

# F C C - TEST REPORT

REPORT NO.: 51424

**FCC – Test Report****No. 51424**

Date: 2008-12-12

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**FCC listed testlab**  
**acc. to Section 2.948 of the FCC - Rules**  
**in compliance with the requirements of**  
**ANSI C63.4 - 2003**

**Product** : 1.5 Inches Keychain Digital Photo Frame**Product Class** : Class B Computing Device Peripheral**Model** : DP-185**Applicant** : VICTORWOOD HOLDINGS LIMITED**FCC ID No.** : T5HDP185

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**LABORATORY - REPORT**

**APPLICANT:** VICTORWOOD HOLDINGS LIMITED  
**ADDRESS:** Unit 15, 8/F, Block B, Sun Fung Centre  
88 Kwok Shui Road  
Kwai Chung, N.T.  
Hong Kong

**DATE OF SAMPLE RECEIVED:** 2008-11-19  
**DATE OF TESTING:** 2008-12-02 to 2008-12-08

**DESCRIPTION OF SAMPLE:**

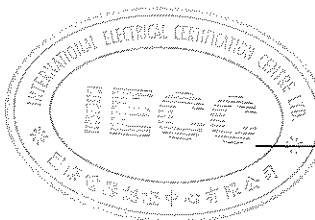
Product: 1.5 Inches Keychain Digital Photo Frame  
Product class: Class B Computing Device Peripheral  
Model no.: DP-185  
FCC ID number: T5HDP185  
Rating: DC 3.7V 180mAH Rechargeable Battery

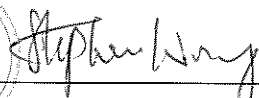
**CONDITION OF TEST SAMPLE:** The received sample was under good condition.

**INVESTIGATIONS REQUESTED:** Measurements to the relevant clauses of F.C.C. Rules and Regulations  
Part 15 Subpart B – 'Unintentional Radiators'

**RESULTS:** See the attached test sheets

**CONCLUSIONS:** From the measurement data obtained, the tested sample was considered to have **COMPLIED** with the requirements for the relevant clauses of Federal Communications Commission Rules as specified above.



  
Stephen C.N. Wong  
Technical Manager

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### Test Location

International Electrical Certification Centre Ltd.  
Unit 602-605, 31 Lok Yip Road, On Lok Tsuen, Fanling, N.T., Hong Kong  
Tel : +852 23052570  
Fax : +852 27564480  
Email : info@iecc.com.hk

### Summary of Test Results

#### Radiated Emission:

**Test result:** Pass  
**Test data:** See attached data sheet

#### Conducted Emission:

**Test result:** Pass  
**Test data:** See attached data sheet

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**TEST EQUIPMENT LIST**

| Equipment                       | Manufacturer    | Model     | Serial No. | Last Calibration Date | Next Calibration Date |
|---------------------------------|-----------------|-----------|------------|-----------------------|-----------------------|
| Test Receiver                   | Rohde & Schwarz | ESCS 30   | 100388     | 26/8/2008             | 25/8/2009             |
| Artificial Mains Network (LISN) | Schwarzbeck     | NSLK 8127 | 8127312    | 2/12/2008             | 1/12/2009             |
| Antenna                         | Schaffner       | CBL6111C  | 2791       | 22/07/2008            | 21/07/2010            |
| Antenna Mast System             | Schwarzbeck     | AM9104    | --         | --                    | --                    |
| Turntable with Controller       | Drehtisch       | DT312     | --         | --                    | --                    |

**TEST SUPPORT UNITS**

The sample was tested with the following PC system :

| Equipment           | Manufacturer | Model         | Serial No.       |
|---------------------|--------------|---------------|------------------|
| NoteBook            | DELL         | PP10S         | H8893 A02        |
| Keyboard (external) | DELL         | SK-8115       | --               |
| Mouse               | HP           | --            | RK679PA#AB2      |
| Monitor (external)  | ViewSonic    | VLCDS23585-1W | 90S040201520     |
| Printer             | HP           | C3990A        | JPZT142121       |
| Ethernet router     | NetScreen    | NS-5GT-103    | 0064022004002202 |

