

**APPENDIX 2: Data of EMI test**

**Output Power (Radiated)**

Company KYOCERA Corporation  
Equipment iBurst User Terminal USB type  
Model UTU03-1890F-US-A  
S/N 18  
Power AC 120V / 60Hz  
Mode Transmitting  
Modulation 7 (Worst)  
EUT-Position H: Y-axis / V: Z-axis  
Tx Antenna 0.8m Height

UL Japan, Inc.  
Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Regulation FCC part 24 Section 24.232(c)  
Test Method FCC part 2 Section 2.1053  
Test Distance 3m  
Date March 4, 2009  
Temperature 19 deg.C.  
Humidity 42 %  
Engineer Kazufumi Nakai

| No. | Frequency<br>[MHz] | P/M<br>Reading (PK)<br>[dBm] |           | SG Reading<br>[dBm] |       | Tx<br>Cable<br>Loss<br>[dB] | Tx<br>Ant.<br>Gain<br>[dBi] | Rx<br>Amp<br>Gain<br>[dB] | RESULT (EIRP)<br>[dBm] |       | LIMIT<br>[dBm]<br>(EIRP) | MARGIN<br>[dB] |      | Mode      | A/C | Remarks |
|-----|--------------------|------------------------------|-----------|---------------------|-------|-----------------------------|-----------------------------|---------------------------|------------------------|-------|--------------------------|----------------|------|-----------|-----|---------|
|     |                    | HOR                          | VER       | HOR                 | VER   |                             |                             |                           | HOR                    | VER   |                          | HOR            | VER  |           |     |         |
|     |                    | 1                            | 1890.3125 | -12.3               | -9.5  |                             |                             |                           | -12.7                  | -11.3 |                          | 5.3            | 10.0 |           |     |         |
| 2   | 1899.6875          | -11.1                        | -9.2      | -11.5               | -10.6 | 5.3                         | 10.0                        | 32.9                      | 26.1                   | 27.0  | 33.0                     | 6.9            | 6.0  | Operating | No2 |         |
| 3   | 1909.6875          | -11.2                        | -9.3      | -10.9               | -9.9  | 5.3                         | 10.0                        | 32.9                      | 26.7                   | 27.7  | 33.0                     | 6.3            | 5.3  | Operating | No2 |         |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain + Rx Amp. Gain  
Rx-ANTENNA : Biconical Antenna(30M-300MHz), Logperiodic Antenna(300M-1000MHz), Horn Antenna(1G-12.75GHz)  
Tx-ANTENNA : 120MHz tuned Dipole Antenna(30M-120MHz), Dipole Antenna(120M-1000MHz), Horn Antenna(1G-12.75GHz)

\*The test result is rounded off to one or two decimal places, so some differences might be observed.

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## Output Power (Conducted)

### Reference data

|           |                               |   |
|-----------|-------------------------------|---|
|           |                               | UL Japan, Inc.                              |
| Company   | KYOCERA Corporation           | Head Office EMC Lab. No.11 measurement room |
| Equipment | iBurst User Terminal USB type | Regulation FCC part 24 Section 24.232(c)    |
| Model     | UTU03-1890F-US-A              | Test Method FCC Part 2 Section 2.1046       |
| S/N       | 18                            | Test Distance -                             |
| Power     | AC 120V / 60Hz                | Date March 3, 2009                          |
| Mode      | Transmitting                  | Temperature 20 deg.C.                       |
|           | Modulation 7 (Worst)          | Humidity 40 %                               |
|           |                               | Engineer Kazufumi Nakai                     |

**Modulation 7 (PK worst)** (Gate on)

| Ch   | Frequency<br>[MHz] | P/M (PK)<br>Reading<br>[dBm] | Atten.<br>[dB] | Cable<br>Loss<br>[dB] | Conducted<br>Power Result<br>[dBm] | Antenna<br>Gain<br>[dBi] | E.I.R.P.<br>Result<br>[dBm] |
|------|--------------------|------------------------------|----------------|-----------------------|------------------------------------|--------------------------|-----------------------------|
| Low  | 1890.3125          | 14.70                        | 9.98           | 0.00                  | 24.68                              | 2.90                     | 27.58                       |
| Mid  | 1899.6875          | 15.03                        | 9.98           | 0.00                  | 25.01                              | 2.90                     | <b>27.91</b>                |
| High | 1909.6875          | 15.01                        | 9.98           | 0.00                  | 24.99                              | 2.90                     | 27.89                       |

Sample Calculation : E.I.R.P. Result = P/M (PK) Reading + Atten. + Cable Loss + Antenna Gain  
Conducted Power Result = P/M (PK) Reading + Atten. + Cable Loss.

