

7 - EVALUATION PROCEDURE

7.1 SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 3.9 mm from the inner surface of the shell. The area covered the entire dimension of the head or EUT and the horizontal grid spacing was 20 mm x 20 mm. Based on these data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Around this point, a volume of 32 mm x 32 mm x 34 mm was assessed by measuring 5 x 5 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm [11]. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
2. The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three onedimensional splines with the "Not a knot"-condition (in x, y and z-directions) [11], [12]. The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
3. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

7.2 Exposure Limits

Table 1: Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands. Wrists. Feet and Ankles
0.4	8.0	20.0

Table 2: Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands. Wrists. Feet and Ankles
0.08	1.6	4.0

Note: Whole-body SAR is averaged over the entire body, partial-body SAR is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Population/Uncontrolled Environments are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.

Occupational/Controlled Environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure (i.e. as a result of employment or occupation).

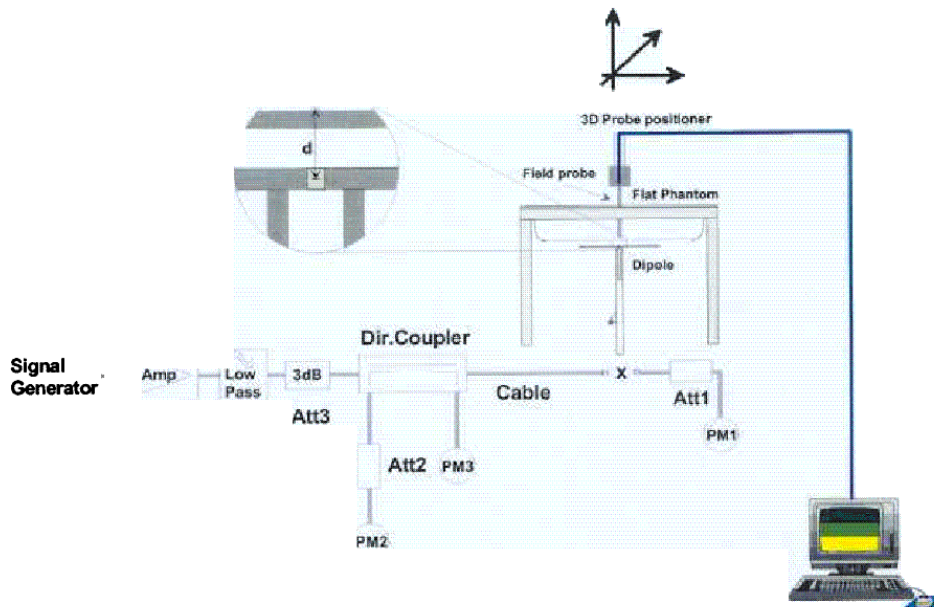
Population/uncontrolled environments Partial-body limit 1.6W/kg applied to the EUT.

7.3 Simulated Tissue Liquid Parameter Confirmation

The dielectric parameters were checked prior to assessment using the HP85070A dielectric probe kit. The dielectric parameters measured are reported in each correspondent section:

7.4 SAR Measurement

The SAR measurement was performed with the E-field probe in mechanical detection mode only. The setup and determination of the forward power into the dipole was performed using the following procedures.



First, the power meter PM1 (including attenuator Att1) is connected to the cable to measure the forward power at the location of the dipole connector (X). The signal generator is adjusted for the desired forward power at the dipole connector (taking into account the attenuation of Att1) as read by power meter PM2. After connecting the cable to the dipole, the signal generator is readjusted for the same reading at power meter PM2. If the signal generator does not allow adjustment in 0.01dB steps, the remaining difference at PM 2 must be taken into consideration. PM3 records the reflected power from the dipole to ensure that the value is not changed from the previous value. The reflected power should be 20dB below the forward power.

The SAR measurements were performed in order to achieve repeatability and to establish an average target value.

7.5 System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 10\%$. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

IEEE P1528 recommended reference value for head

Frequency (MHz)	1 g SAR	10 g SAR	Local SAR at surface (above feed point)	Local SAR at surface (v=2cm offset from feed point)
300	3.0	2.0	4.4	2.1
450	4.9	3.3	7.2	3.2
835	9.5	6.2	14.1	4.9
900	10.8	6.9	16.4	5.4
1450	29.0	16.0	50.2	6.5
1800	38.1	19.8	69.5	6.8
1900	39.7	20.5	72.1	6.6
2000	41.1	21.1	74.6	6.5
2450	52.4	24.0	104.2	7.7
3000	63.8	25.7	140.2	9.5

Validation Dipole SAR Reference Test Result for Body (835 MHz)

Validation Measurement	SAR @ 0.025W Input averaged over 1g	SAR @ 1W Input averaged over 1g	SAR @ 0.025W Input averaged over 10g	SAR @ 1W Input averaged over 10g
Test 1	0.222	8.88	0.112	4.48
Test 2	0.221	8.84	0.111	4.44
Test 3	0.222	8.88	0.112	4.48
Test 4	0.220	8.80	0.111	4.44
Test 5	0.223	8.92	0.113	4.52
Test 6	0.222	8.88	0.115	4.60
Test 7	0.221	8.84	0.114	4.56
Test 8	0.222	8.88	0.114	4.56
Test 9	0.223	8.92	0.113	4.52
Test 10	0.222	8.88	0.112	4.48
Average	0.2218	8.872	0.1127	4.51

Validation Dipole SAR Reference Test Result for Body (1900 MHz)

Validation Measurement	SAR @ 0.126W Input averaged over 1g	SAR @ 1W Input averaged over 1g	SAR @ 0.126W Input averaged over 10g	SAR @ 1W Input averaged over 10g
Test 1	3.1	24.61	1.42	11.27
Test 2	3.1	24.61	1.41	11.20
Test 3	3.2	25.41	1.43	11.35
Test 4	3.2	25.41	1.42	11.27
Test 5	3.1	24.61	1.42	11.27
Test 6	3.2	25.61	1.41	11.20
Test 7	3.2	25.61	1.43	11.35
Test 8	3.1	24.61	1.42	11.27
Test 9	3.1	24.61	1.42	11.27
Test 10	3.1	24.61	1.43	11.35
Average	3.14	24.97	1.421	11.28

