13.1 SAR TEST DATA SUMMARY

Ambient TEMPERATURE (°C)	20.7
Relative HUMIDITY (%)	59.2
Atmospheric PRESSURE (kPa)	99.5

Mixture Type: **835MHz Brain**

Dielectric Constant: **41.5**

Conductivity: **0.90**

Closest Distance (between E-Probe & Phone): 1.7 cm

13.2 Measurement Results (AMPS Head SAR)

FREQUENCY MHz	FREQUENCY Ch.	Modulation	POWER (dBm)	Phantom Position	Antenna Position	SAR (W/kg)
824.04	0991	AMPS	27.0 [Standard Battery]	Left Ear	Fixed	1.230
836.49	0383	AMPS	27.0 [Standard Battery]	Left Ear	Fixed	1.080
848.97	0799	AMPS	27.0 [Standard Battery]	Left Ear	Fixed	1.310
848.97	**0799**	**AMPS**	**27.0 [Extended Battery]**	**Left Ear**	**Fixed**	**1.150**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population				**Brain 1.6 W/kg (mW/g)** averaged over 1 gram		

NOTES:

1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.
2. All modes of operation were investigated and the worst-case are reported.
3. Battery Type ☒ Standard ☒ Extended
4. *Power Measured ☒ Conducted ☐ EIRP ☐ ERP
5. SAR Measurement System ☒ SPEAG ☐ IDX
6. SAR Configuration ☒ Head ☐ Body ☐ Hand

Randy Ortanez
President

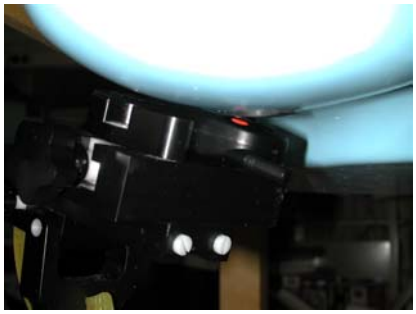


Figure 17. Head SAR Test Setup

13.1 SAR TEST DATA SUMMARY (Continued)

Ambient TEMPERATURE (°C) 20.7
Relative HUMIDITY (%) 59.2
Atmospheric PRESSURE (kPa) 99.5

Mixture Type: **835MHz Brain**

Dielectric Constant: **41.5**

Conductivity: **0.90**

Closest Distance (between E-Probe & Phone): 1.7 cm

13.3 Measurement Results (Cellular CDMA Head SAR)

FREQUENCY MHz	FREQUENCY Ch.	Modulation	POWER (dBm)	Phantom Position	Antenna Position	SAR (W/kg)
824.70	1013	CDMA	25.5 [Standard Battery]	Left Ear	Fixed	0.957
835.89	0363	CDMA	25.5 [Standard Battery]	Left Ear	Fixed	0.757
848.31	0777	CDMA	25.5 [Standard Battery]	Left Ear	Fixed	1.000
848.31	**0777**	**CDMA**	**25.5 [Extended Battery]**	**Left Ear**	**Fixed**	**0.961**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population				**Brain 1.6 W/kg (mW/g)** averaged over 1 gram		

NOTES:
1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.
2. All modes of operation were investigated and the worst-case are reported.
3. Battery Type ☒ Standard ☒ Extended
4. *Power Measured ☒ Conducted ☐ EIRP ☐ ERP
5. SAR Measurement System ☒ SPEAG ☐ IDX
6. SAR Configuration ☒ Head ☐ Body ☐ Hand

Randy Ortanez
President

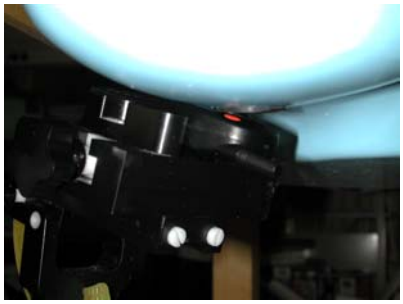


Figure 18. Head SAR Test Setup

13.1 SAR TEST DATA SUMMARY (Continued)

Ambient TEMPERATURE (°C) 20.7
Relative HUMIDITY (%) 59.2
Atmospheric PRESSURE (kPa) 99.5

