

Results

## Radiated Disturbance Measurements

E.U.T.

Category : IMAGE MEMORY CARD READER  
 Model name : DPC-R1  
 Serial number : 00003

Test Specification

Applied standard:  
 FCC Part 15, Subpart B  
 Class B

Operating mode of E.U.T. during the test

Operating

Remarks

None

Applied power : AC 120V 60Hz #  
 Single phase 3- wire

Test Condition

Date : June 28, 2002  
 Open site : Site No.1  
 Distance : 3m  
 Detection : Q.P.  
 Temp./Humi. : 20.0°C, 84 %  
 Tested by : T. Sukegawa

Polarization : Vertical

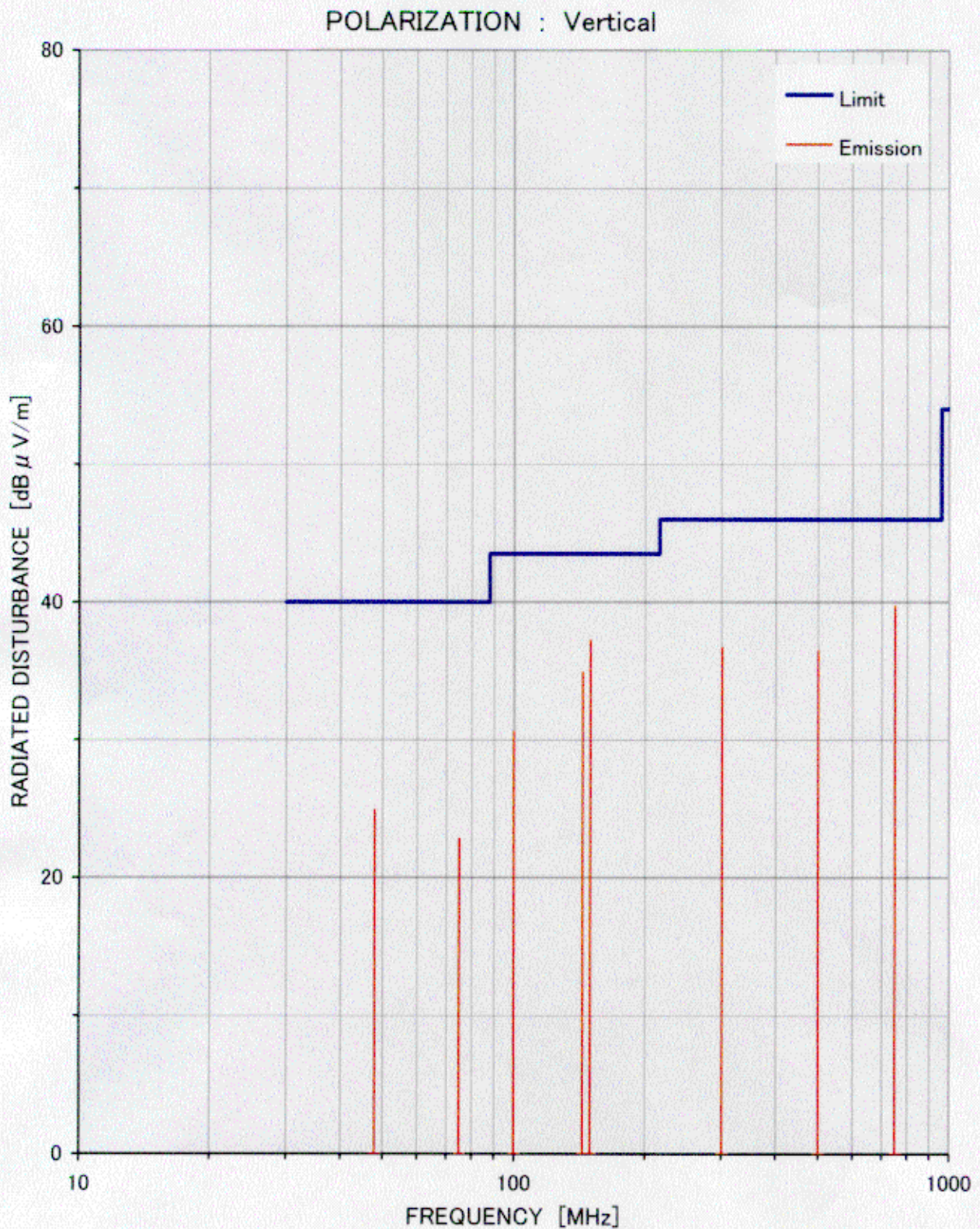
DATA No. 1 ( Refer to Graph 1)

| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V) | Cor. F.<br>(dB/m) | Result<br>(dB $\mu$ V/m) | Limit<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|----------------|-------------------------|-------------------|--------------------------|-------------------------|----------------|
| 48.00          | 38.5                    | -13.6             | 24.9                     | 40.0                    | 15.1           |
| 75.03          | 41.5                    | -18.7             | 22.8                     | 40.0                    | 17.2           |
| 100.04         | 45.2                    | -14.6             | 30.6                     | 43.5                    | 12.9           |
| 144.04         | 45.1                    | -10.2             | 34.9                     | 43.5                    | 8.6            |
| 150.00         | 47.2                    | -10.0             | 37.2                     | 43.5                    | 6.3            |
| 301.47         | 46.4                    | -9.7              | 36.7                     | 46.0                    | 9.3            |
| 501.09         | 41.2                    | -4.7              | 36.5                     | 46.0                    | 9.5            |
| 751.65         | 38.9                    | 0.8               | 39.7                     | 46.0                    | 6.3 †          |

## Remarks

- Formula : Result = Reading + Cor.F.  
Margin = Limit - Result
- The correction factor ( Cor.F. ) includes the antenna factor, cable loss and pre-amplifier gain.
- # : EUT is supplied with DC 5V from PC.
- † : Radiated disturbance is perhaps from the monitor.

Graph 1



## Radiated Disturbance Measurements

E.U.T.

Category : IMAGE MEMORY CARD READER  
 Model name : DPC-R1  
 Serial number : 00003

Test Specification

Applied standard:  
 FCC Part 15, Subpart B  
 Class B

Applied power : AC 120V 60Hz #  
 Single phase 3-wire

Operating mode of E.U.T. during the test

Operating

Test Condition

Date : June 28, 2002  
 Open site : Site No.1  
 Distance : 3m  
 Detection : Q.P.  
 Temp./Humi. : 20.0°C, 84 %  
 Tested by : T. Sukegawa