7.6 Liquid Measurement Result**2003-09-24**

Simulant	Freq [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation	Limits [%]
Body	835	ϵ_r	22	55.2	54.0	-2.17	±5
		σ	22	0.97	0.97	0.00	±5
		1g SAR	22	8.872	8.716	-1.76	±10
Head	835	ϵ_r	22	41.5	41.0	-1.20	±5
		σ	22	0.90	0.87	-3.33	±5
		1g SAR	22	9.50	10.21	7.47	±10

2003-09-29

Simulant	Freq [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation	Limits [%]
Body	1900	ϵ_r	22	53.3	52.9	-0.75	±5
		σ	22	1.52	1.56	2.63	±5
		1g SAR	22	24.97	24.98	0.04	±10
Head	1900	ϵ_r	22	40.0	39.28	-1.80	±5
		σ	22	1.40	1.43	2.14	±5
		1g SAR	22	39.7	39.0	-1.76	±10

ϵ_r = relative permittivity, σ = conductivity and $\rho=1000\text{kg/m}^3$

835 MHz Body Liquid Forward Power = 21.05 dBm = 127.35 mW

835 MHz Head Liquid Forward Power = 20.04 dBm = 100.93 mW

1900 MHz Body Liquid Forward Power = 20.14 dBm = 103.28 mW

1900 MHz Head Liquid Forward Power = 20.1 dBm = 102.33 mW

System Validation 835 MHz Body liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward Power = 21.05 dBm, 9/24/2003)

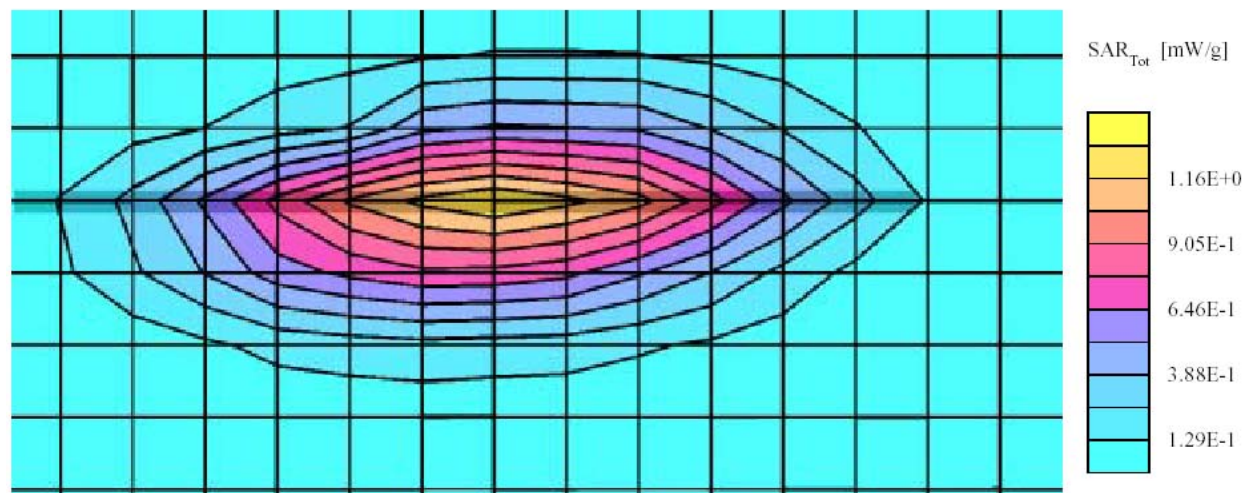
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97$ mho/m $\epsilon_r = 54.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 1.11 mW/g, SAR (10g): 0.603 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.00 dB



System Validation 835 MHz Head liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward Power = 20.4 dBm, 9/24/2003)

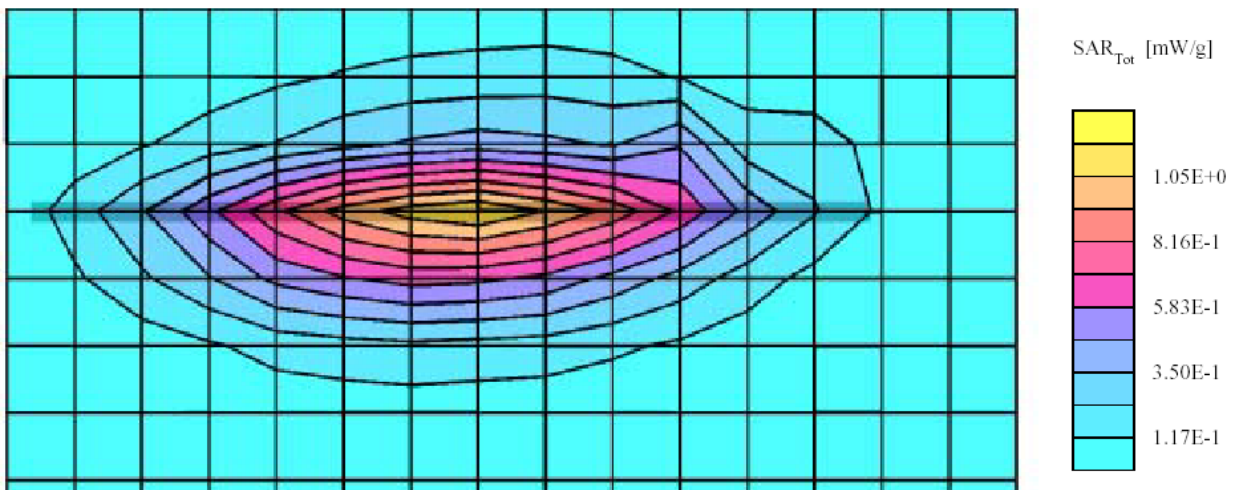
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz

Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 835 (Head) MHz: $\sigma = 0.87$ mho/m $\epsilon_r = 41.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 1.03 mW/g, SAR (10g): 0.580 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.00 dB