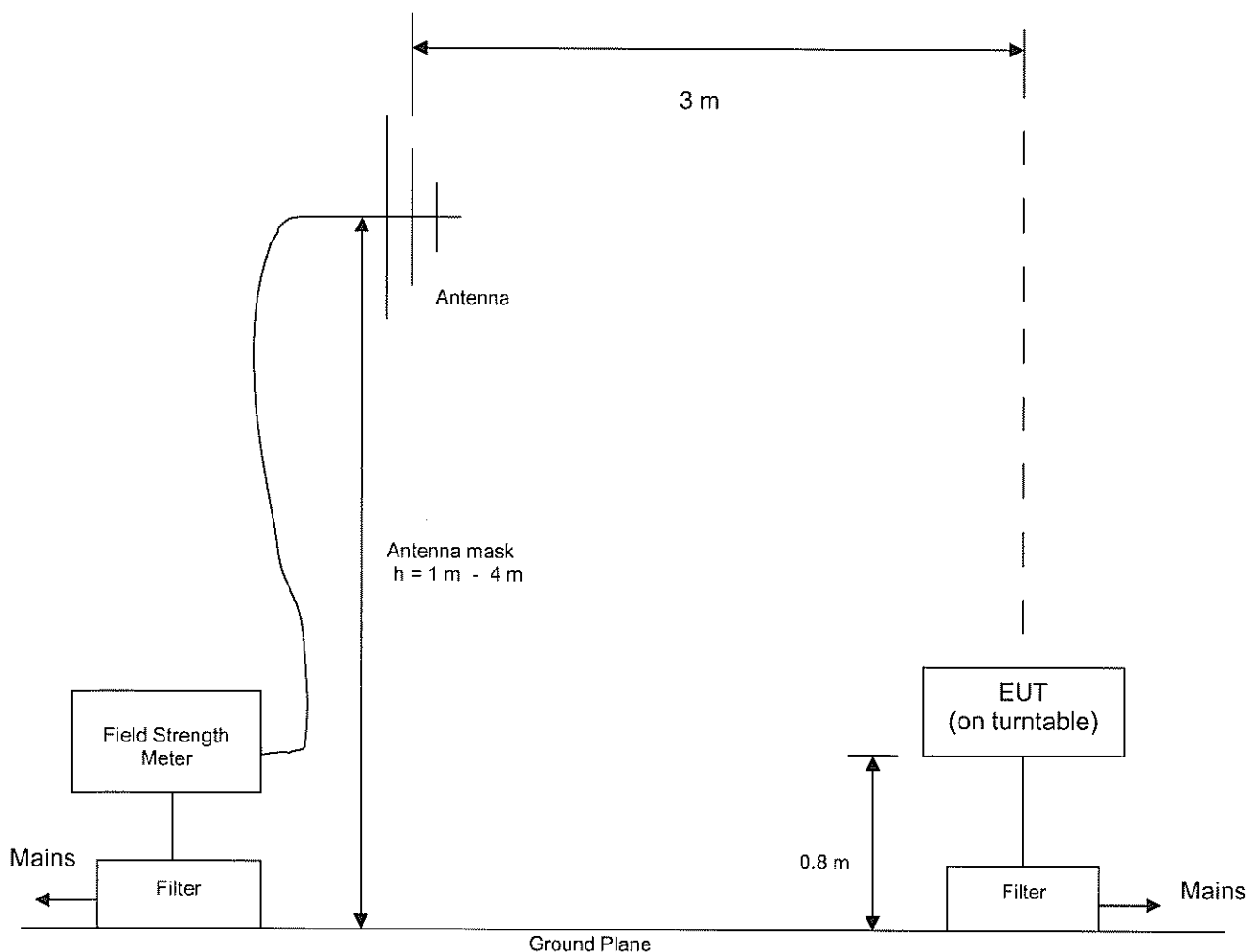
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## Radiated Emission Test Setup (3 m distance) (> 30MHz)



