



# **SAR Evaluation Report** **Supplemental**

in accordance with the requirements of  
FCC Report and Order: ET Docket 93-62, and OET Bulletin 65 Supplement C

for

**TOUGHBOOK 07 MINI PC and Display**

**MODEL: CF-07 & CF-VDW07**

**FCC ID: ACJ9TGWLM-1**

**Nov. 12, 2001**

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**LAB CODE:200065-0**

## 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.

| Antenna Conducted Power Verification Data |    |                |                                 |                        |                                |
|-------------------------------------------|----|----------------|---------------------------------|------------------------|--------------------------------|
| Channel                                   | No | Frequency(MHz) | Conducted Power Before the Test | Test Duration (Minute) | Conducted Power After the Test |
| Low                                       | 1  | 2412           | 11.2                            | 25                     | 11.0                           |
| Middle                                    | 6  | 2437           | 14.1                            | 25                     | 14.0                           |
| High                                      | 11 | 2462           | 14.6                            | 25                     | 14.5                           |

## SAR TEST DATA SUMMARY

| Model No:CF-07 ( PC unit )                                |          |      |                 |                       |                                         |       |        |          |       |
|-----------------------------------------------------------|----------|------|-----------------|-----------------------|-----------------------------------------|-------|--------|----------|-------|
| Body SAR without separation distance to flat phantom      |          |      |                 |                       |                                         |       |        |          |       |
| Mode                                                      | Position | Ch   | Frequency [MHz] | Conducted Power [dBm] | Worst case SAR, averaged over 1g [mW/g] |       |        |          |       |
|                                                           |          |      |                 |                       | Set-up condition (applicable checked)   |       |        | Measured | Limit |
|                                                           |          |      |                 |                       | Internal fixed Ant                      | Cheek | Tilted |          |       |
| SS 2450                                                   | Body     | L/1  | 2412            | 11.2                  | X                                       |       |        | 0.0075   | 1.6   |
| SS 2450                                                   | Body     | M/6  | 2437            | 14.1                  | X                                       |       |        | 0.0095   | 1.6   |
| SS 2450                                                   | Body     | H/11 | 2462            | 14.6                  | X                                       |       |        | 0.0068   | 1.6   |
| Note: Z-Axis Scan Graph @Channel 6 / 2437MHz is attached. |          |      |                 |                       |                                         |       |        |          |       |

| Model No:CF-CDW07 ( Display unit )                       |          |      |                 |                       |                                         |       |        |          |       |
|----------------------------------------------------------|----------|------|-----------------|-----------------------|-----------------------------------------|-------|--------|----------|-------|
| Body SAR without separation distance to flat phantom     |          |      |                 |                       |                                         |       |        |          |       |
| Mode                                                     | Position | Ch   | Frequency [MHz] | Conducted Power [dBm] | Worst case SAR, averaged over 1g [mW/g] |       |        |          |       |
|                                                          |          |      |                 |                       | Set-up condition (applicable checked)   |       |        | Measured | Limit |
|                                                          |          |      |                 |                       | Internal fixed Ant                      | Cheek | Tilted |          |       |
| SS 2450                                                  | Body     | L/1  | 2412            | 11.2                  | X                                       |       |        | 0.0046   | 1.6   |
| SS 2450                                                  | Body     | M/6  | 2437            | 14.1                  | X                                       |       |        | 0.0054   | 1.6   |
| SS 2450                                                  | Body     | H/11 | 2462            | 14.6                  | X                                       |       |        | 0.0082   | 1.6   |
| Note: Z-Axis Scan Graph @Channel 11/2462MHz is attached. |          |      |                 |                       |                                         |       |        |          |       |

