VERIFICATION

Of Compliance

Order No.	**JGZ0511174**
Type of equipment	**ALL ACCESS BASS AMPLIFICATION**
Applicant	**Ashdown Design&Marketing Ltd. Park Farm, Inworth, Colchester, Essex CO5 9SH, UK**
Manufacturing site	**Dongguan Jingheng Electron Co., Ltd. Shenshan Industrial City, Hengli Town, Dongguan City, Guangdong, 523465 P. R. China**
Type designation	**ASHDOWN BASS MINI STACK(Perfect Ten 60, Bass Mini Stack 10F,Bass Mini Stack 10A)**
Technical data	**220VAC, 50/60Hz; 230VAC, 50/60Hz; 240VAC, 50/60Hz, 150W**

The submitted sample of the above equipment has been tested for CE marking according to the following European Directives:

- the EMC Directive 89/336/EEC

Standard(s) used for showing compliance with the essential requirements in the specified directive(s):

Standard(s)	*Test report(s)*	*Issued by*	*Date(s)*
EN55103-1: 1996	**JGZ0511174-1**	**ETL SEMKO**	**11 April 2006**
EN55103-2: 1996	**JGZ0511174-1**	**ETL SEMKO**	**11 April 2006**

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the above listed EU Directive(s).

After preparation of the necessary technical documentation as well as the conformity declaration the CE marking as shown below can be affixed on the equipment. Other relevant Directives have to be observed.

ETL SEMKO GUANG ZHOU

CE

Derek Feng
Assistant Manager
Date: 11 April 2006

Note: This verification is part of the full report and should be read in conjunction with it.

Intertek Testing Service Shenzhen Ltd. Guangzhou GDD Branch
3/F., Hengyun Building, 728 Kaifa Ave.,
Guangzhou Economic & Technological Development District, Guangzhou, China

EMC VERIFICATION SUMMARY

Report No. JGZ0511174-1

☐ ITE ☐Electric household product ☒Others

Product Description:ALL ACCESS BASS AMPLIFICATION Client: **Ashdown Design&Marketing Ltd. Park Farm, Inworth, Colchester, Essex CO5 9SH, UK**

Model: ASHDOWN BASS MINI STACK
(Perfect Ten 60, Bass Mini Stack 10F,Bass Mini Stack 10A)

Sample Receipt Date: 13 March 2006 Test Date: 13 March to 20 March 2006

☒ 1st TEST

☐ 2nd TEST (after modification)

ALL TESTS WERE CONDUCTED IN ACCORDANCE WITH:
* EN 55103-1: 1996
* EN 55103-2: 1996
* EN 55103-1 (EN 61000-3-2): 1996
* EN 55103-1 (EN 61000-3-3): 1996
* EN 55103-2 (EN 61000-4-2): 1996
* EN 55103-2 (EN 61000-4-3): 1996
* EN 55103-2 (EN 61000-4-4): 1996
* EN 55103-2 (EN 61000-4-5): 1996
* EN 55103-2 (EN 61000-4-6): 1996
* EN 55103-2 (EN 61000-4-11): 1996

Test Result	ok	not ok	Test Result	ok	not ok
EN 55103-1: 1996	☒	☐	EN 61000-4-4: 1995+ A1: 2001+A2: 2001	☒	☐
EN 55103-2: 1996	☒	☐	EN 61000-4-6: 1996+A1: 2001	☒	☐
EN 61000-3-2: 2000	☒	☐	EN 61000-4-5: 1995+A1: 2001	☒	☐
EN 61000-3-3: 1995+A1: 2001	☒	☐	EN 61000-4-11: 1994+A1: 2001	☒	☐
EN 61000-4-2: 1995+A1: 1998+ A2: 2001	☒	☐	EN 61000-4-3: 2002+A1: 2002	☒	☐

Tested By:

Signature

Sam Dong – Engineer

Approved By:

Signature

Tendge Huang – Project Engineer

11 April 2006 *Date*

Intertek Testing Services Shenzhen Ltd. Guangzhou GDD Branch
3/F., Hengyun Building, 728 Kaifa Ave., Guangzhou Economic&Technological Development District, Guangzhou, P.R.C. (Post code: 510730)
Tel: (8620) 8396 6868 Fax: (8620) 8222 8170

Report No.: JGZ0511174-1

EMC Results Conclusion (with Justification)

RE: EMC Testing Pursuant to EMC Directive 89/336/EEC Performed On the ALL ACCESS BASS AMPLIFICATION,
Model: ASHDOWN BASS MINI STACK(Perfect Ten 60, Bass Mini Stack 10F,Bass Mini Stack 10A).

