



Appendix D. – CDMA2000 1xRTT Test Modes

Test Summary:

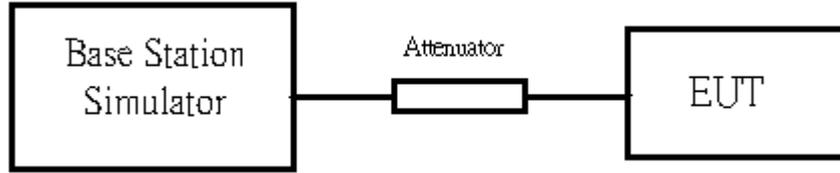
The EUT supports IS95 2G networks, CDMA2000 1xRTT for Cellular, AWS and PCS band. The maximum output power is chosen for EMC testing for worst case scenario. A full EMC measurement in this report is done in CDMA2000 1xRTT mode with FCH RC1 mode for Cellular band, CDMA2000 1xRTT mode with FCH+SCH RC3 mode for AWS band and CDMA2000 1xRTT mode with FCH RC1 mode 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	Channel	Frequency (MHz)	Conducted Power (dBm)
CDMA2000 Cellular	1xRTT	FCH RC1	1013	824.70 (Low)	23.37
			384	836.52 (Mid)	23.95
			777	848.31 (High)	23.90
		FCH RC3	1013	824.70 (Low)	23.29
			384	836.52 (Mid)	23.66
			777	848.31 (High)	23.87
		FCH + SCH RC3	1013	824.70 (Low)	23.28
			384	836.52 (Mid)	23.78
			777	848.31 (High)	23.83
CDMA2000 AWS	1xRTT	FCH RC1	25	1711.25 (Low)	23.75
			450	1732.50 (Mid)	24.40
			875	1753.75 (High)	23.90
		FCH RC3	25	1711.25 (Low)	23.86
			450	1732.50 (Mid)	24.22
			875	1753.75 (High)	24.14
		FCH + SCH RC3	25	1711.25 (Low)	24.01
			450	1732.50 (Mid)	23.98
			875	1753.75 (High)	24.15
CDMA2000 PCS	1xRTT	FCH RC1	25	1851.25 (Low)	23.84
			600	1880.00 (Mid)	24.06
			1177	1908.75 (High)	23.84
		FCH RC3	25	1851.25 (Low)	23.74
			600	1880.00 (Mid)	23.80
			1177	1908.75 (High)	23.72
		FCH + SCH RC3	25	1851.25 (Low)	23.72
			600	1880.00 (Mid)	23.78
			1177	1908.75 (High)	23.69

Setup Configuration



1. The EUT was connected to Base Station, Agilent 8960.
Refer to the drawing of Setup Configuration.
2. The RF path losses was 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				Cell Power	-86.00
	ESN (Hex): 0x6C32D3AE				dBm/1.23 MHz	
	ESN (Dec): 108-03330990				Cell Band	US PCS
	MCC:				Channel	1175
	MNC:				Protocol Rev	6 (IS-2000)
	MSIN: 3163712588				Radio Config	(Fud1, Rvs1)
	Slot Class: Slotted				FCH Service Option Setup	S055 (Loopback)
	Slot Cycle Index: 2					
	FCH Service Option Setup		Value			
	Service Option for Fud1, Rvs1		S055 (Loopback)			
Service Option for Fud2, Rvs2		S09 (Loopback)				
Service Option for Fud3, Rvs3		S032 (+ SCH)				
Service Option for Fud4, Rvs3		S055 (Loopback)				
Service Option for Fud5, Rvs4		S055 (Loopback)				
Background		Active Cell Idle		Sys Type: IS-2000		
		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	Mobile Station Information ESN (Hex): 0x6C32D3AE ESN (Dec): 108-03330990 MCC: MNC: MSIN: 3163712588 Slot Class: Slotted Slot Cycle Index: 2 Protocol Revision: 6 (IS-2000_Rev0) Band Class: US CELL + US PCS MS 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) MS Called Pa	Cell Power
Active Cell		-86.00
System Type		dBm/1.23 MHz
IS-2000		Cell Band
		US PCS
End Call		Channel
		1175
Paging INSI Setup		Protocol Rev
		6 (IS-2000)
Handoff Setup		Radio Config
	(Fud3, Rvs3)	
	S032 (+ SCH)	
	FCH Service Option Setup	
Background	Active Cell	Sys Type: IS-2000
	Connected + Data	
1 of 2	IntRef Offset	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