

APPENDIX 2: Data of EMI test

Peak Output Power (Conducted)

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room

| | | | |
|-----------|--|---------------|---------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part22 Section 22.913(a)(2) |
| MODEL | PV300 | TEST METHOD | FCC Part2 Section 2.1046 |
| S/N | P3-240 | TEST DISTANCE | - |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/09/2008 |
| MODE | Power Control Level of "5" (Max power) | TEMPERATURE | 26 deg.C. |
| | | HUMIDITY | 41% |
| | | ENGINEER | Takahiro Hatakeda |

| Mode | Ch | Frequency [MHz] | P/M Reading [dBm] | Atten. [dB] | Cable Loss [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|-------------------------------|------|--------------------|-------------------------|----------------|-----------------------|-----------------|----------------|----------------|
| GSM (GMSK) | Low | 824.2 | 8.6 | 20.0 | 4.1 | 32.7 | 38.5 | 5.8 |
| | Mid | 836.6 | 8.4 | 20.0 | 4.1 | 32.5 | 38.5 | 6.0 |
| | High | 848.8 | 8.1 | 20.0 | 4.1 | 32.2 | 38.5 | 6.3 |
| GPRS (GMSK) (1DL, 1UL) | Low | 824.2 | 8.6 | 20.0 | 4.1 | 32.7 | 38.5 | 5.8 |
| | Mid | 836.6 | 8.3 | 20.0 | 4.1 | 32.4 | 38.5 | 6.1 |
| | High | 848.8 | 8.1 | 20.0 | 4.1 | 32.2 | 38.5 | 6.3 |
| EGPRS (8PSK) (1DL, 4UL) | Low | 824.2 | 2.6 | 20.0 | 4.1 | 26.7 | 38.5 | 11.8 |
| | Mid | 836.6 | 2.5 | 20.0 | 4.1 | 26.6 | 38.5 | 11.9 |
| | High | 848.8 | 2.3 | 20.0 | 4.1 | 26.4 | 38.5 | 12.1 |

Results = P/M Reading + Atten.Loss + Cable Loss

Peak Output Power (Radiated)
GSM850

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | | |
|--------------|--|---------------|----------------------------------|-------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 | |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.913(a)(2) | |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1046 | |
| S/N | P3-263 | TEST DISTANCE | 3m | |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 | 12/09/2008 |
| MODE | GSM Mode / EGPRS Mode | TEMPERATURE | 22 deg.C. | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % | 29 % |
| | Tx 824.2MHz(Ch128) | ENGINEER | Tomohisa Nakagawa | Tomohisa Nakagawa |
| | Tx 836.6MHz(Ch190) | | | |
| | Tx 848.8MHz(Ch251) | | | |
| EUT-POSITION | H: X-axis / V: Z-axis | | | |
| TX ANTENNA | 0.8m Height | | | |

[GSM Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|------|-------------------------|----------------|------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| | | 1 | 824.20 | 129.2 | 126.9 | | | | 37.6 | 39.4 | | 1.6 | 2.2 | | |
| 2 | 836.60 | 129.1 | 125.8 | 37.6 | 38.2 | 1.7 | 2.2 | 9.7 | 26.2 | 26.8 | 38.5 | 12.3 | 11.7 | Operating | No4 |
| 3 | 848.80 | 129.1 | 123.8 | 37.8 | 36.1 | 1.7 | 2.2 | 9.7 | 26.4 | 24.7 | 38.5 | 12.1 | 13.8 | Operating | No4 |

[EGPRS Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|------|-------------------------|----------------|------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| | | 1 | 824.20 | 123.4 | 120.4 | | | | 31.8 | 32.9 | | 1.6 | 2.2 | | |
| 2 | 836.60 | 122.5 | 119.8 | 31.0 | 32.2 | 1.7 | 2.2 | 9.7 | 19.6 | 20.8 | 38.5 | 18.9 | 17.7 | Operating | No4 |
| 3 | 848.80 | 122.4 | 119.2 | 31.1 | 31.5 | 1.7 | 2.2 | 9.7 | 19.7 | 20.1 | 38.5 | 18.8 | 18.4 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15

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)

All other emissions were at least 20dB below the specification limit.

*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 3MHz/VBW 8MHz)

UL Japan, Inc.

Head Office EMC Lab.

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Peak Output Power (Radiated)
GSM850 + BT

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.913(a)(2) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1046 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/09/2008 |
| MODE | GSM + BT Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % |
| | Tx 824.2MHz(Ch128) | ENGINEER | Tomohisa Nakagawa |
| | Tx 836.6MHz(Ch190) | | |
| | Tx 848.8MHz(Ch251) | | |
| | Bluetooth Hopping On Mode | | |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

[GSM + BT Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|-------|---------------------|------|-----------------------------|-----------------------------|---------------------------------|-----------------------|------|-------------------------|----------------|------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| | | | | | | | | | | | | | | | |
| 1 | 824.20 | 129.1 | 125.4 | 37.5 | 37.9 | 1.6 | 2.2 | 9.8 | 26.0 | 26.4 | 38.5 | 12.5 | 12.1 | Operating | No4 |
| 2 | 836.60 | 129.6 | 125.4 | 38.1 | 37.8 | 1.7 | 2.2 | 9.7 | 26.7 | 26.4 | 38.5 | 11.8 | 12.1 | Operating | No4 |
| 3 | 848.80 | 129.7 | 124.5 | 38.4 | 36.8 | 1.7 | 2.2 | 9.7 | 27.0 | 25.4 | 38.5 | 11.5 | 13.1 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15
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)
All other emissions were at least 20dB below the specification limit.
*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 3MHz/VBW 8MHz)

Emission Bandwidth

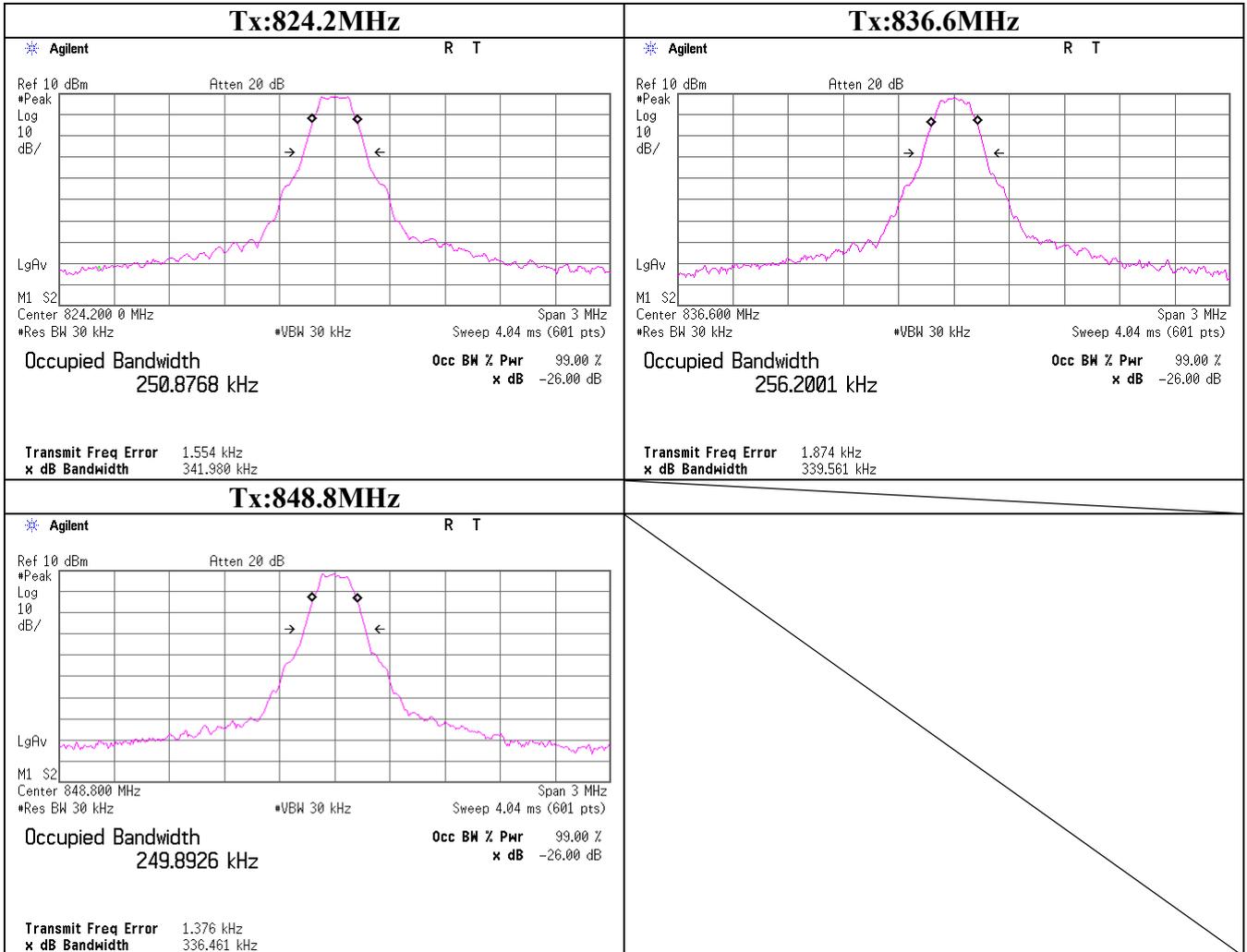
UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room and No.11 Measurement Room

| | | | |
|-----------|--|---------------|---------------------------|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part22 Section 22.917 |
| MODEL | PV300 | TEST METHOD | FCC Part2 Section 2.1049 |
| S/N | P3-040 | TEST DISTANCE | - |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/16/2008 |
| MODE | GSM 850 and EGPRS 850 | TEMPERATURE | 25 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 41% |
| | Tx 824.2MHz (128ch) | ENGINEER | Takahiro Hatakeda |
| | Tx 836.6MHz (190ch) | | |
| | Tx 848.8MHz (251ch) | | |

