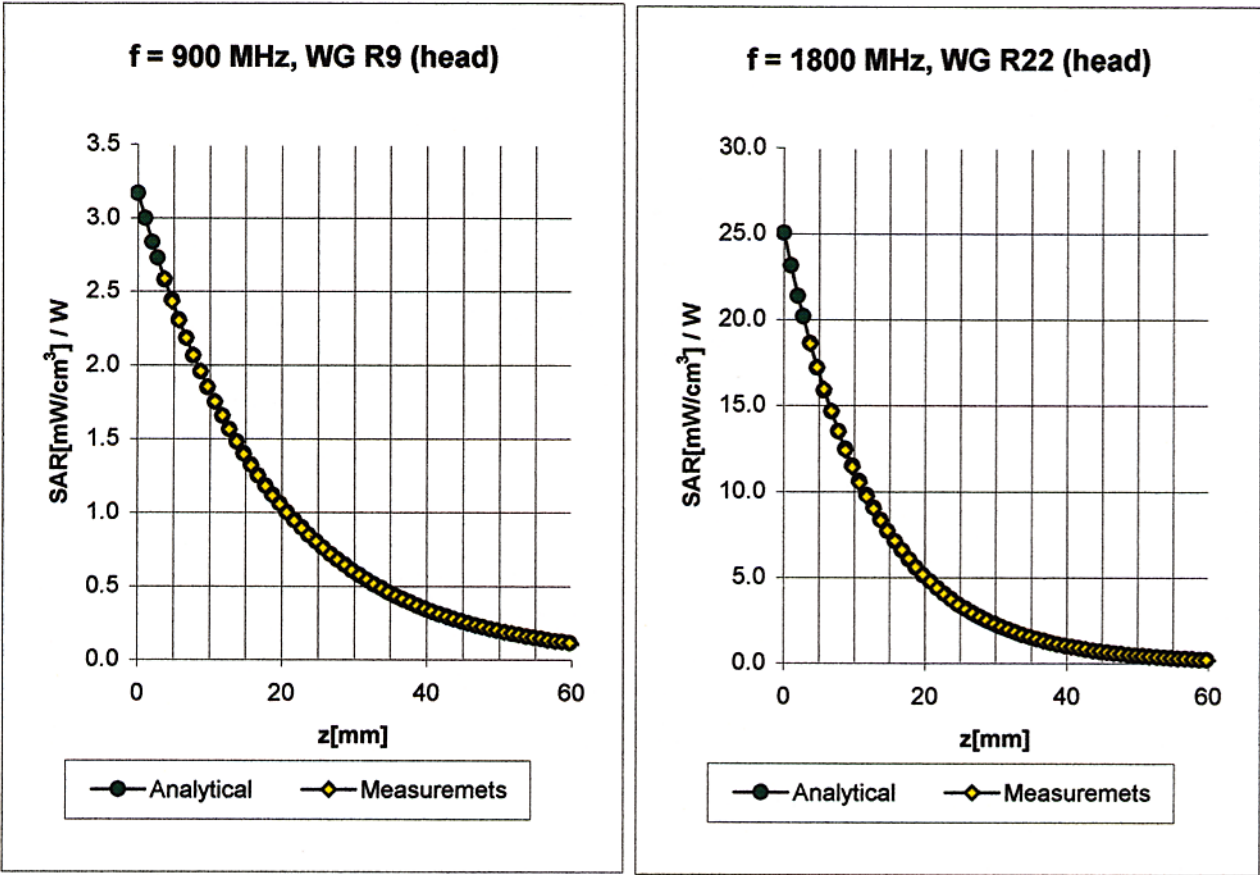


# Conversion Factor Assessment

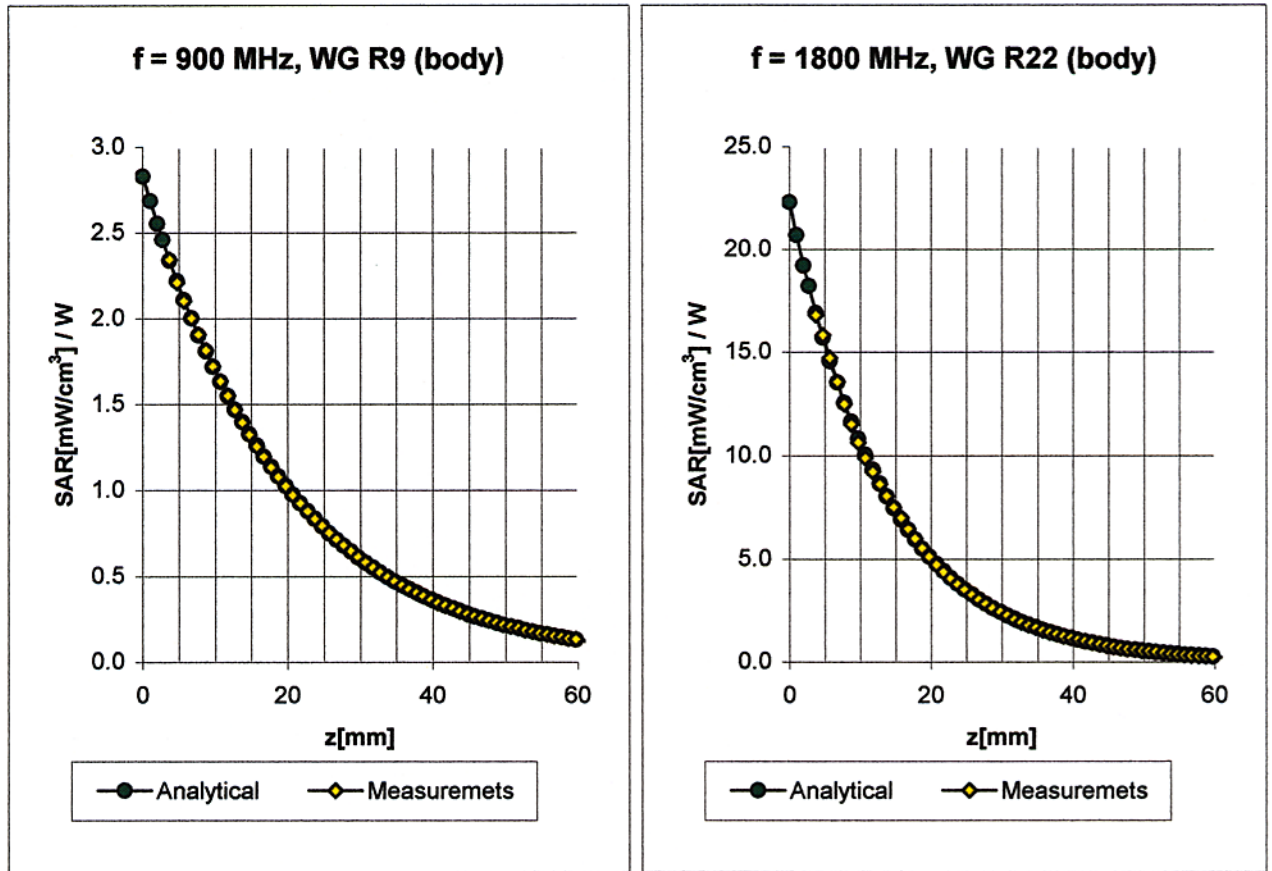


|      |          |                              |                               |
|------|----------|------------------------------|-------------------------------|
| Head | 900 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.97 \pm 5\%$ mho/m |
| Head | 835 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.90 \pm 5\%$ mho/m |
|      | ConvF X  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Boundary effect:              |
|      | ConvF Y  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.31</b>             |
|      | ConvF Z  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Depth <b>2.51</b>             |
| Head | 1800 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\%$ mho/m |
| Head | 1900 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\%$ mho/m |
|      | ConvF X  | <b>5.5</b> $\pm 9.5\%$ (k=2) | Boundary effect:              |
|      | ConvF Y  | <b>5.5</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.40</b>             |
|      | ConvF Z  | <b>5.5</b> $\pm 9.5\%$ (k=2) | Depth <b>2.61</b>             |