Remarks

None

Polarization : Horizontal

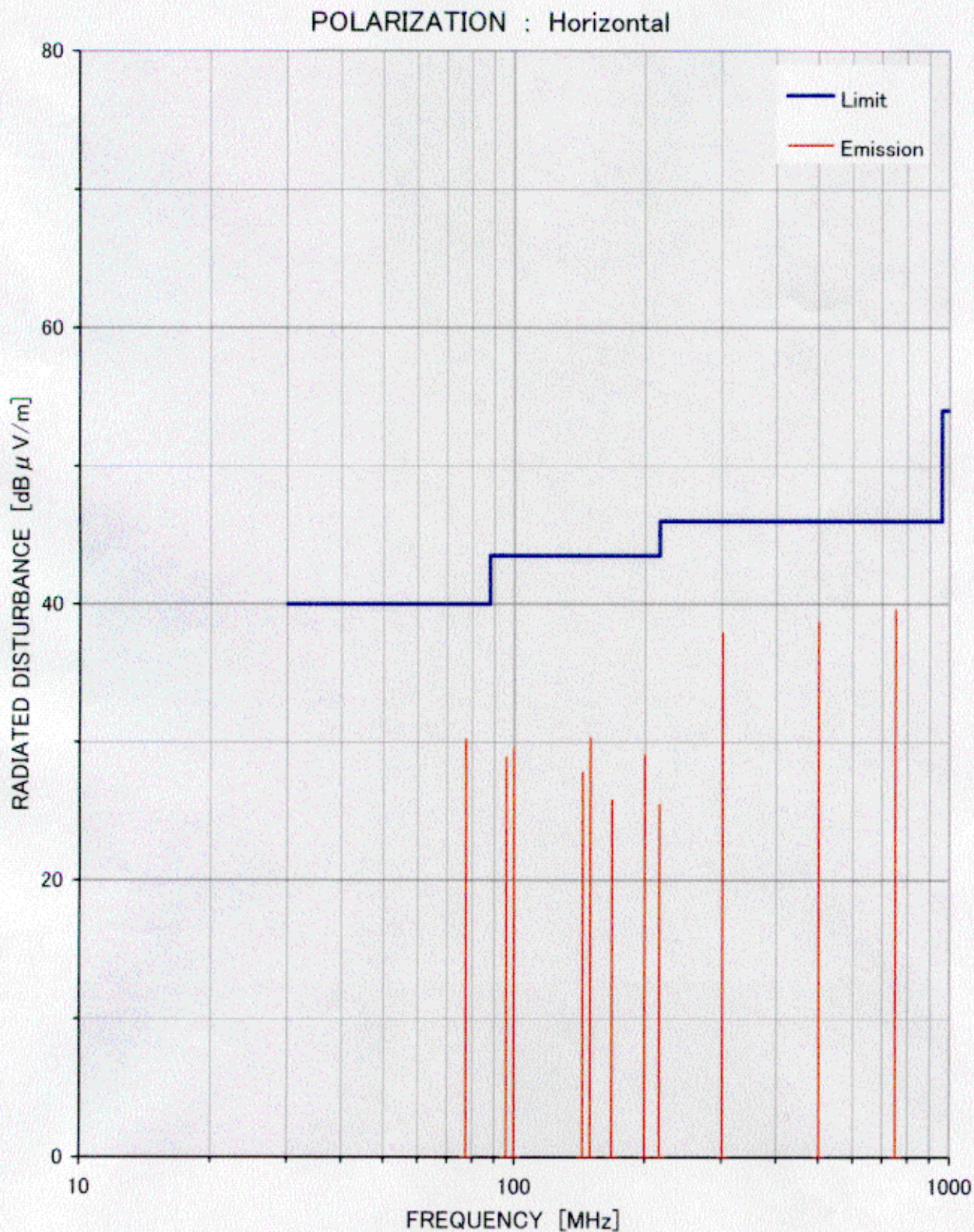
DATA No. 2 (Refer to Graph 2)

| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V) | Cor. F.<br>(dB/m) | Result<br>(dB $\mu$ V/m) | Limit<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|----------------|-------------------------|-------------------|--------------------------|-------------------------|----------------|
| 77.52          | 48.9                    | -18.7             | 30.2                     | 40.0                    | 9.8            |
| 96.02          | 44.5                    | -15.6             | 28.9                     | 43.5                    | 14.6           |
| 100.03         | 44.2                    | -14.6             | 29.6                     | 43.5                    | 13.9           |
| 144.03         | 38.0                    | -10.2             | 27.8                     | 43.5                    | 15.7           |
| 150.01         | 40.3                    | -10.0             | 30.3                     | 43.5                    | 13.2           |
| 168.00         | 35.2                    | -9.4              | 25.8                     | 43.5                    | 17.7           |
| 200.02         | 36.7                    | -7.6              | 29.1                     | 43.5                    | 14.4           |
| 216.00         | 32.8                    | -7.3              | 25.5                     | 43.5                    | 18.0           |
| 301.48         | 47.6                    | -9.7              | 37.9                     | 46.0                    | 8.1            |
| 501.20         | 43.4                    | -4.7              | 38.7                     | 46.0                    | 7.3            |
| 751.65         | 38.8                    | 0.8               | 39.6                     | 46.0                    | 6.4 †          |

Remarks

- Formula : Result = Reading + Cor.F.  
Margin = Limit - Result
- The correction factor ( Cor.F. ) includes the antenna factor, cable loss and pre-amplifier gain.
- # : EUT is supplied with DC 5V from PC.
- † : Radiated disturbance is perhaps from the monitor.

