	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 1 of 22



dB Technology

|----- (Cambridge Ltd.) -----|

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Testing

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REPORT ON ELECTROMAGNETIC COMPATIBILITY TESTS

**Performed at:
TWENTY PENCE TEST SITE**

**Twenty Pence Road,
Cottenham,
Cambridge
U.K.
CB4 4PS**


on

Agricultural Technology Ltd.

Pegasus Walk Through Antenna

dated

17 October 2000

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	Test No: T0284	Test Report	Page: 2 of 22

Equipment Under Test (EUT): Pegasus Walk Through Antenna

Test Commissioned by: Agricultural Technology Ltd.
Place Farm
Kirtling
Newmarket
Suffolk
CB8 9PA

Representative: Jason Sharp

Test Started: 28 September 2000

Test Completed: 29 September 2000

Test Engineer: Dave Smith

Date of Report: 17 October 2000

Report:

Written by: _ _ _ _ Dave Smith _ _ _ _ . Checked by: _ _ _ _ Derek Barlow _ _ _ _ .


Signature: _ _ _ _ D.A.Smith _ _ _ _ . Signature: _ _ _ _ D.Barlow _ _ _ _ .

Date: _ _ _ 21 November 2000 _ _ _ . Date: _ _ _ 21 November 2000 _ _ _ .

Test Standards Applied

CFR 47 : 1999	<i>Code of Federal Regulations: Pt 15 Subpart C - Radio Frequency Devices - PASS Intentional Radiators</i>
---------------	--



	Report No: R1321	FCC ID: PCZ1100	
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Emissions Test Results Summary

CFR 47 : 1999

PASS


Test	Port	Method	Limit	PASS/FAIL	Notes
Conducted Emissions	ac power	ANSI C63.4:1992	FCC_C	PASS	
Radiated Emissions		ANSI C63.4:1992	FCC_C	PASS	



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1 EUT Details

1.1 General


The EUT was an Pegasus Walkthrough Antenna System. The system is intended to detect tags on cattle which pass through a steel frame. Loop antennae are incorporated in the frame. A control unit feeds the antenna with a 134.2kHz signal. The results of the detection system may be output to a PC via a serial port.

The device was therefore considered as an intentional radiator operating under the rules of CFR 47 subsection C and also a digital device under CFR 47 subsection B. The class B limits for a digital device were applied (although the higher class A limits may be considered more appropriate for the system).

Two versions of the system were tested. The only difference between the units was the material used to make the frame which housed the antennae. One version was stainless steel, the other galvanised mild steel. The same controller was used for both units.

Details of the EUT and associated peripherals used during the tests are listed below. Figure 1 shows the interconnections between the EUT and peripherals.

Item	Manufacturer	Model	Description	Serial No:	FCC ID
1	ATL	Pegasus System with galvanized steel frame	EUT		PCZ1100
2	ATL	Pegasus System with stainless steel frame	EUT		PCZ1100
3	Dell	SYS210	PC	SYS210031921	E2K50YDELL210
4	Olivetti	DSM 28-142 PS	Monitor	7072366	BEJCY410
5	Dell	SK-1000REW	Keyboard	M951222710	GYUR265K
6	Logitech	MB-82-950L	Mouse	LT079010452	DZL6QBC
7	HP	Deskjet 850C	Printer	SG563160GC	B94C2145X

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1.2 Modifications to EUT and Peripherals

Details of any modifications that were required to achieve compliance are listed below. The modification numbers are referred to in the results sections as appropriate.

Mod No:	Details
0	Original unit.
1	Mains filter moved next to connector.
2	Screens of co-axial output wires clamped to the case near the connector.

1.3 EUT Operating Modes

The EUT was tested in the following operating mode or modes. Generally, operating modes are chosen that will exercise the functions of the EUT as fully as possible and in a manner likely to produce maximum emission levels or susceptibility. Individual test result sheets reference the operating mode of the EUT.

Operating Mode	Details
1	Normal operating mode with RF power applied to antenna system. Proprietary software running on PC which logs any tags passing through system.


