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Choose certainty.  
Add value.

## RAPPORTO DI PROVA

### TEST REPORT

#### Titolo (Title):

Electro Magnetic Emission Tests on

**SP40 plus**

---

#### Richiedente (Customer):

- Ente/Società (Dept./Firm): Compuprint S.p.A.
- Sig.(Mr.): Daniele Zanino
- Indirizzo (Address): Via Lombardore 282 –10040 Leini ( TO )

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Modulo Richiesta Prova n.: 165  
Test Requesting Form no.:

Rapporto inviato a: Mr. Daniele Zanino  
Report sent to:

---

Nome e Firma esecutore prova: ( P. Fortis )  
Name and Signature of the test engineer:

Nome e Firma Responsabile settore: ( G. Mecchia )  
Name and Signature of the Sector Manager

---

Data ricevimento campioni: 21 / 08 / 2012  
Date of test samples receipt:

Data esecuzione prove: 03 / 07 / 2012  
Date of test execution: 22 / 08 / 2012

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Località esecuzione prove (se diversa dal piè di pagina):  
Site of test execution (if different from the address in the footer):

Presenti alle prove:  
Witness to the test:

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I risultati del presente rapporto di prova si riferiscono esclusivamente al campione sottoposto a prova.  
The test results contained in this Test report relate to the tested samples only.

E' ammessa la riproduzione integrale del presente Rapporto di prova da parte del Richiedente; la riproduzione parziale dev'essere autorizzata per iscritto dal Laboratorio.

The integral reproduction of the present Test report is allowed; the partial reproduction must be authorized in writing by the Lab.

Form: ITA\_F\_09.01 (Rev.13 March 12, 2012)

Document name: EMC 12/165  
Test report no. EMC 12/165  
Revision: 0  
Page 1 of 11

Project manager:  
Piero Fortis  
Issue date:28/08/2012

Phone: +39 0125 636911  
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## 1. **SETUP DI PROVA** *TEST SETUP*

### 1.1. **IDENTIFICAZIONE CAMPIONE** ( Vedere note pag. 18 ) *SAMPLE IDENTIFICATION ( See remarks pag. 18 )*

- Prodotto/materiale sottoposto a prova: **SP40 plus**  
*Product/material subjected to test:*
  
- Descrizione: **Dot matrix printer**  
*Description:*
  
- Livello (Prodotto di serie, prototipo, ecc.): **Series product**  
*Level (Series product, prototype, etc.):*
  
- N° Matricola: **RHS-S81-02973**  
*Part number:*
  
- Codice di identificazione: **C1203461**  
*Identification code:*

### 1.2. **DISPOSITIVI AUSILIARI** **Desktop DELL** *AUXILIARY DEVICES*

### 1.3. **CONFIGURAZIONE DI PROVA** **SP40 plus connected through shielded** *TEST CONFIGURATION* **USB/serial/parallel cable to Desktop**

### 1.4. **SISTEMA DIAGNOSTICO** **Printing through USB/serial and parallel port** *DIAGNOSTIC SYSTEM*

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## 2. **ELENCO DELLE PROVE** *TEST LIST*

- Electromagnetic emission test (conducted)
- Electromagnetic emission test (radiated)

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### 3. METODO DI PROVA

#### TEST METHOD

Normalizzato - Norma di riferimento:  
*Standardized - Reference Standard:*

EN 55022:2006  
FCC Part 15 Sections 15.107 and 15.109

Eventuali scostamenti, aggiunte o limitazioni:  
*Possible differences, additions or limitations:*

Interno - Descrizione:  
*Internal - Description:*

---

### 4. APPARECCHIATURE UTILIZZATE

#### TEST EQUIPMENT USED

SIEMENS shielded enclosure  
SIEMENS semi-anechoic chamber  
(dimensions 20 x 11 x 8 m with 2.5m pyramid absorbers)

Test Receiver	Rohde & Schwarz ESH3	s/n 893517/004
LISN	Schwarzbeck NNLK8121	s/n 8121-219
Test Receiver	Rohde & Schwarz ESU26	s/n 100188
Biconical Antenna	EMCO 3110B	s/n 9408-1910
Log-Periodic Antenna	Electro Metrix LPA-25	s/n 1117

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### 5. CONDIZIONI AMBIENTALI

#### ENVIRONMENTAL CONDITIONS

23,5 °C - 41 % R. H

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### 6. INCERTEZZA DI MISURA

#### MEASUREMENT UNCERTAINTY

for a level of confidence of approximately 95% (k=2):  
± 2.22 dB conducted emissions  
± 4.27 dB radiated emissions.



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Add value.