ET3DV6 SN:1684

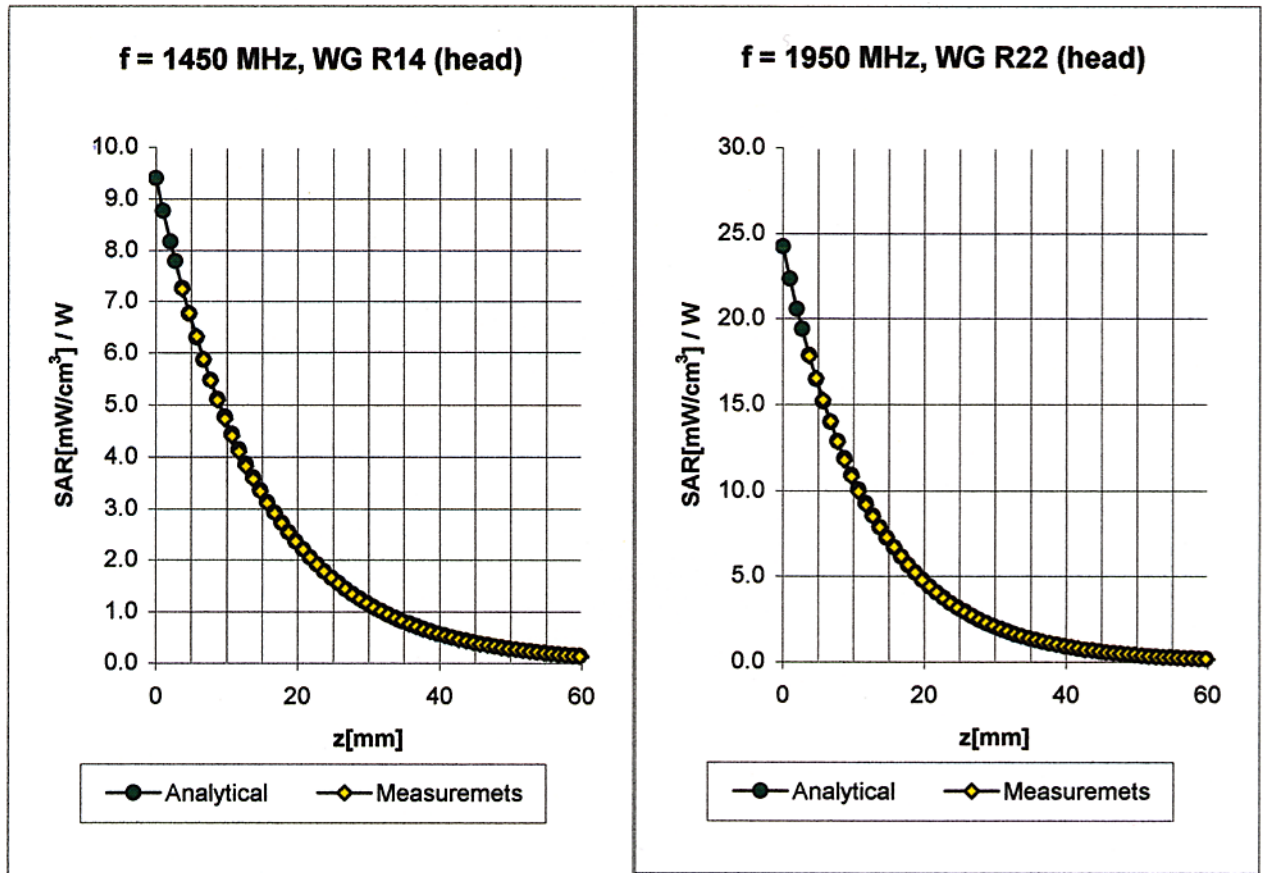
November 20, 2002

# Conversion Factor Assessment



|      |          |                              |                                       |
|------|----------|------------------------------|---------------------------------------|
| Body | 900 MHz  | $\epsilon_r = 55.0 \pm 5\%$  | $\sigma = 1.05 \pm 5\% \text{ mho/m}$ |
| Body | 835 MHz  | $\epsilon_r = 55.2 \pm 5\%$  | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | <b>6.5</b> $\pm 9.5\%$ (k=2) | Boundary effect:                      |
|      | ConvF Y  | <b>6.5</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.26</b>                     |
|      | ConvF Z  | <b>6.5</b> $\pm 9.5\%$ (k=2) | Depth <b>3.22</b>                     |
|      |          |                              |                                       |
| Body | 1800 MHz | $\epsilon_r = 53.3 \pm 5\%$  | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
| Body | 1900 MHz | $\epsilon_r = 53.3 \pm 5\%$  | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | <b>5.1</b> $\pm 9.5\%$ (k=2) | Boundary effect:                      |
|      | ConvF Y  | <b>5.1</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.50</b>                     |
|      | ConvF Z  | <b>5.1</b> $\pm 9.5\%$ (k=2) | Depth <b>2.57</b>                     |

## Conversion Factor Assessment



**Head                      1450 MHz                       $\epsilon_r = 40.5 \pm 5\%$                        $\sigma = 1.20 \pm 5\%$  mho/m**

ConvF X                      **6.1**  $\pm 8.9\%$  (k=2)

Boundary effect:

ConvF Y                      **6.1**  $\pm 8.9\%$  (k=2)

Alpha                      **0.49**

ConvF Z                      **6.1**  $\pm 8.9\%$  (k=2)

Depth                      **2.34**

**Head                      1950 MHz                       $\epsilon_r = 40.0 \pm 5\%$                        $\sigma = 1.40 \pm 5\%$  mho/m**

ConvF X                      **5.2**  $\pm 8.9\%$  (k=2)

Boundary effect:

