CTS Limited

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Certificate of Conformity

Client:

EMS (European) Limited 32 Great Eastern Street London EC3A 2EP

Contact Name:	Dr Jonathan Hughes					
Item Tested:	L5UC	plus Envirostart				
Serial number:	Freezer 0306/35318 Envirostart 2974/1/964/					
Specifications Applied:	EN55011 Class B Conducted Emissions EN55011 Class B Radiated Emissions EN61000-4-4 Fast Transient Bursts EN61000-4-2 Static Discharge EN61000-3-2 Harmonics					
Results:	Conducted Em Radiated Emis Fast Transient Electro Static Harmonics	nissions sions t Bursts Discharge		PASS PASS PASS PASS PASS		
Report Number:	5813	No of Report Pag	ges: 33			
Prepared By:	Dr A J Pratt	Date of Testing:	20.08.2003			
Signature:	him	Date of Report:	20.08.2003			

Directors: Dr A J Pratt & Mrs J Pratt

CTS LTD

EMC Consultants 22, Meadowvale Road Road, Lickey End Bromsgrove, Worcs., B60 1JY Tel: 01527 870270 Fax: 01527 833636 e-mail: ajp@doctoremc.co.uk

		TEST	REPORT	
CLIENT: EMS (European) Ltd 32 Great Eastern Street London EC3A 2EP			Report Number 5813	
CONTACT:	Dr. J	onathan Hughes		
ITEM TESTED):	L5UC-plus Envirostart	For EMS European Ltd	
SERIAL NUMBER:		Frig Freezer 0306/353018	Envirostart 2974/1	1/964/102
SPECIFICATIONS APPLIED:		Checking for EMC Compliant Conducted Emissions Generic EN50082/1 for Immu EN61000-4-2 Static Discharge EN61000-3-2 Harmonics Low Voltage Directive Asse	ce. Generic EN50081/1, EN550 nity Using EN61000-4-4 Fast T e ssed by Client to EN61010	011 Class B for Radiated and ransient Burst
RESULTS:		:- Conducted Emissions Radiated Emissions Fast Transient Burst Static Discharge Harmonics	PASS PASS PASS PASS PASS	1
PREPARED BY	Y: D	r A J PRATT	SIGNED E	sy hat
DATE REPOR	T WR	1TTEN: 22/08/03	DATE OF	TESTING ^{20/08/03}

CONDITIONS OF ISSUE

The results contained within this report apply only to the particular unit tested and to the specifications best suited to the unit under test. The issuing of this test report does not indicate any measure of approval, certification, supervision control or surveillance by CTS of any product. This report is to be used as evidence to support a self certifying document.

TEST SUMMARY TITLE: Using a customers Frig-Freezer Ref. L5UC An 'Envirostart' was fitted and EMC performance recorded For EMS European Ltd. 5813 EMS (European) Ltd **REPORT NO:** CLIENT: P 20/08/03 ADDRESS: 32 Great Eastern Street TEST DATE: London SELF CERTIFY EC3A 2EP **AUTHORITY:** SPECIMEN RECEIVED: 20/08/03 SPECIMEN RETURNED N/A CLIENT LIASON ENGINEER: Dr. J Hughes TEST OBJECTIVE/SPECIFICATION: To check for EMC compliance. Against Generic Standards EN55011 Class B Emissions and EN50082/2 immunity. Immunity use EN61000-4-4 Fast Transient Burst level 3 at 1Kv, EN61000-4-2 Static Discharge level 4 at 4Kv contact, and 8Kv Space. Harmonics EN61000-3-2. Test site location. All tests applied at CTS Chamber in Birmingham UK SYSTEM DESCRIPTION: The set up used a calibrated LISN for conducted emissions and a calibrated antenna at 3M for Radiated emission. The EUT (Equipment under test) consists of a small steel box containing the electronics. The system functions as an 'in-line' control device to limit the energy into small refrigerators etc. The system uses 230v 50 Hz up to 10A. Conducted Emission Plots of the base frig. unit before connection of the EUT were recorded. THE RESULTS IN THIS REPORT ONLY APPLY TO THE SAMPLE SUBMITTED FOR TEST. Summary of Test Results. PASS Conducted Emissions. Using ambient levels as original plot. Radiated Emissions. Using Ambient Trace as original plot PASS Fast Transient Burst Set to 1 KV PASS Static Discharge Set to 4 KV contact and 8 Kv space PASS up to 40th Harmonics see Photo 6 PASS A simple Safety check was performed Using a Standard PAT Test device. Insulation at 500 volts applied Greater than 40M ohm PASS Ground earth integrity with 10A applied Less than 100 m.Ohm PASS

