

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0486M**

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 HEAD Medium parameters used:

$f = 2510$  MHz;  $\sigma = 1.889$  S/m;  $\epsilon_r = 39.271$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Test Date: 10/22/2019; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2510 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 7, Left Head, Cheek, Low.ch, QPSK, 20 MHz Bandwidth,  
1 RB, 99 RB Offset**

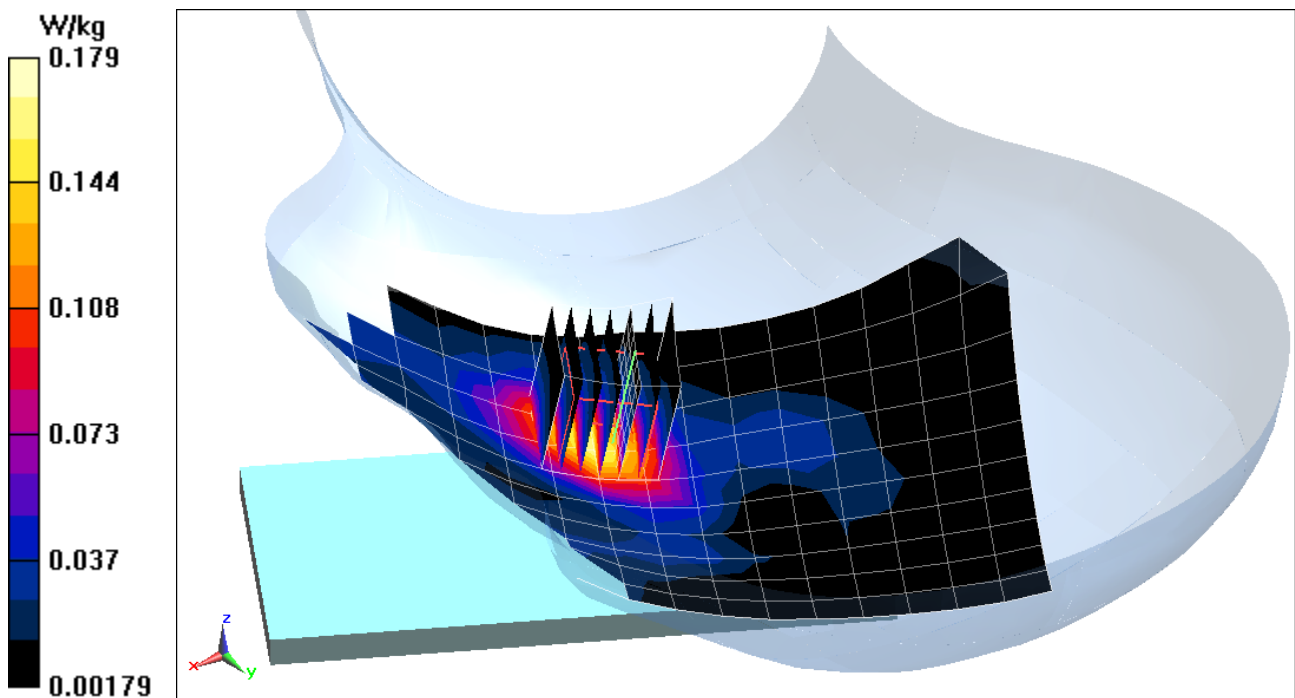
**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.879 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 0.213 W/kg

**SAR(1 g) = 0.123 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0328M**

Communication System: UID 0, LTE Band 48; Frequency: 3560 MHz; Duty Cycle: 1:1.58

Medium: 3500 Head Medium parameters used:

$f = 3560 \text{ MHz}$ ;  $\sigma = 2.843 \text{ S/m}$ ;  $\epsilon_r = 38.957$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/03/2019; Ambient Temp: 20.6°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN3589; ConvF(6.16, 6.16, 6.16) @ 3560 MHz; Calibrated: 1/25/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 20; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 48, ULCA, Right Head, Tilt,**  
**PCC: 20 MHz Bandwidth, Ch. 55340, QPSK, 50 RB, 50 RB Offset**  
**SCC: 20 MHz Bandwidth, Ch. 55538, QPSK, 50 RB, 0 RB Offset**

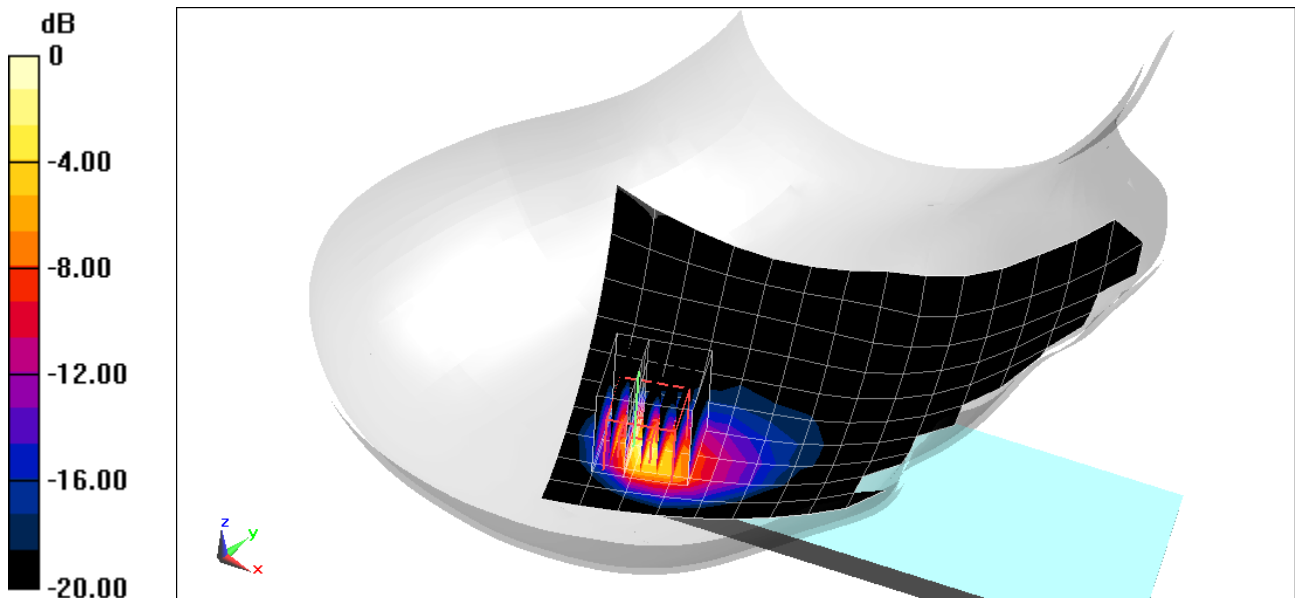
**Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 19.64 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.73 W/kg

**SAR(1 g) = 1.04 W/kg**



0 dB = 2.17 W/kg = 3.36 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0480M**

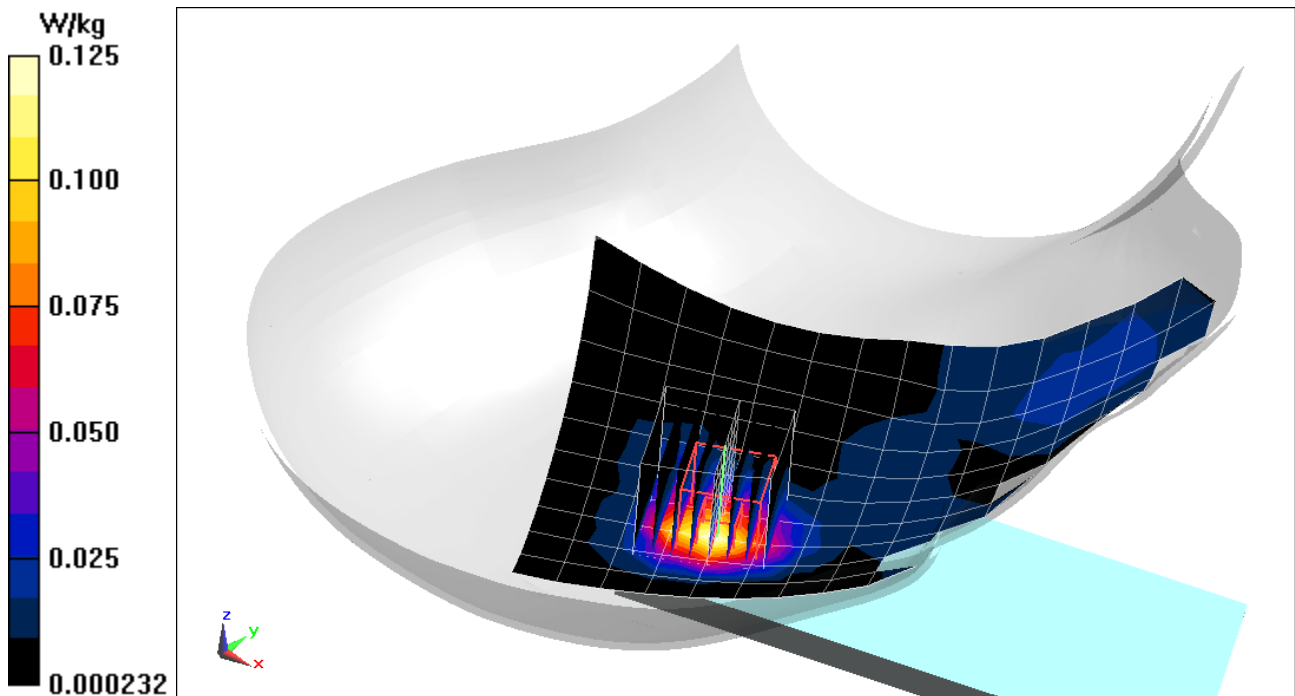
Communication System: UID 0, \_LTE Band 41 (Class 2); Frequency: 2593 MHz; Duty Cycle: 1:2.31  
Medium: 2450 Head Medium parameters used (interpolated):  
 $f = 2593 \text{ MHz}$ ;  $\sigma = 1.958 \text{ S/m}$ ;  $\epsilon_r = 37.75$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section

Test Date: 11/01/2019; Ambient Temp: 21.9°C; Tissue Temp: 19.3°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2593 MHz; Calibrated: 2/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn665; Calibrated: 2/13/2019  
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 41 PC2, ULCA, Right Head, Tilt**  
**PCC: 20 MHz Bandwidth, Ch. 40620, QPSK, 1 RB, 0 RB Offset**  
**SCC: 20 MHz Bandwidth, Ch. 40422, QPSK, 1 RB, 99 Offset**

**Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 6.953 V/m; Power Drift = 0.16 dB  
Peak SAR (extrapolated) = 0.151 W/kg  
**SAR(1 g) = 0.080 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0999M**

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.88 \text{ S/m}$ ;  $\epsilon_r = 41.231$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 680.5 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n71, Right Head, Cheek, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 136100, 50 RB, 28 RB Offset**

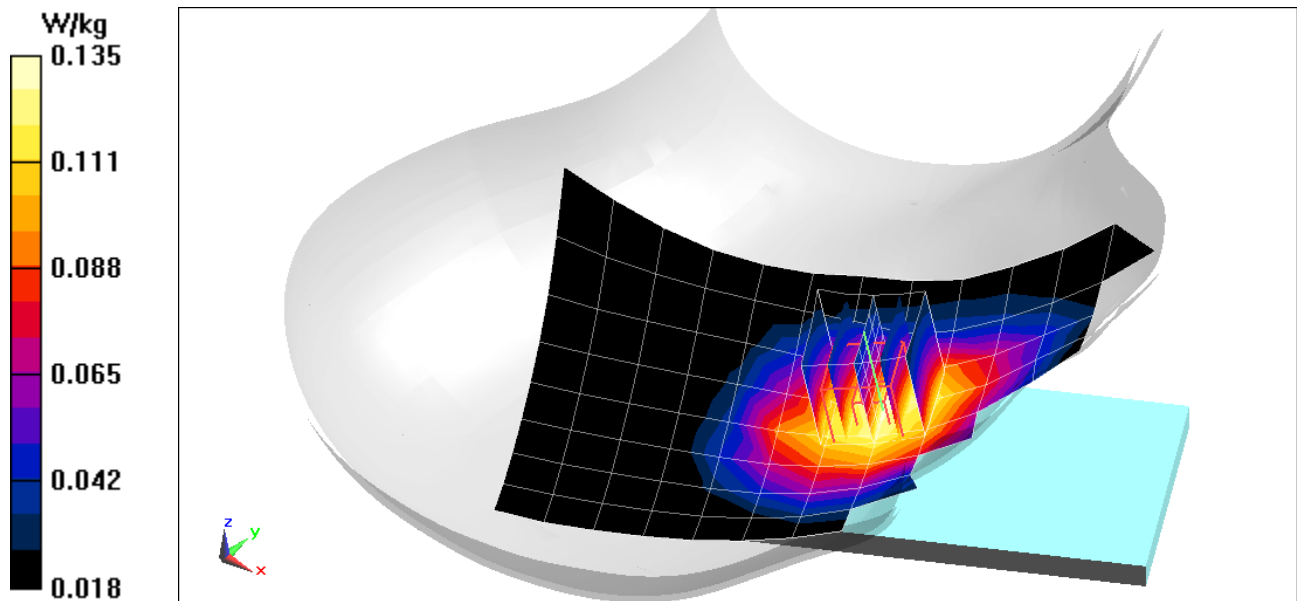
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 12.04 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.144 W/kg

**SAR(1 g) = 0.116 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0977M**

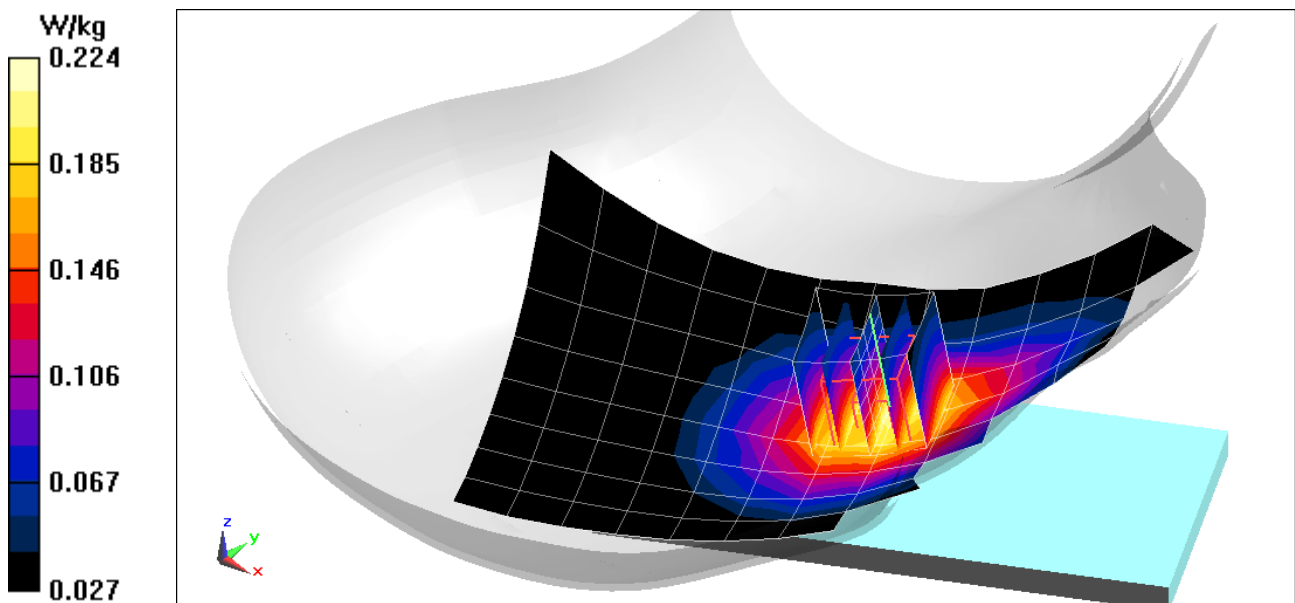
Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium: 835 Head Medium parameters used (interpolated):  
 $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.934 \text{ S/m}$ ;  $\epsilon_r = 40.721$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.5 MHz; Calibrated: 9/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019  
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Right Head, Cheek, NR Band n5, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 167300, 50 RB, 28 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm  
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 14.88 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 0.245 W/kg  
**SAR(1 g) = 0.188 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0909M**

Communication System: UID 0, NR Band n66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1745 \text{ MHz}$ ;  $\sigma = 1.355 \text{ S/m}$ ;  $\epsilon_r = 38.893$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(8.34, 8.34, 8.34) @ 1745 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n66, Left Head, Cheek, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 349000, 1 RB, 53 RB Offset**

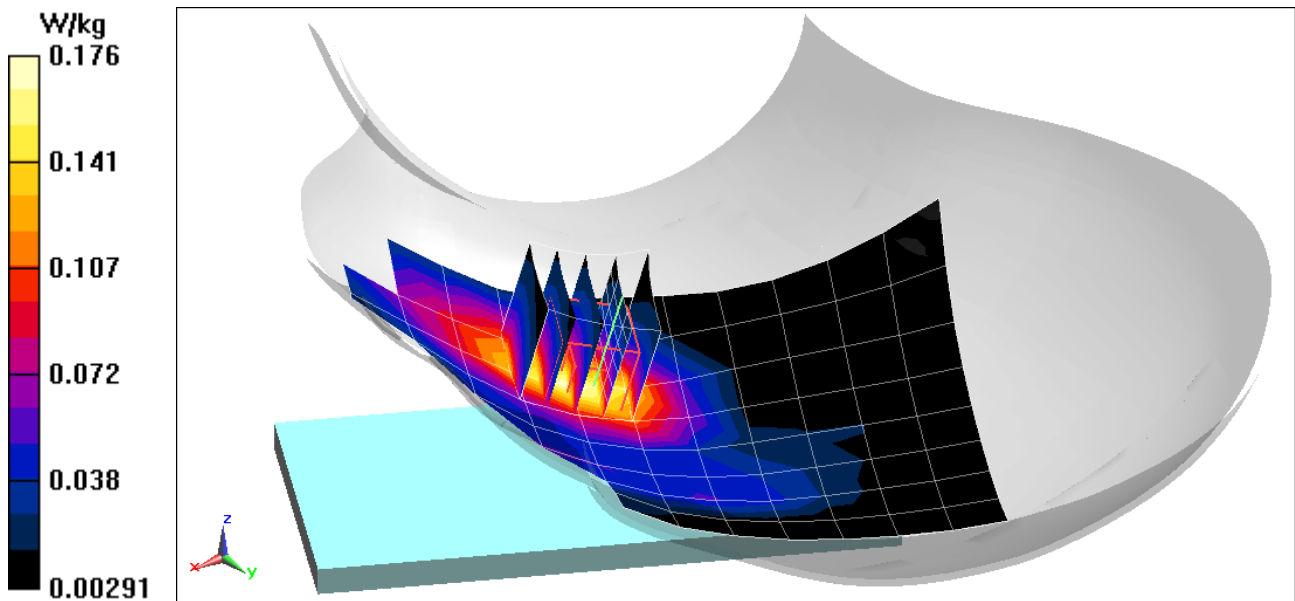
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 10.44 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.204 W/kg

**SAR(1 g) = 0.133 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M**

Communication System: UID 0, NR Band n2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.445 \text{ S/m}$ ;  $\epsilon_r = 38.648$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(8.05, 8.05, 8.05) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n2, Left Head, Cheek, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 380000, 1 RB, 1 RB Offset**

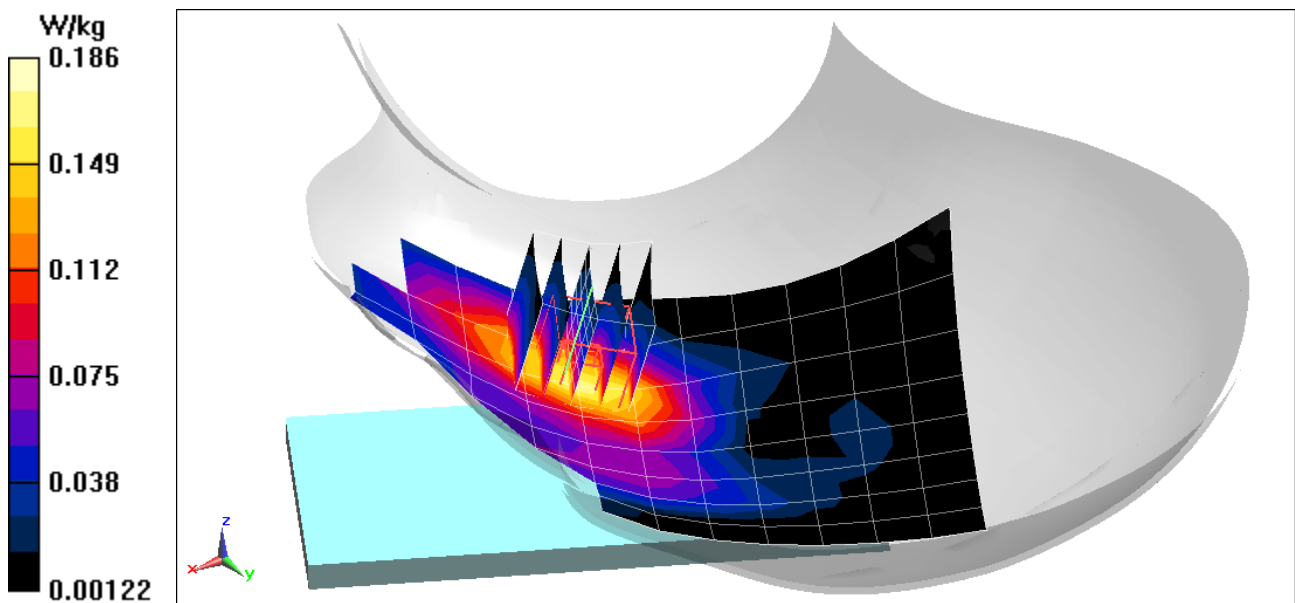
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 10.46 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.214 W/kg

**SAR(1 g) = 0.138 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0353M**

Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4  
Medium: 2450 Head; Medium parameters used (interpolated):  
 $f = 2592.99$  MHz;  $\sigma = 1.981$  S/m;  $\epsilon_r = 40.077$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

Test Date: 12/19/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2592.99 MHz; Calibrated: 2/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn665; Calibrated: 2/13/2019  
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n41, Right Head, Tilt, 100 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 518598, 1 RB, 137 RB Offset**

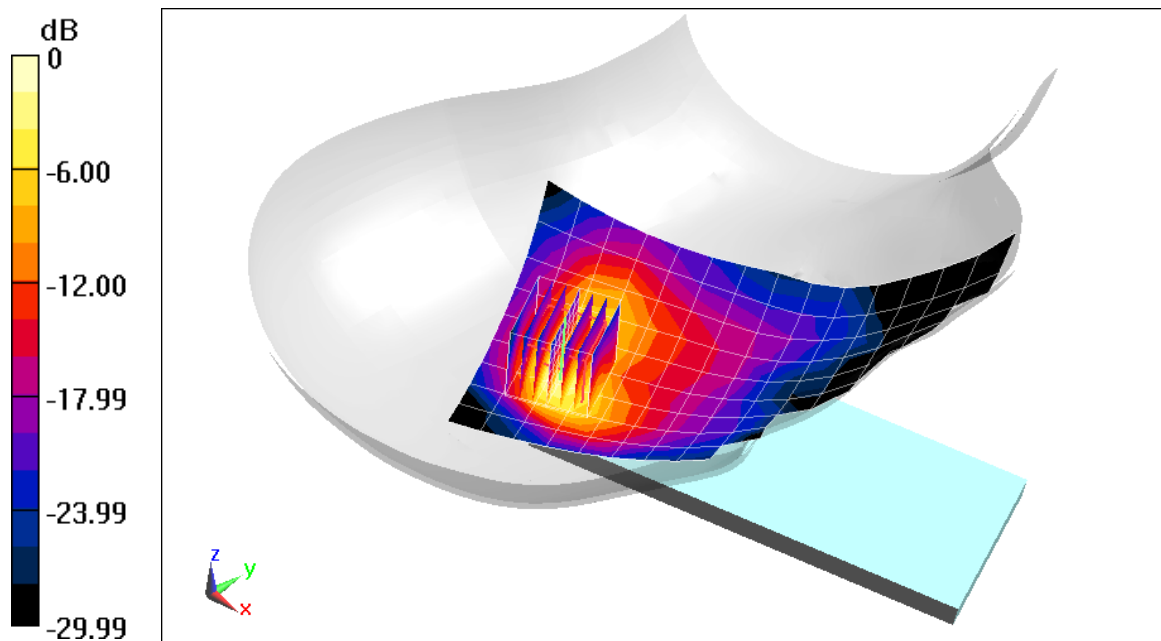
**Area Scan (10x17x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.91 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.20 W/kg

**SAR(1 g) = 0.838 W/kg**



0 dB = 1.67 W/kg = 2.23 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0324M**

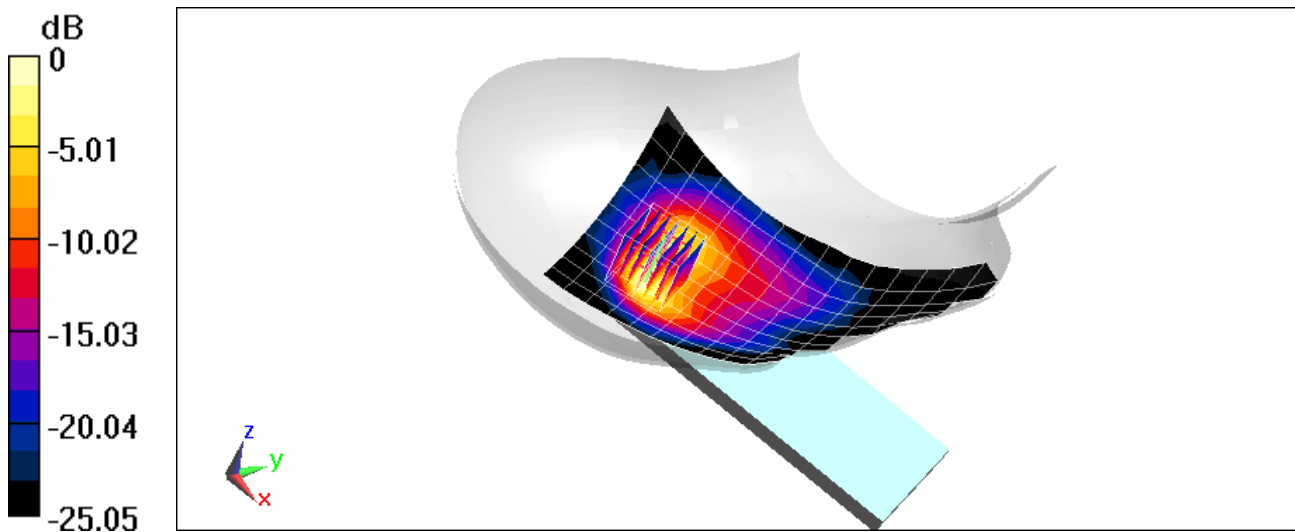
Communication System: UID 0, IEEE 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: 2450 Head Medium parameters used (interpolated):  
f = 2462 MHz;  $\sigma = 1.829$  S/m;  $\epsilon_r = 38.132$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

Test Date: 12/02/2019; Ambient Temp: 22.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2437 MHz; Calibrated: 2/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn665; Calibrated: 2/13/2019  
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Antenna 1  
Right Head, Tilt, Ch 11, 1 Mbps**

**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 14.70 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 1.17 W/kg  
**SAR(1 g) = 0.463 W/kg**



0 dB = 0.814 W/kg = -0.89 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0324M**

Communication System: UID 0, IEEE 802.11n; Frequency: 5270 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Head Medium parameters used:  
 $f = 5270 \text{ MHz}$ ;  $\sigma = 4.579 \text{ S/m}$ ;  $\epsilon_r = 34.473$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section

Test Date: 12/09/2019; Ambient Temp: 22.0°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(5.54, 5.54, 5.54) @ 5270 MHz; Calibrated: 5/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn728; Calibrated: 5/8/2019  
Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.1n, U-NII-2A, MIMO 40 MHz Bandwidth,  
Right Head, Tilt, Ch 54, 27 Mbps**

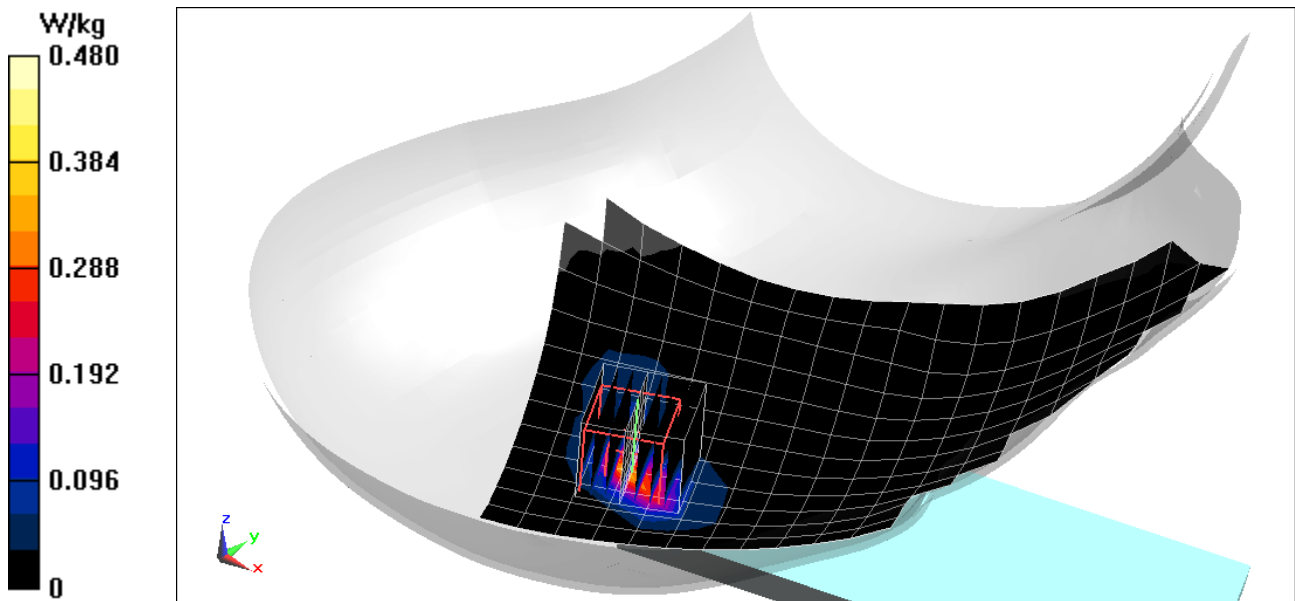
**Area Scan (13x22x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 2.165 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.901 W/kg

**SAR(1 g) = 0.195 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0436M**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.297

Medium: 2450 Head Medium parameters used (interpolated):

$f = 2441 \text{ MHz}$ ;  $\sigma = 1.813 \text{ S/m}$ ;  $\epsilon_r = 38.167$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/02/2019; Ambient Temp: 22.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2441 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Bluetooth, Right Head, Tilt, Ch 39, 1 Mbps**

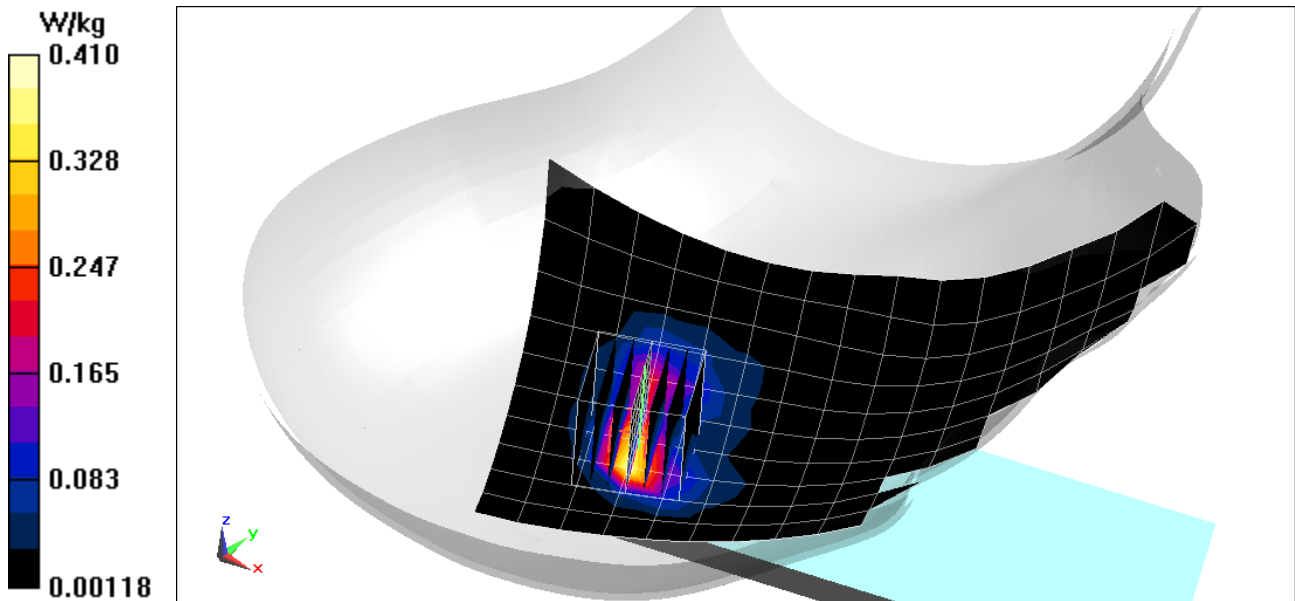
**Area Scan (11x19x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.42 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.568 W/kg

**SAR(1 g) = 0.218 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 820.1 \text{ MHz}$ ;  $\sigma = 0.94 \text{ S/m}$ ;  $\epsilon_r = 55.642$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 820.1 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Cell. CDMA, Rule Part §90S, Body SAR, Back side, Mid.ch**

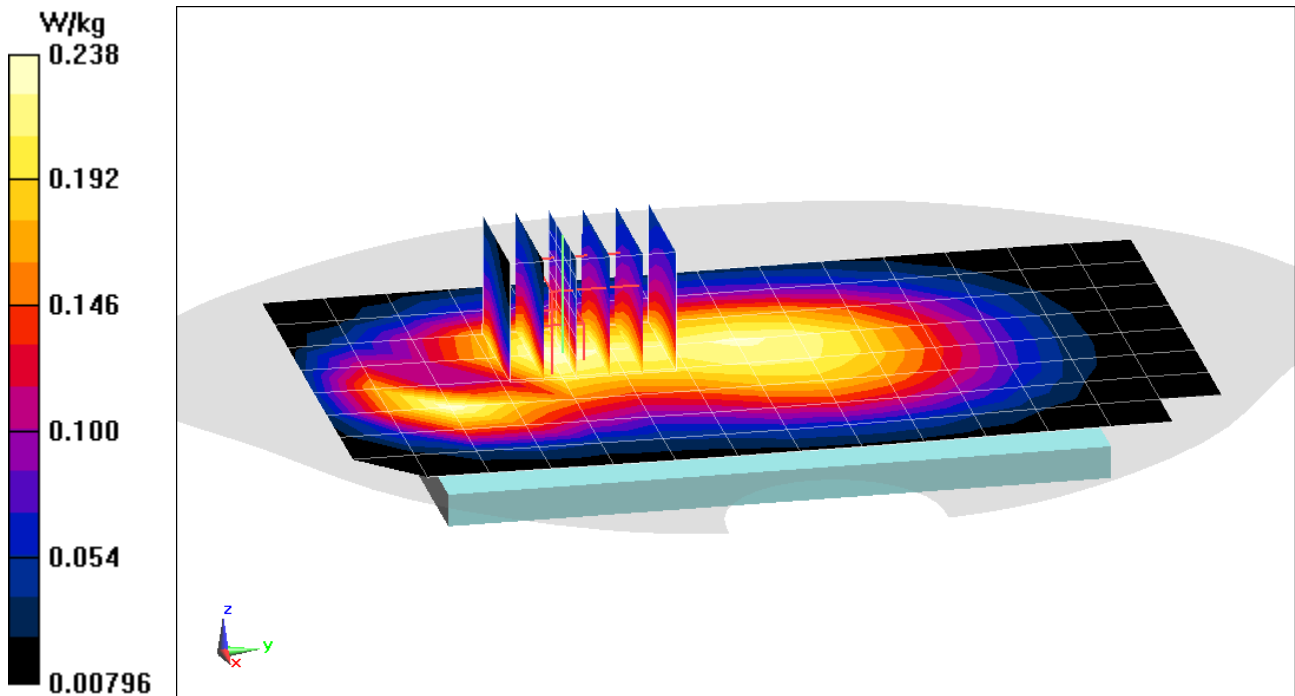
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.63 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.267 W/kg

**SAR(1 g) = 0.195 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 820.1 \text{ MHz}$ ;  $\sigma = 0.94 \text{ S/m}$ ;  $\epsilon_r = 55.642$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 820.1 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Cell. EVDO Rev.0, Rule Part §90S, Body SAR, Back side, Mid.ch**

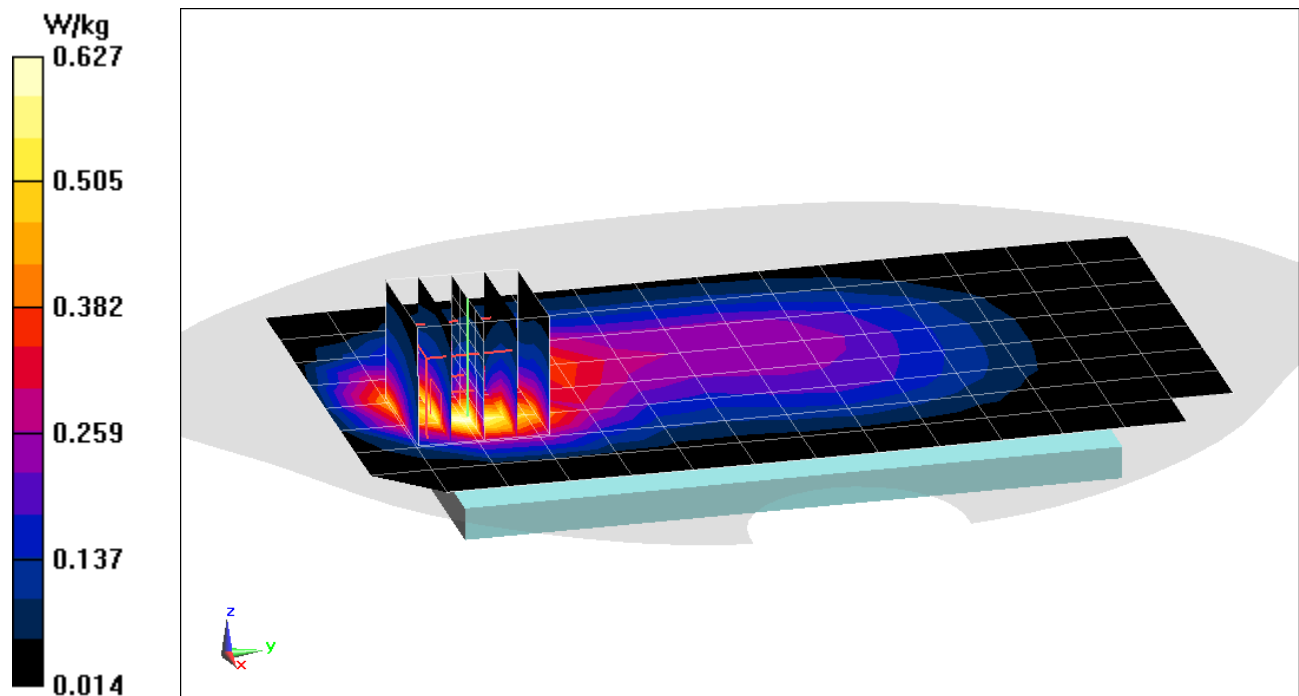
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 22.07 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.764 W/kg

**SAR(1 g) = 0.429 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.52 \text{ MHz}$ ;  $\sigma = 0.957 \text{ S/m}$ ;  $\epsilon_r = 55.48$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.52 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Cell. CDMA, Rule Part §22H, Body SAR, Back side, Mid.ch**

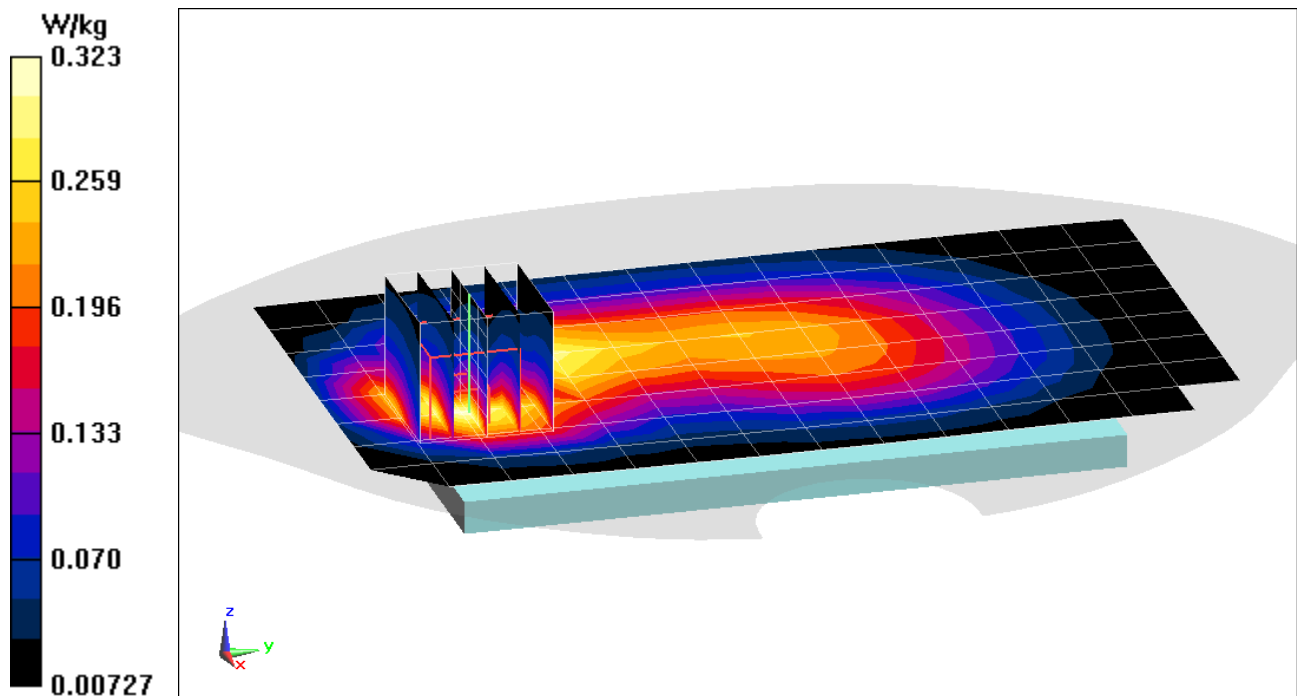
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.93 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.382 W/kg

**SAR(1 g) = 0.231 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, CDMA; Frequency: 848.31 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 848.31$  MHz;  $\sigma = 0.97$  S/m;  $\epsilon_r = 55.364$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 848.31 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Cell. EVDO Rev.0, Rule Part §22H, Body SAR, Back side, High.ch**

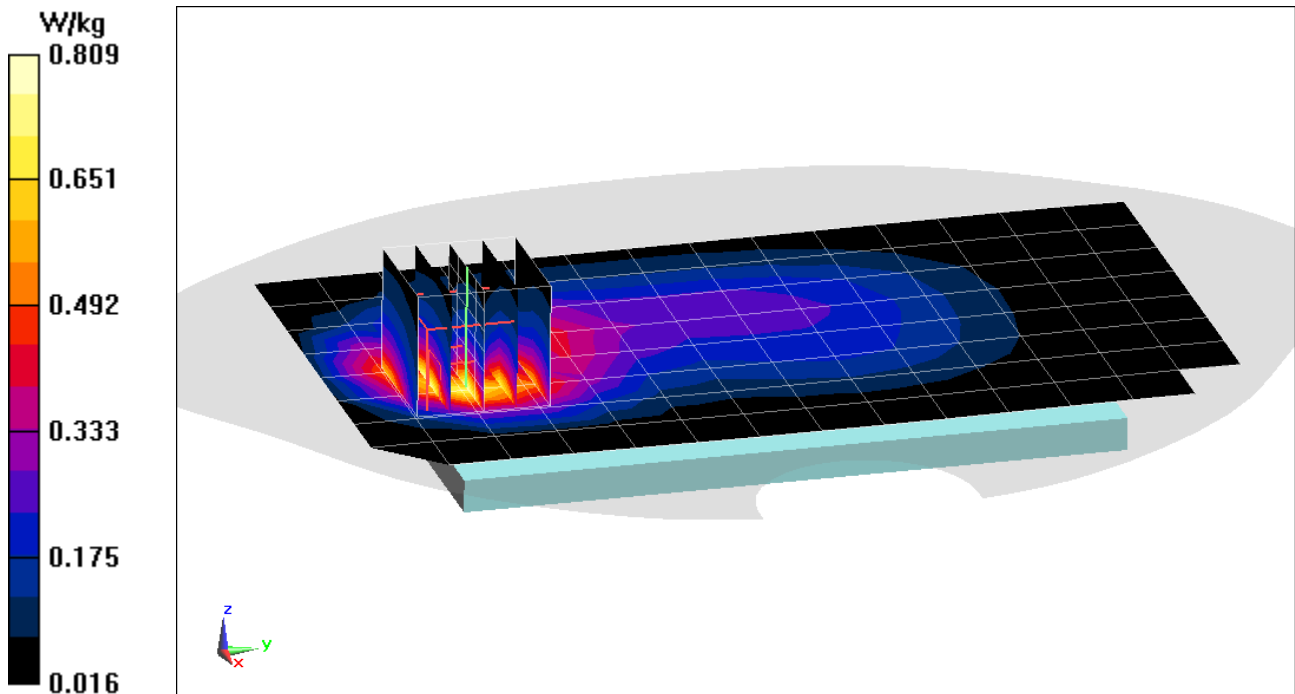
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 24.75 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.985 W/kg

**SAR(1 g) = 0.560 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium: 1900 Body Medium parameters used:  
 $f = 1880 \text{ MHz}$ ;  $\sigma = 1.549 \text{ S/m}$ ;  $\epsilon_r = 51.954$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.1°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1880 MHz; Calibrated: 5/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn859; Calibrated: 5/8/2019  
Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: PCS CDMA, Body SAR, Back side, Mid.ch**

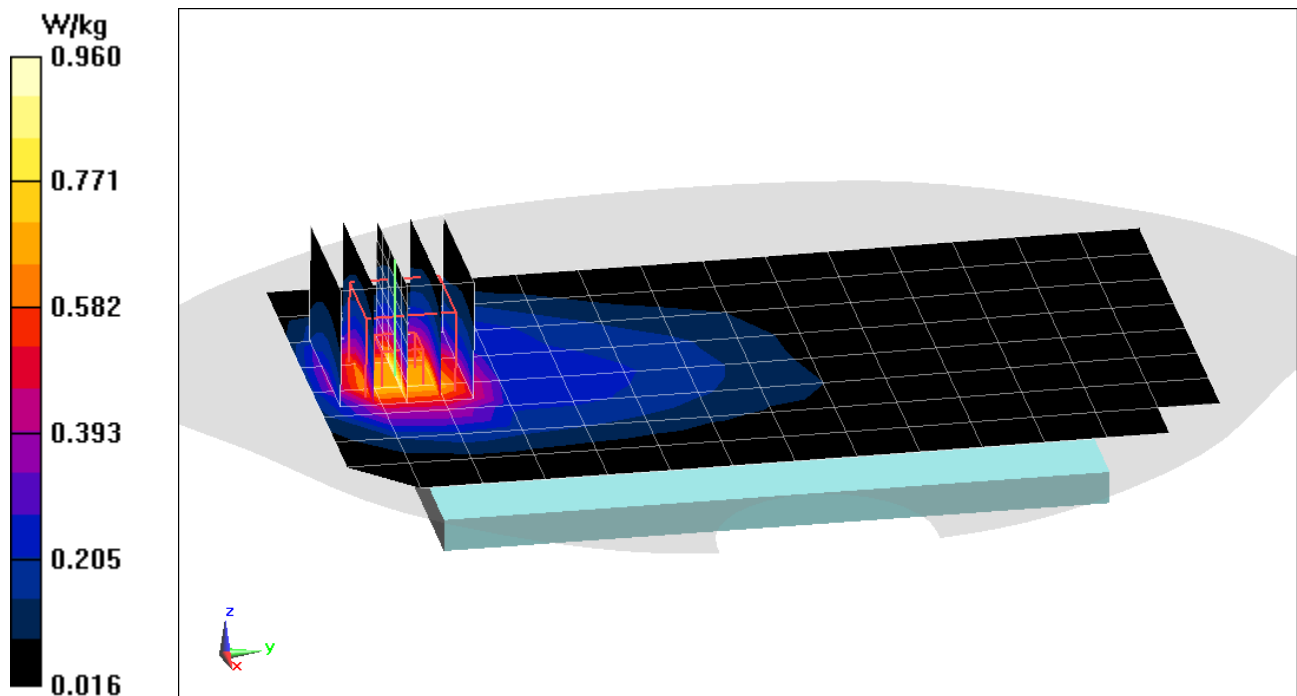
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.78 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.13 W/kg

**SAR(1 g) = 0.667 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0406M**

Communication System: UID 0, CDMA; Frequency: 1908.75 MHz; Duty Cycle: 1:1  
Medium: 1900 Body; Medium parameters used (interpolated):  
 $f = 1908.75 \text{ MHz}$ ;  $\sigma = 1.589 \text{ S/m}$ ;  $\epsilon_r = 51.885$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/01/2020; Ambient Temp: 21.3°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1908.75 MHz; Calibrated: 12/11/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1533; Calibrated: 12/5/2019  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: PCS EVDO, Body SAR, Bottom Edge, High.ch**

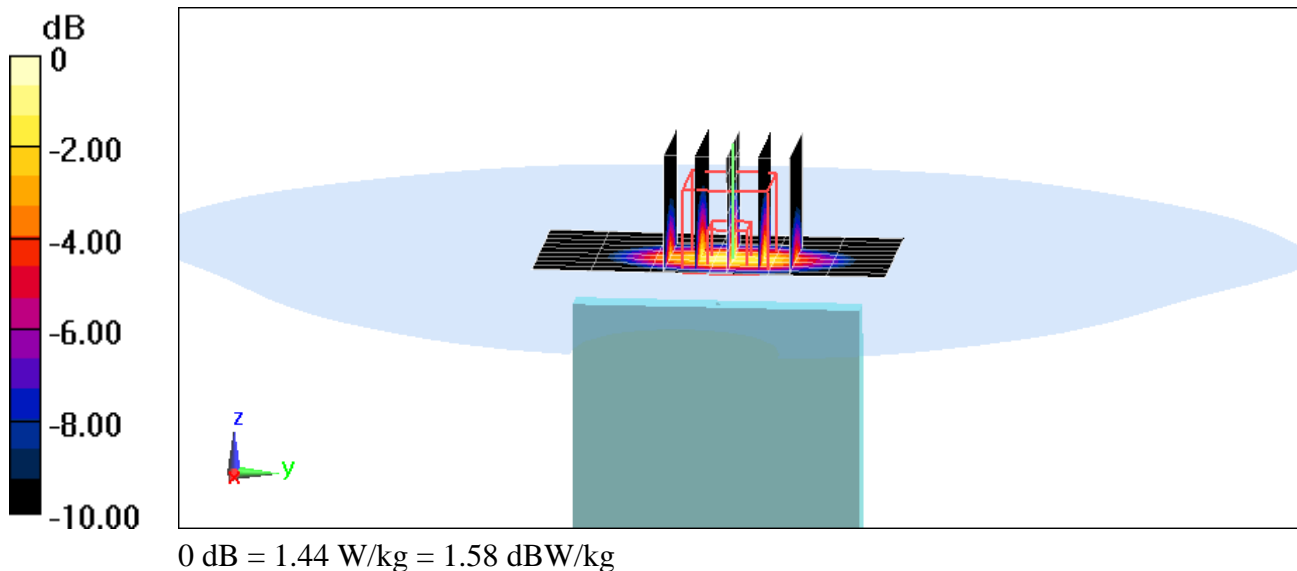
**Area Scan (10x7x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 25.98 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.71 W/kg

**SAR(1 g) = 0.941 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.958 \text{ S/m}$ ;  $\epsilon_r = 55.479$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.6 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: GSM 850, Body SAR, Back side, Mid.ch**

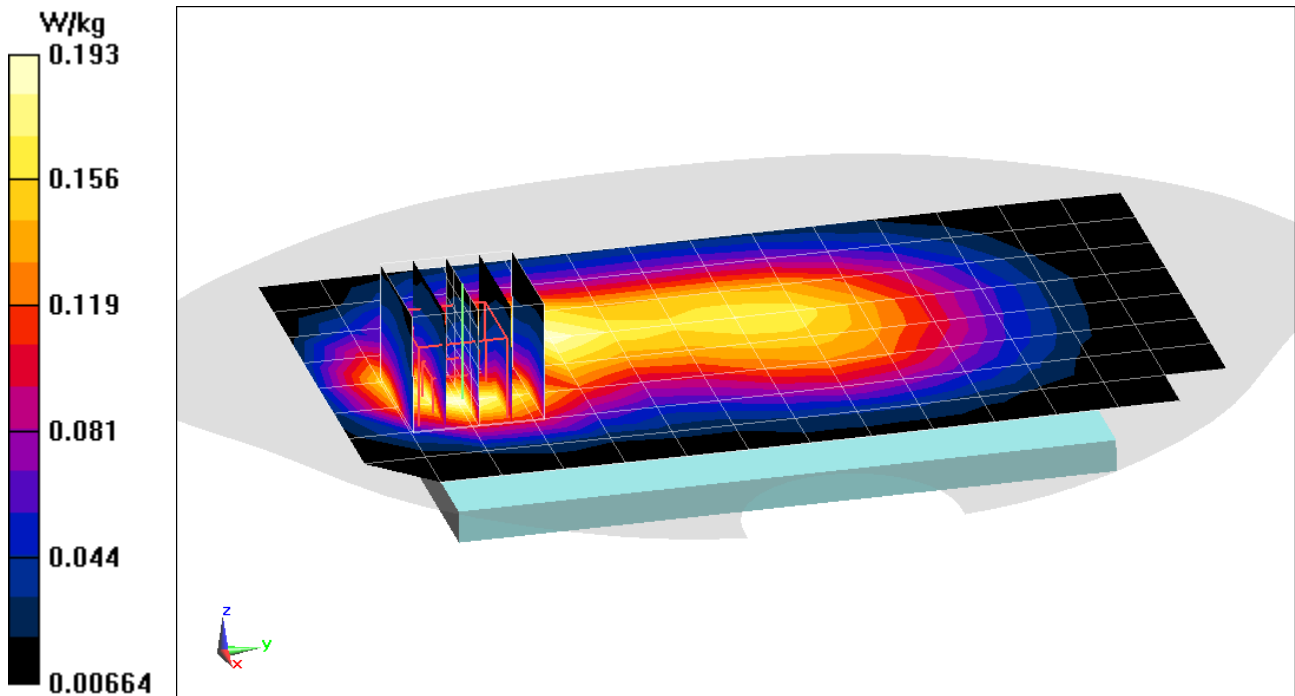
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 12.42 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.229 W/kg

**SAR(1 g) = 0.139 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, \_GSM GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.958 \text{ S/m}$ ;  $\epsilon_r = 55.479$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.6 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: GPRS 850, Body SAR, Back side, Mid.ch, 3 Tx Slots**

