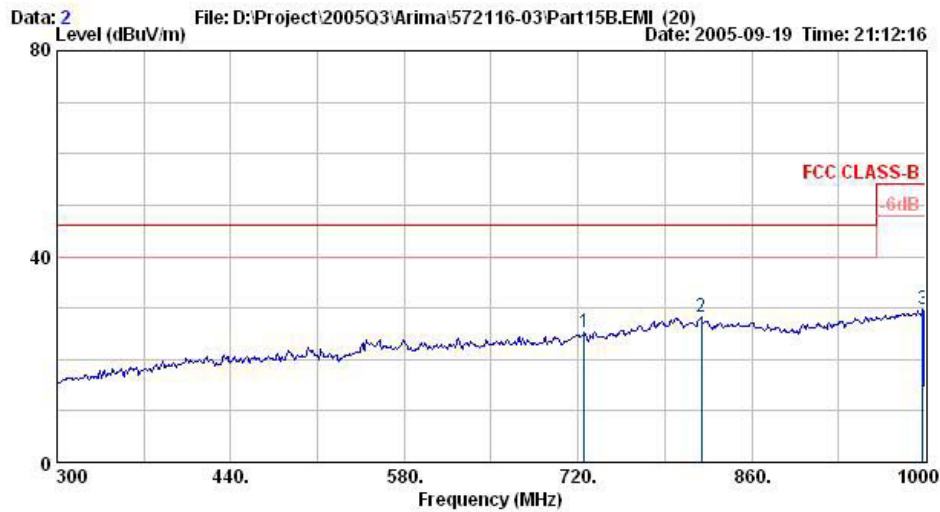




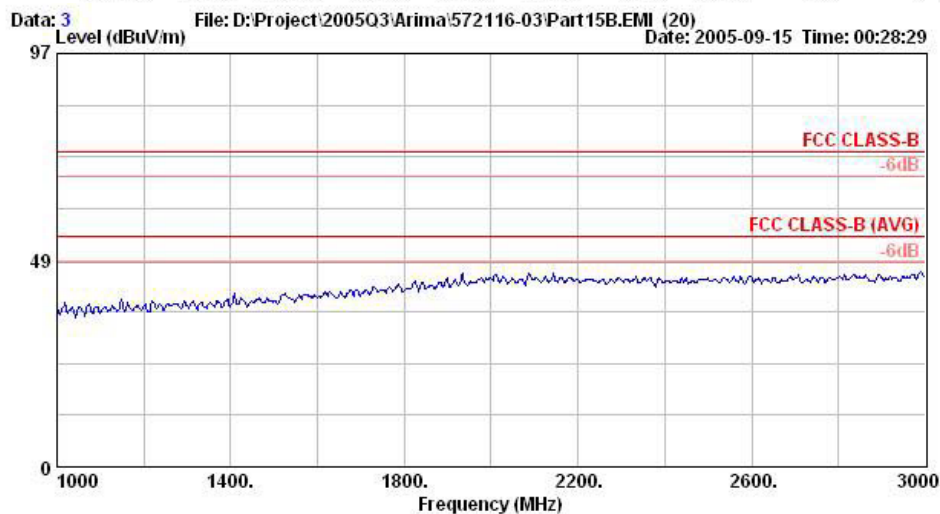
# TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m BI-LOG-2004-1122 HORIZONTAL 100cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

|     | Freq   | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|--------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz    | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |        |        | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB    | cm    | deg    |
| 1   | 724.90 | 25.36  | -20.64 | 46.00  | 31.68       | 19.73 | 4.46   | 30.52 | 100   | 0 Peak |
| 2 @ | 819.40 | 28.21  | -17.79 | 46.00  | 32.03       | 21.52 | 4.96   | 30.29 | 100   | 0 Peak |
| 3   | 997.90 | 29.61  | -24.39 | 54.00  | 31.07       | 22.91 | 6.20   | 30.57 | 100   | 0 Peak |

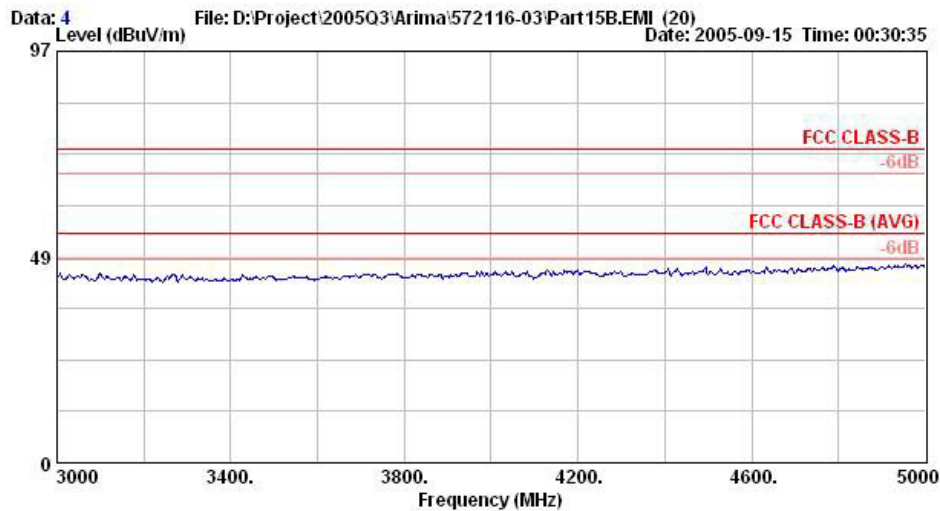


Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 HORIZONTAL 200cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