Contact for testing: Dr A. J. Pratt Telephone Number 01527 870270

See Photo 8

1.0 Conducted Emissions

1.1 Test Detail

A number of preliminary tests are completed to establish worse case conditions prior to recording the measurements. Background noise is reduced as far as possible by fitting filters and other suppression devices prior to the mains input to the LISN. Where EUT's are to be powered by mains feeds in metal conduits a screen lead is used between the LISN and the EUT. A background noise plot was produced in peak and average format. EUT plots were then produced in peak and average formats. EUT = Equipment Under Test.

1.2 Test Method

The EUT is powered up via a suitable calibrated LISN, the EMI receiver is initially set up to measure wide band quasi peaks in the range 150 KHz. to 30 MHz. If the reading is at least 6 dB,s below the recorded limit no further QP measurements are made. If the reading is within 6 dB,s of the recorded limit, or over, a narrow band QP measurement is taken.

These procedures are applied to: A- Line & Neutral.

1.3 Test Configuration

The EUT was mounted on a wooden table 0.8 Mts above the ground plane. The LISN was electrically tied to the ground. The receiver was placed on a wooden table and connected by 50 ohm coaxial cable to the LISN.

1.4 Pass Criteria

EUT must show levels at least 10dB below the limit line on Quasi peak measurements.

1.5 Results See plots ems 10,11, & 12. Dat See Photos 1,2,& 3. Plot16 is with a different small transformer. QP not applied as Peak is same as previous plots.

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2. Radiated Emissions

2.1 Test Method

The emissions were measured using a wide band antenna placed approximately 3 metres from the EUT. The output of the antenna was fed into the EMI test receiver which in turn was being driven by a computer.

The initial reading taken by the receiver is of peak reading, a final quasi peak reading only being necessary where the peak reading is within 6dB of the limit or exceeding the limit level. Where readings are high or within 6dBs of the limit and focused reading is taken.

2.2 Test Configuration

The antenna is placed on the ground 3 meters from the EUT. The EUT is free standing on the ground. The signals are passed via a coupling cable to the receiver. Background measurements are taken and recorded in both vertical and horizontal antenna positions. Some preliminary tests, unrecorded are performed to establish worse case conditions.

2.3 Pass Criteria

EUT must show a level below the limit line, in quasi peak measurements at 120KHz Bandwidth. Ambient conditions MUST be taken into account when tested in an uncontrolled environment.

2.4 Test Details

Tests were performed over a frequency range of 30-1000 MHz, with the antenna in horizontal then vertical polarisation.

2.5 Test Results See plots ems 13 & 14 .dat See Photos 4 & 5

1	Background noise	Vertical	30-1000 MHz	
2	unit operational	Vertical	30-1000 MHz	pass
3				
4				
5	Background noise	Horizontal	30-1000 MHz	
6	Unit operational	Horizontal	30-1000 MHz	pass
7				
8				

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3.0 Immunity to Fast Transient Bursts EN61000-4-4

3.1 Test Method

The immunity of the EUT was submitted for test to fast transient bursts and was assessed in accordance with the methods given in specification EN61000-4-4

The tests were performed on the EUT and subjected to fast transient using a fast transient burst generator via:-

A) By direct injection into Power Leads.

3.2 Test Configuration

A test voltage of 1Kv Bursts in positive and negative directions was applied to the EUT Pass Criteria

There must be no observed change in EUT performance during and after tests.

3.5 Test Results See Photo 7 3.6 Category

PASS FAIL

	1	Х	2		3		4	
--	---	---	---	--	---	--	---	--

Category 1 = No Change

Category 2 = There was change but system automatically reverts back to normal operation on removal of test

Category 3 = There was change and system required manual reset before resuming to normal operation

Category 4 = Permanent damage NON compliant

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Immunity to electrostatic Discharge (ESD) EN61000-4-2 4

4.1 Test Method

The immunity of the EUT was submitted to electrostatic discharge and assessed in accordance with the methods given in specification EN 61000-4-2

4.2 Test Configuration

Via test probe Onto various points on the case.

