



APPENDIX A – CDMA2000 1XEV-DO and 1XRTT Test Modes

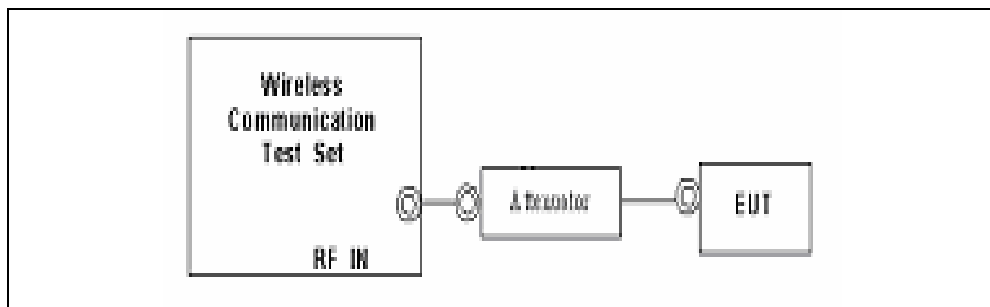
Test Summary:

A full measurement in this report is done in CDMA2000 1XEV-DO mode with the uplink data rate 38.4kbps. The EUT is also able to activate on CDMA2000 1XRTT mode whose RC3 FCH for PCS band and FCH+SCH_RC3 for Cellular band mode are focused on radiated emissions and conducted measurement, including band edge, out of band spurious response, occupied bandwidth and frequency stability.

Base 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.

Test mode	Band	Modulation Type	Cellular Band			PCS Band		
	Channel		1013	384	777	25	600	1175
CDMA 1XRTT	FCH_RC3	BPSK	21.8	22.45	21.48	20.09	20.33	20.57
	FCH+SCH_RC3	BPSK	22.33	22.69	20.43	19.53	19.79	19.99
	FCH_RC1	BPSK	21.68	22.26	21.45	20.04	20.27	20.47
CDMA 1XEV-DO	EVDO-UL:153.6kbps	BPSK	21.96	22.39	21.77	20.17	20.55	20.81
	EVDO-UL:38.4kbps	BPSK	21.95	22.38	21.48	20.22	20.44	20.76
	EVDO-UL:9.6kbps	BPSK	22.14	22.22	21.51	20.16	20.44	20.77

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 the FCH_RC3 and FCH_RC1.
 - b. Set for test mode 3(FCH) and alternating bits for FCH+SCH.
 - c. Set the Power control All Up for all modes on CDMA2000 1XEV-DO .
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	
		Mobile Station Information						Cell Power	
		ESN (Hex): 0x6C32D3AE						-86.00	
		ESN (Dec): 108-03330990						dBm/1.23 MHz	
		NCC:						Cell Band	
		NMC:						US PCS	
		NSIN: 3163712588						Channel	
		Slot Class: Slotted						1175	
		Slot Cycle Index: 2						Protocol Rev	
		FCH Service Option Setup						6 (IS-2000)	
		Value						Radio Config	
Service Option for Fud1, Rvs1 S055 (Loopback)						(Fud1, Rvs1)			
Service Option for Fud2, Rvs2 S09 (Loopback)						S055 (Loopback)			
Service Option for Fud3, Rvs3 S032 (+ SCH)						FCH Service Option Setup ▾			
Service Option for Fud4, Rvs3 S055 (Loopback)									
Service Option for Fud5, Rvs4 S055 (Loopback)									
Close Menu									
		Background		Active Cell		Sys Type: IS-2000			
				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	<div>Mobile Station Information</div> <div>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: CDMA Max EIRP (dB): (Fud1, Rvs1) Registration Type: (Fud2, Rvs2) QPCH Support: (Fud3, Rvs3) Enhanced RC: (Fud4, Rvs3) Min Power Control Step: (Fud5, Rvs4) MS Called Party Number:</div>	Cell Power	-86.00	
Active Cell		dBm/1.23 MHz		
System Type		Cell Band	US PCS	
IS-2000		Channel	1175	
End Call		Protocol Rev	6 (IS-2000)	
Paging INSI Setup		Radio Config	(Fud3, Rvs3)	
Handoff Setup		S032 (+ SCH)		
		FCH Service Option Setup		
		Background	Active Cell	Sys Type: IS-2000
1 of 2		Connected + Data	IntRef Offset	1 of 3

