

Appendix G. FCC CDMA2000 SAR Measurement Procedures

Conducted Output Power:

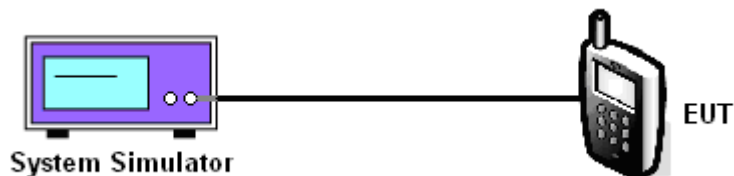
The EUT was tested according to the requirements of the FCC 3G procedures and the 3.1.2.3.4.

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 Parm		
Close Menu		Mobile Station Information ESN (Hex): ESN (Dec): NCC: INC: NSIN: Slot Class: Slot Cycle Index: ---- Protocol Revision:					Cell Power -86.00 dBm/1.23 MHz Cell Band US PCS Channel 1175		
		FCH Service Option Setup Service Option Service Option f Service Option f Service Option f Service Option f Service Option f Service Option f Service Option f Service Option f					Value S055 (Loopback) S09 (Loopback) S055 (Loopback) S055 (Loopback) S055 (Loopback) S055 (Loopback) S055 (Loopback) S055 (Loopback) S055 (Loopback)		
		S01 (Voice) S02 (Loopback) S03 (Voice) S06 (SMS) S055 (Loopback) S068 (Voice)					Protocol Rev 6 (IS-2000-0) Radio Config (Fud1, Rvs1) S055 (Loopback)		
		Active Cell Idle IntRef Offset					Sys Type: IS-2000 1 of 4		

1xRTT setting for Radio Configuration 1 with Service Option 55



Call Setup Screen									
Call Control		Active Cell Operating Mode					Call Params		
		Mobile Station Information					Cell Power		
		ESN (Hex):					-86.00		
		ESN (Dec):					dBm/1.23 MHz		
		NCC:					Cell Band		
		NMC:					US PCS		
		NSIN:					Channel		
		Slot Class:					1175		
		Slot Cycle Index: ----					Protocol Rev		
		Protocol Revision:					6 (IS-2000-0)		
		Close Menu		FCH Service Option Setup					Radio Config
Service Option					(Fud3, Rvs3)				
Service Option f S01 (Voice)					S055 (Loopback)				
Service Option f S02 (Loopback)					S09 (Loopback)				
Service Option f S03 (Voice)					S055 (Loopback)				
Service Option f S06 (SIS)					S055 (Loopback)				
S055 (Loopback)					S055 (Loopback)				
S032 (+ F-SCH)					S055 (Loopback)				
					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 Params		
		Mobile Station Information					Cell Power		
		ESN (Hex):					-86.00		
		ESN (Dec):					dBm/1.23 MHz		
		NCC:					Cell Band		
		NMC:					US PCS		
		NSIN:					Channel		
		Slot Class:					1175		
		Slot Cycle Index: ----					Protocol Rev		
		Protocol Revision:					6 (IS-2000-0)		
		Close Menu		FCH Service Option Setup					Radio Config
Service Option					(Fud3, Rvs3)				
Service Option f S02 (Loopback)					S055 (Loopback)				
Service Option f S03 (Voice)					S09 (Loopback)				
Service Option f S06 (SIS)					S032 (+ SCH)				
S055 (Loopback)					S055 (Loopback)				
S032 (+ F-SCH)					S055 (Loopback)				
S032 (+ SCH)					S032 (+ SCH)				
					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 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		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:					Application Config	▼		
Handoff Setup							FTAP Rate	307.2 kbps		
AT Max Power							RTAP Rate	9.6 kbps		
		Active Cell					Sys Type: IS-856			
		Idle								
1 of 3							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 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					Application Config	▼		
Handoff Setup							F-Traffic Format	4 (1024,2,128)		
AT Max Power							R-Data Pkt Size	128		
		Active Cell					Sys Type: IS-856			
		Idle								
1 of 3							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