

## SAR DATA SUMMARY

Mixture Type: 835MHz Muscle

FREQU	ENCY	Modulation	Begin / End POWER*Separation(dBm)BatteryDistance (cm)**		Begin / End PC			Ante	enna	SAR
MHz	Ch.	wouldtion				Distance (cm) <sup>11</sup>	Posi	tion	(W/kg)	
824.70	1013	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	U	р	0.550
824.70	1013	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	Dov	wn	0.497
836.52	0384	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	U	р	0.241
836.52	0384	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	Dov	wn	0.313
848.31	0777	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	U	р	0.501
848.31	0777	CDMA	23.5	23.5	Standard		Touching ***	Dov	wn	0.494
	Uncont	Spatial rolled Exposure		Populatio	on		1.6 W. average	/ <b>kg (m</b> ed over 1		
. The te Test p	rocedures	used are accordir	ng to FCC/0	OET Bulle	tin 65, Supp.(	C [Jul	•	ypical	configu	uration.
. The te Test p . All mo . Batter	rocedures odes of ope y is fully cl	used are accordir eration were inves narged for all reac	ng to FCC/( stigated, ar lings. Stan	DET Bulle nd worst-c dard Batte	tin 65, Supp.( ase results are eries are the or	C [Jul repo nly oj	y 2001]. orted. ptions.		Ū	uration.
The te Test p All mo Batter <sup>‡</sup> Powe	rocedures odes of ope y is fully ch r Measure	used are accordir eration were inves narged for all reac ed	ng to FCC/( stigated, ar lings. Stan [	DET Bulle nd worst-c dard Batte 피 Cond	tin 65, Supp.( ase results are ries are the or ucted	lul repo nly ol	y 2001]. orted. ptions. ERP	ypical	configu EIRP	uration.
The te Test p All mo Batter <sup>‡</sup> Powe SAR N	rocedures odes of ope y is fully cl r Measure leasureme	used are accordir eration were inves narged for all reac ed ent System	ng to FCC/0 stigated, ar lings. Stan [ [	OET Bulle nd worst-c dard Batte ☑ Cond ☑ DASY	tin 65, Supp.( ase results are eries are the or ucted 3	C [Jul repo nly o D	y 2001]. orted. ptions. ERP IDX		EIRP	
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant	rocedures odes of ope y is fully cl r Measure leasureme om Config	used are accordir eration were inves narged for all read ed ent System uration	ng to FCC/( stigated, ar lings. Stan [ [ [	DET Bulle nd worst-c dard Batte 피 Cond	tin 65, Supp.( ase results are eries are the or ucted 3	lul repo nly ol	y 2001]. orted. ptions. ERP IDX Flat Phantom		Ū	
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant SAR C	rocedures odes of ope y is fully cl r Measure leasureme	used are accordir eration were inves harged for all reac ed ent System uration	ng to FCC/(( stigated, ar lings. Stan [ [ [ [ [ [ [	DET Bulle ad worst-c dard Batte S Cond S DASY Left H Head	tin 65, Supp.( ase results are eries are the or ucted 3	C [Jul repo nly op D C X	y 2001]. orted. ptions. ERP IDX		EIRP Right H	
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant SAR C Test S	rocedures odes of ope y is fully cl r Measure leasureme om Config onfiguratio	used are accordir eration were invest narged for all read ent System uration on Mode	ng to FCC/( stigated, ar lings. Stan [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	DET Bulle ad worst-c dard Batte Cond DASY Left H Head Manu	tin 65, Supp.0 ase results are rries are the or ucted 3 lead	irepo nly op D C X X	y 2001]. orted. ptions. ERP IDX Flat Phantom Body		EIRP Right H	
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant SAR C Test S <sup>‡‡</sup> Test	rocedures odes of ope y is fully cl r Measure leasureme om Config onfiguratio gnal Call I Configuratio	used are accordir eration were invest harged for all read ent System uration on Mode tion	ng to FCC/( stigated, ar lings. Stan [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	DET Bulle ad worst-c dard Batte S Cond S DASY Left H Head Manu With	tin 65, Supp.0 ase results are pries are the or ucted 3 lead 1. Test Codes Holster	C [Jul repo nly op D C C C C C C C C	y 2001]. orted. ERP IDX Flat Phantom Body Base Station Simu		EIRP Right H Hand	Head
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant SAR C Test S <sup>‡‡</sup> Test <sup>‡***</sup> In th	rocedures odes of ope y is fully cl r Measure leasureme om Config onfiguratio gnal Call I Configura ne touch p	used are accordir eration were invest harged for all read ent System uration on Mode tion	ng to FCC/( stigated, ar lings. Stan [ [ [ [ conic lapto]	DET Bulle ad worst-c dard Batte Cond DASY DASY Left H Head Manu With p provide	tin 65, Supp.0 ase results are ries are the or ucted 3 lead 1. Test Codes Holster d 1.8 cm. space	C [Jul repo nly op D C C C C C C C C	y 2001]. orted. ptions. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right H Hand	Head
The te Test p All mo Batter <sup>‡</sup> Powe SAR M Phant SAR C Test S <sup>‡‡</sup> Test <sup>‡‡</sup> Test <sup>‡‡</sup> Test	rocedures odes of ope y is fully cl r Measure leasureme om Config onfiguration gnal Call I Configuration ne touch p paramete	used are accordir eration were invest narged for all read ant System uration on Mode tion osition, the Panas	ng to FCC/(d stigated, ar lings. Stan [ [ [ [ conic lapto] res are liste	DET Bulle ad worst-c dard Batte Cond DASY Left H Head Manu With p provided d on the S	tin 65, Supp.0 ase results are cries are the or ucted 3 lead 1. Test Codes Holster d 1.8 cm. space GAR plots.	C [Jul report nly op D S S C S C S C S C S C S C S S S S S S	y 2001]. orted. ptions. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right H Hand	Head
Test p All mo Batter *Powe SAR M Phant SAR C Test S **Test ***Test Tissue 0. Both s	rocedures odes of ope y is fully cl r Measure leasureme om Config onfiguratio gnal Call I Configuratione touch p paramete ides of the	used are accordir eration were invest harged for all reacted ant System uration on Mode tion osition, the Panas rs and temperatur	ng to FCC/0 stigated, ar lings. Stan [ [ [ conic lapto] res are liste ed and the	DET Bulle ad worst-c dard Batte Cond DASY Left H Head Manu With p provided d on the S	tin 65, Supp.0 ase results are cries are the or ucted 3 lead 1. Test Codes Holster d 1.8 cm. space GAR plots.	C [Jul report nly op D S S C S C S C S C S C S C S S S S S S	y 2001]. orted. ptions. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right H Hand	Head

