

Appendix E. FCC 3G SAR Measurement Procedures

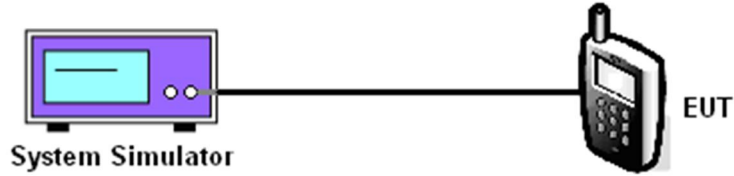
Conducted Output Power:

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	Reverse Traffic						
			Channel (Fwd)	Channel (Rvs)				1013	384	777
CDMA2000 BC0	EVDO Rev.0	Subtype:0/1				RTAP 153.6	All Up	24.03	24.08	23.98
	EVDO Rev.A	Subtype:2				RETAP 4096	All Up	24.02	24.07	23.98

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	Low Ch	Mid. Ch	High Ch
			Forward Traffic	Reverse Traffic						
			Channel (Fwd)	Channel (Rvs)				25	600	1175
CDMA2000 BC1	EVDO Rev.0	Subtype:0/1				RTAP 153.6	All Up	24.20	23.99	24.08
	EVDO Rev.A	Subtype:2				RETAP 4096	All Up	24.16	24.05	24.13

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 1xEV-DO, set the Protocol Release and Data Rate
 - b. 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	
Operating Mode		Access Terminal Information (AT Reported) Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):						Rvs Power Ctrl	
Active Cell								Active bits	
Start Data Connection								Pur Ctrl Step	
Close Session								1.0 dB	
Handoff Setup		Access Terminal Information (AN Assigned) UATI 024: ---- UATI Color Code: ---- MAC Index: ----						Call Drop Timer	
AT Max Power		Protocol Release Session App: 0 (1xEV-DO) Test Applica: A (1xEV-DO-A) Limited TAP: B (1xEV-DO-B) AT Directed: DRC Value Fi: ACK Channel:						On	
23 dBm/1.23MHz								Call Limit Mode	
1 of 3								Off	
								Protocol Rel	
		Active Cell Idle						0 (1xEV-DO)	
		Sys Type: IS-856							
		IntRef Offset						2 of 3	
		PLSUB0 RTAP							

1xEV-DO setting for Protocol Release (Rev.0 or Rev.A)

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

1xEV-DO setting for RTAP data rate



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

1xEV-DO setting for RETAP data rate



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