



Appendix F. 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	23.68	23.63	23.55
		3	3	3	55	Full	All Up	23.70	23.69	23.61
	F-SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	23.71	23.69	23.60
	SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	23.72	23.68	23.58
	EVDO Rev.0*	Subtype:0				RTAP 153.6	All Up	23.68	23.73	23.58
	EVDO Rev.A*	Subtype:0				RETAP 4096	All Up	23.71	23.70	23.59



Call Setup Screen																					
Call Control	Active Cell Operating Mode		Call Parm																		
Close Menu	Mobile Station Information ESN (Hex): ESN (Dec): MCC: MNC: MSIN: 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		Protocol Rev 6 (IS-2000-0)																		
	<table border="1"> <thead> <tr> <th>Service Option</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>S055 (Loopback)</td> <td>S055 (Loopback)</td> </tr> <tr> <td>S09 (Loopback)</td> <td>S09 (Loopback)</td> </tr> <tr> <td>S01 (Voice)</td> <td>S055 (Loopback)</td> </tr> <tr> <td>S02 (Loopback)</td> <td>S055 (Loopback)</td> </tr> <tr> <td>S03 (Voice)</td> <td>S055 (Loopback)</td> </tr> <tr> <td>S06 (SIS)</td> <td>S055 (Loopback)</td> </tr> <tr> <td>S055 (Loopback)</td> <td></td> </tr> <tr> <td>S032 (+ F-SCH)</td> <td></td> </tr> </tbody> </table>		Service Option	Value	S055 (Loopback)	S055 (Loopback)	S09 (Loopback)	S09 (Loopback)	S01 (Voice)	S055 (Loopback)	S02 (Loopback)	S055 (Loopback)	S03 (Voice)	S055 (Loopback)	S06 (SIS)	S055 (Loopback)	S055 (Loopback)		S032 (+ F-SCH)		Radio Config (Fud3, Rvs3) S055 (Loopback)
	Service Option	Value																			
	S055 (Loopback)	S055 (Loopback)																			
	S09 (Loopback)	S09 (Loopback)																			
	S01 (Voice)	S055 (Loopback)																			
	S02 (Loopback)	S055 (Loopback)																			
	S03 (Voice)	S055 (Loopback)																			
	S06 (SIS)	S055 (Loopback)																			
S055 (Loopback)																					
S032 (+ F-SCH)																					
Active Cell Idle		Sys Type: IS-2000																			
IntRef Offset		FCH Service Option Setup																			
		1 of 4																			

1xRTT setting for Radio Configuration 3 with Service Option 55

Call Setup Screen																					
Call Control	Active Cell Operating Mode		Call Parm																		
Close Menu	Mobile Station Information ESN (Hex): ESN (Dec): MCC: MNC: MSIN: Slot Class: Slot Cycle Index: ---- Protocol Revision:		Cell Power -86.00 dBm/1.23 MHz Cell Band US PCS Channel 1175																		
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	Service Option	Value																			
	S055 (Loopback)	S055 (Loopback)																			
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	S06 (SIS)	S055 (Loopback)																			
	S055 (Loopback)																				
S032 (+ F-SCH)																					
S032 (+ SCH)																					
Active Cell Idle		Sys Type: IS-2000																			
IntRef Offset		FCH Service Option Setup																			
		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 (1xEV-DO)</td> <td style="width: 50%;">Application</td> </tr> <tr> <td>Test Applica: A (1xEV-DO-A)</td> <td></td> </tr> <tr> <td>Limited TAP: B (1xEV-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 (1xEV-DO)	Application	Test Applica: A (1xEV-DO-A)		Limited TAP: B (1xEV-DO-B)		AT Directed		DRC Value Fi		ACK Channel		Rvs Power Ctr1
Session App: 0 (1xEV-DO)		Application												
Test Applica: A (1xEV-DO-A)														
Limited TAP: B (1xEV-DO-B)														
AT Directed														
DRC Value Fi														
ACK Channel														
Active Cell		Active bits												
Start Data Connection		Pur Ctr1 Step												
Close Session		1.0 dB												
Handoff Setup	Call Drop Timer													
AT Max Power	On													
23 dBm/1.23MHz	Call Limit Mode													
	Off													
	Protocol Rel													
	0 (1xEV-DO)													
1 of 3	Active Cell Idle	Sys Type: IS-856												
	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
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														
Active Cell		-86.00												
Start Data Connection		dBm/1.23 MHz												
Close Session		Cell Band												
Handoff Setup	US PCS													
AT Max Power	Channel													
23 dBm/1.23MHz	1175													
	Application Config													
	FTAP Rate													
	307.2 kbps													
	(2 Slot, QPSK)													
	RTAP Rate													
	9.6 kbps													
1 of 3	Active Cell Idle	Sys Type: IS-856												
	IntRef	Offset												
	PLSub0	RTAP												
		1 of 3												

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



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

1xEV-DO setting for RETAP data rate (4096 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