determine whether the equipment complied with the requirements of the specification for the purposes of certification.

3.2. Methods And Procedures

The methods and procedures used were as detailed in:

ANSI C63.2 (1987)

Title: American National Standard for Instrumentation - Electromagnetic noise and field strength.

ANSI C63.4 (1992)

Title: American National Standard Methods of Measurement of Electromagnetic Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

ANSI C63.5 (1988)

Title: American National Standard for the Calibration of antennas used for Radiated Emission measurements in Electromagnetic Interference (EMI) control.

ANSI C63.7 (1988)

Title: American National Standard Guide for Construction of Open Area Test Sites for performing Radiated Emission Measurements.

CISPR 16 (1987)

Title: Specification for Radio Interference measuring apparatus and measurement methods.

3.3. Definition Of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the Methods & Procedures section above. Appendix 1 contains a list of the test equipment used.

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4. Deviations From The Test Specification

None.

5. Operation Of The EUT During Testing

5.1. Operating Conditions

The EUT was tested in a normal laboratory environment. During testing, the EUT was powered by a DC power supply of 12V.

5.2. Operating Modes

The EUT was tested in the following operating mode: "MONTAG" custom software was exercising the EUT in both idle and received mode. The idle mode is defined as the EUT awaiting the reception of a signal from a TAG transmitter. The receive mode is defined as a receiving a signal from a TAG transmitter. The reason for choosing this mode was that it was defined by the client as being likely to be the worst case with regards EMC.

5.3. Configuration And Peripherals

The EUT was tested in the following configuration: Tabletop with a PC, Monitor, Keyboard, Mouse, Printer and "Dummy" load as support. The reason for choosing this configuration was that it was defined by the client as being likely to be the worst case with regards EMC.

NB Section 2 of this report contains a full list of support equipment used and Appendix 3 contains a schematic diagram of the test configuration.

6. Summary Of Test Results

6.1. Radiated Emissions

Range Of Measurements	Specification Reference	Compliance Status
Electric Field Strength, 30 MHz to 1000 MHz	Section 15 of C.F.R. 47: 1996	Complied

6.2. Location Of Tests

All the measurements described in this report were performed at the premises of Radio Frequency Investigation Ltd, Dunlop House, Dunlop, Ayrshire, KA3 4BD, Scotland.

7. Measurements, Examinations And Derived Results

7.1. General Comments

7.1.1. This section contains test results only. Details of the test methods and procedures can be found in Appendix 2 of this report.

7.1.2. The measurement uncertainties stated were calculated in accordance with the requirements of NAMAS Document NIS 81 with a confidence level of 95%. Please refer to Section 8 for details of measurement uncertainties.

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7.2. Test Results For Radiated Emissions 30 MHz to 1 GHz: Idle Mode

7.2.1. Electric Field Strength Measurements

7.2.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943 MHz. Therefore tests were performed up to 2000 MHz.

7.2.1.2. Plots of the initial scans can be found in Appendix 4.

7.2.1.3. The following table lists frequencies at which emissions were measured using a Quasi-Peak detector (results incorporate antenna factors and cable losses):

Frequency (MHz)	Ant. Pol.	Q-P Level (dBmV/m)	Limit (dBmV/m)	Margin (dB)	Result
47.429	Vert.	28.6	40.0	11.4	Complied
55.476	Vert.	26.9	40.0	13.1	Complied
58.093	Vert.	25.9	40.0	14.1	Complied
62.306	Vert.	24.6	40.0	15.4	Complied
71.840	Horiz.	30.9	40.0	9.1	Complied
75.834	Vert.	33.3	40.0	6.7	Complied
91.801	Vert.	34.7	43.5	8.8	Complied (note 1)
100.180	Vert.	32.8	43.5	10.7	Complied
133.635	Horiz.	32.5	43.5	11.0	Complied
173.566	Horiz.	30.9	43.5	12.6	Complied
206.726	Vert.	29.8	43.5	13.7	Complied
231.429	Vert.	30.1	46.0	15.9	Complied
247.988	Horiz.	33.9	46.0	12.1	Complied
264.511	Horiz.	40.3	46.0	5.7	Complied
400.877	Vert.	34.8	46.0	11.2	Complied
601.349	Vert.	38.3	46.0	7.7	Complied
677.833	Horiz.	40.5	46.0	5.5	Complied
801.833	Vert.	34.0	46.0	12.0	Complied

Notes

1. This frequency was measured in the presence of an ambient, however, the combined amplitude was 8.8 dB below the limit.

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7.3. Test Results For Radiated Emissions 30 MHz to 1 GHz: Receive Mode

7.3.1. Electric Field Strength Measurements

7.3.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943 MHz. Therefore tests were performed up to 2000 MHz.

7.3.1.2. Plots of the initial scans can be found in Appendix 4.

7.3.1.3. The following table lists frequencies at which emissions were measured using a Quasi-Peak detector (results incorporate antenna factors and cable losses):

Frequency (MHz)	Ant. Pol.	Q-P Level (dBmV/m)	Limit (dBmV/m)	Margin (dB)	Result
47.904	Vert.	35.1	40.0	4.9	Complied
55.806	Vert.	27.2	40.0	12.8	Complied
58.093	Vert.	26.2	40.0	13.8	Complied
62.302	Vert.	23.2	40.0	16.8	Complied
71.786	Horiz.	32.3	40.0	7.7	Complied
75.800	Vert.	31.0	40.0	9.0	Complied
91.801	Vert.	35.2	43.5	8.3	Complied (note 1)
100.200	Vert.	34.1	43.5	9.4	Complied
133.626	Vert.	32.6	43.5	10.9	Complied
173.539	Horiz.	33.1	43.5	10.4	Complied
206.728	Vert.	29.3	43.5	14.2	Complied
231.431	Vert.	31.1	46.0	14.9	Complied
239.716	Vert.	37.6	46.0	8.4	Complied
264.533	Horiz.	37.8	46.0	8.2	Complied
281.050	Horiz.	30.0	46.0	16.0	Complied
300.661	Vert.	30.1	46.0	15.9	Complied
400.900	Vert.	38.3	46.0	7.7	Complied
601.338	Vert.	36.4	46.0	9.6	Complied
677.838	Vert.	42.5	46.0	3.5	Complied

Note

1. This frequency was measured in the presence of a high ambient however, the combined amplitude was 8.3 dB below the limit.

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7.4. Test Results For Radiated Emissions 1 GHz – 2 GHz: Idle Mode

7.4.1. Electric Field Strength Measurements: Peak Measurement

7.4.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943 MHz. Therefore tests were performed up to 2000 MHz.

