ATTACHMENT Q – DIPOLE VALIDATION

■ Validation Data (835MHz Head)

Test Laboratory: HCT

835 Dipole Validation test: Input power(1W)
Liquid Temperature : 21.7 ℃
Date Tested : October 13, 2006

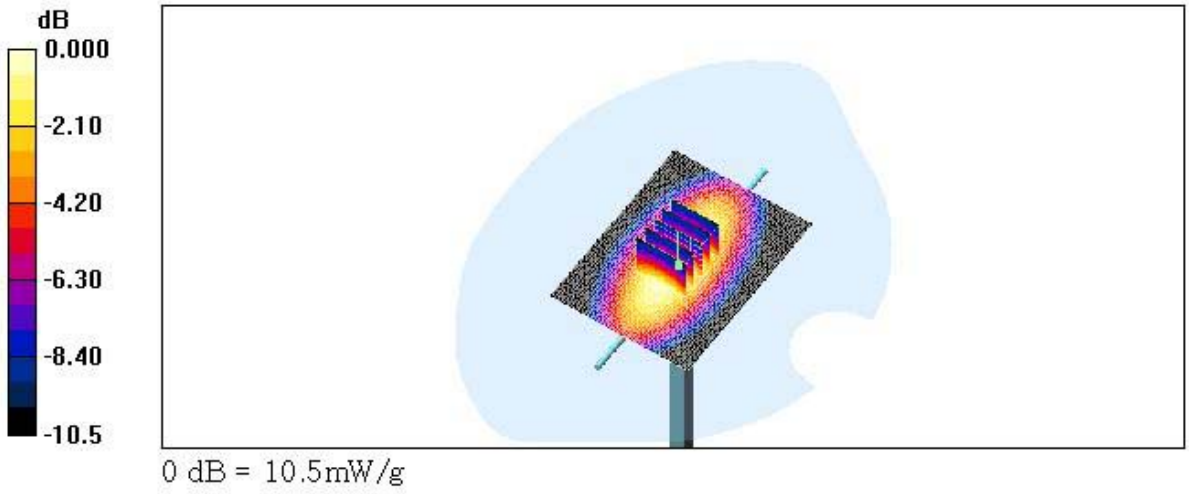
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:441
Program Name: Validation 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; $\sigma = 0.872$ mho/m; $\varepsilon_r = 40.7$; $\rho = 1000$ 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=15mm, dy=15mm
Maximum value of SAR (interpolated) = 10.5 mW/g

Validatoin 835 MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 112.9 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 14.3 W/kg
SAR(1 g) = 9.68 mW/g; SAR(10 g) = 6.33 mW/g
Maximum value of SAR (measured) = 10.5 mW/g



0 dB = 10.5mW/g

■ Validation Data (1900MHz Head)

Test Laboratory: HCT

1900 Dipole Validation test: Input power(1W)
Liquid Temperature : 21.6 ℃
Date Tested : October 14, 2006

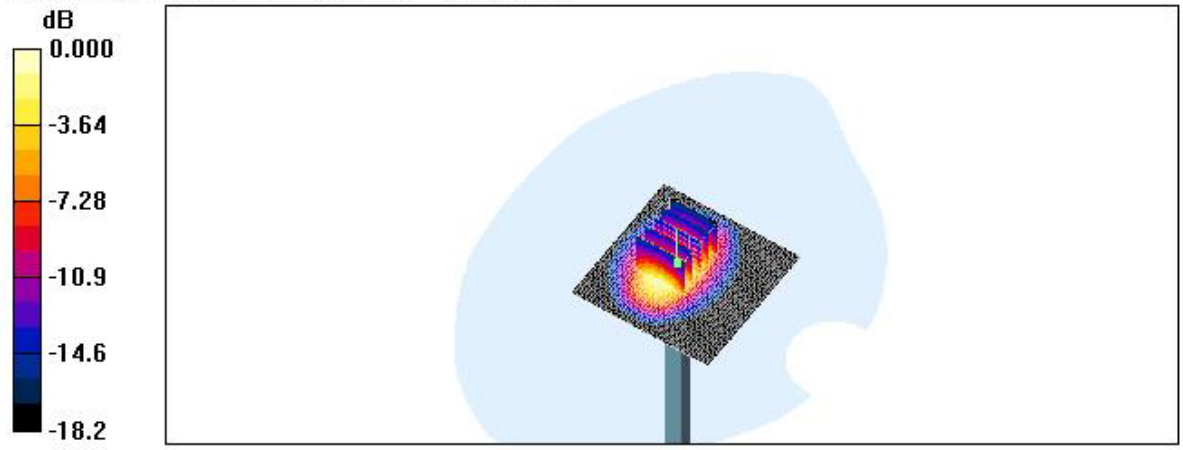
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d032
Program Name: Validation 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; $\sigma = 1.45$ mho/m; $\varepsilon_r = 40$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section ;Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:
- Probe: ET3DV6 - SN1609; ConvF(5.16, 5.16, 5.16); Calibrated: 2006-03-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2005-11-30
- Phantom: SAM 1800/1900 MHz; Type: SAM