Test Mode 3 in Radio Configuration 3 (Service Option32)

Call Setup Screen				
Call Control	Active Cell Operating Mode	Call Params		
Operating Mode	<div>Mobile Station Information</div> <div>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: CDMA CDMA Max EIRP (dBW): -7 -7 Registration Type: QPCH Supported: Yes Enhanced RC Support: Yes Min Power Control Step: Unknown MS Called Party Number:</div>	Rvs Power Ctrl	Alternating bits	
Active Cell		Pur Ctrl Size	0.25 dB	
System Type		Call Drop Timer	Off	
IS-2000		Call Limit Mode	Off	
End Call		Traffic Data Rate	Full	
Paging INSI Setup		Background	Active Cell	Sys Type: IS-2000
Handoff Setup		Connected + Data	IntRef Offset	2 of 3
1 of 2				

RC 3 (FCH+SCH mode) with alternating bits



Call Setup Screen																																											
Call Control		Active Cell Operating Mode						Call Params																																			
Operating Mode		<table border="1"><thead><tr><th colspan="2">Access Terminal Information (AT Reported)</th></tr></thead><tbody><tr><td>Session Seed:</td><td>0x7722375A</td></tr><tr><td>Hardware ID Type (Hex):</td><td>0x010000 ESM</td></tr><tr><td>Hardware ID (Hex):</td><td>0x6020699F</td></tr><tr><td>Hardware ID (Decimal):</td><td>096-02976159</td></tr><tr><th colspan="2">Access Terminal Information (AN Assigned)</th></tr><tr><td>UATI 024:</td><td>2</td></tr><tr><td>UATI Color Code:</td><td>64</td></tr><tr><td>NAC Index:</td><td>5</td></tr><tr><th colspan="2">Access Terminal Information (User Entered)</th></tr><tr><td>AT Max Power:</td><td>23 dBm/1.23 MHz</td></tr><tr><th colspan="2">Application Configuration</th></tr><tr><td>Session Application Type:</td><td>Test Application</td></tr><tr><td>Test Application Protocol:</td><td>RTAP</td></tr><tr><td>Limited TAP:</td><td>Off</td></tr><tr><td>AT Directed Packets:</td><td>50 %</td></tr><tr><td>ACK Channel Bit Fixed Mode Attribute:</td><td>On</td></tr></tbody></table>						Access Terminal Information (AT Reported)		Session Seed:	0x7722375A	Hardware ID Type (Hex):	0x010000 ESM	Hardware ID (Hex):	0x6020699F	Hardware ID (Decimal):	096-02976159	Access Terminal Information (AN Assigned)		UATI 024:	2	UATI Color Code:	64	NAC Index:	5	Access Terminal Information (User Entered)		AT Max Power:	23 dBm/1.23 MHz	Application Configuration		Session Application Type:	Test Application	Test Application Protocol:	RTAP	Limited TAP:	Off	AT Directed Packets:	50 %	ACK Channel Bit Fixed Mode Attribute:	On	Cell Power	
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		675																																									
Start Data Connection																																											
Close Session		Application Config																																									
Handoff Setup		FTAP Rate																																									
		307.2 kbps																																									
		(2 Slot, QPSK)																																									
AT Max Power		RTAP Rate																																									
23 dBm/1.23 MHz		153.6 kbps																																									
Background		Active Cell																																									
		Session Open																																									
		Sys Type: IS-856																																									
		Logging: No Conn.																																									
1 of 3		IntRef Offset																																									
		RTAP																																									
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1XEVD0 setting with RTAP 153.6kbps**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