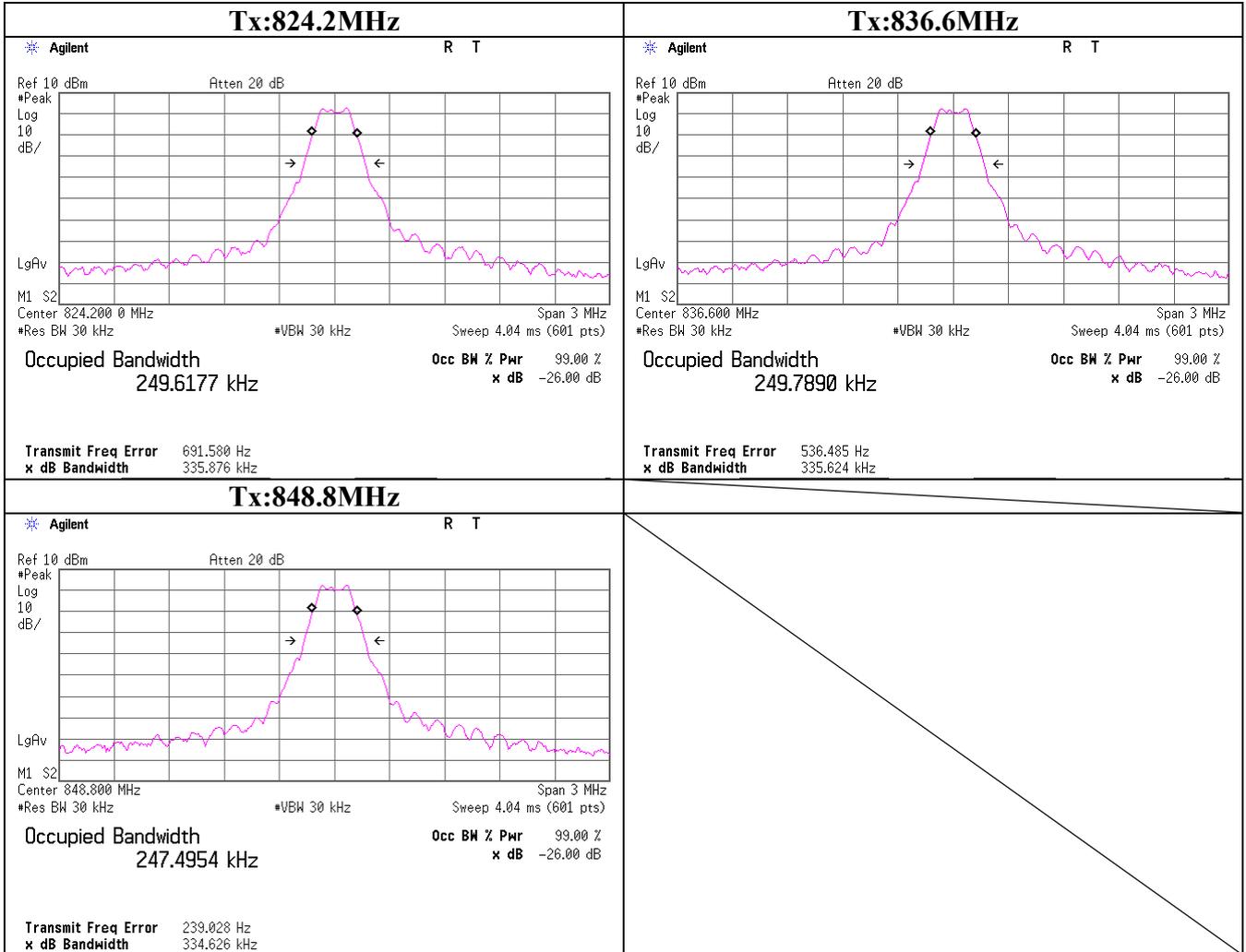
<GSM 850, EGPRS 850>

| Mode | CH | FREQ [MHz] | 26dB Bandwidth [kHz] | 99% OBW [kHz] | Limit [kHz] |
|-------|------|---------------|-------------------------|------------------|----------------|
| GSM | Low | 824.2 | 342.0 | 250.9 | - |
| | Mid | 836.6 | 339.6 | 256.2 | - |
| | High | 848.8 | 336.5 | 249.9 | - |
| EGPRS | Low | 824.2 | 335.9 | 249.6 | - |
| | Mid | 836.6 | 335.6 | 249.8 | - |
| | High | 848.8 | 334.6 | 247.5 | - |

Emission Bandwidth
GSM Mode



Emission Bandwidth
EGPRS Mode



Band Edge (Conducted)

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room and No.11 Measurement Room

| | | | |
|-----------|--|---------------|---------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part2 Section 2.1049 |
| S/N | P3-040 | TEST DISTANCE | - |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/16/2008 |
| MODE | GSM 850 and EGPRS 850 | TEMPERATURE | 25 deg.C. |
| | Power Control Level of "5" (Max power) | | |
| | Tx 824.2MHz | HUMIDITY | 41% |
| | Tx 848.8MHz | ENGINEER | Takahiro Hatakeda |

<GSM 850, EGPRS 850>

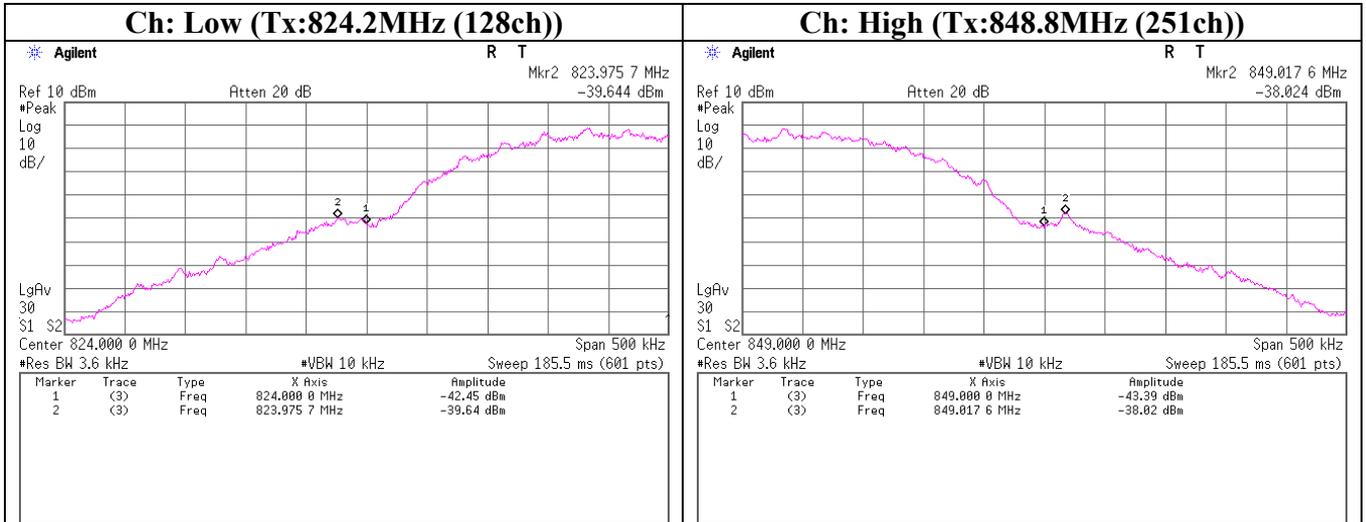
| Mode | Frequency [MHz] | Reading [dBm] | Atten. [dB] | Cable Loss [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|-------|--------------------|------------------|----------------|-----------------------|-----------------|----------------|----------------|
| GSM | 823.976 | -39.6 | 20.0 | 4.1 | -15.5 | -13.0 | 2.5 |
| | 824.000 | -42.5 | 20.0 | 4.1 | -18.4 | -13.0 | 5.4 |
| | 849.000 | -43.4 | 20.0 | 4.1 | -19.3 | -13.0 | 6.3 |
| | 849.018 | -38.0 | 20.0 | 4.1 | -13.9 | -13.0 | 0.9 |
| EGPRS | 823.966 | -43.9 | 20.0 | 4.1 | -19.8 | -13.0 | 6.8 |
| | 823.986 | -43.1 | 20.0 | 4.1 | -19.0 | -13.0 | 6.0 |
| | 824.000 | -45.7 | 20.0 | 4.1 | -21.6 | -13.0 | 8.6 |
| | 849.000 | -50.4 | 20.0 | 4.1 | -26.3 | -13.0 | 13.3 |
| | 849.013 | -43.0 | 20.0 | 4.1 | -18.9 | -13.0 | 5.9 |