1900 MHz Body Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 21 Deg C, Forwar Power = 20.14 dBm, 9/29/2003)

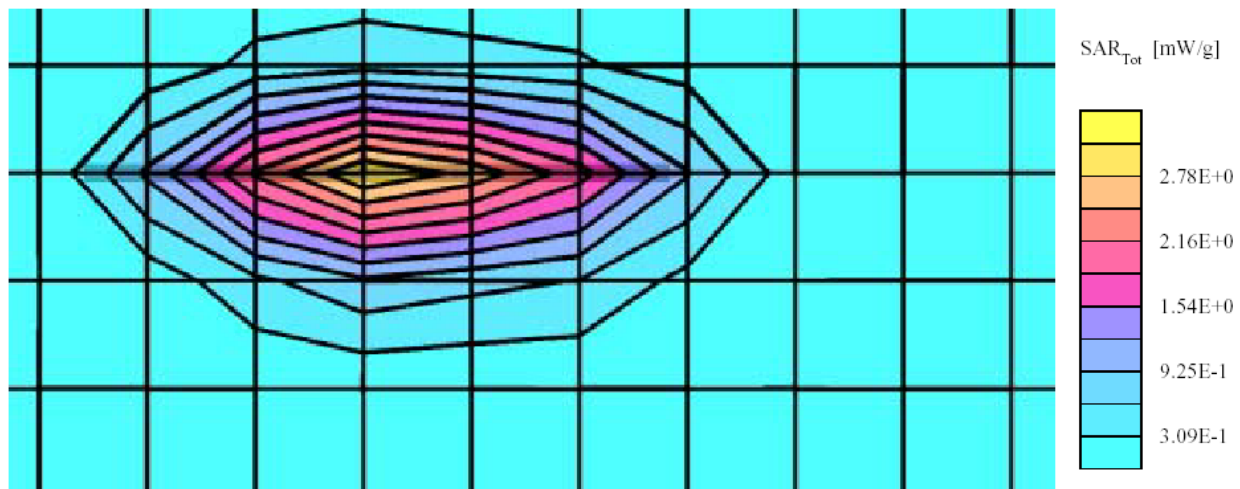
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body1900 MHz: $\sigma = 1.56$ mho/m $\epsilon_r = 52.9$ $\rho = 1.00$ g/cm³

Cube 5x5x7; SAR (1g): 2.58 mW/g, SAR (10g): 1.14 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.01 dB



1900 MHz Head Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 21 Deg C, Forwar Power = 20.1 dBm, 9/29/2003)

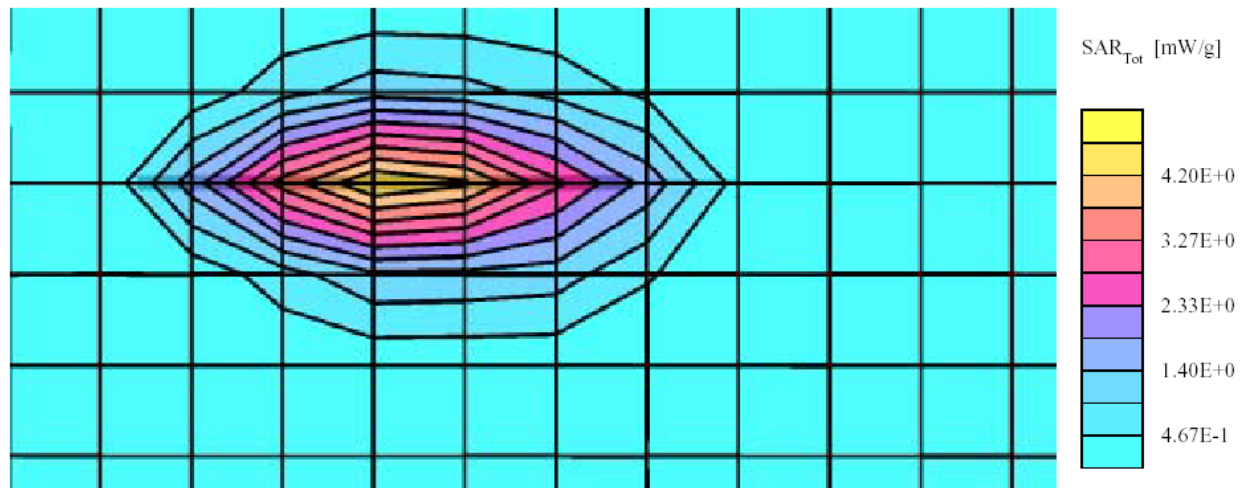
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ET3DV6 - SN1604; ConvF(5.50,5.50,5.50); Crest factor: 1.0; Head 1900 MHz: $\sigma = 1.43$ mho/m $\epsilon_r = 39.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 4.02 mW/g, SAR (10g): 1.72 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.01 dB



7.7 835MHz Head Liquid Probe Comparison Measurement Result

System Validation for Probe ET3DV6, S/N 1604:

System Validation 835 MHz Head liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward Power = 20.03 dBm, 10/27/2003)

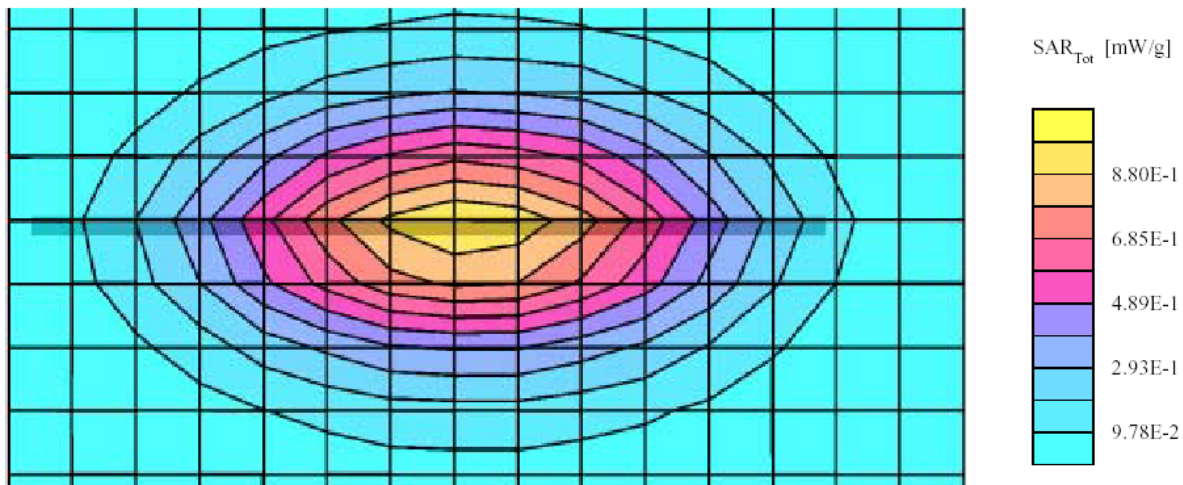
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz

Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 835 (Head) MHz: $\sigma = 0.88 \text{ mho/m}$, $\epsilon_r = 41.5$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.957 mW/g, SAR (10g): 0.562 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.04 dB



System Validation for Probe ES3DV2, S/N 3019:

