

# FCC COMPLIANCE REPORT

Order No. : SKE-04-0874/E  
Reference No. : F690501/LF-EMC000630  
Applicant : MobiTechPlus Inc.  
Address of Applicant : 32-4, Songwol-Dong, Jongno-Gu, Seoul, 110-101, Korea

**Equipment Under Test (EUT) :**

Product Name : PC Camera  
Model No. : MW-200  
FCC ID : SIXMW200

**Standards** : FCC Part 15, Subpart B, Class B  
ANSI C63.4:2001

**Date of Receipt** : 09 September 2004

**Date of Test** : 09 September 2004 to 10 September 2004

**Date of Issue** : 13 September 2004

|                      |             |
|----------------------|-------------|
| <b>Test Result :</b> | <b>PASS</b> |
|----------------------|-------------|

In the configuration tested, the EUT complied with the standards specified above.

**Remarks :**

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report shall not be reproduced except in full, without the written approval of the laboratory. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.



**Kew-Seung, Lim**  
**EMC DIV. Manager**  
**SGS Testing Korea Co., Ltd.**

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## 1. General Information

### 1.1 Manufacturer Information

Manufacturer : MobiTechPlus Inc.

Address : 32-4, Songwol-Dong, Jongno-Gu, Seoul, 110-101, Korea

### 1.2 General Description of EUT

Product Name : PC Camera

Model No. : MW-200

FCC ID : SIXMW200

Serial No : MW200A104C

### 1.3 Details of EUT

Tested Power Supply : AC 110V, 60Hz

Port : USB

Description of Operating : Connect to the Note PC and input video data through EUT and output it through Note PC.

Modifications to the EUT : None

### 1.4 Description of Support Units

| Product | Model No.     | Serial No. | Manufacturer          |
|---------|---------------|------------|-----------------------|
| Note PC | AVERATEC 3200 | N/A        | TriGem Computer, Inc. |
|         |               |            |                       |

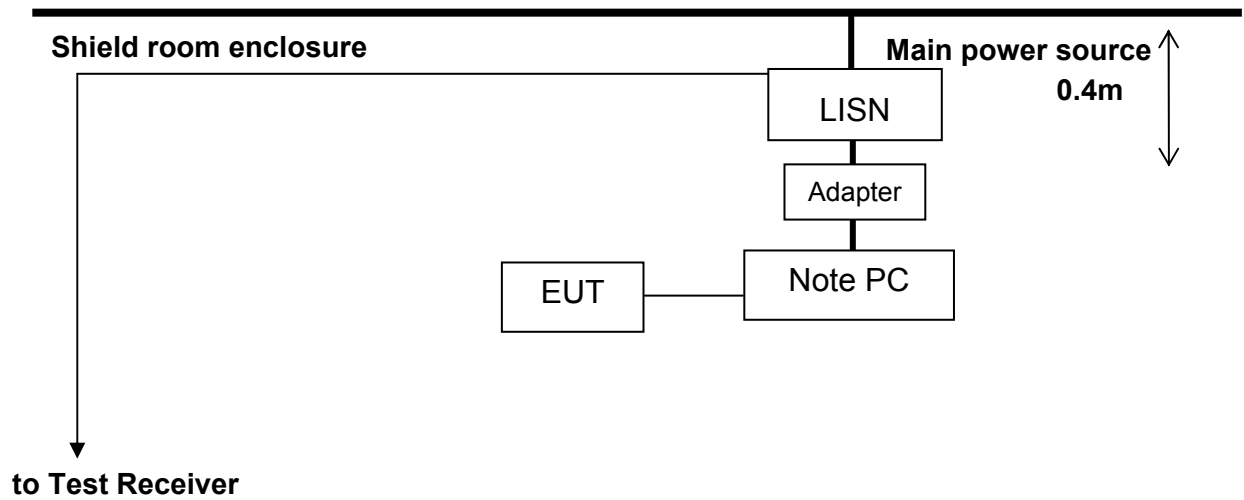
### 1.5 Cable List

| Start   |           | END         |          | Cable Spec |                        |
|---------|-----------|-------------|----------|------------|------------------------|
| Name    | I/O Port  | Name        | I/O Port | Length     | Shield                 |
| EUT     | USB       | Note PC     | USB      | 2.5        | Shielded               |
| Note PC | USB DC IN | EUT Adapter | USB -    | 2.5<br>1.0 | Shielded<br>Unshielded |
| Adapter | -         | LISN        | -        | 1.0        | Unshielded             |

### 1.6 System Configuration

| Description | Model | Serial No. | Manufacturer |
|-------------|-------|------------|--------------|
| Main Board  | N/A   | N/A        | N/A          |
|             |       |            |              |

### 1.7 Test Set-Up Configuration



### 1.8 Measurement Procedure

Conducted Emission Testing was performed according ANSI C63.4:2001 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded room wall.

Radiated Emission Testing was performed according to ANSI C63.4:2001 at the open field test site. The EUT was placed in a 0.8m high table along with the peripherals. The turn table was separated from the antenna distance 10meters. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for maximum.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Reported are maximized emission levels.

