FCC ID: XXX-EYE01USMRW

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Deutscher Akkreditierungs Rat
DAR
DAP-P-01.212-01-90-01
DAT-P-011 / 91-01
TTI - P-G 089 / 94-20

EMISSION -- TESTREPORT

Testreport file no. : **E 14723-1-00 MG** Date of issue : April 6, 1998

Model : EYEUSA

Type : EYEUSA-2

Applicant : Eyecon Ltd

Manufacturer : TBD

Licence holder : Eyecon Ltd

Address : Portside House, Ellesmere Port,
South Wirral L65 2AL

Test result accrdg. to the regulation(s) at page 3 : ● **Positive** O **Negative**

This testreport with appendix consists of **40** pages.
The testresult only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the testlaboratory.

MIKES PRODUCT SERVICE GmbH Ohmstrasse 2-4 94342 Strasskirchen Tel:+9424-9407-0 Fax:+9424-9407-60 Rev.No. 7.2

DIRECTORY

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TESTREGULATIONS

The tests were performed according to following regulations :

o - EN 50081-1 / 2.1991
o - EN 50081-2 / 7.1993

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o - EN 55011	/ 3.1991	o - Group 1 o - class A	o - Group 2 o - class B
o - EN 55014	/ 4.1993	o - Household appliances and similar o - tools o - Semiconductor devices	
o - EN 55014 o - EN 55104	/ A2:1990 / 5.1995	Category:	
o - EN 55015 o - EN 55015	/ A1:1990 / 12.1993		
o - EN 55022	/ 5.1995	o - class A	o - class B
o - prEN 55103-1/ 3.1995 o - prEN 50121-3-2 / 3.1995 o - EN 60601-1-2 / 4.1994			
o - VCCI		o - class 1	o - class 2
● - 47 CFR Part 15 Subpart B (FCC) -Paragraphs: 15.107(a) 109(a) 15.115(b)2(ii), (c)1(ii)		o - class A	● - class B

2.4, 94342 Strasskirchen Tel.:+9424-9407-0 Fax:+9424-9407-60 Rev.No. 7.2

ENVIRONMENTAL CONDITIONS

Temperature:	15-35 ° C
Humidity	45-60 %
Atmospheric pressure	860-1060 hPa

POWER SUPPLY SYSTEM UTILIZED

Power supply system : 110V/60 Hz / 1φ

STATEMENT OF MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error of ±4dB. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

SHORT DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT)

CCTV system for use in the home and light commercial.

Number of received/tested samples: 1/1

DEFINITIONS FOR SYMBOLS USED IN THIS TEST REPORT

- ● - Black box indicates that the listed condition, standard or equipment is applicable for this Report.
- o - Blank box indicates that the listed condition, standard or equipment was not applicable for this Report.

TESTCONDITIONS

The **measurement of the conducted emissions (interference voltage) (Part 15, Paragraph 15.107(a))** were performed in a shielded room.

o - **Test not applicable**

Testlocation :

o - Shielded room no. 1
● - Shielded room no. 2
o - Shielded room no. 3
o - Shielded room no. 4
o - Shielded room no. 5
o - Shielded room no. 6
o - Shielded room no. 7
o - Anechoic chamber
o - Full compact chamber

Used testinstruments :

o - ESH 3	Rohde & Schwarz	O.-No.: 04-7/63-89-009
o - ESHS 20	Rohde & Schwarz	O.-No.: 04-7/63-94-001
● - ESHS 30	Rohde & Schwarz	O.-No.: 04-7/63-92-045
o - SMV - 11	RFT	O.-No.: 04-7/63-86-007
o - FMLK 1518	Schwarzbeck	O.-No.: 04-7/63-90-017

Test - accessories :

o - ESH 2-Z5	Rohde & Schwarz	O.-No.: 04-7/60-87-032
● - ESH 2-Z5	Rohde & Schwarz	O.-No.: 04-7/60-90-033
o - NNB 111	RFT	O.-No.: 04-7/60-92-225
o - NSLK 8127	Schwarzbeck	O.-No.: 04-7/60-90-036
o - NNLK 8121	Schwarzbeck	O.-No.: 04-7/60-89-037
o - NTFM 8132	Schwarzbeck	O.-No.: 04-7/60-87-058
o - NNLA 8120	Schwarzbeck	O.-No.: 04-7/60-93-250
o - NNBM 8114	Schwarzbeck	O.-No.: 04-7/60-95-341
o - NNBM 8116	Schwarzbeck	O.-No.: 04-7/60-95-342
o - NNLK 8129	Schwarzbeck	O.-No.: 04-7/60-96-349
o - T1 - NNB	BOSSE	O.-No.: 04-7/60-87-059
o - T2 - NNB	BOSSE	O.-No.: 04-7/60-87-060
o - TK11	RFT	O.-No.: 04-7/60-83-062
o - TK12	RFT	O.-No.: 04-7/60-83-063
o - ESH 3-Z6	Rohde & Schwarz	O.-No.: 04-7/60-94-263
o - EZ - 10	Rohde & Schwarz	O.-No.: 04-7/60-92-209
o - Lampshade	MIKES	O.-No.: 04-7/60-91-143
o - ESH 2-Z5	Rohde & Schwarz	O.-No.: 04-7/60-94-002
o - ESH 3-Z5	Rohde & Schwarz	O.-No.: 04-7/60-94-003
o - Vehicle - LISN	MIKES	O.-No.: 04-7/60-89-004
o - ESH 2-Z3	Rohde & Schwarz	O.-No.: 04-7/60-94-005
o - Vehicle - LISN	MIKES	O.-No.: 04-7/60-89-038

All used test-instruments as well as the Test-accessories are calibrated regularly.

The **measurement of the levels at the RF ports (Part 15, Paragraph15.115(b)1(ii); (b)2(ii) and (c)1(ii)** were performed in a shielded room.

o - **Test not applicable**

Testlocation :

o - Shielded room no. 1
o - Shielded room no. 2
o - Shielded room no. 3
o - Shielded room no. 4
● - Shielded room no. 5
o - Shielded room no. 6
o - Shielded room no. 7
o - Anechoic chamber
o - Full compact chamber

Used testinstruments :

o - ESVP	Rohde & Schwarz	O.-No.: 04-7/63-89-008
● - ESVS 30	Rohde & Schwarz	O.-No.: 04-7/63-95-056
o - ESU 2	Rohde & Schwarz	O.-No.: 04-7/63-93-008
o - SMV 21	RFT	O.-No.: 04-7/63-90-007
● - FSEM	Rohde & Schwarz	O.-No.: 04-7/74-97-001

Test - accessories :

● - Matching pad 75/50 Ω	Rohde & Schwarz	O.-No.: 04-7/60-92-226
o - NNLK 8121	Schwarzbeck	O.-No.: 04-7/60-89-037
o - NTFM 8132	Schwarzbeck	O.-No.: 04-7/60-87-058
o - NNLA 8120	Schwarzbeck	O.-No.: 04-7/60-93-250
o - NNBM 8114	Schwarzbeck	O.-No.: 04-7/60-95-341
o - NNBM 8116	Schwarzbeck	O.-No.: 04-7/60-95-342
o - NNLK 8129	Schwarzbeck	O.-No.: 04-7/60-96-349
o - T1 - NNB	BOSSE	O.-No.: 04-7/60-87-059
o - T2 - NNB	BOSSE	O.-No.: 04-7/60-87-060
o - TK11	RFT	O.-No.: 04-7/60-83-062
o - TK12	RFT	O.-No.: 04-7/60-83-063
o - ESH 3-Z6	Rohde & Schwarz	O.-No.: 04-7/60-94-263
o - EZ - 10	Rohde & Schwarz	O.-No.: 04-7/60-92-209
o - Lampshade	MIKES	O.-No.: 04-7/60-91-143
o - ESH 2-Z5	Rohde & Schwarz	O.-No.: 04-7/60-94-002
o - ESH 3-Z5	Rohde & Schwarz	O.-No.: 04-7/60-94-003
o - Vehicle - LISN	MIKES	O.-No.: 04-7/60-89-004
o - ESH 2-Z3	Rohde & Schwarz	O.-No.: 04-7/60-94-005
o - Vehicle - LISN	MIKES	O.-No.: 04-7/60-89-038

All used test-instruments as well as the Test-accessories are calibrated regularly.

The **measurement of the radiated emissions (magnetic field)** were performed

● - Test not applicable

o - in a shielded room
o - at a non - reflecting open-site
and
o - in a testdistance of 3 meters.
o - in a testdistance of 30 meters.

Used testinstruments :

o - ESH 3	Rohde & Schwarz	O.-No.: 04-7/63-89-009
o - ESHS 20	Rohde & Schwarz	O.-No.: 04-7/63-94-001
o - ESHS 30	Rohde & Schwarz	O.-No.: 04-7/63-92-045
o - SMV - 11	RFT	O.-No.: 04-7/63-86-007
o - FMLK 1518	Schwarzbeck	O.-No.: 04-7/63-90-017

Test - accessories :

o - HFH 2 Z 2	Rohde & Schwarz	O.-No.: 04-7/62-87-016
o - FMA 11	RFT	O.-No.: 04-7/62-86-006
o - FMZB 1516	Schwarzbeck	O.-No.: 04-7/62-90-018
o - Loop Antenna 2m	MIKES	O.-No.: 04-7/62-96-328

The measurement of the radiated emissions (electric field) in the frequency range of 30 MHz-1000 MHz were performed in horizontal and vertical antenna polarisation at a non-reflecting open-site and a testdistance of:

o - Test not applicable

● - Open-site 1
o - Open-site 2
● - 3 meters
o - 10 meters
o - 30 meters

Used testinstruments :

● - ESVP	Rohde & Schwarz	O.-No.: 04-7/63-89-008
o - ESVS 30	Rohde & Schwarz	O.-No.: 04-7/63-95-056
o - ESU 2	Rohde & Schwarz	O.-No.: 04-7/63-93-008
o - SMV 21	RFT	O.-No.: 04-7/63-90-007

Test - accessories :

● - BBA 9106	Schwarzbeck	O.-No.: 04-7/62-86-072
o - BBA 9106	Schwarzbeck	O.-No.: 04-7/62-91-044
o - BBA 9106	Schwarzbeck	O.-No.: 04-7/62-92-048
o - UHALP 9107	Schwarzbeck	O.-No.: 04-7/62-83-010
o - UHALP 9107	Schwarzbeck	O.-No.: 04-7/62-91-071
● - UHALP 9107	Schwarzbeck	O.-No.: 04-7/62-92-047
o - UHALP 9107	Schwarzbeck	O.-No.: 04-7/62-94-002
o - UHA 9105	Schwarzbeck	O.-No.: 04-7/62-94-003
o - VHA 9103	Schwarzbeck	O.-No.: 04-7/62-94-004

All used test-instruments as well as the Test-accessories are calibrated regularly.