## 7. PIANO DI CAMPIONAMENTO

*SAMPLING PLAN*

Campionamento effettuato dal richiedente (*sample selected by the customer*)

## 8. RISULTATI DELLE PROVE E/O MISURE

*TEST AND / OR MEASUREMENT RESULTS*

See attached diagrams:

Test	Interface	Specification	Limits	Diagrams (see pages)	Result
Conducted emissions 150 kHz - 30 MHz	AC mains	EN 55022 Subclause 5.1 table 1	EN 55022 Class A	7 Parallel port 220 Volt USB port 120 Volt	PASSED
Radiated emissions 30 MHz -1 GHz	enclosure	EN 55022 Subclause 6.1 table 5	EN 55022 Class A	8 ÷ 11	PASSED

## 9. NOTE

*REMARKS*

- The configuration has been supplied by the customer.
- The customer is responsible for this data and for the configuration of tested EUT.(Reference paragraph 1.1 to 1.4)
- Sample under test has been returned to customer.



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Add value.

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10. **APPENDICE (documentazione fotografica del setup di prova / allegati)**  
*APPENDIX (photographic report test setup / attachments)*

- This report has no attachments.

Conducted emission





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## Radiated emission



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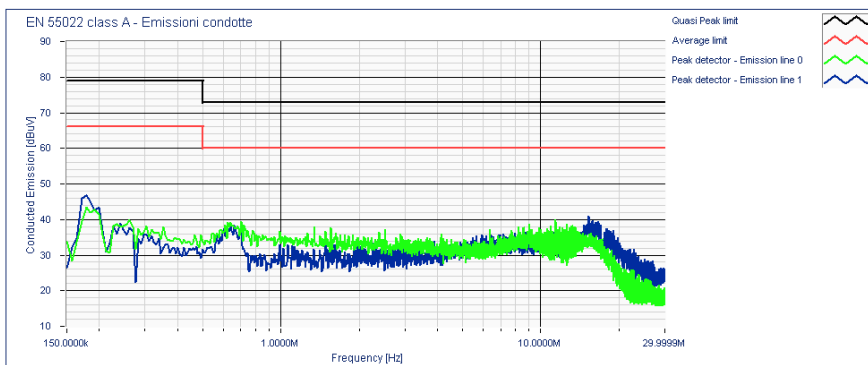
Choose certainty.  
Add value.

TUV ITALIA  
EMC Laboratory  
Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_  
Graph Number: \_\_\_\_\_  
Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint  
Notes: Stand by e stampa  
Parallel port - 220 Volt

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973



Measurement Distance: N.A.      Antenna Orientation: N.A.      Measurement Date: 22/08/2012



CE012-244 SP40 plus

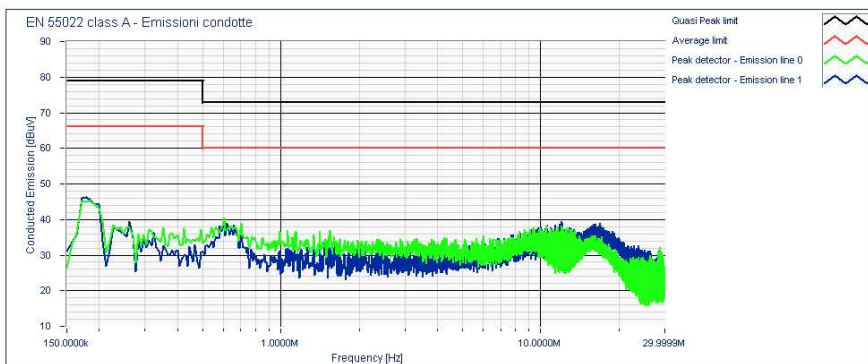
Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_

TUV ITALIA  
EMC Laboratory  
Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_  
Graph Number: \_\_\_\_\_  
Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint  
Notes: Stand by e stampa  
USB port - 120 Volt

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973



Measurement Distance: N.A.      Antenna Orientation: N.A.      Measurement Date: 22/08/2012



CE012-245 SP40 plus

Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_

Form: ITA\_F\_09.01 (Rev.13 March 12, 2012)

Document name: EMC 12/165  
Test report no. EMC 12/165  
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Choose certainty.  
Add value.