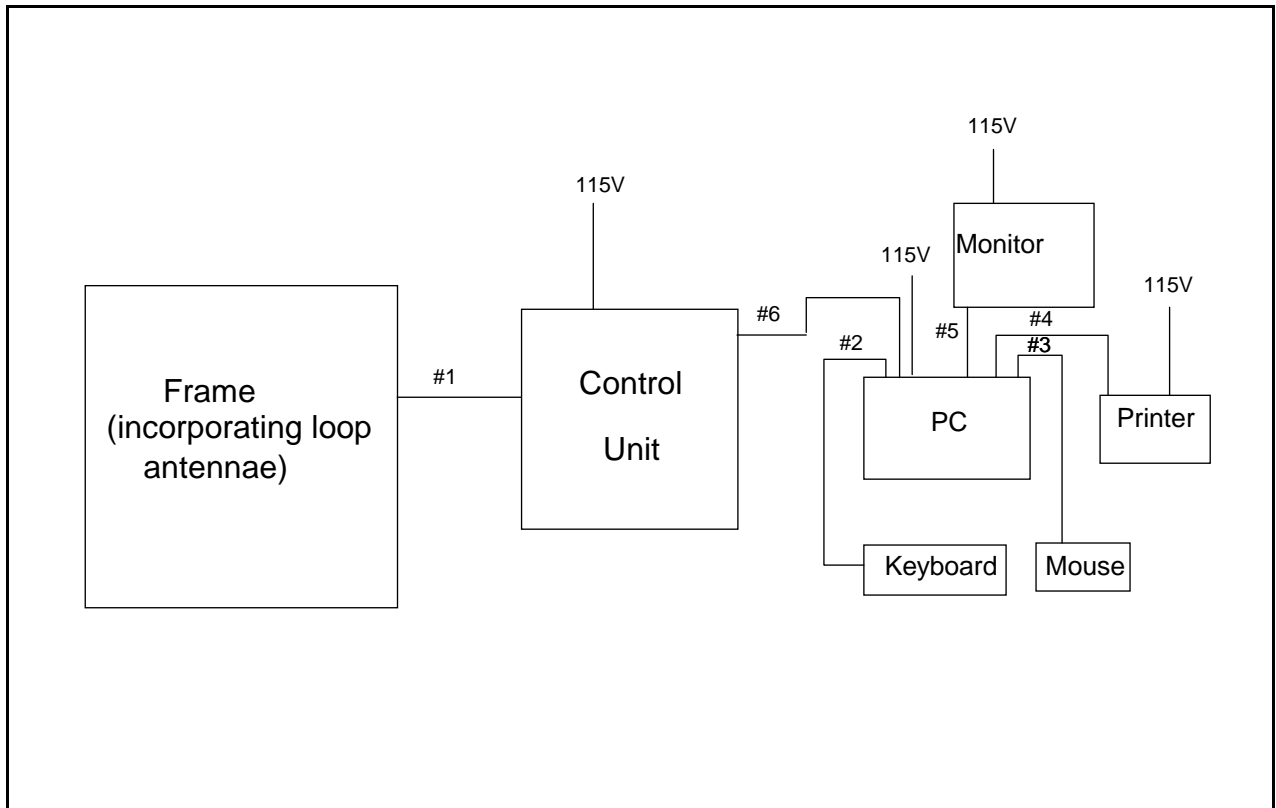

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Figure 1 General Arrangement of EUT and Peripherals




- #1 Co-axial RF feed cable (3 co-axial pairs)
- #2 Screened keyboard cable - 1.5m
- #3 Screened mouse cable - 1.5m
- #4 Screened printer cable - 2m
- #5 Screened monitor cable - 1m
- #5 Screened serial cable - 2m

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2 Test Equipment

The test equipment used during the tests was one or more of the items listed below. Individual test result sheets indicate which items were used.

Ref No:	Manufacturer	Model	Description	Serial	Cal Date
R1	Chase	LHR7000	RF Receiver (10kHz - 30MHz)	1056	18 Aug 2000
R3	Rohde and Schwarz	ESHS10	RF Receiver (9kHz - 30MHz)	843743/010	22 Sep 2000
R4	Rohde and Schwarz	ESVS10	RF Receiver (20MHz - 1GHz)	843744/00	18 Aug 2000
R5 R5B	Hewlett Packard Hewlett Packard	HP 8595E HP87405A	Spectrum Analyser Pre-amp	3412A00701 3207A00322	17 Aug 2000 17 Aug 2000
L1	EMCO	3825/2	LISN	1358	18 Mar 2000
L2	Rohde and Schwarz	ESH3-Z5	LISN	843862/009	18 Mar 2000
A4	Chase	CBL6112	Bilog Antenna (30MHz - 2GHz)	2027	30 May 2000
A5	Chase	CBL111A	Bilog Antenna (30MHz - 1GHz)	1760	30 May 2000
A9	EMCO	6502	Active Loop Antenna	2139	21 Sep 2000

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3 Test Methods

3.1 Conducted Emissions - ac power

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.

Bench top EUTs and peripheral equipment are normally placed on a 0.8m high non-conducting bench, positioned 0.4m from one of the metallic walls of a screened room. Floor standing EUTs are normally placed 0.1m above the metallic floor of the screened room. Mains leads are bundled so as not to exceed 1m.

The EUT is powered using a 50ohm/50uH Line Impedance Stabilisation Network (LISN). Peripherals are powered using a second a 50ohm/50uH LISN.

With the correct supply voltage applied to the EUT scans are performed on both the live and neutral line outputs of the LISN using quasi-peak detection over the specified frequency range. The results of these scans are shown in the plots section at the end of the report.

Significant emissions identified by the scans are measured and the results tabulated. The table of results is shown in the conducted emissions results section.

3.2 Radiated emissions below 30MHz

In order to assess the general characteristics of the intentional radiator (fundamental frequency of 134.2kHz) initial scans were performed in a screened room at a distance of 3m using an active loop antenna. These measurements were performed over the frequency range 100kHz to 30MHz with the galvanized steel frame antenna connected to the system. The results of these scans are shown in Plot 5 and Plot 6.


The limits shown on the plots were extrapolated using factors of 60 dB/decade and 40 dB/decade. The antenna systems are loops and generate a magnetic field. Based on the theoretical extrapolation factor for a magnetic field of 60 dB/decade (backed up by measurement of the extrapolation factor described below) the higher 60 db/decade limits are the more realistic. The scans show a high emission level at the fundamental frequency of 134.2kHz and much lower levels at the 2nd and 3rd harmonics. No other significant emissions were detected.

Emission levels were then measured on an open field site. The first measurements were made with the stainless steel antenna frame at distances of 100m and 180m in order to establish the extrapolation factor. Measurements of 52.6 dBuV/m and 37.7 dBuV/m were made at the fundamental frequency giving an extrapolation factor of 58 dB/decade. (Close to the theoretical factor for a magnetic field of 60 dB/decade).

Measurements were then made with the stainless steel frame at the fundamental frequency at a distance of 180m. The antenna system was rotated through 360° in 45° steps.

Measurements were taken with the plane of the receiving antenna facing the EUT and at 90° to the EUT. The highest recorded measurements are shown in Section 4.2 (with limit adjusted using the extrapolation factor of 58 dB/decade). Measurements were then performed at the 2nd and 3rd harmonics at a distance of 30m. Again the highest measurements are recorded in Section 4.2.

The open field measurements were then repeated with the galvanized steel frame. These measurements are shown in Section 4.3.

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3.3 Radiated Emissions above 30MHz

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.


Initial scans are performed in a semi-anechoic screened room at a distance of 3m. Scans are performed over the frequency range specified in the test standard with the antenna both horizontally and vertically polarised. During these scans the EUT and peripherals are rotated through 360°. Bench top EUTs are placed on a non-conducting bench at a height of 0.8m above the ground plane. Floor standing EUTs are placed 0.1m above the ground plane. The results of the scans are shown in the plots included at the end of the report.

Significant emissions identified by the scans are measured on an open area test site at the appropriate test distance using a CISPR16 quasi-peak receiver. Maximised readings are obtained by rotating the EUT through 360° and adjusting the height of the antenna from 1m to 4m. Measurements are made with the antenna both horizontally and vertically polarised and the results tabulated.

The radiated emission tests above 30MHz were intended to measure emission from the digital devices within the controller. The tests were not intended to measure emissions from the intentional transmitter and the material of the antenna frame was not considered significant. The tests above 30MHz were therefore only performed with the galvanized steel frame connected to the controller.