7.4.1.2. Plots of the initial scans can be found in Appendix 4.

7.4.1.1. The following table lists frequencies at which emissions were measured using a Peak detector (results incorporate antenna factors and cable losses): Highest Peak Level:

Frequency (MHz)	Antenna Polarity (H/V)	Peak Level (dBµV)	Cable Loss (dB)	Antenna Factor (dB)	Actual Peak Level (dBµV/m)	Limit (dBµV/m)	Peak Margin (dB)	Result
1002.2	Vert	18.2	1.9	24.1	44.3	74.0	29.7	Complied
1016.7	Vert	15.9	1.9	24.1	41.9	74.0	32.1	Complied
1041.6	Horiz	13.7	1.9	24.2	39.8	74.0	34.2	Complied
1190.4	Vert	12.5	1.9	24.6	39.0	74.0	35.0	Complied
1336.3	Vert	17.4	1.9	25.0	44.3	74.0	29.7	Complied
1399.9	Vert	15.0	1.9	25.2	42.1	74.0	31.9	Complied

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7.5. Test Results For Radiated Emissions 1GHz – 2GHz: Idle Mode

7.5.1. Electric Field Strength Measurements: Average Measurement

7.5.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943 MHz. Therefore tests were performed up to 2000 MHz.

7.5.1.2. Plots of the initial scans can be found in Appendix 4.

7.5.1.3. The following table lists frequencies at which emissions were measured using an Average detector (results incorporate antenna factors and cable losses): Highest Average Level:

Frequency (MHz)	Antenna Polarity (H/V)	Av. Level (dBµV)	Cable Loss (dB)	Antenna Factor (dB/m)	Actual Average Level (dBµV/m)	Limit (dBµV/m)	Average Margin (dB)	Result
1002.2	Vert	7.1	1.9	24.1	33.1	54.0	20.9	Complied
1016.7	Vert	4.6	1.9	24.1	30.6	54.0	23.4	Complied
1041.6	Horiz	5.9	1.9	24.2	32.0	54.0	22.0	Complied
1190.4	Vert	2.1	1.9	24.6	28.6	54.0	25.4	Complied
1336.3	Vert	8.4	1.9	25.0	35.3	54.0	18.7	Complied
1399.9	Vert	2.6	1.9	25.2	29.7	54.0	24.3	Complied

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7.6. Test Results For Radiated Emissions 1GHz – 2GHz: Receive Mode

7.6.1. Electric Field Strength Measurements: Peak Measurement

7.6.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943MHz. Therefore tests were performed up to 2000 MHz.

7.6.1.2. Plots of the initial scans can be found in Appendix 4.

7.6.1.3. The following table lists frequencies at which emissions were measured using a Peak detector (results incorporate antenna factors and cable losses):

Highest Peak Level:

Frequency (MHz)	Antenna Polarity (H/V)	Peak Level (dBµV)	Cable Loss (dB)	Antenna Factor (dB)	Actual Peak Level (dBµV/m)	Limit (dBµV/m)	Peak Margin (dB)	Result
1000.2	Vert	17.8	1.9	24.1	43.8	74.0	30.2	Complied
1043.6	Vert	14.8	1.9	24.2	40.9	74.0	33.1	Complied
1066.3	Horiz	14.9	1.9	24.3	41.1	74.0	32.9	Complied
1074.6	Horiz	12.1	1.9	24.3	38.3	74.0	35.7	Complied
1197.4	Horiz	11.7	1.9	24.7	38.3	74.0	35.7	Complied
1336.3	Vert	15.7	1.9	25.0	42.6	74.0	31.4	Complied

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7.7. Test Results For Radiated Emissions 1GHz – 2GHz: Receive Mode

7.7.1. Electric Field Strength Measurements: Average Measurement

7.7.1.1. The client has stated that the highest clock frequency for the EUT was 4.1943 MHz. Therefore tests were performed up to 2000 MHz.

7.7.1.2. Plots of the initial scans can be found in Appendix 4.

7.7.1.3. The following table lists frequencies at which emissions were measured using a Average detector (results incorporate antenna factors and cable losses):

Highest Average Level:

Frequency (MHz)	Antenna Polarity (H/V)	Av. Level (dBµV)	Cable Loss (dB)	Antenna Factor (dB/m)	Actual Average Level (dBµV/m)	Limit (dBµV/m)	Av. Margin (dB)	Result
1000.2	Vert	6.5	1.9	24.1	32.5	54.0	21.5	Complied
1043.6	Vert	5.9	1.9	24.2	32.0	54.0	22.0	Complied
1066.3	Horiz	4.3	1.9	24.3	30.5	54.0	23.5	Complied
1074.6	Horiz	3.1	1.9	24.3	29.3	54.0	24.3	Complied
1197.4	Vert	1.5	1.9	24.7	28.1	54.0	25.9	Complied
1336.3	Vert	7.0	1.9	25.0	33.9	54.0	20.1	Complied

8. Measurement Uncertainty

8.1. Company Policy, as based on the NAMAS Accreditation Standard, M10, paragraph 12.11 (o), states that Test Reports shall include estimated uncertainty of the calibration or test result (this information need only appear in test reports and test certificates where it is relevant to the validity or application of the test result, where a client's instructions so require or where uncertainty affects compliance to a specification or limit).

8.2. The global uncertainties have been calculated in accordance with NAMAS NIS 81 (Edition 1, May 1994) as follows:

Measurement Type	Range	Confidence Level	Calculated Uncertainty
Radiated Emissions	30 MHz to 1000 MHz	95%	+/- 4.9 dB
Radiated Emissions	1 GHz to 2 GHz	95%	+/- 4.3 dB

8.3. Measurement uncertainties have been applied in accordance with NAMAS document NIS 81 (edition 1, May 1994), and in the absence of any specification criteria, guidance, or code of practice, compliance has been judged on the basis of shared risk.

8.4. In the case of emissions tests, the measured value of the disturbance from the product sample shall be compared directly with the limits. If the measured value is equal to or less than the limit the product is deemed to pass the test.

8.5. In the case of immunity tests, the equipment is deemed to pass the test if it fulfils the stated performance criteria at the required or a higher severity level. The measurement uncertainty has been taken into account in the calibration procedures stated in the relevant basic standard.

8.6. The methods used to calculate the above uncertainties are in line with those used for calibration laboratories contained in NAMAS document NIS 3003 Edition 8 "The Expression of Uncertainty and Confidence in Measurement" May 1995, which align with international recommendations "Guide to the Expression of Uncertainty in Measurement" ISO/IEC/OIML/BIPM (Prepared by ISO/TAG 4: January 1993).