The measurement of the interference power were performed in a shielded room by using the absorbing clamp on the mains and interface cables in the frequency range 30 MHz - 300 MHz.

● - Test not applicable

Testlocation :
o - Anechoic chamber
o - Full compact chamber

Used testinstruments :

o - ESVP	Rohde & Schwarz	O.-No.: 04-7/63-89-008
o - ESVS 30	Rohde & Schwarz	O.-No.: 04-7/63-95-056
o - ESU 2	Rohde & Schwarz	O.-No.: 04-7/63-93-008
o - SMV 21	RFT	O.-No.: 04-7/63-90-007
o - VUME 1520A	Schwarzbeck	O.-No.: 04-7/63-95-057

Test - accessories :

o - MDS 21	Schwarzbeck	O.-No.: 04-7/60-95-291
o - MDS 21	Schwarzbeck	O.-No.: 04-7/60-96-455
o - MDS 21	Schwarzbeck	O.-No.: 04-7/60-88-016

All used test-instruments as well as the Test-accessories are calibrated regularly.

The measurement of the equivalent radiated emissions in the frequency range 1 GHz - 18 GHz were performed in horizontal and vertical antenna polarisation at a non-reflecting test-site and a testdistance of:

● - Test not applicable

Testlocation :

o - Open-site 1
o - Open-site 2
o - Anechoic chamber
o - Full compact chamber

o - 1 meters
o - 3 meters
o - 10 meters

Used testinstruments :

o - 492P	Tektronix	O.-No.: 04-7/74-87-001
o - R 4131 B	ADVANTEST	O.-Nr.: 04-7/74-96-074
o - R 4131 B	ADVANTEST	O.-Nr.: 04-7/74-96-011

Test - accessories :

o - BBHA 9120	Schwarzbeck	O.-No.: 04-7/62-88-212
o - Model 613A	NARDA	O.-No.: 04-7/62-88-213
o - Model 612	NARDA	O.-No.: 04-7/62-88-214
o - Model 640	NARDA	O.-No.: 04-7/62-88-215
o - Model 639	NARDA	O.-No.: 04-7/62-88-216
o - AWT 4534	AVANTEK	O.-No.: 04-7/66-89-217
o - AMT 8035	AVANTEK	O.-No.: 04-7/66-89-218
o - AMT 12435	AVANTEK	O.-No.: 04-7/66-89-219
o - AMF-5D-120180	AVANTEK	O.-No.: 04-7/66-94-270
o - Sucoflex 104	Suhner	O.-No.: 04-7/60-90-231

All used test-instruments as well as the Test-accessories are calibrated regularly.

EQUIPMENT UNDER TEST

Operation - mode of the EUT.:
The equipment under test was operated during the measurement under following conditions:

o - Standby

o - Testprogram (H - Pattern)

o - Testprogram (color bar)

o - Testprogram (customer specific)

● - Automatic switching mode

Configuration of the equipment under test: see appendix
Following periphery devices and interface cables were connected during the measurement:

● - TV	Type : CT 1850	
● - Antenna	Type : Vestel	
o -	Type :	
o -	Type :	
o -	Type :	
o -	Type :	

o - unshielded power cable

● - unshielded cables: Plug-in power supply to main unit: 2m

● - shielded cables: Antenna lines from E.U.T. to Antenna and TV, Audio, Video; every line 1.5m
4 Camera lines: every line appr. 18m

o -

o -

TESTRESULT

Conducted emissions 450 kHz - 30 MHz

o - Test not applicable

The requirements are ● - MET O - NOT MET

Min. limit margin 9.1 dB at 5.71 MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: There is no difference regarding the conducted emissions of the device if it is operated with cannel 3 or cannel 4.

Conducted levels on RF Port: 1 MHz - 1000 MHz

o - Test not applicable

The requirements are ● - MET O - NOT MET

Min. limit margin 0.38 dB at 61.27 MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: Level of the video carrier of cannel 3.

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TESTRESULT

Radiated emissions (magnetic field) 10 kHz - 30 MHz

● - Test not applicable

The requirements are O - MET O - NOT MET

Min. limit margin _____ dB at _____ MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: _____

Radiated emissions (electric field) 30 MHz - 1000 MHz

○ - Test not applicable

The requirements are ● - MET O - NOT MET

Min. limit margin 220.22 dB at 3.6 MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: There is no difference regarding the radiated emissions of the device if it is operated with cannel 3 or cannel 4.

TESTRESULT

Interference power at the mains and interface cables 30 MHz - 300 MHz

● - Test not applicable

The requirements are O - MET O - NOT MET

Min. limit margin _____ dB at _____ MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: _____

_____

_____

Equivalent radiated emissions 1 GHz - 18 GHz

● - Test not applicable

The requirements are O - MET O - NOT MET

Min. limit margin _____ dB at _____ GHz

Max. limit exceeding _____ dB at _____ GHz

Remarks: _____

_____

_____

MEASUREMENT PROTOCOL FOR FCC, VCCI AND AUSTEL

GENERAL INFORMATION

Test Methodology

Conducted and radiated emission testing is performed according to the procedures in International Special Committee on Radio Interference (CISPR) Publication 22 (1993), European Standard EN 55022 and Australian Standard AS 3548 (which are based on CISPR 22).

The Japanese standard, "Voluntary Control Council for Interference (VCCI) by Data Processing Equipment and Electronic Office Machines, Technical Requirements" is technically equivalent to CISPR 22 (1993). For official compliance, a conformance report must be sent to and accepted by the VCCI.

In compliance with FCC Docket 92-152, "Harmonization of Rules for Digital Devices Incorporate International Standards", testing for FCC compliance may be done following the ANSI C63.4-1992 procedures and using the CISPR 22 Limits.

Measurement Error

The test system for conducted emissions is defined as the LISN, tuned receive and coaxial cable. The test system for radiated emissions is defined as the antenna, the pre-amplifier, the tuned receiver and the coaxial cable. These test systems have an expected error of ±3 dB. The equipment comprising the test systems are calibrated on an annual basis.

Justification

The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral into it's characteristic impedance or left unterminated. When appropriate, the cables are manually manipulated with respect to each other to obtain maximum emissions from the unit.

CONDUCTED EMISSIONS

The final level, expressed in dBµV, is arrived at by taking the reading directly from the EMI receiver. This level is compared directly to the CISPR limit, which is equivalent to the Australian AS 3548 limit.

To convert between dBµV and µV, the following conversions apply:

dBµV = 20(log µV)

µV = Inverse log(dBµV/20)

RADIATED EMISSIONS

The final level, expressed in dBµV/m, is arrived at by taking the reading from the EMI receiver (Level dBµV/m) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This is done automatically in the EMI receiver, where the correction factor are stored. This result then has the CISPR limit subtracted from it to provide the Delta which gives the tabular data as shown in the data sheets at page 24 - 25. The CISPR 22 limit is equivalent to the Australian AS 3548 limit.

Example:

Frequency (MHz)	Level (dBµV/m)	+	Factor (dB)	=	Final (dBµV/m)	-	CISPR B Limit (dBµV/m)	=	Delta CISPR B (dB)
37.19	10.2	+	12.0	=	22.2	-	30	=	-7.8

DETAILS OF TEST PROCEDURES

General Standard Information

The test methods used comply with CISPR Publication 22 (1993), EN 55022 (1987) and AS 3548 (1992) - "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment" and with ANSI C63.4-1992 - "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz."

Conducted Emissions

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasipeak detection, and a Line Impedance Stabilization Network (LISN), with 50Ω /50 µH (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. If the minimum passing margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasipeak and average detection and recorded on the data sheets.

RF Output Level

The limit levels specified correspond to a nominal impendance of 75 Ω.

The correction factor for receivers with a nominal impendance of 50 Ω and connected without a 50/ 70 Ω matching pad is calculated according the following formula:

$$A = \log(75\Omega/50\Omega) = 1.76 \text{ dB}$$

Radiated Emissions

Radiated emissions from the EUT are measured in the frequency range of 30 to 1000MHz using a tuned receiver and appropriate broadband linearly polarized antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasipeak detection and measurements above 1000 MHz are made with a 1 MHz/6 dB bandwidth and peak detection. Table top equipment is placed on a 1.0 X 1.5 meter non-conducting table 80 centimeters above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna was positioned 3, 10 or 30 meters horizontally from the EUT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT are rotated 360 degrees.

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SUMMARY

GENERAL REMARKS:

All tests were performed with the RF channel switched on 3 and then on 4.

FINAL JUDGEMENT:

The requirements according to the technical regulations and tested operation modes are

● - met.

o - **not** met.

The equipment under test

● - **Fulfills** the general approval requirements cited on page 3.

o - **Does not** fulfill the general approval requirements cited on page 3.