We tested the ALL ACCESS BASS AMPLIFICATION, Model ASHDOWN BASS MINI STACK(Perfect Ten 60, Bass Mini Stack 10F,Bass Mini Stack 10A), to determine if it was in compliance with the relevant EN standards as marked on the EMC Verification Summary. We found that the unit met the requirement of EN55103-1, EN 61000-3-2, EN 61000-3-3, EN55103-2 (EN 61000-4-2), EN55103-2 (EN 61000-4-4), EN55103-2 (EN 61000-4-6), EN55103-2 (EN 61000-4-5), EN55103-2 (EN 61000-4-3), &EN55103-2 (EN 61000-4-11) standards when tested as received.

The production units are required to conform to the initial sample as received when the units are placed on the market.

Ctrl. No.: 1.2.1

Intertek Testing Services Shenzhen Ltd. Guangzhou GDD Branch
3/F., Hengyun Building,728 Kaifa Ave., Guangzhou Economic&Technological Development District, Guangzhou,P.R.C.(Post code:510730)
Tel: (8620) 8396 6868 Fax: (8620) 8222 8170

LABORATORY MEASUREMENTS

Configuration

Equipment Under Test (EUT):	ALL ACCESS BASS AMPLIFICATION
Model:	ASHDOWN BASS MINI STACK
Serial No.	Not supplied by the client
Support Equipment:	N/A
Power Source:	220VAC, 50/60Hz; 230VAC, 50/60Hz; 240VAC, 50/60Hz, 150W

Ctrl. No.: 1.3

Emission

EN55103-1
RFI Voltage Test

Test Requirement:	EN55022
Test Method:	EN55022
Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)
	Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Measurement Data:

L Line

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μV)	Permitted limit dB(μV)	Disturbance level dB(μV)	Permitted limit dB(μV)
0.39	<40	58.1	<30	48.1
0.42	<40	57.5	<30	47.5
4.41	<40	56.0	<30	46.0
14.03	<40	60.0	<30	50.0
14.22	<40	60.0	<30	50.0
22.00	<40	60.0	<30	50.0
30.00	<40	60.0	<30	50.0

N Line

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μV)	Permitted limit dB(μV)	Disturbance level dB(μV)	Permitted limit dB(μV)
0.39	<40	58.1	<30	48.1
0.42	<40	57.5	<30	47.5
4.41	<40	56.0	<30	46.0
14.03	<40	60.0	<30	50.0
14.22	<40	60.0	<30	50.0
22.00	<40	60.0	<30	50.0
30.00	<40	60.0	<30	50.0

Notes: 1. The above data and table were recorded for the tests on the mains terminal.

2. Uncertainty: ±3.5 dB at a level of confidence of 95%.

Ctrl. No.: 2.2.4

EN55103-1
Radiated magnetic fields

Test Requirement:	EN55103-1
Test Method:	EN55103-1
Frequency Range:	50Hz to 50KHz
Detector:	Peak for pre-scan (10Hz Resolution Bandwidth)
	Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Measurement Data:

Frequency (Hz)	Voltage(mV)	Test Result H(A/m)	Limit (A/m)	Side
8000	0.035	0.001	0.010	B
45000	0.027	0.001	0.010	B
8000	0.018	0.001	0.010	T
48000	0.024	0.001	0.010	T
50	0.005	0.025	1.000	F
48000	0.031	0.001	0.010	F
8000	0.035	0.001	1.000	L
48000	0.031	0.001	0.010	L
8000	0.041	0.001	1.000	R
48000	0.032	0.001	0.010	R
8000	0.025	0.001	0.010	Rear
48000	0.020	0.001	0.010	Rear

Notes: 1. The above data and table were recorded for the tests on the enclose terminal.

2. Uncertainty: ±1.8 dB at a level of confidence of 95%.

EN55103-1
Conducted Disturbance Test

Test Requirement:	EN55103-1
Test Method:	EN55022
Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)
	Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Measurement Data:

Input port

Model No.: After eight

Frequency (MHz)	Quasi-Peak		Average	
	Reading (dBμA)	Limits (dBμA)	Reading (dBμA)	Limits (dBμA)
0.438	<30	41.8	<20	31.8
0.522	<30	40.0	<20	30.0
0.634	<30	40.0	<20	30.0
20.958	<30	40.0	<20	30.0

Output port

Model No.: After eight

Frequency (MHz)	Quasi-Peak		Average	
	Reading (dBμA)	Limits (dBμA)	Reading (dBμA)	Limits (dBμA)
0.438	<30	41.8	<20	31.8
0.522	<30	40.0	<20	30.0
0.806	<30	40.0	<20	30.0
20.958	<30	40.0	<20	30.0

Notes: 1. The above data and table were recorded for the tests on the mains terminal.
2. Uncertainty: ±3.5 dB at a level of confidence of 95%.