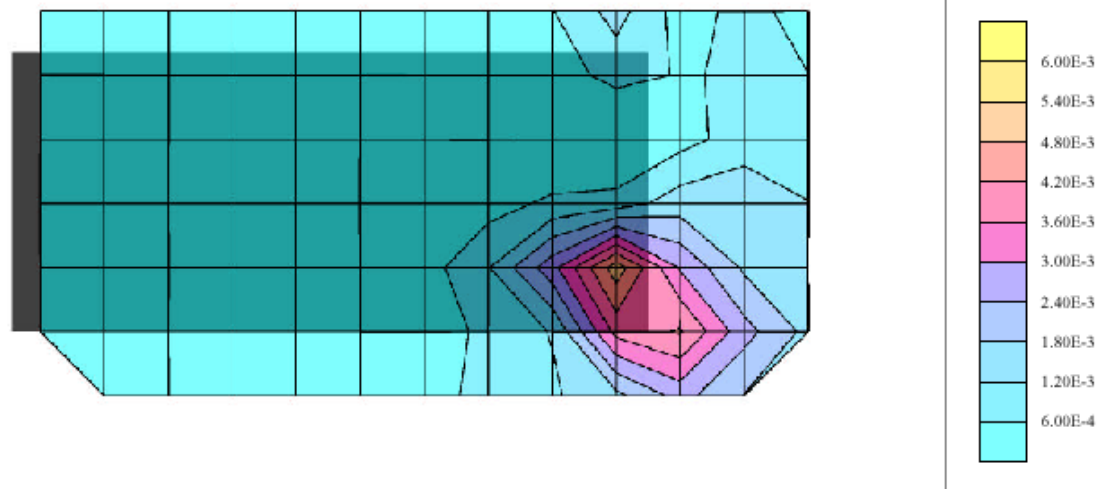
**CF-07 (Body-worn Configuration, L-Channel 01)**

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.53 \text{ mho/m}$   $\epsilon_r = 51.2$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7; SAR (1g): 0.0075 mW/g, SAR (10g): 0.0035 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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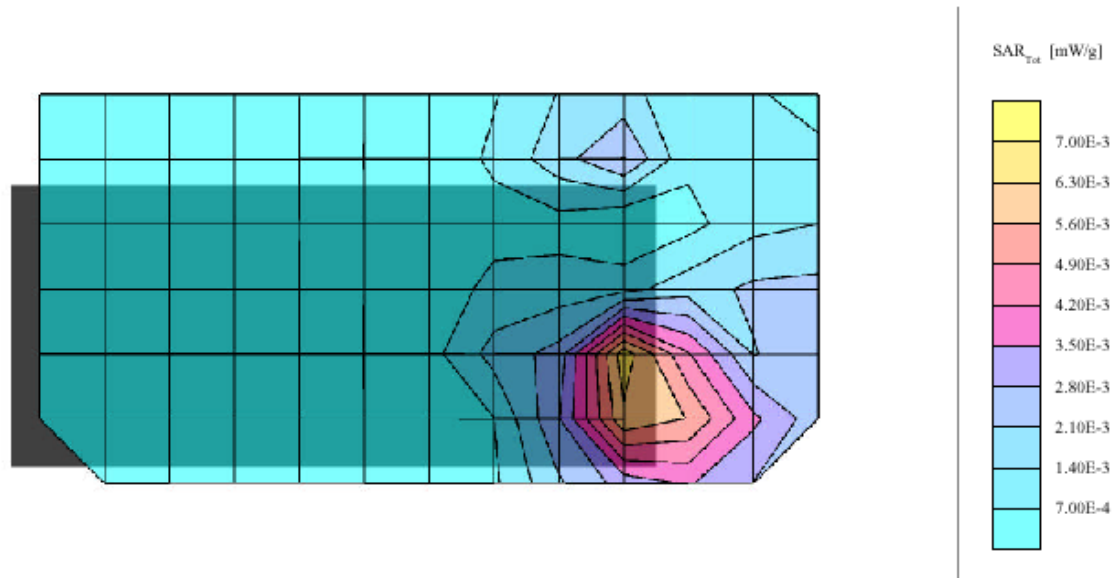
**CF-07 (Body-worn Configuration, M-Channel 06)**