Mixture Type: 835MHz Muscle
Dielectric Constant: 56.2
Conductivity: 0.95

13.4 Measurement Results (AMPS Body SAR w/Holster)

FREQUENCY MHz	FREQUENCY Ch.	Modulation	POWER * (dBm)	Separation Distance (cm)**	Antenna Position	SAR (W/kg)
824.04	0991	AMPS	27.0 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.358
836.49	0363	AMPS	27.0 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.258
848.97	0799	AMPS	27.0 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.419
848.97	**0799**	**AMPS**	**27.0 [Extended Battery]**	**2.5 cm [w/ Holster]**	**Fixed**	**0.395**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					**Body 1.6 W/kg (mW/g)** averaged over 1 gram	

NOTES:
1. All modes of operation were investigated and the worst-case are reported.
2. Battery condition is fully charged for all readings.
3. Battery Type ☒ Standard ☒ Extended
4. * Power Measured ☒ Conducted ☐ EIRP ☐ ERP
5. SAR Measurement System ☒ SPEAG ☐ IDX
6. SAR Configuration ☐ Head ☒ Body ☐ Hand
7. ** Test Configuration ☒ Body Holster ☐ Without Body Holster

Separation Distance of 2.5cm is measured from the flat phantom to the back panel of the phone.

Randy Ortanez
President

Figure 19. Body SAR Test Setup

13.1 SAR TEST DATA SUMMARY (Continued)

Ambient TEMPERATURE (°C) 20.7
Relative HUMIDITY (%) 59.2
Atmospheric PRESSURE (kPa) 99.52

Mixture Type: 835MHz Muscle
Dielectric Constant: 56.2
Conductivity: 0.95

13.5 Measurement Results (Cellular CDMA Body SAR w/Holster)

FREQUENCY MHz	FREQUENCY Ch.	Modulation	POWER * (dBm)	Separation Distance (cm)**	Antenna Position	SAR (W/kg)
824.70	1013	CDMA	25.5 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.267
835.89	0363	CDMA	25.5 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.239
848.31	0777	CDMA	25.5 [Standard Battery]	2.5 cm [w/ Holster]	Fixed	0.248
824.70	**1013**	**CDMA**	**25.5 [Extended Battery]**	**2.5 cm [w/ Holster]**	**Fixed**	**0.220**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					**Body 1.6 W/kg (mW/g)** averaged over 1 gram	

NOTES:

1. All modes of operation were investigated and the worst-case are reported.
2. Battery condition is fully charged for all readings.
3. Battery Type ☒ Standard ☒ Extended
4. * Power Measured ☒ Conducted ☐ EIRP ☐ ERP
5. SAR Measurement System ☒ SPEAG ☐ IDX
6. SAR Configuration ☐ Head ☒ Body ☐ Hand
7. ** Test Configuration ☒ Body Holster ☐ Without Body Holster

Separation Distance of 2.5cm is measured from the flat phantom to the back panel of the phone.

Randy Ortanez
President

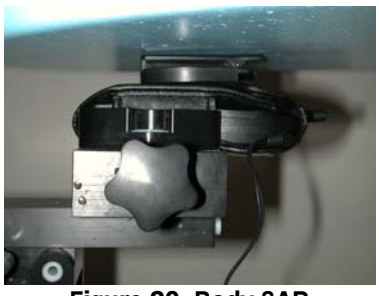


Figure 20. Body SAR Test Setup

HYUNDAI FCC ID:PP4DX-20B -- FM Head SAR

Generic Twin Phantom; Left Hand Section; Probe: ET3DV6 - SN1560 -- Probe Cal Date 20/02/01

