
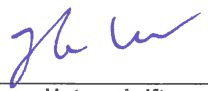
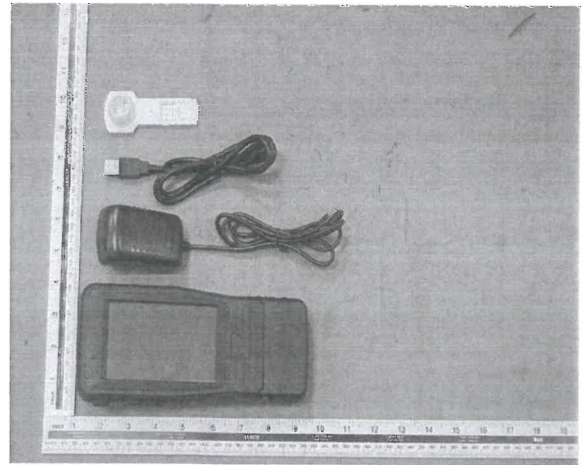


Prüfbericht-Nr.: Test Report No.:	50052904 001	Auftrags-Nr.: Order No.:	164040824	Seite 1 von 32 Page 1 of 32
Kunden-Referenz-Nr.: Client Reference No.:	424145	Auftragsdatum: Order date.:	21 Jul. 2015	
Auftraggeber: Client:	Shenzhen Well Electric Co.,LTD 1-2F, No.227, Hexitun, Hengkeng Guanlan Town, Longhuaxinqu, 518110 Shenzhen City, P.R. China			
Prüfgegenstand: Test item:	Drug Test Analyzer			
Bezeichnung / Typ-Nr.: Identification / Type No.:	WDTP-10			
Auftrags-Inhalt: Order content:	TUV Rheinland - EMC service			
Prüfgrundlage: Test specification:	EN 61326-1:2013 EN 61326-2-6:2013			
Wareneingangsdatum: Date of receipt:	21 July 2015			
Prüfmuster-Nr.: Test sample No.:	A000226899-001			
Prüfzeitraum: Testing period:	Refer to test report			
Ort der Prüfung: Place of testing:	Refer to section 2.1			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
23.08.2016 Dylan Yang Senior Project Engineer 		23.08.2016 Tongle Lee Assistant Manager 		
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date	Name/Stellung Name/Position
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
<p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested</p>				
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				



Test Summary

5.1.1 HARMONICS ON AC MAINS

RESULT: Pass

5.1.2 VOLTAGE FLUCTUATIONS ON AC MAINS

RESULT: Pass

5.1.3 MAINS TERMINAL CONTINUOUS DISTURBANCE VOLTAGE

RESULT: Pass

5.2.1 RADIATED EMISSION

RESULT: Pass

6.2.1 RADIO-FREQUENCY ELECTROMAGNETIC FIELD AMPLITUDE MODULATED (RS)

RESULT: Pass

6.2.2 RADIO-FREQUENCY CONTINUOUS CONDUCTED (CS)

RESULT: Pass

6.2.3 POWER-FREQUENCY MAGNETIC FIELDS

RESULT: Pass

6.3.1 FAST TRANSIENTS (EFT)

RESULT: Pass

6.3.2 SURGE

RESULT: Pass

6.3.3 ELECTROSTATIC DISCHARGES (ESD)

RESULT: Pass

6.4.1 VOLTAGE DIP AND INTERRUPTIONS

RESULT: Pass

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test result

Appendix 2: Measurement uncertainties

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd. (ATC)

F1, Bldg. A, Changyuan New Material Port, Keyuan Road, Science & Industry Park, Nanshan
518057 Shenzhen, P.R. China

Shenzhen Academy of Metrology and Quality Inspection (SMQ)

NETC Building, No. 4 Tongfa Rd., Xili, Nanshan, Shenzhen, China

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Disturbance Voltage (ATC)				
Test Receiver	R&S	ESCS30	100307	2017-01-09
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2017-01-09
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	2017-01-09
RF Coaxial Cable	SUHNER	N-2m	No.2	2017-01-09
Radiated Emission (ATC)				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2017-01-09
Test Receiver	R&S	ESCS30	100307	2017-01-09
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2017-01-09
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2017-01-09
RF Coaxial Cable	Schwarzbeck	N-5m	No.1	2017-01-09
RF Coaxial Cable	Schwarzbeck	N-1m	No.6	2017-01-09
Electrostatic Discharge (ATC)				
ESD Tester	TESEQ	NSG 437	823	2017-01-09
Injected Current (ATC)				
Conducted Immunity Test System	FRANKONIA	CIT-10	126B1121	2017-01-09
CDN	FRANKONIA	CDN-M2/3	A3027020	2017-01-09
6dB Attenuator	Weinschel	WA59-6-33	A329	2017-01-09
150/50 ohms Adaptor	Frankonia	N/A	025	2017-01-09
EM Injection Clamp	FCC	F-203I-23mm	091824	2017-01-09
ISN	Schwarzbeck	CAT5 8158	8158-0035	2017-01-09
EFT, Surge and Voltage Dips (ATC)				
ULTRA COMPACT SIMULATOR	EM TEST	UCS 500 N5	V092810496 8	2017-01-09
Transformer	EM TEST	V4780S2	0109-44	2017-01-09
CAPACITIVE CLAMP	EM TEST	HFK	0509-34	2017-01-09
Radio-Frequency Electromagnetic Field Amplitude Modulated (SMQ)				
Signal Generator	R&S	SMT03	100059	2017-08-15
Voltage Probe	R&S	URV5-Z2	100012	2017-08-15
Field Probe	ETS	HI-6005	121578	2017-08-15
Power Amplifier	AR	250W1000A	335304	2017-08-15
Power Amplifier	MILMEGA	AS0860-75/45	1040084	2017-08-15
Power Meter	R&S	NRVD	100041	2017-08-15
Antenna	AR	AT1080	28568	2017-08-15
Horn Antenna	AR	AT4002A	305754	2017-08-15
Magnetic Field Immunity (ATC)				
Magnetic Field Tester	HAEFELY	MAG100	150577	2017-01-09

3. General Product Information

3.1 Product Function and Intended Use

The **EUTs** (Equipment Under Test) is Drug Test Analyzer for drug test.
For details please refer to the Circuit Diagram & Instruction Manual.

3.2 Ratings and System Details

EUT:	Drug Test Analyzer	POWER SUPPLY
Model Name:	WDTP-10	BY-1202000EU
Rated Input Voltage:	DC 12V or DC 7.4V(via built-in battery)	AC 100-240V
Rated Frequency:	-	50/60Hz
Rated Power:	3W (Max.)	24W (DC 12V, 2.0A)
Protection Class:	III	II

3.3 Independent Operation Modes

The basic operation modes are:

- A. On
 - 1. Charging
 - 2. Measuring
 - 3. Printing
 - 4. Download data to PC
- B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Schematic Diagram.

3.5 Submitted Documents

- Circuit Diagram
- Rating Label
- Construction Drawing
- Instruction Manual
- Bill of Material

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under Test (EUT) was configured to measure their highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Immunity: The equipment under Test (EUT) was configured to have their highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in section 5 & 6.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Model no.	Serial no.
Laptop	Lenovo	ThinkPad X240	N/A
Printer	HP	HP laserjet 1015	CNFG030424

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File. No additional measures were employed to achieve compliance.

5. Test Results EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Harmonics on AC Mains

RESULT:**Pass**

Test procedure	:	IEC 61000-3-2:2005+A1+A2
Class	:	A
Limit	:	Table 1
Measured harmonics	:	1 – 40

While in charging mode, the EUT's rated power is less than 75W and the EUT does not belong to lighting equipment, therefore harmonic current test is not applicable in accordance with Clause 7 of IEC 61000-3-2:2005+A1+A2.

5.1.2 Voltage Fluctuations on AC Mains

RESULT:**Pass**

Test procedure	:	IEC 61000-3-3: 2008
Limit	:	Clause 5
Frequency range	:	0 - 2kHz

While in charging mode, the max.rated input power of the EUTs is about 24W, which unlikely to produce significant voltage fluctuation. Therefore no test was applied.