\*The test result is round off to one or two decimal places, so some differences might be observed.

(Reference data (Precheck) )

(Gate On)

| Mod. | Frequency<br>[MHz] | P/M(PK)<br>Reading<br>[dBm] | Atten.<br>[dB] | Cable<br>Loss<br>[dB] | Conducted<br>Power Result<br>[dBm] | Antenna<br>Gain<br>[dBi] | E.I.R.P.<br>Result<br>[dBm] |
|------|--------------------|-----------------------------|----------------|-----------------------|------------------------------------|--------------------------|-----------------------------|
| 0    | 1899.6875          | 13.45                       | 9.98           | 0.00                  | 23.43                              | 2.90                     | 26.33                       |
| 1    | 1899.6875          | 13.47                       | 9.98           | 0.00                  | 23.45                              | 2.90                     | 26.35                       |
| 2    | 1899.6875          | 14.15                       | 9.98           | 0.00                  | 24.13                              | 2.90                     | 27.03                       |
| 3    | 1899.6875          | 14.52                       | 9.98           | 0.00                  | 24.50                              | 2.90                     | 27.40                       |
| 4    | 1899.6875          | 13.94                       | 9.98           | 0.00                  | 23.92                              | 2.90                     | 26.82                       |
| 5    | 1899.6875          | 14.53                       | 9.98           | 0.00                  | 24.51                              | 2.90                     | 27.41                       |
| 6    | 1899.6875          | 14.40                       | 9.98           | 0.00                  | 24.38                              | 2.90                     | 27.28                       |
| 7    | 1899.6875          | 15.03                       | 9.98           | 0.00                  | <b>25.01</b>                       | 2.90                     | <b>27.91</b>                |

Sample Calculation : E.I.R.P. Result = P/M (PK) Reading + Atten. + Cable Loss + Antenna Gain  
Conducted Power Result = P/M (PK) Reading + Atten. + Cable Loss.

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### Band Edge (Radiated)

|              |  |   |
|--------------|--|---|
| Company      | KYOCERA Corporation                              | UL Japan, Inc.                                  |
| Equipment    | iBurst User Terminal USB type                    | Head Office EMC Lab. No.2 Semi Anechoic Chamber |
| Model        | UTU03-1890F-US-A                                 | Regulation FCC part 24 Section24.238(a),(b)     |
| S/N          | 18   | Test Method FCC part 2 Section 2.1053           |
| Power        | AC 120V / 60Hz                                   | Test Distance 3m                                |
| Mode         | Transmitting, 1890.3125MHz, Modulation 3 (Worst) | Date March 4, 2009                              |
|              | Transmitting, 1909.6875MHz Modulation 0 (Worst)  | Temperature 19 deg.C.                           |
| EUT-Position | H: Y-axis / V: Z-axis                            | Humidity 42 %                                   |
| Tx Antenna   | 0.8m Height                                      | Engineer Kazufumi Nakai                         |