VIDEO AV 30 times

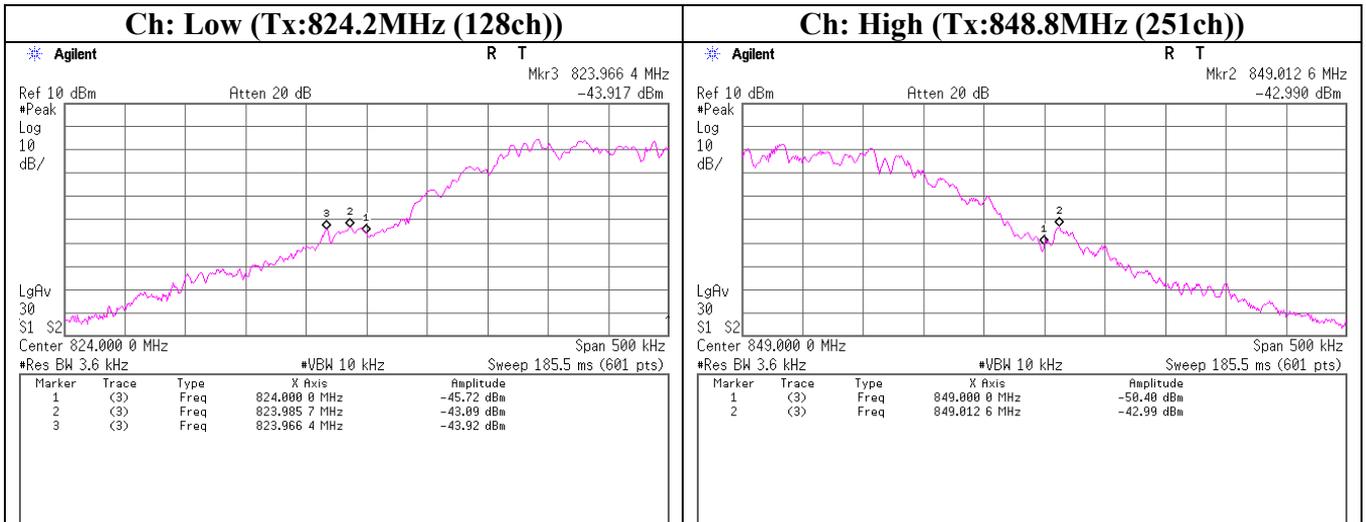
Sample Calculation : Result = Reading + Atten. + Cable Loss(including customer cable)

Band Edge (Conducted)

GSM Mode



EGPRS Mode



Band Edge (Radiated)
GSM850

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | | |
|--------------|--|---------------|----------------------------------|-------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 | |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) | |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 | |
| S/N | P3-263 | TEST DISTANCE | 3m | |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 | 12/09/2008 |
| MODE | GSM Mode / EGPRS Mode | TEMPERATURE | 22 deg.C. | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % | 29 % |
| | Tx 824.2MHz | ENGINEER | Tomohisa Nakagawa | Tomohisa Nakagawa |
| | Tx 848.8MHz | | | |
| EUT-POSITION | H: X-axis / V: Z-axis | | | |
| TX ANTENNA | 0.8m Height | | | |

[GSM Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|-------------------------|----------------|------------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| | | 1 | 823.99 | 82.4 | 79.9 | | | | -9.2 | -7.6 | | 1.6 | 2.2 | | |
| 2 | 824.00 | 79.4 | 77.3 | -12.2 | -10.2 | 1.6 | 2.2 | 9.8 | -23.7 | -21.7 | -13.0 | 10.7 | 8.7 | Operating | No4 |
| 3 | 849.00 | 82.5 | 78.2 | -8.8 | -9.5 | 1.7 | 2.2 | 9.7 | -20.2 | -20.9 | -13.0 | 7.2 | 7.9 | Operating | No4 |
| 4 | 849.02 | 84.7 | 81.1 | -6.6 | -6.6 | 1.7 | 2.2 | 9.7 | -18.0 | -18.0 | -13.0 | 5.0 | 5.0 | Operating | No4 |

[EGPRS Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|--------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|-------------------------|----------------|------------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| | | 1 | 823.99 | 78.3 | 75.8 | | | | -13.3 | -11.7 | | 1.6 | 2.2 | | |
| 2 | 824.00 | 74.8 | 71.0 | -16.8 | -16.5 | 1.6 | 2.2 | 9.8 | -28.3 | -28.0 | -13.0 | 15.3 | 15.0 | Operating | No4 |
| 3 | 849.00 | 69.3 | 72.0 | -22.0 | -15.7 | 1.7 | 2.2 | 9.7 | -33.4 | -27.1 | -13.0 | 20.4 | 14.1 | Operating | No4 |
| 4 | 849.02 | 74.3 | 77.8 | -17.0 | -9.9 | 1.7 | 2.2 | 9.7 | -28.4 | -21.3 | -13.0 | 15.4 | 8.3 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15

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)

All other emissions were at least 20dB below the specification limit.

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

Detector : S/A PK(RBW:3.6kHz/VBW:10kHz)

Band Edge (Radiated)

<GSM850 +BT>

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | | |
|--------------|--|---------------|----------------------------------|-------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 | |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) | |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 | |
| S/N | P3-263 | TEST DISTANCE | 3m | |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 | 12/09/2008 |
| MODE | GSM + BT Mode | TEMPERATURE | 22 deg.C. | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % | 29 % |
| | Tx 824.2MHz(Ch128) | ENGINEER | Tomohisa Nakagawa | Tomohisa Nakagawa |
| | Tx 848.8MHz(Ch251) | | | |
| EUT-POSITION | H: X-axis / V: Z-axis | | | |
| TX ANTENNA | 0.8m Height | | | |

[GSM + BT Mode]

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) | | SG Reading | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) | | LIMIT [dBm] (ERP) | MARGIN | | Mode | A/C |
|-----|--------------------|---|------|------------|------|-----------------------------|-----------------------------|---------------------------------|--------------|-------|-------------------------|--------|-----|-----------|-----|
| | | [dBuV/m] | | [dBm] | | | | | [dBm] | | | [dB] | | | |
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| 1 | 823.99 | 88.6 | 84.6 | -3.0 | -2.9 | 1.6 | 2.2 | 9.8 | -14.5 | -14.4 | -13.0 | 1.5 | 1.4 | Operating | No4 |
| 2 | 824.00 | 83.2 | 79.2 | -8.4 | -8.3 | 1.6 | 2.2 | 9.8 | -19.9 | -19.8 | -13.0 | 6.9 | 6.8 | Operating | No4 |
| 3 | 849.00 | 84.4 | 81.0 | -6.9 | -6.7 | 1.7 | 2.2 | 9.7 | -18.3 | -18.1 | -13.0 | 5.3 | 5.1 | Operating | No4 |
| 4 | 849.02 | 87.7 | 84.2 | -3.6 | -3.5 | 1.7 | 2.2 | 9.7 | -15.0 | -14.9 | -13.0 | 2.0 | 1.9 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15

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)

All other emissions were at least 20dB below the specification limit.

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

Detector : S/A PK(RBW:3.6kHz/VBW:10kHz)

UL Japan, Inc.

Head Office EMC Lab.

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Spurious Emission (Conducted)

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room and No.11 Measurement Room

| | | | |
|-----------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1051 |
| S/N | P3-040 | TEST DISTANCE | - |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/16/2008 |
| MODE | GSM 850 | TEMPERATURE | 25 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 41% |
| | Tx 824.2MHz | ENGINEER | Takahiro Hatakeda |
| | Tx 836.6MHz | | |
| | Tx 848.8MHz | | |

Limit Line

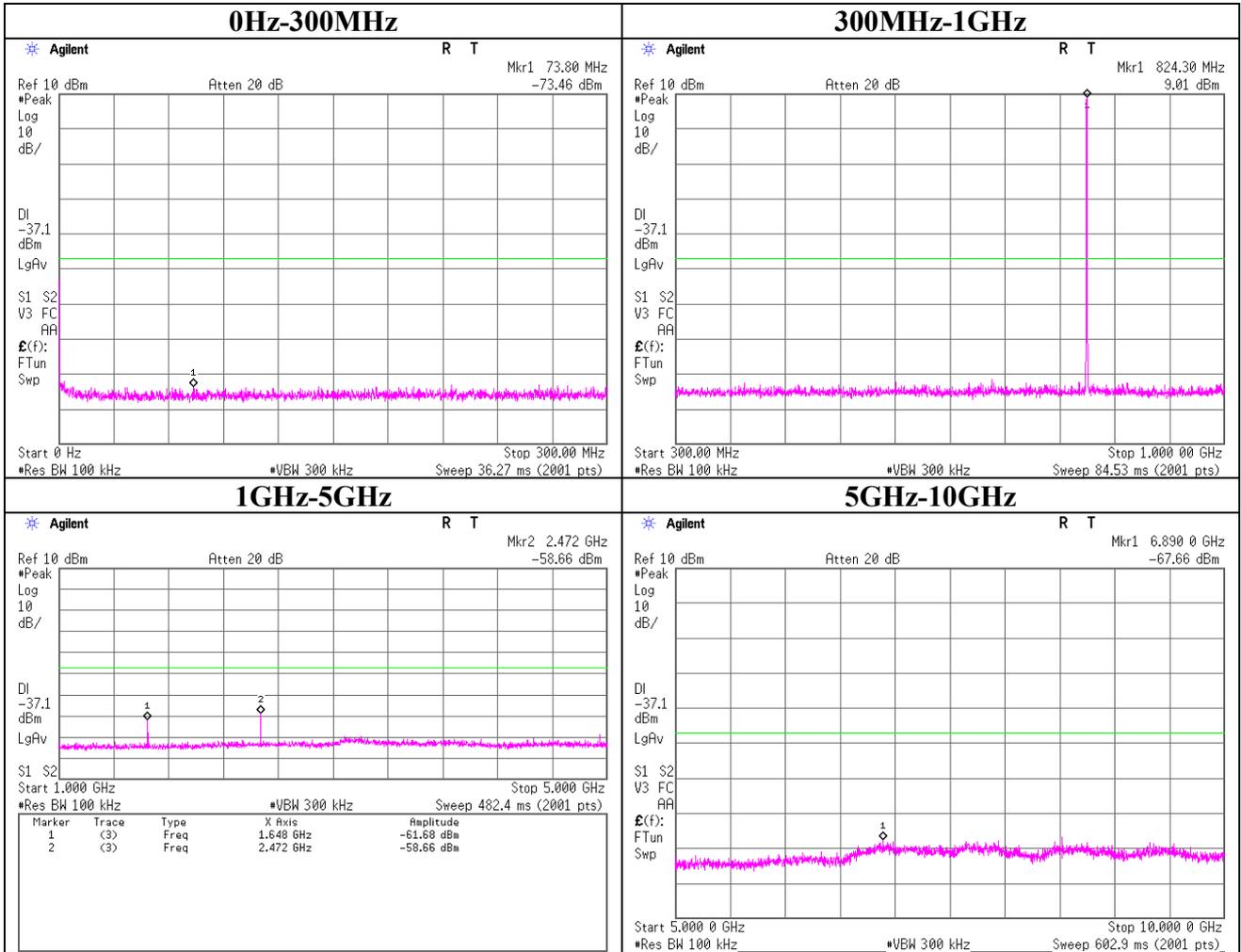
GSM 850

| Tx Frequency [MHz] | Limit [dBm] | Atten. [dB] | Cable Loss [dB] | Limit Line [dBm] |
|--------------------|-------------|-------------|-----------------|------------------|
| 824.2 | -13.0 | 20.0 | 4.1 | -37.1 |
| 836.6 | -13.0 | 20.0 | 4.1 | -37.1 |
| 848.8 | -13.0 | 20.0 | 4.1 | -37.1 |

