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TEST REPORT

Number Composition of document **EMC**

121186-642229A 42 pages

Standard CISPR22 (2008)

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

IEC 61000-3-3 (2008)

Issued to **LEFSON**

Person present during the tests

Apparatus under test

Trade mark Manufacturer Type

Serial number

Audio functions box

LEFSON LEFSON

DCAD and BT36

Test date

June 2013

Tests performed by

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Test site

LCIE Fontenay aux Roses (France)

File issued on

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Written by: Gilles DE BUYSER

Tests operator



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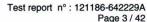
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Emission tests

1. TEST PROGRAM AND SUMMARY OF RESULTS

CISPR22 (2008) Electromagnetic compatibility - Product standard Information technology equipment (ITE) Description of the test Standard Main characteristics Comments 30 - 230 MHz : 40 dB (µV/m) quasi-peak at 3m 230 - 1000 MHz: 47 dB (μV/m) quasi-peak at 3m CISPR22 (2008) 1000 - 3000 MHz: 70 dB (μV/m) peak at 3m Measurement of radiated electric field in Pass 1000 - 3000 MHz : 50 dB (μV/m) average at 3m chamber Class B 3000 - 6000 MHz : 74 dB (μV/m) peak at 3m 3000 - 6000 MHz : 54 dB (μV/m) average at 3m 0.15 - 0.5 MHz: 66 - 56 dB (µV) quasi-peak 56 - 46 dB (μV) average CISPR22 (2008) 0.5 - 5 MHz: Measurement of conducted disturbance on Pass 56 dB (µV) quasi-peak the main power port Class B 46 dB (μV) average 5 - 30 MHz: 60 dB (μV) quasi-peak 50 dB (μV) average 0.15 - 0.5 MHz: 84 - 74 dB (µV) quasi-peak 74 - 64 dB (μV) average 40 - 30 dB (μA) quasi-peak CISPR22 (2008) Measurement of conducted disturbance on 30 - 20 dB (μA) average N.A. telecom port / control port 0.5 - 30 MHz: Class B 74 dB (µV) quasi-peak 64 dB (µV) average 30 dB (µA) quasi-peak 20 dB (µA) average 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 Pst=1, Plt=0.65, Measurement of voltage fluctuation and IEC 61000-3-3 (2008) dc=3%, dmax=4%, Pass flickers dt=3%-200ms

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