Date of receipt of test sample : accdg. to storage record

Testing Start Date : March 27, 1998

Testing End Date : March 30, 1998

- MIKES PRODUCT SERVICE GmbH -

Günter Mikes
Dipl.Ing.(FH)

Test-engineer

Martin Gnadl
Dipl.Ing.(FH)

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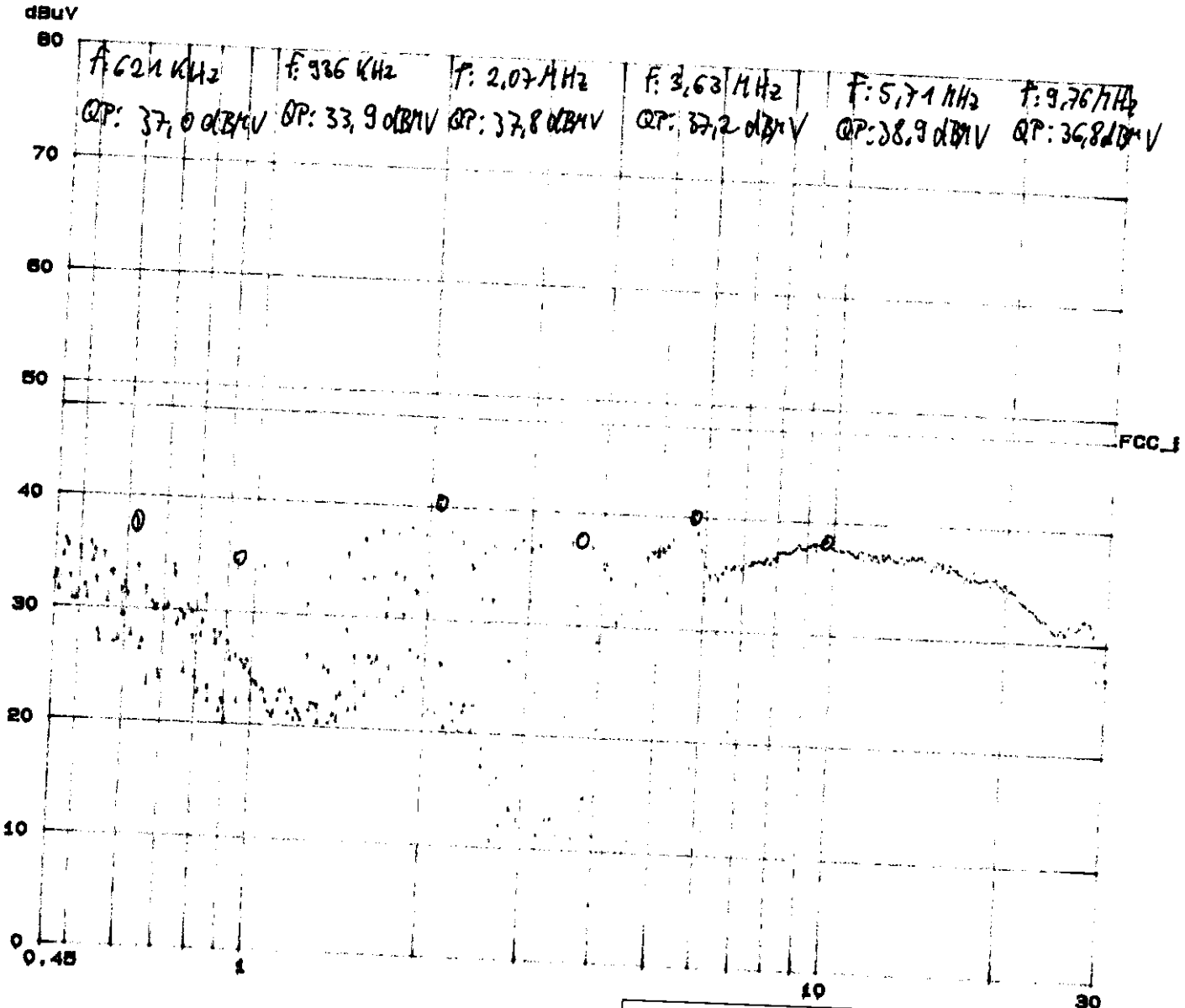
Interference Voltage-Test

450 kHz - 30 MHz

File-number:	E 14723-1-00
Model:	EYEUSA
Client:	Eyecon Ltd
Serial-number:	EYEUSA-S2
Mode:	Automatic switching mode, Cannel 4
Test spec.:	FCC Cl. B
Test point:	Power line/L1, 110V/60 Hz
Remarks:	

Detection Mode ● P
O QP
O AV

Test result: ● ok
O n.ok



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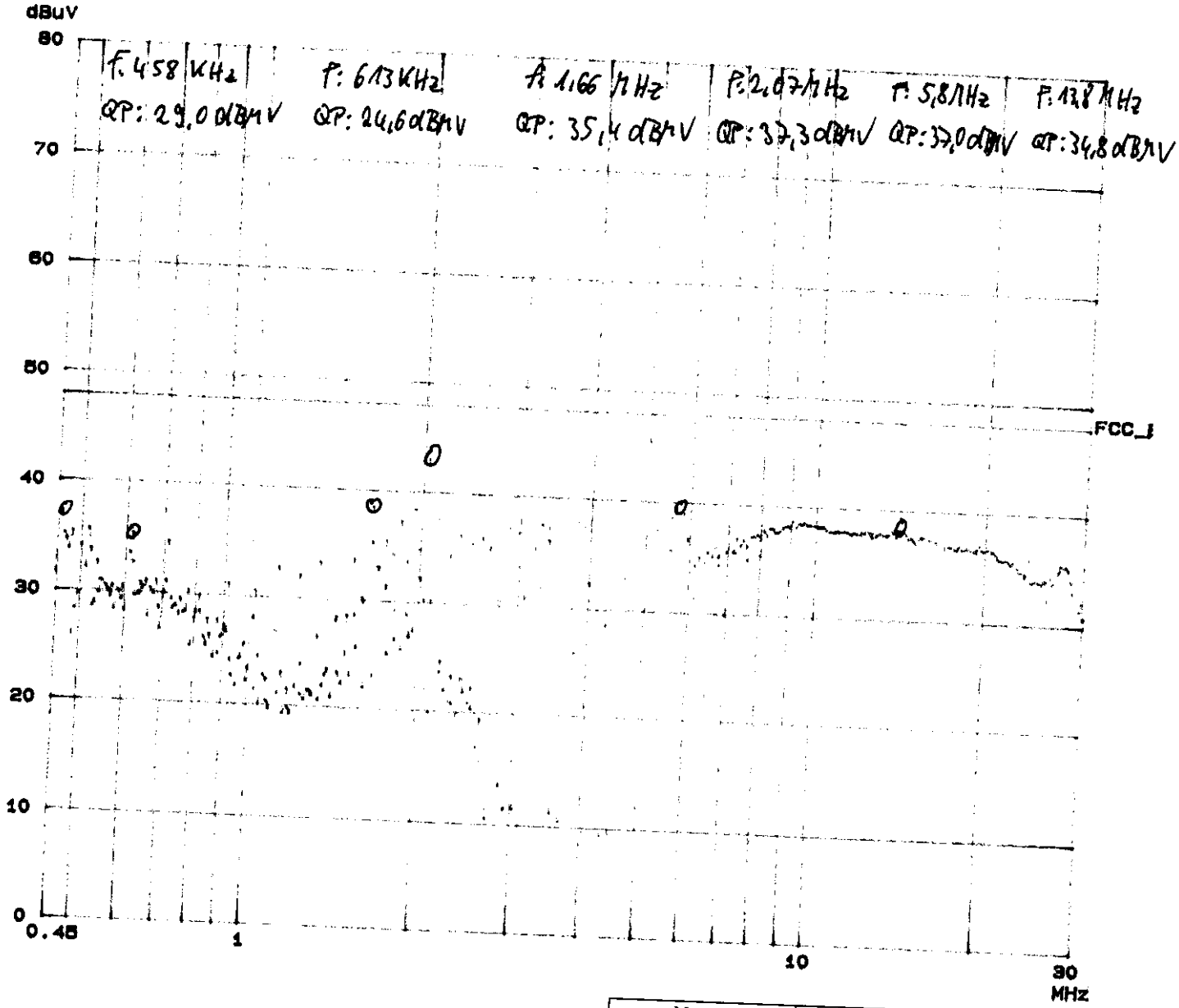
Interference Voltage-Test

450 kHz - 30 MHz

File-number:	E 14723-1-00
Model:	EYEUSA
Client:	Eyecon Ltd
Serial-number:	EYEUSA-S2
Mode:	Automatic switching mode, Cannel 4
Test spec.:	FCC Cl. B
Test point:	Power line/N, 110V/60 Hz
Remarks:	

Detection Mode ● P
O QP
O AV

Test result: ● ok
O n.ok



Name:	Date:	Page:

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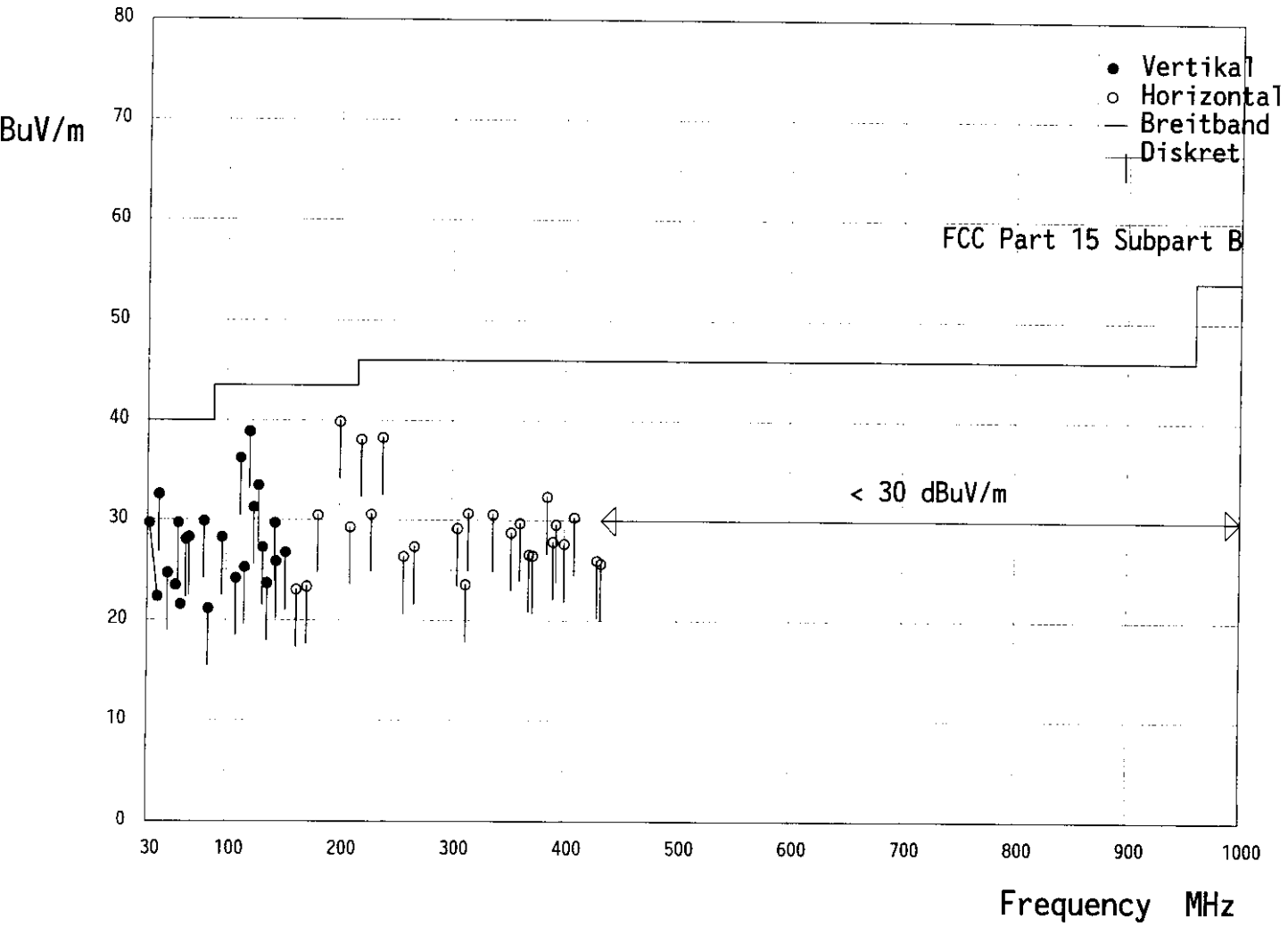
Radiation-Test