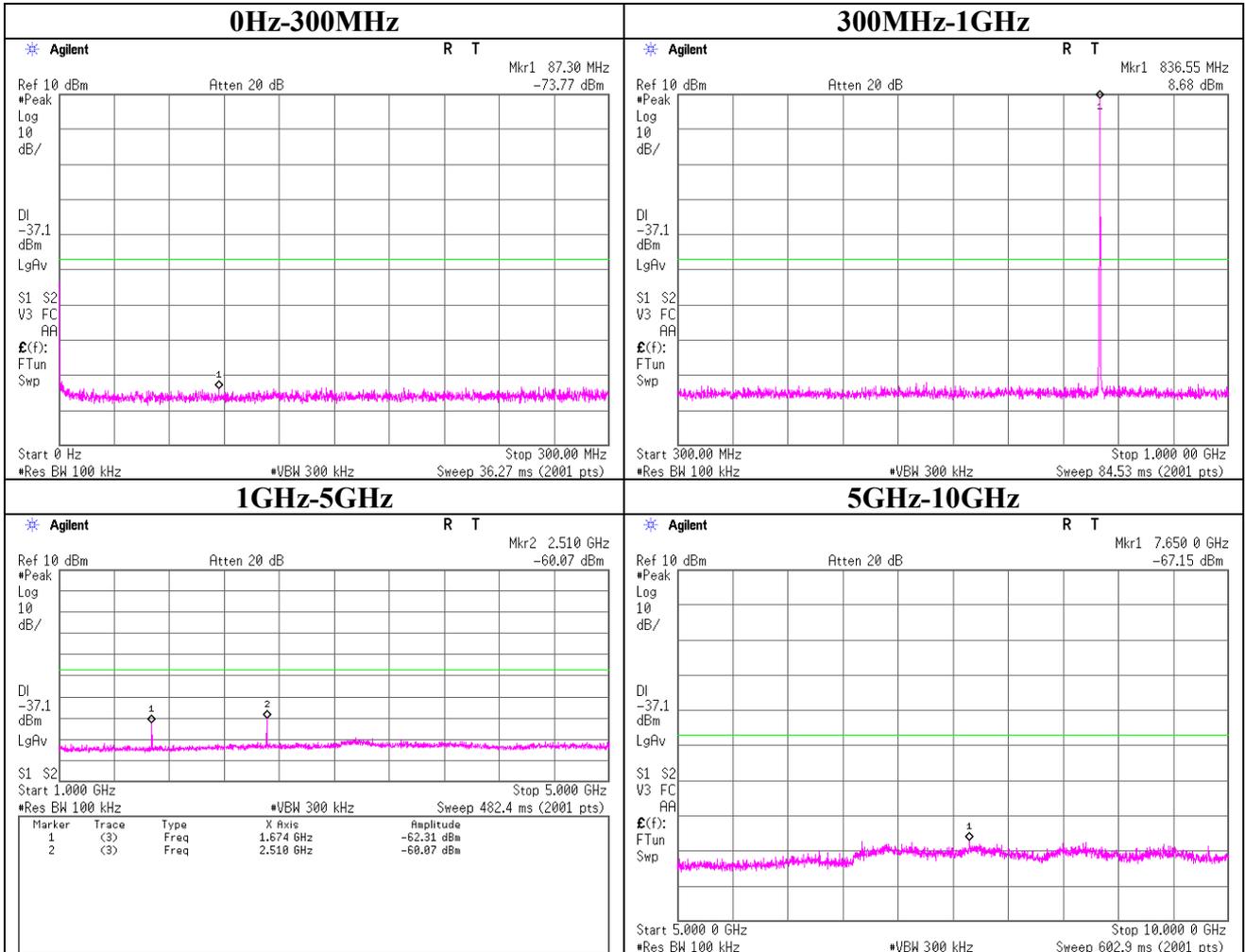
Sample Calculation : Limit Line = Limit - Atten. - Cable Loss

*All the spurious noises were below the above limit line.

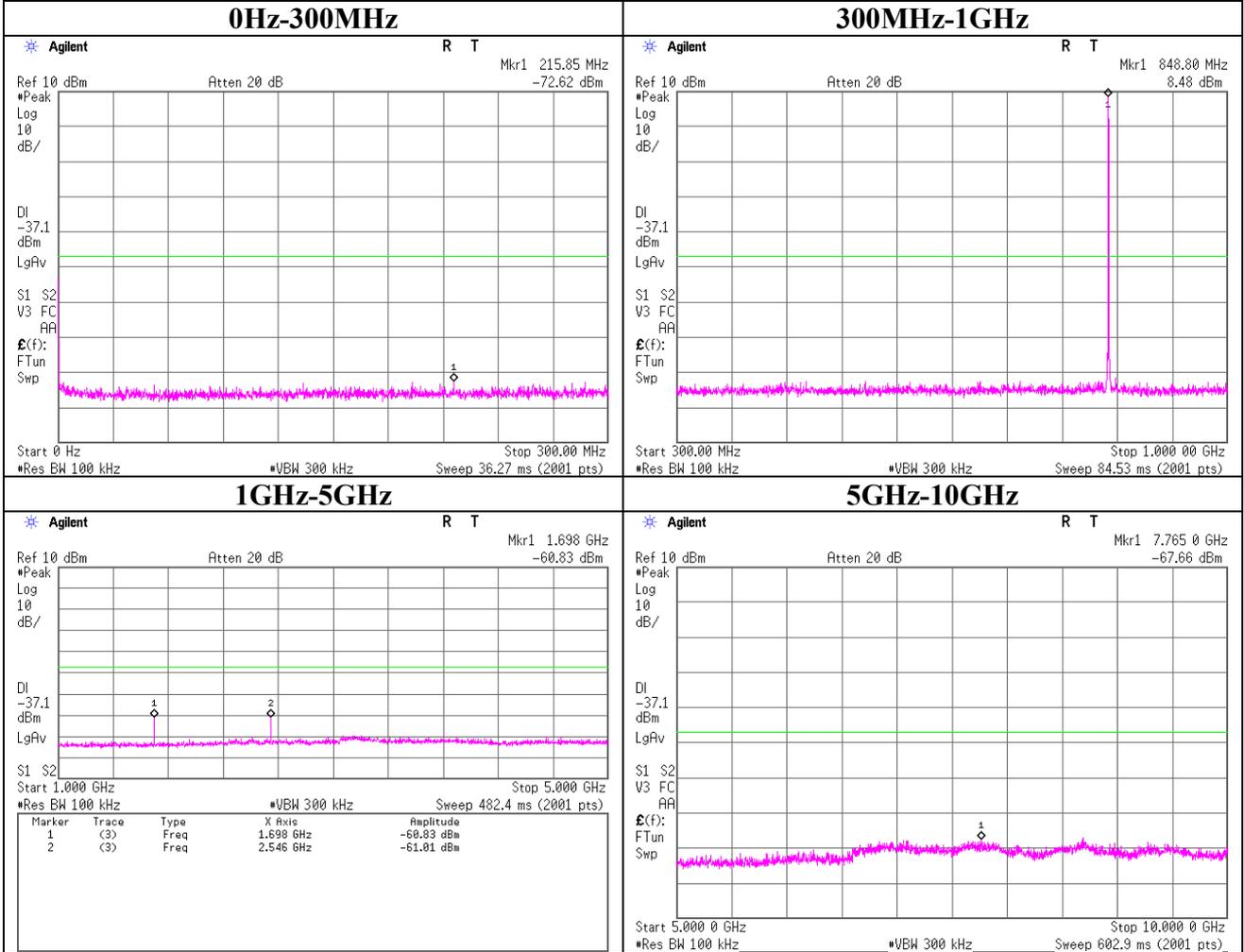
Spurious Emission (Conducted)
GSM Mode / Tx:824.2MHz