Data Table

Radiated Scan
Pursuant to EN55103-1 Emissions Requirement

Test Requirement:	EN55022
Test Method:	EN55022
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Class:	Class B
Detector:	Peak for pre-scan (120kHz resolution bandwidth)
	Quasi-Peak if maximised peak within 6dB of limit

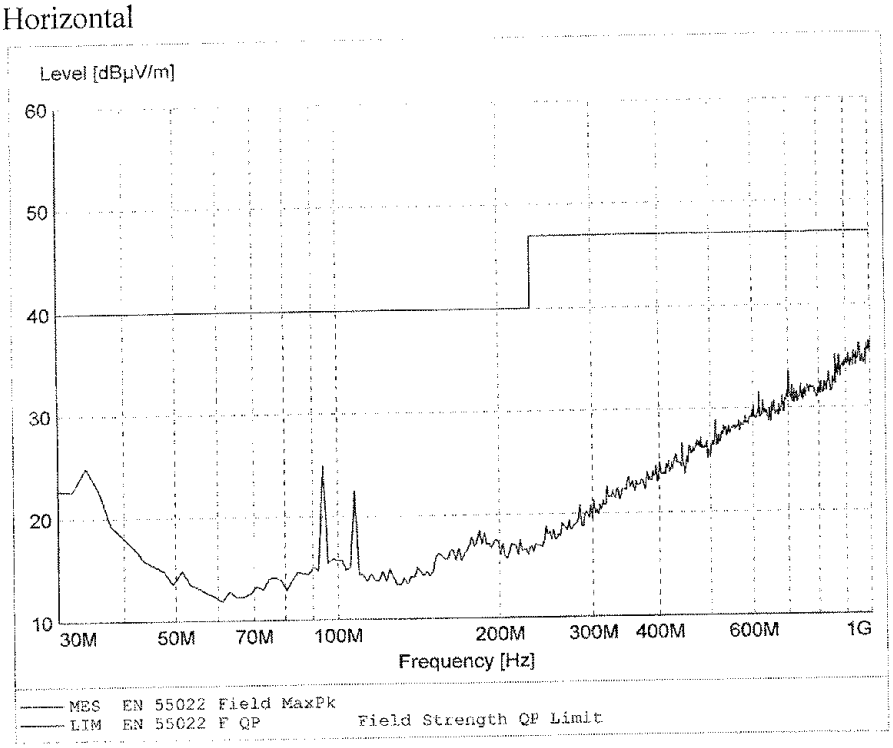
Measurement Data:

Antenna Polarity	Frequency (MHz)	Measured Net at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
H	30.00	<30	40	<-10.0
H	80.00	<30	40	<-10.0
H	500.00	<35	47	<-12.0
H	900.00	<35	47	<-12.0
V	30.00	<30	40	<-10.0
V	100.00	<30	40	<-10.0
V	900.00	<35	47	<-12.0

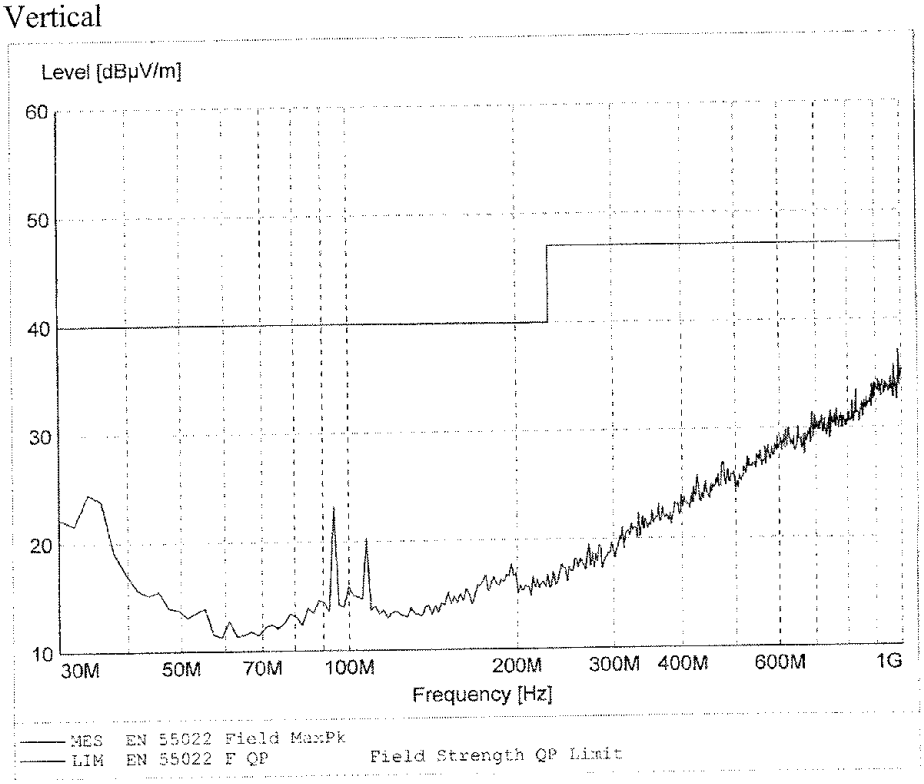
Notes:

1. Quasi-Peak Detector Data.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30 MHz to 1000 MHz.
4. Only emissions significantly above equipment noise floor are reported.
5. Uncertainty: ± 4.2 dB at a level of confidence of 95%.

