

Attachment 2. – Dipole Validation Plots

Validation Data (2600 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 100 mW (20 dBm)
Liquid Temp: 21.4 °C
Test Date: Mar.26, 2010

DUT: Dipole 2600MHz; Type: D2600V2; Serial: D2600V2 – SN:1024

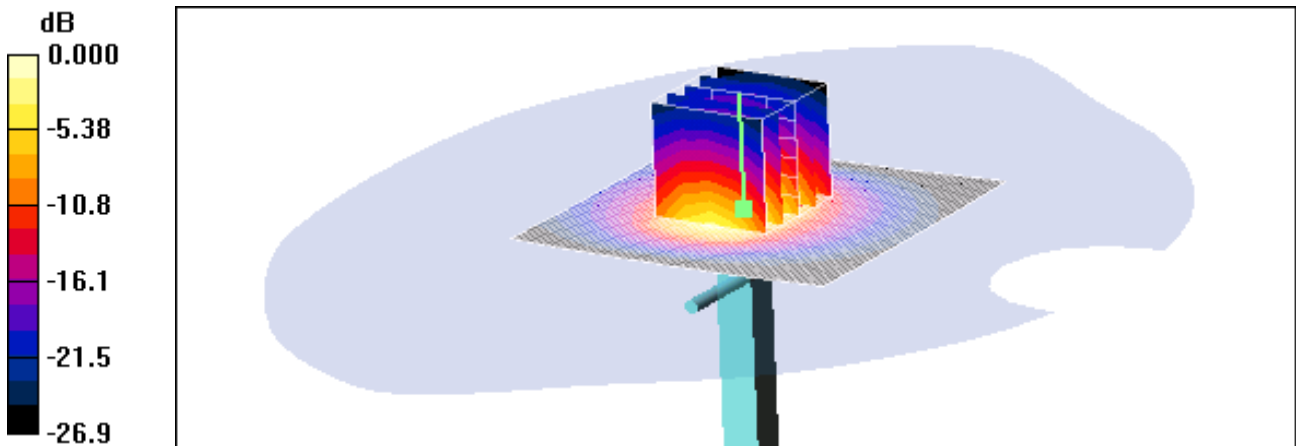
Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2600$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 37.7$; $\rho = 1000$ kg/m³
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ES3DV2 – SN3017; ConvF(4.18, 4.18, 4.18); Calibrated: 2009-07-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: SAM 1800/1900 MHz; Type: SAM

Validation 2600MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.34 mW/g

Validation 2600MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 58.3 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 13.7 W/kg
SAR(1 g) = 5.9 mW/g; SAR(10 g) = 2.49 mW/g
Maximum value of SAR (measured) = 6.70 mW/g



0 dB = 6.70mW/g

Validation Data (2600 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 100 mW (20 dBm)
Liquid Temp: 21.3 °C
Test Date: May 5, 2010