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.53 \text{ mho/m}$   $\epsilon_r = 51.2$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.0095 mW/g, SAR (10g): 0.0047 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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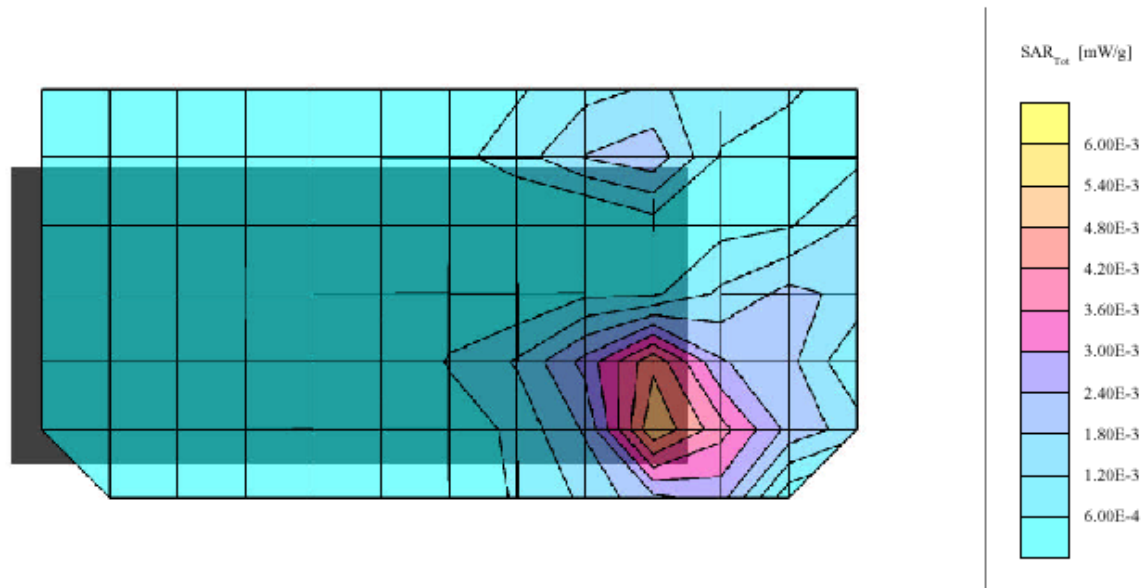
**CF-07 (Body-worn Configuration, H-Channel 11)**

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.53$  mho/m  $\epsilon_r = 51.2$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.0068 mW/g, SAR (10g): 0.0030 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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## Z-Axis Scan For Model No CF-07 @ Channel 6/2437MHz

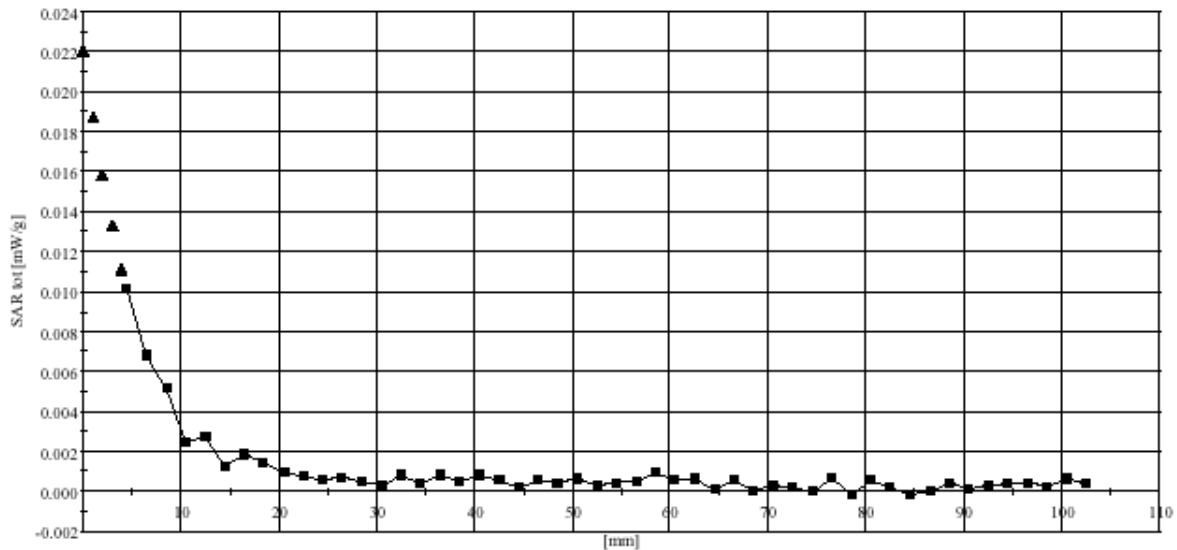
CF-07 (Body-worn Configuration, L-Channel 06)

Generic Twin Phantom; Section; Position: ; Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.53 \text{ mho/m}$   $\epsilon_r = 51.2$   $\rho = 1.00 \text{ g/cm}^3$