Med. Parameters 835 MHz Brain: σ = 0.90 mho/m ε_r = 41.5 ρ = 1.00 g/cm^3; Antenna Position -- Out; Crest Factor 1.0

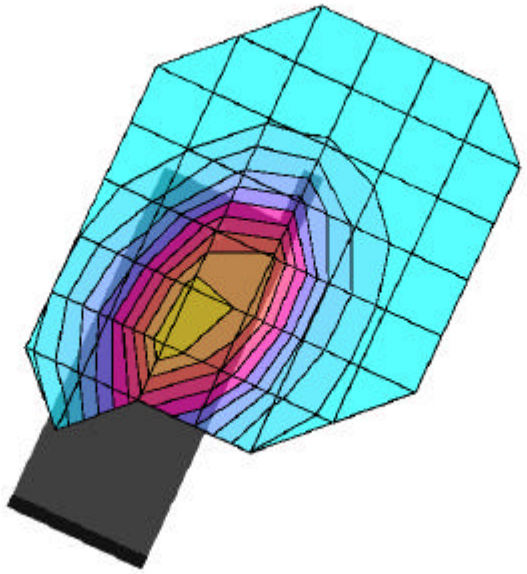
SAR (1g): 1.15 mW/g, SAR (10g): 0.819 mW/g

HYUNDAI DualMode Model:DX-20B

FM Mode, Ch.0799 [848.97MHz]

Conducted Power = 27.0dBm

Test Date -- 06/11/2001



HYUNDAI FCC ID:PP4DX-20B -- Cellular CDMA Head SAR

Generic Twin Phantom; Left Hand Section; Probe: ET3DV6 - SN1560 -- Probe Cal Date 20/02/01

Med. Parameters 835 MHz Brain: σ = 0.90 mho/m ε_r = 41.5 ρ = 1.00 g/cm^3; Antenna Position -- Out; Crest Factor 1.0

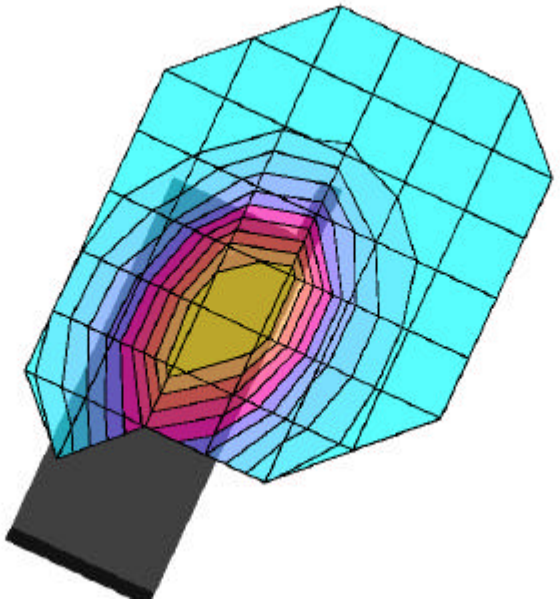
SAR (1g): 0.961 mW/g, SAR (10g): 0.698 mW/g

HYUNDAI DualMode Model:DX-20B

Cellular CDMA Mode, Ch.0777 [848.31MHz]

Conducted Power = 25.5dBm

Test Date -- 06/11/2001



HYUNDAI FCC ID:PP4DX-20B -- FM Body SAR

Generic Twin Phantom; Flat Section; Probe: ET3DV6 - SN1560 -- Probe Cal Date 20/02/01

Med. Parameters 835 MHz Muscle: σ = 0.95 mho/m ε_r = 56.2 ρ = 1.00 g/cm^3; Antenna Position -- Out; Crest Factor 1.0