### 1.9 Standards Applicable for Testing

Table of tests to be carried out under FCC Part 15, Subpart B, CLASS B

| Test Standards                 | Status       |
|--------------------------------|--------------|
| FCC Part 15,Subpart B, Class B | Applicable   |
| Deviation from Standard        | No Deviation |

### 1.10 Summary of Results

The data collected shows that Model **MW-200** complies with Part 15.109 and 107 of FCC Technical Rules.

The highest emission level observed was at 15.59MHz for Q/P mode conducted emission with a margin of 15.3dB and at 15.59MHz for AV mode conducted emission with a margin of 8.0dB and at 176.58MHz radiated emission with a margin of 7.16dB.

## Radio Disturbance

### 2.1 Test Results

|                    | Results     |
|--------------------|-------------|
| Conducted Emission | <b>PASS</b> |
| Radiated Emission  | <b>PASS</b> |

### 2.2 Frequency Range

Conducted Emission : 150 kHz - 30 MHz

Radiated Emission : 30 MHz - 1000 MHz, Above 1000MHz

### 2.3 Limits Of Conducted And Radiated Emission

#### 2.3.1 Limit Of Conducted Emission Of FCC Part 15, Subpart B

| FREQUENCY<br>(MHz) | Class A (dBuV) |         | Class B (dBuV) |         |
|--------------------|----------------|---------|----------------|---------|
|                    | Quasi - peak   | Average | Quasi - peak   | Average |
| 0.15 - 0.5         | 79             | 66      | 66 - 56        | 56 - 46 |
| 0.50 - 5.0         | 73             | 60      | 56             | 46      |
| 5.0 - 30.0         | 73             | 60      | 60             | 50      |

Note : (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified above.

#### 2.3.2 Limit Of Radiated Emission Of FCC Part 15, Subpart B

| FREQUENCY<br>(MHz) | Class A (at 10m)* | Class B (at 10m)* |
|--------------------|-------------------|-------------------|
|                    | dBuV/m            | dBuV/m            |
| 30-230             | 40                | 30                |
| 230-1000           | 47                | 37                |

\* Detector Function : Quasi - Peak

**2.4. Test of Conducted Emission**

**2.4.1 Test Equipments**

| Equipment     | Manufacturer | Model No. | Date of Calibration |
|---------------|--------------|-----------|---------------------|
| Test Receiver | R & S        | ESPC      | Nov. 2003           |
| LISN          | EMCO         | 3825/2    | Dec. 2003           |
| LISN          | EMCO         | 3825/2    | Nov. 2003           |
| Pulse Limiter | PMM          | PL-01     | Jul. 2004           |
| Shielded Room | N/A          | N/A       | -                   |

**2.4.2 Test Site**

**Name and address : SGS Testing Korea Co., Ltd.**  
 18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea, 435-041

**2.4.3 Operating Environment**

Temperature : 22.5 degree C                      Humidity : 39.5 %RH  
 Atmospheric Pressure : 1002 mBar


**2.4.4 Measurement Data**

**Measurement Bandwidth : 9kHz**

**Date of Test : September 09 2004**

| FREQ.<br>(MHz) | LEVEL(dB $\mu$ V) |         | LINE | LIMIT(dB $\mu$ V) |         | MARGIN(dB $\mu$ V) |         |
|----------------|-------------------|---------|------|-------------------|---------|--------------------|---------|
|                | Q-Peak            | Average |      | Q-Peak            | Average | Q-Peak             | Average |
| 0.16           | 47.4              | 26.4    | N    | 65.5              | 55.5    | 18.1               | 29.1    |
| 0.19           | 47.0              | 35.5    | N    | 64.0              | 54.0    | 17.0               | 18.5    |
| 0.22           | 40.9              | 25.6    | N    | 62.8              | 52.8    | 21.9               | 27.2    |
| 0.25           | 38.5              | 23.9    | N    | 61.8              | 51.8    | 23.3               | 27.9    |
| 3.74           | 33.9              | 20.6    | N    | 56.0              | 46.0    | 22.1               | 25.4    |
| 15.59          | 44.7              | 42.0    | N    | 60.0              | 50.0    | 15.3               | 8.0     |

\* Measurements using CISPR quasi-peak mode



**See – Ho, Lee / Test Engineer**

**2.5 Test of Radiated Emission****2.5.1 Test Instruments**

| Description       | Manufacturer | Model No. | Date of Calibration |
|-------------------|--------------|-----------|---------------------|
| Test Receiver     | R & S        | ESVS30    | Dec. 2003           |
| Spectrum Analyzer | H.P          | E4411A    | Oct. 2003           |
| RF Amplifier      | H.P          | 8447F     | May. 2004           |
| Bilog Antenna     | Schaffner    | CBL6111C  | Apr. 2004           |
| RF Select s/w     | DAIWA        | CS201     | Apr. 2004           |
| Open Site         | N/A          | N/A       | -                   |