accdg.FCC Part 15

Typ:	NTSC M through switch	Testdistance:	3 m
Manufacturer:	TBD	Testreceiver:	ESVP
Client:	Eyecon Ltd	Antenna:	BBA, UHALB
Regulation:	FCC Part 15 Cl. B	Testengineer:	Martin Gnadl
Order No.:	E 14723-1-00	Date:	02-04-1998
Operation Mode:	Automatic switching mode, Cannel 4		
Remarks:	The limits are kept.		



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Radiation-Test

accdg.FCC Part 15

Typ: NTSC M through switch
anufacturer: TBD
Client: Eyecon Ltd
Regulation: FCC Part 15 Cl. B
Order No.: E 14723-1-00
ration Mode: Automatic switching mode, Cannel 4
Remarks: The limits are kept.

Testdistance: 3 m
Testreceiver: ESVP
Antenna: BBA, UHALB
Testengineer: Martin Gnadl
Date: 02-04-1998

Result	Frequency [MHz]	Reading [dBuV/m]	Korr [dB]	Final [dBuV/m]	Limit [dBuV/m]	DLimit [dB]	Polarisation	Noise
	31.62	8.8	20.9	29.7	40.0	10.3	Vertikal	Breitband
	39.00	4.8	17.6	22.4	40.0	17.6	Vertikal	Breitband
	40.06	15.5	17.1	32.6	40.0	7.4	Vertikal	Diskret
	48.00	10.0	14.7	24.7	40.0	15.3	Vertikal	Diskret
	55.08	10.5	13.0	23.5	40.0	16.5	Vertikal	Breitband
	57.20	17.1	12.6	29.7	40.0	10.3	Vertikal	Diskret
	59.50	9.5	12.1	21.6	40.0	18.4	Vertikal	Breitband
	64.10	17.0	11.1	28.1	40.0	11.9	Vertikal	Diskret
	66.74	17.9	10.4	28.3	40.0	11.7	Vertikal	Diskret
	80.12	19.5	10.4	29.9	40.0	10.1	Vertikal	Diskret
	84.12	10.0	11.2	21.2	40.0	18.8	Vertikal	Diskret
	96.15	15.0	13.3	28.3	43.5	15.2	Vertikal	Diskret
	108.60	9.0	15.2	24.2	43.5	19.3	Vertikal	Diskret
	112.17	20.5	15.7	36.2	43.5	7.3	Vertikal	Diskret
	116.17	9.0	16.3	25.3	43.5	18.2	Vertikal	Diskret
	120.18	22.0	16.9	38.9	43.5	4.6	Vertikal	Diskret
	124.18	14.1	17.2	31.3	43.5	12.2	Vertikal	Diskret
	128.19	16.0	17.5	33.5	43.5	10.0	Vertikal	Diskret
	132.20	9.5	17.8	27.3	43.5	16.2	Vertikal	Diskret
	136.20	5.6	18.1	23.7	43.5	19.8	Vertikal	Diskret
	143.00	11.3	18.4	29.7	43.5	13.8	Vertikal	Diskret
	144.20	7.5	18.4	25.9	43.5	17.6	Vertikal	Diskret
	152.55	8.3	18.5	26.8	43.5	16.7	Vertikal	Diskret
	162.25	4.5	18.6	23.1	43.5	20.4	Horizontal	Diskret

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Result	Frequency [MHz]	Reading [dBuV/m]	Korr [dB]	Final [dBuV/m]	Limit [dBuV/m]	DLimit [dB]	Polarisation	Noise
	171.62	4.4	19.0	23.4	43.5	20.1	Horizontal	Diskret
	181.16	11.2	19.3	30.5	43.5	13.0	Horizontal	Diskret
	200.22	20.5	19.4	39.9	43.5	3.6	Horizontal	Diskret
	209.76	9.0	20.3	29.3	43.5	14.2	Horizontal	Diskret
	219.30	17.0	21.1	38.1	46.0	7.9	Horizontal	Diskret
	228.38	9.8	20.8	30.6	46.0	15.4	Horizontal	Diskret
	238.36	18.0	20.3	38.3	46.0	7.7	Horizontal	Diskret
	257.40	4.6	21.8	26.4	46.0	19.6	Horizontal	Diskret
	267.00	5.0	22.4	27.4	46.0	18.6	Horizontal	Diskret
	305.10	9.4	19.8	29.2	46.0	16.8	Horizontal	Diskret
	312.50	3.6	20.0	23.6	46.0	22.4	Horizontal	Diskret
	314.64	10.6	20.1	30.7	46.0	15.3	Horizontal	Diskret
	336.54	10.0	20.6	30.6	46.0	15.4	Horizontal	Diskret
	352.77	7.8	21.0	28.8	46.0	17.2	Horizontal	Diskret
	360.57	8.5	21.2	29.7	46.0	16.3	Horizontal	Diskret
	368.60	5.2	21.4	26.6	46.0	19.4	Horizontal	Diskret
	371.84	5.0	21.5	26.5	46.0	19.5	Horizontal	Diskret
	384.61	10.6	21.8	32.4	46.0	13.6	Horizontal	Diskret
	390.00	6.0	21.9	27.9	46.0	18.1	Horizontal	Diskret
	392.63	7.6	22.0	29.6	46.0	16.4	Horizontal	Diskret
	400.00	5.5	22.2	27.7	46.0	18.3	Horizontal	Diskret
	408.66	8.0	22.3	30.3	46.0	15.7	Horizontal	Diskret
	429.00	3.5	22.5	26.0	46.0	20.0	Horizontal	Diskret
	432.70	3.2	22.5	25.7	46.0	20.3	Horizontal	Diskret

432.70 MHz - 1000 MHz < 30 dBuV/m

FCC ID:XXX-EYE01USMRW

Emissions

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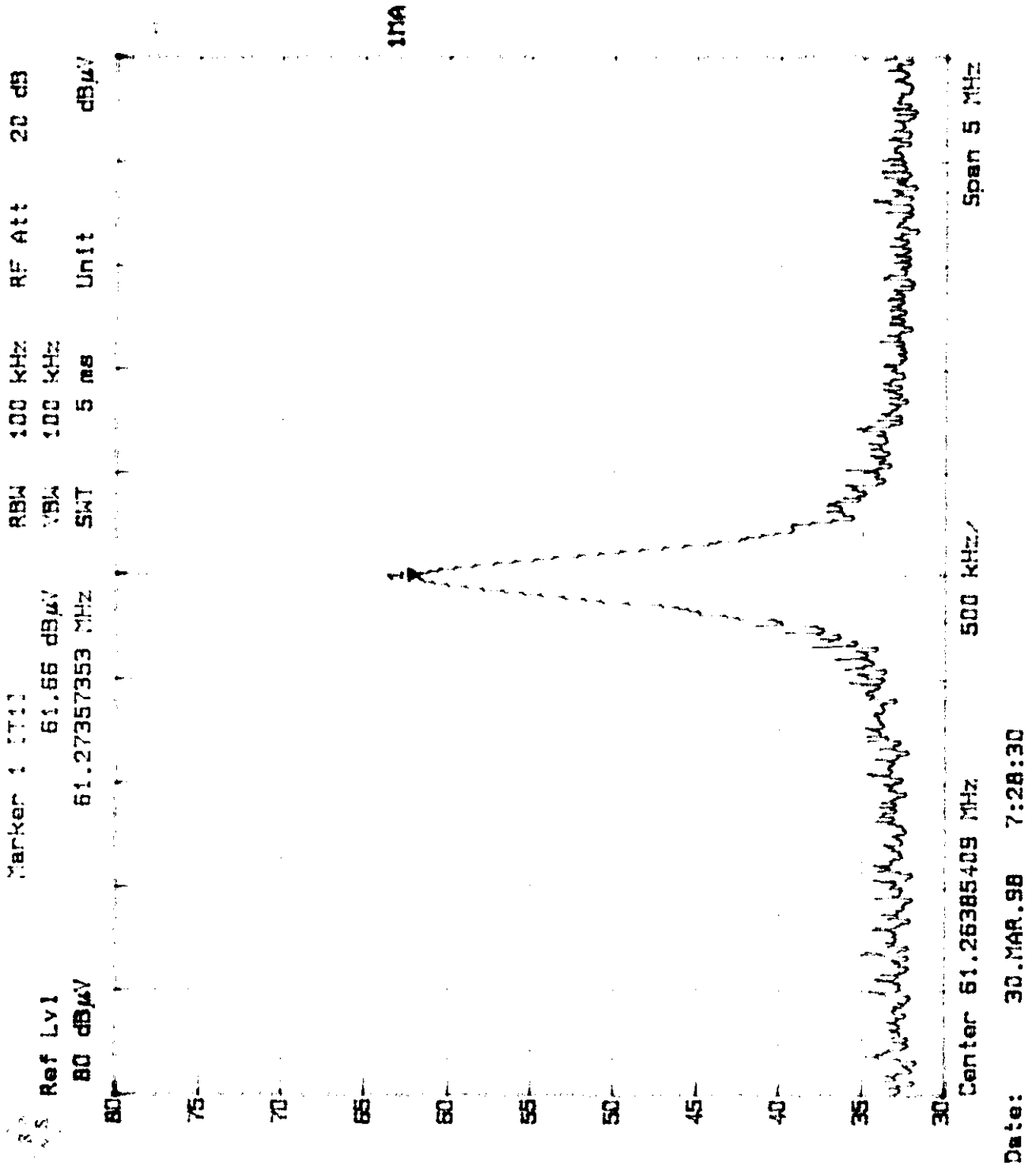
File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level
Specification:	FCC Part 15, Paragraph 15.115(b)1(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB

CANNEL	FREQUENCY MHZ	MEASURED LEVEL dbµV	LIMIT dbµV	MARGIN
3 Video	61,27	61,66 + 7,5 = 69,16	69,54	0,38
3 Audio	56,76	46,26 + 7,5 = 53,76	56,53	2,87
4 Video	67,25	61,29 + 7,5 = 68,79	69,54	0,75
4 Audio	62,75	45,85 + 7,5 = 53,35	56,53	3,18

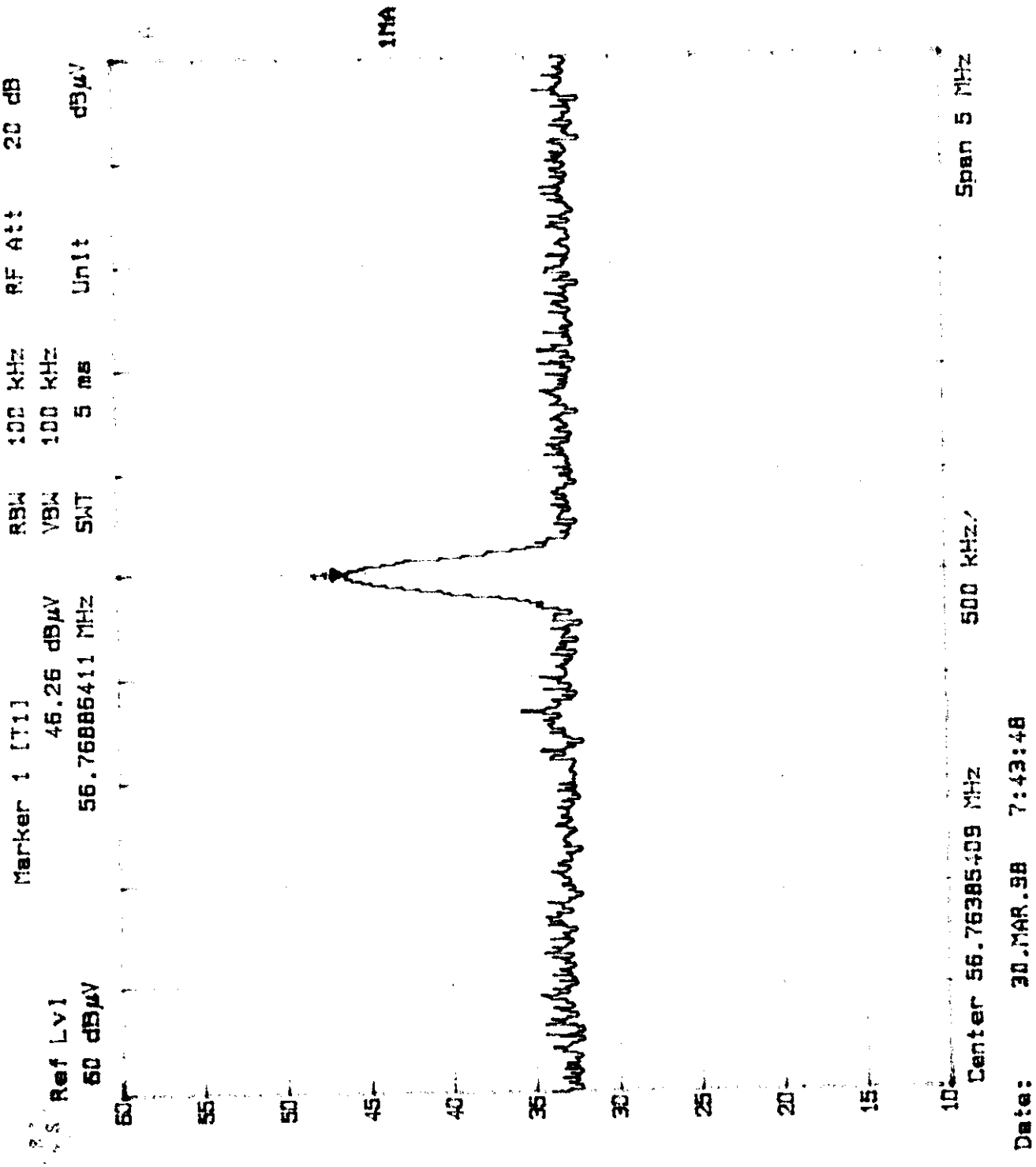
Emissions

Test number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH3 Video
Specification:	FCC Part 15, Paragraph 15.115(b)1(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



Emissions

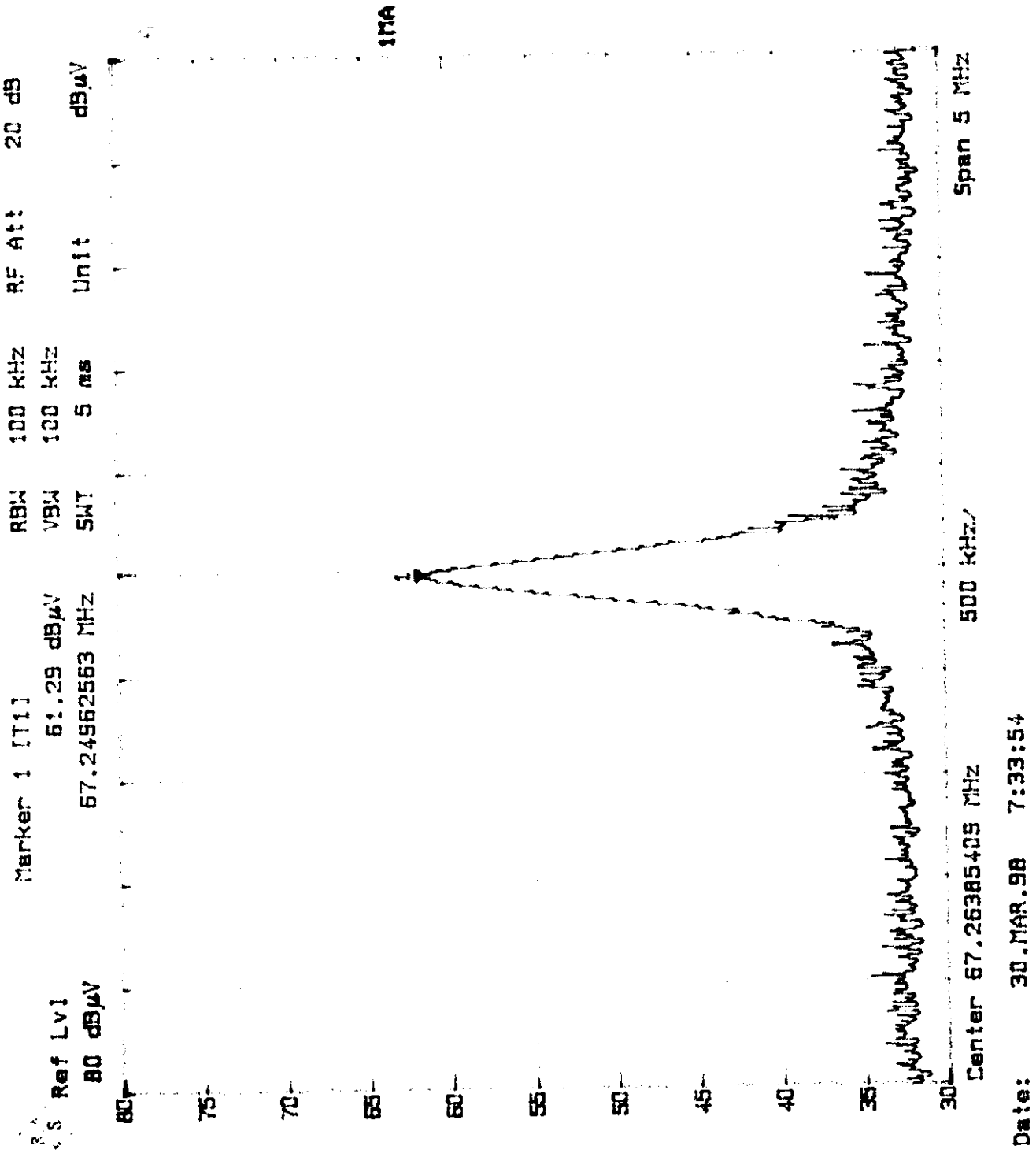
Test number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH3 Audio
Specification:	FCC Part 15, Paragraph 15.115(b)1(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



Date:	Tester:	Page

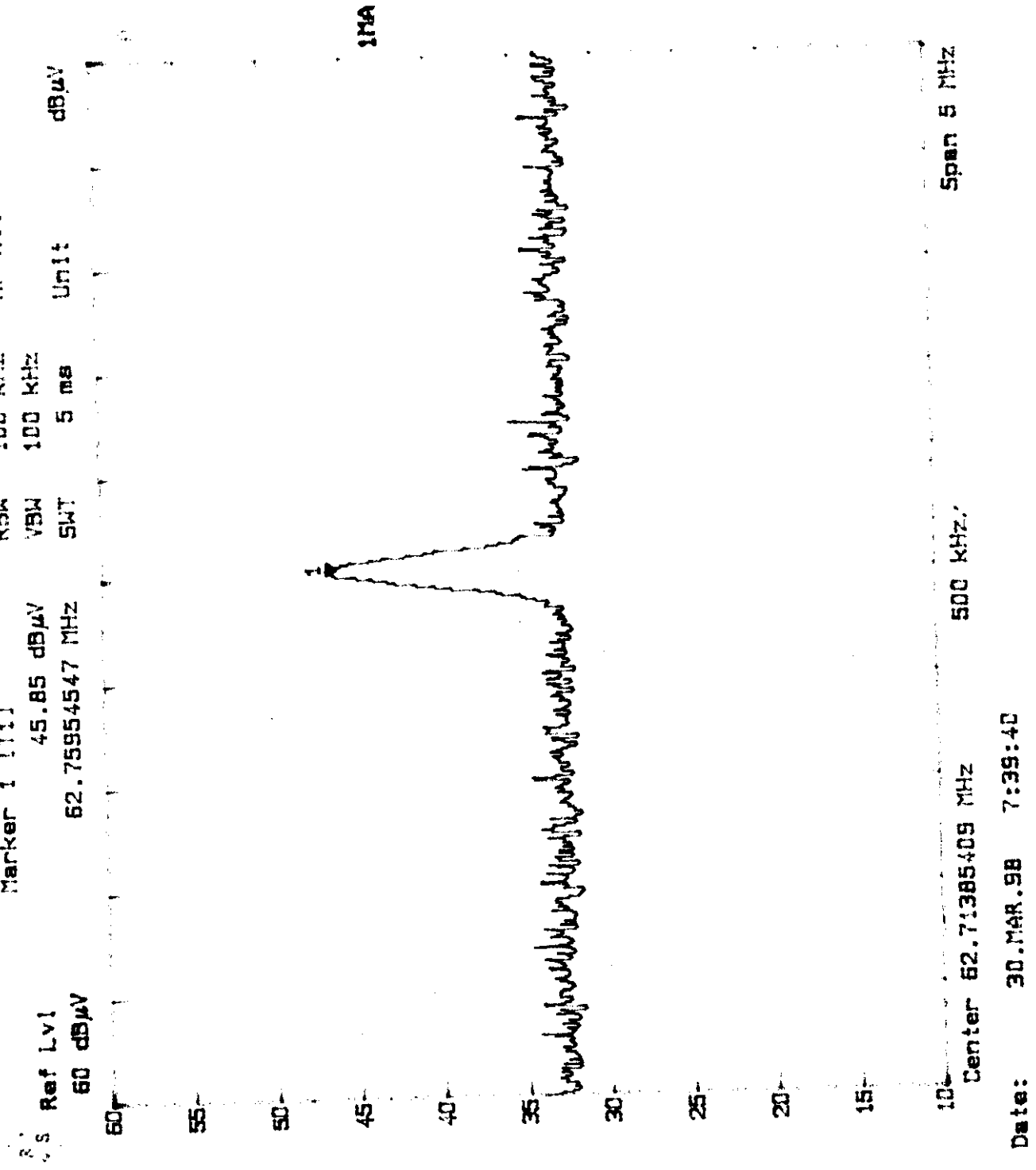
Emissions

E-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH4 Video
Specification:	FCC Part 15, Paragraph 15.115(b)1(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



Emissions

Test number:	E 14723-1-00 MG
Title:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH4 Audio
Specification:	FCC Part 15, Paragraph 15.115(b)1(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



FCC ID:XXX-EYE01USMRW

Emissions

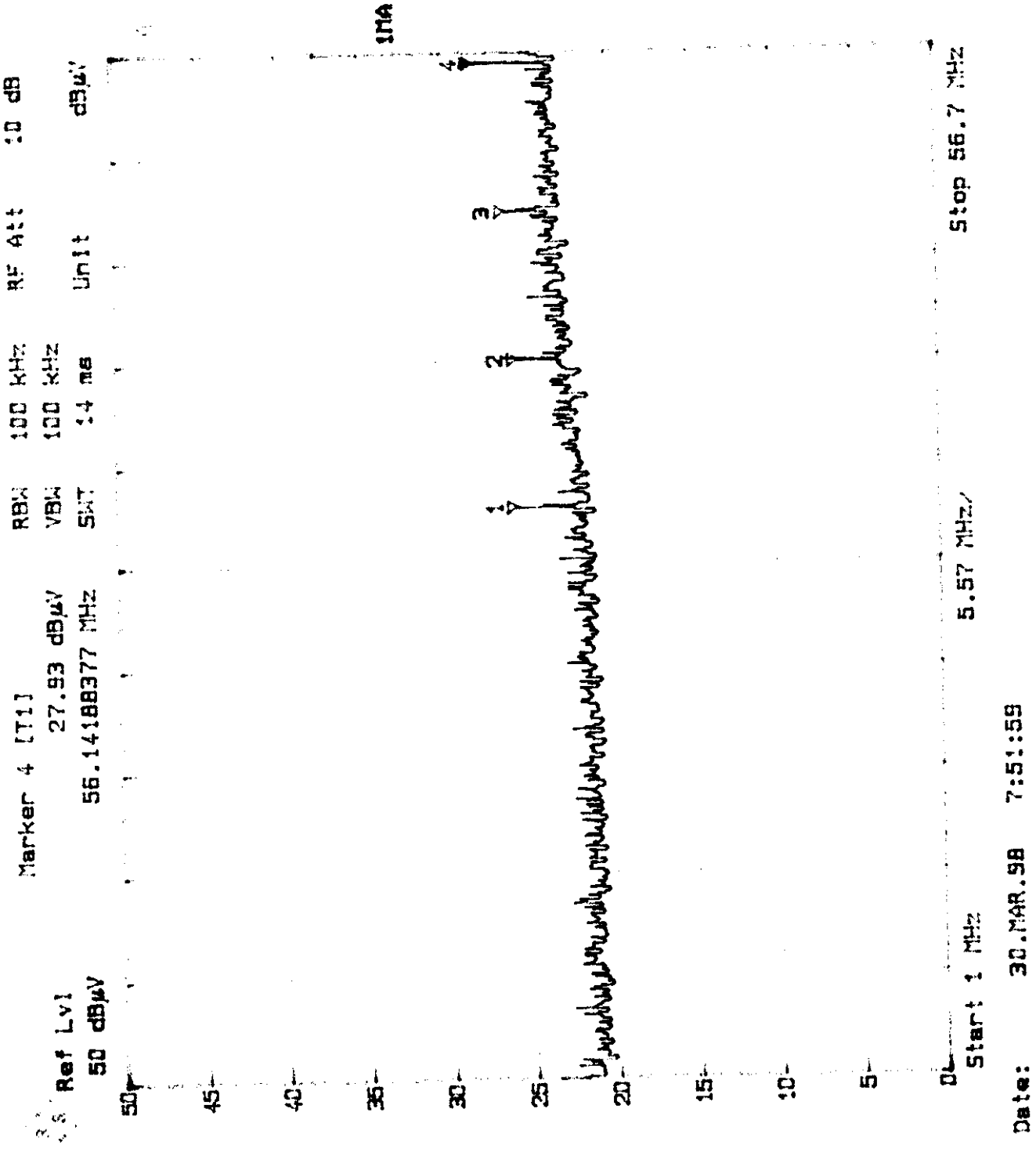
PRODUCT SERVICE

File-number: E 14723-1-00 MG
Model: NTSC trough switch
Client: Eyecon Ltd
Mode: Automatic switching mode
Test point: RF Output Signal level
Specification: FCC Part 15, Paragraph 15.115(b)2(ii)
Notes: 75 to 50 Ω adaptor = 7.5 dB

CANNEL	FREQUENCY MHZ	MEASURED LEVEL dbµV	LIMIT dbµV	MARGIN
CH3 - 4,6 MHz	32,14	25,51 +7,5 = 33,01	39,54	6,53
	40,17	26,47 +7,5 = 33,97	39,54	5,57
	48,10	26,0 +7,5 = 33,5	39,54	6,04
CH3 + 7,4 MHz	633,8	25,04 +7,5 = 32,54	39,54	7,00
	903,4	26,70 +7,5 = 34,20	39,54	5,34
CH4 - 4,6 MHz	48,18	26,6 + 7,5 = 34,1	39,54	5,44
	40,13	26,5 +7,5 = 34,0	39,54	5,54
	32,8	25,6 + 7,5 = 33,1	39,54	6,44
CH4 +7,4 MHz	997,61	25,26+ 7,5 = 32,76	39,54	6,78
	957,0	26,7 + 7,5 = 34,20	39,54	5,34