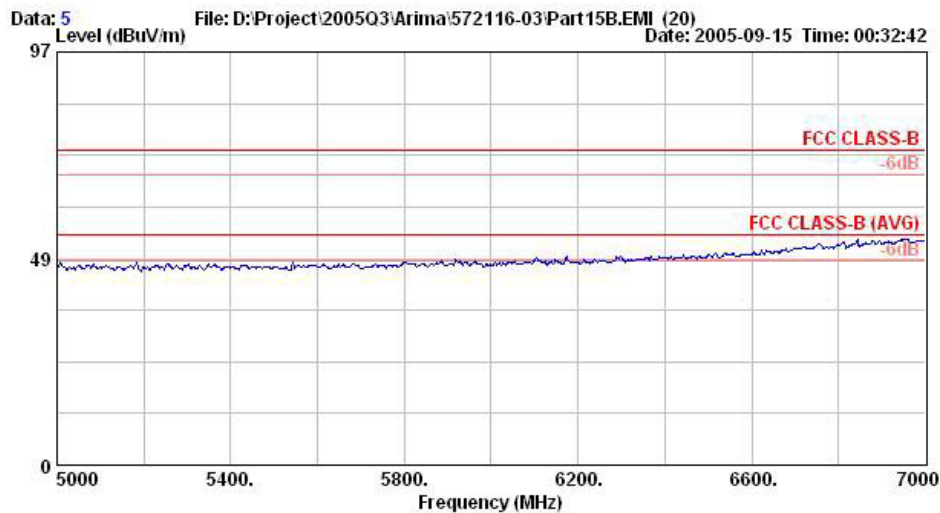


# TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 HORIZONTAL 100cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

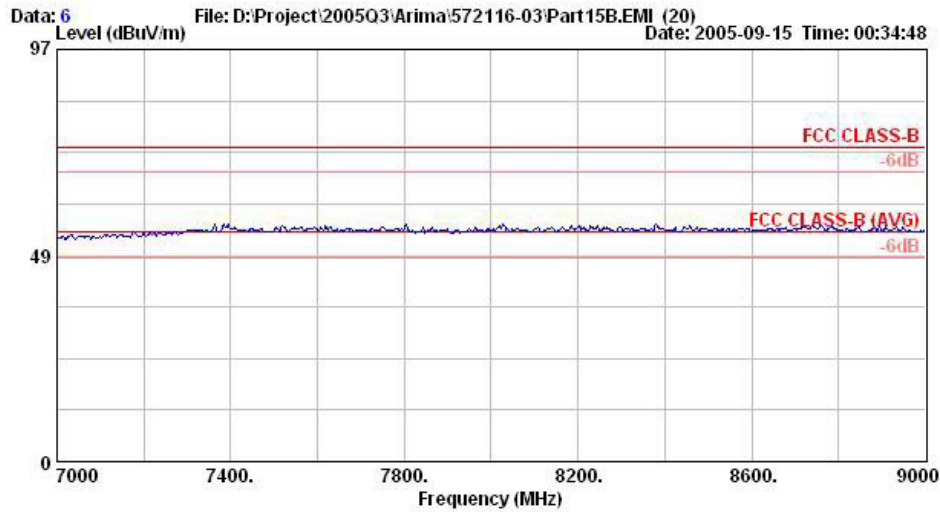


Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 HORIZONTAL 200cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

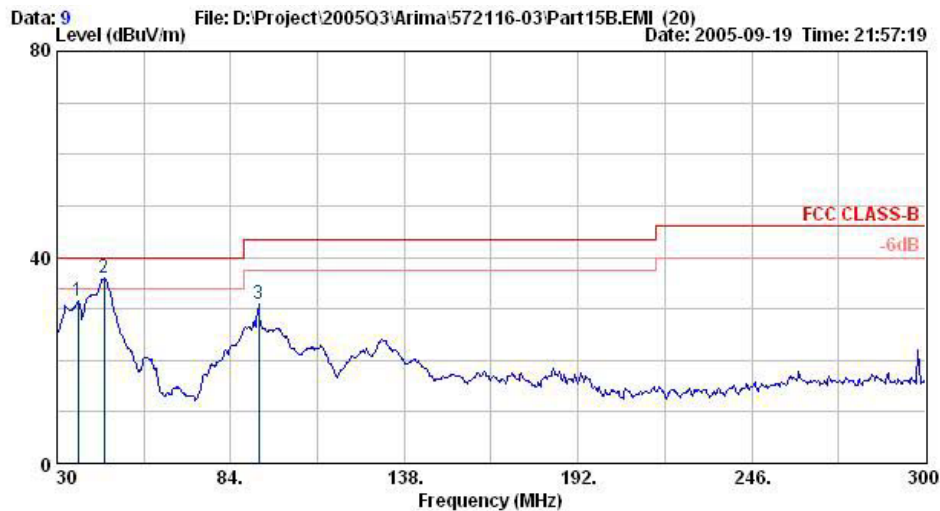


## TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m HF-ANT-071025-940201 HORIZONTAL 100cm 0deg  
 EUT : GSM Tri Band Mobile Phone  
 Power : 120Vac/60Hz  
 Model : FD 572116-03  
 Memo : PCS1900 Idle Mode+Camera+Earphone  
 : +Charger



