

## APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.914 \text{ S/m}$ ;  $\epsilon_r = 41.304$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/08/2021; Ambient Temp: 23.8°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7357; ConvF(10.18, 10.18, 10.18) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

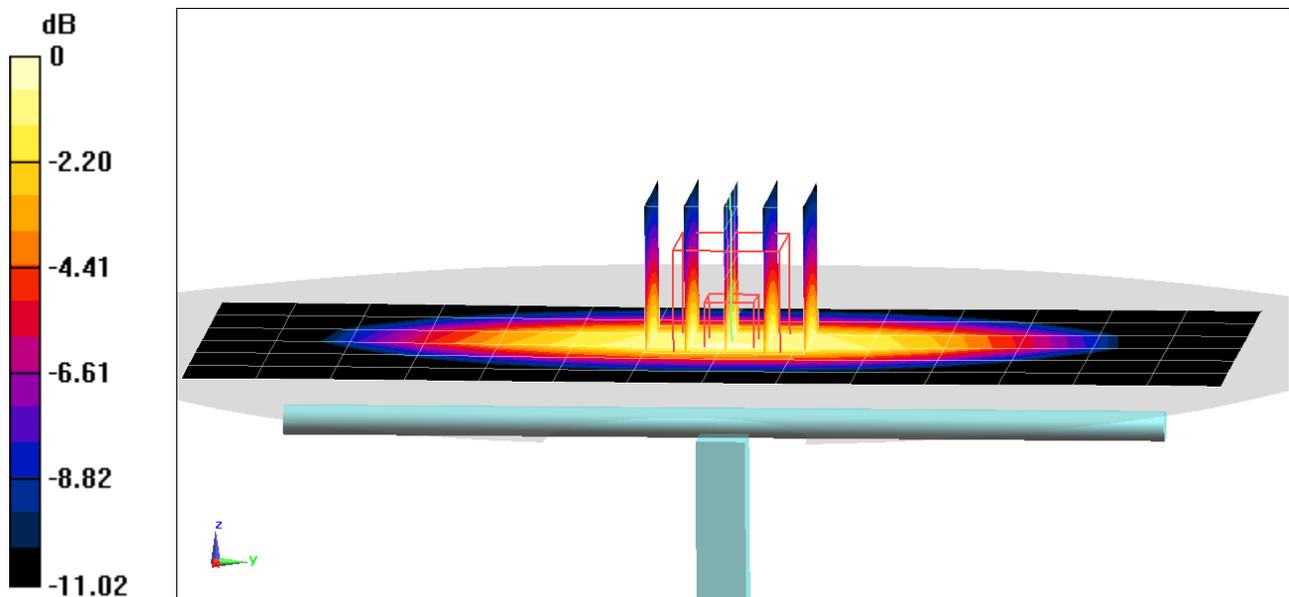
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.82 W/kg

**SAR(1 g) = 1.82 W/kg**

Deviation(1 g) = 3.64%



0 dB = 2.47 W/kg = 3.93 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.917 \text{ S/m}$ ;  $\epsilon_r = 41.732$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/10/2021; Ambient Temp: 22.8°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7357; ConvF(10.18, 10.18, 10.18) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

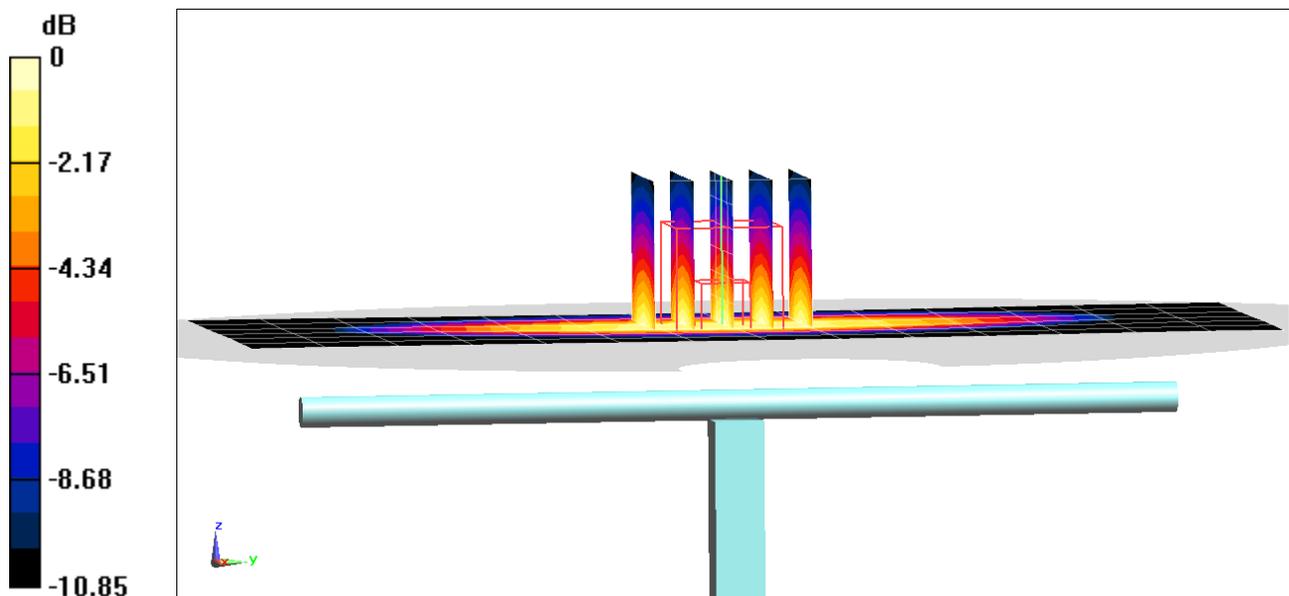
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.80 W/kg

**SAR(1 g) = 1.8 W/kg**

Deviation(1 g) = 2.51%



0 dB = 2.45 W/kg = 3.89 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1161**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.892 \text{ S/m}$ ;  $\epsilon_r = 41.239$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/05/2021; Ambient Temp: 22.2°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7571; ConvF(10.02, 10.02, 10.02) @ 750 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

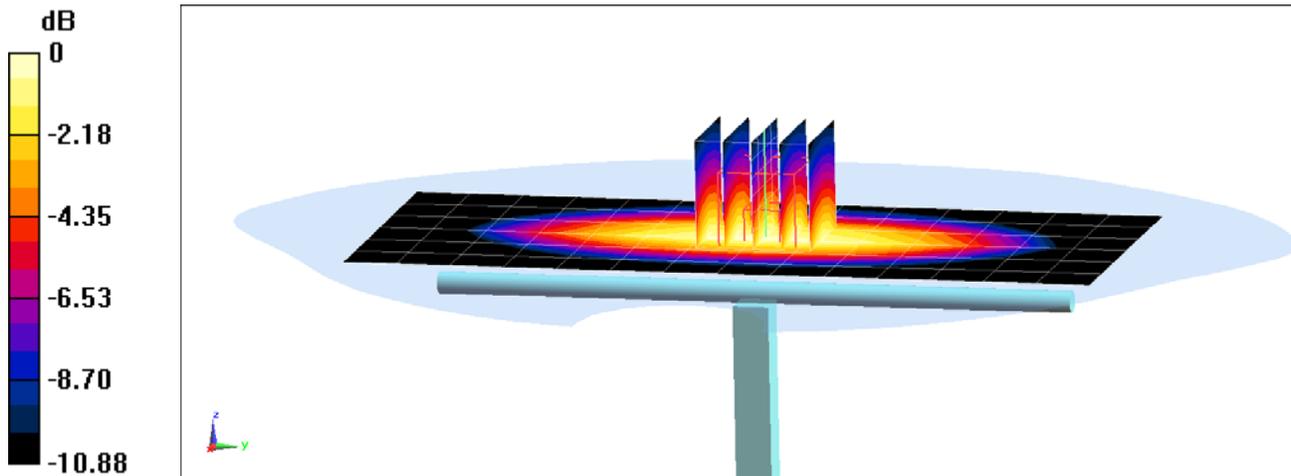
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 44.03 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 2.60 W/kg

