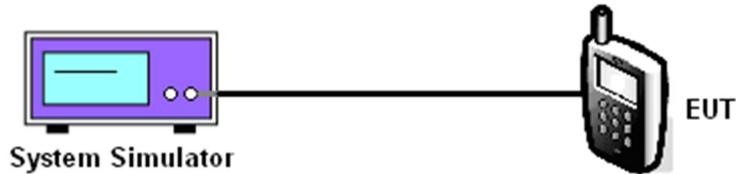


Appendix E. FCC 3G SAR Measurement Procedures

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

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 Params	
Close Menu	Mobile Station Information				Cell Power	-86.00
	ESN (Hex):				dBm/1.23 MHz	
	ESN (Dec):				Cell Band	US PCS
	NCC:				Channel	1175
	NMC:				Protocol Rev	6 (IS-2000-0)
	NSIN:				Radio Config	(Fud1, Rvs1)
	Slot Class:				FCH Service Option Setup	S055 (Loopback)
	Slot Cycle Index: ----				Service Option	S09 (Loopback)
	Protocol Revision:				Service Option f	S01 (Voice)
					Service Option f	S02 (Loopback)
				Service Option f	S03 (Voice)	
				Service Option f	S06 (SMS)	
				Service Option f	S055 (Loopback)	
				Service Option f	S068 (Voice)	
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 Parm																																		
Close Menu	<table border="1"> <thead> <tr> <th colspan="2">Mobile Station Information</th> </tr> </thead> <tbody> <tr><td>ESN (Hex):</td><td></td></tr> <tr><td>ESN (Dec):</td><td></td></tr> <tr><td>NCC:</td><td></td></tr> <tr><td>NMC:</td><td></td></tr> <tr><td>NSIN:</td><td></td></tr> <tr><td>Slot Class:</td><td></td></tr> <tr><td>Slot Cycle Index:</td><td>----</td></tr> <tr><td>Protocol Revision:</td><td></td></tr> </tbody> </table>	Mobile Station Information		ESN (Hex):		ESN (Dec):		NCC:		NMC:		NSIN:		Slot Class:		Slot Cycle Index:	----	Protocol Revision:		<table border="1"> <tbody> <tr><td>Cell Power</td><td>-86.00</td></tr> <tr><td></td><td>dBm/1.23 MHz</td></tr> <tr><td>Cell Band</td><td>US PCS</td></tr> <tr><td>Channel</td><td>1175</td></tr> <tr><td>Protocol Rev</td><td>6 (IS-2000-0)</td></tr> <tr><td>Radio Config</td><td>(Fud3, Rvs3)</td></tr> <tr><td></td><td>S055 (Loopback)</td></tr> <tr><td>FCH Service Option Setup</td><td></td></tr> </tbody> </table>	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)	FCH Service Option Setup	
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Active Cell	Idle	Sys Type: IS-2000																																		
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1xRTT setting for Radio Configuration 3 with Service Option 55

Call Setup Screen																																				
Call Control	Active Cell Operating Mode	Call Parm																																		
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Active Cell	Idle	Sys Type: IS-2000																																		
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 Parm												
Operating Mode	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Access Terminal Information (AT Reported)</p> <p>Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):</p> <hr/> <p style="text-align: center; margin: 0;">Access Terminal Information (AN Assigned)</p> <p>UATI 024: ---- UATI Color Code: ---- MAC Index: ----</p> <hr/> <p style="text-align: center; margin: 0;">Protocol Release</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Session App: 0 (1xEU-DO)</td> <td style="width: 50%;">Application</td> </tr> <tr> <td>Test Applica: A (1xEU-DO-A)</td> <td></td> </tr> <tr> <td>Limited TAP: B (1xEU-DO-B)</td> <td></td> </tr> <tr> <td>AT Directed</td> <td></td> </tr> <tr> <td>DRC Value Fi</td> <td></td> </tr> <tr> <td>ACK Channel</td> <td></td> </tr> </table> </div>	Session App: 0 (1xEU-DO)	Application	Test Applica: A (1xEU-DO-A)		Limited TAP: B (1xEU-DO-B)		AT Directed		DRC Value Fi		ACK Channel		Rvs Power Ctrl
Session App: 0 (1xEU-DO)		Application												
Test Applica: A (1xEU-DO-A)														
Limited TAP: B (1xEU-DO-B)														
AT Directed														
DRC Value Fi														
ACK Channel														
Active Cell		Active bits												
Start Data Connection		Pur Ctrl Step	1.0 dB											
Close Session		Call Drop Timer	On											
Handoff Setup	Call Limit Mode	Off												
AT Max Power	Protocol Rel	0 (1xEU-DO)												
23 dBm/1.23MHz	Active Cell	Sys Type: IS-856												
1 of 3	Idle	IntRef Offset PLSUB0 RTAP												
		2 of 3												