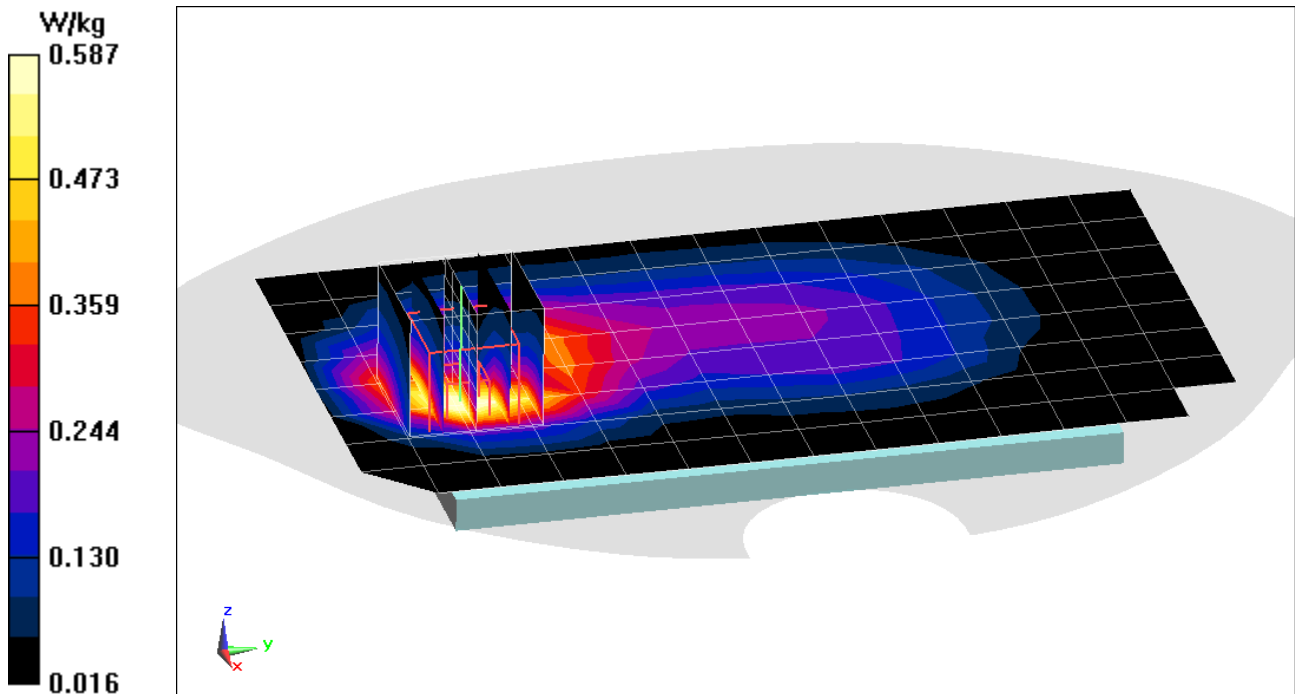
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.32 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.714 W/kg

**SAR(1 g) = 0.409 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: 1900 Body Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.549 \text{ S/m}$ ;  $\epsilon_r = 51.954$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.1°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1880 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: GSM 1900, Body SAR, Back side, Mid.ch**

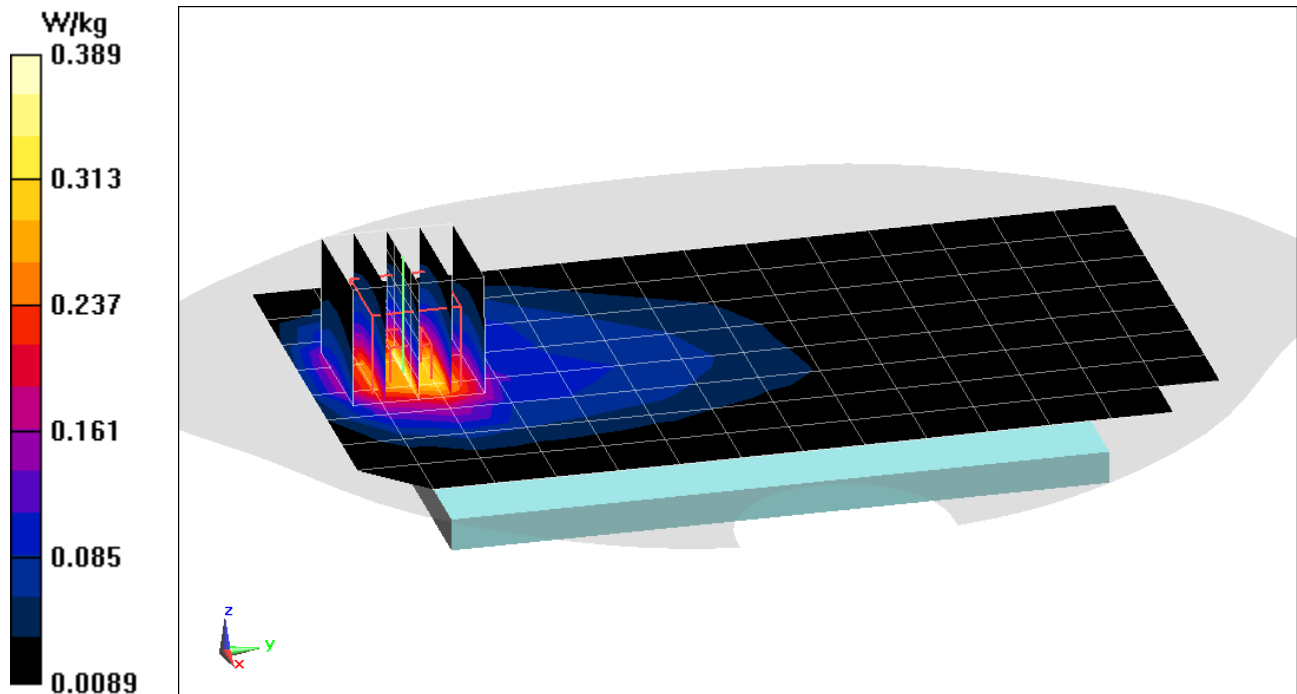
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 13.94 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.454 W/kg

**SAR(1 g) = 0.271 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, GSM GPRS; 4 Tx slots; Frequency: 1909.8 MHz; Duty Cycle: 1:2.076

Medium: 1900 Body; Medium parameters used:

$f = 1910 \text{ MHz}$ ;  $\sigma = 1.59 \text{ S/m}$ ;  $\epsilon_r = 51.834$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/23/2019; Ambient Temp: 20.3°C; Tissue Temp: 24.3°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1909.8 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: GPRS 1900, Body SAR, Bottom Edge, High.ch, 4 Tx Slots**

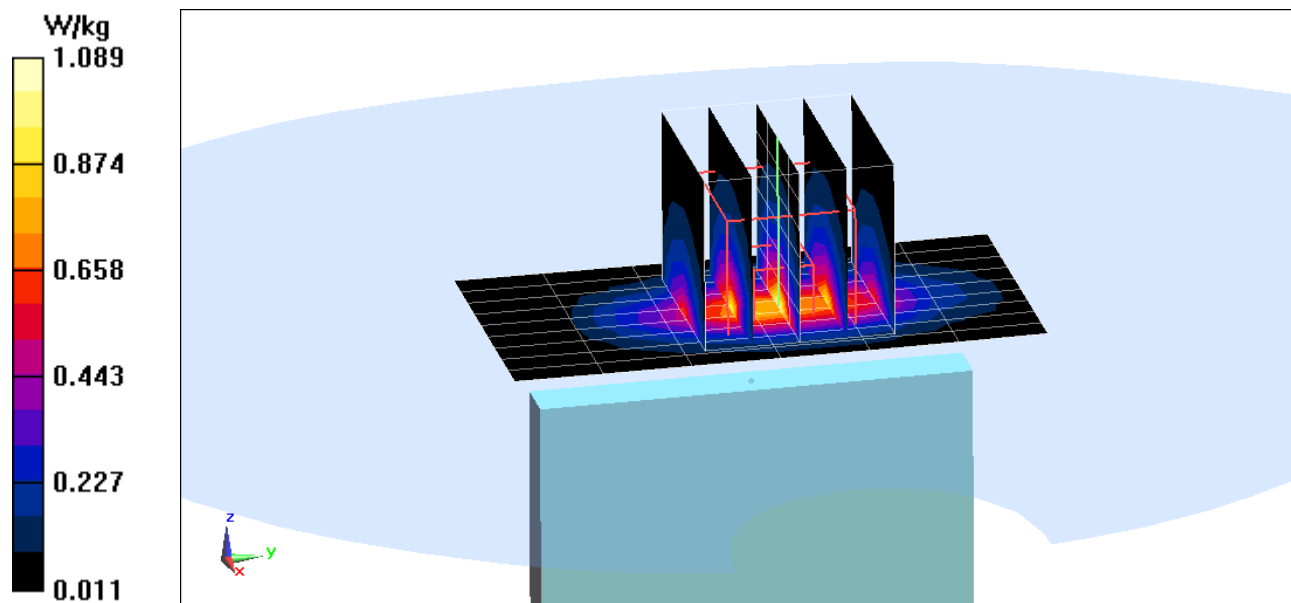
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 22.45 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.27 W/kg

**SAR(1 g) = 0.703 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.966 \text{ S/m}$ ;  $\epsilon_r = 54.793$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.6 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 850, Body SAR, Back side, Mid.ch**

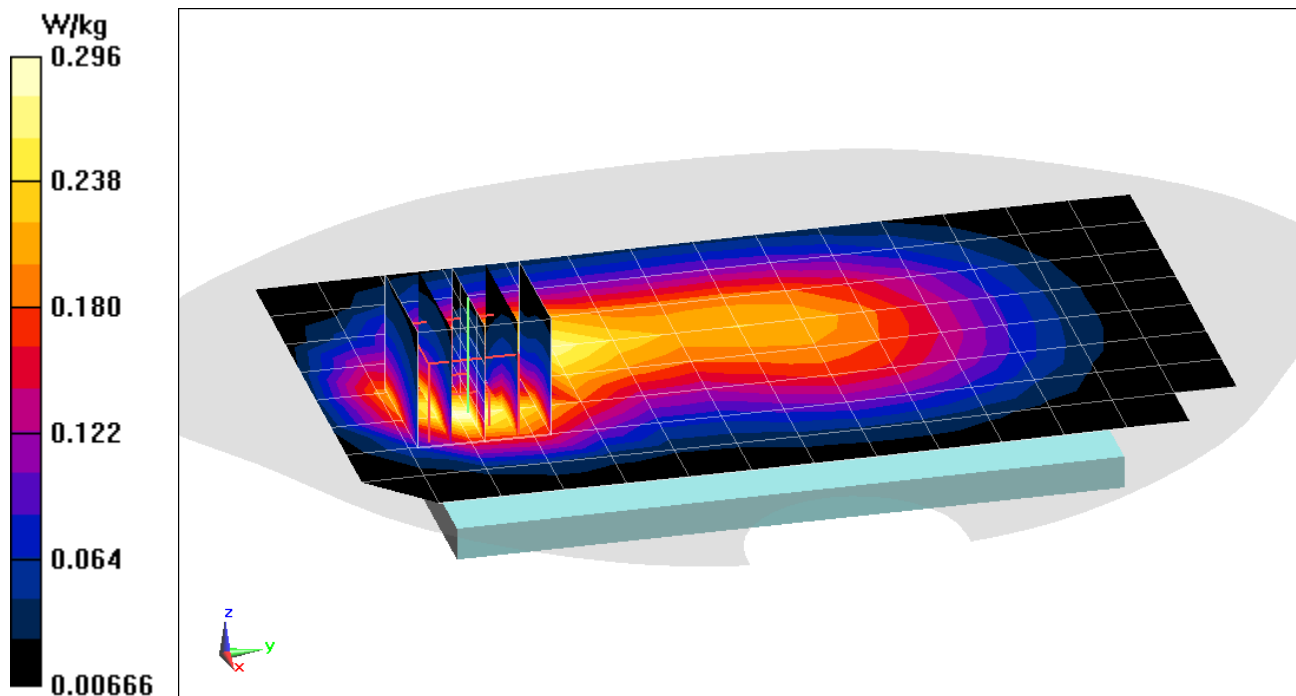
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.21 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.352 W/kg

**SAR(1 g) = 0.211 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M**

Communication System: UID 0, UMTS; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.977 \text{ S/m}$ ;  $\epsilon_r = 54.687$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 846.6 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 850, Body SAR, Back side, High.ch**

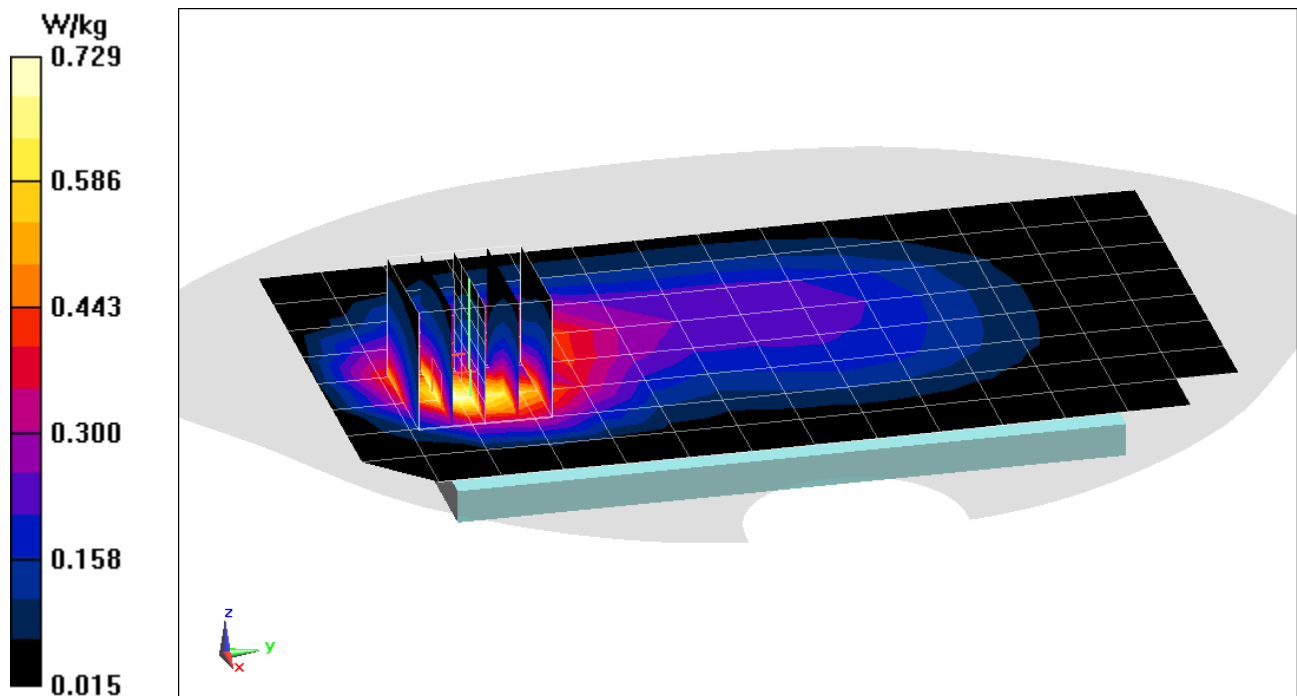
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 23.45 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.887 W/kg

**SAR(1 g) = 0.501 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, UMTS; Frequency: 1752.6 MHz; Duty Cycle: 1:1  
Medium: 1750 Body Medium parameters used (interpolated):  
 $f = 1752.6$  MHz;  $\sigma = 1.51$  S/m;  $\epsilon_r = 52.863$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/21/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7488; ConvF(8.68, 8.68, 8.68) @ 1752.6 MHz; Calibrated: 1/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1530; Calibrated: 1/15/2019  
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1750, Body SAR, Back side, High.ch**

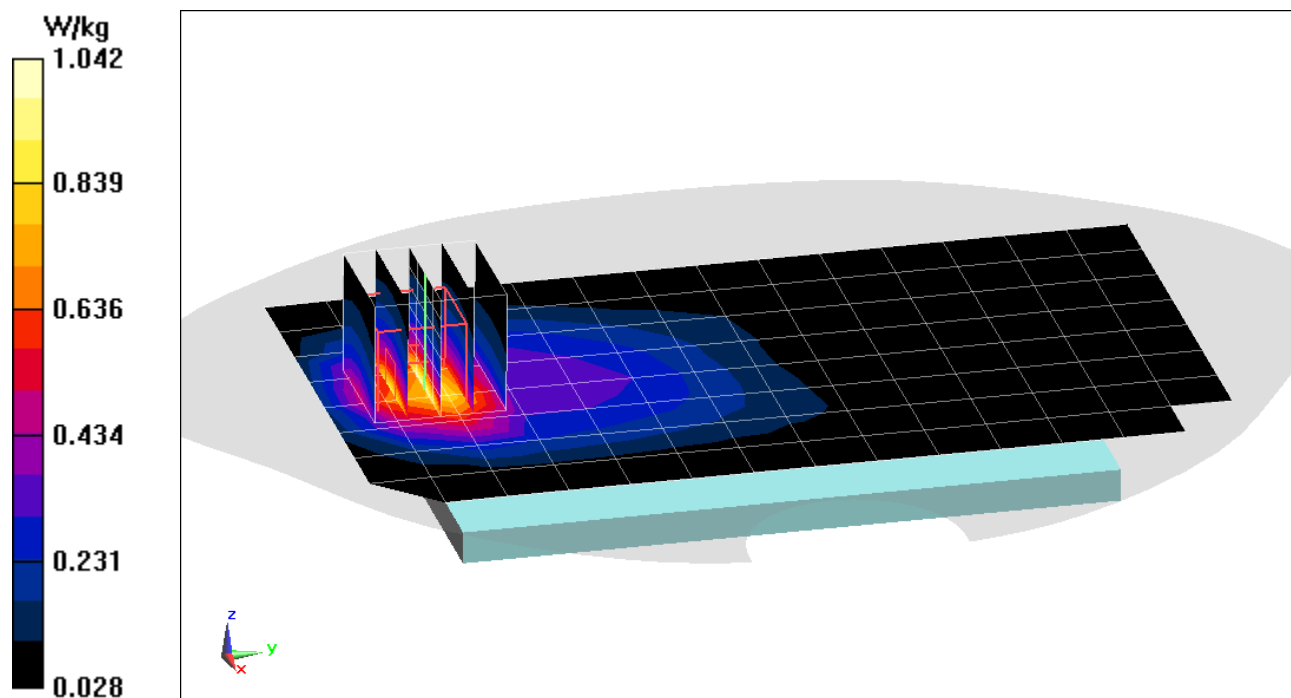
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 23.31 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.759 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0407M**

Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1  
Medium: 1750 Body Medium parameters used (interpolated):  
 $f = 1732.4 \text{ MHz}$ ;  $\sigma = 1.466 \text{ S/m}$ ;  $\epsilon_r = 53.233$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-01-2020; Ambient Temp: 23.4°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1732.4 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1750, Body SAR, Bottom Edge, Mid.ch**

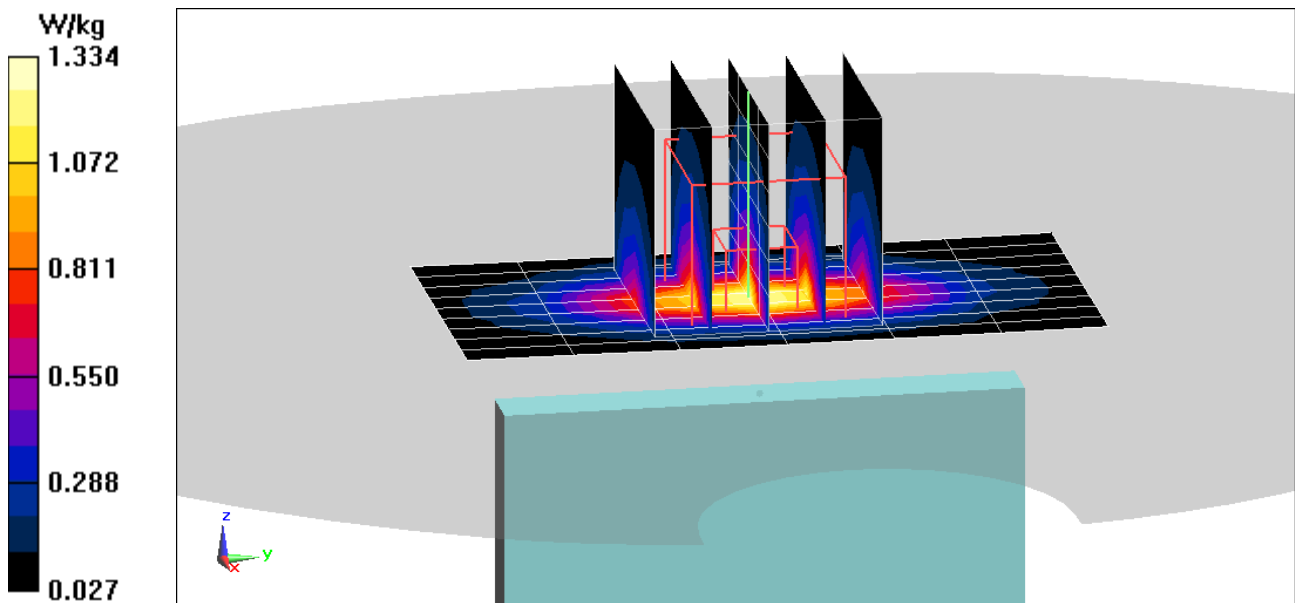
**Area Scan (10x7x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 26.19 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.56 W/kg

**SAR(1 g) = 0.893 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium: 1900 Body Medium parameters used (interpolated):  
 $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.582 \text{ S/m}$ ;  $\epsilon_r = 51.878$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.1°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1907.6 MHz; Calibrated: 5/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn859; Calibrated: 5/8/2019  
Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1900, Body SAR, Back side, High.ch**

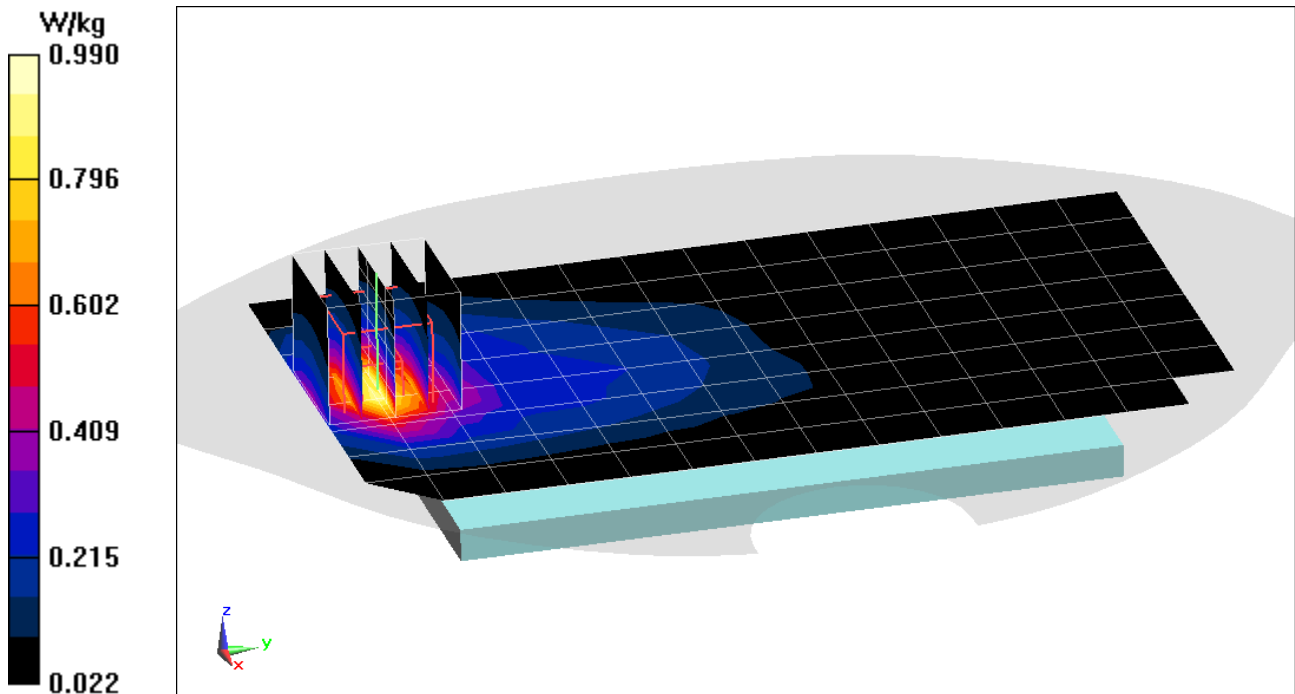
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.81 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.15 W/kg

**SAR(1 g) = 0.681 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium: 1900 Body Medium parameters used (interpolated):  
 $f = 1907.6$  MHz;  $\sigma = 1.588$  S/m;  $\epsilon_r = 51.844$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/23/2019; Ambient Temp: 20.3°C; Tissue Temp: 24.3°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1907.6 MHz; Calibrated: 1/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1530; Calibrated: 1/15/2019  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1900, Body SAR, Bottom Edge, High.ch**

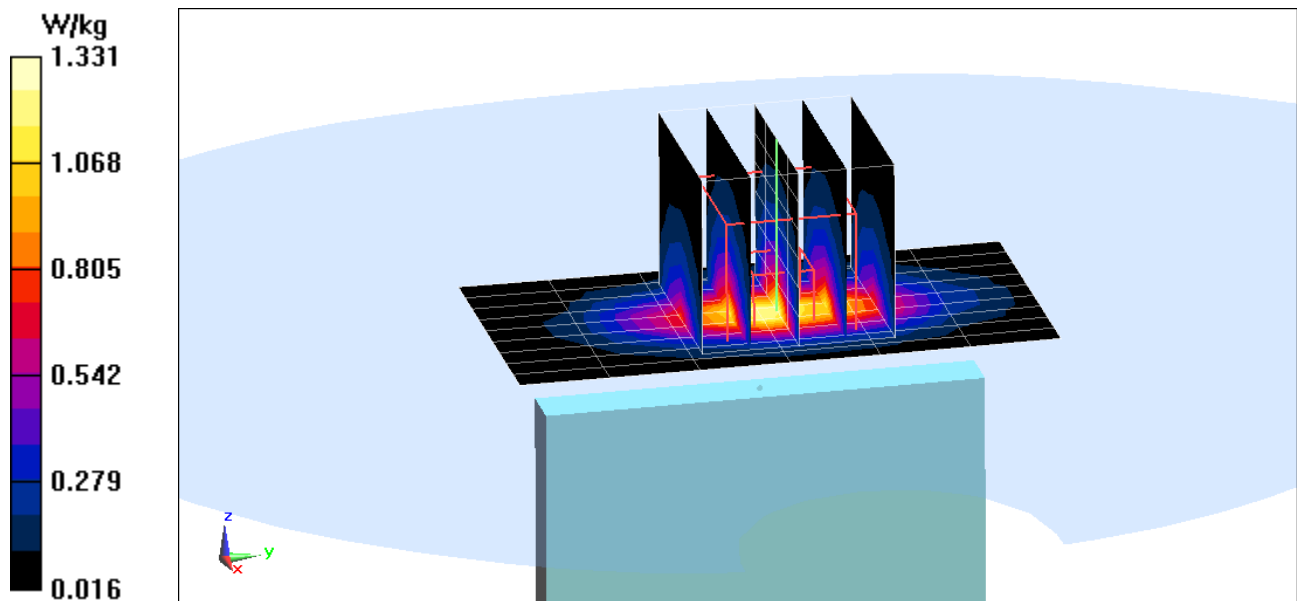
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 24.90 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.57 W/kg

**SAR(1 g) = 0.868 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.914 \text{ S/m}$ ;  $\epsilon_r = 58.472$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/25/2019; Ambient Temp: 20.3°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 71, Body SAR, Back side, Mid.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

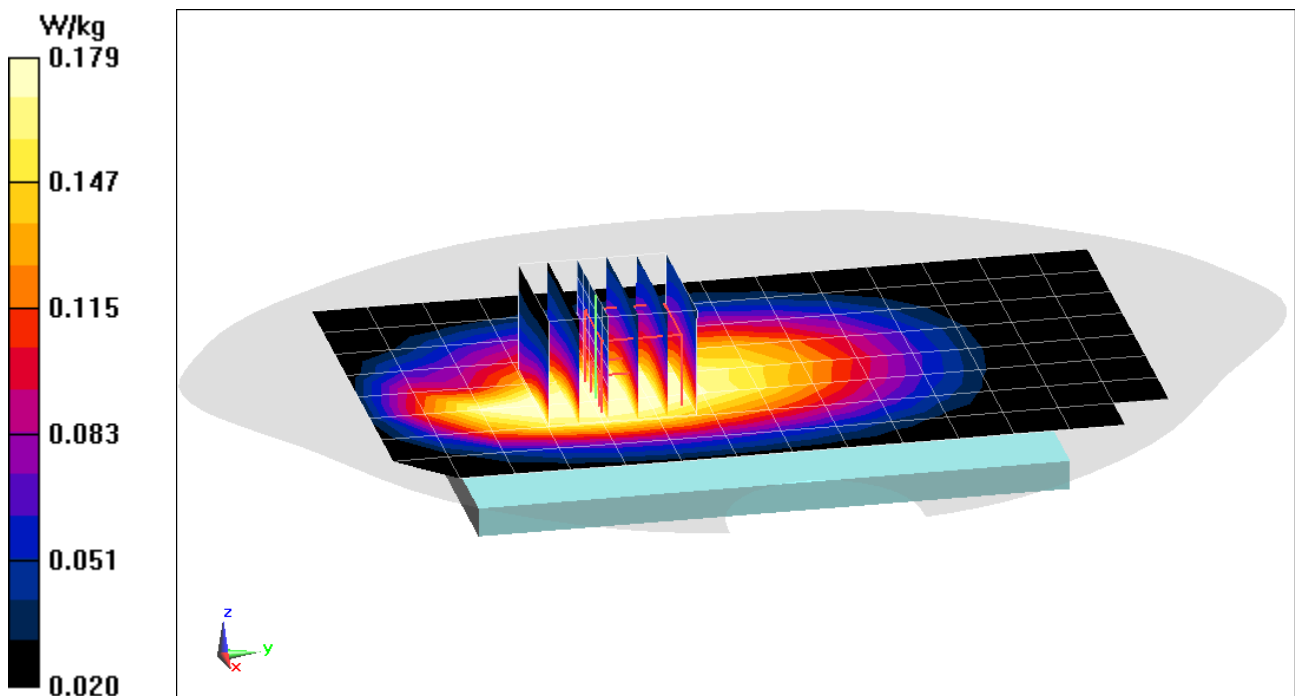
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.08 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.196 W/kg

**SAR(1 g) = 0.148 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

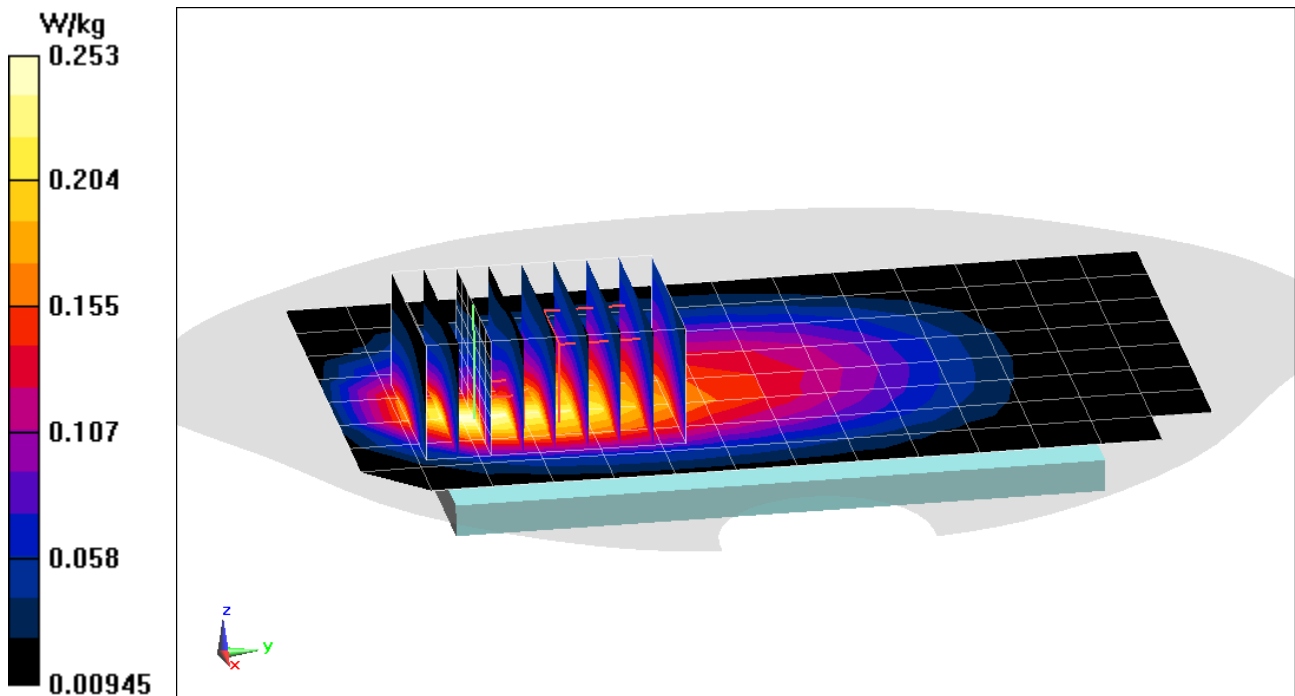
Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1  
Medium: 750 Body Medium parameters used (interpolated):  
 $f = 680.5 \text{ MHz}$ ;  $\sigma = 0.914 \text{ S/m}$ ;  $\epsilon_r = 58.472$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/25/2019; Ambient Temp: 20.3°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019  
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 71, Body SAR, Back side, Mid.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
**Zoom Scan (7x9x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 14.65 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 0.301 W/kg  
**SAR(1 g) = 0.182 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 707.5$  MHz;  $\sigma = 0.928$  S/m;  $\epsilon_r = 56.579$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/23/2019; Ambient Temp: 21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 12, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

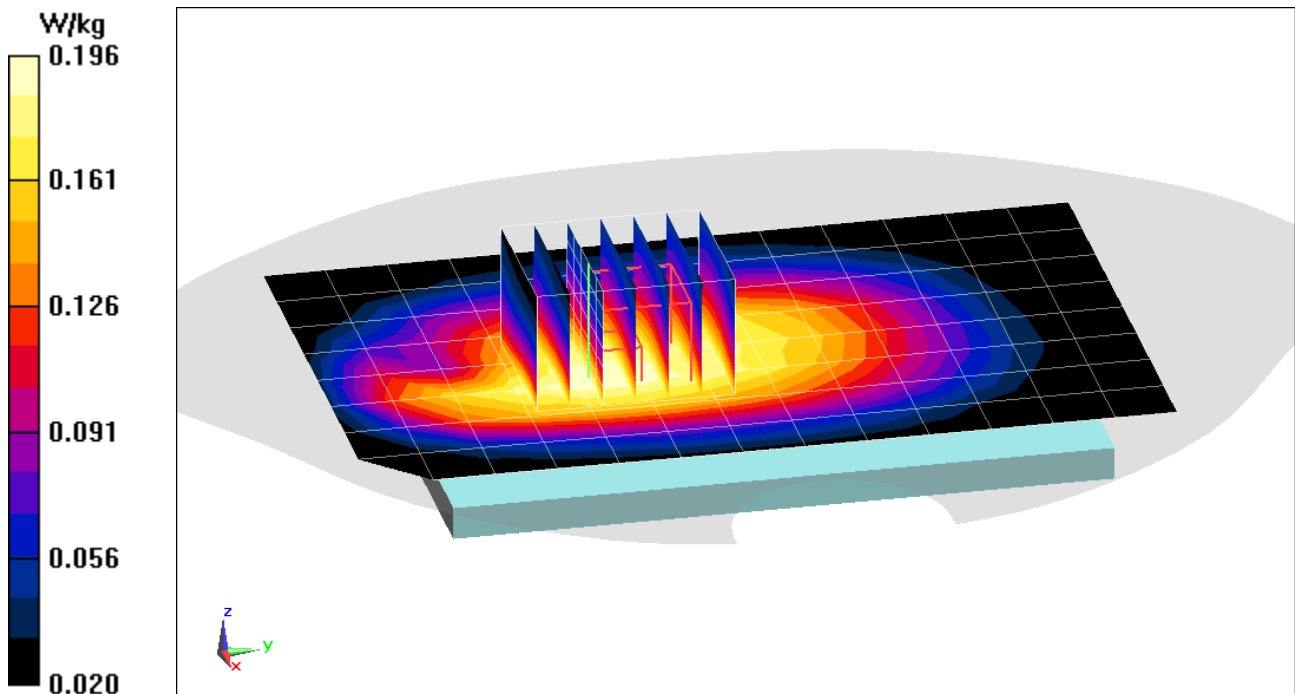
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.67 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.213 W/kg

**SAR(1 g) = 0.166 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 707.5$  MHz;  $\sigma = 0.928$  S/m;  $\epsilon_r = 56.579$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/23/2019; Ambient Temp:21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 12, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

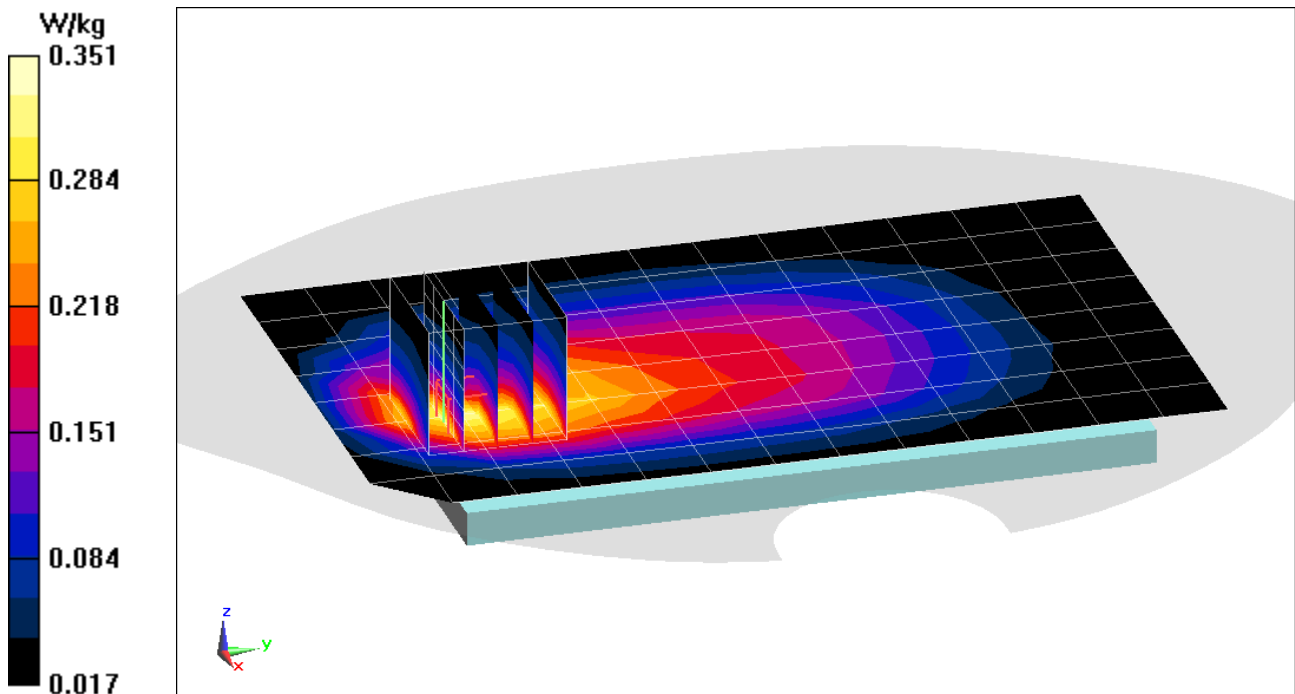
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 16.65 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.417 W/kg

**SAR(1 g) = 0.242 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.997 \text{ S/m}$ ;  $\epsilon_r = 55.863$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/23/2019; Ambient Temp: 21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 782 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 13, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

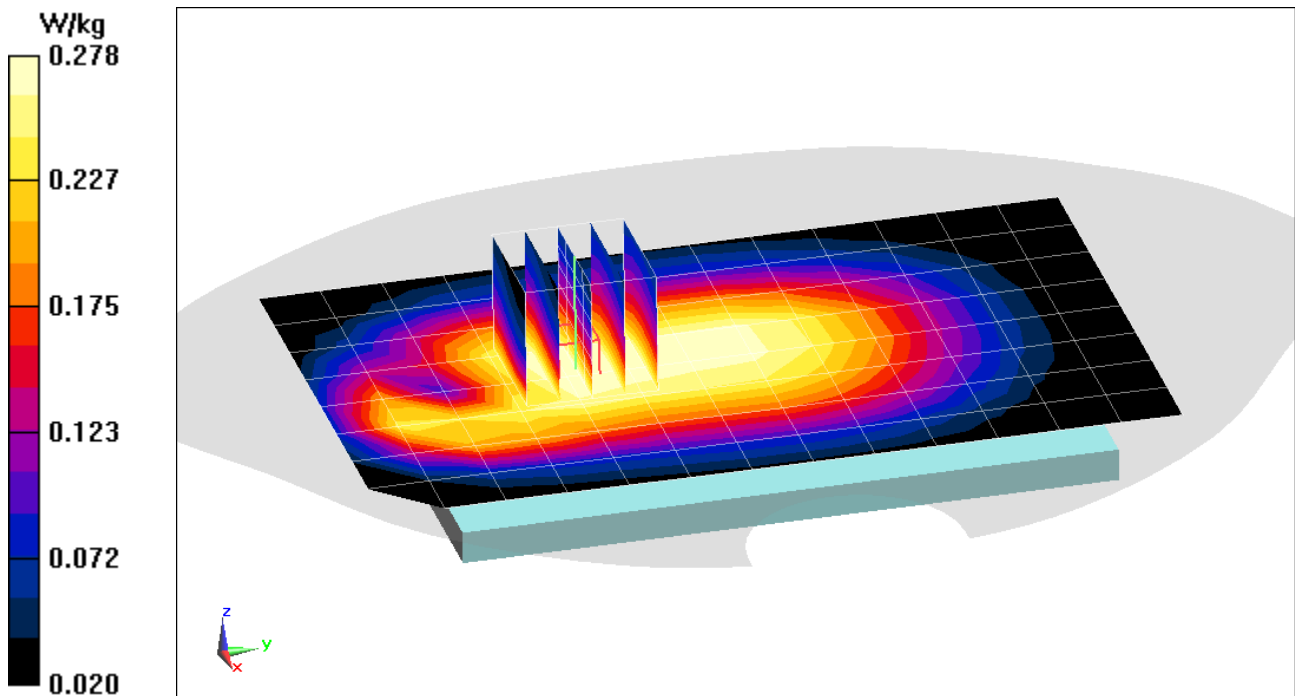
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.81 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.301 W/kg

**SAR(1 g) = 0.235 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.997 \text{ S/m}$ ;  $\epsilon_r = 55.863$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/23/2019; Ambient Temp: 21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 782 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 13, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

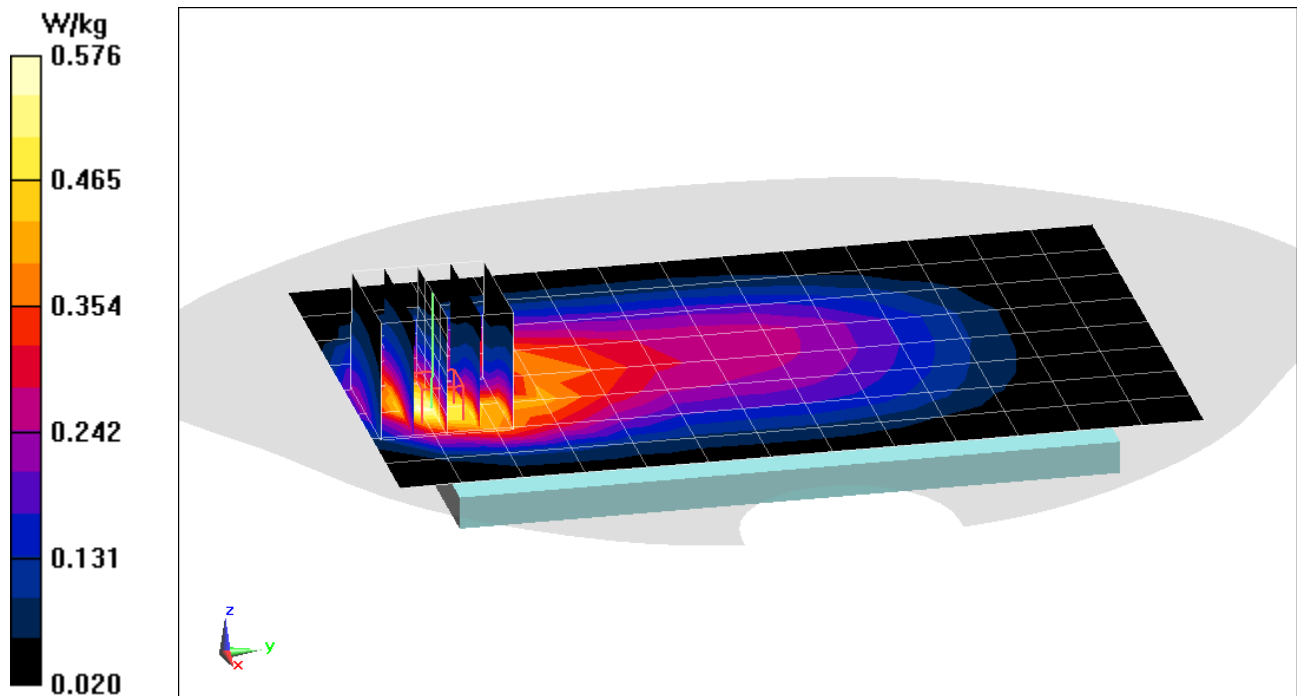
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 20.75 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.681 W/kg

**SAR(1 g) = 0.392 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 793 \text{ MHz}$ ;  $\sigma = 1.008 \text{ S/m}$ ;  $\epsilon_r = 55.759$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/23/2019; Ambient Temp: 21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 793 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 14, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

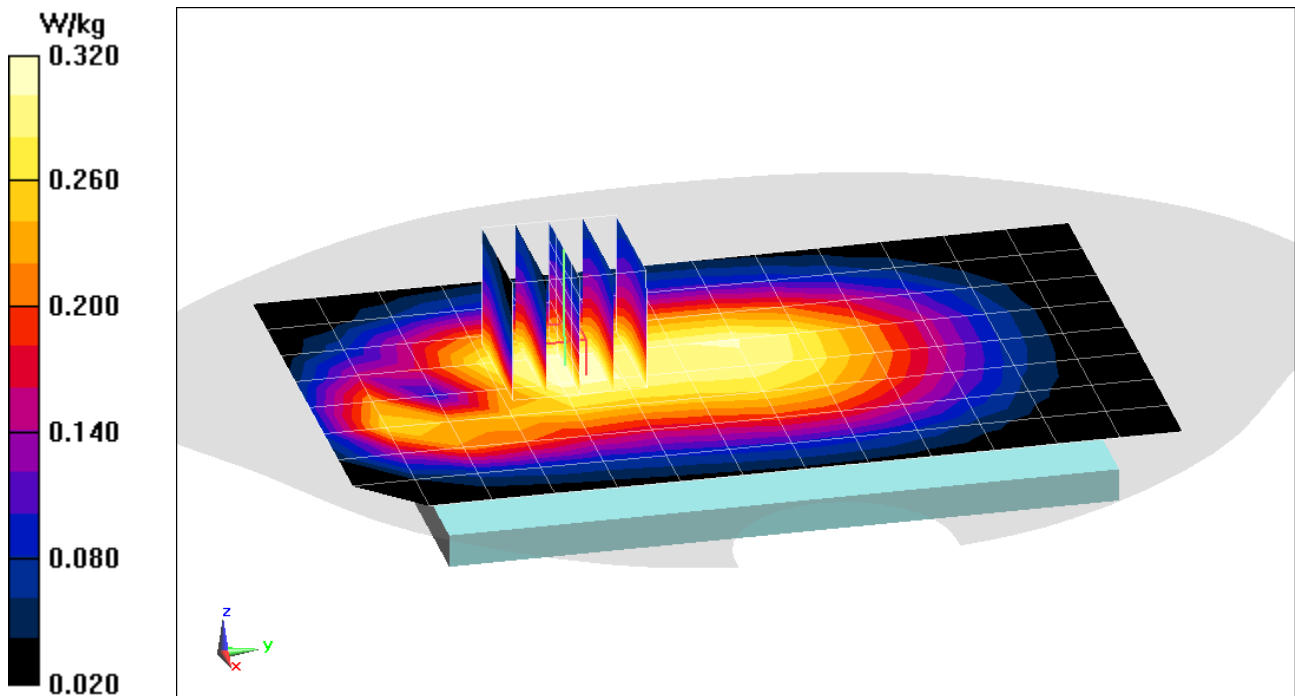
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 16.74 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.348 W/kg

**SAR(1 g) = 0.269 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 793 \text{ MHz}$ ;  $\sigma = 1.008 \text{ S/m}$ ;  $\epsilon_r = 55.759$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/23/2019; Ambient Temp:21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 793 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 14, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

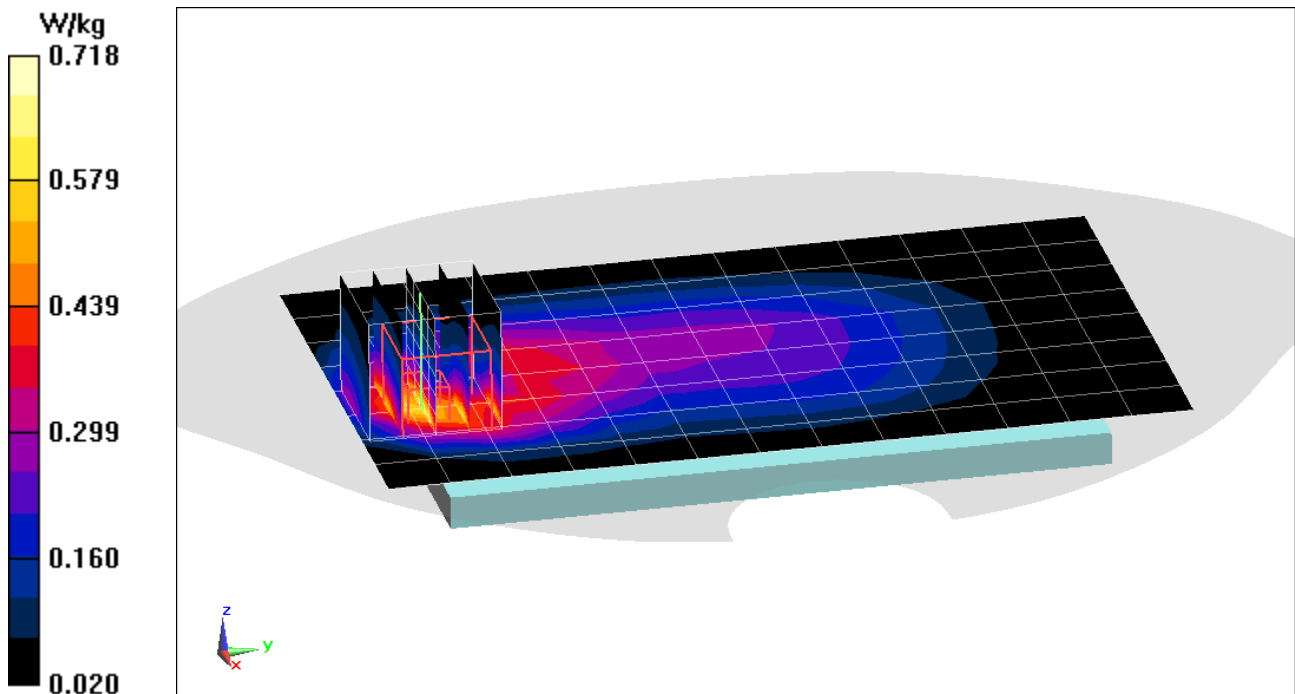
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.60 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.852 W/kg

**SAR(1 g) = 0.487 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 831.5 \text{ MHz}$ ;  $\sigma = 0.96 \text{ S/m}$ ;  $\epsilon_r = 54.846$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 831.5 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch, 15 MHz Bandwidth,  
QPSK, 1 RB, 36 RB Offset**

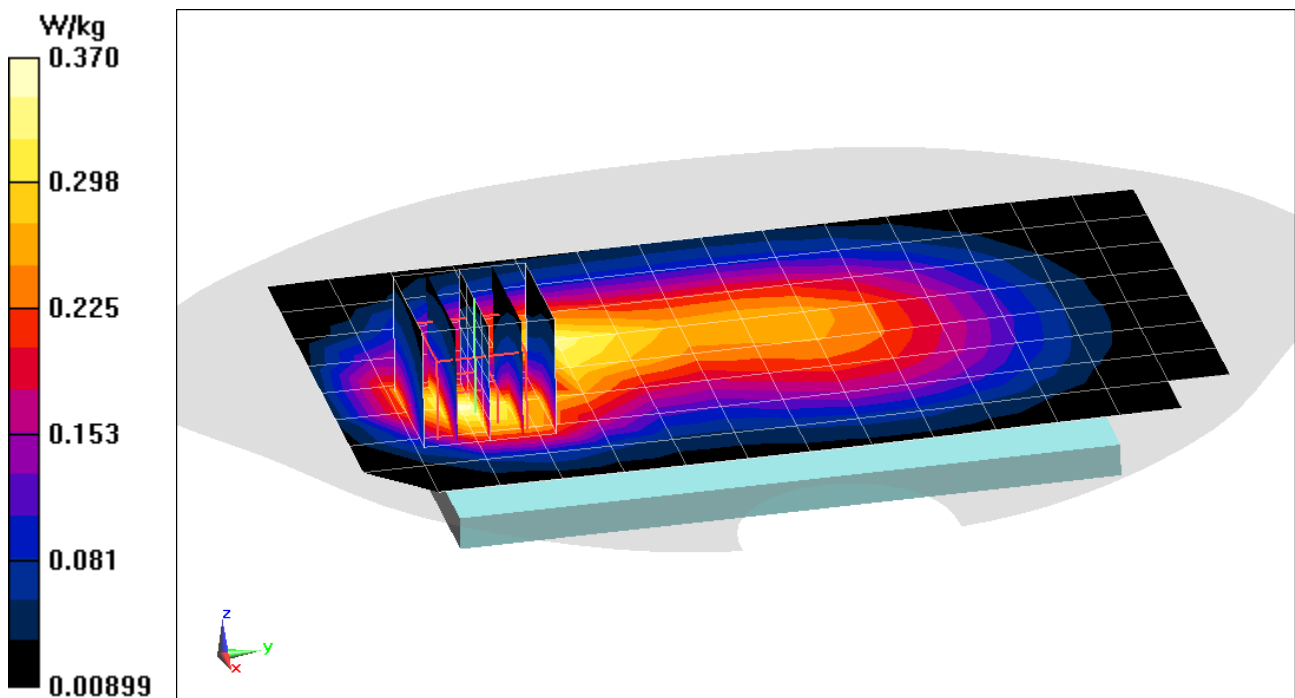
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 17.10 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.433 W/kg

**SAR(1 g) = 0.259 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M**

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 831.5 \text{ MHz}$ ;  $\sigma = 0.96 \text{ S/m}$ ;  $\epsilon_r = 54.846$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 831.5 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch, 15 MHz Bandwidth,  
QPSK, 1 RB, 36 RB Offset**

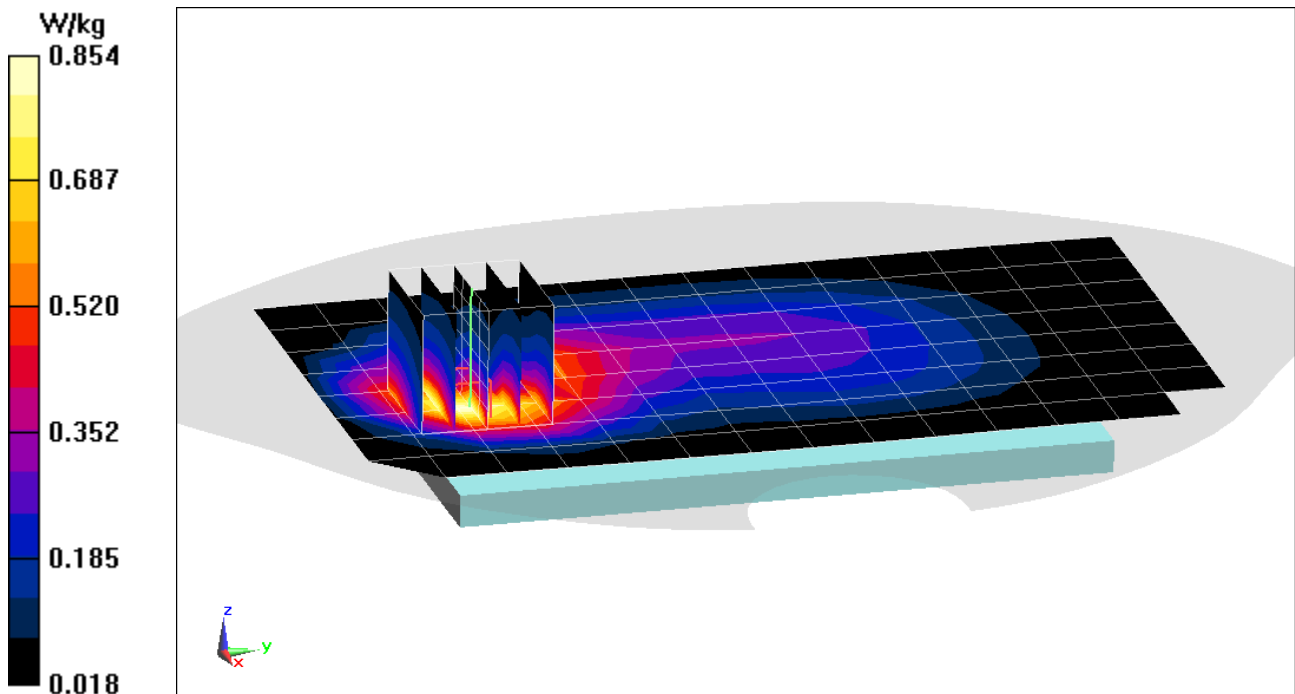
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.46 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.596 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0492M**