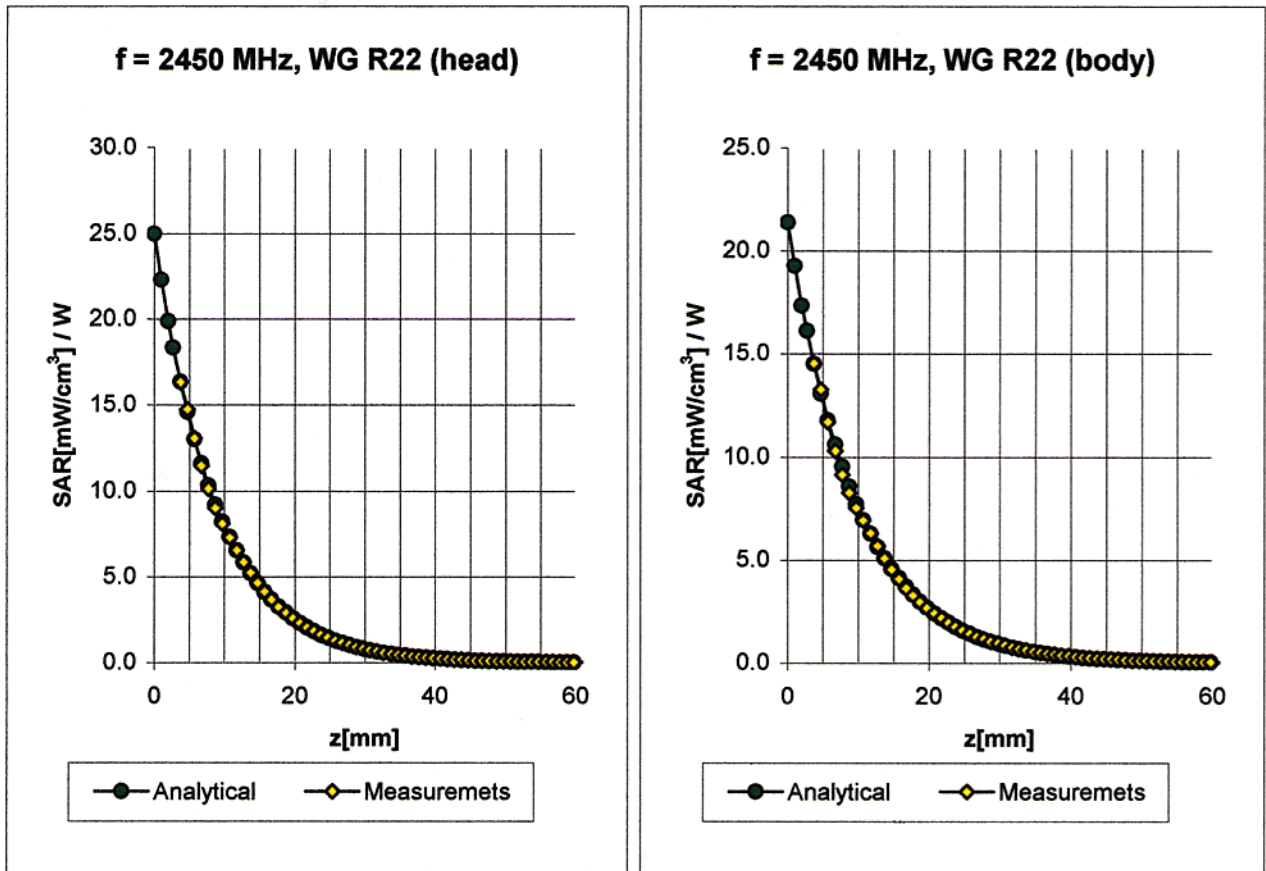
ConvF Y                      **5.2**  $\pm 8.9\%$  (k=2)

Alpha                      **0.47**

ConvF Z                      **5.2**  $\pm 8.9\%$  (k=2)

Depth                      **2.68**

## Conversion Factor Assessment



|             |             |                              |                             |                                       |
|-------------|-------------|------------------------------|-----------------------------|---------------------------------------|
| <b>2450</b> | <b>Head</b> | <b>MHz</b>                   | $\epsilon_r = 39.2 \pm 5\%$ | $\sigma = 1.80 \pm 5\% \text{ mho/m}$ |
|             | ConvF X     | <b>4.9</b> $\pm 8.9\%$ (k=2) | Boundary effect:            |                                       |
|             | ConvF Y     | <b>4.9</b> $\pm 8.9\%$ (k=2) | Alpha                       | <b>1.00</b>                           |
|             | ConvF Z     | <b>4.9</b> $\pm 8.9\%$ (k=2) | Depth                       | <b>1.66</b>                           |
| <b>2450</b> | <b>Body</b> | <b>MHz</b>                   | $\epsilon_r = 52.7 \pm 5\%$ | $\sigma = 1.95 \pm 5\% \text{ mho/m}$ |
|             | ConvF X     | <b>4.4</b> $\pm 8.9\%$ (k=2) | Boundary effect:            |                                       |
|             | ConvF Y     | <b>4.4</b> $\pm 8.9\%$ (k=2) | Alpha                       | <b>1.00</b>                           |
|             | ConvF Z     | <b>4.4</b> $\pm 8.9\%$ (k=2) | Depth                       | <b>1.72</b>                           |

# Deviation from Isotropy in HSL

Error ( $\theta, \phi$ ),  $f = 900 \text{ MHz}$

