



Appendix D. – CDMA2000 Test Modes

Test Summary:

The EUT supports IS95 2G networks, CDMA2000 1xRTT for Cellular band and PCS band. The maximum output power is chosen for EMC and SAR testing for worst case scenario. A full EMC measurement in this report is done in CDMA2000 1xRTT mode with FCH RC1 for Cellular band, and CDMA2000 1x RTT mode with FCH RC3 for PCS band.

Based on all the uplink channels using the same modulation type, BPSK, and those maximum output power are very closer, above test modes could reflect compliance under all operational modes.

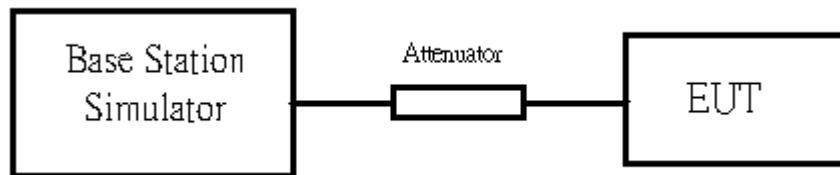
Maximum output power list:

| Bands | Test Mode | Test Status | Modulation Type | Channel | Frequency (MHz) | Conducted Power (dBm) |
|-------------------|-----------|-------------|-----------------|---------|-----------------|-----------------------|
| CDMA2000 Cellular | 1xRTT | FCH _RC1 | QPSK | 1013 | 824.70 (Low) | 24.07 |
| | | | QPSK | 384 | 836.52 (Mid) | 24.42 |
| | | | QPSK | 777 | 848.31 (High) | 24.21 |
| | | FCH_RC3 | QPSK | 1013 | 824.70 (Low) | 23.99 |
| | | | QPSK | 384 | 836.52 (Mid) | 24.39 |
| | | | QPSK | 777 | 848.31 (High) | 24.19 |
| | | FCH+SCH_RC3 | QPSK | 1013 | 824.70 (Low) | 23.95 |
| | | | QPSK | 384 | 836.52 (Mid) | 24.33 |
| | | | QPSK | 777 | 848.31 (High) | 23.93 |

| Bands | Test Mode | Test Status | Modulation Type | Channel | Frequency (MHz) | Conducted Power (dBm) |
|--------------|-----------|-------------|-----------------|---------|-----------------|-----------------------|
| CDMA2000 PCS | 1xRTT | FCH_RC1 | QPSK | 25 | 1851.25 (Low) | 23.26 |
| | | | QPSK | 600 | 1880.00 (Mid) | 23.46 |
| | | | QPSK | 1177 | 1908.75 (High) | 23.52 |
| | | FCH_RC3 | QPSK | 25 | 1851.25 (Low) | 23.47 |
| | | | QPSK | 600 | 1880.00 (Mid) | 23.44 |
| | | | QPSK | 1177 | 1908.75 (High) | 23.54 |
| | | FCH+SCH_RC1 | QPSK | 25 | 1851.25 (Low) | 23.26 |
| | | | QPSK | 600 | 1880.00 (Mid) | 23.44 |
| | | | QPSK | 1177 | 1908.75 (High) | 23.51 |



Setup Configuration



1. The EUT was connected to Base Station, Agilent 8960.
Refer to the drawing of Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station for each modes with following settings:
 - a. Set the Power control All Up for FCH_RC3 and FCH_RC1 with Service Option 55.
 - b. Set the Power control All Up for FCH+SCH with Service Option 32.
4. The transmitted maximum output power was recorded.

Test Mode 1 in Radio Configuration 1 (FCH_RC1)

| Call Setup Screen | | | Call Params | | | |
|-------------------------------|----------------------------|-------------------------------|-----------------|-------------------|--------|--|
| Call Control | Active Cell Operating Mode | | Cell Power | | | |
| Mobile Station Information | | Value | -86.00 | | | |
| ESN (Hex): 0x6C32D3AE | | dBm/1.23 MHz | 108-03330990 | | | |
| ESN (Dec): 108-03330990 | | Cell Band | US PCS | | | |
| MCC: | | Channel | 1175 | | | |
| MNC: | | Protocol Rev | 6 (IS-2000) | | | |
| MSIN: 3163712588 | | Radio Config | (Fud1, Rus1) | | | |
| Slot Class: Slotted | | FCH Service Option Setup | S055 (Loopback) | | | |
| Slot Cycle Index: 2 | | Value | S055 (Loopback) | | | |
| FCH Service Option Setup | | Service Option for Fud1, Rus1 | S055 (Loopback) | | | |
| Service Option for Fud2, Rus2 | | S09 (Loopback) | S032 (+ SCH) | | | |
| Service Option for Fud3, Rus3 | | S055 (Loopback) | S055 (Loopback) | | | |
| Service Option for Fud4, Rus4 | | S055 (Loopback) | S055 (Loopback) | | | |
| Service Option for Fud5, Rus5 | | S055 (Loopback) | S055 (Loopback) | | | |
| Close | | Background | Active Cell | Sys Type: IS-2000 | | |
| Menu | | Idle | IntRef | Offset | 1 of 3 | |

Test Mode 1 in Radio Configuration 1 (FCH_RC1)



Test Mode 3 in Radio Configuration 3 (FCH+SCH)

| Call Setup Screen | | |
|-------------------|----------------------------|-------------|
| Call Control | Active Cell Operating Mode | Call Params |
| Operating Mode | Cell Power | |
| Active Cell | -86.00 | |
| System Type | dBm/1.23 MHz | |
| IS-2000 | Cell Band | |
| End Call | US PCS | |
| Paging INSI Setup | Channel | |
| Handoff Setup | 1175 | |
| | Protocol Rev | |
| | 6 (IS-2000) | |
| | Radio Config | |
| | (Fud3, Rus3) | |
| | S032 (+ SCH) | |
| | FCH Service Option Setup | |
| 1 of 2 | 1 of 3 | |

Test Mode 3 in Radio Configuration 3 (Service Option32)

Reference:

- [1.] SAR Measurement Procedures for 3G Devices CDMA 2000/Ev-Do/WCDMA/HSDPA, June 2006
Laboratory Division Office of Engineering and Technology Federal Communications Commission
- [2.] 3.1.2.3.4 Maximum RF Output Power 3GPP2 C.S0033-0 Version 2.0, Date: 12 December 2003
Recommended Minimum Performance Standards for cdma2000 High Rate Packet Data Access Terminal