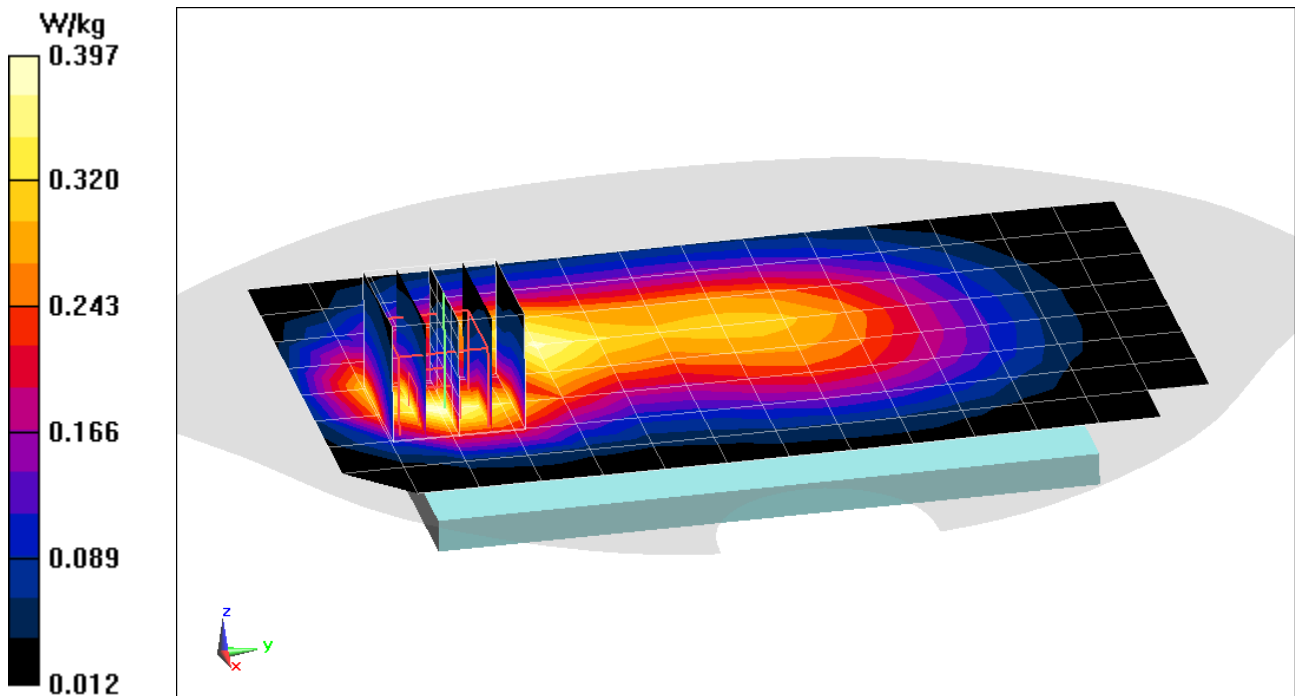
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.966 \text{ S/m}$ ;  $\epsilon_r = 54.795$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.5 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 5 (Cell.), ULCA, Body SAR, Back side,**  
**PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset**  
**SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset**

**Area Scan (9x15x1):** 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 = 15.84 V/m; Power Drift = -0.02 dB  
Peak SAR (extrapolated) = 0.469 W/kg  
**SAR(1 g) = 0.283 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0492M**

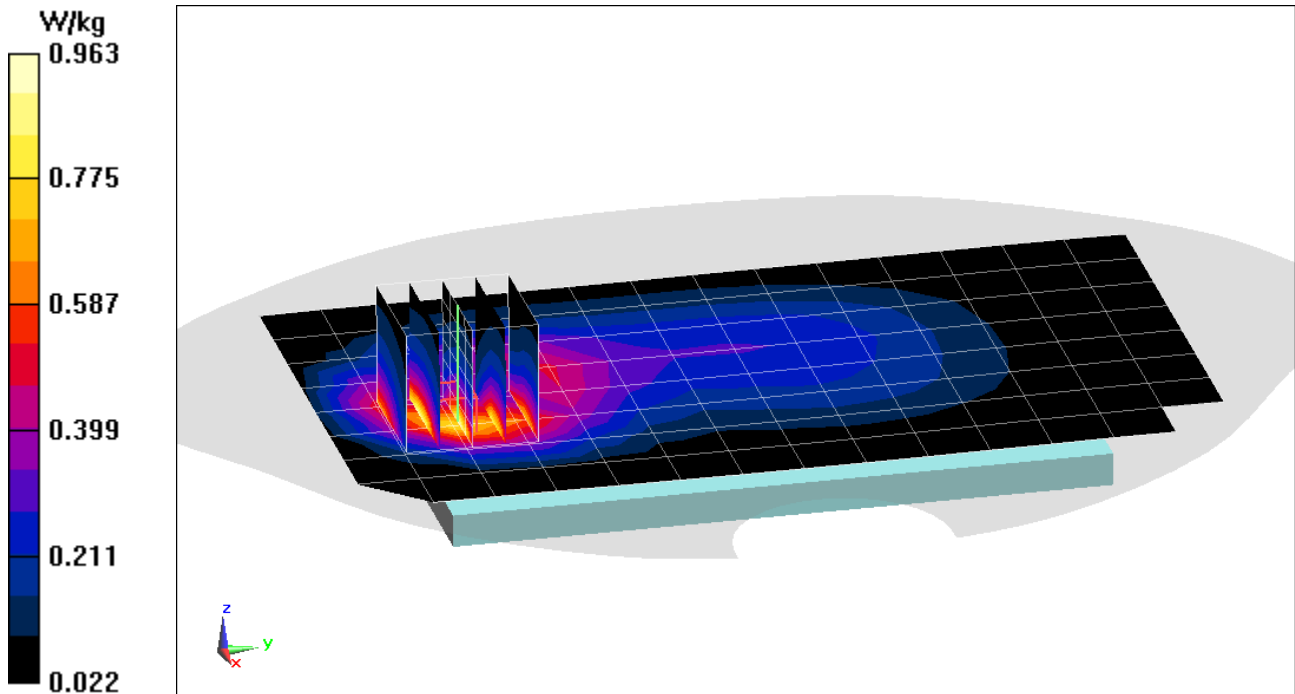
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.5$  MHz;  $\sigma = 0.966$  S/m;  $\epsilon_r = 54.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.5 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 5 (Cell.), ULCA, Body SAR, Back side,**  
**PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset**  
**SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm  
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.23 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 1.17 W/kg  
**SAR(1 g) = 0.664 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0045M**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1720 \text{ MHz}$ ;  $\sigma = 1.488 \text{ S/m}$ ;  $\epsilon_r = 52.386$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/18/2019; Ambient Temp: 20.9°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7488; ConvF(8.68, 8.68, 8.68) @ 1720 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 66 (AWS), CA\_66C ULCA, Body SAR, Back side,**

**PCC: 20 MHz Bandwidth, Ch. 132072, QPSK, 1 RB, 99 RB Offset**

**SCC: 20 MHz Bandwidth, Ch. 132270, QPSK, 1 RB, 0 RB Offset**

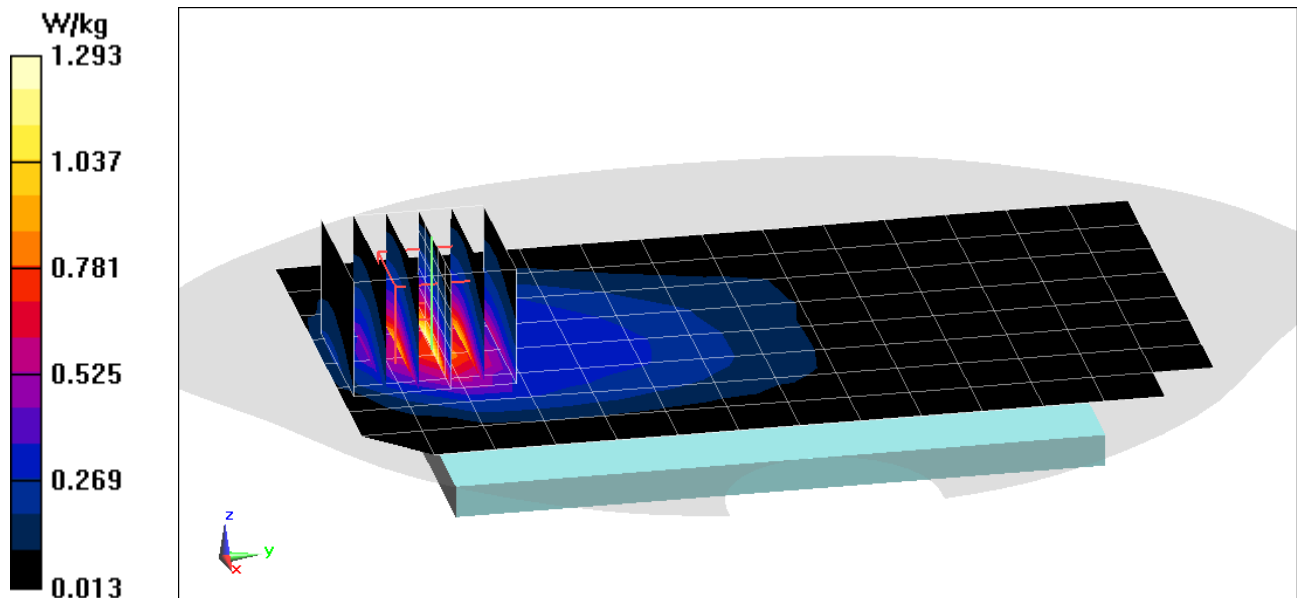
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.67 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.939 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0455M**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1745 \text{ MHz}$ ;  $\sigma = 1.486 \text{ S/m}$ ;  $\epsilon_r = 52.944$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/20/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1745 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 66 (AWS), CA\_66C ULCA, Body SAR, Bottom Edge,**

**PCC: 20 MHz Bandwidth, Ch. 132322, QPSK, 1 RB, 99 RB Offset**

**SCC: 20 MHz Bandwidth, Ch. 132520, QPSK, 1 RB, 0 RB Offset**

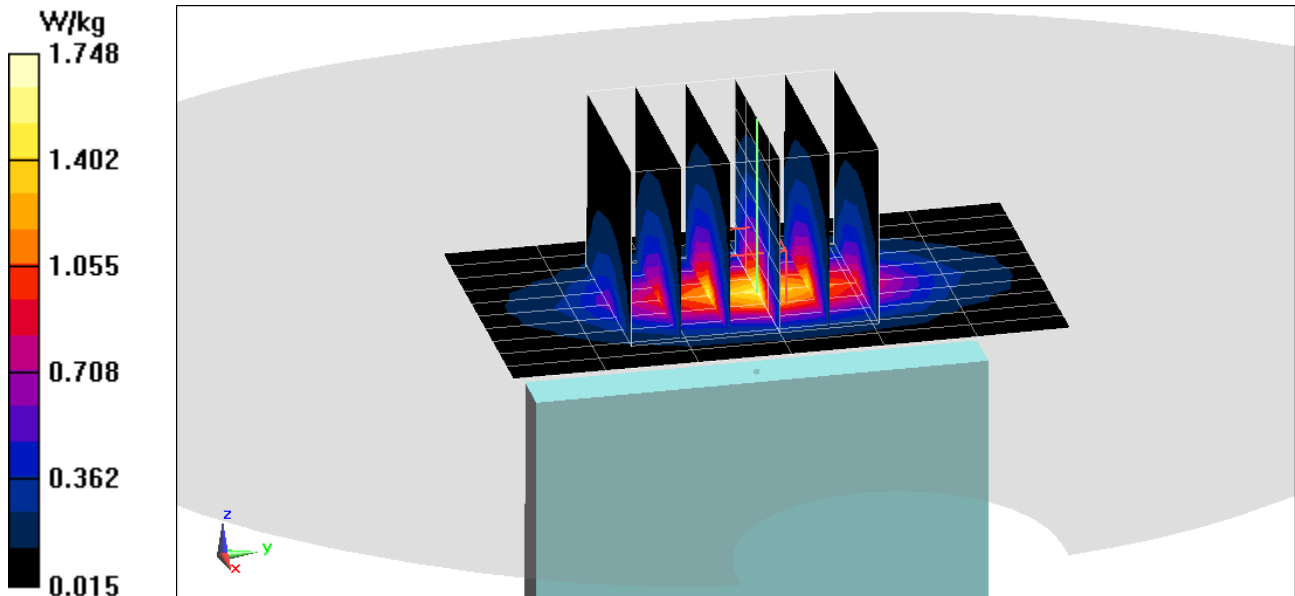
**Area Scan (11x7x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.16 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.06 W/kg

**SAR(1 g) = 1.15 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1  
Medium: 1900 Body Medium parameters used:  
 $f = 1860 \text{ MHz}$ ;  $\sigma = 1.525 \text{ S/m}$ ;  $\epsilon_r = 52.158$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1860 MHz; Calibrated: 5/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn859; Calibrated: 5/8/2019  
Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 25 (PCS), Body SAR, Back side, Low.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

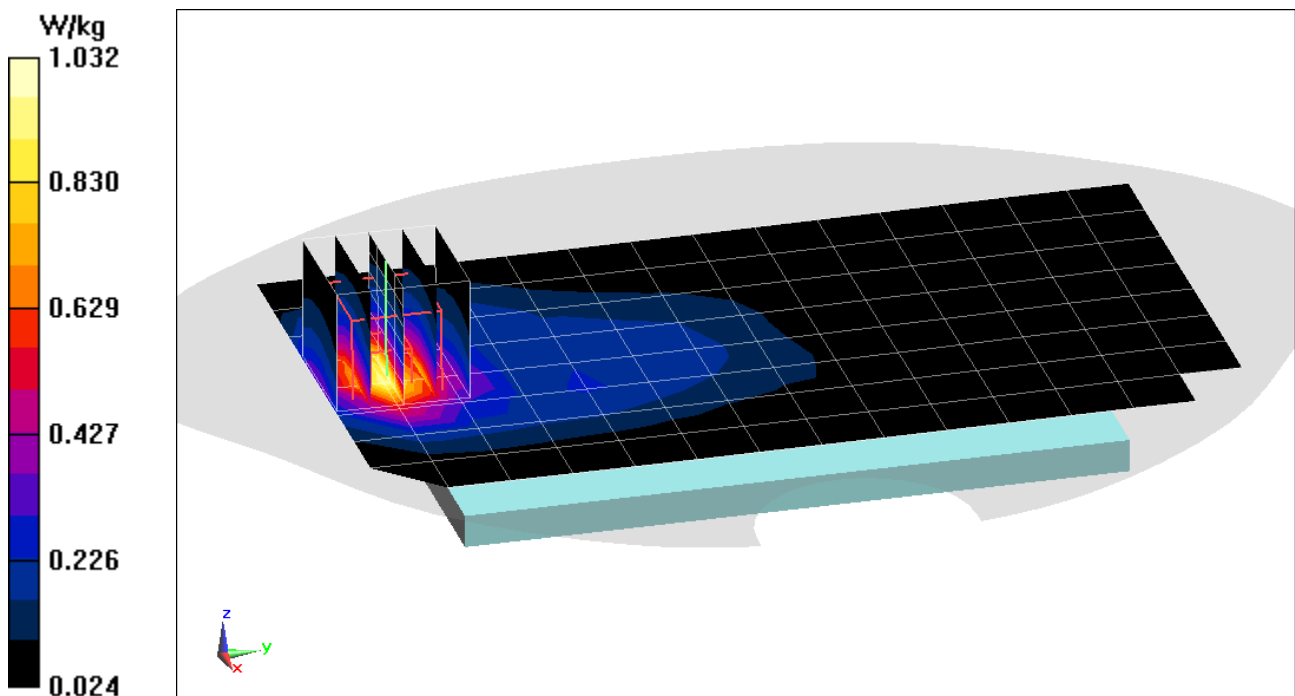
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 22.89 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.717 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0407M**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905 \text{ MHz}$ ;  $\sigma = 1.556 \text{ S/m}$ ;  $\epsilon_r = 51.461$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.3°C; Tissue Temp: 23.8°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1905 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 25 (PCS), Body SAR, Bottom Edge, High.ch,  
20 MHz Bandwidth, QPSK, 100 RB, 0 RB Offset**

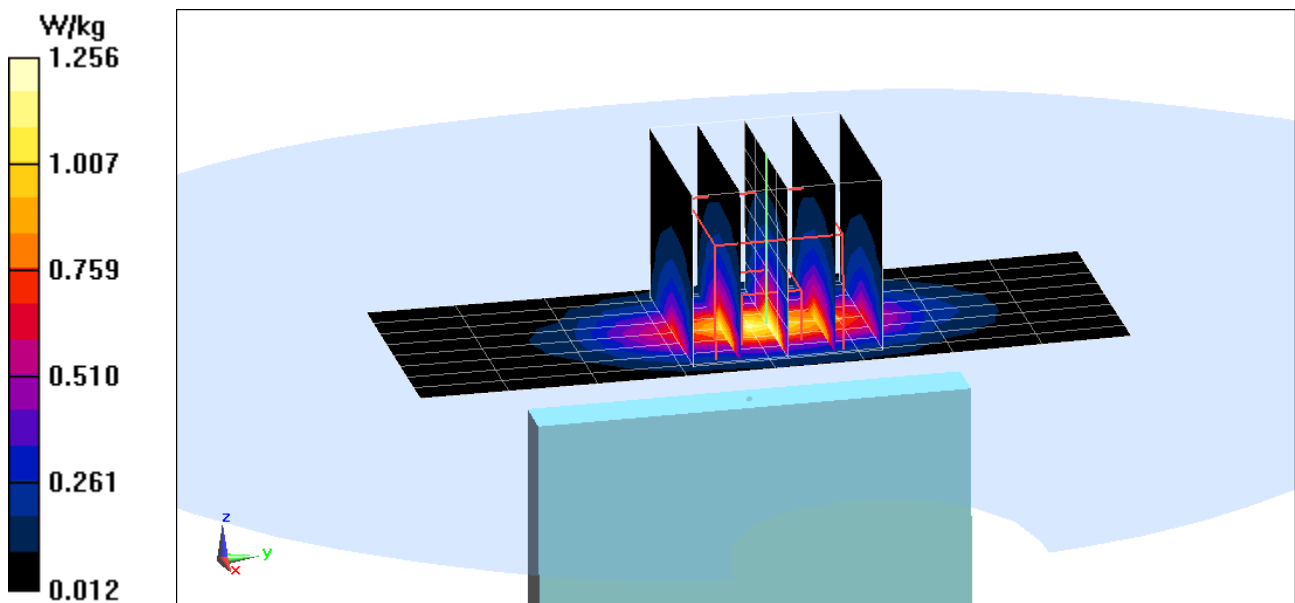
**Area Scan (9x9x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.34 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 0.893 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M**

Communication System: UID 0, LTE Band 2 (PCS); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.571 \text{ S/m}$ ;  $\epsilon_r = 52.013$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1900 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 2 (PCS), Body SAR, Back side, High.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 99 RB Offset**

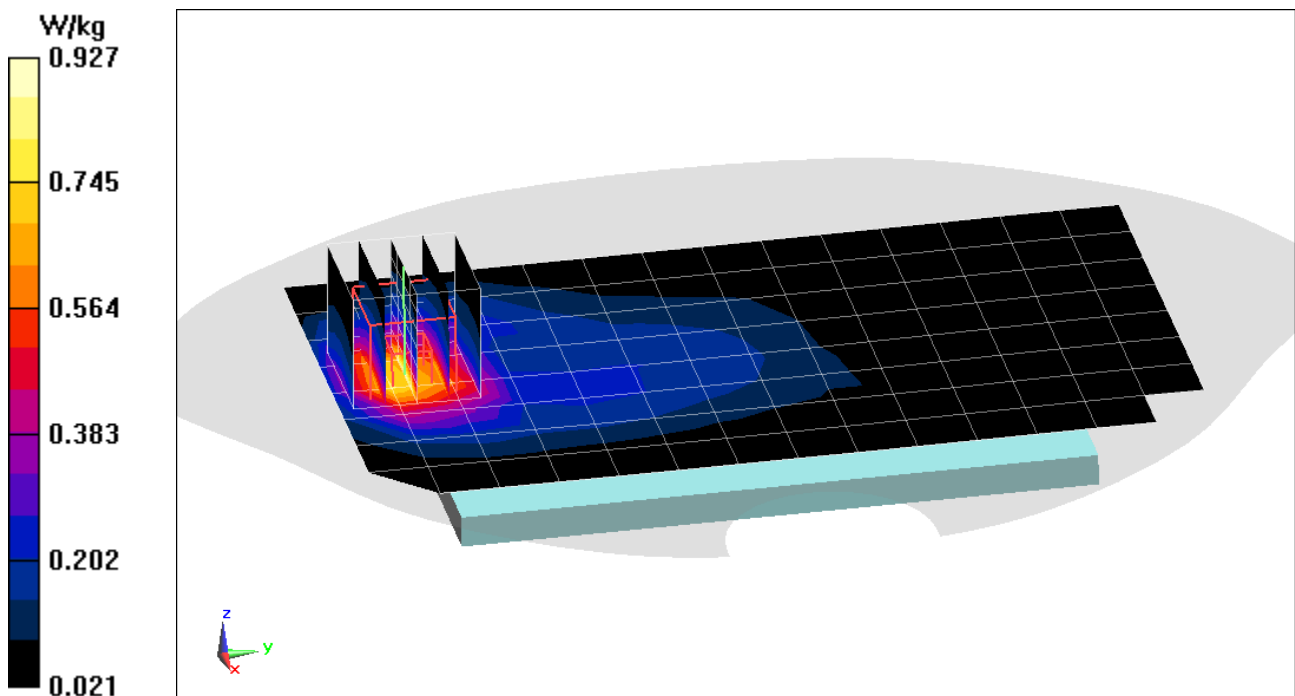
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.29 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.08 W/kg

**SAR(1 g) = 0.640 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M**

Communication System: UID 0, LTE Band 2 (PCS); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.568 \text{ S/m}$ ;  $\epsilon_r = 51.656$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/20/2019; Ambient Temp: 21.1°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 2 (PCS), Body SAR, Bottom Edge, High.ch,  
20 MHz Bandwidth, QPSK, 50 RB, 25 RB Offset**

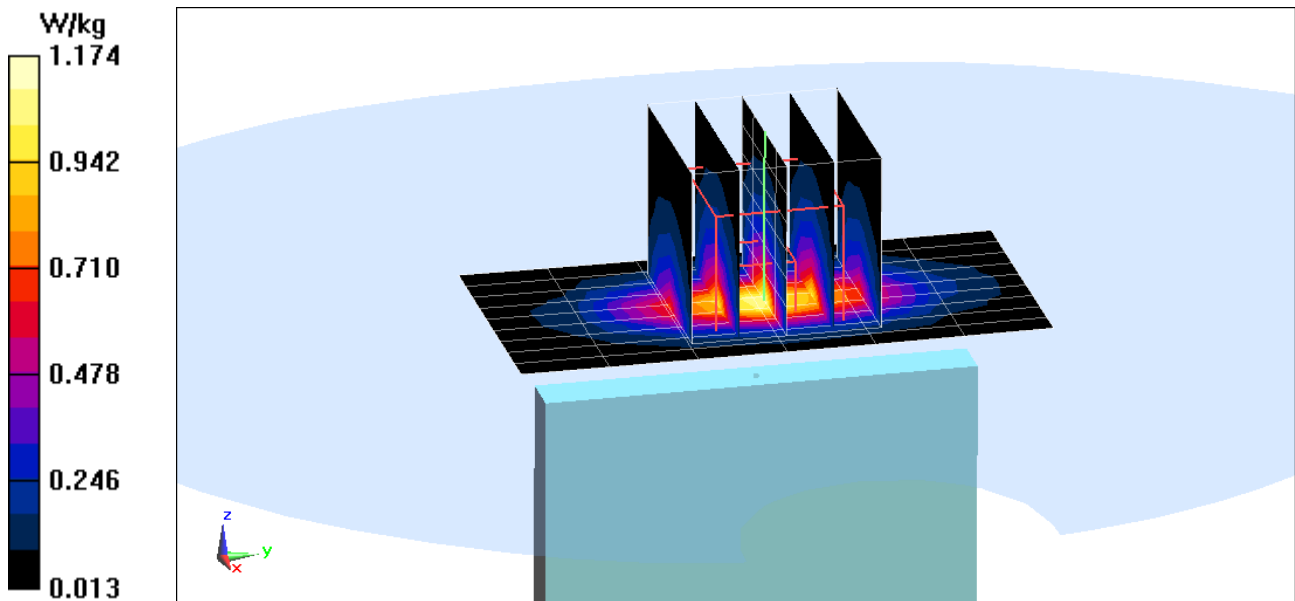
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 25.19 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 0.885 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0486M**

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2310$  MHz;  $\sigma = 1.882$  S/m;  $\epsilon_r = 52.735$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/04/2019; Ambient Temp: 22.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 30, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

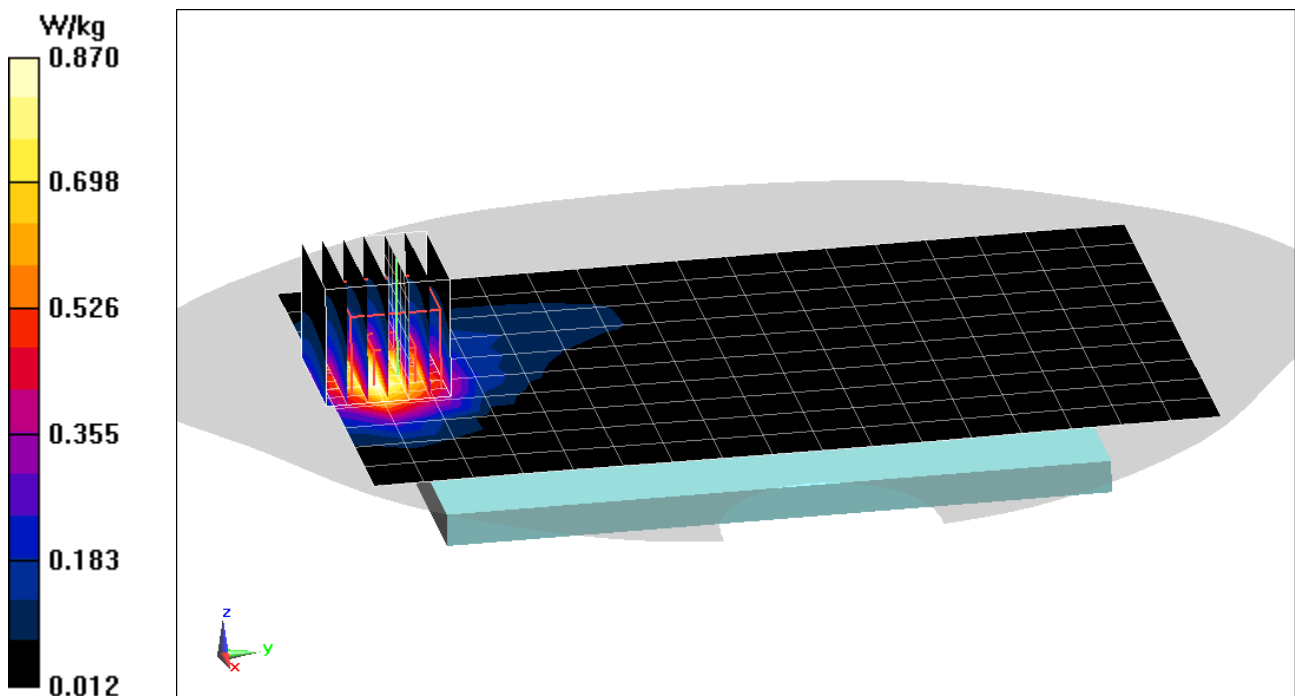
**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.01 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.588 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0486M**

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2310$  MHz;  $\sigma = 1.877$  S/m;  $\epsilon_r = 51.257$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/24/2019; Ambient Temp: 24.0°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 30, Body SAR, Bottom Edge, Mid.ch, 10 MHz Bandwidth,  
QPSK, 25 RB, 12 RB Offset**

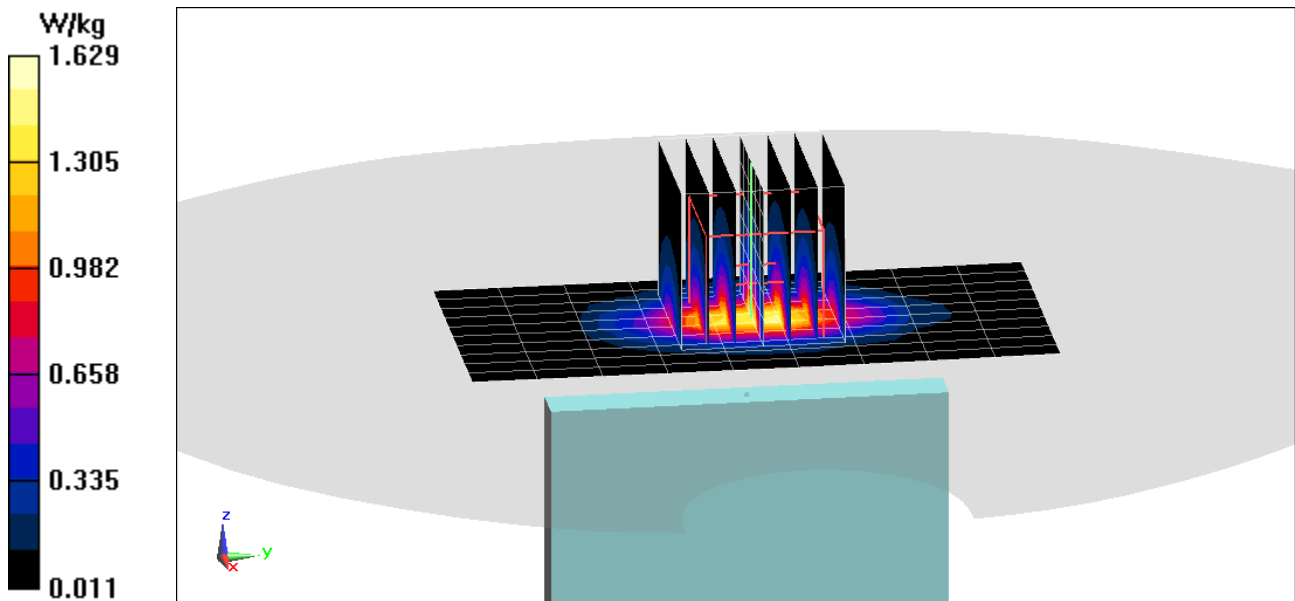
**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.93 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.98 W/kg

**SAR(1 g) = 1.02 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0533M**

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2510 \text{ MHz}$ ;  $\sigma = 2.107 \text{ S/m}$ ;  $\epsilon_r = 52.324$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2510 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 7, Body SAR, Back side, Low.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 99 RB Offset**

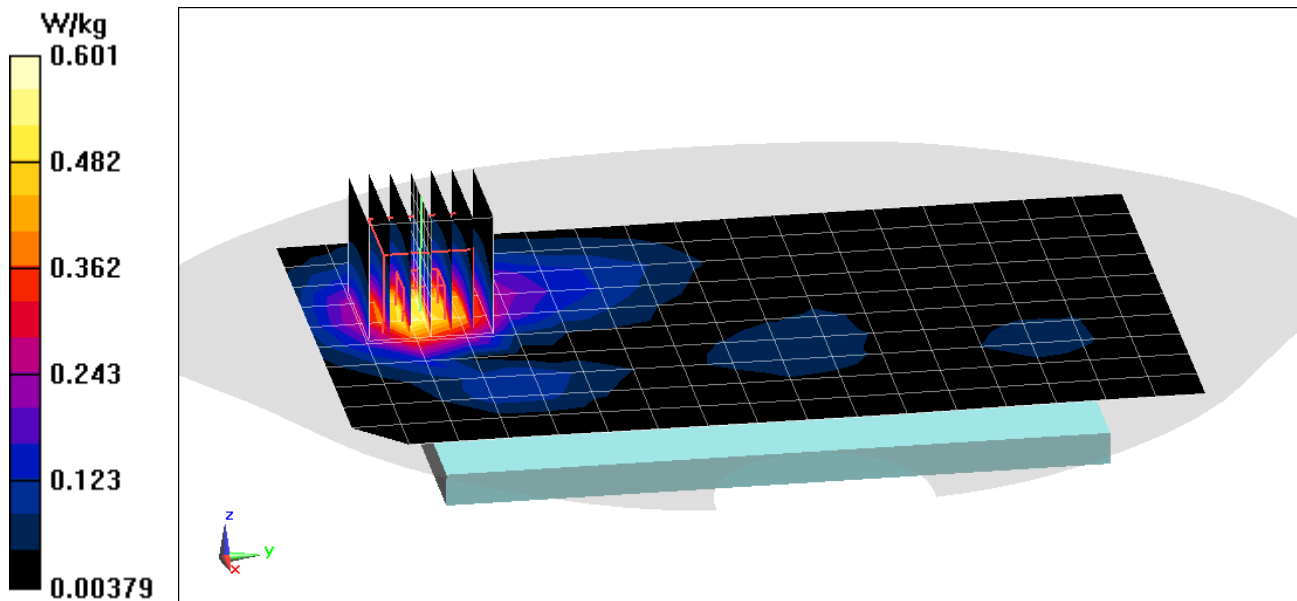
**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.38 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.729 W/kg

**SAR(1 g) = 0.389 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0405M**

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium: 2450 Body; Medium parameters used:  
 $f = 2510 \text{ MHz}$ ;  $\sigma = 2.107 \text{ S/m}$ ;  $\epsilon_r = 52.499$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.8°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2510 MHz; Calibrated: 8/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1450; Calibrated: 8/14/2019  
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 7, Body SAR, Bottom Edge, Low.ch,  
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

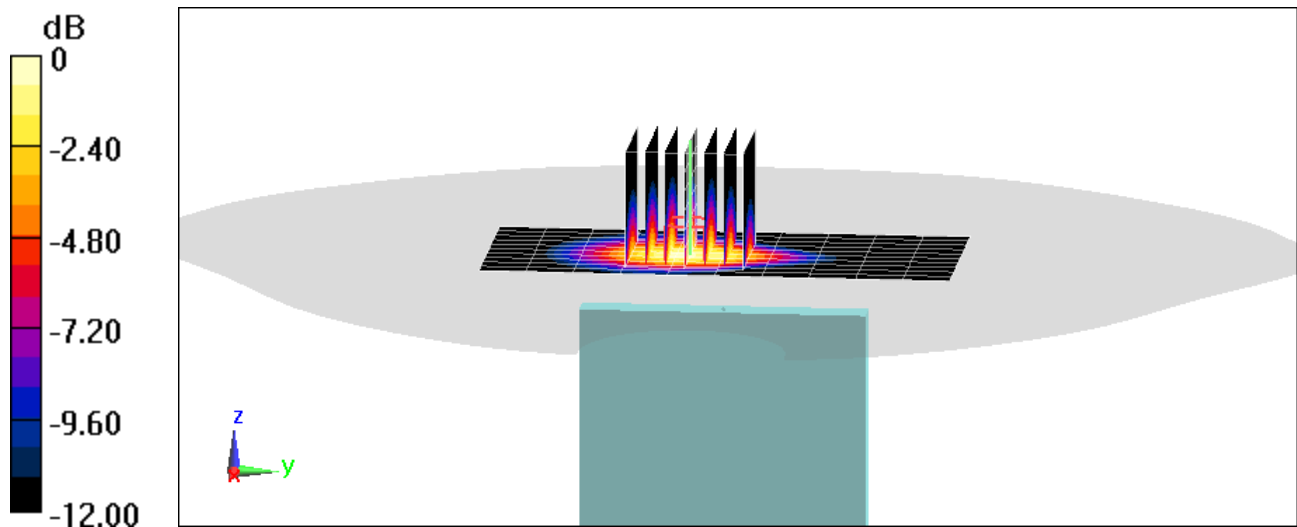
**Area Scan (11x11x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.70 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.73 W/kg

**SAR(1 g) = 0.867 W/kg**



0 dB = 1.41 W/kg = 1.49 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0486M**

Communication System: UID 0, LTE Band 48; Frequency: 3690 MHz; Duty Cycle: 1:1.58

Medium: 3500-3700 Body Medium parameters used:

$f = 3690 \text{ MHz}$ ;  $\sigma = 3.581 \text{ S/m}$ ;  $\epsilon_r = 50.483$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/06/2019; Ambient Temp: 22.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3914; ConvF(6.58, 6.58, 6.58) @ 3690 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 48, ULCA, Body SAR, Back side,**

**PCC: 20 MHz Bandwidth, Ch. 56640, QPSK, 1 RB, 0 RB Offset**

**SCC: 20 MHz Bandwidth, Ch. 56442, QPSK, 1 RB, 99 RB Offset**

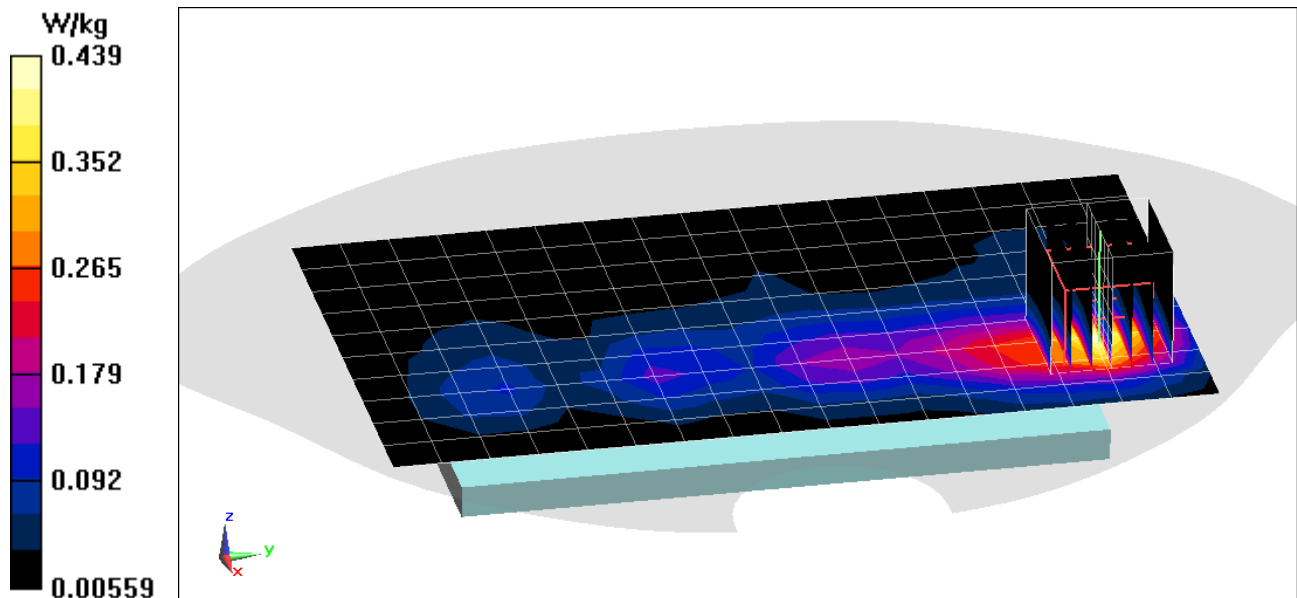
**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 8.459 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.630 W/kg

**SAR(1 g) = 0.233 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0486M**

Communication System: UID 0, LTE Band 48; Frequency: 3560 MHz; Duty Cycle: 1:1.58

Medium: 3600 Body Medium parameters used:

$f = 3560 \text{ MHz}$ ;  $\sigma = 3.521 \text{ S/m}$ ;  $\epsilon_r = 50.487$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/11/2019; Ambient Temp: 21.2°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN3914; ConvF(6.88, 6.88, 6.88) @ 3560 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version S52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 48, ULCA, Body SAR, Top Edge**

**PCC: 20 MHz Bandwidth, Ch. 55340, QPSK, 1 RB, 99 RB Offset**

**SCC: 20 MHz Bandwidth, Ch. 55538, QPSK, 1 RB, 0 RB Offset**

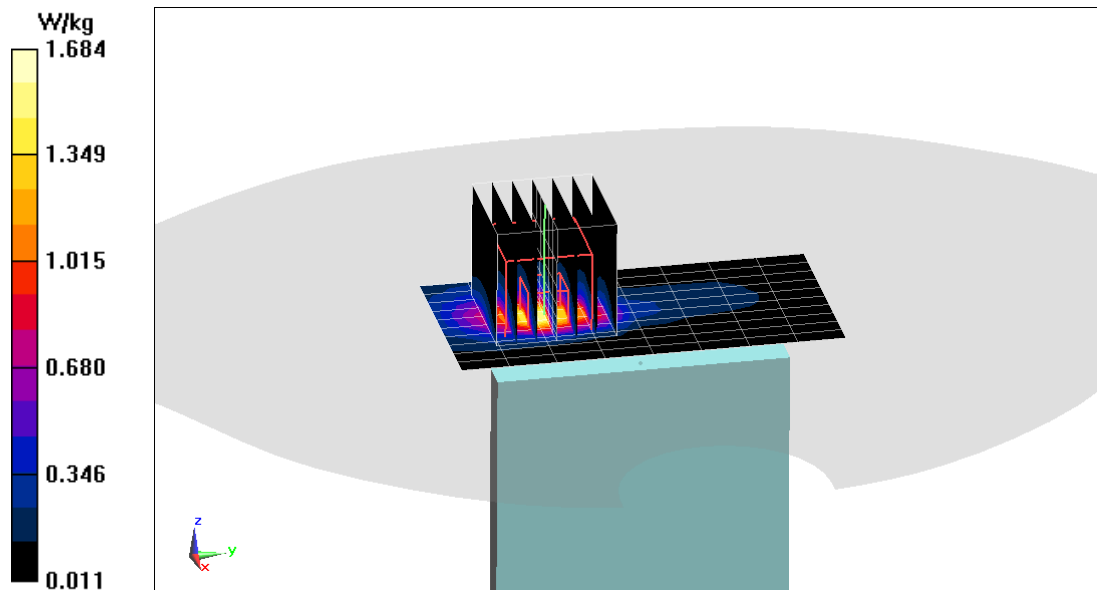
**Area Scan (11x9x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 16.27 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.49 W/kg

**SAR(1 g) = 0.838 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0480M**

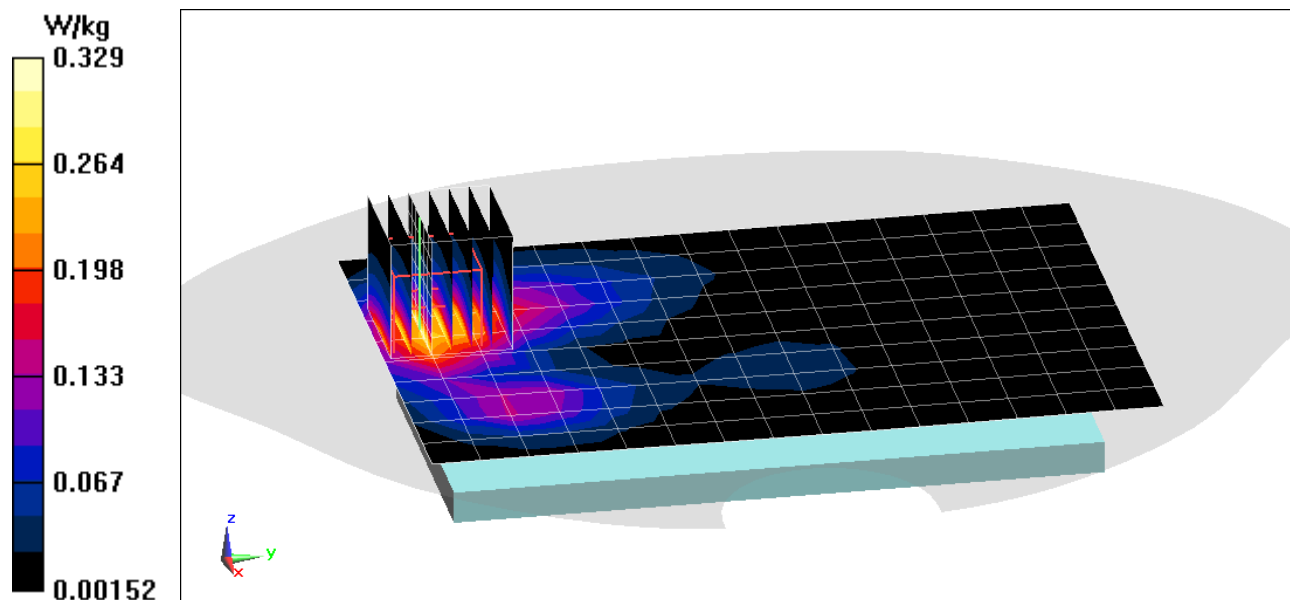
Communication System: UID 0, \_LTE Band 41 (Class 2); Frequency: 2593 MHz; Duty Cycle: 1:2.31  
Medium: 2450 Body Medium parameters used (interpolated):  
 $f = 2593 \text{ MHz}$ ;  $\sigma = 2.215 \text{ S/m}$ ;  $\epsilon_r = 52.417$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/31/2019; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2593 MHz; Calibrated: 7/15/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1323; Calibrated: 7/11/2019  
Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 41 (PC2), ULCA, Body SAR, Back side,**  
**PCC: 20 MHz Bandwidth, Ch. 40620, QPSK, 1 RB, 0 RB Offset**  
**SCC: 20 MHz Bandwidth, Ch. 40422, QPSK, 1 RB, 99 RB Offset**

**Area Scan (11x16x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 10.11 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 0.404 W/kg  
**SAR(1 g) = 0.216 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0405M**

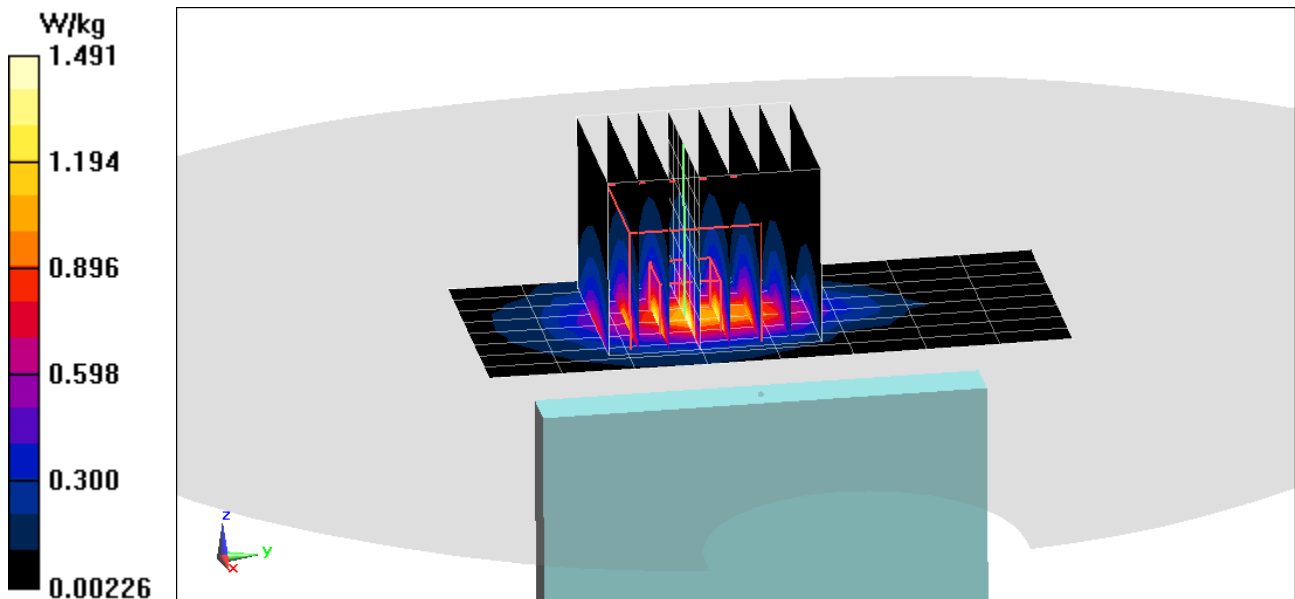
Communication System: UID 0, \_LTE Band 41 (Class 2); Frequency: 2506 MHz; Duty Cycle: 1:2.31  
Medium: 2450 Body; Medium parameters used (interpolated):  
 $f = 2506 \text{ MHz}$ ;  $\sigma = 2.111 \text{ S/m}$ ;  $\epsilon_r = 50.953$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/24/2019; Ambient Temp: 23.7°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2506 MHz; Calibrated: 7/15/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1323; Calibrated: 7/11/2019  
Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 41 (PC2), ULCA, Body SAR, Bottom Edge,**  
**PCC: 20 MHz Bandwidth, Ch. 39750, QPSK, 50 RB, 50 RB Offset**  
**SCC: 20 MHz Bandwidth, Ch. 39948, QPSK, 50 RB, 0 RB Offset**

**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 19.27 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 1.50 W/kg  
**SAR(1 g) = 0.734 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0999M**

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.92 \text{ S/m}$ ;  $\epsilon_r = 55.173$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/20/2019; Ambient Temp: 23.0°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n71, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 136100, 50 RB, 28 RB Offset**

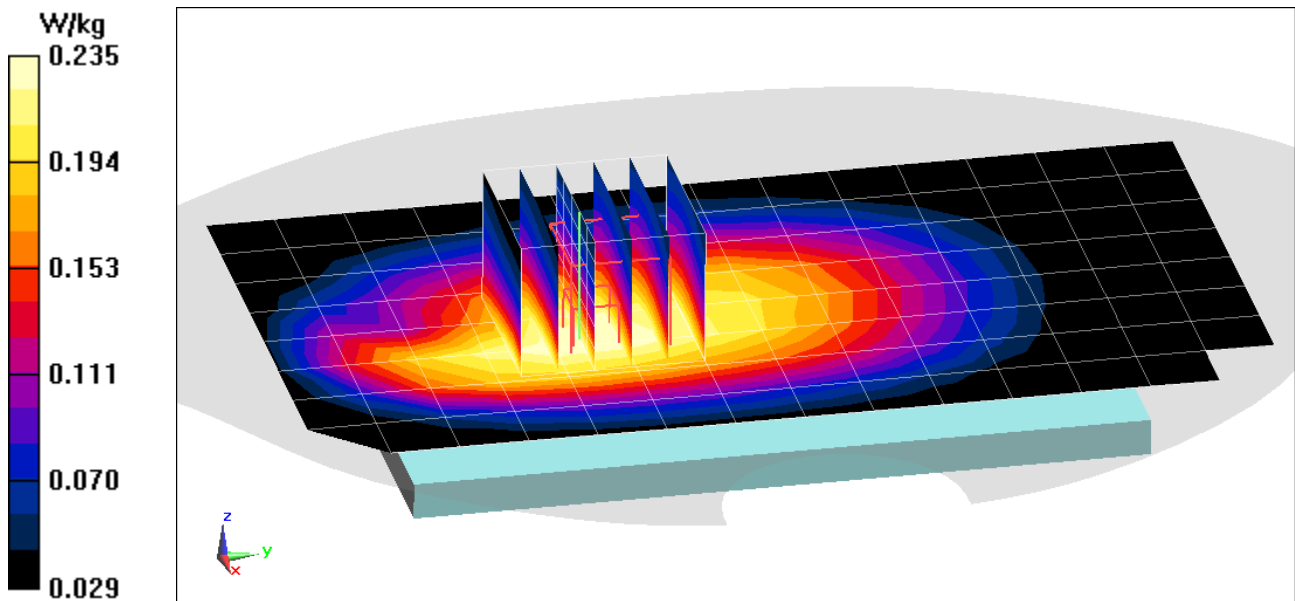
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.03 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.259 W/kg

**SAR(1 g) = 0.198 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0999M**

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.92 \text{ S/m}$ ;  $\epsilon_r = 55.173$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/20/2019; Ambient Temp: 23.0°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n71, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 136100, 50 RB, 28 RB Offset**

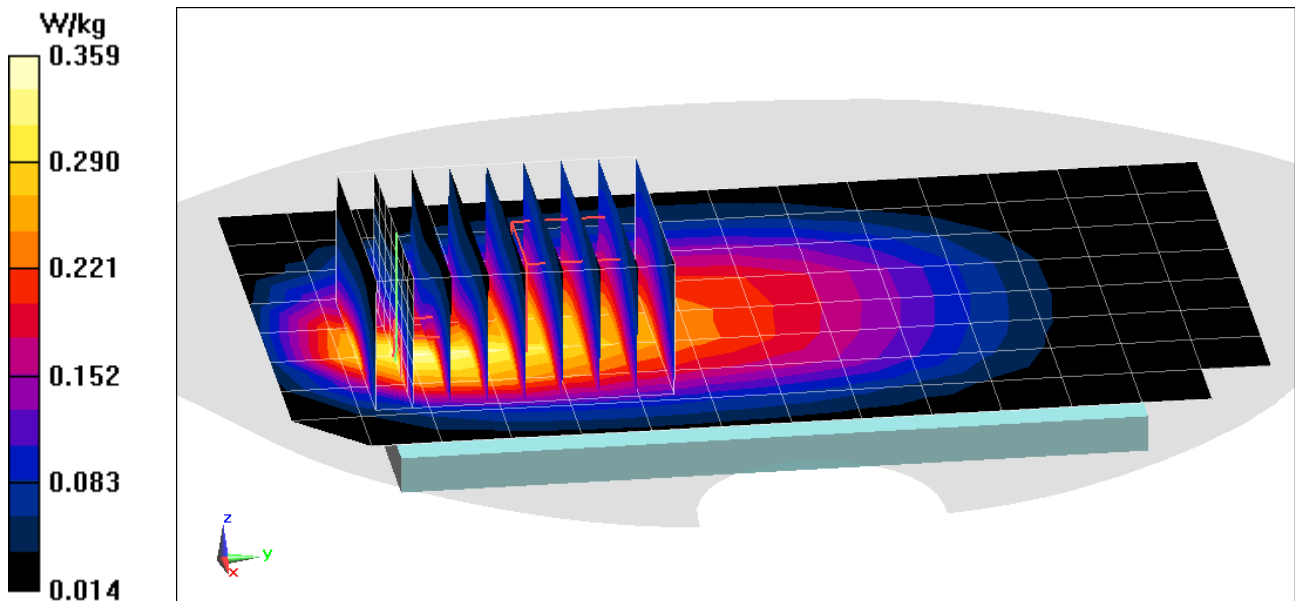
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (8x9x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.85 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.420 W/kg