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

Call Setup Screen														
Call Control	Active Cell Operating Mode	Call Parm												
Operating Mode	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Access Terminal Information (AT Reported)</p> <p>Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):</p> <hr/> <p style="text-align: center; margin: 0;">Access Terminal Information (AN Assigned)</p> <p>UATI 024: ---- UATI Color Code: ---- MAC Index: ----</p> <hr/> <p style="text-align: center; margin: 0;">RTAP Rate</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Session App: 9.6 kbps</td> <td style="width: 50%;">Application</td> </tr> <tr> <td>Test Applica: 19.2 kbps</td> <td></td> </tr> <tr> <td>Limited TAP: 38.4 kbps</td> <td></td> </tr> <tr> <td>AT Directed: 76.8 kbps</td> <td></td> </tr> <tr> <td>DRC Value Fi: 153.6 kbps</td> <td></td> </tr> <tr> <td>ACK Channel</td> <td></td> </tr> </table> </div>	Session App: 9.6 kbps	Application	Test Applica: 19.2 kbps		Limited TAP: 38.4 kbps		AT Directed: 76.8 kbps		DRC Value Fi: 153.6 kbps		ACK Channel		Cell Power
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Test Applica: 19.2 kbps														
Limited TAP: 38.4 kbps														
AT Directed: 76.8 kbps														
DRC Value Fi: 153.6 kbps														
ACK Channel														
Active Cell		-86.00												
Start Data Connection		dBm/1.23 MHz												
Close Session		Cell Band	US PCS											
Handoff Setup	Channel	1175												
AT Max Power	Application Config													
23 dBm/1.23MHz	FTAP Rate	307.2 kbps												
1 of 3	RTAP Rate	(2 Slot, QPSK)												
	9.6 kbps													
	Active Cell	Sys Type: IS-856												
	Idle	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	Active Cell	Cell Power																					
Active Cell	Access Terminal Information (AT Reported) Session Seed: Hardware ID Type (Hex): Hardware ID (Hex): Hardware ID (Decimal):	-86.00 dBm/1.23 MHz																					
Start Data Connection	Access Terminal Information (AN Assigned) UATI 024: ---- UATI Color Code: ---- MAC Index: ----	Cell Band																					
Close Session	Application Configuration <table border="1"> <thead> <tr> <th>Session App</th> <th>R-Data Packet Size</th> <th>Application</th> </tr> </thead> <tbody> <tr> <td>Enhanced Te</td> <td>128</td> <td>AP</td> </tr> <tr> <td>AT Directed</td> <td>256</td> <td>Z</td> </tr> <tr> <td>DRC Value Fi</td> <td>512</td> <td></td> </tr> <tr> <td>ACK Channel</td> <td>768</td> <td></td> </tr> <tr> <td>Reverse Data</td> <td>1024</td> <td>Capacity</td> </tr> <tr> <td>Expected En</td> <td>1536</td> <td>kbps</td> </tr> </tbody> </table>	Session App	R-Data Packet Size	Application	Enhanced Te	128	AP	AT Directed	256	Z	DRC Value Fi	512		ACK Channel	768		Reverse Data	1024	Capacity	Expected En	1536	kbps	Channel
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AT Directed	256	Z																					
DRC Value Fi	512																						
ACK Channel	768																						
Reverse Data	1024	Capacity																					
Expected En	1536	kbps																					
Handoff Setup		1175																					
AT Max Power		Application Config																					
23 dBm/1.23MHz		F-Traffic Format																					
		4 (1024,2,128)																					
		(307.2k, QPSK)																					
		R-Data Pkt Size																					
		128																					
		bits																					
	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