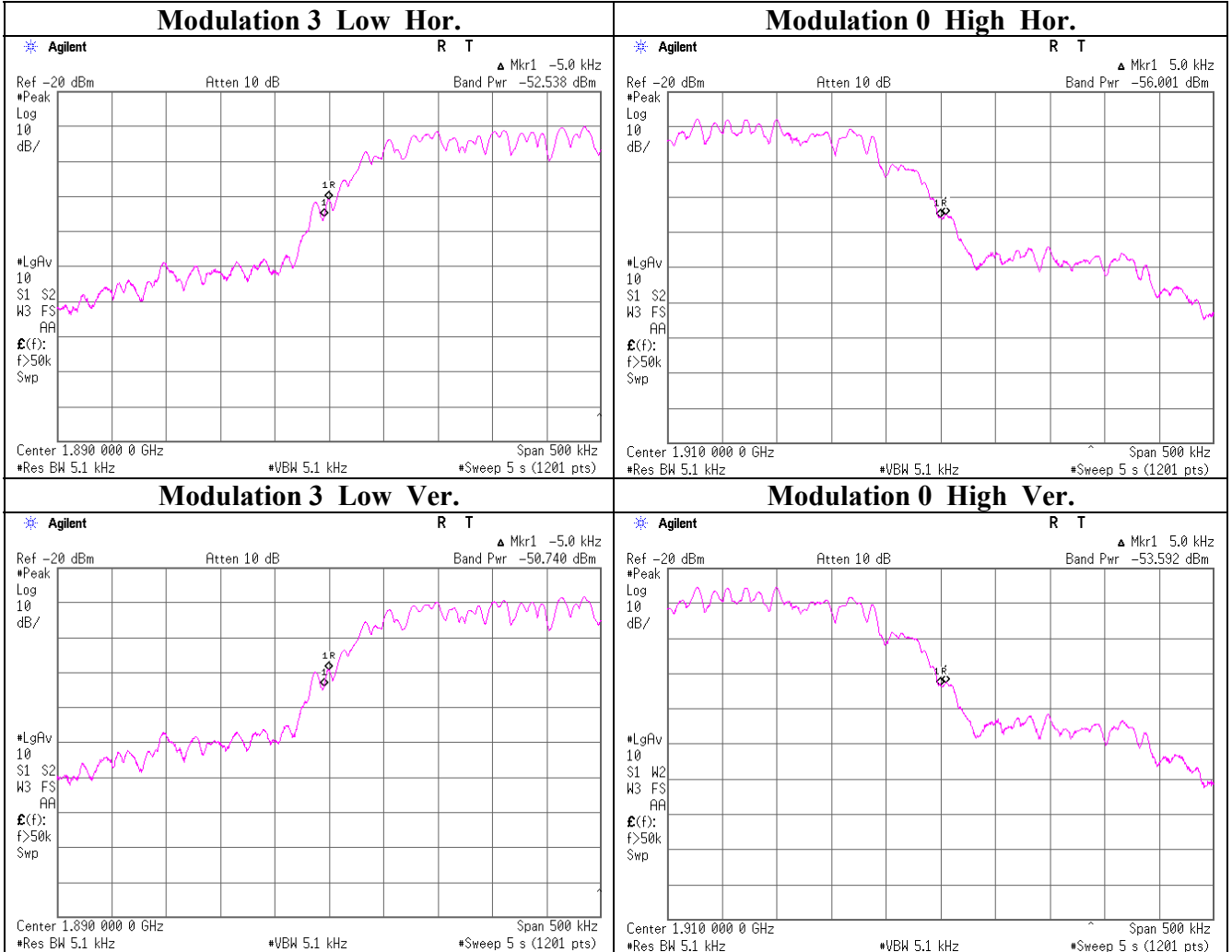
| No. | Frequency<br>[MHz] | S/A Reading<br>(PK)<br>[dBm] |         | SG Reading<br>[dBm] |       | Tx<br>Cable<br>Loss<br>[dB] | Tx<br>Ant.<br>Gain<br>[dBi] | RESULT (EIRP)<br>[dBm] |       | LIMIT<br>[dBm]<br>(EIRP) | MARGIN<br>[dB] |      | Mode      | A/C | Remarks |
|-----|--------------------|------------------------------|---------|---------------------|-------|-----------------------------|-----------------------------|------------------------|-------|--------------------------|----------------|------|-----------|-----|---------|
|     |                    | HOR                          | VER     | HOR                 | VER   |                             |                             | HOR                    | VER   |                          | HOR            | VER  |           |     |         |
|     |                    | 1                            | 1890.00 | -52.5               | -50.7 |                             |                             | -19.7                  | -20.1 |                          | 5.3            | 10.0 |           |     |         |
| 2   | 1910.00            | -56.0                        | -53.6   | -22.9               | -21.9 | 5.3                         | 10.0                        | -18.2                  | -17.2 | -13.0                    | 5.2            | 4.2  | Operating | No2 |         |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain

\*The test result is rounded off to one or two decimal places, so some differences might be observed.