Horizontal



Vertical



EN 61000-3-2
Harmonics

Test Requirement:	EN 61000-3-2
Test Method:	EN 61000-3-2
Frequency Range	100Hz to 2kHz
Measurement Time:	2.5 mins
Class / Severity:	Class A

Note: Test data of Ctrl. No.: 5.1.1 consisting of three pages are attached.

Ctrl. No.: 5.1

Harmonics – Class-A per Ed. 2.1(Run time)

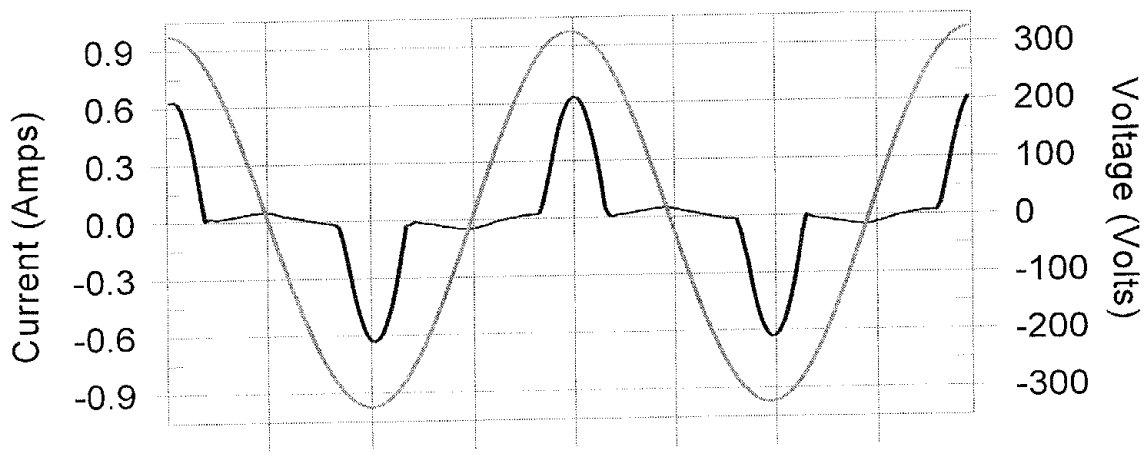
EUT: 100W-2
Test category: Class-A per Ed. 2.1 (European limits)
Test date: 2006-3-8 Start time: 16:17:50
Test duration (min): 2.5 Data file name: H-000259.cts_data

Tested by: GWB
Test Margin: 100
End time: 16:20:30

Test Result: Pass

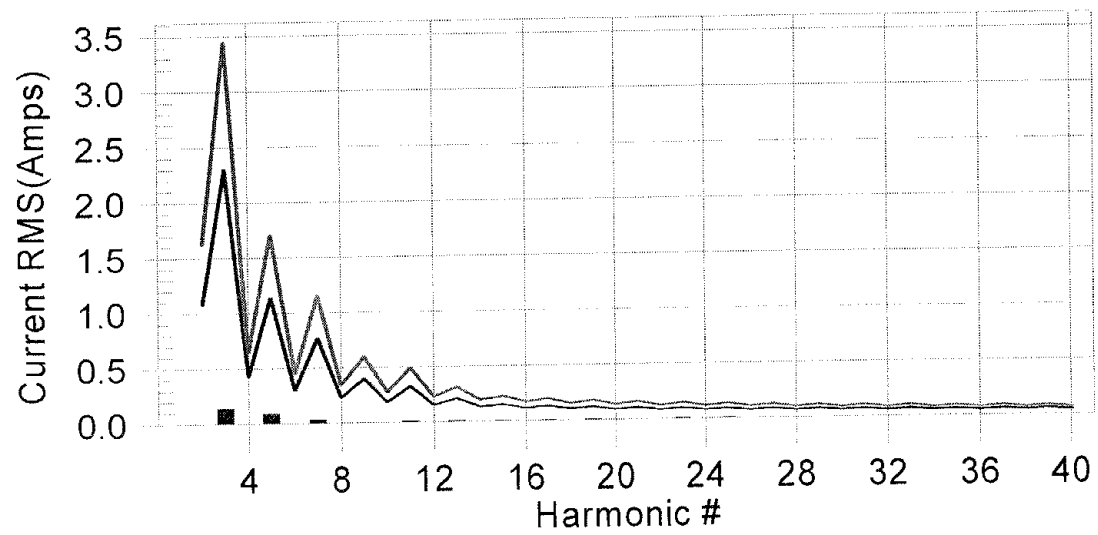
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line

European Limits



Test result: Pass Worst harmonic was #5 with 5.41% of the limit.

