

# **Test Verification of Conformity**

On the basis of the referenced test report(s), the sample(s) of the below product has been found to comply with the relevant harmonized standard(s) to the directive(s) listed on this verification at the time the tests were carried out.

The manufacturer may indicate compliance to said directive(s) by signing a DoC himself and applying the CE-marking to products identical to the tested sample(s). In addition, the manufacturer shall file and keep the documentation according to the rules of the applicable directive(s) and shall consider changes of the standard(s) if relevant. Additional requirements may be applicable such as additional directives or local laws.

Applicant Name & Address	•	Ashdown Design & Marketing Ltd. The Stables, Stevens Farm, Mashbury Road, Chignal St James, Chelmsford, Essex CM1 4TX
Product(s) Tested	:	Guitar Bass MAG Active Cabinet/ Guitar Bass MAG Amplifier
Ratings and principal characteristics	:	AC 220, 230, 240 V, 50/60 Hz, 400 W
Model(s)	:	MAG C115-300 EVOII, MAG C210T-300 EVOII, MAG C410T-300 EVOII, MAG 300H EVOII
Brand name	•	ASHDOWN
Relevant Standard(s) / Specification(s) / Directive(s)	:	EN 55103-1: 1996, Electromagnetic Compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - part 1: Emission
		EN 55103-2: 1996, Electromagnetic Compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - part 2: Immunity
		EMC Directive: 2004/108/EC
Verification Issuing Office Name & Address	•	Same as Intertek Legal Entity
Verification/Report Number(s)		GZ08031045-1 / GZ08031045-1

#### NOTE 1: This verification is part of the full test report(s) and should be read in conjunction with it.

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Signature

Name: Tommy Leung Position: Senior Manager Date: 30 April 2008



## **EMC VERIFICATION SUMMARY**

🗵 Professional Equipment			□ ITE		Others
Product Description: Guitar Bass MAG Active Cabinet /Guitar Bass MAG Amplifier Model: MAG C115-300 EVOII, MAG C210T-300 EVOII, MAG C410T-300 EVOII, MAG 300H EVOII		Client: Ashdown Design & Marketing Ltd. The Stables, Stevens Farm, Mashbury Road, Chignal St James, Chelmsford, Essex CM1 4TX			
Sample Receipt Date: 01 April 2008	8		Test Date: 05 April 2008 to 25 April		
<ul> <li>☑ 1<sup>st</sup> TEST</li> <li>□ 2<sup>nd</sup> TEST (after modification)</li> </ul>		ALL TESTS WERE CONDUCTEI WITH: * EN 55103-1: 1996 * EN 55103-2: 1996	) IN ACCO	RDANCE	
Test Result	ok	not ok	Test Result	ok	not ok
EN 55103-1: 1996	X		EN 61000-4-4: 2004	$\boxtimes$	
EN 55103-2: 1996	$\boxtimes$		EN 61000-4-6: 1996+A1: 2001	X	
EN 61000-3-2: 2006		EN 61000-4-5: 1995+A1: 2001	$\boxtimes$		
EN 61000-3-3: 1995+A1: 2001	$\boxtimes$		EN 6 1000-4-11: 2004	$\mathbf{X}$	
EN 61000-4-2: 1995+A1: 1998+ A2: 2001	X		EN 61000-4-3: 2002+A1: 2002	X	

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

Remarks: All tests were conducted by sub-contractor, which locate in China (Shenzhen).

Tested By:

Signature

Alex Li – Project Engineer

Signature Tommy Leung - Senior Manager Date

Approved By:

30 April 2008

· This summary is part of the full report and should be read in conjunction with it.

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· The test report only allows to be revised only within the report defined retention period unless further standard or the requirement was noticed

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Intertek

Report No.: GZ08031045-1

## EMC Results Conclusion (with Justification)

### RE: EMC Testing Pursuant to EMC Directive 2004/108/EC Performed On the Guitar Bass MAG Active Cabinet/ Guitar Bass MAG Amplifier, Model: MAG C410T-300 EVOII, MAG C115-300 EVOII, MAG C210T-300 EVOII, MAG 300H EVOII

We tested the Guitar Bass MAG Active Cabinet/ Guitar Bass MAG Amplifier, Model MAG C410T-300 EVOII, 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 EUT was not an rack mounted apparutus and would be used in environment E2.