Appendix 1. Test Equipment Used

Instrument	Manufacturer	Model	RFI No.
Radiated Electric Field, Initial Scans:			
Bi Conical Antenna	R & S	HK116	A507
Log Spiral	EMCO	3101	A514
Double Ridge Guide Antenna	EMCO	3115	A605
Display Unit	R & S	ESAI-D	M505
RF Unit	R & S	ESBI	M506
Radiated Electric Field (O.A.T.S.)			
Bi-Log Antenna	Chase	CBL6111A	A546
Double Ridge Guide Antenna	EMCO	3115	A605
Receiver	R & S	ESVP	M023
Receiver	R & S	ESCS 30	L515
3 dB Attenuator	Narda	757c-3	A610

NB In accordance with NAMAS requirements, all the measurement equipment is on a calibration schedule.

Appendix 2. Measurement Methods

A2.1. Radiated Emissions: FCC Part 15

A2.1.1. Radiated emissions measurements were performed in accordance with the standard, against appropriate limits for each detector function.

A2.1.2. Initial measurements covering the entire measurement band in the form of swept scans in a shielded enclosure were performed in order to identify frequencies on which the EUT was generating interference. This determined the frequencies on which the EUT should be re-measured in full on the open area test site. In order to minimise the time taken for the swept measurements, a Peak detector was used in conjunction with the appropriate detector IF measuring bandwidth (see table below). Repetitive scans were performed to allow for emissions with low repetition rates, and for the duty cycle of the EUT. The test configuration was the same for the initial scans as for the final measurements.

A2.1.3. The initial scans were performed using an antenna height of 1.5 m and a measurement distance of 3 m. Following the initial scans, graphs were produced giving an overview of the emissions from the EUT plotted against the appropriate specification limit. A tolerance line was set 6 dB below the specification limit and levels above the tolerance line were re-tested on the open area test site, at the appropriate distance, using a measuring receivers with a Quasi-Peak detector (below 1000 MHz), where applicable, for measurements above 1000 MHz average and peak detectors were used.

A2.1.4. For the main (final) measurements the EUT was arranged on a non-conducting table on an open area test site, as detailed in the specification.

A2.1.5. All measurements on the open area test site were performed using broadband antennas.

A2.1.6. On the open area test site, at each frequency where a signal was found, the levels were maximised by initially rotating the turntable through 360° and then varying the antenna height between 1 m and 4 m. At this point, any signals found to be between the limit and a level 6 dB below it were further maximised by changing the configuration of the EUT, e.g. re-routing cables to peripherals and moving peripherals with respect to the EUT.

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A2.1.7. The test equipment settings for radiated emissions measurements were as follows:

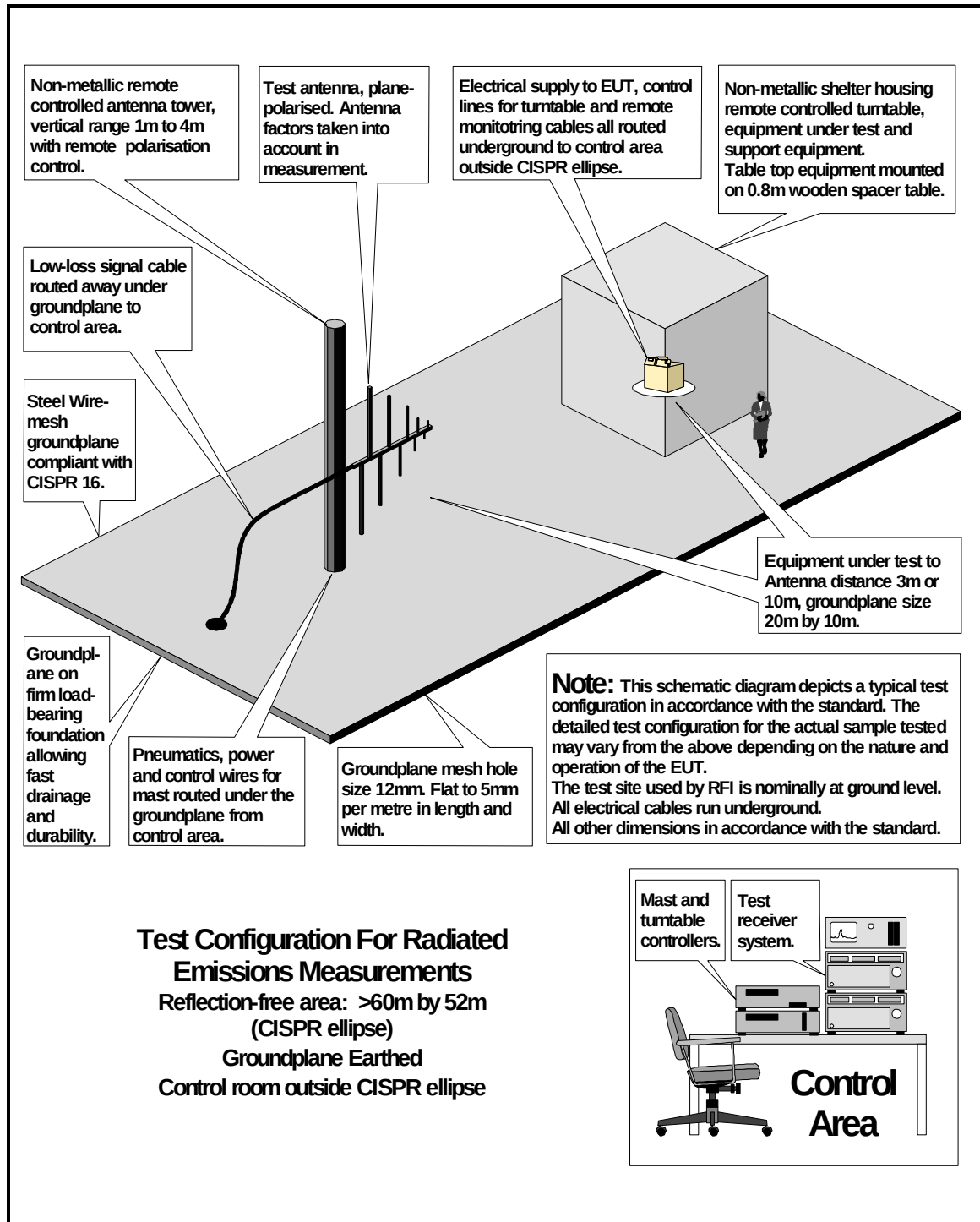
Receiver Function	Initial Scan	Final Measurements Below 1GHz	Final Measurements Above 1 GHz
Detector Type:	Peak	Quasi-Peak (CISPR)	Peak/Average
Mode:	Max Hold	Not applicable	Not applicable
Bandwidth:	100 kHz	120 kHz	1 MHz
Amplitude Range:	60 dB	20 dB	20 dB (typical)
Measurement Time:	Not applicable	> 1 s	> 1 s
Observation Time:	Not applicable	> 15 s	> 15 s
Step Size:	Continuous sweep	Not applicable	Not applicable
Sweep Time:	Coupled	Not applicable	Not applicable