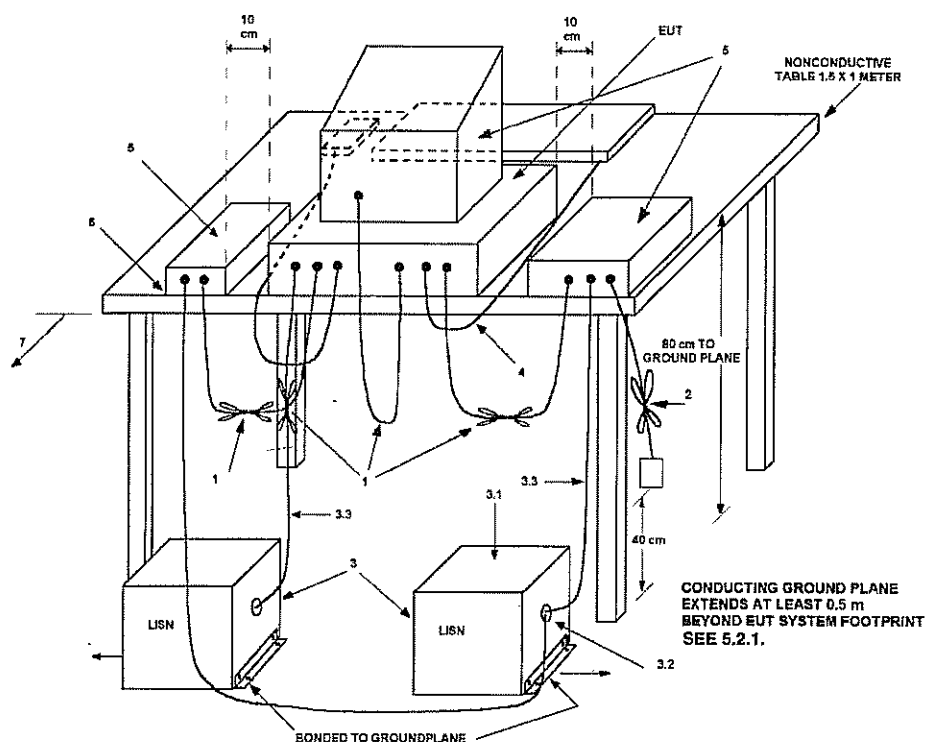
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## Conducted Emission Test Setup



## LEGEND:

- 1) Interconnecting cables that hang closer than 40 cm to the groundplane shall be folded back and forth in the center forming a bundle 30 to 40 cm long (see 6.1.4 and 11.2.4).
- 2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m (see 6.1.4).
- 3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50  $\Omega$ . LISN can be placed on top of, or immediately beneath, reference groundplane (see 5.2.3 and 7.2.1).
  - 3.1) All other equipment powered from additional LISN(s).
  - 3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
  - 3.3) LISN at least 80 cm from nearest part of EUT chassis.
- 4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use (See 6.2.1.3 and 11.2.4).
- 5) Non-EUT components of EUT system being tested (see also Figure 13).
- 6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop (see 6.2.1.1 and 6.2.1.2).
- 7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the groundplane (see 5.2.2 for options).



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**Test Procedure****Radiated Emission :**

The EUT was tested according to ANSI 63.4-2003 for the requirements of FCC Part 15 Subpart B Section 15.109.

During the test, the sample was placed on a turn table and operated under data transfer mode with fully charged built-in rechargeable battery. The computer system included a notebook computer, an external keyboard, a mouse, an external monitor, a printer and an ethernet router was connected to the sample during the test. The table is 0.8 meter above the reference ground plane on the Open Area Test Site and can rotate 360 degrees to determine the position of the maximum emission level. A broad-band antenna for the frequency range 30 - 1000 MHz, connected with 10 meters coaxial cable to the test receiver was used for measurement. The antenna is capable of measuring both horizontal and vertical polarizations. The antenna was raised from 1 to 4 meters to find out the maximum emission level from the EUT.

During the test, under the data transfer mode, the sample was operated with the host notebook computer via the USB connection.

An initial pre-scan was performed to find out the maximum emission level of the sample placed at 3 orthogonal planes. Final measurement (30 MHz – 1000 MHz) was then performed to record the data for the emissions under worst-case condition for combination of the antenna orientation / height and turn table position.

Note : The Open Area Test Site located at IECC was placed on file with the FCC Pursuant to Section 2.948 of the FCC Rules (FCC Registration No. : 97774).

**Conducted Emission :**

The EUT was tested according to ANSI 63.4-2003 for the requirements of FCC Part 15 Subpart B Section 15.107.