Current Test Result Summary (Run time)

EUT: 100W-2
Test category: Class-A per Ed. 2.1 (European limits)
Test date: 2006-3-8 Start time: 16:17:50
Test duration (min): 2.5 Data file name: H-000259.cts_data

Tested by: GWB
Test Margin: 100
End time: 16:20:30

Test Result: Pass
Source qualification: Normal
THC(A): 0.17 I-THD(pk%): 89.87 POHC(A): 0.004 POHC Limit(A): 0.251
Highest parameter values during test:
V_RMS (Volts): 229.70
I_Peak (Amps): 0.694
I_Fund (Amps): 0.195
Power (Watts): 44.3
Frequency(Hz): 50.00
I_RMS (Amps): 0.262
Crest Factor: 2.651
Power Factor: 0.740

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.001	1.080	0.1	0.001	1.620	0.09	Pass
3	0.140	2.300	6.1	0.142	3.450	4.13	Pass
4	0.001	0.430	0.2	0.001	0.645	0.15	Pass
5	0.091	1.140	8.0	0.092	1.710	5.41	Pass
6	0.000	0.300	0.2	0.001	0.450	0.15	Pass
7	0.036	0.770	4.7	0.037	1.155	3.16	Pass
8	0.000	0.230	0.1	0.000	0.345	0.08	Pass
9	0.003	0.400	0.7	0.003	0.600	0.49	Pass
10	0.000	0.184	0.1	0.000	0.276	0.06	Pass
11	0.013	0.330	4.0	0.013	0.495	2.69	Pass
12	0.000	0.153	0.1	0.000	0.230	0.11	Pass
13	0.010	0.210	4.6	0.010	0.315	3.14	Pass
14	0.000	0.131	0.1	0.000	0.197	0.11	Pass
15	0.002	0.150	1.4	0.002	0.225	0.96	Pass
16	0.000	0.115	0.1	0.000	0.173	0.08	Pass
17	0.005	0.132	3.6	0.005	0.199	2.42	Pass
18	0.000	0.102	0.1	0.000	0.153	0.12	Pass
19	0.004	0.118	3.5	0.004	0.178	2.36	Pass
20	0.000	0.092	0.2	0.000	0.138	0.14	Pass
21	0.001	0.107	1.2	0.001	0.161	0.86	Pass
22	0.000	0.084	0.1	0.000	0.125	0.13	Pass
23	0.002	0.098	2.5	0.002	0.147	1.70	Pass
24	0.000	0.077	0.1	0.000	0.115	0.10	Pass
25	0.002	0.090	2.4	0.002	0.135	1.65	Pass
26	0.000	0.071	0.1	0.000	0.106	0.08	Pass
27	0.001	0.083	1.1	0.001	0.125	0.73	Pass
28	0.000	0.066	0.1	0.000	0.099	0.10	Pass
29	0.002	0.078	1.9	0.002	0.116	1.34	Pass
30	0.000	0.061	0.1	0.000	0.092	0.09	Pass
31	0.001	0.073	1.8	0.001	0.109	1.24	Pass
32	0.000	0.058	0.1	0.000	0.086	0.11	Pass
33	0.001	0.068	1.0	0.001	0.102	0.69	Pass
34	0.000	0.054	0.1	0.000	0.081	0.08	Pass
35	0.001	0.064	1.7	0.001	0.096	1.14	Pass
36	0.000	0.051	0.1	0.000	0.077	0.09	Pass
37	0.001	0.061	1.5	0.001	0.091	1.04	Pass
38	0.000	0.048	0.1	0.000	0.073	0.10	Pass
39	0.001	0.058	0.9	0.001	0.087	0.66	Pass
40	0.000	0.046	0.1	0.000	0.069	0.11	Pass

Voltage Source Verification Data (Run time)

EUT: 100W-2
Test category: Class-A per Ed. 2.1 (European limits)
Test date: 2006-3-8 Start time: 16:17:50
Test duration (min): 2.5 Data file name: H-000259.cts_data

Tested by: GWB
Test Margin: 100
End time: 16:20:30

Test Result: Pass

Source qualification: Normal

Highest parameter values during test:

Voltage (Vrms):	229.70	Frequency(Hz):	50.00
I_Peak (Amps):	0.694	I_RMS (Amps):	0.262
I_Fund (Amps):	0.195	Crest Factor:	2.651
Power (Watts):	44.3	Power Factor:	0.740

