

Appendix F. 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.

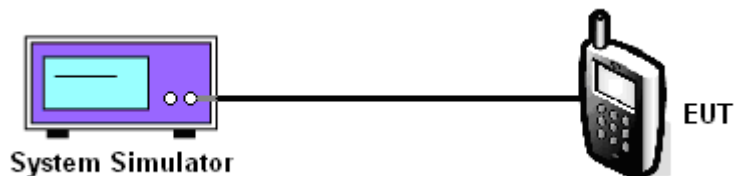
A detailed analysis of the output power verification is provided as the table below:

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	Low Ch	Mid. Ch	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				1013	384	777
CDMA2000 Cellular	FCH	1	1	1	55	Full	All Up	23.56	23.75	23.59
		3	3	3	55	Full	All Up	23.75	23.85	23.66
		3	3	3	32	Full	All Up	23.66	23.77	23.65
	FCH+SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	23.46	23.69	23.54

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	24.56	24.68	24.15
		3	3	3	55	Full	All Up	24.52	24.63	24.44
		3	3	3	32	Full	All Up	24.66	24.70	24.36
	FCH+SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	24.63	24.61	24.38

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				1275
CDMA2000 BC14	FCH	1	1	1	55	Full	All Up	22.45
		3	3	3	55	Full	All Up	22.46
		3	3	3	32	Full	All Up	22.50
	FCH+SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	22.53

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					Cell Power		
		ESN (Hex):					-86.00		
		ESN (Dec):					dBm/1.23 MHz		
		NCC:					Cell Band		
		INC:					US PCS		
		NSIN:					Channel		
		Slot Class:					1175		
		Slot Cycle Index: ----					Protocol Rev		
		Protocol Revision:					6 (IS-2000-0)		
				FCH Service Option Setup				Value	
		Service Option				S055 (Loopback)			
		Service Option f S01 (Voice)				S09 (Loopback)			
		Service Option f S02 (Loopback)				S055 (Loopback)			
		Service Option f S03 (Voice)				S055 (Loopback)			
		Service Option f S06 (SMS)				S055 (Loopback)			
		S055 (Loopback)				Radio Config			
		S068 (Voice)				S055 (Loopback)			
						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 Params	
Close Menu		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)	
		FCH Service Option Setup						Value	
Service Option for Fud3, Rvs3						S055 (Loopback)		Radio Config	
Service Option for S01 (Voice)						S09 (Loopback)		(Fud3, Rvs3)	
Service Option for S02 (Loopback)						S055 (Loopback)		S055 (Loopback)	
Service Option for S03 (Voice)						S055 (Loopback)		FCH Service Option Setup	
Service Option for S06 (SIS)						S055 (Loopback)			
S055 (Loopback)									
S032 (+ F-SCH)									
		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	
Close Menu		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)	
		FCH Service Option Setup						Value	
Service Option for Fud3, Rvs3						S055 (Loopback)		Radio Config	
Service Option for S02 (Loopback)						S09 (Loopback)		(Fud3, Rvs3)	
Service Option for S03 (Voice)						S032 (+ SCH)		S032 (+ SCH)	
Service Option for S06 (SIS)						S055 (Loopback)		FCH Service Option Setup	
Service Option for S055 (Loopback)						S055 (Loopback)			
S032 (+ F-SCH)									
S032 (+ SCH)									
		Active Cell				Sys Type: IS-2000			
		Idle							
		IntRef Offset						1 of 4	

1xRTT setting for Radio Configuration 3 with Service Option 32



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