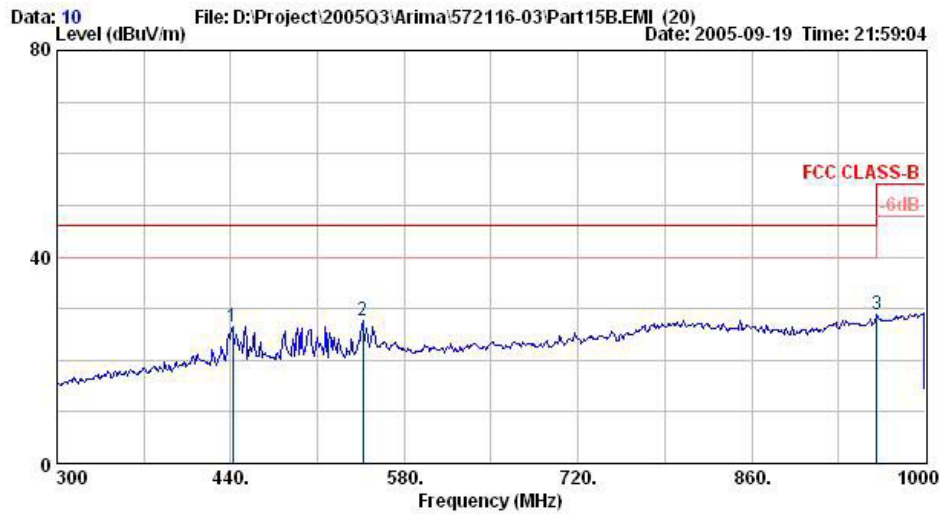
Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m BI-LOG-2004-1122 VERTICAL 101cm 0deg  
 EUT : GSM Tri Band Mobile Phone  
 Power : 120Vac/60Hz  
 Model : FD 572116-03  
 Memo : PCS1900 Idle Mode+Camera+Earphone  
 : +Charger

|     | Freq  | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|-------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz   | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |       |        | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB    | cm    | deg    |
| 1 @ | 36.48 | 31.49  | -8.51  | 40.00  | 46.22       | 16.17 | 0.79   | 31.70 | 101   | 0 Peak |
| 2 @ | 44.58 | 35.84  | -4.16  | 40.00  | 54.77       | 12.10 | 0.58   | 31.62 | 101   | 0 Peak |
| 3 @ | 92.64 | 30.93  | -12.57 | 43.50  | 51.87       | 9.47  | 1.06   | 31.47 | 101   | 0 Peak |



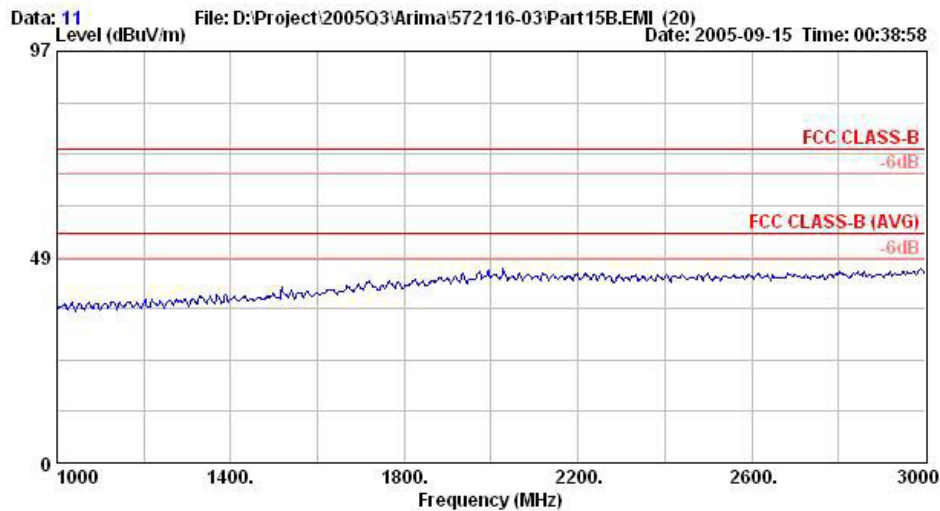
# TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m BI-LOG-2004-1122 VERTICAL 198cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

|     | Freq   | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|--------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz    | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |        |        | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB    | cm    | deg    |
| 1   | 441.40 | 26.59  | -19.41 | 46.00  | 37.55       | 16.40 | 3.24   | 30.59 | 198   | 0 Peak |
| 2 @ | 546.40 | 27.57  | -18.43 | 46.00  | 36.17       | 17.85 | 3.81   | 30.27 | 198   | 0 Peak |
| 3   | 960.80 | 28.92  | -25.08 | 54.00  | 31.57       | 21.79 | 5.93   | 30.37 | 198   | 0 Peak |

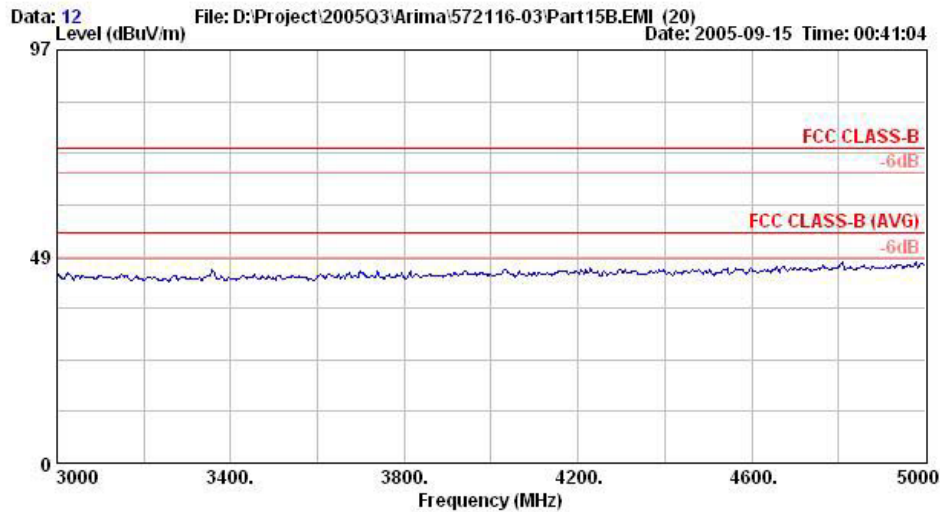


Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 VERTICAL 200cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