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



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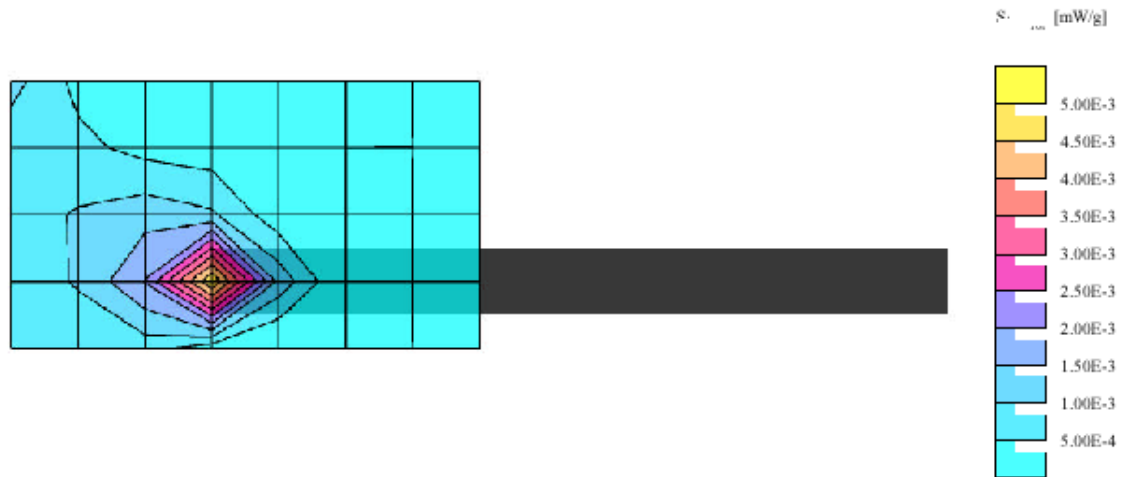
## CF-VDW07 (Body\_Worn Configuration, L-Channel 01)

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.55 \text{ mho/m}$   $\epsilon_r = 51.3$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.0046 mW/g, SAR (10g): 0.0019 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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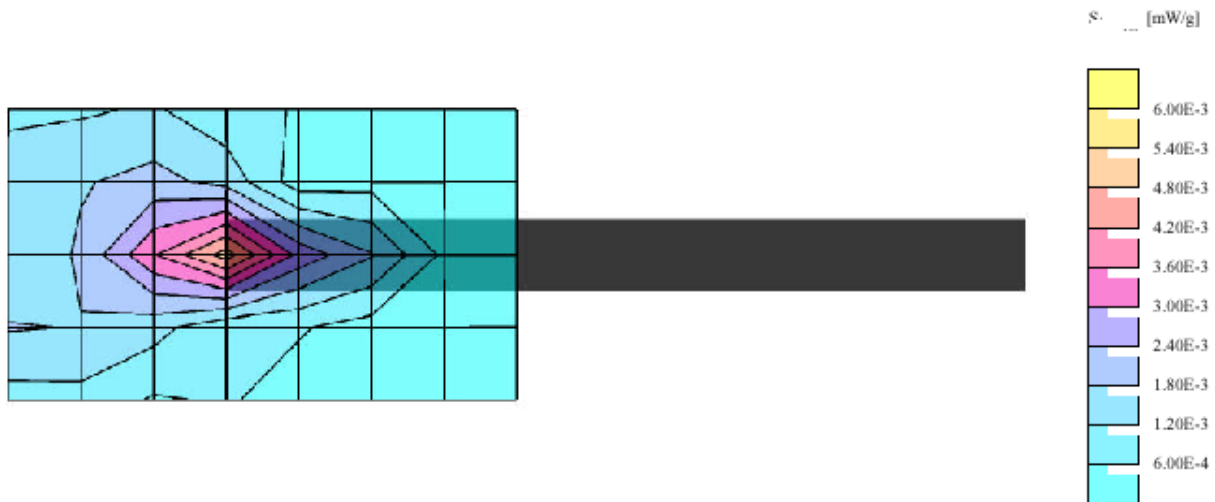
## CF-VDW07 (Body\_Worn Configuration, M-Channel 06)