Appendix 3. Test Configuration Drawings

This appendix contains the following drawings:

Drawing Reference Number	Title
DRG\37143JD01/ETF03\EMIRAD	Test configuration for measurement of radiated emissions
DRG\37143JD01/ETF03\001	Schematic diagram of the EUT, support equipment and interconnecting cables used for the test

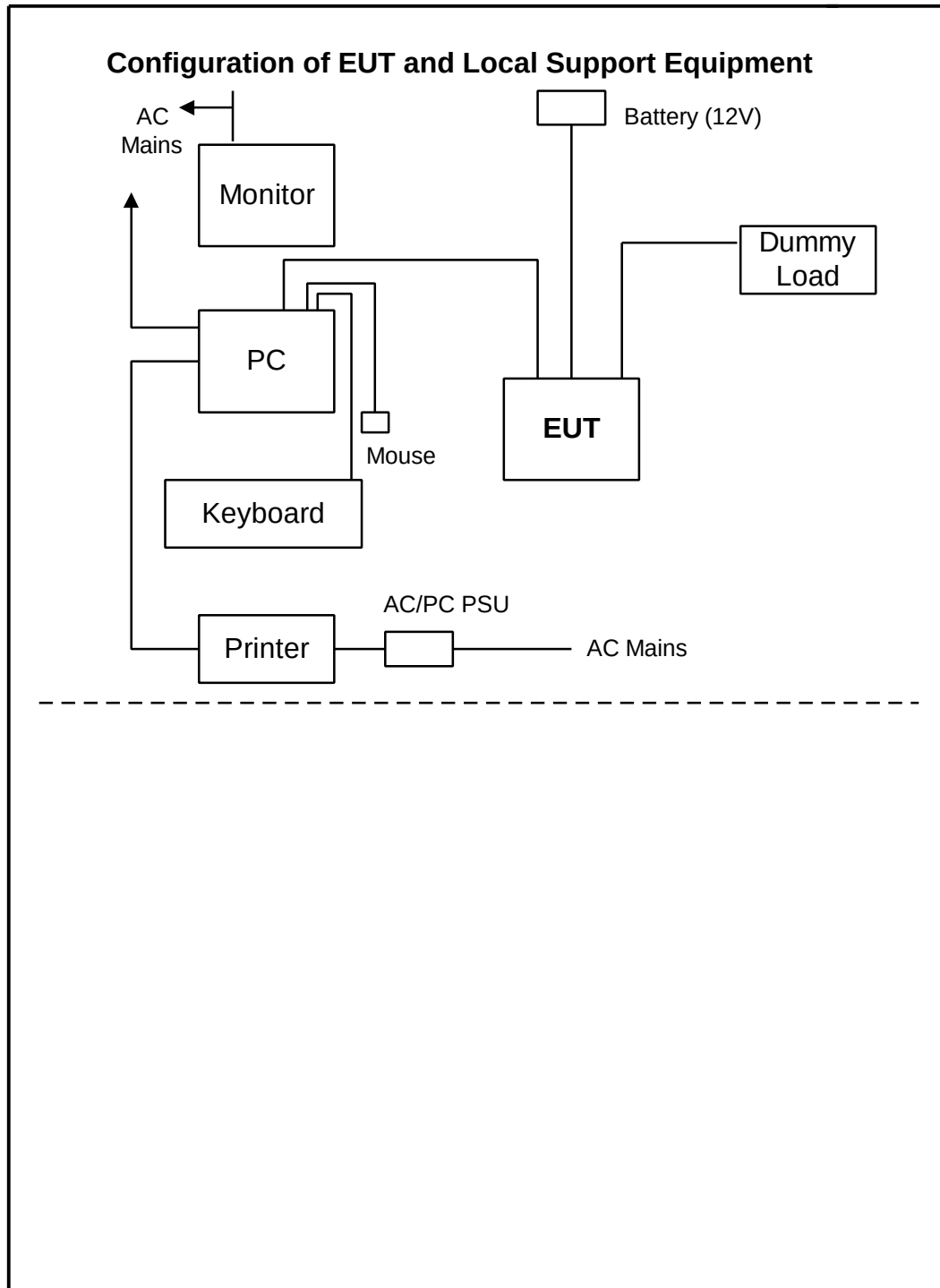
DRG\37143JD01/ETF03\EMIRAD



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DRG\37143JD01/ETF03\001



Appendix 4. Graphical Test Results

This appendix contains the following graphs:

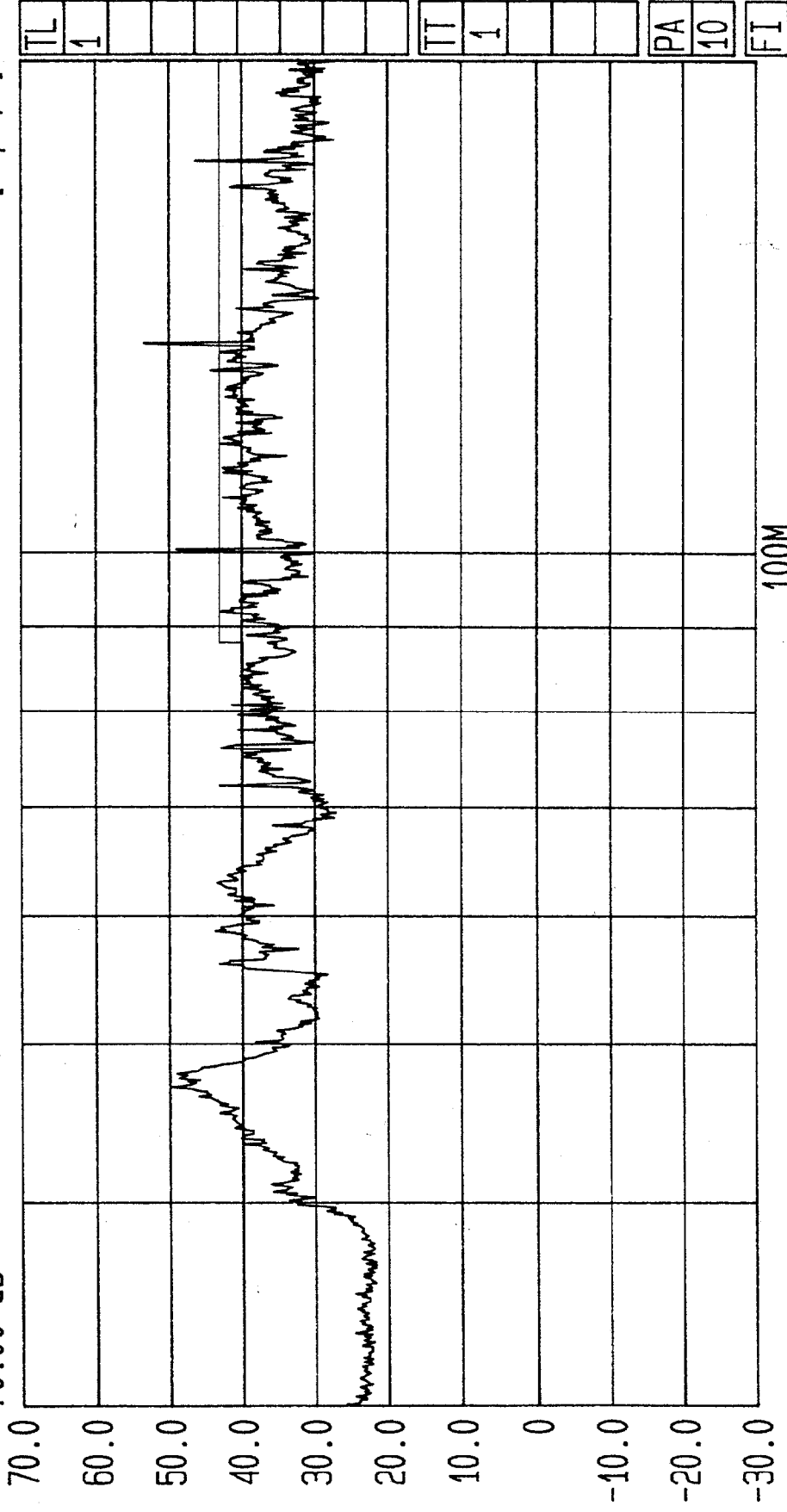
Graph Reference Number	Title
GPH\37143JD01/ETF03\001	Scan of radiated electric field: both polarisations (30 to 200 MHz) Idle mode
GPH\37143JD01/ETF03\002	Scan of radiated electric field: non-polarised (200 to 1000 MHz) Idle mode
GPH\37143JD01/ETF03\003	Scan of radiated electric field: both polarisations (30 to 200 MHz) Receive mode
GPH\37143JD01/ETF03\004	Scan of radiated electric field: non-polarised (200 to 1000 MHz) Receive mode
GPH\37143JD01/ETF03\008	Scan of radiated electric field: (1GHz to 2GHz) Receive mode
GPH\37143JD01/ETF03\009	Scan of radiated electric field: (1GHz to 2GHz) Idle mode

These pages are not included in the total number of pages for this report.



Date 13.Jun.'98 Time 16:35:54
Ref.Lvl 70.00 dB*

Res.Bw 120 kHz [imp] Vid.Bw 3 MHz
TG.Lvl Off
CF.Stp 17.000 MHz RF.Att 0 dB
Unit [dBμV/m]



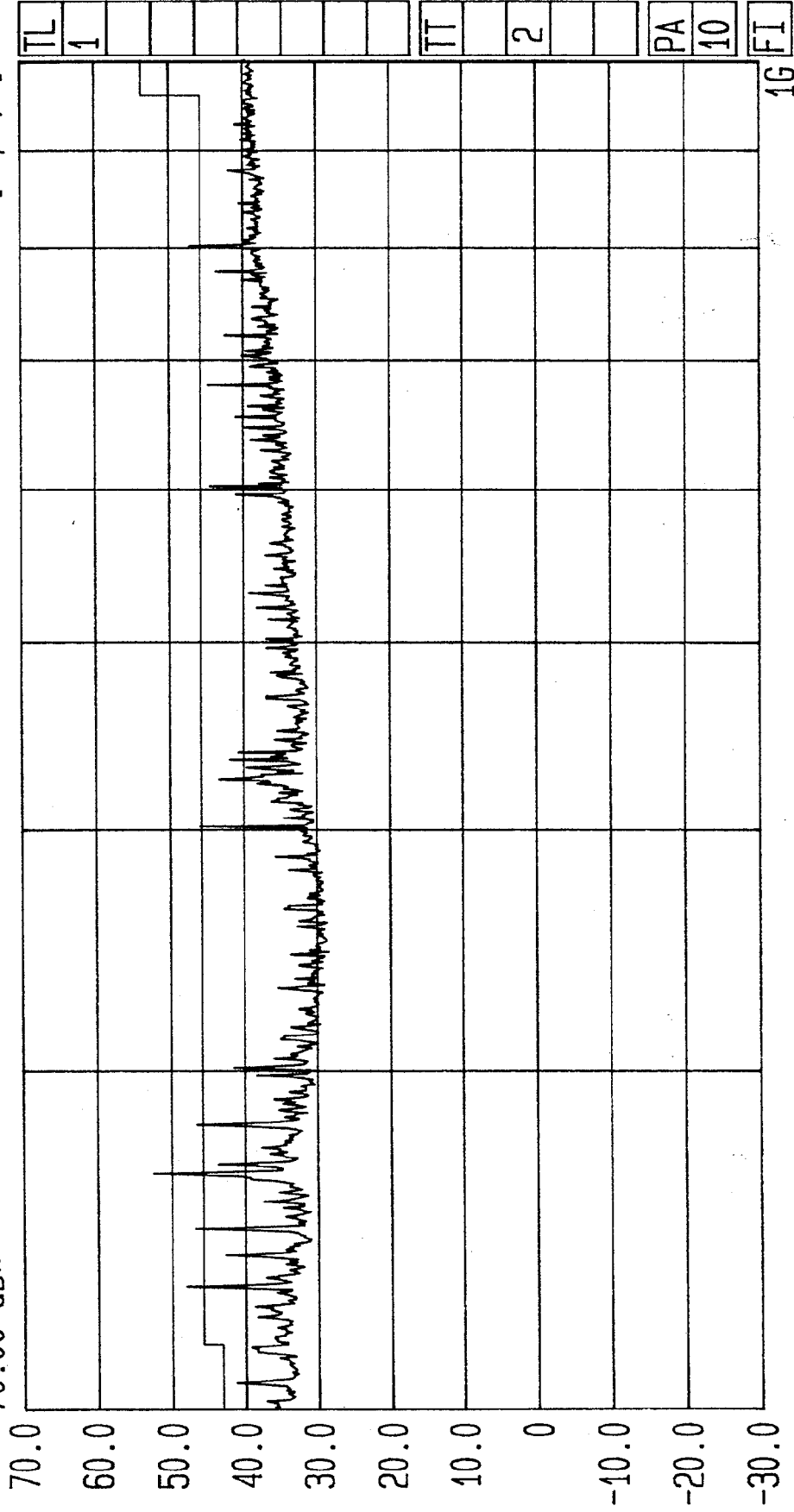
Start 30 MHz Span 170.0 MHz Center 77.45 MHz Sweep 80 ms Stop 200.0 MHz