**SAR(1 g) = 0.247 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0977M**

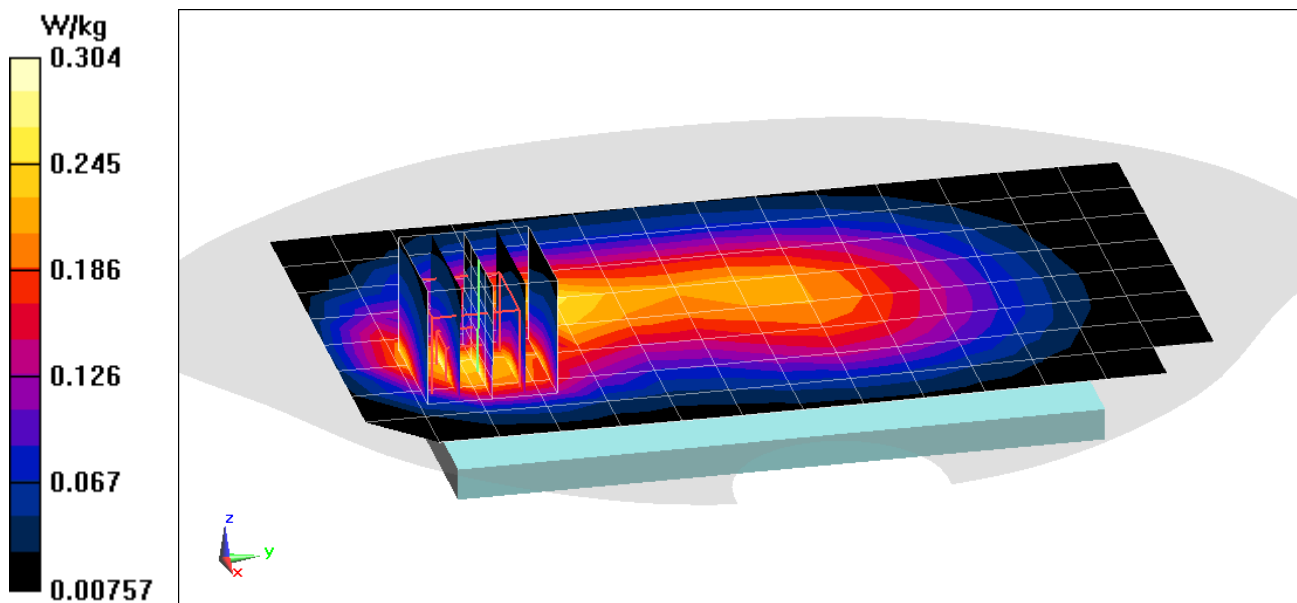
Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.968 \text{ S/m}$ ;  $\epsilon_r = 56.089$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/18/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.5 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n5, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 167300, 50 RB, 28 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm  
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.48 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 0.361 W/kg  
**SAR(1 g) = 0.218 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0977M**

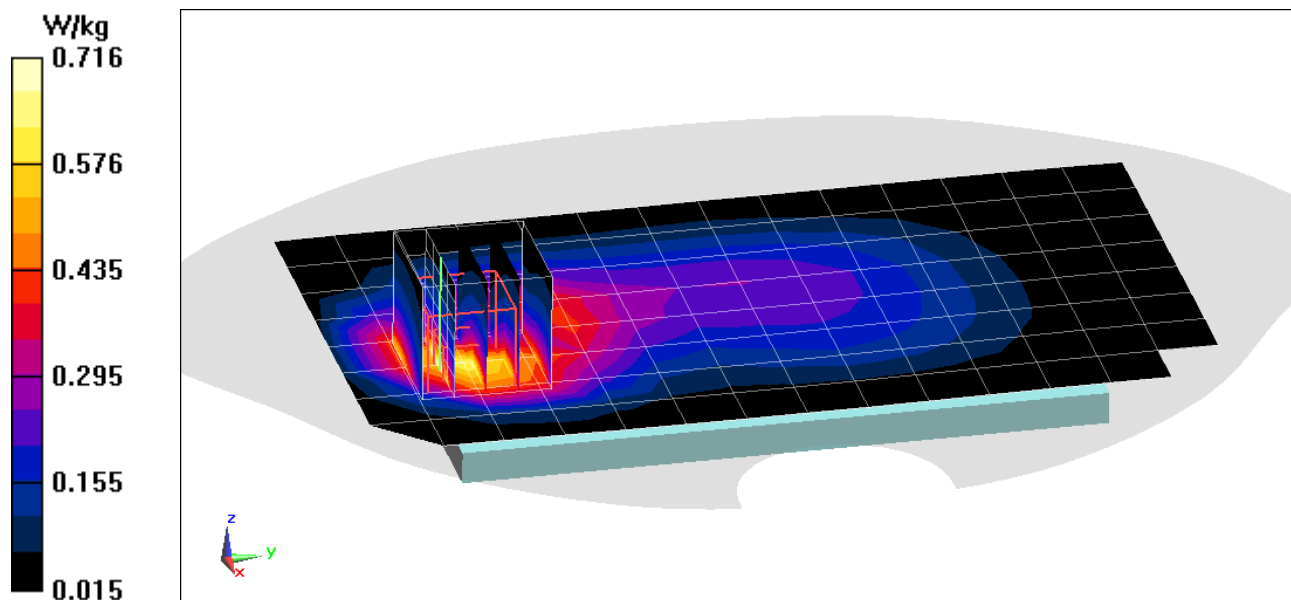
Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium: 835 Body Medium parameters used (interpolated):  
 $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.968 \text{ S/m}$ ;  $\epsilon_r = 56.089$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/18/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 836.5 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n5, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 167300, 50 RB, 28 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm  
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.30 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 0.883 W/kg  
**SAR(1 g) = 0.498 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0909M**

Communication System: UID 0, NR Band n66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1745 \text{ MHz}$ ;  $\sigma = 1.532 \text{ S/m}$ ;  $\epsilon_r = 52.964$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/25/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1745 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n66, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 349000, 1 RB, 53 RB Offset**

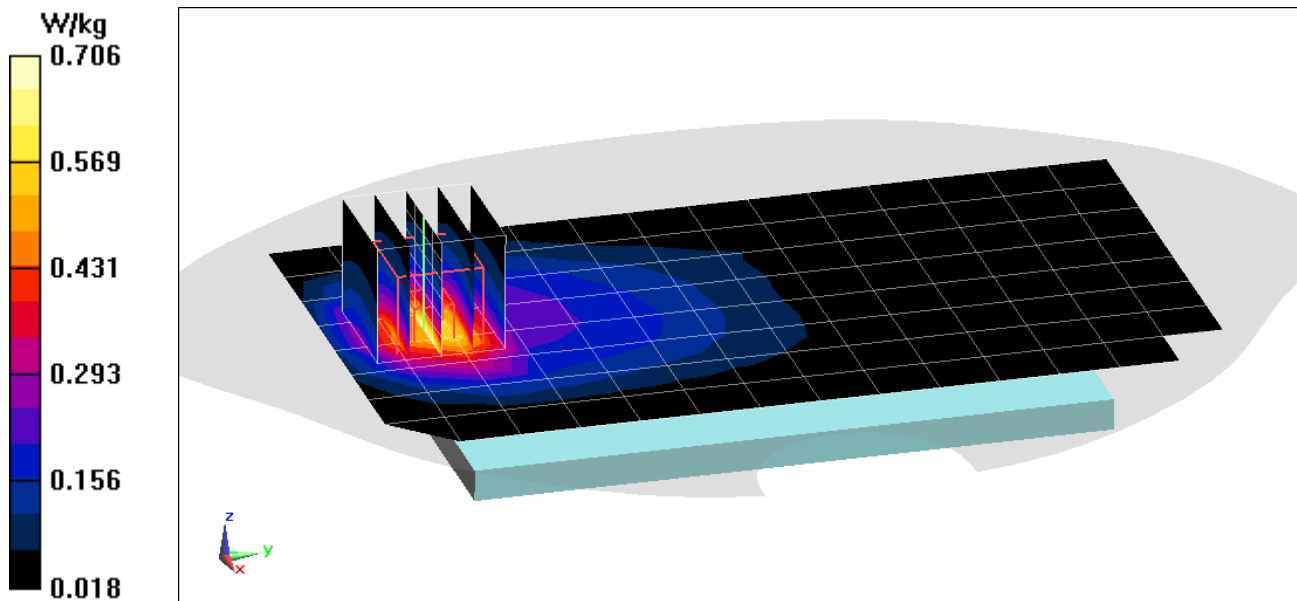
**Area Scan (9x6x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 18.12 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.677 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0909M**

Communication System: UID 0, NR Band n66; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1720$  MHz;  $\sigma = 1.496$  S/m;  $\epsilon_r = 52.853$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/03/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1720 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n66, Body SAR, Bottom Edge, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 344000, 1 RB, 1 RB Offset**

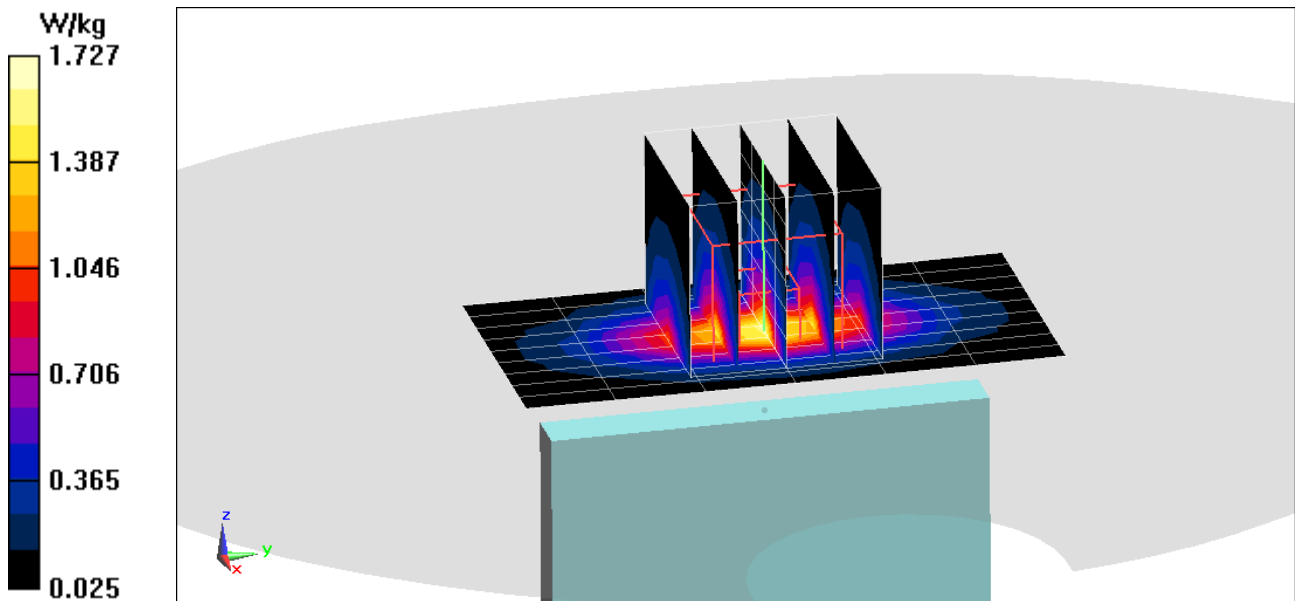
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 29.23 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.03 W/kg

**SAR(1 g) = 1.14 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 1021M**

Communication System: UID 0, NR Band n2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.572$  S/m;  $\epsilon_r = 51.438$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/09/2019; Ambient Temp: 23.7°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n2, Body SAR, Back Side, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 380000, 1 RB, 1 RB Offset**

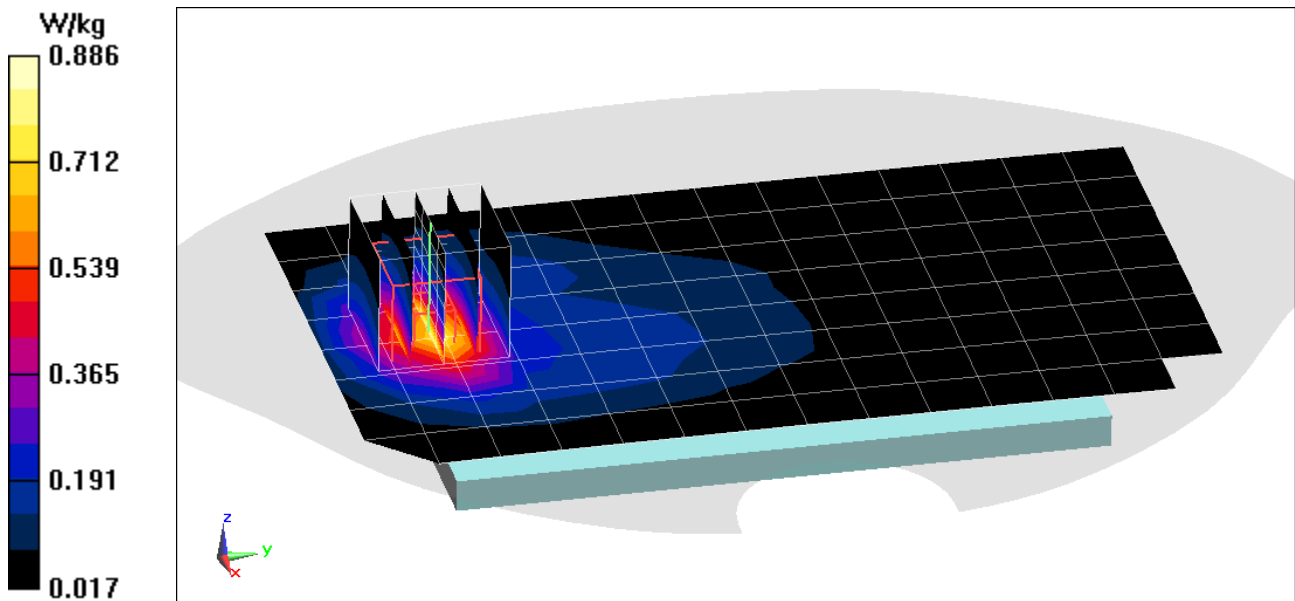
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.59 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.609 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 1021M**

Communication System: UID 0, NR Band n2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.575 \text{ S/m}$ ;  $\epsilon_r = 50.866$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/02/2019; Ambient Temp: 20.7°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n2, Body SAR, Bottom Edge, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 380000, 50 RB, 56 RB Offset**

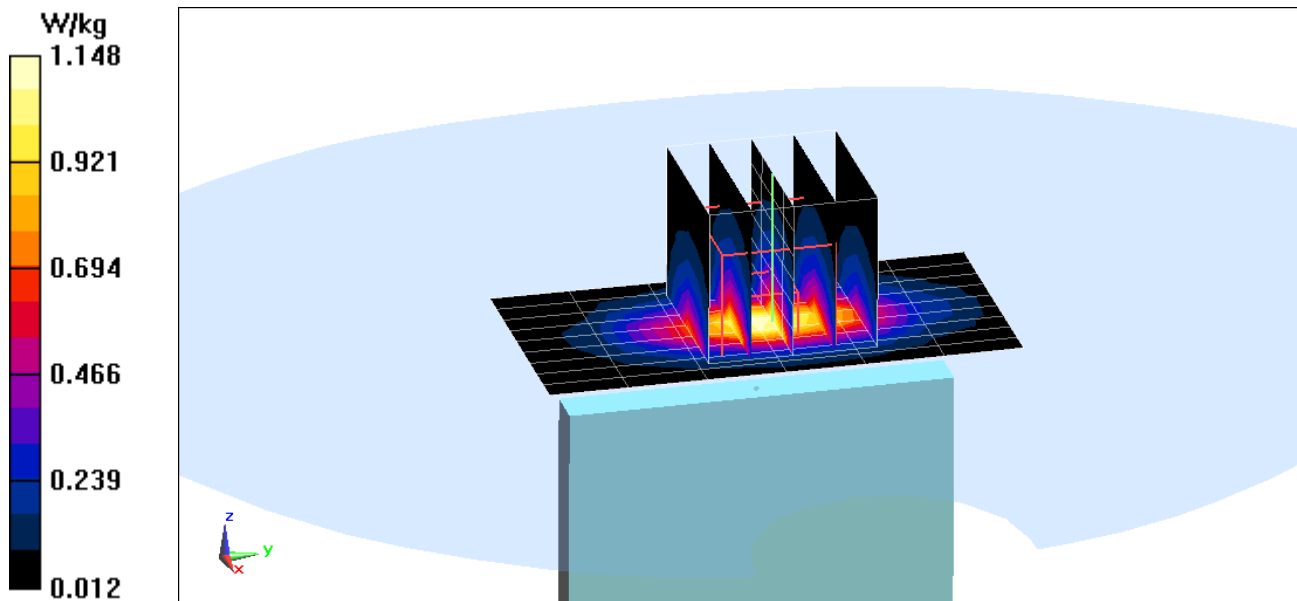
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 23.27 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.45 W/kg

**SAR(1 g) = 0.784 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0353M**

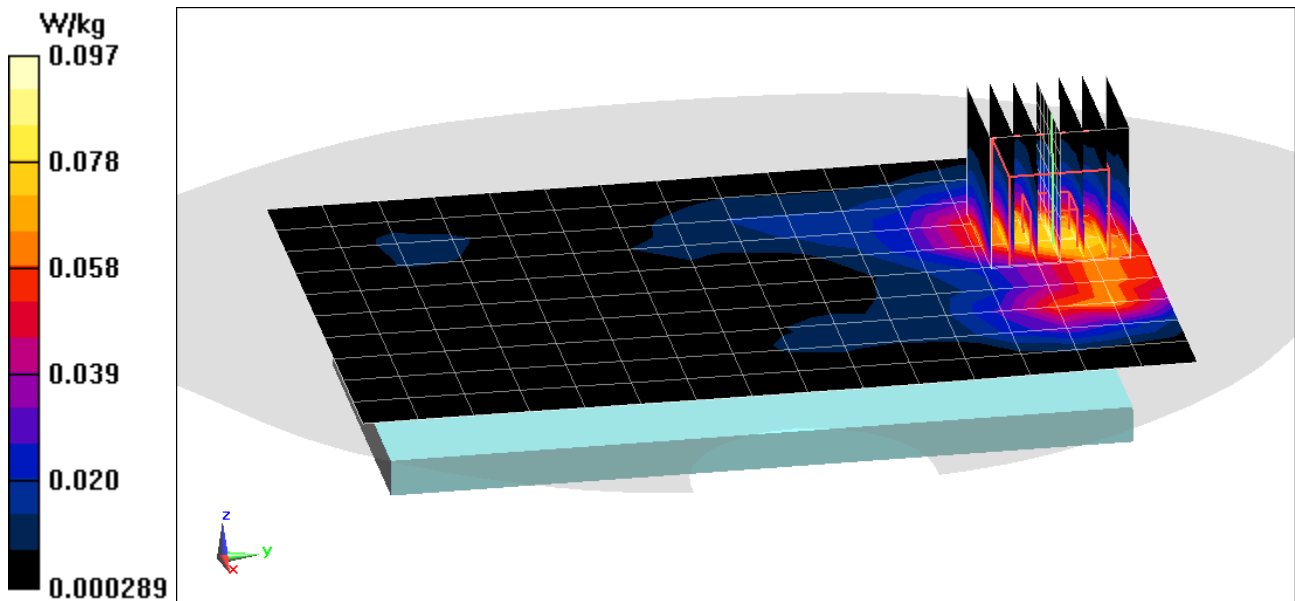
Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4  
Medium: 2450 Body Medium parameters used (interpolated):  
 $f = 2592.99$  MHz;  $\sigma = 2.203$  S/m;  $\epsilon_r = 52.34$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/16/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2592.99 MHz; Calibrated: 7/15/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1323; Calibrated: 7/11/2019  
Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n41, Body SAR, Back Side, 100 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 518598, 135 RB, 69 RB Offset**

**Area Scan (11x16x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 5.599 V/m; Power Drift = -0.10 dB  
Peak SAR (extrapolated) = 0.121 W/kg  
**SAR(1 g) = 0.063 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0353M**

Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2592.99$  MHz;  $\sigma = 2.203$  S/m;  $\epsilon_r = 52.34$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/16/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2592.99 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n41, Body SAR, Top Edge, 100 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 518598, 135 RB, 69 RB Offset**

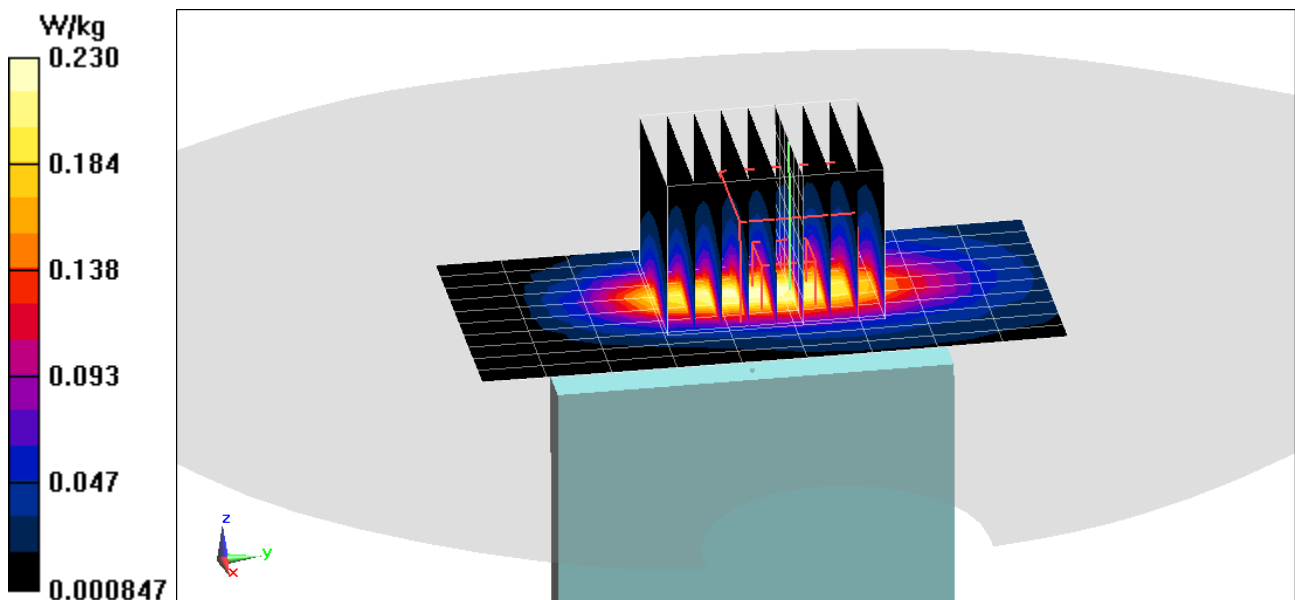
**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x9x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.448 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.294 W/kg

**SAR(1 g) = 0.144 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0324M**

Communication System: UID 0, IEEE 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2462 \text{ MHz}$ ;  $\sigma = 2.06 \text{ S/m}$ ;  $\epsilon_r = 50.508$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/06/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2462 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11b, Antenna 1, 22 MHz Bandwidth, Body SAR, Ch 11, 1 Mbps, Back Side**

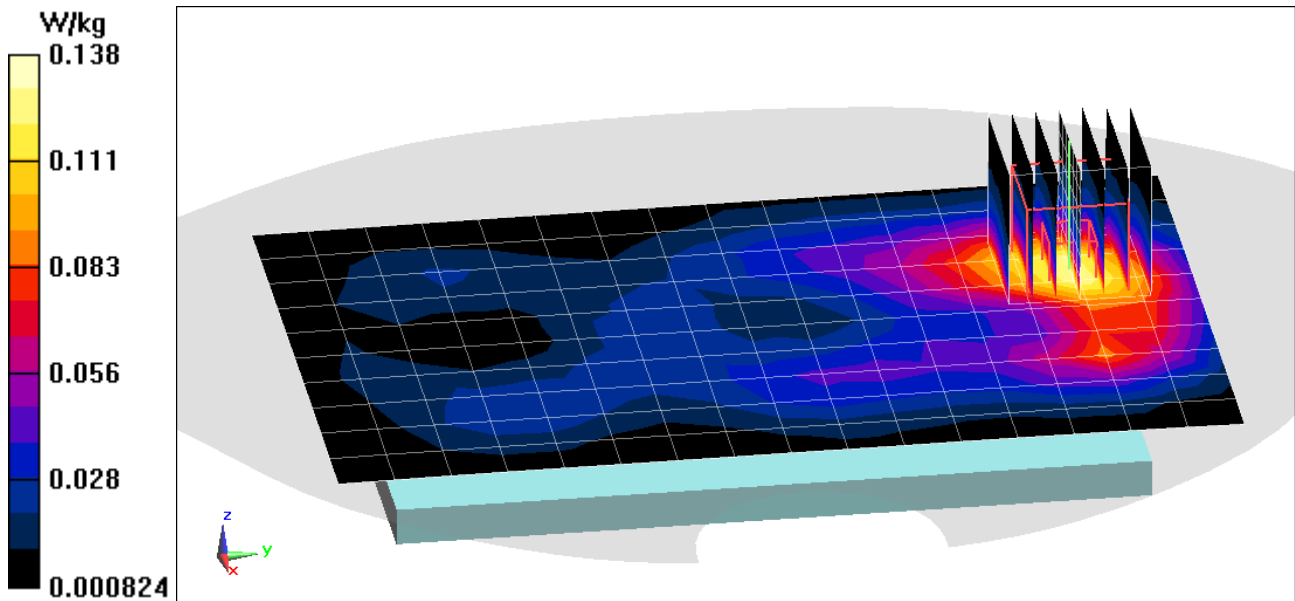
**Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.906 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.169 W/kg

**SAR(1 g) = 0.090 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0324M**

Communication System: UID 0, \_IEEE 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: 2450 Body Medium parameters used (interpolated):  
 $f = 2462 \text{ MHz}$ ;  $\sigma = 2.06 \text{ S/m}$ ;  $\epsilon_r = 50.508$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/06/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2462 MHz; Calibrated: 8/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1450; Calibrated: 8/14/2019  
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Body SAR, Ch 11, 1 Mbps, Top Edge**

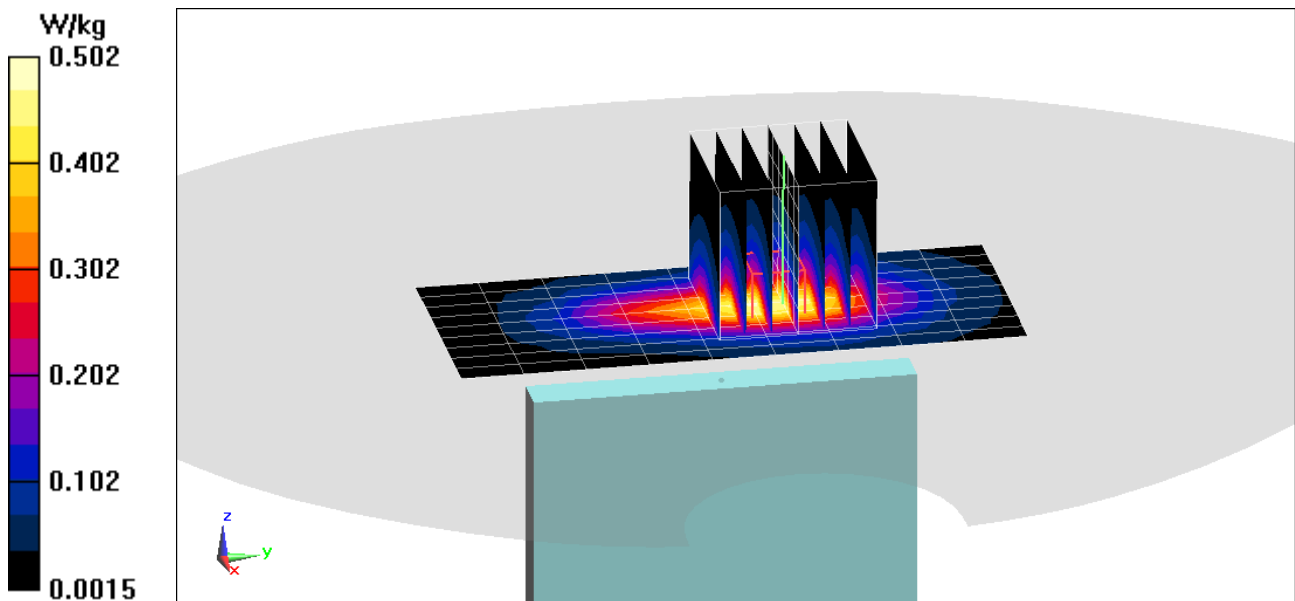
**Area Scan (10x10x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.246 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.615 W/kg

**SAR(1 g) = 0.313 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0402M**

Communication System: UID 0, 802.11n 5.2-5.8 GHz Band; Frequency: 5280 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Body Medium parameters used:  
 $f = 5280 \text{ MHz}$ ;  $\sigma = 5.503 \text{ S/m}$ ;  $\epsilon_r = 47.181$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/1/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5280 MHz; Calibrated: 6/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1334; Calibrated: 6/20/2019  
Phantom: Front; Type: QD 000 P40 CD; Serial: 1686  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11n, MIMO, U-NII-2A, 20 MHz Bandwidth,  
Body SAR, Ch 56, 13 Mbps, Back Side**

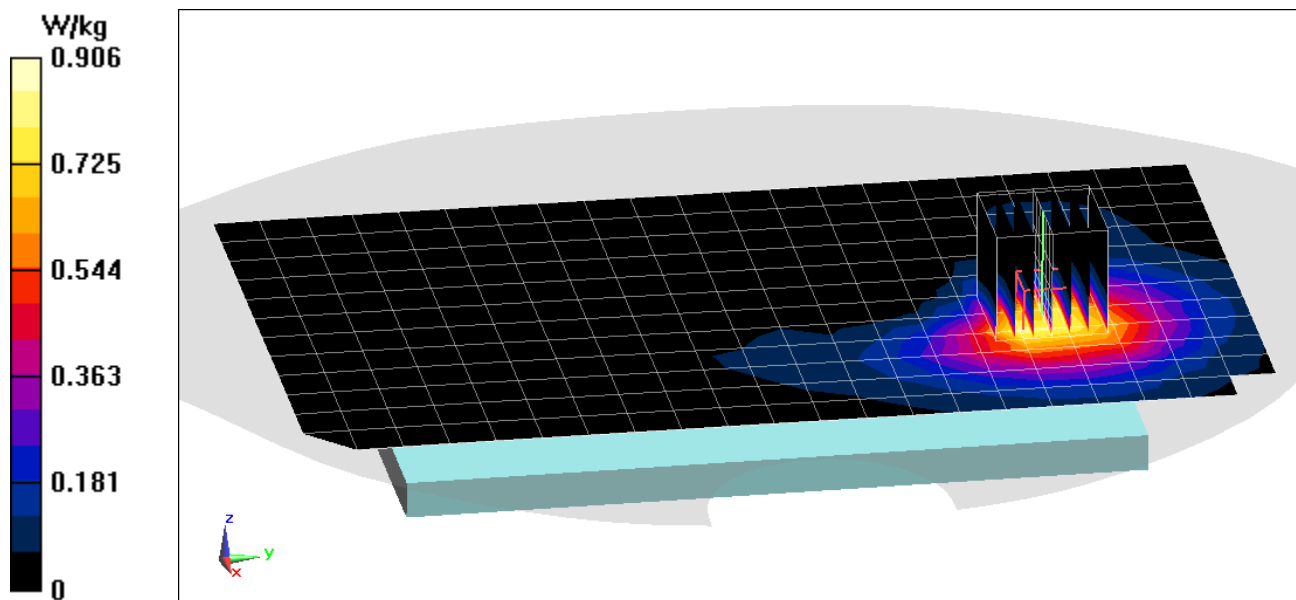
**Area Scan (13x22x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 8.936 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.49 W/kg

**SAR(1 g) = 0.414 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0402M**

Communication System: UID 0, 802.11n 5.2-5.8 GHz Band; Frequency: 5825 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Body Medium parameters used:  
 $f = 5825 \text{ MHz}$ ;  $\sigma = 6.219 \text{ S/m}$ ;  $\epsilon_r = 46.31$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/1/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5825 MHz; Calibrated: 6/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1334; Calibrated: 6/20/2019  
Phantom: Front; Type: QD 000 P40 CD; Serial: 1686  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11n, MIMO, U-NII-3, 20 MHz Bandwidth,  
Body SAR, Ch 165, 13 Mbps, Back Side**

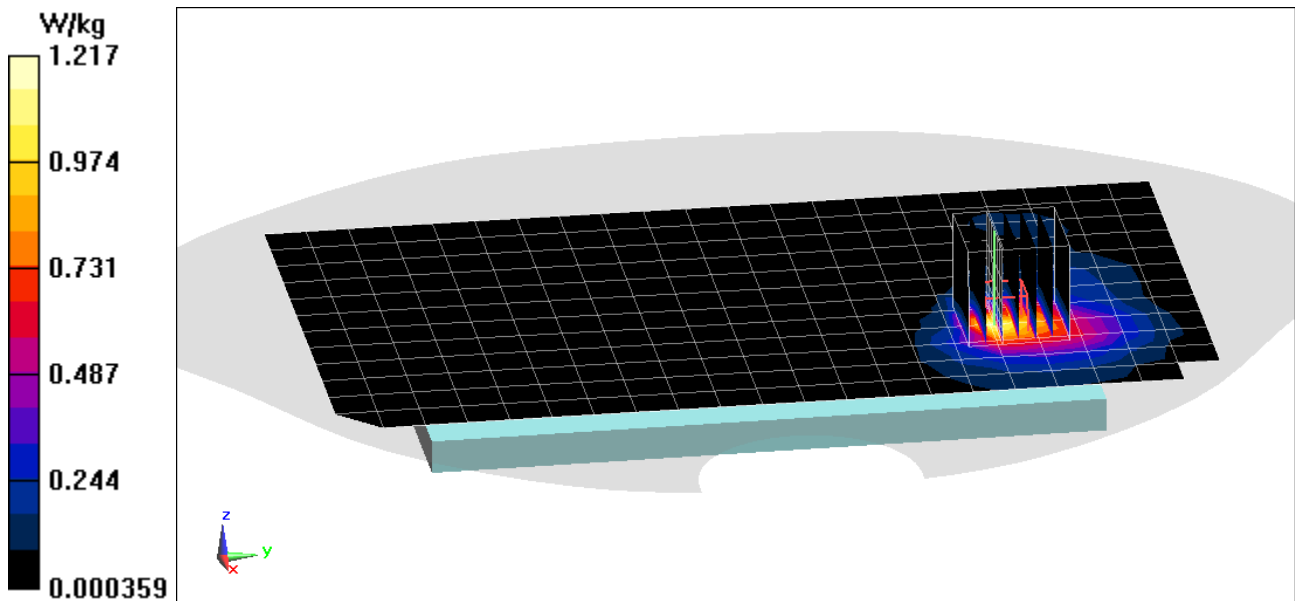
**Area Scan (13x22x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 1.299 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.29 W/kg

**SAR(1 g) = 0.496 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0402M**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.297

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2441$  MHz;  $\sigma = 2.032$  S/m;  $\epsilon_r = 50.594$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/06/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2441 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Bluetooth, Body SAR, Ch 39, 1 Mbps, Back Side**

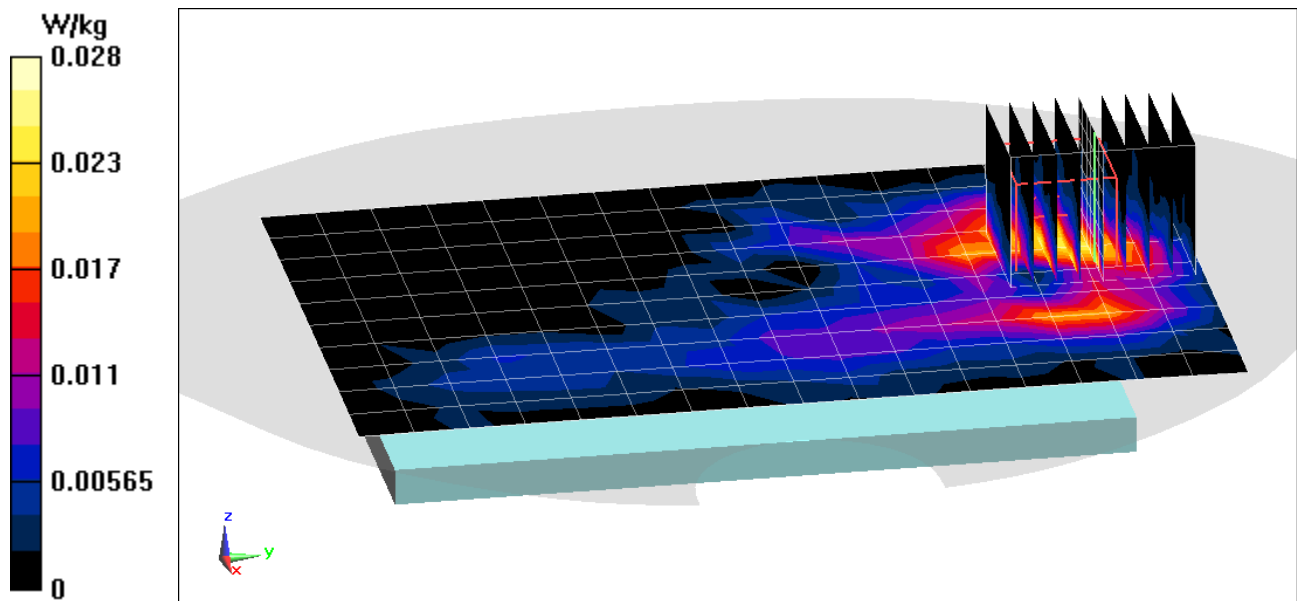
**Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x9x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.8240 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.0500 W/kg

**SAR(1 g) = 0.017 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0402M**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.297

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2441$  MHz;  $\sigma = 2.032$  S/m;  $\epsilon_r = 50.594$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/06/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2441 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: Bluetooth, Body SAR, Ch 39, 1 Mbps, Top Edge**

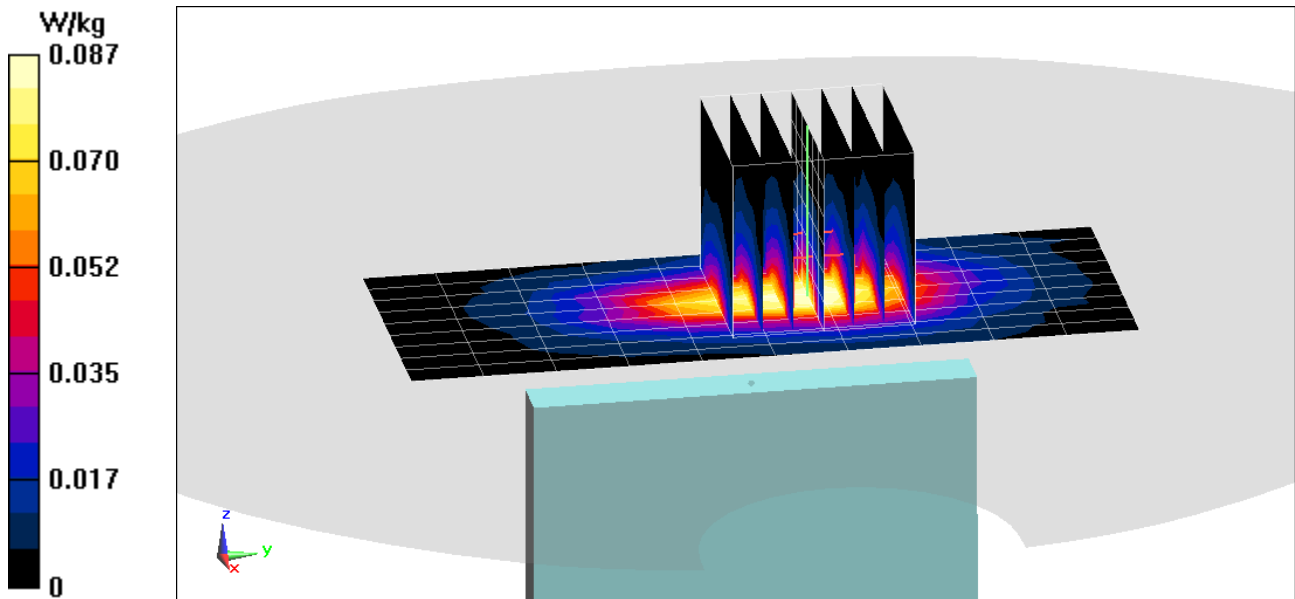
**Area Scan (10x11x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.714 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.105 W/kg

**SAR(1 g) = 0.054 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0406M**

Communication System: UID 0, CDMA; Frequency: 1908.75 MHz; Duty Cycle: 1:1  
Medium: 1900 Body; Medium parameters used (interpolated):  
 $f = 1908.75 \text{ MHz}$ ;  $\sigma = 1.589 \text{ S/m}$ ;  $\epsilon_r = 51.885$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01/01/2020; Ambient Temp: 21.3°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1908.75 MHz; Calibrated: 12/11/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1533; Calibrated: 12/5/2019  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: PCS EVDO, Phablet SAR, Bottom Edge, High.ch**

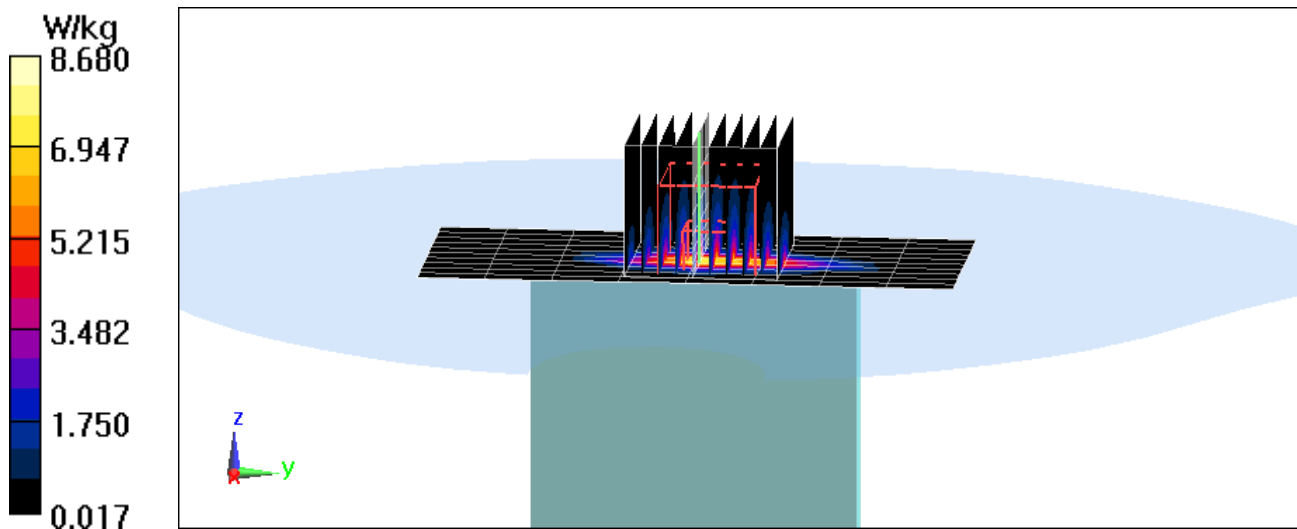
**Area Scan (11x9x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid:  $dx=3.8\text{mm}$ ,  $dy=3.8\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 55.25 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 12.8 W/kg

**SAR(10 g) = 1.93 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, GSM GPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2.076

Medium: 1900 Body Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.555 \text{ S/m}$ ;  $\epsilon_r = 50.942$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/02/2019; Ambient Temp: 20.7°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1880 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: GPRS 1900, Phablet SAR, Bottom Edge, Mid.ch, 4 Tx Slots**

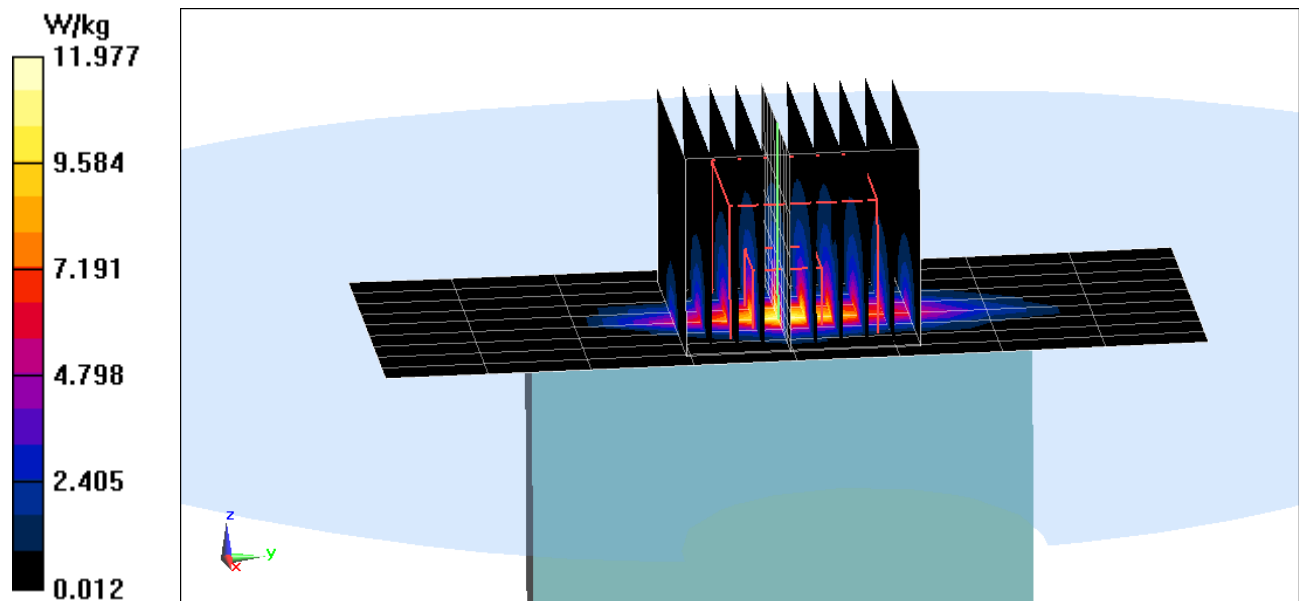
**Area Scan (10x9x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 68.46 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 18.1 W/kg

**SAR(10 g) = 2.51 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, UMTS; Frequency: 1752.6 MHz; Duty Cycle: 1:1  
Medium: 1750 Body Medium parameters used (interpolated):  
 $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.494 \text{ S/m}$ ;  $\epsilon_r = 52.912$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 11/20/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1752.6 MHz; Calibrated: 4/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/18/2019  
Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1750, Phablet SAR, Bottom Edge, High.ch**

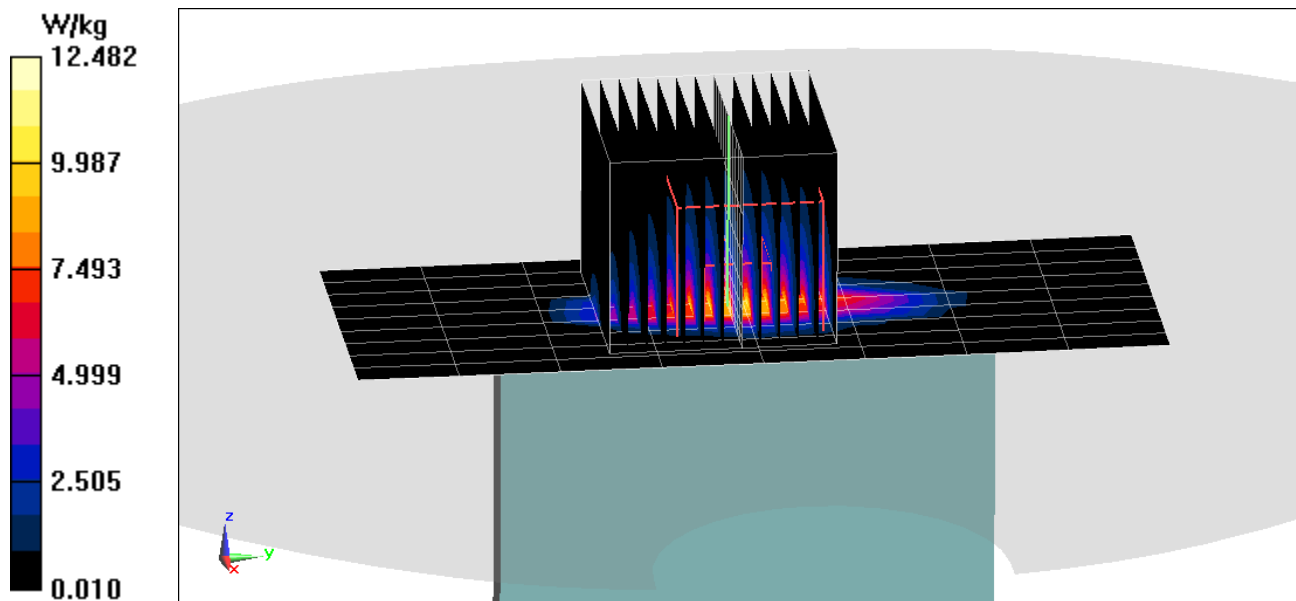
**Area Scan (10x9x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (13x13x8)/Cube 0:** Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 69.55 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 17.9 W/kg

**SAR(10 g) = 2.67 W/kg**





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M**

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium: 1900 Body Medium parameters used (interpolated):  
 $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.527 \text{ S/m}$ ;  $\epsilon_r = 52.029$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 11/23/2019; Ambient Temp: 20.3°C; Tissue Temp: 24.3°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1852.4 MHz; Calibrated: 1/24/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1530; Calibrated: 1/15/2019  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: UMTS 1900, Phablet SAR, Bottom Edge, Low.ch**

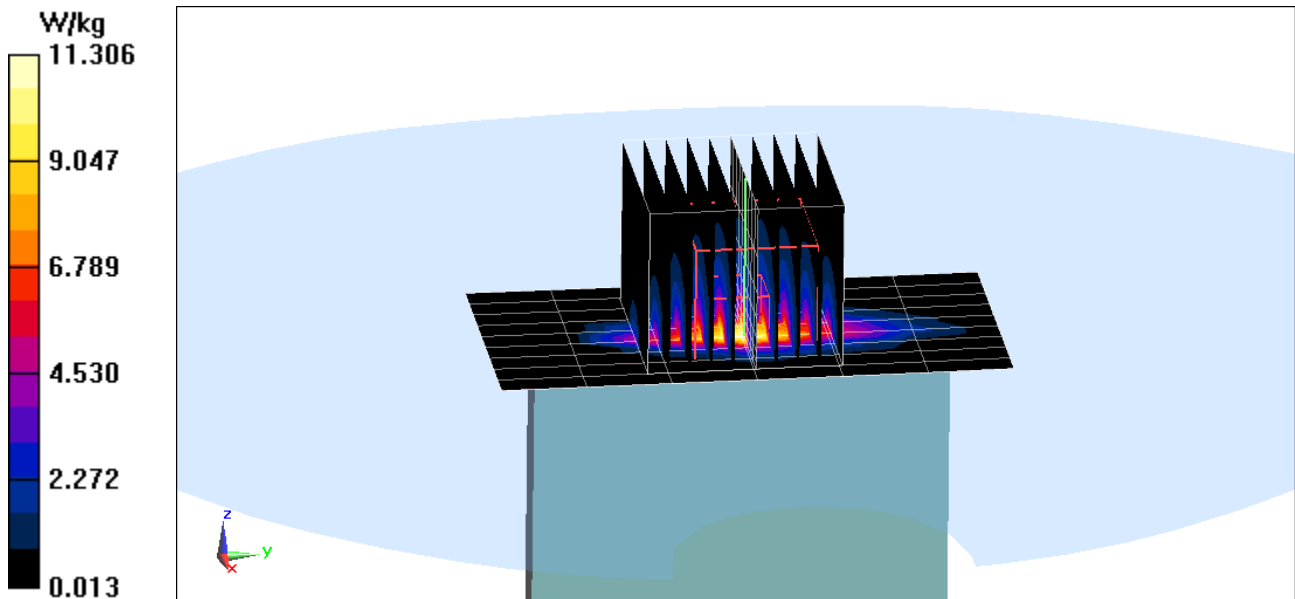
**Area Scan (10x7x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid:  $dx=3.8\text{mm}$ ,  $dy=3.8\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 69.21 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 16.9 W/kg

**SAR(10 g) = 2.42 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0407M**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1720 \text{ MHz}$ ;  $\sigma = 1.502 \text{ S/m}$ ;  $\epsilon_r = 53.055$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/25/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1720 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 66 (AWS), ULCA CA\_66C, Phablet SAR, Bottom Edge,**

**PCC: 20 MHz Bandwidth, Ch. 132072, QPSK, 50 RB, 50 RB Offset**

**SCC: 20 MHz Bandwidth, Ch. 132270, QPSK, 50 RB, 0 RB Offset**

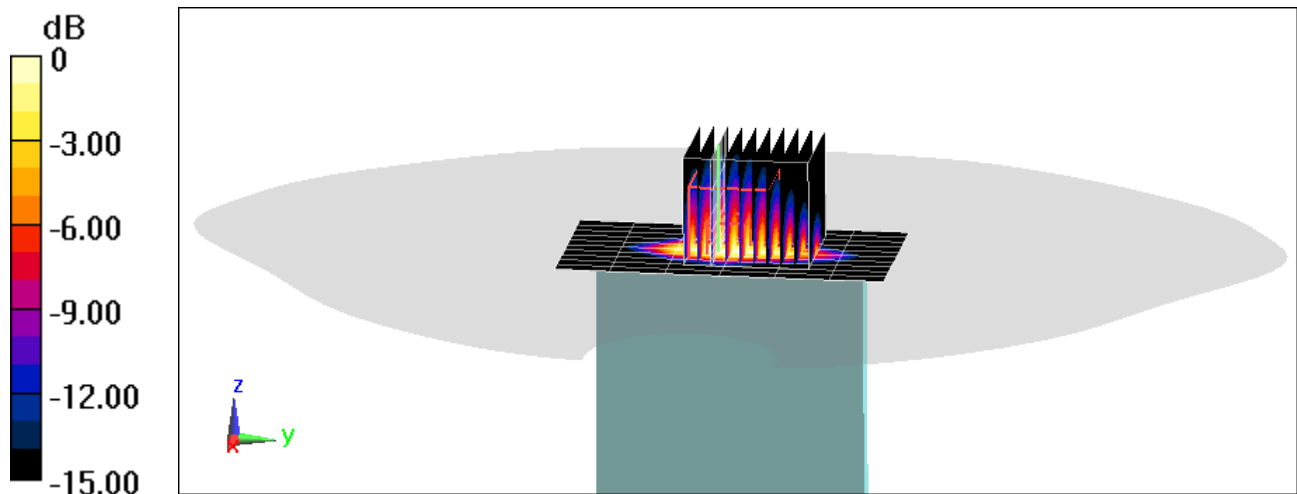
**Area Scan (11x5x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (10x11x8)/Cube 0:** Measurement grid:  $dx=3.8\text{mm}$ ,  $dy=3.8\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4;

Reference Value = 68.23 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 22.1 W/kg

**SAR(10 g) = 2.96 W/kg**



0 dB = 12.6 W/kg = 11.00 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0343M**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1905 \text{ MHz}$ ;  $\sigma = 1.581 \text{ S/m}$ ;  $\epsilon_r = 50.848$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/02/2019; Ambient Temp: 20.7°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1905 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 25 (PCS), Phablet SAR, Bottom Edge, High.ch, 20 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

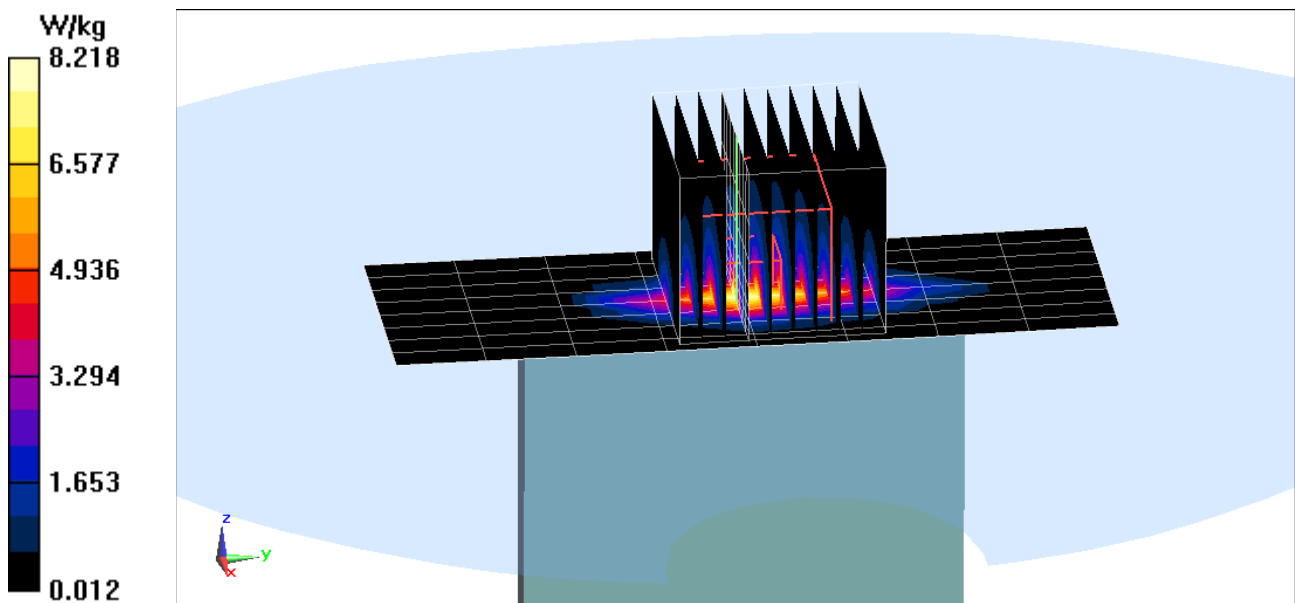
**Area Scan (9x9x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 55.94 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 12.9 W/kg