DUT: Dipole 2600MHz; Type: D2600V2; Serial: D2600V2 – SN: 1024

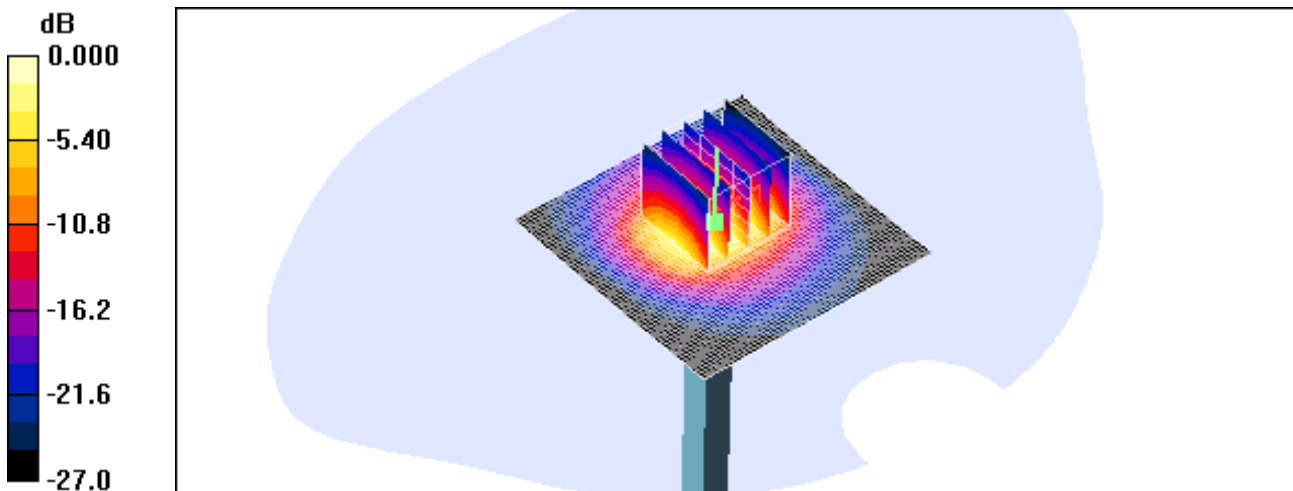
Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2600$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ES3DV2 – SN3017; ConvF(4.18, 4.18, 4.18); Calibrated: 2009-07-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: SAM 1800/1900 MHz; Type: SAM

Validation 2600MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.71 mW/g

Validation 2600MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 60.4 V/m; Power Drift = -0.145 dB
Peak SAR (extrapolated) = 13.5 W/kg
SAR(1 g) = 5.85 mW/g; SAR(10 g) = 2.48 mW/g
Maximum value of SAR (measured) = 6.62 mW/g



0 dB = 6.62mW/g

■ Dielectric Parameter (2600 MHz Head)

Title U600
 SubTitle WiMAX 2600 MHz (Head)
 Test Date Mar.26, 2010

Frequency	e'	e''
2450000000.0000	38.2755	13.5810
2460000000.0000	38.2839	13.6107
2470000000.0000	38.2716	13.5915
2480000000.0000	38.1610	13.6083
2490000000.0000	38.0497	13.5414
2500000000.0000	37.8786	13.5259
2510000000.0000	37.7586	13.5312
2520000000.0000	37.7218	13.6086
2530000000.0000	37.6920	13.6995
2540000000.0000	37.6777	13.8074
2550000000.0000	37.7040	13.8784
2560000000.0000	37.7470	13.9514
2570000000.0000	37.8290	13.9826
2580000000.0000	37.8347	13.9781
2590000000.0000	37.8016	13.9880
2600000000.0000	37.6776	13.9520
2610000000.0000	37.5588	13.9396
2620000000.0000	37.4273	13.8931
2630000000.0000	37.3478	13.9240
2640000000.0000	37.2435	13.9689
2650000000.0000	37.2084	14.0456
2660000000.0000	37.2294	14.1545
2670000000.0000	37.2510	14.2657
2680000000.0000	37.2785	14.3178
2690000000.0000	37.3291	14.3519
2700000000.0000	37.3267	14.3652
2710000000.0000	37.3185	14.3622
2720000000.0000	37.2009	14.3033
2730000000.0000	37.0785	14.2472

■ Dielectric Parameter (2600 MHz Body)