System Validation 835 MHz Head liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward Power = 20.01dBm, 10/27/2003)

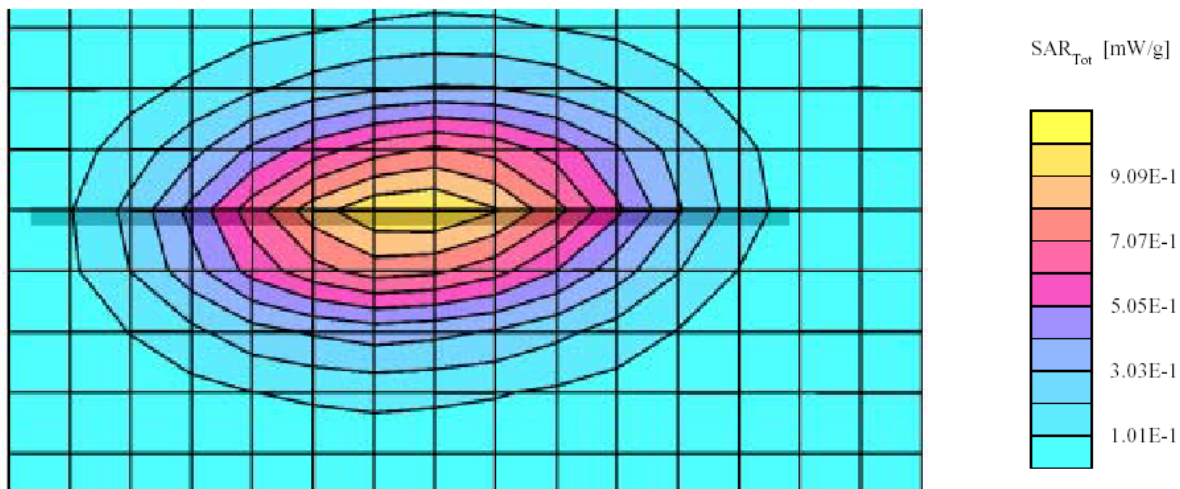
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz

Probe: ES3DV2 - SN3019; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 835 (Head) MHz: $\sigma = 0.88 \text{ mho/m}$ $\epsilon_r = 41.5$ $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.944 mW/g, SAR (10g): 0.599 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.05 dB



835 MHz Liquid Validation for old probe and new probe:

frequency	e'	e''
815000000.0000	41.6784	18.9594
815800000.0000	41.6548	18.9960
816600000.0000	41.6532	18.9826
817400000.0000	41.6960	18.9560
818200000.0000	41.6273	18.9400
819000000.0000	41.6478	18.9304
819800000.0000	41.6525	18.9436
820600000.0000	41.6282	18.9145
821400000.0000	41.6570	18.9469
822200000.0000	41.6668	18.9416
823000000.0000	41.6506	18.9957
823800000.0000	41.6434	18.9887
824600000.0000	41.6212	18.9959
825400000.0000	41.5609	18.9687
826200000.0000	41.6105	18.9599
827000000.0000	41.6714	18.9590
827800000.0000	41.6953	18.9890
828600000.0000	41.6275	18.9322
829400000.0000	41.6154	18.9436
830200000.0000	41.6499	18.9693
831000000.0000	41.6999	18.9928
831800000.0000	41.6025	18.9849
832600000.0000	41.6173	19.0019
833400000.0000	41.5795	18.9378
834200000.0000	41.5522	18.9308
835000000.0000	41.5346	18.9688
835800000.0000	41.5565	18.9829
836600000.0000	41.6205	19.0210
837400000.0000	41.6171	19.0533
838200000.0000	41.6109	18.9972
839000000.0000	41.5361	18.9929
839800000.0000	41.5469	19.0195
840600000.0000	41.5562	19.0223
841400000.0000	41.5711	18.9985
842200000.0000	41.5525	18.9719
843000000.0000	41.6239	18.9781
843800000.0000	41.5551	18.9677
844600000.0000	41.5436	19.0193
845400000.0000	41.5216	18.9942
846200000.0000	41.5225	18.9356
847000000.0000	41.5523	18.9988
847800000.0000	41.5984	18.9826
848600000.0000	41.5384	18.9932
849400000.0000	41.5450	18.9888
850200000.0000	41.5531	19.0081
851000000.0000	41.5570	19.0170
851800000.0000	41.5712	19.0016
852600000.0000	41.5646	18.9745
853400000.0000	41.5670	18.9598
854200000.0000	41.5499	19.0254
855000000.0000	41.5494	18.9838

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10/27/2003

7.8 1900MHz Head Liquid Probe Comparison Measurement Result

System Validation for Probe ET3DV6, S/N 1604:

1900 MHz Head Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 21 Deg C, Forwar Power = 20.06 dBm, 10/30/2003)

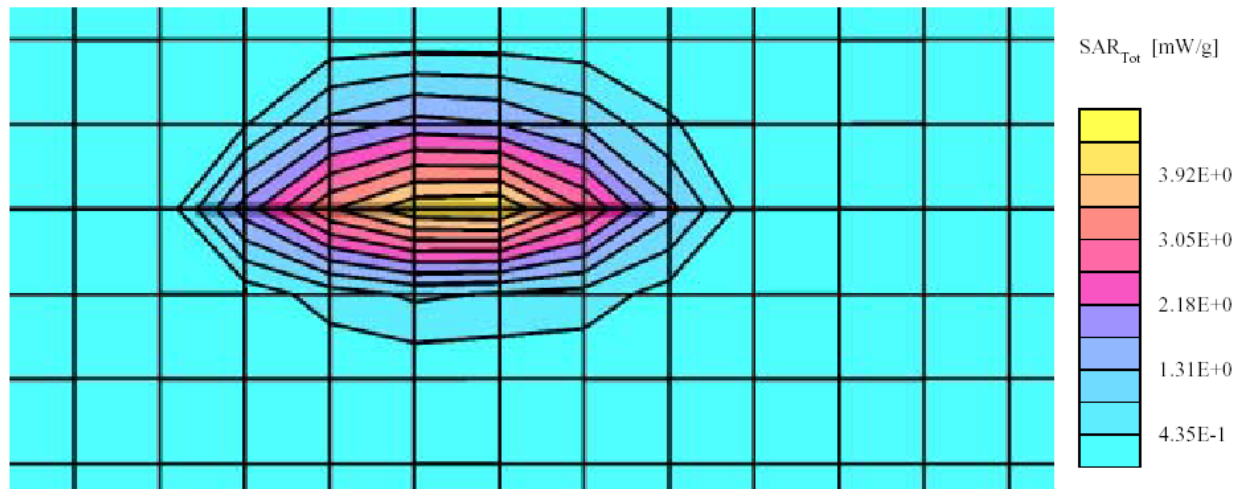
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ET3DV6 - SN1604; ConvF(5.50,5.50,5.50); Crest factor: 1.0; Head 1900 MHz: $\sigma = 1.48$ mho/m $\epsilon_r = 38.7$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 3.97 mW/g, SAR (10g): 1.79 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.04 dB