Detector : S/A, Peak, RBW 5.1kHz, VBW5.1kHz, Sweep 5sec, Video Average mode 10times, Gate On mode.

**Band Edge(Radiated)**



### Spurious Radiated Emission

Company KYOCERA Corporation  
Equipment iBurst User Terminal USB type  
Model UTU03-1890F-US-A  
S/N 18  
Power AC 120V / 60Hz  
Mode Transmitting, 1890.3125MHz  
Modulation 7 (Worst)  
EUT-Position H: Y-axis / V: Z-axis  
Tx Antenna 0.8m Height

UL Japan, Inc.  
Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Regulation FCC part 24 Section 24.238(a)  
Test Method FCC part 2 Section 2.1053  
Test Distance 3m (below 10GHz), 1m (above 10GHz)  
Date March 4, 2009  
Temperature 21 deg. C.  
Humidity 34 %  
Engineer Kazuya Yoshioka

| No. | Frequency<br>[MHz] | Electric Field Strength<br>(After Factor Calculation)<br>[dBuV/m] |        | SG Reading<br>[dBm] |       | Tx<br>Cable<br>Loss<br>[dB] | Tx<br>Ant.<br>Gain<br>[dBi] | Tx Ant.<br>ATT.<br>Loss<br>[dB] | RESULT (EIRP)<br>[dBm] |       | LIMIT<br>(EIRP)<br>[dBm] | MARGIN<br>[dB] |      | Mode      | A/C | Remarks |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|------------------------|-------|--------------------------|----------------|------|-----------|-----|---------|
|     |                    | HOR   | VER    | HOR                 | VER   |                             |                             |                                 | HOR                    | VER   |                          | HOR            | VER  |           |     |         |
|     |                    | 1   | 107.89 | 32.0                | 44.9  |                             |                             |                                 | -56.4                  | -44.1 |                          | 0.5            | 0.1  |           |     |         |
| 2   | 259.27             | 45.4  | 44.9   | -45.2               | -39.4 | 0.9                         | 2.2                         | 9.9                             | -53.8                  | -48.0 | -13.0                    | 40.8           | 35.0 | Operating | No2 |         |
| 3   | 432.01             | 50.0  | 49.6   | -41.7               | -39.8 | 1.1                         | 2.2                         | 9.8                             | -50.5                  | -48.6 | -13.0                    | 37.5           | 35.6 | Operating | No2 |         |
| 4   | 934.81             | 56.7  | 51.1   | -32.9               | -35.9 | 1.9                         | 2.2                         | 9.7                             | -42.3                  | -45.3 | -13.0                    | 29.3           | 32.3 | Operating | No2 |         |
| 5   | 3780.63            | 54.5  | 54.0   | -48.2               | -48.2 | 5.4                         | 12.7                        | 0.0                             | -40.9                  | -40.9 | -13.0                    | 27.9           | 27.9 | Operating | No2 |         |
| 6   | 5670.94            | 52.5  | 52.8   | -48.8               | -49.2 | 6.8                         | 13.3                        | 0.0                             | -42.2                  | -42.6 | -13.0                    | 29.2           | 29.6 | Operating | No2 |         |
| 7   | 7561.25            | 58.6  | 53.7   | -41.4               | -47.4 | 8.0                         | 11.5                        | 0.0                             | -37.8                  | -43.8 | -13.0                    | 24.8           | 30.8 | Operating | No2 |         |
| 8   | 9451.56            | 62.7  | 63.1   | -35.7               | -38.0 | 8.9                         | 11.5                        | 0.0                             | -33.1                  | -35.4 | -13.0                    | 20.1           | 22.4 | Operating | No2 |         |
| 9   | 11341.88           | 63.4  | 66.6   | -44.2               | -40.6 | 9.6                         | 11.6                        | 0.0                             | -42.2                  | -38.6 | -13.0                    | 29.2           | 25.6 | Operating | No2 |         |
| 10  | 13232.19           | 77.4  | 75.0   | -26.2               | -30.9 | 10.3                        | 13.0                        | 0.0                             | -23.5                  | -28.2 | -13.0                    | 10.5           | 15.2 | Operating | No2 |         |
| 11  | 15122.50           | 67.7  | 67.6   | -36.9               | -33.1 | 11.1                        | 14.2                        | 0.0                             | -33.8                  | -30.1 | -13.0                    | 20.8           | 17.1 | Operating | No2 |         |
| 12  | 17012.81           | 66.9  | 66.1   | -31.4               | -26.5 | 12.4                        | 14.5                        | 0.0                             | -29.2                  | -24.4 | -13.0                    | 16.2           | 11.4 | Operating | No2 |         |
| 13  | 18903.13           | 72.1  | 72.6   | -29.4               | -28.9 | 13.0                        | 14.7                        | 0.0                             | -27.7                  | -27.2 | -13.0                    | 14.7           | 14.2 | Operating | No2 |         |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss  
Rx-ANTENNA : Biconical Antenna(30M-300MHz), Logperiodic Antenna(300M-1000MHz), Horn Antenna(1G-20GHz)  
Tx-ANTENNA : 120MHz tuned Dipole Antenna(30M-120MHz), Dipole Antenna(120M-1000MHz), Horn Antenna(1G-20GHz)  
All other emissions were at least 20dB below the specification limit.  
With the result above, the equivalent isotropic radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The test result is rounded off to one or two decimal places, so some differences might be observed.  
Detector: Below 1GHz: S/A PK (RBW:1MHz/VBW:3MHz), Above 1GHz: S/A PK (RBW:1MHz/VBW:3MHz)