**SAR(10 g) = 1.78 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0406M**

Communication System: UID 0, LTE Band 2 (PCS); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.573 \text{ S/m}$ ;  $\epsilon_r = 52.183$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.5°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 2 (PCS), Body SAR, Bottom Edge, High.ch, 20 MHz Bandwidth,  
QPSK, 50 RB, 25 RB Offset**

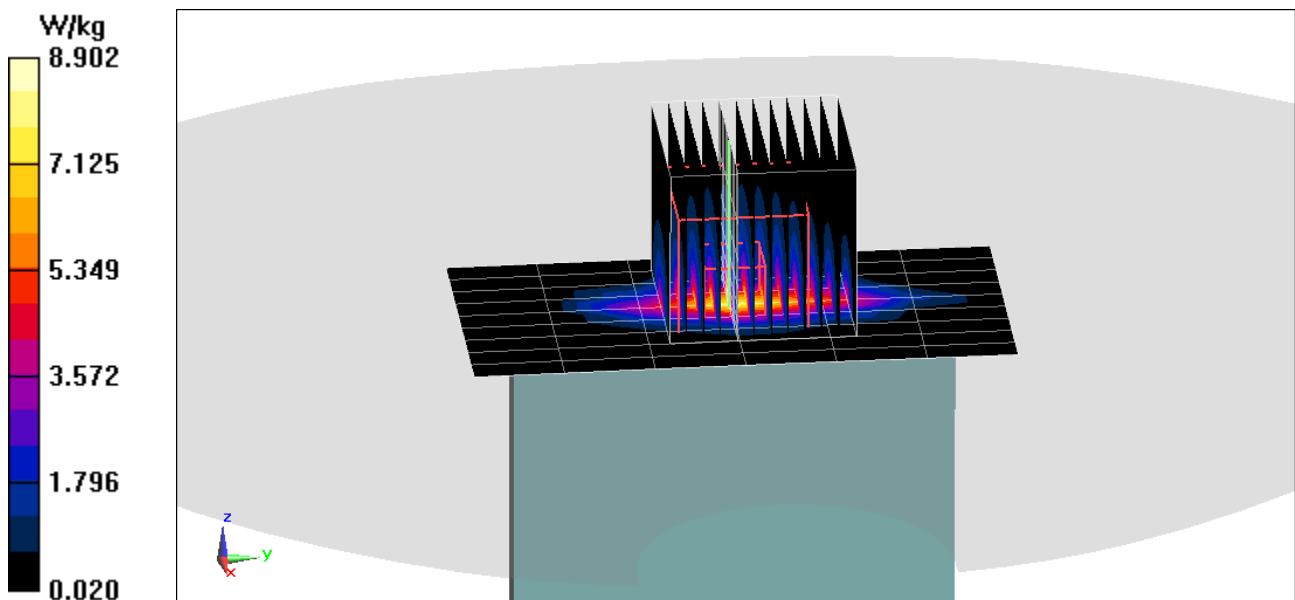
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (12x12x8)/Cube 0:** Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 57.56 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 12.9 W/kg

**SAR(10 g) = 1.94 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0405M**

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2310$  MHz;  $\sigma = 1.8$  S/m;  $\epsilon_r = 51.249$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 11/30/2019; Ambient Temp: 23.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 30, Body SAR, Bottom Edge, Mid.ch, 10 MHz Bandwidth,  
QPSK, 25 RB, 12 RB Offset**

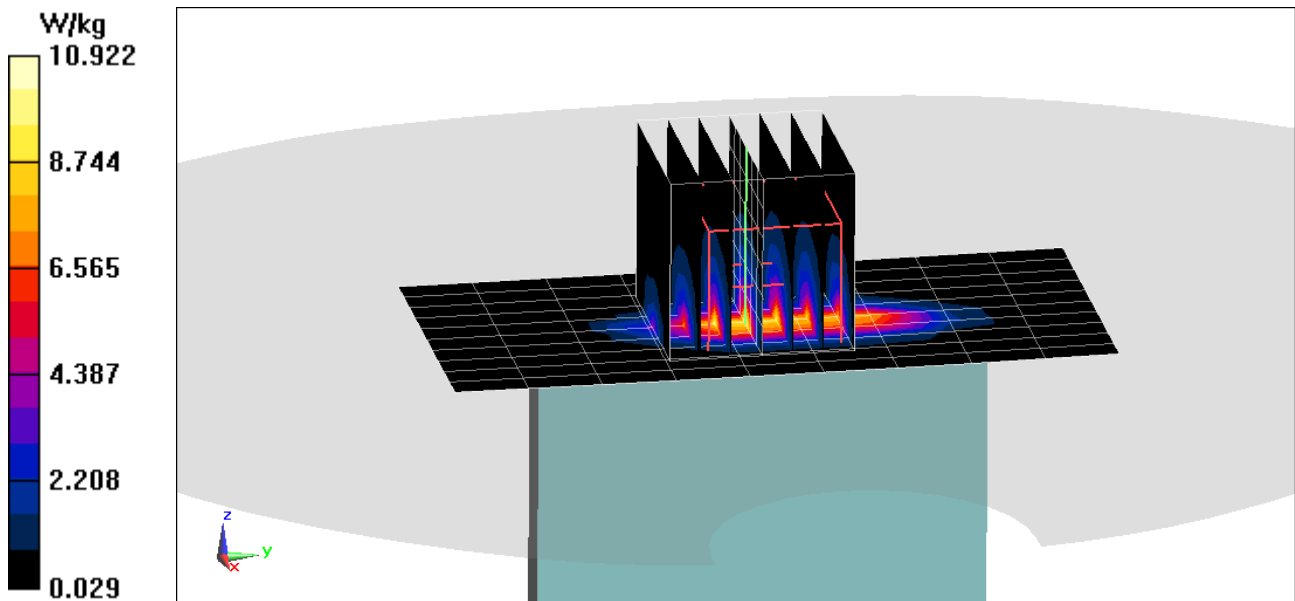
**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 61.51 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 14.5 W/kg

**SAR(10 g) = 2.21 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0405M**

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2510 \text{ MHz}$ ;  $\sigma = 2.111 \text{ S/m}$ ;  $\epsilon_r = 50.886$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/30/2019; Ambient Temp: 23.6°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2510 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 7, Phablet SAR, Bottom Edge, Low.ch, 20 MHz Bandwidth,  
QPSK, 50 RB, 0 RB Offset**

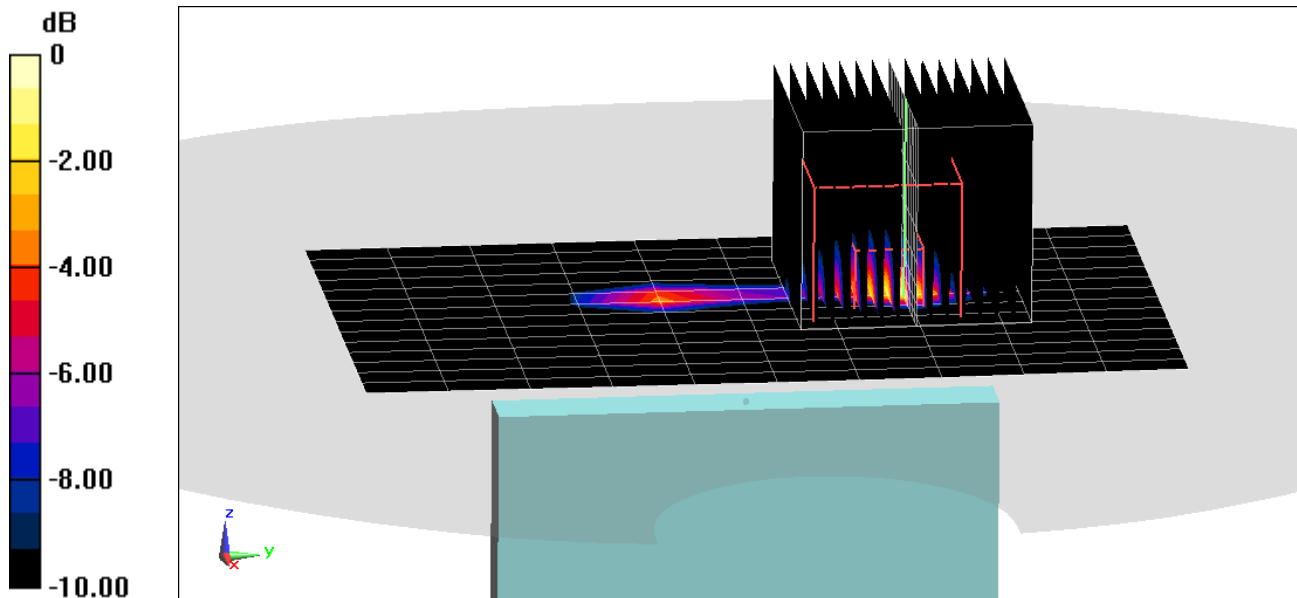
**Area Scan (15x11x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (15x15x8)/Cube 0:** Measurement grid: dx=2.4mm, dy=2.4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 48.28 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 23.9 W/kg

**SAR(10 g) = 1.4 W/kg**



0 dB = 13.0 W/kg = 11.14 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0405M**

Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2636.5 MHz; Duty Cycle: 1:1.58  
Medium: 2450 Body; Medium parameters used (interpolated):  
 $f = 2636.5$  MHz;  $\sigma = 2.261$  S/m;  $\epsilon_r = 51.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/19/2019; Ambient Temp: 21.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(7.37, 7.37, 7.37) @ 2636.5 MHz; Calibrated: 8/16/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1450; Calibrated: 8/14/2019  
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: LTE Band 41, Phablet SAR, Back side, Mid-High.ch,  
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

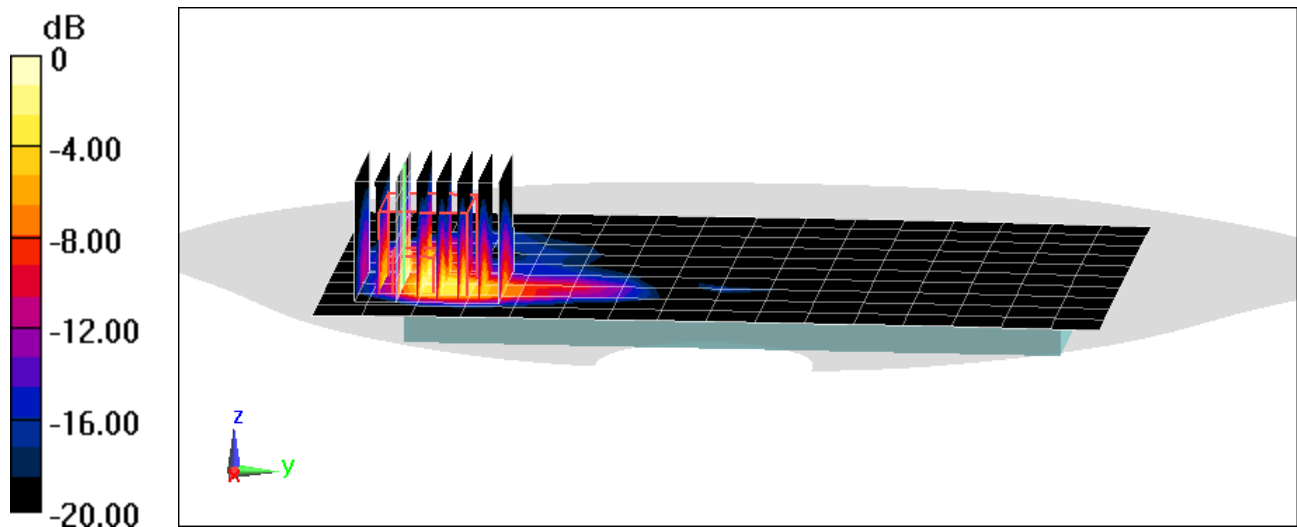
**Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.93 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 15.5 W/kg

**SAR(10 g) = 2.21 W/kg**



0 dB = 10.7 W/kg = 10.29 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0909M**

Communication System: UID 0, NR Band n66; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1720$  MHz;  $\sigma = 1.496$  S/m;  $\epsilon_r = 52.853$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/03/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1720 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n66, Phablet SAR, Bottom Edge, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 344000, 50 RB, 0 RB Offset**

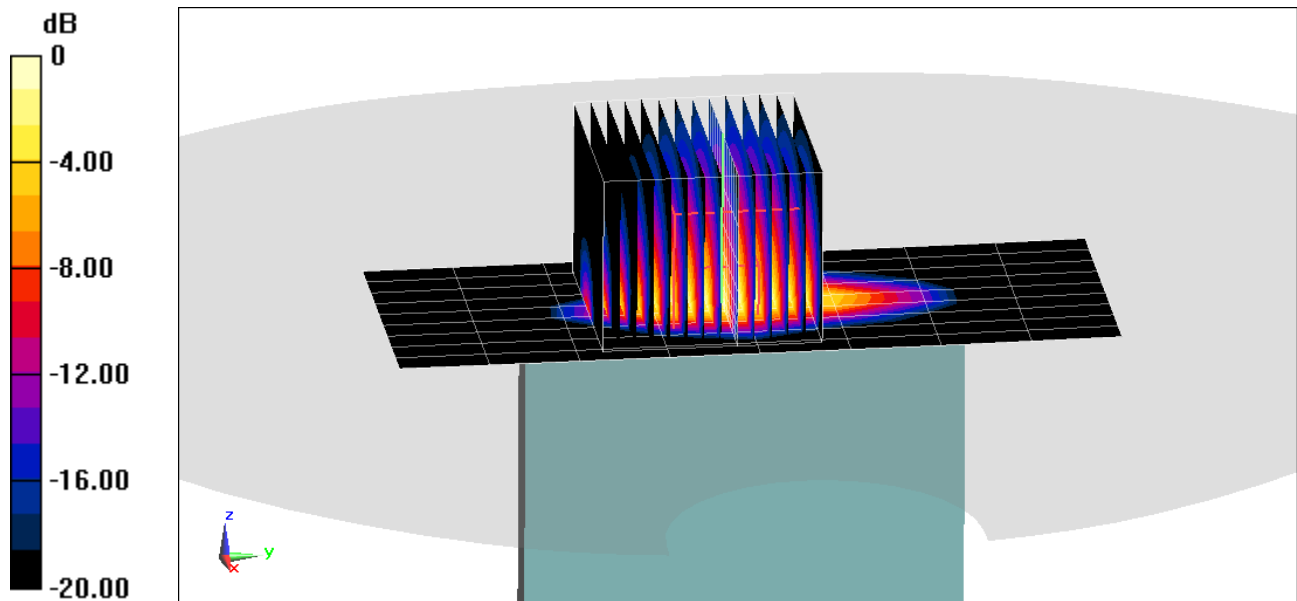
**Area Scan (10x9x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (14x14x8)/Cube 0:** Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 69.29 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.7 W/kg

**SAR(10 g) = 2.77 W/kg**



0 dB = 13.1 W/kg = 11.17 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0406M**

Communication System: UID 0, NR Band n2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.522 \text{ S/m}$ ;  $\epsilon_r = 51.87$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/16/2019; Ambient Temp: 21.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: NR Band n2, Phablet SAR, Bottom Edge, 20 MHz Bandwidth,  
DFT-s-OFDM QPSK, Ch. 380000, 50 RB, 56 RB Offset**

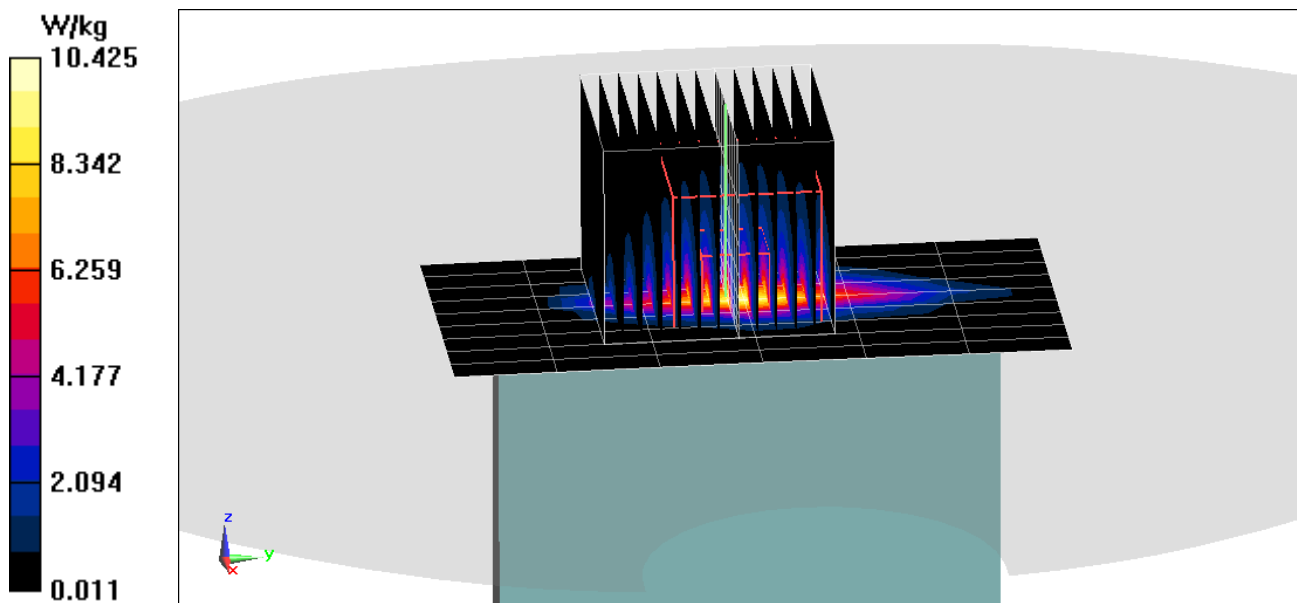
**Area Scan (10x7x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (12x13x8)/Cube 0:** Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 62.57 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 15.0 W/kg

**SAR(10 g) = 2.12 W/kg**



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMG986U; Type: Portable Handset; Serial: 0402M**

Communication System: UID 0, 802.11n 5.2-5.8 GHz Band; Frequency: 5280 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5280$  MHz;  $\sigma = 5.551$  S/m;  $\epsilon_r = 47.449$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5280 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

**Mode: IEEE 802.11n, MIMO, U-NII-2A, 20 MHz Bandwidth,  
Phablet SAR, Ch 56, 13 Mbps, Back Side**

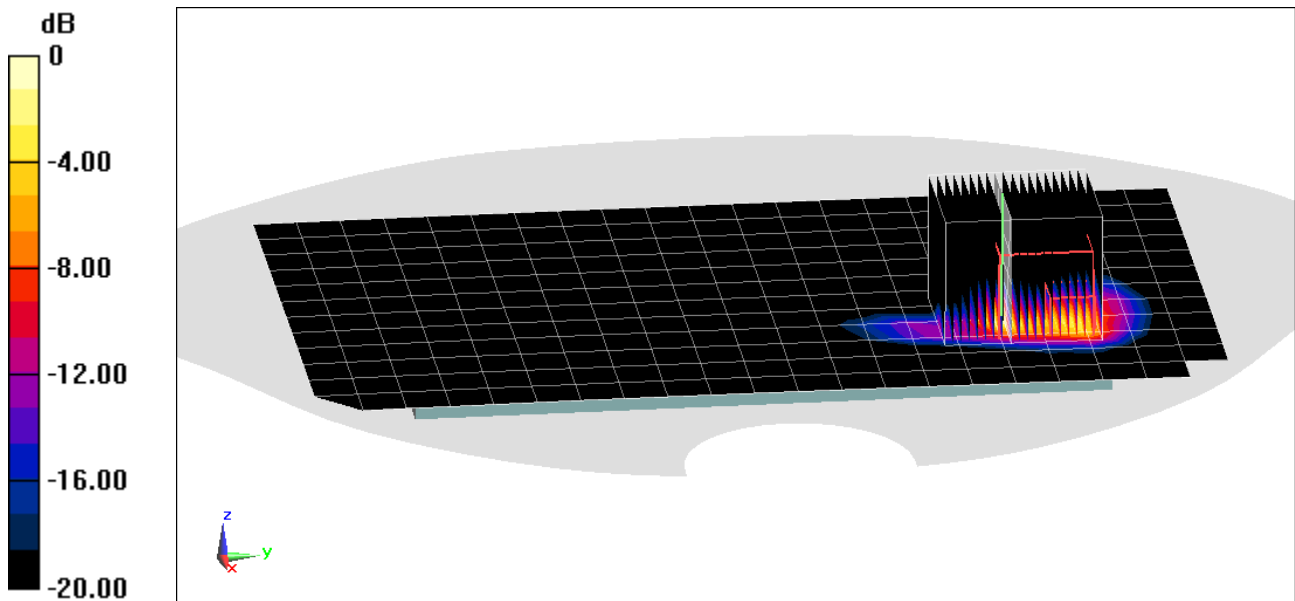
**Area Scan (13x22x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (17x20x8)/Cube 0:** Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 4.681 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 51.6 W/kg

**SAR(10 g) = 2.06 W/kg**



0 dB = 21.4 W/kg = 13.30 dBW/kg

## APPENDIX B: VERIFICATION DATA

# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.895 \text{ S/m}$ ;  $\epsilon_r = 40.706$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 750 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

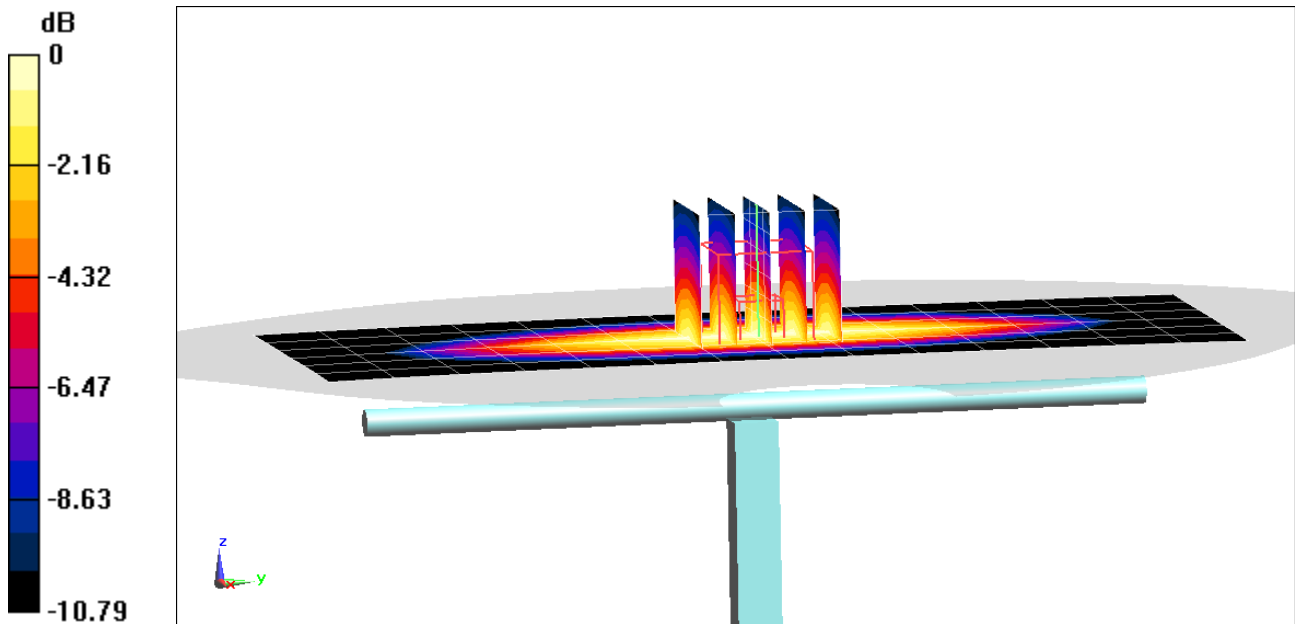
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.58 W/kg

**SAR(1 g) = 1.69 W/kg**

Deviation(1 g) = 1.93%



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

# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.905 \text{ S/m}$ ;  $\epsilon_r = 40.992$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 750 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

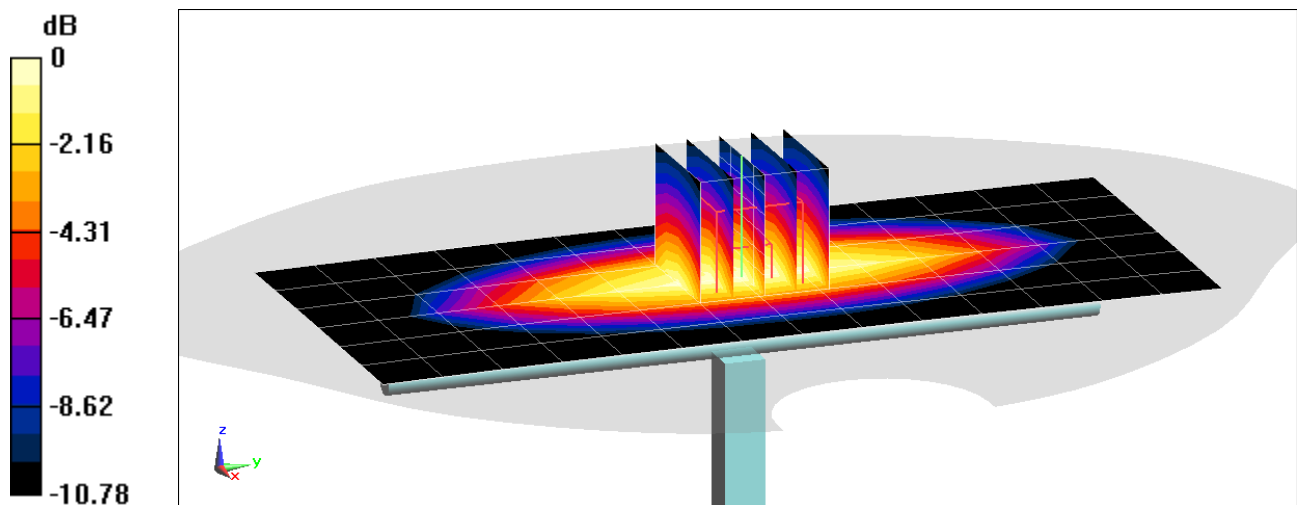
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.48 W/kg

**SAR(1 g) = 1.63 W/kg**

Deviation(1 g) = -1.69%



0 dB = 2.19 W/kg = 3.40 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

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

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.886 \text{ S/m}$ ;  $\epsilon_r = 40.029$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

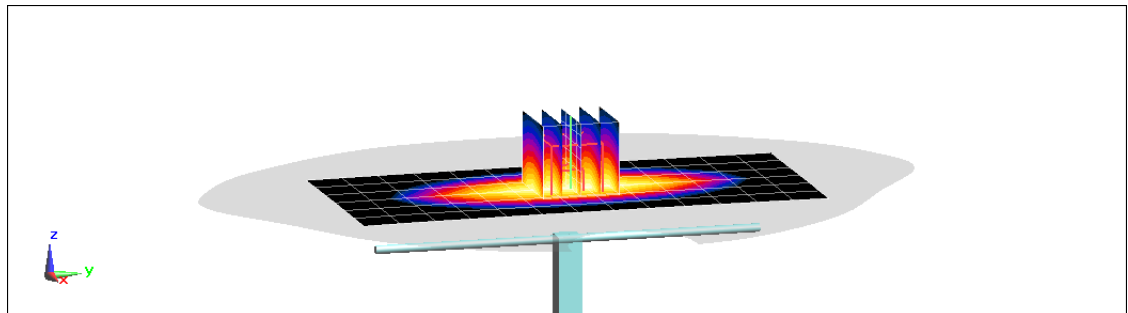
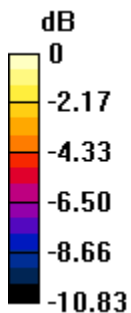
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.87 W/kg

**SAR(1 g) = 1.89 W/kg**

Deviation(1 g) = 0.32%



0 dB = 2.54 W/kg = 4.05 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

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

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.93 \text{ S/m}$ ;  $\epsilon_r = 40.489$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/31/2019; Ambient Temp: 21.3°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

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

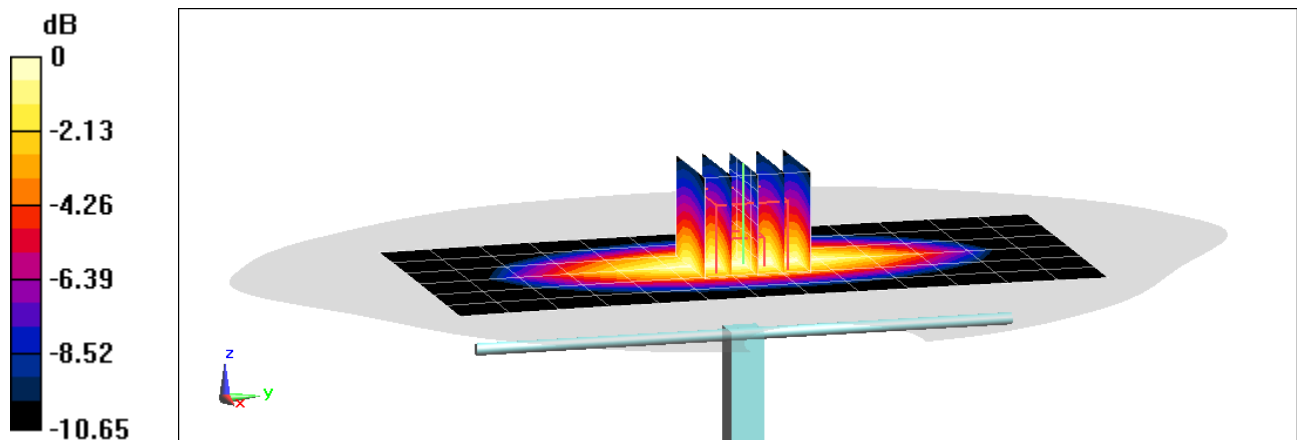
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.94 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.03 W/kg

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

Deviation(1 g) = 6.16%



0 dB = 2.68 W/kg = 4.28 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

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

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.933 \text{ S/m}$ ;  $\epsilon_r = 40.723$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

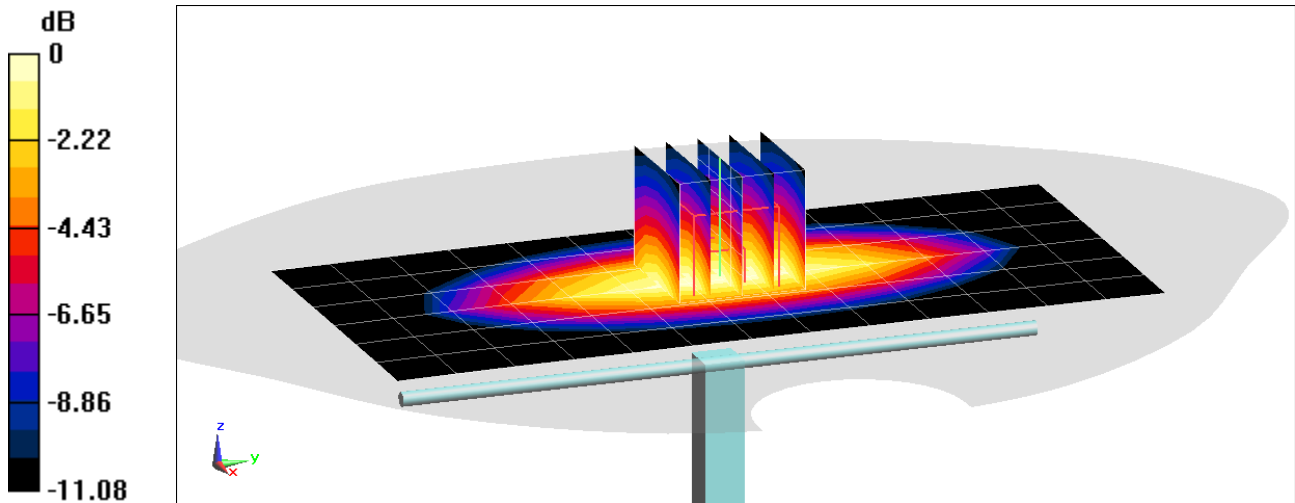
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.01 W/kg

**SAR(1 g) = 1.97 W/kg**

Deviation(1 g) = 4.56%



0 dB = 2.66 W/kg = 4.25 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.401 \text{ S/m}$ ;  $\epsilon_r = 41.488$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/04/2019; Ambient Temp: 22.0°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN3914; ConvF(8.16, 8.16, 8.16) @ 1750 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

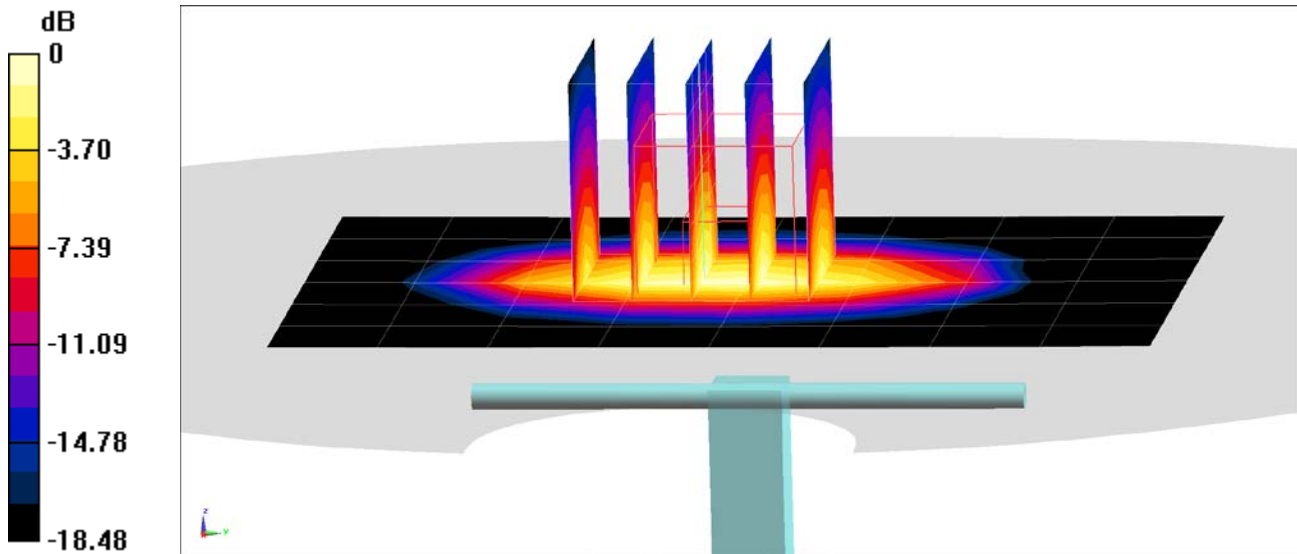
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.41 W/kg

**SAR(1 g) = 3.9 W/kg**

Deviation(1 g) = 7.73%



0 dB = 6.08 W/kg = 7.84 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.359 \text{ S/m}$ ;  $\epsilon_r = 38.889$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

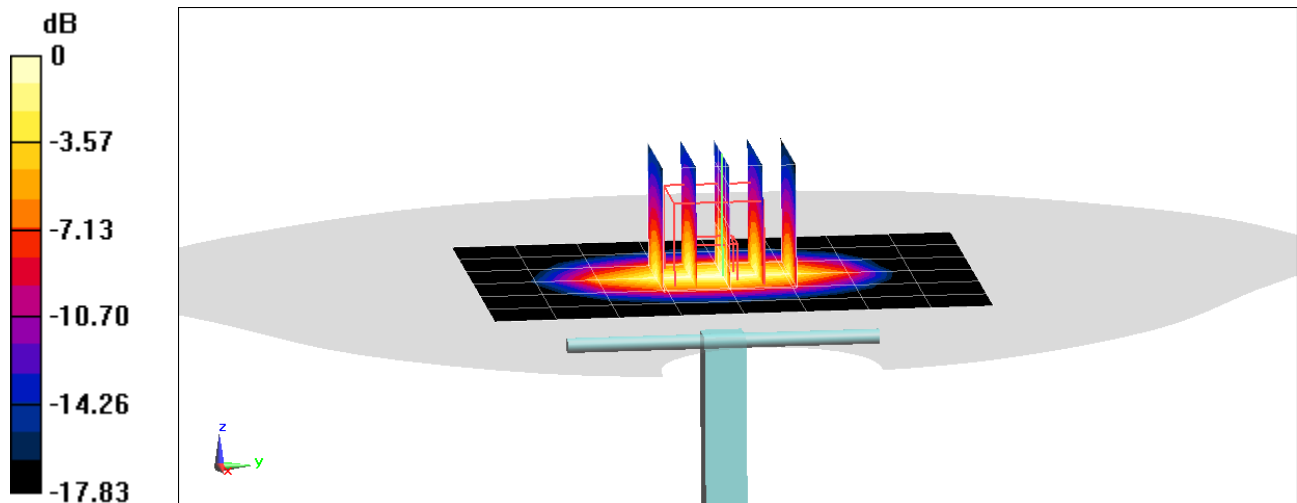
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.92 W/kg

**SAR(1 g) = 3.68 W/kg**

Deviation(1 g) = 0.82%



0 dB = 5.73 W/kg = 7.58 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.449 \text{ S/m}$ ;  $\epsilon_r = 40.608$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/23/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1900 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

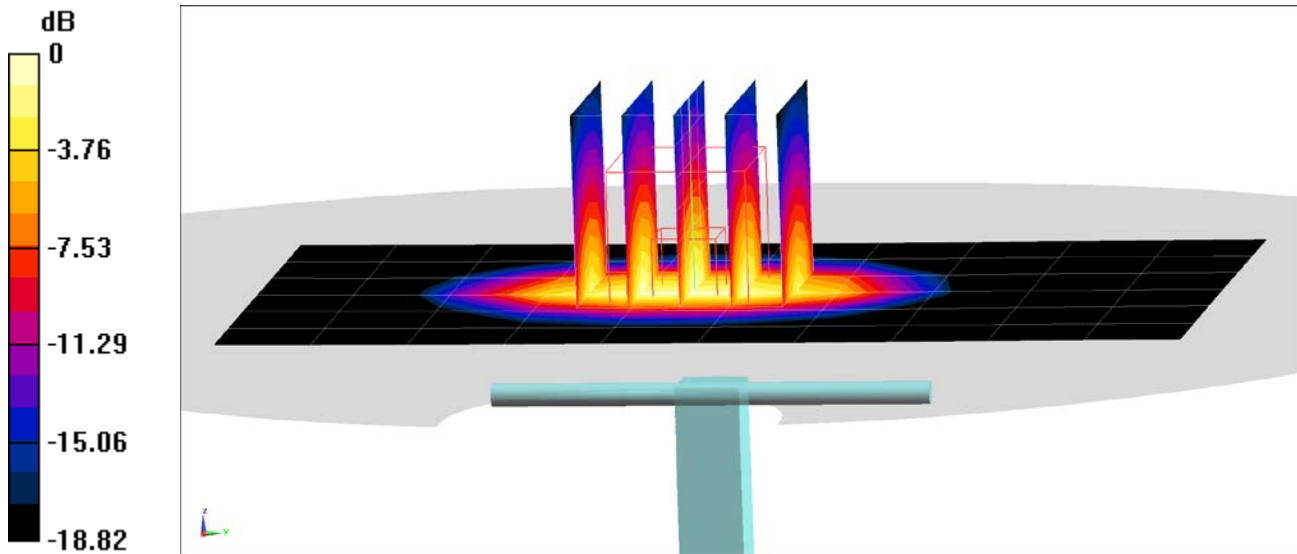
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.91 W/kg

**SAR(1 g) = 4.18 W/kg**

Deviation(1 g) = 5.03%



0 dB = 6.61 W/kg = 8.20 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.449$  S/m;  $\epsilon_r = 40.194$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1900 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

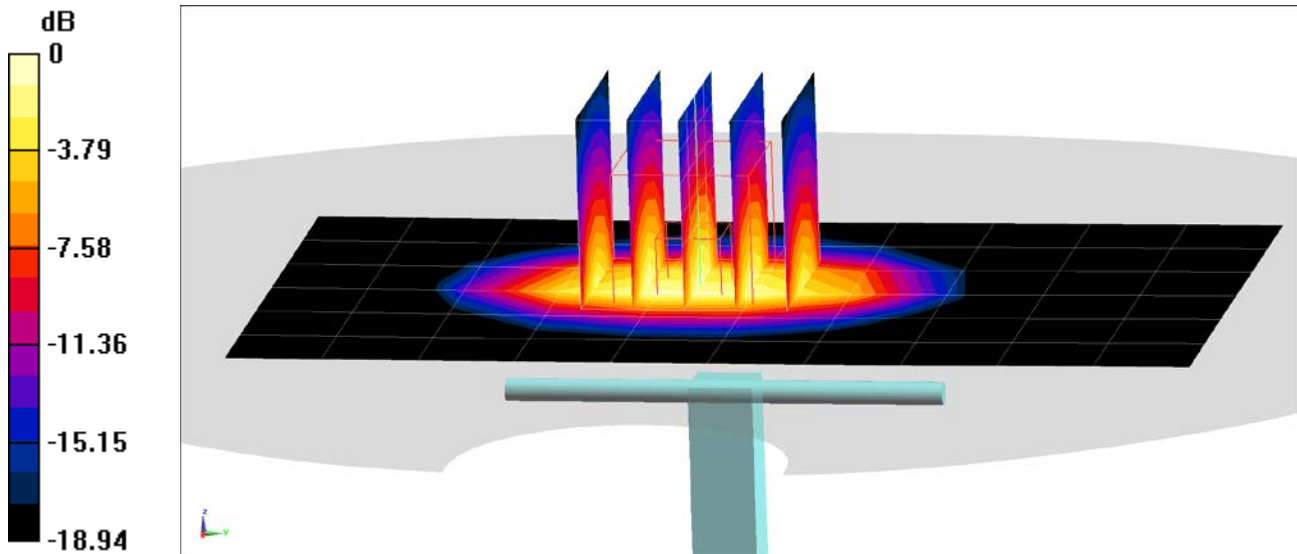
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 8.39 W/kg

**SAR(1 g) = 4.22 W/kg**

Deviation(1 g) = 7.38%



0 dB = 6.83 W/kg = 8.34 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.445 \text{ S/m}$ ;  $\epsilon_r = 38.648$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(8.05, 8.05, 8.05) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

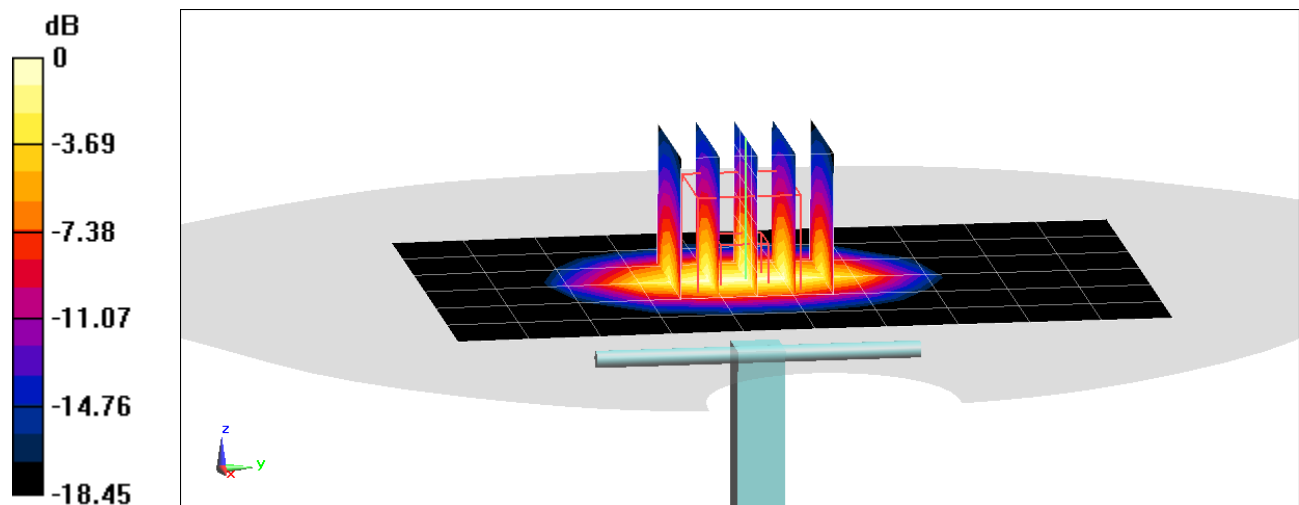
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.82 W/kg

**SAR(1 g) = 4.06 W/kg**

Deviation(1 g) = 2.01%



0 dB = 6.48 W/kg = 8.12 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2300$  MHz;  $\sigma = 1.701$  S/m;  $\epsilon_r = 37.703$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/04/2019; Ambient Temp: 22.3°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7417; ConvF(7.73, 7.73, 7.73) @ 2300 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 2300 MHz System Verification at 20.0 dBm (100 mW)

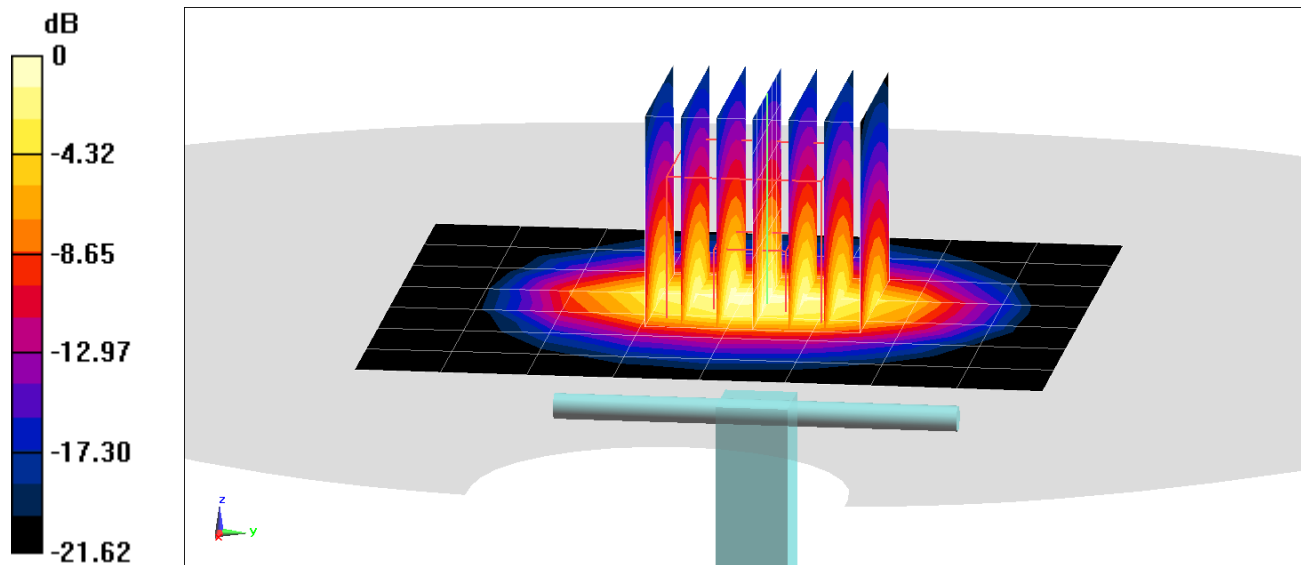
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.4 W/kg

**SAR(1 g) = 5.04 W/kg**

Deviation(1 g) = 5.88%



0 dB = 8.41 W/kg = 9.25 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 HEAD Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 1.844 \text{ S/m}$ ;  $\epsilon_r = 39.361$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/22/2019; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

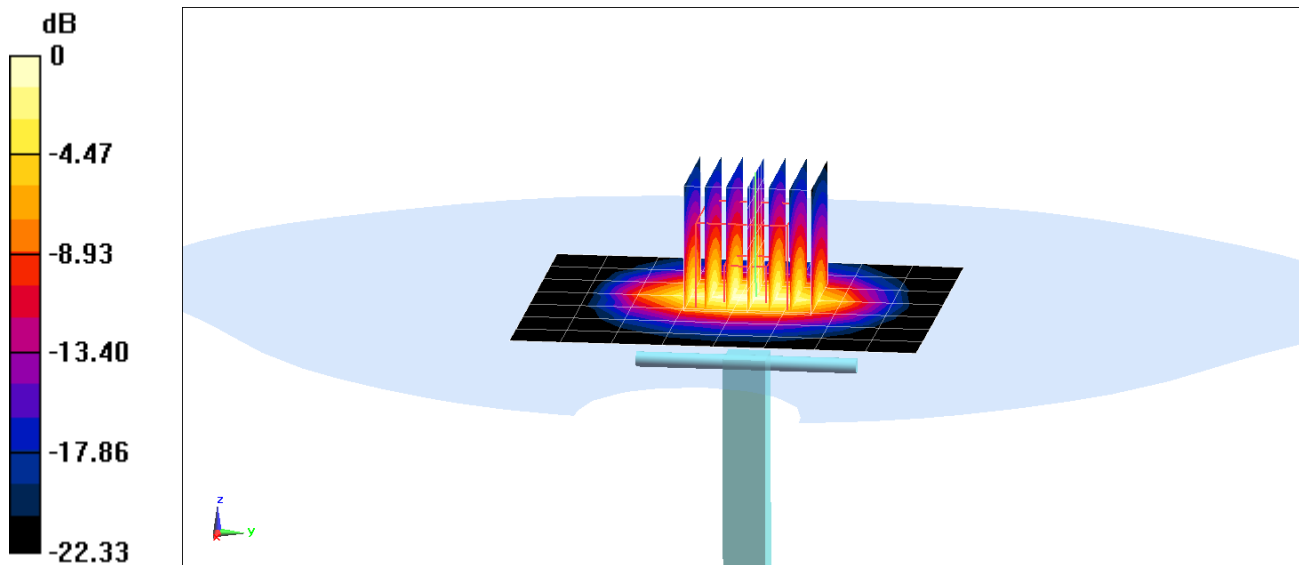
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.2 W/kg

**SAR(1 g) = 5.32 W/kg**

Deviation(1 g) = 0.95%



0 dB = 8.91 W/kg = 9.50 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 1.841 \text{ S/m}$ ;  $\epsilon_r = 37.977$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/01/2019; Ambient Temp: 21.9°C; Tissue Temp: 19.3°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

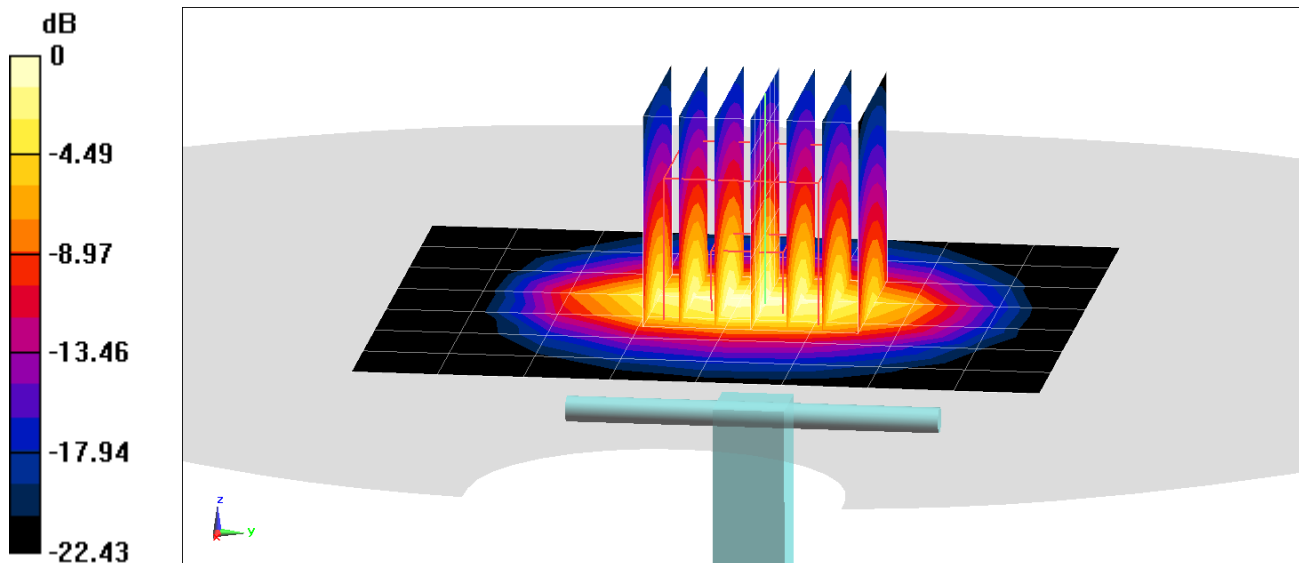
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.0 W/kg

**SAR(1 g) = 5.33 W/kg**

Deviation(1 g) = 1.14%



0 dB = 8.87 W/kg = 9.48 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 981**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 1.82 \text{ S/m}$ ;  $\epsilon_r = 38.152$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/02/2019; Ambient Temp: 22.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7417; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

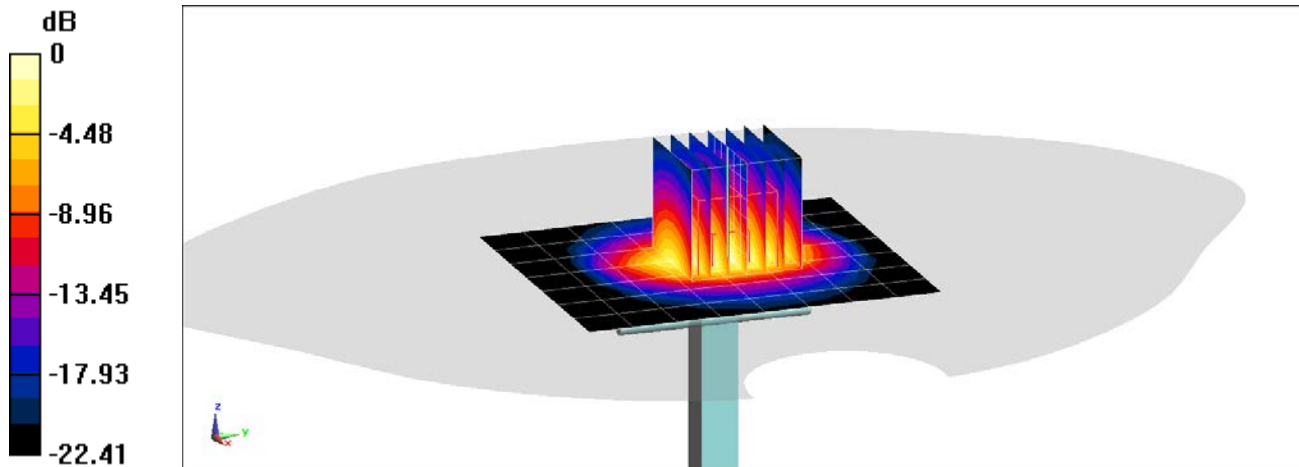
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.1 W/kg

**SAR(1 g) = 5.34 W/kg**

Deviation(1 g) = 2.10%



0 dB = 8.99 W/kg = 9.54 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600$  MHz;  $\sigma = 1.964$  S/m;  $\epsilon_r = 37.736$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/01/2019; Ambient Temp: 21.9°C; Tissue Temp: 19.3°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2600 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

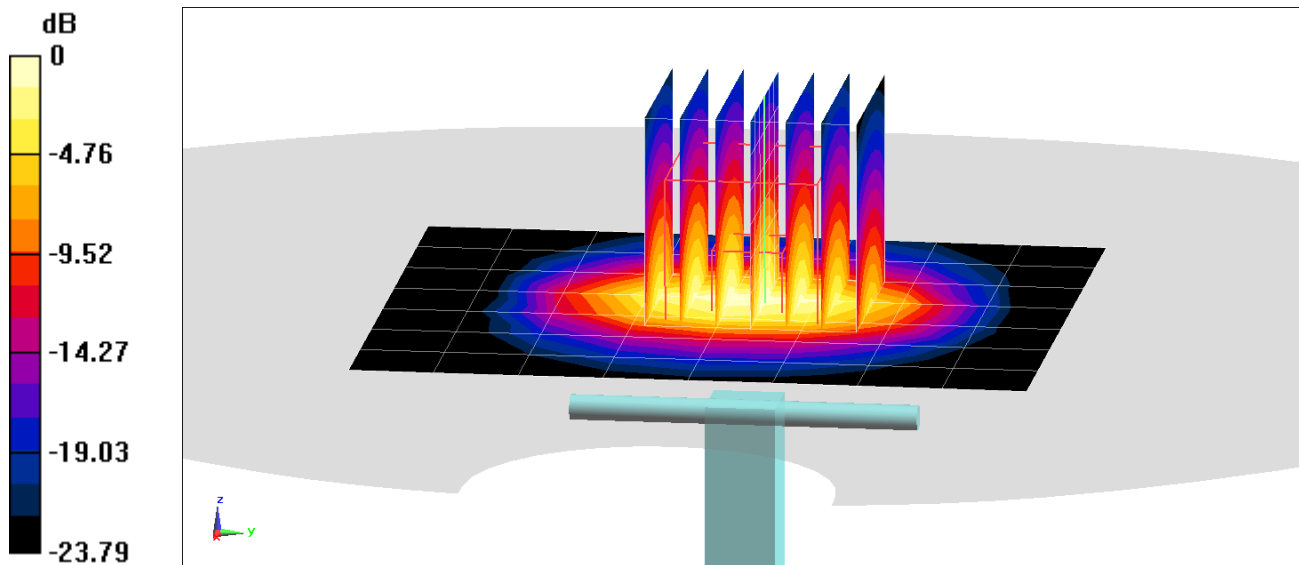
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.7 W/kg