Emissions

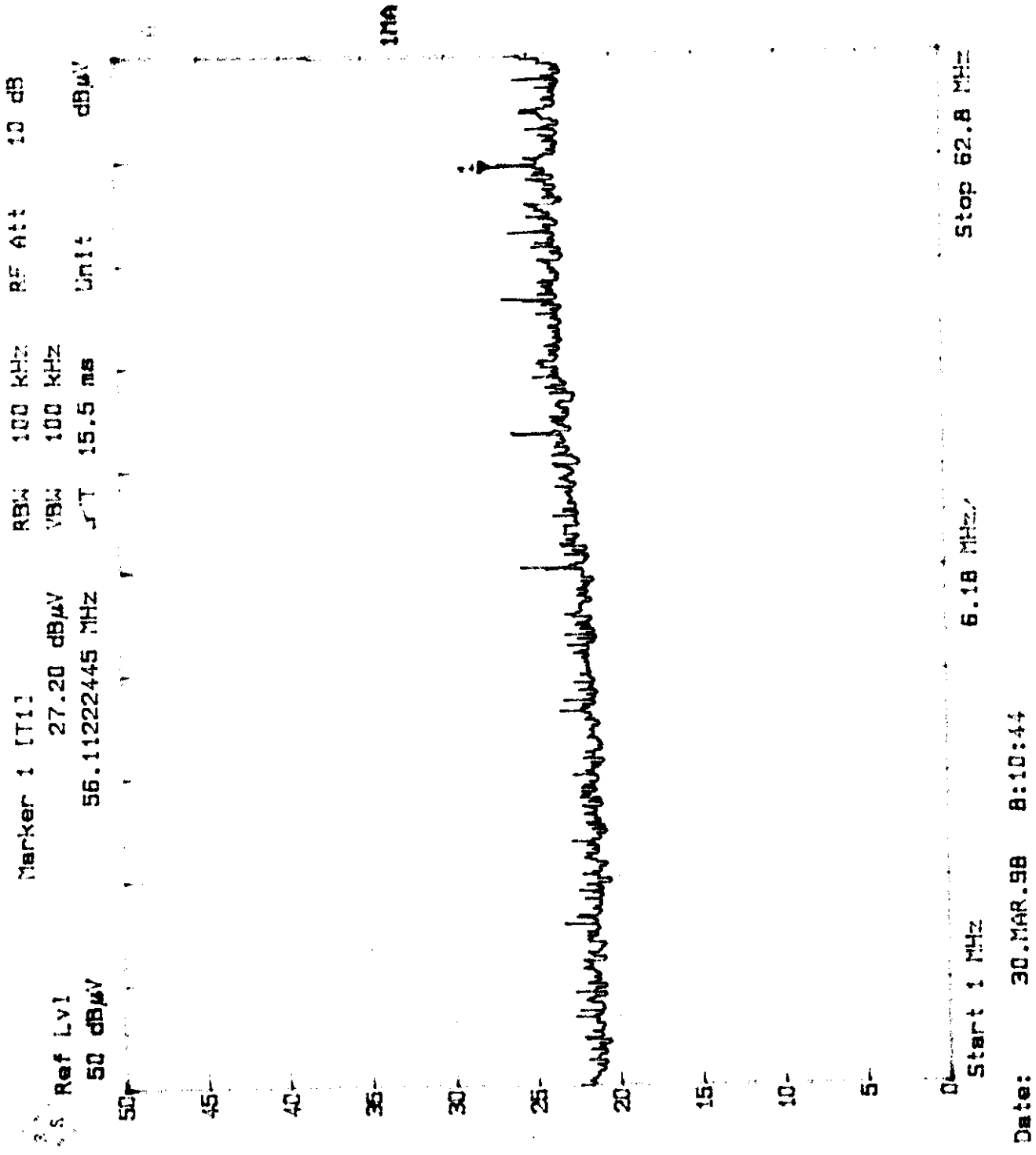
File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH3 - 4.6 MHz
Specification:	FCC Part 15, Paragraph 15.115(b)2(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



Date:	Tester:	Page

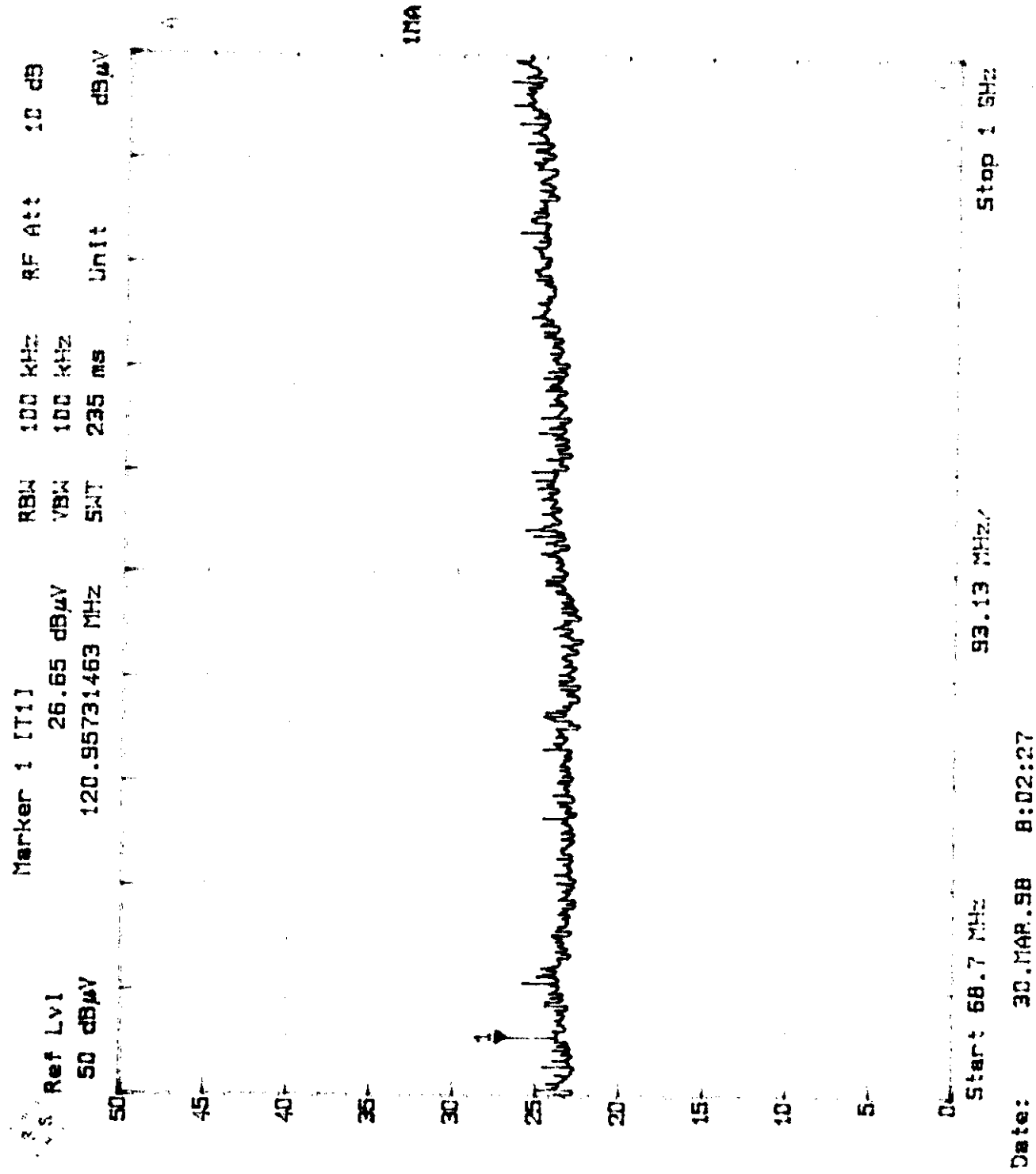
Emissions

File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH4 - 4.6 MHz
Specification:	FCC Part 15, Paragraph 15.115(b)2(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



Emissions

File-number: E 14723-1-00 MG
Model: NTSC through switch
Client: Eyecon Ltd
Mode: Automatic switching mode
Test point: RF Output Signal level, CH3 +7.4 MHz
Specification: FCC Part 15, Paragraph 15.115(b)2(ii)
Notes: 75 to 50 Ω adaptor = 7.5 dB



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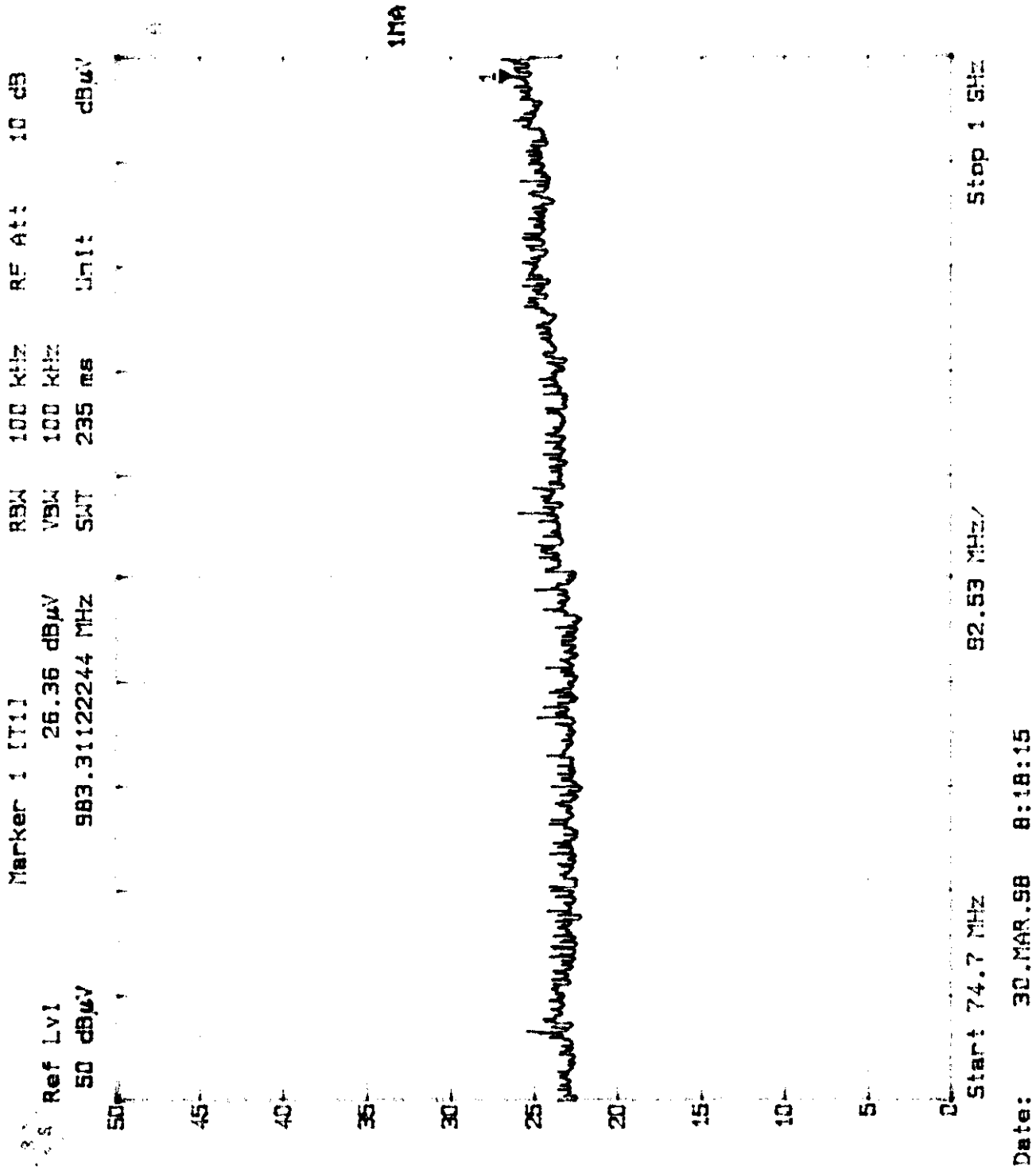
Emissions