### Spurious Radiated Emission

|              |                               |  |
|--------------|-------------------------------|--|
|              |                               | UL Japan, Inc.                                   |
| Company      | KYOCERA Corporation           | Head Office EMC Lab. No.2 Semi Anechoic Chamber  |
| Equipment    | iBurst User Terminal USB type | Regulation FCC part 24 Section 24.238(a)         |
| Model        | UTU03-1890F-US-A              | Test Method FCC part 2 Section 2.1053            |
| S/N          | 18                            | Test Distance 3m (below 10GHz), 1m (above 10GHz) |
| Power        | AC 120V / 60Hz                | Date March 4, 2009                               |
| Mode         | Transmitting, 1899.6875MHz    | Temperature 21 deg. C.                           |
|              | Modulation 7 (Worst)          | Humidity 34 %                                    |
| EUT-Position | H: Y-axis / V: Z-axis         | Engineer Kazuya Yoshioka                         |
| Tx Antenna   | 0.8m Height                   |  |

| No. | Frequency<br>[MHz] | Electric Field Strength<br>(After Factor Calculation)<br>[dBuV/m] |        | SG Reading<br>[dBm] |       | Tx<br>Cable<br>Loss<br>[dB] | Tx<br>Ant.<br>Gain<br>[dBi] | Tx Ant.<br>ATT.<br>Loss<br>[dB] | RESULT (EIRP)<br>[dBm] |       | LIMIT<br>(EIRP)<br>[dBm] | MARGIN<br>[dB] |      | Mode      | A/C | Remarks |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|------------------------|-------|--------------------------|----------------|------|-----------|-----|---------|
|     |                    | HOR   | VER    | HOR                 | VER   |                             |                             |                                 | HOR                    | VER   |                          | HOR            | VER  |           |     |         |
|     |                    | 1   | 107.85 | 35.6                | 40.6  |                             |                             |                                 | -52.8                  | -48.4 |                          | 0.5            | 0.1  |           |     |         |
| 2   | 258.96             | 45.0  | 44.7   | -45.6               | -39.6 | 0.9                         | 2.2                         | 9.9                             | -54.2                  | -48.2 | -13.0                    | 41.2           | 35.2 | Operating | No2 |         |
| 3   | 432.01             | 50.0  | 50.7   | -41.7               | -38.7 | 1.1                         | 2.2                         | 9.8                             | -50.5                  | -47.5 | -13.0                    | 37.5           | 34.5 | Operating | No2 |         |
| 4   | 933.33             | 59.2  | 53.2   | -30.4               | -33.8 | 1.9                         | 2.2                         | 9.6                             | -39.8                  | -43.2 | -13.0                    | 26.8           | 30.2 | Operating | No2 |         |
| 5   | 3799.38            | 55.3  | 55.0   | -47.4               | -47.2 | 5.4                         | 12.7                        | 0.0                             | -40.1                  | -39.9 | -13.0                    | 27.1           | 26.9 | Operating | No2 |         |
| 6   | 5699.06            | 53.9  | 51.5   | -47.4               | -50.4 | 6.8                         | 13.3                        | 0.0                             | -40.8                  | -43.9 | -13.0                    | 27.8           | 30.9 | Operating | No2 |         |