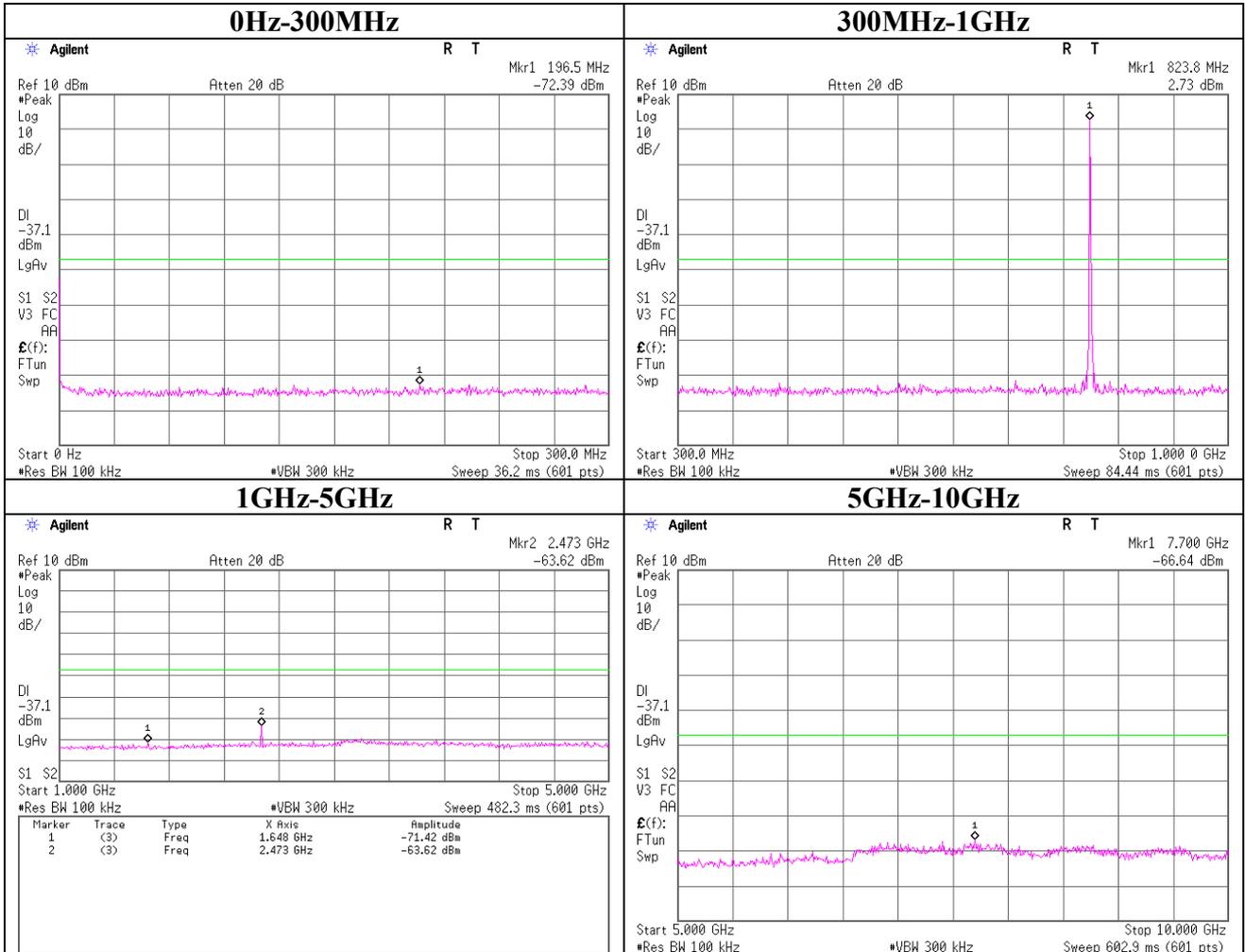
Spurious Emission (Conducted)
GSM Mode / Tx:836.6MHz



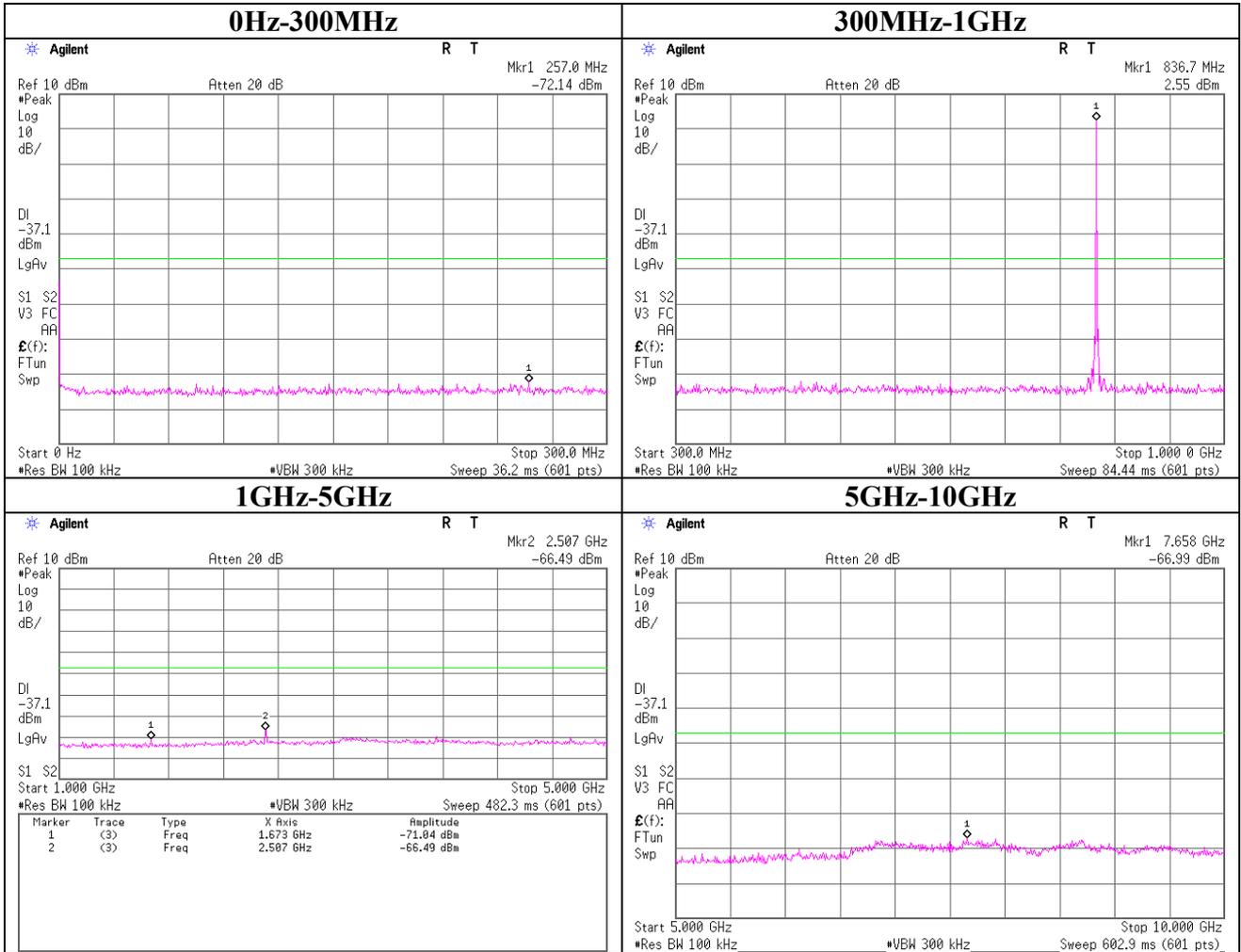
Spurious Emission (Conducted)
GSM Mode / Tx:848.8MHz



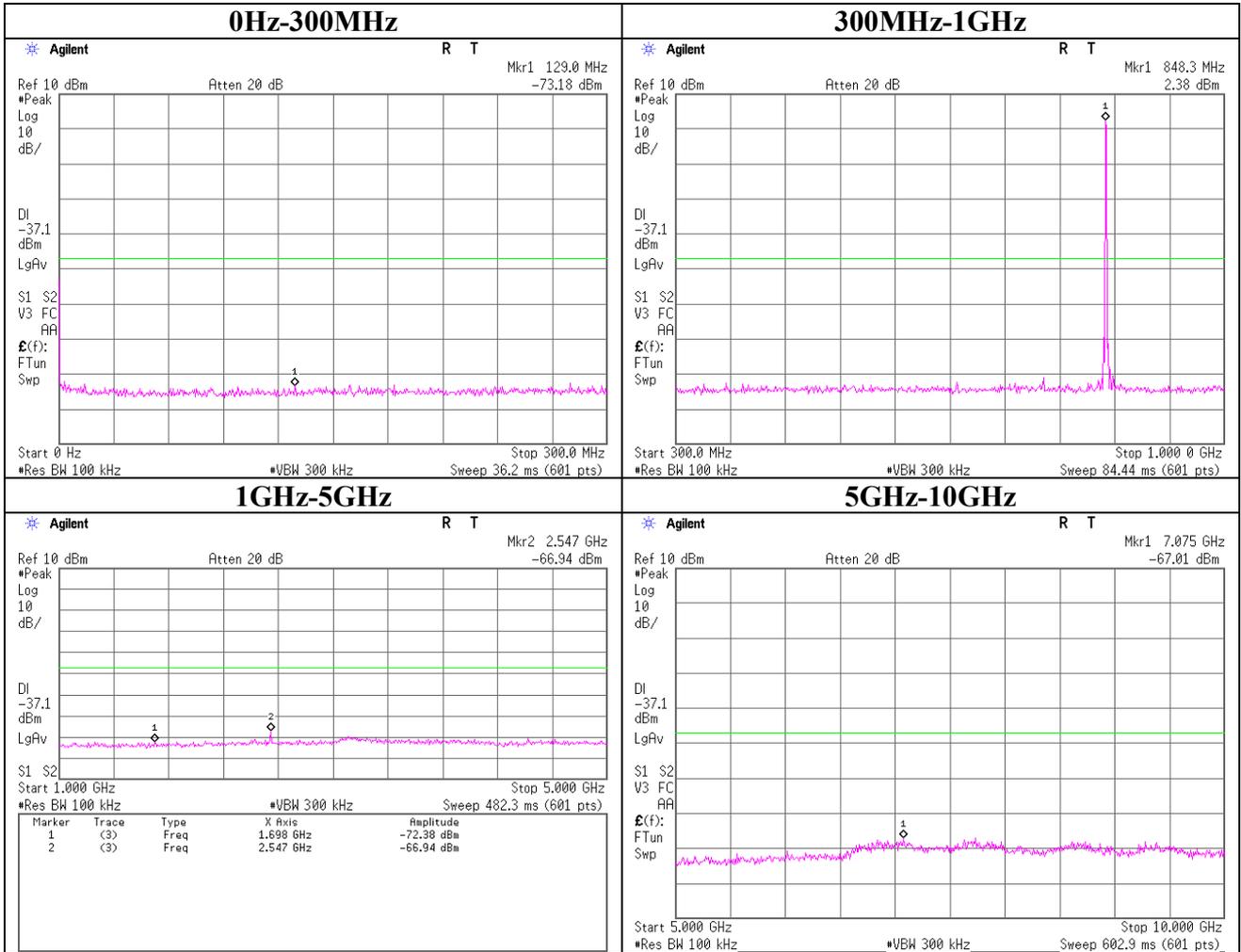
Spurious Emission (Conducted)
 EGPRS Mode / Tx:824.2MHz