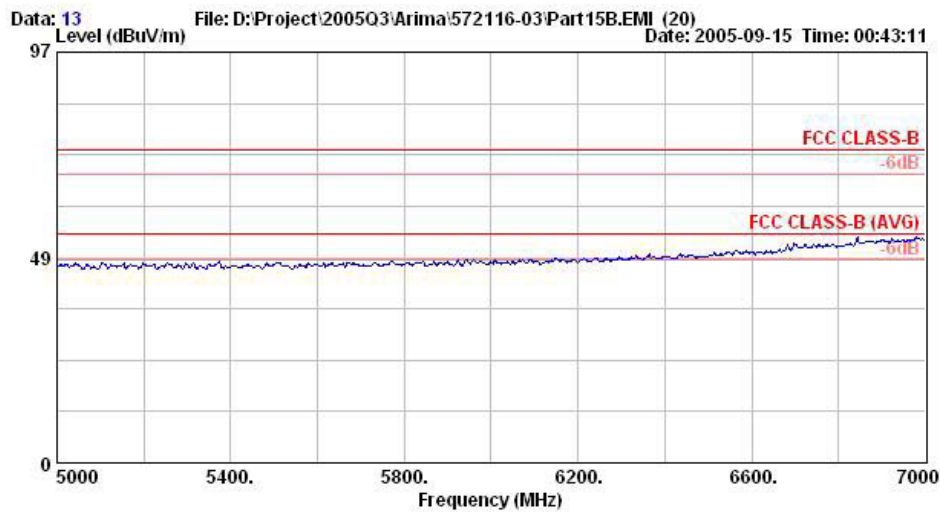


## TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 VERTICAL 100cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
: +Charger

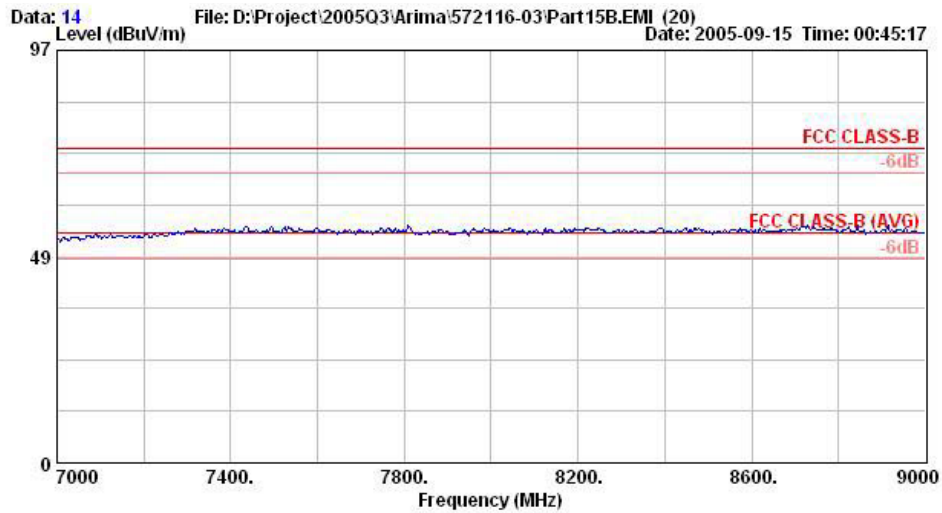


Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 VERTICAL 200cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
: +Charger



## TEST REPORT

Report No. : FD572116-03



Site : 03CH06-HY  
Condition : FCC CLASS-B 3m HF-ANT-071025-940201 VERTICAL 100cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
+Charger

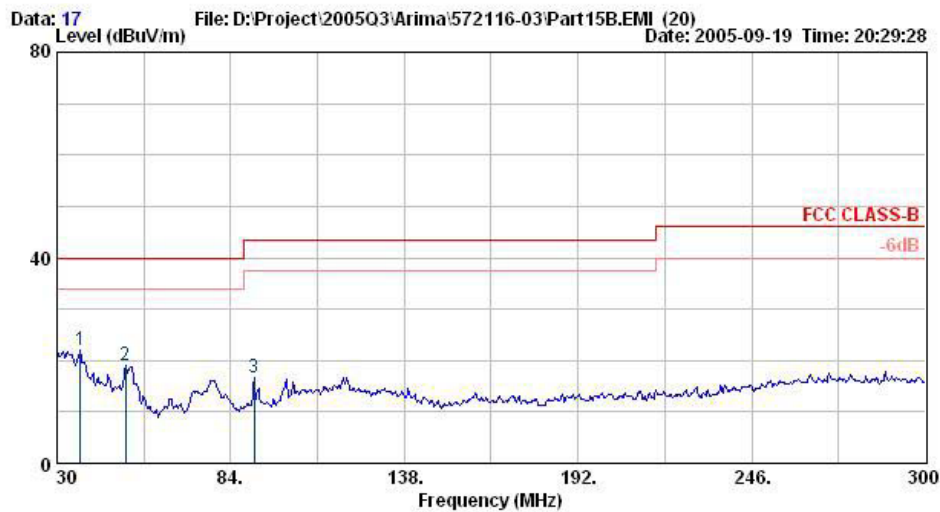
Remark: The spurious emission above 9GHz is too low to be taken.