4.3 Test Details

Two variations of the tests were applied to the EUT, this consists a contact discharge with a charge voltage of 4kV using + and - polarities, then a discharge is applied with a charge voltage of 8kV + and - polarities.

The discharges of both types and positive and negative polarity, were carried out to the following test points:

Case of EUT.

4.4 Test Results See Photo 9

Category

PASS FAIL

1	Х	2	3		4		
---	---	---	---	--	---	--	--

See explanation of categories on previous page. Category Pass

4.5 Pass Criteria

The System moves into start mode and carries on normally after test removed

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The list below indicates the equipment used and last calibration dates of the equipment used during the EMC testing.

An X indicates item of equipment was used.		
EQUIPMENT USED	Last CALIBRATION DATE	
LICN Chara MN2025		V
Serial Number 2564	Nov 2002	^
Schaffner Fast Transient Burst Generator Model NSG2053 Serial Number 1315	Jan 2003	X
Rhode & Schwarz EMI Rx. Serial Number 024 Complete with antenna and coupling cables	Aug 2002	X
Schaffner Coupling Clamp	N/A	
Wavetec Multimeter Model 093	N/A	X
AllTech Current Probe Model 93511-1L Calibrated against LISN	Oct 2001	
AVO MEGGER PAT-2/2 Serial Number 970376	June 1997	
LISN 200A per Phase	Oct 2001	
AV 2200 Harmonics Flicker	Jan 2002	X
Schaffner Static Discharge Gun Model NSG435 Serial Number 5514	Nov 2002	X

NOTES

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Glossary of Terms Used in this Report

EUT	Equipment Under Test
MHz	Hz x E6
GHz	Hz x E12
KHz	Hz x E3
PFC	Power Factor Correction (Cos. 0)
А	Amperes
V	Volts
Kv	Kilo-volts
Н	Henries (Inductance)
C	Farads (Capacitance)
mH	H x E -3
uH	H x E -6
mF	C x E -3
uF	C x E -6
Rt	Rise Time
Pw	Pulse Width
Ft	Fall Time
S	Seconds
mS	S x E-3
uS	S x E -6
dB/uv	Decibel/micro-volts. Ratio with 1 uv Reference
Р	Peak
QP	Quasi Peak
Av	Average

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Conducted Emissions

EUT:	L5UC-Bare. Basic Freezer Unit Serial Number 0306/353018	
Manuf:	Williams UK	
Op Cond:	CTS Chamber Birmingham UK	
Operator:	Dr A.J.Pratt	
Test Spec:	BSEN 55011 Class B Light Commercial Limits	
Comment:	Live Conductor	
	The freezer unit on it's own, no control connected	
Result File:	ems10.dat : New Measurement	
Scan Settings	(1 Range)	

	Free	uencies		1		Receiver Se	ettings		
Start	Stop)	Step	IF BW	Detector	M-Time	Atten	OpRge	
150kHz	3014	IHz	0.8%	10kHz	PK+AV	20msec	Auto	60dB	
Transducer	No.	Start	Stop		Name				
	21	150kHz	3	OMHz	LSN0930A				
Prescan Measu	urement:	Detectors:	XPM	(I + AV					
		Meas Time:	see s	scan settings					
		Subranges:	25						
		Acc Margin:	6 dB						



Conducted	d Emissio	ns						
EUT:	L5UC	-Bare. Basic	Freezer Unit Serial N	umber 0306/353	018			
Manuf:	William	ms UK						
Op Cond:	CTS	Chamber Birming	ham UK					
Operator:	Dr A.	J.Pratt						
Test Spec:	BSEN	55011 Class B	Light Commercial Lim	nits				
Comment:	Live C	conductor						
	The fr	reezer unit on it's ow	wn, no control connecto	ed				
Result File:	ems10	0.dat : New Measur	ement					
Scan Settings	(1 Ra	inge)						
	Freque	encies			Receiver Se	ettings —	0.0	
Start	Stop	Ste	ep IF BW	Detector	M-Time	Atten	OpRge	
150kHz	30MHz	z 0.8	3% 10kHz	PK+AV	20msec	Auto	60GB	
Transducer	No.	Start	Stop	Name				
	21	150kHz	30MHz	LSN0930A				
Prescan Measu	rement:	Detectors:	XPK/+AV					
		Meas Time:	see scan settings					
		Subranges:	25					
		Acc Margin:	6 dB					
Peak Search Re	esults							
Frequency	PK Level	PK Limit	PK Delta	Ref. Offset				
MHz	dBµV	dBµV	dB	dB				
No results								
Frequency	AV Level	AV Limit	AV Delta	Ref. Offset				
MHz	dBµV	dBµV	dB	dB				