**SAR(1 g) = 1.68 W/kg**

Deviation(1 g) = 4.61%



0 dB = 2.28 W/kg = 3.58 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1054**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1  
Medium: 750 Head Medium parameters used:  
 $f = 750 \text{ MHz}$ ;  $\sigma = 0.912 \text{ S/m}$ ;  $\epsilon_r = 41.284$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/18/2021; Ambient Temp: 20.5; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7308; ConvF(10.63, 10.63, 10.63) @ 750 MHz; Calibrated: 7/31/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1450; Calibrated: 8/11/2020  
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

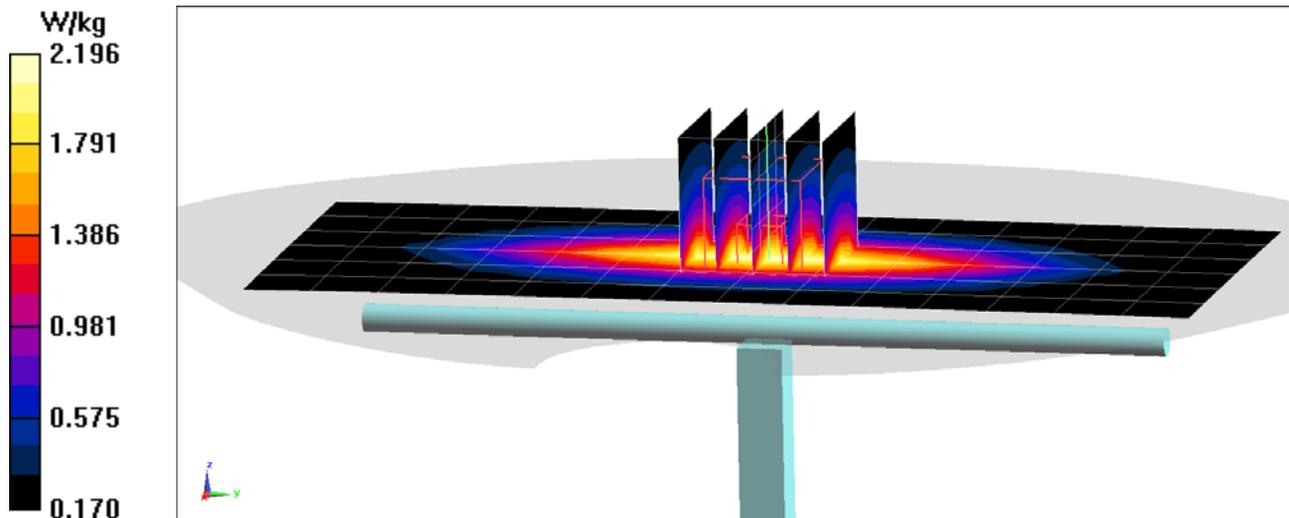
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 43.24 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.52 W/kg

**SAR(1 g) = 1.6 W/kg**

Deviation(1 g) = -7.19%



# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.885 \text{ S/m}$ ;  $\epsilon_r = 40.617$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/14/2021; Ambient Temp: 23.7°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3589; ConvF(8.57, 8.57, 8.57) @ 835 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V4.0 Left (30); Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

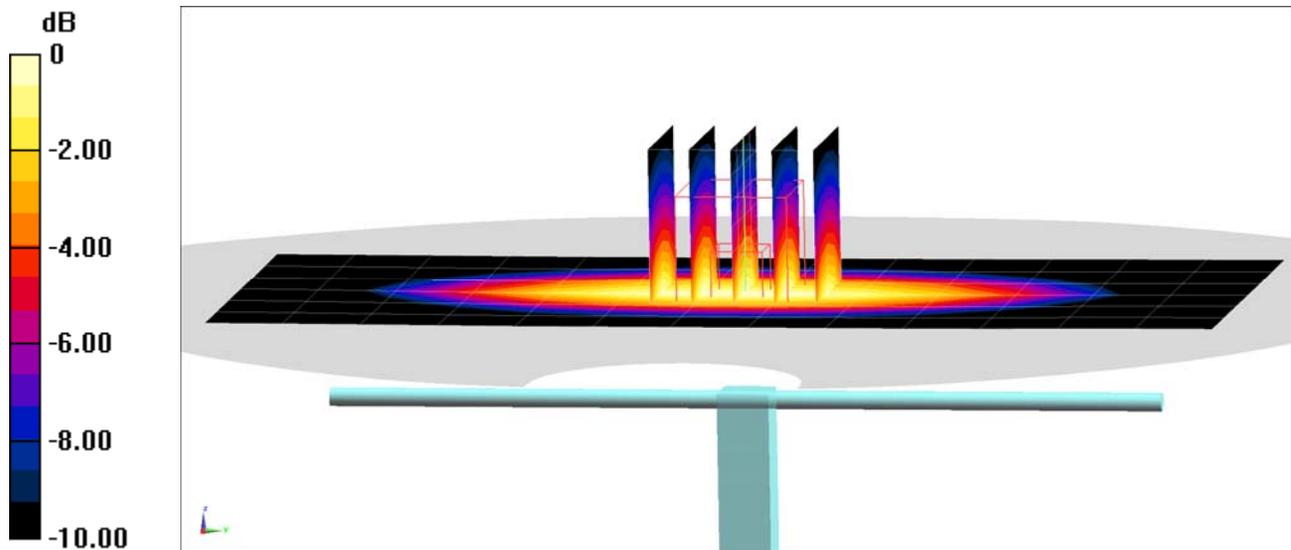
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.03 W/kg

**SAR(1 g) = 1.91 W/kg**

Deviation(1 g) = 1.27%



0 dB = 2.63 W/kg = 4.20 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.873 \text{ S/m}$ ;  $\epsilon_r = 41.617$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/16/2021; Ambient Temp: 23.7°C; Tissue Temp: 23.1°C

Probe: EX3DV4 - SN3589; ConvF(8.57, 8.57, 8.57) @ 835 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V4.0 Left (30); Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