Radio Frequency Investigation Ltd. RADIATED PRESCANS @ 3M GPH/37143E03/01
EUT: 418 MHz Rx \Cust: BASYS \Opcond: IDLE MODE /Eng: JL /Spec: FCC 47 pt15 B



Date 13.Jun.'98 Time 17:15:21
Ref.Lvl 70.00 dB*

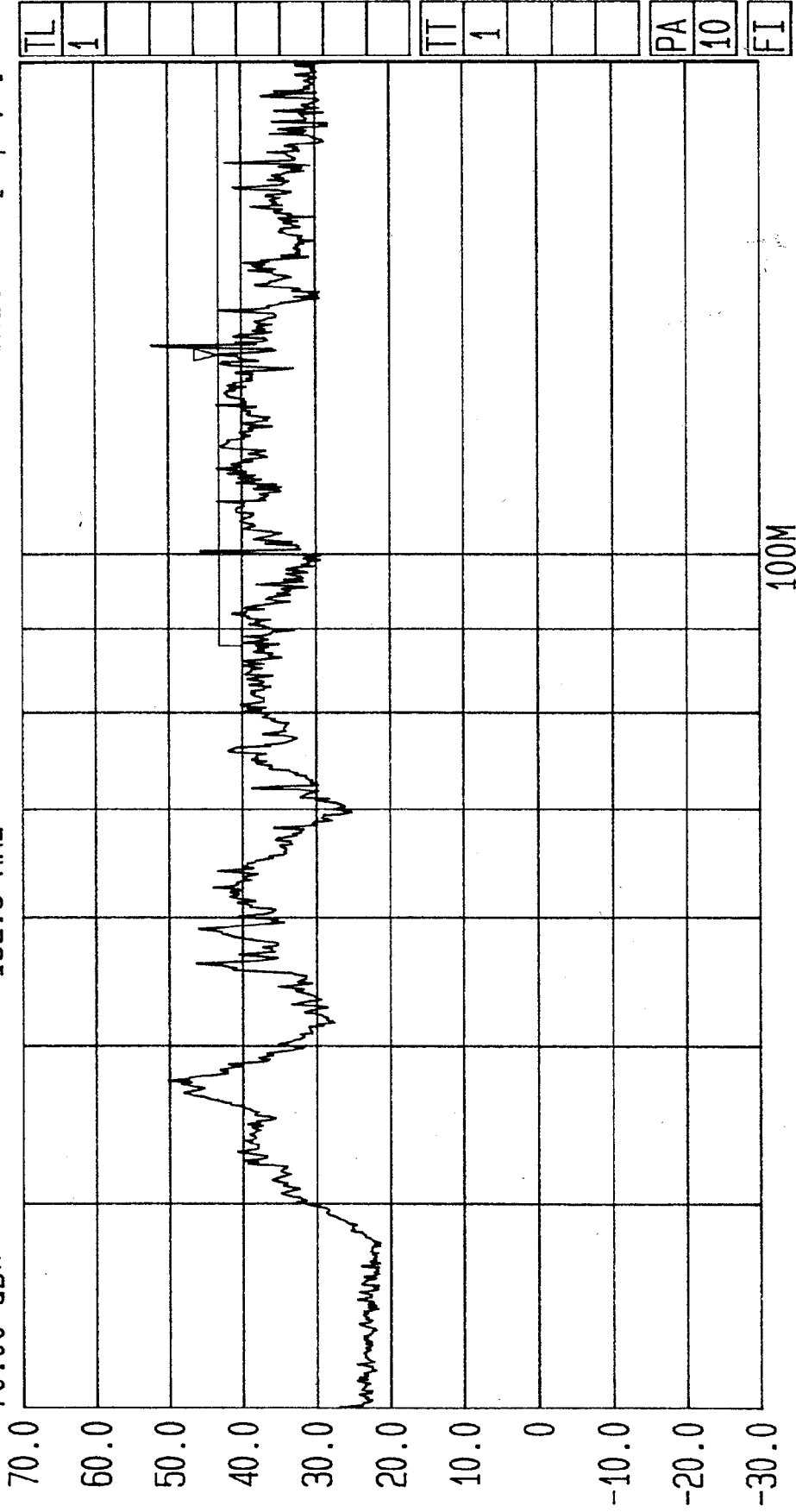
Res.Bw 120 kHz [imp] 3 MHz
TG.Lvl off
CF.Stp 80.000 MHz
RF.Att 0 dB
Unit [dBμV/m]





Date 13.Jun.'98 Time 16:55:18
Ref.Lvl 70.00 dB*
Marker 43.39 dB*
132.3 MHz

Res.Bw 120 kHz [imp]
TG.Lvl off
CF.Stp 17.000 MHz
Vid.Bw 3 MHz
RF.Att 0 dB
Unit [dBμV/m]



Start 30 MHz
Span 170.0 MHz
Center 77.45 MHz
Sweep 80 ms
Stop 200.0 MHz
Radio Frequency Investigation Ltd. RADIATED PRESCANS @ 3M GPH/37143E03/03
EUT: 418 MHz Rx \Cust: BASYS \Opcond: RX MODE /Eng: JL /Spec: FCC 47 pt15 B