4 Test Results

The following sections contain tabulated test results. Plots of various scans are included at the back of this section.

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4.1 Conducted Emission Results

Test Equipment:	Factor Set 1:	EMLISN	RG214	10 m cable
-----------------	---------------	--------	-------	------------

Conducted Emissions

<i>Company:</i> Agricultural Technology Ltd.	<i>Product:</i> Pegasus Walk Through Antenna
<i>Date:</i> 29 September 2000	<i>Test Eng:</i> Dave Smith
<i>Ports:</i> ac power	
<i>Test:</i> ANSI C63.4:1992 using limits of	FCC_C
<i>Ports:</i>	
<i>Test:</i>	

Test	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit FCC_C dBuV	Margin FCC_C dB	Limit	Margin	Notes	
	Stainless Steel Frame														
	1	2	N	1	2.874	qp	37.4	0.1	37.5	48.0	10.5				
	1	2	N	1	3.087	qp	38.9	0.1	39.0	48.0	9.0				
	1	2	N	1	3.219	qp	35.8	0.1	35.9	48.0	12.1				
	1	2	N	1	3.625	qp	39.0	0.1	39.1	48.0	8.9				
	1	2	N	1	3.759	qp	39.5	0.1	39.6	48.0	8.4				
	1	2	N	1	3.893	qp	40.0	0.1	40.1	48.0	7.9				
	1	2	L	1	2.016	qp	40.5	0.1	40.6	48.0	7.4				
	1	2	L	1	2.555	qp	35.2	0.1	35.3	48.0	12.7				
	1	2	L	1	2.872	qp	33.2	0.1	33.3	48.0	14.7				
	1	2	L	1	3.623	qp	38.9	0.1	39.0	48.0	9.0				
	1	2	L	1	3.893	qp	40.5	0.1	40.6	48.0	7.4				
	1	2	L	1	4.836	qp	29.5	0.2	29.7	48.0	18.3				
	Galvanised Steel Frame														
	1	2	L	1	1.746	qp	34.8	0.1	34.9	48.0	13.1				
	1	2	L	1	3.089	qp	35.8	0.1	35.9	48.0	12.1				
	1	2	L	1	3.892	qp	36.7	0.1	36.8	48.0	11.2				
	1	2	L	1	4.295	qp	36.8	0.1	36.9	48.0	11.1				
	1	2	L	1	4.563	qp	35.2	0.2	35.4	48.0	12.6				
	1	2	L	1	21.477	qp	32.1	0.3	32.4	48.0	15.6				
	1	2	N	1	1.751	qp	36.8	0.1	36.9	48.0	11.1				
	1	2	N	1	2.667	qp	31.2	0.1	31.3	48.0	16.7				
	1	2	N	1	3.085	qp	34.5	0.1	34.6	48.0	13.4				
1	2	N	1	4.429	qp	38.2	0.1	38.3	48.0	9.7					
1	2	N	1	4.833	qp	28.2	0.2	28.4	48.0	19.6					
1	2	N	1	21.475	qp	28.9	0.3	29.2	48.0	18.8					
Results										Minimum Margin PASS/FAIL		7.4 dB PASS			
Notes		Comments and Observations													
#1		Results of scans shown in plot 1 and plot 2 for the stainless steel frame and plots 3 and plot 4 for the galvanized steel frame.													


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4.2 Radiated Emissions Results - Intentional Transmitter - Stainless Steel

Test Equipment:	Factor Set 1:	HFB10G	RG214	25 m cable
	Factor Set 2:	LOOP	RG214	100 m cable

Radiated Emissions

Company: Agricultural Technology Ltd.					Product: Pegasus Walk Through Antenna									
Date: 28 September 2000					Test Eng: Dave Smith									
Ports:														
Test: ANSI C63.4:1992					using limits of					FCC_C				
Ports:														
Test:														
Test	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Det	Rec. Level dBuV	Corr'n Factor dB/m	Total Level dBuV/m	Limit FCC_C dBuV/m	Margin FCC_C dB	Limit	Margin	Notes
	1	1	180	2	0.134	av	26.9	10.6	37.5	37.9	0.4			
	1	1	180	2	0.134	av	27.2	10.6	37.8	37.9	0.1			
	1	1	180	2	0.134	av	26.6	10.6	37.2	37.9	0.7			
	1	1	180	2	0.134	av	26.3	10.6	36.9	37.9	1.0			
	1	1	180	2	0.134	av	26.6	10.6	37.2	37.9	0.7			
	1	1	180	2	0.134	av	25.5	10.6	36.1	37.9	1.8			
	1	1	180	2	0.134	av	26.0	10.6	36.6	37.9	1.3			
	1	1	180	2	0.134	av	26.8	10.6	37.4	37.9	0.5			
	1	1	30	2	0.268	av	37.0	11.1	48.1	77.0	29.0			
	1	1	30	2	0.403	av	37.8	11.1	48.9	73.5	24.6			
Results					Minimum Margin PASS/FAIL					0.1 dB PASS				
Notes	Comments and Observations													
	Limits extrapolated using a factor of 58dB/decade as described in section 3.2. The characteristics of the transmitter gave peak values 9dB above average values - peak vaules therefore complied with 47 CFR part 15.35.b (i.e. no more than 20dB above average limits).													