System Validation for Probe ES3DV2, S/N 3019:

1900 MHz Head Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 21 Deg C, Forwar Power = 20.17 dBm, 10/30/2003)

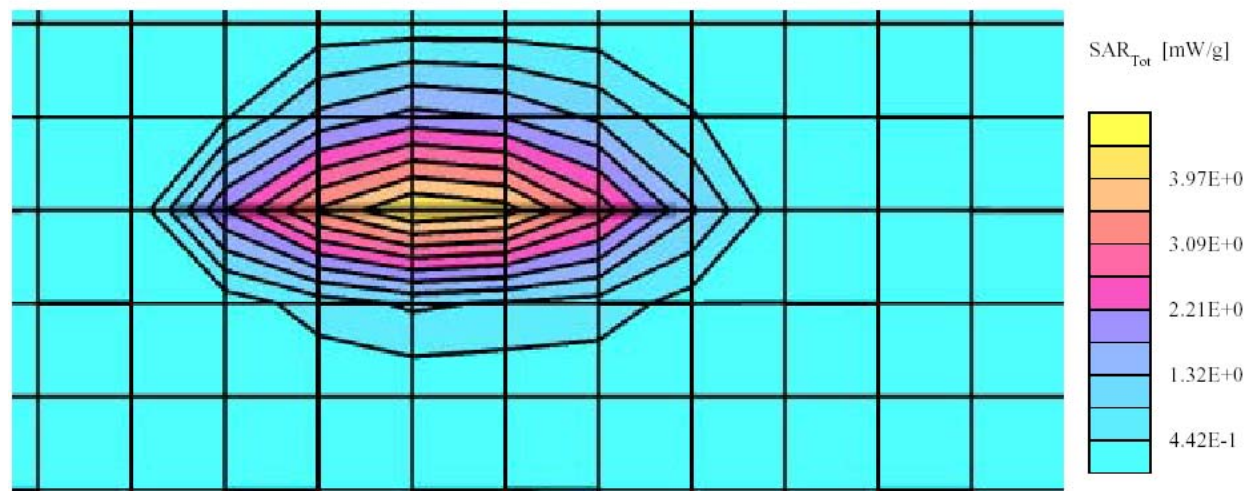
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.70,4.70,4.70); Crest factor: 1.0; Head 1900 MHz: $\sigma = 1.48 \text{ mho/m}$, $\epsilon_r = 38.7$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 4.11 mW/g, SAR (10g): 1.81 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.03 dB



1900 MHz Liquid Validation for old probe and new probe:

frequency	e'	e''
1850000000.0000	39.1847	14.0328
1852000000.0000	39.1462	14.0525
1854000000.0000	39.1489	14.0681
1856000000.0000	39.0592	14.0561
1858000000.0000	38.8624	13.9133
1860000000.0000	38.7551	13.8624
1862000000.0000	38.6732	13.8332
1864000000.0000	38.6379	13.8006
1866000000.0000	38.6692	13.8294
1868000000.0000	38.6966	13.8508
1870000000.0000	38.7135	13.8484
1872000000.0000	38.6987	13.8749
1874000000.0000	38.7441	13.8824
1876000000.0000	38.7652	13.9177
1878000000.0000	38.7868	13.9080
1880000000.0000	38.7578	13.9338
1882000000.0000	38.7286	13.9319
1884000000.0000	38.7137	13.9336
1886000000.0000	38.7237	13.9291
1888000000.0000	38.6977	13.9246
1890000000.0000	38.7227	13.9423
1892000000.0000	38.7167	13.9775
1894000000.0000	38.7147	13.9868
1896000000.0000	38.6967	13.9667
1898000000.0000	38.6997	13.9992
1900000000.0000	38.6736	14.0003
1902000000.0000	38.6625	13.9905
1904000000.0000	38.6891	14.0094
1906000000.0000	38.7121	14.0512
1908000000.0000	38.6661	14.0544
1910000000.0000	38.6716	14.0652
1912000000.0000	38.6722	14.0529
1914000000.0000	38.6238	14.0474
1916000000.0000	38.6342	14.0454
1918000000.0000	38.6510	14.0651
1920000000.0000	38.6299	14.0621
1922000000.0000	38.6461	14.0602
1924000000.0000	38.6290	14.1144
1926000000.0000	38.6513	14.0984
1928000000.0000	38.6479	14.1344
1930000000.0000	38.6468	14.1376
1932000000.0000	38.6744	14.1888
1934000000.0000	38.6698	14.1675
1936000000.0000	38.7109	14.2032
1938000000.0000	38.6810	14.2197
1940000000.0000	38.6374	14.1687
1942000000.0000	38.6534	14.1864
1944000000.0000	38.6523	14.2008
1946000000.0000	38.6620	14.2411
1948000000.0000	38.6381	14.2606
1950000000.0000	38.6500	14.2737

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10/30/2003

8 - SAR TEST RESULTS

This page summarizes the results of the performed dosimetric evaluation. The plots with the corresponding SAR distributions, which reveal information about the location of the maximum SAR with respect to the device could be found in the following pages.

The output power was measured prior to testing and a fresh battery charge was ensured before each test. The modulation characteristics of the EUT is CDMA, therefore, a crest factor of 1 was used during the test.

8.1 SAR Body and Head Worst-Case Test Data

Ambient Temperature (°C): 23.0

Relative Humidity (%): 42.0

Position	Frequency (MHz)	Output Power (dBm)	Test Type	Liquid	Phantom	Notes / Accessories	Measured (mW/g)	Limit (mW/g)	Plot #
Right Side Touching	836	23.83	Body worn	Body	Flat	None	0.0611	1.6	1
Left Side Touching	836	23.83					0.0524		2
Top Touching	836	23.83					0.297		3
Back Touching	836	23.83					0.309		4
Right Side Touching	1880	23.83	Body worn	Body	Flat	None	0.0646	1.6	5
Left Side Touching	1880	23.83					0.0282		6
Top Touching	1880	23.83					0.137		7
Back Touching	1880	23.83					0.232		8

8.2 Plots of Test Result

The plots of test result were attached as reference.