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.55$  mho/m  $\epsilon_r = 51.3$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.0054 mW/g, SAR (10g): 0.0023 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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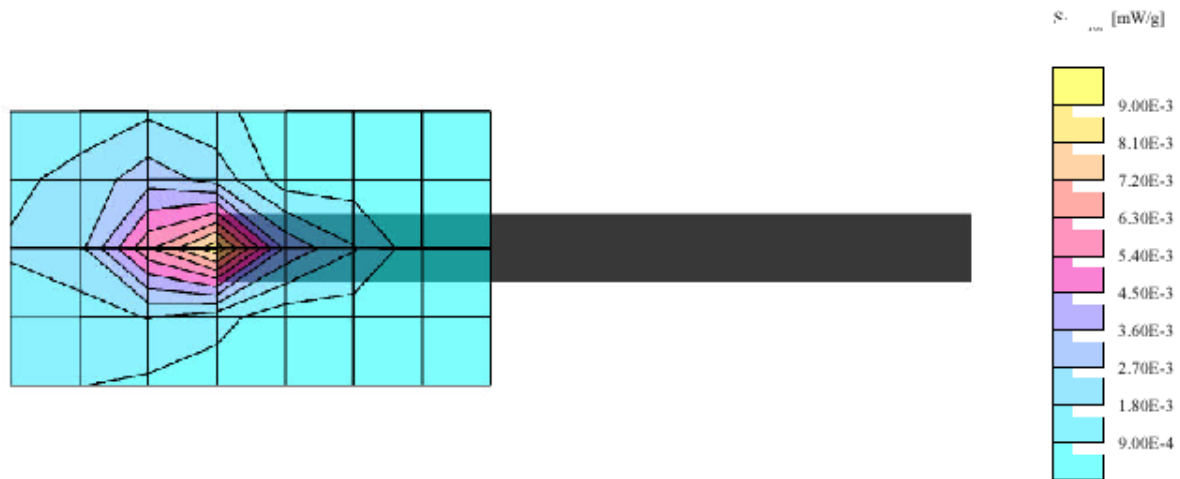
## CF-VDW07 (Body\_Worn Configuration, H-Channel 11)

Generic Twin Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.55 \text{ mho/m}$   $\epsilon_r = 51.3$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.0082 mW/g, SAR (10g): 0.0036 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



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## Z-Axis Scan Graph for Model No:CF-VDW07 @Channel 11/2462MHz

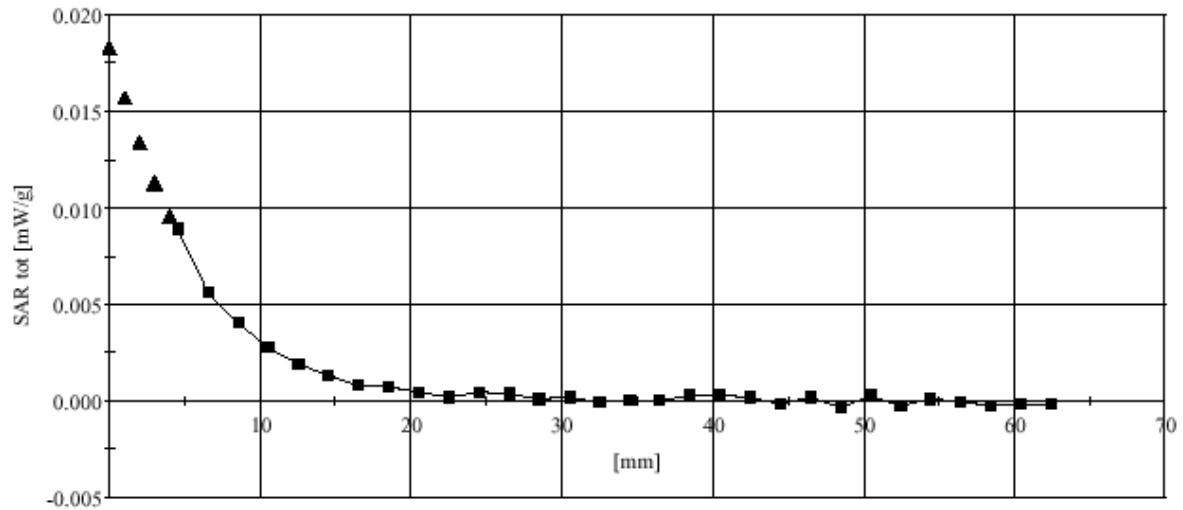
CF-VDW07 (Body\_Worn Configuration, H-Channel 11)

Generic Twin Phantom; Section; Position: ; Frequency: 1800 MHz

Probe: ET3DV6 - SN1577M; ConvF(5.40,5.40,5.40); Crest factor: 1.0; Muscle 1800 MHz:  $\sigma = 1.55 \text{ mho/m}$   $\epsilon_r = 51.3$   $\rho = 1.00 \text{ g/cm}^3$

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



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