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4.3 Radiated Emissions Results - Intentional Transmitter - Galvanized Steel

Test Equipment:	Factor Set 1:	HFB10G	RG214	25 m cable
	Factor Set 2:	LOOP	RG214	100 m cable

Radiated Emissions

Company: Agricultural Technology Ltd.										Product: Pegasus Walk Through Antenna					
Date: 28 September 2000										Test Eng: Dave Smith					
Ports:															
Test: ANSI C63.4:1992										using limits of		FCC_C			
Ports:															
Test:															
Test	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Det	Rec. Level dBuV	Corr'n Factor dB/m	Total Level dBuV/m	Limit FCC_C dBuV/m	Margin FCC_C dB	Limit	Margin	Notes	
	1	1	180	2	0.134	av	25.4	10.6	36.0	37.9	1.9				
	1	1	180	2	0.134	av	24.9	10.6	35.5	37.9	2.4				
	1	1	180	2	0.134	av	24.7	10.6	35.3	37.9	2.6				
	1	1	180	2	0.134	av	25.7	10.6	36.3	37.9	1.6				
	1	1	180	2	0.134	av	26.1	10.6	36.7	37.9	1.2				
	1	1	180	2	0.134	av	25.7	10.6	36.3	37.9	1.6				
	1	1	180	2	0.134	av	24.8	10.6	35.4	37.9	2.5				
	1	1	180	2	0.134	av	26.1	10.6	36.7	37.9	1.2				
	1	1	30	2	0.268	av	37.3	11.1	48.4	77.0	28.7				
	1	1	30	2	0.403	av	34.1	11.1	45.2	73.5	28.3				
Results					Minimum Margin					1.2 dB					
					PASS/FAIL					PASS					
Notes		Comments and Observations													
		Limits extrapolated using a factor of 58dB/decade as described in section 3.2. The characteristics of the transmitter gave peak values 9dB above average values - peak vaules therefore complied with 47 CFR part 15.35.b (i.e. no more than 20dB above average limits.)													


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4.4 Radiated Emissions Results (above 30MHz)

Test Equipment:	Factor Set 1:	HFBIOLOG	RG214	25 m cable
	Factor Set 2:	LOOP	RG214	100 m cable

Radiated Emissions

Company: Agricultural Technology Ltd.										Product: Pegasus Walk Through Antenna				
Date: 28 September 2000										Test Eng: Dave Smith				
Ports:														
Test: ANSI C63.4:1992 using limits of FCC_C														
Ports:														
Test:														
Test	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Total Level dBuV/m	Limit FCC_C dBuV/m	Margin FCC_C dB	Limit	Margin	Notes
	1	1	3	1	30.100	V	15.4	19.6	35.0	40.0	5.0			
	1	1	3	1	30.100	H	6.2	19.6	25.8	40.0	14.2			
	1	1	3	1	38.740	V	20.6	14.6	35.2	40.0	4.8			
	1	1	3	1	38.740	H	9.1	14.6	23.7	40.0	16.3			
	1	1	3	1	54.900	V	20.2	7.9	28.1	40.0	11.9			
	1	1	3	1	54.900	H	22.6	7.9	30.5	40.0	9.5			
	1	1	3	1	60.796	V	19.6	7.8	27.4	40.0	12.6			
	1	1	3	1	60.796	H	21.3	7.8	29.1	40.0	10.9			
	1	1	3	1	81.050	V	30.1	8.8	38.9	40.0	1.1			
	1	1	3	1	81.050	H	26.5	8.8	35.3	40.0	4.7			
	1	1	3	1	95.847	V	16.8	11.9	28.7	43.5	14.8			#1
	1	1	3	1	95.847	H	15.3	11.9	27.2	43.5	16.3			#1
	1	1	3	1	136.076	V	16.8	13.4	30.2	43.5	13.3			
	1	1	3	1	136.076	H	11.3	13.4	24.7	43.5	18.8			
	1	1	3	1	140.731	V	6.3	13.1	19.4	43.5	24.1			
	1	1	3	1	140.731	H	3.3	13.1	16.4	43.5	27.1			
	1	1	3	1	162.500	V	15.3	12.4	27.7	43.5	15.8			
	1	1	3	1	162.500	H	19.1	12.4	31.5	43.5	12.0			
	1	1	3	1	175.123	V	11.6	12.1	23.7	43.5	19.8			
	1	1	3	1	175.123	H	14.6	12.1	26.7	43.5	16.8			
	1	1	3	1	509.870	V	-1.0	21.9	20.9	46.0	25.1			
	1	1	3	1	509.870	H	0.6	21.9	22.5	46.0	23.5			
Results					Minimum Margin PASS/FAIL					1.1 dB PASS				
Notes		Comments and Observations												
#1		Results of screened room scans shown in plot 7 and plot 8. Measured with 10kHz bandwidth because of high ambient signal. In screened room 120kHz and 10kHz bandwidth measurements gave same result at this frequency.												

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Chase EMS 6.21

Notes

Analyse 000929 C5N Pegasus (Stainless)

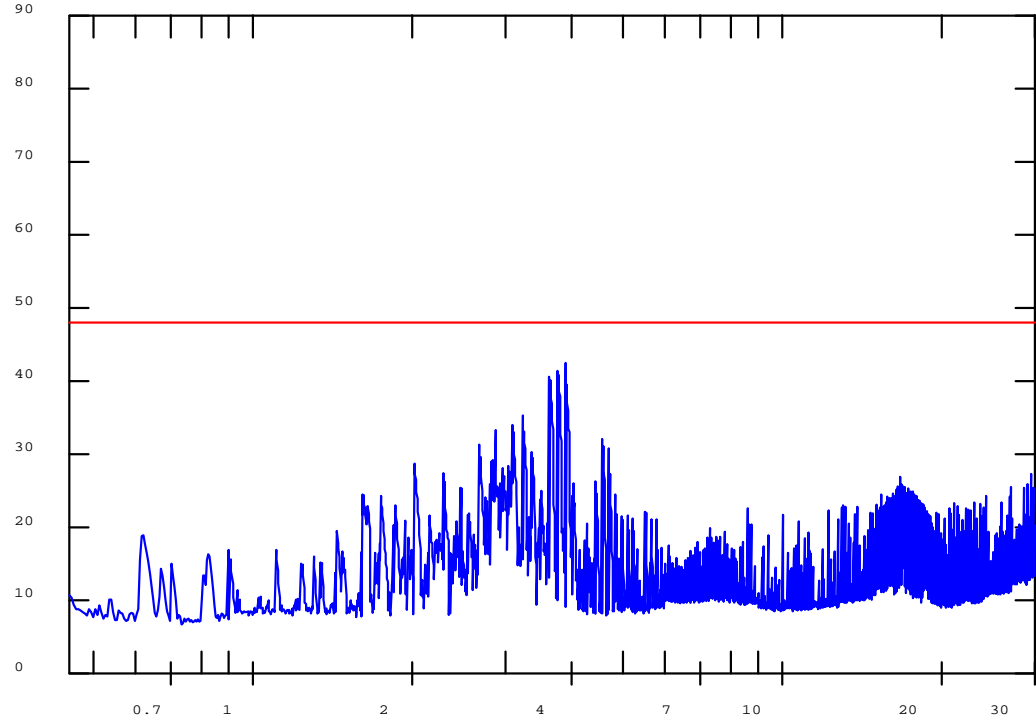
Test: EN55022(B) & Vfg243/1991 Mains Cond (QP Det)