See clause 6.1***

*** IEC 61000-3-3: 2008, clause 6.1:” ... Tests need not be made on equipment which is unlikely to produce significant voltage fluctuations or flicker. ...”

5.1.3 Mains Terminal Continuous Disturbance Voltage

RESULT:**Pass**

Date of testing	:	2015-10-12
Test standard	:	EN 61326-1: 2013 & EN 61326-2-6: 2013
Basic standard	:	CISPR 11: 2009
Frequency range	:	0.15 - 30MHz
Classification	:	Group 1, Class B Equipment
Limits	:	Table 3 of CISPR 11: 2009
Kind of test site	:	Shielded room

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz
Operation Condition	:	According to Clause 5.2, 5.3 of EN 61326-1:2013 & Clause 5.3.101 of EN 61326-2-6:2013
Operation mode	:	A.1
Artificial hand	:	Not applied
Earthing	:	Not connected

Refer to attached Appendix 1

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated Emission

RESULT:**Pass**

Date of testing	:	2015-10-12
Test standard	:	EN 61326-1: 2013 & EN 61326-2-6: 2013
Basic standard	:	CISPR 11: 2009
Frequency range	:	30 - 1000MHz
Classification	:	Group 1, Class B Equipment
Limits	:	Table 5 of CISPR 11: 2009
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz or DC 7.4V(via built-in battery)
Operation Condition	:	According to Clause 5.2, 5.3 of EN 61326-1:2013 & Clause 5.3.101 of EN 61326-2-6:2013
Operation mode	:	A
Earthing	:	Not connected

Refer to attached Appendix 1

6. Test Results IMMUNITY

6.1 Classification of apparatus

According to EN 61326-2-6:2013, the EUT shall be tested in accordance with Table 101 of IEC 61326-2-6:2013 & Table 1 of EN 61326-1: 2012, and comply with the following performance criterion.

Continuous Disturbance

Radio-Frequency Electromagnetic Field Amplitude Modulated (RS)	Criterion A
Radio-Frequency Continuous Conducted (CS)	Criterion A
Power-Frequency Magnetic Fields	Criterion A

Transient Disturbance

Fast Transients (EFT)	Criterion B
Surge	Criterion B
Electrostatic Discharges (ESD)	Criterion B

Power Supply Alterations

Voltage Dips and Interruptions	Criterion B & C
--------------------------------	----------------------------

6.2 Continuous Disturbances

6.2.1 Radio-Frequency Electromagnetic Field Amplitude Modulated (RS)

RESULT:**Pass**

Date of Testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-3:2006
Criterion	:	A
Frequency Range	:	80 - 1000MHz, 1.4 - 2.7GHz
Test Level	:	3V/m (Unmodulated, r.m.s.) for 80 - 1000MHz 3V/m (Unmodulated, r.m.s.) for 1.4 - 2.0GHz 1V/m (Unmodulated, r.m.s.) for 2.0 - 2.7GHz
Modulation	:	AM 80%, 1kHz sine-wave

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz or DC 7.4V(via built-in battery)
Operation Mode	:	A
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1.

6.2.2 Radio-Frequency Continuous Conducted (CS)

RESULT:

Pass

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-6: 2006
Criterion	:	A
Frequency range	:	0.15 - 80 MHz
Source impedance	:	150Ω
Test level	:	3V (unmodulated, r.m.s.)
Modulation	:	AM 80%, 1kHz sine-wave
Sweep mode	:	automatic
Sweep rate	:	< 1.5×10 ⁻³ decade / sec.

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz
Operation Mode	:	A.1
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1

6.2.3 Power-frequency Magnetic Fields

RESULT:**Pass**

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-8: 2009
Criterion	:	A
Test Frequency	:	50/60Hz
Test level	:	3A/m (r.m.s.)

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz or DC 7.4V(via built-in battery)
Operation Mode	:	A
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1

6.3 Transient Disturbances

6.3.1 Fast Transients (EFT)

RESULT:**Pass**

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-4: 2004
Criterion	:	B
Test level	:	±1kV
Test duration	:	≥60sec
Rise time	:	5/50ns
Repetition frequency	:	5kHz

Test setup

Input Voltage	:	AC 100-240V, 50/60Hz
Operation Mode	:	A.1
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1

6.3.2 Surge

RESULT:**Pass**

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-5: 2005
Criterion	:	B
Source impedance	:	2 Ω
Test level	:	± 0.5 kV
Number of surges	:	5 (for each combination of parameters)
Repetition rate	:	Max. 1/min

Test Setup

Input Voltage	:	AC 100-240V, 50/60Hz
Operation Mode	:	A.1
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1

6.3.3 Electrostatic Discharges (ESD)

RESULT:**Pass**

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-2: 2008
Criterion	:	B
Charge voltage	:	±8.0kV (air discharge) ±4.0kV (contact discharge)
Number of discharges	:	>10

Test Setup

Input Voltage	:	AC 100-240V, 50/60Hz or DC 7.4V(via built-in battery)
Operation Mode	:	A
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Refer to attached Appendix 1

6.4 Power Supply Alterations

6.4.1 Voltage Dip and Interruptions

RESULT:**Pass**

Date of testing	:	2015-10-27
Test Specification	:	EN 61326-1:2013 EN 61326-2-6:2013
Basic Standard	:	IEC 61000-4-11: 2004
Criterion	:	B & C

Test Setup

Input Voltage	:	AC 100-240V, 50/60Hz
Operation Mode	:	A.1
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