The difference among the models MAG C115-300 EVOII, MAG C210T-300 EVOII, MAG C410T-300 EVOII, MAG 300H EVOII are the speaker and model number which will not effect the EMC characteristics..

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



Report No.: GZ08031045-1

Guitar Bass MAG Active Cabinet/

## LABORATORY MEASUREMENTS

#### Configuration

**Equipment Under Test (EUT):** 

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Guitar Bass MAG AmplifierModel:MAG C410T-300 EVOIISerial No.:Not labelledSupport Equipment:Audio Signal Generator (EGA-890)Rated Voltage:AC 220, 230, 240 V, 50/60 Hz, 400 W



## Emission

### EN55103-1 RFI Voltage Test

Test Requirement:	EN55103-1
Test Method:	EN55022
Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Detector:	Peak for pre-scan
	Quasi-Peak

Notes:

- 1. Uncertainty:  $\pm 3.5$  dB at a level of confidence of 95%
- 2. The graphics and data table consist of worst case were attached as below.
- 3. Peak scan data was shown on the graph.
- 4. Final data shall refer to the data table for correspondent limits.

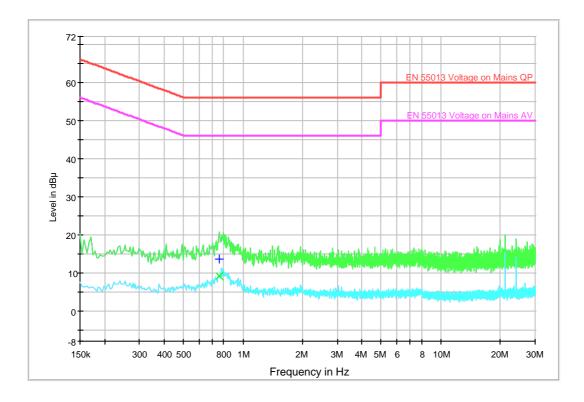


#### **Measurement Data:**

## Test Mode: Input 1kHz signal

## Live Line

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(µV)	Permitted limit dB(µV)	Disturbance level dB(µV)	Permitted limit dB(µV)
0.758	13.5	56.0	9.1	46.0

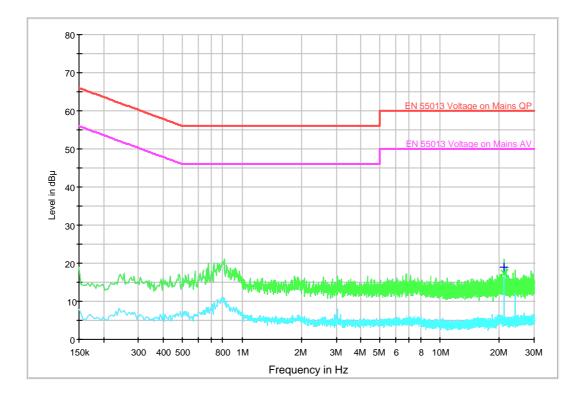




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### **Neutral Line**

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(µV)	Permitted limit dB(µV)	Disturbance level dB(µV)	Permitted limit dB(µV)
21.165	18.9	60.0	17.4	50.0





## EN55103-1 RFI Current Test

Test Requirement:	EN55103-1
Test Method:	EN55022
Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Detector:	Peak for pre-scan
	Quasi-Peak

Notes:

- 1. Uncertainty:  $\pm 3.5$  dB at a level of confidence of 95%
- 2. The graphics and data table consist of worst case were attached as below.
- 3. Peak scan data was shown on the graph.
- 4. Final data shall refer to the data table for correspondent limits.

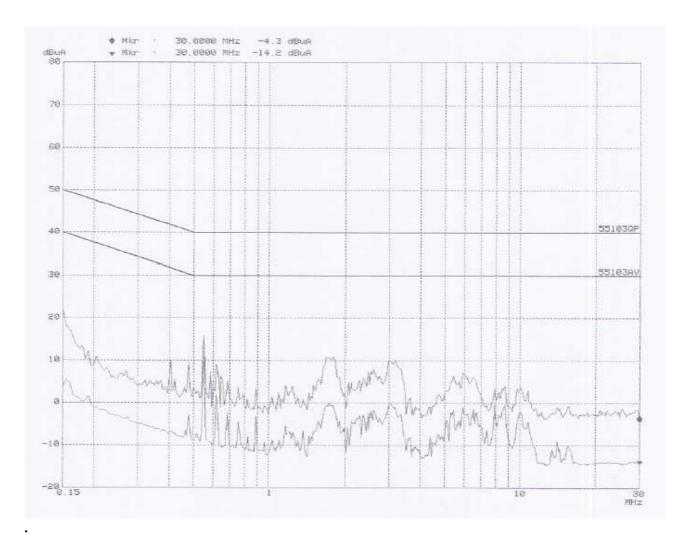


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## Measurement Data: Test Mode: Input 1kHz signal