Spurious Emission (Conducted)
 EGPRS Mode / Tx:836.6MHz



Spurious Emission (Conducted)
 EGPRS Mode / Tx:848.8MHz



Spurious Emission (Radiated)
GSM850 / Tx:824.2MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | GSM Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 32 % |
| | Tx 824.2MHz (128ch) | ENGINEER | Takeshi Choda |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C | Remarks |
|-----|--------------------|---|---------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|-------------------------|----------------|------|-----------|-----|---------|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | | |
| | | 1 | 1648.40 | 50.5 | 54.5 | | | | -51.8 | -48.6 | | 3.5 | 8.5 | | | |
| 2 | 2472.60 | 70.0 | 63.9 | -33.8 | -39.2 | 4.4 | 10.8 | 0.0 | -29.6 | -35.0 | -13.0 | 16.6 | 22.0 | Operating | No4 | |
| 3 | 3296.80 | 44.9 | 45.9 | -58.1 | -57.1 | 5.1 | 11.9 | 0.0 | -53.5 | -52.5 | -13.0 | 40.5 | 39.5 | Operating | No4 | |
| 4 | 4121.00 | 39.4 | 41.2 | -63.8 | -61.2 | 5.6 | 13.0 | 0.0 | -58.5 | -56.0 | -13.0 | 45.5 | 43.0 | Operating | No4 | |
| 5 | 4945.20 | 48.3 | 51.6 | -53.9 | -51.2 | 6.2 | 12.8 | 0.0 | -49.4 | -46.7 | -13.0 | 36.4 | 33.7 | Operating | No4 | |
| 6 | 5769.40 | 43.5 | 47.9 | -58.2 | -54.6 | 6.9 | 13.4 | 0.0 | -53.9 | -50.2 | -13.0 | 40.9 | 37.2 | Operating | No4 | |
| 7 | 6593.60 | 51.5 | 55.6 | -49.2 | -45.9 | 7.4 | 12.4 | 0.0 | -46.4 | -43.1 | -13.0 | 33.4 | 30.1 | Operating | No4 | |
| 8 | 7417.80 | 50.3 | 52.2 | -49.5 | -48.9 | 7.9 | 11.5 | 0.0 | -48.0 | -47.4 | -13.0 | 35.0 | 34.4 | Operating | No4 | |
| 9 | 8242.00 | 53.9 | 51.3 | -45.8 | -49.7 | 8.3 | 11.5 | 0.0 | -44.7 | -48.6 | -13.0 | 31.7 | 35.6 | Operating | No4 | |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15
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)
All other emissions were at least 20dB below the specification limit.
*The test result is rounded off to one or two decimal places, so some differences might be observed.
Detector : S/A PK RBW 100kHz / VBW 300kHz

Spurious Emission (Radiated)
GSM850 / Tx:836.6MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | GSM Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 32 % |
| | Tx 836.6MHz (190ch) | ENGINEER | Takeshi Choda |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] | MARGIN [dB] | | Mode | A/C | Remarks |
|-----|--------------------|---|---------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|----------------|----------------|-------|-----------|-----|---------|
| | | HOR | VER | HOR | VER | | | | HOR | VER | (ERP) | HOR | VER | | | |
| | | 1 | 1673.20 | 54.1 | 55.0 | -48.2 | -48.1 | 3.6 | 8.7 | 0.0 | -45.3 | -45.1 | -13.0 | | | |
| 2 | 2509.80 | 66.0 | 60.7 | -37.9 | -42.4 | 4.5 | 10.8 | 0.0 | -33.6 | -38.2 | -13.0 | 20.6 | 25.2 | Operating | No4 | |
| 3 | 3346.40 | 36.0 | 37.4 | -67.0 | -65.6 | 5.1 | 11.9 | 0.0 | -62.4 | -60.9 | -13.0 | 49.4 | 47.9 | Operating | No4 | |
| 4 | 4183.00 | 38.6 | 39.0 | -64.5 | -63.5 | 5.6 | 13.0 | 0.0 | -59.3 | -58.3 | -13.0 | 46.3 | 45.3 | Operating | No4 | |
| 5 | 5019.60 | 46.6 | 48.4 | -55.5 | -54.4 | 6.3 | 12.8 | 0.0 | -51.1 | -50.0 | -13.0 | 38.1 | 37.0 | Operating | No4 | |
| 6 | 5856.20 | 44.5 | 44.9 | -57.2 | -57.4 | 6.9 | 13.4 | 0.0 | -52.9 | -53.0 | -13.0 | 39.9 | 40.0 | Operating | No4 | |
| 7 | 6692.80 | 52.2 | 54.3 | -48.3 | -47.1 | 7.5 | 12.2 | 0.0 | -45.8 | -44.6 | -13.0 | 32.8 | 31.6 | Operating | No4 | |
| 8 | 7529.40 | 54.0 | 52.7 | -45.8 | -48.3 | 7.9 | 11.5 | 0.0 | -44.3 | -46.9 | -13.0 | 31.3 | 33.9 | Operating | No4 | |
| 9 | 8366.00 | 57.6 | 57.3 | -42.1 | -43.8 | 8.3 | 11.5 | 0.0 | -41.1 | -42.7 | -13.0 | 28.1 | 29.7 | Operating | No4 | |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15
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)
All other emissions were at least 20dB below the specification limit.
*The test result is rounded off to one or two decimal places, so some differences might be observed.
Detector : S/A PK RBW 100kHz / VBW 300kHz

Spurious Emission (Radiated)
GSM850 / Tx:848.8MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | GSM Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 32 % |
| | Tx 848.8MHz (251ch) | ENGINEER | Takeshi Choda |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] | MARGIN [dB] | | Mode | A/C | Remarks | |
|-----|--------------------|---|------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|----------------|----------------|------|-----------|-----|---------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | (ERP) | HOR | | | | VER |
| | | | | | | | | | | | | | | | | | |
| 1 | 1697.60 | 53.1 | 54.3 | -49.2 | -48.8 | 3.6 | 8.8 | 0.0 | -46.2 | -45.7 | -13.0 | 33.2 | 32.7 | Operating | No4 | | |
| 2 | 2546.40 | 57.5 | 48.9 | -46.3 | -54.2 | 4.5 | 10.9 | 0.0 | -42.1 | -50.0 | -13.0 | 29.1 | 37.0 | Operating | No4 | | |
| 3 | 3395.20 | 35.3 | 36.9 | -67.8 | -66.0 | 5.2 | 12.0 | 0.0 | -63.0 | -61.3 | -13.0 | 50.0 | 48.3 | Operating | No4 | | |
| 4 | 4244.00 | 40.0 | 37.6 | -63.0 | -64.9 | 5.7 | 13.0 | 0.0 | -57.9 | -59.7 | -13.0 | 44.9 | 46.7 | Operating | No4 | | |
| 5 | 5092.80 | 45.2 | 45.8 | -56.8 | -57.0 | 6.3 | 12.9 | 0.0 | -52.4 | -52.6 | -13.0 | 39.4 | 39.6 | Operating | No4 | | |
| 6 | 5941.60 | 45.7 | 44.2 | -56.0 | -57.9 | 7.0 | 13.5 | 0.0 | -51.7 | -53.6 | -13.0 | 38.7 | 40.6 | Operating | No4 | | |
| 7 | 6790.40 | 52.3 | 53.1 | -48.1 | -48.3 | 7.5 | 12.0 | 0.0 | -45.8 | -46.0 | -13.0 | 32.8 | 33.0 | Operating | No4 | | |
| 8 | 7639.20 | 55.7 | 53.1 | -44.0 | -47.9 | 8.0 | 11.5 | 0.0 | -42.7 | -46.5 | -13.0 | 29.7 | 33.5 | Operating | No4 | | |
| 9 | 8488.00 | 57.3 | 57.1 | -42.4 | -44.0 | 8.4 | 11.5 | 0.0 | -41.4 | -43.0 | -13.0 | 28.4 | 30.0 | Operating | No4 | | |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss - 2.15
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)
All other emissions were at least 20dB below the specification limit.
*The test result is rounded off to one or two decimal places, so some differences might be observed.
Detector : S/A PK RBW 100kHz / VBW 300kHz