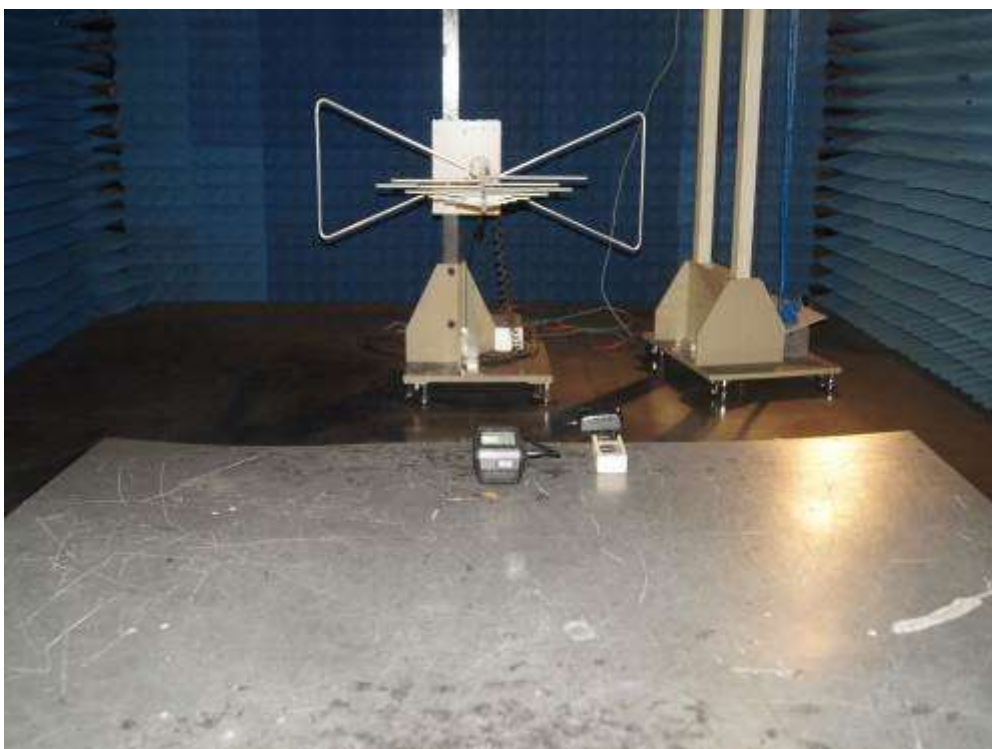
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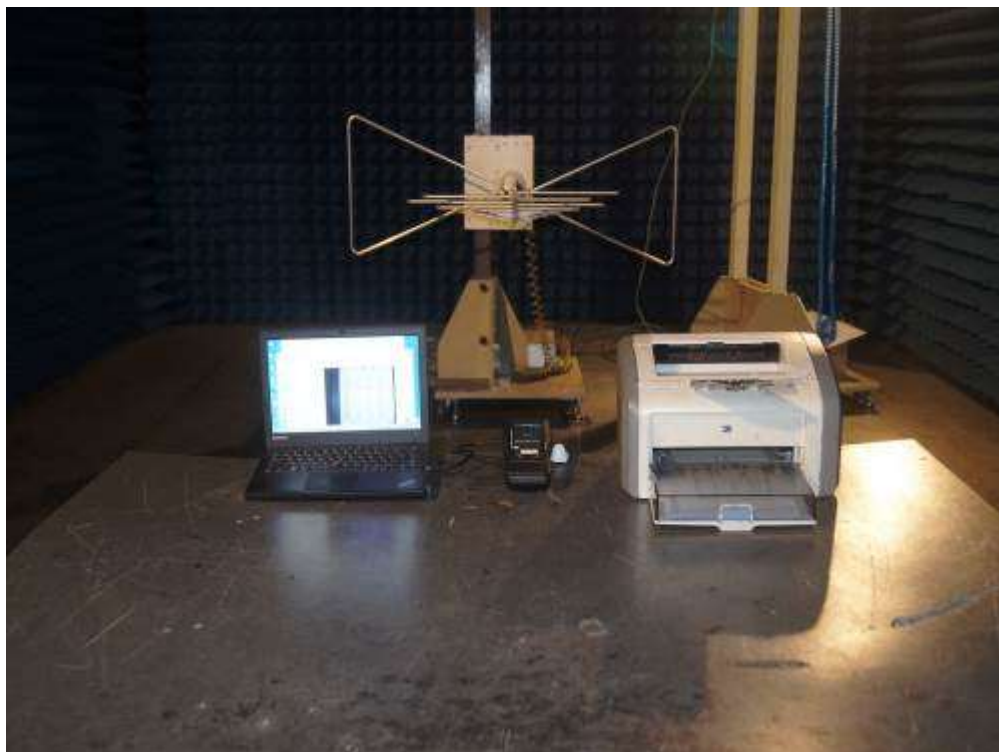
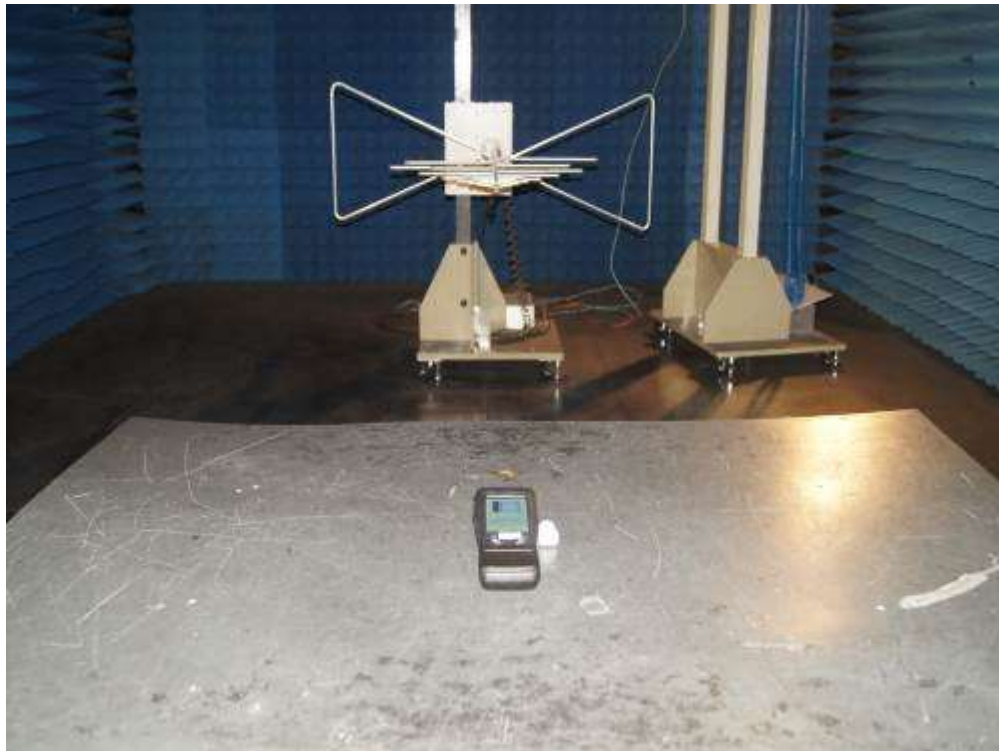
7. Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Emission

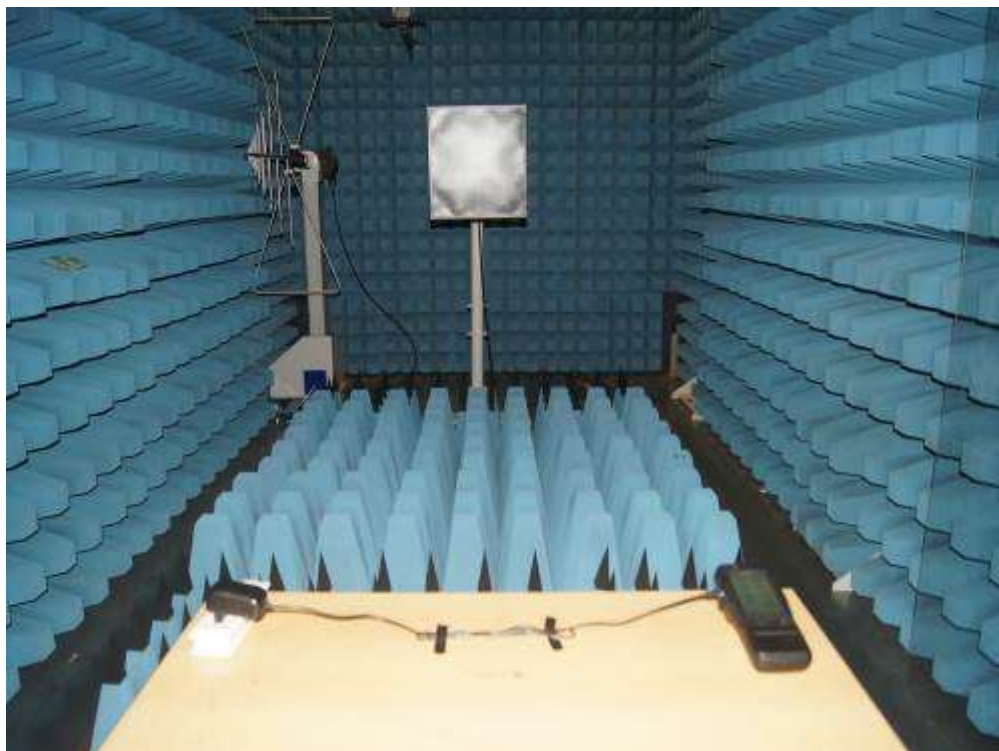
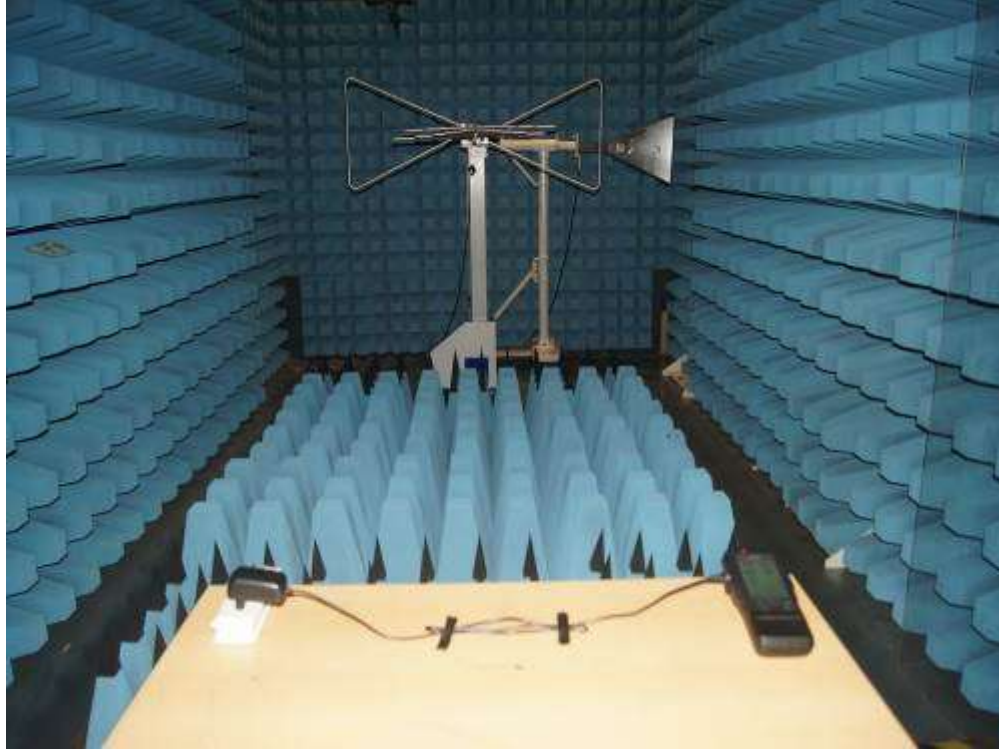