| 7   | 7598.75            | 61.5  | 56.1   | -38.4               | -45.0 | 8.0                         | 11.5                        | 0.0                             | -34.9                  | -41.4 | -13.0                    | 21.9           | 28.4 | Operating | No2 |         |
| 8   | 9498.44            | 66.3  | 65.3   | -32.1               | -35.8 | 8.9                         | 11.5                        | 0.0                             | -29.5                  | -33.2 | -13.0                    | 16.5           | 20.2 | Operating | No2 |         |
| 9   | 11398.13           | 64.1  | 67.1   | -43.3               | -40.0 | 9.6                         | 11.7                        | 0.0                             | -41.2                  | -38.0 | -13.0                    | 28.2           | 25.0 | Operating | No2 |         |
| 10  | 13297.81           | 78.7  | 77.2   | -25.2               | -28.8 | 10.3                        | 12.8                        | 0.0                             | -22.6                  | -26.3 | -13.0                    | 9.6            | 13.3 | Operating | No2 |         |
| 11  | 15197.50           | 67.7  | 68.3   | -36.2               | -31.7 | 11.2                        | 14.4                        | 0.0                             | -33.0                  | -28.5 | -13.0                    | 20.0           | 15.5 | Operating | No2 |         |
| 12  | 17097.19           | 67.6  | 66.0   | -31.9               | -27.4 | 12.4                        | 13.9                        | 0.0                             | -30.4                  | -25.9 | -13.0                    | 17.4           | 12.9 | Operating | No2 |         |
| 13  | 18996.88           | 74.5  | 74.1   | -27.0               | -27.4 | 13.1                        | 14.7                        | 0.0                             | -25.4                  | -25.8 | -13.0                    | 12.4           | 12.8 | Operating | No2 |         |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss  
Rx-ANTENNA : Biconical Antenna(30M-300MHz), Logperiodic Antenna(300M-1000MHz), Horn Antenna(1G-20GHz)  
Tx-ANTENNA : 120MHz tuned Dipole Antenna(30M-120MHz), Dipole Antenna(120M-1000MHz), Horn Antenna(1G-20GHz)  
All other emissions were at least 20dB below the specification limit.  
With the result above, the equivalent isotropic radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The test result is rounded off to one or two decimal places, so some differences might be observed.  
Detector: Below 1GHz: S/A PK(RBW:1MHz/VBW:3MHz), Above 1GHz: S/A PK (RBW:1MHz/VBW:3MHz)

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### Spurious Radiated Emission

|              |                               |  |
|--------------|-------------------------------|--|
|              |                               | UL Japan, Inc.                                   |
| Company      | KYOCERA Corporation           | Head Office EMC Lab. No.2 Semi Anechoic Chamber  |
| Equipment    | iBurst User Terminal USB type | Regulation FCC part 24 Section 24.238(a)         |
| Model        | UTU03-1890F-US-A              | Test Method FCC part 2 Section 2.1053            |
| S/N          | 18                            | Test Distance 3m (below 10GHz), 1m (above 10GHz) |
| Power        | AC 120V / 60Hz                | Date March 4, 2009                               |
| Mode         | Transmitting, 1909.6875MHz    | Temperature 21 deg. C.                           |
|              | Modulation 7 (Worst)          | Humidity 34 %                                    |
| EUT-Position | H: Y-axis / V: Z-axis         | Engineer Kazuya Yoshioka                         |
| Tx Antenna   | 0.8m Height                   |  |

