

Appendix F - FCC 3G SAR Measurement Procedures

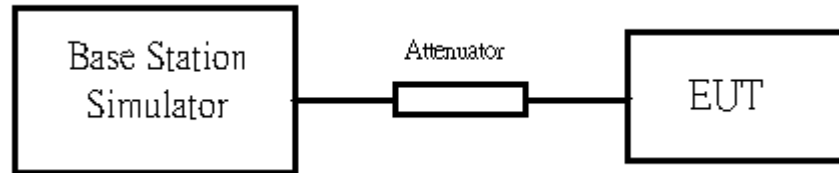
Conducted Output Power:

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	Midd Ch	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				1013	384	777
CDMA2000 Cellular	FCH	1	1	1	55	Full	All Up	21.63	21.51	21.96
		3	3	3	55	Full	All Up	21.65	22.24	21.99
	FCH+SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	21.59	21.62	21.70
	EVDO Rev.0*	Subtype:0				UL:9.6	All Up	20.29	20.72	20.53
	EVDO Rev.0*	Subtype:0				UL:38.4	All Up	21.18	20.28	20.41
	EVDO Rev.0*	Subtype:0				UL:153.6	All Up	20.05	20.42	20.55
	EVDO Rev.A*	Subtype:0				RETAP_128Kbps	All Up	20.18	20.69	20.77
	EVDO Rev.A*	Subtype:0				RETAP_2048Kbps	All Up	20.23	20.88	20.67
	EVDO Rev.A*	Subtype:0				RETAP_4096Kbps	All Up	20.29	20.19	20.25
	EVDO Rev.A*	Subtype:0				RETAP_12288Kbps	All Up	20.39	20.44	20.66

Function Type	Reverse Traffic Channel	Test Mode	Radio Configuration		Service Option	Data Rates (kbps)	Power Control	Low Ch	Midd Ch	High Ch
			Forward Traffic Channel (Fwd)	Reverse Traffic Channel (Rvs)				25	600	1175
CDMA2000 PCS	FCH	1	1	1	55	Full	All Up	18.31	18.04	18.08
		3	3	3	55	Full	All Up	18.33	18.12	18.03
	FCH+SCH	3	3	3	32	FCH:Full,SCH 9.6	All Up	18.15	18.03	17.92
	EVDO Rev.0*	Subtype:0				UL:9.6	All Up	18.16	18.04	17.94
	EVDO Rev.0*	Subtype:0				UL:38.4	All Up	18.10	17.94	17.89
	EVDO Rev.0*	Subtype:0				UL:153.6	All Up	18.11	17.93	17.88
	EVDO Rev.A*	Subtype:0				RETAP_128Kbps	All Up	18.27	18.24	18.05
	EVDO Rev.A*	Subtype:0				RETAP_2048Kbps	All Up	17.94	17.80	17.81
	EVDO Rev.A*	Subtype:0				RETAP_4096Kbps	All Up	18.00	17.86	17.70
	EVDO Rev.A*	Subtype:0				RETAP_12288Kbps	All Up	18.04	17.90	17.80

CDMA2000 Setup Configuration:



Setup Configuration

1. The EUT was connected to Base Station, 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 Base Station with following setting:
 - a. Set the test mode1 and test mode 3.
 - b. Set the Power control All Up for (FCH) and (FCH+SCH).
4. The transmitted maximum output power was recorded.

Call Setup Screen									
Call Control		Active Cell Operating Mode						Call Parm	
	Mobile Station Information ESN (Hex):0x6C32D3AE ESN (Dec):108-03330990 NCC: MNC: MSIN:3163712588 Slot Class:Slotted Slot Cycle Index:2						Cell Power -86.00 dBm/1.23 MHz Cell Band US PCS Channel 1175 Protocol Rev 6 (IS-2000) Radio Config (Fud1, Rvs1) S055 (Loopback) FCH Service Option Setup		
	FCH Service Option Setup				Value				
	Service Option for Fud1, Rvs1				S055 (Loopback)				
	Service Option for Fud2, Rvs2				S09 (Loopback)				
	Service Option for Fud3, Rvs3				S032 (+ SCH)				
	Service Option for Fud4, Rvs3				S055 (Loopback)				
	Service Option for Fud5, Rvs4				S055 (Loopback)				
	Close Menu								
		Background		Active Cell Idle		Sys Type: IS-2000			
			IntRef	Offset					1 of 3

Test Mode 1 in Radio Configuration 1 (FCH)

Call Setup Screen									
Call Control		Active Cell Operating Mode						Call Parmns	
Operating Mode		Mobile Station Information ESN (Hex): 0x6C32D3AE ESN (Dec): 108-03330990 MCC: MNC: MSIN: 3163712588 Slot Class: Slotted Slot Cycle Index: 2 Protocol Revision: 6 (IS-2000_Rev0) Band Class: US Cell, US PCS Radio Config Max EIRP (dBm) (Fud1, Rvs1) Registration (Fud2, Rvs2) QPCH Support (Fud3, Rvs3) Enhanced RC (Fud4, Rvs3) Min Power Co (Fud5, Rvs4) MS Called Pa						Cell Power	
Active Cell								-86.00	
System Type								dBm/1.23 MHz	
IS-2000								Cell Band	
End Call								US PCS	
Paging INSI Setup								Channel	
Handoff Setup								1175	
								Protocol Rev	
								6 (IS-2000)	
								Radio Config	
								(Fud3, Rvs3)	
								S032 (+ SCH	
								FCH Service Option Setup	
Background		Active Cell Connected + Data				Sys Type: IS-2000			
1 of 2		IntRef		Offset				1 of 3	

Test Mode 3 in Radio Configuration 3 (Service Option32)

Call Setup Screen									
Call Control		Active Cell Operating Mode						Call Parm's	
Operating Mode		Access Terminal Information (AT Reported) Session Seed: 0x7722375A Hardware ID Type (Hex): 0x010000 ESM Hardware ID (Hex): 0x602D699F Hardware ID (Decimal): 096-02976159 Access Terminal Information (AM Assigned) UATI 024: 2 UATI Color Code: 64 NAC Index: 5 Access Terminal Information (User Entered) AT Max Power: 23 dBm/1.23 MHz Application Configuration Session Application Type: Test Application Test Application Protocol: RTAP Limited TAP: Off AT Directed Packets: 50 % ACK Channel Bit Fixed Mode Attribute: On						Cell Power	
Active Cell								-60.00	
								dBm/1.23 MHz	
								Cell Band	
		US PCS							
Start Data Connection		Channel							
		675							
Close Session		Application Config							
Handoff Setup		FTAP Rate							
		307.2 kbps							
		(2 Slot, QPSK)							
AT Max Power		RTAP Rate							
23 dBm/1.23 MHz		153.6 kbps							
Background		Active Cell		Sys Type: IS-856					
		Session Open		Logging: No Conn.					
1 of 3		IntRef Offset				RTAP			
						1 of 3			

1xEV-DO setting with RTAP 153.6kbps

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