Alfred Cirwithian Vice President Engineering



PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	Air <b>Prime</b>	<b>Reviewed by:</b> Quality Manager
SAR Filename:	Test Dates:	EUT TYPE: Dual-Band	FCC ID:	Page 22 of 32
SAR-221125617.PNF	Nov. 25-27, 2002	CDMA PCMCIA Modem Card	PNF-PC3220P	

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# SAR DATA SUMMARY (Continued)

Mixture Type:

835MHz Muscle

14.6	14.6 MEASUREMENT RESULTS (CDMA Body SAR w/ Panasonic Laptop)											
FREQU	JENCY	Modulation	Begin / End PC		Begin / End F		Begin / End POWER <sup>‡</sup>	Separation	Antenna	SAR		
MHz	Ch.	Modulation	(dE	3m)	Battery	Distance (cm) <sup>##</sup>	Position	(W/kg)				
824.70	1013	CDMA	23.5	23.5	Standard	1.5	Up	0.120				
824.70	1013	CDMA	23.5	23.5	Standard	1.5	Down	0.110				
836.52	0384	CDMA	23.5	23.5	Standard	1.5	Up	0.143				
836.52	0384	CDMA	23.5	23.5	Standard	1.5	Down	0.094				
848.31	0777	CDMA	23.5	23.5	Standard	1.5	Up	0.118				
848.31	0777	CDMA	23.5	23.5	Standard	1.5	Down	0.117				
	ANSI	/ IEEE C95.1 19	92 - SAFE		-	Muscle						
		Spatial	Peak				/kg (mW/g)					
	Uncont	rolled Exposure	/General	Populatio	on	averaged over 1 gram						

### NOTES:

The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. 1. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].

⊠ DASY3

□ Left Head

Head

□ With Holster

2. All modes of operation were investigated, and worst-case results are reported.

3.	Battery is fully charged for all readings.	Standar	d Batteries are	the only o	ptions.
	<sup>‡</sup> Power Measured	X	Conducted		ERP

- <sup>‡</sup>Power Measured
- SAR Measurement System 4. Phantom Configuration
- 5. SAR Configuration
- 6. Test Signal Call Mode
- 7. <sup>‡‡</sup>Test Configuration
- 8. Tissue parameters and temperatures are listed on the SAR plots.