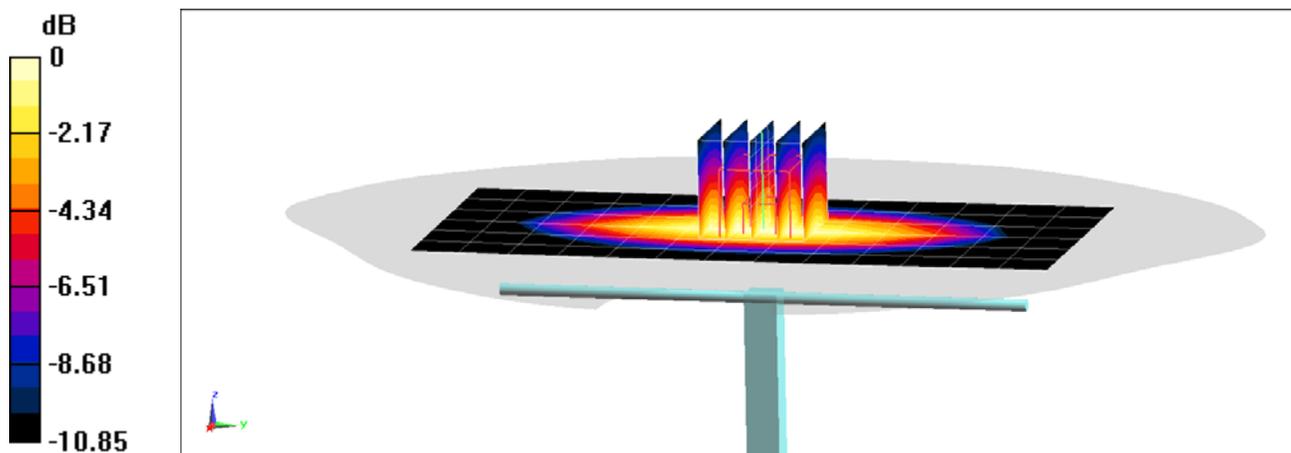
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.75 W/kg

**SAR(1 g) = 1.78 W/kg**

Deviation(1 g) = -5.62



0 dB = 2.41 W/kg = 3.82 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.894 \text{ S/m}$ ;  $\epsilon_r = 41.31$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/21/2021; Ambient Temp: 24.3°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7571; ConvF(9.76, 9.76, 9.76) @ 835 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

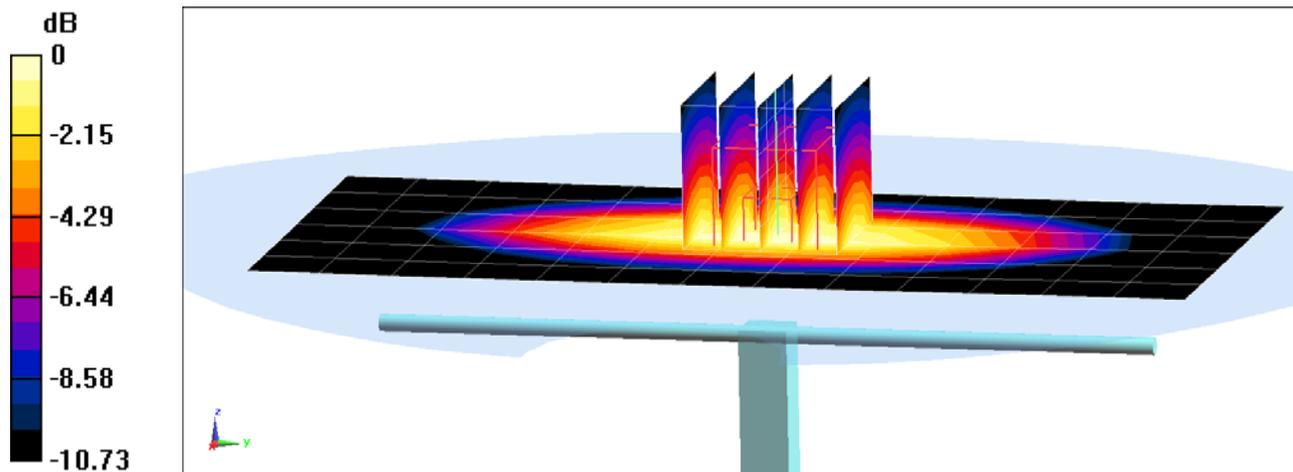
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.16 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.96 W/kg

**SAR(1 g) = 1.95 W/kg**

Deviation(1 g) = 3.39%



0 dB = 2.62 W/kg = 4.18 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.889 \text{ S/m}$ ;  $\epsilon_r = 40.644$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/30/2021; Ambient Temp: 23.5°C; Tissue Temp: 23.5°C

Probe: EX3DV4 - SN7571; ConvF(9.76, 9.76, 9.76) @ 835 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

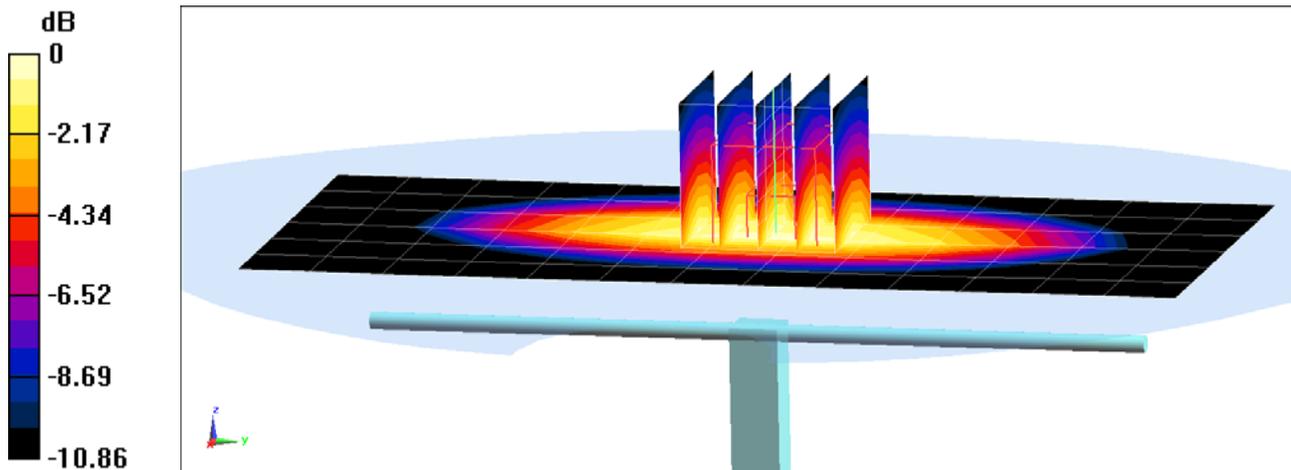
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 45.26 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.79 W/kg

**SAR(1 g) = 1.83 W/kg**

Deviation(1 g) = -5.28%



0 dB = 2.47 W/kg = 3.93 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.883 \text{ S/m}$ ;  $\epsilon_r = 40.346$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/18/2021; Ambient Temp: 23.9°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN3589; ConvF(8.57, 8.57, 8.57) @ 835 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V4.0 Left (30); Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