Spurious Emission (Radiated)
GSM850 / Tx:824.2MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | EGPRS Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % |
| | Tx 824.2MHz (128ch) | ENGINEER | Satofumi Matsuyama |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) | | SG Reading | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) | | LIMIT [dBm] (ERP) | MARGIN | | Mode | A/C |
|-----|--------------------|---|------|------------|-------|-----------------------------|-----------------------------|---------------------------------|--------------|-------|-------------------------|--------|------|-----------|-----|
| | | [dBuV/m] | | [dBm] | | | | | [dBm] | | | [dB] | | | |
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | |
| 1 | 1648.40 | 41.7 | 44.5 | -60.6 | -58.6 | 3.5 | 8.5 | 0.0 | -57.8 | -55.7 | -13.0 | 44.8 | 42.7 | Operating | No4 |
| 2 | 2472.60 | 59.6 | 55.0 | -44.2 | -48.1 | 4.4 | 10.8 | 0.0 | -40.0 | -43.9 | -13.0 | 27.0 | 30.9 | Operating | No4 |
| 4 | 3296.80 | 36.1 | 36.9 | -66.9 | -66.1 | 5.1 | 11.9 | 0.0 | -62.3 | -61.5 | -13.0 | 49.3 | 48.5 | Operating | No4 |
| 5 | 4121.00 | 38.8 | 38.8 | -64.4 | -63.6 | 5.6 | 13.0 | 0.0 | -59.1 | -58.4 | -13.0 | 46.1 | 45.4 | Operating | No4 |
| 6 | 4945.20 | 42.0 | 43.6 | -60.2 | -59.2 | 6.2 | 12.8 | 0.0 | -55.7 | -54.7 | -13.0 | 42.7 | 41.7 | Operating | No4 |
| 7 | 5769.40 | 42.9 | 43.1 | -58.8 | -59.4 | 6.9 | 13.4 | 0.0 | -54.5 | -55.0 | -13.0 | 41.5 | 42.0 | Operating | No4 |
| 8 | 6593.60 | 43.2 | 46.0 | -57.5 | -55.5 | 7.4 | 12.4 | 0.0 | -54.7 | -52.7 | -13.0 | 41.7 | 39.7 | Operating | No4 |
| 9 | 7417.80 | 48.6 | 48.6 | -51.2 | -52.5 | 7.9 | 11.5 | 0.0 | -49.7 | -51.0 | -13.0 | 36.7 | 38.0 | Operating | No4 |
| 10 | 8242.00 | 43.8 | 43.0 | -55.9 | -58.0 | 8.3 | 11.5 | 0.0 | -54.8 | -56.9 | -13.0 | 41.8 | 43.9 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15
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)
All other emissions were at least 20dB below the specification limit.
*The test result is rounded off to one or two decimal places, so some differences might be observed.
Detector : S/A PK RBW 100kHz / VBW 300kHz

Spurious Emission (Radiated)
GSM850 / Tx:836.6MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | EGPRS Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % |
| | Tx 836.6MHz (190ch) | ENGINEER | Satofumi Matsuyama |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C |
|-----|--------------------|---|------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|-------------------------|----------------|------|-----------|-----|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | | | | |
| | | | | | | | | | | | | | | | |
| 1 | 1673.20 | 48.2 | 43.9 | -54.1 | -59.2 | 3.6 | 8.7 | 0.0 | -51.2 | -56.2 | -13.0 | 38.2 | 43.2 | Operating | No4 |
| 2 | 2509.80 | 57.3 | 52.1 | -46.6 | -51.0 | 4.5 | 10.8 | 0.0 | -42.3 | -46.8 | -13.0 | 29.3 | 33.8 | Operating | No4 |
| 3 | 3346.40 | 34.6 | 35.8 | -68.4 | -67.2 | 5.1 | 11.9 | 0.0 | -63.8 | -62.5 | -13.0 | 50.8 | 49.5 | Operating | No4 |
| 4 | 4183.00 | 37.9 | 36.3 | -65.2 | -66.2 | 5.6 | 13.0 | 0.0 | -60.0 | -61.0 | -13.0 | 47.0 | 48.0 | Operating | No4 |
| 5 | 5019.60 | 39.9 | 40.1 | -62.2 | -62.7 | 6.3 | 12.8 | 0.0 | -57.8 | -58.3 | -13.0 | 44.8 | 45.3 | Operating | No4 |
| 6 | 5856.20 | 41.8 | 41.1 | -59.9 | -61.2 | 6.9 | 13.4 | 0.0 | -55.6 | -56.8 | -13.0 | 42.6 | 43.8 | Operating | No4 |
| 7 | 6692.80 | 42.0 | 46.3 | -58.5 | -55.1 | 7.5 | 12.2 | 0.0 | -56.0 | -52.6 | -13.0 | 43.0 | 39.6 | Operating | No4 |
| 8 | 7529.40 | 51.0 | 49.9 | -48.8 | -51.1 | 7.9 | 11.5 | 0.0 | -47.3 | -49.7 | -13.0 | 34.3 | 36.7 | Operating | No4 |
| 9 | 8366.00 | 49.3 | 48.7 | -50.4 | -52.4 | 8.3 | 11.5 | 0.0 | -49.4 | -51.3 | -13.0 | 36.4 | 38.3 | Operating | No4 |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15

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)

All other emissions were at least 20dB below the specification limit.

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

Detector : S/A PK RBW 100kHz / VBW 300kHz

Spurious Emission (Radiated)
GSM850 / Tx:848.8MHz

UL Japan, Inc.
Head Office EMC Lab. No.4 Semi Anechoic Chamber

| | | | |
|--------------|--|---------------|----------------------------------|
| COMPANY | SHARP CORPORATION | REPORT NUMBER | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part 22 Section 22.917(a)(b) |
| MODEL | PV300 | TEST METHOD | FCC Part 2 Section 2.1053 |
| S/N | P3-263 | TEST DISTANCE | 3m |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/08/2008 |
| MODE | EGPRS Mode | TEMPERATURE | 22 deg.C. |
| | Power Control Level of "5" (Max power) | HUMIDITY | 29 % |
| | Tx 848.8MHz (251ch) | ENGINEER | Satofumi Matsuyama |
| EUT-POSITION | H: X-axis / V: Z-axis | | |
| TX ANTENNA | 0.8m Height | | |

| No. | Frequency [MHz] | Electric Field Strength (After Factor Calculation) [dBuV/m] | | SG Reading [dBm] | | Tx Cable Loss [dB] | Tx Ant. Gain [dBi] | Tx Ant. ATT. Loss [dB] | RESULT (ERP) [dBm] | | LIMIT [dBm] (ERP) | MARGIN [dB] | | Mode | A/C | Remarks |
|-----|--------------------|---|---------|---------------------|-------|-----------------------------|-----------------------------|---------------------------------|-----------------------|-------|-------------------------|----------------|------|-----------|-----|---------|
| | | HOR | VER | HOR | VER | | | | HOR | VER | | HOR | VER | | | |
| | | 1 | 1697.60 | 43.4 | 43.8 | | | | -58.9 | -59.3 | | 3.6 | 8.8 | | | |
| 2 | 2546.40 | 52.0 | 46.9 | -51.8 | -56.2 | 4.5 | 10.9 | 0.0 | -47.6 | -52.0 | -13.0 | 34.6 | 39.0 | Operating | No4 | |
| 3 | 3395.20 | 34.2 | 34.2 | -68.9 | -68.7 | 5.2 | 12.0 | 0.0 | -64.1 | -64.0 | -13.0 | 51.1 | 51.0 | Operating | No4 | |
| 4 | 4244.00 | 38.5 | 38.0 | -64.5 | -64.5 | 5.7 | 13.0 | 0.0 | -59.4 | -59.3 | -13.0 | 46.4 | 46.3 | Operating | No4 | |
| 5 | 5092.80 | 40.5 | 42.0 | -61.5 | -60.8 | 6.3 | 12.9 | 0.0 | -57.1 | -56.4 | -13.0 | 44.1 | 43.4 | Operating | No4 | |
| 6 | 5941.60 | 41.8 | 42.6 | -59.9 | -59.5 | 7.0 | 13.5 | 0.0 | -55.6 | -55.2 | -13.0 | 42.6 | 42.2 | Operating | No4 | |
| 7 | 6790.40 | 42.8 | 44.6 | -57.6 | -56.8 | 7.5 | 12.0 | 0.0 | -55.3 | -54.5 | -13.0 | 42.3 | 41.5 | Operating | No4 | |
| 8 | 7639.20 | 55.7 | 50.9 | -44.0 | -50.1 | 8.0 | 11.5 | 0.0 | -42.7 | -48.7 | -13.0 | 29.7 | 35.7 | Operating | No4 | |
| 9 | 8488.00 | 50.0 | 49.4 | -49.7 | -51.7 | 8.4 | 11.5 | 0.0 | -48.7 | -50.7 | -13.0 | 35.7 | 37.7 | Operating | No4 | |

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss -2.15
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)
All other emissions were at least 20dB below the specification limit.
*The test result is rounded off to one or two decimal places, so some differences might be observed.
Detector : S/A PK RBW 100kHz / VBW 300kHz

Frequency Stability(Temperature/Voltage Variation)

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room

| | | | |
|-----------|---|---------------|--|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part22 Section 22.355 |
| MODEL | PV300 | TEST METHOD | FCC Part2 Section 2.1055(a)(1) and (b) FCC Part2 Section 2.1055(d)(1) and (2) |
| S/N | P3-040 | TEST DISTANCE | - |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | DATE | 12/19/2008 |
| MODE | GSM Mode, Power Control Level of "5" (Max power) Tx 836.6MHz (190ch) | TEMPERATURE | 25 deg.C. |
| | | HUMIDITY | 40% |
| | | ENGINEER | Takahiro Hatakeda |

<GSM Mode>

| Temp. [deg.C] | Volt. [V] | Frequency Reading [MHz] | Frequency Error [Hz] | Frequency Error [ppm] | Limit [ppm] |
|------------------|--------------|-------------------------------|----------------------------|-----------------------------|----------------|
| -30.0 | 3.9 | 836.599995 | 27 | 0.032 | 2.5 |
| -20.0 | 3.9 | 836.599969 | 1 | 0.001 | 2.5 |
| -10.0 | 3.9 | 836.599976 | 8 | 0.010 | 2.5 |
| 0.0 | 3.9 | 836.599999 | 31 | 0.037 | 2.5 |
| 10.0 | 3.9 | 836.599972 | 4 | 0.005 | 2.5 |
| 20.0 | 3.9 | 836.599968 | 0 | 0.000 | Reference |
| 30.0 | 3.9 | 836.599967 | 1 | 0.001 | 2.5 |
| 40.0 | 3.9 | 836.599973 | 5 | 0.006 | 2.5 |
| 50.0 | 3.9 | 836.599964 | 4 | 0.005 | 2.5 |

| Temp. [deg.C] | Volt. [V] | Frequency Reading [MHz] | Frequency Error [Hz] | Frequency Error [ppm] | Limit [ppm] |
|------------------|--------------|-------------------------------|----------------------------|-----------------------------|----------------|
| 20.0 | 3.7 | 836.599951 | 17 | 0.020 | 2.5 |
| 20.0 | 3.9 | 836.599968 | 0 | 0.000 | Reference |
| 20.0 | 4.2 | 836.599969 | 1 | 0.001 | 2.5 |