**SAR(1 g) = 5.89 W/kg**

Deviation(1 g) = 5.37%



0 dB = 9.99 W/kg = 10.00 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600$  MHz;  $\sigma = 1.969$  S/m;  $\epsilon_r = 37.468$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/08/2019; Ambient Temp: 22.3°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2600 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

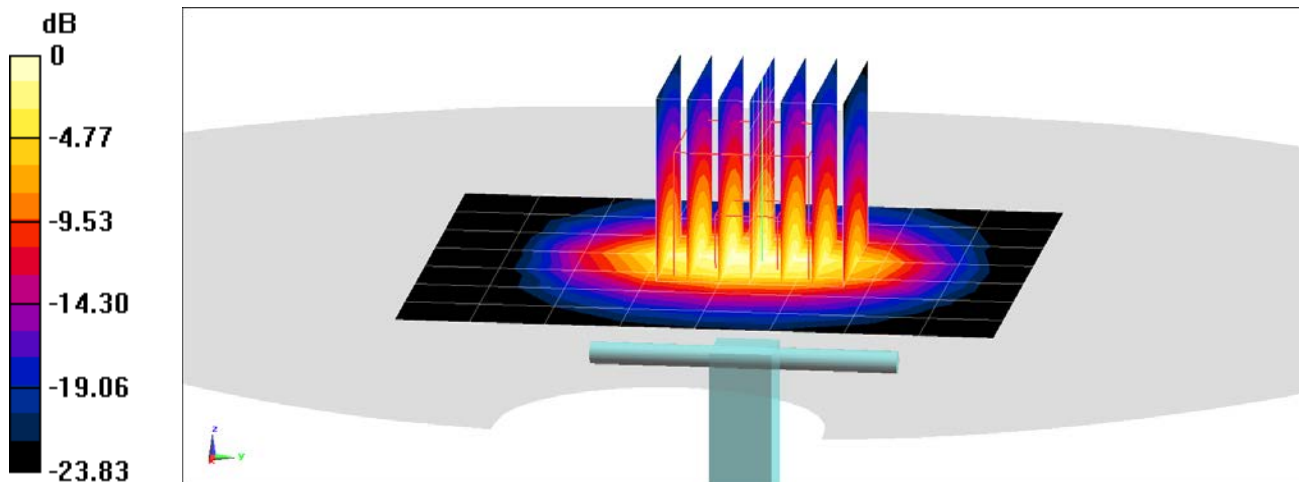
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.9 W/kg

**SAR(1 g) = 5.92 W/kg**

Deviation(1 g) = 5.90%



0 dB = 10.2 W/kg = 10.09 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600 \text{ MHz}$ ;  $\sigma = 1.937 \text{ S/m}$ ;  $\epsilon_r = 37.91$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/02/2019; Ambient Temp: 22.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2600 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

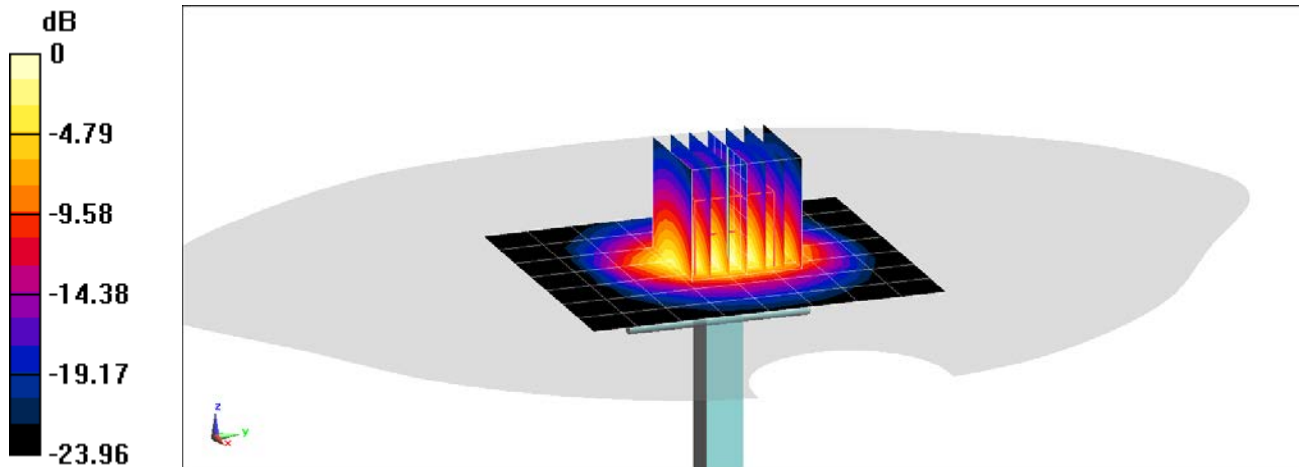
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 13.0 W/kg

**SAR(1 g) = 5.99 W/kg**

Deviation(1 g) = 3.10%



0 dB = 10.3 W/kg = 10.13 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600$  MHz;  $\sigma = 1.987$  S/m;  $\epsilon_r = 40.065$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/19/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7417; ConvF(7.17, 7.17, 7.17) @ 2600 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

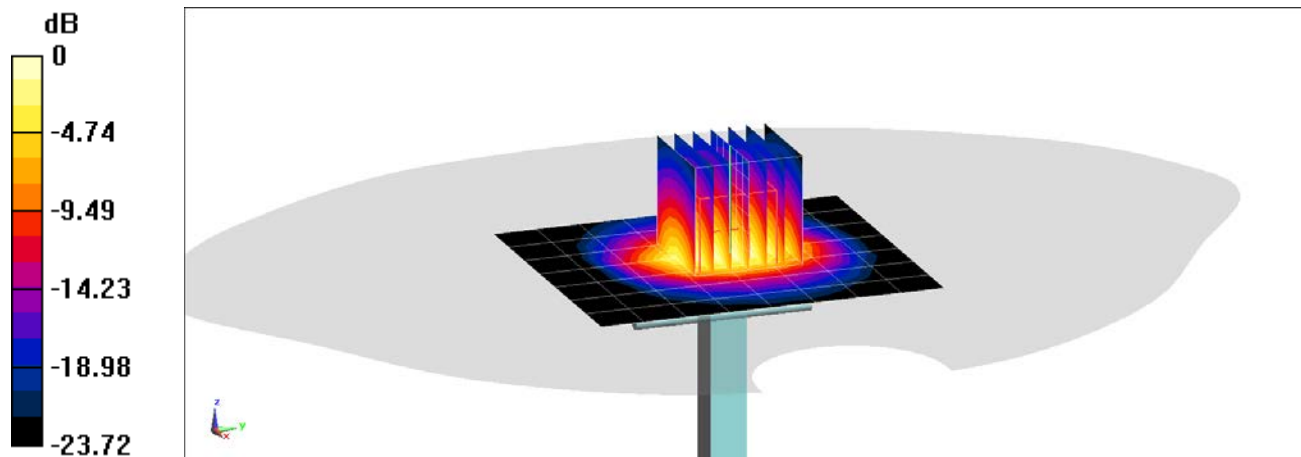
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 13.0 W/kg

**SAR(1 g) = 6.04 W/kg**

Deviation(1 g) = 3.96%



0 dB = 10.3 W/kg = 10.13 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059**

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3500 Head; Medium parameters used:

$f = 3500 \text{ MHz}$ ;  $\sigma = 2.782 \text{ S/m}$ ;  $\epsilon_r = 39.061$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/03/2019; Ambient Temp: 20.6°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN3589; ConvF(6.16, 6.16, 6.16) @ 3500 MHz; Calibrated: 1/25/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 20; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3500 MHz System Verification at 20.0 dBm (100 mW)

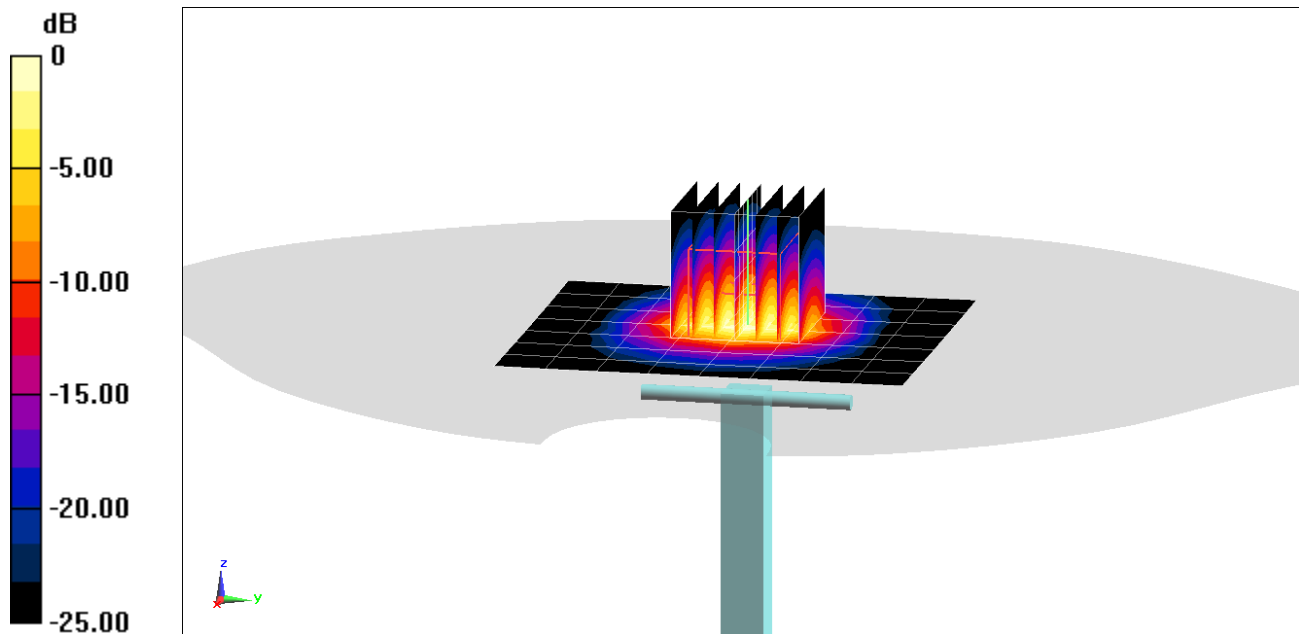
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.4 W/kg

**SAR(1 g) = 6.75 W/kg**

Deviation(1 g) = 4.49%



0 dB = 13.3 W/kg = 11.24 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059**

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3500 Head; Medium parameters used:

$f = 3500 \text{ MHz}$ ;  $\sigma = 2.93 \text{ S/m}$ ;  $\epsilon_r = 36.782$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 20.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN3589; ConvF(6.16, 6.16, 6.16) @ 3500 MHz; Calibrated: 1/25/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3500 MHz System Verification at 20.0 dBm (100 mW)

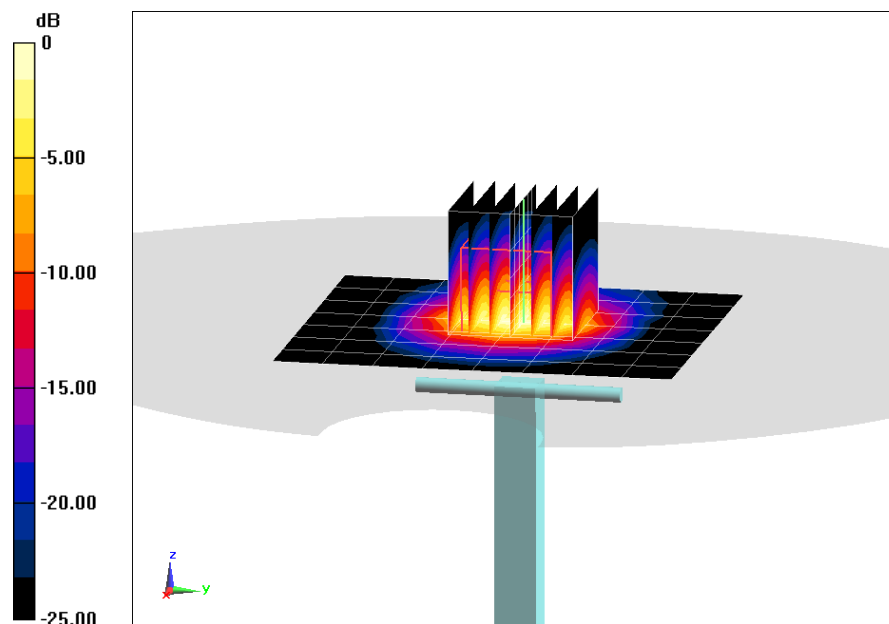
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 19.6 W/kg

**SAR(1 g) = 6.96 W/kg**

Deviation(1 g) = 7.74%



0 dB = 13.7 W/kg = 11.37 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018**

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3500 Head; Medium parameters used:

$f = 3700 \text{ MHz}$ ;  $\sigma = 2.98 \text{ S/m}$ ;  $\epsilon_r = 38.679$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/03/2019; Ambient Temp: 20.6°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN3589; ConvF(6.02, 6.02, 6.02) @ 3700 MHz; Calibrated: 1/25/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 20; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3700 MHz System Verification at 20.0 dBm (100 mW)

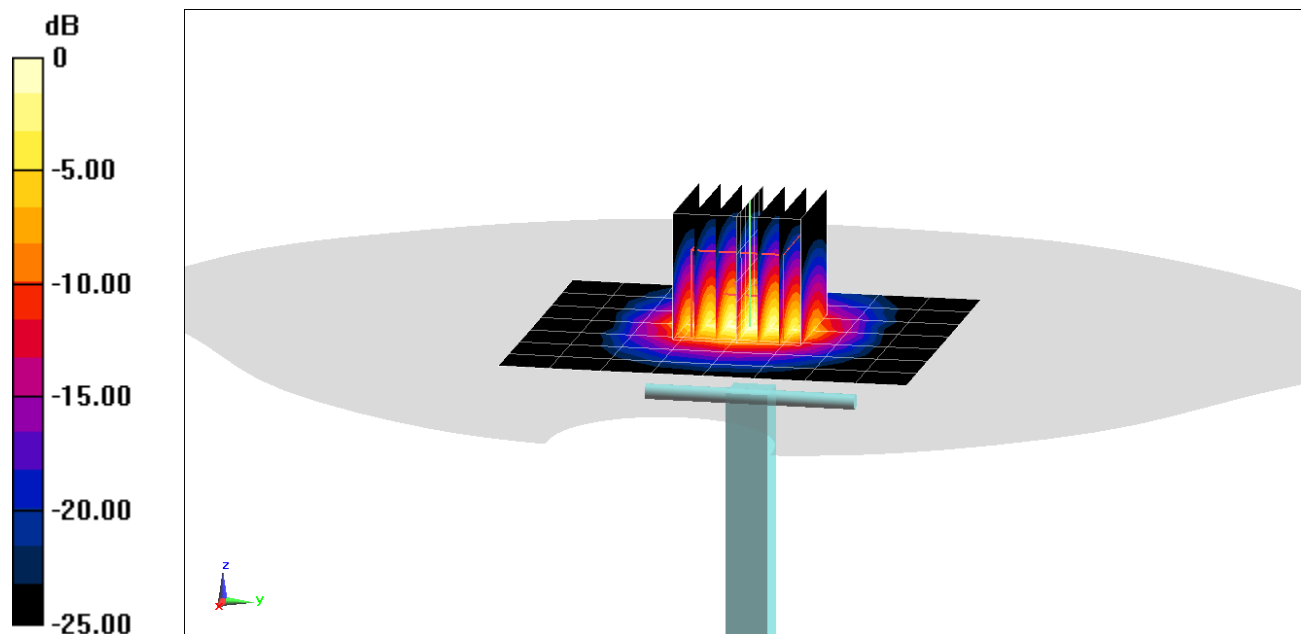
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 19.2 W/kg

**SAR(1 g) = 6.72 W/kg**

Deviation(1 g) = 2.13%



0 dB = 13.6 W/kg = 11.34 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018**

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3500 Head; Medium parameters used:

$f = 3700$  MHz;  $\sigma = 3.088$  S/m;  $\epsilon_r = 36.526$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 20.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN3589; ConvF(6.02, 6.02, 6.02) @ 3700 MHz; Calibrated: 1/25/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3700 MHz System Verification at 20.0 dBm (100 mW)

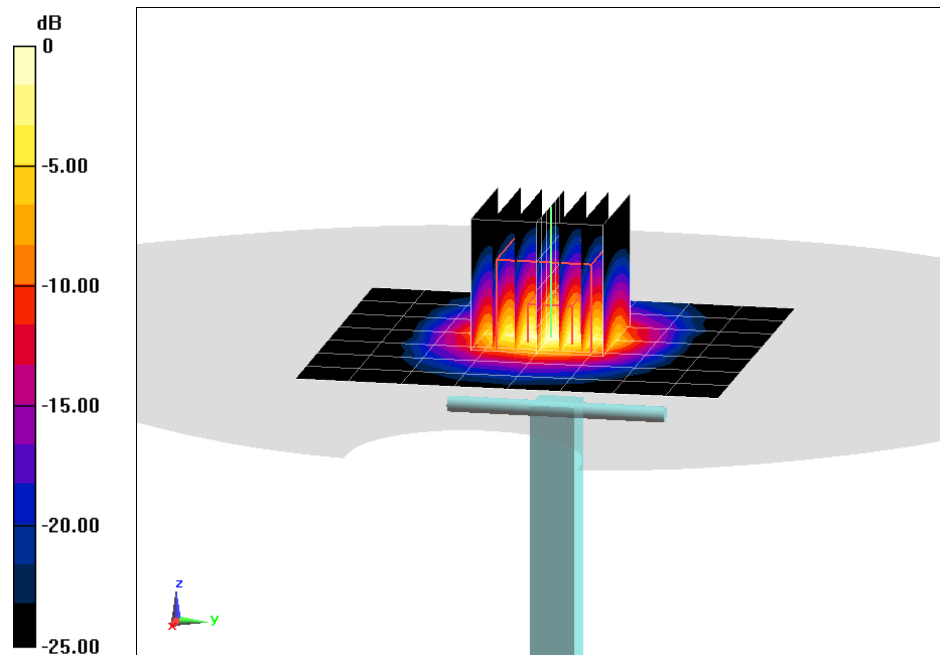
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 20.9 W/kg

**SAR(1 g) = 7.00 W/kg**

Deviation(1 g) = 6.38%



0 dB = 14.4 W/kg = 11.58 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5250$  MHz;  $\sigma = 4.555$  S/m;  $\epsilon_r = 34.508$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.0°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(5.54, 5.54, 5.54) @ 5250 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

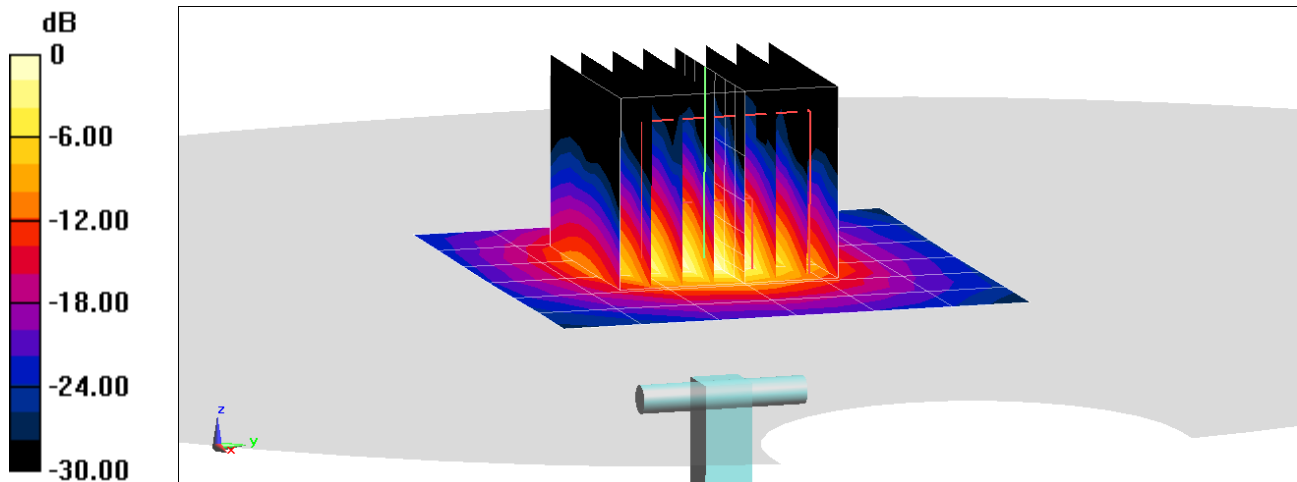
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 15.6 W/kg

**SAR(1 g) = 3.78 W/kg**

Deviation(1 g) = -6.44%



0 dB = 9.15 W/kg = 9.61 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5600 \text{ MHz}$ ;  $\sigma = 4.913 \text{ S/m}$ ;  $\epsilon_r = 34.013$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.0°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.94, 4.94, 4.94) @ 5600 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

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

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 5600 MHz System Verification at 17.0 dBm (50 mW)

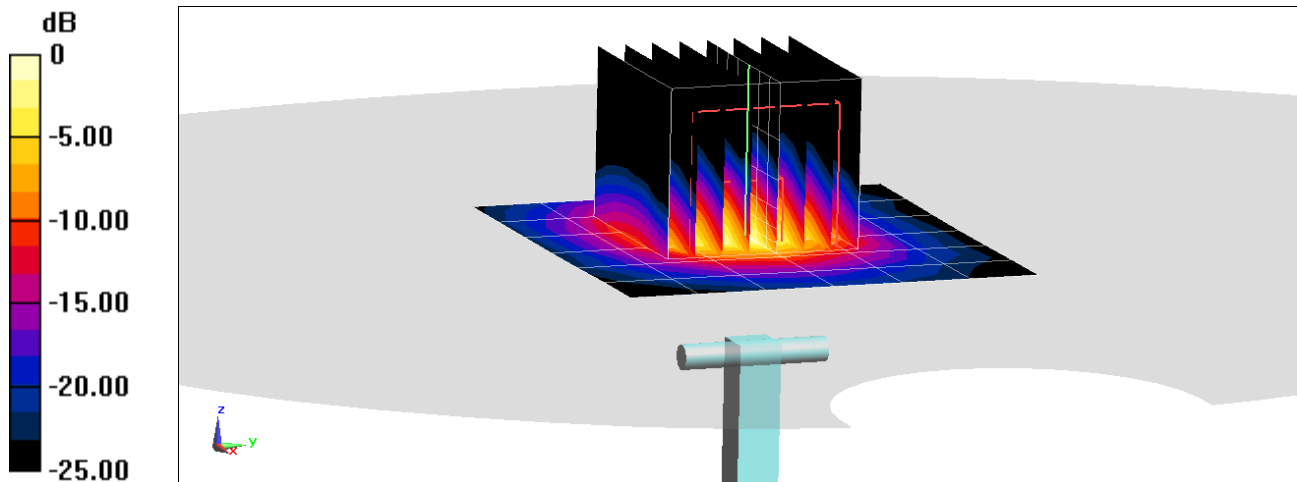
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.4 W/kg

**SAR(1 g) = 4.03 W/kg**

Deviation(1 g) = -2.54%



0 dB = 10.4 W/kg = 10.17 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5750$  MHz;  $\sigma = 5.075$  S/m;  $\epsilon_r = 33.826$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.0°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(5.23, 5.23, 5.23) @ 5750 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## **5750 MHz System Verification at 17.0 dBm (50 mW)**

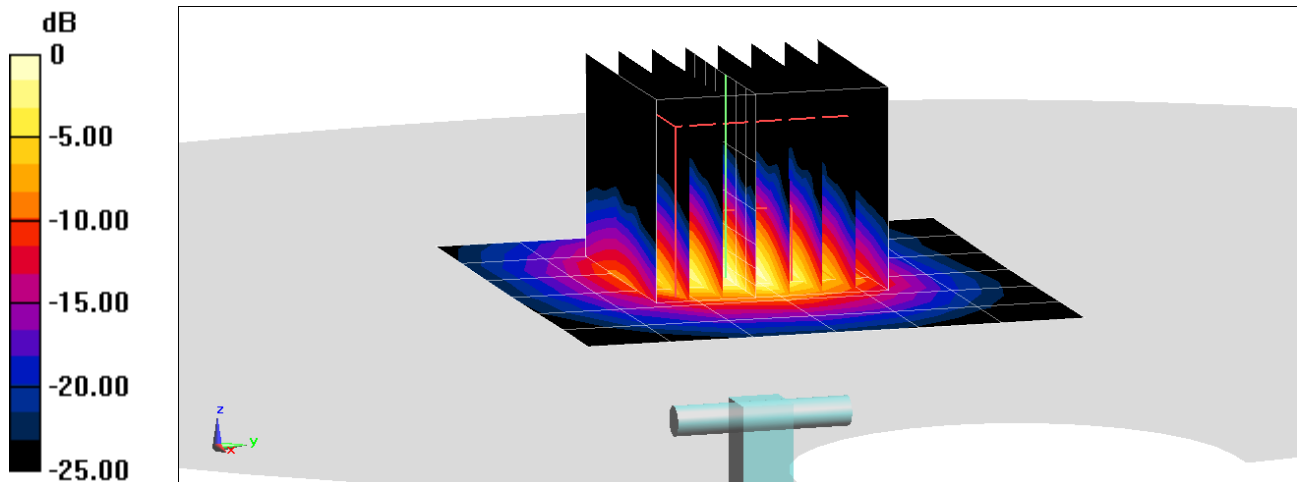
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.6 W/kg

**SAR(1 g) = 3.86 W/kg**

Deviation(1 g) = 3.74%



# PCTEST ENGINEERING LABORATORY, INC.

**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 (interpolated):

$f = 750 \text{ MHz}$ ;  $\sigma = 0.967 \text{ S/m}$ ;  $\epsilon_r = 56.171$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/23/2019; Ambient Temp: 21.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

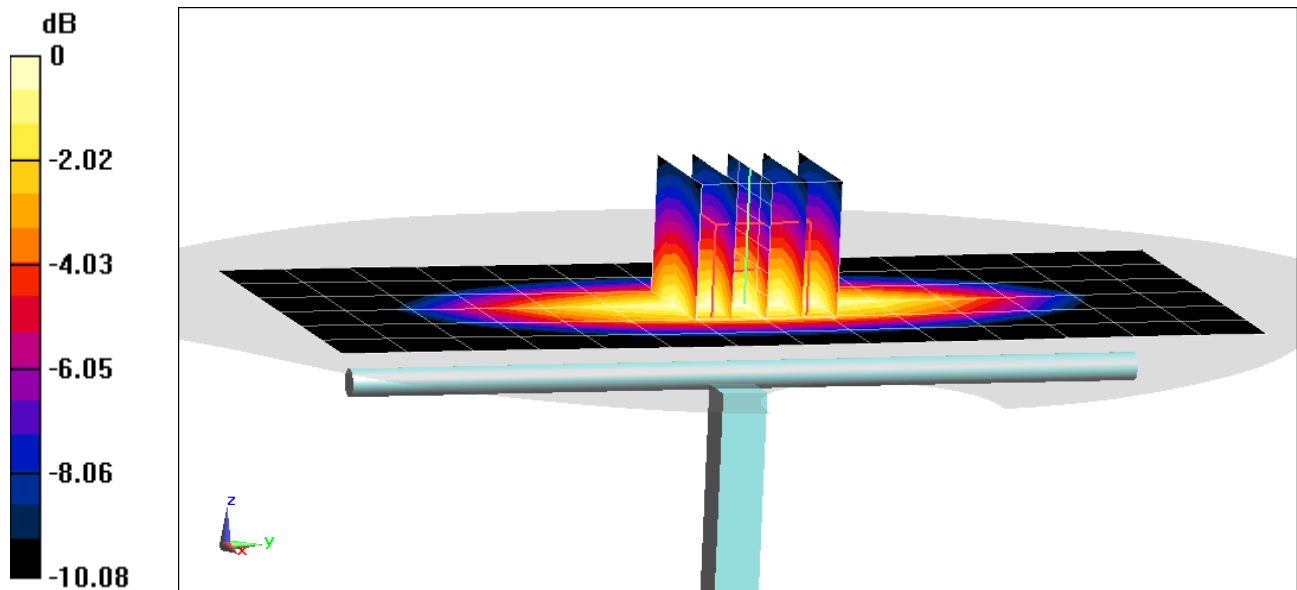
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.69 W/kg

**SAR(1 g) = 1.81 W/kg**

Deviation(1 g) = 5.48%



0 dB = 2.40 W/kg = 3.80 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.977 \text{ S/m}$ ;  $\epsilon_r = 57.856$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/25/2019; Ambient Temp: 20.3°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

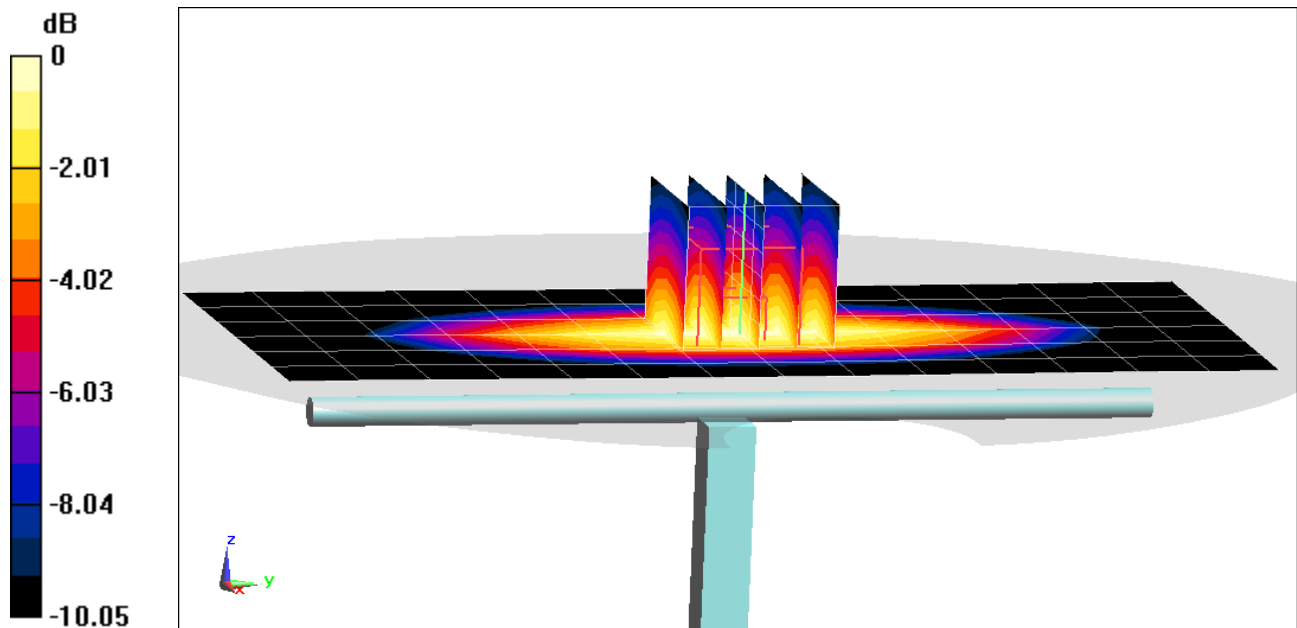
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.61 W/kg

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

Deviation(1 g) = 3.73%



0 dB = 2.35 W/kg = 3.71 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

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

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

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.944 \text{ S/m}$ ;  $\epsilon_r = 55.048$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/20/2019; Ambient Temp: 23.0°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

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

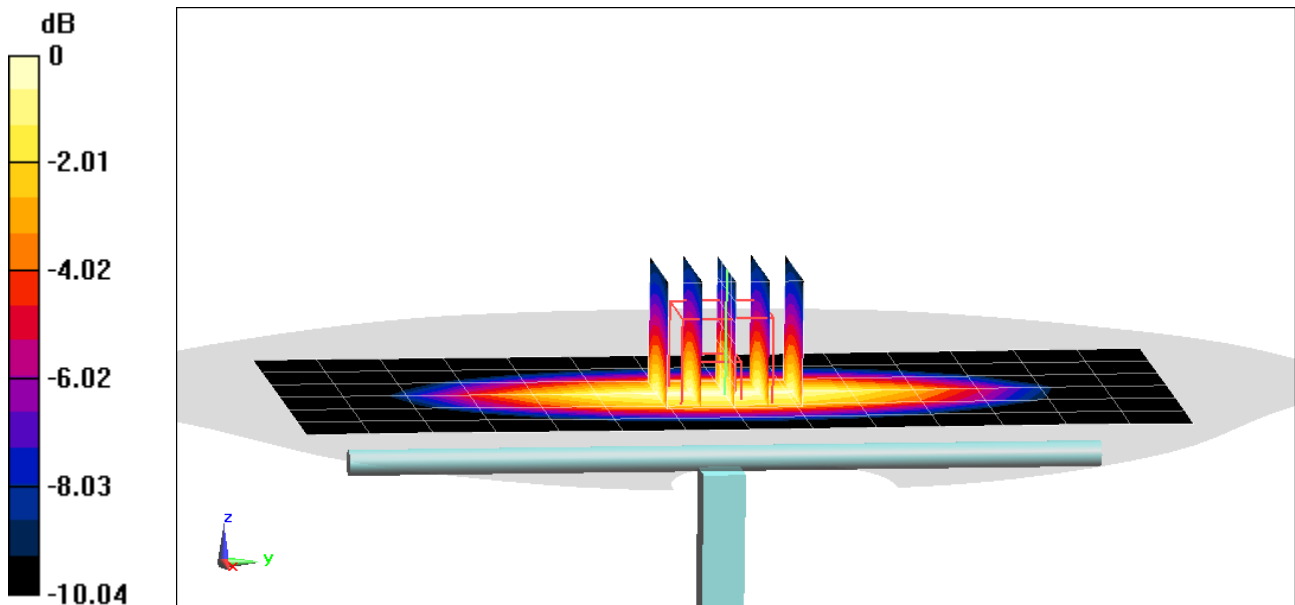
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.55 W/kg

**SAR(1 g) = 1.71 W/kg**

Deviation(1 g) = 1.42%



0 dB = 2.25 W/kg = 3.52 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.964 \text{ S/m}$ ;  $\epsilon_r = 54.811$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/28/2019; Ambient Temp: 20.2°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 835 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

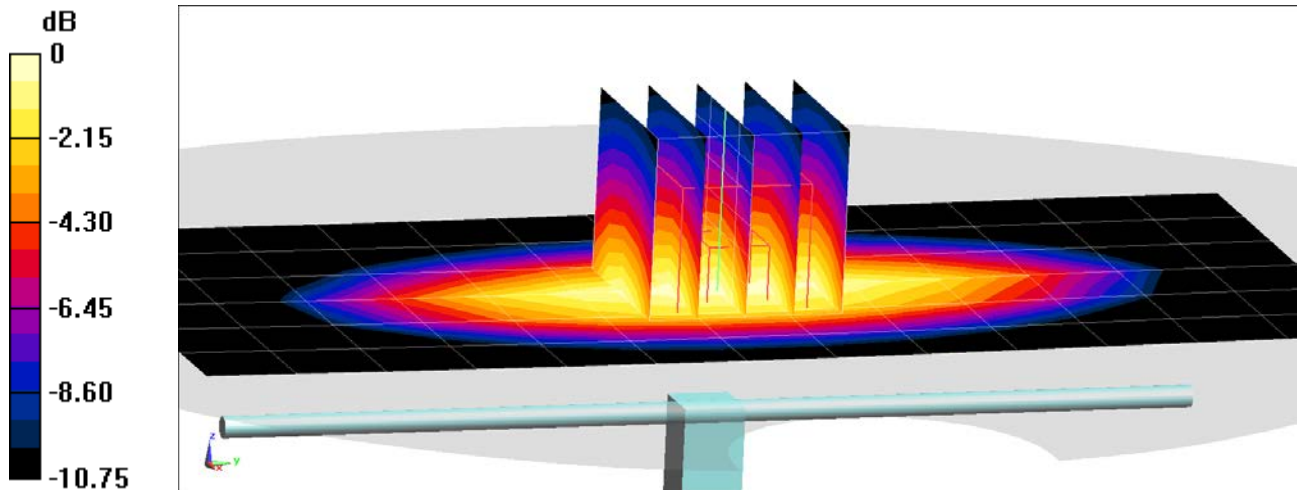
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.92 W/kg

**SAR(1 g) = 1.94 W/kg**

Deviation(1 g) = -0.51%





# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.956 \text{ S/m}$ ;  $\epsilon_r = 55.495$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 835 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

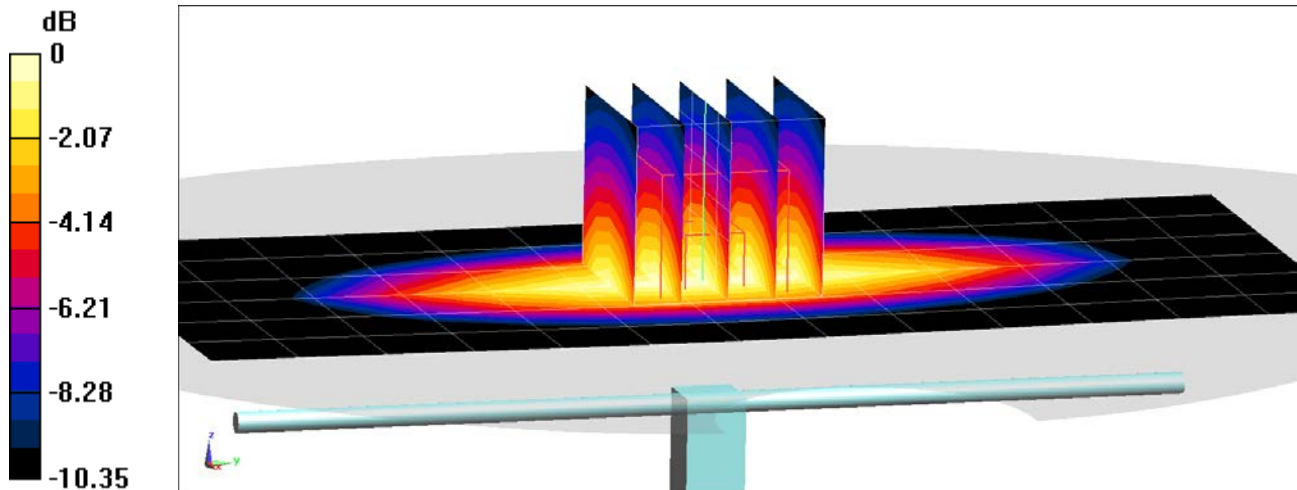
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 1.97 W/kg**

Deviation(1 g) = 1.03%



0 dB = 2.64 W/kg = 4.22 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**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:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.967 \text{ S/m}$ ;  $\epsilon_r = 56.103$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 11/18/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(9.95, 9.95, 9.95) @ 835 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 (30); Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

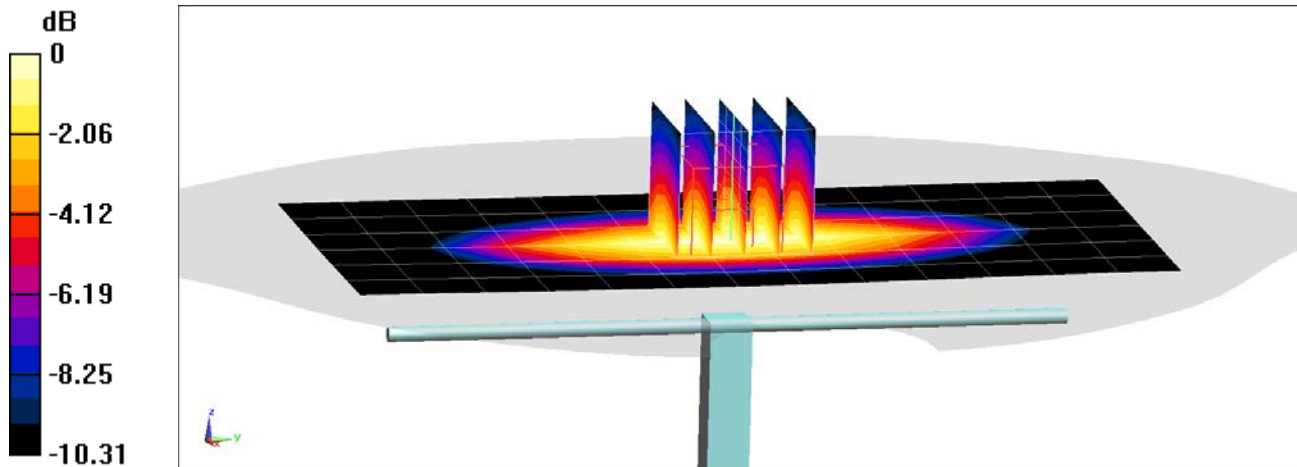
**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.15 W/kg

**SAR(1 g) = 2.06 W/kg**

Deviation(1 g) = 5.64%



0 dB = 2.76 W/kg = 4.41 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.507 \text{ S/m}$ ;  $\epsilon_r = 52.877$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/21/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7488; ConvF(8.68, 8.68, 8.68) @ 1750 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

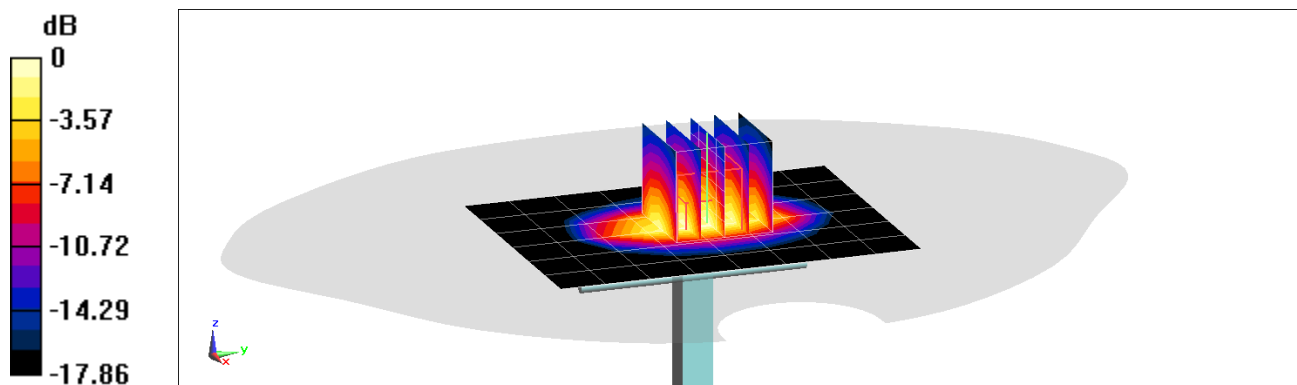
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.98 W/kg

**SAR(1 g) = 3.81 W/kg**

Deviation(1 g) = 1.06%



0 dB = 5.82 W/kg = 7.65 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.522 \text{ S/m}$ ;  $\epsilon_r = 52.293$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/18/2019; Ambient Temp: 20.9°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7488; ConvF(8.68, 8.68, 8.68) @ 1750 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

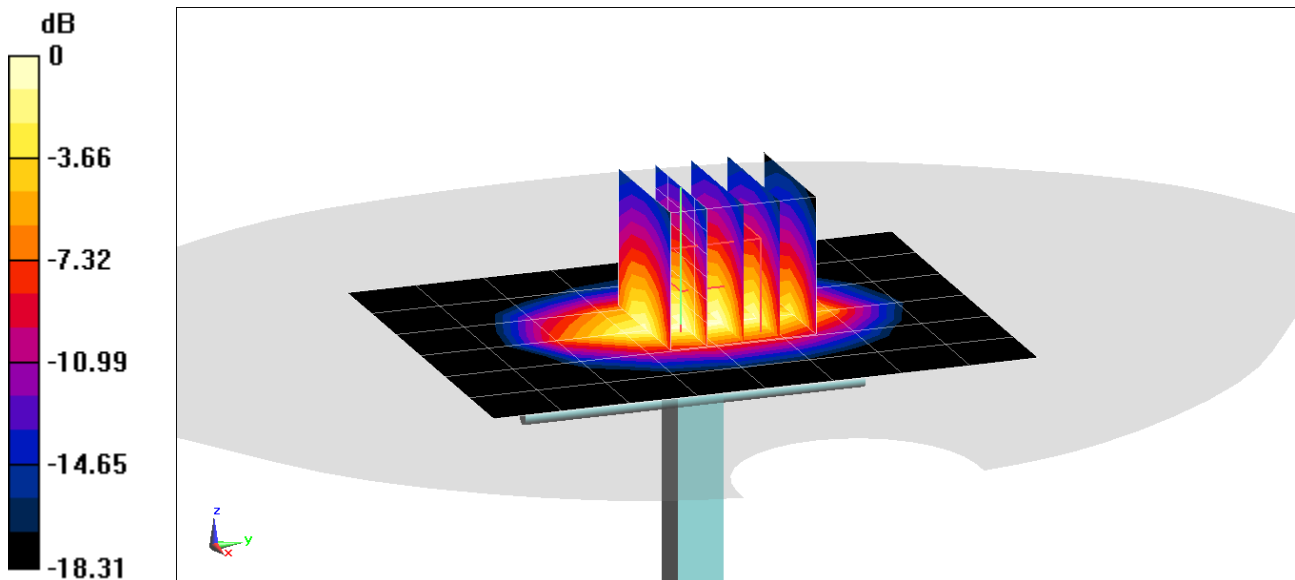
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.00 W/kg

**SAR(1 g) = 3.84 W/kg**

Deviation(1 g) = 1.86%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.492 \text{ S/m}$ ;  $\epsilon_r = 52.924$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/20/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

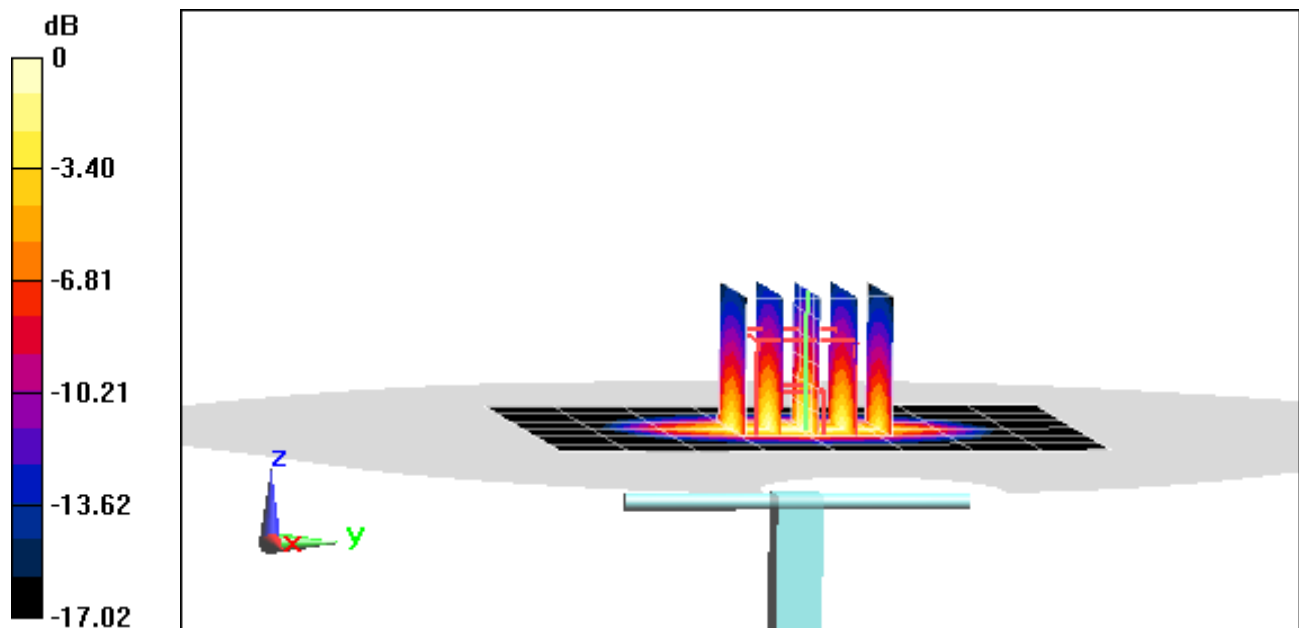
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.58 W/kg

**SAR(1 g) = 3.55 W/kg; SAR(10 g) = 1.88 W/kg**

Deviation(1 g) = -5.84%; Deviation(10 g) = -5.05%



0 dB = 5.48 W/kg = 7.39 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.534 \text{ S/m}$ ;  $\epsilon_r = 53.086$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/25/2019; Ambient Temp: 20.6°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

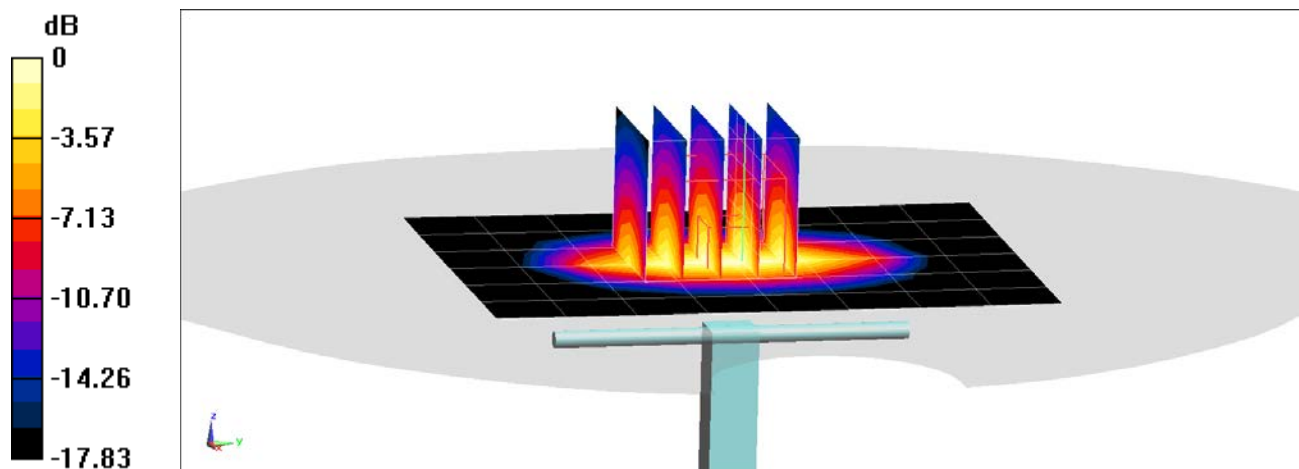
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.62 W/kg

**SAR(10 g) = 2.12 W/kg**

Deviation(10 g) = 7.07%



0 dB = 6.23 W/kg = 7.94 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.532 \text{ S/m}$ ;  $\epsilon_r = 52.733$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/03/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

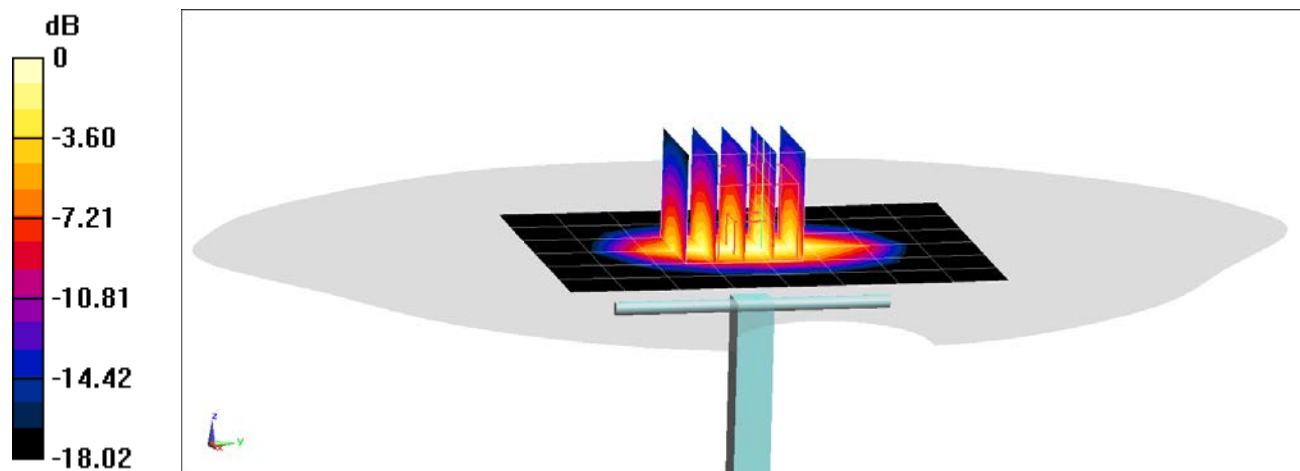
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.53 W/kg

**SAR(1 g) = 4.03 W/kg; SAR(10 g) = 2.12 W/kg**

Deviation(1 g) = 6.90%; Deviation(10 g) = 7.07%



0 dB = 6.18 W/kg = 7.91 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.537 \text{ S/m}$ ;  $\epsilon_r = 52.946$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/25/2019; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

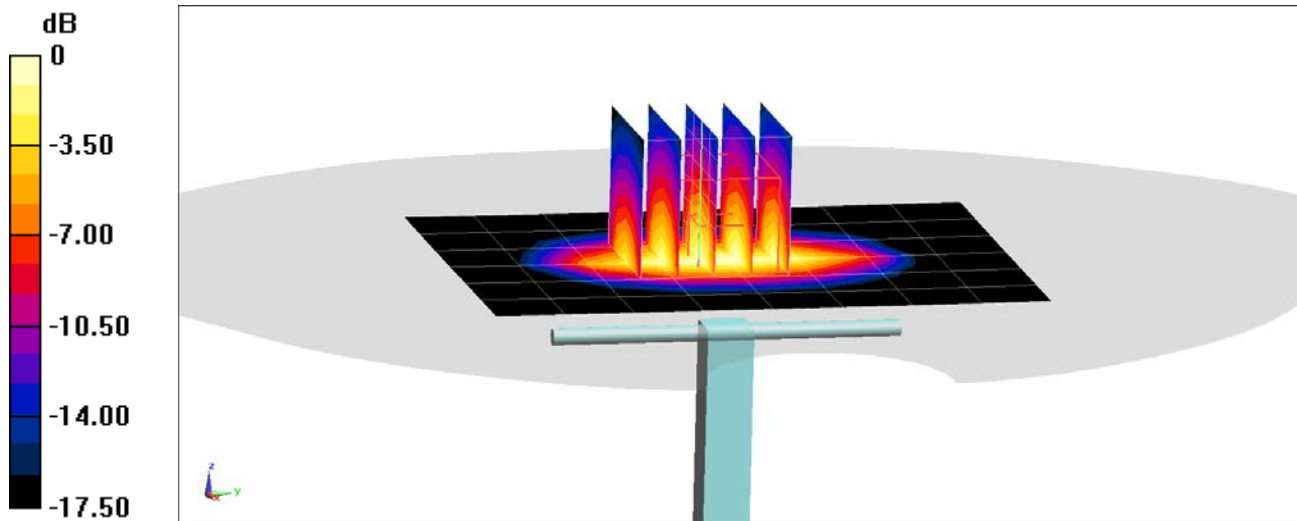
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.04 W/kg

**SAR(1 g) = 3.82 W/kg; SAR(10 g) = 2.01 W/kg**

Deviation(1 g) = 4.37%; Deviation(10g) = 3.61%





# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.485 \text{ S/m}$ ;  $\epsilon_r = 53.166$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-01-2020; Ambient Temp: 23.4°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