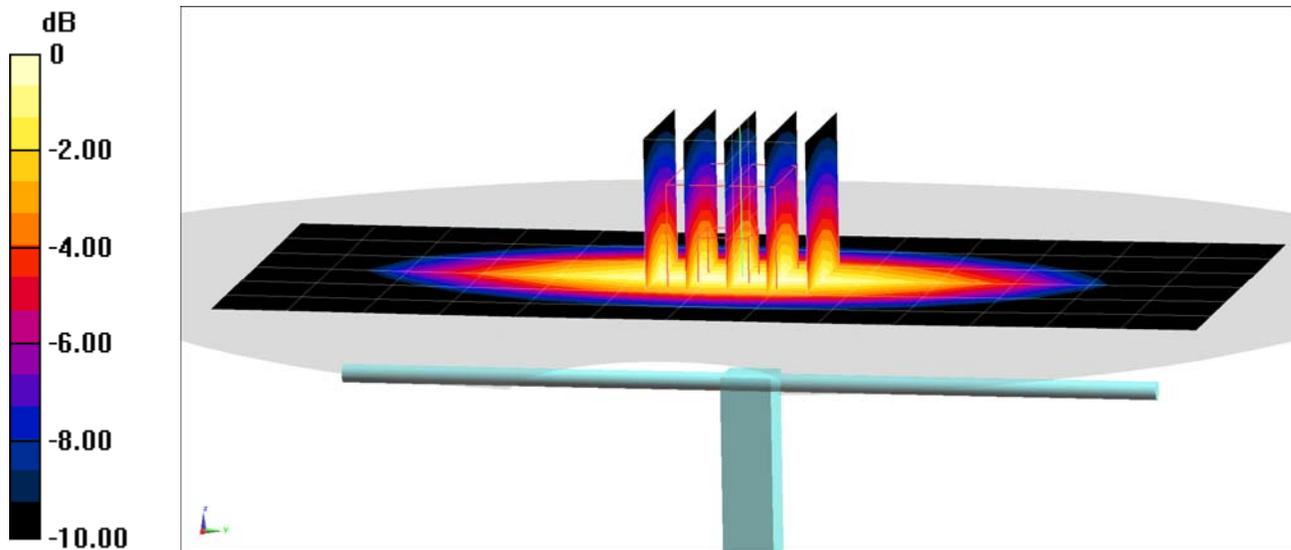
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.01 W/kg

**SAR(1 g) = 1.9 W/kg**

Deviation(1 g) = 0.74%



0 dB = 2.60 W/kg = 4.15 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.947 \text{ S/m}$ ;  $\epsilon_r = 54.962$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/13/2021; Ambient Temp: 23.2°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7357; ConvF(10.29, 10.29, 10.29) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

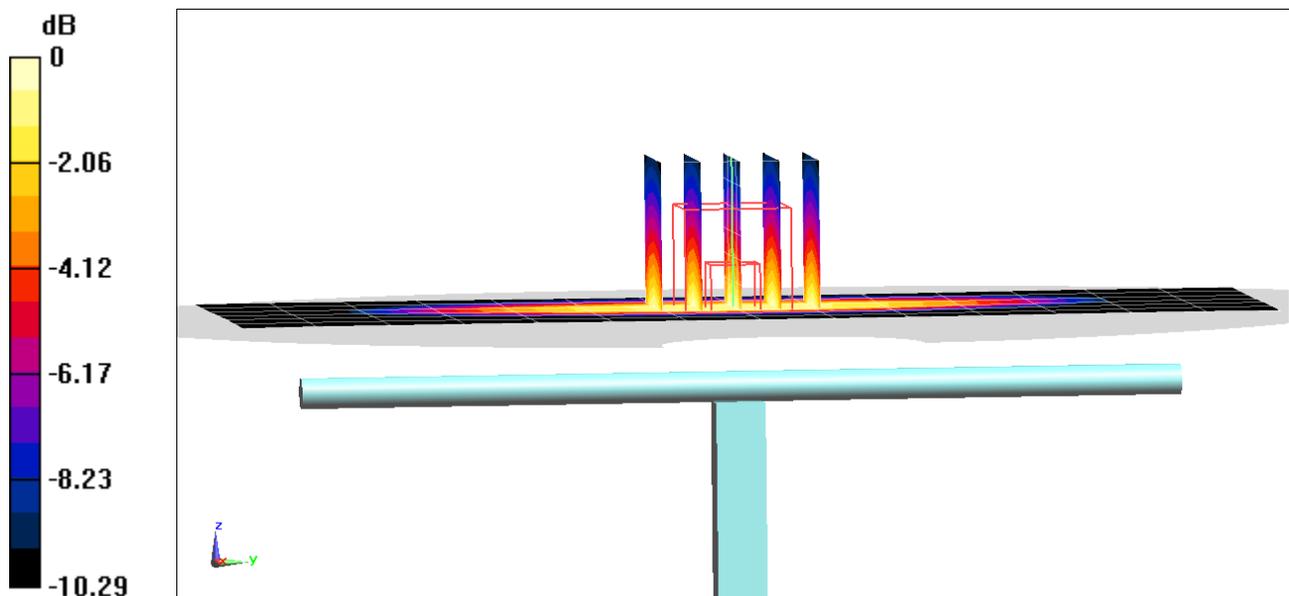
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.76 W/kg

**SAR(1 g) = 1.75 W/kg**

Deviation(1 g) = 1.63%



0 dB = 2.39 W/kg = 3.78 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.965 \text{ S/m}$ ;  $\epsilon_r = 54.958$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/15/2021; Ambient Temp: 22.4°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7357; ConvF(10.29, 10.29, 10.29) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

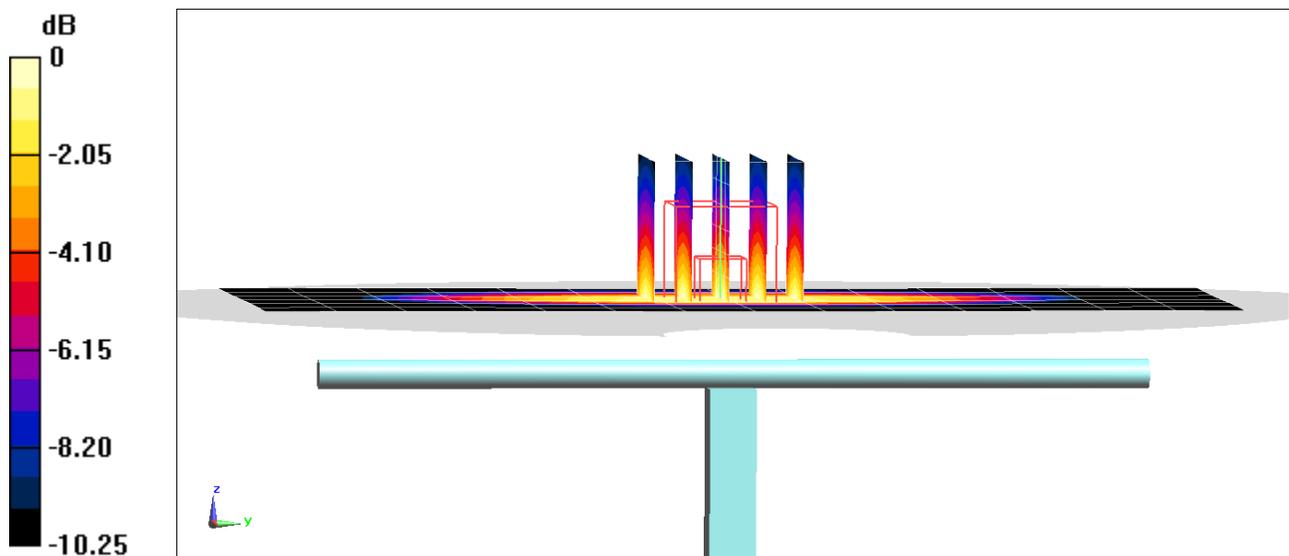
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.79 W/kg