Frequency Stability(Temperature/Voltage Variation)

UL Japan, Inc.
Head Office EMC Lab. No.6 Shielded Room

| | | | |
|-----------|---|---------------|--|
| COMPANY | SHARP CORPORATION | REPORT NO | 29CE0264-HO-01 |
| EQUIPMENT | W-CDMA / GSM Mobile Phone | REGULATION | FCC Part22 Section 22.355 |
| MODEL | PV300 | TEST METHOD | FCC Part2 Section 2.1055(a)(1) and (b) |
| S/N | P3-040 | | FCC Part2 Section 2.1055(d)(1) and (2) |
| POWER | DC5.0V(AC Adapter: AC120V/60Hz) | TEST DISTANCE | - |
| MODE | EGPRS Mode, Power Control Level of "5" (Max power) Tx 836.6MHz (190ch) | DATE | 12/19/2008 |
| | | TEMPERATURE | 25 deg.C. |
| | | HUMIDITY | 40% |
| | | ENGINEER | Takahiro Hatakeda |

<EGPRS Mode>

| Temp. [deg.C] | Volt. [V] | Frequency Reading [MHz] | Frequency Error [Hz] | Frequency Error [ppm] | Limit [ppm] |
|------------------|--------------|-------------------------------|----------------------------|-----------------------------|----------------|
| -30.0 | 3.9 | 836.600023 | 15 | 0.018 | 2.5 |
| -20.0 | 3.9 | 836.599982 | 26 | 0.031 | 2.5 |
| -10.0 | 3.9 | 836.599955 | 53 | 0.063 | 2.5 |
| 0.0 | 3.9 | 836.599978 | 30 | 0.036 | 2.5 |
| 10.0 | 3.9 | 836.600003 | 5 | 0.006 | 2.5 |
| 20.0 | 3.9 | 836.600008 | 0 | 0.000 | Reference |
| 30.0 | 3.9 | 836.599977 | 31 | 0.037 | 2.5 |
| 40.0 | 3.9 | 836.600014 | 6 | 0.007 | 2.5 |
| 50.0 | 3.9 | 836.599960 | 48 | 0.057 | 2.5 |

| Temp. [deg.C] | Volt. [V] | Frequency Reading [MHz] | Frequency Error [Hz] | Frequency Error [ppm] | Limit [ppm] |
|------------------|--------------|-------------------------------|----------------------------|-----------------------------|----------------|
| 20.0 | 3.7 | 836.600005 | 3 | 0.004 | 2.5 |
| 20.0 | 3.9 | 836.600008 | 0 | 0.000 | Reference |
| 20.0 | 4.2 | 836.600015 | 7 | 0.008 | 2.5 |

APPENDIX 3: Test instruments

EMI test equipment (1/2)

| Control No. | Instrument | Manufacturer | Model No | Serial No | Test Item | Calibration Date * Interval(month) |
|-------------|-----------------------------------|--------------------------|--------------------------|-------------------------|-----------|------------------------------------|
| MAEC-04 | Anechoic Chamber(NSA) | TDK | Semi Anechoic Chamber 3m | DA-10005 | RE | 2008/03/27 * 12 |
| MOS-15 | Thermo-Hygrometer | Custom | CTH-180 | - | RE | 2008/01/10 * 12 |
| MJM-07 | Measure | PROMART | SEN1955 | - | RE | - |
| MSTW-14 | EMI measurement program | TSJ | TEPTO-DV | - | RE | - |
| MSA-04 | Spectrum Analyzer | Agilent | E4448A | US44300523 | RE/AT | 2008/08/18 * 12 |
| MTR-07 | Test Receiver | Rohde & Schwarz | ESCI | 100635 | RE | 2008/10/03 * 12 |
| MBA-05 | Biconical Antenna | Schwarzbeck | BBA9106 | 1302 | RE | 2008/01/12 * 12 |
| MLA-08 | Logperiodic Antenna | Schwarzbeck | UKLP9140-A | N/A | RE | 2008/01/12 * 12 |
| MCC-50 | Coaxial cable | UL Japan | - | - | RE | 2008/03/17 * 12 |
| MAT-31 | Attenuator(6dB) | TME | UFA-01 | - | RE | 2008/03/10 * 12 |
| MPA-14 | Pre Amplifier | SONOMA INSTRUMENT | 310 | 260833 | RE | 2008/03/06 * 12 |
| MHA-21 | Horn Antenna 1-18GHz | Schwarzbeck | BBHA9120D | 9120D-557 | RE | 2008/08/11 * 12 |
| MCC-57 | Microwave Cable 1G-26.5GHz (6.0m) | Suhner | SUCOFLEX104 | 246769(1m) / 292411(5m) | RE | 2008/11/05 * 12 |
| MBF-08 | Band Pass Filter | M-City | BPF1800-01 | UL0003 | RE | 2008/05/21 * 12 |
| MBF-09 | Band Pass Filter | M-City | BPF4250-01 | UL0004 | RE | 2008/05/21 * 12 |
| MHF-19 | High Pass Filter 3.5-18.0GHz | TOKIMEC | TF323DCA | 602 | RE | 2008/12/16 * 12 |
| MCC-79 | Microwave Cable 1G-26.5GHz | Suhner | SUCOFLEX104 | 278923/4 | RE | 2007/12/26 * 12 |
| MPA-12 | MicroWave System Amplifier | Agilent | 83017A | MY39500780 | RE | 2008/03/13 * 12 |
| MOS-14 | Thermo-Hygrometer | Custom | CTH-180 | - | AT | 2008/01/10 * 12 |
| MAT-20 | Attenuator(10dB)(above1GHz) | HIROSE ELECTRIC CO.,LTD. | AT-110 | - | AT | 2008/01/09 * 12 |
| MAT-25 | Attenuator(10dB)(above1GHz) | Agilent | 8493C | 71642 | AT | 2008/06/25 * 12 |
| MPSC-01 | Power splitters/Combiners | Mini-Circuit | ZFSC-2-2500 | 0124 | AT | 2008/09/22 * 12 |
| MPM-12 | Power Meter | Anritsu | ML2495A | 0825002 | AT | 2008/08/13 * 12 |
| MPSE-17 | Power sensor | Anritsu | MA2411B | 0738285 | AT | 2008/08/13 * 12 |

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EMI test equipment (2/2)

| Control No. | Instrument | Manufacturer | Model No | Serial No | Test Item | Calibration Date * Interval(month) |
|-------------|----------------------------------|--------------------------|--------------------------|-------------------------|-----------|------------------------------------|
| MAEC-03 | Anechoic Chamber(NSA) | TDK | Semi Anechoic Chamber 3m | DA-10005 | RE | 2008/03/25 * 12 |
| MOS-13 | Thermo-Hygrometer | Custom | CTH-180 | - | RE | 2008/01/10 * 12 |
| MJM-06 | Measure | PROMART | SEN1955 | - | RE | - |
| MSA-10 | Spectrum Analyzer | Agilent | E4448A | MY46180655 | RE | 2008/02/27 * 12 |
| MTR-08 | Test Receiver | Rohde & Schwarz | ESCI | 100767 | RE | 2008/06/12 * 12 |
| MBA-03 | Biconical Antenna | Schwarzbeck | BBA9106 | 1915 | RE | 2008/01/12 * 12 |
| MLA-03 | Logperiodic Antenna | Schwarzbeck | USLP9143 | 174 | RE | 2008/01/12 * 12 |
| MCC-51 | Coaxial cable | UL Japan | - | - | RE | 2008/07/18 * 12 |
| MAT-30 | Attenuator(6dB) | TME | UFA-01 | - | RE | 2008/03/10 * 12 |
| MPA-13 | Pre Amplifier | SONOMA INSTRUMENT | 310 | 260834 | RE | 2008/03/06 * 12 |
| MHA-20 | Horn Antenna 1-18GHz | Schwarzbeck | BBHA9120D | 258 | RE | 2008/04/23 * 12 |
| MCC-56 | Microwave Cable 1G-26.5GHz | Suhner | SUCOFLEX104 | 287602(1m) / 284655(5m) | RE | 2008/03/12 * 12 |
| MPA-11 | MicroWave System Amplifier | Agilent | 83017A | MY39500779 | RE | 2008/03/13 * 12 |
| MCC-78 | Microwave Cable 1G-26.5GHz | Suhner | SUCOFLEX104 | 278993/4 | RE | 2007/12/26 * 12 |
| MAT-21 | Attenuator(20dB)(above1GHz) | HIROSE ELECTRIC CO.,LTD. | AT-120 | 901247 | AT | 2008/01/09 * 12 |
| MRENT-62 | Spectrum Analyzer | Agilent | E4448A | MY46180856 | AT/RE | 2008/11/25 * 12 |
| MCH-04 | Temperature and Humidity Chamber | Espec | PL-2KP | 14015723 | AT | 2008/08/27 * 12 |
| MOS-19 | Thermo-Hygrometer | Custom | CTH-201 | 0001 | AT | 2008/12/08 * 12 |
| MCH-05 | Temperature and Humidity Chamber | Espec | PL-1KP | 14019569 | AT | 2008/05/30 * 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 | 2008/12/08 * 12 |
| MJM-05 | Measure | PROMART | SEN1955 | - | RE | - |
| 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 | 2008/02/15 * 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 |
| MRENT-75 | Radio Communication Tester | Rohde & Schwarz | CMU200 | 104031 | AT | Pre Check |
| MURC-02 | Wireless Communication Test Set | Agilent | E5515C | GB47050683 | RE | Pre Check |

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: Radiated Emission

AT: Antenna Terminal Conducted

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