During the test, the sample was placed on a wooden table and operated under data transfer mode with fully charged built-in rechargeable battery. The computer system included a notebook computer, an external keyboard, a mouse, an external monitor, a printer and an ethernet router was connected to the sample during the test. The table is 0.8 meter above the floor. During the test, under the data transfer mode, the sample was operated with the host notebook computer via the USB connection. The host notebook computer was connected to the LISN which was connected to the test receiver for conducted emission measurement (150kHz – 30MHz).

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**Test Results****Radiated Emission :**

Test Requirement: FCC Part 15 Subpart B Section 15.109

Test Method: ANSI C63.4 : 2003

Deviations from Standard Test Method: Nil

Frequency Range: 30MHz – 1000MHz

Measurement Distance: 3 m

Class: Class B

Detector: Quasi-Peak

Refer to page 11 for measurement data.

**Conducted Emission :**

Test Requirement: FCC Part 15 Subpart B Section 15.107

Test Method: ANSI C63.4 : 2003

Deviations from Standard Test Method: Nil

Frequency Range: 150kHz – 30MHz

Class: Class B

Detector: Quasi-Peak / Average

Refer to page 12 - 15 for measurement data.

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Radiated Emission

Acc: FCC Part 15 Subpart B (15.109)

IECC Ref: 51424  
 Model: DP-185  
 Applicant: VICTORWOOD HOLDINGS LIMITED

Test Equipment  
 Receiver: Rohde & Schwarz ESCS 30  
 Antenna: Schaffner CBL6111C

Ser.Nr.: --

Set under test: 1.5 Inches Keychain Digital Photo Frame

Connected sets: -

Operating mode: DataTransfer with the host computer

| Frequency (MHz) | Horz. Reading dB(μV) | Vert. Reading dB(μV) | Corr. Factor (dB) | Horiz. Test Result dB(μV/m) | Vert. Test Result dB(μV/m) | Limit dB(μV/m) |
|-----------------|----------------------|----------------------|-------------------|-----------------------------|----------------------------|----------------|
| 30              | < 16.0               | < 16.0               | 19.1              | < 35.1                      | < 35.1                     | 40.0           |
| 50              | < 16.0               | < 16.0               | 7.7               | < 23.7                      | < 23.7                     | 40.0           |
| 56              | < 16.0               | < 16.0               | 6.7               | < 22.7                      | < 22.7                     | 40.0           |
| 96              | 24.0                 | 20.0                 | 9.2               | 33.2                        | 29.2                       | 43.5           |
| 120             | < 16.0               | < 16.0               | 11.5              | < 27.5                      | < 27.5                     | 43.5           |
| 192             | < 16.0               | < 16.0               | 9.1               | < 25.1                      | < 25.1                     | 43.5           |
| 240             | < 16.0               | < 16.0               | 12.3              | < 28.3                      | < 28.3                     | 46.0           |
| 360             | < 16.0               | < 16.0               | 15.3              | < 31.3                      | < 31.3                     | 46.0           |
| 408             | < 16.0               | < 16.0               | 17.1              | < 33.1                      | < 33.1                     | 46.0           |
| 500             | < 16.0               | < 16.0               | 18.9              | < 34.9                      | < 34.9                     | 46.0           |
| 700             | < 16.0               | < 16.0               | 22.3              | < 38.3                      | < 38.3                     | 46.0           |
| 1000            | < 16.0               | < 16.0               | 26.2              | < 42.2                      | < 42.2                     | 54.0           |

The measurement results indicate that the test sample meets the FCC requirements.

Note :

1. The above measured data are in Quasi-Peak values.
2. The above results were the worst case results with the sample positioned in all 3 axis during the test. The worst data was found with the sample placed horizontally on the table.