| No. | Frequency<br>[MHz] | Electric Field Strength<br>(After Factor Calculation)<br>[dBuV/m] |        | SG Reading<br>[dBm] |       | Tx<br>Cable<br>Loss<br>[dB] | Tx<br>Ant.<br>Gain<br>[dBi] | Tx Ant.<br>ATT.<br>Loss<br>[dB] | RESULT (EIRP)<br>[dBm] |       | LIMIT<br>[dBm]<br>(EIRP) | MARGIN<br>[dB] |      | Mode      | A/C | Remarks |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|------------------------|-------|--------------------------|----------------|------|-----------|-----|---------|
|     |                    | HOR   | VER    | HOR                 | VER   |                             |                             |                                 | HOR                    | VER   |                          | HOR            | VER  |           |     |         |
|     |                    | 1   | 107.87 | 34.7                | 46.2  |                             |                             |                                 | -53.7                  | -42.8 |                          | 0.5            | 0.1  |           |     |         |
| 2   | 259.59             | 45.1  | 44.6   | -45.5               | -39.7 | 0.9                         | 2.2                         | 9.9                             | -54.2                  | -48.3 | -13.0                    | 41.2           | 35.3 | Operating | No2 |         |
| 3   | 432.08             | 51.5  | 50.6   | -40.2               | -38.8 | 1.1                         | 2.2                         | 9.8                             | -49.0                  | -47.6 | -13.0                    | 36.0           | 34.6 | Operating | No2 |         |
| 4   | 933.50             | 61.0  | 54.4   | -28.6               | -32.6 | 1.9                         | 2.2                         | 9.7                             | -38.0                  | -42.0 | -13.0                    | 25.0           | 29.0 | Operating | No2 |         |
| 5   | 3819.38            | 55.1  | 55.2   | -47.7               | -47.0 | 5.4                         | 12.7                        | 0.0                             | -40.3                  | -39.7 | -13.0                    | 27.3           | 26.7 | Operating | No2 |         |
| 6   | 5729.06            | 54.7  | 51.7   | -46.6               | -50.1 | 6.8                         | 13.4                        | 0.0                             | -40.0                  | -43.6 | -13.0                    | 27.0           | 30.6 | Operating | No2 |         |
| 7   | 7638.75            | 63.0  | 58.0   | -36.9               | -43.1 | 8.0                         | 11.5                        | 0.0                             | -33.4                  | -39.5 | -13.0                    | 20.4           | 26.5 | Operating | No2 |         |
| 8   | 9548.44            | 65.7  | 64.2   | -32.6               | -36.9 | 8.9                         | 11.4                        | 0.0                             | -30.1                  | -34.4 | -13.0                    | 17.1           | 21.4 | Operating | No2 |         |
| 9   | 11458.13           | 63.0  | 66.5   | -44.2               | -40.6 | 9.6                         | 11.8                        | 0.0                             | -42.0                  | -38.4 | -13.0                    | 29.0           | 25.4 | Operating | No2 |         |
| 10  | 13367.81           | 79.1  | 77.0   | -25.0               | -29.0 | 10.4                        | 12.7                        | 0.0                             | -22.7                  | -26.7 | -13.0                    | 9.7            | 13.7 | Operating | No2 |         |
| 11  | 15277.50           | 66.2  | 68.3   | -37.0               | -31.0 | 11.2                        | 14.7                        | 0.0                             | -33.5                  | -27.5 | -13.0                    | 20.5           | 14.5 | Operating | No2 |         |
| 12  | 17187.19           | 68.4  | 68.4   | -32.4               | -25.9 | 12.4                        | 13.2                        | 0.0                             | -31.6                  | -25.0 | -13.0                    | 18.6           | 12.0 | Operating | No2 |         |
| 13  | 19096.88           | 74.9  | 75.1   | -26.6               | -26.4 | 13.1                        | 14.7                        | 0.0                             | -25.0                  | -24.8 | -13.0                    | 12.0           | 11.8 | Operating | No2 |         |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss  
Rx-ANTENNA : Biconical Antenna(30M-300MHz), Logperiodic Antenna(300M-1000MHz), Horn Antenna(1G-20GHz)  
Tx-ANTENNA : 120MHz tuned Dipole Antenna(30M-120MHz), Dipole Antenna(120M-1000MHz), Horn Antenna(1G-20GHz)  
All other emissions were at least 20dB below the specification limit.  
With the result above, the equivalent isotropic radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The test result is rounded off to one or two decimal places, so some differences might be observed.  
Detector: Below 1GHz: S/A PK(RBW:1MHz/VBW:3MHz), Above 1GHz: S/A PK (RBW:1MHz/VBW:3MHz)