## Signal Input Port:

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(µA)	Permitted limit dB(µA)	Disturbance level dB(µA)	Permitted limit dB(µA)
0.150	<30.0	50.0	<20.0	40.0
0.500	<20.0	40.0	<10.0	30.0
20.000	<20.0	40.0	<10.0	30.0

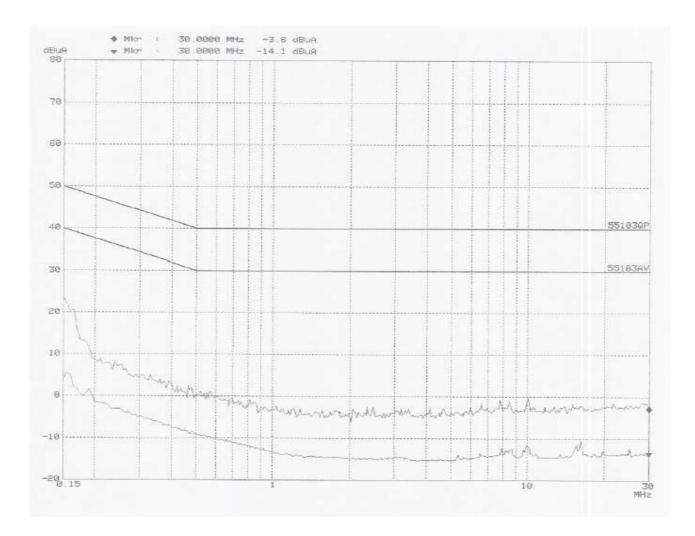




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## Signal Output Port:

Frequency (MHz)	Quasi-Peak		Ave	rage
	Disturbance level dB(µA)	Permitted limit dB(µA)	Disturbance level dB(µA)	Permitted limit dB(µA)
0.150	<30.0	50.0	<20.0	40.0
0.500	<20.0	40.0	<10.0	30.0
20.000	<20.0	40.0	<10.0	30.0





### EN55103-1 Radiated magnetic fields

Test Requirement:	EN55103-1
Test Method:	EN55103-1
Frequency Range:	50Hz to 50KHz
Detector	r.m.s

#### **Measurement Data:**

•

### Input signal: Pink noise

Frequency	Test Result	Limit (A/m)	Side
(Hz)	H(A/m)		
50	0.009	1.0	Bottom
5000	0.00002	0.01	Bottom
50	0.009	1.0	Тор
5000	0.00045	0.01	Тор
50	0.009	1.0	Left
5000	0.00003	0.01	Left
50	0.003	1.0	Right
5000	0.00039	0.01	Right
50	0.015	1.0	Front
5000	0.00008	0.01	Front
50	0.003	1.0	Rear
5000	0.00039	0.01	Rear

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

2. Uncertainty:  $\pm 3.5$  dB at a level of confidence of 95%.



## Data Table

## **Radiated Emission Pursuant to EN55103-1 Emissions Requirement**

Test Requirement:	EN55103-1	
Test Method:	EN55022	
Frequency Range:	30MHz to 1GHz	
Measurement Distance:	3m	
Class:	Class B	
Detector:	Peak for pre-scan	
	Quasi-Peak	

Notes:

- 1. Peak scan data was shown on the graph.
- 2. Final data shall refer to the data table for correspondent limits.
- 3. Frequency range scanned: 30 MHz to 1000 MHz
- 4. Only emissions significantly above equipment noise floor are reported.
- 5. Uncertainty:  $\pm 4.2 \text{ dB}$  at a level of confidence of 95%
- 6. The worst test result as below.