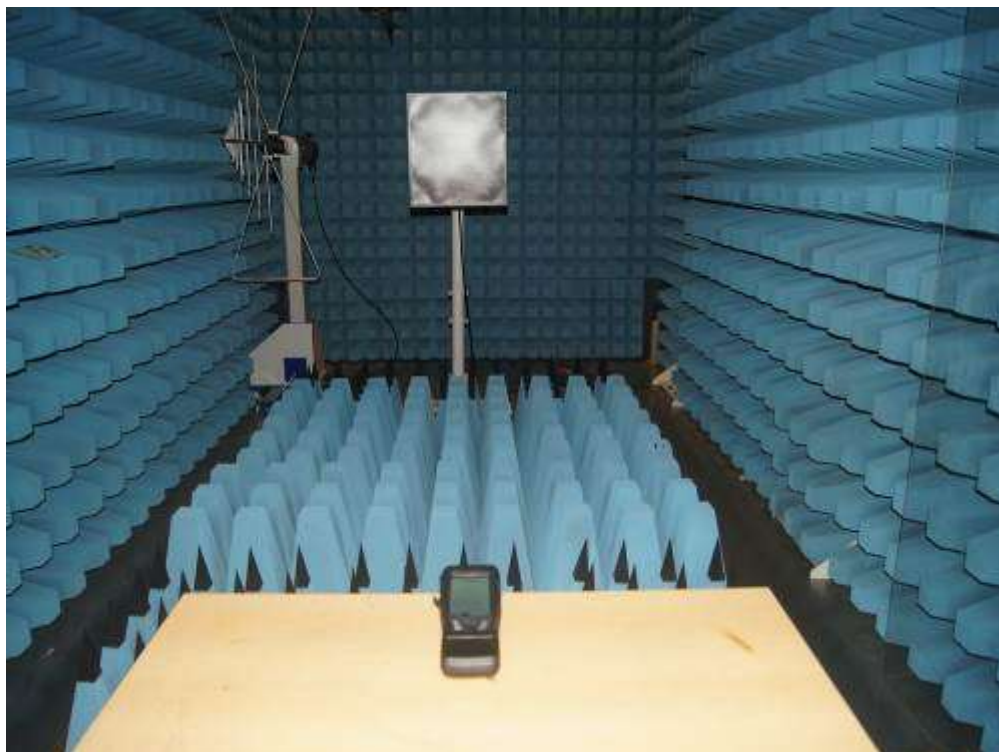
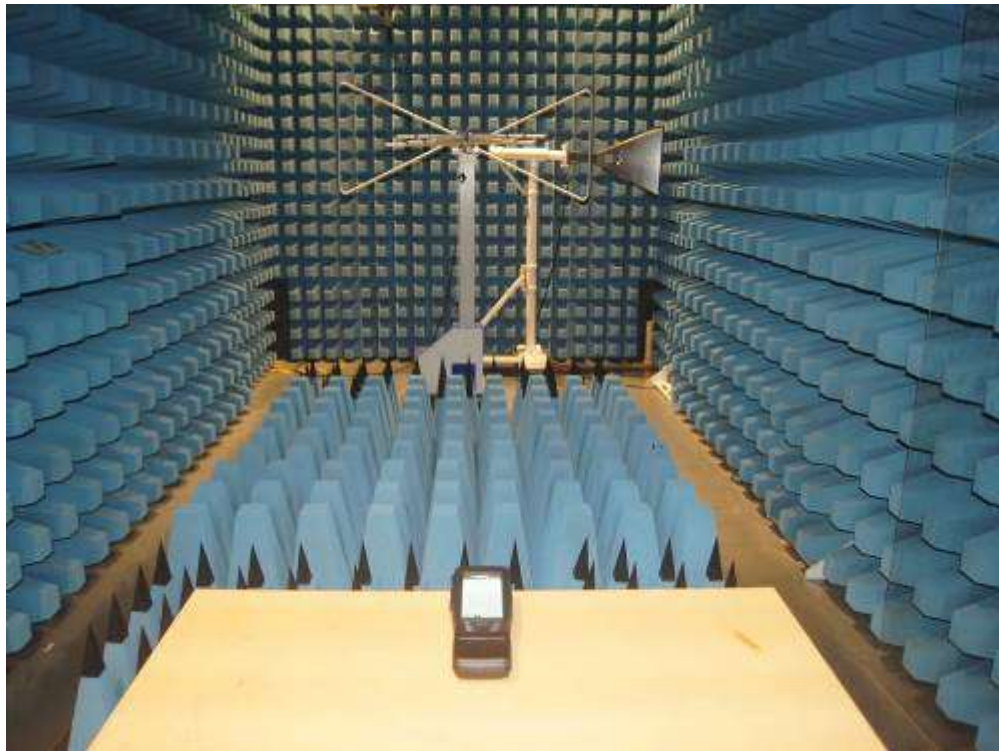
Photograph 2: Set-up for Radiated Emission





Photograph 3: Set-up for Radio Frequency Electromagnetic Field (RS)