9. Both sides of the phone were tested and the worst-case side is reported.

10. Liquid tissue depth is  $15.1 \text{ cm.} \pm 0.1$ 

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Figure 14.6 Body SAR Test Setup -- Bystander Configuration --

PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	Air <b>Prime</b>	<b>Reviewed by:</b> Quality Manager
SAR Filename:	Test Dates:	EUT TYPE: Dual-Band	FCC ID:	Page 23 of 32
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IDX 

Body

 $\mathbf{X}$ 

X

- IX Flat Phantom
- Hand
- 🗵 Manu. Test Codes 🔲 **Base Station Simulator** 
  - Without Holster
- **Right Head**

EIRP



## SAR DATA SUMMARY

Mixture Type: 835MHz Muscle

FREQU	ENCY	Modulation	Beg	in / End	POWER <sup>‡</sup>		Separation	Anter	nna SAR
MHz	Ch.	Modulation	(dE	3m)	Battery		Distance (cm) <sup>#</sup>		ion (W/kg)
824.70	1013	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	Up	0.393
824.70	1013	CDMA	23.5	23.5	Standard		Touching <sup>‡‡‡</sup>	Dow	vn 0.174
836.52	0384	CDMA	23.5	23.5	Standard		Touching ***	Up	0.369
836.52	0384	CDMA	23.5	23.5	Standard		Touching ***	Dow	vn 0.138
848.31	0777	CDMA	23.5	23.5	Standard		Touching ***	Up	0.383
848.31	0777	CDMA	23.5	23.5	Standard		Touching ***	Dow	vn 0.209
	Uncont	Spatial rolled Exposure		Populatio	on			/ <b>kg (m)</b> ed over 1	
Test p	rocedures	orted are the wor used are accordir eration were inves	ng to FCC/	OET Bulle	tin 65, Supp.C	C [Jul	•	ypical c	configuration.
Test p All mo Batter	rocedures odes of ope y is fully ch	used are accordir eration were inves narged for all reac	ng to FCC/ stigated, ar lings. Stan	OET Bulle nd worst-c idard Batte	tin 65, Supp.C ase results are eries are the or	C [Jul repo nly oj	y 2001]. orted. otions.		U U
Test p All mo Batter <sup>‡</sup> Powe	rocedures odes of ope y is fully ch r Measure	used are accordir eration were inves narged for all reac d	ng to FCC/ stigated, ar lings. Stan	OET Bulle nd worst-c	tin 65, Supp.C ase results are eries are the or ucted	C [Jul repo	y 2001]. prted.		configuration. EIRP
Test p All mo Batter <sup>‡</sup> Powe SAR M	rocedures odes of ope y is fully ch	used are accordir eration were inves narged for all reac d nt System	ng to FCC/ stigated, ar lings. Stan l	OET Bulle nd worst-c idard Batte 포 Cond	tin 65, Supp.C ase results are eries are the or ucted '3	lul repo nly ol	y 2001]. orted. otions. ERP		U U
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante	rocedures odes of ope y is fully ch r Measure leasureme	used are accordir eration were inves narged for all reac d nt System uration	ng to FCC/ stigated, ar lings. Stan [ [ ] ]	OET Bulle nd worst-c idard Batte 포 Cond 포 DASY	tin 65, Supp.C ase results are eries are the or ucted '3 lead	C [Jul repo nly op D	y 2001]. orted. otions. ERP IDX		EIRP
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante SAR C	rocedures odes of ope y is fully ch r Measure leasureme om Config	used are accordir eration were inves harged for all reac d nt System uration	ng to FCC/ stigated, ar lings. Stan [ [ ] ] ] ]	OET Bulle nd worst-c idard Batte I Cond I DASY Left H Head	tin 65, Supp.C ase results are eries are the or ucted '3 lead	C [Jul repo nly op D D X	y 2001]. orted. btions. ERP IDX Flat Phantom		EIRP Right Head
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante SAR C Test S <sup>‡‡</sup> Test	rocedures odes of ope y is fully ch r Measure leasureme om Config onfiguratio gnal Call I Configurat	used are accordir eration were invest narged for all read ad nt System uration on Mode tion	ng to FCC/4 stigated, ar lings. Stan [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] ] [ ]	OET Bulle nd worst-c idard Batte Cond Cond Left H Head Manu With	tin 65, Supp.C ase results are eries are the or ucted '3 lead 1. Test Codes Holster	C [Jul repo nly op D S S S S	y 2001]. orted. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right Head Hand
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante SAR C Test S <sup>‡‡</sup> Test <sup>‡‡†</sup> In th	rocedures odes of ope y is fully ch r Measure leasureme om Config onfiguratio gnal Call I Configurat	used are accordir eration were invest narged for all read d nt System uration on Viode tion osition, the Winb	ng to FCC/ stigated, ar lings. Stan [ [ [ ] [ ] ook laptop	OET Bulle and worst-c adard Batte Cond DASY Left F Head Manu With provided	tin 65, Supp.C ase results are eries are the or ucted '3 lead I. Test Codes Holster 2.5 cm. spac	C [Jul repo nly op D S S S S	y 2001]. orted. ERP IDX Flat Phantom Body Base Station Simu		EIRP Right Head Hand
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante SAR C Test Si <sup>‡‡</sup> Test <sup>‡‡</sup> Test <sup>‡‡</sup> Test	rocedures odes of ope y is fully ch r Measure leasureme om Config onfiguration gnal Call I Configuration gnal Call I configuration paramete	used are accordir eration were invest narged for all react d nt System uration on Viode tion osition, the Winb rs and temperatur	ng to FCC/ stigated, ar lings. Stan [ [ [ [ [ [ [ [ [ [ [ [ [ [ ] [ ] [ ]	OET Bulle and worst-c adard Batte Cond Cond DASY Left H Head Manu With provided ed on the S	tin 65, Supp.C ase results are eries are the or ucted 3 lead 1. Test Codes Holster 2.5 cm. spac SAR plots.	C [Jul report nly op D X X X ing b	y 2001]. orted. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right Head Hand
Test p All mo Batter <sup>‡</sup> Powe SAR M Phante SAR C Test S <sup>‡‡</sup> Test <sup>‡‡</sup> Test <sup>‡‡†</sup> In th Tissue	rocedures odes of ope y is fully ch r Measure leasureme om Config onfiguratio gnal Call I Configuratione touch p paramete ides of the	used are accordir eration were invest narged for all read d nt System uration on Viode tion osition, the Winb	ng to FCC/ stigated, ar lings. Stan [ [ [ [ ] ook laptop res are liste ed and the	OET Bulle and worst-c adard Batte Cond Cond DASY Left H Head Manu With provided ed on the S	tin 65, Supp.C ase results are eries are the or ucted 3 lead 1. Test Codes Holster 2.5 cm. spac SAR plots.	C [Jul report nly op D X X X ing b	y 2001]. orted. ERP IDX Flat Phantom Body Base Station Simu Without Holster		EIRP Right Head Hand