Test Engineer :   
Jay

#### 6.4.2 Test Mode: Mode 2

- Frequency Range of Test: from 30 MHz to 25000 MHz
- Test Distance: 3m
- Temperature: 28°C
- Relative Humidity: 64%
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

■ The test that passed at the minimum margin was marked by a frame in the following data



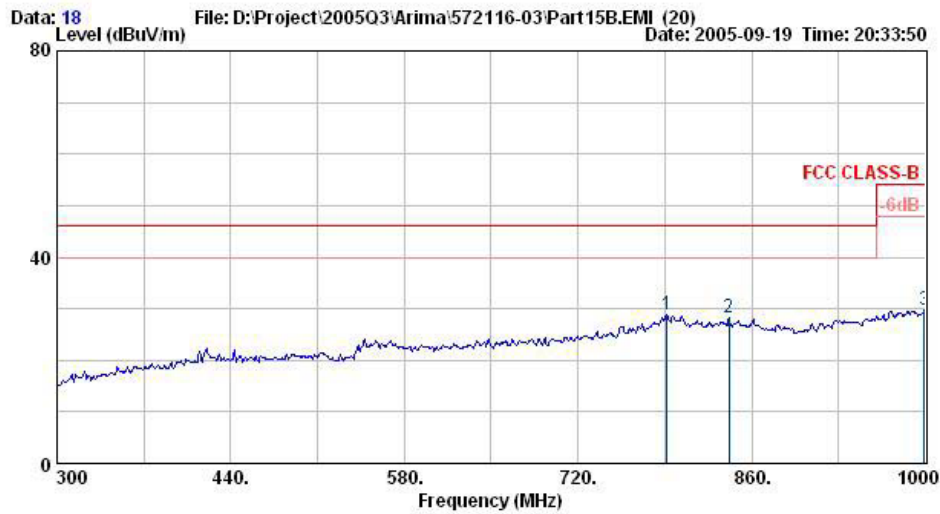
Site : 03CH06-HY  
Condition : FCC CLASS-B 3m BI-LOG-2004-1122 HORIZONTAL 400cm 0deg  
EUT : GSM Tri Band Mobile Phone  
Power : 120Vac/60Hz  
Model : FD 572116-03  
Memo : PCS1900 Idle Mode+Camera+Earphone  
: +Charger MU03-5053055-C5

|     | Freq  | Level  | Over   | Limit  | Read  | Antenna | Cable | Preamp | Ant | Table | Remark |
|-----|-------|--------|--------|--------|-------|---------|-------|--------|-----|-------|--------|
|     | MHz   | dBuV/m | Limit  | Line   | Level | Factor  | Loss  | Factor | Pos | Pos   |        |
|     |       |        | dB     | dBuV/m | dBuV  | dB/m    | dB    | dB     | cm  | deg   |        |
| 1 @ | 37.29 | 21.87  | -18.13 | 40.00  | 37.12 | 15.73   | 0.74  | 31.73  | 400 | 0     | Peak   |
| 2   | 51.33 | 19.07  | -20.93 | 40.00  | 40.05 | 9.59    | 0.88  | 31.45  | 400 | 0     | Peak   |
| 3   | 91.29 | 16.74  | -26.76 | 43.50  | 38.01 | 9.18    | 1.07  | 31.52  | 400 | 0     | Peak   |



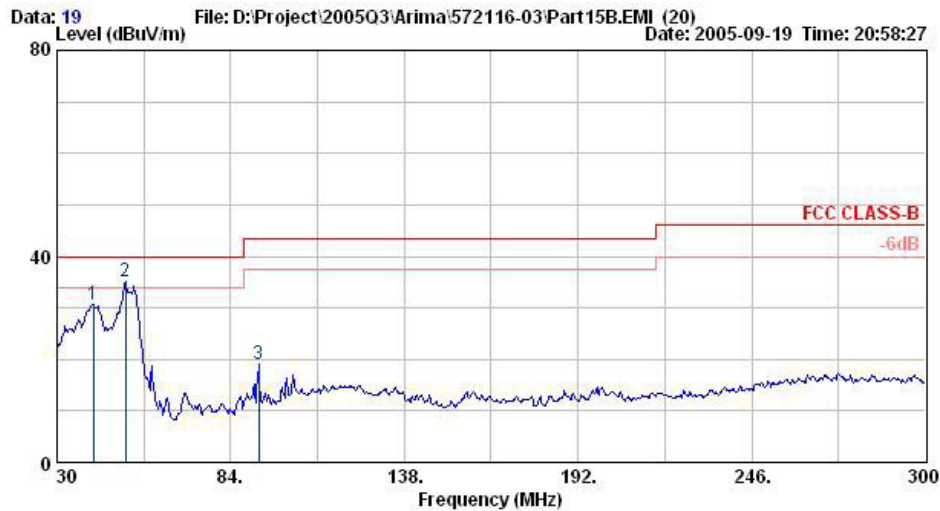
## TEST REPORT

Report No. : FD572116-03



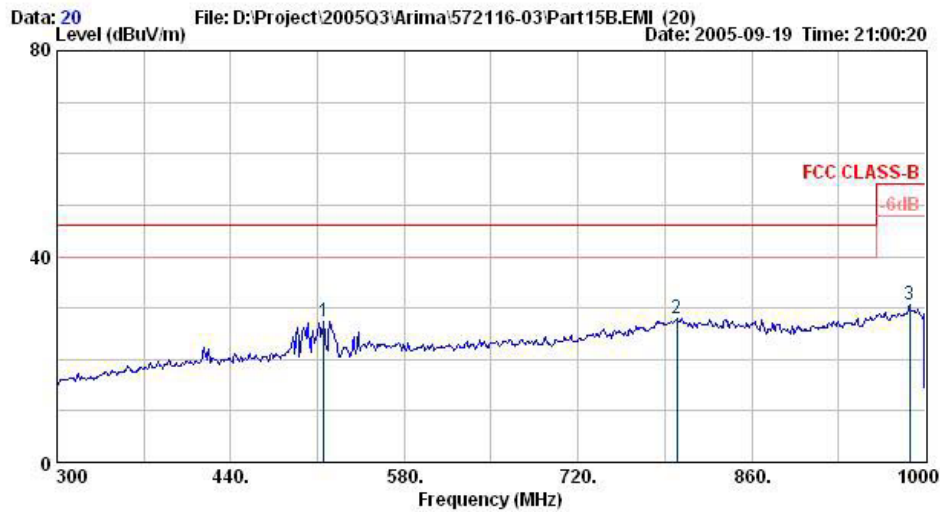
Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m BI-LOG-2004-1122 HORIZONTAL 100cm 0deg  
 EUT : GSM Tri Band Mobile Phone  
 Power : 120Vac/60Hz  
 Model : FD 572116-03  
 Memo : PCS1900 Idle Mode+Camera+Earphone  
 : +Charger MU03-50S3055-CS