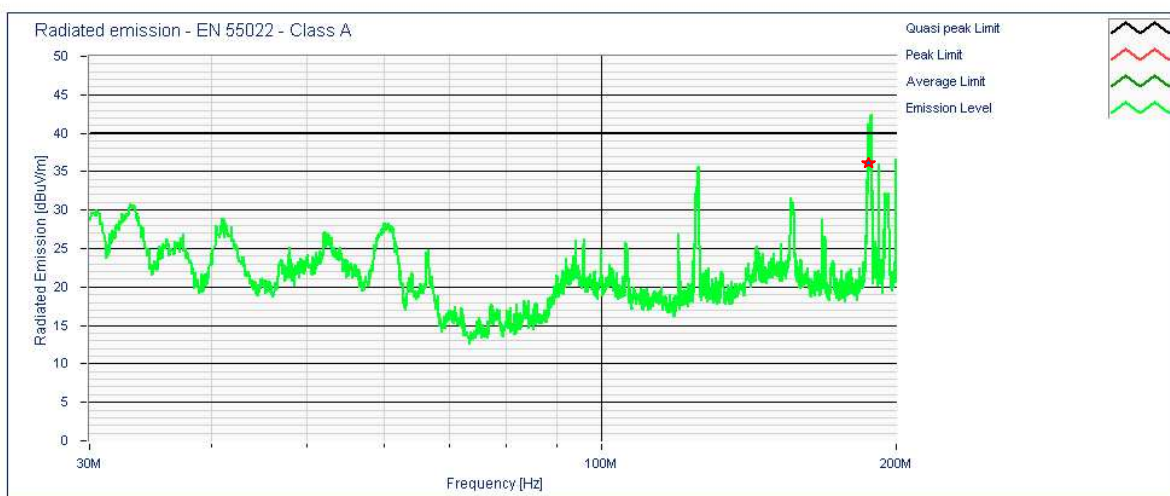
TUV ITALIA  
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Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_  
Graph Number: \_\_\_\_\_  
Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973

Notes: Standby e stampa  
Connected through USB, serial and parallel to P.C. DELL



graf010

Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_

Frequenza [MHz]	Livello Rilevatore di Picco [dBuV/m]	Livello Rilevatore di Quasi-picco [dBuV/m]	Limite In Quasi-picco [dBuV/m]
188,6	42,5	36,2	40





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Choose certainty.  
Add value.

TÜV ITALIA  
EMC Laboratory  
Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_

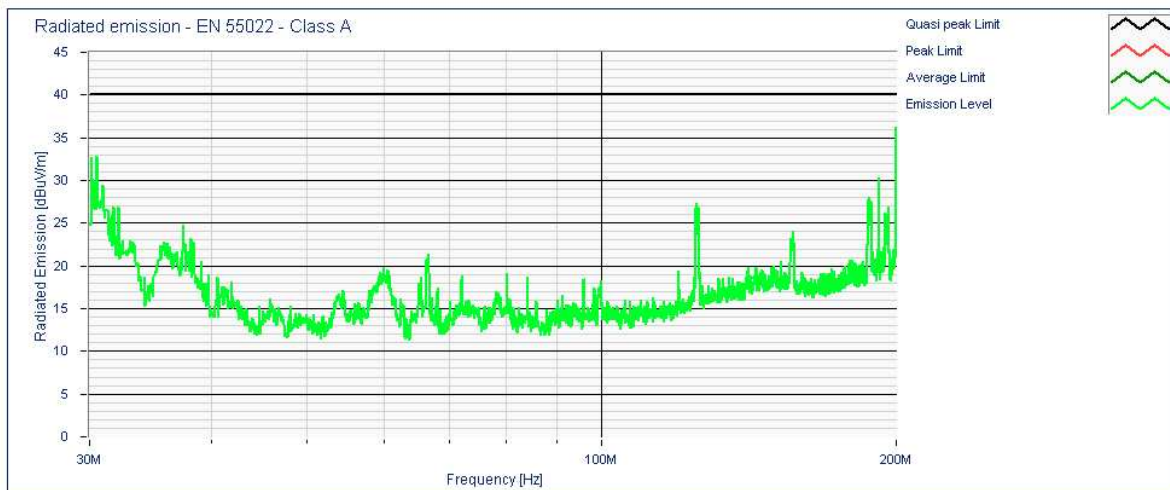
Graph Number: \_\_\_\_\_

Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973

Notes: Standby e stampa  
Connected through USB, serial and parallel to P.C. DELL