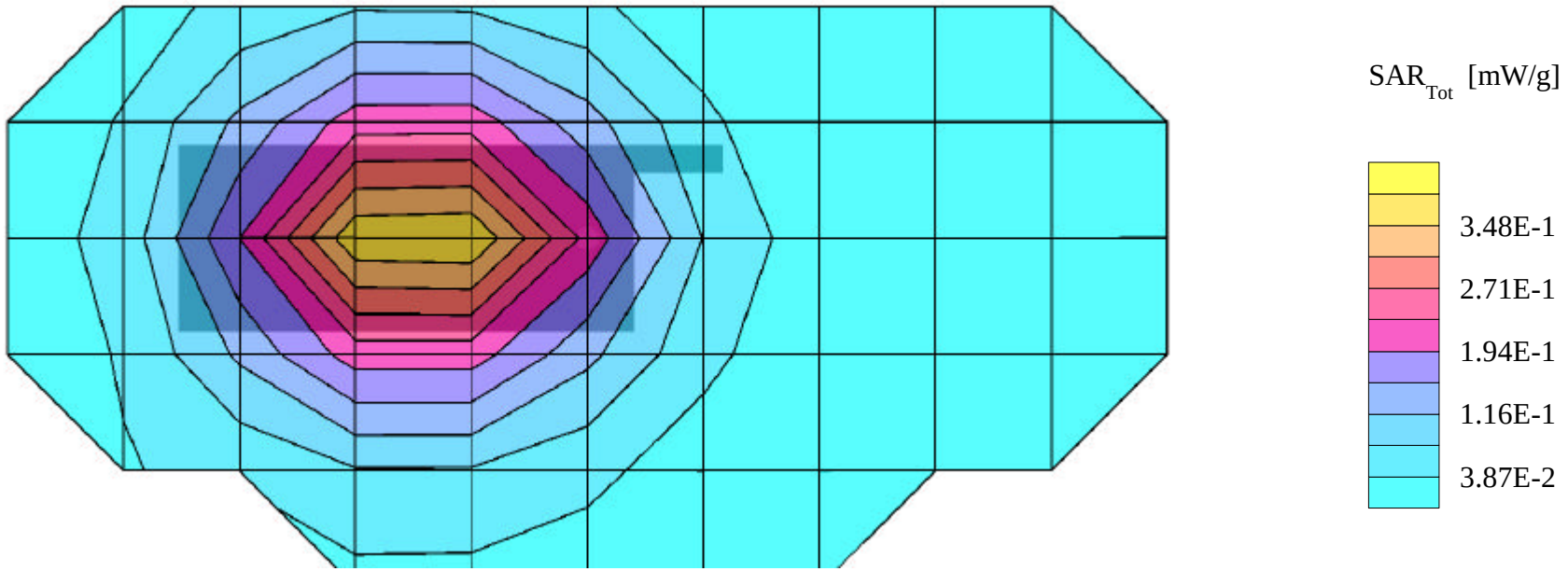
SAR (1g): 0.395 mW/g, SAR (10g): 0.282 mW/g

HYUNDAI DualMode Model:DX-20B

FM Mode, Ch.0799 [848.97MHz]

Conducted Power = 27.0dBm; Spacing = 2.5cm from flat phantom to phone, w/Holster

Test Date -- 06/11/2001



HYUNDAI FCC ID:PP4DX-20B -- Cellular CDMA Body SAR

Generic Twin Phantom; Flat Section; Probe: ET3DV6 - SN1560 -- Probe Cal Date 20/02/01

Med. Parameters 835 MHz Muscle: $\sigma = 0.95$ mho/m $\varepsilon_r = 56.2$ $\rho = 1.00$ g/cm^3; Antenna Position -- Out; Crest Factor 1.0

SAR (1g): 0.220 mW/g, SAR (10g): 0.158 mW/g

HYUNDAI DualMode Model:DX-20B

Cellular CDMA Mode, Ch.1013 [824.70MHz]

Conducted Power = 25.5dBm; Spacing = 2.5cm from flat phantom to phone, w/Holster

Test Date -- 06/11/2001