Verifone, Omni3600D (Right side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/24/2003)

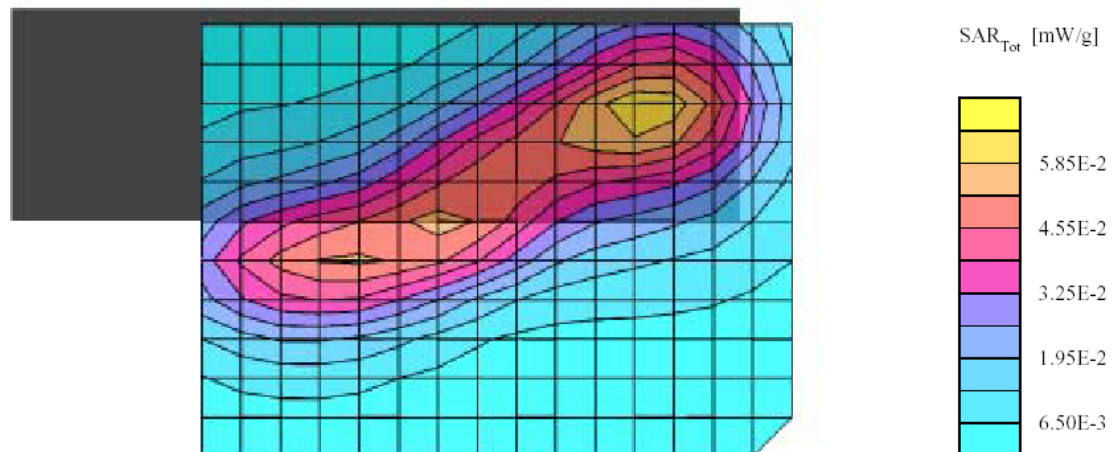
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97$ mho/m $\epsilon_r = 54.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0611 mW/g, SAR (10g): 0.0396 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.00 dB



Plot #1

Verifone, Omni3600D (Left side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/24/2003)

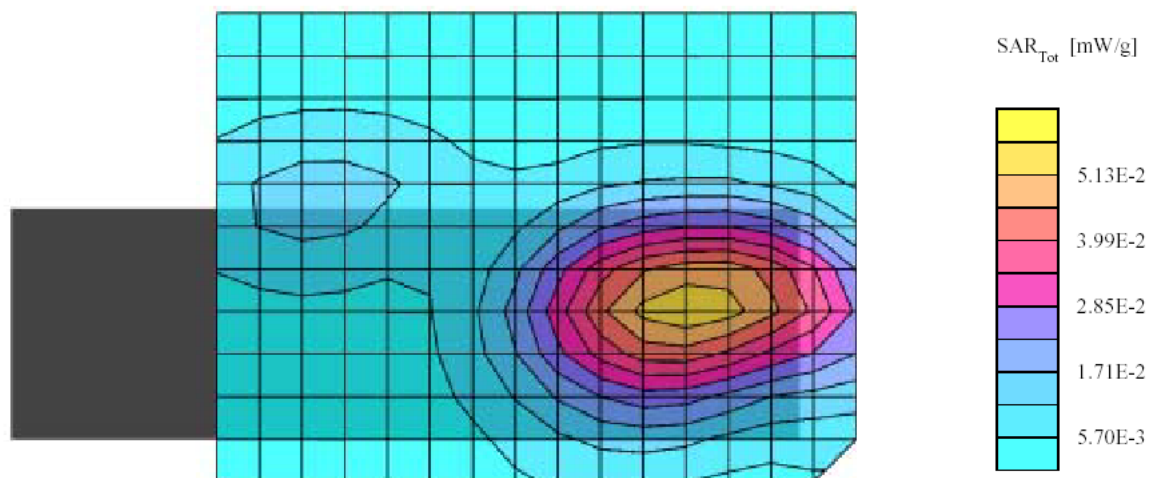
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97$ mho/m $\epsilon_r = 54.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0524 mW/g, SAR (10g): 0.0350 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.03 dB



Plot #2

Verifone, Omni3600D (Top side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/24/2003)

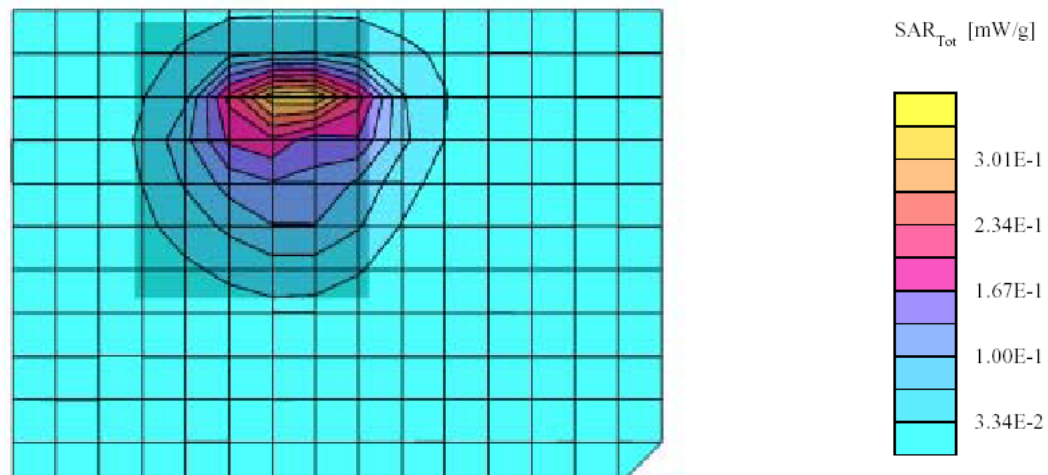
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97$ mho/m $\epsilon_r = 54.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7; SAR (1g): 0.297 mW/g, SAR (10g): 0.143 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.02 dB



Plot #3

Verifone, Omni3600D (Back side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/24/2003)