File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level, CH4 77.4 MHz
Specification:	FCC Part 15, Paragraph 15.115(b)2(ii)
Notes:	75 to 50 Ω adaptor = 7.5 dB



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FCC ID:XXX-EYE01USMRW

Emissions

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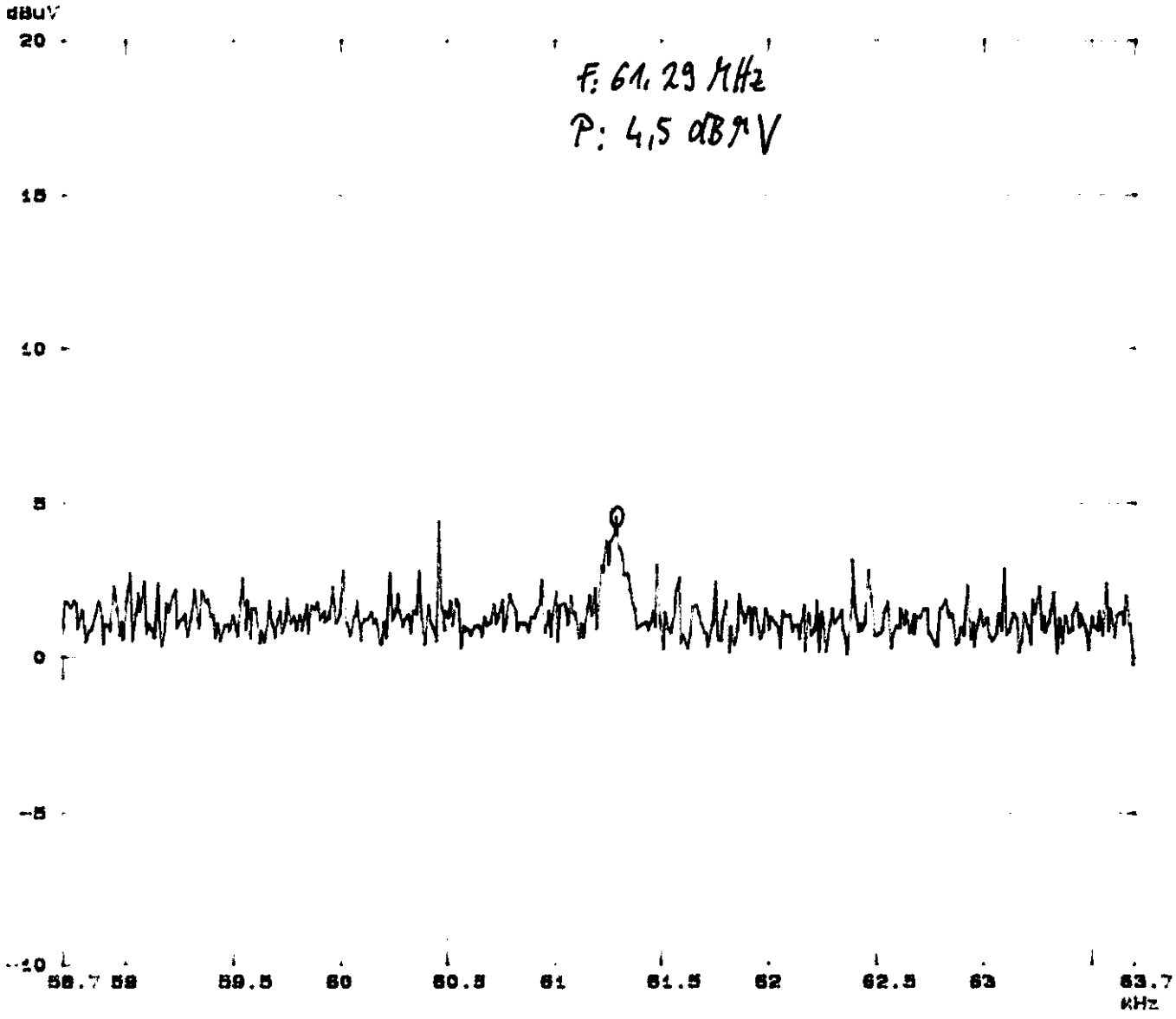
File-number:	E 14723-1-00 MG
Model:	NTSC trough switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Output Signal level (isolation limits)
Specification:	FCC Part 15, Paragraph 15.115(c)1(ii)
Notes:	Measured directly on 75 Ω = 1.76 dB correction factor

CANNEL	FREQUENCY MHZ	MEASURED LEVEL dbµV	LIMIT dbµV	MARGIN
CH3	61,29	4,5 + 1,76 = 6,26	9,54	3,28
CH4	67,24	3,8 + 1,76 = 5,56	9,54	3,98

FCC ID: XXX-EYE01USMRW

Emissions

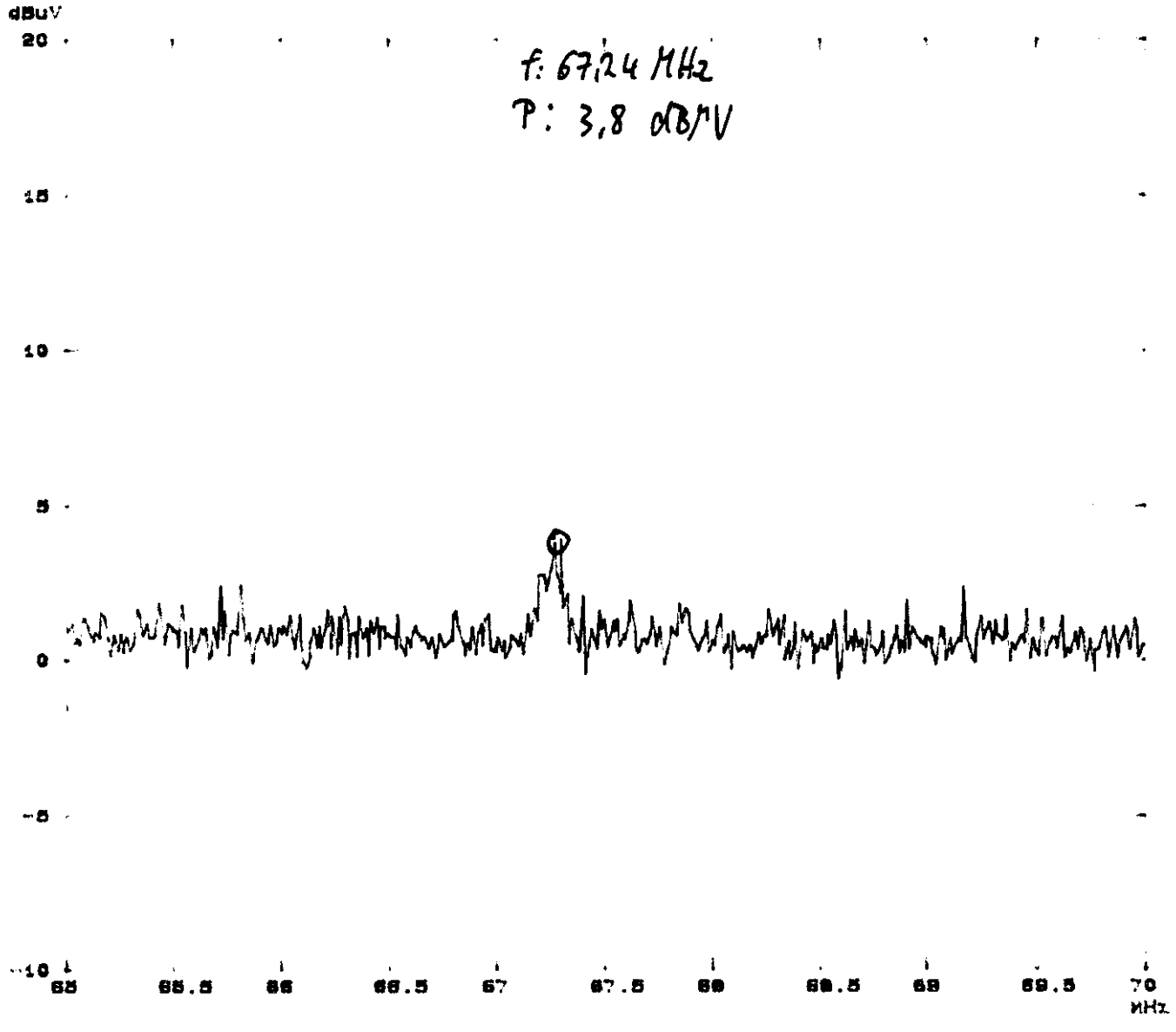
File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Input Signal level, CH3
Specification:	FCC Part 15, Paragraph 15.115(c)1(ii)
Notes:	Measured directly on 75 Ω = 1.76 dB correction factor



FCC ID: XXX-EYE01USMRW

Emissions

File-number:	E 14723-1-00 MG
Model:	NTSC through switch
Client:	Eyecon Ltd
Mode:	Automatic switching mode
Test point:	RF Input Signal level, CH4
Specification:	FCC Part 15, Paragraph 15.115(c)1(ii)
Notes:	Measured directly on 75 Ω = 1.76 dB correction factor



CONSTRUCTIONAL DATAFORM FOR EMC - TESTING

Applicant : Eyecon Ltd

Address : Portside House, Ellesmere Port, South Wirral L65 2AL

Factory : TBD

Address : TBD

Type : NTSC M through switch

Model : EYEUSA Rated voltage : AC 100-120V

Serial-No. : EYEUSA-S2 Rated input power : 25W

:

Configuration of equipment:

CCTV system for use with NTSC TV via A/V cables or RF Rev.

Rev.

Rev.

Short description of the EUT (Purpose of system, area of use, Function of the system) :

CCTV sytem for use in the home and light commercial.

Sources of Interference: Power supply, STB oscillator 8MHz, camera oscillator, Modulator

Internal frequencies: 8MHz, Modulator O/P frequencies 61.25MHz/67.25MHz. Camera 19.069Mhz

Noise suppression components: RFI mains filter in PSU

Measures for electromagnetic shielding: Modulator screened

Eldon Technology, date16/03/98

place of issue

Seal and signature of applicant

o If applicable, if necessary complete overleaf