Operator : KT



U 5 / 6

Interference Voltage 150 KHz - 30 MHz

acc. FCC PART 15 Subpart B Section 15.107 (a) Class B

Cabin 1

Model: DP-185

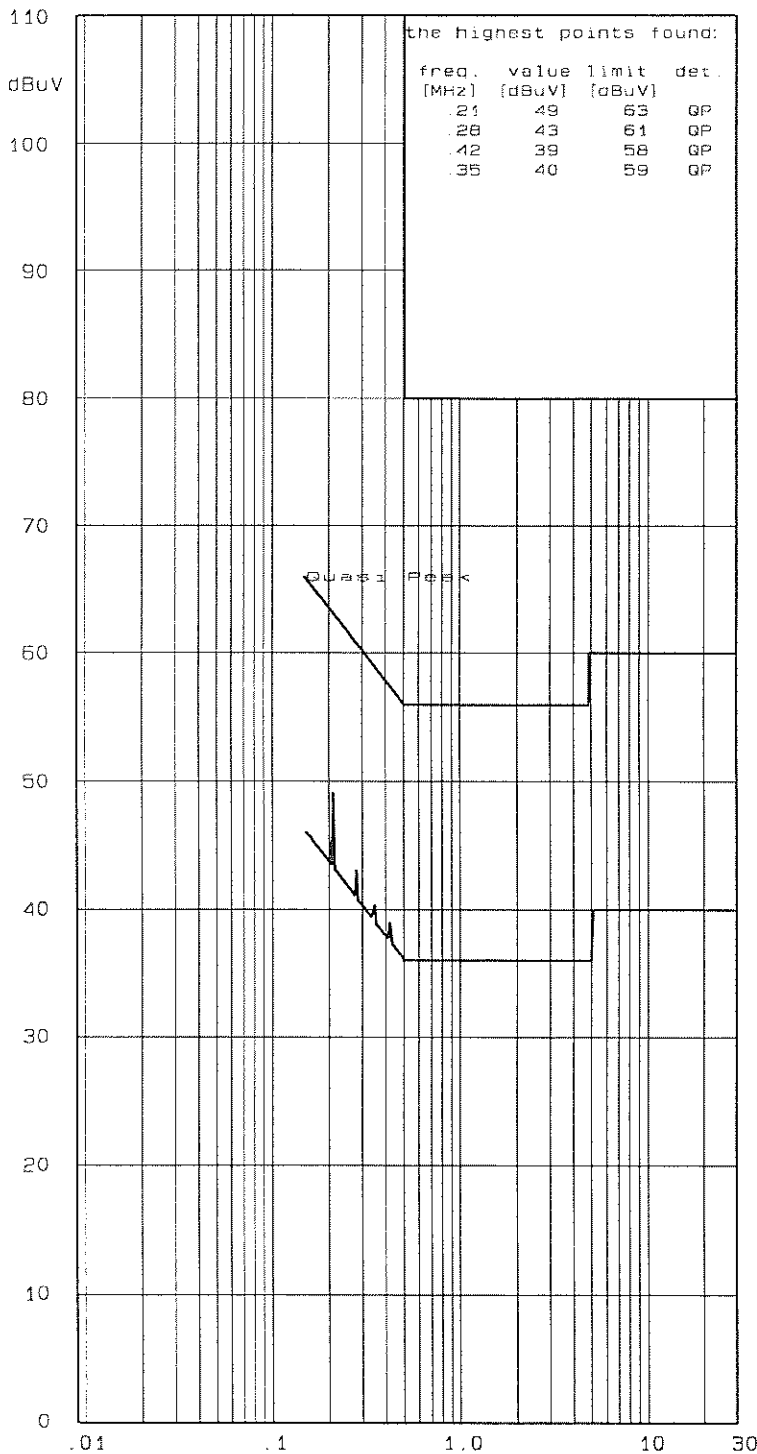
Spl./Ser.No.: 01 / --

Client : VICTORWOOD HOLDINGS

Product: PHOTO FRAME

IECC-No.: 51424

Date: 2 Dec 2008



Test equipment:

Rohde & Schwarz ESH530

Schwarzbeck NSLK8127

Connected sets:

--

Operating mode:

DATA TRANSFER  
TEST W/ REFERENCE COMPUTER  
(L)

--

RFI suppression parts:

--

\* two dB safety margin for  
type approval necessary

Operator: KT

Result: *OK*

IECC



U 5 / 6

Interference Voltage 150 KHz - 30 MHz

acc. FCC PART 15 Subpart B Section 15.107(a) Class B

Cabin 1

Model: DP-185

Spl./Ser.No.: 01 / --

Client : VICTORWOOD HOLDINGS

Product: PHOTO FRAME

IECC-No.: 51424

Date: 2 Dec 2008

Test equipment:

Rohde & Schwarz ESH530

Schwarzbeck NSLK8127

Connected sets:

--

Operating mode:

DATA TRANSFER  
TEST W/ REFERENCE COMPUTER  
(L)

--

RFI suppression parts:

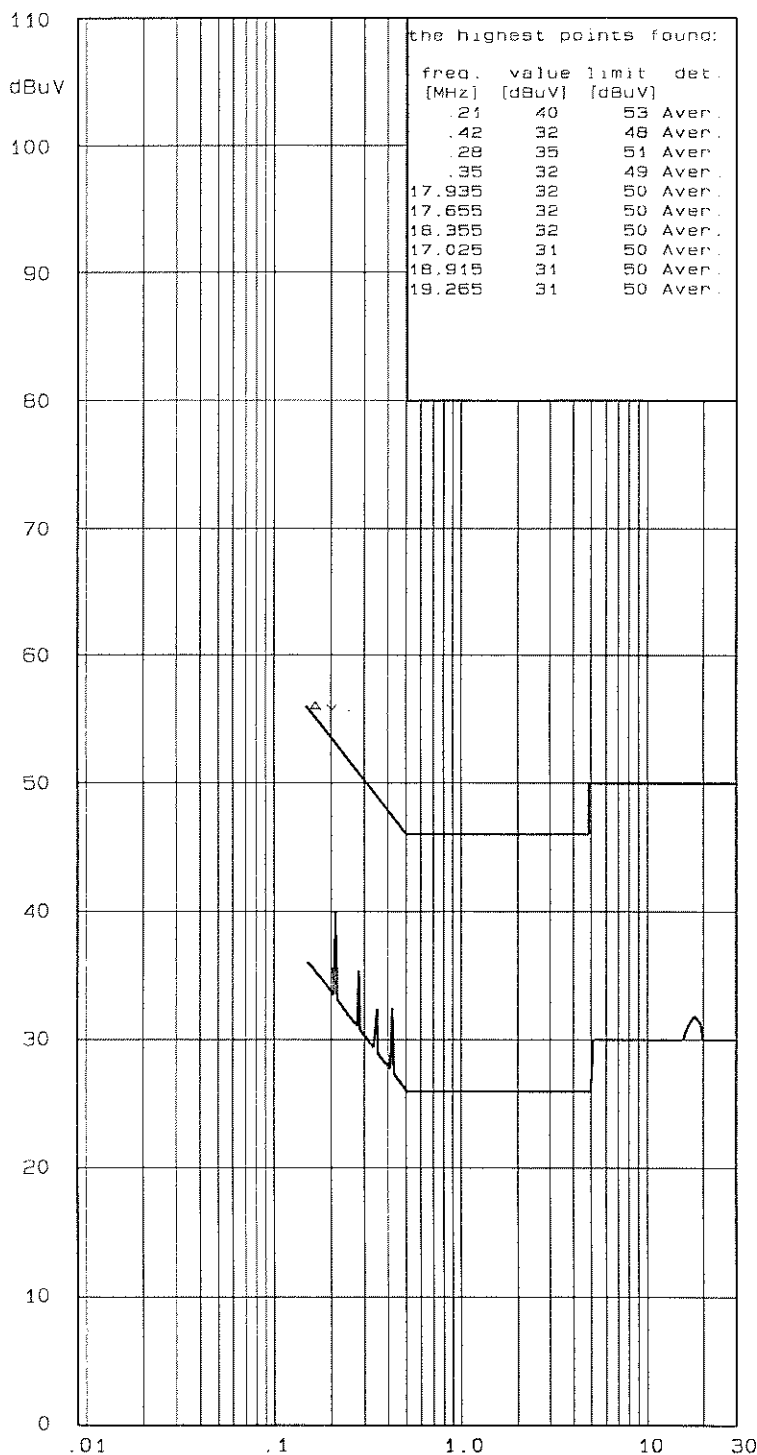
--

\* two dB safety margin for  
type approval necessary

Operator: KT

Result: *ok*

IECC





U 5 / 6

Interference Voltage 150 KHz - 30 MHz

acc. FCC PART 15 Subpart B Section 15.107(a) Class B

Cabin 1

Model: DP-185

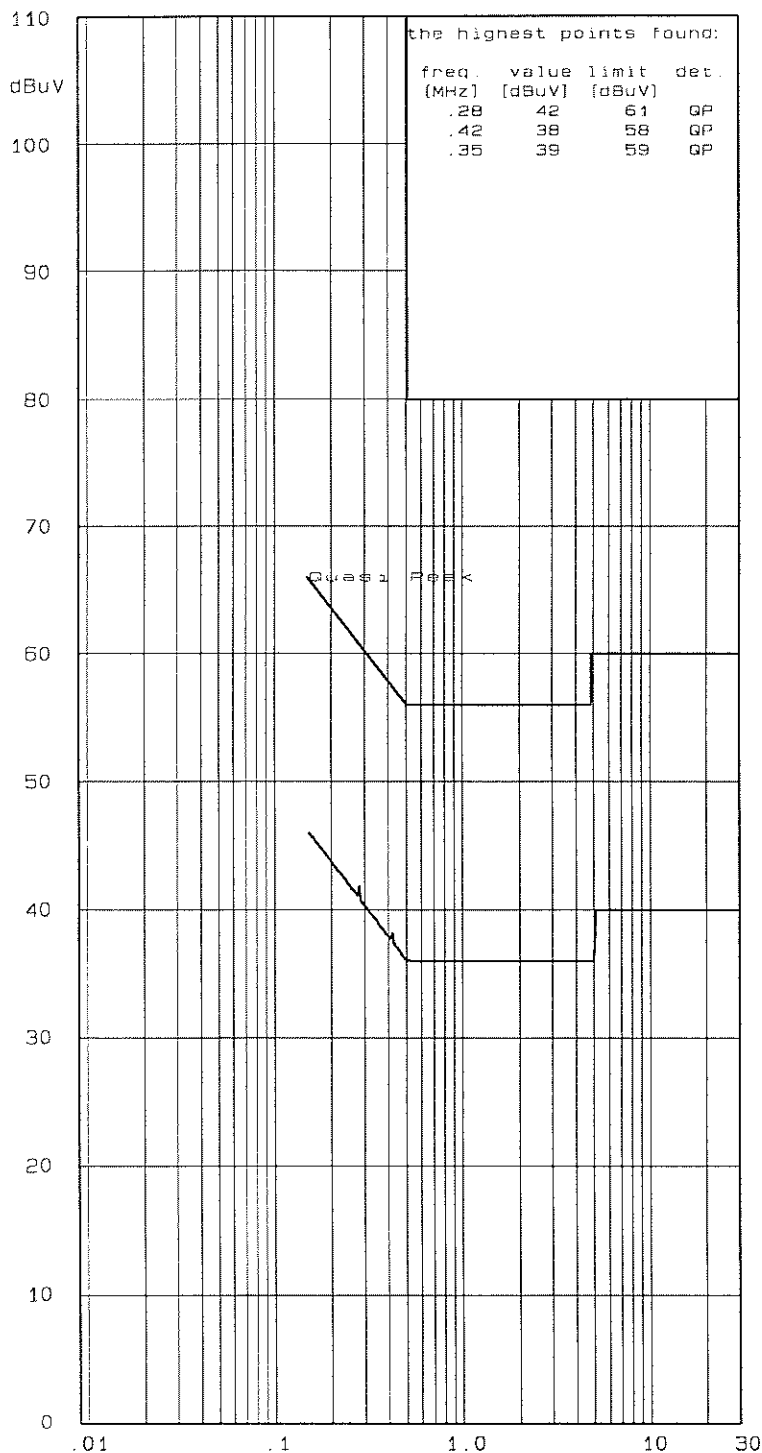
Spl./Ser.No.: 01 / --

Client : VICTORWOOD HOLDINGS

Product: PHOTO FRAME

IECC-No.: 51424

Date: 2 Dec 2008



Test equipment:

Rohde & Schwarz ESHS30

Schwarzbeck NSLK8127

Connected sets:

--

Operating mode:

DATA TRANSFER  
TEST W/ REFERENCE COMPUTER  
(N)

--

RFI suppression parts:

--

\* two dB safety margin for  
type approval necessary

Operator: KT

Result: ok

IECC



U 5 / 6

Interference Voltage 150 KHz - 30 MHz

acc. FCC PART 15 Subpart B Section 15.107 (a) Class B

Cabin 1

Model: DP-185

Spl./Ser.No.: 01 / --

Client : VICTORWOOD HOLDINGS

Product: PHOTO FRAME

IECC-No.: 51424

Date: 2 Dec 2008

Test equipment:

Rohde & Schwarz ESHS30

Schwarzbeck NSLK8127

Connected sets:

--

Operating mode:

DATA TRANSFER  
TEST w/ REFERENCE COMPUTER  
(N)

--

RFI suppression parts:

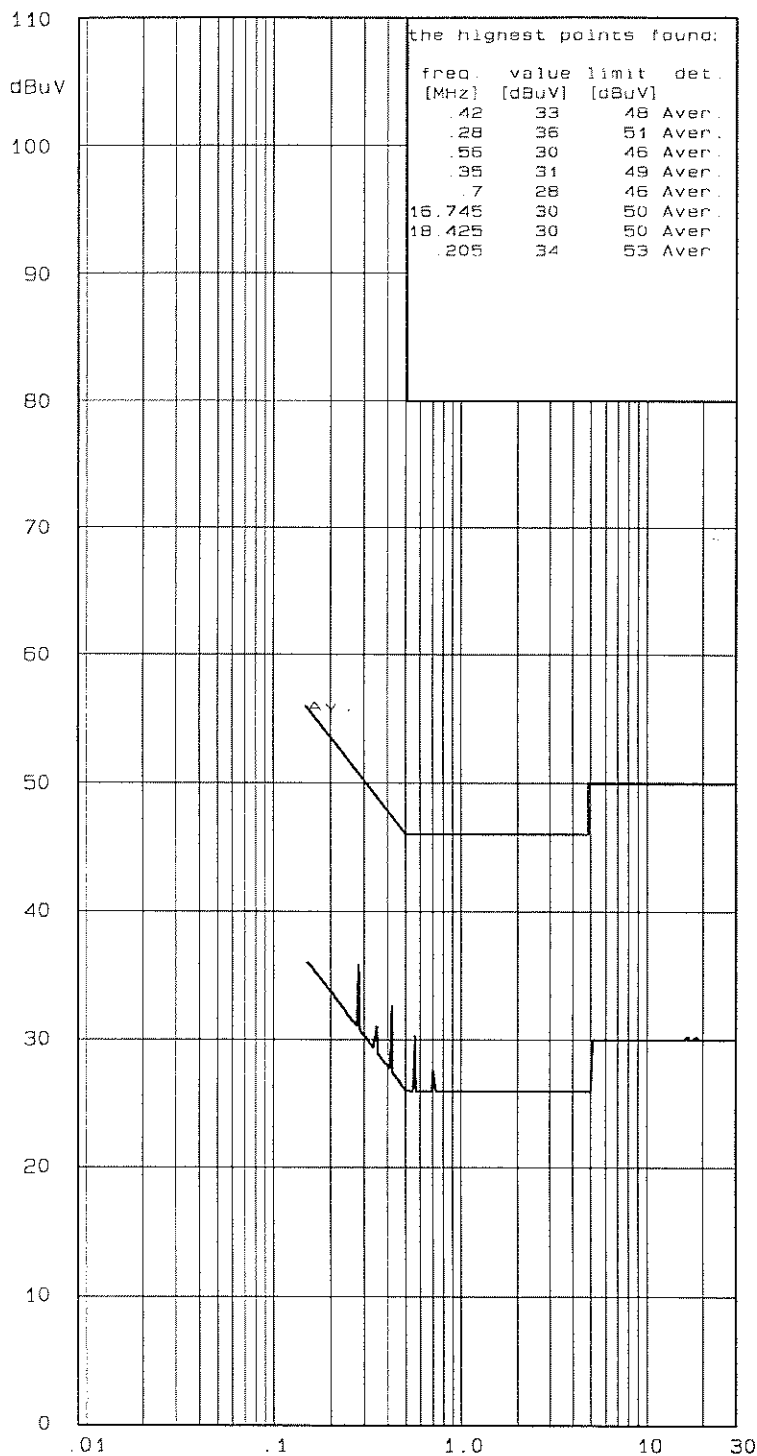
--

\* two dB safety margin for  
type approval necessary

Operator: KT

Result: ok

IECC



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**Photograph Of The Sample**