|     | Freq   | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|--------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz    | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |        |        | dB     | dBuV/m | dBuV        | dB    | dB     | cm    | deg   |        |
| 1 @ | 791.40 | 28.92  | -17.08 | 46.00  | 32.60       | 21.65 | 4.83   | 30.17 | 100   | 0 Peak |
| 2 @ | 841.80 | 28.32  | -17.68 | 46.00  | 32.41       | 21.08 | 5.02   | 30.20 | 100   | 0 Peak |
| 3   | 999.30 | 29.75  | -24.25 | 54.00  | 31.21       | 22.94 | 6.20   | 30.60 | 100   | 0 Peak |



Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m BI-LOG-2004-1122 VERTICAL 102cm 0deg  
 EUT : GSM Tri Band Mobile Phone  
 Power : 120Vac/60Hz  
 Model : FD 572116-03  
 Memo : PCS1900 Idle Mode+Camera+Earphone  
 : +Charger MU03-5053055-C5

|     | Freq  | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|-------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz   | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |       |        | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB    | cm    | deg    |
| 1 @ | 41.34 | 30.66  | -9.34  | 40.00  | 48.01       | 13.74 | 0.60   | 31.69 | 102   | 0 Peak |
| 2 @ | 51.33 | 34.97  | -5.03  | 40.00  | 55.95       | 9.59  | 0.88   | 31.45 | 102   | 0 Peak |
| 3   | 92.64 | 18.94  | -24.56 | 43.50  | 39.88       | 9.47  | 1.06   | 31.47 | 102   | 0 Peak |



Site : 03CH06-HY  
 Condition : FCC CLASS-B 3m BI-LOG-2004-1122 VERTICAL 197cm 0deg  
 EUT : GSM Tri Band Mobile Phone  
 Power : 120Vac/60Hz  
 Model : FD 572116-03  
 Memo : PCS1900 Idle Mode+Camera+Earphone  
 : +Charger MU03-S053055-CS

|     | Freq   | Level  | Over   | Limit  | ReadAntenna | Cable | Preamp | Ant   | Table |        |
|-----|--------|--------|--------|--------|-------------|-------|--------|-------|-------|--------|
|     | MHz    | dBuV/m | Limit  | Line   | Level       | Loss  | Factor | Pos   | Pos   | Remark |
|     |        |        | dB     | dBuV/m | dBuV        | dB/m  | dB     | dB    | cm    | deg    |
| 1   | 514.90 | 27.32  | -18.68 | 46.00  | 37.68       | 16.92 | 3.56   | 30.83 | 197   | 0 Peak |
| 2 @ | 799.80 | 27.89  | -18.11 | 46.00  | 31.21       | 21.90 | 4.90   | 30.12 | 197   | 0 Peak |
| 3   | 987.40 | 30.68  | -23.32 | 54.00  | 32.26       | 22.59 | 6.12   | 30.29 | 197   | 0 Peak |

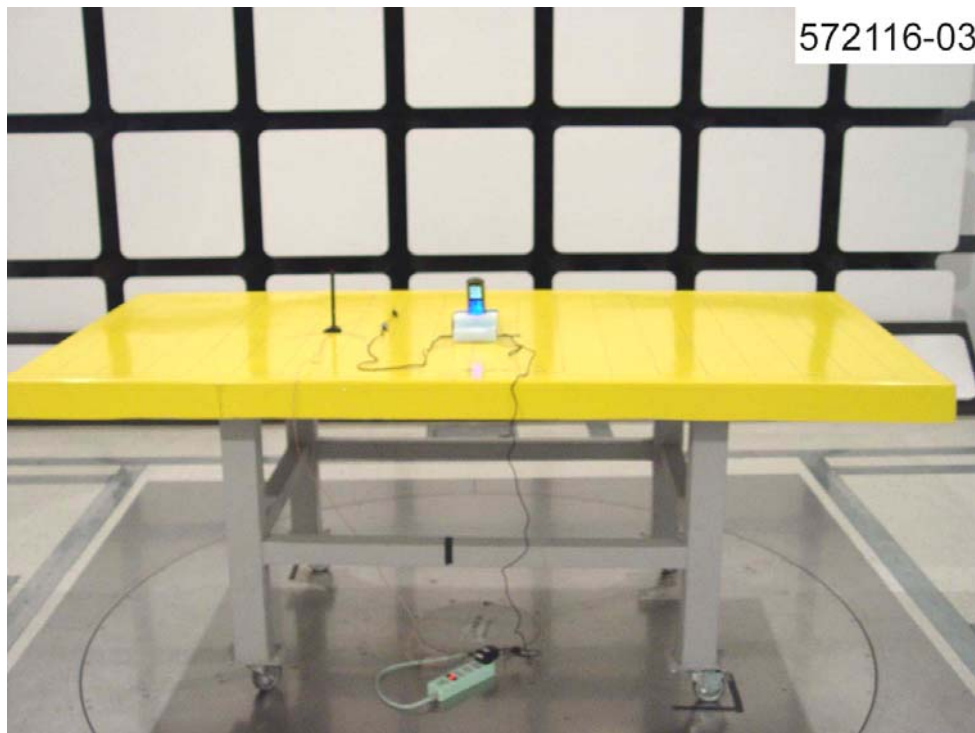
Test Engineer :