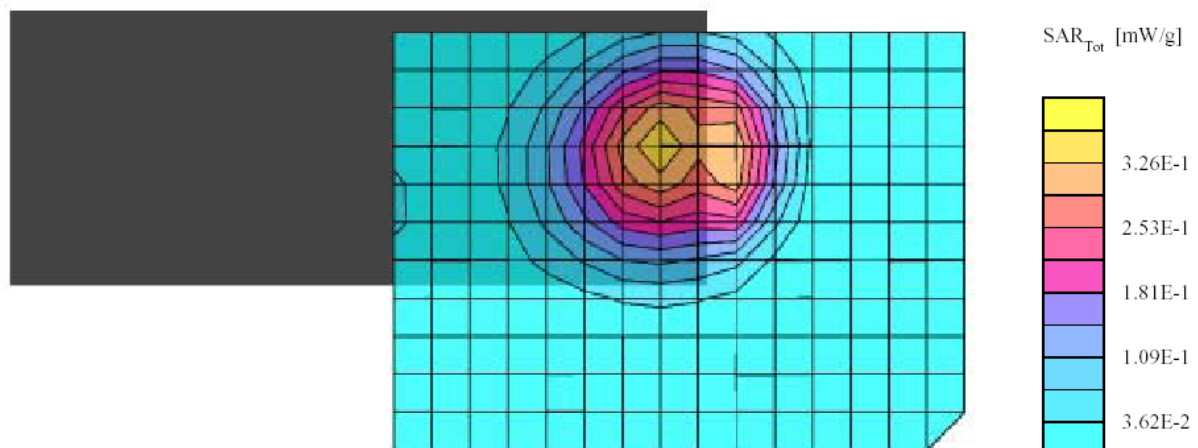
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97 \text{ mho/m}$ $\epsilon_r = 54.0$ $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.309 mW/g, SAR (10g): 0.200 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.01 dB



Plot #4

Verifone, Omni3600D (Right side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/29/2003)

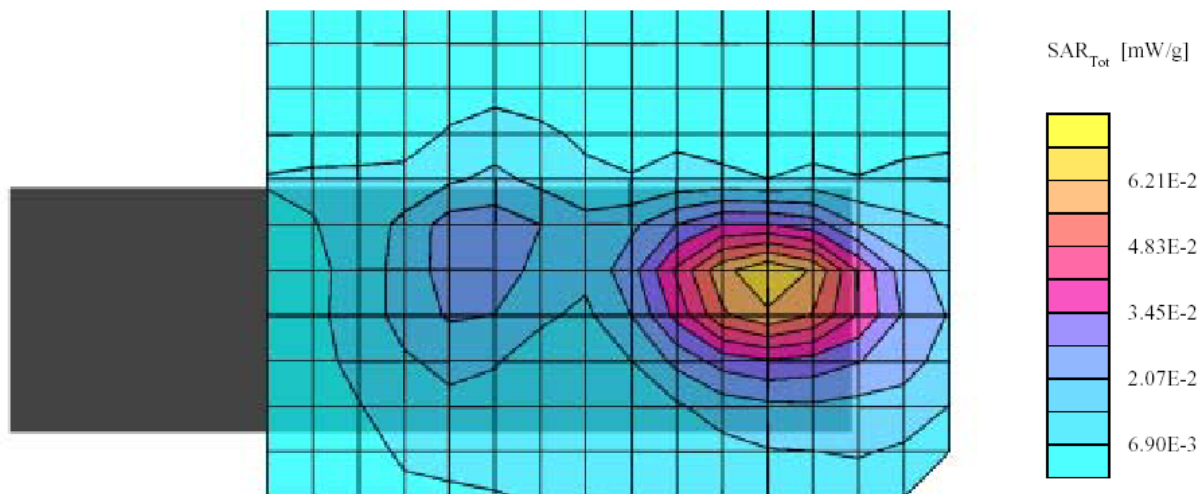
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1900 (Body) MHz: $\sigma = 1.56$ mho/m $\epsilon_r = 52.9$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0646 mW/g, SAR (10g): 0.0393 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.04 dB



Plot #5

Verifone, Omni3600D (Left side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/29/2003)

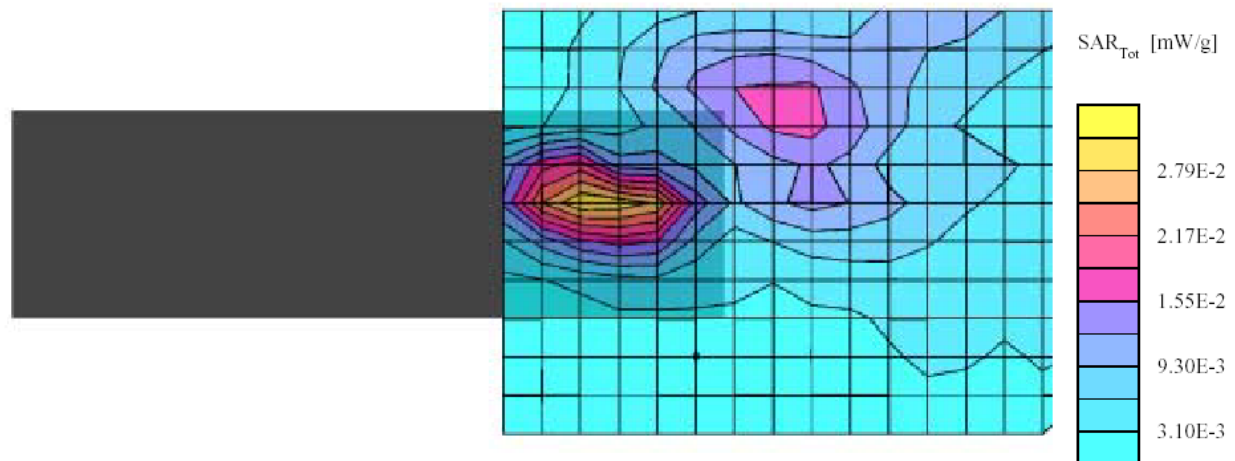
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1900 (Body) MHz: $\sigma = 1.56 \text{ mho/m}$, $\epsilon_r = 52.9$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.0282 mW/g, SAR (10g): 0.0178 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.03 dB



Plot #6

Verifone, Omni3600D (Top side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/29/2003)