RF level

dBuV

000929 C5N P

Quasi-peak




Log Freq. (0.45 - 30)MHz

Limit FCC B (Subpart B) Conduct

PLOT 1 Conducted Emissions - Neutral (Stainless Steel)

Company:	ATL	Product:	Pegasus
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C) QP
Notes:			
Stainless Steel System			
Line:	Neutral	Attenuator:	10dB PAD
Detector:	QuasiPeak	Operating Mode:	1
LISN:	EMCO	Mod. State:	2
Filename:	C0A027BD.plt		

Frequency List (MHz)

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Chase EMS 6.21

Notes

Analyse 000929 C6L Pegasus (Stainless)

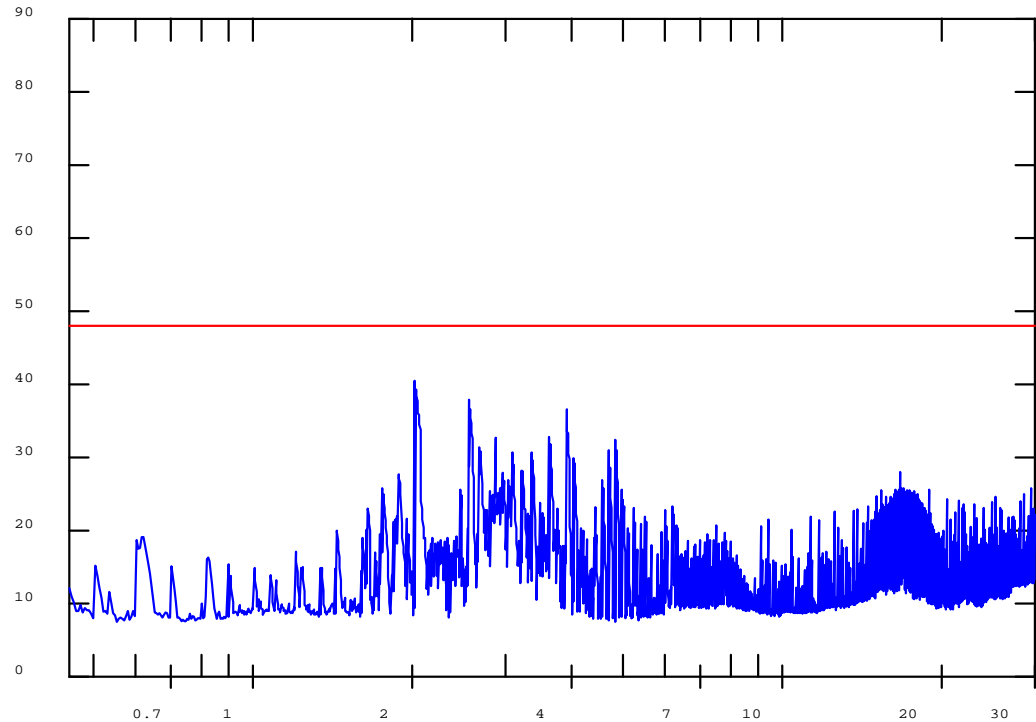
Test: EN55022(B) & Vfg243/1991 Mains Cond (QP Det)

RF level

dBuV

000929 C6L P

Quasi-peak




Log Freq. (0.45 - 30)MHz

Limit FCC B (Subpart B) Conduct

PLOT 2 Conducted Emissions - Live (Stainless Steel)

Company:	ATL	Product:	Pegasus
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C) QP
Notes:			
Stainless Steel System			
Line:	Live	Attenuator:	10dB PAD
Detector:	QuasiPeak	Operating Mode:	1
LISN:	EMCO	Mod. State:	2
Filename:	C0A027C3.plt		

Frequency List (MHz)

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Chase EMS 6.21

Notes

Analyse 000929 C7L Pegasus (Galvanised)

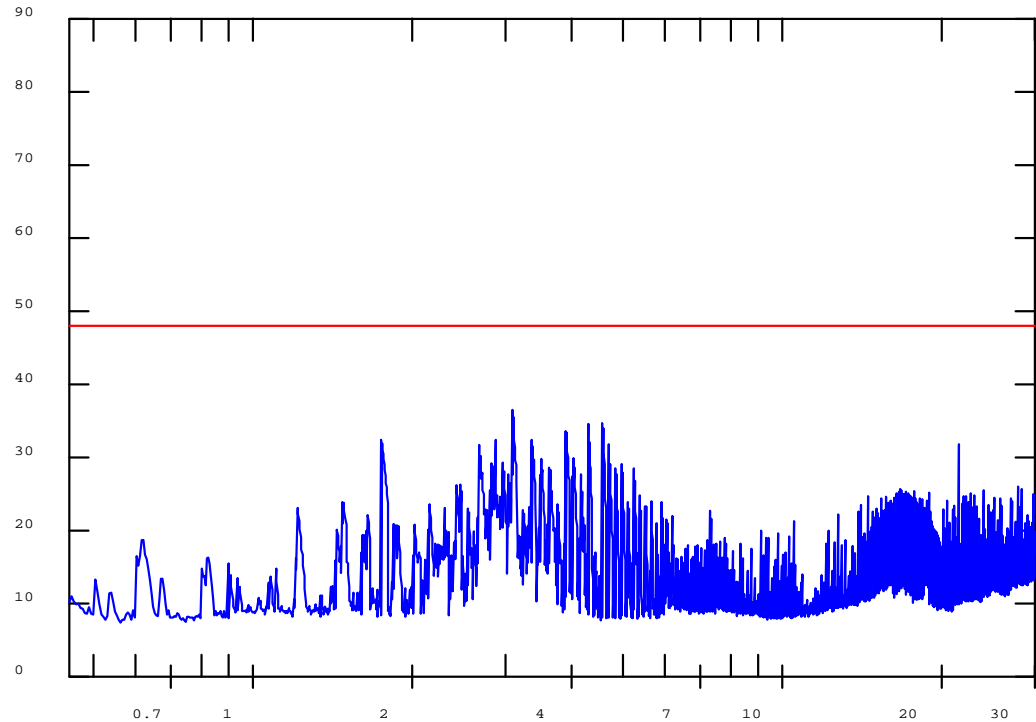
Test: EN55022(B) & Vfg243/1991 Mains Cond (QP Det)

