

## ATTACHMENT Q – DIPOLE VALIDATION

## Validation Data (835MHz Head)

Test Laboratory: HCT

835 Dipole Validation test: Input power(1W)  
Liquid Temperature : 21.6°C  
Date Tested : January 9, 2007

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

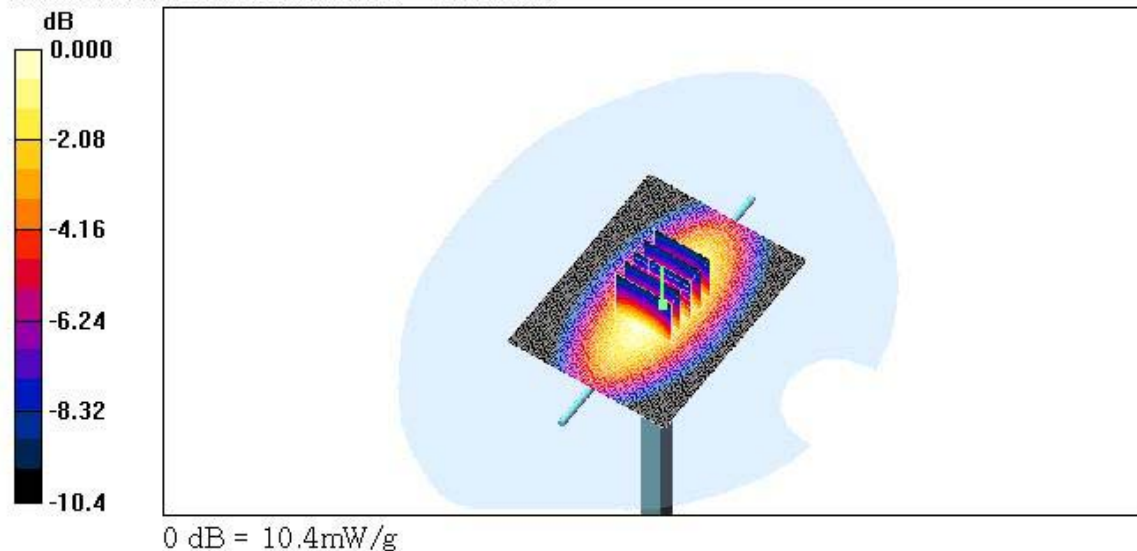
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.876 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 44

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2006-11-17
- Phantom: SAM 835/900 MHz; Type: SAM

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

**Validation 835 MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 111.9 V/m; Power Drift = 0.021 dB  
Peak SAR (extrapolated) = 14.4 W/kg  
**SAR(1 g) = 9.69 mW/g; SAR(10 g) = 6.35 mW/g**  
Maximum value of SAR (measured) = 10.4 mW/g



Dielectric Parameter (835MHz Head)

Title : TX120

SubTitle : CDMA835(HEAD)

January 09, 2007 08:39 AM

Frequency	e'	e''
800.000000 MHz	41.5439	18.8737
805.000000 MHz	41.4541	18.8615
810.000000 MHz	41.4228	18.8231
815.000000 MHz	41.3380	18.8211
820.000000 MHz	41.2671	18.8262
825.000000 MHz	41.2733	18.8578
830.000000 MHz	41.1660	18.8572
835.000000 MHz	41.1469	18.8481
840.000000 MHz	41.1128	18.8955
845.000000 MHz	41.1307	18.8655
850.000000 MHz	41.0435	18.8652
855.000000 MHz	40.9915	18.8758
860.000000 MHz	40.9958	18.9011
865.000000 MHz	40.9789	18.8505
870.000000 MHz	40.8823	18.8740
875.000000 MHz	40.8829	18.8796
880.000000 MHz	40.7982	18.8495
885.000000 MHz	40.7160	18.8242
890.000000 MHz	40.6539	18.8134
895.000000 MHz	40.6109	18.7627
900.000000 MHz	40.5567	18.7059

Dielectric Parameter (835MHz Body)

Title : TX120

SubTitle : CDMA835(Body)

January 09, 2007 12:50 PM

Frequency	e'	e''
800.000000 MHz	53.7326	21.3605
805.000000 MHz	53.6904	21.3511
810.000000 MHz	53.6262	21.3721
815.000000 MHz	53.6225	21.3380
820.000000 MHz	53.5355	21.3504
825.000000 MHz	53.4492	21.3294
830.000000 MHz	53.4739	21.2744
835.000000 MHz	53.4092	21.3070
840.000000 MHz	53.3660	21.2438
845.000000 MHz	53.3799	21.2151
850.000000 MHz	53.3471	21.2359
855.000000 MHz	53.2956	21.1444
860.000000 MHz	53.2706	21.1517
865.000000 MHz	53.1982	21.1444
870.000000 MHz	53.1316	21.0923
875.000000 MHz	53.1431	21.0754
880.000000 MHz	53.0818	21.0329
885.000000 MHz	53.0204	21.0016
890.000000 MHz	52.9796	20.9942
895.000000 MHz	52.9457	21.0158
900.000000 MHz	52.8645	20.9929