**2.5.2 Test Site**Name and address : **SGS Testing Korea Co., Ltd.**

18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea, 435-041

**2.5.3 Operating Environment**

Temperature : 18.5 degree C

Humidity : 46.7 %RH

Atmospheric Pressure : 997 mBar

**2.5.4 Measurement Data**

Measurement Bandwidth : 120kHz

Date of Test : September 10 2004

| FREQ.<br>(MHz) | LEVEL<br>(dB $\mu$ V) | POL<br>(H/V) | AF<br>(dB) | CL<br>(dB) | F/S<br>(dB $\mu$ V/m) | LIMIT<br>(dB) | MARGIN<br>(dB $\mu$ V) |
|----------------|-----------------------|--------------|------------|------------|-----------------------|---------------|------------------------|
| 176.58         | 10.0                  | V            | 9.30       | 3.55       | 22.84                 | 30.0          | 7.16                   |
| 239.94         | 12.0                  | V            | 11.77      | 3.92       | 27.69                 | 37.0          | 9.31                   |
| 256.71         | 7.5                   | V            | 12.59      | 4.05       | 24.14                 | 37.0          | 12.86                  |
| 304.92         | 9.3                   | V            | 13.22      | 4.46       | 26.98                 | 37.0          | 10.02                  |
| 316.72         | 7.3                   | V            | 13.55      | 4.60       | 25.45                 | 37.0          | 11.55                  |
| 432.10         | 6.5                   | V            | 16.43      | 5.89       | 28.82                 | 37.0          | 8.18                   |

\* AF = Antenna Factor. \*\* CL = Cable Loss.

\*\*\* Margin=Each Frequency Limit Level(dBuV) - (Level+AF+CL)



See – Ho, Lee / Test Engineer



### 3. Photographs of Test

- Front View of Conducted Emission



- Rear View of Conducted Emission



- Front View of Radiated Emission



- Rear View of Radiated Emission



Appendix A : Conducted Emission Test Data

MobiTechPlus Inc.

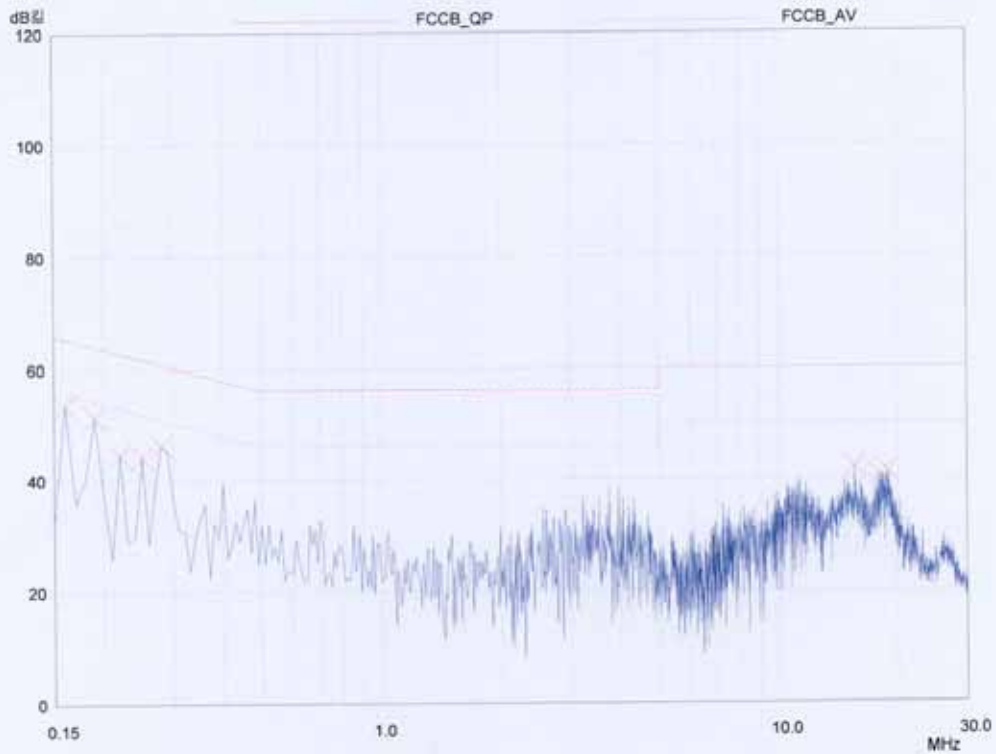
MW-200

EUT: PC CAMERA  
Manuf: MobiTechPlus Inc.  
Op Cond: NEUTRAL  
Operator: S.H.LEE  
Test Spec: FCC Part 15  
Comment:



File: e0674n.dat : New Measurement

Prescan Measurement: X PK  
Meas Time: see scan settings  
Peaks: 8  
Acc Margin: 40 dB



MobiTechPlus Inc.  
MW-200

EUT: PC CAMERA  
Manuf: MobiTechPlus Inc.  
Op Cond: HOT  
Operator: S.H.LEE  
Test Spec: FCC Part 15  
Comment:



File: e0874h.dat : New Measurement

Prescan Measurement: X PK  
Meas Time: see scan settings  
Peaks: 8  
Acc Margin: 40 dB

