

## ATTACHMENT Q – DIPOLE VALIDATION

## Validation Data (835MHz Head)

Test Laboratory: HCT

835 Dipole Validation test: Input power(1W)  
Liquid Temperature : 21.8°C  
Date Tested : August 22, 2006

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:441**  
**Program Name: Validation 835 MHz**

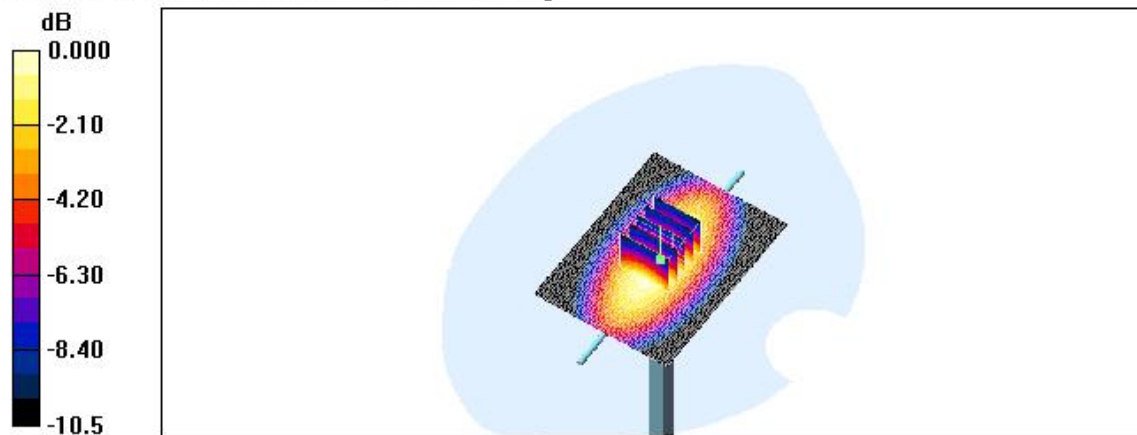
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.875 \text{ mho/m}$ ;  $\epsilon_r = 40.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.85, 6.85, 6.85); Calibrated: 2006-03-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2005-11-30
- Phantom: SAM 835/900 MHz; Type: SAM

**Validatoin 835 MHz/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 10.5 mW/g

**Validatoin 835 MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 113.1 V/m; Power Drift = -0.009 dB  
Peak SAR (extrapolated) = 14.3 W/kg  
**SAR(1 g) = 9.73 mW/g; SAR(10 g) = 6.38 mW/g**  
Maximum value of SAR (measured) = 10.5 mW/g



0 dB = 10.5mW/g

Dielectric Parameter (835MHz Head)

Title : PX220

SubTitle : CDMA835(Head)

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Frequency	e'	e''
800.000000 MHz	41.1445	18.8394
805.000000 MHz	41.0595	18.8379
810.000000 MHz	41.0485	18.8275
815.000000 MHz	40.9874	18.7879
820.000000 MHz	40.8792	18.7670
825.000000 MHz	40.8753	18.8133
830.000000 MHz	40.8082	18.8186
835.000000 MHz	40.7546	18.8307
840.000000 MHz	40.7628	18.8362
845.000000 MHz	40.7236	18.7820
850.000000 MHz	40.6862	18.7691
855.000000 MHz	40.6332	18.7711
860.000000 MHz	40.5920	18.7392
865.000000 MHz	40.5662	18.7236
870.000000 MHz	40.5370	18.7294
875.000000 MHz	40.4672	18.7668
880.000000 MHz	40.3838	18.7529
885.000000 MHz	40.2857	18.6837
890.000000 MHz	40.2585	18.7192
895.000000 MHz	40.1991	18.6748
900.000000 MHz	40.0845	18.6075

Dielectric Parameter (835MHz Body)

Title : PX220

SubTitle : CDMA835(Body)

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Frequency	e'	e''
800.000000 MHz	54.3354	21.0354
805.000000 MHz	54.2753	20.9865
810.000000 MHz	54.2283	21.0349
815.000000 MHz	54.1647	21.0327
820.000000 MHz	54.1091	21.0334
825.000000 MHz	53.9720	21.0359
830.000000 MHz	53.9067	21.0627
835.000000 MHz	53.8386	21.0629
840.000000 MHz	53.7586	21.0567
845.000000 MHz	53.7089	21.0398
850.000000 MHz	53.5921	21.0152
855.000000 MHz	53.5375	20.9790
860.000000 MHz	53.5253	20.9382
865.000000 MHz	53.4596	20.9821
870.000000 MHz	53.4266	20.9387
875.000000 MHz	53.3886	20.9081
880.000000 MHz	53.3439	20.8857
885.000000 MHz	53.2957	20.9070
890.000000 MHz	53.2588	20.8451
895.000000 MHz	53.2493	20.8254
900.000000 MHz	53.1644	20.8247