

Attachment 1 : Summary of Test Results

The test results in the emission were performed according to the requirements of measurement standard and process. Quietek Corporation is assumed full responsibility for the accuracy and completeness of these measurements. The test data of the emission are listed as the attached data.

All the tests were carried out with the EUT in normal operation, which was defined as:

Mode 1: 10Mbps

Mode 2: 100Mbps

The EUT passed all the tests.

The uncertainty is calculated in accordance with NAMAS NIS 81, The total uncertainty for this test is as follows:

➤ **Emission Test**

- Uncertainty in the Conducted Emission Test: $< \pm 2.0 \text{ dB}$
- Uncertainty in the field strength measured: $< \pm 4.0 \text{ dB}$



CONDUCTED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Cardbus PC Card
 Test Mode : Mode 1 Detect Mode : Quasi-Peak & Average

| Frequency | Cable Loss | LISN Factor | Reading Level | Measurement Level | Limits |
|-----------|------------|-------------|---------------|-------------------|--------|
| MHz | dB | dB | Line1 dBuV | Line1 dBuV | dBuV |
| 0.155 | 0.00 | 0.10 | 46.59 | 46.69 | 65.75 |
| 0.258 | 0.03 | 0.10 | 36.75 | 36.88 | 61.51 |
| 0.990 | 0.10 | 0.10 | 27.65 | 27.85 | 56.00 |
| *2.865 | 0.17 | 0.15 | 37.40 | 37.71 | 56.00 |
| 2.865 | 0.17 | 0.15 | 37.21 | 37.52 | 56.00 |
| 9.264 | 0.27 | 0.20 | 38.15 | 38.62 | 60.00 |
| 19.707 | 0.35 | 0.45 | 39.37 | 40.17 | 60.00 |

Average:

| | | | | | |
|--------|------|------|-------|-------|-------|
| 0.155 | 0.00 | 0.10 | 41.30 | 41.40 | 55.73 |
| 0.258 | 0.03 | 0.10 | 33.90 | 34.03 | 51.50 |
| 0.990 | 0.10 | 0.10 | 24.00 | 24.20 | 46.00 |
| 2.865 | 0.17 | 0.15 | 31.20 | 31.51 | 46.00 |
| 9.260 | 0.27 | 0.20 | 32.30 | 32.77 | 50.00 |
| 19.707 | 0.35 | 0.45 | 37.80 | 38.60 | 50.00 |

Remarks :

1. “ * ” means that this data is the worst emission level.



CONDUCTED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Carbus PC Card
 Test Mode : Mode 1 Detect Mode : Quasi-Peak & Average

| Frequency | Cable | LISN | Reading Level | Measurement Level | Limits |
|-----------|-------|--------|---------------|-------------------|--------|
| MHz | Loss | Factor | Line2 | Line2 | |
| | dB | dB | dBuV | dBuV | dBuV |
| 0.161 | 0.00 | 0.10 | 44.08 | 44.18 | 65.41 |
| 0.209 | 0.02 | 0.10 | 43.35 | 43.47 | 63.23 |
| 0.313 | 0.04 | 0.10 | 35.00 | 35.14 | 59.90 |
| *3.807 | 0.18 | 0.16 | 39.17 | 39.51 | 56.00 |
| 9.329 | 0.27 | 0.20 | 36.55 | 37.02 | 60.00 |
| 20.260 | 0.36 | 0.46 | 40.61 | 41.42 | 60.00 |

Average:

| | | | | | |
|--------|------|------|-------|-------|-------|
| 0.161 | 0.00 | 0.10 | 43.90 | 44.00 | 55.41 |
| 0.209 | 0.02 | 0.10 | 34.00 | 34.12 | 53.24 |
| 0.313 | 0.04 | 0.10 | 25.60 | 25.74 | 49.89 |
| 3.807 | 0.18 | 0.16 | 31.30 | 31.64 | 46.00 |
| 9.329 | 0.27 | 0.20 | 29.40 | 29.87 | 50.00 |
| 20.260 | 0.36 | 0.46 | 37.90 | 38.71 | 50.00 |

Remarks :

1. “ * ” means that this data is the worst emission level.



CONDUCTED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Carbus PC Card
 Test Mode : Mode 2 Detect Mode : Quasi-Peak & Average

| Frequency | Cable | LISN | Reading Level | Measurement Level | Limits |
|-----------|-------|--------|---------------|-------------------|--------|
| MHz | Loss | Factor | Line1 | Line1 | |
| | dB | dB | dBuV | dBuV | dBuV |
| 0.157 | 0.00 | 0.10 | 47.54 | 47.64 | 65.62 |
| 0.209 | 0.02 | 0.10 | 42.54 | 42.66 | 63.26 |
| 0.455 | 0.06 | 0.10 | 33.85 | 34.01 | 56.78 |
| 0.638 | 0.08 | 0.10 | 35.70 | 35.88 | 56.00 |
| 0.912 | 0.10 | 0.10 | 35.64 | 35.84 | 56.00 |
| *2.869 | 0.17 | 0.15 | 40.54 | 40.85 | 56.00 |

