

Appendix G. FCC CDMA2000 SAR Measurement Procedures

Conducted Output Power:

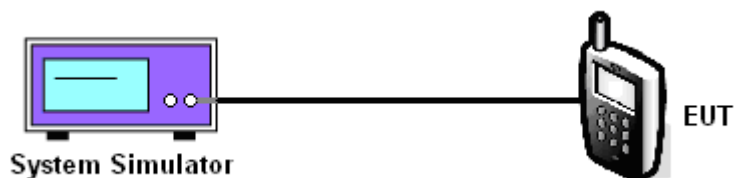
The EUT was tested according to the requirements of the FCC 3G procedures and the 3.1.2.3.4.

A detailed analysis of the output power verification is provided as the table below:

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	Low Ch	Mid. Ch	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				1013	384	777
CDMA2000 Cellular	FCH	1	1	1	55	Full	All Up	23.70	23.69	23.62
		3	3	3	55	Full	All Up	23.71	23.72	23.63
		3	3	3	32	Full	All Up	23.85	23.78	23.66
	SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	23.74	23.63	23.57
	EVDO Rev.0	Subtype:0				RTAP 153.6	All Up	23.83	23.75	23.62
	EVDO Rev.A	Subtype:0				RETAP 4096	All Up	23.78	23.77	23.65

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	Low Ch	Mid. Ch	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				25	600	1175
CDMA2000 PCS	FCH	1	1	1	55	Full	All Up	24.03	23.75	23.46
		3	3	3	55	Full	All Up	24.00	23.79	23.59
		3	3	3	32	Full	All Up	24.09	23.82	23.69
	SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	24.01	23.77	23.60
	EVDO Rev.0	Subtype:0				RTAP 153.6	All Up	24.06	23.81	23.68
	EVDO Rev.A	Subtype:0				RETAP 4096	All Up	24.05	23.80	23.68

CDMA2000 Setup Configuration:



Setup Configuration

1. The EUT was connected to System Simulator, 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 System Simulator with following setting:
 - a. For 1xRTT, set the Radio Configuration and the Service Option
 - b. For 1xEV-DO, set the Protocol Release and Data Rate
 - c. Set the Power Control to All Up Bits
4. The transmitted maximum output power was recorded.

Call Setup Screen									
Call Control		Active Cell Operating Mode					Call Parms		
Mobile Station Information ESN (Hex): ESN (Dec): NCC: NMC: MSIN: Slot Class: Slot Cycle Index: ---- Protocol Revision:		FCH Service Option Setup					Value		
		Service Option for Fud1, Rvs1					S055 (Loopback)		
		Service Option for Fud1, Rvs1					S09 (Loopback)		
		Service Option for Fud1, Rvs1					S055 (Loopback)		
		Service Option for Fud1, Rvs1					S055 (Loopback)		
		Service Option for Fud1, Rvs1					S055 (Loopback)		
		S055 (Loopback)							
		S068 (Voice)							
Close Menu							FCH Service Option Setup		
		Active Cell					Sys Type: IS-2000		
		Idle							
		IntRef Offset							
							1 of 4		

1xRTT setting for Radio Configuration 1 with Service Option 55

Call Setup Screen									
Call Control		Active Cell Operating Mode						Call Parms	
Mobile Station Information ESN (Hex): ESN (Dec): NCC: NMC: NSIN: Slot Class: Slot Cycle Index: ----- Protocol Revision:								Cell Power	
								-86.00	
								dBm/1.23 MHz	
								Cell Band	
								US PCS	
								Channel	
								1175	
								Protocol Rev	
								6 (IS-2000-0)	
								Radio Config	
						(Fud3, Rvs3)			
						S055 (Loopback)			
Close Menu								FCH Service Option Setup	
		Active Cell				Sys Type: IS-2000			
		Idle							
		IntRef		Offset					
								1 of 4	

1xRTT setting for Radio Configuration 3 with Service Option 55

Call Setup Screen									
Call Control		Active Cell Operating Mode						Call Parms	
Mobile Station Information ESN (Hex): ESN (Dec): NCC: NMC: NSIN: Slot Class: Slot Cycle Index: ----- Protocol Revision:								Cell Power	
								-86.00	
								dBm/1.23 MHz	
								Cell Band	
								US PCS	
								Channel	
								1175	
								Protocol Rev	
								6 (IS-2000-0)	
								Radio Config	
						(Fud3, Rvs3)			
						S032 (+ SCH)			
						FCH Service Option Setup			
						1 of 4			
Close Menu		Service Option S02 (Loopback) S03 (Voice) S06 (SMS) S055 (Loopback) S032 (+ F-SCH) S032 (+ SCH)				S055 (Loopback) S09 (Loopback) S032 (+ SCH) S055 (Loopback) S055 (Loopback)			
		Active Cell Idle IntRef Offset				Sys Type: IS-2000			

1xRTT setting for Radio Configuration 3 with Service Option 32

Call Setup Screen										
Call Control		Active Cell Operating Mode					Call Params			
Operating Mode		Access Terminal Information (AT Reported) Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):					Cell Power	-86.00		
Active Cell							Cell Band	US PCS		
Start Data Connection		Access Terminal Information (AN Assigned) UATI 024: ---- UATI Color Code: ---- MAC Index: ----					Channel	1175		
Close Session							Application Config	▼		
Handoff Setup	▼	RTAP Rate Session App: 9.6 kbps Test Applica: 19.2 kbps Limited TAP: 38.4 kbps AT Directed: 76.8 kbps DRC Value Fi: 153.6 kbps ACK Channel:					FTAP Rate	307.2 kbps (2 Slot, QPSK)		
AT Max Power	23 dBm/1.23MHz						RTAP Rate	9.6 kbps		
		Active Cell			Sys Type: IS-856					
		Idle								
1 of 3		IntRef	Offset	PLSub0	RTAP	1 of 3				

1xEV-DO setting for RTAP data rate (9.6 or 38.4 or 153.6 kbps)

Call Setup Screen										
Call Control		Active Cell Operating Mode					Call Params			
Operating Mode		Access Terminal Information (AT Reported) Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):					Cell Power	-86.00		
Active Cell							Cell Band	US PCS		
Start Data Connection		Access Terminal Information (AN Assigned) UATI 024: ---- UATI Color Code: ---- MAC Index: ----					Channel	1175		
Close Session							Application Config	▼		
Handoff Setup	▼	Application Configuration Session App: R-Data Packet Size Enhanced Te: 128 AT Directed: 256 DRC Value Fi: 512 ACK Channel: 768 Reverse Data: 1024 Expected En: 1536					F-Traffic Format	4 (1024,2,128) (307.2k, QPSK)		
AT Max Power	23 dBm/1.23MHz						R-Data Pkt Size	128		
		Active Cell			Sys Type: IS-856					
		Idle								
1 of 3		IntRef	Offset	PLSub0	RETAP	1 of 3				

1xEV-DO setting for RETAP data rate (128 or 2048 or 12288 kbps)



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