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TEST REPORT

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EMC

Standard

CISPR22 (2008)
CISPR24 (2010)
IEC 61000-3-2 (2009)
IEC 61000-3-3 (2008)

Issued to

LEFSON
[redacted]

Person present during the tests: -

Apparatus under test
Trade mark: Audio functions box
Manufacturer: LEFSON
Type: LEFSON
Serial number: DCAD and BT36
-

Test date

June 2013

Tests performed by

G. DE BUYSER and C. FERREIRA

Test site

LCIE Fontenay aux Roses (France)

File issued on

September 11th, 2013

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1. TEST PROGRAM AND SUMMARY OF RESULTS

Emission tests			
CISPR22 (2008) Electromagnetic compatibility - Product standard Information technology equipment (ITE)			
Description of the test	**Standard**	**Main characteristics**	**Comments**
Measurement of radiated electric field in chamber	CISPR22 (2008) Class B	30 – 230 MHz : 40 dB (µV/m) quasi-peak at 3m 230 – 1000 MHz : 47 dB (µV/m) quasi-peak at 3m 1000 – 3000 MHz : 70 dB (µV/m) peak at 3m 1000 – 3000 MHz : 50 dB (µV/m) average at 3m 3000 – 6000 MHz : 74 dB (µV/m) peak at 3m 3000 – 6000 MHz : 54 dB (µV/m) average at 3m	Pass
Measurement of conducted disturbance on the main power port	CISPR22 (2008) Class B	0.15 – 0.5 MHz : 66 – 56 dB (µV) quasi-peak 56 – 46 dB (µV) average 0.5 – 5 MHz : 56 dB (µV) quasi-peak 46 dB (µV) average 5 – 30 MHz : 60 dB (µV) quasi-peak 50 dB (µV) average	Pass
Measurement of conducted disturbance on telecom port / control port	CISPR22 (2008) Class B	0.15 – 0.5 MHz : 84 – 74 dB (µV) quasi-peak 74 – 64 dB (µV) average or 40 – 30 dB (µA) quasi-peak 30 – 20 dB (µA) average 0.5 – 30 MHz : 74 dB (µV) quasi-peak 64 dB (µV) average or 30 dB (µA) quasi-peak 20 dB (µA) average	N.A.
CEI 61000-3-2 (2009) Electromagnetic compatibility - Limit for harmonic current emissions Equipment input current ≤ 16 A per phase			
Measurement of harmonic currents	IEC 61000-3-2 (2009)	Class A	Pass
CEI 61000-3-3 (2008) Electromagnetic compatibility – Limitation of voltage changes, voltage fluctuations and flickers in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection			
Measurement of voltage fluctuation and flickers	IEC 61000-3-3 (2008)	Pst=1, Plt=0.65, dc=3%, dmax=4%, dt=3%-200ms	Pass

N.A.: Not applicable N.P.: Non performed

The product is compliant according to CISPR22 standard.
The product is compliant according to IEC 61000-3-2 and IEC 61000-3-3 standards.

Immunity tests			
CISPR24 (2010) Electromagnetic compatibility - Product standard Information technology equipment (ITE)			
Description of the test	**Standard**	**Main characteristics**	**Comments**
Immunity to electrostatic discharges	IEC 61000-4-2 (2008)	± 2 and ±4kV to contact ± 2, ±4 and ±8kV to air Criteria B	Pass
Immunity to radiated electromagnetic field	IEC 61000-4-3 (2010)	3 V/m : 80-1000 MHz 3 V/m : 1400-2700 MHz AM 80% - 1 kHz Criteria A	Pass
Immunity to electrical fast transient burst on input/ output port	IEC 61000-4-4 (2011)	±1 kV AC power supply ±0.5 kV DC power supply if L>3m ±0.5 kV to I/O if L>3m Criteria B	Pass
Immunity to surges on input/ output port	IEC 61000-4-5 (2005)	± 2kV CM - ± 1kV DM to AC power supply ± 0.5kV CM to indoor telecom port L>3m ± 1 kV CM - ± 0.5kV DM to outdoor telecom port Criteria B	Pass
Immunity to conducted disturbances, induced by radio-frequency fields on input/ output port	IEC 61000-4-6 (2008)	3V : 0.15-80 MHz to AC power supply 3V : 0.15-80 MHz to DC power supply if L>3m 3V : 0.15-80 MHz to I/O if L>3m AM 80% - 1 kHz Criteria A	Pass
Immunity to power magnetic field	IEC 61000-4-8 (2009)	1A/m 50Hz and 60Hz **Criteria A**	Pass
Immunity to voltage dips, short interruptions and voltage variations	IEC 61000-4-11 (2004)	0% Ut – 5000 ms 0% Ut – 10 ms 70% Ut – 500 ms Criteria B depending variations Criteria C depending variations	Pass

N.A.: Not applicable N.P.: Non performed

The product is compliant according to CISPR24 standard