Title U600
 SubTitle WiMAX 2600 MHz (Body)
 Test Date Mar.26, 2010

Frequency	e'	e''
2450000000.0000	51.2279	14.4588
2460000000.0000	51.1893	14.5051
2470000000.0000	51.1587	14.5269
2480000000.0000	51.0513	14.5574
2490000000.0000	51.0390	14.6060
2500000000.0000	50.9650	14.6518
2510000000.0000	50.9473	14.7200
2520000000.0000	50.9776	14.7835
2530000000.0000	50.9908	14.8469
2540000000.0000	50.9941	14.9011
2550000000.0000	50.9520	14.9134
2560000000.0000	50.8844	15.0089
2570000000.0000	50.8644	14.9670
2580000000.0000	50.7613	15.0359
2590000000.0000	50.6963	15.0439
2600000000.0000	50.5958	15.0585
2610000000.0000	50.5327	15.1001
2620000000.0000	50.5072	15.1492
2630000000.0000	50.4854	15.2283
2640000000.0000	50.4835	15.2814
2650000000.0000	50.5119	15.3360
2660000000.0000	50.5142	15.4038
2670000000.0000	50.4723	15.4408
2680000000.0000	50.4118	15.4465
2690000000.0000	50.3735	15.4841
2700000000.0000	50.2702	15.4933
2710000000.0000	50.1942	15.5351
2720000000.0000	50.0986	15.5206
2730000000.0000	50.0245	15.5620

■ Dielectric Parameter (2600 MHz Head)

Title U600
 SubTitle WiMAX 2600 MHz (Head)
 Test Date May 5, 2010

Frequency	e'	e''
2450000000.0000	38.7265	12.6167
2460000000.0000	38.6955	12.6560
2470000000.0000	38.6375	12.6692
2480000000.0000	38.5542	12.7347
2490000000.0000	38.4984	12.7386
2500000000.0000	38.4267	12.7896
2510000000.0000	38.4272	12.8440
2520000000.0000	38.4211	12.9180
2530000000.0000	38.4436	12.9890
2540000000.0000	38.4242	13.0419
2550000000.0000	38.3989	13.0837
2560000000.0000	38.3637	13.1071
2570000000.0000	38.3517	13.0692
2580000000.0000	38.3093	13.0888
2590000000.0000	38.2194	13.1154
2600000000.0000	38.1313	13.1245
2610000000.0000	38.0589	13.1503
2620000000.0000	38.0044	13.2012
2630000000.0000	37.9938	13.2485
2640000000.0000	37.9932	13.3059
2650000000.0000	38.0009	13.3804
2660000000.0000	38.0102	13.4644
2670000000.0000	37.9881	13.4709
2680000000.0000	37.9534	13.4865
2690000000.0000	37.8970	13.4896
2700000000.0000	37.8417	13.4813
2710000000.0000	37.7735	13.4936
2720000000.0000	37.7043	13.5127
2730000000.0000	37.5692	13.5475

Dielectric Parameter (2600 MHz Body)

Title U600
 SubTitle WiMAX 2600 MHz (Body)
 Test Date May 5, 2010

Frequency	e'	e''
2450000000.0000	52.0141	14.7418
2460000000.0000	51.9409	14.7839
2470000000.0000	51.8981	14.8038
2480000000.0000	51.8156	14.8434
2490000000.0000	51.7749	14.8725
2500000000.0000	51.7167	14.8243
2510000000.0000	51.6975	14.7625
2520000000.0000	51.6689	14.8060
2530000000.0000	51.6768	14.8598
2540000000.0000	51.6743	14.8998
2550000000.0000	51.6749	14.9176
2560000000.0000	51.6109	14.9545
2570000000.0000	51.5952	14.9524
2580000000.0000	51.5069	14.9840
2590000000.0000	51.4420	15.0232
2600000000.0000	51.3648	15.0185
2610000000.0000	51.2925	15.0701
2620000000.0000	51.2639	15.0821
2630000000.0000	51.2069	15.1357
2640000000.0000	51.2027	15.1375
2650000000.0000	51.2023	15.1405
2660000000.0000	51.2027	15.1425
2670000000.0000	51.2030	15.1456
2680000000.0000	51.1448	15.1500
2690000000.0000	51.1041	15.1080
2700000000.0000	51.0121	15.1462
2710000000.0000	50.9508	15.1568
2720000000.0000	50.8553	15.1603
2730000000.0000	50.7558	15.1629