Date 13. Jun. '98 Time 17:06:50

Ref. Lvl] Marker

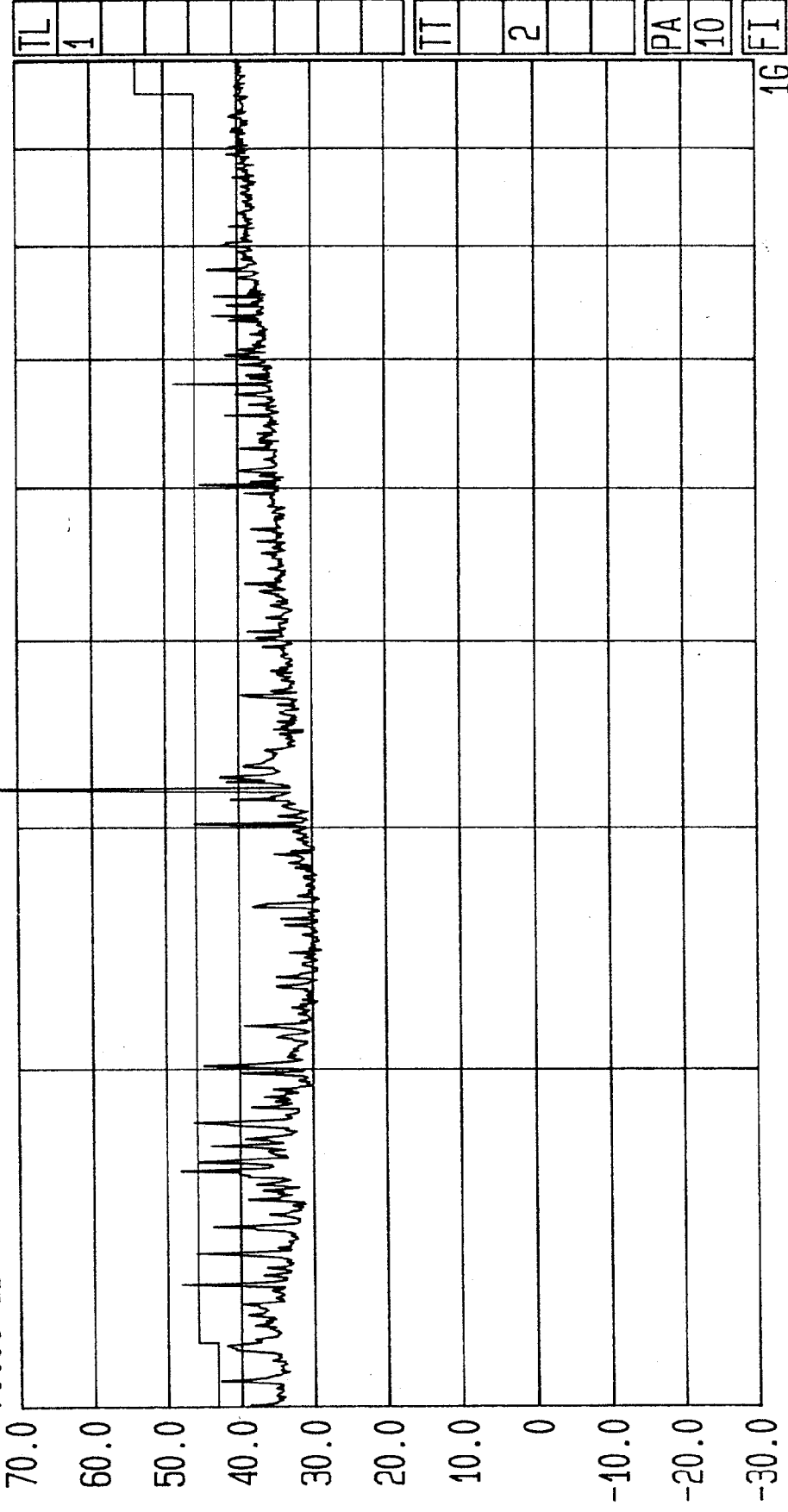
Ref.Lvl	Marker
70.00 dB*	73.98 dB*
	418.5 MHz

Res. Bw
TG.Lvl
CF.Stp

120 kHz [imp]
off
80.000 MHz

Vid.Bw
RF.Att
Unit

3 MHz
0 dB
 $\mu\text{V/m}$



Start
200 MHz

Span
800 MHz

Center
447.2 MHz

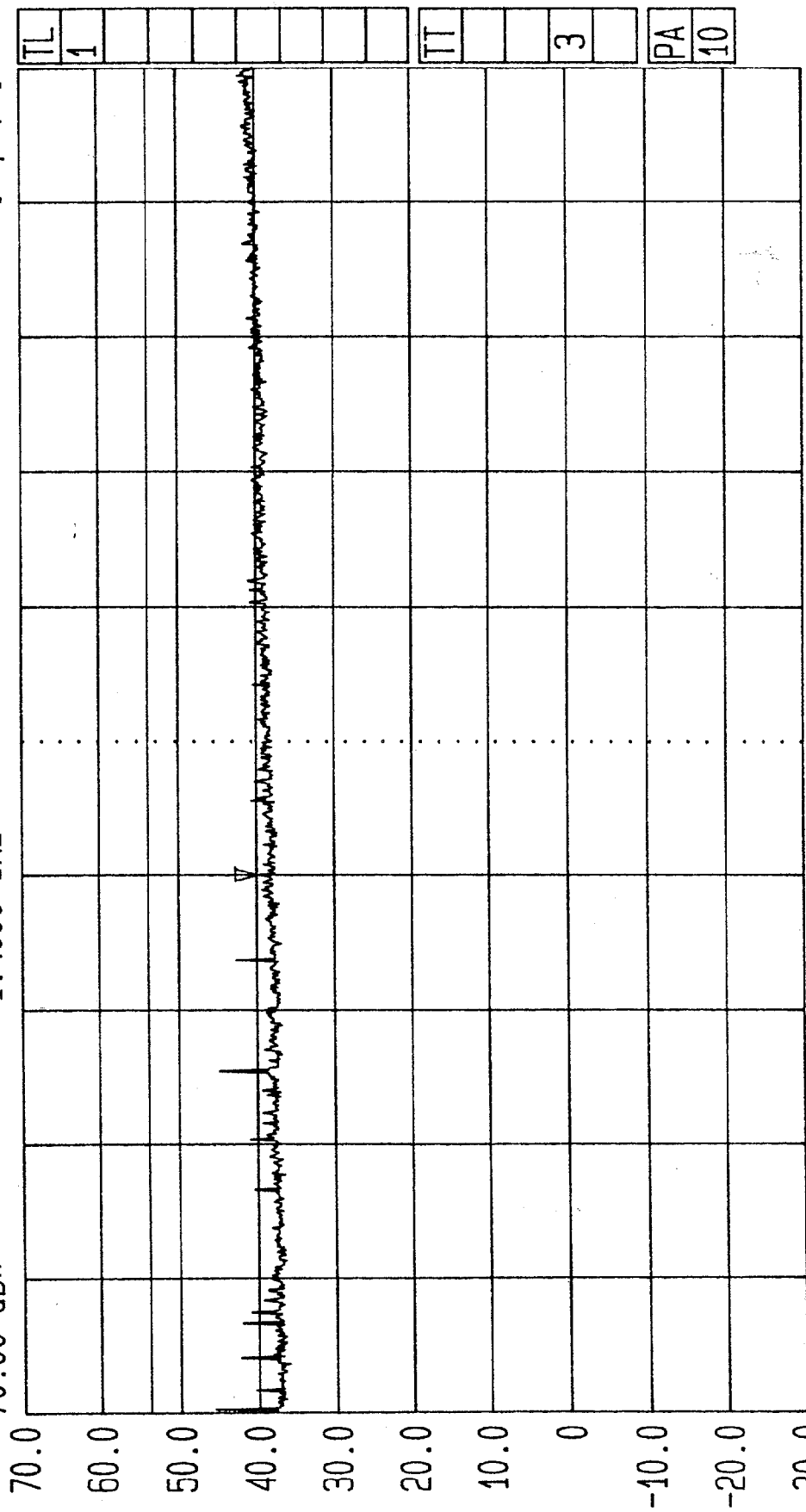
Sweep
360 ms

Stop
1 GHz

Radio Frequency Investigation Ltd. RADIATED PRESCANS @ 3M
EUT: 418 MHz RX \Cust: BASYS \Opcond: RX MODE /Eng: JL
GPH/37143E03/04 /Spec: FCC 47 pt15