No results

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Conducted Emissions

EUT:	L5UC-Bare. Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Neutral Conductor

Result File: ems11.dat : New Measurement

Acc Margin:

Scan Settings (1 Range) Frequencies **Receiver Settings** Start IF BW Stop Step Detector M-Time Atten OpRge 150kHz 30MHz 0.8% 10kHz PK+AV 20msec Auto 60dB Stop Transducer No. Start Name 21 150kHz 30MHz LSN0930A Prescan Measurement: Detectors: XPKI+AV Meas Time: see scan settings Subranges: 25

6 dB



Conducted Emissions

EUT:	L5UC-Bare. Basic Freezer Unit Serial Number 0306/353018	
Manuf:	Williams UK	
Op Cond:	CTS Chamber Birmingham UK	
Operator:	Dr A.J.Pratt	
Test Spec:	BSEN 55011 Class B Light Commercial Limits	
Comment:	Neutral Conductor	

Result File: ems11.dat : New Measurement

Scan Settings (1 Ra		ge) cies			Receiver Se	ettings		
Start 150kHz	Stop 30MHz	Step 0.89	b IF BW % 10kHz	Detector PK+AV	M-Time 20msec	Atten Auto	OpRge 60dB	ľ
Transducer	No. 21	Start 150kHz	Stop 30MHz	Name LSN0930A				
Prescan Measure	ment:	Detectors: Meas Time: Subranges: Acc Margin:	X PK J + AV see scan settings 25 6 dB					
Peak Search Res	ults							
Frequency MHz	PK Level dBµV	PK Limit dBµV	PK Delta dB	Ref. Offset dB				
No results								
Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB	Ref. Offset dB				

No results

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Conducted Emissions

EUT:	L5UC-plus Envirostart, Default. Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Neutral Conductor

Result File: ems12.dat : New Measurement

Scan Settings (1 Range) Frequencies **Receiver Settings** Í IF BW Start Stop Step OpRge Detector M-Time Atten 150kHz 30MHz 0.8% 10kHz 60dB PK+AV 20msec Auto Transducer No. Start Stop Name 21 150kHz 30MHz LSN0930A Final Measurement: Detectors: X QP / + AV Meas Time: 1sec Subranges: 25 Acc Margin: 6dB



Conducted Emissions

EUT:	L5UC-plus Envirostart, Default. Basic Freezer Unit Serial Number 0306/35301
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Neutral Conductor

Result File:

ems12.dat : New Measurement

Scan Settings (1 Ra		nge) ncies			Receiver Se	ettings —		
Start 150kHz	Stop 30MHz	St 2. 0.8	ep IF B 3% 10kh	W Detector Hz PK+AV	M-Time 20msec	Atten Auto	OpRge 60dB	1
Transducer	No. Start 21 150kHz		Stop 30MHz	Name LSN0930A				
Final Measurement:		Detectors: Meas Time: Subranges: Acc Margin:	X QP / + AV 1sec 25 6 dB					
Final Measurem	nent Results							
Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB	Ref. Offset dB				
0.17732 0.22882 0.23623	56.81 55.41 54.98	64.61 62.49 62.23	7.80 7.08 7.25	-51.66 -49.22 -50.67				

0.34354	50.80	59.12	8.32	-47.41
0.35467	50.98	58.85	7.87	-48.64
0.45044	49.01	56.87	7.86	-46.59
0.55413	46.72	56.00	9.28	-45.01
0.66559	45.78	56.00	10.22	-45.08
0.84533	45.28	56.00	10.72	-44.04
1.03166	42.09	56.00	13.91	-45.78
Frequency	AV Level	AV Limit	AV Delta	Ref. Offset
MHz	dBµV	dBµV	dB	dB

No results

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20 Aug 2003 09:36

8

Conducted Emissions

EUT:	L5UC-plus Envirostart, Default/-2.6 Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Live Conductor