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.156	0.459	33.98	OK
3	0.605	2.067	29.27	OK
4	0.069	0.459	14.95	OK
5	0.051	0.919	5.60	OK
6	0.053	0.459	11.53	OK
7	0.024	0.689	3.43	OK
8	0.028	0.459	6.03	OK
9	0.029	0.459	6.26	OK
10	0.032	0.459	7.03	OK
11	0.028	0.230	12.19	OK
12	0.022	0.230	9.49	OK
13	0.023	0.230	10.02	OK
14	0.026	0.230	11.39	OK
15	0.024	0.230	10.36	OK
16	0.029	0.230	12.60	OK
17	0.029	0.230	12.66	OK
18	0.028	0.230	12.21	OK
19	0.016	0.230	6.86	OK
20	0.027	0.230	11.84	OK
21	0.018	0.230	7.77	OK
22	0.020	0.230	8.54	OK
23	0.017	0.230	7.22	OK
24	0.014	0.230	6.17	OK
25	0.014	0.230	6.29	OK
26	0.016	0.230	7.02	OK
27	0.015	0.230	6.48	OK
28	0.014	0.230	6.05	OK
29	0.015	0.230	6.61	OK
30	0.012	0.230	5.30	OK
31	0.010	0.230	4.35	OK
32	0.011	0.230	4.96	OK
33	0.011	0.230	4.80	OK
34	0.009	0.230	3.96	OK
35	0.011	0.230	4.85	OK
36	0.009	0.230	4.00	OK
37	0.009	0.230	3.77	OK
38	0.008	0.230	3.63	OK
39	0.008	0.230	3.34	OK
40	0.011	0.230	4.67	OK

EN 61000-3-3
Voltage Fluctuations

Test Requirement:	EN 61000-3-3
Test Method:	Clause A.3 of EN 61000-3-3
Measurement Time:	10 mins
Class / Severity:	Clause 5 of EN 61000-3-3

Note: A data table of Ctrl. No.: 5.2.1 consisting of one page is attached.

Ctrl. No.: 5.2

Flicker Test Summary per EN61000-3-3 (Run time)

EUT: 100W-2
Test category: dt,dmax,dc and Pst (European limits)
Test date: 2006-3-8 Start time: 16:21:33
Test duration (min): 10 Data file name: F-000260.cts_data

Tested by: GWB
Test Margin: 100
End time: 16:32:11

Test Result: Pass

Status: Test Aborted

Pst_i and limit line

Time is too short for Pst and Plt plots

Parameter values recorded during the test:		European Limits		
Vrms at the end of test (Volt):	229.52			
Highest dt (%):	-0.51	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.50	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.000	Test limit:	1.000	Pass

Immunity

Performance Criteria:

Criterion A: The apparatus shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the apparatus is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

EN 61000-4-2
Electrostatic Discharge

Test Summary (Pursuant to EN55103-2)

Port:	Enclosure
Basic Standard:	EN 61000-4-2
Required Performance Criterion:	B
Limit:	8.0 kV (Air Discharge)
	4.0 kV (Contact Discharge)
	4.0 kV (Indirect Contact Discharge)
Operating Temperature:	24.0 °C
Operating Humidity:	56 %RH
Atmospheric Pressure:	101kPa

Test Results

EN 61000-4-2
Electrostatic Discharge

Direct Application of ESD

Direct Contact Discharge

- Single contact discharge at metal part with > 1 second interval
- At least 10ositive and 10 negative discharges

Applied Voltage (kV)	No. of Discharge	Result (Pursuant to EN61000-4-2, criterion B)
4	60	OK

Direct Air Discharge

- Single air discharge at non-conductive enclosure with > 1 second interval
- At least 10 positive + 10 negative discharges

Applied Voltage (kV)	No. of Discharge	Result (Pursuant to EN61000-4-2, criterion B)
8	60	OK

Ctrl. No.: 7.1

EN 61000-4-2
Electrostatic Discharge

Indirect Application of ESD

Horizontal Coupling Plane under the EUT

- ESD probe shall be positioned horizontally to the centre of the edge of HCP which is located at a distance of 0.1m from the EUT, with Contact Discharge Electrode touching the HCP
- At least 10 positive and 10 negative single discharges

Applied Voltage (kV)	No. of Discharge	Result (pursuant to EN61000-4-2, criterion B)
4	50	OK

Vertical Coupling Plane beside the EUT

- ESD probe shall be positioned horizontally to the centre of the edge of VCP which is located vertically 0.1m from the EUT, with Contact Discharge Electrode touching the VCP
- At least 10 positive and 10 negative single discharges
- Apply discharges to the earth reference plane on each accessible side of the EUT.

Applied Voltage (kV)	No. of Discharge	Result (pursuant to EN61000-4-2, criterion B)
4	60	OK

Ctrl. No.: 7.1

EN 61000-4-6
Injected Current (0.15 MHz to 80 MHz)

Test Summary (Pursuant to EN55103-2)

Port:	A.C. Power Lines	D.C. Power Lines, Signal Lines and Telecommunication Lines
Basic Standard:	EN 61000-4-6	
Required Performance Criterion:	A	
Limit:	3.0V (r.m.s.)	3.0V (r.m.s.)
Test Modulation:	1 kHz, 80% AM	
Frequency	0.15 MHz to 80 MHz	

Note: The EUT was tested under manufacturer's declaration in the User's instructions for this item.