Jay

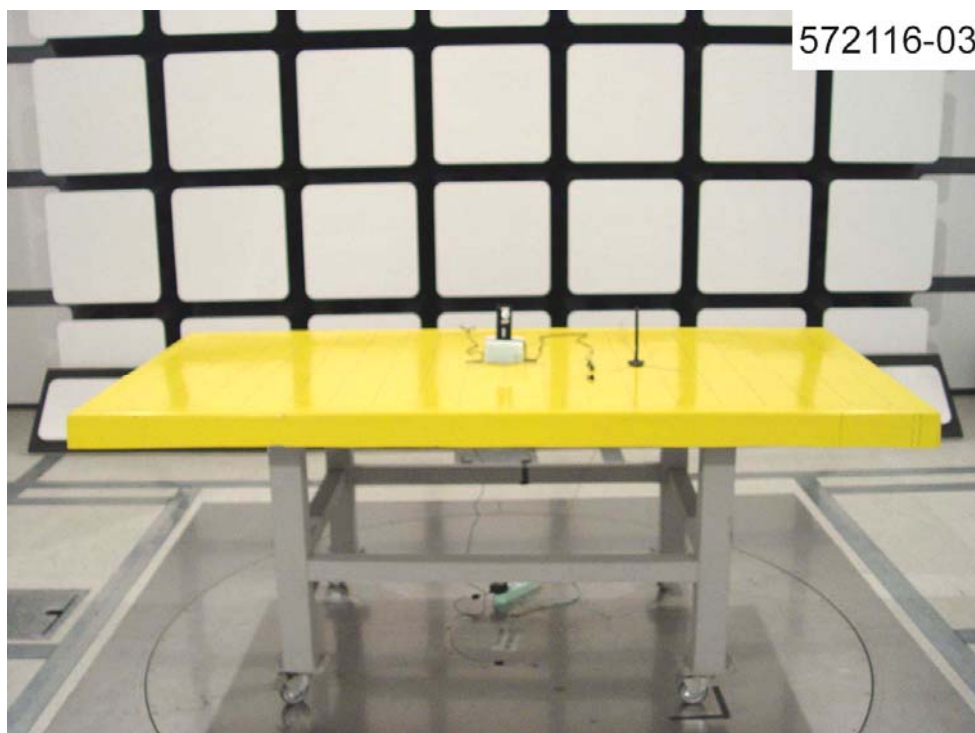
Remark: The spurious emission above 1GHz is too low to be taken.

## 6.5 Photographs of Radiated Emission Test Configuration

FRONT VIEW



REAR VIEW



## 7. List of Measuring Equipment Used

| Instrument                  | Manufacturer       | Model No. | Serial No.    | Characteristics | Calibration Date | Due Date      | Remark                |
|-----------------------------|--------------------|-----------|---------------|-----------------|------------------|---------------|-----------------------|
| EMC Receiver                | R&S                | ESCS 30   | 100174        | 9kHz – 2.75GHz  | Feb. 19, 2005    | Feb. 19, 2006 | Conduction (CO01-HY)  |
| LISN                        | MessTec            | NNB-2/16Z | 2001/009      | 9kHz – 30MHz    | Apr. 26, 2005    | Apr. 26, 2006 | Conduction (CO01-HY)  |
| LISN (Support Unit)         | MessTec            | NNB-2/16Z | 2001/008      | 9kHz – 30MHz    | May 06, 2005     | May 06, 2006  | Conduction (CO01-HY)  |
| EMI Filter                  | LINDGREN           | LRE-2060  | 1004          | < 450Hz         | N/A              | N/A           | Conduction (CO01-HY)  |
| EMI Filter                  | LINDGREN           | N6006     | 201052        | 0 – 60Hz        | N/A              | N/A           | Conduction (CO01-HY)  |
| RF Cable-CON                | Suhner Switzerland | RG223/U   | CB029         | 9kHz – 30MHz    | Dec. 23, 2004    | Dec. 23, 2005 | Conduction (CO01-HY)  |
| Antenna Mast                | INN-CO             | MM3000    | 114/8000604/L | 1m~4m           | NCR              | N/A           | Radiation (03CH06-HY) |
| Bilog Antenna               | Schaffner          | CBL6112B  | 2885          | 30MHz~2GHz      | Nov. 21, 2004    | Nov. 20, 2005 | Radiation (03CH06-HY) |
| Controller                  | INN-CO             | CO2000    | 114/8000604/L | N/A             | NCR              | N/A           | Radiation (03CH06-HY) |
| Digital Radio Communication | R&S                | CMD55     | 832796/0061   | RF Link         | Feb. 18, 2004    | Feb. 17, 2006 | Radiation (03CH06-HY) |
| Double Ridge Horn Antenna   | Com-Power          | AH118     | 071025        | 1G~18G          | Feb. 01, 2005    | Jan. 31, 2006 | Radiation (03CH06-HY) |
| EMI Test Receiver           | R&S                | ESCS30    | 100356        | 9KHz~2.75GHz    | Jun. 28, 2005    | Jun. 27, 2006 | Radiation (03CH06-HY) |
| PreAmplifier                | Agilent            | 8449B     | 3008A01917    | 1~26.5GHz       | Mar. 29, 2005    | Mar. 28, 2006 | Radiation (03CH06-HY) |
| PreAmplifier                | Com-Power          | PA-103    | 161055        | 1MHz~1000MHz    | Mar. 29, 2005    | Mar. 28, 2006 | Radiation (03CH06-HY) |
| SHF-EHF Horn                | Schwarzbeck        | BBHA 9170 | 9170-249      | 14G~40G         | Jul. 21, 2004    | Jul. 20, 2006 | Radiation (03CH06-HY) |
| Spectrum Analyzer           | Agilent            | E4408B    | MY44211030    | 9KHz~26.5GHz    | Jul. 25, 2005    | Jul. 24, 2006 | Radiation (03CH06-HY) |
| Turn Table                  | INN-CO             | DS2000    | 420/650/00    | 0~360 Degree    | NCR              | N/A           | Radiation (03CH06-HY) |