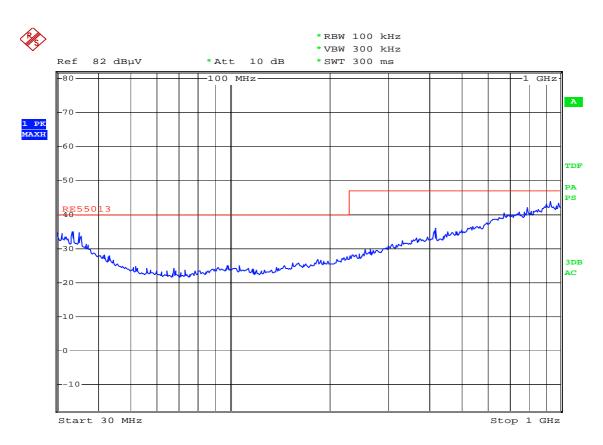


### **Measurement Data:**

## Test Mode: Input 1kHz signal

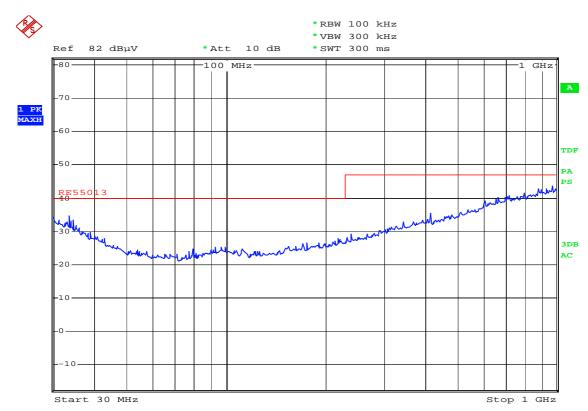
Frequency (MHz)	Readings (dBµV/m)	Polarization	Limits (dBµV/m)
30.000	<30.0	Horizontal	40.5
1000.000	<40.0	Horizontal	47.5
30.000	<30.0	Vertical	40.5
1000.000	<40.0	Vertical	47.5

#### Horizontal





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## Vertical



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## EN 61000-3-2 Harmonics Currents

Test Requirement:	EN 61000-3-2
Test Method:	EN 61000-3-2
Measurement Time:	2.5 mins
Class / Severity:	Class A
Detector:	As per EN 61000-3-2

Note: A data table consisting of the worst test result as below.



## Current Test Result Summary (Run time)

Test Result: Pass THC(A): 0.08 LTHD(rsk9()): 102.67 Source qualification: Normal POHC(A): 0.021 POHC Limit(A): 0.251							
THC(A): 0.98 I-THD(pk%): 102.67 POHC(A): 0.031 POHC Limit(A): 0.251 Highest parameter values during test:							
	V_RMS (Volts)			Frequency(Hz):	50.00		
	I_Peak (Amps):			I_RMS (Amps):			
	I_Fund (Amps):			Crest Factor:	2.533		
	Power (Watts):	221		Power Factor:	2.333 0.704		
1	rower (walls).	221		Fower Factor.	0.704		
Harm#	Harms(avg)	100%Limit	% of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.011	1.080	1.0	0.015	1.620	0.92	Pass
3	0.756	2.300	32.9	0.776	3.450	22.49	Pass
4	0.017	0.430	3.9	0.019	0.645	2.89	Pass
5	0.513	1.140	45.0	0.526	1.710	30.74	Pass
6	0.008	0.300	2.7	0.010	0.450	2.13	Pass
7	0.244	0.770	31.7	0.251	1.155	21.70	Pass
8	0.002	0.230	1.0	0.003	0.345	0.95	Pass
9	0.044	0.400	11.1	0.046	0.600	7.74	Pass
10	0.003	0.184	1.8	0.004	0.276	1.53	Pass
11	0.058	0.330	17.5	0.060	0.495	12.03	Pass
12	0.001	0.153	1.0	0.002	0.230	0.76	Pass
13	0.069	0.210	33.1	0.071	0.315	22.60	Pass
14	0.001	0.131	0.8	0.001	0.197	0.74	Pass
15	0.032	0.150	21.5	0.033	0.225	14.84	Pass
16	0.001	0.115	0.8	0.001	0.173	0.72	Pass
17	0.009	0.132	6.8	0.010	0.199	4.83	Pass
18	0.000	0.102	0.3	0.001	0.153	0.40	Pass
19	0.028	0.118	23.4	0.029	0.178	16.02	Pass
20	0.001	0.092	0.9	0.001	0.138	0.89	Pass
21	0.021	0.107	19.3	0.021	0.161	13.31	Pass
22	0.001	0.084	0.7	0.001	0.125	0.76	Pass
23	0.003	0.098	2.7	0.003	0.147	2.06	Pass
24	0.000	0.077	0.3	0.000	0.115	0.38	Pass
25	0.012	0.090	13.7	0.013	0.135	9.46	Pass
26	0.001	0.071	0.9	0.001	0.106	0.75	Pass
27	0.013	0.083	16.2	0.014	0.125	11.10	Pass
28	0.000	0.066	0.7	0.001	0.099	0.66	Pass
29	0.005	0.078	6.4	0.005	0.116	4.57	Pass
30	0.000	0.061	0.2	0.000	0.092	0.25	Pass
31	0.005	0.073	7.5	0.006	0.109	5.26	Pass
32	0.000	0.058	0.8	0.001	0.086	0.72	Pass
33	0.009	0.068	12.8	0.009	0.102	8.79	Pass
34	0.000	0.054	0.6	0.000	0.081	0.60	Pass
35	0.005	0.064	7.7	0.005	0.096	5.44	Pass
36	0.000	0.051	0.2	0.000	0.077	0.33	Pass
37	0.002	0.061	4.0	0.003	0.091	2.86	Pass
38	0.000	0.048	0.7	0.001	0.073	0.73	Pass
39	0.006	0.058	9.9	0.006	0.087	6.80	Pass
40	0.000	0.046	0.5	0.000	0.069	0.63	Pass