**SAR(1 g) = 1.82 W/kg; SAR(10 g) = 1.21 W/kg**

Deviation(1 g) = 5.69%; Deviation(10 g) = 6.70%



0 dB = 2.45 W/kg = 3.89 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.97 \text{ S/m}$ ;  $\epsilon_r = 54.025$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/17/2021; Ambient Temp: 24.0°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7357; ConvF(10.29, 10.29, 10.29) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

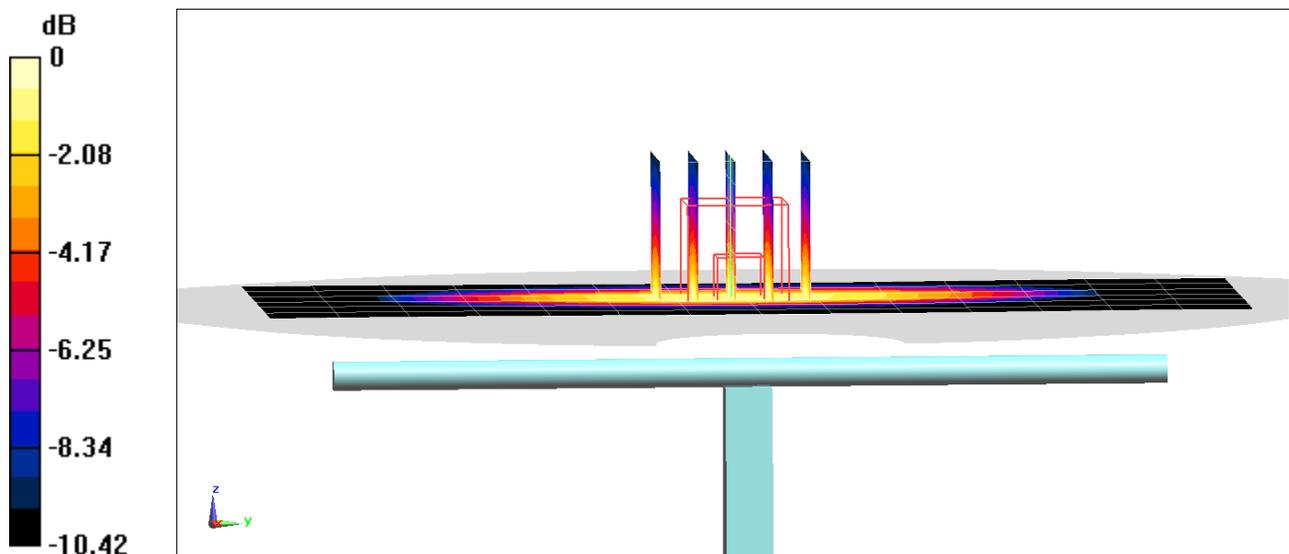
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.80 W/kg

**SAR(1 g) = 1.77 W/kg; SAR(10 g) = 1.16 W/kg**

Deviation(1 g) = 2.79%; Deviation(10 g) = 2.29%



0 dB = 2.41 W/kg = 3.82 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.971 \text{ S/m}$ ;  $\epsilon_r = 54.472$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/04/2021; Ambient Temp: 21.9°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7357; ConvF(10.29, 10.29, 10.29) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

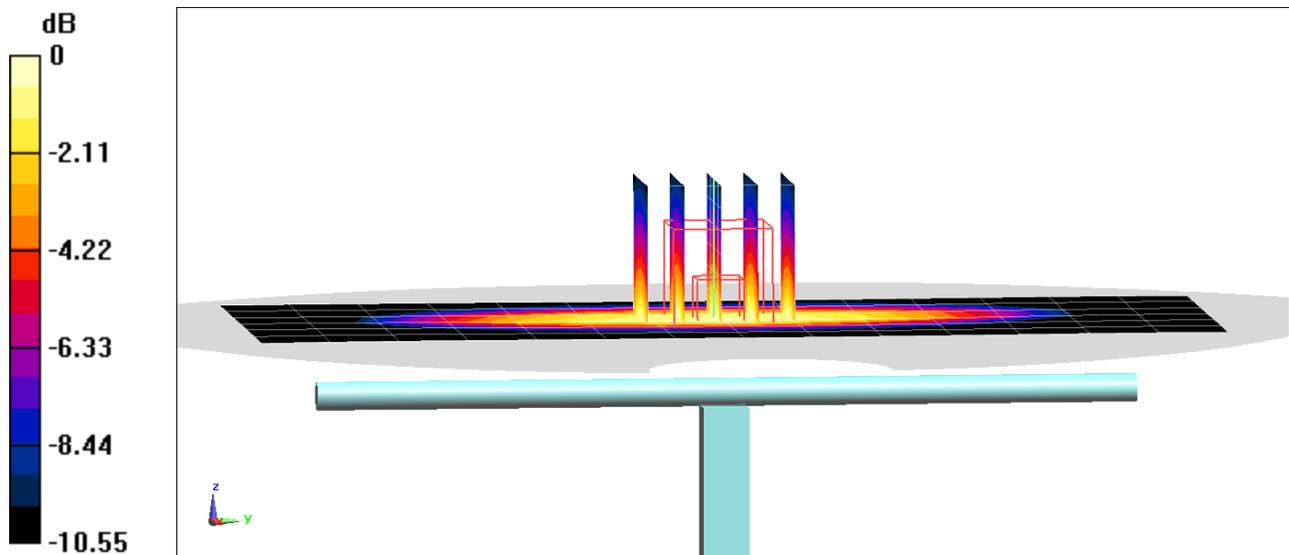
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.80 W/kg

**SAR(1 g) = 1.77 W/kg; SAR(10 g) = 1.16 W/kg**

Deviation(1 g) = 2.79%; Deviation(10 g) = 2.29%



# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.95 \text{ S/m}$ ;  $\epsilon_r = 53.998$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/23/2021; Ambient Temp: 23.7°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3589; ConvF(8.31, 8.31, 8.31) @ 835 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