Measurement Distance: 10 m

Antenna Orientation: Horizontal

Measurement Date: 03/07/2012



graf011

Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_

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Choose certainty.  
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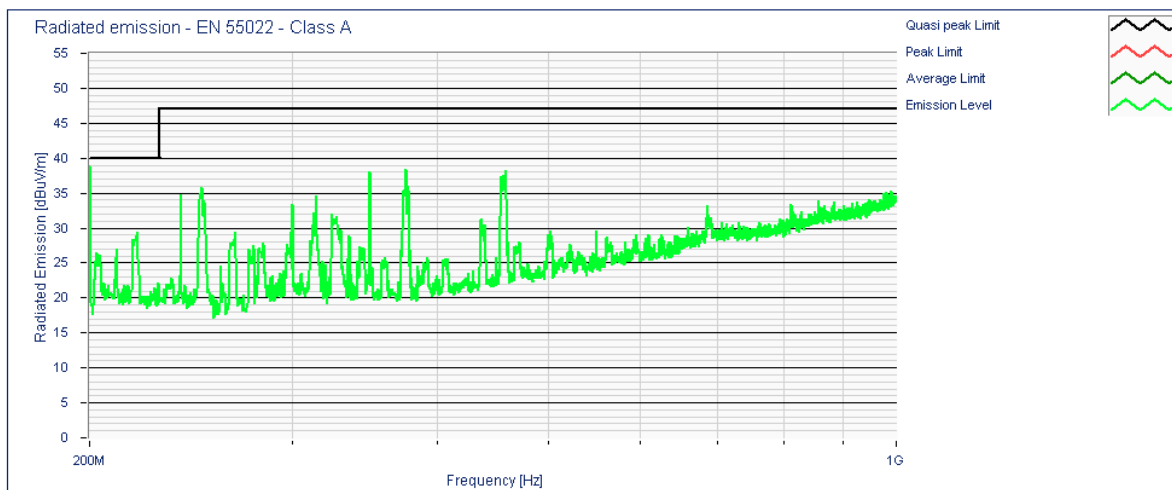
TÜV ITALIA  
EMC Laboratory  
Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_  
Graph Number: \_\_\_\_\_  
Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973

Notes: Standby e stampa  
Connected through USB, serial and parallel to P.C. DELL



Measurement Distance: 10 m

Antenna Orientation: Vertical

Measurement Date: 03/07/2012



graf012

Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_



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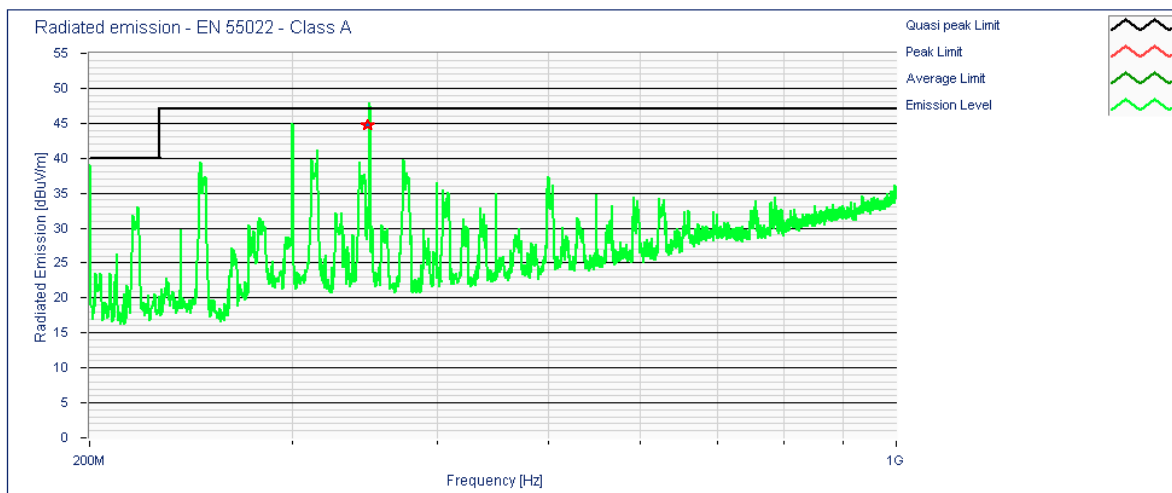
TUV ITALIA  
EMC Laboratory  
Semi-Anechoic Chamber

Report Number: EMC 12 / \_\_\_\_\_  
Graph Number: \_\_\_\_\_  
Graph Code: \_\_\_\_\_

Product: Stampante ad aghi  
Manufacturer: Compuprint

Model: SP 40 plus model M00649  
Serial Number: RHS-S81-02973

Notes: Standby e stampa  
Connected through USB, serial and parallel to P.C. DELL



graf014

Operator: \_\_\_\_\_  
Supervisor: Giuseppe Mecchia  
Release Date: \_\_\_\_\_

Frequenza [MHz]	Livello Rilevatore di Picco [dBuV/m]	Livello Rilevatore di Quasi-picco [dBuV/m]	Limite In Quasi-picco [dBuV/m]
349,7	48	45	47