RF level

dBuV

000929 C7L P

Quasi-peak




Log Freq. (0.45 - 30)MHz

Limit FCC B (Subpart B) Conduct

PLOT 3 Conducted Emissions - Live (Galvanised)

Company:	ATL	Product:	Pegasus
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C) QP
Notes:			
Galvanised Steel System			
Line:	Live	Attenuator:	10dB PAD
Detector:	QuasiPeak	Operating Mode:	1
LISN:	EMCO	Mod. State:	2
Filename:	C0A027D4.plt		

Frequency List (MHz)

	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 18 of 22

Chase EMS 6.21

Notes

Analyse 000929 C8N Pegasus (Galvanised)

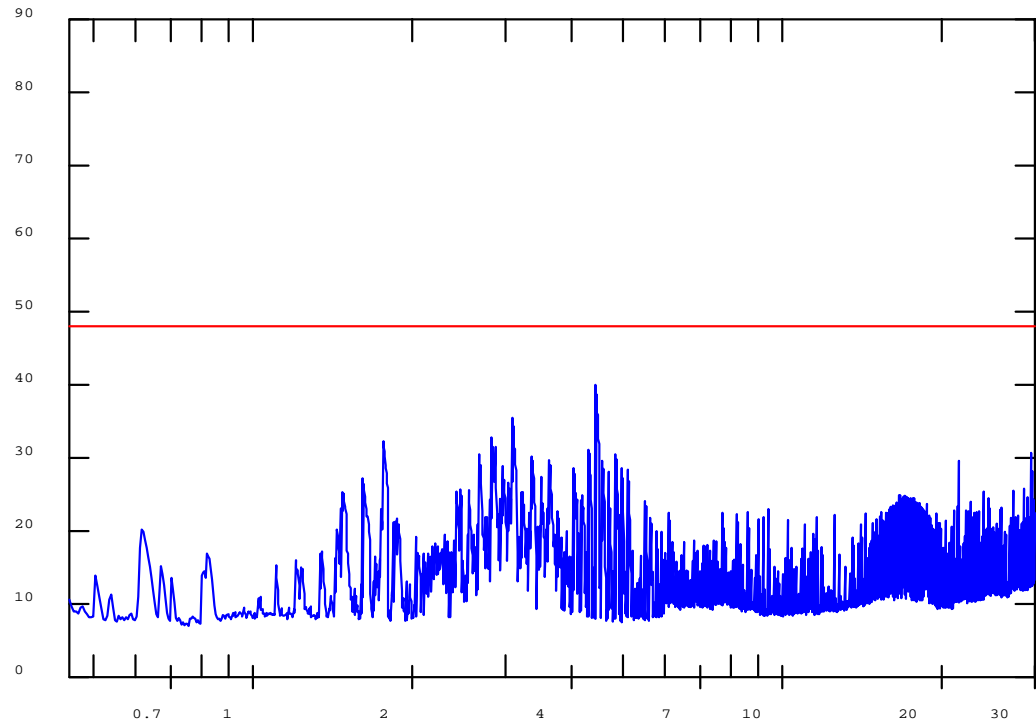
Test: EN55022(B) & Vfg243/1991 Mains Cond (QP Det)

RF level

dBuV

000929 C8N P

Quasi-peak




Log Freq. (0.45 - 30)MHz

Limit FCC B (Subpart B) Conduct

PLOT 4 Conducted Emissions - Neutral (Galvanised)

Company:	ATL	Product:	Pegasus
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C) QP
Notes:			
Galvanised Steel System			
Line:	Neutral	Attenuator:	10dB PAD
Detector:	QuasiPeak	Operating Mode:	1
LISN:	EMCO	Mod. State:	2
Filename:	C0A027DB.plt		

Frequency List (MHz)

	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 19 of 22

Chase EMS 6.21

Notes

Analyse

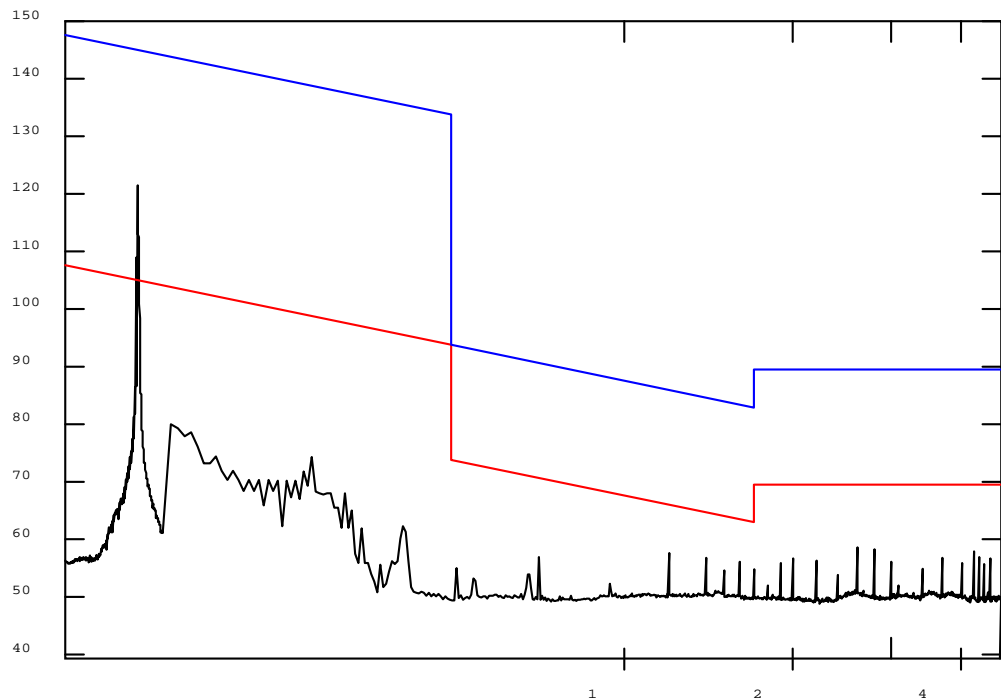
Test: FCC_15C Radaiated 9kHz - 30MHz

RF level

dBuV/m

0009028 H1 P

Quasi-peak




Log Freq. (0.1 - 4.722)MHz

Limit FCC (C) 60dB/dec Radiated

PLOT 5 Radiated Emissions (100kHz to 4.7MHz)