Res.Bw	120 kHz [imp]	Vid.Bw	3 MHz
TG.Lvl	off	RF.Att	0 dB
CF.Stp	100.000 MHz	Unit	[dBμV/m]



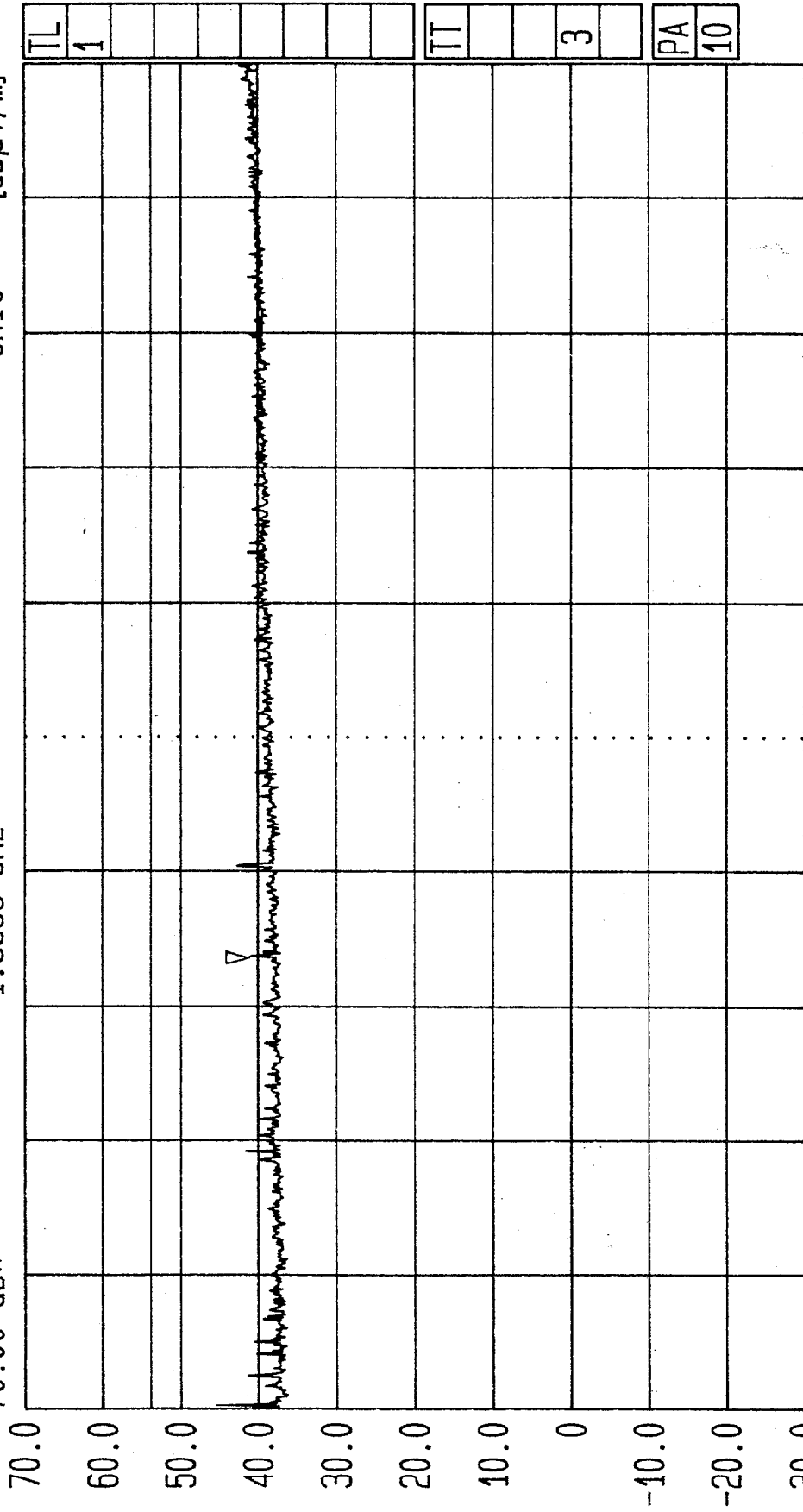
Start	Span	Center	Sweep	Stop
1 GHz	1 GHz	1.5 GHz	600 ms	2 GHz

Radio Frequency Investigation Ltd. RADIATED PRESCANS @ 3M GPH/37143E03/08
EUT: 418 MHz Rx \Cust: BASYS \Opcond: RX MODE /Eng: JL/Spec: FCC 47 pt15 B



Date 13.Jun.'98 Time 18:33:57
Ref.Lvl 70.00 dB* Marker 41.23 dB*
1.3366 GHz

Res.Bw 120 kHz [imp] Vid.Bw 3 MHz
TG.Lvl Off
CF.Stp 100.000 MHz RF.Att 0 dB
Unit [dBμV/m]



Start 1 GHz Center 1.5 GHz Sweep 600 ms Stop 2 GHz
Radio Frequency Investigation Ltd. RADIATED PRESCANS @ 3M GPH/37143E03/0X1
EUT: 418 MHz Rx \Cust: BASYS \Opcond: IDLE MODE /Eng: JL/Spec: FCC 47 pt15 B

Appendix 5. Photographs of the equipment under test.

This appendix contains the following photographs, which have been included in this report at the request of the client.

Photograph Reference Number	Title
PHT\37143JD01/ETF03\001	Front view of radiated emissions.
PHT\37143JD01/ETF03\002	Front right hand side of radiated emissions.
PHT\37143JD01/ETF03\003	Side view of radiated emissions
PHT\37143JD01/ETF03\004	Rear view of radiated emissions

PHT\37143JD01\ETF03\001: Front view of radiated emissions.



PHT\37143JD01\ETF03\002: Front right hand side view of radiated emissions.



PHT\37143JD01\ETF03\003: Side view of radiated emissions.



PHT\37143JD01\ETF03\004: Rear view of radiated emissions.