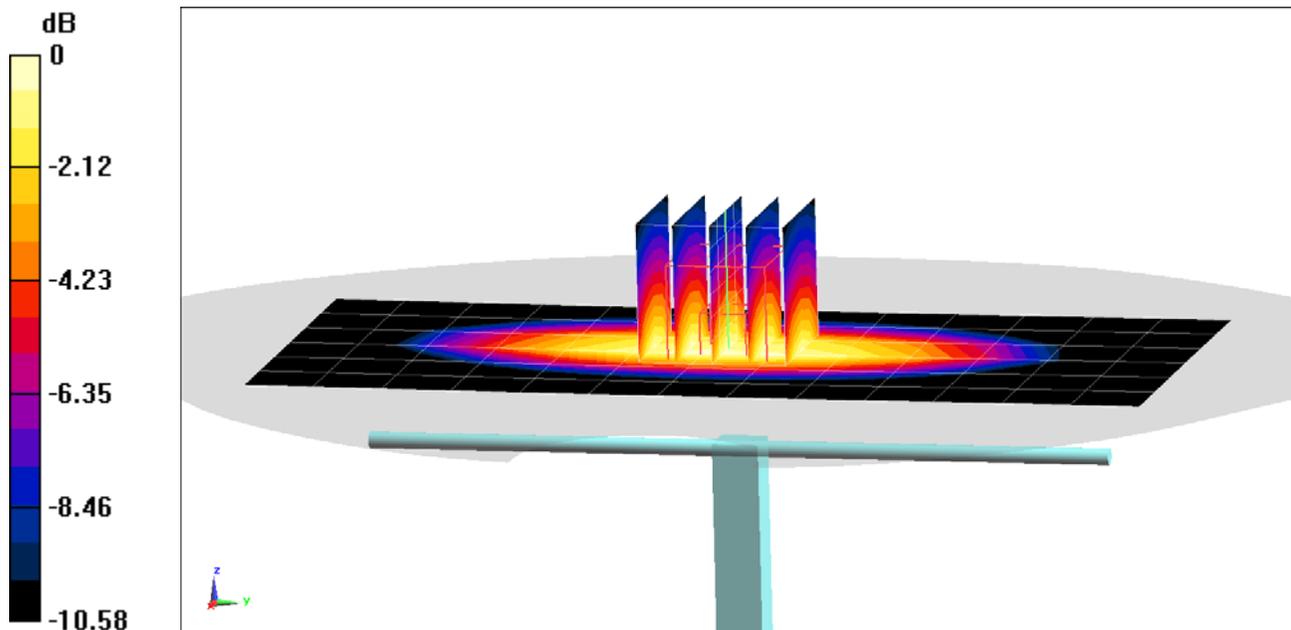
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.22 W/kg

**SAR(1 g) = 2.06 W/kg; SAR(10 g) = 1.35 W/kg**

Deviation(1 g) = 5.64 %; Deviation(10 g) = 5.47%



0 dB = 2.81 W/kg = 4.49 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.953 \text{ S/m}$ ;  $\epsilon_r = 53.539$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/27/2021; Ambient Temp: 24.7°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN3589; ConvF(8.31, 8.31, 8.31) @ 835 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

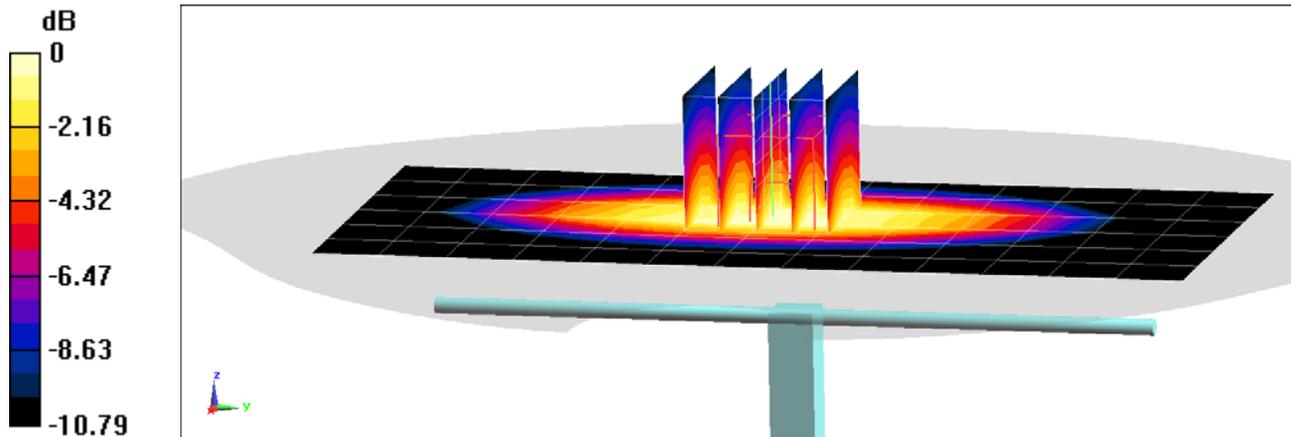
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 45.00 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 3.25 W/kg

**SAR(1 g) = 2.01 W/kg**

Deviation(1 g) = 2.45%



0 dB = 2.77 W/kg = 4.42 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.943 \text{ S/m}$ ;  $\epsilon_r = 52.866$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/11/2021; Ambient Temp: 23.3°C; Tissue Temp: 24.4°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/15/2021

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

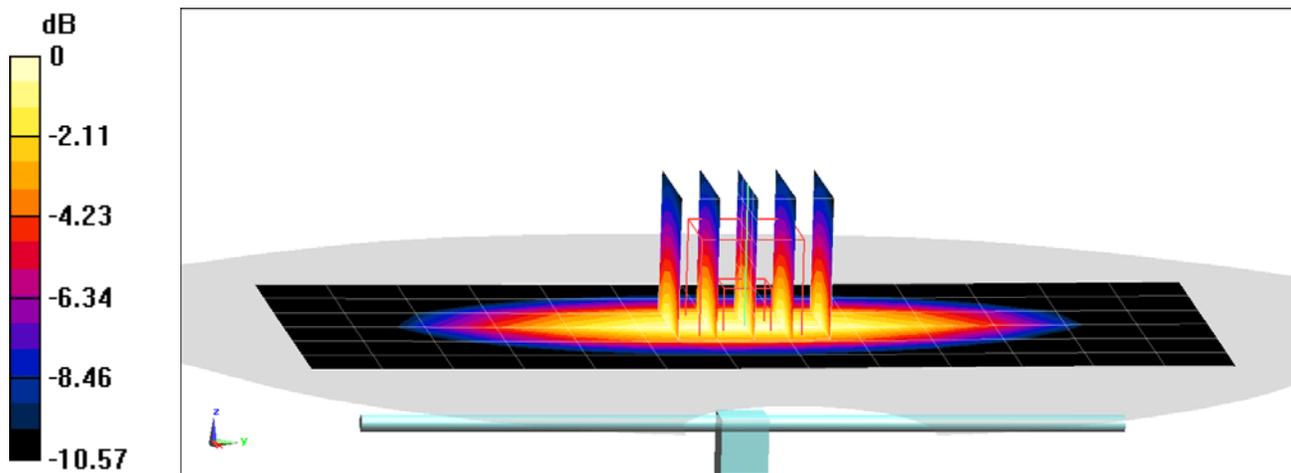
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.10 W/kg

**SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.31 W/kg**

Deviation(1 g) = 2.05%; Deviation(10 g) = 2.34%



0 dB = 2.70 W/kg = 4.31 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.941 \text{ S/m}$ ;  $\epsilon_r = 53.519$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/13/2021; Ambient Temp: 23.5°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/15/2021