Company:	ATL	Product:	Pegasus (Mild Steel)
Date:	28 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C)
Notes:			
Higher limit = 60dB/decade.			
Lower limit = 40dB/decade.			
Polarisation:	Co-axial	Orientation:	Front
Distance:	3m	Antenna:	Bilog
Height:	1m	Filename:	H0928672.plt
Operating Mode:		1	
Mod. State:		0	

Frequency List (MHz)

	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 20 of 22

Chase EMS 6.21

Notes

Analyse

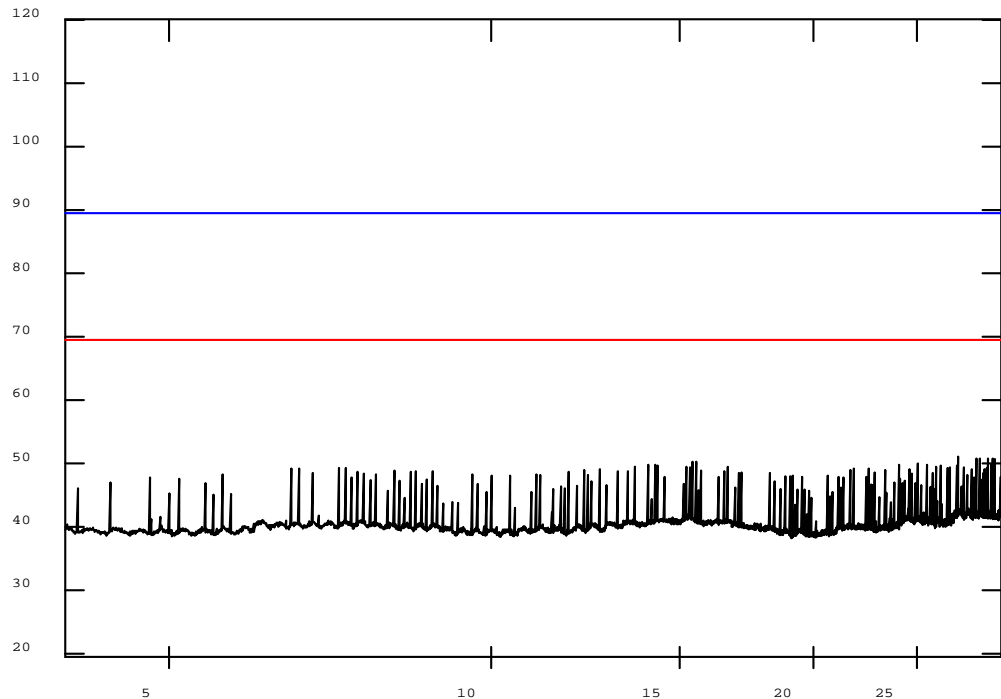
Test: FCC_15C Radaiated 9kHz - 30MHz

RF level

dBuV/m

000928 H2 Pe

Quasi-peak




Log Freq. (4 - 29.969)MHz

Limit FCC (Subpart C) Radiated

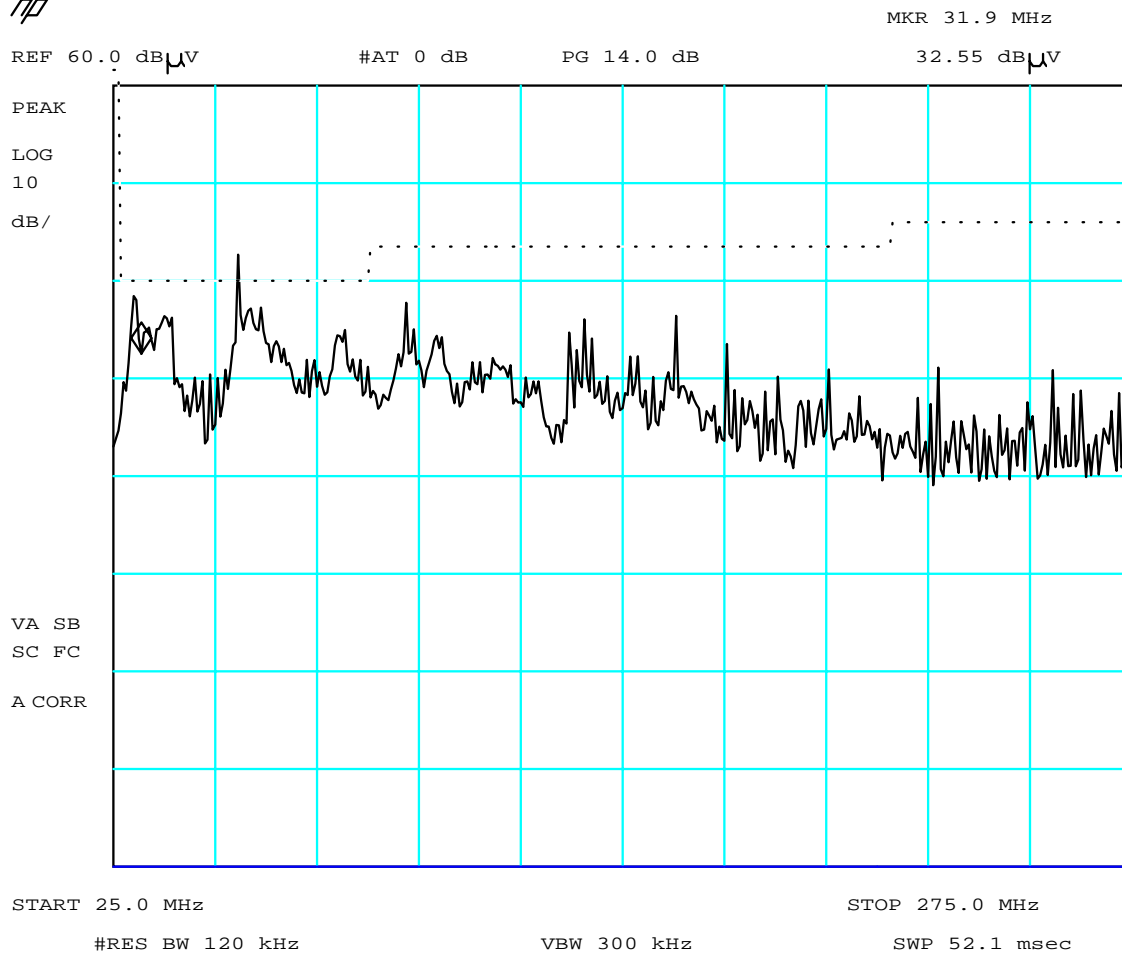
PLOT 6 Radiated Emissions (4MHz to 30MHz)