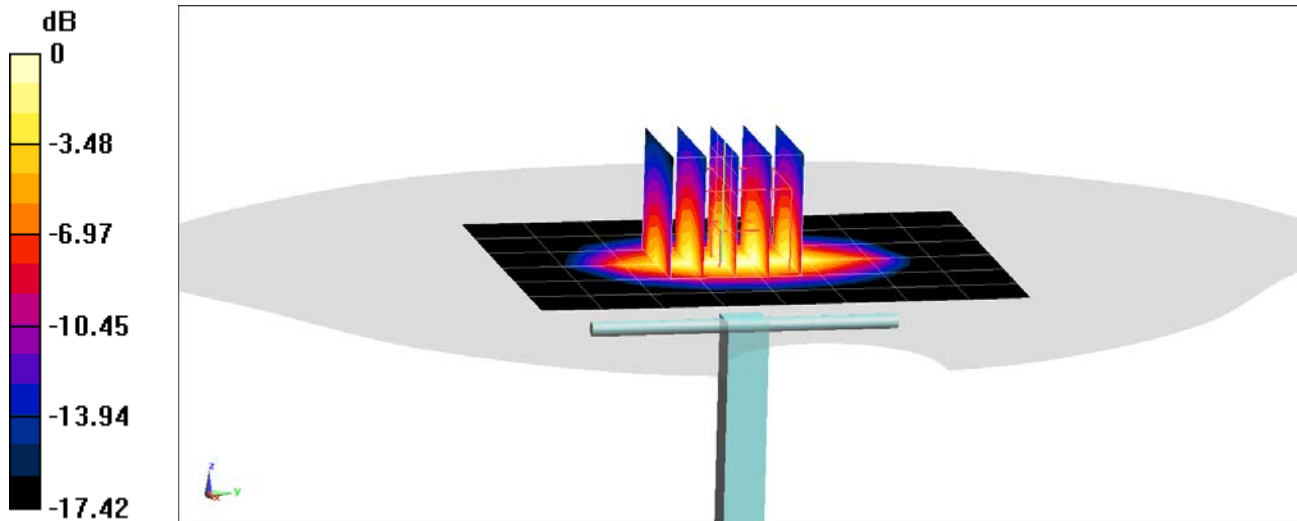
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.95 W/kg

**SAR(1 g) = 3.84 W/kg; SAR(10 g) = 2.04 W/kg**

Deviation(1 g) = 4.92%; Deviation(10 g) = 5.15%



0 dB = 5.78 W/kg = 7.62 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.573 \text{ S/m}$ ;  $\epsilon_r = 51.897$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/28/2019; Ambient Temp: 20.1°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1900 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

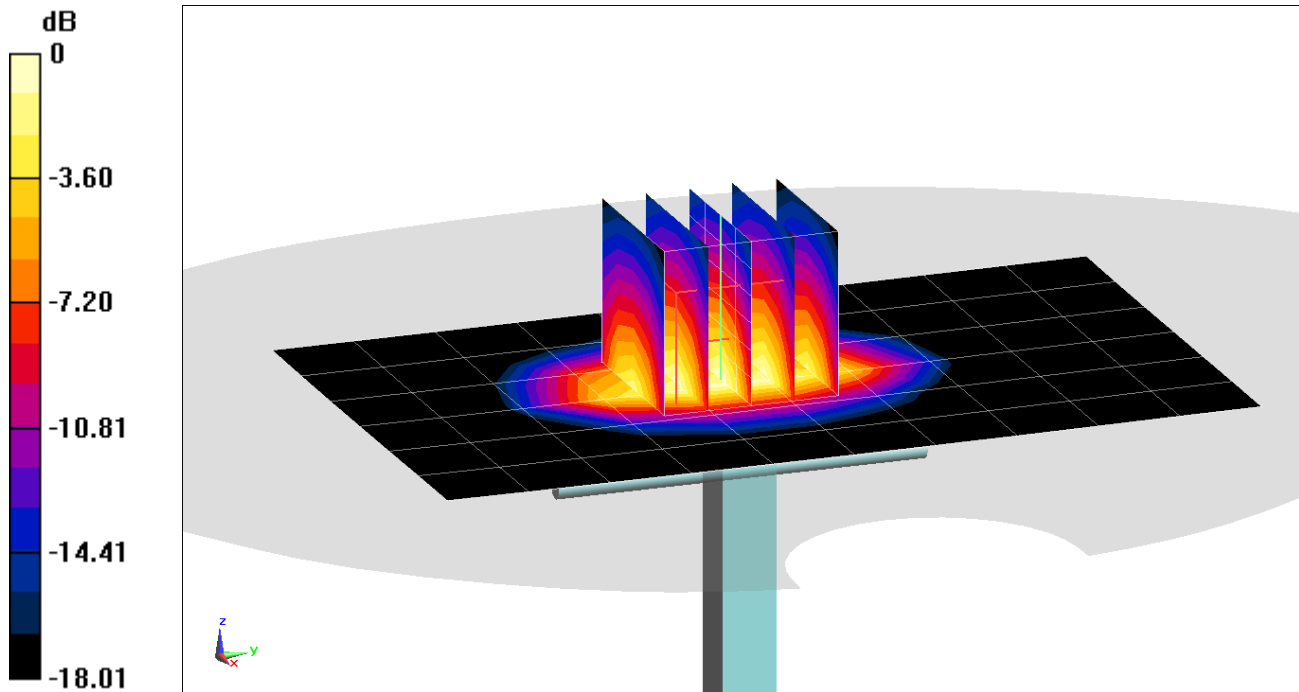
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.62 W/kg

**SAR(1 g) = 4.14 W/kg**

Deviation(1 g) = 5.08%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.571 \text{ S/m}$ ;  $\epsilon_r = 52.013$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/30/2019; Ambient Temp: 21.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF(7.95, 7.95, 7.95) @ 1900 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 5/8/2019

Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

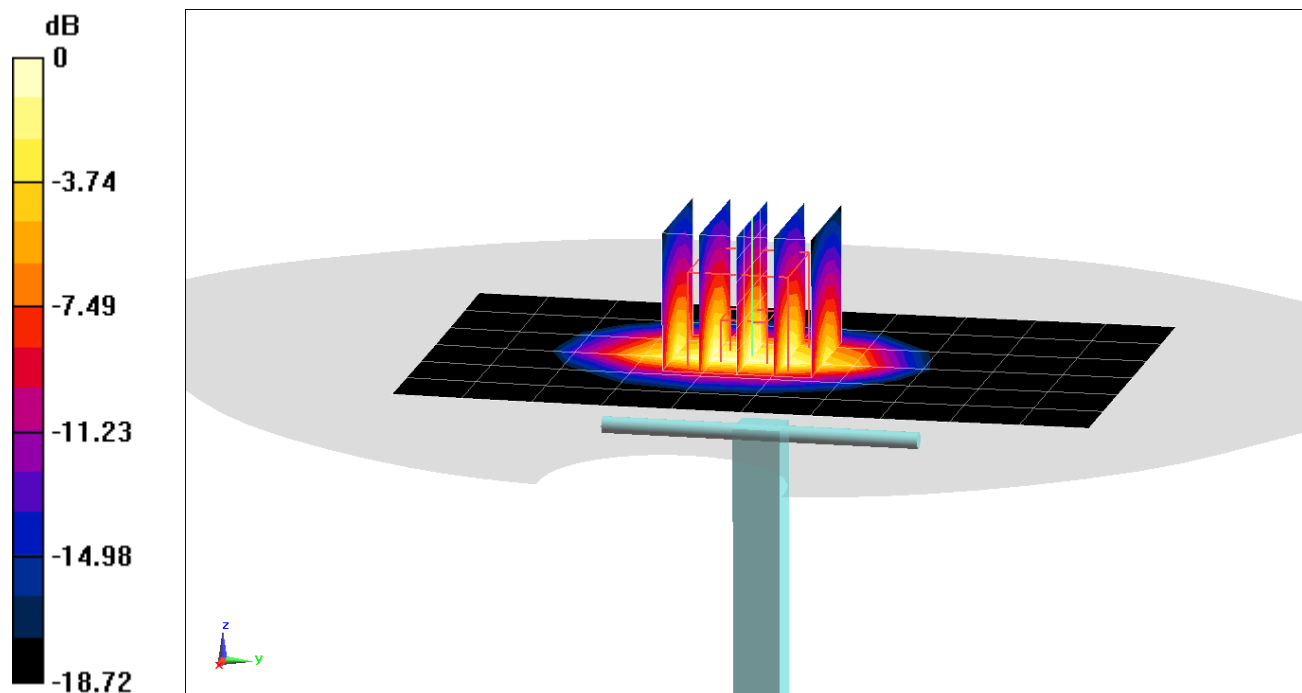
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.83 W/kg

**SAR(1 g) = 4.21 W/kg**

Deviation(1 g) = 7.40%



0 dB = 6.55 W/kg = 8.16 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.568$  S/m;  $\epsilon_r = 51.656$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/20/2019; Ambient Temp: 21.1°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

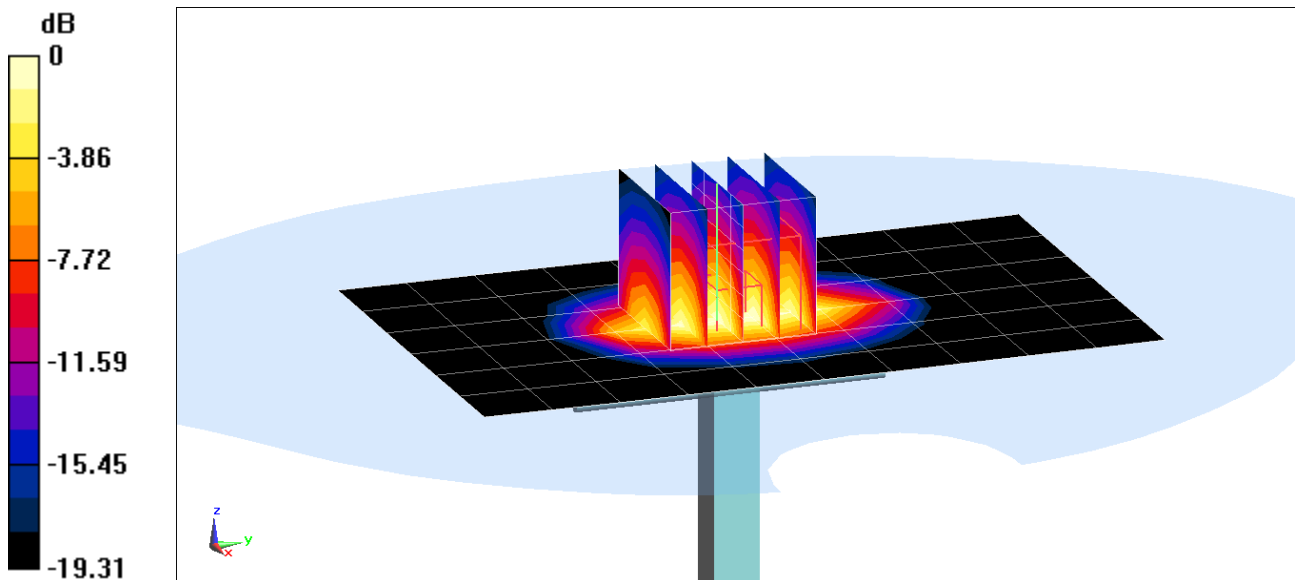
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.92 W/kg

**SAR(1 g) = 4.21 W/kg**

Deviation(1 g) = 6.85%



0 dB = 6.48 W/kg = 8.12 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.579$  S/m;  $\epsilon_r = 51.868$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/23/2019; Ambient Temp: 20.3°C; Tissue Temp: 24.3°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

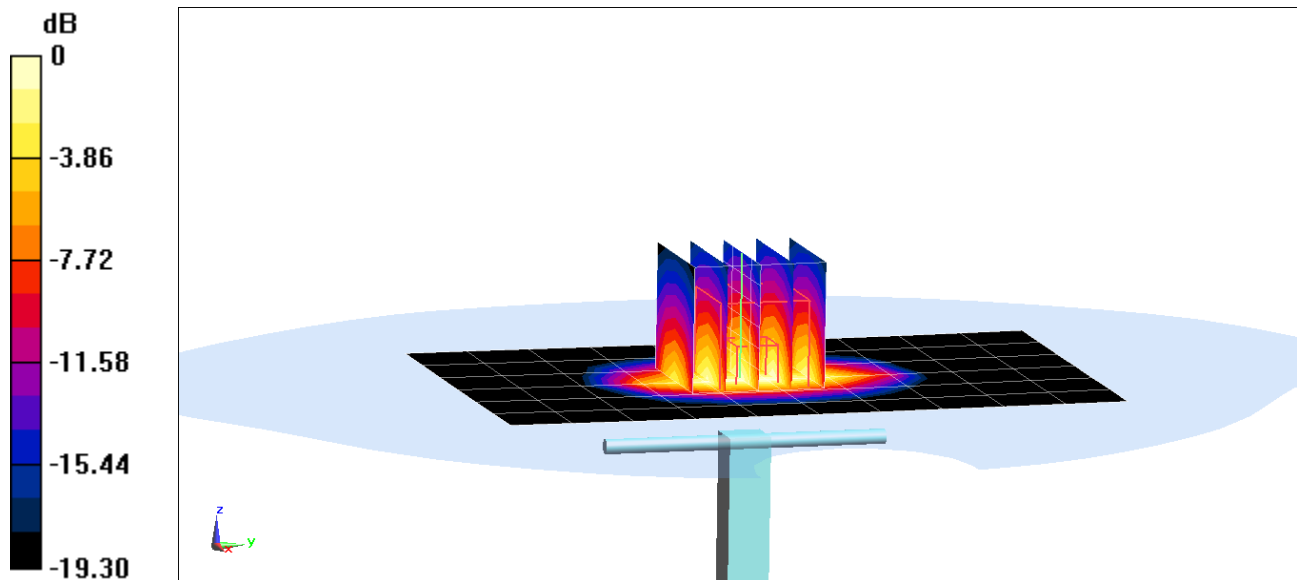
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.71 W/kg

**SAR(1 g) = 3.99 W/kg; SAR(10 g) = 2.01 W/kg**

Deviation(1 g) = 2.05%; Deviation(10 g) = -1.95%



0 dB = 6.28 W/kg = 7.98 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.567 \text{ S/m}$ ;  $\epsilon_r = 51.401$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/26/2019; Ambient Temp: 20.9°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

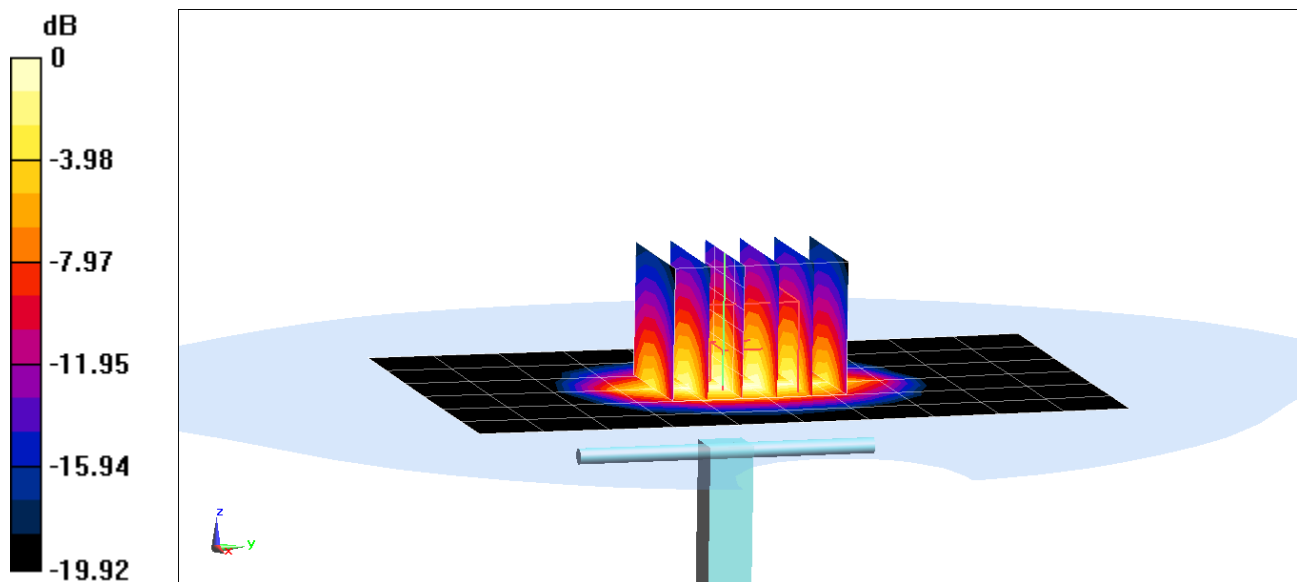
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 7.64 W/kg

**SAR(10 g) = 2.04 W/kg**

Deviation(10 g) = -0.49%



0 dB = 6.00 W/kg = 7.78 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.583$  S/m;  $\epsilon_r = 51.289$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/29/2019; Ambient Temp: 21.7°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

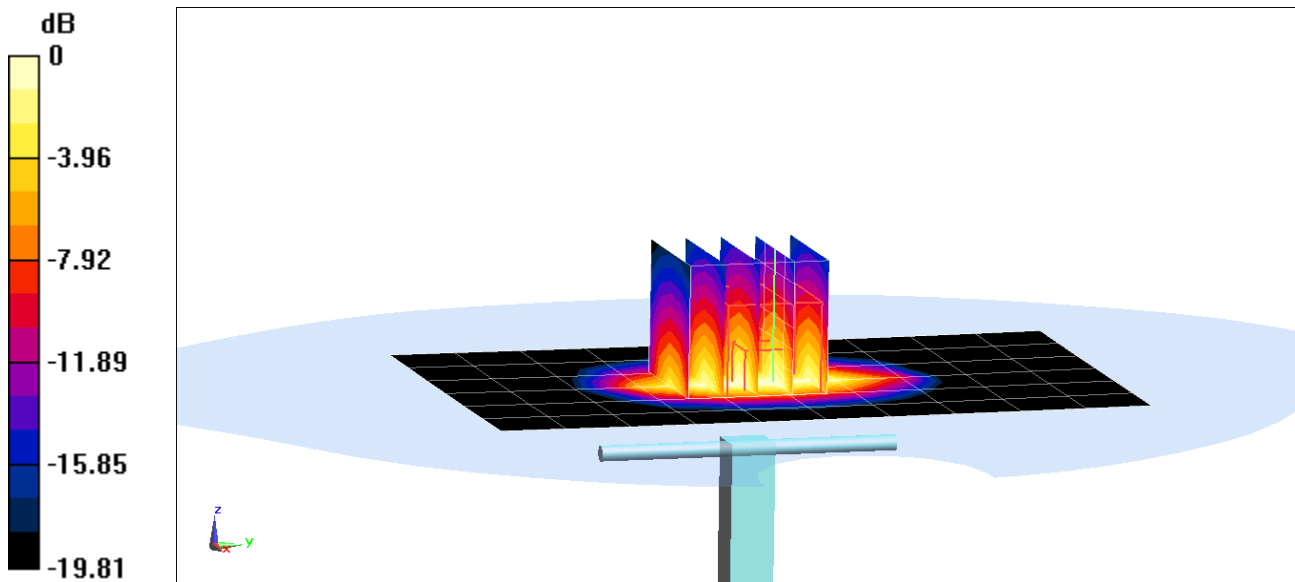
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.89 W/kg

**SAR(1 g) = 4.15 W/kg**

Deviation(1 g) = 5.33%



0 dB = 6.12 W/kg = 7.87 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.575 \text{ S/m}$ ;  $\epsilon_r = 50.866$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/02/2019; Ambient Temp: 20.7°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

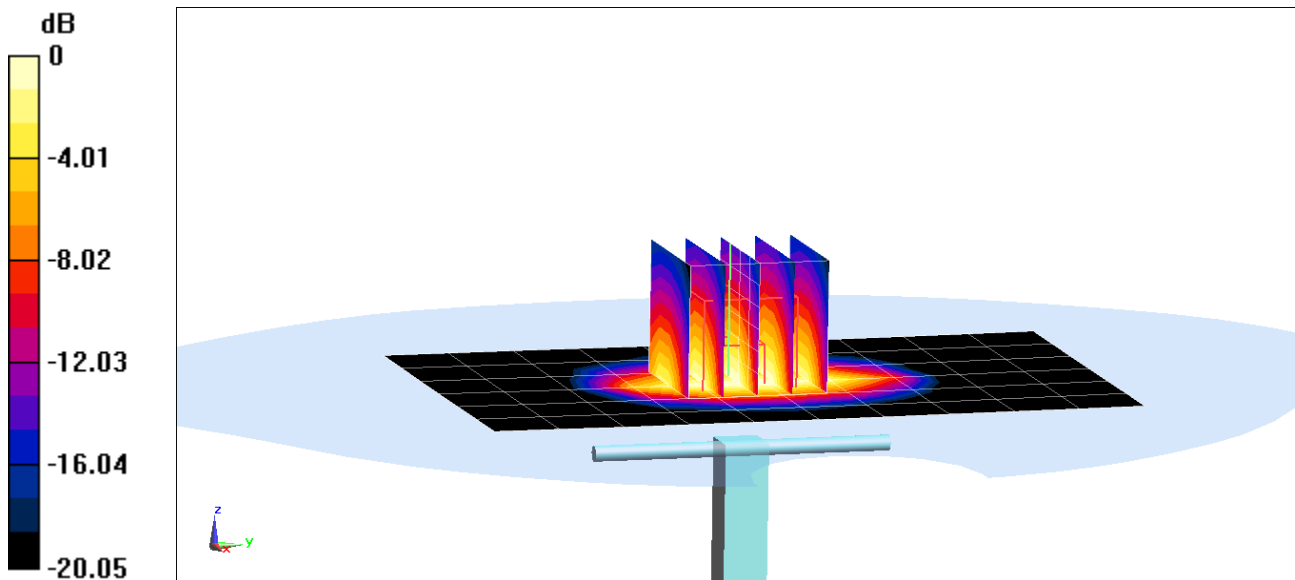
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.98 W/kg

**SAR(1 g) = 4.15 W/kg; SAR(10 g) = 2.09 W/kg**

Deviation(1 g) = 5.33%; Deviation(10 g) = 0.97%



0 dB = 5.84 W/kg = 7.66 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.572 \text{ S/m}$ ;  $\epsilon_r = 51.438$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 23.7°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

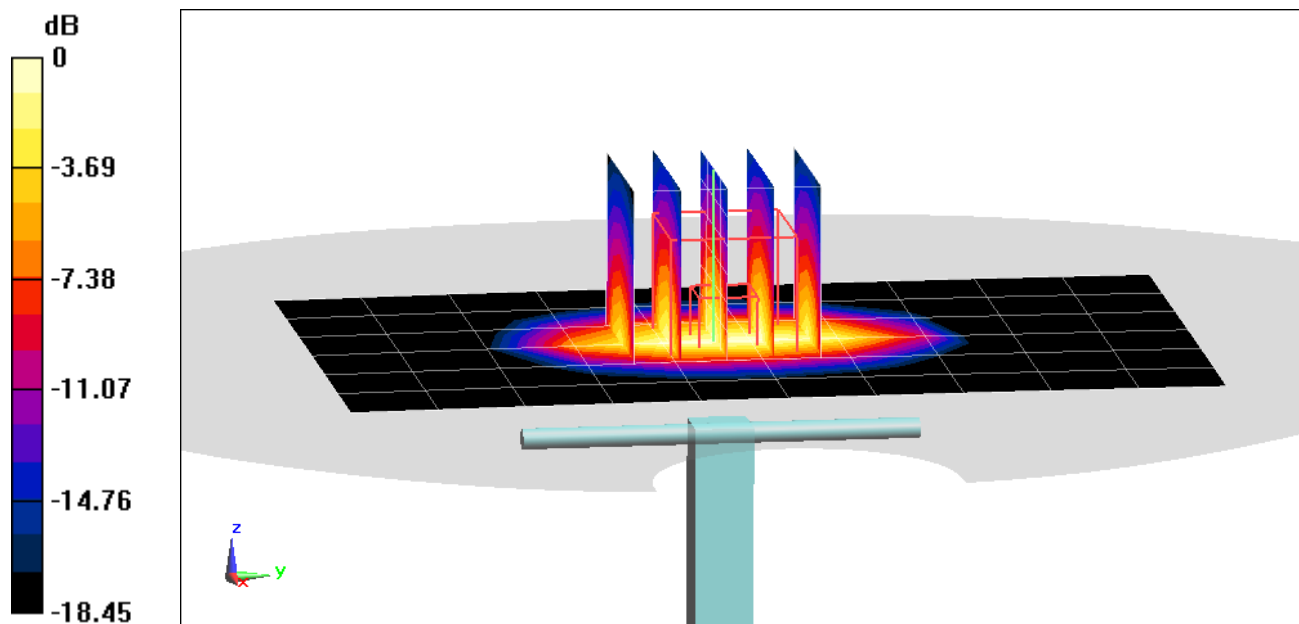
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.68 W/kg

**SAR(1 g) = 4.14 W/kg**

Deviation(1 g) = 5.61%



0 dB = 6.47 W/kg = 8.11 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.551 \text{ S/m}$ ;  $\epsilon_r = 51.482$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.3°C; Tissue Temp: 23.8°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

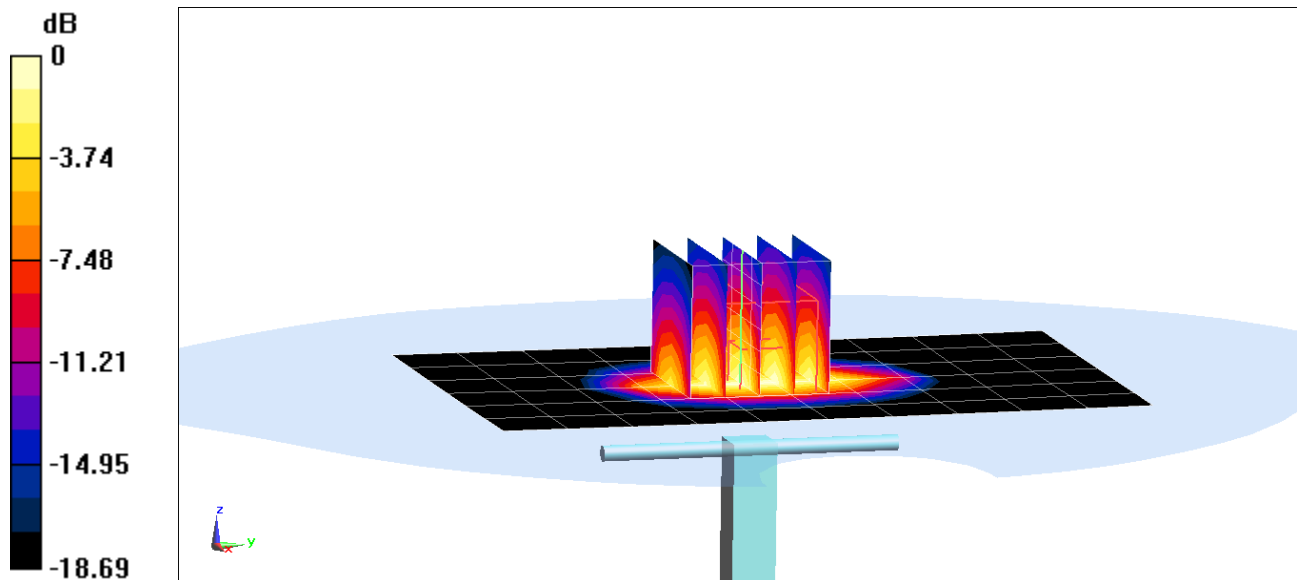
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.72 W/kg

**SAR(1 g) = 4.21 W/kg**

Deviation(1 g) = 6.85%



0 dB = 6.41 W/kg = 8.07 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900$  MHz;  $\sigma = 1.573$  S/m;  $\epsilon_r = 52.183$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.5°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

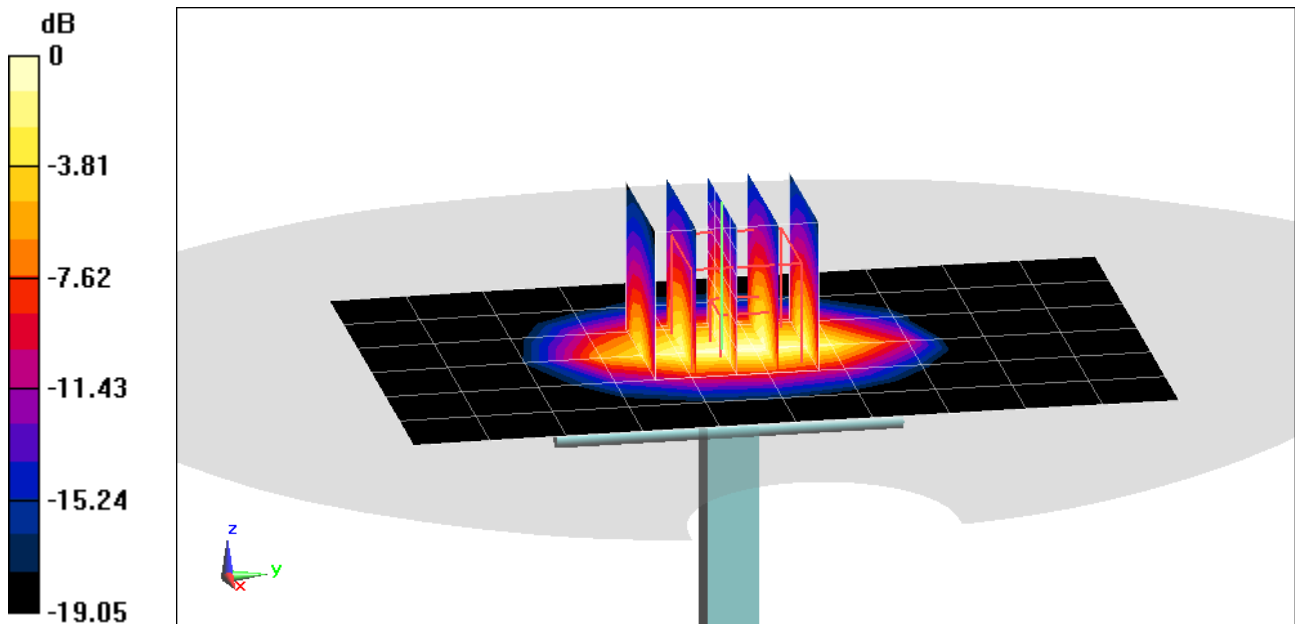
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.58 W/kg

**SAR(10 g) = 2.05 W/kg**

Deviation(10 g) = -0.49%



0 dB = 6.23 W/kg = 7.94 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.522 \text{ S/m}$ ;  $\epsilon_r = 51.87$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/16/2019; Ambient Temp: 21.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7551; ConvF(7.69, 7.69, 7.69) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

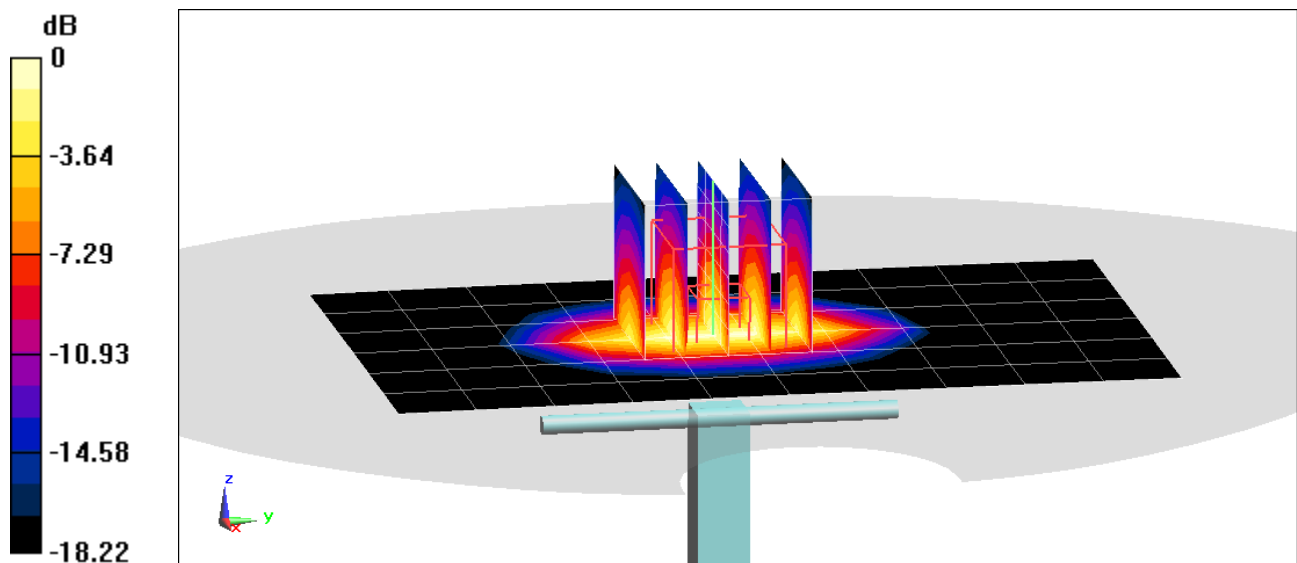
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.76 W/kg

**SAR(10 g) = 2.13 W/kg**

Deviation(10 g) = 3.40%



0 dB = 6.55 W/kg = 8.16 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.579 \text{ S/m}$ ;  $\epsilon_r = 51.919$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/01/2020; Ambient Temp: 21.3°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

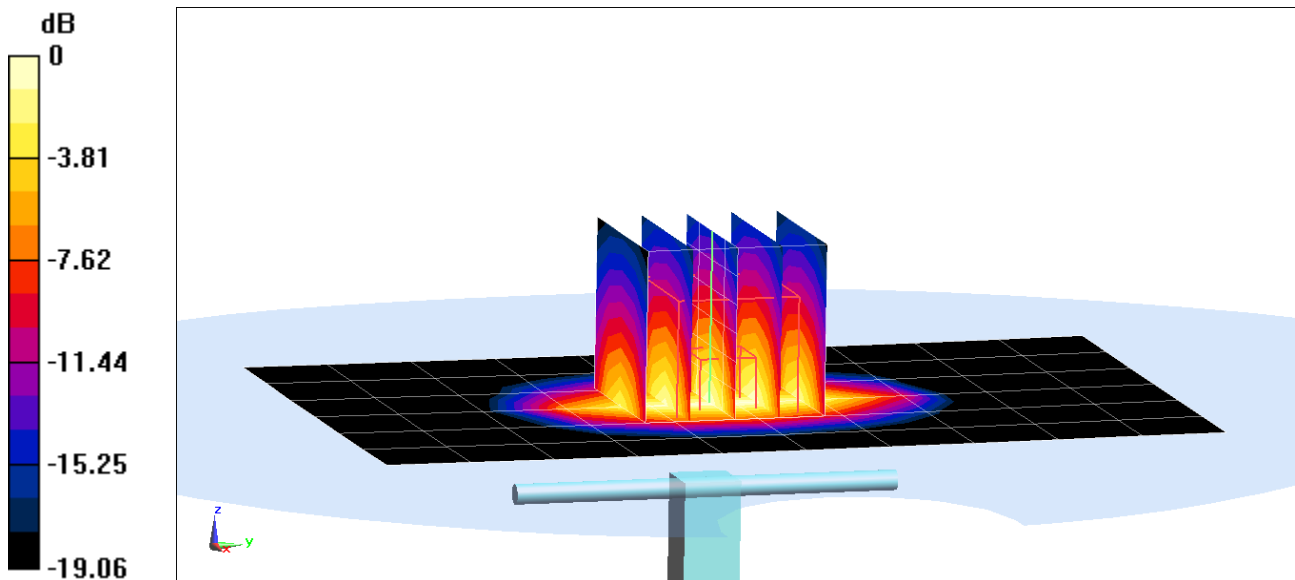
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.91 W/kg

**SAR(1 g) = 4.23 W/kg; SAR(10 g) = 2.14 W/kg**

Deviation(1 g) = 7.91%; Deviation(10 g) = 3.88%



0 dB = 6.62 W/kg = 8.21 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2300 \text{ MHz}$ ;  $\sigma = 1.87 \text{ S/m}$ ;  $\epsilon_r = 52.761$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/04/2019; Ambient Temp: 22.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2300 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2300 MHz System Verification at 20.0 dBm (100 mW)

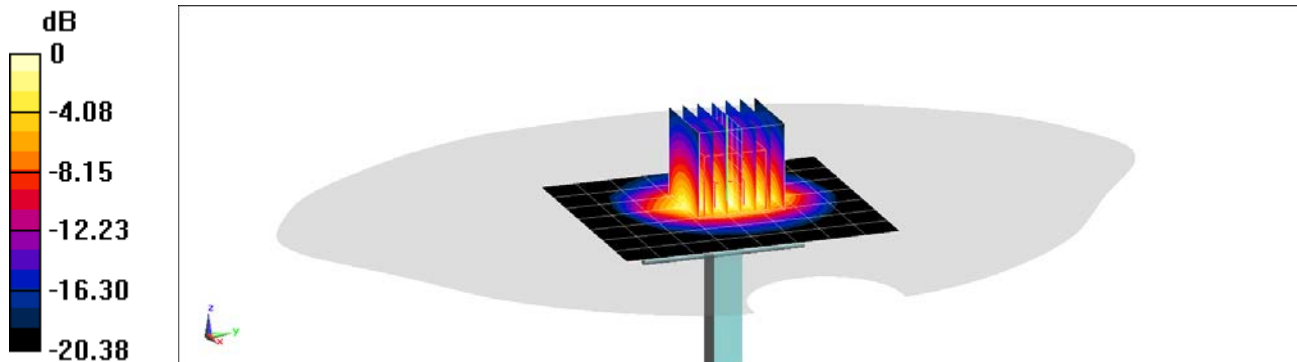
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 8.91 W/kg

**SAR(1 g) = 4.6 W/kg**

Deviation(1 g) = -1.08%



0 dB = 7.37 W/kg = 8.67 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1073**

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2300$  MHz;  $\sigma = 1.866$  S/m;  $\epsilon_r = 51.288$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/24/2019; Ambient Temp: 24.0°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2300 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2300 MHz System Verification at 20.0 dBm (100 mW)

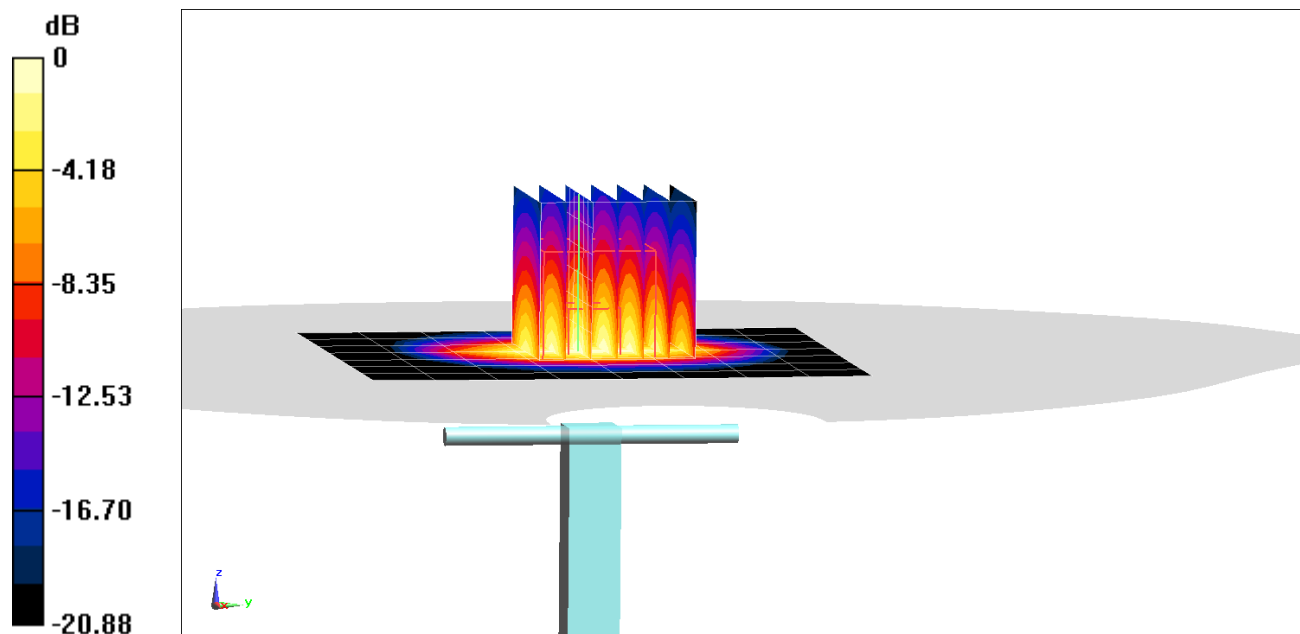
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 8.38 W/kg

**SAR(1 g) = 4.35 W/kg**

Deviation(1 g) = -8.81%



0 dB = 6.87 W/kg = 8.37 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1073**

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2300 \text{ MHz}$ ;  $\sigma = 1.79 \text{ S/m}$ ;  $\epsilon_r = 51.273$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/30/2019; Ambient Temp: 23.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2300 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2300 MHz System Verification at 20.0 dBm (100 mW)

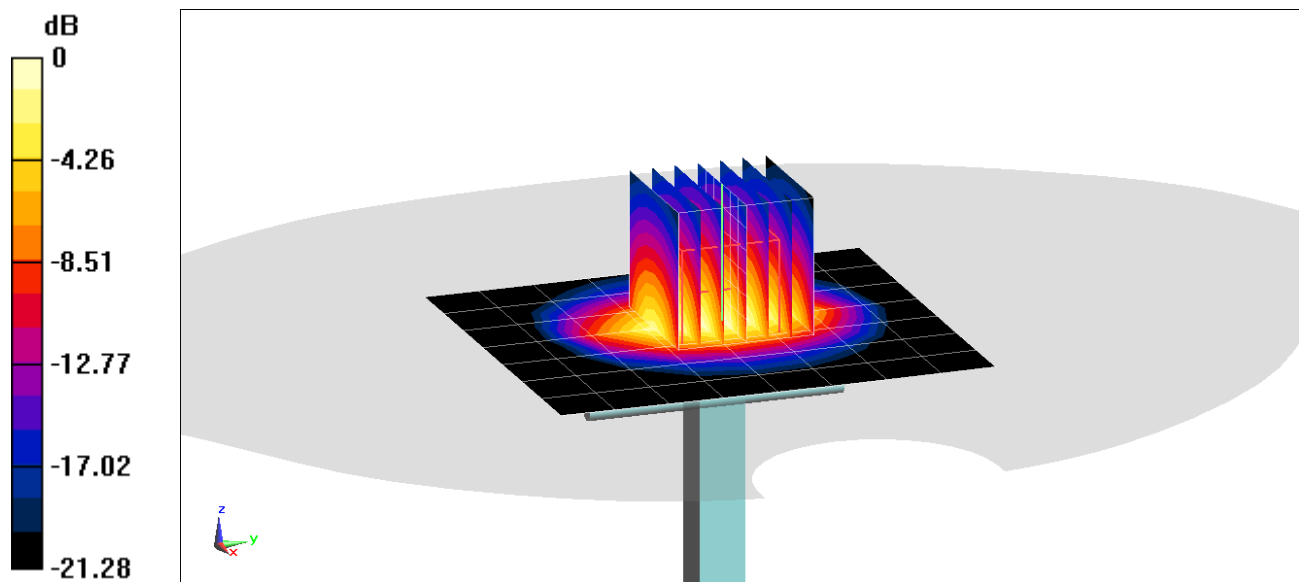
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 9.82 W/kg

**SAR(10 g) = 2.33 W/kg**

Deviation(10 g) = 0.43%



0 dB = 8.04 W/kg = 9.05 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 981**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.035$  S/m;  $\epsilon_r = 52.494$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/28/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

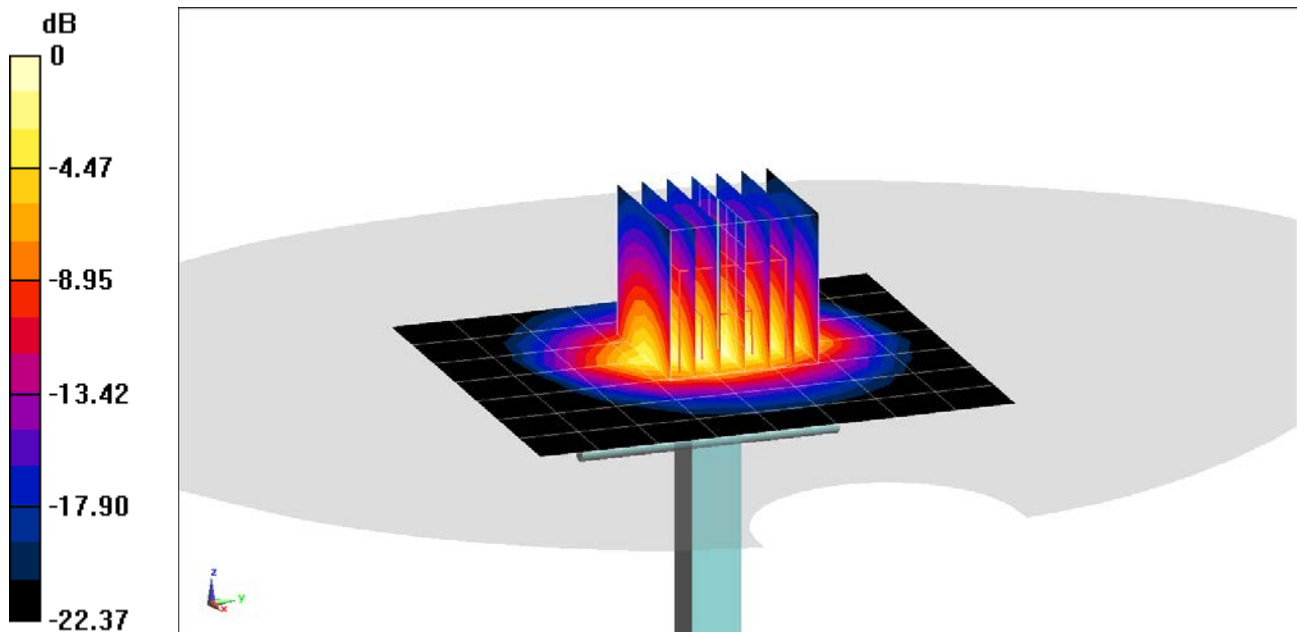
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.5 W/kg

**SAR(1 g) = 5.06 W/kg**

Deviation(1 g) = -0.59%



0 dB = 8.50 W/kg = 9.29 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 1.95 \text{ S/m}$ ;  $\epsilon_r = 50.884$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/30/2019; Ambient Temp: 23.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

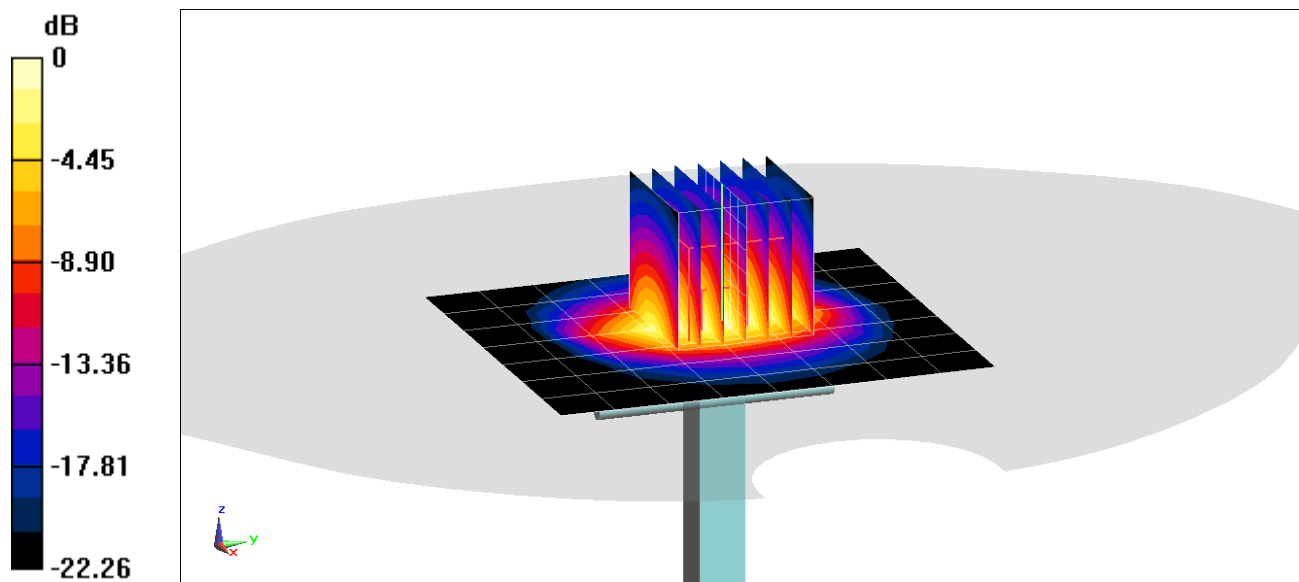
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.1 W/kg

**SAR(1 g) = 4.86 W/kg**

Deviation(1 g) = -4.89%



0 dB = 8.15 W/kg = 9.11 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.044$  S/m;  $\epsilon_r = 50.559$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/06/2019; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

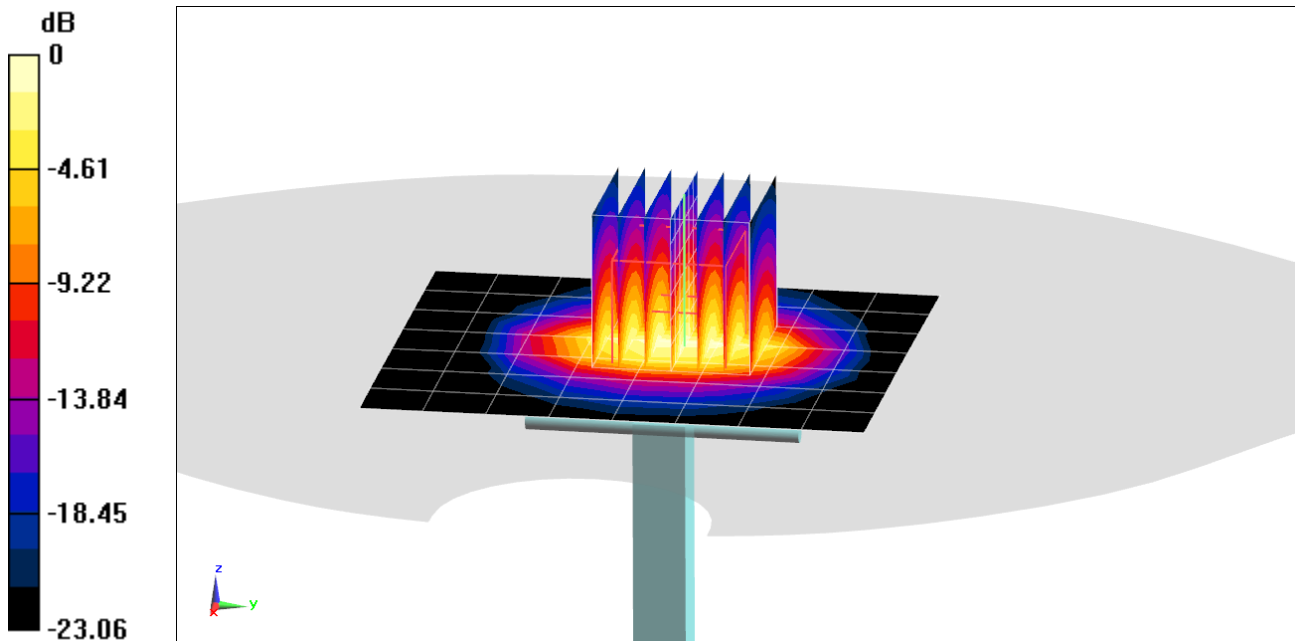
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.0 W/kg

**SAR(1 g) = 5.24 W/kg**

Deviation(1 g) = 3.15%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 2.035 \text{ S/m}$ ;  $\epsilon_r = 51.85$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 23.5°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

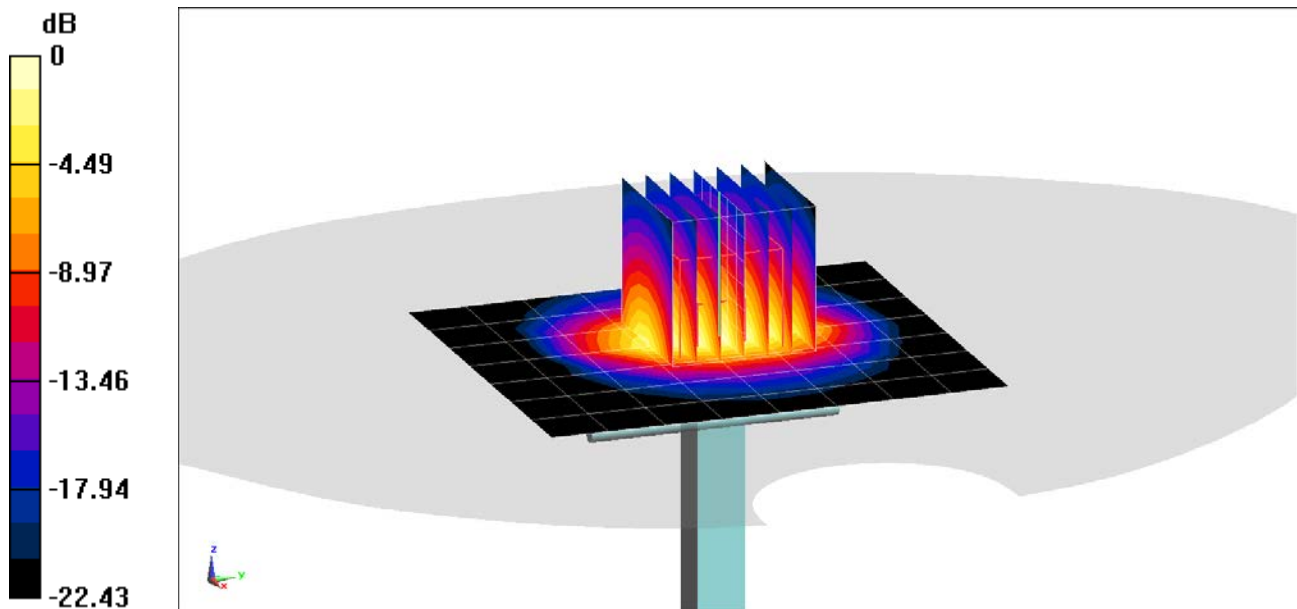
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.4 W/kg

**SAR(1 g) = 5.04 W/kg**

Deviation(1 g) = -1.37%



0 dB = 8.38 W/kg = 9.23 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.034$  S/m;  $\epsilon_r = 52.673$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.8°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

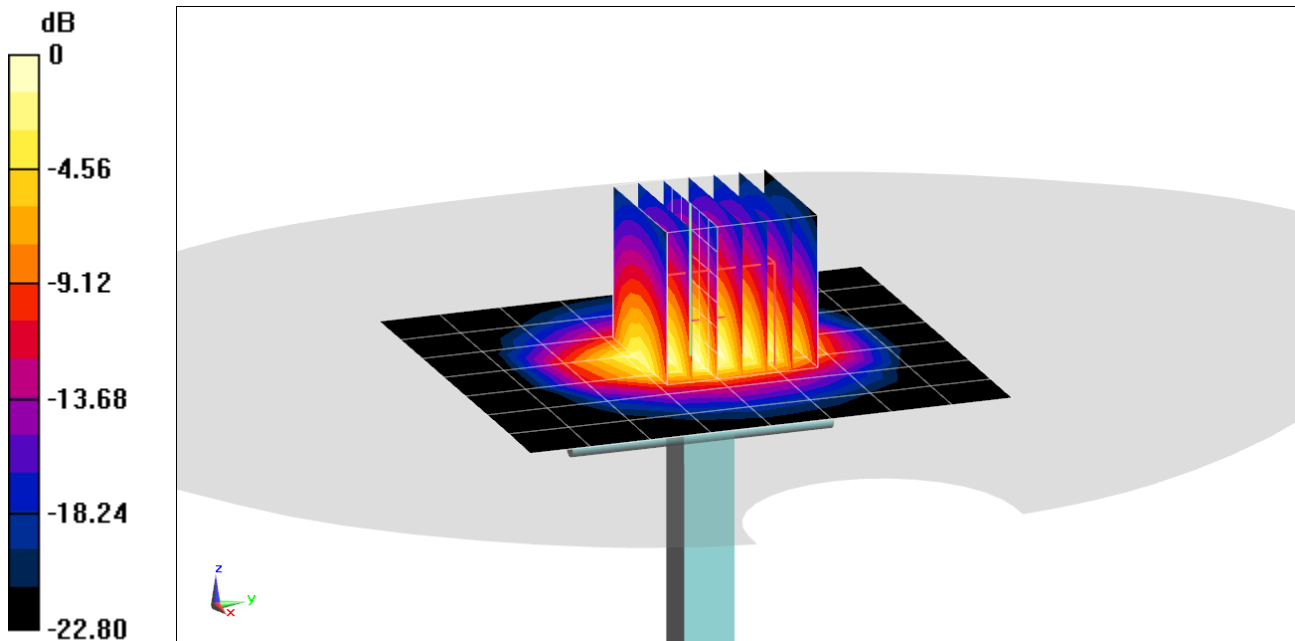
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.2 W/kg