Ctrl. No.: 8.1.1

Test Results

EN 61000-4-6
Injected Current (0.15 MHz to 80 MHz)

Port:	Frequency (MHz)	Level (Pursuant to EN55103-2)	Result
A.C. Power Lines	0.15 to 80	3V (r.m.s.)	OK
D.C. Power Lines	0.15 to 80	3V (r.m.s.)	N/A
Signal Lines	0.15 to 80	3V (r.m.s.)	OK
Telecommunication Lines	0.15 to 80	3V (r.m.s.)	N/A

☒ Meet criterion A - operate as intended during and after the test

☐ Meet criterion B - operate as intended after the test

☐ Meet criterion C - loss/error of function

☒ Additional Information

☒ No observable change

☐ EUT stopped operation and could / could not be reset by operator at ____ V of Injected Current.

☐ EUT was in abnormal operation:
- operation mode was changed from ____ to ____ at ____ V of Injected Current.

☐ _____

Ctrl. No.: 8.1.1

Susceptibility (ERF)
(50Hz to 10 KHz)

Test Summary (Pursuant to EN55103-2)

Port:	Enclose	
Basic Standard:	EN55103-2	
Required Performance Criterion:	A	
Limit:	3.0-0.03A/m 50Hz-5kHz	0.03A/m 5kHz-10kHz
Frequency	50 Hz to 10 KHz	

Note: The EUT was tested under manufacturer's declaration in the User's instructions for this item.

Input 1kHz sine wave, 1/8w output
S/N: 68.0 Environment: E3

Frequency (Hz)	S/N	Result
50	58.0	Pass
100	58.1	Pass
200	58.2	Pass
400	58.0	Pass
800	58.0	Pass
1600	58.1	Pass
3200	58.0	Pass
5000	58.1	Pass
6500	58.1	Pass
8000	58.0	Pass
10000	58.0	Pass

EN 61000-4-4
Electrical Fast Transient/Burst

Test Summary (Pursuant to EN55103-2)

Port Type:	D.C. Power Lines Signal Lines And Telecommunication Lines	A.C. Power Lines
Basic Standard:	EN 61000-4-4	
Required Performance Criterion:	B	
Limit:	±0.5kV	±1.0kV

Ctrl. No.: 9.1

Test Results

EN 61000-4-4
Electrical Fast Transient/Burst

Level (Pursuant to EN55103-2)	Polarity	A.C. Power supply line and protective earth terminal	D.C. Power Lines, Signal Lines & Telecommunication Lines
0.5kV	+	N/A	OK
0.5kV	-	N/A	OK
1kV	+	OK	N/A
1kV	-	OK	N/A

☐ Meet criterion A - operate as intended during and after the test

☒ Meet criterion B - operate as intended after the test

☐ Meet criterion C - loss/error of function

☒ Additional Information

- ☒ No observable change
- ☐ EUT stopped operation and could / could not be reset by operator at ___ kV of Burst.
- ☐ EUT was in abnormal operation:
  - operation mode was changed from ____ to ____ at ____ kV of Burst.
- ☐ _____

Ctrl. No.: 9.1

EN 61000-4-5
Surge Immunity

Test Summary (Pursuant to EN55103-2)

Port:	A.C. Power Lines		Signal and Telecommunication lines	D.C Power lines
A.C. Power Lines	Line to Line	Line to Earth	Line to Ground	
Limit:	5 Positive And 5 Negative Surges			
	1kV	2kV	1kV	0,5kV
Basic Standard:	EN 61000-4-5			
Required Performance Criterion:	B			

Ctrl. No.: 10.1

Report No.: JGZ0511174-1

Test Results

EN 61000-4-5
Surge Immunity

Level (Pursuant to EN55103-2)		Result
Between Phase And Phase:	1kV	N/A
Between Phase And Neutral:	1kV	OK
Between Phase And Earth:	2kV	OK
Between Neutral And Earth:	2kV	OK
Signal lines	1kV	N/A
Telecommunication Lines	1KV	N/A
D.C Power lines	0.5kV	N/A

☐ Meet criterion A - operate as intended during and after the test

☒ Meet criterion B - operate as intended after the test

☐ Meet criterion C - loss/error of function

☒ Additional Information

☒ No observable change

☐ EUT stopped operation and could / could not be reset by operator at ___ V of Surge.

☐ EUT was in abnormal operation:
- operation mode was changed from ____ to ____ at ____ V of Surge.