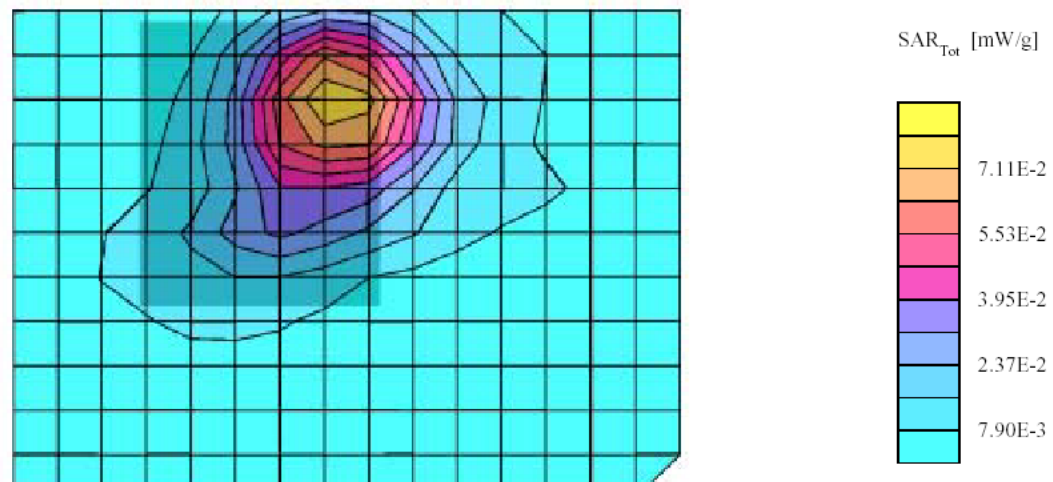
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 1.56 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.137 mW/g, SAR (10g): 0.0863 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: -0.04 dB



Plot #7

Verifone, Omni3600D (Back side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/29/2003)

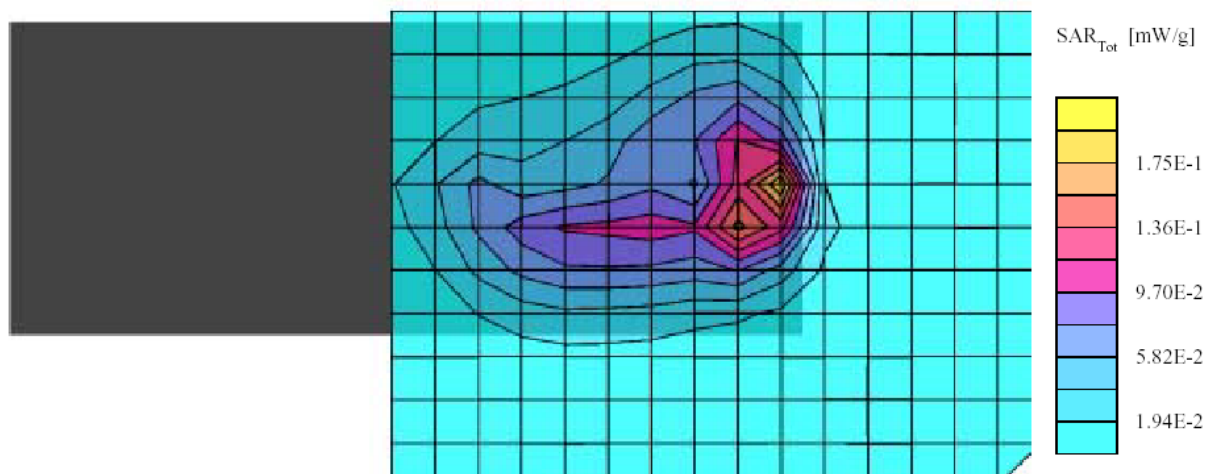
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1900 (Body) MHz: $\sigma = 1.56 \text{ mho/m}$, $\epsilon_r = 52.9$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.232 mW/g, SAR (10g): 0.122 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

Powerdrift: 0.02 dB



Plot #8

EXHIBIT A - SAR SETUP PHOTOGRAPHS

Right Side Touching with Phantom



Left Side Touching with Phantom



Back Side Touching with Phantom



Top Side Touching with Phantom



EXHIBIT B – EUT PHOTOGRAPHS

Chassis - Top View



Chassis - Back View



Chassis – Right Side View



Chassis – Cover off View



EUT – Inside Explode View**EUT – Antenna and Modem View**

EUT – Antenna and Modem View 2**EUT – AnyData Modem and Antenna View**

EUT – AnyData Modem Close Up View**EUT – SN7 Close Up View**

EXHIBIT C – Z-Axis

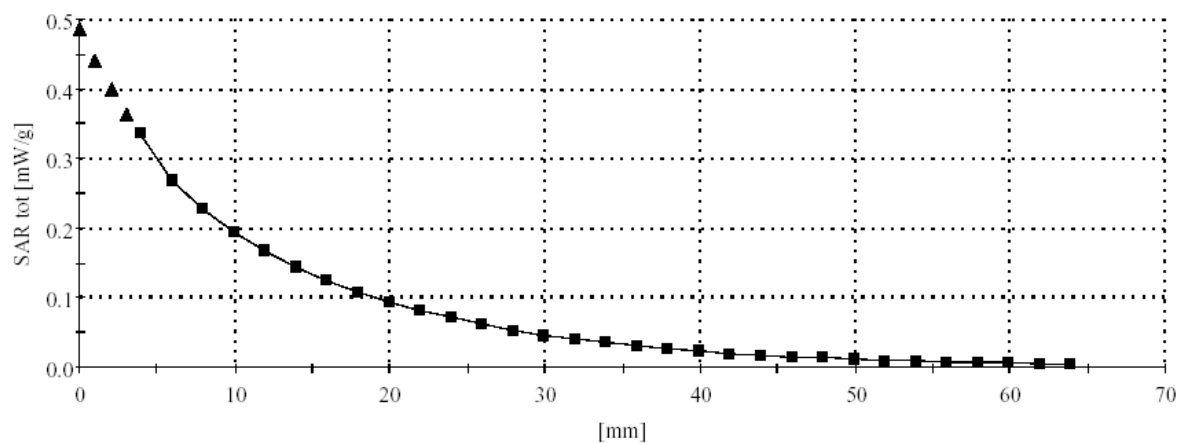
Verifone, Omni3600D (Back side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/24/2003)

SAM Phantom; Section; Position: ; Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.97$ mho/m $\epsilon_r = 54.0$ $\rho = 1.00$ g/cm³

; , 0

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 2.0



Verifone, Omni3600D (Back side in touch with flat phantom, Ambient Temp = 23 Deg C,
Liquid Temp = 21 Deg C, 9/29/2003)

SAM Phantom; Section; Position: ; Frequency: 1880 MHz

Probe: ET3DV6 - SN1604; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1900 (Body) MHz: $\sigma = 1.56$ mho/m $\epsilon_r = 52.9$ $\rho = 1.00$ g/cm³

;, 0

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 2.0