Alfred Cirwithian Vice President Engineering

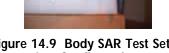


Figure 14.9 Body SAR Test Setup -- Lap Configuration --

PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	Air <b>Prime</b>	<b>Reviewed by:</b> Quality Manager
SAR Filename:	<b>Test Dates:</b>	EUT TYPE: Dual-Band	FCC ID:	Page 26 of 32
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# SAR DATA SUMMARY (Continued)

Mixture Type:

835MHz Muscle

14.10	14.10 MEASUREMENT RESULTS (CDMA Body SAR w/ Winbook Laptop)										
FREQU	JENCY	Modulation	Begin / End POWER <sup>‡</sup>			Separation	Antenna Position	SAR			
MHz	Ch.	Modulation	(dBm) Battery Distance		Distance (cm) <sup>11</sup>	(W/kg)					
824.70	1013	CDMA	23.5	23.5	Standard	1.5	Up	0.152			
824.70	1013	CDMA	23.5	23.5	Standard	1.5	Down	0.027			
836.52	0384	CDMA	23.5	23.5	Standard	1.5	Up	0.161			
836.52	0384	CDMA	23.5	23.5	Standard	1.5	Down	0.027			
848.31	0777	CDMA	23.5	23.5	Standard	1.5	Up	0.166			
848.31	0777	CDMA	23.5	23.5	Standard	1.5	Down	0.030			
	ANSI /	/ IEEE C95.1 19	-	Muscle							
		Spatial	Peak				/kg (mW/g)				
	Uncont	rolled Exposure	/General	Populatio	on	averaged over 1 gram					

### NOTES:

The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. 1. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].

⊠ DASY3

□ Left Head

Head

□ With Holster

🗵 Manu. Test Codes 🔲

2. All modes of operation were investigated, and worst-case results are reported.

3.	Battery is fully charged for all readings.	Standar	d Batteries are	the only o	otions.
	<sup>‡</sup> Power Measured	X	Conducted		ERP

- <sup>‡</sup>Power Measured
- SAR Measurement System 4. Phantom Configuration
- 5. SAR Configuration
- 6. Test Signal Call Mode
- 7. <sup>‡‡</sup>Test Configuration
- 8. Tissue parameters and temperatures are listed on the SAR plots.

9. Both sides of the phone were tested and the worst-case side is reported.

10. Liquid tissue depth is  $15.1 \text{ cm.} \pm 0.1$ 

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Figure 14.10 Body SAR Test Setup -- Bystander Configuration --

PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	AirPrime	<b>Reviewed by:</b> Quality Manager
SAR Filename:	<b>Test Dates:</b>	EUT TYPE: Dual-Band	FCC ID:	Page 27 of 32
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IDX IX Flat Phantom

Body

 $\mathbf{X}$ 

 $\mathbf{X}$ 

**Right Head** 

- Hand
- **Base Station Simulator**
- Without Holster
- EIRP