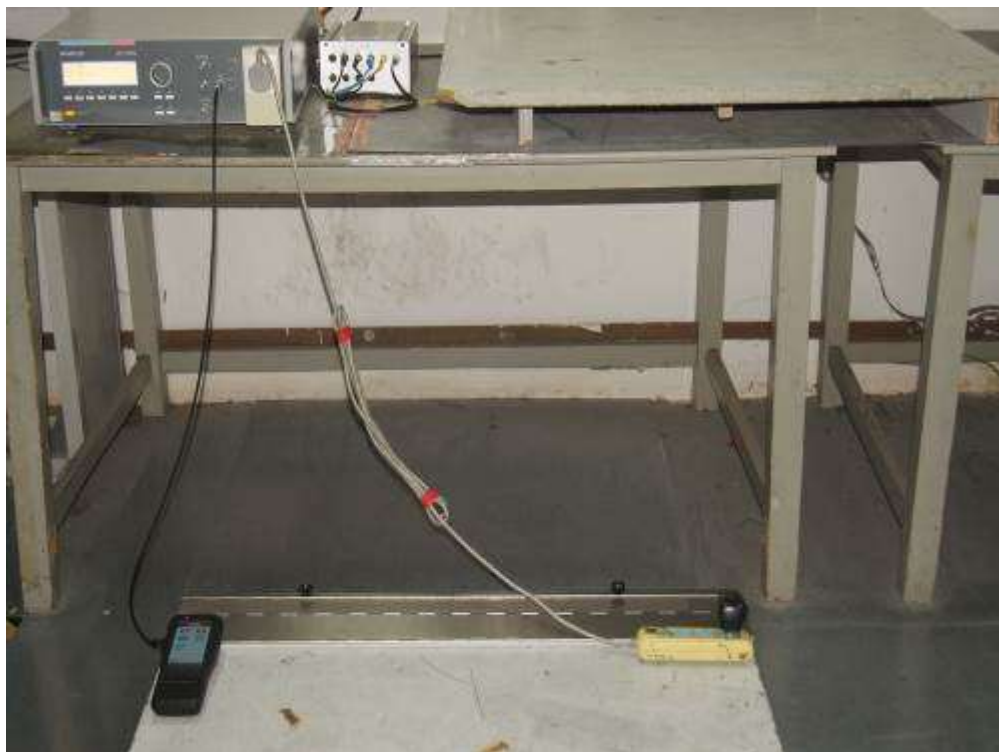




Photograph 4: Set-up for Conducted Susceptibility



Photograph 5: Set-up for EFT



Photograph 6: Set-up for Surge & Voltage Dips on AC Mains



Photograph 7: Set-up for ESD





Photograph 8: Set-up for Power-Frequency Magnetic Fields





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ACCURATE TECHNOLOGY CO., LTD

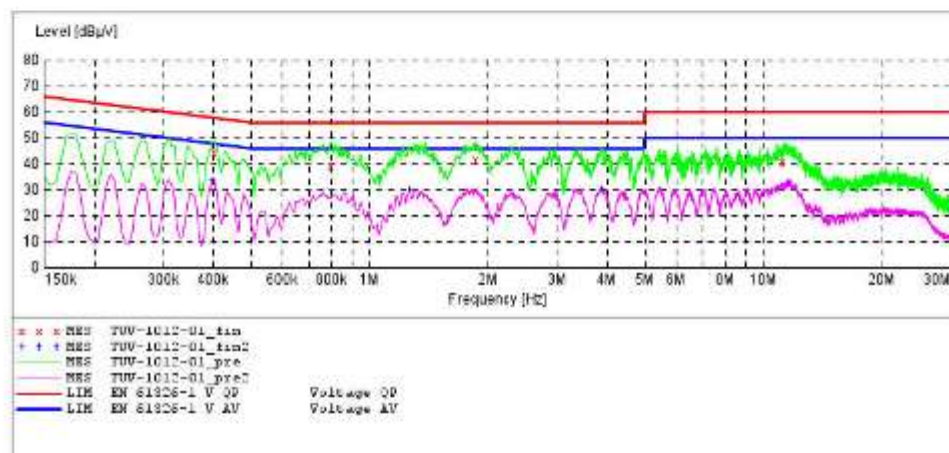
CONDUCTED EMISSION STANDARD EN 61326-1

EUT: Drug Test Analyzer M/N:WOTP-10
 Manufacturer:
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 240V/50Hz
 Comment: Mains Port
 Start of Test: 10/12/2015 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM0 1.70

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average	1.0 s	9 kHz	NSLK8126 2008
			QuasiPeak	1.0 s		
			Average			



MEASUREMENT RESULT: "TUV-1012-01_fin"

10/12/2015

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.405000	44.10	10.7	58	13.7	QP	N	GND
0.800000	39.00	10.8	56	17.0	QP	N	GND
1.865000	41.40	11.0	56	14.6	QP	N	GND
11.215000	40.20	11.3	60	19.8	QP	N	GND

MEASUREMENT RESULT: "TUV-1012-01_fin2"

10/12/2015

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.400000	33.20	10.7	48	14.7	AV	N	GND
1.265000	29.70	10.9	46	16.3	AV	N	GND
3.890000	29.70	11.1	46	16.3	AV	N	GND
11.590000	32.30	11.3	50	17.7	AV	N	GND

ACCURATE TECHNOLOGY CO., LTD

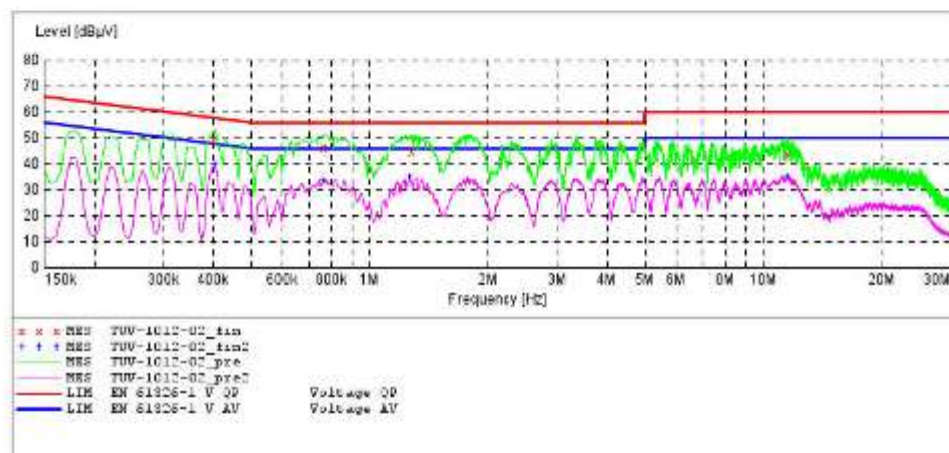
CONDUCTED EMISSION STANDARD EN 61326-1

EUT: Drug Test Analyzer M/N:WOTP-10
 Manufacturer:
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 240V/50Hz
 Comment: Mains Port
 Start of Test: 10/12/2015 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "TUV-1012-02_fin"

10/12/2015							
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.405000	49.00	10.7	58	8.8	QP	L1	GND
0.770000	46.00	10.8	56	10.0	QP	L1	GND
1.285000	44.70	10.9	56	11.3	QP	L1	GND
11.530000	43.40	11.3	60	16.6	QP	L1	GND

MEASUREMENT RESULT: "TUV-1012-02_fin2"

10/12/2015							
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.405000	39.50	10.7	48	8.3	AV	L1	GND
0.765000	33.30	10.8	46	12.7	AV	L1	GND
1.265000	34.60	10.9	46	11.4	AV	L1	GND
11.515000	34.80	11.3	50	15.2	AV	L1	GND



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Fax: +86-0755-26503396

Job No.: Igw2015 #1388

Standard: EN 61326-1

Test item: Radiation Test

Temp.: C/Hum.(%) 23 C/48%

EUT: Drug Test Analyzer

Mode: A.2

Model: WDTP-10

Manufacturer:

Polarization: Vertical

Power Source: DC 7.4V

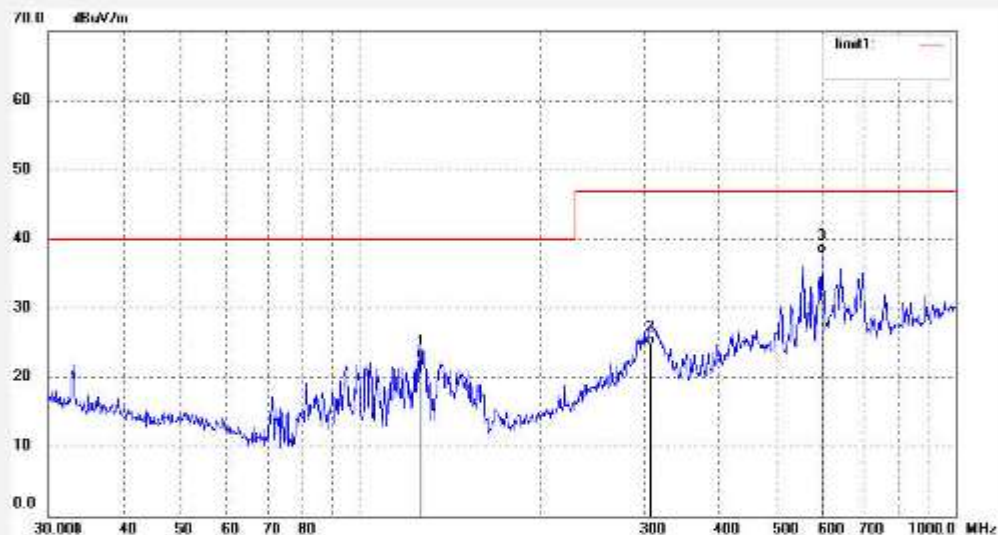
Date: 15/10/12/

Time:

Engineer Signature: PEI

Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	128.7723	38.38	-13.78	22.80	40.00	-17.40	QP			
2	306.7536	33.82	-9.14	24.88	47.00	-22.32	QP			
3	595.1326	40.99	-3.02	37.97	47.00	-9.03	QP			



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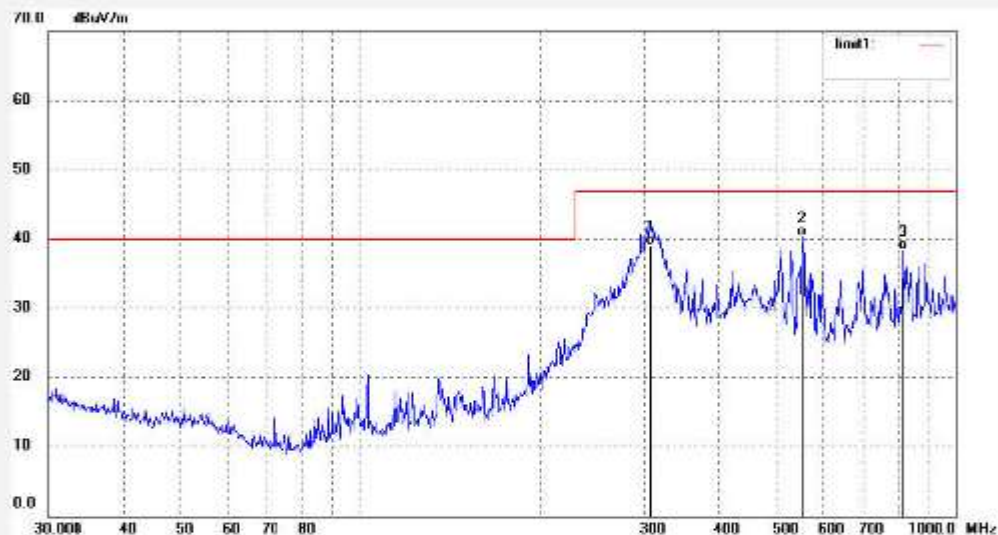
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1389
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.2
Model: WDTP-10
Manufacturer:

Polarization: Horizontal
Power Source: DC 7.4V
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	308.7536	48.27	-9.14	39.13	47.00	-7.87	QP			
2	550.9479	43.98	-3.59	40.37	47.00	-6.63	QP			
3	815.9878	38.09	0.27	38.36	47.00	-8.64	QP			



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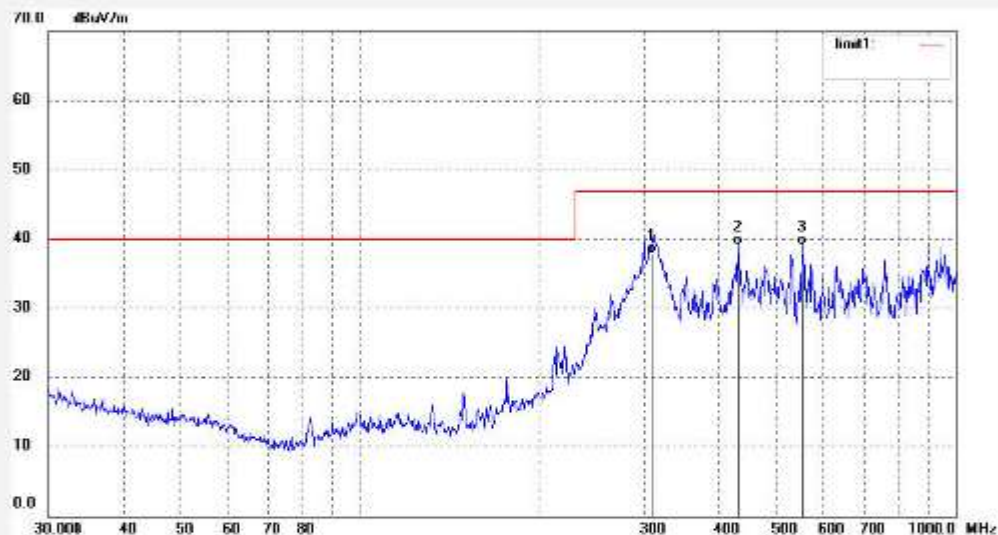
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1390
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.3
Model: WDTP-10
Manufacturer:

Polarization: Horizontal
Power Source: DC 7.4V
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	308.9125	48.87	-9.05	39.82	47.00	-9.18	QP			
2	429.5228	45.24	-8.05	39.19	47.00	-7.81	QP			
3	550.9479	42.70	-3.59	39.11	47.00	-7.89	QP			



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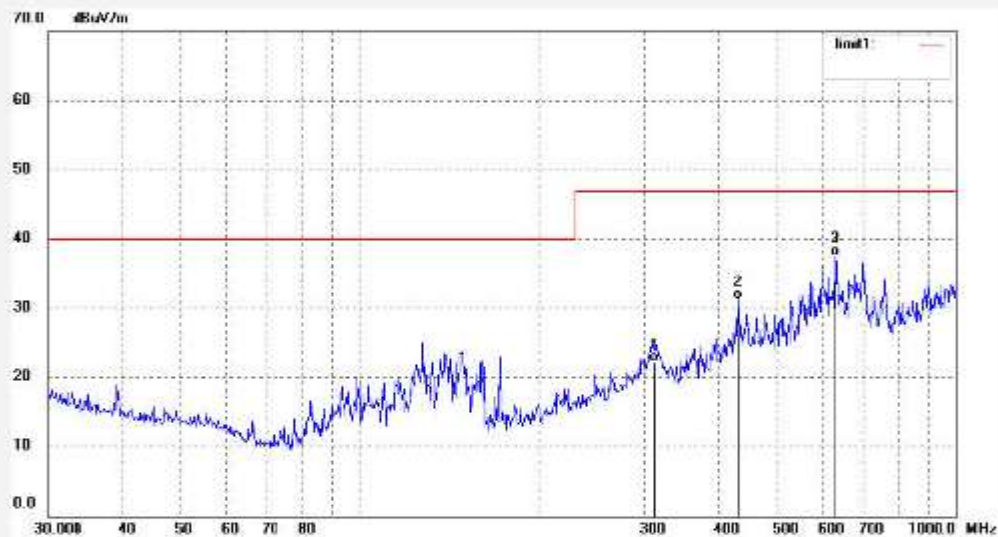
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1391
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.3
Model: WDTP-10
Manufacturer:

Polarization: Vertical
Power Source: DC 7.4V
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	311.0867	31.08	-8.99	22.09	47.00	-24.91	QP			
2	429.5228	37.38	-6.05	31.31	47.00	-15.69	QP			
3	627.2738	40.12	-2.61	37.51	47.00	-9.49	QP			