Graph 2



## Conducted Disturbance Measurements

E.U.T.

Category : IMAGE MEMORY CARD READER  
 Model name : DPC-R1  
 Serial number : 00003

Test Specification

Applied standard :  
 FCC Part 15, Subpart B  
 Class B

Applied power : AC 120V 60Hz #  
 Single phase 3-wire

Operating mode of E.U.T. during the test

Operating

Test Condition

Date : June 28, 2002  
 Shield room : Shield No.1

Remarks

None

Temp./Humi. : 23.5°C, 59 %  
 Tested by : T. Sukegawa

Detection: Q.P.

DATA No. 3 (Refer to Graph 3)

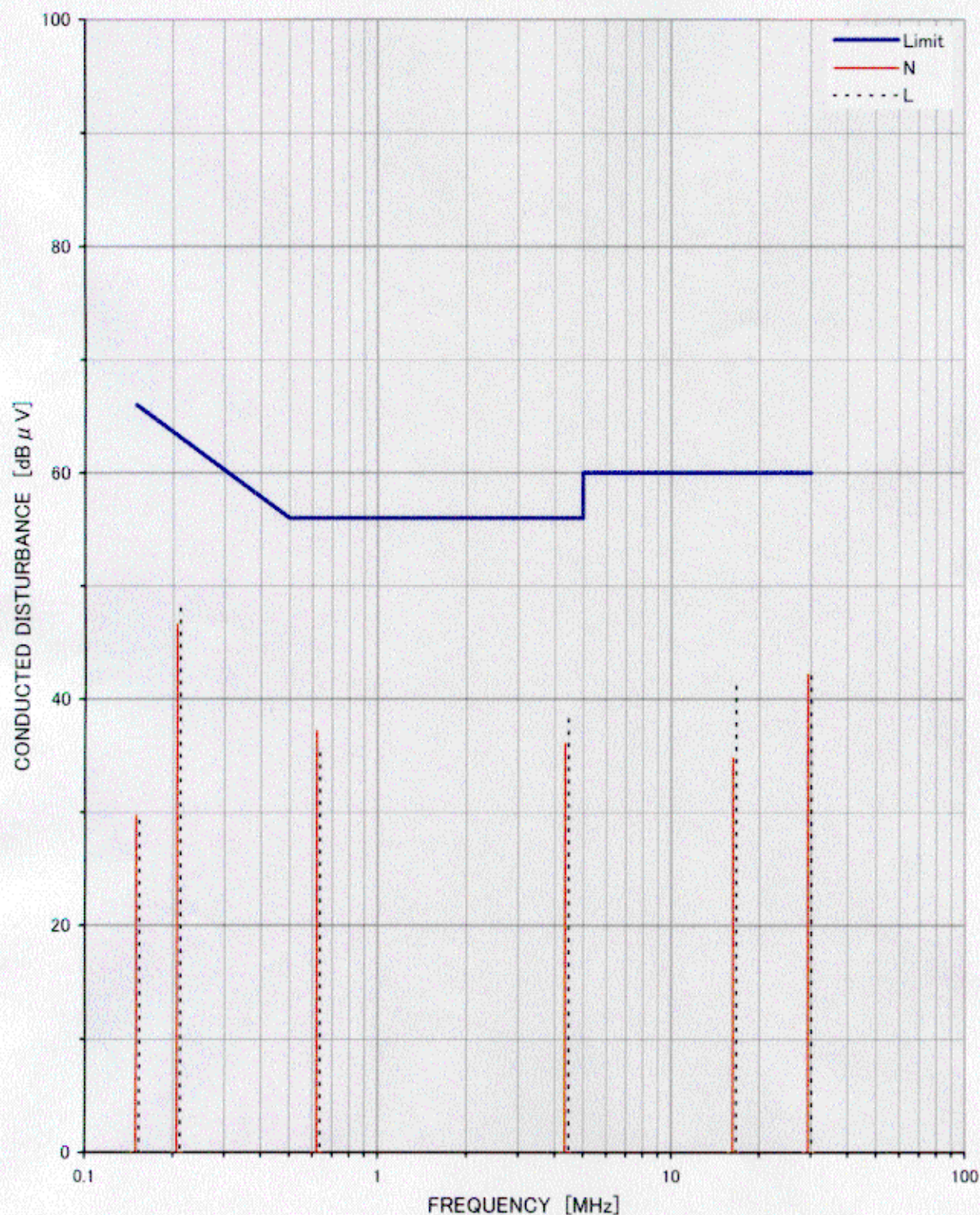
| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V) |      | Cor. F.<br>(dB) |     | Result<br>(dB $\mu$ V) |      | Limit<br>(dB $\mu$ V) | Margin<br>(dB) |      |
|----------------|-------------------------|------|-----------------|-----|------------------------|------|-----------------------|----------------|------|
|                | N                       | L    | N               | L   | N                      | L    |                       | N              | L    |
| 0.150          | 29.5                    | 29.0 | 0.2             | 0.2 | 29.7                   | 29.2 | 66.0                  | 36.3           | 36.8 |
| 0.207          | 46.4                    | 47.8 | 0.2             | 0.2 | 46.6                   | 48.0 | 63.3                  | 16.7           | 15.3 |
| 0.621          | 36.9                    | 34.9 | 0.3             | 0.3 | 37.2                   | 35.2 | 56.0                  | 18.8           | 20.8 |
| 4.355          | 35.6                    | 37.7 | 0.5             | 0.5 | 36.1                   | 38.2 | 56.0                  | 19.9           | 17.8 |
| 16.284         | 34.0                    | 40.2 | 0.8             | 0.9 | 34.8                   | 41.1 | 60.0                  | 25.2           | 18.9 |
| 29.352         | 41.5                    | 40.8 | 0.7             | 1.2 | 42.2                   | 42.0 | 60.0                  | 17.8           | 18.0 |