Validation 1900MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 49.7 mW/g

Validation 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 177.6 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 73.1 W/kg
SAR(1 g) = 41.3 mW/g; SAR(10 g) = 21.6 mW/g
Maximum value of SAR (measured) = 46.2 mW/g



0 dB = 46.2mW/g

■ Dielectric Parameter (835MHz Head)

Title : EZ1000

SubTitle : GSM835(Head)

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Frequency	e'	e''
800.000000 MHz	41.1397	18.8623
805.000000 MHz	41.0011	18.8211
810.000000 MHz	41.0077	18.7955
815.000000 MHz	40.9170	18.7642
820.000000 MHz	40.8522	18.7849
825.000000 MHz	40.8113	18.8307
830.000000 MHz	40.7290	18.7981
835.000000 MHz	40.7192	18.7776
840.000000 MHz	40.6817	18.8065
845.000000 MHz	40.6718	18.7445
850.000000 MHz	40.6113	18.7591
855.000000 MHz	40.5285	18.8004
860.000000 MHz	40.5446	18.7525
865.000000 MHz	40.5300	18.7033
870.000000 MHz	40.4313	18.7493
875.000000 MHz	40.4432	18.6830
880.000000 MHz	40.3275	18.7139
885.000000 MHz	40.2205	18.6825
890.000000 MHz	40.2126	18.7324
895.000000 MHz	40.1364	18.6632
900.000000 MHz	40.0444	18.6389

■ Dielectric Parameter (1900MHz Head)

Frequency	e'	e''
1.800000000 GHz	40.3799	13.3285
1.810000000 GHz	40.3214	13.3788
1.820000000 GHz	40.2736	13.4437
1.830000000 GHz	40.2334	13.5862
1.840000000 GHz	40.2463	13.6889
1.850000000 GHz	40.2326	13.7898
1.860000000 GHz	40.2073	13.8459
1.870000000 GHz	40.1979	13.8341
1.880000000 GHz	40.1251	13.8118
1.890000000 GHz	40.0861	13.7562
1.900000000 GHz	40.0126	13.7116
1.910000000 GHz	39.9338	13.6622
1.920000000 GHz	39.8203	13.6453
1.930000000 GHz	39.7795	13.6649
1.940000000 GHz	39.7432	13.7799
1.950000000 GHz	39.6937	13.8768
1.960000000 GHz	39.6886	13.9709
1.970000000 GHz	39.6770	14.1017
1.980000000 GHz	39.6829	14.1673
1.990000000 GHz	39.6743	14.1741
2.000000000 GHz	39.6636	14.1677

■ Dielectric Parameter (835MHz Body)

Frequency	e'	e''
800.000000 MHz	53.5322	21.3732
805.000000 MHz	53.4745	21.3813
810.000000 MHz	53.4209	21.3653
815.000000 MHz	53.3884	21.3422
820.000000 MHz	53.3310	21.2778
825.000000 MHz	53.2467	21.3071
830.000000 MHz	53.3037	21.3244
835.000000 MHz	53.2250	21.2853
840.000000 MHz	53.2092	21.2349
845.000000 MHz	53.2010	21.2039
850.000000 MHz	53.1857	21.2408
855.000000 MHz	53.1862	21.1414
860.000000 MHz	53.1877	21.1608
865.000000 MHz	53.1357	21.1784
870.000000 MHz	53.1035	21.1029
875.000000 MHz	53.1332	21.1058
880.000000 MHz	53.0831	21.0643
885.000000 MHz	53.0776	21.0272
890.000000 MHz	52.9775	21.0161
895.000000 MHz	53.0040	21.0039
900.000000 MHz	52.9295	20.9991

■ Dielectric Parameter (1900MHz Body)

Title : EZ1000

SubTitle : GSM1900(Body)

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Frequency	e'	e''
1.800000000 GHz	51.5312	13.8361
1.810000000 GHz	51.4997	13.8687
1.820000000 GHz	51.4793	13.9417
1.830000000 GHz	51.4392	13.9888
1.840000000 GHz	51.4334	14.0318
1.850000000 GHz	51.4531	14.0528
1.860000000 GHz	51.4095	14.0681
1.870000000 GHz	51.3868	14.0973
1.880000000 GHz	51.3521	14.1229
1.890000000 GHz	51.3132	14.1454
1.900000000 GHz	51.2457	14.1617
1.910000000 GHz	51.1784	14.1961
1.920000000 GHz	51.0994	14.2310
1.930000000 GHz	51.0512	14.2706
1.940000000 GHz	51.0349	14.3279
1.950000000 GHz	51.0021	14.3686
1.960000000 GHz	50.9992	14.3859
1.970000000 GHz	51.0004	14.4135
1.980000000 GHz	51.0202	14.4594
1.990000000 GHz	50.9941	14.4804
2.000000000 GHz	50.9755	14.4772