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## EN 61000-3-3 Voltage Fluctuations

Test Requirement:	EN 55103-1
Test Method:	EN 61000-3-3
Measurement Time:	10 mins
Class / Severity:	Clause 5 of EN 61000-3-3
Detector:	As per EN 61000-3-3

Note: A data table consisting of the worst test result as below.

Report No.: GZ08031045-1

## Flicker Test Summary per EN/IEC61000-3-3 (Run time)

EUT: MAG C410T-300 Test category: All parameters (European limits) Test date: 4/9/2008 Test duration (min): 10 Comment: Input 1kHz signal Tested by: Alex Test Margin: 100

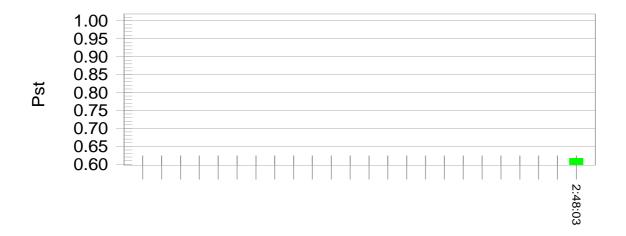
Test Result: Pass

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Status: Test Completed

Pst<sub>i</sub> and limit line

**European Limits** 



#### Time is too short for Plt plot

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.81			
Highest dt (%):	-3.21	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
Average of 22 Dmax:	1.848	Test limit (%):	6.00	Pass



## **Immunity:**

Performance criteria (EN55103-2)

#### The performance criteria are referred to the test standard:

**Performance criterion A:** The apparatus shall continue to operate as intended. 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. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

**Performance criterion B:** The apparatus shall continue to operate as intended after the test. 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. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is, however, allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

**Performance criterion C:** Temporary loss of function is allowed, provided that normal function is automatically restored when the test stimulus is removed, or can be restored by operation of the controls.



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## **Test Summary**

## Pursuant to EN 55103-2 (IEC 61000-4-2): Electrostatic Discharge

Port:	Enclosure
Basic Standard:	IEC 61000-4-2
Required Performance Criterion:	В
Limit:	8.0 kV (Air Discharge)
	4.0 kV (Contact Discharge)
	4.0 kV (Indirect Contact Discharge)
Operating Temperature:	25.0 °C
Operating Humidity:	51 %RH
Atmospheric Pressure:	101 kPa



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#### **Test Results**

#### EN 55103-2 (IEC 61000-4-2) Electrostatic Discharge

Discharge Type	Applied Voltage	Result
		(Pursuant to EN 55103-2 criterion B)
Contact Discharge	±4kV	Ok
Air Discharge	±8kV	N/A
Indirect HCP Discharge	±4kV	Ok
Indirect VCP Discharge	±4kV	Ok

No. of discharge: 10 Discharge for +ve and 10 Discharge for -ve.
1 second between each discharge.
Test Mode: Input 1kHz signal

 $\square$ 

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Additional Information

 $\boxtimes$  No observable change

EUT stopped operation and could / could not be reset by operator at \_\_\_\_\_kV of ESD.