☐ _____

Ctrl. No.: 10.1

EN 61000-4-11
Voltage Dips and Interruptions

Test Summary (Pursuant to EN55103-2)

Port:	A.C. Power Lines			
Limit:	Test level in %U_T	Duration (in period of the rated frequency)	No. of dips/interruptions	Required Performance Criterion:
	<5	1	3	B
	70	5	3	C
	<5	250	3	C
Basic Standard	EN 61000-4-11			

U_T is the rated voltage for the equipment.

Ctrl. No.: 11.1

Test Results

EN 61000-4-11
Voltage Dips and Interruptions

Test condition (Pursuant to EN55103-2)		Result
Test Level in %U_T	Duration (in period of the rated frequency)	
<5	1	OK
70	5	OK
<5	250	OK

U_T is the rated voltage for the equipment.

For <5% U_T / 0,5 Duration Test item:

- ☐ Meet criterion A - operate as intended during and after the test
- ☒ Meet criterion B - operate as intended after the test
- ☐ Meet criterion C - loss/error of function

For other Test items:

- ☐ Meet criterion A - operate as intended during and after the test
- ☐ Meet criterion B - operate as intended after the test
- ☒ Meet criterion C - loss/error of function

☒ Additional Information

- ☒ No observable change
- ☐ EUT stopped operation and could / could not be reset by operator at ___ %U_T Test Level.
- ☐ EUT was in abnormal operation:
  - operation mode was changed from ____ to ____ at ____ %U_T Test Level.

☐ _____

EN 61000-4-3
Radiated Immunity

Test Summary (Pursuant to EN55103-2)

Port:	Enclosure
Basic Standard:	EN 61000-4-3
Required Performance Criterion:	A
Limit:	3.0 V/m (r.m.s.)
Test Modulation:	1kHz, 80% AM
Frequency:	80 MHz to 1000 MHz
Antenna Polarization:	Horizontal and Vertical

Note: The EUT was tested under manufacturer's declaration in the User's instructions for this item.

Report No.: JGZ0511174-1

Test Results

EN 61000-4-3
Radiated Immunity

Frequency (MHz)	Exposed Side	Field Strength (V/m)	Result
80 to 1000	Front	3V/m (r.m.s.)	OK
80 to 1000	Left	3V/m (r.m.s.)	OK
80 to 1000	Rear	3V/m (r.m.s.)	OK
80 to 1000	Right	3V/m (r.m.s.)	OK

☒ Meet criterion A - operate as intended during and after the test

☐ Meet criterion B - operate as intended after the test

☐ Meet criterion C - loss/error of function

☒ Additional Information

☒ No observable change

☐ EUT stopped operation and could / could not be reset by operator.

☐ EUT was in abnormal operation:
- operation mode was changed from ____ to ____ at ____ V/m.

☐ _____

Ctrl. No.: 12.1

Intertek ETL SEMKO

INTERTEK TESTING SERVICES

TO OUR CLIENTS

GUIDELINES FOR COMPLETING A DECLARATION OF CONFORMITY

There are many Directives and Standards in place, and you should assure yourself that the correct ones have been applied to your product.

The attached blank Declaration of Conformity complies with the format published in the Official Journal of the European Community. To complete the form:

1. List all applicable Directives, by number, on the top lines.

   e.g. 88/378/EEC for Toy Directive
   89/336/EEC for EMC Directive
   73/23/EEC for Low Voltage Directive
   93/68/EEC for CE Marking Directive

2. List the Standards under these Directives to which conformity is being declared. Intertek Testing Services test report(s) which you should retain to support your declaration contain this information.

3. Add manufacturer's and importer's name and address. The importer should be located within the EU.

4. Specify the type of equipment and model. You may list a block of serial numbers corresponding to the import quantity during the year of manufacture shown.

5. The Declaration of Conformity should be signed by the manufacturer or his authorized representative established within the EU.

NOTES:

A. A COPY OF THE DECLARATION MUST ACCOMPANY IMPORT PAPERS INTO THE EC. ADDITIONAL COPIES MAY ALSO BE SUPPLIED IN EACH PRODUCT CARTON, WITH EACH PALLETIZED SHIPMENT, IN THE INSTRUCTION MANUAL OR ON THE WARRANTY CARD.

B. THE IMPORTER OR THE MANUFACTURER'S AUTHORIZED REPRESENTATIVE MUST KEEP THE DECLARATION OF CONFORMITY AND THE TEST REPORTS AT THE DISPOSAL OF THE AUTHORITIES FOR A PERIOD OF TEN YEARS AFTER THE EQUIPMENT HAS BEEN PLACED ON THE MARKET.

Declaration of Conformity

Application of Council Directive(s):

_____

Standard(s) to which Conformity is Declared:

_____

Manufacturer's Name: .....

Manufacturer's Address: .....

.....

Import's Name: .....

Import's Address: .....

.....

Type of Equipment: .....

Model No.: .....

Serial No.: .....

Year of Manufacturer: .....

I' the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Place: .....

_____
(Signature)

Date: .....

_____
(Full Name)

_____
(Position)