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

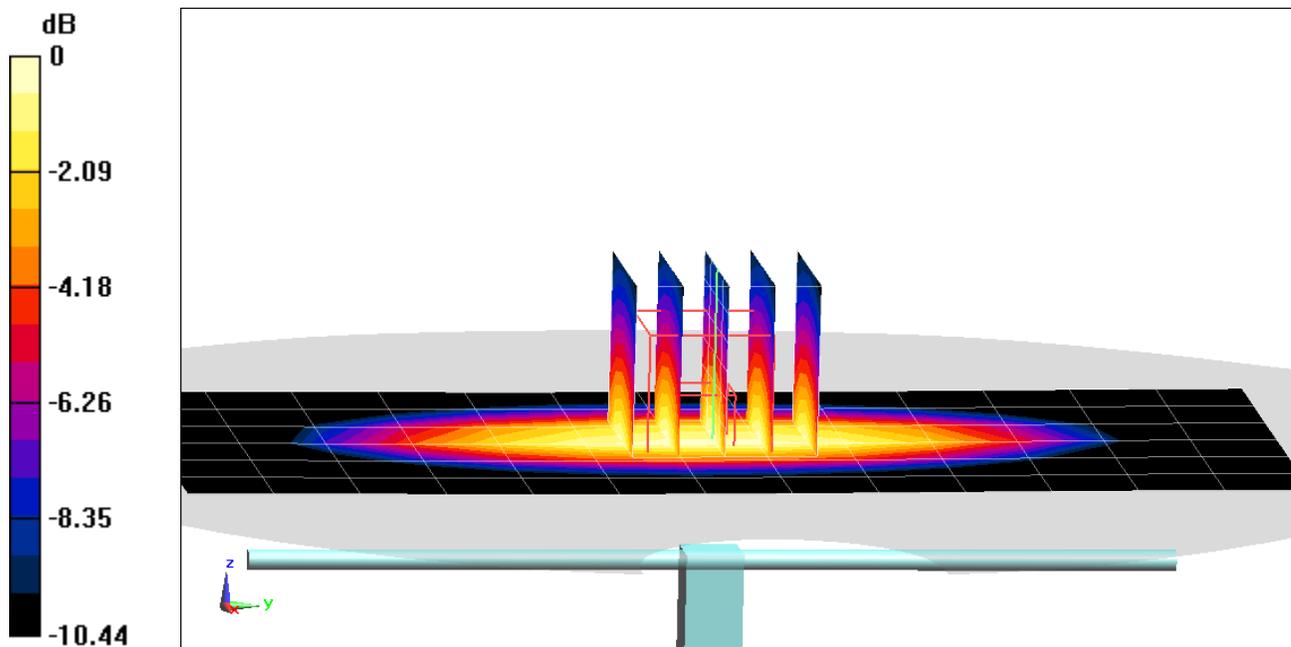
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.31 W/kg**

Deviation(1 g) = 2.05%; Deviation(10 g) = 2.34%



0 dB = 2.65 W/kg = 4.23 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.946 \text{ S/m}$ ;  $\epsilon_r = 52.918$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/15/2021; Ambient Temp: 23.2°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/15/2021

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

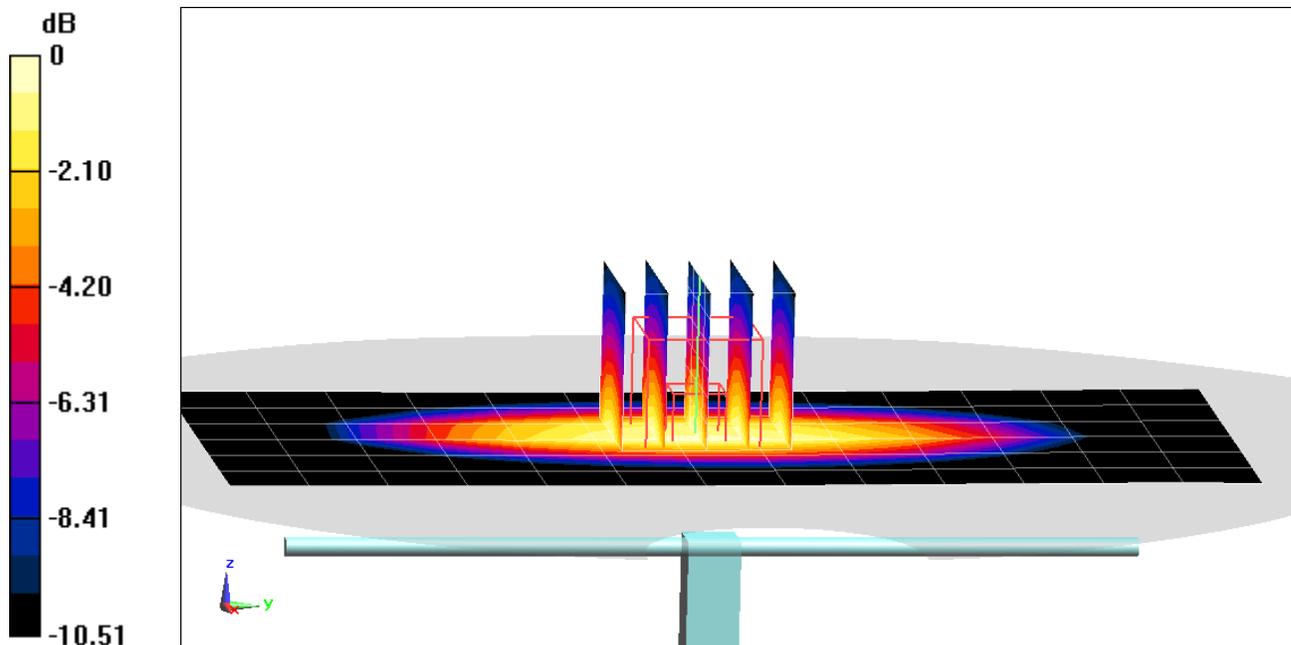
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.24 W/kg

**SAR(1 g) = 2.07 W/kg**

Deviation(1 g) = 5.50%



# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.944 \text{ S/m}$ ;  $\epsilon_r = 52.665$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/19/2021; Ambient Temp: 21.9°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/15/2021

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

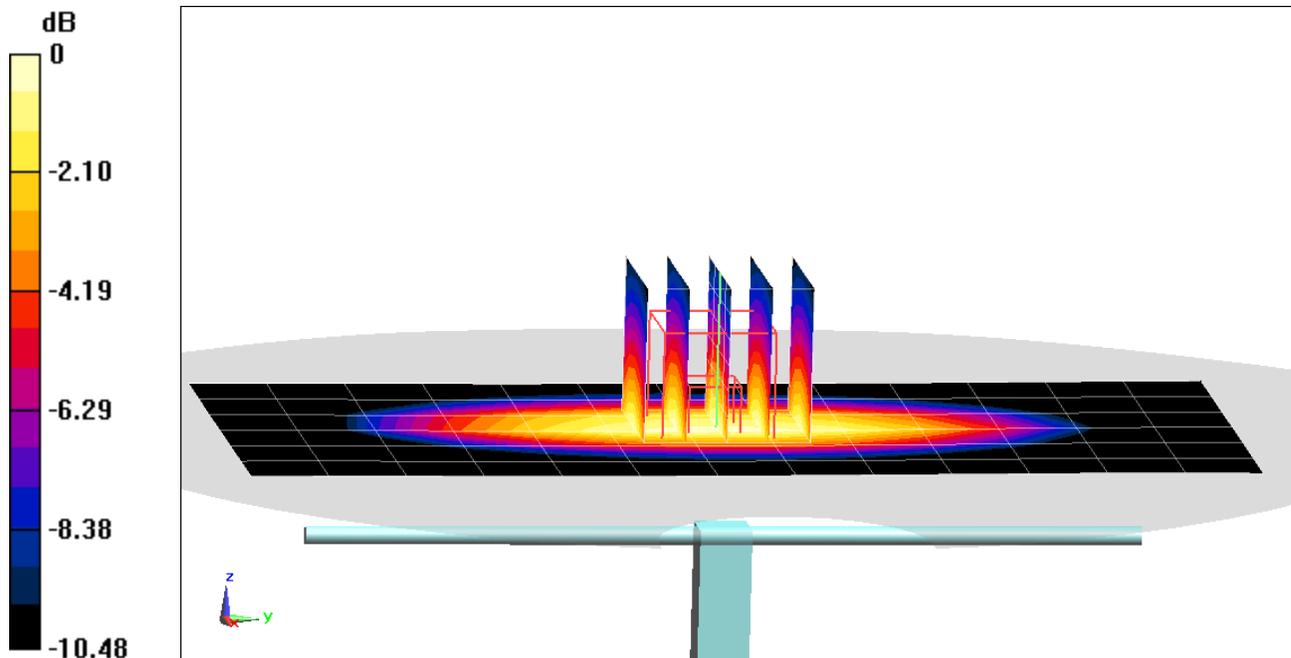
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.18 W/kg

**SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.35 W/kg**

Deviation(1 g) = 5.13%; Deviation(10 g) = 5.47%



0 dB = 2.78 W/kg = 4.44 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

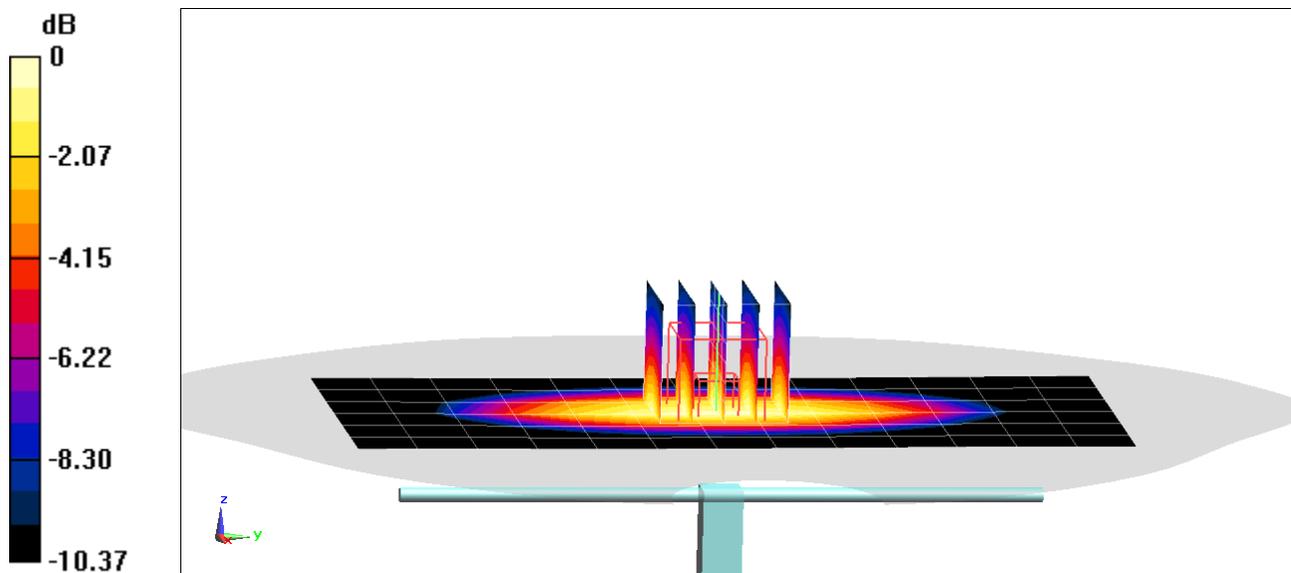
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used:  
 $f = 835 \text{ MHz}$ ;  $\sigma = 0.946 \text{ S/m}$ ;  $\epsilon_r = 54.235$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/21/2021; Ambient Temp: 23.4°C; Tissue Temp: 23.2°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1334; Calibrated: 6/15/2021  
Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm  
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Peak SAR (extrapolated) = 2.99 W/kg  
**SAR(1 g) = 1.96 W/kg**  
Deviation(1 g) = 0.51%



# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.94 \text{ S/m}$ ;  $\epsilon_r = 53.115$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07/23/2021; Ambient Temp: 24.0°C; Tissue Temp: 23.1°C

Probe: EX3DV4 - SN7409; ConvF(9.66, 9.66, 9.66) @ 835 MHz; Calibrated: 6/21/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/15/2021

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

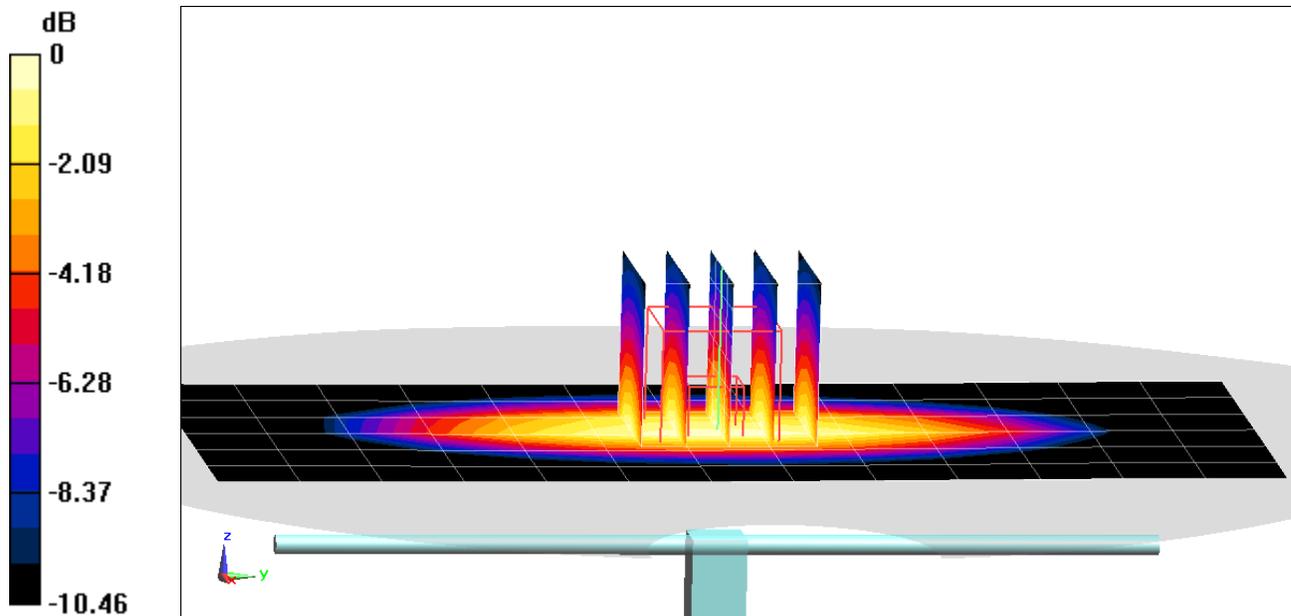
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 3.10 W/kg

**SAR(1 g) = 2 W/kg**

Deviation(1 g) = 2.56%



0 dB = 2.70 W/kg = 4.31 dBW/kg