EUT was in abnormal operation:

- Operation mode was changed from \_\_\_\_\_ to \_\_\_\_ at \_\_\_\_ kV of ESD.



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## Susceptibility (ERF) (50 Hz to 10 KHz)

#### Test Summary (Pursuant to EN55103-2)

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



## Test Results Susceptibility (ERF) (50Hz to 10 KHz)

Frequency (KHz)	Field Strength (A/m)	Result
0.05 to 5	3.0-0.03	OK
5 to 10	0.03	OK

#### X Additional Information

- $\Box$  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.
- The measured S/N ratio was greater than 80dB which manufacture specified.



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#### EN 61000-4-3 Radiated Immunity

## Test Summary (Pursuant to EN55103-2)

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



## **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.)	ОК
80 to 1000	Left	3V/m (r.m.s.)	ОК
80 to 1000	Rear	3V/m (r.m.s.)	OK
80 to 1000	Right	3V/m (r.m.s.)	OK

X Additional Information

- $\Box$  No observable change
- $\Box$  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.
- In the measured S/N ratio was greater than 80dB which manufacture specified.



Report No.: GZ08031045-1

## 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	
Basic Standard:	EN 61000-4-4	
Required Performance Criterion:	В	
Limit:	±0.5kV	±1.0kV



## **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

#### ☑ Additional Information

- $\boxtimes$  No observable change
- $\Box$  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.

.



Report No.: GZ08031045-1

## 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:	В			



## **Test Results**

## EN 61000-4-5 Surge Immunity

Level (Pursuant to EN55103-2)		Result
Between Phase And Neutral:	0.5 kV	ОК
Between Phase And Earth:	1 kV	ОК
Between Neutral And Earth:	1 kV	ОК

#### ☑ Additional Information

- $\boxtimes$  No observable change
- $\Box$  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.
- □ \_\_\_\_\_



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## 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:	А		
Limit:	3.0V (r.m.s.) 3.0V (r.m.s.)		
Test Modulation:	1 kHz, 80% AM		
Frequency	0.15 MHz to 80 MHz		



## **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.)	ОК
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

☑ Additional Information

- $\Box$  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.
- The measured S/N ratio was greater than 80dB which manufacture specified.



## EN 61000-4-11 Voltage Dips and Interruptions

## Test Summary (Pursuant to EN55103-2)

Port:	A.C. Power Lines			
Limit:	Test level in %U <sub>T</sub>	Duration (in period of the rated frequency)	No. of dips/interruptio ns	Required Performance Criterion:
	0	1	3	В
	40	5	3	С
	<5	250	3	С
Basic Standard	EN 61000-4-11			

 $U_T$  is the rated voltage for the equipment.



## **Test Results**

## EN 61000-4-11 Voltage Dips and Interruptions

Test condition (Pursuant to EN55103-2)		Result
Test Level in %U <sub>T</sub>	Duration (in period of the rated frequency)	
0	1	OK
40	5	OK
<5	250	OK

 $U_T$  is the rated voltage for the equipment.

⊠ Additional Information

.

- $\Box$  No observable change
- $\boxtimes$  EUT stopped operation and could self re-start at <u>0</u> %U<sub>T</sub>, 250 periods Test Level.
- EUT was in abnormal operation:
   operation mode was changed from \_\_\_\_\_ to \_\_\_\_ at \_\_\_\_ %U<sub>T</sub> Test Level.