Company:	ATL	Product:	Pegasus (Mild Steel)
Date:	28 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C)
Notes:			
Higher limit = 60dB/decade.			
Lower limit = 40dB/decade.			
Polarisation:	Co-axial	Orientation:	Front
Distance:	3m	Antenna:	Loop
Height:	1m	Filename:	H0928672.plt
Operating Mode:	1	Mod. State:	0

Frequency List (MHz)

	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 21 of 22


hp



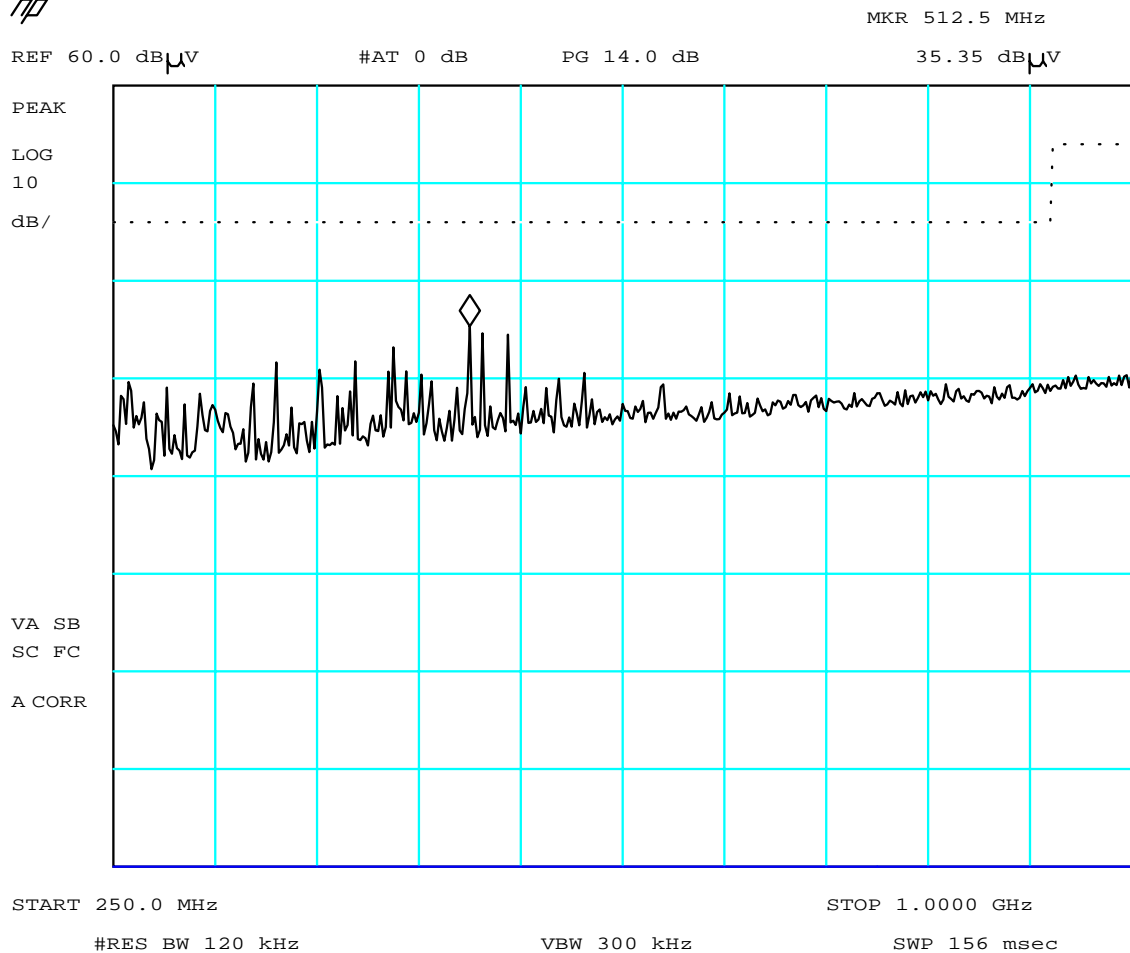
PLOT 7 Radiated Emissions (25MHz to 275MHz)

Company:	ATL	Product:	Pegasus (Mild Steel)
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C)
Notes:			
Good quality screened cable used.			
Mains filter moved close to mains socket.			
Polarisation:	V + H	Orientation:	0 - 360°
Distance:	3m	Antenna:	Bilog
Height:	1m	Filename:	H09293E3.plt
Operating Mode:		1	
Mod. State:		1	

Frequency List (MHz)

	Report No: R1321	FCC ID: PCZ1100	
	Test No: T0284	Test Report	Page: 22 of 22

hp



PLOT 8 Radiated Emissions (250MHz to 1GHz)

Company:	ATL	Product:	Pegasus (Mild Steel)
Date:	29 Sep 00	Test Engineer:	DS
Test:	FCC pt 15	Limit:	FCC (C)
Notes:			
Good quality screened cable used.			
Mains filter moved close to mains socket.			
Polarisation:	V + H	Orientation:	0 - 360°
Distance:	3m	Antenna:	Bilog
Height:	1m	Filename:	H09293FC.plt
Operating Mode:		1	
Mod. State:		1	

Frequency List (MHz)