Remarks

- Formula : Result = Reading + Cor.F.  
 Margin = Limit - Result
- The correction factor ( Cor.F. ) includes the LISN(AMN) voltage division factor and Cable loss.
- The conducted emission limits below 30MHz are consistent with the international standard specified in IEC/CISPR Publication 22. (FCC 02-157)
- # : EUT is supplied with DC 5V from PC.

Graph 3

CONDUCTION / Detection : Q.P.



## Conducted Disturbance Measurements

E.U.T.

Category : IMAGE MEMORY CARD READER  
 Model name : DPC-R1  
 Serial number : 00003

Test Specification

Applied standard :  
 FCC Part 15, Subpart B  
 Class B

Operating mode of E.U.T. during the test

Operating

Applied power : AC 120V 60Hz #  
 Single phase 3-wire

Test Condition

Date : June 28, 2002  
 Shield room : Shield No.1

Remarks

None

Temp./Humi. : 23.5°C, 59 %  
 Tested by : T. Sukegawa

Detection: Average

DATA No. 4 (Refer to Graph 4)

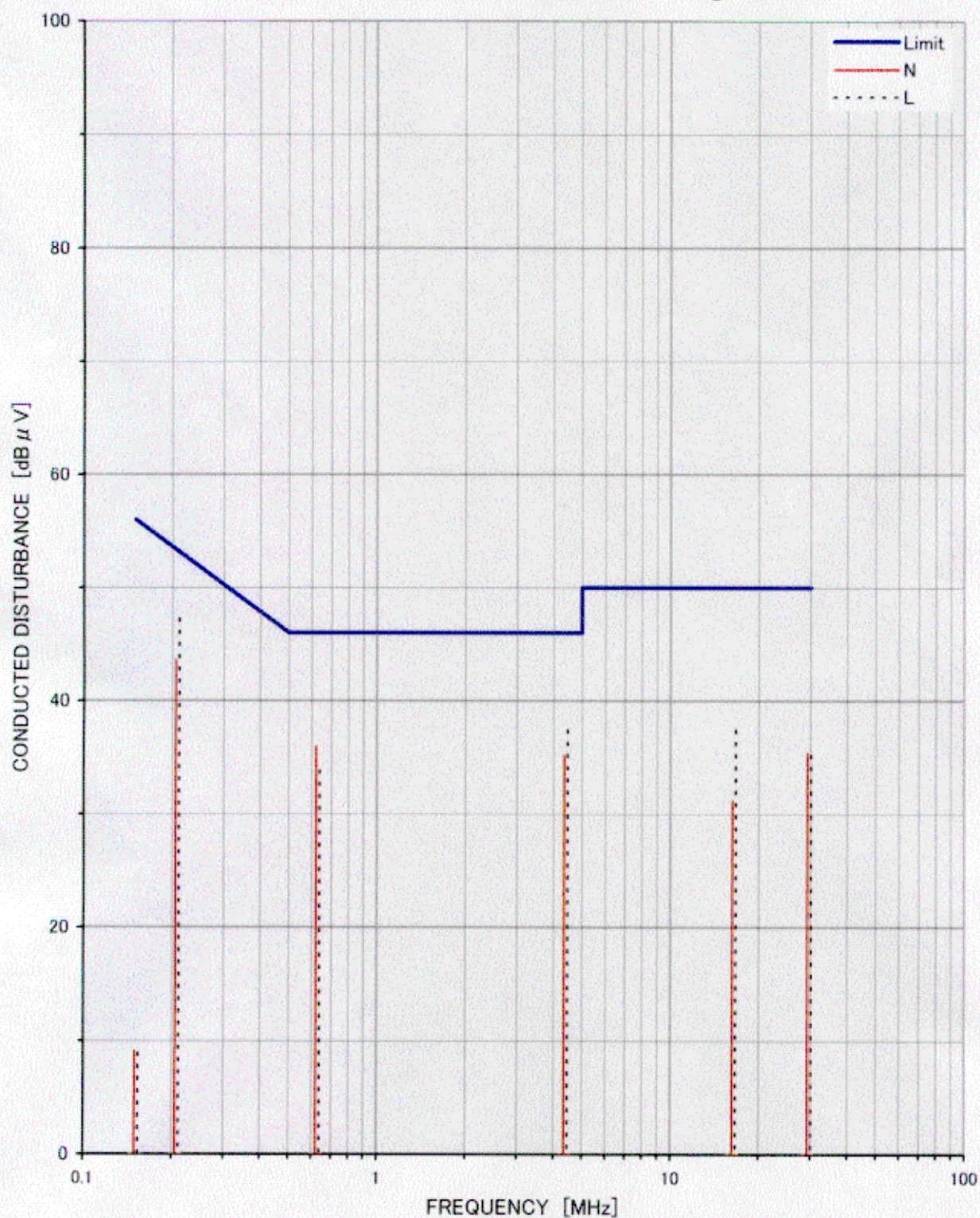
| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V) |      | Cor. F.<br>(dB) |     | Result<br>(dB $\mu$ V) |      | Limit<br>(dB $\mu$ V) | Margin<br>(dB) |      |   |
|----------------|-------------------------|------|-----------------|-----|------------------------|------|-----------------------|----------------|------|---|
|                | N                       | L    | N               | L   | N                      | L    |                       | N              | L    |   |
| 0.150          | 8.9                     | 8.7  | 0.2             | 0.2 | 9.1                    | 8.9  | 56.0                  | 46.9           | 47.1 | # |
| 0.206          | 43.4                    | 47.0 | 0.2             | 0.2 | 43.6                   | 47.2 | 53.3                  | 9.7            | 6.1  |   |
| 0.622          | 35.7                    | 33.5 | 0.3             | 0.3 | 36.0                   | 33.8 | 46.0                  | 10.0           | 12.2 |   |
| 4.356          | 34.7                    | 36.9 | 0.5             | 0.5 | 35.2                   | 37.4 | 46.0                  | 10.8           | 8.6  |   |
| 16.284         | 30.4                    | 36.5 | 0.8             | 0.9 | 31.2                   | 37.4 | 50.0                  | 18.8           | 12.6 |   |
| 29.349         | 34.7                    | 34.0 | 0.7             | 1.2 | 35.4                   | 35.2 | 50.0                  | 14.6           | 14.8 |   |

