

Appendix D. – CDMA2000 Test Modes

Test Summary:

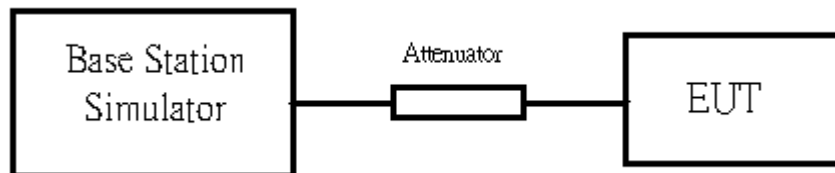
The EUT supports IS95 2G networks, CDMA2000 1xRTT for Cellular band and PCS band. The maximum output power is chosen for EMC and SAR testing for worst case scenario. A full EMC measurement in this report is done in CDMA2000 1xRTT mode with FCH RC1 for Cellular band, and CDMA2000 1x RTT mode with FCH 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 Control	Active Cell Operating Mode						Call Params		
Close Menu	Mobile Station Information ESN (Hex): 0x6C32D3AE ESN (Dec): 108-03330990 MCC: MNC: MSIN: 3163712588 Slot Class: Slotted Slot Cycle Index: 2						Cell Power		
							-86.00		
							dBm/1.23 MHz		
							Cell Band		
							US PCS		
							Channel		
							1175		
							Protocol Rev		
							6 (IS-2000)		
							Radio Config		
							(Fud1, Rvs1)		
							S055 (Loopback)		
							FCH Service Option Setup		
							1 of 3		
	Background		Active Cell		Sys Type: IS-2000				
		Idle							
		IntRef		Offset					

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	Mobile Station Information ESN (Hex): 0x6C32D3AE ESN (Dec): 108-03330990 NCC: NMC: NSIN: 3163712588 Slot Class: Slotted Slot Cycle Index: 2 Protocol Revision: 6 (IS-2000_Rev0) Band Class: US CELL US PCS NS Operating Mode: DNA Max EIRP (dB): (Fud1, Rvs1) 7 Registration: (Fud2, Rvs2) QPCH Support: (Fud3, Rvs3) Enhanced RC: (Fud4, Rvs3) Min Power Co: (Fud5, Rvs4) NS Called Pa	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, Rvs3)	
	S032 (+ SCH)	
	FCH Service Option Setup	
1 of 2	Background Active Cell Connected + Data Sys Type: IS-2000	1 of 3
	IntRef Offset	

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