**SAR(1 g) = 5.4 W/kg; SAR(10 g) = 2.49 W/kg**

Deviation(1 g) = 6.30%; Deviation(10 g) = 3.75%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.042$  S/m;  $\epsilon_r = 51.863$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/19/2019; Ambient Temp: 21.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(7.46, 7.46, 7.46) @ 2450 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

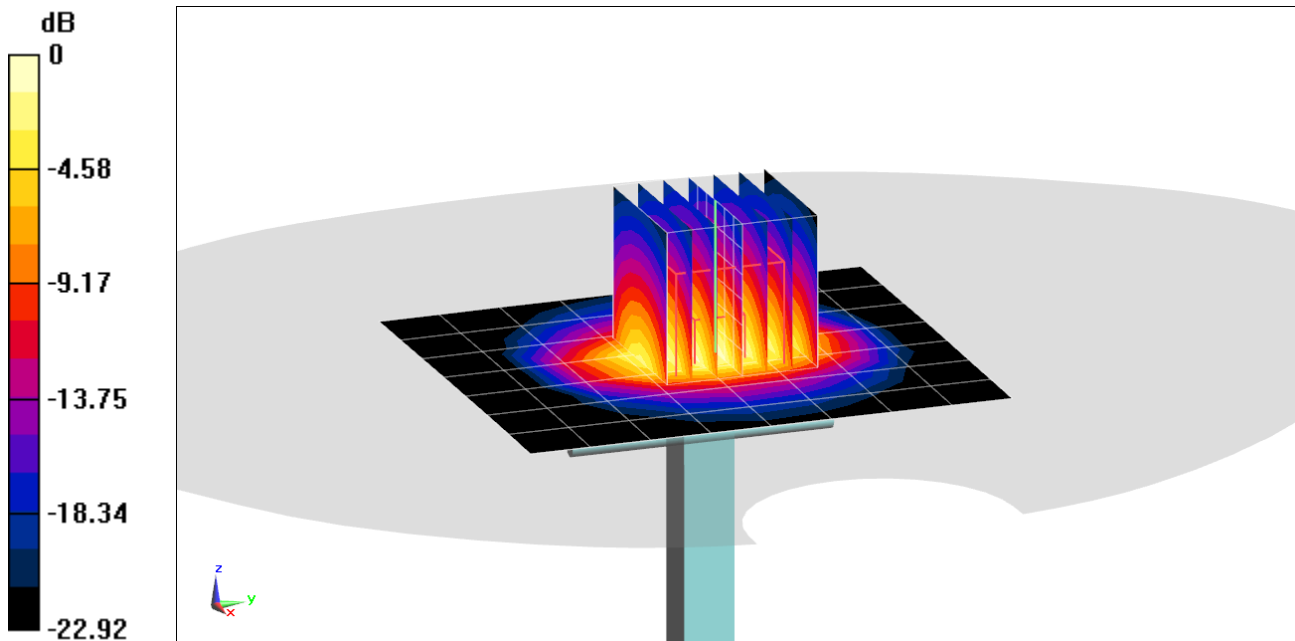
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.5 W/kg

**SAR(10 g) = 2.48 W/kg**

Deviation(10 g) = 3.33%



0 dB = 9.26 W/kg = 9.67 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.047$  S/m;  $\epsilon_r = 51.113$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/24/2019; Ambient Temp: 23.7°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

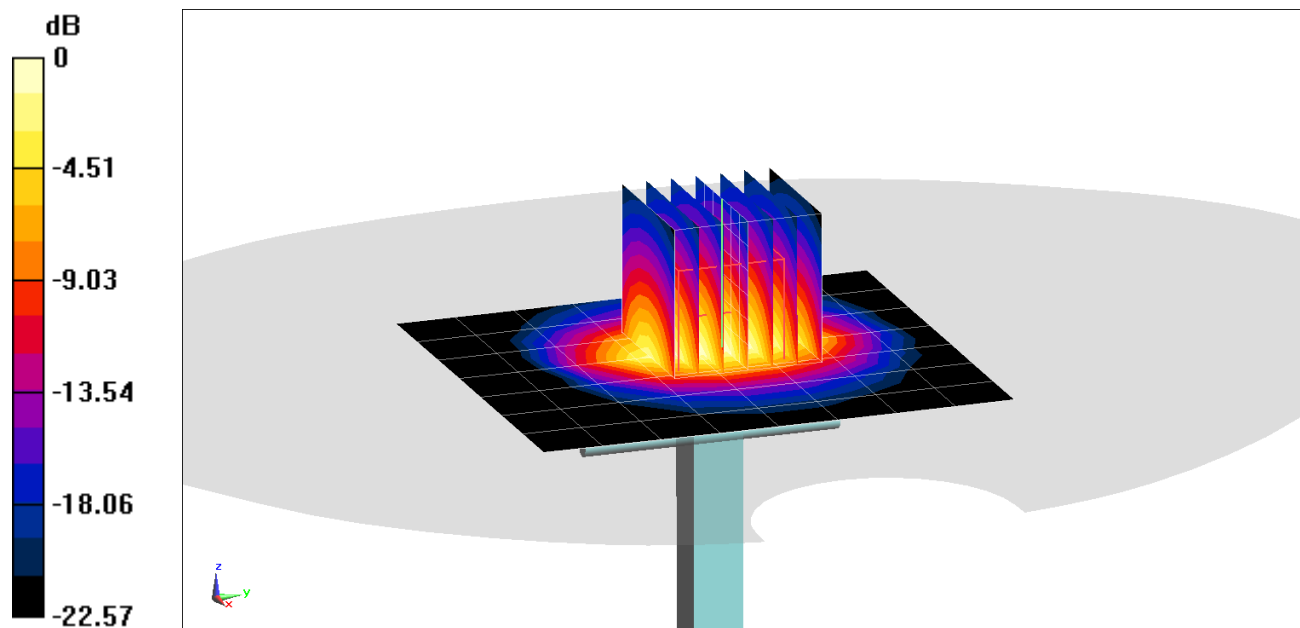
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.9 W/kg

**SAR(1 g) = 5.18 W/kg**

Deviation(1 g) = 1.37%



0 dB = 8.72 W/kg = 9.41 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 2.041 \text{ S/m}$ ;  $\epsilon_r = 51.07$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/30/2019; Ambient Temp: 23.6°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

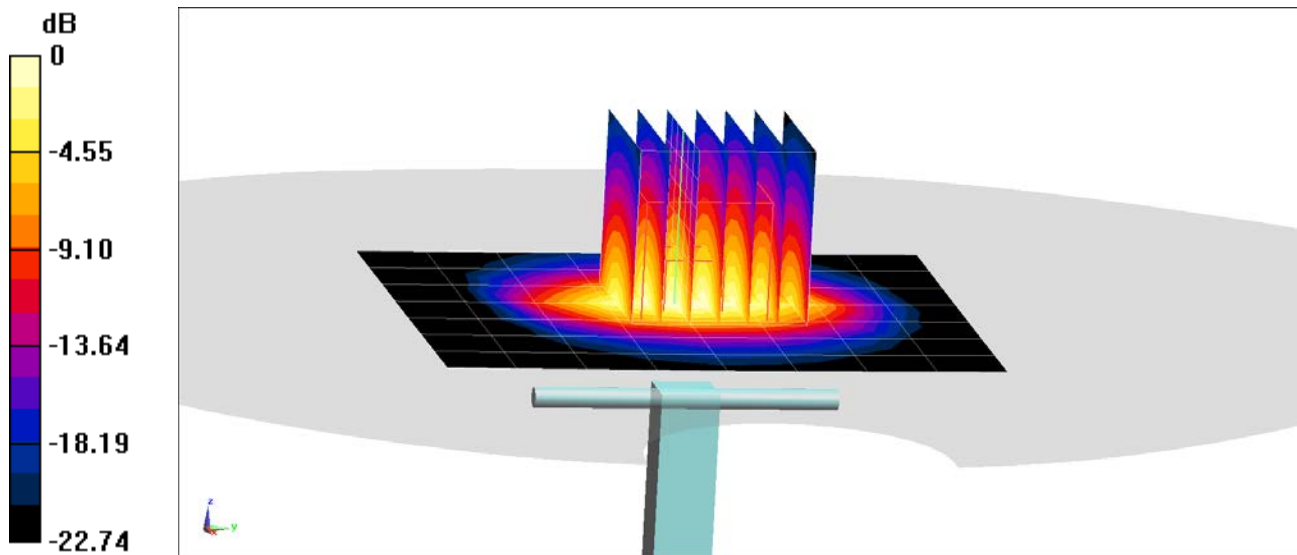
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.6 W/kg

**SAR(10 g) = 2.3 W/kg**

Deviation(10 g) = -4.96%



0 dB = 8.39 W/kg = 9.24 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.224$  S/m;  $\epsilon_r = 52.396$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10/31/2019; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

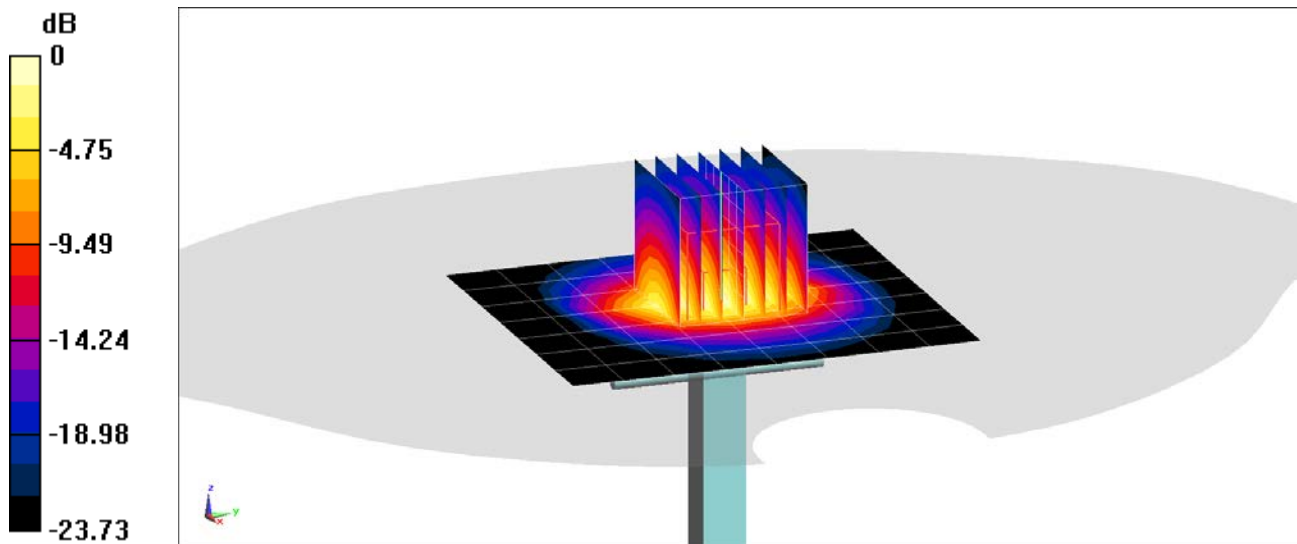
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.7 W/kg

**SAR(1 g) = 5.33 W/kg**

Deviation(1 g) = -4.14%



0 dB = 9.24 W/kg = 9.66 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600 \text{ MHz}$ ;  $\sigma = 2.118 \text{ S/m}$ ;  $\epsilon_r = 50.45$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/30/2019; Ambient Temp: 23.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

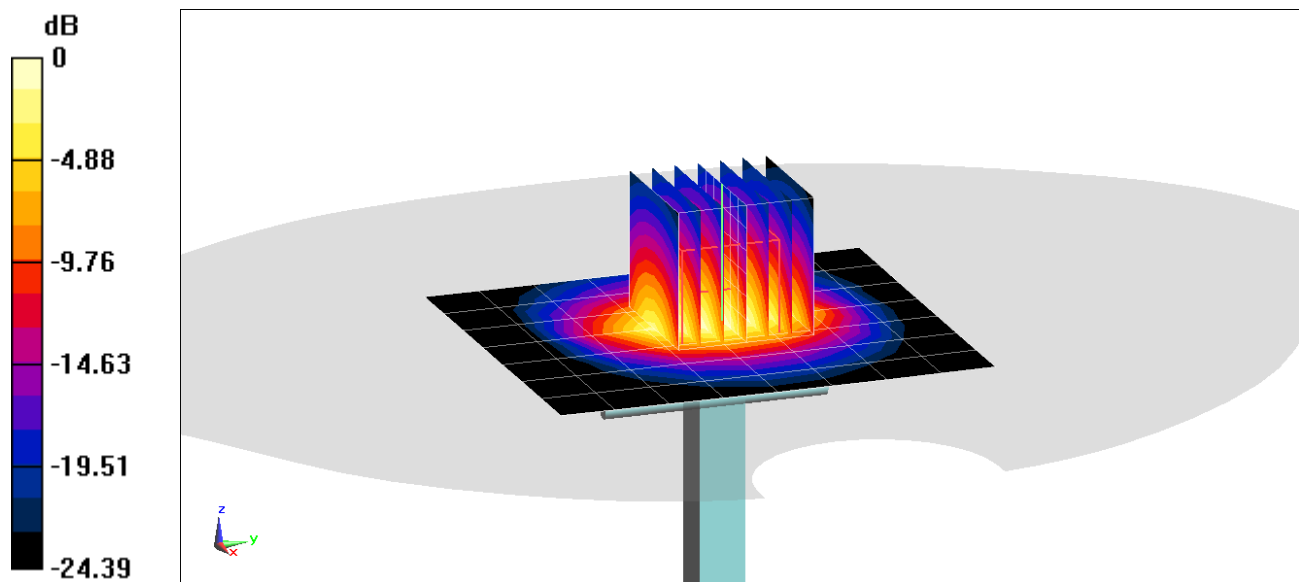
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.7 W/kg

**SAR(1 g) = 5.3 W/kg**

Deviation(1 g) = -3.28%



0 dB = 9.16 W/kg = 9.62 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600 \text{ MHz}$ ;  $\sigma = 2.21 \text{ S/m}$ ;  $\epsilon_r = 51.417$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 23.5°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

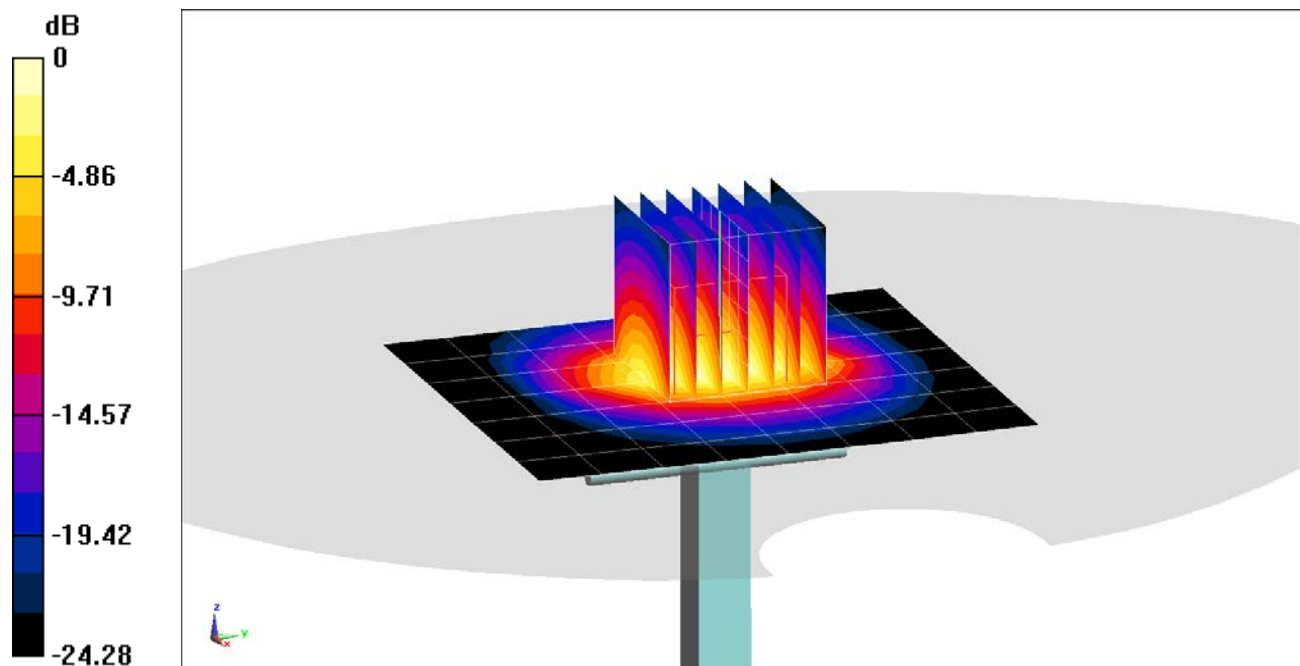
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.3 W/kg

**SAR(1 g) = 5.51 W/kg**

Deviation(1 g) = 0.55%



0 dB = 9.63 W/kg = 9.84 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.213$  S/m;  $\epsilon_r = 52.182$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/12/2019; Ambient Temp: 22.8°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7308; ConvF(7.37, 7.37, 7.37) @ 2600 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

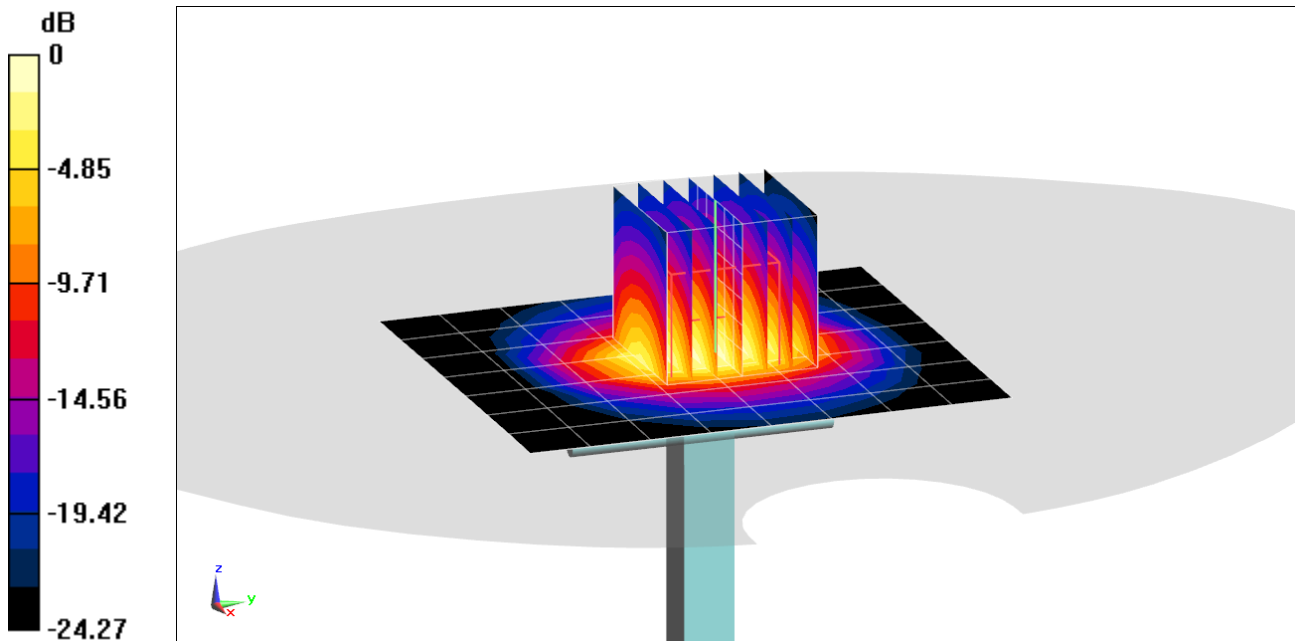
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.8 W/kg

**SAR(1 g) = 5.47 W/kg; SAR(10 g) = 2.42 W/kg**

Deviation(1 g) = -0.18%; Deviation(10 g) = -2.02%



0 dB = 9.33 W/kg = 9.70 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600 \text{ MHz}$ ;  $\sigma = 2.212 \text{ S/m}$ ;  $\epsilon_r = 52.32$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/16/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

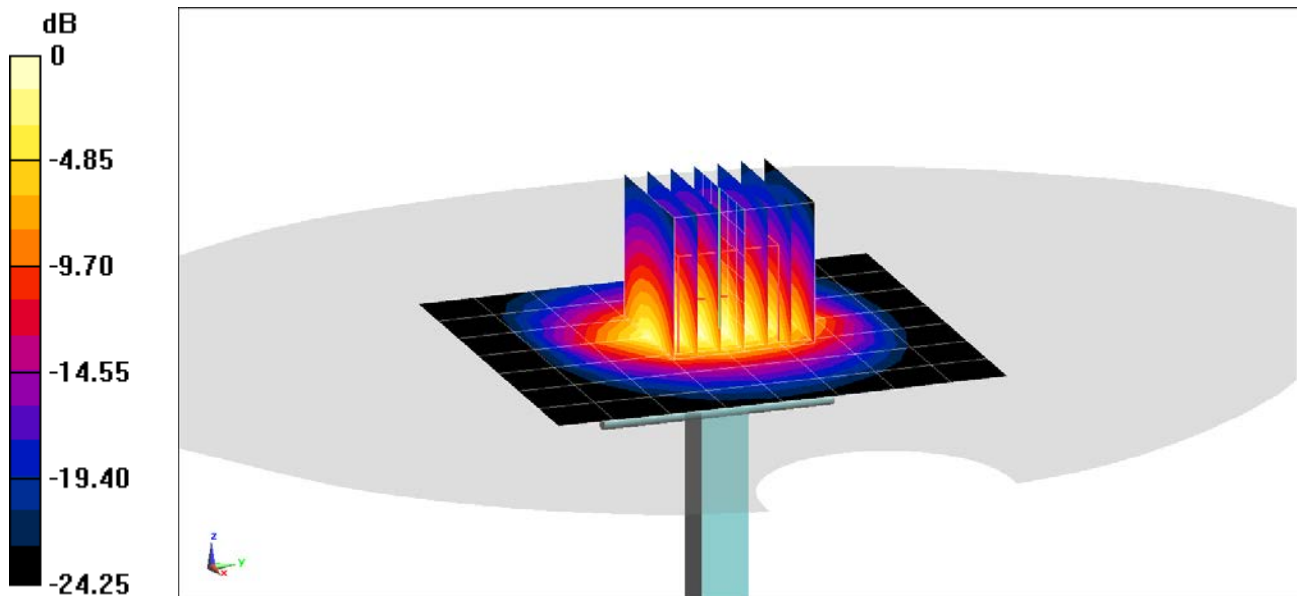
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.4 W/kg

**SAR(1 g) = 5.21 W/kg**

Deviation(1 g) = -4.93%



0 dB = 8.96 W/kg = 9.52 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.219$  S/m;  $\epsilon_r = 51.418$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/19/2019; Ambient Temp: 21.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(7.37, 7.37, 7.37) @ 2600 MHz; Calibrated: 8/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/14/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

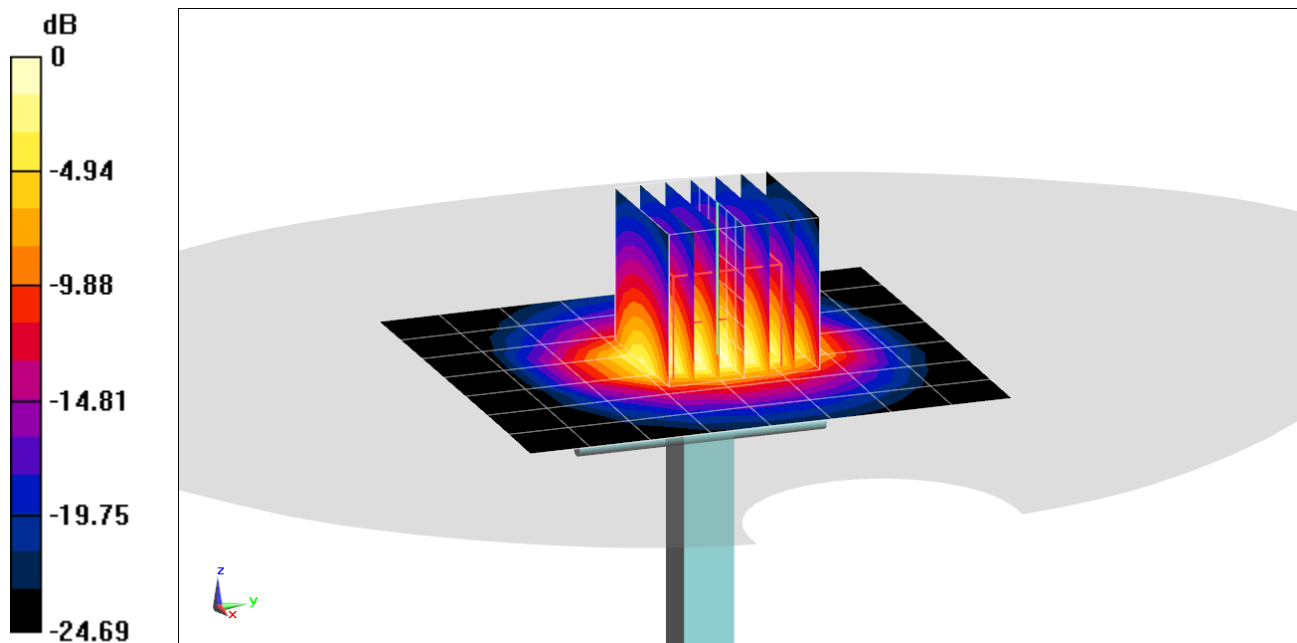
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.4 W/kg

**SAR(10 g) = 2.42 W/kg**

Deviation(10 g) = -3.20%



0 dB = 9.69 W/kg = 9.86 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.224$  S/m;  $\epsilon_r = 50.683$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/24/2019; Ambient Temp: 23.7°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

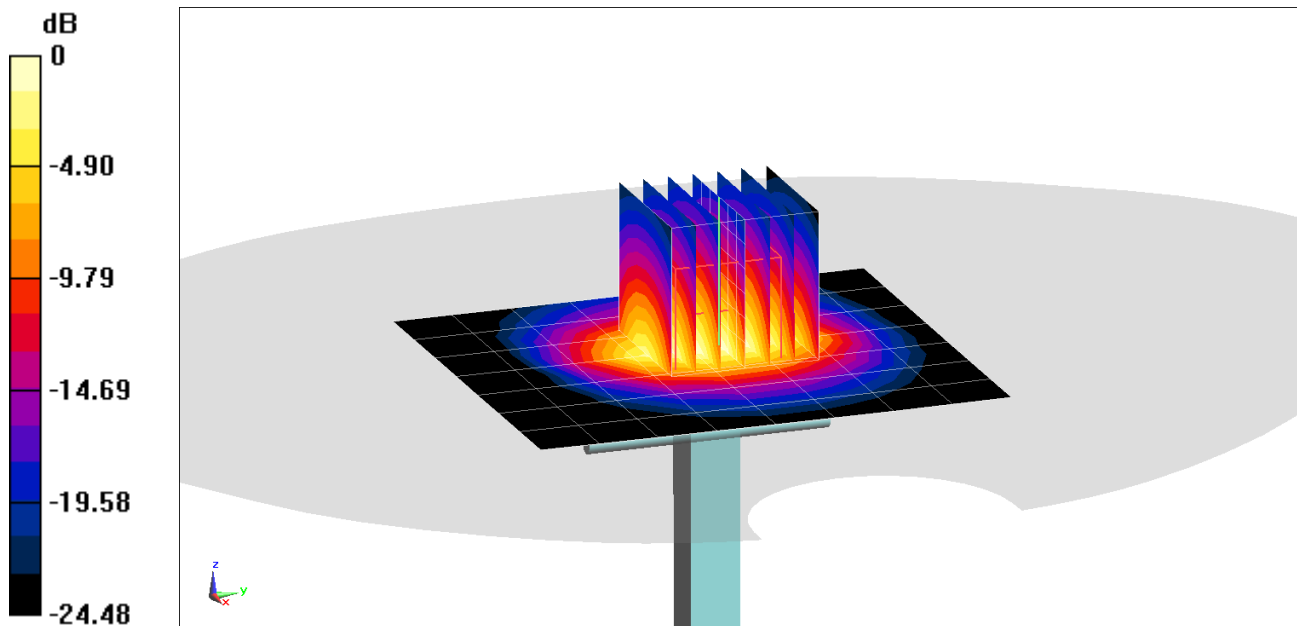
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.6 W/kg

**SAR(1 g) = 5.67 W/kg**

Deviation(1 g) = 3.47%



0 dB = 9.81 W/kg = 9.92 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059**

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3500-3800 Body Medium parameters used:

$f = 3500$  MHz;  $\sigma = 3.376$  S/m;  $\epsilon_r = 50.761$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/06/2019; Ambient Temp: 22.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3914; ConvF(6.88, 6.88, 6.88) @ 3500 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3500 MHz System Verification at 20.0 dBm (100 mW)

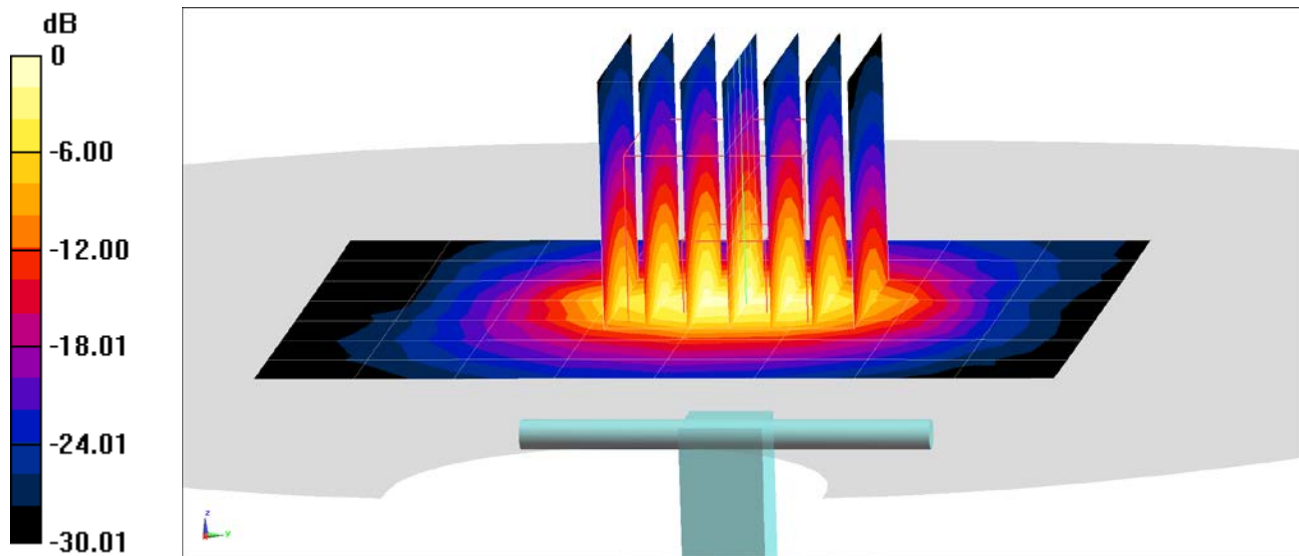
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.0 W/kg

**SAR(1 g) = 6.13 W/kg**

Deviation(1 g) = -5.84%



0 dB = 12.3 W/kg = 10.90 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059**

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3500-3800 Body Medium parameters used:

$f = 3500$  MHz;  $\sigma = 3.458$  S/m;  $\epsilon_r = 50.583$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/11/2019; Ambient Temp: 21.2°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN3914; ConvF(6.88, 6.88, 6.88) @ 3500 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3500 MHz System Verification at 20.0 dBm (100 mW)

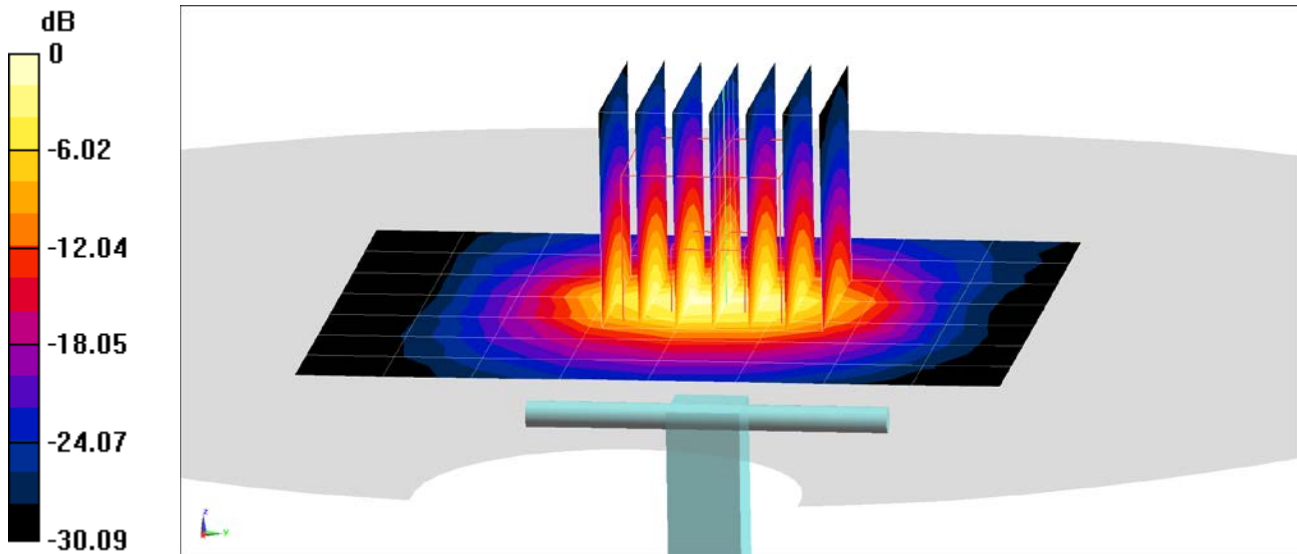
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.1 W/kg

**SAR(1 g) = 6.16 W/kg**

Deviation(1 g) = -5.38%



0 dB = 12.4 W/kg = 10.93 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018**

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1  
Medium: 3500-3800 Body Medium parameters used:  
 $f = 3700 \text{ MHz}$ ;  $\sigma = 3.592 \text{ S/m}$ ;  $\epsilon_r = 50.468$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/06/2019; Ambient Temp: 22.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3914; ConvF(6.58, 6.58, 6.58) @ 3700 MHz; Calibrated: 2/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019  
Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3700 MHz System Verification at 20.0 dBm (100 mW)

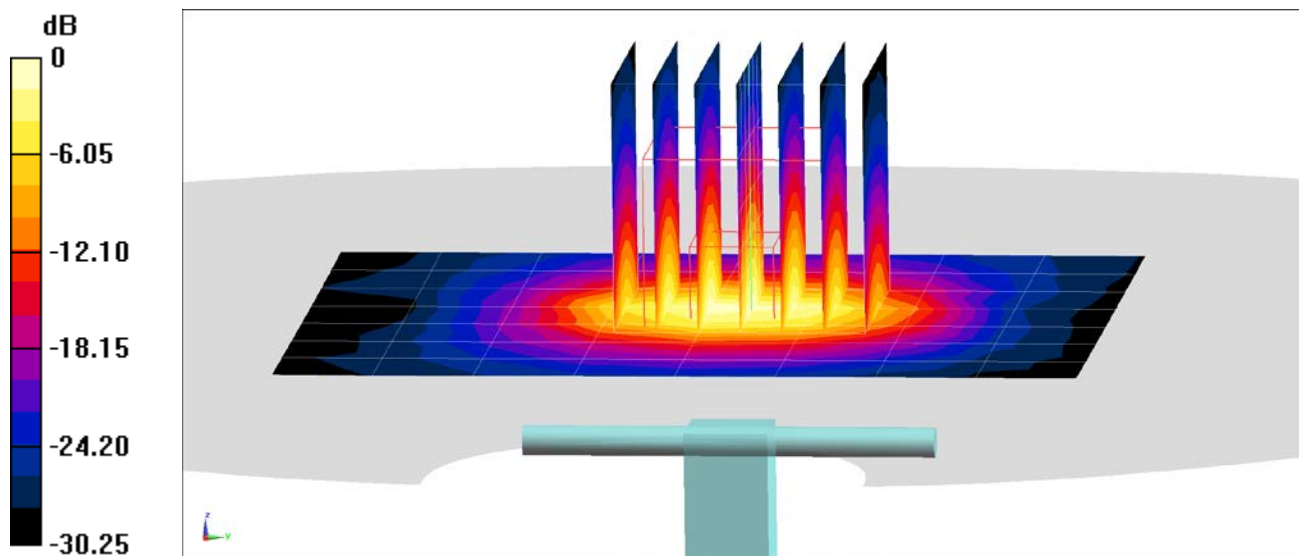
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 19.3 W/kg

**SAR(1 g) = 6.41 W/kg**

Deviation(1 g) = -0.31%



0 dB = 13.2 W/kg = 11.21 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018**

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3500-3800 Body Medium parameters used:

$f = 3700$  MHz;  $\sigma = 3.683$  S/m;  $\epsilon_r = 50.248$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 11/11/2019; Ambient Temp: 21.2°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN3914; ConvF(6.58, 6.58, 6.58) @ 3700 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 3700 MHz System Verification at 20.0 dBm (100 mW)

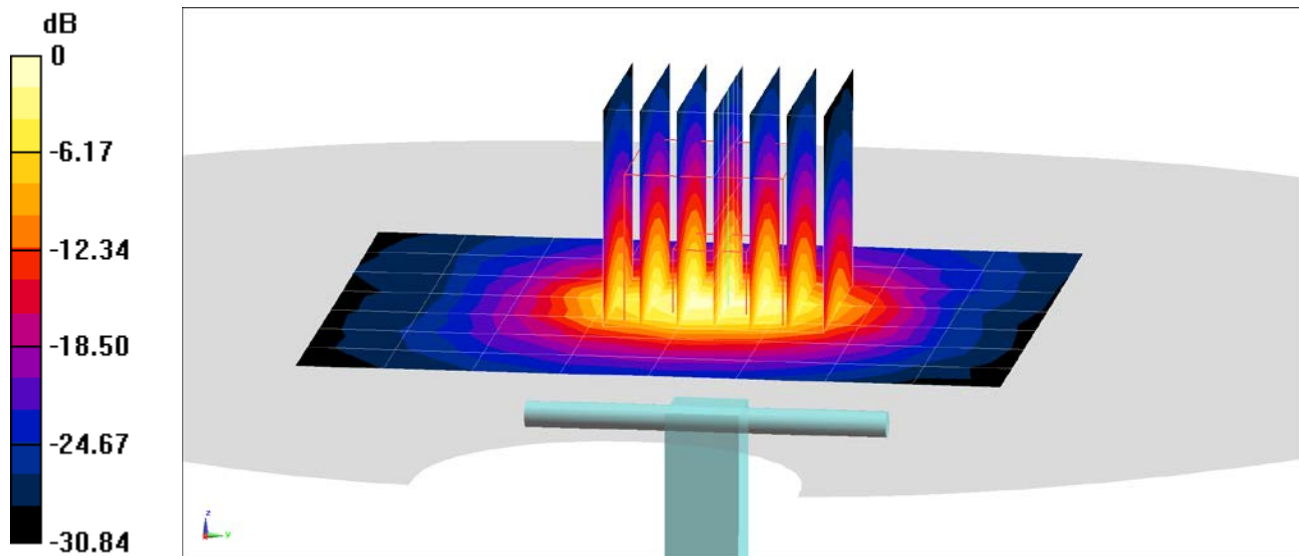
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 19.7 W/kg

**SAR(1 g) = 6.56 W/kg**

Deviation(1 g) = 2.02%



0 dB = 13.4 W/kg = 11.27 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Body Medium parameters used (interpolated):  
 $f = 5250$  MHz;  $\sigma = 5.459$  S/m;  $\epsilon_r = 47.207$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/1/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5250 MHz; Calibrated: 6/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1334; Calibrated: 6/20/2019  
Phantom: Front; Type: QD 000 P40 CD; Serial: 1686  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

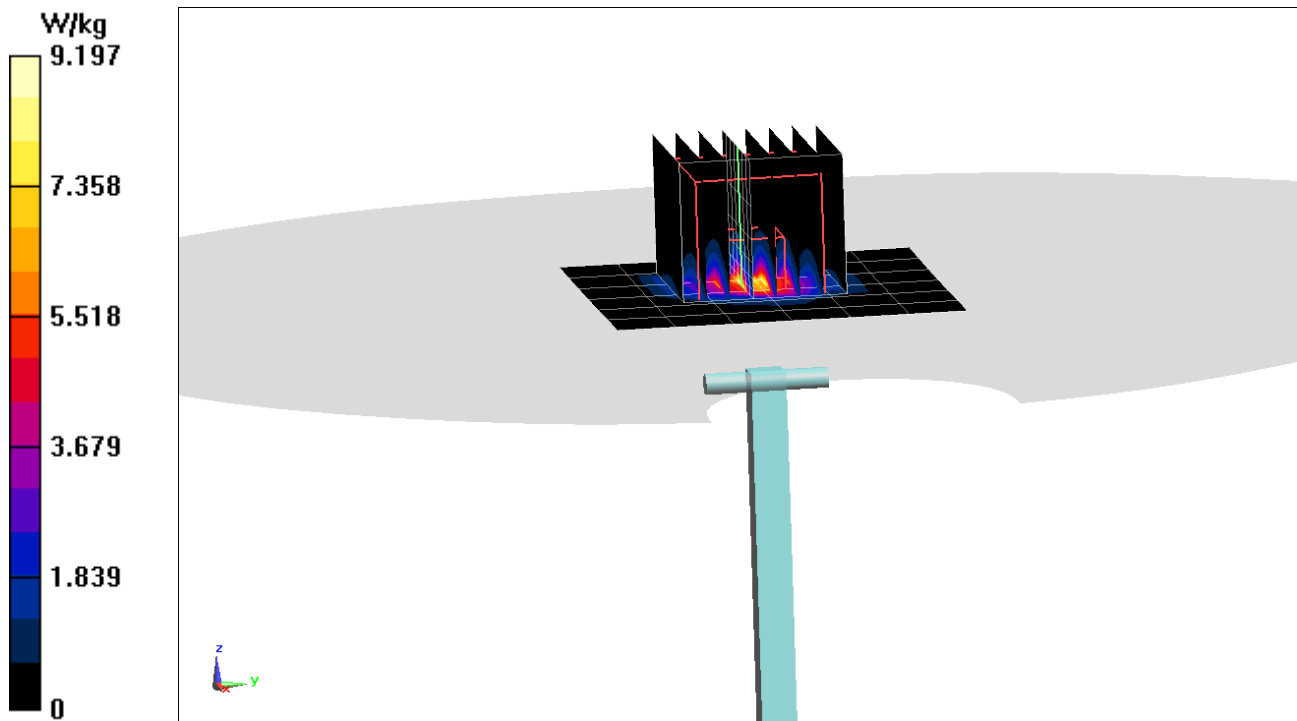
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.7 W/kg

**SAR(1 g) = 3.84 W/kg**

Deviation(1 g) = -0.26%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5600$  MHz;  $\sigma = 5.915$  S/m;  $\epsilon_r = 46.652$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/1/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7409; ConvF(4.22, 4.22, 4.22) @ 5600 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5600 MHz System Verification at 17.0 dBm (50 mW)

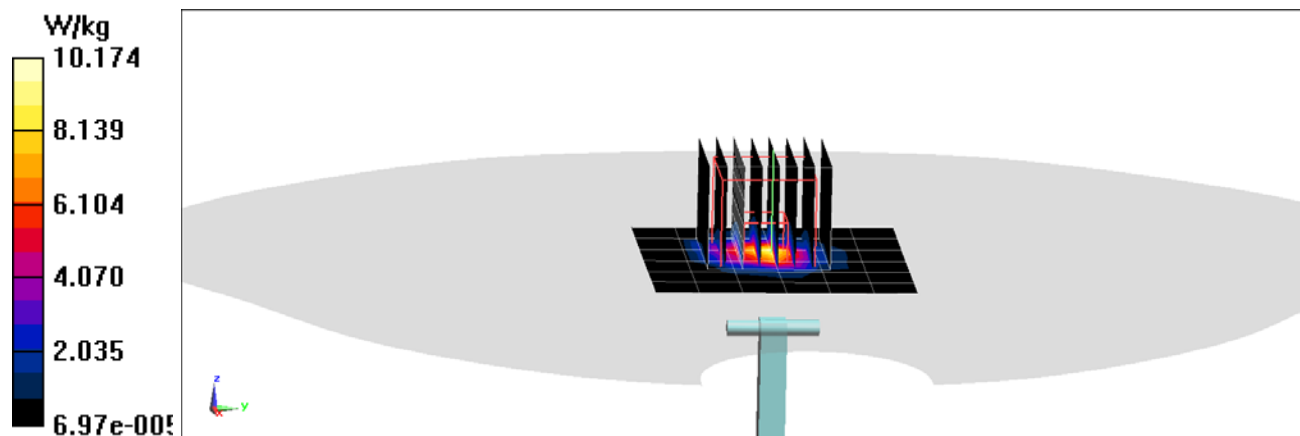
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 19.6 W/kg

**SAR(1 g) = 4.13 W/kg**

Deviation(1 g) = 5.09%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Body Medium parameters used (interpolated):  
 $f = 5750 \text{ MHz}$ ;  $\sigma = 6.122 \text{ S/m}$ ;  $\epsilon_r = 46.428$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/1/2019; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5750 MHz; Calibrated: 6/19/2019  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1334; Calibrated: 6/20/2019  
Phantom: Front; Type: QD 000 P40 CD; Serial: 1686  
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## **5750 MHz System Verification at 17.0 dBm (50 mW)**

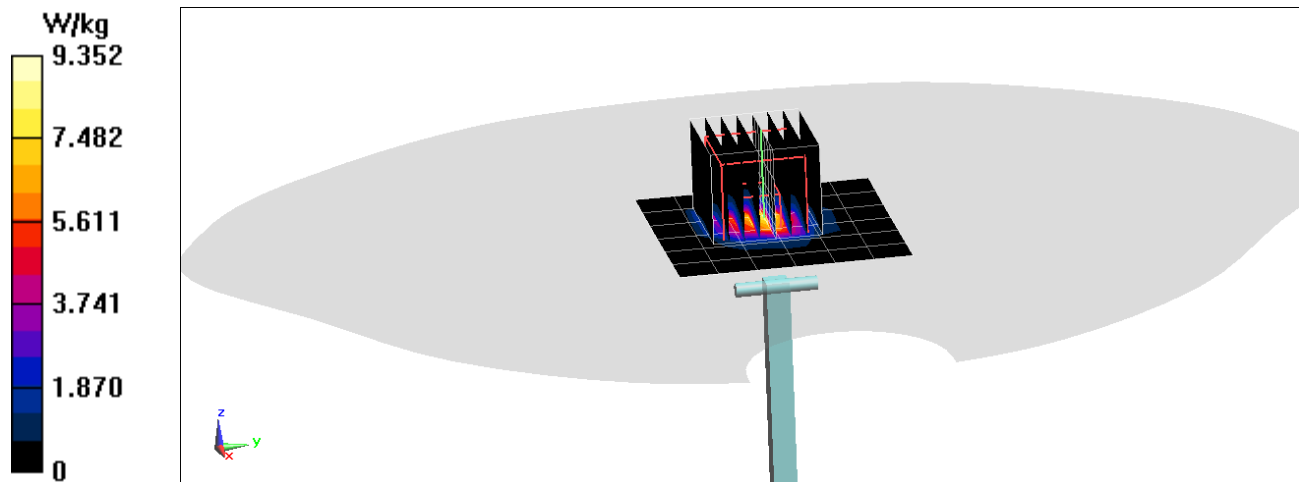
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.7 W/kg

**SAR(1 g) = 3.82 W/kg**

Deviation(1 g) = -0.65%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5250$  MHz;  $\sigma = 5.505$  S/m;  $\epsilon_r = 47.502$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5250 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

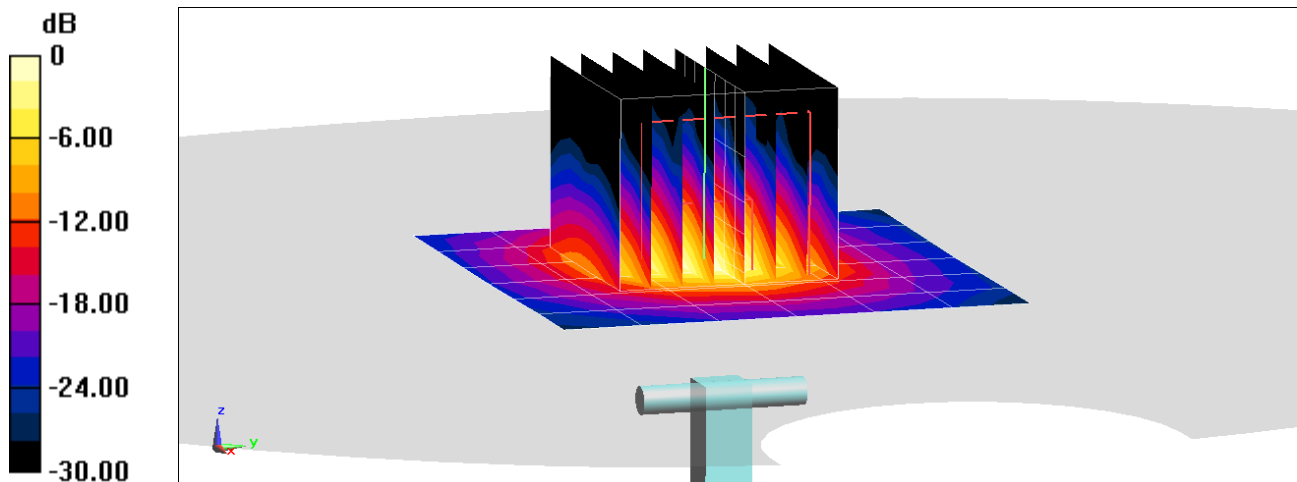
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 15.6 W/kg

**SAR(10 g) = 1.05 W/kg**

Deviation(10 g) = -1.87%



0 dB = 9.15 W/kg = 9.61 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5600$  MHz;  $\sigma = 5.981$  S/m;  $\epsilon_r = 46.917$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7409; ConvF(4.22, 4.22, 4.22) @ 5600 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5600 MHz System Verification at 17.0 dBm (50 mW)

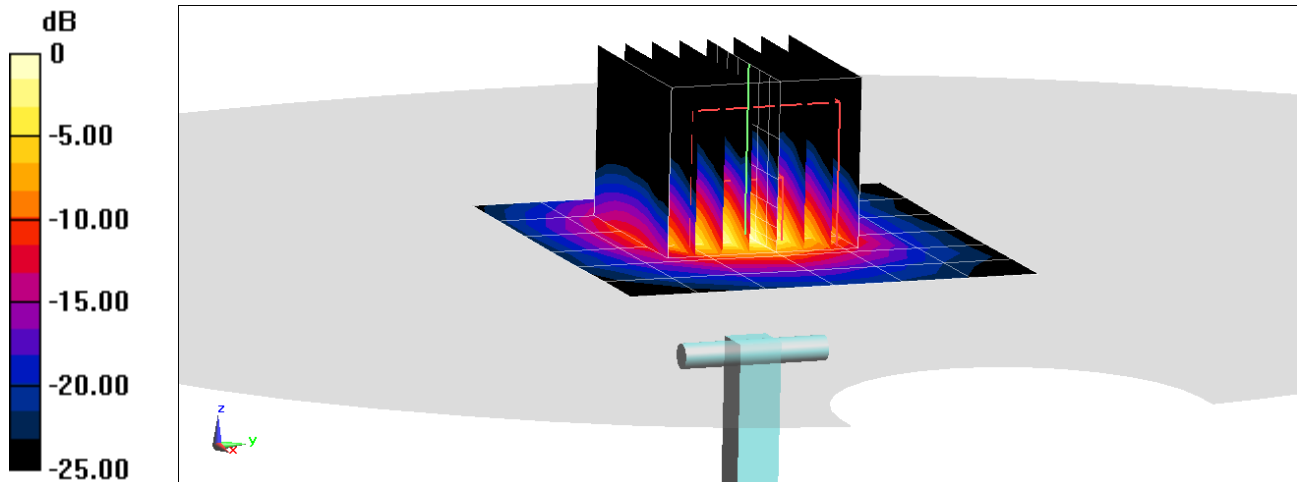
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.4 W/kg

**SAR(10 g) = 1.11 W/kg**

Deviation(10 g) = 1.37%



0 dB = 10.4 W/kg = 10.17 dBW/kg



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:  
 $f = 5750 \text{ MHz}$ ;  $\sigma = 6.19 \text{ S/m}$ ;  $\epsilon_r = 46.693$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/09/2019; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5750 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

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

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

## 5750 MHz System Verification at 17.0 dBm (50 mW)

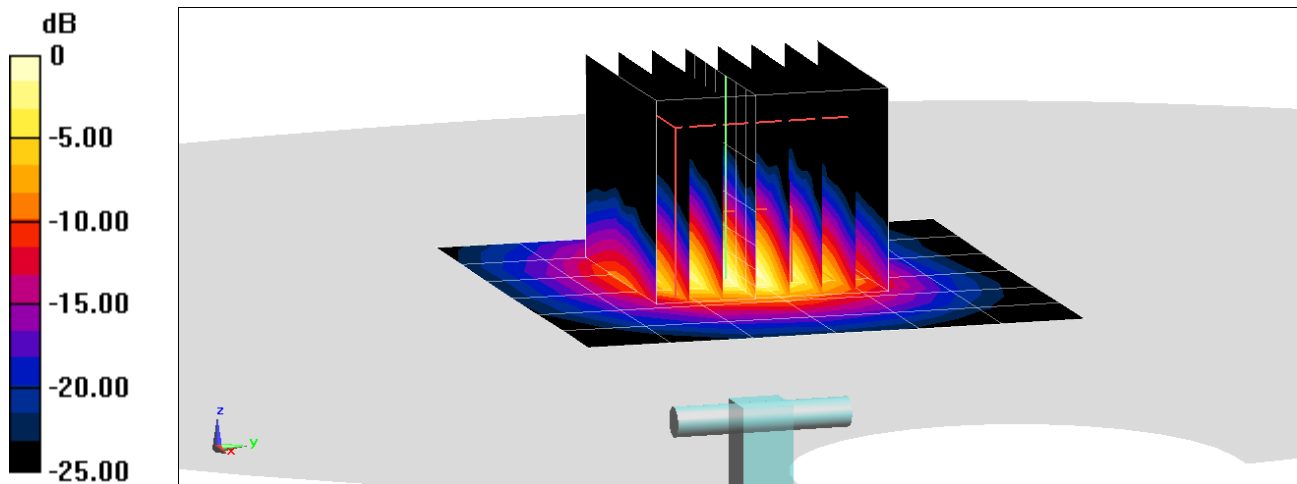
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4;

Peak SAR (extrapolated) = 18.6 W/kg

**SAR(10 g) = 1.06 W/kg**

Deviation(10 g) = -0.47%



0 dB = 9.63 W/kg = 9.84 dBW/kg

## APPENDIX C: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity  $\epsilon'$  can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r'\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively,  $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos\phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

### 3 Composition / Information on ingredients

#### 3.2 Mixtures

**Description:** Aqueous solution with surfactants and inhibitors

**Declarable, or hazardous components:**



CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000	<b>Ethenediol</b> STOT RE 2, H373; Acute Tox. 4, H302	>1.0-4.9%
CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000	<b>Sodium petroleum sulfonate</b> Eye Irrit. 2, H319	< 2.9%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000	<b>Hexylene Glycol / 2-Methyl-pentane-2,4-diol</b> Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.9%
CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000	<b>Alkoxylated alcohol, &gt; C<sub>16</sub></b> Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.0%

**Additional information:**

For the wording of the listed risk phrases refer to section 16.  
Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.  
The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

**Figure C-1**

Note: Liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

<b>FCC ID:</b> A3LSMG986U	 <b>PCTEST</b> PROFESSIONAL COMMUNICATIONS TECHNOLOGY, INC.	<b>SAR EVALUATION REPORT</b>		<b>Approved by:</b> Quality Manager
<b>Test Dates:</b> 10/21/19 – 01/01/20	<b>DUT Type:</b> Portable Handset			APPENDIX C: Page 1 of 3