Remarks

- Formula : Result = Reading + Cor.F.  
Margin = Limit - Result
- The correction factor ( Cor.F. ) includes the LISN(AMN) voltage division factor and Cable loss.
- The conducted emission limits below 30MHz are consistent with the international standard specified in IEC/CISPR Publication 22. (FCC 02-157)
- # : EUT is supplied with DC 5V from PC.
- ‡ : Radiated disturbance is perhaps from the personal computer.

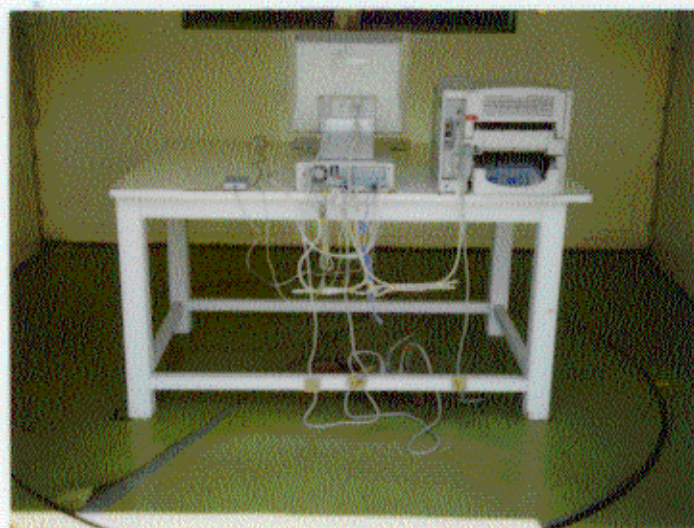
Graph 4

CONDUCTION / Detection : Average



Photograph of Equipment Under Test (E.U.T.)

**Radiated Disturbance Measurement**



Photograph of Equipment Under Test (E.U.T.) (Continued)

Conducted Disturbance Measurement



# **Japan EMC Laboratory Limited**

## **Main Office & Abiko Test Site**

2971, Nakabyo, Abiko-City  
Chiba-Pref., 270-1121, Japan  
Phone +81 471 88 6381  
Fax +81 471 88 6382

## **Technical Center**

3032, Nakabyo, Abiko-City  
Chiba-Pref., 270-1121, Japan  
Phone +81 471 88 5333  
Fax +81 471 88 5320

## **Tsukui Test Site**

493, Nagatake, Tsukui-Machi  
Tsukui-Gun, Kanagawa-Pref., 220-0204, Japan  
Phone +81 427 84 7901  
Fax +81 427 84 7903

## **Fukushima Test Site**

5, Miyamae, Kanameta, Funchiki-Machi  
Tamura-Gun, Fukushima-Pref., 963-4323, Japan  
Phone +81 247 62 8721  
Fax +81 247 62 8722