## Annex 1

## **Used Test Equipment**

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Description	Manufacturer	Model No.	Serial No.
Test Receiver	ROHDE&SCHWARZ	ESCS30	SB3319
AMN	Rohde & Schwarz	ESH3-Z5	SB3997
Absorb Clamp	Rohde & Schwarz	MDS-21	SB3995
EMI Test Receiver	Rohde & Schwarz	ESI26	SB3436
Bilog Antenna	Chase	CBL6112B	SB3440
Harmonic and Flicker tester	CI	500lix-CTS-400	SB2588
Harmonic and Flicker tester	CI	PACS-3	SB2588/01
Power	CI	500lix-CTS-400-NO	SB2588/02
Power	CI	500lix-CTS-400-NO	SB2588/03
Signal Generator	Rohde & Schwarz	SMY01	SB4032
Signal Generator	Rohde & Schwarz	SMY01	SB4033
Amplifier	BONN	BSA1515-25	SB4035
RF Micro volt meter	Rohde & Schwarz	URV5	SB4036
Audio analyzer	Rohde & Schwarz	UPA	SB4037
Stripline	Rohde & Schwarz	TS998JC	SB4039
Level Meter	Rohde & Schwarz	URV35	SB4038
Signal generator	Rohde & Schwarz	SMT03	SB3433
Power amplifier	AR	150W1000	SB3173
Bilog antenna	Chase	CBL6111C	SB2622
Audio analyzer	Rohde & Schwarz	UPL	SB3439
EFT Simulator	SCHNAFFNER	NSG2025-1	SB2556
ESD tester	SCHNAFFNER	NSG435	SB2561
Audio Signal Generator	HK EVERGREEN	EGA-890	SB4630
FM STEREO/FM-AM Signal Generator	JUNG JIN	SG-1501B	SB4628
Immunity Simulator	EMTEST	UCS500M4	SB3070
CW sine Generator	EMTEST	CWS500	SB2605
Simulator	Keytek	EMCPro	SB2617

**NOTE:** Equipments listed above have been calibrated and are in the period of validation



## Annex 2

Outside



## EUT Photo

Inside





#### Guidelines On Issuing EC Declaration Of Conformity Pursuant To EMC Directive

To attest the compliance of apparatus with the relevant EMC Directive, an EC Declaration of Conformity shall be issued by the manufacturer or his authorised representative in the European Community, and the attached EC Declaration of Conformity template contains all mandatory requirements pursuant to and 2004/108/EC. Please follow the steps listed below when preparing an EC Declaration of Conformity:

- 1. Provide the name and address of the manufacturer;
- 2. Provide the name and address of the authorised representative in the European Community, where applicable;
- 3. For Apparatus' Description, specify the brand name and any other information allowing for the description of the apparatus to which the EC Declaration of Conformity refers;
- 4. For Apparatus' Identification, specify the type, batch, serial number or any other information allowing for the identification of the apparatus to which the EC Declaration of Conformity refers;
- 5. Specify the relevant EMC Directive with which the apparatus are in compliance;
- List all dated specifications under which conformity is declared to ensure the conformity of the apparatus with the relevant EMC Directive, you may refer the standards shown in the Test Verification of Conformity issued by Intertek;
- Sign the EC Declaration of Conformity by the person empowered to bind the manufacturer or his authorised representative in the European Community. The Name, Position and Company of this person shall be specified for identification;
- 8. State the date of issuing the EC Declaration of Conformity.

#### NOTES:

- a. The EC Declaration of Conformity shall be held by the manufacturer or his authorised representative in the European Community at the disposal of the competent authorities for a period of at least ten years after the date on which such apparatus was last manufactured. If neither the manufacturer nor his authorised representative is established within the European Community, the obligation to hold the EC Declaration of Conformity at the disposal of the competent authorities shall lie with the person who places the apparatus on the European Community market.
- b. If EMC Directive 2004/108/EC is applied, the manufacturer shall draw up technical documentation according to Annex IV of this EMC Directive; and in addition to CE Marking, the apparatus shall also meet other marks and information as stated in Article 9 of the same EMC Directive.
- c. The EC Declaration of Conformity guidelines and template are for your reference only, you shall ensure that the EMC Directive 89/336/EC and 2004/108/EC are applied correctly.

	EC Declaration of Conformity	
	I, the undersigned,	
Manufacturer's Name:		
Manufacturer's Address:		
Authorised Representativ	/e's Name:	
Authorised Representativ	/e's Address:	
certify and	declare under our sole responsibility that the following apparatus:	
Apparatus' Description:		
Apparatus' Identification:		
	conforms with the essential requirements of	
Directive:		
	based on the following specifications applied:	
Dated Specifications:		
_		
_		
and therefore com	plies with the essential requirements and provisions of the EMC Directiv	′e.
	Signature:	
	Full Name:	
	Position:	
	Company:	