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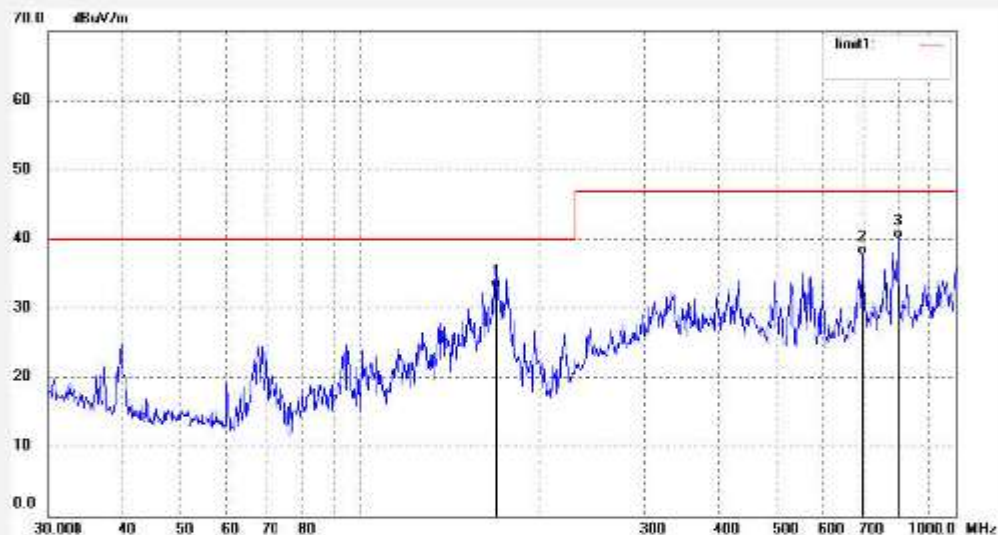
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1392
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.4
Model: WDTP-10
Manufacturer:

Polarization: Vertical
Power Source: DC 7.4V
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	169.5989	48.59	-13.74	32.85	40.00	-7.15	QP			
2	894.4174	39.63	-1.88	37.75	47.00	-9.25	QP			
3	798.9796	39.93	0.02	39.95	47.00	-7.05	QP			



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Job No.: Igw2015 #1393
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.4
Model: WDTP-10
Manufacturer:

Polarization: Horizontal
Power Source: DC 7.4V
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	220.6170	48.24	-11.68	34.56	40.00	-5.44	QP			
2	308.9125	48.90	-9.05	37.85	47.00	-9.15	QP			
3	550.9479	42.74	-3.59	39.15	47.00	-7.85	QP			



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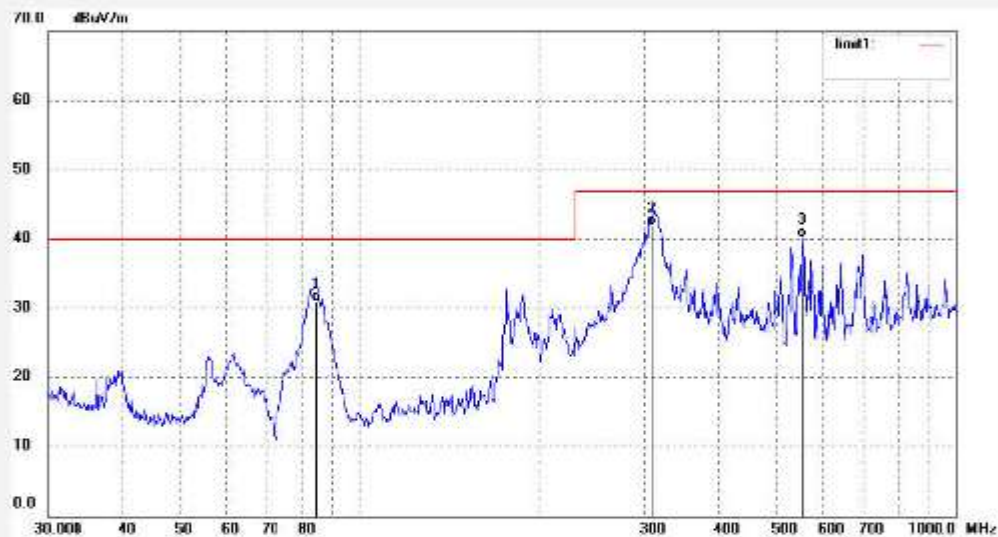
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1394
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.1
Model: WDTP-10
Manufacturer:

Polarization: Horizontal
Power Source: AC 240V/50Hz
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	84.4054	48.42	-15.53	30.89	40.00	-9.11	QP			
2	308.9125	50.97	-9.05	41.92	47.00	-5.08	QP			
3	550.9479	43.79	-3.59	40.20	47.00	-6.80	QP			



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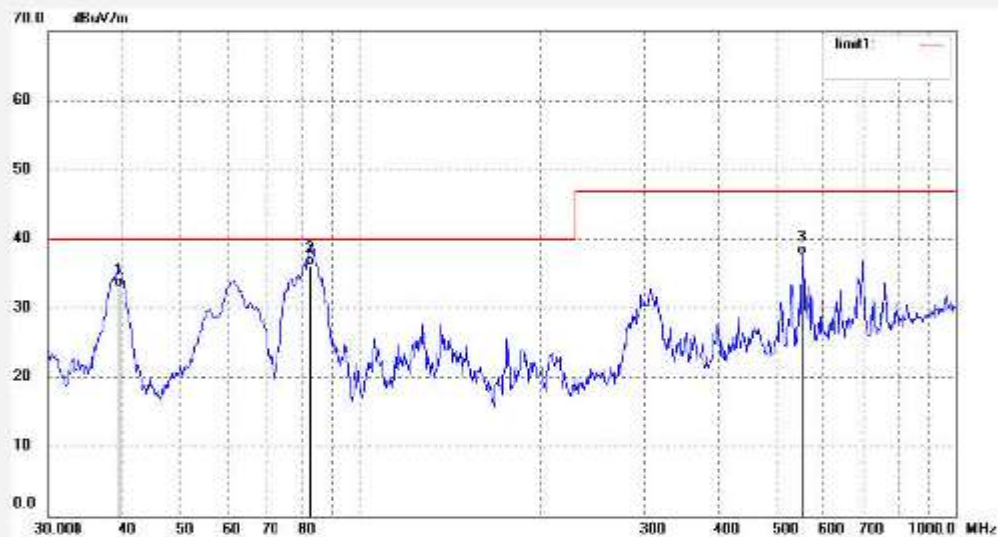
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: Igw2015 #1395
Standard: EN 61326-1
Test item: Radiation Test
Temp.: C/Hum.(%) 23 C/48 %
EUT: Drug Test Analyzer
Mode: A.1
Model: WDTP-10
Manufacturer:

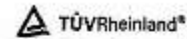
Polarization: Vertical
Power Source: AC 240V/50Hz
Date: 15/10/12/
Time:
Engineer Signature: PEI
Distance: 3m

Note



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	39.4371	44.38	-11.41	32.97	40.00	-7.03	QP			
2	82.6482	52.08	-15.92	36.16	40.00	-3.84	QP			
3	550.9479	41.35	-3.59	37.76	47.00	-9.24	QP			

EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity	ESD		<input checked="" type="checkbox"/> IEC 61000-4-2
Electrostatic Discharge			
Air Discharge: ± 8 kV	Criterion: B	Total: PASS / FAIL	
Contact: ± 4 kV	# of discharges: 10	per test	
Ambient: 25 °C, 50 % RH, 101 kPa	Test Site:		
Operation Mode: A			
Model: WDTP-10			
Location	Kind A=Air C=Cont	Result	
All non-conducted enclosure & Seams	A	Pass	
All conducted enclosure	C	Pass	
HCP & VCP	C	Pass	

For indirect discharge: HCP = Horizontal Coupling Plane, VCP = Vertical Coupling Plane

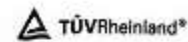
Date:
Inspector:

2615-10-27

Signature:



EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity	RS		<input checked="" type="checkbox"/> IEC 61000-4-3	
Enclosure	Radiated Susceptibility			
Field Strength:	3,3,1 V/m	Criterion:	A	Total: PASS / FAIL
Frequency Range:	80 MHz	to	2700 MHz	
Modulation:	<input type="checkbox"/> none <input checked="" type="checkbox"/> AM <input type="checkbox"/> Pulse	1 kHz,	80 %	
Ambient:	25 °C,	50 % RH,	101 kPa	
Test Site:	Anechoic Chamber			
Operation Mode:	A			
Model:	WDTP-10			
	Frequency Range 1:3V/m 80 – 1000 MHz		Frequency Range 2:3V/m 1400 – 2000 MHz	
Steps	#	%	#	%
	Horizontal	Vertical	Horizontal	Vertical
Front	Pass	Pass	Pass	Pass
Right	Pass	Pass	Pass	Pass
Rear	Pass	Pass	Pass	Pass
Left	Pass	Pass	Pass	Pass
	Frequency Range 1: MHz		Frequency Range 2: MHz	
Steps	#	%	#	%
	Horizontal	Vertical	Horizontal	Vertical
Front				
Right				
Rear				
Left				

Date:
Inspector:

2015-10-27

Signature:

[Signature]

EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity Conn. Lines	EFTB Fast Transient Burst		<input checked="" type="checkbox"/> IEC 61000-4-4			
Level:	Criterion: B		Total: PASS / FAIL			
Ambient:	25 °C,	50 % RH,	101 kPa			
Test Site:						
Operation Mode: A.1						
Model: WDTP-10						
Line: <input checked="" type="checkbox"/> AC Mains <input type="checkbox"/> AC Output <input type="checkbox"/> Signal						
Coupling: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Capacitive Clamp						
Conductor	Voltage	+	-	Voltage	+	-
L	250V			500V		
	1Kv	Pass	Pass	2Kv		
N	250V			500V		
	1Kv	Pass	Pass	2Kv		
LN	250V			500V		
	1Kv	Pass	Pass	2Kv		
PE	250V			500V		
	1Kv			2Kv		
LPE	250V			500V		
	1Kv			2Kv		
NPE	250V			500V		
	1Kv			2Kv		
LNPE	250V			500V		
	1Kv			2Kv		
Model: WDTP-10						
Line: <input checked="" type="checkbox"/> DC line <input type="checkbox"/> Control Line <input type="checkbox"/> Signal Line						
Coupling: <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Capacitive Clamp						
Conductor	Voltage	+	-	Voltage	+	-
	250V			500V		
	1kV	Pass	Pass	2kV		

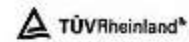
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EMC Test Protocol



Reference:	Drug Test Analyzer WDTP-10
Report:	

Immunity	Surge		<input checked="" type="checkbox"/> IEC 61000-4-5				
Conn. Lines							
Level:	0.5kV	Criterion:	B	Total: PASS / FAIL			
Repetition:	5	Times per test Interval:	60	sec.			
Ambient:	25 °C	50 % RH	101 kPa				
Test Site:							
Operation Mode: A.1							
Model: WDTP-10							
Line: <input checked="" type="checkbox"/> AC Mains <input type="checkbox"/> AC Output <input type="checkbox"/> Signal: Control Cable							
Common Mode (Line - Ground)							
Coupling: <input type="checkbox"/> Cable Shielding, Grounding: <input type="checkbox"/> 2 Sides <input type="checkbox"/> 1 Side (+ 10Nf)							
<input type="checkbox"/> CDN: C= μF, R=Ω, L= Mh							
Conductor	Volt:	500V	1kV	2kV	3kV	4kV	
	Phase	+	-	+	-	+	-
L - N	0°	Pass	Pass				
	90°	Pass	Pass				
	180°	Pass	Pass				
	270°	Pass	Pass				
L - PE	0°						
	90°						
	180°						
	270°						
N - PE	0°						
	90°						
	180°						
	270°						

Date:
Inspector:

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Signature:

P20

EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity Conn. Lines	Conducted disturbances induced by radio-frequency fields		<input checked="" type="checkbox"/> IEC 61000-4-6
Voltage level	3 V	Criterion: A	Total: PASS / FAIL
Frequency Range:	150 kHz to 80 MHz		
Modulation:	<input type="checkbox"/> None <input checked="" type="checkbox"/> AM <input type="checkbox"/> Pulse	1 kHz, 80 %	
Ambient:	25 °C, 50 % RH,	101 kPa	
Test Site:			
Operation Mode: A.1			
Model: WDTP-10			
Line: <input checked="" type="checkbox"/> AC Mains <input type="checkbox"/> AC Output <input type="checkbox"/> Signal			
Common Mode (Line – Ground)			
Coupling: <input type="checkbox"/> Cable Shielding, Grounding: <input type="checkbox"/> 2 Sides <input type="checkbox"/> 1 Side (+ 10nF)			
<input checked="" type="checkbox"/> CDN: C= μF , R= Ω , L= Mh			
Injected Port	Frequency Range (MHz)	Test Level (V)	Result
AC Input Port	0.15-80	3	Pass
Model: WDTP-10			
Line: <input type="checkbox"/> AC Mains <input checked="" type="checkbox"/> DC line <input type="checkbox"/> Signal Line			
Common Mode (Line – Ground)			
Coupling: <input checked="" type="checkbox"/> EM Injection Clamp <input type="checkbox"/> 2 Sides <input type="checkbox"/> 1 Side (+ 10nF)			
<input type="checkbox"/> CDN: C= μF , R= Ω , L= Mh			
Injected Port	Frequency Range (MHz)	Test Level (V)	Result
DC line	0.15-80	3	Pass

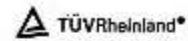
Date:
Inspector:

2015-10-27

Signature:



EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity Conn. Lines	Magnetic Field Immunity		<input checked="" type="checkbox"/> IEC 61000-4-8	
Enclosure	Enclosure	Criterion: A	Total: PASS / FAIL	
Ambient:	25 °C,	50 % RH,	103 kPa	
Test Site:				
Operation Mode: A				
Model: WDTP-10				
Test Level (A/M)	Testing Duration	Coil Orientation	Criterion	Result
3	5min	X	A	Pass
3	5min	Y	A	Pass
3	5min	Z	A	Pass

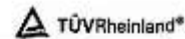
Date:
Inspector:

2015-10-27

Signature:



EMC Test Protocol



Reference: Drug Test Analyzer WDTP-10	
Report:	

Immunity Conn. Lines	Voltage dips, short interruptions and voltage variations	<input checked="" type="checkbox"/> IEC 61000-4-11	
AC Mains	Criterion: B,C	Total: PASS / FAIL	
Ambient: 25 °C,	50 % RH,	101 kPa	
Test Site:			
Operation Mode: A.1			
Model: WDTP-10			
Voltage dips and short interruptions			
Test level % U _T	Voltage dip and short interruptions % U _T	Duration (in period)	Criterion
0	100	0.5	B
0	100	1	B
70	30	25/30*	C
0	100	250/300*	C
a "10/12 cycles" means "10 cycles for 60Hz test" and "12 cycles for 60Hz test"			
Model			
Voltage dips and short interruptions			
Test level % U _T	Voltage dip and short interruptions % U _T	Duration (in period)	Criterion

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2015-10-27

Signature:



Measurement Uncertainties

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Table 1: Measurement Uncertainty levels

Test	Parameters	Expanded uncertainty (U_{lab})	Expanded uncertainty (U_{cisp})
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 2.23 dB ± 2.23 dB	± 4.0 dB ± 3.6 dB
Power disturbance	Level accuracy (30MHz to 300MHz)	± 2.92 dB	± 4.5 dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.50 dB	N/A
Radiated Emission	Level accuracy (9kHz to 30MHz)	± 3.08 dB	N/A
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 4.42 dB	± 5.2 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 4.06 dB	N/A
Mains Harmonic	Voltage	$\pm 0.512\%$	N/A
Voltage Fluctuations & Flicker	Voltage	$\pm 0.512\%$	N/A

As U_{lab} in all applicable tests listed above are less than U_{cisp} according to CISPR 16-4-2:2003,

- compliance is deemed to occur if no measured disturbance exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance exceeds the disturbance limit.