Average:

| | | | | | |
|-------|------|------|-------|-------|-------|
| 0.157 | 0.00 | 0.10 | 40.30 | 40.40 | 55.62 |
| 0.209 | 0.02 | 0.10 | 32.90 | 33.02 | 53.24 |
| 0.455 | 0.06 | 0.10 | 32.90 | 33.06 | 46.78 |
| 0.638 | 0.08 | 0.10 | 34.90 | 35.08 | 46.00 |
| 0.912 | 0.10 | 0.10 | 34.70 | 34.90 | 46.00 |
| 2.869 | 0.17 | 0.15 | 27.10 | 27.41 | 46.00 |

Remarks :

1. “ * ” means that this data is the worst emission level.



CONDUCTED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Carbus PC Card
 Test Mode : Mode 2 Detect Mode : Quasi-Peak & Average

| Frequency | Cable | LISN | Reading Level | Measurement Level | Limits |
|-----------|-------|--------|---------------|-------------------|--------|
| MHz | Loss | Factor | Line2 | Line2 | |
| | dB | dB | dBuV | dBuV | dBuV |
| *0.158 | 0.00 | 0.10 | 47.54 | 47.64 | 65.56 |
| 0.212 | 0.02 | 0.10 | 42.51 | 42.63 | 63.14 |
| 0.457 | 0.06 | 0.10 | 33.91 | 34.07 | 56.74 |
| 0.640 | 0.08 | 0.10 | 35.21 | 35.39 | 56.00 |
| 0.913 | 0.10 | 0.10 | 35.88 | 36.08 | 56.00 |
| 7.508 | 0.25 | 0.19 | 41.06 | 41.49 | 60.00 |

Average:

| | | | | | |
|-------|------|------|-------|-------|-------|
| 0.158 | 0.00 | 0.10 | 38.30 | 38.40 | 55.57 |
| 0.212 | 0.02 | 0.10 | 30.80 | 30.92 | 53.13 |
| 0.457 | 0.06 | 0.10 | 32.90 | 33.06 | 46.75 |
| 0.640 | 0.08 | 0.10 | 34.90 | 35.08 | 46.00 |
| 0.913 | 0.10 | 0.10 | 35.00 | 35.20 | 46.00 |
| 7.508 | 0.25 | 0.19 | 34.80 | 35.23 | 50.00 |

Remarks :

1. “ * ” means that this data is the worst emission level.



RADIATED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Cardbus PC Card
 Test Mode : Mode 1 Test Site : No.2 Open Test Site

| Freq. | Cable | Probe | PreAMP | Reading | Measurement | Margin | Limit | Ant | Turn |
|----------|-------------|-------|--------|---------|-------------|--------|--------|-----|--------|
| MHz | Loss Factor | dB/m | dB | Level | Horizontal | dB | dBuV/m | dB | dBuV/m |
| | dB | | | dB | dBuV | dBuV/m | | dB | dBuV/m |
| | | | | | | | | cm | deg |
| 120.010 | 2.02 | 12.02 | 0.00 | 2.61 | 16.65 | 13.35 | 30.00 | 399 | 203 |
| 160.000 | 2.40 | 10.32 | 0.00 | 3.05 | 15.77 | 14.23 | 30.00 | 399 | 168 |
| 220.003 | 2.98 | 9.38 | 0.00 | 2.39 | 14.76 | 15.24 | 30.00 | 399 | 41 |
| 240.003 | 3.17 | 11.32 | 0.00 | 6.11 | 20.60 | 16.40 | 37.00 | 399 | 123 |
| 263.717 | 3.40 | 14.08 | 0.00 | 3.07 | 20.55 | 16.45 | 37.00 | 399 | 18 |
| 296.195 | 3.71 | 13.15 | 0.00 | 3.20 | 20.06 | 16.94 | 37.00 | 399 | 131 |
| 320.000 | 3.86 | 13.59 | 0.00 | 1.52 | 18.97 | 18.03 | 37.00 | 399 | 173 |
| *400.003 | 4.28 | 15.85 | 0.00 | 5.43 | 25.56 | 11.44 | 37.00 | 336 | 88 |
| 480.003 | 4.69 | 17.00 | 0.00 | 3.24 | 24.93 | 12.07 | 37.00 | 336 | 117 |
| 526.985 | 4.93 | 17.56 | 0.00 | 1.85 | 24.34 | 12.66 | 37.00 | 198 | 19 |

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worst emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss



RADIATED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Cardbus PC Card
 Test Mode : Mode 1 Test Site : No.2 Open Test Site

| Freq. | Cable Loss Factor | Probe | PreAMP | Reading | Measurement | Margin | Limit | Ant | Turn |
|---------|-------------------|-------|--------|---------|-------------|--------|--------|-----|------|
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dB | dBuV/m | cm | deg |
| *40.000 | 1.24 | 12.84 | 0.00 | 10.78 | 24.86 | 5.14 | 30.00 | 104 | 104 |
| 60.000 | 1.44 | 6.00 | 0.00 | 14.62 | 22.06 | 7.94 | 30.00 | 104 | 202 |
| 80.000 | 1.64 | 7.12 | 0.00 | 10.29 | 19.05 | 10.95 | 30.00 | 104 | 40 |
| 120.000 | 2.02 | 11.56 | 0.00 | 4.99 | 18.57 | 11.43 | 30.00 | 104 | 76 |
| 160.000 | 2.40 | 10.28 | 0.00 | 5.68 | 18.36 | 11.64 | 30.00 | 104 | 90 |
| 180.000 | 2.60 | 9.21 | 0.00 | 5.20 | 17.01 | 12.99 | 30.00 | 104 | 133 |
| 200.000 | 2.78 | 9.07 | 0.00 | 8.39 | 20.25 | 9.75 | 30.00 | 104 | 118 |
| 240.000 | 3.17 | 11.22 | 0.00 | 7.31 | 21.70 | 15.30 | 37.00 | 104 | 115 |
| 400.000 | 4.28 | 16.05 | 0.00 | 2.28 | 22.61 | 14.39 | 37.00 | 104 | 29 |

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worst emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss



RADIATED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Cardbus PC Card
 Test Mode : Mode 2 Test Site : No.2 Open Test Site

| Freq. | Cable Loss Factor | Probe | PreAMP | Reading Level | Measurement Horizontal | Margin | Limit | Ant | Turn |
|----------|-------------------|-------|--------|---------------|------------------------|--------|--------|-----|------|
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dB | dBuV/m | cm | deg |
| 50.000 | 1.35 | 7.93 | 0.00 | 4.14 | 13.42 | 16.58 | 30.00 | 399 | 142 |
| *113.107 | 1.94 | 11.81 | 0.00 | 6.30 | 20.05 | 9.95 | 30.00 | 399 | 67 |
| 143.245 | 2.24 | 11.16 | 0.00 | 4.71 | 18.11 | 11.89 | 30.00 | 399 | 102 |
| 164.602 | 2.44 | 9.55 | 0.00 | 1.29 | 13.28 | 16.72 | 30.00 | 399 | 86 |
| 197.500 | 2.76 | 9.10 | 0.00 | 1.33 | 13.19 | 16.81 | 30.00 | 399 | 98 |
| 230.372 | 3.07 | 10.32 | 0.00 | 7.49 | 20.89 | 16.11 | 37.00 | 399 | 2 |
| 250.000 | 3.27 | 12.61 | 0.00 | 1.22 | 17.10 | 19.90 | 37.00 | 399 | 76 |
| 299.640 | 3.75 | 13.33 | 0.00 | 4.44 | 21.52 | 15.48 | 37.00 | 399 | 157 |
| 366.242 | 4.10 | 14.78 | 0.00 | 1.74 | 20.62 | 16.38 | 37.00 | 399 | 14 |

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
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- 3.Emission Level = Reading Level + Antenna Factor + Cable loss



RADIATED EMISSION DATA

Date of Test : December 13, 1999 EUT : 10/100 Cardbus PC Card
 Test Mode : Mode 2 Test Site : No.2 Open Test Site

| Freq. | Cable | Probe | PreAMP | Reading | Measurement | Margin | Limit | Ant | Turn |
|---------|-------------|-------|--------|---------|-------------|--------|-------|-----|--------|
| MHz | Loss Factor | dB/m | dB | Level | Vertical | dB | dBuV | dB | dBuV/m |
| | dB | | | dB | dBuV | dBuV/m | | dB | dBuV/m |
| | | | | | | | | cm | deg |
| *50.000 | 1.35 | 7.39 | 0.00 | 17.55 | 26.29 | 3.71 | 30.00 | 104 | 10 |
| 66.220 | 1.50 | 5.83 | 0.00 | 12.22 | 19.55 | 10.45 | 30.00 | 104 | 203 |
| 113.290 | 1.95 | 11.39 | 0.00 | 6.84 | 20.18 | 9.82 | 30.00 | 104 | 80 |
| 200.000 | 2.78 | 9.07 | 0.00 | 7.58 | 19.44 | 10.56 | 30.00 | 104 | 56 |
| 233.070 | 3.11 | 10.51 | 0.00 | 6.34 | 19.96 | 17.04 | 37.00 | 104 | 68 |
| 325.000 | 3.88 | 14.29 | 0.00 | 4.70 | 22.87 | 14.13 | 37.00 | 104 | 133 |
| 400.000 | 4.28 | 16.05 | 0.00 | 2.26 | 22.59 | 14.41 | 37.00 | 104 | 45 |
| 596.930 | 5.30 | 18.51 | 0.00 | 1.16 | 24.97 | 12.03 | 37.00 | 399 | 31 |

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worst emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss