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### APPENDIX 3: Test instruments

#### EMI test equipment

| Control No.  | Instrument                      | Manufacturer     | Model No                 | Serial No               | Test Item | Calibration Date * Interval(month) |
|--------------|---------------------------------|------------------|--------------------------|-------------------------|-----------|------------------------------------|
| MPM-09       | Power Meter                     | Anritsu          | ML2495A                  | 6K00003348              | AT/RE     | 2008/09/04 * 12                    |
| MPSE-12      | Power sensor                    | Anritsu          | MA2411B                  | 011598                  | AT/RE     | 2008/09/04 * 12                    |
| MAT-24       | Attenuator(10dB)<br>(above1GHz) | Agilent          | 8493C                    | 71389                   | AT        | 2008/06/25 * 12                    |
| MAEC-02      | Anechoic Chamber(NSA)           | TDK              | Semi Anechoic Chamber 3m | DA-06902                | RE        | 2008/04/17 * 12                    |
| MOS-22       | Thermo-Hygrometer               | Custom           | CTH-201                  | 0003                    | RE        | 2009/02/05 * 12                    |
| MJM-05       | Measure                         | PROMART          | SEN1955                  | -                       | RE        | -                                  |
| CUST-MSTW-14 | EMI measurement program         | TSJ              | TEPTO-DV                 | -                       | RE        | -                                  |
| MRENT-62     | Spectrum Analyzer               | Agilent          | E4448A                   | MY46180856              | RE        | 2008/11/25 * 12                    |
| MHA-06       | Horn Antenna 1-18GHz            | Schwarzbeck      | BBHA9120D                | 254                     | RE        | 2009/01/31 * 12                    |
| MCC-47       | Microwave Cable 1G-26.5GHz      | Suhner           | SUCOFLEX104              | 295123(5m) / 287573(1m) | RE        | 2008/11/27 * 12                    |
| MPA-10       | Pre Amplifier                   | Agilent          | 8449B                    | 3008A02142              | RE        | 2008/09/17 * 12                    |
| MHA-02       | Horn Antenna 18-26.5GHz         | EMCO             | 3160-09                  | 1265                    | RE        | 2009/01/31 * 12                    |
| MSG-02       | Signal Generator                | Rohde & Schwarz  | SML03                    | 100332                  | RE        | 2008/10/24 * 12                    |
| MHA-05       | Horn Antenna 1-18GHz            | Schwarzbeck      | BBHA9120D                | 253                     | RE        | 2009/01/31 * 12                    |
| MCC-48       | Microwave Cable 1G-26.5GHz 7m   | Suhner           | SUCOFLEX102              | 23771/2                 | RE        | 2008/08/22 * 12                    |
| MBA-02       | Biconical Antenna               | Schwarzbeck      | BBA9106                  | VHA91032008             | RE        | 2008/10/18 * 12                    |
| MLA-02       | Logperiodic Antenna             | Schwarzbeck      | USLP9143                 | 201                     | RE        | 2008/10/18 * 12                    |
| MCC-12       | Coaxial Cable                   | Fujikura/Agilent | -                        | -                       | RE        | 2009/02/16 * 12                    |
| MAT-07       | Attenuator(6dB)                 | Weinschel Corp   | 2                        | BK7970                  | RE        | 2008/11/14 * 12                    |
| MPA-09       | Pre Amplifier                   | Agilent          | 8447D                    | 2944A10845              | RE        | 2008/09/04 * 12                    |
| MHF-18       | High Pass Filter 3.5-18.0GHz    | TOKIMEC          | TF323DCA                 | 7002                    | RE        | 2008/12/16 * 12                    |
| MCC-77       | Microwave Cable 1G-26.5GHz      | Suhner           | SUCOFLEX104              | 278942/4                | RE        | 2008/12/17 * 12                    |

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

Test Item:

RE: Output Power(Radiated), Band Edge(Radiated), Spurious emission (Radiated)

AT: Output Power(Conducted)

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