## 8. Uncertainty of Evaluation

### Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

| Contribution                                                                         | Uncertainty of $x_i$ |                          | $u(x_i)$ |
|--------------------------------------------------------------------------------------|----------------------|--------------------------|----------|
|                                                                                      | dB                   | Probability Distribution |          |
| Receiver reading                                                                     | 0.10                 | Normal(k=2)              | 0.05     |
| Cable loss                                                                           | 0.10                 | Normal(k=2)              | 0.05     |
| AMN insertion loss                                                                   | 2.50                 | Rectangular              | 0.63     |
| Receiver Spec                                                                        | 1.50                 | Rectangular              | 0.43     |
| Site imperfection                                                                    | 1.39                 | Rectangular              | 0.80     |
| Mismatch                                                                             | +0.34/-0.35          | U-shape                  | 0.24     |
| <b>combined standard uncertainty <math>U_c(y)</math></b>                             | <b>1.13</b>          |                          |          |
| <b>Measuring uncertainty for a level of confidence of 95% <math>U=2U_c(y)</math></b> | <b>2.26</b>          |                          |          |

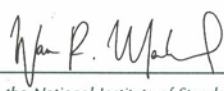
### Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

| Contribution                                                                         | Uncertainty of $x_i$ |                          | $u(x_i)$ |
|--------------------------------------------------------------------------------------|----------------------|--------------------------|----------|
|                                                                                      | dB                   | Probability Distribution |          |
| Receiver reading                                                                     | 0.41                 | Normal(k=2)              | 0.21     |
| Antenna factor calibration                                                           | 0.83                 | Normal(k=2)              | 0.42     |
| Cable loss calibration                                                               | 0.25                 | Normal(k=2)              | 0.13     |
| Pre Amplifier Gain calibration                                                       | 0.27                 | Normal(k=2)              | 0.14     |
| RCV/SPA specification                                                                | 2.50                 | Rectangular              | 0.72     |
| Antenna Factor Interpolation for Frequency                                           | 1.00                 | Rectangular              | 0.29     |
| Site imperfection                                                                    | 1.43                 | Rectangular              | 0.83     |
| Mismatch                                                                             | +0.39/-0.41          | U-shaped                 | 0.28     |
| <b>combined standard uncertainty <math>U_c(y)</math></b>                             | <b>1.27</b>          |                          |          |
| <b>Measuring uncertainty for a level of confidence of 95% <math>U=2U_c(y)</math></b> | <b>2.54</b>          |                          |          |

**Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)**

| Contribution                                                                                                                                  | Uncertainty of $\bar{x}_i$ |                          | $u(x_i)$ | $C_i$ | $C_i * u(x_i)$ |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|----------|-------|----------------|
|                                                                                                                                               | dB                         | Probability Distribution |          |       |                |
| Receiver reading                                                                                                                              | $\pm 0.10$                 | Normal(k=1)              | 0.10     | 1     | 0.10           |
| Antenna factor calibration                                                                                                                    | $\pm 1.70$                 | Normal(k=2)              | 0.85     | 1     | 0.85           |
| Cable loss calibration                                                                                                                        | $\pm 0.50$                 | Normal(k=2)              | 0.25     | 1     | 0.25           |
| Receiver Correction                                                                                                                           | $\pm 2.00$                 | Rectangular              | 1.15     | 1     | 1.15           |
| Antenna Factor Directional                                                                                                                    | $\pm 1.50$                 | Rectangular              | 0.87     | 1     | 0.87           |
| Site imperfection                                                                                                                             | $\pm 2.80$                 | Triangular               | 1.14     | 1     | 1.14           |
| Mismatch<br>Receiver VSWR $\Gamma_1 = 0.197$<br>Antenna VSWR $\Gamma_2 = 0.194$<br>Uncertainty = $20\log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$ | +0.34/-0.35                | U-shaped                 | 0.244    | 1     | 0.244          |
| <b>Combined standard uncertainty <math>U_c(y)</math></b>                                                                                      | <b>2.36</b>                |                          |          |       |                |
| <b>Measuring uncertainty for a level of confidence of 95% <math>U = 2U_c(y)</math></b>                                                        | <b>4.72</b>                |                          |          |       |                |

## 9. Certificate of NVLAP Accreditation

|                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| United States Department of Commerce<br>National Institute of Standards and Technology                                                                                                                                                                                                                                                                    |                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                         |                                                                                                                                                                            |
| ISO/IEC 17025:1999<br>ISO 9002:1994                                                                                                                                                                                                                                                                                                                       |                                                                                         |
| <b>Certificate of Accreditation</b>                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                            |
| <b>SPORTON INTERNATIONAL, INC.</b><br>TAIPEI HSIEN 221<br>TAIWAN                                                                                                                                                                                                                                                                                          |                                                                                                                                                                            |
| <i>is recognized by the National Voluntary Laboratory Accreditation Program<br/>for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,<br/>all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.<br/>Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:</i> |                                                                                                                                                                            |
| <b>ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS</b>                                                                                                                                                                                                                                                                                               |                                                                                                                                                                            |
| December 31, 2005<br><i>Effective through</i>                                                                                                                                                                                                                                                                                                             | <br>For the National Institute of Standards and Technology<br>NVLAP Lab Code: 200079-0 |

NVLAP-01C (06-01)