Result File:

ems15.dat : New Measurement

Scan Settings	(1	Range)		_		Receiver Se	ettings		
Start 150kHz	Sto 30	op MHz	Step 0.8%	IF BW 10kHz	Detector PK+AV	M-Time 20msec	Atten Auto	OpRge 60dB	ł
Transducer	No.	Start	Stop		Name				
	21	150kHz	:	30MHz	LSN0930A				
Final Measurement:		Detectors:	xc	PI+AV					
		Meas Time:	1se	C					
		Subranges:	25						
		Acc Margin	6d	R					



Conducted Emissions

EUT:	L5UC-plus Envirostart, Default/-2.6 Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Live Conductor

Result File:

ems15.dat : New Measurement

Scan Settings (1 Ran Frequen		nge) ncies	Receiver Settings				
Start	Stop	Ste	ep IF BW	Detector	M-Time	Atten	OpRge
150kHz	30MHz	3.0	3% 10kHz	PK+AV	20msec	Auto	60dB
Transducer	No.	Start	Stop	Name			
	21	150kHz	30MHz	LSN0930A			
Final Measurement:		Detectors:	X QP / + AV				
		Meas Time:	1sec				
		Subranges:	25				
		Acc Margin:	6 dB				
Final Measurem	ent Results						
Frequency	QP Level	QP Limit	QP Delta	Ref. Offset			
MHz	dBµV	dBµV	dB	dB			
0.15	56.66	66.00	9.34	-49.35			
0.22164	55.08	62.76	7.68	-48.89			
0.25993	52.62	61.43	8.81	-47.21			

0.34906	50.87	58.98	8.11	-49.00
0.35185	50.69	58.92	8.23	-46.65
0.51578	48.12	56.00	7.88	-47.33
0.54104	46.58	56.00	9.42	-45.44
0.7208	44.91	56.00	11.09	-43.86
0.81881	44.41	56.00	11.59	-44.37
1.11723	42.43	56.00	13.57	-46.07
Frequency	AV Level	AV Limit	AV Delta	Ref. Offset
MHz	dBµV	dBµV	dB	dB

No results

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Conducted Emissions

EUT:	L5UC-plus Envirostart, Default/-2.6 Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Neutral Conductor
Result File:	ems16.dat : New Measurement

Scan Settings	(1 Free	Range) Iuencies				Receiver Se	ttinas		
Start 150kHz	Stop 30M	Hz	Step 0.8%	IF BW 10kHz	Detector PK+AV	M-Time 20msec	Atten Auto	OpRge 60dB	1
Transducer	No. 21	Start 150kHz	Stop 30	MHz	Name LSN0930A				
Prescan Measu	irement:	Detectors:	X PK	/+ AV					

25

6 dB

Subranges: Acc Margin:



Conducted Emissions

EUT:	L5UC-plus Envirostart, Default/-2.6 Basic Freezer Unit Serial Number 0306/353018
Manuf:	Williams UK
Op Cond:	CTS Chamber Birmingham UK
Operator:	Dr A.J.Pratt
Test Spec:	BSEN 55011 Class B Light Commercial Limits
Comment:	Neutral Conductor

Result File:

ems16.dat : New Measurement

Scan Settings (1 Range) Frequencies **Receiver Settings** IF BW Start Step Stop Detector M-Time Atten OpRge 150kHz 30MHz 0.8% 60dB 10kHz PK+AV 20msec Auto Stop Transducer No. Start Name 150kHz 21 30MHz LSN0930A Prescan Measurement: Detectors: XPK/+AV Meas Time: see scan settings 25 Subranges: Acc Margin: 6 dB

Peak Search Results

Frequency	PK Level	PK Limit	PK Delta	Ref. Offset
MHz	dBµV	dBµV	dB	dB
0.17175	66.04*	64.87	-1.17	-60.12
0.227	64.73*	62.56	-2.17	-60.24
0.23249	64.25*	62.36	-1.89	-58.35
0.3249	59.74*	59.58	-0.16	-56.67
0.42263	59.07*	57.40	-1.67	-57.50
0.49961	57.17*	56.01	-1.16	-55.75
0.63452	54.78	56.00	1.22	-52.70
0.67628	54.01	56.00	1.99	-50.81
0.81881	50.38	56.00	5.62	-50.34
Frequency	AV Level	AV Limit	AV Delta	Ref. Offset
MHz	dBµV	dBµV	dB	dB

No results

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20 Aug 2003 11:25

Radiated	Emissio	ns								
EUT: Manuf: Op Cond: Operator:	L5UC-plus Envirostart,Default. Basic Freezer Unit Serial Number 0306/353018 Williams UK CTS Chamber in Birmingham Dr A.J.Pratt									
Test Spec:	BSE	BSEN55011 Class B Limits Antenna at 3 Mts								
Comment:	Verti	cal								
Result File:	EUT Running Normally ems13.dat : New Measurement									
Scan Settings	(1 R — Frequ Stop	ange) Iencies ———	Step	IF BW	Detector	 Receiver Se M-Time 	Receiver Settings M-Time Atten OpRge			
30MHz	1000MHz 0.4%		0.4%	120kHz	z PK	20msec	Auto	60dB		
Transducer	No. 21	Start 30MH	s	top 1000MHz	Name 55022plus	Amp				
Prescan Measur	rement:	Detector: Meas Time: Subranges: Acc Margin:		X PK see scan settin 25 6 dB	ngs					



20 Aug 2003 10:00

CTS for EMS European Ltd

Radiated	Emission	าร						
EUT: Manuf: Op Cond: Operator: Test Spec: Comment: Result File:	L5UC-plus Envirostart,Default. Basic Freezer Unit Serial Number 0306/353018 Williams UK CTS Chamber in Birmingham Dr A.J.Pratt BSEN55011 Class B Limits Antenna at 3 Mts Vertical EUT Running Normally ems13.dat : New Measurement							
Scan Settings Start 30MHz	(1 Ra Freque Stop 1000M	nge) ncies SI Hz D.	ep IF BW 4% 120kHz	Detector PK	Receiver Se M-Time 20msec	ettings Atten Auto	OpRge 60dB]
Transducer	No. Start 21 30MHz		Stop 1000MHz	Name 55022plusA	mp			
Prescan Measur	ement:	Detector: Meas Time: Subranges: Acc Margin:	X PK see scan settings 25 6 dB					
Peak Search Re	sults							
Frequency MHz	PK Level dBµV/m	PK Limit dBµV/m	PK Delta dB					

No results

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Radiated	Emiss	IONS							
EUT: Manuf:	L5UC-plus Envirostart, Default. Basic Freezer Unit Serial Number 0306/353018 Williams UK								
Op Cond:	CTS Chamber in Birmingham								
Operator:	Dr A.J.Pratt								
Test Spec:	BSEN55011 Class B Limits Antenna at 3 Mts								
Comment:	Ho	orizontal							
	EL	JT Running Normal	У						
Result File:	еп	ns14.dat : New Mea	surement						
Scan Settings	(1	Range)							
	Fre	quencies				 Receiver Set 	ettings -		
Start	Sto	p	Step	IF BW	Detector	M-Time	Atten	OpRge	
30MHz	100	OMHz	0.4%	120kHz	PK	20msec	Auto	60dB	
Transducer	No.	Start	Stop		Name				
	21	30MHz	1(DOOMHz	55022plus	Amp			
Prescan Measu	rement:	Detector:	XP	ĸ					
		Meas Time:	see	scan settings					
		Subranges:	25						
		Acc Margin:	6 d	В					



20 Aug 2003 10:07

Radiated Emissions									
EUT: Manuf: Op Cond: Operator: Test Spec: Comment:	L5UC-plus Envirostart, Default. Basic Freezer Unit Serial Number 0306/353018 Williams UK CTS Chamber in Birmingham Dr A.J.Pratt BSEN55011 Class B Limits Antenna at 3 Mts Horizontal								
Result File: ems14.dat : New Measurement									
Scan Settings	(1 Ra — Freque	ange) encies				- Receiver Se	ttings —		1
Start Sto 30MHz 100		S IHz O	.4%	p IF BW % 120kHz	Detector PK	M-Time 20msec	Atten Auto	OpRge 60dB	
Transducer	No. 21	Start 30MHz	Stop 1000	OMHz	Name 55022plus	Amp			
Prescan Measur	ement:	Detector: Meas Time: Subranges: Acc Margin:	X PK see so 25 6 dB	can settings					
Peak Search Re	sults								
Frequency MHz	PK Level dBµV/m	PK Limit dBµV/m	PK dB	C Delta					

No results

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JULY NOIS 017 SLD 03SI&CHLNY



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